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Data Validation Summary

Third Quarter 2023 Groundwater Monitoring Event - Annual Monitoring under 40 CFR 264 Appendix IX For HWMU-16

Post Closure Care Permit Hazardous Waste Management Unit 5 & 16
Radford Army Ammunition Plant, Radford, Virginia
EPA ID# VA1210020730

TRC Engineers, Inc. (formerly Draper Aden Associates) performed data validation of the analytical results for the Third Quarter 2023 semiannual groundwater monitoring event at Hazardous Waste Management Units (HWMUs) 5 and 16 located at the Radford Army Ammunition Plant (RFAAP), in Radford, Virginia.

During Third Quarter 2023, on behalf of BAE Systems, Ordnance Systems Inc. (BAE), TRC Engineers completed groundwater monitoring for HWMUs 5 and 16 in accordance with the Final Hazardous Waste Post-Closure Care Permit for HWMUs 5 and 16 (reissued August 16, 2014). The Third Quarter 2023 event served as the semiannual Corrective Action (CA) groundwater monitoring event for HWMU-5 and the semiannual compliance monitoring event for HWMU-16. The Third Quarter 2023 groundwater monitoring event also served as the annual monitoring event under 40 CFR 264 Appendix IX for HWMU-16.

The Third Quarter 2023 groundwater monitoring event was conducted using revised detection limits (DLs) and quantitation limits (QLs), where applicable, as specified in the Class 1 Permit Modification approved by the Virginia Department of Environmental Quality (VDEQ) in electronic correspondence dated May 5, 2021. Additionally, HWMU-16 total cobalt data were evaluated using the revised alternate source demonstration (ASD) for total cobalt in groundwater at HWMU-16 approved by the VDEQ in electronic correspondence dated September 13, 2021.

The following information summarizes the findings of the Third Quarter 2023 semiannual event for HWMU-16 only. Information for HWMU-5 is provided under a separate document.

Sample Collection/Analytical Services

TRC Engineers of Blacksburg, Virginia, collected groundwater samples July 26-27, 2023.

Samples were submitted for laboratory analysis to Eurofins Cleveland (DBA Canton), (ETAC) of Barberton, Ohio; Eurofins Lancaster Laboratories Environmental Testing, LLC (ELLE) of Lancaster, Pennsylvania, Pace Analytical Services, LLC (Pace), of West Columbia, South Carolina, and to GEL Laboratories (GEL), of Charleston, South Carolina.

Receipt of Monitoring Event Data

On behalf of BAE SYSTEMS, Ordnance Systems, Inc., each laboratory submitted results to TRC in a final certificate of analysis which included analytical results as well as relevant documentation to verify and validate the results. The final certificate of analysis for this event was received on November 14, 2023. *Note: The above four laboratories were utilized to complete the Annual Appendix IX groundwater monitoring event. The final revised certificate of analysis was received November 14, 2023. Additional discussion regarding the October 18, 2023 verification and cyanide resampling event is provided below.*

Verification and Resampling Events:

Verification monitoring was conducted on October 5, 2023 to confirm or refute the initial result for total cyanide, 6.7 J ug/l (<QL) in 16MW9. The verification sample result for cyanide was not detected and did not confirm the original result. Both results were reported, and the verification result (ND) was reported as the final result. A blind field sample duplicate of 16MW9 was also submitted and total cyanide was not detected above the detection limit or QL.

Verification monitoring was conducted on October 17-18, 2023 to confirm or refute the initial result for total silver in 16WC1B, 0.34 J ug/l. The verification sample result for total silver verified the original result as reported (0.59 J ug/l) and the original event result was reported as the final result, although all results are reported. A blind field sample duplicate of 16WC1B was also submitted and total silver was detected at 0.62 J ug/l above the Permit-specified MDL (0.3 ug/l). As such, total silver will be added to the compliance monitoring list for future events.

Summary of Monitoring Event Data by Analytical Method

Certificates of analysis were received from each laboratory in the following sample delivery groups (SDGs):

Summary of Required Analytical Methods and SDGs

Analytical Method			**Hazardous Waste Management Unit 16**
	Laboratory	**SDG (Date Received)**	**Additional Notes**
Volatiles			
8260D	ELLE	410-136864-1 Rev 4 (11/14/2023)	Compliance wells - select volatiles
8260C	ELLE	410-136864-2 (8/11/2023)	Compliance wells – dimethyl ether only
8260D	ELLE	410-136514-1 (8/15/2023)	Plume wells – select volatiles
8260C	ELLE	410-136514-2 (8/15/2023)	Plume wells – dimethyl ether
8260D	ETAC	240-189273-1 (8/12/2023)	Compliance wells – acrolein and trans-1,4-dichlorobutene
Semivolatiles			
8270D	ELLE	410-136864-1 Rev 4 (11/14/2023)	Compliance wells – select semivolatiles
8270D	ELLE	410-136514-1 (8/15/2023)	Plume wells – select semivolatiles

8270E	ETAC	240-189273-1 (8/12/2023)	Compliance wells – select semivolatiles
8270E	PACE	YG28002 (9/25/2023)	Compliance wells – pentachloronitrobenzene, isofrole, pronamide
8270E	GEL	631221 (8/10/2023)	Compliance wells – dimethyl phthalate, di-n-octyl phthalate, hexachlorophene
Inorganics			
6020B	ELLE	410-136864-1 Rev 4 (11/14/2023) 410-136864-3 (total silver reanalysis-not used)	Compliance wells – total metals
6020B	ELLE	410-136514-1 (8/15/2023)	Plume wells – total metals
6020B	ELLE	410-147656-1 (10/27/2023)	Verification event – total silver
7470A	ELLE	410-136864-1 Rev 4 (11/14/2023)	Compliance wells – total mercury
7470A	ELLE	410-136514-1 (8/15/2023)	Plume wells – total mercury
9012B	ELLE	410-136864-1 Rev 4 (11/14/2023)	Compliance wells - cyanide
9012B	ELLE	410-146032-1 (10/18/2023)	Verification event - cyanide

Each final certificate of analysis was complete in its presentation and the data were of acceptable quality. Chains of custody and permit required target analytes are provided in each SDG.

Data Analysis and Validation

Samples were analyzed by *SW-846 Method requirements (Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates)*. Data were evaluated in general accordance with:

- *Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods*, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates.
- *USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review*, November 2020, where applicable.
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review*, November 2020, where applicable.

Where QA/QC criteria differed, the analytical method acceptance criteria were used. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report. TRC of Blacksburg, Virginia, performed a comprehensive data validation, including recalculation of 10% of the data, where noted. Data validation reports and a summary table of data validation results are provided as an attachment (Appendix C).

Reporting of Results

All compliance groundwater monitoring network wells were sampled for the constituents listed in Appendix E to Permit Attachment 3 (Unit 16 Groundwater Compliance Monitoring (Semiannual) Constituent List). This event also served as the annual monitoring event in which the upgradient and point of compliance wells at HWMU-16 were sampled for the 40 CFR Part 264 Appendix IX

constituents listed in Appendix I of Permit Attachment 1 of the Final Post-Closure Care Permit. Results reported between the detection limit and quantitation limit should be considered estimated concentrations. Plume well results were reported to at or above the permit specified quantitation limit for the constituents listed in the semiannual compliance monitoring lists (Attachment 3 Appendix E). Compliance well results were reported to the permit detection limit (Attachment 2, Appendix I).

QLs were at or below the applicable groundwater protection standard (GPS). The laboratory QLs and DLs met the permit specified method detection limit (MDL) and QL, except for plume sample 16Spring. The permit QL for diethyl phthalate is 5 ug/l. The laboratory QL for diethyl phthalate for 16Spring was reported at 5.1 ug/l due to rounding associated with the final sample volume used for analysis.

Additionally, a footnote presented in Appendix G of Permit Attachment 3 indicates that verification is required for constituents detected at concentrations less than the QL if their associated GPSs are equal to the QL and are greater than the applicable risk-based concentrations (i.e., ACL or RSL). In these instances, verification must be conducted using an alternate low-level analytical method in order to confirm or refute the observed initial detections if the QL achievable by that method is less than, or equal to, the ACL or RSL for the subject constituent. If a concentration greater than the low-level analytical method QL is observed, then the GPS for that constituent will be updated, if warranted. During Third Quarter 2023, no constituents with GPSs equal to their respective QLs and greater than the applicable risk-based concentrations were detected.

This Report has been prepared by:

CD 10-27-2023

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Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 6020B							
Laboratory: ELLE, Lancaster, PA							
Antimony	16C1	0.6	U	U		2	Analyte not detected at or above the DL or QL.
	16MW8	0.6	U	U		2	Analyte not detected at or above the DL or QL.
	16MW9	0.6	U	U		2	Analyte not detected at or above the DL or QL.
	16WC1A	0.6	U	U		2	Analyte not detected at or above the DL or QL.
	16WC1B	0.6	U	U		2	Analyte not detected at or above the DL or QL.
	16WDUP	0.6	U	U		2	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Arsenic	16C1	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2.6	J	2.6	J	10	Result < QL.
	16WC1A	5.3	J	5.3	J	10	Result < QL.
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC2B	10	U	U		10	Analyte not detected at or above the QL.
	16-2	10	U	U		10	Analyte not detected at or above the QL.
	16-3	10	U	U		10	Analyte not detected at or above the QL.
	16-5	10	U	U		10	Analyte not detected at or above the QL.
	16SPRING	10	U	U		10	Analyte not detected at or above the QL.
	16WDUP	5.1	J	5.1	J	10	Result < QL. Blind field duplicate of 16CW1A. Estimated RPD is 4.
Barium	16C1	200		200		10	No action taken.
	16MW8	150		150		10	No action taken.
	16MW9	660		660		10	No action taken.
	16WC1A	510		510		10	No action taken.
	16WC1B	89		89		10	No action taken.
	16WC2B	120		120		10	No action taken.
	16-2	240		240		10	No action taken.
	16-3	800		800		10	No action taken.
	16-5	180		180		10	No action taken.
	16SPRING	220		220		10	No action taken.
	16WDUP	520		520		10	No action taken. Blind field duplicate of 16CW1A. RPD is 1.9
Beryllium	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.31	J	0.31	J	1	Result < QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 6020B							
Laboratory: ELLE, Lancaster, PA							
Beryllium	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Cadmium	16C1	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.27	J	0.27	J	1	Result < QL.
	16MW9	0.37	J	0.37	J	1	Result < QL.
	16WC1A	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.71	J	0.71	J	1	Result < QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.2	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Chromium	16C1	1	U	U		5	Analyte not detected at or above the DL or QL.
	16MW8	1	U	U		5	Analyte not detected at or above the DL or QL.
	16MW9	1	U	U		5	Analyte not detected at or above the DL or QL.
	16WC1A	1	U	U		5	Analyte not detected at or above the DL or QL.
	16WC1B	3.3	J	3.3	J	5	Result < QL.
	16WC2B	5	U	U		5	Analyte not detected at or above the QL.
	16-2	5	U	U		5	Analyte not detected at or above the QL.
	16-3	5	U	U		5	Analyte not detected at or above the QL.
	16-5	5	U	U		5	Analyte not detected at or above the QL.
	16SPRING	5	U	U		5	Analyte not detected at or above the QL.
	16WDUP	1	U	U		5	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Cobalt	16C1	1	U	U		5	Analyte not detected at or above the DL or QL.
	16MW8	1	U	U		5	Analyte not detected at or above the DL or QL.
	16MW9	5.7		5.7		5	No action taken.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 6020B							
Laboratory: ELLE, Lancaster, PA							
Cobalt	16WC1A	15		15		5	No action taken. Analyte detected in the CCBs (0.20-0.29 ug/l) had no influence on reported result.
	16WC1B	3.5	J	3.5	J	5	Result < QL. Lab Qualified data since analyte was detected in the CCBs (0.20-0.29 ug/l). Sample result is >10 times the blank contamination and no influence is noted.
	16WC2B	5	U	U		5	Analyte not detected at or above the QL.
	16-2	5	U	U		5	Analyte not detected at or above the QL.
	16-3	5	U	U		5	Analyte not detected at or above the QL.
	16-5	5	U	U		5	Analyte not detected at or above the QL.
	16SPRING	5	U	U		5	Analyte not detected at or above the QL.
	16WDUP	15		15		5	No action taken. Blind field duplicate of 16WC1A. RPD is <1. Analyte detected in the CCBs (0.20-0.29 ug/l) considered to have no influence on reported result.
Copper	16C1	1.7	U	U		5	Analyte not detected at or above the DL or QL.
	16MW8	11		11		5	No action taken.
	16MW9	1.7	U	U		5	Analyte not detected at or above the DL or QL.
	16WC1A	1.7	U	U		5	Analyte not detected at or above the DL or QL.
	16WC1B	2.9	J	2.9	J	5	Result < QL.
	16WC2B	5	U	U		5	Analyte not detected at or above the QL.
	16-2	5	U	U		5	Analyte not detected at or above the QL.
	16-3	5	U	U		5	Analyte not detected at or above the QL.
	16-5	5	U	U		5	Analyte not detected at or above the QL.
	16SPRING	5	U	U		5	Analyte not detected at or above the QL.
	16WDUP	1.7	U	U		5	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Lead	16C1	1	U	U		3	Analyte not detected at or above the DL or QL.
	16MW8	1	U	U		3	Analyte not detected at or above the DL or QL.
	16MW9	1	U	U		3	Analyte not detected at or above the DL or QL.
	16WC1A	1	U	U		3	Analyte not detected at or above the DL or QL.
	16WC1B	1	U	U		3	Analyte not detected at or above the DL or QL.
	16WC2B	3	U	U		3	Analyte not detected at or above the QL.
	16-2	3	U	U		3	Analyte not detected at or above the QL.
	16-3	3	U	U		3	Analyte not detected at or above the QL.
	16-5	3	U	U		3	Analyte not detected at or above the QL.
	16SPRING	3	U	U		3	Analyte not detected at or above the QL.
	16WDUP	1	U	U		3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Nickel	16C1	4	J	4	J	10	Result < QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 6020B							
Laboratory: ELLE, Lancaster, PA							
Nickel	16MW8	2.9	J	2.9	J	10	Result < QL.
	16MW9	17		17		10	No action taken.
	16WC1A	15		15		10	No action taken. Analyte detected in the CCBs (0.54-1.0 ug/l) had no influence on reported result.
	16WC1B	4.7	J	4.7	J	10	Result < QL.
	16WC2B	10	U	U		10	Analyte not detected at or above the QL.
	16-2	10	U	U		10	Analyte not detected at or above the QL.
	16-3	10	U	U		10	Analyte not detected at or above the QL.
	16-5	10	U	U		10	Analyte not detected at or above the QL.
	16SPRING	10	U	U		10	Analyte not detected at or above the QL.
	16WDUP	15		15		10	No action taken. Blind field duplicate of 16WC1A. RPD is <1. Analyte detected in the CCBs (0.54-1.0 ug/l) had no influence on reported result.
Selenium	16C1	3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	3	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Silver	16C1	0.3	U	U		2	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		2	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		2	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		2	Analyte not detected at or above the DL or QL.
	16WC1B	0.59	J	0.59	J	2	Result < QL. Verification event performed on 10/18/23.
	16WC1B	0.34	J	0.34	J	2	Result < QL. Verification event performed on 10/18/23. Verification result (0.59 J ug/l) confirms original result as <QL.
	16WDUP	0.3	U	U		2	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Thallium	16C1	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.2	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Vanadium	16C1	2.5	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2.5	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 6020B							
Laboratory: ELLE, Lancaster, PA							
Vanadium	16MW9	2.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC2B	10	U	U		10	Analyte not detected at or above the QL.
	16-2	10	U	U		10	Analyte not detected at or above the QL.
	16-3	10	U	U		10	Analyte not detected at or above the QL.
	16-5	10	U	U		10	Analyte not detected at or above the QL.
	16SPRING	10	U	U		10	Analyte not detected at or above the QL.
	16WDUP	2.5	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16CW1A.
Zinc	16C1	7.3	U	U		30	Analyte not detected at or above the DL or QL.
	16MW8	25	J	25	J	30	Result < QL.
	16MW9	7.3	U	U		30	Analyte not detected at or above the DL or QL.
	16WC1A	11	J	11	J	30	Result < QL.
	16WC1B	11	J	11	J	30	Result < QL.
	16WC2B	30	U	U		30	Analyte not detected at or above the QL.
	16-2	30	U	U		30	Analyte not detected at or above the QL.
	16-3	30	U	U		30	Analyte not detected at or above the QL.
	16-5	30	U	U		30	Analyte not detected at or above the QL.
	16SPRING	30	U	U		30	Analyte not detected at or above the QL.
	16WDUP	12	J	12	J	30	Result < QL. Blind field duplicate of 16CW1A. Estimated RPD is 9.
Method: 7470A							
Laboratory: ELLE, Lancaster, PA							
Mercury	16C1	0.2	U	U		2	Analyte not detected at or above the DL or QL.
	16MW8	0.2	U	U		2	Analyte not detected at or above the DL or QL.
	16MW9	0.2	U	U		2	Analyte not detected at or above the DL or QL.
	16WC1A	0.2	U	U		2	Analyte not detected at or above the DL or QL.
	16WC1B	0.25	J	0.25	J	2	Result < QL.
	16WC2B	2	U	U		2	Analyte not detected at or above the QL.
	16-2	2	U	U		2	Analyte not detected at or above the QL.
	16-3	2	U	U		2	Analyte not detected at or above the QL.
	16-5	2	U	U		2	Analyte not detected at or above the QL.
	16SPRING	2	U	U		2	Analyte not detected at or above the QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 7470A							
Laboratory: ELLE, Lancaster, PA							
Mercury	16WDUP	0.2	U	U		2	Analyte not detected at or above the DL or QL. Blind field sample duplicate of 16WC1A.
Method: 8260C							
Laboratory: ELLE, Lancaster, PA							
Dimethyl ether	16C1	7.7	J	7.7	J	10	Result < QL.
	16MW8	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.1	U	U		10	Analyte not detected at or above the DL or QL. Original reported result was 1.1J ug/l. Review of instrument data shows actual result of 1.06 ug/l. Improper rounding up by laboratory.
	16WC1B	1.1	U	U		10	Analyte not detected at or above the QL.
	16WC2B	10	U	U		10	Analyte not detected at or above the QL.
	16-2	10	U	U		10	Analyte not detected at or above the QL.
	16-3	10	U	U		10	Analyte not detected at or above the QL.
	16-5	10	U	U		10	Analyte not detected at or above the QL.
	16SPRING	10	U	U		10	Analyte not detected at or above the QL.
	16WDUP	1.1	U	U		10	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Acetone	16C1	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Acetonitrile	16C1	31	U	U		100	Analyte not detected at or above the DL or QL.
	16MW8	31	U	U		100	Analyte not detected at or above the DL or QL.
	16MW9	31	U	U		100	Analyte not detected at or above the DL or QL.
	16WC1A	31	U	U		100	Analyte not detected at or above the DL or QL.
	16WC1B	31	U	U		100	Analyte not detected at or above the DL or QL.
	16WDUP	31	U	U		100	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Acrylonitrile	16C1	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.1	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Acrylonitrile	16WC1A	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Allyl chloride	16C1	1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Benzene	16C1	0.33	J	0.33	J	1	Result < QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.39	J	0.39	J	1	Result < QL.
	16WC1A	0.37	J	0.37	J	1	Result < QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.33	J	0.33	J	1	Result < QL Blind field duplicate of 16WC1A. Estimated RPD is 3.
Bromodichloromethane	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Bromoform	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
2-Butanone	16C1	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16WC2B	10	U	U		10	Analyte not detected at or above the QL.
	16-2	10	U	U		10	Analyte not detected at or above the QL.
	16-3	10	U	U		10	Analyte not detected at or above the QL.
	16-5	10	U	U		10	Analyte not detected at or above the QL.
	16SPRING	10	U	U		10	Analyte not detected at or above the QL.
	16WDUP	1.7	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Carbon disulfide	16C1	0.4	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Carbon tetrachloride	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Chloroethane	16C1	3.4		3.4		1	No action taken.
	16MW8	0.083	J	0.083	J	1	Result < QL.
	16MW9	1.9		1.9		1	No action taken.
	16WC1A	2.2		2.2		1	No action taken.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Chloroethane	16WC1B	0.07	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	2.1		2.1		1	No action taken. Blind field duplicate of 16WC1A.
Chloroform	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Chloroprene	16C1	0.46	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.46	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.46	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.46	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.46	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.46	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Dibromochloromethane	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,2-Dibromo-3-chloropropane	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,2-Dibromoethane	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
1,2-Dibromoethane	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,2-Dichlorobenzene	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,3-Dichlorobenzene	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,4-Dichlorobenzene	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Dichlorodifluoromethane	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Dichlorodifluoromethane	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,1-Dichloroethane	16C1	5.2		5.2		1	No action taken.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	5.1		5.1		1	No action taken.
	16WC1A	4.2		4.2		1	No action taken.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	3.9		3.9		1	No action taken. Blind field duplicate of 16WC1A.
1,2-Dichloroethane	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,1-Dichloroethene	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
trans-1,2-Dichloroethene	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
trans-1,2-Dichloroethene	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,2-Dichloropropane	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,3-Dichloropropane	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
trans-1,3-Dichloropropene	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Diethyl ether	16C1	33		33	J	10	Sample analyzed in dilution (1:4). Original result 36 ug/l (RPD 8.7). Actual QL 40 ug/l.
	16MW8	9.6	J	9.6	J	10	Result < QL.
	16MW9	62		62		10	Sample analyzed in dilution (1:2.5). Original result 62 ug/l (RPD 0). Actual QL 25 ug/l.
	16WC1A	22		22		10	No action taken.
	16WC1B	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC2B	10	U	U	J	10	Analyte not detected at or above the QL. CV %D > ± 20% (-31%).
	16-2	10	U	U	J	10	Analyte not detected at or above the QL. CV %D > ± 20% (-31%).
	16-3	10	U	U	J	10	Analyte not detected at or above the QL. CV %D > ± 20% (-31%).
	16-5	10	U	U	J	10	Analyte not detected at or above the QL. CV %D > ± 20% (-31%).
	16SPRING	10	U	U	J	10	Analyte not detected at or above the QL. CV %D > ± 20% (-31%).

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Diethyl ether	16WDUP	21		21		10	No action taken. Blind field duplicate of 16WC1A.
1,4-Dioxane	16C1	45	U	U		200	Analyte not detected at or above the DL or QL.
	16MW8	45	U	U		200	Sample was diluted 1:5 for re-analysis. Diluted result 26 J ug/l; adjuted QL was 62.5 ug/l.
	16MW9	45	U	U		200	Analyte not detected at or above the DL or QL.
	16WC1A	45	U	U		200	Analyte not detected at or above the DL or QL.
	16WC1B	45	U	U		200	Analyte not detected at or above the DL or QL.
	16WDUP	45	U	U		200	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Ethylbenzene	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Ethyl methacrylate	16C1	0.81	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.81	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.81	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.81	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.81	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.81	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Hexachlorobutadiene	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2-Hexanone	16C1	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
2-Hexanone	16MW9	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Isobutyl alcohol	16C1	11	U	U		200	Analyte not detected at or above the DL or QL.
	16MW8	11	U	U		200	Analyte not detected at or above the DL or QL.
	16MW9	11	U	U		200	Analyte not detected at or above the DL or QL.
	16WC1A	11	U	U		200	Analyte not detected at or above the DL or QL.
	16WC1B	11	U	U		200	Analyte not detected at or above the DL or QL.
	16WDUP	11	U	U		200	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Methacrylonitrile	16C1	9.7	U	U		100	Analyte not detected at or above the DL or QL.
	16MW8	9.7	U	U		100	Analyte not detected at or above the DL or QL.
	16MW9	9.7	U	U		100	Analyte not detected at or above the DL or QL.
	16WC1A	9.7	U	U		100	Analyte not detected at or above the DL or QL.
	16WC1B	9.7	U	U		100	Analyte not detected at or above the DL or QL.
	16WDUP	9.7	U	U		100	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Bromomethane	16C1	0.54	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.54	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.54	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.54	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.54	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.54	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Chloromethane	16C1	0.1	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.1	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.1	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.1	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.1	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Chloromethane	16WDUP	0.1	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Iodomethane	16C1	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.58	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Methyl methacrylate	16C1	3.5	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	3.5	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	3.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	3.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	3.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	3.5	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
4-Methyl-2-pentanone	16C1	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Dibromomethane	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Methylene chloride	16C1	0.7	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.7	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.7	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.7	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.7	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Methylene chloride	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.7	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Naphthalene	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Pentachloroethane	16C1	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.7	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.7	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Propionitrile	16C1	10	U	U		100	Analyte not detected at or above the DL or QL.
	16MW8	10	U	U		100	Analyte not detected at or above the DL or QL.
	16MW9	10	U	U		100	Analyte not detected at or above the DL or QL.
	16WC1A	10	U	U		100	Analyte not detected at or above the DL or QL.
	16WC1B	10	U	U		100	Analyte not detected at or above the DL or QL.
	16WDUP	10	U	U		100	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Styrene	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,1,1,2-Tetrachloroethane	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
1,1,1,2-Tetrachloroethane	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,1,2,2-Tetrachloroethane	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Tetrachloroethene	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Tetrahydrofuran	16C1	16	J	16	J	25	Result < QL.
	16MW8	2	U	U		25	Analyte not detected at or above the DL or QL.
	16MW9	2	U	U		25	Analyte not detected at or above the DL or QL.
	16WC1A	2	U	U		25	Analyte not detected at or above the DL or QL.
	16WC1B	2	U	U		25	Analyte not detected at or above the DL or QL.
	16WC2B	25	U	U		25	Analyte not detected at or above the QL.
	16-2	25	U	U		25	Analyte not detected at or above the QL.
	16-3	25	U	U		25	Analyte not detected at or above the QL.
	16-5	25	U	U		25	Analyte not detected at or above the QL.
	16SPRING	25	U	U		25	Analyte not detected at or above the QL.
	16WDUP	2	U	U		25	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Toluene	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Toluene	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,2,4-Trichlorobenzene	16C1	0.6	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.6	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.6	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.6	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.6	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.6	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,1,1-Trichloroethane	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,1,2-Trichloroethane	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Trichloroethene	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Trichlorofluoromethane	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,2,3-Trichloropropane	16C1	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.3	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.3	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,1,2-Trichloro-1,2,2-Trifluoroethane	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
1,1,2-Trichloro-1,2,2-Trifluoroethane	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Vinyl acetate	16C1	3.2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	3.2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	3.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	3.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	3.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	3.2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Vinyl chloride	16C1	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.23	J	0.23	J	1	Result < QL.
	16WC1B	0.2	U	U		1	Analyte not detected at or above the DL or QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	0.2	J	0.2	J	1	Result < QL. Blind field duplicate of 16WC1A.
Xylenes (Total)	16C1	0.4	U	U		3	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		3	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		3	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		3	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		3	Analyte not detected at or above the DL or QL.
	16WC2B	3	U	U		3	Analyte not detected at or above the QL.
	16-2	3	U	U		3	Analyte not detected at or above the QL.
	16-3	3	U	U		3	Analyte not detected at or above the QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Xylenes (Total)	16-5	3	U	U		3	Analyte not detected at or above the QL.
	16SPRING	3	U	U		3	Analyte not detected at or above the QL.
	16WDUP	0.4	U	U		3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
m,p-Xylene	16C1	0.4	U	U		2	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		2	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		2	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		2	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		2	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		2	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
o-Xylene	16C1	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW8	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16MW9	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1A	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WC1B	0.4	U	U		1	Analyte not detected at or above the DL or QL.
	16WDUP	0.4	U	U		1	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Method: 8260D							
Laboratory: ETAC, Barberton, OH							
Acrolein	16C1	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2.1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
trans-1,4-Dichloro-2-butene	16C1	1.3	U	U	J	10	Analyte not detected at or above the DL or QL. LCS/MS/MSD recovered low (46%/41%/42%).
	16MW8	1.3	U	U	J	10	Analyte not detected at or above the DL or QL. LCS/MS/MSD recovered low (46%/41%/42%).
	16MW9	1.3	U	U	J	10	Analyte not detected at or above the DL or QL. LCS/MS/MSD recovered low (46%/41%/42%).
	16WC1A	1.3	U	U	J	10	Analyte not detected at or above the DL or QL. LCS/MS/MSD recovered low (46%/41%/42%).
	16WC1B	1.3	U	U	J	10	Analyte not detected at or above the DL or QL. LCS/MS/MSD recovered low (46%/41%/42%).
	16WDUP	1.3	U	U	J	10	Analyte not detected at or above the DL or QL. LCS/MS/MSD recovered low (46%/41%/42%). Blind field duplicate of 16WC1A.
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
Acenaphthene	16C1	0.35	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.35	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.35	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.35	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.35	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.35	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Acenaphthylene	16C1	0.48	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.48	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.48	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.48	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.48	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.48	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Anthracene	16C1	0.52	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.52	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.52	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.52	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.52	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.52	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Benzo[a]anthracene	16C1	0.45	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.45	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.45	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.45	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.45	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.45	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Benzo[b]fluoranthene	16C1	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Benzo[k]fluoranthene	16C1	1.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.6	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
Benzo[k]fluoranthene	16MW9	1.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.6	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Benzo[ghi]perylene	16C1	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.42	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Benzo(a)pyrene	16C1	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.5	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
bis(2-Chloro-1-methylethyl)ether	16C1	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.6	U	U	J	10	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-22%).
	16WC1A	0.6	U	U	J	10	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-22%).
	16WC1B	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.6	U	U	J	10	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-22%). Blind field duplicate of 16WC1A.
bis(2-Ethylhexyl)phthalate	16C1	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
4-Bromophenyl phenyl ether	16C1	0.56	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.56	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.56	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.56	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
4-Bromophenyl phenyl ether	16WC1B	0.56	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.56	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
p-Chloro-m-cresol	16C1	1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2-Chloronaphthalene	16C1	0.5	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.5	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.5	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2-Chlorophenol	16C1	1	U	U	J	10	Analyte not detected at or above the DL or QL. MS recovered low (27.7%).
	16MW8	1	U	U	J	10	Analyte not detected at or above the DL or QL. MS recovered low (27.7%).
	16MW9	1	U	U	J	10	Analyte not detected at or above the DL or QL. MS recovered low (27.7%).
	16WC1A	1	U	U	J	10	Analyte not detected at or above the DL or QL. MS recovered low (27.7%).
	16WC1B	1	U	U	J	10	Analyte not detected at or above the DL or QL. MS recovered low (27.7%).
	16WDUP	1	U	U	J	10	Analyte not detected at or above the DL or QL. MS recovered low (27.7%). Blind field duplicate of 16WC1A.
4-Chlorophenyl phenyl ether	16C1	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.61	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Chrysene	16C1	0.31	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.31	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.31	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.31	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.31	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.31	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
Diallate	**16C1**	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW8	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW9	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Dibenz(a,h)anthracene	**16C1**	**0.38**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW8	**0.38**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW9	**0.38**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**0.38**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**0.38**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**0.38**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Dibenzofuran	**16C1**	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW8	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW9	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**0.61**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
2,4-Dichlorophenol	**16C1**	**1.5**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS recovered low (28.2%).**
	16MW8	**1.5**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS recovered low (28.2%).**
	16MW9	**1.5**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS recovered low (28.2%).**
	16WC1A	**1.5**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS recovered low (28.2%).**
	16WC1B	**1.5**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS recovered low (28.2%).**
	16WDUP	**1.5**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS recovered low (28.2%). Blind field duplicate of 16WC1A.**
2,6-Dichlorophenol	**16C1**	**1.4**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS/MSD recovered low (28.1/30.7%).**
	16MW8	**1.4**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS/MSD recovered low (28.1/30.7%).**
	16MW9	**1.4**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS/MSD recovered low (28.1/30.7%).**
	16WC1A	**1.4**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS/MSD recovered low (28.1/30.7%).**
	16WC1B	**1.4**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS/MSD recovered low (28.1/30.7%).**
	16WDUP	**1.4**	**U**	**U**	**J**	**10**	**Analyte not detected at or above the DL or QL. MS/MSD recovered low (28.1/30.7%). Blind field duplicate of 16WC1A.**
Diethyl phthalate	**16C1**	**2**	**U**	**U**		**5**	**Analyte not detected at or above the DL or QL. Actual lab QL is 5 ug/l.**
	16MW8	**2**	**U**	**U**		**5**	**Analyte not detected at or above the DL or QL. Actual lab QL is 5 ug/l.**

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
Diethyl phthalate	16MW9	2	U	U		5	Analyte not detected at or above the DL or QL. Actual lab QL is 5 ug/l.
	16WC1A	2	U	U		5	Analyte not detected at or above the DL or QL. Actual lab QL is 5 ug/l.
	16WC1B	2	U	U		5	Analyte not detected at or above the DL or QL. Actual lab QL is 5 ug/l.
	16WC2B	5	U	U		5	Analyte not detected at or above the QL. Actual lab QL is 5 ug/l.
	16-2	5	U	U		5	Analyte not detected at or above the QL. Actual lab QL is 5 ug/l.
	16-3	5	U	U		5	Analyte not detected at or above the QL. Actual lab QL is 5 ug/l.
	16-5	5	U	U		5	Analyte not detected at or above the QL. Actual lab QL is 5 ug/l.
	16SPRING	5.1	U	U		5.1	Analyte not detected at or above the QL. Actual lab QL is 5 ug/l.
	16WDUP	2	U	U		5	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A. Actual lab QL is 5 ug/l.
O,O-Diethyl O-2-pyrazinyl	16C1	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2.4	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Dimethoate	16C1	3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	3	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
a,a-Dimethylphenethylamine	16C1	5	U	U	J	50	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-28%). LCS/LCSD did not recover.
	16MW8	5	U	U	J	50	Analyte not detected at or above the DL or QL. LCS/LCSD did not recover.
	16MW9	5	U	U	J	50	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-28%). LCS/LCSD did not recover.
	16WC1A	5	U	U	J	50	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-28%). LCS/LCSD did not recover.
	16WC1B	5	U	U	J	50	Analyte not detected at or above the DL or QL LCS/LCSD did not recover.
	16WDUP	5	U	U	J	50	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-28%). LCS/LCSD did not recover. Blind field duplicate of 16WC1A.
m-Dinitrobenzene	16C1	2.3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2.3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2.3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2.3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2.3	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
m-Dinitrobenzene	16WDUP	2.3	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2,4-Dinitrotoluene	16C1	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC2B	10	U	U		10	Analyte not detected at or above the QL.
	16-2	10	U	U		10	Analyte not detected at or above the QL.
	16-3	10	U	U		10	Analyte not detected at or above the QL.
	16-5	10	U	U		10	Analyte not detected at or above the QL.
	16SPRING	10	U	U		10	Analyte not detected at or above the QL.
	16WDUP	2.1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2,6-Dinitrotoluene	16C1	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC2B	10	U	U		10	Analyte not detected at or above the QL.
	16-2	10	U	U		10	Analyte not detected at or above the QL.
	16-3	10	U	U		10	Analyte not detected at or above the QL.
	16-5	10	U	U		10	Analyte not detected at or above the QL.
	16SPRING	10	U	U		10	Analyte not detected at or above the QL.
	16WDUP	2.1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Diphenylamine	16C1	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.59	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Ethyl methanesulfonate	16C1	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.1	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
Ethyl methanesulfonate	16WC1A	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Fluoranthene	16C1	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.42	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.42	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Fluorene	16C1	0.38	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.38	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.38	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.38	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.38	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.38	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Hexachlorobenzene	16C1	0.7	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.7	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.7	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.7	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.7	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.7	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Hexachloropropene	16C1	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Indeno[1,2,3-cd]pyrene	16C1	0.15	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.15	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.15	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.15	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.15	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
Indeno[1,2,3-cd]pyrene	16WDUP	0.15	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Isodrin	16C1	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Kepone	16C1	25	U	U	J	50	Analyte not detected at or above the DL or QL. LCS/LCSD recovered low (25%/40%). RPD is 45.
	16MW8	25	U	U		50	Analyte not detected at or above the DL or QL.
	16MW9	25	U	U	J	50	Analyte not detected at or above the DL or QL. LCS/LCSD recovered low (25%/40%). RPD is 45.
	16WC1A	25	U	U	J	50	Analyte not detected at or above the DL or QL. LCS/LCSD recovered low (25%/40%). RPD is 45.
	16WC1B	25	U	U		50	Analyte not detected at or above the DL or QL.
	16WDUP	25	U	U	J	50	Analyte not detected at or above the DL or QL. LCS/LCSD recovered low (25%/40%). RPD is 45. Blind field duplicate of 16WC1A.
2-Methylnaphthalene	16C1	0.29	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.29	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.29	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.29	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.29	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.29	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2-Methylphenol	16C1	0.8	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.8	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.8	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.8	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.8	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.8	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
3 & 4-Methylphenol	16C1	2.4	U	U		20	Analyte not detected at or above the DL or QL.
	16MW8	2.4	U	U		20	Analyte not detected at or above the DL or QL.
	16MW9	2.4	U	U		20	Analyte not detected at or above the DL or QL.
	16WC1A	2.4	U	U		20	Analyte not detected at or above the DL or QL.
	16WC1B	2.4	U	U		20	Analyte not detected at or above the DL or QL.
	16WDUP	2.4	U	U		20	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
o-Nitroaniline	16C1	1	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
o-Nitroaniline	16MW8	1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
p-Nitroaniline	16C1	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.5	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.5	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Nitrobenzene	16C1	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.61	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
o-Nitrophenol	16C1	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
N-Nitrosodiethylamine	16C1	3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	3	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
N-Nitrosodimethylamine	16C1	2	U	U	J	10	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-23%).
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2	U	U	J	10	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-23%).

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
N-Nitrosodimethylamine	16WC1A	2	U	U	J	10	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-23%).
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2	U	U	J	10	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-23%). Blind field duplicate of 16WC1A.
N-Nitrosodiphenylamine	16C1	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.58	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.59	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
N-Nitrosomorpholine	16C1	3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	3	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	3	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	3	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
N-Nitrosopiperidine	16C1	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.1	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.1	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
5-Nitroso-o-toluidine	16C1	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Pentachlorobenzene	16C1	1.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.6	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
Pentachlorobenzene	**16WDUP**	**1.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Pentachlorophenol	**16C1**	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW8	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW9	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**3**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Phenacetin	**16C1**	**1.4**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW8	**1.4**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW9	**1.4**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**1.4**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**1.4**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**1.4**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Phenanthrene	**16C1**	**0.52**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW8	**0.52**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW9	**0.52**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**0.52**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**0.52**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**0.52**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Phenol	**16C1**	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW8	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW9	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**0.6**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Phorate	**16C1**	**2.5**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW8	**2.5**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16MW9	**2.5**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**2.5**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**2.5**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**2.5**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Pyrene	**16C1**	**0.41**	**U**	**U**		**10**	**Analyte not detected at or above the DL or QL.**

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
Pyrene	16MW8	0.41	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	0.41	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	0.41	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	0.41	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	0.41	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Safrole	16C1	2.2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2.2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2.2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2.2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Sulfotep	16C1	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2.4	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2.4	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,2,4,5-Tetrachlorobenzene	16C1	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2,3,4,6-Tetrachlorophenol	16C1	1.8	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	1.8	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	1.8	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	1.8	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	1.8	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	1.8	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2,4,5-Trichlorophenol	16C1	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270D							
Laboratory: ELLE, Lancaster, PA							
2,4,5-Trichlorophenol	16WC1A	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2,4,6-Trichlorophenol	16C1	1.8	U	U	J	10	Analyte not detected at or above the DL or QL. MS/MSD recovered low (27.7/29.5%).
	16MW8	1.8	U	U	J	10	Analyte not detected at or above the DL or QL. MS/MSD recovered low (27.7/29.5%).
	16MW9	1.8	U	U	J	10	Analyte not detected at or above the DL or QL. MS/MSD recovered low (27.7/29.5%).
	16WC1A	1.8	U	U	J	10	Analyte not detected at or above the DL or QL. MS/MSD recovered low (27.7/29.5%).
	16WC1B	1.8	U	U	J	10	Analyte not detected at or above the DL or QL. MS/MSD recovered low (27.7/29.5%).
	16WDUP	1.8	U	U	J	10	Analyte not detected at or above the DL or QL. MS/MSD recovered low (27.7/29.5%). Blind field duplicate of 16WC1A.
O,O,O-Triethyl phosphorothioate	16C1	2.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	2.6	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	2.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	2.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	2.6	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	2.6	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Method: 8270E							
Laboratory: ETAC, Barberton, OH							
Acetophenone	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2-Acetylaminofluorene	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
4-Aminobiphenyl	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: ETAC, Barberton, OH							
4-Aminobiphenyl	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Aniline	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Aramite	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,4-Benzenediamine	16C1	140	U	U	J	140	Analyte not detected at or above the DL or QL. LCS did not recover.
	16MW8	140	U	U	J	140	Analyte not detected at or above the DL or QL. LCS did not recover.
	16MW9	140	U	U	J	140	Analyte not detected at or above the DL or QL. LCS did not recover.
	16WC1A	140	U	U	J	140	Analyte not detected at or above the DL or QL. LCS did not recover.
	16WC1B	140	U	U	J	140	Analyte not detected at or above the DL or QL. LCS did not recover.
	16WDUP	140	U	U	J	140	Analyte not detected at or above the DL or QL. LCS did not recover. Blind field duplicate of 16WC1A.
Benzyl alcohol	16C1	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-27%).
	16MW8	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-27%).
	16MW9	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-27%).
	16WC1A	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-27%).
	16WC1B	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-27%).
	16WDUP	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-27%). Blind field duplicate of 16WC1A.
bis(2-Chloroethoxy)methane	16C1	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.
	16MW8	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.
	16MW9	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: ETAC, Barberton, OH							
bis(2-Chloroethoxy)methane	16WC1A	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.
	16WC1B	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.
	16WDUP	0.93	U	U		0.93	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
bis(2-Chloroethyl)ether	16C1	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.
	16MW8	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.
	16MW9	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.
	16WC1A	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.
	16WC1B	0.93	U	U		0.93	Analyte not detected at or above the DL or QL.
	16WDUP	0.93	U	U		0.93	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Butyl benzyl phthalate	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
p-Chloroaniline	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Chlorobenzilate	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Di-n-butyl phthalate	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: ETAC, Barberton, OH							
Di-n-butyl phthalate	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
3,3'-Dichlorobenzidine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
p-(Dimethylamino)azobenzene	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
7,12-Dimethylbenz[a]anthracene	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
3,3'-Dimethylbenzidine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2,4-Dimethylphenol	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
4,6-Dinitro-o-cresol	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: ETAC, Barberton, OH							
4,6-Dinitro-o-cresol	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2,4-Dinitrophenol	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Disulfoton	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Famphur	16C1	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-25%).
	16MW8	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-25%).
	16MW9	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-25%).
	16WC1A	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-25%).
	16WC1B	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-25%).
	16WDUP	9.3	U	U	J	9.3	Analyte not detected at or above the DL or QL. CV %D > ± 20% (-25%). Blind field duplicate of 16WC1A.
Hexachlorocyclopentadiene	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Hexachloroethane	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: ETAC, Barberton, OH							
Hexachloroethane	**16WC1A**	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Isophorone	**16C1**	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW8	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW9	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Methapyrilene	**16C1**	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW8	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW9	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
3-Methylcholanthrene	**16C1**	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW8	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW9	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Methyl methane sulfonate	**16C1**	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW8	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW9	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WDUP	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.**
Methyl parathion	**16C1**	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW8	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16MW9	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1A	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**
	16WC1B	**9.3**	**U**	**U**		**9.3**	**Analyte not detected at or above the DL or QL.**

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: ETAC, Barberton, OH							
Methyl parathion	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1,4-Naphthoquinone	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
1-Naphthylamine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2-Naphthylamine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
m-Nitroaniline	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
p-Nitrophenol	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
4-Nitroquinoline-1-oxide	16C1	46	U	U		46	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: ETAC, Barberton, OH							
4-Nitroquinoline-1-oxide	16MW8	46	U	U		46	Analyte not detected at or above the DL or QL.
	16MW9	46	U	U		46	Analyte not detected at or above the DL or QL.
	16WC1A	46	U	U		46	Analyte not detected at or above the DL or QL.
	16WC1B	46	U	U		46	Analyte not detected at or above the DL or QL.
	16WDUP	46	U	U		46	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
N-Nitrosodi-n-butylamine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
N-Nitrosodipropylamine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
N-Nitrosomethylethylamine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
N-Nitrosopyrrolidine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Parathion	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: ETAC, Barberton, OH							
Parathion	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
2-Picoline	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Pyridine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
o-Toluidine	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
sym-Trinitrobenzene	16C1	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW8	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16MW9	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1A	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WC1B	9.3	U	U		9.3	Analyte not detected at or above the DL or QL.
	16WDUP	9.3	U	U		9.3	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Method: 8270E							
Laboratory: GEL Laboratories, Charleston, SC							
Dimethyl phthalate	16C1	0.284	U	U	J	0.945	Analyte not detected at or above the DL or QL. LCS recovered low (55%).
	16MW8	0.282	U	U	J	0.94	Analyte not detected at or above the DL or QL. LCS recovered low (55%).
	16MW9	0.283	U	U	J	0.945	Analyte not detected at or above the DL or QL. LCS recovered low (55%).

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: GEL Laboratories, Charleston, SC							
Dimethyl phthalate	16WC1A	0.286	U	U	J	0.952	Analyte not detected at or above the DL or QL. LCS recovered low (55%).
	16WC1B	0.291	U	U	J	0.94	Analyte not detected at or above the DL or QL. LCS recovered low (55%).
	16WDUP	0.282	U	U	J	0.952	Analyte not detected at or above the DL or QL. LCS recovered low (55%). Blind field duplicate of 16WC1A.
Di-n-octyl phthalate	16C1	0.284	U	U		0.945	Analyte not detected at or above the DL or QL.
	16MW8	0.282	U	U		0.94	Analyte not detected at or above the DL or QL.
	16MW9	0.283	U	U		0.945	Analyte not detected at or above the DL or QL.
	16WC1A	0.286	U	U		0.952	Analyte not detected at or above the DL or QL.
	16WC1B	0.291	U	U		0.94	Analyte not detected at or above the DL or QL.
	16WDUP	0.282	U	U		0.952	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Hexachlorophene	16C1	158	U	U	J	473	Analyte not detected at or above the DL or QL. LCS/MS/MSD not analyzed.
	16MW8	157	U	U	J	470	Analyte not detected at or above the DL or QL. LCS/MS/MSD not analyzed.
	16MW9	158	U	U	J	472	Analyte not detected at or above the DL or QL. LCS/MS/MSD not analyzed.
	16WC1A	159	U	U	J	476	Analyte not detected at or above the DL or QL. LCS/MS/MSD not analyzed.
	16WC1B	162	U	U	J	486	Analyte not detected at or above the DL or QL. LCS/MS/MSD not analyzed.
	16WDUP	157	U	U	J	469	Analyte not detected at or above the DL or QL. LCS/MS/MSD not analyzed. Blind field duplicate of 16WC1A.
Method: 8270E							
Laboratory: Pace, West Columbia, SC							
Isosafrole	16C1	10	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	10	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	10	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	10	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	10	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	10	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Pentachloronitrobenzene	16C1	10	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	10	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	10	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1A	10	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	10	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	10	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Pronamide	16C1	10	U	U		10	Analyte not detected at or above the DL or QL.
	16MW8	10	U	U		10	Analyte not detected at or above the DL or QL.
	16MW9	10	U	U		10	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8270E							
Laboratory: Pace, West Columbia, SC							
Pronamide	16WC1A	10	U	U		10	Analyte not detected at or above the DL or QL.
	16WC1B	10	U	U		10	Analyte not detected at or above the DL or QL.
	16WDUP	10	U	U		10	Analyte not detected at or above the DL or QL. Blind field duplicate of 16WC1A.
Method: 9012B							
Laboratory: ELLE, Lancaster, PA							
Cyanide	16C1	7.5	J	7.5	J	20	Result < QL.
	16MW9	6.7	J	6.7	J	20	Verification event performed October 5, 2023.
	16MW9	5	U	U		20	Verification event performed October 5, 2023. Verification result reported. Original result 6.7 J ug/l.

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes

Definitions:

Appendix IX monitoring events and compliance monitoring wells:

For Appendix IX monitoring events, all compliance well results evaluated to the project detection limit.

See separate table for Appendix IX monitoring event detection limits.

QLDenotes permit quantitation limit.

Q Denotes data qualifier.

U Denotes analyte not detected at or above laboratory detection limit (DL) or QL.

J Denotes analyte reported at or above laboratory detection limit and associated result is estimated. When used with "U" (i.e., "UJ"), denotes analyte not detected at or above laboratory detection limit and project required quantitation limit/detection limit is estimated.

UA Denotes analyte not detected at or above adjusted sample detection limit /QL.

UN Denotes analyte concentration is less than the quantitation limit and five times the blank concentration. Analyte was not reliably detected due to blank contamination.

R Denotes result rejected.

Laboratory Data Qualifiers,

"U" and "<", denote not detected at or above the detection limit or QL.

B or J denote result detected between DL and QL, associated value should be considered an estimated concentration.

Appendix IX monitoring events:

Third Quarter 2003, Second Quarter 2004, Second Quarter 2005, Third Quarter 2006, Second Quarter 2007, Second Quarter 2008, Second Quarter 2009, Second Quarter 2010, 2Q 2011, 2Q 2012, 2Q 2013. 2Q 2014, 2Q 2015, 2Q 2016, 2Q 2017, 2Q2018, 2Q2019, 2Q2020, 4Q2021, 4Q2022

Definitions for Non-Appendix IX Monitoring Events and plume monitoring wells:

QL Denotes permitquantitation limit.

Q Denotes dataqualifier.

U Denotes analyte not detected at or above QL.

UA Denotes analyte not detected at or above adjusted sample QL. See data validation report for further explanation.

UN Denotes analyte concentration is less than five times the blank concentration. Analyte was not reliably detected due to blank contamination.

J Denotes analyte reported at or above QL and associated result is estimated. When used with "U"(i.e., "UJ"), denotes analyte not detected at or above QL and QL is estimated. When used with "UA'(i.e., "UAJ"), denotes analyte not detected at or above adjusted QL and adjusted QL is estimated.

R Denotes resultrejected. See data validation report for further explanation.

Laboratory Data Qualifiers, "U" and "<", denote not detected at or above the QL.

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Data Validation Report

SW-846 METHODS 6020B and 7470A INORGANIC DATA REVIEW SUMMARY

TRC Engineers, Inc. (TRC) (formerly Draper Aden Associates), of Blacksburg, Virginia, performed a comprehensive manual review of the analytical results for the July 26-27, 2023 groundwater monitoring event at Hazardous Waste Management Unit 16 (HWMU 16) located at the Radford Army Ammunition Plant (RFAAP), Radford, Virginia. TRC collected the groundwater samples from monitoring wells 16C1, 16MW8, 16MW9, 16WC1A, 16WC1B, 16-2, 16-3, 16-5, 16WC2B, and 16SPRING. Sample 16WDUP was submitted to the laboratory as a blind sample duplicate for sample 16WC1A. Validation of other required methods is presented on separate reports.

Samples 16C1 (upgradient/background well) and 16MW8, 16MW9, 16WC1A and 16WC1B (compliance wells) were analyzed for fifteen (15) metals by SW-846 Method 6020B and mercury by SW-846 Method 7470A. Samples 16-2, 16-3, 16-5, 16WC2B and 16SPRING (plume wells) were analyzed for eleven (11) metals by SW-846 Method 6020B and mercury by SW-846 Method 7470A. The following information and attached table summarize the inorganic data validation results.

Techniques used for metals analysis include inductively coupled plasma Mass Spectrometry (ICP-MS) and cold vapor atomic absorption (CVAA). Samples 16C1, 16MW8, 16MW9, 16WC1A, 16WC1B were analyzed for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium, and zinc by ICP-MS Method 6020B and mercury by CVAA Method 7470A. The remaining plume monitoring well samples were analyzed for arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc by ICP-MS Method 6020B and mercury by CVAA Method 7470A. Total (T) concentrations were determined for the inorganic (metal) analytes.

TRC sent samples to Eurofins Lancaster Laboratories Environmental Testing, LLC, (ELLE), of Lancaster, Pennsylvania. ELLE performed the Method 6020B and 7470A analyses. On behalf of RFAAP, ELLE submitted results to TRC in a final certificate of analysis, which included sample analytical results, as well as relevant documentation to validate and verify the results. ELLE is accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) for the above analytes, methods, and matrix.

The evaluation of ELLE's compliance with the method and validation of results presented here are based upon a comprehensive review of QA/QC information including holding times, preservation procedures, instrument tuning, calibration and calibration verification data, QL standards, blank samples (method, calibration, and others), interference check sample, pre-digestion matrix spike and matrix spike duplicate (MS/MSD), laboratory control sample (LCS), internal standard, and serial dilution results, where applicable. A review of transcriptions from instrument data to sample summary sheets was performed. Calculation checks were performed on ten percent of the data set, where applicable. The following information is intended to

summarize data review results and any observed significant deviations from method and/or contractual requirements.

ELLE received the samples on ice and in good condition, with custody seals intact. Applicable holding time and preservation criteria were met. The chain of custody was appropriately signed and dated by field and laboratory personnel.

Method 6020B (ICP-MS)/3005A

The certificates of analysis (COAs) appeared complete in their presentation and the data were of acceptable quality. The final COA (revised) was received on November 14, 2023. The data set demonstrated the laboratory's ability to achieve the reported permit quantitation limit (QL) or detection limit (DL). See case narrative for revision information.

QC documentation criteria were met. Applicable instrument tune, calibration and calibration verification requirements were met unless noted below. Blank, interference check samples, pre-digestion MS/MSD, LCS, internal standard and serial dilution results were within control limits. Deviations from QA/QC control limits that were identified during the data review process are summarized below.

The QC deviations for the compliance samples:

1) Several calibration blanks (CCBs) for cobalt exceeded the laboratory's DL for cobalt; however, the total cobalt concentrations for the associated samples were a factor of ten times greater than the CCB concentrations; no influence was noted and no data qualification for total cobalt results was required.
2) Several CCBs for nickel exceeded the laboratory's DL for nickel. Associated samples (16C1, 16MW8, and 16WC1B) were reanalyzed for nickel and nickel was not detected in the associated CCBs. Nickel results for 16WC1A and 16WDUP were reported from the initial run as the sample concentrations were a factor of ten times greater that the CCB concentration of nickel.
3) Sample 16WC1A and associated QC samples were reanalyzed for thallium due to blank contamination above the laboratory's DL in the CCBs. The reanalysis data met blank criteria.

The QC deviations for the plume samples:

1) Several analytes were reported below the laboratory DL in the CCBs; however, associated sample results were reported to at or above the QL and qualification of the data for blank influence was not required.
2) One QL standard recovered high for zinc (218%); however, total zinc was not detected at or above the QL in any project sample and no data qualification was required.

3) Cobalt recovered low in one of the linear range check standards; however, project samples were not associated with this linear range check standard and no data qualification was needed.

Total silver was detected above the permit DL in Point of Compliance (POC) well16WC1B. A verification event was performed on October 17-18, 2023 to confirm or refute the total silver result. The verification result for total silver in 16WC1B confirmed the original result. Both results are reported. A blind field sample duplicate of 16WC1B was also submitted and total silver was detected above the permit DL. As such, total silver will be added to the facility compliance monitoring list for future events.

Field duplicate/sample results exhibited acceptable precision, where applicable.

Target analytes detected at or above the permit detection limit or QL and/or analytical data that required a data validation qualifier due to quality control deviations noted above are summarized on the attached table. The reported concentration for target analytes detected less than the QL should be considered estimated, where applicable.

For this Appendix IX groundwater monitoring event, results for samples 16C1, 16MW8, 16MW9, 16WC1A, 16WC1B, and 16WDUP were reported to at or above the laboratory detection limit. Sample results unaffected by the data validation process, and not detected at or above the detection limit or QL, were validated and reported as "U." The reported concentration for target analytes detected less than the QL were validated and qualified "J" to note that the reported concentration should be considered estimated.

Sample results for 16-2, 16-3, 16-5, 16WC2B, and 16SPRING were reported to at or above the permit required QL. Sample results unaffected by the data validation process, and not detected at or above the permit QL, were validated and reported as "U." No results were rejected based on the data validation criteria.

QLs were at or below the applicable groundwater protection standard (GPS). The laboratory QLs and DLs met the permit specified method detection limit (MDL) and QL.

Method 7470A (CVAA)

The revised and original certificates of analysis appeared complete in their presentation and the data were of acceptable quality. The final COA (revised) was received on November 14, 2023. The data set demonstrated the laboratory's ability to achieve the reported permit quantitation limit (QL) or detection limit (DL) for mercury.

QC documentation criteria were met. Instrument calibration and calibration verification criteria were met. QL standards, blank samples, MS/MSD, and LCS were analyzed as required

and applicable criteria were met unless noted below. No deviations from QA/QC control limits were identified during the data review process.

Field duplicate/sample results exhibited acceptable precision, where applicable.

Target analytes detected at or above the permit detection limit or QL and/or analytical data that required a data validation qualifier due to quality control deviations noted above are summarized on the attached table.

For samples 16-2, 16-3, 16-5, 16WC2B and 16SPRING, total mercury results were reported to at or above the permit required QL. Sample results unaffected by the data validation process, and not detected at or above the permit QL, were validated and reported as "U." For this Appendix IX groundwater monitoring event, sample results for 16C1, 16MW8, 16MW9, 16WC1A, 16WC1B were reported to at or above the permit detection limit. Sample results unaffected by the data validation process, and not detected at or above the permit detection limit or permit QL, were validated and reported as "U." No results were rejected based on the data validation criteria.

The laboratory QL and DL met the permit specified method detection limit (MDL) and QL.

INORGANIC DATA EVALUATION BY SW-846 ICP-MS METHOD 6020B

Eurofins Lancaster Laboratories Environmental, Lancaster, PA; Job IDs: 410-136864-1 Rev4 (compliance), 410-136514-1 (plume), 410-147656-1 (verification event)
☑ - denotes items reviewed. See Data Validation Summary for additional comments.

A. DOCUMENTION COMPLETENESS CRITERIA:
Data Quality Objective: Representativeness
- ☑ Chain of custody – Custody transfers must be signed and dated
- ☑ Chain of custody properly and completely filled out including sampler signatures, date and time of sampling, sample ID, analysis requested

B. DETECTION LIMIT AND QUANTITATION LIMIT CRITERIA:
Data Quality Objective: Analytical Sensitivity
- ☑ Specific detection limit reported
- ☑ Specific quantitation limit reported
- ☑ Instrument detection limit (IDL) less than QL
- ☑ VELAP accredited

C. INITIAL DEMONSTRATION OF CAPABILITY (IDOC) CRITERIA:
Data Quality Objective: Laboratory Method Sensitivity
- ☑ IDOC for analysts F7JF, UCIG and DVW2 are kept on file at the laboratory

D. SAMPLE AND STANDARD PREPARATION CRITERIA:
Data Quality Objective: Accuracy and Representativeness
- ☑ Digestion method: 3005A

E. TECHNICAL HOLDING TIME / PRESERVATION REQUIREMENTS:
Data Quality Objective: Representativeness
- ☑ 6 month holding time, pH<2 with Nitric Acid (HNO_3)

F. INSTRUMENT TUNE CRITERIA:
Data Quality Objective: Verify Operating Conditions
- ☑ Prior to calibration
- ☑ Relative Standard Deviation (RSD) </=5%
- ☑ Resolution < 0.9 amu full width at 10% peak height (or lower)
- ☑ Mass calibration </=0.1 amu difference from true value

G. INITIAL CALIBRATION CRITERIA:
Data Quality Objective: Laboratory Accuracy
- ☑ A single point calibration or a multi-point calibration with a calibration blank and at least 3 standards (low standard at or below the QL)
- ☑ Linear curve fit with correlation coefficient r≥0.995
- ☑ Daily calibration following tuning and prior to sample analysis

H. INITIAL CALIBRATION VERIFICATION (ICV) CRITERIA:
Data Quality Objective: Laboratory Accuracy
- ☑ Daily following initial calibration - Independent/second source used for standard
- ☑ ICV recovery 90-110% - concentration near mid-point of calibration curve
- ☑ Low level ICV (LLICV) – prior to sample analysis, at QL concentration, 80-120% recovery

I. INITIAL CALIBRATION BLANK CRITERIA:

Data Quality Objective: Laboratory Analytical Sensitivity/Instrument Drift/Contamination Evaluation

- ☑ Daily following ICV
- ☑ Interference free (< ±1/2 the QL concentration)

J. QL/LOQ CHECK STANDARD CRITERIA:

Data Quality Objective: Laboratory Analytical Sensitivity

- ☑ Standard analyzed at or below the QL (LLQC), digested, mean of 7 replicates with RSD <5%, analyzed after MDL determination and analyzed at least quarterly
- ☑ QL standard recovery 80-120%

K. CONTINUING CALIBRATION VERIFICATION (CCV) CRITERIA:

Data Quality Objective: Laboratory Analytical Accuracy

- ☑ CCV, prior to analysis, after every 10 samples, at end of analysis
- ☑ CCV recovery within 90-110%, mid-point of curve concentration

L. CONTINUING CALIBRATION BLANK CRITERIA:

Data Quality Objective: Laboratory Analytical Sensitivity/Instrument Drift/Contamination Evaluation

- ☑ Immediately after the CCV and after each group of 10 samples
- ☑ Interference free (<QL)

M. BLANK CRITERIA:

Data Quality Objective: Sensitivity/Instrument Drift/Contamination Evaluation

- N/A Trip Blank (check only if analyzed)
- ☑ Method/Other Lab Blanks (check only if analyzed), one per digestion batch
- ☑ Interference free (<1/2 LLOQ), where applicable

N. INTERFERENCE CHECK SAMPLE (ICS) CRITERIA:

Data Quality Objective: Analytical Accuracy/Verification of Isobaric Interference Corrections

- ☑ At beginning of analytical run or once every 12 hours of continuing sample analysis Results for elements not spiked in solution should be < 2 times the LLOQ. (Ti and Mo are spiked in addition to alkali metals)

O. MATRIX SPIKE DUPLICATE (MSD) CRITERIA:

Data Quality Objective: Method Precision in Sample Matrix

- ☑ All analytes, one MSD or sample duplicate per batch of 20 samples
- ☑ Spiked prior to sample preparation
- ☑ RPD ≤ 20 between MS & MSD results or sample & duplicate results, where applicable

P. MATRIX SPIKE (MS) CRITERIA:

Data Quality Objective: Method Accuracy in Sample Matrix

- ☑ All analytes, one MS per digestion batch of 20 samples
- ☑ Spiked prior to sample preparation
- ☑ Recovery: 75-125%, post-digestion spike analyzed for failed analytes, recovery 75-125%

Q. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

Data Quality Objective: Laboratory Method Accuracy, Laboratory Performance

- ☑ 1 LCS per 20 samples, all analytes, Recovery: 80-120%
- ☑ LCS solution same concentration as MS/MSD solution

R. INTERNAL STANDARDS (IS) CRITERIA:

Data Quality Objective: Analytical Accuracy in Sample Matrix

- ☑ IS added to each sample and QC sample
- ☑ Relative intensity (RI) should be within 70-125%
- ☑ If RI of CCB is <30%, terminate run and recalibrate

S. SERIAL DILUTION TEST CRITERIA:

Data Quality Objective: Accuracy in Sample Matrix

- ☑ <20% Difference (applicable when concentration >25X LLOQ)

T. SAMPLE QUANTITATION AND GENERAL REPORTING CRITERIA:

Data Quality Objective: n/a

- ☑ Sample results reported within instrument calibration range
- ☑ Sample results reported to the permit detection limit (compliance wells) and permit QL (plume wells).

REFERENCES:

TRC conducted a limited data validation of the above noted data set using the data package provided by the analyzing laboratory. Data evaluation was conducted using SW-846 (Test Methods for Evaluating Solid Waste-Physical/Chemical Methods, USEPA, SW-846, 3rd Edition-Final Update I, II/IIA, III, and subsequent updates) method requirements and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020, where applicable). Validation of this data set is limited to review of items detailed in this data review report. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report.

INORGANIC DATA EVALUATION FOR MERCURY BY COLD VAPOR AA SW-846 METHOD 7470A

Eurofins Lancaster Laboratories Environmental, Lancaster, PA; Job IDs: 410-136864-1-Rev.1-Rev.3 (compliance), 410-136514-1 (plume)
☑ - denotes items reviewed. See Data Validation Summary for additional comments.

A. QC DOCUMENTATION CRITERIA:
- ☑ Specific detection limits/quantitation limit (QLs) for target analyte
- ☑ Standard analyzed at the QL (70-130% Recovery)
- ☑ VELAP accredited
- ☑ IDOC for analyst UEFS is kept on file at the laboratory.

B. METHOD INFORMATION DOCUMENTATION:
- ☑ Mercury analyzed by requested method

C. TECHNICAL HOLDING TIME / PRESERVATION REQUIREMENTS:
- ☑ 28 day holding time
- ☑ Adjust pH <2 w/ HNO_3

D. INSTRUMENT CALIBRATION CRITERIA:
- ☑ 1 calibration blank and at least 3 standards, correlation coefficient >0.995
- ☑ Instrument calibrated for every analytical sequence for every method

E. INITIAL / CONTINUING CALIBRATION VERIFICATION CRITERIA:
- ☑ 10 sample frequency for CCV
- ☑ Recovery within 80-120%

F. BLANK SAMPLE CRITERIA:
- N/A Trip Blank (check only if analyzed)
- N/A Equipment Blank (check only if analyzed)
- ☑ Method/other laboratory blanks (check only if analyzed)
- ☑ Interference free

G. MATRIX SPIKE DUPLICATE (MSD) SAMPLE CRITERIA:
- ☑ One MSD or sample duplicate per batch of 20 samples
- ☑ RPD ≤20 between MS and MSD or sample and duplicate results
- ☑ Recovery 75-125% for MSD

H. MATRIX SPIKE (MS) SAMPLE CRITERIA:
- ☑ Recovery within 75-125% range
- ☑ One MS per batch of 20 samples
- ☑ MS added prior to digestion

I. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:
- ☑ LCS for mercury
- ☑ Recovery within 80-120%
- ☑ Independent source for LCS

J. SAMPLE RESULTS CRITERIA:

- ☑ Results reported within instrument calibration range
- ☑ Results reported to permit detection limit (compliance wells)
- ☑ Results reported to permit quantitation limit (plume wells)

TRC conducted a limited data validation of the above noted data set using the data package provided by the analyzing laboratory. Data evaluation was conducted using SW-846 (Test Methods for Evaluating Solid Waste-Physical/Chemical Methods, USEPA, SW-846, 3rd Edition-Final Update I, II/IIA, III, and subsequent updates) method requirements and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020, where applicable). Validation of this data set is limited to review of items detailed in this data review report. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report.

LIMITATIONS:

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Conclusions presented are based upon a review of available information, the results of our field studies, and/or professional judgment. To the best of our knowledge, information provided by others is true and accurate, unless otherwise noted. TRC Engineer's liability, hereunder, shall be limited to amounts due TRC for services actually rendered, or reimbursable expenses actually incurred.

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SW-846 METHOD 8260C/D VOLATILE ORGANICS DATA REVIEW SUMMARY

TRC Engineers, Inc. (TRC) (formerly Draper Aden Associates) of Blacksburg, Virginia, performed a comprehensive manual review of the analytical results for the July 26-27, 2023 monitoring event at Hazardous Waste Management Unit 16 (HWMU 16) located at the Radford Army Ammunition Plant (RFAAP), Radford, Virginia. TRC collected groundwater samples from monitoring wells 16C1, 16MW8, 16MW9, 16WC1A, 16WC1B, 16-2, 16-3, 16-5, 16WC2B, and 16Spring. Groundwater sample 16WDUP was collected and submitted to the laboratory as a blind field duplicate for 16WC1A.

Samples 16C1, 16MW8, 16MW9, 16WC1A, and 16WC1B (compliance monitoring wells) were analyzed for 66 volatile organic target analytes and samples 16-2, 16-3, 16-5, 16WC2B, and 16Spring (plume wells) were analyzed for 21 volatile organic target analytes per USEPA SW-846 Method 8260C or 8260D, as requested. The following information and attached table summarize the Method 8260C and Method 8260D data validation results.

TRC sent samples to Eurofins Lancaster Laboratories Environmental Testing, LLC (ELLE), of Lancaster, Pennsylvania and to Eurofins Cleveland (ETAC) of Barberton, Ohio. ELLE performed SW-846 Methods 8260D and 8260C (dimethyl ether only) volatile analyses. ETAC performed the acrolein and trans-1,4-dichloro-2-butene (8260D) analyses. Each laboratory is VELAP accredited for the analytes, methods and matrix as reported on the certificate of analysis. It should be noted that due to the recent merger, the VELAP certificate states Eurofins Canton as Eurofins Cleveland continues to do business as Eurofins Canton. Each laboratory submitted results to TRC in a final certificate of analysis, which included sample analytical results as well as relevant documentation to validate and verify the results. Job IDs: ELLE: 410-136864-1 Rev 4 (Compliance 8260D), 410-136864-2 (Compliance 8260C); 410-136514-1 (Plume 8260D), 410-136514-2 (Plume 8260C), ETAC: 240-189273-1 (Compliance 8260D).

The evaluation of each laboratory's compliance with Methods 8260C/D and validation of the results were based on a review of the following items: QC deliverables package, QC history documentation, technical holding times and preservation requirements, instrument performance (tune) check, instrument calibration and calibration verification data, blank, surrogate spike, matrix spike and matrix spike duplicate (MS/MSD), laboratory control sample (LCS), internal standards recovery, and/or target analyte identification and quantitation. A review of transcriptions from instrument data to sample summary sheets was performed. Calculation verifications were performed on all reported sample detections and on ten percent of the QA data, where applicable. The following information is intended to summarize data review results and any observed significant deviations from method and/or contractual requirements.

Each laboratory received the samples on ice and in good condition, with custody seals intact. The chains of custody (COCs) were appropriately signed and dated by field and laboratory personnel. Technical holding time and preservation criteria were met, except where

noted below. For Trip Blank 1 and Trip Blank 2 samples, the number of containers listed on the COC as shipped did not match what the laboratory received; however, the number of containers received were sufficient for the required analyses and no action was taken.

The certificates of analysis (COAs) appeared complete in their presentation and the data were of acceptable quality. The final COA (revised) was received on November 14, 2023. The data set demonstrated the laboratory's ability to achieve the reported permit quantitation limit (QL) or detection limit (DL), unless noted below. See case narrative for revision information.

QC deliverables package requirements were met. QC history documentation and instrument performance check criteria were met. Tuning, initial calibration, calibration verification, blanks, surrogates, MS/MSD, LCS, internal standards, identification and quantitation criteria were met, except where noted below. No transcription errors were observed. It is noted that for Point of Compliance (POC) wells, all sample detections at or above the DL were verified through calculations from instrument data. For Plume wells, all sample detections at or above the QL were verified through calculations from instrument data.

Dimethyl ether was analyzed by Method 8260C. The remaining target analytes were analyzed by Method 8260D.

The QC deviations for the compliance samples (ELLE):

Propionitrile exceeded (recovered high) the CV standard percent difference/drift requirement (±20%). Propionitrile was not detected at or above the DL or QL in any project sample and qualification of the data was not required. The remaining CV standard criteria were met.

For acetonitrile, the project detection limit (31 ug/l) (i.e., permit specified detection limit) was greater than the spike added concentration (18.8 ug/l) for the LCS/MS/MSD. The laboratory reported the LCS/MS/MSD concentrations as not detected at or above the project detection limit; however, examination of the instrument data showed the actual concentrations to be 20.5/14.9/19.1 ug/l which are well above the actual laboratory method detection limit of 2 ug/l. As such LCS/MS/MSD recoveries for acetonitrile (109%/79%/102%) were within criteria and no data qualification was needed.

For samples 16C1 and 16MW9, the initial results for diethyl ether exceeded the upper standard calibration range. These samples were analyzed in dilution: 16C1 (1:4) and 16MW9 (1:2.5) and diethyl ether results from the diluted analysis was reported. QL and DLs were adjusted accordingly.

Original reported result for dimethyl ether in 16WC1A was 1.1J ug/l. Review of instrument data shows actual result of 1.06 ug/l and reported as 1.1 J ug/l due to instrument rounding. The final result was reported at not detected, "U", at or above 1.1 ug/l.

The QC deviations for the compliance samples (ETAC):

Acrolein and trans-1,4-dichloro-2-butene were the volatile target analytes that were analyzed at ETAC.

Acrolein recovered high from the LCS and MS/MSD; however, acrolein was not detected at or above the DL or QL in any compliance sample and acrolein data qualification was not required.

Trans-1,4-dichloro-2-butene recovered low in the LCS and MS/MSD. Trans-1,4-dichloro-2-butene was not detected at or above the DL or QL in any compliance sample and these sample results were validated and qualified "UJ" due to the observed QC deficiencies.

The QC deviations for the plume samples (ELLE):

Diethyl ether did not meet (recovered low) the CV standard percent difference/drift requirement (±20%). Diethyl ether was not detected at or above QL in any plume sample and these sample results were validated and qualified "UJ" due to the observed QC deficiency. The remaining CV standard criteria were met.

General Information:

Laboratory analysis was performed using a 25 ml purge volume for all analytes except 2-propanol (ELLE), trans-1,4-dichloro-2-butene (ETAC), and acrolein (ETAC) Analysis for these three analytes was performed using a 5 ml purge volume.

Field duplicate/sample results for 16WC1A exhibited acceptable precision, where applicable. A trip blank was submitted and analyzed for each day of sampling.

For compliance well samples 16C1, 16MW8, 16MW9, 16WC1A, 16WDUP, and 16WC1B, results were reported to at or above the permit specified detection limit for this Appendix IX monitoring event. For the remaining samples (plume wells), target analytes were reported to at or above the permit specified QL.

Target analytes detected at or above the detection limit or QL and/or analytical data that required a data validation qualifier due to quality control deviations noted above are summarized on the attached table. The reported concentration for target analytes detected less than the QL or adjusted QL should be considered estimated.

Results for samples unaffected by the data validation process, and not detected at or above the detection limit and/or QL, were validated and reported as "U." No results were rejected based on the data validation criteria.

QLs were at or below the applicable groundwater protection standard (GPS). The laboratory QLs and DL met the permit specified method detection limit (MDL), where applicable, and QL. The laboratory reported the QL for diethyl ether at 10 ug/l, below the permit required QL of 12.5 ug/l.

SW-846 METHOD 8260C/D (GC/MS) VOLATILE ORGANICS DATA VALIDATION

Comments: *Volatile organic analysis uses a purge and trap system to remove volatile organic target analytes from a 5ml or 25ml water sample (SW-846 5030C). Target analytes are separated and quantified using a capillary column gas chromatograph (GC)/mass spectrometer (MS).*

A. QC DELIVERABLES PACKAGE:

1.	Was the case narrative present/signed by a lab representative?	☑ YES ☐ NO
2.	Was the Chain of Custody present/signed by a lab representative?	☑ YES ☐ NO
3.	Were the sample results included for the sample locations?	☑ YES ☐ NO
4.	Did the results correspond to the project specific analyte list?	☑ YES ☐ NO
5.	Were the analyte QLs reported on sample summary sheets in agreement with the MDL study?	☑ YES ☐ NO
6.	Were sample locations, analytes and QLs in agreement with the electronic deliverable (EDD)?	☑ YES ☐ NO
7.	VELAP accredited?	☑ YES ☐ NO

Comments: QC deliverables package requirements were met.

B. QC HISTORY DOCUMENTATION CRITERIA:

1.	Was an instrument specific MDL study provided which included DL and QL values for the target analytes?	☑ YES ☐ NO
2.	Was the instrument calibration range provided?	☑ YES ☐ NO
3.	Were the instrument specific check sample data provided for the target analytes?	☑ YES ☐ NO

Comments: Except as noted above, QC history documentation was provided and met criteria. The laboratory analyzed the MDL check sample at 1 µg/l (5 ml purge) and at 0.1 µg/l (25 ml purge) for most target analytes.

C. TECHNICAL HOLDING TIME AND PRESERVATION CRITERIA:

1.	Was the 14-day sample collection to analysis holding time met?	☑ YES ☐ NO
2.	Were the samples received at ≤6°C, zero headspace?	☑ YES ☐ NO
3.	Was each sample pH adjusted to <2 with HCl?	☑ YES ☐ NO
4.	Was each sample pH adjusted to 4-5 (acrolein/acrylonitrile)?	See comments
5.	Were samples analyzed unpreserved (2-chloroethyl vinyl only)?	☑ NA ☐ YES ☐ NO

Comments: Technical holding time and sample preservation criteria were met. The laboratory demonstrated the ability to analyze for these two analytes through successful recovery in the LCS/MS/MSD at pH<2.

D. GC/MS INSTRUMENT PERFORMANCE (TUNING) CHECK CRITERIA:

*1.	Was the instrument performance check solution analyzed at the beginning of each 12-hour period prior to standards/samples analysis?	☑ YES ☐ NO
2.	Was there documentation of the injection of 5-50 ng bromofluorobenzene (BFB)?	☑ YES ☐ NO
3.	Were the ion abundance criteria met?	☑ YES ☐ NO
4.	Were calibration, blank, and sample analyses performed within 12 hours of tuning?	☑ YES ☐ NO

Comments: Instrument performance check criteria were met. *For Method 8260D, BFB IPC requirement is for ICALs only.

E. INITIAL GC/MS CALIBRATION CRITERIA:

SW-846 Criteria*:*

1.	Was the internal standard (IS) which was selected for target analyte RF calculation the IS which had the closest retention time?	☑ YES ☐ NO
2.	Were the target analytes included in the ICAL?	☑ YES ☐ NO
3.	Were any calibration levels removed from the curve that would negatively influence the data integrity?	☐ YES ☑ NO
4.	Did the ICALs consist of a minimum of 5 calibration levels?	☑ YES ☐ NO
5.	Was the lowest concentration calibration standard at or below the associated MCL?	☑ YES ☐ NO
6.	Was the calibration curve developed using the same purge volume as that used for the sample analysis?	☑ YES ☐ NO
*7.	Were 8260C minimum Relative Response Factor (RRF) criteria met? *Refer to Table 4- SW-846 Method 8260C (Rev3 8/06) for specific analyte RRFs*	☑ YES ☐ NO
8.	Was each target analyte %RSD ≤ 20%?	☑ YES ☐ NO
9.	Was the correlation coefficient >0.99 for target analytes with ≥20 % RSD? (*System recalibrated if >10% analytes fail above condition)*	☑ YES ☐ NO
10.	Was an initial calibration verification (ICV) standard analyzed immediately following the ICAL?	☑ YES ☐ NO
11.	Was the recovery within 70-130%?	☑ YES ☐ NO
12.	Was the ICV standard prepared from a different source than that used for the ICAL?	☑ YES ☐ NO

Method Validation Performance Criteria:

1.	Did target analytes and surrogates that have RSDs > 20% have ≥0.99 correlation coefficient or coefficient of determination?	☑ YES ☐ NO
2.	For linear regression curves, was the recalculated concentration of the low calibration point within ±30%? 50% for 8260D.	☑ NA ☐ YES ☐ NO
3.	For quadratic curves, was a minimum six standards used?	☑ NA ☐ YES ☐ NO

Comments: Initial calibration criteria were met. *8260D has no minimum RRF requirement.

F. CALIBRATION VERIFICATION CRITERIA:

SW-846 Criteria:

1. Was a calibration verification analyzed at the beginning of each 12-hour period following the analysis of the instrument performance check (IPC) and prior to analysis of the method blank and samples? The calibration verification may be part of the ICAL or analyzed independently during another 12-hour analysis period. ☑ YES ☐ NO

*2. Were 8260C minimum Relative Response Factor (RRF) criteria met?
Refer to Table 4- SW-846 Method 8260C (Rev3 8/06) for specific analyte RRFs ☑ YES ☐ NO

3. Did the target analytes and system monitoring analytes (surrogates) have the % D within ± 20%? ☐ YES ☑ NO
If criteria not met for more than 20% of analytes in the initial calibration, then corrective action must be taken prior to the analysis of samples.
If "NO", list analytes that exceed these criteria: *See data validation report*

TRC Engineers Contractual Requirements:

1. Did the target analytes and system monitoring analytes (surrogates) have % Ds within ± 20%? ☐ YES ☑ NO

Comments: The CV standard criteria were met except where noted above. *For 8260D, data qualification is not required when CV >20% and analyte concentration is below the DL. For 8260D, IPC only needed before ICAL. No minimum RRF requirement for 8260D.

G. BLANK CRITERIA:

*1. Was a method blank analyzed after the calibration standards, prior to sample analysis, and once for every 12-hour period beginning with the injection of BFB? ☑ YES ☐ NO

2. Was a trip blank analyzed with this sample batch? ☑ YES ☐ NO

3. Were the trip blanks and method blanks interference free? ☑ YES ☐ NO

4. Was the level of blank contamination less than 5% of the regulatory limit associated with an analyte or less than 5% of the sample result for the same analyte, whichever is greater? ☑ NA ☐ YES ☐ NO

5. List target analytes detected in the blanks: *None*

6. Did any result exceed the calibration range? ☑ YES ☐ NO

7. Was the sample analyzed immediately after the sample that exceeded the upper calibration range evaluated for carry and no carryover observed? ☑ YES ☐ NO

Comments: Blank criteria were met. *BFB analysis not required with 8260D.

H. SURROGATE CRITERIA:

SW-846 Criteria:

1. Were the following surrogates used? ☑ YES ☐ NO
   - dibromofluoromethane (80-120%)
   - 4-bromofluorobenzene (80-120%)
   - toluene-d8 (80-120%)
   - 1,2-dichloroethane-d4 (80-120%)

2. Were recoveries within specified ranges? ☑ YES ☐ NO
   If "NO", corrective action is required. Flagging of the data as estimated is not acceptable until corrective action has been attempted
3. Were samples with surrogates outside the QC window reanalyzed as required? ☑ NA ☐ YES ☐ NO

Comments: Surrogate criteria were met.

I. MATRIX SPIKE, MATRIX SPIKE DUPLICATE (MS/MSD) CRITERIA:

(MS/MSD Requirements - CLP Guidelines)

Analyte	*% R Water*	*% RPD Water*
1,1-dichloroethene	61-145	14
trichloroethene	71-120	14
benzene	76-127	11
toluene	76-125	13
chlorobenzene	75-130	13

1. Was a matrix spike and matrix spike duplicate (MS/MSD) analyzed per sample batch or every 20 samples, whichever may occur first? ☑ YES ☐ NO
2. Did the MS/MSD spike contain additional target analytes? ☑ YES ☐ NO
3. Was the MS/MSD analyzed on the specific project matrix? ☑ YES ☐ NO
4. MS/MSD acceptance range: 75-125%; 70-130% poor purge analytes; RPD ≤20
5. Were analytes qualified as estimated due to MS/MSD criteria? ☑ YES ☐ NO
   - If yes, and the LCS for the analyte(s) recovered within control limits, matrix interference is suspected.

Comments: MS/MSD criteria were met except where noted above.

J. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

1. Was a LCS included in the sample batch analysis? ☑ YES ☐ NO
2. Did the LCS contain the required target analytes? (No TICs) ☑ YES ☐ NO
3. List the LCS acceptance criteria: 80-120%; 70-130% for poor purge analytes
4. Were any analytes qualified as estimated? ☑ YES ☐ NO

Comments: LCS criteria were met except where noted above.

K. INTERNAL STANDARDS (IS) CRITERIA:

1. Were the following internal standards (IS) used? ☑ YES ☐ NO
   t-butyl alcohol-d_{10}, fluorobenzene, chlorobenzene-d_5, 1,4-dichlorobenzene-d_4
2. Were the IS areas within - 50% to + 100% of the last CV? ☑ YES ☐ NO
3. Were the IS RTs within ± 30 seconds of the last CV? ☑ YES ☐ NO
4. Were samples failing Items 2 and/or 3 above reanalyzed as required by the method? ☑ NA ☐ YES ☐ NO

Comments: Internal standards criteria were met.

L. TARGET ANALYTE IDENTIFICATION:

1. Were the RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT? ☑ YES ☐ NO
2. Check the sample spectra against the laboratory standard spectra to see that the following criteria were met:
   * Characteristic ions maximize in the same scan or within one scan of each other
   * Characteristic ions present in the standard spectra present in the sample spectra for analytes detected above the QL
   * Relative intensities of the ions between the standard and sample spectra within ± 30%
3. Were the reported analytes confirmed? ☑ YES ☐ NO

Comments: Target analyte identification criteria were met. See attached table for detected analytes. Identification criteria were met.

M. TARGET ANALYTE QUANTITATION:

* If the %RSD of an analyte was 20% or less, then the average relative response factor should have been used for quantitation.
* If the %RSD of an analyte was greater than 20%, then the quantitation should have been based on a calibration curve using the first or higher order regression fit of the five calibration points. (6 calibration points for 2nd order).

1. List the detected analytes whose %RSD was > 20%: *None*
   - Was quantitation based on a linear regression fit? ☑ NA ☐ YES ☐ NO
2. Did the initial analysis of any sample have a concentration of an analyte which exceeded the initial calibration range? ☑ YES ☐ NO
   -If so, was the sample reanalyzed at a higher dilution? ☑ YES ☐ NO
3. Were the analyte concentrations that were recorded on the raw sample quantitation reports accurately transferred to the sample summary sheets? ☑ YES ☐ NO
4. Were field sample duplicate RPDs <20 where applicable? ☑ YES ☐ NO

Comments: Target analyte quantitation criteria were met, where applicable.

N. LIBRARY SEARCHES: Library searches were not requested with this data set.

O. CORRECTIVE ACTION TAKEN AND GENERAL COMMENTS:

The initial demonstration of capability (IDOCs) for analysts DVW2, JS6E, TQ4J, (ELLE) and CDG (ETAC) are maintained and kept on file at the laboratory. No corrective action was taken.

REFERENCES:

TRC conducted data validation of the above noted data set using summary tables and instrument data provided by the analyzing laboratory. Data were evaluated in general accordance with SW-846 Method requirements (Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods,

USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates) and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, November 2020, where applicable). Where QA/QC criteria differed, the analytical method acceptance criteria were used. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report.

LIMITATIONS:

TRC Engineers (TRC) prepared this document (which may include drawings, specifications, reports, studies, and attachments) in accordance with the agreement between TRC and BAE Systems, Ordnance Systems, Inc. The standard of care for all professional engineering, environmental and surveying and related services performed or furnished by TRC under this Agreement are the care and skill ordinarily used by members of these professions practicing under similar circumstances at the same time and in the same locality. TRC makes no warranties, express or implied, under this Agreement in connection with TRC services. Conclusions presented are based upon a review of available information, the results of our field studies, and/or professional judgment. To the best of our knowledge, information provided by others is true and accurate, unless otherwise noted. TRC liability, hereunder, shall be limited to amounts due TRC for services actually rendered, or reimbursable expenses actually incurred. Any reuse or modification of any of the aforementioned documents (whether hard copies or electronic transmittals) prepared by TRC without written verification or adaptation by TRC will be at the sole risk of the individual or entity utilizing said documents and such use is without the authorization of TRC. TRC shall have no legal liability resulting from any and all claims, damages, losses, and expenses, including attorney's fees arising out of the unauthorized reuse or modification of these documents. Client shall indemnify TRC from any claims arising out of unauthorized use or modification of the documents whether hard copy or electronic.

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SW-846 METHOD 8270D/E SEMIVOLATILE DATA REVIEW SUMMARY

TRC Engineers, Inc. (TRC) (formerly Draper Aden Associates) of Blacksburg, Virginia, performed a comprehensive manual review of the analytical results for the July 26-27, 2023 groundwater monitoring event at Hazardous Waste Management Unit 16 (HWMU 16) located at the Radford Army Ammunition Plant (RFAAP), Radford, Virginia. TRC collected groundwater samples from monitoring wells 16C1, 16MW8, 16MW9, 16WC1A, 16WC1B, 16-2, 16-3, 16-5, 16WC2B, and 16Spring. Groundwater sample 16WDUP was submitted to the laboratory as a blind sample duplicate for 16WC1A.

Samples 16C1, 16MW8, 16MW9, 16WC1A, and 16WC1B (compliance monitoring wells) were analyzed for 114 semivolatile target analytes. Samples 16-2, 16-3, 16-5, 16WC2B, and 16Spring (plume wells) were analyzed for three semivolatile target analytes. Semivolatile analysis was performed using USEPA SW-846 Method 8270D or 8270E, as specified below. The following information and attached table summarize the Method 8270D and 8270E data validation results. Validation of other required methods is presented on separate reports.

TRC sent samples to Eurofins Lancaster Laboratories Environmental Testing, LLC (ELLE), of Lancaster, Pennsylvania; Eurofins Canton (ETAC), of Barberton, Ohio; GEL Laboratories, LLC, (GEL), of Charleston, South Carolina; and to Pace Analytical Services, LLC of West Columbia, South Carolina. Each laboratory is a VELAP accredited laboratory for the analytes, method and matrix as reported on the certificates of analysis. Each laboratories submitted results to TRC in a final certificate of analysis that included sample analytical results as well as relevant QA/QC and method performance criteria documentation to verify and validate the results. Job IDs: ELLE: 410-136864-1 Rev 4 (compliance) and 410-136514-1 (plume); ETAC: 240-189273-1; GEL: 631221; PACE: YG28002.

The evaluation of each laboratory's compliance with Methods 8270D and 8270E and validation of the results was based on a review of the following items: QC deliverables package, QC history documentation, case narrative, technical holding time and preservation requirements, instrument performance (tune) check, instrument calibrations, blank analysis, surrogate spike recoveries, matrix spike and matrix spike duplicate (MS/MSD) analyses, laboratory control sample (LCS) data, and internal standard requirements. A review of the transcriptions from instrument data to sample summary sheets was performed. Calculation verifications were performed on all reported sample detections and on ten percent of the QA data, where applicable. he following information is intended to summarize data review results and any observed significant deviations from method and/or contractual requirements.

Each laboratory received the samples on ice and in good condition, with custody seals intact. The chain of custody was appropriately signed and dated by field and laboratory personnel. Technical holding time and sample preservation were met.

The certificates of analysis (COAs) appeared complete in their presentation and the data were of acceptable quality. The final COA (revised) was received on November 14, 2023. The data set demonstrated the laboratory's ability to achieve the reported permit quantitation limit (QL) or detection limit (DL), unless noted below. See case narrative for revision information.

QC history documentation, instrument performance check (tuning) criteria, calibration, blank, surrogate, MS/MSD, LCS and internal standard requirements were met, except where noted below.

No transcription errors were observed. It is noted that for Point of Compliance (POC) wells, all sample detections at or above the DL were verified through calculations from instrument data. For Plume wells, all sample detections at or above the QL were verified through calculations from instrument data. Deviations from specific QA/QC criteria that were identified during the data review process are summarized below.

For samples analyzed at ELLE (8270D/3510C):

Bis(2-chloro-1-methylethyl)ether, a,a-dimethylphenethylamine, and N-nitroso-dimethylamine did not meet (recovered low) the continuing calibration verification (CV) standard percent difference/drift requirement (±20%) for the following project samples: 16C1, 16MW9, 16WC1A, and 16WDUP. These analytes were not detected at or above the DL or QL in any project sample and results were validated and qualified "UJ" to note that the DL and QL were estimated due to the observed QC deficiency. The remaining CV standard criteria were met.

2-Chlorophenol, 2,4-dichlorophenol, 2,6-dichlorophenol, and 2,4,6-trichlorophenol recovered low MS and/or MSD recovery. These analytes were not detected at or above the DL or QL in any project sample and results were validated and qualified "UJ" to note that the DL and QL were estimated due to the observed QC deficiency. The remaining MS/MSD criteria were met. This data validation applied to compliance wells only.

Kepone recovered low in the LCS associated with samples 16C1, 16MW9, 16WC1A, and 16WDUP and a,a-dimethylphenethylamine did not recover in the LCS/LCSDs associated with all POC samples. These analytes were not detected at or above the detection limit or QL in any sample and associated sample results for these analytes were validated and qualified "UJ" due to the observed QC deficiency and will continue to be monitored in future events. The remaining LCS/LCSD criteria were met, or no data qualification was required. This data validation applied to compliance wells only.

For diethyl phthlalate in 16Spring, the QL was rounded to 5.1 ug/l, just above the permit QL, due to the laboratory using an adjusted sample volume during extraction. 16Spring was not detected at or above the adjusted QL of 5.1 ug/l.

For samples analyzed at ETAC (8270E/3510C):

Benzyl alcohol and famfur did not meet the continuing calibration verification (CV) standard percent difference/drift requirement (±20%) (recovered low) for the compliance wells. Benzyl alcohol and famfur were not detected at or above the DL or QL in any project sample and results were validated and qualified "UJ" to note that the DL and QL were estimated due to the observed QC deficiency. 2,4-Dinitrophenol exceeded the ±20% difference/drift requirement (recovered high); however, 2,4-dinitrophenol was not detected at or above the detection limit or QL in any project sample and data qualification was not required. The remaining CV standard criteria were met.

One surrogates, 2-fluorophenol, recovered high in the LCS and 16WC1A MSD; however, one surrogate outside recovery criteria (high recovery) is allowable per Method 8270E. No target analytes were detected and no data qualification was required.

1,4-Benzenediamine did not recover in the LCS. 1,4-Benzenediamine was not detected at or above the DL or QL in any project sample and results were validated and qualified "UJ" to note that the DL and QL were estimated due to the observed QC deficiency and will continue to be monitored in future events. The remaining LCS QC criteria were met.

For samples analyzed at GEL (8270E/3510C):

Required target analytes analyzed by GEL were hexachlorophene, dimethyl phthalate and di-n-octylphthalate. The laboratory did not include hexachlorophene in the LCS/MS/MSD spiking mix. Hexachlorophene was not detected at or above the detection limit or QL in any sample and sample results for this analyte were validated and qualified "UJ" to note the results were estimated due to the absence of precision and accuracy data.

The LCS recovered low for dimethyl phthalate and associated results were validated and qualified "UJ" to note the results were estimated due to the QC deficiency. The laboratory QA/QC criteria were met for di-n-octylphthalate.

For samples analyzed at PACE (8270E/3520C):

The laboratory QA/QC criteria were met for Isosafrole, pronamide and pentachloronitrobenzene, the target analytes required to be analyzed at Pace.

General Information:

Due to analytical limitations, 3-methylphenol and 4-methylphenol cannot be analyzed separately. 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The results reported for 3-methylphenol and 4-methylphenol represent the combined total for both compounds.

N-Nitrosodiphenylamine decomposes during analysis to form diphenylamine. The results reported for diphenylamine represent the combined total for both compounds.

For this Appendix IX monitoring event, results for compliance wells (16C1, 16MW8, 16MW9, 16WC1A and 16WC1B) were reported to at or above the permit specified detection limit and quantitation limit, adjusted for final extraction sample volume, if applicable. The sample results unaffected by the data validation process, and not detected at or above the detection limit and/or QL, were validated and reported as "U."

For plume wells (16-2, 16-3, 16-5, 16WC2B, and 16Spring), results were reported to at or above the permit specified QL, unless noted above. The sample results unaffected by the data validation process, and not detected at or above the QL, were validated and reported as "U." For this sampling event, no target analytes were detected. No results were rejected based on the data validation criteria.

QLs were at or below the applicable groundwater protection standard (GPS). The laboratory QLs and DLs met the permit specified method detection limit (MDL) and QL unless noted.

SW-846 METHOD 8270D/E (GC/MS) SEMIVOLATILE ORGANIC DATA VALIDATION

Comments: *Semivolatile (a.k.a, base/neutral and acid extractables) analysis involves sample preparation using SW-846 Method 3510C or 3520C. The semivolatile extracts are concentrated through evaporation. Target analytes are separated and quantified using a capillary column gas chromatograph (GC)/mass spectrometer (MS).*

A. QC DELIVERABLES PACKAGE:

1.	Was the case narrative present/signed by a lab representative?	☑ YES ☐ NO
2.	Was the Chain of Custody present/signed by a lab representative?	☑ YES ☐ NO
3.	Were the sample results included for the sample locations?	☑ YES ☐ NO
4.	Did the data correspond to the project specific analyte list?	☑ YES ☐ NO
5.	Were target analyte QLs reported on sample summary sheets in agreement with the instrument specific MDL study?	☑ YES ☐ NO
6.	VELAP accredited?	☑ YES ☐ NO

Comments: QC deliverables package criteria were met.

B. QC HISTORY DOCUMENTATION CRITERIA:

1.	Were instrument specific detection limits provided for the analytes?	☑ YES ☐ NO
2.	Were instrument specific QLs for target analytes provided?	☑ YES ☐ NO
3.	Was calibration range specified for the target analytes?	☑ YES ☐ NO

Comments: QC history documentation criteria were met.

C. TECHNICAL HOLDING TIME AND PRESERVATION CRITERIA:

1.	Was the 7-day sample collection to extraction holding time met?	☑ YES ☐ NO
2.	Was the 40-day extraction to analysis holding time met?	☑ YES ☐ NO
3.	Were the samples received at ≤6°C?	☑ YES ☐ NO

Comments: The sample collection to extraction/analysis holding times and preservation criteria were met.

D. GC/MS INSTRUMENT PERFORMANCE CHECK CRITERIA:
(Tuning, Injection Port and Column Performance)

1.	Was analysis of the instrument performance check solution performed at the beginning of each 12-hour period of standard and/or sample analysis?	☑ YES ☐ NO
2.	Was there documentation of the injection of 50 ng of DFTPP?	☑ YES ☐ NO
3.	Were ion abundance criteria met?	☑ YES ☐ NO
4.	Was the injection port inertness verified by analysis of 4,4'-DDT?	☑ YES ☐ NO
5.	Was the degradation of DDT to DDE and DDD <20%?	☑ YES ☐ NO
	• If no, does associated data require qualification?	☑ NA ☐ YES ☐ NO

- Was the injection port inertness check acceptable? ☑ YES ☐ NO

6. Was column performance checked through the analysis of peak tailing (<2 tailing factor) of pentachlorophenol and benzidine? ☑ YES ☐ NO
   - If no, does associated data require qualification? ☑ NA ☐ YES ☐ NO
   - Was column performance check acceptable? ☑ YES ☐ NO

Comments: Instrument performance check criteria were met. Laboratory tune criteria windows are within those specified by 8270D/E. Note that IPC solution only required to be analyzed before the ICAL in Method 8270E.

E. INITIAL GC/MS CALIBRATION CRITERIA:

SW-846 Criteria:

1. Were the initial calibrations (ICAL) and any directly associated blanks and samples analyzed within 12-hours of the associated instrument performance (tune) check? ☑ YES ☐ NO
2. Were quantitation ions, used and listed on data, randomly checked against primary quantitation ions as required by Method 8270D and the RFP? ☑ YES ☐ NO
3. Were target analytes included in the ICAL? ☑ YES ☐ NO
4. Did the ICAL consist of a minimum of 5 calibration levels? ☑ YES ☐ NO
5. Was the lowest concentration calibration standard at or below the associated MCL, regulatory compliance, or action limit? ☑ YES ☐ NO
6. Were calibration standards dropped to meet calibration criteria? ☐ YES ☑ NO

*7. Were 8270D minimum RRF criteria met?
Relative Response Factor-range (RRF 0.010-0.900) ☑ YES ☐ NO
**Refer to Table 4 of SW-846 Method 8270D (Rev4 2/07) for specific analyte RRFs*

8. Was each target analyte %RSD ≤ 20%? ☑ YES ☐ NO
9. Was the correlation coefficient or coefficient of determination >0.99 for target analytes with > 20% RSD? ☑ YES ☐ NO
**System recalibrated if >10% analytes fail above condition*
10. Was an initial calibration verification (ICV) standard analyzed immediately following the ICAL? ☑ YES ☐ NO
11. Was the recovery within 70-130%? ☑ YES ☐ NO
12. Was the ICV standard prepared from a different source from the ICAL? ☑ YES ☐ NO

Method Validation Performance Criteria:

1. Did target analytes and surrogates that have RSDs > 20% have ≥0.99 correlation coefficient or coefficient of determination? ☑ YES ☐ NO
2. For linear regression curves, was the recalculated concentration of the low calibration point within ±30/50%? ☑ YES ☐ NO
3. For quadratic curves, was a minimum six standards used? ☐ YES ☐ NO

Comments: Initial calibration criteria were met. *8270E has no minimum RRF requirement.

F. CALIBRATION VERIFICATION CRITERIA:

SW-846 Criteria:

*****1. Was a calibration verification analyzed at the beginning of each 12-hour period following the analysis of the instrument performance check and prior to analysis of the method blank and samples? The calibration verification may be part of the ICAL or analyzed independently during another 12-hour analysis period. ☑ YES ☐ NO

*****2. Were 8270D minimum Relative Response Factor (RRF) criteria met?
Refer to Table 4- SW-846 Method 8270D (Rev4 2/07) for specific analyte RRFs ☑ YES ☐ NO

3. Did the target analytes and system monitoring analytes (surrogates) have the % D within ± 20%? ☑ YES ☐ NO
If criteria not met for more than 20% of analytes in the initial calibration, then corrective action must be taken prior to the analysis of samples.
If "NO", list analytes that exceed these criteria: *None*

TRC Engineers Contractual Requirements:

1. Did the target analytes and system monitoring analytes (surrogates) have % Ds within ± 20%? ☑ YES ☐ NO

Comments: The CV standard criteria were met. * 8270E has no minimum RRF requirement and no qualification for analytes not detected which exceeded 20%D.

G. BLANK CRITERIA:

1. Was a method/extraction blank analyzed on each GC/MS system used for sample analysis? ☑ YES ☐ NO
2. Was a trip blank analyzed with this sample batch? ☑ NA ☐ YES ☐ NO
3. Were the blank samples interference free? ☑ YES ☐ NO
4. Was the level of blank contamination > 5% of the MCL? ☑ NA ☐ YES ☐ NO
5. List target analytes detected in the blanks: *None*

Comments: Blank criteria were met.

H. SURROGATE CRITERIA:

1. Were the following surrogates used? ☑ YES ☐ NO
   - phenol - d_6 (10%-120%)
   - 2-fluorophenol (10%-120%)
   - 2,4,6-tribromophenol (10%-150%)
   - nitrobenzene – d_5 (43%-108%)
   - 2-fluorobiphenyl (43%-116%)
   - p-terphenyl - d_{14} (33%-141%)
2. Were recoveries within the specified ranges? ☐ YES ☑ NO
3. Were any two base/neutral or acid surrogates out of specification or did any one base/neutral or acid extractable surrogates have a recovery of less than 10%? ☑ YES ☐ NO
If yes, was a re-extraction and reanalysis performed to confirm that the non-compliance was due to sample matrix effects rather than laboratory deficiencies? ☐ YES ☑ NO

Comments: Surrogate recovery criteria were met except where noted above.

I. MATRIX SPIKE/ MATRIX SPIKE DUPLICATE (MS/MSD) CRITERIA:

(MS/MSD Requirements - CLP Guidelines)

Analyte	% R Water	% RPD Water
Phenol	12-110	42
2-Chlorophenol	27-123	40
N-Nitroso-di-n-propylamine	41-116	38
4-Chloro-3-methylphenol	23-97	42
Acenaphthene	46-118	31
4-Nitrophenol	10-80	50
2,4-Dinitrotoluene	24-96	38
Pyrene	26-127	31

1. Was a MS/MSD analyzed per sample batch or every 20 samples, whichever may occur first? ☑ YES ☐ NO
2. Did the MS/MSD spike contain additional target analytes? ☑ YES ☐ NO
3. Was the MS/MSD analyzed on the specific project matrix? ☑ YES ☐ NO
4. List MS/MSD target analytes not within laboratory recovery ranges:
   See semivolatile certificate of analysis
5. Was a LCS analyzed to address failed MS spike criteria? ☑ YES ☐ NO
6. Did the LCS for the failed MS analyte(s) fall within the recovery ranges and was the problem identified as matrix interference? ☑ YES ☐ NO
7. Were analytes qualified as estimated due to MS/MSD criteria? ☑ YES ☐ NO
   - If yes, and the LCS for the analyte(s) recovered within control limits, matrix interference is suspected.

Comments: MS/MSD criteria were met except where noted above.

J. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

1. Was a LCS included in the sample analysis? ☑ YES ☐ NO
2. Did the LCS contain the required target analytes? See comment
3. List the LCS target analytes and laboratory recovery range.
   See semivolatile certificate of analysis.
4. Were any analytes qualified as estimated due to LCS criteria? ☑ YES ☐ NO

Comments: LCS criteria were met, except where noted above.

K. INTERNAL STANDARDS CRITERIA:

1. Were the following internal standards (IS) used? ☑ YES ☐ NO
   - 1,4-Dichlorobenzene-d_4
   - Naphthalene-d_8
   - Acenapththene-d_{10}

- Phenanthrene-d_{10}
- Pyrene-d_{10} (Chrysene-d_{12}-TestAmerica)
- Perylene-d_{12}

2. Were the IS areas within ± 50% of last CV? ☑ YES ☐ NO
3. Were the IS RTs within ± 30 seconds of last CV? ☑ YES ☐ NO

Comments: Internal standard criteria were met.

L. TARGET ANALYTE IDENTIFICATION:

1. Were the RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT? ☑ NA ☐ YES ☐ NO
2. Check the sample spectra against the laboratory standard spectra to see that the following criteria were met: ☑ NA ☐ YES ☐ NO
   * Did characteristic ions maximize in the same scan or within one scan of each other?
   * Were the characteristic ions present in the standard spectra present in the sample spectra for analytes detected above the QL?
   * Were the relative ion intensities between the standard and sample spectra within ± 30%?
3. Were the reported analytes confirmed? ☑ NA ☐ YES ☐ NO

Comments: Target analyte identification criteria were met. No target analytes were detected at or above the detection limit or permit QL (compliance samples) or the permit QL (plume samples).

M. TARGET ANALYTE QUANTITATION:

* If the %RSD of an analyte was 20% or less, then the average relative response factor should have been used for quantitation.
* If the %RSD of an analyte was greater than 20%, then the quantitation should be based on a calibration curve using the first or higher order regression fit of the five calibration points (6 calibration points for 2nd order).

1. List the analytes detected above the QL whose %RSD was >20%: *None*
   a. Was quantitation based on a linear regression fit? ☑ NA ☐ YES ☐ NO
   b. Was the curve forced through the origin? ☑ NA ☐ YES ☐ NO
2. Did the initial analysis of any sample have a concentration of a target analyte that exceeded the initial calibration range? ☐ YES ☑ NO
   -If so, was the sample reanalyzed at a higher dilution? ☑ NA ☐ YES ☐ NO
3. Were the analyte concentrations that were recorded on the raw sample quantitation reports accurately transferred to the sample summary sheets? ☑ YES ☐ NO

Comments: Target analyte quantitation criteria were met. No target analytes were detected at or above the detection limit or permit QL (compliance samples) or the permit QL (plume samples).

N. CORRECTIVE ACTION TAKEN AND GENERAL COMMENTS:

Comments: The initial demonstration of capability (IDOCs) for analysts P7EB, DBZA, TMH, CMF, NM1 and JCG are maintained and kept on file at the respective laboratories. No corrective action was taken.

REFERENCES:

TRC Engineers conducted data validation of the above noted data set using summary tables and instrument data provided by the analyzing laboratory. Data were evaluated in general accordance with SW-846 Method requirements (Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates) and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, November 2020, where applicable). Where QA/QC criteria differed, the analytical method acceptance criteria were used. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report.

LIMITATIONS:

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SW-846 METHOD 9012B DATA REVIEW SUMMARY

TRC Engineers, Inc. (TRC) (formerly Draper Aden Associates) performed a comprehensive manual review of the analytical results for the July 26-27, 2023 groundwater monitoring event at Hazardous Waste Management Unit 16 (HWMU 16) located at the Radford Army Ammunition Plant (RFAAP), Radford, Virginia. TRC collected groundwater samples from monitoring wells 16C1, 16MW8, 16MW9, 16WC1A, and 16WC1B. Sample 16WDUP was submitted to the laboratory as a blind field sample duplicate for 16WC1A.

The samples were analyzed for cyanide by SW-846 Method 9012B. The following information and attached table summarize the cyanide data validation results. Validation of other required methods is presented on separate reports.

TRC sent samples to Eurofins Lancaster Laboratories Environmental, (ELLE), of Lancaster Pennsylvania. On behalf of RFAAP, ELLE submitted results to TRC in a final certificate of analysis, which included sample analytical results, as well as relevant documentation to validate and verify the results. ELLE is accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) for the above analyte, method, and matrix.

The evaluation of ELLE's compliance with the method and validation of results presented here are based upon a review of quality assurance/quality control (QA/QC) information including chain-of-custody, case narrative, holding time, preservation procedures, instrument calibration, blank (method, calibration, and other blanks), matrix spike/matrix spike duplicate (MS/MSD), laboratory control sample (LCS), internal standard, and serial dilution data. A review of transcriptions from instrument data to sample summary sheets was performed. Calculation checks were performed on ten percent of the data set, where applicable. The following information is intended to summarize data review results and any observed significant deviations from method and/or contractual requirements.

ELLE received the samples in good condition with custody seals intact. Technical holding time and preservation criteria were met.

The certificates of analysis (COAs) appeared complete in its presentation and the data were of acceptable quality. The final COA (revised) was received on November 14, 2023. The data set demonstrated the laboratory's ability to achieve the reported permit quantitation limit (QL) or detection limit (DL). See case narrative for revision information.

QC history documentation, holding time, sample preservation, instrument calibration and calibration verification criteria were met. Blank, MS/MSD, and LCS samples were analyzed as required and results were within control limits, unless noted below. The blanks were interference free. Deviations from QA/QC control limits were identified during the data review process are summarized below.

Cyanide was detected below the QL in 16MW9. The laboratory re-analyzed the sample outside of holding time criteria and cyanide was not detected in 16MW9. A verification event was conducted on October 5, 2023 to confirm or refute the initial result for cyanide in 16MW9. The verification result for cyanide did not confirm the original result and the verification result was reported as the final result. The initial and the verification event are reported. For the verification event, a blind field sample duplicate of 16MW9 was also submitted and cyanide was not detected above the detection limit or QL.

Cyanide was detected below the QL in 16C1; however, 16C1 is the upgradient well and verification was not needed.

Field duplicate/sample results exhibited acceptable precision, where applicable.

The laboratory QLs and DL met the permit specified method detection limit (MDL) and QL unless specified.

Except where noted above, cyanide was not detected at or above the permit detection limit or permit QL in any sample and sample results for cyanide were validated and reported as "U." No results were rejected for this sampling event based on data validation criteria.

INORGANIC DATA EVALUATION FOR CYANIDE BY SW-846 METHOD 9012B

Eurofins Lancaster Laboratories Environmental (ELLE), Lancaster, PA; Job ID: 410-136864-1 Rev4, 410-146032-1 (Verification); Preparation Method: 9012B

☑ - denotes items reviewed. See Data Validation Summary for additional comments.

A. QC DOCUMENTATION CRITERIA:
- ☑ Specific detection limit for target analyte
- ☑ Specific QLs for target analyte
- ☑ VELAP accredited
- ☑ IDOC for analyst JCG7 kept on file at the laboratory

B. METHOD INFORMATION DOCUMENTATION:
- ☑ Cyanide analyzed by requested method

C. TECHNICAL HOLDING TIME / PRESERVATION REQUIREMENTS:
- ☑ 14 day holding time
- ☑ Cool ≤6° C
- ☑ Adjust pH >12 w/ NaOH

D. INSTRUMENT CALIBRATION CRITERIA:
- ☑ 1 calibration blank and at least 3 standards; correlation coefficient ≥ 0.995

E. INITIAL / CONTINUING CALIBRATION VALIDATION CRITERIA:
- ☑ ICV, recovery 85-115%
- ☑ 10 sample frequency for CCV, recovery 85-115%

F. BLANK SAMPLE CRITERIA:
- ☑ Interference free
- ☑ ICB, then 10 sample frequency for CCB
- ☑ One preparation blank per sample batch

G. MATRIX SPIKE DUPLICATE (MSD) SAMPLE CRITERIA:
- ☑ One MSD or sample duplicate for every 20 samples
- ☑ RPD ≤20 between MS and MSD or sample and duplicate results
- ☑ Recovery 75-125% for MSD

H. MATRIX SPIKE (MS) SAMPLE CRITERIA:
- ☑ One MS sample for every 20 samples
- ☑ MS recovered within 75-125%
- ☑ Spike added prior to distillation

I. LABORATORY CONTROL SAMPLE (LCS) SAMPLE CRITERIA:

- ☑ One LCS sample for every 20 samples
- ☑ LCS recovered within 80-120%
- ☑ Spike added prior to distillation

J. SAMPLE RESULTS CRITERIA:

- ☑ Sample results reported within calibration range
- ☑ Sample results reported to the permit detection limit

REFERENCES:

TRC conducted a limited data validation of the above noted data set using the data package provided by the analyzing laboratory. Data evaluation was conducted using SW-846 (Test Methods for Evaluating Solid Waste-Physical/Chemical Methods, USEPA, SW-846, 3rd Edition-Final Update I, II/IIA, III, and subsequent updates) method requirements and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020, where applicable). Validation of this data set is limited to review of items detailed in this data review report. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report.

LIMITATIONS:

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Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Sample/Blind Field Duplicate Results Greater Than the Quantitation Limit

Facility: HWMU-16 Monitoring Event: Third Quarter 2023

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 6020B							
Laboratory: ELLE, Lancaster, PA							
Barium	16WC1A	510		510		10	No action taken.
	16WDUP	520		520		10	No action taken. Blind field duplicate of 16CW1A. RPD is 1.9
Cobalt	16WC1A	15		15		5	No action taken. Analyte detected in the CCBs (0.20-0.29 ug/l) had no influence on reported result.
	16WDUP	15		15		5	No action taken. Blind field duplicate of 16WC1A. RPD is <1. Analyte detected in the CCBs (0.20-0.29 ug/l) considered to have no influence on reported result.
Nickel	16WC1A	15		15		10	No action taken. Analyte detected in the CCBs (0.54-1.0 ug/l) had no influence on reported result.
	16WDUP	15		15		10	No action taken. Blind field duplicate of 16WC1A. RPD is <1. Analyte detected in the CCBs (0.54-1.0 ug/l) had no influence on reported result.
Method: 8260D							
Laboratory: ELLE, Lancaster, PA							
Chloroethane	16WC1A	2.2		2.2		1	No action taken.
	16WDUP	2.1		2.1		1	No action taken. Blind field duplicate of 16WC1A.
1,1-Dichloroethane	16WC1A	4.2		4.2		1	No action taken.
	16WDUP	3.9		3.9		1	No action taken. Blind field duplicate of 16WC1A.
Diethyl ether	16WC1A	22		22		10	No action taken.
	16WDUP	21		21		10	No action taken. Blind field duplicate of 16WC1A.

Definitions:
Data Validation Qualifiers:
QL Denotes permit quantitation limit. Q Denotes data qualifier.
J Denotes analyte reported at or above quantitation limit and associated result is estimated.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Janet Frazier
TRC, Engineers, Inc.
2200 South Main Street
Suite A
Blacksburg VA 24060

Generated 11/14/2023 11:12 AM Revision 4

JOB DESCRIPTION

RFAAP, Radford HWMU16

JOB NUMBER

410-136864-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

myEOL

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Barb Weyandt

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11/14/2023 11:12 AM
Revision 4

Authorized for release by
Barbara A Weyandt, Project Manager
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Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
cn	Refer to Case Narrative for further detail
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
cn	Refer to Case Narrative for further detail
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-136864-1

REVISION

The report being provided is a revision of the original report sent on 8/17/2023. The report (revision 4) is being revised due to slightly lower limits for hexachlorobenzene, 2-methylphenol and phenol.

Report revision history
Revision 3 - 9/14/2023 - Reason - client requesting reanalysis for silver for Sample 16WC1B.
Revision 2 - 9/7/2023 - Reason - report in-hold data only for CN 9012B; change MDL for 2-methylphenol and phenol.
Revision 1 - 8/30/2023 - Reason - report both results for cyanide analysis.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 7/28/2023 9:25 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 1.8°C

Receipt Exceptions
A trip blank was received in the cooler/package, but not entered with this job. The Trip blank logged in and reported with job number 410-136514.

GC/MS VOA
Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-405906 recovered above the upper control limit for Propionitrile. Non-detections of the affected analytes are reported. Any detections are considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 410-403666 and analytical batch 410-403788 recovered outside control limits for the following analyte(s): a,a-Dimethylphenethylamine. a,a-Dimethylphenethylamine have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 410-404152 was below the method criteria for the following analyte(s): bis (2-chloroisopropyl) ether and N-Nitrosodimethylamine. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) analyzed in 410-404152 was below the method criteria for the following analyte(s): a,a-Dimethylphenethylamine. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 410-403918 and analytical batch 410-404152 recovered outside control limits for the following analyte(s): a,a-Dimethylphenethylamine. a,a-Dimethylphenethylamine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 410-403918 recovered outside control limits for the following analytes: Kepone. The stated control limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 9012B: The following sample(s) were found to contain residual chlorine: 410-136864-4. The chlorine was treated and removed prior to preparation/analysis.

Method 9012B: The following sample(s) were found to contain residual chlorine: 410-136864-4. The chlorine was treated and removed prior to preparation/analysis.

Method 9012B: The following sample(s) were found to contain residual chlorine: 410-136864-4 DU. The chlorine was treated and removed prior to preparation/analysis.

Method 9012B: The following sample(s) were found to contain residual chlorine: 410-136864-4 DU. The chlorine was treated and removed prior to preparation/analysis.

Method 9012B: The following sample(s) were found to contain residual chlorine: 410-136864-4 MS. The chlorine was treated and removed prior to preparation/analysis.

Method 9012B: The following sample(s) were found to contain residual chlorine: 410-136864-4 MS. The chlorine was treated and removed prior to preparation/analysis.

Method 9012B: The following sample(s) were found to contain residual chlorine: 410-136864-6. The chlorine was treated and removed prior to preparation/analysis.

Method 9012B: The following sample(s) were found to contain residual chlorine: 410-136864-6. The chlorine was treated and removed prior to preparation/analysis.

Method 9012B: The laboratory control sample (LCS) for preparation batch 410-406706 and analytical batch 410-406800 recovered outside control limits for the following analytes: Cyanide, total. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: TRC, Engineers, Inc.
Project/Site: RFAAP, Radford HWMU16

Job ID: 410-136864-1

Client Sample ID: 16C1 — Lab Sample ID: 410-136864-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.2		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	0.33	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroethane	3.4		1.0	0.070	ug/L	1		8260D	Total/NA
Tetrahydrofuran	16	J	25	2.0	ug/L	1		8260D	Total/NA
Diethyl ether - DL	33	J	40	4.4	ug/L	4		8260D	Total/NA
Barium	200		10	1.3	ug/L	1		6020B	Total Recoverable
Nickel	4.0	J	10	2.0	ug/L	1		6020B	Total Recoverable
Cyanide, Total	7.5	J	20	5.0	ug/L	1		9012B	Total/NA

Client Sample ID: 16MW8 — Lab Sample ID: 410-136864-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	0.083	J	1.0	0.070	ug/L	1		8260D	Total/NA
Diethyl ether	9.6	J	10	1.1	ug/L	1		8260D	Total/NA
Barium	150		10	1.3	ug/L	1		6020B	Total Recoverable
Beryllium	0.31	J	1.0	0.30	ug/L	1		6020B	Total Recoverable
Cadmium	0.27	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Copper	11		5.0	1.7	ug/L	1		6020B	Total Recoverable
Nickel	2.9	J	10	2.0	ug/L	1		6020B	Total Recoverable
Zinc	25	J	30	7.3	ug/L	1		6020B	Total Recoverable

Client Sample ID: 16MW9 — Lab Sample ID: 410-136864-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.1		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	0.39	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroethane	1.9		1.0	0.070	ug/L	1		8260D	Total/NA
Diethyl ether - DL	62		25	2.8	ug/L	2.5		8260D	Total/NA
Arsenic	2.6	J	10	2.0	ug/L	1		6020B	Total Recoverable
Barium	660		10	1.3	ug/L	1		6020B	Total Recoverable
Cadmium	0.37	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Cobalt	5.7		5.0	1.0	ug/L	1		6020B	Total Recoverable
Nickel	17		10	2.0	ug/L	1		6020B	Total Recoverable
Cyanide, Total	6.7	J	20	5.0	ug/L	1		9012B	Total/NA

Client Sample ID: 16WC1A — Lab Sample ID: 410-136864-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.2		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	0.37	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroethane	2.2		1.0	0.070	ug/L	1		8260D	Total/NA
Diethyl ether	22		10	1.1	ug/L	1		8260D	Total/NA
Vinyl chloride	0.23	J	1.0	0.20	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 16WC1A (Continued) — Lab Sample ID: 410-136864-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.3	J	10	2.0	ug/L	1		6020B	Total Recoverable
Barium	510		10	1.3	ug/L	1		6020B	Total Recoverable
Cobalt	15		5.0	1.0	ug/L	1		6020B	Total Recoverable
Nickel	15	^2	10	2.0	ug/L	1		6020B	Total Recoverable
Zinc	11	J	30	7.3	ug/L	1		6020B	Total Recoverable

Client Sample ID: 16WDUP — Lab Sample ID: 410-136864-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.9		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	0.33	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroethane	2.1		1.0	0.070	ug/L	1		8260D	Total/NA
Diethyl ether	21		10	1.1	ug/L	1		8260D	Total/NA
Vinyl chloride	0.20	J	1.0	0.20	ug/L	1		8260D	Total/NA
Arsenic	5.1	J	10	2.0	ug/L	1		6020B	Total Recoverable
Barium	520		10	1.3	ug/L	1		6020B	Total Recoverable
Cobalt	15	^2	5.0	1.0	ug/L	1		6020B	Total Recoverable
Nickel	15	^2	10	2.0	ug/L	1		6020B	Total Recoverable
Zinc	12	J	30	7.3	ug/L	1		6020B	Total Recoverable

Client Sample ID: 16WC1B — Lab Sample ID: 410-136864-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	89		10	1.3	ug/L	1		6020B	Total Recoverable
Cadmium	0.71	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	3.3	J	5.0	1.0	ug/L	1		6020B	Total Recoverable
Cobalt	3.5	J ^2	5.0	1.0	ug/L	1		6020B	Total Recoverable
Copper	2.9	J	5.0	1.7	ug/L	1		6020B	Total Recoverable
Nickel	4.7	J	10	2.0	ug/L	1		6020B	Total Recoverable
Silver	0.34	J	2.0	0.30	ug/L	1		6020B	Total Recoverable
Zinc	11	J	30	7.3	ug/L	1		6020B	Total Recoverable
Mercury	0.25	J	2.0	0.20	ug/L	1		7470A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 16C1
Date Collected: 07/27/23 12:45
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Propanol	ND		100	50	ug/L			08/07/23 13:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 02:41	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 02:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 02:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40	ug/L			08/09/23 02:41	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 02:41	1
1,1-Dichloroethane	**5.2**		1.0	0.30	ug/L			08/09/23 02:41	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 02:41	1
1,2,3-Trichloropropane	ND		1.0	0.30	ug/L			08/09/23 02:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.60	ug/L			08/09/23 02:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.40	ug/L			08/09/23 02:41	1
1,2-Dibromoethane	ND		1.0	0.30	ug/L			08/09/23 02:41	1
1,2-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 02:41	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/09/23 02:41	1
1,2-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 02:41	1
1,3-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 02:41	1
1,3-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 02:41	1
1,4-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 02:41	1
1,4-Dioxane	ND		200	45	ug/L			08/09/23 02:41	1
2-Butanone	ND		10	1.7	ug/L			08/09/23 02:41	1
2-Hexanone	ND		10	2.0	ug/L			08/09/23 02:41	1
4-Methyl-2-pentanone	ND		10	2.0	ug/L			08/09/23 02:41	1
Acetone	ND		10	2.0	ug/L			08/09/23 02:41	1
Acetonitrile	ND		100	31	ug/L			08/09/23 02:41	1
Acrylonitrile	ND		10	1.1	ug/L			08/09/23 02:41	1
Allyl chloride	ND		10	1.0	ug/L			08/09/23 02:41	1
Benzene	**0.33**	**J**	1.0	0.30	ug/L			08/09/23 02:41	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/09/23 02:41	1
Bromoform	ND		1.0	0.40	ug/L			08/09/23 02:41	1
Bromomethane	ND		1.0	0.54	ug/L			08/09/23 02:41	1
Carbon disulfide	ND		10	0.40	ug/L			08/09/23 02:41	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			08/09/23 02:41	1
Chloroethane	**3.4**		1.0	0.070	ug/L			08/09/23 02:41	1
Chloroform	ND		1.0	0.30	ug/L			08/09/23 02:41	1
Chloromethane	ND		1.0	0.10	ug/L			08/09/23 02:41	1
Chloroprene	ND		10	0.46	ug/L			08/09/23 02:41	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/09/23 02:41	1
Dibromomethane	ND		1.0	0.30	ug/L			08/09/23 02:41	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/09/23 02:41	1
Ethyl methacrylate	ND		10	0.81	ug/L			08/09/23 02:41	1
Ethylbenzene	ND		1.0	0.30	ug/L			08/09/23 02:41	1
Hexachlorobutadiene	ND		1.0	0.40	ug/L			08/09/23 02:41	1
Isobutyl alcohol	ND		200	11	ug/L			08/09/23 02:41	1
m&p-Xylene	ND		2.0	0.40	ug/L			08/09/23 02:41	1
Methacrylonitrile	ND		100	9.7	ug/L			08/09/23 02:41	1
Methyl iodide	ND		10	0.58	ug/L			08/09/23 02:41	1
Methyl methacrylate	ND		10	3.5	ug/L			08/09/23 02:41	1
Methylene Chloride	ND		1.0	0.70	ug/L			08/09/23 02:41	1
Naphthalene	ND		1.0	0.40	ug/L			08/09/23 02:41	1

Client Sample ID: 16C1
Date Collected: 07/27/23 12:45
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	0.40	ug/L			08/09/23 02:41	1
Pentachloroethane	ND		10	1.7	ug/L			08/09/23 02:41	1
Propionitrile	ND	cn	100	10	ug/L			08/09/23 02:41	1
Styrene	ND		1.0	0.30	ug/L			08/09/23 02:41	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/09/23 02:41	1
Tetrahydrofuran	**16**	**J**	25	2.0	ug/L			08/09/23 02:41	1
Toluene	ND		1.0	0.30	ug/L			08/09/23 02:41	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 02:41	1
trans-1,3-Dichloropropene	ND		1.0	0.40	ug/L			08/09/23 02:41	1
Trichloroethene	ND		1.0	0.30	ug/L			08/09/23 02:41	1
Trichlorofluoromethane	ND		1.0	0.40	ug/L			08/09/23 02:41	1
Vinyl acetate	ND		10	3.2	ug/L			08/09/23 02:41	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/09/23 02:41	1
Xylenes, Total	ND		3.0	0.40	ug/L			08/09/23 02:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/09/23 02:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*08/07/23 13:34*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*08/09/23 02:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*08/09/23 02:41*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*08/07/23 13:34*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/07/23 13:34*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*08/09/23 02:41*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/07/23 13:34*	*1*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	**33**	**J**	40	4.4	ug/L			08/09/23 03:03	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*08/09/23 03:03*	*4*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*08/09/23 03:03*	*4*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*08/09/23 03:03*	*4*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/09/23 03:03*	*4*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
1,3-Dinitrobenzene	ND		10	2.3	ug/L		08/03/23 08:20	08/03/23 19:16	1
bis (2-chloroisopropyl) ether	ND	cn	10	0.60	ug/L		08/03/23 08:20	08/03/23 19:16	1
2,3,4,6-Tetrachlorophenol	ND		10	1.8	ug/L		08/03/23 08:20	08/03/23 19:16	1
2,4,5-Trichlorophenol	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
2,4,6-Trichlorophenol	ND		10	1.8	ug/L		08/03/23 08:20	08/03/23 19:16	1
2,4-Dichlorophenol	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 19:16	1
2,4-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 19:16	1
2,6-Dichlorophenol	ND		10	1.4	ug/L		08/03/23 08:20	08/03/23 19:16	1
2,6-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 19:16	1
2-Chloronaphthalene	ND		10	0.50	ug/L		08/03/23 08:20	08/03/23 19:16	1
2-Chlorophenol	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
2-Methylnaphthalene	ND		10	0.29	ug/L		08/03/23 08:20	08/03/23 19:16	1

Client Sample ID: 16C1
Date Collected: 07/27/23 12:45
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-1
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Cresol	ND		10	0.80	ug/L		08/03/23 08:20	08/03/23 19:16	1
2-Nitroaniline	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
2-Nitrophenol	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 19:16	1
4-Bromophenyl-phenylether	ND		10	0.56	ug/L		08/03/23 08:20	08/03/23 19:16	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
4-Chlorophenyl-phenyl ether	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 19:16	1
m & p-Cresol	ND		20	2.4	ug/L		08/03/23 08:20	08/03/23 19:16	1
4-Nitroaniline	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 19:16	1
5-Nitro-o-toluidine	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
Bis(2-ethylhexyl) phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
Acenaphthene	ND		10	0.35	ug/L		08/03/23 08:20	08/03/23 19:16	1
Acenaphthylene	ND		10	0.48	ug/L		08/03/23 08:20	08/03/23 19:16	1
Anthracene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 19:16	1
Benzo[a]anthracene	ND		10	0.45	ug/L		08/03/23 08:20	08/03/23 19:16	1
Benzo[a]pyrene	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 19:16	1
Benzo[b]fluoranthene	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 19:16	1
Benzo[g,h,i]perylene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 19:16	1
Benzo[k]fluoranthene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 19:16	1
Hexachloropropene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
Chrysene	ND		10	0.31	ug/L		08/03/23 08:20	08/03/23 19:16	1
Diallate	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
Dibenz(a,h)anthracene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 19:16	1
Dibenzofuran	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 19:16	1
Diethyl phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
Dimethoate	ND	*1	10	3.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
Ethyl methanesulfonate	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 19:16	1
Fluoranthene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 19:16	1
Fluorene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 19:16	1
Hexachlorobenzene	ND		10	0.70	ug/L		08/03/23 08:20	08/03/23 19:16	1
Indeno[1,2,3-cd]pyrene	ND		10	0.15	ug/L		08/03/23 08:20	08/03/23 19:16	1
Isodrin	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 19:16	1
Kepone	ND	*- *1 cn	50	25	ug/L		08/03/23 08:20	08/03/23 19:16	1
Sulfotepp	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 19:16	1
N-Nitrosodiethylamine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
N-Nitrosodimethylamine	ND	cn	10	2.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58	ug/L		08/03/23 08:20	08/03/23 19:16	1
N-Nitrosomorpholine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
N-Nitrosopiperidine	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 19:16	1
Nitrobenzene	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 19:16	1
o,o',o''-Triethylphosphorothioate	ND		10	2.6	ug/L		08/03/23 08:20	08/03/23 19:16	1
Pentachlorobenzene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 19:16	1
Phenacetin	ND		10	1.4	ug/L		08/03/23 08:20	08/03/23 19:16	1
Pentachlorophenol	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:16	1
Phenanthrene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 19:16	1
Phenol	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 19:16	1
Phorate	ND		10	2.5	ug/L		08/03/23 08:20	08/03/23 19:16	1
Pyrene	ND		10	0.41	ug/L		08/03/23 08:20	08/03/23 19:16	1
Safrole, Total	ND		10	2.2	ug/L		08/03/23 08:20	08/03/23 19:16	1

Client Sample ID: 16C1
Lab Sample ID: 410-136864-1
Date Collected: 07/27/23 12:45
Matrix: Water
Date Received: 07/28/23 09:25

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 19:16	1
a,a-Dimethylphenethylamine	ND	*- cn	50	5.0	ug/L		08/03/23 08:20	08/03/23 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*68*		*13 - 138*	*08/03/23 08:20*	*08/03/23 19:16*	*1*
2-Fluorobiphenyl (Surr)	*61*		*44 - 120*	*08/03/23 08:20*	*08/03/23 19:16*	*1*
2-Fluorophenol (Surr)	*35*		*10 - 120*	*08/03/23 08:20*	*08/03/23 19:16*	*1*
Nitrobenzene-d5 (Surr)	*53*		*31 - 120*	*08/03/23 08:20*	*08/03/23 19:16*	*1*
p-Terphenyl-d14 (Surr)	*84*		*30 - 125*	*08/03/23 08:20*	*08/03/23 19:16*	*1*
Phenol-d5 (Surr)	*27*		*10 - 120*	*08/03/23 08:20*	*08/03/23 19:16*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.60	ug/L		08/03/23 03:28	08/10/23 13:31	1
Arsenic	ND		10	2.0	ug/L		08/03/23 03:28	08/10/23 13:31	1
Barium	**200**		10	1.3	ug/L		08/03/23 03:28	08/10/23 13:31	1
Beryllium	ND		1.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:31	1
Cadmium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:31	1
Chromium	ND		5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:31	1
Cobalt	ND		5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:31	1
Copper	ND		5.0	1.7	ug/L		08/03/23 03:28	08/10/23 13:31	1
Lead	ND		3.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:31	1
Nickel	**4.0**	**J**	10	2.0	ug/L		08/03/23 03:28	08/11/23 09:00	1
Selenium	ND		10	3.0	ug/L		08/03/23 03:28	08/10/23 13:31	1
Silver	ND		2.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:31	1
Thallium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:31	1
Zinc	ND		30	7.3	ug/L		08/03/23 03:28	08/10/23 13:31	1
Vanadium	ND		10	2.5	ug/L		08/03/23 03:28	08/10/23 13:31	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.20	ug/L		08/03/23 06:08	08/04/23 12:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**7.5**	**J**	20	5.0	ug/L		08/09/23 14:30	08/10/23 11:05	1

Client Sample ID: 16MW8
Lab Sample ID: 410-136864-2
Date Collected: 07/26/23 10:05
Matrix: Water
Date Received: 07/28/23 09:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Propanol	ND		100	50	ug/L			08/07/23 13:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 00:51	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 00:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 00:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40	ug/L			08/09/23 00:51	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 00:51	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/09/23 00:51	1

Client Sample ID: 16MW8
Date Collected: 07/26/23 10:05
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 00:51	1
1,2,3-Trichloropropane	ND		1.0	0.30	ug/L			08/09/23 00:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.60	ug/L			08/09/23 00:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.40	ug/L			08/09/23 00:51	1
1,2-Dibromoethane	ND		1.0	0.30	ug/L			08/09/23 00:51	1
1,2-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 00:51	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/09/23 00:51	1
1,2-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 00:51	1
1,3-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 00:51	1
1,3-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 00:51	1
1,4-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 00:51	1
1,4-Dioxane	ND		200	45	ug/L			08/09/23 00:51	1
2-Butanone	ND		10	1.7	ug/L			08/09/23 00:51	1
2-Hexanone	ND		10	2.0	ug/L			08/09/23 00:51	1
4-Methyl-2-pentanone	ND		10	2.0	ug/L			08/09/23 00:51	1
Acetone	ND		10	2.0	ug/L			08/09/23 00:51	1
Acetonitrile	ND		100	31	ug/L			08/09/23 00:51	1
Acrylonitrile	ND		10	1.1	ug/L			08/09/23 00:51	1
Allyl chloride	ND		10	1.0	ug/L			08/09/23 00:51	1
Benzene	ND		1.0	0.30	ug/L			08/09/23 00:51	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/09/23 00:51	1
Bromoform	ND		1.0	0.40	ug/L			08/09/23 00:51	1
Bromomethane	ND		1.0	0.54	ug/L			08/09/23 00:51	1
Carbon disulfide	ND		10	0.40	ug/L			08/09/23 00:51	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			08/09/23 00:51	1
Chloroethane	**0.083**	**J**	1.0	0.070	ug/L			08/09/23 00:51	1
Chloroform	ND		1.0	0.30	ug/L			08/09/23 00:51	1
Chloromethane	ND		1.0	0.10	ug/L			08/09/23 00:51	1
Chloroprene	ND		10	0.46	ug/L			08/09/23 00:51	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/09/23 00:51	1
Dibromomethane	ND		1.0	0.30	ug/L			08/09/23 00:51	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/09/23 00:51	1
Diethyl ether	**9.6**	**J**	10	1.1	ug/L			08/09/23 00:51	1
Ethyl methacrylate	ND		10	0.81	ug/L			08/09/23 00:51	1
Ethylbenzene	ND		1.0	0.30	ug/L			08/09/23 00:51	1
Hexachlorobutadiene	ND		1.0	0.40	ug/L			08/09/23 00:51	1
Isobutyl alcohol	ND		200	11	ug/L			08/09/23 00:51	1
m&p-Xylene	ND		2.0	0.40	ug/L			08/09/23 00:51	1
Methacrylonitrile	ND		100	9.7	ug/L			08/09/23 00:51	1
Methyl iodide	ND		10	0.58	ug/L			08/09/23 00:51	1
Methyl methacrylate	ND		10	3.5	ug/L			08/09/23 00:51	1
Methylene Chloride	ND		1.0	0.70	ug/L			08/09/23 00:51	1
Naphthalene	ND		1.0	0.40	ug/L			08/09/23 00:51	1
o-Xylene	ND		1.0	0.40	ug/L			08/09/23 00:51	1
Pentachloroethane	ND		10	1.7	ug/L			08/09/23 00:51	1
Propionitrile	ND	cn	100	10	ug/L			08/09/23 00:51	1
Styrene	ND		1.0	0.30	ug/L			08/09/23 00:51	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/09/23 00:51	1
Tetrahydrofuran	ND		25	2.0	ug/L			08/09/23 00:51	1

Client Sample ID: 16MW8
Date Collected: 07/26/23 10:05
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.30	ug/L			08/09/23 00:51	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 00:51	1
trans-1,3-Dichloropropene	ND		1.0	0.40	ug/L			08/09/23 00:51	1
Trichloroethene	ND		1.0	0.30	ug/L			08/09/23 00:51	1
Trichlorofluoromethane	ND		1.0	0.40	ug/L			08/09/23 00:51	1
Vinyl acetate	ND		10	3.2	ug/L			08/09/23 00:51	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/09/23 00:51	1
Xylenes, Total	ND		3.0	0.40	ug/L			08/09/23 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/09/23 00:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*08/07/23 13:56*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*08/09/23 00:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*08/09/23 00:51*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*08/07/23 13:56*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/07/23 13:56*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*08/09/23 00:51*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/07/23 13:56*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
1,3-Dinitrobenzene	ND		10	2.3	ug/L		08/02/23 15:28	08/03/23 03:22	1
bis (2-chloroisopropyl) ether	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:22	1
2,3,4,6-Tetrachlorophenol	ND		10	1.8	ug/L		08/02/23 15:28	08/03/23 03:22	1
2,4,5-Trichlorophenol	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
2,4,6-Trichlorophenol	ND		10	1.8	ug/L		08/02/23 15:28	08/03/23 03:22	1
2,4-Dichlorophenol	ND		10	1.5	ug/L		08/02/23 15:28	08/03/23 03:22	1
2,4-Dinitrotoluene	ND		10	2.1	ug/L		08/02/23 15:28	08/03/23 03:22	1
2,6-Dichlorophenol	ND		10	1.4	ug/L		08/02/23 15:28	08/03/23 03:22	1
2,6-Dinitrotoluene	ND		10	2.1	ug/L		08/02/23 15:28	08/03/23 03:22	1
2-Chloronaphthalene	ND		10	0.50	ug/L		08/02/23 15:28	08/03/23 03:22	1
2-Chlorophenol	ND		10	1.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
2-Methylnaphthalene	ND		10	0.29	ug/L		08/02/23 15:28	08/03/23 03:22	1
o-Cresol	ND		10	0.81	ug/L		08/02/23 15:28	08/03/23 03:22	1
2-Nitroaniline	ND		10	1.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
2-Nitrophenol	ND		10	1.2	ug/L		08/02/23 15:28	08/03/23 03:22	1
4-Bromophenyl-phenylether	ND		10	0.56	ug/L		08/02/23 15:28	08/03/23 03:22	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
4-Chlorophenyl-phenyl ether	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:22	1
m & p-Cresol	ND		20	2.4	ug/L		08/02/23 15:28	08/03/23 03:22	1
4-Nitroaniline	ND		10	1.5	ug/L		08/02/23 15:28	08/03/23 03:22	1
5-Nitro-o-toluidine	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
Bis(2-ethylhexyl) phthalate	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
Acenaphthene	ND		10	0.35	ug/L		08/02/23 15:28	08/03/23 03:22	1
Acenaphthylene	ND		10	0.48	ug/L		08/02/23 15:28	08/03/23 03:22	1
Anthracene	ND		10	0.52	ug/L		08/02/23 15:28	08/03/23 03:22	1
Benzo[a]anthracene	ND		10	0.45	ug/L		08/02/23 15:28	08/03/23 03:22	1
Benzo[a]pyrene	ND		10	1.5	ug/L		08/02/23 15:28	08/03/23 03:22	1
Benzo[b]fluoranthene	ND		10	1.2	ug/L		08/02/23 15:28	08/03/23 03:22	1

Client Sample ID: 16MW8
Date Collected: 07/26/23 10:05
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-2
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		10	0.42	ug/L		08/02/23 15:28	08/03/23 03:22	1
Benzo[k]fluoranthene	ND		10	1.6	ug/L		08/02/23 15:28	08/03/23 03:22	1
Hexachloropropene	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
Chrysene	ND		10	0.31	ug/L		08/02/23 15:28	08/03/23 03:22	1
Diallate	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
Dibenz(a,h)anthracene	ND		10	0.38	ug/L		08/02/23 15:28	08/03/23 03:22	1
Dibenzofuran	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:22	1
Diethyl phthalate	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
Dimethoate	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
Ethyl methanesulfonate	ND		10	1.1	ug/L		08/02/23 15:28	08/03/23 03:22	1
Fluoranthene	ND		10	0.42	ug/L		08/02/23 15:28	08/03/23 03:22	1
Fluorene	ND		10	0.38	ug/L		08/02/23 15:28	08/03/23 03:22	1
Hexachlorobenzene	ND		10	0.71	ug/L		08/02/23 15:28	08/03/23 03:22	1
Indeno[1,2,3-cd]pyrene	ND		10	0.15	ug/L		08/02/23 15:28	08/03/23 03:22	1
Isodrin	ND		10	1.1	ug/L		08/02/23 15:28	08/03/23 03:22	1
Kepone	ND		50	25	ug/L		08/02/23 15:28	08/03/23 03:22	1
Sulfotepp	ND		10	2.4	ug/L		08/02/23 15:28	08/03/23 03:22	1
N-Nitrosodiethylamine	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58	ug/L		08/02/23 15:28	08/03/23 03:22	1
N-Nitrosomorpholine	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
N-Nitrosopiperidine	ND		10	1.1	ug/L		08/02/23 15:28	08/03/23 03:22	1
Nitrobenzene	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:22	1
o,o',o''-Triethylphosphorothioate	ND		10	2.6	ug/L		08/02/23 15:28	08/03/23 03:22	1
Pentachlorobenzene	ND		10	1.6	ug/L		08/02/23 15:28	08/03/23 03:22	1
Phenacetin	ND		10	1.4	ug/L		08/02/23 15:28	08/03/23 03:22	1
Pentachlorophenol	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:22	1
Phenanthrene	ND		10	0.52	ug/L		08/02/23 15:28	08/03/23 03:22	1
Phenol	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:22	1
Phorate	ND		10	2.5	ug/L		08/02/23 15:28	08/03/23 03:22	1
Pyrene	ND		10	0.41	ug/L		08/02/23 15:28	08/03/23 03:22	1
Safrole, Total	ND		10	2.2	ug/L		08/02/23 15:28	08/03/23 03:22	1
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4	ug/L		08/02/23 15:28	08/03/23 03:22	1
a,a-Dimethylphenethylamine	ND	*- cn	50	5.0	ug/L		08/02/23 15:28	08/03/23 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*74*		*13 - 138*	*08/02/23 15:28*	*08/03/23 03:22*	*1*
2-Fluorobiphenyl (Surr)	*78*		*44 - 120*	*08/02/23 15:28*	*08/03/23 03:22*	*1*
2-Fluorophenol (Surr)	*36*		*10 - 120*	*08/02/23 15:28*	*08/03/23 03:22*	*1*
Nitrobenzene-d5 (Surr)	*72*		*31 - 120*	*08/02/23 15:28*	*08/03/23 03:22*	*1*
p-Terphenyl-d14 (Surr)	*58*		*30 - 125*	*08/02/23 15:28*	*08/03/23 03:22*	*1*
Phenol-d5 (Surr)	*26*		*10 - 120*	*08/02/23 15:28*	*08/03/23 03:22*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.60	ug/L		08/03/23 03:28	08/10/23 13:29	1
Arsenic	ND		10	2.0	ug/L		08/03/23 03:28	08/10/23 13:29	1
Barium	**150**		10	1.3	ug/L		08/03/23 03:28	08/10/23 13:29	1

Client Sample ID: 16MW8 — Lab Sample ID: 410-136864-2

Date Collected: 07/26/23 10:05 — **Matrix: Water**
Date Received: 07/28/23 09:25

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**0.31**	**J**	1.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:29	1
Cadmium	**0.27**	**J**	1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:29	1
Chromium	ND		5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:29	1
Cobalt	ND		5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:29	1
Copper	**11**		5.0	1.7	ug/L		08/03/23 03:28	08/10/23 13:29	1
Lead	ND		3.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:29	1
Nickel	**2.9**	**J**	10	2.0	ug/L		08/03/23 03:28	08/11/23 08:57	1
Selenium	ND		10	3.0	ug/L		08/03/23 03:28	08/10/23 13:29	1
Silver	ND		2.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:29	1
Thallium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:29	1
Zinc	**25**	**J**	30	7.3	ug/L		08/03/23 03:28	08/10/23 13:29	1
Vanadium	ND		10	2.5	ug/L		08/03/23 03:28	08/10/23 13:29	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.20	ug/L		08/03/23 06:08	08/04/23 12:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND		20	5.0	ug/L		08/08/23 16:00	08/09/23 13:29	1

Client Sample ID: 16MW9 — Lab Sample ID: 410-136864-3

Date Collected: 07/27/23 11:25 — **Matrix: Water**
Date Received: 07/28/23 09:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Propanol	ND		100	50	ug/L			08/07/23 14:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 01:56	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 01:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40	ug/L			08/09/23 01:56	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:56	1
1,1-Dichloroethane	**5.1**		1.0	0.30	ug/L			08/09/23 01:56	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 01:56	1
1,2,3-Trichloropropane	ND		1.0	0.30	ug/L			08/09/23 01:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.60	ug/L			08/09/23 01:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.40	ug/L			08/09/23 01:56	1
1,2-Dibromoethane	ND		1.0	0.30	ug/L			08/09/23 01:56	1
1,2-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 01:56	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:56	1
1,2-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 01:56	1
1,3-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 01:56	1
1,3-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 01:56	1
1,4-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 01:56	1
1,4-Dioxane	ND		200	45	ug/L			08/09/23 01:56	1
2-Butanone	ND		10	1.7	ug/L			08/09/23 01:56	1
2-Hexanone	ND		10	2.0	ug/L			08/09/23 01:56	1
4-Methyl-2-pentanone	ND		10	2.0	ug/L			08/09/23 01:56	1
Acetone	ND		10	2.0	ug/L			08/09/23 01:56	1

Client Sample ID: 16MW9
Date Collected: 07/27/23 11:25
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	ND		100	31	ug/L			08/09/23 01:56	1
Acrylonitrile	ND		10	1.1	ug/L			08/09/23 01:56	1
Allyl chloride	ND		10	1.0	ug/L			08/09/23 01:56	1
Benzene	**0.39**	**J**	1.0	0.30	ug/L			08/09/23 01:56	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/09/23 01:56	1
Bromoform	ND		1.0	0.40	ug/L			08/09/23 01:56	1
Bromomethane	ND		1.0	0.54	ug/L			08/09/23 01:56	1
Carbon disulfide	ND		10	0.40	ug/L			08/09/23 01:56	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			08/09/23 01:56	1
Chloroethane	**1.9**		1.0	0.070	ug/L			08/09/23 01:56	1
Chloroform	ND		1.0	0.30	ug/L			08/09/23 01:56	1
Chloromethane	ND		1.0	0.10	ug/L			08/09/23 01:56	1
Chloroprene	ND		10	0.46	ug/L			08/09/23 01:56	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/09/23 01:56	1
Dibromomethane	ND		1.0	0.30	ug/L			08/09/23 01:56	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/09/23 01:56	1
Ethyl methacrylate	ND		10	0.81	ug/L			08/09/23 01:56	1
Ethylbenzene	ND		1.0	0.30	ug/L			08/09/23 01:56	1
Hexachlorobutadiene	ND		1.0	0.40	ug/L			08/09/23 01:56	1
Isobutyl alcohol	ND		200	11	ug/L			08/09/23 01:56	1
m&p-Xylene	ND		2.0	0.40	ug/L			08/09/23 01:56	1
Methacrylonitrile	ND		100	9.7	ug/L			08/09/23 01:56	1
Methyl iodide	ND		10	0.58	ug/L			08/09/23 01:56	1
Methyl methacrylate	ND		10	3.5	ug/L			08/09/23 01:56	1
Methylene Chloride	ND		1.0	0.70	ug/L			08/09/23 01:56	1
Naphthalene	ND		1.0	0.40	ug/L			08/09/23 01:56	1
o-Xylene	ND		1.0	0.40	ug/L			08/09/23 01:56	1
Pentachloroethane	ND		10	1.7	ug/L			08/09/23 01:56	1
Propionitrile	ND	cn	100	10	ug/L			08/09/23 01:56	1
Styrene	ND		1.0	0.30	ug/L			08/09/23 01:56	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/09/23 01:56	1
Tetrahydrofuran	ND		25	2.0	ug/L			08/09/23 01:56	1
Toluene	ND		1.0	0.30	ug/L			08/09/23 01:56	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 01:56	1
trans-1,3-Dichloropropene	ND		1.0	0.40	ug/L			08/09/23 01:56	1
Trichloroethene	ND		1.0	0.30	ug/L			08/09/23 01:56	1
Trichlorofluoromethane	ND		1.0	0.40	ug/L			08/09/23 01:56	1
Vinyl acetate	ND		10	3.2	ug/L			08/09/23 01:56	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/09/23 01:56	1
Xylenes, Total	ND		3.0	0.40	ug/L			08/09/23 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/09/23 01:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*08/07/23 14:18*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*08/09/23 01:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*08/09/23 01:56*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*08/07/23 14:18*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/07/23 14:18*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/09/23 01:56*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/07/23 14:18*	*1*

Client Sample ID: 16MW9
Date Collected: 07/27/23 11:25
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	**62**		25	2.8	ug/L			08/09/23 02:19	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*08/09/23 02:19*	*2.5*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*08/09/23 02:19*	*2.5*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*08/09/23 02:19*	*2.5*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/09/23 02:19*	*2.5*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
1,3-Dinitrobenzene	ND		10	2.3	ug/L		08/03/23 08:20	08/03/23 19:35	1
bis (2-chloroisopropyl) ether	ND	cn	10	0.60	ug/L		08/03/23 08:20	08/03/23 19:35	1
2,3,4,6-Tetrachlorophenol	ND		10	1.8	ug/L		08/03/23 08:20	08/03/23 19:35	1
2,4,5-Trichlorophenol	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
2,4,6-Trichlorophenol	ND		10	1.8	ug/L		08/03/23 08:20	08/03/23 19:35	1
2,4-Dichlorophenol	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 19:35	1
2,4-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 19:35	1
2,6-Dichlorophenol	ND		10	1.4	ug/L		08/03/23 08:20	08/03/23 19:35	1
2,6-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 19:35	1
2-Chloronaphthalene	ND		10	0.50	ug/L		08/03/23 08:20	08/03/23 19:35	1
2-Chlorophenol	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
2-Methylnaphthalene	ND		10	0.29	ug/L		08/03/23 08:20	08/03/23 19:35	1
o-Cresol	ND		10	0.80	ug/L		08/03/23 08:20	08/03/23 19:35	1
2-Nitroaniline	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
2-Nitrophenol	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 19:35	1
4-Bromophenyl-phenylether	ND		10	0.56	ug/L		08/03/23 08:20	08/03/23 19:35	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
4-Chlorophenyl-phenyl ether	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 19:35	1
m & p-Cresol	ND		20	2.4	ug/L		08/03/23 08:20	08/03/23 19:35	1
4-Nitroaniline	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 19:35	1
5-Nitro-o-toluidine	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
Bis(2-ethylhexyl) phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
Acenaphthene	ND		10	0.35	ug/L		08/03/23 08:20	08/03/23 19:35	1
Acenaphthylene	ND		10	0.48	ug/L		08/03/23 08:20	08/03/23 19:35	1
Anthracene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 19:35	1
Benzo[a]anthracene	ND		10	0.45	ug/L		08/03/23 08:20	08/03/23 19:35	1
Benzo[a]pyrene	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 19:35	1
Benzo[b]fluoranthene	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 19:35	1
Benzo[g,h,i]perylene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 19:35	1
Benzo[k]fluoranthene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 19:35	1
Hexachloropropene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
Chrysene	ND		10	0.31	ug/L		08/03/23 08:20	08/03/23 19:35	1
Diallate	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
Dibenz(a,h)anthracene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 19:35	1
Dibenzofuran	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 19:35	1
Diethyl phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
Dimethoate	ND	*1	10	3.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
Ethyl methanesulfonate	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 19:35	1
Fluoranthene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 19:35	1

Client Sample ID: 16MW9

Date Collected: 07/27/23 11:25
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-3

Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 19:35	1
Hexachlorobenzene	ND		10	0.70	ug/L		08/03/23 08:20	08/03/23 19:35	1
Indeno[1,2,3-cd]pyrene	ND		10	0.15	ug/L		08/03/23 08:20	08/03/23 19:35	1
Isodrin	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 19:35	1
Kepone	ND	*- *1 cn	50	25	ug/L		08/03/23 08:20	08/03/23 19:35	1
Sulfotepp	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 19:35	1
N-Nitrosodiethylamine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
N-Nitrosodimethylamine	ND	cn	10	2.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58	ug/L		08/03/23 08:20	08/03/23 19:35	1
N-Nitrosomorpholine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
N-Nitrosopiperidine	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 19:35	1
Nitrobenzene	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 19:35	1
o,o',o''-Triethylphosphorothioate	ND		10	2.6	ug/L		08/03/23 08:20	08/03/23 19:35	1
Pentachlorobenzene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 19:35	1
Phenacetin	ND		10	1.4	ug/L		08/03/23 08:20	08/03/23 19:35	1
Pentachlorophenol	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:35	1
Phenanthrene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 19:35	1
Phenol	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 19:35	1
Phorate	ND		10	2.5	ug/L		08/03/23 08:20	08/03/23 19:35	1
Pyrene	ND		10	0.41	ug/L		08/03/23 08:20	08/03/23 19:35	1
Safrole, Total	ND		10	2.2	ug/L		08/03/23 08:20	08/03/23 19:35	1
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 19:35	1
a,a-Dimethylphenethylamine	ND	*- cn	50	5.0	ug/L		08/03/23 08:20	08/03/23 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*13 - 138*	*08/03/23 08:20*	*08/03/23 19:35*	*1*
2-Fluorobiphenyl (Surr)	*62*		*44 - 120*	*08/03/23 08:20*	*08/03/23 19:35*	*1*
2-Fluorophenol (Surr)	*33*		*10 - 120*	*08/03/23 08:20*	*08/03/23 19:35*	*1*
Nitrobenzene-d5 (Surr)	*52*		*31 - 120*	*08/03/23 08:20*	*08/03/23 19:35*	*1*
p-Terphenyl-d14 (Surr)	*94*		*30 - 125*	*08/03/23 08:20*	*08/03/23 19:35*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/03/23 08:20*	*08/03/23 19:35*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.60	ug/L		08/02/23 10:20	08/10/23 18:17	1
Arsenic	**2.6**	**J**	10	2.0	ug/L		08/02/23 10:20	08/10/23 18:17	1
Barium	**660**		10	1.3	ug/L		08/02/23 10:20	08/10/23 18:17	1
Beryllium	ND		1.0	0.30	ug/L		08/02/23 10:20	08/10/23 18:17	1
Cadmium	**0.37**	**J**	1.0	0.20	ug/L		08/02/23 10:20	08/10/23 18:17	1
Chromium	ND		5.0	1.0	ug/L		08/02/23 10:20	08/10/23 18:17	1
Cobalt	**5.7**		5.0	1.0	ug/L		08/02/23 10:20	08/10/23 18:17	1
Copper	ND		5.0	1.7	ug/L		08/02/23 10:20	08/10/23 18:17	1
Lead	ND		3.0	1.0	ug/L		08/02/23 10:20	08/10/23 18:17	1
Nickel	**17**		10	2.0	ug/L		08/02/23 10:20	08/10/23 18:17	1
Selenium	ND		10	3.0	ug/L		08/02/23 10:20	08/10/23 18:17	1
Silver	ND		2.0	0.30	ug/L		08/02/23 10:20	08/10/23 18:17	1
Thallium	ND		1.0	0.20	ug/L		08/02/23 10:20	08/10/23 18:17	1
Zinc	ND		30	7.3	ug/L		08/02/23 10:20	08/14/23 23:22	1

Client Sample ID: 16MW9
Lab Sample ID: 410-136864-3
Date Collected: 07/27/23 11:25
Matrix: Water
Date Received: 07/28/23 09:25

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		10	2.5	ug/L		08/02/23 10:20	08/10/23 18:17	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.20	ug/L		08/03/23 05:59	08/04/23 10:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**6.7**	**J**	20	5.0	ug/L		08/09/23 14:30	08/10/23 11:05	1

Client Sample ID: 16WC1A
Lab Sample ID: 410-136864-4
Date Collected: 07/27/23 09:55
Matrix: Water
Date Received: 07/28/23 09:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Propanol	ND		100	50	ug/L			08/07/23 15:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/08/23 22:39	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/08/23 22:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/08/23 22:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40	ug/L			08/08/23 22:39	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/08/23 22:39	1
1,1-Dichloroethane	**4.2**		1.0	0.30	ug/L			08/08/23 22:39	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/08/23 22:39	1
1,2,3-Trichloropropane	ND		1.0	0.30	ug/L			08/08/23 22:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.60	ug/L			08/08/23 22:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.40	ug/L			08/08/23 22:39	1
1,2-Dibromoethane	ND		1.0	0.30	ug/L			08/08/23 22:39	1
1,2-Dichlorobenzene	ND		1.0	0.40	ug/L			08/08/23 22:39	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/08/23 22:39	1
1,2-Dichloropropane	ND		1.0	0.40	ug/L			08/08/23 22:39	1
1,3-Dichlorobenzene	ND		1.0	0.40	ug/L			08/08/23 22:39	1
1,3-Dichloropropane	ND		1.0	0.40	ug/L			08/08/23 22:39	1
1,4-Dichlorobenzene	ND		1.0	0.40	ug/L			08/08/23 22:39	1
1,4-Dioxane	ND		200	45	ug/L			08/08/23 22:39	1
2-Butanone	ND		10	1.7	ug/L			08/08/23 22:39	1
2-Hexanone	ND		10	2.0	ug/L			08/08/23 22:39	1
4-Methyl-2-pentanone	ND		10	2.0	ug/L			08/08/23 22:39	1
Acetone	ND		10	2.0	ug/L			08/08/23 22:39	1
Acetonitrile	ND		100	31	ug/L			08/08/23 22:39	1
Acrylonitrile	ND		10	1.1	ug/L			08/08/23 22:39	1
Allyl chloride	ND		10	1.0	ug/L			08/08/23 22:39	1
Benzene	**0.37**	**J**	1.0	0.30	ug/L			08/08/23 22:39	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/08/23 22:39	1
Bromoform	ND		1.0	0.40	ug/L			08/08/23 22:39	1
Bromomethane	ND		1.0	0.54	ug/L			08/08/23 22:39	1
Carbon disulfide	ND		10	0.40	ug/L			08/08/23 22:39	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			08/08/23 22:39	1
Chloroethane	**2.2**		1.0	0.070	ug/L			08/08/23 22:39	1
Chloroform	ND		1.0	0.30	ug/L			08/08/23 22:39	1

Client Sample ID: 16WC1A
Date Collected: 07/27/23 09:55
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.10	ug/L			08/08/23 22:39	1
Chloroprene	ND		10	0.46	ug/L			08/08/23 22:39	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/08/23 22:39	1
Dibromomethane	ND		1.0	0.30	ug/L			08/08/23 22:39	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/08/23 22:39	1
Diethyl ether	**22**		10	1.1	ug/L			08/08/23 22:39	1
Ethyl methacrylate	ND		10	0.81	ug/L			08/08/23 22:39	1
Ethylbenzene	ND		1.0	0.30	ug/L			08/08/23 22:39	1
Hexachlorobutadiene	ND		1.0	0.40	ug/L			08/08/23 22:39	1
Isobutyl alcohol	ND		200	11	ug/L			08/08/23 22:39	1
m&p-Xylene	ND		2.0	0.40	ug/L			08/08/23 22:39	1
Methacrylonitrile	ND		100	9.7	ug/L			08/08/23 22:39	1
Methyl iodide	ND		10	0.58	ug/L			08/08/23 22:39	1
Methyl methacrylate	ND		10	3.5	ug/L			08/08/23 22:39	1
Methylene Chloride	ND		1.0	0.70	ug/L			08/08/23 22:39	1
Naphthalene	ND		1.0	0.40	ug/L			08/08/23 22:39	1
o-Xylene	ND		1.0	0.40	ug/L			08/08/23 22:39	1
Pentachloroethane	ND		10	1.7	ug/L			08/08/23 22:39	1
Propionitrile	ND	cn	100	10	ug/L			08/08/23 22:39	1
Styrene	ND		1.0	0.30	ug/L			08/08/23 22:39	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/08/23 22:39	1
Tetrahydrofuran	ND		25	2.0	ug/L			08/08/23 22:39	1
Toluene	ND		1.0	0.30	ug/L			08/08/23 22:39	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/08/23 22:39	1
trans-1,3-Dichloropropene	ND		1.0	0.40	ug/L			08/08/23 22:39	1
Trichloroethene	ND		1.0	0.30	ug/L			08/08/23 22:39	1
Trichlorofluoromethane	ND		1.0	0.40	ug/L			08/08/23 22:39	1
Vinyl acetate	ND		10	3.2	ug/L			08/08/23 22:39	1
Vinyl chloride	**0.23**	**J**	1.0	0.20	ug/L			08/08/23 22:39	1
Xylenes, Total	ND		3.0	0.40	ug/L			08/08/23 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*08/08/23 22:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*08/07/23 15:24*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*08/08/23 22:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*08/08/23 22:39*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*08/07/23 15:24*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/07/23 15:24*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/08/23 22:39*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/07/23 15:24*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
1,3-Dinitrobenzene	ND		10	2.3	ug/L		08/03/23 08:20	08/03/23 17:41	1
bis (2-chloroisopropyl) ether	ND	cn	10	0.60	ug/L		08/03/23 08:20	08/03/23 17:41	1
2,3,4,6-Tetrachlorophenol	ND		10	1.8	ug/L		08/03/23 08:20	08/03/23 17:41	1
2,4,5-Trichlorophenol	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
2,4,6-Trichlorophenol	ND	F1	10	1.8	ug/L		08/03/23 08:20	08/03/23 17:41	1
2,4-Dichlorophenol	ND	F1	10	1.5	ug/L		08/03/23 08:20	08/03/23 17:41	1

Client Sample ID: 16WC1A
Date Collected: 07/27/23 09:55
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-4
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 17:41	1
2,6-Dichlorophenol	ND	F1	10	1.4	ug/L		08/03/23 08:20	08/03/23 17:41	1
2,6-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 17:41	1
2-Chloronaphthalene	ND		10	0.50	ug/L		08/03/23 08:20	08/03/23 17:41	1
2-Chlorophenol	ND	F1	10	1.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
2-Methylnaphthalene	ND		10	0.29	ug/L		08/03/23 08:20	08/03/23 17:41	1
o-Cresol	ND		10	0.81	ug/L		08/03/23 08:20	08/03/23 17:41	1
2-Nitroaniline	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
2-Nitrophenol	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 17:41	1
4-Bromophenyl-phenylether	ND		10	0.56	ug/L		08/03/23 08:20	08/03/23 17:41	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
4-Chlorophenyl-phenyl ether	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 17:41	1
m & p-Cresol	ND		20	2.4	ug/L		08/03/23 08:20	08/03/23 17:41	1
4-Nitroaniline	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 17:41	1
5-Nitro-o-toluidine	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
Bis(2-ethylhexyl) phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
Acenaphthene	ND		10	0.35	ug/L		08/03/23 08:20	08/03/23 17:41	1
Acenaphthylene	ND		10	0.48	ug/L		08/03/23 08:20	08/03/23 17:41	1
Anthracene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 17:41	1
Benzo[a]anthracene	ND		10	0.45	ug/L		08/03/23 08:20	08/03/23 17:41	1
Benzo[a]pyrene	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 17:41	1
Benzo[b]fluoranthene	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 17:41	1
Benzo[g,h,i]perylene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 17:41	1
Benzo[k]fluoranthene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 17:41	1
Hexachloropropene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
Chrysene	ND		10	0.31	ug/L		08/03/23 08:20	08/03/23 17:41	1
Diallate	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
Dibenz(a,h)anthracene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 17:41	1
Dibenzofuran	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 17:41	1
Diethyl phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
Dimethoate	ND	*1	10	3.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
Ethyl methanesulfonate	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 17:41	1
Fluoranthene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 17:41	1
Fluorene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 17:41	1
Hexachlorobenzene	ND		10	0.71	ug/L		08/03/23 08:20	08/03/23 17:41	1
Indeno[1,2,3-cd]pyrene	ND		10	0.15	ug/L		08/03/23 08:20	08/03/23 17:41	1
Isodrin	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 17:41	1
Kepone	ND	*- *1 cn	50	25	ug/L		08/03/23 08:20	08/03/23 17:41	1
Sulfotepp	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 17:41	1
N-Nitrosodiethylamine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
N-Nitrosodimethylamine	ND	cn	10	2.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58	ug/L		08/03/23 08:20	08/03/23 17:41	1
N-Nitrosomorpholine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 17:41	1
N-Nitrosopiperidine	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 17:41	1
Nitrobenzene	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 17:41	1
o,o',o''-Triethylphosphorothioate	ND		10	2.6	ug/L		08/03/23 08:20	08/03/23 17:41	1
Pentachlorobenzene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 17:41	1
Phenacetin	ND		10	1.4	ug/L		08/03/23 08:20	08/03/23 17:41	1
Pentachlorophenol	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 17:41	1

Client Sample ID: 16WC1A
Lab Sample ID: 410-136864-4
Date Collected: 07/27/23 09:55
Matrix: Water
Date Received: 07/28/23 09:25

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 17:41	1
Phenol	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 17:41	1
Phorate	ND		10	2.5	ug/L		08/03/23 08:20	08/03/23 17:41	1
Pyrene	ND		10	0.41	ug/L		08/03/23 08:20	08/03/23 17:41	1
Safrole, Total	ND		10	2.2	ug/L		08/03/23 08:20	08/03/23 17:41	1
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 17:41	1
a,a-Dimethylphenethylamine	ND	*- cn	50	5.0	ug/L		08/03/23 08:20	08/03/23 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*41*		*13 - 138*	*08/03/23 08:20*	*08/03/23 17:41*	*1*
2-Fluorobiphenyl (Surr)	*83*		*44 - 120*	*08/03/23 08:20*	*08/03/23 17:41*	*1*
2-Fluorophenol (Surr)	*14*		*10 - 120*	*08/03/23 08:20*	*08/03/23 17:41*	*1*
Nitrobenzene-d5 (Surr)	*74*		*31 - 120*	*08/03/23 08:20*	*08/03/23 17:41*	*1*
p-Terphenyl-d14 (Surr)	*93*		*30 - 125*	*08/03/23 08:20*	*08/03/23 17:41*	*1*
Phenol-d5 (Surr)	*22*		*10 - 120*	*08/03/23 08:20*	*08/03/23 17:41*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.60	ug/L		08/03/23 03:28	08/10/23 13:07	1
Arsenic	**5.3**	**J**	10	2.0	ug/L		08/03/23 03:28	08/10/23 13:07	1
Barium	**510**		10	1.3	ug/L		08/03/23 03:28	08/10/23 13:07	1
Beryllium	ND		1.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:07	1
Cadmium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:07	1
Chromium	ND		5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:07	1
Cobalt	**15**		5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:07	1
Copper	ND		5.0	1.7	ug/L		08/03/23 03:28	08/10/23 13:07	1
Lead	ND		3.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:07	1
Nickel	**15**	**^2**	10	2.0	ug/L		08/03/23 03:28	08/10/23 13:07	1
Selenium	ND		10	3.0	ug/L		08/03/23 03:28	08/10/23 13:07	1
Silver	ND		2.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:07	1
Thallium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/16/23 11:22	1
Zinc	**11**	**J**	30	7.3	ug/L		08/03/23 03:28	08/10/23 13:07	1
Vanadium	ND		10	2.5	ug/L		08/03/23 03:28	08/10/23 13:07	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.20	ug/L		08/03/23 05:59	08/04/23 09:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND	cn	20	5.0	ug/L		08/10/23 09:15	08/10/23 12:41	1

Client Sample ID: 16WDUP
Lab Sample ID: 410-136864-5
Date Collected: 07/27/23 10:20
Matrix: Water
Date Received: 07/28/23 09:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Propanol	ND		100	50	ug/L			08/07/23 14:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 01:12	1

Client Sample ID: 16WDUP
Date Collected: 07/27/23 10:20
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 01:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40	ug/L			08/09/23 01:12	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:12	1
1,1-Dichloroethane	**3.9**		1.0	0.30	ug/L			08/09/23 01:12	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 01:12	1
1,2,3-Trichloropropane	ND		1.0	0.30	ug/L			08/09/23 01:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.60	ug/L			08/09/23 01:12	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.40	ug/L			08/09/23 01:12	1
1,2-Dibromoethane	ND		1.0	0.30	ug/L			08/09/23 01:12	1
1,2-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 01:12	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:12	1
1,2-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 01:12	1
1,3-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 01:12	1
1,3-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 01:12	1
1,4-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 01:12	1
1,4-Dioxane	ND		200	45	ug/L			08/09/23 01:12	1
2-Butanone	ND		10	1.7	ug/L			08/09/23 01:12	1
2-Hexanone	ND		10	2.0	ug/L			08/09/23 01:12	1
4-Methyl-2-pentanone	ND		10	2.0	ug/L			08/09/23 01:12	1
Acetone	ND		10	2.0	ug/L			08/09/23 01:12	1
Acetonitrile	ND		100	31	ug/L			08/09/23 01:12	1
Acrylonitrile	ND		10	1.1	ug/L			08/09/23 01:12	1
Allyl chloride	ND		10	1.0	ug/L			08/09/23 01:12	1
Benzene	**0.33**	**J**	1.0	0.30	ug/L			08/09/23 01:12	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/09/23 01:12	1
Bromoform	ND		1.0	0.40	ug/L			08/09/23 01:12	1
Bromomethane	ND		1.0	0.54	ug/L			08/09/23 01:12	1
Carbon disulfide	ND		10	0.40	ug/L			08/09/23 01:12	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			08/09/23 01:12	1
Chloroethane	**2.1**		1.0	0.070	ug/L			08/09/23 01:12	1
Chloroform	ND		1.0	0.30	ug/L			08/09/23 01:12	1
Chloromethane	ND		1.0	0.10	ug/L			08/09/23 01:12	1
Chloroprene	ND		10	0.46	ug/L			08/09/23 01:12	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/09/23 01:12	1
Dibromomethane	ND		1.0	0.30	ug/L			08/09/23 01:12	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/09/23 01:12	1
Diethyl ether	**21**		10	1.1	ug/L			08/09/23 01:12	1
Ethyl methacrylate	ND		10	0.81	ug/L			08/09/23 01:12	1
Ethylbenzene	ND		1.0	0.30	ug/L			08/09/23 01:12	1
Hexachlorobutadiene	ND		1.0	0.40	ug/L			08/09/23 01:12	1
Isobutyl alcohol	ND		200	11	ug/L			08/09/23 01:12	1
m&p-Xylene	ND		2.0	0.40	ug/L			08/09/23 01:12	1
Methacrylonitrile	ND		100	9.7	ug/L			08/09/23 01:12	1
Methyl iodide	ND		10	0.58	ug/L			08/09/23 01:12	1
Methyl methacrylate	ND		10	3.5	ug/L			08/09/23 01:12	1
Methylene Chloride	ND		1.0	0.70	ug/L			08/09/23 01:12	1
Naphthalene	ND		1.0	0.40	ug/L			08/09/23 01:12	1
o-Xylene	ND		1.0	0.40	ug/L			08/09/23 01:12	1

Client Sample ID: 16WDUP
Date Collected: 07/27/23 10:20
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloroethane	ND		10	1.7	ug/L			08/09/23 01:12	1
Propionitrile	ND	cn	100	10	ug/L			08/09/23 01:12	1
Styrene	ND		1.0	0.30	ug/L			08/09/23 01:12	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/09/23 01:12	1
Tetrahydrofuran	ND		25	2.0	ug/L			08/09/23 01:12	1
Toluene	ND		1.0	0.30	ug/L			08/09/23 01:12	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 01:12	1
trans-1,3-Dichloropropene	ND		1.0	0.40	ug/L			08/09/23 01:12	1
Trichloroethene	ND		1.0	0.30	ug/L			08/09/23 01:12	1
Trichlorofluoromethane	ND		1.0	0.40	ug/L			08/09/23 01:12	1
Vinyl acetate	ND		10	3.2	ug/L			08/09/23 01:12	1
Vinyl chloride	**0.20**	**J**	1.0	0.20	ug/L			08/09/23 01:12	1
Xylenes, Total	ND		3.0	0.40	ug/L			08/09/23 01:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*80 - 120*		*08/09/23 01:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*08/07/23 14:40*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*08/09/23 01:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*08/09/23 01:12*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*08/07/23 14:40*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*08/07/23 14:40*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*08/09/23 01:12*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/07/23 14:40*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
1,3-Dinitrobenzene	ND		10	2.3	ug/L		08/03/23 08:20	08/03/23 19:55	1
bis (2-chloroisopropyl) ether	ND	cn	10	0.61	ug/L		08/03/23 08:20	08/03/23 19:55	1
2,3,4,6-Tetrachlorophenol	ND		10	1.8	ug/L		08/03/23 08:20	08/03/23 19:55	1
2,4,5-Trichlorophenol	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
2,4,6-Trichlorophenol	ND		10	1.8	ug/L		08/03/23 08:20	08/03/23 19:55	1
2,4-Dichlorophenol	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 19:55	1
2,4-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 19:55	1
2,6-Dichlorophenol	ND		10	1.4	ug/L		08/03/23 08:20	08/03/23 19:55	1
2,6-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 19:55	1
2-Chloronaphthalene	ND		10	0.50	ug/L		08/03/23 08:20	08/03/23 19:55	1
2-Chlorophenol	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
2-Methylnaphthalene	ND		10	0.29	ug/L		08/03/23 08:20	08/03/23 19:55	1
o-Cresol	ND		10	0.81	ug/L		08/03/23 08:20	08/03/23 19:55	1
2-Nitroaniline	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
2-Nitrophenol	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 19:55	1
4-Bromophenyl-phenylether	ND		10	0.56	ug/L		08/03/23 08:20	08/03/23 19:55	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
4-Chlorophenyl-phenyl ether	ND		10	0.61	ug/L		08/03/23 08:20	08/03/23 19:55	1
m & p-Cresol	ND		20	2.4	ug/L		08/03/23 08:20	08/03/23 19:55	1
4-Nitroaniline	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 19:55	1
5-Nitro-o-toluidine	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
Bis(2-ethylhexyl) phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
Acenaphthene	ND		10	0.35	ug/L		08/03/23 08:20	08/03/23 19:55	1

Client Sample ID: 16WDUP
Date Collected: 07/27/23 10:20
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-5
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		10	0.48	ug/L		08/03/23 08:20	08/03/23 19:55	1
Anthracene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 19:55	1
Benzo[a]anthracene	ND		10	0.45	ug/L		08/03/23 08:20	08/03/23 19:55	1
Benzo[a]pyrene	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 19:55	1
Benzo[b]fluoranthene	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 19:55	1
Benzo[g,h,i]perylene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 19:55	1
Benzo[k]fluoranthene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 19:55	1
Hexachloropropene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
Chrysene	ND		10	0.31	ug/L		08/03/23 08:20	08/03/23 19:55	1
Diallate	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
Dibenz(a,h)anthracene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 19:55	1
Dibenzofuran	ND		10	0.61	ug/L		08/03/23 08:20	08/03/23 19:55	1
Diethyl phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
Dimethoate	ND	*1	10	3.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
Ethyl methanesulfonate	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 19:55	1
Fluoranthene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 19:55	1
Fluorene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 19:55	1
Hexachlorobenzene	ND		10	0.71	ug/L		08/03/23 08:20	08/03/23 19:55	1
Indeno[1,2,3-cd]pyrene	ND		10	0.15	ug/L		08/03/23 08:20	08/03/23 19:55	1
Isodrin	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 19:55	1
Kepone	ND	*- *1 cn	50	25	ug/L		08/03/23 08:20	08/03/23 19:55	1
Sulfotepp	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 19:55	1
N-Nitrosodiethylamine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
N-Nitrosodimethylamine	ND	cn	10	2.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.59	ug/L		08/03/23 08:20	08/03/23 19:55	1
N-Nitrosomorpholine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
N-Nitrosopiperidine	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 19:55	1
Nitrobenzene	ND		10	0.61	ug/L		08/03/23 08:20	08/03/23 19:55	1
o,o',o''-Triethylphosphorothioate	ND		10	2.6	ug/L		08/03/23 08:20	08/03/23 19:55	1
Pentachlorobenzene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 19:55	1
Phenacetin	ND		10	1.4	ug/L		08/03/23 08:20	08/03/23 19:55	1
Pentachlorophenol	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 19:55	1
Phenanthrene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 19:55	1
Phenol	ND		10	0.61	ug/L		08/03/23 08:20	08/03/23 19:55	1
Phorate	ND		10	2.5	ug/L		08/03/23 08:20	08/03/23 19:55	1
Pyrene	ND		10	0.41	ug/L		08/03/23 08:20	08/03/23 19:55	1
Safrole, Total	ND		10	2.2	ug/L		08/03/23 08:20	08/03/23 19:55	1
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 19:55	1
a,a-Dimethylphenethylamine	ND	*- cn	50	5.0	ug/L		08/03/23 08:20	08/03/23 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*29*		*13 - 138*	*08/03/23 08:20*	*08/03/23 19:55*	*1*
2-Fluorobiphenyl (Surr)	*72*		*44 - 120*	*08/03/23 08:20*	*08/03/23 19:55*	*1*
2-Fluorophenol (Surr)	*11*		*10 - 120*	*08/03/23 08:20*	*08/03/23 19:55*	*1*
Nitrobenzene-d5 (Surr)	*61*		*31 - 120*	*08/03/23 08:20*	*08/03/23 19:55*	*1*
p-Terphenyl-d14 (Surr)	*72*		*30 - 125*	*08/03/23 08:20*	*08/03/23 19:55*	*1*
Phenol-d5 (Surr)	*16*		*10 - 120*	*08/03/23 08:20*	*08/03/23 19:55*	*1*

Client Sample ID: 16WDUP
Lab Sample ID: 410-136864-5

Date Collected: 07/27/23 10:20
Matrix: Water
Date Received: 07/28/23 09:25

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.60	ug/L		08/03/23 03:28	08/10/23 13:33	1
Arsenic	**5.1**	**J**	10	2.0	ug/L		08/03/23 03:28	08/10/23 13:33	1
Barium	**520**		10	1.3	ug/L		08/03/23 03:28	08/10/23 13:33	1
Beryllium	ND		1.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:33	1
Cadmium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:33	1
Chromium	ND		5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:33	1
Cobalt	**15**	**^2**	5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:33	1
Copper	ND		5.0	1.7	ug/L		08/03/23 03:28	08/10/23 13:33	1
Lead	ND		3.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:33	1
Nickel	**15**	**^2**	10	2.0	ug/L		08/03/23 03:28	08/10/23 13:33	1
Selenium	ND		10	3.0	ug/L		08/03/23 03:28	08/10/23 13:33	1
Silver	ND		2.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:33	1
Thallium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:33	1
Zinc	**12**	**J**	30	7.3	ug/L		08/03/23 03:28	08/10/23 13:33	1
Vanadium	ND		10	2.5	ug/L		08/03/23 03:28	08/10/23 13:33	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.20	ug/L		08/03/23 06:08	08/04/23 12:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND	cn	20	5.0	ug/L		08/10/23 09:15	08/10/23 12:44	1

Client Sample ID: 16WC1B
Lab Sample ID: 410-136864-6

Date Collected: 07/26/23 12:05
Matrix: Water
Date Received: 07/28/23 09:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Propanol	ND		100	50	ug/L			08/07/23 15:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40	ug/L			08/09/23 01:34	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 01:34	1
1,2,3-Trichloropropane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.60	ug/L			08/09/23 01:34	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.40	ug/L			08/09/23 01:34	1
1,2-Dibromoethane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
1,2-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 01:34	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
1,2-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 01:34	1
1,3-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 01:34	1
1,3-Dichloropropane	ND		1.0	0.40	ug/L			08/09/23 01:34	1
1,4-Dichlorobenzene	ND		1.0	0.40	ug/L			08/09/23 01:34	1
1,4-Dioxane	ND		200	45	ug/L			08/09/23 01:34	1
2-Butanone	ND		10	1.7	ug/L			08/09/23 01:34	1

Client Sample ID: 16WC1B
Date Collected: 07/26/23 12:05
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		10	2.0	ug/L			08/09/23 01:34	1
4-Methyl-2-pentanone	ND		10	2.0	ug/L			08/09/23 01:34	1
Acetone	ND		10	2.0	ug/L			08/09/23 01:34	1
Acetonitrile	ND		100	31	ug/L			08/09/23 01:34	1
Acrylonitrile	ND		10	1.1	ug/L			08/09/23 01:34	1
Allyl chloride	ND		10	1.0	ug/L			08/09/23 01:34	1
Benzene	ND		1.0	0.30	ug/L			08/09/23 01:34	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
Bromoform	ND		1.0	0.40	ug/L			08/09/23 01:34	1
Bromomethane	ND		1.0	0.54	ug/L			08/09/23 01:34	1
Carbon disulfide	ND		10	0.40	ug/L			08/09/23 01:34	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			08/09/23 01:34	1
Chloroethane	ND		1.0	0.070	ug/L			08/09/23 01:34	1
Chloroform	ND		1.0	0.30	ug/L			08/09/23 01:34	1
Chloromethane	ND		1.0	0.10	ug/L			08/09/23 01:34	1
Chloroprene	ND		10	0.46	ug/L			08/09/23 01:34	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/09/23 01:34	1
Dibromomethane	ND		1.0	0.30	ug/L			08/09/23 01:34	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/09/23 01:34	1
Diethyl ether	ND		10	1.1	ug/L			08/09/23 01:34	1
Ethyl methacrylate	ND		10	0.81	ug/L			08/09/23 01:34	1
Ethylbenzene	ND		1.0	0.30	ug/L			08/09/23 01:34	1
Hexachlorobutadiene	ND		1.0	0.40	ug/L			08/09/23 01:34	1
Isobutyl alcohol	ND		200	11	ug/L			08/09/23 01:34	1
m&p-Xylene	ND		2.0	0.40	ug/L			08/09/23 01:34	1
Methacrylonitrile	ND		100	9.7	ug/L			08/09/23 01:34	1
Methyl iodide	ND		10	0.58	ug/L			08/09/23 01:34	1
Methyl methacrylate	ND		10	3.5	ug/L			08/09/23 01:34	1
Methylene Chloride	ND		1.0	0.70	ug/L			08/09/23 01:34	1
Naphthalene	ND		1.0	0.40	ug/L			08/09/23 01:34	1
o-Xylene	ND		1.0	0.40	ug/L			08/09/23 01:34	1
Pentachloroethane	ND		10	1.7	ug/L			08/09/23 01:34	1
Propionitrile	ND	cn	100	10	ug/L			08/09/23 01:34	1
Styrene	ND		1.0	0.30	ug/L			08/09/23 01:34	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/09/23 01:34	1
Tetrahydrofuran	ND		25	2.0	ug/L			08/09/23 01:34	1
Toluene	ND		1.0	0.30	ug/L			08/09/23 01:34	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/09/23 01:34	1
trans-1,3-Dichloropropene	ND		1.0	0.40	ug/L			08/09/23 01:34	1
Trichloroethene	ND		1.0	0.30	ug/L			08/09/23 01:34	1
Trichlorofluoromethane	ND		1.0	0.40	ug/L			08/09/23 01:34	1
Vinyl acetate	ND		10	3.2	ug/L			08/09/23 01:34	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/09/23 01:34	1
Xylenes, Total	ND		3.0	0.40	ug/L			08/09/23 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*08/09/23 01:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*08/07/23 15:02*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*08/09/23 01:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*08/09/23 01:34*	*1*

Client Sample ID: 16WC1B
Date Collected: 07/26/23 12:05
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*80 - 120*		*08/07/23 15:02*	*1*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*08/07/23 15:02*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/09/23 01:34*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/07/23 15:02*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
1,3-Dinitrobenzene	ND		10	2.3	ug/L		08/02/23 15:28	08/03/23 03:43	1
bis (2-chloroisopropyl) ether	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:43	1
2,3,4,6-Tetrachlorophenol	ND		10	1.8	ug/L		08/02/23 15:28	08/03/23 03:43	1
2,4,5-Trichlorophenol	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
2,4,6-Trichlorophenol	ND		10	1.8	ug/L		08/02/23 15:28	08/03/23 03:43	1
2,4-Dichlorophenol	ND		10	1.5	ug/L		08/02/23 15:28	08/03/23 03:43	1
2,4-Dinitrotoluene	ND		10	2.1	ug/L		08/02/23 15:28	08/03/23 03:43	1
2,6-Dichlorophenol	ND		10	1.4	ug/L		08/02/23 15:28	08/03/23 03:43	1
2,6-Dinitrotoluene	ND		10	2.1	ug/L		08/02/23 15:28	08/03/23 03:43	1
2-Chloronaphthalene	ND		10	0.50	ug/L		08/02/23 15:28	08/03/23 03:43	1
2-Chlorophenol	ND		10	1.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
2-Methylnaphthalene	ND		10	0.29	ug/L		08/02/23 15:28	08/03/23 03:43	1
o-Cresol	ND		10	0.81	ug/L		08/02/23 15:28	08/03/23 03:43	1
2-Nitroaniline	ND		10	1.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
2-Nitrophenol	ND		10	1.2	ug/L		08/02/23 15:28	08/03/23 03:43	1
4-Bromophenyl-phenylether	ND		10	0.56	ug/L		08/02/23 15:28	08/03/23 03:43	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
4-Chlorophenyl-phenyl ether	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:43	1
m & p-Cresol	ND		20	2.4	ug/L		08/02/23 15:28	08/03/23 03:43	1
4-Nitroaniline	ND		10	1.5	ug/L		08/02/23 15:28	08/03/23 03:43	1
5-Nitro-o-toluidine	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
Bis(2-ethylhexyl) phthalate	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
Acenaphthene	ND		10	0.35	ug/L		08/02/23 15:28	08/03/23 03:43	1
Acenaphthylene	ND		10	0.48	ug/L		08/02/23 15:28	08/03/23 03:43	1
Anthracene	ND		10	0.52	ug/L		08/02/23 15:28	08/03/23 03:43	1
Benzo[a]anthracene	ND		10	0.45	ug/L		08/02/23 15:28	08/03/23 03:43	1
Benzo[a]pyrene	ND		10	1.5	ug/L		08/02/23 15:28	08/03/23 03:43	1
Benzo[b]fluoranthene	ND		10	1.2	ug/L		08/02/23 15:28	08/03/23 03:43	1
Benzo[g,h,i]perylene	ND		10	0.42	ug/L		08/02/23 15:28	08/03/23 03:43	1
Benzo[k]fluoranthene	ND		10	1.6	ug/L		08/02/23 15:28	08/03/23 03:43	1
Hexachloropropene	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
Chrysene	ND		10	0.31	ug/L		08/02/23 15:28	08/03/23 03:43	1
Diallate	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
Dibenz(a,h)anthracene	ND		10	0.38	ug/L		08/02/23 15:28	08/03/23 03:43	1
Dibenzofuran	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:43	1
Diethyl phthalate	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
Dimethoate	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
Ethyl methanesulfonate	ND		10	1.1	ug/L		08/02/23 15:28	08/03/23 03:43	1
Fluoranthene	ND		10	0.42	ug/L		08/02/23 15:28	08/03/23 03:43	1
Fluorene	ND		10	0.38	ug/L		08/02/23 15:28	08/03/23 03:43	1
Hexachlorobenzene	ND		10	0.70	ug/L		08/02/23 15:28	08/03/23 03:43	1

Client Sample ID: 16WC1B

Date Collected: 07/26/23 12:05
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-6

Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		10	0.15	ug/L		08/02/23 15:28	08/03/23 03:43	1
Isodrin	ND		10	1.1	ug/L		08/02/23 15:28	08/03/23 03:43	1
Kepone	ND		50	25	ug/L		08/02/23 15:28	08/03/23 03:43	1
Sulfotepp	ND		10	2.4	ug/L		08/02/23 15:28	08/03/23 03:43	1
N-Nitrosodiethylamine	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58	ug/L		08/02/23 15:28	08/03/23 03:43	1
N-Nitrosomorpholine	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
N-Nitrosopiperidine	ND		10	1.1	ug/L		08/02/23 15:28	08/03/23 03:43	1
Nitrobenzene	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:43	1
o,o',o''-Triethylphosphorothioate	ND		10	2.6	ug/L		08/02/23 15:28	08/03/23 03:43	1
Pentachlorobenzene	ND		10	1.6	ug/L		08/02/23 15:28	08/03/23 03:43	1
Phenacetin	ND		10	1.4	ug/L		08/02/23 15:28	08/03/23 03:43	1
Pentachlorophenol	ND		10	3.0	ug/L		08/02/23 15:28	08/03/23 03:43	1
Phenanthrene	ND		10	0.52	ug/L		08/02/23 15:28	08/03/23 03:43	1
Phenol	ND		10	0.60	ug/L		08/02/23 15:28	08/03/23 03:43	1
Phorate	ND		10	2.5	ug/L		08/02/23 15:28	08/03/23 03:43	1
Pyrene	ND		10	0.41	ug/L		08/02/23 15:28	08/03/23 03:43	1
Safrole, Total	ND		10	2.2	ug/L		08/02/23 15:28	08/03/23 03:43	1
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4	ug/L		08/02/23 15:28	08/03/23 03:43	1
a,a-Dimethylphenethylamine	ND	*- cn	50	5.0	ug/L		08/02/23 15:28	08/03/23 03:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*59*		*13 - 138*	*08/02/23 15:28*	*08/03/23 03:43*	*1*
2-Fluorobiphenyl (Surr)	*75*		*44 - 120*	*08/02/23 15:28*	*08/03/23 03:43*	*1*
2-Fluorophenol (Surr)	*31*		*10 - 120*	*08/02/23 15:28*	*08/03/23 03:43*	*1*
Nitrobenzene-d5 (Surr)	*69*		*31 - 120*	*08/02/23 15:28*	*08/03/23 03:43*	*1*
p-Terphenyl-d14 (Surr)	*62*		*30 - 125*	*08/02/23 15:28*	*08/03/23 03:43*	*1*
Phenol-d5 (Surr)	*22*		*10 - 120*	*08/02/23 15:28*	*08/03/23 03:43*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.60	ug/L		08/03/23 03:28	08/10/23 13:27	1
Arsenic	ND		10	2.0	ug/L		08/03/23 03:28	08/10/23 13:27	1
Barium	**89**		10	1.3	ug/L		08/03/23 03:28	08/10/23 13:27	1
Beryllium	ND		1.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:27	1
Cadmium	**0.71**	**J**	1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:27	1
Chromium	**3.3**	**J**	5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:27	1
Cobalt	**3.5**	**J ^2**	5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:27	1
Copper	**2.9**	**J**	5.0	1.7	ug/L		08/03/23 03:28	08/10/23 13:27	1
Lead	ND		3.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:27	1
Nickel	**4.7**	**J**	10	2.0	ug/L		08/03/23 03:28	08/11/23 08:55	1
Selenium	ND		10	3.0	ug/L		08/03/23 03:28	08/10/23 13:27	1
Silver	**0.34**	**J**	2.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:27	1
Thallium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:27	1
Zinc	**11**	**J**	30	7.3	ug/L		08/03/23 03:28	08/10/23 13:27	1
Vanadium	ND		10	2.5	ug/L		08/03/23 03:28	08/10/23 13:27	1

Client Sample ID: 16WC1B
Lab Sample ID: 410-136864-6

Date Collected: 07/26/23 12:05
Matrix: Water
Date Received: 07/28/23 09:25

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.25**	**J**	2.0	0.20	ug/L		08/03/23 06:08	08/04/23 12:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND	cn	20	5.0	ug/L		08/08/23 16:00	08/09/23 13:29	1

Default Detection Limits

Client: TRC, Engineers, Inc.
Job ID: 410-136864-1
Project/Site: RFAAP, Radford HWMU16

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	RL	MDL	Units
1,1,1,2-Tetrachloroethane	1.0	0.30	ug/L
1,1,1-Trichloroethane	1.0	0.30	ug/L
1,1,2,2-Tetrachloroethane	1.0	0.30	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	0.40	ug/L
1,1,2-Trichloroethane	1.0	0.30	ug/L
1,1-Dichloroethane	1.0	0.30	ug/L
1,1-Dichloroethene	1.0	0.30	ug/L
1,2,3-Trichloropropane	1.0	0.30	ug/L
1,2,4-Trichlorobenzene	1.0	0.60	ug/L
1,2-Dibromo-3-Chloropropane	1.0	0.40	ug/L
1,2-Dibromoethane	1.0	0.30	ug/L
1,2-Dichlorobenzene	1.0	0.40	ug/L
1,2-Dichloroethane	1.0	0.30	ug/L
1,2-Dichloropropane	1.0	0.40	ug/L
1,3-Dichlorobenzene	1.0	0.40	ug/L
1,3-Dichloropropane	1.0	0.40	ug/L
1,4-Dichlorobenzene	1.0	0.40	ug/L
1,4-Dioxane	200	45	ug/L
2-Butanone	10	1.7	ug/L
2-Hexanone	10	2.0	ug/L
2-Propanol	100	50	ug/L
4-Methyl-2-pentanone	10	2.0	ug/L
Acetone	10	2.0	ug/L
Acetonitrile	100	31	ug/L
Acrylonitrile	10	1.1	ug/L
Allyl chloride	10	1.0	ug/L
Benzene	1.0	0.30	ug/L
Bromodichloromethane	1.0	0.30	ug/L
Bromoform	1.0	0.40	ug/L
Bromomethane	1.0	0.54	ug/L
Carbon disulfide	10	0.40	ug/L
Carbon tetrachloride	1.0	0.30	ug/L
Chloroethane	1.0	0.070	ug/L
Chloroform	1.0	0.30	ug/L
Chloromethane	1.0	0.10	ug/L
Chloroprene	10	0.46	ug/L
Dibromochloromethane	1.0	0.40	ug/L
Dibromomethane	1.0	0.30	ug/L
Dichlorodifluoromethane	1.0	0.40	ug/L
Diethyl ether	10	1.1	ug/L
Ethyl methacrylate	10	0.81	ug/L
Ethylbenzene	1.0	0.30	ug/L
Hexachlorobutadiene	1.0	0.40	ug/L
Isobutyl alcohol	200	11	ug/L
m&p-Xylene	2.0	0.40	ug/L
Methacrylonitrile	100	9.7	ug/L
Methyl iodide	10	0.58	ug/L
Methyl methacrylate	10	3.5	ug/L
Methylene Chloride	1.0	0.70	ug/L
Naphthalene	1.0	0.40	ug/L
o-Xylene	1.0	0.40	ug/L
Pentachloroethane	10	1.7	ug/L
Propionitrile	100	10	ug/L

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	RL	MDL	Units
Styrene	1.0	0.30	ug/L
Tetrachloroethene	1.0	0.30	ug/L
Tetrahydrofuran	25	2.0	ug/L
Toluene	1.0	0.30	ug/L
trans-1,2-Dichloroethene	1.0	0.30	ug/L
trans-1,3-Dichloropropene	1.0	0.40	ug/L
Trichloroethene	1.0	0.30	ug/L
Trichlorofluoromethane	1.0	0.40	ug/L
Vinyl acetate	10	3.2	ug/L
Vinyl chloride	1.0	0.20	ug/L
Xylenes, Total	3.0	0.40	ug/L

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Prep: 3510C

Analyte	RL	MDL	Units
1,2,4,5-Tetrachlorobenzene	10	2.0	ug/L
1,3-Dinitrobenzene	10	2.3	ug/L
2,3,4,6-Tetrachlorophenol	10	1.8	ug/L
2,4,5-Trichlorophenol	10	2.0	ug/L
2,4,6-Trichlorophenol	10	1.8	ug/L
2,4-Dichlorophenol	10	1.5	ug/L
2,4-Dinitrotoluene	10	2.1	ug/L
2,6-Dichlorophenol	10	1.4	ug/L
2,6-Dinitrotoluene	10	2.1	ug/L
2-Chloronaphthalene	10	0.50	ug/L
2-Chlorophenol	10	1.0	ug/L
2-Methylnaphthalene	10	0.29	ug/L
2-Nitroaniline	10	1.0	ug/L
2-Nitrophenol	10	1.2	ug/L
4-Bromophenyl-phenylether	10	0.56	ug/L
4-Chloro-3-methylphenol	10	1.0	ug/L
4-Chlorophenyl-phenyl ether	10	0.60	ug/L
4-Nitroaniline	10	1.5	ug/L
5-Nitro-o-toluidine	10	2.0	ug/L
a,a-Dimethylphenethylamine	50	5.0	ug/L
Acenaphthene	10	0.35	ug/L
Acenaphthylene	10	0.48	ug/L
Anthracene	10	0.52	ug/L
Benzo[a]anthracene	10	0.45	ug/L
Benzo[a]pyrene	10	1.5	ug/L
Benzo[b]fluoranthene	10	1.2	ug/L
Benzo[g,h,i]perylene	10	0.42	ug/L
Benzo[k]fluoranthene	10	1.6	ug/L
bis (2-chloroisopropyl) ether	10	0.60	ug/L
Bis(2-ethylhexyl) phthalate	10	2.0	ug/L
Chrysene	10	0.31	ug/L
Diallate	10	3.0	ug/L
Dibenz(a,h)anthracene	10	0.38	ug/L
Dibenzofuran	10	0.60	ug/L
Diethyl phthalate	10	2.0	ug/L
Dimethoate	10	3.0	ug/L
Ethyl methanesulfonate	10	1.1	ug/L

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Prep: 3510C

Analyte	RL	MDL	Units
Fluoranthene	10	0.42	ug/L
Fluorene	10	0.38	ug/L
Hexachlorobenzene	10	0.70	ug/L
Hexachloropropene	10	2.0	ug/L
Indeno[1,2,3-cd]pyrene	10	0.15	ug/L
Isodrin	10	1.1	ug/L
Kepone	50	25	ug/L
m & p-Cresol	20	2.4	ug/L
Nitrobenzene	10	0.60	ug/L
N-Nitrosodiethylamine	10	3.0	ug/L
N-Nitrosodimethylamine	10	2.0	ug/L
n-Nitrosodiphenylamine(as diphenylamine)	10	0.58	ug/L
N-Nitrosomorpholine	10	3.0	ug/L
N-Nitrosopiperidine	10	1.1	ug/L
o,o',o''-Triethylphosphorothioate	10	2.6	ug/L
O,O-Diethyl O-2-pyrazinyl phosphorothioate	10	2.4	ug/L
o-Cresol	10	0.80	ug/L
Pentachlorobenzene	10	1.6	ug/L
Pentachlorophenol	10	3.0	ug/L
Phenacetin	10	1.4	ug/L
Phenanthrene	10	0.52	ug/L
Phenol	10	0.60	ug/L
Phorate	10	2.5	ug/L
Pyrene	10	0.41	ug/L
Safrole, Total	10	2.2	ug/L
Sulfotepp	10	2.4	ug/L

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Prep: 3005A

Analyte	RL	MDL	Units
Antimony	2.0	0.60	ug/L
Arsenic	10	2.0	ug/L
Barium	10	1.3	ug/L
Beryllium	1.0	0.30	ug/L
Cadmium	1.0	0.20	ug/L
Chromium	5.0	1.0	ug/L
Cobalt	5.0	1.0	ug/L
Copper	5.0	1.7	ug/L
Lead	3.0	1.0	ug/L
Nickel	10	2.0	ug/L
Selenium	10	3.0	ug/L
Silver	2.0	0.30	ug/L
Thallium	1.0	0.20	ug/L
Vanadium	10	2.5	ug/L
Zinc	30	7.3	ug/L

Method: 7470A - Mercury (CVAA)

Prep: 7470A

Analyte	RL	MDL	Units
Mercury	2.0	0.20	ug/L

Default Detection Limits

Client: TRC, Engineers, Inc.
Job ID: 410-136864-1
Project/Site: RFAAP, Radford HWMU16

General Chemistry

Prep: 9012B

Analyte	RL	MDL	Units
Cyanide, Total	20	5.0	ug/L

Surrogate Summary

Client: TRC, Engineers, Inc.
Project/Site: RFAAP, Radford HWMU16

Job ID: 410-136864-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	BFB	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-136864-1	16C1	105	111	91	100
410-136864-1	16C1	102	103	90	96
410-136864-1 - DL	16C1	106	103	92	97
410-136864-2	16MW8	108	110	91	99
410-136864-2	16MW8	102	102	90	96
410-136864-3	16MW9	104	110	91	99
410-136864-3	16MW9	103	103	90	99
410-136864-3 - DL	16MW9	104	103	88	97
410-136864-4	16WC1A	108	111	90	98
410-136864-4	16WC1A	104	103	89	95
410-136864-4 MS	16WC1A	103	107	95	103
410-136864-4 MS	16WC1A	106	103	97	100
410-136864-4 MS	16WC1A	100	100	90	95
410-136864-4 MSD	16WC1A	103	105	94	103
410-136864-4 MSD	16WC1A	101	103	97	99
410-136864-4 MSD	16WC1A	102	102	90	96
410-136864-5	16WDUP	104	111	92	100
410-136864-5	16WDUP	103	103	83	96
410-136864-6	16WC1B	106	112	88	99
410-136864-6	16WC1B	103	103	89	95
LCS 410-405099/5	Lab Control Sample	101	103	93	101
LCS 410-405906/5	Lab Control Sample	105	103	99	101
LCS 410-405906/6	Lab Control Sample	99	102	90	97
MB 410-405099/9	Method Blank	103	110	93	100
MB 410-405906/8	Method Blank	104	103	89	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(13-138)	(44-120)	(10-120)	(31-120)	(30-125)	(10-120)
410-136864-1	16C1	68	61	35	53	84	27
410-136864-2	16MW8	74	78	36	72	58	26
410-136864-3	16MW9	71	62	33	52	94	28
410-136864-4	16WC1A	41	83	14	74	93	22
410-136864-4 MS	16WC1A	47	72	25	62	84	31
410-136864-4 MSD	16WC1A	45	78	29	70	87	33
410-136864-5	16WDUP	29	72	11	61	72	16
410-136864-6	16WC1B	59	75	31	69	62	22
LCS 410-403666/2-A	Lab Control Sample	79	78	53	74	83	39
LCS 410-403666/4-A	Lab Control Sample	83	76	48	70	79	33
LCS 410-403918/2-A	Lab Control Sample	69	65	48	58	77	33
LCS 410-403918/3-A	Lab Control Sample	87	81	60	73	97	40

Surrogate Summary

Client: TRC, Engineers, Inc. Job ID: 410-136864-1
Project/Site: RFAAP, Radford HWMU16

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(13-138)	(44-120)	(10-120)	(31-120)	(30-125)	(10-120)
LCSD 410-403666/3-A	Lab Control Sample Dup	79	80	50	76	90	38
LCSD 410-403666/5-A	Lab Control Sample Dup	82	79	45	71	83	30
LCSD 410-403918/4-A	Lab Control Sample Dup	89	79	56	71	90	35
MB 410-403666/1-A	Method Blank	85	82	43	73	86	30
MB 410-403918/1-A	Method Blank	81	69	44	64	98	26

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-405099/9
Matrix: Water
Analysis Batch: 405099

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Propanol	ND		100	50	ug/L			08/07/23 11:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*08/07/23 11:19*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*08/07/23 11:19*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*08/07/23 11:19*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/07/23 11:19*	*1*

Lab Sample ID: LCS 410-405099/5
Matrix: Water
Analysis Batch: 405099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2-Propanol			150	118		ug/L		78	52 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 405099

Client Sample ID: 16WC1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2-Propanol	ND		150	110		ug/L		73	52 - 144		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 410-136864-4 MSD
Matrix: Water
Analysis Batch: 405099

Client Sample ID: 16WC1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Propanol	ND		150	132		ug/L		88	52 - 144	18	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-405906/8
Matrix: Water
Analysis Batch: 405906

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40	ug/L			08/08/23 20:27	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/08/23 20:27	1
1,2,3-Trichloropropane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.60	ug/L			08/08/23 20:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.40	ug/L			08/08/23 20:27	1
1,2-Dibromoethane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
1,2-Dichlorobenzene	ND		1.0	0.40	ug/L			08/08/23 20:27	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
1,2-Dichloropropane	ND		1.0	0.40	ug/L			08/08/23 20:27	1
1,3-Dichlorobenzene	ND		1.0	0.40	ug/L			08/08/23 20:27	1
1,3-Dichloropropane	ND		1.0	0.40	ug/L			08/08/23 20:27	1
1,4-Dichlorobenzene	ND		1.0	0.40	ug/L			08/08/23 20:27	1
1,4-Dioxane	ND		200	45	ug/L			08/08/23 20:27	1
2-Butanone	ND		10	1.7	ug/L			08/08/23 20:27	1
2-Hexanone	ND		10	2.0	ug/L			08/08/23 20:27	1
4-Methyl-2-pentanone	ND		10	2.0	ug/L			08/08/23 20:27	1
Acetone	ND		10	2.0	ug/L			08/08/23 20:27	1
Acetonitrile	ND		100	31	ug/L			08/08/23 20:27	1
Acrylonitrile	ND		10	1.1	ug/L			08/08/23 20:27	1
Allyl chloride	ND		10	1.0	ug/L			08/08/23 20:27	1
Benzene	ND		1.0	0.30	ug/L			08/08/23 20:27	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
Bromoform	ND		1.0	0.40	ug/L			08/08/23 20:27	1
Bromomethane	ND		1.0	0.54	ug/L			08/08/23 20:27	1
Carbon disulfide	ND		10	0.40	ug/L			08/08/23 20:27	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			08/08/23 20:27	1
Chloroethane	ND		1.0	0.070	ug/L			08/08/23 20:27	1
Chloroform	ND		1.0	0.30	ug/L			08/08/23 20:27	1
Chloromethane	ND		1.0	0.10	ug/L			08/08/23 20:27	1
Chloroprene	ND		10	0.46	ug/L			08/08/23 20:27	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/08/23 20:27	1
Dibromomethane	ND		1.0	0.30	ug/L			08/08/23 20:27	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/08/23 20:27	1
Diethyl ether	ND		10	1.1	ug/L			08/08/23 20:27	1
Ethyl methacrylate	ND		10	0.81	ug/L			08/08/23 20:27	1
Ethylbenzene	ND		1.0	0.30	ug/L			08/08/23 20:27	1
Hexachlorobutadiene	ND		1.0	0.40	ug/L			08/08/23 20:27	1
Isobutyl alcohol	ND		200	11	ug/L			08/08/23 20:27	1
m&p-Xylene	ND		2.0	0.40	ug/L			08/08/23 20:27	1
Methacrylonitrile	ND		100	9.7	ug/L			08/08/23 20:27	1
Methyl iodide	ND		10	0.58	ug/L			08/08/23 20:27	1
Methyl methacrylate	ND		10	3.5	ug/L			08/08/23 20:27	1
Methylene Chloride	ND		1.0	0.70	ug/L			08/08/23 20:27	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-405906/8
Matrix: Water
Analysis Batch: 405906

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.40	ug/L			08/08/23 20:27	1
o-Xylene	ND		1.0	0.40	ug/L			08/08/23 20:27	1
Pentachloroethane	ND		10	1.7	ug/L			08/08/23 20:27	1
Propionitrile	ND		100	10	ug/L			08/08/23 20:27	1
Styrene	ND		1.0	0.30	ug/L			08/08/23 20:27	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/08/23 20:27	1
Tetrahydrofuran	ND		25	2.0	ug/L			08/08/23 20:27	1
Toluene	ND		1.0	0.30	ug/L			08/08/23 20:27	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/08/23 20:27	1
trans-1,3-Dichloropropene	ND		1.0	0.40	ug/L			08/08/23 20:27	1
Trichloroethene	ND		1.0	0.30	ug/L			08/08/23 20:27	1
Trichlorofluoromethane	ND		1.0	0.40	ug/L			08/08/23 20:27	1
Vinyl acetate	ND		10	3.2	ug/L			08/08/23 20:27	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/08/23 20:27	1
Xylenes, Total	ND		3.0	0.40	ug/L			08/08/23 20:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*08/08/23 20:27*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*08/08/23 20:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*08/08/23 20:27*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/08/23 20:27*	*1*

Lab Sample ID: LCS 410-405906/5
Matrix: Water
Analysis Batch: 405906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.37		ug/L		107	71 - 134
1,1,1-Trichloroethane	5.00	5.06		ug/L		101	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.12		ug/L		102	75 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	4.73		ug/L		95	75 - 133
1,1,2-Trichloroethane	5.00	5.09		ug/L		102	80 - 120
1,1-Dichloroethane	5.00	4.95		ug/L		99	74 - 120
1,1-Dichloroethene	5.00	4.95		ug/L		99	80 - 131
1,2,3-Trichloropropane	5.00	5.16		ug/L		103	80 - 125
1,2,4-Trichlorobenzene	5.00	4.72		ug/L		94	68 - 122
1,2-Dibromo-3-Chloropropane	5.00	5.11		ug/L		102	56 - 148
1,2-Dibromoethane	5.00	5.25		ug/L		105	80 - 120
1,2-Dichlorobenzene	5.00	4.90		ug/L		98	80 - 120
1,2-Dichloroethane	5.00	4.74		ug/L		95	69 - 122
1,2-Dichloropropane	5.00	5.05		ug/L		101	80 - 120
1,3-Dichlorobenzene	5.00	4.82		ug/L		96	80 - 120
1,3-Dichloropropane	5.00	5.16		ug/L		103	80 - 120
1,4-Dichlorobenzene	5.00	4.95		ug/L		99	80 - 120
1,4-Dioxane	125	118	J	ug/L		95	65 - 169
2-Butanone	62.5	64.6		ug/L		103	59 - 141
2-Hexanone	62.5	58.3		ug/L		93	52 - 140
4-Methyl-2-pentanone	62.5	58.9		ug/L		94	55 - 140

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-405906/5
Matrix: Water
Analysis Batch: 405906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	62.5	60.2		ug/L		96	60 - 146
Acrylonitrile	25.0	27.3		ug/L		109	64 - 139
Allyl chloride	5.00	4.89	J	ug/L		98	51 - 126
Benzene	5.00	5.08		ug/L		102	80 - 120
Bromodichloromethane	5.00	4.99		ug/L		100	73 - 124
Bromoform	5.00	5.06		ug/L		101	49 - 144
Bromomethane	5.00	4.76		ug/L		95	60 - 136
Carbon disulfide	5.00	4.95	J	ug/L		99	67 - 130
Carbon tetrachloride	5.00	5.17		ug/L		103	64 - 141
Chloroethane	5.00	4.91		ug/L		98	63 - 120
Chloroform	5.00	4.95		ug/L		99	80 - 120
Chloromethane	5.00	4.45		ug/L		89	56 - 124
Chloroprene	5.00	4.75	J	ug/L		95	60 - 128
Dibromochloromethane	5.00	5.16		ug/L		103	64 - 138
Dibromomethane	5.00	5.22		ug/L		104	80 - 122
Dichlorodifluoromethane	5.00	5.01		ug/L		100	43 - 123
Diethyl ether	5.01	4.54	J	ug/L		91	72 - 121
Ethyl methacrylate	5.00	4.81	J	ug/L		96	55 - 133
Ethylbenzene	5.00	4.95		ug/L		99	80 - 120
Hexachlorobutadiene	5.00	4.86		ug/L		97	72 - 132
Isobutyl alcohol	125	120	J	ug/L		96	57 - 154
m&p-Xylene	10.0	10.5		ug/L		105	80 - 120
Methacrylonitrile	37.5	37.5	J	ug/L		100	60 - 145
Methyl iodide	5.00	4.89	J	ug/L		98	77 - 120
Methyl methacrylate	5.00	4.44	J	ug/L		89	55 - 139
Methylene Chloride	5.00	4.90		ug/L		98	80 - 120
Naphthalene	5.00	4.53		ug/L		91	64 - 122
o-Xylene	5.00	5.02		ug/L		100	80 - 120
Pentachloroethane	5.00	5.22	J	ug/L		104	68 - 134
Propionitrile	37.5	41.4	J	ug/L		110	63 - 145
Styrene	5.00	5.26		ug/L		105	80 - 120
Tetrachloroethene	5.00	4.98		ug/L		100	80 - 120
Tetrahydrofuran	25.0	25.6		ug/L		102	67 - 137
Toluene	5.00	5.01		ug/L		100	80 - 120
trans-1,2-Dichloroethene	5.00	5.03		ug/L		101	80 - 122
trans-1,3-Dichloropropene	5.00	5.13		ug/L		103	61 - 129
Trichloroethene	5.00	4.86		ug/L		97	80 - 120
Trichlorofluoromethane	5.00	4.91		ug/L		98	62 - 136
Vinyl chloride	5.00	4.77		ug/L		95	60 - 125
Xylenes, Total	15.0	15.5		ug/L		103	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-405906/6
Matrix: Water
Analysis Batch: 405906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetonitrile			18.8	ND		ug/L		109	51 - 160		
Vinyl acetate			12.5	14.4		ug/L		115	38 - 145		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 405906

Client Sample ID: 16WC1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane	ND		5.00	5.85		ug/L		117	71 - 134		
1,1,1-Trichloroethane	ND		5.00	5.77		ug/L		115	78 - 126		
1,1,2,2-Tetrachloroethane	ND		5.00	5.39		ug/L		108	75 - 123		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00	5.96		ug/L		119	75 - 133		
1,1,2-Trichloroethane	ND		5.00	5.31		ug/L		106	80 - 120		
1,1-Dichloroethane	4.2		5.00	9.58		ug/L		109	74 - 120		
1,1-Dichloroethene	ND		5.00	5.71		ug/L		114	80 - 131		
1,2,3-Trichloropropane	ND		5.00	5.39		ug/L		108	80 - 125		
1,2,4-Trichlorobenzene	ND		5.00	5.30		ug/L		106	68 - 122		
1,2-Dibromo-3-Chloropropane	ND		5.00	5.12		ug/L		102	56 - 148		
1,2-Dibromoethane	ND		5.00	5.71		ug/L		114	80 - 120		
1,2-Dichlorobenzene	ND		5.00	5.39		ug/L		108	80 - 120		
1,2-Dichloroethane	ND		5.00	5.04		ug/L		101	69 - 122		
1,2-Dichloropropane	ND		5.00	5.58		ug/L		112	80 - 120		
1,3-Dichlorobenzene	ND		5.00	5.38		ug/L		108	80 - 120		
1,3-Dichloropropane	ND		5.00	5.60		ug/L		112	80 - 120		
1,4-Dichlorobenzene	ND		5.00	5.47		ug/L		109	80 - 120		
1,4-Dioxane	ND		125	134	J	ug/L		107	65 - 169		
2-Butanone	ND		62.6	69.6		ug/L		111	59 - 141		
2-Hexanone	ND		62.6	63.2		ug/L		101	52 - 140		
4-Methyl-2-pentanone	ND		62.6	65.5		ug/L		105	55 - 140		
Acetone	ND		62.6	62.8		ug/L		100	60 - 146		
Acrylonitrile	ND		25.0	29.0		ug/L		116	64 - 139		
Allyl chloride	ND		5.00	5.38	J	ug/L		107	51 - 126		
Benzene	0.37	J	5.00	6.09		ug/L		114	80 - 120		
Bromodichloromethane	ND		5.00	5.42		ug/L		108	73 - 124		
Bromoform	ND		5.00	5.21		ug/L		104	49 - 144		
Bromomethane	ND		5.00	5.22		ug/L		104	60 - 136		
Carbon disulfide	ND		5.00	5.27	J	ug/L		105	67 - 130		
Carbon tetrachloride	ND		5.00	5.99		ug/L		120	64 - 141		
Chloroethane	2.2		5.00	7.55		ug/L		106	63 - 120		
Chloroform	ND		5.00	5.50		ug/L		110	80 - 120		
Chloromethane	ND		5.00	5.23		ug/L		105	80 - 120		

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 405906

Client Sample ID: 16WC1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroprene	ND		5.00	5.52	J	ug/L		110	60 - 128
Dibromochloromethane	ND		5.00	5.44		ug/L		109	64 - 138
Dibromomethane	ND		5.00	5.54		ug/L		111	80 - 122
Dichlorodifluoromethane	ND		5.00	5.97		ug/L		119	43 - 123
Diethyl ether	22		5.01	26.1	E 4	ug/L		76	72 - 121
Ethyl methacrylate	ND		5.00	5.21	J	ug/L		104	55 - 133
Ethylbenzene	ND		5.00	5.63		ug/L		113	80 - 120
Hexachlorobutadiene	ND		5.00	5.63		ug/L		113	72 - 132
Isobutyl alcohol	ND		125	129	J	ug/L		103	57 - 154
m&p-Xylene	ND		10.0	11.7		ug/L		116	80 - 120
Methacrylonitrile	ND		37.5	41.8	J	ug/L		111	60 - 145
Methyl iodide	ND		5.00	5.35	J	ug/L		107	77 - 120
Methyl methacrylate	ND		5.00	5.01	J	ug/L		100	55 - 139
Methylene Chloride	ND		5.00	5.43		ug/L		109	80 - 120
Naphthalene	ND		5.00	4.99		ug/L		100	64 - 122
o-Xylene	ND		5.00	5.66		ug/L		113	80 - 120
Pentachloroethane	ND		5.00	5.76	J	ug/L		115	68 - 134
Propionitrile	ND	cn	37.5	45.2	J	ug/L		120	63 - 145
Styrene	ND		5.00	5.86		ug/L		117	80 - 120
Tetrachloroethene	ND		5.00	5.91		ug/L		118	80 - 120
Tetrahydrofuran	ND		25.0	30.1		ug/L		120	67 - 137
Toluene	ND		5.00	5.69		ug/L		114	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.72		ug/L		114	80 - 122
trans-1,3-Dichloropropene	ND		5.00	5.37		ug/L		107	61 - 129
Trichloroethene	ND		5.00	5.80		ug/L		116	80 - 120
Trichlorofluoromethane	ND		5.00	6.02		ug/L		120	62 - 136
Vinyl chloride	0.23	J	5.00	5.88		ug/L		113	60 - 125
Xylenes, Total	ND		15.0	17.4		ug/L		116	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 405906

Client Sample ID: 16WC1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetonitrile	ND		18.8	ND		ug/L		NC	51 - 160
Vinyl acetate	ND		12.5	14.5		ug/L		116	38 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: 410-136864-4 MSD
Matrix: Water
Analysis Batch: 405906

Client Sample ID: 16WC1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		5.00	5.72		ug/L		114	71 - 134	2	30
1,1,1-Trichloroethane	ND		5.00	5.71		ug/L		114	78 - 126	1	30
1,1,2,2-Tetrachloroethane	ND		5.00	5.35		ug/L		107	75 - 123	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00	5.80		ug/L		116	75 - 133	3	30
1,1,2-Trichloroethane	ND		5.00	5.37		ug/L		107	80 - 120	1	30
1,1-Dichloroethane	4.2		5.00	9.55		ug/L		108	74 - 120	0	30
1,1-Dichloroethene	ND		5.00	5.66		ug/L		113	80 - 131	1	30
1,2,3-Trichloropropane	ND		5.00	5.44		ug/L		109	80 - 125	1	30
1,2,4-Trichlorobenzene	ND		5.00	5.27		ug/L		105	68 - 122	1	30
1,2-Dibromo-3-Chloropropane	ND		5.00	5.28		ug/L		106	56 - 148	3	30
1,2-Dibromoethane	ND		5.00	5.55		ug/L		111	80 - 120	3	30
1,2-Dichlorobenzene	ND		5.00	5.36		ug/L		107	80 - 120	1	30
1,2-Dichloroethane	ND		5.00	5.00		ug/L		100	69 - 122	1	30
1,2-Dichloropropane	ND		5.00	5.49		ug/L		110	80 - 120	2	30
1,3-Dichlorobenzene	ND		5.00	5.32		ug/L		106	80 - 120	1	30
1,3-Dichloropropane	ND		5.00	5.46		ug/L		109	80 - 120	2	30
1,4-Dichlorobenzene	ND		5.00	5.40		ug/L		108	80 - 120	1	30
1,4-Dioxane	ND		125	133	J	ug/L		106	65 - 169	1	30
2-Butanone	ND		62.6	67.0		ug/L		107	59 - 141	4	30
2-Hexanone	ND		62.6	61.5		ug/L		98	52 - 140	3	30
4-Methyl-2-pentanone	ND		62.6	62.0		ug/L		99	55 - 140	5	30
Acetone	ND		62.6	58.8		ug/L		94	60 - 146	7	30
Acrylonitrile	ND		25.0	28.0		ug/L		112	64 - 139	3	30
Allyl chloride	ND		5.00	5.39	J	ug/L		108	51 - 126	0	30
Benzene	0.37	J	5.00	5.93		ug/L		111	80 - 120	3	30
Bromodichloromethane	ND		5.00	5.40		ug/L		108	73 - 124	0	30
Bromoform	ND		5.00	4.99		ug/L		100	49 - 144	4	30
Bromomethane	ND		5.00	5.24		ug/L		105	60 - 136	0	30
Carbon disulfide	ND		5.00	5.20	J	ug/L		104	67 - 130	2	30
Carbon tetrachloride	ND		5.00	6.03		ug/L		120	64 - 141	1	30
Chloroethane	2.2		5.00	7.48		ug/L		105	63 - 120	1	30
Chloroform	ND		5.00	5.43		ug/L		109	80 - 120	1	30
Chloromethane	ND		5.00	5.22		ug/L		104	80 - 120	0	30
Chloroprene	ND		5.00	5.54	J	ug/L		111	60 - 128	0	30
Dibromochloromethane	ND		5.00	5.32		ug/L		106	64 - 138	2	30
Dibromomethane	ND		5.00	5.61		ug/L		112	80 - 122	1	30
Dichlorodifluoromethane	ND		5.00	5.78		ug/L		115	43 - 123	3	30
Diethyl ether	22		5.01	26.4	E 4	ug/L		82	72 - 121	1	30
Ethyl methacrylate	ND		5.00	5.05	J	ug/L		101	55 - 133	3	30
Ethylbenzene	ND		5.00	5.56		ug/L		111	80 - 120	1	30
Hexachlorobutadiene	ND		5.00	5.59		ug/L		112	72 - 132	1	30
Isobutyl alcohol	ND		125	125	J	ug/L		100	57 - 154	3	30
m&p-Xylene	ND		10.0	11.3		ug/L		113	80 - 120	3	30
Methacrylonitrile	ND		37.5	40.0	J	ug/L		106	60 - 145	5	30
Methyl iodide	ND		5.00	5.22	J	ug/L		104	77 - 120	3	30
Methyl methacrylate	ND		5.00	4.64	J	ug/L		93	55 - 139	8	30
Methylene Chloride	ND		5.00	5.33		ug/L		107	80 - 120	2	30
Naphthalene	ND		5.00	5.04		ug/L		101	64 - 122	1	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-136864-4 MSD
Matrix: Water
Analysis Batch: 405906

Client Sample ID: 16WC1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
o-Xylene	ND		5.00	5.53		ug/L		110	80 - 120	2	30
Pentachloroethane	ND		5.00	5.60	J	ug/L		112	68 - 134	3	30
Propionitrile	ND	cn	37.5	42.7	J	ug/L		114	63 - 145	6	30
Styrene	ND		5.00	5.74		ug/L		115	80 - 120	2	30
Tetrachloroethene	ND		5.00	5.74		ug/L		115	80 - 120	3	30
Tetrahydrofuran	ND		25.0	30.5		ug/L		122	67 - 137	1	30
Toluene	ND		5.00	5.53		ug/L		110	80 - 120	3	30
trans-1,2-Dichloroethene	ND		5.00	5.67		ug/L		113	80 - 122	1	30
trans-1,3-Dichloropropene	ND		5.00	5.28		ug/L		105	61 - 129	2	30
Trichloroethene	ND		5.00	5.64		ug/L		113	80 - 120	3	30
Trichlorofluoromethane	ND		5.00	5.90		ug/L		118	62 - 136	2	30
Vinyl chloride	0.23	J	5.00	5.71		ug/L		110	60 - 125	3	30
Xylenes, Total	ND		15.0	16.8		ug/L		112	80 - 120	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 410-136864-4 MSD
Matrix: Water
Analysis Batch: 405906

Client Sample ID: 16WC1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetonitrile	ND		18.8	ND		ug/L		NC	51 - 160	NC	30
Vinyl acetate	ND		12.5	14.4		ug/L		115	38 - 145	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-403666/1-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		10	2.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
1,3-Dinitrobenzene	ND		10	2.3	ug/L		08/02/23 15:28	08/02/23 23:30	1
bis (2-chloroisopropyl) ether	ND		10	0.60	ug/L		08/02/23 15:28	08/02/23 23:30	1
2,3,4,6-Tetrachlorophenol	ND		10	1.8	ug/L		08/02/23 15:28	08/02/23 23:30	1
2,4,5-Trichlorophenol	ND		10	2.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
2,4,6-Trichlorophenol	ND		10	1.8	ug/L		08/02/23 15:28	08/02/23 23:30	1
2,4-Dichlorophenol	ND		10	1.5	ug/L		08/02/23 15:28	08/02/23 23:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-403666/1-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10	2.1	ug/L		08/02/23 15:28	08/02/23 23:30	1
2,6-Dichlorophenol	ND		10	1.4	ug/L		08/02/23 15:28	08/02/23 23:30	1
2,6-Dinitrotoluene	ND		10	2.1	ug/L		08/02/23 15:28	08/02/23 23:30	1
2-Chloronaphthalene	ND		10	0.50	ug/L		08/02/23 15:28	08/02/23 23:30	1
2-Chlorophenol	ND		10	1.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
2-Methylnaphthalene	ND		10	0.29	ug/L		08/02/23 15:28	08/02/23 23:30	1
o-Cresol	ND		10	0.80	ug/L		08/02/23 15:28	08/02/23 23:30	1
2-Nitroaniline	ND		10	1.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
2-Nitrophenol	ND		10	1.2	ug/L		08/02/23 15:28	08/02/23 23:30	1
4-Bromophenyl-phenylether	ND		10	0.56	ug/L		08/02/23 15:28	08/02/23 23:30	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
4-Chlorophenyl-phenyl ether	ND		10	0.60	ug/L		08/02/23 15:28	08/02/23 23:30	1
m & p-Cresol	ND		20	2.4	ug/L		08/02/23 15:28	08/02/23 23:30	1
4-Nitroaniline	ND		10	1.5	ug/L		08/02/23 15:28	08/02/23 23:30	1
5-Nitro-o-toluidine	ND		10	2.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
Bis(2-ethylhexyl) phthalate	ND		10	2.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
Acenaphthene	ND		10	0.35	ug/L		08/02/23 15:28	08/02/23 23:30	1
Acenaphthylene	ND		10	0.48	ug/L		08/02/23 15:28	08/02/23 23:30	1
Anthracene	ND		10	0.52	ug/L		08/02/23 15:28	08/02/23 23:30	1
Benzo[a]anthracene	ND		10	0.45	ug/L		08/02/23 15:28	08/02/23 23:30	1
Benzo[a]pyrene	ND		10	1.5	ug/L		08/02/23 15:28	08/02/23 23:30	1
Benzo[b]fluoranthene	ND		10	1.2	ug/L		08/02/23 15:28	08/02/23 23:30	1
Benzo[g,h,i]perylene	ND		10	0.42	ug/L		08/02/23 15:28	08/02/23 23:30	1
Benzo[k]fluoranthene	ND		10	1.6	ug/L		08/02/23 15:28	08/02/23 23:30	1
Hexachloropropene	ND		10	2.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
Chrysene	ND		10	0.31	ug/L		08/02/23 15:28	08/02/23 23:30	1
Diallate	ND		10	3.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
Dibenz(a,h)anthracene	ND		10	0.38	ug/L		08/02/23 15:28	08/02/23 23:30	1
Dibenzofuran	ND		10	0.60	ug/L		08/02/23 15:28	08/02/23 23:30	1
Diethyl phthalate	ND		10	2.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
Dimethoate	ND		10	3.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
Ethyl methanesulfonate	ND		10	1.1	ug/L		08/02/23 15:28	08/02/23 23:30	1
Fluoranthene	ND		10	0.42	ug/L		08/02/23 15:28	08/02/23 23:30	1
Fluorene	ND		10	0.38	ug/L		08/02/23 15:28	08/02/23 23:30	1
Hexachlorobenzene	ND		10	0.70	ug/L		08/02/23 15:28	08/02/23 23:30	1
Indeno[1,2,3-cd]pyrene	ND		10	0.15	ug/L		08/02/23 15:28	08/02/23 23:30	1
Isodrin	ND		10	1.1	ug/L		08/02/23 15:28	08/02/23 23:30	1
Kepone	ND		50	25	ug/L		08/02/23 15:28	08/02/23 23:30	1
Sulfotepp	ND		10	2.4	ug/L		08/02/23 15:28	08/02/23 23:30	1
N-Nitrosodiethylamine	ND		10	3.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58	ug/L		08/02/23 15:28	08/02/23 23:30	1
N-Nitrosomorpholine	ND		10	3.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
N-Nitrosopiperidine	ND		10	1.1	ug/L		08/02/23 15:28	08/02/23 23:30	1
Nitrobenzene	ND		10	0.60	ug/L		08/02/23 15:28	08/02/23 23:30	1
o,o',o''-Triethylphosphorothioate	ND		10	2.6	ug/L		08/02/23 15:28	08/02/23 23:30	1
Pentachlorobenzene	ND		10	1.6	ug/L		08/02/23 15:28	08/02/23 23:30	1
Phenacetin	ND		10	1.4	ug/L		08/02/23 15:28	08/02/23 23:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-403666/1-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		10	3.0	ug/L		08/02/23 15:28	08/02/23 23:30	1
Phenanthrene	ND		10	0.52	ug/L		08/02/23 15:28	08/02/23 23:30	1
Phenol	ND		10	0.60	ug/L		08/02/23 15:28	08/02/23 23:30	1
Phorate	ND		10	2.5	ug/L		08/02/23 15:28	08/02/23 23:30	1
Pyrene	ND		10	0.41	ug/L		08/02/23 15:28	08/02/23 23:30	1
Safrole, Total	ND		10	2.2	ug/L		08/02/23 15:28	08/02/23 23:30	1
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4	ug/L		08/02/23 15:28	08/02/23 23:30	1
a,a-Dimethylphenethylamine	ND		50	5.0	ug/L		08/02/23 15:28	08/02/23 23:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*85*		*13 - 138*	*08/02/23 15:28*	*08/02/23 23:30*	*1*
2-Fluorobiphenyl (Surr)	*82*		*44 - 120*	*08/02/23 15:28*	*08/02/23 23:30*	*1*
2-Fluorophenol (Surr)	*43*		*10 - 120*	*08/02/23 15:28*	*08/02/23 23:30*	*1*
Nitrobenzene-d5 (Surr)	*73*		*31 - 120*	*08/02/23 15:28*	*08/02/23 23:30*	*1*
p-Terphenyl-d14 (Surr)	*86*		*30 - 125*	*08/02/23 15:28*	*08/02/23 23:30*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*08/02/23 15:28*	*08/02/23 23:30*	*1*

Lab Sample ID: LCS 410-403666/2-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	50.0	47.3		ug/L		95	34 - 120
1,3-Dinitrobenzene	50.0	47.0		ug/L		94	61 - 125
bis (2-chloroisopropyl) ether	50.0	45.8		ug/L		92	43 - 121
2,3,4,6-Tetrachlorophenol	50.0	47.2		ug/L		94	60 - 126
2,4,5-Trichlorophenol	50.0	53.0		ug/L		106	60 - 136
2,4,6-Trichlorophenol	50.0	52.0		ug/L		104	63 - 133
2,4-Dichlorophenol	50.0	52.7		ug/L		105	60 - 127
2,4-Dinitrotoluene	50.0	50.4		ug/L		101	66 - 131
2,6-Dichlorophenol	50.0	52.2		ug/L		104	65 - 120
2,6-Dinitrotoluene	50.0	51.6		ug/L		103	66 - 129
2-Chloronaphthalene	50.0	48.6		ug/L		97	51 - 120
2-Chlorophenol	50.0	47.0		ug/L		94	57 - 120
2-Methylnaphthalene	50.0	46.8		ug/L		94	53 - 120
o-Cresol	50.0	45.2		ug/L		90	58 - 120
2-Nitroaniline	50.0	48.1		ug/L		96	63 - 134
2-Nitrophenol	50.0	45.7		ug/L		91	57 - 127
4-Bromophenyl-phenylether	50.0	52.3		ug/L		105	66 - 120
4-Chloro-3-methylphenol	50.0	47.0		ug/L		94	57 - 129
4-Chlorophenyl-phenyl ether	50.0	49.4		ug/L		99	59 - 120
m & p-Cresol	50.0	40.9		ug/L		82	49 - 120
4-Nitroaniline	50.0	48.6		ug/L		97	55 - 126
Bis(2-ethylhexyl) phthalate	50.0	54.2		ug/L		108	60 - 133
Acenaphthene	50.0	48.3		ug/L		97	59 - 120
Acenaphthylene	50.0	51.1		ug/L		102	61 - 121
Anthracene	50.0	49.8		ug/L		100	67 - 123
Benzo[a]anthracene	50.0	54.7		ug/L		109	66 - 133

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-403666/2-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	50.0	54.7		ug/L		109	64 - 131
Benzo[b]fluoranthene	50.0	47.6		ug/L		95	64 - 124
Benzo[g,h,i]perylene	50.0	48.8		ug/L		98	60 - 136
Benzo[k]fluoranthene	50.0	47.9		ug/L		96	67 - 132
Chrysene	50.0	58.5		ug/L		117	70 - 128
Dibenz(a,h)anthracene	50.0	46.8		ug/L		94	59 - 135
Dibenzofuran	50.0	46.7		ug/L		93	63 - 120
Diethyl phthalate	50.0	47.6		ug/L		95	46 - 123
Fluoranthene	50.0	48.6		ug/L		97	70 - 128
Fluorene	50.0	50.7		ug/L		101	66 - 120
Hexachlorobenzene	50.0	49.2		ug/L		98	61 - 126
Indeno[1,2,3-cd]pyrene	50.0	50.2		ug/L		100	55 - 134
N-Nitrosodimethylamine	50.0	31.3		ug/L		63	26 - 120
n-Nitrosodiphenylamine(as diphenylamine)	42.5	43.0		ug/L		101	64 - 130
Nitrobenzene	50.0	45.4		ug/L		91	59 - 120
Pentachlorophenol	100	117		ug/L		117	51 - 138
Phenanthrene	50.0	48.5		ug/L		97	66 - 120
Phenol	50.0	24.8		ug/L		50	22 - 120
Pyrene	50.0	50.9		ug/L		102	67 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*79*		*13 - 138*
2-Fluorobiphenyl (Surr)	*78*		*44 - 120*
2-Fluorophenol (Surr)	*53*		*10 - 120*
Nitrobenzene-d5 (Surr)	*74*		*31 - 120*
p-Terphenyl-d14 (Surr)	*83*		*30 - 125*
Phenol-d5 (Surr)	*39*		*10 - 120*

Lab Sample ID: LCS 410-403666/4-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
5-Nitro-o-toluidine	50.0	46.1		ug/L		92	51 - 120
Hexachloropropene	50.0	31.3		ug/L		63	10 - 120
Diallate	50.0	41.9		ug/L		84	60 - 120
Dimethoate	50.0	35.6		ug/L		71	10 - 120
Ethyl methanesulfonate	50.0	40.1		ug/L		80	61 - 120
Isodrin	50.0	42.4		ug/L		85	58 - 120
Kepone	50.3	37.1	J	ug/L		74	70 - 130
Sulfotepp	50.0	43.4		ug/L		87	38 - 120
N-Nitrosodiethylamine	50.0	43.2		ug/L		86	61 - 120
N-Nitrosomorpholine	50.0	39.5		ug/L		79	44 - 120
N-Nitrosopiperidine	50.0	40.4		ug/L		81	67 - 120
o,o',o''-Triethylphosphorothioate	50.0	38.9		ug/L		78	63 - 120
Pentachlorobenzene	50.0	44.5		ug/L		89	26 - 120
Phenacetin	50.0	46.9		ug/L		94	59 - 126
Phorate	50.0	43.6		ug/L		87	44 - 145

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-403666/4-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Safrole, Total	50.0	43.5		ug/L		87	62 - 120
O,O-Diethyl O-2-pyrazinyl phosphorothioate	50.0	46.1		ug/L		92	63 - 120
a,a-Dimethylphenethylamine	50.0	ND	*-	ug/L		0	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*83*		*13 - 138*
2-Fluorobiphenyl (Surr)	*76*		*44 - 120*
2-Fluorophenol (Surr)	*48*		*10 - 120*
Nitrobenzene-d5 (Surr)	*70*		*31 - 120*
p-Terphenyl-d14 (Surr)	*79*		*30 - 125*
Phenol-d5 (Surr)	*33*		*10 - 120*

Lab Sample ID: LCSD 410-403666/3-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 403666

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	50.0	48.6		ug/L		97	34 - 120	3	30
1,3-Dinitrobenzene	50.0	51.0		ug/L		102	61 - 125	8	30
bis (2-chloroisopropyl) ether	50.0	46.6		ug/L		93	43 - 121	2	30
2,3,4,6-Tetrachlorophenol	50.0	44.1		ug/L		88	60 - 126	7	30
2,4,5-Trichlorophenol	50.0	50.7		ug/L		101	60 - 136	4	30
2,4,6-Trichlorophenol	50.0	51.5		ug/L		103	63 - 133	1	30
2,4-Dichlorophenol	50.0	48.3		ug/L		97	60 - 127	9	30
2,4-Dinitrotoluene	50.0	52.3		ug/L		105	66 - 131	4	30
2,6-Dichlorophenol	50.0	49.6		ug/L		99	65 - 120	5	30
2,6-Dinitrotoluene	50.0	49.3		ug/L		99	66 - 129	4	30
2-Chloronaphthalene	50.0	50.6		ug/L		101	51 - 120	4	30
2-Chlorophenol	50.0	43.2		ug/L		86	57 - 120	8	30
2-Methylnaphthalene	50.0	50.1		ug/L		100	53 - 120	7	30
o-Cresol	50.0	43.6		ug/L		87	58 - 120	3	30
2-Nitroaniline	50.0	52.8		ug/L		106	63 - 134	9	30
2-Nitrophenol	50.0	42.4		ug/L		85	57 - 127	7	30
4-Bromophenyl-phenylether	50.0	49.5		ug/L		99	66 - 120	6	30
4-Chloro-3-methylphenol	50.0	45.3		ug/L		91	57 - 129	4	30
4-Chlorophenyl-phenyl ether	50.0	46.1		ug/L		92	59 - 120	7	30
m & p-Cresol	50.0	36.7		ug/L		73	49 - 120	11	30
4-Nitroaniline	50.0	50.3		ug/L		101	55 - 126	4	30
Bis(2-ethylhexyl) phthalate	50.0	58.0		ug/L		116	60 - 133	7	30
Acenaphthene	50.0	48.9		ug/L		98	59 - 120	1	30
Acenaphthylene	50.0	51.5		ug/L		103	61 - 121	1	30
Anthracene	50.0	50.2		ug/L		100	67 - 123	1	30
Benzo[a]anthracene	50.0	59.8		ug/L		120	66 - 133	9	30
Benzo[a]pyrene	50.0	52.2		ug/L		104	64 - 131	5	30
Benzo[b]fluoranthene	50.0	47.4		ug/L		95	64 - 124	1	30
Benzo[g,h,i]perylene	50.0	51.7		ug/L		103	60 - 136	6	30
Benzo[k]fluoranthene	50.0	48.2		ug/L		96	67 - 132	1	30
Chrysene	50.0	59.1		ug/L		118	70 - 128	1	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-403666/3-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 403666

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenz(a,h)anthracene			50.0	46.3		ug/L		93	59 - 135	1	30
Dibenzofuran			50.0	48.4		ug/L		97	63 - 120	3	30
Diethyl phthalate			50.0	51.9		ug/L		104	46 - 123	9	30
Fluoranthene			50.0	54.1		ug/L		108	70 - 128	11	30
Fluorene			50.0	48.0		ug/L		96	66 - 120	5	30
Hexachlorobenzene			50.0	51.5		ug/L		103	61 - 126	4	30
Indeno[1,2,3-cd]pyrene			50.0	52.5		ug/L		105	55 - 134	5	30
N-Nitrosodimethylamine			50.0	28.8		ug/L		58	26 - 120	9	30
n-Nitrosodiphenylamine(as diphenylamine)			42.5	41.4		ug/L		97	64 - 130	4	30
Nitrobenzene			50.0	46.6		ug/L		93	59 - 120	3	30
Pentachlorophenol			100	113		ug/L		113	51 - 138	4	30
Phenanthrene			50.0	50.5		ug/L		101	66 - 120	4	30
Phenol			50.0	23.3		ug/L		47	22 - 120	6	30
Pyrene			50.0	50.3		ug/L		101	67 - 126	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*79*		*13 - 138*
2-Fluorobiphenyl (Surr)	*80*		*44 - 120*
2-Fluorophenol (Surr)	*50*		*10 - 120*
Nitrobenzene-d5 (Surr)	*76*		*31 - 120*
p-Terphenyl-d14 (Surr)	*90*		*30 - 125*
Phenol-d5 (Surr)	*38*		*10 - 120*

Lab Sample ID: LCSD 410-403666/5-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 403666

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
5-Nitro-o-toluidine			50.0	40.7		ug/L		81	51 - 120	12	30
Hexachloropropene			50.0	33.6		ug/L		67	10 - 120	7	30
Diallate			50.0	40.8		ug/L		82	60 - 120	3	30
Dimethoate			50.0	32.9		ug/L		66	10 - 120	8	30
Ethyl methanesulfonate			50.0	43.8		ug/L		88	61 - 120	9	30
Isodrin			50.0	41.3		ug/L		83	58 - 120	3	30
Kepone			50.3	38.1	J	ug/L		76	70 - 130	3	30
Sulfotepp			50.0	43.3		ug/L		87	38 - 120	0	30
N-Nitrosodiethylamine			50.0	48.7		ug/L		97	61 - 120	12	30
N-Nitrosomorpholine			50.0	38.0		ug/L		76	44 - 120	4	30
N-Nitrosopiperidine			50.0	38.8		ug/L		78	67 - 120	4	30
o,o',o''-Triethylphosphorothioate			50.0	40.4		ug/L		81	63 - 120	4	30
Pentachlorobenzene			50.0	45.3		ug/L		91	26 - 120	2	30
Phenacetin			50.0	46.6		ug/L		93	59 - 126	1	30
Phorate			50.0	44.6		ug/L		89	44 - 145	2	30
Safrole, Total			50.0	41.0		ug/L		82	62 - 120	6	30
O,O-Diethyl O-2-pyrazinyl phosphorothioate			50.0	47.1		ug/L		94	63 - 120	2	30
a,a-Dimethylphenethylamine			50.0	ND	*-	ug/L		0	70 - 130	NC	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-403666/5-A
Matrix: Water
Analysis Batch: 403788

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 403666

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*13 - 138*
2-Fluorobiphenyl (Surr)	*79*		*44 - 120*
2-Fluorophenol (Surr)	*45*		*10 - 120*
Nitrobenzene-d5 (Surr)	*71*		*31 - 120*
p-Terphenyl-d14 (Surr)	*83*		*30 - 125*
Phenol-d5 (Surr)	*30*		*10 - 120*

Lab Sample ID: MB 410-403918/1-A
Matrix: Water
Analysis Batch: 404152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403918

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
1,3-Dinitrobenzene	ND		10	2.3	ug/L		08/03/23 08:20	08/03/23 16:22	1
bis (2-chloroisopropyl) ether	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 16:22	1
2,3,4,6-Tetrachlorophenol	ND		10	1.8	ug/L		08/03/23 08:20	08/03/23 16:22	1
2,4,5-Trichlorophenol	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
2,4,6-Trichlorophenol	ND		10	1.8	ug/L		08/03/23 08:20	08/03/23 16:22	1
2,4-Dichlorophenol	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 16:22	1
2,4-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 16:22	1
2,6-Dichlorophenol	ND		10	1.4	ug/L		08/03/23 08:20	08/03/23 16:22	1
2,6-Dinitrotoluene	ND		10	2.1	ug/L		08/03/23 08:20	08/03/23 16:22	1
2-Chloronaphthalene	ND		10	0.50	ug/L		08/03/23 08:20	08/03/23 16:22	1
2-Chlorophenol	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
2-Methylnaphthalene	ND		10	0.29	ug/L		08/03/23 08:20	08/03/23 16:22	1
o-Cresol	ND		10	0.80	ug/L		08/03/23 08:20	08/03/23 16:22	1
2-Nitroaniline	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
2-Nitrophenol	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 16:22	1
4-Bromophenyl-phenylether	ND		10	0.56	ug/L		08/03/23 08:20	08/03/23 16:22	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
4-Chlorophenyl-phenyl ether	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 16:22	1
m & p-Cresol	ND		20	2.4	ug/L		08/03/23 08:20	08/03/23 16:22	1
4-Nitroaniline	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 16:22	1
5-Nitro-o-toluidine	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
Bis(2-ethylhexyl) phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
Acenaphthene	ND		10	0.35	ug/L		08/03/23 08:20	08/03/23 16:22	1
Acenaphthylene	ND		10	0.48	ug/L		08/03/23 08:20	08/03/23 16:22	1
Anthracene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 16:22	1
Benzo[a]anthracene	ND		10	0.45	ug/L		08/03/23 08:20	08/03/23 16:22	1
Benzo[a]pyrene	ND		10	1.5	ug/L		08/03/23 08:20	08/03/23 16:22	1
Benzo[b]fluoranthene	ND		10	1.2	ug/L		08/03/23 08:20	08/03/23 16:22	1
Benzo[g,h,i]perylene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 16:22	1
Benzo[k]fluoranthene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 16:22	1
Hexachloropropene	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
Chrysene	ND		10	0.31	ug/L		08/03/23 08:20	08/03/23 16:22	1
Diallate	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
Dibenz(a,h)anthracene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 16:22	1
Dibenzofuran	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 16:22	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-403918/1-A
Matrix: Water
Analysis Batch: 404152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403918

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
Dimethoate	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
Ethyl methanesulfonate	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 16:22	1
Fluoranthene	ND		10	0.42	ug/L		08/03/23 08:20	08/03/23 16:22	1
Fluorene	ND		10	0.38	ug/L		08/03/23 08:20	08/03/23 16:22	1
Hexachlorobenzene	ND		10	0.70	ug/L		08/03/23 08:20	08/03/23 16:22	1
Indeno[1,2,3-cd]pyrene	ND		10	0.15	ug/L		08/03/23 08:20	08/03/23 16:22	1
Isodrin	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 16:22	1
Kepone	ND		50	25	ug/L		08/03/23 08:20	08/03/23 16:22	1
Sulfotepp	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 16:22	1
N-Nitrosodiethylamine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58	ug/L		08/03/23 08:20	08/03/23 16:22	1
N-Nitrosomorpholine	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
N-Nitrosopiperidine	ND		10	1.1	ug/L		08/03/23 08:20	08/03/23 16:22	1
Nitrobenzene	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 16:22	1
o,o',o''-Triethylphosphorothioate	ND		10	2.6	ug/L		08/03/23 08:20	08/03/23 16:22	1
Pentachlorobenzene	ND		10	1.6	ug/L		08/03/23 08:20	08/03/23 16:22	1
Phenacetin	ND		10	1.4	ug/L		08/03/23 08:20	08/03/23 16:22	1
Pentachlorophenol	ND		10	3.0	ug/L		08/03/23 08:20	08/03/23 16:22	1
Phenanthrene	ND		10	0.52	ug/L		08/03/23 08:20	08/03/23 16:22	1
Phenol	ND		10	0.60	ug/L		08/03/23 08:20	08/03/23 16:22	1
Phorate	ND		10	2.5	ug/L		08/03/23 08:20	08/03/23 16:22	1
Pyrene	ND		10	0.41	ug/L		08/03/23 08:20	08/03/23 16:22	1
Safrole, Total	ND		10	2.2	ug/L		08/03/23 08:20	08/03/23 16:22	1
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4	ug/L		08/03/23 08:20	08/03/23 16:22	1
a,a-Dimethylphenethylamine	ND		50	5.0	ug/L		08/03/23 08:20	08/03/23 16:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*13 - 138*	*08/03/23 08:20*	*08/03/23 16:22*	*1*
2-Fluorobiphenyl (Surr)	*69*		*44 - 120*	*08/03/23 08:20*	*08/03/23 16:22*	*1*
2-Fluorophenol (Surr)	*44*		*10 - 120*	*08/03/23 08:20*	*08/03/23 16:22*	*1*
Nitrobenzene-d5 (Surr)	*64*		*31 - 120*	*08/03/23 08:20*	*08/03/23 16:22*	*1*
p-Terphenyl-d14 (Surr)	*98*		*30 - 125*	*08/03/23 08:20*	*08/03/23 16:22*	*1*
Phenol-d5 (Surr)	*26*		*10 - 120*	*08/03/23 08:20*	*08/03/23 16:22*	*1*

Lab Sample ID: LCS 410-403918/2-A
Matrix: Water
Analysis Batch: 404152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403918

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	50.0	31.2		ug/L		62	34 - 120
1,3-Dinitrobenzene	50.0	42.4		ug/L		85	61 - 125
bis (2-chloroisopropyl) ether	50.0	28.1		ug/L		56	43 - 121
2,3,4,6-Tetrachlorophenol	50.0	38.3		ug/L		77	60 - 126
2,4,5-Trichlorophenol	50.0	41.7		ug/L		83	60 - 136
2,4,6-Trichlorophenol	50.0	42.9		ug/L		86	63 - 133

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-403918/2-A
Matrix: Water
Analysis Batch: 404152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403918

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dichlorophenol	50.0	40.2		ug/L		80	60 - 127
2,4-Dinitrotoluene	50.0	43.4		ug/L		87	66 - 131
2,6-Dichlorophenol	50.0	41.8		ug/L		84	65 - 120
2,6-Dinitrotoluene	50.0	41.2		ug/L		82	66 - 129
2-Chloronaphthalene	50.0	37.0		ug/L		74	51 - 120
2-Chlorophenol	50.0	38.6		ug/L		77	57 - 120
2-Methylnaphthalene	50.0	36.3		ug/L		73	53 - 120
o-Cresol	50.0	35.7		ug/L		71	58 - 120
2-Nitroaniline	50.0	41.3		ug/L		83	63 - 134
2-Nitrophenol	50.0	41.2		ug/L		82	57 - 127
4-Bromophenyl-phenylether	50.0	37.6		ug/L		75	66 - 120
4-Chloro-3-methylphenol	50.0	34.5		ug/L		69	57 - 129
4-Chlorophenyl-phenyl ether	50.0	36.5		ug/L		73	59 - 120
m & p-Cresol	50.0	33.6		ug/L		67	49 - 120
4-Nitroaniline	50.0	37.1		ug/L		74	55 - 126
Bis(2-ethylhexyl) phthalate	50.0	42.2		ug/L		84	60 - 133
Acenaphthene	50.0	38.5		ug/L		77	59 - 120
Acenaphthylene	50.0	38.6		ug/L		77	61 - 121
Anthracene	50.0	41.7		ug/L		83	67 - 123
Benzo[a]anthracene	50.0	41.3		ug/L		83	66 - 133
Benzo[a]pyrene	50.0	45.1		ug/L		90	64 - 131
Benzo[b]fluoranthene	50.0	40.2		ug/L		80	64 - 124
Benzo[g,h,i]perylene	50.0	38.5		ug/L		77	60 - 136
Benzo[k]fluoranthene	50.0	44.3		ug/L		89	67 - 132
Chrysene	50.0	43.0		ug/L		86	70 - 128
Dibenz(a,h)anthracene	50.0	36.8		ug/L		74	59 - 135
Dibenzofuran	50.0	38.3		ug/L		77	63 - 120
Diethyl phthalate	50.0	39.4		ug/L		79	46 - 123
Fluoranthene	50.0	41.0		ug/L		82	70 - 128
Fluorene	50.0	38.5		ug/L		77	66 - 120
Hexachlorobenzene	50.0	37.5		ug/L		75	61 - 126
Indeno[1,2,3-cd]pyrene	50.0	37.5		ug/L		75	55 - 134
N-Nitrosodimethylamine	50.0	21.4		ug/L		43	26 - 120
n-Nitrosodiphenylamine(as diphenylamine)	42.5	36.4		ug/L		86	64 - 130
Nitrobenzene	50.0	33.5		ug/L		67	59 - 120
Pentachlorophenol	100	66.2		ug/L		66	51 - 138
Phenanthrene	50.0	40.7		ug/L		81	66 - 120
Phenol	50.0	22.5		ug/L		45	22 - 120
Pyrene	50.0	40.4		ug/L		81	67 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*69*		*13 - 138*
2-Fluorobiphenyl (Surr)	*65*		*44 - 120*
2-Fluorophenol (Surr)	*48*		*10 - 120*
Nitrobenzene-d5 (Surr)	*58*		*31 - 120*
p-Terphenyl-d14 (Surr)	*77*		*30 - 125*
Phenol-d5 (Surr)	*33*		*10 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-403918/3-A
Matrix: Water
Analysis Batch: 404152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403918

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
5-Nitro-o-toluidine			50.0	43.0		ug/L		86	51 - 120		
Hexachloropropene			50.0	23.2		ug/L		46	10 - 120		
Diallate			50.0	37.4		ug/L		75	60 - 120		
Dimethoate			50.0	17.8		ug/L		36	10 - 120		
Ethyl methanesulfonate			50.0	40.1		ug/L		80	61 - 120		
Isodrin			50.0	42.5		ug/L		85	58 - 120		
Kepone			50.3	ND	*-	ug/L		25	70 - 130		
Sulfotepp			50.0	38.5		ug/L		77	38 - 120		
N-Nitrosodiethylamine			50.0	37.9		ug/L		76	61 - 120		
N-Nitrosomorpholine			50.0	31.5		ug/L		63	44 - 120		
N-Nitrosopiperidine			50.0	41.3		ug/L		83	67 - 120		
o,o',o''-Triethylphosphorothioate			50.0	42.8		ug/L		86	63 - 120		
Pentachlorobenzene			50.0	33.4		ug/L		67	26 - 120		
Phenacetin			50.0	46.4		ug/L		93	59 - 126		
Phorate			50.0	41.8		ug/L		84	44 - 145		
Safrole, Total			50.0	41.5		ug/L		83	62 - 120		
O,O-Diethyl O-2-pyrazinyl phosphorothioate			50.0	43.3		ug/L		87	63 - 120		
a,a-Dimethylphenethylamine			50.0	ND	*-	ug/L		1	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*87*		*13 - 138*
2-Fluorobiphenyl (Surr)	*81*		*44 - 120*
2-Fluorophenol (Surr)	*60*		*10 - 120*
Nitrobenzene-d5 (Surr)	*73*		*31 - 120*
p-Terphenyl-d14 (Surr)	*97*		*30 - 125*
Phenol-d5 (Surr)	*40*		*10 - 120*

Lab Sample ID: LCSD 410-403918/4-A
Matrix: Water
Analysis Batch: 404152

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 403918

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
5-Nitro-o-toluidine			50.0	42.0		ug/L		84	51 - 120	3	30
Hexachloropropene			50.0	24.7		ug/L		49	10 - 120	6	30
Diallate			50.0	37.7		ug/L		75	60 - 120	1	30
Dimethoate			50.0	26.0	*1	ug/L		52	10 - 120	37	30
Ethyl methanesulfonate			50.0	38.8		ug/L		78	61 - 120	3	30
Isodrin			50.0	41.2		ug/L		82	58 - 120	3	30
Kepone			50.3	ND	*- *1	ug/L		40	70 - 130	45	30
Sulfotepp			50.0	39.3		ug/L		79	38 - 120	2	30
N-Nitrosodiethylamine			50.0	38.4		ug/L		77	61 - 120	1	30
N-Nitrosomorpholine			50.0	30.7		ug/L		61	44 - 120	3	30
N-Nitrosopiperidine			50.0	40.3		ug/L		81	67 - 120	2	30
o,o',o''-Triethylphosphorothioate			50.0	42.7		ug/L		85	63 - 120	0	30
Pentachlorobenzene			50.0	34.9		ug/L		70	26 - 120	4	30
Phenacetin			50.0	45.0		ug/L		90	59 - 126	3	30
Phorate			50.0	39.7		ug/L		79	44 - 145	5	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-403918/4-A
Matrix: Water
Analysis Batch: 404152

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 403918

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Safrole, Total			50.0	41.7		ug/L		83	62 - 120	0	30
O,O-Diethyl O-2-pyrazinyl phosphorothioate			50.0	42.8		ug/L		86	63 - 120	1	30
a,a-Dimethylphenethylamine			50.0	ND	*-	ug/L		1	70 - 130	24	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*13 - 138*
2-Fluorobiphenyl (Surr)	*79*		*44 - 120*
2-Fluorophenol (Surr)	*56*		*10 - 120*
Nitrobenzene-d5 (Surr)	*71*		*31 - 120*
p-Terphenyl-d14 (Surr)	*90*		*30 - 125*
Phenol-d5 (Surr)	*35*		*10 - 120*

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 404152

Client Sample ID: 16WC1A
Prep Type: Total/NA
Prep Batch: 403918

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	ND		50.2	37.3		ug/L		74	34 - 120
1,3-Dinitrobenzene	ND		50.2	47.2		ug/L		94	61 - 125
bis (2-chloroisopropyl) ether	ND	cn	50.2	31.3		ug/L		62	43 - 121
2,3,4,6-Tetrachlorophenol	ND		50.2	29.9		ug/L		60	60 - 126
2,4,5-Trichlorophenol	ND		50.2	31.5		ug/L		63	60 - 136
2,4,6-Trichlorophenol	ND	F1	50.2	27.7	F1	ug/L		55	63 - 133
2,4-Dichlorophenol	ND	F1	50.2	28.2	F1	ug/L		56	60 - 127
2,4-Dinitrotoluene	ND		50.2	48.3		ug/L		96	66 - 131
2,6-Dichlorophenol	ND	F1	50.2	28.1	F1	ug/L		56	65 - 120
2,6-Dinitrotoluene	ND		50.2	45.1		ug/L		90	66 - 129
2-Chloronaphthalene	ND		50.2	42.6		ug/L		85	51 - 120
2-Chlorophenol	ND	F1	50.2	27.7	F1	ug/L		55	57 - 120
2-Methylnaphthalene	ND		50.2	41.1		ug/L		82	53 - 120
o-Cresol	ND		50.2	35.6		ug/L		71	58 - 120
2-Nitroaniline	ND		50.2	44.2		ug/L		88	63 - 134
2-Nitrophenol	ND		50.2	43.4		ug/L		86	57 - 127
4-Bromophenyl-phenylether	ND		50.2	41.4		ug/L		82	66 - 120
4-Chloro-3-methylphenol	ND		50.2	36.1		ug/L		72	57 - 129
4-Chlorophenyl-phenyl ether	ND		50.2	41.6		ug/L		83	59 - 120
m & p-Cresol	ND		50.2	34.6		ug/L		69	49 - 120
4-Nitroaniline	ND		50.2	40.2		ug/L		80	55 - 126
Bis(2-ethylhexyl) phthalate	ND		50.2	49.3		ug/L		98	60 - 133
Acenaphthene	ND		50.2	43.6		ug/L		87	59 - 120
Acenaphthylene	ND		50.2	42.6		ug/L		85	61 - 121
Anthracene	ND		50.2	44.5		ug/L		89	67 - 123
Benzo[a]anthracene	ND		50.2	45.4		ug/L		90	66 - 133
Benzo[a]pyrene	ND		50.2	48.7		ug/L		97	64 - 131
Benzo[b]fluoranthene	ND		50.2	44.8		ug/L		89	64 - 124
Benzo[g,h,i]perylene	ND		50.2	41.7		ug/L		83	60 - 136
Benzo[k]fluoranthene	ND		50.2	46.4		ug/L		92	67 - 132
Chrysene	ND		50.2	46.4		ug/L		92	70 - 128

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 404152

Client Sample ID: 16WC1A
Prep Type: Total/NA
Prep Batch: 403918

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenz(a,h)anthracene	ND		50.2	41.4		ug/L		82	59 - 135
Dibenzofuran	ND		50.2	42.6		ug/L		85	63 - 120
Diethyl phthalate	ND		50.2	47.9		ug/L		95	46 - 123
Fluoranthene	ND		50.2	44.2		ug/L		88	70 - 128
Fluorene	ND		50.2	42.7		ug/L		85	66 - 120
Hexachlorobenzene	ND		50.2	40.5		ug/L		81	61 - 126
Indeno[1,2,3-cd]pyrene	ND		50.2	42.6		ug/L		85	55 - 134
N-Nitrosodimethylamine	ND	cn	50.2	21.3		ug/L		42	26 - 120
n-Nitrosodiphenylamine(as diphenylamine)	ND		42.7	39.7		ug/L		93	64 - 130
Nitrobenzene	ND		50.2	35.5		ug/L		71	59 - 120
Pentachlorophenol	ND		100	77.7		ug/L		77	51 - 138
Phenanthrene	ND		50.2	44.0		ug/L		88	66 - 120
Phenol	ND		50.2	20.9		ug/L		42	22 - 120
Pyrene	ND		50.2	43.9		ug/L		87	67 - 126

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*47*		*13 - 138*
2-Fluorobiphenyl (Surr)	*72*		*44 - 120*
2-Fluorophenol (Surr)	*25*		*10 - 120*
Nitrobenzene-d5 (Surr)	*62*		*31 - 120*
p-Terphenyl-d14 (Surr)	*84*		*30 - 125*
Phenol-d5 (Surr)	*31*		*10 - 120*

Lab Sample ID: 410-136864-4 MSD
Matrix: Water
Analysis Batch: 404152

Client Sample ID: 16WC1A
Prep Type: Total/NA
Prep Batch: 403918

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	ND		50.3	40.7		ug/L		81	34 - 120	9	30
1,3-Dinitrobenzene	ND		50.3	51.5		ug/L		102	61 - 125	9	30
bis (2-chloroisopropyl) ether	ND	cn	50.3	34.6		ug/L		69	43 - 121	10	30
2,3,4,6-Tetrachlorophenol	ND		50.3	30.6		ug/L		61	60 - 126	2	30
2,4,5-Trichlorophenol	ND		50.3	34.2		ug/L		68	60 - 136	8	30
2,4,6-Trichlorophenol	ND	F1	50.3	29.5	F1	ug/L		59	63 - 133	6	30
2,4-Dichlorophenol	ND	F1	50.3	30.5		ug/L		61	60 - 127	8	30
2,4-Dinitrotoluene	ND		50.3	52.1		ug/L		104	66 - 131	8	30
2,6-Dichlorophenol	ND	F1	50.3	30.7	F1	ug/L		61	65 - 120	9	30
2,6-Dinitrotoluene	ND		50.3	48.8		ug/L		97	66 - 129	8	30
2-Chloronaphthalene	ND		50.3	46.0		ug/L		91	51 - 120	8	30
2-Chlorophenol	ND	F1	50.3	30.3		ug/L		60	57 - 120	9	30
2-Methylnaphthalene	ND		50.3	44.7		ug/L		89	53 - 120	8	30
o-Cresol	ND		50.3	38.9		ug/L		77	58 - 120	9	30
2-Nitroaniline	ND		50.3	49.7		ug/L		99	63 - 134	12	30
2-Nitrophenol	ND		50.3	47.6		ug/L		95	57 - 127	9	30
4-Bromophenyl-phenylether	ND		50.3	45.6		ug/L		91	66 - 120	10	30
4-Chloro-3-methylphenol	ND		50.3	39.2		ug/L		78	57 - 129	8	30
4-Chlorophenyl-phenyl ether	ND		50.3	43.8		ug/L		87	59 - 120	5	30
m & p-Cresol	ND		50.3	37.0		ug/L		74	49 - 120	7	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 410-136864-4 MSD
Matrix: Water
Analysis Batch: 404152

Client Sample ID: 16WC1A
Prep Type: Total/NA
Prep Batch: 403918

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Nitroaniline	ND		50.3	41.8		ug/L		83	55 - 126	4	30
Bis(2-ethylhexyl) phthalate	ND		50.3	50.2		ug/L		100	60 - 133	2	30
Acenaphthene	ND		50.3	46.7		ug/L		93	59 - 120	7	30
Acenaphthylene	ND		50.3	46.6		ug/L		93	61 - 121	9	30
Anthracene	ND		50.3	47.9		ug/L		95	67 - 123	7	30
Benzo[a]anthracene	ND		50.3	47.2		ug/L		94	66 - 133	4	30
Benzo[a]pyrene	ND		50.3	50.0		ug/L		99	64 - 131	3	30
Benzo[b]fluoranthene	ND		50.3	48.0		ug/L		95	64 - 124	7	30
Benzo[g,h,i]perylene	ND		50.3	43.5		ug/L		87	60 - 136	4	30
Benzo[k]fluoranthene	ND		50.3	49.3		ug/L		98	67 - 132	6	30
Chrysene	ND		50.3	48.7		ug/L		97	70 - 128	5	30
Dibenz(a,h)anthracene	ND		50.3	43.9		ug/L		87	59 - 135	6	30
Dibenzofuran	ND		50.3	46.0		ug/L		92	63 - 120	8	30
Diethyl phthalate	ND		50.3	51.3		ug/L		102	46 - 123	7	30
Fluoranthene	ND		50.3	46.7		ug/L		93	70 - 128	5	30
Fluorene	ND		50.3	45.8		ug/L		91	66 - 120	7	30
Hexachlorobenzene	ND		50.3	43.0		ug/L		85	61 - 126	6	30
Indeno[1,2,3-cd]pyrene	ND		50.3	45.5		ug/L		90	55 - 134	6	30
N-Nitrosodimethylamine	ND	cn	50.3	23.1		ug/L		46	26 - 120	8	30
n-Nitrosodiphenylamine(as diphenylamine)	ND		42.7	43.5		ug/L		102	64 - 130	9	30
Nitrobenzene	ND		50.3	40.4		ug/L		80	59 - 120	13	30
Pentachlorophenol	ND		101	78.5		ug/L		78	51 - 138	1	30
Phenanthrene	ND		50.3	47.7		ug/L		95	66 - 120	8	30
Phenol	ND		50.3	22.5		ug/L		45	22 - 120	7	30
Pyrene	ND		50.3	47.0		ug/L		94	67 - 126	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*45*		*13 - 138*
2-Fluorobiphenyl (Surr)	*78*		*44 - 120*
2-Fluorophenol (Surr)	*29*		*10 - 120*
Nitrobenzene-d5 (Surr)	*70*		*31 - 120*
p-Terphenyl-d14 (Surr)	*87*		*30 - 125*
Phenol-d5 (Surr)	*33*		*10 - 120*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-403519/1-A
Matrix: Water
Analysis Batch: 407005

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 403519

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.60	ug/L		08/02/23 10:20	08/10/23 17:03	1
Arsenic	ND		10	2.0	ug/L		08/02/23 10:20	08/10/23 17:03	1
Barium	ND		10	1.3	ug/L		08/02/23 10:20	08/10/23 17:03	1
Beryllium	ND		1.0	0.30	ug/L		08/02/23 10:20	08/10/23 17:03	1
Cadmium	ND		1.0	0.20	ug/L		08/02/23 10:20	08/10/23 17:03	1
Chromium	ND		5.0	1.0	ug/L		08/02/23 10:20	08/10/23 17:03	1
Cobalt	ND		5.0	1.0	ug/L		08/02/23 10:20	08/10/23 17:03	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-403519/1-A
Matrix: Water
Analysis Batch: 407005

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 403519

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		5.0	1.7	ug/L		08/02/23 10:20	08/10/23 17:03	1
Lead	ND		3.0	1.0	ug/L		08/02/23 10:20	08/10/23 17:03	1
Nickel	ND		10	2.0	ug/L		08/02/23 10:20	08/10/23 17:03	1
Selenium	ND		10	3.0	ug/L		08/02/23 10:20	08/10/23 17:03	1
Silver	ND		2.0	0.30	ug/L		08/02/23 10:20	08/10/23 17:03	1
Thallium	ND		1.0	0.20	ug/L		08/02/23 10:20	08/10/23 17:03	1
Vanadium	ND		10	2.5	ug/L		08/02/23 10:20	08/10/23 17:03	1

Lab Sample ID: MB 410-403519/1-A
Matrix: Water
Analysis Batch: 408197

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 403519

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		30	7.3	ug/L		08/02/23 10:20	08/14/23 23:18	1

Lab Sample ID: LCS 410-403519/2-A
Matrix: Water
Analysis Batch: 407005

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 403519

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	104		ug/L		104	80 - 120
Arsenic	500	502		ug/L		100	85 - 120
Barium	500	520		ug/L		104	80 - 120
Beryllium	50.0	46.8		ug/L		94	90 - 112
Cadmium	50.0	51.5		ug/L		103	86 - 113
Chromium	500	479		ug/L		96	90 - 115
Cobalt	500	483		ug/L		97	90 - 113
Copper	500	470		ug/L		94	80 - 120
Lead	50.0	51.8		ug/L		104	90 - 115
Nickel	500	487		ug/L		97	90 - 114
Selenium	100	98.7		ug/L		99	80 - 120
Silver	50.0	50.1		ug/L		100	88 - 113
Thallium	100	103		ug/L		103	80 - 120
Vanadium	500	503		ug/L		101	90 - 115

Lab Sample ID: LCS 410-403519/2-A
Matrix: Water
Analysis Batch: 408197

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 403519

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	500	505		ug/L		101	90 - 115

Lab Sample ID: MB 410-403837/1-A
Matrix: Water
Analysis Batch: 407006

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.60	ug/L		08/03/23 03:28	08/10/23 13:03	1
Arsenic	ND		10	2.0	ug/L		08/03/23 03:28	08/10/23 13:03	1
Barium	ND		10	1.3	ug/L		08/03/23 03:28	08/10/23 13:03	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-403837/1-A
Matrix: Water
Analysis Batch: 407006

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:03	1
Cadmium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:03	1
Chromium	ND		5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:03	1
Cobalt	ND		5.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:03	1
Copper	ND		5.0	1.7	ug/L		08/03/23 03:28	08/10/23 13:03	1
Lead	ND		3.0	1.0	ug/L		08/03/23 03:28	08/10/23 13:03	1
Nickel	ND		10	2.0	ug/L		08/03/23 03:28	08/10/23 13:03	1
Selenium	ND		10	3.0	ug/L		08/03/23 03:28	08/10/23 13:03	1
Silver	ND		2.0	0.30	ug/L		08/03/23 03:28	08/10/23 13:03	1
Thallium	ND		1.0	0.20	ug/L		08/03/23 03:28	08/10/23 13:03	1
Zinc	ND		30	7.3	ug/L		08/03/23 03:28	08/10/23 13:03	1
Vanadium	ND		10	2.5	ug/L		08/03/23 03:28	08/10/23 13:03	1

Lab Sample ID: LCS 410-403837/2-A
Matrix: Water
Analysis Batch: 407006

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	106		ug/L		106	80 - 120
Arsenic	500	511		ug/L		102	85 - 120
Barium	500	522		ug/L		104	80 - 120
Beryllium	50.0	47.2		ug/L		94	90 - 112
Cadmium	50.0	54.1		ug/L		108	86 - 113
Chromium	500	523		ug/L		105	90 - 115
Cobalt	500	522		ug/L		104	90 - 113
Copper	500	523		ug/L		105	80 - 120
Lead	50.0	52.8		ug/L		106	90 - 115
Nickel	500	523		ug/L		105	90 - 114
Selenium	100	103		ug/L		103	80 - 120
Silver	50.0	53.3		ug/L		107	88 - 113
Thallium	100	106		ug/L		106	80 - 120
Zinc	500	514		ug/L		103	90 - 115
Vanadium	500	521		ug/L		104	90 - 115

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 407006

Client Sample ID: 16WC1A
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	111		ug/L		111	75 - 125
Arsenic	5.3	J	500	531		ug/L		105	75 - 125
Barium	510		500	1070	E	ug/L		110	75 - 125
Beryllium	ND		50.0	49.2		ug/L		98	75 - 125
Cadmium	ND		50.0	54.9		ug/L		110	75 - 125
Chromium	ND		500	530		ug/L		106	75 - 125
Cobalt	15		500	531		ug/L		103	80 - 125
Copper	ND		500	521		ug/L		104	75 - 125
Lead	ND		50.0	53.1		ug/L		106	75 - 125
Nickel	15	^2	500	534		ug/L		104	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 407006

Client Sample ID: 16WC1A
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	ND		100	106		ug/L		106	75 - 125
Silver	ND		50.0	53.7		ug/L		107	75 - 125
Zinc	11	J	500	582		ug/L		114	75 - 125
Vanadium	ND		500	530		ug/L		106	75 - 125

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 408949

Client Sample ID: 16WC1A
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	ND		100	106		ug/L		106	75 - 125

Lab Sample ID: 410-136864-4 MSD
Matrix: Water
Analysis Batch: 407006

Client Sample ID: 16WC1A
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	109		ug/L		109	75 - 125	1	20
Arsenic	5.3	J	500	526		ug/L		104	75 - 125	1	20
Barium	510		500	1050	E	ug/L		107	75 - 125	1	20
Beryllium	ND		50.0	49.6		ug/L		99	75 - 125	1	20
Cadmium	ND		50.0	53.7		ug/L		107	75 - 125	2	20
Chromium	ND		500	522		ug/L		104	75 - 125	2	20
Cobalt	15		500	527		ug/L		102	80 - 125	1	20
Copper	ND		500	513		ug/L		103	75 - 125	1	20
Lead	ND		50.0	53.4		ug/L		107	75 - 125	1	20
Nickel	15	^2	500	525		ug/L		102	75 - 125	2	20
Selenium	ND		100	106		ug/L		106	75 - 125	1	20
Silver	ND		50.0	52.8		ug/L		106	75 - 125	2	20
Zinc	11	J	500	525		ug/L		103	75 - 125	10	20
Vanadium	ND		500	527		ug/L		105	75 - 125	1	20

Lab Sample ID: 410-136864-4 MSD
Matrix: Water
Analysis Batch: 408949

Client Sample ID: 16WC1A
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium	ND		100	106		ug/L		106	75 - 125	0	20

Lab Sample ID: 410-136864-4 DU
Matrix: Water
Analysis Batch: 407006

Client Sample ID: 16WC1A
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND		ND		ug/L		NC	20
Arsenic	5.3	J	5.51	J	ug/L		4	20
Barium	510		521		ug/L		1	20
Beryllium	ND		ND		ug/L		NC	20
Cadmium	ND		ND		ug/L		NC	20
Chromium	ND		ND		ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-136864-4 DU
Matrix: Water
Analysis Batch: 407006

Client Sample ID: 16WC1A
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cobalt	15			15.4		ug/L				1	20
Copper	ND			ND		ug/L				NC	20
Lead	ND			ND		ug/L				NC	20
Nickel	15	^2		14.7		ug/L				2	20
Selenium	ND			ND		ug/L				NC	20
Silver	ND			ND		ug/L				NC	20
Zinc	11	J		11.9	J	ug/L				4	20
Vanadium	ND			ND		ug/L				NC	20

Lab Sample ID: 410-136864-4 DU
Matrix: Water
Analysis Batch: 408949

Client Sample ID: 16WC1A
Prep Type: Total Recoverable
Prep Batch: 403837

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Thallium	ND			ND		ug/L				NC	20

Lab Sample ID: LRC 410-407005/9
Matrix: Water
Analysis Batch: 407005

Client Sample ID: Lab Control Sample

Analyte			Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			2000	2030		ug/L		101	90 - 110		
Arsenic			2000	2000		ug/L		100	90 - 110		
Barium			2000	1920		ug/L		96	90 - 110		
Beryllium			2000	1790	^5-	ug/L		90	90 - 110		
Cadmium			2000	1870		ug/L		93	90 - 110		
Chromium			2000	1810		ug/L		90	90 - 110		
Cobalt			2000	1770	^5-	ug/L		88	90 - 110		
Copper			2000	1910		ug/L		96	90 - 110		
Lead			2000	2040		ug/L		102	90 - 110		
Nickel			2000	1930		ug/L		97	90 - 110		
Selenium			2000	2000		ug/L		100	90 - 110		
Silver			2000	1900		ug/L		95	90 - 110		
Thallium			2000	2030		ug/L		101	90 - 110		
Zinc			2000	1980		ug/L		99	90 - 110		
Vanadium			2000	1880		ug/L		94	90 - 110		

Lab Sample ID: LRC 410-407006/9
Matrix: Water
Analysis Batch: 407006

Client Sample ID: Lab Control Sample

Analyte			Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			2000	2090		ug/L		105	90 - 110		
Arsenic			2000	2030		ug/L		101	90 - 110		
Barium			2000	2100		ug/L		105	90 - 110		
Beryllium			2000	1960		ug/L		98	90 - 110		
Cadmium			2000	2060		ug/L		103	90 - 110		
Chromium			2000	2040		ug/L		102	90 - 110		
Cobalt			2000	2020		ug/L		101	90 - 110		

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LRC 410-407006/9
Client Sample ID: Lab Control Sample
Matrix: Water
Analysis Batch: 407006

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec Limits
Copper	2000	1970		ug/L		99	90 - 110
Lead	2000	2160		ug/L		108	90 - 110
Nickel	2000	1980		ug/L		99	90 - 110
Selenium	2000	2060		ug/L		103	90 - 110
Silver	2000	2010		ug/L		101	90 - 110
Thallium	2000	2190		ug/L		109	90 - 110
Zinc	2000	2020		ug/L		101	90 - 110
Vanadium	2000	2070		ug/L		104	90 - 110

Lab Sample ID: LRC 410-407255/9
Client Sample ID: Lab Control Sample
Matrix: Water
Analysis Batch: 407255

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	2000	2040		ug/L		102	90 - 110
Arsenic	2000	1970		ug/L		98	90 - 110
Barium	2000	1950		ug/L		98	90 - 110
Cadmium	2000	1930		ug/L		96	90 - 110
Chromium	2000	1920		ug/L		96	90 - 110
Copper	2000	1990		ug/L		100	90 - 110
Lead	2000	2030		ug/L		102	90 - 110
Nickel	2000	2010		ug/L		101	90 - 110
Silver	2000	1940		ug/L		97	90 - 110
Thallium	2000	2050		ug/L		103	90 - 110
Zinc	2000	1930		ug/L		97	90 - 110
Vanadium	2000	1920		ug/L		96	90 - 110

Lab Sample ID: LRC 410-408197/9
Client Sample ID: Lab Control Sample
Matrix: Water
Analysis Batch: 408197

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	2000	1960		ug/L		98	90 - 110
Arsenic	2000	1950		ug/L		98	90 - 110
Barium	2000	1870		ug/L		93	90 - 110
Cadmium	2000	1850		ug/L		93	90 - 110
Chromium	2000	1850		ug/L		93	90 - 110
Copper	2000	1890		ug/L		94	90 - 110
Lead	2000	2030		ug/L		101	90 - 110
Nickel	2000	1900		ug/L		95	90 - 110
Silver	2000	1890		ug/L		94	90 - 110
Thallium	2000	2030		ug/L		101	90 - 110
Zinc	2000	1940		ug/L		97	90 - 110
Vanadium	2000	1870		ug/L		93	90 - 110

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LRC 410-408949/9
Matrix: Water
Analysis Batch: 408949

Client Sample ID: Lab Control Sample

Analyte			Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			2000	1920		ug/L		96	90 - 110		
Arsenic			2000	1970		ug/L		99	90 - 110		
Barium			2000	1810		ug/L		91	90 - 110		
Cadmium			2000	1830		ug/L		91	90 - 110		
Chromium			2000	1940		ug/L		97	90 - 110		
Copper			2000	1920		ug/L		96	90 - 110		
Lead			2000	2030		ug/L		102	90 - 110		
Nickel			2000	1940		ug/L		97	90 - 110		
Selenium			2000	2030		ug/L		102	90 - 110		
Silver			2000	1870		ug/L		93	90 - 110		
Thallium			2000	2040		ug/L		102	90 - 110		
Zinc			2000	1970		ug/L		98	90 - 110		
Vanadium			2000	1900		ug/L		95	90 - 110		

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-403849/1-A
Matrix: Water
Analysis Batch: 404633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.20	ug/L		08/03/23 05:59	08/04/23 09:28	1

Lab Sample ID: LCS 410-403849/2-A
Matrix: Water
Analysis Batch: 404633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403849

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			1.00	1.00	J	ug/L		100	80 - 118		

Lab Sample ID: 410-136864-4 MS
Matrix: Water
Analysis Batch: 404633

Client Sample ID: 16WC1A
Prep Type: Total/NA
Prep Batch: 403849

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		1.00	0.977	J	ug/L		98	80 - 120		

Lab Sample ID: 410-136864-4 MSD
Matrix: Water
Analysis Batch: 404633

Client Sample ID: 16WC1A
Prep Type: Total/NA
Prep Batch: 403849

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.891	J	ug/L		89	80 - 120	9	20

Lab Sample ID: 410-136864-4 DU
Matrix: Water
Analysis Batch: 404633

Client Sample ID: 16WC1A
Prep Type: Total/NA
Prep Batch: 403849

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-403851/1-A
Matrix: Water
Analysis Batch: 404633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.20	ug/L		08/03/23 06:08	08/04/23 11:44	1

Lab Sample ID: LCS 410-403851/2-A
Matrix: Water
Analysis Batch: 404633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	0.990	J	ug/L		99	80 - 118

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 410-405892/2-A
Matrix: Water
Analysis Batch: 406396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		20	5.0	ug/L		08/08/23 16:00	08/09/23 13:16	1

Lab Sample ID: LCS 410-405892/1-A
Matrix: Water
Analysis Batch: 406396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	215		ug/L		107	90 - 110

Lab Sample ID: MB 410-406365/2-A
Matrix: Water
Analysis Batch: 406800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 406365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		20	5.0	ug/L		08/09/23 14:30	08/10/23 11:43	1

Lab Sample ID: LCS 410-406365/1-A
Matrix: Water
Analysis Batch: 406800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 406365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	204		ug/L		102	90 - 110

Lab Sample ID: MB 410-406706/3-A
Matrix: Water
Analysis Batch: 406800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 406706

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		20	5.0	ug/L		08/10/23 09:15	08/10/23 12:40	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 410-406706/1-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 406800
Prep Batch: 406706

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			200	234	*+	ug/L		117	90 - 110		

Lab Sample ID: 410-136864-4 MS
Client Sample ID: 16WC1A
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 406800
Prep Batch: 406706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	cn	200	195	cn	ug/L		97	72 - 114		

Lab Sample ID: 410-136864-4 DU
Client Sample ID: 16WC1A
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 406800
Prep Batch: 406706

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cyanide, Total	ND	cn		ND	cn	ug/L				NC	20

GC/MS VOA

Analysis Batch: 405099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total/NA	Water	8260D	
410-136864-2	16MW8	Total/NA	Water	8260D	
410-136864-3	16MW9	Total/NA	Water	8260D	
410-136864-4	16WC1A	Total/NA	Water	8260D	
410-136864-5	16WDUP	Total/NA	Water	8260D	
410-136864-6	16WC1B	Total/NA	Water	8260D	
MB 410-405099/9	Method Blank	Total/NA	Water	8260D	
LCS 410-405099/5	Lab Control Sample	Total/NA	Water	8260D	
410-136864-4 MS	16WC1A	Total/NA	Water	8260D	
410-136864-4 MSD	16WC1A	Total/NA	Water	8260D	

Analysis Batch: 405906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total/NA	Water	8260D	
410-136864-1 - DL	16C1	Total/NA	Water	8260D	
410-136864-2	16MW8	Total/NA	Water	8260D	
410-136864-3	16MW9	Total/NA	Water	8260D	
410-136864-3 - DL	16MW9	Total/NA	Water	8260D	
410-136864-4	16WC1A	Total/NA	Water	8260D	
410-136864-5	16WDUP	Total/NA	Water	8260D	
410-136864-6	16WC1B	Total/NA	Water	8260D	
MB 410-405906/8	Method Blank	Total/NA	Water	8260D	
LCS 410-405906/5	Lab Control Sample	Total/NA	Water	8260D	
LCS 410-405906/6	Lab Control Sample	Total/NA	Water	8260D	
410-136864-4 MS	16WC1A	Total/NA	Water	8260D	
410-136864-4 MS	16WC1A	Total/NA	Water	8260D	
410-136864-4 MSD	16WC1A	Total/NA	Water	8260D	
410-136864-4 MSD	16WC1A	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 403666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-2	16MW8	Total/NA	Water	3510C	
410-136864-6	16WC1B	Total/NA	Water	3510C	
MB 410-403666/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-403666/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 410-403666/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-403666/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 410-403666/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 403788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-2	16MW8	Total/NA	Water	8270D	403666
410-136864-6	16WC1B	Total/NA	Water	8270D	403666
MB 410-403666/1-A	Method Blank	Total/NA	Water	8270D	403666
LCS 410-403666/2-A	Lab Control Sample	Total/NA	Water	8270D	403666
LCS 410-403666/4-A	Lab Control Sample	Total/NA	Water	8270D	403666
LCSD 410-403666/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	403666
LCSD 410-403666/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	403666

GC/MS Semi VOA

Prep Batch: 403918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total/NA	Water	3510C	
410-136864-3	16MW9	Total/NA	Water	3510C	
410-136864-4	16WC1A	Total/NA	Water	3510C	
410-136864-5	16WDUP	Total/NA	Water	3510C	
MB 410-403918/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-403918/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 410-403918/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-403918/4-A	Lab Control Sample Dup	Total/NA	Water	3510C	
410-136864-4 MS	16WC1A	Total/NA	Water	3510C	
410-136864-4 MSD	16WC1A	Total/NA	Water	3510C	

Analysis Batch: 404152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total/NA	Water	8270D	403918
410-136864-3	16MW9	Total/NA	Water	8270D	403918
410-136864-4	16WC1A	Total/NA	Water	8270D	403918
410-136864-5	16WDUP	Total/NA	Water	8270D	403918
MB 410-403918/1-A	Method Blank	Total/NA	Water	8270D	403918
LCS 410-403918/2-A	Lab Control Sample	Total/NA	Water	8270D	403918
LCS 410-403918/3-A	Lab Control Sample	Total/NA	Water	8270D	403918
LCSD 410-403918/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	403918
410-136864-4 MS	16WC1A	Total/NA	Water	8270D	403918
410-136864-4 MSD	16WC1A	Total/NA	Water	8270D	403918

Metals

Prep Batch: 403519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-3	16MW9	Total Recoverable	Water	3005A	
MB 410-403519/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-403519/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 403837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total Recoverable	Water	3005A	
410-136864-2	16MW8	Total Recoverable	Water	3005A	
410-136864-4	16WC1A	Total Recoverable	Water	3005A	
410-136864-5	16WDUP	Total Recoverable	Water	3005A	
410-136864-6	16WC1B	Total Recoverable	Water	3005A	
MB 410-403837/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-403837/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
410-136864-4 MS	16WC1A	Total Recoverable	Water	3005A	
410-136864-4 MSD	16WC1A	Total Recoverable	Water	3005A	
410-136864-4 DU	16WC1A	Total Recoverable	Water	3005A	

Prep Batch: 403849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-3	16MW9	Total/NA	Water	7470A	
410-136864-4	16WC1A	Total/NA	Water	7470A	
MB 410-403849/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-403849/2-A	Lab Control Sample	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 403849 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-4 MS	16WC1A	Total/NA	Water	7470A	
410-136864-4 MSD	16WC1A	Total/NA	Water	7470A	
410-136864-4 DU	16WC1A	Total/NA	Water	7470A	

Prep Batch: 403851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total/NA	Water	7470A	
410-136864-2	16MW8	Total/NA	Water	7470A	
410-136864-5	16WDUP	Total/NA	Water	7470A	
410-136864-6	16WC1B	Total/NA	Water	7470A	
MB 410-403851/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-403851/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 404633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total/NA	Water	7470A	403851
410-136864-2	16MW8	Total/NA	Water	7470A	403851
410-136864-3	16MW9	Total/NA	Water	7470A	403849
410-136864-4	16WC1A	Total/NA	Water	7470A	403849
410-136864-5	16WDUP	Total/NA	Water	7470A	403851
410-136864-6	16WC1B	Total/NA	Water	7470A	403851
MB 410-403849/1-A	Method Blank	Total/NA	Water	7470A	403849
MB 410-403851/1-A	Method Blank	Total/NA	Water	7470A	403851
LCS 410-403849/2-A	Lab Control Sample	Total/NA	Water	7470A	403849
LCS 410-403851/2-A	Lab Control Sample	Total/NA	Water	7470A	403851
410-136864-4 MS	16WC1A	Total/NA	Water	7470A	403849
410-136864-4 MSD	16WC1A	Total/NA	Water	7470A	403849
410-136864-4 DU	16WC1A	Total/NA	Water	7470A	403849

Analysis Batch: 407005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-3	16MW9	Total Recoverable	Water	6020B	403519
MB 410-403519/1-A	Method Blank	Total Recoverable	Water	6020B	403519
LCS 410-403519/2-A	Lab Control Sample	Total Recoverable	Water	6020B	403519
LRC 410-407005/9	Lab Control Sample		Water	6020B	

Analysis Batch: 407006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total Recoverable	Water	6020B	403837
410-136864-2	16MW8	Total Recoverable	Water	6020B	403837
410-136864-4	16WC1A	Total Recoverable	Water	6020B	403837
410-136864-5	16WDUP	Total Recoverable	Water	6020B	403837
410-136864-6	16WC1B	Total Recoverable	Water	6020B	403837
MB 410-403837/1-A	Method Blank	Total Recoverable	Water	6020B	403837
LCS 410-403837/2-A	Lab Control Sample	Total Recoverable	Water	6020B	403837
LRC 410-407006/9	Lab Control Sample		Water	6020B	
410-136864-4 MS	16WC1A	Total Recoverable	Water	6020B	403837
410-136864-4 MSD	16WC1A	Total Recoverable	Water	6020B	403837
410-136864-4 DU	16WC1A	Total Recoverable	Water	6020B	403837

Metals

Analysis Batch: 407255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total Recoverable	Water	6020B	403837
410-136864-2	16MW8	Total Recoverable	Water	6020B	403837
410-136864-6	16WC1B	Total Recoverable	Water	6020B	403837
LRC 410-407255/9	Lab Control Sample		Water	6020B	

Analysis Batch: 408197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-3	16MW9	Total Recoverable	Water	6020B	403519
MB 410-403519/1-A	Method Blank	Total Recoverable	Water	6020B	403519
LCS 410-403519/2-A	Lab Control Sample	Total Recoverable	Water	6020B	403519
LRC 410-408197/9	Lab Control Sample		Water	6020B	

Analysis Batch: 408949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-4	16WC1A	Total Recoverable	Water	6020B	403837
LRC 410-408949/9	Lab Control Sample		Water	6020B	
410-136864-4 MS	16WC1A	Total Recoverable	Water	6020B	403837
410-136864-4 MSD	16WC1A	Total Recoverable	Water	6020B	403837
410-136864-4 DU	16WC1A	Total Recoverable	Water	6020B	403837

General Chemistry

Prep Batch: 405892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-2	16MW8	Total/NA	Water	9012B	
410-136864-6	16WC1B	Total/NA	Water	9012B	
MB 410-405892/2-A	Method Blank	Total/NA	Water	9012B	
LCS 410-405892/1-A	Lab Control Sample	Total/NA	Water	9012B	

Prep Batch: 406365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total/NA	Water	9012B	
410-136864-3	16MW9	Total/NA	Water	9012B	
MB 410-406365/2-A	Method Blank	Total/NA	Water	9012B	
LCS 410-406365/1-A	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 406396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-2	16MW8	Total/NA	Water	9012B	405892
410-136864-6	16WC1B	Total/NA	Water	9012B	405892
MB 410-405892/2-A	Method Blank	Total/NA	Water	9012B	405892
LCS 410-405892/1-A	Lab Control Sample	Total/NA	Water	9012B	405892

Prep Batch: 406706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-4	16WC1A	Total/NA	Water	9012B	
410-136864-5	16WDUP	Total/NA	Water	9012B	
MB 410-406706/3-A	Method Blank	Total/NA	Water	9012B	
LCS 410-406706/1-A	Lab Control Sample	Total/NA	Water	9012B	
410-136864-4 MS	16WC1A	Total/NA	Water	9012B	
410-136864-4 DU	16WC1A	Total/NA	Water	9012B	

QC Association Summary

Client: TRC, Engineers, Inc.
Project/Site: RFAAP, Radford HWMU16

Job ID: 410-136864-1

General Chemistry

Analysis Batch: 406800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-136864-1	16C1	Total/NA	Water	9012B	406365
410-136864-3	16MW9	Total/NA	Water	9012B	406365
410-136864-4	16WC1A	Total/NA	Water	9012B	406706
410-136864-5	16WDUP	Total/NA	Water	9012B	406706
MB 410-406365/2-A	Method Blank	Total/NA	Water	9012B	406365
MB 410-406706/3-A	Method Blank	Total/NA	Water	9012B	406706
LCS 410-406365/1-A	Lab Control Sample	Total/NA	Water	9012B	406365
LCS 410-406706/1-A	Lab Control Sample	Total/NA	Water	9012B	406706
410-136864-4 MS	16WC1A	Total/NA	Water	9012B	406706
410-136864-4 DU	16WC1A	Total/NA	Water	9012B	406706

Lab Chronicle

Client: TRC, Engineers, Inc.
Project/Site: RFAAP, Radford HWMU16

Job ID: 410-136864-1

Client Sample ID: 16C1

Date Collected: 07/27/23 12:45
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405906	JS6E	ELLE	08/09/23 02:41
Total/NA	Analysis	8260D	DL	4	405906	JS6E	ELLE	08/09/23 03:03
Total/NA	Analysis	8260D		1	405099	TQ4J	ELLE	08/07/23 13:34
Total/NA	Prep	3510C			403918	QKX3	ELLE	08/03/23 08:20
Total/NA	Analysis	8270D		1	404152	P7EB	ELLE	08/03/23 19:16
Total Recoverable	Prep	3005A			403837	HUH3	ELLE	08/03/23 03:28
Total Recoverable	Analysis	6020B		1	407006	UCIG	ELLE	08/10/23 13:31
Total Recoverable	Prep	3005A			403837	HUH3	ELLE	08/03/23 03:28
Total Recoverable	Analysis	6020B		1	407255	F7JF	ELLE	08/11/23 09:00
Total/NA	Prep	7470A			403851	HUH3	ELLE	08/03/23 06:08
Total/NA	Analysis	7470A		1	404633	UEFS	ELLE	08/04/23 12:19
Total/NA	Prep	9012B			406365	NLE3	ELLE	08/09/23 14:30 - 08/09/23 16:15 [1]
Total/NA	Analysis	9012B		1	406800	JCG7	ELLE	08/10/23 11:05

Client Sample ID: 16MW8

Date Collected: 07/26/23 10:05
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405906	JS6E	ELLE	08/09/23 00:51
Total/NA	Analysis	8260D		1	405099	TQ4J	ELLE	08/07/23 13:56
Total/NA	Prep	3510C			403666	T9CY	ELLE	08/02/23 15:28
Total/NA	Analysis	8270D		1	403788	SJ89	ELLE	08/03/23 03:22
Total Recoverable	Prep	3005A			403837	HUH3	ELLE	08/03/23 03:28
Total Recoverable	Analysis	6020B		1	407006	UCIG	ELLE	08/10/23 13:29
Total Recoverable	Prep	3005A			403837	HUH3	ELLE	08/03/23 03:28
Total Recoverable	Analysis	6020B		1	407255	F7JF	ELLE	08/11/23 08:57
Total/NA	Prep	7470A			403851	HUH3	ELLE	08/03/23 06:08
Total/NA	Analysis	7470A		1	404633	UEFS	ELLE	08/04/23 12:07
Total/NA	Prep	9012B			405892	NLE3	ELLE	08/08/23 16:00 - 08/08/23 17:45 [1]
Total/NA	Analysis	9012B		1	406396	JCG7	ELLE	08/09/23 13:29

Client Sample ID: 16MW9

Date Collected: 07/27/23 11:25
Date Received: 07/28/23 09:25

Lab Sample ID: 410-136864-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405906	JS6E	ELLE	08/09/23 01:56
Total/NA	Analysis	8260D	DL	2.5	405906	JS6E	ELLE	08/09/23 02:19
Total/NA	Analysis	8260D		1	405099	TQ4J	ELLE	08/07/23 14:18
Total/NA	Prep	3510C			403918	QKX3	ELLE	08/03/23 08:20
Total/NA	Analysis	8270D		1	404152	P7EB	ELLE	08/03/23 19:35
Total Recoverable	Prep	3005A			403519	UAMX	ELLE	08/02/23 10:20
Total Recoverable	Analysis	6020B		1	407005	UCIG	ELLE	08/10/23 18:17

Lab Chronicle

Client: TRC, Engineers, Inc.
Job ID: 410-136864-1
Project/Site: RFAAP, Radford HWMU16

Client Sample ID: 16MW9
Lab Sample ID: 410-136864-3
Date Collected: 07/27/23 11:25
Matrix: Water
Date Received: 07/28/23 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			403519	UAMX	ELLE	08/02/23 10:20
Total Recoverable	Analysis	6020B		1	408197	UCIG	ELLE	08/14/23 23:22
Total/NA	Prep	7470A			403849	HUH3	ELLE	08/03/23 05:59
Total/NA	Analysis	7470A		1	404633	UEFS	ELLE	08/04/23 10:11
Total/NA	Prep	9012B			406365	NLE3	ELLE	08/09/23 14:30 - 08/09/23 16:15 [1]
Total/NA	Analysis	9012B		1	406800	JCG7	ELLE	08/10/23 11:05

Client Sample ID: 16WC1A
Lab Sample ID: 410-136864-4
Date Collected: 07/27/23 09:55
Matrix: Water
Date Received: 07/28/23 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405906	JS6E	ELLE	08/08/23 22:39
Total/NA	Analysis	8260D		1	405099	TQ4J	ELLE	08/07/23 15:24
Total/NA	Prep	3510C			403918	QKX3	ELLE	08/03/23 08:20
Total/NA	Analysis	8270D		1	404152	P7EB	ELLE	08/03/23 17:41
Total Recoverable	Prep	3005A			403837	HUH3	ELLE	08/03/23 03:28
Total Recoverable	Analysis	6020B		1	407006	UCIG	ELLE	08/10/23 13:07
Total Recoverable	Prep	3005A			403837	HUH3	ELLE	08/03/23 03:28
Total Recoverable	Analysis	6020B		1	408949	LC3M	ELLE	08/16/23 11:22
Total/NA	Prep	7470A			403849	HUH3	ELLE	08/03/23 05:59
Total/NA	Analysis	7470A		1	404633	UEFS	ELLE	08/04/23 09:33
Total/NA	Prep	9012B			406706	UJE2	ELLE	08/10/23 09:15 - 08/10/23 11:00 [1]
Total/NA	Analysis	9012B		1	406800	JCG7	ELLE	08/10/23 12:41

Client Sample ID: 16WDUP
Lab Sample ID: 410-136864-5
Date Collected: 07/27/23 10:20
Matrix: Water
Date Received: 07/28/23 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405906	JS6E	ELLE	08/09/23 01:12
Total/NA	Analysis	8260D		1	405099	TQ4J	ELLE	08/07/23 14:40
Total/NA	Prep	3510C			403918	QKX3	ELLE	08/03/23 08:20
Total/NA	Analysis	8270D		1	404152	P7EB	ELLE	08/03/23 19:55
Total Recoverable	Prep	3005A			403837	HUH3	ELLE	08/03/23 03:28
Total Recoverable	Analysis	6020B		1	407006	UCIG	ELLE	08/10/23 13:33
Total/NA	Prep	7470A			403851	HUH3	ELLE	08/03/23 06:08
Total/NA	Analysis	7470A		1	404633	UEFS	ELLE	08/04/23 12:21
Total/NA	Prep	9012B			406706	UJE2	ELLE	08/10/23 09:15 - 08/10/23 11:00 [1]
Total/NA	Analysis	9012B		1	406800	JCG7	ELLE	08/10/23 12:44

Lab Chronicle

Client: TRC, Engineers, Inc.
Job ID: 410-136864-1
Project/Site: RFAAP, Radford HWMU16

Client Sample ID: 16WC1B
Lab Sample ID: 410-136864-6

Date Collected: 07/26/23 12:05
Matrix: Water
Date Received: 07/28/23 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405906	JS6E	ELLE	08/09/23 01:34
Total/NA	Analysis	8260D		1	405099	TQ4J	ELLE	08/07/23 15:02
Total/NA	Prep	3510C			403666	T9CY	ELLE	08/02/23 15:28
Total/NA	Analysis	8270D		1	403788	SJ89	ELLE	08/03/23 03:43
Total Recoverable	Prep	3005A			403837	HUH3	ELLE	08/03/23 03:28
Total Recoverable	Analysis	6020B		1	407006	UCIG	ELLE	08/10/23 13:27
Total Recoverable	Prep	3005A			403837	HUH3	ELLE	08/03/23 03:28
Total Recoverable	Analysis	6020B		1	407255	F7JF	ELLE	08/11/23 08:55
Total/NA	Prep	7470A			403851	HUH3	ELLE	08/03/23 06:08
Total/NA	Analysis	7470A		1	404633	UEFS	ELLE	08/04/23 12:09
Total/NA	Prep	9012B			405892	NLE3	ELLE	08/08/23 16:00 - 08/08/23 17:45 [1]
Total/NA	Analysis	9012B		1	406396	JCG7	ELLE	08/09/23 13:29

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: TRC, Engineers, Inc. Job ID: 410-136864-1
Project/Site: RFAAP, Radford HWMU16

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460182	06-14-25

Method Summary

Client: TRC, Engineers, Inc. Job ID: 410-136864-1
Project/Site: RFAAP, Radford HWMU16

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
9012B	Cyanide, Total andor Amenable	SW846	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: TRC, Engineers, Inc.
Project/Site: RFAAP, Radford HWMU16

Job ID: 410-136864-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-136864-1	16C1	Water	07/27/23 12:45	07/28/23 09:25
410-136864-2	16MW8	Water	07/26/23 10:05	07/28/23 09:25
410-136864-3	16MW9	Water	07/27/23 11:25	07/28/23 09:25
410-136864-4	16WC1A	Water	07/27/23 09:55	07/28/23 09:25
410-136864-5	16WDUP	Water	07/27/23 10:20	07/28/23 09:25
410-136864-6	16WC1B	Water	07/26/23 12:05	07/28/23 09:25

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 395211

Lab Sample ID: IC 410-395211/3 Client Sample ID:

Date Analyzed: 07/10/23 15:50 Lab File ID: CL10X02.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorodifluoromethane	1.70	Incomplete Integration	DVW2	07/11/23 08:09
Acetonitrile	3.36	Incomplete Integration	DVW2	07/11/23 08:11
Vinyl acetate	4.51	Incomplete Integration	DVW2	07/11/23 08:11
Ethyl acetate	5.48	Incomplete Integration	DVW2	07/11/23 08:11
2-Chloroethyl vinyl ether	8.60	Incomplete Integration	DVW2	07/11/23 08:11
cis-1,4-Dichloro-2-butene	11.72	Peak assignment corrected	DVW2	07/11/23 08:08
Cyclohexanone	11.72	Incomplete Integration	DVW2	07/11/23 08:12

Lab Sample ID: IC 410-395211/4 Client Sample ID:

Date Analyzed: 07/10/23 16:12 Lab File ID: CL10X03.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.35	Incomplete Integration	DVW2	07/11/23 08:13
Vinyl acetate	4.50	Incomplete Integration	DVW2	07/11/23 08:13
Ethyl acetate	5.51	Incomplete Integration	DVW2	07/11/23 08:13
cis-1,4-Dichloro-2-butene	11.64	Incomplete Integration	DVW2	07/11/23 08:13

Lab Sample ID: IC 410-395211/5 Client Sample ID:

Date Analyzed: 07/10/23 16:34 Lab File ID: CL10X04.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.36	Incomplete Integration	DVW2	07/11/23 08:15
Ethyl acetate	5.42	Incomplete Integration	DVW2	07/11/23 08:15
cis-1,4-Dichloro-2-butene	11.64	Incomplete Integration	DVW2	07/11/23 08:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 395211

Lab Sample ID: IC 410-395211/6 Client Sample ID:

Date Analyzed: 07/10/23 16:56 Lab File ID: CL10X05.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.34	Incomplete Integration	DVW2	07/11/23 08:16
Vinyl acetate	4.47	Incomplete Integration	DVW2	07/11/23 08:16
cis-1,4-Dichloro-2-butene	11.63	Incomplete Integration	DVW2	07/11/23 08:16

Lab Sample ID: IC 410-395211/7 Client Sample ID:

Date Analyzed: 07/10/23 17:18 Lab File ID: CL10X06.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.36	Incomplete Integration	DVW2	07/11/23 08:17
Vinyl acetate	4.46	Incomplete Integration	DVW2	07/11/23 08:17
Ethyl acetate	5.39	Baseline	UKEK	07/11/23 20:33
cis-1,4-Dichloro-2-butene	11.63	Incomplete Integration	DVW2	07/11/23 08:17

Lab Sample ID: IC 410-395211/8 Client Sample ID:

Date Analyzed: 07/10/23 17:40 Lab File ID: CL10X07.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.32	Incomplete Integration	DVW2	07/11/23 08:09
Vinyl acetate	4.45	Incomplete Integration	DVW2	07/11/23 08:09
Ethyl acetate	5.38	Incomplete Integration	DVW2	07/11/23 08:09
2-Chloroethyl vinyl ether	8.54	Incomplete Integration	DVW2	07/11/23 08:10
cis-1,4-Dichloro-2-butene	11.63	Incomplete Integration	DVW2	07/11/23 08:10

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 395211

Lab Sample ID: IC 410-395211/9 Client Sample ID:

Date Analyzed: 07/10/23 18:02 Lab File ID: CL10X08.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.32	Incomplete Integration	DVW2	07/11/23 08:18
Vinyl acetate	4.43	Incomplete Integration	DVW2	07/11/23 08:18
Ethyl acetate	5.37	Incomplete Integration	DVW2	07/11/23 08:18
2-Chloroethyl vinyl ether	8.54	Incomplete Integration	DVW2	07/11/23 08:18
cis-1,4-Dichloro-2-butene	11.63	Incomplete Integration	DVW2	07/11/23 08:18

Lab Sample ID: ICV 410-395211/11 Client Sample ID:

Date Analyzed: 07/10/23 18:45 Lab File ID: CL10X10.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.32	Incomplete Integration	DVW2	07/11/23 08:20
Vinyl acetate	4.43	Peak assignment corrected	DVW2	07/11/23 08:07
Ethyl acetate	5.39	Incomplete Integration	DVW2	07/11/23 08:20
2-Chloroethyl vinyl ether	8.54	Peak assignment corrected	DVW2	07/11/23 08:07
cis-1,4-Dichloro-2-butene	11.63	Peak assignment corrected	DVW2	07/11/23 08:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 395211

Lab Sample ID: IC 410-395211/13 Client Sample ID:

Date Analyzed: 07/10/23 19:29 Lab File ID: CL10X12.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.70	Incomplete Integration	DVW2	07/11/23 08:26
1,3-Butadiene	1.95	Incomplete Integration	DVW2	07/11/23 08:26
Bromomethane	2.22	Incomplete Integration	DVW2	07/11/23 08:26
Freon 123a	2.80	Incomplete Integration	DVW2	07/11/23 08:26
Carbon disulfide	3.21	Incomplete Integration	DVW2	07/11/23 08:27
Methyl acetate	3.34	Incomplete Integration	DVW2	07/11/23 08:27
Methylene Chloride	3.50	Incomplete Integration	DVW2	07/11/23 08:27
t-Butyl alcohol-d10 (IS)	3.55	Incomplete Integration	DVW2	07/11/23 08:45
1,1-Dichloroethane	4.45	Incomplete Integration	DVW2	07/11/23 08:28
Chloroprene	4.57	Incomplete Integration	DVW2	07/11/23 08:28
Ethyl t-butyl ether	5.08	Incomplete Integration	DVW2	07/11/23 08:28
2,2-Dichloropropane	5.33	Incomplete Integration	DVW2	07/11/23 08:28
2-Butanone	5.40	Incomplete Integration	DVW2	07/11/23 08:28
Propionitrile	5.56	Incomplete Integration	DVW2	07/11/23 08:28
Tetrahydrofuran	5.72	Incomplete Integration	DVW2	07/11/23 08:28
1,1,1-Trichloroethane	6.05	Incomplete Integration	DVW2	07/11/23 08:28
Trichloroethene	7.45	Incomplete Integration	DVW2	07/11/23 08:30
Methyl methacrylate	7.93	Incomplete Integration	DVW2	07/11/23 08:30
1,4-Dioxane	7.96	Incomplete Integration	DVW2	07/11/23 08:30
2-Nitropropane	8.43	Incomplete Integration	DVW2	07/11/23 08:30
1-Bromo-2-chloroethane	8.56	Incomplete Integration	DVW2	07/11/23 08:30
trans-1,3-Dichloropropene	9.49	Incomplete Integration	DVW2	07/11/23 08:31
Ethyl methacrylate	9.56	Incomplete Integration	DVW2	07/11/23 08:31
2-Hexanone	9.96	Incomplete Integration	DVW2	07/11/23 08:31
Ethylbenzene	10.79	Incomplete Integration	DVW2	07/11/23 08:39
1,1,2,2-Tetrachloroethane	11.85	Baseline	UKEK	07/11/23 20:34
trans-1,4-Dichloro-2-butene	11.88	Baseline	UKEK	07/11/23 20:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 395211

Lab Sample ID: IC 410-395211/14 Client Sample ID:

Date Analyzed: 07/10/23 19:51 Lab File ID: CL10X13.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Incomplete Integration	DVW2	07/11/23 08:39
1,3-Butadiene	1.93	Incomplete Integration	DVW2	07/11/23 08:39
Methyl acetate	3.34	Incomplete Integration	DVW2	07/11/23 08:40
t-Butyl alcohol-d10 (IS)	3.55	Incomplete Integration	DVW2	07/11/23 08:45
t-Butyl alcohol	3.65	Incomplete Integration	DVW2	07/11/23 08:41
Chloroprene	4.56	Incomplete Integration	DVW2	07/11/23 08:41
2,2-Dichloropropane	5.32	Incomplete Integration	DVW2	07/11/23 08:41
Propionitrile	5.54	Incomplete Integration	DVW2	07/11/23 08:41
Tetrahydrofuran	5.71	Incomplete Integration	DVW2	07/11/23 08:41
Trichloroethene	7.45	Incomplete Integration	DVW2	07/11/23 08:42
n-Butanol	7.60	Incomplete Integration	DVW2	07/11/23 08:42
Methylcyclohexane	7.74	Incomplete Integration	DVW2	07/11/23 08:42
1,4-Dioxane	8.02	Incomplete Integration	DVW2	07/11/23 08:42
1-Chlorohexane	10.69	Incomplete Integration	DVW2	07/11/23 08:43

Lab Sample ID: IC 410-395211/15 Client Sample ID:

Date Analyzed: 07/10/23 20:13 Lab File ID: CL10X14.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Incomplete Integration	DVW2	07/11/23 08:44
Chloromethane	1.84	Incomplete Integration	DVW2	07/11/23 08:44
Methyl acetate	3.33	Incomplete Integration	DVW2	07/11/23 08:45
n-Butanol	7.53	Incomplete Integration	DVW2	07/11/23 08:46
1,4-Dioxane	7.91	Incomplete Integration	DVW2	07/11/23 08:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 395211

Lab Sample ID: IC 410-395211/16 Client Sample ID:

Date Analyzed: 07/10/23 20:35 Lab File ID: CL10X15.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Incomplete Integration	DVW2	07/11/23 08:48
Isobutyl alcohol	6.53	Incomplete Integration	DVW2	07/11/23 08:48
n-Butanol	7.46	Incomplete Integration	DVW2	07/11/23 08:49
1,4-Dioxane	7.91	Incomplete Integration	DVW2	07/11/23 08:49

Lab Sample ID: IC 410-395211/17 Client Sample ID:

Date Analyzed: 07/10/23 20:57 Lab File ID: CL10X16.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.67	Incomplete Integration	DVW2	07/11/23 08:50
t-Butyl alcohol	3.65	Split Peak	UKEK	07/11/23 19:43

Lab Sample ID: ICIS 410-395211/18 Client Sample ID:

Date Analyzed: 07/10/23 21:18 Lab File ID: CL10X17.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Incomplete Integration	DVW2	07/11/23 08:21
t-Butyl alcohol-d10 (IS)	3.55	Baseline	UKEK	07/11/23 20:39
Acrylonitrile	3.79	Incomplete Integration	DVW2	07/11/23 08:22
1,4-Dioxane	7.89	Incomplete Integration	DVW2	07/11/23 08:22
Ethylbenzene	10.79	Incomplete Integration	DVW2	07/11/23 08:37
m&p-Xylene	10.91	Incomplete Integration	DVW2	07/11/23 08:25

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 395211

Lab Sample ID: IC 410-395211/19 Client Sample ID:

Date Analyzed: 07/10/23 21:40 Lab File ID: CL10X18.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Incomplete Integration	DVW2	07/11/23 08:51
Methyl acetate	3.32	Incomplete Integration	DVW2	07/11/23 08:51
t-Butyl alcohol-d10 (IS)	3.55	Baseline	UKEK	07/11/23 20:40
1,4-Dioxane	7.88	Incomplete Integration	DVW2	07/11/23 08:52

Lab Sample ID: ICV 410-395211/21 Client Sample ID:

Date Analyzed: 07/10/23 22:24 Lab File ID: CL10X20.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.69	Baseline	UKEK	07/11/23 20:42
Methyl acetate	3.33	Incomplete Integration	DVW2	07/11/23 08:54
n-Butanol	7.45	Incomplete Integration	DVW2	07/11/23 08:54
1,4-Dioxane	7.92	Incomplete Integration	DVW2	07/11/23 08:54

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 405906

Lab Sample ID: CCVIS 410-405906/3 Client Sample ID:

Date Analyzed: 08/08/23 18:38 Lab File ID: CG08X02.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Missed Peak	JS6E	08/08/23 19:00

Lab Sample ID: CCV 410-405906/4 Client Sample ID:

Date Analyzed: 08/08/23 19:00 Lab File ID: CG08X03.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.32	Incomplete Integration	JS6E	08/08/23 19:29

Lab Sample ID: LCS 410-405906/5 Client Sample ID:

Date Analyzed: 08/08/23 19:22 Lab File ID: CG08X04.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Missed Peak	JS6E	08/08/23 19:49

Lab Sample ID: LCS 410-405906/6 Client Sample ID:

Date Analyzed: 08/08/23 19:44 Lab File ID: CG08X05.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.30	Incomplete Integration	JS6E	08/08/23 20:14

Lab Sample ID: MB 410-405906/8 Client Sample ID:

Date Analyzed: 08/08/23 20:27 Lab File ID: CG08X07.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	JS6E	08/08/23 21:06

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 405906

Lab Sample ID: 410-136864-4 Client Sample ID: 16WC1A

Date Analyzed: 08/08/23 22:39 Lab File ID: CG08X13.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.70	Incomplete Integration	innoonk	08/09/23 10:54
Methylene Chloride	3.48	Incomplete Integration	innoonk	08/09/23 10:55
Tetrahydrofuran	5.70	Incomplete Integration	innoonk	08/09/23 10:55
Trichloroethene	7.45	Incomplete Integration	innoonk	08/09/23 10:56
Tetrachloroethene	9.76	Incomplete Integration	innoonk	08/09/23 10:56
1,2-Dibromo-3-Chloropropane		Invalid Compound ID	innoonk	08/09/23 10:57
2-Hexanone		Invalid Compound ID	innoonk	08/09/23 10:56
Isobutyl alcohol		Invalid Compound ID	innoonk	08/09/23 10:56
Vinyl acetate		Invalid Compound ID	innoonk	08/09/23 10:55

Lab Sample ID: 410-136864-4 MS Client Sample ID: 16WC1A MS

Date Analyzed: 08/08/23 23:01 Lab File ID: CG08X14.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Incomplete Integration	innoonk	08/09/23 10:58

Lab Sample ID: 410-136864-4 MSD Client Sample ID: 16WC1A MSD

Date Analyzed: 08/08/23 23:23 Lab File ID: CG08X15.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.67	Incomplete Integration	innoonk	08/09/23 10:59

Lab Sample ID: 410-136864-2 Client Sample ID: 16MW8

Date Analyzed: 08/09/23 00:51 Lab File ID: CG08X19.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	3.50	Incomplete Integration	innoonk	08/09/23 12:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 405906

Lab Sample ID: 410-136864-5 Client Sample ID: 16WDUP

Date Analyzed: 08/09/23 01:12 Lab File ID: CG08X20.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	3.48	Incomplete Integration	innoonk	08/09/23 13:34
Tetrahydrofuran	5.70	Incomplete Integration	innoonk	08/09/23 13:34
Trichloroethene	7.45	Incomplete Integration	innoonk	08/09/23 13:34
Dichlorodifluoromethane		Incomplete Integration	innoonk	08/09/23 13:32

Lab Sample ID: 410-136864-6 Client Sample ID: 16WC1B

Date Analyzed: 08/09/23 01:34 Lab File ID: CG08X21.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	innoonk	08/09/23 13:35

Lab Sample ID: 410-136864-3 Client Sample ID: 16MW9

Date Analyzed: 08/09/23 01:56 Lab File ID: CG08X22.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	3.48	Incomplete Integration	innoonk	08/09/23 13:37
Trichloroethene	7.46	Incomplete Integration	innoonk	08/09/23 13:38
2-Butanone		Invalid Compound ID	innoonk	08/09/23 13:37
Vinyl acetate		Invalid Compound ID	innoonk	08/09/23 13:37

Lab Sample ID: 410-136864-1 Client Sample ID: 16C1

Date Analyzed: 08/09/23 02:41 Lab File ID: CG08X24.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone		Invalid Compound ID	innoonk	08/09/23 14:58
Isobutyl alcohol		Invalid Compound ID	innoonk	08/09/23 14:58
Trichlorofluoromethane		Invalid Compound ID	innoonk	08/09/23 14:58

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 405906

Lab Sample ID: 410-136864-1 DL Client Sample ID: 16C1 DL

Date Analyzed: 08/09/23 03:03 Lab File ID: CG08X25.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene (Surr)	11.72	Incomplete Integration	innoonk	08/09/23 15:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 9355 Analysis Batch Number: 400238

Lab Sample ID: IC 410-400238/12 Client Sample ID:

Date Analyzed: 07/24/23 23:20 Lab File ID: YL24X11.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.26	Incomplete Integration	K4WN	07/25/23 16:15
Vinyl chloride	2.26	Incomplete Integration	K4WN	07/25/23 16:15
Bromomethane	2.58	Incomplete Integration	K4WN	07/25/23 16:16
n-Pentane	2.99	Incomplete Integration	K4WN	07/25/23 16:49
1,1-Dichloroethene	3.51	Incomplete Integration	K4WN	07/25/23 16:16
2-Propanol	3.68	Incomplete Integration	K4WN	07/25/23 16:16
Carbon disulfide	3.83	Split Peak	UKEK	07/27/23 19:14
Methyl acetate	3.93	Incomplete Integration	K4WN	07/25/23 16:16
t-Butyl alcohol-d10 (IS)	4.14	Incomplete Integration	K4WN	07/25/23 16:17
t-Butyl alcohol	4.34	Incomplete Integration	K4WN	07/25/23 16:17
n-Hexane	4.99	Incomplete Integration	K4WN	07/25/23 16:17
2-Butanone	6.06	Incomplete Integration	K4WN	07/25/23 16:17
Isobutyl alcohol	7.16	Incomplete Integration	K4WN	07/25/23 16:18
Trichloroethene	8.17	Incomplete Integration	K4WN	07/25/23 16:18
1,4-Dioxane	8.60	Incomplete Integration	K4WN	07/25/23 16:18
Ethyl methacrylate	10.10	Incomplete Integration	K4WN	07/25/23 16:18
2-Hexanone	10.48	Incomplete Integration	K4WN	07/25/23 16:18

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 9355 Analysis Batch Number: 400238

Lab Sample ID: IC 410-400238/13 Client Sample ID:

Date Analyzed: 07/24/23 23:42 Lab File ID: YL24X12.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.95	Incomplete Integration	K4WN	07/25/23 16:19
n-Pentane	2.98	Incomplete Integration	K4WN	07/25/23 16:20
Carbon disulfide	3.80	Split Peak	UKEK	07/27/23 19:13
Methyl acetate	3.93	Incomplete Integration	K4WN	07/25/23 16:20
t-Butyl alcohol-d10 (IS)	4.13	Incomplete Integration	K4WN	07/25/23 16:20
Isobutyl alcohol	7.14	Incomplete Integration	K4WN	07/25/23 16:21
1,2-Dibromoethane	10.74	Incomplete Integration	K4WN	07/25/23 16:21

Lab Sample ID: IC 410-400238/14 Client Sample ID:

Date Analyzed: 07/25/23 00:04 Lab File ID: YL24X13.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.80	Split Peak	UKEK	07/27/23 19:13
Methyl acetate	3.93	Incomplete Integration	K4WN	07/25/23 16:22
t-Butyl alcohol	4.31	Incomplete Integration	K4WN	07/25/23 16:23
1,4-Dioxane	8.58	Incomplete Integration	K4WN	07/25/23 16:23

Lab Sample ID: IC 410-400238/15 Client Sample ID:

Date Analyzed: 07/25/23 00:26 Lab File ID: YL24X14.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.80	Split Peak	UKEK	07/27/23 19:13
t-Butyl alcohol	4.27	Incomplete Integration	K4WN	07/25/23 16:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 9355 Analysis Batch Number: 400238

Lab Sample ID: ICIS 410-400238/16 Client Sample ID:

Date Analyzed: 07/25/23 00:49 Lab File ID: YL24X15.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.81	Split Peak	UKEK	07/27/23 19:12
t-Butyl alcohol-d10 (IS)	4.13	Incomplete Integration	K4WN	07/25/23 16:12
t-Butyl alcohol	4.25	Incomplete Integration	K4WN	07/25/23 16:12
1,4-Dioxane	8.57	Incomplete Integration	K4WN	07/25/23 16:12

Lab Sample ID: IC 410-400238/17 Client Sample ID:

Date Analyzed: 07/25/23 01:10 Lab File ID: YL24X16.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.81	Split Peak	UKEK	07/27/23 19:12
Methyl acetate	3.92	Incomplete Integration	K4WN	07/25/23 16:27
t-Butyl alcohol-d10 (IS)	4.15	Incomplete Integration	K4WN	07/25/23 16:27
t-Butyl alcohol	4.25	Incomplete Integration	K4WN	07/25/23 16:27

Lab Sample ID: IC 410-400238/18 Client Sample ID:

Date Analyzed: 07/25/23 01:32 Lab File ID: YL24X17.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.83	Split Peak	UKEK	07/27/23 19:12
t-Butyl alcohol-d10 (IS)	4.11	Incomplete Integration	K4WN	07/25/23 16:28
t-Butyl alcohol	4.24	Incomplete Integration	K4WN	07/25/23 16:29
1,4-Dioxane	8.57	Incomplete Integration	K4WN	07/25/23 16:29

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 9355 Analysis Batch Number: 400238

Lab Sample ID: ICV 410-400238/20 Client Sample ID:

Date Analyzed: 07/25/23 02:16 Lab File ID: YL24X19.D GC Column: R-624SilMS 3 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.94	Incomplete Integration	K4WN	07/25/23 16:40
Acetone	3.50	Incomplete Integration	K4WN	07/25/23 16:41
2-Propanol	3.65	Incomplete Integration	K4WN	07/25/23 16:41
Carbon disulfide	3.80	Split Peak	UKEK	07/27/23 19:11
Methyl acetate	3.92	Incomplete Integration	K4WN	07/25/23 16:41
1,4-Dioxane	8.58	Incomplete Integration	K4WN	07/25/23 16:42

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 356566

Lab Sample ID: IC 410-356566/3 Client Sample ID:

Date Analyzed: 03/23/23 13:56 Lab File ID: DC2312.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Phenol	4.22	Peak assignment corrected	P7EB	03/23/23 14:51
Isosafrole Peak 1	6.67	Peak assignment corrected	P7EB	03/23/23 14:51
2-Chloronaphthalene	6.94	Split Peak	P7EB	03/23/23 14:52
1-Chloronaphthalene	6.95	Split Peak	P7EB	03/23/23 14:52
2,3,4,6-Tetrachlorophenol	7.73	Split Peak	P7EB	03/23/23 14:54
Dibenz[a,h]acridine	14.75	Split Peak	P7EB	03/23/23 14:54
Dibenz[a,j]acridine	14.82	Split Peak	P7EB	03/23/23 16:44
Indeno[1,2,3-cd]pyrene	15.06	Split Peak	P7EB	03/23/23 14:54

Lab Sample ID: IC 410-356566/7 Client Sample ID:

Date Analyzed: 03/23/23 15:02 Lab File ID: DC2315.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Di-n-octyl phthalate	12.49	Split Peak	P7EB	03/23/23 17:11

Lab Sample ID: IC 410-356566/8 Client Sample ID:

Date Analyzed: 03/23/23 15:24 Lab File ID: DC2316.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Di-n-octyl phthalate	12.49	Split Peak	P7EB	03/23/23 17:10

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 356566

Lab Sample ID: IC 410-356566/9 Client Sample ID:

Date Analyzed: 03/23/23 15:46 Lab File ID: DC2317.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N,N-dimethylformamide	2.55	Split Peak	P7EB	03/23/23 16:26
N-Nitrosodi-n-butylamine	6.19	Split Peak	P7EB	03/23/23 16:40
Dinoseb	8.86	Split Peak	P7EB	03/23/23 16:54
Bis(2-ethylhexyl) phthalate	11.61	Split Peak	P7EB	03/23/23 17:07
Di-n-octyl phthalate	12.49	Split Peak	P7EB	03/23/23 17:09
7,12-Dimethylbenz(a)anthracene	12.96	Split Peak	P7EB	03/23/23 17:08
Indeno[1,2,3-cd]pyrene	15.06	Split Peak	P7EB	03/23/23 16:27

Lab Sample ID: IC 410-356566/4 Client Sample ID:

Date Analyzed: 03/23/23 16:08 Lab File ID: DC2318.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isosafrole Peak 1	6.67	Split Peak	P7EB	03/23/23 16:33
Dibenz[a,j]acridine	14.82	Split Peak	P7EB	03/23/23 16:42

Lab Sample ID: ICV 410-356566/12 Client Sample ID:

Date Analyzed: 03/23/23 17:14 Lab File ID: DC2321.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-phenylenediamine		Split Peak	P7EB	03/23/23 17:53
Hexachlorocyclopentadiene		Invalid Compound ID	P7EB	03/23/23 19:32
Benzidine	10.15	Split Peak	P7EB	03/23/23 17:52

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 357445

Lab Sample ID: IC 410-357445/7 Client Sample ID:

Date Analyzed: 03/26/23 16:18 Lab File ID: DC2656.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methapyrilene	9.70	Split Peak	P7EB	03/26/23 17:08

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 362760

Lab Sample ID: IC 410-362760/4 Client Sample ID:

Date Analyzed: 04/10/23 21:02 Lab File ID: DD1053.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Aramite Peak 1	10.27	Split Peak	P7EB	04/10/23 22:34
Aramite Peak 2	10.28	Split Peak	P7EB	04/10/23 22:34
Aramite Peak 3	10.33	Split Peak	P7EB	04/10/23 22:34
Aramite Peak 4	10.41	Split Peak	P7EB	04/10/23 22:34

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 404152

Lab Sample ID: CCVIS 410-404152/2 Client Sample ID:

Date Analyzed: 08/03/23 14:43 Lab File ID: DH0351.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chloronaphthalene	6.44	Split Peak	P7EB	08/03/23 15:06
1-Chloronaphthalene	6.46	Split Peak	P7EB	08/03/23 15:06
a,a-Dimethylphenethylamine		Assign Peak	phakdeer	08/07/23 15:27
Famphur		Invalid Compound ID	P7EB	08/03/23 15:06

Lab Sample ID: IC 410-404152/5 Client Sample ID:

Date Analyzed: 08/03/23 15:30 Lab File ID: DH0353.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a-Dimethylphenethylamine	5.14	Split Peak	P7EB	08/03/23 15:48
Aramite Peak 1	9.84	Split Peak	P7EB	08/03/23 15:48
Aramite Peak 2	9.87	Split Peak	P7EB	08/03/23 15:48
Aramite Peak 3	9.91	Split Peak	P7EB	08/03/23 15:48
Aramite Peak 4	9.98	Split Peak	P7EB	08/03/23 15:48

Lab Sample ID: MB 410-403918/1-A Client Sample ID:

Date Analyzed: 08/03/23 16:22 Lab File ID: DH0355a.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[a]pyrene		Invalid Compound ID	P7EB	08/04/23 14:01

Lab Sample ID: LCS 410-403918/3-A Client Sample ID:

Date Analyzed: 08/03/23 17:02 Lab File ID: DH0357.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a-Dimethylphenethylamine	5.22	Assign Peak	phakdeer	08/07/23 15:27
Kepone	10.47	Incomplete Integration	P7EB	08/04/23 14:04

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 404152

Lab Sample ID: LCSD 410-403918/4-A Client Sample ID:

Date Analyzed: 08/03/23 17:21 Lab File ID: DH0358.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a-Dimethylphenethylamine	5.23	Assign Peak	phakdeer	08/07/23 15:26
Kepone	10.44	Incomplete Integration	P7EB	08/04/23 14:05

Lab Sample ID: 410-136864-4 Client Sample ID: 16WC1A

Date Analyzed: 08/03/23 17:41 Lab File ID: DH0359.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chlorophenol		Invalid Compound ID	P7EB	08/04/23 14:05
Benzo[a]pyrene		Invalid Compound ID	P7EB	08/04/23 14:06
Nitrobenzene		Invalid Compound ID	P7EB	08/04/23 14:06

Lab Sample ID: 410-136864-1 Client Sample ID: 16C1

Date Analyzed: 08/03/23 19:16 Lab File ID: DH0362a.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[a]pyrene		Invalid Compound ID	P7EB	08/04/23 14:08
Nitrobenzene		Invalid Compound ID	P7EB	08/04/23 14:08

Lab Sample ID: 410-136864-3 Client Sample ID: 16MW9

Date Analyzed: 08/03/23 19:35 Lab File ID: DH0363.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[a]pyrene		Invalid Compound ID	P7EB	08/04/23 14:09

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 404152

Lab Sample ID: 410-136864-5 Client Sample ID: 16WDUP

Date Analyzed: 08/03/23 19:55 Lab File ID: DH0364.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chlorophenol		Invalid Compound ID	P7EB	08/04/23 14:09
Benzo[a]pyrene		Invalid Compound ID	P7EB	08/04/23 14:09

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 414994

Lab Sample ID: ICIS 410-414994/2 Client Sample ID:

Date Analyzed: 08/31/23 16:23 Lab File ID: DH3151.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chloronaphthalene	6.86	Baseline	SJ89	09/01/23 07:57
1-Chloronaphthalene	6.88	Baseline	SJ89	09/01/23 07:58
1,2-Diphenylhydrazine	8.06	Baseline	SJ89	09/01/23 07:58

Lab Sample ID: IC 410-414994/4 Client Sample ID:

Date Analyzed: 08/31/23 17:16 Lab File ID: DH3152.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Diphenylhydrazine	8.06	Baseline	SJ89	09/01/23 08:05

Lab Sample ID: IC 410-414994/3 Client Sample ID:

Date Analyzed: 08/31/23 17:37 Lab File ID: DH3153.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodi-n-butylamine	6.11	Baseline	SJ89	09/01/23 08:02
2-Chloronaphthalene	6.86	Baseline	SJ89	09/01/23 08:02
1-Chloronaphthalene	6.87	Baseline	SJ89	09/01/23 08:02
trans-Diallate	8.38	Baseline	SJ89	09/01/23 08:02
N-Nitrosomethylethylamine		Invalid Compound ID	SJ89	09/01/23 08:01
Benzo[a]pyrene	13.31	Baseline	SJ89	09/01/23 08:03
Dibenz(a,h)anthracene	15.06	Baseline	SJ89	09/01/23 08:03
Benzo[g,h,i]perylene	15.47	Baseline	SJ89	09/01/23 08:03

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 414994

Lab Sample ID: IC 410-414994/5 Client Sample ID:

Date Analyzed: 08/31/23 17:58 Lab File ID: DH3154.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Diphenylhydrazine	8.06	Baseline	SJ89	09/01/23 08:06

Lab Sample ID: IC 410-414994/7 Client Sample ID:

Date Analyzed: 08/31/23 18:40 Lab File ID: DH3156.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosomethylethylamine	2.84	Baseline	SJ89	09/01/23 08:16
2-Chloronaphthalene	6.86	Baseline	SJ89	09/01/23 08:17
1-Chloronaphthalene	6.87	Baseline	SJ89	09/01/23 08:17

Lab Sample ID: IC 410-414994/8 Client Sample ID:

Date Analyzed: 08/31/23 19:00 Lab File ID: DH3157.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosomethylethylamine	2.84	Baseline	SJ89	09/01/23 08:18
2-Chloronaphthalene	6.86	Baseline	SJ89	09/01/23 08:18
1-Chloronaphthalene	6.87	Baseline	SJ89	09/01/23 08:18

Lab Sample ID: IC 410-414994/9 Client Sample ID:

Date Analyzed: 08/31/23 19:21 Lab File ID: DH3158.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N,N-dimethylformamide	2.51	Baseline	SJ89	09/01/23 08:20
Phenol	4.14	Baseline	SJ89	09/01/23 08:20
m & p-Cresol	4.87	Baseline	SJ89	09/01/23 08:20

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 414994

Lab Sample ID: ICV 410-414994/12 Client Sample ID:

Date Analyzed: 08/31/23 20:24 Lab File ID: DH3161.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-phenylenediamine	6.12	Split Peak	P7EB	09/05/23 15:56
2-Chloronaphthalene	6.86	Split Peak	P7EB	09/05/23 15:56
1-Chloronaphthalene	6.87	Split Peak	P7EB	09/05/23 15:56
1,3,5-Trinitrobenzene	8.26	Split Peak	P7EB	09/05/23 15:56

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 435991

Lab Sample ID: ICIS 410-435991/2 Client Sample ID:

Date Analyzed: 10/26/23 12:12 Lab File ID: DJ2601b.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1-Chloronaphthalene	6.82	Baseline	SJ89	10/26/23 12:42

Lab Sample ID: IC 410-435991/5 Client Sample ID:

Date Analyzed: 10/26/23 13:25 Lab File ID: DJ2604.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chloronaphthalene	6.79	Split Peak	N5QU	10/26/23 19:35
1-Chloronaphthalene	6.81	Split Peak	N5QU	10/26/23 19:35

Lab Sample ID: IC 410-435991/6 Client Sample ID:

Date Analyzed: 10/26/23 13:46 Lab File ID: DJ2605.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chloronaphthalene	6.79	Split Peak	N5QU	10/26/23 19:38
1-Chloronaphthalene	6.81	Split Peak	N5QU	10/26/23 19:38

Lab Sample ID: IC 410-435991/8 Client Sample ID:

Date Analyzed: 10/26/23 14:27 Lab File ID: DJ2607.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isosafrole Peak 1	6.53	Split Peak	N5QU	10/26/23 19:48
2-Chloronaphthalene	6.79	Split Peak	N5QU	10/26/23 19:48
1-Chloronaphthalene	6.81	Split Peak	N5QU	10/26/23 19:48

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Analysis Batch Number: 435991

Lab Sample ID: IC 410-435991/9 Client Sample ID:

Date Analyzed: 10/26/23 14:48 Lab File ID: DJ2608.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m & p-Cresol	4.82	Split Peak	N5QU	10/26/23 19:52
Isosafrole Peak 1	6.53	Split Peak	N5QU	10/26/23 19:53
2-Chloronaphthalene	6.79	Split Peak	N5QU	10/26/23 19:53
1-Chloronaphthalene	6.81	Split Peak	N5QU	10/26/23 19:53
1,4-Dinitrobenzene	7.02	Split Peak	N5QU	10/26/23 19:53
Pentachloronitrobenzene		Split Peak	N5QU	10/26/23 19:54

Lab Sample ID: ICV 410-435991/12 Client Sample ID:

Date Analyzed: 10/26/23 15:50 Lab File ID: DJ2611.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-phenylenediamine		Split Peak	N5QU	10/26/23 20:15
Benzoic acid		Invalid Compound ID	SJ89	10/27/23 07:15
Famphur		Invalid Compound ID	SJ89	10/27/23 07:20
Methapyrilene		Invalid Compound ID	SJ89	10/27/23 07:14

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 397829

Lab Sample ID: ICIS 410-397829/2 Client Sample ID:

Date Analyzed: 07/18/23 07:41 Lab File ID: JG1801a.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,3,4,6-Tetrachlorophenol	7.53	Baseline	SJ89	07/18/23 11:03

Lab Sample ID: IC 410-397829/3 Client Sample ID:

Date Analyzed: 07/18/23 08:07 Lab File ID: JG1802.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dinitrobenzene	6.94	Baseline	SJ89	07/18/23 11:02
Disulfoton	8.63	Baseline	SJ89	07/18/23 11:04
1,4-phenylenediamine		Invalid Compound ID	SJ89	07/18/23 11:02
N,N-dimethylformamide		Invalid Compound ID	SJ89	07/18/23 11:01
N-Nitrosodi-n-butylamine		Invalid Compound ID	SJ89	07/18/23 11:02
N-Nitrosomethylethylamine		Invalid Compound ID	SJ89	07/18/23 11:02
Dibenz[a,j]acridine	14.41	Baseline	SJ89	07/18/23 11:04

Lab Sample ID: IC 410-397829/4 Client Sample ID:

Date Analyzed: 07/18/23 08:28 Lab File ID: JG1803.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chloronaphthalene	6.69	Baseline	SJ89	07/18/23 11:05
1-Chloronaphthalene	6.71	Baseline	SJ89	07/18/23 11:05
2,3,4,6-Tetrachlorophenol	7.54	Baseline	SJ89	07/18/23 11:06

Lab Sample ID: IC 410-397829/5 Client Sample ID:

Date Analyzed: 07/18/23 08:49 Lab File ID: JG1804.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,3,4,6-Tetrachlorophenol	7.54	Baseline	SJ89	07/18/23 11:07

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 397829

Lab Sample ID: IC 410-397829/6 Client Sample ID:

Date Analyzed: 07/18/23 09:10 Lab File ID: JG1805.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N,N-dimethylformamide	2.26	Baseline	SJ89	07/18/23 11:08
2,3,4,6-Tetrachlorophenol	7.53	Baseline	SJ89	07/18/23 11:09

Lab Sample ID: IC 410-397829/7 Client Sample ID:

Date Analyzed: 07/18/23 09:31 Lab File ID: JG1806.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,3,4,6-Tetrachlorophenol	7.53	Baseline	SJ89	07/18/23 11:11

Lab Sample ID: IC 410-397829/8 Client Sample ID:

Date Analyzed: 07/18/23 09:52 Lab File ID: JG1807.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,3,4,6-Tetrachlorophenol	7.53	Peak assignment corrected	SJ89	07/18/23 11:22

Lab Sample ID: IC 410-397829/9 Client Sample ID:

Date Analyzed: 07/18/23 10:14 Lab File ID: JG1808.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isosafrole Peak 1	6.43	Peak assignment corrected	SJ89	07/18/23 11:27
2,3,4,6-Tetrachlorophenol	7.54	Peak assignment corrected	SJ89	07/18/23 11:27
trans-Diallate	8.21	Peak assignment corrected	SJ89	07/18/23 11:28
N,N-dimethylformamide		Invalid Compound ID	SJ89	07/18/23 11:27

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 397829

Lab Sample ID: ICV 410-397829/12 Client Sample ID:

Date Analyzed: 07/18/23 11:17 Lab File ID: JG1811.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N,N-dimethylformamide	2.26	Peak assignment corrected	SJ89	07/18/23 15:00
Methyl methanesulfonate	2.92	Peak assignment corrected	SJ89	07/18/23 15:00
Ethyl methanesulfonate	3.59	Peak assignment corrected	SJ89	07/18/23 15:00
Hexachloropropene	5.65	Peak assignment corrected	SJ89	07/18/23 15:00
Isosafrole Peak 1	6.43	Peak assignment corrected	SJ89	07/18/23 15:01
Isosafrole Peak 2	6.64	Peak assignment corrected	SJ89	07/18/23 15:01
1-Chloronaphthalene	6.71	Peak assignment corrected	SJ89	07/18/23 15:01
1,4-Naphthoquinone	6.86	Peak assignment corrected	SJ89	07/18/23 15:01
Pentachlorobenzene	7.37	Peak assignment corrected	SJ89	07/18/23 15:02
Dinoseb	8.62	Peak assignment corrected	SJ89	07/18/23 15:02
Isodrin	9.62	Peak assignment corrected	SJ89	07/18/23 15:02
Benzoic acid		Invalid Compound ID	SJ89	07/18/23 15:11
Indene		Invalid Compound ID	SJ89	07/18/23 15:00
Chlorobenzilate	10.33	Peak assignment corrected	SJ89	07/18/23 15:02
7,12-Dimethylbenz(a)anthracene	12.60	Peak assignment corrected	SJ89	07/18/23 15:02

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 403788

Lab Sample ID: IC 410-403788/5 Client Sample ID:

Date Analyzed: 08/02/23 21:45 Lab File ID: JH0254.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Aramite Peak 1	10.06	Incomplete Integration	P7EB	08/02/23 22:18
Aramite Peak 2	10.08	Incomplete Integration	P7EB	08/02/23 22:18
Aramite Peak 3	10.13	Incomplete Integration	P7EB	08/02/23 22:18

Lab Sample ID: MB 410-403666/1-A Client Sample ID:

Date Analyzed: 08/02/23 23:30 Lab File ID: JH0259.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	N5QU	08/03/23 07:34
Benzo[a]pyrene		Invalid Compound ID	N5QU	08/03/23 07:37
Bis(2-ethylhexyl) phthalate		Split Peak	N5QU	08/03/23 07:36
Isodrin		Invalid Compound ID	N5QU	08/03/23 07:36
Nitrobenzene		Invalid Compound ID	N5QU	08/03/23 07:34
n-Nitrosodiphenylamine(as diphenylamine)		Invalid Compound ID	N5QU	08/03/23 07:34

Lab Sample ID: LCS 410-403666/4-A Client Sample ID:

Date Analyzed: 08/03/23 00:33 Lab File ID: JH0262.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Kepone	10.67	Split Peak	N5QU	08/03/23 10:00

Lab Sample ID: LCSD 410-403666/5-A Client Sample ID:

Date Analyzed: 08/03/23 00:54 Lab File ID: JH0263.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Kepone	10.76	Split Peak	N5QU	08/03/23 07:45

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 403788

Lab Sample ID: 410-136864-2 Client Sample ID: 16MW8

Date Analyzed: 08/03/23 03:22 Lab File ID: JH0270.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[a]pyrene		Invalid Compound ID	N5QU	08/03/23 07:54
Nitrobenzene		Invalid Compound ID	N5QU	08/03/23 07:52
n-Nitrosodiphenylamine(as diphenylamine)		Invalid Compound ID	N5QU	08/03/23 07:53

Lab Sample ID: 410-136864-6 Client Sample ID: 16WC1B

Date Analyzed: 08/03/23 03:43 Lab File ID: JH0271.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	N5QU	08/03/23 07:55
Acenaphthene		Invalid Compound ID	N5QU	08/03/23 07:56
Benzo[a]anthracene		Split Peak	N5QU	08/03/23 07:57
Benzo[a]pyrene		Invalid Compound ID	N5QU	08/03/23 07:57
Chrysene		Split Peak	N5QU	08/03/23 07:57
Nitrobenzene		Invalid Compound ID	N5QU	08/03/23 07:55
Pentachlorophenol		Split Peak	N5QU	08/03/23 07:56
Phenanthrene		Split Peak	N5QU	08/03/23 07:56

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 437867

Lab Sample ID: IC 410-437867/3 Client Sample ID:

Date Analyzed: 10/31/23 15:02 Lab File ID: JJ3102.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chloronaphthalene	6.38	Baseline	GLQ9	10/31/23 20:33
1-Chloronaphthalene	6.40	Baseline	GLQ9	10/31/23 20:33

Lab Sample ID: IC 410-437867/5 Client Sample ID:

Date Analyzed: 10/31/23 15:45 Lab File ID: JJ3104.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N,N-dimethylformamide	2.01	Baseline	GLQ9	10/31/23 20:38

Lab Sample ID: IC 410-437867/6 Client Sample ID:

Date Analyzed: 10/31/23 16:06 Lab File ID: JJ3105.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N,N-dimethylformamide	2.05	Baseline	GLQ9	10/31/23 20:40
1,4-phenylenediamine	5.68	Baseline	GLQ9	10/31/23 20:41
2-Chloronaphthalene	6.38	Baseline	GLQ9	10/31/23 20:41
1-Chloronaphthalene	6.40	Baseline	GLQ9	10/31/23 20:41
Disulfoton	8.32	Baseline	GLQ9	10/31/23 20:42

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 437867

Lab Sample ID: IC 410-437867/7 Client Sample ID:

Date Analyzed: 10/31/23 16:27 Lab File ID: JJ3106.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosomethylethylamine	2.36	Incomplete Integration	P7EB	11/01/23 07:13
m & p-Cresol	4.46	Baseline	GLQ9	10/31/23 20:44
2-Chloronaphthalene	6.38	Baseline	GLQ9	10/31/23 20:45
1-Chloronaphthalene	6.40	Baseline	GLQ9	10/31/23 20:45
Disulfoton	8.32	Baseline	GLQ9	10/31/23 20:46

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 437867

Lab Sample ID: IC 410-437867/8 Client Sample ID:

Date Analyzed: 10/31/23 16:49 Lab File ID: JJ3107.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Fluorophenol (Surr)	2.86	Baseline	GLQ9	10/31/23 20:47
Phenol-d5 (Surr)	3.72	Baseline	GLQ9	10/31/23 20:47
Phenol	3.73	Split Peak	P7EB	11/01/23 08:54
1,4-Dichlorobenzene	4.02	Baseline	GLQ9	10/31/23 20:48
1,2-Dichlorobenzene	4.18	Baseline	GLQ9	10/31/23 20:48
Benzyl alcohol	4.23	Baseline	GLQ9	10/31/23 20:48
o-Cresol	4.32	Baseline	GLQ9	10/31/23 20:48
Acetophenone	4.45	Baseline	GLQ9	10/31/23 20:48
N-Nitrosomorpholine	4.45	Baseline	GLQ9	10/31/23 20:49
o-Toluidine	4.45	Baseline	GLQ9	10/31/23 20:48
m & p-Cresol	4.47	Baseline	GLQ9	10/31/23 20:49
Caprolactam	5.68	Baseline	GLQ9	10/31/23 20:49
Isosafrole Peak 1	6.15	Baseline	GLQ9	10/31/23 20:49
Isosafrole Peak 2	6.36	Baseline	GLQ9	10/31/23 20:50
2-Chloronaphthalene	6.39	Baseline	GLQ9	10/31/23 20:50
1-Chloronaphthalene	6.40	Baseline	GLQ9	10/31/23 20:50
1,4-Dinitrobenzene		Invalid Compound ID	P7EB	11/01/23 07:16
Aniline		Baseline	GLQ9	10/31/23 20:47
Dibenz[a,h]acridine	13.78	Baseline	GLQ9	10/31/23 20:51
Dibenz[a,j]acridine	13.86	Incomplete Integration	P7EB	11/01/23 07:16

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 437867

Lab Sample ID: IC 410-437867/9 Client Sample ID:

Date Analyzed: 10/31/23 17:10 Lab File ID: JJ3108.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	1.93	Incomplete Integration	P7EB	11/01/23 07:29
Methyl methanesulfonate	2.69	Incomplete Integration	P7EB	11/01/23 07:29
Ethyl methanesulfonate	3.44	Incomplete Integration	P7EB	11/01/23 07:29
Phenol-d5 (Surr)	3.83	Incomplete Integration	P7EB	11/01/23 07:28
Isosafrole Peak 2	6.36	Baseline	GLQ9	10/31/23 20:53
2-Chloronaphthalene	6.40	Baseline	GLQ9	10/31/23 20:52
1-Chloronaphthalene	6.41	Baseline	GLQ9	10/31/23 20:52
Diphenyl ether	6.48	Baseline	GLQ9	10/31/23 20:52
1,4-Dinitrobenzene	6.78	Incomplete Integration	P7EB	11/01/23 07:30
4-Nitrophenol	7.22	Incomplete Integration	P7EB	11/01/23 07:30
4-Nitroaniline	7.45	Incomplete Integration	P7EB	11/01/23 07:30
Sulfotepp	7.71	Incomplete Integration	P7EB	11/01/23 07:15
trans-Diallate	7.82	Incomplete Integration	P7EB	11/01/23 07:31
1,3,5-Trinitrobenzene	7.93	Incomplete Integration	P7EB	11/01/23 07:30
Disulfoton	8.33	Incomplete Integration	P7EB	11/01/23 07:31
2-Naphthylamine		Incomplete Integration	P7EB	11/01/23 07:30
Aniline		Invalid Compound ID	P7EB	11/01/23 08:51
Benzo[a]pyrene	12.55	Baseline	SJ89	11/02/23 10:27
Dibenz[a,h]acridine	13.79	Baseline	GLQ9	10/31/23 20:54
Dibenz[a,j]acridine	13.86	Baseline	GLQ9	10/31/23 20:54

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Analysis Batch Number: 437867

Lab Sample ID: ICV 410-437867/12 Client Sample ID:

Date Analyzed: 10/31/23 18:13 Lab File ID: JJ3111.D GC Column: DB-5MS 30m 0 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-phenylenediamine	5.68	Incomplete Integration	P7EB	11/01/23 08:03
Aramite Peak 1		Invalid Compound ID	P7EB	11/01/23 08:02
Aramite Peak 2		Invalid Compound ID	P7EB	11/01/23 08:02
Aramite Peak 3		Invalid Compound ID	P7EB	11/01/23 08:02
Aramite Peak 4		Invalid Compound ID	P7EB	11/01/23 08:02
Benzoic acid		Invalid Compound ID	P7EB	11/01/23 08:02
Famphur		Invalid Compound ID	P7EB	11/01/23 08:02
Indene		Invalid Compound ID	P7EB	11/01/23 08:02
Methapyrilene		Invalid Compound ID	P7EB	11/01/23 08:02

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
Hg_0.1Control_00157	08/08/23	08/01/23	0.15% HNO3, Lot 4344656	10 mL	Hg_1Control_00150	1 mL	Mercury	0.1 ug/mL
.Hg_1Control_00150	08/08/23	08/01/23	0.15% HNO3, Lot 4344656	10 mL	MT_10Hg_2%HCl_00007	1 mL	Mercury	1 ug/mL
..MT_10Hg_2%HCl_00007	04/30/24	High Purity Standards, Lot 2308711-100			(Purchased Reagent)		Mercury	10 ug/mL
Hg_1Cal_00145	08/08/23	08/01/23	0.15% HNO3, Lot 4344656	10 mL	MT_S_10Hg_IV_00019	1 mL	Mercury	1 ug/mL
.MT_S_10Hg_IV_00019	02/27/24	Inorganic Ventures, Lot R2-Hg700202			(Purchased Reagent)		Mercury	10 ug/mL
Hg_1Control_00150	08/08/23	08/01/23	0.15% HNO3, Lot 4344656	10 mL	MT_10Hg_2%HCl_00007	1 mL	Mercury	1 ug/mL
.MT_10Hg_2%HCl_00007	04/30/24	High Purity Standards, Lot 2308711-100			(Purchased Reagent)		Mercury	10 ug/mL
Hg_5%KMnO4_00200	01/28/24	07/28/23	DI Water, Lot DI07282023	2000 mL	MT_KMnO4_FI_00107	100.17 g	Potassium Permanganate	4.97845 %
.MT_KMnO4_FI_00107	07/20/24	Fisher, Lot 218618			(Purchased Reagent)		Potassium Permanganate	99.4 %
MP_1:1HCl_00029	01/10/24	07/10/23	DI Water, Lot DI07102023	20000 mL	MT_HCl_JT_00011	10000 mL	Hydrogen Chloride	188000 ug/mL
.MT_HCl_JT_00011	04/11/24	J.T.Baker, Lot 22L0562004			(Purchased Reagent)		Hydrogen Chloride	37.6 %
MP_1:1HNO3_00045	01/27/24	07/27/23	DI Water, Lot DI07272023	20000 mL	MT_HNO3_Fishe_00009	2500 mL	Nitric acid	340000 ug/mL
					MT_HNO3_Fishe_00010	7500 mL	Nitric acid	340000 ug/mL
.MT_HNO3_Fishe_00009	06/15/24	Fisher, Lot 226243			(Purchased Reagent)		Nitric acid	68 %
.MT_HNO3_Fishe_00010	06/15/24	Fisher, Lot 230664			(Purchased Reagent)		Nitric acid	68 %
MP_40Hg_IV_00164	08/03/23	07/27/23	DI Water, Lot DI07272023	200 mL	MT_HNO3_JT_00003	0.3 mL	Nitric acid	1047 ug/mL
					MT_S_10Hg_IV_00014	0.8 mL	Mercury	0.04 ug/mL
.MT_HNO3_JT_00003	06/09/24	J.T.Baker, Lot 0000234822			(Purchased Reagent)		Nitric acid	69.8 %
.MT_S_10Hg_IV_00014	06/15/24	Inorganic Ventures, Lot R2-Hg700202			(Purchased Reagent)		Mercury	10 ug/mL
MP_5%KMnO4_00362	01/28/24	07/28/23	DI Water, Lot DI07282023	2000 mL	MT_KMnO4_FI_00107	100.04 g	Potassium Permanganate	4.97199 %
.MT_KMnO4_FI_00107	07/20/24	Fisher, Lot 218618			(Purchased Reagent)		Potassium Permanganate	99.4 %
MP_5K2S2O8_00091	01/06/24	07/06/23	DI Water, Lot DI07062023	2000 mL	MT_K2S2O8_JT_00029	100.14 g	Potassium persulfate	4.98196 %
.MT_K2S2O8_JT_00029	05/05/24	J.T.Baker, Lot 22A3061007			(Purchased Reagent)		Potassium persulfate	99.5 %
MP_5K2S2O8_00092	01/20/24	07/20/23	DI Water, Lot DI07202023	2000 mL	MT_K2S2O8_JT_00025	35 g	Potassium persulfate	4.97749 %
					MT_K2S2O8_JT_00029	65.05 g	Potassium persulfate	4.97749 %
.MT_K2S2O8_JT_00025	07/20/24	J.T.Baker, Lot 22A3061007			(Purchased Reagent)		Potassium persulfate	99.5 %
.MT_K2S2O8_JT_00029	05/05/24	J.T.Baker, Lot 22A3061007			(Purchased Reagent)		Potassium persulfate	99.5 %
MP_NaClHNO_00195	01/14/24	07/14/23	DI Water, Lot DI07142023	2000 mL	MT_H3NO_Fishe_00015	240.19 g	Hydroxylamine hydrochloride	11.9735 %
					MT_NaCl_JT_00028	240.23 1/cm	Sodium Chloride	1201150 %
.MT_H3NO_Fishe_00015	07/14/24	Fisher, Lot 222401			(Purchased Reagent)		Hydroxylamine hydrochloride	99.7 %
.MT_NaCl_JT_00028	07/20/24	J.T.Baker, Lot 22K1561075			(Purchased Reagent)		Sodium Chloride	100 %
MP_NaClHNO_00200	01/27/24	07/27/23	DI Water, Lot DI07272023	2000 mL	MT_H3NO_Fishe_00024	240.06 g	Hydroxylamine hydrochloride	11.967 %
					MT_NaCl_JT_00025	240.31 g	Sodium Chloride	12.0155 %
.MT_H3NO_Fishe_00024	02/14/24	Fisher, Lot 222401			(Purchased Reagent)		Hydroxylamine hydrochloride	99.7 %

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MT_NaCl_JT_00025	10/14/25	J.T.Baker, Lot 22K1561075			(Purchased Reagent)		Sodium Chloride	100 %
MSS_RV8270_1_00028	07/24/23	03/22/23	MeCl2, Lot 226679	1 mL	MSS_FV8270_1_00032	250 uL	Benzidine	0.375 ppm
							1,3,5-Trinitrobenzene	0.125 ppm
							1,4-Dinitrobenzene	0.125 ppm
							1-Naphthylamine	0.125 ppm
							2-Acetylaminofluorene	0.125 ppm
							2-Naphthylamine	0.125 ppm
							2-Picoline	0.125 ppm
							2-Toluidine	0.125 ppm
							3,3'-Dimethylbenzidine	0.125 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.125 ppm
							4-Aminobiphenyl	0.125 ppm
							4-Nitroquinoline-1-oxide	0.125 ppm
							5-Nitro-o-toluidine	0.125 ppm
							Dibenz[a,h]acridine	0.125 ppm
							N-Nitrosodi-n-butylamine	0.125 ppm
							N-Nitrosodiethylamine	0.125 ppm
							N-Nitrosomethylethylamine	0.125 ppm
							N-Nitrosomorpholine	0.125 ppm
							N-Nitrosopiperidine	0.125 ppm
							N-Nitrosopyrrolidine	0.125 ppm
							p-Dimethylamino azobenzene	0.125 ppm
							p-Phenylene diamine	0.125 ppm
							Pentachloronitrobenzene	0.125 ppm
							Phenacetin	0.125 ppm
							Pronamide	0.125 ppm
							Quinoline	0.125 ppm
							1,4-Naphthoquinone	0.125 ppm
							1-Chloronaphthalene	0.125 ppm
							7,12-Dimethylbenz(a)anthracene	0.125 ppm
							Chlorobenzilate	0.125 ppm
							Dinoseb	0.125 ppm
							Ethyl methanesulfonate	0.125 ppm
							Hexachloropropene	0.125 ppm
							Isodrin	0.125 ppm
							Isosafrole Peak 1	0.02 ppm
							Isosafrole Peak 2	0.105 ppm
							Methyl methanesulfonate	0.125 ppm
							Pentachlorobenzene	0.125 ppm
							3-Methylcholanthrene	0.125 ppm
							6-Methylchrysene	0.125 ppm
							cis-Diallate	0.0925 ppm
							Dimethoate	0.125 ppm
							Disulfoton	0.125 ppm
							Ethyl Parathion	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl parathion	0.125 ppm
							o,o',o''-Triethylphosphorothioate	0.125 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.125 ppm
							Phorate	0.125 ppm
							Safrole, Total	0.125 ppm
							Sulfotepp	0.125 ppm
							trans-Diallate	0.0325 ppm
							2,4,6-Tribromophenol (Surr)	0.25 ppm
							2-Fluorobiphenyl (Surr)	0.25 ppm
							2-Fluorophenol (Surr)	0.25 ppm
							Nitrobenzene-d5 (Surr)	0.25 ppm
							p-Terphenyl-d14 (Surr)	0.25 ppm
							Phenol-d5 (Surr)	0.25 ppm
							Dibenz[a,j]acridine	0.125 ppm
							1,1'-Biphenyl	0.125 ppm
							1,2,4,5-Tetrachlorobenzene	0.125 ppm
							1,2,4-Trichlorobenzene	0.125 ppm
							1,2-Dichlorobenzene	0.125 ppm
							1,2-Diphenylhydrazine	0.125 ppm
							1,3-Dichlorobenzene	0.125 ppm
							1,3-Dinitrobenzene	0.125 ppm
							1,4-Dichlorobenzene	0.125 ppm
							1,4-Dioxane	0.125 ppm
							1-Methylnaphthalene	0.125 ppm
							2,3,4,6-Tetrachlorophenol	0.125 ppm
							2,4,5-Trichlorophenol	0.125 ppm
							2,4,6-Trichlorophenol	0.125 ppm
							2,4-Dichlorophenol	0.125 ppm
							2,4-Dimethylphenol	0.125 ppm
							2,4-Dinitrophenol	1.25 ppm
							2,4-Dinitrotoluene	0.125 ppm
							2,6-Dichlorophenol	0.125 ppm
							2,6-Dinitrotoluene	0.125 ppm
							2-Chloronaphthalene	0.125 ppm
							2-Chlorophenol	0.125 ppm
							2-Methylnaphthalene	0.125 ppm
							2-Nitroaniline	0.125 ppm
							2-Nitrophenol	0.125 ppm
							3-Nitroaniline	0.125 ppm
							4,6-Dinitro-2-methylphenol	0.75 ppm
							4-Bromophenyl-phenylether	0.125 ppm
							4-Chloro-3-methylphenol	0.125 ppm
							4-Chloroaniline	0.125 ppm
							4-Chlorophenyl-phenyl ether	0.125 ppm
							4-Nitroaniline	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	0.75 ppm
							Acenaphthene	0.125 ppm
							Acenaphthylene	0.125 ppm
							Acetophenone	0.125 ppm
							Aniline	0.125 ppm
							Anthracene	0.125 ppm
							Benzo[a]anthracene	0.125 ppm
							Benzo[a]pyrene	0.125 ppm
							Benzo[b]fluoranthene	0.125 ppm
							Benzo[g,h,i]perylene	0.125 ppm
							Benzo[k]fluoranthene	0.125 ppm
							Benzyl alcohol	0.125 ppm
							bis (2-chloroisopropyl) ether	0.125 ppm
							Bis(2-chloroethoxy)methane	0.125 ppm
							Bis(2-chloroethyl)ether	0.125 ppm
							Bis(2-ethylhexyl) phthalate	0.125 ppm
							Butyl benzyl phthalate	0.125 ppm
							Carbazole	0.125 ppm
							Chrysene	0.125 ppm
							Di-n-butyl phthalate	0.125 ppm
							Di-n-octyl phthalate	0.125 ppm
							Dibenz(a,h)anthracene	0.125 ppm
							Dibenzofuran	0.125 ppm
							Diethyl phthalate	0.125 ppm
							Dimethyl phthalate	0.125 ppm
							Fluoranthene	0.125 ppm
							Fluorene	0.125 ppm
							Hexachlorobenzene	0.125 ppm
							Hexachlorobutadiene	0.125 ppm
							Hexachlorocyclopentadiene	0.125 ppm
							Hexachloroethane	0.125 ppm
							Indeno[1,2,3-cd]pyrene	0.125 ppm
							Isophorone	0.125 ppm
							m & p-Cresol	0.125 ppm
							N-Nitrosodi-n-propylamine	0.125 ppm
							N-Nitrosodimethylamine	0.125 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.10625 ppm
							Naphthalene	0.125 ppm
							Nitrobenzene	0.125 ppm
							o-Cresol	0.125 ppm
							Pentachlorophenol	0.625 ppm
							Phenanthrene	0.125 ppm
							Phenol	0.125 ppm
							Pyrene	0.125 ppm
							Pyridine	0.25 ppm
							3,3'-Dichlorobenzidine	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Alpha-Terpineol	0.125 ppm
							Dimethylformamide	0.125 ppm
							Octachlorostyrene	0.125 ppm
							Phenyl ether	0.125 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FV8270_1_00032	07/24/23	03/22/23	MeCl2, Lot 226679	2 mL	MSS_FV8270_2_00029	1000 uL	Benzidine	1.5 ppm
							1,3,5-Trinitrobenzene	0.5 ppm
							1,4-Dinitrobenzene	0.5 ppm
							1-Naphthylamine	0.5 ppm
							2-Acetylaminofluorene	0.5 ppm
							2-Naphthylamine	0.5 ppm
							2-Picoline	0.5 ppm
							2-Toluidine	0.5 ppm
							3,3'-Dimethylbenzidine	0.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.5 ppm
							4-Aminobiphenyl	0.5 ppm
							4-Nitroquinoline-1-oxide	0.5 ppm
							5-Nitro-o-toluidine	0.5 ppm
							Dibenz[a,h]acridine	0.5 ppm
							N-Nitrosodi-n-butylamine	0.5 ppm
							N-Nitrosodiethylamine	0.5 ppm
							N-Nitrosomethylethylamine	0.5 ppm
							N-Nitrosomorpholine	0.5 ppm
							N-Nitrosopiperidine	0.5 ppm
							N-Nitrosopyrrolidine	0.5 ppm
							p-Dimethylamino azobenzene	0.5 ppm
							p-Phenylene diamine	0.5 ppm
							Pentachloronitrobenzene	0.5 ppm
							Phenacetin	0.5 ppm
							Pronamide	0.5 ppm
							Quinoline	0.5 ppm
							1,4-Naphthoquinone	0.5 ppm
							1-Chloronaphthalene	0.5 ppm
							7,12-Dimethylbenz(a)anthracene	0.5 ppm
							Chlorobenzilate	0.5 ppm
							Dinoseb	0.5 ppm
							Ethyl methanesulfonate	0.5 ppm
							Hexachloropropene	0.5 ppm
							Isodrin	0.5 ppm
							Isosafrole Peak 1	0.08 ppm
							Isosafrole Peak 2	0.42 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methanesulfonate	0.5 ppm
							Pentachlorobenzene	0.5 ppm
							3-Methylcholanthrene	0.5 ppm
							6-Methylchrysene	0.5 ppm
							cis-Diallate	0.37 ppm
							Dimethoate	0.5 ppm
							Disulfoton	0.5 ppm
							Ethyl Parathion	0.5 ppm
							Methyl parathion	0.5 ppm
							o,o',o''-Triethylphosphorothioate	0.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.5 ppm
							Phorate	0.5 ppm
							Safrole, Total	0.5 ppm
							Sulfotepp	0.5 ppm
							trans-Diallate	0.13 ppm
							2,4,6-Tribromophenol (Surr)	1 ppm
							2-Fluorobiphenyl (Surr)	1 ppm
							2-Fluorophenol (Surr)	1 ppm
							Nitrobenzene-d5 (Surr)	1 ppm
							p-Terphenyl-d14 (Surr)	1 ppm
							Phenol-d5 (Surr)	1 ppm
							Dibenz[a,j]acridine	0.5 ppm
							1,1'-Biphenyl	0.5 ppm
							1,2,4,5-Tetrachlorobenzene	0.5 ppm
							1,2,4-Trichlorobenzene	0.5 ppm
							1,2-Dichlorobenzene	0.5 ppm
							1,2-Diphenylhydrazine	0.5 ppm
							1,3-Dichlorobenzene	0.5 ppm
							1,3-Dinitrobenzene	0.5 ppm
							1,4-Dichlorobenzene	0.5 ppm
							1,4-Dioxane	0.5 ppm
							1-Methylnaphthalene	0.5 ppm
							2,3,4,6-Tetrachlorophenol	0.5 ppm
							2,4,5-Trichlorophenol	0.5 ppm
							2,4,6-Trichlorophenol	0.5 ppm
							2,4-Dichlorophenol	0.5 ppm
							2,4-Dimethylphenol	0.5 ppm
							2,4-Dinitrophenol	5 ppm
							2,4-Dinitrotoluene	0.5 ppm
							2,6-Dichlorophenol	0.5 ppm
							2,6-Dinitrotoluene	0.5 ppm
							2-Chloronaphthalene	0.5 ppm
							2-Chlorophenol	0.5 ppm
							2-Methylnaphthalene	0.5 ppm
							2-Nitroaniline	0.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrophenol	0.5 ppm
							3-Nitroaniline	0.5 ppm
							4,6-Dinitro-2-methylphenol	3 ppm
							4-Bromophenyl-phenylether	0.5 ppm
							4-Chloro-3-methylphenol	0.5 ppm
							4-Chloroaniline	0.5 ppm
							4-Chlorophenyl-phenyl ether	0.5 ppm
							4-Nitroaniline	0.5 ppm
							4-Nitrophenol	3 ppm
							Acenaphthene	0.5 ppm
							Acenaphthylene	0.5 ppm
							Acetophenone	0.5 ppm
							Aniline	0.5 ppm
							Anthracene	0.5 ppm
							Benzo[a]anthracene	0.5 ppm
							Benzo[a]pyrene	0.5 ppm
							Benzo[b]fluoranthene	0.5 ppm
							Benzo[g,h,i]perylene	0.5 ppm
							Benzo[k]fluoranthene	0.5 ppm
							Benzyl alcohol	0.5 ppm
							bis (2-chloroisopropyl) ether	0.5 ppm
							Bis(2-chloroethoxy)methane	0.5 ppm
							Bis(2-chloroethyl)ether	0.5 ppm
							Bis(2-ethylhexyl) phthalate	0.5 ppm
							Butyl benzyl phthalate	0.5 ppm
							Carbazole	0.5 ppm
							Chrysene	0.5 ppm
							Di-n-butyl phthalate	0.5 ppm
							Di-n-octyl phthalate	0.5 ppm
							Dibenz(a,h)anthracene	0.5 ppm
							Dibenzofuran	0.5 ppm
							Diethyl phthalate	0.5 ppm
							Dimethyl phthalate	0.5 ppm
							Fluoranthene	0.5 ppm
							Fluorene	0.5 ppm
							Hexachlorobenzene	0.5 ppm
							Hexachlorobutadiene	0.5 ppm
							Hexachlorocyclopentadiene	0.5 ppm
							Hexachloroethane	0.5 ppm
							Indeno[1,2,3-cd]pyrene	0.5 ppm
							Isophorone	0.5 ppm
							m & p-Cresol	0.5 ppm
							N-Nitrosodi-n-propylamine	0.5 ppm
							N-Nitrosodimethylamine	0.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.425 ppm
							Naphthalene	0.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene	0.5 ppm
							o-Cresol	0.5 ppm
							Pentachlorophenol	2.5 ppm
							Phenanthrene	0.5 ppm
							Phenol	0.5 ppm
							Pyrene	0.5 ppm
							Pyridine	1 ppm
							3,3'-Dichlorobenzidine	0.5 ppm
							Alpha-Terpineol	0.5 ppm
							Dimethylformamide	0.5 ppm
							Octachlorostyrene	0.5 ppm
							Phenyl ether	0.5 ppm
							1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
					MSS_FV8270_IS_00005	20 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_2_00029	07/24/23	03/22/23	MeCl2, Lot 226679	5 mL	MSS_8270_APWS_00014	20 uL	Benzidine	3 ppm
							1,3,5-Trinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							1-Naphthylamine	1 ppm
							2-Acetylaminofluorene	1 ppm
							2-Naphthylamine	1 ppm
							2-Picoline	1 ppm
							2-Toluidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm
							4,4'-Methylene bis(2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm
							4-Nitroquinoline-1-oxide	1 ppm
							5-Nitro-o-toluidine	1 ppm
							Dibenz[a,h]acridine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							p-Phenylene diamine	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Pronamide	1 ppm
							Quinoline	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							7,12-Dimethylbenz(a)anthracene	1 ppm
							Chlorobenzilate	1 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isodrin	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							Pentachlorobenzene	1 ppm
							3-Methylcholanthrene	1 ppm
							6-Methylchrysene	1 ppm
							cis-Diallate	0.74 ppm
							Dimethoate	1 ppm
							Disulfoton	1 ppm
							Ethyl Parathion	1 ppm
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1 ppm
							Phorate	1 ppm
							Safrole, Total	1 ppm
							Sulfotepp	1 ppm
							trans-Diallate	0.26 ppm
					MSS_8270_WS_00015	20 uL	2,4,6-Tribromophenol (Surr)	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm
							2-Fluorophenol (Surr)	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm
							Phenol-d5 (Surr)	2 ppm
							Dibenz[a,j]acridine	1 ppm
							1,1'-Biphenyl	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							1,4-Dioxane	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylnaphthalene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,4,5-Trichlorophenol	1 ppm
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	10 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dichlorophenol	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm
							4,6-Dinitro-2-methylphenol	6 ppm
							4-Bromophenyl-phenylether	1 ppm
							4-Chloro-3-methylphenol	1 ppm
							4-Chloroaniline	1 ppm
							4-Chlorophenyl-phenyl ether	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	6 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Acetophenone	1 ppm
							Aniline	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm
							Benzo[a]pyrene	1 ppm
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm
							Benzo[k]fluoranthene	1 ppm
							Benzyl alcohol	1 ppm
							bis (2-chloroisopropyl) ether	1 ppm
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz(a,h)anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm
							Hexachlorobenzene	1 ppm
							Hexachlorobutadiene	1 ppm
							Hexachlorocyclopentadiene	1 ppm
							Hexachloroethane	1 ppm
							Indeno[1,2,3-cd]pyrene	1 ppm
							Isophorone	1 ppm
							m & p-Cresol	1 ppm
							N-Nitrosodi-n-propylamine	1 ppm
							N-Nitrosodimethylamine	1 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.85 ppm
							Naphthalene	1 ppm
							Nitrobenzene	1 ppm
							o-Cresol	1 ppm
							Pentachlorophenol	5 ppm
							Phenanthrene	1 ppm
							Phenol	1 ppm
							Pyrene	1 ppm
							Pyridine	2 ppm
							3,3'-Dichlorobenzidine	1 ppm
							Benzidine	3 ppm
							Alpha-Terpineol	1 ppm
							Dimethylformamide	1 ppm
							Octachlorostyrene	1 ppm
							Phenyl ether	1 ppm
					MSS_AB_24DNP_00007	40 uL	2,4-Dinitrophenol	10 ppm
					MSS_AB_46D2MP_00004	20 uL	4,6-Dinitro-2-methylphenol	6 ppm
					MSS_AB_4NP_00003	20 uL	4-Nitrophenol	6 ppm
					MSS_AB_PCP_00004	15 uL	Pentachlorophenol	5 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
...MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00009	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
....MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
....OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
....OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
....OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
....OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
...MSS_8270_WS_00015	09/22/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00004	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
....MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
....OP_RES_APPX6_00004	08/31/24		Restek, Lot A0175669		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
....OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
....OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
....OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
...MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
...MSS_AB_4NP_00003	07/24/23		Absolute, Lot 072418		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
...MSS_AB_PCP_00004	06/22/27		Absolute, Lot 062222		(Purchased Reagent)		Pentachlorophenol	1000 ug/mL
...MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
							1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_1_00029	07/24/23	06/08/23	MeCl2, Lot 226055	1 mL	MSS_FV8270_1_00033	250 uL	Benzidine	0.375 ppm
							1,3,5-Trinitrobenzene	0.125 ppm
							1,4-Dinitrobenzene	0.125 ppm
							1-Naphthylamine	0.125 ppm
							2-Acetylaminofluorene	0.125 ppm
							2-Naphthylamine	0.125 ppm
							2-Picoline	0.125 ppm
							2-Toluidine	0.125 ppm
							3,3'-Dimethylbenzidine	0.125 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.125 ppm
							4-Aminobiphenyl	0.125 ppm
							4-Nitroquinoline-1-oxide	0.125 ppm
							5-Nitro-o-toluidine	0.125 ppm
							Dibenz[a,h]acridine	0.125 ppm
							N-Nitrosodi-n-butylamine	0.125 ppm
							N-Nitrosodiethylamine	0.125 ppm
							N-Nitrosomethylethylamine	0.125 ppm
							N-Nitrosomorpholine	0.125 ppm
							N-Nitrosopiperidine	0.125 ppm
							N-Nitrosopyrrolidine	0.125 ppm
							p-Dimethylamino azobenzene	0.125 ppm
							p-Phenylene diamine	0.125 ppm
							Pentachloronitrobenzene	0.125 ppm
							Phenacetin	0.125 ppm
							Pronamide	0.125 ppm
							Quinoline	0.125 ppm
							1,4-Naphthoquinone	0.125 ppm
							1-Chloronaphthalene	0.125 ppm
							7,12-Dimethylbenz(a)anthracene	0.125 ppm
							Chlorobenzilate	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dinoseb	0.125 ppm
							Ethyl methanesulfonate	0.125 ppm
							Hexachloropropene	0.125 ppm
							Isodrin	0.125 ppm
							Isosafrole Peak 1	0.02 ppm
							Isosafrole Peak 2	0.105 ppm
							Methyl methanesulfonate	0.125 ppm
							Pentachlorobenzene	0.125 ppm
							3-Methylcholanthrene	0.125 ppm
							6-Methylchrysene	0.125 ppm
							cis-Diallate	0.0925 ppm
							Dimethoate	0.125 ppm
							Disulfoton	0.125 ppm
							Ethyl Parathion	0.125 ppm
							Methyl parathion	0.125 ppm
							o,o',o''-Triethylphosphorothioate	0.125 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.125 ppm
							Phorate	0.125 ppm
							Safrole, Total	0.125 ppm
							Sulfotepp	0.125 ppm
							trans-Diallate	0.0325 ppm
							2,4,6-Tribromophenol (Surr)	0.25 ppm
							2-Fluorobiphenyl (Surr)	0.25 ppm
							2-Fluorophenol (Surr)	0.25 ppm
							Nitrobenzene-d5 (Surr)	0.25 ppm
							p-Terphenyl-d14 (Surr)	0.25 ppm
							Phenol-d5 (Surr)	0.25 ppm
							Dibenz[a,j]acridine	0.125 ppm
							1,1'-Biphenyl	0.125 ppm
							1,2,4,5-Tetrachlorobenzene	0.125 ppm
							1,2,4-Trichlorobenzene	0.125 ppm
							1,2-Dichlorobenzene	0.125 ppm
							1,2-Diphenylhydrazine	0.125 ppm
							1,3-Dichlorobenzene	0.125 ppm
							1,3-Dinitrobenzene	0.125 ppm
							1,4-Dichlorobenzene	0.125 ppm
							1,4-Dioxane	0.125 ppm
							1-Methylnaphthalene	0.125 ppm
							2,3,4,6-Tetrachlorophenol	0.125 ppm
							2,4,5-Trichlorophenol	0.125 ppm
							2,4,6-Trichlorophenol	0.125 ppm
							2,4-Dichlorophenol	0.125 ppm
							2,4-Dimethylphenol	0.125 ppm
							2,4-Dinitrophenol	1.25 ppm
							2,4-Dinitrotoluene	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dichlorophenol	0.125 ppm
							2,6-Dinitrotoluene	0.125 ppm
							2-Chloronaphthalene	0.125 ppm
							2-Chlorophenol	0.125 ppm
							2-Methylnaphthalene	0.125 ppm
							2-Nitroaniline	0.125 ppm
							2-Nitrophenol	0.125 ppm
							3-Nitroaniline	0.125 ppm
							4,6-Dinitro-2-methylphenol	0.75 ppm
							4-Bromophenyl-phenylether	0.125 ppm
							4-Chloro-3-methylphenol	0.125 ppm
							4-Chloroaniline	0.125 ppm
							4-Chlorophenyl-phenyl ether	0.125 ppm
							4-Nitroaniline	0.125 ppm
							4-Nitrophenol	0.75 ppm
							Acenaphthene	0.125 ppm
							Acenaphthylene	0.125 ppm
							Acetophenone	0.125 ppm
							Aniline	0.125 ppm
							Anthracene	0.125 ppm
							Benzo[a]anthracene	0.125 ppm
							Benzo[a]pyrene	0.125 ppm
							Benzo[b]fluoranthene	0.125 ppm
							Benzo[g,h,i]perylene	0.125 ppm
							Benzo[k]fluoranthene	0.125 ppm
							Benzyl alcohol	0.125 ppm
							bis (2-chloroisopropyl) ether	0.125 ppm
							Bis(2-chloroethoxy)methane	0.125 ppm
							Bis(2-chloroethyl)ether	0.125 ppm
							Bis(2-ethylhexyl) phthalate	0.125 ppm
							Butyl benzyl phthalate	0.125 ppm
							Carbazole	0.125 ppm
							Chrysene	0.125 ppm
							Di-n-butyl phthalate	0.125 ppm
							Di-n-octyl phthalate	0.125 ppm
							Dibenz(a,h)anthracene	0.125 ppm
							Dibenzofuran	0.125 ppm
							Diethyl phthalate	0.125 ppm
							Dimethyl phthalate	0.125 ppm
							Fluoranthene	0.125 ppm
							Fluorene	0.125 ppm
							Hexachlorobenzene	0.125 ppm
							Hexachlorobutadiene	0.125 ppm
							Hexachlorocyclopentadiene	0.125 ppm
							Hexachloroethane	0.125 ppm
							Indeno[1,2,3-cd]pyrene	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isophorone	0.125 ppm
							m & p-Cresol	0.125 ppm
							N-Nitrosodi-n-propylamine	0.125 ppm
							N-Nitrosodimethylamine	0.125 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.10625 ppm
							Naphthalene	0.125 ppm
							Nitrobenzene	0.125 ppm
							o-Cresol	0.125 ppm
							Pentachlorophenol	0.625 ppm
							Phenanthrene	0.125 ppm
							Phenol	0.125 ppm
							Pyrene	0.125 ppm
							Pyridine	0.25 ppm
							3,3'-Dichlorobenzidine	0.125 ppm
							Alpha-Terpineol	0.125 ppm
							Dimethylformamide	0.125 ppm
							Octachlorostyrene	0.125 ppm
							Phenyl ether	0.125 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FV8270_1_00033	07/24/23	06/08/23	MeCl2, Lot 226055	2 mL	MSS_FV8270_2_00030	1000 uL	Benzidine	1.5 ppm
							1,3,5-Trinitrobenzene	0.5 ppm
							1,4-Dinitrobenzene	0.5 ppm
							1-Naphthylamine	0.5 ppm
							2-Acetylaminofluorene	0.5 ppm
							2-Naphthylamine	0.5 ppm
							2-Picoline	0.5 ppm
							2-Toluidine	0.5 ppm
							3,3'-Dimethylbenzidine	0.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.5 ppm
							4-Aminobiphenyl	0.5 ppm
							4-Nitroquinoline-1-oxide	0.5 ppm
							5-Nitro-o-toluidine	0.5 ppm
							Dibenz[a,h]acridine	0.5 ppm
							N-Nitrosodi-n-butylamine	0.5 ppm
							N-Nitrosodiethylamine	0.5 ppm
							N-Nitrosomethylethylamine	0.5 ppm
							N-Nitrosomorpholine	0.5 ppm
							N-Nitrosopiperidine	0.5 ppm
							N-Nitrosopyrrolidine	0.5 ppm
							p-Dimethylamino azobenzene	0.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Phenylene diamine	0.5 ppm
							Pentachloronitrobenzene	0.5 ppm
							Phenacetin	0.5 ppm
							Pronamide	0.5 ppm
							Quinoline	0.5 ppm
							1,4-Naphthoquinone	0.5 ppm
							1-Chloronaphthalene	0.5 ppm
							7,12-Dimethylbenz(a)anthracene	0.5 ppm
							Chlorobenzilate	0.5 ppm
							Dinoseb	0.5 ppm
							Ethyl methanesulfonate	0.5 ppm
							Hexachloropropene	0.5 ppm
							Isodrin	0.5 ppm
							Isosafrole Peak 1	0.08 ppm
							Isosafrole Peak 2	0.42 ppm
							Methyl methanesulfonate	0.5 ppm
							Pentachlorobenzene	0.5 ppm
							3-Methylcholanthrene	0.5 ppm
							6-Methylchrysene	0.5 ppm
							cis-Diallate	0.37 ppm
							Dimethoate	0.5 ppm
							Disulfoton	0.5 ppm
							Ethyl Parathion	0.5 ppm
							Methyl parathion	0.5 ppm
							o,o',o''-Triethylphosphorothioate	0.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.5 ppm
							Phorate	0.5 ppm
							Safrole, Total	0.5 ppm
							Sulfotepp	0.5 ppm
							trans-Diallate	0.13 ppm
							2,4,6-Tribromophenol (Surr)	1 ppm
							2-Fluorobiphenyl (Surr)	1 ppm
							2-Fluorophenol (Surr)	1 ppm
							Nitrobenzene-d5 (Surr)	1 ppm
							p-Terphenyl-d14 (Surr)	1 ppm
							Phenol-d5 (Surr)	1 ppm
							Dibenz[a,j]acridine	0.5 ppm
							1,1'-Biphenyl	0.5 ppm
							1,2,4,5-Tetrachlorobenzene	0.5 ppm
							1,2,4-Trichlorobenzene	0.5 ppm
							1,2-Dichlorobenzene	0.5 ppm
							1,2-Diphenylhydrazine	0.5 ppm
							1,3-Dichlorobenzene	0.5 ppm
							1,3-Dinitrobenzene	0.5 ppm
							1,4-Dichlorobenzene	0.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	0.5 ppm
							1-Methylnaphthalene	0.5 ppm
							2,3,4,6-Tetrachlorophenol	0.5 ppm
							2,4,5-Trichlorophenol	0.5 ppm
							2,4,6-Trichlorophenol	0.5 ppm
							2,4-Dichlorophenol	0.5 ppm
							2,4-Dimethylphenol	0.5 ppm
							2,4-Dinitrophenol	5 ppm
							2,4-Dinitrotoluene	0.5 ppm
							2,6-Dichlorophenol	0.5 ppm
							2,6-Dinitrotoluene	0.5 ppm
							2-Chloronaphthalene	0.5 ppm
							2-Chlorophenol	0.5 ppm
							2-Methylnaphthalene	0.5 ppm
							2-Nitroaniline	0.5 ppm
							2-Nitrophenol	0.5 ppm
							3-Nitroaniline	0.5 ppm
							4,6-Dinitro-2-methylphenol	3 ppm
							4-Bromophenyl-phenylether	0.5 ppm
							4-Chloro-3-methylphenol	0.5 ppm
							4-Chloroaniline	0.5 ppm
							4-Chlorophenyl-phenyl ether	0.5 ppm
							4-Nitroaniline	0.5 ppm
							4-Nitrophenol	3 ppm
							Acenaphthene	0.5 ppm
							Acenaphthylene	0.5 ppm
							Acetophenone	0.5 ppm
							Aniline	0.5 ppm
							Anthracene	0.5 ppm
							Benzo[a]anthracene	0.5 ppm
							Benzo[a]pyrene	0.5 ppm
							Benzo[b]fluoranthene	0.5 ppm
							Benzo[g,h,i]perylene	0.5 ppm
							Benzo[k]fluoranthene	0.5 ppm
							Benzyl alcohol	0.5 ppm
							bis (2-chloroisopropyl) ether	0.5 ppm
							Bis(2-chloroethoxy)methane	0.5 ppm
							Bis(2-chloroethyl)ether	0.5 ppm
							Bis(2-ethylhexyl) phthalate	0.5 ppm
							Butyl benzyl phthalate	0.5 ppm
							Carbazole	0.5 ppm
							Chrysene	0.5 ppm
							Di-n-butyl phthalate	0.5 ppm
							Di-n-octyl phthalate	0.5 ppm
							Dibenz(a,h)anthracene	0.5 ppm
							Dibenzofuran	0.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	0.5 ppm
							Dimethyl phthalate	0.5 ppm
							Fluoranthene	0.5 ppm
							Fluorene	0.5 ppm
							Hexachlorobenzene	0.5 ppm
							Hexachlorobutadiene	0.5 ppm
							Hexachlorocyclopentadiene	0.5 ppm
							Hexachloroethane	0.5 ppm
							Indeno[1,2,3-cd]pyrene	0.5 ppm
							Isophorone	0.5 ppm
							m & p-Cresol	0.5 ppm
							N-Nitrosodi-n-propylamine	0.5 ppm
							N-Nitrosodimethylamine	0.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.425 ppm
							Naphthalene	0.5 ppm
							Nitrobenzene	0.5 ppm
							o-Cresol	0.5 ppm
							Pentachlorophenol	2.5 ppm
							Phenanthrene	0.5 ppm
							Phenol	0.5 ppm
							Pyrene	0.5 ppm
							Pyridine	1 ppm
							3,3'-Dichlorobenzidine	0.5 ppm
							Alpha-Terpineol	0.5 ppm
							Dimethylformamide	0.5 ppm
							Octachlorostyrene	0.5 ppm
							Phenyl ether	0.5 ppm
							1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
					MSS_FV8270_IS_00005	20 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_2_00030	07/24/23	06/08/23	MeCl2, Lot 226055	5 mL	MSS_8270_APWS_00015	20 uL	Benzidine	3 ppm
							1,3,5-Trinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							1-Naphthylamine	1 ppm
							2-Acetylaminofluorene	1 ppm
							2-Naphthylamine	1 ppm
							2-Picoline	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Toluidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm
							4,4'-Methylene bis(2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm
							4-Nitroquinoline-1-oxide	1 ppm
							5-Nitro-o-toluidine	1 ppm
							Dibenz[a,h]acridine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							p-Phenylene diamine	1 ppm
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Pronamide	1 ppm
							Quinoline	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							7,12-Dimethylbenz(a)anthracene	1 ppm
							Chlorobenzilate	1 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isodrin	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							Pentachlorobenzene	1 ppm
							3-Methylcholanthrene	1 ppm
							6-Methylchrysene	1 ppm
							cis-Diallate	0.74 ppm
							Dimethoate	1 ppm
							Disulfoton	1 ppm
							Ethyl Parathion	1 ppm
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1 ppm
							Phorate	1 ppm
							Safrole, Total	1 ppm
							Sulfotepp	1 ppm
							trans-Diallate	0.26 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_8270_WS_00016	20 uL	2,4,6-Tribromophenol (Surr)	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm
							2-Fluorophenol (Surr)	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm
							Phenol-d5 (Surr)	2 ppm
							Dibenz[a,j]acridine	1 ppm
							1,1'-Biphenyl	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							1,4-Dioxane	1 ppm
							1-Methylnaphthalene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,4,5-Trichlorophenol	1 ppm
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	10 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dichlorophenol	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm
							4,6-Dinitro-2-methylphenol	6 ppm
							4-Bromophenyl-phenylether	1 ppm
							4-Chloro-3-methylphenol	1 ppm
							4-Chloroaniline	1 ppm
							4-Chlorophenyl-phenyl ether	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	6 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Acetophenone	1 ppm
							Aniline	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm
							Benzo[a]pyrene	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm
							Benzo[k]fluoranthene	1 ppm
							Benzyl alcohol	1 ppm
							bis (2-chloroisopropyl) ether	1 ppm
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz(a,h)anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm
							Hexachlorobenzene	1 ppm
							Hexachlorobutadiene	1 ppm
							Hexachlorocyclopentadiene	1 ppm
							Hexachloroethane	1 ppm
							Indeno[1,2,3-cd]pyrene	1 ppm
							Isophorone	1 ppm
							m & p-Cresol	1 ppm
							N-Nitrosodi-n-propylamine	1 ppm
							N-Nitrosodimethylamine	1 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.85 ppm
							Naphthalene	1 ppm
							Nitrobenzene	1 ppm
							o-Cresol	1 ppm
							Pentachlorophenol	5 ppm
							Phenanthrene	1 ppm
							Phenol	1 ppm
							Pyrene	1 ppm
							Pyridine	2 ppm
							3,3'-Dichlorobenzidine	1 ppm
							Benzidine	3 ppm
							Alpha-Terpineol	1 ppm
							Dimethylformamide	1 ppm
							Octachlorostyrene	1 ppm
							Phenyl ether	1 ppm
					MSS_AB_24DNP_00007	40 uL	2,4-Dinitrophenol	10 ppm
					MSS_AB_46D2MP_00004	20 uL	4,6-Dinitro-2-methylphenol	6 ppm
					MSS_AB_4NP_00003	20 uL	4-Nitrophenol	6 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_AB_PCP_00004	15 uL	Pentachlorophenol	5 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
...MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
....MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
....OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
....OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
....OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
....OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
...MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
....MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
....OP_RES_APPX6_00005	05/31/25		Restek, Lot A0184892		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
....OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
....OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
....OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
...MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
...MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
...MSS_AB_4NP_00003	07/24/23		Absolute, Lot 072418		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
...MSS_AB_PCP_00004	06/22/27		Absolute, Lot 062222		(Purchased Reagent)		Pentachlorophenol	1000 ug/mL
...MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
							1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_1_00030	10/31/23	07/24/23	MeCl2, Lot 232230	1 mL	MSS_FV8270_1_00034	250 uL	Benzidine	0.375 ppm
							1,3,5-Trinitrobenzene	0.125 ppm
							1,4-Dinitrobenzene	0.125 ppm
							1-Naphthylamine	0.125 ppm
							2-Acetylaminofluorene	0.125 ppm
							2-Naphthylamine	0.125 ppm
							2-Picoline	0.125 ppm
							2-Toluidine	0.125 ppm
							3,3'-Dimethylbenzidine	0.125 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.125 ppm
							4-Aminobiphenyl	0.125 ppm
							4-Nitroquinoline-1-oxide	0.125 ppm
							5-Nitro-o-toluidine	0.125 ppm
							Dibenz[a,h]acridine	0.125 ppm
							N-Nitrosodi-n-butylamine	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	0.125 ppm
							1,2-Dichlorobenzene	0.125 ppm
							1,2-Diphenylhydrazine	0.125 ppm
							1,3-Dichlorobenzene	0.125 ppm
							1,3-Dinitrobenzene	0.125 ppm
							1,4-Dichlorobenzene	0.125 ppm
							1,4-Dioxane	0.125 ppm
							1-Methylnaphthalene	0.125 ppm
							2,3,4,6-Tetrachlorophenol	0.125 ppm
							2,4,5-Trichlorophenol	0.125 ppm
							2,4,6-Trichlorophenol	0.125 ppm
							2,4-Dichlorophenol	0.125 ppm
							2,4-Dimethylphenol	0.125 ppm
							2,4-Dinitrophenol	1.25 ppm
							2,4-Dinitrotoluene	0.125 ppm
							2,6-Dichlorophenol	0.125 ppm
							2,6-Dinitrotoluene	0.125 ppm
							2-Chloronaphthalene	0.125 ppm
							2-Chlorophenol	0.125 ppm
							2-Methylnaphthalene	0.125 ppm
							2-Nitroaniline	0.125 ppm
							2-Nitrophenol	0.125 ppm
							3-Nitroaniline	0.125 ppm
							4,6-Dinitro-2-methylphenol	0.75 ppm
							4-Bromophenyl-phenylether	0.125 ppm
							4-Chloro-3-methylphenol	0.125 ppm
							4-Chloroaniline	0.125 ppm
							4-Chlorophenyl-phenyl ether	0.125 ppm
							4-Nitroaniline	0.125 ppm
							4-Nitrophenol	0.75 ppm
							Acenaphthene	0.125 ppm
							Acenaphthylene	0.125 ppm
							Acetophenone	0.125 ppm
							Aniline	0.125 ppm
							Anthracene	0.125 ppm
							Benzo[a]anthracene	0.125 ppm
							Benzo[a]pyrene	0.125 ppm
							Benzo[b]fluoranthene	0.125 ppm
							Benzo[g,h,i]perylene	0.125 ppm
							Benzo[k]fluoranthene	0.125 ppm
							Benzyl alcohol	0.125 ppm
							bis (2-chloroisopropyl) ether	0.125 ppm
							Bis(2-chloroethoxy)methane	0.125 ppm
							Bis(2-chloroethyl)ether	0.125 ppm
							Bis(2-ethylhexyl) phthalate	0.125 ppm
							Butyl benzyl phthalate	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	0.125 ppm
							Chrysene	0.125 ppm
							Di-n-butyl phthalate	0.125 ppm
							Di-n-octyl phthalate	0.125 ppm
							Dibenz(a,h)anthracene	0.125 ppm
							Dibenzofuran	0.125 ppm
							Diethyl phthalate	0.125 ppm
							Dimethyl phthalate	0.125 ppm
							Fluoranthene	0.125 ppm
							Fluorene	0.125 ppm
							Hexachlorobenzene	0.125 ppm
							Hexachlorobutadiene	0.125 ppm
							Hexachlorocyclopentadiene	0.125 ppm
							Hexachloroethane	0.125 ppm
							Indeno[1,2,3-cd]pyrene	0.125 ppm
							Isophorone	0.125 ppm
							m & p-Cresol	0.125 ppm
							N-Nitrosodi-n-propylamine	0.125 ppm
							N-Nitrosodimethylamine	0.125 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.10625 ppm
							Naphthalene	0.125 ppm
							Nitrobenzene	0.125 ppm
							o-Cresol	0.125 ppm
							Pentachlorophenol	0.625 ppm
							Phenanthrene	0.125 ppm
							Phenol	0.125 ppm
							Pyrene	0.125 ppm
							Pyridine	0.25 ppm
							3,3'-Dichlorobenzidine	0.125 ppm
							Alpha-Terpineol	0.125 ppm
							Dimethylformamide	0.125 ppm
							Octachlorostyrene	0.125 ppm
							Phenyl ether	0.125 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FV8270_1_00034	10/31/23	07/24/23	MeCl2, Lot 232230	2 mL	MSS_FV8270_2_00031	1000 uL	Benzidine	1.5 ppm
							1,3,5-Trinitrobenzene	0.5 ppm
							1,4-Dinitrobenzene	0.5 ppm
							1-Naphthylamine	0.5 ppm
							2-Acetylaminofluorene	0.5 ppm
							2-Naphthylamine	0.5 ppm
							2-Picoline	0.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Toluidine	0.5 ppm
							3,3'-Dimethylbenzidine	0.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.5 ppm
							4-Aminobiphenyl	0.5 ppm
							4-Nitroquinoline-1-oxide	0.5 ppm
							5-Nitro-o-toluidine	0.5 ppm
							Dibenz[a,h]acridine	0.5 ppm
							N-Nitrosodi-n-butylamine	0.5 ppm
							N-Nitrosodiethylamine	0.5 ppm
							N-Nitrosomethylethylamine	0.5 ppm
							N-Nitrosomorpholine	0.5 ppm
							N-Nitrosopiperidine	0.5 ppm
							N-Nitrosopyrrolidine	0.5 ppm
							p-Dimethylamino azobenzene	0.5 ppm
							p-Phenylene diamine	0.5 ppm
							Pentachloronitrobenzene	0.5 ppm
							Phenacetin	0.5 ppm
							Pronamide	0.5 ppm
							Quinoline	0.5 ppm
							1,4-Naphthoquinone	0.5 ppm
							1-Chloronaphthalene	0.5 ppm
							7,12-Dimethylbenz(a)anthracene	0.5 ppm
							Chlorobenzilate	0.5 ppm
							Dinoseb	0.5 ppm
							Ethyl methanesulfonate	0.5 ppm
							Hexachloropropene	0.5 ppm
							Isodrin	0.5 ppm
							Isosafrole Peak 1	0.08 ppm
							Isosafrole Peak 2	0.42 ppm
							Methyl methanesulfonate	0.5 ppm
							Pentachlorobenzene	0.5 ppm
							3-Methylcholanthrene	0.5 ppm
							6-Methylchrysene	0.5 ppm
							cis-Diallate	0.37 ppm
							Dimethoate	0.5 ppm
							Disulfoton	0.5 ppm
							Ethyl Parathion	0.5 ppm
							Methyl parathion	0.5 ppm
							o,o',o''-Triethylphosphorothioate	0.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.5 ppm
							Phorate	0.5 ppm
							Safrole, Total	0.5 ppm
							Sulfotepp	0.5 ppm
							trans-Diallate	0.13 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Tribromophenol (Surr)	1 ppm
							2-Fluorobiphenyl (Surr)	1 ppm
							2-Fluorophenol (Surr)	1 ppm
							Nitrobenzene-d5 (Surr)	1 ppm
							p-Terphenyl-d14 (Surr)	1 ppm
							Phenol-d5 (Surr)	1 ppm
							Dibenz[a,j]acridine	0.5 ppm
							1,1'-Biphenyl	0.5 ppm
							1,2,4,5-Tetrachlorobenzene	0.5 ppm
							1,2,4-Trichlorobenzene	0.5 ppm
							1,2-Dichlorobenzene	0.5 ppm
							1,2-Diphenylhydrazine	0.5 ppm
							1,3-Dichlorobenzene	0.5 ppm
							1,3-Dinitrobenzene	0.5 ppm
							1,4-Dichlorobenzene	0.5 ppm
							1,4-Dioxane	0.5 ppm
							1-Methylnaphthalene	0.5 ppm
							2,3,4,6-Tetrachlorophenol	0.5 ppm
							2,4,5-Trichlorophenol	0.5 ppm
							2,4,6-Trichlorophenol	0.5 ppm
							2,4-Dichlorophenol	0.5 ppm
							2,4-Dimethylphenol	0.5 ppm
							2,4-Dinitrophenol	5 ppm
							2,4-Dinitrotoluene	0.5 ppm
							2,6-Dichlorophenol	0.5 ppm
							2,6-Dinitrotoluene	0.5 ppm
							2-Chloronaphthalene	0.5 ppm
							2-Chlorophenol	0.5 ppm
							2-Methylnaphthalene	0.5 ppm
							2-Nitroaniline	0.5 ppm
							2-Nitrophenol	0.5 ppm
							3-Nitroaniline	0.5 ppm
							4,6-Dinitro-2-methylphenol	3 ppm
							4-Bromophenyl-phenylether	0.5 ppm
							4-Chloro-3-methylphenol	0.5 ppm
							4-Chloroaniline	0.5 ppm
							4-Chlorophenyl-phenyl ether	0.5 ppm
							4-Nitroaniline	0.5 ppm
							4-Nitrophenol	3 ppm
							Acenaphthene	0.5 ppm
							Acenaphthylene	0.5 ppm
							Acetophenone	0.5 ppm
							Aniline	0.5 ppm
							Anthracene	0.5 ppm
							Benzo[a]anthracene	0.5 ppm
							Benzo[a]pyrene	0.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	0.5 ppm
							Benzo[g,h,i]perylene	0.5 ppm
							Benzo[k]fluoranthene	0.5 ppm
							Benzyl alcohol	0.5 ppm
							bis (2-chloroisopropyl) ether	0.5 ppm
							Bis(2-chloroethoxy)methane	0.5 ppm
							Bis(2-chloroethyl)ether	0.5 ppm
							Bis(2-ethylhexyl) phthalate	0.5 ppm
							Butyl benzyl phthalate	0.5 ppm
							Carbazole	0.5 ppm
							Chrysene	0.5 ppm
							Di-n-butyl phthalate	0.5 ppm
							Di-n-octyl phthalate	0.5 ppm
							Dibenz(a,h)anthracene	0.5 ppm
							Dibenzofuran	0.5 ppm
							Diethyl phthalate	0.5 ppm
							Dimethyl phthalate	0.5 ppm
							Fluoranthene	0.5 ppm
							Fluorene	0.5 ppm
							Hexachlorobenzene	0.5 ppm
							Hexachlorobutadiene	0.5 ppm
							Hexachlorocyclopentadiene	0.5 ppm
							Hexachloroethane	0.5 ppm
							Indeno[1,2,3-cd]pyrene	0.5 ppm
							Isophorone	0.5 ppm
							m & p-Cresol	0.5 ppm
							N-Nitrosodi-n-propylamine	0.5 ppm
							N-Nitrosodimethylamine	0.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.425 ppm
							Naphthalene	0.5 ppm
							Nitrobenzene	0.5 ppm
							o-Cresol	0.5 ppm
							Pentachlorophenol	2.5 ppm
							Phenanthrene	0.5 ppm
							Phenol	0.5 ppm
							Pyrene	0.5 ppm
							Pyridine	1 ppm
							3,3'-Dichlorobenzidine	0.5 ppm
							Alpha-Terpineol	0.5 ppm
							Dimethylformamide	0.5 ppm
							Octachlorostyrene	0.5 ppm
							Phenyl ether	0.5 ppm
							1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
					MSS_FV8270_IS_00005	20 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_2_00031	10/31/23	07/24/23	MeCl2, Lot 232230	5 mL	MSS_8270_APWS_00015	20 uL	Benzidine	3 ppm
							1,3,5-Trinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							1-Naphthylamine	1 ppm
							2-Acetylaminofluorene	1 ppm
							2-Naphthylamine	1 ppm
							2-Picoline	1 ppm
							2-Toluidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm
							4,4'-Methylene bis(2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm
							4-Nitroquinoline-1-oxide	1 ppm
							5-Nitro-o-toluidine	1 ppm
							Dibenz[a,h]acridine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							p-Phenylene diamine	1 ppm
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Pronamide	1 ppm
							Quinoline	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							7,12-Dimethylbenz(a)anthracene	1 ppm
							Chlorobenzilate	1 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isodrin	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							Pentachlorobenzene	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Methylcholanthrene	1 ppm
							6-Methylchrysene	1 ppm
							cis-Diallate	0.74 ppm
							Dimethoate	1 ppm
							Disulfoton	1 ppm
							Ethyl Parathion	1 ppm
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1 ppm
							Phorate	1 ppm
							Safrole, Total	1 ppm
							Sulfotepp	1 ppm
							trans-Diallate	0.26 ppm
					MSS_8270_WS_00016	20 uL	2,4,6-Tribromophenol (Surr)	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm
							2-Fluorophenol (Surr)	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm
							Phenol-d5 (Surr)	2 ppm
							Dibenz[a,j]acridine	1 ppm
							1,1'-Biphenyl	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							1,4-Dioxane	1 ppm
							1-Methylnaphthalene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,4,5-Trichlorophenol	1 ppm
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	10 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dichlorophenol	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,6-Dinitro-2-methylphenol	6 ppm
							4-Bromophenyl-phenylether	1 ppm
							4-Chloro-3-methylphenol	1 ppm
							4-Chloroaniline	1 ppm
							4-Chlorophenyl-phenyl ether	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	6 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Acetophenone	1 ppm
							Aniline	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm
							Benzo[a]pyrene	1 ppm
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm
							Benzo[k]fluoranthene	1 ppm
							Benzyl alcohol	1 ppm
							bis (2-chloroisopropyl) ether	1 ppm
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz(a,h)anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm
							Hexachlorobenzene	1 ppm
							Hexachlorobutadiene	1 ppm
							Hexachlorocyclopentadiene	1 ppm
							Hexachloroethane	1 ppm
							Indeno[1,2,3-cd]pyrene	1 ppm
							Isophorone	1 ppm
							m & p-Cresol	1 ppm
							N-Nitrosodi-n-propylamine	1 ppm
							N-Nitrosodimethylamine	1 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.85 ppm
							Naphthalene	1 ppm
							Nitrobenzene	1 ppm
							o-Cresol	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	5 ppm
							Phenanthrene	1 ppm
							Phenol	1 ppm
							Pyrene	1 ppm
							Pyridine	2 ppm
							3,3'-Dichlorobenzidine	1 ppm
							Benzidine	3 ppm
							Alpha-Terpineol	1 ppm
							Dimethylformamide	1 ppm
							Octachlorostyrene	1 ppm
							Phenyl ether	1 ppm
					MSS_AB_24DNP_00007	40 uL	2,4-Dinitrophenol	10 ppm
					MSS_AB_46D2MP_00004	20 uL	4,6-Dinitro-2-methylphenol	6 ppm
					MSS_AB_4NP_00006	20 uL	4-Nitrophenol	6 ppm
					MSS_AB_PCP_00004	15 uL	Pentachlorophenol	5 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
...MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
....MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
....OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
....OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
....OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
....OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
...MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
....MSS_8270_SURR_00004	10/31/23	Sigma- Aldrich, Lot LRAC8467			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
....OP_RES_APPX6_00005	05/31/25	Restek, Lot A0184892			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
....OP_RES_LCS1_00011	04/30/24	Restek, Lot A0190414			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
....OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
....OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
...MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
...MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
...MSS_AB_4NP_00006	02/13/28		Absolute, Lot 021323		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
...MSS_AB_PCP_00004	06/22/27		Absolute, Lot 062222		(Purchased Reagent)		Pentachlorophenol	1000 ug/mL
...MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
							1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_1_00032	03/05/24	10/19/23	MeCl2, Lot 63209	1 mL	MSS_FV8270_1_00036	250 uL	Benzidine	0.375 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trinitrobenzene	0.125 ppm
							1,4-Dinitrobenzene	0.125 ppm
							1-Naphthylamine	0.125 ppm
							2-Acetylaminofluorene	0.125 ppm
							2-Naphthylamine	0.125 ppm
							2-Picoline	0.125 ppm
							2-Toluidine	0.125 ppm
							3,3'-Dimethylbenzidine	0.125 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.125 ppm
							4-Aminobiphenyl	0.125 ppm
							4-Nitroquinoline-1-oxide	0.125 ppm
							5-Nitro-o-toluidine	0.125 ppm
							Dibenz[a,h]acridine	0.125 ppm
							N-Nitrosodi-n-butylamine	0.125 ppm
							N-Nitrosodiethylamine	0.125 ppm
							N-Nitrosomethylethylamine	0.125 ppm
							N-Nitrosomorpholine	0.125 ppm
							N-Nitrosopiperidine	0.125 ppm
							N-Nitrosopyrrolidine	0.125 ppm
							p-Dimethylamino azobenzene	0.125 ppm
							p-Phenylene diamine	0.125 ppm
							Pentachloronitrobenzene	0.125 ppm
							Phenacetin	0.125 ppm
							Pronamide	0.125 ppm
							Quinoline	0.125 ppm
							1,4-Naphthoquinone	0.125 ppm
							1-Chloronaphthalene	0.125 ppm
							7,12-Dimethylbenz(a)anthracene	0.125 ppm
							Chlorobenzilate	0.125 ppm
							Dinoseb	0.125 ppm
							Ethyl methanesulfonate	0.125 ppm
							Hexachloropropene	0.125 ppm
							Isodrin	0.125 ppm
							Isosafrole Peak 1	0.02 ppm
							Isosafrole Peak 2	0.105 ppm
							Methyl methanesulfonate	0.125 ppm
							Pentachlorobenzene	0.125 ppm
							3-Methylcholanthrene	0.125 ppm
							6-Methylchrysene	0.125 ppm
							cis-Diallate	0.0925 ppm
							Dimethoate	0.125 ppm
							Disulfoton	0.125 ppm
							Ethyl Parathion	0.125 ppm
							Methyl parathion	0.125 ppm
							o,o',o''-Triethylphosphorothioate	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.125 ppm
							Phorate	0.125 ppm
							Safrole, Total	0.125 ppm
							Sulfotepp	0.125 ppm
							trans-Diallate	0.0325 ppm
							2,4,6-Tribromophenol (Surr)	0.25 ppm
							2-Fluorobiphenyl (Surr)	0.25 ppm
							2-Fluorophenol (Surr)	0.25 ppm
							Nitrobenzene-d5 (Surr)	0.25 ppm
							p-Terphenyl-d14 (Surr)	0.25 ppm
							Phenol-d5 (Surr)	0.25 ppm
							Dibenz[a,j]acridine	0.125 ppm
							1,1'-Biphenyl	0.125 ppm
							1,2,4,5-Tetrachlorobenzene	0.125 ppm
							1,2,4-Trichlorobenzene	0.125 ppm
							1,2-Dichlorobenzene	0.125 ppm
							1,2-Diphenylhydrazine	0.125 ppm
							1,3-Dichlorobenzene	0.125 ppm
							1,3-Dinitrobenzene	0.125 ppm
							1,4-Dichlorobenzene	0.125 ppm
							1,4-Dioxane	0.125 ppm
							1-Methylnaphthalene	0.125 ppm
							2,3,4,6-Tetrachlorophenol	0.125 ppm
							2,4,5-Trichlorophenol	0.125 ppm
							2,4,6-Trichlorophenol	0.125 ppm
							2,4-Dichlorophenol	0.125 ppm
							2,4-Dimethylphenol	0.125 ppm
							2,4-Dinitrophenol	1.25 ppm
							2,4-Dinitrotoluene	0.125 ppm
							2,6-Dichlorophenol	0.125 ppm
							2,6-Dinitrotoluene	0.125 ppm
							2-Chloronaphthalene	0.125 ppm
							2-Chlorophenol	0.125 ppm
							2-Methylnaphthalene	0.125 ppm
							2-Nitroaniline	0.125 ppm
							2-Nitrophenol	0.125 ppm
							3-Nitroaniline	0.125 ppm
							4,6-Dinitro-2-methylphenol	0.75 ppm
							4-Bromophenyl-phenylether	0.125 ppm
							4-Chloro-3-methylphenol	0.125 ppm
							4-Chloroaniline	0.125 ppm
							4-Chlorophenyl-phenyl ether	0.125 ppm
							4-Nitroaniline	0.125 ppm
							4-Nitrophenol	0.75 ppm
							Acenaphthene	0.125 ppm
							Acenaphthylene	0.125 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	0.125 ppm
							Aniline	0.125 ppm
							Anthracene	0.125 ppm
							Benzo[a]anthracene	0.125 ppm
							Benzo[a]pyrene	0.125 ppm
							Benzo[b]fluoranthene	0.125 ppm
							Benzo[g,h,i]perylene	0.125 ppm
							Benzo[k]fluoranthene	0.125 ppm
							Benzyl alcohol	0.125 ppm
							bis (2-chloroisopropyl) ether	0.125 ppm
							Bis(2-chloroethoxy)methane	0.125 ppm
							Bis(2-chloroethyl)ether	0.125 ppm
							Bis(2-ethylhexyl) phthalate	0.125 ppm
							Butyl benzyl phthalate	0.125 ppm
							Carbazole	0.125 ppm
							Chrysene	0.125 ppm
							Di-n-butyl phthalate	0.125 ppm
							Di-n-octyl phthalate	0.125 ppm
							Dibenz(a,h)anthracene	0.125 ppm
							Dibenzofuran	0.125 ppm
							Diethyl phthalate	0.125 ppm
							Dimethyl phthalate	0.125 ppm
							Fluoranthene	0.125 ppm
							Fluorene	0.125 ppm
							Hexachlorobenzene	0.125 ppm
							Hexachlorobutadiene	0.125 ppm
							Hexachlorocyclopentadiene	0.125 ppm
							Hexachloroethane	0.125 ppm
							Indeno[1,2,3-cd]pyrene	0.125 ppm
							Isophorone	0.125 ppm
							m & p-Cresol	0.125 ppm
							N-Nitrosodi-n-propylamine	0.125 ppm
							N-Nitrosodimethylamine	0.125 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.10625 ppm
							Naphthalene	0.125 ppm
							Nitrobenzene	0.125 ppm
							o-Cresol	0.125 ppm
							Pentachlorophenol	0.625 ppm
							Phenanthrene	0.125 ppm
							Phenol	0.125 ppm
							Pyrene	0.125 ppm
							Pyridine	0.25 ppm
							3,3'-Dichlorobenzidine	0.125 ppm
							Alpha-Terpineol	0.125 ppm
							Dimethylformamide	0.125 ppm
							Octachlorostyrene	0.125 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenyl ether	0.125 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FV8270_1_00036	03/05/24	10/18/23	MeCl2, Lot 63209	2 mL	MSS_FV8270_2_00033	1000 uL	Benzidine	1.5 ppm
							1,3,5-Trinitrobenzene	0.5 ppm
							1,4-Dinitrobenzene	0.5 ppm
							1-Naphthylamine	0.5 ppm
							2-Acetylaminofluorene	0.5 ppm
							2-Naphthylamine	0.5 ppm
							2-Picoline	0.5 ppm
							2-Toluidine	0.5 ppm
							3,3'-Dimethylbenzidine	0.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.5 ppm
							4-Aminobiphenyl	0.5 ppm
							4-Nitroquinoline-1-oxide	0.5 ppm
							5-Nitro-o-toluidine	0.5 ppm
							Dibenz[a,h]acridine	0.5 ppm
							N-Nitrosodi-n-butylamine	0.5 ppm
							N-Nitrosodiethylamine	0.5 ppm
							N-Nitrosomethylethylamine	0.5 ppm
							N-Nitrosomorpholine	0.5 ppm
							N-Nitrosopiperidine	0.5 ppm
							N-Nitrosopyrrolidine	0.5 ppm
							p-Dimethylamino azobenzene	0.5 ppm
							p-Phenylene diamine	0.5 ppm
							Pentachloronitrobenzene	0.5 ppm
							Phenacetin	0.5 ppm
							Pronamide	0.5 ppm
							Quinoline	0.5 ppm
							1,4-Naphthoquinone	0.5 ppm
							1-Chloronaphthalene	0.5 ppm
							7,12-Dimethylbenz(a)anthracene	0.5 ppm
							Chlorobenzilate	0.5 ppm
							Dinoseb	0.5 ppm
							Ethyl methanesulfonate	0.5 ppm
							Hexachloropropene	0.5 ppm
							Isodrin	0.5 ppm
							Isosafrole Peak 1	0.08 ppm
							Isosafrole Peak 2	0.42 ppm
							Methyl methanesulfonate	0.5 ppm
							Pentachlorobenzene	0.5 ppm
							3-Methylcholanthrene	0.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							6-Methylchrysene	0.5 ppm
							cis-Diallate	0.37 ppm
							Dimethoate	0.5 ppm
							Disulfoton	0.5 ppm
							Ethyl Parathion	0.5 ppm
							Methyl parathion	0.5 ppm
							o,o',o''-Triethylphosphorothioate	0.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.5 ppm
							Phorate	0.5 ppm
							Safrole, Total	0.5 ppm
							Sulfotepp	0.5 ppm
							trans-Diallate	0.13 ppm
							2,4,6-Tribromophenol (Surr)	1 ppm
							2-Fluorobiphenyl (Surr)	1 ppm
							2-Fluorophenol (Surr)	1 ppm
							Nitrobenzene-d5 (Surr)	1 ppm
							p-Terphenyl-d14 (Surr)	1 ppm
							Phenol-d5 (Surr)	1 ppm
							Dibenz[a,j]acridine	0.5 ppm
							1,1'-Biphenyl	0.5 ppm
							1,2,4,5-Tetrachlorobenzene	0.5 ppm
							1,2,4-Trichlorobenzene	0.5 ppm
							1,2-Dichlorobenzene	0.5 ppm
							1,2-Diphenylhydrazine	0.5 ppm
							1,3-Dichlorobenzene	0.5 ppm
							1,3-Dinitrobenzene	0.5 ppm
							1,4-Dichlorobenzene	0.5 ppm
							1,4-Dioxane	0.5 ppm
							1-Methylnaphthalene	0.5 ppm
							2,3,4,6-Tetrachlorophenol	0.5 ppm
							2,4,5-Trichlorophenol	0.5 ppm
							2,4,6-Trichlorophenol	0.5 ppm
							2,4-Dichlorophenol	0.5 ppm
							2,4-Dimethylphenol	0.5 ppm
							2,4-Dinitrophenol	5 ppm
							2,4-Dinitrotoluene	0.5 ppm
							2,6-Dichlorophenol	0.5 ppm
							2,6-Dinitrotoluene	0.5 ppm
							2-Chloronaphthalene	0.5 ppm
							2-Chlorophenol	0.5 ppm
							2-Methylnaphthalene	0.5 ppm
							2-Nitroaniline	0.5 ppm
							2-Nitrophenol	0.5 ppm
							3-Nitroaniline	0.5 ppm
							4,6-Dinitro-2-methylphenol	3 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromophenyl-phenylether	0.5 ppm
							4-Chloro-3-methylphenol	0.5 ppm
							4-Chloroaniline	0.5 ppm
							4-Chlorophenyl-phenyl ether	0.5 ppm
							4-Nitroaniline	0.5 ppm
							4-Nitrophenol	3 ppm
							Acenaphthene	0.5 ppm
							Acenaphthylene	0.5 ppm
							Acetophenone	0.5 ppm
							Aniline	0.5 ppm
							Anthracene	0.5 ppm
							Benzo[a]anthracene	0.5 ppm
							Benzo[a]pyrene	0.5 ppm
							Benzo[b]fluoranthene	0.5 ppm
							Benzo[g,h,i]perylene	0.5 ppm
							Benzo[k]fluoranthene	0.5 ppm
							Benzyl alcohol	0.5 ppm
							bis (2-chloroisopropyl) ether	0.5 ppm
							Bis(2-chloroethoxy)methane	0.5 ppm
							Bis(2-chloroethyl)ether	0.5 ppm
							Bis(2-ethylhexyl) phthalate	0.5 ppm
							Butyl benzyl phthalate	0.5 ppm
							Carbazole	0.5 ppm
							Chrysene	0.5 ppm
							Di-n-butyl phthalate	0.5 ppm
							Di-n-octyl phthalate	0.5 ppm
							Dibenz(a,h)anthracene	0.5 ppm
							Dibenzofuran	0.5 ppm
							Diethyl phthalate	0.5 ppm
							Dimethyl phthalate	0.5 ppm
							Fluoranthene	0.5 ppm
							Fluorene	0.5 ppm
							Hexachlorobenzene	0.5 ppm
							Hexachlorobutadiene	0.5 ppm
							Hexachlorocyclopentadiene	0.5 ppm
							Hexachloroethane	0.5 ppm
							Indeno[1,2,3-cd]pyrene	0.5 ppm
							Isophorone	0.5 ppm
							m & p-Cresol	0.5 ppm
							N-Nitrosodi-n-propylamine	0.5 ppm
							N-Nitrosodimethylamine	0.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.425 ppm
							Naphthalene	0.5 ppm
							Nitrobenzene	0.5 ppm
							o-Cresol	0.5 ppm
							Pentachlorophenol	2.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene	0.5 ppm
							Phenol	0.5 ppm
							Pyrene	0.5 ppm
							Pyridine	1 ppm
							3,3'-Dichlorobenzidine	0.5 ppm
							Alpha-Terpineol	0.5 ppm
							Dimethylformamide	0.5 ppm
							Octachlorostyrene	0.5 ppm
							Phenyl ether	0.5 ppm
							1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
					MSS_FV8270_IS_00006	20 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_2_00033	03/05/24	10/18/23	MeCl2, Lot 63209	5 mL	MSS_8270_APWS_00016	20 uL	Benzidine	3 ppm
							1,3,5-Trinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							1-Naphthylamine	1 ppm
							2-Acetylaminofluorene	1 ppm
							2-Naphthylamine	1 ppm
							2-Picoline	1 ppm
							2-Toluidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm
							4,4'-Methylene bis(2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm
							4-Nitroquinoline-1-oxide	1 ppm
							5-Nitro-o-toluidine	1 ppm
							Dibenz[a,h]acridine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							p-Phenylene diamine	1 ppm
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Pronamide	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Quinoline	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							7,12-Dimethylbenz(a)anthracene	1 ppm
							Chlorobenzilate	1 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isodrin	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							Pentachlorobenzene	1 ppm
							3-Methylcholanthrene	1 ppm
							6-Methylchrysene	1 ppm
							cis-Diallate	0.74 ppm
							Dimethoate	1 ppm
							Disulfoton	1 ppm
							Ethyl Parathion	1 ppm
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1 ppm
							Phorate	1 ppm
							Safrole, Total	1 ppm
							Sulfotepp	1 ppm
							trans-Diallate	0.26 ppm
					MSS_8270_WS_00017	20 uL	2,4,6-Tribromophenol (Surr)	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm
							2-Fluorophenol (Surr)	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm
							Phenol-d5 (Surr)	2 ppm
							Dibenz[a,j]acridine	1 ppm
							1,1'-Biphenyl	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							1,4-Dioxane	1 ppm
							1-Methylnaphthalene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,4,5-Trichlorophenol	1 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	10 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dichlorophenol	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm
							4,6-Dinitro-2-methylphenol	6 ppm
							4-Bromophenyl-phenylether	1 ppm
							4-Chloro-3-methylphenol	1 ppm
							4-Chloroaniline	1 ppm
							4-Chlorophenyl-phenyl ether	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	6 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Acetophenone	1 ppm
							Aniline	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm
							Benzo[a]pyrene	1 ppm
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm
							Benzo[k]fluoranthene	1 ppm
							Benzyl alcohol	1 ppm
							bis (2-chloroisopropyl) ether	1 ppm
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz(a,h)anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00012	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00008	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
....MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
....OP_RES_APPX1_00012	06/30/24		Restek, Lot A0198786		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
....OP_RES_APPX2_00012	03/31/24		Restek, Lot A0196332		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
....OP_RES_APPX3_00008	03/31/24		Restek, Lot A0195409		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
....OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
...MSS_8270_WS_00017	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_8270_SURR_00005	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00006	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00013	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00010	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
....MSS_8270_SURR_00005	06/30/26		Sigma- Aldrich, Lot LRAC5703		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
....OP_RES_APPX6_00006	03/31/26		Restek, Lot A0195365		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
....OP_RES_LCS1_00013	09/30/24		Restek, Lot A0195772		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
....OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
....OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
...MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
...MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
...MSS_AB_4NP_00006	02/13/28		Absolute, Lot 021323		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
...MSS_AB_PCP_00004	06/22/27		Absolute, Lot 062222		(Purchased Reagent)		Pentachlorophenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
							1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_2_00029	06/30/23	03/22/23	MeCl2, Lot 226679	3 mL	MSS_BAS_WS_00010	7.5 uL	Atrazine	0.25 ppm
							Benzaldehyde	0.25 ppm
							Caprolactam	0.25 ppm
					MSS_FV8270_2_00029	750 uL	Benzidine	0.75 ppm
							1,3,5-Trinitrobenzene	0.25 ppm
							1,4-Dinitrobenzene	0.25 ppm
							1-Naphthylamine	0.25 ppm
							2-Acetylaminofluorene	0.25 ppm
							2-Naphthylamine	0.25 ppm
							2-Picoline	0.25 ppm
							2-Toluidine	0.25 ppm
							3,3'-Dimethylbenzidine	0.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.25 ppm
							4-Aminobiphenyl	0.25 ppm
							4-Nitroquinoline-1-oxide	0.25 ppm
							5-Nitro-o-toluidine	0.25 ppm
							Dibenz[a,h]acridine	0.25 ppm
							N-Nitrosodi-n-butylamine	0.25 ppm
							N-Nitrosodiethylamine	0.25 ppm
							N-Nitrosomethylethylamine	0.25 ppm
							N-Nitrosomorpholine	0.25 ppm
							N-Nitrosopiperidine	0.25 ppm
							N-Nitrosopyrrolidine	0.25 ppm
							p-Dimethylamino azobenzene	0.25 ppm
							p-Phenylene diamine	0.25 ppm
							Pentachloronitrobenzene	0.25 ppm
							Phenacetin	0.25 ppm
							Pronamide	0.25 ppm
							Quinoline	0.25 ppm
							1,4-Naphthoquinone	0.25 ppm
							1-Chloronaphthalene	0.25 ppm
							7,12-Dimethylbenz(a)anthracene	0.25 ppm
							Chlorobenzilate	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dinoseb	0.25 ppm
							Ethyl methanesulfonate	0.25 ppm
							Hexachloropropene	0.25 ppm
							Isodrin	0.25 ppm
							Isosafrole Peak 1	0.04 ppm
							Isosafrole Peak 2	0.21 ppm
							Methyl methanesulfonate	0.25 ppm
							Pentachlorobenzene	0.25 ppm
							3-Methylcholanthrene	0.25 ppm
							6-Methylchrysene	0.25 ppm
							cis-Diallate	0.185 ppm
							Dimethoate	0.25 ppm
							Disulfoton	0.25 ppm
							Ethyl Parathion	0.25 ppm
							Methyl parathion	0.25 ppm
							o,o',o''-Triethylphosphorothioate	0.25 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.25 ppm
							Phorate	0.25 ppm
							Safrole, Total	0.25 ppm
							Sulfotepp	0.25 ppm
							trans-Diallate	0.065 ppm
							2,4,6-Tribromophenol (Surr)	0.5 ppm
							2-Fluorobiphenyl (Surr)	0.5 ppm
							2-Fluorophenol (Surr)	0.5 ppm
							Nitrobenzene-d5 (Surr)	0.5 ppm
							p-Terphenyl-d14 (Surr)	0.5 ppm
							Phenol-d5 (Surr)	0.5 ppm
							Dibenz[a,j]acridine	0.25 ppm
							1,1'-Biphenyl	0.25 ppm
							1,2,4,5-Tetrachlorobenzene	0.25 ppm
							1,2,4-Trichlorobenzene	0.25 ppm
							1,2-Dichlorobenzene	0.25 ppm
							1,2-Diphenylhydrazine	0.25 ppm
							1,3-Dichlorobenzene	0.25 ppm
							1,3-Dinitrobenzene	0.25 ppm
							1,4-Dichlorobenzene	0.25 ppm
							1,4-Dioxane	0.25 ppm
							1-Methylnaphthalene	0.25 ppm
							2,3,4,6-Tetrachlorophenol	0.25 ppm
							2,4,5-Trichlorophenol	0.25 ppm
							2,4,6-Trichlorophenol	0.25 ppm
							2,4-Dichlorophenol	0.25 ppm
							2,4-Dimethylphenol	0.25 ppm
							2,4-Dinitrophenol	2.5 ppm
							2,4-Dinitrotoluene	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dichlorophenol	0.25 ppm
							2,6-Dinitrotoluene	0.25 ppm
							2-Chloronaphthalene	0.25 ppm
							2-Chlorophenol	0.25 ppm
							2-Methylnaphthalene	0.25 ppm
							2-Nitroaniline	0.25 ppm
							2-Nitrophenol	0.25 ppm
							3-Nitroaniline	0.25 ppm
							4,6-Dinitro-2-methylphenol	1.5 ppm
							4-Bromophenyl-phenylether	0.25 ppm
							4-Chloro-3-methylphenol	0.25 ppm
							4-Chloroaniline	0.25 ppm
							4-Chlorophenyl-phenyl ether	0.25 ppm
							4-Nitroaniline	0.25 ppm
							4-Nitrophenol	1.5 ppm
							Acenaphthene	0.25 ppm
							Acenaphthylene	0.25 ppm
							Acetophenone	0.25 ppm
							Aniline	0.25 ppm
							Anthracene	0.25 ppm
							Benzo[a]anthracene	0.25 ppm
							Benzo[a]pyrene	0.25 ppm
							Benzo[b]fluoranthene	0.25 ppm
							Benzo[g,h,i]perylene	0.25 ppm
							Benzo[k]fluoranthene	0.25 ppm
							Benzyl alcohol	0.25 ppm
							bis (2-chloroisopropyl) ether	0.25 ppm
							Bis(2-chloroethoxy)methane	0.25 ppm
							Bis(2-chloroethyl)ether	0.25 ppm
							Bis(2-ethylhexyl) phthalate	0.25 ppm
							Butyl benzyl phthalate	0.25 ppm
							Carbazole	0.25 ppm
							Chrysene	0.25 ppm
							Di-n-butyl phthalate	0.25 ppm
							Di-n-octyl phthalate	0.25 ppm
							Dibenz(a,h)anthracene	0.25 ppm
							Dibenzofuran	0.25 ppm
							Diethyl phthalate	0.25 ppm
							Dimethyl phthalate	0.25 ppm
							Fluoranthene	0.25 ppm
							Fluorene	0.25 ppm
							Hexachlorobenzene	0.25 ppm
							Hexachlorobutadiene	0.25 ppm
							Hexachlorocyclopentadiene	0.25 ppm
							Hexachloroethane	0.25 ppm
							Indeno[1,2,3-cd]pyrene	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isophorone	0.25 ppm
							m & p-Cresol	0.25 ppm
							N-Nitrosodi-n-propylamine	0.25 ppm
							N-Nitrosodimethylamine	0.25 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.2125 ppm
							Naphthalene	0.25 ppm
							Nitrobenzene	0.25 ppm
							o-Cresol	0.25 ppm
							Pentachlorophenol	1.25 ppm
							Phenanthrene	0.25 ppm
							Phenol	0.25 ppm
							Pyrene	0.25 ppm
							Pyridine	0.5 ppm
							3,3'-Dichlorobenzidine	0.25 ppm
							Alpha-Terpineol	0.25 ppm
							Dimethylformamide	0.25 ppm
							Octachlorostyrene	0.25 ppm
							Phenyl ether	0.25 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00010	06/30/23	03/22/23	MeCl2, Lot 226679	5 mL	OP_LCSmix2stk_00005	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00005	06/30/23		Restek, Lot A0179852		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_2_00029	07/24/23	03/22/23	MeCl2, Lot 226679	5 mL	MSS_8270_APWS_00014	20 uL	Benzidine	3 ppm
							1,3,5-Trinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							1-Naphthylamine	1 ppm
							2-Acetylaminofluorene	1 ppm
							2-Naphthylamine	1 ppm
							2-Picoline	1 ppm
							2-Toluidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm
							4,4'-Methylene bis(2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm
							4-Nitroquinoline-1-oxide	1 ppm
							5-Nitro-o-toluidine	1 ppm
							Dibenz[a,h]acridine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							p-Phenylene diamine	1 ppm
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Pronamide	1 ppm
							Quinoline	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							7,12-Dimethylbenz(a)anthracene	1 ppm
							Chlorobenzilate	1 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isodrin	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							Pentachlorobenzene	1 ppm
							3-Methylcholanthrene	1 ppm
							6-Methylchrysene	1 ppm
							cis-Diallate	0.74 ppm
							Dimethoate	1 ppm
							Disulfoton	1 ppm
							Ethyl Parathion	1 ppm
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1 ppm
							Phorate	1 ppm
							Safrole, Total	1 ppm
							Sulfotepp	1 ppm
							trans-Diallate	0.26 ppm
					MSS_8270_WS_00015	20 uL	2,4,6-Tribromophenol (Surr)	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm
							2-Fluorophenol (Surr)	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm
							Phenol-d5 (Surr)	2 ppm
							Dibenz[a,j]acridine	1 ppm
							1,1'-Biphenyl	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							1,4-Dioxane	1 ppm
							1-Methylnaphthalene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,4,5-Trichlorophenol	1 ppm
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	10 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dichlorophenol	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm
							4,6-Dinitro-2-methylphenol	6 ppm
							4-Bromophenyl-phenylether	1 ppm
							4-Chloro-3-methylphenol	1 ppm
							4-Chloroaniline	1 ppm
							4-Chlorophenyl-phenyl ether	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	6 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Acetophenone	1 ppm
							Aniline	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm
							Benzo[a]pyrene	1 ppm
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm
							Benzo[k]fluoranthene	1 ppm
							Benzyl alcohol	1 ppm
							bis (2-chloroisopropyl) ether	1 ppm
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz(a,h)anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm
							Hexachlorobenzene	1 ppm
							Hexachlorobutadiene	1 ppm
							Hexachlorocyclopentadiene	1 ppm
							Hexachloroethane	1 ppm
							Indeno[1,2,3-cd]pyrene	1 ppm
							Isophorone	1 ppm
							m & p-Cresol	1 ppm
							N-Nitrosodi-n-propylamine	1 ppm
							N-Nitrosodimethylamine	1 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.85 ppm
							Naphthalene	1 ppm
							Nitrobenzene	1 ppm
							o-Cresol	1 ppm
							Pentachlorophenol	5 ppm
							Phenanthrene	1 ppm
							Phenol	1 ppm
							Pyrene	1 ppm
							Pyridine	2 ppm
							3,3'-Dichlorobenzidine	1 ppm
							Benzidine	3 ppm
							Alpha-Terpineol	1 ppm
							Dimethylformamide	1 ppm
							Octachlorostyrene	1 ppm
							Phenyl ether	1 ppm
					MSS_AB_24DNP_00007	40 uL	2,4-Dinitrophenol	10 ppm
					MSS_AB_46D2MP_00004	20 uL	4,6-Dinitro-2-methylphenol	6 ppm
					MSS_AB_4NP_00003	20 uL	4-Nitrophenol	6 ppm
					MSS_AB_PCP_00004	15 uL	Pentachlorophenol	5 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00009	2500 uL	1,3,5-Trinitrobenzene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00015	09/22/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00004	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23	Sigma- Aldrich, Lot LRAC8467			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00004	08/31/24	Restek, Lot A0175669			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24	Restek, Lot A0190414			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS_AB_4NP_00003	07/24/23		Absolute, Lot 072418		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
..MSS_AB_PCP_00004	06/22/27		Absolute, Lot 062222		(Purchased Reagent)		Pentachlorophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_2_00030	07/24/23	06/08/23	MeCl2, Lot 226055	3 mL	MSS_BAS_WS_00012	7.5 uL	Atrazine	0.25 ppm
							Benzaldehyde	0.25 ppm
							Caprolactam	0.25 ppm
					MSS_FV8270_2_00030	750 uL	Benzidine	0.75 ppm
							1,3,5-Trinitrobenzene	0.25 ppm
							1,4-Dinitrobenzene	0.25 ppm
							1-Naphthylamine	0.25 ppm
							2-Acetylaminofluorene	0.25 ppm
							2-Naphthylamine	0.25 ppm
							2-Picoline	0.25 ppm
							2-Toluidine	0.25 ppm
							3,3'-Dimethylbenzidine	0.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.25 ppm
							4-Aminobiphenyl	0.25 ppm
							4-Nitroquinoline-1-oxide	0.25 ppm
							5-Nitro-o-toluidine	0.25 ppm
							Dibenz[a,h]acridine	0.25 ppm
							N-Nitrosodi-n-butylamine	0.25 ppm
							N-Nitrosodiethylamine	0.25 ppm
							N-Nitrosomethylethylamine	0.25 ppm
							N-Nitrosomorpholine	0.25 ppm
							N-Nitrosopiperidine	0.25 ppm
							N-Nitrosopyrrolidine	0.25 ppm
							p-Dimethylamino azobenzene	0.25 ppm
							p-Phenylene diamine	0.25 ppm
							Pentachloronitrobenzene	0.25 ppm
							Phenacetin	0.25 ppm
							Pronamide	0.25 ppm
							Quinoline	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Naphthoquinone	0.25 ppm
							1-Chloronaphthalene	0.25 ppm
							7,12-Dimethylbenz(a)anthracene	0.25 ppm
							Chlorobenzilate	0.25 ppm
							Dinoseb	0.25 ppm
							Ethyl methanesulfonate	0.25 ppm
							Hexachloropropene	0.25 ppm
							Isodrin	0.25 ppm
							Isosafrole Peak 1	0.04 ppm
							Isosafrole Peak 2	0.21 ppm
							Methyl methanesulfonate	0.25 ppm
							Pentachlorobenzene	0.25 ppm
							3-Methylcholanthrene	0.25 ppm
							6-Methylchrysene	0.25 ppm
							cis-Diallate	0.185 ppm
							Dimethoate	0.25 ppm
							Disulfoton	0.25 ppm
							Ethyl Parathion	0.25 ppm
							Methyl parathion	0.25 ppm
							o,o',o''-Triethylphosphorothioate	0.25 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.25 ppm
							Phorate	0.25 ppm
							Safrole, Total	0.25 ppm
							Sulfotepp	0.25 ppm
							trans-Diallate	0.065 ppm
							2,4,6-Tribromophenol (Surr)	0.5 ppm
							2-Fluorobiphenyl (Surr)	0.5 ppm
							2-Fluorophenol (Surr)	0.5 ppm
							Nitrobenzene-d5 (Surr)	0.5 ppm
							p-Terphenyl-d14 (Surr)	0.5 ppm
							Phenol-d5 (Surr)	0.5 ppm
							Dibenz[a,j]acridine	0.25 ppm
							1,1'-Biphenyl	0.25 ppm
							1,2,4,5-Tetrachlorobenzene	0.25 ppm
							1,2,4-Trichlorobenzene	0.25 ppm
							1,2-Dichlorobenzene	0.25 ppm
							1,2-Diphenylhydrazine	0.25 ppm
							1,3-Dichlorobenzene	0.25 ppm
							1,3-Dinitrobenzene	0.25 ppm
							1,4-Dichlorobenzene	0.25 ppm
							1,4-Dioxane	0.25 ppm
							1-Methylnaphthalene	0.25 ppm
							2,3,4,6-Tetrachlorophenol	0.25 ppm
							2,4,5-Trichlorophenol	0.25 ppm
							2,4,6-Trichlorophenol	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dichlorophenol	0.25 ppm
							2,4-Dimethylphenol	0.25 ppm
							2,4-Dinitrophenol	2.5 ppm
							2,4-Dinitrotoluene	0.25 ppm
							2,6-Dichlorophenol	0.25 ppm
							2,6-Dinitrotoluene	0.25 ppm
							2-Chloronaphthalene	0.25 ppm
							2-Chlorophenol	0.25 ppm
							2-Methylnaphthalene	0.25 ppm
							2-Nitroaniline	0.25 ppm
							2-Nitrophenol	0.25 ppm
							3-Nitroaniline	0.25 ppm
							4,6-Dinitro-2-methylphenol	1.5 ppm
							4-Bromophenyl-phenylether	0.25 ppm
							4-Chloro-3-methylphenol	0.25 ppm
							4-Chloroaniline	0.25 ppm
							4-Chlorophenyl-phenyl ether	0.25 ppm
							4-Nitroaniline	0.25 ppm
							4-Nitrophenol	1.5 ppm
							Acenaphthene	0.25 ppm
							Acenaphthylene	0.25 ppm
							Acetophenone	0.25 ppm
							Aniline	0.25 ppm
							Anthracene	0.25 ppm
							Benzo[a]anthracene	0.25 ppm
							Benzo[a]pyrene	0.25 ppm
							Benzo[b]fluoranthene	0.25 ppm
							Benzo[g,h,i]perylene	0.25 ppm
							Benzo[k]fluoranthene	0.25 ppm
							Benzyl alcohol	0.25 ppm
							bis (2-chloroisopropyl) ether	0.25 ppm
							Bis(2-chloroethoxy)methane	0.25 ppm
							Bis(2-chloroethyl)ether	0.25 ppm
							Bis(2-ethylhexyl) phthalate	0.25 ppm
							Butyl benzyl phthalate	0.25 ppm
							Carbazole	0.25 ppm
							Chrysene	0.25 ppm
							Di-n-butyl phthalate	0.25 ppm
							Di-n-octyl phthalate	0.25 ppm
							Dibenz(a,h)anthracene	0.25 ppm
							Dibenzofuran	0.25 ppm
							Diethyl phthalate	0.25 ppm
							Dimethyl phthalate	0.25 ppm
							Fluoranthene	0.25 ppm
							Fluorene	0.25 ppm
							Hexachlorobenzene	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	0.25 ppm
							Hexachlorocyclopentadiene	0.25 ppm
							Hexachloroethane	0.25 ppm
							Indeno[1,2,3-cd]pyrene	0.25 ppm
							Isophorone	0.25 ppm
							m & p-Cresol	0.25 ppm
							N-Nitrosodi-n-propylamine	0.25 ppm
							N-Nitrosodimethylamine	0.25 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.2125 ppm
							Naphthalene	0.25 ppm
							Nitrobenzene	0.25 ppm
							o-Cresol	0.25 ppm
							Pentachlorophenol	1.25 ppm
							Phenanthrene	0.25 ppm
							Phenol	0.25 ppm
							Pyrene	0.25 ppm
							Pyridine	0.5 ppm
							3,3'-Dichlorobenzidine	0.25 ppm
							Alpha-Terpineol	0.25 ppm
							Dimethylformamide	0.25 ppm
							Octachlorostyrene	0.25 ppm
							Phenyl ether	0.25 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00012	12/08/23	06/08/23	MeCl2, Lot 226055	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_2_00030	07/24/23	06/08/23	MeCl2, Lot 226055	5 mL	MSS_8270_APWS_00015	20 uL	Benzidine	3 ppm
							1,3,5-Trinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							1-Naphthylamine	1 ppm
							2-Acetylaminofluorene	1 ppm
							2-Naphthylamine	1 ppm
							2-Picoline	1 ppm
							2-Toluidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm
							4,4'-Methylene bis(2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitroquinoline-1-oxide	1 ppm
							5-Nitro-o-toluidine	1 ppm
							Dibenz[a,h]acridine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							p-Phenylene diamine	1 ppm
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Pronamide	1 ppm
							Quinoline	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							7,12-Dimethylbenz(a)anthracene	1 ppm
							Chlorobenzilate	1 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isodrin	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							Pentachlorobenzene	1 ppm
							3-Methylcholanthrene	1 ppm
							6-Methylchrysene	1 ppm
							cis-Diallate	0.74 ppm
							Dimethoate	1 ppm
							Disulfoton	1 ppm
							Ethyl Parathion	1 ppm
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1 ppm
							Phorate	1 ppm
							Safrole, Total	1 ppm
							Sulfotepp	1 ppm
							trans-Diallate	0.26 ppm
					MSS_8270_WS_00016	20 uL	2,4,6-Tribromophenol (Surr)	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm
							2-Fluorophenol (Surr)	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	2 ppm
							Dibenz[a,j]acridine	1 ppm
							1,1'-Biphenyl	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							1,4-Dioxane	1 ppm
							1-Methylnaphthalene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,4,5-Trichlorophenol	1 ppm
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	10 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dichlorophenol	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm
							4,6-Dinitro-2-methylphenol	6 ppm
							4-Bromophenyl-phenylether	1 ppm
							4-Chloro-3-methylphenol	1 ppm
							4-Chloroaniline	1 ppm
							4-Chlorophenyl-phenyl ether	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	6 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Acetophenone	1 ppm
							Aniline	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm
							Benzo[a]pyrene	1 ppm
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm
							Benzo[k]fluoranthene	1 ppm
							Benzyl alcohol	1 ppm
							bis (2-chloroisopropyl) ether	1 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz(a,h)anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm
							Hexachlorobenzene	1 ppm
							Hexachlorobutadiene	1 ppm
							Hexachlorocyclopentadiene	1 ppm
							Hexachloroethane	1 ppm
							Indeno[1,2,3-cd]pyrene	1 ppm
							Isophorone	1 ppm
							m & p-Cresol	1 ppm
							N-Nitrosodi-n-propylamine	1 ppm
							N-Nitrosodimethylamine	1 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.85 ppm
							Naphthalene	1 ppm
							Nitrobenzene	1 ppm
							o-Cresol	1 ppm
							Pentachlorophenol	5 ppm
							Phenanthrene	1 ppm
							Phenol	1 ppm
							Pyrene	1 ppm
							Pyridine	2 ppm
							3,3'-Dichlorobenzidine	1 ppm
							Benzidine	3 ppm
							Alpha-Terpineol	1 ppm
							Dimethylformamide	1 ppm
							Octachlorostyrene	1 ppm
							Phenyl ether	1 ppm
					MSS_AB_24DNP_00007	40 uL	2,4-Dinitrophenol	10 ppm
					MSS_AB_46D2MP_00004	20 uL	4,6-Dinitro-2-methylphenol	6 ppm
					MSS_AB_4NP_00003	20 uL	4-Nitrophenol	6 ppm
					MSS_AB_PCP_00004	15 uL	Pentachlorophenol	5 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00005	05/31/25		Restek, Lot A0184892		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS_AB_4NP_00003	07/24/23		Absolute, Lot 072418		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
..MSS_AB_PCP_00004	06/22/27		Absolute, Lot 062222		(Purchased Reagent)		Pentachlorophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_2_00031	10/31/23	07/24/23	MeCl2, Lot 232230	3 mL	MSS_BAS_WS_00012	7.5 uL	Atrazine	0.25 ppm
							Benzaldehyde	0.25 ppm
							Caprolactam	0.25 ppm
					MSS_FV8270_2_00031	750 uL	Benzidine	0.75 ppm
							1,3,5-Trinitrobenzene	0.25 ppm
							1,4-Dinitrobenzene	0.25 ppm
							1-Naphthylamine	0.25 ppm
							2-Acetylaminofluorene	0.25 ppm
							2-Naphthylamine	0.25 ppm
							2-Picoline	0.25 ppm
							2-Toluidine	0.25 ppm
							3,3'-Dimethylbenzidine	0.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.25 ppm
							4-Aminobiphenyl	0.25 ppm
							4-Nitroquinoline-1-oxide	0.25 ppm
							5-Nitro-o-toluidine	0.25 ppm
							Dibenz[a,h]acridine	0.25 ppm
							N-Nitrosodi-n-butylamine	0.25 ppm
							N-Nitrosodiethylamine	0.25 ppm
							N-Nitrosomethylethylamine	0.25 ppm
							N-Nitrosomorpholine	0.25 ppm
							N-Nitrosopiperidine	0.25 ppm
							N-Nitrosopyrrolidine	0.25 ppm
							p-Dimethylamino azobenzene	0.25 ppm
							p-Phenylene diamine	0.25 ppm
							Pentachloronitrobenzene	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenacetin	0.25 ppm
							Pronamide	0.25 ppm
							Quinoline	0.25 ppm
							1,4-Naphthoquinone	0.25 ppm
							1-Chloronaphthalene	0.25 ppm
							7,12-Dimethylbenz(a)anthracene	0.25 ppm
							Chlorobenzilate	0.25 ppm
							Dinoseb	0.25 ppm
							Ethyl methanesulfonate	0.25 ppm
							Hexachloropropene	0.25 ppm
							Isodrin	0.25 ppm
							Isosafrole Peak 1	0.04 ppm
							Isosafrole Peak 2	0.21 ppm
							Methyl methanesulfonate	0.25 ppm
							Pentachlorobenzene	0.25 ppm
							3-Methylcholanthrene	0.25 ppm
							6-Methylchrysene	0.25 ppm
							cis-Diallate	0.185 ppm
							Dimethoate	0.25 ppm
							Disulfoton	0.25 ppm
							Ethyl Parathion	0.25 ppm
							Methyl parathion	0.25 ppm
							o,o',o''-Triethylphosphorothioate	0.25 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.25 ppm
							Phorate	0.25 ppm
							Safrole, Total	0.25 ppm
							Sulfotepp	0.25 ppm
							trans-Diallate	0.065 ppm
							2,4,6-Tribromophenol (Surr)	0.5 ppm
							2-Fluorobiphenyl (Surr)	0.5 ppm
							2-Fluorophenol (Surr)	0.5 ppm
							Nitrobenzene-d5 (Surr)	0.5 ppm
							p-Terphenyl-d14 (Surr)	0.5 ppm
							Phenol-d5 (Surr)	0.5 ppm
							Dibenz[a,j]acridine	0.25 ppm
							1,1'-Biphenyl	0.25 ppm
							1,2,4,5-Tetrachlorobenzene	0.25 ppm
							1,2,4-Trichlorobenzene	0.25 ppm
							1,2-Dichlorobenzene	0.25 ppm
							1,2-Diphenylhydrazine	0.25 ppm
							1,3-Dichlorobenzene	0.25 ppm
							1,3-Dinitrobenzene	0.25 ppm
							1,4-Dichlorobenzene	0.25 ppm
							1,4-Dioxane	0.25 ppm
							1-Methylnaphthalene	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	0.25 ppm
							2,4,5-Trichlorophenol	0.25 ppm
							2,4,6-Trichlorophenol	0.25 ppm
							2,4-Dichlorophenol	0.25 ppm
							2,4-Dimethylphenol	0.25 ppm
							2,4-Dinitrophenol	2.5 ppm
							2,4-Dinitrotoluene	0.25 ppm
							2,6-Dichlorophenol	0.25 ppm
							2,6-Dinitrotoluene	0.25 ppm
							2-Chloronaphthalene	0.25 ppm
							2-Chlorophenol	0.25 ppm
							2-Methylnaphthalene	0.25 ppm
							2-Nitroaniline	0.25 ppm
							2-Nitrophenol	0.25 ppm
							3-Nitroaniline	0.25 ppm
							4,6-Dinitro-2-methylphenol	1.5 ppm
							4-Bromophenyl-phenylether	0.25 ppm
							4-Chloro-3-methylphenol	0.25 ppm
							4-Chloroaniline	0.25 ppm
							4-Chlorophenyl-phenyl ether	0.25 ppm
							4-Nitroaniline	0.25 ppm
							4-Nitrophenol	1.5 ppm
							Acenaphthene	0.25 ppm
							Acenaphthylene	0.25 ppm
							Acetophenone	0.25 ppm
							Aniline	0.25 ppm
							Anthracene	0.25 ppm
							Benzo[a]anthracene	0.25 ppm
							Benzo[a]pyrene	0.25 ppm
							Benzo[b]fluoranthene	0.25 ppm
							Benzo[g,h,i]perylene	0.25 ppm
							Benzo[k]fluoranthene	0.25 ppm
							Benzyl alcohol	0.25 ppm
							bis (2-chloroisopropyl) ether	0.25 ppm
							Bis(2-chloroethoxy)methane	0.25 ppm
							Bis(2-chloroethyl)ether	0.25 ppm
							Bis(2-ethylhexyl) phthalate	0.25 ppm
							Butyl benzyl phthalate	0.25 ppm
							Carbazole	0.25 ppm
							Chrysene	0.25 ppm
							Di-n-butyl phthalate	0.25 ppm
							Di-n-octyl phthalate	0.25 ppm
							Dibenz(a,h)anthracene	0.25 ppm
							Dibenzofuran	0.25 ppm
							Diethyl phthalate	0.25 ppm
							Dimethyl phthalate	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	0.25 ppm
							Fluorene	0.25 ppm
							Hexachlorobenzene	0.25 ppm
							Hexachlorobutadiene	0.25 ppm
							Hexachlorocyclopentadiene	0.25 ppm
							Hexachloroethane	0.25 ppm
							Indeno[1,2,3-cd]pyrene	0.25 ppm
							Isophorone	0.25 ppm
							m & p-Cresol	0.25 ppm
							N-Nitrosodi-n-propylamine	0.25 ppm
							N-Nitrosodimethylamine	0.25 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.2125 ppm
							Naphthalene	0.25 ppm
							Nitrobenzene	0.25 ppm
							o-Cresol	0.25 ppm
							Pentachlorophenol	1.25 ppm
							Phenanthrene	0.25 ppm
							Phenol	0.25 ppm
							Pyrene	0.25 ppm
							Pyridine	0.5 ppm
							3,3'-Dichlorobenzidine	0.25 ppm
							Alpha-Terpineol	0.25 ppm
							Dimethylformamide	0.25 ppm
							Octachlorostyrene	0.25 ppm
							Phenyl ether	0.25 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00012	12/08/23	06/08/23	MeCl2, Lot 226055	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_2_00031	10/31/23	07/24/23	MeCl2, Lot 232230	5 mL	MSS_8270_APWS_00015	20 uL	Benzidine	3 ppm
							1,3,5-Trinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							1-Naphthylamine	1 ppm
							2-Acetylaminofluorene	1 ppm
							2-Naphthylamine	1 ppm
							2-Picoline	1 ppm
							2-Toluidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,4'-Methylene bis(2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm
							4-Nitroquinoline-1-oxide	1 ppm
							5-Nitro-o-toluidine	1 ppm
							Dibenz[a,h]acridine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							p-Phenylene diamine	1 ppm
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Pronamide	1 ppm
							Quinoline	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							7,12-Dimethylbenz(a)anthracene	1 ppm
							Chlorobenzilate	1 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isodrin	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							Pentachlorobenzene	1 ppm
							3-Methylcholanthrene	1 ppm
							6-Methylchrysene	1 ppm
							cis-Diallate	0.74 ppm
							Dimethoate	1 ppm
							Disulfoton	1 ppm
							Ethyl Parathion	1 ppm
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1 ppm
							Phorate	1 ppm
							Safrole, Total	1 ppm
							Sulfotepp	1 ppm
							trans-Diallate	0.26 ppm
					MSS_8270_WS_00016	20 uL	2,4,6-Tribromophenol (Surr)	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorophenol (Surr)	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm
							Phenol-d5 (Surr)	2 ppm
							Dibenz[a,j]acridine	1 ppm
							1,1'-Biphenyl	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							1,4-Dioxane	1 ppm
							1-Methylnaphthalene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,4,5-Trichlorophenol	1 ppm
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	10 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dichlorophenol	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm
							4,6-Dinitro-2-methylphenol	6 ppm
							4-Bromophenyl-phenylether	1 ppm
							4-Chloro-3-methylphenol	1 ppm
							4-Chloroaniline	1 ppm
							4-Chlorophenyl-phenyl ether	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	6 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Acetophenone	1 ppm
							Aniline	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm
							Benzo[a]pyrene	1 ppm
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	1 ppm
							Benzyl alcohol	1 ppm
							bis (2-chloroisopropyl) ether	1 ppm
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz(a,h)anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm
							Hexachlorobenzene	1 ppm
							Hexachlorobutadiene	1 ppm
							Hexachlorocyclopentadiene	1 ppm
							Hexachloroethane	1 ppm
							Indeno[1,2,3-cd]pyrene	1 ppm
							Isophorone	1 ppm
							m & p-Cresol	1 ppm
							N-Nitrosodi-n-propylamine	1 ppm
							N-Nitrosodimethylamine	1 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.85 ppm
							Naphthalene	1 ppm
							Nitrobenzene	1 ppm
							o-Cresol	1 ppm
							Pentachlorophenol	5 ppm
							Phenanthrene	1 ppm
							Phenol	1 ppm
							Pyrene	1 ppm
							Pyridine	2 ppm
							3,3'-Dichlorobenzidine	1 ppm
							Benzidine	3 ppm
							Alpha-Terpineol	1 ppm
							Dimethylformamide	1 ppm
							Octachlorostyrene	1 ppm
							Phenyl ether	1 ppm
					MSS_AB_24DNP_00007	40 uL	2,4-Dinitrophenol	10 ppm
					MSS_AB_46D2MP_00004	20 uL	4,6-Dinitro-2-methylphenol	6 ppm
					MSS_AB_4NP_00006	20 uL	4-Nitrophenol	6 ppm
					MSS_AB_PCP_00004	15 uL	Pentachlorophenol	5 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00005	05/31/25		Restek, Lot A0184892		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS_AB_4NP_00006	02/13/28		Absolute, Lot 021323		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
..MSS_AB_PCP_00004	06/22/27		Absolute, Lot 062222		(Purchased Reagent)		Pentachlorophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_2_00033	03/05/24	10/19/23	MeCl2, Lot 63209	3 mL	MSS_BAS_WS_00014	7.5 uL	Atrazine	0.25 ppm
							Benzaldehyde	0.25 ppm
							Caprolactam	0.25 ppm
					MSS_FV8270_2_00033	750 uL	Benzidine	0.75 ppm
							1,3,5-Trinitrobenzene	0.25 ppm
							1,4-Dinitrobenzene	0.25 ppm
							1-Naphthylamine	0.25 ppm
							2-Acetylaminofluorene	0.25 ppm
							2-Naphthylamine	0.25 ppm
							2-Picoline	0.25 ppm
							2-Toluidine	0.25 ppm
							3,3'-Dimethylbenzidine	0.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.25 ppm
							4-Aminobiphenyl	0.25 ppm
							4-Nitroquinoline-1-oxide	0.25 ppm
							5-Nitro-o-toluidine	0.25 ppm
							Dibenz[a,h]acridine	0.25 ppm
							N-Nitrosodi-n-butylamine	0.25 ppm
							N-Nitrosodiethylamine	0.25 ppm
							N-Nitrosomethylethylamine	0.25 ppm
							N-Nitrosomorpholine	0.25 ppm
							N-Nitrosopiperidine	0.25 ppm
							N-Nitrosopyrrolidine	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Dimethylamino azobenzene	0.25 ppm
							p-Phenylene diamine	0.25 ppm
							Pentachloronitrobenzene	0.25 ppm
							Phenacetin	0.25 ppm
							Pronamide	0.25 ppm
							Quinoline	0.25 ppm
							1,4-Naphthoquinone	0.25 ppm
							1-Chloronaphthalene	0.25 ppm
							7,12-Dimethylbenz(a)anthracene	0.25 ppm
							Chlorobenzilate	0.25 ppm
							Dinoseb	0.25 ppm
							Ethyl methanesulfonate	0.25 ppm
							Hexachloropropene	0.25 ppm
							Isodrin	0.25 ppm
							Isosafrole Peak 1	0.04 ppm
							Isosafrole Peak 2	0.21 ppm
							Methyl methanesulfonate	0.25 ppm
							Pentachlorobenzene	0.25 ppm
							3-Methylcholanthrene	0.25 ppm
							6-Methylchrysene	0.25 ppm
							cis-Diallate	0.185 ppm
							Dimethoate	0.25 ppm
							Disulfoton	0.25 ppm
							Ethyl Parathion	0.25 ppm
							Methyl parathion	0.25 ppm
							o,o',o''-Triethylphosphorothioate	0.25 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.25 ppm
							Phorate	0.25 ppm
							Safrole, Total	0.25 ppm
							Sulfotepp	0.25 ppm
							trans-Diallate	0.065 ppm
							2,4,6-Tribromophenol (Surr)	0.5 ppm
							2-Fluorobiphenyl (Surr)	0.5 ppm
							2-Fluorophenol (Surr)	0.5 ppm
							Nitrobenzene-d5 (Surr)	0.5 ppm
							p-Terphenyl-d14 (Surr)	0.5 ppm
							Phenol-d5 (Surr)	0.5 ppm
							Dibenz[a,j]acridine	0.25 ppm
							1,1'-Biphenyl	0.25 ppm
							1,2,4,5-Tetrachlorobenzene	0.25 ppm
							1,2,4-Trichlorobenzene	0.25 ppm
							1,2-Dichlorobenzene	0.25 ppm
							1,2-Diphenylhydrazine	0.25 ppm
							1,3-Dichlorobenzene	0.25 ppm
							1,3-Dinitrobenzene	0.25 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	0.25 ppm
							1,4-Dioxane	0.25 ppm
							1-Methylnaphthalene	0.25 ppm
							2,3,4,6-Tetrachlorophenol	0.25 ppm
							2,4,5-Trichlorophenol	0.25 ppm
							2,4,6-Trichlorophenol	0.25 ppm
							2,4-Dichlorophenol	0.25 ppm
							2,4-Dimethylphenol	0.25 ppm
							2,4-Dinitrophenol	2.5 ppm
							2,4-Dinitrotoluene	0.25 ppm
							2,6-Dichlorophenol	0.25 ppm
							2,6-Dinitrotoluene	0.25 ppm
							2-Chloronaphthalene	0.25 ppm
							2-Chlorophenol	0.25 ppm
							2-Methylnaphthalene	0.25 ppm
							2-Nitroaniline	0.25 ppm
							2-Nitrophenol	0.25 ppm
							3-Nitroaniline	0.25 ppm
							4,6-Dinitro-2-methylphenol	1.5 ppm
							4-Bromophenyl-phenylether	0.25 ppm
							4-Chloro-3-methylphenol	0.25 ppm
							4-Chloroaniline	0.25 ppm
							4-Chlorophenyl-phenyl ether	0.25 ppm
							4-Nitroaniline	0.25 ppm
							4-Nitrophenol	1.5 ppm
							Acenaphthene	0.25 ppm
							Acenaphthylene	0.25 ppm
							Acetophenone	0.25 ppm
							Aniline	0.25 ppm
							Anthracene	0.25 ppm
							Benzo[a]anthracene	0.25 ppm
							Benzo[a]pyrene	0.25 ppm
							Benzo[b]fluoranthene	0.25 ppm
							Benzo[g,h,i]perylene	0.25 ppm
							Benzo[k]fluoranthene	0.25 ppm
							Benzyl alcohol	0.25 ppm
							bis (2-chloroisopropyl) ether	0.25 ppm
							Bis(2-chloroethoxy)methane	0.25 ppm
							Bis(2-chloroethyl)ether	0.25 ppm
							Bis(2-ethylhexyl) phthalate	0.25 ppm
							Butyl benzyl phthalate	0.25 ppm
							Carbazole	0.25 ppm
							Chrysene	0.25 ppm
							Di-n-butyl phthalate	0.25 ppm
							Di-n-octyl phthalate	0.25 ppm
							Dibenz(a,h)anthracene	0.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzofuran	0.25 ppm
							Diethyl phthalate	0.25 ppm
							Dimethyl phthalate	0.25 ppm
							Fluoranthene	0.25 ppm
							Fluorene	0.25 ppm
							Hexachlorobenzene	0.25 ppm
							Hexachlorobutadiene	0.25 ppm
							Hexachlorocyclopentadiene	0.25 ppm
							Hexachloroethane	0.25 ppm
							Indeno[1,2,3-cd]pyrene	0.25 ppm
							Isophorone	0.25 ppm
							m & p-Cresol	0.25 ppm
							N-Nitrosodi-n-propylamine	0.25 ppm
							N-Nitrosodimethylamine	0.25 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.2125 ppm
							Naphthalene	0.25 ppm
							Nitrobenzene	0.25 ppm
							o-Cresol	0.25 ppm
							Pentachlorophenol	1.25 ppm
							Phenanthrene	0.25 ppm
							Phenol	0.25 ppm
							Pyrene	0.25 ppm
							Pyridine	0.5 ppm
							3,3'-Dichlorobenzidine	0.25 ppm
							Alpha-Terpineol	0.25 ppm
							Dimethylformamide	0.25 ppm
							Octachlorostyrene	0.25 ppm
							Phenyl ether	0.25 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00014	04/05/24	10/05/23	MeCl2, Lot 63209	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24	Restek, Lot A0193487			(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_2_00033	03/05/24	10/18/23	MeCl2, Lot 63209	5 mL	MSS_8270_APWS_00016	20 uL	Benzidine	3 ppm
							1,3,5-Trinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							1-Naphthylamine	1 ppm
							2-Acetylaminofluorene	1 ppm
							2-Naphthylamine	1 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Picoline	1 ppm
							2-Toluidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm
							4,4'-Methylene bis(2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm
							4-Nitroquinoline-1-oxide	1 ppm
							5-Nitro-o-toluidine	1 ppm
							Dibenz[a,h]acridine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							p-Phenylene diamine	1 ppm
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Pronamide	1 ppm
							Quinoline	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							7,12-Dimethylbenz(a)anthracene	1 ppm
							Chlorobenzilate	1 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isodrin	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							Pentachlorobenzene	1 ppm
							3-Methylcholanthrene	1 ppm
							6-Methylchrysene	1 ppm
							cis-Diallate	0.74 ppm
							Dimethoate	1 ppm
							Disulfoton	1 ppm
							Ethyl Parathion	1 ppm
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1 ppm
							Phorate	1 ppm
							Safrole, Total	1 ppm
							Sulfotepp	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-Diallate	0.26 ppm
					MSS_8270_WS_00017	20 uL	2,4,6-Tribromophenol (Surr)	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm
							2-Fluorophenol (Surr)	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm
							Phenol-d5 (Surr)	2 ppm
							Dibenz[a,j]acridine	1 ppm
							1,1'-Biphenyl	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							1,4-Dioxane	1 ppm
							1-Methylnaphthalene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,4,5-Trichlorophenol	1 ppm
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	10 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dichlorophenol	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm
							4,6-Dinitro-2-methylphenol	6 ppm
							4-Bromophenyl-phenylether	1 ppm
							4-Chloro-3-methylphenol	1 ppm
							4-Chloroaniline	1 ppm
							4-Chlorophenyl-phenyl ether	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	6 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Acetophenone	1 ppm
							Aniline	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	1 ppm
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm
							Benzo[k]fluoranthene	1 ppm
							Benzyl alcohol	1 ppm
							bis (2-chloroisopropyl) ether	1 ppm
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz(a,h)anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm
							Hexachlorobenzene	1 ppm
							Hexachlorobutadiene	1 ppm
							Hexachlorocyclopentadiene	1 ppm
							Hexachloroethane	1 ppm
							Indeno[1,2,3-cd]pyrene	1 ppm
							Isophorone	1 ppm
							m & p-Cresol	1 ppm
							N-Nitrosodi-n-propylamine	1 ppm
							N-Nitrosodimethylamine	1 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	0.85 ppm
							Naphthalene	1 ppm
							Nitrobenzene	1 ppm
							o-Cresol	1 ppm
							Pentachlorophenol	5 ppm
							Phenanthrene	1 ppm
							Phenol	1 ppm
							Pyrene	1 ppm
							Pyridine	2 ppm
							3,3'-Dichlorobenzidine	1 ppm
							Benzidine	3 ppm
							Alpha-Terpineol	1 ppm
							Dimethylformamide	1 ppm
							Octachlorostyrene	1 ppm
							Phenyl ether	1 ppm
					MSS_AB_24DNP_00007	40 uL	2,4-Dinitrophenol	10 ppm
					MSS_AB_46D2MP_00004	20 uL	4,6-Dinitro-2-methylphenol	6 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_AB_4NP_00006	20 uL	4-Nitrophenol	6 ppm
					MSS_AB_PCP_00004	15 uL	Pentachlorophenol	5 ppm
					MSS_FV8270_IS_00006	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00012	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00012	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					OP_RES_APPX3_00008	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00012	06/30/24		Restek, Lot A0198786		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00012	03/31/24		Restek, Lot A0196332		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00008	03/31/24		Restek, Lot A0195409		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00017	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_8270_SURR_00005	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00006	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00013	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00010	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00005	06/30/26		Sigma- Aldrich, Lot LRAC5703		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00006	03/31/26		Restek, Lot A0195365		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00013	09/30/24		Restek, Lot A0195772		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS_AB_4NP_00006	02/13/28		Absolute, Lot 021323		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
..MSS_AB_PCP_00004	06/22/27		Absolute, Lot 062222		(Purchased Reagent)		Pentachlorophenol	1000 ug/mL
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_3_00026	06/30/23	03/22/23	MeCl2, Lot 226679	1 mL	MSS_BAS_WS_00010	12.5 uL	Atrazine	1.25 ppm
							Benzaldehyde	1.25 ppm
							Caprolactam	1.25 ppm
					MSS_FV8270_3_00030	250 uL	Benzidine	3.75 ppm
							1,3,5-Trinitrobenzene	1.25 ppm
							1,4-Dinitrobenzene	1.25 ppm
							1-Naphthylamine	1.25 ppm
							2-Acetylaminofluorene	1.25 ppm
							2-Naphthylamine	1.25 ppm
							2-Picoline	1.25 ppm
							2-Toluidine	1.25 ppm
							3,3'-Dimethylbenzidine	1.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	1.25 ppm
							4-Aminobiphenyl	1.25 ppm
							4-Nitroquinoline-1-oxide	1.25 ppm
							5-Nitro-o-toluidine	1.25 ppm
							Dibenz[a,h]acridine	1.25 ppm
							N-Nitrosodi-n-butylamine	1.25 ppm
							N-Nitrosodiethylamine	1.25 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosomethylethylamine	1.25 ppm
							N-Nitrosomorpholine	1.25 ppm
							N-Nitrosopiperidine	1.25 ppm
							N-Nitrosopyrrolidine	1.25 ppm
							p-Dimethylamino azobenzene	1.25 ppm
							p-Phenylene diamine	1.25 ppm
							Pentachloronitrobenzene	1.25 ppm
							Phenacetin	1.25 ppm
							Pronamide	1.25 ppm
							Quinoline	1.25 ppm
							1,4-Naphthoquinone	1.25 ppm
							1-Chloronaphthalene	1.25 ppm
							7,12-Dimethylbenz(a)anthracene	1.25 ppm
							Chlorobenzilate	1.25 ppm
							Dinoseb	1.25 ppm
							Ethyl methanesulfonate	1.25 ppm
							Hexachloropropene	1.25 ppm
							Isodrin	1.25 ppm
							Isosafrole Peak 1	0.2 ppm
							Isosafrole Peak 2	1.05 ppm
							Methyl methanesulfonate	1.25 ppm
							Pentachlorobenzene	1.25 ppm
							3-Methylcholanthrene	1.25 ppm
							6-Methylchrysene	1.25 ppm
							cis-Diallate	0.925 ppm
							Dimethoate	1.25 ppm
							Disulfoton	1.25 ppm
							Ethyl Parathion	1.25 ppm
							Methyl parathion	1.25 ppm
							o,o',o''-Triethylphosphorothioate	1.25 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1.25 ppm
							Phorate	1.25 ppm
							Safrole, Total	1.25 ppm
							Sulfotepp	1.25 ppm
							trans-Diallate	0.325 ppm
							2,4,6-Tribromophenol (Surr)	2.5 ppm
							2-Fluorobiphenyl (Surr)	2.5 ppm
							2-Fluorophenol (Surr)	2.5 ppm
							Nitrobenzene-d5 (Surr)	2.5 ppm
							p-Terphenyl-d14 (Surr)	2.5 ppm
							Phenol-d5 (Surr)	2.5 ppm
							Dibenz[a,j]acridine	1.25 ppm
							1,1'-Biphenyl	1.25 ppm
							1,2,4,5-Tetrachlorobenzene	1.25 ppm
							1,2,4-Trichlorobenzene	1.25 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	1.25 ppm
							1,2-Diphenylhydrazine	1.25 ppm
							1,3-Dichlorobenzene	1.25 ppm
							1,3-Dinitrobenzene	1.25 ppm
							1,4-Dichlorobenzene	1.25 ppm
							1,4-Dioxane	1.25 ppm
							1-Methylnaphthalene	1.25 ppm
							2,3,4,6-Tetrachlorophenol	1.25 ppm
							2,4,5-Trichlorophenol	1.25 ppm
							2,4,6-Trichlorophenol	1.25 ppm
							2,4-Dichlorophenol	1.25 ppm
							2,4-Dimethylphenol	1.25 ppm
							2,4-Dinitrophenol	5 ppm
							2,4-Dinitrotoluene	1.25 ppm
							2,6-Dichlorophenol	1.25 ppm
							2,6-Dinitrotoluene	1.25 ppm
							2-Chloronaphthalene	1.25 ppm
							2-Chlorophenol	1.25 ppm
							2-Methylnaphthalene	1.25 ppm
							2-Nitroaniline	1.25 ppm
							2-Nitrophenol	1.25 ppm
							3-Nitroaniline	1.25 ppm
							4,6-Dinitro-2-methylphenol	3.75 ppm
							4-Bromophenyl-phenylether	1.25 ppm
							4-Chloro-3-methylphenol	1.25 ppm
							4-Chloroaniline	1.25 ppm
							4-Chlorophenyl-phenyl ether	1.25 ppm
							4-Nitroaniline	1.25 ppm
							4-Nitrophenol	3.75 ppm
							Acenaphthene	1.25 ppm
							Acenaphthylene	1.25 ppm
							Acetophenone	1.25 ppm
							Aniline	1.25 ppm
							Anthracene	1.25 ppm
							Benzo[a]anthracene	1.25 ppm
							Benzo[a]pyrene	1.25 ppm
							Benzo[b]fluoranthene	1.25 ppm
							Benzo[g,h,i]perylene	1.25 ppm
							Benzo[k]fluoranthene	1.25 ppm
							Benzyl alcohol	1.25 ppm
							bis (2-chloroisopropyl) ether	1.25 ppm
							Bis(2-chloroethoxy)methane	1.25 ppm
							Bis(2-chloroethyl)ether	1.25 ppm
							Bis(2-ethylhexyl) phthalate	1.25 ppm
							Butyl benzyl phthalate	1.25 ppm
							Carbazole	1.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	1.25 ppm
							Di-n-butyl phthalate	1.25 ppm
							Di-n-octyl phthalate	1.25 ppm
							Dibenz(a,h)anthracene	1.25 ppm
							Dibenzofuran	1.25 ppm
							Diethyl phthalate	1.25 ppm
							Dimethyl phthalate	1.25 ppm
							Fluoranthene	1.25 ppm
							Fluorene	1.25 ppm
							Hexachlorobenzene	1.25 ppm
							Hexachlorobutadiene	1.25 ppm
							Hexachlorocyclopentadiene	1.25 ppm
							Hexachloroethane	1.25 ppm
							Indeno[1,2,3-cd]pyrene	1.25 ppm
							Isophorone	1.25 ppm
							m & p-Cresol	1.25 ppm
							N-Nitrosodi-n-propylamine	1.25 ppm
							N-Nitrosodimethylamine	1.25 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	1.0625 ppm
							Naphthalene	1.25 ppm
							Nitrobenzene	1.25 ppm
							o-Cresol	1.25 ppm
							Pentachlorophenol	2.5 ppm
							Phenanthrene	1.25 ppm
							Phenol	1.25 ppm
							Pyrene	1.25 ppm
							Pyridine	2.5 ppm
							3,3'-Dichlorobenzidine	1.25 ppm
							Alpha-Terpineol	1.25 ppm
							Dimethylformamide	1.25 ppm
							Octachlorostyrene	1.25 ppm
							Phenyl ether	1.25 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00010	06/30/23	03/22/23	MeCl2, Lot 226679	5 mL	OP_LCSmix2stk_00005	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00005	06/30/23	Restek, Lot A0179852			(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_3_00030	07/24/23	03/22/23	MeCl2, Lot 226679	2 mL	MSS_8270_APWS_00014	40 uL	Benzidine	15 ppm
							1,3,5-Trinitrobenzene	5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dinitrobenzene	5 ppm
							1-Naphthylamine	5 ppm
							2-Acetylaminofluorene	5 ppm
							2-Naphthylamine	5 ppm
							2-Picoline	5 ppm
							2-Toluidine	5 ppm
							3,3'-Dimethylbenzidine	5 ppm
							4,4'-Methylene bis(2-chloroaniline)	5 ppm
							4-Aminobiphenyl	5 ppm
							4-Nitroquinoline-1-oxide	5 ppm
							5-Nitro-o-toluidine	5 ppm
							Dibenz[a,h]acridine	5 ppm
							N-Nitrosodi-n-butylamine	5 ppm
							N-Nitrosodiethylamine	5 ppm
							N-Nitrosomethylethylamine	5 ppm
							N-Nitrosomorpholine	5 ppm
							N-Nitrosopiperidine	5 ppm
							N-Nitrosopyrrolidine	5 ppm
							p-Dimethylamino azobenzene	5 ppm
							p-Phenylene diamine	5 ppm
							Pentachloronitrobenzene	5 ppm
							Phenacetin	5 ppm
							Pronamide	5 ppm
							Quinoline	5 ppm
							1,4-Naphthoquinone	5 ppm
							1-Chloronaphthalene	5 ppm
							7,12-Dimethylbenz(a)anthracene	5 ppm
							Chlorobenzilate	5 ppm
							Dinoseb	5 ppm
							Ethyl methanesulfonate	5 ppm
							Hexachloropropene	5 ppm
							Isodrin	5 ppm
							Isosafrole Peak 1	0.8 ppm
							Isosafrole Peak 2	4.2 ppm
							Methyl methanesulfonate	5 ppm
							Pentachlorobenzene	5 ppm
							3-Methylcholanthrene	5 ppm
							6-Methylchrysene	5 ppm
							cis-Diallate	3.7 ppm
							Dimethoate	5 ppm
							Disulfoton	5 ppm
							Ethyl Parathion	5 ppm
							Methyl parathion	5 ppm
							o,o',o''-Triethylphosphorothioate	5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	5 ppm
							Phorate	5 ppm
							Safrole, Total	5 ppm
							Sulfotepp	5 ppm
							trans-Diallate	1.3 ppm
					MSS_8270_WS_00015	40 uL	2,4,6-Tribromophenol (Surr)	10 ppm
							2-Fluorobiphenyl (Surr)	10 ppm
							2-Fluorophenol (Surr)	10 ppm
							Nitrobenzene-d5 (Surr)	10 ppm
							p-Terphenyl-d14 (Surr)	10 ppm
							Phenol-d5 (Surr)	10 ppm
							Dibenz[a,j]acridine	5 ppm
							1,1'-Biphenyl	5 ppm
							1,2,4,5-Tetrachlorobenzene	5 ppm
							1,2,4-Trichlorobenzene	5 ppm
							1,2-Dichlorobenzene	5 ppm
							1,2-Diphenylhydrazine	5 ppm
							1,3-Dichlorobenzene	5 ppm
							1,3-Dinitrobenzene	5 ppm
							1,4-Dichlorobenzene	5 ppm
							1,4-Dioxane	5 ppm
							1-Methylnaphthalene	5 ppm
							2,3,4,6-Tetrachlorophenol	5 ppm
							2,4,5-Trichlorophenol	5 ppm
							2,4,6-Trichlorophenol	5 ppm
							2,4-Dichlorophenol	5 ppm
							2,4-Dimethylphenol	5 ppm
							2,4-Dinitrophenol	20 ppm
							2,4-Dinitrotoluene	5 ppm
							2,6-Dichlorophenol	5 ppm
							2,6-Dinitrotoluene	5 ppm
							2-Chloronaphthalene	5 ppm
							2-Chlorophenol	5 ppm
							2-Methylnaphthalene	5 ppm
							2-Nitroaniline	5 ppm
							2-Nitrophenol	5 ppm
							3-Nitroaniline	5 ppm
							4,6-Dinitro-2-methylphenol	15 ppm
							4-Bromophenyl-phenylether	5 ppm
							4-Chloro-3-methylphenol	5 ppm
							4-Chloroaniline	5 ppm
							4-Chlorophenyl-phenyl ether	5 ppm
							4-Nitroaniline	5 ppm
							4-Nitrophenol	15 ppm
							Acenaphthene	5 ppm
							Acenaphthylene	5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	5 ppm
							Aniline	5 ppm
							Anthracene	5 ppm
							Benzo[a]anthracene	5 ppm
							Benzo[a]pyrene	5 ppm
							Benzo[b]fluoranthene	5 ppm
							Benzo[g,h,i]perylene	5 ppm
							Benzo[k]fluoranthene	5 ppm
							Benzyl alcohol	5 ppm
							bis (2-chloroisopropyl) ether	5 ppm
							Bis(2-chloroethoxy)methane	5 ppm
							Bis(2-chloroethyl)ether	5 ppm
							Bis(2-ethylhexyl) phthalate	5 ppm
							Butyl benzyl phthalate	5 ppm
							Carbazole	5 ppm
							Chrysene	5 ppm
							Di-n-butyl phthalate	5 ppm
							Di-n-octyl phthalate	5 ppm
							Dibenz(a,h)anthracene	5 ppm
							Dibenzofuran	5 ppm
							Diethyl phthalate	5 ppm
							Dimethyl phthalate	5 ppm
							Fluoranthene	5 ppm
							Fluorene	5 ppm
							Hexachlorobenzene	5 ppm
							Hexachlorobutadiene	5 ppm
							Hexachlorocyclopentadiene	5 ppm
							Hexachloroethane	5 ppm
							Indeno[1,2,3-cd]pyrene	5 ppm
							Isophorone	5 ppm
							m & p-Cresol	5 ppm
							N-Nitrosodi-n-propylamine	5 ppm
							N-Nitrosodimethylamine	5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	4.25 ppm
							Naphthalene	5 ppm
							Nitrobenzene	5 ppm
							o-Cresol	5 ppm
							Pentachlorophenol	10 ppm
							Phenanthrene	5 ppm
							Phenol	5 ppm
							Pyrene	5 ppm
							Pyridine	10 ppm
							3,3'-Dichlorobenzidine	5 ppm
							Benzidine	15 ppm
							Alpha-Terpineol	5 ppm
							Dimethylformamide	5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Octachlorostyrene	5 ppm
							Phenyl ether	5 ppm
					MSS_AB_24DNP_00007	20 uL	2,4-Dinitrophenol	20 ppm
					MSS_AB_46D2MP_00004	10 uL	4,6-Dinitro-2-methylphenol	15 ppm
					MSS_AB_4NP_00003	10 uL	4-Nitrophenol	15 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00009	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00015	09/22/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00004	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23	Sigma- Aldrich, Lot LRAC8467			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00004	08/31/24	Restek, Lot A0175669			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24	Restek, Lot A0190414			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS_AB_4NP_00003	07/24/23		Absolute, Lot 072418		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_3_00027	07/24/23	06/08/23	MeCl2, Lot 226055	1 mL	MSS_BAS_WS_00012	12.5 uL	Atrazine	1.25 ppm
							Benzaldehyde	1.25 ppm
							Caprolactam	1.25 ppm
					MSS_FV8270_3_00031	250 uL	Benzidine	3.75 ppm
							1,3,5-Trinitrobenzene	1.25 ppm
							1,4-Dinitrobenzene	1.25 ppm
							1-Naphthylamine	1.25 ppm
							2-Acetylaminofluorene	1.25 ppm
							2-Naphthylamine	1.25 ppm
							2-Picoline	1.25 ppm
							2-Toluidine	1.25 ppm
							3,3'-Dimethylbenzidine	1.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	1.25 ppm
							4-Aminobiphenyl	1.25 ppm
							4-Nitroquinoline-1-oxide	1.25 ppm
							5-Nitro-o-toluidine	1.25 ppm
							Dibenz[a,h]acridine	1.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-butylamine	1.25 ppm
							N-Nitrosodiethylamine	1.25 ppm
							N-Nitrosomethylethylamine	1.25 ppm
							N-Nitrosomorpholine	1.25 ppm
							N-Nitrosopiperidine	1.25 ppm
							N-Nitrosopyrrolidine	1.25 ppm
							p-Dimethylamino azobenzene	1.25 ppm
							p-Phenylene diamine	1.25 ppm
							Pentachloronitrobenzene	1.25 ppm
							Phenacetin	1.25 ppm
							Pronamide	1.25 ppm
							Quinoline	1.25 ppm
							1,4-Naphthoquinone	1.25 ppm
							1-Chloronaphthalene	1.25 ppm
							7,12-Dimethylbenz(a)anthracene	1.25 ppm
							Chlorobenzilate	1.25 ppm
							Dinoseb	1.25 ppm
							Ethyl methanesulfonate	1.25 ppm
							Hexachloropropene	1.25 ppm
							Isodrin	1.25 ppm
							Isosafrole Peak 1	0.2 ppm
							Isosafrole Peak 2	1.05 ppm
							Methyl methanesulfonate	1.25 ppm
							Pentachlorobenzene	1.25 ppm
							3-Methylcholanthrene	1.25 ppm
							6-Methylchrysene	1.25 ppm
							cis-Diallate	0.925 ppm
							Dimethoate	1.25 ppm
							Disulfoton	1.25 ppm
							Ethyl Parathion	1.25 ppm
							Methyl parathion	1.25 ppm
							o,o',o''-Triethylphosphorothioate	1.25 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1.25 ppm
							Phorate	1.25 ppm
							Safrole, Total	1.25 ppm
							Sulfotepp	1.25 ppm
							trans-Diallate	0.325 ppm
							2,4,6-Tribromophenol (Surr)	2.5 ppm
							2-Fluorobiphenyl (Surr)	2.5 ppm
							2-Fluorophenol (Surr)	2.5 ppm
							Nitrobenzene-d5 (Surr)	2.5 ppm
							p-Terphenyl-d14 (Surr)	2.5 ppm
							Phenol-d5 (Surr)	2.5 ppm
							Dibenz[a,j]acridine	1.25 ppm
							1,1'-Biphenyl	1.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4,5-Tetrachlorobenzene	1.25 ppm
							1,2,4-Trichlorobenzene	1.25 ppm
							1,2-Dichlorobenzene	1.25 ppm
							1,2-Diphenylhydrazine	1.25 ppm
							1,3-Dichlorobenzene	1.25 ppm
							1,3-Dinitrobenzene	1.25 ppm
							1,4-Dichlorobenzene	1.25 ppm
							1,4-Dioxane	1.25 ppm
							1-Methylnaphthalene	1.25 ppm
							2,3,4,6-Tetrachlorophenol	1.25 ppm
							2,4,5-Trichlorophenol	1.25 ppm
							2,4,6-Trichlorophenol	1.25 ppm
							2,4-Dichlorophenol	1.25 ppm
							2,4-Dimethylphenol	1.25 ppm
							2,4-Dinitrophenol	5 ppm
							2,4-Dinitrotoluene	1.25 ppm
							2,6-Dichlorophenol	1.25 ppm
							2,6-Dinitrotoluene	1.25 ppm
							2-Chloronaphthalene	1.25 ppm
							2-Chlorophenol	1.25 ppm
							2-Methylnaphthalene	1.25 ppm
							2-Nitroaniline	1.25 ppm
							2-Nitrophenol	1.25 ppm
							3-Nitroaniline	1.25 ppm
							4,6-Dinitro-2-methylphenol	3.75 ppm
							4-Bromophenyl-phenylether	1.25 ppm
							4-Chloro-3-methylphenol	1.25 ppm
							4-Chloroaniline	1.25 ppm
							4-Chlorophenyl-phenyl ether	1.25 ppm
							4-Nitroaniline	1.25 ppm
							4-Nitrophenol	3.75 ppm
							Acenaphthene	1.25 ppm
							Acenaphthylene	1.25 ppm
							Acetophenone	1.25 ppm
							Aniline	1.25 ppm
							Anthracene	1.25 ppm
							Benzo[a]anthracene	1.25 ppm
							Benzo[a]pyrene	1.25 ppm
							Benzo[b]fluoranthene	1.25 ppm
							Benzo[g,h,i]perylene	1.25 ppm
							Benzo[k]fluoranthene	1.25 ppm
							Benzyl alcohol	1.25 ppm
							bis (2-chloroisopropyl) ether	1.25 ppm
							Bis(2-chloroethoxy)methane	1.25 ppm
							Bis(2-chloroethyl)ether	1.25 ppm
							Bis(2-ethylhexyl) phthalate	1.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butyl benzyl phthalate	1.25 ppm
							Carbazole	1.25 ppm
							Chrysene	1.25 ppm
							Di-n-butyl phthalate	1.25 ppm
							Di-n-octyl phthalate	1.25 ppm
							Dibenz(a,h)anthracene	1.25 ppm
							Dibenzofuran	1.25 ppm
							Diethyl phthalate	1.25 ppm
							Dimethyl phthalate	1.25 ppm
							Fluoranthene	1.25 ppm
							Fluorene	1.25 ppm
							Hexachlorobenzene	1.25 ppm
							Hexachlorobutadiene	1.25 ppm
							Hexachlorocyclopentadiene	1.25 ppm
							Hexachloroethane	1.25 ppm
							Indeno[1,2,3-cd]pyrene	1.25 ppm
							Isophorone	1.25 ppm
							m & p-Cresol	1.25 ppm
							N-Nitrosodi-n-propylamine	1.25 ppm
							N-Nitrosodimethylamine	1.25 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	1.0625 ppm
							Naphthalene	1.25 ppm
							Nitrobenzene	1.25 ppm
							o-Cresol	1.25 ppm
							Pentachlorophenol	2.5 ppm
							Phenanthrene	1.25 ppm
							Phenol	1.25 ppm
							Pyrene	1.25 ppm
							Pyridine	2.5 ppm
							3,3'-Dichlorobenzidine	1.25 ppm
							Alpha-Terpineol	1.25 ppm
							Dimethylformamide	1.25 ppm
							Octachlorostyrene	1.25 ppm
							Phenyl ether	1.25 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00012	12/08/23	06/08/23	MeCl2, Lot 226055	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24	Restek, Lot A0193487			(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSS_FV8270_3_00031	07/24/23	06/08/23	MeCl2, Lot 226055	2 mL	MSS_8270_APWS_00015	40 uL	Benzidine	15 ppm
							1,3,5-Trinitrobenzene	5 ppm
							1,4-Dinitrobenzene	5 ppm
							1-Naphthylamine	5 ppm
							2-Acetylaminofluorene	5 ppm
							2-Naphthylamine	5 ppm
							2-Picoline	5 ppm
							2-Toluidine	5 ppm
							3,3'-Dimethylbenzidine	5 ppm
							4,4'-Methylene bis(2-chloroaniline)	5 ppm
							4-Aminobiphenyl	5 ppm
							4-Nitroquinoline-1-oxide	5 ppm
							5-Nitro-o-toluidine	5 ppm
							Dibenz[a,h]acridine	5 ppm
							N-Nitrosodi-n-butylamine	5 ppm
							N-Nitrosodiethylamine	5 ppm
							N-Nitrosomethylethylamine	5 ppm
							N-Nitrosomorpholine	5 ppm
							N-Nitrosopiperidine	5 ppm
							N-Nitrosopyrrolidine	5 ppm
							p-Dimethylamino azobenzene	5 ppm
							p-Phenylene diamine	5 ppm
							Pentachloronitrobenzene	5 ppm
							Phenacetin	5 ppm
							Pronamide	5 ppm
							Quinoline	5 ppm
							1,4-Naphthoquinone	5 ppm
							1-Chloronaphthalene	5 ppm
							7,12-Dimethylbenz(a)anthracene	5 ppm
							Chlorobenzilate	5 ppm
							Dinoseb	5 ppm
							Ethyl methanesulfonate	5 ppm
							Hexachloropropene	5 ppm
							Isodrin	5 ppm
							Isosafrole Peak 1	0.8 ppm
							Isosafrole Peak 2	4.2 ppm
							Methyl methanesulfonate	5 ppm
							Pentachlorobenzene	5 ppm
							3-Methylcholanthrene	5 ppm
							6-Methylchrysene	5 ppm
							cis-Diallate	3.7 ppm
							Dimethoate	5 ppm
							Disulfoton	5 ppm
							Ethyl Parathion	5 ppm
							Methyl parathion	5 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o,o',o''-Triethylphosphorothioate	5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	5 ppm
							Phorate	5 ppm
							Safrole, Total	5 ppm
							Sulfotepp	5 ppm
							trans-Diallate	1.3 ppm
					MSS_8270_WS_00016	40 uL	2,4,6-Tribromophenol (Surr)	10 ppm
							2-Fluorobiphenyl (Surr)	10 ppm
							2-Fluorophenol (Surr)	10 ppm
							Nitrobenzene-d5 (Surr)	10 ppm
							p-Terphenyl-d14 (Surr)	10 ppm
							Phenol-d5 (Surr)	10 ppm
							Dibenz[a,j]acridine	5 ppm
							1,1'-Biphenyl	5 ppm
							1,2,4,5-Tetrachlorobenzene	5 ppm
							1,2,4-Trichlorobenzene	5 ppm
							1,2-Dichlorobenzene	5 ppm
							1,2-Diphenylhydrazine	5 ppm
							1,3-Dichlorobenzene	5 ppm
							1,3-Dinitrobenzene	5 ppm
							1,4-Dichlorobenzene	5 ppm
							1,4-Dioxane	5 ppm
							1-Methylnaphthalene	5 ppm
							2,3,4,6-Tetrachlorophenol	5 ppm
							2,4,5-Trichlorophenol	5 ppm
							2,4,6-Trichlorophenol	5 ppm
							2,4-Dichlorophenol	5 ppm
							2,4-Dimethylphenol	5 ppm
							2,4-Dinitrophenol	20 ppm
							2,4-Dinitrotoluene	5 ppm
							2,6-Dichlorophenol	5 ppm
							2,6-Dinitrotoluene	5 ppm
							2-Chloronaphthalene	5 ppm
							2-Chlorophenol	5 ppm
							2-Methylnaphthalene	5 ppm
							2-Nitroaniline	5 ppm
							2-Nitrophenol	5 ppm
							3-Nitroaniline	5 ppm
							4,6-Dinitro-2-methylphenol	15 ppm
							4-Bromophenyl-phenylether	5 ppm
							4-Chloro-3-methylphenol	5 ppm
							4-Chloroaniline	5 ppm
							4-Chlorophenyl-phenyl ether	5 ppm
							4-Nitroaniline	5 ppm
							4-Nitrophenol	15 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	5 ppm
							Acenaphthylene	5 ppm
							Acetophenone	5 ppm
							Aniline	5 ppm
							Anthracene	5 ppm
							Benzo[a]anthracene	5 ppm
							Benzo[a]pyrene	5 ppm
							Benzo[b]fluoranthene	5 ppm
							Benzo[g,h,i]perylene	5 ppm
							Benzo[k]fluoranthene	5 ppm
							Benzyl alcohol	5 ppm
							bis (2-chloroisopropyl) ether	5 ppm
							Bis(2-chloroethoxy)methane	5 ppm
							Bis(2-chloroethyl)ether	5 ppm
							Bis(2-ethylhexyl) phthalate	5 ppm
							Butyl benzyl phthalate	5 ppm
							Carbazole	5 ppm
							Chrysene	5 ppm
							Di-n-butyl phthalate	5 ppm
							Di-n-octyl phthalate	5 ppm
							Dibenz(a,h)anthracene	5 ppm
							Dibenzofuran	5 ppm
							Diethyl phthalate	5 ppm
							Dimethyl phthalate	5 ppm
							Fluoranthene	5 ppm
							Fluorene	5 ppm
							Hexachlorobenzene	5 ppm
							Hexachlorobutadiene	5 ppm
							Hexachlorocyclopentadiene	5 ppm
							Hexachloroethane	5 ppm
							Indeno[1,2,3-cd]pyrene	5 ppm
							Isophorone	5 ppm
							m & p-Cresol	5 ppm
							N-Nitrosodi-n-propylamine	5 ppm
							N-Nitrosodimethylamine	5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	4.25 ppm
							Naphthalene	5 ppm
							Nitrobenzene	5 ppm
							o-Cresol	5 ppm
							Pentachlorophenol	10 ppm
							Phenanthrene	5 ppm
							Phenol	5 ppm
							Pyrene	5 ppm
							Pyridine	10 ppm
							3,3'-Dichlorobenzidine	5 ppm
							Benzidine	15 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Alpha-Terpineol	5 ppm
							Dimethylformamide	5 ppm
							Octachlorostyrene	5 ppm
							Phenyl ether	5 ppm
					MSS_AB_24DNP_00007	20 uL	2,4-Dinitrophenol	20 ppm
					MSS_AB_46D2MP_00004	10 uL	4,6-Dinitro-2-methylphenol	15 ppm
					MSS_AB_4NP_00003	10 uL	4-Nitrophenol	15 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23	Sigma- Aldrich, Lot LRAC8467			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00005	05/31/25	Restek, Lot A0184892			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24	Restek, Lot A0190414			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS_AB_4NP_00003	07/24/23		Absolute, Lot 072418		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_3_00028	10/31/23	07/24/23	MeCl2, Lot 232230	1 mL	MSS_BAS_WS_00012	12.5 uL	Atrazine	1.25 ppm
							Benzaldehyde	1.25 ppm
							Caprolactam	1.25 ppm
					MSS_FV8270_3_00032	250 uL	Benzidine	3.75 ppm
							1,3,5-Trinitrobenzene	1.25 ppm
							1,4-Dinitrobenzene	1.25 ppm
							1-Naphthylamine	1.25 ppm
							2-Acetylaminofluorene	1.25 ppm
							2-Naphthylamine	1.25 ppm
							2-Picoline	1.25 ppm
							2-Toluidine	1.25 ppm
							3,3'-Dimethylbenzidine	1.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	1.25 ppm
							4-Aminobiphenyl	1.25 ppm
							4-Nitroquinoline-1-oxide	1.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							5-Nitro-o-toluidine	1.25 ppm
							Dibenz[a,h]acridine	1.25 ppm
							N-Nitrosodi-n-butylamine	1.25 ppm
							N-Nitrosodiethylamine	1.25 ppm
							N-Nitrosomethylethylamine	1.25 ppm
							N-Nitrosomorpholine	1.25 ppm
							N-Nitrosopiperidine	1.25 ppm
							N-Nitrosopyrrolidine	1.25 ppm
							p-Dimethylamino azobenzene	1.25 ppm
							p-Phenylene diamine	1.25 ppm
							Pentachloronitrobenzene	1.25 ppm
							Phenacetin	1.25 ppm
							Pronamide	1.25 ppm
							Quinoline	1.25 ppm
							1,4-Naphthoquinone	1.25 ppm
							1-Chloronaphthalene	1.25 ppm
							7,12-Dimethylbenz(a)anthracene	1.25 ppm
							Chlorobenzilate	1.25 ppm
							Dinoseb	1.25 ppm
							Ethyl methanesulfonate	1.25 ppm
							Hexachloropropene	1.25 ppm
							Isodrin	1.25 ppm
							Isosafrole Peak 1	0.2 ppm
							Isosafrole Peak 2	1.05 ppm
							Methyl methanesulfonate	1.25 ppm
							Pentachlorobenzene	1.25 ppm
							3-Methylcholanthrene	1.25 ppm
							6-Methylchrysene	1.25 ppm
							cis-Diallate	0.925 ppm
							Dimethoate	1.25 ppm
							Disulfoton	1.25 ppm
							Ethyl Parathion	1.25 ppm
							Methyl parathion	1.25 ppm
							o,o',o''-Triethylphosphorothioate	1.25 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1.25 ppm
							Phorate	1.25 ppm
							Safrole, Total	1.25 ppm
							Sulfotepp	1.25 ppm
							trans-Diallate	0.325 ppm
							2,4,6-Tribromophenol (Surr)	2.5 ppm
							2-Fluorobiphenyl (Surr)	2.5 ppm
							2-Fluorophenol (Surr)	2.5 ppm
							Nitrobenzene-d5 (Surr)	2.5 ppm
							p-Terphenyl-d14 (Surr)	2.5 ppm
							Phenol-d5 (Surr)	2.5 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz[a,j]acridine	1.25 ppm
							1,1'-Biphenyl	1.25 ppm
							1,2,4,5-Tetrachlorobenzene	1.25 ppm
							1,2,4-Trichlorobenzene	1.25 ppm
							1,2-Dichlorobenzene	1.25 ppm
							1,2-Diphenylhydrazine	1.25 ppm
							1,3-Dichlorobenzene	1.25 ppm
							1,3-Dinitrobenzene	1.25 ppm
							1,4-Dichlorobenzene	1.25 ppm
							1,4-Dioxane	1.25 ppm
							1-Methylnaphthalene	1.25 ppm
							2,3,4,6-Tetrachlorophenol	1.25 ppm
							2,4,5-Trichlorophenol	1.25 ppm
							2,4,6-Trichlorophenol	1.25 ppm
							2,4-Dichlorophenol	1.25 ppm
							2,4-Dimethylphenol	1.25 ppm
							2,4-Dinitrophenol	5 ppm
							2,4-Dinitrotoluene	1.25 ppm
							2,6-Dichlorophenol	1.25 ppm
							2,6-Dinitrotoluene	1.25 ppm
							2-Chloronaphthalene	1.25 ppm
							2-Chlorophenol	1.25 ppm
							2-Methylnaphthalene	1.25 ppm
							2-Nitroaniline	1.25 ppm
							2-Nitrophenol	1.25 ppm
							3-Nitroaniline	1.25 ppm
							4,6-Dinitro-2-methylphenol	3.75 ppm
							4-Bromophenyl-phenylether	1.25 ppm
							4-Chloro-3-methylphenol	1.25 ppm
							4-Chloroaniline	1.25 ppm
							4-Chlorophenyl-phenyl ether	1.25 ppm
							4-Nitroaniline	1.25 ppm
							4-Nitrophenol	3.75 ppm
							Acenaphthene	1.25 ppm
							Acenaphthylene	1.25 ppm
							Acetophenone	1.25 ppm
							Aniline	1.25 ppm
							Anthracene	1.25 ppm
							Benzo[a]anthracene	1.25 ppm
							Benzo[a]pyrene	1.25 ppm
							Benzo[b]fluoranthene	1.25 ppm
							Benzo[g,h,i]perylene	1.25 ppm
							Benzo[k]fluoranthene	1.25 ppm
							Benzyl alcohol	1.25 ppm
							bis (2-chloroisopropyl) ether	1.25 ppm
							Bis(2-chloroethoxy)methane	1.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	1.25 ppm
							Bis(2-ethylhexyl) phthalate	1.25 ppm
							Butyl benzyl phthalate	1.25 ppm
							Carbazole	1.25 ppm
							Chrysene	1.25 ppm
							Di-n-butyl phthalate	1.25 ppm
							Di-n-octyl phthalate	1.25 ppm
							Dibenz(a,h)anthracene	1.25 ppm
							Dibenzofuran	1.25 ppm
							Diethyl phthalate	1.25 ppm
							Dimethyl phthalate	1.25 ppm
							Fluoranthene	1.25 ppm
							Fluorene	1.25 ppm
							Hexachlorobenzene	1.25 ppm
							Hexachlorobutadiene	1.25 ppm
							Hexachlorocyclopentadiene	1.25 ppm
							Hexachloroethane	1.25 ppm
							Indeno[1,2,3-cd]pyrene	1.25 ppm
							Isophorone	1.25 ppm
							m & p-Cresol	1.25 ppm
							N-Nitrosodi-n-propylamine	1.25 ppm
							N-Nitrosodimethylamine	1.25 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	1.0625 ppm
							Naphthalene	1.25 ppm
							Nitrobenzene	1.25 ppm
							o-Cresol	1.25 ppm
							Pentachlorophenol	2.5 ppm
							Phenanthrene	1.25 ppm
							Phenol	1.25 ppm
							Pyrene	1.25 ppm
							Pyridine	2.5 ppm
							3,3'-Dichlorobenzidine	1.25 ppm
							Alpha-Terpineol	1.25 ppm
							Dimethylformamide	1.25 ppm
							Octachlorostyrene	1.25 ppm
							Phenyl ether	1.25 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00012	12/08/23	06/08/23	MeCl2, Lot 226055	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_3_00032	10/31/23	07/24/23	MeCl2, Lot 232230	2 mL	MSS_8270_APWS_00015	40 uL	Benzidine	15 ppm
							1,3,5-Trinitrobenzene	5 ppm
							1,4-Dinitrobenzene	5 ppm
							1-Naphthylamine	5 ppm
							2-Acetylaminofluorene	5 ppm
							2-Naphthylamine	5 ppm
							2-Picoline	5 ppm
							2-Toluidine	5 ppm
							3,3'-Dimethylbenzidine	5 ppm
							4,4'-Methylene bis(2-chloroaniline)	5 ppm
							4-Aminobiphenyl	5 ppm
							4-Nitroquinoline-1-oxide	5 ppm
							5-Nitro-o-toluidine	5 ppm
							Dibenz[a,h]acridine	5 ppm
							N-Nitrosodi-n-butylamine	5 ppm
							N-Nitrosodiethylamine	5 ppm
							N-Nitrosomethylethylamine	5 ppm
							N-Nitrosomorpholine	5 ppm
							N-Nitrosopiperidine	5 ppm
							N-Nitrosopyrrolidine	5 ppm
							p-Dimethylamino azobenzene	5 ppm
							p-Phenylene diamine	5 ppm
							Pentachloronitrobenzene	5 ppm
							Phenacetin	5 ppm
							Pronamide	5 ppm
							Quinoline	5 ppm
							1,4-Naphthoquinone	5 ppm
							1-Chloronaphthalene	5 ppm
							7,12-Dimethylbenz(a)anthracene	5 ppm
							Chlorobenzilate	5 ppm
							Dinoseb	5 ppm
							Ethyl methanesulfonate	5 ppm
							Hexachloropropene	5 ppm
							Isodrin	5 ppm
							Isosafrole Peak 1	0.8 ppm
							Isosafrole Peak 2	4.2 ppm
							Methyl methanesulfonate	5 ppm
							Pentachlorobenzene	5 ppm
							3-Methylcholanthrene	5 ppm
							6-Methylchrysene	5 ppm
							cis-Diallate	3.7 ppm
							Dimethoate	5 ppm
							Disulfoton	5 ppm
							Ethyl Parathion	5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl parathion	5 ppm
							o,o',o''-Triethylphosphorothioate	5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	5 ppm
							Phorate	5 ppm
							Safrole, Total	5 ppm
							Sulfotepp	5 ppm
							trans-Diallate	1.3 ppm
					MSS_8270_WS_00016	40 uL	2,4,6-Tribromophenol (Surr)	10 ppm
							2-Fluorobiphenyl (Surr)	10 ppm
							2-Fluorophenol (Surr)	10 ppm
							Nitrobenzene-d5 (Surr)	10 ppm
							p-Terphenyl-d14 (Surr)	10 ppm
							Phenol-d5 (Surr)	10 ppm
							Dibenz[a,j]acridine	5 ppm
							1,1'-Biphenyl	5 ppm
							1,2,4,5-Tetrachlorobenzene	5 ppm
							1,2,4-Trichlorobenzene	5 ppm
							1,2-Dichlorobenzene	5 ppm
							1,2-Diphenylhydrazine	5 ppm
							1,3-Dichlorobenzene	5 ppm
							1,3-Dinitrobenzene	5 ppm
							1,4-Dichlorobenzene	5 ppm
							1,4-Dioxane	5 ppm
							1-Methylnaphthalene	5 ppm
							2,3,4,6-Tetrachlorophenol	5 ppm
							2,4,5-Trichlorophenol	5 ppm
							2,4,6-Trichlorophenol	5 ppm
							2,4-Dichlorophenol	5 ppm
							2,4-Dimethylphenol	5 ppm
							2,4-Dinitrophenol	20 ppm
							2,4-Dinitrotoluene	5 ppm
							2,6-Dichlorophenol	5 ppm
							2,6-Dinitrotoluene	5 ppm
							2-Chloronaphthalene	5 ppm
							2-Chlorophenol	5 ppm
							2-Methylnaphthalene	5 ppm
							2-Nitroaniline	5 ppm
							2-Nitrophenol	5 ppm
							3-Nitroaniline	5 ppm
							4,6-Dinitro-2-methylphenol	15 ppm
							4-Bromophenyl-phenylether	5 ppm
							4-Chloro-3-methylphenol	5 ppm
							4-Chloroaniline	5 ppm
							4-Chlorophenyl-phenyl ether	5 ppm
							4-Nitroaniline	5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	15 ppm
							Acenaphthene	5 ppm
							Acenaphthylene	5 ppm
							Acetophenone	5 ppm
							Aniline	5 ppm
							Anthracene	5 ppm
							Benzo[a]anthracene	5 ppm
							Benzo[a]pyrene	5 ppm
							Benzo[b]fluoranthene	5 ppm
							Benzo[g,h,i]perylene	5 ppm
							Benzo[k]fluoranthene	5 ppm
							Benzyl alcohol	5 ppm
							bis (2-chloroisopropyl) ether	5 ppm
							Bis(2-chloroethoxy)methane	5 ppm
							Bis(2-chloroethyl)ether	5 ppm
							Bis(2-ethylhexyl) phthalate	5 ppm
							Butyl benzyl phthalate	5 ppm
							Carbazole	5 ppm
							Chrysene	5 ppm
							Di-n-butyl phthalate	5 ppm
							Di-n-octyl phthalate	5 ppm
							Dibenz(a,h)anthracene	5 ppm
							Dibenzofuran	5 ppm
							Diethyl phthalate	5 ppm
							Dimethyl phthalate	5 ppm
							Fluoranthene	5 ppm
							Fluorene	5 ppm
							Hexachlorobenzene	5 ppm
							Hexachlorobutadiene	5 ppm
							Hexachlorocyclopentadiene	5 ppm
							Hexachloroethane	5 ppm
							Indeno[1,2,3-cd]pyrene	5 ppm
							Isophorone	5 ppm
							m & p-Cresol	5 ppm
							N-Nitrosodi-n-propylamine	5 ppm
							N-Nitrosodimethylamine	5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	4.25 ppm
							Naphthalene	5 ppm
							Nitrobenzene	5 ppm
							o-Cresol	5 ppm
							Pentachlorophenol	10 ppm
							Phenanthrene	5 ppm
							Phenol	5 ppm
							Pyrene	5 ppm
							Pyridine	10 ppm
							3,3'-Dichlorobenzidine	5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzidine	15 ppm
							Alpha-Terpineol	5 ppm
							Dimethylformamide	5 ppm
							Octachlorostyrene	5 ppm
							Phenyl ether	5 ppm
					MSS_AB_24DNP_00007	20 uL	2,4-Dinitrophenol	20 ppm
					MSS_AB_46D2MP_00004	10 uL	4,6-Dinitro-2-methylphenol	15 ppm
					MSS_AB_4NP_00006	10 uL	4-Nitrophenol	15 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00005	05/31/25		Restek, Lot A0184892		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS_AB_4NP_00006	02/13/28		Absolute, Lot 021323		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_3_00030	03/05/24	10/19/23	MeCl2, Lot 63209	1 mL	MSS_BAS_WS_00014	12.5 uL	Atrazine	1.25 ppm
							Benzaldehyde	1.25 ppm
							Caprolactam	1.25 ppm
					MSS_FV8270_3_00034	250 uL	Benzidine	3.75 ppm
							1,3,5-Trinitrobenzene	1.25 ppm
							1,4-Dinitrobenzene	1.25 ppm
							1-Naphthylamine	1.25 ppm
							2-Acetylaminofluorene	1.25 ppm
							2-Naphthylamine	1.25 ppm
							2-Picoline	1.25 ppm
							2-Toluidine	1.25 ppm
							3,3'-Dimethylbenzidine	1.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	1.25 ppm
							4-Aminobiphenyl	1.25 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitroquinoline-1-oxide	1.25 ppm
							5-Nitro-o-toluidine	1.25 ppm
							Dibenz[a,h]acridine	1.25 ppm
							N-Nitrosodi-n-butylamine	1.25 ppm
							N-Nitrosodiethylamine	1.25 ppm
							N-Nitrosomethylethylamine	1.25 ppm
							N-Nitrosomorpholine	1.25 ppm
							N-Nitrosopiperidine	1.25 ppm
							N-Nitrosopyrrolidine	1.25 ppm
							p-Dimethylamino azobenzene	1.25 ppm
							p-Phenylene diamine	1.25 ppm
							Pentachloronitrobenzene	1.25 ppm
							Phenacetin	1.25 ppm
							Pronamide	1.25 ppm
							Quinoline	1.25 ppm
							1,4-Naphthoquinone	1.25 ppm
							1-Chloronaphthalene	1.25 ppm
							7,12-Dimethylbenz(a)anthracene	1.25 ppm
							Chlorobenzilate	1.25 ppm
							Dinoseb	1.25 ppm
							Ethyl methanesulfonate	1.25 ppm
							Hexachloropropene	1.25 ppm
							Isodrin	1.25 ppm
							Isosafrole Peak 1	0.2 ppm
							Isosafrole Peak 2	1.05 ppm
							Methyl methanesulfonate	1.25 ppm
							Pentachlorobenzene	1.25 ppm
							3-Methylcholanthrene	1.25 ppm
							6-Methylchrysene	1.25 ppm
							cis-Diallate	0.925 ppm
							Dimethoate	1.25 ppm
							Disulfoton	1.25 ppm
							Ethyl Parathion	1.25 ppm
							Methyl parathion	1.25 ppm
							o,o',o''-Triethylphosphorothioate	1.25 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1.25 ppm
							Phorate	1.25 ppm
							Safrole, Total	1.25 ppm
							Sulfotepp	1.25 ppm
							trans-Diallate	0.325 ppm
							2,4,6-Tribromophenol (Surr)	2.5 ppm
							2-Fluorobiphenyl (Surr)	2.5 ppm
							2-Fluorophenol (Surr)	2.5 ppm
							Nitrobenzene-d5 (Surr)	2.5 ppm
							p-Terphenyl-d14 (Surr)	2.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	2.5 ppm
							Dibenz[a,j]acridine	1.25 ppm
							1,1'-Biphenyl	1.25 ppm
							1,2,4,5-Tetrachlorobenzene	1.25 ppm
							1,2,4-Trichlorobenzene	1.25 ppm
							1,2-Dichlorobenzene	1.25 ppm
							1,2-Diphenylhydrazine	1.25 ppm
							1,3-Dichlorobenzene	1.25 ppm
							1,3-Dinitrobenzene	1.25 ppm
							1,4-Dichlorobenzene	1.25 ppm
							1,4-Dioxane	1.25 ppm
							1-Methylnaphthalene	1.25 ppm
							2,3,4,6-Tetrachlorophenol	1.25 ppm
							2,4,5-Trichlorophenol	1.25 ppm
							2,4,6-Trichlorophenol	1.25 ppm
							2,4-Dichlorophenol	1.25 ppm
							2,4-Dimethylphenol	1.25 ppm
							2,4-Dinitrophenol	5 ppm
							2,4-Dinitrotoluene	1.25 ppm
							2,6-Dichlorophenol	1.25 ppm
							2,6-Dinitrotoluene	1.25 ppm
							2-Chloronaphthalene	1.25 ppm
							2-Chlorophenol	1.25 ppm
							2-Methylnaphthalene	1.25 ppm
							2-Nitroaniline	1.25 ppm
							2-Nitrophenol	1.25 ppm
							3-Nitroaniline	1.25 ppm
							4,6-Dinitro-2-methylphenol	3.75 ppm
							4-Bromophenyl-phenylether	1.25 ppm
							4-Chloro-3-methylphenol	1.25 ppm
							4-Chloroaniline	1.25 ppm
							4-Chlorophenyl-phenyl ether	1.25 ppm
							4-Nitroaniline	1.25 ppm
							4-Nitrophenol	3.75 ppm
							Acenaphthene	1.25 ppm
							Acenaphthylene	1.25 ppm
							Acetophenone	1.25 ppm
							Aniline	1.25 ppm
							Anthracene	1.25 ppm
							Benzo[a]anthracene	1.25 ppm
							Benzo[a]pyrene	1.25 ppm
							Benzo[b]fluoranthene	1.25 ppm
							Benzo[g,h,i]perylene	1.25 ppm
							Benzo[k]fluoranthene	1.25 ppm
							Benzyl alcohol	1.25 ppm
							bis (2-chloroisopropyl) ether	1.25 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethoxy)methane	1.25 ppm
							Bis(2-chloroethyl)ether	1.25 ppm
							Bis(2-ethylhexyl) phthalate	1.25 ppm
							Butyl benzyl phthalate	1.25 ppm
							Carbazole	1.25 ppm
							Chrysene	1.25 ppm
							Di-n-butyl phthalate	1.25 ppm
							Di-n-octyl phthalate	1.25 ppm
							Dibenz(a,h)anthracene	1.25 ppm
							Dibenzofuran	1.25 ppm
							Diethyl phthalate	1.25 ppm
							Dimethyl phthalate	1.25 ppm
							Fluoranthene	1.25 ppm
							Fluorene	1.25 ppm
							Hexachlorobenzene	1.25 ppm
							Hexachlorobutadiene	1.25 ppm
							Hexachlorocyclopentadiene	1.25 ppm
							Hexachloroethane	1.25 ppm
							Indeno[1,2,3-cd]pyrene	1.25 ppm
							Isophorone	1.25 ppm
							m & p-Cresol	1.25 ppm
							N-Nitrosodi-n-propylamine	1.25 ppm
							N-Nitrosodimethylamine	1.25 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	1.0625 ppm
							Naphthalene	1.25 ppm
							Nitrobenzene	1.25 ppm
							o-Cresol	1.25 ppm
							Pentachlorophenol	2.5 ppm
							Phenanthrene	1.25 ppm
							Phenol	1.25 ppm
							Pyrene	1.25 ppm
							Pyridine	2.5 ppm
							3,3'-Dichlorobenzidine	1.25 ppm
							Alpha-Terpineol	1.25 ppm
							Dimethylformamide	1.25 ppm
							Octachlorostyrene	1.25 ppm
							Phenyl ether	1.25 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00014	04/05/24	10/05/23	MeCl2, Lot 63209	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_3_00034	03/05/24	10/18/23	MeCl2, Lot 63209	2 mL	MSS_8270_APWS_00016	40 uL	Benzidine	15 ppm
							1,3,5-Trinitrobenzene	5 ppm
							1,4-Dinitrobenzene	5 ppm
							1-Naphthylamine	5 ppm
							2-Acetylaminofluorene	5 ppm
							2-Naphthylamine	5 ppm
							2-Picoline	5 ppm
							2-Toluidine	5 ppm
							3,3'-Dimethylbenzidine	5 ppm
							4,4'-Methylene bis(2-chloroaniline)	5 ppm
							4-Aminobiphenyl	5 ppm
							4-Nitroquinoline-1-oxide	5 ppm
							5-Nitro-o-toluidine	5 ppm
							Dibenz[a,h]acridine	5 ppm
							N-Nitrosodi-n-butylamine	5 ppm
							N-Nitrosodiethylamine	5 ppm
							N-Nitrosomethylethylamine	5 ppm
							N-Nitrosomorpholine	5 ppm
							N-Nitrosopiperidine	5 ppm
							N-Nitrosopyrrolidine	5 ppm
							p-Dimethylamino azobenzene	5 ppm
							p-Phenylene diamine	5 ppm
							Pentachloronitrobenzene	5 ppm
							Phenacetin	5 ppm
							Pronamide	5 ppm
							Quinoline	5 ppm
							1,4-Naphthoquinone	5 ppm
							1-Chloronaphthalene	5 ppm
							7,12-Dimethylbenz(a)anthracene	5 ppm
							Chlorobenzilate	5 ppm
							Dinoseb	5 ppm
							Ethyl methanesulfonate	5 ppm
							Hexachloropropene	5 ppm
							Isodrin	5 ppm
							Isosafrole Peak 1	0.8 ppm
							Isosafrole Peak 2	4.2 ppm
							Methyl methanesulfonate	5 ppm
							Pentachlorobenzene	5 ppm
							3-Methylcholanthrene	5 ppm
							6-Methylchrysene	5 ppm
							cis-Diallate	3.7 ppm
							Dimethoate	5 ppm
							Disulfoton	5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl Parathion	5 ppm
							Methyl parathion	5 ppm
							o,o',o''-Triethylphosphorothioate	5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	5 ppm
							Phorate	5 ppm
							Safrole, Total	5 ppm
							Sulfotepp	5 ppm
							trans-Diallate	1.3 ppm
					MSS_8270_WS_00017	40 uL	2,4,6-Tribromophenol (Surr)	10 ppm
							2-Fluorobiphenyl (Surr)	10 ppm
							2-Fluorophenol (Surr)	10 ppm
							Nitrobenzene-d5 (Surr)	10 ppm
							p-Terphenyl-d14 (Surr)	10 ppm
							Phenol-d5 (Surr)	10 ppm
							Dibenz[a,j]acridine	5 ppm
							1,1'-Biphenyl	5 ppm
							1,2,4,5-Tetrachlorobenzene	5 ppm
							1,2,4-Trichlorobenzene	5 ppm
							1,2-Dichlorobenzene	5 ppm
							1,2-Diphenylhydrazine	5 ppm
							1,3-Dichlorobenzene	5 ppm
							1,3-Dinitrobenzene	5 ppm
							1,4-Dichlorobenzene	5 ppm
							1,4-Dioxane	5 ppm
							1-Methylnaphthalene	5 ppm
							2,3,4,6-Tetrachlorophenol	5 ppm
							2,4,5-Trichlorophenol	5 ppm
							2,4,6-Trichlorophenol	5 ppm
							2,4-Dichlorophenol	5 ppm
							2,4-Dimethylphenol	5 ppm
							2,4-Dinitrophenol	20 ppm
							2,4-Dinitrotoluene	5 ppm
							2,6-Dichlorophenol	5 ppm
							2,6-Dinitrotoluene	5 ppm
							2-Chloronaphthalene	5 ppm
							2-Chlorophenol	5 ppm
							2-Methylnaphthalene	5 ppm
							2-Nitroaniline	5 ppm
							2-Nitrophenol	5 ppm
							3-Nitroaniline	5 ppm
							4,6-Dinitro-2-methylphenol	15 ppm
							4-Bromophenyl-phenylether	5 ppm
							4-Chloro-3-methylphenol	5 ppm
							4-Chloroaniline	5 ppm
							4-Chlorophenyl-phenyl ether	5 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitroaniline	5 ppm
							4-Nitrophenol	15 ppm
							Acenaphthene	5 ppm
							Acenaphthylene	5 ppm
							Acetophenone	5 ppm
							Aniline	5 ppm
							Anthracene	5 ppm
							Benzo[a]anthracene	5 ppm
							Benzo[a]pyrene	5 ppm
							Benzo[b]fluoranthene	5 ppm
							Benzo[g,h,i]perylene	5 ppm
							Benzo[k]fluoranthene	5 ppm
							Benzyl alcohol	5 ppm
							bis (2-chloroisopropyl) ether	5 ppm
							Bis(2-chloroethoxy)methane	5 ppm
							Bis(2-chloroethyl)ether	5 ppm
							Bis(2-ethylhexyl) phthalate	5 ppm
							Butyl benzyl phthalate	5 ppm
							Carbazole	5 ppm
							Chrysene	5 ppm
							Di-n-butyl phthalate	5 ppm
							Di-n-octyl phthalate	5 ppm
							Dibenz(a,h)anthracene	5 ppm
							Dibenzofuran	5 ppm
							Diethyl phthalate	5 ppm
							Dimethyl phthalate	5 ppm
							Fluoranthene	5 ppm
							Fluorene	5 ppm
							Hexachlorobenzene	5 ppm
							Hexachlorobutadiene	5 ppm
							Hexachlorocyclopentadiene	5 ppm
							Hexachloroethane	5 ppm
							Indeno[1,2,3-cd]pyrene	5 ppm
							Isophorone	5 ppm
							m & p-Cresol	5 ppm
							N-Nitrosodi-n-propylamine	5 ppm
							N-Nitrosodimethylamine	5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	4.25 ppm
							Naphthalene	5 ppm
							Nitrobenzene	5 ppm
							o-Cresol	5 ppm
							Pentachlorophenol	10 ppm
							Phenanthrene	5 ppm
							Phenol	5 ppm
							Pyrene	5 ppm
							Pyridine	10 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3,3'-Dichlorobenzidine	5 ppm
							Benzidine	15 ppm
							Alpha-Terpineol	5 ppm
							Dimethylformamide	5 ppm
							Octachlorostyrene	5 ppm
							Phenyl ether	5 ppm
					MSS_AB_24DNP_00007	20 uL	2,4-Dinitrophenol	20 ppm
					MSS_AB_46D2MP_00004	10 uL	4,6-Dinitro-2-methylphenol	15 ppm
					MSS_AB_4NP_00006	10 uL	4-Nitrophenol	15 ppm
					MSS_FV8270_IS_00006	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00012	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00012	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00008	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00012	06/30/24		Restek, Lot A0198786		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00012	03/31/24		Restek, Lot A0196332		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00008	03/31/24		Restek, Lot A0195409		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00017	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_8270_SURR_00005	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00006	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00013	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00010	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00005	06/30/26		Sigma- Aldrich, Lot LRAC5703		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00006	03/31/26		Restek, Lot A0195365		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00013	09/30/24		Restek, Lot A0195772		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_AB_46D2MP_00004	11/19/24		Absolute, Lot 111919		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS_AB_4NP_00006	02/13/28		Absolute, Lot 021323		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_4_00026	06/30/23	03/22/23	MeCl2, Lot 226679	3 mL	MSS_BAS_WS_00010	112.5 uL	Atrazine	3.75 ppm
							Benzaldehyde	3.75 ppm
							Caprolactam	3.75 ppm
					MSS_FV8270_4_00028	750 uL	Benzidine	11.25 ppm
							1,3,5-Trinitrobenzene	3.75 ppm
							1,4-Dinitrobenzene	3.75 ppm
							1-Naphthylamine	3.75 ppm
							2-Acetylaminofluorene	3.75 ppm
							2-Naphthylamine	3.75 ppm
							2-Picoline	3.75 ppm
							2-Toluidine	3.75 ppm
							3,3'-Dimethylbenzidine	3.75 ppm
							4,4'-Methylene bis(2-chloroaniline)	3.75 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Aminobiphenyl	3.75 ppm
							4-Nitroquinoline-1-oxide	3.75 ppm
							5-Nitro-o-toluidine	3.75 ppm
							Dibenz[a,h]acridine	3.75 ppm
							N-Nitrosodi-n-butylamine	3.75 ppm
							N-Nitrosodiethylamine	3.75 ppm
							N-Nitrosomethylethylamine	3.75 ppm
							N-Nitrosomorpholine	3.75 ppm
							N-Nitrosopiperidine	3.75 ppm
							N-Nitrosopyrrolidine	3.75 ppm
							p-Dimethylamino azobenzene	3.75 ppm
							p-Phenylene diamine	3.75 ppm
							Pentachloronitrobenzene	3.75 ppm
							Phenacetin	3.75 ppm
							Pronamide	3.75 ppm
							Quinoline	3.75 ppm
							1,4-Naphthoquinone	3.75 ppm
							1-Chloronaphthalene	3.75 ppm
							7,12-Dimethylbenz(a)anthracene	3.75 ppm
							Chlorobenzilate	3.75 ppm
							Dinoseb	3.75 ppm
							Ethyl methanesulfonate	3.75 ppm
							Hexachloropropene	3.75 ppm
							Isodrin	3.75 ppm
							Isosafrole Peak 1	0.6 ppm
							Isosafrole Peak 2	3.15 ppm
							Methyl methanesulfonate	3.75 ppm
							Pentachlorobenzene	3.75 ppm
							3-Methylcholanthrene	3.75 ppm
							6-Methylchrysene	3.75 ppm
							cis-Diallate	2.775 ppm
							Dimethoate	3.75 ppm
							Disulfoton	3.75 ppm
							Ethyl Parathion	3.75 ppm
							Methyl parathion	3.75 ppm
							o,o',o''-Triethylphosphorothioate	3.75 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	3.75 ppm
							Phorate	3.75 ppm
							Safrole, Total	3.75 ppm
							Sulfotepp	3.75 ppm
							trans-Diallate	0.975 ppm
							2,4,6-Tribromophenol (Surr)	7.5 ppm
							2-Fluorobiphenyl (Surr)	7.5 ppm
							2-Fluorophenol (Surr)	7.5 ppm
							Nitrobenzene-d5 (Surr)	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Terphenyl-d14 (Surr)	7.5 ppm
							Phenol-d5 (Surr)	7.5 ppm
							Dibenz[a,j]acridine	3.75 ppm
							1,1'-Biphenyl	3.75 ppm
							1,2,4,5-Tetrachlorobenzene	3.75 ppm
							1,2,4-Trichlorobenzene	3.75 ppm
							1,2-Dichlorobenzene	3.75 ppm
							1,2-Diphenylhydrazine	3.75 ppm
							1,3-Dichlorobenzene	3.75 ppm
							1,3-Dinitrobenzene	3.75 ppm
							1,4-Dichlorobenzene	3.75 ppm
							1,4-Dioxane	3.75 ppm
							1-Methylnaphthalene	3.75 ppm
							2,3,4,6-Tetrachlorophenol	3.75 ppm
							2,4,5-Trichlorophenol	3.75 ppm
							2,4,6-Trichlorophenol	3.75 ppm
							2,4-Dichlorophenol	3.75 ppm
							2,4-Dimethylphenol	3.75 ppm
							2,4-Dinitrophenol	11.25 ppm
							2,4-Dinitrotoluene	3.75 ppm
							2,6-Dichlorophenol	3.75 ppm
							2,6-Dinitrotoluene	3.75 ppm
							2-Chloronaphthalene	3.75 ppm
							2-Chlorophenol	3.75 ppm
							2-Methylnaphthalene	3.75 ppm
							2-Nitroaniline	3.75 ppm
							2-Nitrophenol	3.75 ppm
							3-Nitroaniline	3.75 ppm
							4,6-Dinitro-2-methylphenol	7.5 ppm
							4-Bromophenyl-phenylether	3.75 ppm
							4-Chloro-3-methylphenol	3.75 ppm
							4-Chloroaniline	3.75 ppm
							4-Chlorophenyl-phenyl ether	3.75 ppm
							4-Nitroaniline	3.75 ppm
							4-Nitrophenol	7.5 ppm
							Acenaphthene	3.75 ppm
							Acenaphthylene	3.75 ppm
							Acetophenone	3.75 ppm
							Aniline	3.75 ppm
							Anthracene	3.75 ppm
							Benzo[a]anthracene	3.75 ppm
							Benzo[a]pyrene	3.75 ppm
							Benzo[b]fluoranthene	3.75 ppm
							Benzo[g,h,i]perylene	3.75 ppm
							Benzo[k]fluoranthene	3.75 ppm
							Benzyl alcohol	3.75 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							bis (2-chloroisopropyl) ether	3.75 ppm
							Bis(2-chloroethoxy)methane	3.75 ppm
							Bis(2-chloroethyl)ether	3.75 ppm
							Bis(2-ethylhexyl) phthalate	3.75 ppm
							Butyl benzyl phthalate	3.75 ppm
							Carbazole	3.75 ppm
							Chrysene	3.75 ppm
							Di-n-butyl phthalate	3.75 ppm
							Di-n-octyl phthalate	3.75 ppm
							Dibenz(a,h)anthracene	3.75 ppm
							Dibenzofuran	3.75 ppm
							Diethyl phthalate	3.75 ppm
							Dimethyl phthalate	3.75 ppm
							Fluoranthene	3.75 ppm
							Fluorene	3.75 ppm
							Hexachlorobenzene	3.75 ppm
							Hexachlorobutadiene	3.75 ppm
							Hexachlorocyclopentadiene	3.75 ppm
							Hexachloroethane	3.75 ppm
							Indeno[1,2,3-cd]pyrene	3.75 ppm
							Isophorone	3.75 ppm
							m & p-Cresol	3.75 ppm
							N-Nitrosodi-n-propylamine	3.75 ppm
							N-Nitrosodimethylamine	3.75 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	3.1875 ppm
							Naphthalene	3.75 ppm
							Nitrobenzene	3.75 ppm
							o-Cresol	3.75 ppm
							Pentachlorophenol	7.5 ppm
							Phenanthrene	3.75 ppm
							Phenol	3.75 ppm
							Pyrene	3.75 ppm
							Pyridine	7.5 ppm
							3,3'-Dichlorobenzidine	3.75 ppm
							Alpha-Terpineol	3.75 ppm
							Dimethylformamide	3.75 ppm
							Octachlorostyrene	3.75 ppm
							Phenyl ether	3.75 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00010	06/30/23	03/22/23	MeCl2, Lot 226679	5 mL	OP_LCSmix2stk_00005	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	100 ppm
..OP_LCSmix2stk_00005	06/30/23		Restek, Lot A0179852		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_4_00028	08/31/23	03/22/23	MeCl2, Lot 226679	2 mL	MSS_8270_APWS_00014	120 uL	Benzidine	45 ppm
							1,3,5-Trinitrobenzene	15 ppm
							1,4-Dinitrobenzene	15 ppm
							1-Naphthylamine	15 ppm
							2-Acetylaminofluorene	15 ppm
							2-Naphthylamine	15 ppm
							2-Picoline	15 ppm
							2-Toluidine	15 ppm
							3,3'-Dimethylbenzidine	15 ppm
							4,4'-Methylene bis(2-chloroaniline)	15 ppm
							4-Aminobiphenyl	15 ppm
							4-Nitroquinoline-1-oxide	15 ppm
							5-Nitro-o-toluidine	15 ppm
							Dibenz[a,h]acridine	15 ppm
							N-Nitrosodi-n-butylamine	15 ppm
							N-Nitrosodiethylamine	15 ppm
							N-Nitrosomethylethylamine	15 ppm
							N-Nitrosomorpholine	15 ppm
							N-Nitrosopiperidine	15 ppm
							N-Nitrosopyrrolidine	15 ppm
							p-Dimethylamino azobenzene	15 ppm
							p-Phenylene diamine	15 ppm
							Pentachloronitrobenzene	15 ppm
							Phenacetin	15 ppm
							Pronamide	15 ppm
							Quinoline	15 ppm
							1,4-Naphthoquinone	15 ppm
							1-Chloronaphthalene	15 ppm
							7,12-Dimethylbenz(a)anthracene	15 ppm
							Chlorobenzilate	15 ppm
							Dinoseb	15 ppm
							Ethyl methanesulfonate	15 ppm
							Hexachloropropene	15 ppm
							Isodrin	15 ppm
							Isosafrole Peak 1	2.4 ppm
							Isosafrole Peak 2	12.6 ppm
							Methyl methanesulfonate	15 ppm
							Pentachlorobenzene	15 ppm
							3-Methylcholanthrene	15 ppm
							6-Methylchrysene	15 ppm
							cis-Diallate	11.1 ppm
							Dimethoate	15 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Disulfoton	15 ppm
							Ethyl Parathion	15 ppm
							Methyl parathion	15 ppm
							o,o',o''-Triethylphosphorothioate	15 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	15 ppm
							Phorate	15 ppm
							Safrole, Total	15 ppm
							Sulfotepp	15 ppm
							trans-Diallate	3.9 ppm
					MSS_8270_WS_00015	120 uL	2,4,6-Tribromophenol (Surr)	30 ppm
							2-Fluorobiphenyl (Surr)	30 ppm
							2-Fluorophenol (Surr)	30 ppm
							Nitrobenzene-d5 (Surr)	30 ppm
							p-Terphenyl-d14 (Surr)	30 ppm
							Phenol-d5 (Surr)	30 ppm
							Dibenz[a,j]acridine	15 ppm
							1,1'-Biphenyl	15 ppm
							1,2,4,5-Tetrachlorobenzene	15 ppm
							1,2,4-Trichlorobenzene	15 ppm
							1,2-Dichlorobenzene	15 ppm
							1,2-Diphenylhydrazine	15 ppm
							1,3-Dichlorobenzene	15 ppm
							1,3-Dinitrobenzene	15 ppm
							1,4-Dichlorobenzene	15 ppm
							1,4-Dioxane	15 ppm
							1-Methylnaphthalene	15 ppm
							2,3,4,6-Tetrachlorophenol	15 ppm
							2,4,5-Trichlorophenol	15 ppm
							2,4,6-Trichlorophenol	15 ppm
							2,4-Dichlorophenol	15 ppm
							2,4-Dimethylphenol	15 ppm
							2,4-Dinitrophenol	45 ppm
							2,4-Dinitrotoluene	15 ppm
							2,6-Dichlorophenol	15 ppm
							2,6-Dinitrotoluene	15 ppm
							2-Chloronaphthalene	15 ppm
							2-Chlorophenol	15 ppm
							2-Methylnaphthalene	15 ppm
							2-Nitroaniline	15 ppm
							2-Nitrophenol	15 ppm
							3-Nitroaniline	15 ppm
							4,6-Dinitro-2-methylphenol	30 ppm
							4-Bromophenyl-phenylether	15 ppm
							4-Chloro-3-methylphenol	15 ppm
							4-Chloroaniline	15 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl-phenyl ether	15 ppm
							4-Nitroaniline	15 ppm
							4-Nitrophenol	30 ppm
							Acenaphthene	15 ppm
							Acenaphthylene	15 ppm
							Acetophenone	15 ppm
							Aniline	15 ppm
							Anthracene	15 ppm
							Benzo[a]anthracene	15 ppm
							Benzo[a]pyrene	15 ppm
							Benzo[b]fluoranthene	15 ppm
							Benzo[g,h,i]perylene	15 ppm
							Benzo[k]fluoranthene	15 ppm
							Benzyl alcohol	15 ppm
							bis (2-chloroisopropyl) ether	15 ppm
							Bis(2-chloroethoxy)methane	15 ppm
							Bis(2-chloroethyl)ether	15 ppm
							Bis(2-ethylhexyl) phthalate	15 ppm
							Butyl benzyl phthalate	15 ppm
							Carbazole	15 ppm
							Chrysene	15 ppm
							Di-n-butyl phthalate	15 ppm
							Di-n-octyl phthalate	15 ppm
							Dibenz(a,h)anthracene	15 ppm
							Dibenzofuran	15 ppm
							Diethyl phthalate	15 ppm
							Dimethyl phthalate	15 ppm
							Fluoranthene	15 ppm
							Fluorene	15 ppm
							Hexachlorobenzene	15 ppm
							Hexachlorobutadiene	15 ppm
							Hexachlorocyclopentadiene	15 ppm
							Hexachloroethane	15 ppm
							Indeno[1,2,3-cd]pyrene	15 ppm
							Isophorone	15 ppm
							m & p-Cresol	15 ppm
							N-Nitrosodi-n-propylamine	15 ppm
							N-Nitrosodimethylamine	15 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	12.75 ppm
							Naphthalene	15 ppm
							Nitrobenzene	15 ppm
							o-Cresol	15 ppm
							Pentachlorophenol	30 ppm
							Phenanthrene	15 ppm
							Phenol	15 ppm
							Pyrene	15 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyridine	30 ppm
							3,3'-Dichlorobenzidine	15 ppm
							Benzidine	45 ppm
							Alpha-Terpineol	15 ppm
							Dimethylformamide	15 ppm
							Octachlorostyrene	15 ppm
							Phenyl ether	15 ppm
					MSS_AB_24DNP_00007	30 uL	2,4-Dinitrophenol	45 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00009	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00015	09/22/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00004	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00004	08/31/24		Restek, Lot A0175669		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_4_00027	10/31/23	06/08/23	MeCl2, Lot 226055	3 mL	MSS_BAS_WS_00012	112.5 uL	Atrazine	3.75 ppm
							Benzaldehyde	3.75 ppm
							Caprolactam	3.75 ppm
					MSS_FV8270_4_00029	750 uL	Benzidine	11.25 ppm
							1,3,5-Trinitrobenzene	3.75 ppm
							1,4-Dinitrobenzene	3.75 ppm
							1-Naphthylamine	3.75 ppm
							2-Acetylaminofluorene	3.75 ppm
							2-Naphthylamine	3.75 ppm
							2-Picoline	3.75 ppm
							2-Toluidine	3.75 ppm
							3,3'-Dimethylbenzidine	3.75 ppm
							4,4'-Methylene bis(2-chloroaniline)	3.75 ppm
							4-Aminobiphenyl	3.75 ppm
							4-Nitroquinoline-1-oxide	3.75 ppm
							5-Nitro-o-toluidine	3.75 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz[a,h]acridine	3.75 ppm
							N-Nitrosodi-n-butylamine	3.75 ppm
							N-Nitrosodiethylamine	3.75 ppm
							N-Nitrosomethylethylamine	3.75 ppm
							N-Nitrosomorpholine	3.75 ppm
							N-Nitrosopiperidine	3.75 ppm
							N-Nitrosopyrrolidine	3.75 ppm
							p-Dimethylamino azobenzene	3.75 ppm
							p-Phenylene diamine	3.75 ppm
							Pentachloronitrobenzene	3.75 ppm
							Phenacetin	3.75 ppm
							Pronamide	3.75 ppm
							Quinoline	3.75 ppm
							1,4-Naphthoquinone	3.75 ppm
							1-Chloronaphthalene	3.75 ppm
							7,12-Dimethylbenz(a)anthracene	3.75 ppm
							Chlorobenzilate	3.75 ppm
							Dinoseb	3.75 ppm
							Ethyl methanesulfonate	3.75 ppm
							Hexachloropropene	3.75 ppm
							Isodrin	3.75 ppm
							Isosafrole Peak 1	0.6 ppm
							Isosafrole Peak 2	3.15 ppm
							Methyl methanesulfonate	3.75 ppm
							Pentachlorobenzene	3.75 ppm
							3-Methylcholanthrene	3.75 ppm
							6-Methylchrysene	3.75 ppm
							cis-Diallate	2.775 ppm
							Dimethoate	3.75 ppm
							Disulfoton	3.75 ppm
							Ethyl Parathion	3.75 ppm
							Methyl parathion	3.75 ppm
							o,o',o''-Triethylphosphorothioate	3.75 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	3.75 ppm
							Phorate	3.75 ppm
							Safrole, Total	3.75 ppm
							Sulfotepp	3.75 ppm
							trans-Diallate	0.975 ppm
							2,4,6-Tribromophenol (Surr)	7.5 ppm
							2-Fluorobiphenyl (Surr)	7.5 ppm
							2-Fluorophenol (Surr)	7.5 ppm
							Nitrobenzene-d5 (Surr)	7.5 ppm
							p-Terphenyl-d14 (Surr)	7.5 ppm
							Phenol-d5 (Surr)	7.5 ppm
							Dibenz[a,j]acridine	3.75 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1'-Biphenyl	3.75 ppm
							1,2,4,5-Tetrachlorobenzene	3.75 ppm
							1,2,4-Trichlorobenzene	3.75 ppm
							1,2-Dichlorobenzene	3.75 ppm
							1,2-Diphenylhydrazine	3.75 ppm
							1,3-Dichlorobenzene	3.75 ppm
							1,3-Dinitrobenzene	3.75 ppm
							1,4-Dichlorobenzene	3.75 ppm
							1,4-Dioxane	3.75 ppm
							1-Methylnaphthalene	3.75 ppm
							2,3,4,6-Tetrachlorophenol	3.75 ppm
							2,4,5-Trichlorophenol	3.75 ppm
							2,4,6-Trichlorophenol	3.75 ppm
							2,4-Dichlorophenol	3.75 ppm
							2,4-Dimethylphenol	3.75 ppm
							2,4-Dinitrophenol	11.25 ppm
							2,4-Dinitrotoluene	3.75 ppm
							2,6-Dichlorophenol	3.75 ppm
							2,6-Dinitrotoluene	3.75 ppm
							2-Chloronaphthalene	3.75 ppm
							2-Chlorophenol	3.75 ppm
							2-Methylnaphthalene	3.75 ppm
							2-Nitroaniline	3.75 ppm
							2-Nitrophenol	3.75 ppm
							3-Nitroaniline	3.75 ppm
							4,6-Dinitro-2-methylphenol	7.5 ppm
							4-Bromophenyl-phenylether	3.75 ppm
							4-Chloro-3-methylphenol	3.75 ppm
							4-Chloroaniline	3.75 ppm
							4-Chlorophenyl-phenyl ether	3.75 ppm
							4-Nitroaniline	3.75 ppm
							4-Nitrophenol	7.5 ppm
							Acenaphthene	3.75 ppm
							Acenaphthylene	3.75 ppm
							Acetophenone	3.75 ppm
							Aniline	3.75 ppm
							Anthracene	3.75 ppm
							Benzo[a]anthracene	3.75 ppm
							Benzo[a]pyrene	3.75 ppm
							Benzo[b]fluoranthene	3.75 ppm
							Benzo[g,h,i]perylene	3.75 ppm
							Benzo[k]fluoranthene	3.75 ppm
							Benzyl alcohol	3.75 ppm
							bis (2-chloroisopropyl) ether	3.75 ppm
							Bis(2-chloroethoxy)methane	3.75 ppm
							Bis(2-chloroethyl)ether	3.75 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	3.75 ppm
							Butyl benzyl phthalate	3.75 ppm
							Carbazole	3.75 ppm
							Chrysene	3.75 ppm
							Di-n-butyl phthalate	3.75 ppm
							Di-n-octyl phthalate	3.75 ppm
							Dibenz(a,h)anthracene	3.75 ppm
							Dibenzofuran	3.75 ppm
							Diethyl phthalate	3.75 ppm
							Dimethyl phthalate	3.75 ppm
							Fluoranthene	3.75 ppm
							Fluorene	3.75 ppm
							Hexachlorobenzene	3.75 ppm
							Hexachlorobutadiene	3.75 ppm
							Hexachlorocyclopentadiene	3.75 ppm
							Hexachloroethane	3.75 ppm
							Indeno[1,2,3-cd]pyrene	3.75 ppm
							Isophorone	3.75 ppm
							m & p-Cresol	3.75 ppm
							N-Nitrosodi-n-propylamine	3.75 ppm
							N-Nitrosodimethylamine	3.75 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	3.1875 ppm
							Naphthalene	3.75 ppm
							Nitrobenzene	3.75 ppm
							o-Cresol	3.75 ppm
							Pentachlorophenol	7.5 ppm
							Phenanthrene	3.75 ppm
							Phenol	3.75 ppm
							Pyrene	3.75 ppm
							Pyridine	7.5 ppm
							3,3'-Dichlorobenzidine	3.75 ppm
							Alpha-Terpineol	3.75 ppm
							Dimethylformamide	3.75 ppm
							Octachlorostyrene	3.75 ppm
							Phenyl ether	3.75 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00012	12/08/23	06/08/23	MeCl2, Lot 226055	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	2000 ug/mL
.MSS_FV8270_4_00029	10/31/23	06/08/23	MeCl2, Lot 226055	2 mL	MSS_8270_APWS_00015	120 uL	Benzidine	45 ppm
							1,3,5-Trinitrobenzene	15 ppm
							1,4-Dinitrobenzene	15 ppm
							1-Naphthylamine	15 ppm
							2-Acetylaminofluorene	15 ppm
							2-Naphthylamine	15 ppm
							2-Picoline	15 ppm
							2-Toluidine	15 ppm
							3,3'-Dimethylbenzidine	15 ppm
							4,4'-Methylene bis(2-chloroaniline)	15 ppm
							4-Aminobiphenyl	15 ppm
							4-Nitroquinoline-1-oxide	15 ppm
							5-Nitro-o-toluidine	15 ppm
							Dibenz[a,h]acridine	15 ppm
							N-Nitrosodi-n-butylamine	15 ppm
							N-Nitrosodiethylamine	15 ppm
							N-Nitrosomethylethylamine	15 ppm
							N-Nitrosomorpholine	15 ppm
							N-Nitrosopiperidine	15 ppm
							N-Nitrosopyrrolidine	15 ppm
							p-Dimethylamino azobenzene	15 ppm
							p-Phenylene diamine	15 ppm
							Pentachloronitrobenzene	15 ppm
							Phenacetin	15 ppm
							Pronamide	15 ppm
							Quinoline	15 ppm
							1,4-Naphthoquinone	15 ppm
							1-Chloronaphthalene	15 ppm
							7,12-Dimethylbenz(a)anthracene	15 ppm
							Chlorobenzilate	15 ppm
							Dinoseb	15 ppm
							Ethyl methanesulfonate	15 ppm
							Hexachloropropene	15 ppm
							Isodrin	15 ppm
							Isosafrole Peak 1	2.4 ppm
							Isosafrole Peak 2	12.6 ppm
							Methyl methanesulfonate	15 ppm
							Pentachlorobenzene	15 ppm
							3-Methylcholanthrene	15 ppm
							6-Methylchrysene	15 ppm
							cis-Diallate	11.1 ppm
							Dimethoate	15 ppm
							Disulfoton	15 ppm
							Ethyl Parathion	15 ppm
							Methyl parathion	15 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o,o',o''-Triethylphosphorothioate	15 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	15 ppm
							Phorate	15 ppm
							Safrole, Total	15 ppm
							Sulfotepp	15 ppm
							trans-Diallate	3.9 ppm
					MSS_8270_WS_00016	120 uL	2,4,6-Tribromophenol (Surr)	30 ppm
							2-Fluorobiphenyl (Surr)	30 ppm
							2-Fluorophenol (Surr)	30 ppm
							Nitrobenzene-d5 (Surr)	30 ppm
							p-Terphenyl-d14 (Surr)	30 ppm
							Phenol-d5 (Surr)	30 ppm
							Dibenz[a,j]acridine	15 ppm
							1,1'-Biphenyl	15 ppm
							1,2,4,5-Tetrachlorobenzene	15 ppm
							1,2,4-Trichlorobenzene	15 ppm
							1,2-Dichlorobenzene	15 ppm
							1,2-Diphenylhydrazine	15 ppm
							1,3-Dichlorobenzene	15 ppm
							1,3-Dinitrobenzene	15 ppm
							1,4-Dichlorobenzene	15 ppm
							1,4-Dioxane	15 ppm
							1-Methylnaphthalene	15 ppm
							2,3,4,6-Tetrachlorophenol	15 ppm
							2,4,5-Trichlorophenol	15 ppm
							2,4,6-Trichlorophenol	15 ppm
							2,4-Dichlorophenol	15 ppm
							2,4-Dimethylphenol	15 ppm
							2,4-Dinitrophenol	45 ppm
							2,4-Dinitrotoluene	15 ppm
							2,6-Dichlorophenol	15 ppm
							2,6-Dinitrotoluene	15 ppm
							2-Chloronaphthalene	15 ppm
							2-Chlorophenol	15 ppm
							2-Methylnaphthalene	15 ppm
							2-Nitroaniline	15 ppm
							2-Nitrophenol	15 ppm
							3-Nitroaniline	15 ppm
							4,6-Dinitro-2-methylphenol	30 ppm
							4-Bromophenyl-phenylether	15 ppm
							4-Chloro-3-methylphenol	15 ppm
							4-Chloroaniline	15 ppm
							4-Chlorophenyl-phenyl ether	15 ppm
							4-Nitroaniline	15 ppm
							4-Nitrophenol	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	15 ppm
							Acenaphthylene	15 ppm
							Acetophenone	15 ppm
							Aniline	15 ppm
							Anthracene	15 ppm
							Benzo[a]anthracene	15 ppm
							Benzo[a]pyrene	15 ppm
							Benzo[b]fluoranthene	15 ppm
							Benzo[g,h,i]perylene	15 ppm
							Benzo[k]fluoranthene	15 ppm
							Benzyl alcohol	15 ppm
							bis (2-chloroisopropyl) ether	15 ppm
							Bis(2-chloroethoxy)methane	15 ppm
							Bis(2-chloroethyl)ether	15 ppm
							Bis(2-ethylhexyl) phthalate	15 ppm
							Butyl benzyl phthalate	15 ppm
							Carbazole	15 ppm
							Chrysene	15 ppm
							Di-n-butyl phthalate	15 ppm
							Di-n-octyl phthalate	15 ppm
							Dibenz(a,h)anthracene	15 ppm
							Dibenzofuran	15 ppm
							Diethyl phthalate	15 ppm
							Dimethyl phthalate	15 ppm
							Fluoranthene	15 ppm
							Fluorene	15 ppm
							Hexachlorobenzene	15 ppm
							Hexachlorobutadiene	15 ppm
							Hexachlorocyclopentadiene	15 ppm
							Hexachloroethane	15 ppm
							Indeno[1,2,3-cd]pyrene	15 ppm
							Isophorone	15 ppm
							m & p-Cresol	15 ppm
							N-Nitrosodi-n-propylamine	15 ppm
							N-Nitrosodimethylamine	15 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	12.75 ppm
							Naphthalene	15 ppm
							Nitrobenzene	15 ppm
							o-Cresol	15 ppm
							Pentachlorophenol	30 ppm
							Phenanthrene	15 ppm
							Phenol	15 ppm
							Pyrene	15 ppm
							Pyridine	30 ppm
							3,3'-Dichlorobenzidine	15 ppm
							Benzidine	45 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Alpha-Terpineol	15 ppm
							Dimethylformamide	15 ppm
							Octachlorostyrene	15 ppm
							Phenyl ether	15 ppm
					MSS_AB_24DNP_00007	30 uL	2,4-Dinitrophenol	45 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23	Sigma- Aldrich, Lot LRAC8467			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00005	05/31/25	Restek, Lot A0184892			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24	Restek, Lot A0190414			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_4_00030	03/05/24	10/19/23	MeCl2, Lot 63209	3 mL	MSS_BAS_WS_00014	112.5 uL	Atrazine	3.75 ppm
							Benzaldehyde	3.75 ppm
							Caprolactam	3.75 ppm
					MSS_FV8270_4_00031	750 uL	Benzidine	11.25 ppm
							1,3,5-Trinitrobenzene	3.75 ppm
							1,4-Dinitrobenzene	3.75 ppm
							1-Naphthylamine	3.75 ppm
							2-Acetylaminofluorene	3.75 ppm
							2-Naphthylamine	3.75 ppm
							2-Picoline	3.75 ppm
							2-Toluidine	3.75 ppm
							3,3'-Dimethylbenzidine	3.75 ppm
							4,4'-Methylene bis(2-chloroaniline)	3.75 ppm
							4-Aminobiphenyl	3.75 ppm
							4-Nitroquinoline-1-oxide	3.75 ppm
							5-Nitro-o-toluidine	3.75 ppm
							Dibenz[a,h]acridine	3.75 ppm
							N-Nitrosodi-n-butylamine	3.75 ppm
							N-Nitrosodiethylamine	3.75 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosomethylethylamine	3.75 ppm
							N-Nitrosomorpholine	3.75 ppm
							N-Nitrosopiperidine	3.75 ppm
							N-Nitrosopyrrolidine	3.75 ppm
							p-Dimethylamino azobenzene	3.75 ppm
							p-Phenylene diamine	3.75 ppm
							Pentachloronitrobenzene	3.75 ppm
							Phenacetin	3.75 ppm
							Pronamide	3.75 ppm
							Quinoline	3.75 ppm
							1,4-Naphthoquinone	3.75 ppm
							1-Chloronaphthalene	3.75 ppm
							7,12-Dimethylbenz(a)anthracene	3.75 ppm
							Chlorobenzilate	3.75 ppm
							Dinoseb	3.75 ppm
							Ethyl methanesulfonate	3.75 ppm
							Hexachloropropene	3.75 ppm
							Isodrin	3.75 ppm
							Isosafrole Peak 1	0.6 ppm
							Isosafrole Peak 2	3.15 ppm
							Methyl methanesulfonate	3.75 ppm
							Pentachlorobenzene	3.75 ppm
							3-Methylcholanthrene	3.75 ppm
							6-Methylchrysene	3.75 ppm
							cis-Diallate	2.775 ppm
							Dimethoate	3.75 ppm
							Disulfoton	3.75 ppm
							Ethyl Parathion	3.75 ppm
							Methyl parathion	3.75 ppm
							o,o',o''-Triethylphosphorothioate	3.75 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	3.75 ppm
							Phorate	3.75 ppm
							Safrole, Total	3.75 ppm
							Sulfotepp	3.75 ppm
							trans-Diallate	0.975 ppm
							2,4,6-Tribromophenol (Surr)	7.5 ppm
							2-Fluorobiphenyl (Surr)	7.5 ppm
							2-Fluorophenol (Surr)	7.5 ppm
							Nitrobenzene-d5 (Surr)	7.5 ppm
							p-Terphenyl-d14 (Surr)	7.5 ppm
							Phenol-d5 (Surr)	7.5 ppm
							Dibenz[a,j]acridine	3.75 ppm
							1,1'-Biphenyl	3.75 ppm
							1,2,4,5-Tetrachlorobenzene	3.75 ppm
							1,2,4-Trichlorobenzene	3.75 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	3.75 ppm
							1,2-Diphenylhydrazine	3.75 ppm
							1,3-Dichlorobenzene	3.75 ppm
							1,3-Dinitrobenzene	3.75 ppm
							1,4-Dichlorobenzene	3.75 ppm
							1,4-Dioxane	3.75 ppm
							1-Methylnaphthalene	3.75 ppm
							2,3,4,6-Tetrachlorophenol	3.75 ppm
							2,4,5-Trichlorophenol	3.75 ppm
							2,4,6-Trichlorophenol	3.75 ppm
							2,4-Dichlorophenol	3.75 ppm
							2,4-Dimethylphenol	3.75 ppm
							2,4-Dinitrophenol	11.25 ppm
							2,4-Dinitrotoluene	3.75 ppm
							2,6-Dichlorophenol	3.75 ppm
							2,6-Dinitrotoluene	3.75 ppm
							2-Chloronaphthalene	3.75 ppm
							2-Chlorophenol	3.75 ppm
							2-Methylnaphthalene	3.75 ppm
							2-Nitroaniline	3.75 ppm
							2-Nitrophenol	3.75 ppm
							3-Nitroaniline	3.75 ppm
							4,6-Dinitro-2-methylphenol	7.5 ppm
							4-Bromophenyl-phenylether	3.75 ppm
							4-Chloro-3-methylphenol	3.75 ppm
							4-Chloroaniline	3.75 ppm
							4-Chlorophenyl-phenyl ether	3.75 ppm
							4-Nitroaniline	3.75 ppm
							4-Nitrophenol	7.5 ppm
							Acenaphthene	3.75 ppm
							Acenaphthylene	3.75 ppm
							Acetophenone	3.75 ppm
							Aniline	3.75 ppm
							Anthracene	3.75 ppm
							Benzo[a]anthracene	3.75 ppm
							Benzo[a]pyrene	3.75 ppm
							Benzo[b]fluoranthene	3.75 ppm
							Benzo[g,h,i]perylene	3.75 ppm
							Benzo[k]fluoranthene	3.75 ppm
							Benzyl alcohol	3.75 ppm
							bis (2-chloroisopropyl) ether	3.75 ppm
							Bis(2-chloroethoxy)methane	3.75 ppm
							Bis(2-chloroethyl)ether	3.75 ppm
							Bis(2-ethylhexyl) phthalate	3.75 ppm
							Butyl benzyl phthalate	3.75 ppm
							Carbazole	3.75 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	3.75 ppm
							Di-n-butyl phthalate	3.75 ppm
							Di-n-octyl phthalate	3.75 ppm
							Dibenz(a,h)anthracene	3.75 ppm
							Dibenzofuran	3.75 ppm
							Diethyl phthalate	3.75 ppm
							Dimethyl phthalate	3.75 ppm
							Fluoranthene	3.75 ppm
							Fluorene	3.75 ppm
							Hexachlorobenzene	3.75 ppm
							Hexachlorobutadiene	3.75 ppm
							Hexachlorocyclopentadiene	3.75 ppm
							Hexachloroethane	3.75 ppm
							Indeno[1,2,3-cd]pyrene	3.75 ppm
							Isophorone	3.75 ppm
							m & p-Cresol	3.75 ppm
							N-Nitrosodi-n-propylamine	3.75 ppm
							N-Nitrosodimethylamine	3.75 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	3.1875 ppm
							Naphthalene	3.75 ppm
							Nitrobenzene	3.75 ppm
							o-Cresol	3.75 ppm
							Pentachlorophenol	7.5 ppm
							Phenanthrene	3.75 ppm
							Phenol	3.75 ppm
							Pyrene	3.75 ppm
							Pyridine	7.5 ppm
							3,3'-Dichlorobenzidine	3.75 ppm
							Alpha-Terpineol	3.75 ppm
							Dimethylformamide	3.75 ppm
							Octachlorostyrene	3.75 ppm
							Phenyl ether	3.75 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00014	04/05/24	10/05/23	MeCl2, Lot 63209	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_4_00031	03/05/24	10/18/23	MeCl2, Lot 63209	2 mL	MSS_8270_APWS_00016	120 uL	Benzidine	45 ppm
							1,3,5-Trinitrobenzene	15 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dinitrobenzene	15 ppm
							1-Naphthylamine	15 ppm
							2-Acetylaminofluorene	15 ppm
							2-Naphthylamine	15 ppm
							2-Picoline	15 ppm
							2-Toluidine	15 ppm
							3,3'-Dimethylbenzidine	15 ppm
							4,4'-Methylene bis(2-chloroaniline)	15 ppm
							4-Aminobiphenyl	15 ppm
							4-Nitroquinoline-1-oxide	15 ppm
							5-Nitro-o-toluidine	15 ppm
							Dibenz[a,h]acridine	15 ppm
							N-Nitrosodi-n-butylamine	15 ppm
							N-Nitrosodiethylamine	15 ppm
							N-Nitrosomethylethylamine	15 ppm
							N-Nitrosomorpholine	15 ppm
							N-Nitrosopiperidine	15 ppm
							N-Nitrosopyrrolidine	15 ppm
							p-Dimethylamino azobenzene	15 ppm
							p-Phenylene diamine	15 ppm
							Pentachloronitrobenzene	15 ppm
							Phenacetin	15 ppm
							Pronamide	15 ppm
							Quinoline	15 ppm
							1,4-Naphthoquinone	15 ppm
							1-Chloronaphthalene	15 ppm
							7,12-Dimethylbenz(a)anthracene	15 ppm
							Chlorobenzilate	15 ppm
							Dinoseb	15 ppm
							Ethyl methanesulfonate	15 ppm
							Hexachloropropene	15 ppm
							Isodrin	15 ppm
							Isosafrole Peak 1	2.4 ppm
							Isosafrole Peak 2	12.6 ppm
							Methyl methanesulfonate	15 ppm
							Pentachlorobenzene	15 ppm
							3-Methylcholanthrene	15 ppm
							6-Methylchrysene	15 ppm
							cis-Diallate	11.1 ppm
							Dimethoate	15 ppm
							Disulfoton	15 ppm
							Ethyl Parathion	15 ppm
							Methyl parathion	15 ppm
							o,o',o''-Triethylphosphorothioate	15 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	15 ppm
							Phorate	15 ppm
							Safrole, Total	15 ppm
							Sulfotepp	15 ppm
							trans-Diallate	3.9 ppm
					MSS_8270_WS_00017	120 uL	2,4,6-Tribromophenol (Surr)	30 ppm
							2-Fluorobiphenyl (Surr)	30 ppm
							2-Fluorophenol (Surr)	30 ppm
							Nitrobenzene-d5 (Surr)	30 ppm
							p-Terphenyl-d14 (Surr)	30 ppm
							Phenol-d5 (Surr)	30 ppm
							Dibenz[a,j]acridine	15 ppm
							1,1'-Biphenyl	15 ppm
							1,2,4,5-Tetrachlorobenzene	15 ppm
							1,2,4-Trichlorobenzene	15 ppm
							1,2-Dichlorobenzene	15 ppm
							1,2-Diphenylhydrazine	15 ppm
							1,3-Dichlorobenzene	15 ppm
							1,3-Dinitrobenzene	15 ppm
							1,4-Dichlorobenzene	15 ppm
							1,4-Dioxane	15 ppm
							1-Methylnaphthalene	15 ppm
							2,3,4,6-Tetrachlorophenol	15 ppm
							2,4,5-Trichlorophenol	15 ppm
							2,4,6-Trichlorophenol	15 ppm
							2,4-Dichlorophenol	15 ppm
							2,4-Dimethylphenol	15 ppm
							2,4-Dinitrophenol	45 ppm
							2,4-Dinitrotoluene	15 ppm
							2,6-Dichlorophenol	15 ppm
							2,6-Dinitrotoluene	15 ppm
							2-Chloronaphthalene	15 ppm
							2-Chlorophenol	15 ppm
							2-Methylnaphthalene	15 ppm
							2-Nitroaniline	15 ppm
							2-Nitrophenol	15 ppm
							3-Nitroaniline	15 ppm
							4,6-Dinitro-2-methylphenol	30 ppm
							4-Bromophenyl-phenylether	15 ppm
							4-Chloro-3-methylphenol	15 ppm
							4-Chloroaniline	15 ppm
							4-Chlorophenyl-phenyl ether	15 ppm
							4-Nitroaniline	15 ppm
							4-Nitrophenol	30 ppm
							Acenaphthene	15 ppm
							Acenaphthylene	15 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	15 ppm
							Aniline	15 ppm
							Anthracene	15 ppm
							Benzo[a]anthracene	15 ppm
							Benzo[a]pyrene	15 ppm
							Benzo[b]fluoranthene	15 ppm
							Benzo[g,h,i]perylene	15 ppm
							Benzo[k]fluoranthene	15 ppm
							Benzyl alcohol	15 ppm
							bis (2-chloroisopropyl) ether	15 ppm
							Bis(2-chloroethoxy)methane	15 ppm
							Bis(2-chloroethyl)ether	15 ppm
							Bis(2-ethylhexyl) phthalate	15 ppm
							Butyl benzyl phthalate	15 ppm
							Carbazole	15 ppm
							Chrysene	15 ppm
							Di-n-butyl phthalate	15 ppm
							Di-n-octyl phthalate	15 ppm
							Dibenz(a,h)anthracene	15 ppm
							Dibenzofuran	15 ppm
							Diethyl phthalate	15 ppm
							Dimethyl phthalate	15 ppm
							Fluoranthene	15 ppm
							Fluorene	15 ppm
							Hexachlorobenzene	15 ppm
							Hexachlorobutadiene	15 ppm
							Hexachlorocyclopentadiene	15 ppm
							Hexachloroethane	15 ppm
							Indeno[1,2,3-cd]pyrene	15 ppm
							Isophorone	15 ppm
							m & p-Cresol	15 ppm
							N-Nitrosodi-n-propylamine	15 ppm
							N-Nitrosodimethylamine	15 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	12.75 ppm
							Naphthalene	15 ppm
							Nitrobenzene	15 ppm
							o-Cresol	15 ppm
							Pentachlorophenol	30 ppm
							Phenanthrene	15 ppm
							Phenol	15 ppm
							Pyrene	15 ppm
							Pyridine	30 ppm
							3,3'-Dichlorobenzidine	15 ppm
							Benzidine	45 ppm
							Alpha-Terpineol	15 ppm
							Dimethylformamide	15 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Octachlorostyrene	15 ppm
							Phenyl ether	15 ppm
					MSS_AB_24DNP_00007	30 uL	2,4-Dinitrophenol	45 ppm
					MSS_FV8270_IS_00006	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00012	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00012	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00008	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00012	06/30/24		Restek, Lot A0198786		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00012	03/31/24		Restek, Lot A0196332		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00008	03/31/24		Restek, Lot A0195409		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00017	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_8270_SURR_00005	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00006	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00013	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00010	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00005	06/30/26	Sigma- Aldrich, Lot LRAC5703			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00006	03/31/26	Restek, Lot A0195365			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00013	09/30/24	Restek, Lot A0195772			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_5_00036	06/30/23	03/22/23	MeCl2, Lot 226679	3 mL	MSS_BAS_WS_00010	225 uL	Atrazine	7.5 ppm
							Benzaldehyde	7.5 ppm
							Caprolactam	7.5 ppm
					MSS_FV8270_5_00035	750 uL	Benzidine	22.5 ppm
							1,3,5-Trinitrobenzene	7.5 ppm
							1,4-Dinitrobenzene	7.5 ppm
							1-Naphthylamine	7.5 ppm
							2-Acetylaminofluorene	7.5 ppm
							2-Naphthylamine	7.5 ppm
							2-Picoline	7.5 ppm
							2-Toluidine	7.5 ppm
							3,3'-Dimethylbenzidine	7.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	7.5 ppm
							4-Aminobiphenyl	7.5 ppm
							4-Nitroquinoline-1-oxide	7.5 ppm
							5-Nitro-o-toluidine	7.5 ppm
							Dibenz[a,h]acridine	7.5 ppm
							N-Nitrosodi-n-butylamine	7.5 ppm
							N-Nitrosodiethylamine	7.5 ppm
							N-Nitrosomethylethylamine	7.5 ppm
							N-Nitrosomorpholine	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosopiperidine	7.5 ppm
							N-Nitrosopyrrolidine	7.5 ppm
							p-Dimethylamino azobenzene	7.5 ppm
							p-Phenylene diamine	7.5 ppm
							Pentachloronitrobenzene	7.5 ppm
							Phenacetin	7.5 ppm
							Pronamide	7.5 ppm
							Quinoline	7.5 ppm
							1,4-Naphthoquinone	7.5 ppm
							1-Chloronaphthalene	7.5 ppm
							7,12-Dimethylbenz(a)anthracene	7.5 ppm
							Chlorobenzilate	7.5 ppm
							Dinoseb	7.5 ppm
							Ethyl methanesulfonate	7.5 ppm
							Hexachloropropene	7.5 ppm
							Isodrin	7.5 ppm
							Isosafrole Peak 1	1.2 ppm
							Isosafrole Peak 2	6.3 ppm
							Methyl methanesulfonate	7.5 ppm
							Pentachlorobenzene	7.5 ppm
							3-Methylcholanthrene	7.5 ppm
							6-Methylchrysene	7.5 ppm
							cis-Diallate	5.55 ppm
							Dimethoate	7.5 ppm
							Disulfoton	7.5 ppm
							Ethyl Parathion	7.5 ppm
							Methyl parathion	7.5 ppm
							o,o',o''-Triethylphosphorothioate	7.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	7.5 ppm
							Phorate	7.5 ppm
							Safrole, Total	7.5 ppm
							Sulfotepp	7.5 ppm
							trans-Diallate	1.95 ppm
							2,4,6-Tribromophenol (Surr)	15 ppm
							2-Fluorobiphenyl (Surr)	15 ppm
							2-Fluorophenol (Surr)	15 ppm
							Nitrobenzene-d5 (Surr)	15 ppm
							p-Terphenyl-d14 (Surr)	15 ppm
							Phenol-d5 (Surr)	15 ppm
							Dibenz[a,j]acridine	7.5 ppm
							1,1'-Biphenyl	7.5 ppm
							1,2,4,5-Tetrachlorobenzene	7.5 ppm
							1,2,4-Trichlorobenzene	7.5 ppm
							1,2-Dichlorobenzene	7.5 ppm
							1,2-Diphenylhydrazine	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	7.5 ppm
							1,3-Dinitrobenzene	7.5 ppm
							1,4-Dichlorobenzene	7.5 ppm
							1,4-Dioxane	7.5 ppm
							1-Methylnaphthalene	7.5 ppm
							2,3,4,6-Tetrachlorophenol	7.5 ppm
							2,4,5-Trichlorophenol	7.5 ppm
							2,4,6-Trichlorophenol	7.5 ppm
							2,4-Dichlorophenol	7.5 ppm
							2,4-Dimethylphenol	7.5 ppm
							2,4-Dinitrophenol	17.5 ppm
							2,4-Dinitrotoluene	7.5 ppm
							2,6-Dichlorophenol	7.5 ppm
							2,6-Dinitrotoluene	7.5 ppm
							2-Chloronaphthalene	7.5 ppm
							2-Chlorophenol	7.5 ppm
							2-Methylnaphthalene	7.5 ppm
							2-Nitroaniline	7.5 ppm
							2-Nitrophenol	7.5 ppm
							3-Nitroaniline	7.5 ppm
							4,6-Dinitro-2-methylphenol	15 ppm
							4-Bromophenyl-phenylether	7.5 ppm
							4-Chloro-3-methylphenol	7.5 ppm
							4-Chloroaniline	7.5 ppm
							4-Chlorophenyl-phenyl ether	7.5 ppm
							4-Nitroaniline	7.5 ppm
							4-Nitrophenol	15 ppm
							Acenaphthene	7.5 ppm
							Acenaphthylene	7.5 ppm
							Acetophenone	7.5 ppm
							Aniline	7.5 ppm
							Anthracene	7.5 ppm
							Benzo[a]anthracene	7.5 ppm
							Benzo[a]pyrene	7.5 ppm
							Benzo[b]fluoranthene	7.5 ppm
							Benzo[g,h,i]perylene	7.5 ppm
							Benzo[k]fluoranthene	7.5 ppm
							Benzyl alcohol	7.5 ppm
							bis (2-chloroisopropyl) ether	7.5 ppm
							Bis(2-chloroethoxy)methane	7.5 ppm
							Bis(2-chloroethyl)ether	7.5 ppm
							Bis(2-ethylhexyl) phthalate	7.5 ppm
							Butyl benzyl phthalate	7.5 ppm
							Carbazole	7.5 ppm
							Chrysene	7.5 ppm
							Di-n-butyl phthalate	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	7.5 ppm
							Dibenz(a,h)anthracene	7.5 ppm
							Dibenzofuran	7.5 ppm
							Diethyl phthalate	7.5 ppm
							Dimethyl phthalate	7.5 ppm
							Fluoranthene	7.5 ppm
							Fluorene	7.5 ppm
							Hexachlorobenzene	7.5 ppm
							Hexachlorobutadiene	7.5 ppm
							Hexachlorocyclopentadiene	7.5 ppm
							Hexachloroethane	7.5 ppm
							Indeno[1,2,3-cd]pyrene	7.5 ppm
							Isophorone	7.5 ppm
							m & p-Cresol	7.5 ppm
							N-Nitrosodi-n-propylamine	7.5 ppm
							N-Nitrosodimethylamine	7.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	6.375 ppm
							Naphthalene	7.5 ppm
							Nitrobenzene	7.5 ppm
							o-Cresol	7.5 ppm
							Pentachlorophenol	15 ppm
							Phenanthrene	7.5 ppm
							Phenol	7.5 ppm
							Pyrene	7.5 ppm
							Pyridine	15 ppm
							3,3'-Dichlorobenzidine	7.5 ppm
							Alpha-Terpineol	7.5 ppm
							Dimethylformamide	7.5 ppm
							Octachlorostyrene	7.5 ppm
							Phenyl ether	7.5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00010	06/30/23	03/22/23	MeCl2, Lot 226679	5 mL	OP_LCSmix2stk_00005	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00005	06/30/23		Restek, Lot A0179852		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_5_00035	08/31/23	03/22/23	MeCl2, Lot 226679	5 mL	MSS_8270_APWS_00014	600 uL	Benzidine	90 ppm
							1,3,5-Trinitrobenzene	30 ppm
							1,4-Dinitrobenzene	30 ppm
							1-Naphthylamine	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Acetylaminofluorene	30 ppm
							2-Naphthylamine	30 ppm
							2-Picoline	30 ppm
							2-Toluidine	30 ppm
							3,3'-Dimethylbenzidine	30 ppm
							4,4'-Methylene bis(2-chloroaniline)	30 ppm
							4-Aminobiphenyl	30 ppm
							4-Nitroquinoline-1-oxide	30 ppm
							5-Nitro-o-toluidine	30 ppm
							Dibenz[a,h]acridine	30 ppm
							N-Nitrosodi-n-butylamine	30 ppm
							N-Nitrosodiethylamine	30 ppm
							N-Nitrosomethylethylamine	30 ppm
							N-Nitrosomorpholine	30 ppm
							N-Nitrosopiperidine	30 ppm
							N-Nitrosopyrrolidine	30 ppm
							p-Dimethylamino azobenzene	30 ppm
							p-Phenylene diamine	30 ppm
							Pentachloronitrobenzene	30 ppm
							Phenacetin	30 ppm
							Pronamide	30 ppm
							Quinoline	30 ppm
							1,4-Naphthoquinone	30 ppm
							1-Chloronaphthalene	30 ppm
							7,12-Dimethylbenz(a)anthracene	30 ppm
							Chlorobenzilate	30 ppm
							Dinoseb	30 ppm
							Ethyl methanesulfonate	30 ppm
							Hexachloropropene	30 ppm
							Isodrin	30 ppm
							Isosafrole Peak 1	4.8 ppm
							Isosafrole Peak 2	25.2 ppm
							Methyl methanesulfonate	30 ppm
							Pentachlorobenzene	30 ppm
							3-Methylcholanthrene	30 ppm
							6-Methylchrysene	30 ppm
							cis-Diallate	22.2 ppm
							Dimethoate	30 ppm
							Disulfoton	30 ppm
							Ethyl Parathion	30 ppm
							Methyl parathion	30 ppm
							o,o',o''-Triethylphosphorothioate	30 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	30 ppm
							Phorate	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Safrole, Total	30 ppm
							Sulfotepp	30 ppm
							trans-Diallate	7.8 ppm
					MSS_8270_WS_00015	600 uL	2,4,6-Tribromophenol (Surr)	60 ppm
							2-Fluorobiphenyl (Surr)	60 ppm
							2-Fluorophenol (Surr)	60 ppm
							Nitrobenzene-d5 (Surr)	60 ppm
							p-Terphenyl-d14 (Surr)	60 ppm
							Phenol-d5 (Surr)	60 ppm
							Dibenz[a,j]acridine	30 ppm
							1,1'-Biphenyl	30 ppm
							1,2,4,5-Tetrachlorobenzene	30 ppm
							1,2,4-Trichlorobenzene	30 ppm
							1,2-Dichlorobenzene	30 ppm
							1,2-Diphenylhydrazine	30 ppm
							1,3-Dichlorobenzene	30 ppm
							1,3-Dinitrobenzene	30 ppm
							1,4-Dichlorobenzene	30 ppm
							1,4-Dioxane	30 ppm
							1-Methylnaphthalene	30 ppm
							2,3,4,6-Tetrachlorophenol	30 ppm
							2,4,5-Trichlorophenol	30 ppm
							2,4,6-Trichlorophenol	30 ppm
							2,4-Dichlorophenol	30 ppm
							2,4-Dimethylphenol	30 ppm
							2,4-Dinitrophenol	70 ppm
							2,4-Dinitrotoluene	30 ppm
							2,6-Dichlorophenol	30 ppm
							2,6-Dinitrotoluene	30 ppm
							2-Chloronaphthalene	30 ppm
							2-Chlorophenol	30 ppm
							2-Methylnaphthalene	30 ppm
							2-Nitroaniline	30 ppm
							2-Nitrophenol	30 ppm
							3-Nitroaniline	30 ppm
							4,6-Dinitro-2-methylphenol	60 ppm
							4-Bromophenyl-phenylether	30 ppm
							4-Chloro-3-methylphenol	30 ppm
							4-Chloroaniline	30 ppm
							4-Chlorophenyl-phenyl ether	30 ppm
							4-Nitroaniline	30 ppm
							4-Nitrophenol	60 ppm
							Acenaphthene	30 ppm
							Acenaphthylene	30 ppm
							Acetophenone	30 ppm
							Aniline	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	30 ppm
							Benzo[a]anthracene	30 ppm
							Benzo[a]pyrene	30 ppm
							Benzo[b]fluoranthene	30 ppm
							Benzo[g,h,i]perylene	30 ppm
							Benzo[k]fluoranthene	30 ppm
							Benzyl alcohol	30 ppm
							bis (2-chloroisopropyl) ether	30 ppm
							Bis(2-chloroethoxy)methane	30 ppm
							Bis(2-chloroethyl)ether	30 ppm
							Bis(2-ethylhexyl) phthalate	30 ppm
							Butyl benzyl phthalate	30 ppm
							Carbazole	30 ppm
							Chrysene	30 ppm
							Di-n-butyl phthalate	30 ppm
							Di-n-octyl phthalate	30 ppm
							Dibenz(a,h)anthracene	30 ppm
							Dibenzofuran	30 ppm
							Diethyl phthalate	30 ppm
							Dimethyl phthalate	30 ppm
							Fluoranthene	30 ppm
							Fluorene	30 ppm
							Hexachlorobenzene	30 ppm
							Hexachlorobutadiene	30 ppm
							Hexachlorocyclopentadiene	30 ppm
							Hexachloroethane	30 ppm
							Indeno[1,2,3-cd]pyrene	30 ppm
							Isophorone	30 ppm
							m & p-Cresol	30 ppm
							N-Nitrosodi-n-propylamine	30 ppm
							N-Nitrosodimethylamine	30 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	25.5 ppm
							Naphthalene	30 ppm
							Nitrobenzene	30 ppm
							o-Cresol	30 ppm
							Pentachlorophenol	60 ppm
							Phenanthrene	30 ppm
							Phenol	30 ppm
							Pyrene	30 ppm
							Pyridine	60 ppm
							3,3'-Dichlorobenzidine	30 ppm
							Benzidine	90 ppm
							Alpha-Terpineol	30 ppm
							Dimethylformamide	30 ppm
							Octachlorostyrene	30 ppm
							Phenyl ether	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_AB_24DNP_00007	50 uL	2,4-Dinitrophenol	70 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00009	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00015	09/22/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00004	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00004	08/31/24		Restek, Lot A0175669		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_5_00037	10/31/23	06/08/23	MeCl2, Lot 226055	3 mL	MSS_BAS_WS_00012	225 uL	Atrazine	7.5 ppm
							Benzaldehyde	7.5 ppm
							Caprolactam	7.5 ppm
					MSS_FV8270_5_00036	750 uL	Benzidine	22.5 ppm
							1,3,5-Trinitrobenzene	7.5 ppm
							1,4-Dinitrobenzene	7.5 ppm
							1-Naphthylamine	7.5 ppm
							2-Acetylaminofluorene	7.5 ppm
							2-Naphthylamine	7.5 ppm
							2-Picoline	7.5 ppm
							2-Toluidine	7.5 ppm
							3,3'-Dimethylbenzidine	7.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	7.5 ppm
							4-Aminobiphenyl	7.5 ppm
							4-Nitroquinoline-1-oxide	7.5 ppm
							5-Nitro-o-toluidine	7.5 ppm
							Dibenz[a,h]acridine	7.5 ppm
							N-Nitrosodi-n-butylamine	7.5 ppm
							N-Nitrosodiethylamine	7.5 ppm
							N-Nitrosomethylethylamine	7.5 ppm
							N-Nitrosomorpholine	7.5 ppm
							N-Nitrosopiperidine	7.5 ppm
							N-Nitrosopyrrolidine	7.5 ppm
							p-Dimethylamino azobenzene	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Phenylene diamine	7.5 ppm
							Pentachloronitrobenzene	7.5 ppm
							Phenacetin	7.5 ppm
							Pronamide	7.5 ppm
							Quinoline	7.5 ppm
							1,4-Naphthoquinone	7.5 ppm
							1-Chloronaphthalene	7.5 ppm
							7,12-Dimethylbenz(a)anthracene	7.5 ppm
							Chlorobenzilate	7.5 ppm
							Dinoseb	7.5 ppm
							Ethyl methanesulfonate	7.5 ppm
							Hexachloropropene	7.5 ppm
							Isodrin	7.5 ppm
							Isosafrole Peak 1	1.2 ppm
							Isosafrole Peak 2	6.3 ppm
							Methyl methanesulfonate	7.5 ppm
							Pentachlorobenzene	7.5 ppm
							3-Methylcholanthrene	7.5 ppm
							6-Methylchrysene	7.5 ppm
							cis-Diallate	5.55 ppm
							Dimethoate	7.5 ppm
							Disulfoton	7.5 ppm
							Ethyl Parathion	7.5 ppm
							Methyl parathion	7.5 ppm
							o,o',o''-Triethylphosphorothioate	7.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	7.5 ppm
							Phorate	7.5 ppm
							Safrole, Total	7.5 ppm
							Sulfotepp	7.5 ppm
							trans-Diallate	1.95 ppm
							2,4,6-Tribromophenol (Surr)	15 ppm
							2-Fluorobiphenyl (Surr)	15 ppm
							2-Fluorophenol (Surr)	15 ppm
							Nitrobenzene-d5 (Surr)	15 ppm
							p-Terphenyl-d14 (Surr)	15 ppm
							Phenol-d5 (Surr)	15 ppm
							Dibenz[a,j]acridine	7.5 ppm
							1,1'-Biphenyl	7.5 ppm
							1,2,4,5-Tetrachlorobenzene	7.5 ppm
							1,2,4-Trichlorobenzene	7.5 ppm
							1,2-Dichlorobenzene	7.5 ppm
							1,2-Diphenylhydrazine	7.5 ppm
							1,3-Dichlorobenzene	7.5 ppm
							1,3-Dinitrobenzene	7.5 ppm
							1,4-Dichlorobenzene	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	7.5 ppm
							1-Methylnaphthalene	7.5 ppm
							2,3,4,6-Tetrachlorophenol	7.5 ppm
							2,4,5-Trichlorophenol	7.5 ppm
							2,4,6-Trichlorophenol	7.5 ppm
							2,4-Dichlorophenol	7.5 ppm
							2,4-Dimethylphenol	7.5 ppm
							2,4-Dinitrophenol	17.5 ppm
							2,4-Dinitrotoluene	7.5 ppm
							2,6-Dichlorophenol	7.5 ppm
							2,6-Dinitrotoluene	7.5 ppm
							2-Chloronaphthalene	7.5 ppm
							2-Chlorophenol	7.5 ppm
							2-Methylnaphthalene	7.5 ppm
							2-Nitroaniline	7.5 ppm
							2-Nitrophenol	7.5 ppm
							3-Nitroaniline	7.5 ppm
							4,6-Dinitro-2-methylphenol	15 ppm
							4-Bromophenyl-phenylether	7.5 ppm
							4-Chloro-3-methylphenol	7.5 ppm
							4-Chloroaniline	7.5 ppm
							4-Chlorophenyl-phenyl ether	7.5 ppm
							4-Nitroaniline	7.5 ppm
							4-Nitrophenol	15 ppm
							Acenaphthene	7.5 ppm
							Acenaphthylene	7.5 ppm
							Acetophenone	7.5 ppm
							Aniline	7.5 ppm
							Anthracene	7.5 ppm
							Benzo[a]anthracene	7.5 ppm
							Benzo[a]pyrene	7.5 ppm
							Benzo[b]fluoranthene	7.5 ppm
							Benzo[g,h,i]perylene	7.5 ppm
							Benzo[k]fluoranthene	7.5 ppm
							Benzyl alcohol	7.5 ppm
							bis (2-chloroisopropyl) ether	7.5 ppm
							Bis(2-chloroethoxy)methane	7.5 ppm
							Bis(2-chloroethyl)ether	7.5 ppm
							Bis(2-ethylhexyl) phthalate	7.5 ppm
							Butyl benzyl phthalate	7.5 ppm
							Carbazole	7.5 ppm
							Chrysene	7.5 ppm
							Di-n-butyl phthalate	7.5 ppm
							Di-n-octyl phthalate	7.5 ppm
							Dibenz(a,h)anthracene	7.5 ppm
							Dibenzofuran	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	7.5 ppm
							Dimethyl phthalate	7.5 ppm
							Fluoranthene	7.5 ppm
							Fluorene	7.5 ppm
							Hexachlorobenzene	7.5 ppm
							Hexachlorobutadiene	7.5 ppm
							Hexachlorocyclopentadiene	7.5 ppm
							Hexachloroethane	7.5 ppm
							Indeno[1,2,3-cd]pyrene	7.5 ppm
							Isophorone	7.5 ppm
							m & p-Cresol	7.5 ppm
							N-Nitrosodi-n-propylamine	7.5 ppm
							N-Nitrosodimethylamine	7.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	6.375 ppm
							Naphthalene	7.5 ppm
							Nitrobenzene	7.5 ppm
							o-Cresol	7.5 ppm
							Pentachlorophenol	15 ppm
							Phenanthrene	7.5 ppm
							Phenol	7.5 ppm
							Pyrene	7.5 ppm
							Pyridine	15 ppm
							3,3'-Dichlorobenzidine	7.5 ppm
							Alpha-Terpineol	7.5 ppm
							Dimethylformamide	7.5 ppm
							Octachlorostyrene	7.5 ppm
							Phenyl ether	7.5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00012	12/08/23	06/08/23	MeCl2, Lot 226055	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_5_00036	10/31/23	06/08/23	MeCl2, Lot 226055	5 mL	MSS_8270_APWS_00015	600 uL	Benzidine	90 ppm
							1,3,5-Trinitrobenzene	30 ppm
							1,4-Dinitrobenzene	30 ppm
							1-Naphthylamine	30 ppm
							2-Acetylaminofluorene	30 ppm
							2-Naphthylamine	30 ppm
							2-Picoline	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Toluidine	30 ppm
							3,3'-Dimethylbenzidine	30 ppm
							4,4'-Methylene bis(2-chloroaniline)	30 ppm
							4-Aminobiphenyl	30 ppm
							4-Nitroquinoline-1-oxide	30 ppm
							5-Nitro-o-toluidine	30 ppm
							Dibenz[a,h]acridine	30 ppm
							N-Nitrosodi-n-butylamine	30 ppm
							N-Nitrosodiethylamine	30 ppm
							N-Nitrosomethylethylamine	30 ppm
							N-Nitrosomorpholine	30 ppm
							N-Nitrosopiperidine	30 ppm
							N-Nitrosopyrrolidine	30 ppm
							p-Dimethylamino azobenzene	30 ppm
							p-Phenylene diamine	30 ppm
							Pentachloronitrobenzene	30 ppm
							Phenacetin	30 ppm
							Pronamide	30 ppm
							Quinoline	30 ppm
							1,4-Naphthoquinone	30 ppm
							1-Chloronaphthalene	30 ppm
							7,12-Dimethylbenz(a)anthracene	30 ppm
							Chlorobenzilate	30 ppm
							Dinoseb	30 ppm
							Ethyl methanesulfonate	30 ppm
							Hexachloropropene	30 ppm
							Isodrin	30 ppm
							Isosafrole Peak 1	4.8 ppm
							Isosafrole Peak 2	25.2 ppm
							Methyl methanesulfonate	30 ppm
							Pentachlorobenzene	30 ppm
							3-Methylcholanthrene	30 ppm
							6-Methylchrysene	30 ppm
							cis-Diallate	22.2 ppm
							Dimethoate	30 ppm
							Disulfoton	30 ppm
							Ethyl Parathion	30 ppm
							Methyl parathion	30 ppm
							o,o',o''-Triethylphosphorothioate	30 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	30 ppm
							Phorate	30 ppm
							Safrole, Total	30 ppm
							Sulfotepp	30 ppm
							trans-Diallate	7.8 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_8270_WS_00016	600 uL	2,4,6-Tribromophenol (Surr)	60 ppm
							2-Fluorobiphenyl (Surr)	60 ppm
							2-Fluorophenol (Surr)	60 ppm
							Nitrobenzene-d5 (Surr)	60 ppm
							p-Terphenyl-d14 (Surr)	60 ppm
							Phenol-d5 (Surr)	60 ppm
							Dibenz[a,j]acridine	30 ppm
							1,1'-Biphenyl	30 ppm
							1,2,4,5-Tetrachlorobenzene	30 ppm
							1,2,4-Trichlorobenzene	30 ppm
							1,2-Dichlorobenzene	30 ppm
							1,2-Diphenylhydrazine	30 ppm
							1,3-Dichlorobenzene	30 ppm
							1,3-Dinitrobenzene	30 ppm
							1,4-Dichlorobenzene	30 ppm
							1,4-Dioxane	30 ppm
							1-Methylnaphthalene	30 ppm
							2,3,4,6-Tetrachlorophenol	30 ppm
							2,4,5-Trichlorophenol	30 ppm
							2,4,6-Trichlorophenol	30 ppm
							2,4-Dichlorophenol	30 ppm
							2,4-Dimethylphenol	30 ppm
							2,4-Dinitrophenol	70 ppm
							2,4-Dinitrotoluene	30 ppm
							2,6-Dichlorophenol	30 ppm
							2,6-Dinitrotoluene	30 ppm
							2-Chloronaphthalene	30 ppm
							2-Chlorophenol	30 ppm
							2-Methylnaphthalene	30 ppm
							2-Nitroaniline	30 ppm
							2-Nitrophenol	30 ppm
							3-Nitroaniline	30 ppm
							4,6-Dinitro-2-methylphenol	60 ppm
							4-Bromophenyl-phenylether	30 ppm
							4-Chloro-3-methylphenol	30 ppm
							4-Chloroaniline	30 ppm
							4-Chlorophenyl-phenyl ether	30 ppm
							4-Nitroaniline	30 ppm
							4-Nitrophenol	60 ppm
							Acenaphthene	30 ppm
							Acenaphthylene	30 ppm
							Acetophenone	30 ppm
							Aniline	30 ppm
							Anthracene	30 ppm
							Benzo[a]anthracene	30 ppm
							Benzo[a]pyrene	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	30 ppm
							Benzo[g,h,i]perylene	30 ppm
							Benzo[k]fluoranthene	30 ppm
							Benzyl alcohol	30 ppm
							bis (2-chloroisopropyl) ether	30 ppm
							Bis(2-chloroethoxy)methane	30 ppm
							Bis(2-chloroethyl)ether	30 ppm
							Bis(2-ethylhexyl) phthalate	30 ppm
							Butyl benzyl phthalate	30 ppm
							Carbazole	30 ppm
							Chrysene	30 ppm
							Di-n-butyl phthalate	30 ppm
							Di-n-octyl phthalate	30 ppm
							Dibenz(a,h)anthracene	30 ppm
							Dibenzofuran	30 ppm
							Diethyl phthalate	30 ppm
							Dimethyl phthalate	30 ppm
							Fluoranthene	30 ppm
							Fluorene	30 ppm
							Hexachlorobenzene	30 ppm
							Hexachlorobutadiene	30 ppm
							Hexachlorocyclopentadiene	30 ppm
							Hexachloroethane	30 ppm
							Indeno[1,2,3-cd]pyrene	30 ppm
							Isophorone	30 ppm
							m & p-Cresol	30 ppm
							N-Nitrosodi-n-propylamine	30 ppm
							N-Nitrosodimethylamine	30 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	25.5 ppm
							Naphthalene	30 ppm
							Nitrobenzene	30 ppm
							o-Cresol	30 ppm
							Pentachlorophenol	60 ppm
							Phenanthrene	30 ppm
							Phenol	30 ppm
							Pyrene	30 ppm
							Pyridine	60 ppm
							3,3'-Dichlorobenzidine	30 ppm
							Benzidine	90 ppm
							Alpha-Terpineol	30 ppm
							Dimethylformamide	30 ppm
							Octachlorostyrene	30 ppm
							Phenyl ether	30 ppm
					MSS_AB_24DNP_00007	50 uL	2,4-Dinitrophenol	70 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00005	05/31/25		Restek, Lot A0184892		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_5_00037	10/31/23	06/08/23	MeCl2, Lot 226055	3 mL	MSS_FV8270_5_00036	750 uL	Diallate	7.5 ppm
.MSS_FV8270_5_00036	10/31/23	06/08/23	MeCl2, Lot 226055	5 mL	MSS_8270_APWS_00015	600 uL	Diallate	30 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	OP_RES_APPX4_00008	2500 uL	Diallate	250 ppm
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		Diallate	1000 ug/mL
MSS_RV8270_5_00039	03/05/24	10/19/23	MeCl2, Lot 63209	3 mL	MSS_BAS_WS_00014	225 uL	Atrazine	7.5 ppm
							Benzaldehyde	7.5 ppm
							Caprolactam	7.5 ppm
					MSS_FV8270_5_00038	750 uL	Benzidine	22.5 ppm
							1,3,5-Trinitrobenzene	7.5 ppm
							1,4-Dinitrobenzene	7.5 ppm
							1-Naphthylamine	7.5 ppm
							2-Acetylaminofluorene	7.5 ppm
							2-Naphthylamine	7.5 ppm
							2-Picoline	7.5 ppm
							2-Toluidine	7.5 ppm
							3,3'-Dimethylbenzidine	7.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	7.5 ppm
							4-Aminobiphenyl	7.5 ppm
							4-Nitroquinoline-1-oxide	7.5 ppm
							5-Nitro-o-toluidine	7.5 ppm
							Dibenz[a,h]acridine	7.5 ppm
							N-Nitrosodi-n-butylamine	7.5 ppm
							N-Nitrosodiethylamine	7.5 ppm
							N-Nitrosomethylethylamine	7.5 ppm
							N-Nitrosomorpholine	7.5 ppm
							N-Nitrosopiperidine	7.5 ppm
							N-Nitrosopyrrolidine	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Dimethylamino azobenzene	7.5 ppm
							p-Phenylene diamine	7.5 ppm
							Pentachloronitrobenzene	7.5 ppm
							Phenacetin	7.5 ppm
							Pronamide	7.5 ppm
							Quinoline	7.5 ppm
							1,4-Naphthoquinone	7.5 ppm
							1-Chloronaphthalene	7.5 ppm
							7,12-Dimethylbenz(a)anthracene	7.5 ppm
							Chlorobenzilate	7.5 ppm
							Dinoseb	7.5 ppm
							Ethyl methanesulfonate	7.5 ppm
							Hexachloropropene	7.5 ppm
							Isodrin	7.5 ppm
							Isosafrole Peak 1	1.2 ppm
							Isosafrole Peak 2	6.3 ppm
							Methyl methanesulfonate	7.5 ppm
							Pentachlorobenzene	7.5 ppm
							3-Methylcholanthrene	7.5 ppm
							6-Methylchrysene	7.5 ppm
							cis-Diallate	5.55 ppm
							Dimethoate	7.5 ppm
							Disulfoton	7.5 ppm
							Ethyl Parathion	7.5 ppm
							Methyl parathion	7.5 ppm
							o,o',o''-Triethylphosphorothioate	7.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	7.5 ppm
							Phorate	7.5 ppm
							Safrole, Total	7.5 ppm
							Sulfotepp	7.5 ppm
							trans-Diallate	1.95 ppm
							2,4,6-Tribromophenol (Surr)	15 ppm
							2-Fluorobiphenyl (Surr)	15 ppm
							2-Fluorophenol (Surr)	15 ppm
							Nitrobenzene-d5 (Surr)	15 ppm
							p-Terphenyl-d14 (Surr)	15 ppm
							Phenol-d5 (Surr)	15 ppm
							Dibenz[a,j]acridine	7.5 ppm
							1,1'-Biphenyl	7.5 ppm
							1,2,4,5-Tetrachlorobenzene	7.5 ppm
							1,2,4-Trichlorobenzene	7.5 ppm
							1,2-Dichlorobenzene	7.5 ppm
							1,2-Diphenylhydrazine	7.5 ppm
							1,3-Dichlorobenzene	7.5 ppm
							1,3-Dinitrobenzene	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	7.5 ppm
							1,4-Dioxane	7.5 ppm
							1-Methylnaphthalene	7.5 ppm
							2,3,4,6-Tetrachlorophenol	7.5 ppm
							2,4,5-Trichlorophenol	7.5 ppm
							2,4,6-Trichlorophenol	7.5 ppm
							2,4-Dichlorophenol	7.5 ppm
							2,4-Dimethylphenol	7.5 ppm
							2,4-Dinitrophenol	17.5 ppm
							2,4-Dinitrotoluene	7.5 ppm
							2,6-Dichlorophenol	7.5 ppm
							2,6-Dinitrotoluene	7.5 ppm
							2-Chloronaphthalene	7.5 ppm
							2-Chlorophenol	7.5 ppm
							2-Methylnaphthalene	7.5 ppm
							2-Nitroaniline	7.5 ppm
							2-Nitrophenol	7.5 ppm
							3-Nitroaniline	7.5 ppm
							4,6-Dinitro-2-methylphenol	15 ppm
							4-Bromophenyl-phenylether	7.5 ppm
							4-Chloro-3-methylphenol	7.5 ppm
							4-Chloroaniline	7.5 ppm
							4-Chlorophenyl-phenyl ether	7.5 ppm
							4-Nitroaniline	7.5 ppm
							4-Nitrophenol	15 ppm
							Acenaphthene	7.5 ppm
							Acenaphthylene	7.5 ppm
							Acetophenone	7.5 ppm
							Aniline	7.5 ppm
							Anthracene	7.5 ppm
							Benzo[a]anthracene	7.5 ppm
							Benzo[a]pyrene	7.5 ppm
							Benzo[b]fluoranthene	7.5 ppm
							Benzo[g,h,i]perylene	7.5 ppm
							Benzo[k]fluoranthene	7.5 ppm
							Benzyl alcohol	7.5 ppm
							bis (2-chloroisopropyl) ether	7.5 ppm
							Bis(2-chloroethoxy)methane	7.5 ppm
							Bis(2-chloroethyl)ether	7.5 ppm
							Bis(2-ethylhexyl) phthalate	7.5 ppm
							Butyl benzyl phthalate	7.5 ppm
							Carbazole	7.5 ppm
							Chrysene	7.5 ppm
							Di-n-butyl phthalate	7.5 ppm
							Di-n-octyl phthalate	7.5 ppm
							Dibenz(a,h)anthracene	7.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzofuran	7.5 ppm
							Diethyl phthalate	7.5 ppm
							Dimethyl phthalate	7.5 ppm
							Fluoranthene	7.5 ppm
							Fluorene	7.5 ppm
							Hexachlorobenzene	7.5 ppm
							Hexachlorobutadiene	7.5 ppm
							Hexachlorocyclopentadiene	7.5 ppm
							Hexachloroethane	7.5 ppm
							Indeno[1,2,3-cd]pyrene	7.5 ppm
							Isophorone	7.5 ppm
							m & p-Cresol	7.5 ppm
							N-Nitrosodi-n-propylamine	7.5 ppm
							N-Nitrosodimethylamine	7.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	6.375 ppm
							Naphthalene	7.5 ppm
							Nitrobenzene	7.5 ppm
							o-Cresol	7.5 ppm
							Pentachlorophenol	15 ppm
							Phenanthrene	7.5 ppm
							Phenol	7.5 ppm
							Pyrene	7.5 ppm
							Pyridine	15 ppm
							3,3'-Dichlorobenzidine	7.5 ppm
							Alpha-Terpineol	7.5 ppm
							Dimethylformamide	7.5 ppm
							Octachlorostyrene	7.5 ppm
							Phenyl ether	7.5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00014	04/05/24	10/05/23	MeCl2, Lot 63209	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_5_00038	03/05/24	10/18/23	MeCl2, Lot 6320	5 mL	MSS_8270_APWS_00016	600 uL	Benzidine	90 ppm
							1,3,5-Trinitrobenzene	30 ppm
							1,4-Dinitrobenzene	30 ppm
							1-Naphthylamine	30 ppm
							2-Acetylaminofluorene	30 ppm
							2-Naphthylamine	30 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Picoline	30 ppm
							2-Toluidine	30 ppm
							3,3'-Dimethylbenzidine	30 ppm
							4,4'-Methylene bis(2-chloroaniline)	30 ppm
							4-Aminobiphenyl	30 ppm
							4-Nitroquinoline-1-oxide	30 ppm
							5-Nitro-o-toluidine	30 ppm
							Dibenz[a,h]acridine	30 ppm
							N-Nitrosodi-n-butylamine	30 ppm
							N-Nitrosodiethylamine	30 ppm
							N-Nitrosomethylethylamine	30 ppm
							N-Nitrosomorpholine	30 ppm
							N-Nitrosopiperidine	30 ppm
							N-Nitrosopyrrolidine	30 ppm
							p-Dimethylamino azobenzene	30 ppm
							p-Phenylene diamine	30 ppm
							Pentachloronitrobenzene	30 ppm
							Phenacetin	30 ppm
							Pronamide	30 ppm
							Quinoline	30 ppm
							1,4-Naphthoquinone	30 ppm
							1-Chloronaphthalene	30 ppm
							7,12-Dimethylbenz(a)anthracene	30 ppm
							Chlorobenzilate	30 ppm
							Dinoseb	30 ppm
							Ethyl methanesulfonate	30 ppm
							Hexachloropropene	30 ppm
							Isodrin	30 ppm
							Isosafrole Peak 1	4.8 ppm
							Isosafrole Peak 2	25.2 ppm
							Methyl methanesulfonate	30 ppm
							Pentachlorobenzene	30 ppm
							3-Methylcholanthrene	30 ppm
							6-Methylchrysene	30 ppm
							cis-Diallate	22.2 ppm
							Dimethoate	30 ppm
							Disulfoton	30 ppm
							Ethyl Parathion	30 ppm
							Methyl parathion	30 ppm
							o,o',o''-Triethylphosphorothioate	30 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	30 ppm
							Phorate	30 ppm
							Safrole, Total	30 ppm
							Sulfotepp	30 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-Diallate	7.8 ppm
					MSS_8270_WS_00017	600 uL	2,4,6-Tribromophenol (Surr)	60 ppm
							2-Fluorobiphenyl (Surr)	60 ppm
							2-Fluorophenol (Surr)	60 ppm
							Nitrobenzene-d5 (Surr)	60 ppm
							p-Terphenyl-d14 (Surr)	60 ppm
							Phenol-d5 (Surr)	60 ppm
							Dibenz[a,j]acridine	30 ppm
							1,1'-Biphenyl	30 ppm
							1,2,4,5-Tetrachlorobenzene	30 ppm
							1,2,4-Trichlorobenzene	30 ppm
							1,2-Dichlorobenzene	30 ppm
							1,2-Diphenylhydrazine	30 ppm
							1,3-Dichlorobenzene	30 ppm
							1,3-Dinitrobenzene	30 ppm
							1,4-Dichlorobenzene	30 ppm
							1,4-Dioxane	30 ppm
							1-Methylnaphthalene	30 ppm
							2,3,4,6-Tetrachlorophenol	30 ppm
							2,4,5-Trichlorophenol	30 ppm
							2,4,6-Trichlorophenol	30 ppm
							2,4-Dichlorophenol	30 ppm
							2,4-Dimethylphenol	30 ppm
							2,4-Dinitrophenol	70 ppm
							2,4-Dinitrotoluene	30 ppm
							2,6-Dichlorophenol	30 ppm
							2,6-Dinitrotoluene	30 ppm
							2-Chloronaphthalene	30 ppm
							2-Chlorophenol	30 ppm
							2-Methylnaphthalene	30 ppm
							2-Nitroaniline	30 ppm
							2-Nitrophenol	30 ppm
							3-Nitroaniline	30 ppm
							4,6-Dinitro-2-methylphenol	60 ppm
							4-Bromophenyl-phenylether	30 ppm
							4-Chloro-3-methylphenol	30 ppm
							4-Chloroaniline	30 ppm
							4-Chlorophenyl-phenyl ether	30 ppm
							4-Nitroaniline	30 ppm
							4-Nitrophenol	60 ppm
							Acenaphthene	30 ppm
							Acenaphthylene	30 ppm
							Acetophenone	30 ppm
							Aniline	30 ppm
							Anthracene	30 ppm
							Benzo[a]anthracene	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	30 ppm
							Benzo[b]fluoranthene	30 ppm
							Benzo[g,h,i]perylene	30 ppm
							Benzo[k]fluoranthene	30 ppm
							Benzyl alcohol	30 ppm
							bis (2-chloroisopropyl) ether	30 ppm
							Bis(2-chloroethoxy)methane	30 ppm
							Bis(2-chloroethyl)ether	30 ppm
							Bis(2-ethylhexyl) phthalate	30 ppm
							Butyl benzyl phthalate	30 ppm
							Carbazole	30 ppm
							Chrysene	30 ppm
							Di-n-butyl phthalate	30 ppm
							Di-n-octyl phthalate	30 ppm
							Dibenz(a,h)anthracene	30 ppm
							Dibenzofuran	30 ppm
							Diethyl phthalate	30 ppm
							Dimethyl phthalate	30 ppm
							Fluoranthene	30 ppm
							Fluorene	30 ppm
							Hexachlorobenzene	30 ppm
							Hexachlorobutadiene	30 ppm
							Hexachlorocyclopentadiene	30 ppm
							Hexachloroethane	30 ppm
							Indeno[1,2,3-cd]pyrene	30 ppm
							Isophorone	30 ppm
							m & p-Cresol	30 ppm
							N-Nitrosodi-n-propylamine	30 ppm
							N-Nitrosodimethylamine	30 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	25.5 ppm
							Naphthalene	30 ppm
							Nitrobenzene	30 ppm
							o-Cresol	30 ppm
							Pentachlorophenol	60 ppm
							Phenanthrene	30 ppm
							Phenol	30 ppm
							Pyrene	30 ppm
							Pyridine	60 ppm
							3,3'-Dichlorobenzidine	30 ppm
							Benzidine	90 ppm
							Alpha-Terpineol	30 ppm
							Dimethylformamide	30 ppm
							Octachlorostyrene	30 ppm
							Phenyl ether	30 ppm
					MSS_AB_24DNP_00007	50 uL	2,4-Dinitrophenol	70 ppm
					MSS_FV8270_IS_00006	100 uL	1,4-Dichlorobenzene-d4	20 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00012	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00012	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00008	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00012	06/30/24		Restek, Lot A0198786		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00012	03/31/24		Restek, Lot A0196332		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00008	03/31/24		Restek, Lot A0195409		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00017	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_8270_SURR_00005	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00006	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00013	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00010	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00005	06/30/26		Sigma- Aldrich, Lot LRAC5703		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00006	03/31/26		Restek, Lot A0195365		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00013	09/30/24		Restek, Lot A0195772		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_AB_24DNP_00007	12/09/25		Absolute, Lot 120920		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_6_00042	06/30/23	03/22/23	MeCl2, Lot 226679	5 mL	MSS_BAS_WS_00010	625 uL	Atrazine	12.5 ppm
							Benzaldehyde	12.5 ppm
							Caprolactam	12.5 ppm
					MSS_FV8270_6_00049	1250 uL	Benzidine	37.5 ppm
							1,3,5-Trinitrobenzene	12.5 ppm
							1,4-Dinitrobenzene	12.5 ppm
							1-Naphthylamine	12.5 ppm
							2-Acetylaminofluorene	12.5 ppm
							2-Naphthylamine	12.5 ppm
							2-Picoline	12.5 ppm
							2-Toluidine	12.5 ppm
							3,3'-Dimethylbenzidine	12.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	12.5 ppm
							4-Aminobiphenyl	12.5 ppm
							4-Nitroquinoline-1-oxide	12.5 ppm
							5-Nitro-o-toluidine	12.5 ppm
							Dibenz[a,h]acridine	12.5 ppm
							N-Nitrosodi-n-butylamine	12.5 ppm
							N-Nitrosodiethylamine	12.5 ppm
							N-Nitrosomethylethylamine	12.5 ppm
							N-Nitrosomorpholine	12.5 ppm
							N-Nitrosopiperidine	12.5 ppm
							N-Nitrosopyrrolidine	12.5 ppm
							p-Dimethylamino azobenzene	12.5 ppm
							p-Phenylene diamine	12.5 ppm
							Pentachloronitrobenzene	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenacetin	12.5 ppm
							Pronamide	12.5 ppm
							Quinoline	12.5 ppm
							1,4-Naphthoquinone	12.5 ppm
							1-Chloronaphthalene	12.5 ppm
							7,12-Dimethylbenz(a)anthracene	12.5 ppm
							Chlorobenzilate	12.5 ppm
							Dinoseb	12.5 ppm
							Ethyl methanesulfonate	12.5 ppm
							Hexachloropropene	12.5 ppm
							Isodrin	12.5 ppm
							Isosafrole Peak 1	2 ppm
							Isosafrole Peak 2	10.5 ppm
							Methyl methanesulfonate	12.5 ppm
							Pentachlorobenzene	12.5 ppm
							3-Methylcholanthrene	12.5 ppm
							6-Methylchrysene	12.5 ppm
							cis-Diallate	9.25 ppm
							Dimethoate	12.5 ppm
							Disulfoton	12.5 ppm
							Ethyl Parathion	12.5 ppm
							Methyl parathion	12.5 ppm
							o,o',o''-Triethylphosphorothioate	12.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	12.5 ppm
							Phorate	12.5 ppm
							Safrole, Total	12.5 ppm
							Sulfotepp	12.5 ppm
							trans-Diallate	3.25 ppm
							2,4,6-Tribromophenol (Surr)	25 ppm
							2-Fluorobiphenyl (Surr)	25 ppm
							2-Fluorophenol (Surr)	25 ppm
							Nitrobenzene-d5 (Surr)	25 ppm
							p-Terphenyl-d14 (Surr)	25 ppm
							Phenol-d5 (Surr)	25 ppm
							Dibenz[a,j]acridine	12.5 ppm
							1,1'-Biphenyl	12.5 ppm
							1,2,4,5-Tetrachlorobenzene	12.5 ppm
							1,2,4-Trichlorobenzene	12.5 ppm
							1,2-Dichlorobenzene	12.5 ppm
							1,2-Diphenylhydrazine	12.5 ppm
							1,3-Dichlorobenzene	12.5 ppm
							1,3-Dinitrobenzene	12.5 ppm
							1,4-Dichlorobenzene	12.5 ppm
							1,4-Dioxane	12.5 ppm
							1-Methylnaphthalene	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	12.5 ppm
							2,4,5-Trichlorophenol	12.5 ppm
							2,4,6-Trichlorophenol	12.5 ppm
							2,4-Dichlorophenol	12.5 ppm
							2,4-Dimethylphenol	12.5 ppm
							2,4-Dinitrophenol	25 ppm
							2,4-Dinitrotoluene	12.5 ppm
							2,6-Dichlorophenol	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							2-Chloronaphthalene	12.5 ppm
							2-Chlorophenol	12.5 ppm
							2-Methylnaphthalene	12.5 ppm
							2-Nitroaniline	12.5 ppm
							2-Nitrophenol	12.5 ppm
							3-Nitroaniline	12.5 ppm
							4,6-Dinitro-2-methylphenol	25 ppm
							4-Bromophenyl-phenylether	12.5 ppm
							4-Chloro-3-methylphenol	12.5 ppm
							4-Chloroaniline	12.5 ppm
							4-Chlorophenyl-phenyl ether	12.5 ppm
							4-Nitroaniline	12.5 ppm
							4-Nitrophenol	25 ppm
							Acenaphthene	12.5 ppm
							Acenaphthylene	12.5 ppm
							Acetophenone	12.5 ppm
							Aniline	12.5 ppm
							Anthracene	12.5 ppm
							Benzo[a]anthracene	12.5 ppm
							Benzo[a]pyrene	12.5 ppm
							Benzo[b]fluoranthene	12.5 ppm
							Benzo[g,h,i]perylene	12.5 ppm
							Benzo[k]fluoranthene	12.5 ppm
							Benzyl alcohol	12.5 ppm
							bis (2-chloroisopropyl) ether	12.5 ppm
							Bis(2-chloroethoxy)methane	12.5 ppm
							Bis(2-chloroethyl)ether	12.5 ppm
							Bis(2-ethylhexyl) phthalate	12.5 ppm
							Butyl benzyl phthalate	12.5 ppm
							Carbazole	12.5 ppm
							Chrysene	12.5 ppm
							Di-n-butyl phthalate	12.5 ppm
							Di-n-octyl phthalate	12.5 ppm
							Dibenz(a,h)anthracene	12.5 ppm
							Dibenzofuran	12.5 ppm
							Diethyl phthalate	12.5 ppm
							Dimethyl phthalate	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	12.5 ppm
							Fluorene	12.5 ppm
							Hexachlorobenzene	12.5 ppm
							Hexachlorobutadiene	12.5 ppm
							Hexachlorocyclopentadiene	12.5 ppm
							Hexachloroethane	12.5 ppm
							Indeno[1,2,3-cd]pyrene	12.5 ppm
							Isophorone	12.5 ppm
							m & p-Cresol	12.5 ppm
							N-Nitrosodi-n-propylamine	12.5 ppm
							N-Nitrosodimethylamine	12.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	10.625 ppm
							Naphthalene	12.5 ppm
							Nitrobenzene	12.5 ppm
							o-Cresol	12.5 ppm
							Pentachlorophenol	25 ppm
							Phenanthrene	12.5 ppm
							Phenol	12.5 ppm
							Pyrene	12.5 ppm
							Pyridine	25 ppm
							3,3'-Dichlorobenzidine	12.5 ppm
							Alpha-Terpineol	12.5 ppm
							Dimethylformamide	12.5 ppm
							Octachlorostyrene	12.5 ppm
							Phenyl ether	12.5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00010	06/30/23	03/22/23	MeCl2, Lot 226679	5 mL	OP_LCSmix2stk_00005	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00005	06/30/23		Restek, Lot A0179852		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_6_00049	08/31/23	03/22/23	MeCl2, Lot 226679	5 mL	MSS_8270_APWS_00014	1000 uL	Benzidine	150 ppm
							1,3,5-Trinitrobenzene	50 ppm
							1,4-Dinitrobenzene	50 ppm
							1-Naphthylamine	50 ppm
							2-Acetylaminofluorene	50 ppm
							2-Naphthylamine	50 ppm
							2-Picoline	50 ppm
							2-Toluidine	50 ppm
							3,3'-Dimethylbenzidine	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,4'-Methylene bis(2-chloroaniline)	50 ppm
							4-Aminobiphenyl	50 ppm
							4-Nitroquinoline-1-oxide	50 ppm
							5-Nitro-o-toluidine	50 ppm
							Dibenz[a,h]acridine	50 ppm
							N-Nitrosodi-n-butylamine	50 ppm
							N-Nitrosodiethylamine	50 ppm
							N-Nitrosomethylethylamine	50 ppm
							N-Nitrosomorpholine	50 ppm
							N-Nitrosopiperidine	50 ppm
							N-Nitrosopyrrolidine	50 ppm
							p-Dimethylamino azobenzene	50 ppm
							p-Phenylene diamine	50 ppm
							Pentachloronitrobenzene	50 ppm
							Phenacetin	50 ppm
							Pronamide	50 ppm
							Quinoline	50 ppm
							1,4-Naphthoquinone	50 ppm
							1-Chloronaphthalene	50 ppm
							7,12-Dimethylbenz(a)anthracene	50 ppm
							Chlorobenzilate	50 ppm
							Dinoseb	50 ppm
							Ethyl methanesulfonate	50 ppm
							Hexachloropropene	50 ppm
							Isodrin	50 ppm
							Isosafrole Peak 1	8 ppm
							Isosafrole Peak 2	42 ppm
							Methyl methanesulfonate	50 ppm
							Pentachlorobenzene	50 ppm
							3-Methylcholanthrene	50 ppm
							6-Methylchrysene	50 ppm
							cis-Diallate	37 ppm
							Dimethoate	50 ppm
							Disulfoton	50 ppm
							Ethyl Parathion	50 ppm
							Methyl parathion	50 ppm
							o,o',o''-Triethylphosphorothioate	50 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	50 ppm
							Phorate	50 ppm
							Safrole, Total	50 ppm
							Sulfotepp	50 ppm
							trans-Diallate	13 ppm
					MSS_8270_WS_00015	1000 uL	2,4,6-Tribromophenol (Surr)	100 ppm
							2-Fluorobiphenyl (Surr)	100 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorophenol (Surr)	100 ppm
							Nitrobenzene-d5 (Surr)	100 ppm
							p-Terphenyl-d14 (Surr)	100 ppm
							Phenol-d5 (Surr)	100 ppm
							Dibenz[a,j]acridine	50 ppm
							1,1'-Biphenyl	50 ppm
							1,2,4,5-Tetrachlorobenzene	50 ppm
							1,2,4-Trichlorobenzene	50 ppm
							1,2-Dichlorobenzene	50 ppm
							1,2-Diphenylhydrazine	50 ppm
							1,3-Dichlorobenzene	50 ppm
							1,3-Dinitrobenzene	50 ppm
							1,4-Dichlorobenzene	50 ppm
							1,4-Dioxane	50 ppm
							1-Methylnaphthalene	50 ppm
							2,3,4,6-Tetrachlorophenol	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dimethylphenol	50 ppm
							2,4-Dinitrophenol	100 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dichlorophenol	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Nitroaniline	50 ppm
							2-Nitrophenol	50 ppm
							3-Nitroaniline	50 ppm
							4,6-Dinitro-2-methylphenol	100 ppm
							4-Bromophenyl-phenylether	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Chloroaniline	50 ppm
							4-Chlorophenyl-phenyl ether	50 ppm
							4-Nitroaniline	50 ppm
							4-Nitrophenol	100 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Acetophenone	50 ppm
							Aniline	50 ppm
							Anthracene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	50 ppm
							Benzyl alcohol	50 ppm
							bis (2-chloroisopropyl) ether	50 ppm
							Bis(2-chloroethoxy)methane	50 ppm
							Bis(2-chloroethyl)ether	50 ppm
							Bis(2-ethylhexyl) phthalate	50 ppm
							Butyl benzyl phthalate	50 ppm
							Carbazole	50 ppm
							Chrysene	50 ppm
							Di-n-butyl phthalate	50 ppm
							Di-n-octyl phthalate	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Dibenzofuran	50 ppm
							Diethyl phthalate	50 ppm
							Dimethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Hexachlorocyclopentadiene	50 ppm
							Hexachloroethane	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							Isophorone	50 ppm
							m & p-Cresol	50 ppm
							N-Nitrosodi-n-propylamine	50 ppm
							N-Nitrosodimethylamine	50 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	42.5 ppm
							Naphthalene	50 ppm
							Nitrobenzene	50 ppm
							o-Cresol	50 ppm
							Pentachlorophenol	100 ppm
							Phenanthrene	50 ppm
							Phenol	50 ppm
							Pyrene	50 ppm
							Pyridine	100 ppm
							3,3'-Dichlorobenzidine	50 ppm
							Benzidine	150 ppm
							Alpha-Terpineol	50 ppm
							Dimethylformamide	50 ppm
							Octachlorostyrene	50 ppm
							Phenyl ether	50 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00009	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00015	09/22/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00004	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23	Sigma- Aldrich, Lot LRAC8467			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00004	08/31/24	Restek, Lot A0175669			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24	Restek, Lot A0190414			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_6_00042	06/30/23	03/22/23	MeCl2, Lot 226679	5 mL	MSS_FV8270_6_00049	1250 uL	Diallate	12.5 ppm
.MSS_FV8270_6_00049	08/31/23	03/22/23	MeCl2, Lot 226679	5 mL	MSS_8270_APWS_00014	1000 uL	Diallate	50 ppm
..MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	OP_RES_APPX4_00008	2500 uL	Diallate	250 ppm
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		Diallate	1000 ug/mL
MSS_RV8270_6_00045	10/31/23	06/08/23	MeCl2, Lot 226055	5 mL	MSS_BAS_WS_00012	625 uL	Atrazine	12.5 ppm
							Benzaldehyde	12.5 ppm
							Caprolactam	12.5 ppm
					MSS_FV8270_6_00053	1250 uL	Benzidine	37.5 ppm
							1,3,5-Trinitrobenzene	12.5 ppm
							1,4-Dinitrobenzene	12.5 ppm
							1-Naphthylamine	12.5 ppm
							2-Acetylaminofluorene	12.5 ppm
							2-Naphthylamine	12.5 ppm
							2-Picoline	12.5 ppm
							2-Toluidine	12.5 ppm
							3,3'-Dimethylbenzidine	12.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	12.5 ppm
							4-Aminobiphenyl	12.5 ppm
							4-Nitroquinoline-1-oxide	12.5 ppm
							5-Nitro-o-toluidine	12.5 ppm
							Dibenz[a,h]acridine	12.5 ppm
							N-Nitrosodi-n-butylamine	12.5 ppm
							N-Nitrosodiethylamine	12.5 ppm
							N-Nitrosomethylethylamine	12.5 ppm
							N-Nitrosomorpholine	12.5 ppm
							N-Nitrosopiperidine	12.5 ppm
							N-Nitrosopyrrolidine	12.5 ppm
							p-Dimethylamino azobenzene	12.5 ppm
							p-Phenylene diamine	12.5 ppm
							Pentachloronitrobenzene	12.5 ppm
							Phenacetin	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pronamide	12.5 ppm
							Quinoline	12.5 ppm
							1,4-Naphthoquinone	12.5 ppm
							1-Chloronaphthalene	12.5 ppm
							7,12-Dimethylbenz(a)anthracene	12.5 ppm
							Chlorobenzilate	12.5 ppm
							Dinoseb	12.5 ppm
							Ethyl methanesulfonate	12.5 ppm
							Hexachloropropene	12.5 ppm
							Isodrin	12.5 ppm
							Isosafrole Peak 1	2 ppm
							Isosafrole Peak 2	10.5 ppm
							Methyl methanesulfonate	12.5 ppm
							Pentachlorobenzene	12.5 ppm
							3-Methylcholanthrene	12.5 ppm
							6-Methylchrysene	12.5 ppm
							cis-Diallate	9.25 ppm
							Dimethoate	12.5 ppm
							Disulfoton	12.5 ppm
							Ethyl Parathion	12.5 ppm
							Methyl parathion	12.5 ppm
							o,o',o''-Triethylphosphorothioate	12.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	12.5 ppm
							Phorate	12.5 ppm
							Safrole, Total	12.5 ppm
							Sulfotepp	12.5 ppm
							trans-Diallate	3.25 ppm
							2,4,6-Tribromophenol (Surr)	25 ppm
							2-Fluorobiphenyl (Surr)	25 ppm
							2-Fluorophenol (Surr)	25 ppm
							Nitrobenzene-d5 (Surr)	25 ppm
							p-Terphenyl-d14 (Surr)	25 ppm
							Phenol-d5 (Surr)	25 ppm
							Dibenz[a,j]acridine	12.5 ppm
							1,1'-Biphenyl	12.5 ppm
							1,2,4,5-Tetrachlorobenzene	12.5 ppm
							1,2,4-Trichlorobenzene	12.5 ppm
							1,2-Dichlorobenzene	12.5 ppm
							1,2-Diphenylhydrazine	12.5 ppm
							1,3-Dichlorobenzene	12.5 ppm
							1,3-Dinitrobenzene	12.5 ppm
							1,4-Dichlorobenzene	12.5 ppm
							1,4-Dioxane	12.5 ppm
							1-Methylnaphthalene	12.5 ppm
							2,3,4,6-Tetrachlorophenol	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,5-Trichlorophenol	12.5 ppm
							2,4,6-Trichlorophenol	12.5 ppm
							2,4-Dichlorophenol	12.5 ppm
							2,4-Dimethylphenol	12.5 ppm
							2,4-Dinitrophenol	25 ppm
							2,4-Dinitrotoluene	12.5 ppm
							2,6-Dichlorophenol	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							2-Chloronaphthalene	12.5 ppm
							2-Chlorophenol	12.5 ppm
							2-Methylnaphthalene	12.5 ppm
							2-Nitroaniline	12.5 ppm
							2-Nitrophenol	12.5 ppm
							3-Nitroaniline	12.5 ppm
							4,6-Dinitro-2-methylphenol	25 ppm
							4-Bromophenyl-phenylether	12.5 ppm
							4-Chloro-3-methylphenol	12.5 ppm
							4-Chloroaniline	12.5 ppm
							4-Chlorophenyl-phenyl ether	12.5 ppm
							4-Nitroaniline	12.5 ppm
							4-Nitrophenol	25 ppm
							Acenaphthene	12.5 ppm
							Acenaphthylene	12.5 ppm
							Acetophenone	12.5 ppm
							Aniline	12.5 ppm
							Anthracene	12.5 ppm
							Benzo[a]anthracene	12.5 ppm
							Benzo[a]pyrene	12.5 ppm
							Benzo[b]fluoranthene	12.5 ppm
							Benzo[g,h,i]perylene	12.5 ppm
							Benzo[k]fluoranthene	12.5 ppm
							Benzyl alcohol	12.5 ppm
							bis (2-chloroisopropyl) ether	12.5 ppm
							Bis(2-chloroethoxy)methane	12.5 ppm
							Bis(2-chloroethyl)ether	12.5 ppm
							Bis(2-ethylhexyl) phthalate	12.5 ppm
							Butyl benzyl phthalate	12.5 ppm
							Carbazole	12.5 ppm
							Chrysene	12.5 ppm
							Di-n-butyl phthalate	12.5 ppm
							Di-n-octyl phthalate	12.5 ppm
							Dibenz(a,h)anthracene	12.5 ppm
							Dibenzofuran	12.5 ppm
							Diethyl phthalate	12.5 ppm
							Dimethyl phthalate	12.5 ppm
							Fluoranthene	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	12.5 ppm
							Hexachlorobenzene	12.5 ppm
							Hexachlorobutadiene	12.5 ppm
							Hexachlorocyclopentadiene	12.5 ppm
							Hexachloroethane	12.5 ppm
							Indeno[1,2,3-cd]pyrene	12.5 ppm
							Isophorone	12.5 ppm
							m & p-Cresol	12.5 ppm
							N-Nitrosodi-n-propylamine	12.5 ppm
							N-Nitrosodimethylamine	12.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	10.625 ppm
							Naphthalene	12.5 ppm
							Nitrobenzene	12.5 ppm
							o-Cresol	12.5 ppm
							Pentachlorophenol	25 ppm
							Phenanthrene	12.5 ppm
							Phenol	12.5 ppm
							Pyrene	12.5 ppm
							Pyridine	25 ppm
							3,3'-Dichlorobenzidine	12.5 ppm
							Alpha-Terpineol	12.5 ppm
							Dimethylformamide	12.5 ppm
							Octachlorostyrene	12.5 ppm
							Phenyl ether	12.5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00012	12/08/23	06/08/23	MeCl2, Lot 226055	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_6_00053	10/31/23	06/08/23	MeCl2, Lot 226055	5 mL	MSS_8270_APWS_00015	1000 uL	Benzidine	150 ppm
							1,3,5-Trinitrobenzene	50 ppm
							1,4-Dinitrobenzene	50 ppm
							1-Naphthylamine	50 ppm
							2-Acetylaminofluorene	50 ppm
							2-Naphthylamine	50 ppm
							2-Picoline	50 ppm
							2-Toluidine	50 ppm
							3,3'-Dimethylbenzidine	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,4'-Methylene bis(2-chloroaniline)	50 ppm
							4-Aminobiphenyl	50 ppm
							4-Nitroquinoline-1-oxide	50 ppm
							5-Nitro-o-toluidine	50 ppm
							Dibenz[a,h]acridine	50 ppm
							N-Nitrosodi-n-butylamine	50 ppm
							N-Nitrosodiethylamine	50 ppm
							N-Nitrosomethylethylamine	50 ppm
							N-Nitrosomorpholine	50 ppm
							N-Nitrosopiperidine	50 ppm
							N-Nitrosopyrrolidine	50 ppm
							p-Dimethylamino azobenzene	50 ppm
							p-Phenylene diamine	50 ppm
							Pentachloronitrobenzene	50 ppm
							Phenacetin	50 ppm
							Pronamide	50 ppm
							Quinoline	50 ppm
							1,4-Naphthoquinone	50 ppm
							1-Chloronaphthalene	50 ppm
							7,12-Dimethylbenz(a)anthracene	50 ppm
							Chlorobenzilate	50 ppm
							Dinoseb	50 ppm
							Ethyl methanesulfonate	50 ppm
							Hexachloropropene	50 ppm
							Isodrin	50 ppm
							Isosafrole Peak 1	8 ppm
							Isosafrole Peak 2	42 ppm
							Methyl methanesulfonate	50 ppm
							Pentachlorobenzene	50 ppm
							3-Methylcholanthrene	50 ppm
							6-Methylchrysene	50 ppm
							cis-Diallate	37 ppm
							Dimethoate	50 ppm
							Disulfoton	50 ppm
							Ethyl Parathion	50 ppm
							Methyl parathion	50 ppm
							o,o',o''-Triethylphosphorothioate	50 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	50 ppm
							Phorate	50 ppm
							Safrole, Total	50 ppm
							Sulfotepp	50 ppm
							trans-Diallate	13 ppm
					MSS_8270_WS_00016	1000 uL	2,4,6-Tribromophenol (Surr)	100 ppm
							2-Fluorobiphenyl (Surr)	100 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorophenol (Surr)	100 ppm
							Nitrobenzene-d5 (Surr)	100 ppm
							p-Terphenyl-d14 (Surr)	100 ppm
							Phenol-d5 (Surr)	100 ppm
							Dibenz[a,j]acridine	50 ppm
							1,1'-Biphenyl	50 ppm
							1,2,4,5-Tetrachlorobenzene	50 ppm
							1,2,4-Trichlorobenzene	50 ppm
							1,2-Dichlorobenzene	50 ppm
							1,2-Diphenylhydrazine	50 ppm
							1,3-Dichlorobenzene	50 ppm
							1,3-Dinitrobenzene	50 ppm
							1,4-Dichlorobenzene	50 ppm
							1,4-Dioxane	50 ppm
							1-Methylnaphthalene	50 ppm
							2,3,4,6-Tetrachlorophenol	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dimethylphenol	50 ppm
							2,4-Dinitrophenol	100 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dichlorophenol	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Nitroaniline	50 ppm
							2-Nitrophenol	50 ppm
							3-Nitroaniline	50 ppm
							4,6-Dinitro-2-methylphenol	100 ppm
							4-Bromophenyl-phenylether	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Chloroaniline	50 ppm
							4-Chlorophenyl-phenyl ether	50 ppm
							4-Nitroaniline	50 ppm
							4-Nitrophenol	100 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Acetophenone	50 ppm
							Aniline	50 ppm
							Anthracene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	50 ppm
							Benzyl alcohol	50 ppm
							bis (2-chloroisopropyl) ether	50 ppm
							Bis(2-chloroethoxy)methane	50 ppm
							Bis(2-chloroethyl)ether	50 ppm
							Bis(2-ethylhexyl) phthalate	50 ppm
							Butyl benzyl phthalate	50 ppm
							Carbazole	50 ppm
							Chrysene	50 ppm
							Di-n-butyl phthalate	50 ppm
							Di-n-octyl phthalate	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Dibenzofuran	50 ppm
							Diethyl phthalate	50 ppm
							Dimethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Hexachlorocyclopentadiene	50 ppm
							Hexachloroethane	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							Isophorone	50 ppm
							m & p-Cresol	50 ppm
							N-Nitrosodi-n-propylamine	50 ppm
							N-Nitrosodimethylamine	50 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	42.5 ppm
							Naphthalene	50 ppm
							Nitrobenzene	50 ppm
							o-Cresol	50 ppm
							Pentachlorophenol	100 ppm
							Phenanthrene	50 ppm
							Phenol	50 ppm
							Pyrene	50 ppm
							Pyridine	100 ppm
							3,3'-Dichlorobenzidine	50 ppm
							Benzidine	150 ppm
							Alpha-Terpineol	50 ppm
							Dimethylformamide	50 ppm
							Octachlorostyrene	50 ppm
							Phenyl ether	50 ppm
					MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23	Sigma- Aldrich, Lot LRAC8467			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00005	05/31/25	Restek, Lot A0184892			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24	Restek, Lot A0190414			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_6_00045	10/31/23	06/08/23	MeCl2, Lot 226055	5 mL	MSS_FV8270_6_00053	1250 uL	Diallate	12.5 ppm
.MSS_FV8270_6_00053	10/31/23	06/08/23	MeCl2, Lot 226055	5 mL	MSS_8270_APWS_00015	1000 uL	Diallate	50 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	OP_RES_APPX4_00008	2500 uL	Diallate	250 ppm
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		Diallate	1000 ug/mL
MSS_RV8270_6_00046	08/31/23	06/30/23	MeCl2, Lot 231028	5 mL	MSS_RV8270_IS_00065	100 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_RV8270_IS_00065	11/30/23	06/25/23	MeCl2, Lot 231028	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_6_00046	08/31/23	06/30/23	MeCl2, Lot 231028	5 mL	MSS_8270_APWS_00014	250 uL	5-Nitro-o-toluidine	12.5 ppm
							a,a-Dimethylphenethylamine	12.5 ppm
							N-Nitrosodiethylamine	12.5 ppm
							N-Nitrosomorpholine	12.5 ppm
							N-Nitrosopiperidine	12.5 ppm
							Phenacetin	12.5 ppm
							Ethyl methanesulfonate	12.5 ppm
							Hexachloropropene	12.5 ppm
							Isodrin	12.5 ppm
							Pentachlorobenzene	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diallate	12.5 ppm
							Dimethoate	12.5 ppm
							o,o',o''-Triethylphosphorothioate	12.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	12.5 ppm
							Phorate	12.5 ppm
							Safrole, Total	12.5 ppm
							Sulfotepp	12.5 ppm
					MSS_8270_WS_00015	250 uL	2,4,6-Tribromophenol (Surr)	25 ppm
							2-Fluorobiphenyl (Surr)	25 ppm
							2-Fluorophenol (Surr)	25 ppm
							Nitrobenzene-d5 (Surr)	25 ppm
							p-Terphenyl-d14 (Surr)	25 ppm
							Phenol-d5 (Surr)	25 ppm
							1,2,4,5-Tetrachlorobenzene	12.5 ppm
							1,3-Dinitrobenzene	12.5 ppm
							2,3,4,6-Tetrachlorophenol	12.5 ppm
							2,4,5-Trichlorophenol	12.5 ppm
							2,4,6-Trichlorophenol	12.5 ppm
							2,4-Dichlorophenol	12.5 ppm
							2,4-Dinitrotoluene	12.5 ppm
							2,6-Dichlorophenol	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							2-Chloronaphthalene	12.5 ppm
							2-Chlorophenol	12.5 ppm
							2-Methylnaphthalene	12.5 ppm
							2-Nitroaniline	12.5 ppm
							2-Nitrophenol	12.5 ppm
							4-Bromophenyl-phenylether	12.5 ppm
							4-Chloro-3-methylphenol	12.5 ppm
							4-Chlorophenyl-phenyl ether	12.5 ppm
							4-Nitroaniline	12.5 ppm
							Acenaphthene	12.5 ppm
							Acenaphthylene	12.5 ppm
							Anthracene	12.5 ppm
							Benzo[a]anthracene	12.5 ppm
							Benzo[a]pyrene	12.5 ppm
							Benzo[b]fluoranthene	12.5 ppm
							Benzo[g,h,i]perylene	12.5 ppm
							Benzo[k]fluoranthene	12.5 ppm
							bis (2-chloroisopropyl) ether	12.5 ppm
							Bis(2-ethylhexyl) phthalate	12.5 ppm
							Chrysene	12.5 ppm
							Dibenz(a,h)anthracene	12.5 ppm
							Dibenzofuran	12.5 ppm
							Diethyl phthalate	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	12.5 ppm
							Fluorene	12.5 ppm
							Hexachlorobenzene	12.5 ppm
							Indeno[1,2,3-cd]pyrene	12.5 ppm
							m & p-Cresol	12.5 ppm
							N-Nitrosodimethylamine	12.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	10.625 ppm
							Nitrobenzene	12.5 ppm
							o-Cresol	12.5 ppm
							Pentachlorophenol	25 ppm
							Phenanthrene	12.5 ppm
							Phenol	12.5 ppm
							Pyrene	12.5 ppm
.MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	OP_RES_APPX1_00009	2500 uL	5-Nitro-o-toluidine	250 ppm
							a,a-Dimethylphenethylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							Phenacetin	250 ppm
					OP_RES_APPX2_00011	2500 uL	Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX4_00008	2500 uL	Diallate	250 ppm
							Dimethoate	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
..OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		5-Nitro-o-toluidine	1000 ug/mL
							a,a-Dimethylphenethylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							Phenacetin	1000 ug/mL
..OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
..OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		Diallate	1000 ug/mL
							Dimethoate	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
.MSS_8270_WS_00015	09/22/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_LCS1_00011	2500 uL	1,2,4,5-Tetrachlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Chrysene	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m & p-Cresol	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
..MSS_8270_SURR_00004	10/31/23	Sigma- Aldrich, Lot LRAC8467			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
..OP_RES_LCS1_00011	04/30/24	Restek, Lot A0190414			(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
MSS_RV8270_6_00047	03/05/24	09/06/23	MeCl2, Lot 232361	5 mL	MSS_BAS_WS_00013	625 uL	Atrazine	12.5 ppm
							Benzaldehyde	12.5 ppm
							Caprolactam	12.5 ppm
					MSS_FV8270_6_00055	1250 uL	Benzidine	37.5 ppm
							1,3,5-Trinitrobenzene	12.5 ppm
							1,4-Dinitrobenzene	12.5 ppm
							1-Naphthylamine	12.5 ppm
							2-Acetylaminofluorene	12.5 ppm
							2-Naphthylamine	12.5 ppm
							2-Picoline	12.5 ppm
							2-Toluidine	12.5 ppm
							3,3'-Dimethylbenzidine	12.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	12.5 ppm
							4-Aminobiphenyl	12.5 ppm
							4-Nitroquinoline-1-oxide	12.5 ppm
							5-Nitro-o-toluidine	12.5 ppm
							Dibenz[a,h]acridine	12.5 ppm
							N-Nitrosodi-n-butylamine	12.5 ppm
							N-Nitrosodiethylamine	12.5 ppm
							N-Nitrosomethylethylamine	12.5 ppm
							N-Nitrosomorpholine	12.5 ppm
							N-Nitrosopiperidine	12.5 ppm
							N-Nitrosopyrrolidine	12.5 ppm
							p-Dimethylamino azobenzene	12.5 ppm
							p-Phenylene diamine	12.5 ppm
							Pentachloronitrobenzene	12.5 ppm
							Phenacetin	12.5 ppm
							Pronamide	12.5 ppm
							Quinoline	12.5 ppm
							1,4-Naphthoquinone	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Chloronaphthalene	12.5 ppm
							7,12-Dimethylbenz(a)anthracene	12.5 ppm
							Chlorobenzilate	12.5 ppm
							Dinoseb	12.5 ppm
							Ethyl methanesulfonate	12.5 ppm
							Hexachloropropene	12.5 ppm
							Isodrin	12.5 ppm
							Isosafrole Peak 1	2 ppm
							Isosafrole Peak 2	10.5 ppm
							Methyl methanesulfonate	12.5 ppm
							Pentachlorobenzene	12.5 ppm
							3-Methylcholanthrene	12.5 ppm
							6-Methylchrysene	12.5 ppm
							cis-Diallate	9.25 ppm
							Dimethoate	12.5 ppm
							Disulfoton	12.5 ppm
							Ethyl Parathion	12.5 ppm
							Methyl parathion	12.5 ppm
							o,o',o''-Triethylphosphorothioate	12.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	12.5 ppm
							Phorate	12.5 ppm
							Safrole, Total	12.5 ppm
							Sulfotepp	12.5 ppm
							trans-Diallate	3.25 ppm
							2,4,6-Tribromophenol (Surr)	25 ppm
							2-Fluorobiphenyl (Surr)	25 ppm
							2-Fluorophenol (Surr)	25 ppm
							Nitrobenzene-d5 (Surr)	25 ppm
							p-Terphenyl-d14 (Surr)	25 ppm
							Phenol-d5 (Surr)	25 ppm
							Dibenz[a,j]acridine	12.5 ppm
							1,1'-Biphenyl	12.5 ppm
							1,2,4,5-Tetrachlorobenzene	12.5 ppm
							1,2,4-Trichlorobenzene	12.5 ppm
							1,2-Dichlorobenzene	12.5 ppm
							1,2-Diphenylhydrazine	12.5 ppm
							1,3-Dichlorobenzene	12.5 ppm
							1,3-Dinitrobenzene	12.5 ppm
							1,4-Dichlorobenzene	12.5 ppm
							1,4-Dioxane	12.5 ppm
							1-Methylnaphthalene	12.5 ppm
							2,3,4,6-Tetrachlorophenol	12.5 ppm
							2,4,5-Trichlorophenol	12.5 ppm
							2,4,6-Trichlorophenol	12.5 ppm
							2,4-Dichlorophenol	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dimethylphenol	12.5 ppm
							2,4-Dinitrophenol	25 ppm
							2,4-Dinitrotoluene	12.5 ppm
							2,6-Dichlorophenol	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							2-Chloronaphthalene	12.5 ppm
							2-Chlorophenol	12.5 ppm
							2-Methylnaphthalene	12.5 ppm
							2-Nitroaniline	12.5 ppm
							2-Nitrophenol	12.5 ppm
							3-Nitroaniline	12.5 ppm
							4,6-Dinitro-2-methylphenol	25 ppm
							4-Bromophenyl-phenylether	12.5 ppm
							4-Chloro-3-methylphenol	12.5 ppm
							4-Chloroaniline	12.5 ppm
							4-Chlorophenyl-phenyl ether	12.5 ppm
							4-Nitroaniline	12.5 ppm
							4-Nitrophenol	25 ppm
							Acenaphthene	12.5 ppm
							Acenaphthylene	12.5 ppm
							Acetophenone	12.5 ppm
							Aniline	12.5 ppm
							Anthracene	12.5 ppm
							Benzo[a]anthracene	12.5 ppm
							Benzo[a]pyrene	12.5 ppm
							Benzo[b]fluoranthene	12.5 ppm
							Benzo[g,h,i]perylene	12.5 ppm
							Benzo[k]fluoranthene	12.5 ppm
							Benzyl alcohol	12.5 ppm
							bis (2-chloroisopropyl) ether	12.5 ppm
							Bis(2-chloroethoxy)methane	12.5 ppm
							Bis(2-chloroethyl)ether	12.5 ppm
							Bis(2-ethylhexyl) phthalate	12.5 ppm
							Butyl benzyl phthalate	12.5 ppm
							Carbazole	12.5 ppm
							Chrysene	12.5 ppm
							Di-n-butyl phthalate	12.5 ppm
							Di-n-octyl phthalate	12.5 ppm
							Dibenz(a,h)anthracene	12.5 ppm
							Dibenzofuran	12.5 ppm
							Diethyl phthalate	12.5 ppm
							Dimethyl phthalate	12.5 ppm
							Fluoranthene	12.5 ppm
							Fluorene	12.5 ppm
							Hexachlorobenzene	12.5 ppm
							Hexachlorobutadiene	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	12.5 ppm
							Hexachloroethane	12.5 ppm
							Indeno[1,2,3-cd]pyrene	12.5 ppm
							Isophorone	12.5 ppm
							m & p-Cresol	12.5 ppm
							N-Nitrosodi-n-propylamine	12.5 ppm
							N-Nitrosodimethylamine	12.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	10.625 ppm
							Naphthalene	12.5 ppm
							Nitrobenzene	12.5 ppm
							o-Cresol	12.5 ppm
							Pentachlorophenol	25 ppm
							Phenanthrene	12.5 ppm
							Phenol	12.5 ppm
							Pyrene	12.5 ppm
							Pyridine	25 ppm
							3,3'-Dichlorobenzidine	12.5 ppm
							Alpha-Terpineol	12.5 ppm
							Dimethylformamide	12.5 ppm
							Octachlorostyrene	12.5 ppm
							Phenyl ether	12.5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00013	03/06/24	09/06/23	MeCl2, Lot 232361	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_6_00055	03/05/24	09/06/23	MeCl2, Lot 232361	5 mL	MSS_8270_APWS_00016	1000 uL	Benzidine	150 ppm
							1,3,5-Trinitrobenzene	50 ppm
							1,4-Dinitrobenzene	50 ppm
							1-Naphthylamine	50 ppm
							2-Acetylaminofluorene	50 ppm
							2-Naphthylamine	50 ppm
							2-Picoline	50 ppm
							2-Toluidine	50 ppm
							3,3'-Dimethylbenzidine	50 ppm
							4,4'-Methylene bis(2-chloroaniline)	50 ppm
							4-Aminobiphenyl	50 ppm
							4-Nitroquinoline-1-oxide	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							5-Nitro-o-toluidine	50 ppm
							Dibenz[a,h]acridine	50 ppm
							N-Nitrosodi-n-butylamine	50 ppm
							N-Nitrosodiethylamine	50 ppm
							N-Nitrosomethylethylamine	50 ppm
							N-Nitrosomorpholine	50 ppm
							N-Nitrosopiperidine	50 ppm
							N-Nitrosopyrrolidine	50 ppm
							p-Dimethylamino azobenzene	50 ppm
							p-Phenylene diamine	50 ppm
							Pentachloronitrobenzene	50 ppm
							Phenacetin	50 ppm
							Pronamide	50 ppm
							Quinoline	50 ppm
							1,4-Naphthoquinone	50 ppm
							1-Chloronaphthalene	50 ppm
							7,12-Dimethylbenz(a)anthracene	50 ppm
							Chlorobenzilate	50 ppm
							Dinoseb	50 ppm
							Ethyl methanesulfonate	50 ppm
							Hexachloropropene	50 ppm
							Isodrin	50 ppm
							Isosafrole Peak 1	8 ppm
							Isosafrole Peak 2	42 ppm
							Methyl methanesulfonate	50 ppm
							Pentachlorobenzene	50 ppm
							3-Methylcholanthrene	50 ppm
							6-Methylchrysene	50 ppm
							cis-Diallate	37 ppm
							Dimethoate	50 ppm
							Disulfoton	50 ppm
							Ethyl Parathion	50 ppm
							Methyl parathion	50 ppm
							o,o',o''-Triethylphosphorothioate	50 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	50 ppm
							Phorate	50 ppm
							Safrole, Total	50 ppm
							Sulfotepp	50 ppm
							trans-Diallate	13 ppm
					MSS_8270_WS_00017	1000 uL	2,4,6-Tribromophenol (Surr)	100 ppm
							2-Fluorobiphenyl (Surr)	100 ppm
							2-Fluorophenol (Surr)	100 ppm
							Nitrobenzene-d5 (Surr)	100 ppm
							p-Terphenyl-d14 (Surr)	100 ppm
							Phenol-d5 (Surr)	100 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz[a,j]acridine	50 ppm
							1,1'-Biphenyl	50 ppm
							1,2,4,5-Tetrachlorobenzene	50 ppm
							1,2,4-Trichlorobenzene	50 ppm
							1,2-Dichlorobenzene	50 ppm
							1,2-Diphenylhydrazine	50 ppm
							1,3-Dichlorobenzene	50 ppm
							1,3-Dinitrobenzene	50 ppm
							1,4-Dichlorobenzene	50 ppm
							1,4-Dioxane	50 ppm
							1-Methylnaphthalene	50 ppm
							2,3,4,6-Tetrachlorophenol	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dimethylphenol	50 ppm
							2,4-Dinitrophenol	100 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dichlorophenol	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Nitroaniline	50 ppm
							2-Nitrophenol	50 ppm
							3-Nitroaniline	50 ppm
							4,6-Dinitro-2-methylphenol	100 ppm
							4-Bromophenyl-phenylether	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Chloroaniline	50 ppm
							4-Chlorophenyl-phenyl ether	50 ppm
							4-Nitroaniline	50 ppm
							4-Nitrophenol	100 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Acetophenone	50 ppm
							Aniline	50 ppm
							Anthracene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm
							Benzo[k]fluoranthene	50 ppm
							Benzyl alcohol	50 ppm
							bis (2-chloroisopropyl) ether	50 ppm
							Bis(2-chloroethoxy)methane	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	50 ppm
							Bis(2-ethylhexyl) phthalate	50 ppm
							Butyl benzyl phthalate	50 ppm
							Carbazole	50 ppm
							Chrysene	50 ppm
							Di-n-butyl phthalate	50 ppm
							Di-n-octyl phthalate	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Dibenzofuran	50 ppm
							Diethyl phthalate	50 ppm
							Dimethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Hexachlorocyclopentadiene	50 ppm
							Hexachloroethane	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							Isophorone	50 ppm
							m & p-Cresol	50 ppm
							N-Nitrosodi-n-propylamine	50 ppm
							N-Nitrosodimethylamine	50 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	42.5 ppm
							Naphthalene	50 ppm
							Nitrobenzene	50 ppm
							o-Cresol	50 ppm
							Pentachlorophenol	100 ppm
							Phenanthrene	50 ppm
							Phenol	50 ppm
							Pyrene	50 ppm
							Pyridine	100 ppm
							3,3'-Dichlorobenzidine	50 ppm
							Benzidine	150 ppm
							Alpha-Terpineol	50 ppm
							Dimethylformamide	50 ppm
							Octachlorostyrene	50 ppm
							Phenyl ether	50 ppm
					MSS_FV8270_IS_00006	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00012	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00012	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00008	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00012	06/30/24		Restek, Lot A0198786		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00012	03/31/24		Restek, Lot A0196332		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00008	03/31/24		Restek, Lot A0195409		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00017	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_8270_SURR_00005	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00006	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00013	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyridine	500 ppm
					OP_RES_LCS2_00010	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00005	06/30/26		Sigma- Aldrich, Lot LRAC5703		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00006	03/31/26		Restek, Lot A0195365		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00013	09/30/24		Restek, Lot A0195772		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_6_00047	03/05/24	09/06/23	MeCl2, Lot 232361	5 mL	MSS_FV8270_6_00055	1250 uL	Diallate	12.5 ppm
.MSS_FV8270_6_00055	03/05/24	09/06/23	MeCl2, Lot 232361	5 mL	MSS_8270_APWS_00016	1000 uL	Diallate	50 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	OP_RES_APPX4_00008	2500 uL	Diallate	250 ppm
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		Diallate	1000 ug/mL
MSS_RV8270_6_00048	03/05/24	10/19/23	MeCl2, Lot 63209	5 mL	MSS_BAS_WS_00014	625 uL	Atrazine	12.5 ppm
							Benzaldehyde	12.5 ppm
							Caprolactam	12.5 ppm
					MSS_FV8270_6_00056	1250 uL	Benzidine	37.5 ppm
							1,3,5-Trinitrobenzene	12.5 ppm
							1,4-Dinitrobenzene	12.5 ppm
							1-Naphthylamine	12.5 ppm
							2-Acetylaminofluorene	12.5 ppm
							2-Naphthylamine	12.5 ppm
							2-Picoline	12.5 ppm
							2-Toluidine	12.5 ppm
							3,3'-Dimethylbenzidine	12.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	12.5 ppm
							4-Aminobiphenyl	12.5 ppm
							4-Nitroquinoline-1-oxide	12.5 ppm
							5-Nitro-o-toluidine	12.5 ppm
							Dibenz[a,h]acridine	12.5 ppm
							N-Nitrosodi-n-butylamine	12.5 ppm
							N-Nitrosodiethylamine	12.5 ppm
							N-Nitrosomethylethylamine	12.5 ppm
							N-Nitrosomorpholine	12.5 ppm
							N-Nitrosopiperidine	12.5 ppm
							N-Nitrosopyrrolidine	12.5 ppm
							p-Dimethylamino azobenzene	12.5 ppm
							p-Phenylene diamine	12.5 ppm
							Pentachloronitrobenzene	12.5 ppm
							Phenacetin	12.5 ppm
							Pronamide	12.5 ppm
							Quinoline	12.5 ppm
							1,4-Naphthoquinone	12.5 ppm
							1-Chloronaphthalene	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	12.5 ppm
							Chlorobenzilate	12.5 ppm
							Dinoseb	12.5 ppm
							Ethyl methanesulfonate	12.5 ppm
							Hexachloropropene	12.5 ppm
							Isodrin	12.5 ppm
							Isosafrole Peak 1	2 ppm
							Isosafrole Peak 2	10.5 ppm
							Methyl methanesulfonate	12.5 ppm
							Pentachlorobenzene	12.5 ppm
							3-Methylcholanthrene	12.5 ppm
							6-Methylchrysene	12.5 ppm
							cis-Diallate	9.25 ppm
							Dimethoate	12.5 ppm
							Disulfoton	12.5 ppm
							Ethyl Parathion	12.5 ppm
							Methyl parathion	12.5 ppm
							o,o',o''-Triethylphosphorothioate	12.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	12.5 ppm
							Phorate	12.5 ppm
							Safrole, Total	12.5 ppm
							Sulfotepp	12.5 ppm
							trans-Diallate	3.25 ppm
							2,4,6-Tribromophenol (Surr)	25 ppm
							2-Fluorobiphenyl (Surr)	25 ppm
							2-Fluorophenol (Surr)	25 ppm
							Nitrobenzene-d5 (Surr)	25 ppm
							p-Terphenyl-d14 (Surr)	25 ppm
							Phenol-d5 (Surr)	25 ppm
							Dibenz[a,j]acridine	12.5 ppm
							1,1'-Biphenyl	12.5 ppm
							1,2,4,5-Tetrachlorobenzene	12.5 ppm
							1,2,4-Trichlorobenzene	12.5 ppm
							1,2-Dichlorobenzene	12.5 ppm
							1,2-Diphenylhydrazine	12.5 ppm
							1,3-Dichlorobenzene	12.5 ppm
							1,3-Dinitrobenzene	12.5 ppm
							1,4-Dichlorobenzene	12.5 ppm
							1,4-Dioxane	12.5 ppm
							1-Methylnaphthalene	12.5 ppm
							2,3,4,6-Tetrachlorophenol	12.5 ppm
							2,4,5-Trichlorophenol	12.5 ppm
							2,4,6-Trichlorophenol	12.5 ppm
							2,4-Dichlorophenol	12.5 ppm
							2,4-Dimethylphenol	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	25 ppm
							2,4-Dinitrotoluene	12.5 ppm
							2,6-Dichlorophenol	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							2-Chloronaphthalene	12.5 ppm
							2-Chlorophenol	12.5 ppm
							2-Methylnaphthalene	12.5 ppm
							2-Nitroaniline	12.5 ppm
							2-Nitrophenol	12.5 ppm
							3-Nitroaniline	12.5 ppm
							4,6-Dinitro-2-methylphenol	25 ppm
							4-Bromophenyl-phenylether	12.5 ppm
							4-Chloro-3-methylphenol	12.5 ppm
							4-Chloroaniline	12.5 ppm
							4-Chlorophenyl-phenyl ether	12.5 ppm
							4-Nitroaniline	12.5 ppm
							4-Nitrophenol	25 ppm
							Acenaphthene	12.5 ppm
							Acenaphthylene	12.5 ppm
							Acetophenone	12.5 ppm
							Aniline	12.5 ppm
							Anthracene	12.5 ppm
							Benzo[a]anthracene	12.5 ppm
							Benzo[a]pyrene	12.5 ppm
							Benzo[b]fluoranthene	12.5 ppm
							Benzo[g,h,i]perylene	12.5 ppm
							Benzo[k]fluoranthene	12.5 ppm
							Benzyl alcohol	12.5 ppm
							bis (2-chloroisopropyl) ether	12.5 ppm
							Bis(2-chloroethoxy)methane	12.5 ppm
							Bis(2-chloroethyl)ether	12.5 ppm
							Bis(2-ethylhexyl) phthalate	12.5 ppm
							Butyl benzyl phthalate	12.5 ppm
							Carbazole	12.5 ppm
							Chrysene	12.5 ppm
							Di-n-butyl phthalate	12.5 ppm
							Di-n-octyl phthalate	12.5 ppm
							Dibenz(a,h)anthracene	12.5 ppm
							Dibenzofuran	12.5 ppm
							Diethyl phthalate	12.5 ppm
							Dimethyl phthalate	12.5 ppm
							Fluoranthene	12.5 ppm
							Fluorene	12.5 ppm
							Hexachlorobenzene	12.5 ppm
							Hexachlorobutadiene	12.5 ppm
							Hexachlorocyclopentadiene	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	12.5 ppm
							Indeno[1,2,3-cd]pyrene	12.5 ppm
							Isophorone	12.5 ppm
							m & p-Cresol	12.5 ppm
							N-Nitrosodi-n-propylamine	12.5 ppm
							N-Nitrosodimethylamine	12.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	10.625 ppm
							Naphthalene	12.5 ppm
							Nitrobenzene	12.5 ppm
							o-Cresol	12.5 ppm
							Pentachlorophenol	25 ppm
							Phenanthrene	12.5 ppm
							Phenol	12.5 ppm
							Pyrene	12.5 ppm
							Pyridine	25 ppm
							3,3'-Dichlorobenzidine	12.5 ppm
							Alpha-Terpineol	12.5 ppm
							Dimethylformamide	12.5 ppm
							Octachlorostyrene	12.5 ppm
							Phenyl ether	12.5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00014	04/05/24	10/05/23	MeCl2, Lot 63209	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_6_00056	03/05/24	10/18/23	MeCl2, Lot 63209	5 mL	MSS_8270_APWS_00016	1000 uL	Benzidine	150 ppm
							1,3,5-Trinitrobenzene	50 ppm
							1,4-Dinitrobenzene	50 ppm
							1-Naphthylamine	50 ppm
							2-Acetylaminofluorene	50 ppm
							2-Naphthylamine	50 ppm
							2-Picoline	50 ppm
							2-Toluidine	50 ppm
							3,3'-Dimethylbenzidine	50 ppm
							4,4'-Methylene bis(2-chloroaniline)	50 ppm
							4-Aminobiphenyl	50 ppm
							4-Nitroquinoline-1-oxide	50 ppm
							5-Nitro-o-toluidine	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz[a,h]acridine	50 ppm
							N-Nitrosodi-n-butylamine	50 ppm
							N-Nitrosodiethylamine	50 ppm
							N-Nitrosomethylethylamine	50 ppm
							N-Nitrosomorpholine	50 ppm
							N-Nitrosopiperidine	50 ppm
							N-Nitrosopyrrolidine	50 ppm
							p-Dimethylamino azobenzene	50 ppm
							p-Phenylene diamine	50 ppm
							Pentachloronitrobenzene	50 ppm
							Phenacetin	50 ppm
							Pronamide	50 ppm
							Quinoline	50 ppm
							1,4-Naphthoquinone	50 ppm
							1-Chloronaphthalene	50 ppm
							7,12-Dimethylbenz(a)anthracene	50 ppm
							Chlorobenzilate	50 ppm
							Dinoseb	50 ppm
							Ethyl methanesulfonate	50 ppm
							Hexachloropropene	50 ppm
							Isodrin	50 ppm
							Isosafrole Peak 1	8 ppm
							Isosafrole Peak 2	42 ppm
							Methyl methanesulfonate	50 ppm
							Pentachlorobenzene	50 ppm
							3-Methylcholanthrene	50 ppm
							6-Methylchrysene	50 ppm
							cis-Diallate	37 ppm
							Dimethoate	50 ppm
							Disulfoton	50 ppm
							Ethyl Parathion	50 ppm
							Methyl parathion	50 ppm
							o,o',o''-Triethylphosphorothioate	50 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	50 ppm
							Phorate	50 ppm
							Safrole, Total	50 ppm
							Sulfotepp	50 ppm
							trans-Diallate	13 ppm
					MSS_8270_WS_00017	1000 uL	2,4,6-Tribromophenol (Surr)	100 ppm
							2-Fluorobiphenyl (Surr)	100 ppm
							2-Fluorophenol (Surr)	100 ppm
							Nitrobenzene-d5 (Surr)	100 ppm
							p-Terphenyl-d14 (Surr)	100 ppm
							Phenol-d5 (Surr)	100 ppm
							Dibenz[a,j]acridine	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1'-Biphenyl	50 ppm
							1,2,4,5-Tetrachlorobenzene	50 ppm
							1,2,4-Trichlorobenzene	50 ppm
							1,2-Dichlorobenzene	50 ppm
							1,2-Diphenylhydrazine	50 ppm
							1,3-Dichlorobenzene	50 ppm
							1,3-Dinitrobenzene	50 ppm
							1,4-Dichlorobenzene	50 ppm
							1,4-Dioxane	50 ppm
							1-Methylnaphthalene	50 ppm
							2,3,4,6-Tetrachlorophenol	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dimethylphenol	50 ppm
							2,4-Dinitrophenol	100 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dichlorophenol	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Nitroaniline	50 ppm
							2-Nitrophenol	50 ppm
							3-Nitroaniline	50 ppm
							4,6-Dinitro-2-methylphenol	100 ppm
							4-Bromophenyl-phenylether	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Chloroaniline	50 ppm
							4-Chlorophenyl-phenyl ether	50 ppm
							4-Nitroaniline	50 ppm
							4-Nitrophenol	100 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Acetophenone	50 ppm
							Aniline	50 ppm
							Anthracene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm
							Benzo[k]fluoranthene	50 ppm
							Benzyl alcohol	50 ppm
							bis (2-chloroisopropyl) ether	50 ppm
							Bis(2-chloroethoxy)methane	50 ppm
							Bis(2-chloroethyl)ether	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	50 ppm
							Butyl benzyl phthalate	50 ppm
							Carbazole	50 ppm
							Chrysene	50 ppm
							Di-n-butyl phthalate	50 ppm
							Di-n-octyl phthalate	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Dibenzofuran	50 ppm
							Diethyl phthalate	50 ppm
							Dimethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Hexachlorocyclopentadiene	50 ppm
							Hexachloroethane	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							Isophorone	50 ppm
							m & p-Cresol	50 ppm
							N-Nitrosodi-n-propylamine	50 ppm
							N-Nitrosodimethylamine	50 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	42.5 ppm
							Naphthalene	50 ppm
							Nitrobenzene	50 ppm
							o-Cresol	50 ppm
							Pentachlorophenol	100 ppm
							Phenanthrene	50 ppm
							Phenol	50 ppm
							Pyrene	50 ppm
							Pyridine	100 ppm
							3,3'-Dichlorobenzidine	50 ppm
							Benzidine	150 ppm
							Alpha-Terpineol	50 ppm
							Dimethylformamide	50 ppm
							Octachlorostyrene	50 ppm
							Phenyl ether	50 ppm
					MSS_FV8270_IS_00006	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00012	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00012	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00008	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00012	06/30/24		Restek, Lot A0198786		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00012	03/31/24		Restek, Lot A0196332		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00008	03/31/24		Restek, Lot A0195409		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00017	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_8270_SURR_00005	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00006	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00013	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					OP_RES_LCS2_00010	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00005	06/30/26	Sigma- Aldrich, Lot LRAC5703			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00006	03/31/26	Restek, Lot A0195365			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00013	09/30/24	Restek, Lot A0195772			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_6_00048	03/05/24	10/19/23	MeCl2, Lot 63209	5 mL	MSS_FV8270_6_00056	1250 uL	Diallate	12.5 ppm
.MSS_FV8270_6_00056	03/05/24	10/18/23	MeCl2, Lot 63209	5 mL	MSS_8270_APWS_00016	1000 uL	Diallate	50 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	OP_RES_APPX4_00008	2500 uL	Diallate	250 ppm
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		Diallate	1000 ug/mL
MSS_RV8270_7_00029	06/30/23	03/22/23	MeCl2, Lot 226679	1 mL	MSS_BAS_WS_00010	200 uL	Atrazine	20 ppm
							Benzaldehyde	20 ppm
							Caprolactam	20 ppm
					MSS_FV8270_7_00032	250 uL	Benzidine	60 ppm
							1,3,5-Trinitrobenzene	20 ppm
							1,4-Dinitrobenzene	20 ppm
							1-Naphthylamine	20 ppm
							2-Acetylaminofluorene	20 ppm
							2-Naphthylamine	20 ppm
							2-Picoline	20 ppm
							2-Toluidine	20 ppm
							3,3'-Dimethylbenzidine	20 ppm
							4,4'-Methylene bis(2-chloroaniline)	20 ppm
							4-Aminobiphenyl	20 ppm
							4-Nitroquinoline-1-oxide	20 ppm
							5-Nitro-o-toluidine	20 ppm
							Dibenz[a,h]acridine	20 ppm
							N-Nitrosodi-n-butylamine	20 ppm
							N-Nitrosodiethylamine	20 ppm
							N-Nitrosomethylethylamine	20 ppm
							N-Nitrosomorpholine	20 ppm
							N-Nitrosopiperidine	20 ppm
							N-Nitrosopyrrolidine	20 ppm
							p-Dimethylamino azobenzene	20 ppm
							p-Phenylene diamine	20 ppm
							Pentachloronitrobenzene	20 ppm
							Phenacetin	20 ppm
							Pronamide	20 ppm
							Quinoline	20 ppm
							1,4-Naphthoquinone	20 ppm
							1-Chloronaphthalene	20 ppm
							7,12-Dimethylbenz(a)anthracene	20 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzilate	20 ppm
							Dinoseb	20 ppm
							Ethyl methanesulfonate	20 ppm
							Hexachloropropene	20 ppm
							Isodrin	20 ppm
							Isosafrole Peak 1	3.2 ppm
							Isosafrole Peak 2	16.8 ppm
							Methyl methanesulfonate	20 ppm
							Pentachlorobenzene	20 ppm
							3-Methylcholanthrene	20 ppm
							6-Methylchrysene	20 ppm
							cis-Diallate	14.8 ppm
							Dimethoate	20 ppm
							Disulfoton	20 ppm
							Ethyl Parathion	20 ppm
							Methyl parathion	20 ppm
							o,o',o''-Triethylphosphorothioate	20 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	20 ppm
							Phorate	20 ppm
							Safrole, Total	20 ppm
							Sulfotepp	20 ppm
							trans-Diallate	5.2 ppm
							2,4,6-Tribromophenol (Surr)	40 ppm
							2-Fluorobiphenyl (Surr)	40 ppm
							2-Fluorophenol (Surr)	40 ppm
							Nitrobenzene-d5 (Surr)	40 ppm
							p-Terphenyl-d14 (Surr)	40 ppm
							Phenol-d5 (Surr)	40 ppm
							Dibenz[a,j]acridine	20 ppm
							1,1'-Biphenyl	20 ppm
							1,2,4,5-Tetrachlorobenzene	20 ppm
							1,2,4-Trichlorobenzene	20 ppm
							1,2-Dichlorobenzene	20 ppm
							1,2-Diphenylhydrazine	20 ppm
							1,3-Dichlorobenzene	20 ppm
							1,3-Dinitrobenzene	20 ppm
							1,4-Dichlorobenzene	20 ppm
							1,4-Dioxane	20 ppm
							1-Methylnaphthalene	20 ppm
							2,3,4,6-Tetrachlorophenol	20 ppm
							2,4,5-Trichlorophenol	20 ppm
							2,4,6-Trichlorophenol	20 ppm
							2,4-Dichlorophenol	20 ppm
							2,4-Dimethylphenol	20 ppm
							2,4-Dinitrophenol	40 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	20 ppm
							2,6-Dichlorophenol	20 ppm
							2,6-Dinitrotoluene	20 ppm
							2-Chloronaphthalene	20 ppm
							2-Chlorophenol	20 ppm
							2-Methylnaphthalene	20 ppm
							2-Nitroaniline	20 ppm
							2-Nitrophenol	20 ppm
							3-Nitroaniline	20 ppm
							4,6-Dinitro-2-methylphenol	40 ppm
							4-Bromophenyl-phenylether	20 ppm
							4-Chloro-3-methylphenol	20 ppm
							4-Chloroaniline	20 ppm
							4-Chlorophenyl-phenyl ether	20 ppm
							4-Nitroaniline	20 ppm
							4-Nitrophenol	40 ppm
							Acenaphthene	20 ppm
							Acenaphthylene	20 ppm
							Acetophenone	20 ppm
							Aniline	20 ppm
							Anthracene	20 ppm
							Benzo[a]anthracene	20 ppm
							Benzo[a]pyrene	20 ppm
							Benzo[b]fluoranthene	20 ppm
							Benzo[g,h,i]perylene	20 ppm
							Benzo[k]fluoranthene	20 ppm
							Benzyl alcohol	20 ppm
							bis (2-chloroisopropyl) ether	20 ppm
							Bis(2-chloroethoxy)methane	20 ppm
							Bis(2-chloroethyl)ether	20 ppm
							Bis(2-ethylhexyl) phthalate	20 ppm
							Butyl benzyl phthalate	20 ppm
							Carbazole	20 ppm
							Chrysene	20 ppm
							Di-n-butyl phthalate	20 ppm
							Di-n-octyl phthalate	20 ppm
							Dibenz(a,h)anthracene	20 ppm
							Dibenzofuran	20 ppm
							Diethyl phthalate	20 ppm
							Dimethyl phthalate	20 ppm
							Fluoranthene	20 ppm
							Fluorene	20 ppm
							Hexachlorobenzene	20 ppm
							Hexachlorobutadiene	20 ppm
							Hexachlorocyclopentadiene	20 ppm
							Hexachloroethane	20 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	20 ppm
							Isophorone	20 ppm
							m & p-Cresol	20 ppm
							N-Nitrosodi-n-propylamine	20 ppm
							N-Nitrosodimethylamine	20 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	17 ppm
							Naphthalene	20 ppm
							Nitrobenzene	20 ppm
							o-Cresol	20 ppm
							Pentachlorophenol	40 ppm
							Phenanthrene	20 ppm
							Phenol	20 ppm
							Pyrene	20 ppm
							Pyridine	40 ppm
							3,3'-Dichlorobenzidine	20 ppm
							Alpha-Terpineol	20 ppm
							Dimethylformamide	20 ppm
							Octachlorostyrene	20 ppm
							Phenyl ether	20 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00010	06/30/23	03/22/23	MeCl2, Lot 226679	5 mL	OP_LCSmix2stk_00005	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00005	06/30/23		Restek, Lot A0179852		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_7_00032	08/31/23	03/22/23	MeCl2, Lot 226679	2 mL	MSS_8270_APWS_00014	640 uL	Benzidine	240 ppm
							1,3,5-Trinitrobenzene	80 ppm
							1,4-Dinitrobenzene	80 ppm
							1-Naphthylamine	80 ppm
							2-Acetylaminofluorene	80 ppm
							2-Naphthylamine	80 ppm
							2-Picoline	80 ppm
							2-Toluidine	80 ppm
							3,3'-Dimethylbenzidine	80 ppm
							4,4'-Methylene bis(2-chloroaniline)	80 ppm
							4-Aminobiphenyl	80 ppm
							4-Nitroquinoline-1-oxide	80 ppm
							5-Nitro-o-toluidine	80 ppm
							Dibenz[a,h]acridine	80 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-butylamine	80 ppm
							N-Nitrosodiethylamine	80 ppm
							N-Nitrosomethylethylamine	80 ppm
							N-Nitrosomorpholine	80 ppm
							N-Nitrosopiperidine	80 ppm
							N-Nitrosopyrrolidine	80 ppm
							p-Dimethylamino azobenzene	80 ppm
							p-Phenylene diamine	80 ppm
							Pentachloronitrobenzene	80 ppm
							Phenacetin	80 ppm
							Pronamide	80 ppm
							Quinoline	80 ppm
							1,4-Naphthoquinone	80 ppm
							1-Chloronaphthalene	80 ppm
							7,12-Dimethylbenz(a)anthracene	80 ppm
							Chlorobenzilate	80 ppm
							Dinoseb	80 ppm
							Ethyl methanesulfonate	80 ppm
							Hexachloropropene	80 ppm
							Isodrin	80 ppm
							Isosafrole Peak 1	12.8 ppm
							Isosafrole Peak 2	67.2 ppm
							Methyl methanesulfonate	80 ppm
							Pentachlorobenzene	80 ppm
							3-Methylcholanthrene	80 ppm
							6-Methylchrysene	80 ppm
							cis-Diallate	59.2 ppm
							Dimethoate	80 ppm
							Disulfoton	80 ppm
							Ethyl Parathion	80 ppm
							Methyl parathion	80 ppm
							o,o',o''-Triethylphosphorothioate	80 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	80 ppm
							Phorate	80 ppm
							Safrole, Total	80 ppm
							Sulfotepp	80 ppm
							trans-Diallate	20.8 ppm
					MSS_8270_WS_00015	640 uL	2,4,6-Tribromophenol (Surr)	160 ppm
							2-Fluorobiphenyl (Surr)	160 ppm
							2-Fluorophenol (Surr)	160 ppm
							Nitrobenzene-d5 (Surr)	160 ppm
							p-Terphenyl-d14 (Surr)	160 ppm
							Phenol-d5 (Surr)	160 ppm
							Dibenz[a,j]acridine	80 ppm
							1,1'-Biphenyl	80 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4,5-Tetrachlorobenzene	80 ppm
							1,2,4-Trichlorobenzene	80 ppm
							1,2-Dichlorobenzene	80 ppm
							1,2-Diphenylhydrazine	80 ppm
							1,3-Dichlorobenzene	80 ppm
							1,3-Dinitrobenzene	80 ppm
							1,4-Dichlorobenzene	80 ppm
							1,4-Dioxane	80 ppm
							1-Methylnaphthalene	80 ppm
							2,3,4,6-Tetrachlorophenol	80 ppm
							2,4,5-Trichlorophenol	80 ppm
							2,4,6-Trichlorophenol	80 ppm
							2,4-Dichlorophenol	80 ppm
							2,4-Dimethylphenol	80 ppm
							2,4-Dinitrophenol	160 ppm
							2,4-Dinitrotoluene	80 ppm
							2,6-Dichlorophenol	80 ppm
							2,6-Dinitrotoluene	80 ppm
							2-Chloronaphthalene	80 ppm
							2-Chlorophenol	80 ppm
							2-Methylnaphthalene	80 ppm
							2-Nitroaniline	80 ppm
							2-Nitrophenol	80 ppm
							3-Nitroaniline	80 ppm
							4,6-Dinitro-2-methylphenol	160 ppm
							4-Bromophenyl-phenylether	80 ppm
							4-Chloro-3-methylphenol	80 ppm
							4-Chloroaniline	80 ppm
							4-Chlorophenyl-phenyl ether	80 ppm
							4-Nitroaniline	80 ppm
							4-Nitrophenol	160 ppm
							Acenaphthene	80 ppm
							Acenaphthylene	80 ppm
							Acetophenone	80 ppm
							Aniline	80 ppm
							Anthracene	80 ppm
							Benzo[a]anthracene	80 ppm
							Benzo[a]pyrene	80 ppm
							Benzo[b]fluoranthene	80 ppm
							Benzo[g,h,i]perylene	80 ppm
							Benzo[k]fluoranthene	80 ppm
							Benzyl alcohol	80 ppm
							bis (2-chloroisopropyl) ether	80 ppm
							Bis(2-chloroethoxy)methane	80 ppm
							Bis(2-chloroethyl)ether	80 ppm
							Bis(2-ethylhexyl) phthalate	80 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butyl benzyl phthalate	80 ppm
							Carbazole	80 ppm
							Chrysene	80 ppm
							Di-n-butyl phthalate	80 ppm
							Di-n-octyl phthalate	80 ppm
							Dibenz(a,h)anthracene	80 ppm
							Dibenzofuran	80 ppm
							Diethyl phthalate	80 ppm
							Dimethyl phthalate	80 ppm
							Fluoranthene	80 ppm
							Fluorene	80 ppm
							Hexachlorobenzene	80 ppm
							Hexachlorobutadiene	80 ppm
							Hexachlorocyclopentadiene	80 ppm
							Hexachloroethane	80 ppm
							Indeno[1,2,3-cd]pyrene	80 ppm
							Isophorone	80 ppm
							m & p-Cresol	80 ppm
							N-Nitrosodi-n-propylamine	80 ppm
							N-Nitrosodimethylamine	80 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	68 ppm
							Naphthalene	80 ppm
							Nitrobenzene	80 ppm
							o-Cresol	80 ppm
							Pentachlorophenol	160 ppm
							Phenanthrene	80 ppm
							Phenol	80 ppm
							Pyrene	80 ppm
							Pyridine	160 ppm
							3,3'-Dichlorobenzidine	80 ppm
							Benzidine	240 ppm
							Alpha-Terpineol	80 ppm
							Dimethylformamide	80 ppm
							Octachlorostyrene	80 ppm
							Phenyl ether	80 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00009	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00015	09/22/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00004	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00004	08/31/24		Restek, Lot A0175669		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_7_00030	10/31/23	06/08/23	MeCl2, Lot 226055	1 mL	MSS_BAS_WS_00012	200 uL	Atrazine	20 ppm
							Benzaldehyde	20 ppm
							Caprolactam	20 ppm
					MSS_FV8270_7_00033	250 uL	Benzidine	60 ppm
							1,3,5-Trinitrobenzene	20 ppm
							1,4-Dinitrobenzene	20 ppm
							1-Naphthylamine	20 ppm
							2-Acetylaminofluorene	20 ppm
							2-Naphthylamine	20 ppm
							2-Picoline	20 ppm
							2-Toluidine	20 ppm
							3,3'-Dimethylbenzidine	20 ppm
							4,4'-Methylene bis(2-chloroaniline)	20 ppm
							4-Aminobiphenyl	20 ppm
							4-Nitroquinoline-1-oxide	20 ppm
							5-Nitro-o-toluidine	20 ppm
							Dibenz[a,h]acridine	20 ppm
							N-Nitrosodi-n-butylamine	20 ppm
							N-Nitrosodiethylamine	20 ppm
							N-Nitrosomethylethylamine	20 ppm
							N-Nitrosomorpholine	20 ppm
							N-Nitrosopiperidine	20 ppm
							N-Nitrosopyrrolidine	20 ppm
							p-Dimethylamino azobenzene	20 ppm
							p-Phenylene diamine	20 ppm
							Pentachloronitrobenzene	20 ppm
							Phenacetin	20 ppm
							Pronamide	20 ppm
							Quinoline	20 ppm
							1,4-Naphthoquinone	20 ppm
							1-Chloronaphthalene	20 ppm
							7,12-Dimethylbenz(a)anthracene	20 ppm
							Chlorobenzilate	20 ppm
							Dinoseb	20 ppm
							Ethyl methanesulfonate	20 ppm
							Hexachloropropene	20 ppm
							Isodrin	20 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isosafrole Peak 1	3.2 ppm
							Isosafrole Peak 2	16.8 ppm
							Methyl methanesulfonate	20 ppm
							Pentachlorobenzene	20 ppm
							3-Methylcholanthrene	20 ppm
							6-Methylchrysene	20 ppm
							cis-Diallate	14.8 ppm
							Dimethoate	20 ppm
							Disulfoton	20 ppm
							Ethyl Parathion	20 ppm
							Methyl parathion	20 ppm
							o,o',o''-Triethylphosphorothioate	20 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	20 ppm
							Phorate	20 ppm
							Safrole, Total	20 ppm
							Sulfotepp	20 ppm
							trans-Diallate	5.2 ppm
							2,4,6-Tribromophenol (Surr)	40 ppm
							2-Fluorobiphenyl (Surr)	40 ppm
							2-Fluorophenol (Surr)	40 ppm
							Nitrobenzene-d5 (Surr)	40 ppm
							p-Terphenyl-d14 (Surr)	40 ppm
							Phenol-d5 (Surr)	40 ppm
							Dibenz[a,j]acridine	20 ppm
							1,1'-Biphenyl	20 ppm
							1,2,4,5-Tetrachlorobenzene	20 ppm
							1,2,4-Trichlorobenzene	20 ppm
							1,2-Dichlorobenzene	20 ppm
							1,2-Diphenylhydrazine	20 ppm
							1,3-Dichlorobenzene	20 ppm
							1,3-Dinitrobenzene	20 ppm
							1,4-Dichlorobenzene	20 ppm
							1,4-Dioxane	20 ppm
							1-Methylnaphthalene	20 ppm
							2,3,4,6-Tetrachlorophenol	20 ppm
							2,4,5-Trichlorophenol	20 ppm
							2,4,6-Trichlorophenol	20 ppm
							2,4-Dichlorophenol	20 ppm
							2,4-Dimethylphenol	20 ppm
							2,4-Dinitrophenol	40 ppm
							2,4-Dinitrotoluene	20 ppm
							2,6-Dichlorophenol	20 ppm
							2,6-Dinitrotoluene	20 ppm
							2-Chloronaphthalene	20 ppm
							2-Chlorophenol	20 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	20 ppm
							2-Nitroaniline	20 ppm
							2-Nitrophenol	20 ppm
							3-Nitroaniline	20 ppm
							4,6-Dinitro-2-methylphenol	40 ppm
							4-Bromophenyl-phenylether	20 ppm
							4-Chloro-3-methylphenol	20 ppm
							4-Chloroaniline	20 ppm
							4-Chlorophenyl-phenyl ether	20 ppm
							4-Nitroaniline	20 ppm
							4-Nitrophenol	40 ppm
							Acenaphthene	20 ppm
							Acenaphthylene	20 ppm
							Acetophenone	20 ppm
							Aniline	20 ppm
							Anthracene	20 ppm
							Benzo[a]anthracene	20 ppm
							Benzo[a]pyrene	20 ppm
							Benzo[b]fluoranthene	20 ppm
							Benzo[g,h,i]perylene	20 ppm
							Benzo[k]fluoranthene	20 ppm
							Benzyl alcohol	20 ppm
							bis (2-chloroisopropyl) ether	20 ppm
							Bis(2-chloroethoxy)methane	20 ppm
							Bis(2-chloroethyl)ether	20 ppm
							Bis(2-ethylhexyl) phthalate	20 ppm
							Butyl benzyl phthalate	20 ppm
							Carbazole	20 ppm
							Chrysene	20 ppm
							Di-n-butyl phthalate	20 ppm
							Di-n-octyl phthalate	20 ppm
							Dibenz(a,h)anthracene	20 ppm
							Dibenzofuran	20 ppm
							Diethyl phthalate	20 ppm
							Dimethyl phthalate	20 ppm
							Fluoranthene	20 ppm
							Fluorene	20 ppm
							Hexachlorobenzene	20 ppm
							Hexachlorobutadiene	20 ppm
							Hexachlorocyclopentadiene	20 ppm
							Hexachloroethane	20 ppm
							Indeno[1,2,3-cd]pyrene	20 ppm
							Isophorone	20 ppm
							m & p-Cresol	20 ppm
							N-Nitrosodi-n-propylamine	20 ppm
							N-Nitrosodimethylamine	20 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Nitrosodiphenylamine(as diphenylamine)	17 ppm
							Naphthalene	20 ppm
							Nitrobenzene	20 ppm
							o-Cresol	20 ppm
							Pentachlorophenol	40 ppm
							Phenanthrene	20 ppm
							Phenol	20 ppm
							Pyrene	20 ppm
							Pyridine	40 ppm
							3,3'-Dichlorobenzidine	20 ppm
							Alpha-Terpineol	20 ppm
							Dimethylformamide	20 ppm
							Octachlorostyrene	20 ppm
							Phenyl ether	20 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00012	12/08/23	06/08/23	MeCl2, Lot 226055	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_7_00033	10/31/23	06/08/23	MeCl2, Lot 226055	2 mL	MSS_8270_APWS_00015	640 uL	Benzidine	240 ppm
							1,3,5-Trinitrobenzene	80 ppm
							1,4-Dinitrobenzene	80 ppm
							1-Naphthylamine	80 ppm
							2-Acetylaminofluorene	80 ppm
							2-Naphthylamine	80 ppm
							2-Picoline	80 ppm
							2-Toluidine	80 ppm
							3,3'-Dimethylbenzidine	80 ppm
							4,4'-Methylene bis(2-chloroaniline)	80 ppm
							4-Aminobiphenyl	80 ppm
							4-Nitroquinoline-1-oxide	80 ppm
							5-Nitro-o-toluidine	80 ppm
							Dibenz[a,h]acridine	80 ppm
							N-Nitrosodi-n-butylamine	80 ppm
							N-Nitrosodiethylamine	80 ppm
							N-Nitrosomethylethylamine	80 ppm
							N-Nitrosomorpholine	80 ppm
							N-Nitrosopiperidine	80 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosopyrrolidine	80 ppm
							p-Dimethylamino azobenzene	80 ppm
							p-Phenylene diamine	80 ppm
							Pentachloronitrobenzene	80 ppm
							Phenacetin	80 ppm
							Pronamide	80 ppm
							Quinoline	80 ppm
							1,4-Naphthoquinone	80 ppm
							1-Chloronaphthalene	80 ppm
							7,12-Dimethylbenz(a)anthracene	80 ppm
							Chlorobenzilate	80 ppm
							Dinoseb	80 ppm
							Ethyl methanesulfonate	80 ppm
							Hexachloropropene	80 ppm
							Isodrin	80 ppm
							Isosafrole Peak 1	12.8 ppm
							Isosafrole Peak 2	67.2 ppm
							Methyl methanesulfonate	80 ppm
							Pentachlorobenzene	80 ppm
							3-Methylcholanthrene	80 ppm
							6-Methylchrysene	80 ppm
							cis-Diallate	59.2 ppm
							Dimethoate	80 ppm
							Disulfoton	80 ppm
							Ethyl Parathion	80 ppm
							Methyl parathion	80 ppm
							o,o',o''-Triethylphosphorothioate	80 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	80 ppm
							Phorate	80 ppm
							Safrole, Total	80 ppm
							Sulfotepp	80 ppm
							trans-Diallate	20.8 ppm
					MSS_8270_WS_00016	640 uL	2,4,6-Tribromophenol (Surr)	160 ppm
							2-Fluorobiphenyl (Surr)	160 ppm
							2-Fluorophenol (Surr)	160 ppm
							Nitrobenzene-d5 (Surr)	160 ppm
							p-Terphenyl-d14 (Surr)	160 ppm
							Phenol-d5 (Surr)	160 ppm
							Dibenz[a,j]acridine	80 ppm
							1,1'-Biphenyl	80 ppm
							1,2,4,5-Tetrachlorobenzene	80 ppm
							1,2,4-Trichlorobenzene	80 ppm
							1,2-Dichlorobenzene	80 ppm
							1,2-Diphenylhydrazine	80 ppm
							1,3-Dichlorobenzene	80 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	80 ppm
							1,4-Dichlorobenzene	80 ppm
							1,4-Dioxane	80 ppm
							1-Methylnaphthalene	80 ppm
							2,3,4,6-Tetrachlorophenol	80 ppm
							2,4,5-Trichlorophenol	80 ppm
							2,4,6-Trichlorophenol	80 ppm
							2,4-Dichlorophenol	80 ppm
							2,4-Dimethylphenol	80 ppm
							2,4-Dinitrophenol	160 ppm
							2,4-Dinitrotoluene	80 ppm
							2,6-Dichlorophenol	80 ppm
							2,6-Dinitrotoluene	80 ppm
							2-Chloronaphthalene	80 ppm
							2-Chlorophenol	80 ppm
							2-Methylnaphthalene	80 ppm
							2-Nitroaniline	80 ppm
							2-Nitrophenol	80 ppm
							3-Nitroaniline	80 ppm
							4,6-Dinitro-2-methylphenol	160 ppm
							4-Bromophenyl-phenylether	80 ppm
							4-Chloro-3-methylphenol	80 ppm
							4-Chloroaniline	80 ppm
							4-Chlorophenyl-phenyl ether	80 ppm
							4-Nitroaniline	80 ppm
							4-Nitrophenol	160 ppm
							Acenaphthene	80 ppm
							Acenaphthylene	80 ppm
							Acetophenone	80 ppm
							Aniline	80 ppm
							Anthracene	80 ppm
							Benzo[a]anthracene	80 ppm
							Benzo[a]pyrene	80 ppm
							Benzo[b]fluoranthene	80 ppm
							Benzo[g,h,i]perylene	80 ppm
							Benzo[k]fluoranthene	80 ppm
							Benzyl alcohol	80 ppm
							bis (2-chloroisopropyl) ether	80 ppm
							Bis(2-chloroethoxy)methane	80 ppm
							Bis(2-chloroethyl)ether	80 ppm
							Bis(2-ethylhexyl) phthalate	80 ppm
							Butyl benzyl phthalate	80 ppm
							Carbazole	80 ppm
							Chrysene	80 ppm
							Di-n-butyl phthalate	80 ppm
							Di-n-octyl phthalate	80 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	80 ppm
							Dibenzofuran	80 ppm
							Diethyl phthalate	80 ppm
							Dimethyl phthalate	80 ppm
							Fluoranthene	80 ppm
							Fluorene	80 ppm
							Hexachlorobenzene	80 ppm
							Hexachlorobutadiene	80 ppm
							Hexachlorocyclopentadiene	80 ppm
							Hexachloroethane	80 ppm
							Indeno[1,2,3-cd]pyrene	80 ppm
							Isophorone	80 ppm
							m & p-Cresol	80 ppm
							N-Nitrosodi-n-propylamine	80 ppm
							N-Nitrosodimethylamine	80 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	68 ppm
							Naphthalene	80 ppm
							Nitrobenzene	80 ppm
							o-Cresol	80 ppm
							Pentachlorophenol	160 ppm
							Phenanthrene	80 ppm
							Phenol	80 ppm
							Pyrene	80 ppm
							Pyridine	160 ppm
							3,3'-Dichlorobenzidine	80 ppm
							Benzidine	240 ppm
							Alpha-Terpineol	80 ppm
							Dimethylformamide	80 ppm
							Octachlorostyrene	80 ppm
							Phenyl ether	80 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00005	05/31/25		Restek, Lot A0184892		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_7_00032	03/05/24	10/19/23	MeCl2, Lot 63209	1 mL	MSS_BAS_WS_00014	200 uL	Atrazine	20 ppm
							Benzaldehyde	20 ppm
							Caprolactam	20 ppm
					MSS_FV8270_7_00035	250 uL	Benzidine	60 ppm
							1,3,5-Trinitrobenzene	20 ppm
							1,4-Dinitrobenzene	20 ppm
							1-Naphthylamine	20 ppm
							2-Acetylaminofluorene	20 ppm
							2-Naphthylamine	20 ppm
							2-Picoline	20 ppm
							2-Toluidine	20 ppm
							3,3'-Dimethylbenzidine	20 ppm
							4,4'-Methylene bis(2-chloroaniline)	20 ppm
							4-Aminobiphenyl	20 ppm
							4-Nitroquinoline-1-oxide	20 ppm
							5-Nitro-o-toluidine	20 ppm
							Dibenz[a,h]acridine	20 ppm
							N-Nitrosodi-n-butylamine	20 ppm
							N-Nitrosodiethylamine	20 ppm
							N-Nitrosomethylethylamine	20 ppm
							N-Nitrosomorpholine	20 ppm
							N-Nitrosopiperidine	20 ppm
							N-Nitrosopyrrolidine	20 ppm
							p-Dimethylamino azobenzene	20 ppm
							p-Phenylene diamine	20 ppm
							Pentachloronitrobenzene	20 ppm
							Phenacetin	20 ppm
							Pronamide	20 ppm
							Quinoline	20 ppm
							1,4-Naphthoquinone	20 ppm
							1-Chloronaphthalene	20 ppm
							7,12-Dimethylbenz(a)anthracene	20 ppm
							Chlorobenzilate	20 ppm
							Dinoseb	20 ppm
							Ethyl methanesulfonate	20 ppm
							Hexachloropropene	20 ppm
							Isodrin	20 ppm
							Isosafrole Peak 1	3.2 ppm
							Isosafrole Peak 2	16.8 ppm
							Methyl methanesulfonate	20 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorobenzene	20 ppm
							3-Methylcholanthrene	20 ppm
							6-Methylchrysene	20 ppm
							cis-Diallate	14.8 ppm
							Dimethoate	20 ppm
							Disulfoton	20 ppm
							Ethyl Parathion	20 ppm
							Methyl parathion	20 ppm
							o,o',o''-Triethylphosphorothioate	20 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	20 ppm
							Phorate	20 ppm
							Safrole, Total	20 ppm
							Sulfotepp	20 ppm
							trans-Diallate	5.2 ppm
							2,4,6-Tribromophenol (Surr)	40 ppm
							2-Fluorobiphenyl (Surr)	40 ppm
							2-Fluorophenol (Surr)	40 ppm
							Nitrobenzene-d5 (Surr)	40 ppm
							p-Terphenyl-d14 (Surr)	40 ppm
							Phenol-d5 (Surr)	40 ppm
							Dibenz[a,j]acridine	20 ppm
							1,1'-Biphenyl	20 ppm
							1,2,4,5-Tetrachlorobenzene	20 ppm
							1,2,4-Trichlorobenzene	20 ppm
							1,2-Dichlorobenzene	20 ppm
							1,2-Diphenylhydrazine	20 ppm
							1,3-Dichlorobenzene	20 ppm
							1,3-Dinitrobenzene	20 ppm
							1,4-Dichlorobenzene	20 ppm
							1,4-Dioxane	20 ppm
							1-Methylnaphthalene	20 ppm
							2,3,4,6-Tetrachlorophenol	20 ppm
							2,4,5-Trichlorophenol	20 ppm
							2,4,6-Trichlorophenol	20 ppm
							2,4-Dichlorophenol	20 ppm
							2,4-Dimethylphenol	20 ppm
							2,4-Dinitrophenol	40 ppm
							2,4-Dinitrotoluene	20 ppm
							2,6-Dichlorophenol	20 ppm
							2,6-Dinitrotoluene	20 ppm
							2-Chloronaphthalene	20 ppm
							2-Chlorophenol	20 ppm
							2-Methylnaphthalene	20 ppm
							2-Nitroaniline	20 ppm
							2-Nitrophenol	20 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitroaniline	20 ppm
							4,6-Dinitro-2-methylphenol	40 ppm
							4-Bromophenyl-phenylether	20 ppm
							4-Chloro-3-methylphenol	20 ppm
							4-Chloroaniline	20 ppm
							4-Chlorophenyl-phenyl ether	20 ppm
							4-Nitroaniline	20 ppm
							4-Nitrophenol	40 ppm
							Acenaphthene	20 ppm
							Acenaphthylene	20 ppm
							Acetophenone	20 ppm
							Aniline	20 ppm
							Anthracene	20 ppm
							Benzo[a]anthracene	20 ppm
							Benzo[a]pyrene	20 ppm
							Benzo[b]fluoranthene	20 ppm
							Benzo[g,h,i]perylene	20 ppm
							Benzo[k]fluoranthene	20 ppm
							Benzyl alcohol	20 ppm
							bis (2-chloroisopropyl) ether	20 ppm
							Bis(2-chloroethoxy)methane	20 ppm
							Bis(2-chloroethyl)ether	20 ppm
							Bis(2-ethylhexyl) phthalate	20 ppm
							Butyl benzyl phthalate	20 ppm
							Carbazole	20 ppm
							Chrysene	20 ppm
							Di-n-butyl phthalate	20 ppm
							Di-n-octyl phthalate	20 ppm
							Dibenz(a,h)anthracene	20 ppm
							Dibenzofuran	20 ppm
							Diethyl phthalate	20 ppm
							Dimethyl phthalate	20 ppm
							Fluoranthene	20 ppm
							Fluorene	20 ppm
							Hexachlorobenzene	20 ppm
							Hexachlorobutadiene	20 ppm
							Hexachlorocyclopentadiene	20 ppm
							Hexachloroethane	20 ppm
							Indeno[1,2,3-cd]pyrene	20 ppm
							Isophorone	20 ppm
							m & p-Cresol	20 ppm
							N-Nitrosodi-n-propylamine	20 ppm
							N-Nitrosodimethylamine	20 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	17 ppm
							Naphthalene	20 ppm
							Nitrobenzene	20 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Cresol	20 ppm
							Pentachlorophenol	40 ppm
							Phenanthrene	20 ppm
							Phenol	20 ppm
							Pyrene	20 ppm
							Pyridine	40 ppm
							3,3'-Dichlorobenzidine	20 ppm
							Alpha-Terpineol	20 ppm
							Dimethylformamide	20 ppm
							Octachlorostyrene	20 ppm
							Phenyl ether	20 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00014	04/05/24	10/05/23	MeCl2, Lot 63209	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_7_00035	03/05/24	10/18/23	MeCl2, Lot 63209	2 mL	MSS_8270_APWS_00016	640 uL	Benzidine	240 ppm
							1,3,5-Trinitrobenzene	80 ppm
							1,4-Dinitrobenzene	80 ppm
							1-Naphthylamine	80 ppm
							2-Acetylaminofluorene	80 ppm
							2-Naphthylamine	80 ppm
							2-Picoline	80 ppm
							2-Toluidine	80 ppm
							3,3'-Dimethylbenzidine	80 ppm
							4,4'-Methylene bis(2-chloroaniline)	80 ppm
							4-Aminobiphenyl	80 ppm
							4-Nitroquinoline-1-oxide	80 ppm
							5-Nitro-o-toluidine	80 ppm
							Dibenz[a,h]acridine	80 ppm
							N-Nitrosodi-n-butylamine	80 ppm
							N-Nitrosodiethylamine	80 ppm
							N-Nitrosomethylethylamine	80 ppm
							N-Nitrosomorpholine	80 ppm
							N-Nitrosopiperidine	80 ppm
							N-Nitrosopyrrolidine	80 ppm
							p-Dimethylamino azobenzene	80 ppm
							p-Phenylene diamine	80 ppm
							Pentachloronitrobenzene	80 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenacetin	80 ppm
							Pronamide	80 ppm
							Quinoline	80 ppm
							1,4-Naphthoquinone	80 ppm
							1-Chloronaphthalene	80 ppm
							7,12-Dimethylbenz(a)anthracene	80 ppm
							Chlorobenzilate	80 ppm
							Dinoseb	80 ppm
							Ethyl methanesulfonate	80 ppm
							Hexachloropropene	80 ppm
							Isodrin	80 ppm
							Isosafrole Peak 1	12.8 ppm
							Isosafrole Peak 2	67.2 ppm
							Methyl methanesulfonate	80 ppm
							Pentachlorobenzene	80 ppm
							3-Methylcholanthrene	80 ppm
							6-Methylchrysene	80 ppm
							cis-Diallate	59.2 ppm
							Dimethoate	80 ppm
							Disulfoton	80 ppm
							Ethyl Parathion	80 ppm
							Methyl parathion	80 ppm
							o,o',o''-Triethylphosphorothioate	80 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	80 ppm
							Phorate	80 ppm
							Safrole, Total	80 ppm
							Sulfotepp	80 ppm
							trans-Diallate	20.8 ppm
					MSS_8270_WS_00017	640 uL	2,4,6-Tribromophenol (Surr)	160 ppm
							2-Fluorobiphenyl (Surr)	160 ppm
							2-Fluorophenol (Surr)	160 ppm
							Nitrobenzene-d5 (Surr)	160 ppm
							p-Terphenyl-d14 (Surr)	160 ppm
							Phenol-d5 (Surr)	160 ppm
							Dibenz[a,j]acridine	80 ppm
							1,1'-Biphenyl	80 ppm
							1,2,4,5-Tetrachlorobenzene	80 ppm
							1,2,4-Trichlorobenzene	80 ppm
							1,2-Dichlorobenzene	80 ppm
							1,2-Diphenylhydrazine	80 ppm
							1,3-Dichlorobenzene	80 ppm
							1,3-Dinitrobenzene	80 ppm
							1,4-Dichlorobenzene	80 ppm
							1,4-Dioxane	80 ppm
							1-Methylnaphthalene	80 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	80 ppm
							2,4,5-Trichlorophenol	80 ppm
							2,4,6-Trichlorophenol	80 ppm
							2,4-Dichlorophenol	80 ppm
							2,4-Dimethylphenol	80 ppm
							2,4-Dinitrophenol	160 ppm
							2,4-Dinitrotoluene	80 ppm
							2,6-Dichlorophenol	80 ppm
							2,6-Dinitrotoluene	80 ppm
							2-Chloronaphthalene	80 ppm
							2-Chlorophenol	80 ppm
							2-Methylnaphthalene	80 ppm
							2-Nitroaniline	80 ppm
							2-Nitrophenol	80 ppm
							3-Nitroaniline	80 ppm
							4,6-Dinitro-2-methylphenol	160 ppm
							4-Bromophenyl-phenylether	80 ppm
							4-Chloro-3-methylphenol	80 ppm
							4-Chloroaniline	80 ppm
							4-Chlorophenyl-phenyl ether	80 ppm
							4-Nitroaniline	80 ppm
							4-Nitrophenol	160 ppm
							Acenaphthene	80 ppm
							Acenaphthylene	80 ppm
							Acetophenone	80 ppm
							Aniline	80 ppm
							Anthracene	80 ppm
							Benzo[a]anthracene	80 ppm
							Benzo[a]pyrene	80 ppm
							Benzo[b]fluoranthene	80 ppm
							Benzo[g,h,i]perylene	80 ppm
							Benzo[k]fluoranthene	80 ppm
							Benzyl alcohol	80 ppm
							bis (2-chloroisopropyl) ether	80 ppm
							Bis(2-chloroethoxy)methane	80 ppm
							Bis(2-chloroethyl)ether	80 ppm
							Bis(2-ethylhexyl) phthalate	80 ppm
							Butyl benzyl phthalate	80 ppm
							Carbazole	80 ppm
							Chrysene	80 ppm
							Di-n-butyl phthalate	80 ppm
							Di-n-octyl phthalate	80 ppm
							Dibenz(a,h)anthracene	80 ppm
							Dibenzofuran	80 ppm
							Diethyl phthalate	80 ppm
							Dimethyl phthalate	80 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	80 ppm
							Fluorene	80 ppm
							Hexachlorobenzene	80 ppm
							Hexachlorobutadiene	80 ppm
							Hexachlorocyclopentadiene	80 ppm
							Hexachloroethane	80 ppm
							Indeno[1,2,3-cd]pyrene	80 ppm
							Isophorone	80 ppm
							m & p-Cresol	80 ppm
							N-Nitrosodi-n-propylamine	80 ppm
							N-Nitrosodimethylamine	80 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	68 ppm
							Naphthalene	80 ppm
							Nitrobenzene	80 ppm
							o-Cresol	80 ppm
							Pentachlorophenol	160 ppm
							Phenanthrene	80 ppm
							Phenol	80 ppm
							Pyrene	80 ppm
							Pyridine	160 ppm
							3,3'-Dichlorobenzidine	80 ppm
							Benzidine	240 ppm
							Alpha-Terpineol	80 ppm
							Dimethylformamide	80 ppm
							Octachlorostyrene	80 ppm
							Phenyl ether	80 ppm
					MSS_FV8270_IS_00006	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00012	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00012	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00008	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00012	06/30/24		Restek, Lot A0198786		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00012	03/31/24		Restek, Lot A0196332		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00008	03/31/24		Restek, Lot A0195409		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MSS_8270_WS_00017	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_8270_SURR_00005	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00006	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00013	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00010	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00005	06/30/26	Sigma- Aldrich, Lot LRAC5703			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00006	03/31/26		Restek, Lot A0195365		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00013	09/30/24		Restek, Lot A0195772		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSS_RV8270_8_00029	06/30/23	03/22/23	MeCl2, Lot 226679	1 mL	MSS_BAS_WS_00010	300 uL	Atrazine	30 ppm
							Benzaldehyde	30 ppm
							Caprolactam	30 ppm
					MSS_FV8270_8_00029	250 uL	Benzidine	90 ppm
							1,3,5-Trinitrobenzene	30 ppm
							1,4-Dinitrobenzene	30 ppm
							1-Naphthylamine	30 ppm
							2-Acetylaminofluorene	30 ppm
							2-Naphthylamine	30 ppm
							2-Picoline	30 ppm
							2-Toluidine	30 ppm
							3,3'-Dimethylbenzidine	30 ppm
							4,4'-Methylene bis(2-chloroaniline)	30 ppm
							4-Aminobiphenyl	30 ppm
							4-Nitroquinoline-1-oxide	30 ppm
							5-Nitro-o-toluidine	30 ppm
							Dibenz[a,h]acridine	30 ppm
							N-Nitrosodi-n-butylamine	30 ppm
							N-Nitrosodiethylamine	30 ppm
							N-Nitrosomethylethylamine	30 ppm
							N-Nitrosomorpholine	30 ppm
							N-Nitrosopiperidine	30 ppm
							N-Nitrosopyrrolidine	30 ppm
							p-Dimethylamino azobenzene	30 ppm
							p-Phenylene diamine	30 ppm
							Pentachloronitrobenzene	30 ppm
							Phenacetin	30 ppm
							Pronamide	30 ppm
							Quinoline	30 ppm
							1,4-Naphthoquinone	30 ppm
							1-Chloronaphthalene	30 ppm
							7,12-Dimethylbenz(a)anthracene	30 ppm
							Chlorobenzilate	30 ppm
							Dinoseb	30 ppm
							Ethyl methanesulfonate	30 ppm
							Hexachloropropene	30 ppm
							Isodrin	30 ppm
							Isosafrole Peak 1	4.8 ppm
							Isosafrole Peak 2	25.2 ppm
							Methyl methanesulfonate	30 ppm
							Pentachlorobenzene	30 ppm
							3-Methylcholanthrene	30 ppm
							6-Methylchrysene	30 ppm
							cis-Diallate	22.2 ppm
							Dimethoate	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Disulfoton	30 ppm
							Ethyl Parathion	30 ppm
							Methyl parathion	30 ppm
							o,o',o''-Triethylphosphorothioate	30 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	30 ppm
							Phorate	30 ppm
							Safrole, Total	30 ppm
							Sulfotepp	30 ppm
							trans-Diallate	7.8 ppm
							2,4,6-Tribromophenol (Surr)	60 ppm
							2-Fluorobiphenyl (Surr)	60 ppm
							2-Fluorophenol (Surr)	60 ppm
							Nitrobenzene-d5 (Surr)	60 ppm
							p-Terphenyl-d14 (Surr)	60 ppm
							Phenol-d5 (Surr)	60 ppm
							Dibenz[a,j]acridine	30 ppm
							1,1'-Biphenyl	30 ppm
							1,2,4,5-Tetrachlorobenzene	30 ppm
							1,2,4-Trichlorobenzene	30 ppm
							1,2-Dichlorobenzene	30 ppm
							1,2-Diphenylhydrazine	30 ppm
							1,3-Dichlorobenzene	30 ppm
							1,3-Dinitrobenzene	30 ppm
							1,4-Dichlorobenzene	30 ppm
							1,4-Dioxane	30 ppm
							1-Methylnaphthalene	30 ppm
							2,3,4,6-Tetrachlorophenol	30 ppm
							2,4,5-Trichlorophenol	30 ppm
							2,4,6-Trichlorophenol	30 ppm
							2,4-Dichlorophenol	30 ppm
							2,4-Dimethylphenol	30 ppm
							2,4-Dinitrophenol	60 ppm
							2,4-Dinitrotoluene	30 ppm
							2,6-Dichlorophenol	30 ppm
							2,6-Dinitrotoluene	30 ppm
							2-Chloronaphthalene	30 ppm
							2-Chlorophenol	30 ppm
							2-Methylnaphthalene	30 ppm
							2-Nitroaniline	30 ppm
							2-Nitrophenol	30 ppm
							3-Nitroaniline	30 ppm
							4,6-Dinitro-2-methylphenol	60 ppm
							4-Bromophenyl-phenylether	30 ppm
							4-Chloro-3-methylphenol	30 ppm
							4-Chloroaniline	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl-phenyl ether	30 ppm
							4-Nitroaniline	30 ppm
							4-Nitrophenol	60 ppm
							Acenaphthene	30 ppm
							Acenaphthylene	30 ppm
							Acetophenone	30 ppm
							Aniline	30 ppm
							Anthracene	30 ppm
							Benzo[a]anthracene	30 ppm
							Benzo[a]pyrene	30 ppm
							Benzo[b]fluoranthene	30 ppm
							Benzo[g,h,i]perylene	30 ppm
							Benzo[k]fluoranthene	30 ppm
							Benzyl alcohol	30 ppm
							bis (2-chloroisopropyl) ether	30 ppm
							Bis(2-chloroethoxy)methane	30 ppm
							Bis(2-chloroethyl)ether	30 ppm
							Bis(2-ethylhexyl) phthalate	30 ppm
							Butyl benzyl phthalate	30 ppm
							Carbazole	30 ppm
							Chrysene	30 ppm
							Di-n-butyl phthalate	30 ppm
							Di-n-octyl phthalate	30 ppm
							Dibenz(a,h)anthracene	30 ppm
							Dibenzofuran	30 ppm
							Diethyl phthalate	30 ppm
							Dimethyl phthalate	30 ppm
							Fluoranthene	30 ppm
							Fluorene	30 ppm
							Hexachlorobenzene	30 ppm
							Hexachlorobutadiene	30 ppm
							Hexachlorocyclopentadiene	30 ppm
							Hexachloroethane	30 ppm
							Indeno[1,2,3-cd]pyrene	30 ppm
							Isophorone	30 ppm
							m & p-Cresol	30 ppm
							N-Nitrosodi-n-propylamine	30 ppm
							N-Nitrosodimethylamine	30 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	25.5 ppm
							Naphthalene	30 ppm
							Nitrobenzene	30 ppm
							o-Cresol	30 ppm
							Pentachlorophenol	60 ppm
							Phenanthrene	30 ppm
							Phenol	30 ppm
							Pyrene	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyridine	60 ppm
							3,3'-Dichlorobenzidine	30 ppm
							Alpha-Terpineol	30 ppm
							Dimethylformamide	30 ppm
							Octachlorostyrene	30 ppm
							Phenyl ether	30 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00010	06/30/23	03/22/23	MeCl2, Lot 226679	5 mL	OP_LCSmix2stk_00005	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00005	06/30/23	Restek, Lot A0179852			(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_8_00029	08/31/23	03/22/23	MeCl2, Lot 226679	2 mL	MSS_8270_APWS_00014	960 uL	Benzidine	360 ppm
							1,3,5-Trinitrobenzene	120 ppm
							1,4-Dinitrobenzene	120 ppm
							1-Naphthylamine	120 ppm
							2-Acetylaminofluorene	120 ppm
							2-Naphthylamine	120 ppm
							2-Picoline	120 ppm
							2-Toluidine	120 ppm
							3,3'-Dimethylbenzidine	120 ppm
							4,4'-Methylene bis(2-chloroaniline)	120 ppm
							4-Aminobiphenyl	120 ppm
							4-Nitroquinoline-1-oxide	120 ppm
							5-Nitro-o-toluidine	120 ppm
							Dibenz[a,h]acridine	120 ppm
							N-Nitrosodi-n-butylamine	120 ppm
							N-Nitrosodiethylamine	120 ppm
							N-Nitrosomethylethylamine	120 ppm
							N-Nitrosomorpholine	120 ppm
							N-Nitrosopiperidine	120 ppm
							N-Nitrosopyrrolidine	120 ppm
							p-Dimethylamino azobenzene	120 ppm
							p-Phenylene diamine	120 ppm
							Pentachloronitrobenzene	120 ppm
							Phenacetin	120 ppm
							Pronamide	120 ppm
							Quinoline	120 ppm
							1,4-Naphthoquinone	120 ppm
							1-Chloronaphthalene	120 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	120 ppm
							Chlorobenzilate	120 ppm
							Dinoseb	120 ppm
							Ethyl methanesulfonate	120 ppm
							Hexachloropropene	120 ppm
							Isodrin	120 ppm
							Isosafrole Peak 1	19.2 ppm
							Isosafrole Peak 2	100.8 ppm
							Methyl methanesulfonate	120 ppm
							Pentachlorobenzene	120 ppm
							3-Methylcholanthrene	120 ppm
							6-Methylchrysene	120 ppm
							cis-Diallate	88.8 ppm
							Dimethoate	120 ppm
							Disulfoton	120 ppm
							Ethyl Parathion	120 ppm
							Methyl parathion	120 ppm
							o,o',o''-Triethylphosphorothioate	120 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	120 ppm
							Phorate	120 ppm
							Safrole, Total	120 ppm
							Sulfotepp	120 ppm
							trans-Diallate	31.2 ppm
					MSS_8270_WS_00015	960 uL	2,4,6-Tribromophenol (Surr)	240 ppm
							2-Fluorobiphenyl (Surr)	240 ppm
							2-Fluorophenol (Surr)	240 ppm
							Nitrobenzene-d5 (Surr)	240 ppm
							p-Terphenyl-d14 (Surr)	240 ppm
							Phenol-d5 (Surr)	240 ppm
							Dibenz[a,j]acridine	120 ppm
							1,1'-Biphenyl	120 ppm
							1,2,4,5-Tetrachlorobenzene	120 ppm
							1,2,4-Trichlorobenzene	120 ppm
							1,2-Dichlorobenzene	120 ppm
							1,2-Diphenylhydrazine	120 ppm
							1,3-Dichlorobenzene	120 ppm
							1,3-Dinitrobenzene	120 ppm
							1,4-Dichlorobenzene	120 ppm
							1,4-Dioxane	120 ppm
							1-Methylnaphthalene	120 ppm
							2,3,4,6-Tetrachlorophenol	120 ppm
							2,4,5-Trichlorophenol	120 ppm
							2,4,6-Trichlorophenol	120 ppm
							2,4-Dichlorophenol	120 ppm
							2,4-Dimethylphenol	120 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	240 ppm
							2,4-Dinitrotoluene	120 ppm
							2,6-Dichlorophenol	120 ppm
							2,6-Dinitrotoluene	120 ppm
							2-Chloronaphthalene	120 ppm
							2-Chlorophenol	120 ppm
							2-Methylnaphthalene	120 ppm
							2-Nitroaniline	120 ppm
							2-Nitrophenol	120 ppm
							3-Nitroaniline	120 ppm
							4,6-Dinitro-2-methylphenol	240 ppm
							4-Bromophenyl-phenylether	120 ppm
							4-Chloro-3-methylphenol	120 ppm
							4-Chloroaniline	120 ppm
							4-Chlorophenyl-phenyl ether	120 ppm
							4-Nitroaniline	120 ppm
							4-Nitrophenol	240 ppm
							Acenaphthene	120 ppm
							Acenaphthylene	120 ppm
							Acetophenone	120 ppm
							Aniline	120 ppm
							Anthracene	120 ppm
							Benzo[a]anthracene	120 ppm
							Benzo[a]pyrene	120 ppm
							Benzo[b]fluoranthene	120 ppm
							Benzo[g,h,i]perylene	120 ppm
							Benzo[k]fluoranthene	120 ppm
							Benzyl alcohol	120 ppm
							bis (2-chloroisopropyl) ether	120 ppm
							Bis(2-chloroethoxy)methane	120 ppm
							Bis(2-chloroethyl)ether	120 ppm
							Bis(2-ethylhexyl) phthalate	120 ppm
							Butyl benzyl phthalate	120 ppm
							Carbazole	120 ppm
							Chrysene	120 ppm
							Di-n-butyl phthalate	120 ppm
							Di-n-octyl phthalate	120 ppm
							Dibenz(a,h)anthracene	120 ppm
							Dibenzofuran	120 ppm
							Diethyl phthalate	120 ppm
							Dimethyl phthalate	120 ppm
							Fluoranthene	120 ppm
							Fluorene	120 ppm
							Hexachlorobenzene	120 ppm
							Hexachlorobutadiene	120 ppm
							Hexachlorocyclopentadiene	120 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	120 ppm
							Indeno[1,2,3-cd]pyrene	120 ppm
							Isophorone	120 ppm
							m & p-Cresol	120 ppm
							N-Nitrosodi-n-propylamine	120 ppm
							N-Nitrosodimethylamine	120 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	102 ppm
							Naphthalene	120 ppm
							Nitrobenzene	120 ppm
							o-Cresol	120 ppm
							Pentachlorophenol	240 ppm
							Phenanthrene	120 ppm
							Phenol	120 ppm
							Pyrene	120 ppm
							Pyridine	240 ppm
							3,3'-Dichlorobenzidine	120 ppm
							Benzidine	360 ppm
							Alpha-Terpineol	120 ppm
							Dimethylformamide	120 ppm
							Octachlorostyrene	120 ppm
							Phenyl ether	120 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00014	08/31/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00009	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00015	09/22/23	03/22/23	MeCl2, Lot 226679	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00004	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23		Sigma- Aldrich, Lot LRAC8467		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00004	08/31/24		Restek, Lot A0175669		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24		Restek, Lot A0190414		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_8_00030	10/31/23	06/08/23	MeCl2, Lot 226055	1 mL	MSS_BAS_WS_00012	300 uL	Atrazine	30 ppm
							Benzaldehyde	30 ppm
							Caprolactam	30 ppm
					MSS_FV8270_8_00030	250 uL	Benzidine	90 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trinitrobenzene	30 ppm
							1,4-Dinitrobenzene	30 ppm
							1-Naphthylamine	30 ppm
							2-Acetylaminofluorene	30 ppm
							2-Naphthylamine	30 ppm
							2-Picoline	30 ppm
							2-Toluidine	30 ppm
							3,3'-Dimethylbenzidine	30 ppm
							4,4'-Methylene bis(2-chloroaniline)	30 ppm
							4-Aminobiphenyl	30 ppm
							4-Nitroquinoline-1-oxide	30 ppm
							5-Nitro-o-toluidine	30 ppm
							Dibenz[a,h]acridine	30 ppm
							N-Nitrosodi-n-butylamine	30 ppm
							N-Nitrosodiethylamine	30 ppm
							N-Nitrosomethylethylamine	30 ppm
							N-Nitrosomorpholine	30 ppm
							N-Nitrosopiperidine	30 ppm
							N-Nitrosopyrrolidine	30 ppm
							p-Dimethylamino azobenzene	30 ppm
							p-Phenylene diamine	30 ppm
							Pentachloronitrobenzene	30 ppm
							Phenacetin	30 ppm
							Pronamide	30 ppm
							Quinoline	30 ppm
							1,4-Naphthoquinone	30 ppm
							1-Chloronaphthalene	30 ppm
							7,12-Dimethylbenz(a)anthracene	30 ppm
							Chlorobenzilate	30 ppm
							Dinoseb	30 ppm
							Ethyl methanesulfonate	30 ppm
							Hexachloropropene	30 ppm
							Isodrin	30 ppm
							Isosafrole Peak 1	4.8 ppm
							Isosafrole Peak 2	25.2 ppm
							Methyl methanesulfonate	30 ppm
							Pentachlorobenzene	30 ppm
							3-Methylcholanthrene	30 ppm
							6-Methylchrysene	30 ppm
							cis-Diallate	22.2 ppm
							Dimethoate	30 ppm
							Disulfoton	30 ppm
							Ethyl Parathion	30 ppm
							Methyl parathion	30 ppm
							o,o',o''-Triethylphosphorothioate	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	30 ppm
							Phorate	30 ppm
							Safrole, Total	30 ppm
							Sulfotepp	30 ppm
							trans-Diallate	7.8 ppm
							2,4,6-Tribromophenol (Surr)	60 ppm
							2-Fluorobiphenyl (Surr)	60 ppm
							2-Fluorophenol (Surr)	60 ppm
							Nitrobenzene-d5 (Surr)	60 ppm
							p-Terphenyl-d14 (Surr)	60 ppm
							Phenol-d5 (Surr)	60 ppm
							Dibenz[a,j]acridine	30 ppm
							1,1'-Biphenyl	30 ppm
							1,2,4,5-Tetrachlorobenzene	30 ppm
							1,2,4-Trichlorobenzene	30 ppm
							1,2-Dichlorobenzene	30 ppm
							1,2-Diphenylhydrazine	30 ppm
							1,3-Dichlorobenzene	30 ppm
							1,3-Dinitrobenzene	30 ppm
							1,4-Dichlorobenzene	30 ppm
							1,4-Dioxane	30 ppm
							1-Methylnaphthalene	30 ppm
							2,3,4,6-Tetrachlorophenol	30 ppm
							2,4,5-Trichlorophenol	30 ppm
							2,4,6-Trichlorophenol	30 ppm
							2,4-Dichlorophenol	30 ppm
							2,4-Dimethylphenol	30 ppm
							2,4-Dinitrophenol	60 ppm
							2,4-Dinitrotoluene	30 ppm
							2,6-Dichlorophenol	30 ppm
							2,6-Dinitrotoluene	30 ppm
							2-Chloronaphthalene	30 ppm
							2-Chlorophenol	30 ppm
							2-Methylnaphthalene	30 ppm
							2-Nitroaniline	30 ppm
							2-Nitrophenol	30 ppm
							3-Nitroaniline	30 ppm
							4,6-Dinitro-2-methylphenol	60 ppm
							4-Bromophenyl-phenylether	30 ppm
							4-Chloro-3-methylphenol	30 ppm
							4-Chloroaniline	30 ppm
							4-Chlorophenyl-phenyl ether	30 ppm
							4-Nitroaniline	30 ppm
							4-Nitrophenol	60 ppm
							Acenaphthene	30 ppm
							Acenaphthylene	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	30 ppm
							Aniline	30 ppm
							Anthracene	30 ppm
							Benzo[a]anthracene	30 ppm
							Benzo[a]pyrene	30 ppm
							Benzo[b]fluoranthene	30 ppm
							Benzo[g,h,i]perylene	30 ppm
							Benzo[k]fluoranthene	30 ppm
							Benzyl alcohol	30 ppm
							bis (2-chloroisopropyl) ether	30 ppm
							Bis(2-chloroethoxy)methane	30 ppm
							Bis(2-chloroethyl)ether	30 ppm
							Bis(2-ethylhexyl) phthalate	30 ppm
							Butyl benzyl phthalate	30 ppm
							Carbazole	30 ppm
							Chrysene	30 ppm
							Di-n-butyl phthalate	30 ppm
							Di-n-octyl phthalate	30 ppm
							Dibenz(a,h)anthracene	30 ppm
							Dibenzofuran	30 ppm
							Diethyl phthalate	30 ppm
							Dimethyl phthalate	30 ppm
							Fluoranthene	30 ppm
							Fluorene	30 ppm
							Hexachlorobenzene	30 ppm
							Hexachlorobutadiene	30 ppm
							Hexachlorocyclopentadiene	30 ppm
							Hexachloroethane	30 ppm
							Indeno[1,2,3-cd]pyrene	30 ppm
							Isophorone	30 ppm
							m & p-Cresol	30 ppm
							N-Nitrosodi-n-propylamine	30 ppm
							N-Nitrosodimethylamine	30 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	25.5 ppm
							Naphthalene	30 ppm
							Nitrobenzene	30 ppm
							o-Cresol	30 ppm
							Pentachlorophenol	60 ppm
							Phenanthrene	30 ppm
							Phenol	30 ppm
							Pyrene	30 ppm
							Pyridine	60 ppm
							3,3'-Dichlorobenzidine	30 ppm
							Alpha-Terpineol	30 ppm
							Dimethylformamide	30 ppm
							Octachlorostyrene	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenyl ether	30 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00012	12/08/23	06/08/23	MeCl2, Lot 226055	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_8_00030	10/31/23	06/08/23	MeCl2, Lot 226055	2 mL	MSS_8270_APWS_00015	960 uL	Benzidine	360 ppm
							1,3,5-Trinitrobenzene	120 ppm
							1,4-Dinitrobenzene	120 ppm
							1-Naphthylamine	120 ppm
							2-Acetylaminofluorene	120 ppm
							2-Naphthylamine	120 ppm
							2-Picoline	120 ppm
							2-Toluidine	120 ppm
							3,3'-Dimethylbenzidine	120 ppm
							4,4'-Methylene bis(2-chloroaniline)	120 ppm
							4-Aminobiphenyl	120 ppm
							4-Nitroquinoline-1-oxide	120 ppm
							5-Nitro-o-toluidine	120 ppm
							Dibenz[a,h]acridine	120 ppm
							N-Nitrosodi-n-butylamine	120 ppm
							N-Nitrosodiethylamine	120 ppm
							N-Nitrosomethylethylamine	120 ppm
							N-Nitrosomorpholine	120 ppm
							N-Nitrosopiperidine	120 ppm
							N-Nitrosopyrrolidine	120 ppm
							p-Dimethylamino azobenzene	120 ppm
							p-Phenylene diamine	120 ppm
							Pentachloronitrobenzene	120 ppm
							Phenacetin	120 ppm
							Pronamide	120 ppm
							Quinoline	120 ppm
							1,4-Naphthoquinone	120 ppm
							1-Chloronaphthalene	120 ppm
							7,12-Dimethylbenz(a)anthracene	120 ppm
							Chlorobenzilate	120 ppm
							Dinoseb	120 ppm
							Ethyl methanesulfonate	120 ppm
							Hexachloropropene	120 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isodrin	120 ppm
							Isosafrole Peak 1	19.2 ppm
							Isosafrole Peak 2	100.8 ppm
							Methyl methanesulfonate	120 ppm
							Pentachlorobenzene	120 ppm
							3-Methylcholanthrene	120 ppm
							6-Methylchrysene	120 ppm
							cis-Diallate	88.8 ppm
							Dimethoate	120 ppm
							Disulfoton	120 ppm
							Ethyl Parathion	120 ppm
							Methyl parathion	120 ppm
							o,o',o''-Triethylphosphorothioate	120 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	120 ppm
							Phorate	120 ppm
							Safrole, Total	120 ppm
							Sulfotepp	120 ppm
							trans-Diallate	31.2 ppm
					MSS_8270_WS_00016	960 uL	2,4,6-Tribromophenol (Surr)	240 ppm
							2-Fluorobiphenyl (Surr)	240 ppm
							2-Fluorophenol (Surr)	240 ppm
							Nitrobenzene-d5 (Surr)	240 ppm
							p-Terphenyl-d14 (Surr)	240 ppm
							Phenol-d5 (Surr)	240 ppm
							Dibenz[a,j]acridine	120 ppm
							1,1'-Biphenyl	120 ppm
							1,2,4,5-Tetrachlorobenzene	120 ppm
							1,2,4-Trichlorobenzene	120 ppm
							1,2-Dichlorobenzene	120 ppm
							1,2-Diphenylhydrazine	120 ppm
							1,3-Dichlorobenzene	120 ppm
							1,3-Dinitrobenzene	120 ppm
							1,4-Dichlorobenzene	120 ppm
							1,4-Dioxane	120 ppm
							1-Methylnaphthalene	120 ppm
							2,3,4,6-Tetrachlorophenol	120 ppm
							2,4,5-Trichlorophenol	120 ppm
							2,4,6-Trichlorophenol	120 ppm
							2,4-Dichlorophenol	120 ppm
							2,4-Dimethylphenol	120 ppm
							2,4-Dinitrophenol	240 ppm
							2,4-Dinitrotoluene	120 ppm
							2,6-Dichlorophenol	120 ppm
							2,6-Dinitrotoluene	120 ppm
							2-Chloronaphthalene	120 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	120 ppm
							2-Methylnaphthalene	120 ppm
							2-Nitroaniline	120 ppm
							2-Nitrophenol	120 ppm
							3-Nitroaniline	120 ppm
							4,6-Dinitro-2-methylphenol	240 ppm
							4-Bromophenyl-phenylether	120 ppm
							4-Chloro-3-methylphenol	120 ppm
							4-Chloroaniline	120 ppm
							4-Chlorophenyl-phenyl ether	120 ppm
							4-Nitroaniline	120 ppm
							4-Nitrophenol	240 ppm
							Acenaphthene	120 ppm
							Acenaphthylene	120 ppm
							Acetophenone	120 ppm
							Aniline	120 ppm
							Anthracene	120 ppm
							Benzo[a]anthracene	120 ppm
							Benzo[a]pyrene	120 ppm
							Benzo[b]fluoranthene	120 ppm
							Benzo[g,h,i]perylene	120 ppm
							Benzo[k]fluoranthene	120 ppm
							Benzyl alcohol	120 ppm
							bis (2-chloroisopropyl) ether	120 ppm
							Bis(2-chloroethoxy)methane	120 ppm
							Bis(2-chloroethyl)ether	120 ppm
							Bis(2-ethylhexyl) phthalate	120 ppm
							Butyl benzyl phthalate	120 ppm
							Carbazole	120 ppm
							Chrysene	120 ppm
							Di-n-butyl phthalate	120 ppm
							Di-n-octyl phthalate	120 ppm
							Dibenz(a,h)anthracene	120 ppm
							Dibenzofuran	120 ppm
							Diethyl phthalate	120 ppm
							Dimethyl phthalate	120 ppm
							Fluoranthene	120 ppm
							Fluorene	120 ppm
							Hexachlorobenzene	120 ppm
							Hexachlorobutadiene	120 ppm
							Hexachlorocyclopentadiene	120 ppm
							Hexachloroethane	120 ppm
							Indeno[1,2,3-cd]pyrene	120 ppm
							Isophorone	120 ppm
							m & p-Cresol	120 ppm
							N-Nitrosodi-n-propylamine	120 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	120 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	102 ppm
							Naphthalene	120 ppm
							Nitrobenzene	120 ppm
							o-Cresol	120 ppm
							Pentachlorophenol	240 ppm
							Phenanthrene	120 ppm
							Phenol	120 ppm
							Pyrene	120 ppm
							Pyridine	240 ppm
							3,3'-Dichlorobenzidine	120 ppm
							Benzidine	360 ppm
							Alpha-Terpineol	120 ppm
							Dimethylformamide	120 ppm
							Octachlorostyrene	120 ppm
							Phenyl ether	120 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00015	12/08/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00010	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00011	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00007	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00016	10/31/23	06/08/23	MeCl2, Lot 226055	10 mL	MSS_8270_SURR_00004	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00005	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00011	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00009	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00004	10/31/23	Sigma- Aldrich, Lot LRAC8467			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00005	05/31/25	Restek, Lot A0184892			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00011	04/30/24	Restek, Lot A0190414			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_8_00032	03/05/24	10/19/23	MeCl2, Lot 63209	1 mL	MSS_BAS_WS_00014	300 uL	Atrazine	30 ppm
							Benzaldehyde	30 ppm
							Caprolactam	30 ppm
					MSS_FV8270_8_00032	250 uL	Benzidine	90 ppm
							1,3,5-Trinitrobenzene	30 ppm
							1,4-Dinitrobenzene	30 ppm
							1-Naphthylamine	30 ppm
							2-Acetylaminofluorene	30 ppm
							2-Naphthylamine	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Picoline	30 ppm
							2-Toluidine	30 ppm
							3,3'-Dimethylbenzidine	30 ppm
							4,4'-Methylene bis(2-chloroaniline)	30 ppm
							4-Aminobiphenyl	30 ppm
							4-Nitroquinoline-1-oxide	30 ppm
							5-Nitro-o-toluidine	30 ppm
							Dibenz[a,h]acridine	30 ppm
							N-Nitrosodi-n-butylamine	30 ppm
							N-Nitrosodiethylamine	30 ppm
							N-Nitrosomethylethylamine	30 ppm
							N-Nitrosomorpholine	30 ppm
							N-Nitrosopiperidine	30 ppm
							N-Nitrosopyrrolidine	30 ppm
							p-Dimethylamino azobenzene	30 ppm
							p-Phenylene diamine	30 ppm
							Pentachloronitrobenzene	30 ppm
							Phenacetin	30 ppm
							Pronamide	30 ppm
							Quinoline	30 ppm
							1,4-Naphthoquinone	30 ppm
							1-Chloronaphthalene	30 ppm
							7,12-Dimethylbenz(a)anthracene	30 ppm
							Chlorobenzilate	30 ppm
							Dinoseb	30 ppm
							Ethyl methanesulfonate	30 ppm
							Hexachloropropene	30 ppm
							Isodrin	30 ppm
							Isosafrole Peak 1	4.8 ppm
							Isosafrole Peak 2	25.2 ppm
							Methyl methanesulfonate	30 ppm
							Pentachlorobenzene	30 ppm
							3-Methylcholanthrene	30 ppm
							6-Methylchrysene	30 ppm
							cis-Diallate	22.2 ppm
							Dimethoate	30 ppm
							Disulfoton	30 ppm
							Ethyl Parathion	30 ppm
							Methyl parathion	30 ppm
							o,o',o''-Triethylphosphorothioate	30 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	30 ppm
							Phorate	30 ppm
							Safrole, Total	30 ppm
							Sulfotepp	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-Diallate	7.8 ppm
							2,4,6-Tribromophenol (Surr)	60 ppm
							2-Fluorobiphenyl (Surr)	60 ppm
							2-Fluorophenol (Surr)	60 ppm
							Nitrobenzene-d5 (Surr)	60 ppm
							p-Terphenyl-d14 (Surr)	60 ppm
							Phenol-d5 (Surr)	60 ppm
							Dibenz[a,j]acridine	30 ppm
							1,1'-Biphenyl	30 ppm
							1,2,4,5-Tetrachlorobenzene	30 ppm
							1,2,4-Trichlorobenzene	30 ppm
							1,2-Dichlorobenzene	30 ppm
							1,2-Diphenylhydrazine	30 ppm
							1,3-Dichlorobenzene	30 ppm
							1,3-Dinitrobenzene	30 ppm
							1,4-Dichlorobenzene	30 ppm
							1,4-Dioxane	30 ppm
							1-Methylnaphthalene	30 ppm
							2,3,4,6-Tetrachlorophenol	30 ppm
							2,4,5-Trichlorophenol	30 ppm
							2,4,6-Trichlorophenol	30 ppm
							2,4-Dichlorophenol	30 ppm
							2,4-Dimethylphenol	30 ppm
							2,4-Dinitrophenol	60 ppm
							2,4-Dinitrotoluene	30 ppm
							2,6-Dichlorophenol	30 ppm
							2,6-Dinitrotoluene	30 ppm
							2-Chloronaphthalene	30 ppm
							2-Chlorophenol	30 ppm
							2-Methylnaphthalene	30 ppm
							2-Nitroaniline	30 ppm
							2-Nitrophenol	30 ppm
							3-Nitroaniline	30 ppm
							4,6-Dinitro-2-methylphenol	60 ppm
							4-Bromophenyl-phenylether	30 ppm
							4-Chloro-3-methylphenol	30 ppm
							4-Chloroaniline	30 ppm
							4-Chlorophenyl-phenyl ether	30 ppm
							4-Nitroaniline	30 ppm
							4-Nitrophenol	60 ppm
							Acenaphthene	30 ppm
							Acenaphthylene	30 ppm
							Acetophenone	30 ppm
							Aniline	30 ppm
							Anthracene	30 ppm
							Benzo[a]anthracene	30 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	30 ppm
							Benzo[b]fluoranthene	30 ppm
							Benzo[g,h,i]perylene	30 ppm
							Benzo[k]fluoranthene	30 ppm
							Benzyl alcohol	30 ppm
							bis (2-chloroisopropyl) ether	30 ppm
							Bis(2-chloroethoxy)methane	30 ppm
							Bis(2-chloroethyl)ether	30 ppm
							Bis(2-ethylhexyl) phthalate	30 ppm
							Butyl benzyl phthalate	30 ppm
							Carbazole	30 ppm
							Chrysene	30 ppm
							Di-n-butyl phthalate	30 ppm
							Di-n-octyl phthalate	30 ppm
							Dibenz(a,h)anthracene	30 ppm
							Dibenzofuran	30 ppm
							Diethyl phthalate	30 ppm
							Dimethyl phthalate	30 ppm
							Fluoranthene	30 ppm
							Fluorene	30 ppm
							Hexachlorobenzene	30 ppm
							Hexachlorobutadiene	30 ppm
							Hexachlorocyclopentadiene	30 ppm
							Hexachloroethane	30 ppm
							Indeno[1,2,3-cd]pyrene	30 ppm
							Isophorone	30 ppm
							m & p-Cresol	30 ppm
							N-Nitrosodi-n-propylamine	30 ppm
							N-Nitrosodimethylamine	30 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	25.5 ppm
							Naphthalene	30 ppm
							Nitrobenzene	30 ppm
							o-Cresol	30 ppm
							Pentachlorophenol	60 ppm
							Phenanthrene	30 ppm
							Phenol	30 ppm
							Pyrene	30 ppm
							Pyridine	60 ppm
							3,3'-Dichlorobenzidine	30 ppm
							Alpha-Terpineol	30 ppm
							Dimethylformamide	30 ppm
							Octachlorostyrene	30 ppm
							Phenyl ether	30 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_BAS_WS_00014	04/05/24	10/05/23	MeCl2, Lot 63209	5 mL	OP_LCSmix2stk_00007	250 uL	Atrazine	100 ppm
							Benzaldehyde	100 ppm
							Caprolactam	100 ppm
..OP_LCSmix2stk_00007	07/31/24		Restek, Lot A0193487		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.MSS_FV8270_8_00032	03/05/24	10/18/23	MeCl2, Lot 63209	2 mL	MSS_8270_APWS_00016	960 uL	Benzidine	360 ppm
							1,3,5-Trinitrobenzene	120 ppm
							1,4-Dinitrobenzene	120 ppm
							1-Naphthylamine	120 ppm
							2-Acetylaminofluorene	120 ppm
							2-Naphthylamine	120 ppm
							2-Picoline	120 ppm
							2-Toluidine	120 ppm
							3,3'-Dimethylbenzidine	120 ppm
							4,4'-Methylene bis(2-chloroaniline)	120 ppm
							4-Aminobiphenyl	120 ppm
							4-Nitroquinoline-1-oxide	120 ppm
							5-Nitro-o-toluidine	120 ppm
							Dibenz[a,h]acridine	120 ppm
							N-Nitrosodi-n-butylamine	120 ppm
							N-Nitrosodiethylamine	120 ppm
							N-Nitrosomethylethylamine	120 ppm
							N-Nitrosomorpholine	120 ppm
							N-Nitrosopiperidine	120 ppm
							N-Nitrosopyrrolidine	120 ppm
							p-Dimethylamino azobenzene	120 ppm
							p-Phenylene diamine	120 ppm
							Pentachloronitrobenzene	120 ppm
							Phenacetin	120 ppm
							Pronamide	120 ppm
							Quinoline	120 ppm
							1,4-Naphthoquinone	120 ppm
							1-Chloronaphthalene	120 ppm
							7,12-Dimethylbenz(a)anthracene	120 ppm
							Chlorobenzilate	120 ppm
							Dinoseb	120 ppm
							Ethyl methanesulfonate	120 ppm
							Hexachloropropene	120 ppm
							Isodrin	120 ppm
							Isosafrole Peak 1	19.2 ppm
							Isosafrole Peak 2	100.8 ppm
							Methyl methanesulfonate	120 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorobenzene	120 ppm
							3-Methylcholanthrene	120 ppm
							6-Methylchrysene	120 ppm
							cis-Diallate	88.8 ppm
							Dimethoate	120 ppm
							Disulfoton	120 ppm
							Ethyl Parathion	120 ppm
							Methyl parathion	120 ppm
							o,o',o''-Triethylphosphorothioate	120 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	120 ppm
							Phorate	120 ppm
							Safrole, Total	120 ppm
							Sulfotepp	120 ppm
							trans-Diallate	31.2 ppm
					MSS_8270_WS_00017	960 uL	2,4,6-Tribromophenol (Surr)	240 ppm
							2-Fluorobiphenyl (Surr)	240 ppm
							2-Fluorophenol (Surr)	240 ppm
							Nitrobenzene-d5 (Surr)	240 ppm
							p-Terphenyl-d14 (Surr)	240 ppm
							Phenol-d5 (Surr)	240 ppm
							Dibenz[a,j]acridine	120 ppm
							1,1'-Biphenyl	120 ppm
							1,2,4,5-Tetrachlorobenzene	120 ppm
							1,2,4-Trichlorobenzene	120 ppm
							1,2-Dichlorobenzene	120 ppm
							1,2-Diphenylhydrazine	120 ppm
							1,3-Dichlorobenzene	120 ppm
							1,3-Dinitrobenzene	120 ppm
							1,4-Dichlorobenzene	120 ppm
							1,4-Dioxane	120 ppm
							1-Methylnaphthalene	120 ppm
							2,3,4,6-Tetrachlorophenol	120 ppm
							2,4,5-Trichlorophenol	120 ppm
							2,4,6-Trichlorophenol	120 ppm
							2,4-Dichlorophenol	120 ppm
							2,4-Dimethylphenol	120 ppm
							2,4-Dinitrophenol	240 ppm
							2,4-Dinitrotoluene	120 ppm
							2,6-Dichlorophenol	120 ppm
							2,6-Dinitrotoluene	120 ppm
							2-Chloronaphthalene	120 ppm
							2-Chlorophenol	120 ppm
							2-Methylnaphthalene	120 ppm
							2-Nitroaniline	120 ppm
							2-Nitrophenol	120 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitroaniline	120 ppm
							4,6-Dinitro-2-methylphenol	240 ppm
							4-Bromophenyl-phenylether	120 ppm
							4-Chloro-3-methylphenol	120 ppm
							4-Chloroaniline	120 ppm
							4-Chlorophenyl-phenyl ether	120 ppm
							4-Nitroaniline	120 ppm
							4-Nitrophenol	240 ppm
							Acenaphthene	120 ppm
							Acenaphthylene	120 ppm
							Acetophenone	120 ppm
							Aniline	120 ppm
							Anthracene	120 ppm
							Benzo[a]anthracene	120 ppm
							Benzo[a]pyrene	120 ppm
							Benzo[b]fluoranthene	120 ppm
							Benzo[g,h,i]perylene	120 ppm
							Benzo[k]fluoranthene	120 ppm
							Benzyl alcohol	120 ppm
							bis (2-chloroisopropyl) ether	120 ppm
							Bis(2-chloroethoxy)methane	120 ppm
							Bis(2-chloroethyl)ether	120 ppm
							Bis(2-ethylhexyl) phthalate	120 ppm
							Butyl benzyl phthalate	120 ppm
							Carbazole	120 ppm
							Chrysene	120 ppm
							Di-n-butyl phthalate	120 ppm
							Di-n-octyl phthalate	120 ppm
							Dibenz(a,h)anthracene	120 ppm
							Dibenzofuran	120 ppm
							Diethyl phthalate	120 ppm
							Dimethyl phthalate	120 ppm
							Fluoranthene	120 ppm
							Fluorene	120 ppm
							Hexachlorobenzene	120 ppm
							Hexachlorobutadiene	120 ppm
							Hexachlorocyclopentadiene	120 ppm
							Hexachloroethane	120 ppm
							Indeno[1,2,3-cd]pyrene	120 ppm
							Isophorone	120 ppm
							m & p-Cresol	120 ppm
							N-Nitrosodi-n-propylamine	120 ppm
							N-Nitrosodimethylamine	120 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	102 ppm
							Naphthalene	120 ppm
							Nitrobenzene	120 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Cresol	120 ppm
							Pentachlorophenol	240 ppm
							Phenanthrene	120 ppm
							Phenol	120 ppm
							Pyrene	120 ppm
							Pyridine	240 ppm
							3,3'-Dichlorobenzidine	120 ppm
							Benzidine	360 ppm
							Alpha-Terpineol	120 ppm
							Dimethylformamide	120 ppm
							Octachlorostyrene	120 ppm
							Phenyl ether	120 ppm
					MSS_FV8270_IS_00006	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_8270_APWS_00016	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_AB_BZIDIN_00011	1000 uL	Benzidine	500 ppm
					OP_RES_APPX1_00012	2500 uL	1,3,5-Trinitrobenzene	250 ppm
							1,4-Dinitrobenzene	250 ppm
							1-Naphthylamine	250 ppm
							2-Acetylaminofluorene	250 ppm
							2-Naphthylamine	250 ppm
							2-Picoline	250 ppm
							2-Toluidine	250 ppm
							3,3'-Dimethylbenzidine	250 ppm
							4,4'-Methylene bis(2-chloroaniline)	250 ppm
							4-Aminobiphenyl	250 ppm
							4-Nitroquinoline-1-oxide	250 ppm
							5-Nitro-o-toluidine	250 ppm
							Dibenz[a,h]acridine	250 ppm
							N-Nitrosodi-n-butylamine	250 ppm
							N-Nitrosodiethylamine	250 ppm
							N-Nitrosomethylethylamine	250 ppm
							N-Nitrosomorpholine	250 ppm
							N-Nitrosopiperidine	250 ppm
							N-Nitrosopyrrolidine	250 ppm
							p-Dimethylamino azobenzene	250 ppm
							p-Phenylene diamine	250 ppm
							Pentachloronitrobenzene	250 ppm
							Phenacetin	250 ppm
							Pronamide	250 ppm
							Quinoline	250 ppm
					OP_RES_APPX2_00012	2500 uL	1,4-Naphthoquinone	250 ppm
							1-Chloronaphthalene	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	250 ppm
							Chlorobenzilate	250 ppm
							Dinoseb	250 ppm
							Ethyl methanesulfonate	250 ppm
							Hexachloropropene	250 ppm
							Isodrin	250 ppm
							Isosafrole Peak 1	40 ppm
							Isosafrole Peak 2	210 ppm
							Methyl methanesulfonate	250 ppm
							Pentachlorobenzene	250 ppm
					OP_RES_APPX3_00008	1250 uL	3-Methylcholanthrene	250 ppm
							6-Methylchrysene	250 ppm
					OP_RES_APPX4_00008	2500 uL	cis-Diallate	185 ppm
							Dimethoate	250 ppm
							Disulfoton	250 ppm
							Ethyl Parathion	250 ppm
							Methyl parathion	250 ppm
							o,o',o''-Triethylphosphorothioate	250 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	250 ppm
							Phorate	250 ppm
							Safrole, Total	250 ppm
							Sulfotepp	250 ppm
							trans-Diallate	65 ppm
...MSS_AB_BZIDIN_00011	10/27/25		Absolute, Lot 102722		(Purchased Reagent)		Benzidine	5000 ug/mL
...OP_RES_APPX1_00012	06/30/24		Restek, Lot A0198786		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
...OP_RES_APPX2_00012	03/31/24		Restek, Lot A0196332		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
...OP_RES_APPX3_00008	03/31/24		Restek, Lot A0195409		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
...OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		cis-Diallate	740 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..MSS_8270_WS_00017	03/05/24	09/05/23	MeCl2, Lot 232361	10 mL	MSS_8270_SURR_00005	1250 uL	2,4,6-Tribromophenol (Surr)	500 ppm
							2-Fluorobiphenyl (Surr)	500 ppm
							2-Fluorophenol (Surr)	500 ppm
							Nitrobenzene-d5 (Surr)	500 ppm
							p-Terphenyl-d14 (Surr)	500 ppm
							Phenol-d5 (Surr)	500 ppm
					OP_RES_APPX6_00006	1250 uL	Dibenz[a,j]acridine	250 ppm
					OP_RES_LCS1_00013	2500 uL	1,1'-Biphenyl	250 ppm
							1,2,4,5-Tetrachlorobenzene	250 ppm
							1,2,4-Trichlorobenzene	250 ppm
							1,2-Dichlorobenzene	250 ppm
							1,2-Diphenylhydrazine	250 ppm
							1,3-Dichlorobenzene	250 ppm
							1,3-Dinitrobenzene	250 ppm
							1,4-Dichlorobenzene	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	250 ppm
							1-Methylnaphthalene	250 ppm
							2,3,4,6-Tetrachlorophenol	250 ppm
							2,4,5-Trichlorophenol	250 ppm
							2,4,6-Trichlorophenol	250 ppm
							2,4-Dichlorophenol	250 ppm
							2,4-Dimethylphenol	250 ppm
							2,4-Dinitrophenol	500 ppm
							2,4-Dinitrotoluene	250 ppm
							2,6-Dichlorophenol	250 ppm
							2,6-Dinitrotoluene	250 ppm
							2-Chloronaphthalene	250 ppm
							2-Chlorophenol	250 ppm
							2-Methylnaphthalene	250 ppm
							2-Nitroaniline	250 ppm
							2-Nitrophenol	250 ppm
							3-Nitroaniline	250 ppm
							4,6-Dinitro-2-methylphenol	500 ppm
							4-Bromophenyl-phenylether	250 ppm
							4-Chloro-3-methylphenol	250 ppm
							4-Chloroaniline	250 ppm
							4-Chlorophenyl-phenyl ether	250 ppm
							4-Nitroaniline	250 ppm
							4-Nitrophenol	500 ppm
							Acenaphthene	250 ppm
							Acenaphthylene	250 ppm
							Acetophenone	250 ppm
							Aniline	250 ppm
							Anthracene	250 ppm
							Benzo[a]anthracene	250 ppm
							Benzo[a]pyrene	250 ppm
							Benzo[b]fluoranthene	250 ppm
							Benzo[g,h,i]perylene	250 ppm
							Benzo[k]fluoranthene	250 ppm
							Benzyl alcohol	250 ppm
							bis (2-chloroisopropyl) ether	250 ppm
							Bis(2-chloroethoxy)methane	250 ppm
							Bis(2-chloroethyl)ether	250 ppm
							Bis(2-ethylhexyl) phthalate	250 ppm
							Butyl benzyl phthalate	250 ppm
							Carbazole	250 ppm
							Chrysene	250 ppm
							Di-n-butyl phthalate	250 ppm
							Di-n-octyl phthalate	250 ppm
							Dibenz(a,h)anthracene	250 ppm
							Dibenzofuran	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	250 ppm
							Dimethyl phthalate	250 ppm
							Fluoranthene	250 ppm
							Fluorene	250 ppm
							Hexachlorobenzene	250 ppm
							Hexachlorobutadiene	250 ppm
							Hexachlorocyclopentadiene	250 ppm
							Hexachloroethane	250 ppm
							Indeno[1,2,3-cd]pyrene	250 ppm
							Isophorone	250 ppm
							m & p-Cresol	250 ppm
							N-Nitrosodi-n-propylamine	250 ppm
							N-Nitrosodimethylamine	250 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	212.5 ppm
							Naphthalene	250 ppm
							Nitrobenzene	250 ppm
							o-Cresol	250 ppm
							Pentachlorophenol	500 ppm
							Phenanthrene	250 ppm
							Phenol	250 ppm
							Pyrene	250 ppm
							Pyridine	500 ppm
					OP_RES_LCS2_00010	1250 uL	3,3'-Dichlorobenzidine	250 ppm
							Benzidine	250 ppm
					OP_RES_LCSadd_00003	1250 uL	Alpha-Terpineol	250 ppm
							Dimethylformamide	250 ppm
							Octachlorostyrene	250 ppm
							Phenyl ether	250 ppm
...MSS_8270_SURR_00005	06/30/26	Sigma- Aldrich, Lot LRAC5703			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol (Surr)	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5 (Surr)	4000 ug/mL
...OP_RES_APPX6_00006	03/31/26	Restek, Lot A0195365			(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
...OP_RES_LCS1_00013	09/30/24	Restek, Lot A0195772			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
...OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							Octachlorostyrene	2000 ug/mL
							Phenyl ether	2000 ug/mL
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_IS_00038	11/30/23	01/27/22	MeCl2, Lot 216836	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
.MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_IS_00059	09/28/23	03/28/23	MeCl2, Lot 226679	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
.MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270ICV_00019	04/30/23	03/23/23	MeCl2, Lot 226680	3 mL	MSS_FV8270ICV_00022	750 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FV8270ICV_00022	04/30/23	01/11/23	MeCl2, Lot 224289	5 mL	MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270ICV_00019	04/30/23	03/23/23	MeCl2, Lot 226680	3 mL	MSS_FV8270ICV_00022	750 uL	1,2,4,5-Tetrachlorobenzene	12.5 ppm
							1,3-Dinitrobenzene	12.5 ppm
							2,3,4,6-Tetrachlorophenol	12.5 ppm
							2,4,5-Trichlorophenol	12.5 ppm
							2,4,6-Trichlorophenol	12.5 ppm
							2,4-Dichlorophenol	12.5 ppm
							2,4-Dinitrotoluene	12.5 ppm
							2,6-Dichlorophenol	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							2-Chloronaphthalene	12.5 ppm
							2-Chlorophenol	12.5 ppm
							2-Methylnaphthalene	12.5 ppm
							2-Nitroaniline	12.5 ppm
							2-Nitrophenol	12.5 ppm
							4-Bromophenyl-phenylether	12.5 ppm
							4-Chloro-3-methylphenol	12.5 ppm
							4-Chlorophenyl-phenyl ether	12.5 ppm
							4-Nitroaniline	12.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	12.5 ppm
							Acenaphthylene	12.5 ppm
							Anthracene	12.5 ppm
							Benzo[a]anthracene	12.5 ppm
							Benzo[a]pyrene	12.5 ppm
							Benzo[b]fluoranthene	12.5 ppm
							Benzo[g,h,i]perylene	12.5 ppm
							Benzo[k]fluoranthene	12.5 ppm
							bis (2-chloroisopropyl) ether	12.5 ppm
							Bis(2-ethylhexyl) phthalate	12.5 ppm
							Chrysene	12.5 ppm
							Dibenz(a,h)anthracene	12.5 ppm
							Dibenzofuran	12.5 ppm
							Diethyl phthalate	12.5 ppm
							Fluoranthene	12.5 ppm
							Fluorene	12.5 ppm
							Hexachlorobenzene	12.5 ppm
							Indeno[1,2,3-cd]pyrene	12.5 ppm
							m & p-Cresol	12.5 ppm
							N-Nitrosodimethylamine	12.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	10.625 ppm
							Nitrobenzene	12.5 ppm
							o-Cresol	12.5 ppm
							Pentachlorophenol	25 ppm
							Phenanthrene	12.5 ppm
							Phenol	12.5 ppm
							Pyrene	12.5 ppm
							5-Nitro-o-toluidine	12.5 ppm
							N-Nitrosodiethylamine	12.5 ppm
							N-Nitrosomorpholine	12.5 ppm
							N-Nitrosopiperidine	12.5 ppm
							Phenacetin	12.5 ppm
							Ethyl methanesulfonate	12.5 ppm
							Hexachloropropene	12.5 ppm
							Isodrin	12.5 ppm
							Pentachlorobenzene	12.5 ppm
							Diallate	12.5 ppm
							Dimethoate	12.5 ppm
							o,o',o''-Triethylphosphorothioate	12.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	12.5 ppm
							Phorate	12.5 ppm
							Safrole, Total	12.5 ppm
							Sulfotepp	12.5 ppm
.MSS_FV8270ICV_00022	04/30/23	01/11/23	MeCl2, Lot 224289	5 mL	MS_RES_ICV1_00005	250 uL	1,2,4,5-Tetrachlorobenzene	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	50 ppm
							2,3,4,6-Tetrachlorophenol	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dichlorophenol	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Nitroaniline	50 ppm
							2-Nitrophenol	50 ppm
							4-Bromophenyl-phenylether	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Chlorophenyl-phenyl ether	50 ppm
							4-Nitroaniline	50 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Anthracene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm
							Benzo[k]fluoranthene	50 ppm
							bis (2-chloroisopropyl) ether	50 ppm
							Bis(2-ethylhexyl) phthalate	50 ppm
							Chrysene	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Dibenzofuran	50 ppm
							Diethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							m & p-Cresol	50 ppm
							N-Nitrosodimethylamine	50 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	42.5 ppm
							Nitrobenzene	50 ppm
							o-Cresol	50 ppm
							Pentachlorophenol	100 ppm
							Phenanthrene	50 ppm
							Phenol	50 ppm
							Pyrene	50 ppm
					MS_RES_ICV4_00005	250 uL	5-Nitro-o-toluidine	50 ppm
							N-Nitrosodiethylamine	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosomorpholine	50 ppm
							N-Nitrosopiperidine	50 ppm
							Phenacetin	50 ppm
					MS_RES_ICV5_00010	250 uL	Ethyl methanesulfonate	50 ppm
							Hexachloropropene	50 ppm
							Isodrin	50 ppm
							Pentachlorobenzene	50 ppm
					MS_RES_ICV7_00004	250 uL	Diallate	50 ppm
							Dimethoate	50 ppm
							o,o',o''-Triethylphosphorothioate	50 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	50 ppm
							Phorate	50 ppm
							Safrole, Total	50 ppm
							Sulfotepp	50 ppm
..MS_RES_ICV1_00005	07/31/23		Restek, Lot A0180323		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
..MS_RES_ICV4_00005	04/30/23		Restek, Lot A0184124		(Purchased Reagent)		5-Nitro-o-toluidine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							Phenacetin	1000 ug/mL
..MS_RES_ICV5_00010	05/31/23		Restek, Lot A0185388		(Purchased Reagent)		Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
..MS_RES_ICV7_00004	09/30/23		Restek, Lot A0176003		(Purchased Reagent)		Diallate	1000 ug/mL
							Dimethoate	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
MSS_RV8270ICV_00022	07/31/23	07/18/23	MeCl2, Lot 232230	2 mL	MSS_FV8270ICV_00027	750 uL	1,4-Dichlorobenzene-d4	7.5 ppm
							Acenaphthene-d10	7.5 ppm
							Naphthalene-d8	7.5 ppm
							Perylene-d12	7.5 ppm
							Phenanthrene-d10	7.5 ppm
							Pyrene-d10 (IS)	7.5 ppm
.MSS_FV8270ICV_00027	07/31/23	07/18/23	MeCl2, Lot 232230	5 mL	MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270ICV_00022	07/31/23	07/18/23	MeCl2, Lot 232230	2 mL	MSS_FV8270ICV_00027	750 uL	1,2,4,5-Tetrachlorobenzene	18.75 ppm
							1,3-Dinitrobenzene	18.75 ppm
							2,3,4,6-Tetrachlorophenol	18.75 ppm
							2,4,5-Trichlorophenol	18.75 ppm
							2,4,6-Trichlorophenol	18.75 ppm
							2,4-Dichlorophenol	18.75 ppm
							2,4-Dinitrotoluene	18.75 ppm
							2,6-Dichlorophenol	18.75 ppm
							2,6-Dinitrotoluene	18.75 ppm
							2-Chloronaphthalene	18.75 ppm
							2-Chlorophenol	18.75 ppm
							2-Methylnaphthalene	18.75 ppm
							2-Nitroaniline	18.75 ppm
							2-Nitrophenol	18.75 ppm
							4-Bromophenyl-phenylether	18.75 ppm
							4-Chloro-3-methylphenol	18.75 ppm
							4-Chlorophenyl-phenyl ether	18.75 ppm
							4-Nitroaniline	18.75 ppm
							Acenaphthene	18.75 ppm
							Acenaphthylene	18.75 ppm
							Anthracene	18.75 ppm
							Benzo[a]anthracene	18.75 ppm
							Benzo[a]pyrene	18.75 ppm
							Benzo[b]fluoranthene	18.75 ppm
							Benzo[g,h,i]perylene	18.75 ppm
							Benzo[k]fluoranthene	18.75 ppm
							bis (2-chloroisopropyl) ether	18.75 ppm
							Bis(2-ethylhexyl) phthalate	18.75 ppm
							Chrysene	18.75 ppm
							Dibenz(a,h)anthracene	18.75 ppm
							Dibenzofuran	18.75 ppm
							Diethyl phthalate	18.75 ppm
							Fluoranthene	18.75 ppm
							Fluorene	18.75 ppm
							Hexachlorobenzene	18.75 ppm
							Indeno[1,2,3-cd]pyrene	18.75 ppm
							m & p-Cresol	18.75 ppm
							N-Nitrosodimethylamine	18.75 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	15.9375 ppm
							Nitrobenzene	18.75 ppm
							o-Cresol	18.75 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	37.5 ppm
							Phenanthrene	18.75 ppm
							Phenol	18.75 ppm
							Pyrene	18.75 ppm
							5-Nitro-o-toluidine	18.75 ppm
							N-Nitrosodiethylamine	18.75 ppm
							N-Nitrosomorpholine	18.75 ppm
							N-Nitrosopiperidine	18.75 ppm
							Phenacetin	18.75 ppm
							Ethyl methanesulfonate	18.75 ppm
							Hexachloropropene	18.75 ppm
							Isodrin	18.75 ppm
							Pentachlorobenzene	18.75 ppm
							Diallate	18.75 ppm
							Dimethoate	18.75 ppm
							o,o',o''-Triethylphosphorothioate	18.75 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	18.75 ppm
							Phorate	18.75 ppm
							Safrole, Total	18.75 ppm
							Sulfotepp	18.75 ppm
.MSS_FV8270ICV_00027	07/31/23	07/18/23	MeCl2, Lot 232230	5 mL	MS_RES_ICV1_00005	250 uL	1,2,4,5-Tetrachlorobenzene	50 ppm
							1,3-Dinitrobenzene	50 ppm
							2,3,4,6-Tetrachlorophenol	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dichlorophenol	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Nitroaniline	50 ppm
							2-Nitrophenol	50 ppm
							4-Bromophenyl-phenylether	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Chlorophenyl-phenyl ether	50 ppm
							4-Nitroaniline	50 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Anthracene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	50 ppm
							bis (2-chloroisopropyl) ether	50 ppm
							Bis(2-ethylhexyl) phthalate	50 ppm
							Chrysene	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Dibenzofuran	50 ppm
							Diethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							m & p-Cresol	50 ppm
							N-Nitrosodimethylamine	50 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	42.5 ppm
							Nitrobenzene	50 ppm
							o-Cresol	50 ppm
							Pentachlorophenol	100 ppm
							Phenanthrene	50 ppm
							Phenol	50 ppm
							Pyrene	50 ppm
					MS_RES_ICV4_00006	250 uL	5-Nitro-o-toluidine	50 ppm
							N-Nitrosodiethylamine	50 ppm
							N-Nitrosomorpholine	50 ppm
							N-Nitrosopiperidine	50 ppm
							Phenacetin	50 ppm
					MS_RES_ICV5_00011	250 uL	Ethyl methanesulfonate	50 ppm
							Hexachloropropene	50 ppm
							Isodrin	50 ppm
							Pentachlorobenzene	50 ppm
					MS_RES_ICV7_00004	250 uL	Diallate	50 ppm
							Dimethoate	50 ppm
							o,o',o''-Triethylphosphorothioate	50 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	50 ppm
							Phorate	50 ppm
							Safrole, Total	50 ppm
							Sulfotepp	50 ppm
..MS_RES_ICV1_00005	07/31/23		Restek, Lot A0180323		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
..MS_RES_ICV4_00006	08/31/23		Restek, Lot A018955		(Purchased Reagent)		5-Nitro-o-toluidine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							Phenacetin	1000 ug/mL
..MS_RES_ICV5_00011	01/31/24		Restek, Lot A0194106		(Purchased Reagent)		Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MS_RES_ICV7_00004	09/30/23		Restek, Lot A0176003		(Purchased Reagent)		Diallate	1000 ug/mL
							Dimethoate	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
MSS_RV8270ICV_00024	11/30/23	08/29/23	MeCl2, Lot 231361	3 mL	MSS_FV8270ICV_00029	750 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FV8270ICV_00029	11/30/23	08/07/23	MeCl2, Lot 63146	5 mL	MSS_FV8270_IS_00006	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270ICV_00024	11/30/23	08/29/23	MeCl2, Lot 231361	3 mL	MSS_FV8270ICV_00029	750 uL	1,2,4,5-Tetrachlorobenzene	12.5 ppm
							1,3-Dinitrobenzene	12.5 ppm
							2,3,4,6-Tetrachlorophenol	12.5 ppm
							2,4,5-Trichlorophenol	12.5 ppm
							2,4,6-Trichlorophenol	12.5 ppm
							2,4-Dichlorophenol	12.5 ppm
							2,4-Dinitrotoluene	12.5 ppm
							2,6-Dichlorophenol	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							2-Chloronaphthalene	12.5 ppm
							2-Chlorophenol	12.5 ppm
							2-Methylnaphthalene	12.5 ppm
							2-Nitroaniline	12.5 ppm
							2-Nitrophenol	12.5 ppm
							4-Bromophenyl-phenylether	12.5 ppm
							4-Chloro-3-methylphenol	12.5 ppm
							4-Chlorophenyl-phenyl ether	12.5 ppm
							4-Nitroaniline	12.5 ppm
							Acenaphthene	12.5 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthylene	12.5 ppm
							Anthracene	12.5 ppm
							Benzo[a]anthracene	12.5 ppm
							Benzo[a]pyrene	12.5 ppm
							Benzo[b]fluoranthene	12.5 ppm
							Benzo[g,h,i]perylene	12.5 ppm
							Benzo[k]fluoranthene	12.5 ppm
							bis (2-chloroisopropyl) ether	12.5 ppm
							Bis(2-ethylhexyl) phthalate	12.5 ppm
							Chrysene	12.5 ppm
							Dibenz(a,h)anthracene	12.5 ppm
							Dibenzofuran	12.5 ppm
							Diethyl phthalate	12.5 ppm
							Fluoranthene	12.5 ppm
							Fluorene	12.5 ppm
							Hexachlorobenzene	12.5 ppm
							Indeno[1,2,3-cd]pyrene	12.5 ppm
							m & p-Cresol	12.5 ppm
							N-Nitrosodimethylamine	12.5 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	10.625 ppm
							Nitrobenzene	12.5 ppm
							o-Cresol	12.5 ppm
							Pentachlorophenol	25 ppm
							Phenanthrene	12.5 ppm
							Phenol	12.5 ppm
							Pyrene	12.5 ppm
							5-Nitro-o-toluidine	12.5 ppm
							N-Nitrosodiethylamine	12.5 ppm
							N-Nitrosomorpholine	12.5 ppm
							N-Nitrosopiperidine	12.5 ppm
							Phenacetin	12.5 ppm
							Ethyl methanesulfonate	12.5 ppm
							Hexachloropropene	12.5 ppm
							Isodrin	12.5 ppm
							Pentachlorobenzene	12.5 ppm
							Diallate	12.5 ppm
							Dimethoate	12.5 ppm
							o,o',o''-Triethylphosphorothioate	12.5 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	12.5 ppm
							Phorate	12.5 ppm
							Safrole, Total	12.5 ppm
							Sulfotepp	12.5 ppm
.MSS_FV8270ICV_00029	11/30/23	08/07/23	MeCl2, Lot 63146	5 mL	MS_RES_ICV1_00007	250 uL	1,2,4,5-Tetrachlorobenzene	50 ppm
							1,3-Dinitrobenzene	50 ppm

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dichlorophenol	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Nitroaniline	50 ppm
							2-Nitrophenol	50 ppm
							4-Bromophenyl-phenylether	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Chlorophenyl-phenyl ether	50 ppm
							4-Nitroaniline	50 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Anthracene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm
							Benzo[k]fluoranthene	50 ppm
							bis (2-chloroisopropyl) ether	50 ppm
							Bis(2-ethylhexyl) phthalate	50 ppm
							Chrysene	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Dibenzofuran	50 ppm
							Diethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							m & p-Cresol	50 ppm
							N-Nitrosodimethylamine	50 ppm
							n-Nitrosodiphenylamine(as diphenylamine)	42.5 ppm
							Nitrobenzene	50 ppm
							o-Cresol	50 ppm
							Pentachlorophenol	100 ppm
							Phenanthrene	50 ppm
							Phenol	50 ppm
							Pyrene	50 ppm
					MS_RES_ICV4_00007	250 uL	5-Nitro-o-toluidine	50 ppm
							N-Nitrosodiethylamine	50 ppm
							N-Nitrosomorpholine	50 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosopiperidine	50 ppm
							Phenacetin	50 ppm
					MS_RES_ICV5_00011	250 uL	Ethyl methanesulfonate	50 ppm
							Hexachloropropene	50 ppm
							Isodrin	50 ppm
							Pentachlorobenzene	50 ppm
					MS_RES_ICV7_00005	250 uL	Diallate	50 ppm
							Dimethoate	50 ppm
							o,o',o''-Triethylphosphorothioate	50 ppm
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	50 ppm
							Phorate	50 ppm
							Safrole, Total	50 ppm
							Sulfotepp	50 ppm
..MS_RES_ICV1_00007	07/31/24		Restek, Lot A0194078		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
..MS_RES_ICV4_00007	03/31/24		Restek, Lot A0195541		(Purchased Reagent)		5-Nitro-o-toluidine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							Phenacetin	1000 ug/mL
..MS_RES_ICV5_00011	01/31/24		Restek, Lot A0194106		(Purchased Reagent)		Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
..MS_RES_ICV7_00005	07/31/24		Restek, Lot A0187599		(Purchased Reagent)		Diallate	1000 ug/mL
							Dimethoate	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
MSS_RVAAP_SP_00008	05/05/23	10/30/22	MeCl2, Lot 224291	1 mL	MSS_FVAAP_SP_00011	250 uL	a,a-Dimethylphenethylamine	12.5 ppm
							Aramite Peak 1	1.25 ppm
							Aramite Peak 2	1.25 ppm
							Aramite Peak 3	5 ppm
							Aramite Peak 4	5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FVAAP_SP_00011	05/05/23	10/30/22	MeCl2, Lot 224291	2 mL	MSS_AB_AADMPE_00003	100 uL	a,a-Dimethylphenethylamine	50 ppm
					MSS_AB_ARAMIT_00003	50 uL	Aramite Peak 1	5 ppm
							Aramite Peak 2	5 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aramite Peak 3	20 ppm
							Aramite Peak 4	20 ppm
					MSS_FV8270_IS_00005	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_AB_AADMPE_00003	05/05/23		Absolute, Lot 050520		(Purchased Reagent)		a,a-Dimethylphenethylamine	1000 ug/mL
..MSS_AB_ARAMIT_00003	06/02/25		Absolute, Lot 060222		(Purchased Reagent)		Aramite Peak 1	200 ug/mL
							Aramite Peak 2	200 ug/mL
							Aramite Peak 3	800 ug/mL
							Aramite Peak 4	800 ug/mL
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVAAP_SP_00010	02/02/24	08/02/23	MeCl2, Lot 60355	1 mL	MSS_FVAAP_SP_00014	250 uL	a,a-Dimethylphenethylamine	12.5 ppm
							Aramite Peak 1	1.25 ppm
							Aramite Peak 2	1.25 ppm
							Aramite Peak 3	5 ppm
							Aramite Peak 4	5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FVAAP_SP_00014	02/02/24	08/02/23	MeCl2, Lot 60355	2 mL	MSS_AB_AADMPE_00004	100 uL	a,a-Dimethylphenethylamine	50 ppm
					MSS_AB_ARAMIT_00003	50 uL	Aramite Peak 1	5 ppm
							Aramite Peak 2	5 ppm
							Aramite Peak 3	20 ppm
							Aramite Peak 4	20 ppm
					MSS_FV8270_IS_00006	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_AB_AADMPE_00004	05/12/26		Absolute, Lot 051223		(Purchased Reagent)		a,a-Dimethylphenethylamine	1000 ug/mL
..MSS_AB_ARAMIT_00003	06/02/25		Absolute, Lot 060222		(Purchased Reagent)		Aramite Peak 1	200 ug/mL
							Aramite Peak 2	200 ug/mL
							Aramite Peak 3	800 ug/mL
							Aramite Peak 4	800 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MSS_FV8270_IS_00006	07/31/26		Restek, Lot A0200416		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVABC_3_00011	08/16/23	03/26/23	MeCl2, Lot 226680	2 mL	MSS_AB_FAMPHU_00006	2.5 uL	Famphur	1.25 ug/mL
					MSS_AB_KEPONE_00005	25 uL	Kepone	12.5 ug/mL
					MSS_AB_METH_00004	2.5 uL	Methapyrilene	1.25 ug/mL
					MSS_RV8270_IS_00057	40 uL	1,4-Dichlorobenzene-d4	5 ug/mL
							Acenaphthene-d10	5 ug/mL
							Naphthalene-d8	5 ug/mL
							Perylene-d12	5 ug/mL
							Phenanthrene-d10	5 ug/mL
							Pyrene-d10 (IS)	5 ug/mL
.MSS_AB_FAMPHU_00006	10/28/24		Absolute, Lot 102821		(Purchased Reagent)		Famphur	1000 ug/mL
.MSS_AB_KEPONE_00005	01/18/26		Absolute, Lot 011821		(Purchased Reagent)		Kepone	1000 ug/mL
.MSS_AB_METH_00004	02/02/24		Absolute, Lot 020221		(Purchased Reagent)		Methapyrilene	1000 ug/mL
.MSS_RV8270_IS_00057	08/16/23	02/16/23	MeCl2, Lot 218390	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVABC_4_00010	08/16/23	03/26/23	MeCl2, Lot 226680	1 mL	MSS_AB_FAMPHU_00006	3.75 uL	Famphur	3.75 ug/mL
					MSS_AB_KEPONE_00005	20 uL	Kepone	20 ug/mL
					MSS_AB_METH_00004	3.75 uL	Methapyrilene	3.75 ug/mL
					MSS_RV8270_IS_00057	20 uL	1,4-Dichlorobenzene-d4	5 ug/mL
							Acenaphthene-d10	5 ug/mL
							Naphthalene-d8	5 ug/mL
							Perylene-d12	5 ug/mL
							Phenanthrene-d10	5 ug/mL
							Pyrene-d10 (IS)	5 ug/mL
.MSS_AB_FAMPHU_00006	10/28/24		Absolute, Lot 102821		(Purchased Reagent)		Famphur	1000 ug/mL
.MSS_AB_KEPONE_00005	01/18/26		Absolute, Lot 011821		(Purchased Reagent)		Kepone	1000 ug/mL
.MSS_AB_METH_00004	02/02/24		Absolute, Lot 020221		(Purchased Reagent)		Methapyrilene	1000 ug/mL
.MSS_RV8270_IS_00057	08/16/23	02/16/23	MeCl2, Lot 218390	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVABC_5_00010	08/16/23	03/26/23	MeCl2, Lot 226680	1 mL	MSS_AB_FAMPHU_00006	7.5 uL	Famphur	7.5 ug/mL
					MSS_AB_KEPONE_00005	40 uL	Kepone	40 ug/mL
					MSS_AB_METH_00004	7.5 uL	Methapyrilene	7.5 ug/mL
					MSS_RV8270_IS_00057	20 uL	1,4-Dichlorobenzene-d4	5 ug/mL
							Acenaphthene-d10	5 ug/mL
							Naphthalene-d8	5 ug/mL
							Perylene-d12	5 ug/mL
							Phenanthrene-d10	5 ug/mL
							Pyrene-d10 (IS)	5 ug/mL
.MSS_AB_FAMPHU_00006	10/28/24		Absolute, Lot 102821		(Purchased Reagent)		Famphur	1000 ug/mL
.MSS_AB_KEPONE_00005	01/18/26		Absolute, Lot 011821		(Purchased Reagent)		Kepone	1000 ug/mL
.MSS_AB_METH_00004	02/02/24		Absolute, Lot 020221		(Purchased Reagent)		Methapyrilene	1000 ug/mL
.MSS_RV8270_IS_00057	08/16/23	02/16/23	MeCl2, Lot 218390	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVABC_6_00015	08/16/23	03/26/23	MeCl2, Lot 226680	2 mL	MSS_AB_FAMPHU_00006	25 uL	Famphur	12.5 ug/mL
					MSS_AB_KEPONE_00005	120 uL	Kepone	60 ug/mL
					MSS_AB_METH_00004	25 uL	Methapyrilene	12.5 ug/mL
					MSS_RV8270_IS_00057	40 uL	1,4-Dichlorobenzene-d4	5 ug/mL
							Acenaphthene-d10	5 ug/mL
							Naphthalene-d8	5 ug/mL
							Perylene-d12	5 ug/mL
							Phenanthrene-d10	5 ug/mL
							Pyrene-d10 (IS)	5 ug/mL
.MSS_AB_FAMPHU_00006	10/28/24		Absolute, Lot 102821		(Purchased Reagent)		Famphur	1000 ug/mL
.MSS_AB_KEPONE_00005	01/18/26		Absolute, Lot 011821		(Purchased Reagent)		Kepone	1000 ug/mL
.MSS_AB_METH_00004	02/02/24		Absolute, Lot 020221		(Purchased Reagent)		Methapyrilene	1000 ug/mL
.MSS_RV8270_IS_00057	08/16/23	02/16/23	MeCl2, Lot 218390	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVABC_7_00011	08/16/23	03/26/23	MeCl2, Lot 226680	1 mL	MSS_AB_FAMPHU_00006	20 uL	Famphur	20 ug/mL
					MSS_AB_KEPONE_00005	80 uL	Kepone	80 ug/mL
					MSS_AB_METH_00004	20 uL	Methapyrilene	20 ug/mL
					MSS_RV8270_IS_00057	20 uL	1,4-Dichlorobenzene-d4	5 ug/mL
							Acenaphthene-d10	5 ug/mL
							Naphthalene-d8	5 ug/mL
							Perylene-d12	5 ug/mL
							Phenanthrene-d10	5 ug/mL
							Pyrene-d10 (IS)	5 ug/mL
.MSS_AB_FAMPHU_00006	10/28/24		Absolute, Lot 102821		(Purchased Reagent)		Famphur	1000 ug/mL
.MSS_AB_KEPONE_00005	01/18/26		Absolute, Lot 011821		(Purchased Reagent)		Kepone	1000 ug/mL
.MSS_AB_METH_00004	02/02/24		Absolute, Lot 020221		(Purchased Reagent)		Methapyrilene	1000 ug/mL
.MSS_RV8270_IS_00057	08/16/23	02/16/23	MeCl2, Lot 218390	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVABC_8_00012	08/16/23	03/26/23	MeCl2, Lot 226680	1 mL	MSS_AB_FAMPHU_00006	30 uL	Famphur	30 ug/mL
					MSS_AB_KEPONE_00005	100 uL	Kepone	100 ug/mL
					MSS_AB_METH_00004	30 uL	Methapyrilene	30 ug/mL
					MSS_RV8270_IS_00057	20 uL	1,4-Dichlorobenzene-d4	5 ug/mL
							Acenaphthene-d10	5 ug/mL
							Naphthalene-d8	5 ug/mL
							Perylene-d12	5 ug/mL
							Phenanthrene-d10	5 ug/mL
							Pyrene-d10 (IS)	5 ug/mL
.MSS_AB_FAMPHU_00006	10/28/24		Absolute, Lot 102821		(Purchased Reagent)		Famphur	1000 ug/mL
.MSS_AB_KEPONE_00005	01/18/26		Absolute, Lot 011821		(Purchased Reagent)		Kepone	1000 ug/mL
.MSS_AB_METH_00004	02/02/24		Absolute, Lot 020221		(Purchased Reagent)		Methapyrilene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSS_RV8270_IS_00057	08/16/23	02/16/23	MeCl2, Lot 218390	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVBAS_ICV_00011	04/05/23	10/05/22	MeCl2, Lot 214960	2 mL	MSS_FVICV_BAS_00007	500 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FVICV_BAS_00007	04/05/23	10/05/22	MeCl2, Lot 224848	5 mL	MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVBAS_ICV_00013	09/28/23	07/06/23	MeCl2, Lot 214960	2 mL	MSS_ICV_BAcS_00006	500 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_ICV_BAcS_00006	09/28/23	03/28/23	MeCl2, Lot 226679	5 mL	MSS_FV8270_IS_00005	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVDFTPP_00012							4,4'-DDD	
							4,4'-DDE	
							Aramite, Total	
							Diallate	
							Isosafrole	
							Tentatively Identified Compound	
							Total Cresols	
					MSS_AB_DFTPP_00015	650 uL	4,4'-DDT	13 ppm
							Benzidine_T	13 ppm
							DFTPP	13 ppm
							Pentachlorophenol_T	13 ppm
.MSS_AB_DFTPP_00015	05/24/24		Absolute, Lot 052421		(Purchased Reagent)		4,4'-DDT	500 ug/mL
							Benzidine_T	500 ug/mL
							DFTPP	500 ug/mL
							Pentachlorophenol_T	500 ug/mL
MSS_RVDFTPP_00013							4,4'-DDD	
							4,4'-DDE	
							Aramite, Total	
							Diallate	
							Isosafrole	
							m&p-Methylphenol	
							Tentatively Identified Compound	
							Total Cresols	
					MSS_AB_DFTPP_00016	650 uL	4,4'-DDT	13 ppm
							Benzidine_T	13 ppm
							DFTPP	13 ppm
							Pentachlorophenol_T	13 ppm
.MSS_AB_DFTPP_00016	07/20/25		Absolute, Lot 072022		(Purchased Reagent)		4,4'-DDT	500 ug/mL
							Benzidine_T	500 ug/mL
							DFTPP	500 ug/mL
							Pentachlorophenol_T	500 ug/mL
MSS_RVDFTPP_00014							4,4'-DDD	
							4,4'-DDE	
							Aramite, Total	
							Diallate	
							Isosafrole	
							m&p-Methylphenol	
							Tentatively Identified Compound	
							Total Cresols	
					MSS_AB_DFTPP_00016	650 uL	4,4'-DDT	13 ppm
							Benzidine_T	13 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							DFTPP	13 ppm
							Pentachlorophenol_T	13 ppm
.MSS_AB_DFTPP_00016	07/20/25		Absolute, Lot 072022		(Purchased Reagent)		4,4'-DDT	500 ug/mL
							Benzidine_T	500 ug/mL
							DFTPP	500 ug/mL
							Pentachlorophenol_T	500 ug/mL
MSS_RVHCPICV_00007	08/16/23	03/22/23	MeCl2, Lot 226680	1 mL	MSS_RV8270_IS_00058	20 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_RV8270_IS_00058	08/16/23	03/10/23	MeCl2, Lot 226455	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVPDAICV_00001	04/14/23	12/21/22	MeCl2, Lot 225721	1 mL	MSS_RV8270_IS_00055	20 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_RV8270_IS_00055	06/18/23	12/18/22	MeCl2, Lot 225721	25 mL	MSS_FV8270_IS_00005	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00005	11/30/23		Restek, Lot A0166482		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSV_4ppbEE_00546	07/29/23	07/25/23	DI Water, Lot DI 07032023	1000 mL	MSV_CCV_2CEVE_00130	4 uL	2-Chloroethyl vinyl ether	0.004 ug/mL
					MSV_CCV_EE_00005	4 uL	Diethyl ether	0.00400054 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSV_CCV_GASES_00517	2 uL	1,2-Dichloro-1,1,2-trifluoroethane	0.004 ug/mL
							Bromomethane	0.004 ug/mL
							Butadiene	0.004 ug/mL
							Chloroethane	0.004 ug/mL
							Chloromethane	0.004 ug/mL
							Dichlorodifluoromethane	0.004 ug/mL
							Dichlorofluoromethane	0.004 ug/mL
							Trichlorofluoromethane	0.004 ug/mL
							Vinyl chloride	0.004 ug/mL
					MSV_CCV_VOC#1_00136	4 uL	1,1,1,2-Tetrachloroethane	0.004 ug/mL
							1,1,1-Trichloroethane	0.004 ug/mL
							1,1,2,2-Tetrachloroethane	0.004 ug/mL
							1,1,2-Trichloroethane	0.004 ug/mL
							1,1-Dichloroethane	0.004 ug/mL
							1,1-Dichloroethene	0.004 ug/mL
							1,1-Dichloropropene	0.004 ug/mL
							1,2,3-Trichlorobenzene	0.004 ug/mL
							1,2,3-Trichloropropane	0.004 ug/mL
							1,2,4-Trichlorobenzene	0.004 ug/mL
							1,2,4-Trimethylbenzene	0.004 ug/mL
							1,2-Dibromo-3-Chloropropane	0.004 ug/mL
							1,2-Dibromoethane	0.004 ug/mL
							1,2-Dichlorobenzene	0.004 ug/mL
							1,2-Dichloroethane	0.004 ug/mL
							1,2-Dichloropropane	0.004 ug/mL
							1,3,5-Trimethylbenzene	0.004 ug/mL
							1,3-Dichlorobenzene	0.004 ug/mL
							1,3-Dichloropropane	0.004 ug/mL
							1,4-Dichlorobenzene	0.004 ug/mL
							2,2-Dichloropropane	0.004 ug/mL
							2-Chlorotoluene	0.004 ug/mL
							4-Chlorotoluene	0.004 ug/mL
							4-Isopropyltoluene	0.004 ug/mL
							Benzene	0.004 ug/mL
							Bromobenzene	0.004 ug/mL
							Bromodichloromethane	0.004 ug/mL
							Bromoform	0.004 ug/mL
							Carbon tetrachloride	0.004 ug/mL
							Chlorobenzene	0.004 ug/mL
							Chlorobromomethane	0.004 ug/mL
							Chloroform	0.004 ug/mL
							cis-1,2-Dichloroethene	0.004 ug/mL
							cis-1,3-Dichloropropene	0.004 ug/mL
							Dibromochloromethane	0.004 ug/mL
							Dibromomethane	0.004 ug/mL
							Ethylbenzene	0.004 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	0.004 ug/mL
							Isopropylbenzene	0.004 ug/mL
							m&p-Xylene	0.008 ug/mL
							Methylene Chloride	0.004 ug/mL
							n-Butylbenzene	0.004 ug/mL
							N-Propylbenzene	0.004 ug/mL
							Naphthalene	0.004 ug/mL
							o-Xylene	0.004 ug/mL
							sec-Butylbenzene	0.004 ug/mL
							Styrene	0.004 ug/mL
							tert-Butylbenzene	0.004 ug/mL
							Tetrachloroethene	0.004 ug/mL
							Toluene	0.004 ug/mL
							trans-1,2-Dichloroethene	0.004 ug/mL
							trans-1,3-Dichloropropene	0.004 ug/mL
							Trichloroethene	0.004 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.004 ug/mL
							1,2,3-Trimethylbenzene	0.004 ug/mL
							1,3,5-Trichlorobenzene	0.004 ug/mL
							1,3-Diethylbenzene	0.004 ug/mL
							1,4-Dioxane	0.05 ug/mL
							1-Chlorohexane	0.004 ug/mL
							2-ethoxy-2-methyl butane	0.004 ug/mL
							2-Methyl-2-propanol	0.02 ug/mL
							2-Methylnaphthalene	0.004 ug/mL
							2-Nitropropane	0.02 ug/mL
							2-Propanol	0.02 ug/mL
							Acrylonitrile	0.01 ug/mL
							Allyl chloride	0.004 ug/mL
							Benzyl chloride	0.004 ug/mL
							Carbon disulfide	0.004 ug/mL
							Chloroprene	0.004 ug/mL
							Cyclohexane	0.004 ug/mL
							Ethyl methacrylate	0.004 ug/mL
							Hexane	0.004 ug/mL
							Isobutyl alcohol	0.05 ug/mL
							Isopropyl ether	0.004 ug/mL
							Methacrylonitrile	0.01 ug/mL
							Methyl acetate	0.004 ug/mL
							Methyl iodide	0.004 ug/mL
							Methyl methacrylate	0.004 ug/mL
							Methyl tert-butyl ether	0.004 ug/mL
							Methylcyclohexane	0.004 ug/mL
							n-Butanol	0.05 ug/mL
							n-Heptane	0.004 ug/mL
							o-diethylbenzene	0.004 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Diethylbenzene	0.004 ug/mL
							Pentane	0.004 ug/mL
							Propionitrile	0.02 ug/mL
							Tert-amyl methyl ether	0.004 ug/mL
							Tert-butyl ethyl ether	0.004 ug/mL
							Tetrahydrofuran	0.02 ug/mL
							trans-1,4-Dichloro-2-butene	0.01 ug/mL
					MSV_CCV_VOC#3_00135	3.2 uL	Acrolein	0.0400013 ug/mL
							2-Butanone	0.008 ug/mL
							2-Hexanone	0.008 ug/mL
							4-Methyl-2-pentanone	0.008 ug/mL
							Acetone	0.008 ug/mL
.MSV_CCV_2CEVE_00130	08/22/23	07/23/23	Methanol, Lot EG095	5 mL	MSV_V_2CLEVE_00136	1 mL	2-Chloroethyl vinyl ether	1000 ug/mL
..MSV_V_2CLEVE_00136	04/30/25		Restek, Lot A0184487		(Purchased Reagent)		2-Chloroethyl vinyl ether	5000 ug/mL
.MSV_CCV_EE_00005	11/10/23	05/10/23	Methanol, Lot EG095	50 mL	MSV_EE_MISCSK_00012	1.686 mL	Diethyl ether	1000.14 ug/mL
..MSV_EE_MISCSK_00012	11/10/23	05/10/23	Methanol, Lot EG095	10 mL	MSV_EE_Neat_00009	0.2966 g	Diethyl ether	29660 ug/mL
...MSV_EE_Neat_00009	05/30/27		Chem Service, Lot 14084700		(Purchased Reagent)		Diethyl ether	1 g/g
.MSV_CCV_GASES_00517	07/31/23		Restek, Lot A0197586		(Purchased Reagent)		1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL
							Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.MSV_CCV_VOC#1_00136	08/22/23	07/23/23	Methanol, Lot EG095	5 mL	MSV_MegaMIX#1_00135	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3,5-Trimethylbenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	1000 ug/mL
							2,2-Dichloropropane	1000 ug/mL
							2-Chlorotoluene	1000 ug/mL
							4-Chlorotoluene	1000 ug/mL
							4-Isopropyltoluene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromobenzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chlorobromomethane	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Isopropylbenzene	1000 ug/mL
							m&p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							n-Butylbenzene	1000 ug/mL
							N-Propylbenzene	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							sec-Butylbenzene	1000 ug/mL
							Styrene	1000 ug/mL
							tert-Butylbenzene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_MegaMix#2_00130	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2,3-Trimethylbenzene	1000 ug/mL
							1,3,5-Trichlorobenzene	1000 ug/mL
							1,3-Diethylbenzene	1000 ug/mL
							1,4-Dioxane	12500 ug/mL
							1-Chlorohexane	1000 ug/mL
							2-ethoxy-2-methyl butane	1000 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitropropane	5000 ug/mL
							2-Propanol	5000 ug/mL
							Acrylonitrile	2500 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Allyl chloride	1000 ug/mL
							Benzyl chloride	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Chloroprene	1000 ug/mL
							Cyclohexane	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Hexane	1000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Isopropyl ether	1000 ug/mL
							Methacrylonitrile	2500 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl iodide	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							n-Butanol	12500 ug/mL
							n-Heptane	1000 ug/mL
							o-diethylbenzene	1000 ug/mL
							p-Diethylbenzene	1000 ug/mL
							Pentane	1000 ug/mL
							Propionitrile	5000 ug/mL
							Tert-amyl methyl ether	1000 ug/mL
							Tert-butyl ethyl ether	1000 ug/mL
							Tetrahydrofuran	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_MegaMIX#1_00135	08/22/23		Restek, Lot A0184527		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chlorobromomethane	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m&p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00130	08/22/23		Restek, Lot A0186885		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2,3-Trimethylbenzene	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,3-Diethylbenzene	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							1-Chlorohexane	5000 ug/mL
							2-ethoxy-2-methyl butane	5000 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							2-Methylnaphthalene	5000 ug/mL
							2-Nitropropane	25000 ug/mL
							2-Propanol	25000 ug/mL
							Acrylonitrile	12500 ug/mL
							Allyl chloride	5000 ug/mL
							Benzyl chloride	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	5000 ug/mL
							Chloroprene	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropyl ether	5000 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl iodide	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							n-Butanol	62500 ug/mL
							n-Heptane	5000 ug/mL
							o-diethylbenzene	5000 ug/mL
							p-Diethylbenzene	5000 ug/mL
							Pentane	5000 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
							Tetrahydrofuran	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_CCV_VOC#3_00135	07/30/23	07/23/23	Methanol, Lot EG095	5 mL	MSV_CCV_ACR_00011	0.5 mL	Acrolein	12500.4 ug/mL
					MSV_V_Ketones_00130	1 mL	2-Butanone	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_CCV_ACR_00011	07/30/23	05/31/23	Methanol, Lot EG095	10 mL	MSV_VACR_STK_00033	9.259 mL	Acrolein	125004 ug/mL
...MSV_VACR_STK_00033	07/30/23	05/31/23	Methanol, Lot EG095	10 mL	MSV_ACROLEIN_00026	1.4564 g	Acrolein	135008 ug/mL
....MSV_ACROLEIN_00026	11/30/23	Chem Service, Lot 13910600			(Purchased Reagent)		Acrolein	0.927 g/g
..MSV_V_Ketones_00130	06/30/25	Restek, Lot A0186508			(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
MSV_CCV_2CEVE_00130	08/22/23	07/23/23	Methanol, Lot EG095	5 mL	MSV_V_2CLEVE_00136	1 mL	2-Chloroethyl vinyl ether	1000 ug/mL
.MSV_V_2CLEVE_00136	04/30/25	Restek, Lot A0184487			(Purchased Reagent)		2-Chloroethyl vinyl ether	5000 ug/mL
MSV_CCV_CYC_00006	07/23/23	01/23/23	50/50 MeOH/Water, Lot EB679	200 mL	MSV_VCYC_STK_00009	9.615 mL	Cyclohexanone	6249.75 ug/mL
.MSV_VCYC_STK_00009	07/23/23	01/23/23	50/50 MeOH/Water, Lot EB679	10 mL	MSV_CYC_00008	1.3 g	Cyclohexanone	130000 ug/mL
..MSV_CYC_00008	06/30/25	Chem Service, Lot 13529800			(Purchased Reagent)		Cyclohexanone	1 g/g
MSV_CCV_CYC_00007	01/19/24	07/19/23	50/50 MeOH/Water, Lot EG095	100 mL	MSV_VCYC_STK_00010	6.248 mL	Cyclohexanone	6249.87 ug/mL
.MSV_VCYC_STK_00010	01/19/24	07/19/23	50/50 MeOH/Water, Lot EG095	10 mL	MSV_CYC_00009	1.0003 g	Cyclohexanone	100030 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MSV_CYC_00009	06/30/25	Chem Service, Lot 14568900			(Purchased Reagent)		Cyclohexanone	1 g/g
MSV_CCV_EE_00005	11/10/23	05/10/23	Methanol, Lot EG095	50 mL	MSV_EE_MISCSK_00012	1.686 mL	Diethyl ether	1000.14 ug/mL
.MSV_EE_MISCSK_00012	11/10/23	05/10/23	Methanol, Lot EG095	10 mL	MSV_EE_Neat_00009	0.2966 g	Diethyl ether	29660 ug/mL
..MSV_EE_Neat_00009	05/30/27	Chem Service, Lot 14084700			(Purchased Reagent)		Diethyl ether	1 g/g
MSV_CCV_GASES_00528	07/31/23	Restek, Lot A0197586			(Purchased Reagent)		1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL
							Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_CCV_V5ACE_00026	08/08/23	07/09/23	Methanol, Lot EG095	10 mL	MSV_AcetatesV_00057	1 mL	Acetonitrile	5000 ug/mL
							Ethyl acetate	1000 ug/mL
							Vinyl acetate	1000 ug/mL
.MSV_AcetatesV_00057	11/30/24	Restek, Lot A0197847			(Purchased Reagent)		Acetonitrile	50000 ug/mL
							Ethyl acetate	10000 ug/mL
							Vinyl acetate	10000 ug/mL
MSV_CCV_V5ACE_00027	09/06/23	08/07/23	Methanol, Lot EG095	10 mL	MSV_AcetatesV_00028	1 mL	Acetonitrile	5000 ug/mL
							Vinyl acetate	1000 ug/mL
.MSV_AcetatesV_00028	10/31/23	Restek, Lot A0184542			(Purchased Reagent)		Acetonitrile	50000 ug/mL
							Vinyl acetate	10000 ug/mL
MSV_CCV_VOC#1_00136	08/22/23	07/23/23	Methanol, Lot EG095	5 mL	MSV_MegaMIX#1_00135	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3,5-Trimethylbenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2-Dichloropropane	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	1000 ug/mL
							4-Chlorotoluene	1000 ug/mL
							4-Isopropyltoluene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromobenzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chlorobromomethane	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Isopropylbenzene	1000 ug/mL
							m&p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							n-Butylbenzene	1000 ug/mL
							N-Propylbenzene	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							sec-Butylbenzene	1000 ug/mL
							Styrene	1000 ug/mL
							tert-Butylbenzene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_MegaMix#2_00130	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2,3-Trimethylbenzene	1000 ug/mL
							1,3,5-Trichlorobenzene	1000 ug/mL
							1,3-Diethylbenzene	1000 ug/mL
							1,4-Dioxane	12500 ug/mL
							1-Chlorohexane	1000 ug/mL
							2-ethoxy-2-methyl butane	1000 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitropropane	5000 ug/mL
							2-Propanol	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Allyl chloride	1000 ug/mL
							Benzyl chloride	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	1000 ug/mL
							Chloroprene	1000 ug/mL
							Cyclohexane	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Hexane	1000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Isopropyl ether	1000 ug/mL
							Methacrylonitrile	2500 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl iodide	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							n-Butanol	12500 ug/mL
							n-Heptane	1000 ug/mL
							o-diethylbenzene	1000 ug/mL
							p-Diethylbenzene	1000 ug/mL
							Pentane	1000 ug/mL
							Propionitrile	5000 ug/mL
							Tert-amyl methyl ether	1000 ug/mL
							Tert-butyl ethyl ether	1000 ug/mL
							Tetrahydrofuran	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
.MSV_MegaMIX#1_00135	08/22/23		Restek, Lot A0184527		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chlorobromomethane	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m&p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
.MSV_MegaMix#2_00130	08/22/23		Restek, Lot A0186885		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2,3-Trimethylbenzene	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,3-Diethylbenzene	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							1-Chlorohexane	5000 ug/mL
							2-ethoxy-2-methyl butane	5000 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							2-Methylnaphthalene	5000 ug/mL
							2-Nitropropane	25000 ug/mL
							2-Propanol	25000 ug/mL
							Acrylonitrile	12500 ug/mL
							Allyl chloride	5000 ug/mL
							Benzyl chloride	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Chloroprene	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropyl ether	5000 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl iodide	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							n-Butanol	62500 ug/mL
							n-Heptane	5000 ug/mL
							o-diethylbenzene	5000 ug/mL
							p-Diethylbenzene	5000 ug/mL
							Pentane	5000 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
							Tetrahydrofuran	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
MSV_CCV_VOC#1_00138	09/05/23	08/06/23	Methanol, Lot EG095	5 mL	MSV_MegaMix#2_00132	1 mL	2-Propanol	5000 ug/mL
.MSV_MegaMix#2_00132	09/05/25	Restek, Lot A0186885			(Purchased Reagent)		2-Propanol	25000 ug/mL
MSV_CCV_VOC#3_00135	07/30/23	07/23/23	Methanol, Lot EG095	5 mL	MSV_CCV_ACR_00011	0.5 mL	Acrolein	12500.4 ug/mL
					MSV_V_Ketones_00130	1 mL	2-Butanone	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone	2500 ug/mL
							Acetone	2500 ug/mL
.MSV_CCV_ACR_00011	07/30/23	05/31/23	Methanol, Lot EG095	10 mL	MSV_VACR_STK_00033	9.259 mL	Acrolein	125004 ug/mL
..MSV_VACR_STK_00033	07/30/23	05/31/23	Methanol, Lot EG095	10 mL	MSV_ACROLEIN_00026	1.4564 g	Acrolein	135008 ug/mL
...MSV_ACROLEIN_00026	11/30/23	Chem Service, Lot 13910600			(Purchased Reagent)		Acrolein	0.927 g/g
.MSV_V_Ketones_00130	06/30/25	Restek, Lot A0186508			(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
MSV_DME_00048	08/09/23	Restek, Lot A0190883			(Purchased Reagent)		Dimethyl ether	1000 ug/mL
MSV_DME_00053	09/06/23	Restek, Lot A0190883			(Purchased Reagent)		Dimethyl ether	1000 ug/mL
MSV_HP20_ISSS_00096	07/27/23	01/27/23	Methanol, Lot EB679	10 mL	MSV_8260_SS_00835	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
					MSV_Cus826_IS_00533	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_8260_SS_00835	03/31/25		Restek, Lot A0183565		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
.MSV_Cus826_IS_00533	04/30/25		Restek, Lot A0184225		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_HP20_ISSS_00113	02/03/24	08/03/23	Methanol, Lot EB679	10 mL	MSV_Cus826_IS_00599	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL
.MSV_Cus826_IS_00599	04/30/26		Restek, Lot A0197488		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_HP20_ISSS_00113	02/03/24	08/03/23	Methanol, Lot EB679	10 mL	MSV_8260_SS_00979	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MSV_8260_SS_00979	02/29/28		Restek, Lot A0195060		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MSV_HP25_ISO_00008	10/10/23	04/10/23	Methanol, Lot EG095	10 mL	MSV_Cus826_IS_00555	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL
.MSV_Cus826_IS_00555	04/30/25		Restek, Lot A0184225		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_HP25_ISSS_00073	12/21/23	06/21/23	Methanol, Lot EG095	10 mL	MSV_8260_SS_00940	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
					MSV_Cus826_IS_00578	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL
.MSV_8260_SS_00940	12/21/23		Restek, Lot A0195060		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
.MSV_Cus826_IS_00578	12/21/23		Restek, Lot A0197488		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_HP25_ISSS_00074	01/25/24	07/25/23	Methanol, Lot EG095	10 mL	MSV_Cus826_IS_00595	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL
.MSV_Cus826_IS_00595	04/30/26		Restek, Lot A0197488		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_HP25_ISSS_00074	01/25/24	07/25/23	Methanol, Lot EG095	10 mL	MSV_8260_SS_00974	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MSV_8260_SS_00974	02/29/28		Restek, Lot A0195060		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MSV_LCS_EE_00007	11/10/23	05/10/23	Methanol, Lot EG095	50 mL	MSV_QEE_MiscS_00011	0.077 mL	Diethyl ether	40.04 ug/mL
.MSV_QEE_MiscS_00011	11/10/23	05/10/23	Methanol, Lot EG095	10 mL	MSV_EE_Neat_00009	0.26 g	Diethyl ether	26000 ug/mL
..MSV_EE_Neat_00009	05/30/27		Chem Service, Lot 14084700		(Purchased Reagent)		Diethyl ether	1 g/g
MSV_LCS_Penta_00030	07/26/23	06/26/23	Methanol, Lot EG095	25 mL	MSV_Q_PentaCL_00025	1 mL	Pentachloroethane	40 ug/mL
.MSV_Q_PentaCL_00025	04/30/24		Restek, Lot A0171317		(Purchased Reagent)		Pentachloroethane	1000 ug/mL
MSV_LCS_Penta_00031	08/26/23	07/27/23	Methanol, Lot EG095	25 mL	MSV_Q_PentaCL_00034	1 mL	Pentachloroethane	40 ug/mL
.MSV_Q_PentaCL_00034	04/30/25		Restek, Lot A0184455		(Purchased Reagent)		Pentachloroethane	1000 ug/mL
MSV_LCS_V5ACE_00027	08/08/23	07/09/23	Methanol, Lot EG095	50 mL	MSV_AcetatesQ_00050	1 mL	Acetonitrile	300 ug/mL
							Vinyl acetate	200 ug/mL
.MSV_AcetatesQ_00050	10/31/24		Restek, Lot A0197545		(Purchased Reagent)		Acetonitrile	15000 ug/mL
							Vinyl acetate	10000 ug/mL
MSV_LCS_V5ACE_00028	09/06/23	08/07/23	Methanol, Lot EG095	50 mL	MSV_AcetatesQ_00047	1 mL	Acetonitrile	300 ug/mL
							Vinyl acetate	200 ug/mL
.MSV_AcetatesQ_00047	10/31/23		Restek, Lot A0184484		(Purchased Reagent)		Acetonitrile	15000 ug/mL
							Vinyl acetate	10000 ug/mL
MSV_LCS_VOC#1_00118	08/08/23	07/09/23	Methanol, Lot EG095	25 mL	MSV_M_MIX1SEC_00133	1 mL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							Benzene	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chloroform	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							m&p-Xylene	80 ug/mL
							Methylene Chloride	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							Styrene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
					MSV_M_MIX2SEC_00138	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	40 ug/mL
							1,4-Dioxane	1000 ug/mL
							Acrylonitrile	200 ug/mL
							Allyl chloride	40 ug/mL
							Carbon disulfide	40 ug/mL
							Chloroprene	40 ug/mL
							Ethyl methacrylate	40 ug/mL
							Isobutyl alcohol	1000 ug/mL
							Methacrylonitrile	300 ug/mL
							Methyl iodide	40 ug/mL
							Methyl methacrylate	40 ug/mL
							Propionitrile	300 ug/mL
							Tetrahydrofuran	200 ug/mL
					MSV_Q_Ketones_00139	1 mL	2-Butanone	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone	500 ug/mL
							Acetone	500 ug/mL
.MSV_M_MIX1SEC_00133	04/30/25		Restek, Lot A0184354		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chloroform	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							m&p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00138	04/30/25		Restek, Lot A0184412		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,4-Dioxane	25000 ug/mL
							Acrylonitrile	5000 ug/mL
							Allyl chloride	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Chloroprene	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Isobutyl alcohol	25000 ug/mL
							Methacrylonitrile	7500 ug/mL
							Methyl iodide	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Propionitrile	7500 ug/mL
							Tetrahydrofuran	5000 ug/mL
.MSV_Q_Ketones_00139	04/30/25		Restek, Lot A0184721		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
MSV_LCS_VOC#1_00120	08/22/23	07/23/23	Methanol, Lot EG095	25 mL	MSV_M_MIX2SEC_00140	1 mL	2-Propanol	300 ug/mL
.MSV_M_MIX2SEC_00140	04/30/25		Restek, Lot A0184412		(Purchased Reagent)		2-Propanol	7500 ug/mL
MSV_LCS_VOC#1_00124	09/05/23	08/06/23	Methanol, Lot EG095	25 mL	MSV_M_MIX1SEC_00146	1 mL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							Benzene	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chloroform	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							m&p-Xylene	80 ug/mL
							Methylene Chloride	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							Styrene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
					MSV_M_MIX2SEC_00142	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	40 ug/mL
							1,4-Dioxane	1000 ug/mL
							2-Propanol	300 ug/mL
							Acrylonitrile	200 ug/mL
							Allyl chloride	40 ug/mL
							Carbon disulfide	40 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroprene	40 ug/mL
							Ethyl methacrylate	40 ug/mL
							Isobutyl alcohol	1000 ug/mL
							Methacrylonitrile	300 ug/mL
							Methyl iodide	40 ug/mL
							Methyl methacrylate	40 ug/mL
							Propionitrile	300 ug/mL
							Tetrahydrofuran	200 ug/mL
					MSV_Q_Ketones_00144	1 mL	2-Butanone	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone	500 ug/mL
							Acetone	500 ug/mL
.MSV_M_MIX1SEC_00146	04/30/25		Restek, Lot A0184354		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chloroform	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							m&p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00142	04/30/25		Restek, Lot A0184412		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,4-Dioxane	25000 ug/mL
							2-Propanol	7500 ug/mL
							Acrylonitrile	5000 ug/mL
							Allyl chloride	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Chloroprene	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Isobutyl alcohol	25000 ug/mL
							Methacrylonitrile	7500 ug/mL
							Methyl iodide	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Propionitrile	7500 ug/mL
							Tetrahydrofuran	5000 ug/mL
.MSV_Q_Ketones_00144	04/30/25		Restek, Lot A0184721		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
MSV_LL_#1_826_00084	07/30/23	07/09/23	Methanol, Lot EG095	1 mL	MSV_CCV_VOC#1_00134	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m&p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,4-Dioxane	2500 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							2-Nitropropane	250 ug/mL
							Acrylonitrile	125 ug/mL
							Allyl chloride	50 ug/mL
							Benzyl chloride	50 ug/mL
							Carbon disulfide	50 ug/mL
							Chloroprene	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropyl ether	50 ug/mL
							Methacrylonitrile	500 ug/mL
							Methyl acetate	50 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl iodide	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							n-Butanol	4375 ug/mL
							n-Heptane	50 ug/mL
							Propionitrile	1000 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
							Tetrahydrofuran	250 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_CCV_VOC#3_00133	200 uL	Acrolein	2500.08 ug/mL
							2-Butanone	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone	500 ug/mL
							Acetone	500 ug/mL
					MSV_V_VOA2_00196	150 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	4375 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
.MSV_CCV_VOC#1_00134	08/08/23	07/09/23	Methanol, Lot EG095	5 mL	MSV_MegaMIX#1_00133	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3,5-Trimethylbenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2-Dichloropropane	1000 ug/mL
							2-Chlorotoluene	1000 ug/mL
							4-Chlorotoluene	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromobenzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chlorobromomethane	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Isopropylbenzene	1000 ug/mL
							m&p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							n-Butylbenzene	1000 ug/mL
							N-Propylbenzene	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							sec-Butylbenzene	1000 ug/mL
							Styrene	1000 ug/mL
							tert-Butylbenzene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_MegaMix#2_00141	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2,3-Trimethylbenzene	1000 ug/mL
							1,3,5-Trichlorobenzene	1000 ug/mL
							1,4-Dioxane	12500 ug/mL
							1-Chlorohexane	1000 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Allyl chloride	1000 ug/mL
							Benzyl chloride	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Chloroprene	1000 ug/mL
							Cyclohexane	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Hexane	1000 ug/mL
							Isobutyl alcohol	12500 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl ether	1000 ug/mL
							Methacrylonitrile	2500 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl iodide	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							n-Butanol	12500 ug/mL
							n-Heptane	1000 ug/mL
							Propionitrile	5000 ug/mL
							Tert-amyl methyl ether	1000 ug/mL
							Tert-butyl ethyl ether	1000 ug/mL
							Tetrahydrofuran	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_MegaMIX#1_00133	08/08/23		Restek, Lot A0184527		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chlorobromomethane	5000 ug/mL
							Chloroform	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m&p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00141	08/08/23		Restek, Lot A0197578		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2,3-Trimethylbenzene	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							1-Chlorohexane	5000 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							Acrylonitrile	12500 ug/mL
							Allyl chloride	5000 ug/mL
							Benzyl chloride	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Chloroprene	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropyl ether	5000 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl iodide	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							n-Butanol	62500 ug/mL
							n-Heptane	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
							Tetrahydrofuran	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_CCV_VOC#3_00133	07/30/23	07/09/23	Methanol, Lot EG095	5 mL	MSV_CCV_ACR_00011	0.5 mL	Acrolein	12500.4 ug/mL
					MSV_V_Ketones_00128	1 mL	2-Butanone	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_CCV_ACR_00011	07/30/23	05/31/23	Methanol, Lot EG095	10 mL	MSV_VACR_STK_00033	9.259 mL	Acrolein	125004 ug/mL
...MSV_VACR_STK_00033	07/30/23	05/31/23	Methanol, Lot EG095	10 mL	MSV_ACROLEIN_00026	1.4564 g	Acrolein	135008 ug/mL
....MSV_ACROLEIN_00026	11/30/23	Chem Service, Lot 13910600			(Purchased Reagent)		Acrolein	0.927 g/g
..MSV_V_Ketones_00128	06/30/25	Restek, Lot A0186508			(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
.MSV_V_VOA2_00196	08/08/23	07/09/23	Methanol, Lot EG095	5 mL	MSV_V#2B_00325	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00325	05/31/25	Restek, Lot A0197599			(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
MSV_LL_#1_826_00088	09/05/23	08/06/23	Methanol, Lot EG095	1 mL	MSV_CCV_VOC#1_00138	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chloroform	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							m&p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,4-Dioxane	2500 ug/mL
							Acrylonitrile	125 ug/mL
							Allyl chloride	50 ug/mL
							Carbon disulfide	50 ug/mL
							Chloroprene	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							Methyl iodide	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Propionitrile	1000 ug/mL
							Tetrahydrofuran	250 ug/mL
					MSV_CCV_VOC#3_00137	200 uL	2-Butanone	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone	500 ug/mL
							Acetone	500 ug/mL
					MSV_V_VOA2_00199	150 uL	1,4-Dioxane	2500 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							Propionitrile	1000 ug/mL
.MSV_CCV_VOC#1_00138	09/05/23	08/06/23	Methanol, Lot EG095	5 mL	MSV_MegaMIX#1_00137	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chloroform	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							m&p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_MegaMix#2_00132	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,4-Dioxane	12500 ug/mL
							Acrylonitrile	2500 ug/mL
							Allyl chloride	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Chloroprene	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							Methyl iodide	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Propionitrile	5000 ug/mL
							Tetrahydrofuran	5000 ug/mL
..MSV_MegaMIX#1_00137	09/05/23		Restek, Lot A0184527		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chloroform	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							m&p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							Styrene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00132	09/05/25		Restek, Lot A0186885		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							Acrylonitrile	12500 ug/mL
							Allyl chloride	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Chloroprene	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl iodide	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Propionitrile	25000 ug/mL
							Tetrahydrofuran	25000 ug/mL
.MSV_CCV_VOC#3_00137	09/05/23	08/06/23	Methanol, Lot EG095	5 mL	MSV_V_Ketones_00133	1 mL	2-Butanone	2500 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_V_Ketones_00133	01/31/25		Restek, Lot A0186508		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
.MSV_V_VOA2_00199	09/05/23	08/06/23	Methanol, Lot EG095	5 mL	MSV_V#2B_00328	1 mL	1,4-Dioxane	12500 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							Propionitrile	5000 ug/mL
..MSV_V#2B_00328	05/31/25		Restek, Lot A0197599		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							Propionitrile	25000 ug/mL
MSV_LL_#2_826_00095	07/18/23	07/09/23	Methanol, Lot EG095	1 mL	MSV_BCE_00058	25 uL	1-Bromo-2-chloroethane	50 ug/mL
					MSV_CCV_EE_00005	50 uL	Diethyl ether	50.0068 ug/mL
					MSV_V_PentaCL_00034	10 uL	Pentachloroethane	50 ug/mL
.MSV_BCE_00058	08/08/23		Restek, Lot A0177627		(Purchased Reagent)		1-Bromo-2-chloroethane	2000 ug/mL
.MSV_CCV_EE_00005	11/10/23	05/10/23	Methanol, Lot EG095	50 mL	MSV_EE_MISCSK_00012	1.686 mL	Diethyl ether	1000.14 ug/mL
..MSV_EE_MISCSK_00012	11/10/23	05/10/23	Methanol, Lot EG095	10 mL	MSV_EE_Neat_00009	0.2966 g	Diethyl ether	29660 ug/mL
...MSV_EE_Neat_00009	05/30/27		Chem Service, Lot 14084700		(Purchased Reagent)		Diethyl ether	1 g/g
.MSV_V_PentaCL_00034	07/18/23		Restek, Lot A0184174		(Purchased Reagent)		Pentachloroethane	5000 ug/mL
MSV_LL_#2_826_00098	08/15/23	08/06/23	Methanol, Lot EG095	1 mL	MSV_CCV_EE_00005	50 uL	Diethyl ether	50.0068 ug/mL
					MSV_V_PentaCL_00035	10 uL	Pentachloroethane	50 ug/mL
.MSV_CCV_EE_00005	11/10/23	05/10/23	Methanol, Lot EG095	50 mL	MSV_EE_MISCSK_00012	1.686 mL	Diethyl ether	1000.14 ug/mL
..MSV_EE_MISCSK_00012	11/10/23	05/10/23	Methanol, Lot EG095	10 mL	MSV_EE_Neat_00009	0.2966 g	Diethyl ether	29660 ug/mL
...MSV_EE_Neat_00009	05/30/27		Chem Service, Lot 14084700		(Purchased Reagent)		Diethyl ether	1 g/g
.MSV_V_PentaCL_00035	08/15/23		Restek, Lot A0184174		(Purchased Reagent)		Pentachloroethane	5000 ug/mL
MSV_LL_GAS826_00159	07/16/23	07/09/23	Methanol, Lot EG095	1 mL	MSV_CCV_GASES_00513	25 uL	1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
							Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00513	07/16/23		Restek, Lot A0197586		(Purchased Reagent)		1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL
							Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_LL_GAS826_00163	08/12/23	08/06/23	Methanol, Lot EG095	1 mL	MSV_CCV_GASES_00539	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00539	08/12/23		Restek, Lot A0197586		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_Q_QDME_00033	08/09/23	07/10/23	Methanol, Lot EG095	1 mL	MSV_DME_00048	100 uL	Dimethyl ether	100 ug/mL
.MSV_DME_00048	08/09/23		Restek, Lot A0190883		(Purchased Reagent)		Dimethyl ether	1000 ug/mL
MSV_QC_Gas826_00149	07/16/23	07/09/23	Methanol, Lot EG095	1 mL	MSV_QC_2K_GAS_00169	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00169	07/16/23		Restek, Lot A0184924		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QC_Gas826_00154	08/13/23	08/06/23	Methanol, Lot EG095	1 mL	MSV_QC_2K_GAS_00171	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00171	08/13/23		Restek, Lot A0184924		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_V_BFB_00012							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							divinyl benzene	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tentatively Identified Compound	
							Total BTEX	
							Total Diethylbenzene	
							Xylenes, Total	
					MSV_VBFB_STK_00010	0.096 mL	BFB	49.7971 ug/mL
.MSV_VBFB_STK_00010	12/13/23	06/13/23	Methanol, Lot EG095	10 mL	MSV_4BFB_NEAT_00010	1.2968 g	BFB	129680 ug/mL
..MSV_4BFB_NEAT_00010	05/31/25	Chem Service, Lot 13775500			(Purchased Reagent)		BFB	1 g/g
MSV_V_SMRV4_00060	07/25/23	06/26/23	Methanol, Lot EG095	1 mL	MSV_CCV_2CEVE_00126	200 uL	2-Chloroethyl vinyl ether	200 ug/mL
					MSV_CCV_LKB_00007	400 uL	cis-1,4-Dichloro-2-butene	399.99 ug/mL
					MSV_V_SMFreon_00028	100 uL	Chlorodifluoromethane	200 ug/mL
.MSV_CCV_2CEVE_00126	07/25/23	06/25/23	Methanol, Lot EG095	5 mL	MSV_V_2CLEVE_00132	1 mL	2-Chloroethyl vinyl ether	1000 ug/mL
..MSV_V_2CLEVE_00132	04/30/25	Restek, Lot A0184487			(Purchased Reagent)		2-Chloroethyl vinyl ether	5000 ug/mL
.MSV_CCV_LKB_00007	12/26/23	06/26/23	Methanol, Lot EG095	50 mL	MSV_Vc14d_STK_00009	1.411 mL	cis-1,4-Dichloro-2-butene	999.976 ug/mL
..MSV_Vc14d_STK_00009	12/26/23	06/26/23	Methanol, Lot EG095	10 mL	MSV_c14dcb_Nt_00004	0.373 g	cis-1,4-Dichloro-2-butene	35435 ug/mL
...MSV_c14dcb_Nt_00004	08/16/27	Aldrich, Lot SHBH4584V			(Purchased Reagent)		cis-1,4-Dichloro-2-butene	0.95 g/g
.MSV_V_SMFreon_00028	07/26/23	Restek, Lot A0184508			(Purchased Reagent)		Chlorodifluoromethane	2000 ug/mL
MT_HNO3_Fishe_00007	05/25/24	Fisher, Lot 225038			(Purchased Reagent)		Nitric acid	68 %
MT_HNO3_Fishe_00008	06/11/24	Fisher, Lot 222846			(Purchased Reagent)		Nitric acid	68 %
MT_I_IV_PDS_00019	11/04/23	08/04/23	2% Nitric Acid, Lot 4453602	250 mL	MT_LCS-SPK-A_00030	50 mL	Thallium	5 ug/mL
.MT_LCS-SPK-A_00030	07/17/24	Inorganic Ventures, Lot U2-MEB728825			(Purchased Reagent)		Thallium	25 mg/L
							Al	1250 mg/L
							Arsenic	125 mg/L
							B	125 mg/L
							Barium	125 mg/L
							Beryllium	12.5 mg/L
							Ca	1250 mg/L
							Cadmium	12.5 mg/L
							Chromium	125 mg/L
							Cobalt	125 mg/L
							Copper	125 mg/L
							Fe	1250 mg/L
							K	1250 mg/L
							Lead	12.5 mg/L
							Li	125 mg/L
							Mg	1250 mg/L
							Mn	125 mg/L
							Na	1250 mg/L
							Nickel	125 mg/L
							P	125 mg/L
							Selenium	25 mg/L
							Silver	12.5 mg/L
							Sr	12.5 mg/L
							Sulfur	1250 mg/L

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Th	125 mg/L
							Thallium	25 mg/L
							U	12.5 mg/L
							Vanadium	125 mg/L
							Zinc	125 mg/L
MT_LCS-SPK-B_00029	07/17/24	Inorganic Ventures, Lot U2-MEB728826			(Purchased Reagent)		Antimony	25 mg/L
							Mo	12.5 mg/L
							Si	1250 mg/L
							Sn	25 mg/L
							Ti	125 mg/L
							W	125 mg/L
							Zr	125 mg/L
MT_MJ_CCV_00168	08/26/23	07/27/23	DI Water, Lot DI07272023	5 L	MT_S_MSSPK-A_00001	5 mL	Arsenic	499.9 ppb
							Barium	500 ppb
							Beryllium	49.98 ppb
							Cadmium	49.99 ppb
							Chromium	499.9 ppb
							Cobalt	500.2 ppb
							Copper	500 ppb
							Lead	50 ppb
							Nickel	499.9 ppb
							Selenium	50.01 ppb
							Silver	50 ppb
							Thallium	50.02 ppb
							Vanadium	500 ppb
							Zinc	500.1 ppb
					MT_S_MSSPK-B_00002	5 mL	Antimony	49.97 ppb
.MT_S_MSSPK-A_00001	12/27/23	Inorganic Ventures, Lot T2-MEB716952			(Purchased Reagent)		Arsenic	499.9 ug/mL
							Barium	500 ug/mL
							Beryllium	49.98 ug/mL
							Cadmium	49.99 ug/mL
							Chromium	499.9 ug/mL
							Cobalt	500.2 ug/mL
							Copper	500 ug/mL
							Lead	50 ug/mL
							Nickel	499.9 ug/mL
							Selenium	50.01 ug/mL
							Silver	50 ug/mL
							Thallium	50.02 ug/mL
							Vanadium	500 ug/mL
							Zinc	500.1 ug/mL
.MT_S_MSSPK-B_00002	12/27/23	Inorganic Ventures, Lot T2-MEB716953			(Purchased Reagent)		Antimony	49.97 ug/mL
MT_MJ_CRI-V_00151	08/24/23	07/25/23	J, Lot 4170412	1 L	MT_MJ_1V_IV_00020	1.5 mL	Vanadium	2.0025 ug/L
					MT_S_MWLLC_SC_00005	1 mL	Antimony	1.01 ug/L
							Arsenic	2.02 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Barium	1.99 ug/L
							Beryllium	0.499 ug/L
							Cadmium	0.496 ug/L
							Chromium	2 ug/L
							Cobalt	0.504 ug/L
							Copper	0.999 ug/L
							Lead	0.503 ug/L
							Nickel	1 ug/L
							Selenium	1 ug/L
							Silver	0.496 ug/L
							Thallium	0.5 ug/L
							Vanadium	2.0025 ug/L
							Zinc	10 ug/L
.MT_MJ_1V_IV_00020	09/23/23	06/23/23	J, Lot 4458890	100 mL	MT_1KV_PIV_00007	0.1 mL	Vanadium	1.001 mg/L
..MT_1KV_PIV_00007	09/14/24	Inorganic Ventures, Lot R2-V696167			(Purchased Reagent)		Vanadium	1001 mg/L
.MT_S_MWLLC_SC_00005	09/30/23	SCP Science, Lot S220721047			(Purchased Reagent)		Antimony	1.01 ug/mL
							Arsenic	2.02 ug/mL
							Barium	1.99 ug/mL
							Beryllium	0.499 ug/mL
							Cadmium	0.496 ug/mL
							Chromium	2 ug/mL
							Cobalt	0.504 ug/mL
							Copper	0.999 ug/mL
							Lead	0.503 ug/mL
							Nickel	1 ug/mL
							Selenium	1 ug/mL
							Silver	0.496 ug/mL
							Thallium	0.5 ug/mL
							Vanadium	0.501 ug/mL
							Zinc	10 ug/mL
MT_MJ_CRI-V_00152	09/03/23	08/04/23	J, Lot 4170412	1 L	MT_MJ_1V_IV_00020	1.5 mL	Vanadium	2.0025 ug/L
					MT_S_MWLLC_SC_00005	1 mL	Antimony	1.01 ug/L
							Arsenic	2.02 ug/L
							Barium	1.99 ug/L
							Beryllium	0.499 ug/L
							Cadmium	0.496 ug/L
							Chromium	2 ug/L
							Cobalt	0.504 ug/L
							Copper	0.999 ug/L
							Lead	0.503 ug/L
							Nickel	1 ug/L
							Selenium	1 ug/L
							Silver	0.496 ug/L
							Thallium	0.5 ug/L
							Vanadium	2.0025 ug/L
							Zinc	10 ug/L

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MT_MJ_1V_IV_00020	09/23/23	06/23/23	J, Lot 4458890	100 mL	MT_1KV_PIV_00007	0.1 mL	Vanadium	1.001 mg/L
..MT_1KV_PIV_00007	09/14/24	Inorganic Ventures, Lot R2-V696167			(Purchased Reagent)		Vanadium	1001 mg/L
.MT_S_MWLLC_SC_00005	09/30/23	SCP Science, Lot S220721047			(Purchased Reagent)		Antimony	1.01 ug/mL
							Arsenic	2.02 ug/mL
							Barium	1.99 ug/mL
							Beryllium	0.499 ug/mL
							Cadmium	0.496 ug/mL
							Chromium	2 ug/mL
							Cobalt	0.504 ug/mL
							Copper	0.999 ug/mL
							Lead	0.503 ug/mL
							Nickel	1 ug/mL
							Selenium	1 ug/mL
							Silver	0.496 ug/mL
							Thallium	0.5 ug/mL
							Vanadium	0.501 ug/mL
							Zinc	10 ug/mL
MT_MJ_CRI-V_00153	09/10/23	08/11/23	J, Lot 4170412	1 L	MT_MJ_1V_IV_00020	1.5 mL	Vanadium	2.0025 ug/L
					MT_S_MWLLC_SC_00005	1 mL	Antimony	1.01 ug/L
							Arsenic	2.02 ug/L
							Barium	1.99 ug/L
							Beryllium	0.499 ug/L
							Cadmium	0.496 ug/L
							Chromium	2 ug/L
							Cobalt	0.504 ug/L
							Copper	0.999 ug/L
							Lead	0.503 ug/L
							Nickel	1 ug/L
							Selenium	1 ug/L
							Silver	0.496 ug/L
							Thallium	0.5 ug/L
							Vanadium	2.0025 ug/L
							Zinc	10 ug/L
.MT_MJ_1V_IV_00020	09/23/23	06/23/23	J, Lot 4458890	100 mL	MT_1KV_PIV_00007	0.1 mL	Vanadium	1.001 mg/L
..MT_1KV_PIV_00007	09/14/24	Inorganic Ventures, Lot R2-V696167			(Purchased Reagent)		Vanadium	1001 mg/L
.MT_S_MWLLC_SC_00005	09/30/23	SCP Science, Lot S220721047			(Purchased Reagent)		Antimony	1.01 ug/mL
							Arsenic	2.02 ug/mL
							Barium	1.99 ug/mL
							Beryllium	0.499 ug/mL
							Cadmium	0.496 ug/mL
							Chromium	2 ug/mL
							Cobalt	0.504 ug/mL
							Copper	0.999 ug/mL
							Lead	0.503 ug/mL
							Nickel	1 ug/mL
							Selenium	1 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Silver	0.496 ug/mL
							Thallium	0.5 ug/mL
							Vanadium	0.501 ug/mL
							Zinc	10 ug/mL
MT_MJ_ICSA_00104	09/07/23	08/08/23	J, Lot 3094411	500 mL	MT_S_ICS2A_IV_00011	50 mL	Al	100 ug/mL
							Antimony	0.00012 ug/mL
							Arsenic	0.0077 ug/mL
							Barium	0.0004 ug/mL
							Beryllium	0.000011 ug/mL
							Ca	298.8 ug/mL
							Cadmium	0.00045 ug/mL
							Chromium	0.0036 ug/mL
							Cobalt	0.00028 ug/mL
							Copper	0.00044 ug/mL
							Fe	260.1 ug/mL
							K	100 ug/mL
							Lead	0.000093 ug/mL
							Mg	100 ug/mL
							Mn	0.0006 ug/mL
							Mo	2.001 ug/mL
							Na	260.1 ug/mL
							Nickel	0.0012 ug/mL
							Selenium	0.000072 ug/mL
							Silver	0.0003 ug/mL
							Sn	0.00017 ug/mL
							Sr	0.0018 ug/mL
							Thallium	0.000062 ug/mL
							Ti	2.001 ug/mL
							U	0.00011 ug/mL
							Vanadium	0.00031 ug/mL
							Zinc	0.0011 ug/mL
.MT_S_ICS2A_IV_00011	07/22/25	Inorganic Ventures, Lot T2-MEB714677			(Purchased Reagent)		Al	1000 ug/mL
							Antimony	0.0012 ug/mL
							Arsenic	0.077 ug/mL
							Barium	0.004 ug/mL
							Beryllium	0.00011 ug/mL
							Ca	2988 ug/mL
							Cadmium	0.0045 ug/mL
							Chromium	0.036 ug/mL
							Cobalt	0.0028 ug/mL
							Copper	0.0044 ug/mL
							Fe	2601 ug/mL
							K	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Lead	0.00093 ug/mL
							Mg	1000 ug/mL
							Mn	0.006 ug/mL
							Mo	20.01 ug/mL
							Na	2601 ug/mL
							Nickel	0.012 ug/mL
							Selenium	0.00072 ug/mL
							Silver	0.003 ug/mL
							Sn	0.0017 ug/mL
							Sr	0.018 ug/mL
							Thallium	0.00062 ug/mL
							Ti	20.01 ug/mL
							U	0.0011 ug/mL
							Vanadium	0.0031 ug/mL
							Zinc	0.011 ug/mL
MT_MJ_ICSAB_00081	09/07/23	08/08/23	J, Lot 4224585	500 mL	MT_S_ICS2A_IV_00011	50 mL	Al	100 ug/mL
							Antimony	0.00012 ug/mL
							Arsenic	0.1077 ug/mL
							Barium	0.0004 ug/mL
							Beryllium	0.000011 ug/mL
							Ca	298.8 ug/mL
							Cadmium	0.10045 ug/mL
							Chromium	0.2037 ug/mL
							Cobalt	0.20038 ug/mL
							Copper	0.20054 ug/mL
							Fe	260.1 ug/mL
							K	100 ug/mL
							Lead	0.000093 ug/mL
							Mg	100 ug/mL
							Mn	0.2007 ug/mL
							Mo	2.001 ug/mL
							Na	260.1 ug/mL
							Nickel	0.2013 ug/mL
							Selenium	0.100072 ug/mL
							Silver	0.05032 ug/mL
							Sn	0.00017 ug/mL
							Sr	0.0018 ug/mL
							Thallium	0.000062 ug/mL
							Ti	2.001 ug/mL
							U	0.00011 ug/mL
							Vanadium	0.20041 ug/mL
							Zinc	0.1011 ug/mL
					MT_S_ICS2B_IV_00011	5 mL	Arsenic	0.1077 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cadmium	0.10045 ug/mL
							Chromium	0.2037 ug/mL
							Cobalt	0.20038 ug/mL
							Copper	0.20054 ug/mL
							Mn	0.2007 ug/mL
							Nickel	0.2013 ug/mL
							Selenium	0.100072 ug/mL
							Silver	0.05032 ug/mL
							Vanadium	0.20041 ug/mL
							Zinc	0.1011 ug/mL
.MT_S_ICS2A_IV_00011	07/22/25	Inorganic Ventures, Lot T2-MEB714677			(Purchased Reagent)		Al	1000 ug/mL
							Antimony	0.0012 ug/mL
							Arsenic	0.077 ug/mL
							Barium	0.004 ug/mL
							Beryllium	0.00011 ug/mL
							Ca	2988 ug/mL
							Cadmium	0.0045 ug/mL
							Chromium	0.036 ug/mL
							Cobalt	0.0028 ug/mL
							Copper	0.0044 ug/mL
							Fe	2601 ug/mL
							K	1000 ug/mL
							Lead	0.00093 ug/mL
							Mg	1000 ug/mL
							Mn	0.006 ug/mL
							Mo	20.01 ug/mL
							Na	2601 ug/mL
							Nickel	0.012 ug/mL
							Selenium	0.00072 ug/mL
							Silver	0.003 ug/mL
							Sn	0.0017 ug/mL
							Sr	0.018 ug/mL
							Thallium	0.00062 ug/mL
							Ti	20.01 ug/mL
							U	0.0011 ug/mL
							Vanadium	0.0031 ug/mL
							Zinc	0.011 ug/mL
.MT_S_ICS2B_IV_00011	10/25/23	Inorganic Ventures, Lot S2-MEB711470			(Purchased Reagent)		Arsenic	10 ug/mL
							Cadmium	10 ug/mL
							Chromium	20.01 ug/mL
							Cobalt	20.01 ug/mL
							Copper	20.01 ug/mL
							Mn	20.01 ug/mL
							Nickel	20.01 ug/mL
							Selenium	10 ug/mL
							Silver	5.002 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vanadium	20.01 ug/mL
							Zinc	10 ug/mL
MT_MJ_ICV_00088	08/21/23	07/22/23	J, Lot 4170412	1 L	MT_S_ICVSPK-A_00005	2 mL	Arsenic	500 ppb
							Barium	500 ppb
							Beryllium	50 ppb
							Cadmium	50 ppb
							Chromium	500 ppb
							Cobalt	500 ppb
							Copper	500 ppb
							Lead	50 ppb
							Nickel	500 ppb
							Selenium	50 ppb
							Silver	50 ppb
							Thallium	50 ppb
							Vanadium	500 ppb
							Zinc	500 ppb
					MT_S_ICVSPK-B_00003	2 mL	Antimony	50 ppb
.MT_S_ICVSPK-A_00005	04/03/24	High-Purity Standards, Lot U2-MEB728821			(Purchased Reagent)		Arsenic	250 ug/mL
							Barium	250 ug/mL
							Beryllium	25 ug/mL
							Cadmium	25 ug/mL
							Chromium	250 ug/mL
							Cobalt	250 ug/mL
							Copper	250 ug/mL
							Lead	25 ug/mL
							Nickel	250 ug/mL
							Selenium	25 ug/mL
							Silver	25 ug/mL
							Thallium	25 ug/mL
							Vanadium	250 ug/mL
							Zinc	250 ug/mL
.MT_S_ICVSPK-B_00003	04/03/24	High-Purity Standards, Lot U2-MEB728822			(Purchased Reagent)		Antimony	25 ug/mL
MT_MJ_LRC_00094	09/03/23	08/04/23	J, Lot 4119918	0.5 L	MT_I_CCVSPK-A_00005	10 mL	Arsenic	2000 ppb
							Barium	2000 ppb
							Beryllium	2000 ppb
							Cadmium	2000 ppb
							Chromium	2000 ppb
							Cobalt	2000 ppb
							Copper	2000 ppb
							Lead	2000 ppb
							Nickel	2000 ppb
							Selenium	2000 ppb
							Silver	2000 ppb
							Thallium	2000 ppb
							Vanadium	2000 ppb
							Zinc	2000 ppb

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MT_I_CCVSPK-B_00004	10 mL	Antimony	2000 ppb
.MT_I_CCVSPK-A_00005	04/12/24	Inorganic Ventures, Lot T2-MEB720690			(Purchased Reagent)		Arsenic	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Nickel	100 mg/L
							Selenium	100 mg/L
							Silver	100 mg/L
							Thallium	100 mg/L
							Vanadium	100 mg/L
							Zinc	100 mg/L
.MT_I_CCVSPK-B_00004	04/12/24	Inorganic Ventures, Lot T2-MEB720691			(Purchased Reagent)		Antimony	100 mg/L
MT_MJ_S1_00109	09/07/23	08/08/23	J, Lot 4072374	500 mL	MT_S_MSSPK-A_00001	1 mL	Arsenic	999.8 ppb
							Barium	1000 ppb
							Beryllium	99.96 ppb
							Cadmium	99.98 ppb
							Chromium	999.8 ppb
							Cobalt	1000.4 ppb
							Copper	1000 ppb
							Lead	100 ppb
							Nickel	999.8 ppb
							Selenium	100.02 ppb
							Silver	100 ppb
							Thallium	100.04 ppb
							Vanadium	1000 ppb
							Zinc	1000.2 ppb
					MT_S_MSSPK-B_00002	1 mL	Antimony	99.94 ppb
.MT_S_MSSPK-A_00001	12/27/23	Inorganic Ventures, Lot T2-MEB716952			(Purchased Reagent)		Arsenic	499.9 ug/mL
							Barium	500 ug/mL
							Beryllium	49.98 ug/mL
							Cadmium	49.99 ug/mL
							Chromium	499.9 ug/mL
							Cobalt	500.2 ug/mL
							Copper	500 ug/mL
							Lead	50 ug/mL
							Nickel	499.9 ug/mL
							Selenium	50.01 ug/mL
							Silver	50 ug/mL
							Thallium	50.02 ug/mL
							Vanadium	500 ug/mL
							Zinc	500.1 ug/mL
.MT_S_MSSPK-B_00002	12/27/23	Inorganic Ventures, Lot T2-MEB716953			(Purchased Reagent)		Antimony	49.97 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MT_SULF_FI_00019	05/24/24	ThermoFisher Scientific, Lot 222369			(Purchased Reagent)		Sulfuric acid	96.3 %
OP_MINAPP1_MS_00116	08/21/23	07/20/23	ACETONE, Lot EG397-US	50 mL	OP_APPIX1_MS_00078	12.5 mL	Kepone	12571 ppb
							1,3,5-Trinitrobenzene	12500 ppb
							1,4-Dinitrobenzene	12500 ppb
							1-Naphthylamine	12500 ppb
							2-Acetylaminofluorene	12500 ppb
							2-Naphthylamine	12500 ppb
							2-Picoline	12500 ppb
							2-Toluidine	12500 ppb
							3,3'-Dimethylbenzidine	12500 ppb
							4,4'-Methylene bis(2-chloroaniline)	12500 ppb
							4-Aminobiphenyl	12500 ppb
							4-Nitroquinoline-1-oxide	12500 ppb
							5-Nitro-o-toluidine	12500 ppb
							a,a-Dimethylphenethylamine	12500 ppb
							Dibenz[a,h]acridine	12500 ppb
							N-Nitrosodi-n-butylamine	12500 ppb
							N-Nitrosodiethylamine	12500 ppb
							N-Nitrosomethylethylamine	12500 ppb
							N-Nitrosomorpholine	12500 ppb
							N-Nitrosopiperidine	12500 ppb
							N-Nitrosopyrrolidine	12500 ppb
							p-Dimethylamino azobenzene	12500 ppb
							p-Phenylene diamine	12500 ppb
							Pentachloronitrobenzene	12500 ppb
							Phenacetin	12500 ppb
							Pronamide	12500 ppb
							Quinoline	12500 ppb
							1,4-Naphthoquinone	25006.3 ppb
							1-Chloronaphthalene	12500 ppb
							2,3,5,6-Tetrachlorophenol	12500 ppb
							7,12-Dimethylbenz(a)anthracene	12500 ppb
							Chlorobenzilate	12500 ppb
							Dinoseb	12500 ppb
							Ethyl methanesulfonate	12500 ppb
							Hexachloropropene	12500 ppb
							Isodrin	12500 ppb
							Isosafrole	12500 ppb
							Isosafrole Peak 1	2000 ppb
							Isosafrole Peak 2	10500 ppb
							Methyl methanesulfonate	12500 ppb
							Pentachlorobenzene	12500 ppb
							Pentachloroethane	12500 ppb
							3-Methylcholanthrene	12500 ppb
							6-Methylchrysene	12500 ppb

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aramite, Total	12500 ppb
							cis-Diallate	9250 ppb
							Diallate	12500 ppb
							Dimethoate	12500 ppb
							Disulfoton	12500 ppb
							Ethyl Parathion	12500 ppb
							Famphur	12500 ppb
							Methyl parathion	12500 ppb
							o,o',o''-Triethylphosphorothioate	12500 ppb
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	12500 ppb
							Phorate	12500 ppb
							Safrole, Total	12500 ppb
							Sulfotepp	12500 ppb
							trans-Diallate	3250 ppb
							Methapyrilene	25000 ppb
							Dibenz[a,j]acridine	12500 ppb
					OP_NPQUIN_STK_00006	0.625 mL	1,4-Naphthoquinone	25006.3 ppb
.OP_APPIX1_MS_00078	08/21/23	07/20/23	Acetone, Lot EG397-US	80 mL	OP_APXKEP_STK_00005	0.44 mL	Kepone	50284.1 ppb
					OP_RES_APPX1_00009	2 mL	1,3,5-Trinitrobenzene	50000 ppb
							1,4-Dinitrobenzene	50000 ppb
							1-Naphthylamine	50000 ppb
							2-Acetylaminofluorene	50000 ppb
							2-Naphthylamine	50000 ppb
							2-Picoline	50000 ppb
							2-Toluidine	50000 ppb
							3,3'-Dimethylbenzidine	50000 ppb
							4,4'-Methylene bis(2-chloroaniline)	50000 ppb
							4-Aminobiphenyl	50000 ppb
							4-Nitroquinoline-1-oxide	50000 ppb
							5-Nitro-o-toluidine	50000 ppb
							a,a-Dimethylphenethylamine	50000 ppb
							Dibenz[a,h]acridine	50000 ppb
							N-Nitrosodi-n-butylamine	50000 ppb
							N-Nitrosodiethylamine	50000 ppb
							N-Nitrosomethylethylamine	50000 ppb
							N-Nitrosomorpholine	50000 ppb
							N-Nitrosopiperidine	50000 ppb
							N-Nitrosopyrrolidine	50000 ppb
							p-Dimethylamino azobenzene	50000 ppb
							p-Phenylene diamine	50000 ppb
							Pentachloronitrobenzene	50000 ppb
							Phenacetin	50000 ppb
							Pronamide	50000 ppb
							Quinoline	50000 ppb

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					OP_RES_APPX1_00010	2 mL	1,3,5-Trinitrobenzene	50000 ppb
							1,4-Dinitrobenzene	50000 ppb
							1-Naphthylamine	50000 ppb
							2-Acetylaminofluorene	50000 ppb
							2-Naphthylamine	50000 ppb
							2-Picoline	50000 ppb
							2-Toluidine	50000 ppb
							3,3'-Dimethylbenzidine	50000 ppb
							4,4'-Methylene bis(2-chloroaniline)	50000 ppb
							4-Aminobiphenyl	50000 ppb
							4-Nitroquinoline-1-oxide	50000 ppb
							5-Nitro-o-toluidine	50000 ppb
							a,a-Dimethylphenethylamine	50000 ppb
							Dibenz[a,h]acridine	50000 ppb
							N-Nitrosodi-n-butylamine	50000 ppb
							N-Nitrosodiethylamine	50000 ppb
							N-Nitrosomethylethylamine	50000 ppb
							N-Nitrosomorpholine	50000 ppb
							N-Nitrosopiperidine	50000 ppb
							N-Nitrosopyrrolidine	50000 ppb
							p-Dimethylamino azobenzene	50000 ppb
							p-Phenylene diamine	50000 ppb
							Pentachloronitrobenzene	50000 ppb
							Phenacetin	50000 ppb
							Pronamide	50000 ppb
							Quinoline	50000 ppb
					OP_RES_APPX2_00011	4 mL	1,4-Naphthoquinone	50000 ppb
							1-Chloronaphthalene	50000 ppb
							2,3,5,6-Tetrachlorophenol	50000 ppb
							7,12-Dimethylbenz(a)anthracene	50000 ppb
							Chlorobenzilate	50000 ppb
							Dinoseb	50000 ppb
							Ethyl methanesulfonate	50000 ppb
							Hexachloropropene	50000 ppb
							Isodrin	50000 ppb
							Isosafrole	50000 ppb
							Isosafrole Peak 1	8000 ppb
							Isosafrole Peak 2	42000 ppb
							Methyl methanesulfonate	50000 ppb
							Pentachlorobenzene	50000 ppb
							Pentachloroethane	50000 ppb
					OP_RES_APPX3_00007	2 mL	3-Methylcholanthrene	50000 ppb
							6-Methylchrysene	50000 ppb
					OP_RES_APPX4_00008	4 mL	Aramite, Total	50000 ppb
							cis-Diallate	37000 ppb
							Diallate	50000 ppb

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethoate	50000 ppb
							Disulfoton	50000 ppb
							Ethyl Parathion	50000 ppb
							Famphur	50000 ppb
							Methyl parathion	50000 ppb
							o,o',o''-Triethylphosphorothioate	50000 ppb
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	50000 ppb
							Phorate	50000 ppb
							Safrole, Total	50000 ppb
							Sulfotepp	50000 ppb
							trans-Diallate	13000 ppb
					OP_RES_APPX5_00010	4 mL	Methapyrilene	100000 ppb
					OP_RES_APPX6_00005	2 mL	Dibenz[a,j]acridine	50000 ppb
..OP_APXKEP_STK_00005	05/12/24	05/12/23	Methanol, Lot 221032	10 mL	OP_KEPONE_NT_00002	0.1008 g	Kepone	9142560 ppb
...OP_KEPONE_NT_00002	11/30/27		CHEM SERVICE, Lot 12672000		(Purchased Reagent)		Kepone	90.7 %
..OP_RES_APPX1_00009	08/31/23		Restek, Lot A0188198		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							a,a-Dimethylphenethylamine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
..OP_RES_APPX1_00010	02/29/24		Restek, Lot A0194294		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,4-Dinitrobenzene	1000 ug/mL
							1-Naphthylamine	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Acetylaminofluorene	1000 ug/mL
							2-Naphthylamine	1000 ug/mL
							2-Picoline	1000 ug/mL
							2-Toluidine	1000 ug/mL
							3,3'-Dimethylbenzidine	1000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	1000 ug/mL
							4-Aminobiphenyl	1000 ug/mL
							4-Nitroquinoline-1-oxide	1000 ug/mL
							5-Nitro-o-toluidine	1000 ug/mL
							a,a-Dimethylphenethylamine	1000 ug/mL
							Dibenz[a,h]acridine	1000 ug/mL
							N-Nitrosodi-n-butylamine	1000 ug/mL
							N-Nitrosodiethylamine	1000 ug/mL
							N-Nitrosomethylethylamine	1000 ug/mL
							N-Nitrosomorpholine	1000 ug/mL
							N-Nitrosopiperidine	1000 ug/mL
							N-Nitrosopyrrolidine	1000 ug/mL
							p-Dimethylamino azobenzene	1000 ug/mL
							p-Phenylene diamine	1000 ug/mL
							Pentachloronitrobenzene	1000 ug/mL
							Phenacetin	1000 ug/mL
							Pronamide	1000 ug/mL
							Quinoline	1000 ug/mL
..OP_RES_APPX2_00011	01/31/24		Restek, Lot A0193498		(Purchased Reagent)		1,4-Naphthoquinone	1000 ug/mL
							1-Chloronaphthalene	1000 ug/mL
							2,3,5,6-Tetrachlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Chlorobenzilate	1000 ug/mL
							Dinoseb	1000 ug/mL
							Ethyl methanesulfonate	1000 ug/mL
							Hexachloropropene	1000 ug/mL
							Isodrin	1000 ug/mL
							Isosafrole	1000 ug/mL
							Isosafrole Peak 1	160 ug/mL
							Isosafrole Peak 2	840 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							Pentachlorobenzene	1000 ug/mL
							Pentachloroethane	1000 ug/mL
..OP_RES_APPX3_00007	01/31/24		Restek, Lot A0193475		(Purchased Reagent)		3-Methylcholanthrene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
..OP_RES_APPX4_00008	01/31/25		Restek, Lot A0193163		(Purchased Reagent)		Aramite, Total	1000 ug/mL
							cis-Diallate	740 ug/mL
							Diallate	1000 ug/mL
							Dimethoate	1000 ug/mL
							Disulfoton	1000 ug/mL
							Ethyl Parathion	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Famphur	1000 ug/mL
							Methyl parathion	1000 ug/mL
							o,o',o''-Triethylphosphorothioate	1000 ug/mL
							O,O-Diethyl O-2-pyrazinyl phosphorothioate	1000 ug/mL
							Phorate	1000 ug/mL
							Safrole, Total	1000 ug/mL
							Sulfotepp	1000 ug/mL
							trans-Diallate	260 ug/mL
..OP_RES_APPX5_00010	01/31/25		Restek, Lot A0193415		(Purchased Reagent)		Methapyrilene	2000 ug/mL
..OP_RES_APPX6_00005	05/31/25		Restek, Lot A0184892		(Purchased Reagent)		Dibenz[a,j]acridine	2000 ug/mL
.OP_NPQUIN_STK_00006	02/14/28		ABSOLUTE, Lot 021423		(Purchased Reagent)		1,4-Naphthoquinone	1000.5 ug/mL
OP_MINIBNA_SS_00094	01/06/24	07/25/23	Methanol, Lot 221032	1000 mL	OP_BNA_SS_00056	250 mL	1-Methylnaphthalene-d10	250 ppb
							2,4,6-Tribromophenol (Surr)	50000 ppb
							2-Fluorobiphenyl (Surr)	25000 ppb
							2-Fluorophenol (Surr)	50000 ppb
							Benzo(a)pyrene-d12 (Surr)	250 ppb
							Fluoranthene-d10 (Surr)	250 ppb
							Nitrobenzene-d5 (Surr)	25000 ppb
							p-Terphenyl-d14 (Surr)	25000 ppb
							Phenol-d5 (Surr)	50000 ppb
.OP_BNA_SS_00056	01/06/24	07/05/23	Methanol, Lot 221032	2000 mL	OP_BNA_STK_00055	2000 mL	1-Methylnaphthalene-d10	1000 ppb
							2,4,6-Tribromophenol (Surr)	200000 ppb
							2-Fluorobiphenyl (Surr)	100000 ppb
							2-Fluorophenol (Surr)	200000 ppb
							Benzo(a)pyrene-d12 (Surr)	1000 ppb
							Fluoranthene-d10 (Surr)	1000 ppb
							Nitrobenzene-d5 (Surr)	100000 ppb
							p-Terphenyl-d14 (Surr)	100000 ppb
							Phenol-d5 (Surr)	200000 ppb
..OP_BNA_STK_00055	03/31/25		Agilent, Lot 0006730540		(Purchased Reagent)		1-Methylnaphthalene-d10	1 ug/mL
							2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Benzo(a)pyrene-d12 (Surr)	1 ug/mL
							Fluoranthene-d10 (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							p-Terphenyl-d14 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
OP_MINLCS1_MS_00178	08/22/23	07/28/23	ACETONE, Lot EG397-US	100 mL	OP_LCS1_MS_00059	25 mL	1,1'-Biphenyl	12500 ppb
							1,2,4,5-Tetrachlorobenzene	12500 ppb
							1,2,4-Trichlorobenzene	12500 ppb
							1,2-Dichlorobenzene	12500 ppb
							1,2-Diphenylhydrazine	12500 ppb
							1,3-Dichlorobenzene	12500 ppb

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	12500 ppb
							1,4-Dichlorobenzene	12500 ppb
							1,4-Dioxane	12500 ppb
							1-Methylnaphthalene	12500 ppb
							2,3,4,6-Tetrachlorophenol	12500 ppb
							2,4,5-Trichlorophenol	12500 ppb
							2,4,6-Trichlorophenol	12500 ppb
							2,4-Dichlorophenol	12500 ppb
							2,4-Dimethylphenol	12500 ppb
							2,4-Dinitrophenol	25000 ppb
							2,4-Dinitrotoluene	12500 ppb
							2,6-Dichlorophenol	12500 ppb
							2,6-Dinitrotoluene	12500 ppb
							2-Chloronaphthalene	12500 ppb
							2-Chlorophenol	12500 ppb
							2-Methylnaphthalene	12500 ppb
							2-Nitroaniline	12500 ppb
							2-Nitrophenol	12500 ppb
							3-Nitroaniline	12500 ppb
							4,6-Dinitro-2-methylphenol	25000 ppb
							4-Bromophenyl-phenylether	12500 ppb
							4-Chloro-3-methylphenol	12500 ppb
							4-Chloroaniline	12500 ppb
							4-Chlorophenyl-phenyl ether	12500 ppb
							4-Nitroaniline	12500 ppb
							4-Nitrophenol	25000 ppb
							Acenaphthene	12500 ppb
							Acenaphthylene	12500 ppb
							Acetophenone	12500 ppb
							Aniline	12500 ppb
							Anthracene	12500 ppb
							Benzo[a]anthracene	12500 ppb
							Benzo[a]pyrene	12500 ppb
							Benzo[b]fluoranthene	12500 ppb
							Benzo[g,h,i]perylene	12500 ppb
							Benzo[k]fluoranthene	12500 ppb
							Benzyl alcohol	12500 ppb
							bis (2-chloroisopropyl) ether	12500 ppb
							Bis(2-chloroethoxy)methane	12500 ppb
							Bis(2-chloroethyl)ether	12500 ppb
							Bis(2-ethylhexyl) phthalate	12500 ppb
							Butyl benzyl phthalate	12500 ppb
							Carbazole	12500 ppb
							Chrysene	12500 ppb
							Di-n-butyl phthalate	12500 ppb
							Di-n-octyl phthalate	12500 ppb

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	12500 ppb
							Dibenzofuran	12500 ppb
							Diethyl phthalate	12500 ppb
							Dimethyl phthalate	12500 ppb
							Fluoranthene	12500 ppb
							Fluorene	12500 ppb
							Hexachlorobenzene	12500 ppb
							Hexachlorobutadiene	12500 ppb
							Hexachlorocyclopentadiene	12500 ppb
							Hexachloroethane	12500 ppb
							Hexadecane	12500 ppb
							Indeno[1,2,3-cd]pyrene	12500 ppb
							Isophorone	12500 ppb
							m & p-Cresol	12500 ppb
							n-Decane	12500 ppb
							N-Nitrosodi-n-propylamine	12500 ppb
							N-Nitrosodimethylamine	12500 ppb
							n-Nitrosodiphenylamine(as diphenylamine)	10625 ppb
							n-Octadecane	12500 ppb
							Naphthalene	12500 ppb
							Nitrobenzene	12500 ppb
							o-Cresol	12500 ppb
							Pentachlorophenol	25000 ppb
							Phenanthrene	12500 ppb
							Phenol	12500 ppb
							Pyrene	12500 ppb
							Pyridine	25000 ppb
							3,3'-Dichlorobenzidine	25000 ppb
							Benzidine	25000 ppb
							Benzoic acid	12500 ppb
							Indene	12500 ppb
							1-Methylphenanthrene	12500 ppb
							2,3-Dichlorobenzenamine	12500 ppb
							Alpha Methyl Styrene	12500 ppb
							Alpha-Terpineol	12500 ppb
							Dimethylformamide	12500 ppb
							icosane	12500 ppb
							n-Docosane	12500 ppb
							n-Tetradecane	12500 ppb
							Octachlorostyrene	12500 ppb
							Phenyl ether	12500 ppb
.OP_LCS1_MS_00059	08/22/23	07/21/23	Acetone, Lot EG397-US	400 mL	OP_RES_LCS1_00013	20 mL	1,1'-Biphenyl	50000 ppb
							1,2,4,5-Tetrachlorobenzene	50000 ppb
							1,2,4-Trichlorobenzene	50000 ppb
							1,2-Dichlorobenzene	50000 ppb
							1,2-Diphenylhydrazine	50000 ppb

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	50000 ppb
							1,3-Dinitrobenzene	50000 ppb
							1,4-Dichlorobenzene	50000 ppb
							1,4-Dioxane	50000 ppb
							1-Methylnaphthalene	50000 ppb
							2,3,4,6-Tetrachlorophenol	50000 ppb
							2,4,5-Trichlorophenol	50000 ppb
							2,4,6-Trichlorophenol	50000 ppb
							2,4-Dichlorophenol	50000 ppb
							2,4-Dimethylphenol	50000 ppb
							2,4-Dinitrophenol	100000 ppb
							2,4-Dinitrotoluene	50000 ppb
							2,6-Dichlorophenol	50000 ppb
							2,6-Dinitrotoluene	50000 ppb
							2-Chloronaphthalene	50000 ppb
							2-Chlorophenol	50000 ppb
							2-Methylnaphthalene	50000 ppb
							2-Nitroaniline	50000 ppb
							2-Nitrophenol	50000 ppb
							3-Nitroaniline	50000 ppb
							4,6-Dinitro-2-methylphenol	100000 ppb
							4-Bromophenyl-phenylether	50000 ppb
							4-Chloro-3-methylphenol	50000 ppb
							4-Chloroaniline	50000 ppb
							4-Chlorophenyl-phenyl ether	50000 ppb
							4-Nitroaniline	50000 ppb
							4-Nitrophenol	100000 ppb
							Acenaphthene	50000 ppb
							Acenaphthylene	50000 ppb
							Acetophenone	50000 ppb
							Aniline	50000 ppb
							Anthracene	50000 ppb
							Benzo[a]anthracene	50000 ppb
							Benzo[a]pyrene	50000 ppb
							Benzo[b]fluoranthene	50000 ppb
							Benzo[g,h,i]perylene	50000 ppb
							Benzo[k]fluoranthene	50000 ppb
							Benzyl alcohol	50000 ppb
							bis (2-chloroisopropyl) ether	50000 ppb
							Bis(2-chloroethoxy)methane	50000 ppb
							Bis(2-chloroethyl)ether	50000 ppb
							Bis(2-ethylhexyl) phthalate	50000 ppb
							Butyl benzyl phthalate	50000 ppb
							Carbazole	50000 ppb
							Chrysene	50000 ppb
							Di-n-butyl phthalate	50000 ppb

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	50000 ppb
							Dibenz(a,h)anthracene	50000 ppb
							Dibenzofuran	50000 ppb
							Diethyl phthalate	50000 ppb
							Dimethyl phthalate	50000 ppb
							Fluoranthene	50000 ppb
							Fluorene	50000 ppb
							Hexachlorobenzene	50000 ppb
							Hexachlorobutadiene	50000 ppb
							Hexachlorocyclopentadiene	50000 ppb
							Hexachloroethane	50000 ppb
							Hexadecane	50000 ppb
							Indeno[1,2,3-cd]pyrene	50000 ppb
							Isophorone	50000 ppb
							m & p-Cresol	50000 ppb
							n-Decane	50000 ppb
							N-Nitrosodi-n-propylamine	50000 ppb
							N-Nitrosodimethylamine	50000 ppb
							n-Nitrosodiphenylamine(as diphenylamine)	42500 ppb
							n-Octadecane	50000 ppb
							Naphthalene	50000 ppb
							Nitrobenzene	50000 ppb
							o-Cresol	50000 ppb
							Pentachlorophenol	100000 ppb
							Phenanthrene	50000 ppb
							Phenol	50000 ppb
							Pyrene	50000 ppb
							Pyridine	100000 ppb
					OP_RES_LCS2_00009	10 mL	3,3'-Dichlorobenzidine	100000 ppb
							Benzidine	100000 ppb
					OP_RES_LCS2_00010	10 mL	3,3'-Dichlorobenzidine	100000 ppb
							Benzidine	100000 ppb
					OP_RES_LCS3_00007	10 mL	Benzoic acid	50000 ppb
							Indene	50000 ppb
					OP_RES_LCSadd_00003	10 mL	1-Methylphenanthrene	50000 ppb
							2,3-Dichlorobenzenamine	50000 ppb
							Alpha Methyl Styrene	50000 ppb
							Alpha-Terpineol	50000 ppb
							Dimethylformamide	50000 ppb
							icosane	50000 ppb
							n-Docosane	50000 ppb
							n-Tetradecane	50000 ppb
							Octachlorostyrene	50000 ppb
							Phenyl ether	50000 ppb
..OP_RES_LCS1_00013	09/30/24		Restek, Lot A0195772		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl-phenylether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl-phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Nitrosodiphenylamine(as diphenylamine)	850 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..OP_RES_LCS2_00009	02/29/24		Restek, Lot A0188589		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..OP_RES_LCS2_00010	08/31/24		Restek, Lot A0194453		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..OP_RES_LCS3_00007	07/31/24		Restek, Lot A0193718		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..OP_RES_LCSadd_00003	02/28/26		Restek, Lot A0194427		(Purchased Reagent)		1-Methylphenanthrene	2000 ug/mL
							2,3-Dichlorobenzenamine	2000 ug/mL
							Alpha Methyl Styrene	2000 ug/mL
							Alpha-Terpineol	2000 ug/mL
							Dimethylformamide	2000 ug/mL
							icosane	2000 ug/mL
							n-Docosane	2000 ug/mL
							n-Tetradecane	2000 ug/mL
							Octachlorostyrene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenyl ether	2000 ug/mL
OP_MINLCS2_MS_00102	08/14/23	07/24/23	ACETONE, Lot EG397-US	100 mL	OP_LCS 2_MS_00047	25 mL	Atrazine	12500 ppb
							Benzaldehyde	12500 ppb
							Caprolactam	12500 ppb
.OP_LCS 2_MS_00047	08/14/23	07/13/23	ACETONE, Lot EG397-US	400 mL	OP_LCSmix2stk_00007	10 mL	Atrazine	50000 ppb
							Benzaldehyde	50000 ppb
							Caprolactam	50000 ppb
..OP_LCSmix2stk_00007	07/31/24	Restek, Lot A0193487			(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
WC-PR20mg/lQC_00940	08/09/23	08/08/23	Sodium Hyroxide, Lot in house	25 mL	WC_FL_CNVeriS_00022	0.5 mL	Cyanide, Amenable	20 mg/L
							Cyanide, Available	20 mg/L
							Cyanide, Free	20 mg/L
							Cyanide, Non-amenable	20 mg/L
							Cyanide, Reactive	20 mg/L
							Cyanide, Total	20 mg/L
							Cyanide, Weak Acid Dissociable	20 mg/L
							Potassium hydroxide	0.04 mg/L
.WC_FL_CNVeriS_00022	09/30/23	RICCA, Lot 4303N11			(Purchased Reagent)		Cyanide, Amenable	1000 mg/L
							Cyanide, Available	1000 mg/L
							Cyanide, Free	1000 mg/L
							Cyanide, Non-amenable	1000 mg/L
							Cyanide, Reactive	1000 mg/L
							Cyanide, Total	1000 mg/L
							Cyanide, Weak Acid Dissociable	1000 mg/L
							Potassium hydroxide	2 mg/L
WC-PR20mg/lQC_00941	08/10/23	08/09/23	Sodium Hyroxide, Lot in house	25 mL	WC_FL_CNVeriS_00022	0.5 mL	Cyanide, Amenable	20 mg/L
							Cyanide, Available	20 mg/L
							Cyanide, Free	20 mg/L
							Cyanide, Non-amenable	20 mg/L
							Cyanide, Reactive	20 mg/L
							Cyanide, Total	20 mg/L
							Cyanide, Weak Acid Dissociable	20 mg/L
							Potassium hydroxide	0.04 mg/L
.WC_FL_CNVeriS_00022	09/30/23	RICCA, Lot 4303N11			(Purchased Reagent)		Cyanide, Amenable	1000 mg/L
							Cyanide, Available	1000 mg/L
							Cyanide, Free	1000 mg/L
							Cyanide, Non-amenable	1000 mg/L
							Cyanide, Reactive	1000 mg/L
							Cyanide, Total	1000 mg/L
							Cyanide, Weak Acid Dissociable	1000 mg/L
							Potassium hydroxide	2 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WC-PR20mg/lQC_00942	08/11/23	08/10/23	Sodium Hyroxide, Lot in house	25 mL	WC_FL_CNVeriS_00022	0.5 mL	Cyanide, Amenable	20 mg/L
							Cyanide, Available	20 mg/L
							Cyanide, Free	20 mg/L
							Cyanide, Non-amenable	20 mg/L
							Cyanide, Reactive	20 mg/L
							Cyanide, Total	20 mg/L
							Cyanide, Weak Acid Dissociable	20 mg/L
							Potassium hydroxide	0.04 mg/L
.WC_FL_CNVeriS_00022	09/30/23	RICCA, Lot 4303N11			(Purchased Reagent)		Cyanide, Amenable	1000 mg/L
							Cyanide, Available	1000 mg/L
							Cyanide, Free	1000 mg/L
							Cyanide, Non-amenable	1000 mg/L
							Cyanide, Reactive	1000 mg/L
							Cyanide, Total	1000 mg/L
							Cyanide, Weak Acid Dissociable	1000 mg/L
							Potassium hydroxide	2 mg/L
WC_FL_CCVCN_00586	08/10/23	08/09/23	Sodium Hyroxide, Lot 31238	100 mL	WC_FL_Q_10 CN_00576	1.5 mL	Cyanide, Total	0.15 mg/L
.WC_FL_Q_10 CN_00576	08/10/23	08/09/23	NaOH, Lot 13347	50 mL	WC_FL_CNVeriS_00022	0.5 mL	Cyanide, Total	10 mg/L
..WC_FL_CNVeriS_00022	09/30/23	RICCA, Lot 4303N11			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WC_FL_CCVCN_00587	08/11/23	08/10/23	Sodium Hyroxide, Lot 31238	100 mL	WC_FL_Q_10 CN_00577	1.5 mL	Cyanide, Total	0.15 mg/L
.WC_FL_Q_10 CN_00577	08/11/23	08/10/23	NaOH, Lot 13347	50 mL	WC_FL_CNVeriS_00022	0.5 mL	Cyanide, Total	10 mg/L
..WC_FL_CNVeriS_00022	09/30/23	RICCA, Lot 4303N11			(Purchased Reagent)		Cyanide, Total	1000 mg/L

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 5719965.SEC **Lot No.:** A0180323

Description : 8270 List 1 / Std #1 MegaMix (2017)
8270 List 1 / Std #1 MegaMix (2017) 500-2000 µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2023 **Storage:** 0°C or colder

Handling: Carcinogen/reproductive toxin. **Ship:** Ambient
Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane		1,005.5	µg/mL	+/- 5.8596	µg/mL	Gravimetric
	CAS #	123-91-1.SEC	(Lot KLE2K)		+/- 12.0264	µg/mL	Unstressed
	Purity	99%			+/- 19.1335	µg/mL	Stressed
2	N-Nitrosodimethylamine		1,008.0	µg/mL	+/- 5.8741	µg/mL	Gravimetric
	CAS #	62-75-9.SEC	(Lot 71L89)		+/- 12.0563	µg/mL	Unstressed
	Purity	99%			+/- 19.1811	µg/mL	Stressed
3	Pyridine		2,001.5	µg/mL	+/- 11.6638	µg/mL	Gravimetric
	CAS #	110-86-1.SEC	(Lot QN8DK)		+/- 23.9391	µg/mL	Unstressed
	Purity	99%			+/- 38.0862	µg/mL	Stressed
4	Phenol		1,002.8	µg/mL	+/- 5.8435	µg/mL	Gravimetric
	CAS #	108-95-2.SEC	(Lot EDPYN)		+/- 11.9935	µg/mL	Unstressed
	Purity	99%			+/- 19.0811	µg/mL	Stressed
5	Aniline		1,005.8	µg/mL	+/- 5.8610	µg/mL	Gravimetric
	CAS #	62-53-3.SEC	(Lot ZCD3N)		+/- 12.0294	µg/mL	Unstressed
	Purity	99%			+/- 19.1382	µg/mL	Stressed
6	Bis(2-chloroethyl)ether		1,005.8	µg/mL	+/- 5.8610	µg/mL	Gravimetric
	CAS #	111-44-4.SEC	(Lot FA01043)		+/- 12.0294	µg/mL	Unstressed
	Purity	99%			+/- 19.1382	µg/mL	Stressed
7	n-Decane (C10)		1,004.3	µg/mL	+/- 5.8523	µg/mL	Gravimetric
	CAS #	124-18-5.SEC	(Lot UCVNN)		+/- 12.0114	µg/mL	Unstressed
	Purity	99%			+/- 19.1097	µg/mL	Stressed

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571995.SEC **Lot No.:** A0194078

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2,000 µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2024 **Storage:** 0°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dioxane	123-91-1.SEC	QHRWO	99%	1,007.3 µg/mL	+/- 18.6139
2	N-Nitrosodimethylamine	62-75-9.SEC	61H72	99%	1,005.5 µg/mL	+/- 18.5816
3	Pyridine	110-86-1.SEC	QN8DK	99%	2,014.3 µg/mL	+/- 37.2233
4	Phenol	108-95-2.SEC	EDPYN	99%	1,004.3 µg/mL	+/- 18.5585
5	Aniline	62-53-3.SEC	ZCD3N	99%	1,007.5 µg/mL	+/- 18.6186
6	Bis(2-chloroethyl)ether	111-44-4.SEC	FA010143	99%	1,007.5 µg/mL	+/- 18.6186
7	n-Decane (C10)	124-18-5.SEC	UCVNN	99%	1,002.5 µg/mL	+/- 18.5262
8	2-Chlorophenol	95-57-8.SEC	GJ01	99%	1,006.5 µg/mL	+/- 18.6001
9	1,3-Dichlorobenzene	541-73-1.SEC	ZA2ZI	99%	1,006.5 µg/mL	+/- 18.6001
10	1,4-Dichlorobenzene	106-46-7.SEC	J5GVD	99%	1,006.8 µg/mL	+/- 18.6047
11	Benzyl alcohol	100-51-6.SEC	QZBUO	99%	1,009.5 µg/mL	+/- 18.6555
12	1,2-Dichlorobenzene	95-50-1.SEC	R6QDM	99%	1,002.8 µg/mL	+/- 18.5308
13	2-Methylphenol (o-cresol)	95-48-7.SEC	NC7HL	99%	1,007.0 µg/mL	+/- 18.6093
14	2,2'-oxybis(1-chloropropane)	108-60-1.SEC	29-MAR-45-5	99%	1,004.0 µg/mL	+/- 18.5539
15	Acetophenone	98-86-2.SEC	NSGTI	99%	1,004.0 µg/mL	+/- 18.5539
16	3-Methylphenol (m-cresol)	108-39-4.SEC	6LHTM	99%	501.3 µg/mL	+/- 9.2631

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570667.SEC **Lot No.:** A0184124

Description : 8270 Supplemental Standard #1
8270 Supplemental Standard #1 1,000µg/mL, Methylene chloride, 1mL/ampul
Also described as 8270 List 2 / Std #1

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	2-Picoline	1,006.0	µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 109-06-8.SEC	(Lot PUXDM)		+/- 12.0878	µg/mL	Unstressed
	Purity 99%			+/- 19.1779	µg/mL	Stressed
2	N-Nitrosomethylethylamine	1,000.0	µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 10595-95-6.SEC	(Lot 5-RFS-156-7)		+/- 12.0157	µg/mL	Unstressed
	Purity 99%			+/- 19.0635	µg/mL	Stressed
3	Acrylamide	1,007.0	µg/mL	+/- 5.9813	µg/mL	Gravimetric
	CAS # 79-06-1.SEC	(Lot CQRXE)		+/- 12.0998	µg/mL	Unstressed
	Purity 99%			+/- 19.1969	µg/mL	Stressed
4	N-Nitrosodiethylamine	1,005.0	µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 55-18-5.SEC	(Lot 7943600)		+/- 12.0757	µg/mL	Unstressed
	Purity 99%			+/- 19.1588	µg/mL	Stressed
5	N-Nitrosopyrrolidine	1,001.0	µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 930-55-2.SEC	(Lot 8416800)		+/- 12.0277	µg/mL	Unstressed
	Purity 99%			+/- 19.0825	µg/mL	Stressed
6	o-Toluidine	1,005.0	µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 95-53-4.SEC	(Lot 42MPF)		+/- 12.0757	µg/mL	Unstressed
	Purity 99%			+/- 19.1588	µg/mL	Stressed
7	N-Nitrosomorpholine	1,001.0	µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 59-89-2.SEC	(Lot 1259990O)		+/- 12.0277	µg/mL	Unstressed
	Purity 99%			+/- 19.0825	µg/mL	Stressed

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570667.SEC **Lot No.:** A0188955

Description : 8270 Supplemental Standard #1

8270 Supplemental Standard #1 1,000µg/mL, Methylene chloride, 1mL/ampul
Also described as 8270 List 2 / Std #1

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L., k=2)		
1	2-Picoline		1,001.0	µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS #	109-06-8.SEC	(Lot PUXDM)		+/- 12.0277	µg/mL	Unstressed
	Purity	99%			+/- 19.0825	µg/mL	Stressed
2	N-Nitrosomethylethylamine		1,001.0	µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS #	10595-95-6.SEC	(Lot 5-RFS-156-7)		+/- 12.0277	µg/mL	Unstressed
	Purity	99%			+/- 19.0825	µg/mL	Stressed
3	Acrylamide		1,005.0	µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS #	79-06-1.SEC	(Lot CQRXE)		+/- 12.0757	µg/mL	Unstressed
	Purity	99%			+/- 19.1588	µg/mL	Stressed
4	N-Nitrosodiethylamine		1,002.0	µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS #	55-18-5.SEC	(Lot 7943600)		+/- 12.0397	µg/mL	Unstressed
	Purity	99%			+/- 19.1016	µg/mL	Stressed
5	N-Nitrosopyrrolidine		1,004.0	µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS #	930-55-2.SEC	(Lot 13339800)		+/- 12.0637	µg/mL	Unstressed
	Purity	99%			+/- 19.1397	µg/mL	Stressed
6	o-Toluidine		1,000.0	µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS #	95-53-4.SEC	(Lot 42MPF)		+/- 12.0157	µg/mL	Unstressed
	Purity	99%			+/- 19.0635	µg/mL	Stressed
7	N-Nitrosomorpholine		1,005.0	µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS #	59-89-2.SEC	(Lot 12599900)		+/- 12.0757	µg/mL	Unstressed
	Purity	99%			+/- 19.1588	µg/mL	Stressed

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570667.SEC **Lot No.:** A0195541

Description : 8270 Supplemental Standard #1

8270 Supplemental Standard #1 1,000µg/mL, Methylene chloride, 1mL/ampul
Also described as 8270 List 2 / Std #1

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2024 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Picoline	109-06-8.SEC	PUXDM	99%	1,005.7 µg/mL	+/- 18.6212
2	N-Nitrosomethylethylamine	10595-95-6.SEC	C-RFS-156-7	99%	1,004.9 µg/mL	+/- 18.6064
3	Acrylamide	79-06-1.SEC	CQRXE	99%	1,005.2 µg/mL	+/- 18.6119
4	N-Nitrosodiethylamine	55-18-5.SEC	7943600	99%	1,005.1 µg/mL	+/- 18.6101
5	N-Nitrosopyrrolidine	930-55-2.SEC	13339800	99%	1,005.5 µg/mL	+/- 18.6175
6	o-Toluidine	95-53-4.SEC	42MPF	99%	1,005.1 µg/mL	+/- 18.6101
7	N-Nitrosomorpholine	59-89-2.SEC	13699600	99%	1,005.6 µg/mL	+/- 18.6193
8	N-Nitrosopiperidine	100-75-4.SEC	1-VAM-19-3	99%	1,005.0 µg/mL	+/- 18.6082
9	Phentermine (a,a-Dimethylphenethylamine)	122-09-8 *	S221011RSR	99%	1,006.0 µg/mL	+/- 18.6267
10	Quinoline	91-22-5.SEC	H15Y033	99%	1,005.3 µg/mL	+/- 18.6138
11	N-Nitrosodi-n-butylamine	924-16-3.SEC	13675000	99%	1,005.8 µg/mL	+/- 18.6230
12	1,4-Phenylenediamine	106-50-3.SEC	WL2EJ	99%	1,005.5 µg/mL	+/- 18.6175
13	1,4-Dinitrobenzene	100-25-4.SEC	3EUXH	99%	1,005.4 µg/mL	+/- 18.6156
14	1-Naphthylamine (1-aminonaphthalene)	134-32-7.SEC	RP220413	99%	1,005.0 µg/mL	+/- 18.6082
15	2-Naphthylamine (2-aminonaphthalene)	91-59-8.SEC	8532800	99%	1,004.9 µg/mL	+/- 18.6064

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569733.SEC **Lot No.:** A0185388

Description : 8270 List 2 / Std #2 (2015)

8270 List 2 / Std #2 (2015) 1,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2023 **Storage:** -20°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Methyl methanesulfonate		998.0 µg/mL	+/- 7.0767 µg/mL		Gravimetric
	CAS # 66-27-3.SEC	(Lot LO7ZB)		+/- 46.0217 µg/mL		Unstressed
	Purity 99%			+/- 47.1908 µg/mL		Stressed
2	Ethyl methanesulfonate		1,006.0 µg/mL	+/- 5.9753 µg/mL		Gravimetric
	CAS # 62-50-0.SEC	(Lot 10207660)		+/- 46.2267 µg/mL		Unstressed
	Purity 99%			+/- 47.4093 µg/mL		Stressed
3	Pentachloroethane		1,008.0 µg/mL	+/- 5.9872 µg/mL		Gravimetric
	CAS # 76-01-7.SEC	(Lot 786507)		+/- 46.3186 µg/mL		Unstressed
	Purity 99%			+/- 47.5035 µg/mL		Stressed
4	Hexachloropropene		995.7 µg/mL	+/- 5.9140 µg/mL		Gravimetric
	CAS # 1888-71-7.SEC	(Lot 9044200)		+/- 45.7525 µg/mL		Unstressed
	Purity 98%			+/- 46.9229 µg/mL		Stressed
5	Isosafrole (cis & trans)		1,008.0 µg/mL	+/- 5.9872 µg/mL		Gravimetric
	CAS # 120-58-1.SEC	(Lot 6732500)		+/- 46.3186 µg/mL		Unstressed
	Purity 99%	12% cis; 88% trans		+/- 47.5035 µg/mL		Stressed
6	1-Chloronaphthalene		1,000.0 µg/mL	+/- 5.9397 µg/mL		Gravimetric
	CAS # 90-13-1 *	(Lot K2OBC)		+/- 45.9510 µg/mL		Unstressed
	Purity 99%			+/- 47.1265 µg/mL		Stressed
7	1,4-Naphthoquinone		1,006.0 µg/mL	+/- 5.9753 µg/mL		Gravimetric
	CAS # 130-15-4.SEC	(Lot FQB5E)		+/- 46.2267 µg/mL		Unstressed
	Purity 99%			+/- 47.4093 µg/mL		Stressed

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569733.SEC **Lot No.:** A0194106

Description : 8270 List 2 / Std #2 (2015)

8270 List 2 / Std #2 (2015) 1,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2024 **Storage:** -20°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl methanesulfonate	66-27-3.SEC	LO7ZB	99%	1,006.8 µg/mL	+/- 23.1130
2	Ethyl methanesulfonate	62-50-0.SEC	10207660	99%	1,006.8 µg/mL	+/- 23.1130
3	Pentachloroethane	76-01-7.SEC	786507	99%	1,005.8 µg/mL	+/- 23.0901
4	Hexachloropropene	1888-71-7.SEC	9044200	98%	1,003.1 µg/mL	+/- 23.0287
5	Isosafrole (cis & trans) 12% cis; 88% trans	120-58-1.SEC	6732500	99%	1,002.4 µg/mL	+/- 23.0120
6	1-Chloronaphthalene	90-13-1 *	K2OBC	99%	1,003.4 µg/mL	+/- 23.0350
7	1,4-Naphthoquinone	130-15-4.SEC	FQB5E	99%	1,006.4 µg/mL	+/- 23.1038
8	Pentachlorobenzene	608-93-5.SEC	7639800	99%	1,005.0 µg/mL	+/- 23.0717
9	2,3,5,6-Tetrachlorophenol	935-95-5.SEC	5150900	98%	1,001.8 µg/mL	+/- 22.9972
10	Dinoseb	88-85-7.SEC	10589700	99%	1,008.8 µg/mL	+/- 23.1589
11	Isodrin	465-73-6.SEC	G172913	98%	1,008.8 µg/mL	+/- 23.1592
12	Chlorobenzilate	510-15-6.SEC	G171850	99%	1,004.0 µg/mL	+/- 23.0487
13	7,12-Dimethylbenz(a)anthracene	57-97-6.SEC	10589600	99%	1,008.2 µg/mL	+/- 23.1452

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567681.SEC **Lot No.:** A0176003

Description : 8270 List 2 / Std #4

8270 List 2 / Std #4 1,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2023 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	o,o,o-Triethyl phosphorothioate		1,005.5 µg/mL	+/- 5.9722 µg/mL	Gravimetric
	CAS # 126-68-1 *	(Lot 2-KRR-57-1)		+/- 43.1393 µg/mL	Unstressed
	Purity 98%			+/- 43.1579 µg/mL	Stressed
2	Safrole		1,008.0 µg/mL	+/- 5.9872 µg/mL	Gravimetric
	CAS # 94-59-7.SEC	(Lot 793000)		+/- 43.2474 µg/mL	Unstressed
	Purity 99%			+/- 43.2660 µg/mL	Stressed
3	Zinophos (thionazine)		1,008.0 µg/mL	+/- 5.9872 µg/mL	Gravimetric
	CAS # 297-97-2.SEC	(Lot G855697)		+/- 43.2474 µg/mL	Unstressed
	Purity 99%			+/- 43.2660 µg/mL	Stressed
4	Sulfotepp		999.6 µg/mL	+/- 5.9373 µg/mL	Gravimetric
	CAS # 3689-24-5.SEC	(Lot G150852)		+/- 42.8870 µg/mL	Unstressed
	Purity 98%			+/- 42.9055 µg/mL	Stressed
5	Diallate (cis and trans)		1,008.0 µg/mL	+/- 5.9872 µg/mL	Gravimetric
	CAS # 2303-16-4.SEC	(Lot G979493)		+/- 43.2474 µg/mL	Unstressed
	Purity 96%	75% cis-Isomer; 25% trans-Isomer		+/- 43.2660 µg/mL	Stressed
6	Phorate		1,009.4 µg/mL	+/- 5.9955 µg/mL	Gravimetric
	CAS # 298-02-2.SEC	(Lot G765644)		+/- 43.3075 µg/mL	Unstressed
	Purity 98%			+/- 43.3261 µg/mL	Stressed
7	Dimethoate		1,004.0 µg/mL	+/- 5.9635 µg/mL	Gravimetric
	CAS # 60-51-5.SEC	(Lot G131991)		+/- 43.0758 µg/mL	Unstressed
	Purity 99%			+/- 43.0943 µg/mL	Stressed

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567681.SEC **Lot No.:** A0187599

Description : 8270 List 2 / Std #4

8270 List 2 / Std #4 1,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2024 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	o,o,o-Triethyl phosphorothioate **CAS #** 126-68-1 * **Purity** 98%	(Lot 2-KRR-57-1)	1,001.6 µg/mL	+/- 5.9490 +/- 42.9711 +/- 42.9896	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Safrole **CAS #** 94-59-7.SEC **Purity** 99%	(Lot 793000)	1,000.0 µg/mL	+/- 5.9397 +/- 42.9042 +/- 42.9227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Zinophos (thionazine) **CAS #** 297-97-2.SEC **Purity** 99%	(Lot G855697)	1,000.0 µg/mL	+/- 5.9397 +/- 42.9042 +/- 42.9227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Sulfotepp **CAS #** 3689-24-5.SEC **Purity** 98%	(Lot G150852)	1,003.5 µg/mL	+/- 5.9606 +/- 43.0552 +/- 43.0737	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Diallate (cis and trans) **CAS #** 2303-16-4.SEC **Purity** 97%	(Lot 40325) 75% cis-Isomer; 25% trans-Isomer	997.2 µg/mL	+/- 5.9228 +/- 42.7823 +/- 42.8008	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Phorate **CAS #** 298-02-2.SEC **Purity** 98%	(Lot G765644)	1,003.5 µg/mL	+/- 5.9606 +/- 43.0552 +/- 43.0737	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dimethoate **CAS #** 60-51-5.SEC **Purity** 99%	(Lot G160588)	1,000.0 µg/mL	+/- 5.9397 +/- 42.9042 +/- 42.9227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Certificate of Analysis

EPA 8270 Surrogate Standard

Certified Reference Material

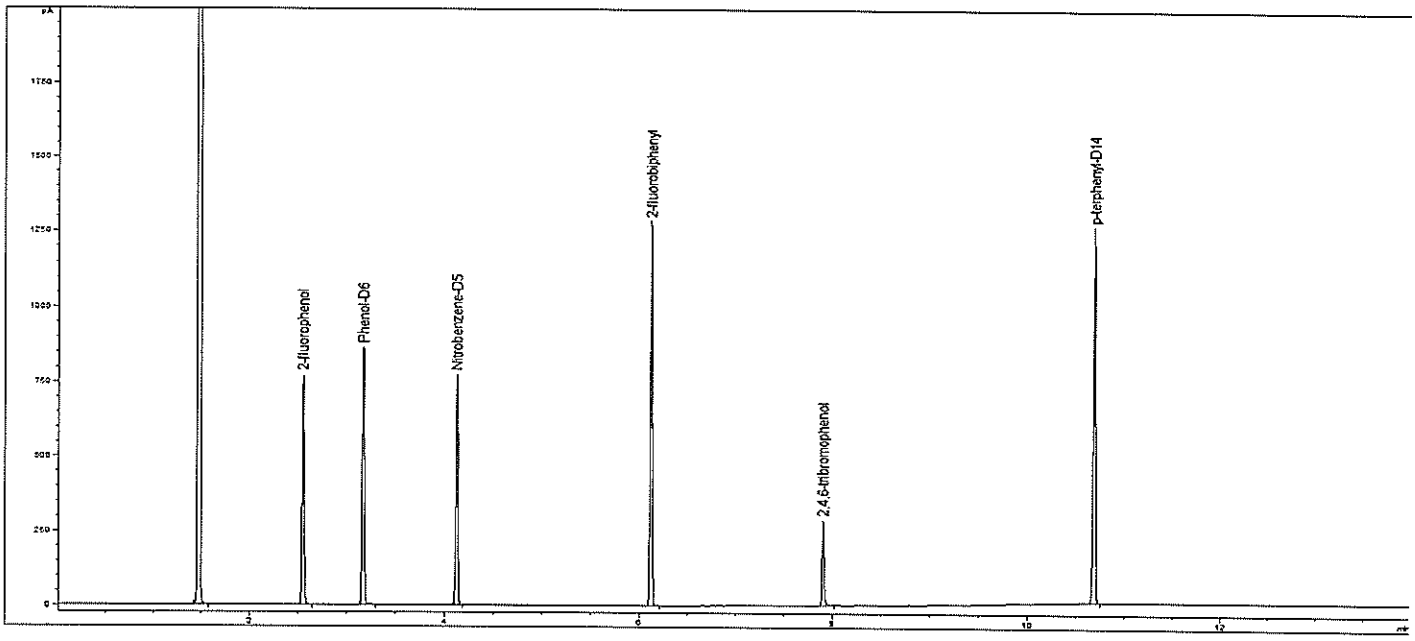
Description

Product ID CRM47960
Lot LRAC8467
Expiration Date October 2023
Manufacturing Date October 2020
Storage Conditions Refrigerate
Solvent/Matrix DICHLOROMETHANE

Certified Values

Analyte	*Certified Value* [1,4]	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*	*CAS*
2-FLUOROPHENOL	4003 ± 110	µg/mL	99.9	01	LB92543	367-12-4
PHENOL-D6	4002 ± 75	µg/mL	99.5	02	MBBC6771	13127-88-3
NITROBENZENE-D5	4001 ± 50	µg/mL	99.9	03	LB83753	4165-60-0
2-FLUOROBIPHENYL	4001 ± 79	µg/mL	99.9	04	MKCK0527	321-60-8
2,4,6-TRIBROMOPHENOL	4004 ± 92	µg/mL	99.7	05	LB81262	118-79-6
P-TERPHENYL-D14	4047 ± 131	µg/mL	99.5	06	PR-27278/121715	1718-51-0

Informational Values



***Additional Information*:**

Analytical Method Parameters:
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #214)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 270 °C, Injection Volume: 1.0 µL
Injection Mode: Split, Split Ratio: 40: 1
Temperature Program: 100 °C (Hold 1 min) @ 20 °C/min to 280 °C (Hold 4 min)

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CERTIFIED WEIGHT REPORT

Part Number: 70159
Lot Number: 120920
Description: 2,4-Dinitrophenol

Expiration Date: 120925
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060

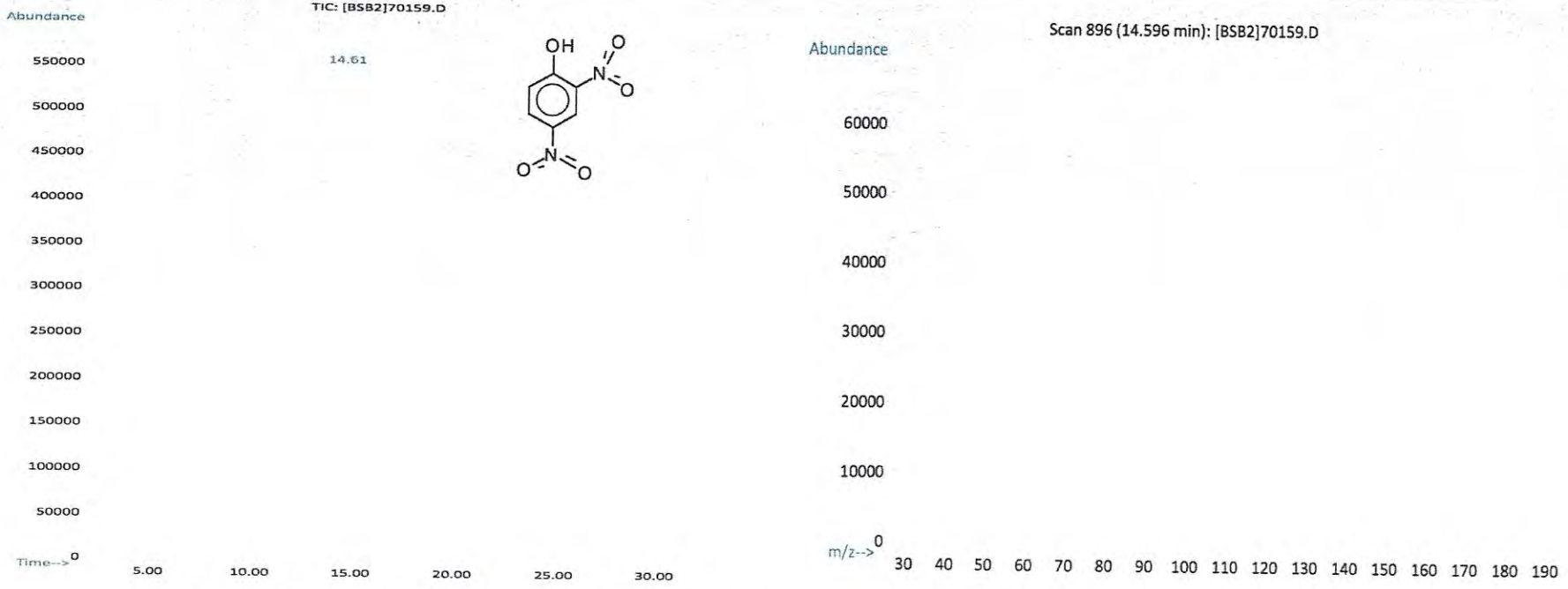
Solvent(s): **Lot#**
Methanol DY186-US

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

		120920
Formulated By:	Prashant Chauhan	DATE
		120920
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2,4-Dinitrophenol	159	011719	1000	98	0.2	0.10205	0.10225	1002.0	4.2	51-28-5	N/A	orl-rat 30mg/kg

Method GC8MSD-3.M: Column: (30m X 0.25mm ID X 0.25µm film thickness), Temp 1 = 50°C (1min.), Temp 2 = 300°C (4 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C. Analysis performed by Melissa Stonier.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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CERTIFIED WEIGHT REPORT

Part Number: 70158
Lot Number: 111919
Description: 4,6-Dinitro-2-methylphenol

Solvent(s): **Lot#**
Methanol DV182-US

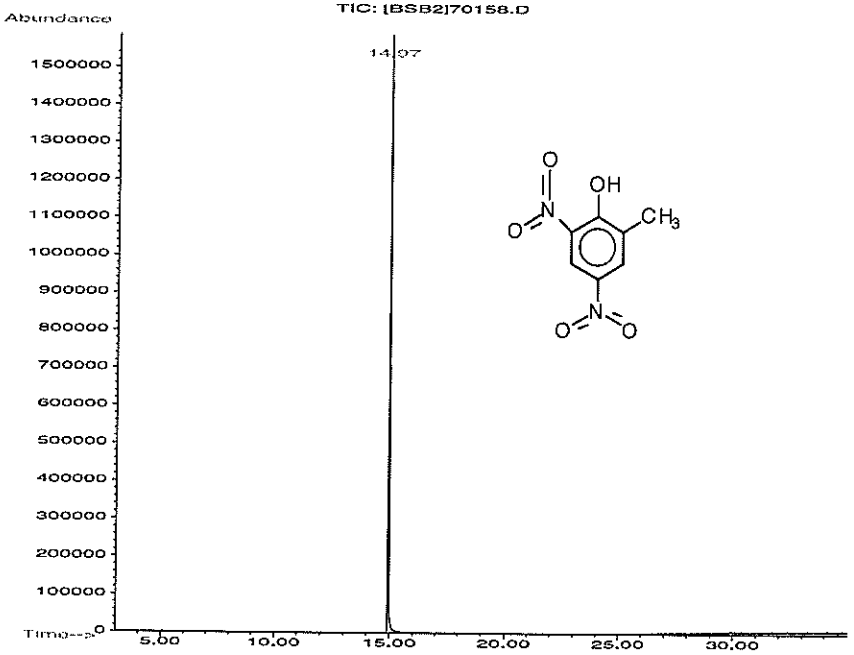
Expiration Date: 111924
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

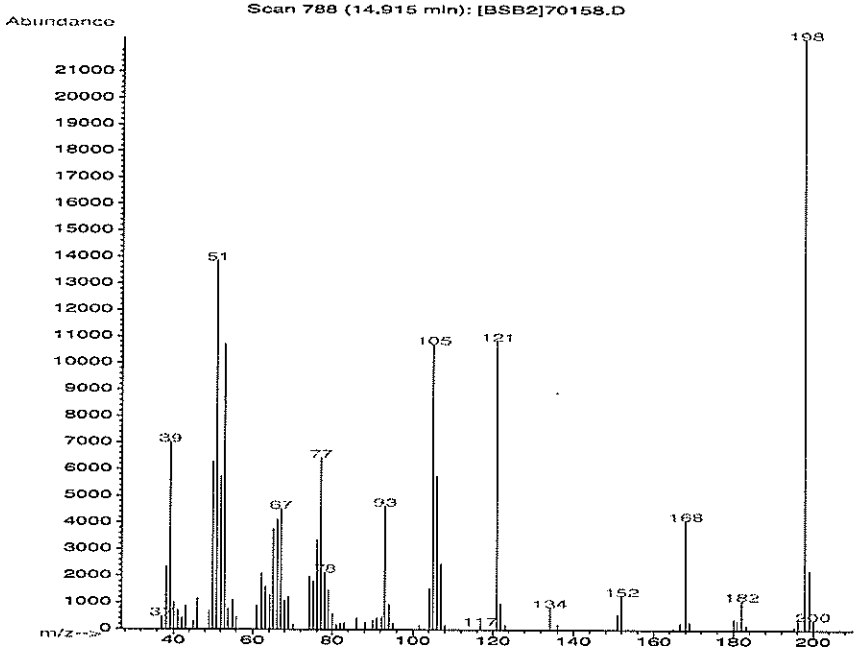
Weight(s) shown below were combined and diluted to (mL): 50.0 | 5E-05 Balance Uncertainty | 0.007 Flask Uncertainty

111919	
Formulated By: Justin Dippold	DATE
111919	
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 4,6-Dinitro-2-methylphenol	158	052097	1000	98	0.2	0.05102	0.05110	1001.6	4.5	534-52-1	0.2mg/m3/8H (skin)	orl-rat 10mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.





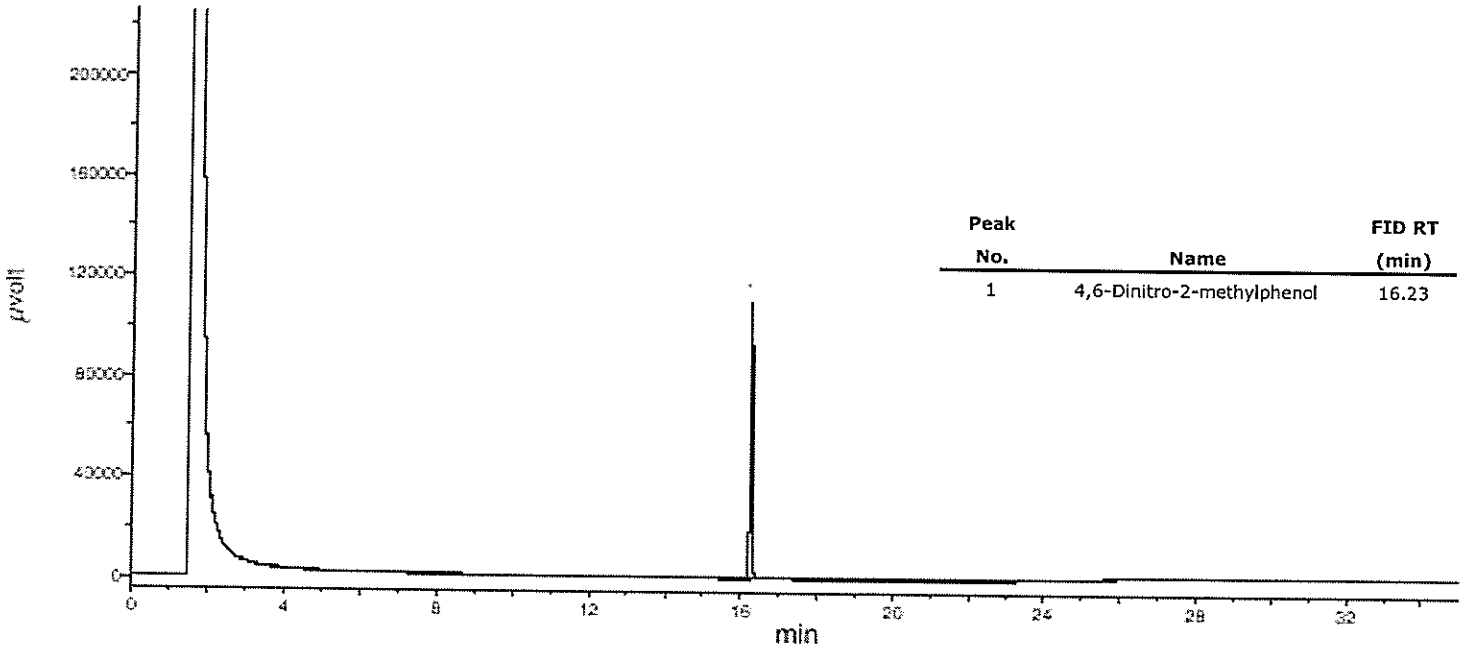
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 40, "P70158 L111919 [1000µg/mL in methanol]"

Run Length: 35.00 min, 20999 points at 10 points/second.
Created: Thu, Jan 9, 2020 at 3:51:34 PM.
Sampled: Sequence "010720-GC9M1", Method "GC9-M1".
Analyzed using Method "GC9-M1".

Comments

GC9-M1 Analysis by Melissa Stonier
Column ID Rtx-5 30 meter x 0.53mm x .5um Film Thickness
Flow rates; Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL, Hydrogen (detector) = 30 mL, Air (detector) =360 mL
Oven Temp 1 = 50°C (1 min), Rate = 10°C/min, Oven Temp 2 = 300°C (9 min), Total Run Time = 35 Minutes.
Injector Temp = 200°C, FID Temp = 300°C, FID Signal = eDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 3



Peak No.	Name	FID RT (min)
1	4,6-Dinitro-2-methylphenol	16.23

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CERTIFIED WEIGHT REPORT

Part Number: 70231
Lot Number: 072418
Description: 4-Nitrophenol

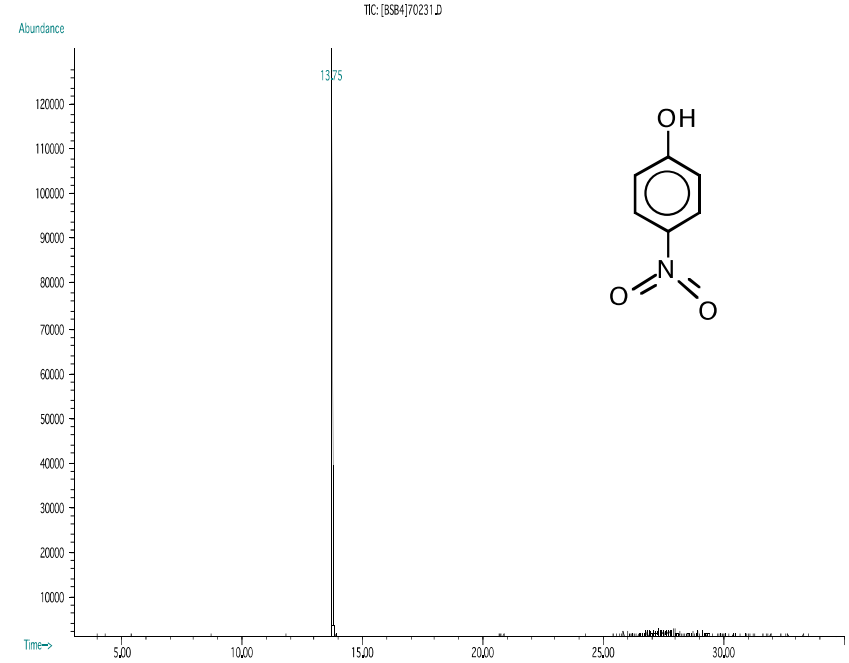
Solvent(s): **Lot#**
Methanol DS526

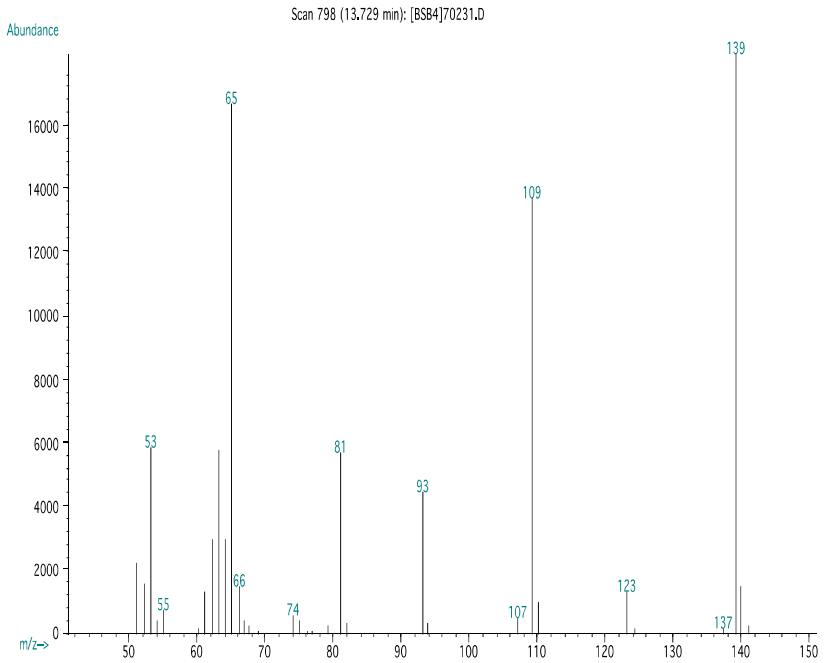
Expiration Date: 072423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 2684186 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.001 Flask Uncertainty

Eli Aliaga	072418
Formulated By: Eli Aliaga	DATE
Pedro Rentas	072418
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 4-Nitrophenol	231	FGM01	1000	99	0.2	0.10102	0.10109	1000.7	4.2	100-02-7	N/A	orl-rat 250mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





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11:12 AM

CERTIFIED WEIGHT REPORT

Part Number: 70231
Lot Number: 021323
Description: 4-Nitrophenol

Expiration Date: 021328
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

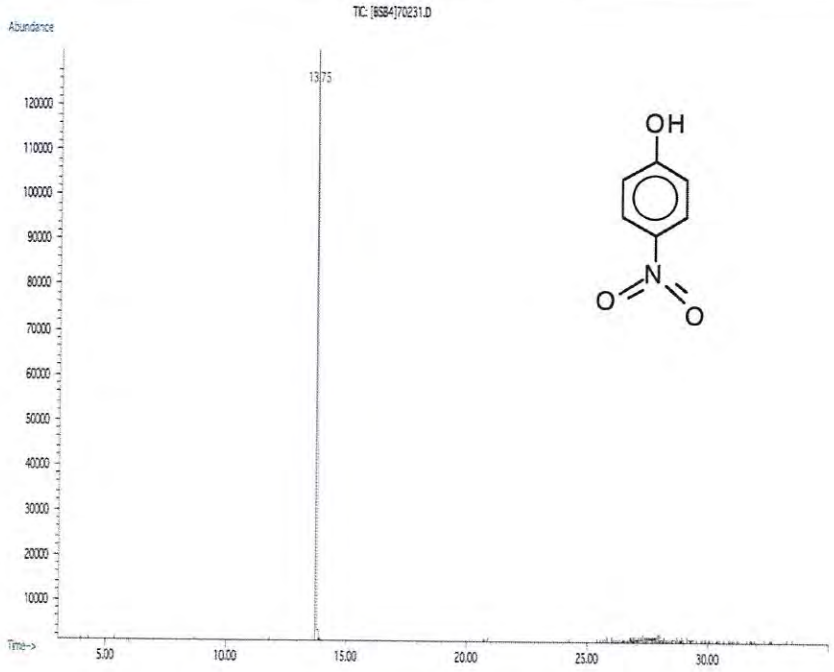
Solvent(s): **Lot#**
Methanol EF282-US

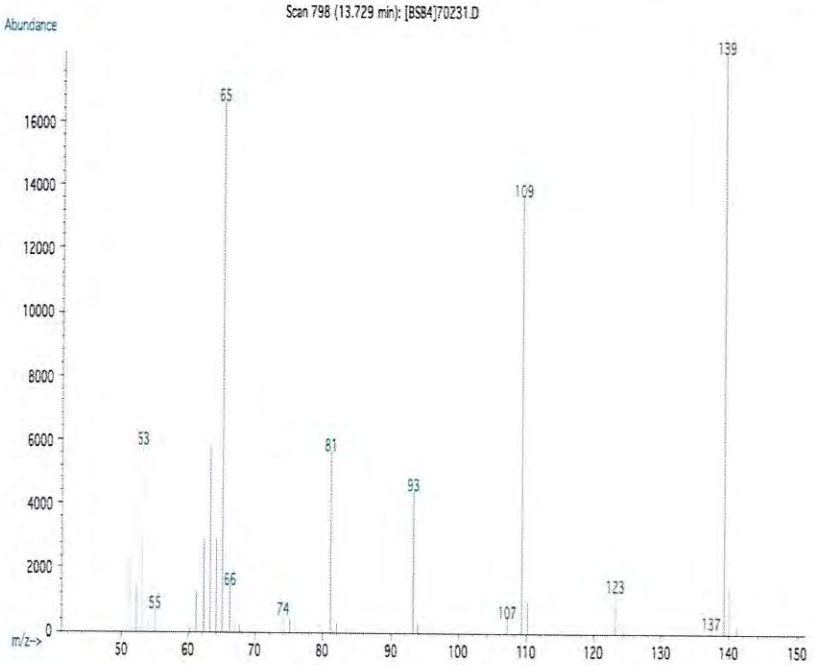
		021323
Formulated By:	Benson Chan	DATE
		021323
Reviewed By:	Pedro L. Rentas	DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 — 0.012 Flask Uncertainty; 5E-05 Balance Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 4-Nitrophenol	231	FGM01	1000	99	0.2	0.10101	0.10123	1002.1	4.2	100-02-7	N/A	orl-rat 250mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





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CERTIFIED WEIGHT REPORT

Part Number: 70369
Lot Number: 050520
Description: a,a-Dimethylphenethylamine

Expiration Date: 050523
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060

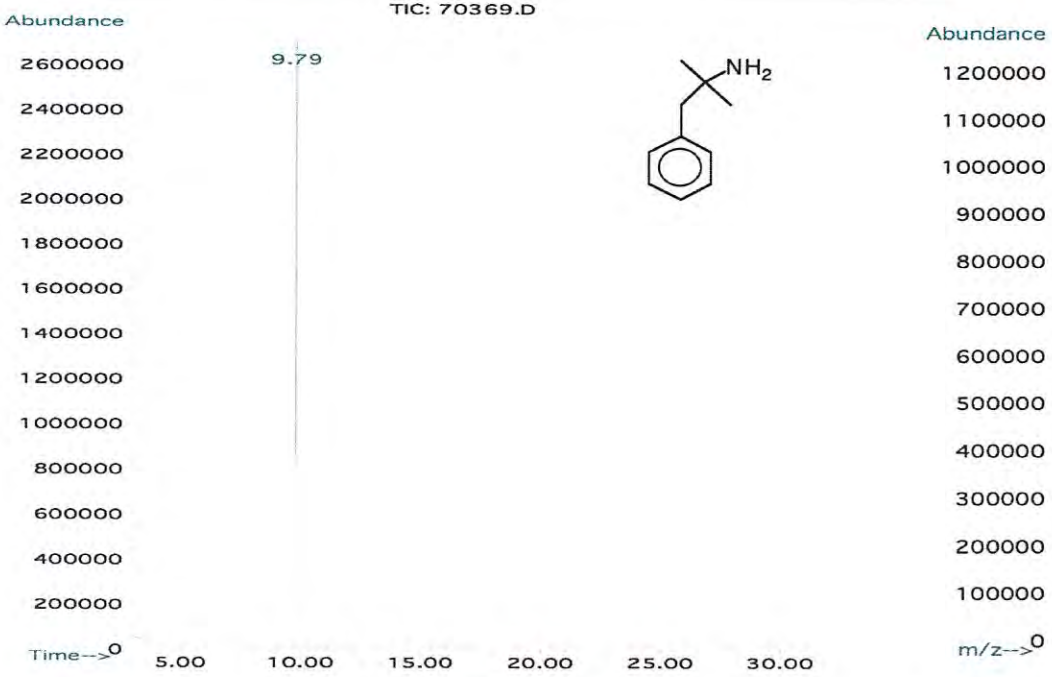
Solvent(s): Methylene chloride **Lot#** 104929

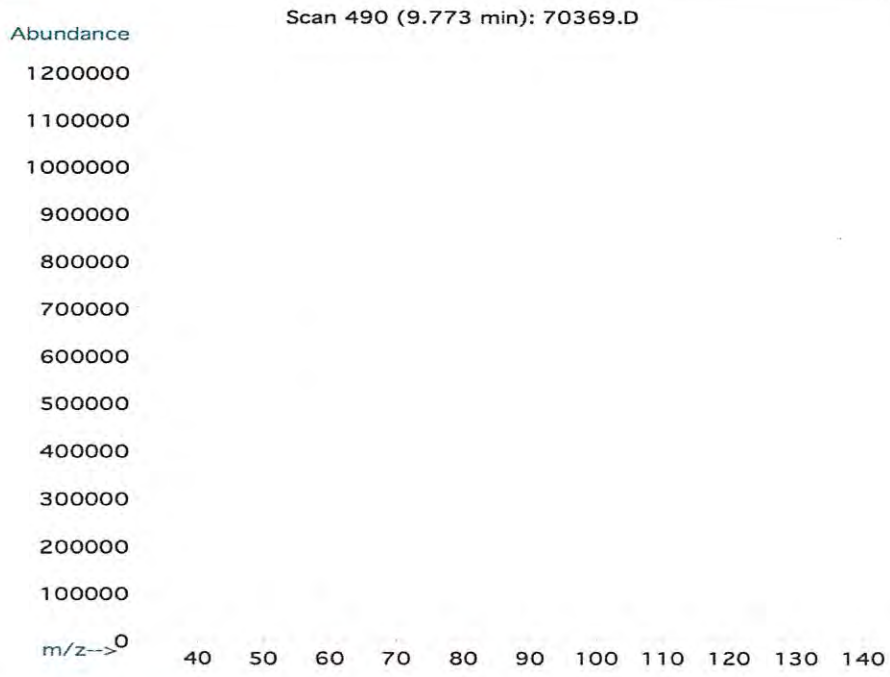
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.010 Flask Uncertainty

Formulated By: Prashant Chauhan	050520 DATE
Reviewed By: Pedro L. Rentas	050520 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. a,a-Dimethylphenethylamine	369	082317	1000	99.3	0.2	0.05035	0.05045	1001.9	4.5	122-09-8	N/A	orl-mus 105mg/kg

Method GC8MSD2.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Melissa Stonier.





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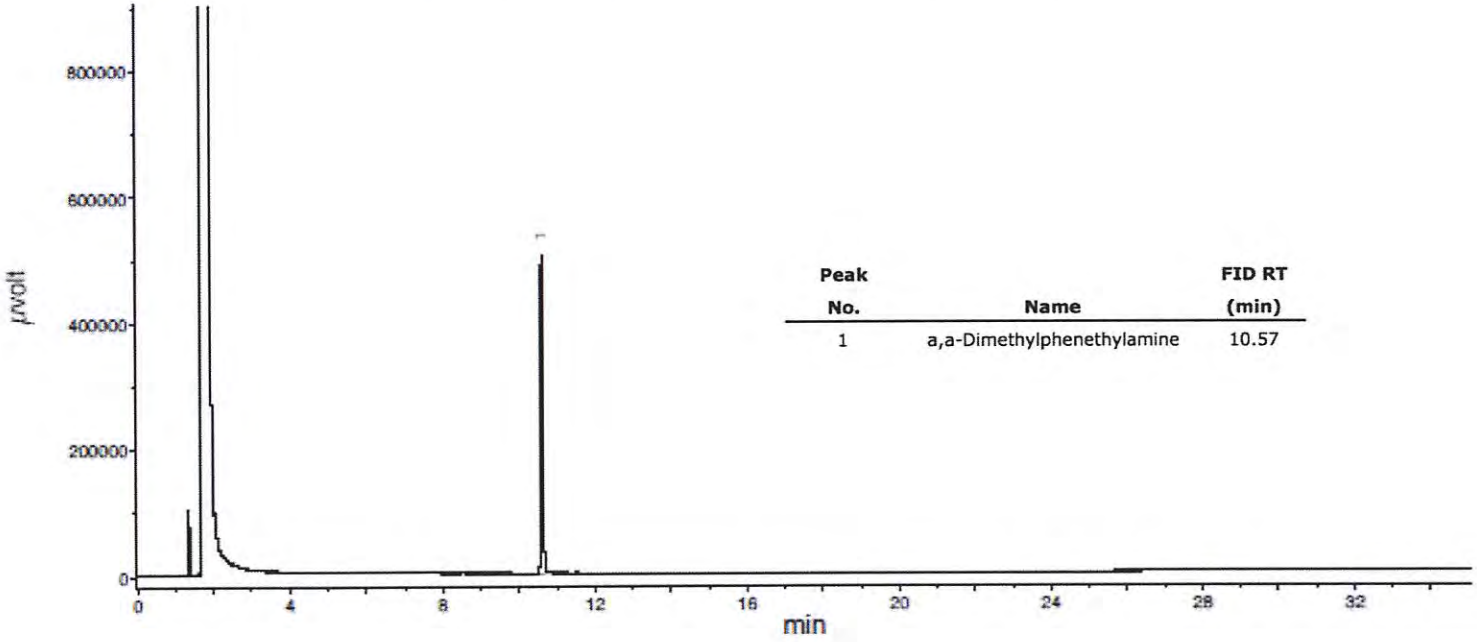
Run 31, "P70369 L050520 [1000µg/mL in MeCl2]"

Run Length: 35.00 min, 20999 points at 10 points/second.
Created: Thu, May 7, 2020 at 9:46:13 AM.
Sampled: Sequence "050620-GC4M1", Method "GC4-M1".
Analyzed using Method "GC4-M1".

Comments

GC4-M1 Analysis by Melissa Stonier
Column ID SPB5 L#60062-01A : 30 meter x 0.53mm x 1.5um Film Thickness
Flow rates; Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL, Hydrogen (detector) = 30 mL, Air (detector) =360 mL
Oven Temp 1 = 50°C (1 min), Rate = 10°C/min, Oven Temp 2 = 300°C (9 min), Total Run Time = 35 Minutes.
Injector Temp = 200°C, FID Temp = 300°C, FID Signal = eDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 3



Peak No.	Name	FID RT (min)
1	a,a-Dimethylphenethylamine	10.57

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CERTIFIED WEIGHT REPORT

Part Number: 70369
Lot Number: 051223
Description: a,a-Dimethylphenethylamine

Expiration Date: 051226
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

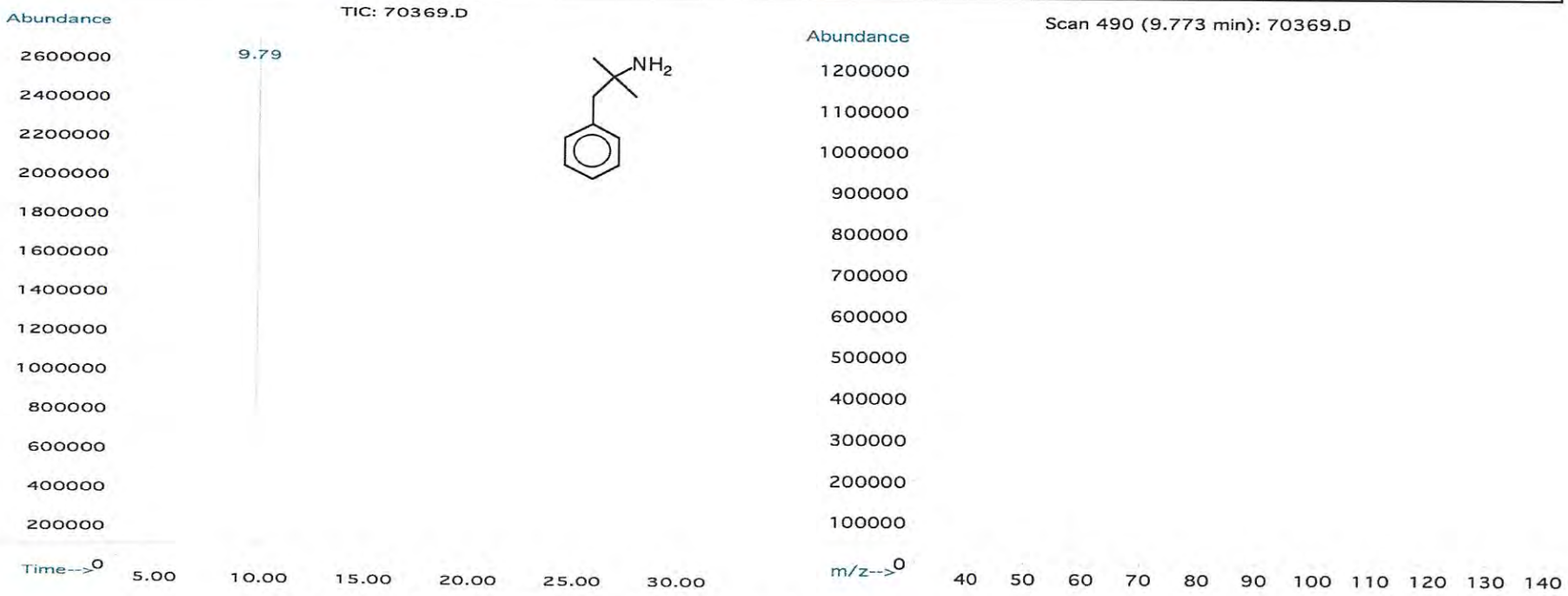
Solvent(s): **Lot#**
Methylene chloride C21F09CAS0000DCM

Prashant Chauhan	Formulated By:	051223 DATE
Pedro L. Rentas	Reviewed By:	051223 DATE

Weight(s) shown below were combined and diluted to (mL): 50.0 | 5E-05 Balance Uncertainty | 0.007 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. a,a-Dimethylphenethylamine	369	082317	1000	99.3	0.2	0.05038	0.05048	1001.9	4.5	122-09-8	N/A	orl-mus 105mg/kg

Method GC8MSD2.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Melissa Stonier.



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CERTIFIED WEIGHT REPORT

Part Number: 70482
Lot Number: 060222
Description: Aramite

Expiration Date: 060225
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

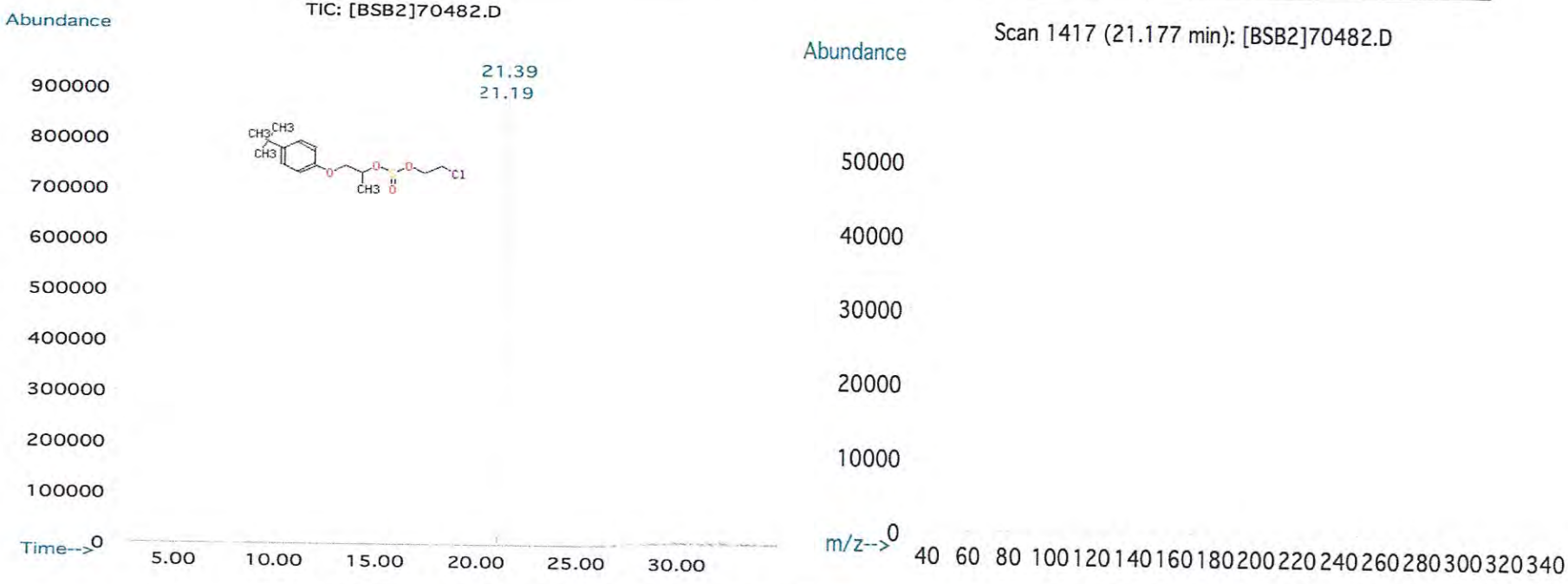
Weight(s) shown below were combined and diluted to (mL): 25.0

Solvent(s):	Lot#	
n-Hexane	SHBL0924	
5E-05	Balance Uncertainty	
0.005	Flask Uncertainty	

Formulated By:	Prashant Chauhan	060222 DATE
Reviewed By:	Pedro L. Rentas	060222 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Aramite	482	070218	2000	96.5	0.2	0.05185	0.05195	2003.9	9.2	140-57-8	N/A	orl-rat 3900mg/kg

Method GC8MSD1.M: Column:DB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9.00 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Melissa Stonier.



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Reagent

MSS_AB_BZIDIN_00011

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CERTIFIED WEIGHT REPORT

Part Number: 43124
Lot Number: 102722
Description: Benzidine

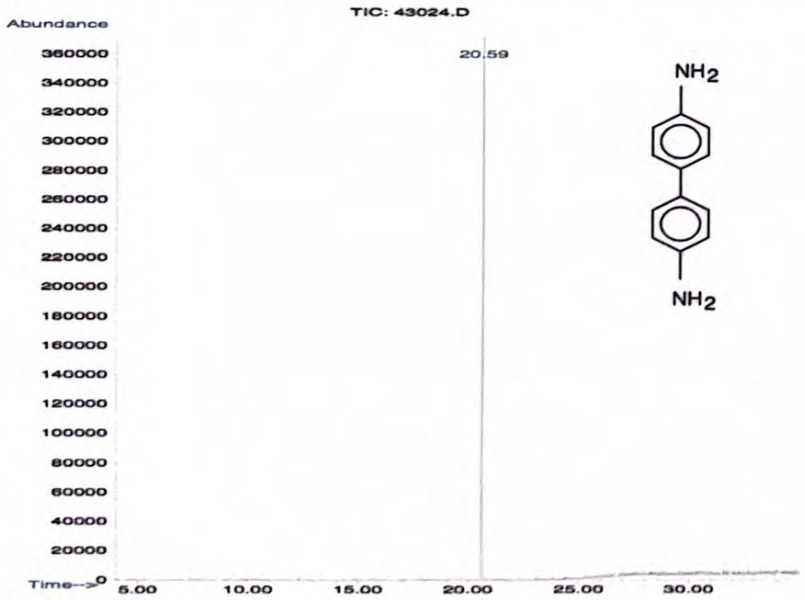
Solvent: Methylene chloride Lot# C21F09CAS0000DCM

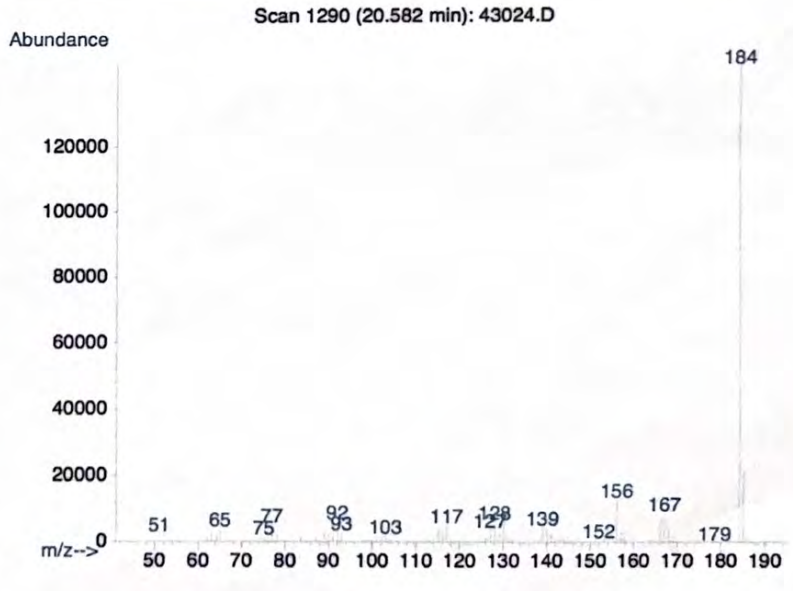
Expiration Date: 102725
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 30.0 0.0003 Flask Uncertainty

Formulated By: Prashant Chauhan	102722 DATE
Reviewed By: Pedro L. Rentas	102722 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) µg/mL	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Benzidine	27	SLBH5327V	5000	98	0.2	0.15314	0.15324	5003.1	20.7	92-87-5	N/A	orl-rat 309mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Nicole Davis.





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Reagent

MSS_AB_DFTPP_00015

CERTIFIED WEIGHT REPORT

Part Number: 43030
Lot Number: 052421
Description: CLP Semi-Volatile Tuning Standard
4 components
Expiration Date: 052424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 500
NIST Test ID#: 6UTB

Solvent(s): Methylene chloride **Lot#** 105345

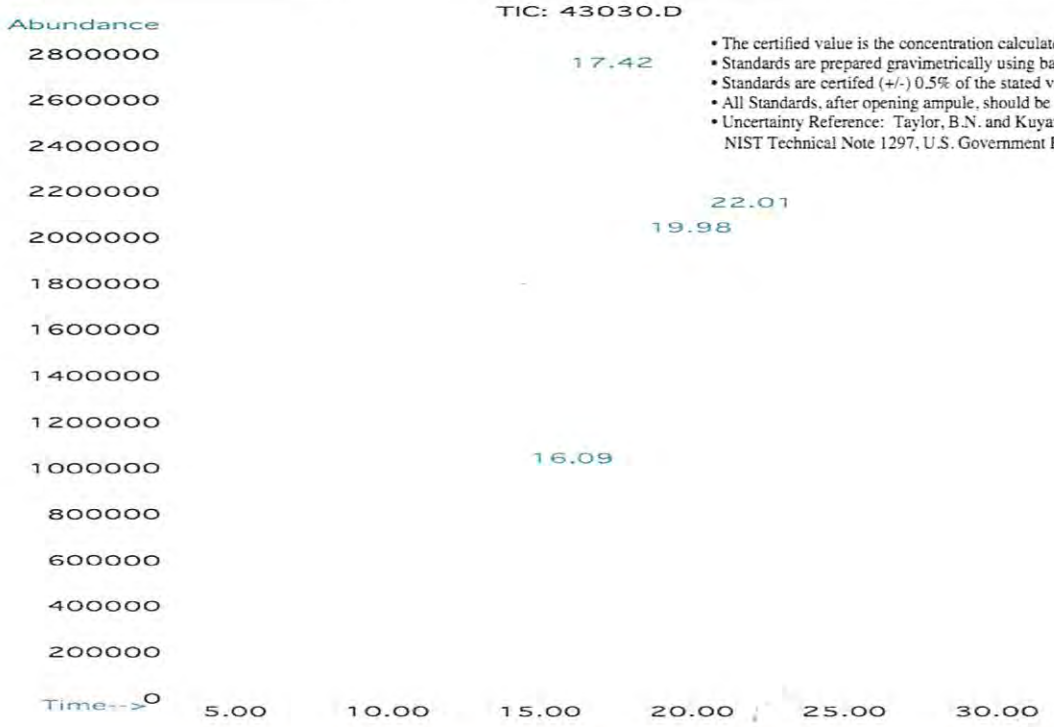
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

Formulated By:	Prashant Chauhan	052421 DATE
Reviewed By:	Pedro L. Rentas	052421 DATE

CAUTION: Sonicate Before Use

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Benzidine	27	SLBH5327V	500	98	0.2	0.10205	0.10225	501.0	2.1	92-87-5	N/A	orl-rat 309mg/kg
2.	4,4'-DDT	101	04029MM	500	99	0.2	0.10102	0.10120	500.9	2.1	50-29-3	N/A	orl-rat 87mg/kg
3.	Decafluorotriphenylphosphine	105	10220909	500	97	0.2	0.10311	0.10324	500.7	2.1	5074-71-5	N/A	N/A
4.	Pentachlorophenol	243	06324ED	500	98	0.2	0.10205	0.10221	500.8	2.1	87-86-5	0.5mg/m3/8H (skin)	orl-rat 27mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.



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Retention Time (min.)

Pentachlorophenol	16.09
Decafluorotriphenylphosphine	17.42
Benzidine	19.98
4,4'-DDT	22.01

Reagent

MSS_AB_DFTPP_00016

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CERTIFIED WEIGHT REPORT

Part Number: 43030
Lot Number: 072022
Description: CLP Semi-Volatile Tuning Standard
4 components
Expiration Date: 072025
~~Recommended Storage:~~ ~~Refrigerate (4 °C)~~
Nominal Concentration (µg/mL): 500
NIST Test ID#: 6UTB

Solvent(s): Methylene chloride **Lot#** 105345

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 200.0

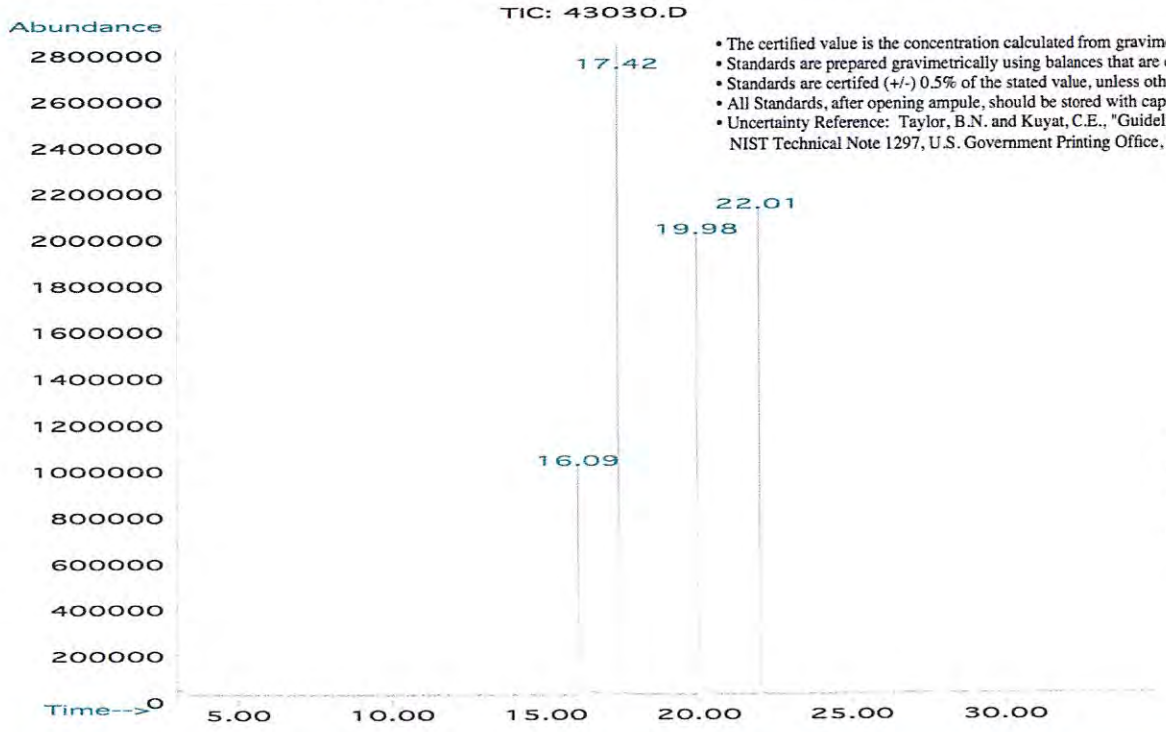
CAUTION: Sonicate Before Use

Gabriel Helland 072022
Formulated By: Gabriel Helland DATE

Pedro Rentas 072022
Reviewed By: Pedro L. Rentas DATE

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Benzidine	27	SLBH5327V	500	98	0.2	0.10205	0.10215	500.5	2.1	92-87-5	N/A	orl-rat 309mg/kg
2.	4,4'-DDT	101	04029MM	500	99	0.2	0.10102	0.10106	500.2	2.1	50-29-3	N/A	orl-rat 87mg/kg
3.	Decafluorotriphenylphosphine	105	10220909	500	97	0.2	0.10311	0.10327	500.8	2.1	5074-71-5	N/A	N/A
4.	Pentachlorophenol	243	06324ED	500	98	0.2	0.10205	0.10222	500.8	2.1	87-86-5	0.5mg/m3/8H (skin)	orl-rat 27mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.



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Retention Time (min.)

Pentachlorophenol	16.09
Decafluorotriphenylphosphine	17.42
Benzidine	19.98
4,4'-DDT	22.01

Reagent

MSS_AB_FAMPHU_00006

CERTIFIED WEIGHT REPORT

Part Number: 70402
Lot Number: 020221
Description: Methapyrilene hydrochloride

Expiration Date: 020224
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060

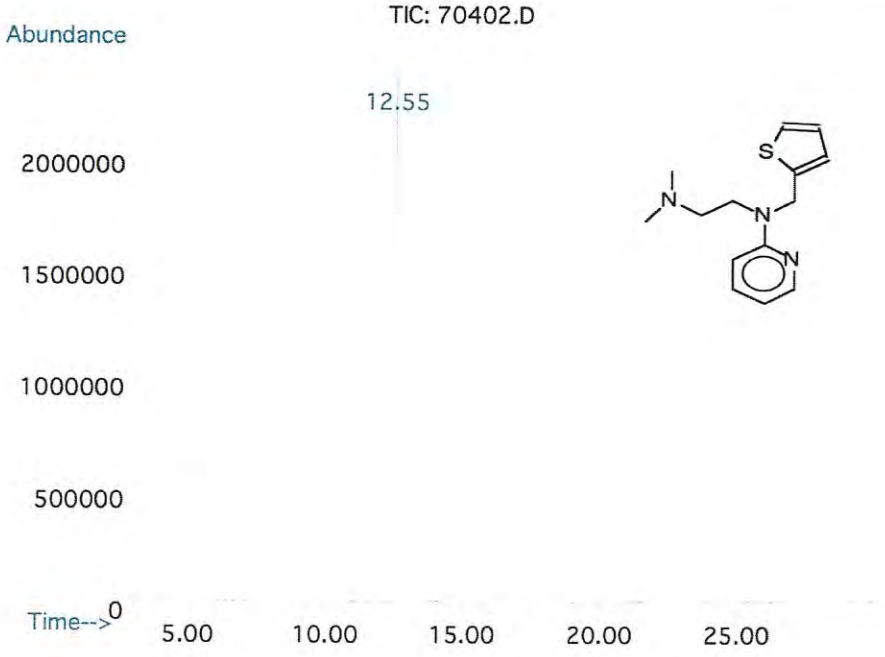
Solvent(s): **Lot#**
Methanol DY186-US

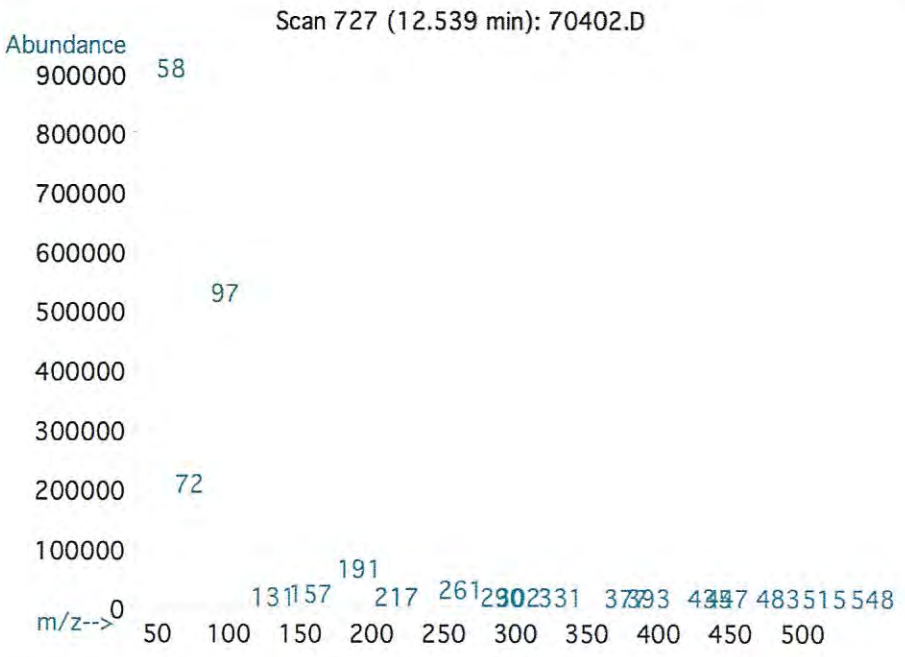
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.002 Flask Uncertainty

Eli Aliaga		020221
Formulated By:	Eli Aliaga	DATE
Pedro Rentas		020221
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Methapyrilene hydrochloride	402	37F-0929	1000	99	0.2	0.02526	0.02530	1001.7	5.7	135-23-9	N/A	orl-rat 521mg/kg

Method GC8MSD-7.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Gina McLane.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

MSS_AB_KEPONE_00005

Absolute Standards, Inc.
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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

11/14/2023
11:12 AM

CERTIFIED WEIGHT REPORT

Part Number: 70433
Lot Number: 011821
Description: Kepone

Expiration Date: 011826
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060

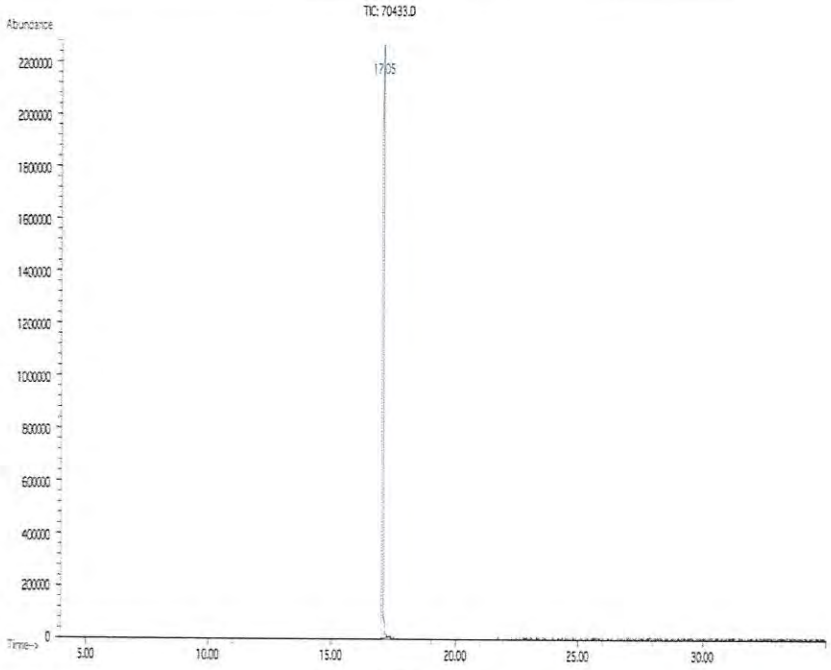
Solvent(s): **Lot#**
Acetone 81025

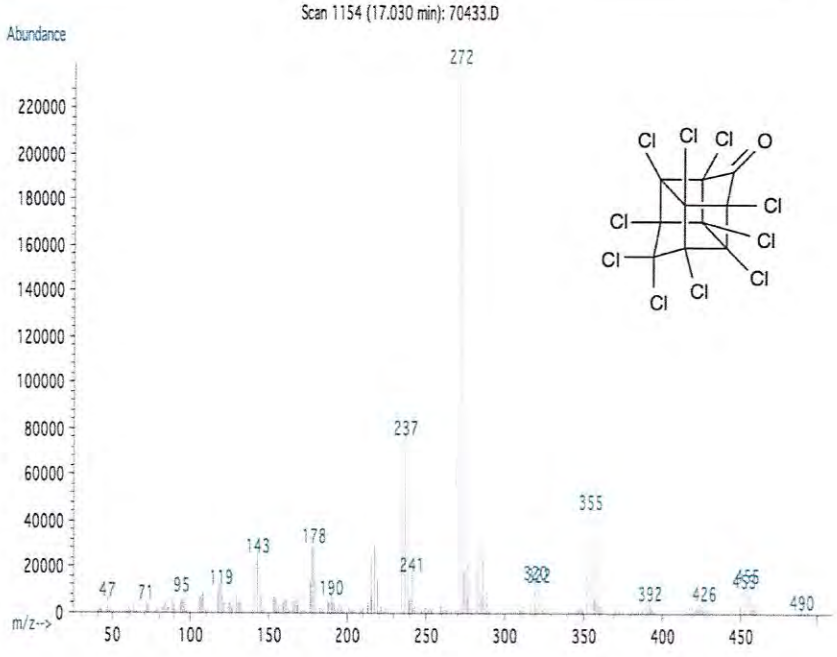
		011821
Formulated By:	Benson Chan	DATE
		011821
Reviewed By:	Pedro L. Rentas	DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 | 0.057 Flask Uncertainty | 5E-05 Balance Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Kepone	433	020191JC	1000	99	0.2	0.10102	0.10120	1001.8	4.3	143-50-0	N/A	N/A

Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

MSS_AB_METH_00004

11/14/2022
11:12 AM

CERTIFIED WEIGHT REPORT

Part Number: 70387
Lot Number: 102821
Description: Famphur

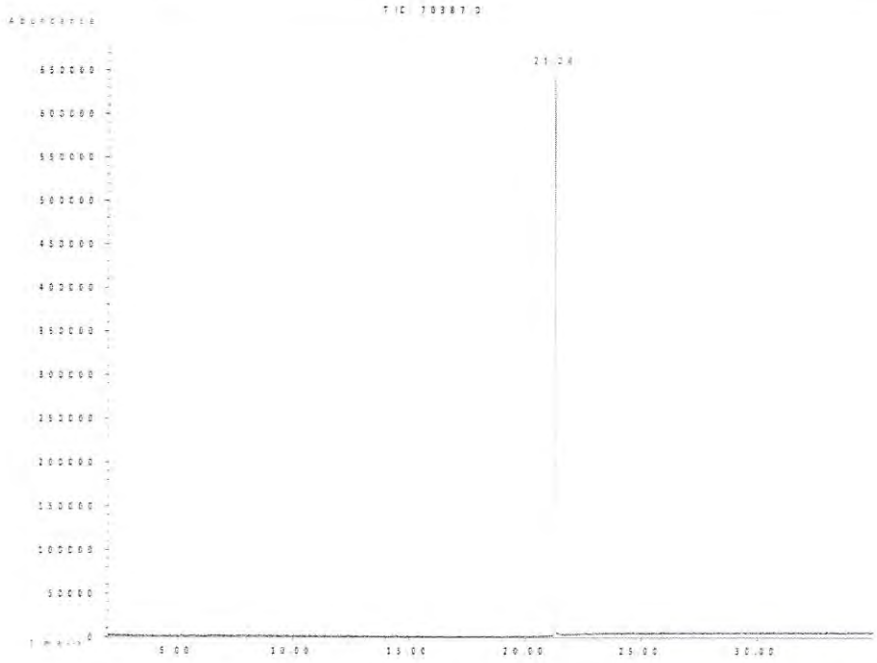
Solvent: Methanol **Lot#** EA899-US

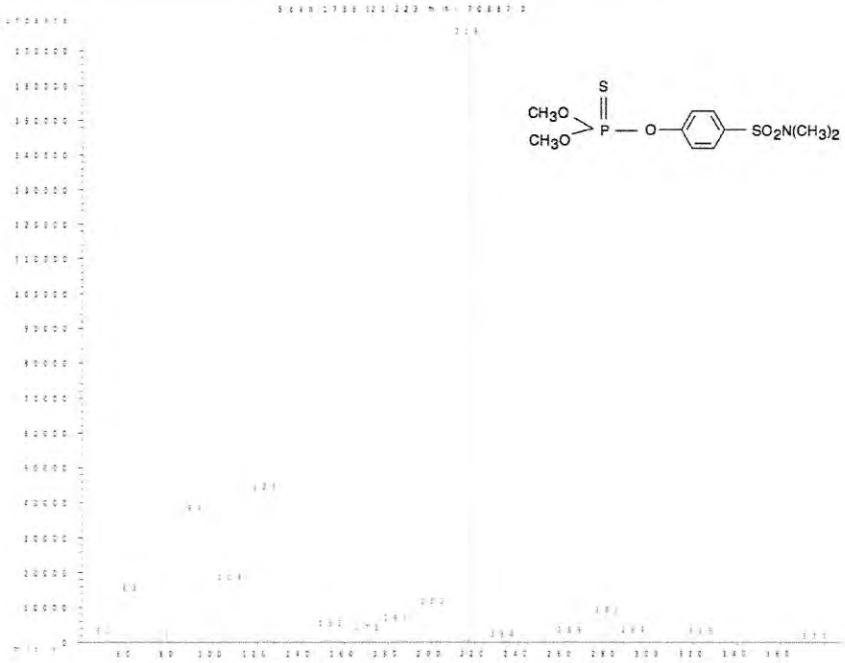
Expiration Date: 102824
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

		102821
Formulated By:	Benson Chan	DATE
		102821
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Famphur	387	10851000	1000	98.2	0.5	0.05095	0.05101	1001.1	10.4	52-85-7	N/A	orl-rat 28mg/kg

Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

MSS_AB_PCP_00004

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Certified Reference Material CRM

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AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT

Part Number: 79261
Lot Number: 062222
Description: Pentachlorophenol

Solvent(s): Acetone **Lot#** 81025

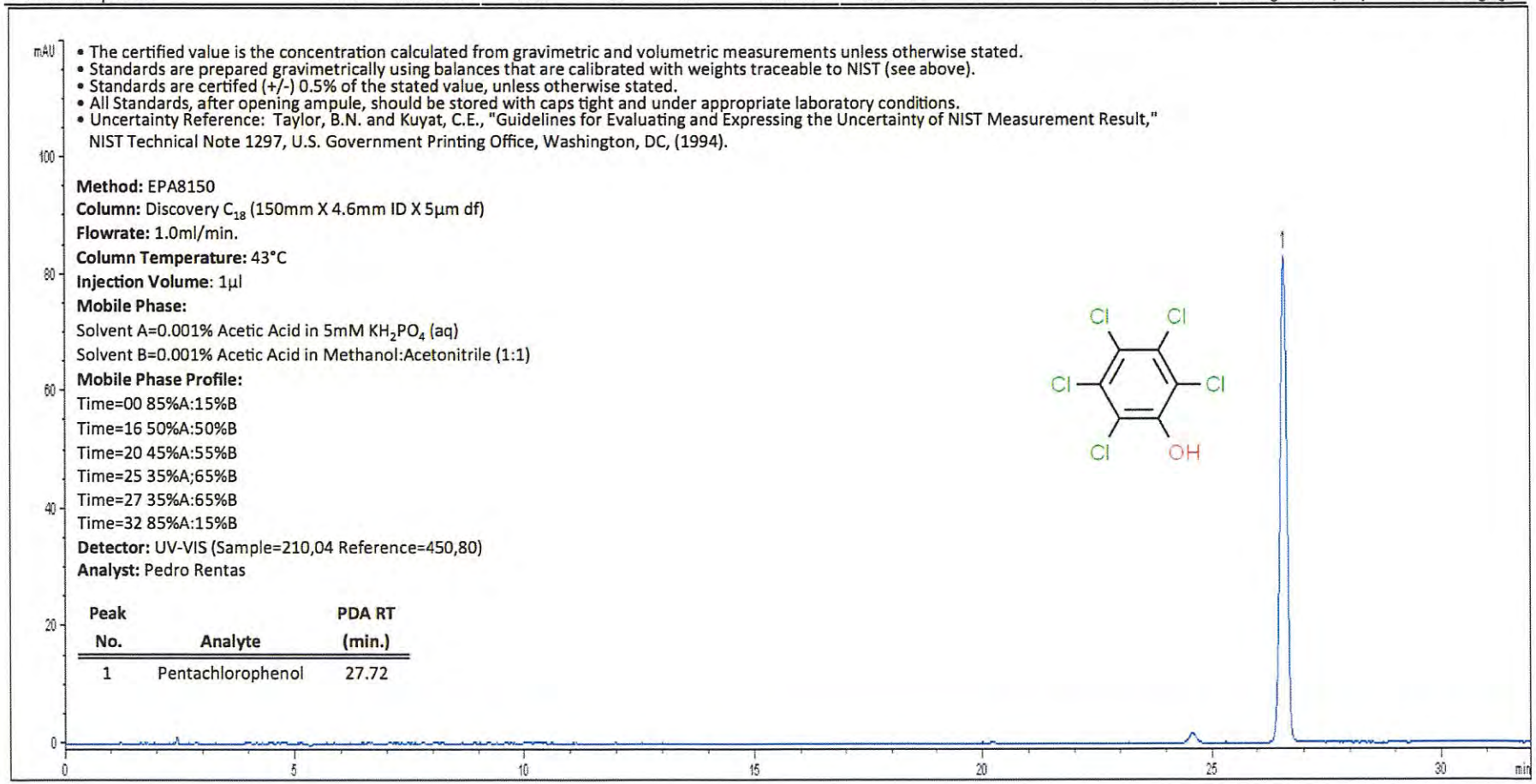
Expiration Date: 062227
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.006 Flask Uncertainty

		062222
Formulated By:	Benson Chan	DATE
		062222
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) µg/mL	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Pentachlorophenol	243	06324ED	1000	98	0.2	0.05106	0.05112	1001.1	4.5	87-86-5	0.5mg/m3/8H (skin)	orl-rat 27mg/kg

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Method: EPA8150
Column: Discovery C_{18} (150mm X 4.6mm ID X 5µm df)
Flowrate: 1.0ml/min.
Column Temperature: 43°C
Injection Volume: 1µl
Mobile Phase:
Solvent A=0.001% Acetic Acid in 5mM KH_2PO_4 (aq)
Solvent B=0.001% Acetic Acid in Methanol:Acetonitrile (1:1)
Mobile Phase Profile:
Time=00 85%A:15%B
Time=16 50%A:50%B
Time=20 45%A:55%B
Time=25 35%A;65%B
Time=27 35%A:65%B
Time=32 85%A:15%B
Detector: UV-VIS (Sample=210,04 Reference=450,80)
Analyst: Pedro Rentas



Peak No.	Analyte	PDA RT (min.)
1	Pentachlorophenol	27.72

Reagent

MSS_FV8270_IS_00005

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 576940 **Lot No.:** A0166482

Description : Custom Internal Standard

Custom Internal Standard 1,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2023 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4	1,001.3 µg/mL	+/- 5.8215	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-30447)		+/- 45.0977	µg/mL	Unstressed
	Purity 99%		+/- 50.0414	µg/mL	Stressed
2	Naphthalene-d8	1,003.7 µg/mL	+/- 5.8358	µg/mL	Gravimetric
	CAS # 1146-65-2 (Lot M-1452)		+/- 45.2087	µg/mL	Unstressed
	Purity 99%		+/- 50.1647	µg/mL	Stressed
3	Acenaphthene-d10	1,005.7 µg/mL	+/- 5.8474	µg/mL	Gravimetric
	CAS # 15067-26-2 (Lot PR-30913)		+/- 45.2988	µg/mL	Unstressed
	Purity 99%		+/- 50.2646	µg/mL	Stressed
4	Phenanthrene-d10	1,006.9 µg/mL	+/- 5.8540	µg/mL	Gravimetric
	CAS # 1517-22-2 (Lot PR-29119)		+/- 45.3499	µg/mL	Unstressed
	Purity 99%		+/- 50.3213	µg/mL	Stressed
5	Pyrene-d10	1,008.7 µg/mL	+/- 5.8649	µg/mL	Gravimetric
	CAS # 1718-52-1 (Lot PR-30304)		+/- 45.4340	µg/mL	Unstressed
	Purity 99%		+/- 50.4146	µg/mL	Stressed
6	Perylene-d12	1,004.0 µg/mL	+/- 5.8373	µg/mL	Gravimetric
	CAS # 1520-96-3 (Lot PR-30020)		+/- 45.2208	µg/mL	Unstressed
	Purity 99%		+/- 50.1780	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

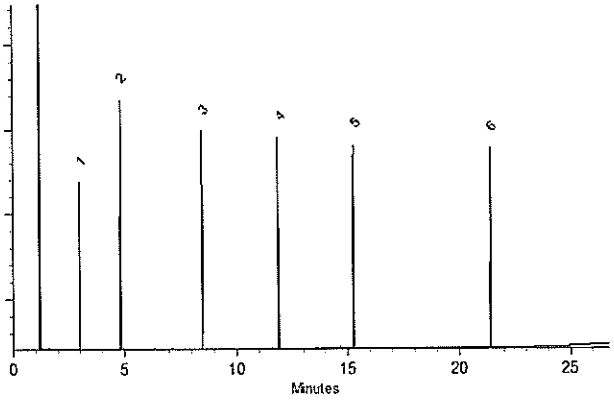
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 18-Nov-2020 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 19-Nov-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MSS_FV8270_IS_00006

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Certificate #3222.02

Certificate of Analysis

chromatographic

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 576940 **Lot No.:** A0200416

Description : Custom Internal Standard

Custom Internal Standard 1,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2026 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	1,005.6 µg/mL	+/- 45.2921
2	Naphthalene-d8	1146-65-2	M-2180	99%	1,005.4 µg/mL	+/- 45.2846
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	1,005.3 µg/mL	+/- 45.2771
4	Phenanthrene-d10	1517-22-2	PR-32303	99%	1,005.1 µg/mL	+/- 45.2696
5	Pyrene-d10	1718-52-1	PR-30304	99%	1,005.2 µg/mL	+/- 45.2733
6	Perylene-d12	1520-96-3	PR-33205	99%	1,005.3 µg/mL	+/- 45.2771

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Reagent

MSV_AcetatesV_00028

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Testing Laboratory
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577489 **Lot No.:** A0184542

Description : Custom Acetates Standard

Custom Acetates Standard 10,000-50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2023 **Storage:** -20°C or colder

Ship: On Ice

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile	50,150.0 µg/mL	+/- 293.6393 µg/mL	Gravimetric
	CAS # 75-05-8 (Lot SHBH6233)		+/- 2,481.0559 µg/mL	Unstressed
	Purity 99%		+/- 2,542.7375 µg/mL	Stressed
2	Vinyl acetate	10,064.0 µg/mL	+/- 59.0612 µg/mL	Gravimetric
	CAS # 108-05-4 (Lot RD210830)		+/- 497.9092 µg/mL	Unstressed
	Purity 99%		+/- 510.2869 µg/mL	Stressed
3	Ethyl acetate	10,082.2 µg/mL	+/- 59.1682 µg/mL	Gravimetric
	CAS # 141-78-6 (Lot SHBN3179)		+/- 498.8116 µg/mL	Unstressed
	Purity 98%		+/- 511.2118 µg/mL	Stressed
4	Isopropyl acetate	10,082.0 µg/mL	+/- 59.1668 µg/mL	Gravimetric
	CAS # 108-21-4 (Lot BCBZ4645)		+/- 498.7997 µg/mL	Unstressed
	Purity 99%		+/- 511.1996 µg/mL	Stressed
5	Propyl acetate	10,062.0 µg/mL	+/- 59.0495 µg/mL	Gravimetric
	CAS # 109-60-4 (Lot TFFKL)		+/- 497.8102 µg/mL	Unstressed
	Purity 99%		+/- 510.1855 µg/mL	Stressed
6	Butyl acetate	10,070.0 µg/mL	+/- 59.0964 µg/mL	Gravimetric
	CAS # 123-86-4 (Lot SHBN3806)		+/- 498.2060 µg/mL	Unstressed
	Purity 99%		+/- 510.5911 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

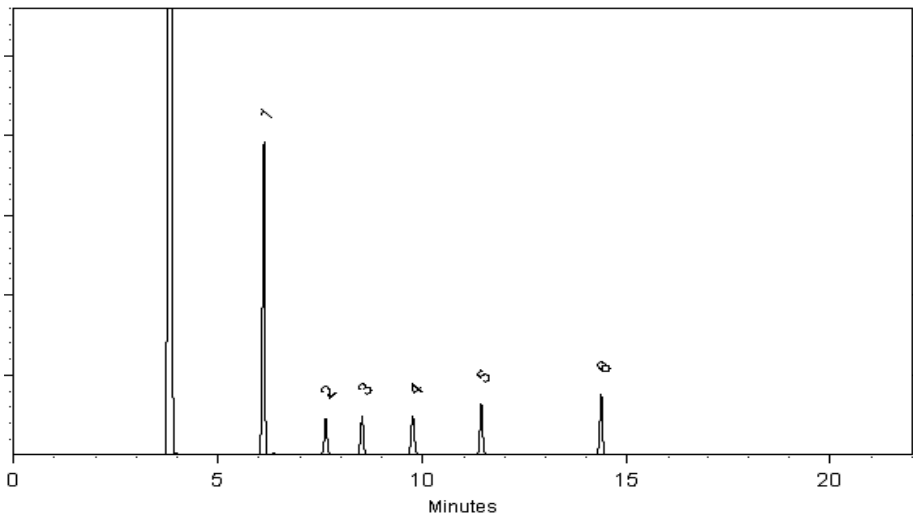
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 26-Apr-2022 **Balance:** B707717271

Fang-Yun Lo - QC Analyst

Date Passed: 05-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

MSV_BCE_00058

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Certificate of Analysis

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30469 **Lot No.:** A0177627

Description : 1-Bromo-2-chloroethane Standard

1-Bromo-2-Chloroethane Std, 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-2-chloroethane	2,001.3 µg/mL	+/- 11.8868	µg/mL	Gravimetric
	CAS # 107-04-0 (Lot BCCC1146)		+/- 112.2344	µg/mL	Unstressed
	Purity 99%		+/- 114.8594	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

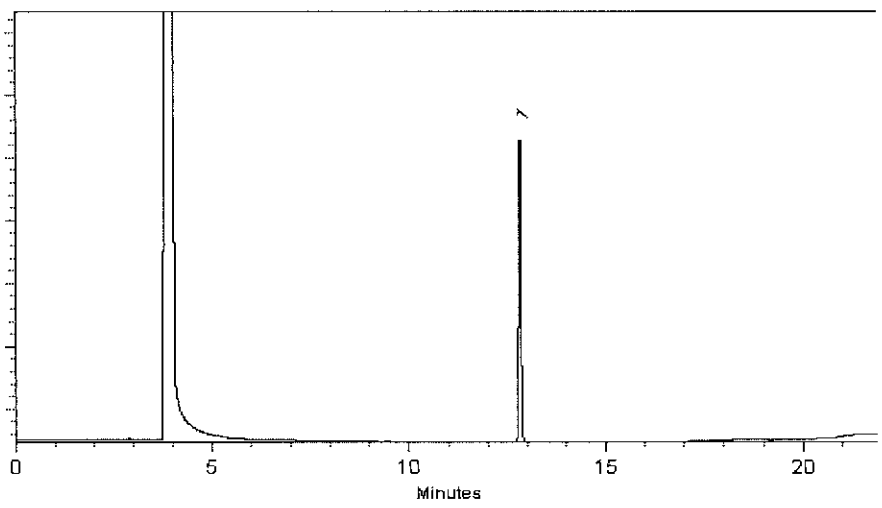
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis - Mix Technician

Date Mixed: 20-Oct-2021 **Balance:** B251644995

Alexis Shelow - Operations Tech I

Date Passed: 22-Oct-2021

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

MSV_c14dcb_Nt_00004

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Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
cis-1,4-Dichloro-2-butene - 95%

Product Number:	**195707**
Batch Number:	**SHBH4584V**
Brand:	ALDRICH
CAS Number:	1476-11-5
MDL Number:	MFCD00062950
Formula:	C4H6Cl2
Formula Weight:	125.00 g/mol
Storage Temperature:	Store at 2 - 8 °C
Quality Release Date:	30 AUG 2016

Test	Specification	Result
Appearance (Color)	Colorless to Light Yellow	Very Faint Yellow
Appearance (Form)	Liquid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 94.5 %	98.0 %

Michael Grady, Manager
Quality Control
Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Reagent

MSV_CYC_00008

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info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Cyclohexanone

CATALOG NUMBER	N-11531-1G
LOT NUMBER	13529800
DATE CERTIFIED	06/20/22
EXPIRATION DATE	06/30/27
CAS NUMBER	108-94-1
MOLECULAR FORMULA	C6H10O
MOLECULAR WEIGHT	98.16
STORAGE	Store at room temperature (20 - 25 °C).
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
% PURITY (GC/FID)	99.5
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
PHYSICAL APPEARANCE	COLORLESS LIQUID
GC/MS SPECTRA ID	MATCHES NIST

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.

PJLA Testing

PJLA Reference Material Producer

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info@chemservice.com • www.chemservice.com

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Kristin R Jones

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.

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CERTIFICATE OF ANALYSIS

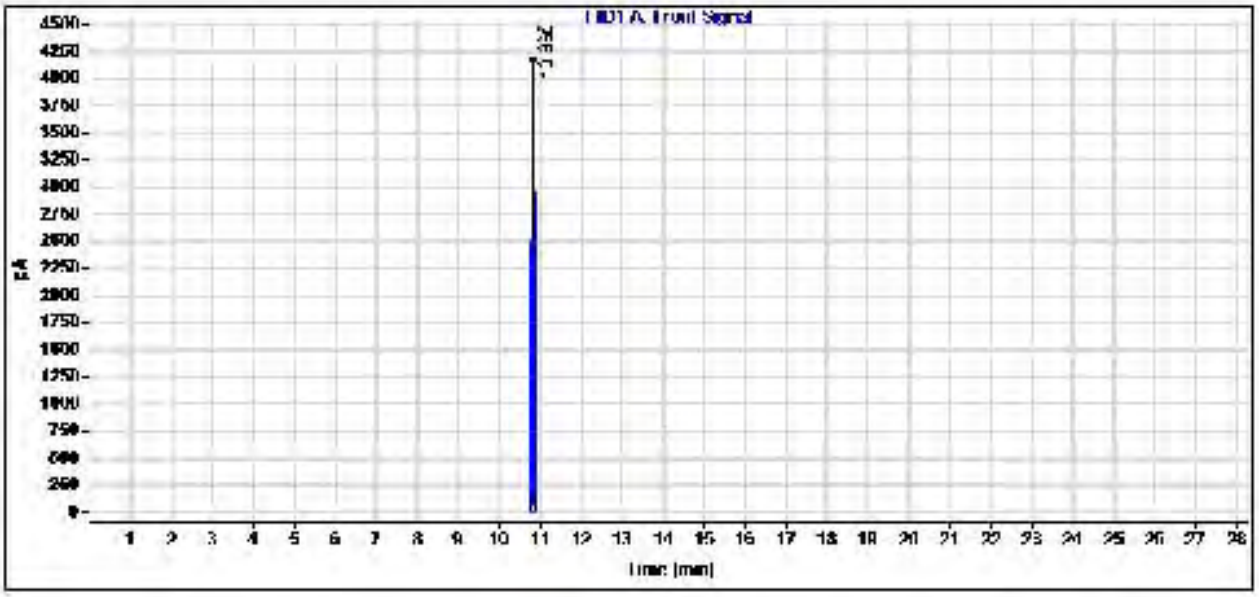
Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2022 DATA\0622\FID010695.D

Sample name: N-11531

Instrument: GC 1
Injection date: 6/17/2022 1:49:46 PM
Acq. method: SCREEN NEAT-FRANNY.M
Column name: DB-624 (30m x 0.53mm x 3.0um)

Sample type: Sample
Location: Vial 51
Injection volume: 1.0uL



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
10.835	BB	0.0350	9220.0693	4132.2539	100.0000
		Sum	9220.0693		

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.
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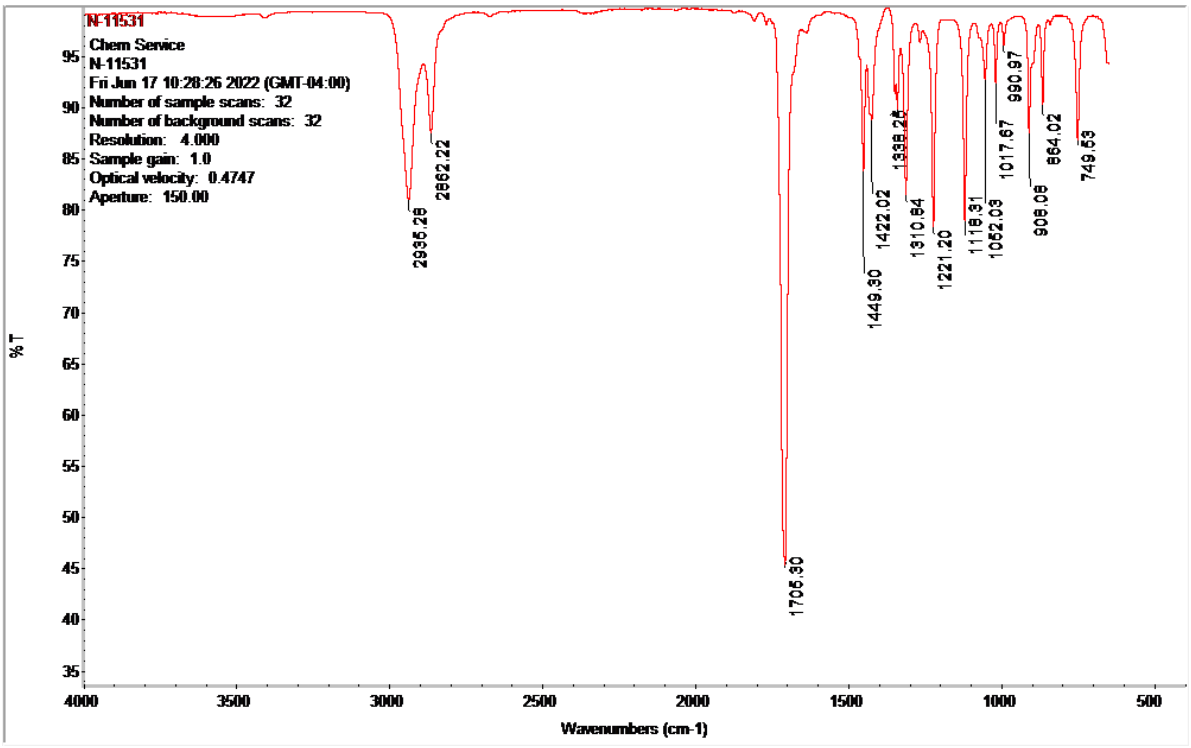
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number: N-11531-1G
Description: Cyclohexanone
Lot Number: 13529800
Expiration Date: 06/30/27



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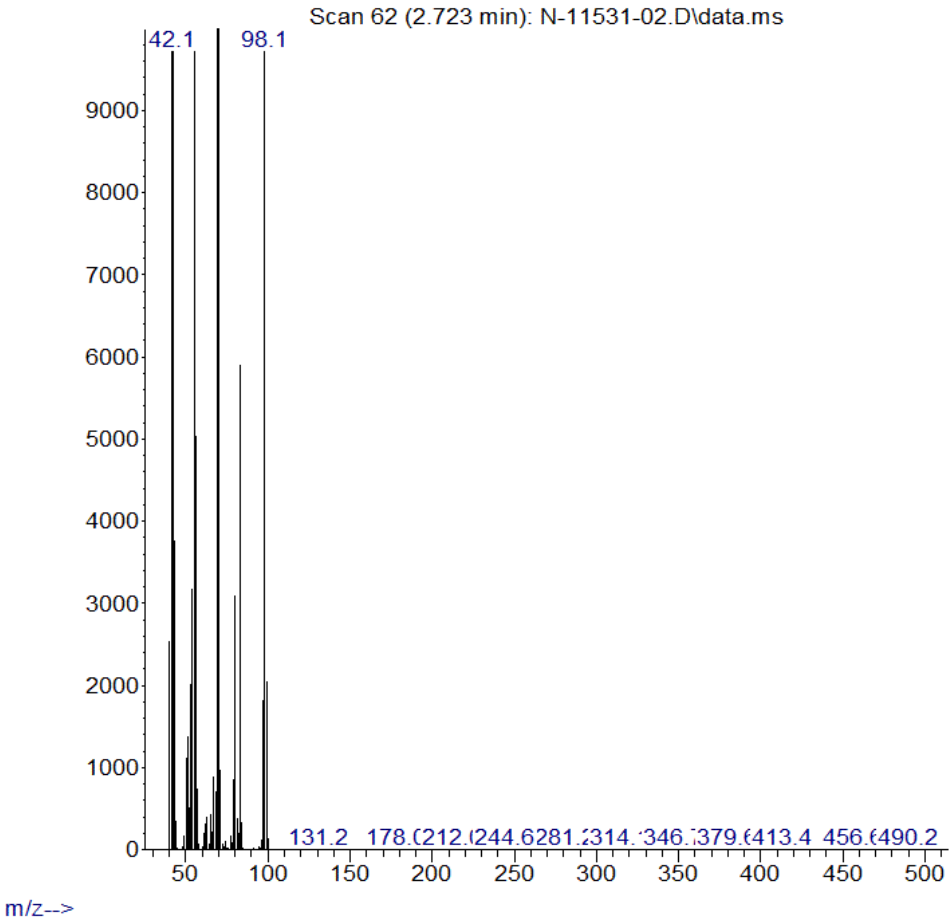
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number: N-11531-1G
Description: Cyclohexanone
Lot Number: 13529800
Expiration Date: 06/30/27



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CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number: N-11531-1G
Description: Cyclohexanone
Lot Number: 13529800
Expiration Date: 06/30/27

ChemService Area Percent Report

```
 Data Path : D:\MassHunter\GCMS\1\data\2022\0622\
 Data File : N-11531-02.D
 Acq On    : 17 Jun 2022  12:40
 Operator  :
 Sample    : N-11531
 Misc      :
 ALS Vial  : 16   Sample Multiplier: 1

 Integration Parameters: autoint1.e
 Integrator: ChemStation

 Method    : D:\MassHunter\GCMS\1\methods\SCREEN NO SD.M
 Title     :

 Signal     : TIC: N-11531-02.D\data.ms
```

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.723	58	62	80	BV 2	106211218	1767870280	100.00%	100.000%

Sum of corrected areas: 1767870280

SCREEN NO SD.M Fri Jun 17 13:13:05 2022

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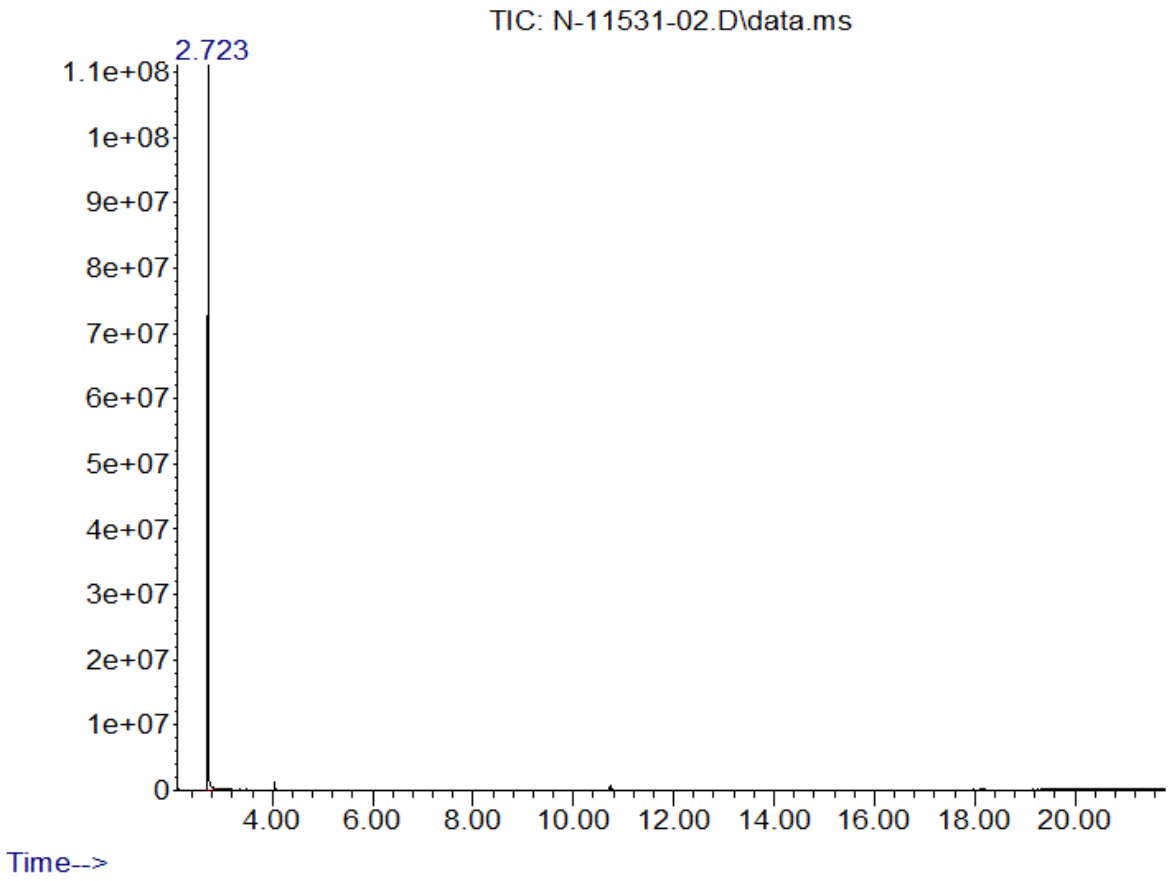
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number: N-11531-1G
Description: Cyclohexanone
Lot Number: 13529800
Expiration Date: 06/30/27



Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.
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Reagent

MSV_Q_PentaCL_00025

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577498 **Lot No.:** A0171317

Description : Custom Pentachloroethane.SEC Standard

Custom Pentachloroethane.SEC Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachloroethane	1,010.0 µg/mL	+/- 5.9991 µg/mL	Gravimetric
	CAS # 76-01-7.SEC (Lot 8170200)		+/- 56.6430 µg/mL	Unstressed
	Purity 99%		+/- 57.9678 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

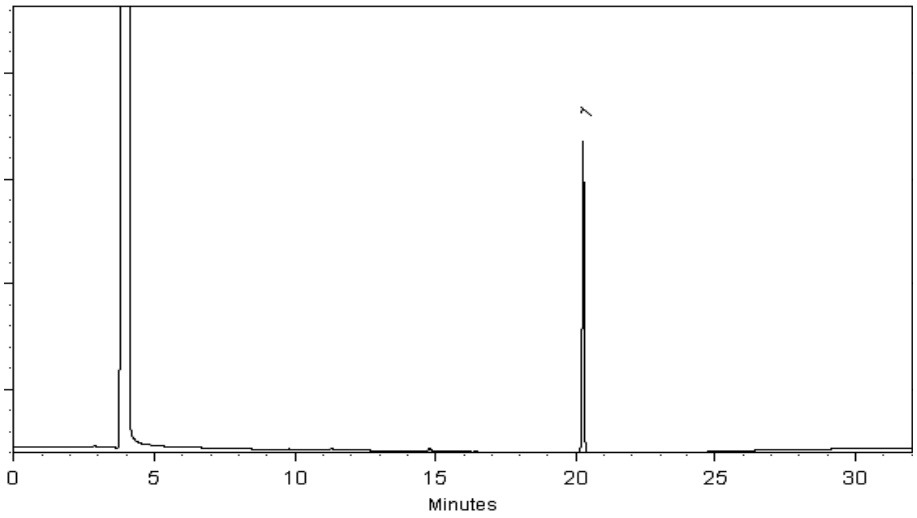
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

Date Mixed: 14-Apr-2021 **Balance:** B707717271

Alexis Shelow - Operations Tech I

Date Passed: 16-Apr-2021

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577498 **Lot No.:** A0184455

Description : Custom Pentachloroethane.SEC Standard

Custom Pentachloroethane.SEC Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachloroethane	1,004.0 µg/mL	+/- 5.9635 µg/mL	Gravimetric
	CAS # 76-01-7.SEC (Lot 786507)		+/- 56.3065 µg/mL	Unstressed
	Purity 99%		+/- 57.6234 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

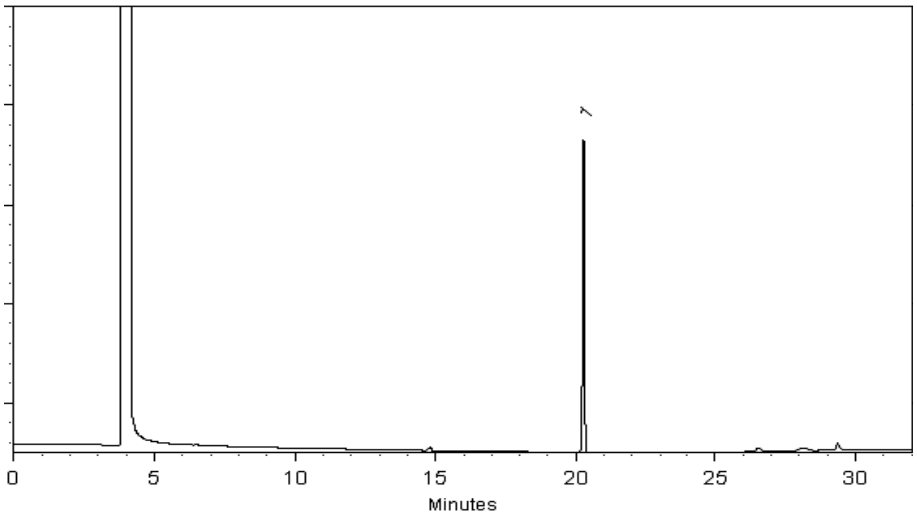
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Whitney Bennett - Operation Tech I

Date Mixed: 25-Apr-2022 **Balance:** 1128342314

Fang-Yun Lo - QC Analyst

Date Passed: 26-Apr-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577488.SEC **Lot No.:** A0184924

Description : Custom Gases.SEC Standard

Custom Gases.SEC Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,000.3 µg/mL	+/- 17.8749 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 27545)		+/- 112.9722 µg/mL	Unstressed
	Purity 99%		+/- 115.5779 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,002.3 µg/mL	+/- 19.9305 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 113.4254 µg/mL	Unstressed
	Purity 99%		+/- 116.0260 µg/mL	Stressed
3	Vinyl chloride	2,002.4 µg/mL	+/- 21.8874 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 113.7916 µg/mL	Unstressed
	Purity 99%		+/- 116.3843 µg/mL	Stressed
4	1,3-Butadiene	2,003.4 µg/mL	+/- 24.0683 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 26996)		+/- 114.2862 µg/mL	Unstressed
	Purity 99%		+/- 116.8705 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,007.9 µg/mL	+/- 17.0860 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot 00017022)		+/- 113.2712 µg/mL	Unstressed
	Purity 99%		+/- 115.8898 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,002.2 µg/mL	+/- 20.1773 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 113.4619 µg/mL	Unstressed
	Purity 98%		+/- 116.0614 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,000.0 µg/mL	+/- 11.7371 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 12841600)		+/- 112.1494 µg/mL	Unstressed
	Purity 99%		+/- 114.7730 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 00010739)			+/-	112.1494	µg/mL	Unstressed
	Purity 99%				+/-	114.7730	µg/mL	Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)		2,000.5	µg/mL	+/-	25.4843	µg/mL	Gravimetric
	CAS # 354-23-4 *	(Lot Q9B-64)			+/-	114.4324	µg/mL	Unstressed
	Purity 99%				+/-	117.0060	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

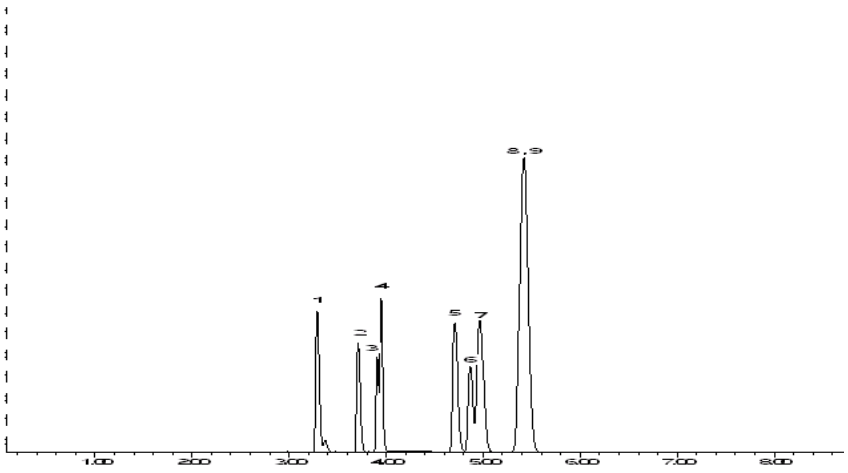
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 05-May-2022 **Balance:** 1127510105

Marlina Cowan - Operations Tech I

Date Passed: 10-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577488.SEC **Lot No.:** A0184924

Description : Custom Gases.SEC Standard

Custom Gases.SEC Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,000.3 µg/mL	+/- 17.8749 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 27545)		+/- 112.9722 µg/mL	Unstressed
	Purity 99%		+/- 115.5779 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,002.3 µg/mL	+/- 19.9305 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 113.4254 µg/mL	Unstressed
	Purity 99%		+/- 116.0260 µg/mL	Stressed
3	Vinyl chloride	2,002.4 µg/mL	+/- 21.8874 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 113.7916 µg/mL	Unstressed
	Purity 99%		+/- 116.3843 µg/mL	Stressed
4	1,3-Butadiene	2,003.4 µg/mL	+/- 24.0683 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 26996)		+/- 114.2862 µg/mL	Unstressed
	Purity 99%		+/- 116.8705 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,007.9 µg/mL	+/- 17.0860 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot 00017022)		+/- 113.2712 µg/mL	Unstressed
	Purity 99%		+/- 115.8898 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,002.2 µg/mL	+/- 20.1773 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 113.4619 µg/mL	Unstressed
	Purity 98%		+/- 116.0614 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,000.0 µg/mL	+/- 11.7371 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 12841600)		+/- 112.1494 µg/mL	Unstressed
	Purity 99%		+/- 114.7730 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 00010739)			+/-	112.1494	µg/mL	Unstressed
	Purity 99%				+/-	114.7730	µg/mL	Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)		2,000.5	µg/mL	+/-	25.4843	µg/mL	Gravimetric
	CAS # 354-23-4 *	(Lot Q9B-64)			+/-	114.4324	µg/mL	Unstressed
	Purity 99%				+/-	117.0060	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

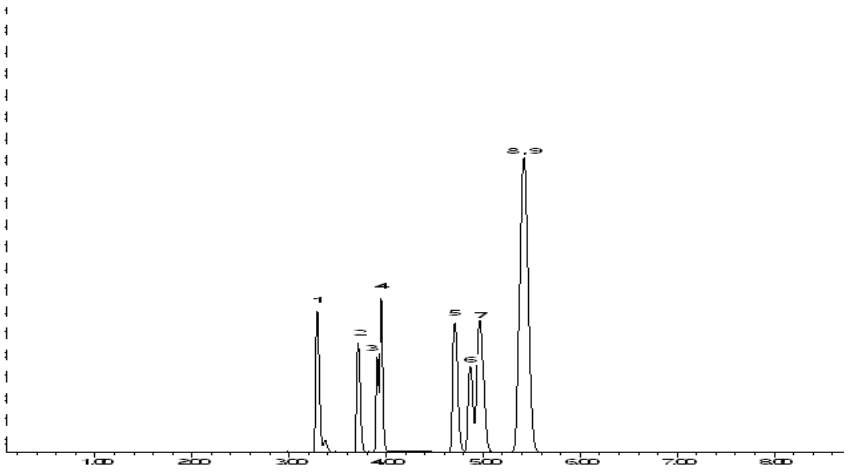
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 05-May-2022 **Balance:** 1127510105

Marlina Cowan - Operations Tech I

Date Passed: 10-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577491 **Lot No.:** A0184174

Description : Custom Pentachloroethane Standard

Custom Pentachloroethane Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachloroethane	5,022.0 µg/mL	+/- 29.4719 µg/mL	Gravimetric
	CAS # 76-01-7 (Lot 10518800)		+/- 281.6071 µg/mL	Unstressed
	Purity 99%		+/- 288.1950 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

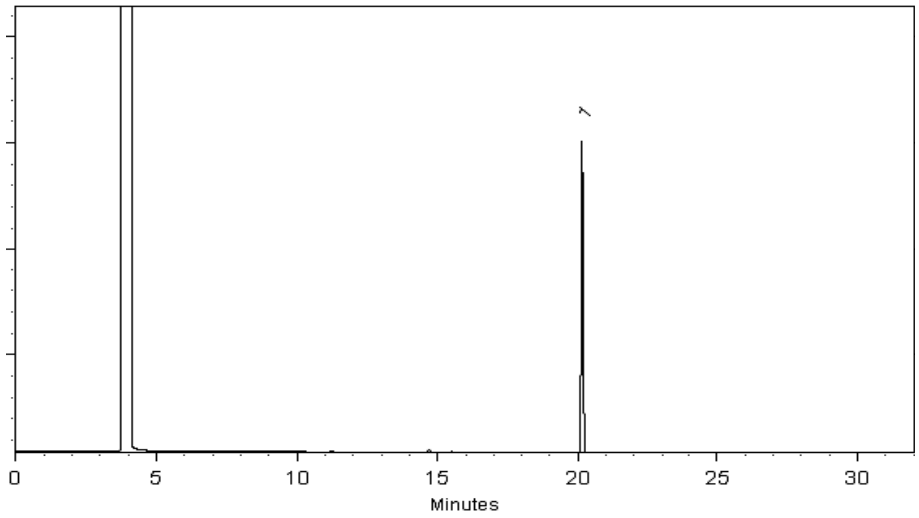
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Nick Yaw - Operations Tech I

Date Mixed: 15-Apr-2022 **Balance:** B707717271

Christie Mills - Operations Technician II

Date Passed: 20-Apr-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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ISO/IEC 17025 Accredited
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577491 **Lot No.:** A0184174

Description : Custom Pentachloroethane Standard

Custom Pentachloroethane Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachloroethane	5,022.0 µg/mL	+/- 29.4719 µg/mL	Gravimetric
	CAS # 76-01-7 (Lot 10518800)		+/- 281.6071 µg/mL	Unstressed
	Purity 99%		+/- 288.1950 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

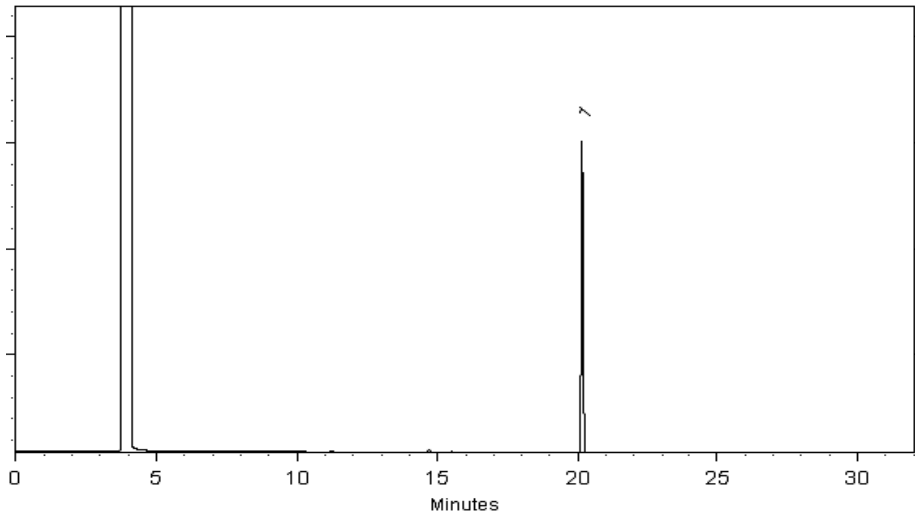
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Nick Yaw - Operations Tech I

Date Mixed: 15-Apr-2022 **Balance:** B707717271

Christie Mills - Operations Technician II

Date Passed: 20-Apr-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577490 **Lot No.:** A0184508

Description : Custom SM Freons Standard

Custom SM Freons Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Chlorotrifluoroethylene	2,000.6 µg/mL	+/- 37.3988 µg/mL	Gravimetric
	CAS # 79-38-9 (Lot 202600)		+/- 117.6695 µg/mL	Unstressed
	Purity 99%		+/- 120.1742 µg/mL	Stressed
2	Chlorodifluoromethane (CFC-22)	2,004.5 µg/mL	+/- 79.7514 µg/mL	Gravimetric
	CAS # 75-45-6 (Lot Q162-44)		+/- 137.3187 µg/mL	Unstressed
	Purity 99%		+/- 139.4793 µg/mL	Stressed
3	2-Chloro-1,1,1-trifluoroethane (HCFC-133a)	2,000.3 µg/mL	+/- 53.9352 µg/mL	Gravimetric
	CAS # 75-88-7 (Lot Q157-146)		+/- 123.9040 µg/mL	Unstressed
	Purity 99%		+/- 126.2843 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

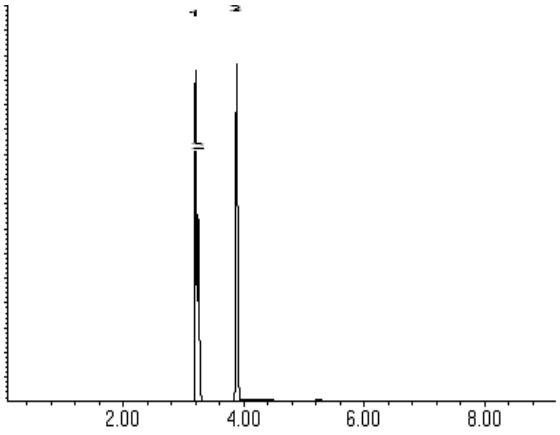
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis - Mix Technician

Date Mixed: 25-Apr-2022 **Balance:** B707717271

Christie Mills - Operations Technician II

Date Passed: 02-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

MT_10Hg_2%HCl_00007

7221 Investment Drive • North Charleston, SC 29418
843.767.7900 • info@highpuritystandards.com • www.highpuritystandards.com

Certificate of Analysis

Certified Reference Material

ANAB ANSI National Accreditation Board ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034:2016 (RMP) Accreditation Certificate Number AR-1436

Product Description: Mercury

Product Number: **10-33-2-100**
Lot Number: **2308711-100**
Matrix: 2% HCl

Certified Value:

Element	µg/mL	SRM ID
Hg	10.0 ± 0.2	3133

The Certified value is based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.
* Refer to Traceability Information, Section 4

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for one year from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: April 2023
Expiration Date: April 30, 2024
Certificate Issue Date: March 28, 2023

Moven Mutuvari

Moven Mutuvari, Ph. D, VP Manufacturing

Reagent

MT_1KV_PIV_00007

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV1
Lot Number:	R2-V696167
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Vanadium
Starting Material:	Vanadium pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9907%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 4 µg/mL

Density: 1.016 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1003 ± 7 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **1001 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1000 ± 3 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000510	M	Eu	<	0.000110	M	Na		0.010317	M	Se	<	0.002300	M	Zn		0.000966
O	Al		0.005538	O	Fe		0.038010	M	Nb	<	0.000710	O	Si		0.028236	M	Zr	<	0.002500
M	As	<	0.000410	M	Ga	<	0.007100	M	Nd	<	0.000210	M	Sm	<	0.000110				
M	Au	<	0.000410	M	Gd	<	0.000110	M	Ni		0.001194	M	Sn	<	0.003300				
M	B	<	0.006000	M	Ge	<	0.000110	M	Os	<	0.000410	M	Sr		0.000152				
M	Ba		0.000195	M	Hf	<	0.000110	O	P	<	0.120000	M	Ta	<	0.000110				
M	Be	<	0.000110	M	Hg	<	0.000310	M	Pb	<	0.002300	M	Tb	<	0.000110				
M	Bi	<	0.000610	M	Ho	<	0.000110	M	Pd	<	0.000610	M	Te	<	0.000610				
M	Ca		0.019548	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210				
M	Cd	<	0.000410	M	Ir	<	0.000110	M	Pt	<	0.000410	M	Ti	<	0.021000				
M	Ce	<	0.000310	M	K		0.043440	M	Rb	<	0.000410	M	Tl	<	0.000110				
M	Co	<	0.001100	M	La	<	0.000110	M	Re	<	0.000110	M	Tm	<	0.000110				
O	Cr		0.020634	M	Li	<	0.001400	M	Rh	<	0.000110	M	U	<	0.000310				
M	Cs		0.000619	M	Lu	<	0.000110	M	Ru	<	0.000410	s	V	<					
M	Cu	<	0.001800	M	Mg		0.000999	n	S	<		M	W	<	0.003100				
M	Dy	<	0.000110	M	Mn		0.000944	M	Sb		0.008253	M	Y	<	0.000110				
M	Er	<	0.000110	M	Mo		0.009339	M	Sc	<	0.000310	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 $H_2V_{10}O_{28}^{4-}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4, HF, H_3PO_4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na_2CO_3 / KNO_3); Oxides (V_2O_3 - use HCl, V_2O_4 - use HCl or HNO_3, V_2O_5 - use concentrated acids); Ores (Na_2CO_3 / KNO_3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V_2O_5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 14, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **September 14, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MT_H3NO_Fishe_00015

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	H330	Quality Test / Release Date	05/31/2022
Lot Number	222401		
Description	HYDROXYLAMINE HYDROCHLORIDE, A.C.S.		
Country of Origin	India	Suggested Retest Date	May/2027

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Colorless to white crystals
AMMONIUM (NH4)	PASS/FAIL	= PASS TEST	PASS TEST
ASSAY	%	>= 96	99.7
CLARITY OF ALCOHOL SOLUTION	PASS/FAIL	= PASS TEST	PASS TEST
HEAVY METALS BY ICP-OES	ppm	<= 5	3.085
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IGNITION RESIDUE	%	<= 0.05	<0.05
IRON (Fe)	ppm	<= 5	<5
MERCURY (Hg)	ppm	<= 0.05	<0.05
SULFUR COMPOUNDS	%	<= 0.005	<0.005
TITRATABLE FREE ACID	MEQ/G	<= 0.25	<0.25

Ira Marootian - Quality Control Manager - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

MT_H3NO_Fishe_00024

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

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Result Name	Units	Specifications	Test Value
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AMMONIUM (NH4)	PASS/FAIL	= PASS TEST	PASS TEST
ASSAY	%	>= 96	99.7
CLARITY OF ALCOHOL SOLUTION	PASS/FAIL	= PASS TEST	PASS TEST
HEAVY METALS BY ICP-OES	ppm	<= 5	3.085
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IGNITION RESIDUE	%	<= 0.05	<0.05
IRON (Fe)	ppm	<= 5	<5
MERCURY (Hg)	ppm	<= 0.05	<0.05
SULFUR COMPOUNDS	%	<= 0.005	<0.005
TITRATABLE FREE ACID	MEQ/G	<= 0.25	<0.25

Ira Marootian - Quality Control Manager - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

MT_HCl_JT_00011

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

Material No.: 9530-33
Batch No.: 22L0562004
Manufactured Date: 2022-10-25
Retest Date: 2027-10-24
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6 %
ACS - Color (APHA)	≤ 10	5
ACS - Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.190
ACS - Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS - Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS - Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.5 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities - Arsenic (As)	≤ 0.010 ppm	< 0.010 ppm
Trace Impurities - Aluminum (Al)	≤ 10.0 ppb	0.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities - Barium (Ba)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Boron (B)	≤ 20.0 ppb	2.3 ppb
Trace Impurities - Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	43.0 ppb
Trace Impurities - Chromium (Cr)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities - Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities - Gallium (Ga)	≤ 1.0 ppb	0.4 ppb
Trace Impurities - Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities - Gold (Au)	≤ 4.0 ppb	0.2 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities - Iron (Fe)	≤ 15 ppb	1 ppb

>>> Continued on page 2 >>>

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

Material No.: 9530-33
Batch No.: 22L0562004

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities - Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	4.7 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities - Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	0.5 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	2.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	6.5 ppb
Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Tantalum (Ta)	≤ 1.0 ppb	< 0.9 ppb
Trace Impurities - Thallium (Tl)	≤ 5.0 ppb	2.0 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	0.3 ppb
Trace Impurities - Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	< 0.3 ppb
Trace Impurities - Zirconium (Zr)	≤ 1.0 ppb	< 0.1 ppb

>>> Continued on page 3 >>>

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

Material No.: 9530-33
Batch No.: 22L0562004

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

Reagent

MT_HNO3_Fishe_00007

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	A200	Quality Test / Release Date	11/14/2022
Lot Number	225038		
Description	NITRIC ACID, CERTIFIED ACS		
Country of Origin	United States	Suggested Retest Date	Nov/2027
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid free from suspended matter.
ALUMINUM	ppm	<= 0.2	<0.2
ARSENIC (As)	ppm	<= 0.004	<0.004
ASSAY	w/w %	Inclusive Between 68.0 - 70.0	69.8
BORON (B)	ppm	<= 0.1	<0.1
CALCIUM (Ca)	ppm	<= 0.2	<0.2
CHLORIDE	ppm	<= 0.08	<0.08
CHROMIUM (Cr)	ppm	<= 0.1	<0.1
COLOR	APHA	<= 10	<10
COPPER (Cu)	ppm	<= 0.05	<0.05
GOLD (Au)	ppm	<= 0.3	<0.3
HEAVY METALS (as Pb)	ppm	<= 0.2	<0.2
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	ppm	<= 0.2	<0.2
LEAD (Pb)	ppm	<= 0.1	<0.1
MAGNESIUM (Mg)	ppm	<= 0.3	<0.3
NICKEL (Ni)	ppm	<= 0.05	<0.05
PHOSPHATE (PO4)	ppm	<= 0.2	<0.2
POTASSIUM (K)	ppm	<= 0.3	<0.3
RESIDUE AFTER IGNITION	ppm	<= 2	<2
SODIUM (Na)	ppm	<= 0.3	<0.3
SULFATE (SO4)	ppm	<= 0.5	<0.5
TIN (Sn)	ppm	<= 0.3	<0.3
TITANIUM (Ti)	ppm	<= 0.3	<0.3

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

ZINC (Zn)	ppm	<= 0.3	<0.3

Dudhatra chetan.

Chetan Dudhatra - Quality Control Supervisor - Bridgewater

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

MT_HNO3_Fishe_00009

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

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Catalog Number	A200	Quality Test / Release Date	02/01/2023
Lot Number	226243		
Description	NITRIC ACID, CERTIFIED ACS		
Country of Origin	Canada	Suggested Retest Date	Jan/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless free from suspended matter
ALUMINUM	ppm	<= 0.2	<0.2
ARSENIC (As)	ppm	<= 0.004	<0.004
ASSAY	w/w %	Inclusive Between 68.0 - 70.0	69.6
BORON (B)	ppm	<= 0.1	<0.1
CALCIUM (Ca)	ppm	<= 0.2	<0.2
CHLORIDE	ppm	<= 0.08	<0.08
CHROMIUM (Cr)	ppm	<= 0.1	<0.1
COLOR	APHA	<= 10	<10
COPPER (Cu)	ppm	<= 0.05	<0.05
GOLD (Au)	ppm	<= 0.3	<0.3
HEAVY METALS (as Pb)	ppm	<= 0.2	<0.2
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	ppm	<= 0.2	<0.2
LEAD (Pb)	ppm	<= 0.1	<0.1
MAGNESIUM (Mg)	ppm	<= 0.3	<0.3
NICKEL (Ni)	ppm	<= 0.05	<0.05
PHOSPHATE (PO4)	ppm	<= 0.2	<0.2
POTASSIUM (K)	ppm	<= 0.3	<0.3
RESIDUE AFTER IGNITION	ppm	<= 2	<2
SODIUM (Na)	ppm	<= 0.3	<0.3
SULFATE (SO4)	ppm	<= 0.5	<0.5
TIN (Sn)	ppm	<= 0.3	<0.3
TITANIUM (Ti)	ppm	<= 0.3	<0.3

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

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201.796.7100 tel
201.796.1329 fax

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ZINC (Zn)	ppm	<= 0.3	<0.3

Dudhatra chetan.

Chetan Dudhatra - Quality Control Supervisor - Bridgewater

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

MT_HNO3_Fishe_00010

Certificate of Analysis

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Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

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Catalog Number	A200	Quality Test / Release Date	04/20/2023
Lot Number	230664		
Description	NITRIC ACID, CERTIFIED ACS		
Country of Origin	Canada	Suggested Retest Date	Apr/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless free from suspended matter
ALUMINUM	ppm	<= 0.2	<0.2
ARSENIC (As)	ppm	<= 0.004	<0.004
ASSAY	w/w %	Inclusive Between 68.0 - 70.0	69.5
BORON (B)	ppm	<= 0.1	<0.1
CALCIUM (Ca)	ppm	<= 0.2	<0.2
CHLORIDE	ppm	<= 0.08	<0.08
CHROMIUM (Cr)	ppm	<= 0.1	<0.1
COLOR	APHA	<= 10	<10
COPPER (Cu)	ppm	<= 0.05	<0.05
GOLD (Au)	ppm	<= 0.3	<0.3
HEAVY METALS (as Pb)	ppm	<= 0.2	<0.2
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	ppm	<= 0.2	<0.2
LEAD (Pb)	ppm	<= 0.1	<0.1
MAGNESIUM (Mg)	ppm	<= 0.3	<0.3
NICKEL (Ni)	ppm	<= 0.05	<0.05
PHOSPHATE (PO4)	ppm	<= 0.2	<0.2
POTASSIUM (K)	ppm	<= 0.3	<0.3
RESIDUE AFTER IGNITION	ppm	<= 2	<2
SODIUM (Na)	ppm	<= 0.3	<0.3
SULFATE (SO4)	ppm	<= 0.5	<0.5
TIN (Sn)	ppm	<= 0.3	<0.3
TITANIUM (Ti)	ppm	<= 0.3	<0.3

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Certificate of Analysis

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201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

ZINC (Zn)	ppm	<= 0.3	<0.3

Chetan Dudhatra - Quality Control Supervisor - Bridgewater

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

MT_HNO3_JT_00003

Nitric Acid, 69.0-70.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

Material No.: 9598-34
Batch No.: 0000234822
Manufactured Date: 2019/06/11
Retest Date: 2024/06/09
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (HNO_3)	69.0 - 70.0 %	69.8
Appearance	Passes Test	PT
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 2 ppm	< 1
Chloride (Cl)	<= 0.04 ppm	< 0.03
Phosphate (PO_4)	<= 0.1 ppm	<0.01
Sulfate (SO_4)	<= 0.4 ppm	< 0.2
Trace Impurities - Aluminum (Al)	<= 30.0 ppb	1.0
Arsenic and Antimony (as As)	<= 5 ppb	< 2
Trace Impurities - Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities - Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities - Bismuth (Bi)	<= 1.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 4.0 ppb	1.0
Trace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	3.0
Trace Impurities - Chromium (Cr)	<= 10.0 ppb	4.0
Trace Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 20.0 ppb	0.2
Trace Impurities - Germanium (Ge)	<= 4.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 10.0 ppb	0.7
Trace Impurities - Lead (Pb)	<= 0.5 ppb	< 0.5

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9598-34
Batch No.: 0000234822

Test	Specification	Result
Trace Impurities - Lithium (Li)	<= 1.0 ppb	< 0.2
Trace Impurities - Magnesium (Mg)	<= 7.0 ppb	0.2
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	< 0.1
Trace Impurities - Molybdenum (Mo)	<= 5.0 ppb	< 3.0
Trace Impurities - Nickel (Ni)	<= 1.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 5.0 ppb	< 2.0
Trace Impurities - Silicon (Si)	<= 20.0 ppb	1.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 200.0 ppb	2.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 2.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.4
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	0.1

For Laboratory, Research or Manufacturing Use
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

Receipt Date in TALs Based off of Product Manufacture Date

Expiration Date in TALs Based off of Manufacture Suggested Retest Date

For Receipt, Open, and Expiration date; refer to individual bottle.

ELLE QA

ELLE Dept. 4022 Management

Reagent

MT_I_CCVSPK-A_00005

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Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	35-TSPEURF-CCV-A
Lot Number:	T2-MEB720690
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,
Sulfur,

100 µg/mL ea:

Selenium, Strontium,
Thorium, Thallium,
Vanadium, Zinc,
Silver, Nickel,
Phosphorus, Lead,
Manganese, Lithium,
Cadmium, Cobalt,
Chromium, Copper,
Arsenic, Boron,
Barium, Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 000 ± 18 µg/mL	Arsenic, As	100.0 ± 0.9 µg/mL
Barium, Ba	100.0 ± 0.5 µg/mL	Beryllium, Be	100.0 ± 0.7 µg/mL
Boron, B	100.0 ± 0.6 µg/mL	Cadmium, Cd	100.0 ± 0.4 µg/mL
Calcium, Ca	4 999 ± 22 µg/mL	Chromium, Cr	100.0 ± 0.8 µg/mL
Cobalt, Co	100.0 ± 0.6 µg/mL	Copper, Cu	100.0 ± 0.5 µg/mL
Iron, Fe	5 000 ± 21 µg/mL	Lead, Pb	100.0 ± 0.6 µg/mL
Lithium, Li	100.0 ± 0.4 µg/mL	Magnesium, Mg	5 000 ± 20 µg/mL
Manganese, Mn	100.0 ± 0.5 µg/mL	Nickel, Ni	100.0 ± 0.6 µg/mL
Phosphorus, P	100.0 ± 0.4 µg/mL	Potassium, K	5 000 ± 22 µg/mL
Selenium, Se	100.0 ± 0.6 µg/mL	Silver, Ag	100.0 ± 0.4 µg/mL
Sodium, Na	5 000 ± 22 µg/mL	Strontium, Sr	100.1 ± 0.4 µg/mL
Sulfur, S	5 000 ± 25 µg/mL	Thallium, Tl	100.0 ± 0.7 µg/mL
Thorium, Th	100.0 ± 0.5 µg/mL	Vanadium, V	100.0 ± 0.6 µg/mL
Zinc, Zn	100.0 ± 0.5 µg/mL		

Density: 1.127 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Th	EDTA	928	928
Tl	ICP Assay	3158	151215
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 27, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

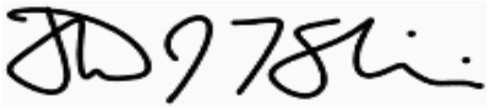
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MT_I_CCVSPK-B_00004

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	35-TSPEURF-CCV-B
Lot Number:	T2-MEB720691
Matrix:	5% (v/v) HNO3 2.9% (v/v) HF
Value / Analyte(s):	5 000 µg/mL ea: Silicon, 100 µg/mL ea: Tin, Titanium, Tungsten, Zirconium, Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**100.0 ± 0.8 µg/mL**	**Molybdenum, Mo**	**100.0 ± 0.6 µg/mL**
Silicon, Si	**5 000 ± 28 µg/mL**	**Tin, Sn**	**100.0 ± 0.6 µg/mL**
Titanium, Ti	**100.0 ± 0.7 µg/mL**	**Tungsten, W**	**100.0 ± 0.6 µg/mL**
Zirconium, Zr	**100.0 ± 0.6 µg/mL**		

Density: 1.049 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Sb	ICP Assay	3102a	140911
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
W	ICP Assay	3163	140606
W	Calculated		See Sec. 4.2
Zr	ICP Assay	3169	130920
Zr	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 24, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 24, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

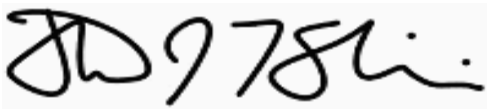
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MT_K2S2O8_JT_00025

Potassium Persulfate
BAKER ANALYZED® Reagent
(potassium peroxydisulfate)

Material No.: 3238-01
Batch No.: 22A3061007
Manufactured Date: 2021-07-28
Retest Date: 2028-07-26
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS - Assay ($K_2S_2O_8$) (by gravimetry)	≥ 99.0 %	99.5 %
Trace Impurities - Iron (Fe)	≤ 0.001 %	< 0.001 %
Trace Impurities - ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Trace Impurities - Manganese (Mn)	≤ 2.000 ppm	< 2.000 ppm

For Laboratory,Research,or Manufacturing Use
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Reagent

MT_K2S2O8_JT_00029

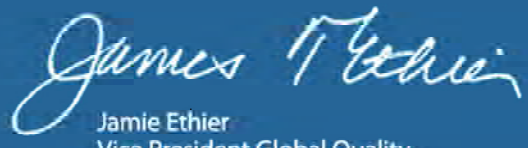
Potassium Persulfate
BAKER ANALYZED® Reagent
(potassium peroxydisulfate)

Material No.: 3238-01
Batch No.: 22A3061007
Manufactured Date: 2021-07-28
Retest Date: 2028-07-26
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS - Assay ($K_2S_2O_8$) (by gravimetry)	≥ 99.0 %	99.5 %
Trace Impurities - Iron (Fe)	≤ 0.001 %	< 0.001 %
Trace Impurities - ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Trace Impurities - Manganese (Mn)	≤ 2.000 ppm	< 2.000 ppm

For Laboratory,Research,or Manufacturing Use
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC



For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Reagent

MT_KMnO4_FI_00107

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P279	Quality Test / Release Date	01/28/2022
Lot Number	218618		
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jan/2027

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Dark purple to purple green crystals
ASSAY	%	>= 99	99.4
CHLORIDE & CHLORATE	%	<= 0.005	<0.005
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.2	<0.2
MERCURY (Hg)	ppm	<= 0.05	<0.004
SULFATE (SO4)	%	<= 0.02	<0.02

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

MT_LCS-SPK-A_00030

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	IV-62801-A
Lot Number:	U2-MEB728825
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,
Sulfur,

125 µg/mL ea:

Thorium, Vanadium,
Zinc, Nickel,
Phosphorus, Manganese,
Lithium, Cobalt,
Chromium, Copper,
Arsenic, Boron,
Barium,

25 µg/mL ea:

Thallium, Selenium,

12.5 µg/mL ea:

Strontium, Uranium,
Silver, Beryllium,
Cadmium, Lead

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 250 ± 4 µg/mL	Arsenic, As	125.0 ± 1.0 µg/mL
Barium, Ba	125.0 ± 0.6 µg/mL	Beryllium, Be	12.50 ± 0.08 µg/mL
Boron, B	125.0 ± 0.7 µg/mL	Cadmium, Cd	12.51 ± 0.05 µg/mL
Calcium, Ca	1 250 ± 6 µg/mL	Chromium, Cr	125.0 ± 0.9 µg/mL
Cobalt, Co	125.0 ± 0.6 µg/mL	Copper, Cu	125.0 ± 0.5 µg/mL
Iron, Fe	1 250 ± 5 µg/mL	Lead, Pb	12.50 ± 0.05 µg/mL
Lithium, Li	125.0 ± 0.5 µg/mL	Magnesium, Mg	1 250 ± 5 µg/mL
Manganese, Mn	125.0 ± 0.5 µg/mL	Nickel, Ni	125.0 ± 0.6 µg/mL
Phosphorus, P	125.0 ± 0.6 µg/mL	Potassium, K	1 250 ± 5 µg/mL
Selenium, Se	25.00 ± 0.16 µg/mL	Silver, Ag	12.50 ± 0.05 µg/mL
Sodium, Na	1 250 ± 6 µg/mL	Strontium, Sr	12.50 ± 0.05 µg/mL
Sulfur, S	1 250 ± 6 µg/mL	Thallium, Tl	25.00 ± 0.18 µg/mL
Thorium, Th	125.0 ± 0.6 µg/mL	Uranium, U	12.50 ± 0.06 µg/mL
Vanadium, V	125.0 ± 0.6 µg/mL	Zinc, Zn	125.0 ± 0.6 µg/mL

Density: 1.057 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Th	EDTA	928	928
Tl	ICP Assay	3158	151215
U	ICP Assay	traceable to 3164	R2-U689597
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains “LOW” levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 25, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 25, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

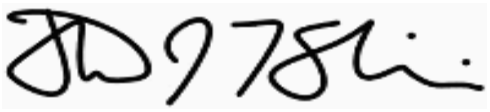
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MT_LCS-SPK-B_00029

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	IV-62801-B
Lot Number:	U2-MEB728826
Matrix:	5% (v/v) HNO3 1.5% (v/v) HF
Value / Analyte(s):	1 250 µg/mL ea: Silicon, 125 µg/mL ea: Titanium, Tungsten, Zirconium, 25 µg/mL ea: Tin, Antimony, 12.5 µg/mL ea: Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**25.04 ± 0.19 µg/mL**	**Molybdenum, Mo**	**12.51 ± 0.07 µg/mL**
Silicon, Si	**1 252 ± 8 µg/mL**	**Tin, Sn**	**25.03 ± 0.16 µg/mL**
Titanium, Ti	**125.2 ± 0.9 µg/mL**	**Tungsten, W**	**125.2 ± 0.7 µg/mL**
Zirconium, Zr	**125.2 ± 1.0 µg/mL**		

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Sb	ICP Assay	3102a	140911
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
W	ICP Assay	3163	140606
Zr	ICP Assay	3169	130920

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 25, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 25, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

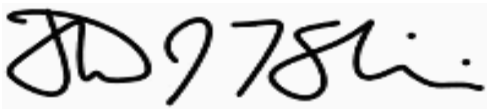
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MT_NaCl_JT_00025

Sodium Chloride, Crystal
Ultrapure Bioreagent
For Liquid Chromatography and Molecular Biology applications

Material No.: 4058-02
Batch No.: 22K1561075
Manufactured Date: 2020-10-15
Retest Date: 2025-10-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (NaCl)	≥ 99.0 %	99.6 %
DNase Activity	Passes Test	Passes Test
RNase Activity	Passes Test	Passes Test
Protease Activity	Passes Test	Passes Test
pH of 5% Solution at 25°C	5.5 - 7.5	6.1
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
Iodide (I)	≤ 0.002 %	< 0.002 %
ACS - Sulfate (SO_4)	≤ 0.003 %	< 0.003 %
Barium (Ba)	≤ 0.001 %	< 0.001 %
Calcium, Magnesium, and R_2O_3 Precipitate	≤ 0.005 %	< 0.005 %
Potassium (K)	≤ 0.005 %	0.002 %
Nitrogen Compounds (as N)	≤ 5 ppm	< 5 ppm
Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Heavy Metals (as Pb)	≤ 2 ppm	< 2 ppm
Trace Impurities - Iron (Fe)	≤ 1 ppm	< 1 ppm

Sodium Chloride, Crystal
Ultrapure Bioreagent
For Liquid Chromatography and Molecular Biology applications

Material No.: 4058-02
Batch No.: 22K1561075

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use

Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

Reagent

MT_NaCl_JT_00028

Sodium Chloride, Crystal
Ultrapure Bioreagent
For Liquid Chromatography and Molecular Biology applications

Material No.: 4058-02
Batch No.: 22K1561075
Manufactured Date: 2020-10-15
Retest Date: 2025-10-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (NaCl)	≥ 99.0 %	99.6 %
DNase Activity	Passes Test	Passes Test
RNase Activity	Passes Test	Passes Test
Protease Activity	Passes Test	Passes Test
pH of 5% Solution at 25°C	5.5 - 7.5	6.1
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
Iodide (I)	≤ 0.002 %	< 0.002 %
ACS - Sulfate (SO_4)	≤ 0.003 %	< 0.003 %
Barium (Ba)	≤ 0.001 %	< 0.001 %
Calcium, Magnesium, and R_2O_3 Precipitate	≤ 0.005 %	< 0.005 %
Potassium (K)	≤ 0.005 %	0.002 %
Nitrogen Compounds (as N)	≤ 5 ppm	< 5 ppm
Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Heavy Metals (as Pb)	≤ 2 ppm	< 2 ppm
Trace Impurities - Iron (Fe)	≤ 1 ppm	< 1 ppm

Sodium Chloride, Crystal
Ultrapure Bioreagent
For Liquid Chromatography and Molecular Biology applications

Material No.: 4058-02
Batch No.: 22K1561075

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use

Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

Reagent

MT_S_10Hg_IV_00014

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	R2-HG700202
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.000 ± 0.052 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.000011	M	Eu	<	0.000201	O	Na		0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al		0.000001	O	Fe		0.000001	M	Nb	<	0.000201	O	Si		0.000005	M	Zr	<	0.000201
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201				
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007				
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201				
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201				
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201				
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216				
O	Ca		0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201				
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402				
M	Ce	<	0.000201	O	K		0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508				
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201				
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058				
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201				
M	Cu	<	0.000402	O	Mg		0.000001	O	S	<	0.053950	M	W	<	0.000604				
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201				
M	Er	<	0.000201	M	Mo		0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 19, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 19, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MT_S_10Hg_IV_00019

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	R2-HG700202
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.000 ± 0.052 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.000011	M	Eu	<	0.000201	O	Na		0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al		0.000001	O	Fe		0.000001	M	Nb	<	0.000201	O	Si		0.000005	M	Zr	<	0.000201
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201				
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007				
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201				
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201				
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201				
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216				
O	Ca		0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201				
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402				
M	Ce	<	0.000201	O	K		0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508				
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201				
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058				
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201				
M	Cu	<	0.000402	O	Mg		0.000001	O	S	<	0.053950	M	W	<	0.000604				
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201				
M	Er	<	0.000201	M	Mo		0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 19, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 19, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

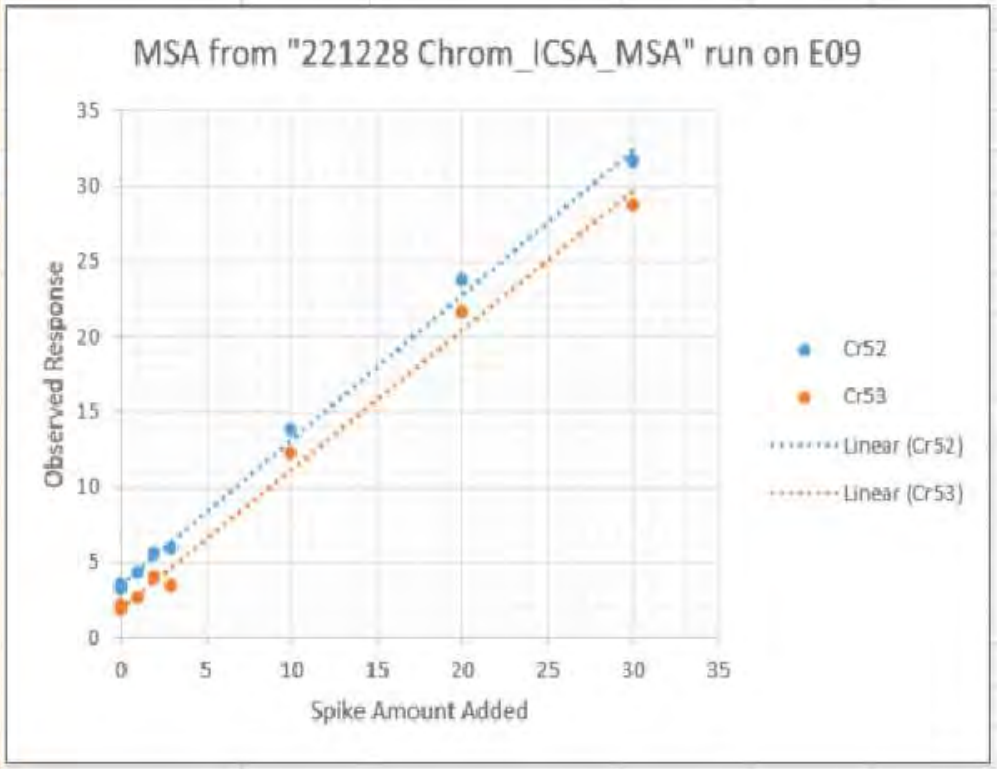
Paul Gaines
Chairman / Senior Technical Director

Reagent

MT_S_ICS2A_IV_00011

	MSA CALC (Cr52) 3.618		MSA CALC (Cr53) 2.045
	ISOTOPE RATIO CALCULATION		
AVG CCB	180		503
AVG ICSA	2477		725
NET CPS	2297		223
RATIO 53/52		**0.10**	
NA 53/52		**0.11**	

The Chromium 53/52 ratio is close to the observed Natural Abundance (NA) ratio of 0.11
This suggests that Cr contaminant is real Cr and not due to anomalous interference on mass 52 alone.



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Certificate of Analysis

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	6020ICS-9A
Lot Number:	T2-MEB714677
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	21 215 µg/mL ea: Chloride,
	3 000 µg/mL ea: Calcium,
	2 500 µg/mL ea: Iron, Sodium,
	2 000 µg/mL ea: Carbon,
	1 000 µg/mL ea: Aluminum, Phosphorus, Sulfur, Potassium, Magnesium,
	20 µg/mL ea: Molybdenum, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**1 000 ± 3 µg/mL**	**Calcium, Ca**	**3 001 ± 13 µg/mL**
Carbon, C	**2 001 ± 4 µg/mL**	**Chloride, Cl**	**21 230.0 ± 100.0 µg/mL**
Iron, Fe	**2 501 ± 11 µg/mL**	**Magnesium, Mg**	**1 000 ± 4 µg/mL**
Molybdenum, Mo	**20.01 ± 0.11 µg/mL**	**Phosphorus, P**	**1 000 ± 4 µg/mL**
Potassium, K	**1 000 ± 4 µg/mL**	**Sodium, Na**	**2 501 ± 11 µg/mL**
Sulfur, S	**1 001 ± 4 µg/mL**	**Titanium, Ti**	**20.01 ± 0.12 µg/mL**

Density: 1.051 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.003300	M	Eu	<	0.000110	s	Na	<		M	Se	<	0.000720	O	Zn		0.011000
s	Al	<		s	Fe	<		M	Nb	<	0.000110	n	Si	<		M	Zr	<	0.002100
M	As		0.077000	M	Ga		0.016000	M	Nd	<	0.000420	M	Sm	<	0.000110				
M	Au	<	0.000410	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn	<	0.001700				
M	B	<	0.006200	M	Ge	<	0.002500	M	Os	<	0.000110	M	Sr		0.018000				
M	Ba		0.004000	M	Hf	<	0.000110	s	P	<		M	Ta	<	0.000210				
O	Be	<	0.000110	M	Hg	<	0.000620	M	Pb		0.000930	M	Tb	<	0.000110				
M	Bi	<	0.001300	M	Ho	<	0.000110	M	Pd	<	0.000110	M	Te	<	0.003300				
s	Ca	<		M	In	<	0.000210	M	Pr	<	0.000110	M	Th	<	0.000210				
M	Cd		0.004500	M	Ir	<	0.000110	M	Pt	<	0.000110	s	Ti	<					
M	Ce	<	0.000620	s	K	<		M	Rb		0.027000	M	Tl	<	0.000620				
M	Co		0.002800	M	La	<	0.000830	M	Re	<	0.000110	M	Tm	<	0.000110				
M	Cr		0.029000	O	Li		0.001900	M	Rh	<	0.000110	M	U	<	0.001100				
M	Cs		0.001900	M	Lu	<	0.000110	M	Ru	<	0.000110	M	V	<	0.003100				
O	Cu	<	0.004400	s	Mg	<		s	S	<		M	W		0.001600				
M	Dy	<	0.000110	M	Mn		0.006000	M	Sb		0.001200	M	Y		0.000420				
M	Er	<	0.000110	s	Mo	<		M	Sc	<	0.000620	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 30, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

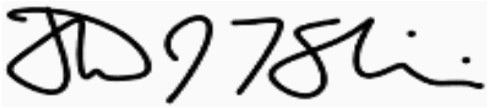
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MT_S_ICVSPK-A_00005

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	IV-69496
Lot Number:	U2-MEB728821
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	2 500 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

250 µg/mL ea:

Nickel, Manganese,
Cobalt, Chromium,
Copper, Arsenic,
Barium, Vanadium,
Zinc,

25 µg/mL ea:

Silver, Beryllium,
Cadmium, Lead,
Selenium, Strontium,
Thallium, Uranium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	2 500 ± 9 µg/mL	Arsenic, As	250.0 ± 2.1 µg/mL
Barium, Ba	250.0 ± 1.2 µg/mL	Beryllium, Be	25.00 ± 0.16 µg/mL
Cadmium, Cd	25.00 ± 0.10 µg/mL	Calcium, Ca	2 500 ± 11 µg/mL
Chromium, Cr	250.0 ± 1.8 µg/mL	Cobalt, Co	250.0 ± 1.2 µg/mL
Copper, Cu	250.0 ± 1.0 µg/mL	Iron, Fe	2 500 ± 10 µg/mL
Lead, Pb	25.00 ± 0.11 µg/mL	Magnesium, Mg	2 500 ± 11 µg/mL
Manganese, Mn	250.0 ± 1.0 µg/mL	Nickel, Ni	250.0 ± 1.1 µg/mL
Potassium, K	2 500 ± 11 µg/mL	Selenium, Se	24.99 ± 0.20 µg/mL
Silver, Ag	25.00 ± 0.13 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Strontium, Sr	25.01 ± 0.10 µg/mL	Thallium, Tl	25.00 ± 0.13 µg/mL
Uranium, U	25.01 ± 0.15 µg/mL	Vanadium, V	250.0 ± 1.1 µg/mL
Zinc, Zn	250.0 ± 1.1 µg/mL		

Density: 1.074 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	EDTA	928	928
Co	ICP Assay	traceable to 3113	M2-CO661665
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Tl	ICP Assay	3158	151215
U	ICP Assay	3164	891509
U	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.6 ± 0.1
Uranium 235U	0.42 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 25, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 25, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

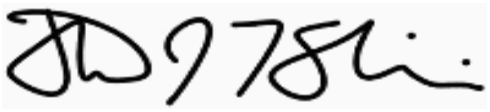
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	IV-69497
Lot Number:	U2-MEB728822
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	2 500 µg/mL ea: Titanium, 25 µg/mL ea: Molybdenum, Antimony, Tin

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**25.01 ± 0.19 µg/mL**	**Molybdenum, Mo**	**25.00 ± 0.15 µg/mL**
Tin, Sn	**25.00 ± 0.13 µg/mL**	**Titanium, Ti**	**2 500 ± 18 µg/mL**

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Sb	ICP Assay	3102a	140911
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 25, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 25, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

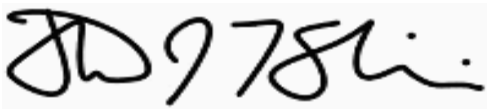
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	IV-66048-A
Lot Number:	T2-MEB716952
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

500 µg/mL ea:

Nickel, Manganese,
Cobalt, Chromium,
Copper, Arsenic,
Barium, Vanadium,
Zinc,

50 µg/mL ea:

Silver, Beryllium,
Cadmium, Lead,
Selenium, Strontium,
Thallium, Uranium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 000 ± 18 µg/mL	Arsenic, As	499.9 ± 4.1 µg/mL
Barium, Ba	500.0 ± 2.3 µg/mL	Beryllium, Be	49.98 ± 0.26 µg/mL
Cadmium, Cd	49.99 ± 0.22 µg/mL	Calcium, Ca	4 998 ± 22 µg/mL
Chromium, Cr	499.9 ± 3.7 µg/mL	Cobalt, Co	500.2 ± 2.4 µg/mL
Copper, Cu	500.0 ± 2.0 µg/mL	Iron, Fe	5 000 ± 21 µg/mL
Lead, Pb	50.00 ± 0.22 µg/mL	Magnesium, Mg	5 000 ± 20 µg/mL
Manganese, Mn	500.2 ± 2.0 µg/mL	Nickel, Ni	499.9 ± 2.2 µg/mL
Potassium, K	5 001 ± 19 µg/mL	Selenium, Se	50.01 ± 0.35 µg/mL
Silver, Ag	50.00 ± 0.22 µg/mL	Sodium, Na	5 000 ± 18 µg/mL
Strontium, Sr	49.97 ± 0.22 µg/mL	Thallium, Tl	50.02 ± 0.32 µg/mL
Uranium, U	50.00 ± 0.25 µg/mL	Vanadium, V	500.0 ± 2.2 µg/mL
Zinc, Zn	500.1 ± 2.2 µg/mL		

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Sr	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 24, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 24, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

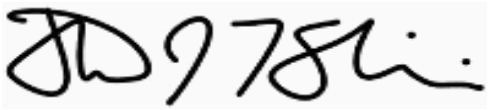
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	IV-66048-B
Lot Number:	T2-MEB716953
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	5 000 µg/mL ea: Titanium, 50 µg/mL ea: Molybdenum, Antimony, Tin

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**49.97 ± 0.40 µg/mL**	**Molybdenum, Mo**	**50.03 ± 0.24 µg/mL**
Tin, Sn	**49.97 ± 0.27 µg/mL**	**Titanium, Ti**	**5 000 ± 37 µg/mL**

Density: 1.040 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sn	ICP Assay	3161a	140917
Sn	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

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Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 24, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 24, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

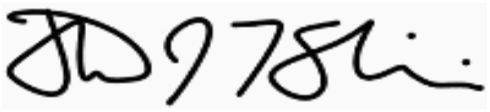
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MT_S_MWLLC_SC_00005

SCP SCIENCE

Providing Innovative Solutions to Analytical Chemists

Certificate of Analysis

1.0 DESCRIPTION : ***Plasma*** **CAL – Custom Standard**

Catalogue Number : **AQ0-154-615** **MW-LLC**

Lot Number : **S220721047**

Matrix: **2.0% HNO3 Tr. HF**

Expiration Date (End of month): **September 2023**

2.0 CERTIFIED VALUES AND ASSOCIATED UNCERTAINTY:

Method of Analysis: Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)

Traceability: Applicable NIST Standard Reference Materials (see list below):

3101a	Al	3109a	Ca	3117a	Eu	3126a	Fe	3134	Mo	3142a	Pr	3151	Ag	3159	Th	3167a	Y
3102a	Sb	3110	Ce	3118a	Gd	3127a	La	3135a	Nd	3143	Re	3152a	Na	3160a	Tm	3168a	Zn
3103a	As	3111a	Cs	3119a	Ga	3128	Pb	3136	Ni	3144	Rh	3153a	Sr	3161a	Sn	3169	Zr
3104a	Ba	3112a	Cr	3120a	Ge	3129a	Li	3137	Nb	3145a	Rb	3154	S	3162a	Ti		
3105a	Be	3113	Co	3121	Au	3130a	Lu	3138	Pd	3147a	Sm	3155	Ta	3163	W		
3106	Bi	3114	Cu	3122	Hf	3131a	Mg	3139a	P	3148a	Sc	3156	Te	3164	U		
3107	B	3115a	Dy	3123a	Ho	3132	Mn	3140	Pt	3149	Se	3157a	Tb	3165	V		
3108	Cd	3116a	Er	3124a	In	3133	Hg	3141a	K	3150	Si	3158	Tl	3166a	Yb		

Certified Concentrations:

Ag*	0.496 ± 1%	µg/ml	K	199.5 ± 1.5	µg/ml	Ti	10.05 ± 0.06	µg/ml
Al	24.81 ± 0.14	µg/ml	Mg	50.3 ± 0.4	µg/ml	Tl*	0.500 ± 1%	µg/ml
As*	2.02 ± 0.01	µg/ml	Mn*	2.00 ± 0.02	µg/ml	U*	1.01 ± 0.01	µg/ml
Ba*	1.99 ± 0.01	µg/ml	Mo*	0.497 ± 1%	µg/ml	V*	0.501 ± 1%	µg/ml
Be*	0.499 ± 1%	µg/ml	Na	198.6 ± 1.9	µg/ml	Zn	10.00 ± 0.06	µg/ml
Ca	100.3 ± 1.0	µg/ml	Ni*	1.00 ± 0.01	µg/ml			
Cd*	0.496 ± 1%	µg/ml	Pb*	0.503 ± 1%	µg/ml			
Co*	0.504 ± 1%	µg/ml	Sb*	1.01 ± 0.01	µg/ml			
Cr*	2.00 ± 0.01	µg/ml	Se*	1.00 ± 0.01	µg/ml			
Cu*	0.999 ± 1%	µg/ml	Sn*	2.00 ± 0.02	µg/ml			
Fe	49.92 ± 0.28	µg/ml	Sr*	0.992 ± 1%	µg/ml			

ACCREDITED
Reference Material Producer
CERTIFICATE #2885.02

*Concentration value derived from v/v dilutions of certified, NIST-traceable starting materials

Note: The uncertainty of the certified value has been calculated from applicable uncertainty contributors (u_i) such as the SRM inherited uncertainty, weighing and dilution errors and instrument variability. The combined uncertainty ($uc= v\Sigma u_i^2$) has been multiplied by a coverage factor (k) of 2 to provide a 95% confidence interval.

3.0 REFERENCE VALUES:

Density: **1.010 g/ml @ 23.0 °C**

4.0 APPROVAL AND DATE OF CERTIFICATION:

Certification Approval: Yaling Sui, Chemist

Certification Date: **August 23, 2022**

Yaling Sui

SCP SCIENCE

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5.0 INTENDED USE:

- ICP Standards: For the calibration of, including but not limited to: ICP-AES, ICP-MS, FAAS, GFAA, XRF and DCP.
- AA Standards: For the calibration of Flame (FAAS) and Graphite Furnace (GFAA) Atomic Absorption Spectrometers.
- Matrix Modifiers: For the optimization of analytical conditions to provide better Graphite Furnace Atomic Absorption (GFAA) instrument response and improved detection limits.
- pH Standards: For the calibrating pH meters or for other wet chemistry applications.
- Conductivity Standards: For electrolytic conductivity measurement as a calibration standard.
- IC Standards: for calibration of, but not limited to IC, HPLC, TLC, ISE, IR, NMR, MS, UV/VIS or other wet chemistry applications.

For any inquiries, please contact **SCP SCIENCE**.

6.0 INSTRUCTIONS FOR USE:

Handling and Storage: Keep product tightly capped when not in use. The solution should be opened for a minimum amount of time necessary to dispense the amount required. Do not pipet or use directly from container. Do not return unused portions back to container. Store under normal laboratory conditions. Avoid exposure to excessive sources of heat and humidity or direct sunlight.

Stability: This Standard is guaranteed to be stable and accurate to within the specified uncertainty of measurement up to the unopened expiry date, if sealed, or up to the opened expiry date (when indicated), whichever comes first, provided the solution is kept tightly capped and stored under the indicated storage conditions. Purchasers will be notified of any significant changes resulting in re-certification or withdrawal of the product prior to the expiration date.

7.0 HAZARDOUS INFORMATION :

Please refer to the associated Material Safety Data Sheet (MSDS) for information regarding this product (available at www.SCPSCIENCE.com).

8.0 HOMOGENEITY:

This solution has been blended according to an in-house procedure and its homogeneity is guaranteed to be fit for purpose when a sample size sufficient for the intended method of analysis is used.

9.0 TRACEABILITY:

This CRM (Certified Reference Material) is traceable to the NIST SRM (Standard Reference Material) indicated in section 2 through an unbroken chain of comparisons. In addition, balances used are regularly calibrated using weights which are traceable to NIST (National Institute of Standards and Technology) or NRC (National Research Council of Canada) standards. All conductivity meters used to analyze this standard have been regularly calibrated using a NIST or NRC traceable Thermometer and standards. All pH meters used to analyze this standard have been regularly calibrated using a NIST or NRC traceable thermometer and pH/MV simulator.

10.0 PREPARATION*:*

For the preparation of these solutions, 18 meghom/cm double deionized water, high-purity acids and glassware calibrated to ASTM Class A specifications are used.

11.0 QUALITY SYSTEM CERTIFICATIONS*:*

ISO 9001 Certification: This standard was produced in a facility which operates a **registered** ISO 9001 Quality Management System. Please consult our web site for a copy of the most recent revision of our certificate of registration.

ISO 17025 Accreditation: SCP SCIENCE (Corporate Headquarters) operates an ISO 17025 **accredited** laboratory. Please consult our web site for a copy of the most recent revision of our certificate and scope of accreditation.

ISO 17034 Accreditation: SCP SCIENCE (Corporate Headquarters) is an ISO 17034 accredited Reference Material Producer. Please consult our website for a copy of our most recent certificate and scope of accreditation.

ACCREDITED
Reference Material Producer
CERT# 2885.02

ilac-MRA ACCREDITED
Testing Laboratory CERT#2885.01

Corporate Headquarters:

CORPORATE HEADQUARTERS	USA	FRANCE	GERMANY
21800 Clark Graham	3rd Party Distribution Center	12 Ave. de Québec, Bat. IRIS	Alte Marktoberdorfer Straße 14,
Baie D'Urfé (Montréal), Quebec	348 Route 11, Champlain,	91140, Villebon-sur-Yvette	87616, Marktoberdorf
H9X 4B6 Canada	N.Y. 12919-4816		
Phone: +1 (800) 361-6820	Phone: +1 (800) 361-6820	Phone: +33 (0) 1 69 18 71 17	Phone: +49 (0) 8342-89560-61
Fax: +1 (800) 253-5549	Fax: +1 (800) 253-5549	Fax: +33 (0) 1 60 92 05 67	Fax: +49 (0) 8342-89560-69

CORPORATE : Phone: +1 (514) 457-0701 | Fax: +1 (514) 457-4499 www.scpscience.com | sales@scpscience.com

Reagent

MT_SULF_FI_00019

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	A300	Quality Test / Release Date	08/10/2022
Lot Number	222369		
Description	SULFURIC ACID, CERTIFIED ACS		
Country of Origin	United States	Suggested Retest Date	Aug/2027
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Colorless and free from suspended or insoluble matter
ALUMINUM	ppm	<= 0.2	<0.1
AMMONIUM (NH4)	ppm	<= 1	<1
ARSENIC (As)	ppm	<= 0.004	<0.001
ASSAY	w/w %	Inclusive Between 95.0 - 98.0	96
BORON (B)	ppm	<= 0.05	<0.05
CALCIUM (Ca)	ppm	<= 0.3	<0.1
CHLORIDE	ppm	<= 0.1	<0.1
CHROMIUM (Cr)	ppm	<= 0.2	<0.1
COLOR	APHA	<= 10	<10
COPPER (Cu)	ppm	<= 0.1	<0.100
GOLD (Au)	ppm	<= 0.3	<0.1
HEAVY METALS (as Pb)	ppm	<= 0.8	<0.8
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	ppm	<= 0.2	<0.2
LEAD (Pb)	ppm	<= 0.3	<0.1
MAGNESIUM (Mg)	ppm	<= 0.3	<0.1
MANGANESE (Mn)	ppm	<= 0.2	<0.1
MERCURY (Hg)	ppb	<= 5	<5
NICKEL (Ni)	ppm	<= 0.1	<0.1
NITRATE (NO3)	ppm	<= 0.2	<0.1
PHOSPHATE (PO4)	ppm	<= 0.5	<0.1
POTASSIUM (K)	ppm	<= 0.3	<0.1

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

RESIDUE AFTER IGNITION	ppm	<= 3	<3
SODIUM (Na)	ppm	<= 0.3	<0.1
SUBSTANCES REDUCING KMNO4	ppm	<= 2	<2
TIN (Sn)	ppm	<= 0.2	<0.1
TITANIUM (Ti)	ppm	<= 0.3	<0.1
ZINC (Zn)	ppm	<= 0.2	<0.1

Ira Marootian - Quality Control Manager - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

OP_KEPONE_NT_00002

OP-Kepone-NT-00002

CHEMSERVICE INC

660 Tower Lane • P O Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

11/14/2023
11:12 AM

CERTIFICATE OF ANALYSIS

Chlordecone

CATALOG NUMBER	N-12291-100MG
LOT NUMBER	12672000
DATE CERTIFIED	11/29/21
EXPIRATION DATE	11/30/27
CAS NUMBER	143-50-0
MOLECULAR FORMULA	C10Cl10O
MOLECULAR WEIGHT	490.60
STORAGE	Store at room temperature (20 - 25 °C).
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
GC/MS SPECTRA ID	MATCHES NIST LIBRARY
% PURITY	90.7
TGA ANALYSIS	9.3% RESIDUAL SOLVENT/WATER

Page 785 of 7038

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.

PJLA Testing

PJLA Reference Material Producer

COA Form
Revision 3 (3/2015)

Print Date: 11/30/21

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

11/14/2023
11:12 AM

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

Page 786 of 7038

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.

PJLA Testing

PJLA Reference Material Producer

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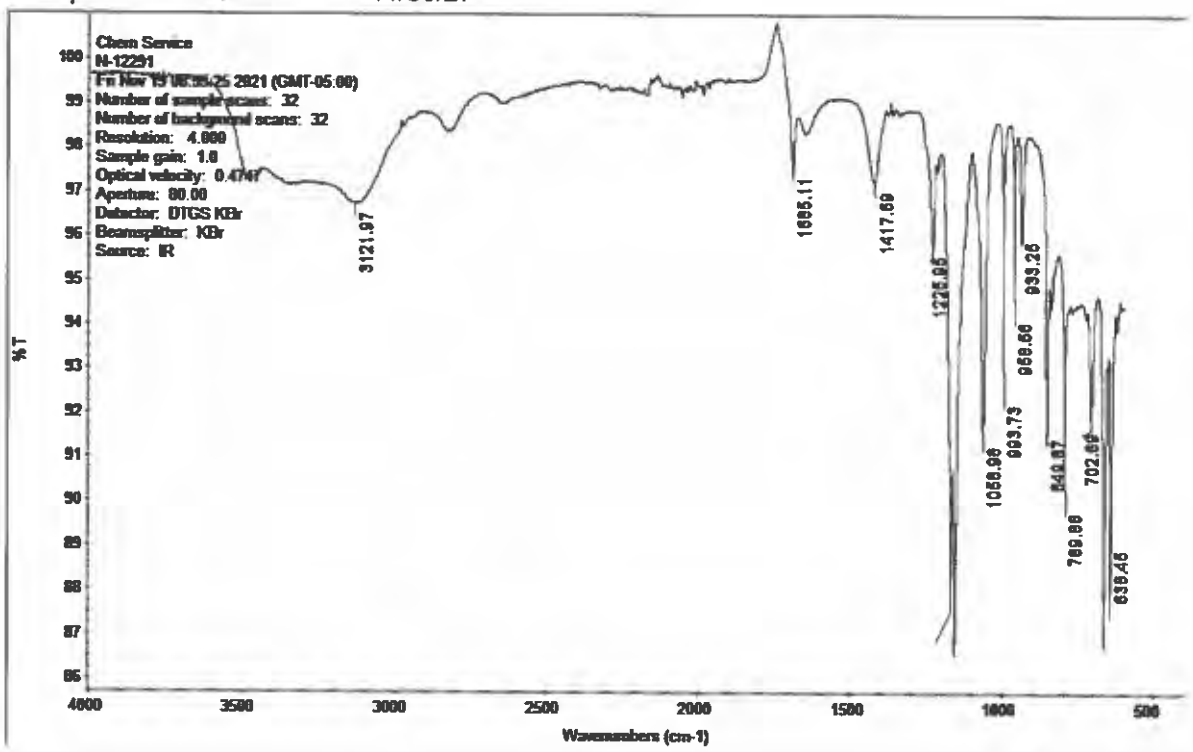
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12291-100MG
Description:	Chlordecone
Lot Number:	12672000
Expiration Date:	11/30/27



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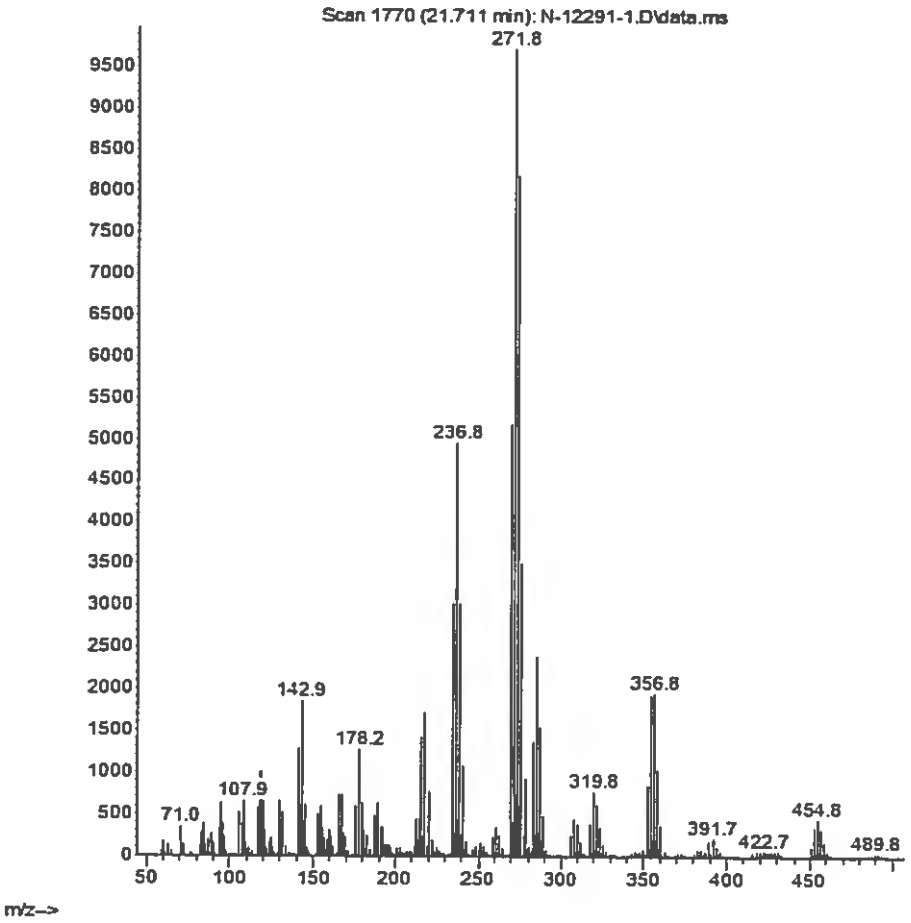

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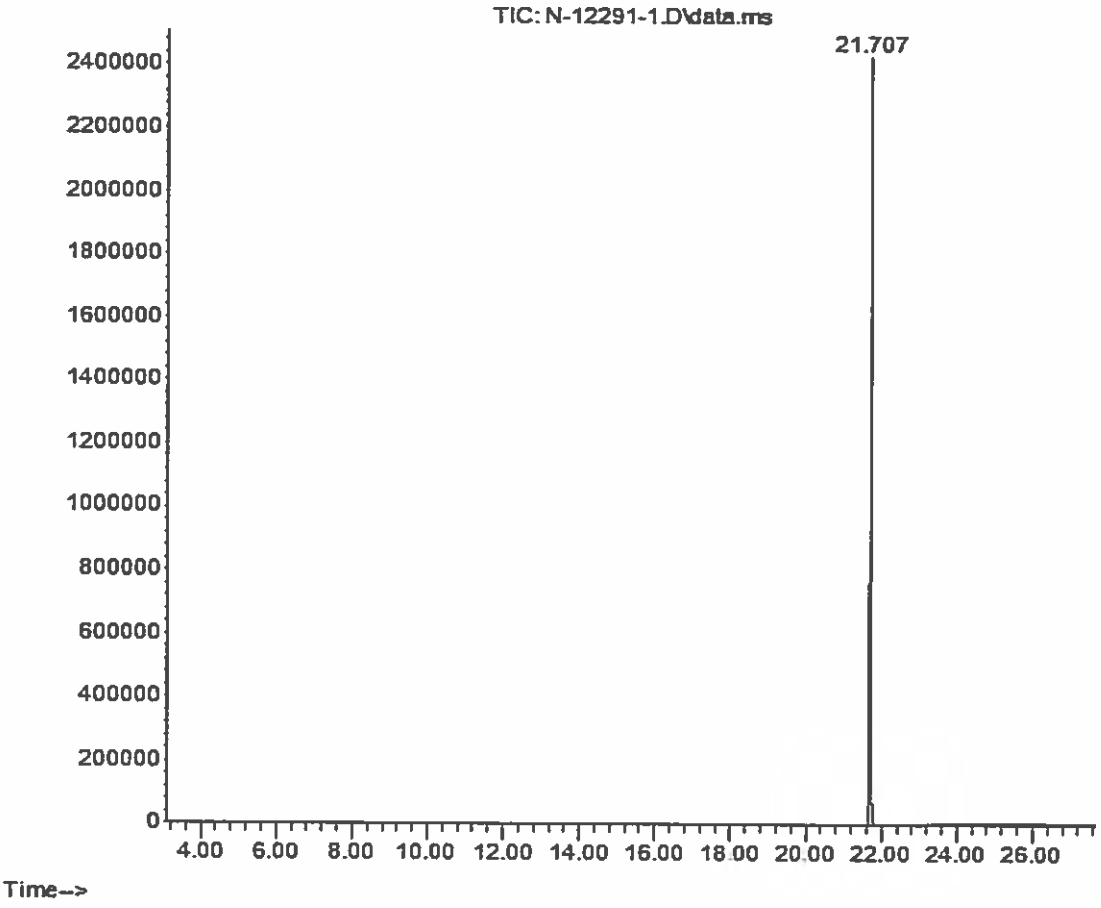

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Gas

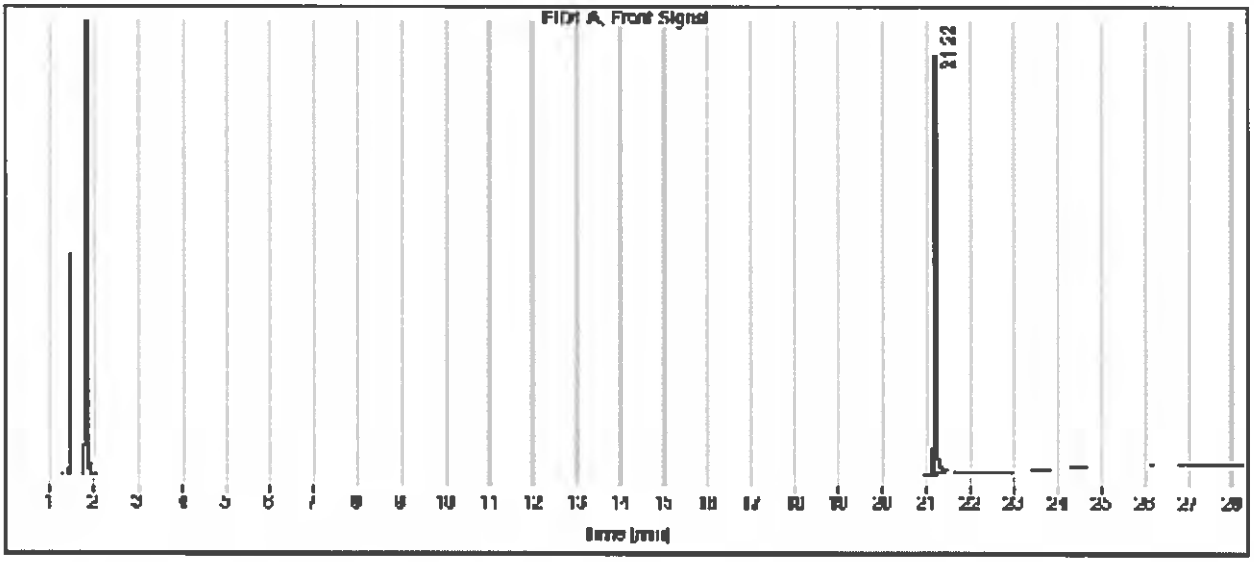
Data file: C:\CHEM32\051F0803.

Sample name: N-12291

Instrument: GC 2
Injection date: 11/10/2021 8:42:10 PM
Acq. method: N-12291.M
Column name: HP-5

CERTIFICATE OF ANALYSIS

Sample type: Sample
Location: Vial 51
Injection volume: 1.0uL



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
21.220	BB	0.0416	1179.0609	434.9742	100.00
		Sum	1179.0609		

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.

PJLA Testing

PJLA Reference Material Producer

Reagent

OP_LCSmix2stk_00005

OP-LCSMIX2STK-00005
3 PRO300

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569732 **Lot No.:** A0179852

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2023 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	Benzaldehyde	2,000.4 µg/mL	+/- 11.6305	µg/mL	Gravimetric
	CAS # 100-52-7 (Lot SHBJ3062)		+/- 39.9386	µg/mL	Unstressed
	Purity 99%		+/- 89.6444	µg/mL	Stressed
2	epsilon-Caprolactam	2,000.3 µg/mL	+/- 11.6299	µg/mL	Gravimetric
	CAS # 105-60-2 (Lot I16X016)		+/- 39.9366	µg/mL	Unstressed
	Purity 99%		+/- 89.6400	µg/mL	Stressed
3	Atrazine	2,000.6 µg/mL	+/- 11.6317	µg/mL	Gravimetric
	CAS # 1912-24-9 (Lot PI8FG)		+/- 39.9426	µg/mL	Unstressed
	Purity 99%		+/- 89.6534	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

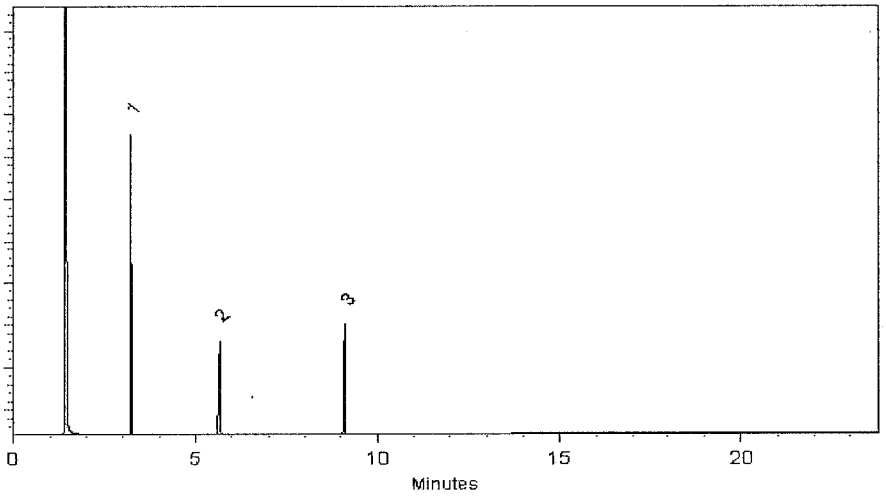
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

Date Mixed: 22-Dec-2021 **Balance:** 1128360905

Marlina Cowan - Operations Tech I

Date Passed: 28-Dec-2021

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

OP_LCSmix2stk_00007

OP-LCSmix2stk-00007

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569732 **Lot No.:** A0193487

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2024 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L., k=2)
1	Benzaldehyde	100-52-7	RDA102822RSR	99%	2,000.0 µg/mL	+/- 58.7396
2	epsilon-Caprolactam	105-60-2	I16X016	99%	2,000.3 µg/mL	+/- 58.7469
3	Atrazine	1912-24-9	PI8FG	99%	2,000.3 µg/mL	+/- 58.7494

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

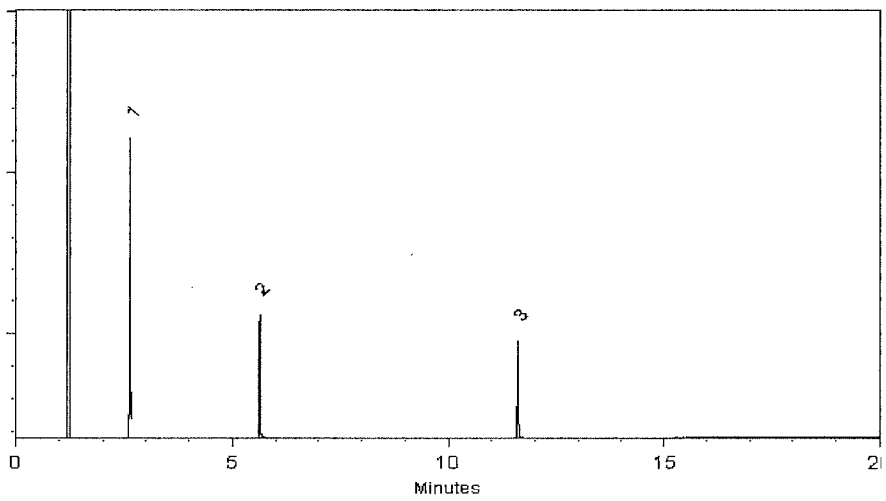
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Russ Bookhamer - Operations Technician I

Date Mixed: 12-Jan-2023 **Balance Serial #** B442140311

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

OP_NPQUIN_STK_00006

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

OR-NPQUIN-STK-00006

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

11/14/2023
11:12 AM

CERTIFIED WEIGHT REPORT

Part Number: 79415
Lot Number: 021423
Description: 1,4-Naphthoquinone

Expiration Date: 021428
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

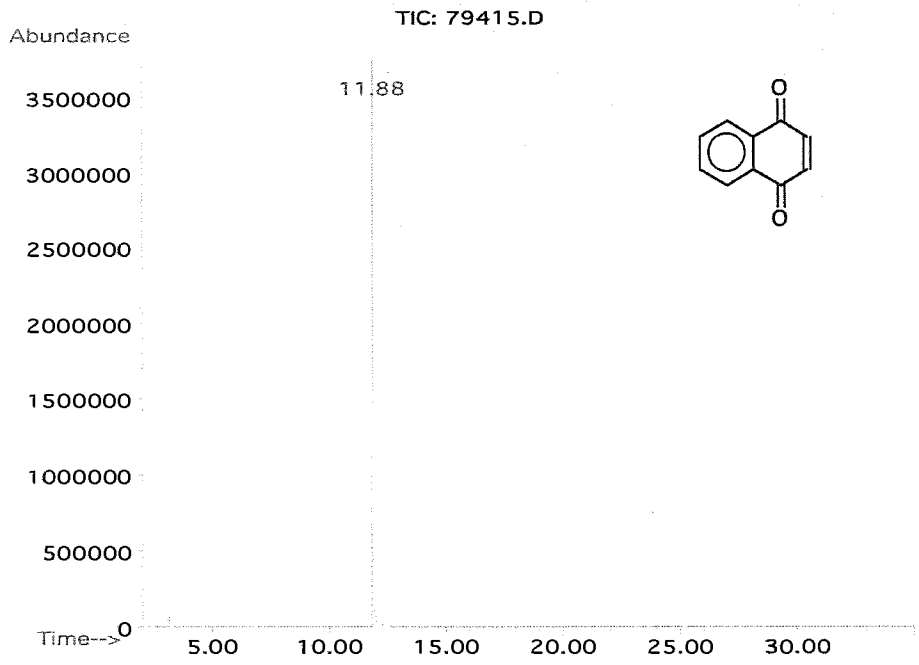
Solvent: Acetone **Lot#** 220128-BOO2554

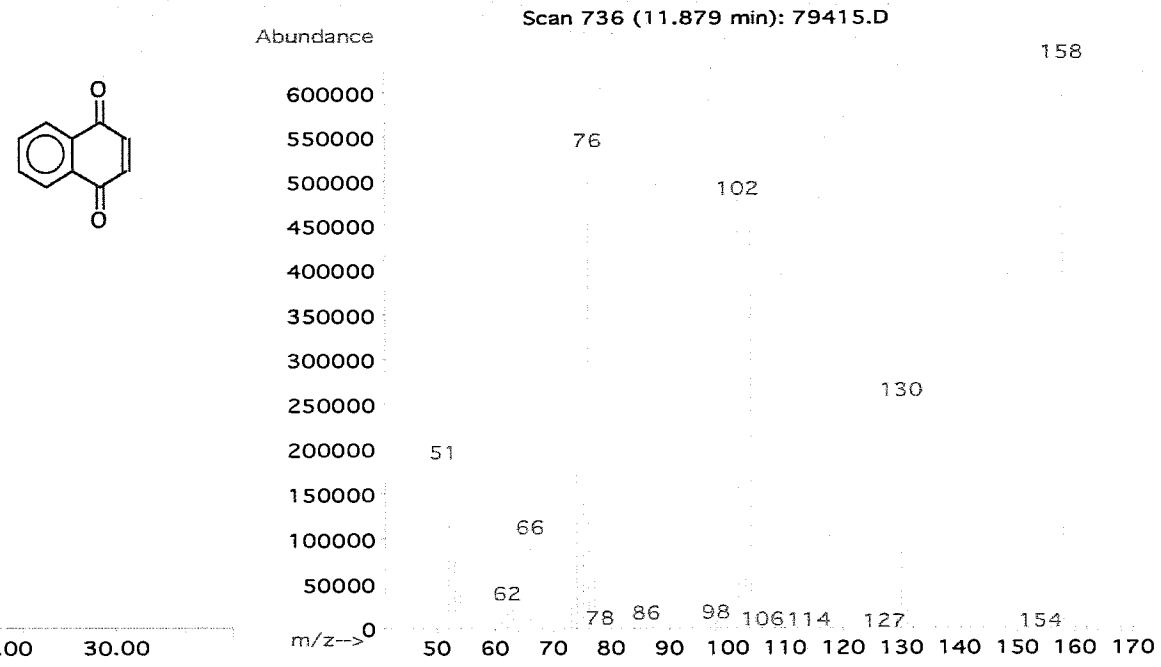
Prashant Chauhan		021423
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		021423
Reviewed By:	Pedro L. Rentas	DATE

Weight(s) shown below were combined and diluted to (mL): 200.1 ± 0.058 Flask Uncertainty; 5E-05 Balance Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Naphthoquinone	412	06711PT	1000	97	0.2	0.20625	0.20636	1000.5	4.2	130-15-4	N/A	orl-rat 190mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

OP_RES_APPX1_00009

OP-RES-APPX1-00009

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570667 **Lot No.:** A0188198

Description : 8270 Supplemental Standard #1

8270 Supplemental Standard #1 1,000µg/mL, Methylene chloride, 1mL/ampul
Also described as 8270 List 2 / Std #1

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	2-Picoline		1,002.0	µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 109-06-8	(Lot STBD4888V)			+/- 12.0397	µg/mL	Unstressed
	Purity 99%				+/- 19.1016	µg/mL	Stressed
2	N-Nitrosomethylethylamine		1,006.7	µg/mL	+/- 5.9793	µg/mL	Gravimetric
	CAS # 10595-95-6	(Lot 12688600)			+/- 12.0958	µg/mL	Unstressed
	Purity 99%				+/- 19.1906	µg/mL	Stressed
3	Acrylamide		1,008.7	µg/mL	+/- 5.9912	µg/mL	Gravimetric
	CAS # 79-06-1	(Lot 01402JA)			+/- 12.1198	µg/mL	Unstressed
	Purity 99%				+/- 19.2287	µg/mL	Stressed
4	N-Nitrosodiethylamine		1,008.0	µg/mL	+/- 5.9872	µg/mL	Gravimetric
	CAS # 55-18-5	(Lot UT2EJ)			+/- 12.1118	µg/mL	Unstressed
	Purity 99%				+/- 19.2160	µg/mL	Stressed
5	N-Nitrosopyrrolidine		1,010.0	µg/mL	+/- 5.9991	µg/mL	Gravimetric
	CAS # 930-55-2	(Lot 21-JPO-19-1)			+/- 12.1358	µg/mL	Unstressed
	Purity 99%				+/- 19.2541	µg/mL	Stressed
6	o-Toluidine		1,006.0	µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 95-53-4	(Lot 03417PZ)			+/- 12.0878	µg/mL	Unstressed
	Purity 99%				+/- 19.1779	µg/mL	Stressed
7	N-Nitrosomorpholine		1,007.3	µg/mL	+/- 5.9833	µg/mL	Gravimetric
	CAS # 59-89-2	(Lot GOJNI)			+/- 12.1038	µg/mL	Unstressed
	Purity 99%				+/- 19.2033	µg/mL	Stressed

8	N-Nitrosopiperidine		1,003.3	µg/mL	+/-	5.9595	µg/mL	Gravimetric
	CAS # 100-75-4	(Lot 12724500)			+/-	12.0557	µg/mL	Unstressed
	Purity 99%				+/-	19.1270	µg/mL	Stressed
9	Phentermine (a,a-Dimethylphenethylamine)		1,006.8	µg/mL	+/-	5.9800	µg/mL	Gravimetric
	CAS # 122-09-8	(Lot 220713RSR)			+/-	12.0972	µg/mL	Unstressed
	Purity 98%				+/-	19.1929	µg/mL	Stressed
10	Quinoline		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 91-22-5	(Lot UU6EC)			+/-	12.0397	µg/mL	Unstressed
	Purity 99%				+/-	19.1016	µg/mL	Stressed
11	N-Nitrosodi-n-butylamine		1,009.3	µg/mL	+/-	5.9951	µg/mL	Gravimetric
	CAS # 924-16-3	(Lot 7BSAG)			+/-	12.1278	µg/mL	Unstressed
	Purity 99%				+/-	19.2414	µg/mL	Stressed
12	1,4-Phenylenediamine		1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 106-50-3	(Lot 13110400)			+/-	12.0637	µg/mL	Unstressed
	Purity 99%				+/-	19.1397	µg/mL	Stressed
13	1,4-Dinitrobenzene		1,007.3	µg/mL	+/-	5.9833	µg/mL	Gravimetric
	CAS # 100-25-4	(Lot STBF8844V)			+/-	12.1038	µg/mL	Unstressed
	Purity 99%				+/-	19.2033	µg/mL	Stressed
14	1-Naphthylamine (1-aminonaphthalene)		1,008.7	µg/mL	+/-	5.9912	µg/mL	Gravimetric
	CAS # 134-32-7	(Lot R7NAN-IP)			+/-	12.1198	µg/mL	Unstressed
	Purity 99%				+/-	19.2287	µg/mL	Stressed
15	2-Naphthylamine (2-aminonaphthalene)		1,005.3	µg/mL	+/-	5.9714	µg/mL	Gravimetric
	CAS # 91-59-8	(Lot 811345)			+/-	12.0797	µg/mL	Unstressed
	Purity 99%				+/-	19.1651	µg/mL	Stressed
16	5-Nitro-o-toluidine		1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
	CAS # 99-55-8	(Lot H67GL)			+/-	12.0878	µg/mL	Unstressed
	Purity 99%				+/-	19.1779	µg/mL	Stressed
17	1,3,5-Trinitrobenzene		1,004.7	µg/mL	+/-	5.9674	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot A6TDK)			+/-	12.0717	µg/mL	Unstressed
	Purity 99%				+/-	19.1524	µg/mL	Stressed
18	Phenacetin		1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
	CAS # 62-44-2	(Lot 88F0225)			+/-	12.0878	µg/mL	Unstressed
	Purity 99%				+/-	19.1779	µg/mL	Stressed
19	4-Aminobiphenyl		1,001.3	µg/mL	+/-	5.9476	µg/mL	Gravimetric
	CAS # 92-67-1	(Lot SLBF0806V)			+/-	12.0317	µg/mL	Unstressed
	Purity 99%				+/-	19.0889	µg/mL	Stressed
20	Propyzamide		1,002.7	µg/mL	+/-	5.9555	µg/mL	Gravimetric
	CAS # 23950-58-5	(Lot 13291100)			+/-	12.0477	µg/mL	Unstressed
	Purity 99%				+/-	19.1143	µg/mL	Stressed
21	Pentachloronitrobenzene (quintozene)		1,003.6	µg/mL	+/-	5.9612	µg/mL	Gravimetric
	CAS # 82-68-8	(Lot 12599700)			+/-	12.0592	µg/mL	Unstressed
	Purity 97%				+/-	19.1326	µg/mL	Stressed
22	4-Nitroquinoline-N-oxide		1,002.9	µg/mL	+/-	5.9567	µg/mL	Gravimetric
	CAS # 56-57-5	(Lot WXBD5722V)			+/-	12.0501	µg/mL	Unstressed
	Purity 98%				+/-	19.1181	µg/mL	Stressed
23	p-Dimethylaminoazobenzene		1,005.5	µg/mL	+/-	5.9722	µg/mL	Gravimetric
	CAS # 60-11-7	(Lot BCBP8840V)			+/-	12.0815	µg/mL	Unstressed
	Purity 98%				+/-	19.1679	µg/mL	Stressed

24	3,3'-Dimethylbenzidine (o-tolidine)		1,010.0	µg/mL	+/- 5.9991	µg/mL	Gravimetric
	CAS # 119-93-7	(Lot ELVJM)			+/- 12.1358	µg/mL	Unstressed
	Purity 99%				+/- 19.2541	µg/mL	Stressed
25	2-Acetylaminofluorene		1,004.0	µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 53-96-3	(Lot WZDQE)			+/- 12.0637	µg/mL	Unstressed
	Purity 99%				+/- 19.1397	µg/mL	Stressed
26	4,4'-Methylene-bis(2-chloroaniline)		1,008.2	µg/mL	+/- 5.9881	µg/mL	Gravimetric
	CAS # 101-14-4	(Lot RP220422)			+/- 12.1136	µg/mL	Unstressed
	Purity 97%				+/- 19.2189	µg/mL	Stressed
27	Dibenz(a,h)acridine		1,006.7	µg/mL	+/- 5.9793	µg/mL	Gravimetric
	CAS # 226-36-8	(Lot 012016)			+/- 12.0958	µg/mL	Unstressed
	Purity 99%				+/- 19.1906	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

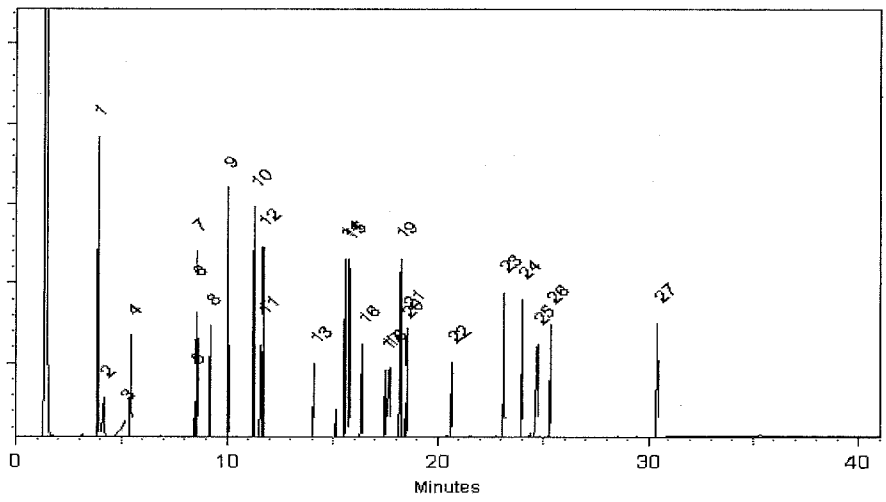
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 04-Aug-2022 **Balance:** 1128360905

Christie Mills - Operations Tech II - ARM QC

Date Passed: 19-Sep-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

OP_RES_APPX1_00010

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

OP - RES-APPX1 - 00010

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570667 **Lot No.:** A0194294

Description : 8270 Supplemental Standard #1

8270 Supplemental Standard #1 1,000µg/mL, Methylene chloride, 1mL/ampul
Also described as 8270 List 2 / Std #1

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2024 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L., K=2)
1	2-Picoline	109-06-8	STBJ3945	99%	1,010.0 µg/mL	+/- 18.7008
2	N-Nitrosomethylethylamine	10595-95-6	14026600	99%	1,010.0 µg/mL	+/- 18.7008
3	Acrylamide	79-06-1	01402JA	99%	1,010.0 µg/mL	+/- 18.7008
4	N-Nitrosodiethylamine	55-18-5	UT2EJ	99%	1,010.0 µg/mL	+/- 18.7008
5	N-Nitrosopyrrolidine	930-55-2	21-JPO-19-1	99%	1,008.7 µg/mL	+/- 18.6761
6	o-Toluidine	95-53-4	03417PZ	99%	1,008.7 µg/mL	+/- 18.6761
7	N-Nitrosomorpholine	59-89-2	GOJNI	99%	1,008.0 µg/mL	+/- 18.6638
8	N-Nitrosopiperidine	100-75-4	13638800	99%	1,008.7 µg/mL	+/- 18.6761
9	Phentermine (a,a-Dimethylphenethylamine)	122-09-8	S221011RSR	99%	1,009.3 µg/mL	+/- 18.6884
10	Quinoline	91-22-5	UU6EC	99%	1,009.3 µg/mL	+/- 18.6884
11	N-Nitrosodi-n-butylamine	924-16-3	7BSAG	99%	1,009.3 µg/mL	+/- 18.6884
12	1,4-Phenylenediamine	106-50-3	13950700	99%	1,010.0 µg/mL	+/- 18.7008
13	1,4-Dinitrobenzene	100-25-4	STBF8844V	99%	1,009.3 µg/mL	+/- 18.6884
14	1-Naphthylamine (1-aminonaphthalene)	134-32-7	R7NAN-IP	99%	1,005.3 µg/mL	+/- 18.6144
15	2-Naphthylamine (2-aminonaphthalene)	91-59-8	811345	99%	1,004.7 µg/mL	+/- 18.6020

16	5-Nitro-o-toluidine	99-55-8	H67GL	99%	1,009.3	µg/mL	+/- 18.6884
17	1,3,5-Trinitrobenzene	99-35-4	A6TDK	99%	1,008.7	µg/mL	+/- 18.6761
18	Phenacetin	62-44-2	88F0225	99%	1,010.0	µg/mL	+/- 18.7008
19	4-Aminobiphenyl	92-67-1	SLCD6545	99%	1,006.7	µg/mL	+/- 18.6391
20	Propyzamide	23950-58-5	13721600	99%	1,010.0	µg/mL	+/- 18.7008
21	Pentachloronitrobenzene (quintozene)	82-68-8	14011000	98%	1,008.7	µg/mL	+/- 18.6776
22	4-Nitroquinoline-N-oxide	56-57-5	WXBD7133V	99%	1,010.0	µg/mL	+/- 18.7008
23	p-Dimethylaminoazobenzene	60-11-7	BCBP8840V	98%	990.5	µg/mL	+/- 18.3389
24	3,3'-Dimethylbenzidine (o-tolidine)	119-93-7	ELVJM	99%	1,009.3	µg/mL	+/- 18.6884
25	2-Acetylaminofluorene	53-96-3	WZDQE	99%	1,007.3	µg/mL	+/- 18.6514
26	4,4'-Methylene-bis(2-chloroaniline)	101-14-4	RP230106	97%	1,009.4	µg/mL	+/- 18.6905
27	Dibenz(a,h)acridine	226-36-8	012016	99%	1,010.0	µg/mL	+/- 18.7008

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

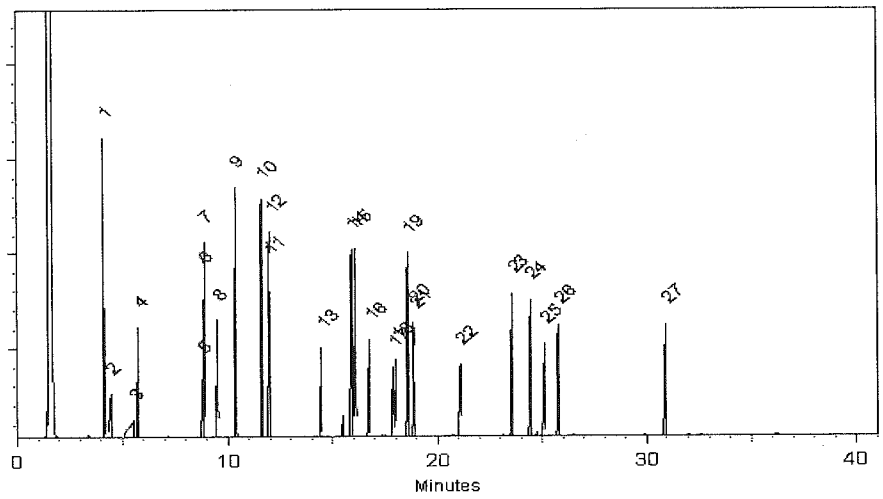
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko - Operations Tech I

Date Mixed: 03-Feb-2023 **Balance Serial #** 1128360905

Christie Mills - Operations Tech II - ARM QC

Date Passed: 15-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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OP-RES-APPX2-00011

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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569733 **Lot No.:** A0193498

Description : 8270 List 2 / Std #2 (2015)

8270 List 2 / Std #2 (2015) 1,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2024 **Storage:** -20°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl methanesulfonate	66-27-3	MKCM5645	99%	1,001.3 µg/mL	+/- 22.9875
2	Ethyl methanesulfonate	62-50-0	H6VUB	99%	1,002.7 µg/mL	+/- 23.0181
3	Pentachloroethane	76-01-7	13550700	97%	999.7 µg/mL	+/- 22.9511
4	Hexachloropropene	1888-71-7	44391/3	99%	1,007.3 µg/mL	+/- 23.1253
5	Isosafrole (cis & trans) 16% cis; 84% trans	120-58-1	MKBZ0058V	97%	1,001.7 µg/mL	+/- 22.9956
6	1-Chloronaphthalene	90-13-1	K2OBC	99%	1,000.0 µg/mL	+/- 22.9569
7	1,4-Naphthoquinone	130-15-4	13230700	99%	1,006.0 µg/mL	+/- 23.0947
8	Pentachlorobenzene	608-93-5	MKCD4132	99%	1,006.7 µg/mL	+/- 23.1100
9	2,3,5,6-Tetrachlorophenol	935-95-5	012016	99%	1,005.3 µg/mL	+/- 23.0794
10	Dinoseb	88-85-7	50001	99%	1,000.0 µg/mL	+/- 22.9569
11	Isodrin	465-73-6	13728400	98%	1,000.3 µg/mL	+/- 22.9627
12	Chlorobenzilate	510-15-6	13562500	97%	1,003.6 µg/mL	+/- 23.0402
13	7,12-Dimethylbenz(a)anthracene	57-97-6	QXLNC	99%	1,000.0 µg/mL	+/- 22.9569

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

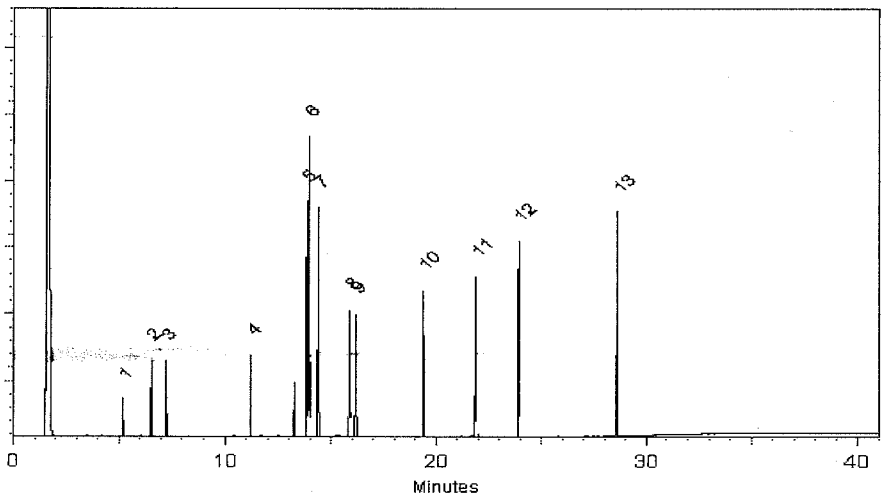
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
0.2µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Russ Bookhamer - Operations Technician I **Date Mixed:** 12-Jan-2023 **Balance Serial #** B442140311

Christie Mills - Operations Tech II - ARM QC **Date Passed:** 16-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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OP_RES-APX4-00008

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Certificate of Analysis

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567681 **Lot No.:** A0193163

Description : 8270 List 2 / Std #4

8270 List 2 / Std #4 1,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2025 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o,o,o-Triethyl phosphorothioate	126-68-1	2-KRR-57-1	98%	1,007.1 µg/mL	+/- 45.9677
2	Safrole	94-59-7	322225/11292	99%	1,001.7 µg/mL	+/- 45.7191
3	Zinophos (thionazine)	297-97-2	13866700	99%	1,009.3 µg/mL	+/- 46.0690
4	Sulfotepp	3689-24-5	13969000	96%	1,003.5 µg/mL	+/- 45.8037
5	Diallate (cis and trans) 74% cis-Diallate; 26% trans-Diallate	2303-16-4	13469800	98%	1,001.6 µg/mL	+/- 45.7142
6	Phorate	298-02-2	13939400	99%	1,000.0 µg/mL	+/- 45.6430
7	Dimethoate	60-51-5	13597200	99%	1,003.3 µg/mL	+/- 45.7952
8	Disulfoton	298-04-4	13839400	98%	1,002.9 µg/mL	+/- 45.7739
9	Methyl parathion	298-00-0	13855300	99%	1,008.3 µg/mL	+/- 46.0234
10	Parathion (Ethyl parathion)	56-38-2	13836200	99%	1,007.3 µg/mL	+/- 45.9778
11	Aramite 6% Isomer 1; 6% Isomer 2; 42% Isomer 3; 46% Isomer 4	140-57-8	13721500	76%	1,004.5 µg/mL	+/- 45.8469
12	Famphur	52-85-7	13419800	98%	1,007.4 µg/mL	+/- 45.9826

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

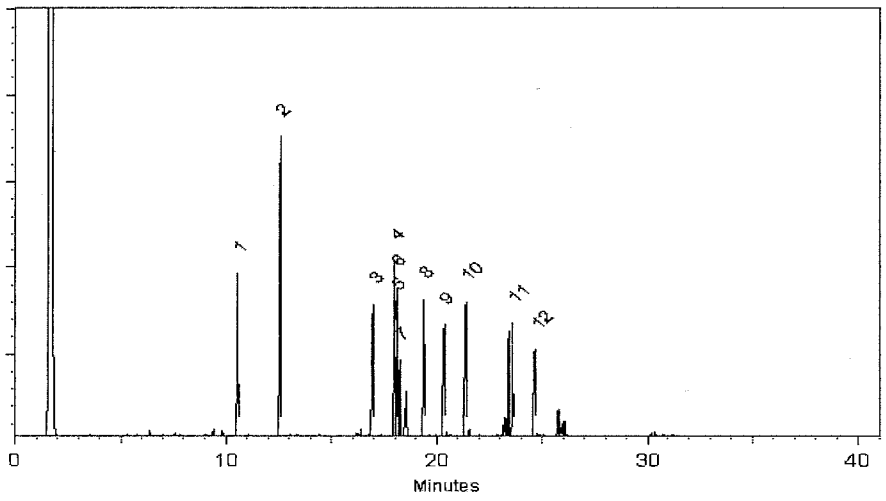
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 03-Jan-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 06-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

OP_RES_APPX5_00010

OP-RES-APPX5_00010

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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567682 **Lot No.:** A0193415

Description : 8270 List 2 / Std #5 Methapyrilene

8270 List 2 / Std #5 Methapyrilene 2,000µg/mL, Methylene chloride, 1mL/ampul
*The reported compound masses are for Methapyrilene HCl. Purity is adjusted to correct for the HCl salt. The reported concentration is of Methapyrilene.

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2025 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L., K=2)
1	Methapyrilene hydrochloride	135-23-9	3-JLW-10-1	87%	2,007.4 µg/mL	+/- 37.1224

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:
*The reported compound masses are for Methapyrilene HCl. Purity is adjusted to correct for the HCl salt. The reported concentration is of Methapyrilene, CAS # 91-80-5

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

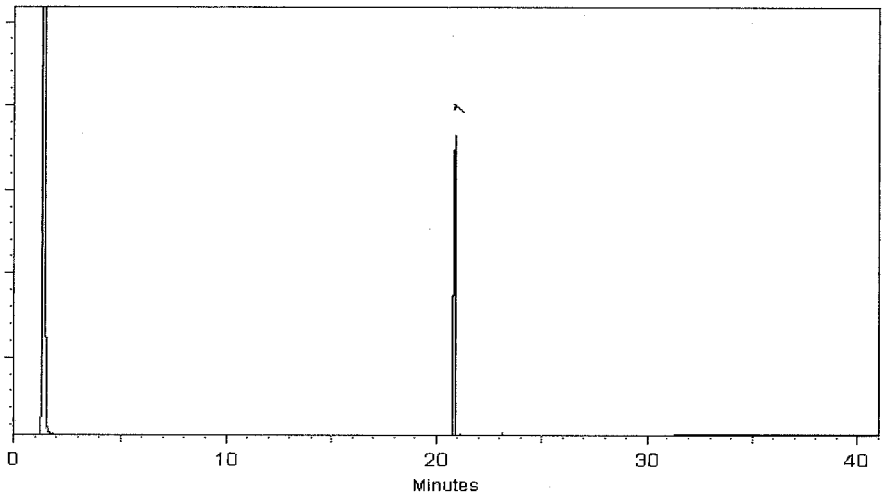
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 10-Jan-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 12-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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OP-RES-APPX6-00004
STM33426B

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568727 **Lot No.:** A0175669

Description : 8270 List 2/ Std #8 Dibenz(a,j)acridine

8270 List 2/ Std #8 Dibenz(a,j)acridine 2,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibenz(a,j)acridine	2,011.8 µg/mL	+/- 11.8063	µg/mL	Gravimetric
	CAS # 224-42-0 (Lot 0012019)		+/- 90.6260	µg/mL	Unstressed
	Purity 97%		+/- 100.5578	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

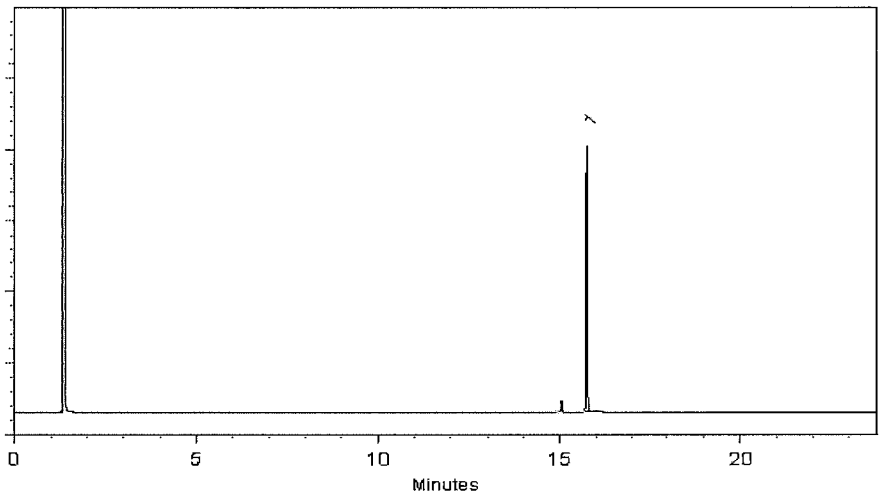
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 23-Aug-2021 **Balance:** 1128360905

Marlina Cowan - Operations Tech I

Date Passed: 25-Aug-2021

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

OP_RES_APPX6_00005

OP-RES-APPX6-00005

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568727 **Lot No.:** A0184892

Description : 8270 List 2/ Std #8 Dibenz(a,j)acridine

8270 List 2/ Std #8 Dibenz(a,j)acridine 2,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2025 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibenz(a,j)acridine	2,015.9 µg/mL	+/- 11.8302	µg/mL	Gravimetric
	CAS # 224-42-0 (Lot 0012019)		+/- 90.8098	µg/mL	Unstressed
	Purity 98%		+/- 100.7617	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

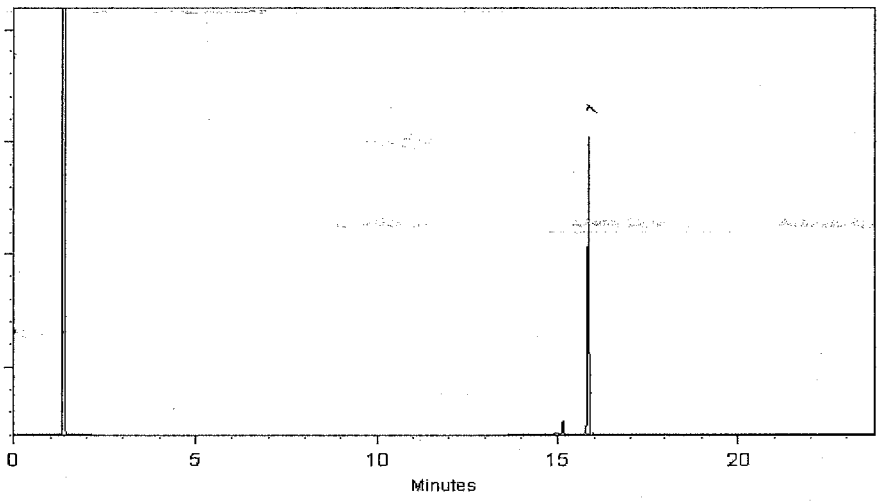
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Nick Yaw - Operations Tech I

Date Mixed: 04-May-2022 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

OP_RES_APPX6_00006

OP-RES-APPX6-00006

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568727 **Lot No.:** A0195365

Description : 8270 List 2/ Std #8 Dibenz(a,j)acridine

8270 List 2/ Std #8 Dibenz(a,j)acridine 2,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2026 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L., K=2)
1	Dibenz(a,j)acridine	224-42-0	0012011	97%	2,018.6 µg/mL	+/- 90.9319

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

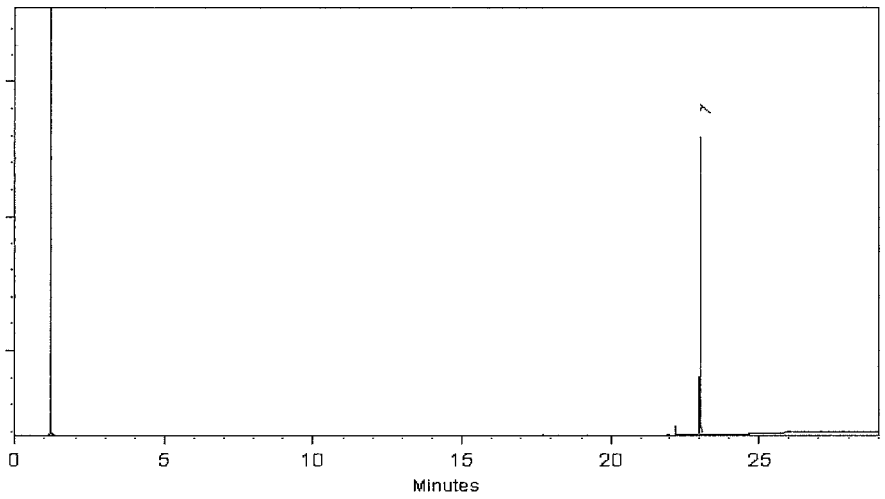
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
0.2µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 02-Mar-2023 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

OP_RES_LCS1_00011

OP-RES-LC51-00011

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571995 **Lot No.:** A0190414

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2000 µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2024 **Storage:** 0°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.I., k=2)		
1	1,4-Dioxane		1,003.3	µg/mL	+/- 5.8469	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBN3770)			+/- 12.0005	µg/mL	Unstressed
	Purity 99%				+/- 19.0922	µg/mL	Stressed
2	N-Nitrosodimethylamine		1,006.7	µg/mL	+/- 5.8664	µg/mL	Gravimetric
	CAS # 62-75-9	(Lot 220624JLM)			+/- 12.0403	µg/mL	Unstressed
	Purity 99%				+/- 19.1557	µg/mL	Stressed
3	Pyridine		2,011.7	µg/mL	+/- 11.6960	µg/mL	Gravimetric
	CAS # 110-86-1	(Lot SHBN7324)			+/- 24.0476	µg/mL	Unstressed
	Purity 99%				+/- 38.2714	µg/mL	Stressed
4	Phenol		1,006.3	µg/mL	+/- 5.8644	µg/mL	Gravimetric
	CAS # 108-95-2	(Lot MKCK1120)			+/- 12.0364	µg/mL	Unstressed
	Purity 99%				+/- 19.1493	µg/mL	Stressed
5	Aniline		1,004.7	µg/mL	+/- 5.8547	µg/mL	Gravimetric
	CAS # 62-53-3	(Lot X22F726)			+/- 12.0164	µg/mL	Unstressed
	Purity 99%				+/- 19.1176	µg/mL	Stressed
6	Bis(2-chloroethyl)ether		1,004.0	µg/mL	+/- 5.8508	µg/mL	Gravimetric
	CAS # 111-44-4	(Lot SHBL6942)			+/- 12.0084	µg/mL	Unstressed
	Purity 99%				+/- 19.1049	µg/mL	Stressed
7	n-Decane (C10)		1,007.2	µg/mL	+/- 5.8693	µg/mL	Gravimetric
	CAS # 124-18-5	(Lot SHBN8619)			+/- 12.0463	µg/mL	Unstressed
	Purity 99%				+/- 19.1652	µg/mL	Stressed

8	2-Chlorophenol		1,005.3	µg/mL	+/-	5.8586	µg/mL	Gravimetric
	CAS # 95-57-8	(Lot STBH7290)			+/-	12.0244	µg/mL	Unstressed
	Purity 99%				+/-	19.1303	µg/mL	Stressed
9	1,3-Dichlorobenzene		1,003.0	µg/mL	+/-	5.8450	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCCD5315)			+/-	11.9965	µg/mL	Unstressed
	Purity 99%				+/-	19.0859	µg/mL	Stressed
10	1,4-Dichlorobenzene		1,005.3	µg/mL	+/-	5.8586	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	12.0244	µg/mL	Unstressed
	Purity 99%				+/-	19.1303	µg/mL	Stressed
11	Benzyl alcohol		1,003.3	µg/mL	+/-	5.8469	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBK5943)			+/-	12.0005	µg/mL	Unstressed
	Purity 99%				+/-	19.0922	µg/mL	Stressed
12	1,2-Dichlorobenzene		1,005.3	µg/mL	+/-	5.8586	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBN3835)			+/-	12.0244	µg/mL	Unstressed
	Purity 99%				+/-	19.1303	µg/mL	Stressed
13	2-Methylphenol (o-cresol)		1,005.2	µg/mL	+/-	5.8576	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBN7598)			+/-	12.0224	µg/mL	Unstressed
	Purity 99%				+/-	19.1271	µg/mL	Stressed
14	2,2'-oxybis(1-chloropropane)		1,006.7	µg/mL	+/-	5.8664	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 12549200)			+/-	12.0403	µg/mL	Unstressed
	Purity 99%				+/-	19.1557	µg/mL	Stressed
15	Acetophenone		1,005.0	µg/mL	+/-	5.8567	µg/mL	Gravimetric
	CAS # 98-86-2	(Lot STBH8205)			+/-	12.0204	µg/mL	Unstressed
	Purity 99%				+/-	19.1240	µg/mL	Stressed
16	3-Methylphenol (m-cresol)		503.7	µg/mL	+/-	2.9351	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot STBJ0710)			+/-	6.0242	µg/mL	Unstressed
	Purity 99%				+/-	9.5842	µg/mL	Stressed
17	4-Methylphenol (p-cresol)		503.0	µg/mL	+/-	2.9312	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot SHBN1151)			+/-	6.0162	µg/mL	Unstressed
	Purity 99%				+/-	9.5715	µg/mL	Stressed
18	N-Nitroso-di-n-propylamine		1,002.7	µg/mL	+/-	5.8431	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot 2D5VJ)			+/-	11.9925	µg/mL	Unstressed
	Purity 99%				+/-	19.0796	µg/mL	Stressed
19	Hexachloroethane		1,003.3	µg/mL	+/-	5.8469	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot QTORH)			+/-	12.0005	µg/mL	Unstressed
	Purity 99%				+/-	19.0922	µg/mL	Stressed
20	Nitrobenzene		1,005.8	µg/mL	+/-	5.8615	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot 10224044)			+/-	12.0304	µg/mL	Unstressed
	Purity 99%				+/-	19.1398	µg/mL	Stressed
21	Isophorone		1,004.3	µg/mL	+/-	5.8528	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKCC9506)			+/-	12.0124	µg/mL	Unstressed
	Purity 99%				+/-	19.1113	µg/mL	Stressed
22	2-Nitrophenol		1,003.2	µg/mL	+/-	5.8460	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCCB2407)			+/-	11.9985	µg/mL	Unstressed
	Purity 99%				+/-	19.0891	µg/mL	Stressed
23	2,4-Dimethylphenol		1,002.8	µg/mL	+/-	5.8440	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot XW5GK)			+/-	11.9945	µg/mL	Unstressed
	Purity 99%				+/-	19.0827	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,007.5	µg/mL	+/-	5.8712	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 13670200)			+/-	12.0503	µg/mL	Unstressed
	Purity 99%				+/-	19.1715	µg/mL	Stressed
25	2,4-Dichlorophenol		1,002.2	µg/mL	+/-	5.8401	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBZ6787)			+/-	11.9865	µg/mL	Unstressed
	Purity 99%				+/-	19.0700	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,003.7	µg/mL	+/-	5.8489	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBM0526)			+/-	12.0045	µg/mL	Unstressed
	Purity 99%				+/-	19.0986	µg/mL	Stressed
27	Naphthalene		1,003.3	µg/mL	+/-	5.8469	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKCH0219)			+/-	12.0005	µg/mL	Unstressed
	Purity 99%				+/-	19.0922	µg/mL	Stressed
28	2,6-Dichlorophenol		1,007.7	µg/mL	+/-	5.8722	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKCP7682)			+/-	12.0523	µg/mL	Unstressed
	Purity 99%				+/-	19.1747	µg/mL	Stressed
29	4-Chloroaniline		1,007.7	µg/mL	+/-	5.8722	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot H24K)			+/-	12.0523	µg/mL	Unstressed
	Purity 99%				+/-	19.1747	µg/mL	Stressed
30	Hexachlorobutadiene		1,004.0	µg/mL	+/-	5.8508	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot X05J)			+/-	12.0084	µg/mL	Unstressed
	Purity 99%				+/-	19.1049	µg/mL	Stressed
31	4-Chloro-3-methylphenol		1,002.3	µg/mL	+/-	5.8411	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot BCCD4461)			+/-	11.9885	µg/mL	Unstressed
	Purity 99%				+/-	19.0732	µg/mL	Stressed
32	2-Methylnaphthalene		1,009.1	µg/mL	+/-	5.8807	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBK0259)			+/-	12.0697	µg/mL	Unstressed
	Purity 96%				+/-	19.2024	µg/mL	Stressed
33	1-Methylnaphthalene		1,004.2	µg/mL	+/-	5.8518	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 5234.00-3)			+/-	12.0104	µg/mL	Unstressed
	Purity 99%				+/-	19.1081	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,007.3	µg/mL	+/-	5.8703	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 13278000)			+/-	12.0483	µg/mL	Unstressed
	Purity 99%				+/-	19.1684	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,003.3	µg/mL	+/-	5.8469	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012019)			+/-	12.0005	µg/mL	Unstressed
	Purity 99%				+/-	19.0922	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,004.7	µg/mL	+/-	5.8547	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot STBJ5914)			+/-	12.0164	µg/mL	Unstressed
	Purity 99%				+/-	19.1176	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,006.8	µg/mL	+/-	5.8671	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHN01)			+/-	12.0418	µg/mL	Unstressed
	Purity 98%				+/-	19.1580	µg/mL	Stressed
38	2-Chloronaphthalene		1,007.0	µg/mL	+/-	5.8683	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot RPN7O)			+/-	12.0443	µg/mL	Unstressed
	Purity 99%				+/-	19.1620	µg/mL	Stressed
39	Biphenyl		1,003.7	µg/mL	+/-	5.8489	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot MKCL6515)			+/-	12.0045	µg/mL	Unstressed
	Purity 99%				+/-	19.0986	µg/mL	Stressed

40	2-Nitroaniline		1,003.7 µg/mL	+/- 5.8489	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKCJ8895)		+/- 12.0045	µg/mL	Unstressed
	Purity 99%			+/- 19.0986	µg/mL	Stressed
41	Acenaphthylene		1,004.2 µg/mL	+/- 5.8518	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot Q24W)		+/- 12.0104	µg/mL	Unstressed
	Purity 96%			+/- 19.1080	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,002.7 µg/mL	+/- 5.8431	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot 1-DXX-24-1)		+/- 11.9925	µg/mL	Unstressed
	Purity 99%			+/- 19.0796	µg/mL	Stressed
43	Dimethylphthalate		1,008.0 µg/mL	+/- 5.8741	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)		+/- 12.0563	µg/mL	Unstressed
	Purity 99%			+/- 19.1811	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,005.3 µg/mL	+/- 5.8586	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCCG1833)		+/- 12.0244	µg/mL	Unstressed
	Purity 99%			+/- 19.1303	µg/mL	Stressed
45	3-Nitroaniline		1,008.7 µg/mL	+/- 5.8780	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKCH5457)		+/- 12.0643	µg/mL	Unstressed
	Purity 99%			+/- 19.1937	µg/mL	Stressed
46	Acenaphthene		1,000.0 µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKCQ4733)		+/- 11.9606	µg/mL	Unstressed
	Purity 99%			+/- 19.0288	µg/mL	Stressed
47	2,4-Dinitrophenol		2,016.3 µg/mL	+/- 11.7231	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBK5145-DR3)		+/- 24.1034	µg/mL	Unstressed
	Purity 99%			+/- 38.3602	µg/mL	Stressed
48	Dibenzofuran		1,002.0 µg/mL	+/- 5.8392	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKCN1772)		+/- 11.9845	µg/mL	Unstressed
	Purity 99%			+/- 19.0669	µg/mL	Stressed
49	4-Nitrophenol		2,007.5 µg/mL	+/- 11.6718	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKCN1089)		+/- 23.9978	µg/mL	Unstressed
	Purity 99%			+/- 38.1921	µg/mL	Stressed
50	2,4-Dinitrotoluene		1,003.8 µg/mL	+/- 5.8499	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 12.0065	µg/mL	Unstressed
	Purity 99%			+/- 19.1018	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,002.7 µg/mL	+/- 5.8431	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot PR-30126)		+/- 11.9925	µg/mL	Unstressed
	Purity 99%			+/- 19.0796	µg/mL	Stressed
52	Fluorene		1,006.8 µg/mL	+/- 5.8673	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 094650L18G)		+/- 12.0423	µg/mL	Unstressed
	Purity 99%			+/- 19.1588	µg/mL	Stressed
53	n-Hexadecane (C16)		1,004.8 µg/mL	+/- 5.8556	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBM4146)		+/- 12.0183	µg/mL	Unstressed
	Purity 98%			+/- 19.1207	µg/mL	Stressed
54	Diethylphthalate		1,008.2 µg/mL	+/- 5.8751	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot BCCD3396)		+/- 12.0583	µg/mL	Unstressed
	Purity 99%			+/- 19.1842	µg/mL	Stressed
55	4-Chlorophenyl phenyl ether		1,005.2 µg/mL	+/- 5.8576	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKCQ0984)		+/- 12.0224	µg/mL	Unstressed
	Purity 99%			+/- 19.1271	µg/mL	Stressed

56	4-Nitroaniline		1,005.5	µg/mL	+/-	5.8596	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot RP220906)			+/-	12.0264	µg/mL	Unstressed
	Purity 99%				+/-	19.1335	µg/mL	Stressed
57	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,012.0	µg/mL	+/-	11.6979	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot RP220915)			+/-	24.0516	µg/mL	Unstressed
	Purity 99%				+/-	38.2777	µg/mL	Stressed
58	Diphenylamine		853.5	µg/mL	+/-	4.9738	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKCH1042)			+/-	10.2084	µg/mL	Unstressed
	Purity 99%				+/-	16.2411	µg/mL	Stressed
59	Azobenzene		1,001.8	µg/mL	+/-	5.8382	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot BCCC9136)			+/-	11.9825	µg/mL	Unstressed
	Purity 99%				+/-	19.0637	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,007.2	µg/mL	+/-	5.8693	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBH6361)			+/-	12.0463	µg/mL	Unstressed
	Purity 99%				+/-	19.1652	µg/mL	Stressed
61	Hexachlorobenzene		1,006.0	µg/mL	+/-	5.8625	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot 13562400)			+/-	12.0324	µg/mL	Unstressed
	Purity 99%				+/-	19.1430	µg/mL	Stressed
62	Pentachlorophenol		2,016.7	µg/mL	+/-	11.7251	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 211229RSR)			+/-	24.1074	µg/mL	Unstressed
	Purity 99%				+/-	38.3665	µg/mL	Stressed
63	n-Octadecane (C18)		1,007.4	µg/mL	+/-	5.8709	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot UE5NG)			+/-	12.0496	µg/mL	Unstressed
	Purity 98%				+/-	19.1704	µg/mL	Stressed
64	Phenanthrene		1,002.0	µg/mL	+/-	5.8392	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKCQ2033)			+/-	11.9845	µg/mL	Unstressed
	Purity 99%				+/-	19.0669	µg/mL	Stressed
65	Anthracene		1,004.2	µg/mL	+/-	5.8518	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKCP3968)			+/-	12.0104	µg/mL	Unstressed
	Purity 99%				+/-	19.1081	µg/mL	Stressed
66	Carbazole		1,002.8	µg/mL	+/-	5.8440	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 13058900)			+/-	11.9945	µg/mL	Unstressed
	Purity 99%				+/-	19.0827	µg/mL	Stressed
67	Di-n-butylphthalate		1,001.2	µg/mL	+/-	5.8343	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKCN4337)			+/-	11.9746	µg/mL	Unstressed
	Purity 99%				+/-	19.0510	µg/mL	Stressed
68	Fluoranthene		1,005.8	µg/mL	+/-	5.8615	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKCQ4728)			+/-	12.0304	µg/mL	Unstressed
	Purity 99%				+/-	19.1398	µg/mL	Stressed
69	Pyrene		1,006.7	µg/mL	+/-	5.8664	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCCG7845)			+/-	12.0403	µg/mL	Unstressed
	Purity 99%				+/-	19.1557	µg/mL	Stressed
70	Benzyl butyl phthalate		1,008.5	µg/mL	+/-	5.8771	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot MKCN9008)			+/-	12.0623	µg/mL	Unstressed
	Purity 99%				+/-	19.1906	µg/mL	Stressed
71	Benz(a)anthracene		1,001.9	µg/mL	+/-	5.8387	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot RP220209)			+/-	11.9836	µg/mL	Unstressed
	Purity 96%				+/-	19.0654	µg/mL	Stressed

72	Chrysene		1,007.0	µg/mL	+/-	5.8683	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot 468677L08C)			+/-	12.0443	µg/mL	Unstressed
	Purity 99%				+/-	19.1620	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,004.7	µg/mL	+/-	5.8547	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKCQ3468)			+/-	12.0164	µg/mL	Unstressed
	Purity 99%				+/-	19.1176	µg/mL	Stressed
74	Di-n-octyl phthalate		1,006.5	µg/mL	+/-	5.8654	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 13651900)			+/-	12.0383	µg/mL	Unstressed
	Purity 99%				+/-	19.1525	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,001.3	µg/mL	+/-	5.8353	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot 012022B)			+/-	11.9765	µg/mL	Unstressed
	Purity 99%				+/-	19.0542	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,005.7	µg/mL	+/-	5.8605	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012022K)			+/-	12.0284	µg/mL	Unstressed
	Purity 99%				+/-	19.1367	µg/mL	Stressed
77	Benzo(a)pyrene		1,004.7	µg/mL	+/-	5.8547	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot Z8BKF)			+/-	12.0164	µg/mL	Unstressed
	Purity 99%				+/-	19.1176	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,002.5	µg/mL	+/-	5.8421	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot 8-URV-39-3)			+/-	11.9905	µg/mL	Unstressed
	Purity 99%				+/-	19.0764	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,007.3	µg/mL	+/-	5.8703	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	12.0483	µg/mL	Unstressed
	Purity 99%				+/-	19.1684	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,003.4	µg/mL	+/-	5.8471	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot PMEVE)			+/-	12.0008	µg/mL	Unstressed
	Purity 98%				+/-	19.0927	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 1000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 855 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.
This lot was approved even though the %D for 4,6-DN-2-MP was greater than 10%.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

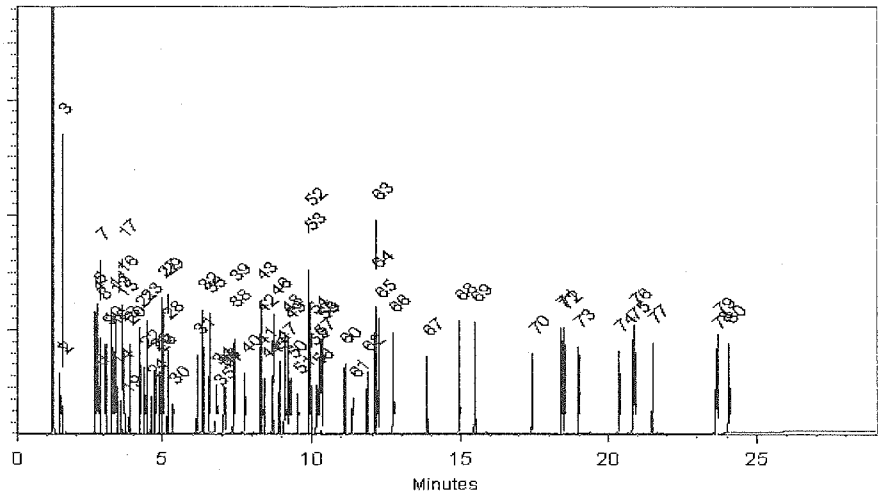
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician **Date Mixed:** 10-Oct-2022 **Balance:** B442140311

Marlina Cowan -- Operations Tech II ARM QC **Date Passed:** 17-Oct-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

OP_RES_LCS1_00013

OP-RESLCS1-00013

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571995 **Lot No.:** A0195772

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2,000 µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2024 **Storage:** 0°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L., K=2)
1	1,4-Dioxane	123-91-1	SHBN3770	99%	1,005.4 µg/mL	+/- 18.5755
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,005.2 µg/mL	+/- 18.5718
3	Pyridine	110-86-1	SHBN7324	99%	2,010.1 µg/mL	+/- 37.1374
4	Phenol	108-95-2	MKCK1120	99%	1,005.1 µg/mL	+/- 18.5706
5	Aniline	62-53-3	X22F726	99%	1,005.2 µg/mL	+/- 18.5718
6	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,005.0 µg/mL	+/- 18.5681
7	n-Decane (C10)	124-18-5	SHBN8619	99%	1,004.9 µg/mL	+/- 18.5669
8	2-Chlorophenol	95-57-8	STBJ3909	99%	1,005.1 µg/mL	+/- 18.5706
9	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,004.9 µg/mL	+/- 18.5669
10	1,4-Dichlorobenzene	106-46-7	MKBS4401V	99%	1,005.1 µg/mL	+/- 18.5706
11	Benzyl alcohol	100-51-6	SHBK5943	99%	1,004.9 µg/mL	+/- 18.5669
12	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,005.1 µg/mL	+/- 18.5706
13	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,005.3 µg/mL	+/- 18.5743
14	2,2'-oxybis(1-chloropropane)	108-60-1	2-KMW-57-8	99%	1,005.3 µg/mL	+/- 18.5730
15	Acetophenone	98-86-2	STBH8205	99%	1,005.4 µg/mL	+/- 18.5755
16	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.3 µg/mL	+/- 9.2831

17	4-Methylphenol (p-cresol)	106-44-5	SHBN1151	99%	502.7	µg/mL	+/- 9.2893
18	N-Nitroso-di-n-propylamine	621-64-7	2D5VJ	99%	1,005.1	µg/mL	+/- 18.5706
19	Hexachloroethane	67-72-1	QTORH	99%	1,004.9	µg/mL	+/- 18.5656
20	Nitrobenzene	98-95-3	10224044	99%	1,004.9	µg/mL	+/- 18.5656
21	Isophorone	78-59-1	MKCC9506	99%	1,005.1	µg/mL	+/- 18.5706
22	2-Nitrophenol	88-75-5	BCCB2407	99%	1,004.9	µg/mL	+/- 18.5669
23	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,005.2	µg/mL	+/- 18.5718
24	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,004.9	µg/mL	+/- 18.5669
25	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,005.4	µg/mL	+/- 18.5755
26	1,2,4-Trichlorobenzene	120-82-1	SHBM0526	99%	1,005.2	µg/mL	+/- 18.5718
27	Naphthalene	91-20-3	MKCH0219	99%	1,004.7	µg/mL	+/- 18.5619
28	2,6-Dichlorophenol	87-65-0	MKCP7682	99%	1,005.0	µg/mL	+/- 18.5681
29	4-Chloroaniline	106-47-8	H24K	99%	1,004.9	µg/mL	+/- 18.5669
30	Hexachlorobutadiene	87-68-3	664800	99%	1,004.9	µg/mL	+/- 18.5669
31	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.9	µg/mL	+/- 18.5656
32	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,005.0	µg/mL	+/- 18.5680
33	1-Methylnaphthalene	90-12-0	5234.00-3	99%	1,005.1	µg/mL	+/- 18.5706
34	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCS1444	99%	1,005.2	µg/mL	+/- 18.5718
35	Hexachlorocyclopentadiene	77-47-4	0012019	99%	1,005.2	µg/mL	+/- 18.5718
36	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.9	µg/mL	+/- 18.5656
37	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,005.1	µg/mL	+/- 18.5697
38	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,004.9	µg/mL	+/- 18.5669
39	Biphenyl	92-52-4	MKCJ6240	99%	1,005.3	µg/mL	+/- 18.5743
40	2-Nitroaniline	88-74-4	MKCK7278	99%	1,005.0	µg/mL	+/- 18.5681
41	Acenaphthylene	208-96-8	U25W	96%	1,005.0	µg/mL	+/- 18.5680
42	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,005.3	µg/mL	+/- 18.5743
43	Dimethylphthalate	131-11-3	10117699	99%	1,005.1	µg/mL	+/- 18.5706
44	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,005.0	µg/mL	+/- 18.5681
45	3-Nitroaniline	99-09-2	MKCH5457	99%	1,005.1	µg/mL	+/- 18.5706
46	Acenaphthene	83-32-9	MKCR7169	99%	1,004.7	µg/mL	+/- 18.5619
47	2,4-Dinitrophenol	51-28-5	DR221221RSR	99%	2,010.0	µg/mL	+/- 37.1362
48	Dibenzofuran	132-64-9	MKCN1772	99%	1,005.3	µg/mL	+/- 18.5743
49	4-Nitrophenol	100-02-7	MKCN1089	99%	2,009.8	µg/mL	+/- 37.1325
50	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,005.2	µg/mL	+/- 18.5718
51	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,004.8	µg/mL	+/- 18.5644
52	Fluorene	86-73-7	10217947	99%	1,005.3	µg/mL	+/- 18.5743

53	n-Hexadecane (C16)	544-76-3	SHBQ0897	99%	1,004.9	µg/mL	+/- 18.5669
54	Diethylphthalate	84-66-2	BCCD3396	99%	1,005.2	µg/mL	+/- 18.5718
55	4-Chlorophenyl phenyl ether	7005-72-3	MKCQ0984	99%	1,005.1	µg/mL	+/- 18.5693
56	4-Nitroaniline	100-01-6	RP230111	99%	1,005.0	µg/mL	+/- 18.5681
57	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	221221JIM	99%	2,010.3	µg/mL	+/- 37.1411
58	Diphenylamine	122-39-4	MKCH1042	99%	854.3	µg/mL	+/- 15.7844
59	Azobenzene	103-33-3	BCCC9136	99%	1,004.9	µg/mL	+/- 18.5656
60	4-Bromophenyl phenyl ether	101-55-3	STBB9729V	99%	1,004.8	µg/mL	+/- 18.5644
61	Hexachlorobenzene	118-74-1	13994200	99%	1,004.9	µg/mL	+/- 18.5669
62	Pentachlorophenol	87-86-5	RP221012	99%	2,010.1	µg/mL	+/- 37.1374
63	n-Octadecane (C18)	593-45-3	UE5NG	98%	1,005.0	µg/mL	+/- 18.5685
64	Phenanthrene	85-01-8	MKCQ2033	99%	1,004.9	µg/mL	+/- 18.5669
65	Anthracene	120-12-7	MKCP3968	99%	1,005.4	µg/mL	+/- 18.5755
66	Carbazole	86-74-8	13058900	99%	1,005.1	µg/mL	+/- 18.5693
67	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,005.3	µg/mL	+/- 18.5730
68	Fluoranthene	206-44-0	MKCQ4728	99%	1,005.1	µg/mL	+/- 18.5693
69	Pyrene	129-00-0	BCCG7845	99%	1,005.1	µg/mL	+/- 18.5706
70	Benzyl butyl phthalate	85-68-7	MKCN9008	99%	1,005.1	µg/mL	+/- 18.5693
71	Benz(a)anthracene	56-55-3	0012022BAA	99%	1,005.1	µg/mL	+/- 18.5706
72	Chrysene	218-01-9	468677R25M	99%	1,004.9	µg/mL	+/- 18.5669
73	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,005.0	µg/mL	+/- 18.5681
74	Di-n-octyl phthalate	117-84-0	13651900	99%	1,005.3	µg/mL	+/- 18.5743
75	Benzo(b)fluoranthene	205-99-2	012022B	99%	1,004.9	µg/mL	+/- 18.5669
76	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,005.1	µg/mL	+/- 18.5693
77	Benzo(a)pyrene	50-32-8	J6IUE	99%	1,005.1	µg/mL	+/- 18.5706
78	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	99%	1,005.3	µg/mL	+/- 18.5730
79	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	1,005.1	µg/mL	+/- 18.5706
80	Benzo(g,h,i)perylene	191-24-2	PMEVE	98%	1,005.2	µg/mL	+/- 18.5721

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 1000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 855 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.
This lot was approved even though the %D for 4,6-DN-2-MP was greater than 10%.

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

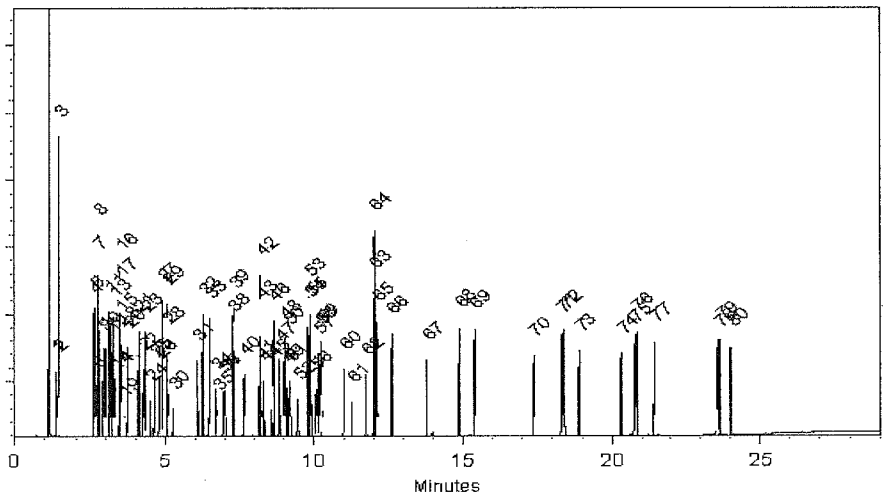
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Nick Yaw - Operations Tech I

Date Mixed: 10-Mar-2023 **Balance Serial #** B442140311

Christie Mills - Operations Tech II - ARM QC

Date Passed: 05-Apr-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

OP_RES_LCS2_00009

OR-RBS-LCS2-00009

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569730 **Lot No.:** A0188589

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2000 µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : February 29, 2024 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Benzidine **CAS #** 92-87-5 (Lot 220511RSR) **Purity** 99%	2,002.5 µg/mL	+/- 11.6427 µg/mL +/- 23.9380 µg/mL +/- 38.0970 µg/mL	Gravimetric Unstressed Stressed
2	3,3'-Dichlorobenzidine **CAS #** 91-94-1 (Lot 220223RSR) **Purity** 99%	2,002.9 µg/mL	+/- 11.6449 µg/mL +/- 23.9425 µg/mL +/- 38.1041 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

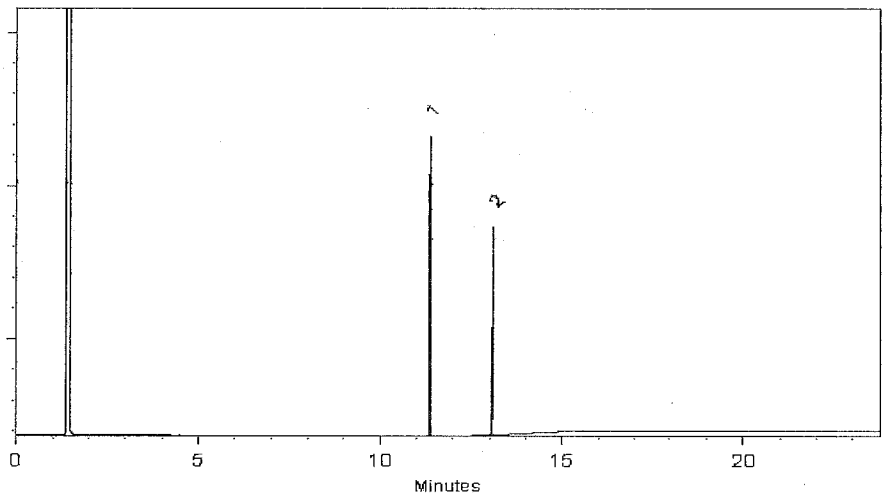
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis - Mix Technician

Date Mixed: 16-Aug-2022 **Balance:** B442140311

Christie Mills - Operations Tech II - ARM QC

Date Passed: 23-Aug-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

OP_RES_LCSadd_00003

OP-RES-LCSadd-00003

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 576938 **Lot No.:** A0194427

Description : Custom 8270/625 Add-in Standard

Custom 8270/625 Add-ins Standard 2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	N,N-Dimethylformamide	68-12-2	SHBM2285	99%	2,002.5 µg/mL	+/- 89.4802
2	alpha-Methylstyrene	98-83-9	MKBS2502V	99%	2,003.0 µg/mL	+/- 89.5026
3	a-Terpineol	98-55-5	RP221122N	96%	2,008.6 µg/mL	+/- 89.7510
4	2,3-Dichloroaniline	608-27-5	11518TI	99%	2,002.5 µg/mL	+/- 89.4802
5	n-Tetradecane (C14)	629-59-4	STBK2282	99%	2,002.6 µg/mL	+/- 89.4825
6	Diphenyl ether	101-84-8	SHBP8623	99%	2,002.7 µg/mL	+/- 89.4892
7	1-Methylphenanthrene	832-69-9	14026400	99%	2,003.3 µg/mL	+/- 89.5149
8	n-Eicosane (C20)	112-95-8	MKCN8767	97%	2,004.3 µg/mL	+/- 89.5611
9	Octachlorostyrene	29082-74-4	803929	99%	2,001.5 µg/mL	+/- 89.4333
10	n-Docosane (C22)	629-97-0	MKCQ3882	99%	2,002.6 µg/mL	+/- 89.4813

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

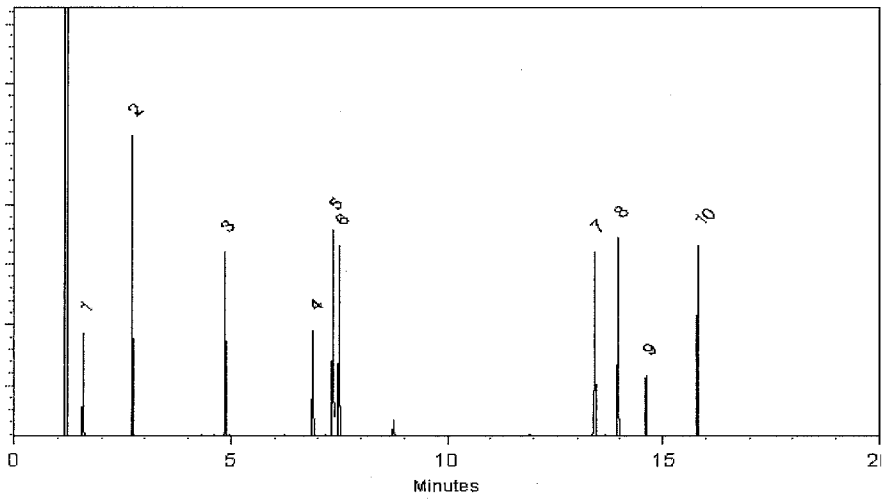
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

Date Mixed: 07-Feb-2023 **Balance Serial #** 1128360905

Christie Mills - Operations Tech II - ARM QC

Date Passed: 15-Feb-2023

REVIEWED

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

WC_FL_CNVeriS_00022

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Cyanide Standard, 1000 ppm CN^-

Lot Number: 4303N11 **Product Number:** 2543

Manufacture Date: MAR 29, 2023
Expiration Date: SEP 2023

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.
Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Cyanide	151-50-8	ACS
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN^-)	995-1005 ppm	1004 ppm

Specification	Reference
Stock Standard Cyanide Solution	APHA (4500-CN- F)
Stock Cyanide Solution	APHA (4500-CN- E)
Stock Cyanide Solution	APHA (4500-CN- K)
Stock Cyanide Solution	APHA (4500-CN- H)
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846) (7.3.3.2)
Cyanide Calibration Stock Solution (1,000 mg/L CN-)	EPA (SW-846) (9213)
Stock Cyanide Solution	EPA (335.3)
Stock Cyanide Solution	EPA (335.2)
Cyanide Solution Stock	ASTM (D 4282)
Simple Cyanide Solution, Stock (1.0 g/L CN)	ASTM (D 4374)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
2543-4	120 mL amber poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

Paul Brandon (03/29/2023)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Sample Container Check Report

Client: TRC, Engineers, Inc. Job ID: 410-136864-1
Project/Site: RFAAP, Radford HWMU16

Sample Container Checks and Verifications

Lab Sample ID: 410-136864-1 Client Sample ID: 16C1

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
K	pH Check, 24hr Adjustment Confirmation Required	T7ZN	08/02/2023	<2	<2	N/A	N/A	N/A	N/A	N/A
L	pH Check	U6AA	08/02/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
L	Chlorine Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A
L	Sulfide Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-136864-2 Client Sample ID: 16MW8

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
I	pH Check, 24hr Adjustment Confirmation Required	T7ZN	08/02/2023	<2	<2	N/A	N/A	N/A	N/A	N/A
J	pH Check	U6AA	08/02/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
J	Chlorine Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A
J	Sulfide Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-136864-3 Client Sample ID: 16MW9

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
K	pH Check, 24hr Adjustment Confirmation Required	T7ZN	08/02/2023	<2	<2	N/A	N/A	N/A	N/A	N/A
L	pH Check	U6AA	08/02/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
L	Chlorine Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A
L	Sulfide Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-136864-4 Client Sample ID: 16WC1A

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
I	pH Check, 24hr Adjustment Confirmation Required	T7ZN	08/02/2023	<2	<2	N/A	N/A	N/A	N/A	N/A
J	pH Check	U6AA	08/02/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
J	Chlorine Check	U6AA	08/02/2023	Y	N/A	N/A	MKCR5650	04/30/2025	N/A	N/A
J	Sulfide Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-136864-4 DU Client Sample ID: 16WC1A

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
B	pH Check	U6AA	08/02/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
B	Chlorine Check	U6AA	08/02/2023	Y	N/A	N/A	MKCR5650	04/30/2025	N/A	N/A
B	Sulfide Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-136864-4 MS Client Sample ID: 16WC1A

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
I	pH Check, 24hr Adjustment Confirmation Required	T7ZN	08/02/2023	<2	<2	N/A	N/A	N/A	N/A	N/A
J	pH Check	U6AA	08/02/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
J	Chlorine Check	U6AA	08/02/2023	Y	N/A	N/A	MKCR5650	04/30/2025	N/A	N/A

Sample Container Check Report

Client: TRC, Engineers, Inc.
Job ID: 410-136864-1
Project/Site: RFAAP, Radford HWMU16

Sample Container Checks and Verifications (Continued)

Lab Sample ID: 410-136864-4 MS
Client Sample ID: 16WC1A

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
J	Sulfide Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-136864-4 MSD
Client Sample ID: 16WC1A

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
I	pH Check, 24hr Adjustment Confirmation Required	T7ZN	08/02/2023	<2	<2	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-136864-5
Client Sample ID: 16WDUP

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
I	pH Check, 24hr Adjustment Confirmation Required	T7ZN	08/02/2023	<2	<2	N/A	N/A	N/A	N/A	N/A
J	pH Check	U6AA	08/02/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
J	Chlorine Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A
J	Sulfide Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-136864-6
Client Sample ID: 16WC1B

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
I	pH Check, 24hr Adjustment Confirmation Required	T7ZN	08/02/2023	<2	<2	N/A	N/A	N/A	N/A	N/A
J	pH Check	U6AA	08/02/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
J	Chlorine Check	U6AA	08/02/2023	Y	N/A	N/A	MKCR5650	04/30/2025	N/A	N/A
J	Sulfide Check	U6AA	08/02/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

Method 8260D

Volatile Organic Compounds (GC/MS) by Method 8260D

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): R-624SilMS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
16C1	410-136864-1	111	105	100	91
16MW8	410-136864-2	110	108	99	91
16MW9	410-136864-3	110	104	99	91
16WC1A	410-136864-4	111	108	98	90
16WDUP	410-136864-5	111	104	100	92
16WC1B	410-136864-6	112	106	99	88
	MB 410-405099/9	110	103	100	93
	LCS 410-405099/5	103	101	101	93
16WC1A MS	410-136864-4 MS	107	103	103	95
16WC1A MSD	410-136864-4 MSD	105	103	103	94

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	80-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	80-120

Column to be used to flag recovery values

FORM II 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YG07X04.D

Lab ID: LCS 410-405099/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2-Propanol	150	118	78	52-144	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YG07X18.D

Lab ID: 410-136864-4 MS Client ID: 16WC1A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2-Propanol	150	ND	110	73	52-144	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YG07X19.D

Lab ID: 410-136864-4 MSD Client ID: 16WC1A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2-Propanol	150	132	88	18	30	52-144	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: YG07X08.D Lab Sample ID: MB 410-405099/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 9355 Date Analyzed: 08/07/2023 11:19

GC Column: R-624SilMS 30m ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-405099/5	YG07X04.D	08/07/2023 09:51
16C1	410-136864-1	YG07X12.D	08/07/2023 13:34
16MW8	410-136864-2	YG07X13.D	08/07/2023 13:56
16MW9	410-136864-3	YG07X14.D	08/07/2023 14:18
16WDUP	410-136864-5	YG07X15.D	08/07/2023 14:40
16WC1B	410-136864-6	YG07X16.D	08/07/2023 15:02
16WC1A	410-136864-4	YG07X17.D	08/07/2023 15:24
16WC1A MS	410-136864-4 MS	YG07X18.D	08/07/2023 15:46
16WC1A MSD	410-136864-4 MSD	YG07X19.D	08/07/2023 16:08

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: YL24T01.D BFB Injection Date: 07/24/2023

Instrument ID: 9355 BFB Injection Time: 19:26

Analysis Batch No.: 400238

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	47.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	78.2	
175	5.0 - 9.0 % of mass 174	5.6	(7.2) 1
176	95.0 - 101.0 % of mass 174	75.8	(97.0) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-400238/12	YL24X11.D	07/24/2023	23:20
	IC 410-400238/13	YL24X12.D	07/24/2023	23:42
	IC 410-400238/14	YL24X13.D	07/25/2023	0:04
	IC 410-400238/15	YL24X14.D	07/25/2023	0:26
	ICIS 410-400238/16	YL24X15.D	07/25/2023	0:49
	IC 410-400238/17	YL24X16.D	07/25/2023	1:10
	IC 410-400238/18	YL24X17.D	07/25/2023	1:32
	ICV 410-400238/20	YL24X19.D	07/25/2023	2:16

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: YG07T01.D BFB Injection Date: 08/07/2023

Instrument ID: 9355 BFB Injection Time: 08:05

Analysis Batch No.: 405099

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.9	
75	30.0 - 60.0 % of mass 95	47.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	82.0	
175	5.0 - 9.0 % of mass 174	6.8	(8.2) 1
176	95.0 - 101.0 % of mass 174	82.2	(100.2) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-405099/3	YG07X02.D	08/07/2023	9:07
	LCS 410-405099/5	YG07X04.D	08/07/2023	9:51
	MB 410-405099/9	YG07X08.D	08/07/2023	11:19
16C1	410-136864-1	YG07X12.D	08/07/2023	13:34
16MW8	410-136864-2	YG07X13.D	08/07/2023	13:56
16MW9	410-136864-3	YG07X14.D	08/07/2023	14:18
16WDUP	410-136864-5	YG07X15.D	08/07/2023	14:40
16WC1B	410-136864-6	YG07X16.D	08/07/2023	15:02
16WC1A	410-136864-4	YG07X17.D	08/07/2023	15:24
16WC1A MS	410-136864-4 MS	YG07X18.D	08/07/2023	15:46
16WC1A MSD	410-136864-4 MSD	YG07X19.D	08/07/2023	16:08

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-400238/16 Date Analyzed: 07/25/2023 00:49

Instrument ID: 9355 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): YL24X15.D Heated Purge: (Y/N) N

Calibration ID: 52236

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		602127	4.13	1116591	7.66	827927	11.17
UPPER LIMIT		1204254	4.63	2233182	8.16	1655854	11.67
LOWER LIMIT		301064	3.63	558296	7.16	413964	10.67
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-400238/20		613733	4.13	1102735	7.66	812514	11.17
CCVIS 410-405099/3		404835	4.16	874312	7.67	630341	11.17

TBAd10 = t-Butyl alcohol-d10 (IS)
FB = Fluorobenzene (IS)
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-400238/16 Date Analyzed: 07/25/2023 00:49

Instrument ID: 9355 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): YL24X15.D Heated Purge: (Y/N) N

Calibration ID: 52236

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		485563	13.06				
UPPER LIMIT		971126	13.56				
LOWER LIMIT		242782	12.56				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-400238/20		482649	13.06				
CCVIS 410-405099/3		369753	13.06				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: CCVIS 410-405099/3 Date Analyzed: 08/07/2023 09:07

Instrument ID: 9355 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): YG07X02.D Heated Purge: (Y/N) N

Calibration ID: 52236

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		404835	4.16	874312	7.67	630341	11.17
UPPER LIMIT		809670	4.66	1748624	8.17	1260682	11.67
LOWER LIMIT		202418	3.66	437156	7.17	315171	10.67
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-405099/5		387655	4.12	882156	7.66	635660	11.17
MB 410-405099/9		360941	4.13	832166	7.67	589736	11.17
410-136864-1	16C1	389596	4.13	806203	7.67	566074	11.17
410-136864-2	16MW8	354540	4.19	851526	7.67	592969	11.17
410-136864-3	16MW9	357003	4.16	846030	7.67	581433	11.17
410-136864-5	16WDUP	337172	4.15	821523	7.67	570705	11.17
410-136864-6	16WC1B	358281	4.15	821453	7.67	573136	11.17
410-136864-4	16WC1A	347687	4.18	821350	7.67	568676	11.17
410-136864-4 MS	16WC1A MS	375486	4.19	895537	7.67	636814	11.17
410-136864-4 MSD	16WC1A MSD	386829	4.15	874597	7.67	614145	11.17

TBAd10 = t-Butyl alcohol-d10 (IS)
FB = Fluorobenzene (IS)
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: CCVIS 410-405099/3 Date Analyzed: 08/07/2023 09:07

Instrument ID: 9355 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): YG07X02.D Heated Purge: (Y/N) N

Calibration ID: 52236

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		369753	13.06				
UPPER LIMIT		739506	13.56				
LOWER LIMIT		184877	12.56				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-405099/5		370328	13.06				
MB 410-405099/9		349643	13.06				
410-136864-1	16C1	332421	13.06				
410-136864-2	16MW8	348135	13.06				
410-136864-3	16MW9	341780	13.06				
410-136864-5	16WDUP	336240	13.06				
410-136864-6	16WC1B	330649	13.06				
410-136864-4	16WC1A	327551	13.06				
410-136864-4 MS	16WC1A MS	383136	13.06				
410-136864-4 MSD	16WC1A MSD	365415	13.06				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16C1 Lab Sample ID: 410-136864-1

Matrix: Water Lab File ID: YG07X12.D

Analysis Method: 8260D Date Collected: 07/27/2023 12:45

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 13:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	ND		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
1868-53-7	Dibromofluoromethane (Surr)	111		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X12.D
Lims ID: 410-136864-A-1
Client ID: 16C1
Sample Type: Client
Inject. Date: 07-Aug-2023 13:34:30 ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-010
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:14:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
20 Isopropyl alcohol	45		3.668				ND	7
* 27 t-Butyl alcohol-d10 (IS)	65	4.133	4.161	-0.028	42	389596	250.0	
$ 52 Dibromofluoromethane (Surr)	113	6.764	6.757	0.007	94	212621	55.3	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.215	7.222	-0.007	72	50710	52.3	
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	806203	50.0	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	752712	50.1	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	566074	50.0	
$ 144 4-Bromofluorobenzene (Surr)	95	12.184	12.177	0.007	94	263280	45.7	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	95	332421	50.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

MSV_HP20_ISSS_00113 Amount Added: 1.00 Units: uL Run Reagent

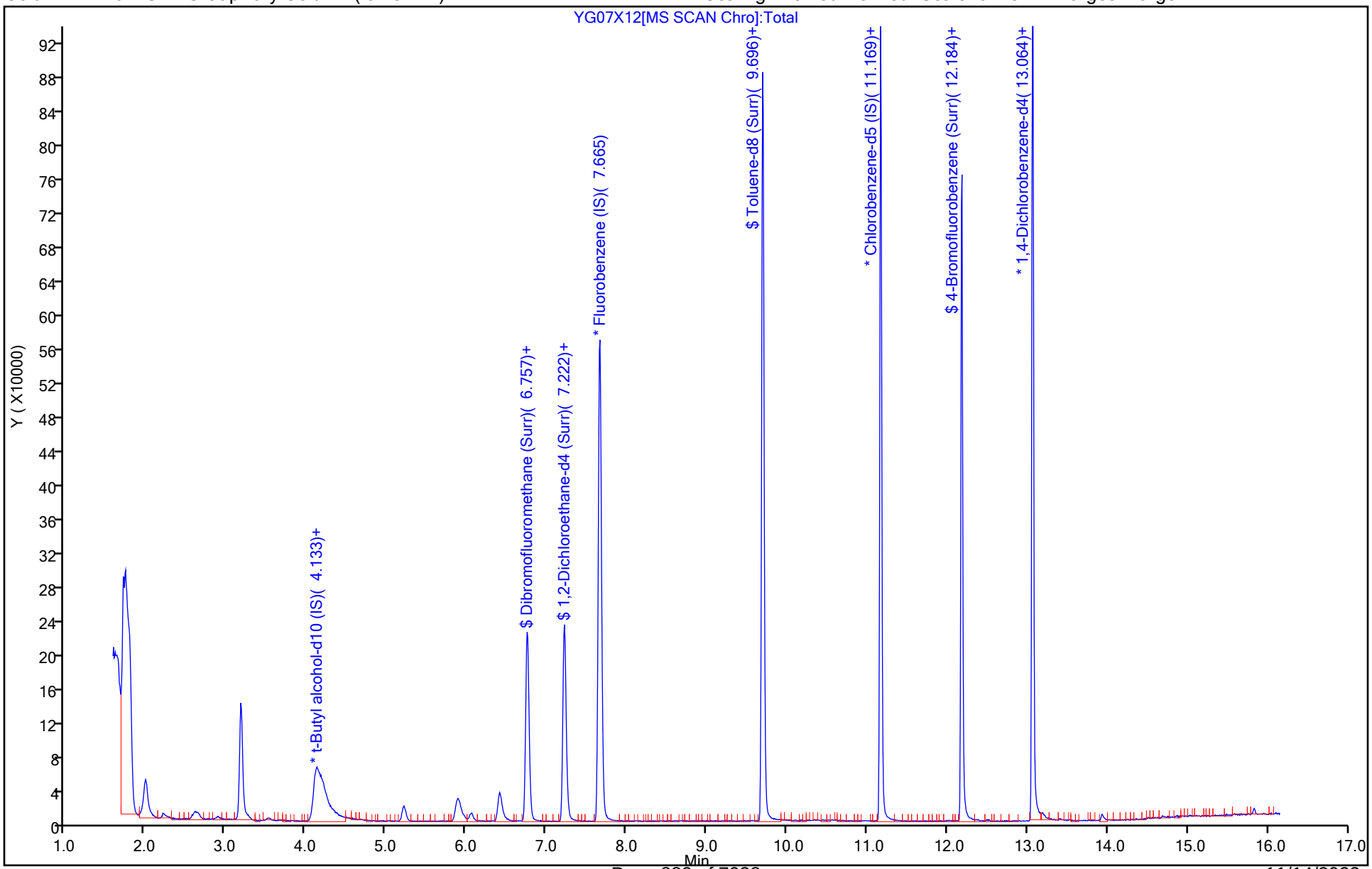
Report Date: 08-Aug-2023 08:14:20 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X12.D

Injection Date:	07-Aug-2023 13:34:30	Instrument ID:	9355	Operator ID:	CLM27445
Lims ID:	410-136864-A-1	Lab Sample ID:	410-136864-1	Worklist Smp#:	10
Client ID:	16C1				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X12.D
Lims ID: 410-136864-A-1
Client ID: 16C1
Sample Type: Client
Inject. Date: 07-Aug-2023 13:34:30 ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-010
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:14:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	55.3	110.54
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	52.3	104.65
$ 81 Toluene-d8 (Surr)	50.0	50.1	100.14
$ 144 4-Bromofluorobenzene (Surr)	50.0	45.7	91.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW8 Lab Sample ID: 410-136864-2

Matrix: Water Lab File ID: YG07X13.D

Analysis Method: 8260D Date Collected: 07/26/2023 10:05

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 13:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	ND		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		80-120
1868-53-7	Dibromofluoromethane (Surr)	110		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X13.D
Lims ID: 410-136864-A-2
Client ID: 16MW8
Sample Type: Client
Inject. Date: 07-Aug-2023 13:56:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-011
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:14:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
20 Isopropyl alcohol	45		3.668				ND	7
* 27 t-Butyl alcohol-d10 (IS)	65	4.190	4.161	0.029	39	354540	250.0	
$ 52 Dibromofluoromethane (Surr)	113	6.764	6.757	0.007	87	224451	55.2	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.229	7.222	0.007	72	55254	54.0	
* 63 Fluorobenzene (IS)	96	7.672	7.665	0.007	99	851526	50.0	
$ 81 Toluene-d8 (Surr)	98	9.703	9.696	0.007	93	778911	49.5	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	592969	50.0	
$ 144 4-Bromofluorobenzene (Surr)	95	12.184	12.177	0.007	94	274252	45.5	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	94	348135	50.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

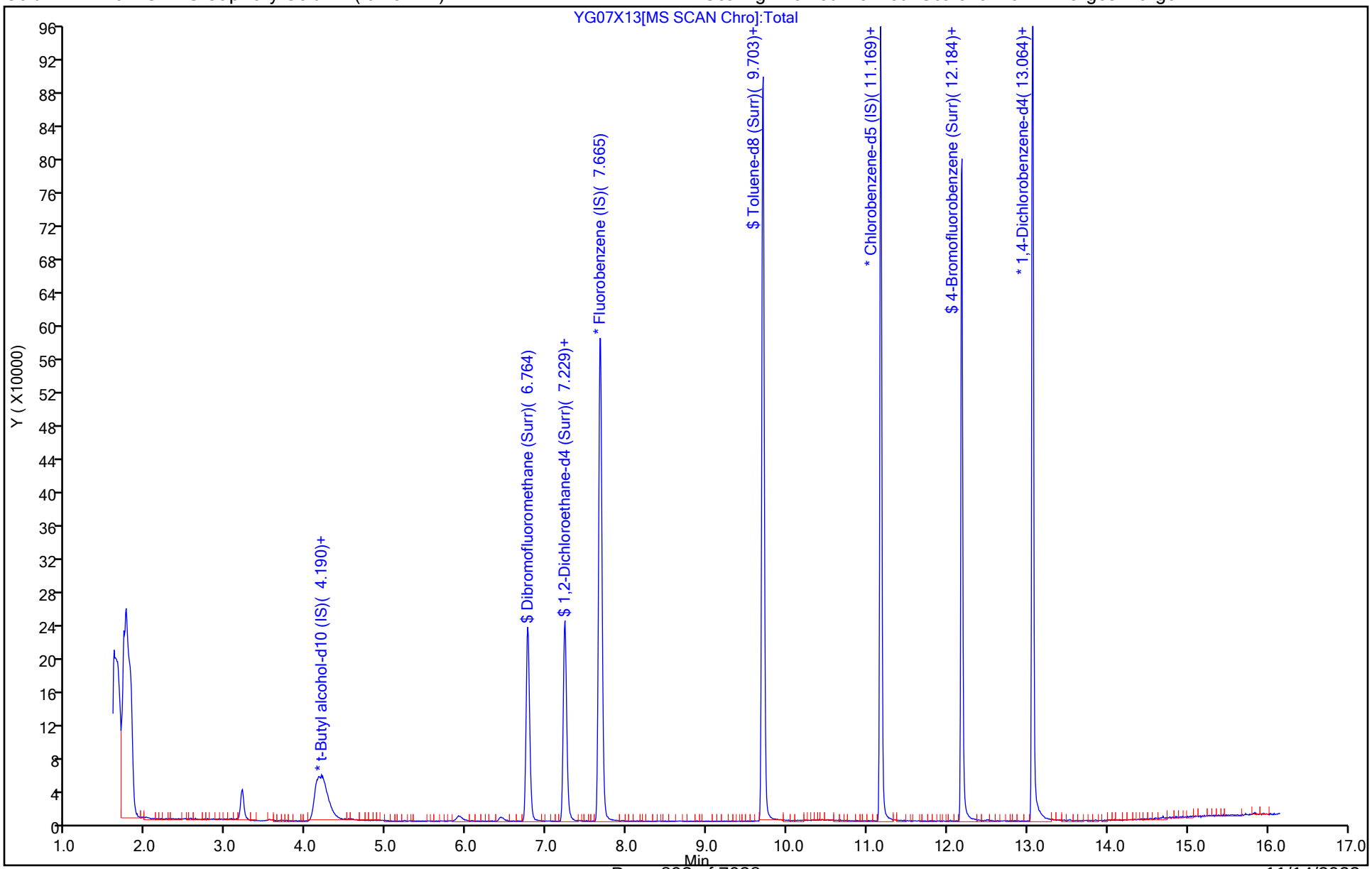
MSV_HP20_ISSS_00113 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 08-Aug-2023 08:14:30 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X13.D				
Injection Date:	07-Aug-2023 13:56:30	Instrument ID:	9355	Operator ID:	CLM27445
Lims ID:	410-136864-A-2	Lab Sample ID:	410-136864-2	Worklist Smp#:	11
Client ID:	16MW8				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X13.D
Lims ID: 410-136864-A-2
Client ID: 16MW8
Sample Type: Client
Inject. Date: 07-Aug-2023 13:56:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-011
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:14:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	55.2	110.48
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	54.0	107.96
$ 81 Toluene-d8 (Surr)	50.0	49.5	98.93
$ 144 4-Bromofluorobenzene (Surr)	50.0	45.5	90.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW9 Lab Sample ID: 410-136864-3

Matrix: Water Lab File ID: YG07X14.D

Analysis Method: 8260D Date Collected: 07/27/2023 11:25

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 14:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	ND		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	110		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X14.D
Lims ID: 410-136864-A-3
Client ID: 16MW9
Sample Type: Client
Inject. Date: 07-Aug-2023 14:18:30 ALS Bottle#: 13 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-012
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:14:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
20 Isopropyl alcohol	45		3.668				ND	
* 27 t-Butyl alcohol-d10 (IS)	65	4.162	4.161	0.001	40	357003	250.0	
$ 52 Dibromofluoromethane (Surr)	113	6.764	6.757	0.007	93	222446	55.1	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.229	7.222	0.007	72	53086	52.2	
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	846030	50.0	
$ 81 Toluene-d8 (Surr)	98	9.703	9.696	0.007	93	767577	49.7	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	581433	50.0	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	92	269182	45.5	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	94	341780	50.0	

QC Flag Legend
Processing Flags

Reagents:
MSV_HP20_ISSS_00113 Amount Added: 1.00 Units: uL Run Reagent

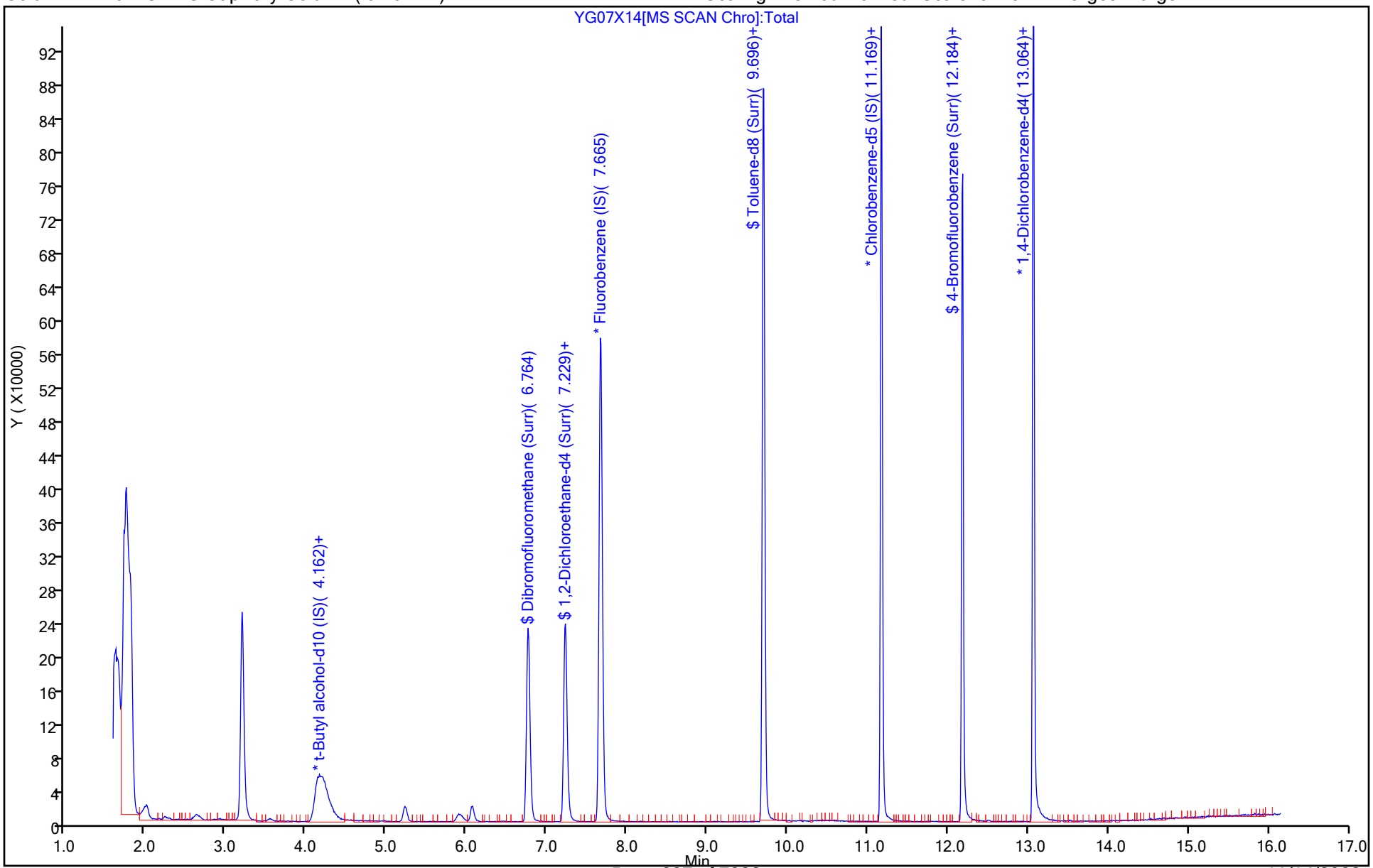
Report Date: 08-Aug-2023 08:14:39 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X14.D

Injection Date:	07-Aug-2023 14:18:30	Instrument ID:	9355	Operator ID:	CLM27445
Lims ID:	410-136864-A-3	Lab Sample ID:	410-136864-3	Worklist Smp#:	12
Client ID:	16MW9				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
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Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X14.D
Lims ID: 410-136864-A-3
Client ID: 16MW9
Sample Type: Client
Inject. Date: 07-Aug-2023 14:18:30 ALS Bottle#: 13 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-012
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:14:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	55.1	110.20
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	52.2	104.40
$ 81 Toluene-d8 (Surr)	50.0	49.7	99.42
$ 144 4-Bromofluorobenzene (Surr)	50.0	45.5	91.02

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A Lab Sample ID: 410-136864-4

Matrix: Water Lab File ID: YG07X17.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 15:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	ND		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		80-120
1868-53-7	Dibromofluoromethane (Surr)	111		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X17.D
Lims ID: 410-136864-A-4
Client ID: 16WC1A
Sample Type: Client
Inject. Date: 07-Aug-2023 15:24:30 ALS Bottle#: 16 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-015
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 08:18:39 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:18:39

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1	Chlorotrifluoroethene	116		1.902				ND	
3	Chlorodifluoromethane	51	1.981	1.938	0.043	96	55617	9.58	
2	Dichlorodifluoromethane	85		1.952				ND	
4	Chloromethane	50		2.145				ND	
5	Vinyl chloride	62		2.252				ND	7
6	Butadiene	39		2.260				ND	
7	2-Chloro-1,1,1-Trifluoroethane	118		2.317				ND	
8	Bromomethane	94		2.588				ND	
9	Chloroethane	64	2.667	2.660	0.007	96	7948	2.07	
10	Dichlorofluoromethane	67	2.910	2.896	0.014	93	4043	0.3802	
11	Trichlorofluoromethane	101		2.975				ND	
12	Pentane	43		2.989				ND	7
13	Ethanol	45		3.182				ND	U
14	Ethyl ether	59	3.196	3.189	0.007	93	77882	24.3	a
15	1,2-Dichloro-1,1,2-trifluoroetha	67		3.275				ND	
16	Acrolein	56		3.346				ND	
17	1,1-Dichloroethene	96		3.504				ND	
18	Acetone	58		3.504				ND	
19	1,1,2-Trichloro-1,2,2-trifluoroe	101		3.554				ND	
20	Isopropyl alcohol	45		3.668				ND	7
21	Iodomethane	142		3.718				ND	
22	Carbon disulfide	76		3.825				ND	
23	Acetonitrile	41		3.854				ND	
24	Methyl acetate	43		3.926				ND	
25	3-Chloro-1-propene	41		3.961				ND	
26	Methylene Chloride	84		4.154				ND	
* 27	t-Butyl alcohol-d10 (IS)	65	4.183	4.161	0.022	42	347687	250.0	
28	2-Methyl-2-propanol	59		4.276				ND	7
29	Acrylonitrile	53		4.455				ND	
30	Methyl tert-butyl ether	73		4.548				ND	
32	trans-1,2-Dichloroethene	96		4.569				ND	
33	Hexane	57		4.998				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
34 Vinyl acetate	43		5.205				ND	
35 1,1-Dichloroethane	63	5.227	5.220	0.007	96	28544	4.48	
36 Isopropyl ether	45		5.284				ND	
37 2-Chloro-1,3-butadiene	53		5.334				ND	
T 38 Vinyl acetate (TIC)	43		5.420				ND	
39 Tert-butyl ethyl ether	59		5.828				ND	
40 2-Butanone (MEK)	43		6.021				ND	
41 cis-1,2-Dichloroethene	96	6.063	6.056	0.007	76	12874	3.22	
42 2,2-Dichloropropane	77		6.078				ND	
43 Propionitrile	54		6.085				ND	
44 Ethyl acetate	43		6.092				ND	
S 45 1,2-Dichloroethene, Total	100				0		3.22	
46 Methyl acrylate	55		6.156				ND	
T 47 Ethyl Acetate TIC	43		6.284				ND	
48 Methacrylonitrile	67		6.314				ND	
49 Chlorobromomethane	128		6.392				ND	
50 Tetrahydrofuran	71	6.442	6.414	0.028	83	1650	1.77	
51 Chloroform	83		6.543				ND	
$ 52 Dibromofluoromethane (Surr)	113	6.764	6.757	0.007	94	217637	55.5	
53 1,1,1-Trichloroethane	97		6.786				ND	
54 Cyclohexane	56		6.900				ND	
55 1,1-Dichloropropene	75		6.993				ND	
56 Carbon tetrachloride	117		7.000				ND	
57 Isobutyl alcohol	41		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.229	7.222	0.007	72	53487	54.2	
59 Benzene	78	7.258	7.258	0.000	86	5295	0.3456	M
61 Isopropyl acetate	43		7.322				ND	
60 1,2-Dichloroethane	62		7.329				ND	
62 Tert-amyl methyl ether	73		7.451				ND	
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	821350	50.0	
64 n-Heptane	43		7.687				ND	
65 t-Amyl alcohol	73		7.842				ND	
66 n-Butanol	56		8.008				ND	
67 Trichloroethene	95		8.151				ND	
68 Ethyl acrylate	55		8.251				ND	
69 Methylcyclohexane	83		8.480				ND	
70 1,2-Dichloropropane	63		8.480				ND	
71 2-ethoxy-2-methyl butane	87		8.495				ND	
72 Methyl methacrylate	69		8.559				ND	
73 1,4-Dioxane	88		8.573				ND	
74 Dibromomethane	93		8.595				ND	
75 n-Propyl acetate	61		8.637				ND	
76 Dichlorobromomethane	83		8.831				ND	
77 2-Nitropropane	41		9.074				ND	
78 2-Chloroethyl vinyl ether	63		9.195				ND	
79 cis-1,3-Dichloropropene	75		9.381				ND	
80 4-Methyl-2-pentanone (MIBK)	43		9.538				ND	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	742893	49.2	
82 Toluene	92		9.774				ND	
T 89 Hexachloroethane TIC	117	11.169	10.000	1.169	1	568676	34.6	
T 86 4-Ethyltoluene TIC	105	7.229	10.000	-2.771	1	358	0.0218	
T 104 Propene oxide TIC	58	9.696	10.000	-0.304	1	5112	0.3112	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 90 Isooctane TIC	57		10.000				ND	
T 83 Tetranitromethane TIC	46		10.000				ND	
T 102 1,3-Dichlorobutene-2(total) TIC	89	11.169	10.000	1.169	8	4883	0.2973	7
T 273 3-Pentanone TIC	57		10.000				ND	
T 111 tert-amyl alcohol TIC	59	11.169	10.000	1.169	12	5408	0.3292	
T 108 Ethylene oxide TIC	43	9.703	10.000	-0.297	24	2846	0.1733	
T 95 1,1-Dichloro-1-fluoroethane TIC	81	11.154	10.000	1.154	1	417	0.0254	
T 272 Dimethylformamide TIC	73	11.169	10.000	1.169	17	2007	0.1222	
T 91 Ethyl acrylate TIC	55	9.696	10.000	-0.304	15	2526	0.1538	
T 271 sec-Butyl Alcohol TIC	45	9.703	10.000	-0.297	7	347	0.0211	
T 113 Propionaldehyde TIC	58	9.696	10.000	-0.304	1	5112	0.3112	
T 110 Allyl Alcohol TIC	57		10.000				ND	
T 94 n-Butyl acrylate TIC	55	9.696	10.000	-0.304	1	2526	0.1538	
T 105 Propanol TIC								
T 84 1,1,1-Trifluoro-2,2-dichloroetha	83	9.696	10.000	-0.304	1	274	0.0167	
T 98 n-Nonane TIC	43	9.703	10.000	-0.297	22	2846	0.1733	
T 92 Chloroacetaldehyde TIC	50	9.760	10.000	-0.240	1	111	0.006757	
T 216 Methyl Isothiocyanate TIC	73	11.169	10.000	1.169	1	2007	0.1222	
T 97 Epichlorohydrin TIC	57		10.000				ND	
T 87 Propane TIC	43		10.000				ND	
T 115 Dichloro-1,1,2,2-tetrafluoroetha	85	11.169	10.000	1.169	1	2778	0.1691	
T 107 Freon 115 TIC	85		10.000				ND	
T 101 1,2-Dichlorofluoroethane TIC	81		10.000				ND	
T 100 Vinyl Fluoride TIC	46	9.696	10.000	-0.304	15	7810	0.4754	
T 118 divinyl benzene TIC	131	1.673	10.000	-8.327	29	341	0.0208	
T 85 2,3-Dichloro-1,3-butadiene TIC	51	11.169	10.000	1.169	0	2499	0.1521	
T 112 1-Chlorobutane TIC	56	9.696	10.000	-0.304	19	11159	0.6793	
T 88 Chlorofluoromethane TIC	68	2.231	10.000	-7.769	83	6182	0.3763	
T 106 Bromoethane TIC	108	13.071	10.000	3.071	1	1092	0.0665	
T 117 1,1,2-Trifluoroethane TIC	51	11.169	10.000	1.169	7	2499	0.1521	
T 99 Diethoxymethane TIC	59	11.169	10.000	1.169	0	5408	0.3292	
T 114 Acetonitrile TIC	41	9.703	10.000	-0.297	20	1805	0.1099	
T 109 Fluoromethane TIC	34		10.000				ND	
T 96 1,1,1-Trichloro-2,2,2-trifluoroe	151	13.064	10.000	3.064	1	39754	2.42	
T 93 1-Bromo-2-chloroethane TIC	63	9.696	10.000	-0.304	1	269	0.0164	
T 103 2,3,4-Trichlorobutene TIC	109	13.064	10.000	3.064	0	818	0.0498	
T 116 1-Chloro-1,1-difluoroethane TIC	65	9.703	10.000	-0.297	1	1542	0.0939	
119 trans-1,3-Dichloropropene	75		10.032				ND	
S 120 1,3-Dichloropropene, Total	100		10.060				ND	7
121 Ethyl methacrylate	69		10.089				ND	
122 1,1,2-Trichloroethane	97		10.239				ND	
123 Tetrachloroethene	166		10.339				ND	
124 1,3-Dichloropropane	76		10.404				ND	
125 3,4-Dichloro-1-butene	75		10.439				ND	
126 2-Hexanone	43		10.439				ND	
127 n-Butyl acetate	43		10.575				ND	
128 Chlorodibromomethane	129		10.625				ND	
129 Ethylene Dibromide	107		10.740				ND	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	568676	50.0	
131 1-Chlorohexane	91		11.176				ND	U
132 Chlorobenzene	112		11.197				ND	
S 133 Xylenes, Total	106		11.245				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
134 1,1,1,2-Tetrachloroethane	131		11.276				ND	
135 Ethylbenzene	91		11.283				ND	
136 m-Xylene & p-Xylene	106		11.398				ND	
137 n-Butyl acrylate	55		11.676				ND	
138 o-Xylene	106		11.726				ND	
139 Styrene	104		11.748				ND	
140 Bromoform	173		11.905				ND	
141 Isopropylbenzene	105		12.034				ND	
142 cis-1,4-Dichloro-2-butene	88		12.070				ND	
143 Cyclohexanone	55		12.098				ND	7
$ 144 4-Bromofluorobenzene (Surr)	95	12.184	12.177	0.007	94	261416	45.2	
145 1,1,2,2-Tetrachloroethane	83		12.270				ND	
147 trans-1,4-Dichloro-2-butene	53		12.291				ND	
146 Bromobenzene	156		12.298				ND	
148 1,2,3-Trichloropropane	110		12.320				ND	
149 N-Propylbenzene	91		12.363				ND	
150 2-Chlorotoluene	126		12.441				ND	
151 1,3,5-Trimethylbenzene	105		12.499				ND	
152 4-Chlorotoluene	126		12.534				ND	
153 2,3,4-Trichlorobutene	109		12.542				ND	
154 tert-Butylbenzene	134		12.742				ND	
155 Pentachloroethane	167		12.777				ND	
156 1,2,4-Trimethylbenzene	105		12.785				ND	
157 sec-Butylbenzene	105		12.906				ND	
158 1,3-Dichlorobenzene	146		13.006				ND	
159 4-Isopropyltoluene	119		13.013				ND	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	95	327551	50.0	
161 1,4-Dichlorobenzene	146		13.085				ND	
162 1,2,3-Trimethylbenzene	105		13.092				ND	
163 Benzyl chloride	91		13.157				ND	7
164 1,3-Diethylbenzene	119		13.214				ND	
165 p-Diethylbenzene	119		13.285				ND	
166 n-Butylbenzene	92		13.307				ND	
167 1,2-Dichlorobenzene	146		13.342				ND	
168 o-diethylbenzene	119		13.357				ND	
169 2-Butoxyethyl acetate	43		13.514				ND	
170 Hexachloroethane	201		13.560				ND	
171 1,2-Dibromo-3-Chloropropane	75		13.886				ND	
172 1,3,5-Trichlorobenzene	180		14.015				ND	
173 1,2,4-Trichlorobenzene	180		14.436				ND	
174 2-Ethylhexyl acrylate	55		14.486				ND	
175 Hexachlorobutadiene	225		14.522				ND	
176 Naphthalene	128		14.622				ND	
177 1,2,3-Trichlorobenzene	180		14.758				ND	
178 2-Methylnaphthalene	142		15.395				ND	
179 C4-C10	1		0.000				ND	
181 3-Methyl-1-butene	1		0.000				ND	
182 2,3-Dichloro-1,3-butadiene	1		0.000				ND	
183 Propene oxide	1		0.000				ND	
184 1,3-Divinylbenzene	1		0.000				ND	
185 Propanol	1		0.000				ND	
186 3-chloro-1-Butene TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
215 1,1,2-Trichloro-1,2,2-trifluoroe	1		0.000				ND	
187 Diethoxymethane	1		0.000				ND	
189 1-Chlorobutane	1		0.000				ND	
190 1,1,2,2-Tetrachloro-1,2-difluoro	1		0.000				ND	
191 Isobutyl acetate	43		0.000				ND	
192 1,4-Divinylbenzene	1		0.000				ND	
193 tert-Butyl Formate	1		0.000				ND	
194 Chloroacetonitrile	1		0.000				ND	
195 C6-C12	1		0.000				ND	
S 180 divinyl benzene	1		0.000				ND	7
196 trans-1,2,3-Trichlorobutene-2	1		0.000				ND	
197 cis-1,2,3-Trichlorobutene-2	1		0.000				ND	
198 3-chloro-1-Butene	1		0.000				ND	
200 n-Nonane	1		0.000				ND	
201 C5-C12	1		0.000				ND	
202 C6-C10	1		0.000				ND	
203 n-Octane	1		0.000				ND	
204 Undecane	1		0.000				ND	
205 C4-C12	1		0.000				ND	
206 1-Bromo-2-chloroethane	1		0.000				ND	
S 188 Total BTEX	1		0.000				ND	
S 207 Total Diethylbenzene	1		0.000				ND	7
209 4-Ethyltoluene	1		0.000				ND	
210 Dodecane	57		0.000				ND	
211 sec-Butyl Alcohol	45		0.000				ND	
212 Butane	1		0.000				ND	
213 n-Decane	57		0.000				ND	
214 Ethyl bromide	1		0.000				ND	
199 Methylal	1		0.000				ND	
208 1,1-Dichloro-1-fluoroethane	1		0.000				ND	

QC Flag Legend

Processing Flags
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected
- a - User Assigned ID

Reagents:

MSV_HP20_ISSS_00113 Amount Added: 1.00 Units: uL Run Reagent

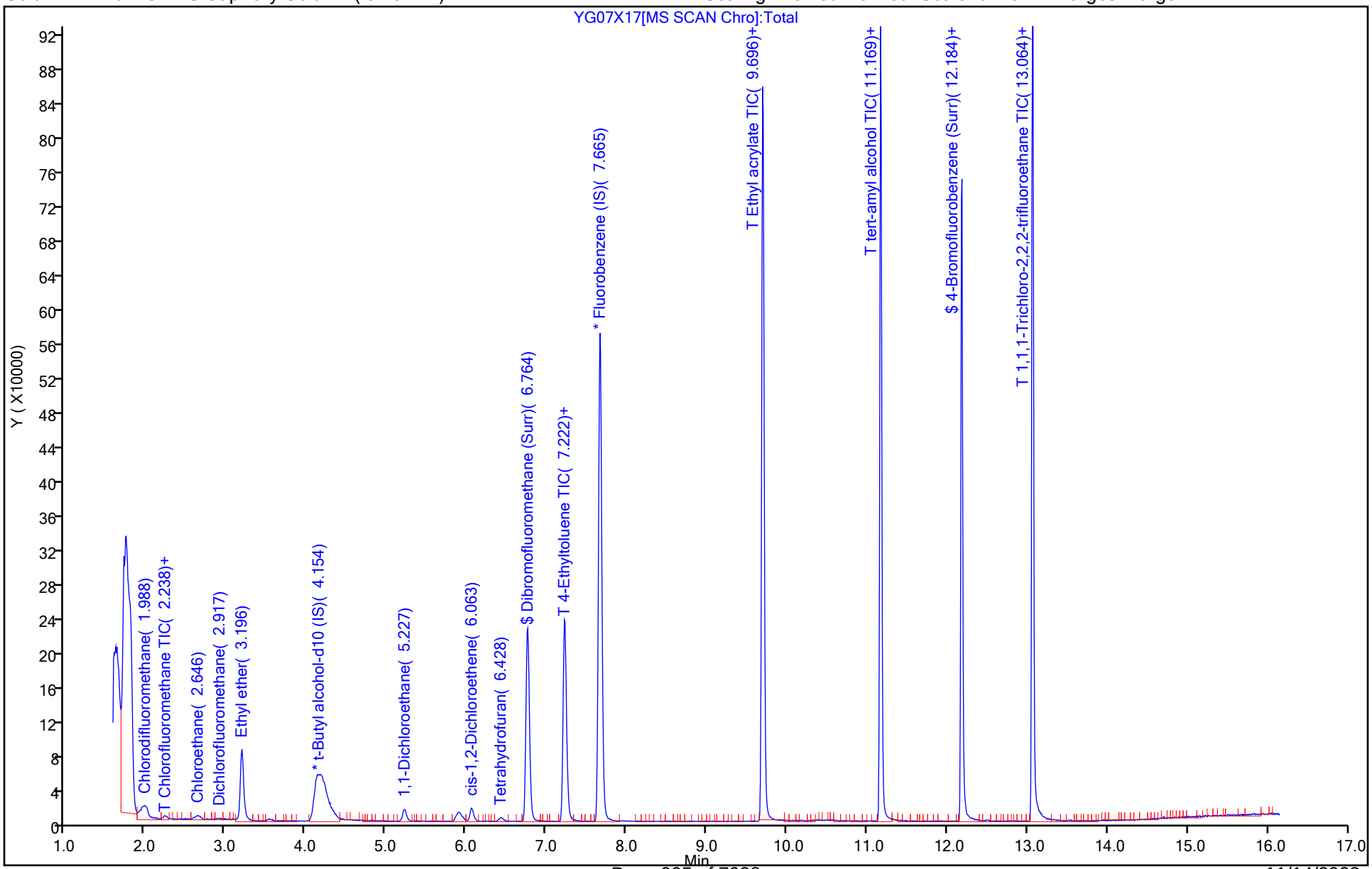
Report Date: 08-Aug-2023 08:18:39 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X17.D

Injection Date:	07-Aug-2023 15:24:30	Instrument ID:	9355	Operator ID:	CLM27445
Lims ID:	410-136864-A-4	Lab Sample ID:	410-136864-4	Worklist Smp#:	15
Client ID:	16WC1A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



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Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X17.D				
Lims ID:	410-136864-A-4				
Client ID:	16WC1A				
Sample Type:	Client				
Inject. Date:	07-Aug-2023 15:24:30	ALS Bottle#:	16	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090764-015				
Operator ID:	CLM27445	Instrument ID:	9355		
Method:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m				
Limit Group:	MSV - 8260C_D				
Last Update:	08-Aug-2023 08:18:39	Calib Date:	25-Jul-2023 01:32:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1624				

First Level Reviewer: innoonk Date: 08-Aug-2023 08:18:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	55.5	111.06
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	54.2	108.35
$ 81 Toluene-d8 (Surr)	50.0	49.2	98.38
$ 144 4-Bromofluorobenzene (Surr)	50.0	45.2	90.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WDUP Lab Sample ID: 410-136864-5

Matrix: Water Lab File ID: YG07X15.D

Analysis Method: 8260D Date Collected: 07/27/2023 10:20

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 14:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	ND		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	111		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X15.D
Lims ID: 410-136864-A-5
Client ID: 16WDUP
Sample Type: Client
Inject. Date: 07-Aug-2023 14:40:30 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-013
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:15:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
20 Isopropyl alcohol	45		3.668				ND	
* 27 t-Butyl alcohol-d10 (IS)	65	4.147	4.161	-0.014	39	337172	250.0	
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.757	0.000	94	217475	55.5	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.222	0.000	72	51278	51.9	
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	821523	50.0	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	94	757980	50.0	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	570705	50.0	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	92	266814	46.0	
* 160 1,4-Dichlorobenzene-d4	152	13.063	13.064	-0.001	95	336240	50.0	

QC Flag Legend
Processing Flags

Reagents:
MSV_HP20_ISSS_00113 Amount Added: 1.00 Units: uL Run Reagent

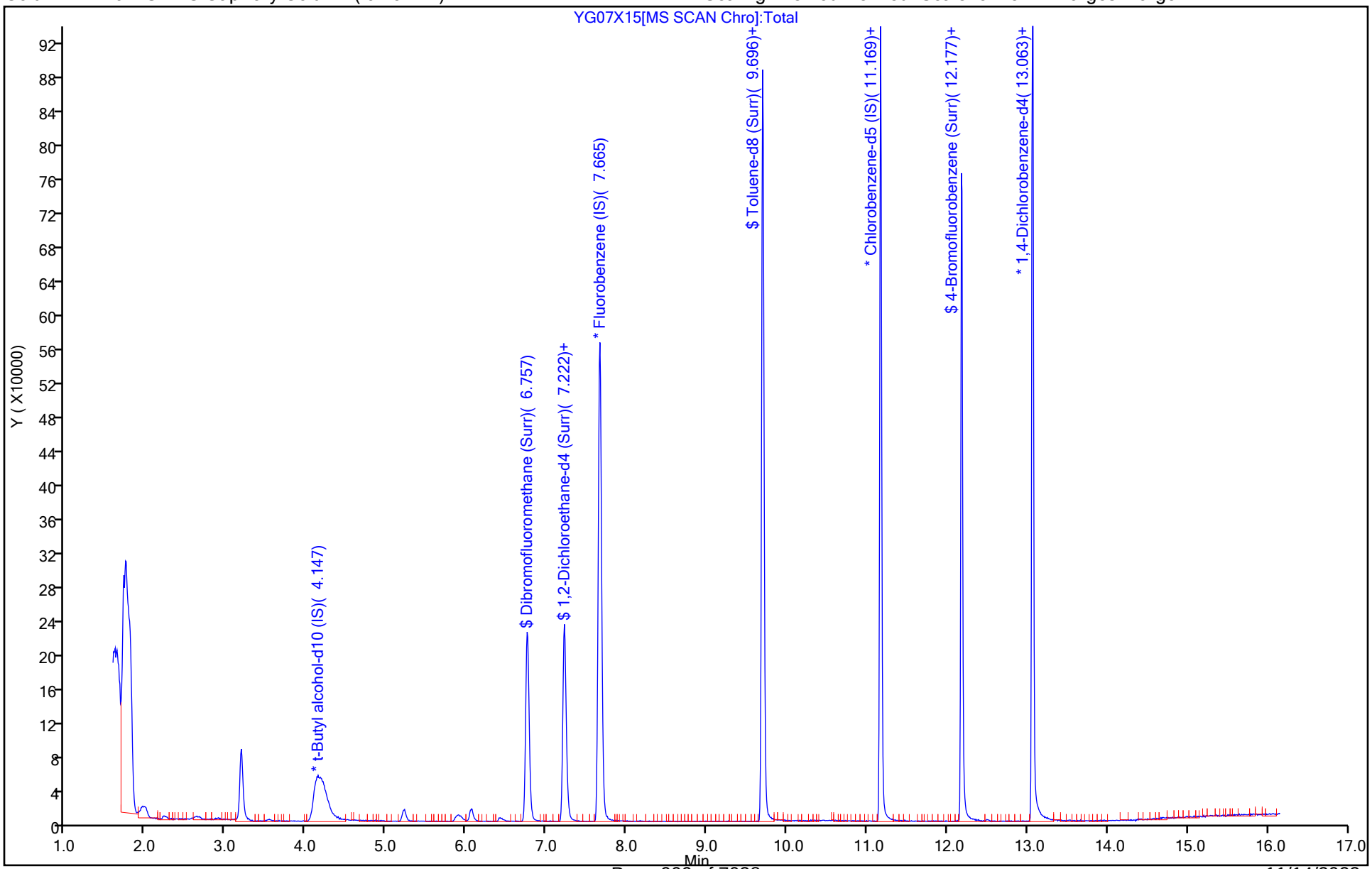
Report Date: 08-Aug-2023 08:15:28 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X15.D

Injection Date:	07-Aug-2023 14:40:30	Instrument ID:	9355	Operator ID:	CLM27445
Lims ID:	410-136864-A-5	Lab Sample ID:	410-136864-5	Worklist Smp#:	13
Client ID:	16WDUP				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



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Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X15.D
Lims ID: 410-136864-A-5
Client ID: 16WDUP
Sample Type: Client
Inject. Date: 07-Aug-2023 14:40:30 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-013
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:15:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	55.5	110.95
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	51.9	103.85
$ 81 Toluene-d8 (Surr)	50.0	50.0	100.02
$ 144 4-Bromofluorobenzene (Surr)	50.0	46.0	91.92

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1B Lab Sample ID: 410-136864-6

Matrix: Water Lab File ID: YG07X16.D

Analysis Method: 8260D Date Collected: 07/26/2023 12:05

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 15:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	ND		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
1868-53-7	Dibromofluoromethane (Surr)	112		80-120
460-00-4	4-Bromofluorobenzene (Surr)	88		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X16.D
Lims ID: 410-136864-A-6
Client ID: 16WC1B
Sample Type: Client
Inject. Date: 07-Aug-2023 15:02:30 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-014
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:15:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
20 Isopropyl alcohol	45		3.668				ND	
* 27 t-Butyl alcohol-d10 (IS)	65	4.147	4.161	-0.014	40	358281	250.0	
$ 52 Dibromofluoromethane (Surr)	113	6.764	6.757	0.007	93	219741	56.1	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.222	0.000	72	52467	53.1	
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	821453	50.0	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	757231	49.7	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	573136	50.0	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	93	255963	43.9	
* 160 1,4-Dichlorobenzene-d4	152	13.063	13.064	-0.001	95	330649	50.0	

QC Flag Legend
Processing Flags

Reagents:
MSV_HP20_ISSS_00113 Amount Added: 1.00 Units: uL Run Reagent

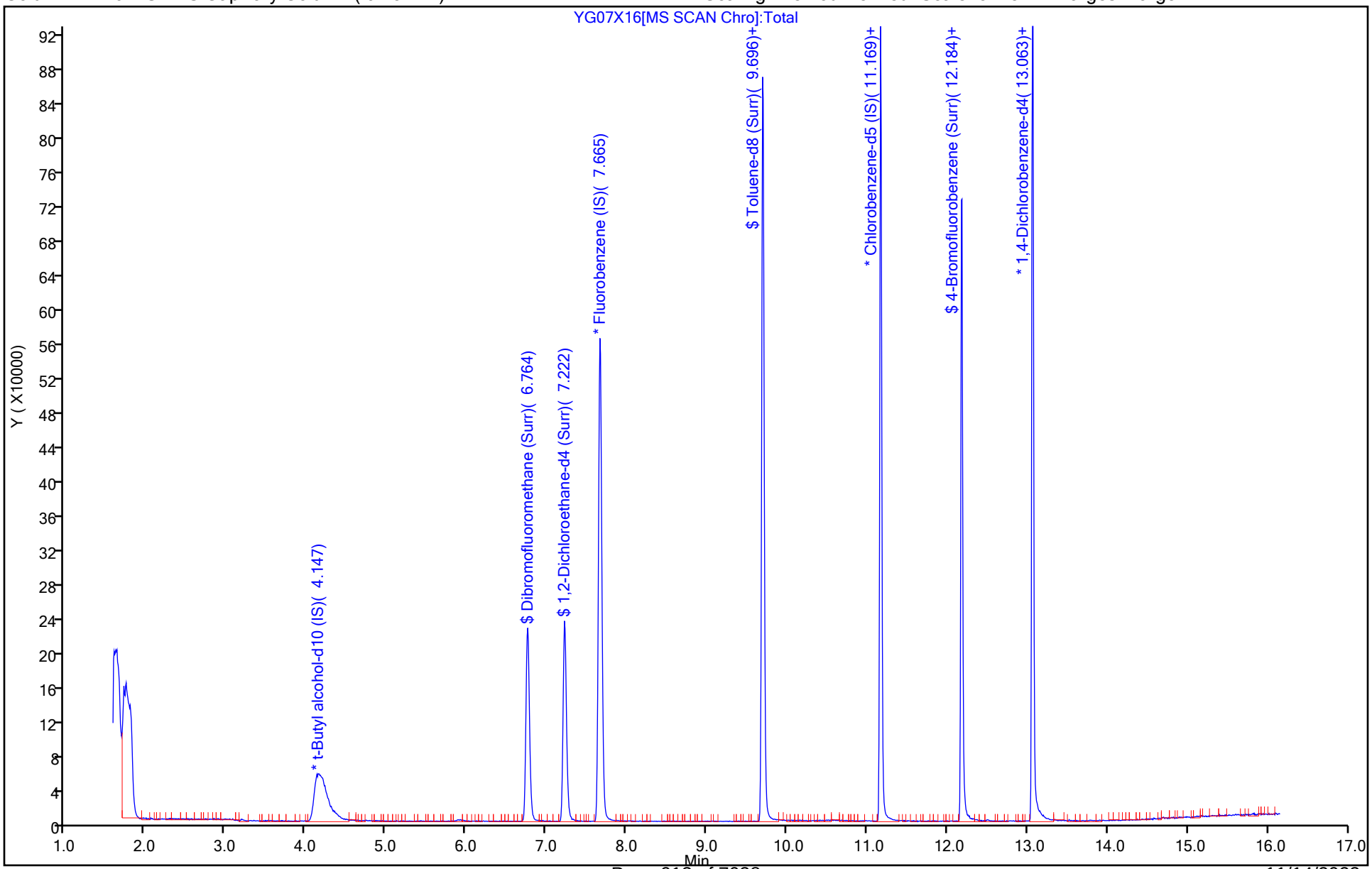
Report Date: 08-Aug-2023 08:15:51 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X16.D

Injection Date:	07-Aug-2023 15:02:30	Instrument ID:	9355	Operator ID:	CLM27445
Lims ID:	410-136864-A-6	Lab Sample ID:	410-136864-6	Worklist Smp#:	14
Client ID:	16WC1B				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



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Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X16.D
Lims ID: 410-136864-A-6
Client ID: 16WC1B
Sample Type: Client
Inject. Date: 07-Aug-2023 15:02:30 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-014
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 17:03:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:15:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	56.1	112.12
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	53.1	106.27
$ 81 Toluene-d8 (Surr)	50.0	49.7	99.50
$ 144 4-Bromofluorobenzene (Surr)	50.0	43.9	87.81

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-400238/12	YL24X11.D
Level 2	IC 410-400238/13	YL24X12.D
Level 3	IC 410-400238/14	YL24X13.D
Level 4	IC 410-400238/15	YL24X14.D
Level 5	ICIS 410-400238/16	YL24X15.D
Level 6	IC 410-400238/17	YL24X16.D
Level 7	IC 410-400238/18	YL24X17.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3567 0.4620	0.5207 0.4398	0.5162	0.4832	0.5047	Ave		0.4690			0.1000	12.3		20.0			
Chloromethane	0.5177 0.5082	0.5572 0.4848	0.5362	0.5468	0.5352	Ave		0.5266			0.1000	4.7		20.0			
Vinyl chloride	0.4090 0.4701	0.5237 0.4535	0.5046	0.5088	0.4993	Ave		0.4813			0.1000	8.3		20.0			
1,3-Butadiene	0.4389 0.4309	0.5046 0.4128	0.4823	0.4694	0.4602	Ave		0.4570				6.9		20.0			
Bromomethane	0.3315 0.3118	0.3409 0.2905	0.3262	0.3307	0.3227	Ave		0.3220			0.1000	5.1		20.0			
Chloroethane	0.2481 0.2218	0.2435 0.2096	0.2367	0.2461	0.2288	Ave		0.2335			0.1000	6.1		20.0			
Dichlorofluoromethane	0.5987 0.6326	0.6867 0.6004	0.6762	0.6838	0.6531	Ave		0.6473			0.1000	5.8		20.0			
Trichlorofluoromethane	0.3541 0.4643	0.5032 0.4524	0.4970	0.4937	0.5011	Ave		0.4665			0.1000	11.4		20.0			
n-Pentane	0.4478 0.3615	0.4004 0.3660	0.4417	0.4115	0.3976	Ave		0.4038				8.3		20.0			
Ethyl ether	0.1857 0.1948	0.1933 0.1889	0.2076	0.2001	0.1978	Ave		0.1954				3.7		20.0			
Freon 123a	0.3968 0.2933	0.3730 0.2855	0.3398	0.3315	0.3209	Ave		0.3344				12.0		20.0			
Acrolein	1.0073 0.8825	0.8443 0.8749	0.8888	0.8804	0.8926	Ave		0.8958				5.8		20.0			
1,1-Dichloroethene	0.2048 0.2101	0.2213 0.2112	0.2349	0.2251	0.2214	Ave		0.2184			0.1000	4.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetone	0.4546 0.4885	0.4677 0.4633	0.5066	0.4990	0.4978	Ave		0.4825			0.1000	4.2		20.0			
Freon 113	0.1715 0.2653	0.2573 0.2589	0.2921	0.2795	0.2841	Ave		0.2584			0.1000	15.7		20.0			
2-Propanol	0.8264 0.5917	0.5988 0.5650	0.6099	0.5608	0.5568	Ave		0.6156				15.5		20.0			
Methyl iodide	0.3688 0.4332	0.4173 0.4252	0.4551	0.4570	0.4392	Ave		0.4280				7.0		20.0			
Carbon disulfide	0.6560 0.7960	0.7952 0.7695	0.8540	0.8266	0.8269	Ave		0.7892			0.1000	8.2		20.0			
Methyl acetate	0.3712 0.3176	0.2991 0.3355	0.3291	0.3391	0.3348	Ave		0.3323			0.1000	6.6		20.0			
Allyl chloride	0.3483 0.3480	0.3455 0.3389	0.3780	0.3680	0.3602	Ave		0.3553				3.9		20.0			
Methylene Chloride	0.2842 0.2555	0.2597 0.2519	0.2699	0.2681	0.2577	Ave		0.2639			0.1000	4.2		20.0			
t-Butyl alcohol	1.2061 0.9541	1.1454 0.8791	1.0870	1.0009	0.9949	Ave		1.0382				11.0		20.0			
Acrylonitrile	0.1416 0.1736	0.1695 0.1694	0.1828	0.1799	0.1741	Ave		0.1701				8.0		20.0			
Methyl tertiary butyl ether	0.8386 0.8515	0.8531 0.8197	0.9219	0.8967	0.8740	Ave		0.8651			0.1000	4.1		20.0			
trans-1,2-Dichloroethene	0.1970 0.2145	0.2207 0.2099	0.2372	0.2304	0.2245	Ave		0.2192			0.1000	6.1		20.0			
n-Hexane	0.2562 0.3241	0.3414 0.3241	0.3762	0.3529	0.3638	Ave		0.3341				11.8		20.0			
1,1-Dichloroethane	0.3279 0.3884	0.3866 0.3767	0.4216	0.4138	0.4030	Ave		0.3883			0.2000	8.0		20.0			
Isopropyl ether	0.7787 0.8055	0.7996 0.7888	0.8747	0.8412	0.8257	Ave		0.8163				4.1		20.0			
2-Chloro-1,3-butadiene	0.2797 0.3412	0.3391 0.3318	0.3783	0.3668	0.3635	Ave		0.3429				9.5		20.0			
Ethyl t-butyl ether	0.7518 0.8132	0.7974 0.7847	0.8560	0.8420	0.8370	Ave		0.8117				4.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Butanone	0.1919 0.2539	0.2447 0.2550	0.2367	0.2399	0.2533	Ave		0.2393			0.1000	9.3		20.0			
cis-1,2-Dichloroethene	0.2076 0.2454	0.2391 0.2358	0.2645	0.2587	0.2548	Ave		0.2437			0.1000	7.8		20.0			
2,2-Dichloropropane	0.3586 0.4058	0.3963 0.4045	0.4326	0.4227	0.4186	Ave		0.4056				5.9		20.0			
Propionitrile	0.7173 0.7977	0.7811 0.7865	0.8279	0.8065	0.8179	Ave		0.7907				4.6		20.0			
Methacrylonitrile	0.1597 0.1710	0.1664 0.1683	0.1765	0.1720	0.1727	Ave		0.1695				3.2		20.0			
Bromochloromethane	0.1014 0.1249	0.1264 0.1209	0.1341	0.1318	0.1281	Ave		0.1239				8.8		20.0			
Tetrahydrofuran	0.7079 0.6522	0.6659 0.6328	0.7018	0.6669	0.6642	Ave		0.6703				4.0		20.0			
Chloroform	0.3582 0.3916	0.3948 0.3774	0.4279	0.4204	0.4024	Ave		0.3961			0.2000	6.0		20.0			
1,1,1-Trichloroethane	0.3355 0.3949	0.3870 0.3936	0.4276	0.4163	0.4090	Ave		0.3949			0.1000	7.5		20.0			
Cyclohexane	0.3832 0.4694	0.4649 0.4705	0.5236	0.4868	0.5039	Ave		0.4718			0.1000	9.4		20.0			
1,1-Dichloropropene	0.2396 0.3016	0.2929 0.2939	0.3229	0.3151	0.3137	Ave		0.2971				9.3		20.0			
Carbon tetrachloride	0.2442 0.3338	0.3142 0.3334	0.3511	0.3451	0.3450	Ave		0.3238			0.1000	11.5		20.0			
Isobutyl alcohol	0.4178 0.2985	0.2815 0.2954	0.3150	0.2924	0.3023	Ave		0.3147				14.8		20.0			
Benzene	0.8094 0.9341	0.9195 0.9090	1.0108	0.9822	0.9639	Ave		0.9327			0.5000	7.0		20.0			
1,2-Dichloroethane	0.3070 0.3273	0.3231 0.3120	0.3455	0.3322	0.3323	Ave		0.3256			0.1000	4.0		20.0			
t-Amyl methyl ether	0.7352 0.8188	0.7889 0.8040	0.8510	0.8416	0.8339	Ave		0.8105				4.9		20.0			
n-Heptane	0.2745 0.3720	0.3408 0.3836	0.4001	0.3837	0.4000	Ave		0.3650				12.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
n-Butanol	0.1884 0.2574	0.2450 0.2670	0.2611	0.2413	0.2576	Ave		0.2454				10.9		20.0			
Trichloroethene	0.1983 0.2445	0.2415 0.2401	0.2604	0.2500	0.2525	Ave		0.2411			0.2000	8.3		20.0			
Methylcyclohexane	0.3561 0.4780	0.4517 0.4917	0.5291	0.4969	0.5108	Ave		0.4735			0.1000	12.1		20.0			
1,2-Dichloropropane	0.2258 0.2602	0.2447 0.2573	0.2705	0.2630	0.2633	Ave		0.2550			0.1000	5.9		20.0			
t-Amyl ethyl ether	0.3008 0.3759	0.3620 0.4012	0.3944	0.3908	0.3897	Ave		0.3736				9.3		20.0			
Methyl methacrylate	0.2152 0.2611	0.2417 0.2740	0.2635	0.2637	0.2626	Ave		0.2546				7.8		20.0			
1,4-Dioxane	+++++ 0.0803	0.0782 0.0809	0.0800	0.0820	0.0824	Ave		0.0806			0.0050	1.9		20.0			
Dibromomethane	0.1309 0.1685	0.1571 0.1681	0.1763	0.1696	0.1685	Ave		0.1627				9.3		20.0			
Bromodichloromethane	0.2617 0.3249	0.3050 0.3212	0.3221	0.3220	0.3230	Ave		0.3114			0.2000	7.4		20.0			
2-Nitropropane	1.1168 1.1529	1.0337 1.1497	1.1491	1.1258	1.1551	Ave		1.1262				3.8		20.0			
2-Chloroethyl vinyl ether	0.1192 0.1908	0.1508 0.2007	0.1760	0.1832	0.1854	Ave		0.1723				16.3		20.0			
cis-1,3-Dichloropropene	0.3122 0.4070	0.3634 0.4182	0.4010	0.3952	0.4029	Ave		0.3857			0.2000	9.5		20.0			
4-Methyl-2-pentanone	0.3929 0.5166	0.4708 0.5099	0.4866	0.5012	0.5188	Ave		0.4852			0.1000	9.1		20.0			
Toluene	0.7272 0.7991	0.7835 0.7591	0.8754	0.8305	0.8191	Ave		0.7991			0.4000	6.1		20.0			
trans-1,3-Dichloropropene	0.4161 0.5045	0.4534 0.4989	0.5108	0.4976	0.5038	Ave		0.4836			0.1000	7.3		20.0			
Ethyl methacrylate	0.5114 0.5874	0.5758 0.5671	0.6108	0.6016	0.6003	Ave		0.5792				5.8		20.0			
1,1,2-Trichloroethane	0.3070 0.3153	0.3067 0.3034	0.3322	0.3181	0.3195	Ave		0.3146			0.1000	3.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	0.2809 0.3394	0.3251 0.3224	0.3725	0.3562	0.3561	Ave		0.3361			0.2000	9.0		20.0			
1,3-Dichloropropane	0.4353 0.5072	0.4988 0.4980	0.5342	0.5206	0.5178	Ave		0.5017				6.4		20.0			
2-Hexanone	0.3162 0.4629	0.4186 0.4509	0.4629	0.4662	0.4766	Ave		0.4363			0.1000	12.9		20.0			
Dibromochloromethane	0.3013 0.3612	0.3185 0.3546	0.3604	0.3499	0.3607	Ave		0.3438				7.0		20.0			
1,2-Dibromoethane	0.2833 0.3383	0.3231 0.3338	0.3529	0.3429	0.3429	Ave		0.3310			0.1000	6.9		20.0			
1-Chlorohexane	0.4758 0.4228	0.4425 0.4075	0.4928	0.4558	0.4506	Ave		0.4497				6.5		20.0			
Chlorobenzene	0.7827 0.9040	0.8787 0.8766	0.9645	0.9343	0.9233	Ave		0.8949			0.5000	6.5		20.0			
1,1,1,2-Tetrachloroethane	0.3340 0.3694	0.3425 0.3486	0.3830	0.3817	0.3754	Ave		0.3621				5.5		20.0			
Ethylbenzene	1.4580 1.6183	1.5681 1.5226	1.7838	1.7180	1.6875	Ave		1.6223			0.1000	7.1		20.0			
m&p-Xylene	0.5190 0.6303	0.6158 0.5960	0.6879	0.6585	0.6488	Ave		0.6223			0.1000	8.8		20.0			
o-Xylene	0.5900 0.6760	0.6402 0.6409	0.7361	0.7027	0.6928	Ave		0.6684			0.3000	7.3		20.0			
Styrene	0.8767 1.0651	0.9965 1.0273	1.1359	1.0992	1.0786	Ave		1.0399			0.3000	8.2		20.0			
Bromoform	0.2568 0.3044	0.2746 0.3031	0.3036	0.2986	0.3037	Ave		0.2921			0.1000	6.5		20.0			
Isopropylbenzene	1.4481 1.8219	1.7411 1.6667	1.9959	1.9181	1.8895	Ave		1.7830			0.1000	10.3		20.0			
Cyclohexanone	0.3720	0.3140 0.3632	0.3274	0.3715	0.3717	Ave		0.3533				7.3		20.0			
1,1,2,2-Tetrachloroethane	1.0335 1.1226	1.0901 1.0279	1.1699	1.1039	1.1216	Ave		1.0956			0.3000	4.6		20.0			
Bromobenzene	0.5709 0.7130	0.6691 0.6628	0.7310	0.7066	0.7157	Ave		0.6813				8.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.2227 0.3118	0.2690 0.2998	0.3092	0.2995	0.3145	Ave		0.2895				11.5		20.0			
1,2,3-Trichloropropane	0.2691 0.3234	0.3059 0.2949	0.3434	0.3155	0.3215	Ave		0.3105				7.6		20.0			
N-Propylbenzene	2.6530 3.5631	3.3487 3.0879	3.7817	3.6422	3.6419	Ave		3.3884				11.7		20.0			
2-Chlorotoluene	0.5626 0.7381	0.6745 0.6804	0.7730	0.7430	0.7427	Ave		0.7021				10.1		20.0			
1,3,5-Trimethylbenzene	2.0683 2.8752	2.5760 2.5691	2.9019	2.7917	2.8691	Ave		2.6645				11.2		20.0			
4-Chlorotoluene	0.5786 0.7069	0.6533 0.6675	0.7367	0.7112	0.7073	Ave		0.6802				7.8		20.0			
tert-Butylbenzene	0.3555 0.5502	0.4575 0.5281	0.5239	0.5248	0.5569	Ave		0.4996				14.3		20.0			
1,2,4-Trimethylbenzene	2.3359 2.9479	2.6427 2.6502	3.0511	2.9078	2.9535	Ave		2.7842				9.0		20.0			
sec-Butylbenzene	2.6613 3.6805	3.2507 3.2190	3.8001	3.6557	3.7591	Ave		3.4323				12.1		20.0			
1,3-Dichlorobenzene	1.2320 1.4539	1.3553 1.3618	1.5279	1.4638	1.4749	Ave		1.4099			0.6000	7.1		20.0			
p-Isopropyltoluene	2.2217 3.2322	2.8232 2.8942	3.3300	3.1956	3.3190	Ave		3.0023				13.3		20.0			
1,4-Dichlorobenzene	1.2645 1.4093	1.3584 1.3224	1.5027	1.4403	1.4318	Ave		1.3899			0.5000	5.8		20.0			
1,2,3-Trimethylbenzene	2.5703 3.2263	2.9070 2.8861	3.2806	3.1285	3.2187	Ave		3.0311				8.5		20.0			
Benzyl chloride	1.7628 2.3518	1.9435 2.2091	2.3087	2.2439	2.3486	Ave		2.1669				10.5		20.0			
1,3-Diethylbenzene	1.3763 1.9386	1.7157 1.8165	2.0344	1.9344	1.9827	Ave		1.8284				12.4		20.0			
1,4-Diethylbenzene	1.4276 2.0029	1.7714 1.8904	2.1286	2.0348	2.0477	Ave		1.9005				12.6		20.0			
n-Butylbenzene	1.2156 1.5961	1.3940 1.5351	1.6937	1.6333	1.6464	Ave		1.5306				11.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.3480 1.5881	1.4883 1.4774	1.6867	1.6117	1.6073	Ave		1.5439			0.4000	7.3		20.0			
1,2-Diethylbenzene	1.4664 1.6785	1.4228 1.5976	1.7387	1.6508	1.7121	Ave		1.6096				7.6		20.0			
1,2-Dibromo-3-Chloropropane	0.3148 0.3608	0.3406 0.3450	0.3682	0.3468	0.3643	Ave		0.3486			0.0500	5.2		20.0			
1,3,5-Trichlorobenzene	1.0873 1.3825	1.2531 1.3086	1.4602	1.3614	1.4134	Ave		1.3238				9.4		20.0			
1,2,4-Trichlorobenzene	1.0511 1.3654	1.2768 1.2576	1.4844	1.3621	1.4171	Ave		1.3164			0.2000	10.7		20.0			
Hexachlorobutadiene	0.4087 0.5548	0.4700 0.5522	0.5546	0.5368	0.5738	Ave		0.5215				11.5		20.0			
Naphthalene	4.2971 5.0322	4.9367 3.9426	5.6135	5.1721	5.2398	Ave		4.8906				11.8		20.0			
1,2,3-Trichlorobenzene	1.1737 1.4434	1.3960 1.2865	1.5651	1.4533	1.4890	Ave		1.4010				9.4		20.0			
2-Methylnaphthalene	2.6757 3.2755	3.0731 2.7332	3.5501	3.2986	3.3614	Ave		3.1382				10.5		20.0			
Dibromofluoromethane (Surr)	0.2392 0.2358	0.2406 0.2351	0.2406	0.2419	0.2369	Ave		0.2386				1.1		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0609 0.0597	0.0596 0.0588	0.0607	0.0597	0.0613	Ave		0.0601				1.5		20.0			
Toluene-d8 (Surr)	1.3461 1.3204	1.3453 1.2841	1.3406	1.3257	1.3328	Ave		1.3278				1.6		20.0			
4-Bromofluorobenzene (Surr)	0.5152 0.4996	0.5056 0.5149	0.5138	0.5049	0.5064	Ave		0.5086				1.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-400238/12	YL24X11.D
Level 2	IC 410-400238/13	YL24X12.D
Level 3	IC 410-400238/14	YL24X13.D
Level 4	IC 410-400238/15	YL24X14.D
Level 5	ICIS 410-400238/16	YL24X15.D
Level 6	IC 410-400238/17	YL24X16.D
Level 7	IC 410-400238/18	YL24X17.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	7960 1048531	45562 3076990	113994	213746	563581	1.00 100	4.00 300	10.0	20.0	50.0
Chloromethane	FB	Ave	11552 1153328	48754 3391979	118413	241893	597597	1.00 100	4.00 300	10.0	20.0	50.0
Vinyl chloride	FB	Ave	9127 1066930	45829 3173128	111437	225045	557528	1.00 100	4.00 300	10.0	20.0	50.0
1,3-Butadiene	FB	Ave	9793 977936	44153 2888341	106512	207636	513894	1.00 100	4.00 300	10.0	20.0	50.0
Bromomethane	FB	Ave	7396 707637	29829 2032496	72047	146291	360270	1.00 100	4.00 300	10.0	20.0	50.0
Chloroethane	FB	Ave	5535 503420	21309 1466742	52272	108881	255451	1.00 100	4.00 300	10.0	20.0	50.0
Dichlorofluoromethane	FB	Ave	13359 1435592	60091 4200559	149329	302467	729259	1.00 100	4.00 300	10.0	20.0	50.0
Trichlorofluoromethane	FB	Ave	7902 1053845	44031 3164798	109756	218365	559551	1.00 100	4.00 300	10.0	20.0	50.0
n-Pentane	FB	Ave	9992 820421	35039 2560723	97551	182031	443936	1.00 100	4.00 300	10.0	20.0	50.0
Ethyl ether	FB	Ave	4145 442063	16917 1321564	45856	88505	220875	1.00 100	4.00 300	10.0	20.0	50.0
Freon 123a	FB	Ave	8854 665553	32642 1997326	75048	146653	358348	1.00 100	4.00 300	10.0	20.0	50.0
Acrolein	TBAd10	Ave	24274 2181648	80702 6769259	210551	424870	1074955	10.0 1000	40.0 3000	100	200	500
1,1-Dichloroethene	FB	Ave	4570 476833	19366 1477621	51885	99567	247250	1.00 100	4.00 300	10.0	20.0	50.0
Acetone	TBAd10	Ave	2191 241512	8940 717016	24001	48159	119889	2.00 200	8.00 600	20.0	40.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Freon 113	FB	Ave	3827 602175	22511 1811572	64521	123639	317220	1.00 100	4.00 300	10.0	20.0	50.0
2-Propanol	TBAd10	Ave	9957 731369	28618 2185932	72241	135311	335276	5.00 500	20.0 1500	50.0	100	250
Methyl iodide	FB	Ave	8230 983065	36519 2974577	100504	202168	490409	1.00 100	4.00 300	10.0	20.0	50.0
Carbon disulfide	FB	Ave	14638 1806622	69583 5383307	188609	365647	923261	1.00 100	4.00 300	10.0	20.0	50.0
Methyl acetate	FB	Ave	8282 720719	26175 2347047	72679	149987	373829	1.00 100	4.00 300	10.0	20.0	50.0
Allyl chloride	FB	Ave	7772 789703	30234 2371186	83472	162777	402170	1.00 100	4.00 300	10.0	20.0	50.0
Methylene Chloride	FB	Ave	6342 579795	22722 1762513	59617	118592	287708	1.00 100	4.00 300	10.0	20.0	50.0
t-Butyl alcohol	TBAd10	Ave	14531 1179361	54742 3400772	128742	241513	599060	5.00 500	20.0 1500	50.0	100	250
Acrylonitrile	FB	Ave	7900 985070	37084 2962061	100939	198924	486122	2.50 250	10.0 750	25.0	50.0	125
Methyl tertiary butyl ether	FB	Ave	18712 1932520	74647 5734694	203602	396641	975942	1.00 100	4.00 300	10.0	20.0	50.0
trans-1,2-Dichloroethene	FB	Ave	4396 486772	19315 1468519	52379	101900	250622	1.00 100	4.00 300	10.0	20.0	50.0
n-Hexane	FB	Ave	5717 735455	29876 2267235	83090	156099	406232	1.00 100	4.00 300	10.0	20.0	50.0
1,1-Dichloroethane	FB	Ave	7317 881568	33826 2635679	93114	183033	450000	1.00 100	4.00 300	10.0	20.0	50.0
Isopropyl ether	FB	Ave	17375 1828200	69966 5518477	193178	372087	921974	1.00 100	4.00 300	10.0	20.0	50.0
2-Chloro-1,3-butadiene	FB	Ave	6241 774382	29676 2321680	83539	162260	405851	1.00 100	4.00 300	10.0	20.0	50.0
Ethyl t-butyl ether	FB	Ave	16775 1845630	69774 5489909	189057	372473	934561	1.00 100	4.00 300	10.0	20.0	50.0
2-Butanone	FB	Ave	8562 1152439	42828 3568387	104544	212215	565715	2.00 200	8.00 600	20.0	40.0	100
cis-1,2-Dichloroethene	FB	Ave	4633 556910	20922 1649590	58419	114441	284483	1.00 100	4.00 300	10.0	20.0	50.0
2,2-Dichloropropane	FB	Ave	8002 921025	34681 2829682	95537	186985	467460	1.00 100	4.00 300	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Propionitrile	TBAd10	Ave	8642 985976	37328 3042579	98056	194609	492503	5.00 500	20.0 1500	50.0	100	250
Methacrylonitrile	FB	Ave	8909 970073	36397 2943730	97427	190160	482132	2.50 250	10.0 750	25.0	50.0	125
Bromochloromethane	FB	Ave	2263 283485	11059 845539	29613	58305	143088	1.00 100	4.00 300	10.0	20.0	50.0
Tetrahydrofuran	TBAd10	Ave	8529 806145	31826 2448240	83123	160904	399953	5.00 500	20.0 1500	50.0	100	250
Chloroform	FB	Ave	7994 888701	34549 2640442	94501	185954	449283	1.00 100	4.00 300	10.0	20.0	50.0
1,1,1-Trichloroethane	FB	Ave	7487 896260	33864 2753883	94428	184165	456726	1.00 100	4.00 300	10.0	20.0	50.0
Cyclohexane	FB	Ave	8550 1065298	40681 3291644	115646	215326	562668	1.00 100	4.00 300	10.0	20.0	50.0
1,1-Dichloropropene	FB	Ave	5347 684442	25633 2056196	71323	139373	350252	1.00 100	4.00 300	10.0	20.0	50.0
Carbon tetrachloride	FB	Ave	5449 757489	27496 2332584	77530	152643	385232	1.00 100	4.00 300	10.0	20.0	50.0
Isobutyl alcohol	TBAd10	Ave	12583 922556	33629 2857014	93286	176373	455126	12.5 1250	50.0 3750	125	250	625
Benzene	FB	Ave	18060 2119908	80462 6359698	223227	434458	1076306	1.00 100	4.00 300	10.0	20.0	50.0
1,2-Dichloroethane	FB	Ave	6851 742822	28276 2182752	76309	146948	371036	1.00 100	4.00 300	10.0	20.0	50.0
t-Amyl methyl ether	FB	Ave	16405 1858269	69035 5624887	187936	372264	931141	1.00 100	4.00 300	10.0	20.0	50.0
n-Heptane	FB	Ave	6125 844165	29821 2683690	88363	169720	446689	1.00 100	4.00 300	10.0	20.0	50.0
n-Butanol	TBAd10	Ave	5675 795384	29275 2582639	77326	145547	387696	12.5 1250	50.0 3750	125	250	625
Trichloroethene	FB	Ave	4425 554855	21135 1679563	57519	110596	281957	1.00 100	4.00 300	10.0	20.0	50.0
Methylcyclohexane	FB	Ave	7946 1084823	39529 3439857	116849	219796	570385	1.00 100	4.00 300	10.0	20.0	50.0
1,2-Dichloropropane	FB	Ave	5039 590636	21412 1800242	59733	116334	293944	1.00 100	4.00 300	10.0	20.0	50.0
t-Amyl ethyl ether	FB	Ave	6712	31675	87102	172886	435180	1.00	4.00	10.0	20.0	50.0

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			853095	2806971				100	300			
Methyl methacrylate	FB	Ave	4803 592675	21151 1917015	58205	116649	293173	1.00 100	4.00 300	10.0	20.0	50.0
1,4-Dioxane	TBAd10	Ave	+++++ 248158	9339 782023	23692	49489	124077	+++++ 1250	50.0 3750	125	250	625
Dibromomethane	FB	Ave	2922 382479	13744 1176144	38927	75041	188115	1.00 100	4.00 300	10.0	20.0	50.0
Bromodichloromethane	FB	Ave	5840 737452	26687 2246870	71129	142435	360633	1.00 100	4.00 300	10.0	20.0	50.0
2-Nitropropane	TBAd10	Ave	13455 1425100	49401 4447820	136096	271638	695541	5.00 500	20.0 1500	50.0	100	250
2-Chloroethyl vinyl ether	FB	Ave	2660 433009	13192 1404070	38871	81039	206966	1.00 100	4.00 300	10.0	20.0	50.0
cis-1,3-Dichloropropene	FB	Ave	6967 923661	31797 2926143	88564	174821	449846	1.00 100	4.00 300	10.0	20.0	50.0
4-Methyl-2-pentanone	FB	Ave	17533 2344791	82389 7135213	214918	443436	1158533	2.00 200	8.00 600	20.0	40.0	100
Toluene	CBZd5	Ave	11648 1378242	49839 4254969	140872	271625	678154	1.00 100	4.00 300	10.0	20.0	50.0
trans-1,3-Dichloropropene	CBZd5	Ave	6665 870217	28844 2796537	82202	162749	417085	1.00 100	4.00 300	10.0	20.0	50.0
Ethyl methacrylate	CBZd5	Ave	8191 1013155	36625 3178323	98288	196770	496971	1.00 100	4.00 300	10.0	20.0	50.0
1,1,2-Trichloroethane	CBZd5	Ave	4918 543789	19511 1700365	53459	104038	264504	1.00 100	4.00 300	10.0	20.0	50.0
Tetrachloroethene	CBZd5	Ave	4500 585455	20683 1806852	59935	116508	294849	1.00 100	4.00 300	10.0	20.0	50.0
1,3-Dichloropropane	CBZd5	Ave	6973 874724	31731 2791469	85959	170280	428667	1.00 100	4.00 300	10.0	20.0	50.0
2-Hexanone	CBZd5	Ave	10131 1596862	53256 5054346	148968	304928	789103	2.00 200	8.00 600	20.0	40.0	100
Dibromochloromethane	CBZd5	Ave	4826 622965	20261 1987295	57996	114449	298593	1.00 100	4.00 300	10.0	20.0	50.0
1,2-Dibromoethane	CBZd5	Ave	4538 583520	20550 1870986	56794	112135	283897	1.00 100	4.00 300	10.0	20.0	50.0
1-Chlorohexane	CBZd5	Ave	7621 729194	28148 2284059	79297	149072	373025	1.00 100	4.00 300	10.0	20.0	50.0
Chlorobenzene	CBZd5	Ave	12538 1559162	55898 4913558	155214	305582	764397	1.00 100	4.00 300	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBZd5	Ave	5350 637045	21787 1953663	61638	124853	310773	1.00 100	4.00 300	10.0	20.0	50.0
Ethylbenzene	CBZd5	Ave	23354 2791206	99747 8534209	287055	561876	1397087	1.00 100	4.00 300	10.0	20.0	50.0
m&p-Xylene	CBZd5	Ave	16626 2174332	78347 6680570	221393	430766	1074243	2.00 200	8.00 600	20.0	40.0	100
o-Xylene	CBZd5	Ave	9451 1165948	40723 3592115	118449	229820	573574	1.00 100	4.00 300	10.0	20.0	50.0
Styrene	CBZd5	Ave	14043 1837089	63387 5758000	182783	359494	893031	1.00 100	4.00 300	10.0	20.0	50.0
Bromoform	CBZd5	Ave	4114 524984	17467 1698989	48858	97671	251435	1.00 100	4.00 300	10.0	20.0	50.0
Isopropylbenzene	CBZd5	Ave	23196 3142359	110756 9341579	321174	627322	1564393	1.00 100	4.00 300	10.0	20.0	50.0
Cyclohexanone	TBAd10	Ave	 1149392	150043 3512477	193903	448219	559571	 1250	200 3750	250	500	625
1,1,2,2-Tetrachloroethane	DCBd4	Ave	10161 1112647	42061 3517718	114110	218365	544584	1.00 100	4.00 300	10.0	20.0	50.0
Bromobenzene	DCBd4	Ave	5613 706681	25817 2268304	71296	139771	347510	1.00 100	4.00 300	10.0	20.0	50.0
trans-1,4-Dichloro-2-butene	DCBd4	Ave	5474 772598	25943 2564607	75404	148095	381723	2.50 250	10.0 750	25.0	50.0	125
1,2,3-Trichloropropane	DCBd4	Ave	2646 320516	11801 1009321	33496	62407	156100	1.00 100	4.00 300	10.0	20.0	50.0
N-Propylbenzene	DCBd4	Ave	26085 3531487	129208 10567866	368844	720469	1768393	1.00 100	4.00 300	10.0	20.0	50.0
2-Chlorotoluene	DCBd4	Ave	5532 731545	26026 2328649	75391	146972	360649	1.00 100	4.00 300	10.0	20.0	50.0
1,3,5-Trimethylbenzene	DCBd4	Ave	20336 2849750	99394 8792205	283035	552231	1393115	1.00 100	4.00 300	10.0	20.0	50.0
4-Chlorotoluene	DCBd4	Ave	5689 700664	25208 2284464	71851	140679	343417	1.00 100	4.00 300	10.0	20.0	50.0
tert-Butylbenzene	DCBd4	Ave	3495 545358	17653 1807199	51102	103813	270428	1.00 100	4.00 300	10.0	20.0	50.0
1,2,4-Trimethylbenzene	DCBd4	Ave	22967 2921805	101968 9069807	297587	575192	1434117	1.00 100	4.00 300	10.0	20.0	50.0
sec-Butylbenzene	DCBd4	Ave	26166 3647883	125424 11016386	370639	723131	1825295	1.00 100	4.00 300	10.0	20.0	50.0
1,3-Dichlorobenzene	DCBd4	Ave	12113	52294	149028	289558	716139	1.00	4.00	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1441040	4660437				100	300			
p-Isopropyltoluene	DCBd4	Ave	21844 3203597	108929 9904627	324791	632123	1611560	1.00 100	4.00 300	10.0	20.0	50.0
1,4-Dichlorobenzene	DCBd4	Ave	12433 1396835	52411 4525544	146563	284909	695227	1.00 100	4.00 300	10.0	20.0	50.0
1,2,3-Trimethylbenzene	DCBd4	Ave	25271 3197740	112165 9877088	319971	618855	1562898	1.00 100	4.00 300	10.0	20.0	50.0
Benzyl chloride	DCBd4	Ave	17332 2330944	74987 7560094	225177	443864	1140411	1.00 100	4.00 300	10.0	20.0	50.0
1,3-Diethylbenzene	DCBd4	Ave	13532 1921449	66200 6216542	198422	382641	962727	1.00 100	4.00 300	10.0	20.0	50.0
1,4-Diethylbenzene	DCBd4	Ave	14036 1985114	68348 6469353	207613	402507	994289	1.00 100	4.00 300	10.0	20.0	50.0
n-Butylbenzene	DCBd4	Ave	11952 1581957	53787 5253536	165198	323077	799425	1.00 100	4.00 300	10.0	20.0	50.0
1,2-Dichlorobenzene	DCBd4	Ave	13254 1574048	57424 5055979	164510	318817	780461	1.00 100	4.00 300	10.0	20.0	50.0
1,2-Diethylbenzene	DCBd4	Ave	14418 1663619	54896 5467479	169585	326552	831324	1.00 100	4.00 300	10.0	20.0	50.0
1,2-Dibromo-3-Chloropropane	DCBd4	Ave	3095 357560	13142 1180587	35916	68602	176888	1.00 100	4.00 300	10.0	20.0	50.0
1,3,5-Trichlorobenzene	DCBd4	Ave	10690 1370262	48348 4478361	142424	269310	686299	1.00 100	4.00 300	10.0	20.0	50.0
1,2,4-Trichlorobenzene	DCBd4	Ave	10335 1353331	49266 4304000	144780	269437	688107	1.00 100	4.00 300	10.0	20.0	50.0
Hexachlorobutadiene	DCBd4	Ave	4018 549844	18136 1889904	54090	106189	278598	1.00 100	4.00 300	10.0	20.0	50.0
Naphthalene	DCBd4	Ave	42250 4987588	190479 13492772	547507	1023098	2544261	1.00 100	4.00 300	10.0	20.0	50.0
1,2,3-Trichlorobenzene	DCBd4	Ave	11540 1430621	53864 4402946	152653	287477	723004	1.00 100	4.00 300	10.0	20.0	50.0
2-Methylnaphthalene	DCBd4	Ave	26308 3246454	118573 9353715	346263	652496	1632189	1.00 100	4.00 300	10.0	20.0	50.0
Dibromofluoromethane (Surr)	FB	Ave	266876 267595	263149 274149	265636	267559	264540	50.0 50.0	50.0 50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	67927 67777	65212 68608	66994	65966	68494	50.0 50.0	50.0 50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBZd5	Ave	1078107 1138667	1069695 1199549	1078636	1083984	1103443	50.0 50.0	50.0 50.0	50.0	50.0	50.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	412658	402033	413404	412822	419248	50.0	50.0	50.0	50.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			430822	480956				50.0	50.0			

Curve Type Legend:
Ave = Average ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-400238/12	YL24X11.D
Level 2	IC 410-400238/13	YL24X12.D
Level 3	IC 410-400238/14	YL24X13.D
Level 4	IC 410-400238/15	YL24X14.D
Level 5	ICIS 410-400238/16	YL24X15.D
Level 6	IC 410-400238/17	YL24X16.D
Level 7	IC 410-400238/18	YL24X17.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	-23.9 -6.2	11.0	10.0	3.0	7.6	-1.5	50 30	30	30	30	30	30
Chloromethane	-1.7 -7.9	5.8	1.8	3.8	1.6	-3.5	50 30	30	30	30	30	30
Vinyl chloride	-15.0 -5.8	8.8	4.8	5.7	3.7	-2.3	50 30	30	30	30	30	30
1,3-Butadiene	-4.0 -9.7	10.4	5.5	2.7	0.7	-5.7	50 30	30	30	30	30	30
Bromomethane	2.9 -9.8	5.9	1.3	2.7	0.2	-3.2	50 30	30	30	30	30	30
Chloroethane	6.2 -10.2	4.3	1.4	5.4	-2.0	-5.0	50 30	30	30	30	30	30
Dichlorofluoromethane	-7.5 -7.3	6.1	4.5	5.6	0.9	-2.3	50 30	30	30	30	30	30
Trichlorofluoromethane	-24.1 -3.0	7.9	6.5	5.8	7.4	-0.5	50 30	30	30	30	30	30
n-Pentane	10.9 -9.4	-0.8	9.4	1.9	-1.5	-10.5	50 30	30	30	30	30	30
Ethyl ether	-5.0 -3.4	-1.1	6.2	2.4	1.2	-0.4	50 30	30	30	30	30	30
Freon 123a	18.7 -14.6	11.6	1.6	-0.9	-4.0	-12.3	50 30	30	30	30	30	30
Acrolein	12.4 -2.3	-5.8	-0.8	-1.7	-0.4	-1.5	50 30	30	30	30	30	30
1,1-Dichloroethene	-6.2 -3.3	1.3	7.6	3.1	1.4	-3.8	50 30	30	30	30	30	30
Acetone	-5.8 -4.0	-3.1	5.0	3.4	3.2	1.2	50 30	30	30	30	30	30
Freon 113	-33.6 0.2	-0.4	13.1	8.2	9.9	2.7	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
2-Propanol	34.2 -8.2	-2.7	-0.9	-8.9	-9.6	-3.9	50 30	30	30	30	30	30
Methyl iodide	-13.8 -0.7	-2.5	6.3	6.8	2.6	1.2	50 30	30	30	30	30	30
Carbon disulfide	-16.9 -2.5	0.8	8.2	4.7	4.8	0.9	50 30	30	30	30	30	30
Methyl acetate	11.7 0.9	-10.0	-1.0	2.0	0.7	-4.4	50 30	30	30	30	30	30
Allyl chloride	-2.0 -4.6	-2.7	6.4	3.6	1.4	-2.1	50 30	30	30	30	30	30
Methylene Chloride	7.7 -4.5	-1.6	2.3	1.6	-2.3	-3.2	50 30	30	30	30	30	30
t-Butyl alcohol	16.2 -15.3	10.3	4.7	-3.6	-4.2	-8.1	50 30	30	30	30	30	30
Acrylonitrile	-16.8 -0.5	-0.4	7.5	5.7	2.4	2.0	50 30	30	30	30	30	30
Methyl tertiary butyl ether	-3.1 -5.2	-1.4	6.6	3.7	1.0	-1.6	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	-10.1 -4.2	0.7	8.2	5.1	2.4	-2.1	50 30	30	30	30	30	30
n-Hexane	-23.3 -3.0	2.2	12.6	5.6	8.9	-3.0	50 30	30	30	30	30	30
1,1-Dichloroethane	-15.6 -3.0	-0.4	8.6	6.6	3.8	0.0	50 30	30	30	30	30	30
Isopropyl ether	-4.6 -3.4	-2.1	7.2	3.0	1.2	-1.3	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-18.4 -3.2	-1.1	10.3	7.0	6.0	-0.5	50 30	30	30	30	30	30
Ethyl t-butyl ether	-7.4 -3.3	-1.8	5.5	3.7	3.1	0.2	50 30	30	30	30	30	30
2-Butanone	-19.8 6.6	2.2	-1.1	0.2	5.8	6.1	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-14.8 -3.2	-1.9	8.5	6.2	4.5	0.7	50 30	30	30	30	30	30
2,2-Dichloropropane	-11.6 -0.3	-2.3	6.7	4.2	3.2	0.1	50 30	30	30	30	30	30
Propionitrile	-9.3 -0.5	-1.2	4.7	2.0	3.4	0.9	50 30	30	30	30	30	30
Methacrylonitrile	-5.8 -0.7	-1.8	4.1	1.5	1.9	0.9	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromochloromethane	-18.2 -2.5	2.0	8.2	6.3	3.4	0.8	50 30	30	30	30	30	30
Tetrahydrofuran	5.6 -5.6	-0.6	4.7	-0.5	-0.9	-2.7	50 30	30	30	30	30	30
Chloroform	-9.6 -4.7	-0.3	8.0	6.1	1.6	-1.1	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-15.0 -0.3	-2.0	8.3	5.4	3.6	0.0	50 30	30	30	30	30	30
Cyclohexane	-18.8 -0.3	-1.5	11.0	3.2	6.8	-0.5	50 30	30	30	30	30	30
1,1-Dichloropropene	-19.3 -1.1	-1.4	8.7	6.0	5.6	1.5	50 30	30	30	30	30	30
Carbon tetrachloride	-24.6 3.0	-3.0	8.4	6.6	6.5	3.1	50 30	30	30	30	30	30
Isobutyl alcohol	32.7 -6.1	-10.6	0.1	-7.1	-3.9	-5.1	50 30	30	30	30	30	30
Benzene	-13.2 -2.5	-1.4	8.4	5.3	3.3	0.1	50 30	30	30	30	30	30
1,2-Dichloroethane	-5.7 -4.2	-0.8	6.1	2.0	2.0	0.5	50 30	30	30	30	30	30
t-Amyl methyl ether	-9.3 -0.8	-2.7	5.0	3.8	2.9	1.0	50 30	30	30	30	30	30
n-Heptane	-24.8 5.1	-6.6	9.6	5.1	9.6	1.9	50 30	30	30	30	30	30
n-Butanol	-23.2 8.8	-0.2	6.4	-1.7	4.9	4.9	50 30	30	30	30	30	30
Trichloroethene	-17.7 -0.4	0.2	8.0	3.7	4.8	1.4	50 30	30	30	30	30	30
Methylcyclohexane	-24.8 3.8	-4.6	11.7	4.9	7.9	1.0	50 30	30	30	30	30	30
1,2-Dichloropropane	-11.4 0.9	-4.0	6.1	3.1	3.2	2.1	50 30	30	30	30	30	30
t-Amyl ethyl ether	-19.5 7.4	-3.1	5.6	4.6	4.3	0.6	50 30	30	30	30	30	30
Methyl methacrylate	-15.4 7.6	-5.0	3.5	3.6	3.1	2.6	50 30	30	30	30	30	30
1,4-Dioxane	+++++ 0.3	-3.1	-0.8	1.7	2.2	-0.4	30	50	30	30	30	30
Dibromomethane	-19.5 3.3	-3.5	8.3	4.3	3.5	3.6	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromodichloromethane	-16.0 3.1	-2.1	3.4	3.4	3.7	4.3	50 30	30	30	30	30	30
2-Nitropropane	-0.8 2.1	-8.2	2.0	0.0	2.6	2.4	50 30	30	30	30	30	30
2-Chloroethyl vinyl ether	-30.8 16.5	-12.5	2.2	6.3	7.6	10.7	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-19.1 8.4	-5.8	4.0	2.5	4.5	5.5	50 30	30	30	30	30	30
4-Methyl-2-pentanone	-19.0 5.1	-3.0	0.3	3.3	6.9	6.5	50 30	30	30	30	30	30
Toluene	-9.0 -5.0	-2.0	9.5	3.9	2.5	0.0	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-14.0 3.2	-6.2	5.6	2.9	4.2	4.3	50 30	30	30	30	30	30
Ethyl methacrylate	-11.7 -2.1	-0.6	5.5	3.9	3.6	1.4	50 30	30	30	30	30	30
1,1,2-Trichloroethane	-2.4 -3.6	-2.5	5.6	1.1	1.6	0.2	50 30	30	30	30	30	30
Tetrachloroethene	-16.4 -4.1	-3.3	10.8	6.0	6.0	1.0	50 30	30	30	30	30	30
1,3-Dichloropropane	-13.2 -0.7	-0.6	6.5	3.8	3.2	1.1	50 30	30	30	30	30	30
2-Hexanone	-27.5 3.3	-4.1	6.1	6.8	9.2	6.1	50 30	30	30	30	30	30
Dibromochloromethane	-12.4 3.1	-7.4	4.8	1.8	4.9	5.1	50 30	30	30	30	30	30
1,2-Dibromoethane	-14.4 0.8	-2.4	6.6	3.6	3.6	2.2	50 30	30	30	30	30	30
1-Chlorohexane	5.8 -9.4	-1.6	9.6	1.4	0.2	-6.0	50 30	30	30	30	30	30
Chlorobenzene	-12.5 -2.0	-1.8	7.8	4.4	3.2	1.0	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-7.8 -3.7	-5.4	5.8	5.4	3.7	2.0	50 30	30	30	30	30	30
Ethylbenzene	-10.1 -6.1	-3.3	10.0	5.9	4.0	-0.2	50 30	30	30	30	30	30
m&p-Xylene	-16.6 -4.2	-1.0	10.5	5.8	4.2	1.3	50 30	30	30	30	30	30
o-Xylene	-11.7 -4.1	-4.2	10.1	5.1	3.7	1.1	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Styrene	-15.7 -1.2	-4.2	9.2	5.7	3.7	2.4	50 30	30	30	30	30	30
Bromoform	-12.1 3.8	-6.0	3.9	2.2	4.0	4.2	50 30	30	30	30	30	30
Isopropylbenzene	-18.8 -6.5	-2.3	11.9	7.6	6.0	2.2	50 30	30	30	30	30	30
Cyclohexanone	2.8	-11.1	-7.3	5.2	5.2	5.3	30	50	30	30	30	30
1,1,2,2-Tetrachloroethane	-5.7 -6.2	-0.5	6.8	0.8	2.4	2.5	50 30	30	30	30	30	30
Bromobenzene	-16.2 -2.7	-1.8	7.3	3.7	5.0	4.7	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-23.1 3.5	-7.1	6.8	3.4	8.6	7.7	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-13.3 -5.0	-1.5	10.6	1.6	3.5	4.1	50 30	30	30	30	30	30
N-Propylbenzene	-21.7 -8.9	-1.2	11.6	7.5	7.5	5.2	50 30	30	30	30	30	30
2-Chlorotoluene	-19.9 -3.1	-3.9	10.1	5.8	5.8	5.1	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-22.4 -3.6	-3.3	8.9	4.8	7.7	7.9	50 30	30	30	30	30	30
4-Chlorotoluene	-14.9 -1.9	-4.0	8.3	4.6	4.0	3.9	50 30	30	30	30	30	30
tert-Butylbenzene	-28.8 5.7	-8.4	4.9	5.1	11.5	10.1	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-16.1 -4.8	-5.1	9.6	4.4	6.1	5.9	50 30	30	30	30	30	30
sec-Butylbenzene	-22.5 -6.2	-5.3	10.7	6.5	9.5	7.2	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-12.6 -3.4	-3.9	8.4	3.8	4.6	3.1	50 30	30	30	30	30	30
p-Isopropyltoluene	-26.0 -3.6	-6.0	10.9	6.4	10.5	7.7	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-9.0 -4.9	-2.3	8.1	3.6	3.0	1.4	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	-15.2 -4.8	-4.1	8.2	3.2	6.2	6.4	50 30	30	30	30	30	30
Benzyl chloride	-18.6 1.9	-10.3	6.5	3.6	8.4	8.5	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 400238

SDG No.:

Instrument ID: 9355 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2023 23:20 Calibration End Date: 07/25/2023 01:32 Calibration ID: 52236

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
1,3-Diethylbenzene	-24.7 -0.7	-6.2	11.3	5.8	8.4	6.0	50 30	30	30	30	30	30
1,4-Diethylbenzene	-24.9 -0.5	-6.8	12.0	7.1	7.7	5.4	50 30	30	30	30	30	30
n-Butylbenzene	-20.6 0.3	-8.9	10.7	6.7	7.6	4.3	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-12.7 -4.3	-3.6	9.2	4.4	4.1	2.9	50 30	30	30	30	30	30
1,2-Diethylbenzene	-8.9 -0.7	-11.6	8.0	2.6	6.4	4.3	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-9.7 -1.1	-2.3	5.6	-0.5	4.5	3.5	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-17.9 -1.1	-5.3	10.3	2.8	6.8	4.4	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-20.1 -4.5	-3.0	12.8	3.5	7.7	3.7	50 30	30	30	30	30	30
Hexachlorobutadiene	-21.6 5.9	-9.9	6.3	2.9	10.0	6.4	50 30	30	30	30	30	30
Naphthalene	-12.1 -19.4	0.9	14.8	5.8	7.1	2.9	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-16.2 -8.2	-0.4	11.7	3.7	6.3	3.0	50 30	30	30	30	30	30
2-Methylnaphthalene	-14.7 -12.9	-2.1	13.1	5.1	7.1	4.4	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	0.3 -1.5	0.8	0.8	1.4	-0.7	-1.2	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	1.3 -2.1	-0.8	0.9	-0.8	2.1	-0.6	50 30	30	30	30	30	30
Toluene-d8 (Surr)	1.4 -3.3	1.3	1.0	-0.2	0.4	-0.6	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	1.3 1.2	-0.6	1.0	-0.7	-0.4	-1.8	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Lims ID: IC v1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jul-2023 23:20:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0089720-012
Misc. Info.: IC 1
Operator ID: MEC29284 Instrument ID: 9355
Sublist: chrom-MSVoa_9355*sub43

Method: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 27-Jul-2023 22:23:57 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1604

First Level Reviewer: UKAD Date: 25-Jul-2023 10:47:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.938	1.930	0.008	83	7960	1.00	0.7605	
4 Chloromethane	50	2.138	2.124	0.014	98	11552	1.00	0.9831	
5 Vinyl chloride	62	2.259	2.238	0.021	77	9127	1.00	0.8498	M
6 Butadiene	39	2.259	2.245	0.014	95	9793	1.00	0.9603	M
8 Bromomethane	94	2.581	2.574	0.007	92	7396	1.00	1.03	M
9 Chloroethane	64	2.660	2.645	0.015	23	5535	1.00	1.06	
10 Dichlorofluoromethane	67	2.896	2.881	0.015	96	13359	1.00	0.9248	
11 Trichlorofluoromethane	101	2.974	2.960	0.014	58	7902	1.00	0.7591	
12 Pentane	43	2.989	2.967	0.022	89	9992	1.00	1.11	M
14 Ethyl ether	59	3.189	3.175	0.014	78	4145	1.00	0.9504	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.253	3.260	-0.007	41	8854	1.00	1.19	
16 Acrolein	56	3.353	3.332	0.021	98	24274	10.0	11.2	
17 1,1-Dichloroethene	96	3.511	3.482	0.029	84	4570	1.00	0.9377	M
18 Acetone	58	3.511	3.496	0.015	97	2191	2.00	1.88	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.546	3.532	0.014	69	3827	1.00	0.6637	
20 Isopropyl alcohol	45	3.682	3.654	0.028	52	9957	5.00	6.71	M
21 Iodomethane	142	3.718	3.689	0.029	93	8230	1.00	0.8618	
22 Carbon disulfide	76	3.825	3.811	0.014	94	14638	1.00	0.8313	M
24 Methyl acetate	43	3.933	3.911	0.022	96	8282	1.00	1.12	M
25 3-Chloro-1-propene	41	3.961	3.947	0.014	90	7772	1.00	0.9804	
26 Methylene Chloride	84	4.147	4.133	0.014	54	6342	1.00	1.08	
* 27 t-Butyl alcohol-d10 (IS)	65	4.140	4.140	0.000	48	602404	250.0	250.0	M
28 2-Methyl-2-propanol	59	4.340	4.247	0.093	39	14531	5.00	5.81	M
29 Acrylonitrile	53	4.476	4.433	0.043	96	7900	2.50	2.08	
30 Methyl tert-butyl ether	73	4.547	4.533	0.014	91	18712	1.00	0.9694	
32 trans-1,2-Dichloroethene	96	4.569	4.555	0.014	71	4396	1.00	0.8989	
33 Hexane	57	4.991	4.984	0.007	94	5717	1.00	0.7669	M
35 1,1-Dichloroethane	63	5.212	5.205	0.007	92	7317	1.00	0.8445	
36 Isopropyl ether	45	5.298	5.270	0.028	94	17375	1.00	0.9539	
37 2-Chloro-1,3-butadiene	53	5.334	5.320	0.014	87	6241	1.00	0.8156	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.827	5.813	0.014	98	16775	1.00	0.9261	
40 2-Butanone (MEK)	43	6.056	6.006	0.050	67	8562	2.00	1.60	M
41 cis-1,2-Dichloroethene	96	6.063	6.042	0.021	80	4633	1.00	0.8520	
42 2,2-Dichloropropane	77	6.063	6.070	-0.007	72	8002	1.00	0.8842	
43 Propionitrile	54	6.128	6.085	0.043	91	8642	5.00	4.54	
S 45 1,2-Dichloroethene, Total	100				0			1.75	
48 Methacrylonitrile	67	6.335	6.306	0.029	92	8909	2.50	2.36	
49 Chlorobromomethane	128	6.399	6.385	0.014	91	2263	1.00	0.8182	
50 Tetrahydrofuran	71	6.428	6.407	0.021	91	8529	5.00	5.28	
51 Chloroform	83	6.542	6.528	0.014	90	7994	1.00	0.9044	
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.750	0.007	93	266876	50.0	50.1	
53 1,1,1-Trichloroethane	97	6.771	6.771	0.000	95	7487	1.00	0.8497	
54 Cyclohexane	56	6.907	6.893	0.014	85	8550	1.00	0.8122	
55 1,1-Dichloropropene	75	6.993	6.986	0.007	91	5347	1.00	0.8065	
56 Carbon tetrachloride	117	7.000	6.993	0.007	87	5449	1.00	0.7541	
57 Isobutyl alcohol	41	7.164	7.129	0.035	29	12583	12.5	16.6	M
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.214	0.008	72	67927	50.0	50.6	
59 Benzene	78	7.257	7.250	0.007	92	18060	1.00	0.8678	
60 1,2-Dichloroethane	62	7.329	7.322	0.007	94	6851	1.00	0.9428	
62 Tert-amyl methyl ether	73	7.450	7.443	0.007	97	16405	1.00	0.9071	
* 63 Fluorobenzene (IS)	96	7.665	7.658	0.007	99	1115702	50.0	50.0	
64 n-Heptane	43	7.686	7.679	0.007	37	6125	1.00	0.7521	
66 n-Butanol	56	8.101	8.008	0.093	22	5675	12.5	9.60	
67 Trichloroethene	95	8.166	8.151	0.015	91	4425	1.00	0.8227	M
69 Methylcyclohexane	83	8.473	8.473	0.000	90	7946	1.00	0.7521	
70 1,2-Dichloropropane	63	8.487	8.480	0.007	68	5039	1.00	0.8857	
71 2-ethoxy-2-methyl butane	87	8.494	8.487	0.007	88	6712	1.00	0.8052	
72 Methyl methacrylate	69	8.580	8.559	0.021	90	4803	1.00	0.8456	
73 1,4-Dioxane	88	8.595	8.566	0.029	0	135	12.5	0.6948	M
74 Dibromomethane	93	8.609	8.594	0.015	95	2922	1.00	0.8048	
76 Dichlorobromomethane	83	8.830	8.823	0.007	97	5840	1.00	0.8404	
77 2-Nitropropane	41	9.081	9.074	0.007	98	13455	5.00	4.96	
78 2-Chloroethyl vinyl ether	63	9.217	9.188	0.029	80	2660	1.00	0.6919	
79 cis-1,3-Dichloropropene	75	9.388	9.381	0.007	93	6967	1.00	0.8095	
80 4-Methyl-2-pentanone (MIBK)	43	9.546	9.538	0.008	96	17533	2.00	1.62	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	94	1078107	50.0	50.7	
82 Toluene	92	9.781	9.774	0.007	99	11648	1.00	0.9099	
119 trans-1,3-Dichloropropene	75	10.046	10.032	0.014	89	6665	1.00	0.8604	
S 120 1,3-Dichloropropene, Total	100				0			1.67	
121 Ethyl methacrylate	69	10.103	10.089	0.014	89	8191	1.00	0.8829	M
122 1,1,2-Trichloroethane	97	10.239	10.232	0.007	88	4918	1.00	0.9759	
123 Tetrachloroethene	166	10.339	10.332	0.007	95	4500	1.00	0.8358	
124 1,3-Dichloropropane	76	10.404	10.396	0.008	88	6973	1.00	0.8677	
126 2-Hexanone	43	10.475	10.439	0.036	96	10131	2.00	1.45	M
128 Chlorodibromomethane	129	10.625	10.625	0.000	86	4826	1.00	0.8763	
129 Ethylene Dibromide	107	10.740	10.740	0.000	95	4538	1.00	0.8558	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	86	800919	50.0	50.0	
131 1-Chlorohexane	91	11.183	11.176	0.007	75	7621	1.00	1.06	
132 Chlorobenzene	112	11.197	11.197	0.000	93	12538	1.00	0.8747	
S 133 Xylenes, Total	106				0			2.55	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	92	5350	1.00	0.9224	
135 Ethylbenzene	91	11.290	11.283	0.007	98	23354	1.00	0.8987	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 m-Xylene & p-Xylene	106	11.405	11.397	0.008	99	16626	2.00	1.67	
138 o-Xylene	106	11.733	11.726	0.007	96	9451	1.00	0.8828	
139 Styrene	104	11.755	11.748	0.007	93	14043	1.00	0.8430	
140 Bromoform	173	11.912	11.905	0.007	96	4114	1.00	0.8792	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	23196	1.00	0.8121	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	90	412658	50.0	50.6	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	94	10161	1.00	0.9432	
147 trans-1,4-Dichloro-2-butene	53	12.306	12.298	0.008	80	5474	2.50	1.92	
146 Bromobenzene	156	12.298	12.298	0.000	97	5613	1.00	0.8379	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	81	2646	1.00	0.8667	
149 N-Propylbenzene	91	12.370	12.363	0.007	99	26085	1.00	0.7830	
150 2-Chlorotoluene	126	12.441	12.441	0.000	96	5532	1.00	0.8014	
151 1,3,5-Trimethylbenzene	105	12.506	12.499	0.007	94	20336	1.00	0.7763	
152 4-Chlorotoluene	126	12.541	12.534	0.007	96	5689	1.00	0.8506	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	3495	1.00	0.7116	
156 1,2,4-Trimethylbenzene	105	12.792	12.785	0.007	96	22967	1.00	0.8390	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	26166	1.00	0.7754	
158 1,3-Dichlorobenzene	146	13.013	13.006	0.007	80	12113	1.00	0.8738	
159 4-Isopropyltoluene	119	13.021	13.013	0.008	97	21844	1.00	0.7400	
* 160 1,4-Dichlorobenzene-d4	152	13.063	13.063	0.000	95	491605	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	91	12433	1.00	0.9098	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	97	25271	1.00	0.8480	
163 Benzyl chloride	91	13.164	13.156	0.008	98	17332	1.00	0.8135	
164 1,3-Diethylbenzene	119	13.221	13.214	0.007	94	13532	1.00	0.7528	
165 p-Diethylbenzene	119	13.292	13.292	0.000	94	14036	1.00	0.7512	
166 n-Butylbenzene	92	13.314	13.307	0.008	95	11952	1.00	0.7942	
167 1,2-Dichlorobenzene	146	13.349	13.342	0.007	98	13254	1.00	0.8731	
168 o-diethylbenzene	119	13.364	13.357	0.007	94	14418	1.00	0.9111	
171 1,2-Dibromo-3-Chloropropane	75	13.900	13.886	0.014	83	3095	1.00	0.9029	
172 1,3,5-Trichlorobenzene	180	14.029	14.022	0.007	97	10690	1.00	0.8213	
173 1,2,4-Trichlorobenzene	180	14.458	14.443	0.015	93	10335	1.00	0.7985	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	92	4018	1.00	0.7836	
176 Naphthalene	128	14.629	14.622	0.007	97	42250	1.00	0.8787	
177 1,2,3-Trichlorobenzene	180	14.772	14.765	0.007	96	11540	1.00	0.8378	
178 2-Methylnaphthalene	142	15.423	15.394	0.029	92	26308	1.00	0.8526	
S 207 Total Diethylbenzene	1				0			2.41	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_4ppbEE_00546	Amount Added: 12.50	Units: mL	
MSV_HP20_ISSS_00096	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 27-Jul-2023 22:23:57 Chrom Revision: 2.3 26-Jul-2023 13:45:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D

Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355 Operator ID: MEC29284

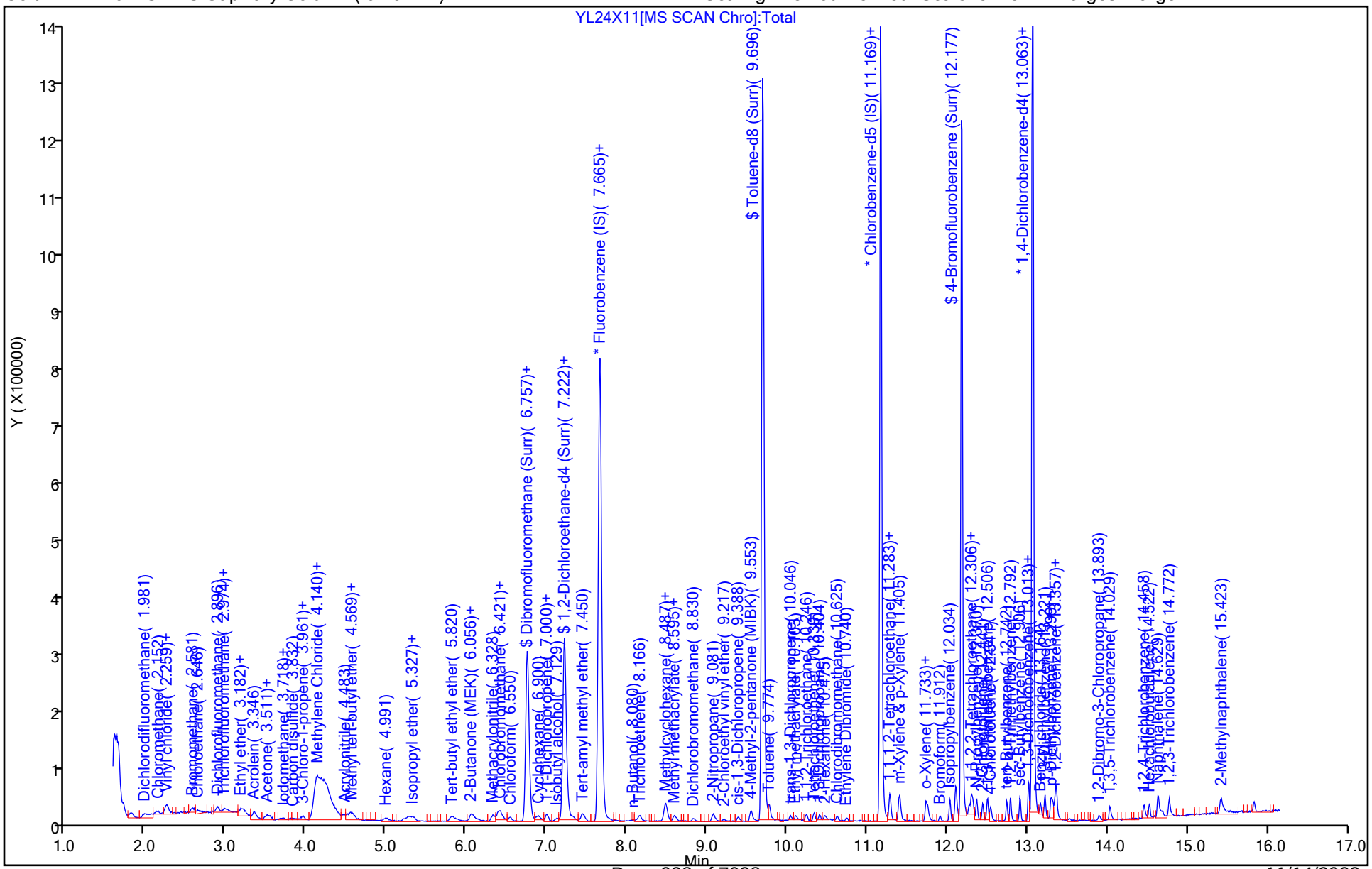
Lims ID: IC v1 Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

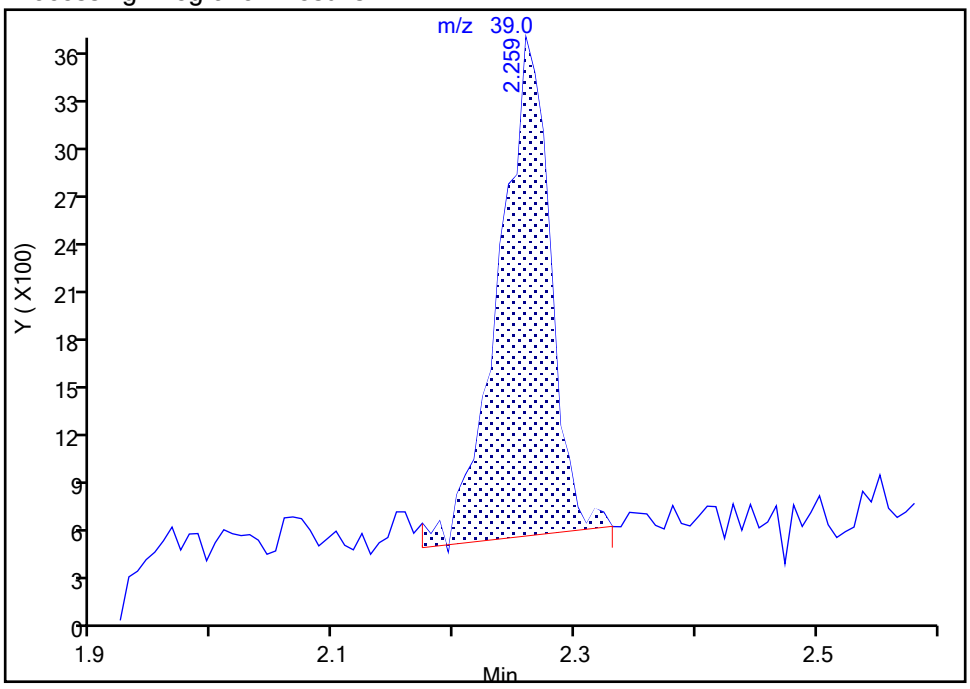
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D				
Injection Date:	24-Jul-2023 23:20:30	Instrument ID:	9355		
Lims ID:	IC v1				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

6 Butadiene, CAS: 106-99-0

Signal: 1

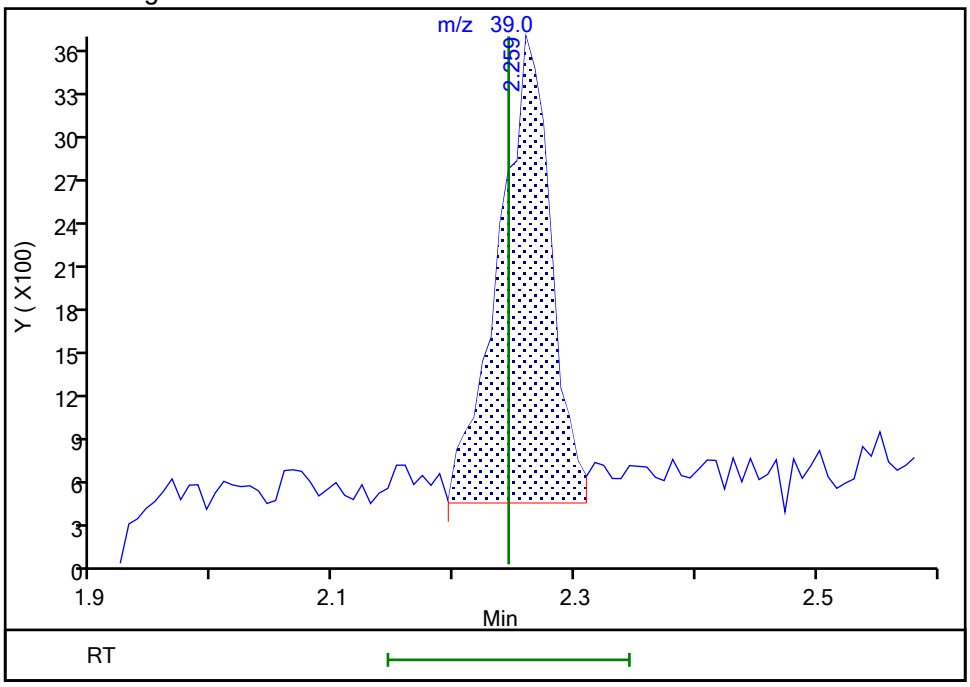
Processing Integration Results

RT: 2.26
Area: 9376
Amount: 0.924811
Amount Units: ug/l



Manual Integration Results

RT: 2.26
Area: 9793
Amount: 0.960300
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:15:56 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

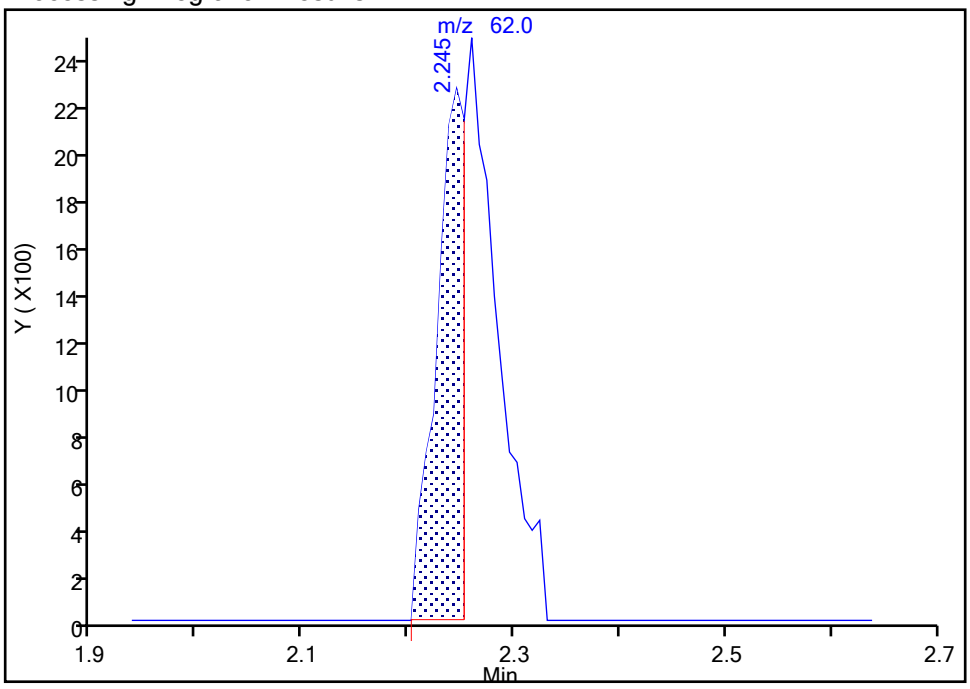
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

5 Vinyl chloride, CAS: 75-01-4

Signal: 1

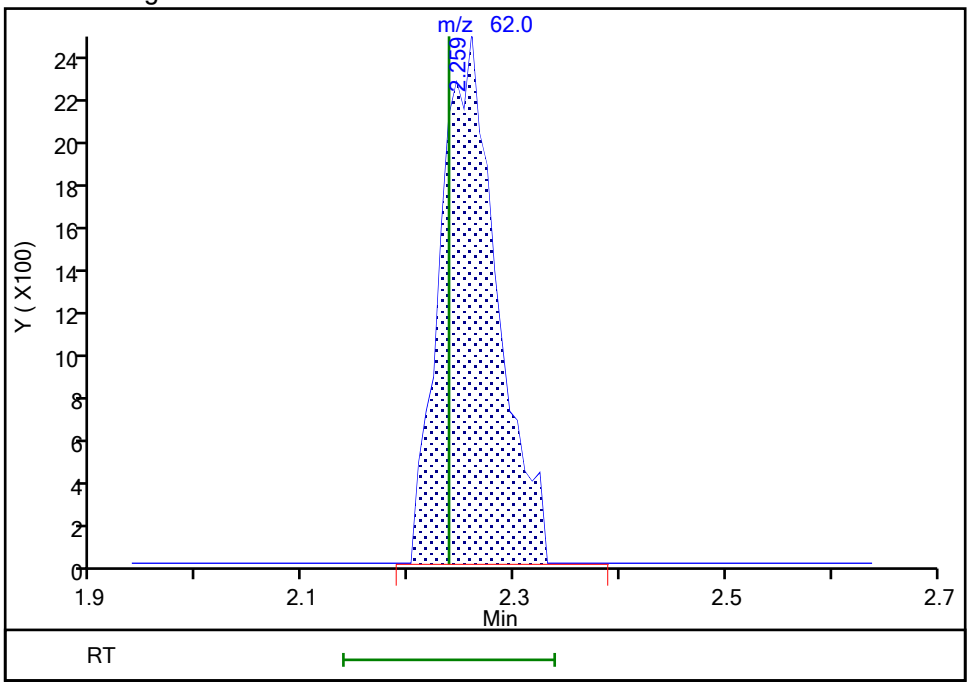
Processing Integration Results

RT: 2.25
Area: 4292
Amount: 0.953015
Amount Units: ug/l



Manual Integration Results

RT: 2.26
Area: 9127
Amount: 0.849842
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:15:42 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

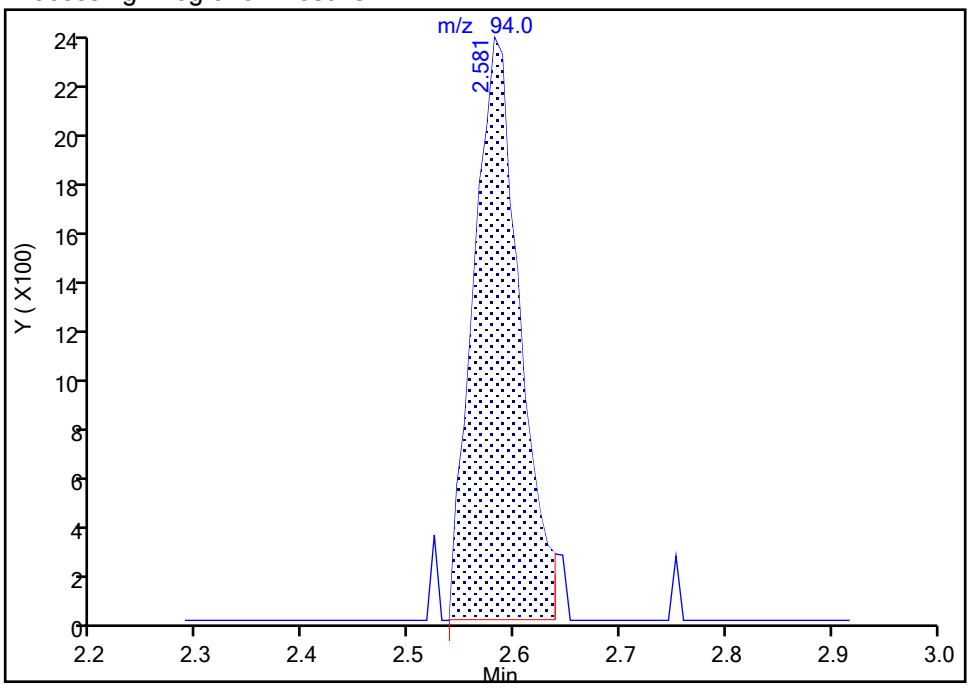
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D				
Injection Date:	24-Jul-2023 23:20:30	Instrument ID:	9355		
Lims ID:	IC v1				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

8 Bromomethane, CAS: 74-83-9

Signal: 1

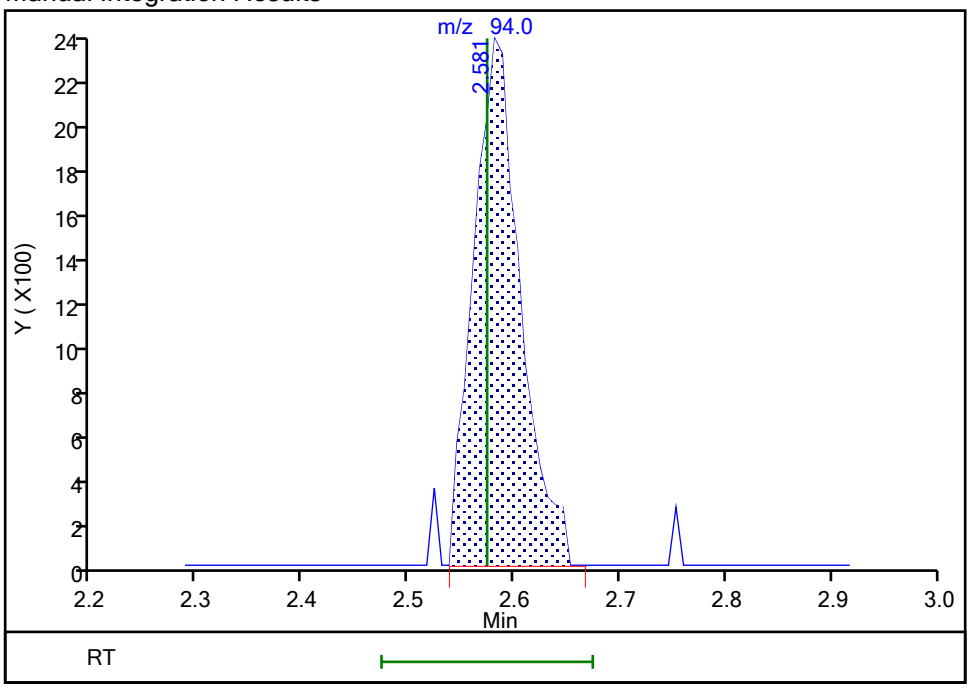
Processing Integration Results

RT: 2.58
Area: 7281
Amount: 1.015557
Amount Units: ug/l



Manual Integration Results

RT: 2.58
Area: 7396
Amount: 1.029239
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:16:02 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

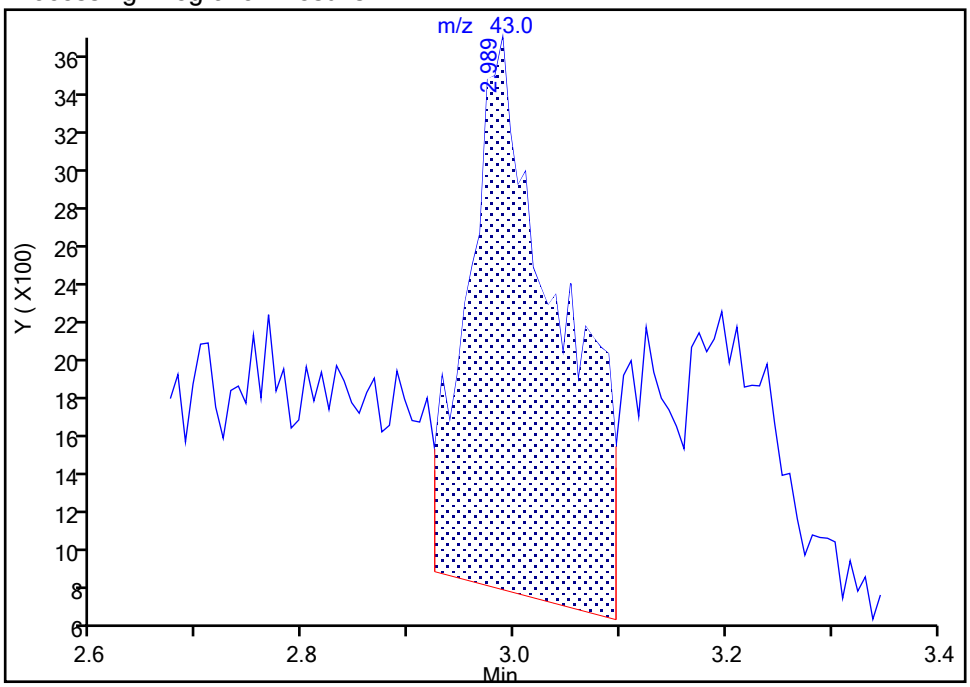
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

12 Pentane, CAS: 109-66-0

Signal: 1

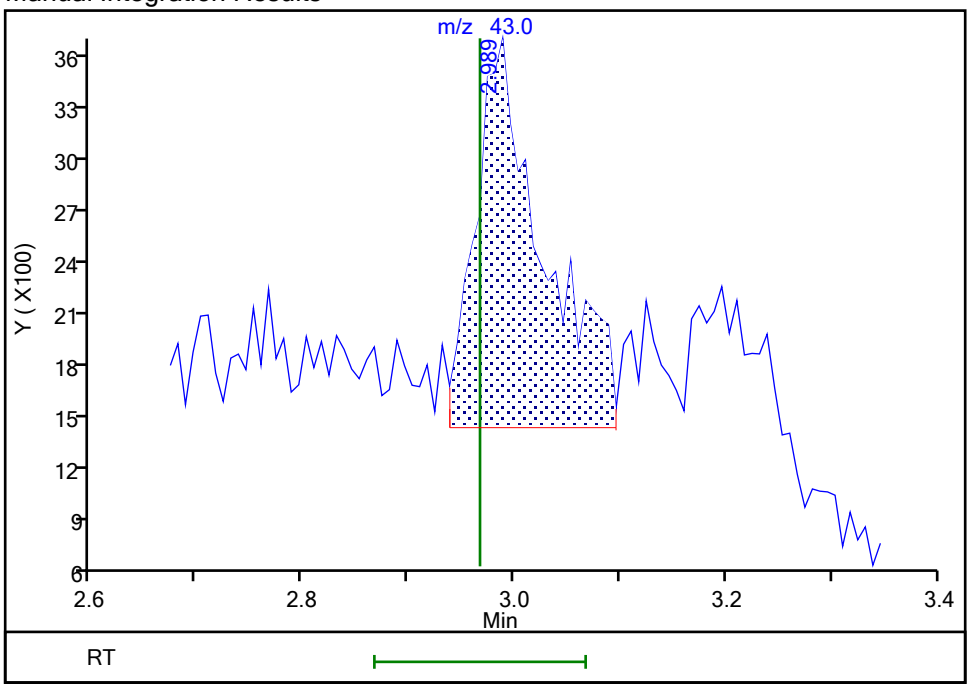
Processing Integration Results

RT: 2.99
Area: 17420
Amount: 1.003590
Amount Units: ug/l



Manual Integration Results

RT: 2.99
Area: 9992
Amount: 1.108969
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:49:35 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

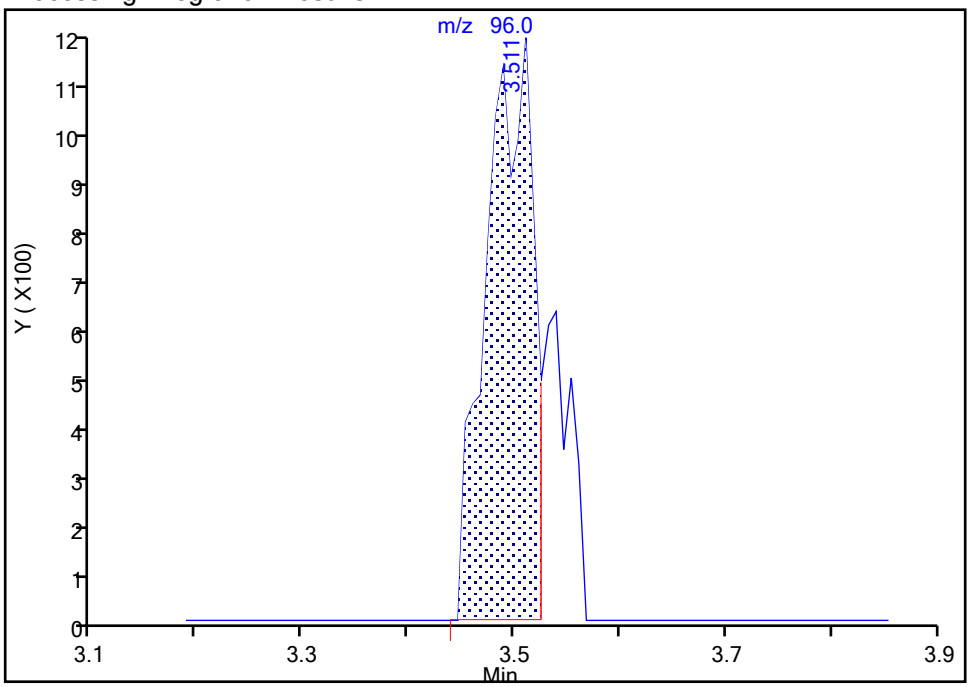
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

17 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

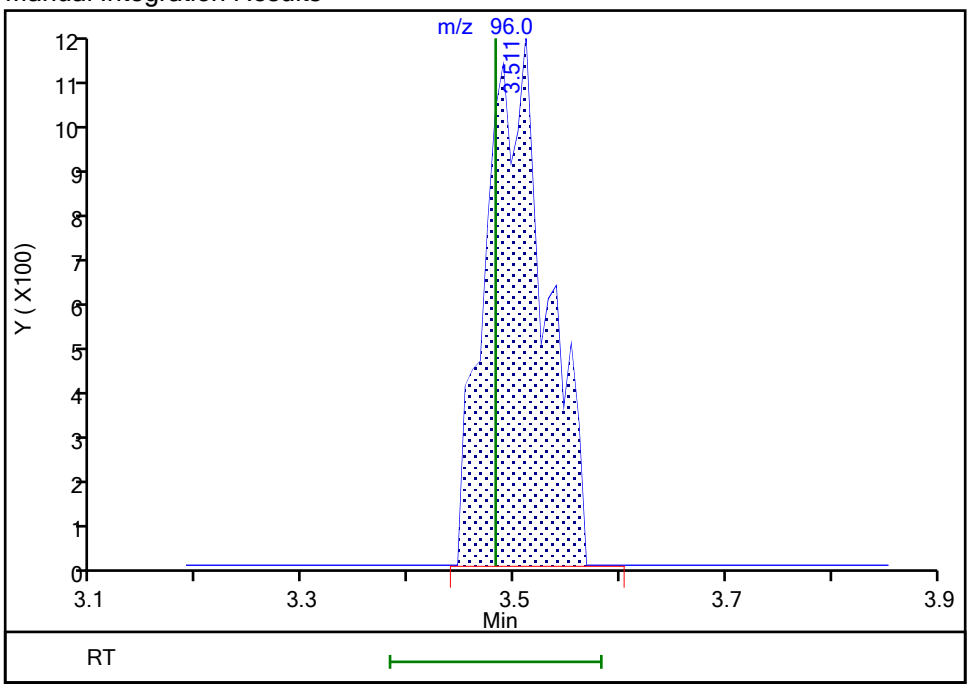
Processing Integration Results

RT: 3.51
Area: 3577
Amount: 0.755953
Amount Units: ug/l



Manual Integration Results

RT: 3.51
Area: 4570
Amount: 0.937698
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:16:26 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

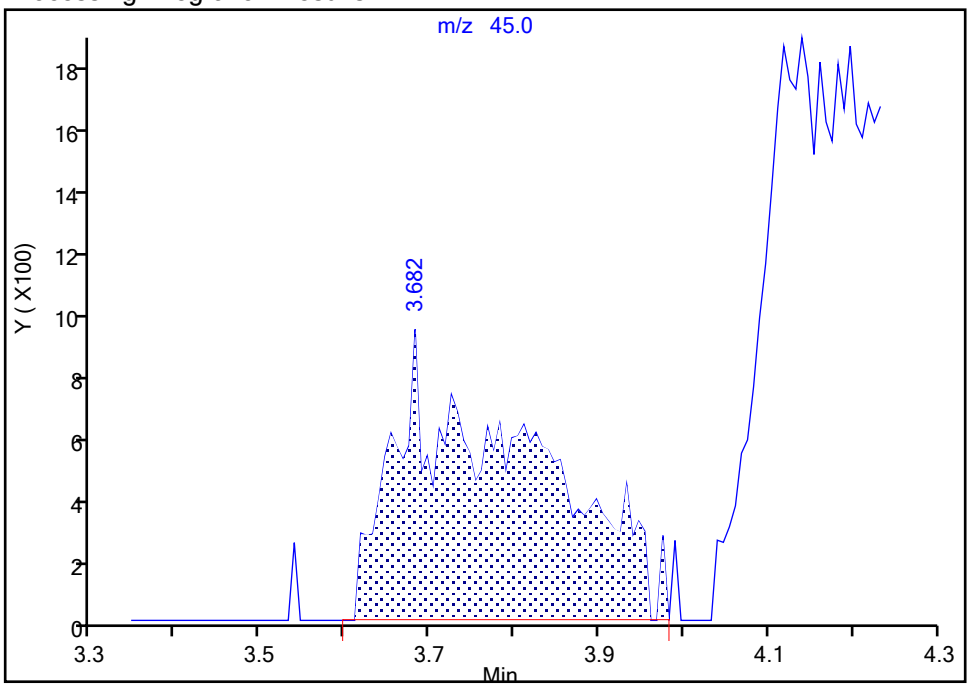
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

20 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

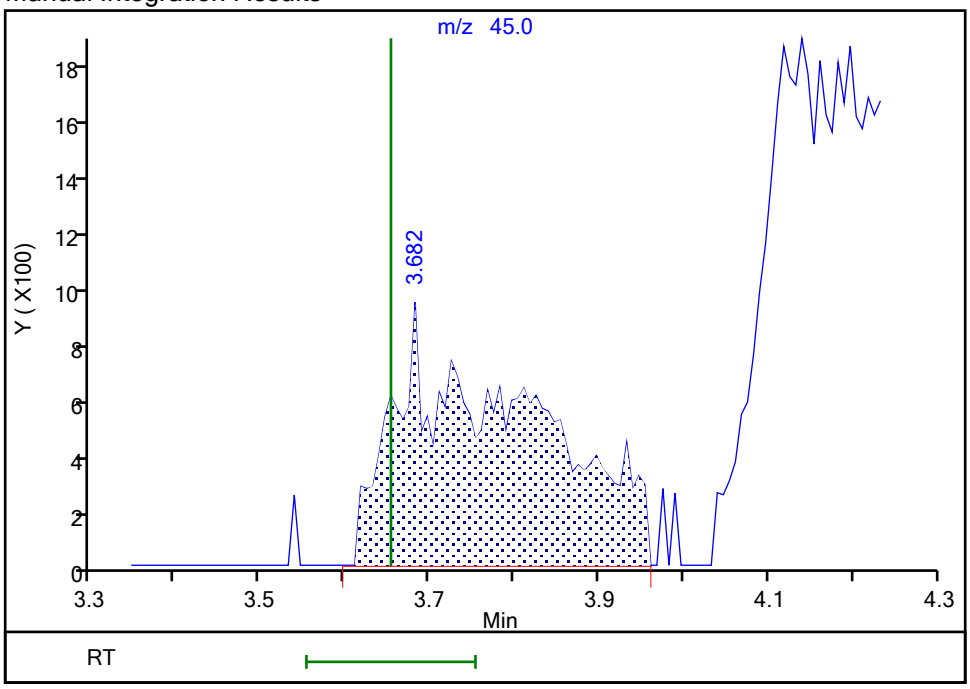
Processing Integration Results

RT: 3.68
Area: 10074
Amount: 6.762865
Amount Units: ug/l



Manual Integration Results

RT: 3.68
Area: 9957
Amount: 6.711976
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:16:33 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

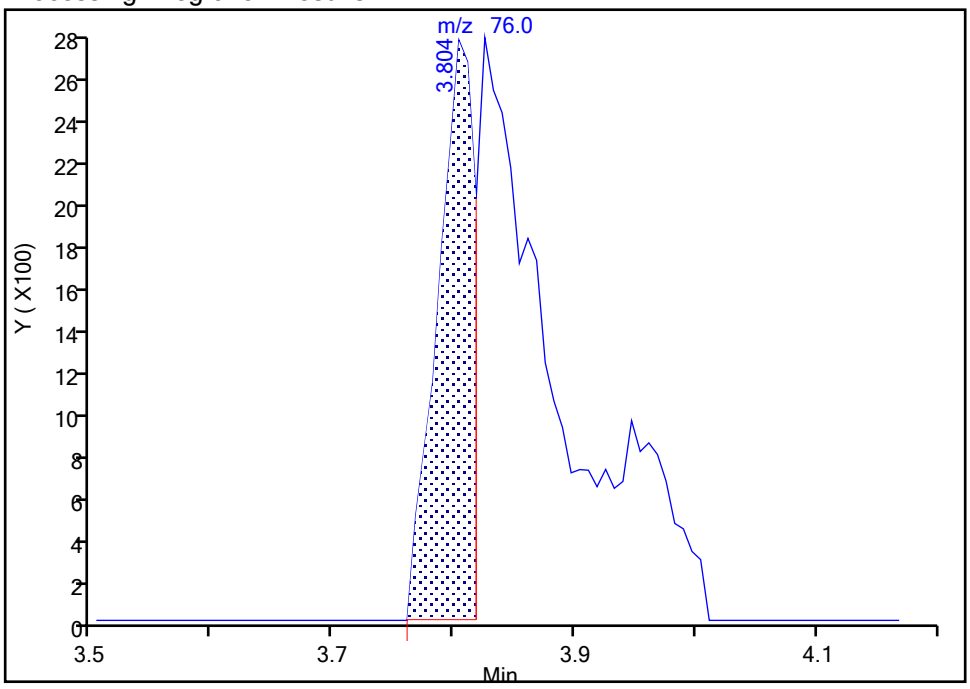
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

22 Carbon disulfide, CAS: 75-15-0

Signal: 1

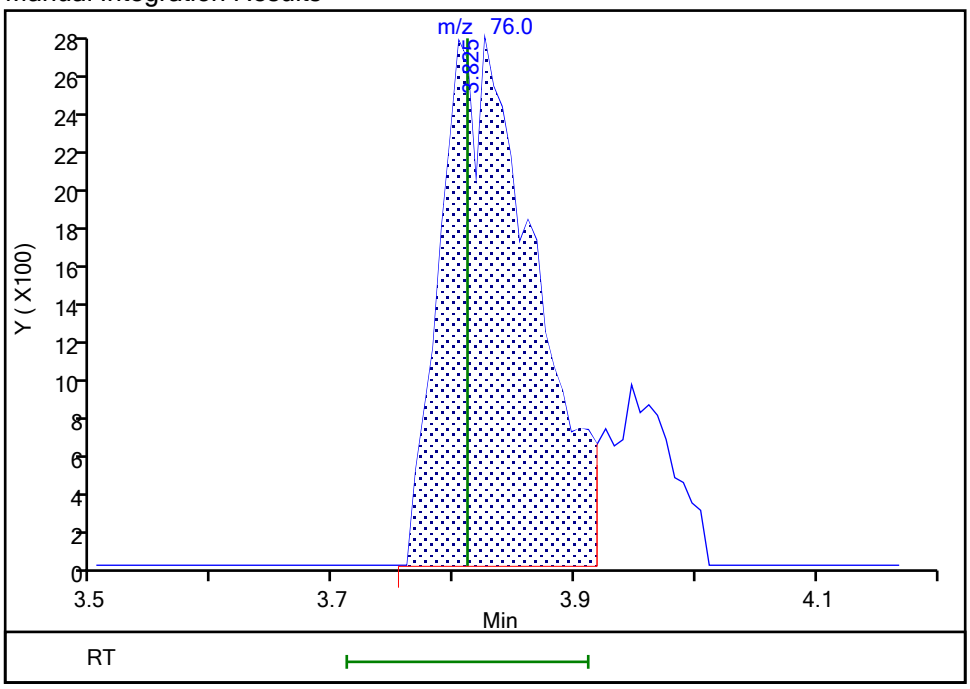
Processing Integration Results

RT: 3.80
Area: 5825
Amount: 0.969958
Amount Units: ug/l



Manual Integration Results

RT: 3.83
Area: 14638
Amount: 0.831256
Amount Units: ug/l



Reviewer: UKEK, 27-Jul-2023 19:14:27 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

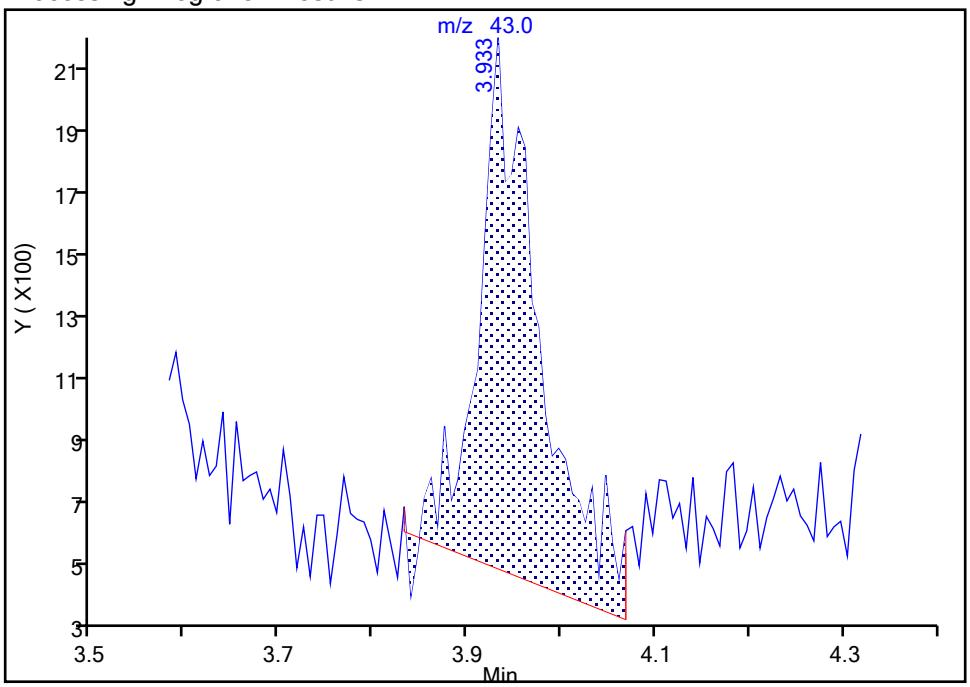
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D				
Injection Date:	24-Jul-2023 23:20:30	Instrument ID:	9355		
Lims ID:	IC v1				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

24 Methyl acetate, CAS: 79-20-9

Signal: 1

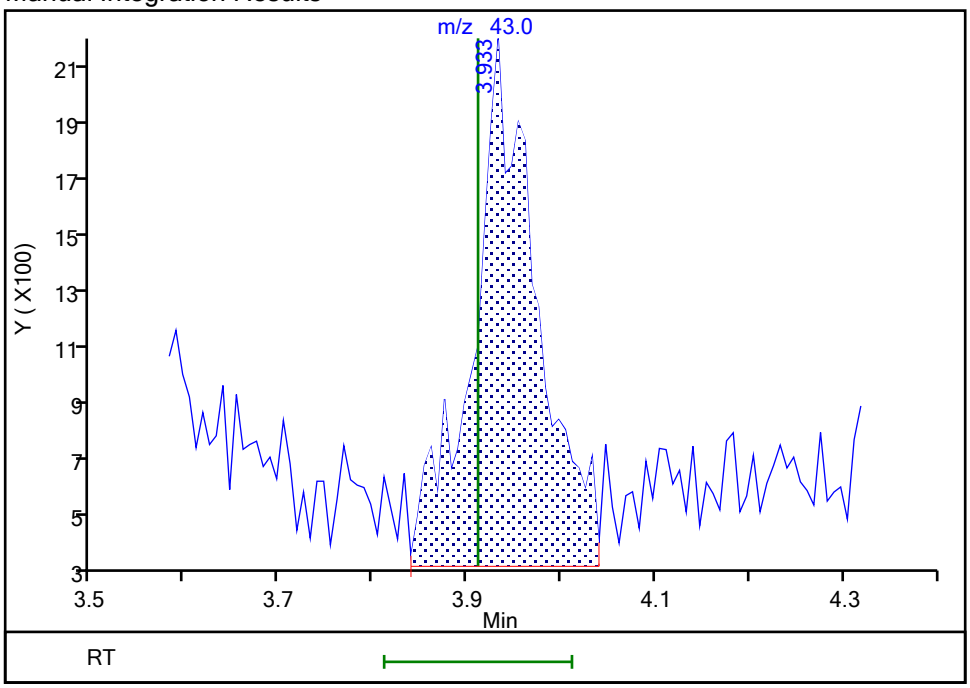
Processing Integration Results

RT: 3.93
Area: 7443
Amount: 1.016689
Amount Units: ug/l



Manual Integration Results

RT: 3.93
Area: 8282
Amount: 1.116847
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:16:59 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

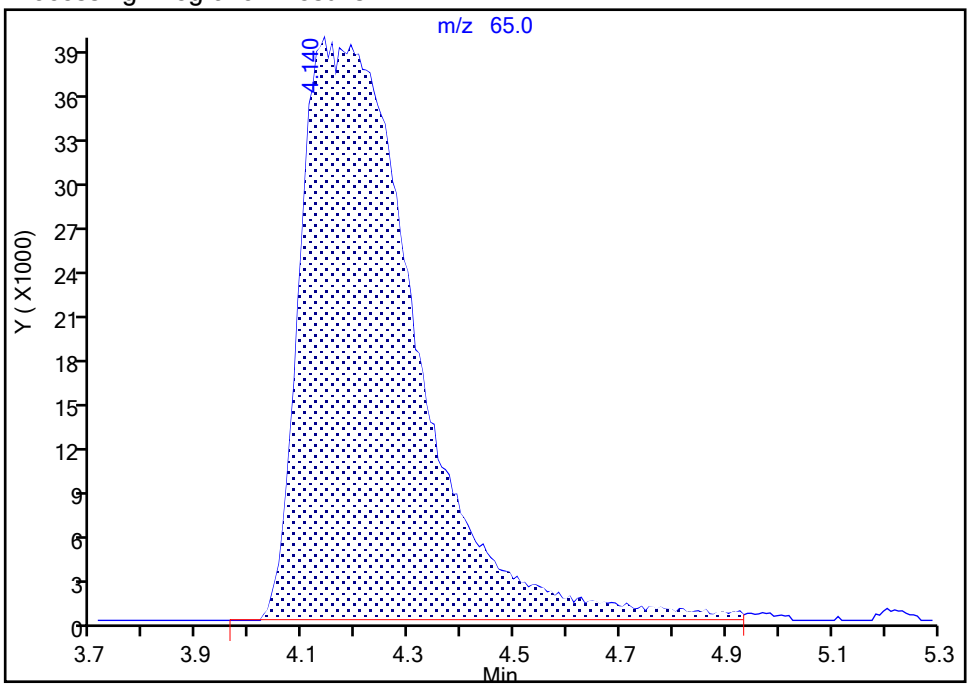
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 27 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

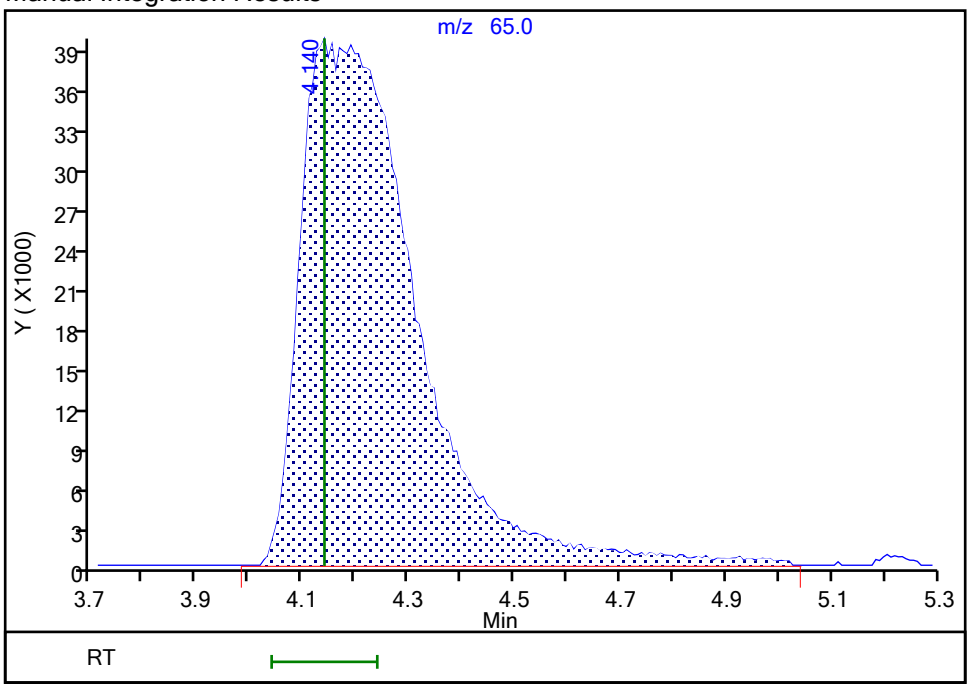
Processing Integration Results

RT: 4.14
Area: 600309
Amount: 250.0000
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 602404
Amount: 250.0000
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:17:11 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

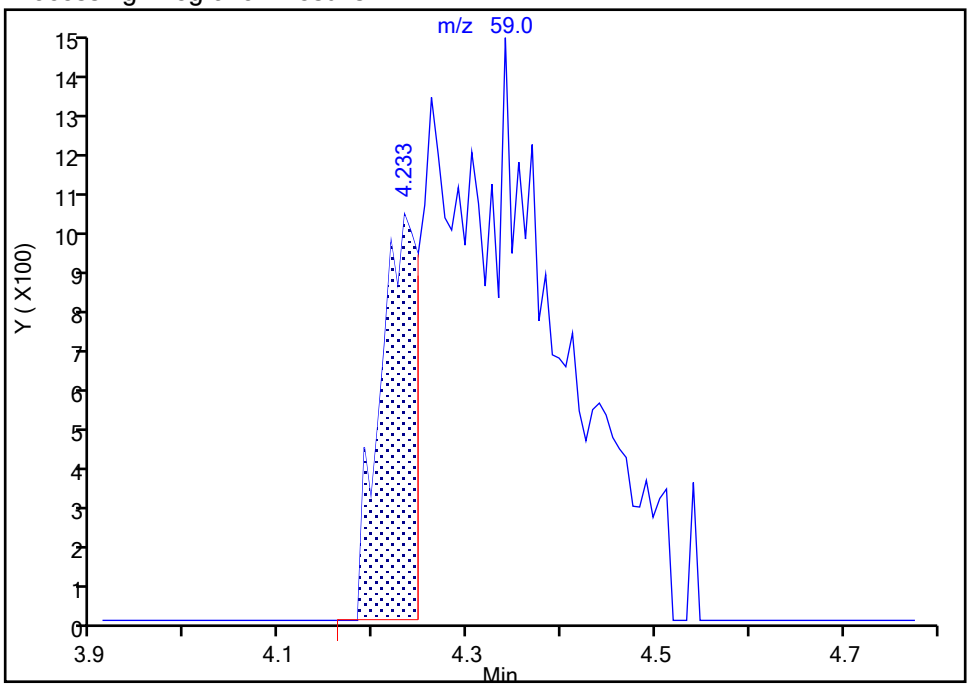
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

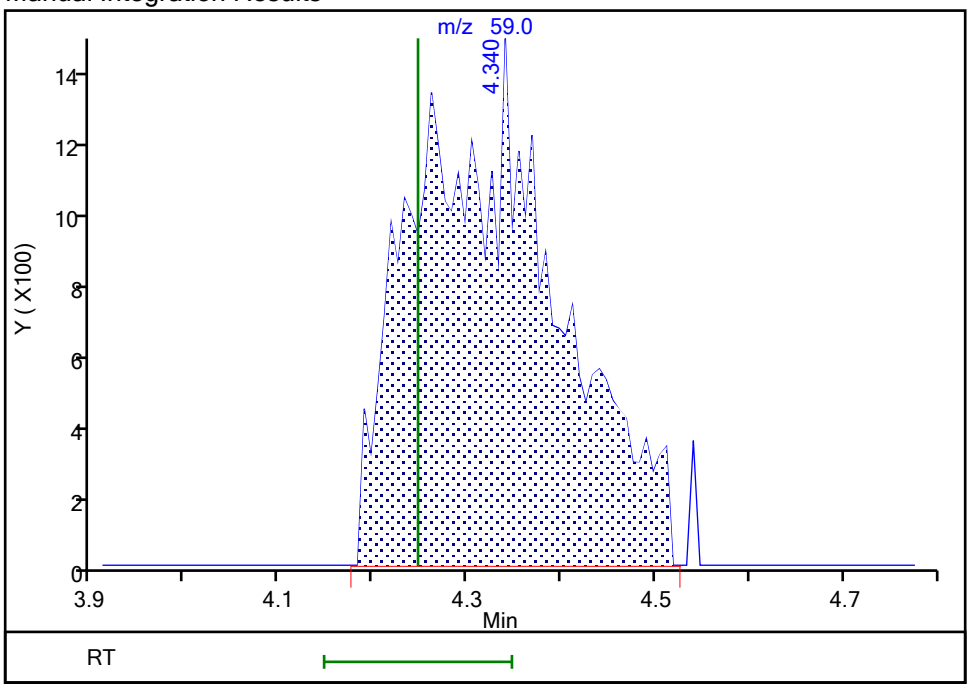
Processing Integration Results

RT: 4.23
Area: 2761
Amount: 3.147555
Amount Units: ug/l



Manual Integration Results

RT: 4.34
Area: 14531
Amount: 5.808443
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:17:15 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

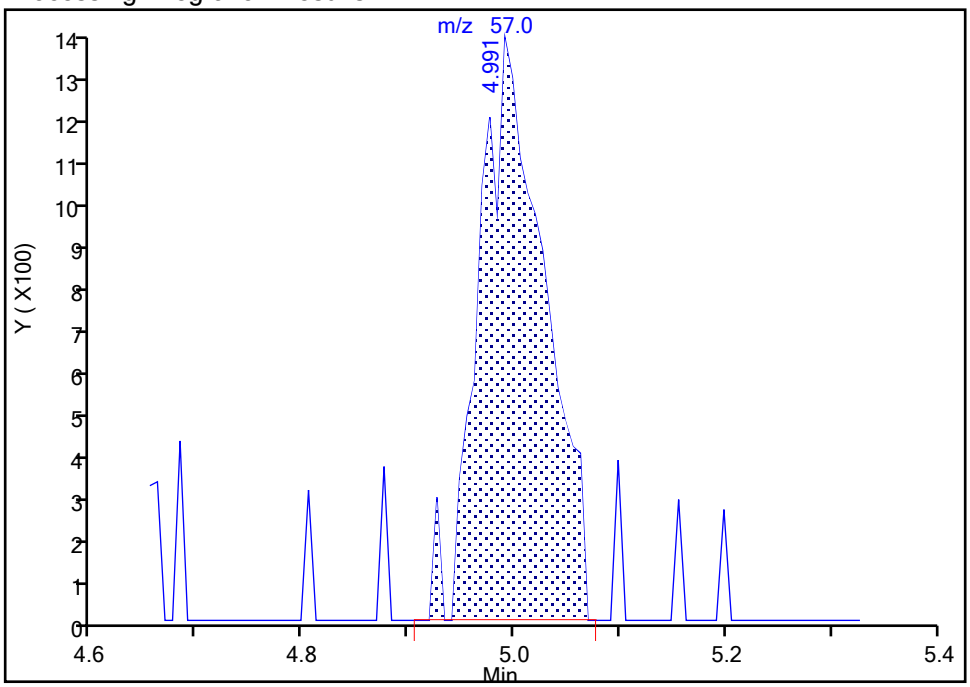
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

33 Hexane, CAS: 110-54-3

Signal: 1

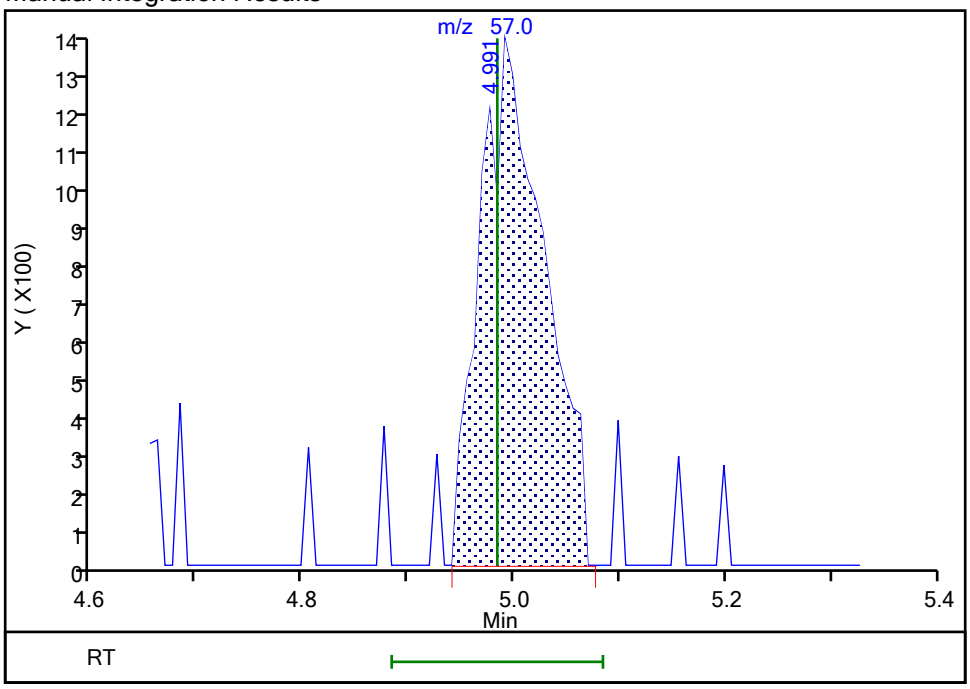
Processing Integration Results

RT: 4.99
Area: 5838
Amount: 0.781280
Amount Units: ug/l



Manual Integration Results

RT: 4.99
Area: 5717
Amount: 0.766861
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:17:23 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

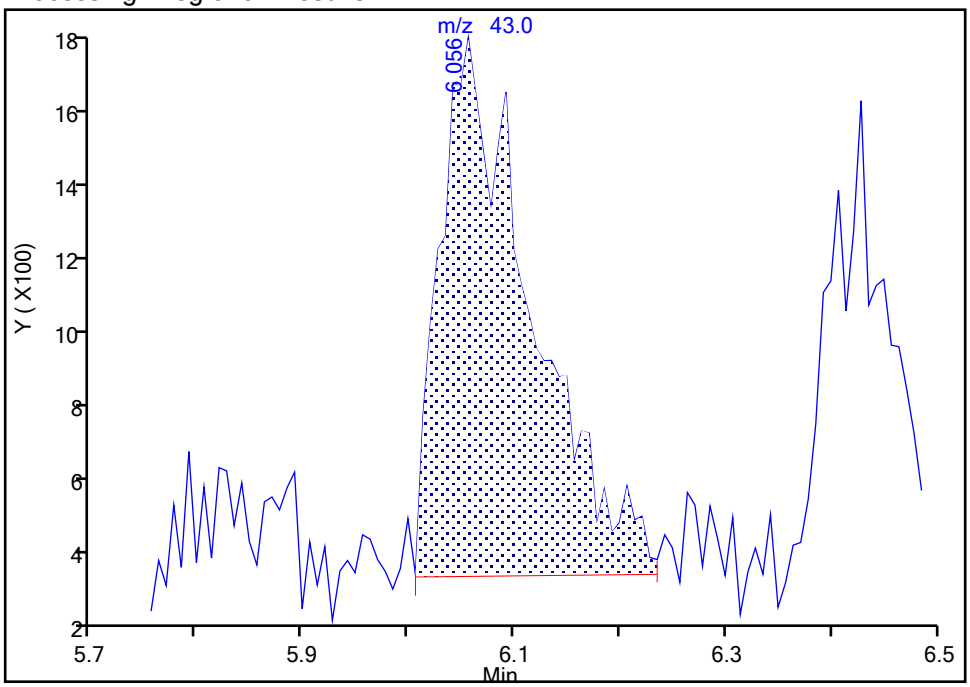
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D				
Injection Date:	24-Jul-2023 23:20:30	Instrument ID:	9355		
Lims ID:	IC v1				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

40 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

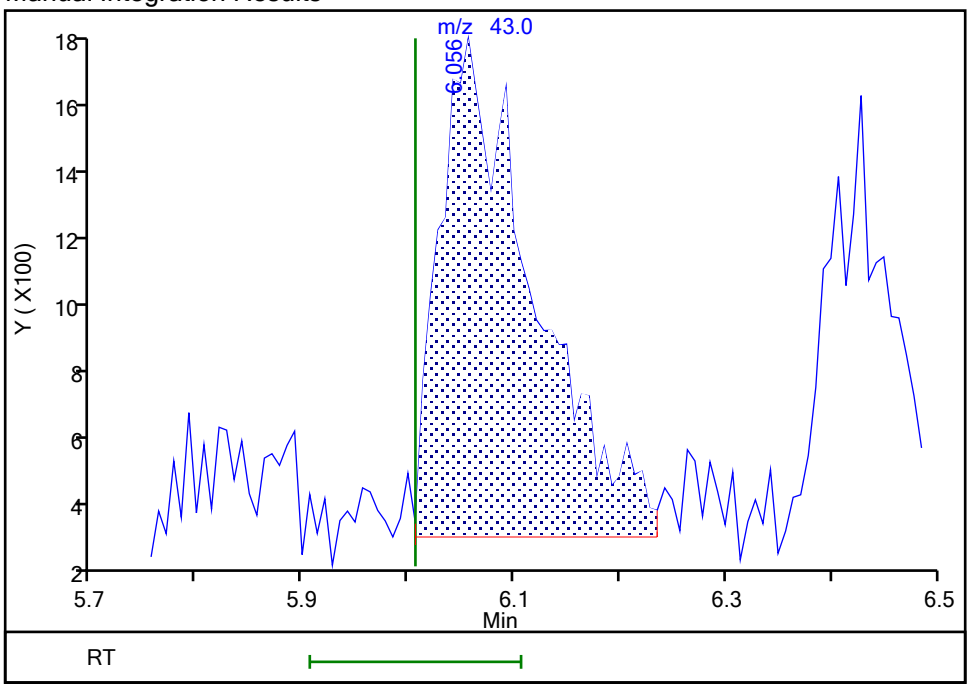
Processing Integration Results

RT: 6.06
Area: 8130
Amount: 1.531144
Amount Units: ug/l



Manual Integration Results

RT: 6.06
Area: 8562
Amount: 1.603187
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:17:36 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

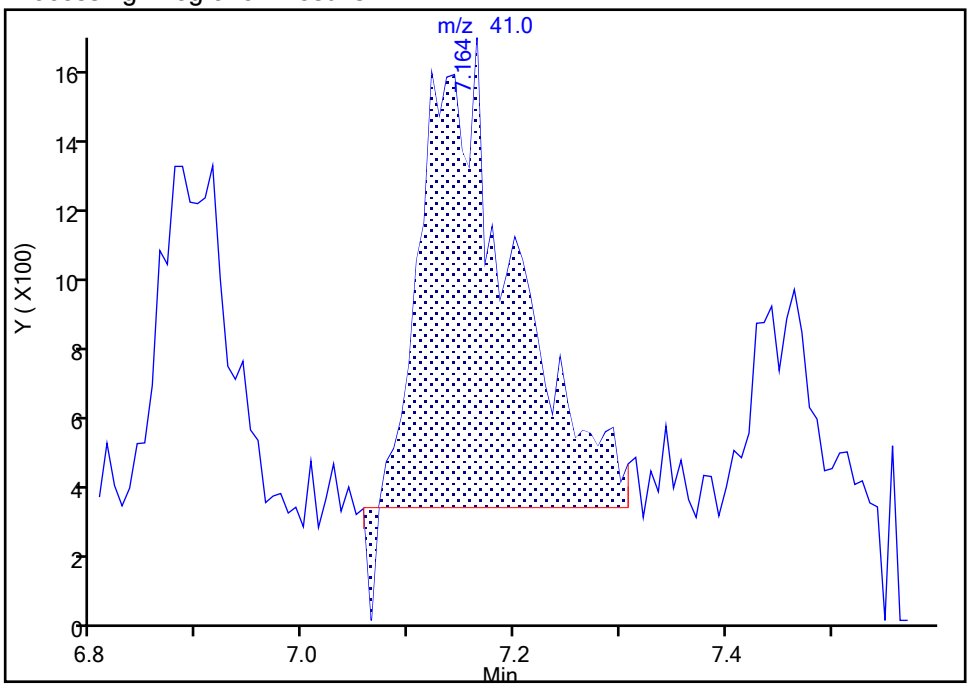
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D				
Injection Date:	24-Jul-2023 23:20:30	Instrument ID:	9355		
Lims ID:	IC v1				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

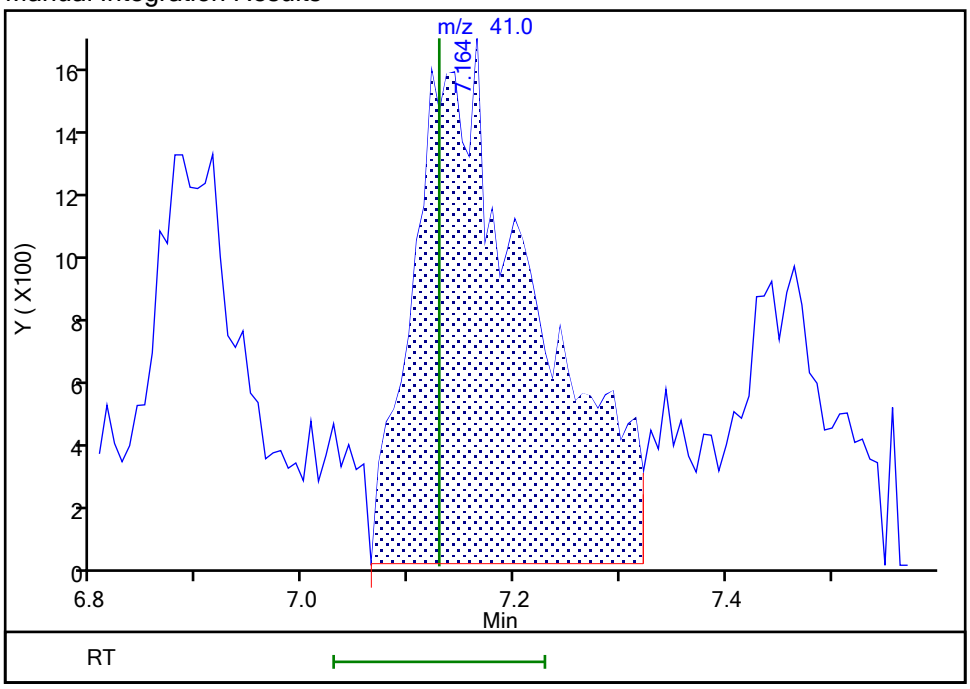
Processing Integration Results

RT: 7.16
Area: 7676
Amount: 10.847942
Amount Units: ug/l



Manual Integration Results

RT: 7.16
Area: 12583
Amount: 16.593196
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:18:02 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

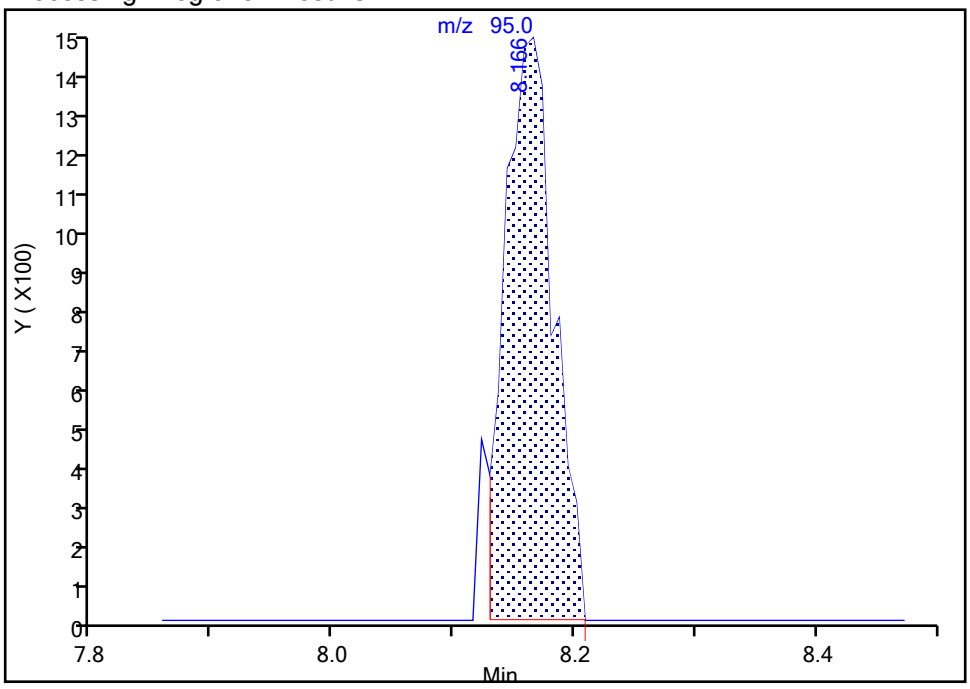
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D				
Injection Date:	24-Jul-2023 23:20:30	Instrument ID:	9355		
Lims ID:	IC v1				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

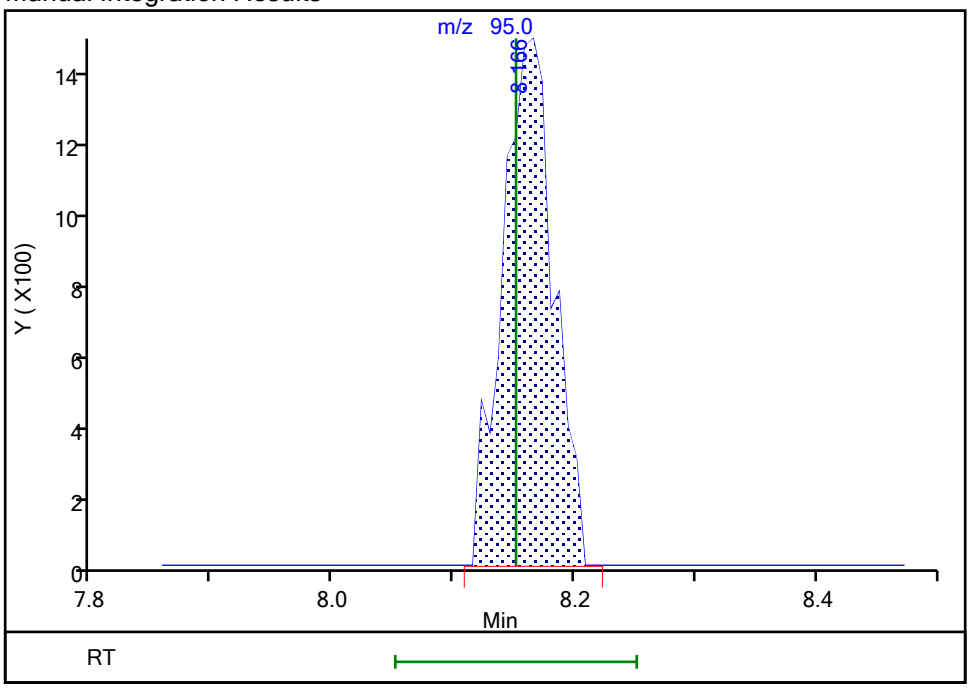
Processing Integration Results

RT: 8.17
Area: 4227
Amount: 0.790010
Amount Units: ug/l



Manual Integration Results

RT: 8.17
Area: 4425
Amount: 0.822667
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:18:15 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

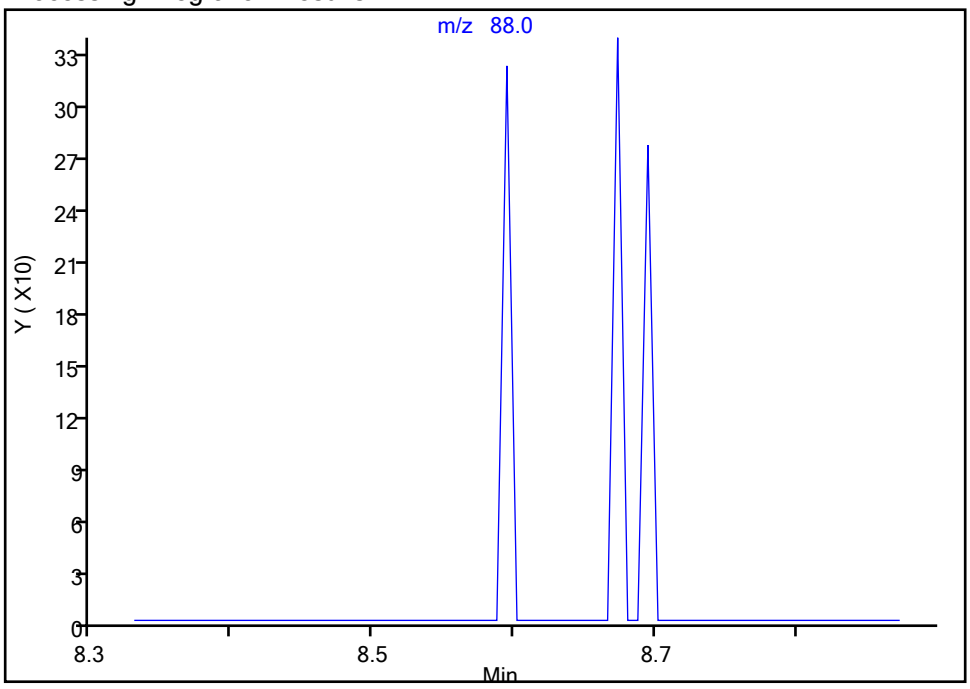
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

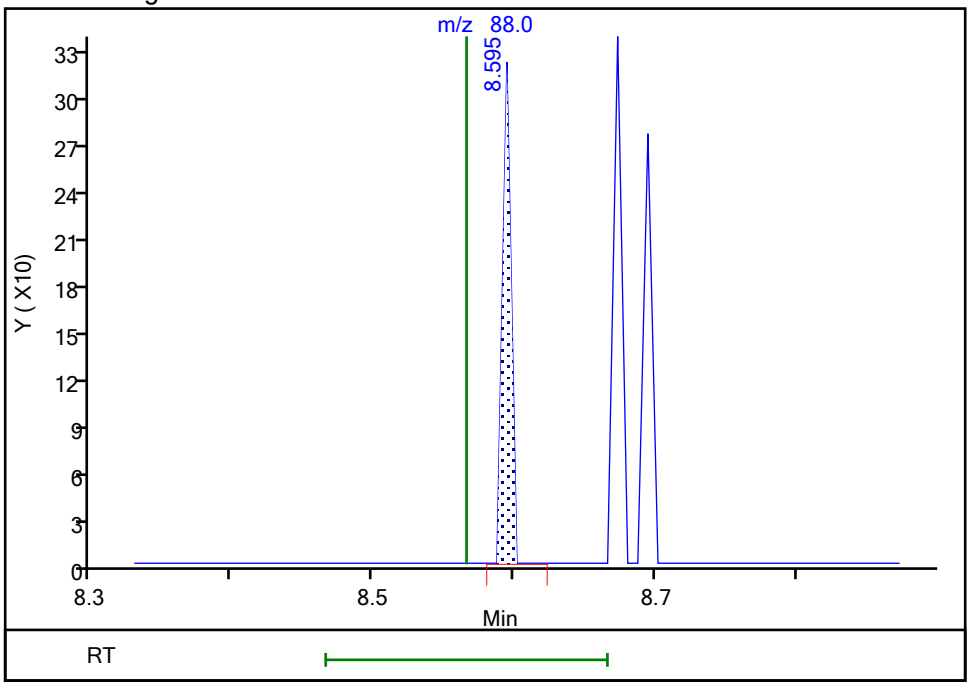
Not Detected
Expected RT: 8.57

Processing Integration Results



Manual Integration Results

RT: 8.59
Area: 135
Amount: 0.694807
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:18:21 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

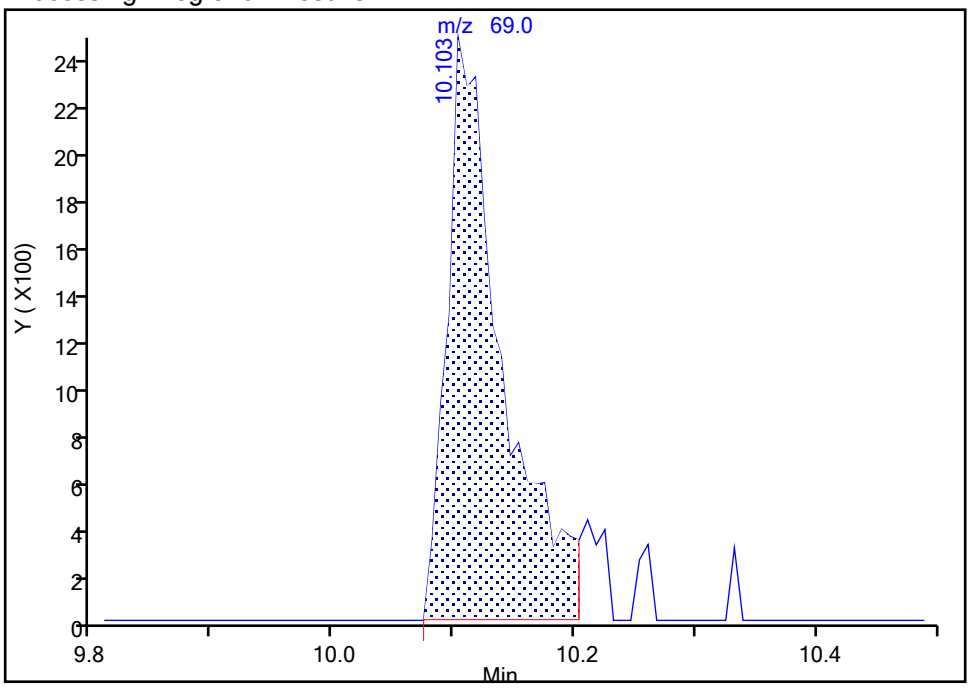
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

121 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

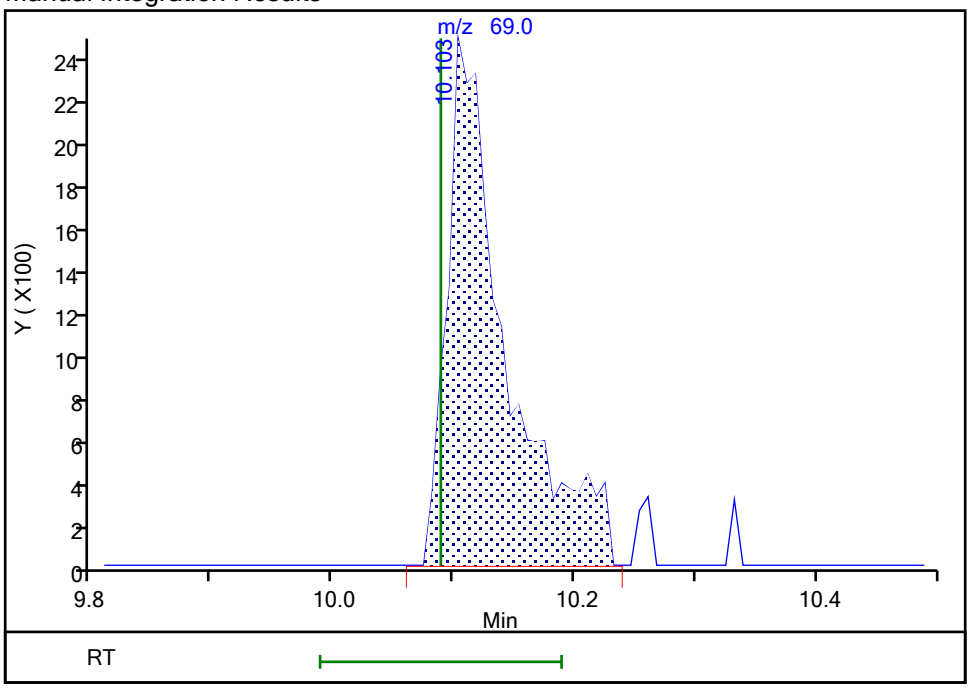
Processing Integration Results

RT: 10.10
Area: 7713
Amount: 0.837527
Amount Units: ug/l



Manual Integration Results

RT: 10.10
Area: 8191
Amount: 0.882885
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:18:39 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

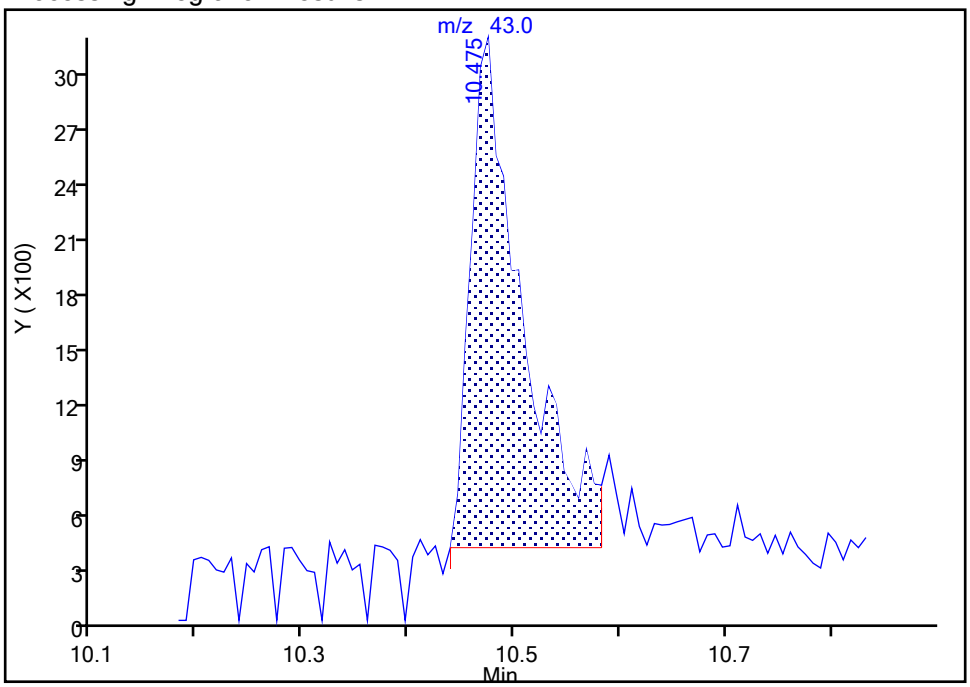
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X11.D
Injection Date: 24-Jul-2023 23:20:30 Instrument ID: 9355
Lims ID: IC v1
Client ID:
Operator ID: MEC29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

126 2-Hexanone, CAS: 591-78-6

Signal: 1

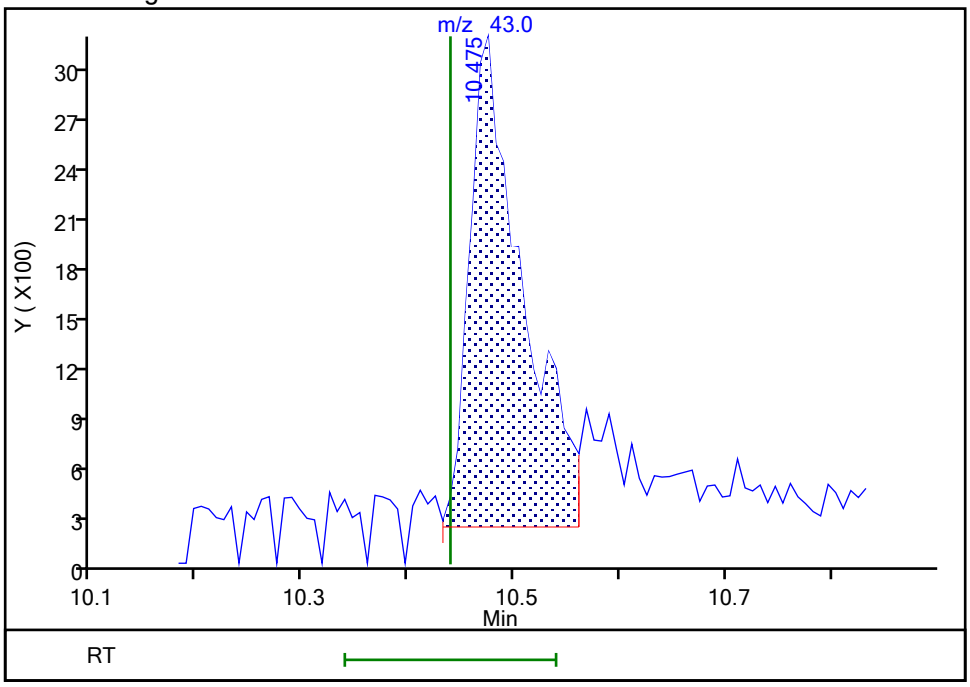
Processing Integration Results

RT: 10.48
Area: 9292
Amount: 1.340998
Amount Units: ug/l



Manual Integration Results

RT: 10.48
Area: 10131
Amount: 1.449543
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:18:54 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X12.D
Lims ID: IC v4
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jul-2023 23:42:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0089720-013
Misc. Info.: IC 4
Operator ID: MEC29284 Instrument ID: 9355
Sublist: chrom-MSVoa_9355*sub43

Method: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 27-Jul-2023 22:24:03 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1604

First Level Reviewer: K4WN Date: 25-Jul-2023 16:21:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.945	1.930	0.015	98	45562	4.00	4.44	M
4 Chloromethane	50	2.138	2.124	0.014	98	48754	4.00	4.23	
5 Vinyl chloride	62	2.245	2.238	0.007	79	45829	4.00	4.35	
6 Butadiene	39	2.252	2.245	0.007	94	44153	4.00	4.42	
8 Bromomethane	94	2.581	2.574	0.007	92	29829	4.00	4.23	
9 Chloroethane	64	2.653	2.645	0.008	98	21309	4.00	4.17	
10 Dichlorofluoromethane	67	2.896	2.881	0.015	97	60091	4.00	4.24	
11 Trichlorofluoromethane	101	2.975	2.960	0.015	88	44031	4.00	4.31	
12 Pentane	43	2.982	2.967	0.015	96	35039	4.00	3.97	M
14 Ethyl ether	59	3.189	3.175	0.014	94	16917	4.00	3.96	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.268	3.260	0.008	93	32642	4.00	4.46	
16 Acrolein	56	3.339	3.332	0.007	100	80702	40.0	37.7	
17 1,1-Dichloroethene	96	3.489	3.482	0.007	98	19366	4.00	4.05	
18 Acetone	58	3.518	3.496	0.022	92	8940	8.00	7.75	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.539	3.532	0.007	90	22511	4.00	3.98	
20 Isopropyl alcohol	45	3.668	3.654	0.014	95	28618	20.0	19.5	
21 Iodomethane	142	3.690	3.689	0.001	98	36519	4.00	3.90	
22 Carbon disulfide	76	3.804	3.811	-0.007	99	69583	4.00	4.03	M
24 Methyl acetate	43	3.933	3.911	0.022	98	26175	4.00	3.60	M
25 3-Chloro-1-propene	41	3.961	3.947	0.014	91	30234	4.00	3.89	
26 Methylene Chloride	84	4.147	4.133	0.014	45	22722	4.00	3.94	
* 27 t-Butyl alcohol-d10 (IS)	65	4.126	4.140	-0.014	50	597386	250.0	250.0	M
28 2-Methyl-2-propanol	59	4.254	4.247	0.007	95	54742	20.0	22.1	
29 Acrylonitrile	53	4.469	4.433	0.036	99	37084	10.0	9.96	
30 Methyl tert-butyl ether	73	4.540	4.533	0.007	99	74647	4.00	3.94	
32 trans-1,2-Dichloroethene	96	4.569	4.555	0.014	99	19315	4.00	4.03	
33 Hexane	57	4.998	4.984	0.014	93	29876	4.00	4.09	
35 1,1-Dichloroethane	63	5.227	5.205	0.022	96	33826	4.00	3.98	
36 Isopropyl ether	45	5.284	5.270	0.014	93	69966	4.00	3.92	
37 2-Chloro-1,3-butadiene	53	5.334	5.320	0.014	91	29676	4.00	3.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.820	5.813	0.007	97	69774	4.00	3.93	
40 2-Butanone (MEK)	43	6.035	6.006	0.029	92	42828	8.00	8.18	
41 cis-1,2-Dichloroethene	96	6.056	6.042	0.014	82	20922	4.00	3.92	
42 2,2-Dichloropropane	77	6.063	6.070	-0.007	80	34681	4.00	3.91	
43 Propionitrile	54	6.128	6.085	0.043	91	37328	20.0	19.8	
S 45 1,2-Dichloroethene, Total	100				0			7.95	
48 Methacrylonitrile	67	6.314	6.306	0.008	90	36397	10.0	9.82	
49 Chlorobromomethane	128	6.400	6.385	0.015	93	11059	4.00	4.08	
50 Tetrahydrofuran	71	6.428	6.407	0.021	92	31826	20.0	19.9	
51 Chloroform	83	6.535	6.528	0.007	93	34549	4.00	3.99	
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.750	0.007	93	263149	50.0	50.4	
53 1,1,1-Trichloroethane	97	6.786	6.771	0.015	35	33864	4.00	3.92	
54 Cyclohexane	56	6.893	6.893	0.000	92	40681	4.00	3.94	
55 1,1-Dichloropropene	75	6.993	6.986	0.007	93	25633	4.00	3.94	
56 Carbon tetrachloride	117	7.000	6.993	0.007	91	27496	4.00	3.88	
57 Isobutyl alcohol	41	7.136	7.129	0.007	92	33629	50.0	44.7	M
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.214	0.008	72	65212	50.0	49.6	
59 Benzene	78	7.258	7.250	0.008	92	80462	4.00	3.94	
60 1,2-Dichloroethane	62	7.329	7.322	0.007	97	28276	4.00	3.97	
62 Tert-amyl methyl ether	73	7.443	7.443	0.000	99	69035	4.00	3.89	
* 63 Fluorobenzene (IS)	96	7.665	7.658	0.007	99	1093809	50.0	50.0	
64 n-Heptane	43	7.687	7.679	0.008	92	29821	4.00	3.74	
66 n-Butanol	56	8.051	8.008	0.043	89	29275	50.0	49.9	
67 Trichloroethene	95	8.158	8.151	0.007	96	21135	4.00	4.01	
69 Methylcyclohexane	83	8.473	8.473	0.000	91	39529	4.00	3.82	
70 1,2-Dichloropropane	63	8.487	8.480	0.007	70	21412	4.00	3.84	
71 2-ethoxy-2-methyl butane	87	8.495	8.487	0.008	91	31675	4.00	3.88	
72 Methyl methacrylate	69	8.573	8.559	0.014	91	21151	4.00	3.80	
73 1,4-Dioxane	88	8.595	8.566	0.029	36	9339	50.0	48.5	
74 Dibromomethane	93	8.602	8.594	0.008	97	13744	4.00	3.86	
76 Dichlorobromomethane	83	8.831	8.823	0.008	99	26687	4.00	3.92	
77 2-Nitropropane	41	9.081	9.074	0.007	97	49401	20.0	18.4	
78 2-Chloroethyl vinyl ether	63	9.210	9.188	0.022	91	13192	4.00	3.50	
79 cis-1,3-Dichloropropene	75	9.388	9.381	0.007	95	31797	4.00	3.77	
80 4-Methyl-2-pentanone (MIBK)	43	9.546	9.538	0.008	97	82389	8.00	7.76	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	1069695	50.0	50.7	
82 Toluene	92	9.774	9.774	0.000	97	49839	4.00	3.92	
119 trans-1,3-Dichloropropene	75	10.039	10.032	0.007	93	28844	4.00	3.75	
S 120 1,3-Dichloropropene, Total	100				0			7.52	
121 Ethyl methacrylate	69	10.096	10.089	0.007	90	36625	4.00	3.98	
122 1,1,2-Trichloroethane	97	10.239	10.232	0.007	89	19511	4.00	3.90	
123 Tetrachloroethene	166	10.339	10.332	0.007	96	20683	4.00	3.87	
124 1,3-Dichloropropane	76	10.404	10.396	0.008	88	31731	4.00	3.98	
126 2-Hexanone	43	10.454	10.439	0.015	96	53256	8.00	7.68	
128 Chlorodibromomethane	129	10.625	10.625	0.000	89	20261	4.00	3.71	
129 Ethylene Dibromide	107	10.740	10.740	0.000	98	20550	4.00	3.90	M
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	86	795137	50.0	50.0	
131 1-Chlorohexane	91	11.183	11.176	0.007	97	28148	4.00	3.94	
132 Chlorobenzene	112	11.197	11.197	0.000	95	55898	4.00	3.93	
S 133 Xylenes, Total	106				0			11.7	
134 1,1,1,2-Tetrachloroethane	131	11.283	11.276	0.007	94	21787	4.00	3.78	
135 Ethylbenzene	91	11.283	11.283	0.000	98	99747	4.00	3.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 m-Xylene & p-Xylene	106	11.405	11.397	0.008	100	78347	8.00	7.92	
138 o-Xylene	106	11.734	11.726	0.008	96	40723	4.00	3.83	
139 Styrene	104	11.748	11.748	0.000	94	63387	4.00	3.83	
140 Bromoform	173	11.905	11.905	0.000	97	17467	4.00	3.76	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	110756	4.00	3.91	
143 Cyclohexanone	55	12.105	12.098	0.007	93	150043	200.0	177.7	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	90	402033	50.0	49.7	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	94	42061	4.00	3.98	
147 trans-1,4-Dichloro-2-butene	53	12.298	12.298	0.000	89	25943	10.0	9.29	
146 Bromobenzene	156	12.298	12.298	0.000	96	25817	4.00	3.93	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	83	11801	4.00	3.94	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	129208	4.00	3.95	
150 2-Chlorotoluene	126	12.441	12.441	0.000	96	26026	4.00	3.84	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	93	99394	4.00	3.87	
152 4-Chlorotoluene	126	12.534	12.534	0.000	97	25208	4.00	3.84	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	17653	4.00	3.66	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	97	101968	4.00	3.80	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	125424	4.00	3.79	
158 1,3-Dichlorobenzene	146	13.013	13.006	0.007	98	52294	4.00	3.85	
159 4-Isopropyltoluene	119	13.013	13.013	0.000	97	108929	4.00	3.76	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.063	0.001	95	482301	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	52411	4.00	3.91	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	112165	4.00	3.84	
163 Benzyl chloride	91	13.156	13.156	0.000	98	74987	4.00	3.59	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	95	66200	4.00	3.75	
165 p-Diethylbenzene	119	13.292	13.292	0.000	95	68348	4.00	3.73	
166 n-Butylbenzene	92	13.314	13.307	0.008	97	53787	4.00	3.64	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	97	57424	4.00	3.86	
168 o-diethylbenzene	119	13.364	13.357	0.007	95	54896	4.00	3.54	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	86	13142	4.00	3.91	
172 1,3,5-Trichlorobenzene	180	14.022	14.022	0.000	97	48348	4.00	3.79	
173 1,2,4-Trichlorobenzene	180	14.444	14.443	0.001	94	49266	4.00	3.88	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	96	18136	4.00	3.60	
176 Naphthalene	128	14.622	14.622	0.000	97	190479	4.00	4.04	
177 1,2,3-Trichlorobenzene	180	14.765	14.765	0.000	97	53864	4.00	3.99	
178 2-Methylnaphthalene	142	15.402	15.394	0.008	92	118573	4.00	3.92	
S 207 Total Diethylbenzene	1				0			11.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_CCV_VOC#1_00136	Amount Added:	4.00	Units: uL	
MSV_CCV_CYC_00007	Amount Added:	32.00	Units: uL	
MSV_CCV_VOC#3_00135	Amount Added:	3.20	Units: uL	
MSV_CCV_2CEVE_00130	Amount Added:	4.00	Units: uL	
MSV_CCV_EE_00005	Amount Added:	4.00	Units: uL	
MSV_CCV_GASES_00528	Amount Added:	2.00	Units: uL	
MSV_HP20_ISSS_00096	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 27-Jul-2023 22:24:03 Chrom Revision: 2.3 26-Jul-2023 13:45:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X12.D

Injection Date: 24-Jul-2023 23:42:30 Instrument ID: 9355 Operator ID: MEC29284

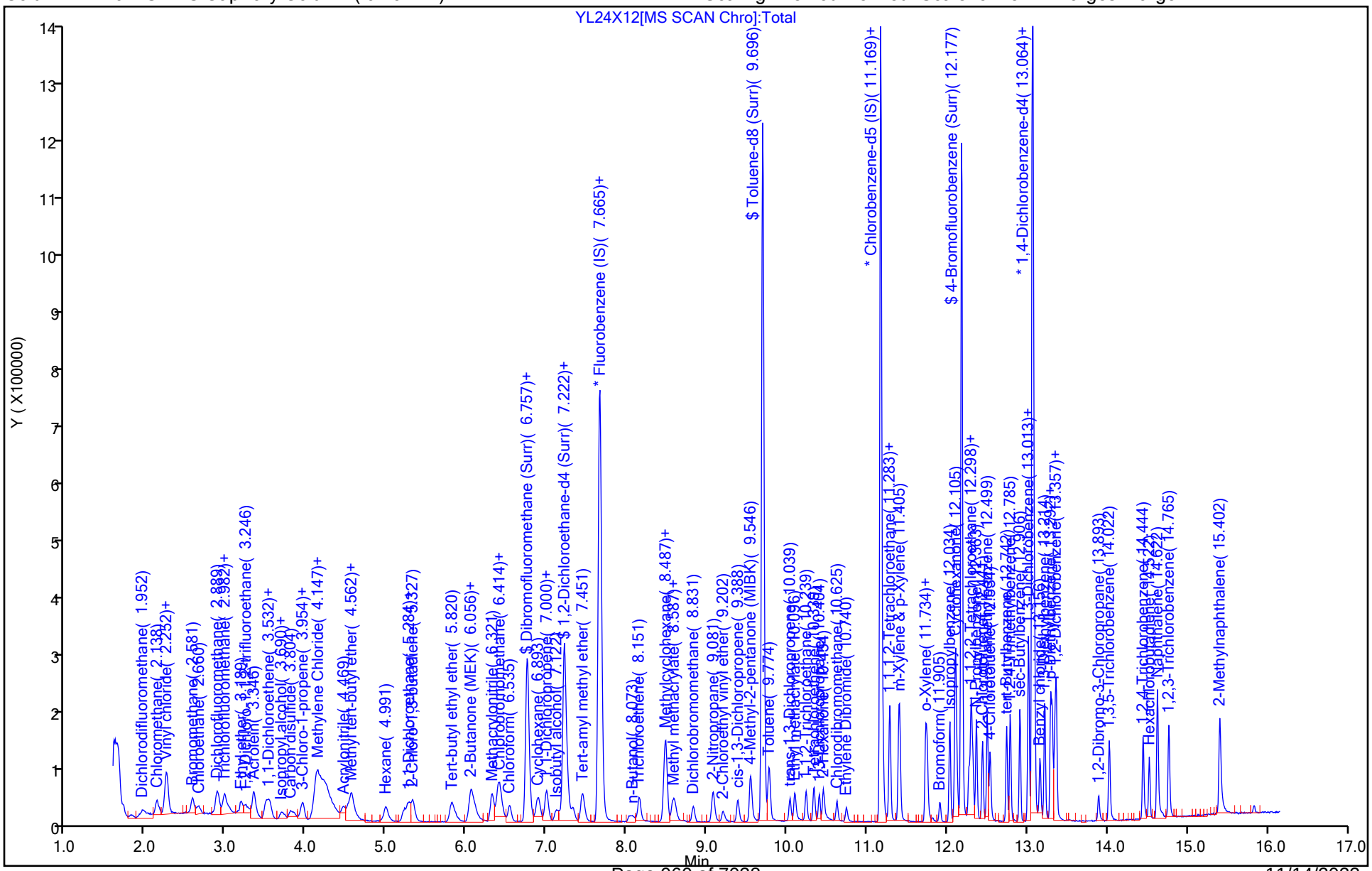
Lims ID: IC v4 Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 12

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

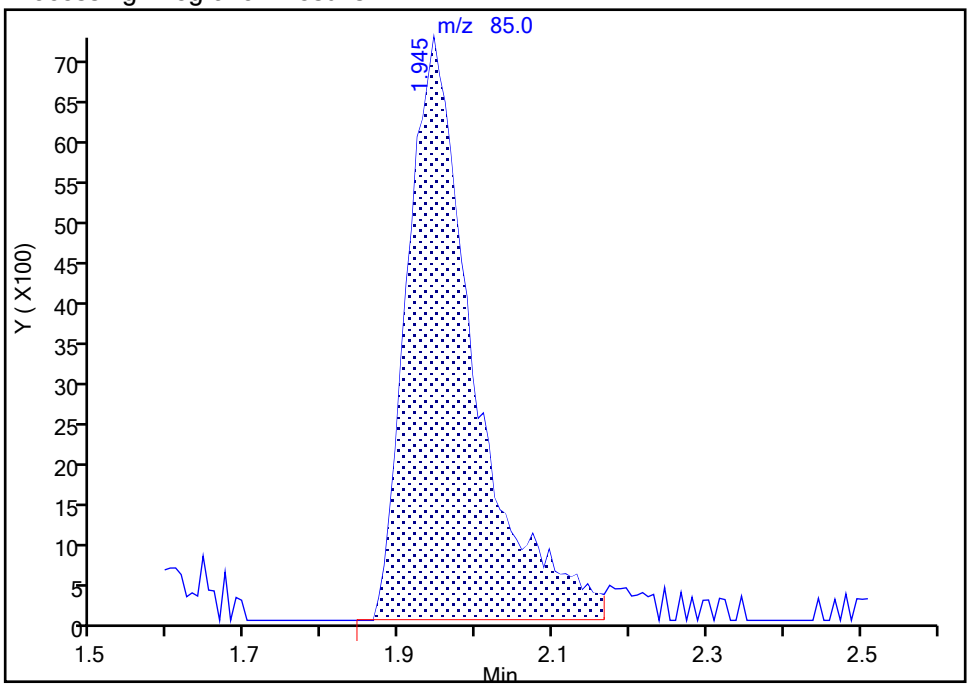
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X12.D
Injection Date: 24-Jul-2023 23:42:30 Instrument ID: 9355
Lims ID: IC v4
Client ID:
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

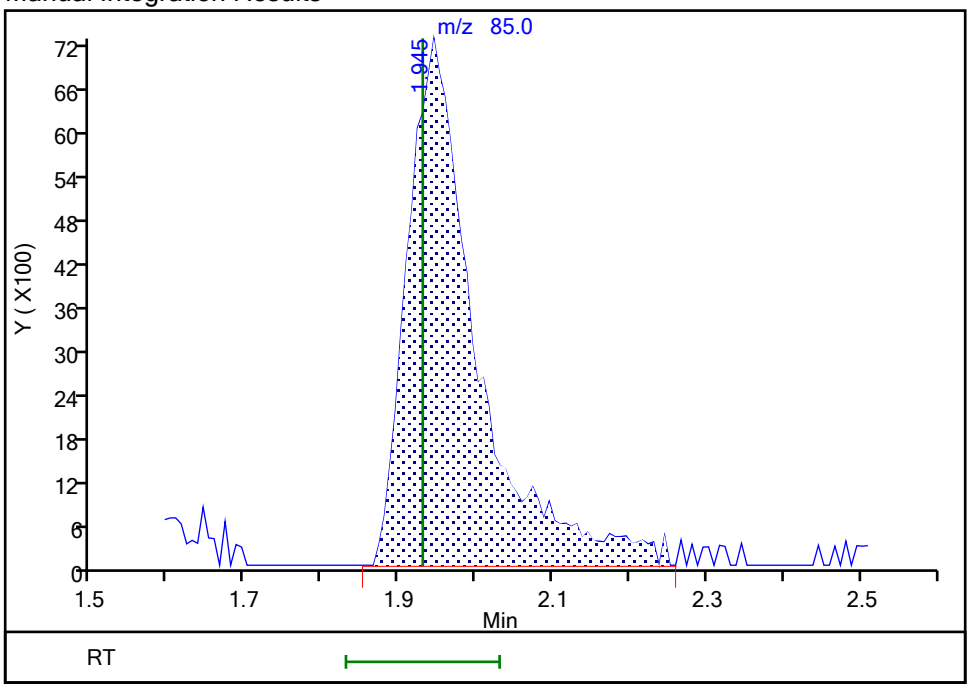
Processing Integration Results

RT: 1.94
Area: 44008
Amount: 4.312210
Amount Units: ug/l



Manual Integration Results

RT: 1.94
Area: 45562
Amount: 4.440334
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:19:50 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

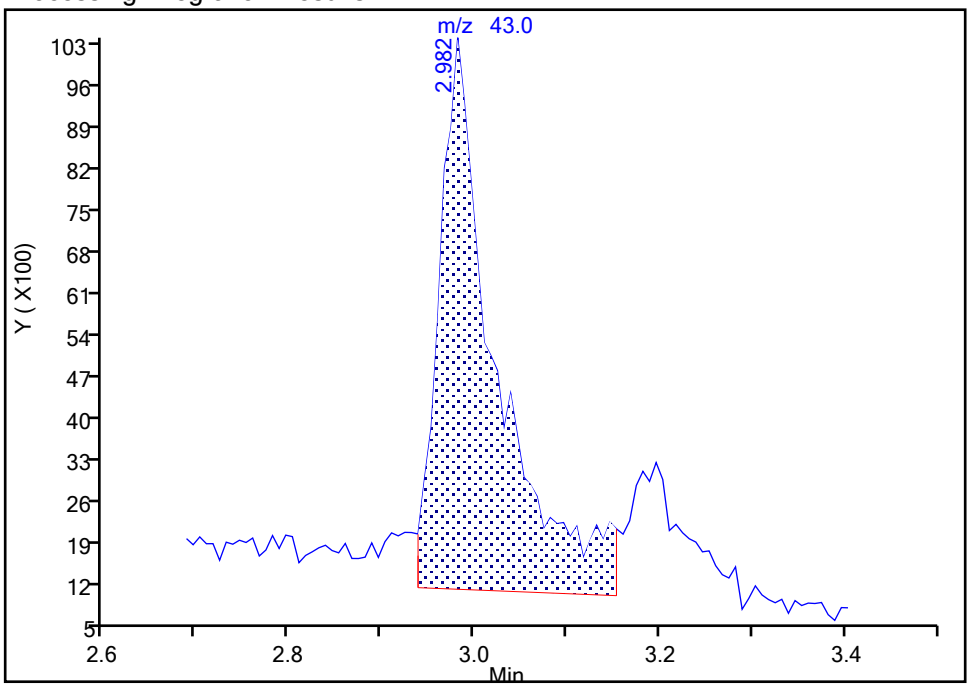
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X12.D				
Injection Date:	24-Jul-2023 23:42:30	Instrument ID:	9355		
Lims ID:	IC v4				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

12 Pentane, CAS: 109-66-0

Signal: 1

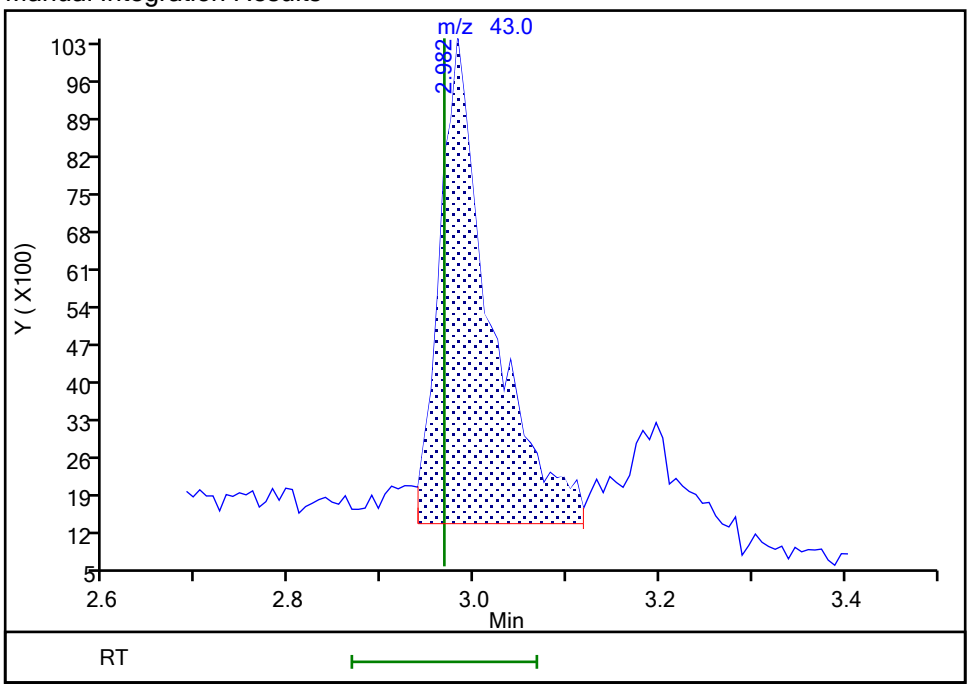
Processing Integration Results

RT: 2.98
Area: 40286
Amount: 4.024248
Amount Units: ug/l



Manual Integration Results

RT: 2.98
Area: 35039
Amount: 3.966663
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:20:10 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

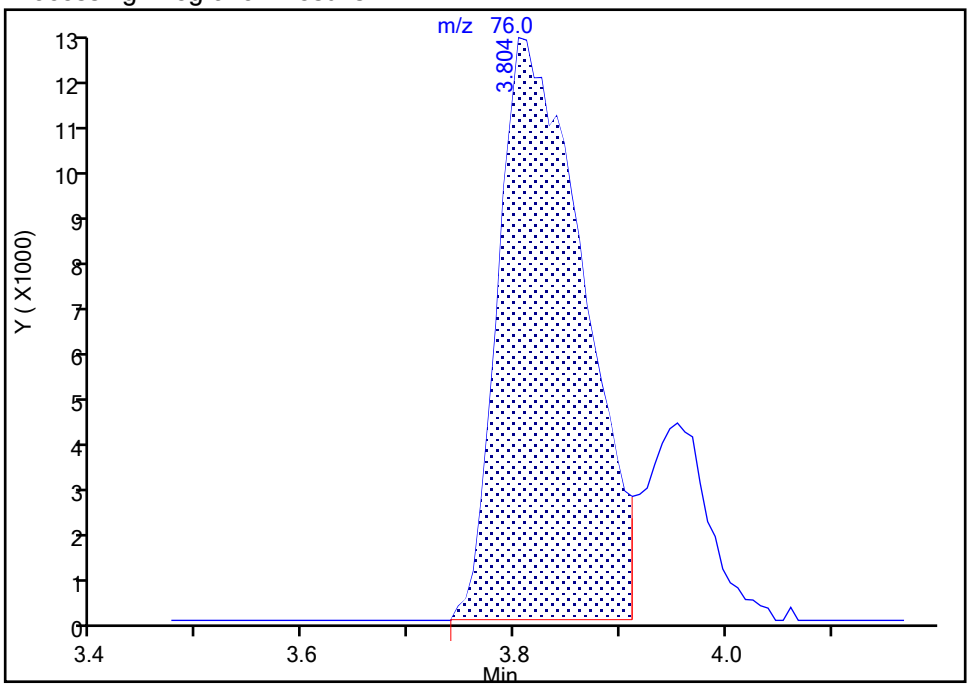
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X12.D
Injection Date: 24-Jul-2023 23:42:30 Instrument ID: 9355
Lims ID: IC v4
Client ID:
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

22 Carbon disulfide, CAS: 75-15-0

Signal: 1

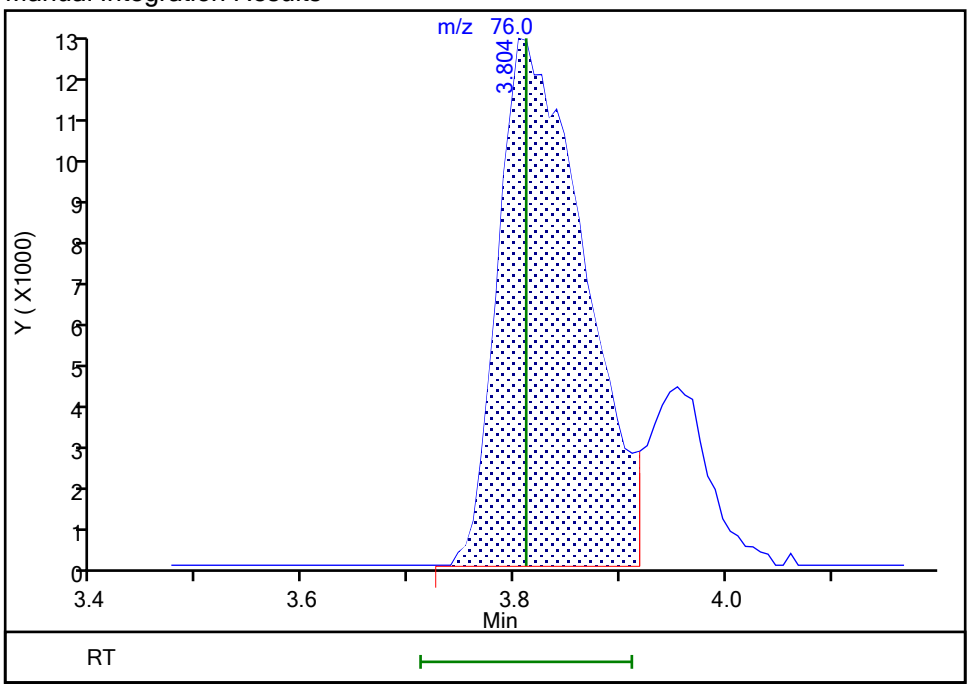
Processing Integration Results

RT: 3.80
Area: 68451
Amount: 3.854588
Amount Units: ug/l



Manual Integration Results

RT: 3.80
Area: 69583
Amount: 4.030537
Amount Units: ug/l



Reviewer: UKEK, 27-Jul-2023 19:13:54 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

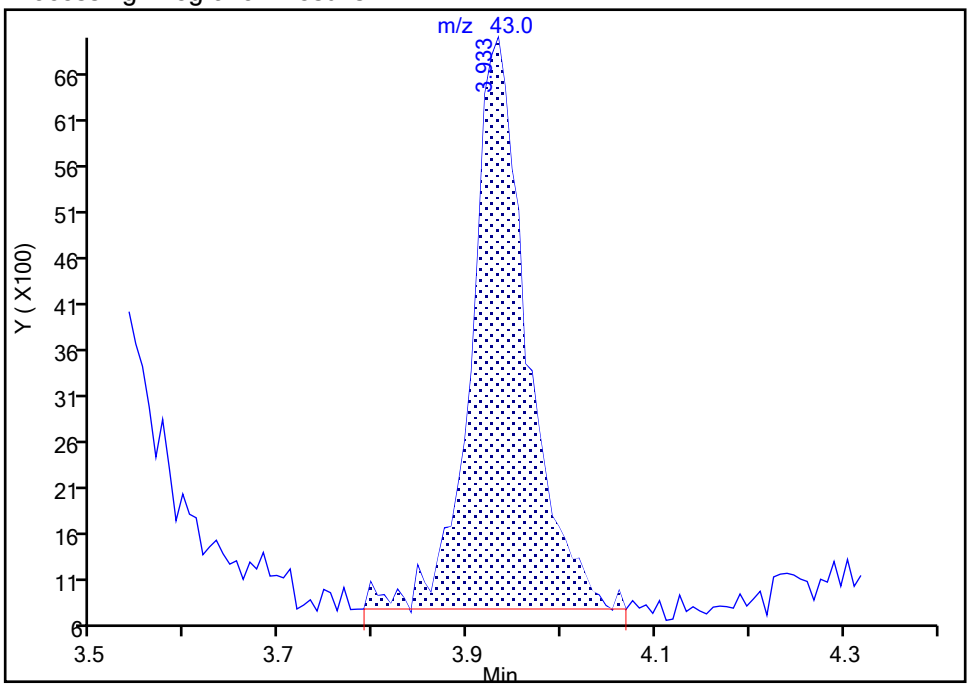
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X12.D				
Injection Date:	24-Jul-2023 23:42:30	Instrument ID:	9355		
Lims ID:	IC v4				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

24 Methyl acetate, CAS: 79-20-9

Signal: 1

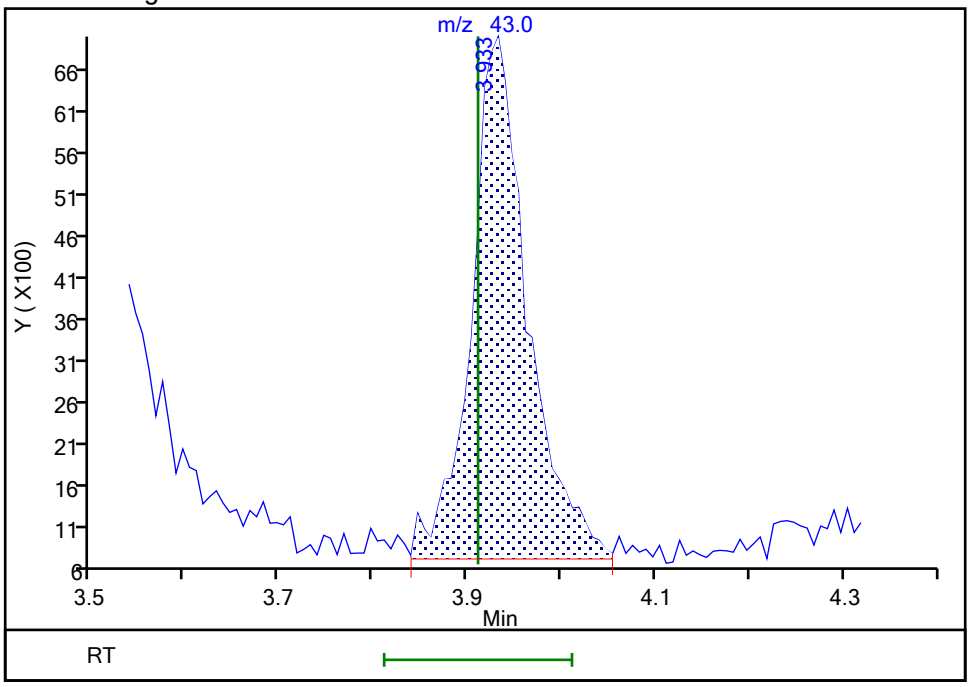
Processing Integration Results

RT: 3.93
Area: 25613
Amount: 3.511193
Amount Units: ug/l



Manual Integration Results

RT: 3.93
Area: 26175
Amount: 3.600411
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:20:35 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

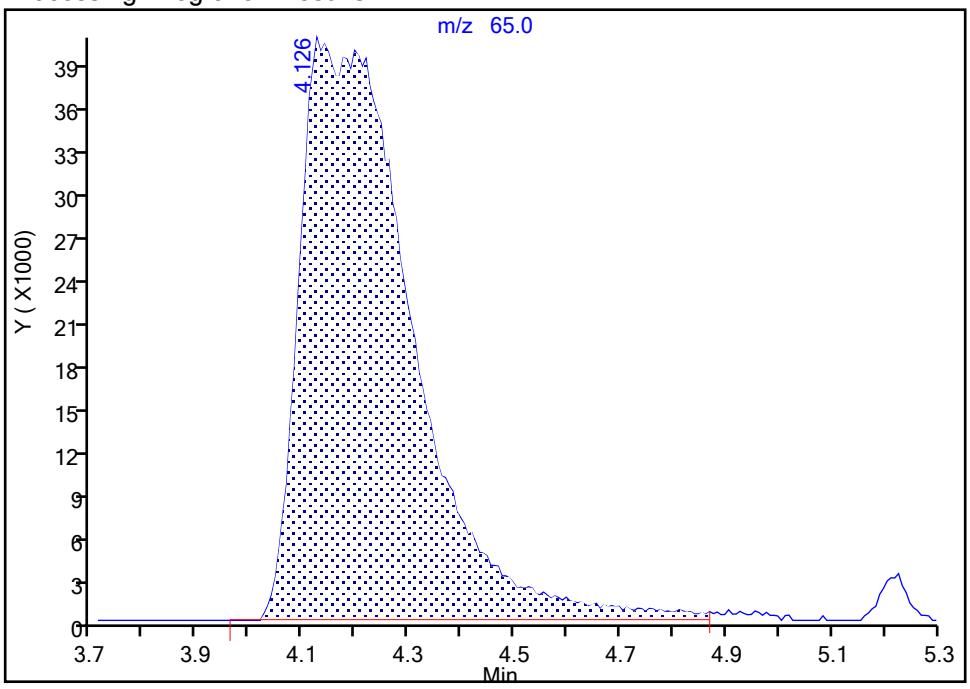
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X12.D
Injection Date: 24-Jul-2023 23:42:30 Instrument ID: 9355
Lims ID: IC v4
Client ID:
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 27 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

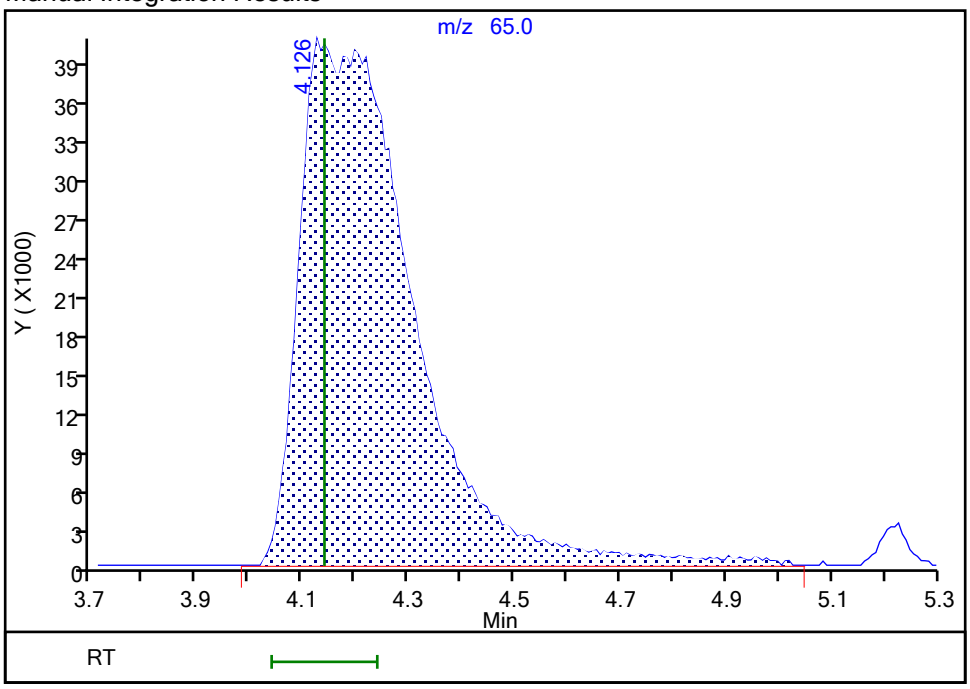
Processing Integration Results

RT: 4.13
Area: 593457
Amount: 250.0000
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 597386
Amount: 250.0000
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:20:43 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

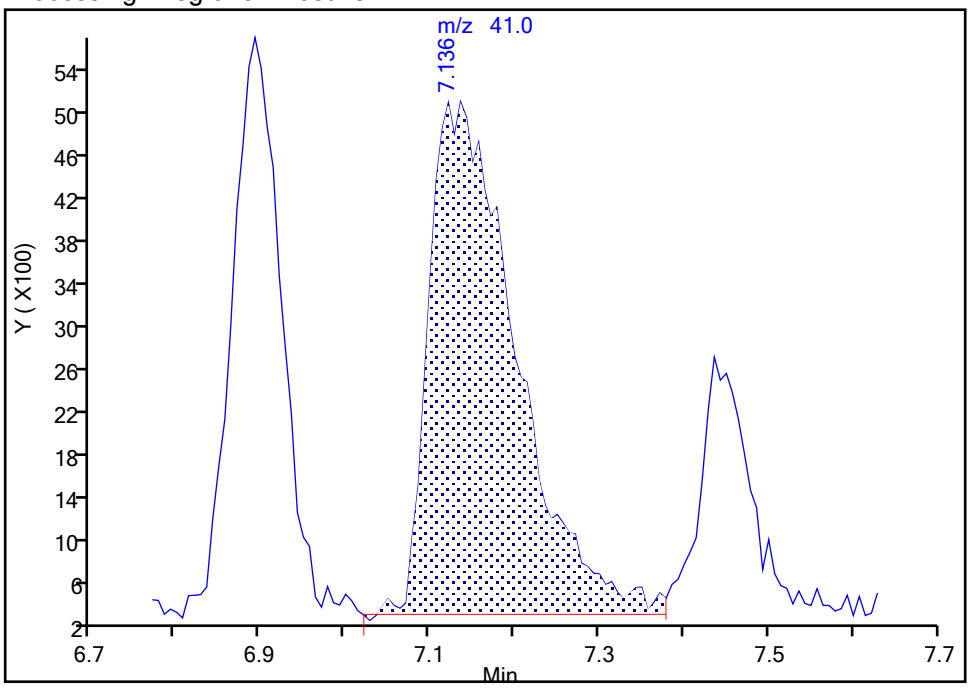
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X12.D				
Injection Date:	24-Jul-2023 23:42:30	Instrument ID:	9355		
Lims ID:	IC v4				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

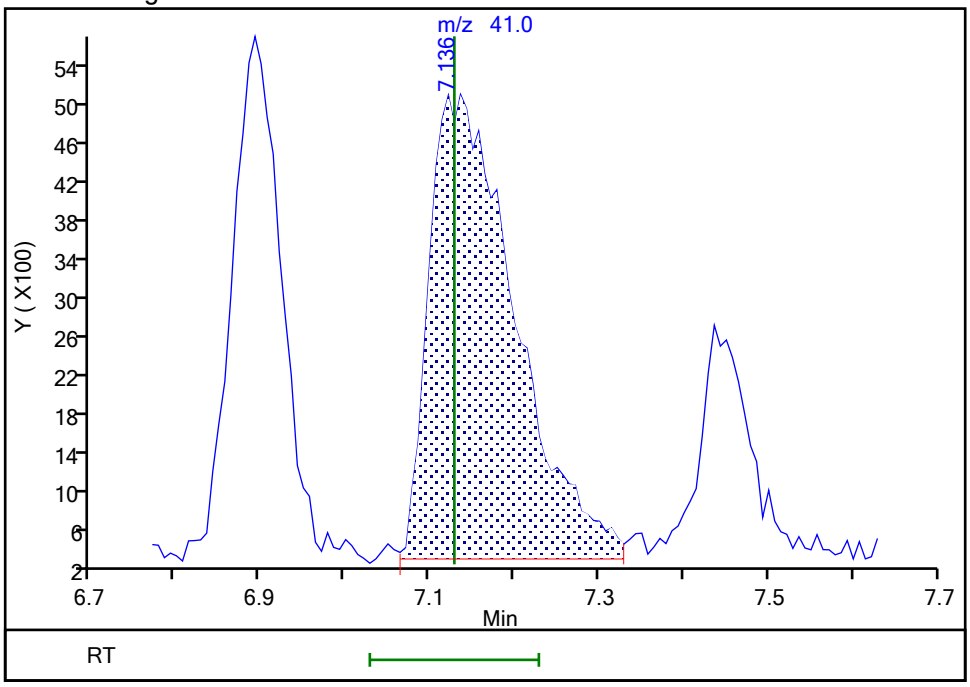
Processing Integration Results

RT: 7.14
Area: 34248
Amount: 45.261452
Amount Units: ug/l



Manual Integration Results

RT: 7.14
Area: 33629
Amount: 44.719053
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:21:08 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

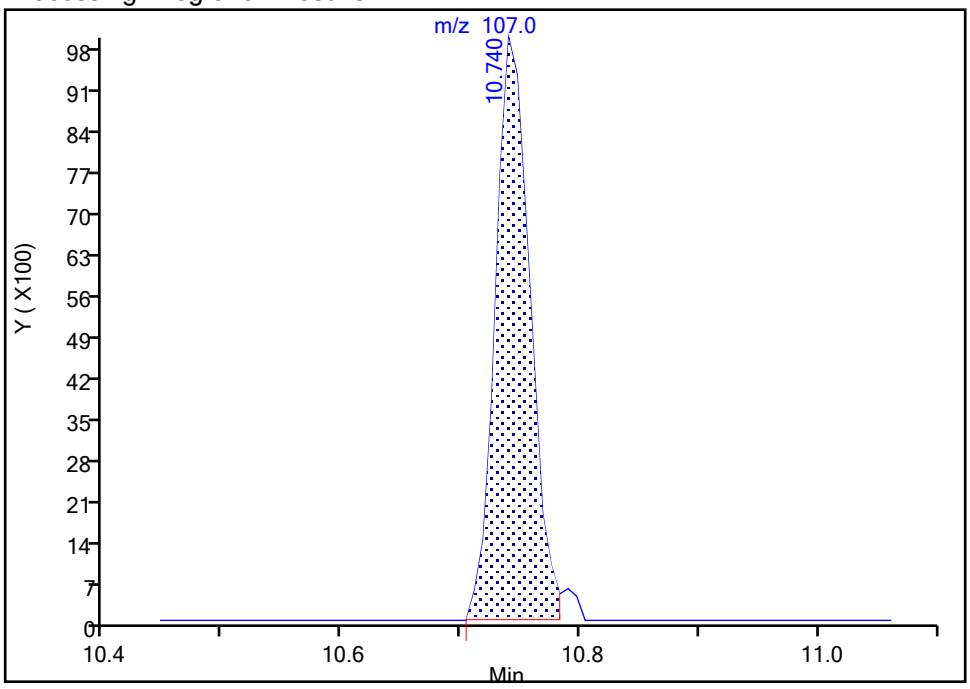
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X12.D
Injection Date: 24-Jul-2023 23:42:30 Instrument ID: 9355
Lims ID: IC v4
Client ID:
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

129 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

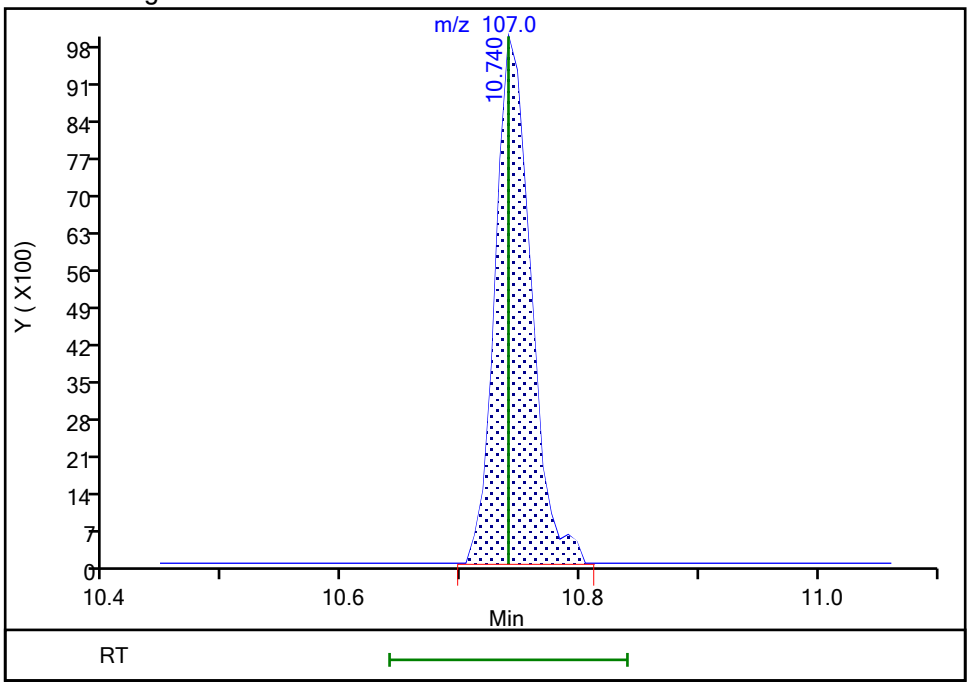
Processing Integration Results

RT: 10.74
Area: 20143
Amount: 3.837003
Amount Units: ug/l



Manual Integration Results

RT: 10.74
Area: 20550
Amount: 3.903723
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:21:35 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X13.D
Lims ID: IC v10
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Jul-2023 00:04:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0089720-014
Misc. Info.: IC 10
Operator ID: MEC29284 Instrument ID: 9355
Sublist: chrom-MSVoa_9355*sub43

Method: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 27-Jul-2023 22:24:23 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1604

First Level Reviewer: K4WN Date: 25-Jul-2023 16:23:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.938	1.930	0.008	99	113994	10.0	11.0	
4 Chloromethane	50	2.131	2.124	0.007	99	118413	10.0	10.2	
5 Vinyl chloride	62	2.238	2.238	0.000	82	111437	10.0	10.5	
6 Butadiene	39	2.252	2.245	0.007	92	106512	10.0	10.6	
8 Bromomethane	94	2.574	2.574	0.000	90	72047	10.0	10.1	
9 Chloroethane	64	2.646	2.645	0.001	100	52272	10.0	10.1	
10 Dichlorofluoromethane	67	2.889	2.881	0.008	97	149329	10.0	10.4	
11 Trichlorofluoromethane	101	2.953	2.960	-0.007	97	109756	10.0	10.7	
12 Pentane	43	2.975	2.967	0.008	97	97551	10.0	10.9	
14 Ethyl ether	59	3.182	3.175	0.007	92	45856	10.0	10.6	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.268	3.260	0.008	92	75048	10.0	10.2	
16 Acrolein	56	3.339	3.332	0.007	99	210551	100.0	99.2	
17 1,1-Dichloroethene	96	3.482	3.482	0.000	98	51885	10.0	10.8	
18 Acetone	58	3.504	3.496	0.008	99	24001	20.0	21.0	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.540	3.532	0.008	92	64521	10.0	11.3	
20 Isopropyl alcohol	45	3.668	3.654	0.014	32	72241	50.0	49.5	
21 Iodomethane	142	3.690	3.689	0.001	98	100504	10.0	10.6	
22 Carbon disulfide	76	3.804	3.811	-0.007	99	188609	10.0	10.8	M
24 Methyl acetate	43	3.926	3.911	0.015	98	72679	10.0	9.90	M
25 3-Chloro-1-propene	41	3.954	3.947	0.007	90	83472	10.0	10.6	
26 Methylene Chloride	84	4.133	4.133	0.000	92	59617	10.0	10.2	
* 27 t-Butyl alcohol-d10 (IS)	65	4.204	4.140	0.064	92	592201	250.0	250.0	
28 2-Methyl-2-propanol	59	4.305	4.247	0.058	97	128742	50.0	52.3	M
29 Acrylonitrile	53	4.448	4.433	0.015	100	100939	25.0	26.9	
30 Methyl tert-butyl ether	73	4.541	4.533	0.008	96	203602	10.0	10.7	
32 trans-1,2-Dichloroethene	96	4.562	4.555	0.007	99	52379	10.0	10.8	
33 Hexane	57	4.991	4.984	0.007	93	83090	10.0	11.3	
35 1,1-Dichloroethane	63	5.213	5.205	0.008	96	93114	10.0	10.9	
36 Isopropyl ether	45	5.277	5.270	0.007	94	193178	10.0	10.7	
37 2-Chloro-1,3-butadiene	53	5.327	5.320	0.007	92	83539	10.0	11.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.813	5.813	0.000	98	189057	10.0	10.5	
40 2-Butanone (MEK)	43	6.021	6.006	0.015	99	104544	20.0	19.8	
41 cis-1,2-Dichloroethene	96	6.049	6.042	0.007	82	58419	10.0	10.9	
42 2,2-Dichloropropane	77	6.078	6.070	0.008	89	95537	10.0	10.7	
43 Propionitrile	54	6.092	6.085	0.007	99	98056	50.0	52.4	
S 45 1,2-Dichloroethene, Total	100				0			21.7	
48 Methacrylonitrile	67	6.314	6.306	0.008	92	97427	25.0	26.0	
49 Chlorobromomethane	128	6.392	6.385	0.007	94	29613	10.0	10.8	
50 Tetrahydrofuran	71	6.414	6.407	0.007	92	83123	50.0	52.4	
51 Chloroform	83	6.535	6.528	0.007	93	94501	10.0	10.8	
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.750	0.007	94	265636	50.0	50.4	
53 1,1,1-Trichloroethane	97	6.779	6.771	0.008	97	94428	10.0	10.8	
54 Cyclohexane	56	6.886	6.893	-0.007	92	115646	10.0	11.1	
55 1,1-Dichloropropene	75	6.993	6.986	0.007	94	71323	10.0	10.9	
56 Carbon tetrachloride	117	6.993	6.993	0.000	88	77530	10.0	10.8	
57 Isobutyl alcohol	41	7.122	7.129	-0.007	96	93286	125.0	125.1	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.215	7.214	0.001	75	66994	50.0	50.5	
59 Benzene	78	7.258	7.250	0.008	96	223227	10.0	10.8	
60 1,2-Dichloroethane	62	7.322	7.322	0.000	97	76309	10.0	10.6	
62 Tert-amyl methyl ether	73	7.444	7.443	0.001	98	187936	10.0	10.5	
* 63 Fluorobenzene (IS)	96	7.658	7.658	0.000	99	1104258	50.0	50.0	
64 n-Heptane	43	7.687	7.679	0.008	92	88363	10.0	11.0	
66 n-Butanol	56	8.030	8.008	0.022	89	77326	125.0	133.0	
67 Trichloroethene	95	8.151	8.151	0.000	99	57519	10.0	10.8	
69 Methylcyclohexane	83	8.473	8.473	0.000	91	116849	10.0	11.2	
70 1,2-Dichloropropane	63	8.480	8.480	0.000	87	59733	10.0	10.6	
71 2-ethoxy-2-methyl butane	87	8.487	8.487	0.000	94	87102	10.0	10.6	
72 Methyl methacrylate	69	8.566	8.559	0.007	92	58205	10.0	10.4	
73 1,4-Dioxane	88	8.580	8.566	0.014	35	23692	125.0	124.0	M
74 Dibromomethane	93	8.595	8.594	0.001	97	38927	10.0	10.8	
76 Dichlorobromomethane	83	8.831	8.823	0.008	99	71129	10.0	10.3	
77 2-Nitropropane	41	9.074	9.074	0.000	99	136096	50.0	51.0	
78 2-Chloroethyl vinyl ether	63	9.195	9.188	0.007	92	38871	10.0	10.2	
79 cis-1,3-Dichloropropene	75	9.381	9.381	0.000	96	88564	10.0	10.4	
80 4-Methyl-2-pentanone (MIBK)	43	9.546	9.538	0.008	97	214918	20.0	20.1	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	94	1078636	50.0	50.5	
82 Toluene	92	9.775	9.774	0.001	98	140872	10.0	11.0	
119 trans-1,3-Dichloropropene	75	10.032	10.032	0.000	93	82202	10.0	10.6	
S 120 1,3-Dichloropropene, Total	100				0			21.0	
121 Ethyl methacrylate	69	10.096	10.089	0.007	90	98288	10.0	10.5	
122 1,1,2-Trichloroethane	97	10.239	10.232	0.007	90	53459	10.0	10.6	
123 Tetrachloroethene	166	10.339	10.332	0.007	98	59935	10.0	11.1	
124 1,3-Dichloropropane	76	10.404	10.396	0.008	91	85959	10.0	10.6	
126 2-Hexanone	43	10.447	10.439	0.008	97	148968	20.0	21.2	
128 Chlorodibromomethane	129	10.625	10.625	0.000	90	57996	10.0	10.5	
129 Ethylene Dibromide	107	10.740	10.740	0.000	98	56794	10.0	10.7	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	86	804604	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	98	79297	10.0	11.0	
132 Chlorobenzene	112	11.197	11.197	0.000	95	155214	10.0	10.8	
S 133 Xylenes, Total	106				0			33.1	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	94	61638	10.0	10.6	
135 Ethylbenzene	91	11.283	11.283	0.000	98	287055	10.0	11.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 m-Xylene & p-Xylene	106	11.398	11.397	0.001	100	221393	20.0	22.1	
138 o-Xylene	106	11.734	11.726	0.008	97	118449	10.0	11.0	
139 Styrene	104	11.748	11.748	0.000	94	182783	10.0	10.9	
140 Bromoform	173	11.905	11.905	0.000	96	48858	10.0	10.4	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	321174	10.0	11.2	
143 Cyclohexanone	55	12.106	12.098	0.008	92	193903	250.0	231.7	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	90	413404	50.0	50.5	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	94	114110	10.0	10.7	
147 trans-1,4-Dichloro-2-butene	53	12.299	12.298	0.001	81	75404	25.0	26.7	
146 Bromobenzene	156	12.299	12.298	0.001	96	71296	10.0	10.7	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	83	33496	10.0	11.1	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	368844	10.0	11.2	
150 2-Chlorotoluene	126	12.442	12.441	0.001	97	75391	10.0	11.0	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	93	283035	10.0	10.9	
152 4-Chlorotoluene	126	12.535	12.534	0.001	98	71851	10.0	10.8	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	51102	10.0	10.5	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	98	297587	10.0	11.0	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	370639	10.0	11.1	
158 1,3-Dichlorobenzene	146	13.014	13.006	0.008	98	149028	10.0	10.8	
159 4-Isopropyltoluene	119	13.014	13.013	0.001	97	324791	10.0	11.1	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.063	0.001	95	487674	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	146563	10.0	10.8	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	319971	10.0	10.8	
163 Benzyl chloride	91	13.157	13.156	0.001	98	225177	10.0	10.7	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	95	198422	10.0	11.1	
165 p-Diethylbenzene	119	13.292	13.292	0.000	95	207613	10.0	11.2	
166 n-Butylbenzene	92	13.307	13.307	0.001	97	165198	10.0	11.1	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	98	164510	10.0	10.9	
168 o-diethylbenzene	119	13.357	13.357	0.000	96	169585	10.0	10.8	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	87	35916	10.0	10.6	
172 1,3,5-Trichlorobenzene	180	14.022	14.022	0.000	97	142424	10.0	11.0	
173 1,2,4-Trichlorobenzene	180	14.444	14.443	0.001	94	144780	10.0	11.3	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	97	54090	10.0	10.6	
176 Naphthalene	128	14.622	14.622	0.000	97	547507	10.0	11.5	
177 1,2,3-Trichlorobenzene	180	14.765	14.765	0.000	96	152653	10.0	11.2	
178 2-Methylnaphthalene	142	15.395	15.394	0.001	92	346263	10.0	11.3	
S 207 Total Diethylbenzene	1				0			33.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_CCV_VOC#1_00136	Amount Added:	2.00	Units: uL	
MSV_CCV_CYC_00007	Amount Added:	8.00	Units: uL	
MSV_CCV_VOC#3_00135	Amount Added:	1.60	Units: uL	
MSV_CCV_2CEVE_00130	Amount Added:	2.00	Units: uL	
MSV_CCV_EE_00005	Amount Added:	2.00	Units: uL	
MSV_CCV_GASES_00528	Amount Added:	1.00	Units: uL	
MSV_HP20_ISSS_00096	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 27-Jul-2023 22:24:24 Chrom Revision: 2.3 26-Jul-2023 13:45:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X13.D

Injection Date: 25-Jul-2023 00:04:30 Instrument ID: 9355 Operator ID: MEC29284

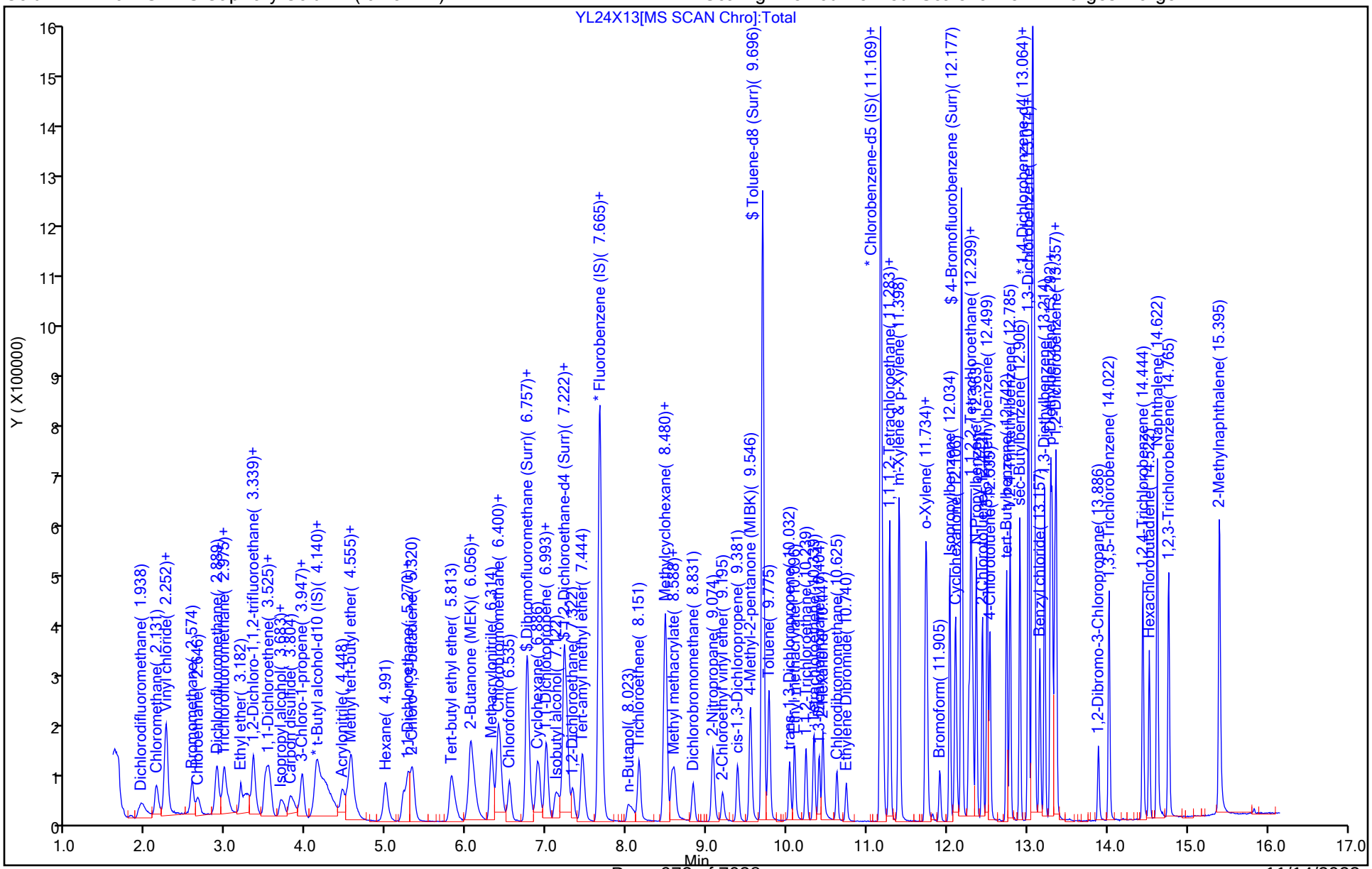
Lims ID: IC v10 Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 13

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

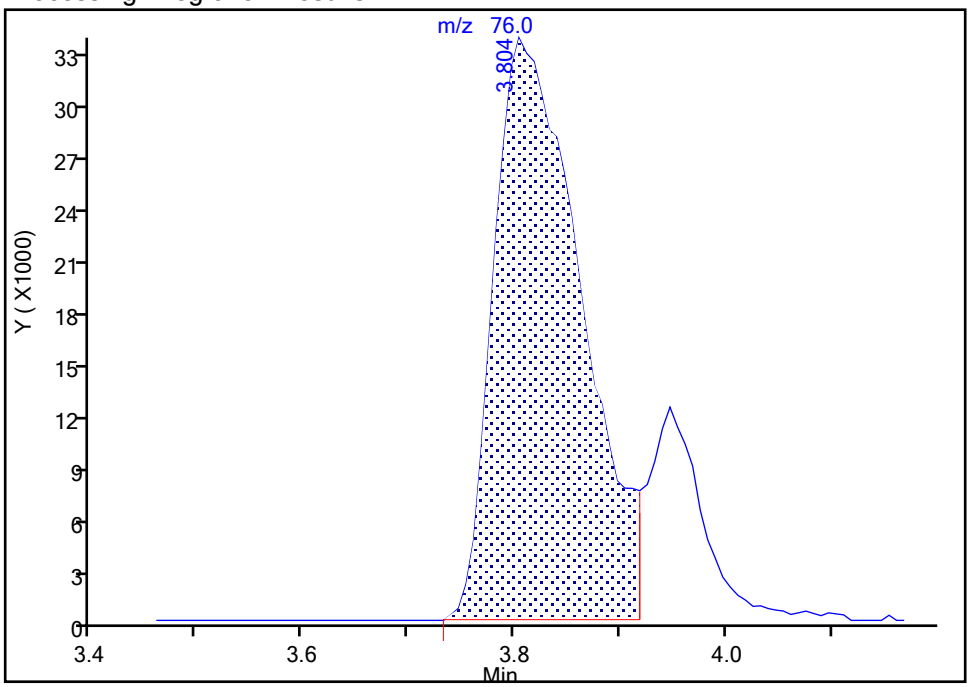
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X13.D				
Injection Date:	25-Jul-2023 00:04:30	Instrument ID:	9355		
Lims ID:	IC v10				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

22 Carbon disulfide, CAS: 75-15-0

Signal: 1

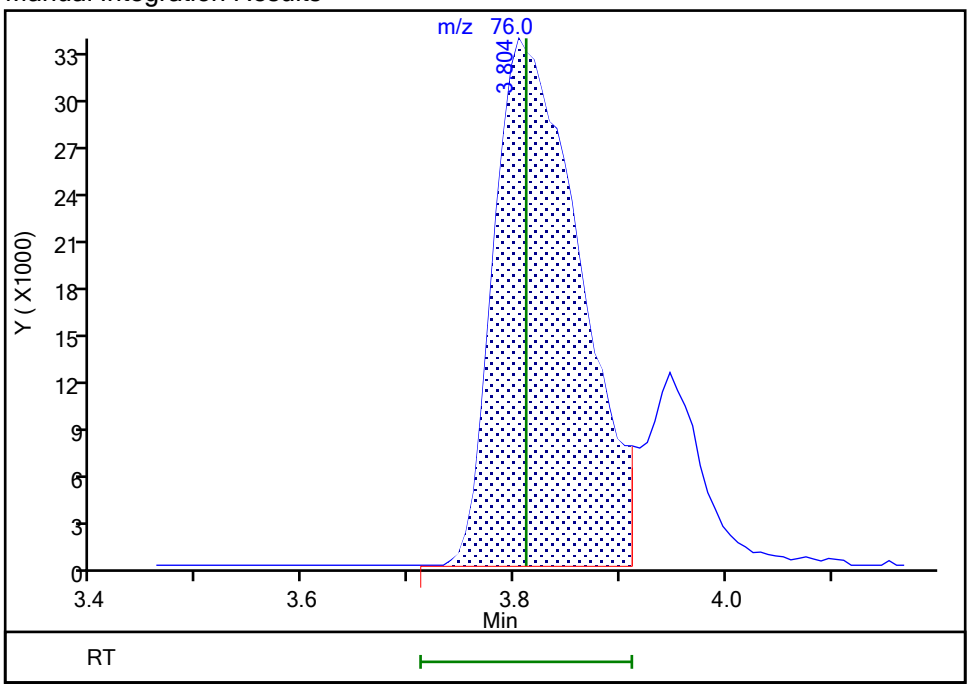
Processing Integration Results

RT: 3.80
Area: 191777
Amount: 10.349009
Amount Units: ug/l



Manual Integration Results

RT: 3.80
Area: 188609
Amount: 10.821640
Amount Units: ug/l



Reviewer: UKEK, 27-Jul-2023 19:13:22 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

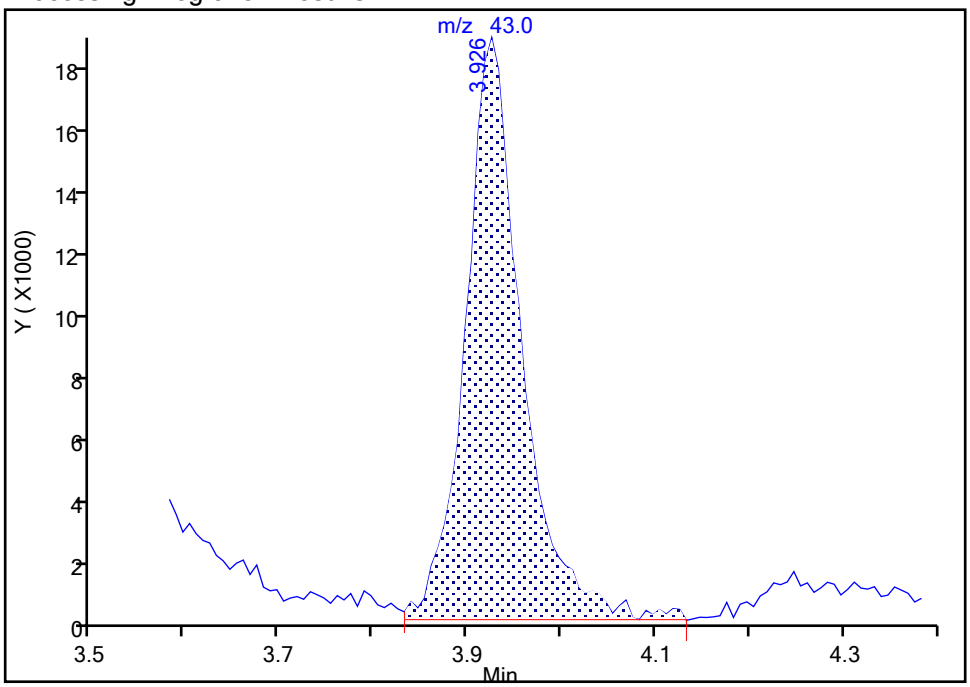
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X13.D				
Injection Date:	25-Jul-2023 00:04:30	Instrument ID:	9355		
Lims ID:	IC v10				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

24 Methyl acetate, CAS: 79-20-9

Signal: 1

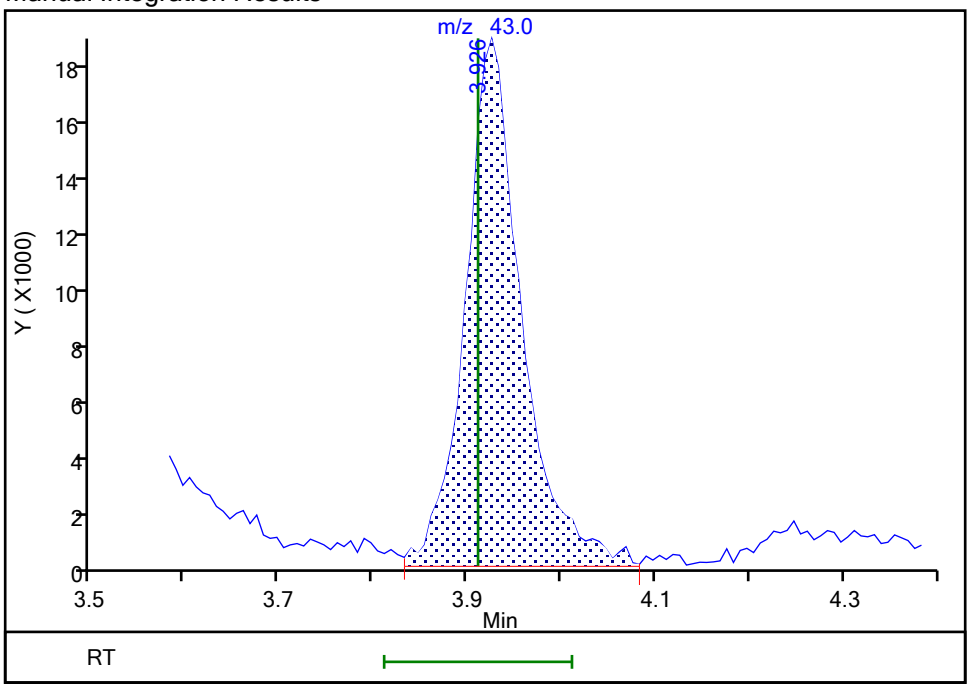
Processing Integration Results

RT: 3.93
Area: 73293
Amount: 9.925088
Amount Units: ug/l



Manual Integration Results

RT: 3.93
Area: 72679
Amount: 9.902508
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:22:55 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

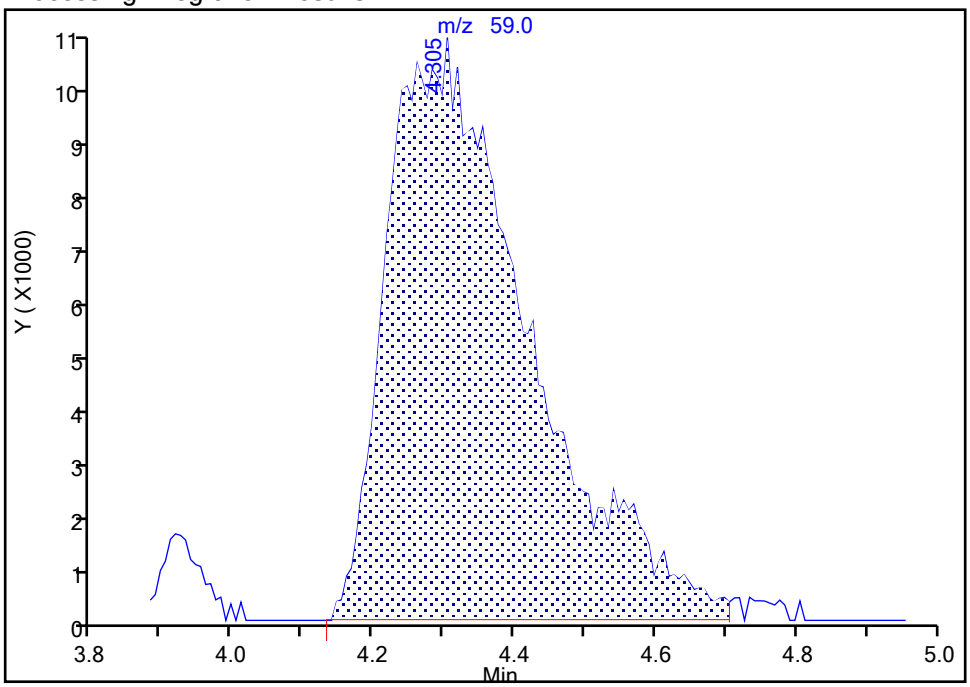
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X13.D				
Injection Date:	25-Jul-2023 00:04:30	Instrument ID:	9355		
Lims ID:	IC v10				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

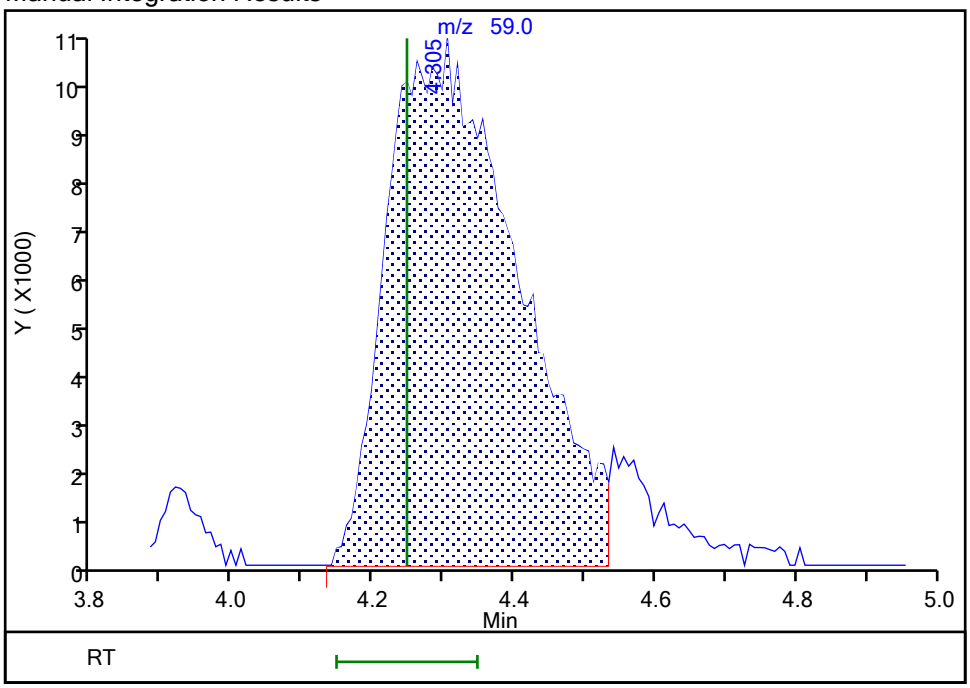
Processing Integration Results

RT: 4.30
Area: 139323
Amount: 53.162102
Amount Units: ug/l



Manual Integration Results

RT: 4.30
Area: 128742
Amount: 52.348376
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:23:06 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

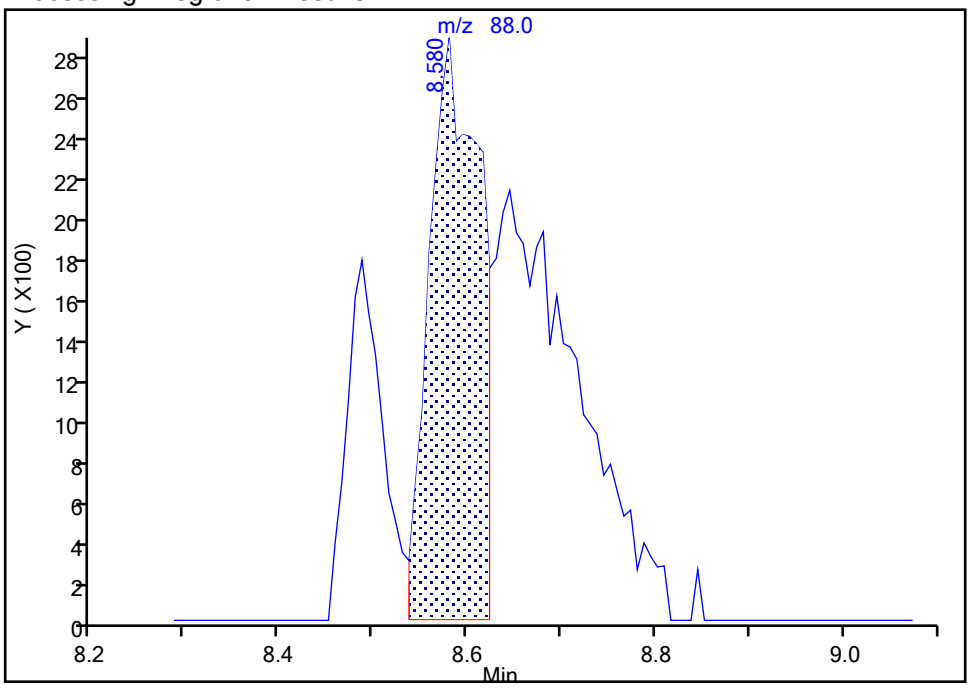
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X13.D				
Injection Date:	25-Jul-2023 00:04:30	Instrument ID:	9355		
Lims ID:	IC v10				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

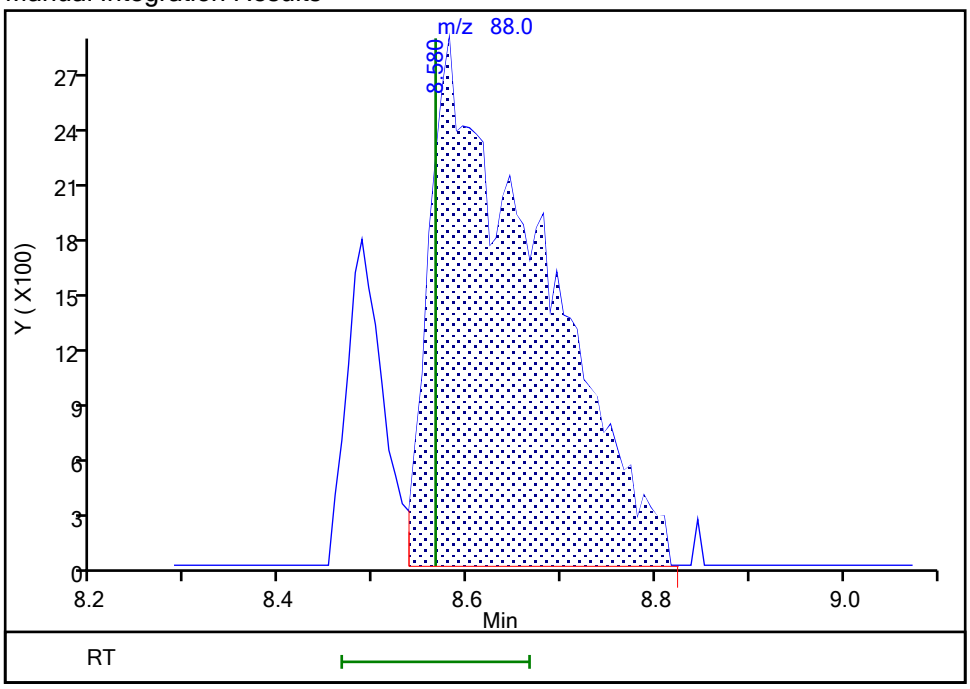
Processing Integration Results

RT: 8.58
Area: 10869
Amount: 72.041825
Amount Units: ug/l



Manual Integration Results

RT: 8.58
Area: 23692
Amount: 124.0370
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:23:26 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X14.D
Lims ID: IC v20
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Jul-2023 00:26:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0089720-015
Misc. Info.: IC 20
Operator ID: MEC29284 Instrument ID: 9355
Sublist: chrom-MSVoa_9355*sub43

Method: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 27-Jul-2023 22:24:44 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1604

First Level Reviewer: K4WN Date: 25-Jul-2023 16:25:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.938	1.938	0.000	99	213746	20.0	20.6	
4 Chloromethane	50	2.131	2.131	0.000	99	241893	20.0	20.8	
5 Vinyl chloride	62	2.245	2.245	0.000	98	225045	20.0	21.1	
6 Butadiene	39	2.252	2.252	0.000	92	207636	20.0	20.5	
8 Bromomethane	94	2.574	2.574	0.000	90	146291	20.0	20.5	
9 Chloroethane	64	2.653	2.653	0.000	100	108881	20.0	21.1	
10 Dichlorofluoromethane	67	2.889	2.889	0.000	97	302467	20.0	21.1	
11 Trichlorofluoromethane	101	2.968	2.968	0.000	96	218365	20.0	21.2	
12 Pentane	43	2.975	2.975	0.000	98	182031	20.0	20.4	
14 Ethyl ether	59	3.182	3.182	0.000	93	88505	20.0	20.5	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.261	3.261	0.000	92	146653	20.0	19.8	
16 Acrolein	56	3.339	3.339	0.000	99	424870	200.0	196.6	
17 1,1-Dichloroethene	96	3.489	3.489	0.000	97	99567	20.0	20.6	
18 Acetone	58	3.504	3.504	0.000	87	48159	40.0	41.4	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.540	3.540	0.000	93	123639	20.0	21.6	
20 Isopropyl alcohol	45	3.661	3.661	0.000	96	135311	100.0	91.1	
21 Iodomethane	142	3.697	3.697	0.000	97	202168	20.0	21.4	
22 Carbon disulfide	76	3.804	3.804	0.000	99	365647	20.0	20.9	M
24 Methyl acetate	43	3.918	3.918	0.000	98	149987	20.0	20.4	
25 3-Chloro-1-propene	41	3.947	3.947	0.000	90	162777	20.0	20.7	
26 Methylene Chloride	84	4.133	4.133	0.000	93	118592	20.0	20.3	
* 27 t-Butyl alcohol-d10 (IS)	65	4.140	4.140	0.000	92	603218	250.0	250.0	
28 2-Methyl-2-propanol	59	4.269	4.269	0.000	99	241513	100.0	96.4	M
29 Acrylonitrile	53	4.448	4.448	0.000	98	198924	50.0	52.9	
30 Methyl tert-butyl ether	73	4.533	4.533	0.000	95	396641	20.0	20.7	
32 trans-1,2-Dichloroethene	96	4.562	4.562	0.000	99	101900	20.0	21.0	
33 Hexane	57	4.984	4.984	0.000	94	156099	20.0	21.1	
35 1,1-Dichloroethane	63	5.213	5.213	0.000	96	183033	20.0	21.3	
36 Isopropyl ether	45	5.270	5.270	0.000	94	372087	20.0	20.6	
37 2-Chloro-1,3-butadiene	53	5.334	5.334	0.000	91	162260	20.0	21.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.813	5.813	0.000	98	372473	20.0	20.7	
40 2-Butanone (MEK)	43	6.021	6.021	0.000	100	212215	40.0	40.1	
41 cis-1,2-Dichloroethene	96	6.049	6.049	0.000	83	114441	20.0	21.2	
42 2,2-Dichloropropane	77	6.071	6.071	0.000	89	186985	20.0	20.8	
43 Propionitrile	54	6.099	6.099	0.000	95	194609	100.0	102.0	
S 45 1,2-Dichloroethene, Total	100				0			42.3	
48 Methacrylonitrile	67	6.314	6.314	0.000	91	190160	50.0	50.7	
49 Chlorobromomethane	128	6.392	6.392	0.000	96	58305	20.0	21.3	
50 Tetrahydrofuran	71	6.407	6.407	0.000	91	160904	100.0	99.5	
51 Chloroform	83	6.535	6.535	0.000	94	185954	20.0	21.2	
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.757	0.000	94	267559	50.0	50.7	
53 1,1,1-Trichloroethane	97	6.771	6.771	0.000	98	184165	20.0	21.1	
54 Cyclohexane	56	6.893	6.893	0.000	91	215326	20.0	20.6	
55 1,1-Dichloropropene	75	6.993	6.993	0.000	95	139373	20.0	21.2	
56 Carbon tetrachloride	117	7.000	7.000	0.000	96	152643	20.0	21.3	
57 Isobutyl alcohol	41	7.129	7.129	0.000	95	176373	250.0	232.3	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.222	0.000	82	65966	50.0	49.6	
59 Benzene	78	7.258	7.258	0.000	97	434458	20.0	21.1	
60 1,2-Dichloroethane	62	7.329	7.329	0.000	97	146948	20.0	20.4	
62 Tert-amyl methyl ether	73	7.444	7.444	0.000	98	372264	20.0	20.8	
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	98	1105864	50.0	50.0	
64 n-Heptane	43	7.680	7.680	0.000	94	169720	20.0	21.0	
66 n-Butanol	56	8.030	8.030	0.000	89	145547	250.0	245.8	
67 Trichloroethene	95	8.151	8.151	0.000	98	110596	20.0	20.7	
69 Methylcyclohexane	83	8.473	8.473	0.000	92	219796	20.0	21.0	
70 1,2-Dichloropropane	63	8.480	8.480	0.000	86	116334	20.0	20.6	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	90	172886	20.0	20.9	
72 Methyl methacrylate	69	8.559	8.559	0.000	90	116649	20.0	20.7	
73 1,4-Dioxane	88	8.580	8.580	0.000	83	49489	250.0	254.4	
74 Dibromomethane	93	8.595	8.595	0.000	97	75041	20.0	20.9	
76 Dichlorobromomethane	83	8.831	8.831	0.000	99	142435	20.0	20.7	
77 2-Nitropropane	41	9.074	9.074	0.000	98	271638	100.0	100.0	
78 2-Chloroethyl vinyl ether	63	9.195	9.195	0.000	92	81039	20.0	21.3	
79 cis-1,3-Dichloropropene	75	9.381	9.381	0.000	96	174821	20.0	20.5	
80 4-Methyl-2-pentanone (MIBK)	43	9.539	9.539	0.000	97	443436	40.0	41.3	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	1083984	50.0	49.9	
82 Toluene	92	9.775	9.775	0.000	98	271625	20.0	20.8	
119 trans-1,3-Dichloropropene	75	10.032	10.032	0.000	93	162749	20.0	20.6	
S 120 1,3-Dichloropropene, Total	100				0			41.1	
121 Ethyl methacrylate	69	10.089	10.089	0.000	90	196770	20.0	20.8	
122 1,1,2-Trichloroethane	97	10.239	10.239	0.000	90	104038	20.0	20.2	
123 Tetrachloroethene	166	10.339	10.339	0.000	97	116508	20.0	21.2	
124 1,3-Dichloropropane	76	10.404	10.404	0.000	91	170280	20.0	20.8	
126 2-Hexanone	43	10.447	10.447	0.000	98	304928	40.0	42.7	
128 Chlorodibromomethane	129	10.625	10.625	0.000	89	114449	20.0	20.4	
129 Ethylene Dibromide	107	10.740	10.740	0.000	99	112135	20.0	20.7	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	86	817649	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	98	149072	20.0	20.3	
132 Chlorobenzene	112	11.197	11.197	0.000	94	305582	20.0	20.9	
S 133 Xylenes, Total	106				0			63.4	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	95	124853	20.0	21.1	
135 Ethylbenzene	91	11.283	11.283	0.000	98	561876	20.0	21.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 m-Xylene & p-Xylene	106	11.398	11.398	0.000	100	430766	40.0	42.3	
138 o-Xylene	106	11.727	11.727	0.000	97	229820	20.0	21.0	
139 Styrene	104	11.748	11.748	0.000	95	359494	20.0	21.1	
140 Bromoform	173	11.905	11.905	0.000	97	97671	20.0	20.4	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	627322	20.0	21.5	
143 Cyclohexanone	55	12.106	12.106	0.000	93	448219	500.0	525.8	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	90	412822	50.0	49.6	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	94	218365	20.0	20.2	
147 trans-1,4-Dichloro-2-butene	53	12.299	12.299	0.000	84	148095	50.0	51.7	
146 Bromobenzene	156	12.299	12.299	0.000	96	139771	20.0	20.7	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	83	62407	20.0	20.3	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	720469	20.0	21.5	
150 2-Chlorotoluene	126	12.442	12.442	0.000	97	146972	20.0	21.2	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	93	552231	20.0	21.0	
152 4-Chlorotoluene	126	12.535	12.535	0.000	97	140679	20.0	20.9	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	103813	20.0	21.0	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	98	575192	20.0	20.9	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	723131	20.0	21.3	
158 1,3-Dichlorobenzene	146	13.006	13.006	0.000	98	289558	20.0	20.8	
159 4-Isopropyltoluene	119	13.014	13.014	0.000	97	632123	20.0	21.3	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	95	494528	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	94	284909	20.0	20.7	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	618855	20.0	20.6	
163 Benzyl chloride	91	13.157	13.157	0.000	98	443864	20.0	20.7	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	95	382641	20.0	21.2	
165 p-Diethylbenzene	119	13.292	13.292	0.000	94	402507	20.0	21.4	
166 n-Butylbenzene	92	13.307	13.307	0.000	96	323077	20.0	21.3	
167 1,2-Dichlorobenzene	146	13.343	13.343	0.000	98	318817	20.0	20.9	
168 o-diethylbenzene	119	13.357	13.357	0.000	96	326552	20.0	20.5	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	87	68602	20.0	19.9	
172 1,3,5-Trichlorobenzene	180	14.022	14.022	0.000	98	269310	20.0	20.6	
173 1,2,4-Trichlorobenzene	180	14.444	14.444	0.000	94	269437	20.0	20.7	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	98	106189	20.0	20.6	
176 Naphthalene	128	14.622	14.622	0.000	97	1023098	20.0	21.2	
177 1,2,3-Trichlorobenzene	180	14.765	14.765	0.000	96	287477	20.0	20.7	
178 2-Methylnaphthalene	142	15.395	15.395	0.000	93	652496	20.0	21.0	
S 207 Total Diethylbenzene	1				0			63.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_CCV_VOC#1_00136	Amount Added:	4.00	Units: uL	
MSV_CCV_CYC_00007	Amount Added:	16.00	Units: uL	
MSV_CCV_VOC#3_00135	Amount Added:	3.20	Units: uL	
MSV_CCV_2CEVE_00130	Amount Added:	4.00	Units: uL	
MSV_CCV_EE_00005	Amount Added:	4.00	Units: uL	
MSV_CCV_GASES_00528	Amount Added:	2.00	Units: uL	
MSV_HP20_ISSS_00096	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 27-Jul-2023 22:24:45 Chrom Revision: 2.3 26-Jul-2023 13:45:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X14.D

Injection Date: 25-Jul-2023 00:26:30 Instrument ID: 9355 Operator ID: MEC29284

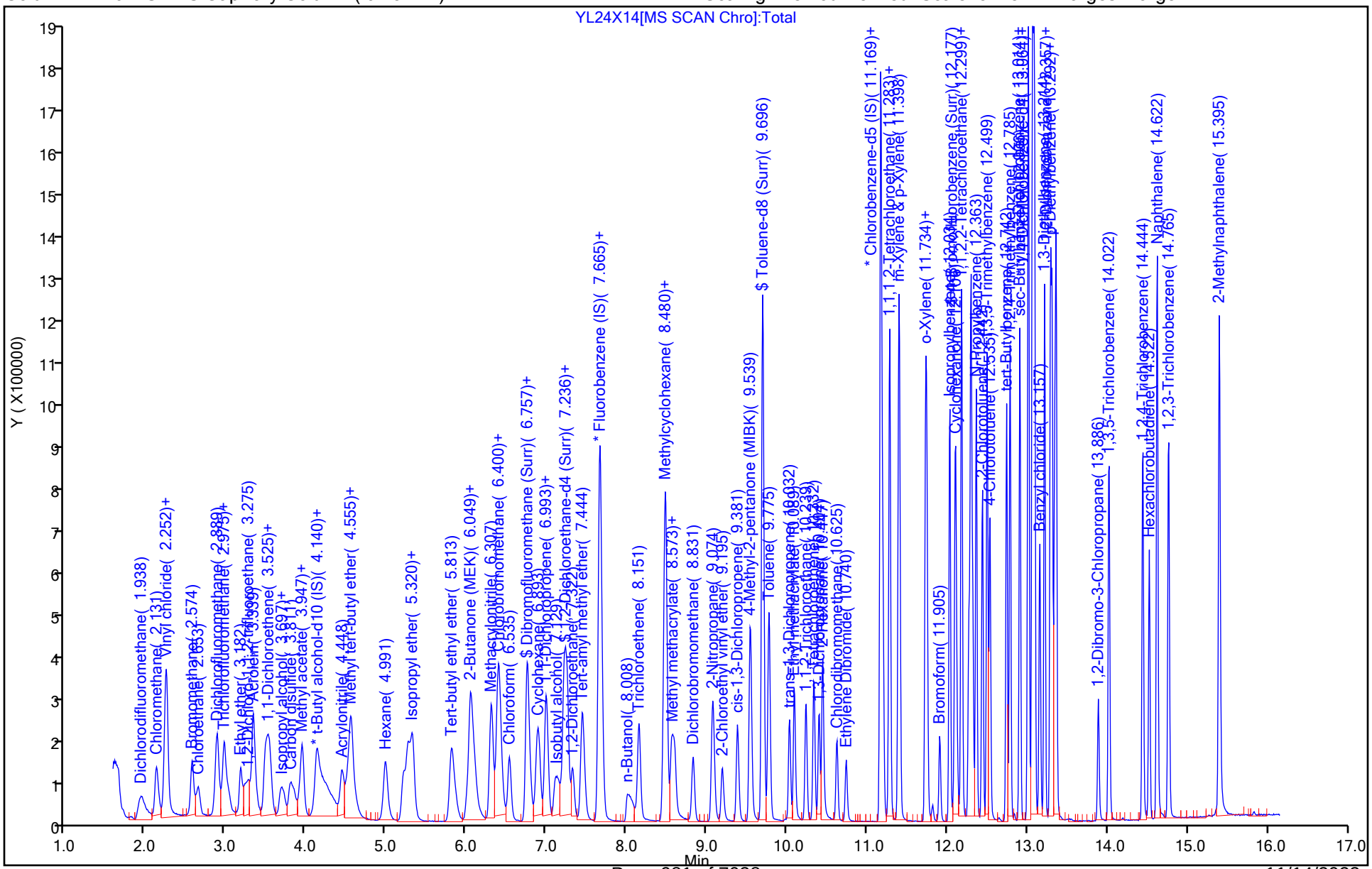
Lims ID: IC v20 Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 14

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

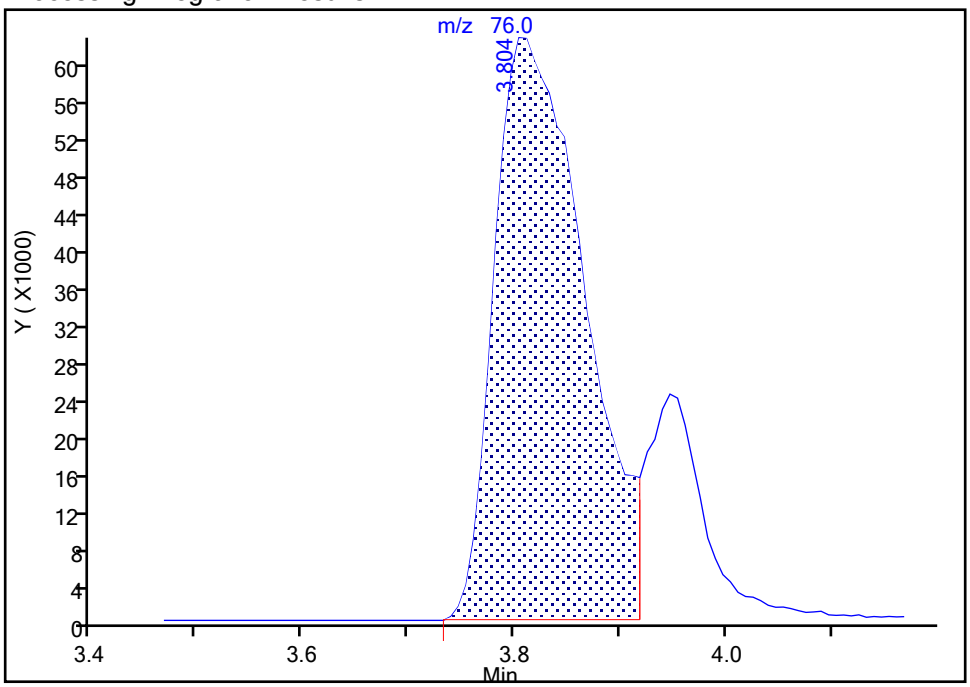
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X14.D				
Injection Date:	25-Jul-2023 00:26:30	Instrument ID:	9355		
Lims ID:	IC v20				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

22 Carbon disulfide, CAS: 75-15-0

Signal: 1

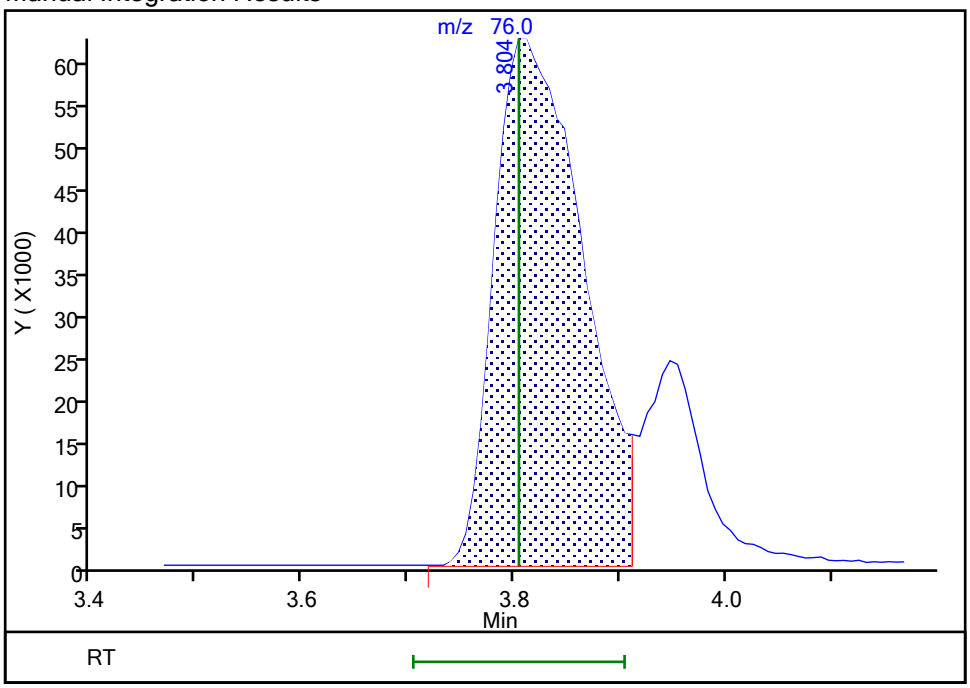
Processing Integration Results

RT: 3.80
Area: 372173
Amount: 19.427779
Amount Units: ug/l



Manual Integration Results

RT: 3.80
Area: 365647
Amount: 20.948914
Amount Units: ug/l



Reviewer: UKEK, 27-Jul-2023 19:13:03 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

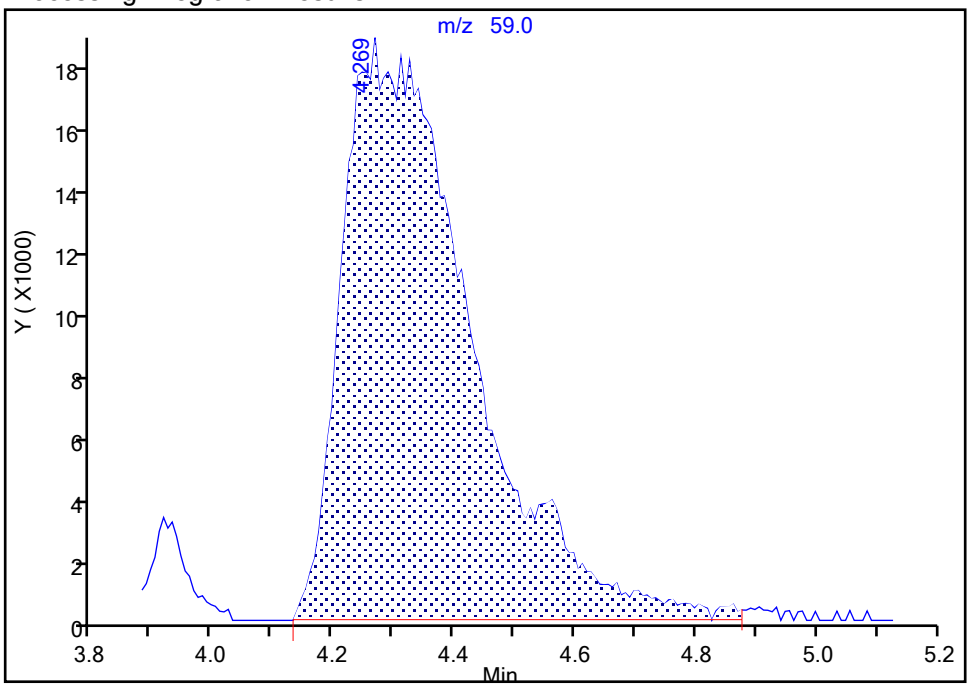
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X14.D
Injection Date: 25-Jul-2023 00:26:30 Instrument ID: 9355
Lims ID: IC v20
Client ID:
Operator ID: MEC29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

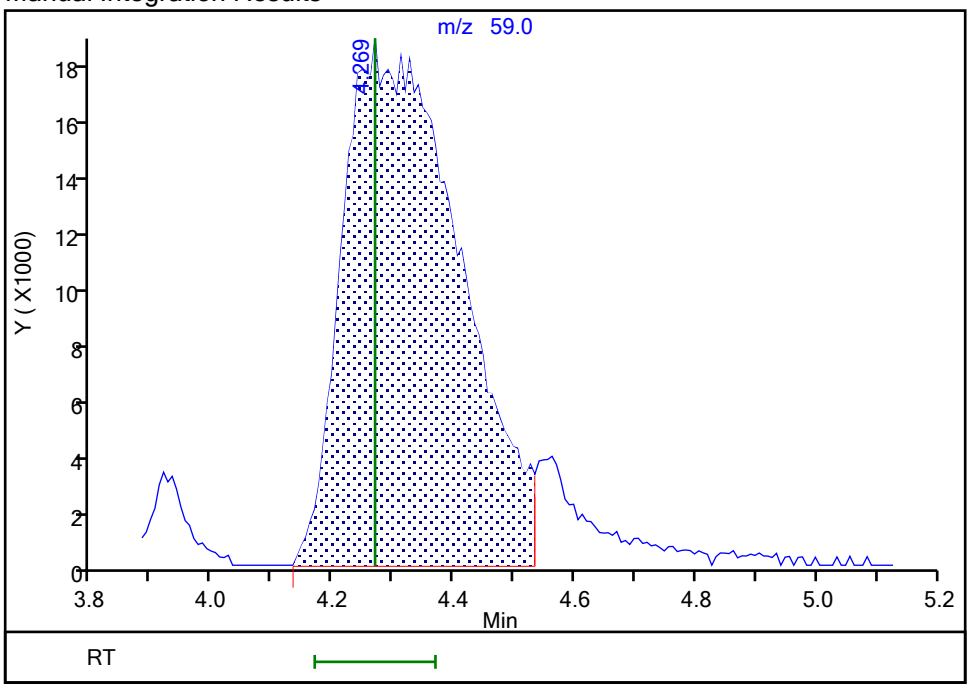
Processing Integration Results

RT: 4.27
Area: 265591
Amount: 100.6529
Amount Units: ug/l



Manual Integration Results

RT: 4.27
Area: 241513
Amount: 96.409165
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:24:41 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X15.D
Lims ID: ICIS v50
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 25-Jul-2023 00:49:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0089720-016
Misc. Info.: IC 50
Operator ID: MEC29284 Instrument ID: 9355
Sublist: chrom-MSVoa_9355*sub43

Method: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 27-Jul-2023 22:25:05 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1604

First Level Reviewer: K4WN Date: 25-Jul-2023 16:09:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.930	1.930	0.000	99	563581	50.0	53.8	
4 Chloromethane	50	2.124	2.124	0.000	99	597597	50.0	50.8	
5 Vinyl chloride	62	2.238	2.238	0.000	98	557528	50.0	51.9	
6 Butadiene	39	2.245	2.245	0.000	94	513894	50.0	50.4	
8 Bromomethane	94	2.574	2.574	0.000	90	360270	50.0	50.1	
9 Chloroethane	64	2.645	2.645	0.000	100	255451	50.0	49.0	
10 Dichlorofluoromethane	67	2.881	2.881	0.000	97	729259	50.0	50.4	
11 Trichlorofluoromethane	101	2.960	2.960	0.000	97	559551	50.0	53.7	
12 Pentane	43	2.967	2.967	0.000	97	443936	50.0	49.2	
14 Ethyl ether	59	3.175	3.175	0.000	93	220875	50.0	50.6	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.260	3.260	0.000	92	358348	50.0	48.0	
16 Acrolein	56	3.332	3.332	0.000	99	1074955	500.0	498.2	
17 1,1-Dichloroethene	96	3.482	3.482	0.000	98	247250	50.0	50.7	
18 Acetone	58	3.496	3.496	0.000	99	119889	100.0	103.2	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.532	3.532	0.000	93	317220	50.0	55.0	
20 Isopropyl alcohol	45	3.654	3.654	0.000	96	335276	250.0	226.1	
21 Iodomethane	142	3.689	3.689	0.000	98	490409	50.0	51.3	
22 Carbon disulfide	76	3.811	3.811	0.000	99	923261	50.0	52.4	M
24 Methyl acetate	43	3.911	3.911	0.000	98	373829	50.0	50.4	
25 3-Chloro-1-propene	41	3.947	3.947	0.000	90	402170	50.0	50.7	
26 Methylene Chloride	84	4.133	4.133	0.000	93	287708	50.0	48.8	
* 27 t-Butyl alcohol-d10 (IS)	65	4.126	4.126	0.000	88	602127	250.0	250.0	M
28 2-Methyl-2-propanol	59	4.247	4.247	0.000	99	599060	250.0	239.6	M
29 Acrylonitrile	53	4.433	4.433	0.000	99	486122	125.0	127.9	
30 Methyl tert-butyl ether	73	4.533	4.533	0.000	95	975942	50.0	50.5	
32 trans-1,2-Dichloroethene	96	4.555	4.555	0.000	99	250622	50.0	51.2	
33 Hexane	57	4.984	4.984	0.000	94	406232	50.0	54.4	
35 1,1-Dichloroethane	63	5.205	5.205	0.000	96	450000	50.0	51.9	
36 Isopropyl ether	45	5.270	5.270	0.000	95	921974	50.0	50.6	
37 2-Chloro-1,3-butadiene	53	5.320	5.320	0.000	91	405851	50.0	53.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.813	5.813	0.000	98	934561	50.0	51.6	
40 2-Butanone (MEK)	43	6.006	6.006	0.000	100	565715	100.0	105.8	
41 cis-1,2-Dichloroethene	96	6.042	6.042	0.000	83	284483	50.0	52.3	
42 2,2-Dichloropropane	77	6.070	6.070	0.000	88	467460	50.0	51.6	
43 Propionitrile	54	6.085	6.085	0.000	99	492503	250.0	258.6	
48 Methacrylonitrile	67	6.306	6.306	0.000	92	482132	125.0	127.4	
49 Chlorobromomethane	128	6.385	6.385	0.000	96	143088	50.0	51.7	
50 Tetrahydrofuran	71	6.407	6.407	0.000	91	399953	250.0	247.8	
51 Chloroform	83	6.528	6.528	0.000	93	449283	50.0	50.8	
$ 52 Dibromofluoromethane (Surr)	113	6.750	6.750	0.000	93	264540	50.0	49.6	
53 1,1,1-Trichloroethane	97	6.771	6.771	0.000	98	456726	50.0	51.8	
54 Cyclohexane	56	6.893	6.893	0.000	92	562668	50.0	53.4	
55 1,1-Dichloropropene	75	6.986	6.986	0.000	96	350252	50.0	52.8	
56 Carbon tetrachloride	117	6.993	6.993	0.000	97	385232	50.0	53.3	
57 Isobutyl alcohol	41	7.129	7.129	0.000	95	455126	625.0	600.5	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.214	0.000	89	68494	50.0	51.0	
59 Benzene	78	7.250	7.250	0.000	97	1076306	50.0	51.7	
60 1,2-Dichloroethane	62	7.322	7.322	0.000	97	371036	50.0	51.0	
62 Tert-amyl methyl ether	73	7.443	7.443	0.000	98	931141	50.0	51.4	
* 63 Fluorobenzene (IS)	96	7.658	7.658	0.000	99	1116591	50.0	50.0	
64 n-Heptane	43	7.679	7.679	0.000	92	446689	50.0	54.8	
66 n-Butanol	56	8.008	8.008	0.000	90	387696	625.0	655.9	
67 Trichloroethene	95	8.151	8.151	0.000	99	281957	50.0	52.4	
69 Methylcyclohexane	83	8.473	8.473	0.000	92	570385	50.0	53.9	
70 1,2-Dichloropropane	63	8.480	8.480	0.000	91	293944	50.0	51.6	
71 2-ethoxy-2-methyl butane	87	8.487	8.487	0.000	94	435180	50.0	52.2	
72 Methyl methacrylate	69	8.559	8.559	0.000	92	293173	50.0	51.6	
73 1,4-Dioxane	88	8.566	8.566	0.000	34	124077	625.0	638.9	M
74 Dibromomethane	93	8.594	8.594	0.000	96	188115	50.0	51.8	
76 Dichlorobromomethane	83	8.823	8.823	0.000	100	360633	50.0	51.9	
77 2-Nitropropane	41	9.074	9.074	0.000	98	695541	250.0	256.4	
78 2-Chloroethyl vinyl ether	63	9.188	9.188	0.000	92	206966	50.0	53.8	
79 cis-1,3-Dichloropropene	75	9.381	9.381	0.000	95	449846	50.0	52.2	
80 4-Methyl-2-pentanone (MIBK)	43	9.538	9.538	0.000	97	1158533	100.0	106.9	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	1103443	50.0	50.2	
82 Toluene	92	9.774	9.774	0.000	98	678154	50.0	51.2	
119 trans-1,3-Dichloropropene	75	10.032	10.032	0.000	93	417085	50.0	52.1	
121 Ethyl methacrylate	69	10.089	10.089	0.000	90	496971	50.0	51.8	
122 1,1,2-Trichloroethane	97	10.232	10.232	0.000	90	264504	50.0	50.8	
123 Tetrachloroethene	166	10.332	10.332	0.000	98	294849	50.0	53.0	
124 1,3-Dichloropropane	76	10.396	10.396	0.000	91	428667	50.0	51.6	
126 2-Hexanone	43	10.439	10.439	0.000	97	789103	100.0	109.2	
128 Chlorodibromomethane	129	10.625	10.625	0.000	90	298593	50.0	52.5	
129 Ethylene Dibromide	107	10.740	10.740	0.000	99	283897	50.0	51.8	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	827927	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	98	373025	50.0	50.1	
132 Chlorobenzene	112	11.197	11.197	0.000	94	764397	50.0	51.6	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	96	310773	50.0	51.8	
135 Ethylbenzene	91	11.283	11.283	0.000	98	1397087	50.0	52.0	
136 m-Xylene & p-Xylene	106	11.397	11.397	0.000	100	1074243	100.0	104.2	
138 o-Xylene	106	11.726	11.726	0.000	97	573574	50.0	51.8	
139 Styrene	104	11.748	11.748	0.000	95	893031	50.0	51.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
140 Bromoform	173	11.905	11.905	0.000	97	251435	50.0	52.0	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	1564393	50.0	53.0	
143 Cyclohexanone	55	12.098	12.098	0.000	93	559571	625.0	657.6	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	90	419248	50.0	49.8	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	94	544584	50.0	51.2	
147 trans-1,4-Dichloro-2-butene	53	12.298	12.298	0.000	80	381723	125.0	135.8	
146 Bromobenzene	156	12.298	12.298	0.000	93	347510	50.0	52.5	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	84	156100	50.0	51.8	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	1768393	50.0	53.7	
150 2-Chlorotoluene	126	12.441	12.441	0.000	97	360649	50.0	52.9	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	93	1393115	50.0	53.8	
152 4-Chlorotoluene	126	12.534	12.534	0.000	97	343417	50.0	52.0	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	270428	50.0	55.7	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	98	1434117	50.0	53.0	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	1825295	50.0	54.8	
158 1,3-Dichlorobenzene	146	13.006	13.006	0.000	98	716139	50.0	52.3	
159 4-Isopropyltoluene	119	13.013	13.013	0.000	97	1611560	50.0	55.3	
* 160 1,4-Dichlorobenzene-d4	152	13.063	13.063	0.000	95	485563	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	695227	50.0	51.5	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	1562898	50.0	53.1	
163 Benzyl chloride	91	13.156	13.156	0.000	98	1140411	50.0	54.2	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	95	962727	50.0	54.2	
165 p-Diethylbenzene	119	13.292	13.292	0.000	93	994289	50.0	53.9	
166 n-Butylbenzene	92	13.307	13.307	0.000	97	799425	50.0	53.8	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	98	780461	50.0	52.1	
168 o-diethylbenzene	119	13.357	13.357	0.000	96	831324	50.0	53.2	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	86	176888	50.0	52.2	
172 1,3,5-Trichlorobenzene	180	14.022	14.022	0.000	98	686299	50.0	53.4	
173 1,2,4-Trichlorobenzene	180	14.443	14.443	0.000	94	688107	50.0	53.8	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	97	278598	50.0	55.0	
176 Naphthalene	128	14.622	14.622	0.000	97	2544261	50.0	53.6	
177 1,2,3-Trichlorobenzene	180	14.765	14.765	0.000	96	723004	50.0	53.1	
178 2-Methylnaphthalene	142	15.394	15.394	0.000	92	1632189	50.0	53.6	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_CCV_VOC#1_00136	Amount Added:	5.00	Units: uL	
MSV_CCV_CYC_00007	Amount Added:	10.00	Units: uL	
MSV_CCV_VOC#3_00135	Amount Added:	4.00	Units: uL	
MSV_CCV_2CEVE_00130	Amount Added:	5.00	Units: uL	
MSV_CCV_EE_00005	Amount Added:	5.00	Units: uL	
MSV_CCV_GASES_00528	Amount Added:	2.50	Units: uL	
MSV_HP20_ISSS_00096	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 27-Jul-2023 22:25:06 Chrom Revision: 2.3 26-Jul-2023 13:45:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X15.D

Injection Date: 25-Jul-2023 00:49:30 Instrument ID: 9355 Operator ID: MEC29284

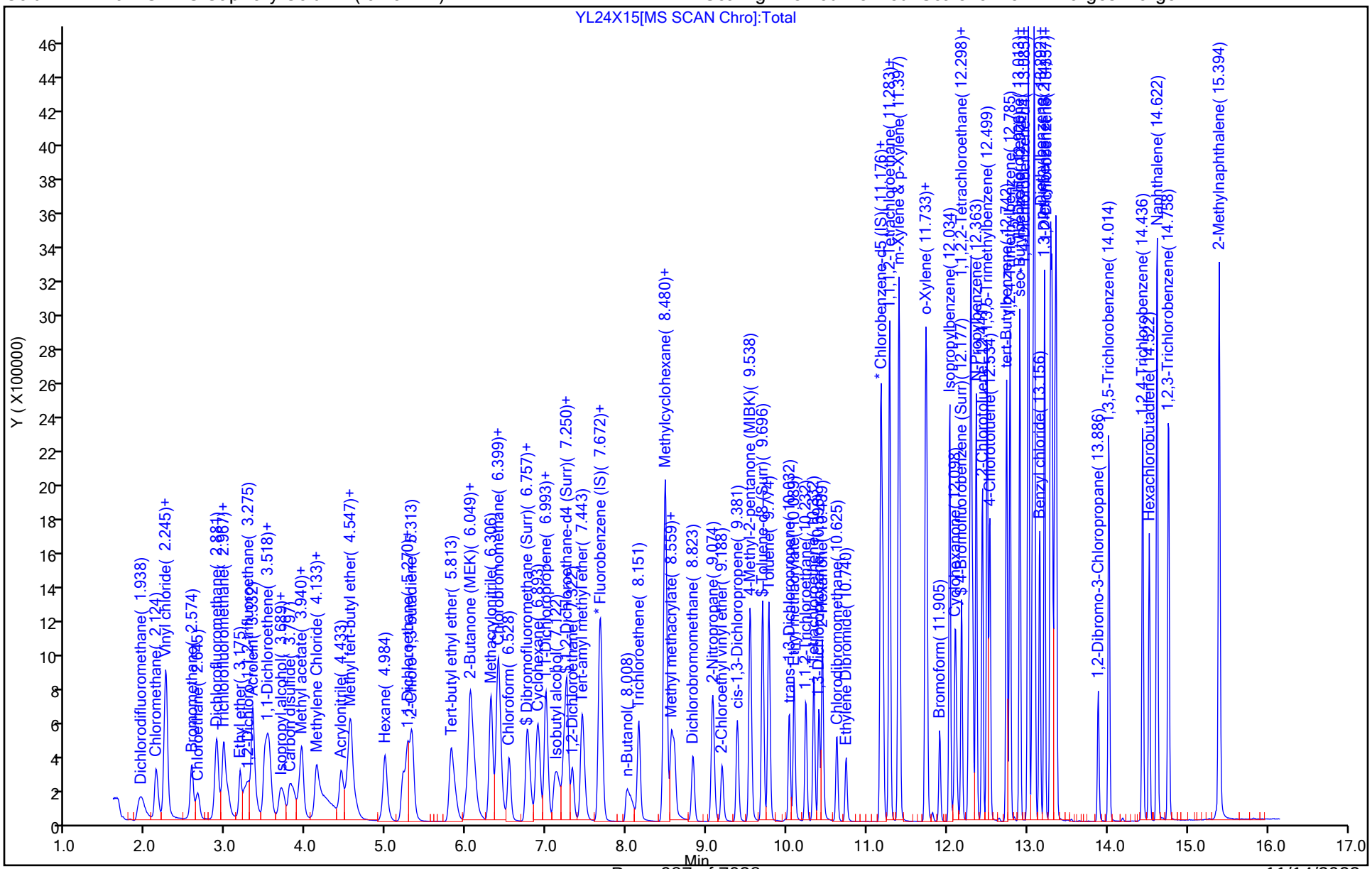
Lims ID: ICIS v50 Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 15

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

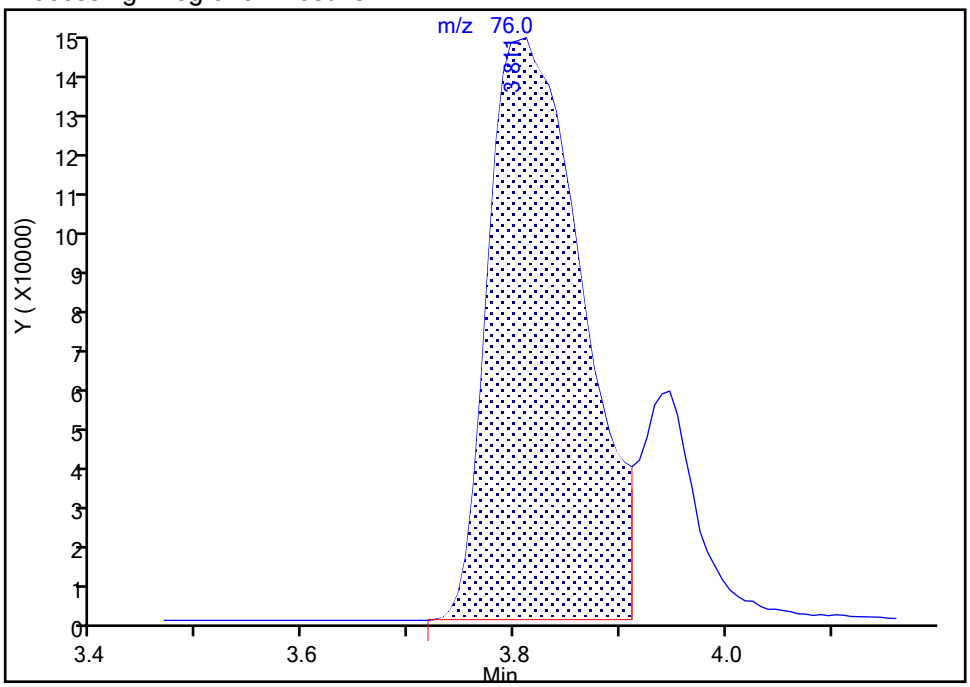
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X15.D
Injection Date: 25-Jul-2023 00:49:30 Instrument ID: 9355
Lims ID: ICIS v50
Client ID:
Operator ID: MEC29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

22 Carbon disulfide, CAS: 75-15-0

Signal: 1

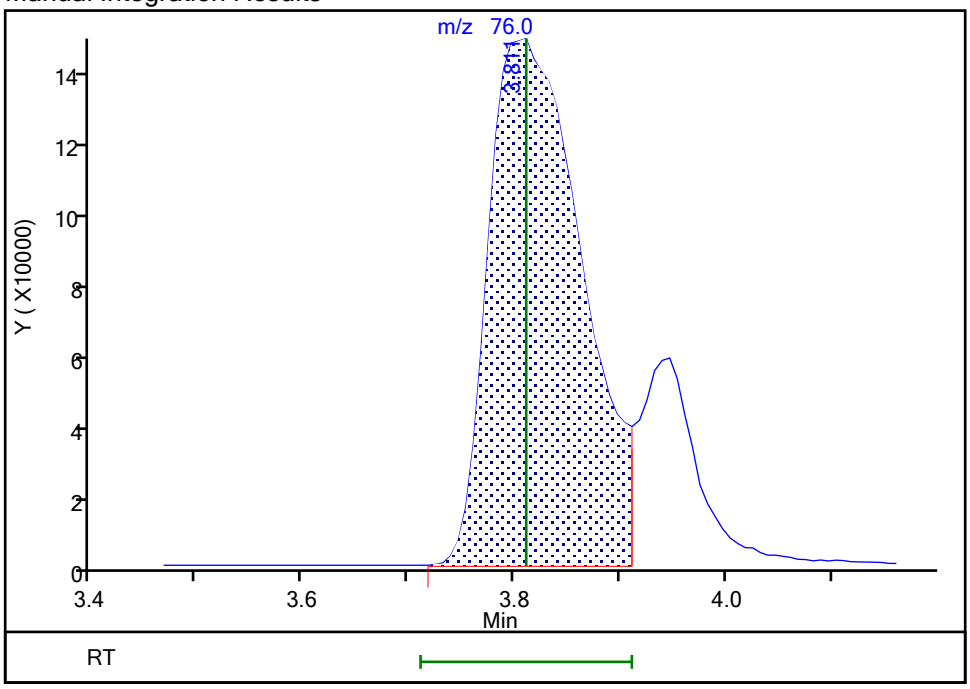
Processing Integration Results

RT: 3.81
Area: 923261
Amount: 46.196308
Amount Units: ug/l



Manual Integration Results

RT: 3.81
Area: 923261
Amount: 52.387971
Amount Units: ug/l



Reviewer: UKEK, 27-Jul-2023 19:12:42 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

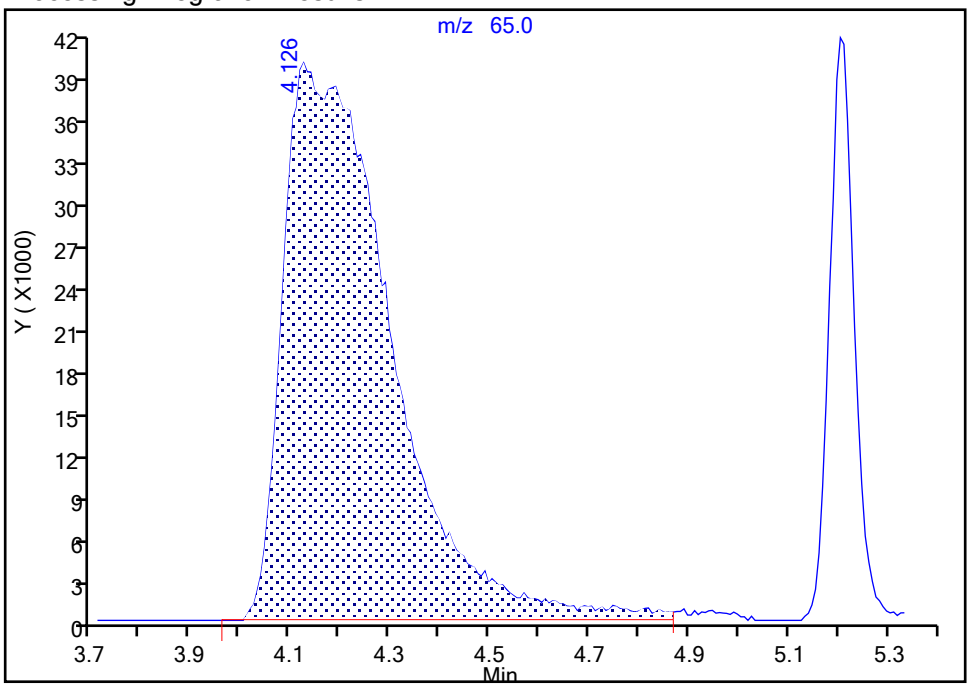
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X15.D
Injection Date: 25-Jul-2023 00:49:30 Instrument ID: 9355
Lims ID: ICIS v50
Client ID:
Operator ID: MEC29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 27 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

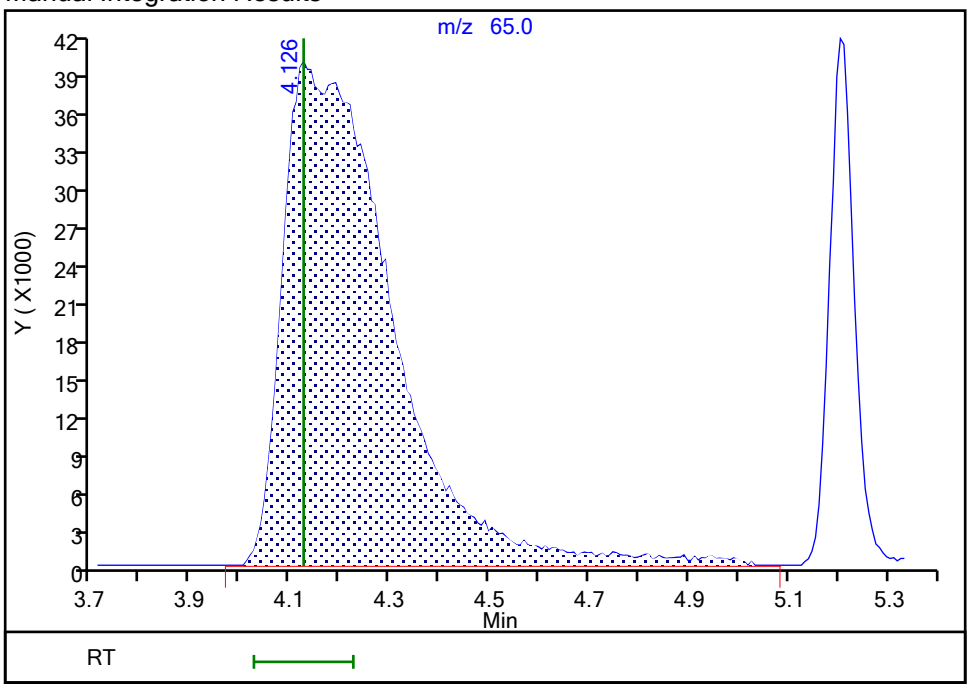
Processing Integration Results

RT: 4.13
Area: 597475
Amount: 250.0000
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 602127
Amount: 250.0000
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:12:07 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

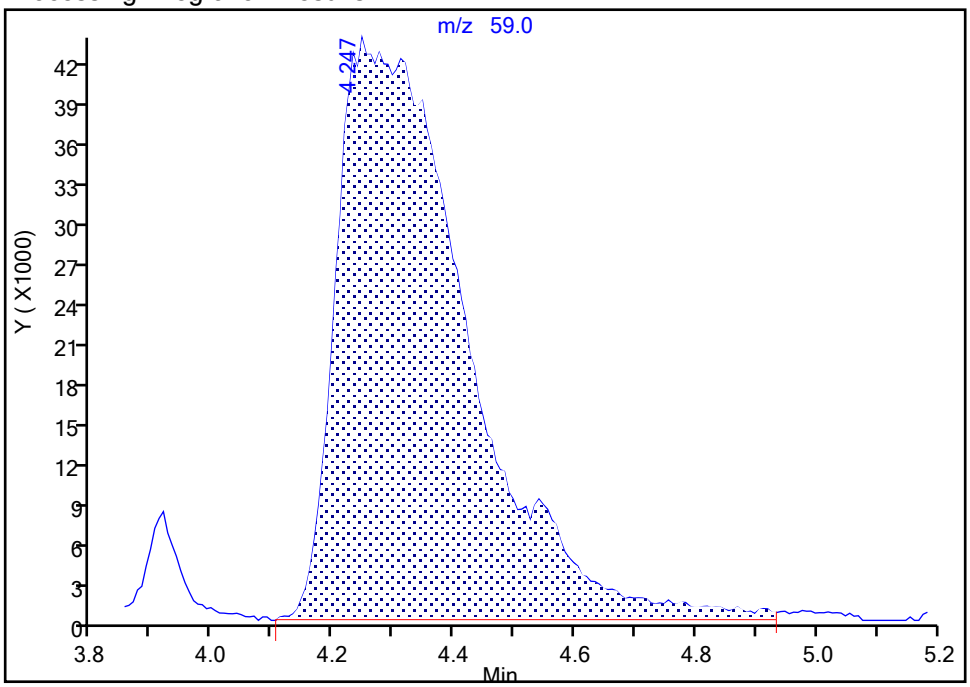
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X15.D
Injection Date: 25-Jul-2023 00:49:30 Instrument ID: 9355
Lims ID: ICIS v50
Client ID:
Operator ID: MEC29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

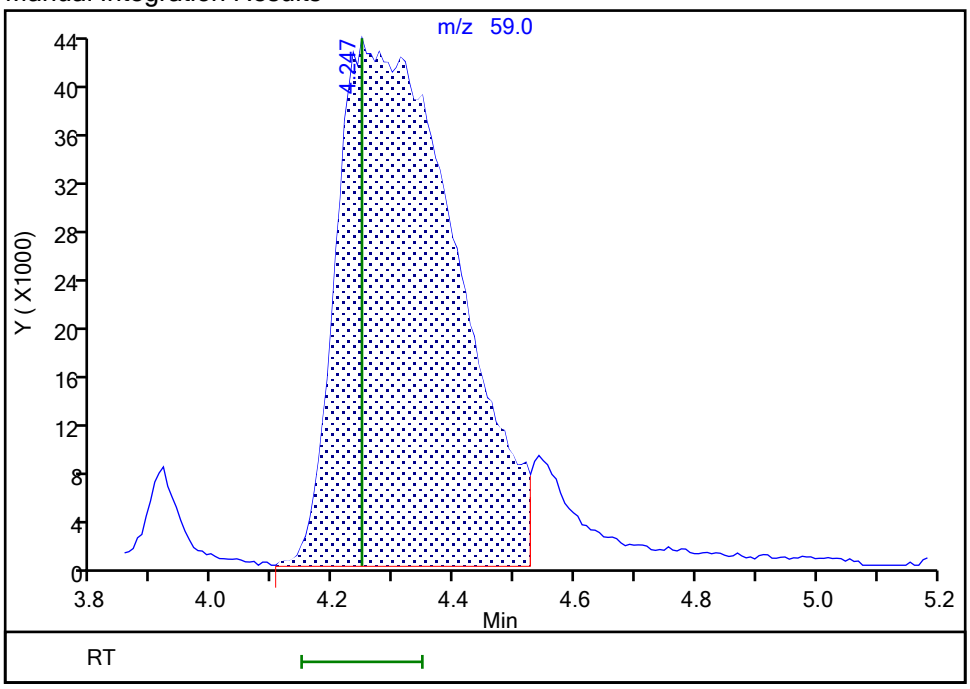
Processing Integration Results

RT: 4.25
Area: 659034
Amount: 258.2324
Amount Units: ug/l



Manual Integration Results

RT: 4.25
Area: 599060
Amount: 239.5710
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:12:17 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

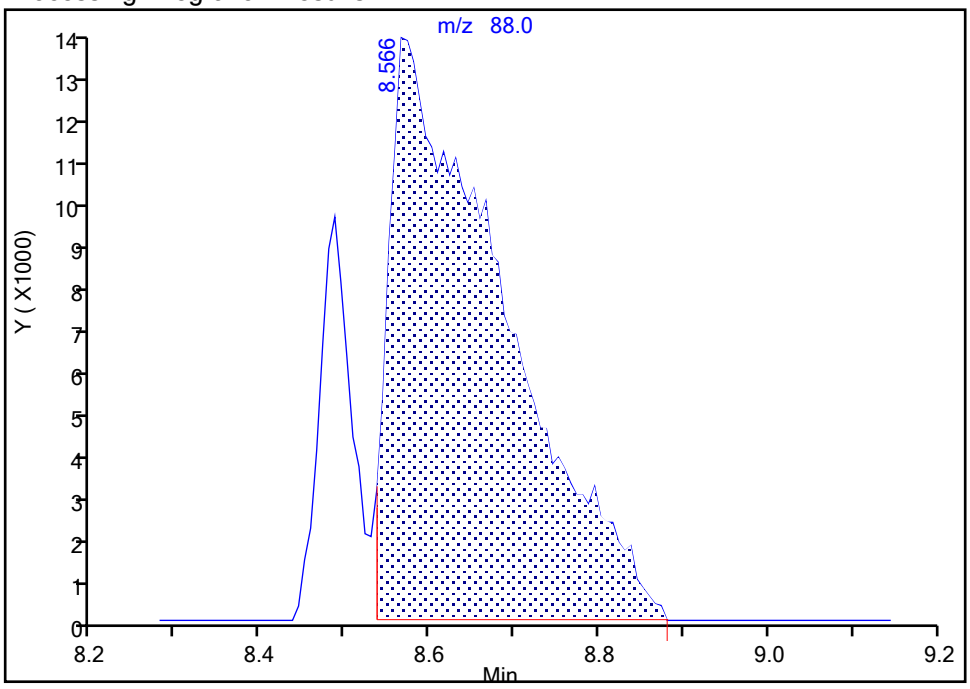
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X15.D
Injection Date: 25-Jul-2023 00:49:30 Instrument ID: 9355
Lims ID: ICIS v50
Client ID:
Operator ID: MEC29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

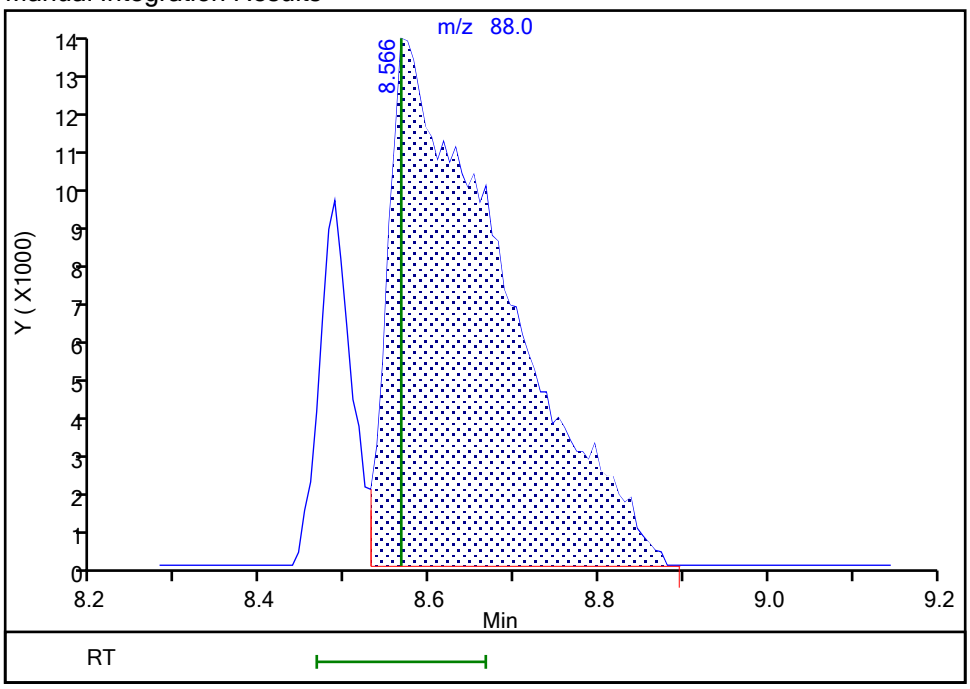
Processing Integration Results

RT: 8.57
Area: 123269
Amount: 630.1425
Amount Units: ug/l



Manual Integration Results

RT: 8.57
Area: 124077
Amount: 638.8836
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:12:39 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X16.D
Lims ID: IC v100
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-Jul-2023 01:10:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0089720-017
Misc. Info.: IC 100
Operator ID: MEC29284 Instrument ID: 9355
Sublist: chrom-MSVoa_9355*sub43

Method: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 27-Jul-2023 22:25:32 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1604

First Level Reviewer: K4WN Date: 25-Jul-2023 16:28:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.945	1.930	0.015	99	1048531	100.0	98.5	
4 Chloromethane	50	2.138	2.124	0.014	99	1153328	100.0	96.5	
5 Vinyl chloride	62	2.252	2.238	0.014	98	1066930	100.0	97.7	
6 Butadiene	39	2.260	2.245	0.015	92	977936	100.0	94.3	
8 Bromomethane	94	2.581	2.574	0.007	90	707637	100.0	96.8	
9 Chloroethane	64	2.653	2.645	0.008	100	503420	100.0	95.0	
10 Dichlorofluoromethane	67	2.896	2.881	0.015	97	1435592	100.0	97.7	
11 Trichlorofluoromethane	101	2.975	2.960	0.015	55	1053845	100.0	99.5	
12 Pentane	43	2.982	2.967	0.015	97	820421	100.0	89.5	
14 Ethyl ether	59	3.182	3.175	0.007	92	442063	100.0	99.7	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.275	3.260	0.015	92	665553	100.0	87.7	
16 Acrolein	56	3.339	3.332	0.007	99	2181648	1000.0	985.1	
17 1,1-Dichloroethene	96	3.497	3.482	0.015	98	476833	100.0	96.2	
18 Acetone	58	3.504	3.496	0.008	100	241512	200.0	202.5	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.547	3.532	0.015	92	602175	100.0	102.7	
20 Isopropyl alcohol	45	3.661	3.654	0.007	100	731369	500.0	480.5	
21 Iodomethane	142	3.697	3.689	0.008	98	983065	100.0	101.2	
22 Carbon disulfide	76	3.811	3.811	0.000	99	1806622	100.0	100.9	M
24 Methyl acetate	43	3.918	3.911	0.007	98	720719	100.0	95.6	M
25 3-Chloro-1-propene	41	3.954	3.947	0.007	91	789703	100.0	97.9	
* 27 t-Butyl alcohol-d10 (IS)	65	4.147	4.126	0.021	84	618045	250.0	250.0	M
26 Methylene Chloride	84	4.140	4.133	0.007	92	579795	100.0	96.8	
28 2-Methyl-2-propanol	59	4.247	4.247	0.000	100	1179361	500.0	459.5	M
29 Acrylonitrile	53	4.448	4.433	0.015	99	985070	250.0	255.1	
30 Methyl tert-butyl ether	73	4.541	4.533	0.008	95	1932520	100.0	98.4	
32 trans-1,2-Dichloroethene	96	4.562	4.555	0.007	99	486772	100.0	97.9	
33 Hexane	57	4.991	4.984	0.007	93	735455	100.0	97.0	
35 1,1-Dichloroethane	63	5.213	5.205	0.008	96	881568	100.0	100.0	
36 Isopropyl ether	45	5.277	5.270	0.007	94	1828200	100.0	98.7	
37 2-Chloro-1,3-butadiene	53	5.327	5.320	0.007	91	774382	100.0	99.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.820	5.813	0.007	98	1845630	100.0	100.2	
40 2-Butanone (MEK)	43	6.013	6.006	0.007	100	1152439	200.0	212.2	
41 cis-1,2-Dichloroethene	96	6.049	6.042	0.007	83	556910	100.0	100.7	
42 2,2-Dichloropropane	77	6.078	6.070	0.008	87	921025	100.0	100.1	
43 Propionitrile	54	6.085	6.085	0.000	99	985976	500.0	504.4	
S 45 1,2-Dichloroethene, Total	100				0			198.6	
48 Methacrylonitrile	67	6.307	6.306	0.001	92	970073	250.0	252.2	
49 Chlorobromomethane	128	6.392	6.385	0.007	96	283485	100.0	100.8	
50 Tetrahydrofuran	71	6.407	6.407	0.000	90	806145	500.0	486.5	
51 Chloroform	83	6.535	6.528	0.007	93	888701	100.0	98.9	
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.750	0.007	93	267595	50.0	49.4	
53 1,1,1-Trichloroethane	97	6.779	6.771	0.008	98	896260	100.0	100.0	
54 Cyclohexane	56	6.900	6.893	0.007	91	1065298	100.0	99.5	
55 1,1-Dichloropropene	75	6.993	6.986	0.007	97	684442	100.0	101.5	
56 Carbon tetrachloride	117	7.000	6.993	0.007	97	757489	100.0	103.1	
57 Isobutyl alcohol	41	7.122	7.129	-0.007	95	922556	1250.0	1185.8	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.214	0.008	88	67777	50.0	49.7	
59 Benzene	78	7.258	7.250	0.008	96	2119908	100.0	100.1	
60 1,2-Dichloroethane	62	7.322	7.322	0.000	97	742822	100.0	100.5	
62 Tert-amyl methyl ether	73	7.451	7.443	0.008	98	1858269	100.0	101.0	
* 63 Fluorobenzene (IS)	96	7.665	7.658	0.007	99	1134754	50.0	50.0	
64 n-Heptane	43	7.687	7.679	0.008	93	844165	100.0	101.9	
66 n-Butanol	56	8.008	8.008	0.000	89	795384	1250.0	1311.0	
67 Trichloroethene	95	8.151	8.151	0.000	99	554855	100.0	101.4	
69 Methylcyclohexane	83	8.473	8.473	0.000	92	1084823	100.0	101.0	
70 1,2-Dichloropropane	63	8.480	8.480	0.000	85	590636	100.0	102.1	
71 2-ethoxy-2-methyl butane	87	8.495	8.487	0.008	90	853095	100.0	100.6	
72 Methyl methacrylate	69	8.559	8.559	0.000	92	592675	100.0	102.6	
73 1,4-Dioxane	88	8.580	8.566	0.014	38	248158	1250.0	1244.9	
74 Dibromomethane	93	8.595	8.594	0.001	97	382479	100.0	103.6	
76 Dichlorobromomethane	83	8.831	8.823	0.008	100	737452	100.0	104.3	
77 2-Nitropropane	41	9.074	9.074	0.000	97	1425100	500.0	511.9	
78 2-Chloroethyl vinyl ether	63	9.188	9.188	0.000	92	433009	100.0	110.7	
79 cis-1,3-Dichloropropene	75	9.381	9.381	0.000	96	923661	100.0	105.5	
80 4-Methyl-2-pentanone (MIBK)	43	9.539	9.538	0.001	97	2344791	200.0	212.9	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	1138667	50.0	49.7	
82 Toluene	92	9.775	9.774	0.000	98	1378242	100.0	100.0	
119 trans-1,3-Dichloropropene	75	10.032	10.032	0.000	93	870217	100.0	104.3	
S 120 1,3-Dichloropropene, Total	100				0			209.8	
121 Ethyl methacrylate	69	10.089	10.089	0.000	90	1013155	100.0	101.4	
122 1,1,2-Trichloroethane	97	10.239	10.232	0.007	90	543789	100.0	100.2	
123 Tetrachloroethene	166	10.339	10.332	0.007	97	585455	100.0	101.0	
124 1,3-Dichloropropane	76	10.404	10.396	0.008	90	874724	100.0	101.1	
126 2-Hexanone	43	10.439	10.439	0.000	97	1596862	200.0	212.2	
128 Chlorodibromomethane	129	10.625	10.625	0.000	90	622965	100.0	105.1	
129 Ethylene Dibromide	107	10.740	10.740	0.000	99	583520	100.0	102.2	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	862386	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	99	729194	100.0	94.0	
132 Chlorobenzene	112	11.197	11.197	0.000	95	1559162	100.0	101.0	
S 133 Xylenes, Total	106				0			303.7	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	96	637045	100.0	102.0	
135 Ethylbenzene	91	11.283	11.283	0.000	98	2791206	100.0	99.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 m-Xylene & p-Xylene	106	11.398	11.397	0.001	100	2174332	200.0	202.6	
138 o-Xylene	106	11.727	11.726	0.001	97	1165948	100.0	101.1	
139 Styrene	104	11.748	11.748	0.000	95	1837089	100.0	102.4	
140 Bromoform	173	11.905	11.905	0.000	97	524984	100.0	104.2	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	3142359	100.0	102.2	
143 Cyclohexanone	55	12.105	12.098	0.007	92	1149392	1250.0	1316.0	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	90	430822	50.0	49.1	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	94	1112647	100.0	102.5	
147 trans-1,4-Dichloro-2-butene	53	12.291	12.298	-0.007	80	772598	250.0	269.3	
146 Bromobenzene	156	12.299	12.298	0.001	90	706681	100.0	104.7	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	84	320516	100.0	104.1	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	3531487	100.0	105.2	
150 2-Chlorotoluene	126	12.442	12.441	0.001	97	731545	100.0	105.1	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	93	2849750	100.0	107.9	
152 4-Chlorotoluene	126	12.534	12.534	0.000	97	700664	100.0	103.9	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	545358	100.0	110.1	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	98	2921805	100.0	105.9	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	3647883	100.0	107.2	
158 1,3-Dichlorobenzene	146	13.006	13.006	0.000	98	1441040	100.0	103.1	
159 4-Isopropyltoluene	119	13.014	13.013	0.001	97	3203597	100.0	107.7	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.063	0.001	94	495568	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	94	1396835	100.0	101.4	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	3197740	100.0	106.4	
163 Benzyl chloride	91	13.157	13.156	0.001	98	2330944	100.0	108.5	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	95	1921449	100.0	106.0	
165 p-Diethylbenzene	119	13.285	13.292	-0.007	93	1985114	100.0	105.4	
166 n-Butylbenzene	92	13.307	13.307	0.001	96	1581957	100.0	104.3	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	98	1574048	100.0	102.9	
168 o-diethylbenzene	119	13.357	13.357	0.000	96	1663619	100.0	104.3	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	87	357560	100.0	103.5	
172 1,3,5-Trichlorobenzene	180	14.015	14.022	-0.007	98	1370262	100.0	104.4	
173 1,2,4-Trichlorobenzene	180	14.436	14.443	-0.007	94	1353331	100.0	103.7	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	98	549844	100.0	106.4	
176 Naphthalene	128	14.622	14.622	0.000	97	4987588	100.0	102.9	
177 1,2,3-Trichlorobenzene	180	14.758	14.765	-0.007	96	1430621	100.0	103.0	
178 2-Methylnaphthalene	142	15.395	15.394	0.001	91	3246454	100.0	104.4	
S 207 Total Diethylbenzene	1				0			315.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_CCV_VOC#1_00136	Amount Added:	5.00	Units: uL	
MSV_CCV_CYC_00007	Amount Added:	10.00	Units: uL	
MSV_CCV_VOC#3_00135	Amount Added:	4.00	Units: uL	
MSV_CCV_2CEVE_00130	Amount Added:	5.00	Units: uL	
MSV_CCV_EE_00005	Amount Added:	5.00	Units: uL	
MSV_CCV_GASES_00528	Amount Added:	2.50	Units: uL	
MSV_HP20_ISSS_00096	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 27-Jul-2023 22:25:33 Chrom Revision: 2.3 26-Jul-2023 13:45:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X16.D

Injection Date: 25-Jul-2023 01:10:30 Instrument ID: 9355 Operator ID: MEC29284

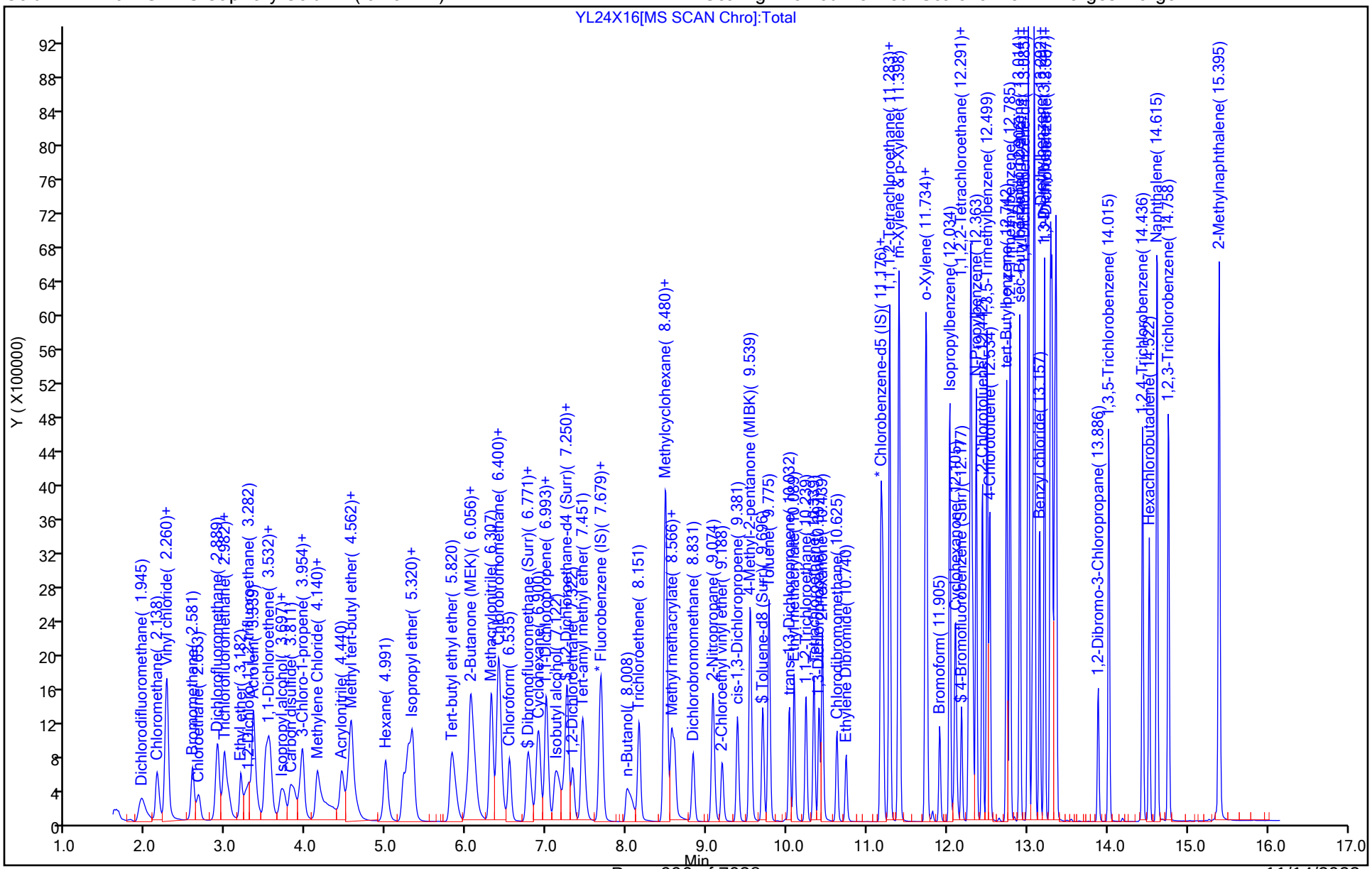
Lims ID: IC v100 Worklist Smp#: 17

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 16

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

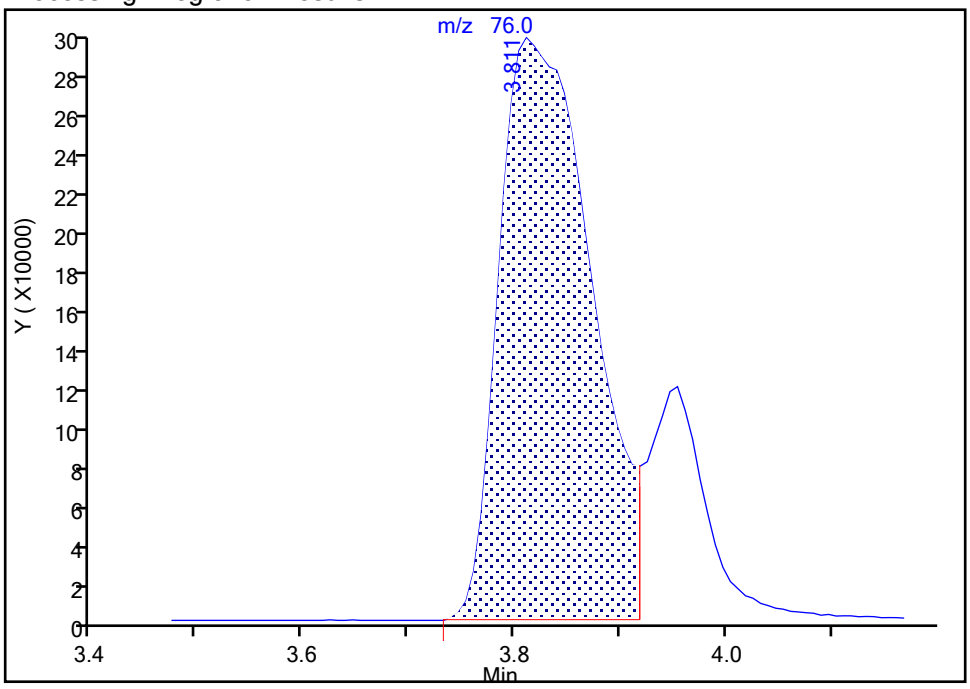
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X16.D
Injection Date: 25-Jul-2023 01:10:30 Instrument ID: 9355
Lims ID: IC v100
Client ID:
Operator ID: MEC29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

22 Carbon disulfide, CAS: 75-15-0

Signal: 1

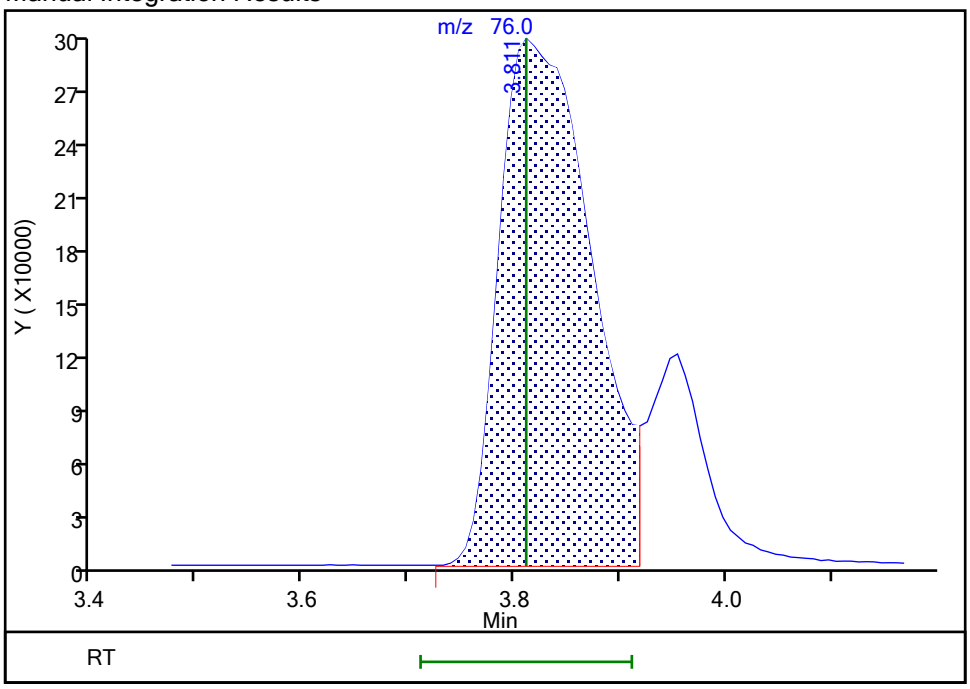
Processing Integration Results

RT: 3.81
Area: 1806628
Amount: 86.241916
Amount Units: ug/l



Manual Integration Results

RT: 3.81
Area: 1806622
Amount: 100.8711
Amount Units: ug/l



Reviewer: UKEK, 27-Jul-2023 19:12:23 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

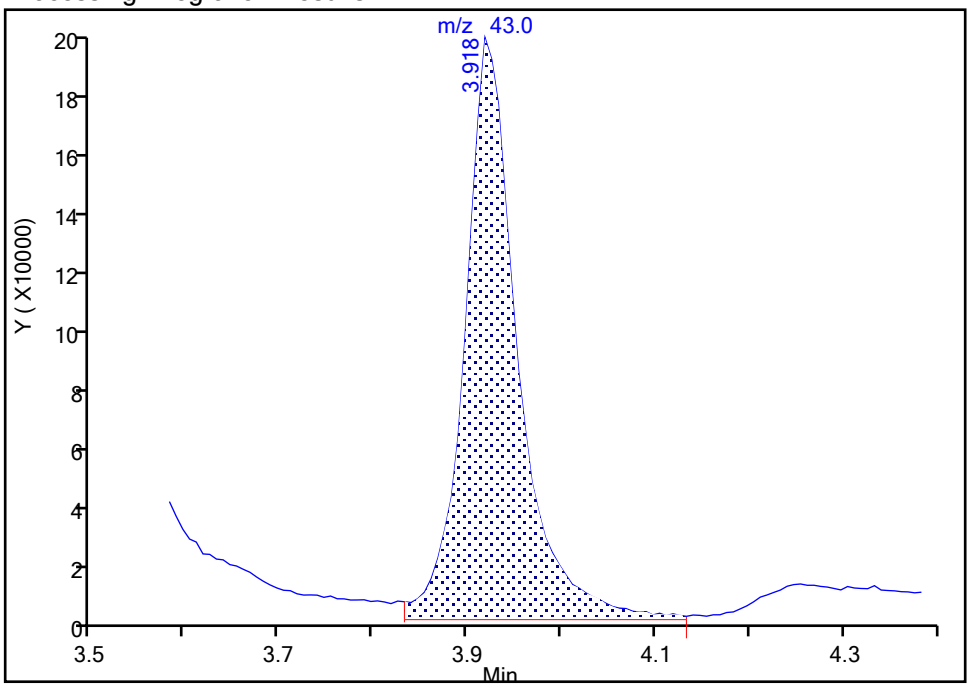
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X16.D				
Injection Date:	25-Jul-2023 01:10:30	Instrument ID:	9355		
Lims ID:	IC v100				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

24 Methyl acetate, CAS: 79-20-9

Signal: 1

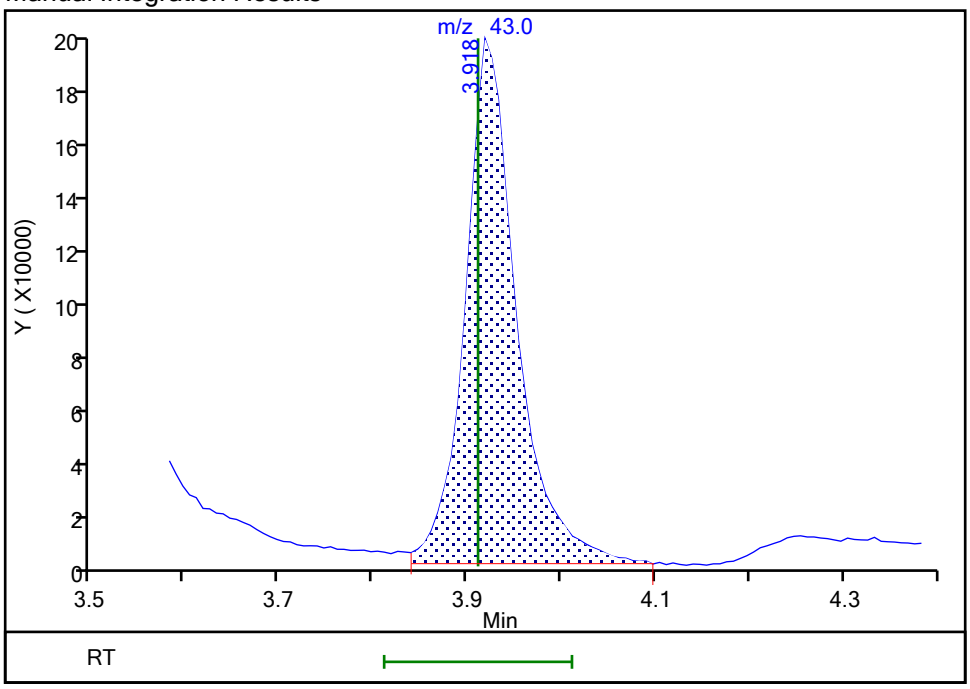
Processing Integration Results

RT: 3.92
Area: 746899
Amount: 98.541400
Amount Units: ug/l



Manual Integration Results

RT: 3.92
Area: 720719
Amount: 95.558886
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:27:14 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

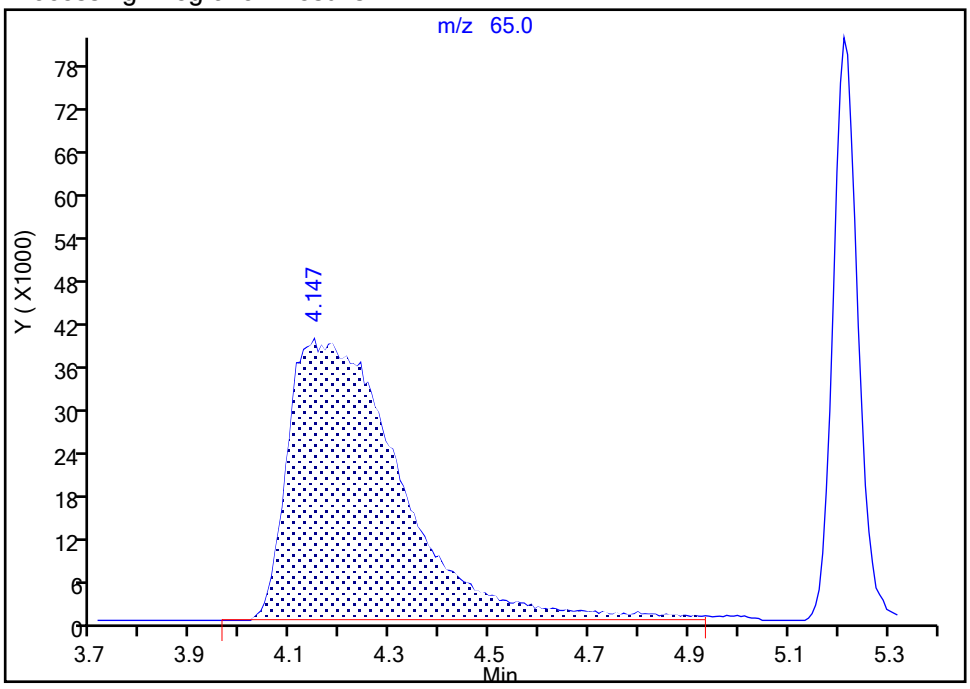
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X16.D
Injection Date: 25-Jul-2023 01:10:30 Instrument ID: 9355
Lims ID: IC v100
Client ID:
Operator ID: MEC29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 27 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

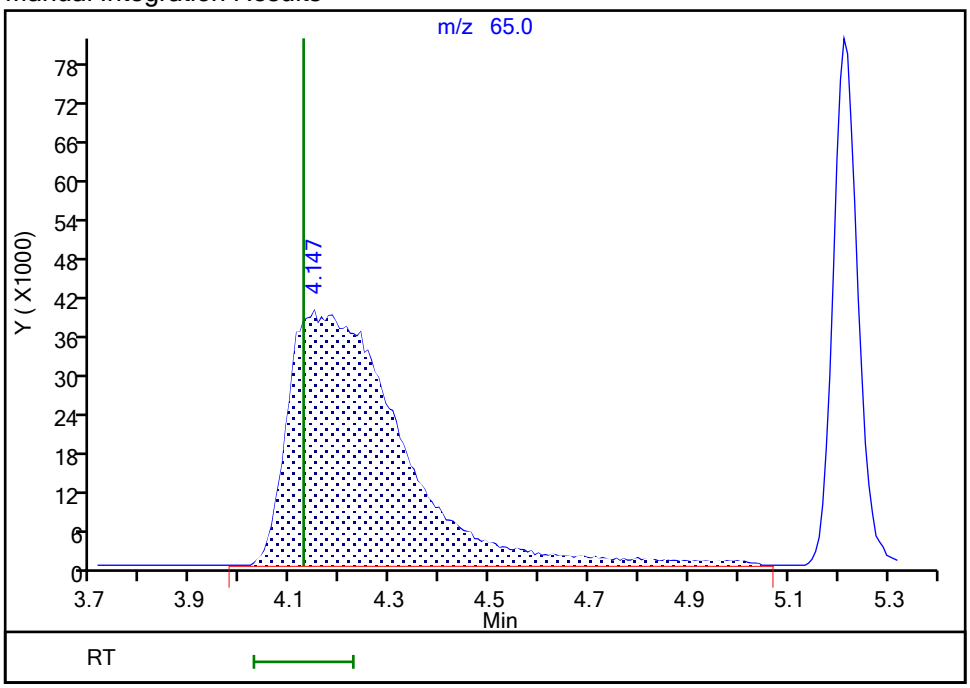
Processing Integration Results

RT: 4.15
Area: 614697
Amount: 250.0000
Amount Units: ug/l



Manual Integration Results

RT: 4.15
Area: 618045
Amount: 250.0000
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:27:27 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

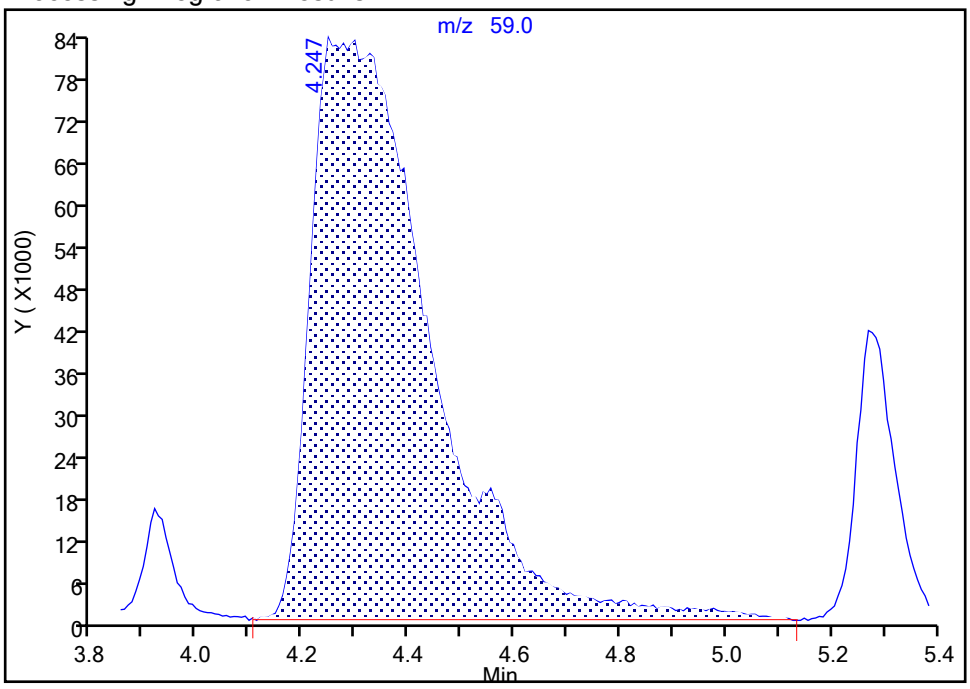
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X16.D
Injection Date: 25-Jul-2023 01:10:30 Instrument ID: 9355
Lims ID: IC v100
Client ID:
Operator ID: MEC29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

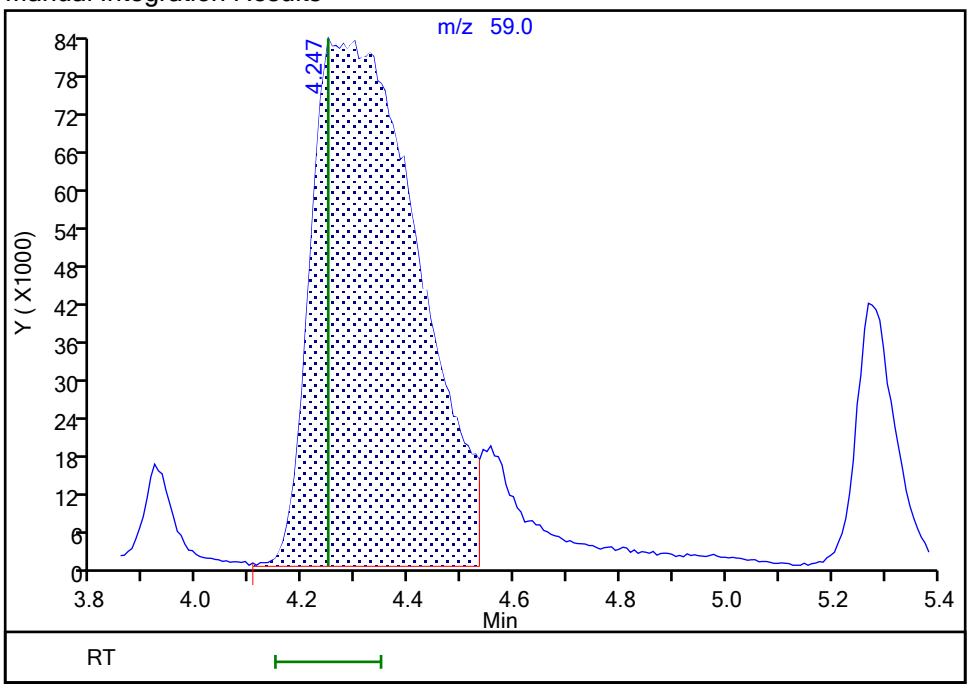
Processing Integration Results

RT: 4.25
Area: 1321301
Amount: 495.5671
Amount Units: ug/l



Manual Integration Results

RT: 4.25
Area: 1179361
Amount: 459.4929
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:27:35 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D
Lims ID: IC v300
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 25-Jul-2023 01:32:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0089720-018
Misc. Info.: IC 300
Operator ID: MEC29284 Instrument ID: 9355
Sublist: chrom-MSVoa_9355*sub43

Method: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 27-Jul-2023 22:25:56 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1604

First Level Reviewer: K4WN Date: 25-Jul-2023 16:40:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.931	1.930	0.001	99	3076990	300.0	281.3	
4 Chloromethane	50	2.124	2.124	0.000	99	3391979	300.0	276.2	
5 Vinyl chloride	62	2.238	2.238	0.000	98	3173128	300.0	282.7	
6 Butadiene	39	2.245	2.245	0.000	92	2888341	300.0	271.0	
8 Bromomethane	94	2.567	2.574	-0.007	90	2032496	300.0	270.6	
9 Chloroethane	64	2.646	2.645	0.001	100	1466742	300.0	269.3	
10 Dichlorofluoromethane	67	2.882	2.881	0.001	97	4200559	300.0	278.2	
11 Trichlorofluoromethane	101	2.960	2.960	0.000	98	3164798	300.0	290.9	
12 Pentane	43	2.967	2.967	0.000	97	2560723	300.0	271.9	
14 Ethyl ether	59	3.168	3.175	-0.007	93	1321564	300.0	290.0	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.268	3.260	0.008	92	1997326	300.0	256.1	
16 Acrolein	56	3.325	3.332	-0.007	99	6769259	3000.1	2929.9	
17 1,1-Dichloroethene	96	3.489	3.482	0.007	98	1477621	300.0	290.1	
18 Acetone	58	3.489	3.496	-0.007	89	717016	600.0	576.2	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.532	3.532	0.000	93	1811572	300.0	300.6	
20 Isopropyl alcohol	45	3.654	3.654	0.000	97	2185932	1500.0	1376.7	
21 Iodomethane	142	3.697	3.689	0.008	98	2974577	300.0	298.0	
22 Carbon disulfide	76	3.825	3.811	0.014	99	5383307	300.0	292.5	M
24 Methyl acetate	43	3.904	3.911	-0.007	98	2347047	300.0	302.8	
25 3-Chloro-1-propene	41	3.940	3.947	-0.007	93	2371186	300.0	286.2	
* 27 t-Butyl alcohol-d10 (IS)	65	4.111	4.126	-0.015	82	644778	250.0	250.0	M
26 Methylene Chloride	84	4.133	4.133	0.000	92	1762513	300.0	286.4	
28 2-Methyl-2-propanol	59	4.240	4.247	-0.007	99	3400772	1500.0	1270.0	M
29 Acrylonitrile	53	4.433	4.433	0.000	99	2962061	750.0	746.5	
30 Methyl tert-butyl ether	73	4.533	4.533	0.000	95	5734694	300.0	284.3	
32 trans-1,2-Dichloroethene	96	4.548	4.555	-0.007	99	1468519	300.0	287.3	
33 Hexane	57	4.977	4.984	-0.007	93	2267235	300.0	291.0	
35 1,1-Dichloroethane	63	5.205	5.205	0.000	96	2635679	300.0	291.1	
36 Isopropyl ether	45	5.270	5.270	0.000	94	5518477	300.0	289.9	
37 2-Chloro-1,3-butadiene	53	5.320	5.320	0.000	91	2321680	300.0	290.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.813	5.813	0.000	98	5489909	300.0	290.0	
40 2-Butanone (MEK)	43	6.006	6.006	0.000	100	3568387	600.0	639.3	
41 cis-1,2-Dichloroethene	96	6.042	6.042	0.000	82	1649590	300.0	290.3	
42 2,2-Dichloropropane	77	6.078	6.070	0.008	89	2829682	300.0	299.2	
43 Propionitrile	54	6.078	6.085	-0.007	98	3042579	1500.0	1492.0	
S 45 1,2-Dichloroethene, Total	100				0			577.6	
48 Methacrylonitrile	67	6.307	6.306	0.001	92	2943730	750.0	744.7	
49 Chlorobromomethane	128	6.385	6.385	0.000	96	845539	300.0	292.5	
50 Tetrahydrofuran	71	6.400	6.407	-0.007	90	2448240	1500.0	1416.3	
51 Chloroform	83	6.528	6.528	0.000	93	2640442	300.0	285.8	
$ 52 Dibromofluoromethane (Surr)	113	6.750	6.750	0.000	94	274149	50.0	49.3	
53 1,1,1-Trichloroethane	97	6.779	6.771	0.008	98	2753883	300.0	299.1	
54 Cyclohexane	56	6.900	6.893	0.007	91	3291644	300.0	299.2	
55 1,1-Dichloropropene	75	6.986	6.986	0.000	97	2056196	300.0	296.8	
56 Carbon tetrachloride	117	7.000	6.993	0.007	96	2332584	300.0	308.9	
57 Isobutyl alcohol	41	7.115	7.129	-0.014	95	2857014	3750.0	3519.9	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.215	7.214	0.001	71	68608	50.0	48.9	
59 Benzene	78	7.250	7.250	0.000	96	6359698	300.0	292.4	
60 1,2-Dichloroethane	62	7.322	7.322	0.000	97	2182752	300.0	287.4	
62 Tert-amyl methyl ether	73	7.451	7.443	0.008	98	5624887	300.0	297.6	
* 63 Fluorobenzene (IS)	96	7.658	7.658	0.000	99	1166034	50.0	50.0	
64 n-Heptane	43	7.679	7.679	0.000	93	2683690	300.0	315.3	
66 n-Butanol	56	8.008	8.008	0.000	89	2582639	3750.0	4080.5	
67 Trichloroethene	95	8.151	8.151	0.000	99	1679563	300.0	298.8	
69 Methylcyclohexane	83	8.473	8.473	0.000	92	3439857	300.0	311.5	
70 1,2-Dichloropropane	63	8.480	8.480	0.000	88	1800242	300.0	302.8	
71 2-ethoxy-2-methyl butane	87	8.487	8.487	0.000	94	2806971	300.0	322.2	
72 Methyl methacrylate	69	8.559	8.559	0.000	92	1917015	300.0	322.9	
73 1,4-Dioxane	88	8.573	8.566	0.007	90	782023	3750.0	3760.3	M
74 Dibromomethane	93	8.595	8.594	0.001	97	1176144	300.0	309.9	
76 Dichlorobromomethane	83	8.823	8.823	0.000	100	2246870	300.0	309.4	
77 2-Nitropropane	41	9.074	9.074	0.000	97	4447820	1500.0	1531.4	
78 2-Chloroethyl vinyl ether	63	9.188	9.188	0.000	91	1404070	300.0	349.5	
79 cis-1,3-Dichloropropene	75	9.381	9.381	0.000	96	2926143	300.0	325.3	
80 4-Methyl-2-pentanone (MIBK)	43	9.539	9.538	0.000	97	7135213	600.0	630.5	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	94	1199549	50.0	48.4	
82 Toluene	92	9.774	9.774	0.000	98	4254969	300.0	285.0	
119 trans-1,3-Dichloropropene	75	10.025	10.032	-0.007	93	2796537	300.0	309.5	
S 120 1,3-Dichloropropene, Total	100				0			634.8	
121 Ethyl methacrylate	69	10.089	10.089	0.000	90	3178323	300.0	293.7	
122 1,1,2-Trichloroethane	97	10.239	10.232	0.007	90	1700365	300.0	289.3	
123 Tetrachloroethene	166	10.339	10.332	0.007	97	1806852	300.0	287.7	
124 1,3-Dichloropropane	76	10.397	10.396	0.001	91	2791469	300.0	297.8	
126 2-Hexanone	43	10.439	10.439	0.000	97	5054346	600.0	620.0	
128 Chlorodibromomethane	129	10.625	10.625	0.000	90	1987295	300.0	309.4	
129 Ethylene Dibromide	107	10.740	10.740	0.000	99	1870986	300.0	302.5	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	86	934155	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	98	2284059	300.0	271.9	
132 Chlorobenzene	112	11.197	11.197	0.000	96	4913558	300.0	293.9	
S 133 Xylenes, Total	106				0			862.2	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	96	1953663	300.0	288.8	
135 Ethylbenzene	91	11.283	11.283	0.000	98	8534209	300.0	281.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 m-Xylene & p-Xylene	106	11.398	11.397	0.001	98	6680570	600.0	574.6	
138 o-Xylene	106	11.726	11.726	0.000	96	3592115	300.0	287.7	
139 Styrene	104	11.748	11.748	0.000	94	5758000	300.0	296.4	
140 Bromoform	173	11.905	11.905	0.000	97	1698989	300.0	311.3	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	9341579	300.0	280.4	
143 Cyclohexanone	55	12.105	12.098	0.007	92	3512477	3749.9	3854.8	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	90	480956	50.0	50.6	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	93	3517718	300.0	281.4	
147 trans-1,4-Dichloro-2-butene	53	12.299	12.298	0.000	88	2564607	750.0	776.6	
146 Bromobenzene	156	12.299	12.298	0.000	92	2268304	300.0	291.9	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	84	1009321	300.0	284.9	
149 N-Propylbenzene	91	12.363	12.363	0.000	98	10567866	300.0	273.4	
150 2-Chlorotoluene	126	12.442	12.441	0.001	97	2328649	300.0	290.8	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	94	8792205	300.0	289.3	
152 4-Chlorotoluene	126	12.534	12.534	0.000	97	2284464	300.0	294.4	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	1807199	300.0	317.1	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	98	9069807	300.0	285.6	
157 sec-Butylbenzene	105	12.906	12.906	0.000	95	11016386	300.0	281.4	
158 1,3-Dichlorobenzene	146	13.006	13.006	0.000	98	4660437	300.0	289.8	
159 4-Isopropyltoluene	119	13.014	13.013	0.001	95	9904627	300.0	289.2	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.063	0.001	95	570382	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	93	4525544	300.0	285.4	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	9877088	300.0	285.7	
163 Benzyl chloride	91	13.157	13.156	0.001	99	7560094	300.0	305.8	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	94	6216542	300.0	298.0	
165 p-Diethylbenzene	119	13.292	13.292	0.000	95	6469353	300.0	298.4	
166 n-Butylbenzene	92	13.307	13.307	0.001	98	5253536	300.0	300.9	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	98	5055979	300.0	287.1	
168 o-diethylbenzene	119	13.364	13.357	0.007	95	5467479	300.0	297.8	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	88	1180587	300.0	296.8	
172 1,3,5-Trichlorobenzene	180	14.015	14.022	-0.007	98	4478361	300.0	296.6	
173 1,2,4-Trichlorobenzene	180	14.436	14.443	-0.007	95	4304000	300.0	286.6	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	98	1889904	300.0	317.6	
176 Naphthalene	128	14.622	14.622	0.000	99	13492772	300.0	241.8	
177 1,2,3-Trichlorobenzene	180	14.765	14.765	0.000	96	4402946	300.0	275.5	
178 2-Methylnaphthalene	142	15.395	15.394	0.001	91	9353715	300.0	261.3	
S 207 Total Diethylbenzene	1				0			894.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_CCV_VOC#1_00136	Amount Added:	15.00	Units: uL	
MSV_CCV_CYC_00007	Amount Added:	30.00	Units: uL	
MSV_CCV_VOC#3_00135	Amount Added:	12.00	Units: uL	
MSV_CCV_2CEVE_00130	Amount Added:	15.00	Units: uL	
MSV_CCV_EE_00005	Amount Added:	15.00	Units: uL	
MSV_CCV_GASES_00528	Amount Added:	7.50	Units: uL	
MSV_HP20_ISSS_00096	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 27-Jul-2023 22:25:57 Chrom Revision: 2.3 26-Jul-2023 13:45:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Injection Date: 25-Jul-2023 01:32:30 Instrument ID: 9355 Operator ID: MEC29284

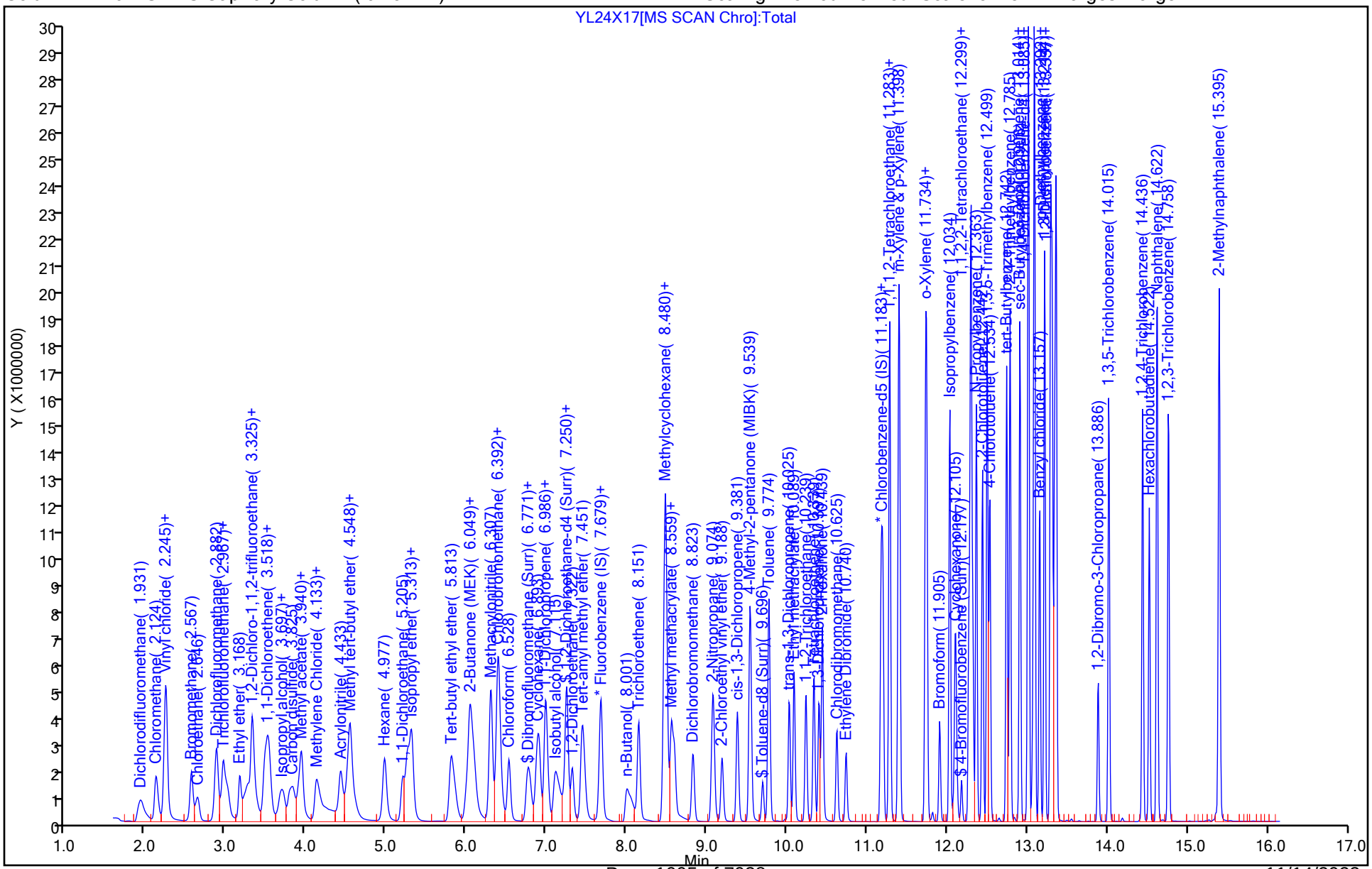
Lims ID: IC v300 Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 17

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

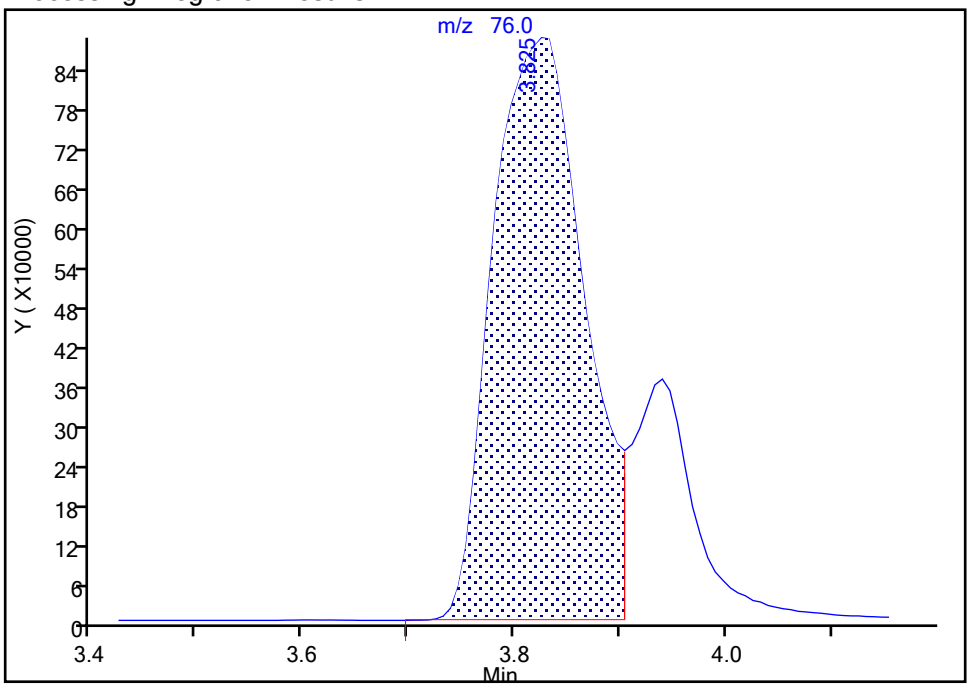
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D
Injection Date: 25-Jul-2023 01:32:30 Instrument ID: 9355
Lims ID: IC v300
Client ID:
Operator ID: MEC29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

22 Carbon disulfide, CAS: 75-15-0

Signal: 1

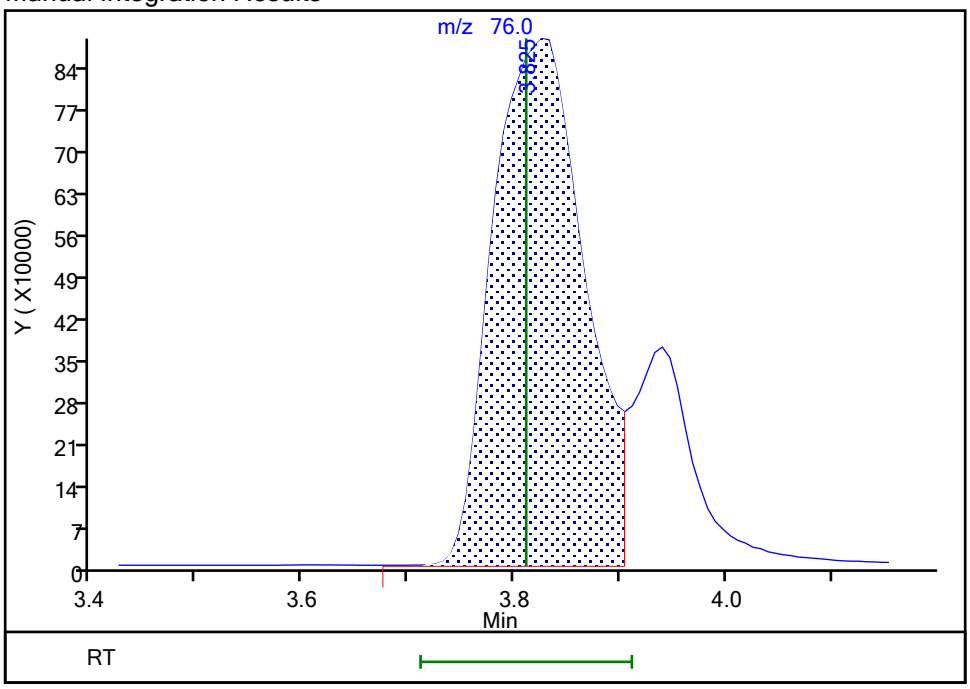
Processing Integration Results

RT: 3.83
Area: 5383348
Amount: 242.6818
Amount Units: ug/l



Manual Integration Results

RT: 3.83
Area: 5383307
Amount: 292.5089
Amount Units: ug/l



Reviewer: UKEK, 27-Jul-2023 19:12:06 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

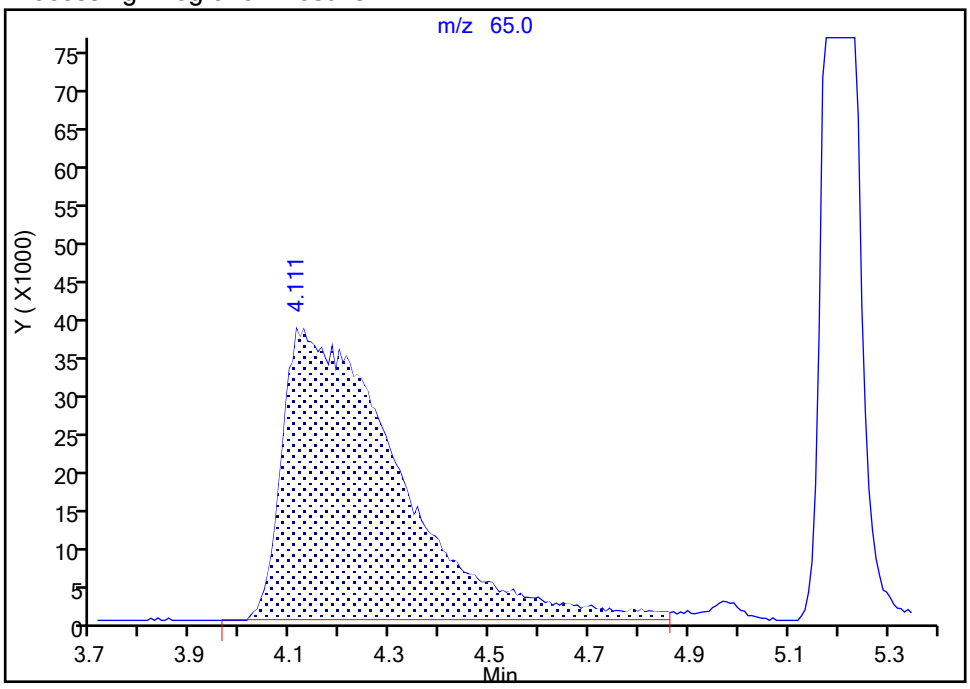
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D				
Injection Date:	25-Jul-2023 01:32:30	Instrument ID:	9355		
Lims ID:	IC v300				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

* 27 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

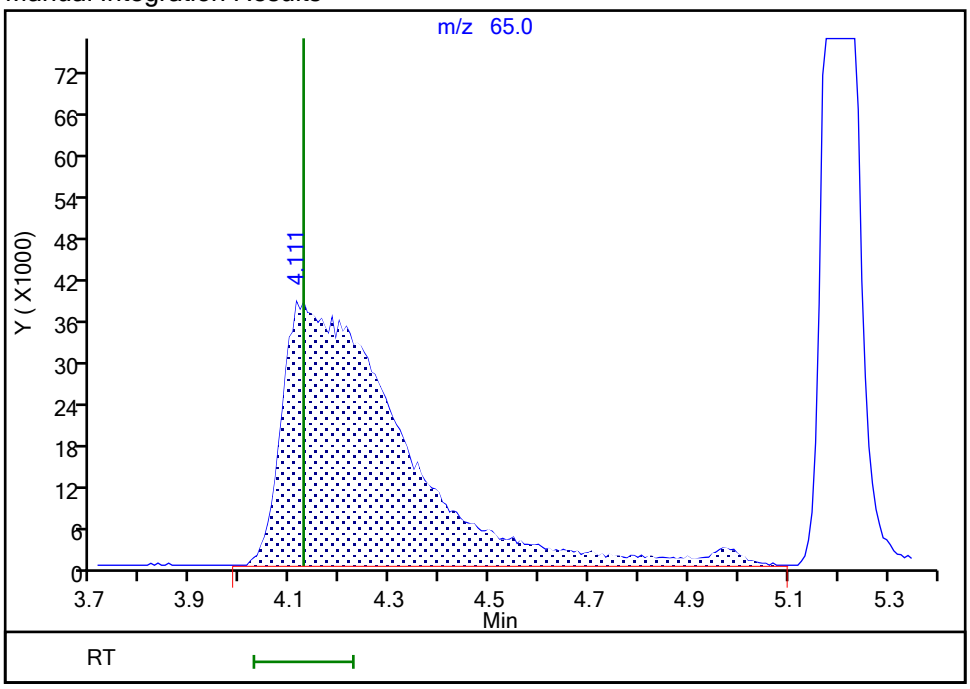
Processing Integration Results

RT: 4.11
Area: 630151
Amount: 250.0000
Amount Units: ug/l



Manual Integration Results

RT: 4.11
Area: 644778
Amount: 250.0000
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:28:58 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

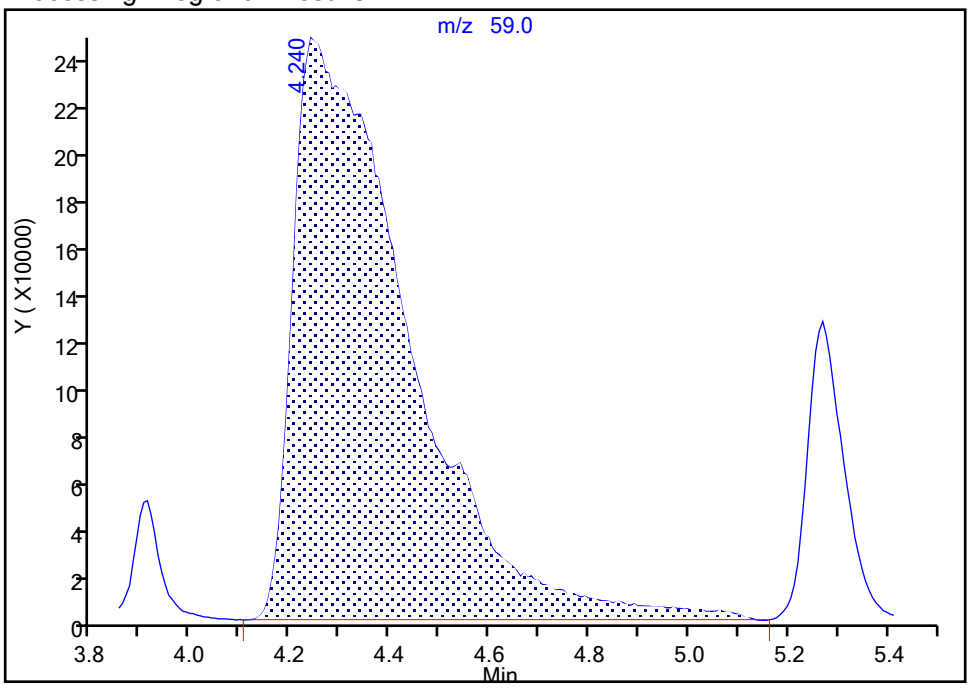
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D
Injection Date: 25-Jul-2023 01:32:30 Instrument ID: 9355
Lims ID: IC v300
Client ID:
Operator ID: MEC29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

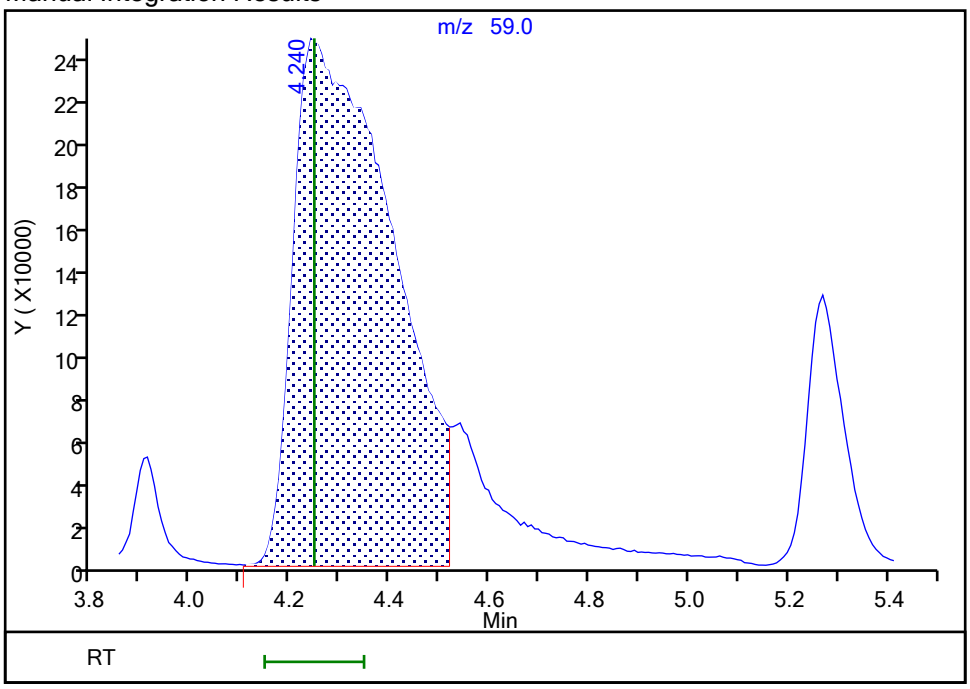
Processing Integration Results

RT: 4.24
Area: 3955562
Amount: 1448.6512
Amount Units: ug/l



Manual Integration Results

RT: 4.24
Area: 3400772
Amount: 1270.0459
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:29:05 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

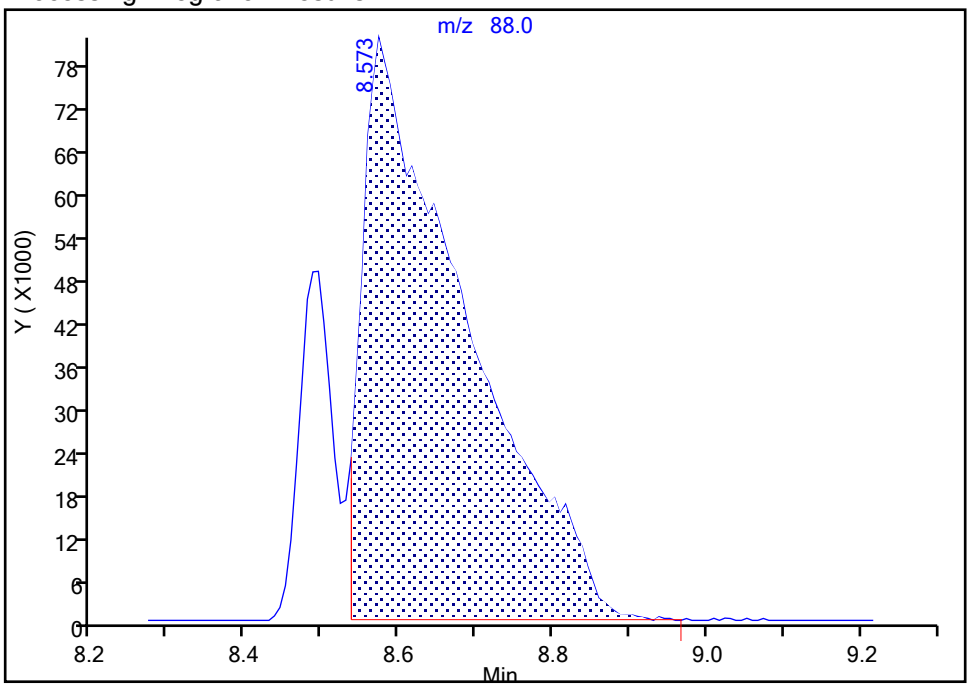
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D				
Injection Date:	25-Jul-2023 01:32:30	Instrument ID:	9355		
Lims ID:	IC v300				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

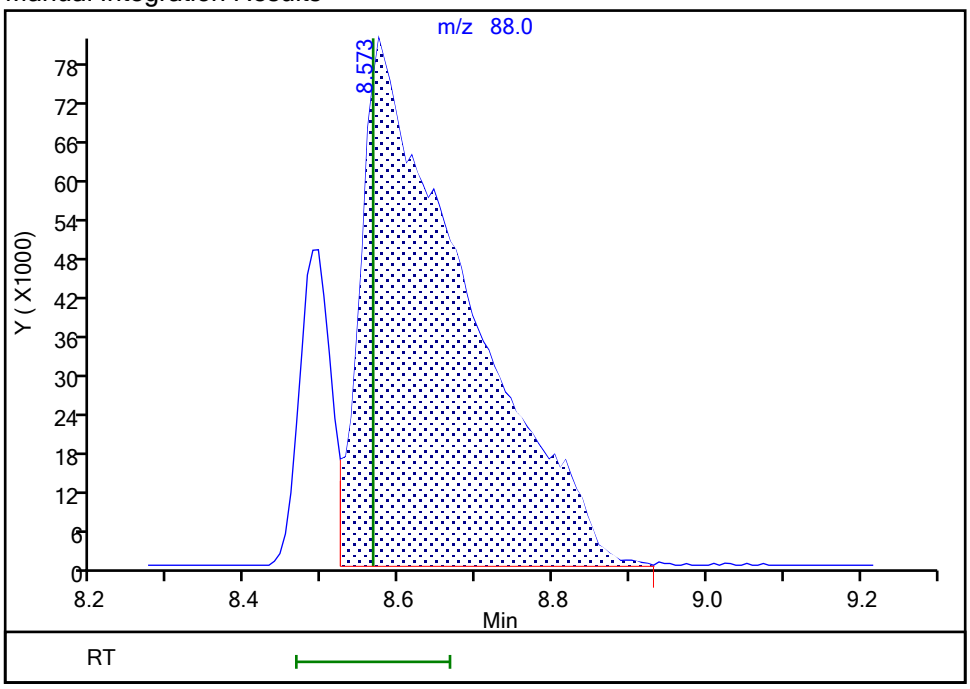
Processing Integration Results

RT: 8.57
Area: 768194
Amount: 3495.7016
Amount Units: ug/l



Manual Integration Results

RT: 8.57
Area: 782023
Amount: 3760.3465
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:29:32 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

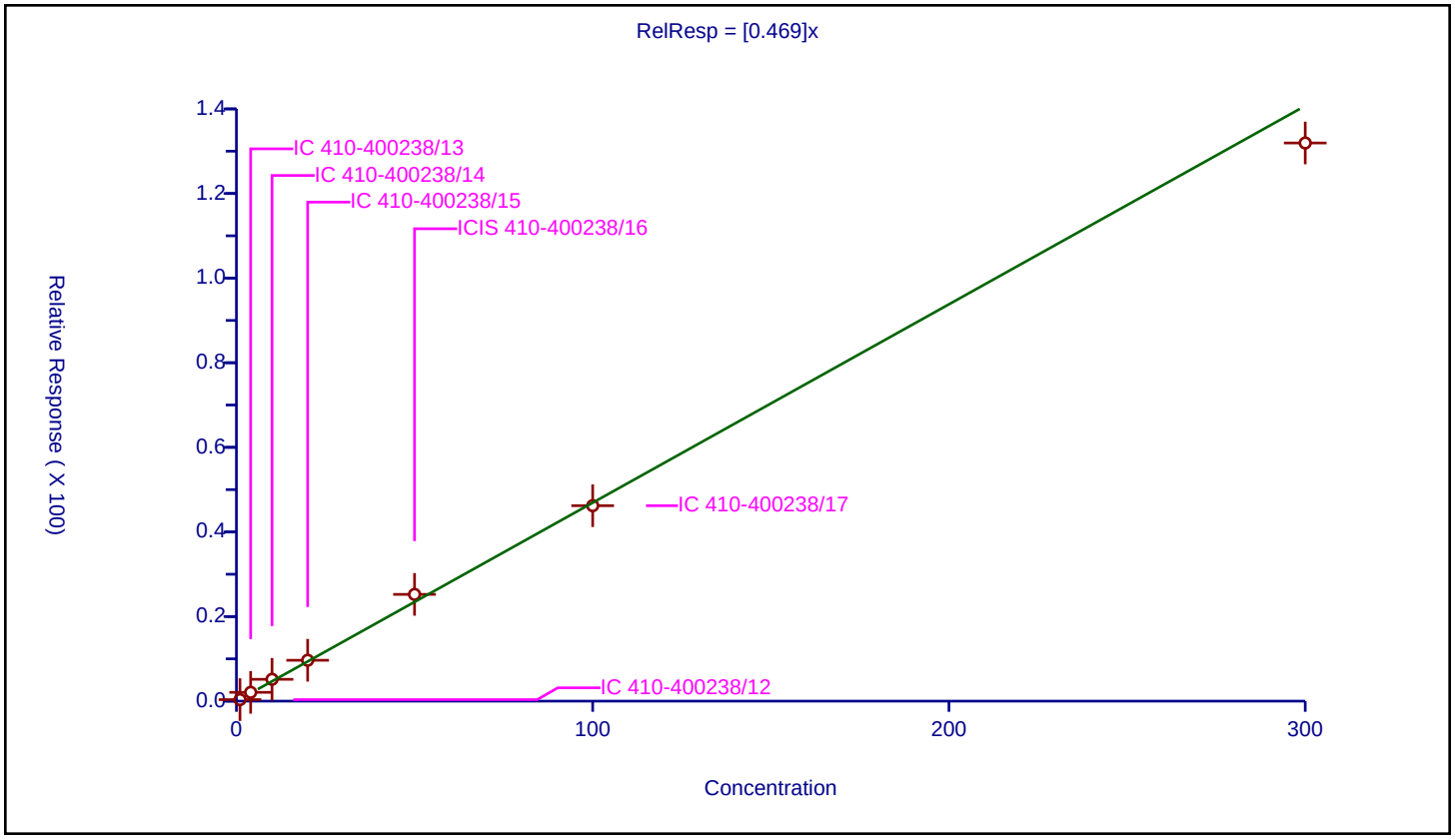
Curve Coefficients

Intercept:	0
Slope:	0.469

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	12.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.356726	50.0	1115702.0	0.356726	Y
2	IC 410-400238/13	4.0	2.082722	50.0	1093809.0	0.52068	Y
3	IC 410-400238/14	10.0	5.161566	50.0	1104258.0	0.516157	Y
4	IC 410-400238/15	20.0	9.664208	50.0	1105864.0	0.48321	Y
5	ICIS 410-400238/16	50.0	25.23668	50.0	1116591.0	0.504734	Y
6	IC 410-400238/17	100.0	46.200807	50.0	1134754.0	0.462008	Y
7	IC 410-400238/18	300.0	131.942551	50.0	1166034.0	0.439809	Y



11/14/2023
11:12 AM

Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

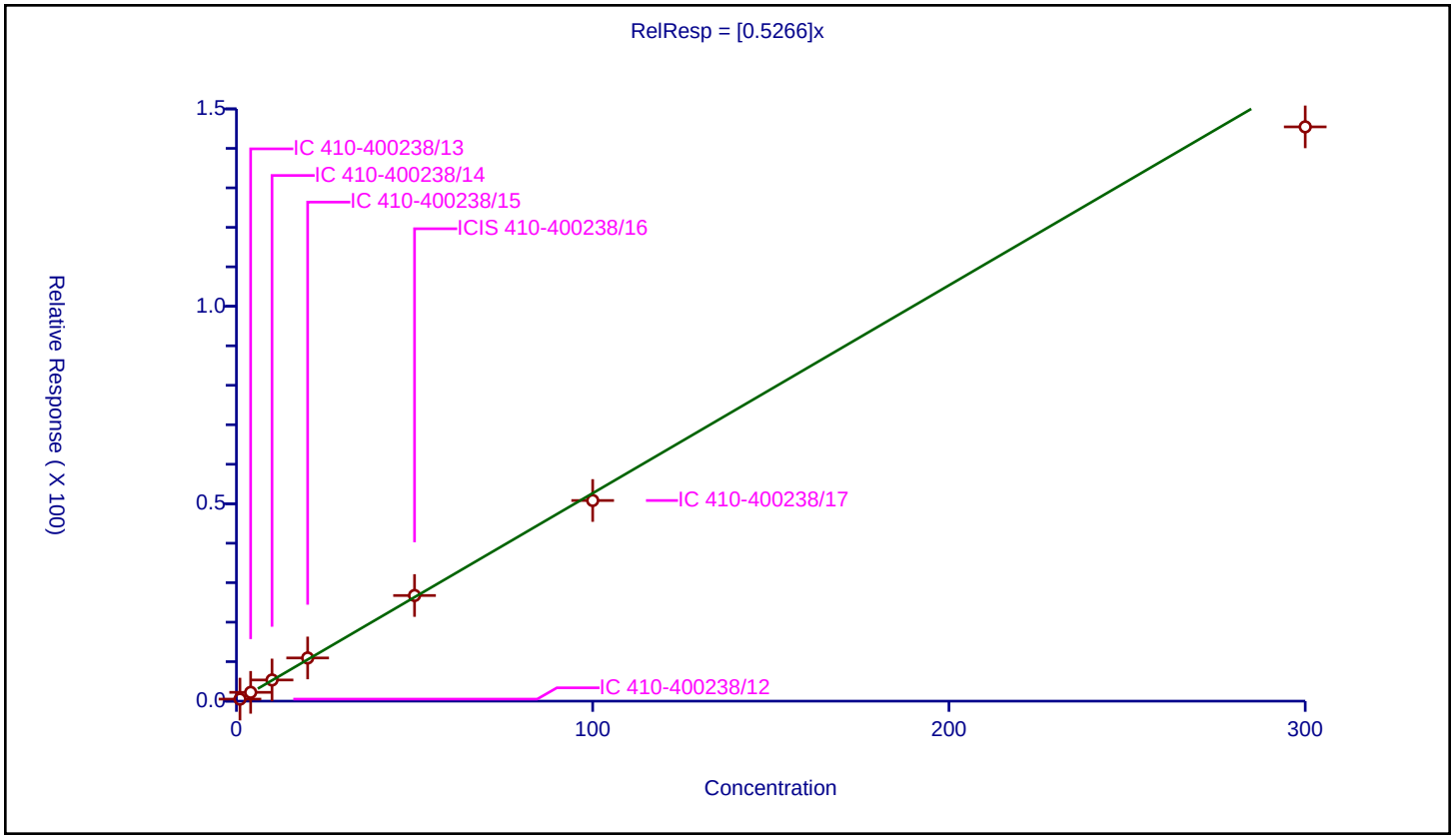
Curve Coefficients

Intercept:	0
Slope:	0.5266

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.517701	50.0	1115702.0	0.517701	Y
2	IC 410-400238/13	4.0	2.228634	50.0	1093809.0	0.557159	Y
3	IC 410-400238/14	10.0	5.361655	50.0	1104258.0	0.536165	Y
4	IC 410-400238/15	20.0	10.936833	50.0	1105864.0	0.546842	Y
5	ICIS 410-400238/16	50.0	26.759888	50.0	1116591.0	0.535198	Y
6	IC 410-400238/17	100.0	50.818415	50.0	1134754.0	0.508184	Y
7	IC 410-400238/18	300.0	145.449404	50.0	1166034.0	0.484831	Y



11/14/2023
11:12 AM

Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

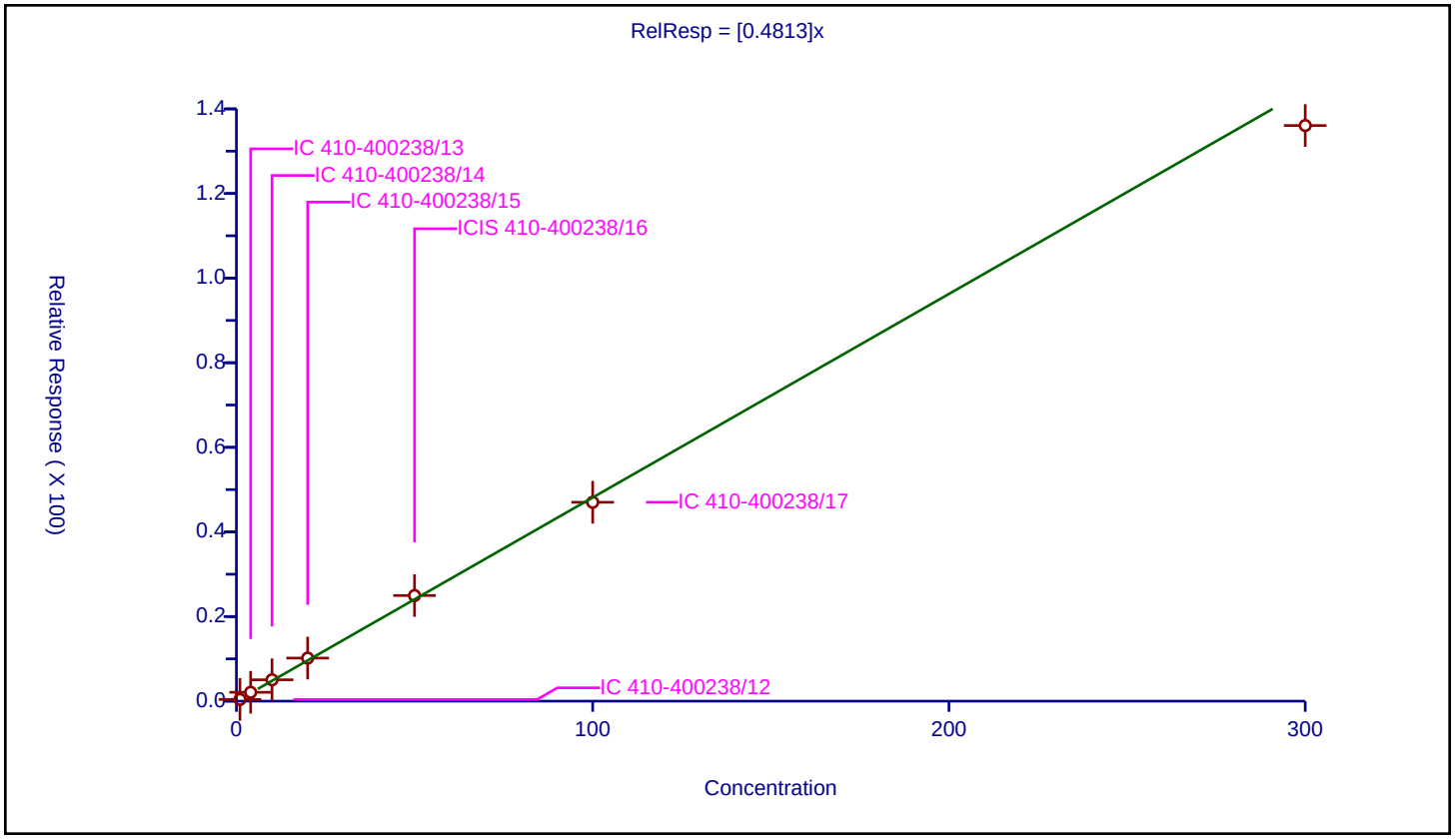
Curve Coefficients

Intercept:	0
Slope:	0.4813

Error Coefficients

Standard Error:	1390000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.409025	50.0	1115702.0	0.409025	Y
2	IC 410-400238/13	4.0	2.094927	50.0	1093809.0	0.523732	Y
3	IC 410-400238/14	10.0	5.045786	50.0	1104258.0	0.504579	Y
4	IC 410-400238/15	20.0	10.175076	50.0	1105864.0	0.508754	Y
5	ICIS 410-400238/16	50.0	24.965632	50.0	1116591.0	0.499313	Y
6	IC 410-400238/17	100.0	47.011511	50.0	1134754.0	0.470115	Y
7	IC 410-400238/18	300.0	136.064986	50.0	1166034.0	0.45355	Y



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Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

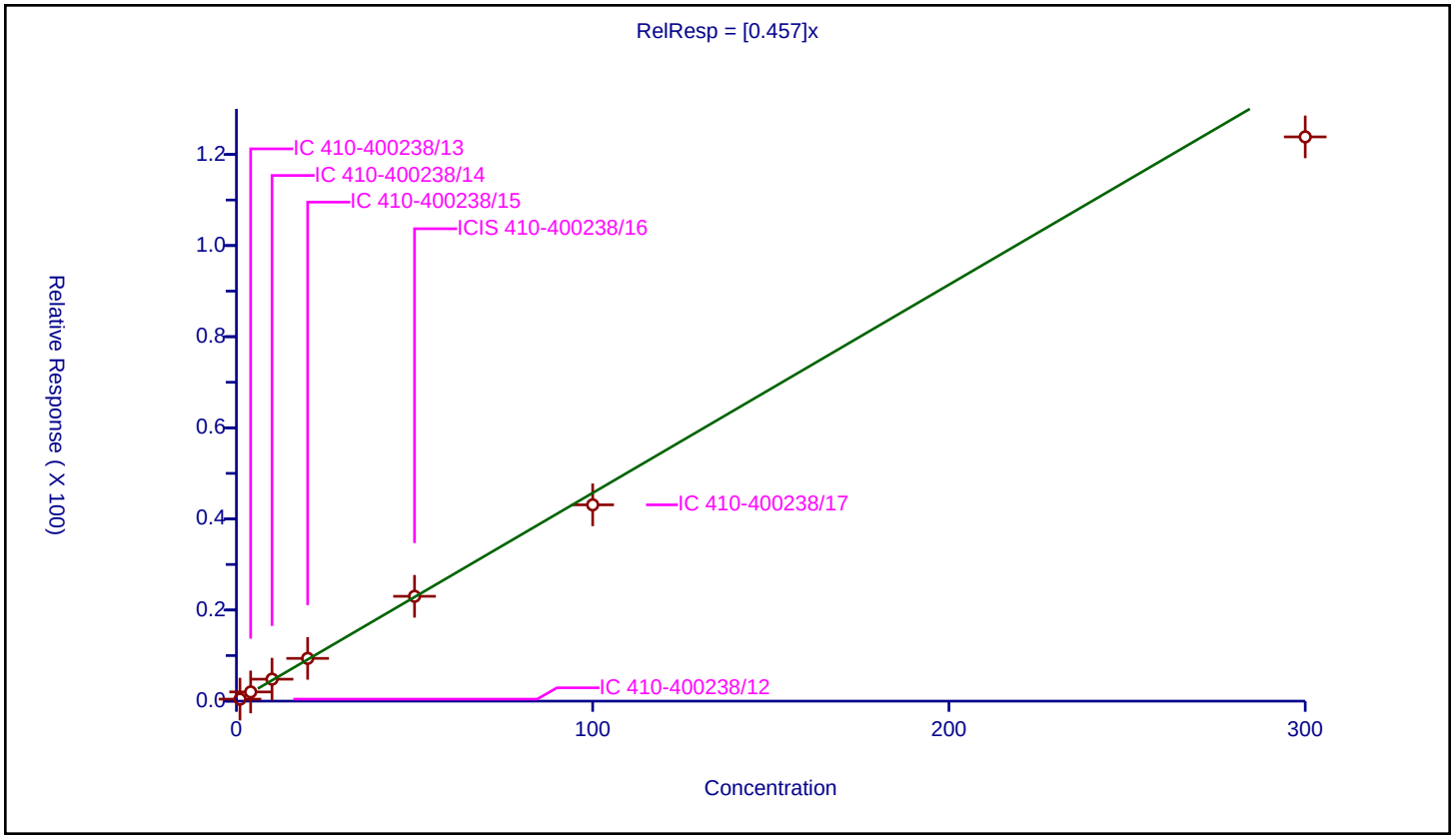
Curve Coefficients

Intercept:	0
Slope:	0.457

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	6.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.438872	50.0	1115702.0	0.438872	Y
2	IC 410-400238/13	4.0	2.018314	50.0	1093809.0	0.504578	Y
3	IC 410-400238/14	10.0	4.822786	50.0	1104258.0	0.482279	Y
4	IC 410-400238/15	20.0	9.387954	50.0	1105864.0	0.469398	Y
5	ICIS 410-400238/16	50.0	23.011738	50.0	1116591.0	0.460235	Y
6	IC 410-400238/17	100.0	43.09022	50.0	1134754.0	0.430902	Y
7	IC 410-400238/18	300.0	123.853207	50.0	1166034.0	0.412844	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

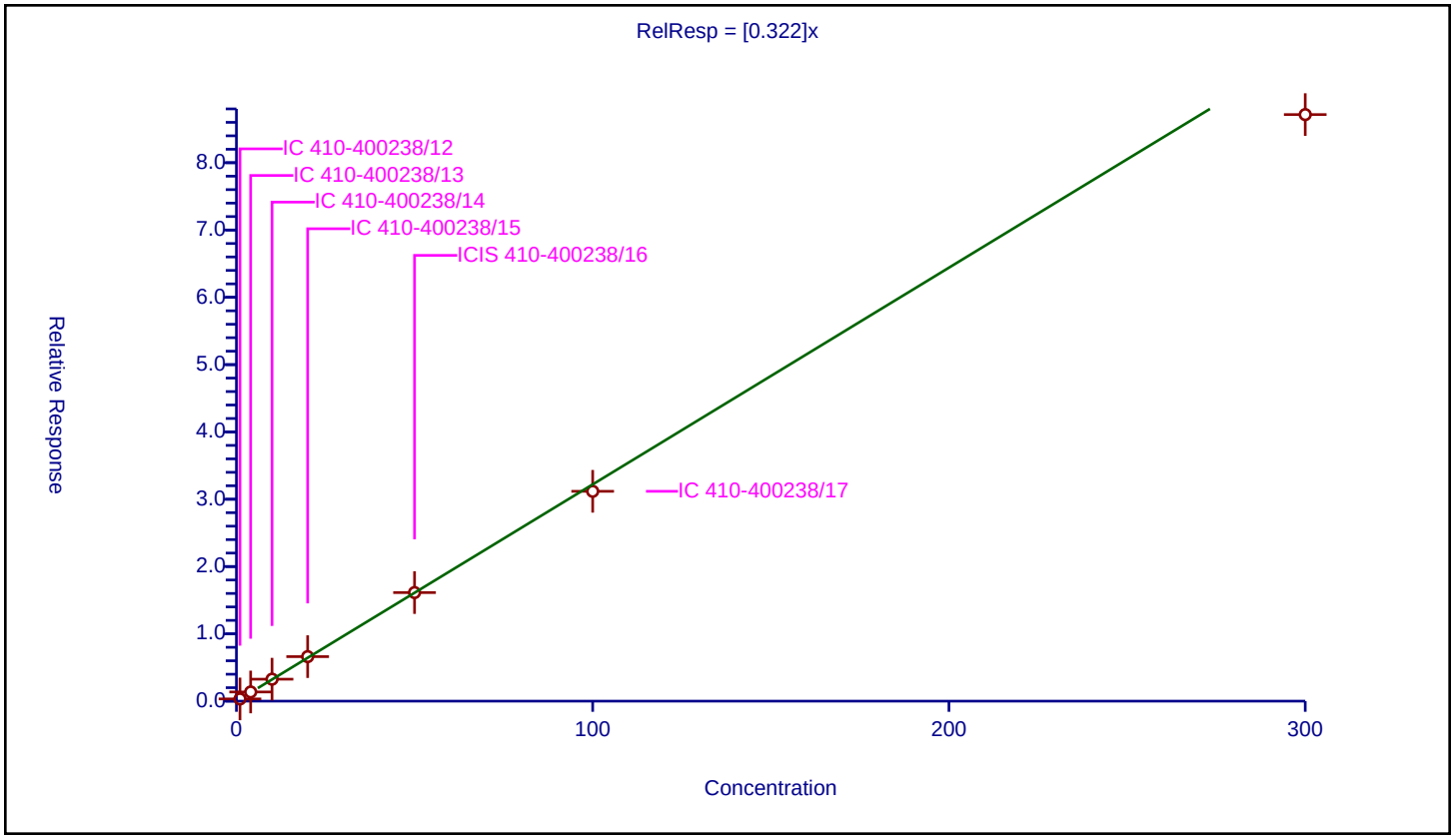
Curve Coefficients

Intercept:	0
Slope:	0.322

Error Coefficients

Standard Error:	893000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.331451	50.0	1115702.0	0.331451	Y
2	IC 410-400238/13	4.0	1.363538	50.0	1093809.0	0.340884	Y
3	IC 410-400238/14	10.0	3.262236	50.0	1104258.0	0.326224	Y
4	IC 410-400238/15	20.0	6.614331	50.0	1105864.0	0.330717	Y
5	ICIS 410-400238/16	50.0	16.132586	50.0	1116591.0	0.322652	Y
6	IC 410-400238/17	100.0	31.180194	50.0	1134754.0	0.311802	Y
7	IC 410-400238/18	300.0	87.154234	50.0	1166034.0	0.290514	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

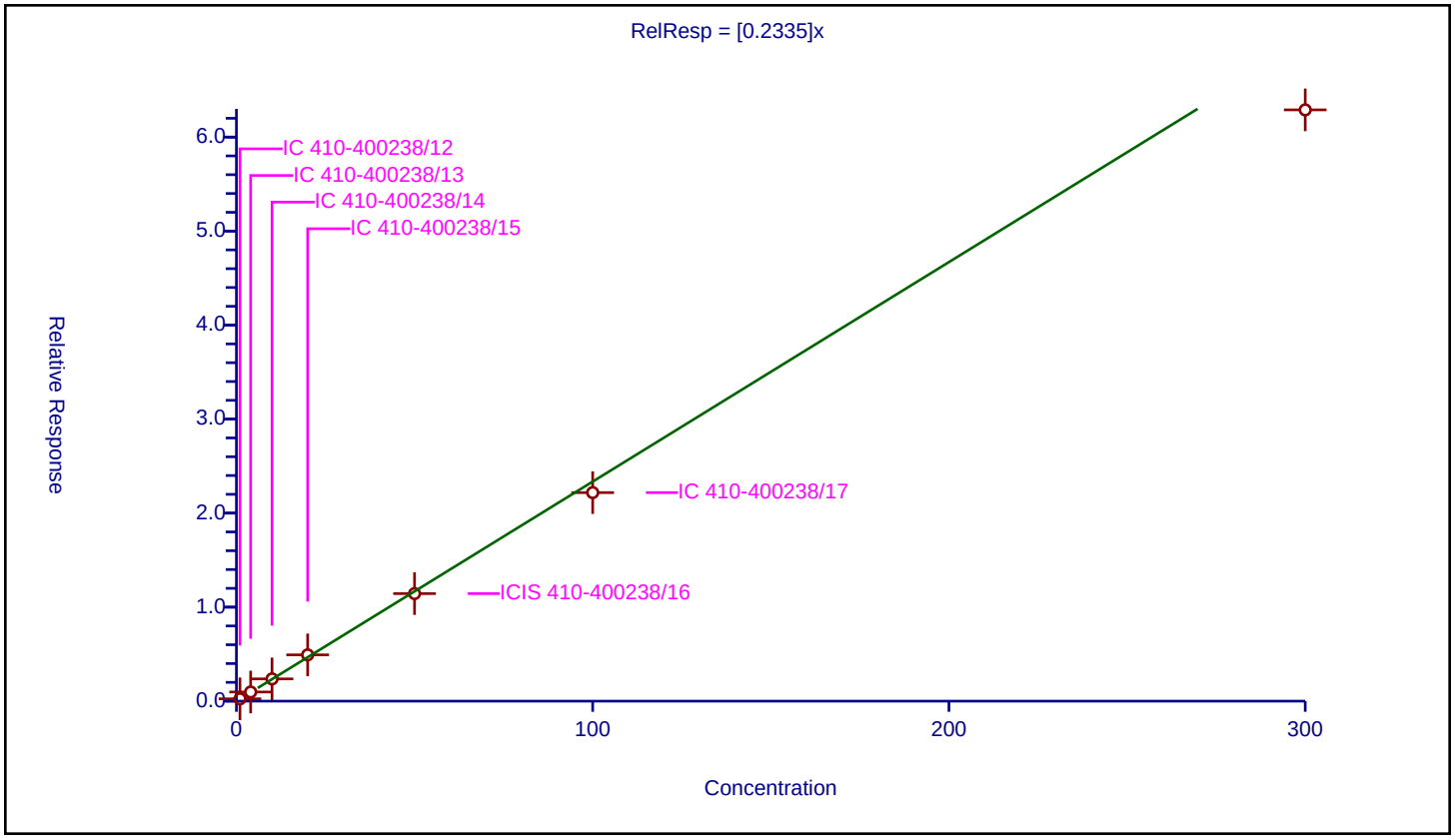
Curve Coefficients

Intercept:	0
Slope:	0.2335

Error Coefficients

Standard Error:	644000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.24805	50.0	1115702.0	0.24805	Y
2	IC 410-400238/13	4.0	0.974073	50.0	1093809.0	0.243518	Y
3	IC 410-400238/14	10.0	2.366838	50.0	1104258.0	0.236684	Y
4	IC 410-400238/15	20.0	4.922893	50.0	1105864.0	0.246145	Y
5	ICIS 410-400238/16	50.0	11.43888	50.0	1116591.0	0.228778	Y
6	IC 410-400238/17	100.0	22.1819	50.0	1134754.0	0.221819	Y
7	IC 410-400238/18	300.0	62.894478	50.0	1166034.0	0.209648	Y



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Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

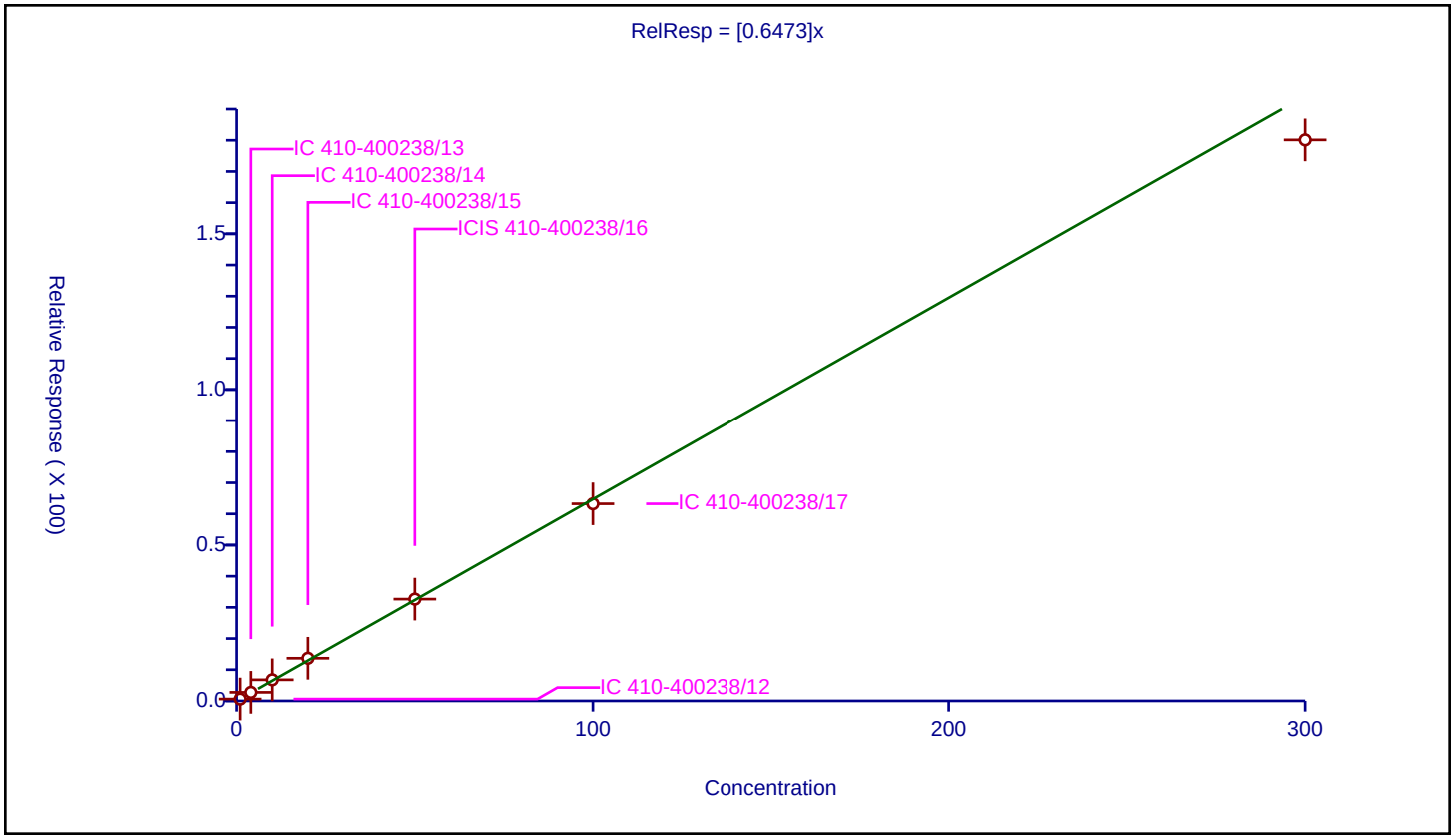
Curve Coefficients

Intercept:	0
Slope:	0.6473

Error Coefficients

Standard Error:	1840000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.598681	50.0	1115702.0	0.598681	Y
2	IC 410-400238/13	4.0	2.746869	50.0	1093809.0	0.686717	Y
3	IC 410-400238/14	10.0	6.761509	50.0	1104258.0	0.676151	Y
4	IC 410-400238/15	20.0	13.675597	50.0	1105864.0	0.68378	Y
5	ICIS 410-400238/16	50.0	32.655601	50.0	1116591.0	0.653112	Y
6	IC 410-400238/17	100.0	63.255648	50.0	1134754.0	0.632556	Y
7	IC 410-400238/18	300.0	180.121635	50.0	1166034.0	0.600405	Y



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Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

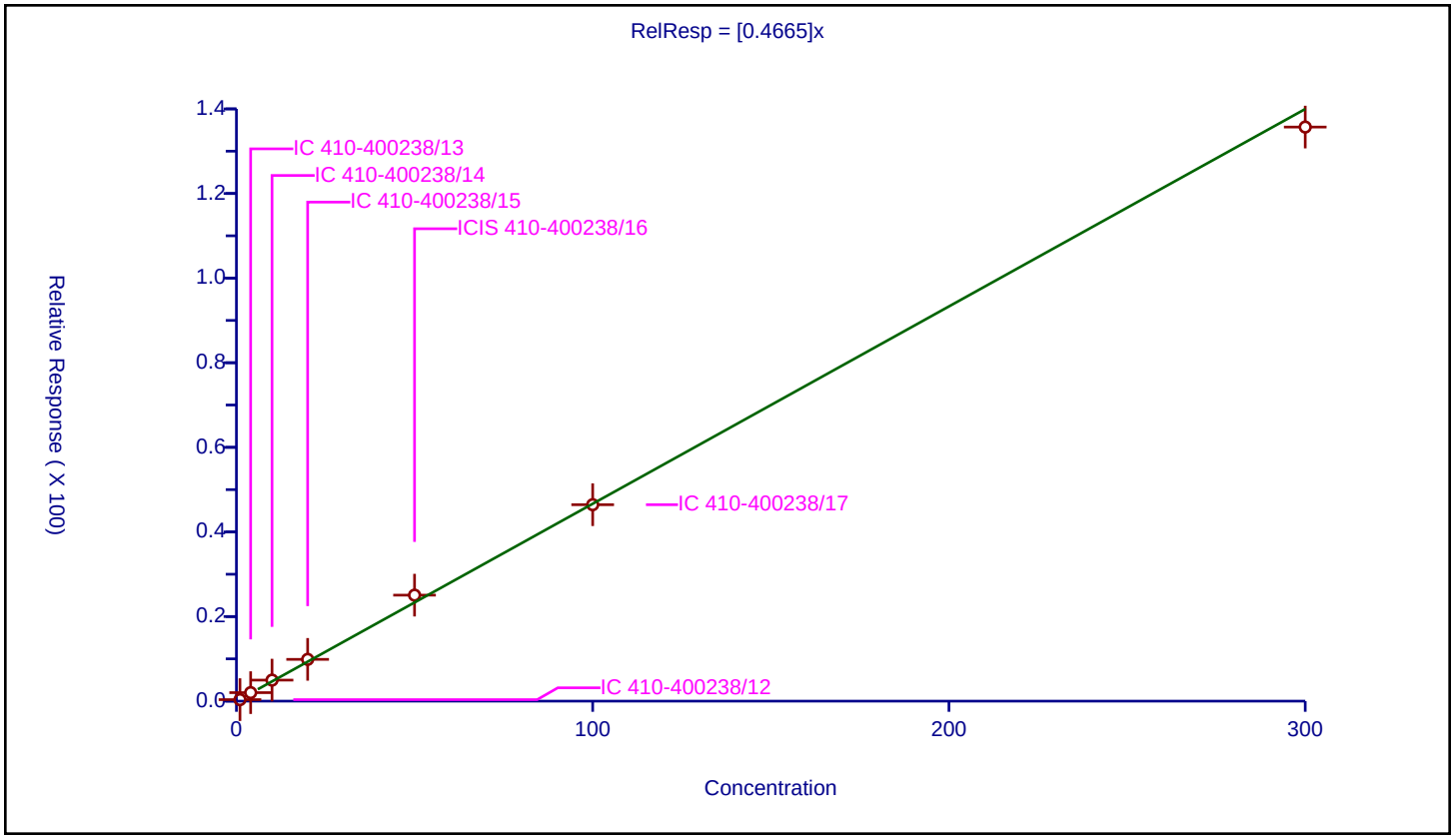
Curve Coefficients

Intercept:	0
Slope:	0.4665

Error Coefficients

Standard Error:	1380000
Relative Standard Error:	11.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.354127	50.0	1115702.0	0.354127	Y
2	IC 410-400238/13	4.0	2.012737	50.0	1093809.0	0.503184	Y
3	IC 410-400238/14	10.0	4.969672	50.0	1104258.0	0.496967	Y
4	IC 410-400238/15	20.0	9.873049	50.0	1105864.0	0.493652	Y
5	ICIS 410-400238/16	50.0	25.05622	50.0	1116591.0	0.501124	Y
6	IC 410-400238/17	100.0	46.434954	50.0	1134754.0	0.46435	Y
7	IC 410-400238/18	300.0	135.707792	50.0	1166034.0	0.452359	Y



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Calibration / Pentane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

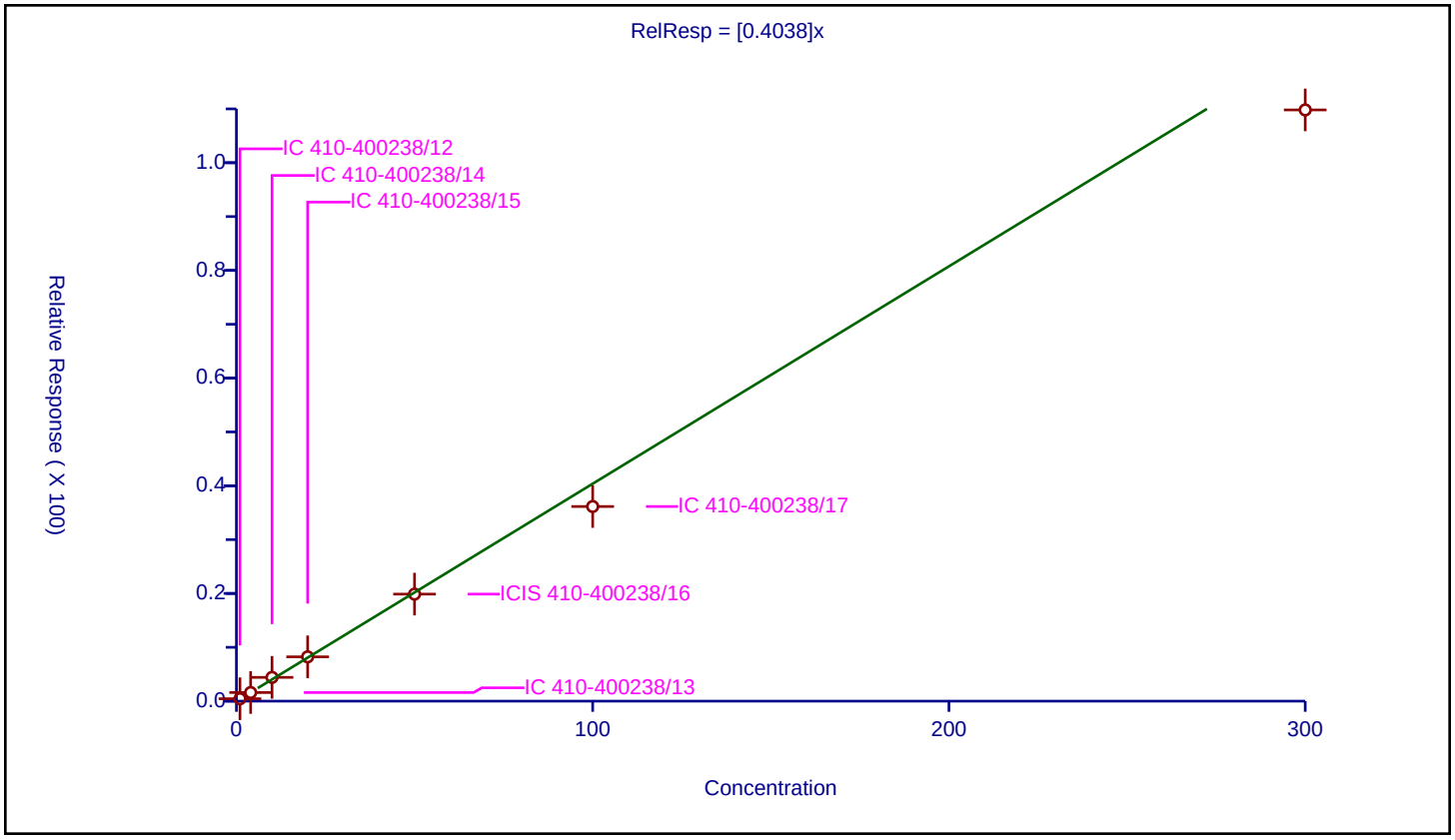
Curve Coefficients

Intercept:	0
Slope:	0.4038

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.44779	50.0	1115702.0	0.44779	Y
2	IC 410-400238/13	4.0	1.601696	50.0	1093809.0	0.400424	Y
3	IC 410-400238/14	10.0	4.417038	50.0	1104258.0	0.441704	Y
4	IC 410-400238/15	20.0	8.230262	50.0	1105864.0	0.411513	Y
5	ICIS 410-400238/16	50.0	19.879078	50.0	1116591.0	0.397582	Y
6	IC 410-400238/17	100.0	36.149729	50.0	1134754.0	0.361497	Y
7	IC 410-400238/18	300.0	109.804817	50.0	1166034.0	0.366016	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

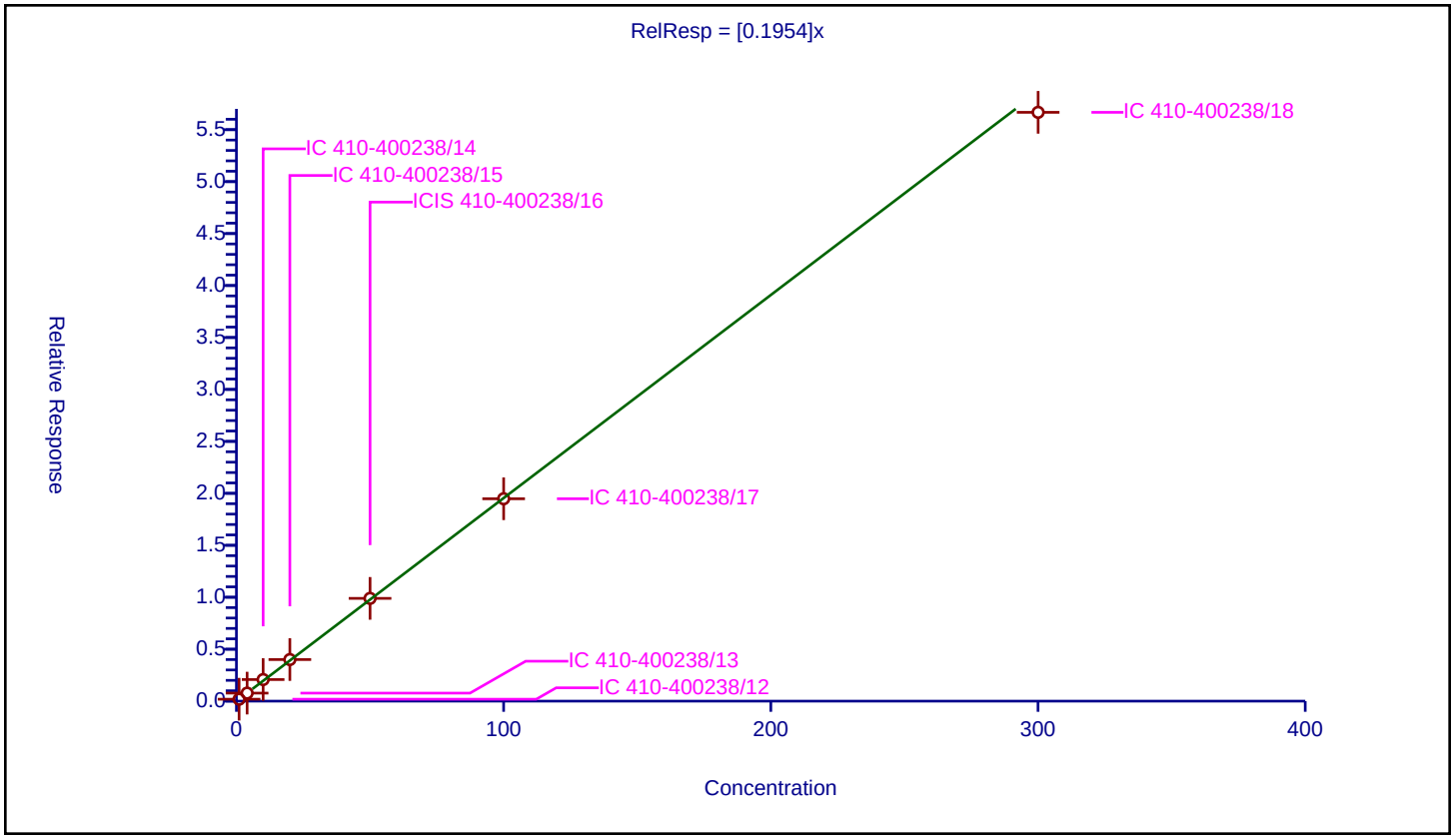
Curve Coefficients

Intercept:	0
Slope:	0.1954

Error Coefficients

Standard Error:	577000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.000135	0.185757	50.0	1115702.0	0.185732	Y
2	IC 410-400238/13	4.000541	0.773307	50.0	1093809.0	0.193301	Y
3	IC 410-400238/14	10.001352	2.076326	50.0	1104258.0	0.207605	Y
4	IC 410-400238/15	20.002704	4.001622	50.0	1105864.0	0.200054	Y
5	ICIS 410-400238/16	50.00676	9.890596	50.0	1116591.0	0.197785	Y
6	IC 410-400238/17	100.01352	19.478363	50.0	1134754.0	0.194757	Y
7	IC 410-400238/18	300.04056	56.669188	50.0	1166034.0	0.188872	Y



Calibration / 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

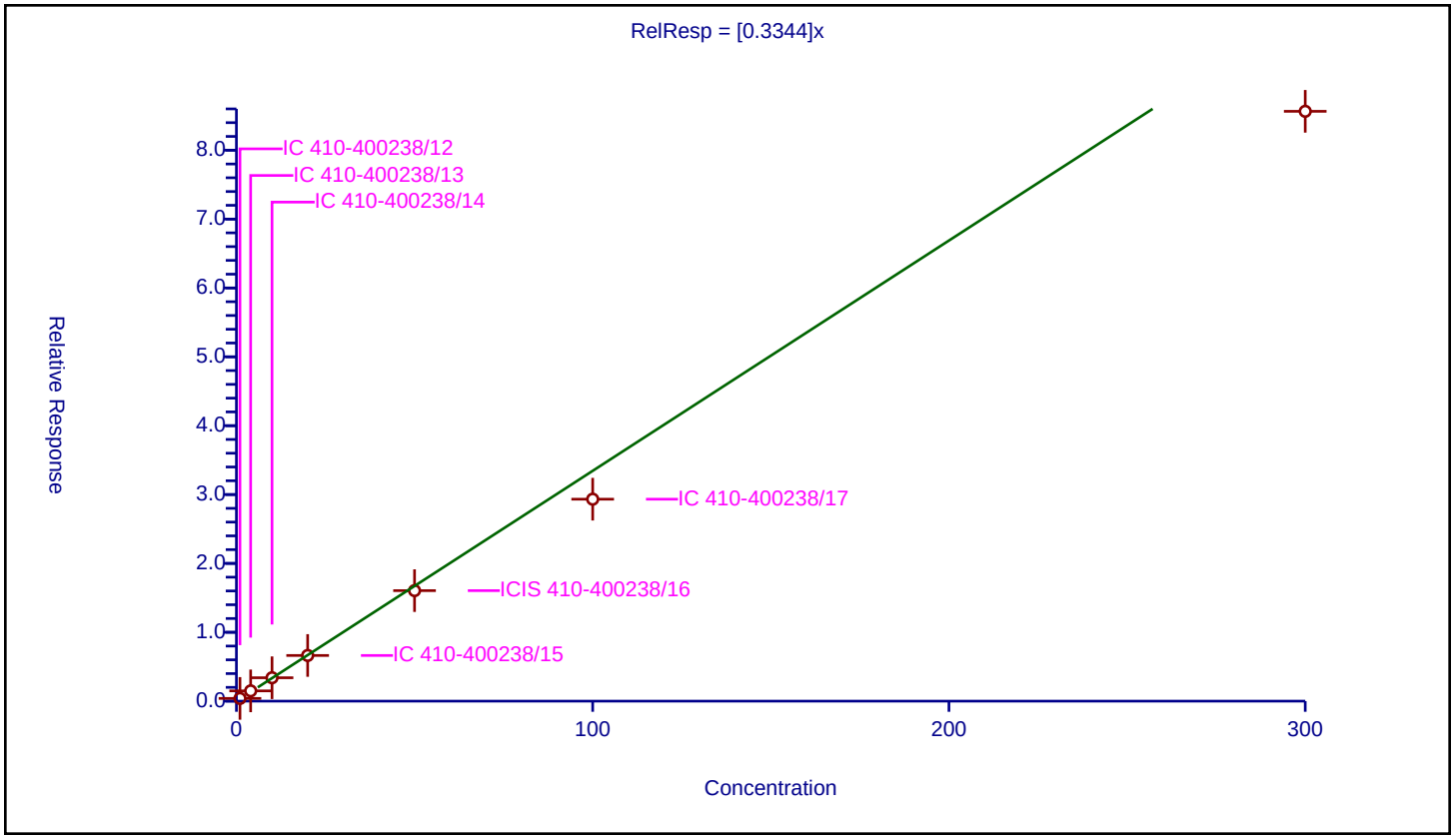
Curve Coefficients

Intercept:	0
Slope:	0.3344

Error Coefficients

Standard Error:	875000
Relative Standard Error:	12.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.396791	50.0	1115702.0	0.396791	Y
2	IC 410-400238/13	4.0	1.492125	50.0	1093809.0	0.373031	Y
3	IC 410-400238/14	10.0	3.398119	50.0	1104258.0	0.339812	Y
4	IC 410-400238/15	20.0	6.630698	50.0	1105864.0	0.331535	Y
5	ICIS 410-400238/16	50.0	16.04652	50.0	1116591.0	0.32093	Y
6	IC 410-400238/17	100.0	29.325872	50.0	1134754.0	0.293259	Y
7	IC 410-400238/18	300.0	85.64613	50.0	1166034.0	0.285487	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

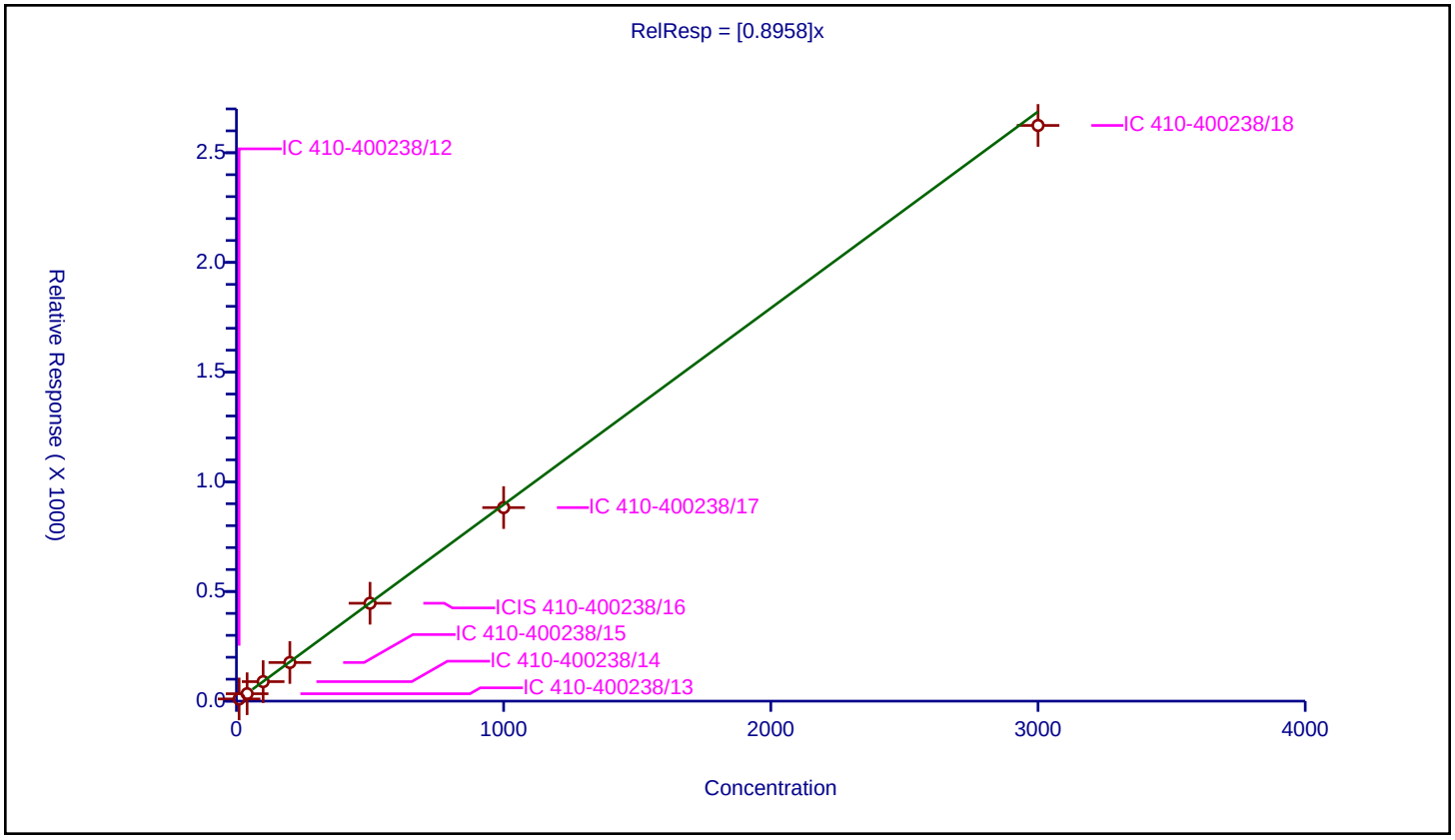
Curve Coefficients

Intercept:	0
Slope:	0.8958

Error Coefficients

Standard Error:	2940000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	10.000333	10.073804	250.0	602404.0	1.007347	Y
2	IC 410-400238/13	40.001333	33.772971	250.0	597386.0	0.844296	Y
3	IC 410-400238/14	100.003333	88.884939	250.0	592201.0	0.88882	Y
4	IC 410-400238/15	200.006666	176.084765	250.0	603218.0	0.880394	Y
5	ICIS 410-400238/16	500.016666	446.315727	250.0	602127.0	0.892602	Y
6	IC 410-400238/17	1000.033332	882.479431	250.0	618045.0	0.88245	Y
7	IC 410-400238/18	3000.099995	2624.647165	250.0	644778.0	0.874853	Y



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Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

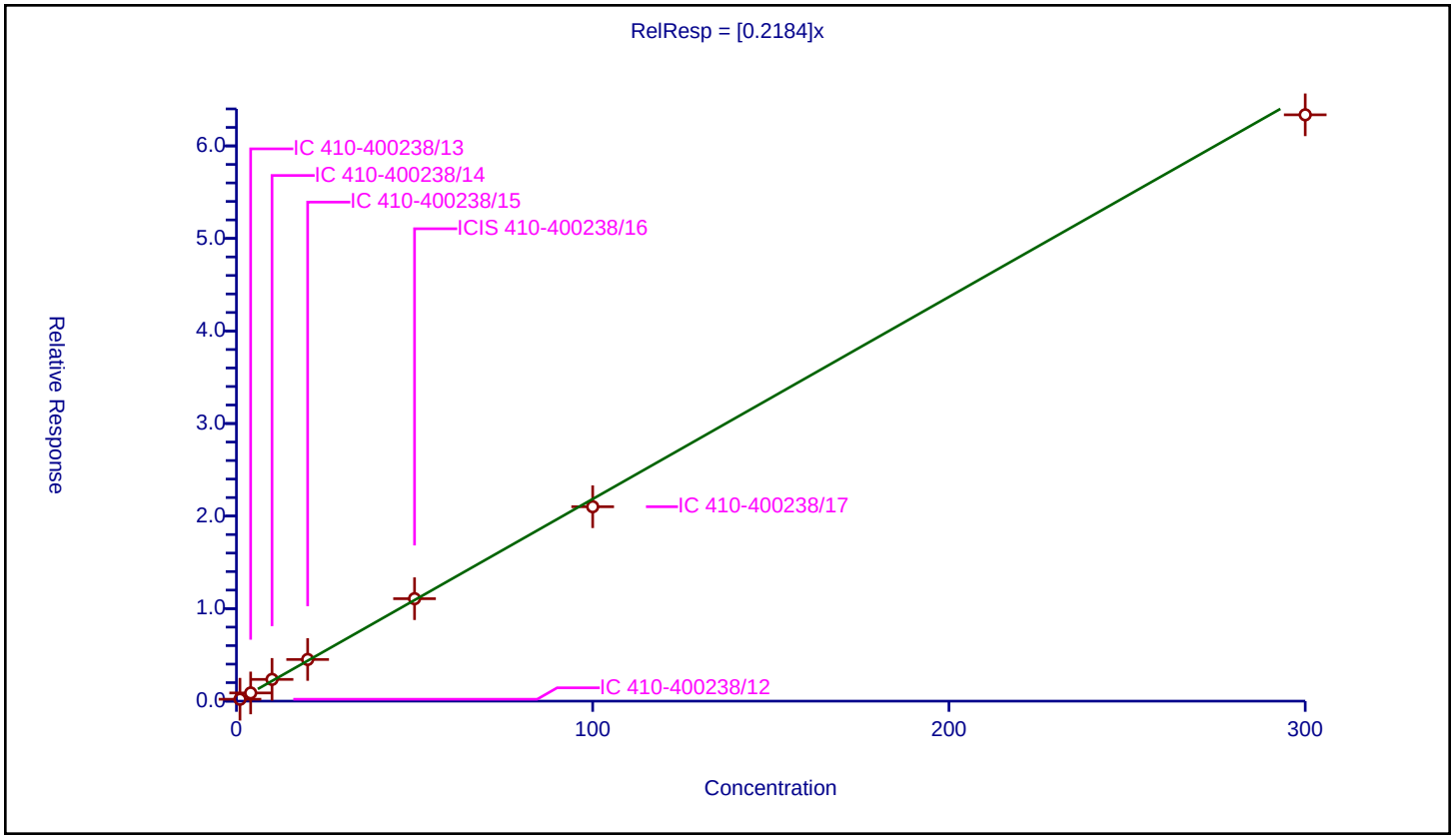
Curve Coefficients

Intercept:	0
Slope:	0.2184

Error Coefficients

Standard Error:	644000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.204804	50.0	1115702.0	0.204804	Y
2	IC 410-400238/13	4.0	0.885255	50.0	1093809.0	0.221314	Y
3	IC 410-400238/14	10.0	2.349315	50.0	1104258.0	0.234932	Y
4	IC 410-400238/15	20.0	4.501774	50.0	1105864.0	0.225089	Y
5	ICIS 410-400238/16	50.0	11.071646	50.0	1116591.0	0.221433	Y
6	IC 410-400238/17	100.0	21.010413	50.0	1134754.0	0.210104	Y
7	IC 410-400238/18	300.0	63.360974	50.0	1166034.0	0.211203	Y



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Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

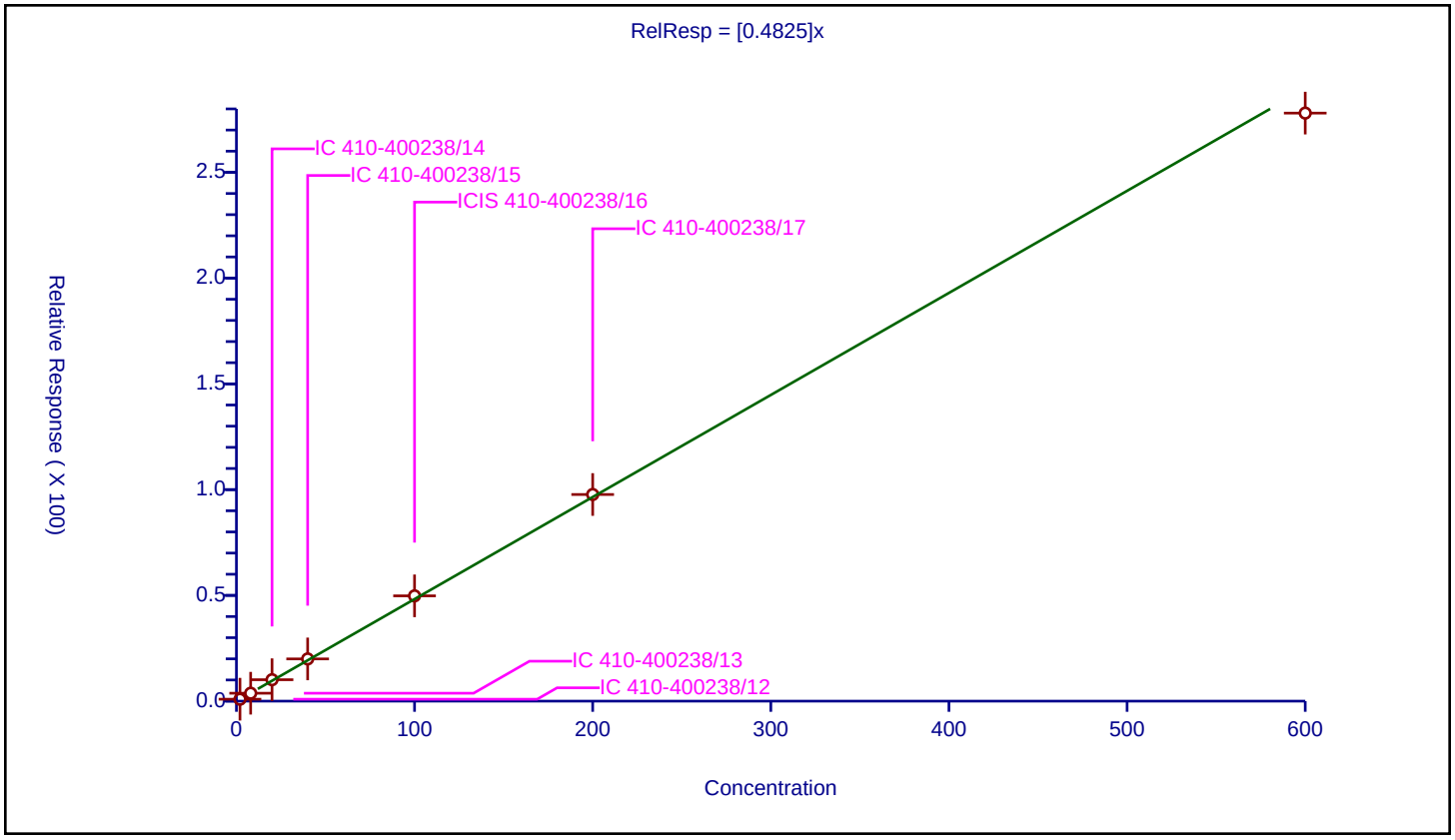
Curve Coefficients

Intercept:	0
Slope:	0.4825

Error Coefficients

Standard Error:	313000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	2.0	0.909274	250.0	602404.0	0.454637	Y
2	IC 410-400238/13	8.0	3.7413	250.0	597386.0	0.467662	Y
3	IC 410-400238/14	20.0	10.132117	250.0	592201.0	0.506606	Y
4	IC 410-400238/15	40.0	19.959202	250.0	603218.0	0.49898	Y
5	ICIS 410-400238/16	100.0	49.77729	250.0	602127.0	0.497773	Y
6	IC 410-400238/17	200.0	97.691916	250.0	618045.0	0.48846	Y
7	IC 410-400238/18	600.0	278.008865	250.0	644778.0	0.463348	Y



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Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

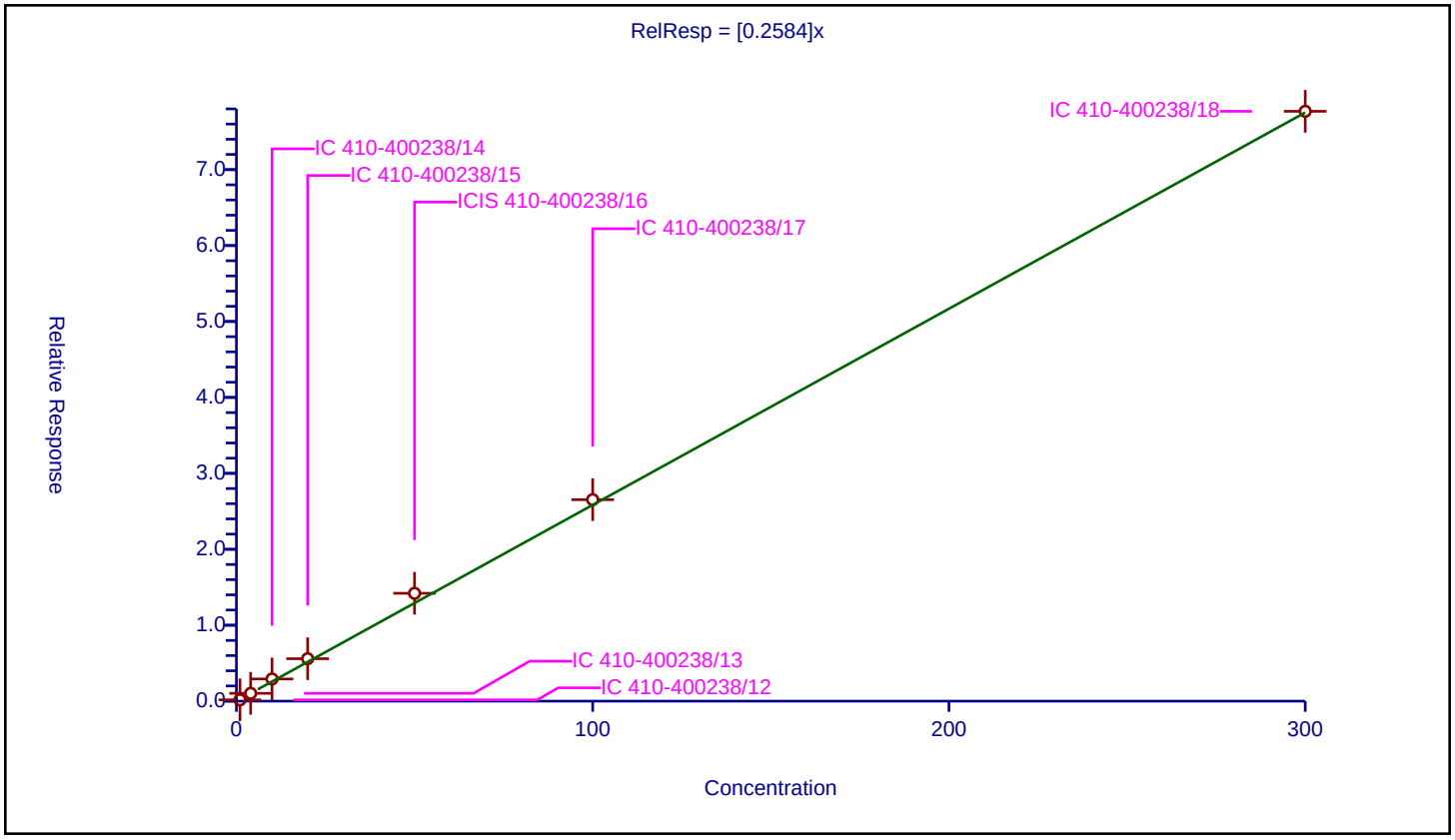
Curve Coefficients

Intercept:	0
Slope:	0.2584

Error Coefficients

Standard Error:	792000
Relative Standard Error:	15.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.171506	50.0	1115702.0	0.171506	Y
2	IC 410-400238/13	4.0	1.029019	50.0	1093809.0	0.257255	Y
3	IC 410-400238/14	10.0	2.921464	50.0	1104258.0	0.292146	Y
4	IC 410-400238/15	20.0	5.590154	50.0	1105864.0	0.279508	Y
5	ICIS 410-400238/16	50.0	14.204843	50.0	1116591.0	0.284097	Y
6	IC 410-400238/17	100.0	26.533284	50.0	1134754.0	0.265333	Y
7	IC 410-400238/18	300.0	77.680925	50.0	1166034.0	0.258936	Y



Calibration / Isopropyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

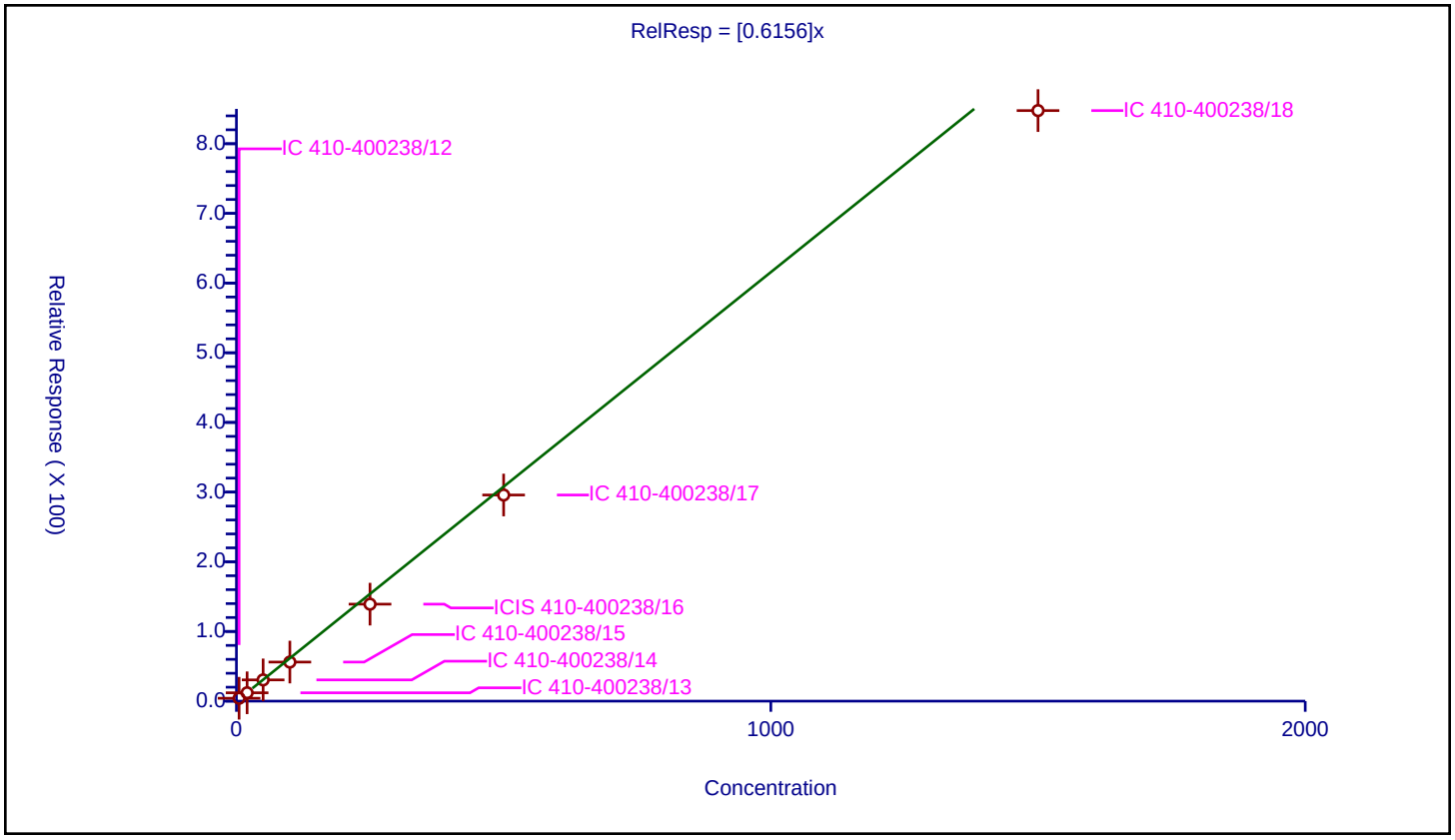
Curve Coefficients

Intercept:	0
Slope:	0.6156

Error Coefficients

Standard Error:	953000
Relative Standard Error:	15.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	5.0	4.132194	250.0	602404.0	0.826439	Y
2	IC 410-400238/13	20.0	11.976344	250.0	597386.0	0.598817	Y
3	IC 410-400238/14	50.0	30.496825	250.0	592201.0	0.609936	Y
4	IC 410-400238/15	100.0	56.078814	250.0	603218.0	0.560788	Y
5	ICIS 410-400238/16	250.0	139.204852	250.0	602127.0	0.556819	Y
6	IC 410-400238/17	500.0	295.839704	250.0	618045.0	0.591679	Y
7	IC 410-400238/18	1500.0	847.552181	250.0	644778.0	0.565035	Y



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Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

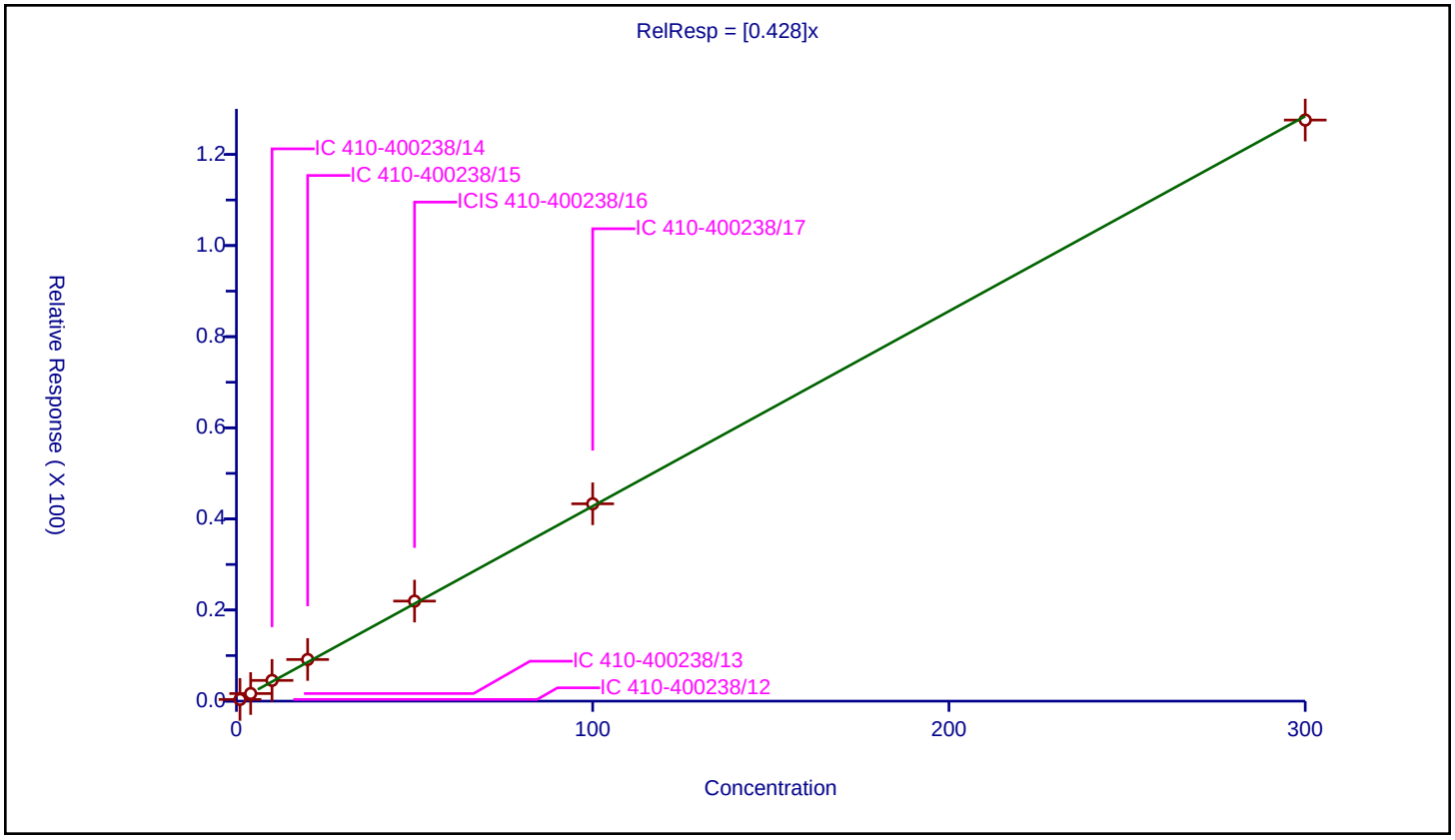
Curve Coefficients

Intercept:	0
Slope:	0.428

Error Coefficients

Standard Error:	1300000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.368826	50.0	1115702.0	0.368826	Y
2	IC 410-400238/13	4.0	1.66935	50.0	1093809.0	0.417337	Y
3	IC 410-400238/14	10.0	4.550748	50.0	1104258.0	0.455075	Y
4	IC 410-400238/15	20.0	9.140726	50.0	1105864.0	0.457036	Y
5	ICIS 410-400238/16	50.0	21.9601	50.0	1116591.0	0.439202	Y
6	IC 410-400238/17	100.0	43.316217	50.0	1134754.0	0.433162	Y
7	IC 410-400238/18	300.0	127.551041	50.0	1166034.0	0.42517	Y



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Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

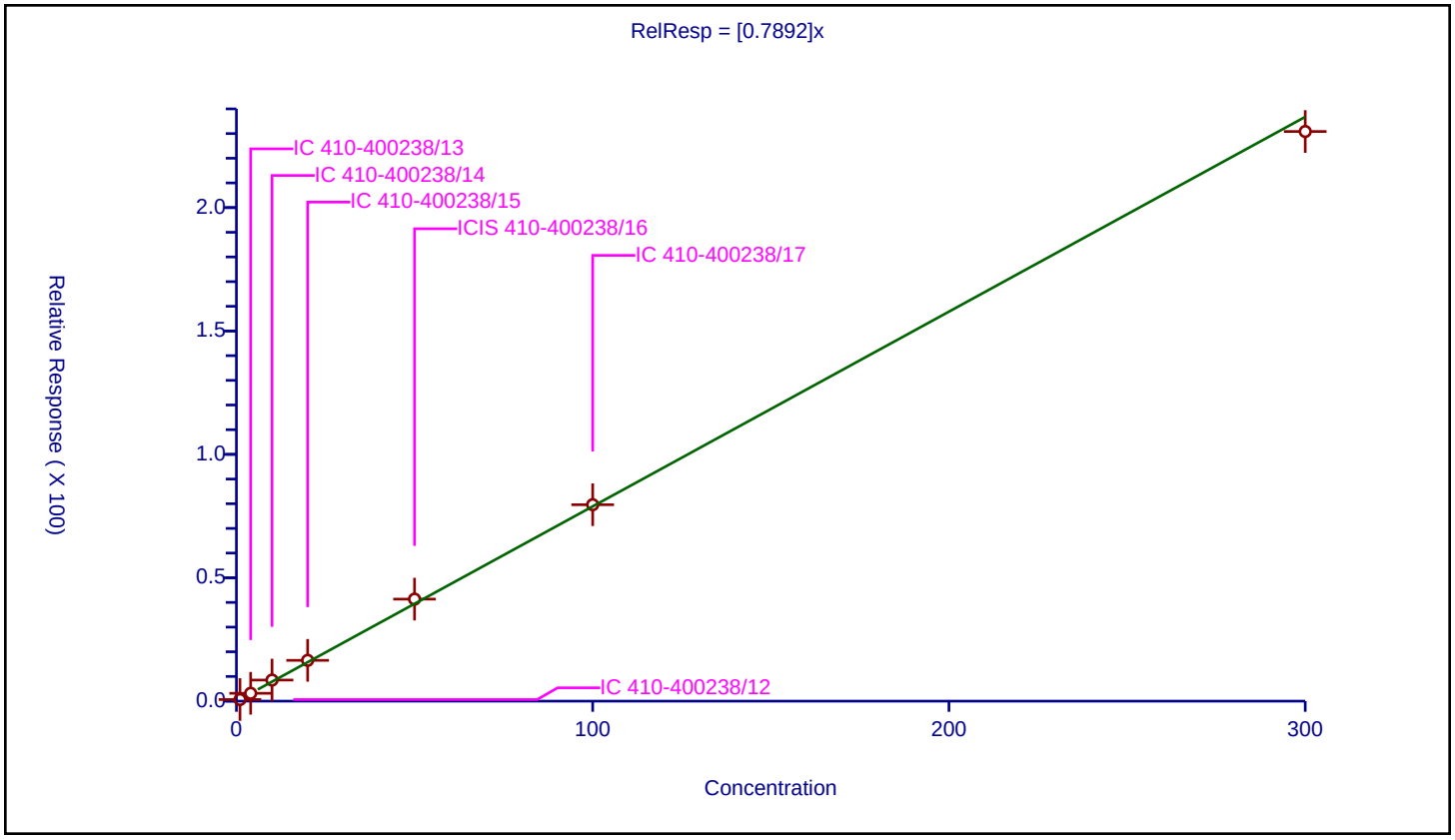
Curve Coefficients

Intercept:	0
Slope:	0.7892

Error Coefficients

Standard Error:	2350000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.656	50.0	1115702.0	0.656	Y
2	IC 410-400238/13	4.0	3.180766	50.0	1093809.0	0.795191	Y
3	IC 410-400238/14	10.0	8.540078	50.0	1104258.0	0.854008	Y
4	IC 410-400238/15	20.0	16.532187	50.0	1105864.0	0.826609	Y
5	ICIS 410-400238/16	50.0	41.342846	50.0	1116591.0	0.826857	Y
6	IC 410-400238/17	100.0	79.604126	50.0	1134754.0	0.796041	Y
7	IC 410-400238/18	300.0	230.838337	50.0	1166034.0	0.769461	Y



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Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

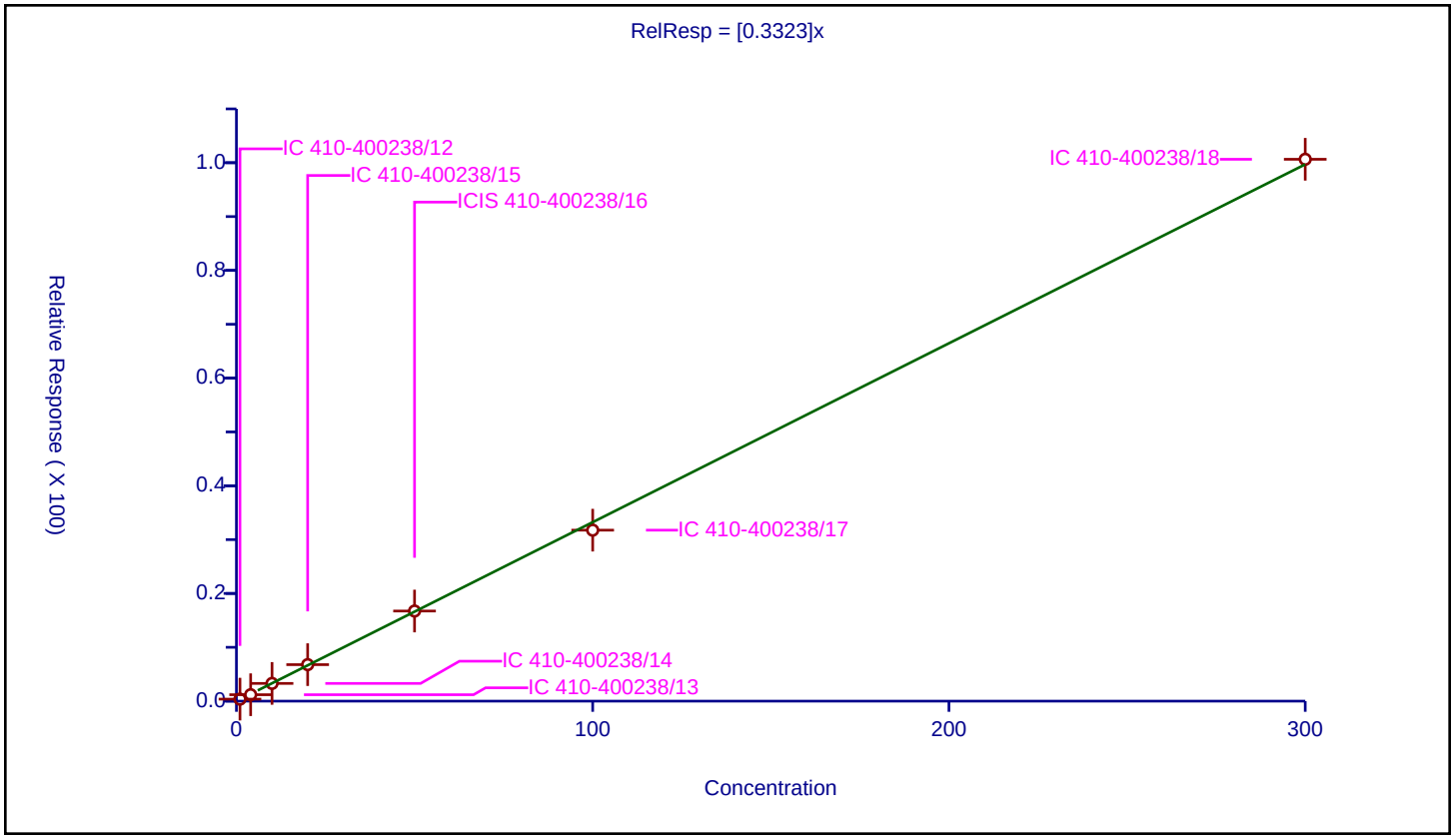
Curve Coefficients

Intercept:	0
Slope:	0.3323

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.371156	50.0	1115702.0	0.371156	Y
2	IC 410-400238/13	4.0	1.196507	50.0	1093809.0	0.299127	Y
3	IC 410-400238/14	10.0	3.290852	50.0	1104258.0	0.329085	Y
4	IC 410-400238/15	20.0	6.78144	50.0	1105864.0	0.339072	Y
5	ICIS 410-400238/16	50.0	16.739746	50.0	1116591.0	0.334795	Y
6	IC 410-400238/17	100.0	31.756619	50.0	1134754.0	0.317566	Y
7	IC 410-400238/18	300.0	100.642305	50.0	1166034.0	0.335474	Y



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Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

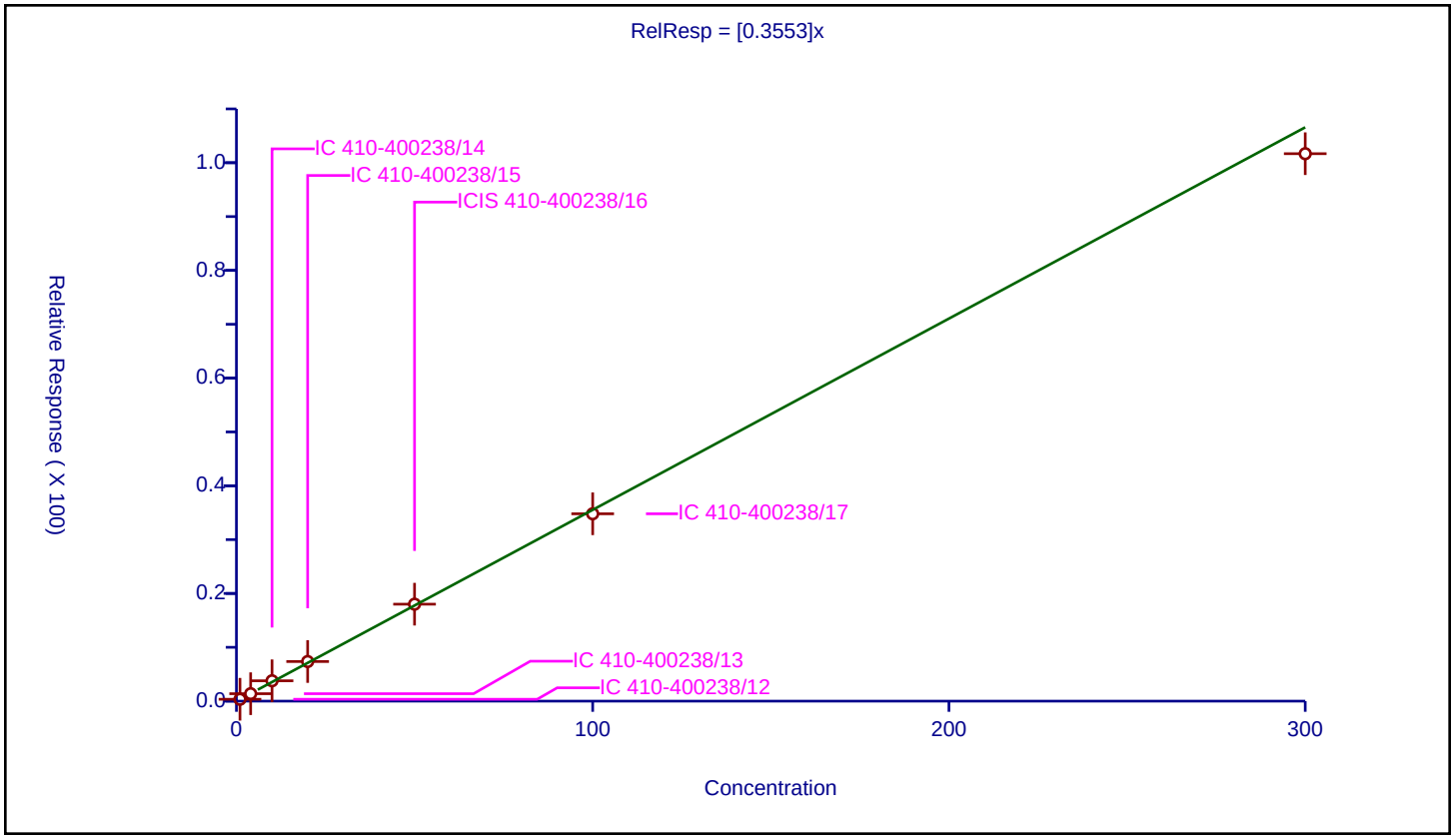
Curve Coefficients

Intercept:	0
Slope:	0.3553

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.348301	50.0	1115702.0	0.348301	Y
2	IC 410-400238/13	4.0	1.382051	50.0	1093809.0	0.345513	Y
3	IC 410-400238/14	10.0	3.779552	50.0	1104258.0	0.377955	Y
4	IC 410-400238/15	20.0	7.359721	50.0	1105864.0	0.367986	Y
5	ICIS 410-400238/16	50.0	18.008832	50.0	1116591.0	0.360177	Y
6	IC 410-400238/17	100.0	34.79622	50.0	1134754.0	0.347962	Y
7	IC 410-400238/18	300.0	101.677395	50.0	1166034.0	0.338925	Y



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Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

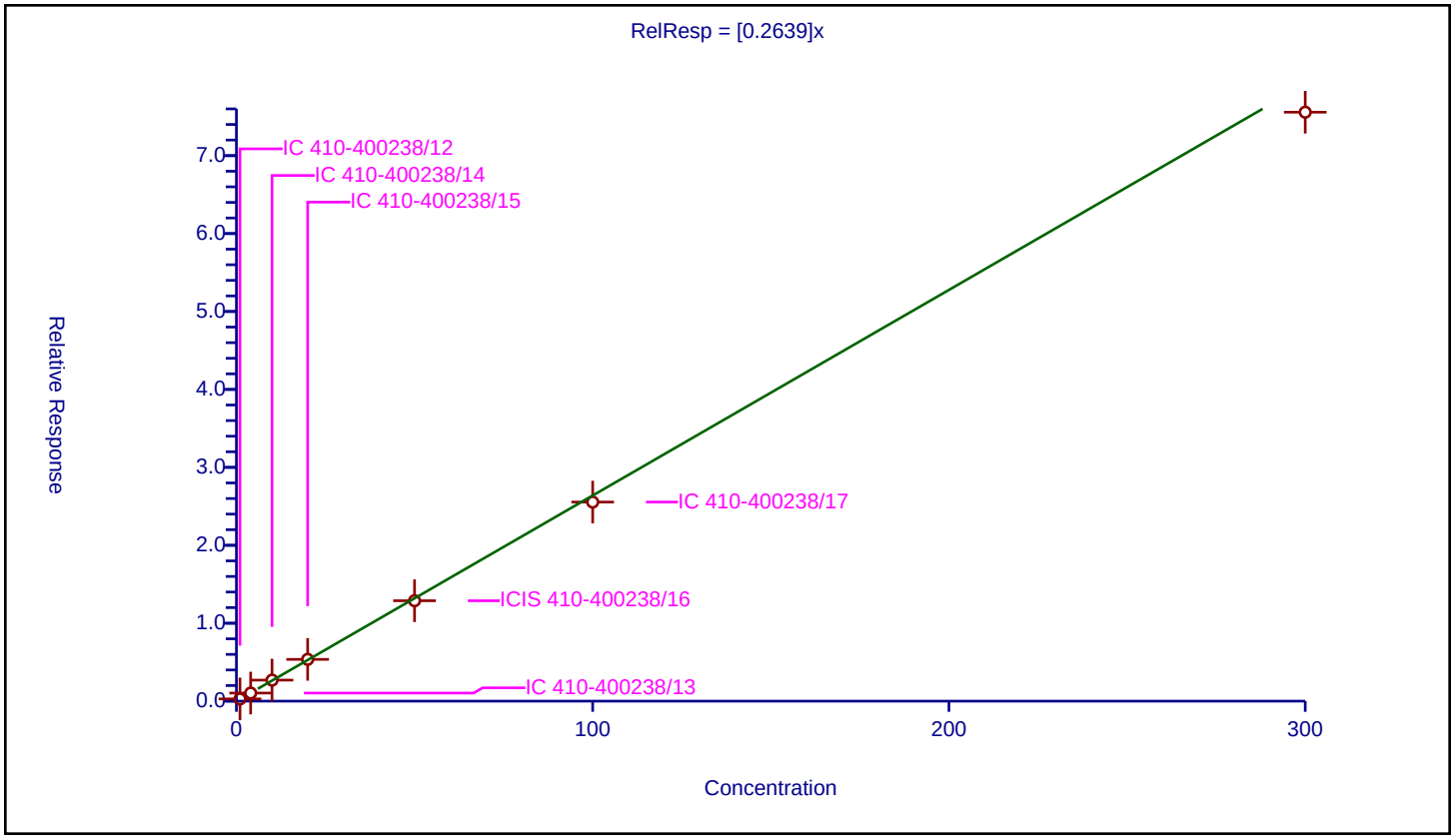
Curve Coefficients

Intercept:	0
Slope:	0.2639

Error Coefficients

Standard Error:	768000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.284216	50.0	1115702.0	0.284216	Y
2	IC 410-400238/13	4.0	1.038664	50.0	1093809.0	0.259666	Y
3	IC 410-400238/14	10.0	2.699414	50.0	1104258.0	0.269941	Y
4	IC 410-400238/15	20.0	5.361961	50.0	1105864.0	0.268098	Y
5	ICIS 410-400238/16	50.0	12.883321	50.0	1116591.0	0.257666	Y
6	IC 410-400238/17	100.0	25.547167	50.0	1134754.0	0.255472	Y
7	IC 410-400238/18	300.0	75.577256	50.0	1166034.0	0.251924	Y



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Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

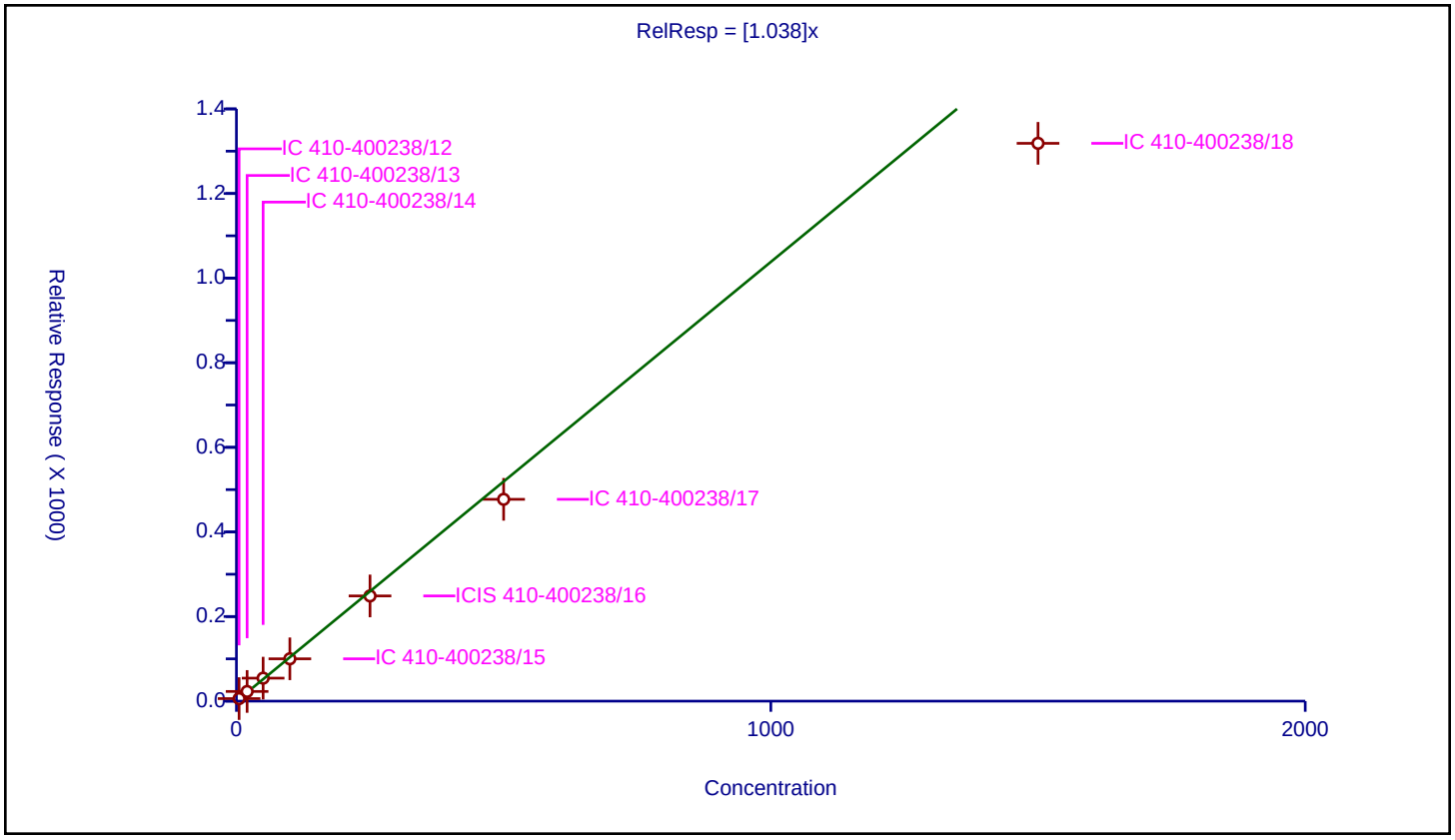
Curve Coefficients

Intercept:	0
Slope:	1.038

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	11.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	5.0	6.030421	250.0	602404.0	1.206084	Y
2	IC 410-400238/13	20.0	22.908973	250.0	597386.0	1.145449	Y
3	IC 410-400238/14	50.0	54.348946	250.0	592201.0	1.086979	Y
4	IC 410-400238/15	100.0	100.093581	250.0	603218.0	1.000936	Y
5	ICIS 410-400238/16	250.0	248.726598	250.0	602127.0	0.994906	Y
6	IC 410-400238/17	500.0	477.053046	250.0	618045.0	0.954106	Y
7	IC 410-400238/18	1500.0	1318.58252	250.0	644778.0	0.879055	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

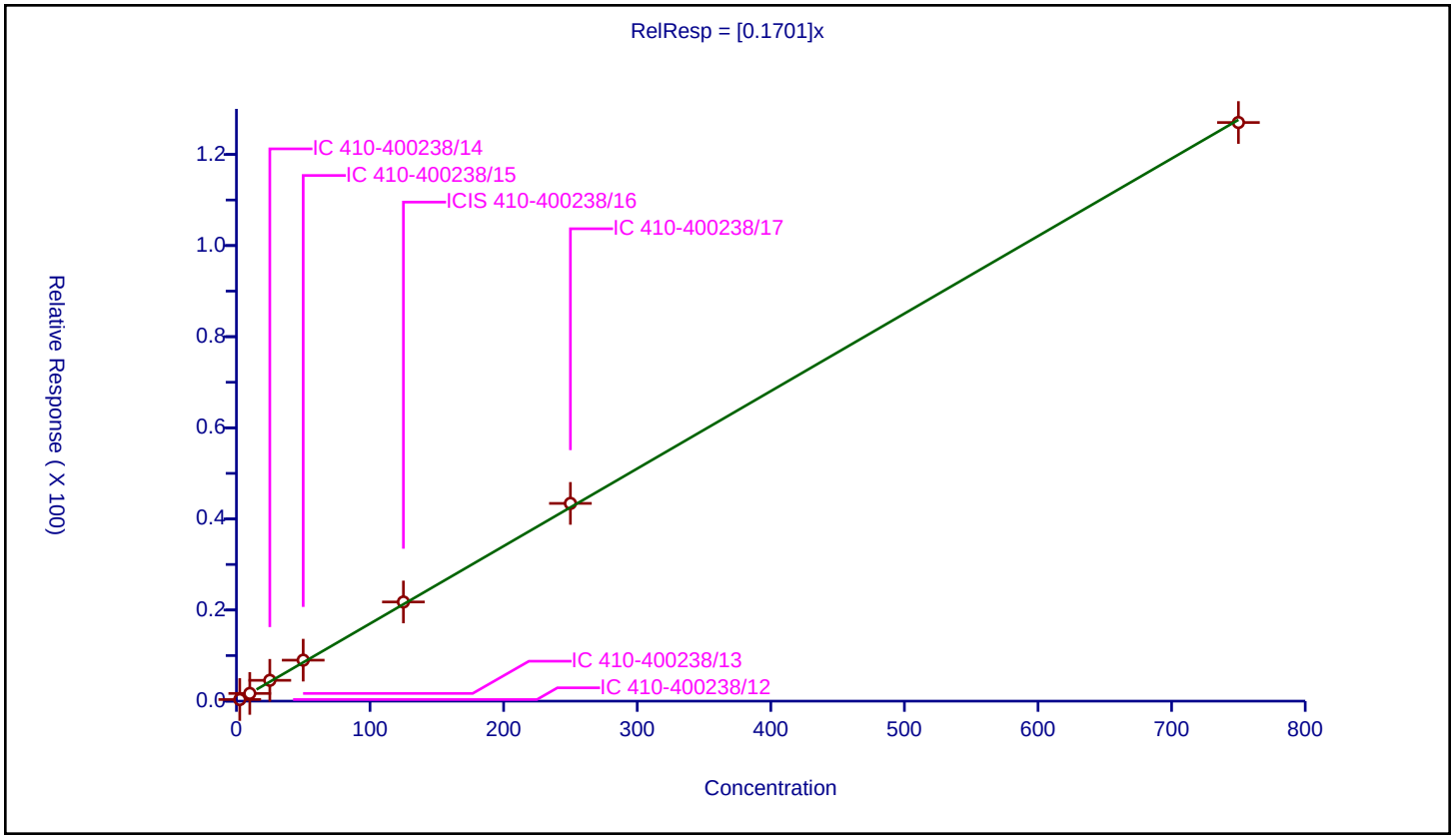
Curve Coefficients

Intercept:	0
Slope:	0.1701

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	8.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	2.5	0.354037	50.0	1115702.0	0.141615	Y
2	IC 410-400238/13	10.0	1.695177	50.0	1093809.0	0.169518	Y
3	IC 410-400238/14	25.0	4.570445	50.0	1104258.0	0.182818	Y
4	IC 410-400238/15	50.0	8.994054	50.0	1105864.0	0.179881	Y
5	ICIS 410-400238/16	125.0	21.768132	50.0	1116591.0	0.174145	Y
6	IC 410-400238/17	250.0	43.404562	50.0	1134754.0	0.173618	Y
7	IC 410-400238/18	750.0	127.014349	50.0	1166034.0	0.169352	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

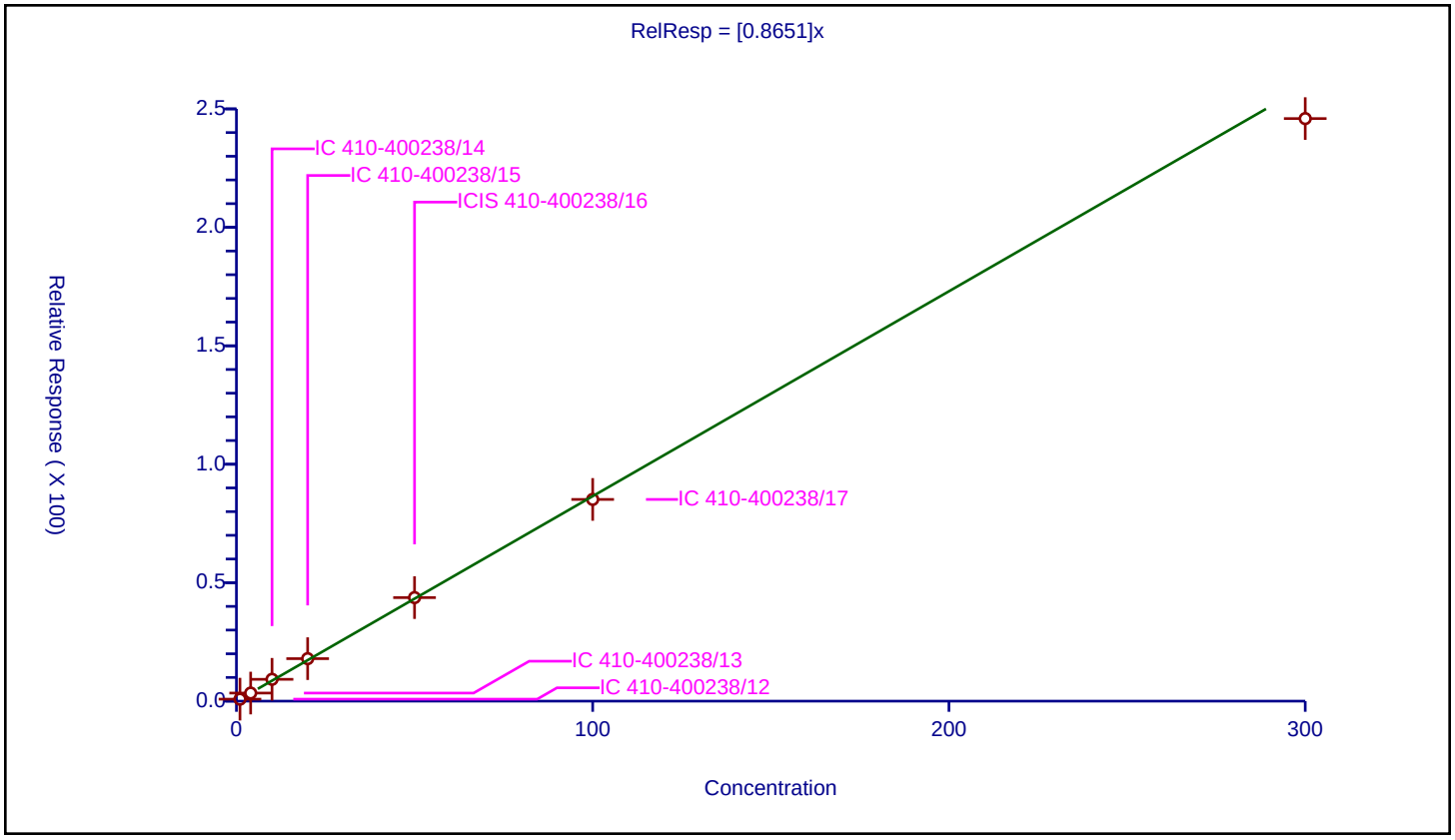
Curve Coefficients

Intercept:	0
Slope:	0.8651

Error Coefficients

Standard Error:	2510000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.838575	50.0	1115702.0	0.838575	Y
2	IC 410-400238/13	4.0	3.41225	50.0	1093809.0	0.853063	Y
3	IC 410-400238/14	10.0	9.218951	50.0	1104258.0	0.921895	Y
4	IC 410-400238/15	20.0	17.933534	50.0	1105864.0	0.896677	Y
5	ICIS 410-400238/16	50.0	43.701857	50.0	1116591.0	0.874037	Y
6	IC 410-400238/17	100.0	85.151495	50.0	1134754.0	0.851515	Y
7	IC 410-400238/18	300.0	245.905951	50.0	1166034.0	0.819687	Y



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Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

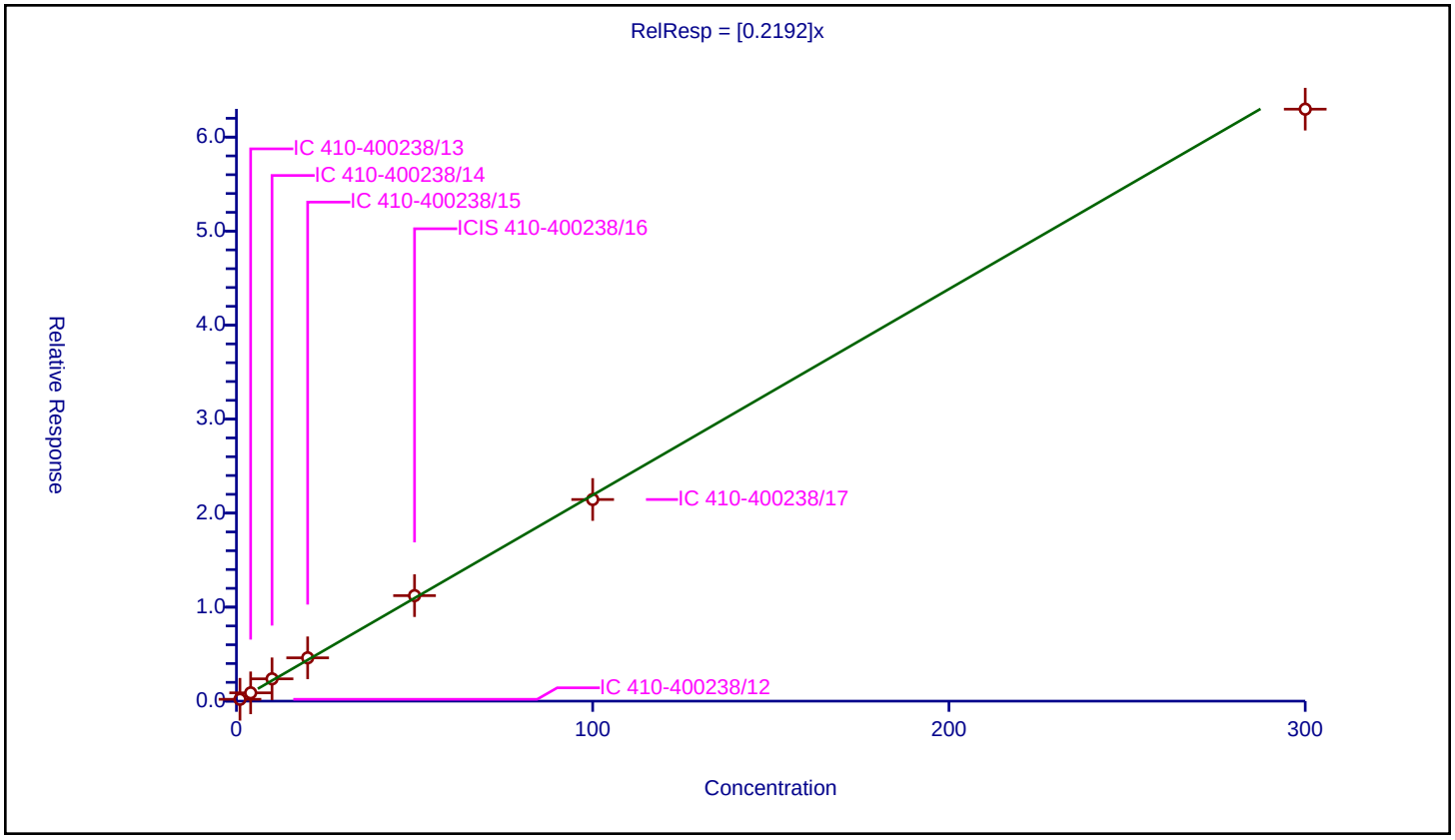
Curve Coefficients

Intercept:	0
Slope:	0.2192

Error Coefficients

Standard Error:	642000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.197006	50.0	1115702.0	0.197006	Y
2	IC 410-400238/13	4.0	0.882924	50.0	1093809.0	0.220731	Y
3	IC 410-400238/14	10.0	2.371683	50.0	1104258.0	0.237168	Y
4	IC 410-400238/15	20.0	4.607257	50.0	1105864.0	0.230363	Y
5	ICIS 410-400238/16	50.0	11.222641	50.0	1116591.0	0.224453	Y
6	IC 410-400238/17	100.0	21.448349	50.0	1134754.0	0.214483	Y
7	IC 410-400238/18	300.0	62.970677	50.0	1166034.0	0.209902	Y



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Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

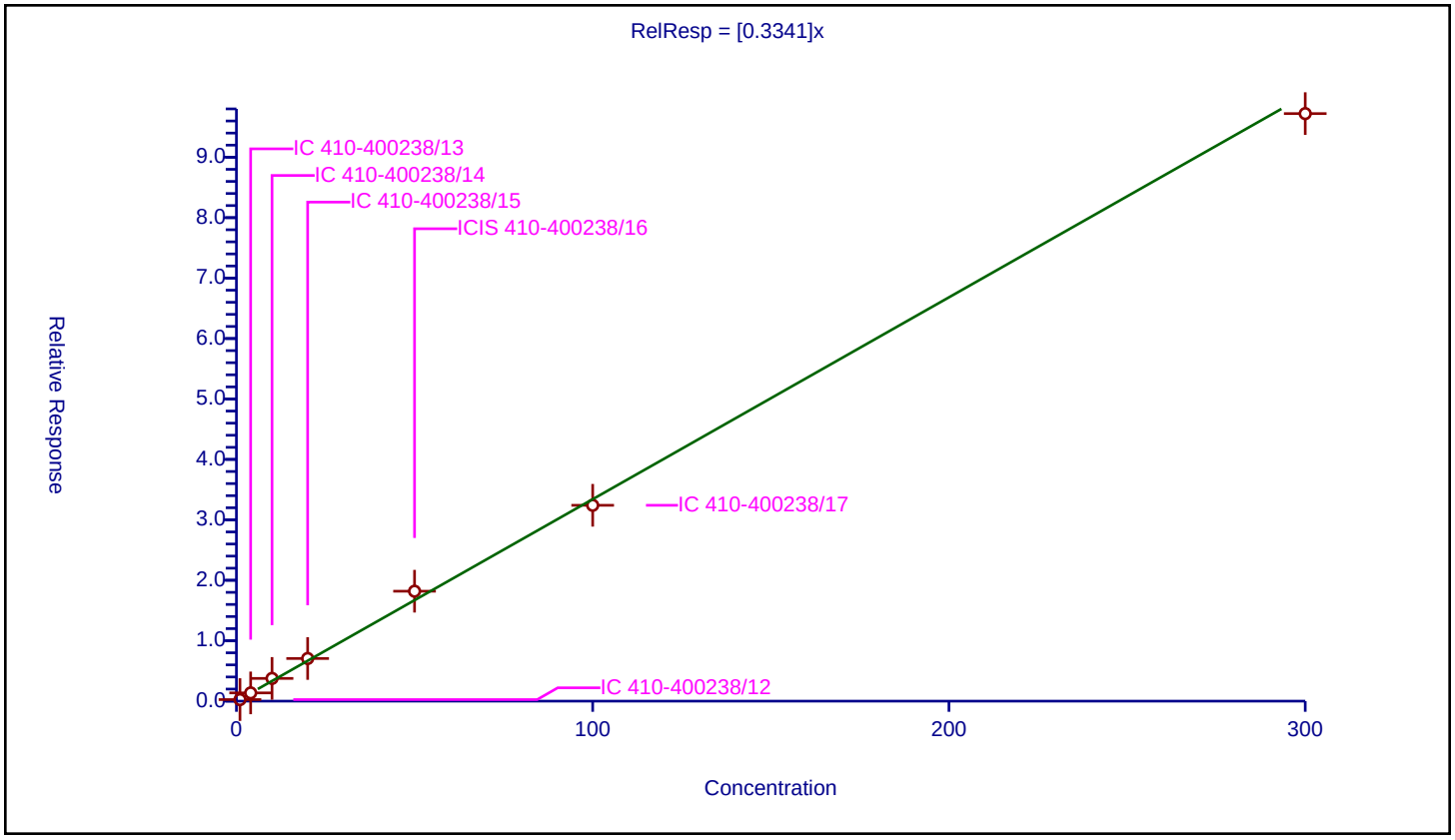
Curve Coefficients

Intercept:	0
Slope:	0.3341

Error Coefficients

Standard Error:	990000
Relative Standard Error:	11.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.256206	50.0	1115702.0	0.256206	Y
2	IC 410-400238/13	4.0	1.365686	50.0	1093809.0	0.341422	Y
3	IC 410-400238/14	10.0	3.762255	50.0	1104258.0	0.376225	Y
4	IC 410-400238/15	20.0	7.057785	50.0	1105864.0	0.352889	Y
5	ICIS 410-400238/16	50.0	18.190725	50.0	1116591.0	0.363815	Y
6	IC 410-400238/17	100.0	32.405922	50.0	1134754.0	0.324059	Y
7	IC 410-400238/18	300.0	97.219935	50.0	1166034.0	0.324066	Y



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Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

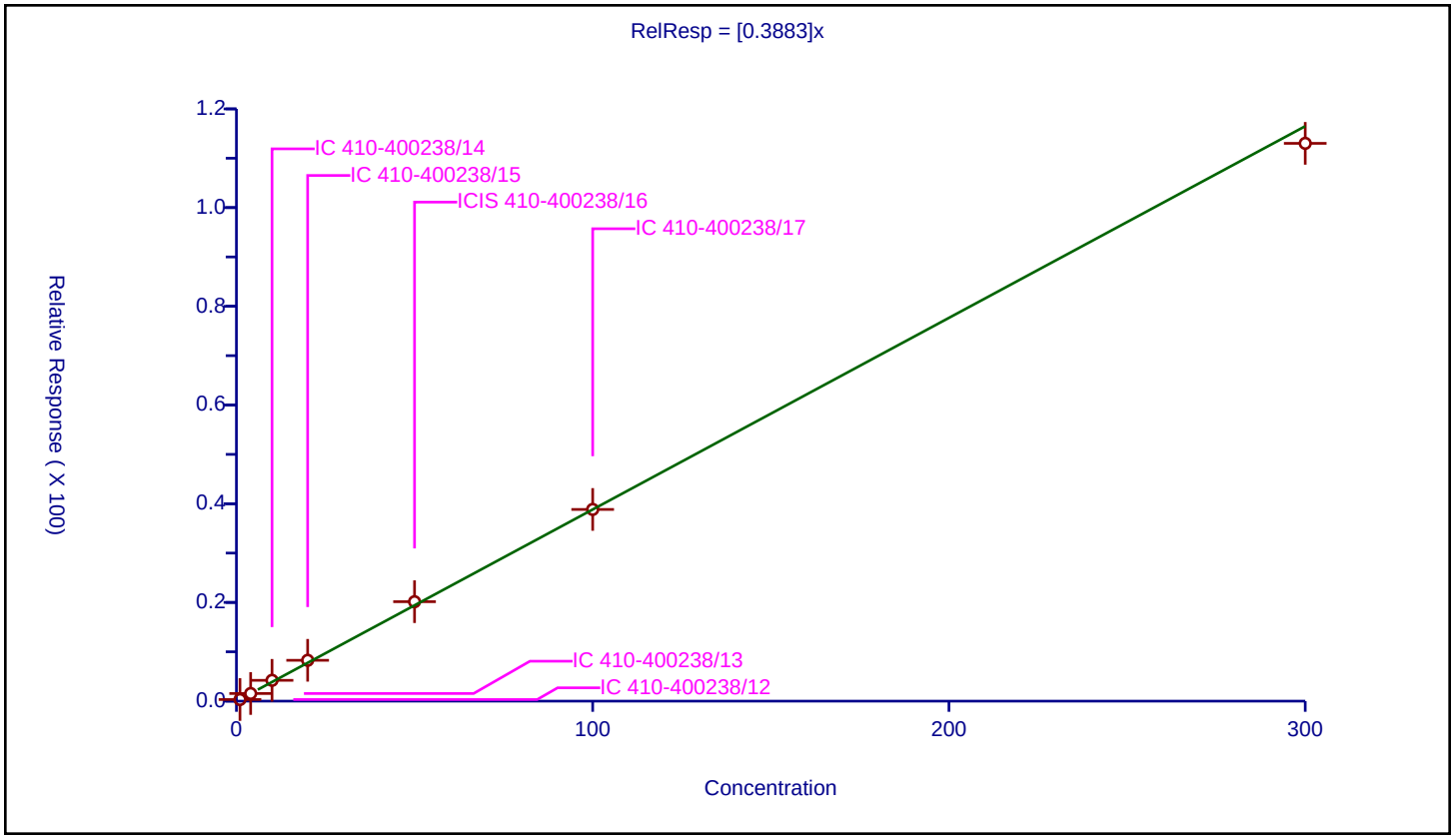
Curve Coefficients

Intercept:	0
Slope:	0.3883

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	8.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.32791	50.0	1115702.0	0.32791	Y
2	IC 410-400238/13	4.0	1.546248	50.0	1093809.0	0.386562	Y
3	IC 410-400238/14	10.0	4.216134	50.0	1104258.0	0.421613	Y
4	IC 410-400238/15	20.0	8.275566	50.0	1105864.0	0.413778	Y
5	ICIS 410-400238/16	50.0	20.150619	50.0	1116591.0	0.403012	Y
6	IC 410-400238/17	100.0	38.844014	50.0	1134754.0	0.38844	Y
7	IC 410-400238/18	300.0	113.01896	50.0	1166034.0	0.37673	Y



Calibration / Isopropyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

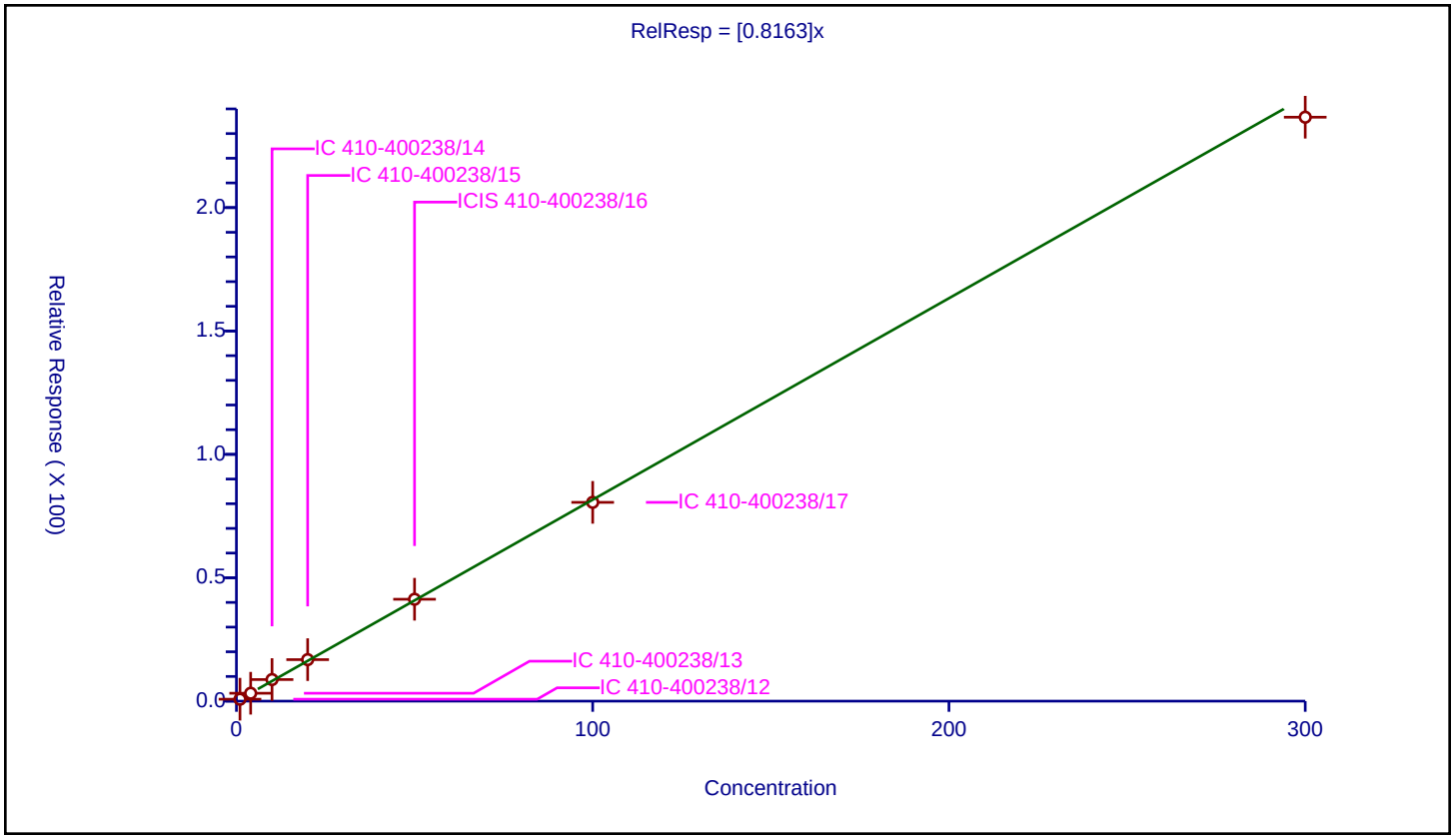
Curve Coefficients

Intercept:	0
Slope:	0.8163

Error Coefficients

Standard Error:	2410000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.778658	50.0	1115702.0	0.778658	Y
2	IC 410-400238/13	4.0	3.198273	50.0	1093809.0	0.799568	Y
3	IC 410-400238/14	10.0	8.746959	50.0	1104258.0	0.874696	Y
4	IC 410-400238/15	20.0	16.823362	50.0	1105864.0	0.841168	Y
5	ICIS 410-400238/16	50.0	41.285215	50.0	1116591.0	0.825704	Y
6	IC 410-400238/17	100.0	80.554904	50.0	1134754.0	0.805549	Y
7	IC 410-400238/18	300.0	236.634481	50.0	1166034.0	0.788782	Y



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Calibration / 2-Chloro-1,3-butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

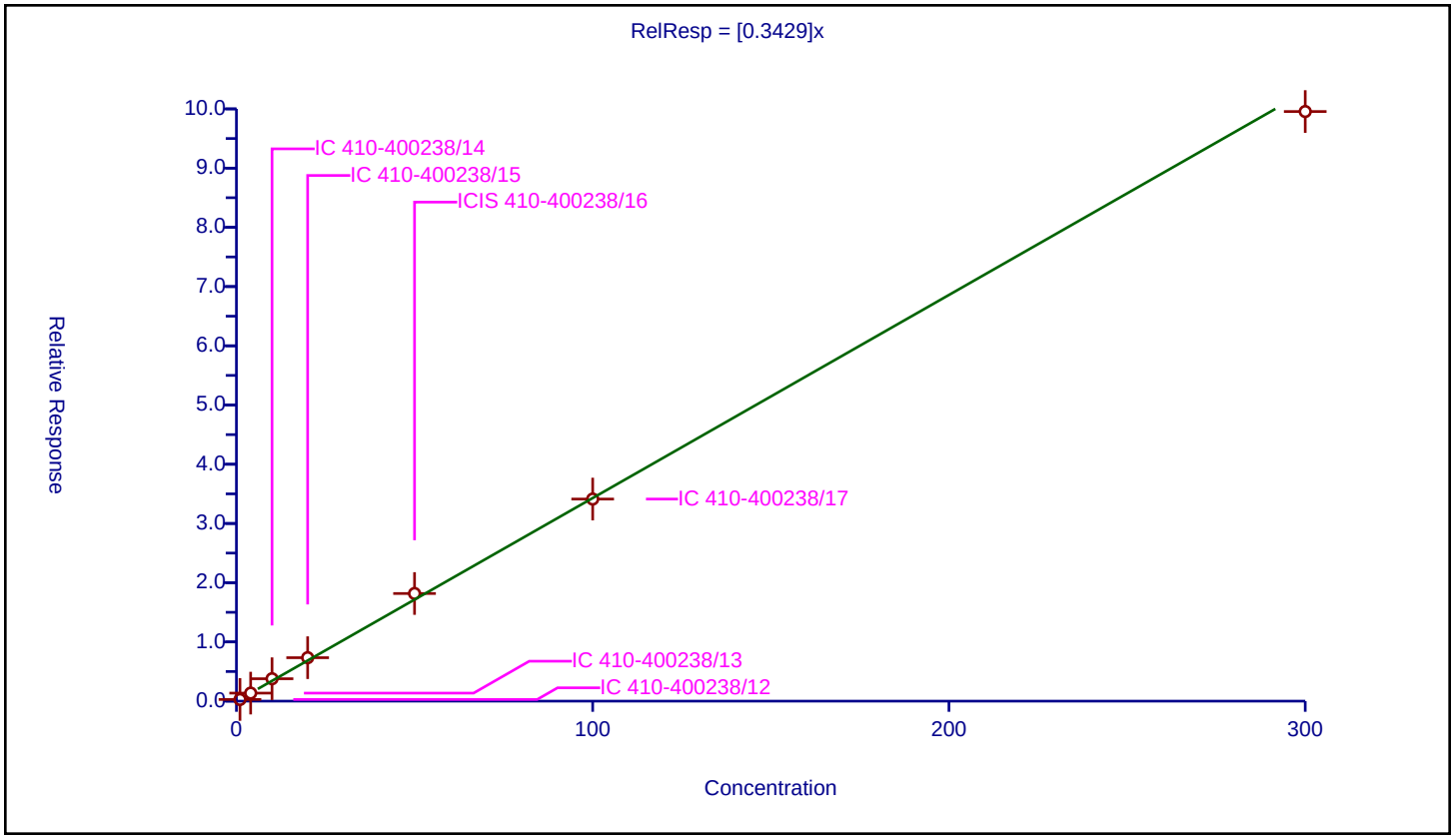
Curve Coefficients

Intercept:	0
Slope:	0.3429

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	9.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.279689	50.0	1115702.0	0.279689	Y
2	IC 410-400238/13	4.0	1.356544	50.0	1093809.0	0.339136	Y
3	IC 410-400238/14	10.0	3.782585	50.0	1104258.0	0.378259	Y
4	IC 410-400238/15	20.0	7.336345	50.0	1105864.0	0.366817	Y
5	ICIS 410-400238/16	50.0	18.173664	50.0	1116591.0	0.363473	Y
6	IC 410-400238/17	100.0	34.12114	50.0	1134754.0	0.341211	Y
7	IC 410-400238/18	300.0	99.554558	50.0	1166034.0	0.331849	Y



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Calibration / Tert-butyl ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

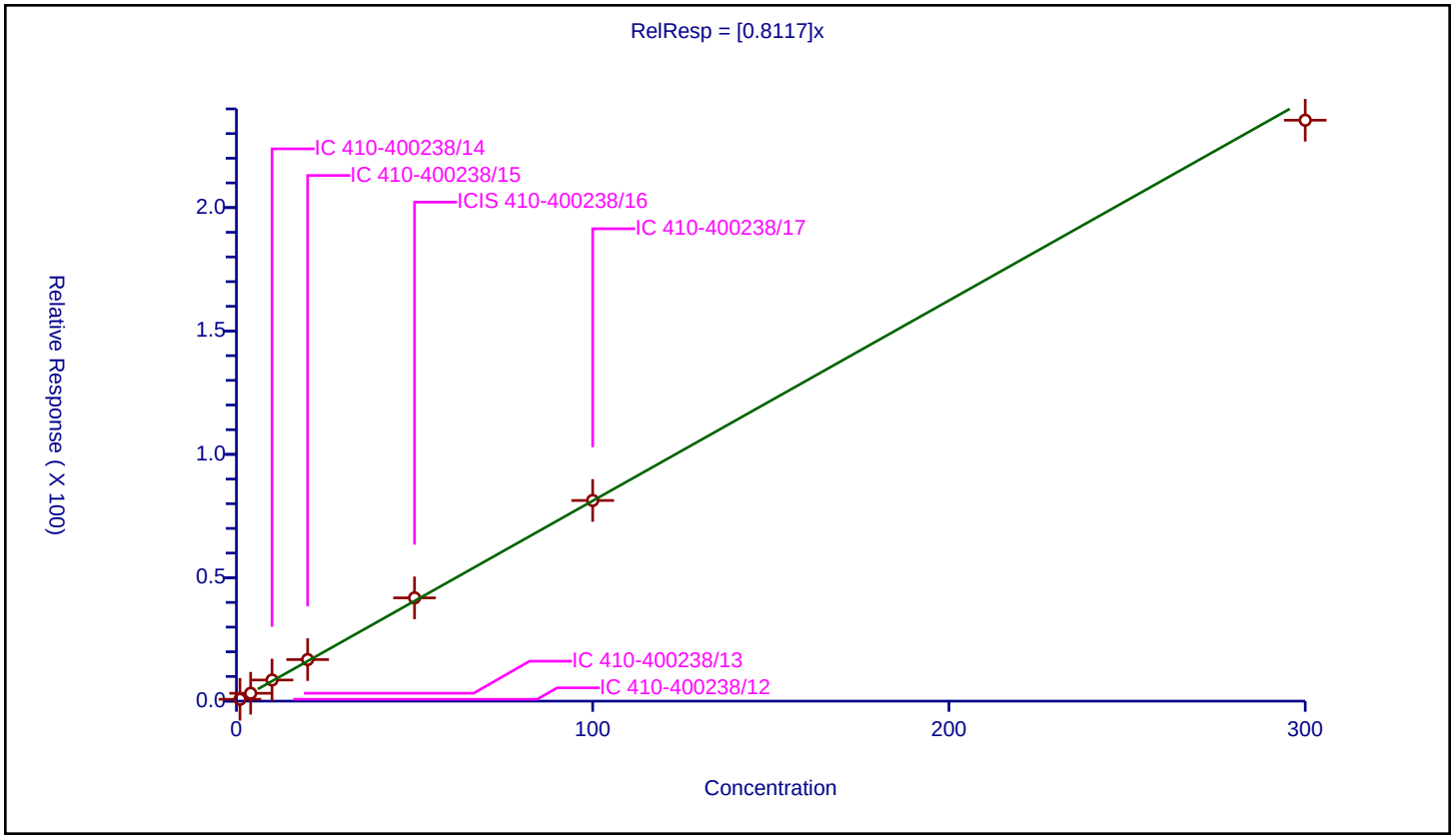
Curve Coefficients

Intercept:	0
Slope:	0.8117

Error Coefficients

Standard Error:	2400000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.751769	50.0	1115702.0	0.751769	Y
2	IC 410-400238/13	4.0	3.189497	50.0	1093809.0	0.797374	Y
3	IC 410-400238/14	10.0	8.560364	50.0	1104258.0	0.856036	Y
4	IC 410-400238/15	20.0	16.840814	50.0	1105864.0	0.842041	Y
5	ICIS 410-400238/16	50.0	41.848851	50.0	1116591.0	0.836977	Y
6	IC 410-400238/17	100.0	81.322912	50.0	1134754.0	0.813229	Y
7	IC 410-400238/18	300.0	235.409473	50.0	1166034.0	0.784698	Y



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Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

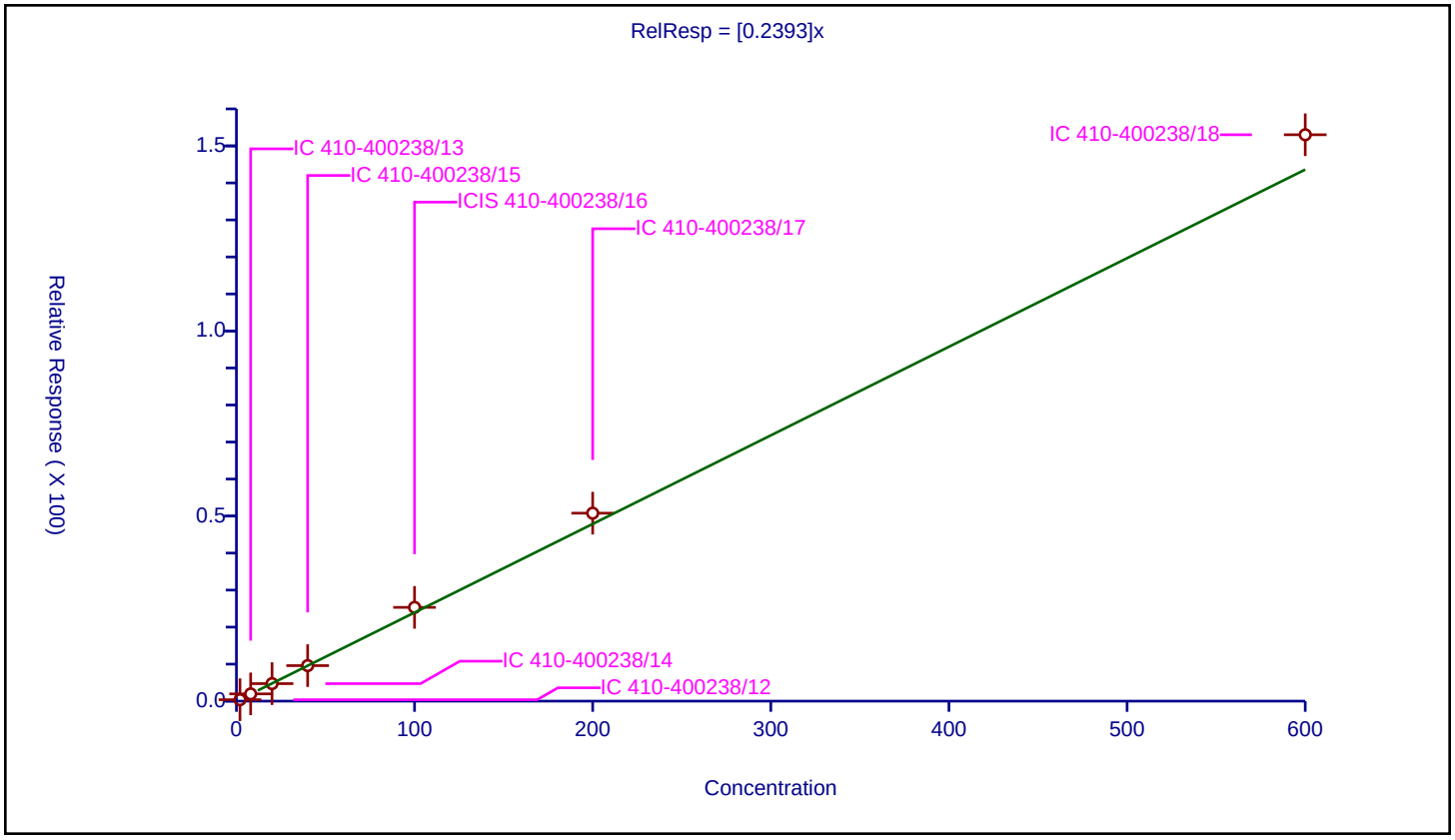
Curve Coefficients

Intercept:	0
Slope:	0.2393

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	2.0	0.383705	50.0	1115702.0	0.191852	Y
2	IC 410-400238/13	8.0	1.957746	50.0	1093809.0	0.244718	Y
3	IC 410-400238/14	20.0	4.733676	50.0	1104258.0	0.236684	Y
4	IC 410-400238/15	40.0	9.594986	50.0	1105864.0	0.239875	Y
5	ICIS 410-400238/16	100.0	25.332239	50.0	1116591.0	0.253322	Y
6	IC 410-400238/17	200.0	50.779244	50.0	1134754.0	0.253896	Y
7	IC 410-400238/18	600.0	153.013849	50.0	1166034.0	0.255023	Y



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Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

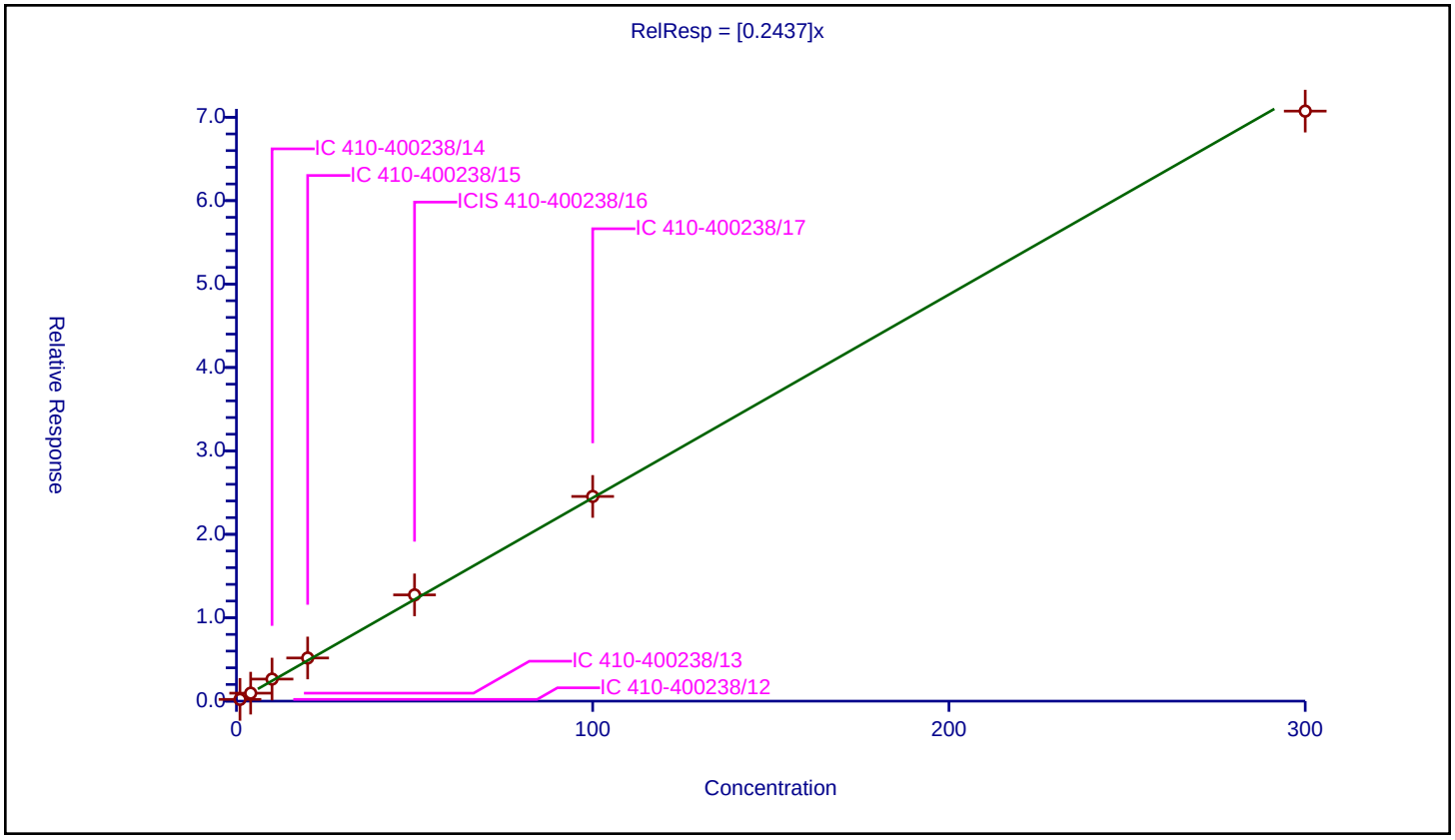
Curve Coefficients

Intercept:	0
Slope:	0.2437

Error Coefficients

Standard Error:	722000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.207627	50.0	1115702.0	0.207627	Y
2	IC 410-400238/13	4.0	0.956383	50.0	1093809.0	0.239096	Y
3	IC 410-400238/14	10.0	2.64517	50.0	1104258.0	0.264517	Y
4	IC 410-400238/15	20.0	5.17428	50.0	1105864.0	0.258714	Y
5	ICIS 410-400238/16	50.0	12.738908	50.0	1116591.0	0.254778	Y
6	IC 410-400238/17	100.0	24.538799	50.0	1134754.0	0.245388	Y
7	IC 410-400238/18	300.0	70.735073	50.0	1166034.0	0.235784	Y



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Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

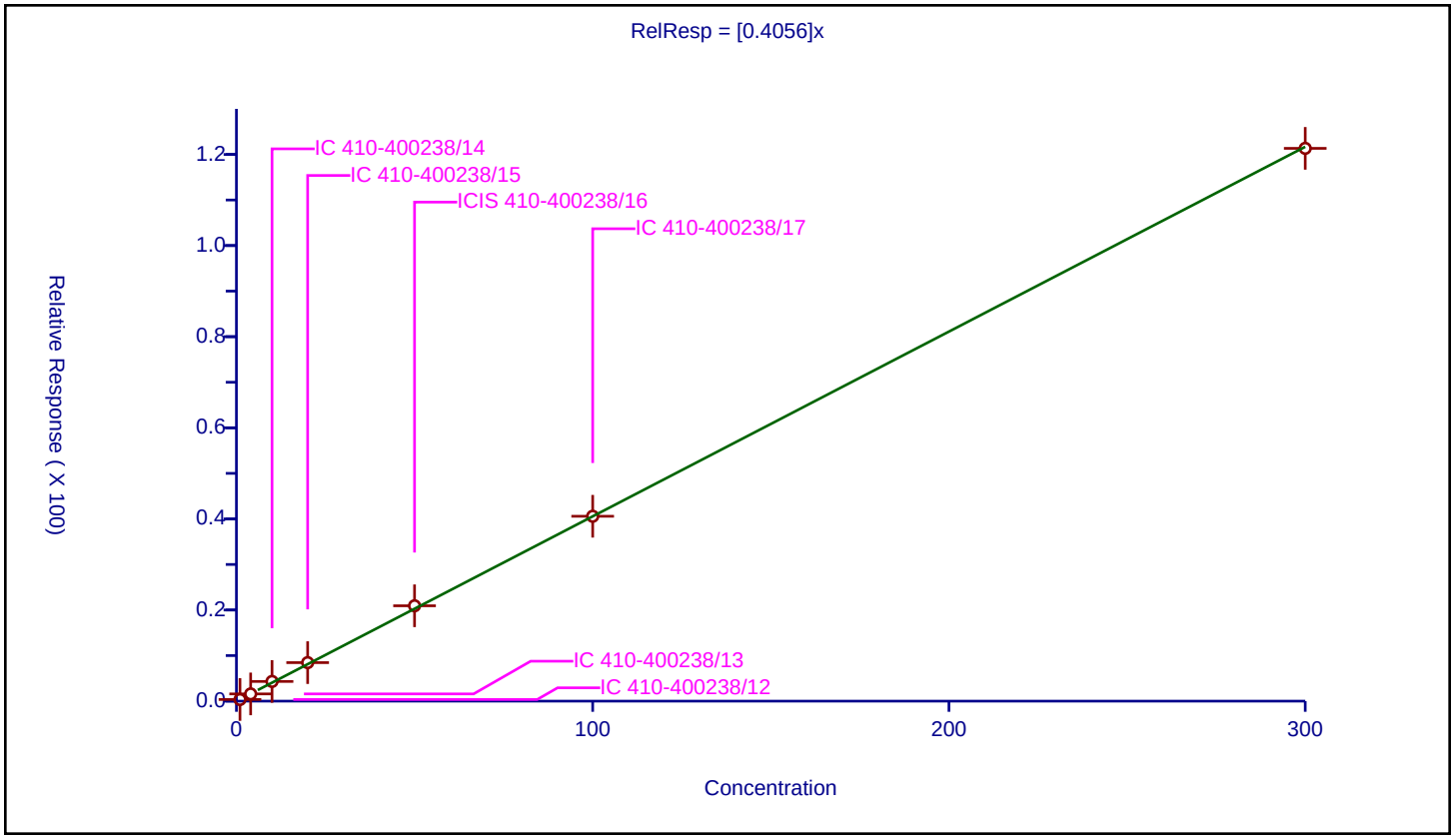
Curve Coefficients

Intercept:	0
Slope:	0.4056

Error Coefficients

Standard Error:	1230000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.358608	50.0	1115702.0	0.358608	Y
2	IC 410-400238/13	4.0	1.585332	50.0	1093809.0	0.396333	Y
3	IC 410-400238/14	10.0	4.325846	50.0	1104258.0	0.432585	Y
4	IC 410-400238/15	20.0	8.454249	50.0	1105864.0	0.422712	Y
5	ICIS 410-400238/16	50.0	20.932463	50.0	1116591.0	0.418649	Y
6	IC 410-400238/17	100.0	40.582584	50.0	1134754.0	0.405826	Y
7	IC 410-400238/18	300.0	121.337886	50.0	1166034.0	0.40446	Y



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Calibration / Propionitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

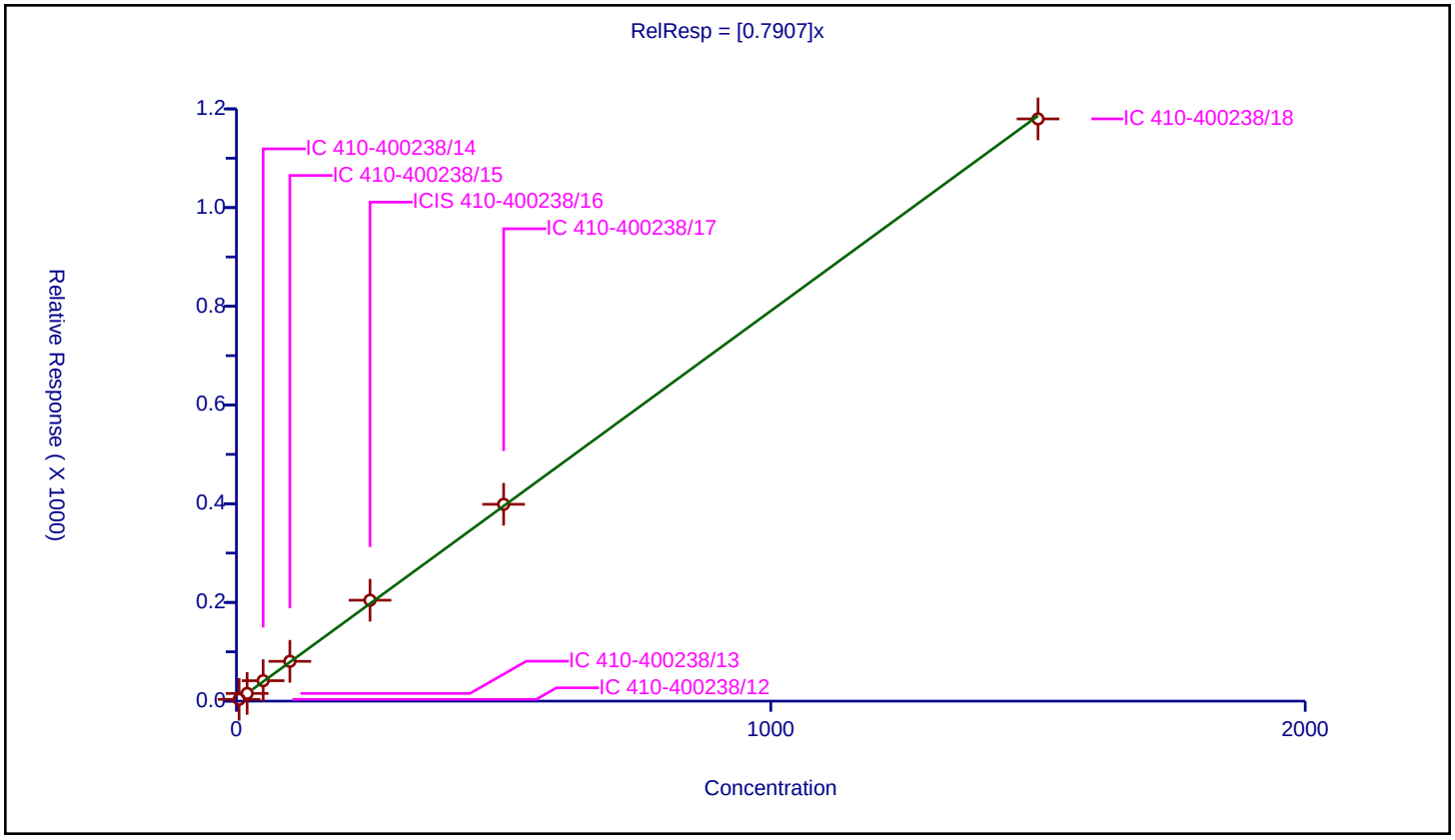
Curve Coefficients

Intercept:	0
Slope:	0.7907

Error Coefficients

Standard Error:	1320000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	5.0	3.586464	250.0	602404.0	0.717293	Y
2	IC 410-400238/13	20.0	15.621391	250.0	597386.0	0.78107	Y
3	IC 410-400238/14	50.0	41.394729	250.0	592201.0	0.827895	Y
4	IC 410-400238/15	100.0	80.654506	250.0	603218.0	0.806545	Y
5	ICIS 410-400238/16	250.0	204.484685	250.0	602127.0	0.817939	Y
6	IC 410-400238/17	500.0	398.828564	250.0	618045.0	0.797657	Y
7	IC 410-400238/18	1500.0	1179.700222	250.0	644778.0	0.786467	Y



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Calibration / Methacrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

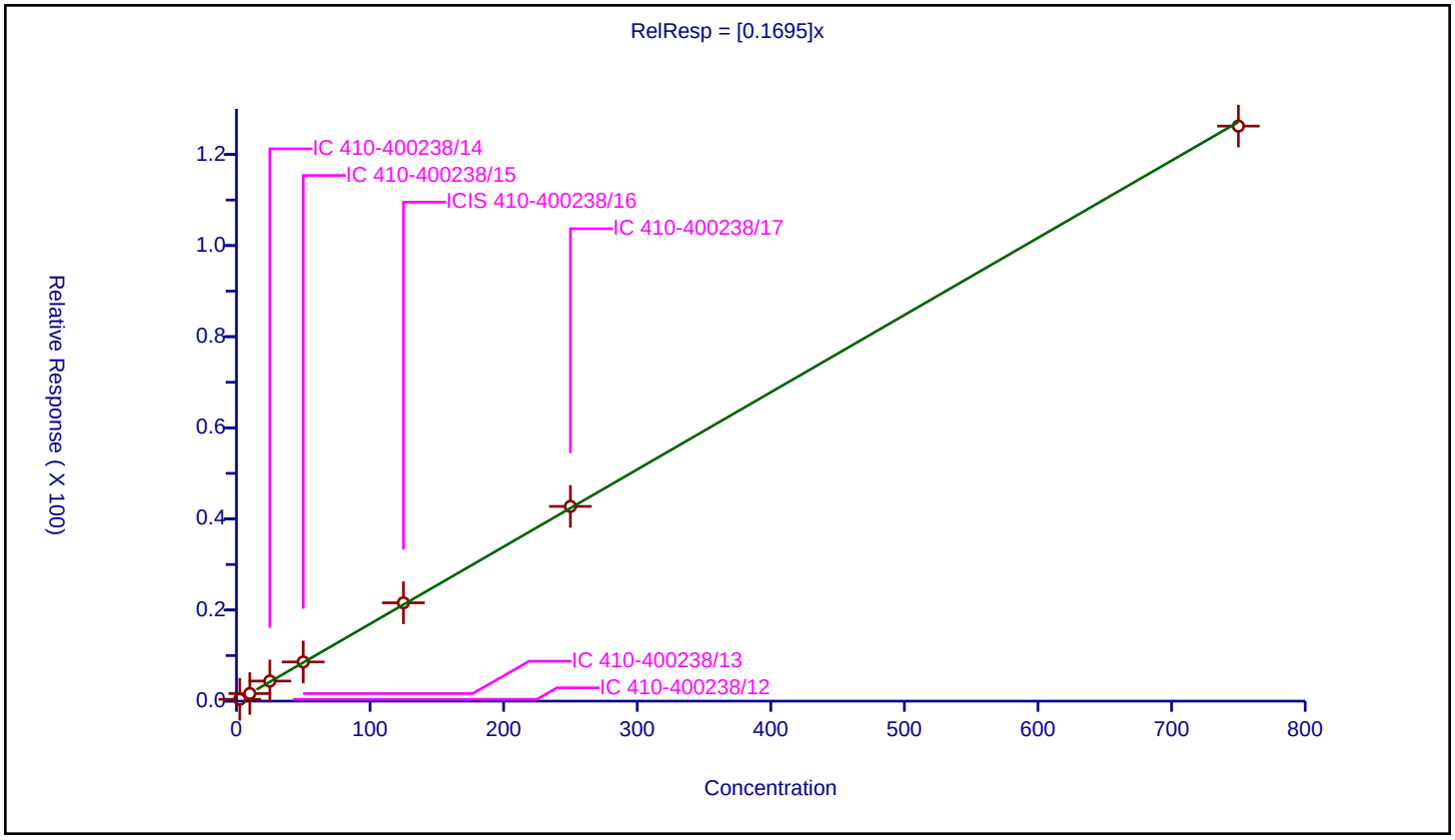
Curve Coefficients

Intercept:	0
Slope:	0.1695

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	2.5	0.399255	50.0	1115702.0	0.159702	Y
2	IC 410-400238/13	10.0	1.663773	50.0	1093809.0	0.166377	Y
3	IC 410-400238/14	25.0	4.411424	50.0	1104258.0	0.176457	Y
4	IC 410-400238/15	50.0	8.597802	50.0	1105864.0	0.171956	Y
5	ICIS 410-400238/16	125.0	21.589463	50.0	1116591.0	0.172716	Y
6	IC 410-400238/17	250.0	42.743758	50.0	1134754.0	0.170975	Y
7	IC 410-400238/18	750.0	126.228309	50.0	1166034.0	0.168304	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

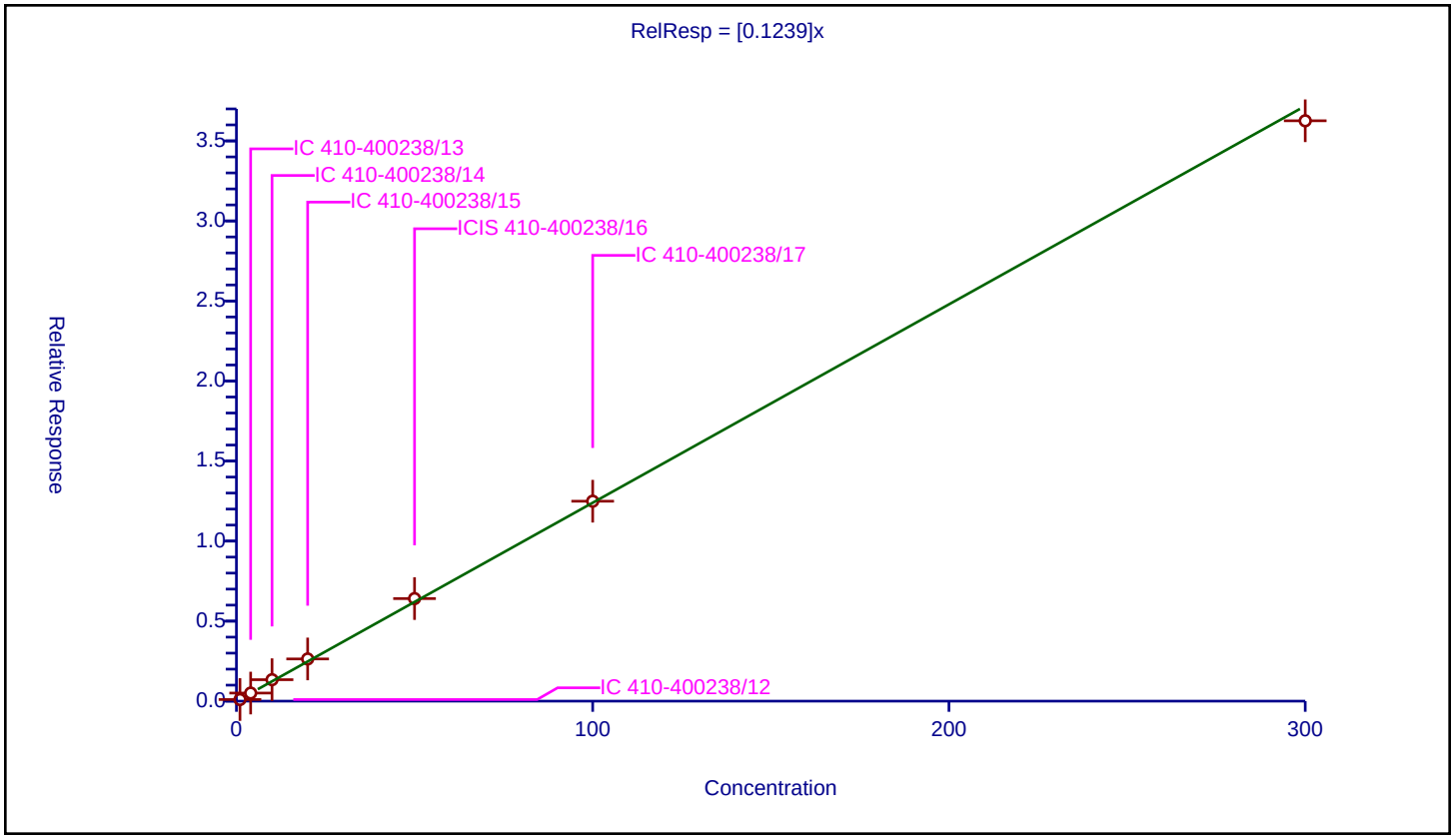
Curve Coefficients

Intercept:	0
Slope:	0.1239

Error Coefficients

Standard Error:	370000
Relative Standard Error:	8.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.101416	50.0	1115702.0	0.101416	Y
2	IC 410-400238/13	4.0	0.505527	50.0	1093809.0	0.126382	Y
3	IC 410-400238/14	10.0	1.340855	50.0	1104258.0	0.134086	Y
4	IC 410-400238/15	20.0	2.636174	50.0	1105864.0	0.131809	Y
5	ICIS 410-400238/16	50.0	6.40736	50.0	1116591.0	0.128147	Y
6	IC 410-400238/17	100.0	12.491033	50.0	1134754.0	0.12491	Y
7	IC 410-400238/18	300.0	36.257047	50.0	1166034.0	0.120857	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

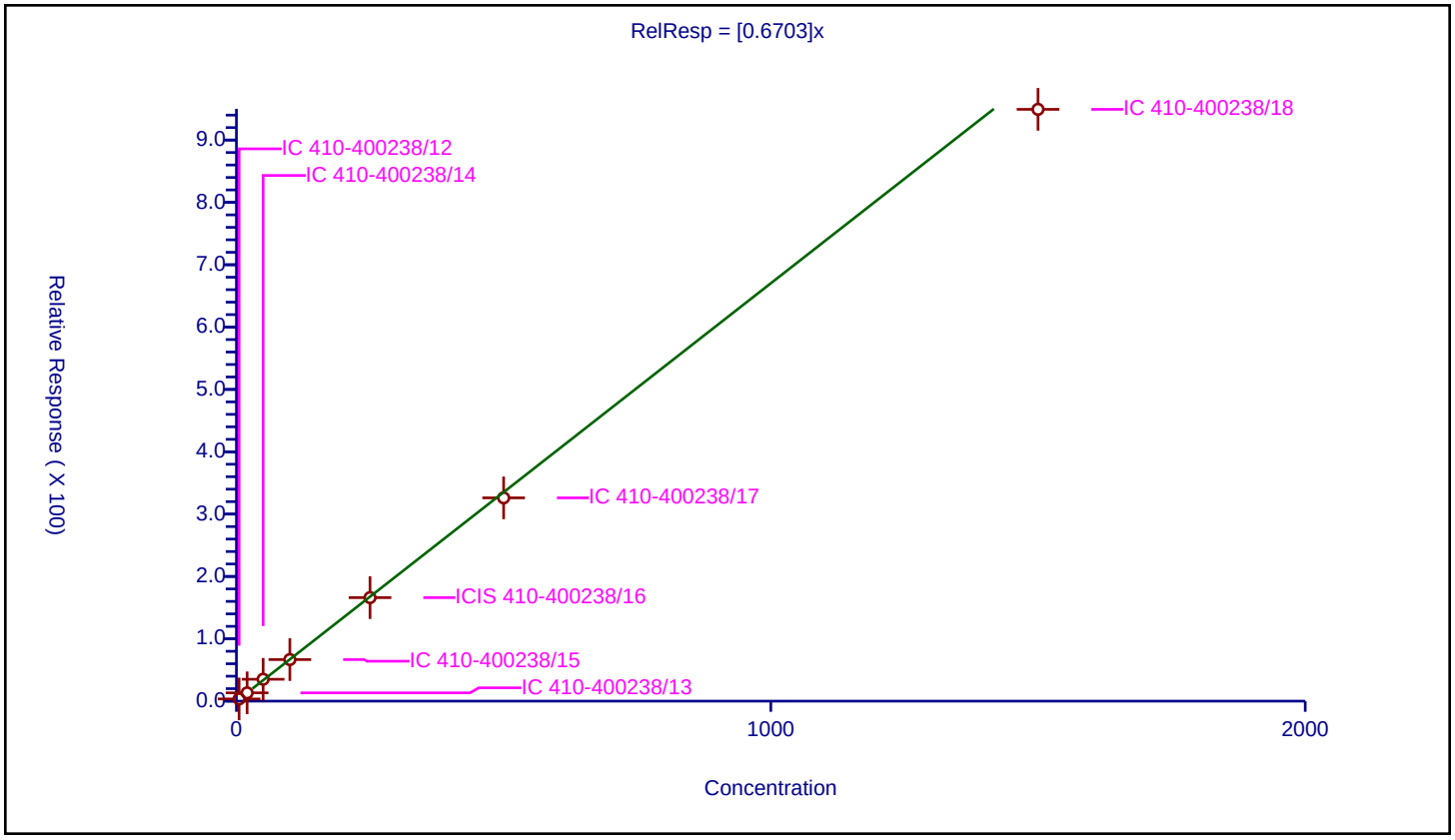
Curve Coefficients

Intercept:	0
Slope:	0.6703

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	5.0	3.539568	250.0	602404.0	0.707914	Y
2	IC 410-400238/13	20.0	13.318859	250.0	597386.0	0.665943	Y
3	IC 410-400238/14	50.0	35.090704	250.0	592201.0	0.701814	Y
4	IC 410-400238/15	100.0	66.685676	250.0	603218.0	0.666857	Y
5	ICIS 410-400238/16	250.0	166.058406	250.0	602127.0	0.664234	Y
6	IC 410-400238/17	500.0	326.086693	250.0	618045.0	0.652173	Y
7	IC 410-400238/18	1500.0	949.256954	250.0	644778.0	0.632838	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

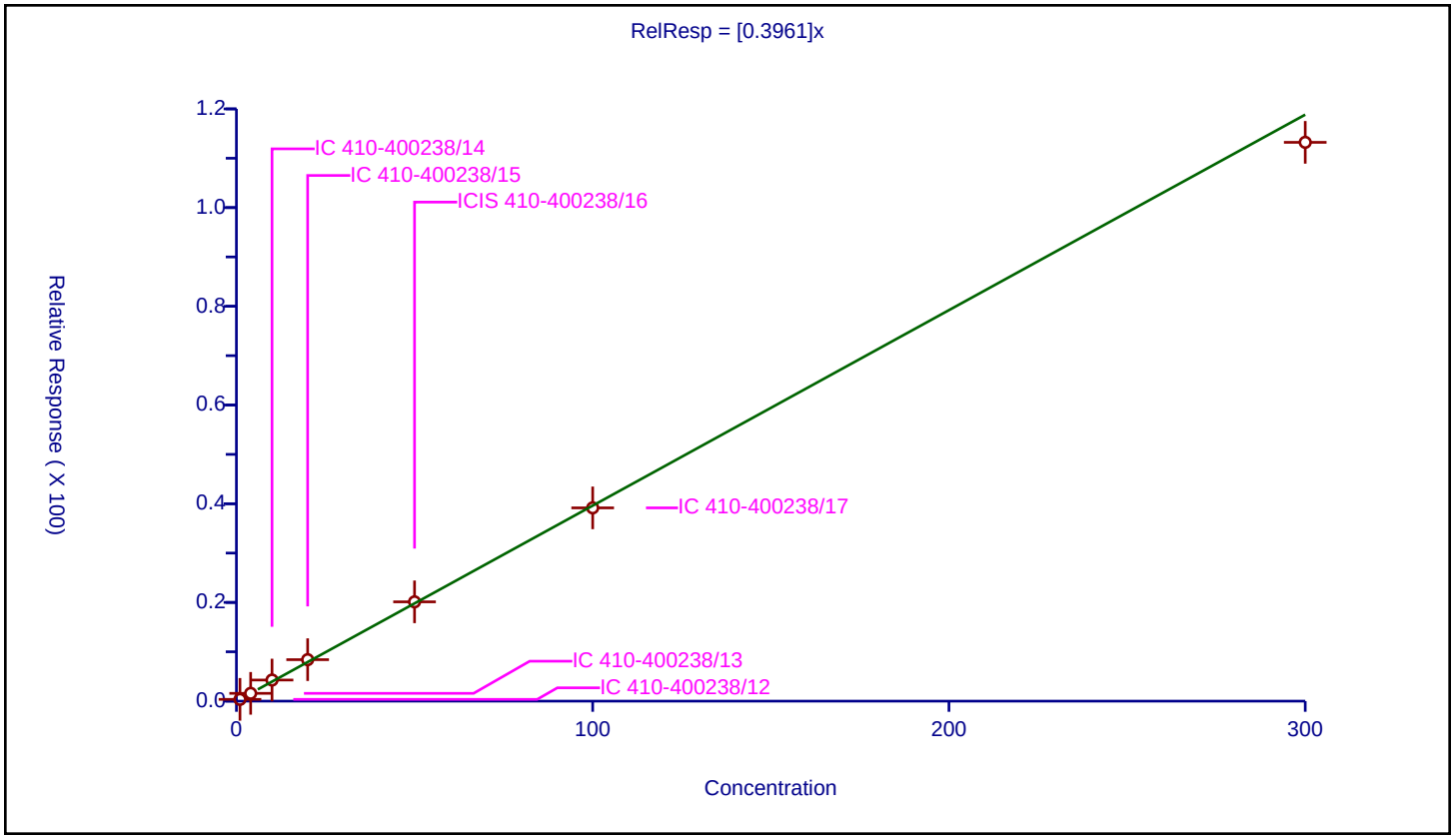
Curve Coefficients

Intercept:	0
Slope:	0.3961

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.35825	50.0	1115702.0	0.35825	Y
2	IC 410-400238/13	4.0	1.579298	50.0	1093809.0	0.394824	Y
3	IC 410-400238/14	10.0	4.278937	50.0	1104258.0	0.427894	Y
4	IC 410-400238/15	20.0	8.407634	50.0	1105864.0	0.420382	Y
5	ICIS 410-400238/16	50.0	20.118513	50.0	1116591.0	0.40237	Y
6	IC 410-400238/17	100.0	39.158311	50.0	1134754.0	0.391583	Y
7	IC 410-400238/18	300.0	113.223199	50.0	1166034.0	0.377411	Y



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Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

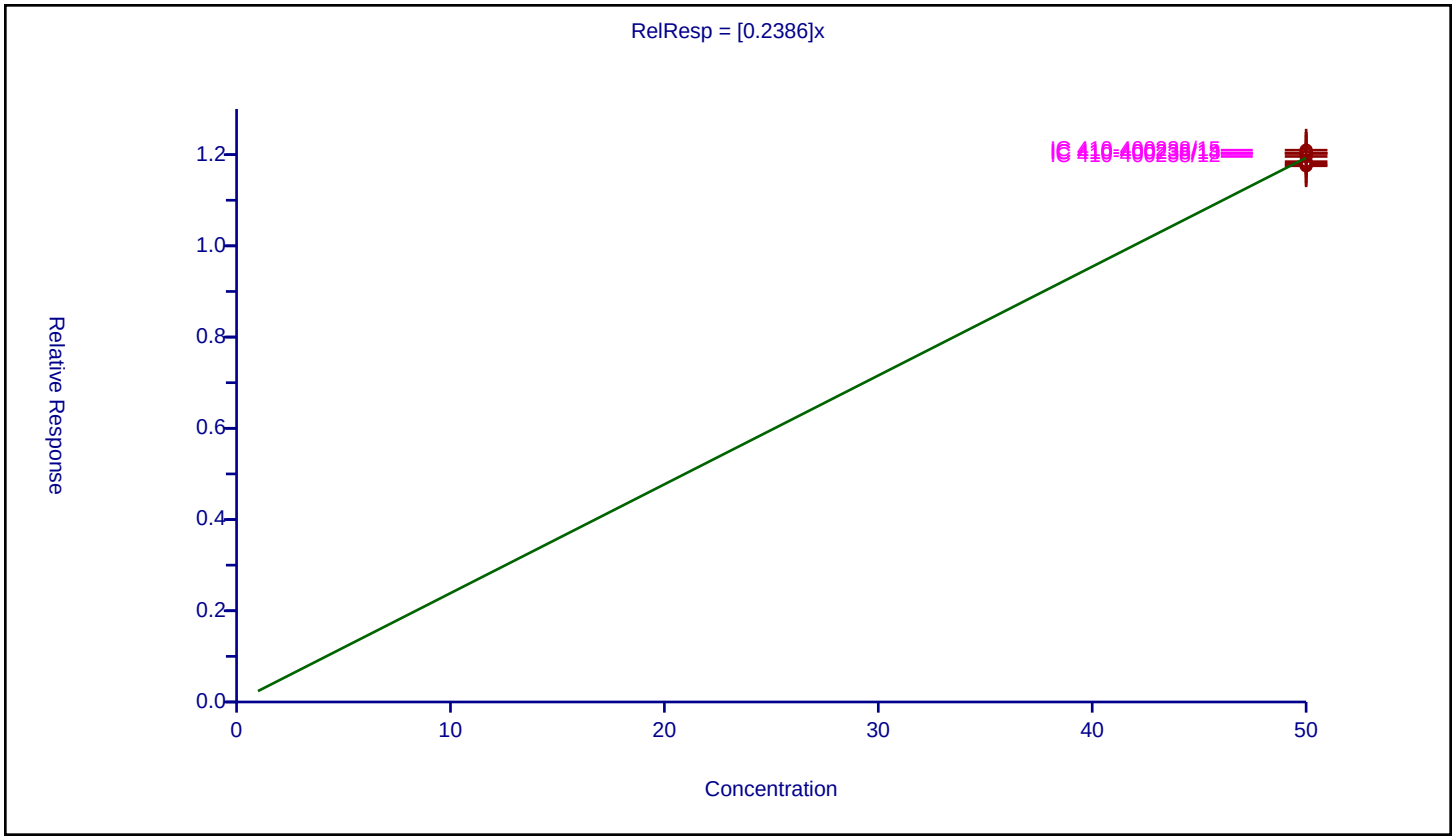
Curve Coefficients

Intercept:	0
Slope:	0.2386

Error Coefficients

Standard Error:	288000
Relative Standard Error:	1.1
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	50.0	11.960004	50.0	1115702.0	0.2392	Y
2	IC 410-400238/13	50.0	12.02902	50.0	1093809.0	0.24058	Y
3	IC 410-400238/14	50.0	12.027805	50.0	1104258.0	0.240556	Y
4	IC 410-400238/15	50.0	12.097283	50.0	1105864.0	0.241946	Y
5	ICIS 410-400238/16	50.0	11.845877	50.0	1116591.0	0.236918	Y
6	IC 410-400238/17	50.0	11.790882	50.0	1134754.0	0.235818	Y
7	IC 410-400238/18	50.0	11.755618	50.0	1166034.0	0.235112	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

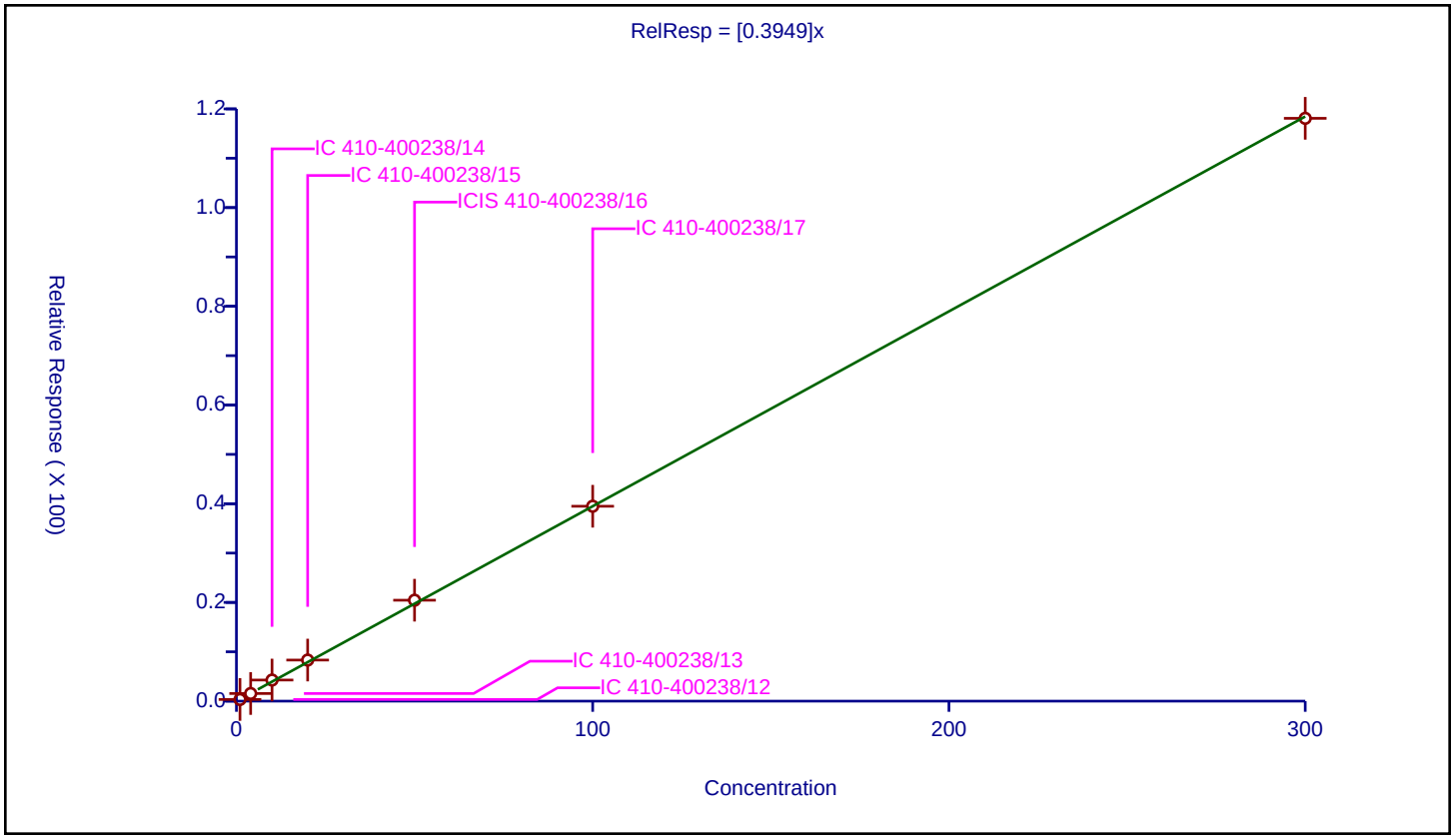
Curve Coefficients

Intercept:	0
Slope:	0.3949

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.335529	50.0	1115702.0	0.335529	Y
2	IC 410-400238/13	4.0	1.547985	50.0	1093809.0	0.386996	Y
3	IC 410-400238/14	10.0	4.275631	50.0	1104258.0	0.427563	Y
4	IC 410-400238/15	20.0	8.326747	50.0	1105864.0	0.416337	Y
5	ICIS 410-400238/16	50.0	20.451804	50.0	1116591.0	0.409036	Y
6	IC 410-400238/17	100.0	39.491379	50.0	1134754.0	0.394914	Y
7	IC 410-400238/18	300.0	118.087594	50.0	1166034.0	0.393625	Y



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Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

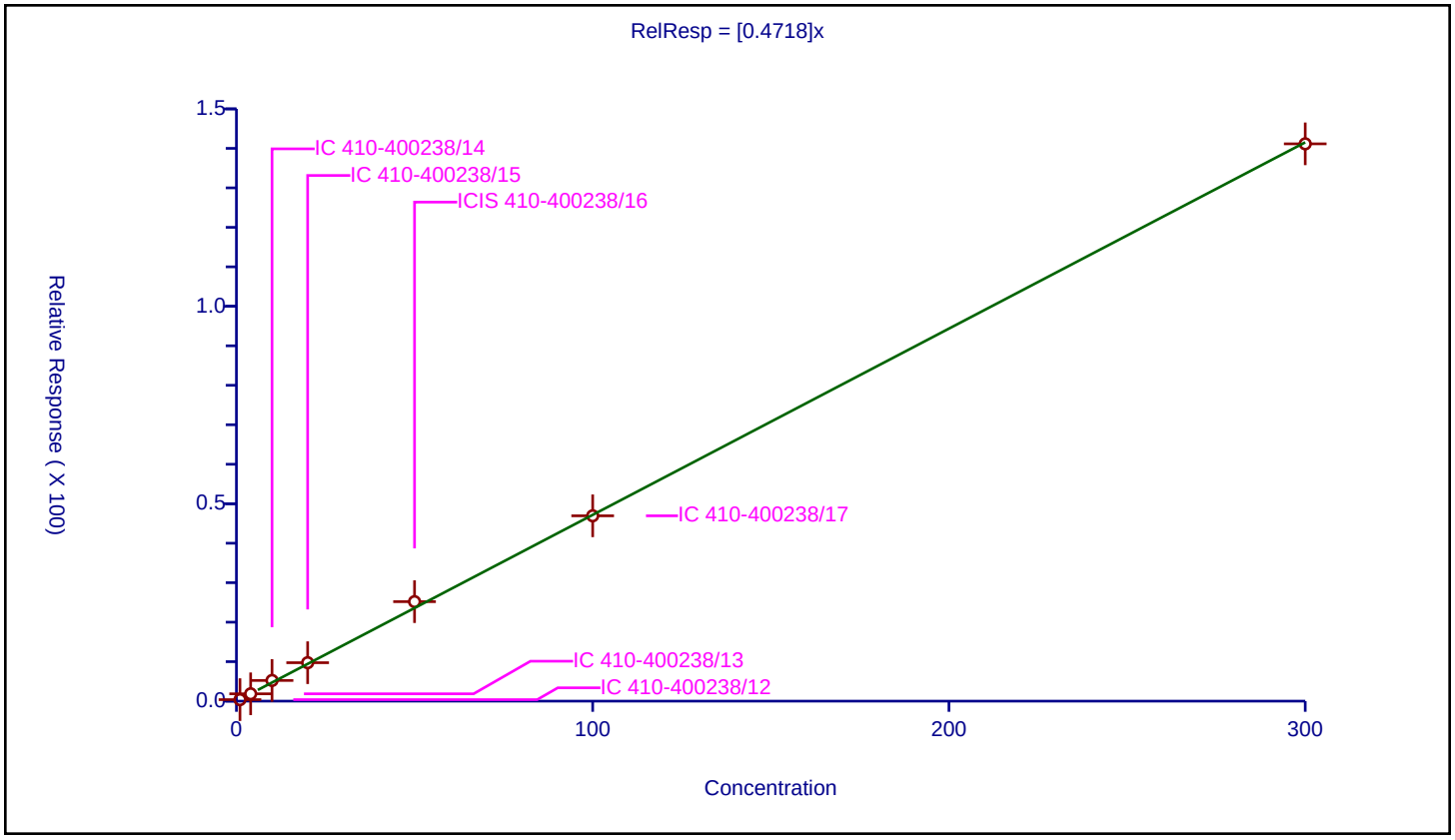
Curve Coefficients

Intercept:	0
Slope:	0.4718

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.383167	50.0	1115702.0	0.383167	Y
2	IC 410-400238/13	4.0	1.859603	50.0	1093809.0	0.464901	Y
3	IC 410-400238/14	10.0	5.236367	50.0	1104258.0	0.523637	Y
4	IC 410-400238/15	20.0	9.735646	50.0	1105864.0	0.486782	Y
5	ICIS 410-400238/16	50.0	25.195797	50.0	1116591.0	0.503916	Y
6	IC 410-400238/17	100.0	46.939601	50.0	1134754.0	0.469396	Y
7	IC 410-400238/18	300.0	141.146999	50.0	1166034.0	0.47049	Y



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Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

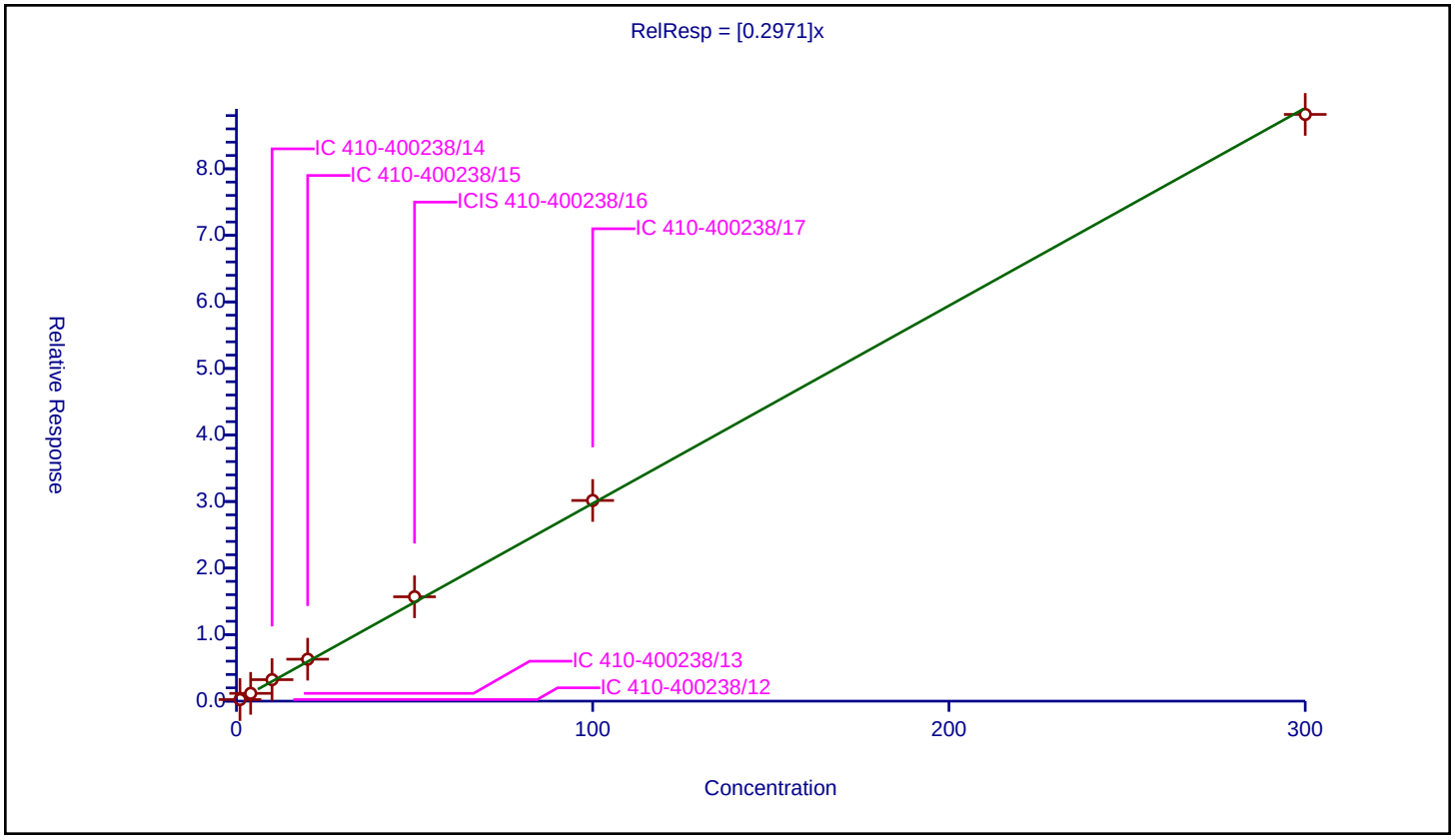
Curve Coefficients

Intercept:	0
Slope:	0.2971

Error Coefficients

Standard Error:	899000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.239625	50.0	1115702.0	0.239625	Y
2	IC 410-400238/13	4.0	1.171731	50.0	1093809.0	0.292933	Y
3	IC 410-400238/14	10.0	3.229454	50.0	1104258.0	0.322945	Y
4	IC 410-400238/15	20.0	6.301543	50.0	1105864.0	0.315077	Y
5	ICIS 410-400238/16	50.0	15.683988	50.0	1116591.0	0.31368	Y
6	IC 410-400238/17	100.0	30.158166	50.0	1134754.0	0.301582	Y
7	IC 410-400238/18	300.0	88.170499	50.0	1166034.0	0.293902	Y



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11:12 AM

Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

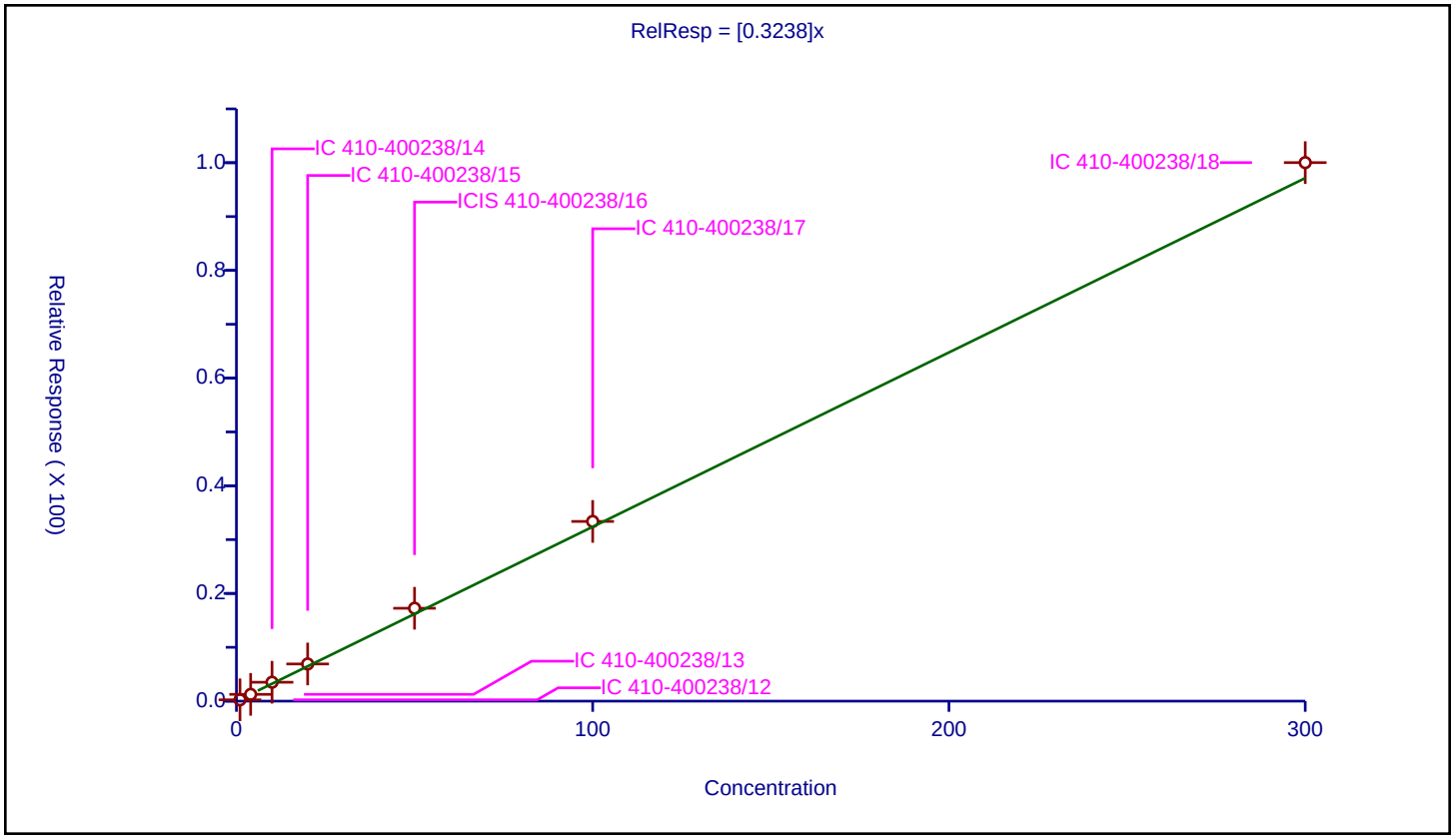
Curve Coefficients

Intercept:	0
Slope:	0.3238

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	11.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.244196	50.0	1115702.0	0.244196	Y
2	IC 410-400238/13	4.0	1.256892	50.0	1093809.0	0.314223	Y
3	IC 410-400238/14	10.0	3.510502	50.0	1104258.0	0.35105	Y
4	IC 410-400238/15	20.0	6.901527	50.0	1105864.0	0.345076	Y
5	ICIS 410-400238/16	50.0	17.250363	50.0	1116591.0	0.345007	Y
6	IC 410-400238/17	100.0	33.376794	50.0	1134754.0	0.333768	Y
7	IC 410-400238/18	300.0	100.022126	50.0	1166034.0	0.333407	Y



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11:12 AM

Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

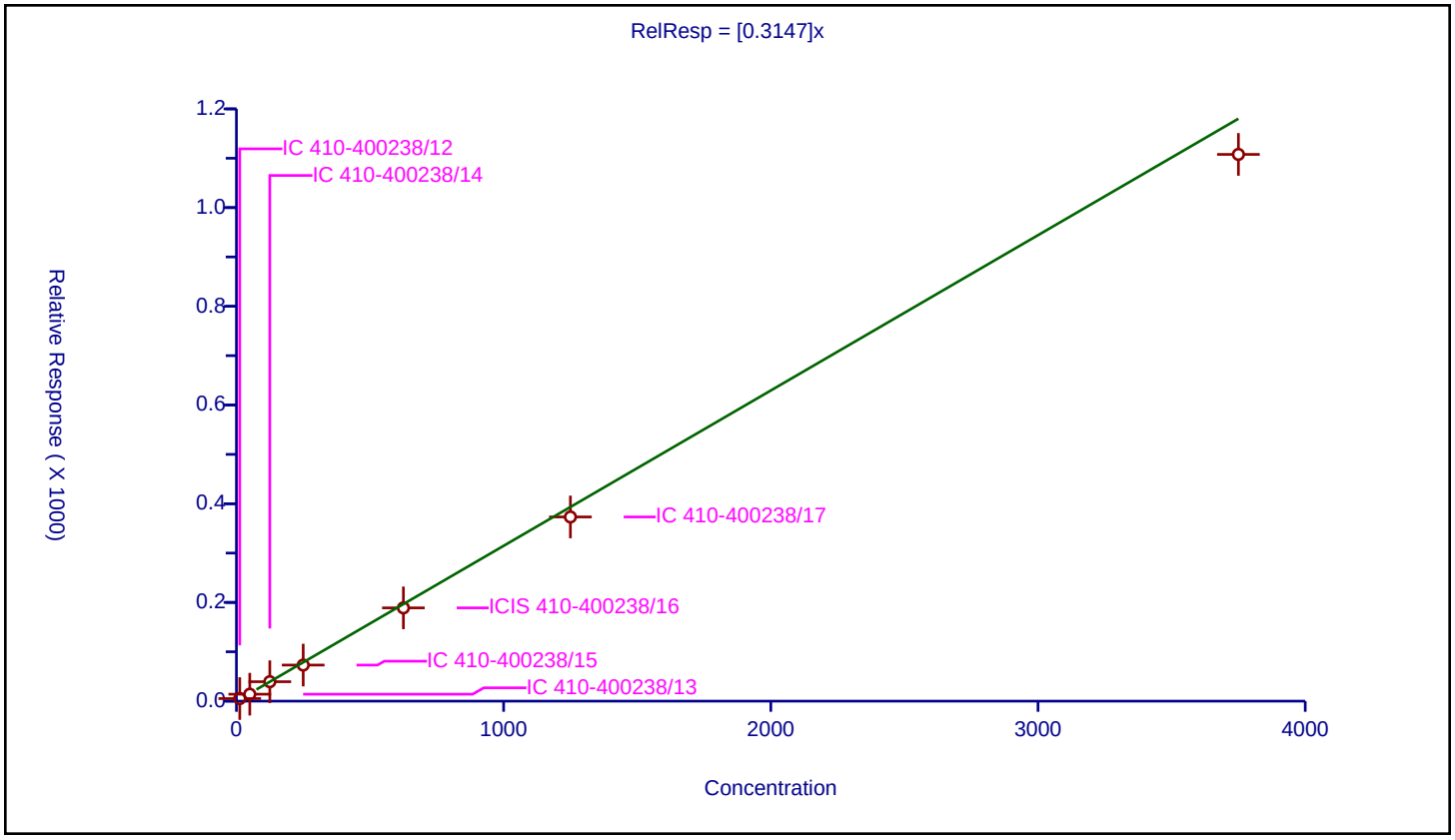
Curve Coefficients

Intercept:	0
Slope:	0.3147

Error Coefficients

Standard Error:	1240000
Relative Standard Error:	14.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	12.5	5.221994	250.0	602404.0	0.41776	Y
2	IC 410-400238/13	50.0	14.073396	250.0	597386.0	0.281468	Y
3	IC 410-400238/14	125.0	39.381055	250.0	592201.0	0.315048	Y
4	IC 410-400238/15	250.0	73.096708	250.0	603218.0	0.292387	Y
5	ICIS 410-400238/16	625.0	188.965949	250.0	602127.0	0.302346	Y
6	IC 410-400238/17	1250.0	373.175092	250.0	618045.0	0.29854	Y
7	IC 410-400238/18	3750.0	1107.75104	250.0	644778.0	0.2954	Y



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Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

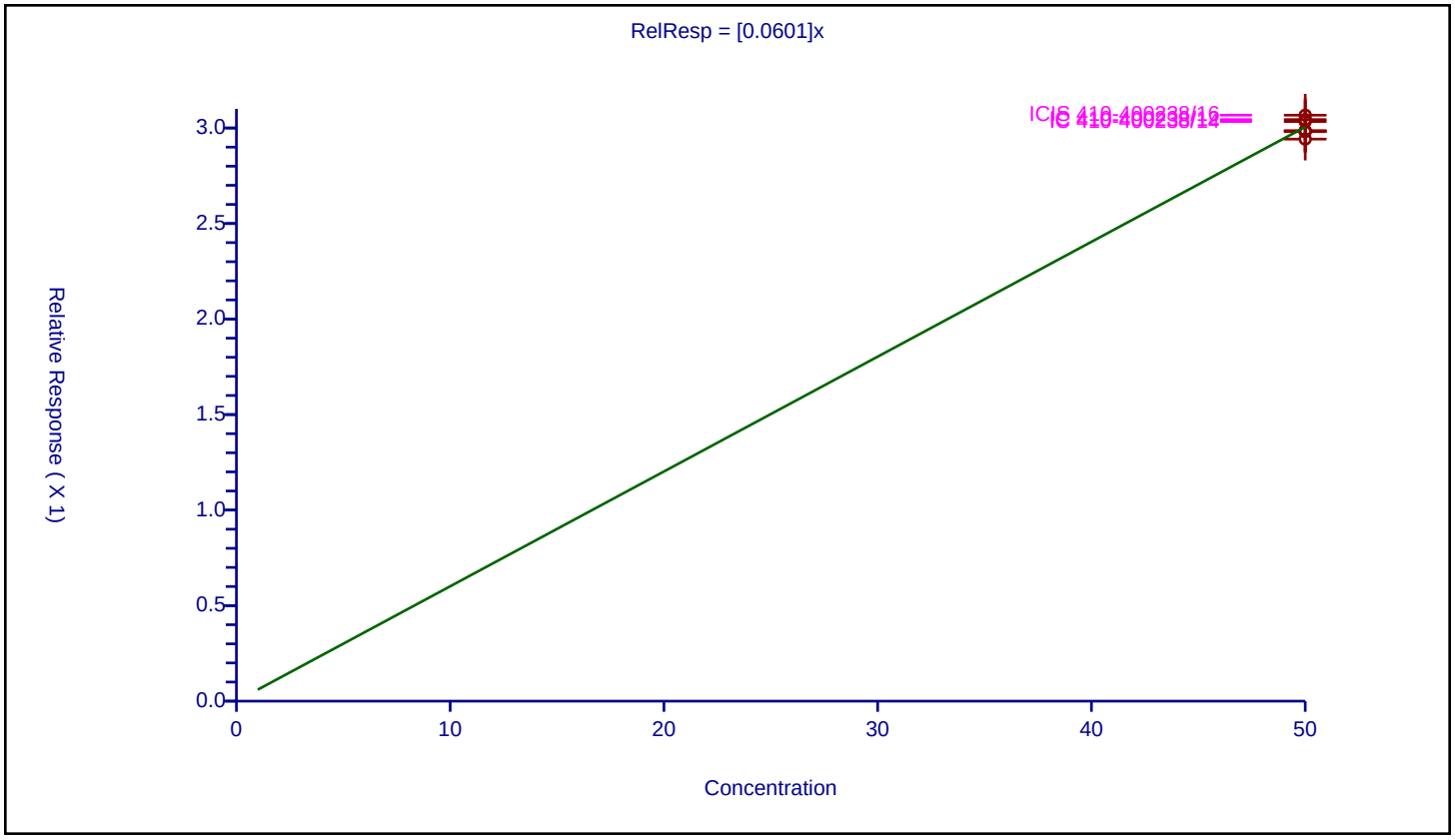
Curve Coefficients

Intercept:	0
Slope:	0.0601

Error Coefficients

Standard Error:	72700
Relative Standard Error:	1.5
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	50.0	3.044137	50.0	1115702.0	0.060883	Y
2	IC 410-400238/13	50.0	2.980959	50.0	1093809.0	0.059619	Y
3	IC 410-400238/14	50.0	3.03344	50.0	1104258.0	0.060669	Y
4	IC 410-400238/15	50.0	2.982555	50.0	1105864.0	0.059651	Y
5	ICIS 410-400238/16	50.0	3.067103	50.0	1116591.0	0.061342	Y
6	IC 410-400238/17	50.0	2.986418	50.0	1134754.0	0.059728	Y
7	IC 410-400238/18	50.0	2.941938	50.0	1166034.0	0.058839	Y



11/14/2023
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Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

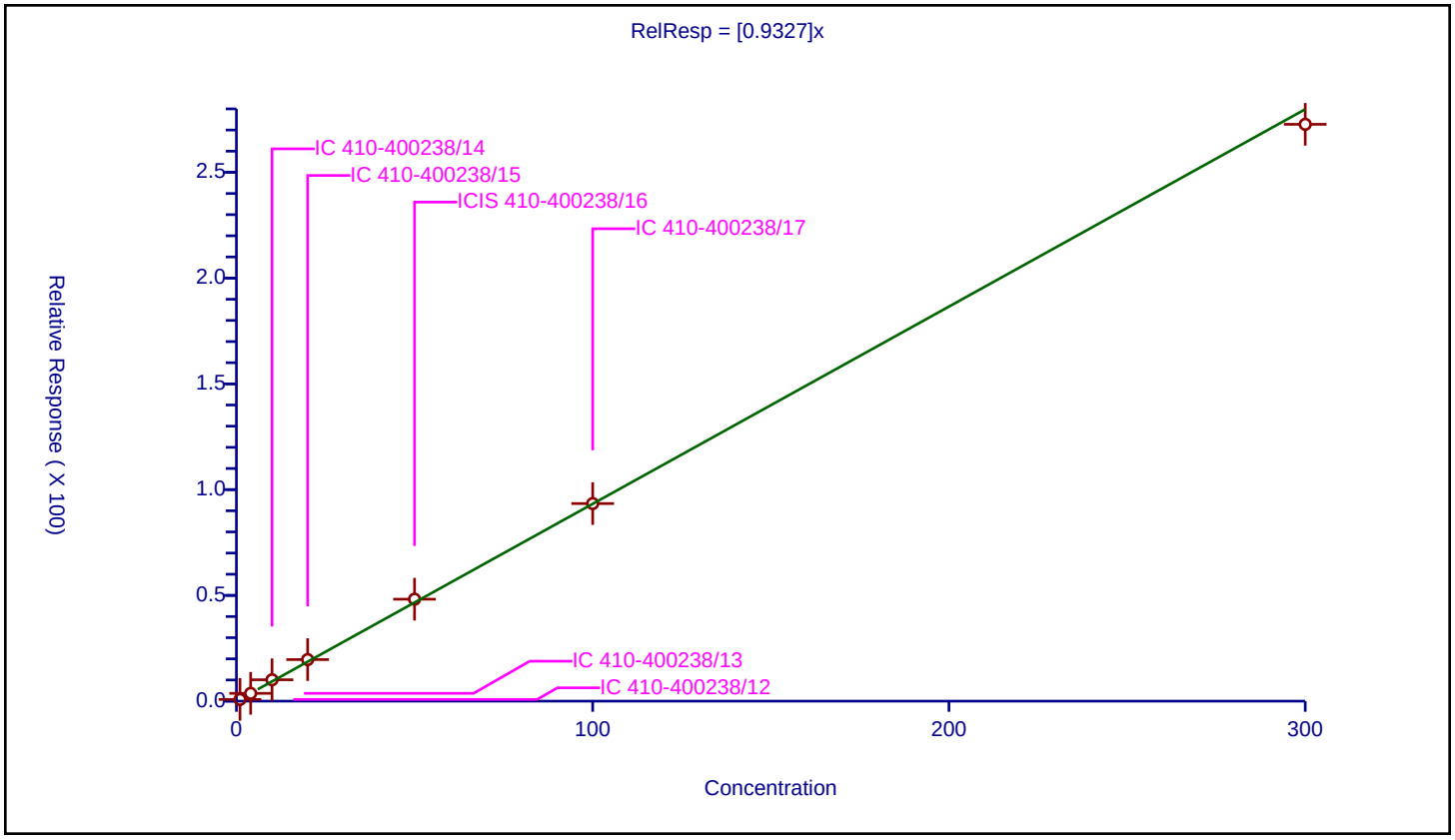
Curve Coefficients

Intercept:	0
Slope:	0.9327

Error Coefficients

Standard Error:	2780000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.809356	50.0	1115702.0	0.809356	Y
2	IC 410-400238/13	4.0	3.678064	50.0	1093809.0	0.919516	Y
3	IC 410-400238/14	10.0	10.107556	50.0	1104258.0	1.010756	Y
4	IC 410-400238/15	20.0	19.643374	50.0	1105864.0	0.982169	Y
5	ICIS 410-400238/16	50.0	48.196072	50.0	1116591.0	0.963921	Y
6	IC 410-400238/17	100.0	93.408263	50.0	1134754.0	0.934083	Y
7	IC 410-400238/18	300.0	272.70637	50.0	1166034.0	0.909021	Y



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Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

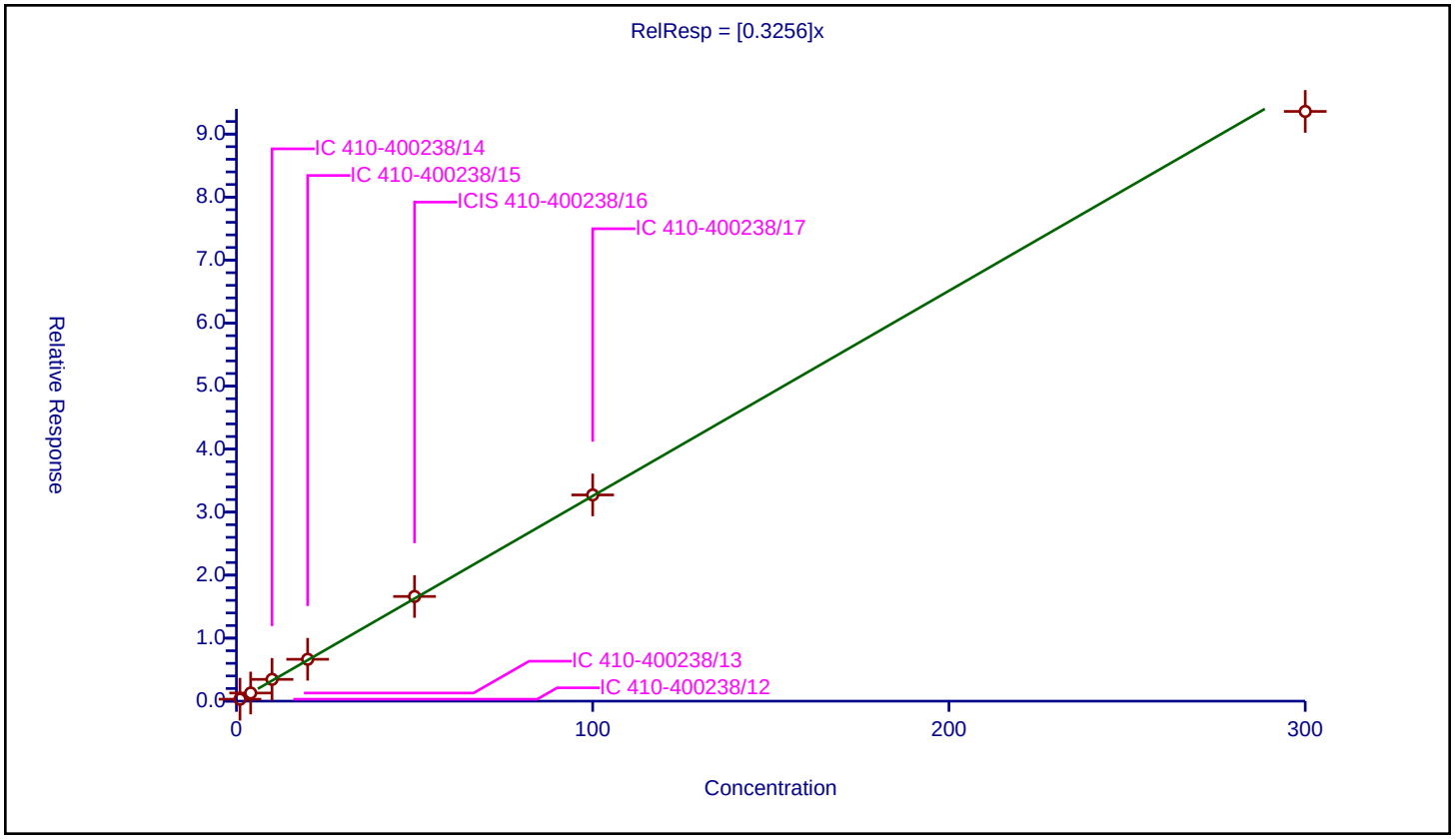
Curve Coefficients

Intercept:	0
Slope:	0.3256

Error Coefficients

Standard Error:	956000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.307026	50.0	1115702.0	0.307026	Y
2	IC 410-400238/13	4.0	1.292547	50.0	1093809.0	0.323137	Y
3	IC 410-400238/14	10.0	3.455216	50.0	1104258.0	0.345522	Y
4	IC 410-400238/15	20.0	6.644036	50.0	1105864.0	0.332202	Y
5	ICIS 410-400238/16	50.0	16.614678	50.0	1116591.0	0.332294	Y
6	IC 410-400238/17	100.0	32.73053	50.0	1134754.0	0.327305	Y
7	IC 410-400238/18	300.0	93.597271	50.0	1166034.0	0.311991	Y



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Calibration / Tert-amyl methyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

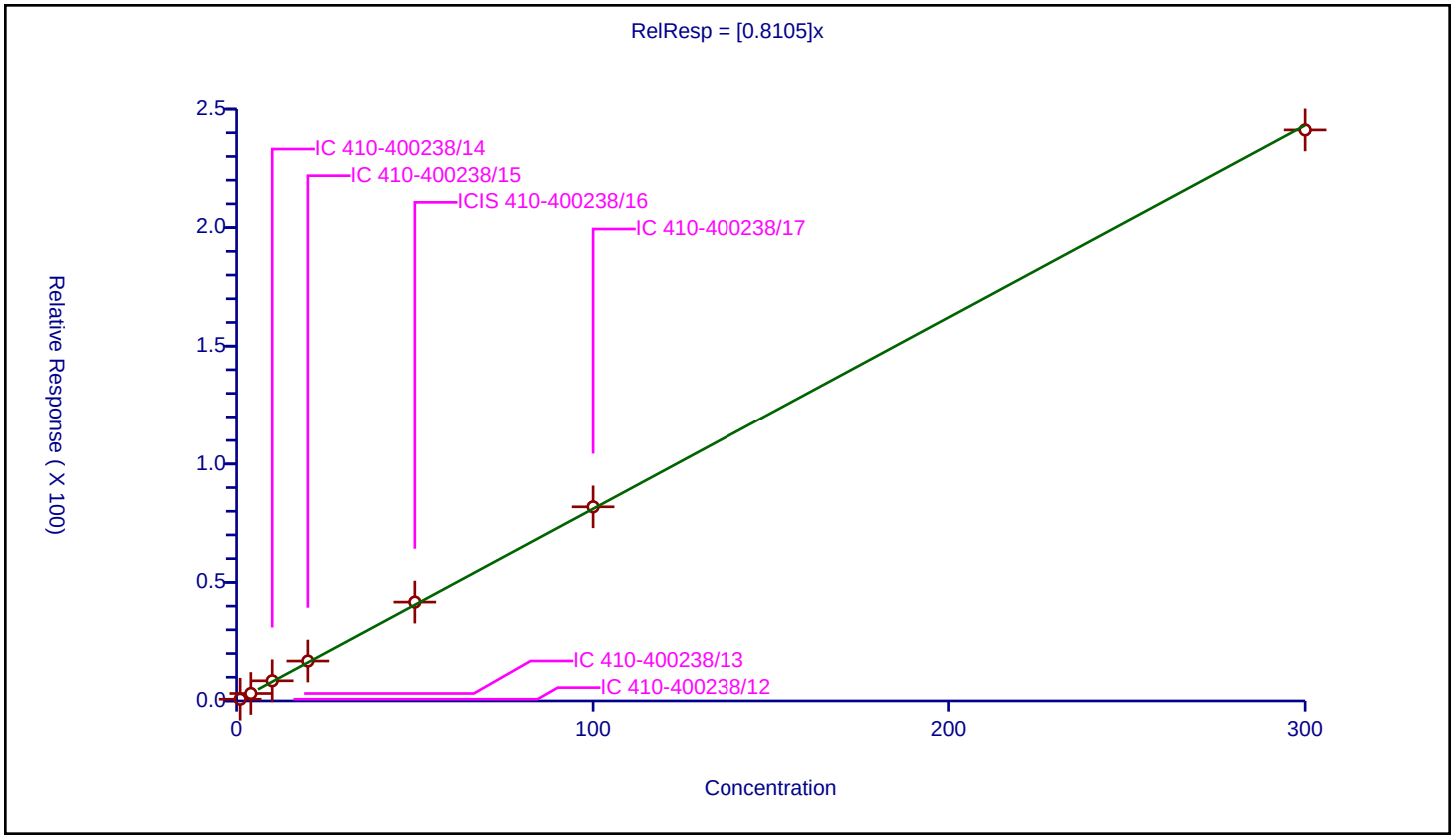
Curve Coefficients

Intercept:	0
Slope:	0.8105

Error Coefficients

Standard Error:	2450000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.735187	50.0	1115702.0	0.735187	Y
2	IC 410-400238/13	4.0	3.155715	50.0	1093809.0	0.788929	Y
3	IC 410-400238/14	10.0	8.509606	50.0	1104258.0	0.850961	Y
4	IC 410-400238/15	20.0	16.831364	50.0	1105864.0	0.841568	Y
5	ICIS 410-400238/16	50.0	41.695706	50.0	1116591.0	0.833914	Y
6	IC 410-400238/17	100.0	81.879817	50.0	1134754.0	0.818798	Y
7	IC 410-400238/18	300.0	241.197384	50.0	1166034.0	0.803991	Y



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Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

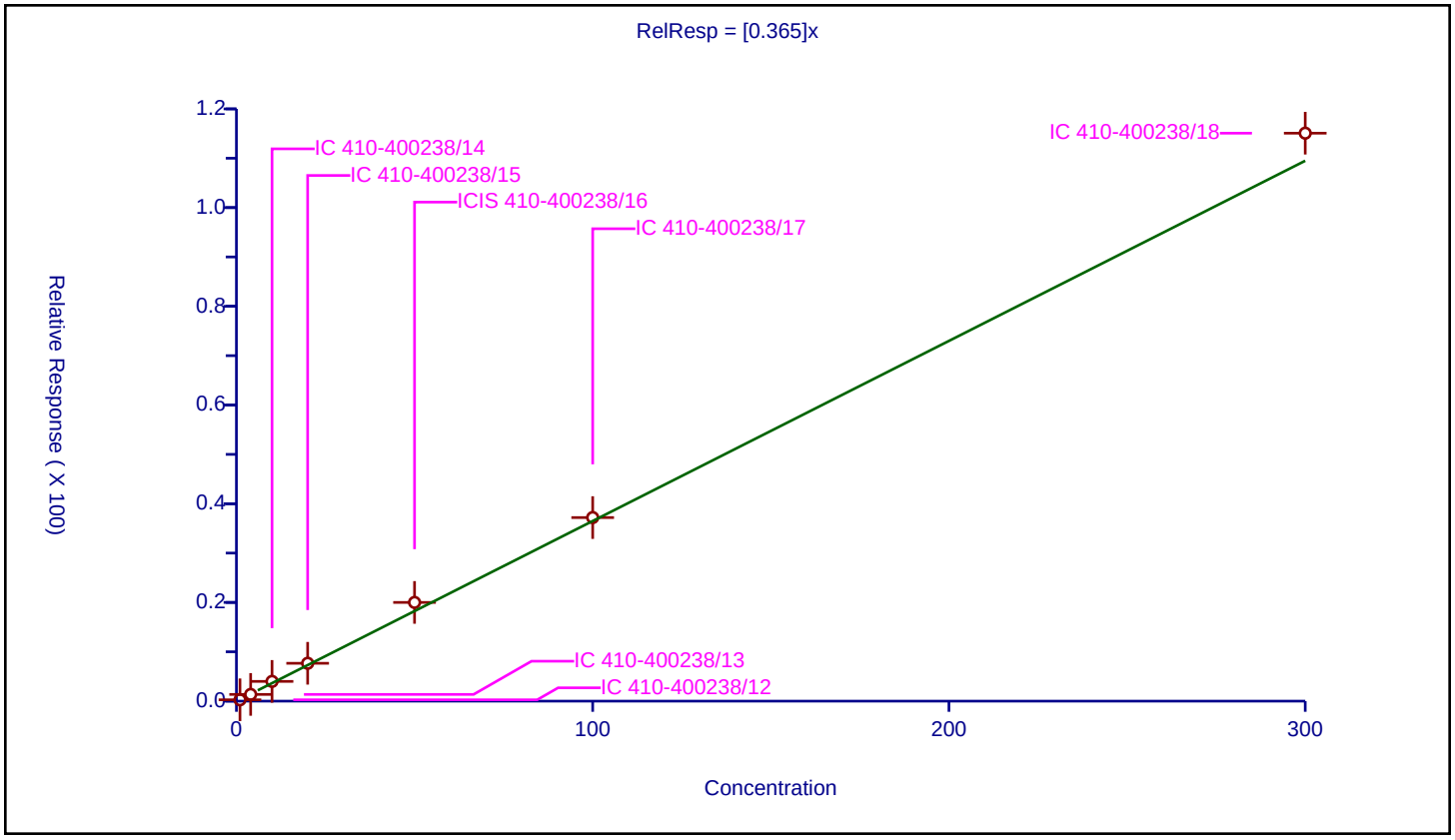
Curve Coefficients

Intercept:	0
Slope:	0.365

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	12.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.274491	50.0	1115702.0	0.274491	Y
2	IC 410-400238/13	4.0	1.363172	50.0	1093809.0	0.340793	Y
3	IC 410-400238/14	10.0	4.001012	50.0	1104258.0	0.400101	Y
4	IC 410-400238/15	20.0	7.673638	50.0	1105864.0	0.383682	Y
5	ICIS 410-400238/16	50.0	20.002355	50.0	1116591.0	0.400047	Y
6	IC 410-400238/17	100.0	37.195947	50.0	1134754.0	0.371959	Y
7	IC 410-400238/18	300.0	115.077691	50.0	1166034.0	0.383592	Y



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Calibration / n-Butanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

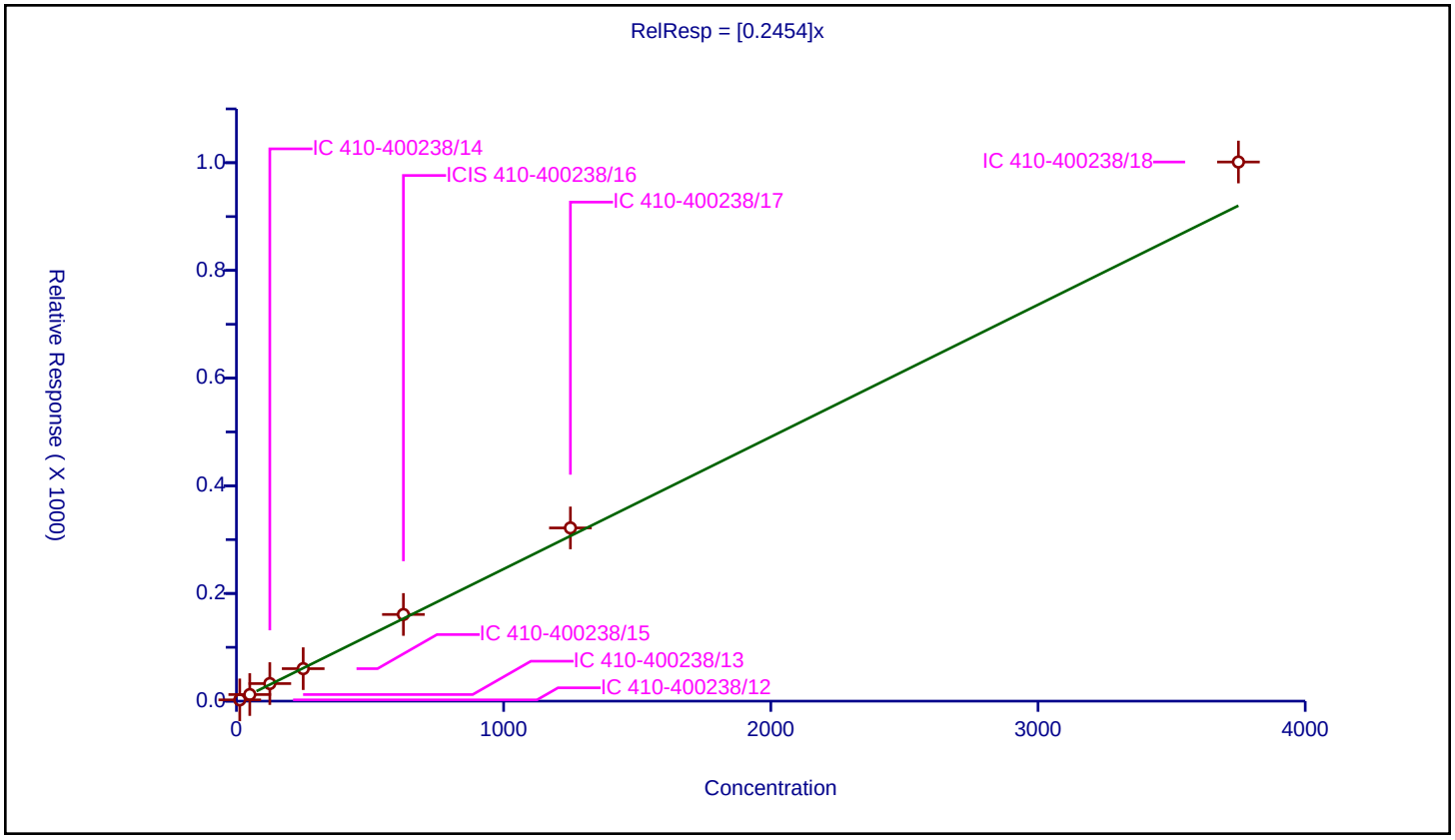
Curve Coefficients

Intercept:	0
Slope:	0.2454

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	10.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	12.5	2.355147	250.0	602404.0	0.188412	Y
2	IC 410-400238/13	50.0	12.251291	250.0	597386.0	0.245026	Y
3	IC 410-400238/14	125.0	32.643477	250.0	592201.0	0.261148	Y
4	IC 410-400238/15	250.0	60.321061	250.0	603218.0	0.241284	Y
5	ICIS 410-400238/16	625.0	160.969364	250.0	602127.0	0.257551	Y
6	IC 410-400238/17	1250.0	321.733854	250.0	618045.0	0.257387	Y
7	IC 410-400238/18	3750.0	1001.367525	250.0	644778.0	0.267031	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

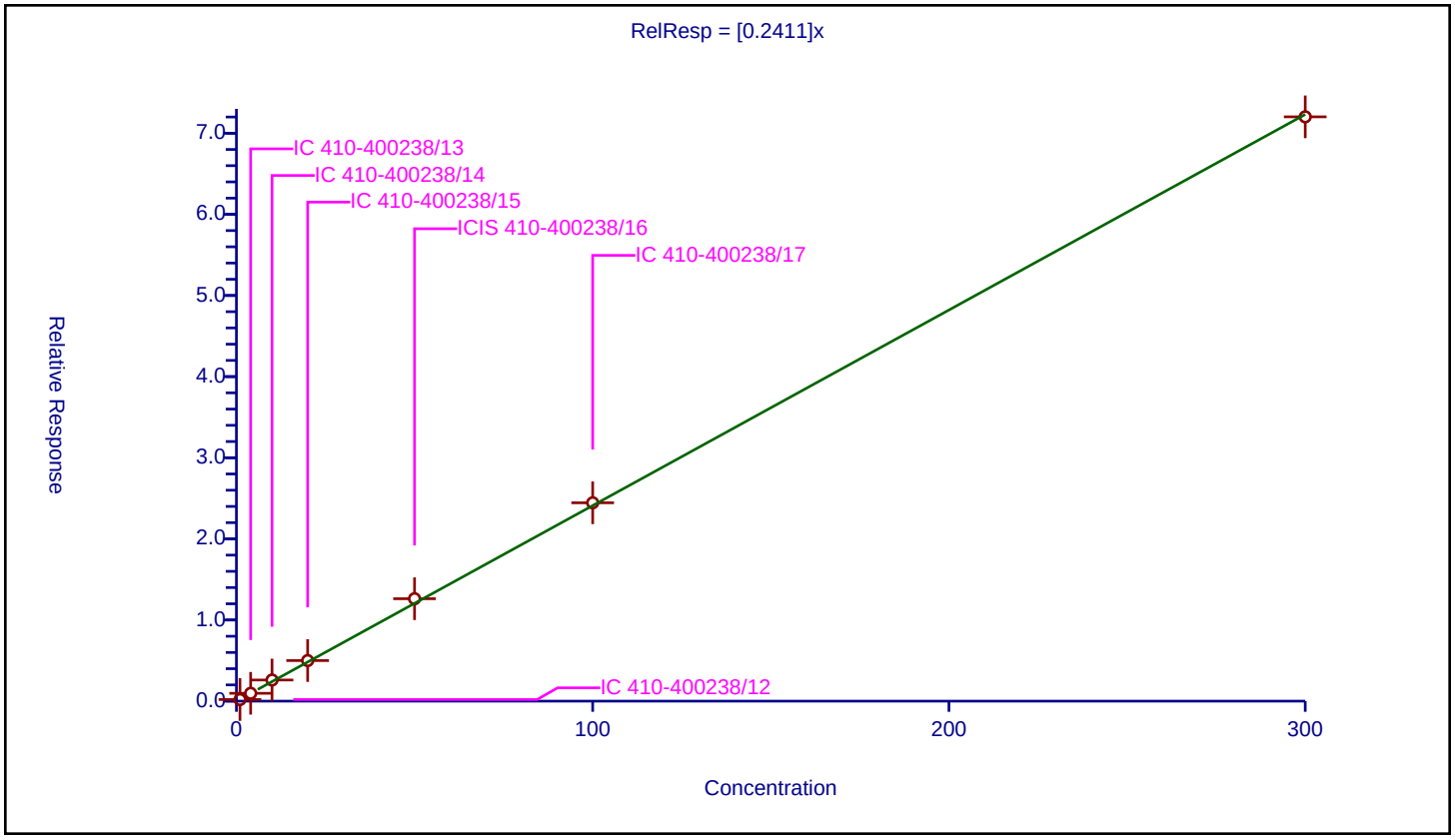
Curve Coefficients

Intercept:	0
Slope:	0.2411

Error Coefficients

Standard Error:	733000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.198306	50.0	1115702.0	0.198306	Y
2	IC 410-400238/13	4.0	0.966119	50.0	1093809.0	0.24153	Y
3	IC 410-400238/14	10.0	2.604419	50.0	1104258.0	0.260442	Y
4	IC 410-400238/15	20.0	5.000434	50.0	1105864.0	0.250022	Y
5	ICIS 410-400238/16	50.0	12.625796	50.0	1116591.0	0.252516	Y
6	IC 410-400238/17	100.0	24.44825	50.0	1134754.0	0.244483	Y
7	IC 410-400238/18	300.0	72.020327	50.0	1166034.0	0.240068	Y



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Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

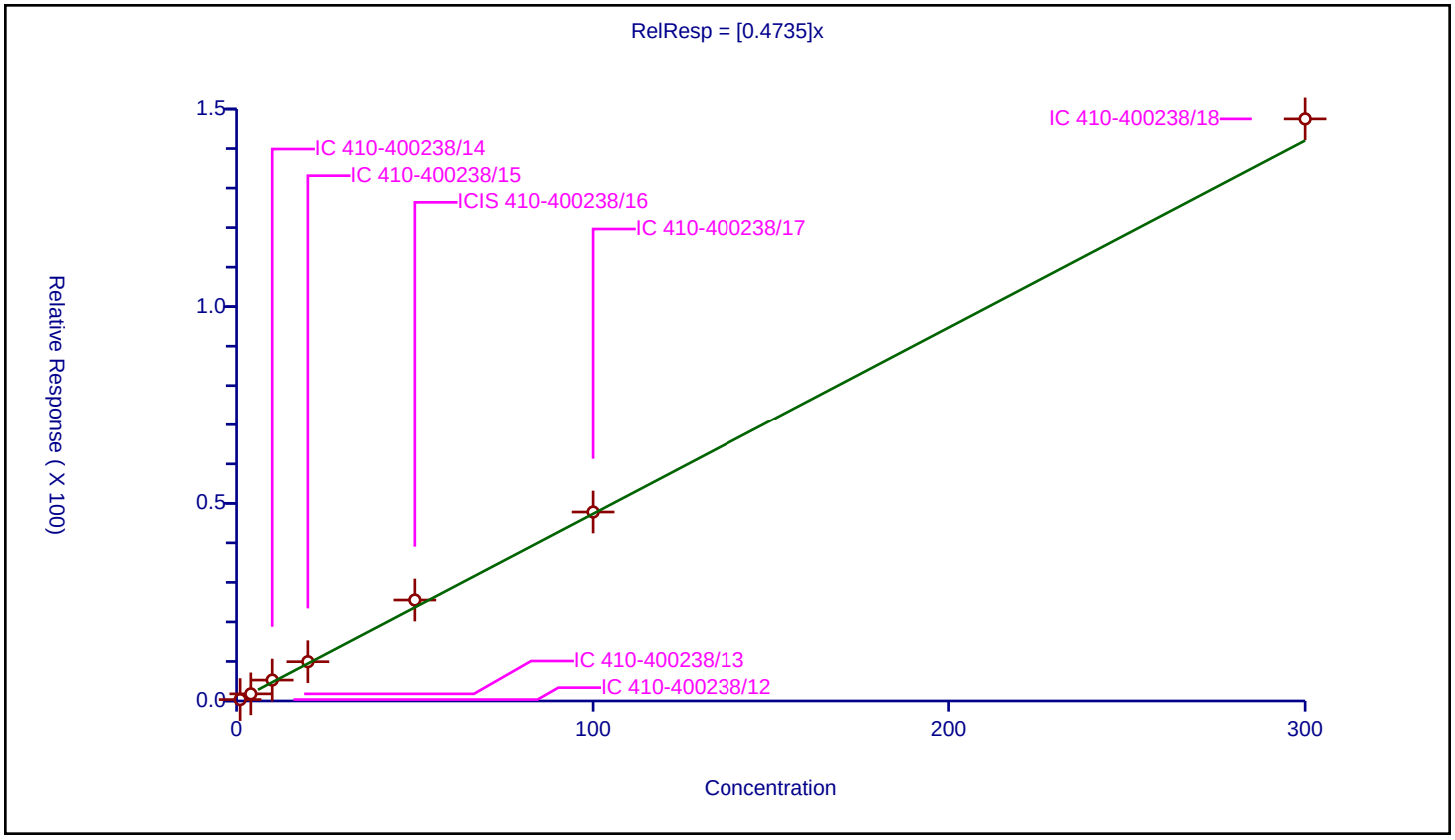
Curve Coefficients

Intercept:	0
Slope:	0.4735

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	12.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.356099	50.0	1115702.0	0.356099	Y
2	IC 410-400238/13	4.0	1.806943	50.0	1093809.0	0.451736	Y
3	IC 410-400238/14	10.0	5.290838	50.0	1104258.0	0.529084	Y
4	IC 410-400238/15	20.0	9.93775	50.0	1105864.0	0.496888	Y
5	ICIS 410-400238/16	50.0	25.541358	50.0	1116591.0	0.510827	Y
6	IC 410-400238/17	100.0	47.79992	50.0	1134754.0	0.477999	Y
7	IC 410-400238/18	300.0	147.502431	50.0	1166034.0	0.491675	Y



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Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

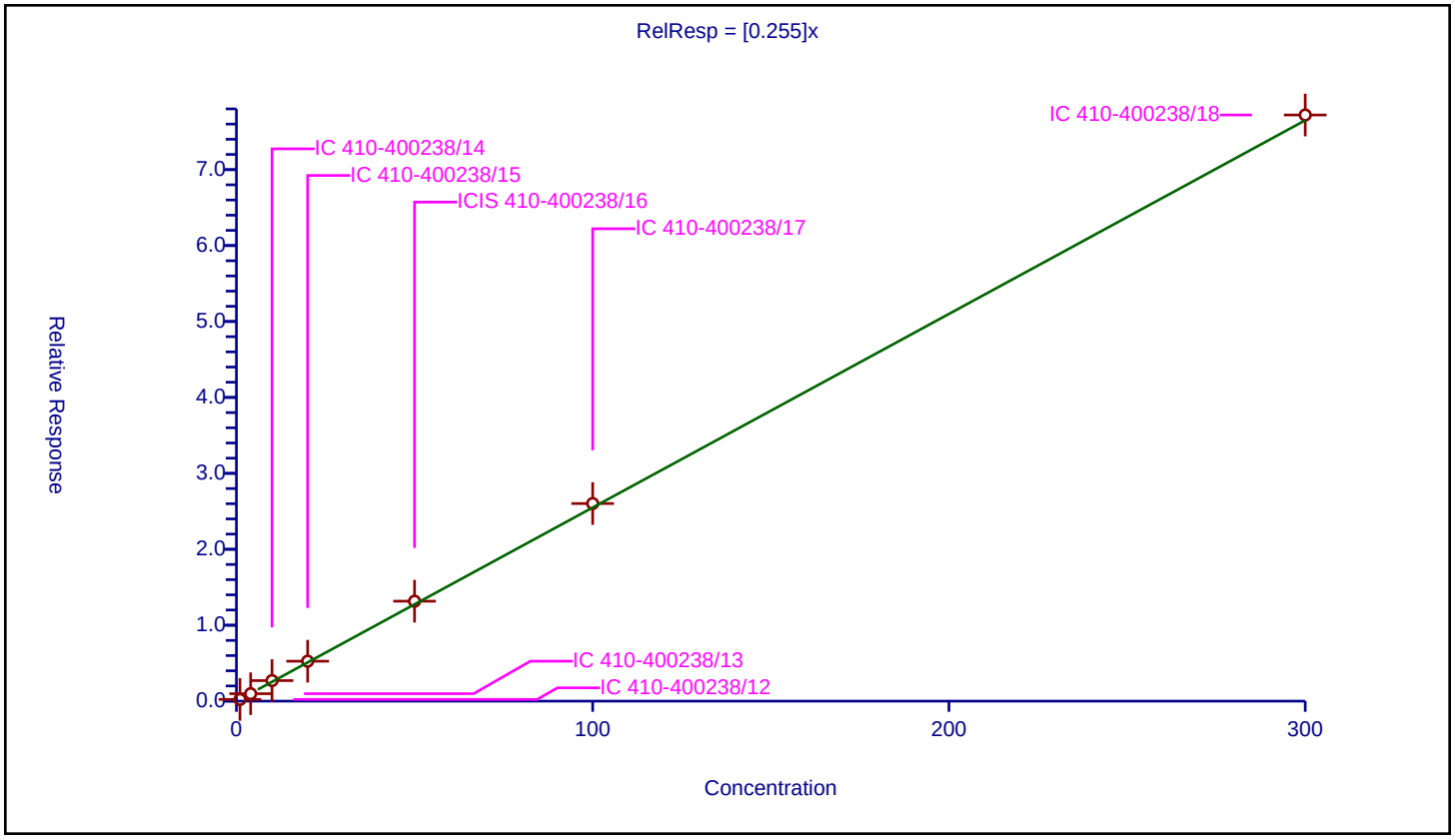
Curve Coefficients

Intercept:	0
Slope:	0.255

Error Coefficients

Standard Error:	785000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.225822	50.0	1115702.0	0.225822	Y
2	IC 410-400238/13	4.0	0.978781	50.0	1093809.0	0.244695	Y
3	IC 410-400238/14	10.0	2.704667	50.0	1104258.0	0.270467	Y
4	IC 410-400238/15	20.0	5.259869	50.0	1105864.0	0.262993	Y
5	ICIS 410-400238/16	50.0	13.162564	50.0	1116591.0	0.263251	Y
6	IC 410-400238/17	100.0	26.024848	50.0	1134754.0	0.260248	Y
7	IC 410-400238/18	300.0	77.19509	50.0	1166034.0	0.257317	Y



Calibration / 2-ethoxy-2-methyl butane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

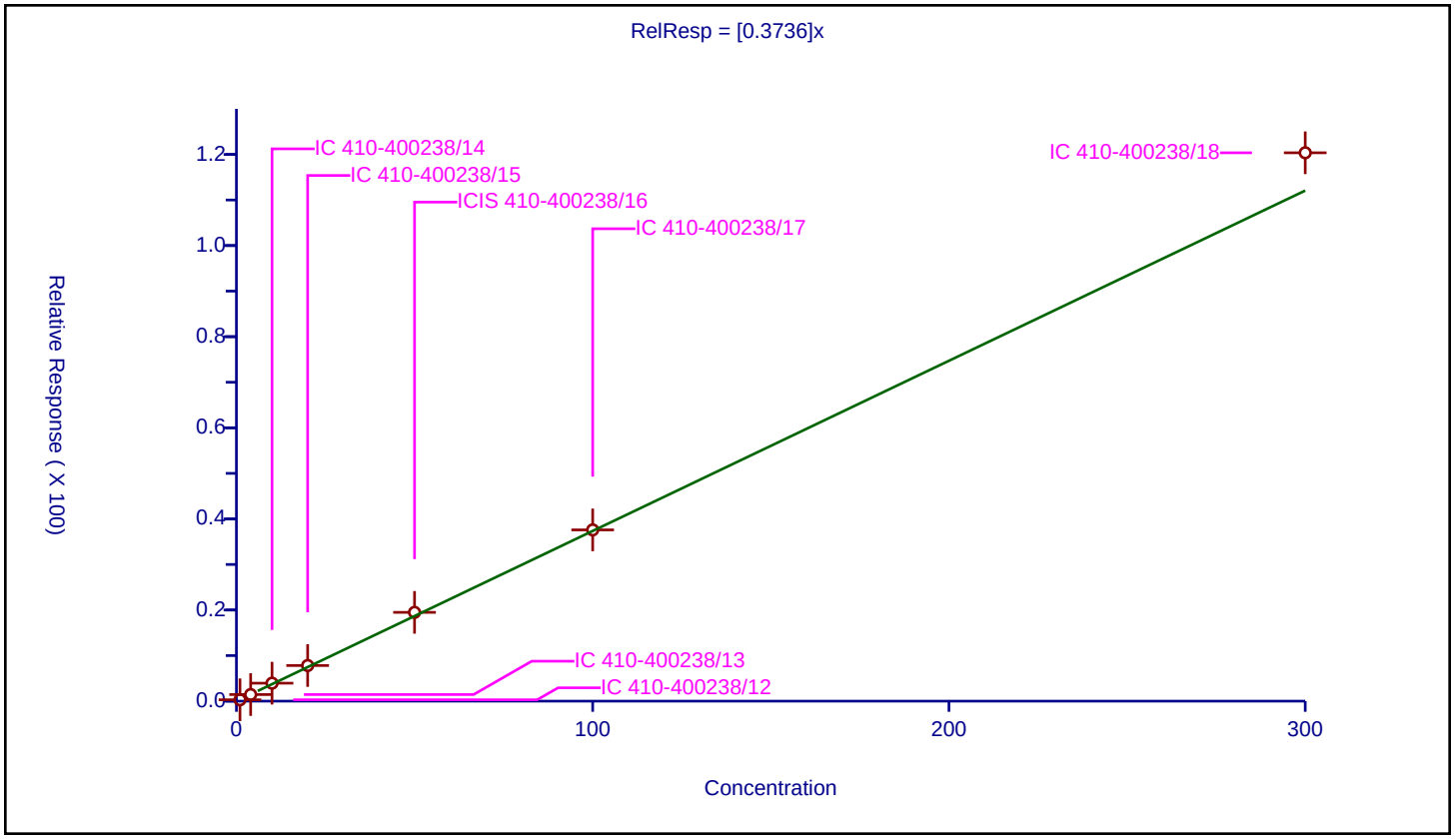
Curve Coefficients

Intercept:	0
Slope:	0.3736

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	9.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.300797	50.0	1115702.0	0.300797	Y
2	IC 410-400238/13	4.0	1.447922	50.0	1093809.0	0.36198	Y
3	IC 410-400238/14	10.0	3.943915	50.0	1104258.0	0.394392	Y
4	IC 410-400238/15	20.0	7.816784	50.0	1105864.0	0.390839	Y
5	ICIS 410-400238/16	50.0	19.486992	50.0	1116591.0	0.38974	Y
6	IC 410-400238/17	100.0	37.589425	50.0	1134754.0	0.375894	Y
7	IC 410-400238/18	300.0	120.364029	50.0	1166034.0	0.401213	Y



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Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

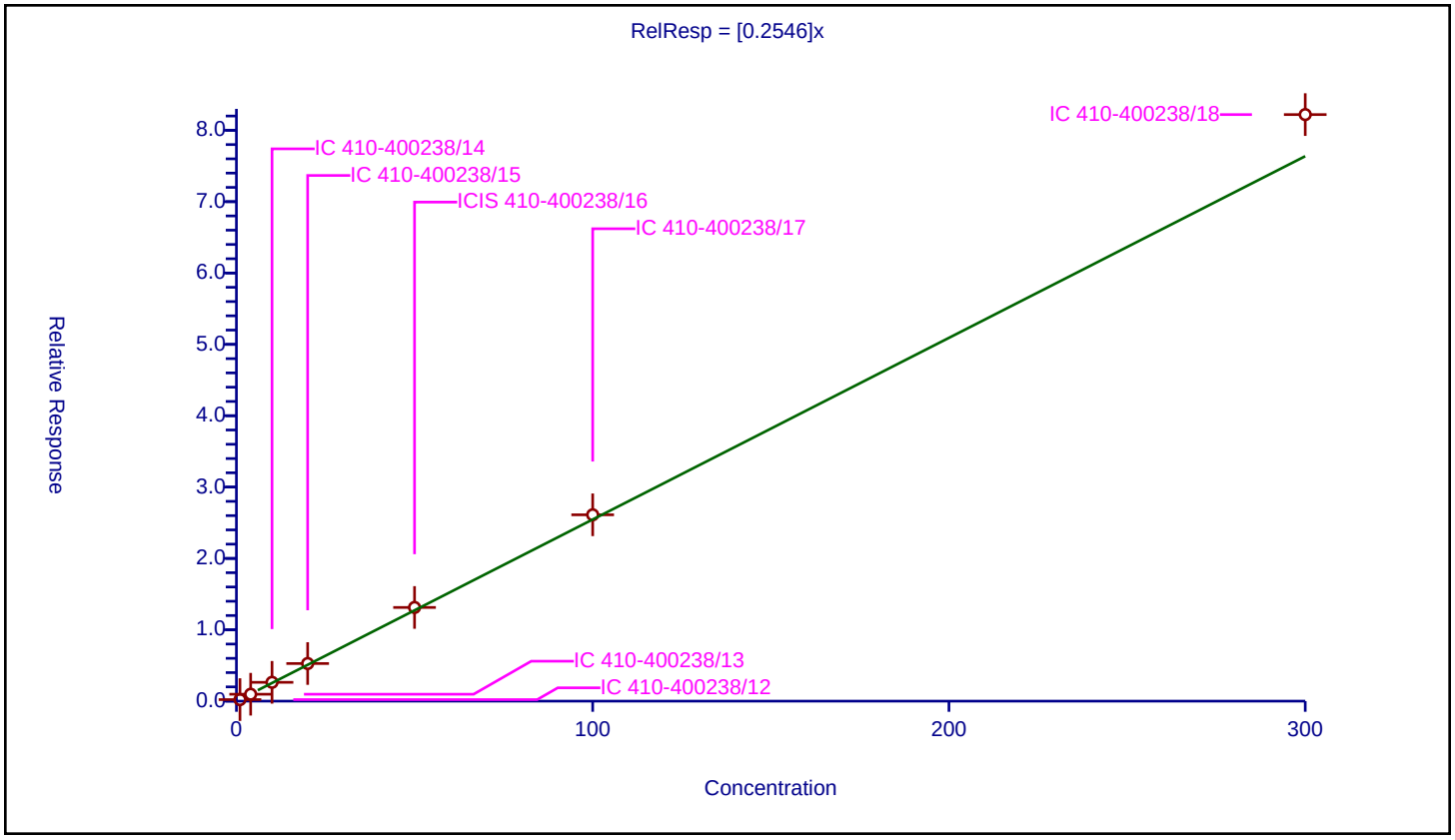
Curve Coefficients

Intercept:	0
Slope:	0.2546

Error Coefficients

Standard Error:	830000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.215246	50.0	1115702.0	0.215246	Y
2	IC 410-400238/13	4.0	0.966851	50.0	1093809.0	0.241713	Y
3	IC 410-400238/14	10.0	2.63548	50.0	1104258.0	0.263548	Y
4	IC 410-400238/15	20.0	5.274111	50.0	1105864.0	0.263706	Y
5	ICIS 410-400238/16	50.0	13.128039	50.0	1116591.0	0.262561	Y
6	IC 410-400238/17	100.0	26.114691	50.0	1134754.0	0.261147	Y
7	IC 410-400238/18	300.0	82.202363	50.0	1166034.0	0.274008	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

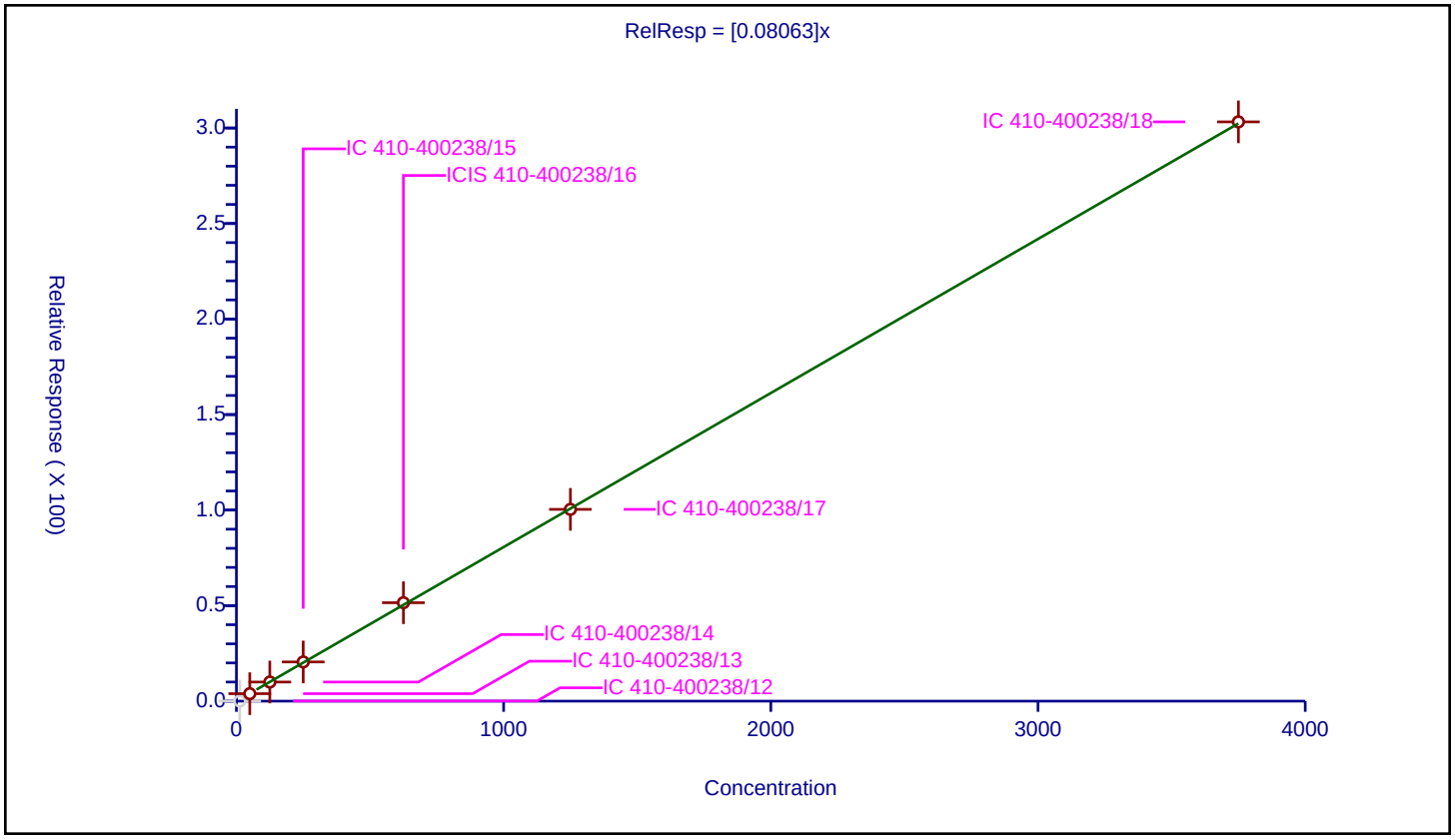
Curve Coefficients

Intercept:	0
Slope:	0.08063

Error Coefficients

Standard Error:	372000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	12.5	0.056026	250.0	602404.0	0.004482	N
2	IC 410-400238/13	50.0	3.908277	250.0	597386.0	0.078166	Y
3	IC 410-400238/14	125.0	10.001672	250.0	592201.0	0.080013	Y
4	IC 410-400238/15	250.0	20.510412	250.0	603218.0	0.082042	Y
5	ICIS 410-400238/16	625.0	51.516125	250.0	602127.0	0.082426	Y
6	IC 410-400238/17	1250.0	100.380231	250.0	618045.0	0.080304	Y
7	IC 410-400238/18	3750.0	303.214052	250.0	644778.0	0.080857	Y



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Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

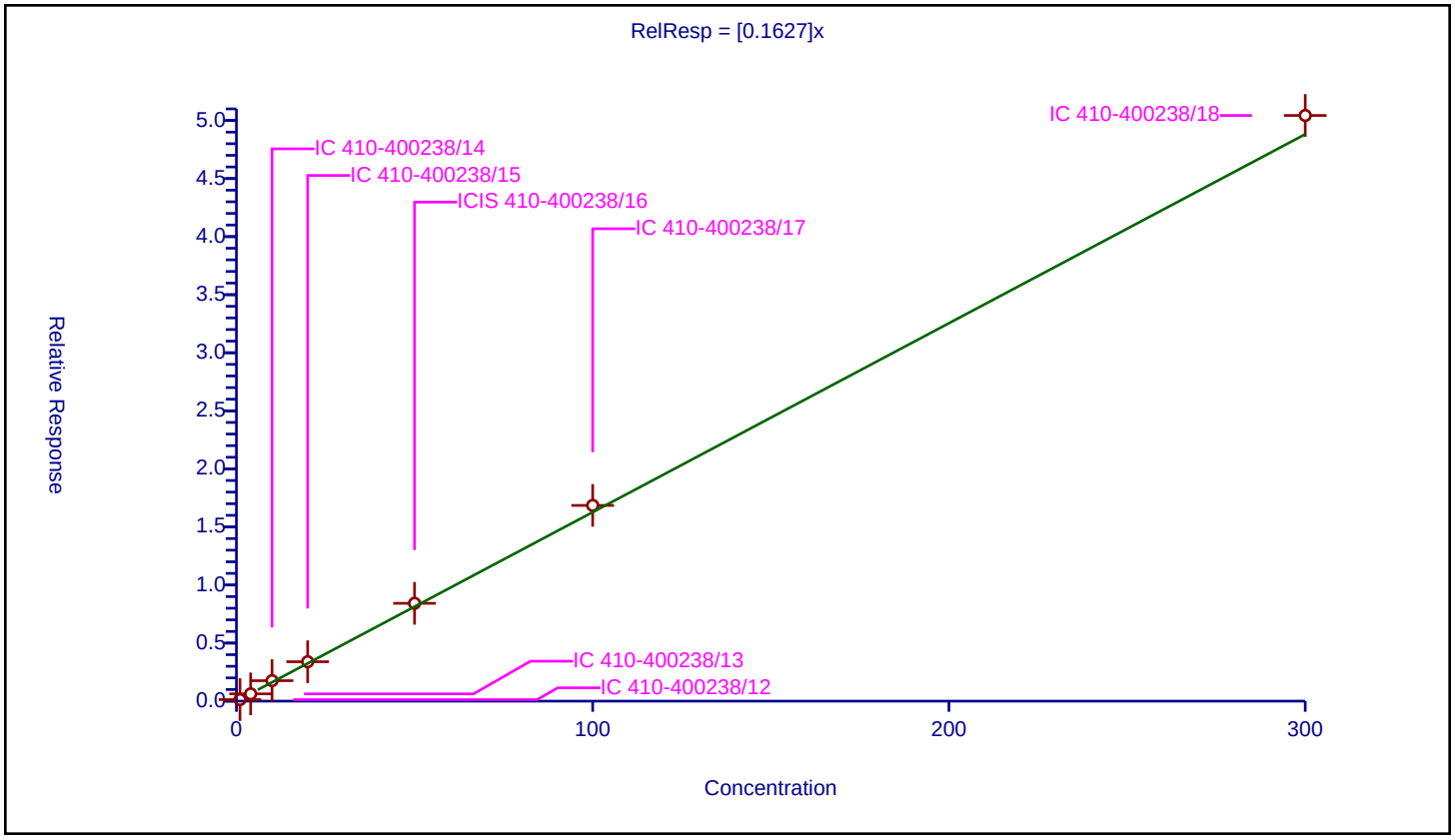
Curve Coefficients

Intercept:	0
Slope:	0.1627

Error Coefficients

Standard Error:	512000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.130949	50.0	1115702.0	0.130949	Y
2	IC 410-400238/13	4.0	0.628263	50.0	1093809.0	0.157066	Y
3	IC 410-400238/14	10.0	1.762586	50.0	1104258.0	0.176259	Y
4	IC 410-400238/15	20.0	3.392867	50.0	1105864.0	0.169643	Y
5	ICIS 410-400238/16	50.0	8.42363	50.0	1116591.0	0.168473	Y
6	IC 410-400238/17	100.0	16.852948	50.0	1134754.0	0.168529	Y
7	IC 410-400238/18	300.0	50.433521	50.0	1166034.0	0.168112	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

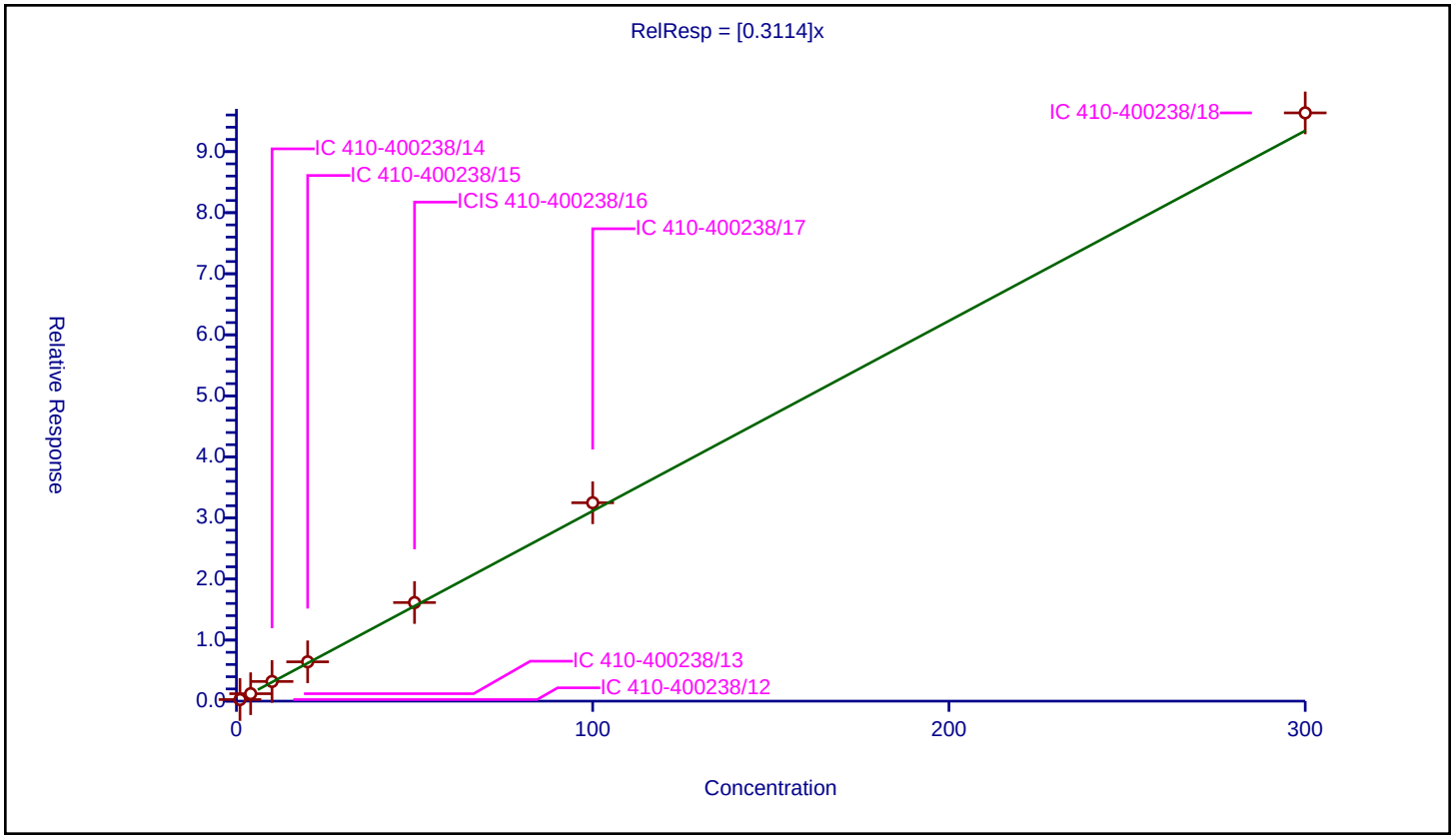
Curve Coefficients

Intercept:	0
Slope:	0.3114

Error Coefficients

Standard Error:	979000
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.261719	50.0	1115702.0	0.261719	Y
2	IC 410-400238/13	4.0	1.219911	50.0	1093809.0	0.304978	Y
3	IC 410-400238/14	10.0	3.220669	50.0	1104258.0	0.322067	Y
4	IC 410-400238/15	20.0	6.439987	50.0	1105864.0	0.321999	Y
5	ICIS 410-400238/16	50.0	16.148841	50.0	1116591.0	0.322977	Y
6	IC 410-400238/17	100.0	32.493915	50.0	1134754.0	0.324939	Y
7	IC 410-400238/18	300.0	96.346676	50.0	1166034.0	0.321156	Y



Calibration / 2-Nitropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

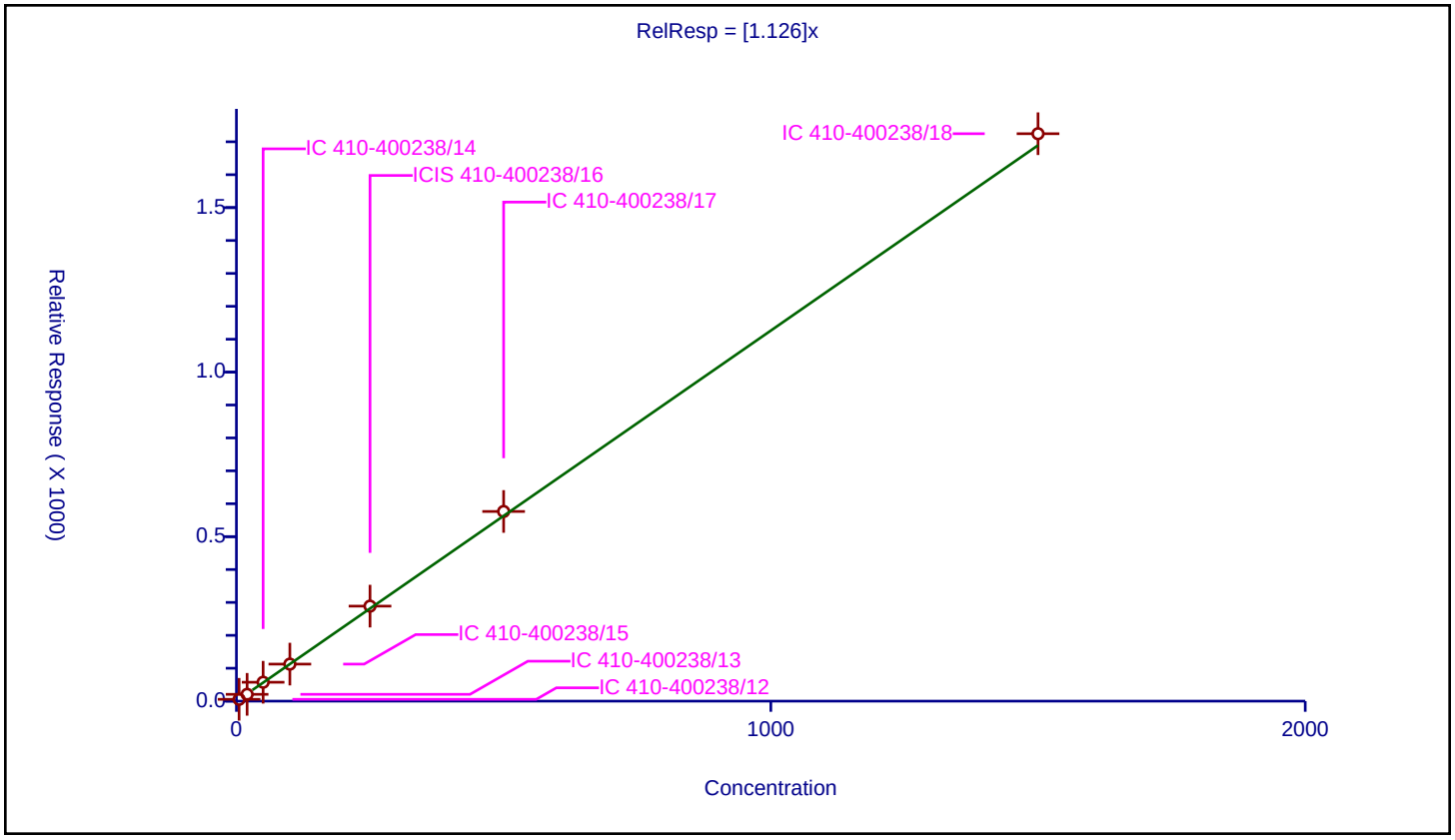
Curve Coefficients

Intercept:	0
Slope:	1.126

Error Coefficients

Standard Error:	1930000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	5.0	5.583877	250.0	602404.0	1.116775	Y
2	IC 410-400238/13	20.0	20.673819	250.0	597386.0	1.033691	Y
3	IC 410-400238/14	50.0	57.453466	250.0	592201.0	1.149069	Y
4	IC 410-400238/15	100.0	112.578703	250.0	603218.0	1.125787	Y
5	ICIS 410-400238/16	250.0	288.785007	250.0	602127.0	1.15514	Y
6	IC 410-400238/17	500.0	576.454789	250.0	618045.0	1.15291	Y
7	IC 410-400238/18	1500.0	1724.554808	250.0	644778.0	1.149703	Y



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Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

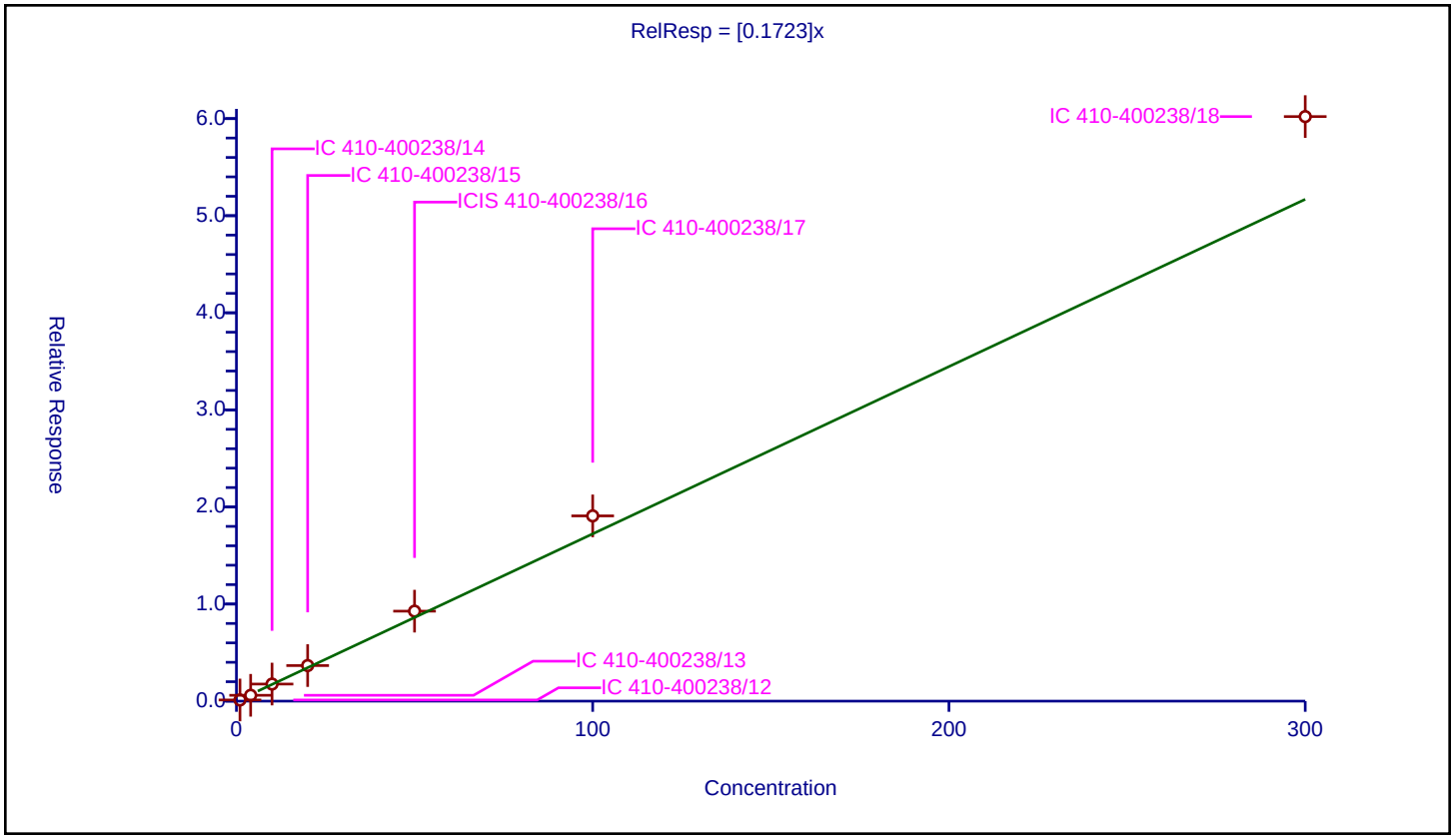
Curve Coefficients

Intercept:	0
Slope:	0.1723

Error Coefficients

Standard Error:	607000
Relative Standard Error:	16.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.119207	50.0	1115702.0	0.119207	Y
2	IC 410-400238/13	4.0	0.60303	50.0	1093809.0	0.150758	Y
3	IC 410-400238/14	10.0	1.760051	50.0	1104258.0	0.176005	Y
4	IC 410-400238/15	20.0	3.664058	50.0	1105864.0	0.183203	Y
5	ICIS 410-400238/16	50.0	9.267762	50.0	1116591.0	0.185355	Y
6	IC 410-400238/17	100.0	19.079422	50.0	1134754.0	0.190794	Y
7	IC 410-400238/18	300.0	60.207078	50.0	1166034.0	0.20069	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

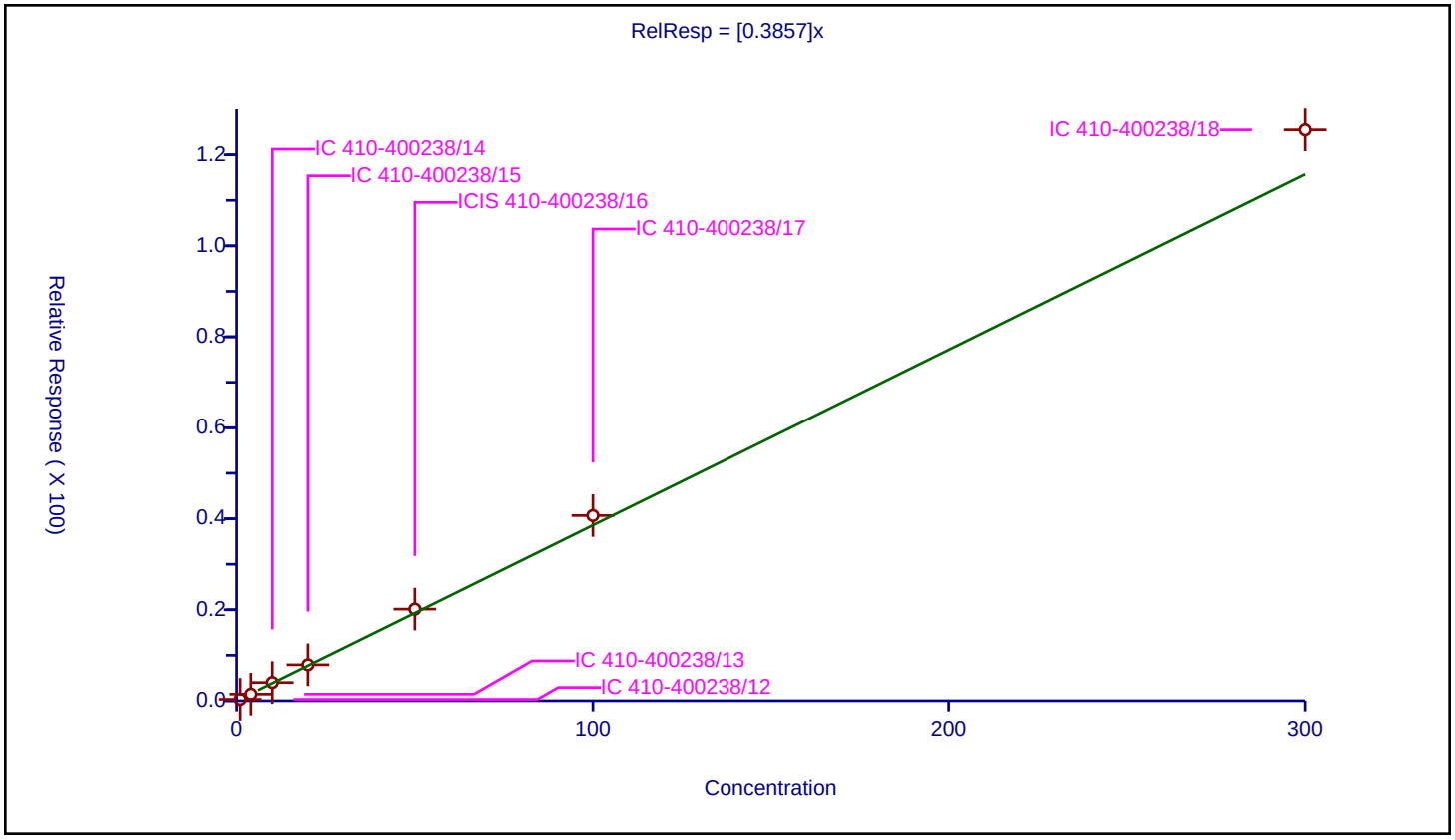
Curve Coefficients

Intercept:	0
Slope:	0.3857

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	9.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.312225	50.0	1115702.0	0.312225	Y
2	IC 410-400238/13	4.0	1.453499	50.0	1093809.0	0.363375	Y
3	IC 410-400238/14	10.0	4.010114	50.0	1104258.0	0.401011	Y
4	IC 410-400238/15	20.0	7.904272	50.0	1105864.0	0.395214	Y
5	ICIS 410-400238/16	50.0	20.143723	50.0	1116591.0	0.402874	Y
6	IC 410-400238/17	100.0	40.698733	50.0	1134754.0	0.406987	Y
7	IC 410-400238/18	300.0	125.474171	50.0	1166034.0	0.418247	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

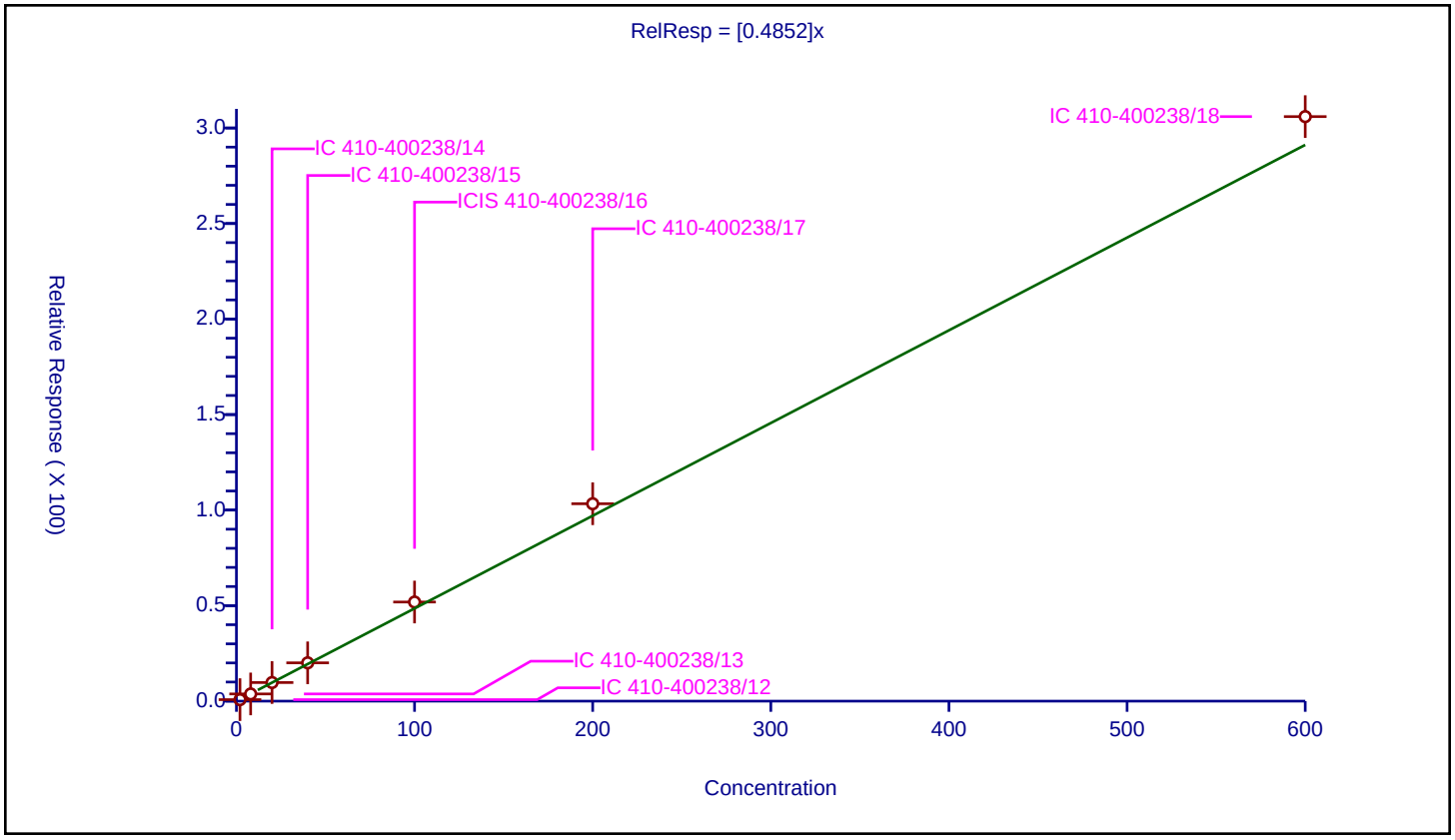
Curve Coefficients

Intercept:	0
Slope:	0.4852

Error Coefficients

Standard Error:	3110000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	2.0	0.785738	50.0	1115702.0	0.392869	Y
2	IC 410-400238/13	8.0	3.766151	50.0	1093809.0	0.470769	Y
3	IC 410-400238/14	20.0	9.731331	50.0	1104258.0	0.486567	Y
4	IC 410-400238/15	40.0	20.049301	50.0	1105864.0	0.501233	Y
5	ICIS 410-400238/16	100.0	51.878127	50.0	1116591.0	0.518781	Y
6	IC 410-400238/17	200.0	103.317151	50.0	1134754.0	0.516586	Y
7	IC 410-400238/18	600.0	305.960761	50.0	1166034.0	0.509935	Y



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Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

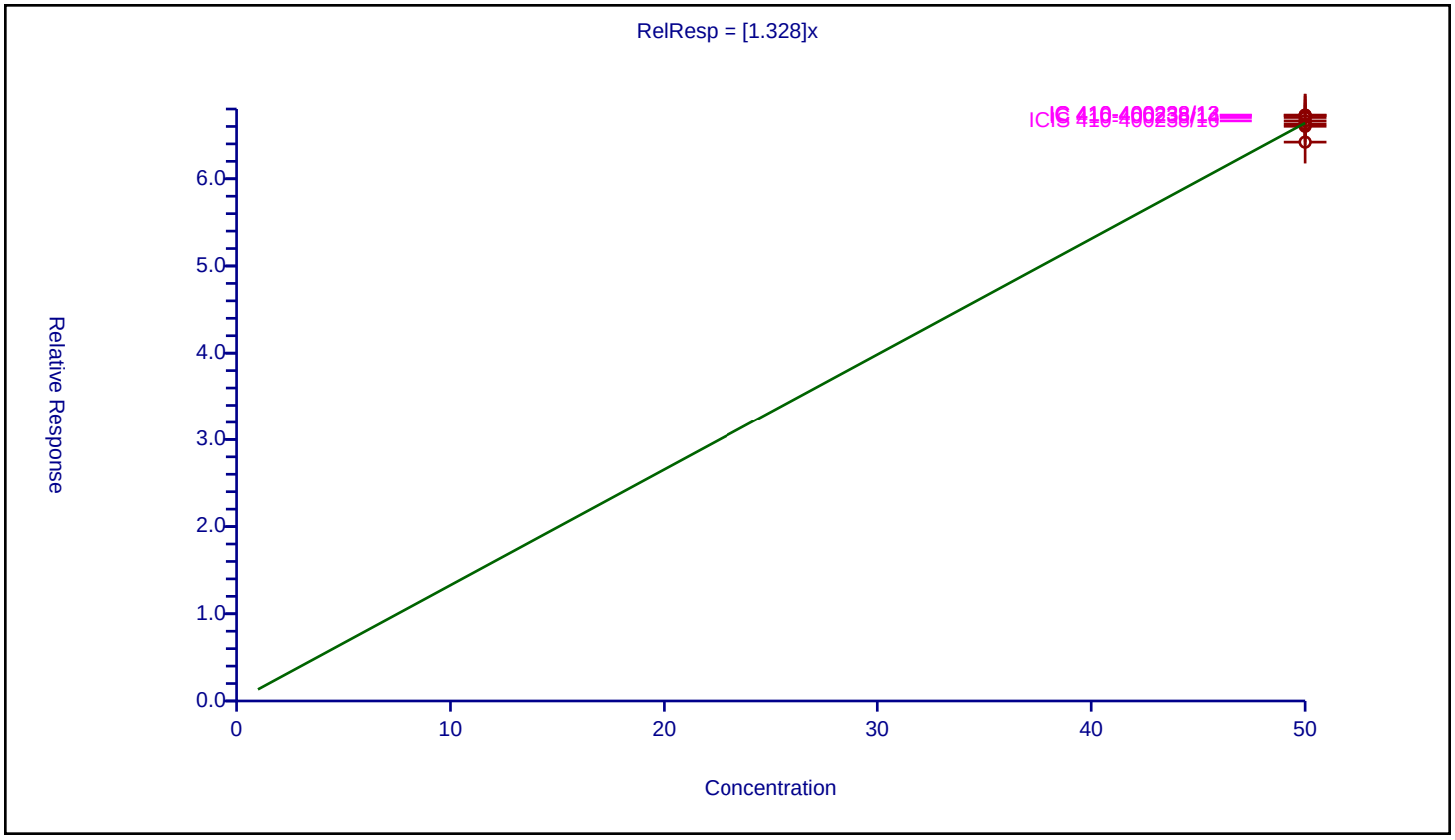
Curve Coefficients

Intercept:	0
Slope:	1.328

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	1.6
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	50.0	67.304372	50.0	800919.0	1.346087	Y
2	IC 410-400238/13	50.0	67.264824	50.0	795137.0	1.345296	Y
3	IC 410-400238/14	50.0	67.028998	50.0	804604.0	1.34058	Y
4	IC 410-400238/15	50.0	66.286634	50.0	817649.0	1.325733	Y
5	ICIS 410-400238/16	50.0	66.638907	50.0	827927.0	1.332778	Y
6	IC 410-400238/17	50.0	66.018407	50.0	862386.0	1.320368	Y
7	IC 410-400238/18	50.0	64.20503	50.0	934155.0	1.284101	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

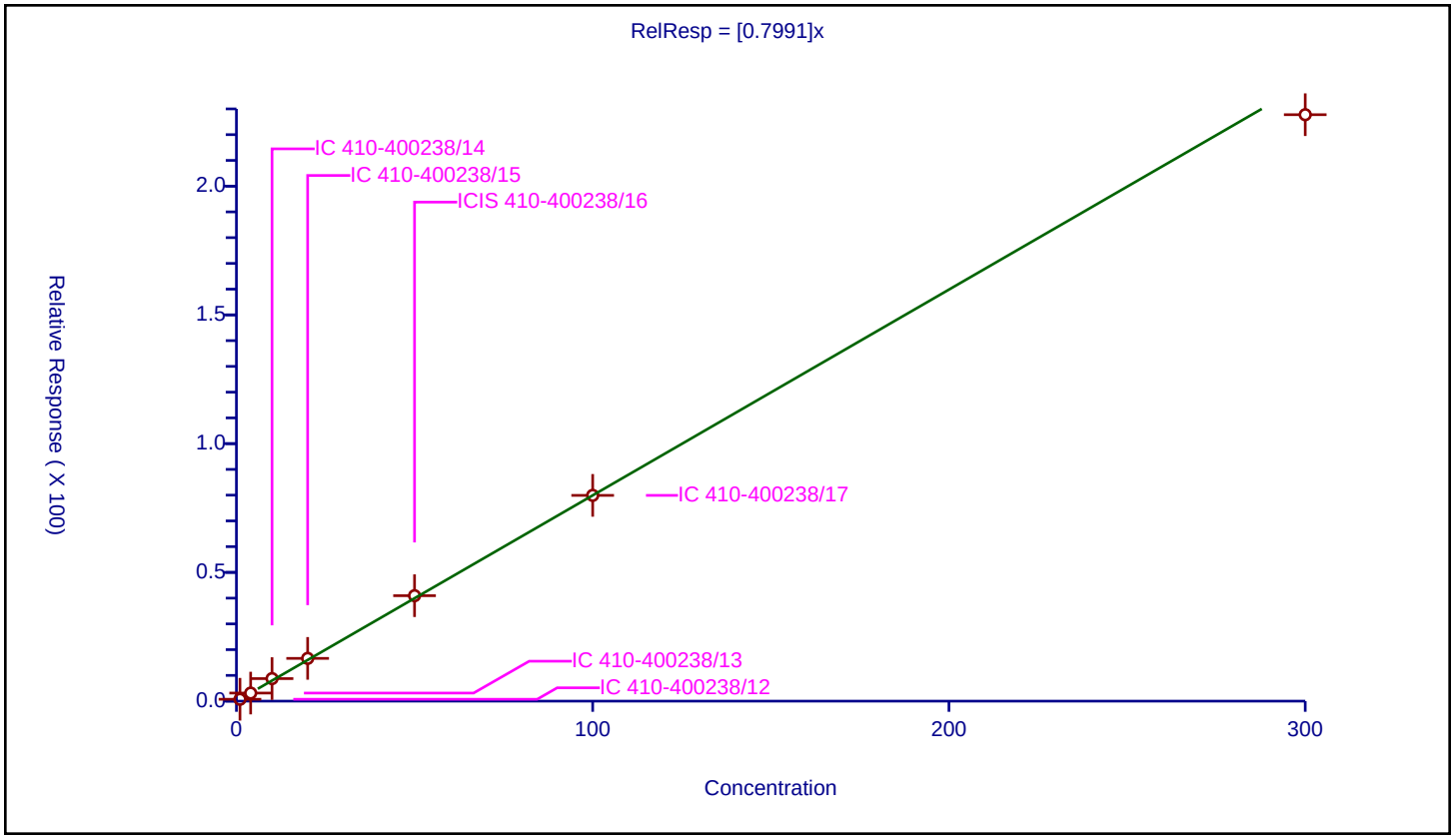
Curve Coefficients

Intercept:	0
Slope:	0.7991

Error Coefficients

Standard Error:	1850000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.727165	50.0	800919.0	0.727165	Y
2	IC 410-400238/13	4.0	3.133988	50.0	795137.0	0.783497	Y
3	IC 410-400238/14	10.0	8.75412	50.0	804604.0	0.875412	Y
4	IC 410-400238/15	20.0	16.610122	50.0	817649.0	0.830506	Y
5	ICIS 410-400238/16	50.0	40.954939	50.0	827927.0	0.819099	Y
6	IC 410-400238/17	100.0	79.908649	50.0	862386.0	0.799086	Y
7	IC 410-400238/18	300.0	227.744272	50.0	934155.0	0.759148	Y



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Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

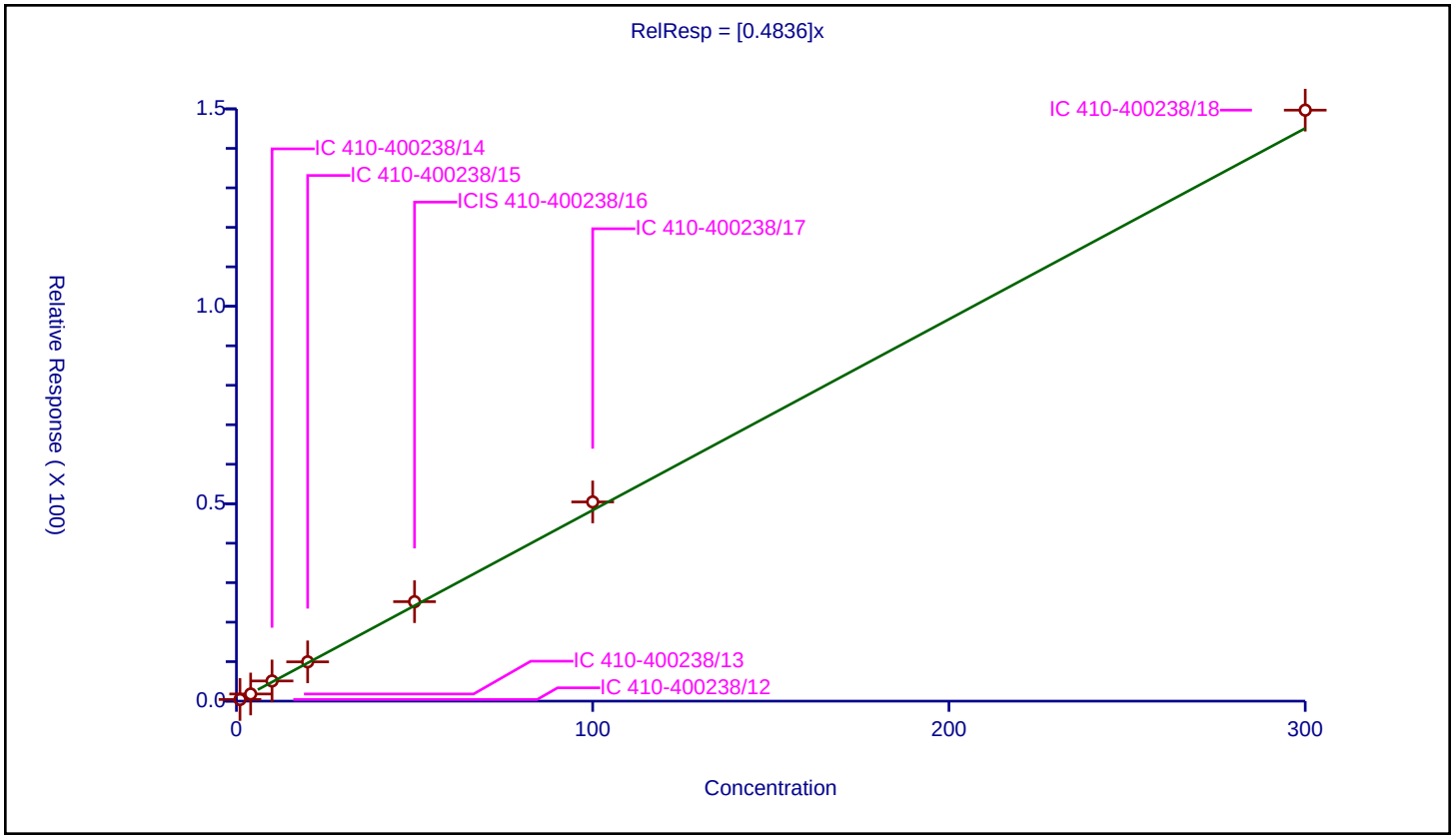
Curve Coefficients

Intercept:	0
Slope:	0.4836

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.416085	50.0	800919.0	0.416085	Y
2	IC 410-400238/13	4.0	1.813775	50.0	795137.0	0.453444	Y
3	IC 410-400238/14	10.0	5.108227	50.0	804604.0	0.510823	Y
4	IC 410-400238/15	20.0	9.952253	50.0	817649.0	0.497613	Y
5	ICIS 410-400238/16	50.0	25.188513	50.0	827927.0	0.50377	Y
6	IC 410-400238/17	100.0	50.454031	50.0	862386.0	0.50454	Y
7	IC 410-400238/18	300.0	149.682708	50.0	934155.0	0.498942	Y



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Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

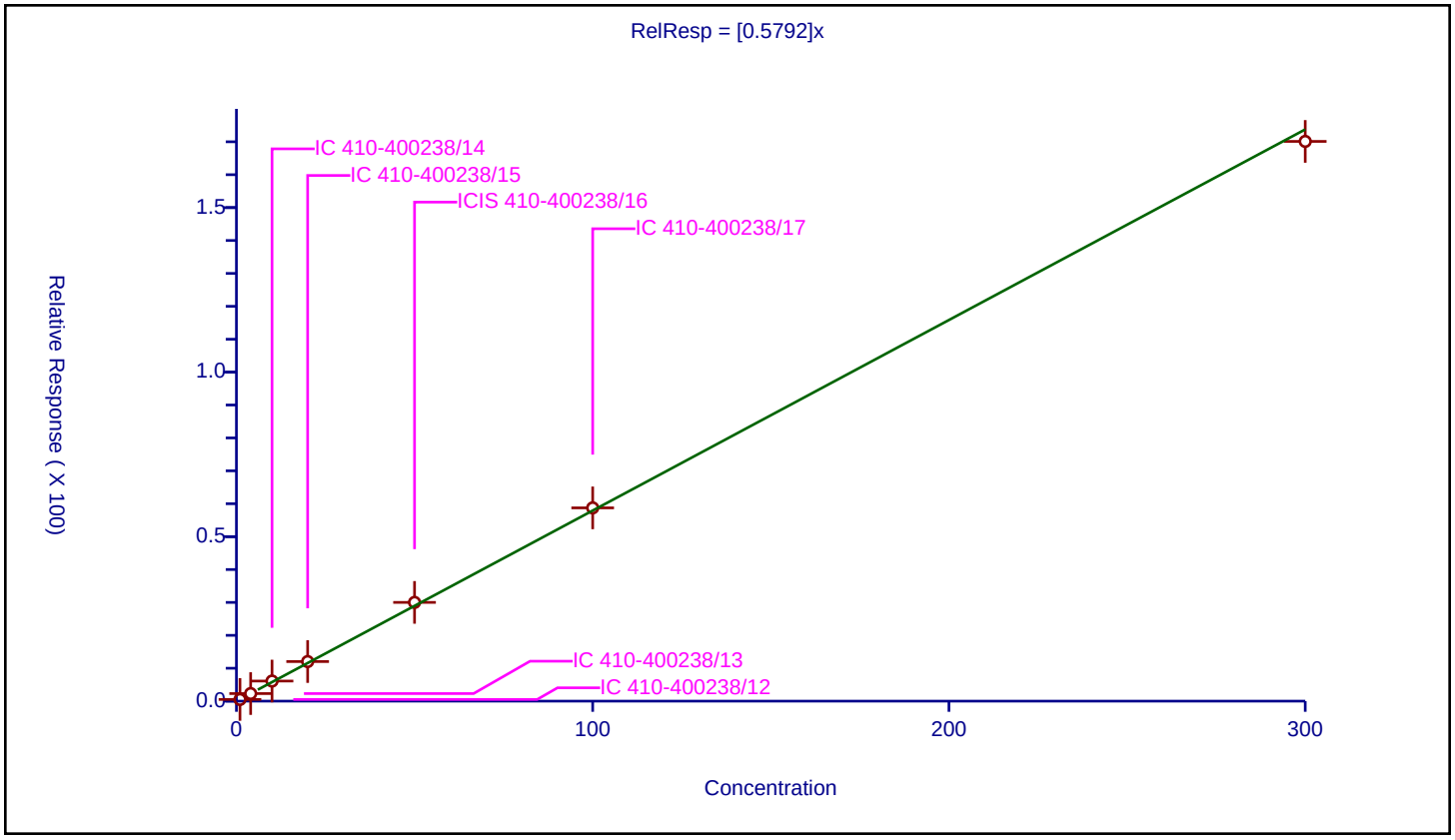
Curve Coefficients

Intercept:	0
Slope:	0.5792

Error Coefficients

Standard Error:	1380000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.51135	50.0	800919.0	0.51135	Y
2	IC 410-400238/13	4.0	2.303062	50.0	795137.0	0.575766	Y
3	IC 410-400238/14	10.0	6.107849	50.0	804604.0	0.610785	Y
4	IC 410-400238/15	20.0	12.032669	50.0	817649.0	0.601633	Y
5	ICIS 410-400238/16	50.0	30.012972	50.0	827927.0	0.600259	Y
6	IC 410-400238/17	100.0	58.741387	50.0	862386.0	0.587414	Y
7	IC 410-400238/18	300.0	170.117539	50.0	934155.0	0.567058	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

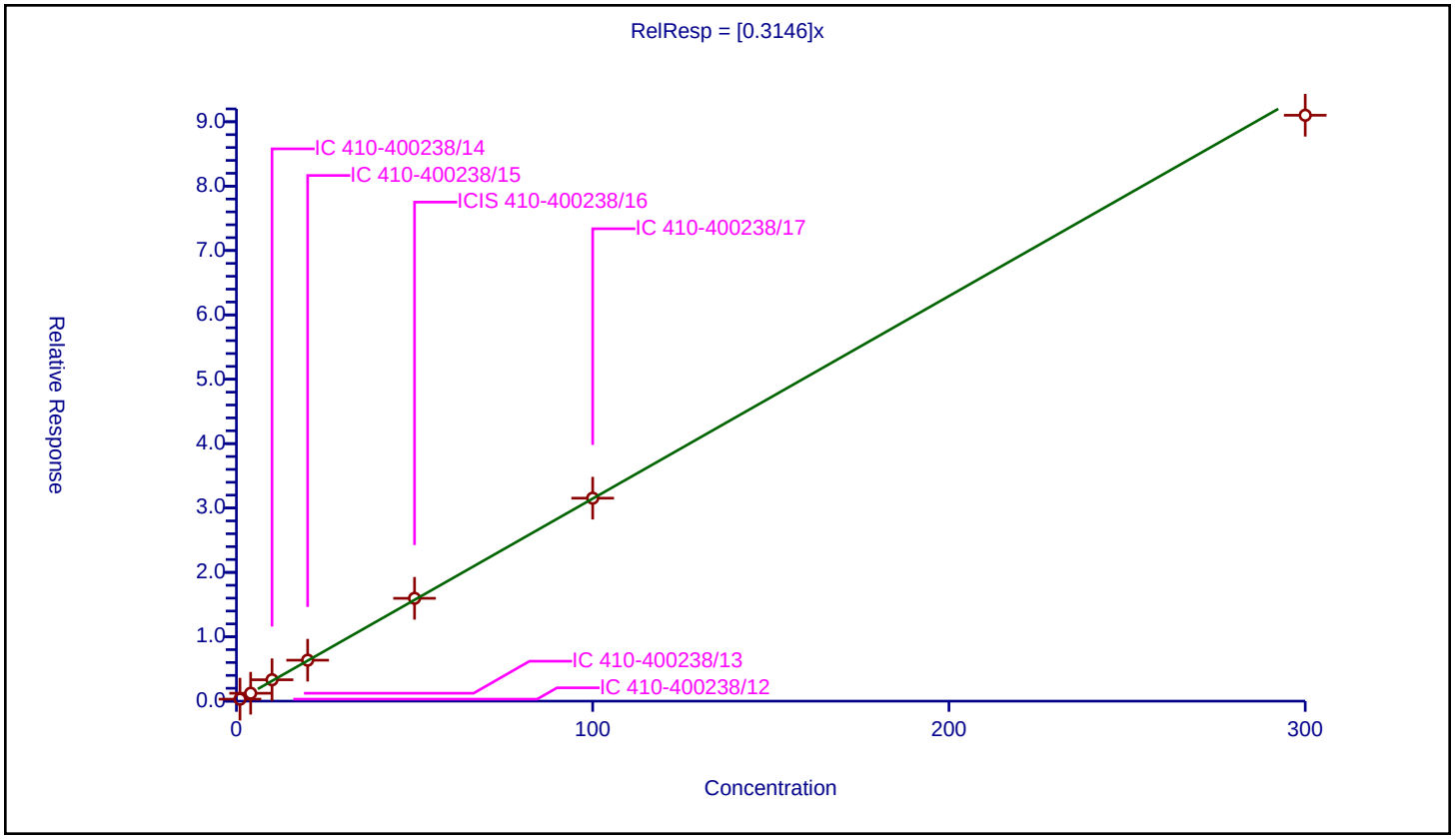
Curve Coefficients

Intercept:	0
Slope:	0.3146

Error Coefficients

Standard Error:	738000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.307022	50.0	800919.0	0.307022	Y
2	IC 410-400238/13	4.0	1.226895	50.0	795137.0	0.306724	Y
3	IC 410-400238/14	10.0	3.322069	50.0	804604.0	0.332207	Y
4	IC 410-400238/15	20.0	6.362021	50.0	817649.0	0.318101	Y
5	ICIS 410-400238/16	50.0	15.973872	50.0	827927.0	0.319477	Y
6	IC 410-400238/17	100.0	31.528167	50.0	862386.0	0.315282	Y
7	IC 410-400238/18	300.0	91.01086	50.0	934155.0	0.30337	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

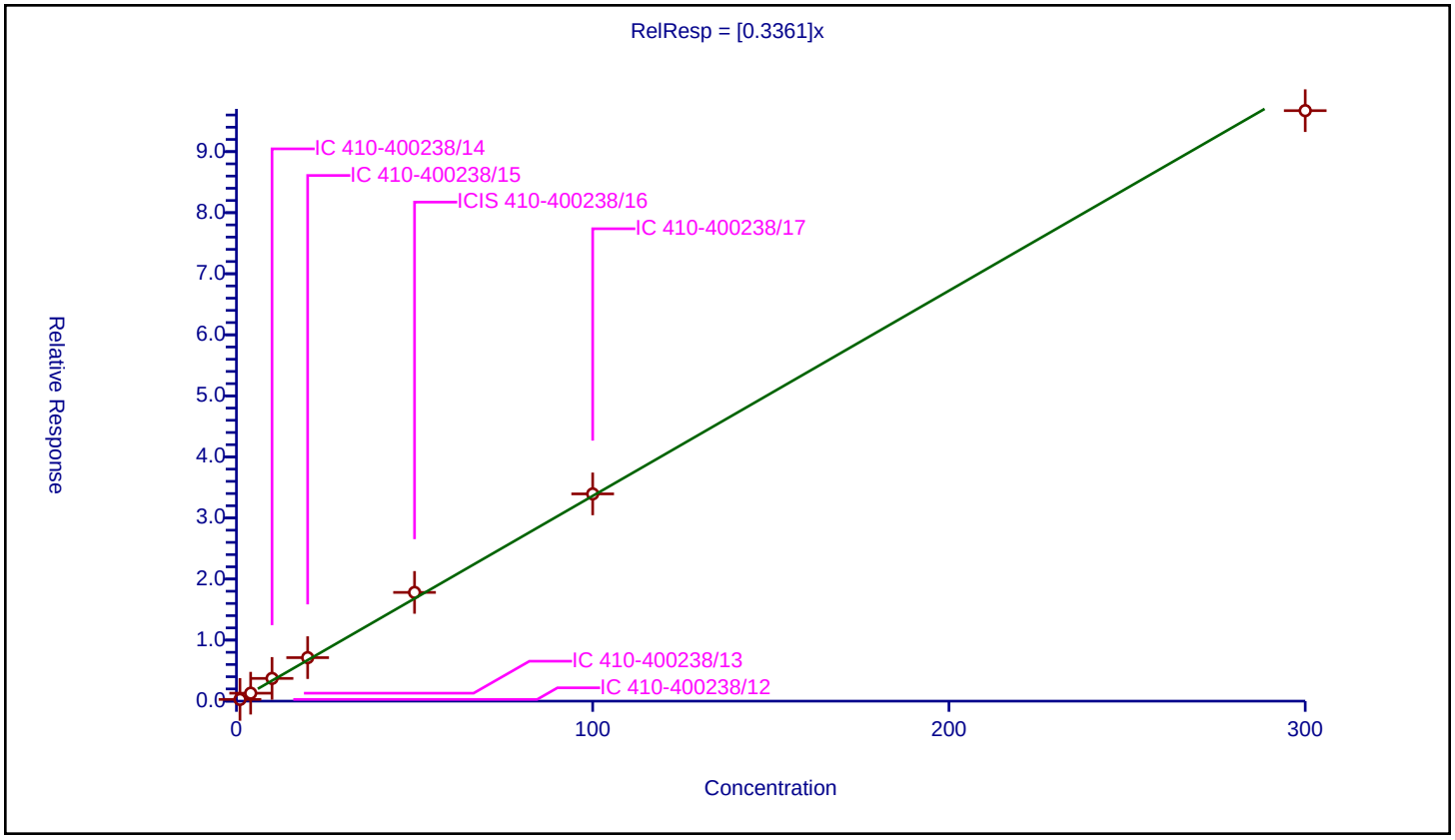
Curve Coefficients

Intercept:	0
Slope:	0.3361

Error Coefficients

Standard Error:	787000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.280927	50.0	800919.0	0.280927	Y
2	IC 410-400238/13	4.0	1.300593	50.0	795137.0	0.325148	Y
3	IC 410-400238/14	10.0	3.724503	50.0	804604.0	0.37245	Y
4	IC 410-400238/15	20.0	7.124573	50.0	817649.0	0.356229	Y
5	ICIS 410-400238/16	50.0	17.806461	50.0	827927.0	0.356129	Y
6	IC 410-400238/17	100.0	33.943907	50.0	862386.0	0.339439	Y
7	IC 410-400238/18	300.0	96.710503	50.0	934155.0	0.322368	Y



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Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

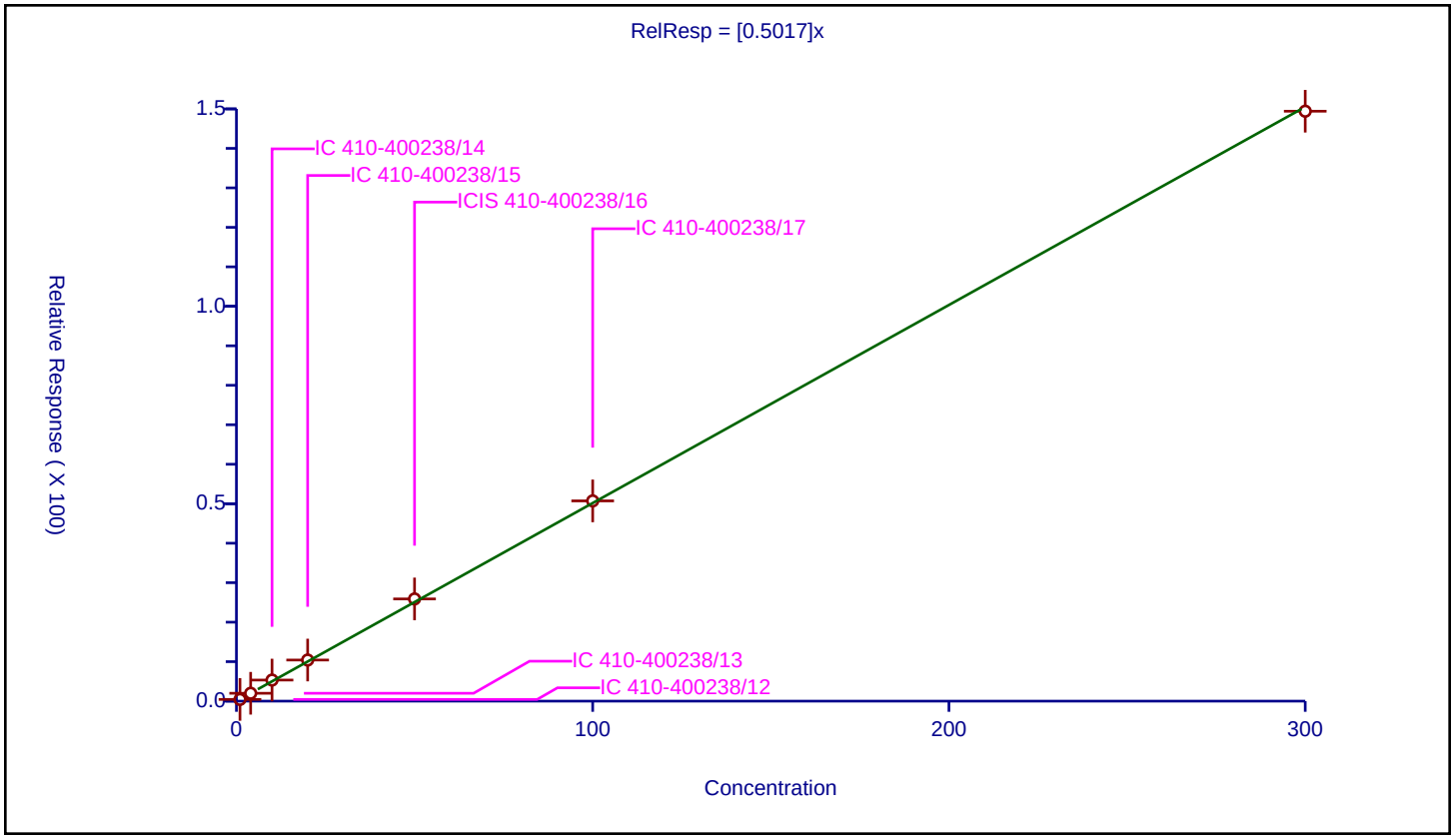
Curve Coefficients

Intercept:	0
Slope:	0.5017

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.435312	50.0	800919.0	0.435312	Y
2	IC 410-400238/13	4.0	1.995317	50.0	795137.0	0.498829	Y
3	IC 410-400238/14	10.0	5.341696	50.0	804604.0	0.53417	Y
4	IC 410-400238/15	20.0	10.412781	50.0	817649.0	0.520639	Y
5	ICIS 410-400238/16	50.0	25.887971	50.0	827927.0	0.517759	Y
6	IC 410-400238/17	100.0	50.715341	50.0	862386.0	0.507153	Y
7	IC 410-400238/18	300.0	149.411447	50.0	934155.0	0.498038	Y



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Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

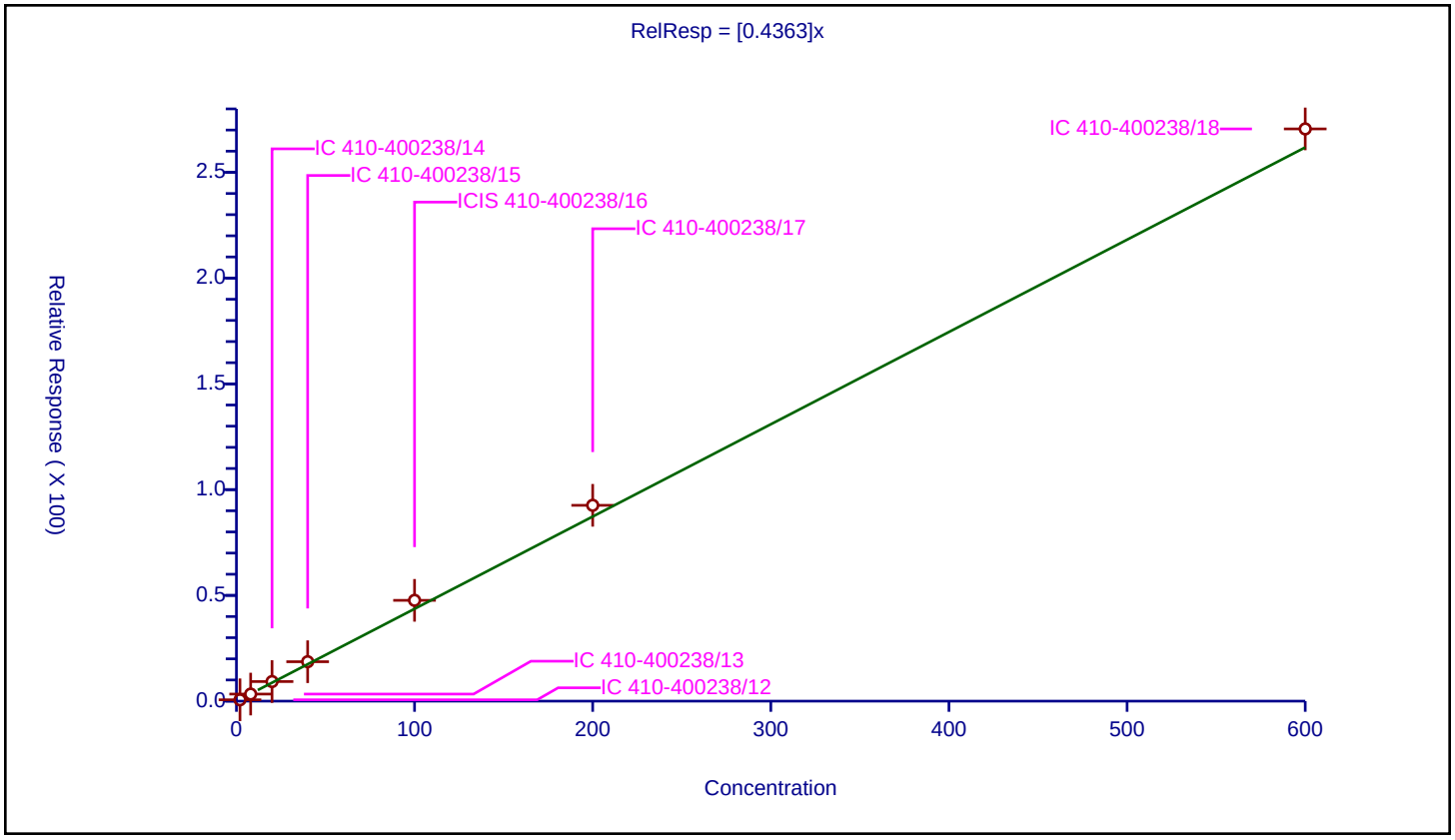
Curve Coefficients

Intercept:	0
Slope:	0.4363

Error Coefficients

Standard Error:	2190000
Relative Standard Error:	12.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	2.0	0.632461	50.0	800919.0	0.31623	Y
2	IC 410-400238/13	8.0	3.348857	50.0	795137.0	0.418607	Y
3	IC 410-400238/14	20.0	9.257225	50.0	804604.0	0.462861	Y
4	IC 410-400238/15	40.0	18.646632	50.0	817649.0	0.466166	Y
5	ICIS 410-400238/16	100.0	47.655349	50.0	827927.0	0.476553	Y
6	IC 410-400238/17	200.0	92.583947	50.0	862386.0	0.46292	Y
7	IC 410-400238/18	600.0	270.530372	50.0	934155.0	0.450884	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

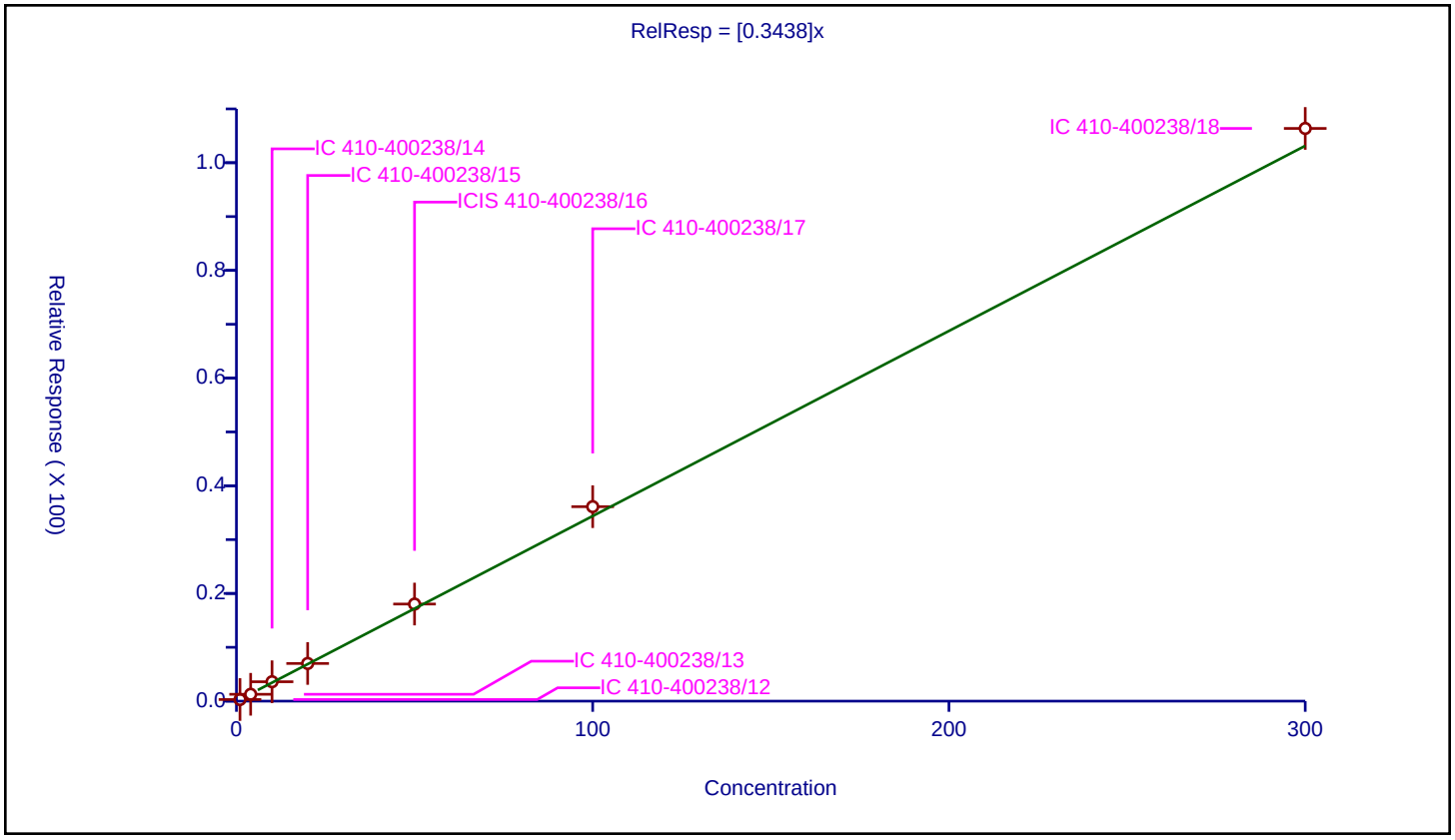
Curve Coefficients

Intercept:	0
Slope:	0.3438

Error Coefficients

Standard Error:	861000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.301279	50.0	800919.0	0.301279	Y
2	IC 410-400238/13	4.0	1.274057	50.0	795137.0	0.318514	Y
3	IC 410-400238/14	10.0	3.604009	50.0	804604.0	0.360401	Y
4	IC 410-400238/15	20.0	6.998663	50.0	817649.0	0.349933	Y
5	ICIS 410-400238/16	50.0	18.032568	50.0	827927.0	0.360651	Y
6	IC 410-400238/17	100.0	36.118687	50.0	862386.0	0.361187	Y
7	IC 410-400238/18	300.0	106.36859	50.0	934155.0	0.354562	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

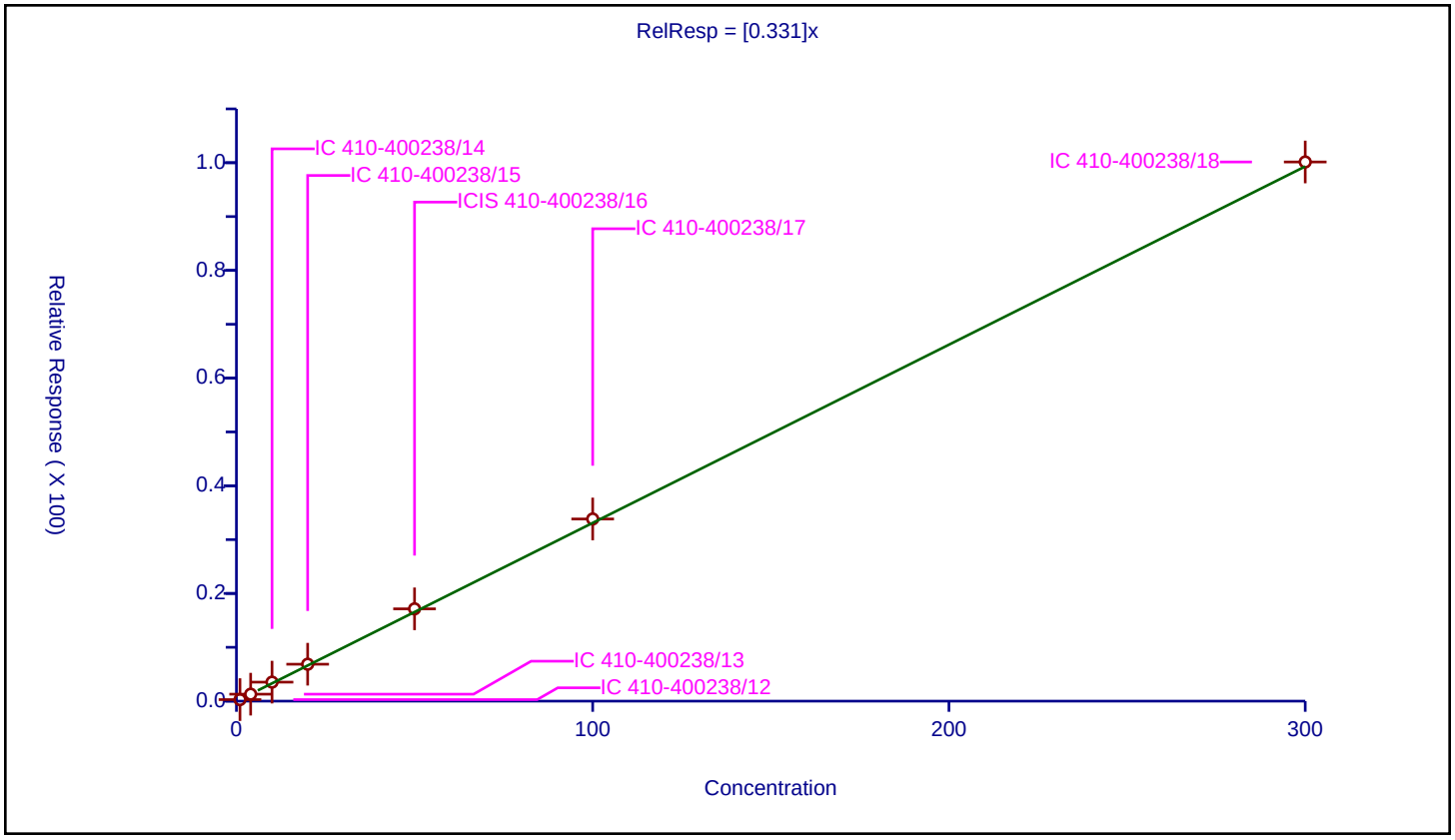
Curve Coefficients

Intercept:	0
Slope:	0.331

Error Coefficients

Standard Error:	810000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.2833	50.0	800919.0	0.2833	Y
2	IC 410-400238/13	4.0	1.29223	50.0	795137.0	0.323058	Y
3	IC 410-400238/14	10.0	3.529314	50.0	804604.0	0.352931	Y
4	IC 410-400238/15	20.0	6.85716	50.0	817649.0	0.342858	Y
5	ICIS 410-400238/16	50.0	17.14505	50.0	827927.0	0.342901	Y
6	IC 410-400238/17	100.0	33.831718	50.0	862386.0	0.338317	Y
7	IC 410-400238/18	300.0	100.143231	50.0	934155.0	0.333811	Y



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Calibration / 1-Chlorohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

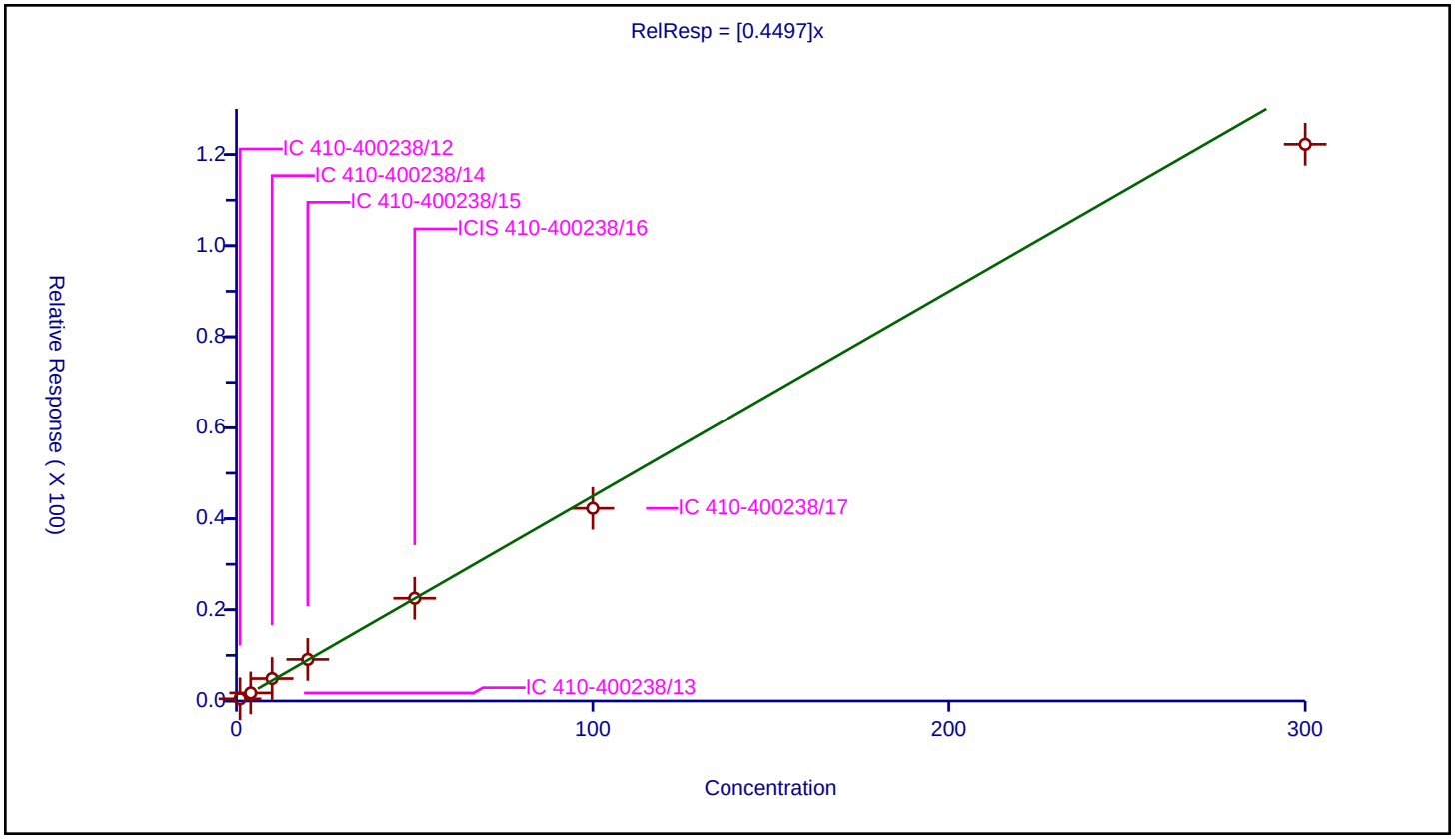
Curve Coefficients

Intercept:	0
Slope:	0.4497

Error Coefficients

Standard Error:	993000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.475766	50.0	800919.0	0.475766	Y
2	IC 410-400238/13	4.0	1.770009	50.0	795137.0	0.442502	Y
3	IC 410-400238/14	10.0	4.927704	50.0	804604.0	0.49277	Y
4	IC 410-400238/15	20.0	9.115892	50.0	817649.0	0.455795	Y
5	ICIS 410-400238/16	50.0	22.52765	50.0	827927.0	0.450553	Y
6	IC 410-400238/17	100.0	42.277704	50.0	862386.0	0.422777	Y
7	IC 410-400238/18	300.0	122.252678	50.0	934155.0	0.407509	Y



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Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

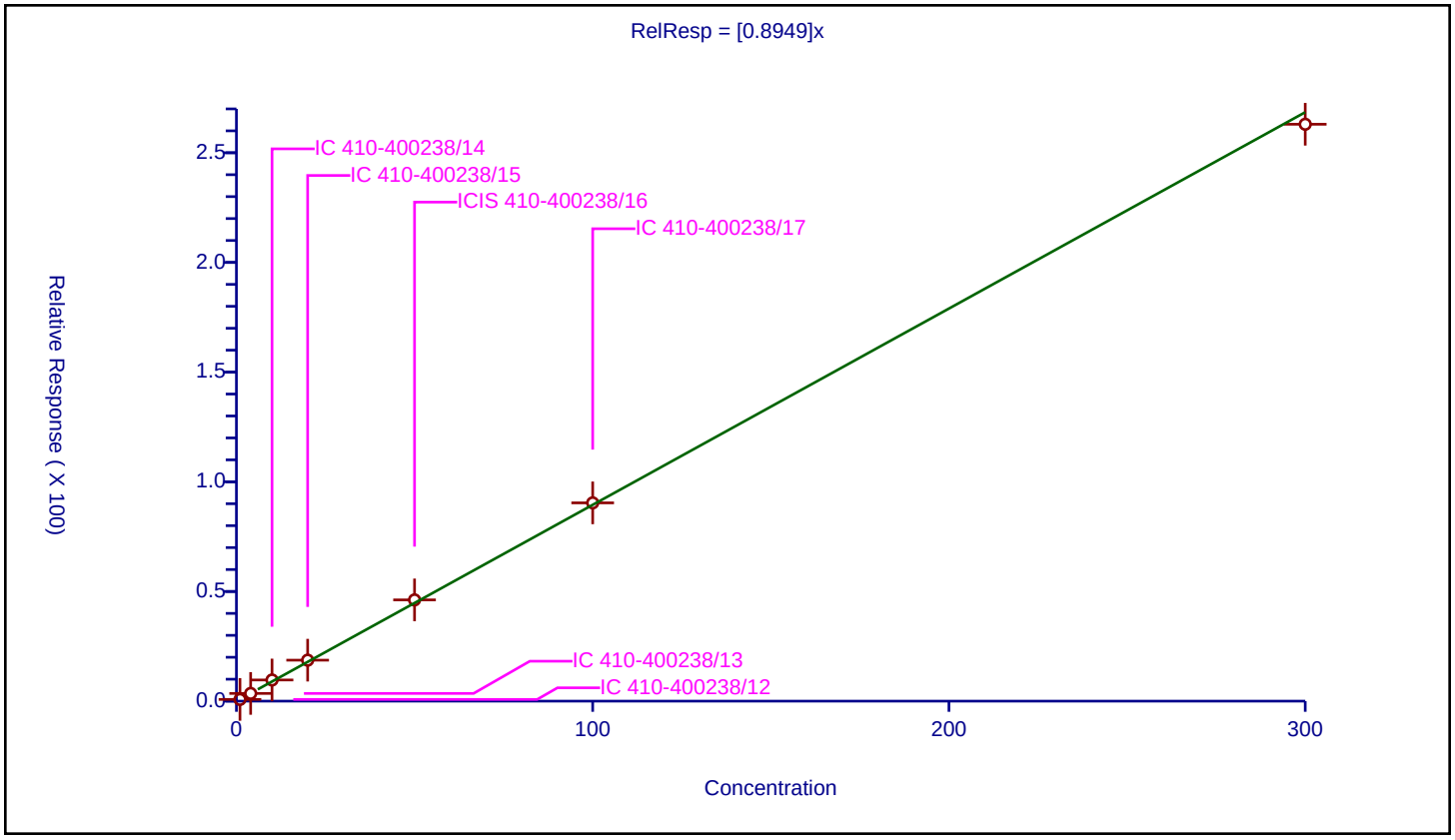
Curve Coefficients

Intercept:	0
Slope:	0.8949

Error Coefficients

Standard Error:	2130000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.782726	50.0	800919.0	0.782726	Y
2	IC 410-400238/13	4.0	3.514992	50.0	795137.0	0.878748	Y
3	IC 410-400238/14	10.0	9.645366	50.0	804604.0	0.964537	Y
4	IC 410-400238/15	20.0	18.686625	50.0	817649.0	0.934331	Y
5	ICIS 410-400238/16	50.0	46.163309	50.0	827927.0	0.923266	Y
6	IC 410-400238/17	100.0	90.398151	50.0	862386.0	0.903982	Y
7	IC 410-400238/18	300.0	262.994792	50.0	934155.0	0.876649	Y



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Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

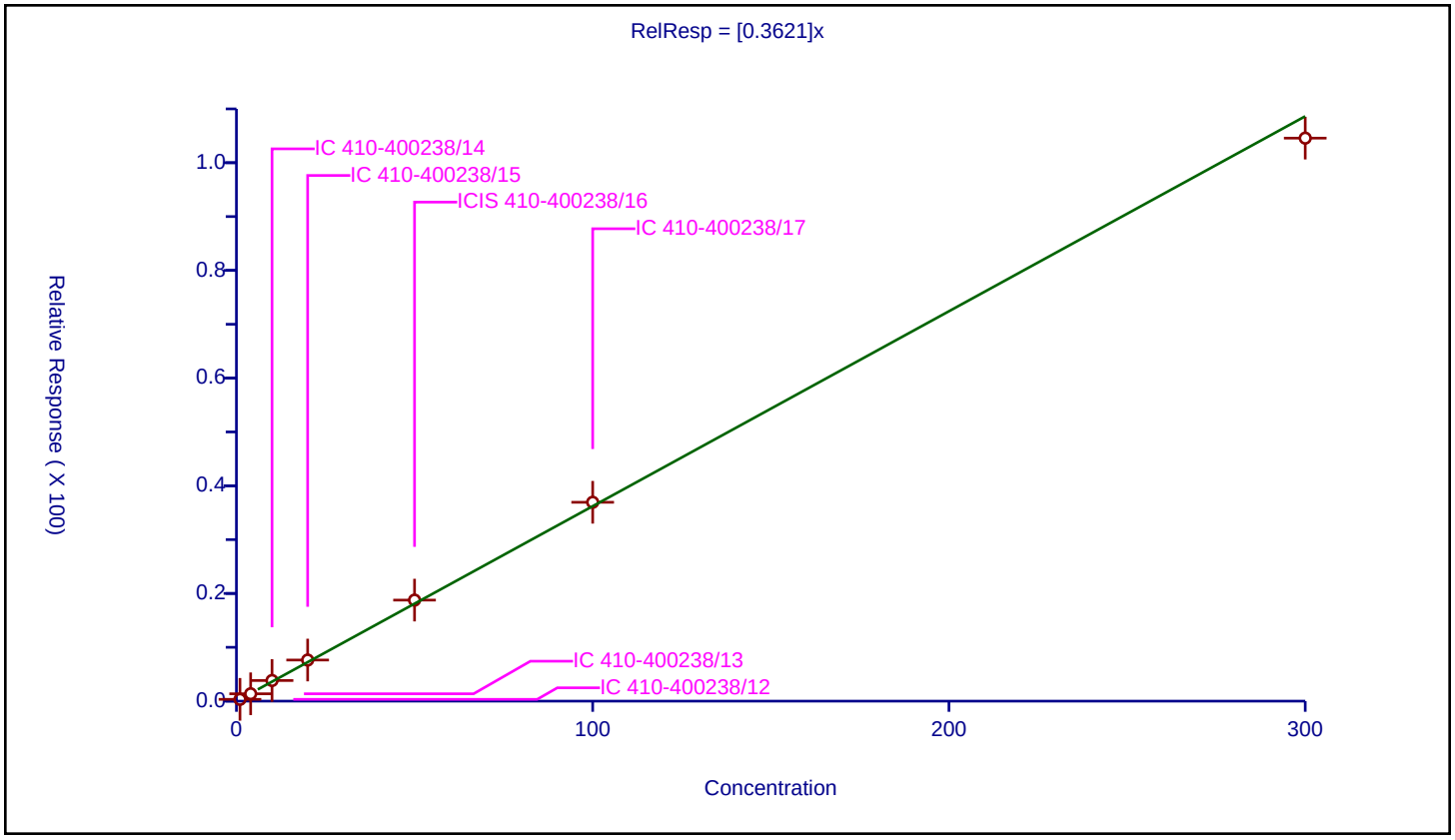
Curve Coefficients

Intercept:	0
Slope:	0.3621

Error Coefficients

Standard Error:	850000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.333991	50.0	800919.0	0.333991	Y
2	IC 410-400238/13	4.0	1.370015	50.0	795137.0	0.342504	Y
3	IC 410-400238/14	10.0	3.830331	50.0	804604.0	0.383033	Y
4	IC 410-400238/15	20.0	7.634878	50.0	817649.0	0.381744	Y
5	ICIS 410-400238/16	50.0	18.76814	50.0	827927.0	0.375363	Y
6	IC 410-400238/17	100.0	36.935027	50.0	862386.0	0.36935	Y
7	IC 410-400238/18	300.0	104.56846	50.0	934155.0	0.348562	Y



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Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

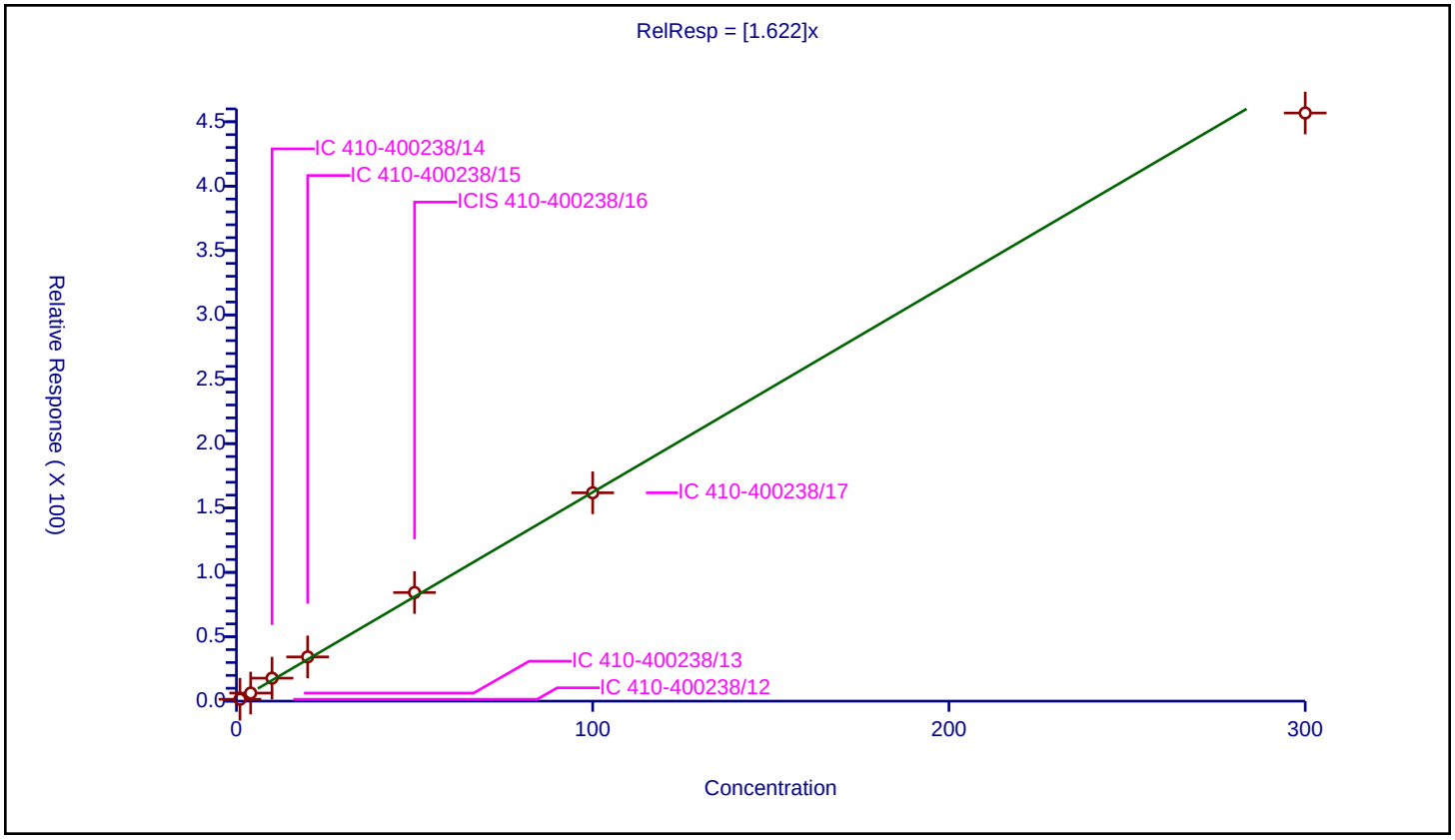
Curve Coefficients

Intercept:	0
Slope:	1.622

Error Coefficients

Standard Error:	3720000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.45795	50.0	800919.0	1.45795	Y
2	IC 410-400238/13	4.0	6.272315	50.0	795137.0	1.568079	Y
3	IC 410-400238/14	10.0	17.838278	50.0	804604.0	1.783828	Y
4	IC 410-400238/15	20.0	34.359242	50.0	817649.0	1.717962	Y
5	ICIS 410-400238/16	50.0	84.372596	50.0	827927.0	1.687452	Y
6	IC 410-400238/17	100.0	161.830433	50.0	862386.0	1.618304	Y
7	IC 410-400238/18	300.0	456.787632	50.0	934155.0	1.522625	Y



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Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

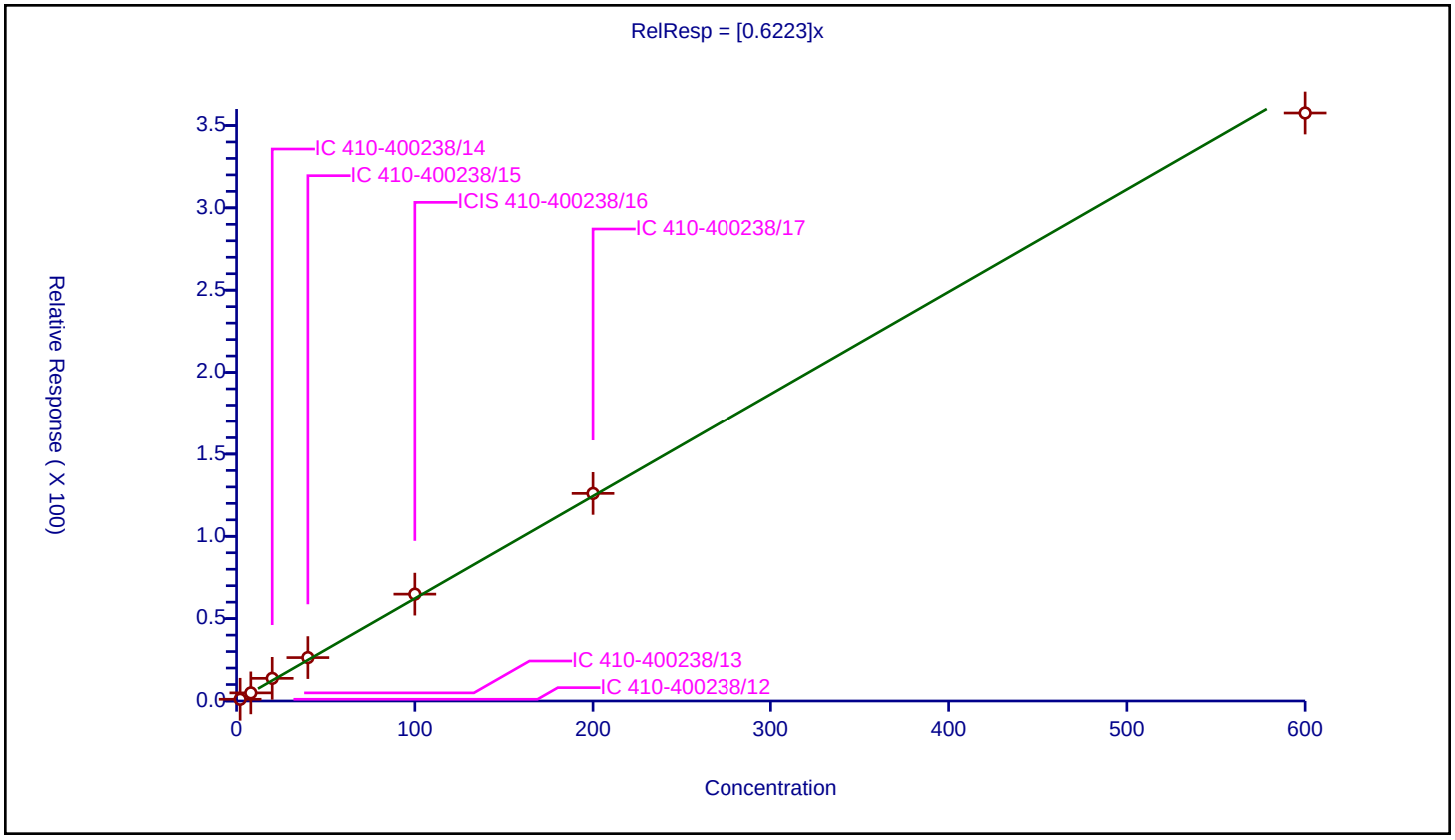
Curve Coefficients

Intercept:	0
Slope:	0.6223

Error Coefficients

Standard Error:	2910000
Relative Standard Error:	8.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	2.0	1.037933	50.0	800919.0	0.518966	Y
2	IC 410-400238/13	8.0	4.926635	50.0	795137.0	0.615829	Y
3	IC 410-400238/14	20.0	13.757886	50.0	804604.0	0.687894	Y
4	IC 410-400238/15	40.0	26.341743	50.0	817649.0	0.658544	Y
5	ICIS 410-400238/16	100.0	64.875466	50.0	827927.0	0.648755	Y
6	IC 410-400238/17	200.0	126.064894	50.0	862386.0	0.630324	Y
7	IC 410-400238/18	600.0	357.572887	50.0	934155.0	0.595955	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

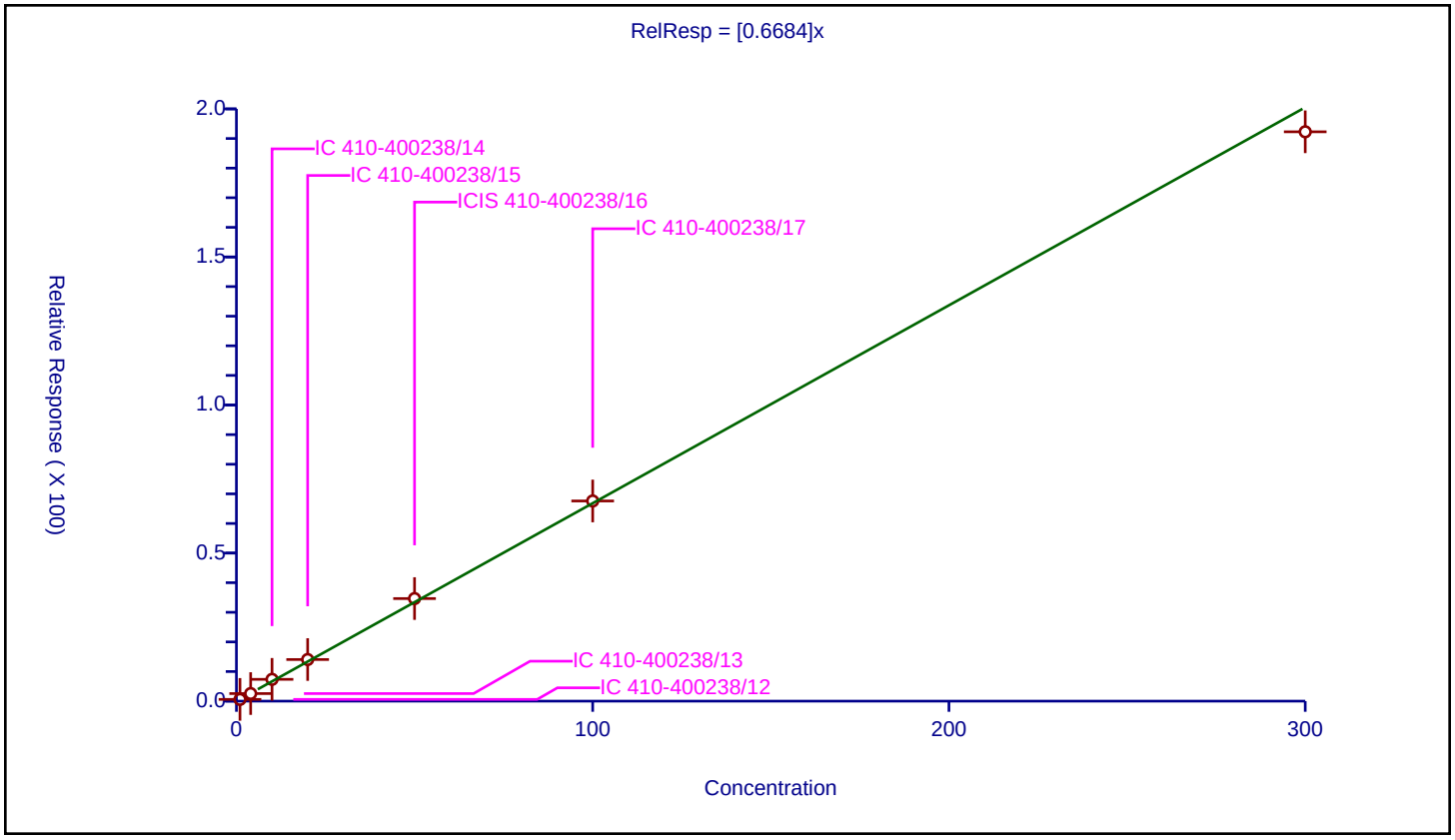
Curve Coefficients

Intercept:	0
Slope:	0.6684

Error Coefficients

Standard Error:	1560000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.59001	50.0	800919.0	0.59001	Y
2	IC 410-400238/13	4.0	2.560754	50.0	795137.0	0.640188	Y
3	IC 410-400238/14	10.0	7.360702	50.0	804604.0	0.73607	Y
4	IC 410-400238/15	20.0	14.053708	50.0	817649.0	0.702685	Y
5	ICIS 410-400238/16	50.0	34.639165	50.0	827927.0	0.692783	Y
6	IC 410-400238/17	100.0	67.600123	50.0	862386.0	0.676001	Y
7	IC 410-400238/18	300.0	192.26547	50.0	934155.0	0.640885	Y



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Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

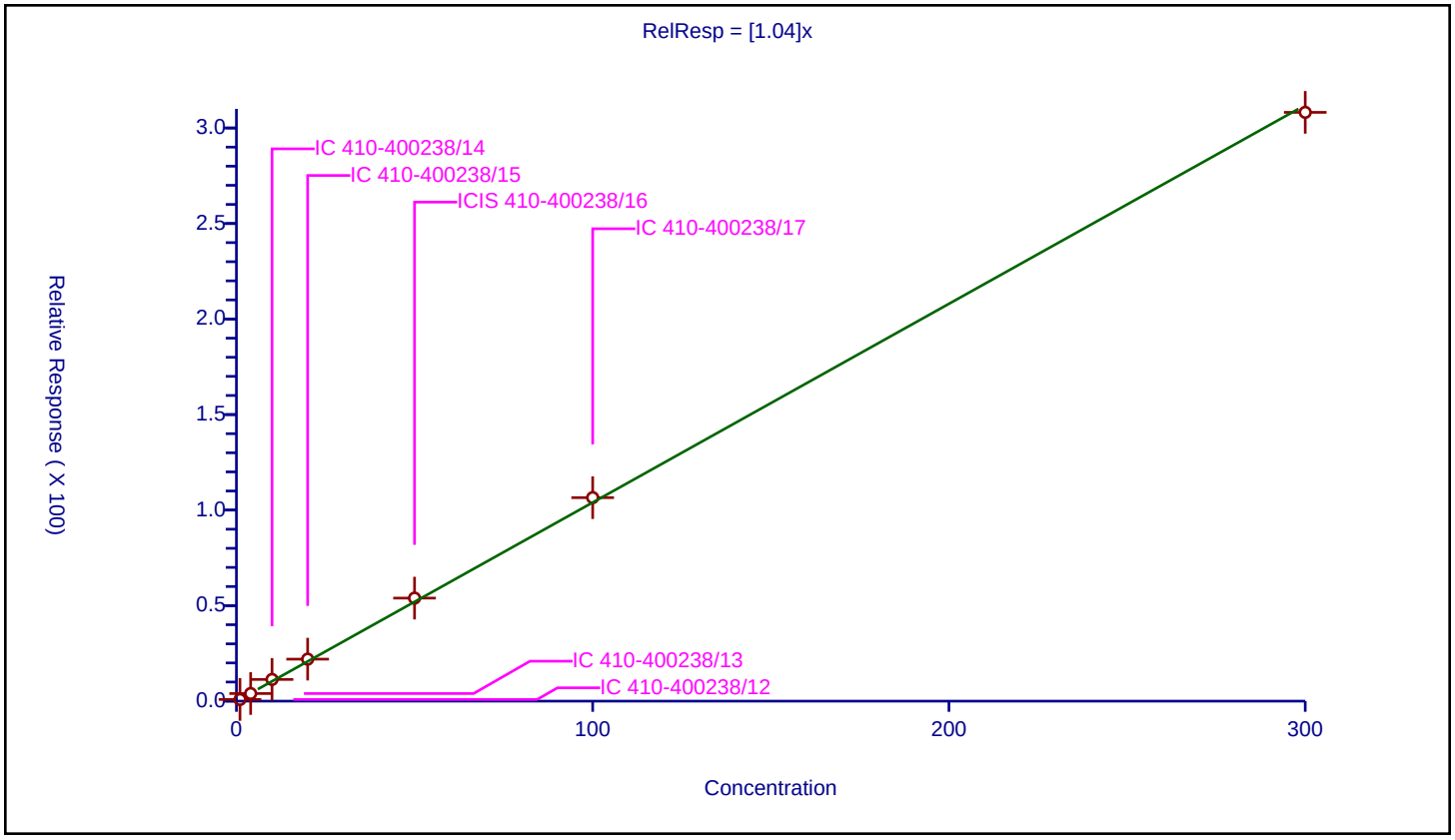
Curve Coefficients

Intercept:	0
Slope:	1.04

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.87668	50.0	800919.0	0.87668	Y
2	IC 410-400238/13	4.0	3.985917	50.0	795137.0	0.996479	Y
3	IC 410-400238/14	10.0	11.358569	50.0	804604.0	1.135857	Y
4	IC 410-400238/15	20.0	21.983394	50.0	817649.0	1.09917	Y
5	ICIS 410-400238/16	50.0	53.931748	50.0	827927.0	1.078635	Y
6	IC 410-400238/17	100.0	106.511991	50.0	862386.0	1.06512	Y
7	IC 410-400238/18	300.0	308.192966	50.0	934155.0	1.02731	Y



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Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

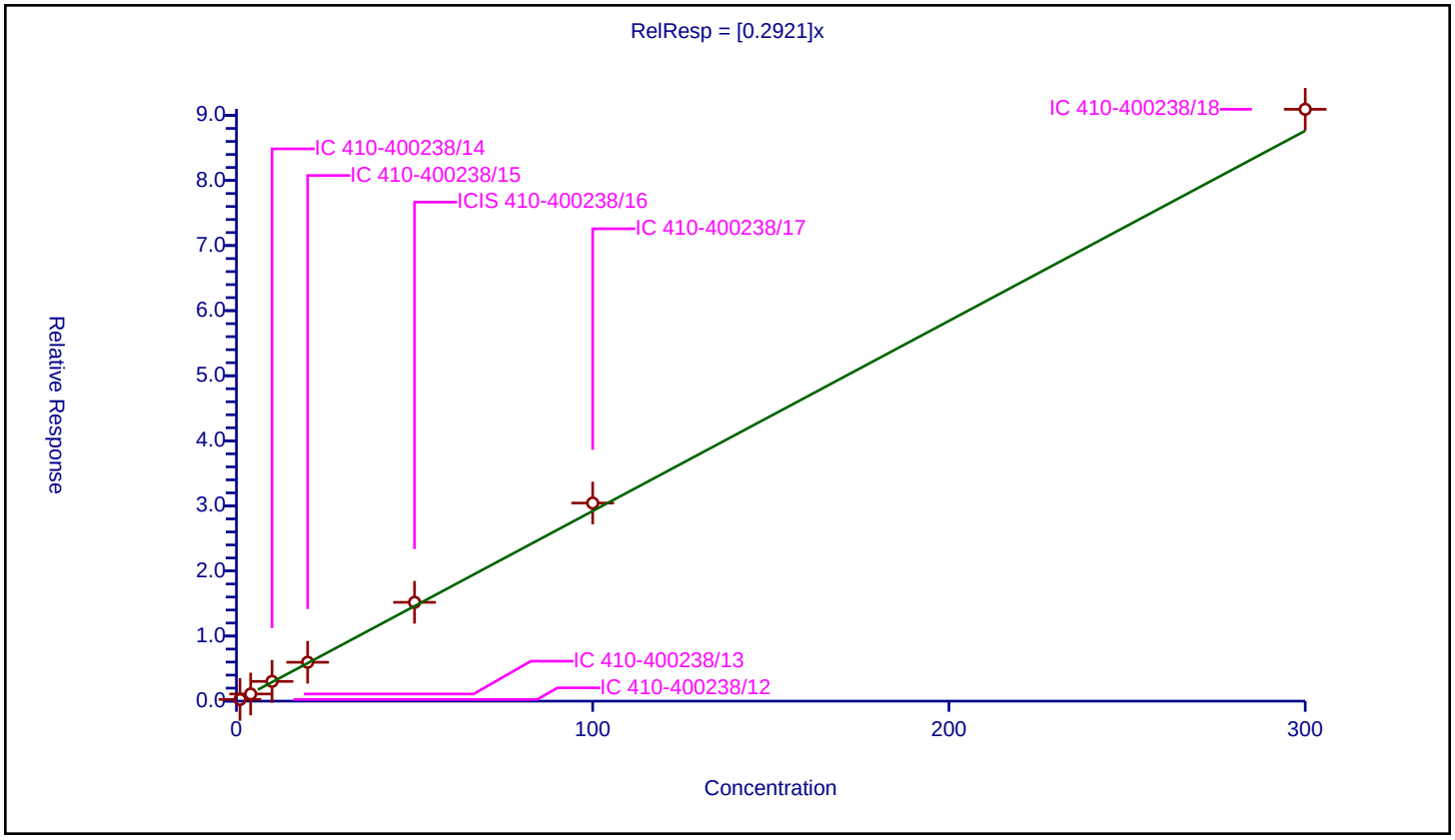
Curve Coefficients

Intercept:	0
Slope:	0.2921

Error Coefficients

Standard Error:	735000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.25683	50.0	800919.0	0.25683	Y
2	IC 410-400238/13	4.0	1.098364	50.0	795137.0	0.274591	Y
3	IC 410-400238/14	10.0	3.036152	50.0	804604.0	0.303615	Y
4	IC 410-400238/15	20.0	5.972673	50.0	817649.0	0.298634	Y
5	ICIS 410-400238/16	50.0	15.184612	50.0	827927.0	0.303692	Y
6	IC 410-400238/17	100.0	30.437878	50.0	862386.0	0.304379	Y
7	IC 410-400238/18	300.0	90.937211	50.0	934155.0	0.303124	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

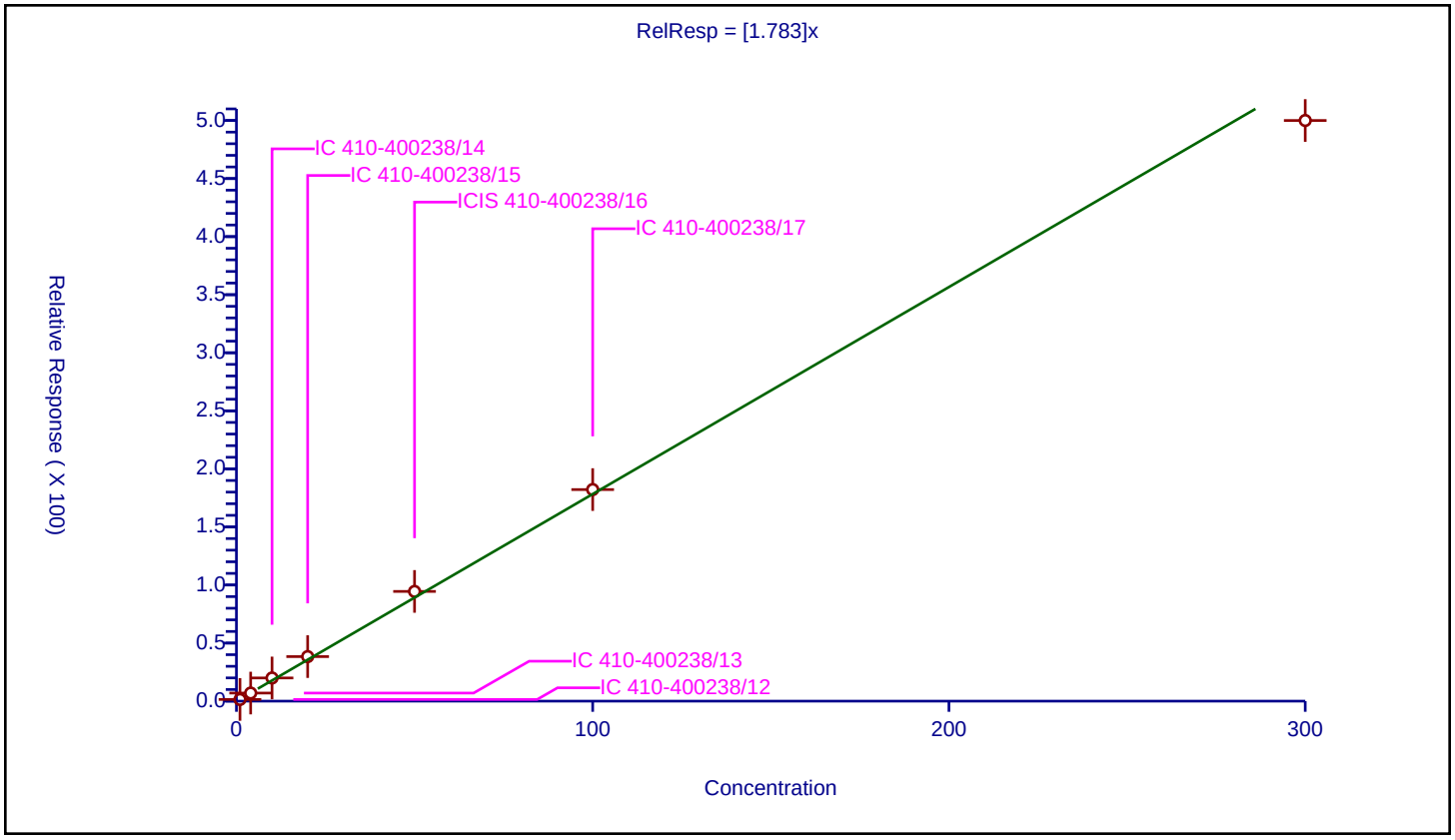
Curve Coefficients

Intercept:	0
Slope:	1.783

Error Coefficients

Standard Error:	4080000
Relative Standard Error:	10.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.448087	50.0	800919.0	1.448087	Y
2	IC 410-400238/13	4.0	6.964586	50.0	795137.0	1.741146	Y
3	IC 410-400238/14	10.0	19.958514	50.0	804604.0	1.995851	Y
4	IC 410-400238/15	20.0	38.361326	50.0	817649.0	1.918066	Y
5	ICIS 410-400238/16	50.0	94.476506	50.0	827927.0	1.88953	Y
6	IC 410-400238/17	100.0	182.18982	50.0	862386.0	1.821898	Y
7	IC 410-400238/18	300.0	500.001552	50.0	934155.0	1.666672	Y



Calibration / Cyclohexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

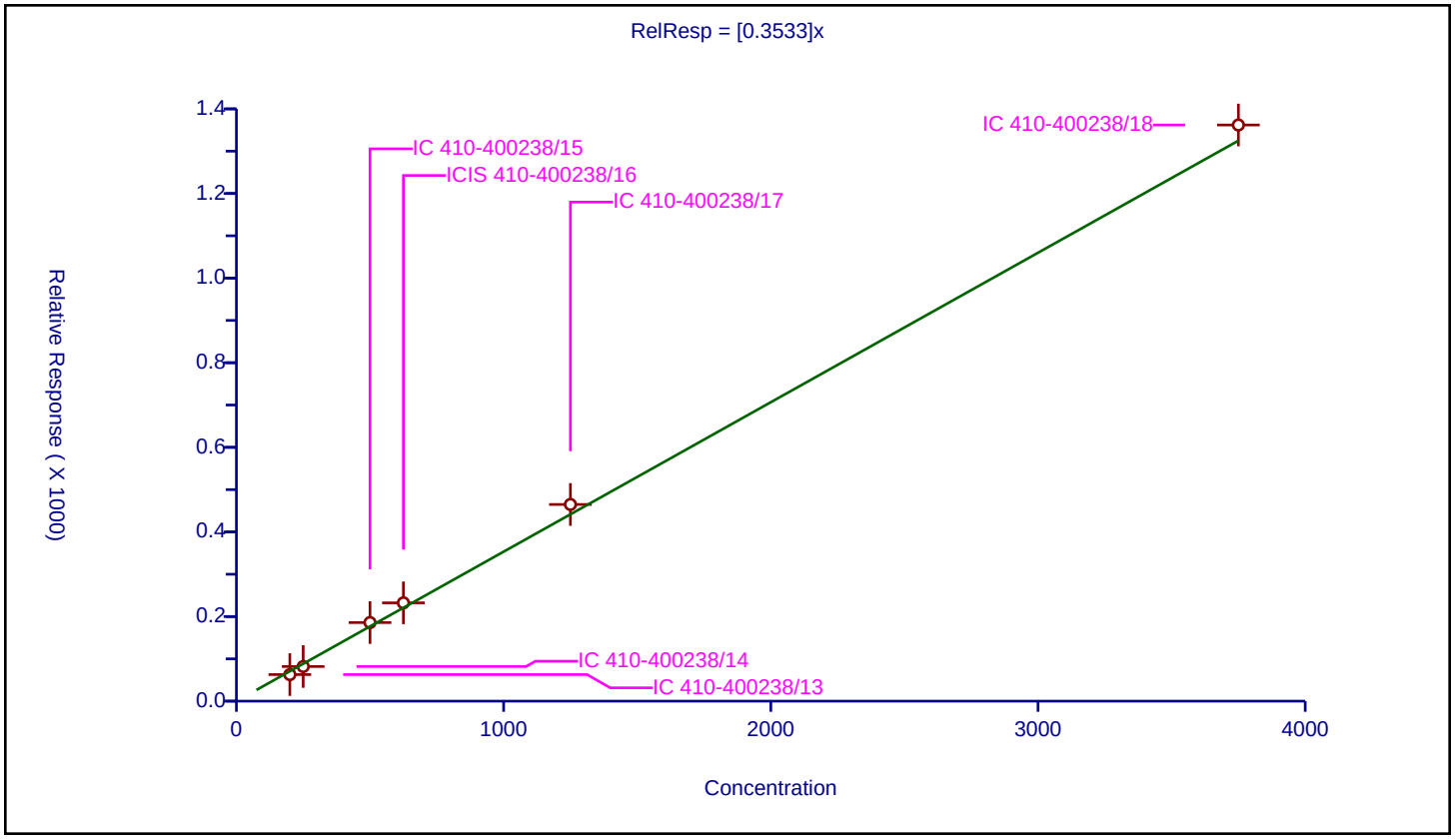
Curve Coefficients

Intercept:	0
Slope:	0.3533

Error Coefficients

Standard Error:	1690000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/13	199.995981	62.791478	250.0	597386.0	0.313964	Y
2	IC 410-400238/14	249.994976	81.85692	250.0	592201.0	0.327434	Y
3	IC 410-400238/15	499.989952	185.761615	250.0	603218.0	0.371531	Y
4	ICIS 410-400238/16	624.98744	232.33097	250.0	602127.0	0.371737	Y
5	IC 410-400238/17	1249.97488	464.930547	250.0	618045.0	0.371952	Y
6	IC 410-400238/18	3749.92464	1361.893939	250.0	644778.0	0.363179	Y



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Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

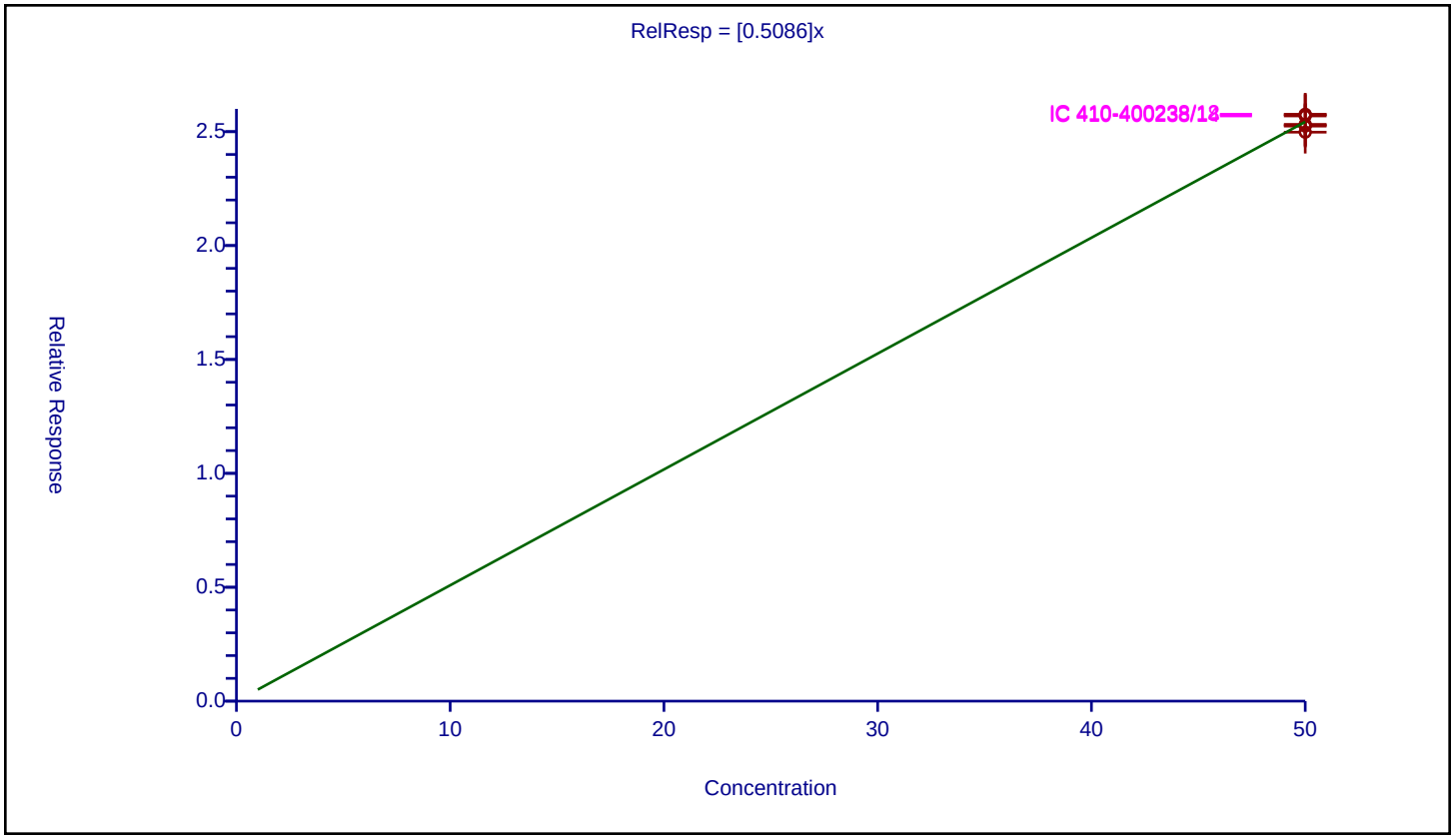
Curve Coefficients

Intercept:	0
Slope:	0.5086

Error Coefficients

Standard Error:	459000
Relative Standard Error:	1.2
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	50.0	25.761531	50.0	800919.0	0.515231	Y
2	IC 410-400238/13	50.0	25.280738	50.0	795137.0	0.505615	Y
3	IC 410-400238/14	50.0	25.689905	50.0	804604.0	0.513798	Y
4	IC 410-400238/15	50.0	25.244451	50.0	817649.0	0.504889	Y
5	ICIS 410-400238/16	50.0	25.31914	50.0	827927.0	0.506383	Y
6	IC 410-400238/17	50.0	24.97849	50.0	862386.0	0.49957	Y
7	IC 410-400238/18	50.0	25.742837	50.0	934155.0	0.514857	Y



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Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

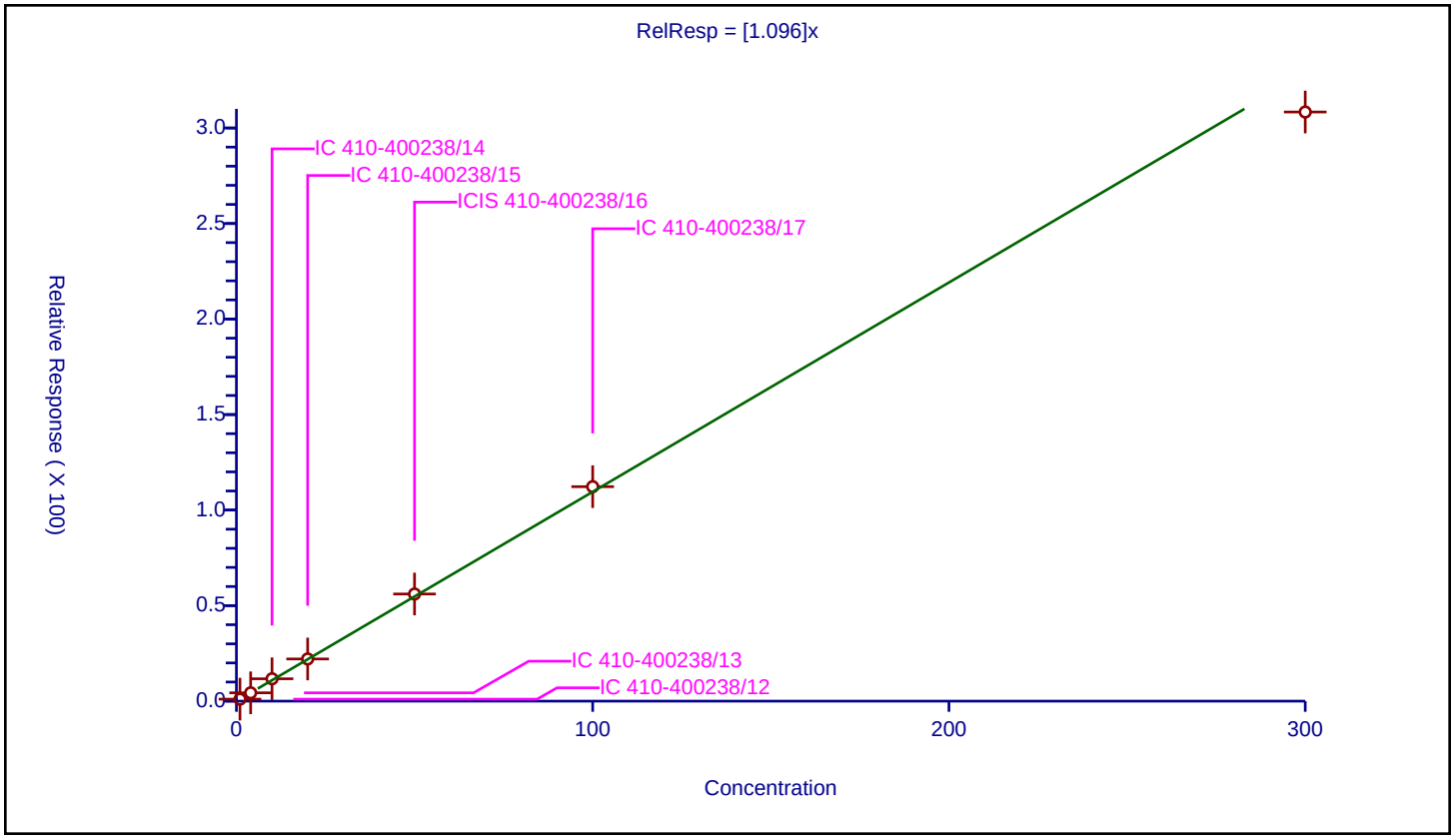
Curve Coefficients

Intercept:	0
Slope:	1.096

Error Coefficients

Standard Error:	1530000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.033452	50.0	491605.0	1.033452	Y
2	IC 410-400238/13	4.0	4.360451	50.0	482301.0	1.090113	Y
3	IC 410-400238/14	10.0	11.699414	50.0	487674.0	1.169941	Y
4	IC 410-400238/15	20.0	22.078123	50.0	494528.0	1.103906	Y
5	ICIS 410-400238/16	50.0	56.077584	50.0	485563.0	1.121552	Y
6	IC 410-400238/17	100.0	112.259771	50.0	495568.0	1.122598	Y
7	IC 410-400238/18	300.0	308.365096	50.0	570382.0	1.027884	Y



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Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

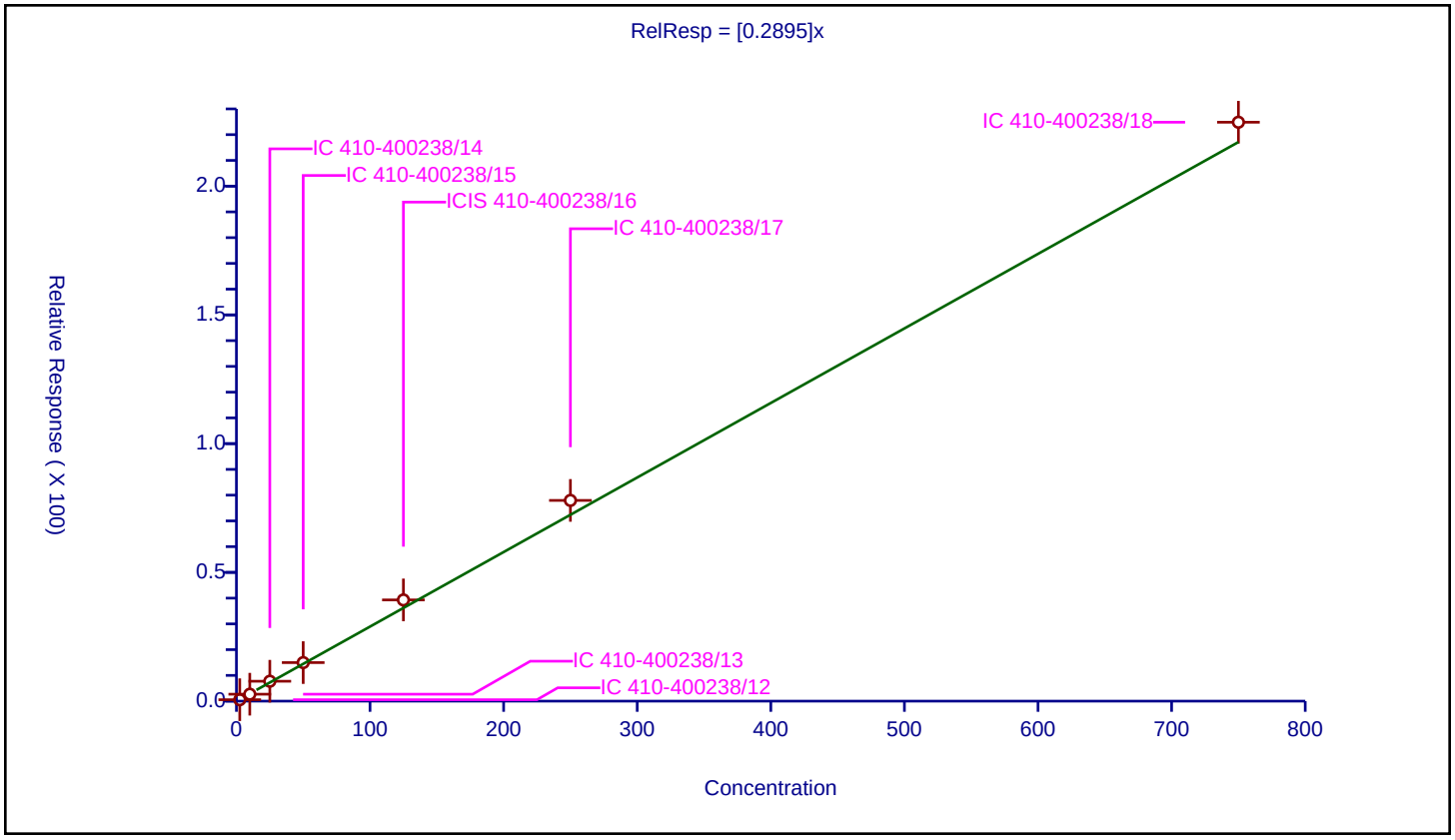
Curve Coefficients

Intercept:	0
Slope:	0.2895

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	11.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	2.5	0.556748	50.0	491605.0	0.222699	Y
2	IC 410-400238/13	10.0	2.689503	50.0	482301.0	0.26895	Y
3	IC 410-400238/14	25.0	7.730984	50.0	487674.0	0.309239	Y
4	IC 410-400238/15	50.0	14.973369	50.0	494528.0	0.299467	Y
5	ICIS 410-400238/16	125.0	39.307258	50.0	485563.0	0.314458	Y
6	IC 410-400238/17	250.0	77.950755	50.0	495568.0	0.311803	Y
7	IC 410-400238/18	750.0	224.814861	50.0	570382.0	0.299753	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

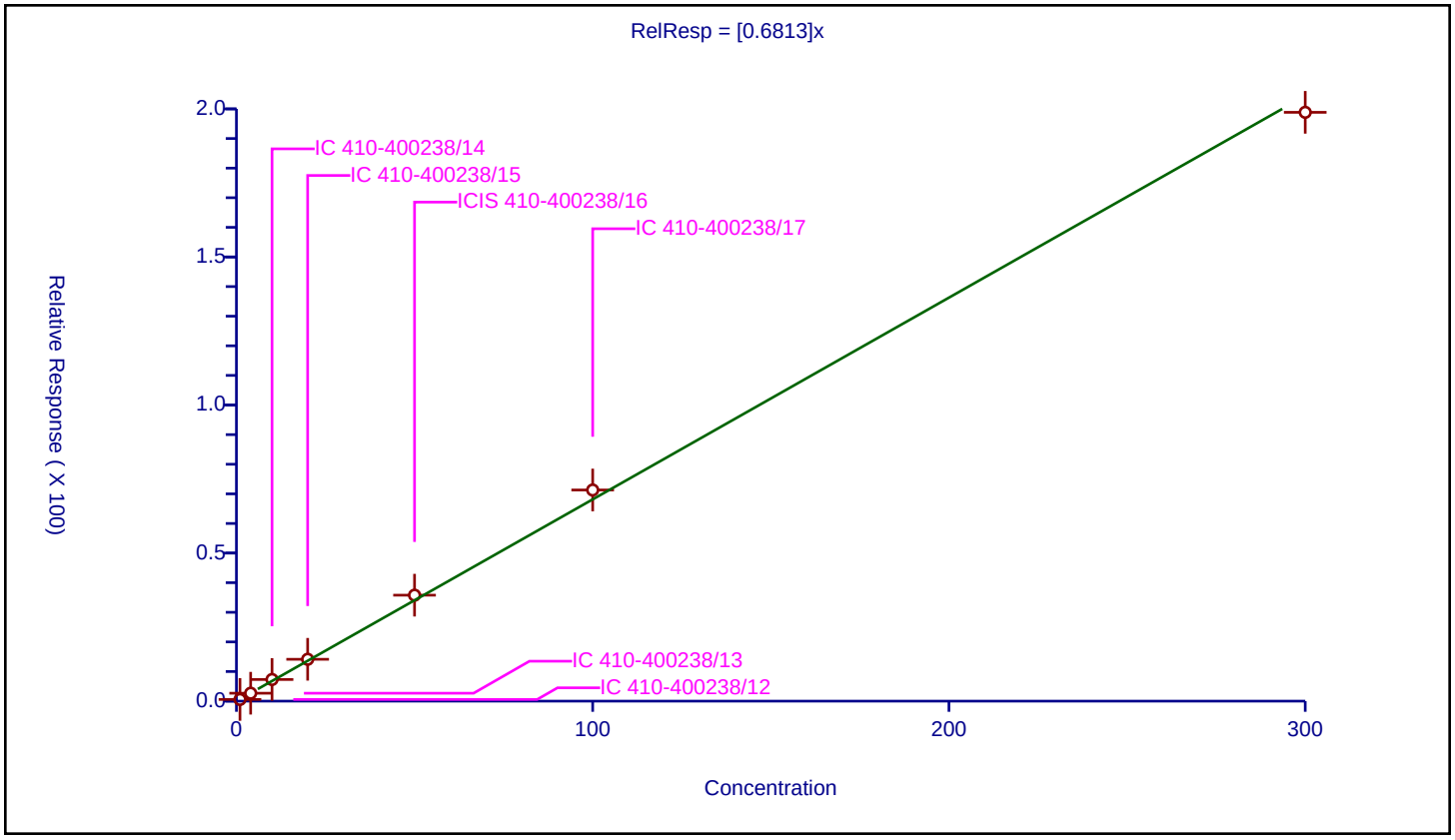
Curve Coefficients

Intercept:	0
Slope:	0.6813

Error Coefficients

Standard Error:	982000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.570885	50.0	491605.0	0.570885	Y
2	IC 410-400238/13	4.0	2.676441	50.0	482301.0	0.66911	Y
3	IC 410-400238/14	10.0	7.309801	50.0	487674.0	0.73098	Y
4	IC 410-400238/15	20.0	14.131758	50.0	494528.0	0.706588	Y
5	ICIS 410-400238/16	50.0	35.784234	50.0	485563.0	0.715685	Y
6	IC 410-400238/17	100.0	71.300104	50.0	495568.0	0.713001	Y
7	IC 410-400238/18	300.0	198.840777	50.0	570382.0	0.662803	Y



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Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

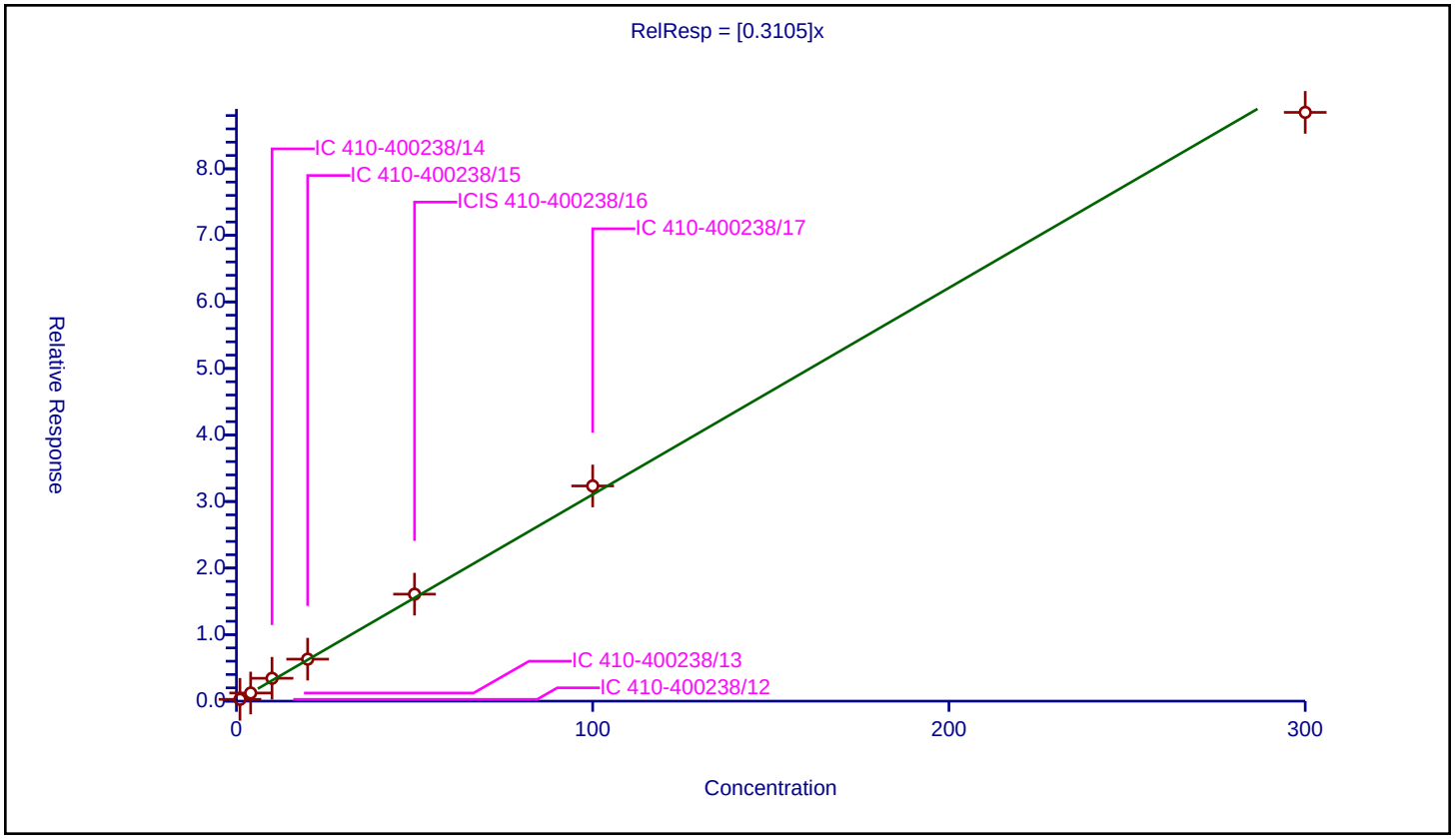
Curve Coefficients

Intercept:	0
Slope:	0.3105

Error Coefficients

Standard Error:	438000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.269118	50.0	491605.0	0.269118	Y
2	IC 410-400238/13	4.0	1.223406	50.0	482301.0	0.305852	Y
3	IC 410-400238/14	10.0	3.434261	50.0	487674.0	0.343426	Y
4	IC 410-400238/15	20.0	6.309754	50.0	494528.0	0.315488	Y
5	ICIS 410-400238/16	50.0	16.074124	50.0	485563.0	0.321482	Y
6	IC 410-400238/17	100.0	32.338246	50.0	495568.0	0.323382	Y
7	IC 410-400238/18	300.0	88.477634	50.0	570382.0	0.294925	Y



11/14/2023
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Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

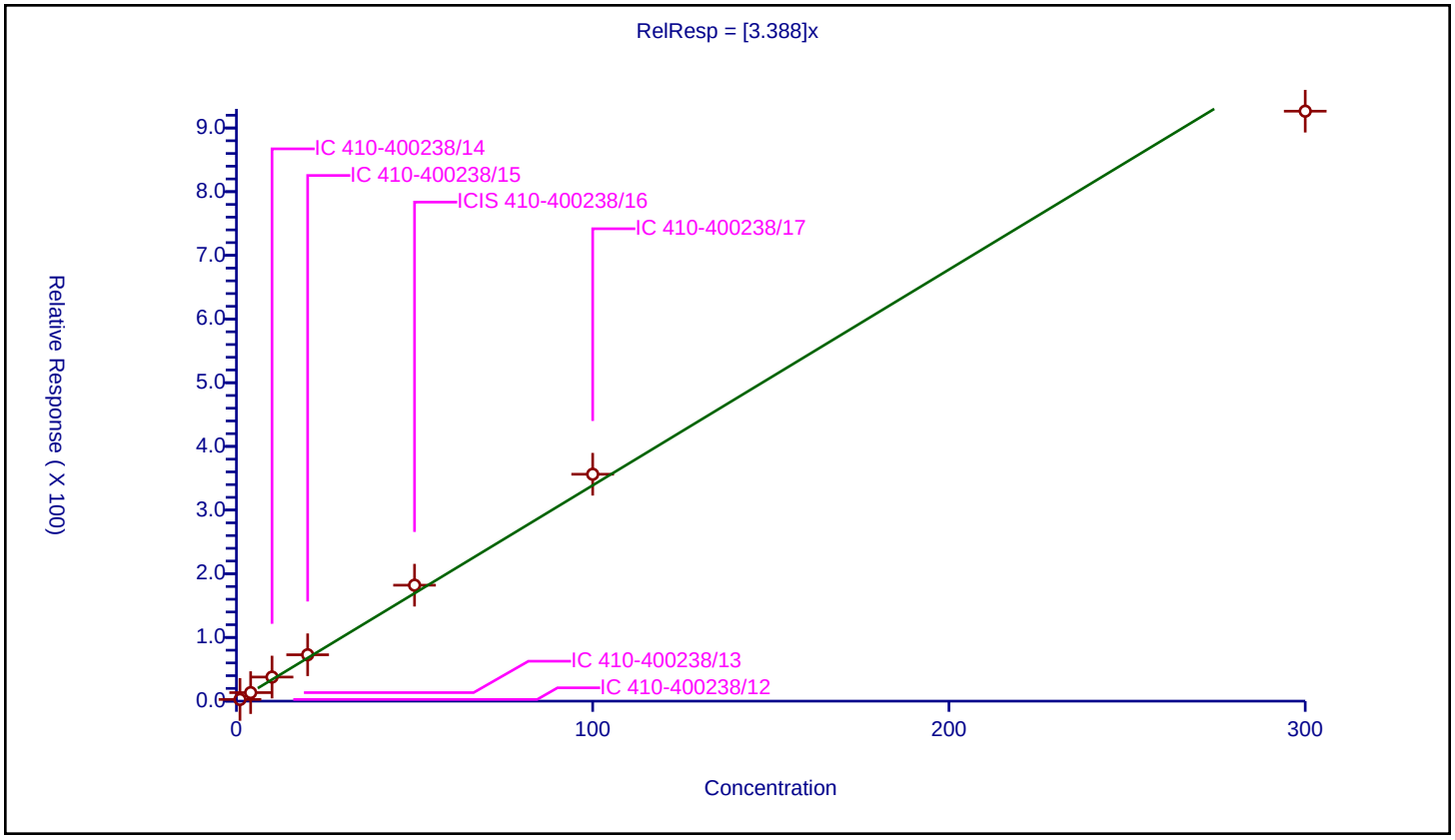
Curve Coefficients

Intercept:	0
Slope:	3.388

Error Coefficients

Standard Error:	4620000
Relative Standard Error:	11.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	2.653045	50.0	491605.0	2.653045	Y
2	IC 410-400238/13	4.0	13.394955	50.0	482301.0	3.348739	Y
3	IC 410-400238/14	10.0	37.816656	50.0	487674.0	3.781666	Y
4	IC 410-400238/15	20.0	72.844106	50.0	494528.0	3.642205	Y
5	ICIS 410-400238/16	50.0	182.097174	50.0	485563.0	3.641943	Y
6	IC 410-400238/17	100.0	356.307005	50.0	495568.0	3.56307	Y
7	IC 410-400238/18	300.0	926.384949	50.0	570382.0	3.08795	Y



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Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

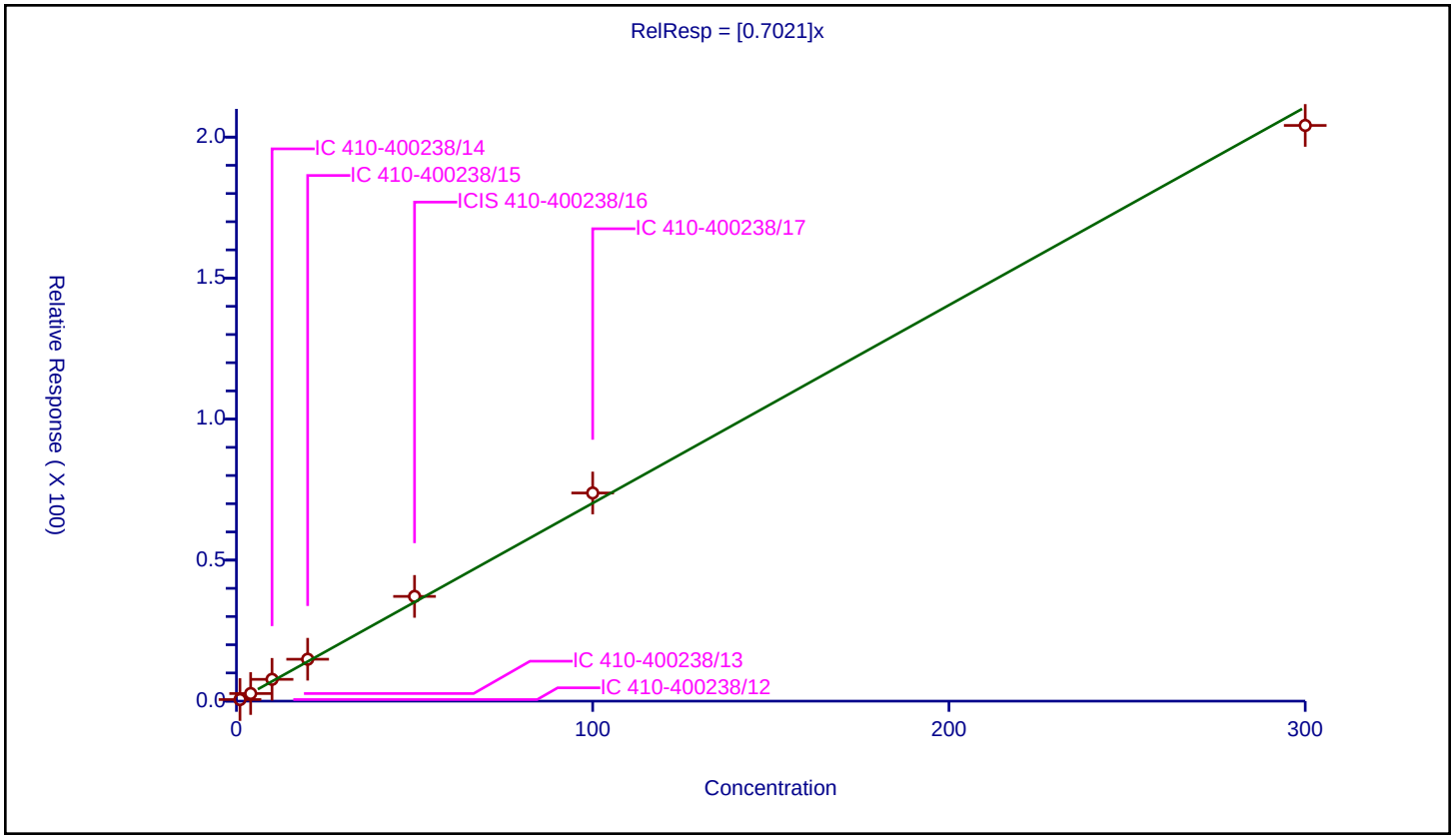
Curve Coefficients

Intercept:	0
Slope:	0.7021

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	10.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.562647	50.0	491605.0	0.562647	Y
2	IC 410-400238/13	4.0	2.698108	50.0	482301.0	0.674527	Y
3	IC 410-400238/14	10.0	7.729651	50.0	487674.0	0.772965	Y
4	IC 410-400238/15	20.0	14.859826	50.0	494528.0	0.742991	Y
5	ICIS 410-400238/16	50.0	37.137199	50.0	485563.0	0.742744	Y
6	IC 410-400238/17	100.0	73.808741	50.0	495568.0	0.738087	Y
7	IC 410-400238/18	300.0	204.130653	50.0	570382.0	0.680436	Y



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Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

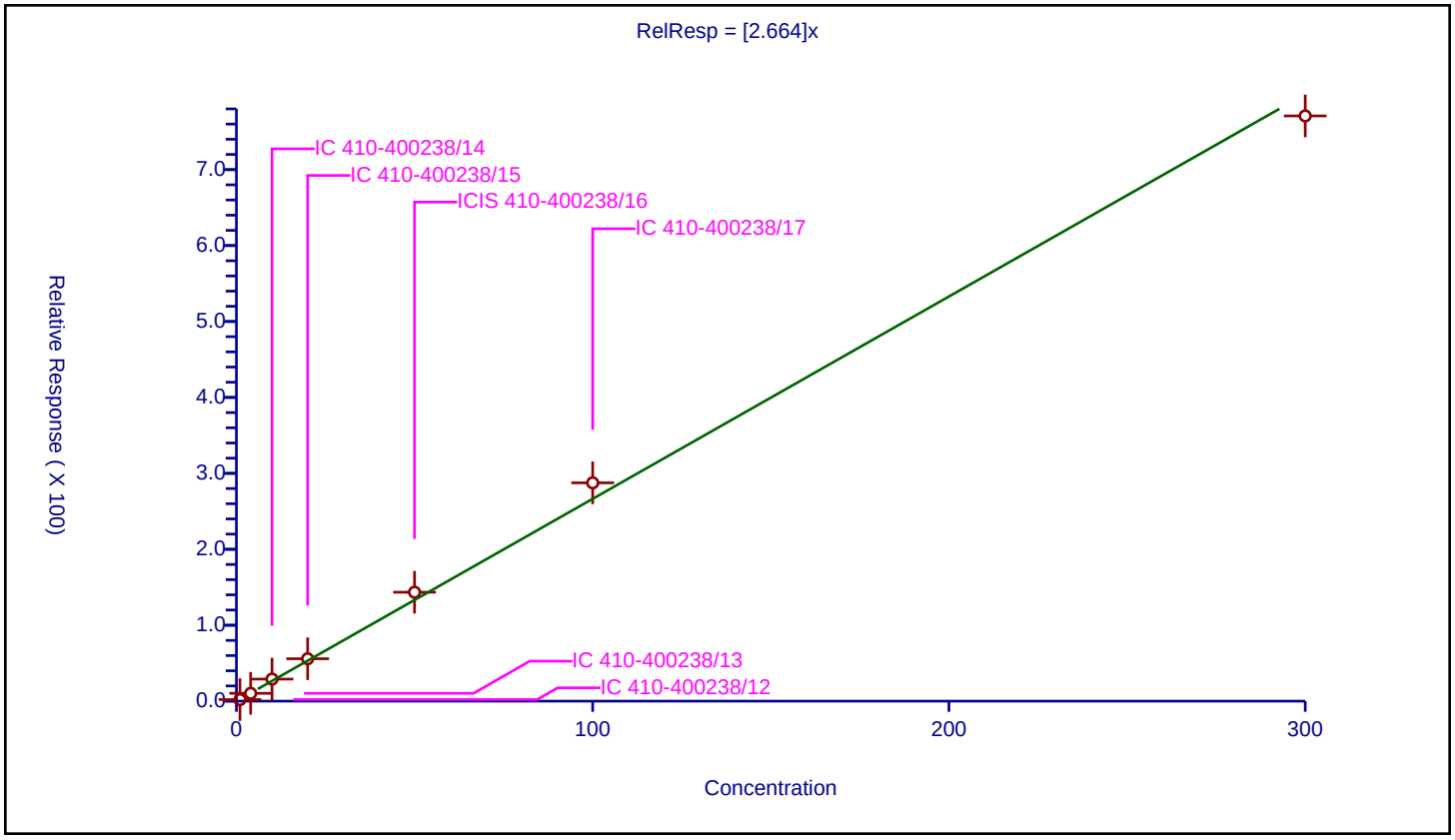
Curve Coefficients

Intercept:	0
Slope:	2.664

Error Coefficients

Standard Error:	3820000
Relative Standard Error:	11.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	2.068327	50.0	491605.0	2.068327	Y
2	IC 410-400238/13	4.0	10.304146	50.0	482301.0	2.576037	Y
3	IC 410-400238/14	10.0	29.018873	50.0	487674.0	2.901887	Y
4	IC 410-400238/15	20.0	55.834149	50.0	494528.0	2.791707	Y
5	ICIS 410-400238/16	50.0	143.453579	50.0	485563.0	2.869072	Y
6	IC 410-400238/17	100.0	287.523609	50.0	495568.0	2.875236	Y
7	IC 410-400238/18	300.0	770.729529	50.0	570382.0	2.569098	Y



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Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

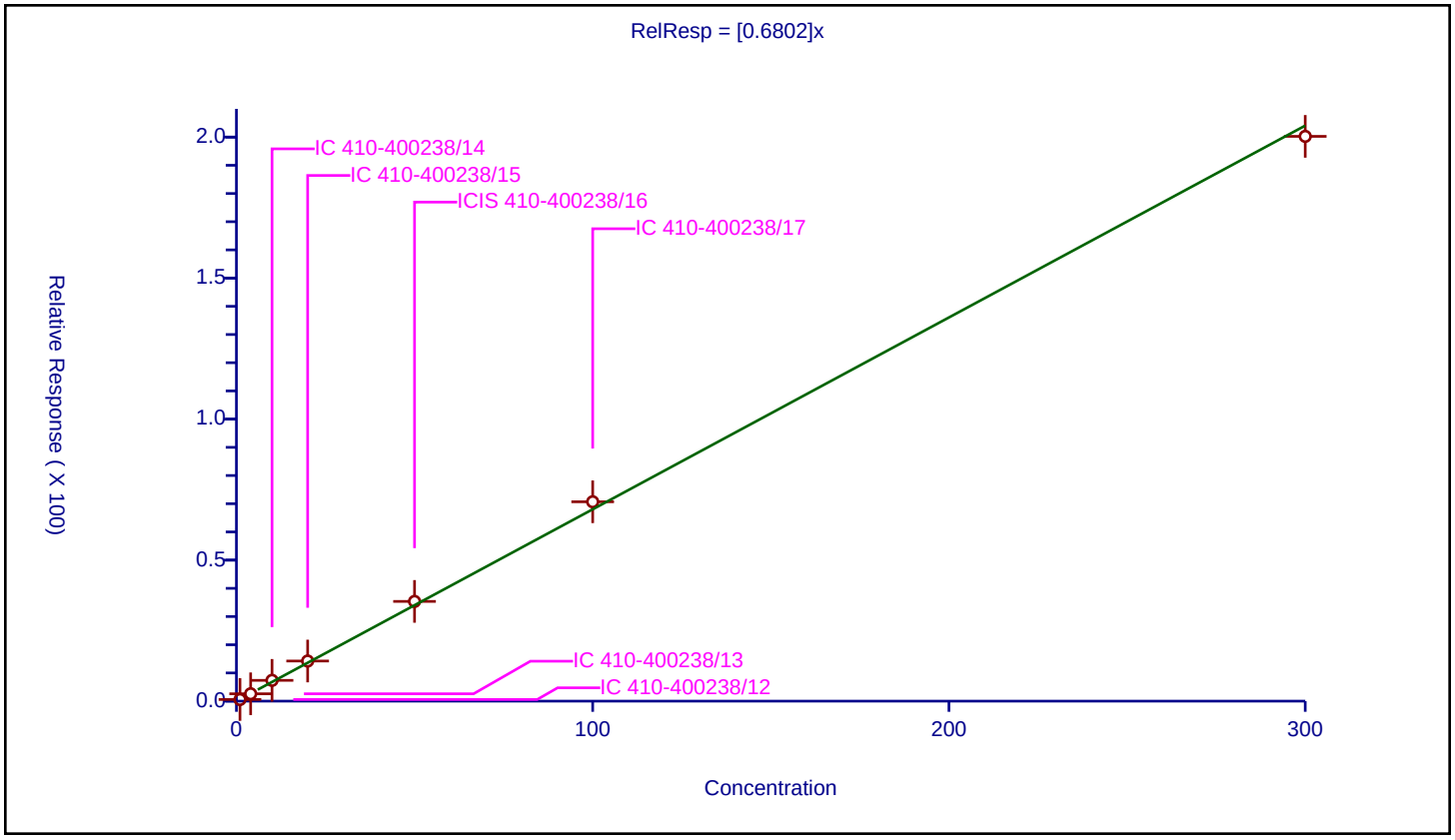
Curve Coefficients

Intercept:	0
Slope:	0.6802

Error Coefficients

Standard Error:	988000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.578615	50.0	491605.0	0.578615	Y
2	IC 410-400238/13	4.0	2.613306	50.0	482301.0	0.653326	Y
3	IC 410-400238/14	10.0	7.366704	50.0	487674.0	0.73667	Y
4	IC 410-400238/15	20.0	14.223563	50.0	494528.0	0.711178	Y
5	ICIS 410-400238/16	50.0	35.362764	50.0	485563.0	0.707255	Y
6	IC 410-400238/17	100.0	70.693023	50.0	495568.0	0.70693	Y
7	IC 410-400238/18	300.0	200.257371	50.0	570382.0	0.667525	Y



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Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

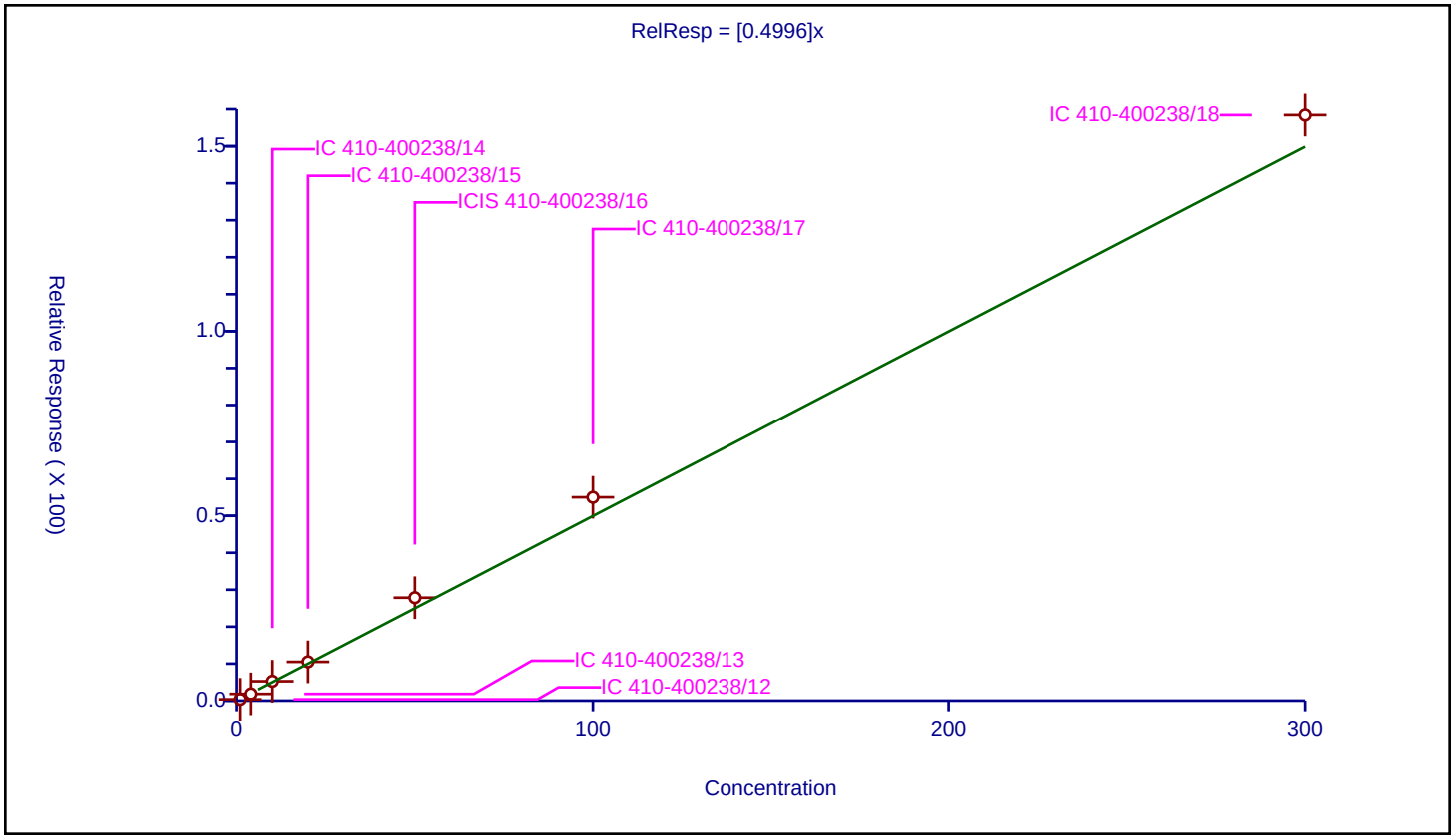
Curve Coefficients

Intercept:	0
Slope:	0.4996

Error Coefficients

Standard Error:	780000
Relative Standard Error:	14.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.355468	50.0	491605.0	0.355468	Y
2	IC 410-400238/13	4.0	1.830081	50.0	482301.0	0.45752	Y
3	IC 410-400238/14	10.0	5.239361	50.0	487674.0	0.523936	Y
4	IC 410-400238/15	20.0	10.49617	50.0	494528.0	0.524809	Y
5	ICIS 410-400238/16	50.0	27.84685	50.0	485563.0	0.556937	Y
6	IC 410-400238/17	100.0	55.023529	50.0	495568.0	0.550235	Y
7	IC 410-400238/18	300.0	158.420059	50.0	570382.0	0.528067	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

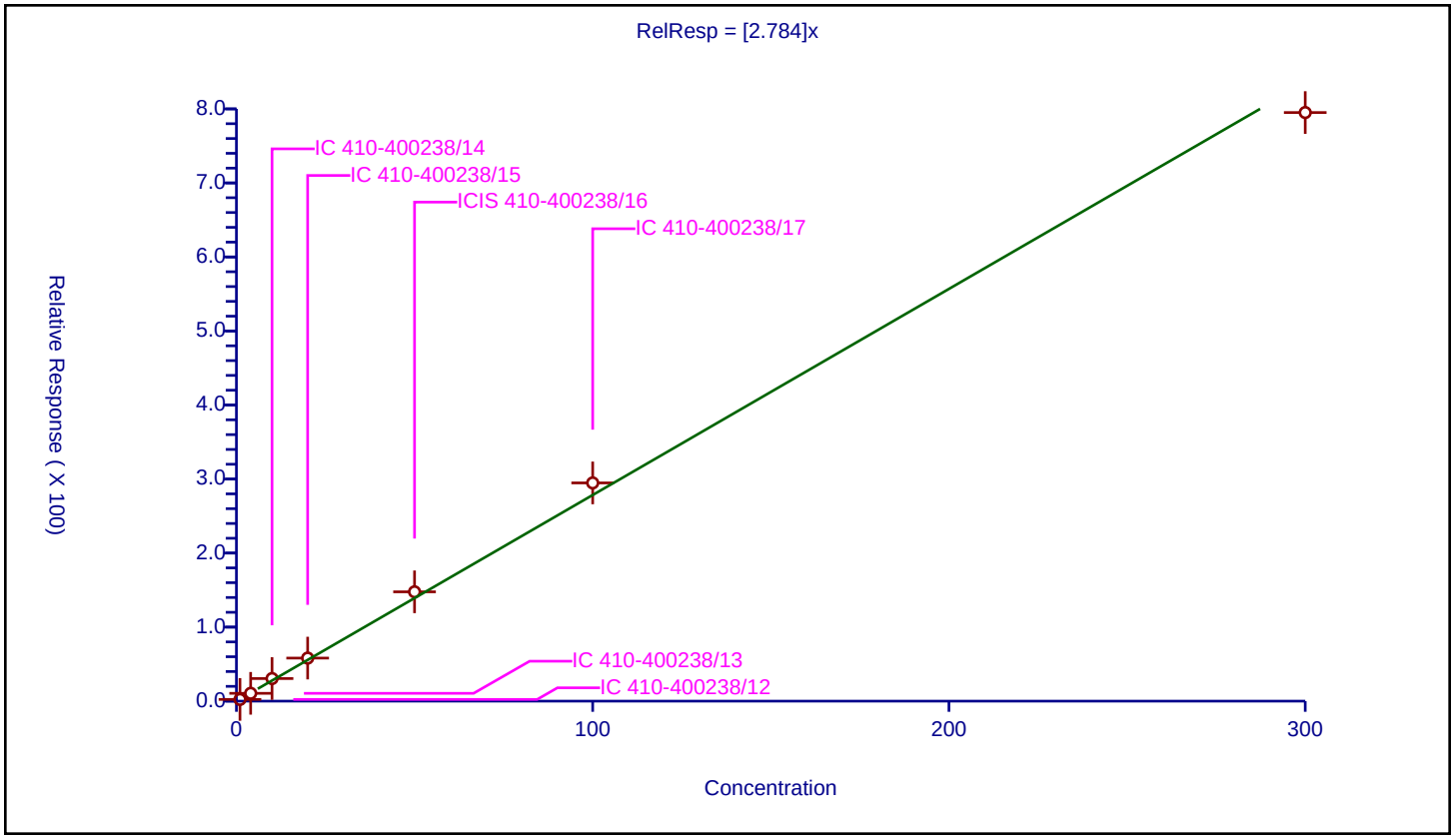
Curve Coefficients

Intercept:	0
Slope:	2.784

Error Coefficients

Standard Error:	3940000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	2.33592	50.0	491605.0	2.33592	Y
2	IC 410-400238/13	4.0	10.570992	50.0	482301.0	2.642748	Y
3	IC 410-400238/14	10.0	30.510854	50.0	487674.0	3.051085	Y
4	IC 410-400238/15	20.0	58.155655	50.0	494528.0	2.907783	Y
5	ICIS 410-400238/16	50.0	147.675688	50.0	485563.0	2.953514	Y
6	IC 410-400238/17	100.0	294.79355	50.0	495568.0	2.947936	Y
7	IC 410-400238/18	300.0	795.064273	50.0	570382.0	2.650214	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

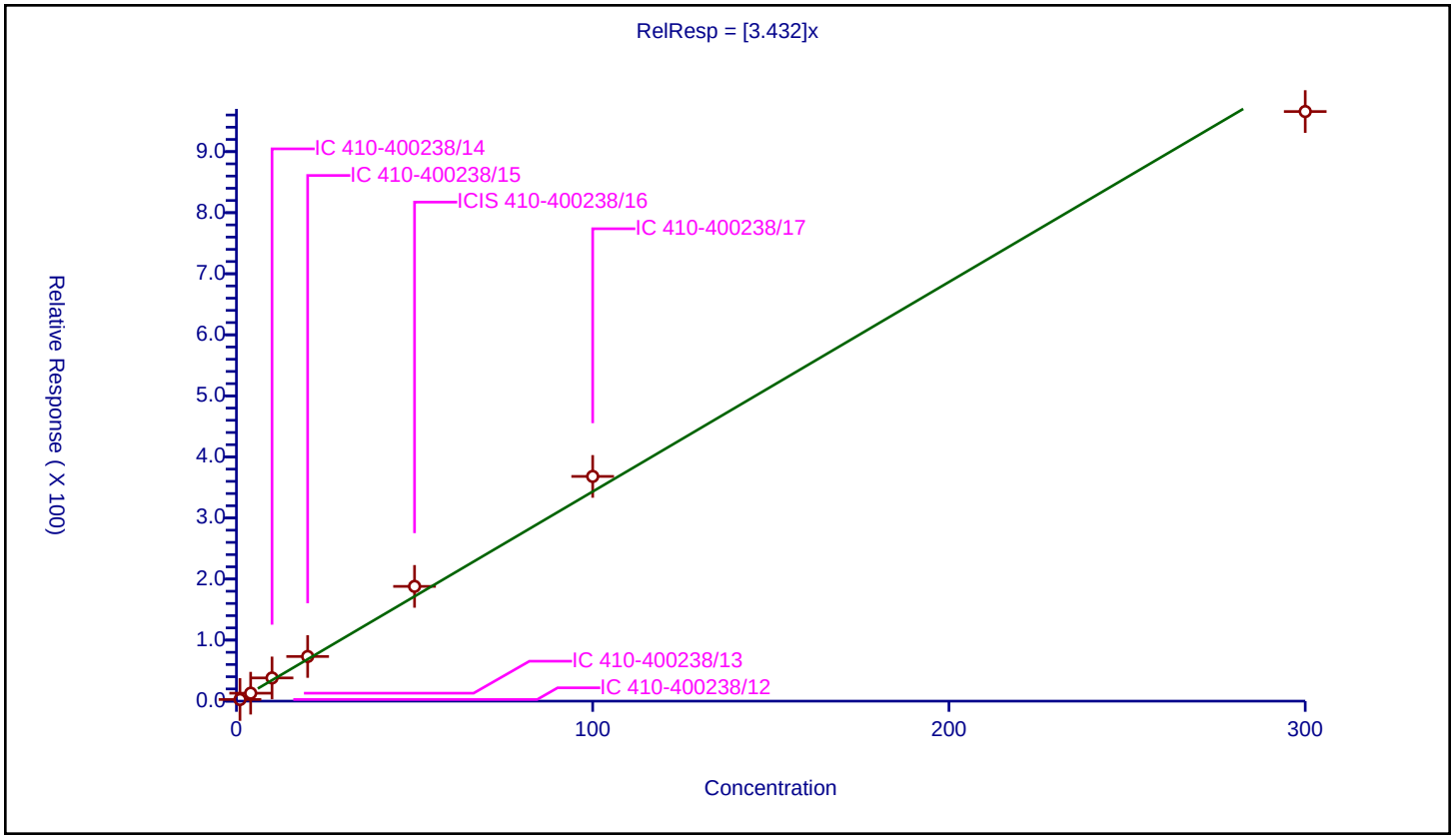
Curve Coefficients

Intercept:	0
Slope:	3.432

Error Coefficients

Standard Error:	4810000
Relative Standard Error:	12.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	2.661283	50.0	491605.0	2.661283	Y
2	IC 410-400238/13	4.0	13.002668	50.0	482301.0	3.250667	Y
3	IC 410-400238/14	10.0	38.000693	50.0	487674.0	3.800069	Y
4	IC 410-400238/15	20.0	73.113251	50.0	494528.0	3.655663	Y
5	ICIS 410-400238/16	50.0	187.956558	50.0	485563.0	3.759131	Y
6	IC 410-400238/17	100.0	368.050701	50.0	495568.0	3.680507	Y
7	IC 410-400238/18	300.0	965.702459	50.0	570382.0	3.219008	Y



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Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

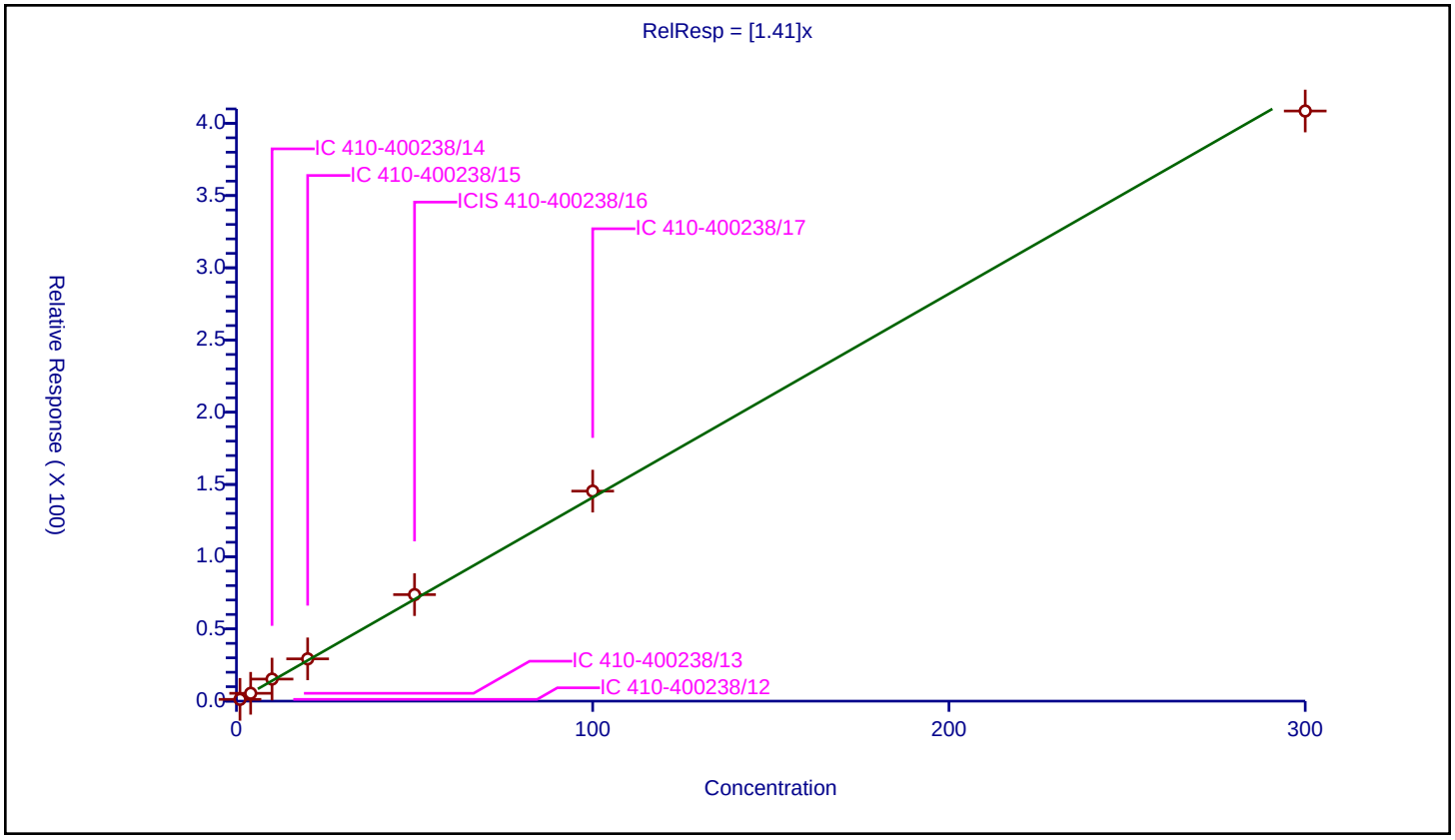
Curve Coefficients

Intercept:	0
Slope:	1.41

Error Coefficients

Standard Error:	2020000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.231985	50.0	491605.0	1.231985	Y
2	IC 410-400238/13	4.0	5.421303	50.0	482301.0	1.355326	Y
3	IC 410-400238/14	10.0	15.279469	50.0	487674.0	1.527947	Y
4	IC 410-400238/15	20.0	29.276199	50.0	494528.0	1.46381	Y
5	ICIS 410-400238/16	50.0	73.74316	50.0	485563.0	1.474863	Y
6	IC 410-400238/17	100.0	145.392761	50.0	495568.0	1.453928	Y
7	IC 410-400238/18	300.0	408.536472	50.0	570382.0	1.361788	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

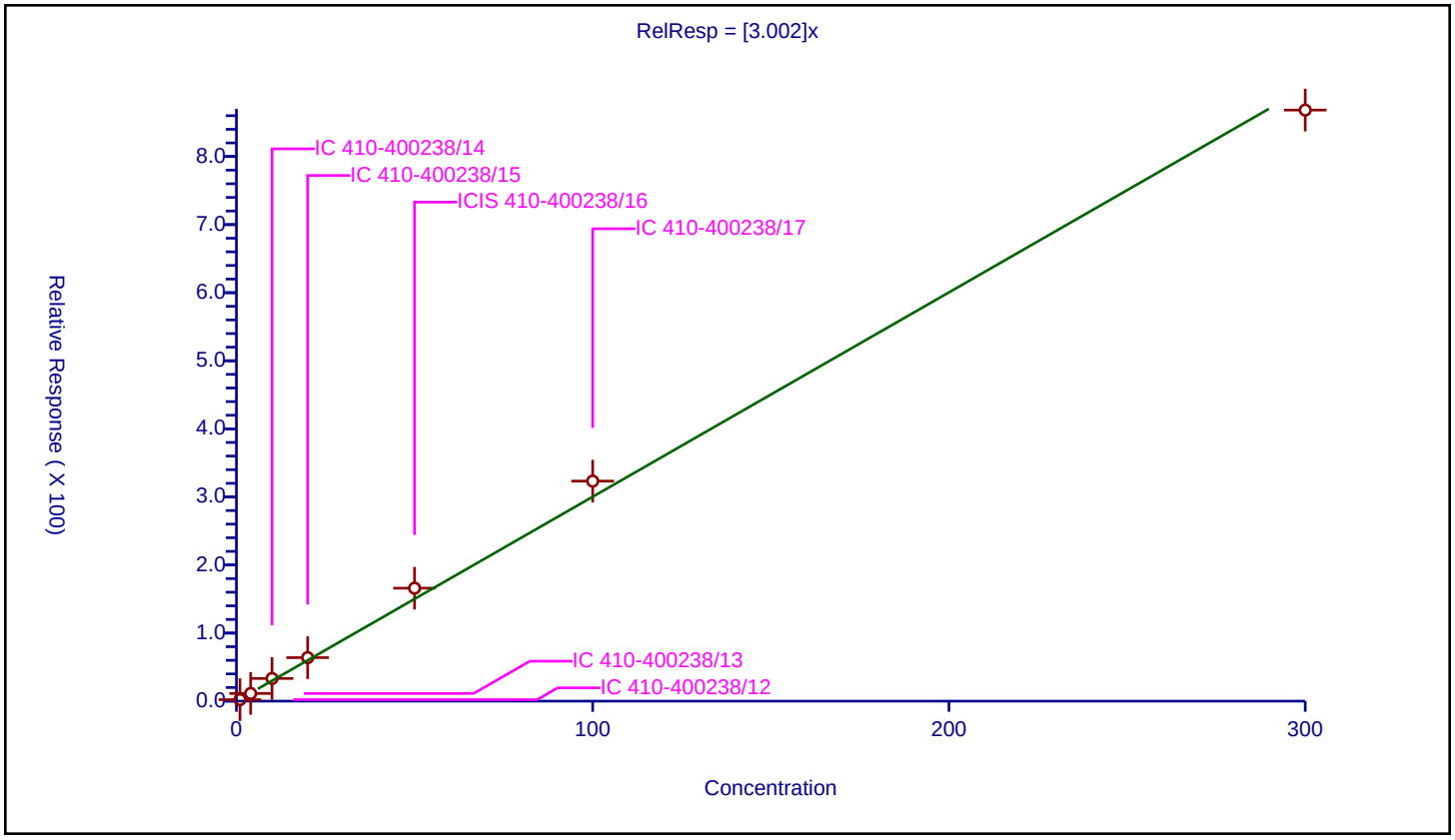
Curve Coefficients

Intercept:	0
Slope:	3.002

Error Coefficients

Standard Error:	4310000
Relative Standard Error:	13.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	2.221702	50.0	491605.0	2.221702	Y
2	IC 410-400238/13	4.0	11.292637	50.0	482301.0	2.823159	Y
3	IC 410-400238/14	10.0	33.300012	50.0	487674.0	3.330001	Y
4	IC 410-400238/15	20.0	63.91175	50.0	494528.0	3.195588	Y
5	ICIS 410-400238/16	50.0	165.94757	50.0	485563.0	3.318951	Y
6	IC 410-400238/17	100.0	323.224764	50.0	495568.0	3.232248	Y
7	IC 410-400238/18	300.0	868.245053	50.0	570382.0	2.89415	Y



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Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

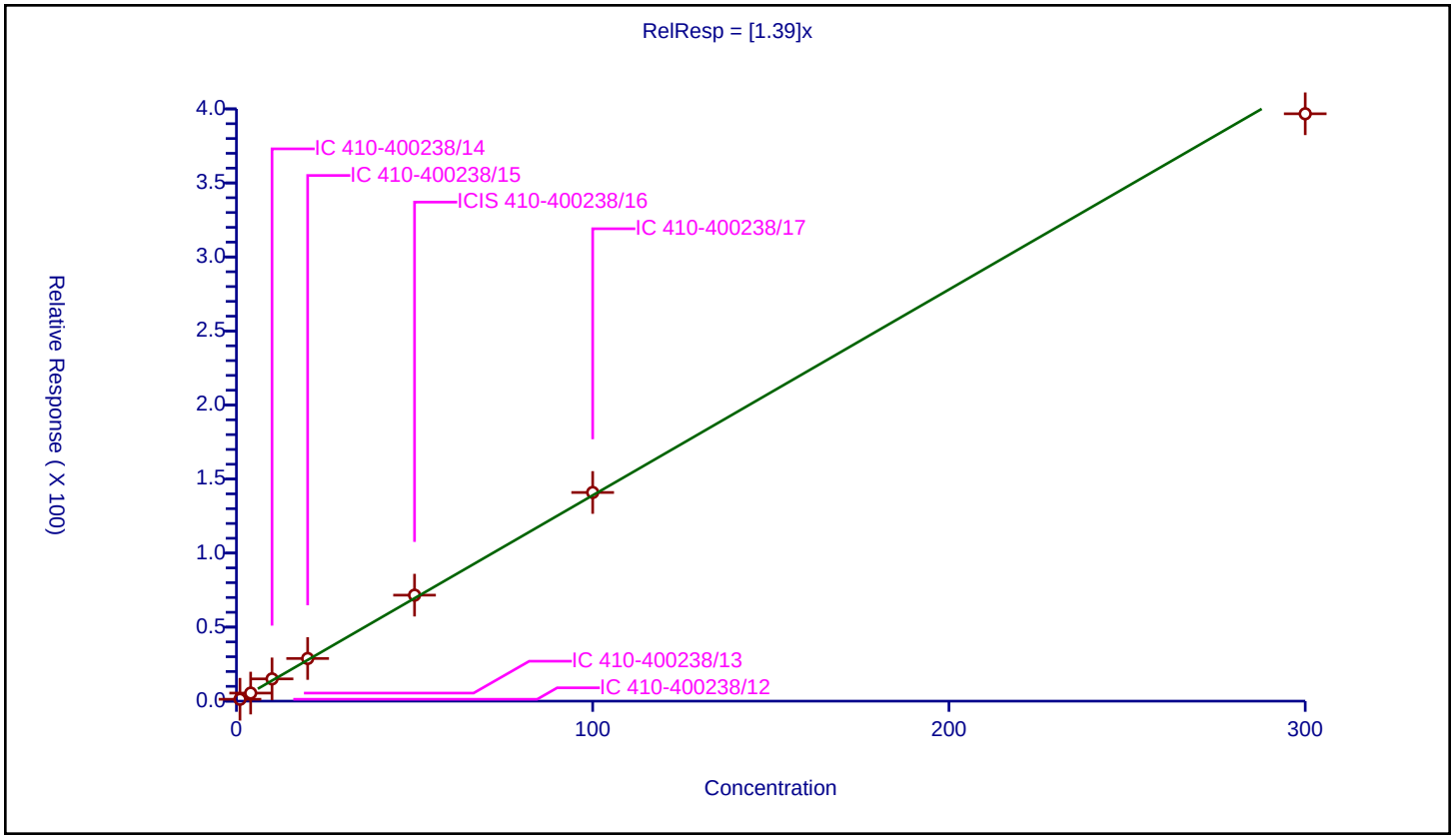
Curve Coefficients

Intercept:	0
Slope:	1.39

Error Coefficients

Standard Error:	1960000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.264531	50.0	491605.0	1.264531	Y
2	IC 410-400238/13	4.0	5.433433	50.0	482301.0	1.358358	Y
3	IC 410-400238/14	10.0	15.026739	50.0	487674.0	1.502674	Y
4	IC 410-400238/15	20.0	28.806155	50.0	494528.0	1.440308	Y
5	ICIS 410-400238/16	50.0	71.589783	50.0	485563.0	1.431796	Y
6	IC 410-400238/17	100.0	140.932728	50.0	495568.0	1.409327	Y
7	IC 410-400238/18	300.0	396.711677	50.0	570382.0	1.322372	Y



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Calibration / 1,2,3-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

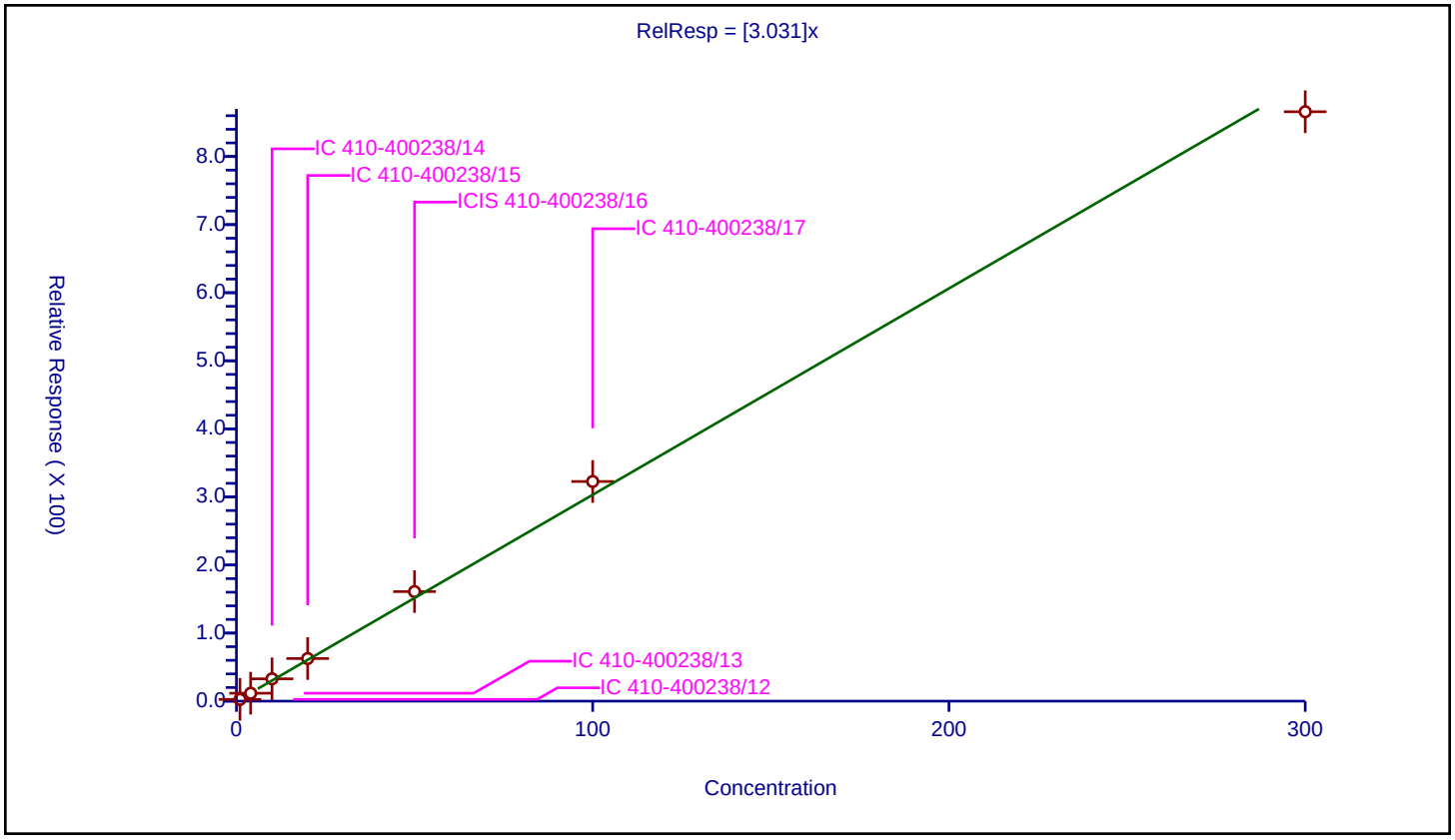
Curve Coefficients

Intercept:	0
Slope:	3.031

Error Coefficients

Standard Error:	4300000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	2.570255	50.0	491605.0	2.570255	Y
2	IC 410-400238/13	4.0	11.628112	50.0	482301.0	2.907028	Y
3	IC 410-400238/14	10.0	32.805829	50.0	487674.0	3.280583	Y
4	IC 410-400238/15	20.0	62.570269	50.0	494528.0	3.128513	Y
5	ICIS 410-400238/16	50.0	160.936686	50.0	485563.0	3.218734	Y
6	IC 410-400238/17	100.0	322.633826	50.0	495568.0	3.226338	Y
7	IC 410-400238/18	300.0	865.830969	50.0	570382.0	2.886103	Y



Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

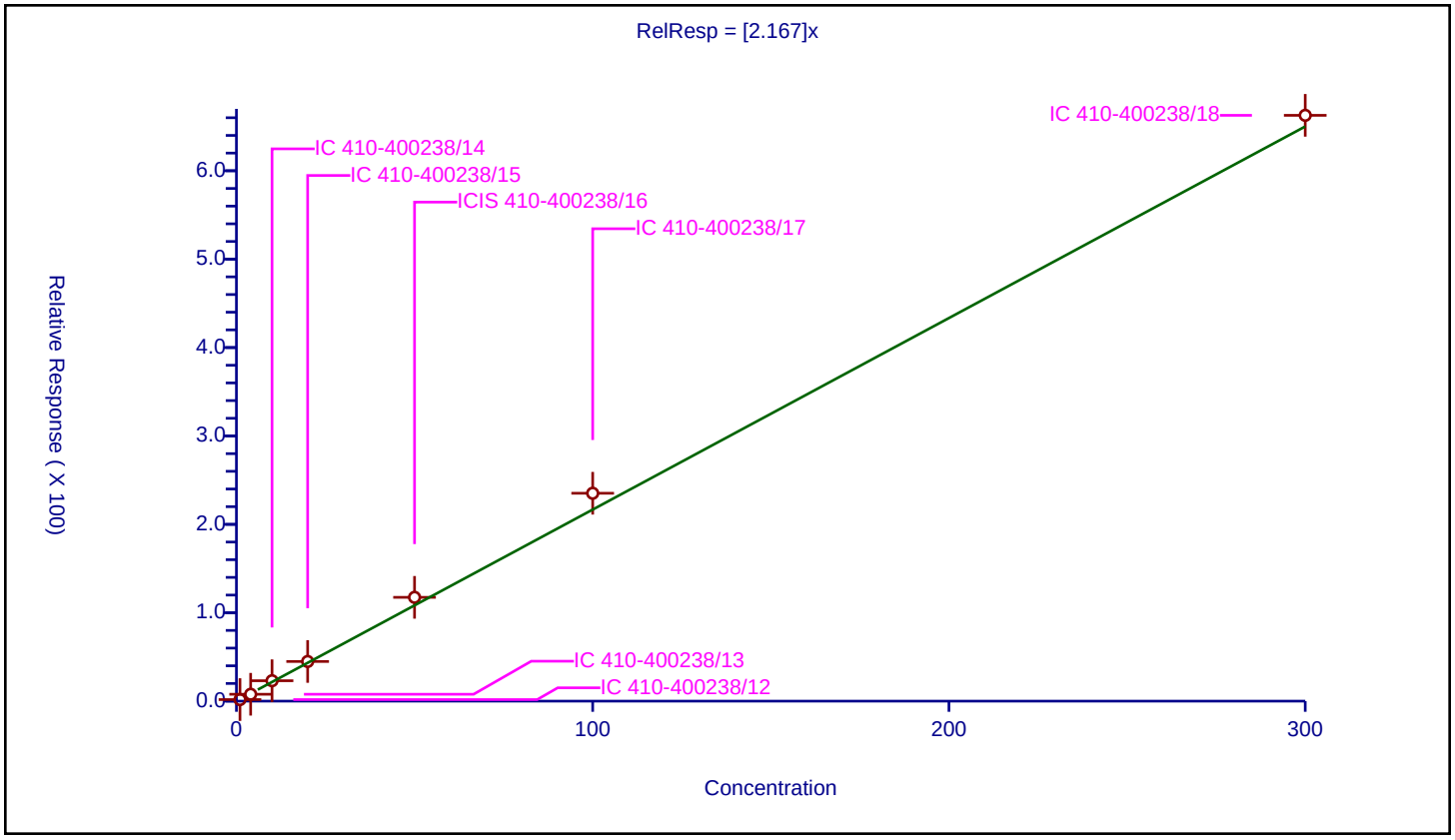
Curve Coefficients

Intercept:	0
Slope:	2.167

Error Coefficients

Standard Error:	3270000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.762797	50.0	491605.0	1.762797	Y
2	IC 410-400238/13	4.0	7.77388	50.0	482301.0	1.94347	Y
3	IC 410-400238/14	10.0	23.086837	50.0	487674.0	2.308684	Y
4	IC 410-400238/15	20.0	44.87754	50.0	494528.0	2.243877	Y
5	ICIS 410-400238/16	50.0	117.431827	50.0	485563.0	2.348637	Y
6	IC 410-400238/17	100.0	235.179027	50.0	495568.0	2.35179	Y
7	IC 410-400238/18	300.0	662.722	50.0	570382.0	2.209073	Y



Calibration / 1,3-Diethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

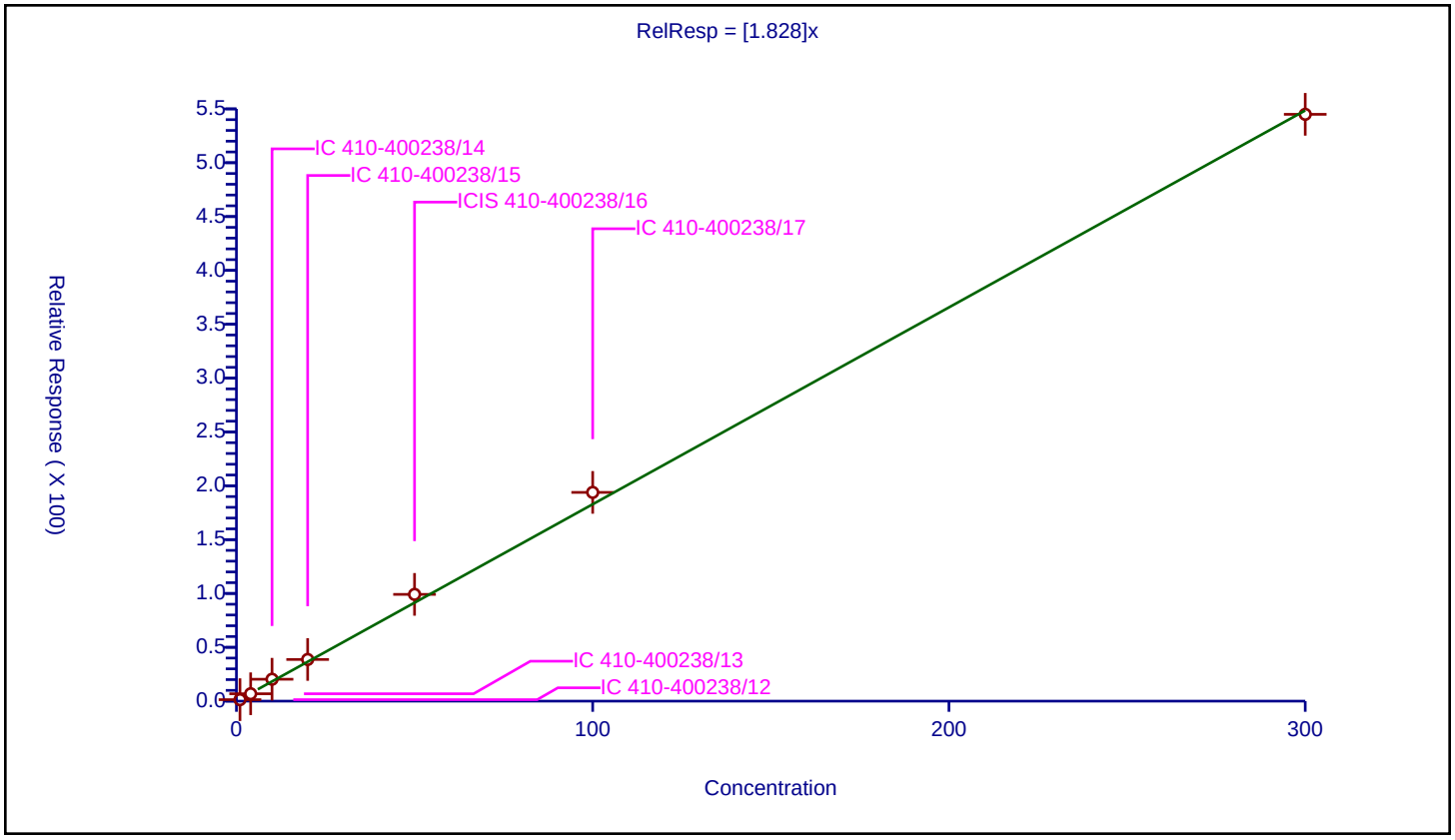
Curve Coefficients

Intercept:	0
Slope:	1.828

Error Coefficients

Standard Error:	2690000
Relative Standard Error:	12.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.376308	50.0	491605.0	1.376308	Y
2	IC 410-400238/13	4.0	6.862934	50.0	482301.0	1.715734	Y
3	IC 410-400238/14	10.0	20.343713	50.0	487674.0	2.034371	Y
4	IC 410-400238/15	20.0	38.687496	50.0	494528.0	1.934375	Y
5	ICIS 410-400238/16	50.0	99.135128	50.0	485563.0	1.982703	Y
6	IC 410-400238/17	100.0	193.863304	50.0	495568.0	1.938633	Y
7	IC 410-400238/18	300.0	544.945493	50.0	570382.0	1.816485	Y



Calibration / p-Diethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

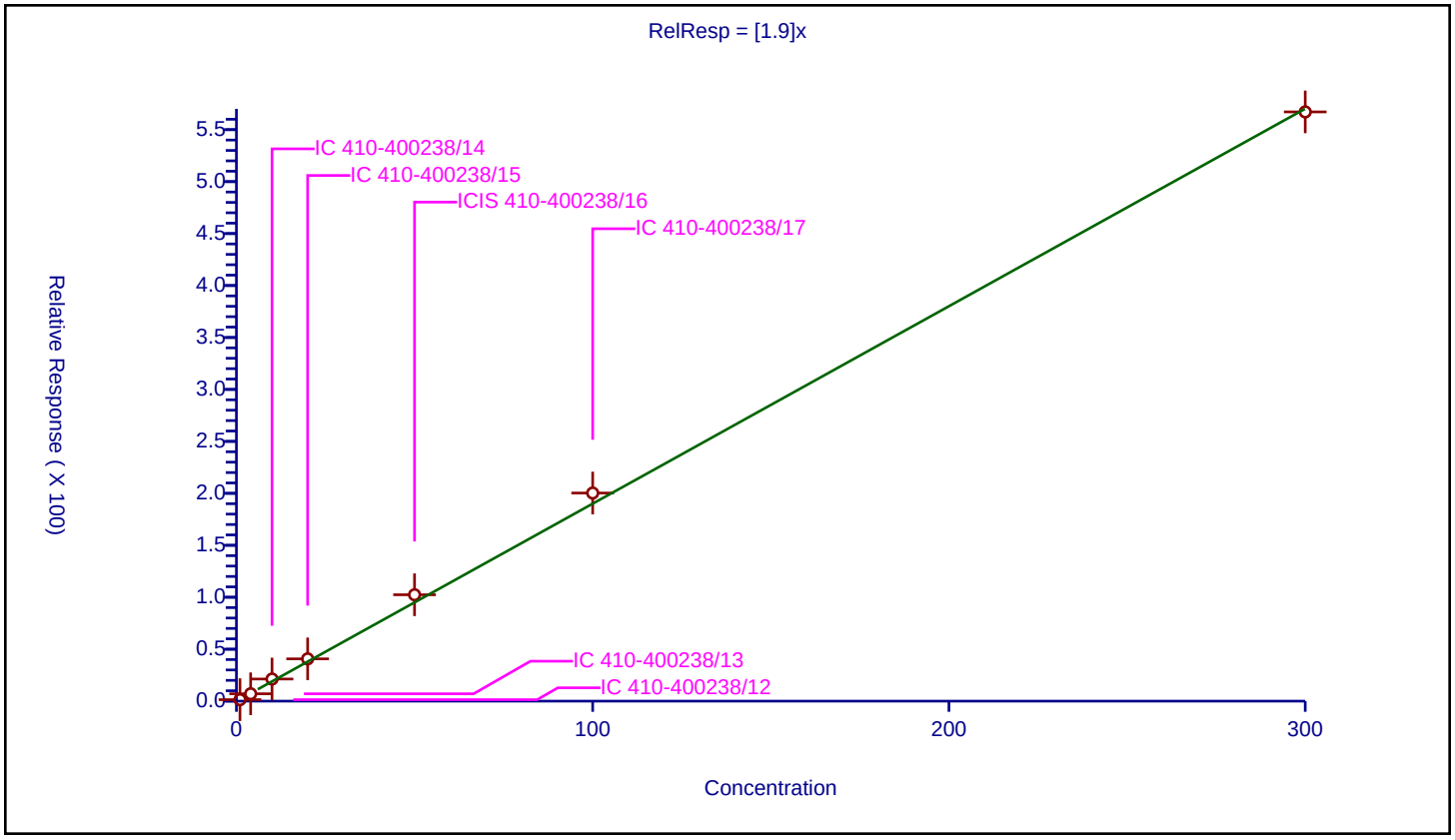
Curve Coefficients

Intercept:	0
Slope:	1.9

Error Coefficients

Standard Error:	2800000
Relative Standard Error:	12.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.427569	50.0	491605.0	1.427569	Y
2	IC 410-400238/13	4.0	7.085617	50.0	482301.0	1.771404	Y
3	IC 410-400238/14	10.0	21.286044	50.0	487674.0	2.128604	Y
4	IC 410-400238/15	20.0	40.696078	50.0	494528.0	2.034804	Y
5	ICIS 410-400238/16	50.0	102.385169	50.0	485563.0	2.047703	Y
6	IC 410-400238/17	100.0	200.286742	50.0	495568.0	2.002867	Y
7	IC 410-400238/18	300.0	567.107044	50.0	570382.0	1.890357	Y



11/14/2023
11:12 AM

Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

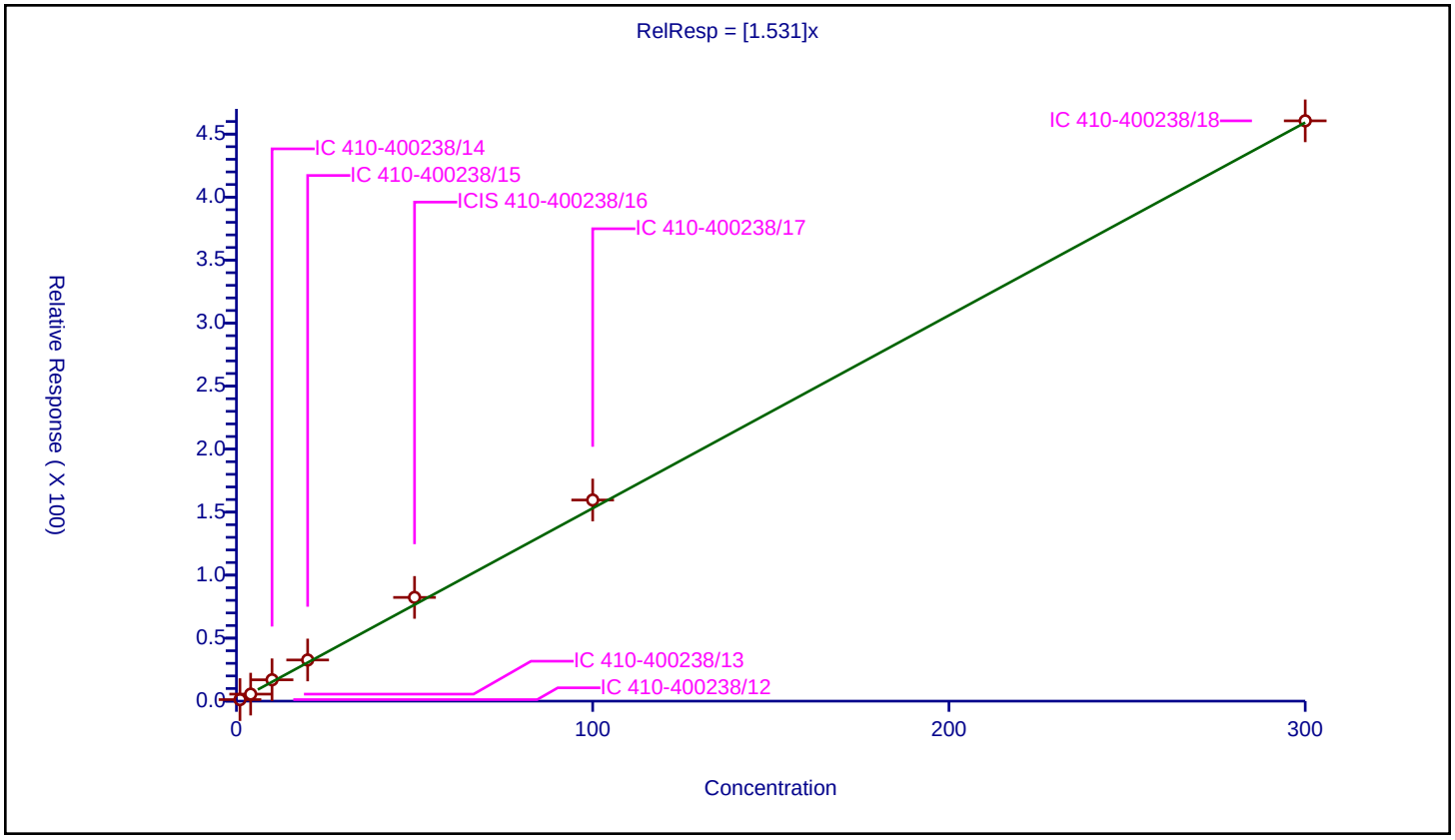
Curve Coefficients

Intercept:	0
Slope:	1.531

Error Coefficients

Standard Error:	2270000
Relative Standard Error:	11.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.21561	50.0	491605.0	1.21561	Y
2	IC 410-400238/13	4.0	5.576082	50.0	482301.0	1.394021	Y
3	IC 410-400238/14	10.0	16.937339	50.0	487674.0	1.693734	Y
4	IC 410-400238/15	20.0	32.665188	50.0	494528.0	1.633259	Y
5	ICIS 410-400238/16	50.0	82.31939	50.0	485563.0	1.646388	Y
6	IC 410-400238/17	100.0	159.610487	50.0	495568.0	1.596105	Y
7	IC 410-400238/18	300.0	460.527857	50.0	570382.0	1.535093	Y



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Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

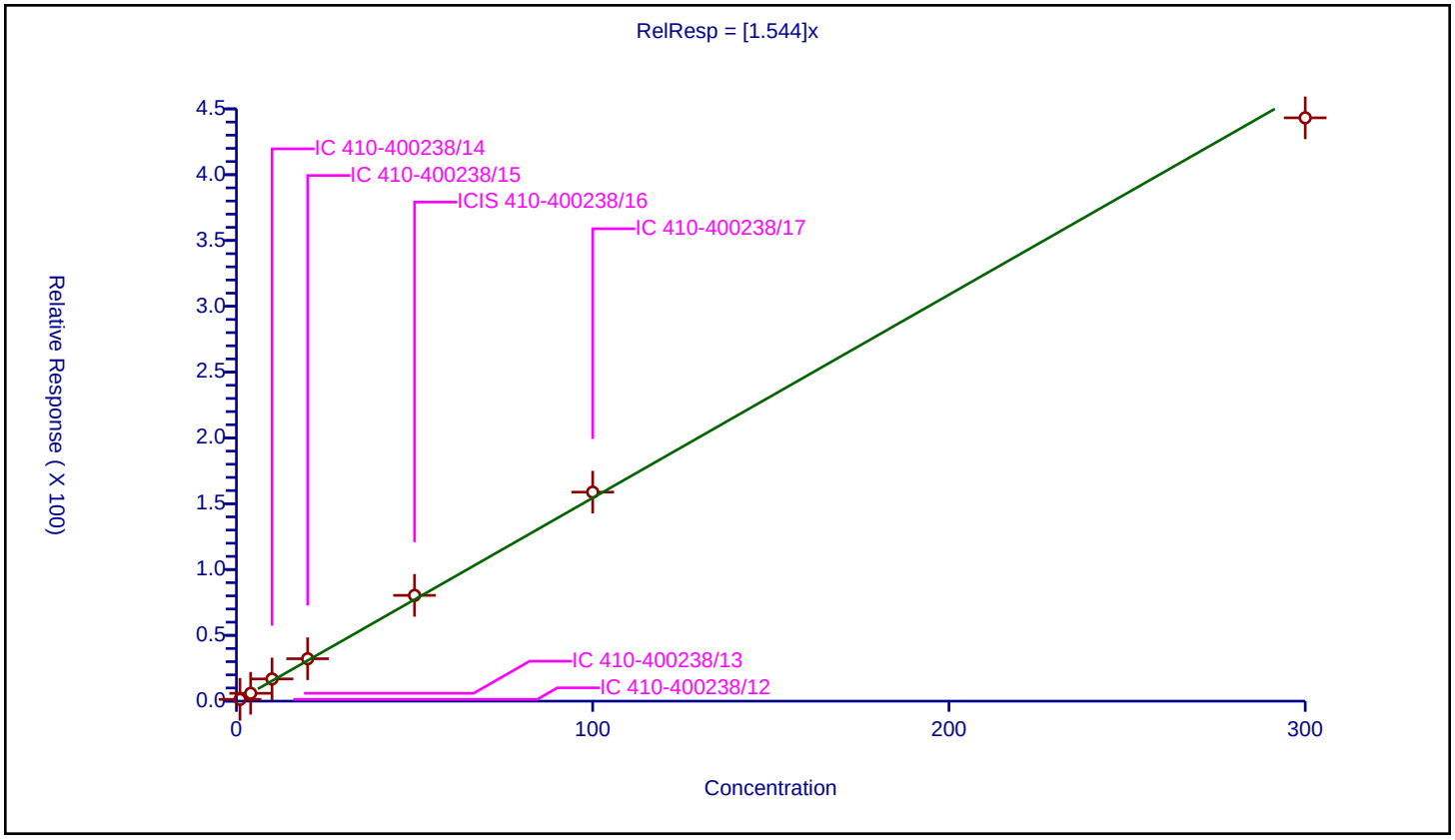
Curve Coefficients

Intercept:	0
Slope:	1.544

Error Coefficients

Standard Error:	2190000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.348033	50.0	491605.0	1.348033	Y
2	IC 410-400238/13	4.0	5.953129	50.0	482301.0	1.488282	Y
3	IC 410-400238/14	10.0	16.8668	50.0	487674.0	1.68668	Y
4	IC 410-400238/15	20.0	32.234474	50.0	494528.0	1.611724	Y
5	ICIS 410-400238/16	50.0	80.366605	50.0	485563.0	1.607332	Y
6	IC 410-400238/17	100.0	158.812514	50.0	495568.0	1.588125	Y
7	IC 410-400238/18	300.0	443.209901	50.0	570382.0	1.477366	Y



Calibration / o-diethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

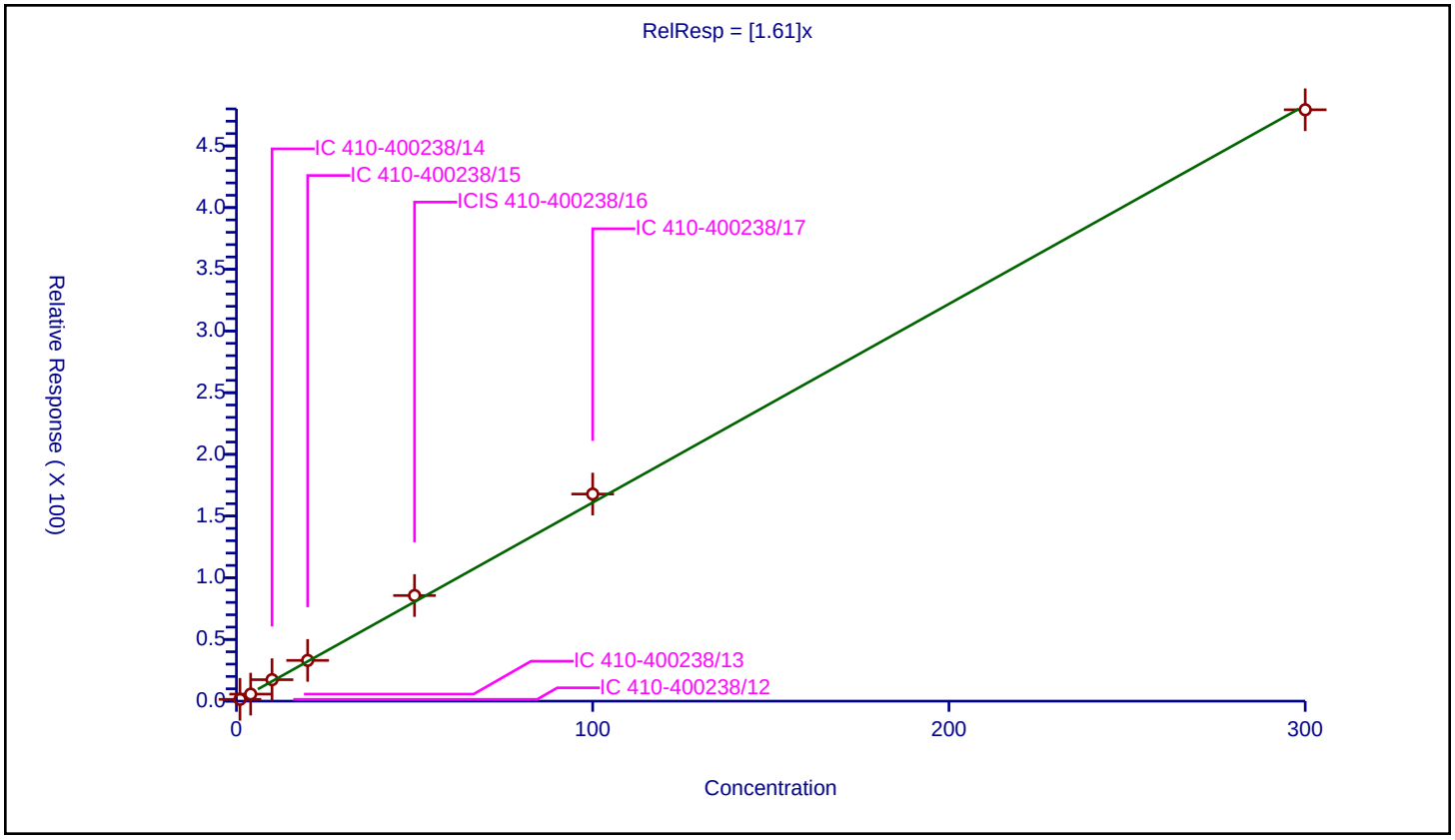
Curve Coefficients

Intercept:	0
Slope:	1.61

Error Coefficients

Standard Error:	2360000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.466421	50.0	491605.0	1.466421	Y
2	IC 410-400238/13	4.0	5.691052	50.0	482301.0	1.422763	Y
3	IC 410-400238/14	10.0	17.387127	50.0	487674.0	1.738713	Y
4	IC 410-400238/15	20.0	33.016533	50.0	494528.0	1.650827	Y
5	ICIS 410-400238/16	50.0	85.604134	50.0	485563.0	1.712083	Y
6	IC 410-400238/17	100.0	167.84972	50.0	495568.0	1.678497	Y
7	IC 410-400238/18	300.0	479.282218	50.0	570382.0	1.597607	Y



11/14/2023
11:12 AM

Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

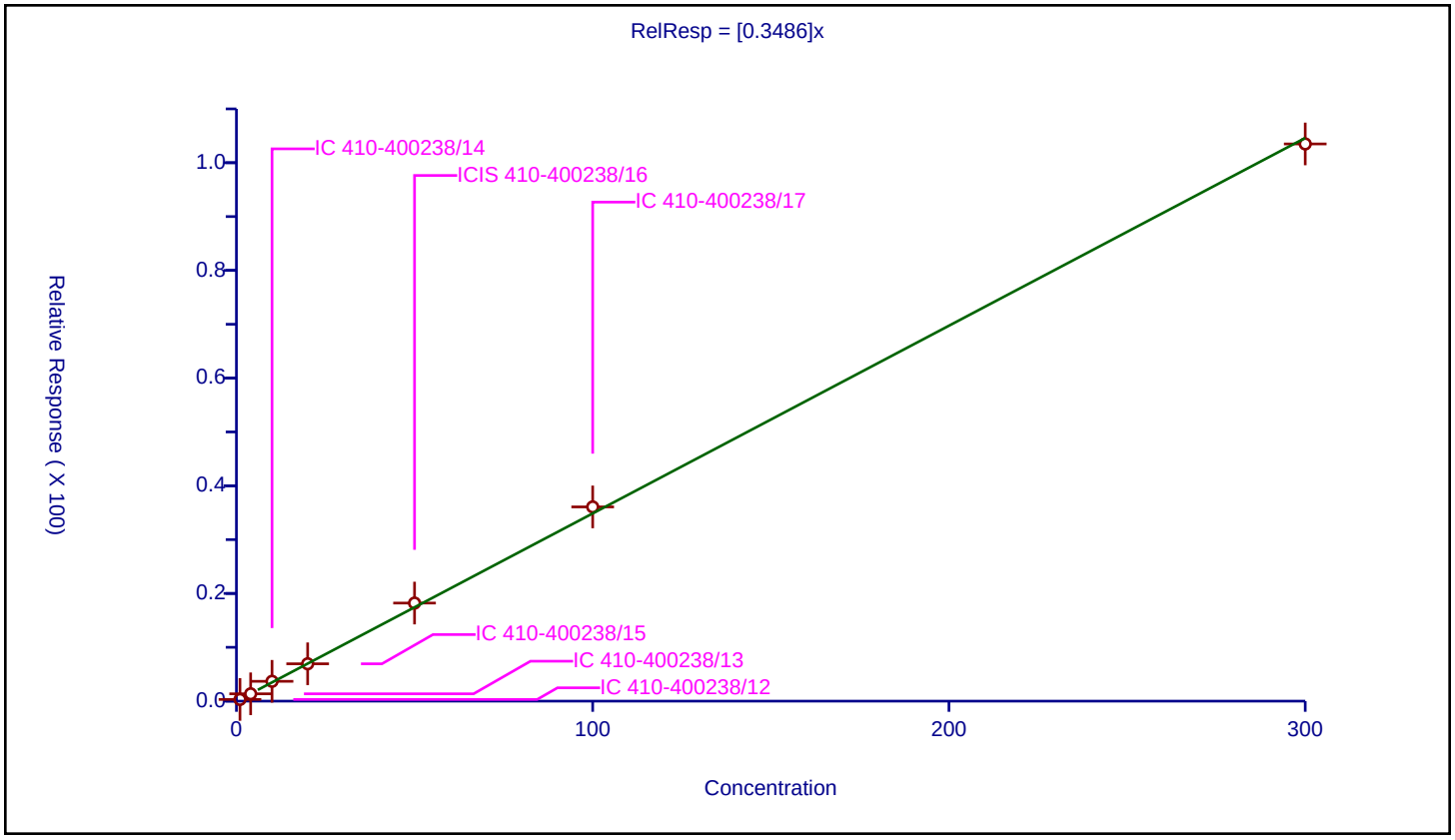
Curve Coefficients

Intercept:	0
Slope:	0.3486

Error Coefficients

Standard Error:	510000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.314785	50.0	491605.0	0.314785	Y
2	IC 410-400238/13	4.0	1.362427	50.0	482301.0	0.340607	Y
3	IC 410-400238/14	10.0	3.682378	50.0	487674.0	0.368238	Y
4	IC 410-400238/15	20.0	6.936109	50.0	494528.0	0.346805	Y
5	ICIS 410-400238/16	50.0	18.214732	50.0	485563.0	0.364295	Y
6	IC 410-400238/17	100.0	36.075776	50.0	495568.0	0.360758	Y
7	IC 410-400238/18	300.0	103.490906	50.0	570382.0	0.34497	Y



11/14/2023
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Calibration / 1,3,5-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

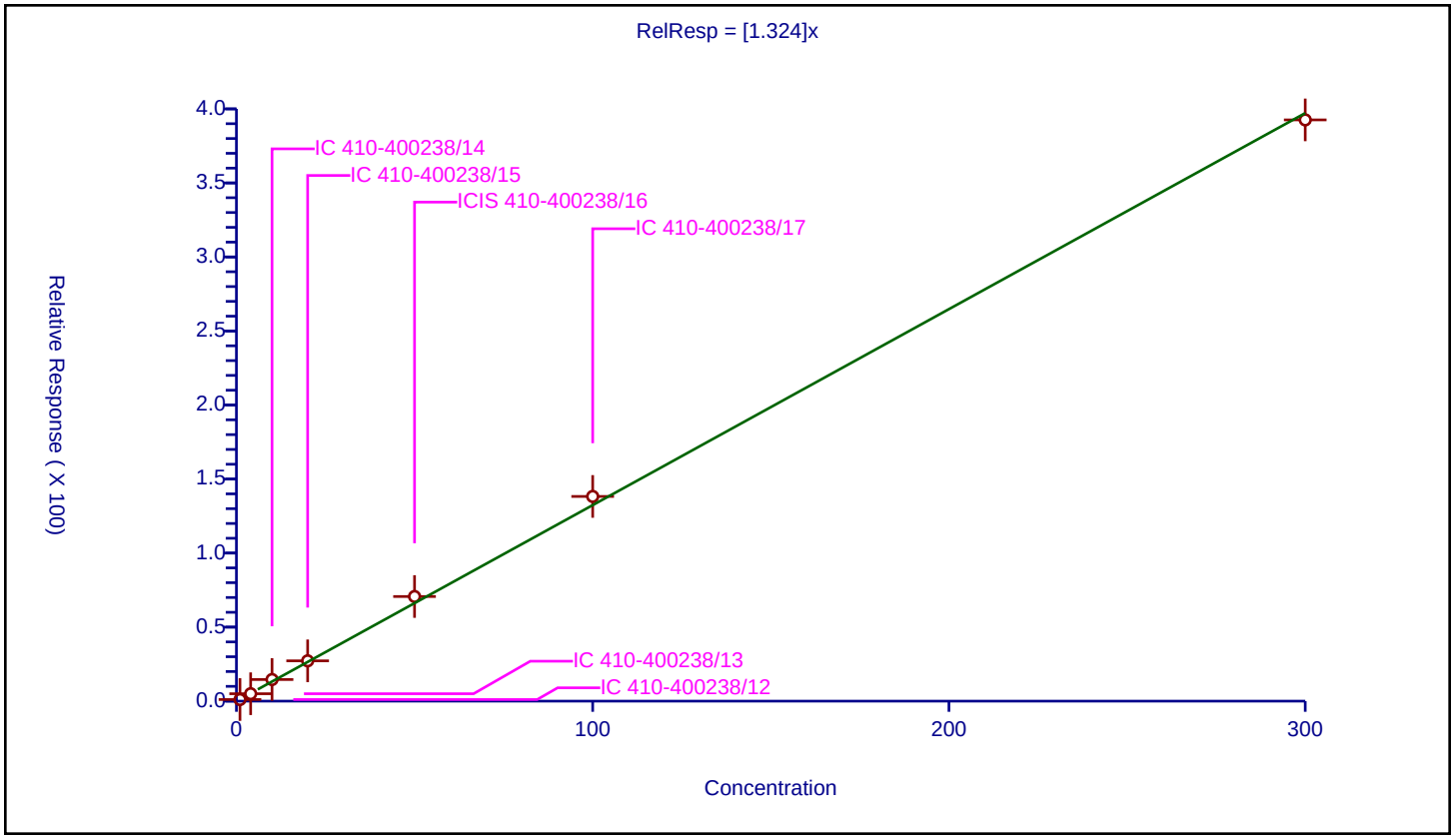
Curve Coefficients

Intercept:	0
Slope:	1.324

Error Coefficients

Standard Error:	1940000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.087255	50.0	491605.0	1.087255	Y
2	IC 410-400238/13	4.0	5.012223	50.0	482301.0	1.253056	Y
3	IC 410-400238/14	10.0	14.602378	50.0	487674.0	1.460238	Y
4	IC 410-400238/15	20.0	27.228994	50.0	494528.0	1.36145	Y
5	ICIS 410-400238/16	50.0	70.670438	50.0	485563.0	1.413409	Y
6	IC 410-400238/17	100.0	138.251663	50.0	495568.0	1.382517	Y
7	IC 410-400238/18	300.0	392.57559	50.0	570382.0	1.308585	Y



11/14/2023
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Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

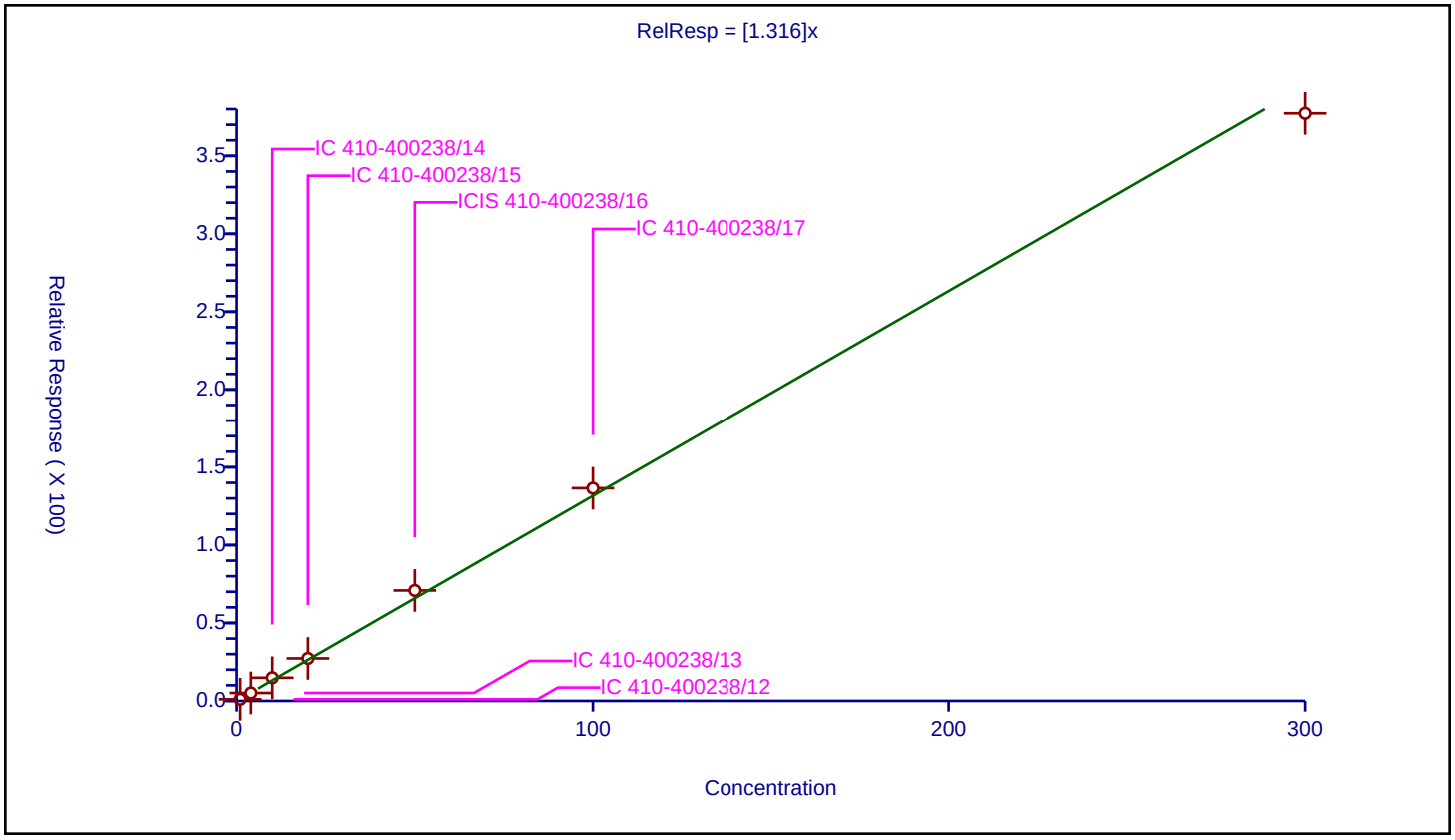
Curve Coefficients

Intercept:	0
Slope:	1.316

Error Coefficients

Standard Error:	1870000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.051149	50.0	491605.0	1.051149	Y
2	IC 410-400238/13	4.0	5.107391	50.0	482301.0	1.276848	Y
3	IC 410-400238/14	10.0	14.843933	50.0	487674.0	1.484393	Y
4	IC 410-400238/15	20.0	27.241835	50.0	494528.0	1.362092	Y
5	ICIS 410-400238/16	50.0	70.856614	50.0	485563.0	1.417132	Y
6	IC 410-400238/17	100.0	136.543421	50.0	495568.0	1.365434	Y
7	IC 410-400238/18	300.0	377.291008	50.0	570382.0	1.257637	Y



11/14/2023
11:12 AM

Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

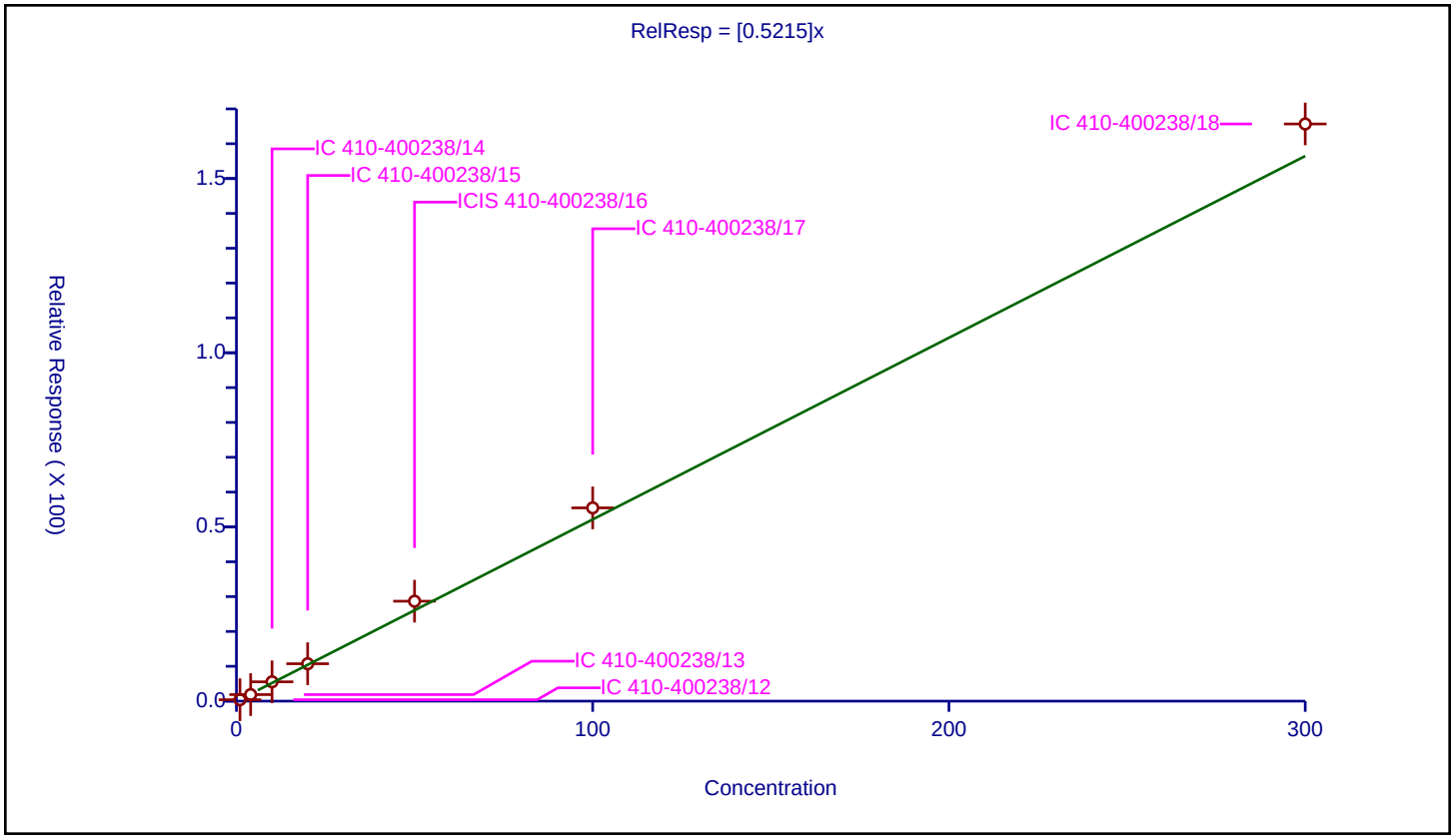
Curve Coefficients

Intercept:	0
Slope:	0.5215

Error Coefficients

Standard Error:	813000
Relative Standard Error:	11.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	0.408661	50.0	491605.0	0.408661	Y
2	IC 410-400238/13	4.0	1.880154	50.0	482301.0	0.470038	Y
3	IC 410-400238/14	10.0	5.545713	50.0	487674.0	0.554571	Y
4	IC 410-400238/15	20.0	10.736399	50.0	494528.0	0.53682	Y
5	ICIS 410-400238/16	50.0	28.688141	50.0	485563.0	0.573763	Y
6	IC 410-400238/17	100.0	55.476141	50.0	495568.0	0.554761	Y
7	IC 410-400238/18	300.0	165.670025	50.0	570382.0	0.552233	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

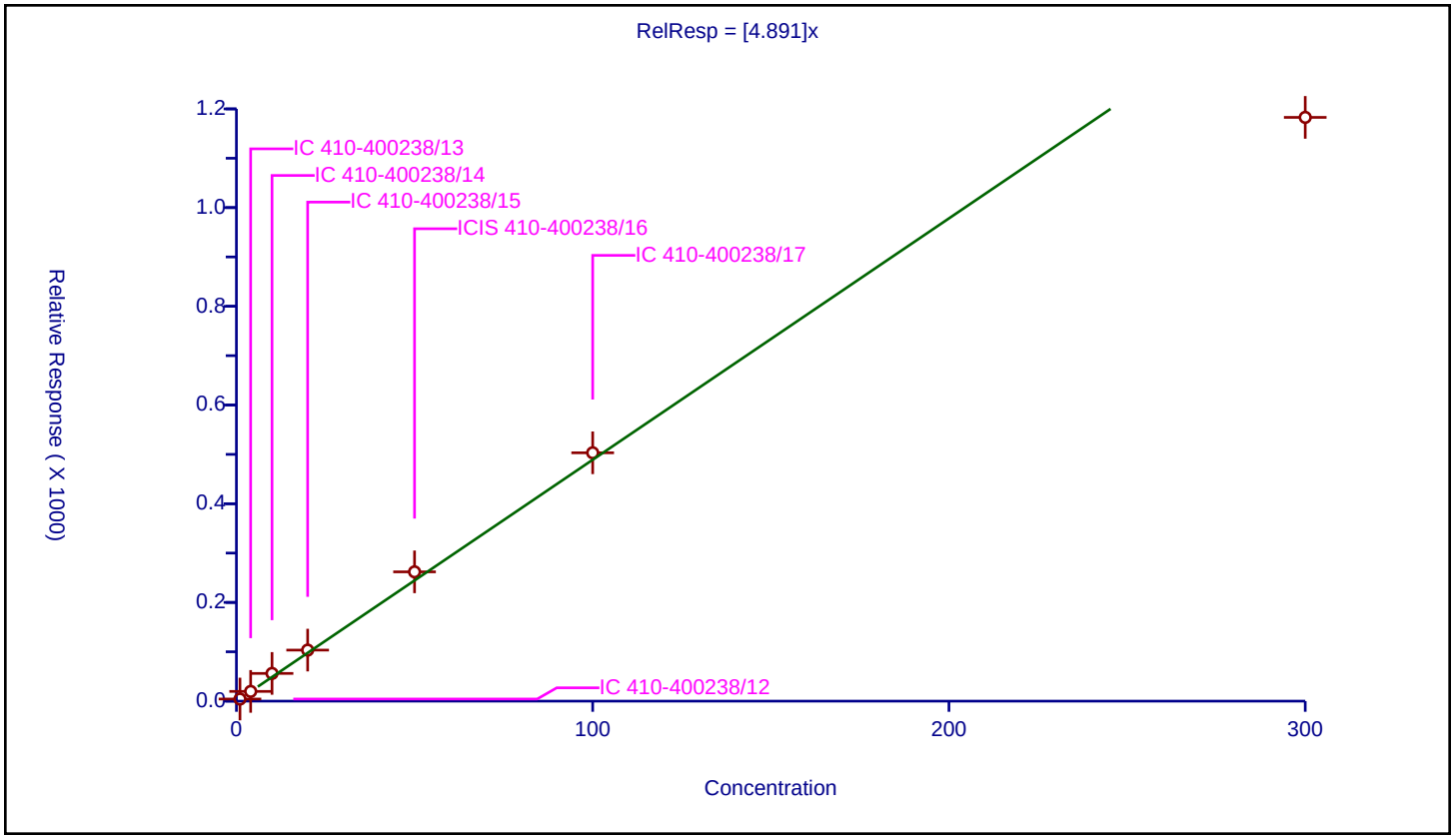
Curve Coefficients

Intercept:	0
Slope:	4.891

Error Coefficients

Standard Error:	5980000
Relative Standard Error:	11.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	4.297149	50.0	491605.0	4.297149	Y
2	IC 410-400238/13	4.0	19.746901	50.0	482301.0	4.936725	Y
3	IC 410-400238/14	10.0	56.134528	50.0	487674.0	5.613453	Y
4	IC 410-400238/15	20.0	103.441868	50.0	494528.0	5.172093	Y
5	ICIS 410-400238/16	50.0	261.990823	50.0	485563.0	5.239816	Y
6	IC 410-400238/17	100.0	503.219336	50.0	495568.0	5.032193	Y
7	IC 410-400238/18	300.0	1182.783819	50.0	570382.0	3.942613	Y



11/14/2023
11:12 AM

Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

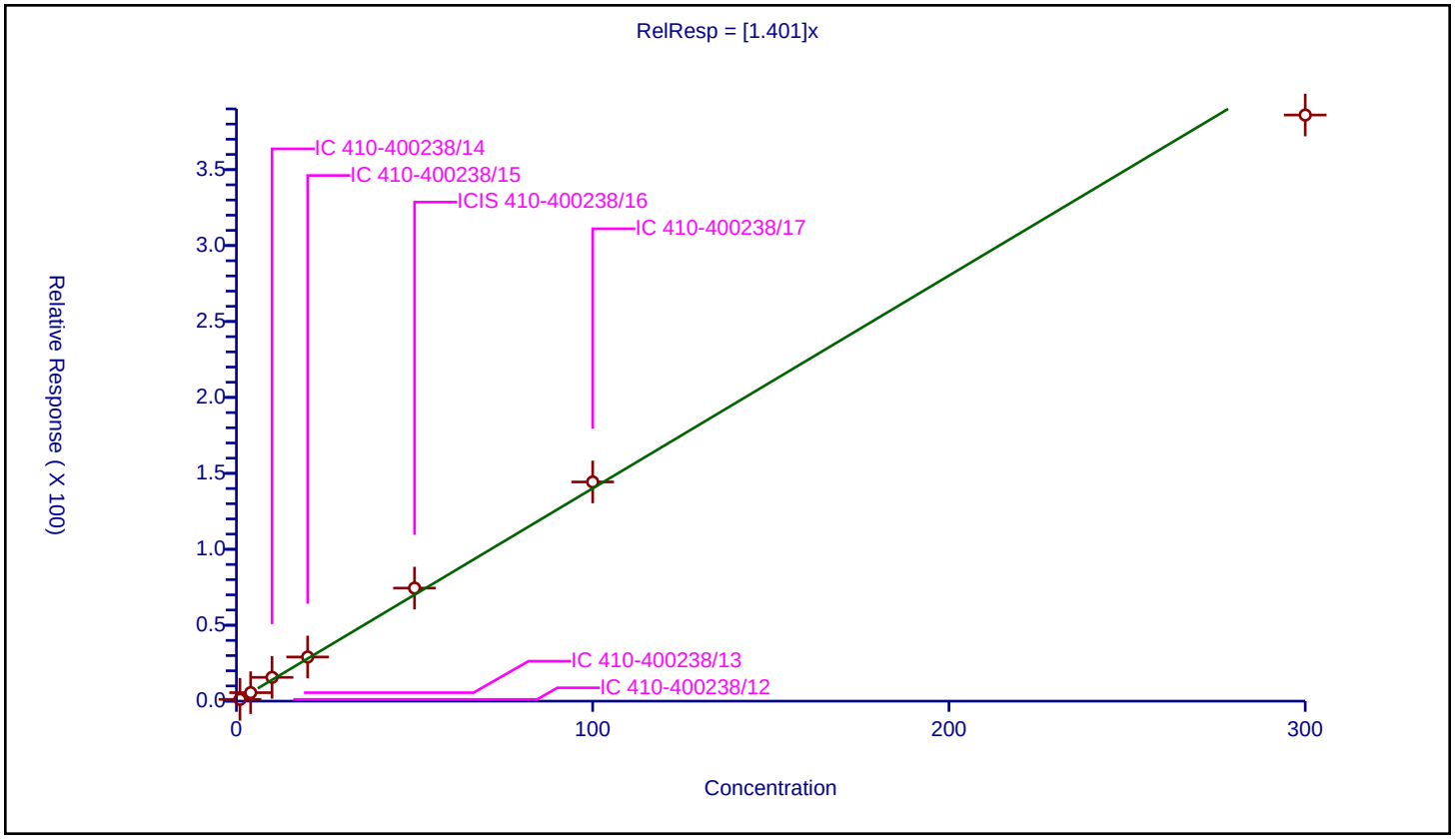
Curve Coefficients

Intercept:	0
Slope:	1.401

Error Coefficients

Standard Error:	1920000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	1.173707	50.0	491605.0	1.173707	Y
2	IC 410-400238/13	4.0	5.584065	50.0	482301.0	1.396016	Y
3	IC 410-400238/14	10.0	15.651132	50.0	487674.0	1.565113	Y
4	IC 410-400238/15	20.0	29.065796	50.0	494528.0	1.45329	Y
5	ICIS 410-400238/16	50.0	74.450071	50.0	485563.0	1.489001	Y
6	IC 410-400238/17	100.0	144.341543	50.0	495568.0	1.443415	Y
7	IC 410-400238/18	300.0	385.964669	50.0	570382.0	1.286549	Y



Calibration / 2-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

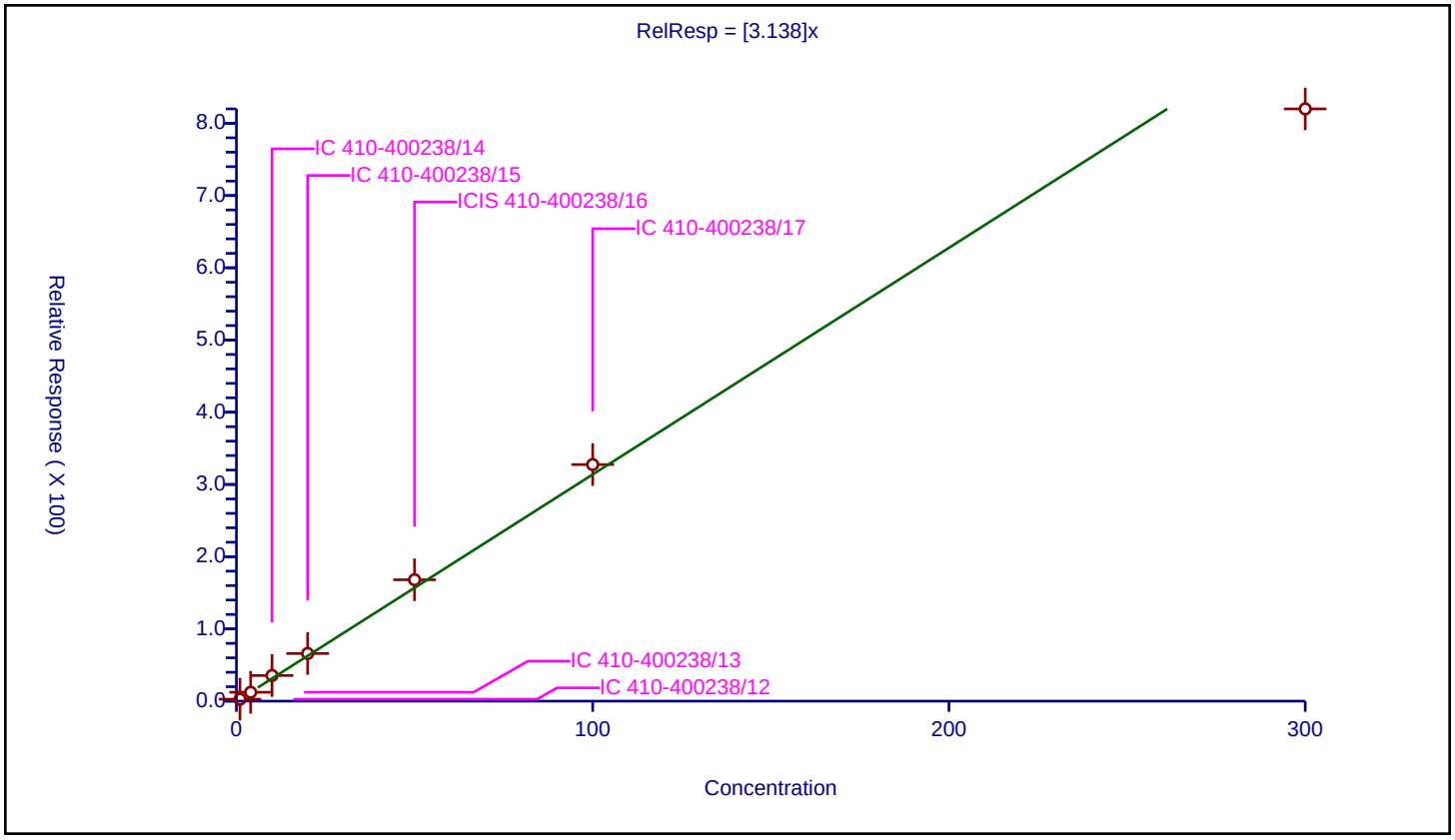
Curve Coefficients

Intercept:	0
Slope:	3.138

Error Coefficients

Standard Error:	4110000
Relative Standard Error:	10.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-400238/12	1.0	2.675725	50.0	491605.0	2.675725	Y
2	IC 410-400238/13	4.0	12.292427	50.0	482301.0	3.073107	Y
3	IC 410-400238/14	10.0	35.501483	50.0	487674.0	3.550148	Y
4	IC 410-400238/15	20.0	65.971593	50.0	494528.0	3.29858	Y
5	ICIS 410-400238/16	50.0	168.071805	50.0	485563.0	3.361436	Y
6	IC 410-400238/17	100.0	327.548792	50.0	495568.0	3.275488	Y
7	IC 410-400238/18	300.0	819.951804	50.0	570382.0	2.733173	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-400238/20 Calibration Date: 07/25/2023 02:16

Instrument ID: 9355 Calib Start Date: 07/24/2023 23:20

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/25/2023 01:32

Lab File ID: YL24X19.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4690	0.3728	0.1000	15.9	20.0	-20.5	30.0
Chloromethane	Ave	0.5266	0.4226	0.1000	16.0	20.0	-19.8	30.0
Vinyl chloride	Ave	0.4813	0.3996	0.1000	16.6	20.0	-17.0	30.0
1,3-Butadiene	Ave	0.4570	0.3570		15.6	20.0	-21.9	30.0
Bromomethane	Ave	0.3220	0.2680	0.1000	16.6	20.0	-16.8	30.0
Chloroethane	Ave	0.2335	0.2073	0.1000	17.8	20.0	-11.2	30.0
Dichlorofluoromethane	Ave	0.6473	0.5477		16.9	20.0	-15.4	30.0
Trichlorofluoromethane	Ave	0.4665	0.4226	0.1000	18.1	20.0	-9.4	30.0
n-Pentane	Ave	0.4038	0.3592		17.8	20.0	-11.0	30.0
Ethyl ether	Ave	0.1954	0.2005		20.5	20.0	2.6	30.0
Freon 123a	Ave	0.3344	0.2888		17.3	20.0	-13.6	30.0
Acrolein	Ave	0.8958	0.9094		152	150	1.5	30.0
1,1-Dichloroethene	Ave	0.2184	0.2171	0.1000	19.9	20.0	-0.6	30.0
Acetone	Ave	0.4825	0.4806	0.1000	249	250	-0.4	30.0
Freon 113	Ave	0.2584	0.2690	0.1000	20.8	20.0	4.1	30.0
2-Propanol	Ave	0.6156	0.5254		128	150	-14.7	30.0
Methyl iodide	Ave	0.4280	0.4170		19.5	20.0	-2.6	30.0
Carbon disulfide	Ave	0.7892	0.7782	0.1000	19.7	20.0	-1.4	30.0
Methyl acetate	Ave	0.3323	0.3306	0.1000	19.9	20.0	-0.5	30.0
Allyl chloride	Ave	0.3553	0.3426		19.3	20.0	-3.6	30.0
Methylene Chloride	Ave	0.2639	0.2604	0.1000	19.7	20.0	-1.3	30.0
t-Butyl alcohol	Ave	1.038	1.067		206	200	2.8	30.0
Acrylonitrile	Ave	0.1701	0.1764		104	100	3.7	30.0
Methyl tertiary butyl ether	Ave	0.8651	0.8512	0.1000	19.7	20.0	-1.6	30.0
trans-1,2-Dichloroethene	Ave	0.2192	0.2191	0.1000	20.0	20.0	-0.0	30.0
n-Hexane	Ave	0.3341	0.3359		20.1	20.0	0.5	30.0
1,1-Dichloroethane	Ave	0.3883	0.3882	0.2000	20.0	20.0	-0.0	30.0
Isopropyl ether	Ave	0.8163	0.8026		19.7	20.0	-1.7	30.0
2-Chloro-1,3-butadiene	Ave	0.3429	0.3428		20.0	20.0	-0.0	30.0
Ethyl t-butyl ether	Ave	0.8117	0.8406		20.7	20.0	3.6	30.0
2-Butanone	Ave	0.2393	0.2555	0.1000	267	250	6.8	30.0
cis-1,2-Dichloroethene	Ave	0.2437	0.2590	0.1000	21.3	20.0	6.3	30.0
2,2-Dichloropropane	Ave	0.4056	0.4193		20.7	20.0	3.4	30.0
Propionitrile	Ave	0.7907	0.7894		150	150	-0.2	30.0
Methacrylonitrile	Ave	0.1695	0.1729		153	150	2.0	30.0
Bromochloromethane	Ave	0.1239	0.1285		20.7	20.0	3.7	30.0
Tetrahydrofuran	Ave	0.6703	0.6447		96.2	100	-3.8	30.0
Chloroform	Ave	0.3961	0.3992	0.2000	20.2	20.0	0.8	30.0
1,1,1-Trichloroethane	Ave	0.3949	0.4048	0.1000	20.5	20.0	2.5	30.0
Cyclohexane	Ave	0.4718	0.4811	0.1000	20.4	20.0	2.0	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-400238/20 Calibration Date: 07/25/2023 02:16

Instrument ID: 9355 Calib Start Date: 07/24/2023 23:20

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/25/2023 01:32

Lab File ID: YL24X19.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1-Dichloropropene	Ave	0.2971	0.3221		21.7	20.0	8.4	30.0
Carbon tetrachloride	Ave	0.3238	0.3283	0.1000	20.3	20.0	1.4	30.0
Isobutyl alcohol	Ave	0.3147	0.2859		454	500	-9.1	30.0
Benzene	Ave	0.9327	0.9711	0.5000	20.8	20.0	4.1	30.0
1,2-Dichloroethane	Ave	0.3256	0.3164	0.1000	19.4	20.0	-2.8	30.0
t-Amyl methyl ether	Ave	0.8105	0.8220		20.3	20.0	1.4	30.0
n-Heptane	Ave	0.3650	0.3607		19.8	20.0	-1.2	30.0
n-Butanol	Ave	0.2454	0.2511		1020	1000	2.3	30.0
Trichloroethene	Ave	0.2411	0.2434	0.2000	20.2	20.0	1.0	30.0
Methylcyclohexane	Ave	0.4735	0.4703	0.1000	19.9	20.0	-0.7	30.0
1,2-Dichloropropane	Ave	0.2550	0.2588	0.1000	20.3	20.0	1.5	30.0
t-Amyl ethyl ether	Ave	0.3736	0.3684		19.7	20.0	-1.4	30.0
Methyl methacrylate	Ave	0.2546	0.2532		19.9	20.0	-0.5	30.0
1,4-Dioxane	Ave	0.0806	0.0822	0.0050	509	500	1.9	30.0
Dibromomethane	Ave	0.1627	0.1706		21.0	20.0	4.9	30.0
Bromodichloromethane	Ave	0.3114	0.3129	0.2000	20.1	20.0	0.5	30.0
2-Nitropropane	Ave	1.126	1.054		18.7	20.0	-6.4	30.0
2-Chloroethyl vinyl ether	Ave	0.1723	0.1792		20.8	20.0	4.0	30.0
cis-1,3-Dichloropropene	Ave	0.3857	0.3786	0.2000	19.6	20.0	-1.8	30.0
4-Methyl-2-pentanone	Ave	0.4852	0.5073	0.1000	261	250	4.5	30.0
Toluene	Ave	0.7991	0.8304	0.4000	20.8	20.0	3.9	30.0
trans-1,3-Dichloropropene	Ave	0.4836	0.4817	0.1000	19.9	20.0	-0.4	30.0
Ethyl methacrylate	Ave	0.5792	0.5815		20.1	20.0	0.4	30.0
1,1,2-Trichloroethane	Ave	0.3146	0.3245	0.1000	20.6	20.0	3.1	30.0
Tetrachloroethene	Ave	0.3361	0.3489	0.2000	20.8	20.0	3.8	30.0
1,3-Dichloropropane	Ave	0.5017	0.5120		20.4	20.0	2.1	30.0
2-Hexanone	Ave	0.4363	0.4756	0.1000	272	250	9.0	30.0
Dibromochloromethane	Ave	0.3438	0.3440		20.0	20.0	0.0	30.0
1,2-Dibromoethane	Ave	0.3310	0.3419	0.1000	20.7	20.0	3.3	30.0
1-Chlorohexane	Ave	0.4497	0.4373		19.5	20.0	-2.7	30.0
Chlorobenzene	Ave	0.8949	0.9025	0.5000	20.2	20.0	0.8	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3621	0.3732		20.6	20.0	3.1	30.0
Ethylbenzene	Ave	1.622	1.689	0.1000	20.8	20.0	4.1	30.0
m&p-Xylene	Ave	0.6223	0.6471	0.1000	41.6	40.0	4.0	30.0
o-Xylene	Ave	0.6684	0.6846	0.3000	20.5	20.0	2.4	30.0
Styrene	Ave	1.040	1.079	0.3000	20.8	20.0	3.8	30.0
Bromoform	Ave	0.2921	0.2746	0.1000	18.8	20.0	-6.0	30.0
Isopropylbenzene	Ave	1.783	1.899	0.1000	21.3	20.0	6.5	30.0
Cyclohexanone	Ave	0.3533	0.2873		406	500	-18.7	30.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.110	0.3000	20.3	20.0	1.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-400238/20 Calibration Date: 07/25/2023 02:16

Instrument ID: 9355 Calib Start Date: 07/24/2023 23:20

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/25/2023 01:32

Lab File ID: YL24X19.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bromobenzene	Ave	0.6813	0.7102		20.8	20.0	4.2	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2895	0.3055		106	100	5.5	30.0
1,2,3-Trichloropropane	Ave	0.3105	0.3180		20.5	20.0	2.4	30.0
N-Propylbenzene	Ave	3.388	3.594		21.2	20.0	6.1	30.0
2-Chlorotoluene	Ave	0.7021	0.7314		20.8	20.0	4.2	30.0
1,3,5-Trimethylbenzene	Ave	2.664	2.788		20.9	20.0	4.6	30.0
4-Chlorotoluene	Ave	0.6802	0.6954		20.4	20.0	2.2	30.0
tert-Butylbenzene	Ave	0.4996	0.5277		21.1	20.0	5.6	30.0
1,2,4-Trimethylbenzene	Ave	2.784	2.831		20.3	20.0	1.7	30.0
sec-Butylbenzene	Ave	3.432	3.633		21.2	20.0	5.8	30.0
1,3-Dichlorobenzene	Ave	1.410	1.427	0.6000	20.2	20.0	1.2	30.0
p-Isopropyltoluene	Ave	3.002	3.161		21.1	20.0	5.3	30.0
1,4-Dichlorobenzene	Ave	1.390	1.489	0.5000	21.4	20.0	7.1	30.0
1,2,3-Trimethylbenzene	Ave	3.031	3.045		20.1	20.0	0.5	30.0
Benzyl chloride	Ave	2.167	2.173		20.1	20.0	0.3	30.0
1,3-Diethylbenzene	Ave	1.828	1.871		20.5	20.0	2.3	30.0
1,4-Diethylbenzene	Ave	1.900	1.950		20.5	20.0	2.6	30.0
n-Butylbenzene	Ave	1.531	1.583		20.7	20.0	3.4	30.0
1,2-Dichlorobenzene	Ave	1.544	1.575	0.4000	20.4	20.0	2.0	30.0
1,2-Diethylbenzene	Ave	1.610	1.573		19.5	20.0	-2.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.3486	0.3378	0.0500	19.4	20.0	-3.1	30.0
1,3,5-Trichlorobenzene	Ave	1.324	1.341		20.3	20.0	1.3	30.0
1,2,4-Trichlorobenzene	Ave	1.316	1.415	0.2000	21.5	20.0	7.5	30.0
Hexachlorobutadiene	Ave	0.5215	0.5689		21.8	20.0	9.1	30.0
Naphthalene	Ave	4.891	5.283		21.6	20.0	8.0	30.0
1,2,3-Trichlorobenzene	Ave	1.401	1.520		21.7	20.0	8.5	30.0
2-Methylnaphthalene	Ave	3.138	3.553		22.6	20.0	13.2	30.0
Dibromofluoromethane (Surr)	Ave	0.2386	0.2374		49.7	50.0	-0.5	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0601	0.0596		49.6	50.0	-0.8	30.0
Toluene-d8 (Surr)	Ave	1.328	1.327		50.0	50.0	-0.0	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5086	0.5090		50.0	50.0	0.0	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X19.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 25-Jul-2023 02:16:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0089720-020
Misc. Info.: ICV LG
Operator ID: MEC29284 Instrument ID: 9355
Sublist:

Method: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 27-Jul-2023 22:25:56 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1604

First Level Reviewer: K4WN Date: 25-Jul-2023 16:43:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.938	1.930	0.008	99	164438	20.0	15.9	M
4 Chloromethane	50	2.131	2.124	0.007	99	186388	20.0	16.0	
5 Vinyl chloride	62	2.238	2.238	0.000	98	176263	20.0	16.6	
6 Butadiene	39	2.252	2.245	0.007	91	157490	20.0	15.6	
8 Bromomethane	94	2.567	2.574	-0.007	90	118198	20.0	16.6	
9 Chloroethane	64	2.638	2.645	-0.007	100	91423	20.0	17.8	
10 Dichlorofluoromethane	67	2.882	2.881	0.001	97	241571	20.0	16.9	
11 Trichlorofluoromethane	101	2.960	2.960	0.000	96	186385	20.0	18.1	
12 Pentane	43	2.967	2.967	0.000	97	158437	20.0	17.8	
14 Ethyl ether	59	3.175	3.175	0.000	93	88519	20.0	20.5	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.260	3.260	0.000	91	127408	20.0	17.3	
16 Acrolein	56	3.332	3.332	0.000	99	334846	150.0	152.3	
17 1,1-Dichloroethene	96	3.482	3.482	0.000	97	95760	20.0	19.9	
18 Acetone	58	3.496	3.496	0.000	100	294933	250.0	249.0	M
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.539	3.532	0.007	93	118645	20.0	20.8	
20 Isopropyl alcohol	45	3.654	3.654	0.000	96	193479	150.0	128.0	M
21 Iodomethane	142	3.689	3.689	0.000	98	183944	20.0	19.5	
22 Carbon disulfide	76	3.804	3.811	-0.007	99	343260	20.0	19.7	M
24 Methyl acetate	43	3.918	3.911	0.007	97	145804	20.0	19.9	M
25 3-Chloro-1-propene	41	3.947	3.947	0.000	89	151135	20.0	19.3	
* 27 t-Butyl alcohol-d10 (IS)	65	4.126	4.126	0.000	89	613733	250.0	250.0	
26 Methylene Chloride	84	4.133	4.133	0.000	92	114882	20.0	19.7	
28 2-Methyl-2-propanol	59	4.247	4.247	0.000	100	523944	200.0	205.6	
29 Acrylonitrile	53	4.440	4.433	0.007	99	388942	100.0	103.7	
30 Methyl tert-butyl ether	73	4.533	4.533	0.000	95	375459	20.0	19.7	
32 trans-1,2-Dichloroethene	96	4.555	4.555	0.000	98	96648	20.0	20.0	
33 Hexane	57	4.984	4.984	0.000	94	148144	20.0	20.1	
35 1,1-Dichloroethane	63	5.205	5.205	0.000	96	171220	20.0	20.0	
36 Isopropyl ether	45	5.270	5.270	0.000	94	354003	20.0	19.7	
37 2-Chloro-1,3-butadiene	53	5.320	5.320	0.000	91	151202	20.0	20.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.813	5.813	0.000	99	370778	20.0	20.7	
40 2-Butanone (MEK)	43	6.006	6.006	0.000	100	1408948	250.0	266.9	
41 cis-1,2-Dichloroethene	96	6.042	6.042	0.000	80	114238	20.0	21.3	
42 2,2-Dichloropropane	77	6.071	6.070	0.001	72	184950	20.0	20.7	
43 Propionitrile	54	6.078	6.085	-0.007	98	290697	150.0	149.8	
48 Methacrylonitrile	67	6.306	6.306	0.000	92	571904	150.0	153.0	
49 Chlorobromomethane	128	6.385	6.385	0.000	95	56683	20.0	20.7	
50 Tetrahydrofuran	71	6.407	6.407	0.000	92	158268	100.0	96.2	
51 Chloroform	83	6.535	6.528	0.007	93	176104	20.0	20.2	
$ 52 Dibromofluoromethane (Surr)	113	6.750	6.750	0.000	93	261752	50.0	49.7	
53 1,1,1-Trichloroethane	97	6.771	6.771	0.000	98	178572	20.0	20.5	
54 Cyclohexane	56	6.886	6.893	-0.007	92	212199	20.0	20.4	
55 1,1-Dichloropropene	75	6.993	6.986	0.007	95	142093	20.0	21.7	
56 Carbon tetrachloride	117	6.993	6.993	0.000	96	144796	20.0	20.3	
57 Isobutyl alcohol	41	7.122	7.129	-0.007	95	350992	500.0	454.3	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.215	7.214	0.001	91	65769	50.0	49.6	
59 Benzene	78	7.250	7.250	0.000	97	428348	20.0	20.8	
60 1,2-Dichloroethane	62	7.322	7.322	0.000	97	139548	20.0	19.4	
62 Tert-amyl methyl ether	73	7.443	7.443	0.000	98	362559	20.0	20.3	
* 63 Fluorobenzene (IS)	96	7.658	7.658	0.000	98	1102735	50.0	50.0	
64 n-Heptane	43	7.679	7.679	0.000	94	159113	20.0	19.8	
66 n-Butanol	56	8.001	8.008	-0.007	90	616324	1000.0	1023.0	
67 Trichloroethene	95	8.151	8.151	0.000	99	107384	20.0	20.2	
69 Methylcyclohexane	83	8.473	8.473	0.000	93	207455	20.0	19.9	
70 1,2-Dichloropropane	63	8.480	8.480	0.000	71	114173	20.0	20.3	
71 2-ethoxy-2-methyl butane	87	8.487	8.487	0.000	90	162507	20.0	19.7	
72 Methyl methacrylate	69	8.559	8.559	0.000	91	111672	20.0	19.9	
73 1,4-Dioxane	88	8.580	8.566	0.014	88	100842	500.0	509.4	M
74 Dibromomethane	93	8.595	8.594	0.001	97	75257	20.0	21.0	
76 Dichlorobromomethane	83	8.823	8.823	0.000	99	138003	20.0	20.1	
77 2-Nitropropane	41	9.074	9.074	0.000	98	51759	20.0	18.7	
78 2-Chloroethyl vinyl ether	63	9.195	9.188	0.007	92	79038	20.0	20.8	
79 cis-1,3-Dichloropropene	75	9.381	9.381	0.000	96	167002	20.0	19.6	
80 4-Methyl-2-pentanone (MIBK)	43	9.538	9.538	0.000	97	2797218	250.0	261.4	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	1078593	50.0	50.0	
82 Toluene	92	9.774	9.774	0.000	98	269895	20.0	20.8	
119 trans-1,3-Dichloropropene	75	10.032	10.032	0.000	93	156542	20.0	19.9	
121 Ethyl methacrylate	69	10.089	10.089	0.000	90	189000	20.0	20.1	
122 1,1,2-Trichloroethane	97	10.239	10.232	0.007	90	105459	20.0	20.6	
123 Tetrachloroethene	166	10.339	10.332	0.007	97	113402	20.0	20.8	
124 1,3-Dichloropropane	76	10.396	10.396	0.000	92	166406	20.0	20.4	
126 2-Hexanone	43	10.439	10.439	0.000	97	1932045	250.0	272.5	
128 Chlorodibromomethane	129	10.625	10.625	0.000	90	111795	20.0	20.0	
129 Ethylene Dibromide	107	10.740	10.740	0.000	99	111105	20.0	20.7	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	86	812514	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	98	142141	20.0	19.5	
132 Chlorobenzene	112	11.197	11.197	0.000	95	293313	20.0	20.2	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	95	121307	20.0	20.6	
135 Ethylbenzene	91	11.283	11.283	0.000	98	548941	20.0	20.8	
136 m-Xylene & p-Xylene	106	11.397	11.397	0.000	100	420626	40.0	41.6	
138 o-Xylene	106	11.726	11.726	0.000	97	222497	20.0	20.5	
139 Styrene	104	11.748	11.748	0.000	94	350747	20.0	20.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
140 Bromoform	173	11.905	11.905	0.000	97	89246	20.0	18.8	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	617305	20.0	21.3	
143 Cyclohexanone	55	12.105	12.098	0.007	92	352548	499.8	406.5	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	89	413582	50.0	50.0	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	93	214336	20.0	20.3	
147 trans-1,4-Dichloro-2-butene	53	12.298	12.298	0.000	91	294903	100.0	105.5	
146 Bromobenzene	156	12.298	12.298	0.000	76	137107	20.0	20.8	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	83	61398	20.0	20.5	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	693922	20.0	21.2	
150 2-Chlorotoluene	126	12.441	12.441	0.000	97	141213	20.0	20.8	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	94	538282	20.0	20.9	
152 4-Chlorotoluene	126	12.534	12.534	0.000	97	134254	20.0	20.4	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	101868	20.0	21.1	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	98	546559	20.0	20.3	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	701368	20.0	21.2	
158 1,3-Dichlorobenzene	146	13.006	13.006	0.000	98	275564	20.0	20.2	
159 4-Isopropyltoluene	119	13.013	13.013	0.000	97	610334	20.0	21.1	
* 160 1,4-Dichlorobenzene-d4	152	13.063	13.063	0.000	95	482649	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	287466	20.0	21.4	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	587902	20.0	20.1	
163 Benzyl chloride	91	13.156	13.156	0.000	98	419558	20.0	20.1	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	96	361267	20.0	20.5	
165 p-Diethylbenzene	119	13.292	13.292	0.000	95	376398	20.0	20.5	
166 n-Butylbenzene	92	13.307	13.307	0.001	97	305596	20.0	20.7	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	99	304062	20.0	20.4	
168 o-diethylbenzene	119	13.357	13.357	0.000	96	303640	20.0	19.5	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	87	65220	20.0	19.4	
172 1,3,5-Trichlorobenzene	180	14.022	14.022	0.000	98	258945	20.0	20.3	
173 1,2,4-Trichlorobenzene	180	14.443	14.443	0.000	94	273135	20.0	21.5	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	98	109839	20.0	21.8	
176 Naphthalene	128	14.622	14.622	0.000	97	1019853	20.0	21.6	
177 1,2,3-Trichlorobenzene	180	14.765	14.765	0.000	96	293495	20.0	21.7	
178 2-Methylnaphthalene	142	15.394	15.394	0.000	92	686003	20.0	22.6	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00120	Amount Added: 50.00	Units: uL	
MSV_LCS_CYC_00005	Amount Added: 50.00	Units: uL	
MSV_LCS_Gases_00152	Amount Added: 50.00	Units: uL	
MSV_LCS_ACROL_00123	Amount Added: 50.00	Units: uL	
MSV_LCS_2CEVE_00125	Amount Added: 50.00	Units: uL	
MSV_LCS_EE_00007	Amount Added: 50.00	Units: uL	
MSV_HP20_ISSS_00096	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 27-Jul-2023 22:27:32 Chrom Revision: 2.3 26-Jul-2023 13:45:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X19.D

Injection Date: 25-Jul-2023 02:16:30 Instrument ID: 9355 Operator ID: MEC29284

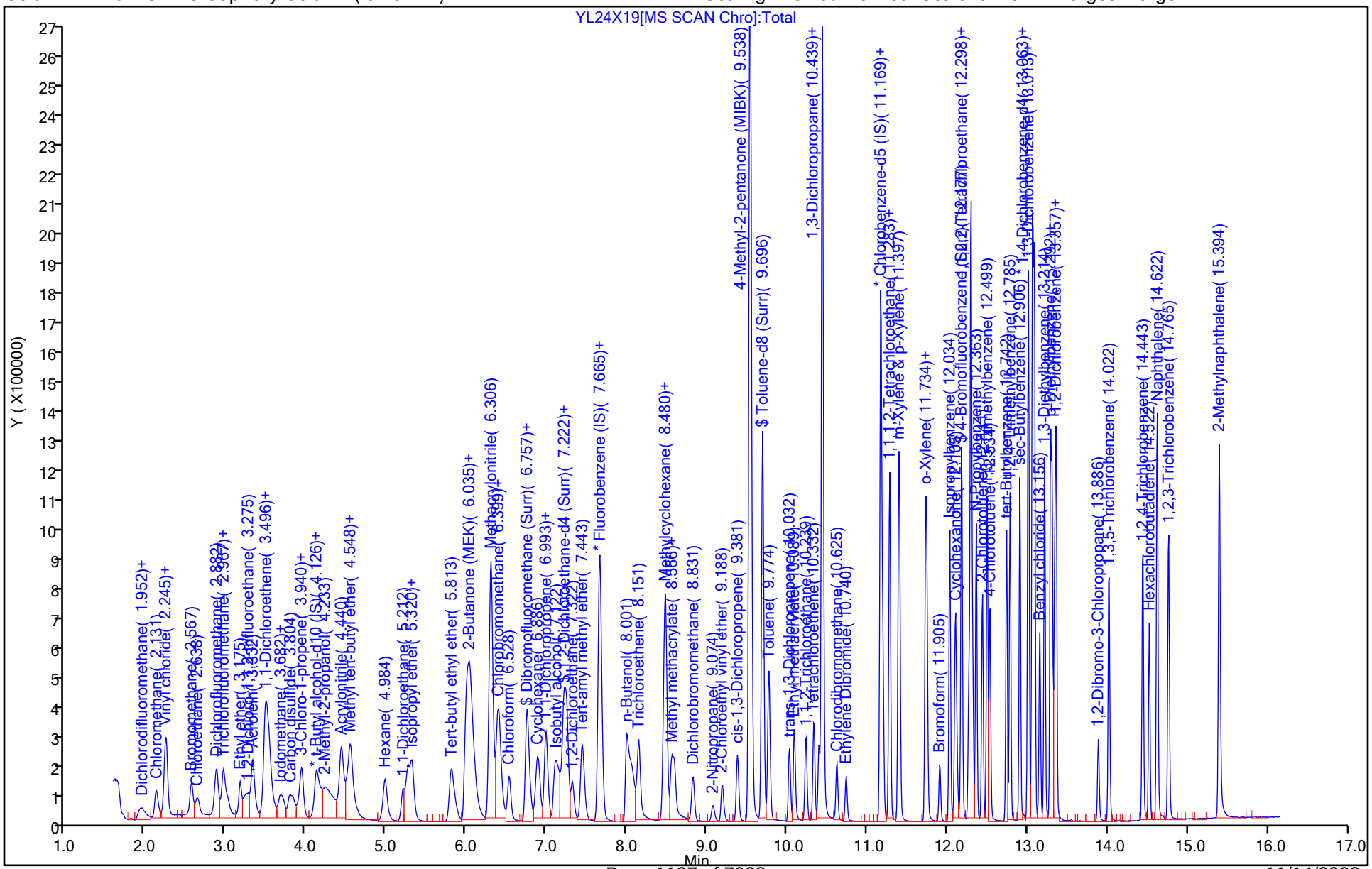
Lims ID: ICV Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 19

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

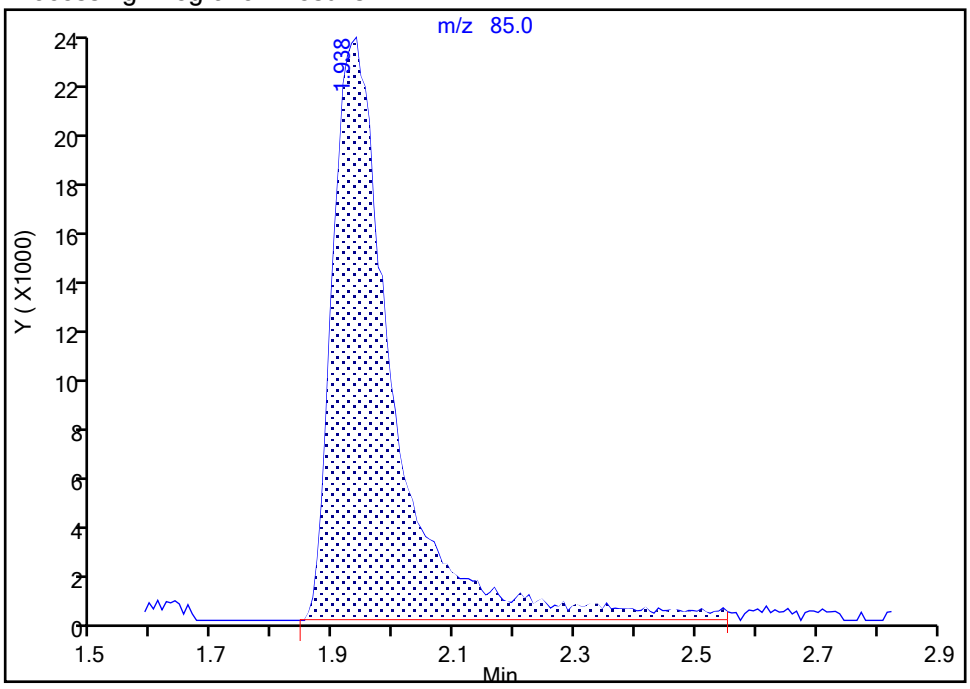
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X19.D				
Injection Date:	25-Jul-2023 02:16:30	Instrument ID:	9355		
Lims ID:	ICV				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

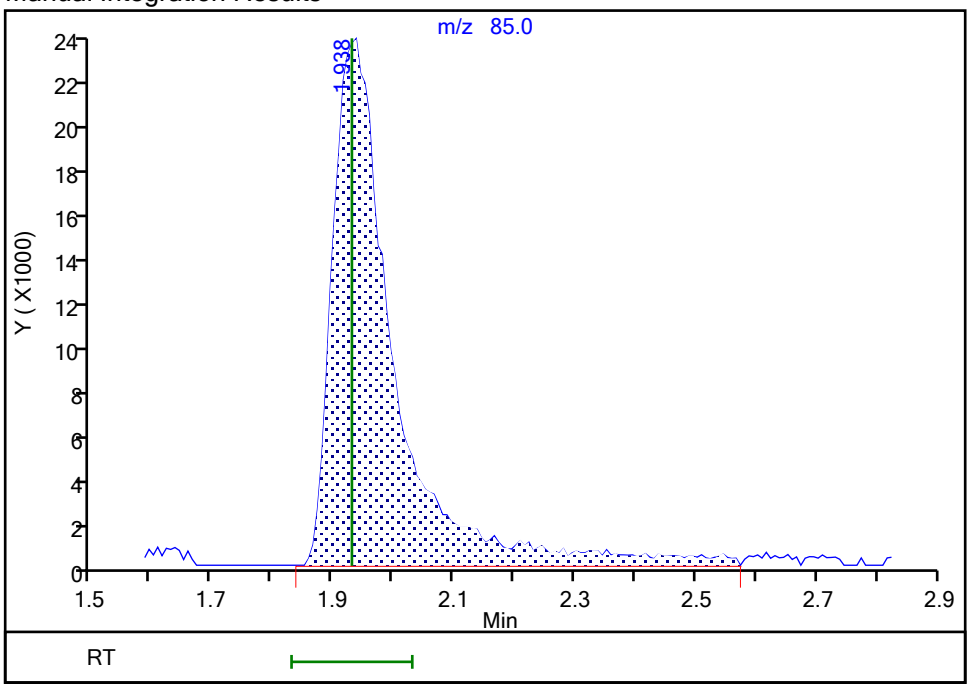
Processing Integration Results

RT: 1.94
Area: 164177
Amount: 15.870679
Amount Units: ug/l



Manual Integration Results

RT: 1.94
Area: 164438
Amount: 15.895909
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:40:56 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

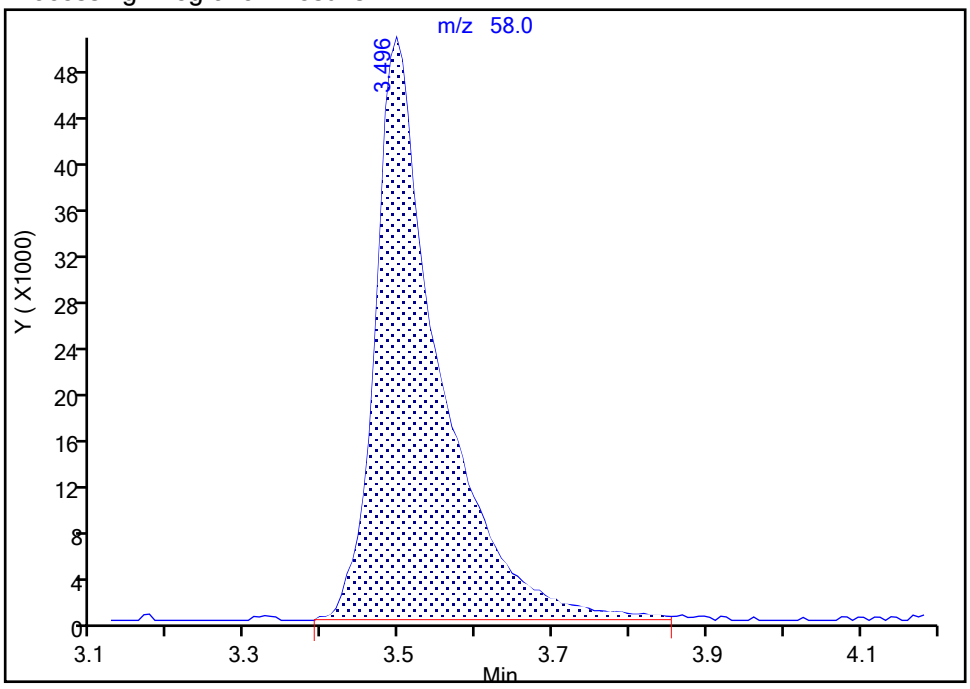
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X19.D
Injection Date: 25-Jul-2023 02:16:30 Instrument ID: 9355
Lims ID: ICV
Client ID:
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

18 Acetone, CAS: 67-64-1

Signal: 1

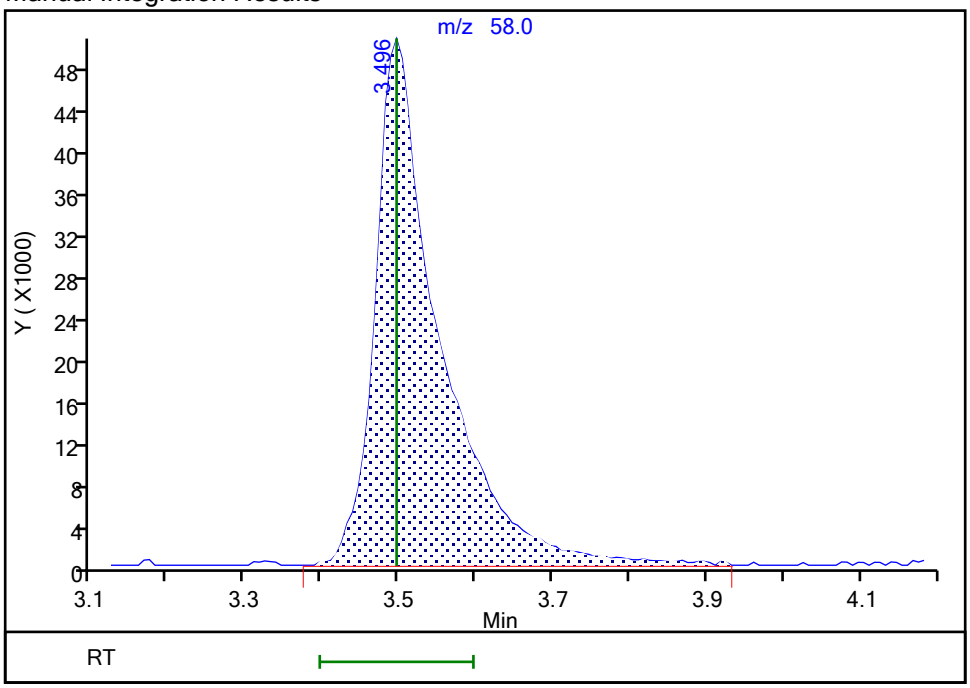
Processing Integration Results

RT: 3.50
Area: 293644
Amount: 247.9070
Amount Units: ug/l



Manual Integration Results

RT: 3.50
Area: 294933
Amount: 248.9952
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:41:09 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

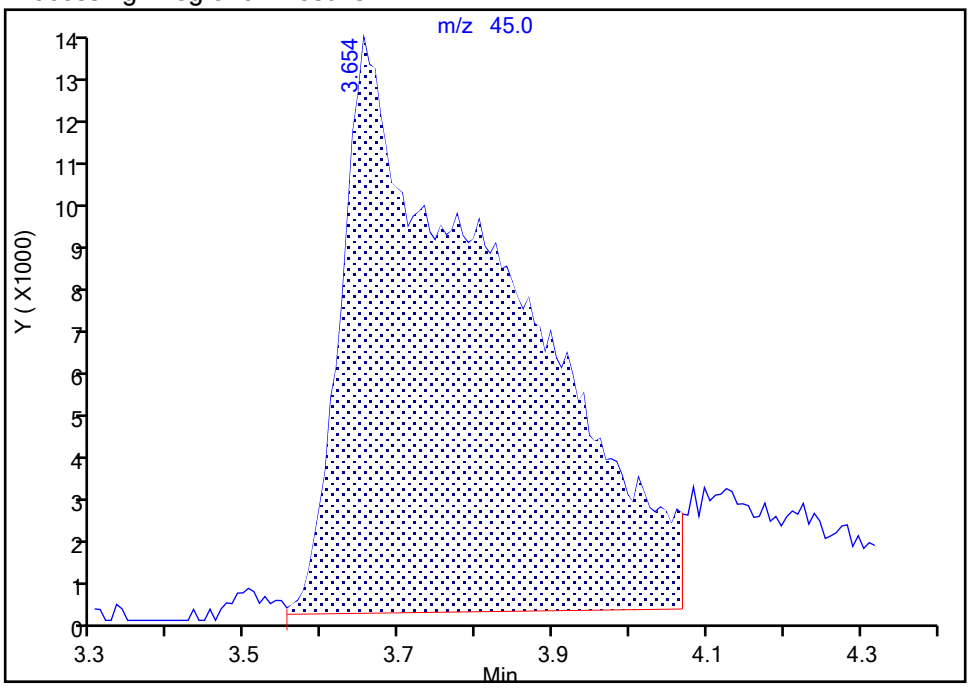
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X19.D				
Injection Date:	25-Jul-2023 02:16:30	Instrument ID:	9355		
Lims ID:	ICV				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

20 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

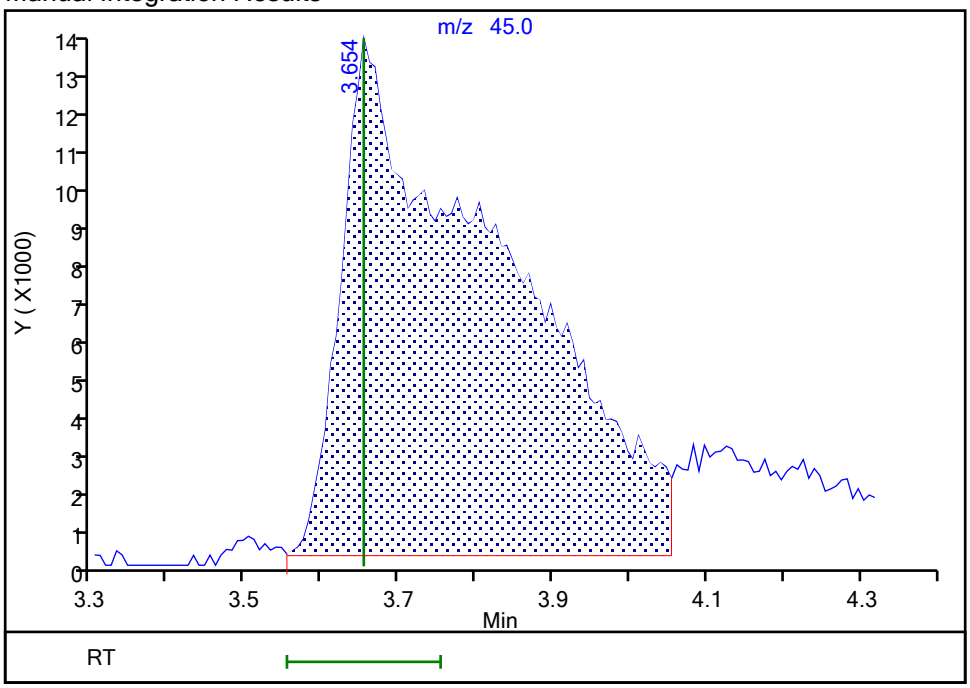
Processing Integration Results

RT: 3.65
Area: 195974
Amount: 129.6668
Amount Units: ug/l



Manual Integration Results

RT: 3.65
Area: 193479
Amount: 128.0160
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:41:37 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

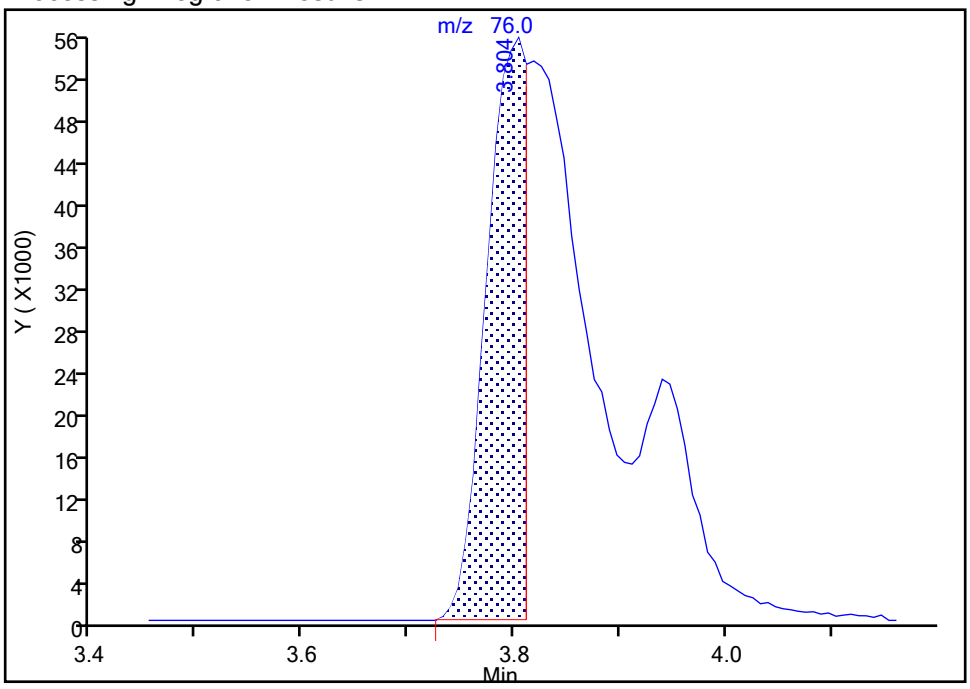
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X19.D				
Injection Date:	25-Jul-2023 02:16:30	Instrument ID:	9355		
Lims ID:	ICV				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

22 Carbon disulfide, CAS: 75-15-0

Signal: 1

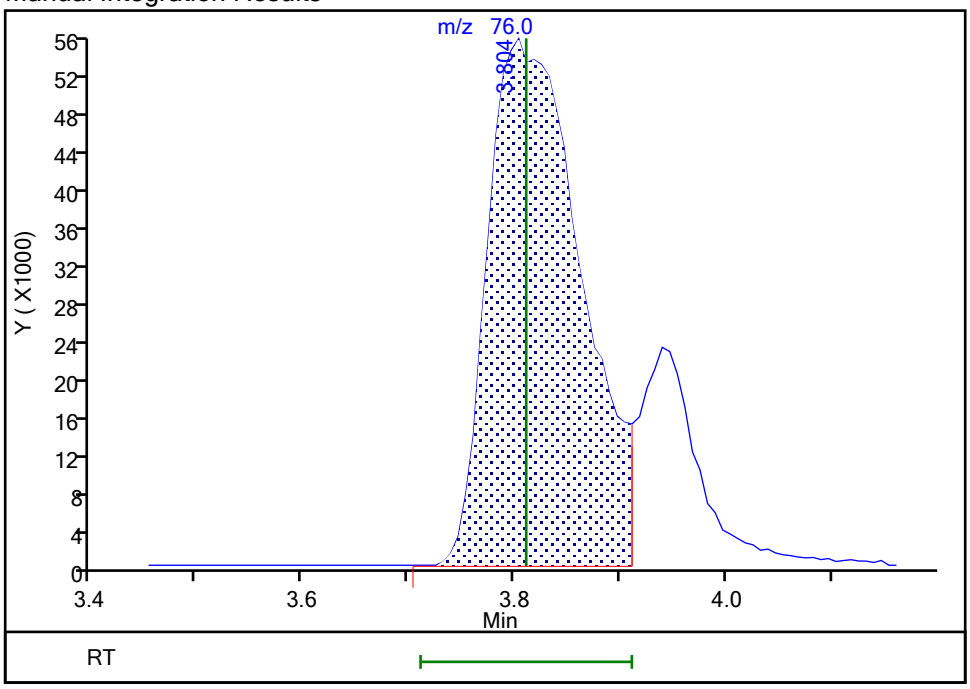
Processing Integration Results

RT: 3.80
Area: 148477
Amount: 6.857401
Amount Units: ug/l



Manual Integration Results

RT: 3.80
Area: 343260
Amount: 19.722104
Amount Units: ug/l



Reviewer: UKEK, 27-Jul-2023 19:11:34 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

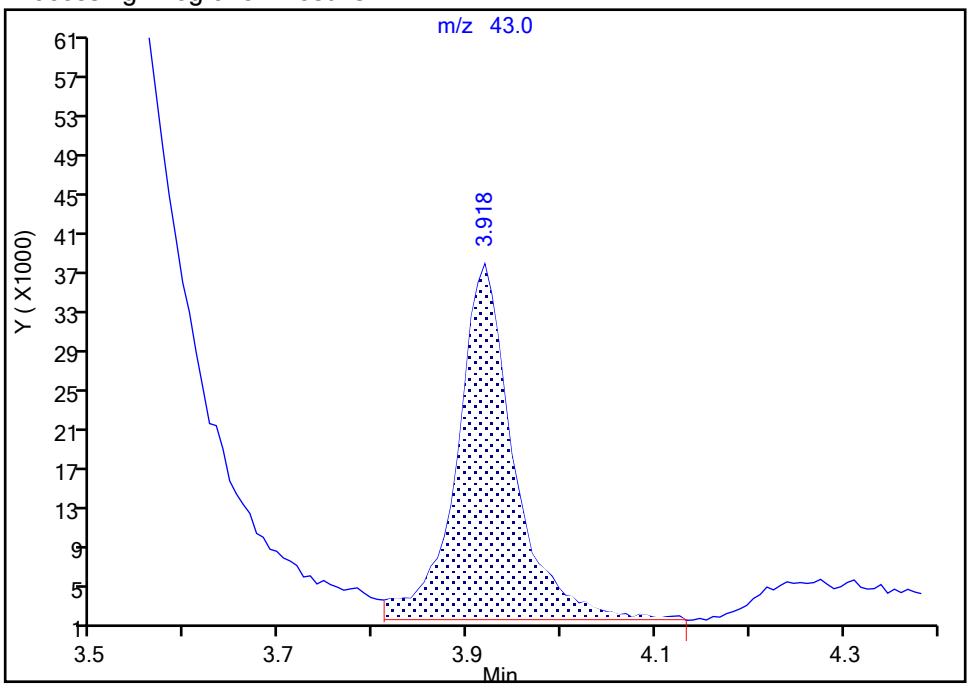
Data File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X19.D				
Injection Date:	25-Jul-2023 02:16:30	Instrument ID:	9355		
Lims ID:	ICV				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

24 Methyl acetate, CAS: 79-20-9

Signal: 1

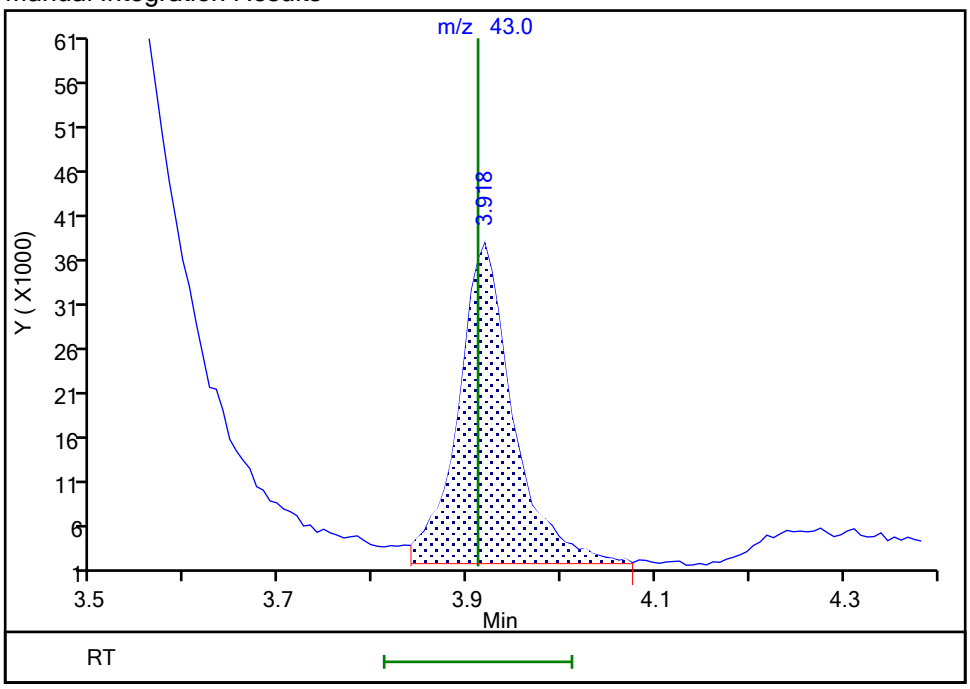
Processing Integration Results

RT: 3.92
Area: 153233
Amount: 20.906820
Amount Units: ug/l



Manual Integration Results

RT: 3.92
Area: 145804
Amount: 19.893221
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:41:56 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

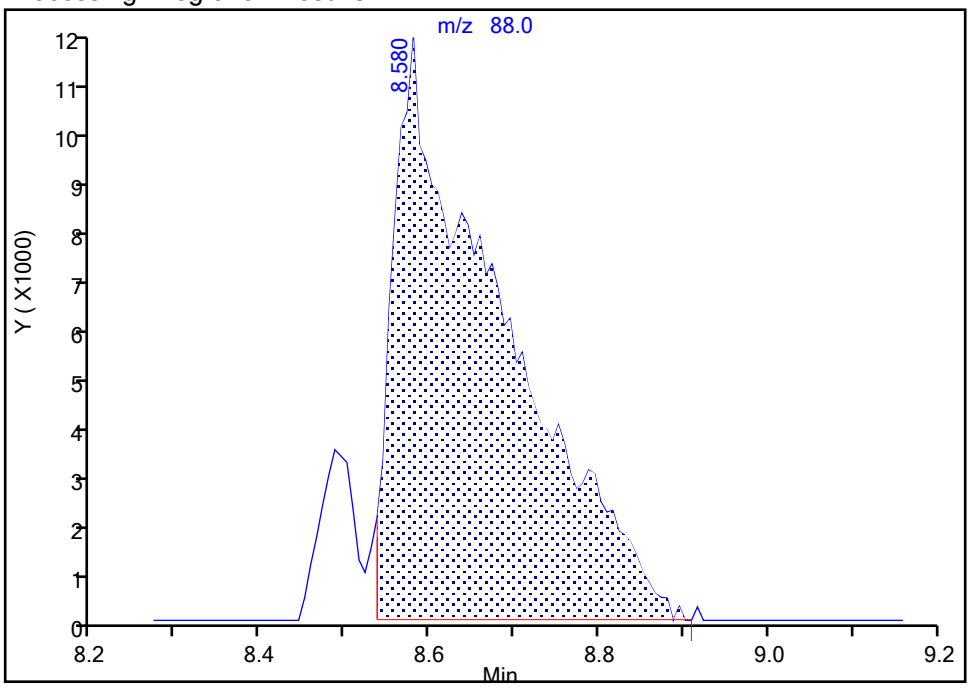
Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X19.D
Injection Date: 25-Jul-2023 02:16:30 Instrument ID: 9355
Lims ID: ICV
Client ID:
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

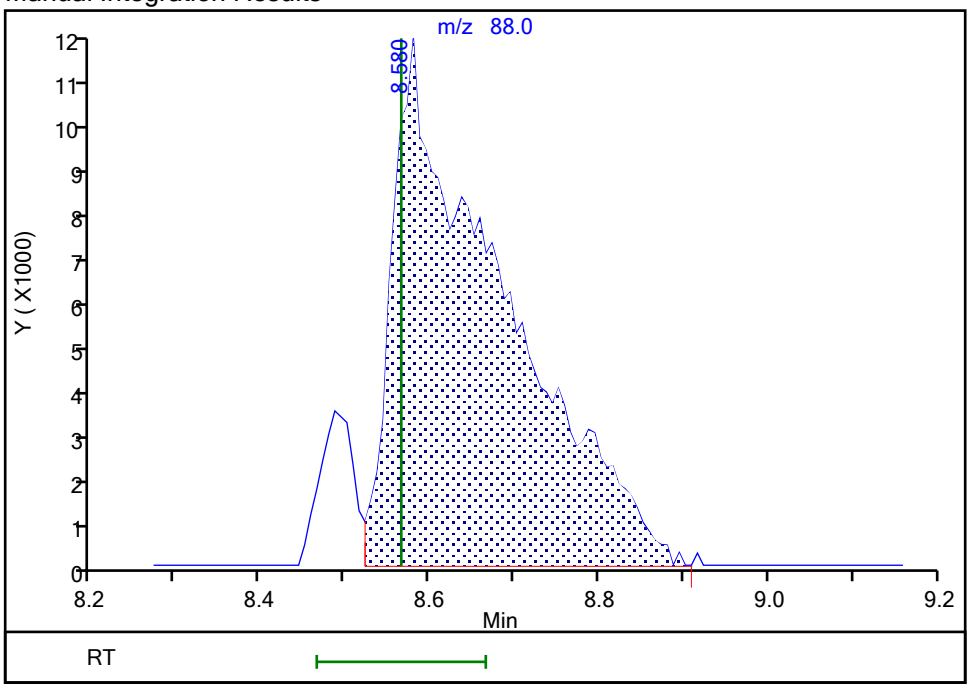
Processing Integration Results

RT: 8.58
Area: 99853
Amount: 504.4292
Amount Units: ug/l



Manual Integration Results

RT: 8.58
Area: 100842
Amount: 509.4253
Amount Units: ug/l



Reviewer: K4WN, 25-Jul-2023 16:42:23 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-405099/3 Calibration Date: 08/07/2023 09:07

Instrument ID: 9355 Calib Start Date: 07/24/2023 23:20

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/25/2023 01:32

Lab File ID: YG07X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4690	0.4723	0.1000	50.3	50.0	0.7	20.0
Chloromethane	Ave	0.5266	0.4952	0.1000	47.0	50.0	-6.0	20.0
Vinyl chloride	Ave	0.4813	0.4623	0.1000	48.0	50.0	-4.0	20.0
1,3-Butadiene	Ave	0.4570	0.4654		50.9	50.0	1.8	20.0
Bromomethane	Ave	0.3220	0.2997	0.1000	46.5	50.0	-6.9	20.0
Chloroethane	Ave	0.2335	0.2350	0.1000	50.3	50.0	0.6	20.0
Dichlorofluoromethane	Ave	0.6473	0.6450		49.8	50.0	-0.4	20.0
Trichlorofluoromethane	Ave	0.4665	0.5076	0.1000	54.4	50.0	8.8	20.0
n-Pentane	Ave	0.4038	0.3643		45.1	50.0	-9.8	20.0
Ethyl ether	Ave	0.1954	0.1644		42.1	50.0	-15.9	20.0
Freon 123a	Ave	0.3344	0.3388		50.7	50.0	1.3	20.0
Acrolein	Ave	0.8958	1.111		620	500	24.0*	20.0
1,1-Dichloroethene	Ave	0.2184	0.2359	0.1000	54.0	50.0	8.0	20.0
Acetone	Ave	0.4825	0.5575	0.1000	116	100	15.5	20.0
Freon 113	Ave	0.2584	0.2793	0.1000	54.0	50.0	8.1	20.0
2-Propanol	Ave	0.6156	0.5810		236	250	-5.6	20.0
Methyl iodide	Ave	0.4280	0.4772		55.8	50.0	11.5	20.0
Carbon disulfide	Ave	0.7892	0.8225	0.1000	52.1	50.0	4.2	20.0
Methyl acetate	Ave	0.3323	0.3338	0.1000	50.2	50.0	0.4	20.0
Allyl chloride	Ave	0.3553	0.3685		51.9	50.0	3.7	20.0
Methylene Chloride	Ave	0.2639	0.2867	0.1000	54.3	50.0	8.7	20.0
t-Butyl alcohol	Ave	1.038	0.9804		236	250	-5.6	20.0
Acrylonitrile	Ave	0.1701	0.1932		142	125	13.6	20.0
Methyl tertiary butyl ether	Ave	0.8651	0.8112	0.1000	46.9	50.0	-6.2	20.0
trans-1,2-Dichloroethene	Ave	0.2192	0.2442	0.1000	55.7	50.0	11.4	20.0
n-Hexane	Ave	0.3341	0.3519		52.7	50.0	5.3	20.0
1,1-Dichloroethane	Ave	0.3883	0.4315	0.2000	55.6	50.0	11.1	20.0
Isopropyl ether	Ave	0.8163	0.8154		49.9	50.0	-0.1	20.0
2-Chloro-1,3-butadiene	Ave	0.3429	0.3644		53.1	50.0	6.3	20.0
Ethyl t-butyl ether	Ave	0.8117	0.7487		46.1	50.0	-7.8	20.0
2-Butanone	Ave	0.2393	0.2390	0.1000	99.9	100	-0.1	20.0
cis-1,2-Dichloroethene	Ave	0.2437	0.2733	0.1000	56.1	50.0	12.2	20.0
2,2-Dichloropropane	Ave	0.4056	0.4119		50.8	50.0	1.5	20.0
Propionitrile	Ave	0.7907	0.9576		303	250	21.1*	20.0
Methacrylonitrile	Ave	0.1695	0.1816		134	125	7.2	20.0
Bromochloromethane	Ave	0.1239	0.1445		58.3	50.0	16.6	20.0
Tetrahydrofuran	Ave	0.6703	0.7972		297	250	18.9	20.0
Chloroform	Ave	0.3961	0.4434	0.2000	56.0	50.0	12.0	20.0
1,1,1-Trichloroethane	Ave	0.3949	0.4339	0.1000	54.9	50.0	9.9	20.0
Cyclohexane	Ave	0.4718	0.4917	0.1000	52.1	50.0	4.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-405099/3 Calibration Date: 08/07/2023 09:07

Instrument ID: 9355 Calib Start Date: 07/24/2023 23:20

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/25/2023 01:32

Lab File ID: YG07X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1-Dichloropropene	Ave	0.2971	0.3332		56.1	50.0	12.2	20.0
Carbon tetrachloride	Ave	0.3238	0.3782	0.1000	58.4	50.0	16.8	20.0
Isobutyl alcohol	Ave	0.3147	0.3243		644	625	3.0	20.0
Benzene	Ave	0.9327	1.011	0.5000	54.2	50.0	8.4	20.0
1,2-Dichloroethane	Ave	0.3256	0.3570	0.1000	54.8	50.0	9.6	20.0
t-Amyl methyl ether	Ave	0.8105	0.7614		47.0	50.0	-6.1	20.0
n-Heptane	Ave	0.3650	0.4098		56.1	50.0	12.3	20.0
n-Butanol	Ave	0.2454	0.2560		652	625	4.3	20.0
Trichloroethene	Ave	0.2411	0.2583	0.2000	53.6	50.0	7.1	20.0
1,2-Dichloropropane	Ave	0.2550	0.2735	0.1000	53.6	50.0	7.3	20.0
Methylcyclohexane	Ave	0.4735	0.5250	0.1000	55.4	50.0	10.9	20.0
t-Amyl ethyl ether	Ave	0.3736	0.3656		48.9	50.0	-2.1	20.0
Methyl methacrylate	Ave	0.2546	0.2579		50.7	50.0	1.3	20.0
1,4-Dioxane	Ave	0.0806	0.0882	0.0050	684	625	9.4	20.0
Dibromomethane	Ave	0.1627	0.1795		55.2	50.0	10.3	20.0
Bromodichloromethane	Ave	0.3114	0.3358	0.2000	53.9	50.0	7.8	20.0
2-Nitropropane	Ave	1.126	1.288		286	250	14.4	20.0
2-Chloroethyl vinyl ether	Ave	0.1723	0.1969		57.1	50.0	14.3	20.0
cis-1,3-Dichloropropene	Ave	0.3857	0.4029	0.2000	52.2	50.0	4.5	20.0
4-Methyl-2-pentanone	Ave	0.4852	0.4729	0.1000	97.5	100	-2.5	20.0
Toluene	Ave	0.7991	0.8524	0.4000	53.3	50.0	6.7	20.0
trans-1,3-Dichloropropene	Ave	0.4836	0.5118	0.1000	52.9	50.0	5.8	20.0
Ethyl methacrylate	Ave	0.5792	0.5673		49.0	50.0	-2.1	20.0
1,1,2-Trichloroethane	Ave	0.3146	0.3359	0.1000	53.4	50.0	6.8	20.0
Tetrachloroethene	Ave	0.3361	0.3851	0.2000	57.3	50.0	14.6	20.0
1,3-Dichloropropane	Ave	0.5017	0.5399		53.8	50.0	7.6	20.0
2-Hexanone	Ave	0.4363	0.4494	0.1000	103	100	3.0	20.0
Dibromochloromethane	Ave	0.3438	0.3826		55.6	50.0	11.3	20.0
1,2-Dibromoethane	Ave	0.3310	0.3539	0.1000	53.5	50.0	6.9	20.0
1-Chlorohexane	Ave	0.4497	0.4426		49.2	50.0	-1.6	20.0
Chlorobenzene	Ave	0.8949	0.9698	0.5000	54.2	50.0	8.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3621	0.4091		56.5	50.0	13.0	20.0
Ethylbenzene	Ave	1.622	1.677	0.1000	51.7	50.0	3.3	20.0
m&p-Xylene	Ave	0.6223	0.6523	0.1000	105	100	4.8	20.0
o-Xylene	Ave	0.6684	0.6914	0.3000	51.7	50.0	3.5	20.0
Styrene	Ave	1.040	1.081	0.3000	52.0	50.0	3.9	20.0
Bromoform	Ave	0.2921	0.3246	0.1000	55.6	50.0	11.1	20.0
Isopropylbenzene	Ave	1.783	1.914	0.1000	53.7	50.0	7.3	20.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.143	0.3000	52.2	50.0	4.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2895	0.3052		132	125	5.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-405099/3 Calibration Date: 08/07/2023 09:07

Instrument ID: 9355 Calib Start Date: 07/24/2023 23:20

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/25/2023 01:32

Lab File ID: YG07X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bromobenzene	Ave	0.6813	0.7472		54.8	50.0	9.7	20.0
1,2,3-Trichloropropane	Ave	0.3105	0.3315		53.4	50.0	6.7	20.0
N-Propylbenzene	Ave	3.388	3.715		54.8	50.0	9.6	20.0
2-Chlorotoluene	Ave	0.7021	0.7682		54.7	50.0	9.4	20.0
1,3,5-Trimethylbenzene	Ave	2.664	2.932		55.0	50.0	10.0	20.0
4-Chlorotoluene	Ave	0.6802	0.7272		53.5	50.0	6.9	20.0
tert-Butylbenzene	Ave	0.4996	0.6033		60.4	50.0	20.8*	20.0
1,2,4-Trimethylbenzene	Ave	2.784	2.974		53.4	50.0	6.8	20.0
sec-Butylbenzene	Ave	3.432	3.959		57.7	50.0	15.4	20.0
1,3-Dichlorobenzene	Ave	1.410	1.513	0.6000	53.7	50.0	7.3	20.0
p-Isopropyltoluene	Ave	3.002	3.382		56.3	50.0	12.7	20.0
1,4-Dichlorobenzene	Ave	1.390	1.470	0.5000	52.9	50.0	5.8	20.0
1,2,3-Trimethylbenzene	Ave	3.031	3.284		54.2	50.0	8.3	20.0
Benzyl chloride	Ave	2.167	2.247		51.8	50.0	3.7	20.0
1,3-Diethylbenzene	Ave	1.828	1.993		54.5	50.0	9.0	20.0
1,4-Diethylbenzene	Ave	1.900	2.072		54.5	50.0	9.0	20.0
n-Butylbenzene	Ave	1.531	1.675		54.7	50.0	9.4	20.0
1,2-Dichlorobenzene	Ave	1.544	1.650	0.4000	53.4	50.0	6.9	20.0
1,2-Diethylbenzene	Ave	1.610	1.752		54.4	50.0	8.9	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.3486	0.3593	0.0500	51.5	50.0	3.1	20.0
1,3,5-Trichlorobenzene	Ave	1.324	1.476		55.7	50.0	11.5	20.0
1,2,4-Trichlorobenzene	Ave	1.316	1.469	0.2000	55.8	50.0	11.6	20.0
Hexachlorobutadiene	Ave	0.5215	0.6597		63.2	50.0	26.5*	20.0
Naphthalene	Ave	4.891	5.248		53.7	50.0	7.3	20.0
1,2,3-Trichlorobenzene	Ave	1.401	1.585		56.6	50.0	13.2	20.0
2-Methylnaphthalene	Ave	3.138	3.362		53.6	50.0	7.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2386	0.2538		53.2	50.0	6.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0601	0.0610		50.7	50.0	1.4	20.0
Toluene-d8 (Surr)	Ave	1.328	1.346		50.7	50.0	1.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5086	0.4722		46.4	50.0	-7.2	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 07-Aug-2023 09:07:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-003
Misc. Info.: CCVIS
Operator ID: CLM27445 Instrument ID: 9355
Sublist: chrom-MSVoa_9355*sub56

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 09:43:16 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1655

First Level Reviewer: TQ4J Date: 07-Aug-2023 09:43:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.952	1.952	0.000	99	412931	50.0	50.3	
4 Chloromethane	50	2.145	2.145	0.000	99	432943	50.0	47.0	
5 Vinyl chloride	62	2.252	2.252	0.000	98	404161	50.0	48.0	
6 Butadiene	39	2.260	2.260	0.000	93	406884	50.0	50.9	
8 Bromomethane	94	2.588	2.588	0.000	91	262055	50.0	46.5	
9 Chloroethane	64	2.660	2.660	0.000	100	205466	50.0	50.3	
10 Dichlorofluoromethane	67	2.896	2.896	0.000	97	563892	50.0	49.8	
11 Trichlorofluoromethane	101	2.975	2.975	0.000	68	443844	50.0	54.4	
12 Pentane	43	2.989	2.989	0.000	96	318550	50.0	45.1	
14 Ethyl ether	59	3.189	3.189	0.000	93	143748	50.0	42.1	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.275	3.275	0.000	92	296232	50.0	50.7	
16 Acrolein	56	3.346	3.346	0.000	99	899340	500.0	620.0	
17 1,1-Dichloroethene	96	3.504	3.504	0.000	98	206282	50.0	54.0	
18 Acetone	58	3.504	3.504	0.000	78	90277	100.0	115.5	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.554	3.554	0.000	91	244208	50.0	54.0	
20 Isopropyl alcohol	45	3.668	3.668	0.000	96	235225	250.0	235.9	
21 Iodomethane	142	3.718	3.718	0.000	99	417215	50.0	55.8	
22 Carbon disulfide	76	3.825	3.825	0.000	99	719156	50.0	52.1	
24 Methyl acetate	43	3.926	3.926	0.000	98	291813	50.0	50.2	
25 3-Chloro-1-propene	41	3.961	3.961	0.000	89	322194	50.0	51.9	
26 Methylene Chloride	84	4.154	4.154	0.000	93	250651	50.0	54.3	
* 27 t-Butyl alcohol-d10 (IS)	65	4.161	4.161	0.000	92	404835	250.0	250.0	
28 2-Methyl-2-propanol	59	4.276	4.276	0.000	99	396886	250.0	236.1	
29 Acrylonitrile	53	4.455	4.455	0.000	99	422333	125.0	142.0	
30 Methyl tert-butyl ether	73	4.548	4.548	0.000	96	709252	50.0	46.9	
32 trans-1,2-Dichloroethene	96	4.569	4.569	0.000	99	213524	50.0	55.7	
33 Hexane	57	4.998	4.998	0.000	93	307695	50.0	52.7	
35 1,1-Dichloroethane	63	5.220	5.220	0.000	96	377252	50.0	55.6	
36 Isopropyl ether	45	5.284	5.284	0.000	95	712905	50.0	49.9	
37 2-Chloro-1,3-butadiene	53	5.334	5.334	0.000	91	318633	50.0	53.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.828	5.828	0.000	97	654583	50.0	46.1	
40 2-Butanone (MEK)	43	6.021	6.021	0.000	100	417985	100.0	99.9	
41 cis-1,2-Dichloroethene	96	6.056	6.056	0.000	83	238968	50.0	56.1	
42 2,2-Dichloropropane	77	6.078	6.078	0.000	88	360111	50.0	50.8	
43 Propionitrile	54	6.085	6.085	0.000	98	387656	250.0	302.8	
48 Methacrylonitrile	67	6.314	6.314	0.000	92	397013	125.0	134.0	
49 Chlorobromomethane	128	6.392	6.392	0.000	96	126340	50.0	58.3	
50 Tetrahydrofuran	71	6.414	6.414	0.000	91	322718	250.0	297.3	
51 Chloroform	83	6.543	6.543	0.000	93	387713	50.0	56.0	
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.757	0.000	94	221939	50.0	53.2	
53 1,1,1-Trichloroethane	97	6.786	6.786	0.000	98	379357	50.0	54.9	
54 Cyclohexane	56	6.900	6.900	0.000	91	429919	50.0	52.1	
55 1,1-Dichloropropene	75	6.993	6.993	0.000	98	291354	50.0	56.1	
56 Carbon tetrachloride	117	7.000	7.000	0.000	97	330653	50.0	58.4	
57 Isobutyl alcohol	41	7.122	7.122	0.000	95	328199	625.0	644.0	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.222	0.000	89	53295	50.0	50.7	
59 Benzene	78	7.258	7.258	0.000	96	883559	50.0	54.2	
60 1,2-Dichloroethane	62	7.329	7.329	0.000	97	312153	50.0	54.8	
62 Tert-amyl methyl ether	73	7.451	7.451	0.000	98	665690	50.0	47.0	
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	874312	50.0	50.0	
64 n-Heptane	43	7.687	7.687	0.000	92	358254	50.0	56.1	
66 n-Butanol	56	8.008	8.008	0.000	91	259063	625.0	651.9	
67 Trichloroethene	95	8.151	8.151	0.000	99	225809	50.0	53.6	
69 Methylcyclohexane	83	8.480	8.480	0.000	92	459016	50.0	55.4	
70 1,2-Dichloropropane	63	8.480	8.480	0.000	82	239106	50.0	53.6	
71 2-ethoxy-2-methyl butane	87	8.495	8.495	0.000	92	319641	50.0	48.9	
72 Methyl methacrylate	69	8.559	8.559	0.000	90	225474	50.0	50.7	
73 1,4-Dioxane	88	8.573	8.573	0.000	64	89297	625.0	683.9	
74 Dibromomethane	93	8.595	8.595	0.000	96	156963	50.0	55.2	
76 Dichlorobromomethane	83	8.831	8.831	0.000	99	293611	50.0	53.9	
77 2-Nitropropane	41	9.074	9.074	0.000	99	521355	250.0	285.9	
78 2-Chloroethyl vinyl ether	63	9.195	9.195	0.000	91	172113	50.0	57.1	
79 cis-1,3-Dichloropropene	75	9.381	9.381	0.000	96	352274	50.0	52.2	
80 4-Methyl-2-pentanone (MIBK)	43	9.538	9.538	0.000	97	826903	100.0	97.5	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	848656	50.0	50.7	
82 Toluene	92	9.774	9.774	0.000	98	537326	50.0	53.3	
119 trans-1,3-Dichloropropene	75	10.032	10.032	0.000	92	322619	50.0	52.9	
121 Ethyl methacrylate	69	10.089	10.089	0.000	89	357574	50.0	49.0	
122 1,1,2-Trichloroethane	97	10.239	10.239	0.000	90	211718	50.0	53.4	
123 Tetrachloroethene	166	10.339	10.339	0.000	97	242734	50.0	57.3	
124 1,3-Dichloropropane	76	10.404	10.404	0.000	90	340294	50.0	53.8	
126 2-Hexanone	43	10.439	10.439	0.000	97	566504	100.0	103.0	
128 Chlorodibromomethane	129	10.625	10.625	0.000	90	241168	50.0	55.6	
129 Ethylene Dibromide	107	10.740	10.740	0.000	98	223071	50.0	53.5	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	630341	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	99	278960	50.0	49.2	
132 Chlorobenzene	112	11.197	11.197	0.000	95	611330	50.0	54.2	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	95	257898	50.0	56.5	
135 Ethylbenzene	91	11.283	11.283	0.000	98	1056807	50.0	51.7	
136 m-Xylene & p-Xylene	106	11.398	11.398	0.000	100	822337	100.0	104.8	
138 o-Xylene	106	11.726	11.726	0.000	97	435849	50.0	51.7	
139 Styrene	104	11.748	11.748	0.000	95	681184	50.0	52.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
140 Bromoform	173	11.905	11.905	0.000	97	204586	50.0	55.6	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	1206500	50.0	53.7	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	92	297665	50.0	46.4	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	94	422708	50.0	52.2	
147 trans-1,4-Dichloro-2-butene	53	12.291	12.291	0.000	81	282149	125.0	131.8	
146 Bromobenzene	156	12.298	12.298	0.000	93	276279	50.0	54.8	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	83	122564	50.0	53.4	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	1373463	50.0	54.8	
150 2-Chlorotoluene	126	12.441	12.441	0.000	97	284040	50.0	54.7	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	94	1084081	50.0	55.0	
152 4-Chlorotoluene	126	12.534	12.534	0.000	97	268900	50.0	53.5	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	223081	50.0	60.4	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	97	1099467	50.0	53.4	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	1464008	50.0	57.7	
158 1,3-Dichlorobenzene	146	13.006	13.006	0.000	98	559391	50.0	53.7	
159 4-Isopropyltoluene	119	13.013	13.013	0.000	97	1250602	50.0	56.3	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	94	369753	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	543586	50.0	52.9	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	1214106	50.0	54.2	
163 Benzyl chloride	91	13.157	13.157	0.000	98	830854	50.0	51.8	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	95	736946	50.0	54.5	
165 p-Diethylbenzene	119	13.285	13.285	0.000	93	766270	50.0	54.5	
166 n-Butylbenzene	92	13.307	13.307	0.000	96	619320	50.0	54.7	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	98	610074	50.0	53.4	
168 o-diethylbenzene	119	13.357	13.357	0.000	96	647823	50.0	54.4	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	88	132855	50.0	51.5	
172 1,3,5-Trichlorobenzene	180	14.015	14.015	0.000	98	545737	50.0	55.7	
173 1,2,4-Trichlorobenzene	180	14.436	14.436	0.000	94	543092	50.0	55.8	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	97	243939	50.0	63.2	
176 Naphthalene	128	14.622	14.622	0.000	97	1940476	50.0	53.7	
177 1,2,3-Trichlorobenzene	180	14.758	14.758	0.000	96	586150	50.0	56.6	
178 2-Methylnaphthalene	142	15.395	15.395	0.000	92	1243002	50.0	53.6	

QC Flag Legend

Processing Flags

Reagents:

MSV_CCV_VOC#1_00138	Amount Added:	5.00	Units: uL	
MSV_CCV_2CEVE_00132	Amount Added:	5.00	Units: uL	
MSV_CCV_VOC#3_00137	Amount Added:	4.00	Units: uL	
MSV_CCV_EE_00005	Amount Added:	5.00	Units: uL	
MSV_CCV_GASES_00537	Amount Added:	2.50	Units: uL	
MSV_HP20_ISSS_00113	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 07-Aug-2023 09:43:16 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X02.D

Injection Date: 07-Aug-2023 09:07:30 Instrument ID: 9355 Operator ID: CLM27445

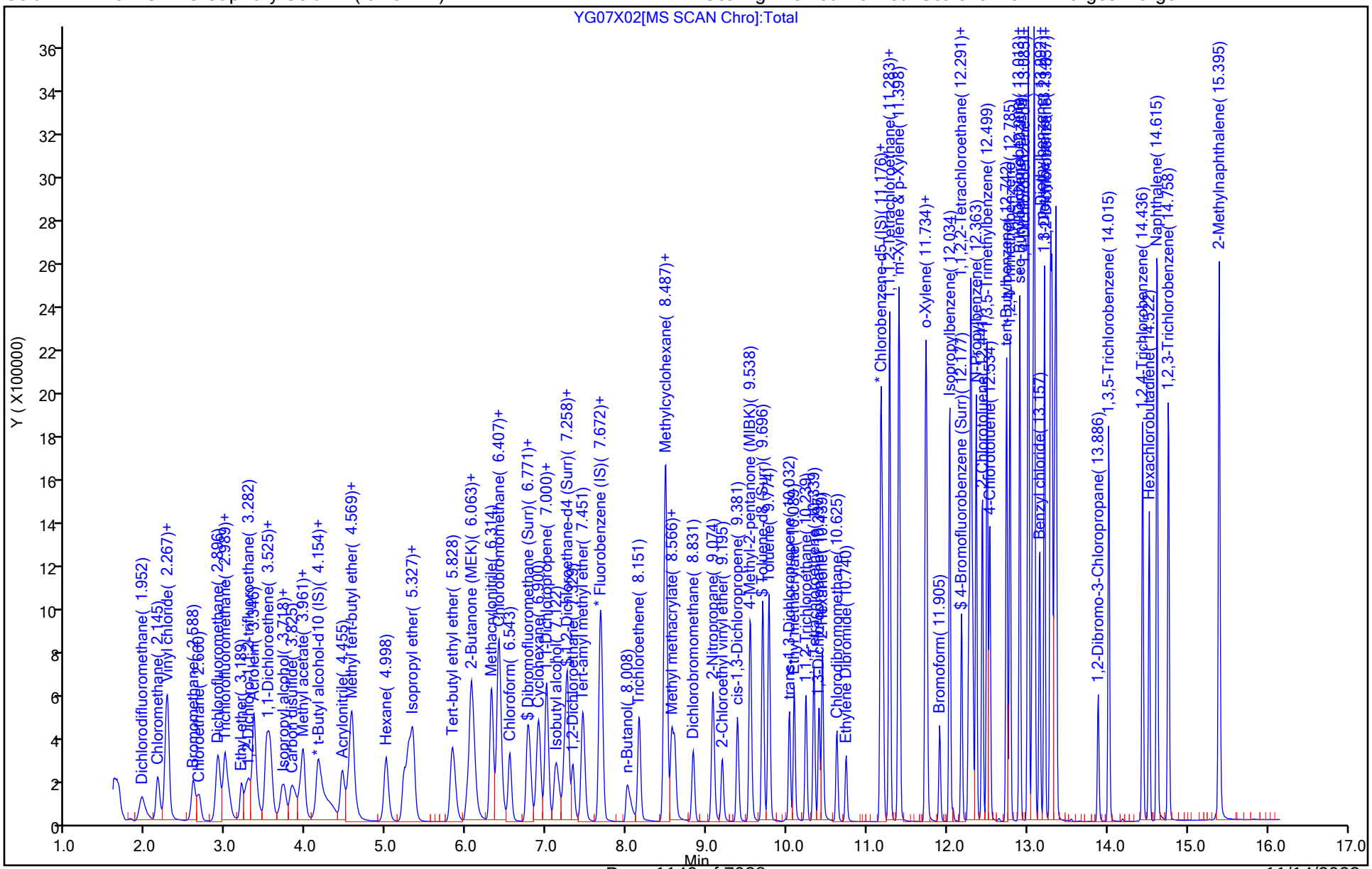
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24T01.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 24-Jul-2023 19:26:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: BFB
Operator ID: MEC29284 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 25-Jul-2023 18:05:09 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: K4WN Date: 24-Jul-2023 19:37:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 31 BFB	95	4.586	4.586	0.000	0	181388	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

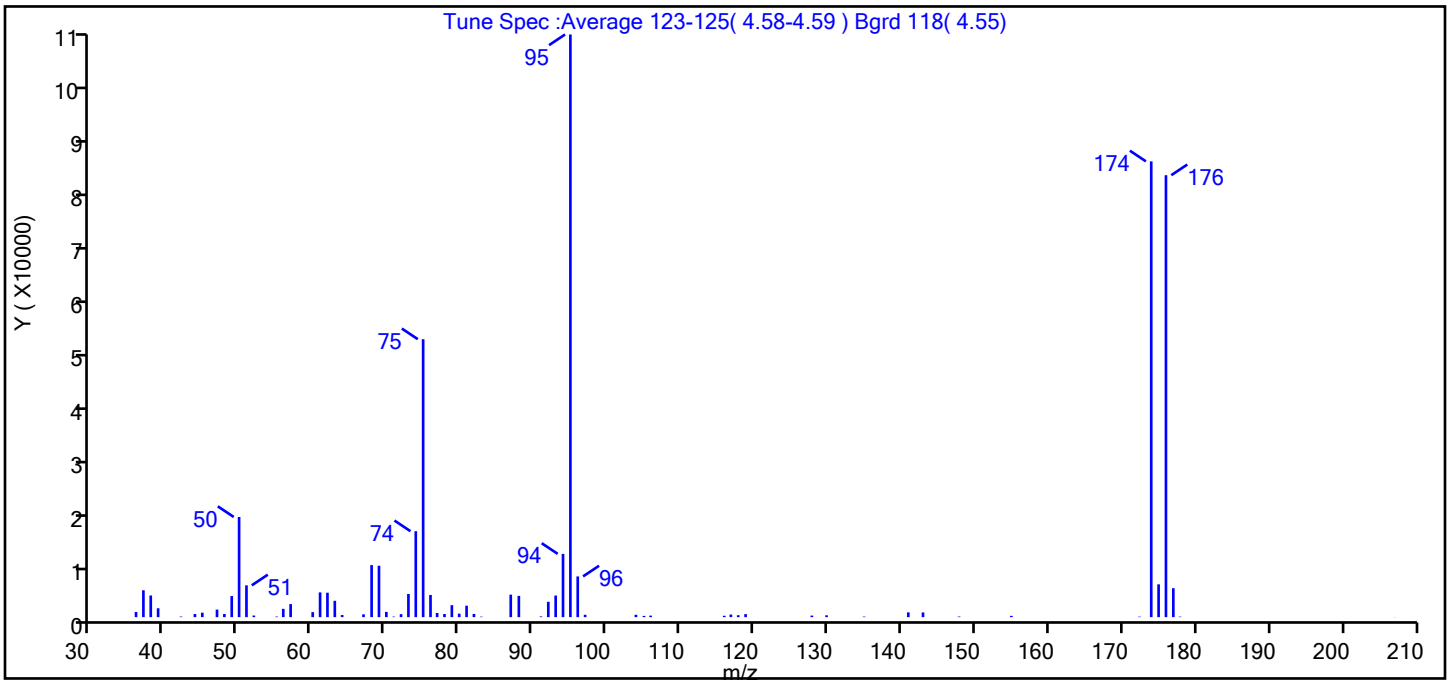
MSV_V_BFB_00012 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24T01.D
Injection Date: 24-Jul-2023 19:26:30 Instrument ID: 9355
Lims ID: bfb
Client ID:
Operator ID: MEC29284 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 31 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.2
75	30 to 60% of m/z 95	47.7
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	78.2
175	5 to 9% of m/z 174	5.6 (7.2)
176	Greater than 95% but less than 101% of m/z 174	75.8 (97.0)
177	5 to 9% of m/z 176	5.0 (6.5)

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24T01.D\MSVoa_9355.rslt\spectra.d
Injection Date: 24-Jul-2023 19:26:30
Spectrum: Tune Spec :Average 123-125(4.58-4.59) Bgrd 118(4.55)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	921	61.00	4379	80.00	620	117.00	462
37.00	4757	62.00	4323	81.00	2022	118.00	342
38.00	3831	63.00	2893	82.00	570	119.00	531
39.00	1569	64.00	372	83.00	85	128.00	275
42.00	102	67.00	495	87.00	3978	130.00	325
44.00	557	68.00	9208	88.00	3759	135.00	97
45.00	791	69.00	9096	91.00	126	141.00	844
47.00	1339	70.00	929	92.00	2713	143.00	832
48.00	553	71.00	98	93.00	3819	148.00	107
49.00	3728	72.00	526	94.00	11196	155.00	230
50.00	17720	73.00	4100	95.00	103088	172.00	88
51.00	5628	74.00	15206	96.00	7206	174.00	80640
52.00	285	75.00	49176	97.00	421	175.00	5804
55.00	104	76.00	3920	104.00	419	176.00	78192
56.00	1469	77.00	738	105.00	220	177.00	5121
57.00	2310	78.00	554	106.00	270	178.00	90
60.00	886	79.00	2120	116.00	243	207.00	17

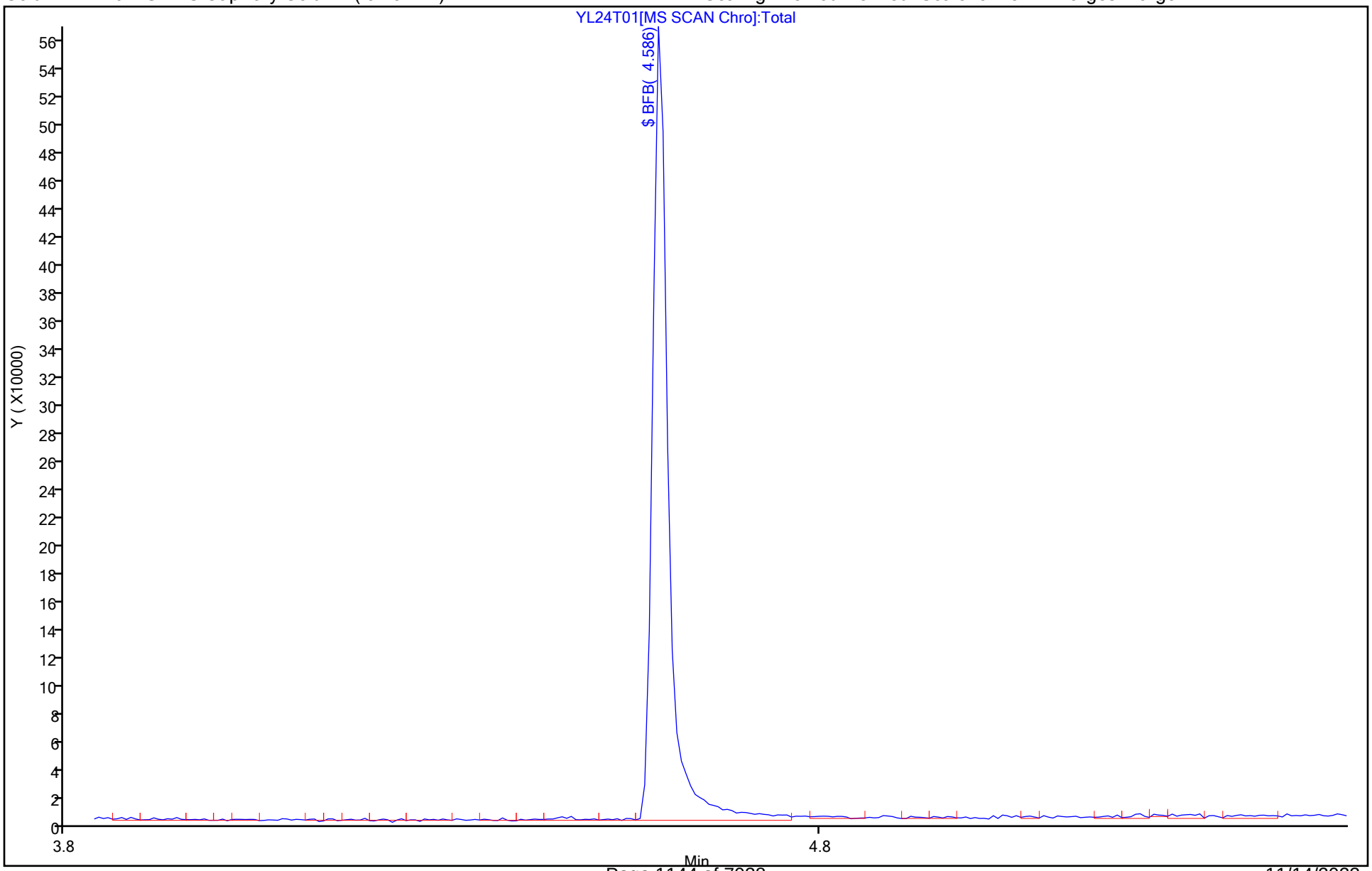
Report Date: 25-Jul-2023 18:05:09 Chrom Revision: 2.3 24-Jul-2023 18:08:00

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24T01.D

Injection Date:	24-Jul-2023 19:26:30	Instrument ID:	9355	Operator ID:	MEC29284
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07T01.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	07-Aug-2023 08:05:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0090764-001				
Misc. Info.:	BFB				
Operator ID:	CLM27445	Instrument ID:	9355		
Method:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m				
Limit Group:	MSV - 8260C_D				
Last Update:	07-Aug-2023 09:43:14	Calib Date:	25-Jul-2023 01:32:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1655				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 31 BFB	95	4.586	4.586	0.000	0	98087	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

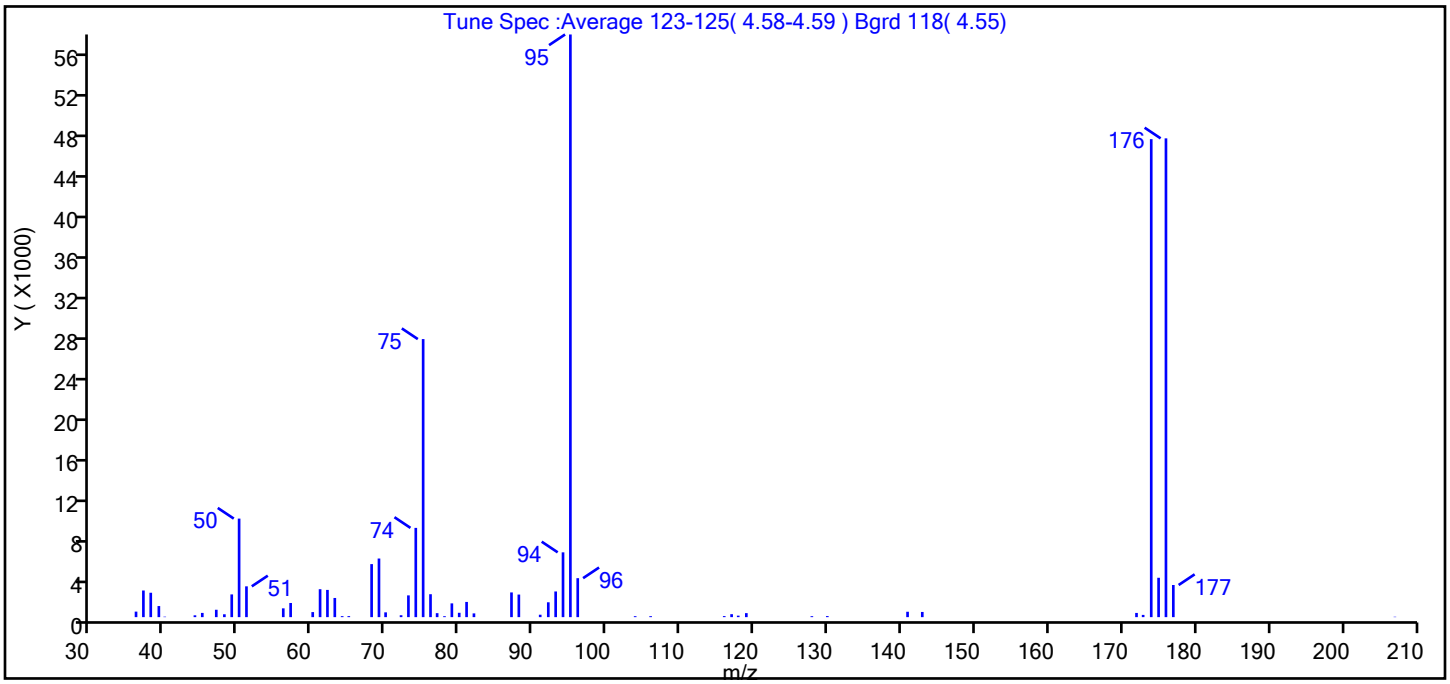
MSV_V_BFB_00012 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07T01.D
Injection Date: 07-Aug-2023 08:05:30 Instrument ID: 9355
Lims ID: bfb
Client ID:
Operator ID: CLM27445 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MSVoa_9355 Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 31 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.9
75	30 to 60% of m/z 95	47.7
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	82.0
175	5 to 9% of m/z 174	6.8 (8.2)
176	Greater than 95% but less than 101% of m/z 174	82.2 (100.2)
177	5 to 9% of m/z 176	5.5 (6.7)

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07T01.D\MSVoa_9355.rslt\spectra.d
Injection Date: 07-Aug-2023 08:05:30
Spectrum: Tune Spec :Average 123-125(4.58-4.59) Bgrd 118(4.55)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 59

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	548	61.00	2769	79.00	1365	117.00	295
37.00	2641	62.00	2699	80.00	432	118.00	149
38.00	2418	63.00	1901	81.00	1508	119.00	398
39.00	1099	64.00	98	82.00	372	128.00	94
40.00	46	65.00	101	87.00	2450	130.00	105
44.00	182	68.00	5257	88.00	2238	141.00	534
45.00	419	69.00	5810	91.00	240	143.00	515
47.00	732	70.00	475	92.00	1473	172.00	417
48.00	285	72.00	189	93.00	2545	173.00	223
49.00	2253	73.00	2157	94.00	6423	174.00	47376
50.00	9767	74.00	8847	95.00	57752	175.00	3902
51.00	3053	75.00	27560	96.00	3863	176.00	47456
56.00	872	76.00	2273	104.00	94	177.00	3186
57.00	1403	77.00	394	106.00	95	207.00	38
60.00	501	78.00	92	116.00	104		

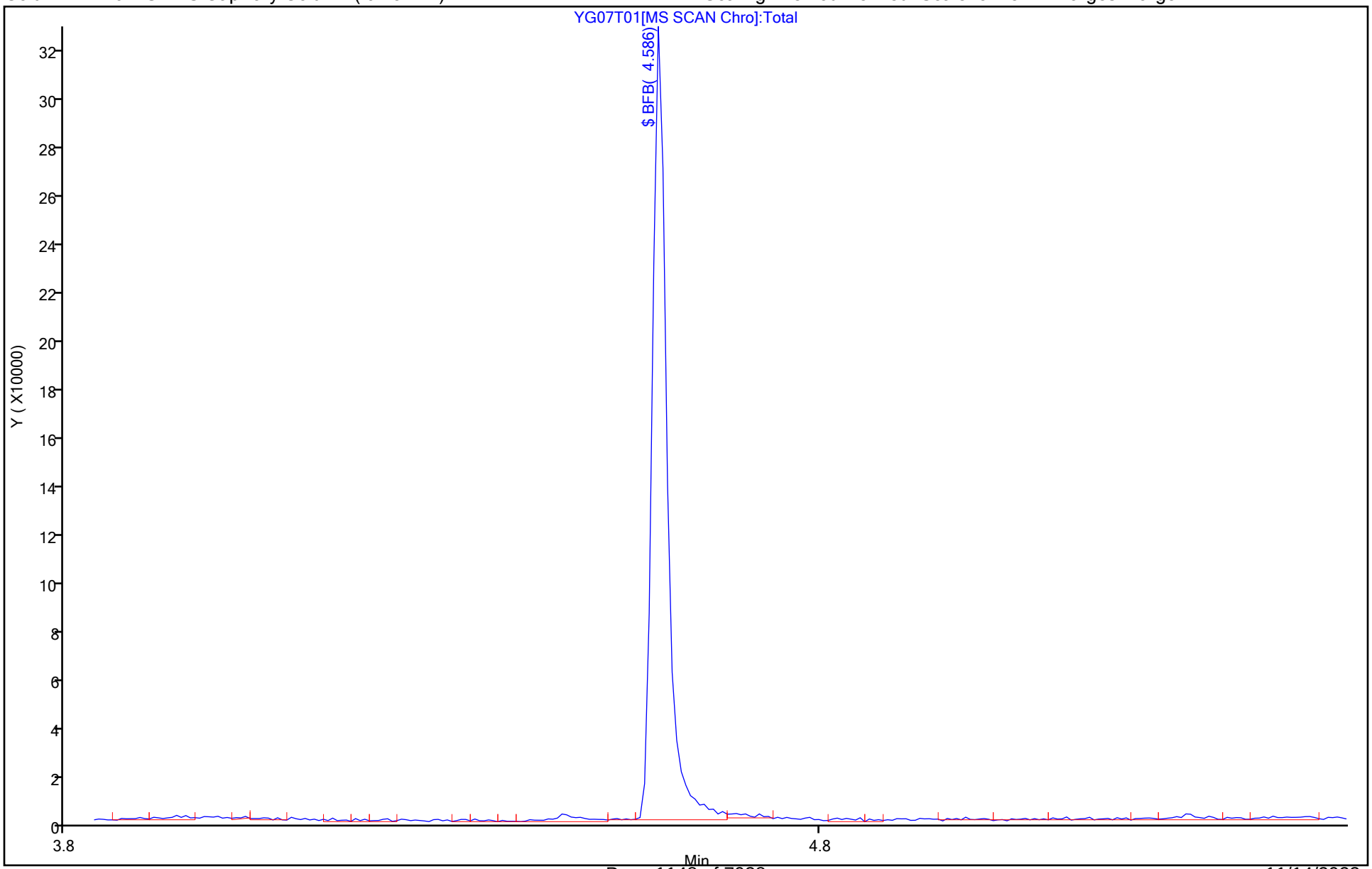
Report Date: 07-Aug-2023 09:43:14 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07T01.D

Injection Date:	07-Aug-2023 08:05:30	Instrument ID:	9355	Operator ID:	CLM27445
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-405099/9

Matrix: Water Lab File ID: YG07X08.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 11:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	ND		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
1868-53-7	Dibromofluoromethane (Surr)	110		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X08.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 07-Aug-2023 11:19:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-009
Misc. Info.: MB
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 11:57:19 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1655

First Level Reviewer: TQ4J Date: 07-Aug-2023 11:57:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.902					ND	
3 Chlorodifluoromethane	51		1.938					ND	
2 Dichlorodifluoromethane	85		1.952					ND	
4 Chloromethane	50		2.145					ND	
5 Vinyl chloride	62		2.252					ND	
6 Butadiene	39		2.260					ND	
7 2-Chloro-1,1,1-Trifluoroethane	118		2.317					ND	
8 Bromomethane	94		2.588					ND	
9 Chloroethane	64		2.660					ND	
10 Dichlorofluoromethane	67		2.896					ND	
11 Trichlorofluoromethane	101		2.975					ND	
12 Pentane	43		2.989					ND	U
13 Ethanol	45		3.182					ND	
14 Ethyl ether	59		3.189					ND	
15 1,2-Dichloro-1,1,2-trifluoroetha	67		3.275					ND	
16 Acrolein	56		3.346					ND	
17 1,1-Dichloroethene	96		3.504					ND	
18 Acetone	58		3.504					ND	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.554					ND	
20 Isopropyl alcohol	45		3.668					ND	
21 Iodomethane	142		3.718					ND	
22 Carbon disulfide	76		3.825					ND	
23 Acetonitrile	41		3.854					ND	
24 Methyl acetate	43		3.926					ND	
25 3-Chloro-1-propene	41		3.961					ND	
26 Methylene Chloride	84		4.154					ND	
* 27 t-Butyl alcohol-d10 (IS)	65	4.133	4.161	-0.028	40	360941	250.0	250.0	
28 2-Methyl-2-propanol	59		4.276					ND	
29 Acrylonitrile	53		4.455					ND	
30 Methyl tert-butyl ether	73		4.548					ND	
32 trans-1,2-Dichloroethene	96		4.569					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Hexane	57		4.998				ND		
34 Vinyl acetate	43		5.205				ND		
35 1,1-Dichloroethane	63		5.220				ND		
36 Isopropyl ether	45		5.284				ND		
37 2-Chloro-1,3-butadiene	53		5.334				ND		
39 Tert-butyl ethyl ether	59		5.828				ND		
40 2-Butanone (MEK)	43		6.021				ND		
41 cis-1,2-Dichloroethene	96		6.056				ND		
42 2,2-Dichloropropane	77		6.078				ND		
43 Propionitrile	54		6.085				ND		
44 Ethyl acetate	43		6.092				ND		
S 45 1,2-Dichloroethene, Total	100		6.155				ND		7
46 Methyl acrylate	55		6.156				ND		
48 Methacrylonitrile	67		6.314				ND		
49 Chlorobromomethane	128		6.392				ND		
50 Tetrahydrofuran	71		6.414				ND		
51 Chloroform	83		6.543				ND		
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.757	0.000	94	217759	50.0	54.8	
53 1,1,1-Trichloroethane	97		6.786				ND		
54 Cyclohexane	56		6.900				ND		
55 1,1-Dichloropropene	75		6.993				ND		
56 Carbon tetrachloride	117		7.000				ND		
57 Isobutyl alcohol	41		7.122				ND		
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.222	0.000	72	51734	50.0	51.7	
59 Benzene	78		7.258				ND		
61 Isopropyl acetate	43		7.322				ND		
60 1,2-Dichloroethane	62		7.329				ND		
62 Tert-amyl methyl ether	73		7.451				ND		
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	832166	50.0	50.0	
64 n-Heptane	43		7.687				ND		
65 t-Amyl alcohol	73		7.842				ND		
66 n-Butanol	56		8.008				ND		
67 Trichloroethene	95		8.151				ND		
68 Ethyl acrylate	55		8.251				ND		
69 Methylcyclohexane	83		8.480				ND		
70 1,2-Dichloropropane	63		8.480				ND		
71 2-ethoxy-2-methyl butane	87		8.495				ND		
72 Methyl methacrylate	69		8.559				ND		
73 1,4-Dioxane	88		8.573				ND		
74 Dibromomethane	93		8.595				ND		
75 n-Propyl acetate	61		8.637				ND		
76 Dichlorobromomethane	83		8.831				ND		
77 2-Nitropropane	41		9.074				ND		
78 2-Chloroethyl vinyl ether	63		9.195				ND		
79 cis-1,3-Dichloropropene	75		9.381				ND		
80 4-Methyl-2-pentanone (MIBK)	43		9.538				ND		
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	780442	50.0	49.8	
82 Toluene	92		9.774				ND		
119 trans-1,3-Dichloropropene	75		10.032				ND		
S 120 1,3-Dichloropropene, Total	100		10.060				ND		7
121 Ethyl methacrylate	69		10.089				ND		
122 1,1,2-Trichloroethane	97		10.239				ND		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 Tetrachloroethene	166		10.339					ND	
124 1,3-Dichloropropane	76		10.404					ND	
125 3,4-Dichloro-1-butene	75		10.439					ND	
126 2-Hexanone	43		10.439					ND	
127 n-Butyl acetate	43		10.575					ND	
128 Chlorodibromomethane	129		10.625					ND	
129 Ethylene Dibromide	107		10.740					ND	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	589736	50.0	50.0	
131 1-Chlorohexane	91		11.176					ND	U
132 Chlorobenzene	112		11.197					ND	
S 133 Xylenes, Total	106		11.245					ND	7
134 1,1,1,2-Tetrachloroethane	131		11.276					ND	
135 Ethylbenzene	91		11.283					ND	
136 m-Xylene & p-Xylene	106		11.398					ND	
137 n-Butyl acrylate	55		11.676					ND	
138 o-Xylene	106		11.726					ND	
139 Styrene	104		11.748					ND	
140 Bromoform	173		11.905					ND	
141 Isopropylbenzene	105		12.034					ND	
142 cis-1,4-Dichloro-2-butene	88		12.070					ND	
143 Cyclohexanone	55		12.098					ND	7
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	92	278523	50.0	46.4	
145 1,1,2,2-Tetrachloroethane	83		12.270					ND	
147 trans-1,4-Dichloro-2-butene	53		12.291					ND	
146 Bromobenzene	156		12.298					ND	
148 1,2,3-Trichloropropane	110		12.320					ND	
149 N-Propylbenzene	91		12.363					ND	
150 2-Chlorotoluene	126		12.441					ND	
151 1,3,5-Trimethylbenzene	105		12.499					ND	
152 4-Chlorotoluene	126		12.534					ND	
153 2,3,4-Trichlorobutene	109		12.542					ND	
154 tert-Butylbenzene	134		12.742					ND	
155 Pentachloroethane	167		12.777					ND	
156 1,2,4-Trimethylbenzene	105		12.785					ND	
157 sec-Butylbenzene	105		12.906					ND	
158 1,3-Dichlorobenzene	146		13.006					ND	
159 4-Isopropyltoluene	119		13.013					ND	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	95	349643	50.0	50.0	
161 1,4-Dichlorobenzene	146		13.085					ND	
162 1,2,3-Trimethylbenzene	105		13.092					ND	
163 Benzyl chloride	91		13.157					ND	7
164 1,3-Diethylbenzene	119		13.214					ND	
165 p-Diethylbenzene	119		13.285					ND	
166 n-Butylbenzene	92		13.307					ND	
167 1,2-Dichlorobenzene	146		13.342					ND	
168 o-diethylbenzene	119		13.357					ND	
169 2-Butoxyethyl acetate	43		13.514					ND	
170 Hexachloroethane	201		13.560					ND	
171 1,2-Dibromo-3-Chloropropane	75		13.886					ND	
172 1,3,5-Trichlorobenzene	180		14.015					ND	
173 1,2,4-Trichlorobenzene	180		14.436					ND	
174 2-Ethylhexyl acrylate	55		14.486					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
175 Hexachlorobutadiene	225		14.522					ND	
176 Naphthalene	128		14.622					ND	
177 1,2,3-Trichlorobenzene	180		14.758					ND	
178 2-Methylnaphthalene	142		15.395					ND	
179 C4-C10	1		0.000					ND	
181 3-Methyl-1-butene	1		0.000					ND	
182 2,3-Dichloro-1,3-butadiene	1		0.000					ND	
183 Propene oxide	1		0.000					ND	
184 1,3-Divinylbenzene	1		0.000					ND	
185 Propanol	1		0.000					ND	
186 3-chloro-1-Butene TIC	1		0.000					ND	
215 1,1,2-Trichloro-1,2,2-trifluoroe	1		0.000					ND	
187 Diethoxymethane	1		0.000					ND	
189 1-Chlorobutane	1		0.000					ND	
190 1,1,2,2-Tetrachloro-1,2-difluoro	1		0.000					ND	
191 Isobutyl acetate	43		0.000					ND	
192 1,4-Divinylbenzene	1		0.000					ND	
193 tert-Butyl Formate	1		0.000					ND	
194 Chloroacetonitrile	1		0.000					ND	
195 C6-C12	1		0.000					ND	
S 180 divinyl benzene	1		0.000					ND	7
196 trans-1,2,3-Trichlorobutene-2	1		0.000					ND	
197 cis-1,2,3-Trichlorobutene-2	1		0.000					ND	
198 3-chloro-1-Butene	1		0.000					ND	
200 n-Nonane	1		0.000					ND	
201 C5-C12	1		0.000					ND	
202 C6-C10	1		0.000					ND	
203 n-Octane	1		0.000					ND	
204 Undecane	1		0.000					ND	
205 C4-C12	1		0.000					ND	
206 1-Bromo-2-chloroethane	1		0.000					ND	
S 188 Total BTEX	1		0.000					ND	
S 207 Total Diethylbenzene	1		0.000					ND	7
209 4-Ethyltoluene	1		0.000					ND	
210 Dodecane	57		0.000					ND	
211 sec-Butyl Alcohol	45		0.000					ND	
212 Butane	1		0.000					ND	
213 n-Decane	57		0.000					ND	
214 Ethyl bromide	1		0.000					ND	
199 Methylal	1		0.000					ND	
208 1,1-Dichloro-1-fluoroethane	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_HP20_ISSS_00113 Amount Added: 1.00 Units: uL Run Reagent

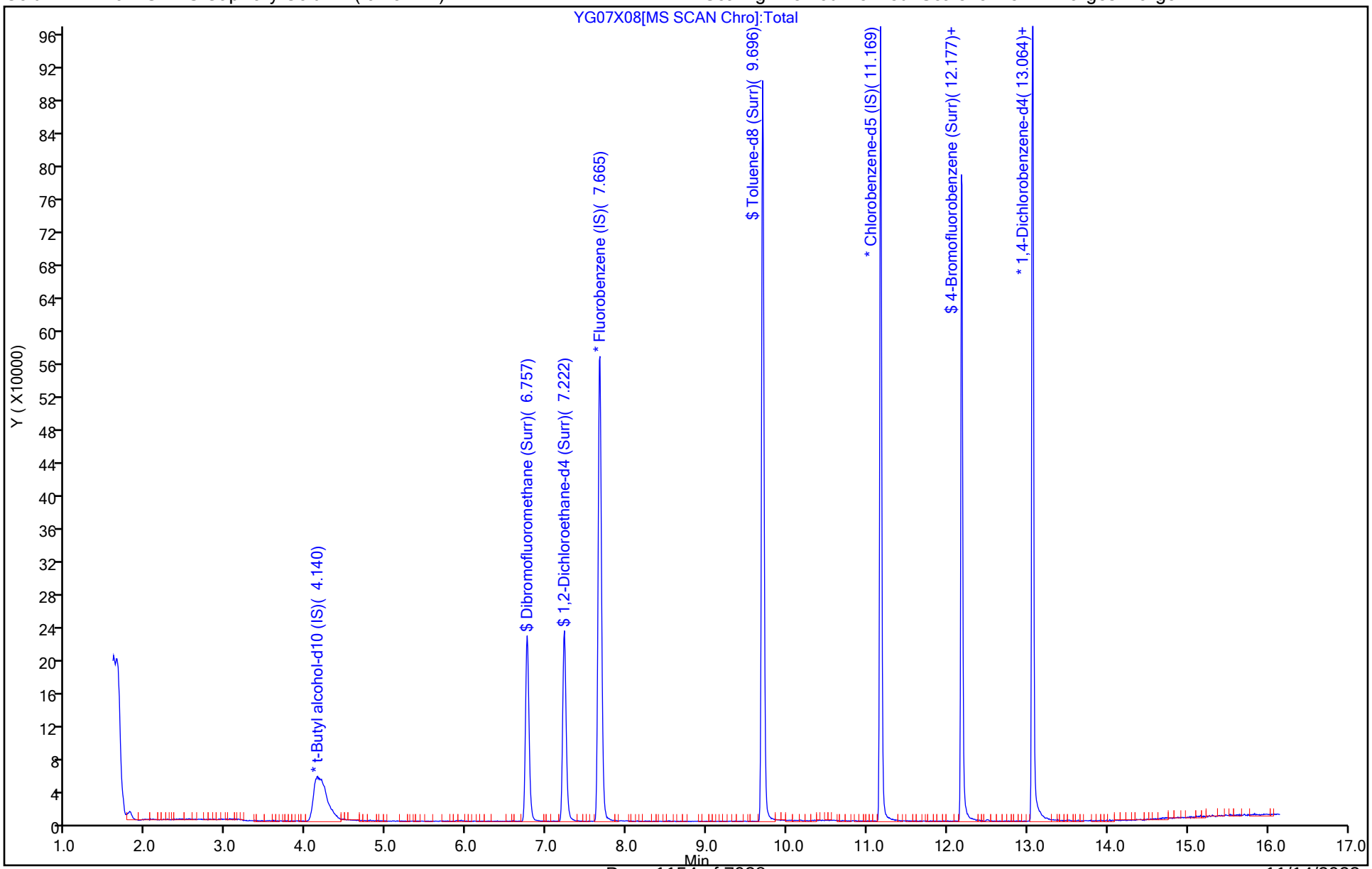
Report Date: 07-Aug-2023 11:59:11 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X08.D

Injection Date:	07-Aug-2023 11:19:30	Instrument ID:	9355	Operator ID:	CLM27445
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVoa_9355	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X08.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	07-Aug-2023 11:19:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090764-009				
Misc. Info.:	MB				
Operator ID:	CLM27445	Instrument ID:	9355		
Method:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m				
Limit Group:	MSV - 8260C_D				
Last Update:	07-Aug-2023 11:57:19	Calib Date:	25-Jul-2023 01:32:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1655				
First Level Reviewer: TQ4J		Date:	07-Aug-2023 11:57:19		

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	54.8	109.68
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	51.7	103.43
$ 81 Toluene-d8 (Surr)	50.0	49.8	99.66
$ 144 4-Bromofluorobenzene (Surr)	50.0	46.4	92.86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-405099/5

Matrix: Water Lab File ID: YG07X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 09:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	118		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X04.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 07-Aug-2023 09:51:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-005
Misc. Info.: LCS
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 07-Aug-2023 11:26:44 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1655

First Level Reviewer: TQ4J Date: 07-Aug-2023 11:23:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.938	1.952	-0.014	99	94724	20.0	11.4	
4 Chloromethane	50	2.131	2.145	-0.014	99	125580	20.0	13.5	
5 Vinyl chloride	62	2.238	2.252	-0.014	98	116584	20.0	13.7	
6 Butadiene	39	2.260	2.260	0.000	92	123186	20.0	15.3	
8 Bromomethane	94	2.574	2.588	-0.014	91	77158	20.0	13.6	
9 Chloroethane	64	2.646	2.660	-0.014	100	64870	20.0	15.7	
10 Dichlorofluoromethane	67	2.896	2.896	0.000	97	169983	20.0	14.9	
11 Trichlorofluoromethane	101	2.975	2.975	0.000	49	130736	20.0	15.9	
12 Pentane	43	2.967	2.989	-0.022	98	116839	20.0	16.4	
14 Ethyl ether	59	3.175	3.189	-0.014	93	64136	20.0	18.6	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.261	3.275	-0.014	92	95392	20.0	16.2	
16 Acrolein	56	3.339	3.346	-0.007	99	268408	150.0	193.2	
17 1,1-Dichloroethene	96	3.489	3.504	-0.015	46	78687	20.0	20.4	
18 Acetone	58	3.497	3.504	-0.007	100	225504	250.0	301.4	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.532	3.554	-0.022	92	84370	20.0	18.5	
20 Isopropyl alcohol	45	3.661	3.668	-0.007	77	112360	150.0	117.7	
21 Iodomethane	142	3.704	3.718	-0.014	98	151945	20.0	20.1	
22 Carbon disulfide	76	3.825	3.825	0.000	99	341255	20.0	24.5	M
24 Methyl acetate	43	3.918	3.926	-0.008	98	112738	20.0	19.2	
25 3-Chloro-1-propene	41	3.947	3.961	-0.014	89	114477	20.0	18.3	
26 Methylene Chloride	84	4.133	4.154	-0.021	96	93077	20.0	20.0	
* 27 t-Butyl alcohol-d10 (IS)	65	4.119	4.161	-0.042	91	387655	250.0	250.0	
28 2-Methyl-2-propanol	59	4.262	4.276	-0.014	98	283867	200.0	176.3	
29 Acrylonitrile	53	4.440	4.455	-0.015	99	307628	100.0	102.5	
30 Methyl tert-butyl ether	73	4.533	4.548	-0.015	96	256490	20.0	16.8	
32 trans-1,2-Dichloroethene	96	4.555	4.569	-0.014	99	76627	20.0	19.8	
33 Hexane	57	4.991	4.998	-0.007	93	94507	20.0	16.0	
35 1,1-Dichloroethane	63	5.213	5.220	-0.007	96	137627	20.0	20.1	
36 Isopropyl ether	45	5.277	5.284	-0.007	95	255075	20.0	17.7	
37 2-Chloro-1,3-butadiene	53	5.327	5.334	-0.007	92	109913	20.0	18.2	
39 Tert-butyl ethyl ether	59	5.813	5.828	-0.015	97	241625	20.0	16.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Butanone (MEK)	43	6.006	6.021	-0.015	100	1061893	250.0	251.5	
41 cis-1,2-Dichloroethene	96	6.049	6.056	-0.007	81	88153	20.0	20.5	
42 2,2-Dichloropropane	77	6.063	6.078	-0.015	75	133289	20.0	18.6	
43 Propionitrile	54	6.078	6.085	-0.007	97	214583	150.0	175.0	
48 Methacrylonitrile	67	6.307	6.314	-0.007	92	441005	150.0	147.5	
49 Chlorobromomethane	128	6.385	6.392	-0.007	96	47164	20.0	21.6	
50 Tetrahydrofuran	71	6.407	6.414	-0.007	91	119827	100.0	115.3	
51 Chloroform	83	6.535	6.543	-0.008	93	140247	20.0	20.1	
$ 52 Dibromofluoromethane (Surr)	113	6.750	6.757	-0.007	93	216159	50.0	51.4	
53 1,1,1-Trichloroethane	97	6.779	6.786	-0.008	98	136295	20.0	19.6	
54 Cyclohexane	56	6.893	6.900	-0.007	91	142075	20.0	17.1	
55 1,1-Dichloropropene	75	6.993	6.993	0.000	98	106947	20.0	20.4	
56 Carbon tetrachloride	117	7.000	7.000	0.000	96	117577	20.0	20.6	
57 Isobutyl alcohol	41	7.115	7.122	-0.007	95	227603	500.0	466.4	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.215	7.222	-0.007	79	53573	50.0	50.5	
59 Benzene	78	7.250	7.258	-0.008	97	329904	20.0	20.0	
60 1,2-Dichloroethane	62	7.322	7.329	-0.007	97	117896	20.0	20.5	
62 Tert-amyl methyl ether	73	7.443	7.451	-0.008	98	244772	20.0	17.1	
* 63 Fluorobenzene (IS)	96	7.658	7.665	-0.007	98	882156	50.0	50.0	
64 n-Heptane	43	7.687	7.687	0.000	93	104700	20.0	16.3	
66 n-Butanol	56	8.001	8.008	-0.007	91	352974	1000.0	927.6	
67 Trichloroethene	95	8.151	8.151	0.000	99	82390	20.0	19.4	
69 Methylcyclohexane	83	8.466	8.480	-0.014	97	139839	20.0	16.7	
70 1,2-Dichloropropane	63	8.480	8.480	0.000	90	85210	20.0	18.9	
71 2-ethoxy-2-methyl butane	87	8.487	8.495	-0.008	91	113369	20.0	17.2	
72 Methyl methacrylate	69	8.559	8.559	0.000	91	79783	20.0	17.8	
73 1,4-Dioxane	88	8.566	8.573	-0.007	54	45222	500.0	361.7	
74 Dibromomethane	93	8.595	8.595	0.000	96	59157	20.0	20.6	
76 Dichlorobromomethane	83	8.823	8.831	-0.008	99	104739	20.0	19.1	
77 2-Nitropropane	41	9.074	9.074	0.000	100	35408	20.0	20.3	
78 2-Chloroethyl vinyl ether	63	9.188	9.195	-0.007	91	53823	20.0	17.7	
79 cis-1,3-Dichloropropene	75	9.381	9.381	0.000	96	119691	20.0	17.6	
80 4-Methyl-2-pentanone (MIBK)	43	9.539	9.538	0.000	97	2092878	250.0	244.5	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	855154	50.0	50.7	
82 Toluene	92	9.774	9.774	0.000	98	196727	20.0	19.4	
119 trans-1,3-Dichloropropene	75	10.032	10.032	0.000	92	114554	20.0	18.6	
121 Ethyl methacrylate	69	10.089	10.089	0.000	90	119649	20.0	16.2	
122 1,1,2-Trichloroethane	97	10.232	10.239	-0.007	90	78009	20.0	19.5	
123 Tetrachloroethene	166	10.332	10.339	-0.007	96	85811	20.0	20.1	
124 1,3-Dichloropropane	76	10.397	10.404	-0.007	90	126094	20.0	19.8	
126 2-Hexanone	43	10.439	10.439	0.000	98	1404434	250.0	253.2	
128 Chlorodibromomethane	129	10.625	10.625	0.000	89	84930	20.0	19.4	
129 Ethylene Dibromide	107	10.740	10.740	0.000	98	82283	20.0	19.6	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	635660	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	97	96027	20.0	16.8	
132 Chlorobenzene	112	11.197	11.197	0.000	95	219177	20.0	19.3	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	94	92001	20.0	20.0	
135 Ethylbenzene	91	11.283	11.283	0.000	98	380088	20.0	18.4	
136 m-Xylene & p-Xylene	106	11.398	11.398	0.000	100	297278	40.0	37.6	
138 o-Xylene	106	11.726	11.726	0.000	97	154238	20.0	18.2	
139 Styrene	104	11.748	11.748	0.000	95	236636	20.0	17.9	
140 Bromoform	173	11.905	11.905	0.000	97	68628	20.0	18.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
141 Isopropylbenzene	105	12.034	12.034	0.000	96	426400	20.0	18.8	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	92	300406	50.0	46.5	
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	93	157256	20.0	19.4	
147 trans-1,4-Dichloro-2-butene	53	12.291	12.291	0.000	91	199412	100.0	93.0	
146 Bromobenzene	156	12.298	12.298	0.000	82	103408	20.0	20.5	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	83	45108	20.0	19.6	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	482530	20.0	19.2	
150 2-Chlorotoluene	126	12.442	12.441	0.001	97	101013	20.0	19.4	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	93	370840	20.0	18.8	
152 4-Chlorotoluene	126	12.534	12.534	0.000	97	98804	20.0	19.6	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	73661	20.0	19.9	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	97	375335	20.0	18.2	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	481596	20.0	18.9	
158 1,3-Dichlorobenzene	146	13.006	13.006	0.000	98	200061	20.0	19.2	
159 4-Isopropyltoluene	119	13.014	13.013	0.001	97	415894	20.0	18.7	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	95	370328	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	210576	20.0	20.5	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	408092	20.0	18.2	
163 Benzyl chloride	91	13.157	13.157	0.001	98	275742	20.0	17.2	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	95	242150	20.0	17.9	
165 p-Diethylbenzene	119	13.285	13.285	0.000	96	256156	20.0	18.2	
166 n-Butylbenzene	92	13.307	13.307	0.000	97	210816	20.0	18.6	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	98	215774	20.0	18.9	
168 o-diethylbenzene	119	13.357	13.357	0.000	95	210695	20.0	17.7	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	87	44746	20.0	17.3	
172 1,3,5-Trichlorobenzene	180	14.022	14.015	0.007	98	188176	20.0	19.2	
173 1,2,4-Trichlorobenzene	180	14.444	14.436	0.008	95	189187	20.0	19.4	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	96	79617	20.0	20.6	
176 Naphthalene	128	14.622	14.622	0.000	97	684616	20.0	18.9	
177 1,2,3-Trichlorobenzene	180	14.765	14.758	0.007	96	209014	20.0	20.1	
178 2-Methylnaphthalene	142	15.395	15.395	0.000	92	404092	20.0	17.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00124	Amount Added: 50.00	Units: uL	
MSV_LCS_2CEVE_00127	Amount Added: 50.00	Units: uL	
MSV_LCS_ACROL_00125	Amount Added: 50.00	Units: uL	
MSV_LCS_Gases_00154	Amount Added: 50.00	Units: uL	
MSV_LCS_EE_00007	Amount Added: 50.00	Units: uL	
MSV_HP20_ISSS_00113	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 07-Aug-2023 11:27:37 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X04.D

Injection Date: 07-Aug-2023 09:51:30 Instrument ID: 9355 Operator ID: CLM27445

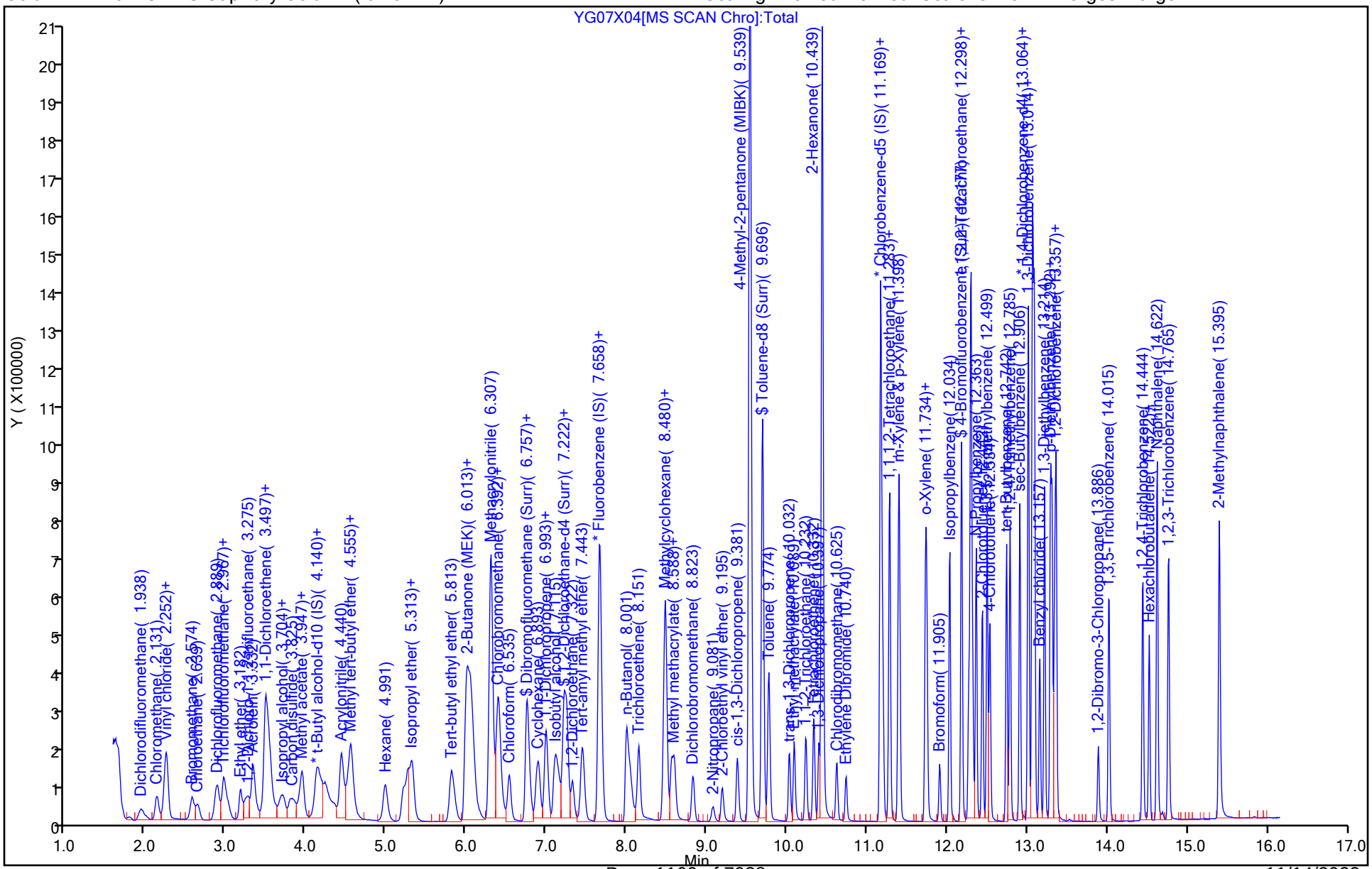
Lims ID: LCS Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X04.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	07-Aug-2023 09:51:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090764-005				
Misc. Info.:	LCS				
Operator ID:	CLM27445	Instrument ID:	9355		
Method:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m				
Limit Group:	MSV - 8260C_D				
Last Update:	07-Aug-2023 11:26:44	Calib Date:	25-Jul-2023 01:32:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1655				
First Level Reviewer: TQ4J		Date:	07-Aug-2023 11:23:37		

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	51.4	102.70
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	50.5	101.04
$ 81 Toluene-d8 (Surr)	50.0	50.7	101.31
$ 144 4-Bromofluorobenzene (Surr)	50.0	46.5	92.92

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MS Lab Sample ID: 410-136864-4 MS

Matrix: Water Lab File ID: YG07X18.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 15:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	110		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	103		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X18.D
Lims ID: 410-136864-A-4 MS
Client ID: 16WC1A
Sample Type: MS
Inject. Date: 07-Aug-2023 15:46:30 ALS Bottle#: 17 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-016
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 08:20:13 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:20:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.945	1.952	-0.007	99	140901	20.0	16.8	
4 Chloromethane	50	2.152	2.145	0.007	99	139603	20.0	14.8	
5 Vinyl chloride	62	2.252	2.252	0.000	98	138011	20.0	16.0	
6 Butadiene	39	2.267	2.260	0.007	92	168661	20.0	20.6	
8 Bromomethane	94	2.588	2.588	0.000	91	90486	20.0	15.7	
9 Chloroethane	64	2.667	2.660	0.007	100	84094	20.0	20.1	
10 Dichlorofluoromethane	67	2.903	2.896	0.007	97	196005	20.0	16.9	
11 Trichlorofluoromethane	101	2.975	2.975	-0.001	54	166084	20.0	19.9	
12 Pentane	43	2.989	2.989	0.000	97	151862	20.0	21.0	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.275	3.275	0.000	91	119785	20.0	20.0	
16 Acrolein	56	3.346	3.346	0.000	99	274149	150.0	203.8	
17 1,1-Dichloroethene	96	3.504	3.504	0.000	82	94635	20.0	24.2	
18 Acetone	58	3.511	3.504	0.007	100	237502	250.0	327.7	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.554	3.554	0.000	92	109364	20.0	23.6	
20 Isopropyl alcohol	45	3.668	3.668	0.000	96	101366	150.0	109.6	
21 Iodomethane	142	3.725	3.718	0.007	98	173855	20.0	22.7	
22 Carbon disulfide	76	3.840	3.825	0.015	100	312276	20.0	22.1	
24 Methyl acetate	43	3.925	3.926	-0.001	98	141357	20.0	23.7	
25 3-Chloro-1-propene	41	3.961	3.961	0.000	88	136339	20.0	21.4	
26 Methylene Chloride	84	4.154	4.154	0.000	97	105881	20.0	22.4	
* 27 t-Butyl alcohol-d10 (IS)	65	4.190	4.161	0.029	93	375486	250.0	250.0	
28 2-Methyl-2-propanol	59	4.269	4.276	-0.007	100	263343	200.0	168.9	
29 Acrylonitrile	53	4.447	4.455	-0.008	99	324708	100.0	106.6	
30 Methyl tert-butyl ether	73	4.555	4.548	0.007	97	271770	20.0	17.5	
32 trans-1,2-Dichloroethene	96	4.569	4.569	0.000	100	89682	20.0	22.8	
33 Hexane	57	4.998	4.998	0.000	95	127483	20.0	21.3	
35 1,1-Dichloroethane	63	5.220	5.220	0.000	96	184236	20.0	26.5	
36 Isopropyl ether	45	5.284	5.284	0.000	93	273158	20.0	18.7	
37 2-Chloro-1,3-butadiene	53	5.334	5.334	0.000	92	129147	20.0	21.0	
39 Tert-butyl ethyl ether	59	5.827	5.828	-0.001	97	254215	20.0	17.5	
40 2-Butanone (MEK)	43	6.013	6.021	-0.008	100	1096262	250.0	255.7	
41 cis-1,2-Dichloroethene	96	6.056	6.056	0.000	81	116640	20.0	26.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	77	6.078	6.078	0.000	75	153396	20.0	21.1	
43 Propionitrile	54	6.092	6.085	0.007	99	233484	150.0	196.6	
48 Methacrylonitrile	67	6.314	6.314	0.000	92	465454	150.0	153.3	
49 Chlorobromomethane	128	6.399	6.392	0.007	94	52283	20.0	23.6	
50 Tetrahydrofuran	71	6.414	6.414	0.000	91	125141	100.0	124.3	
51 Chloroform	83	6.542	6.543	-0.001	93	158718	20.0	22.4	
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.757	0.000	93	228187	50.0	53.4	
53 1,1,1-Trichloroethane	97	6.786	6.786	0.000	98	158139	20.0	22.4	
54 Cyclohexane	56	6.900	6.900	0.000	91	181327	20.0	21.5	
55 1,1-Dichloropropene	75	6.993	6.993	0.000	97	125350	20.0	23.6	
56 Carbon tetrachloride	117	7.007	7.000	0.007	97	138688	20.0	23.9	
57 Isobutyl alcohol	41	7.122	7.122	0.000	94	223373	500.0	472.6	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.222	0.000	87	55282	50.0	51.4	
59 Benzene	78	7.258	7.258	0.000	97	380838	20.0	22.8	
60 1,2-Dichloroethane	62	7.336	7.329	0.007	97	124508	20.0	21.3	
62 Tert-amyl methyl ether	73	7.451	7.451	0.000	97	254683	20.0	17.5	
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	98	895537	50.0	50.0	
64 n-Heptane	43	7.687	7.687	0.000	93	138916	20.0	21.3	
66 n-Butanol	56	8.008	8.008	0.000	91	348606	1000.0	945.8	
67 Trichloroethene	95	8.151	8.151	0.000	99	97426	20.0	22.6	
69 Methylcyclohexane	83	8.480	8.480	0.000	93	185475	20.0	21.9	
70 1,2-Dichloropropane	63	8.487	8.480	0.007	76	97529	20.0	21.4	
71 2-ethoxy-2-methyl butane	87	8.495	8.495	-0.001	94	122888	20.0	18.4	
72 Methyl methacrylate	69	8.566	8.559	0.007	90	82638	20.0	18.1	
73 1,4-Dioxane	88	8.573	8.573	0.000	61	51271	500.0	423.3	M
74 Dibromomethane	93	8.595	8.595	0.000	95	64199	20.0	22.0	
76 Dichlorobromomethane	83	8.831	8.831	0.000	99	116662	20.0	20.9	
77 2-Nitropropane	41	9.081	9.074	0.007	96	35169	20.0	20.8	
78 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
79 cis-1,3-Dichloropropene	75	9.388	9.381	0.007	96	125006	20.0	18.1	
80 4-Methyl-2-pentanone (MIBK)	43	9.538	9.538	0.000	97	2212363	250.0	254.6	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	93	866861	50.0	51.3	
82 Toluene	92	9.774	9.774	0.000	98	219932	20.0	21.6	
119 trans-1,3-Dichloropropene	75	10.032	10.032	0.000	93	118060	20.0	19.2	
121 Ethyl methacrylate	69	10.096	10.089	0.007	89	126663	20.0	17.2	
122 1,1,2-Trichloroethane	97	10.239	10.239	0.000	91	82954	20.0	20.7	
123 Tetrachloroethene	166	10.339	10.339	0.000	98	103315	20.0	24.1	
124 1,3-Dichloropropane	76	10.404	10.404	0.000	91	133533	20.0	20.9	
126 2-Hexanone	43	10.439	10.439	0.000	97	1460703	250.0	262.9	
128 Chlorodibromomethane	129	10.625	10.625	0.000	90	88518	20.0	20.2	
129 Ethylene Dibromide	107	10.740	10.740	0.000	100	86675	20.0	20.6	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	636814	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	97	111584	20.0	19.5	
132 Chlorobenzene	112	11.197	11.197	0.000	95	248317	20.0	21.8	
134 1,1,1,2-Tetrachloroethane	131	11.283	11.276	0.007	95	105160	20.0	22.8	
135 Ethylbenzene	91	11.283	11.283	0.000	98	444434	20.0	21.5	
136 m-Xylene & p-Xylene	106	11.398	11.398	0.000	99	341544	40.0	43.1	
138 o-Xylene	106	11.734	11.726	0.008	96	175524	20.0	20.6	
139 Styrene	104	11.748	11.748	0.000	94	269487	20.0	20.3	
140 Bromoform	173	11.905	11.905	0.000	97	71170	20.0	19.1	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	499709	20.0	22.0	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	92	308724	50.0	47.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	93	168471	20.0	20.1	
147 trans-1,4-Dichloro-2-butene	53	12.298	12.291	0.007	90	192998	100.0	87.0	
146 Bromobenzene	156	12.298	12.298	0.000	85	115952	20.0	22.2	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	83	49802	20.0	20.9	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	575714	20.0	22.2	
150 2-Chlorotoluene	126	12.441	12.441	0.000	97	116829	20.0	21.7	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	94	433487	20.0	21.2	
152 4-Chlorotoluene	126	12.534	12.534	0.000	97	110777	20.0	21.3	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	83770	20.0	21.9	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	98	436081	20.0	20.4	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	575413	20.0	21.9	
158 1,3-Dichlorobenzene	146	13.013	13.006	0.007	98	225122	20.0	20.8	
159 4-Isopropyltoluene	119	13.013	13.013	0.000	97	486838	20.0	21.2	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	95	383136	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	235622	20.0	22.1	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	462718	20.0	19.9	
163 Benzyl chloride	91	13.156	13.157	0.000	98	297310	20.0	17.9	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	95	289455	20.0	20.7	
165 p-Diethylbenzene	119	13.292	13.285	0.007	94	303383	20.0	20.8	
166 n-Butylbenzene	92	13.307	13.307	0.000	96	253977	20.0	21.7	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	98	245604	20.0	20.8	
168 o-diethylbenzene	119	13.364	13.357	0.007	94	246463	20.0	20.0	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	87	48789	20.0	18.3	
172 1,3,5-Trichlorobenzene	180	14.022	14.015	0.007	98	209215	20.0	20.6	
173 1,2,4-Trichlorobenzene	180	14.444	14.436	0.008	95	205388	20.0	20.4	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	96	93732	20.0	23.5	
176 Naphthalene	128	14.622	14.622	0.000	97	715165	20.0	19.1	
177 1,2,3-Trichlorobenzene	180	14.765	14.758	0.007	96	225618	20.0	21.0	
178 2-Methylnaphthalene	142	15.394	15.395	-0.001	92	418837	20.0	17.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00124	Amount Added: 21.50	Units: uL	
MSV_LCS_2CEVE_00127	Amount Added: 21.50	Units: uL	
MSV_LCS_ACROL_00125	Amount Added: 21.50	Units: uL	
MSV_LCS_Gases_00154	Amount Added: 21.50	Units: uL	
MSV_HP20_ISSS_00113	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 08-Aug-2023 08:20:14 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X18.D

Injection Date: 07-Aug-2023 15:46:30 Instrument ID: 9355 Operator ID: CLM27445

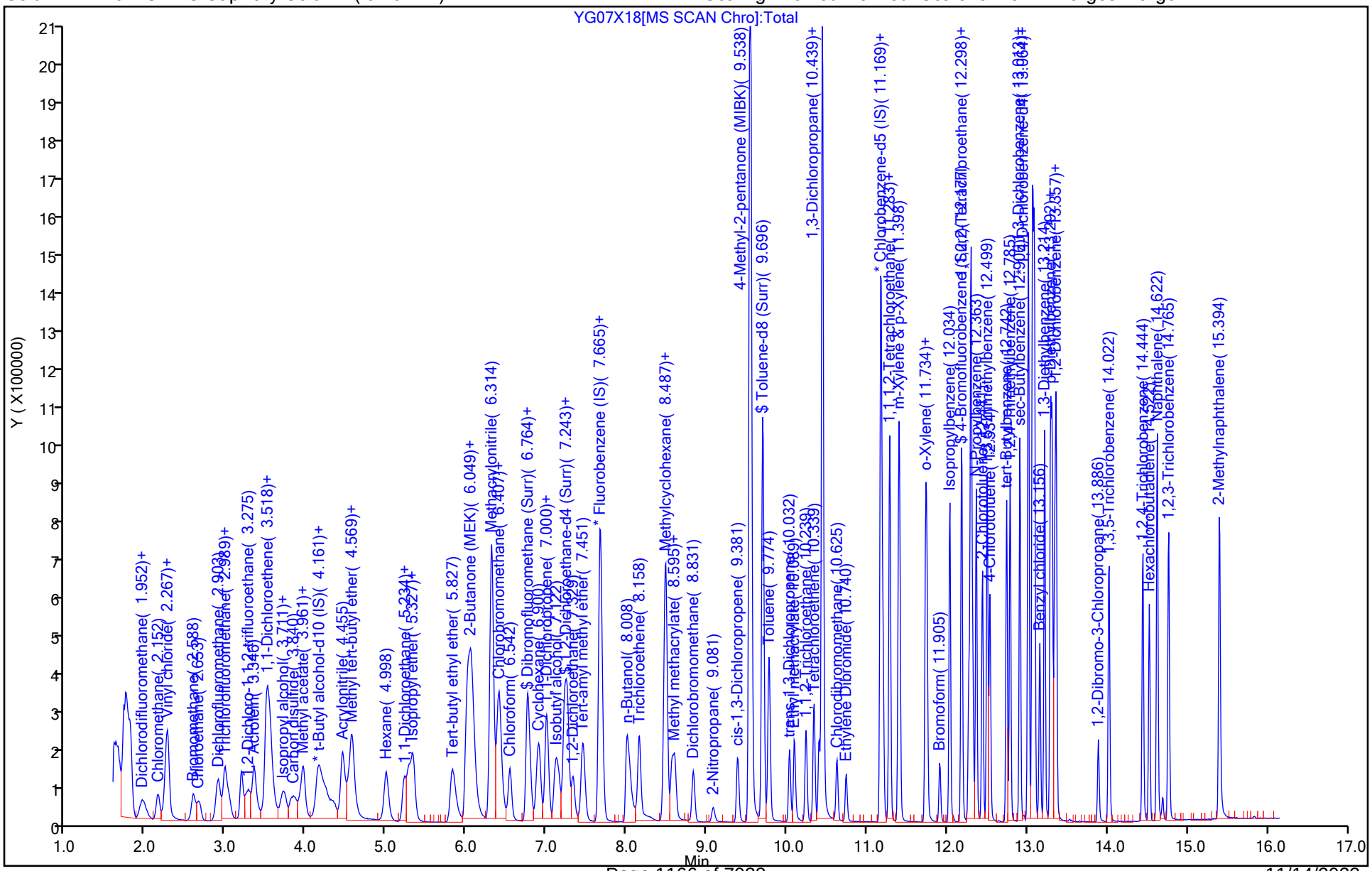
Lims ID: 410-136864-A-4 MS Worklist Smp#: 16

Client ID: 16WC1A

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 17

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X18.D				
Lims ID:	410-136864-A-4 MS				
Client ID:	16WC1A				
Sample Type:	MS				
Inject. Date:	07-Aug-2023 15:46:30	ALS Bottle#:	17	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090764-016				
Operator ID:	CLM27445	Instrument ID:	9355		
Method:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m				
Limit Group:	MSV - 8260C_D				
Last Update:	08-Aug-2023 08:20:13	Calib Date:	25-Jul-2023 01:32:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1624				

First Level Reviewer: innoonk Date: 08-Aug-2023 08:20:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	53.4	106.80
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	51.4	102.71
$ 81 Toluene-d8 (Surr)	50.0	51.3	102.52
$ 144 4-Bromofluorobenzene (Surr)	50.0	47.7	95.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MSD Lab Sample ID: 410-136864-4 MSD

Matrix: Water Lab File ID: YG07X19.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2023 16:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 5.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405099 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-63-0	2-Propanol	132		100	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	103		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X19.D
Lims ID: 410-136864-A-4 MSD
Client ID: 16WC1A
Sample Type: MSD
Inject. Date: 07-Aug-2023 16:08:30 ALS Bottle#: 18 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090764-017
Operator ID: CLM27445 Instrument ID: 9355

Method: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 08:21:20 Calib Date: 25-Jul-2023 01:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1624

First Level Reviewer: innoonk Date: 08-Aug-2023 08:21:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.952	1.952	0.000	99	147343	20.0	18.0	
4 Chloromethane	50	2.145	2.145	0.000	99	150820	20.0	16.4	
5 Vinyl chloride	62	2.252	2.252	0.000	98	144857	20.0	17.2	
6 Butadiene	39	2.267	2.260	0.007	96	181254	20.0	22.7	
8 Bromomethane	94	2.588	2.588	0.000	91	94083	20.0	16.7	
9 Chloroethane	64	2.660	2.660	0.000	99	86016	20.0	21.1	
10 Dichlorofluoromethane	67	2.896	2.896	0.000	97	200345	20.0	17.7	
11 Trichlorofluoromethane	101	2.982	2.975	0.007	52	169366	20.0	20.8	
12 Pentane	43	2.982	2.989	-0.007	98	153879	20.0	21.8	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.275	3.275	0.000	92	115531	20.0	19.8	
16 Acrolein	56	3.346	3.346	0.000	100	279038	150.0	201.3	
17 1,1-Dichloroethene	96	3.504	3.504	0.000	77	97215	20.0	25.4	
18 Acetone	58	3.504	3.504	0.000	100	247061	250.0	330.9	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.547	3.554	-0.007	92	113639	20.0	25.1	
20 Isopropyl alcohol	45	3.668	3.668	0.000	96	125520	150.0	131.8	
21 Iodomethane	142	3.711	3.718	-0.007	97	173547	20.0	23.2	
22 Carbon disulfide	76	3.847	3.825	0.022	99	328621	20.0	23.8	M
24 Methyl acetate	43	3.925	3.926	-0.001	98	126430	20.0	21.7	
25 3-Chloro-1-propene	41	3.961	3.961	0.000	88	131917	20.0	21.2	
26 Methylene Chloride	84	4.147	4.154	-0.007	93	106667	20.0	23.1	
* 27 t-Butyl alcohol-d10 (IS)	65	4.147	4.161	-0.014	91	386829	250.0	250.0	
28 2-Methyl-2-propanol	59	4.254	4.276	-0.022	98	301212	200.0	187.5	
29 Acrylonitrile	53	4.447	4.455	-0.008	99	332683	100.0	111.8	
30 Methyl tert-butyl ether	73	4.555	4.548	0.007	90	278305	20.0	18.4	
32 trans-1,2-Dichloroethene	96	4.569	4.569	0.000	98	89710	20.0	23.4	
33 Hexane	57	4.991	4.998	-0.007	94	131299	20.0	22.5	
35 1,1-Dichloroethane	63	5.213	5.220	-0.007	96	183532	20.0	27.0	
36 Isopropyl ether	45	5.284	5.284	0.000	95	275684	20.0	19.3	
37 2-Chloro-1,3-butadiene	53	5.327	5.334	-0.007	91	130545	20.0	21.8	
39 Tert-butyl ethyl ether	59	5.820	5.828	-0.008	96	261831	20.0	18.4	
40 2-Butanone (MEK)	43	6.013	6.021	-0.008	100	1140176	250.0	272.3	
41 cis-1,2-Dichloroethene	96	6.049	6.056	-0.007	82	115274	20.0	27.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	77	6.078	6.078	0.000	73	157128	20.0	22.1	
43 Propionitrile	54	6.085	6.085	0.000	98	228088	150.0	186.4	
48 Methacrylonitrile	67	6.307	6.314	-0.007	92	473518	150.0	159.7	
49 Chlorobromomethane	128	6.392	6.392	0.000	93	52603	20.0	24.3	
50 Tetrahydrofuran	71	6.407	6.414	-0.007	93	127737	100.0	123.2	
51 Chloroform	83	6.535	6.543	-0.008	93	159330	20.0	23.0	
$ 52 Dibromofluoromethane (Surr)	113	6.757	6.757	0.000	94	219640	50.0	52.6	
53 1,1,1-Trichloroethane	97	6.778	6.786	-0.008	99	159718	20.0	23.1	
54 Cyclohexane	56	6.893	6.900	-0.007	91	183550	20.0	22.2	
55 1,1-Dichloropropene	75	6.993	6.993	0.000	97	127396	20.0	24.5	
56 Carbon tetrachloride	117	7.000	7.000	0.000	97	140752	20.0	24.8	
57 Isobutyl alcohol	41	7.115	7.122	-0.008	94	248283	500.0	509.9	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.222	7.222	0.000	81	54206	50.0	51.6	
59 Benzene	78	7.258	7.258	0.000	97	379627	20.0	23.3	
60 1,2-Dichloroethane	62	7.329	7.329	0.000	97	123288	20.0	21.6	
62 Tert-amyl methyl ether	73	7.451	7.451	0.000	97	260523	20.0	18.4	
* 63 Fluorobenzene (IS)	96	7.665	7.665	0.000	98	874597	50.0	50.0	
64 n-Heptane	43	7.687	7.687	0.000	94	145467	20.0	22.8	
66 n-Butanol	56	8.008	8.008	0.000	91	378126	1000.0	995.8	
67 Trichloroethene	95	8.151	8.151	0.000	98	95408	20.0	22.6	
69 Methylcyclohexane	83	8.473	8.480	-0.007	92	184246	20.0	22.2	
70 1,2-Dichloropropane	63	8.480	8.480	0.000	82	95717	20.0	21.5	
71 2-ethoxy-2-methyl butane	87	8.495	8.495	-0.001	90	128930	20.0	19.7	
72 Methyl methacrylate	69	8.559	8.559	0.000	90	82286	20.0	18.5	
73 1,4-Dioxane	88	8.573	8.573	0.000	63	56791	500.0	455.2	
74 Dibromomethane	93	8.595	8.595	0.000	97	63663	20.0	22.4	
76 Dichlorobromomethane	83	8.831	8.831	0.000	99	115997	20.0	21.3	
77 2-Nitropropane	41	9.074	9.074	0.000	97	34127	20.0	19.6	
78 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
79 cis-1,3-Dichloropropene	75	9.381	9.381	0.000	96	127579	20.0	18.9	
80 4-Methyl-2-pentanone (MIBK)	43	9.538	9.538	0.000	97	2177566	250.0	256.5	
$ 81 Toluene-d8 (Surr)	98	9.696	9.696	0.000	94	839224	50.0	51.5	
82 Toluene	92	9.774	9.774	0.000	98	220628	20.0	22.5	
119 trans-1,3-Dichloropropene	75	10.032	10.032	0.000	93	120054	20.0	20.2	
121 Ethyl methacrylate	69	10.089	10.089	0.000	89	125802	20.0	17.7	
122 1,1,2-Trichloroethane	97	10.239	10.239	0.000	90	82403	20.0	21.3	
123 Tetrachloroethene	166	10.339	10.339	0.000	97	98587	20.0	23.9	
124 1,3-Dichloropropane	76	10.396	10.404	-0.008	91	132847	20.0	21.6	
126 2-Hexanone	43	10.439	10.439	0.000	97	1449706	250.0	270.5	
128 Chlorodibromomethane	129	10.625	10.625	0.000	90	87814	20.0	20.8	
129 Ethylene Dibromide	107	10.740	10.740	0.000	98	87919	20.0	21.6	
* 130 Chlorobenzene-d5 (IS)	117	11.169	11.169	0.000	85	614145	50.0	50.0	
131 1-Chlorohexane	91	11.176	11.176	0.000	97	110379	20.0	20.0	
132 Chlorobenzene	112	11.197	11.197	0.000	95	244060	20.0	22.2	
134 1,1,1,2-Tetrachloroethane	131	11.276	11.276	0.000	95	101837	20.0	22.9	
135 Ethylbenzene	91	11.283	11.283	0.000	98	418374	20.0	21.0	
136 m-Xylene & p-Xylene	106	11.398	11.398	0.000	100	330151	40.0	43.2	
138 o-Xylene	106	11.734	11.726	0.008	96	169260	20.0	20.6	
139 Styrene	104	11.748	11.748	0.000	95	259974	20.0	20.4	
140 Bromoform	173	11.905	11.905	0.000	97	68376	20.0	19.1	
141 Isopropylbenzene	105	12.034	12.034	0.000	96	481661	20.0	22.0	
$ 144 4-Bromofluorobenzene (Surr)	95	12.177	12.177	0.000	92	292517	50.0	46.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
145 1,1,2,2-Tetrachloroethane	83	12.270	12.270	0.000	93	164735	20.0	20.6	
147 trans-1,4-Dichloro-2-butene	53	12.298	12.291	0.007	91	190663	100.0	90.1	
146 Bromobenzene	156	12.298	12.298	0.000	85	110540	20.0	22.2	
148 1,2,3-Trichloropropane	110	12.320	12.320	0.000	83	46559	20.0	20.5	
149 N-Propylbenzene	91	12.363	12.363	0.000	99	545591	20.0	22.0	
150 2-Chlorotoluene	126	12.441	12.441	0.000	97	114155	20.0	22.2	
151 1,3,5-Trimethylbenzene	105	12.499	12.499	0.000	94	418623	20.0	21.5	
152 4-Chlorotoluene	126	12.534	12.534	0.000	97	108756	20.0	21.9	
154 tert-Butylbenzene	134	12.742	12.742	0.000	93	84709	20.0	23.2	
156 1,2,4-Trimethylbenzene	105	12.785	12.785	0.000	98	417290	20.0	20.5	
157 sec-Butylbenzene	105	12.906	12.906	0.000	94	561123	20.0	22.4	
158 1,3-Dichlorobenzene	146	13.006	13.006	0.000	98	218338	20.0	21.2	
159 4-Isopropyltoluene	119	13.013	13.013	0.000	97	474670	20.0	21.6	
* 160 1,4-Dichlorobenzene-d4	152	13.064	13.064	0.000	95	365415	50.0	50.0	
161 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	230584	20.0	22.7	
162 1,2,3-Trimethylbenzene	105	13.092	13.092	0.000	98	449284	20.0	20.3	
163 Benzyl chloride	91	13.156	13.157	0.000	98	283693	20.0	17.9	
164 1,3-Diethylbenzene	119	13.214	13.214	0.000	95	275921	20.0	20.6	
165 p-Diethylbenzene	119	13.292	13.285	0.007	94	290046	20.0	20.9	
166 n-Butylbenzene	92	13.307	13.307	0.000	96	240980	20.0	21.5	
167 1,2-Dichlorobenzene	146	13.342	13.342	0.000	98	229614	20.0	20.3	
168 o-diethylbenzene	119	13.357	13.357	0.000	96	239602	20.0	20.4	
171 1,2-Dibromo-3-Chloropropane	75	13.886	13.886	0.000	86	46786	20.0	18.4	
172 1,3,5-Trichlorobenzene	180	14.022	14.015	0.007	98	206394	20.0	21.3	
173 1,2,4-Trichlorobenzene	180	14.444	14.436	0.008	95	204759	20.0	21.3	
175 Hexachlorobutadiene	225	14.522	14.522	0.000	97	94472	20.0	24.8	
176 Naphthalene	128	14.622	14.622	0.000	97	721722	20.0	20.2	
177 1,2,3-Trichlorobenzene	180	14.765	14.758	0.007	96	227220	20.0	22.2	
178 2-Methylnaphthalene	142	15.394	15.395	-0.001	92	442071	20.0	19.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00124	Amount Added: 21.50	Units: uL	
MSV_LCS_2CEVE_00127	Amount Added: 21.50	Units: uL	
MSV_LCS_ACROL_00125	Amount Added: 21.50	Units: uL	
MSV_LCS_Gases_00154	Amount Added: 21.50	Units: uL	
MSV_HP20_ISSS_00113	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 08-Aug-2023 08:21:20 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X19.D

Injection Date: 07-Aug-2023 16:08:30 Instrument ID: 9355 Operator ID: CLM27445

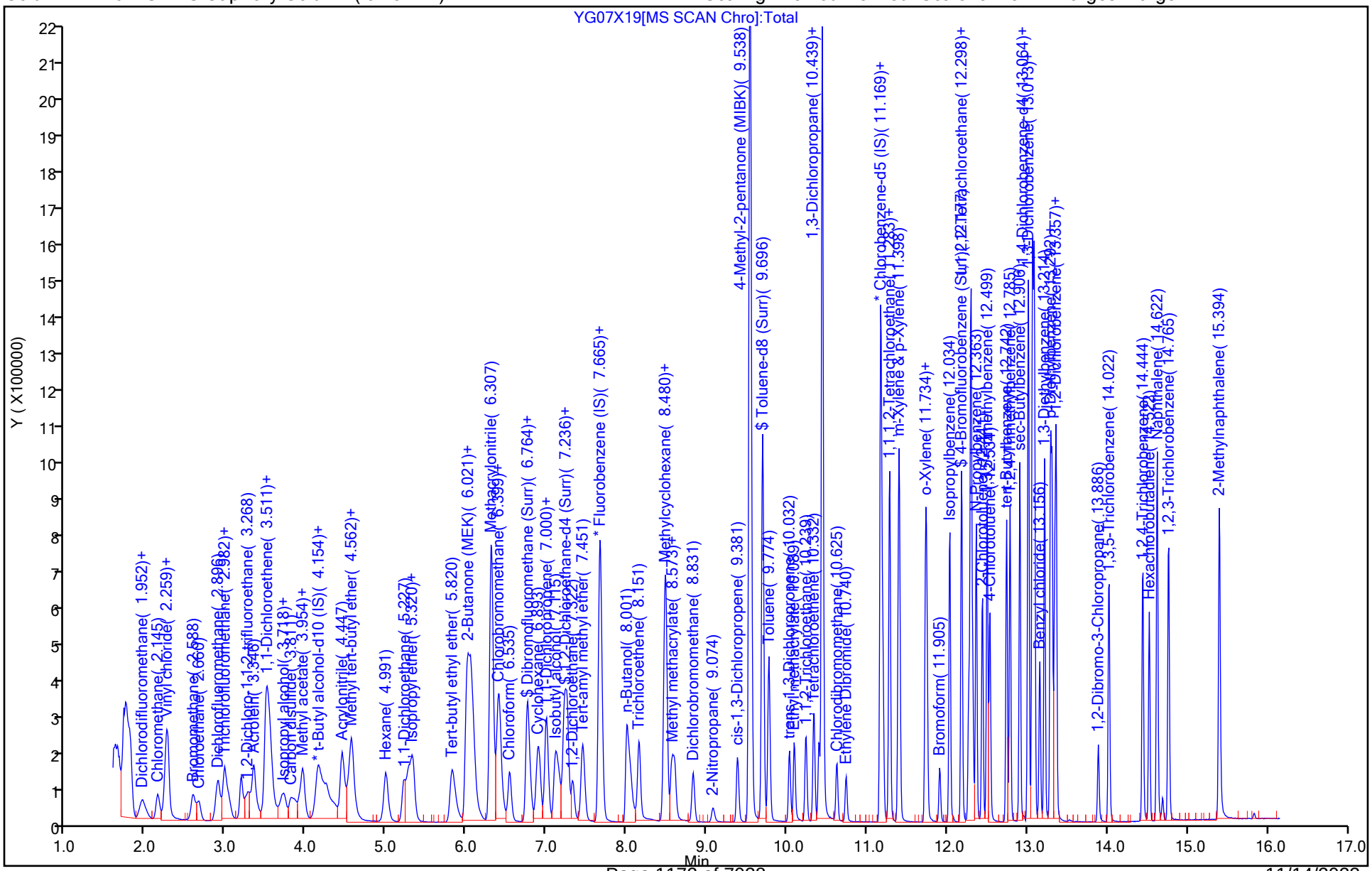
Lims ID: 410-136864-A-4 MSD Worklist Smp#: 17

Client ID: 16WC1A

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 18

Method: MSVoa_9355 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\YG07X19.D				
Lims ID:	410-136864-A-4 MSD				
Client ID:	16WC1A				
Sample Type:	MSD				
Inject. Date:	07-Aug-2023 16:08:30	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090764-017				
Operator ID:	CLM27445	Instrument ID:	9355		
Method:	\\chromfs\Lancaster\ChromData\9355\20230807-90764.b\MSVoa_9355.m				
Limit Group:	MSV - 8260C_D				
Last Update:	08-Aug-2023 08:21:20	Calib Date:	25-Jul-2023 01:32:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\9355\20230724-89720.b\YL24X17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1624				

First Level Reviewer: innoonk Date: 08-Aug-2023 08:21:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	50.0	52.6	105.26
$ 58 1,2-Dichloroethane-d4 (Surr)	50.0	51.6	103.12
$ 81 Toluene-d8 (Surr)	50.0	51.5	102.91
$ 144 4-Bromofluorobenzene (Surr)	50.0	46.8	93.65

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 9355 Start Date: 07/24/2023 19:26

Analysis Batch Number: 400238 End Date: 07/25/2023 03:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-400238/1		07/24/2023 19:26	1	YL24T01.D	R-624SilMS 30m 0.25(mm)
IC 410-400238/3		07/24/2023 20:03	1		R-624SilMS 30m 0.25(mm)
IC 410-400238/4		07/24/2023 20:25	1		R-624SilMS 30m 0.25(mm)
IC 410-400238/5		07/24/2023 20:47	1		R-624SilMS 30m 0.25(mm)
IC 410-400238/6		07/24/2023 21:09	1		R-624SilMS 30m 0.25(mm)
CCV 410-400238/1006		07/24/2023 21:09	1		R-624SilMS 30m 0.25(mm)
IC 410-400238/7		07/24/2023 21:31	1		R-624SilMS 30m 0.25(mm)
IC 410-400238/8		07/24/2023 21:53	1		R-624SilMS 30m 0.25(mm)
ICV 410-400238/10		07/24/2023 22:37	1		R-624SilMS 30m 0.25(mm)
IC 410-400238/12		07/24/2023 23:20	1	YL24X11.D	R-624SilMS 30m 0.25(mm)
IC 410-400238/13		07/24/2023 23:42	1	YL24X12.D	R-624SilMS 30m 0.25(mm)
IC 410-400238/14		07/25/2023 00:04	1	YL24X13.D	R-624SilMS 30m 0.25(mm)
IC 410-400238/15		07/25/2023 00:26	1	YL24X14.D	R-624SilMS 30m 0.25(mm)
ICIS 410-400238/16		07/25/2023 00:49	1	YL24X15.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-400238/1016		07/25/2023 00:49	1		R-624SilMS 30m 0.25(mm)
IC 410-400238/17		07/25/2023 01:10	1	YL24X16.D	R-624SilMS 30m 0.25(mm)
IC 410-400238/18		07/25/2023 01:32	1	YL24X17.D	R-624SilMS 30m 0.25(mm)
ICV 410-400238/20		07/25/2023 02:16	1	YL24X19.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		07/25/2023 03:00	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		07/25/2023 03:22	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		07/25/2023 03:44	1		R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 9355 Start Date: 08/07/2023 08:05

Analysis Batch Number: 405099 End Date: 08/07/2023 18:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-405099/1		08/07/2023 08:05	1	YG07T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-405099/3		08/07/2023 09:07	1	YG07X02.D	R-624SilMS 30m 0.25(mm)
CCV 410-405099/4		08/07/2023 09:29	1		R-624SilMS 30m 0.25(mm)
LCS 410-405099/5		08/07/2023 09:51	1	YG07X04.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		08/07/2023 10:35	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/07/2023 10:57	1		R-624SilMS 30m 0.25(mm)
MB 410-405099/9		08/07/2023 11:19	1	YG07X08.D	R-624SilMS 30m 0.25(mm)
410-136864-1	16C1	08/07/2023 13:34	1	YG07X12.D	R-624SilMS 30m 0.25(mm)
410-136864-2	16MW8	08/07/2023 13:56	1	YG07X13.D	R-624SilMS 30m 0.25(mm)
410-136864-3	16MW9	08/07/2023 14:18	1	YG07X14.D	R-624SilMS 30m 0.25(mm)
410-136864-5	16WDUP	08/07/2023 14:40	1	YG07X15.D	R-624SilMS 30m 0.25(mm)
410-136864-6	16WC1B	08/07/2023 15:02	1	YG07X16.D	R-624SilMS 30m 0.25(mm)
410-136864-4	16WC1A	08/07/2023 15:24	1	YG07X17.D	R-624SilMS 30m 0.25(mm)
410-136864-4 MS	16WC1A MS	08/07/2023 15:46	1	YG07X18.D	R-624SilMS 30m 0.25(mm)
410-136864-4 MSD	16WC1A MSD	08/07/2023 16:08	1	YG07X19.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		08/07/2023 16:31	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/07/2023 16:52	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/07/2023 17:14	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/07/2023 17:36	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/07/2023 17:59	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/07/2023 18:21	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/07/2023 18:43	1		R-624SilMS 30m 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 400238 Batch Start Date: 07/24/23 19:26 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	MSV_4ppbEE 00546	MSV_CCV_2CEVE 00130	MSV_CCV_CYC 00007
BFB 410-400238/1		8260D		1 uL	1 uL				
IC 410-400238/12		8260D		5 mL	5 mL	2705	12.5 mL		
IC 410-400238/13		8260D		5 mL	5 mL	2705		4 uL	32 uL
IC 410-400238/14		8260D		5 mL	5 mL	2705		2 uL	8 uL
IC 410-400238/15		8260D		5 mL	5 mL	2705		4 uL	16 uL
ICIS 410-400238/16		8260D		5 mL	5 mL	2705		5 uL	10 uL
IC 410-400238/17		8260D		5 mL	5 mL	2705		5 uL	10 uL
IC 410-400238/18		8260D		5 mL	5 mL	2705		15 uL	30 uL
ICV 410-400238/20		8260D		5 mL	5 mL	2705			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_CCV_EE 00005	MSV_CCV_GASES 00528	MSV_CCV_VOC#1 00136	MSV_CCV_VOC#3 00135	MSV_HP20_ISSS 00096	MSV_LCS_2CEVE 00125
BFB 410-400238/1		8260D							
IC 410-400238/12		8260D						1 uL	
IC 410-400238/13		8260D		4 uL	2 uL	4 uL	3.2 uL	1 uL	
IC 410-400238/14		8260D		2 uL	1 uL	2 uL	1.6 uL	1 uL	
IC 410-400238/15		8260D		4 uL	2 uL	4 uL	3.2 uL	1 uL	
ICIS 410-400238/16		8260D		5 uL	2.5 uL	5 uL	4 uL	1 uL	
IC 410-400238/17		8260D		5 uL	2.5 uL	5 uL	4 uL	1 uL	
IC 410-400238/18		8260D		15 uL	7.5 uL	15 uL	12 uL	1 uL	
ICV 410-400238/20		8260D						1 uL	50 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 400238 Batch Start Date: 07/24/23 19:26 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_ACROL 00123	MSV_LCS_CYC 00005	MSV_LCS_EE 00007	MSV_LCS_Gases 00152	MSV_LCS_VOC#1 00120	MSV_V_BFB 00012
BFB 410-400238/1		8260D							1 uL
IC 410-400238/12		8260D							
IC 410-400238/13		8260D							
IC 410-400238/14		8260D							
IC 410-400238/15		8260D							
ICIS 410-400238/16		8260D							
IC 410-400238/17		8260D							
IC 410-400238/18		8260D							
ICV 410-400238/20		8260D		50 uL	50 uL	50 uL	50 uL	50 uL	

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 405099 Batch Start Date: 08/07/23 08:05 Batch Analyst: Mellinger, Corie M

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-405099/1		8260D		1 uL	1 uL				
CCVIS 410-405099/3		8260D		5 mL	5 mL				2705
LCS 410-405099/5		8260D		5 mL	5 mL				2705
MB 410-405099/9		8260D		5 mL	5 mL				2705
410-136864-A-1	16C1	8260D	T	5 mL	5 mL	<2 SU	N	N	
410-136864-A-2	16MW8	8260D	T	5 mL	5 mL	<2 SU	N	N	
410-136864-A-3	16MW9	8260D	T	5 mL	5 mL	<2 SU	N	N	
410-136864-A-5	16WDUP	8260D	T	5 mL	5 mL	<2 SU	N	N	
410-136864-A-6	16WC1B	8260D	T	5 mL	5 mL	<2 SU	N	N	
410-136864-A-4	16WC1A	8260D	T	5 mL	5 mL	<2 SU	N	N	
410-136864-A-4 MS	16WC1A	8260D	T	5 mL	5 mL	<2 SU	N	N	
410-136864-A-4 MSD	16WC1A	8260D	T	5 mL	5 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_CCV_2CEVE 00132	MSV_CCV_EE 00005	MSV_CCV_GASES 00537	MSV_CCV_VOC#1 00138	MSV_CCV_VOC#3 00137	MSV_HP20_ISSS 00113
BFB 410-405099/1		8260D							
CCVIS 410-405099/3		8260D		5 uL	5 uL	2.5 uL	5 uL	4 uL	1 uL
LCS 410-405099/5		8260D							1 uL
MB 410-405099/9		8260D							1 uL
410-136864-A-1	16C1	8260D	T						1 uL
410-136864-A-2	16MW8	8260D	T						1 uL
410-136864-A-3	16MW9	8260D	T						1 uL
410-136864-A-5	16WDUP	8260D	T						1 uL
410-136864-A-6	16WC1B	8260D	T						1 uL
410-136864-A-4	16WC1A	8260D	T						1 uL
410-136864-A-4 MS	16WC1A	8260D	T						1 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 405099 Batch Start Date: 08/07/23 08:05 Batch Analyst: Mellinger, Corie M

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_CCV_2CEVE 00132	MSV_CCV_EE 00005	MSV_CCV_GASES 00537	MSV_CCV_VOC#1 00138	MSV_CCV_VOC#3 00137	MSV_HP20_ISSS 00113
410-136864-A-4 MSD	16WC1A	8260D	T						1 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_2CEVE 00127	MSV_LCS_ACROL 00125	MSV_LCS_EE 00007	MSV_LCS_Gases 00154	MSV_LCS_VOC#1 00124	MSV_V_BFB 00012
BFB 410-405099/1		8260D							1 uL
CCVIS 410-405099/3		8260D							
LCS 410-405099/5		8260D		50 uL	50 uL	50 uL	50 uL	50 uL	
MB 410-405099/9		8260D							
410-136864-A-1	16C1	8260D	T						
410-136864-A-2	16MW8	8260D	T						
410-136864-A-3	16MW9	8260D	T						
410-136864-A-5	16WDUP	8260D	T						
410-136864-A-6	16WC1B	8260D	T						
410-136864-A-4	16WC1A	8260D	T						
410-136864-A-4 MS	16WC1A	8260D	T	21.5 uL	21.5 uL		21.5 uL	21.5 uL	
410-136864-A-4 MSD	16WC1A	8260D	T	21.5 uL	21.5 uL		21.5 uL	21.5 uL	

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8260D Low Level

Volatile Organic Compounds (GC/MS) by Method 8260D Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): R-624SilMS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
16C1	410-136864-1	103	102	96	90
16C1 DL	410-136864-1 DL	103	106	97	92
16MW8	410-136864-2	102	102	96	90
16MW9	410-136864-3	103	103	99	90
16MW9 DL	410-136864-3 DL	103	104	97	88
16WC1A	410-136864-4	103	104	95	89
16WDUP	410-136864-5	103	103	96	83
16WC1B	410-136864-6	103	103	95	89
	MB 410-405906/8	103	104	98	89
	LCS 410-405906/5	103	105	101	99
	LCS 410-405906/6	102	99	97	90
16WC1A MS	410-136864-4 MS	103	106	100	97
16WC1A MS	410-136864-4 MS	100	100	95	90
16WC1A MSD	410-136864-4 MSD	103	101	99	97
16WC1A MSD	410-136864-4 MSD	102	102	96	90

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	80-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	80-120

Column to be used to flag recovery values

FORM II 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CG08X04.D

Lab ID: LCS 410-405906/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.37	107	71-134	
1,1,1-Trichloroethane	5.00	5.06	101	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.12	102	75-123	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	4.73	95	75-133	
1,1,2-Trichloroethane	5.00	5.09	102	80-120	
1,1-Dichloroethane	5.00	4.95	99	74-120	
1,1-Dichloroethene	5.00	4.95	99	80-131	
1,2,3-Trichloropropane	5.00	5.16	103	80-125	
1,2,4-Trichlorobenzene	5.00	4.72	94	68-122	
1,2-Dibromo-3-Chloropropane	5.00	5.11	102	56-148	
1,2-Dibromoethane	5.00	5.25	105	80-120	
1,2-Dichlorobenzene	5.00	4.90	98	80-120	
1,2-Dichloroethane	5.00	4.74	95	69-122	
1,2-Dichloropropane	5.00	5.05	101	80-120	
1,3-Dichlorobenzene	5.00	4.82	96	80-120	
1,3-Dichloropropane	5.00	5.16	103	80-120	
1,4-Dichlorobenzene	5.00	4.95	99	80-120	
1,4-Dioxane	125	118 J	95	65-169	
2-Butanone	62.5	64.6	103	59-141	
2-Hexanone	62.5	58.3	93	52-140	
4-Methyl-2-pentanone	62.5	58.9	94	55-140	
Acetone	62.5	60.2	96	60-146	
Acrylonitrile	25.0	27.3	109	64-139	
Allyl chloride	5.00	4.89 J	98	51-126	
Benzene	5.00	5.08	102	80-120	
Bromodichloromethane	5.00	4.99	100	73-124	
Bromoform	5.00	5.06	101	49-144	
Bromomethane	5.00	4.76	95	60-136	
Carbon disulfide	5.00	4.95 J	99	67-130	
Carbon tetrachloride	5.00	5.17	103	64-141	
Chloroethane	5.00	4.91	98	63-120	
Chloroform	5.00	4.95	99	80-120	
Chloromethane	5.00	4.45	89	56-124	
Chloroprene	5.00	4.75 J	95	60-128	
Dibromochloromethane	5.00	5.16	103	64-138	
Dibromomethane	5.00	5.22	104	80-122	
Dichlorodifluoromethane	5.00	5.01	100	43-123	
Diethyl ether	5.01	4.54 J	91	72-121	
Ethyl methacrylate	5.00	4.81 J	96	55-133	
Ethylbenzene	5.00	4.95	99	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CG08X04.D

Lab ID: LCS 410-405906/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	4.86	97	72-132	
Isobutyl alcohol	125	120 J	96	57-154	
m&p-Xylene	10.0	10.5	105	80-120	
Methacrylonitrile	37.5	37.5 J	100	60-145	
Methyl iodide	5.00	4.89 J	98	77-120	
Methyl methacrylate	5.00	4.44 J	89	55-139	
Methylene Chloride	5.00	4.90	98	80-120	
Naphthalene	5.00	4.53	91	64-122	
o-Xylene	5.00	5.02	100	80-120	
Pentachloroethane	5.00	5.22 J	104	68-134	
Propionitrile	37.5	41.4 J	110	63-145	
Styrene	5.00	5.26	105	80-120	
Tetrachloroethene	5.00	4.98	100	80-120	
Tetrahydrofuran	25.0	25.6	102	67-137	
Toluene	5.00	5.01	100	80-120	
trans-1,2-Dichloroethene	5.00	5.03	101	80-122	
trans-1,3-Dichloropropene	5.00	5.13	103	61-129	
Trichloroethene	5.00	4.86	97	80-120	
Trichlorofluoromethane	5.00	4.91	98	62-136	
Vinyl chloride	5.00	4.77	95	60-125	
Xylenes, Total	15.0	15.5	103	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CG08X05.D

Lab ID: LCS 410-405906/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	18.8	ND	109	51-160	
Vinyl acetate	12.5	14.4	115	38-145	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CG08X14.D

Lab ID: 410-136864-4 MS Client ID: 16WC1A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	5.85	117	71-134	
1,1,1-Trichloroethane	5.00	ND	5.77	115	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	5.39	108	75-123	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	ND	5.96	119	75-133	
1,1,2-Trichloroethane	5.00	ND	5.31	106	80-120	
1,1-Dichloroethane	5.00	4.2	9.58	109	74-120	
1,1-Dichloroethene	5.00	ND	5.71	114	80-131	
1,2,3-Trichloropropane	5.00	ND	5.39	108	80-125	
1,2,4-Trichlorobenzene	5.00	ND	5.30	106	68-122	
1,2-Dibromo-3-Chloropropane	5.00	ND	5.12	102	56-148	
1,2-Dibromoethane	5.00	ND	5.71	114	80-120	
1,2-Dichlorobenzene	5.00	ND	5.39	108	80-120	
1,2-Dichloroethane	5.00	ND	5.04	101	69-122	
1,2-Dichloropropane	5.00	ND	5.58	112	80-120	
1,3-Dichlorobenzene	5.00	ND	5.38	108	80-120	
1,3-Dichloropropane	5.00	ND	5.60	112	80-120	
1,4-Dichlorobenzene	5.00	ND	5.47	109	80-120	
1,4-Dioxane	125	ND	134 J	107	65-169	
2-Butanone	62.6	ND	69.6	111	59-141	
2-Hexanone	62.6	ND	63.2	101	52-140	
4-Methyl-2-pentanone	62.6	ND	65.5	105	55-140	
Acetone	62.6	ND	62.8	100	60-146	
Acrylonitrile	25.0	ND	29.0	116	64-139	
Allyl chloride	5.00	ND	5.38 J	107	51-126	
Benzene	5.00	0.37 J	6.09	114	80-120	
Bromodichloromethane	5.00	ND	5.42	108	73-124	
Bromoform	5.00	ND	5.21	104	49-144	
Bromomethane	5.00	ND	5.22	104	60-136	
Carbon disulfide	5.00	ND	5.27 J	105	67-130	
Carbon tetrachloride	5.00	ND	5.99	120	64-141	
Chloroethane	5.00	2.2	7.55	106	63-120	
Chloroform	5.00	ND	5.50	110	80-120	
Chloromethane	5.00	ND	5.23	105	80-120	
Chloroprene	5.00	ND	5.52 J	110	60-128	
Dibromochloromethane	5.00	ND	5.44	109	64-138	
Dibromomethane	5.00	ND	5.54	111	80-122	
Dichlorodifluoromethane	5.00	ND	5.97	119	43-123	
Diethyl ether	5.01	22	26.1	76	72-121	E 4
Ethyl methacrylate	5.00	ND	5.21 J	104	55-133	
Ethylbenzene	5.00	ND	5.63	113	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CG08X14.D

Lab ID: 410-136864-4 MS Client ID: 16WC1A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	ND	5.63	113	72-132	
Isobutyl alcohol	125	ND	129 J	103	57-154	
m&p-Xylene	10.0	ND	11.7	116	80-120	
Methacrylonitrile	37.5	ND	41.8 J	111	60-145	
Methyl iodide	5.00	ND	5.35 J	107	77-120	
Methyl methacrylate	5.00	ND	5.01 J	100	55-139	
Methylene Chloride	5.00	ND	5.43	109	80-120	
Naphthalene	5.00	ND	4.99	100	64-122	
o-Xylene	5.00	ND	5.66	113	80-120	
Pentachloroethane	5.00	ND	5.76 J	115	68-134	
Propionitrile	37.5	ND	45.2 J	120	63-145	
Styrene	5.00	ND	5.86	117	80-120	
Tetrachloroethene	5.00	ND	5.91	118	80-120	
Tetrahydrofuran	25.0	ND	30.1	120	67-137	
Toluene	5.00	ND	5.69	114	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.72	114	80-122	
trans-1,3-Dichloropropene	5.00	ND	5.37	107	61-129	
Trichloroethene	5.00	ND	5.80	116	80-120	
Trichlorofluoromethane	5.00	ND	6.02	120	62-136	
Vinyl chloride	5.00	0.23 J	5.88	113	60-125	
Xylenes, Total	15.0	ND	17.4	116	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CG08X16.D

Lab ID: 410-136864-4 MS Client ID: 16WC1A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetonitrile	18.8	ND	ND	NC	51-160	
Vinyl acetate	12.5	ND	14.5	116	38-145	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CG08X15.D

Lab ID: 410-136864-4 MSD Client ID: 16WC1A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.72	114	2	30	71-134	
1,1,1-Trichloroethane	5.00	5.71	114	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.35	107	1	30	75-123	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	5.80	116	3	30	75-133	
1,1,2-Trichloroethane	5.00	5.37	107	1	30	80-120	
1,1-Dichloroethane	5.00	9.55	108	0	30	74-120	
1,1-Dichloroethene	5.00	5.66	113	1	30	80-131	
1,2,3-Trichloropropane	5.00	5.44	109	1	30	80-125	
1,2,4-Trichlorobenzene	5.00	5.27	105	1	30	68-122	
1,2-Dibromo-3-Chloropropane	5.00	5.28	106	3	30	56-148	
1,2-Dibromoethane	5.00	5.55	111	3	30	80-120	
1,2-Dichlorobenzene	5.00	5.36	107	1	30	80-120	
1,2-Dichloroethane	5.00	5.00	100	1	30	69-122	
1,2-Dichloropropane	5.00	5.49	110	2	30	80-120	
1,3-Dichlorobenzene	5.00	5.32	106	1	30	80-120	
1,3-Dichloropropane	5.00	5.46	109	2	30	80-120	
1,4-Dichlorobenzene	5.00	5.40	108	1	30	80-120	
1,4-Dioxane	125	133 J	106	1	30	65-169	
2-Butanone	62.6	67.0	107	4	30	59-141	
2-Hexanone	62.6	61.5	98	3	30	52-140	
4-Methyl-2-pentanone	62.6	62.0	99	5	30	55-140	
Acetone	62.6	58.8	94	7	30	60-146	
Acrylonitrile	25.0	28.0	112	3	30	64-139	
Allyl chloride	5.00	5.39 J	108	0	30	51-126	
Benzene	5.00	5.93	111	3	30	80-120	
Bromodichloromethane	5.00	5.40	108	0	30	73-124	
Bromoform	5.00	4.99	100	4	30	49-144	
Bromomethane	5.00	5.24	105	0	30	60-136	
Carbon disulfide	5.00	5.20 J	104	2	30	67-130	
Carbon tetrachloride	5.00	6.03	120	1	30	64-141	
Chloroethane	5.00	7.48	105	1	30	63-120	
Chloroform	5.00	5.43	109	1	30	80-120	
Chloromethane	5.00	5.22	104	0	30	80-120	
Chloroprene	5.00	5.54 J	111	0	30	60-128	
Dibromochloromethane	5.00	5.32	106	2	30	64-138	
Dibromomethane	5.00	5.61	112	1	30	80-122	
Dichlorodifluoromethane	5.00	5.78	115	3	30	43-123	
Diethyl ether	5.01	26.4	82	1	30	72-121	E 4
Ethyl methacrylate	5.00	5.05 J	101	3	30	55-133	
Ethylbenzene	5.00	5.56	111	1	30	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CG08X15.D

Lab ID: 410-136864-4 MSD Client ID: 16WC1A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Hexachlorobutadiene	5.00	5.59	112	1	30	72-132	
Isobutyl alcohol	125	125 J	100	3	30	57-154	
m&p-Xylene	10.0	11.3	113	3	30	80-120	
Methacrylonitrile	37.5	40.0 J	106	5	30	60-145	
Methyl iodide	5.00	5.22 J	104	3	30	77-120	
Methyl methacrylate	5.00	4.64 J	93	8	30	55-139	
Methylene Chloride	5.00	5.33	107	2	30	80-120	
Naphthalene	5.00	5.04	101	1	30	64-122	
o-Xylene	5.00	5.53	110	2	30	80-120	
Pentachloroethane	5.00	5.60 J	112	3	30	68-134	
Propionitrile	37.5	42.7 J	114	6	30	63-145	
Styrene	5.00	5.74	115	2	30	80-120	
Tetrachloroethene	5.00	5.74	115	3	30	80-120	
Tetrahydrofuran	25.0	30.5	122	1	30	67-137	
Toluene	5.00	5.53	110	3	30	80-120	
trans-1,2-Dichloroethene	5.00	5.67	113	1	30	80-122	
trans-1,3-Dichloropropene	5.00	5.28	105	2	30	61-129	
Trichloroethene	5.00	5.64	113	3	30	80-120	
Trichlorofluoromethane	5.00	5.90	118	2	30	62-136	
Vinyl chloride	5.00	5.71	110	3	30	60-125	
Xylenes, Total	15.0	16.8	112	3	30	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CG08X17.D

Lab ID: 410-136864-4 MSD Client ID: 16WC1A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetonitrile	18.8	ND	NC	NC	30	51-160	
Vinyl acetate	12.5	14.4	115	0	30	38-145	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: CG08X07.D Lab Sample ID: MB 410-405906/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 10193 Date Analyzed: 08/08/2023 20:27

GC Column: R-624SilMS 30m ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-405906/5	CG08X04.D	08/08/2023 19:22
	LCS 410-405906/6	CG08X05.D	08/08/2023 19:44
16WC1A	410-136864-4	CG08X13.D	08/08/2023 22:39
16WC1A MS	410-136864-4 MS	CG08X14.D	08/08/2023 23:01
16WC1A MSD	410-136864-4 MSD	CG08X15.D	08/08/2023 23:23
16WC1A MS	410-136864-4 MS	CG08X16.D	08/08/2023 23:45
16WC1A MSD	410-136864-4 MSD	CG08X17.D	08/09/2023 00:07
16MW8	410-136864-2	CG08X19.D	08/09/2023 00:51
16WDUP	410-136864-5	CG08X20.D	08/09/2023 01:12
16WC1B	410-136864-6	CG08X21.D	08/09/2023 01:34
16MW9	410-136864-3	CG08X22.D	08/09/2023 01:56
16MW9 DL	410-136864-3 DL	CG08X23.D	08/09/2023 02:19
16C1	410-136864-1	CG08X24.D	08/09/2023 02:41
16C1 DL	410-136864-1 DL	CG08X25.D	08/09/2023 03:03

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: CL10T04.D BFB Injection Date: 07/10/2023

Instrument ID: 10193 BFB Injection Time: 15:13

Analysis Batch No.: 395211

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.2	
75	30.0 - 60.0 % of mass 95	44.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	1.0	(1.1) 1
174	Greater than 50% of mass 95	89.4	
175	5.0 - 9.0 % of mass 174	6.1	(6.9) 1
176	95.0 - 101.0 % of mass 174	86.3	(96.6) 1
177	5.0 - 9.0 % of mass 176	6.1	(7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-395211/3	CL10X02.D	07/10/2023	15:50
	IC 410-395211/4	CL10X03.D	07/10/2023	16:12
	IC 410-395211/5	CL10X04.D	07/10/2023	16:34
	IC 410-395211/6	CL10X05.D	07/10/2023	16:56
	IC 410-395211/7	CL10X06.D	07/10/2023	17:18
	IC 410-395211/8	CL10X07.D	07/10/2023	17:40
	IC 410-395211/9	CL10X08.D	07/10/2023	18:02
	ICV 410-395211/11	CL10X10.D	07/10/2023	18:45
	IC 410-395211/13	CL10X12.D	07/10/2023	19:29
	IC 410-395211/14	CL10X13.D	07/10/2023	19:51
	IC 410-395211/15	CL10X14.D	07/10/2023	20:13
	IC 410-395211/16	CL10X15.D	07/10/2023	20:35
	IC 410-395211/17	CL10X16.D	07/10/2023	20:57
	ICIS 410-395211/18	CL10X17.D	07/10/2023	21:18
	IC 410-395211/19	CL10X18.D	07/10/2023	21:40
	ICV 410-395211/21	CL10X20.D	07/10/2023	22:24

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: CG08T01.D BFB Injection Date: 08/08/2023

Instrument ID: 10193 BFB Injection Time: 18:03

Analysis Batch No.: 405906

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.4	
75	30.0 - 60.0 % of mass 95	42.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.9	(0.9) 1
174	Greater than 50% of mass 95	91.9	
175	5.0 - 9.0 % of mass 174	6.8	(7.4) 1
176	95.0 - 101.0 % of mass 174	91.9	(99.9) 1
177	5.0 - 9.0 % of mass 176	4.8	(5.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-405906/3	CG08X02.D	08/08/2023	18:38
	CCV 410-405906/4	CG08X03.D	08/08/2023	19:00
	LCS 410-405906/5	CG08X04.D	08/08/2023	19:22
	LCS 410-405906/6	CG08X05.D	08/08/2023	19:44
	MB 410-405906/8	CG08X07.D	08/08/2023	20:27
16WC1A	410-136864-4	CG08X13.D	08/08/2023	22:39
16WC1A MS	410-136864-4 MS	CG08X14.D	08/08/2023	23:01
16WC1A MSD	410-136864-4 MSD	CG08X15.D	08/08/2023	23:23
16WC1A MS	410-136864-4 MS	CG08X16.D	08/08/2023	23:45
16WC1A MSD	410-136864-4 MSD	CG08X17.D	08/09/2023	0:07
16MW8	410-136864-2	CG08X19.D	08/09/2023	0:51
16WDUP	410-136864-5	CG08X20.D	08/09/2023	1:12
16WC1B	410-136864-6	CG08X21.D	08/09/2023	1:34
16MW9	410-136864-3	CG08X22.D	08/09/2023	1:56
16MW9 DL	410-136864-3 DL	CG08X23.D	08/09/2023	2:19
16C1	410-136864-1	CG08X24.D	08/09/2023	2:41
16C1 DL	410-136864-1 DL	CG08X25.D	08/09/2023	3:03

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-395211/18 Date Analyzed: 07/10/2023 21:18

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CL10X17.D Heated Purge: (Y/N) N

Calibration ID: 51835

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		168052	3.55	2510713	6.95	1990861	10.66
UPPER LIMIT		336104	4.05	5021426	7.45	3981722	11.16
LOWER LIMIT		84026	3.05	1255357	6.45	995431	10.16
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-395211/11		163935	3.54	2440146	6.95	1953617	10.66
ICV 410-395211/21		170270	3.56	2617359	6.95	2032145	10.66
CCVIS 410-405906/3		287628	3.54	4285906	6.93	3345755	10.65

TBAd10 = t-Butyl alcohol-d10 (IS)
FB = Fluorobenzene (IS)
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-395211/18 Date Analyzed: 07/10/2023 21:18

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CL10X17.D Heated Purge: (Y/N) N

Calibration ID: 51835

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		1214109	12.62				
UPPER LIMIT		2428218	13.12				
LOWER LIMIT		607055	12.12				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-395211/11		1131305	12.63				
ICV 410-395211/21		1221694	12.63				
CCVIS 410-405906/3		2022217	12.62				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: CCVIS 410-405906/3 Date Analyzed: 08/08/2023 18:38

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CG08X02.D Heated Purge: (Y/N) N

Calibration ID: 51835

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		287628	3.54	4285906	6.93	3345755	10.65
UPPER LIMIT		575256	4.04	8571812	7.43	6691510	11.15
LOWER LIMIT		143814	3.04	2142953	6.43	1672878	10.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-405906/5		297302	3.53	4137704	6.93	3206275	10.65
MB 410-405906/8		291677	3.53	3808276	6.94	2935252	10.65
410-136864-4	16WC1A	278187	3.54	3816511	6.94	2990804	10.66
410-136864-4 MS	16WC1A MS	280647	3.53	4035088	6.93	3126956	10.65
410-136864-4 MSD	16WC1A MSD	288709	3.53	4081051	6.93	3185504	10.65
410-136864-4 MS	16WC1A MS	269840	3.53	3930075	6.93	3058566	10.65
410-136864-4 MSD	16WC1A MSD	289987	3.54	3896733	6.93	3040955	10.65
410-136864-2	16MW8	270376	3.53	3772145	6.94	2947068	10.66
410-136864-5	16WDUP	254967	3.53	3798128	6.93	2994118	10.65
410-136864-6	16WC1B	260177	3.54	3771859	6.94	2997194	10.66
410-136864-3	16MW9	253693	3.53	3803984	6.93	2880847	10.66
410-136864-3 DL	16MW9 DL	250113	3.52	3781079	6.93	2945278	10.65
410-136864-1	16C1	254174	3.53	3760695	6.93	2919864	10.66
410-136864-1 DL	16C1 DL	266648	3.54	3745168	6.94	2934203	10.66

TBAd10 = t-Butyl alcohol-d10 (IS)
FB = Fluorobenzene (IS)
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: CCVIS 410-405906/3 Date Analyzed: 08/08/2023 18:38

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CG08X02.D Heated Purge: (Y/N) N

Calibration ID: 51835

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		2022217	12.62				
UPPER LIMIT		4044434	13.12				
LOWER LIMIT		1011109	12.12				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-405906/5		1960785	12.62				
MB 410-405906/8		1616490	12.63				
410-136864-4	16WC1A	1576674	12.63				
410-136864-4 MS	16WC1A MS	1906091	12.62				
410-136864-4 MSD	16WC1A MSD	1923821	12.62				
410-136864-4 MS	16WC1A MS	1608332	12.63				
410-136864-4 MSD	16WC1A MSD	1612741	12.63				
410-136864-2	16MW8	1566123	12.63				
410-136864-5	16WDUP	1611879	12.63				
410-136864-6	16WC1B	1606982	12.63				
410-136864-3	16MW9	1552944	12.63				
410-136864-3 DL	16MW9 DL	1542545	12.63				
410-136864-1	16C1	1474657	12.63				
410-136864-1 DL	16C1 DL	1598775	12.63				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16C1 Lab Sample ID: 410-136864-1

Matrix: Water Lab File ID: CG08X24.D

Analysis Method: 8260D Date Collected: 07/27/2023 12:45

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 02:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.30
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.30
75-34-3	1,1-Dichloroethane	5.2		1.0	0.30
75-35-4	1,1-Dichloroethene	ND		1.0	0.30
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.40
106-93-4	1,2-Dibromoethane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.40
107-06-2	1,2-Dichloroethane	ND		1.0	0.30
78-87-5	1,2-Dichloropropane	ND		1.0	0.40
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.40
142-28-9	1,3-Dichloropropane	ND		1.0	0.40
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.40
123-91-1	1,4-Dioxane	ND		200	45
78-93-3	2-Butanone	ND		10	1.7
591-78-6	2-Hexanone	ND		10	2.0
108-10-1	4-Methyl-2-pentanone	ND		10	2.0
67-64-1	Acetone	ND		10	2.0
75-05-8	Acetonitrile	ND		100	31
107-13-1	Acrylonitrile	ND		10	1.1
107-05-1	Allyl chloride	ND		10	1.0
71-43-2	Benzene	0.33	J	1.0	0.30
75-27-4	Bromodichloromethane	ND		1.0	0.30
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.54
75-15-0	Carbon disulfide	ND		10	0.40
56-23-5	Carbon tetrachloride	ND		1.0	0.30
75-00-3	Chloroethane	3.4		1.0	0.070
67-66-3	Chloroform	ND		1.0	0.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16C1 Lab Sample ID: 410-136864-1

Matrix: Water Lab File ID: CG08X24.D

Analysis Method: 8260D Date Collected: 07/27/2023 12:45

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 02:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.10
126-99-8	Chloroprene	ND		10	0.46
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.30
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
97-63-2	Ethyl methacrylate	ND		10	0.81
100-41-4	Ethylbenzene	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		1.0	0.40
78-83-1	Isobutyl alcohol	ND		200	11
179601-23-1	m&p-Xylene	ND		2.0	0.40
126-98-7	Methacrylonitrile	ND		100	9.7
74-88-4	Methyl iodide	ND		10	0.58
80-62-6	Methyl methacrylate	ND		10	3.5
75-09-2	Methylene Chloride	ND		1.0	0.70
91-20-3	Naphthalene	ND		1.0	0.40
95-47-6	o-Xylene	ND		1.0	0.40
76-01-7	Pentachloroethane	ND		10	1.7
107-12-0	Propionitrile	ND	cn	100	10
100-42-5	Styrene	ND		1.0	0.30
127-18-4	Tetrachloroethene	ND		1.0	0.30
109-99-9	Tetrahydrofuran	16	J	25	2.0
108-88-3	Toluene	ND		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.40
79-01-6	Trichloroethene	ND		1.0	0.30
75-69-4	Trichlorofluoromethane	ND		1.0	0.40
108-05-4	Vinyl acetate	ND		10	3.2
75-01-4	Vinyl chloride	ND		1.0	0.20
1330-20-7	Xylenes, Total	ND		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16C1 Lab Sample ID: 410-136864-1

Matrix: Water Lab File ID: CG08X24.D

Analysis Method: 8260D Date Collected: 07/27/2023 12:45

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 02:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D
Lims ID: 410-136864-B-1
Client ID: 16C1
Sample Type: Client
Inject. Date: 09-Aug-2023 02:41:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-025
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 14:59:19 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 14:59:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85		1.684				ND	
4 Dimethyl ether	45	1.721	1.739	-0.018	96	976654	7.65	
5 Chloromethane	50		1.849				ND	7
6 Vinyl chloride	62	1.928	1.940	-0.012	36	9654	0.0863	
9 Bromomethane	94		2.209				ND	7
10 Chloroethane	64	2.264	2.270	-0.006	99	222614	3.38	
12 Trichlorofluoromethane	101		2.532				ND	U
14 Ethyl ether	59	2.690	2.696	-0.006	89	2591322	36.0	E
18 1,1-Dichloroethene	96	2.940	2.946	-0.006	96	16742	0.2046	
20 Acetone	43	2.995	2.989	0.006	28	6210	0.5147	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.001				ND	7
22 Iodomethane	142		3.111				ND	
25 Carbon disulfide	76		3.196				ND	7
27 Acetonitrile	41		3.318				ND	
29 3-Chloro-1-propene	41		3.336				ND	7
30 Methylene Chloride	84	3.489	3.489	0.000	90	56712	0.5546	
* 31 t-Butyl alcohol-d10 (IS)	65	3.526	3.544	-0.018	97	254174	50.0	
33 Acrylonitrile	53		3.800				ND	
35 trans-1,2-Dichloroethene	96		3.824				ND	7
37 1,1-Dichloroethane	63	4.434	4.434	0.000	95	905030	5.20	
38 Vinyl acetate	43		4.446				ND	7
40 2-Chloro-1,3-butadiene	53		4.550				ND	
42 2-Butanone (MEK)	43		5.281				ND	U
45 Propionitrile	54		5.391				ND	
47 Methacrylonitrile	67		5.586				ND	
49 Tetrahydrofuran	71	5.678	5.659	0.019	87	112144	16.2	
50 Chloroform	83		5.799				ND	
53 1,1,1-Trichloroethane	97	6.013	6.025	-0.012	47	35708	0.2461	
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	94	902569	10.3	
56 Carbon tetrachloride	117		6.238				ND	
58 Isobutyl alcohol	41		6.476				ND	U
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.488	6.482	0.006	99	189476	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Benzene	78	6.513	6.507	0.006	94	138473	0.3335	
61 1,2-Dichloroethane	62		6.592				ND	7
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	99	3760695	10.0	
68 Trichloroethene	95		7.427				ND	
70 1,2-Dichloropropane	63		7.769				ND	7
72 Dibromomethane	93		7.884				ND	
74 1,4-Dioxane	88		7.890				ND	7
73 Methyl methacrylate	69		7.890				ND	7
76 Dichlorobromomethane	83		8.134				ND	
82 4-Methyl-2-pentanone (MIBK)	43		8.915				ND	7
$ 83 Toluene-d8 (Surr)	98	9.049	9.043	0.006	93	3690083	9.62	
84 Toluene	92		9.134				ND	7
85 trans-1,3-Dichloropropene	75		9.451				ND	7
86 Ethyl methacrylate	69		9.536				ND	7
87 1,1,2-Trichloroethane	97		9.671				ND	
88 Tetrachloroethene	166	9.768	9.750	0.018	95	15775	0.1199	
89 1,3-Dichloropropane	76		9.841				ND	7
106 2-Hexanone	43		9.921				ND	7
108 Chlorodibromomethane	129		10.073				ND	
110 Ethylene Dibromide	107		10.183				ND	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.652	0.006	83	2919864	10.0	
114 1,1,1,2-Tetrachloroethane	131		10.774				ND	
115 Ethylbenzene	91		10.780				ND	
116 m-Xylene & p-Xylene	106		10.902				ND	
S 117 Xylenes, Total	106		11.245				ND	7
118 o-Xylene	106		11.250				ND	7
119 Styrene	104		11.268				ND	7
120 Bromoform	173		11.426				ND	7
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1228537	8.95	
126 1,1,2,2-Tetrachloroethane	83		11.829				ND	
128 1,2,3-Trichloropropane	110		11.871				ND	
134 Pentachloroethane	167		12.329				ND	
137 1,3-Dichlorobenzene	146		12.566				ND	7
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1474657	10.0	
140 1,4-Dichlorobenzene	146		12.640				ND	7
144 1,2-Dichlorobenzene	146		12.902				ND	7
148 1,2-Dibromo-3-Chloropropane	155		13.469				ND	7
150 1,2,4-Trichlorobenzene	180		14.023				ND	
151 Hexachlorobutadiene	225		14.103				ND	
152 Naphthalene	128		14.200				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

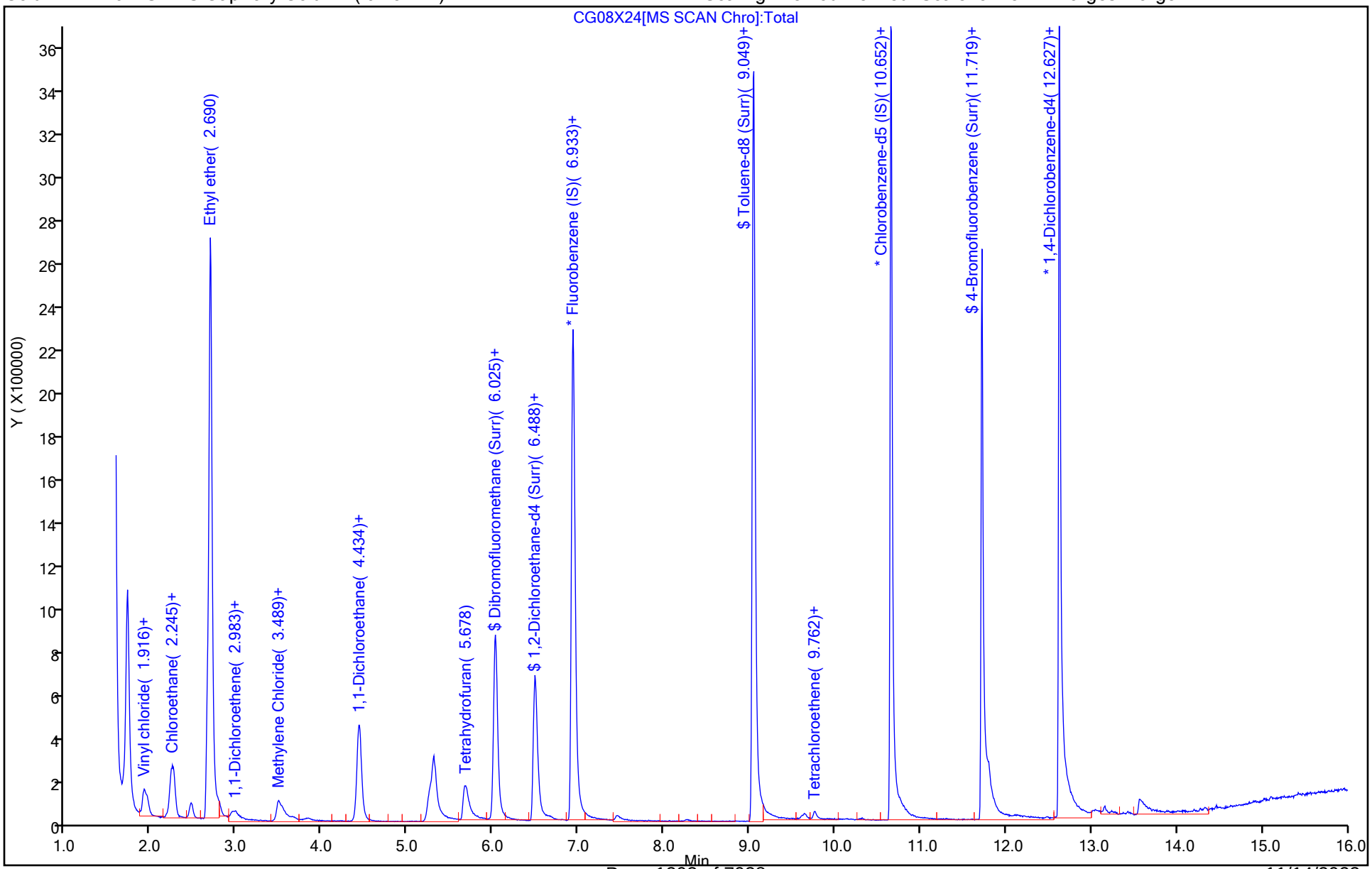
MSV_HP25_ISSS_00074 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Aug-2023 14:59:19 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D				
Injection Date:	09-Aug-2023 02:41:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-B-1	Lab Sample ID:	410-136864-1	Worklist Smp#:	25
Client ID:	16C1				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D				
Lims ID:	410-136864-B-1				
Client ID:	16C1				
Sample Type:	Client				
Inject. Date:	09-Aug-2023 02:41:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-025				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 14:59:19	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 14:59:19

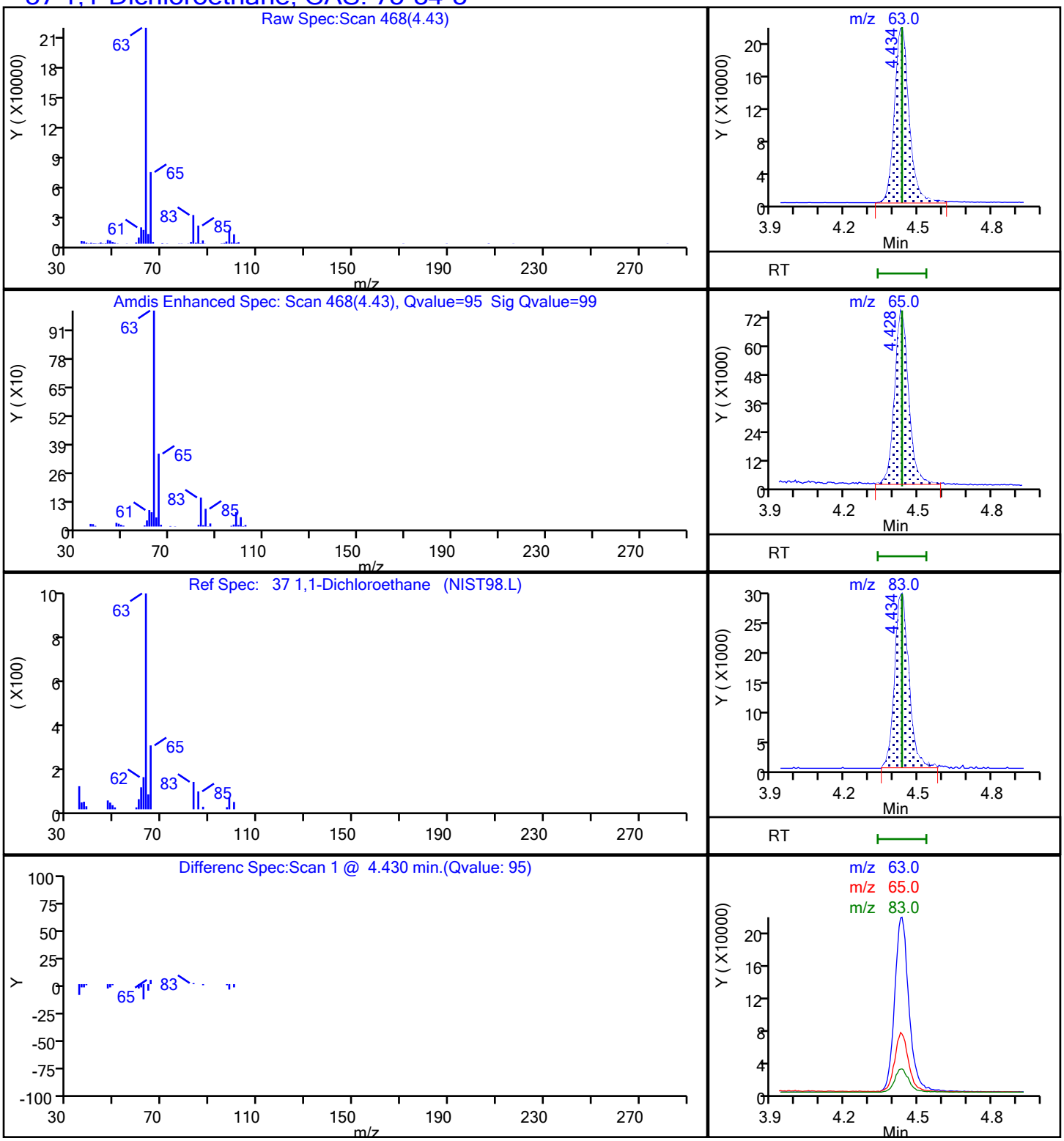
Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	102.66
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.92
$ 83 Toluene-d8 (Surr)	10.0	9.62	96.19
$ 124 4-Bromofluorobenzene (Surr)	10.0	8.95	89.51

Report Date: 09-Aug-2023 14:59:19 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D				
Injection Date:	09-Aug-2023 02:41:30	Instrument ID:	10193		
Lims ID:	410-136864-B-1	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	gaw91131	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

37 1,1-Dichloroethane, CAS: 75-34-3

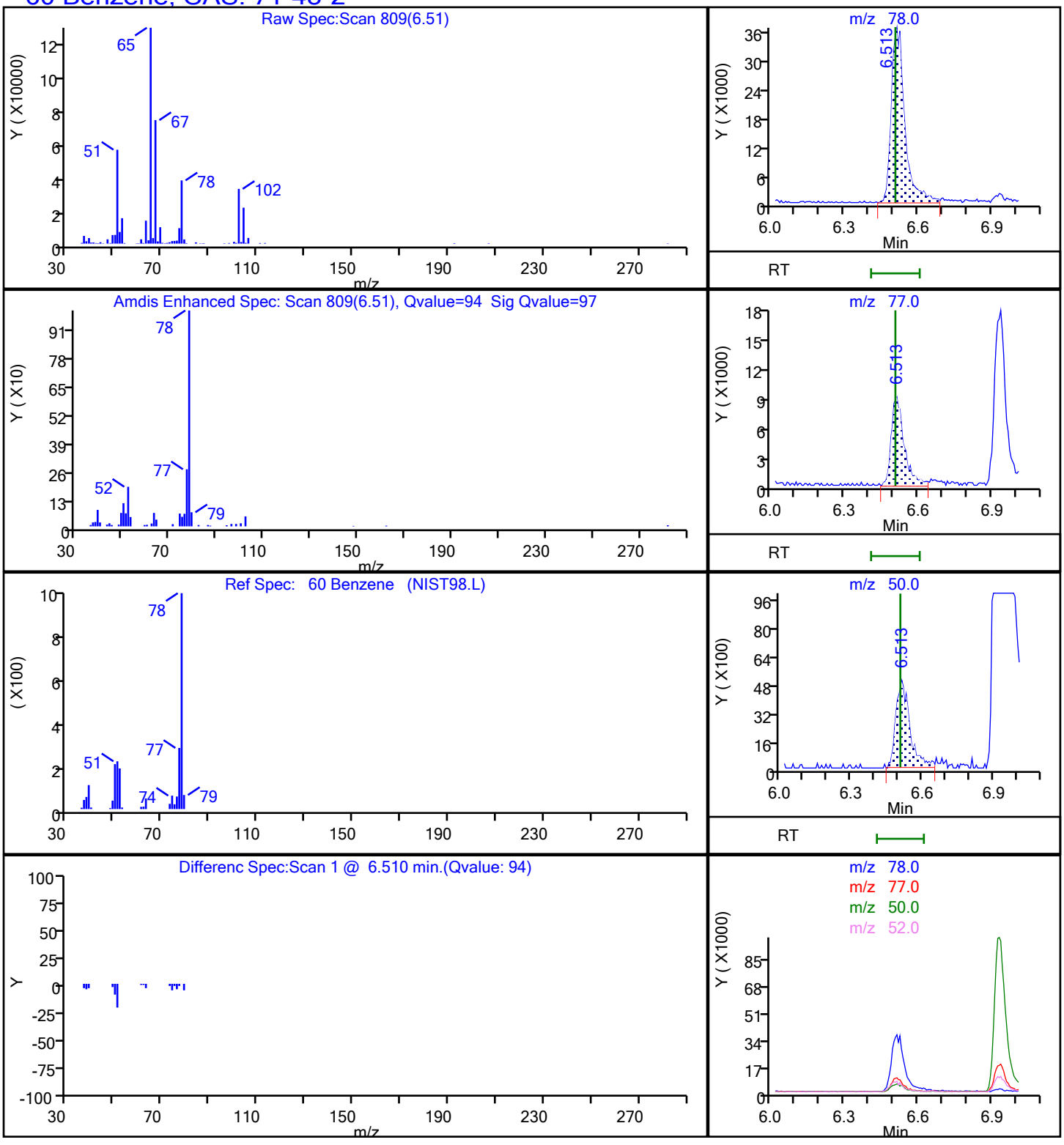


11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D				
Injection Date:	09-Aug-2023 02:41:30	Instrument ID:	10193		
Lims ID:	410-136864-B-1	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	gaw91131	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

60 Benzene, CAS: 71-43-2

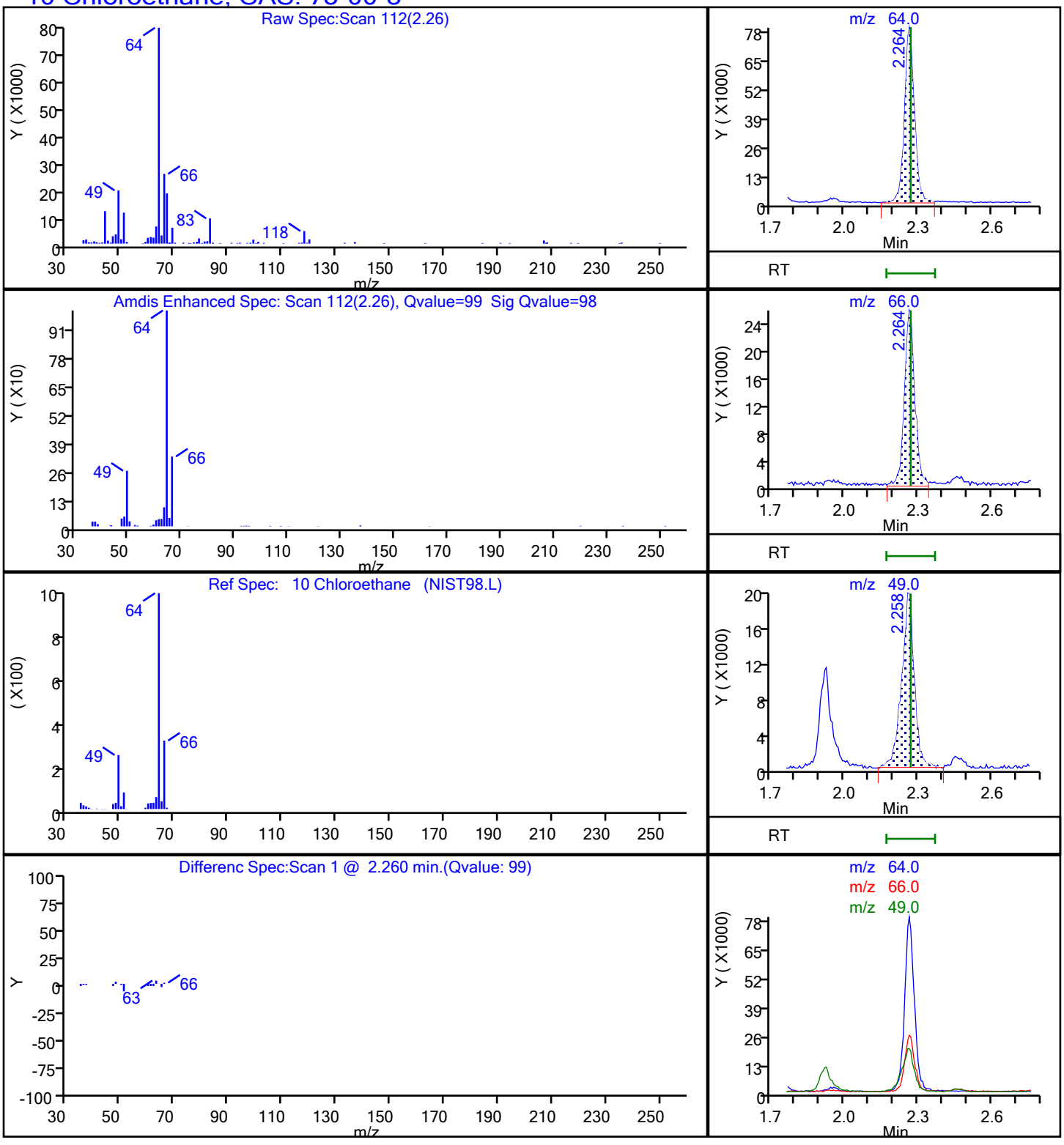


Report Date: 09-Aug-2023 14:59:19 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D				
Injection Date:	09-Aug-2023 02:41:30	Instrument ID:	10193		
Lims ID:	410-136864-B-1	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	gaw91131	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

10 Chloroethane, CAS: 75-00-3



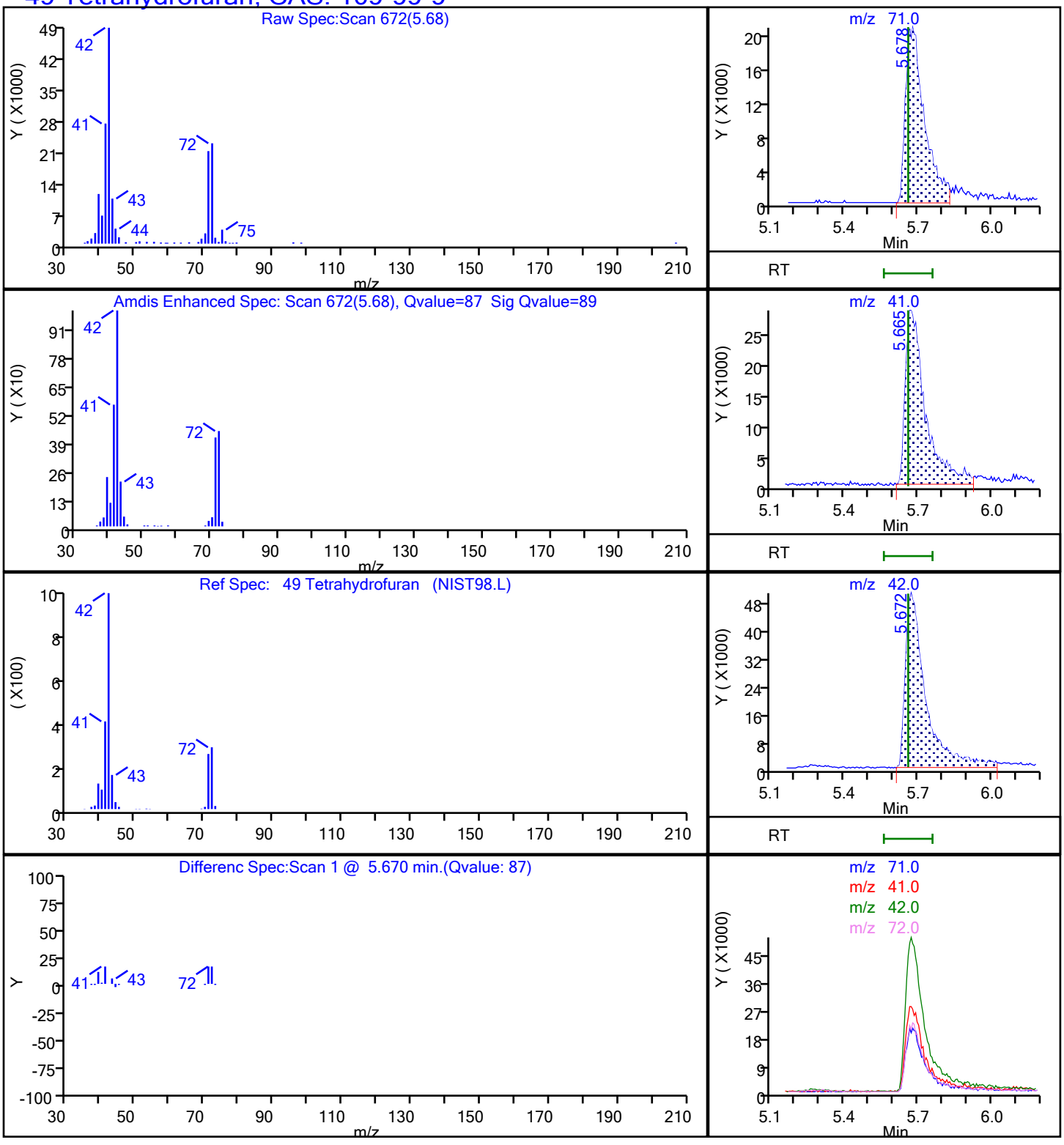
11/14/2023
11:12 AM

Report Date: 09-Aug-2023 14:59:19 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D				
Injection Date:	09-Aug-2023 02:41:30	Instrument ID:	10193		
Lims ID:	410-136864-B-1	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	gaw91131	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

49 Tetrahydrofuran, CAS: 109-99-9



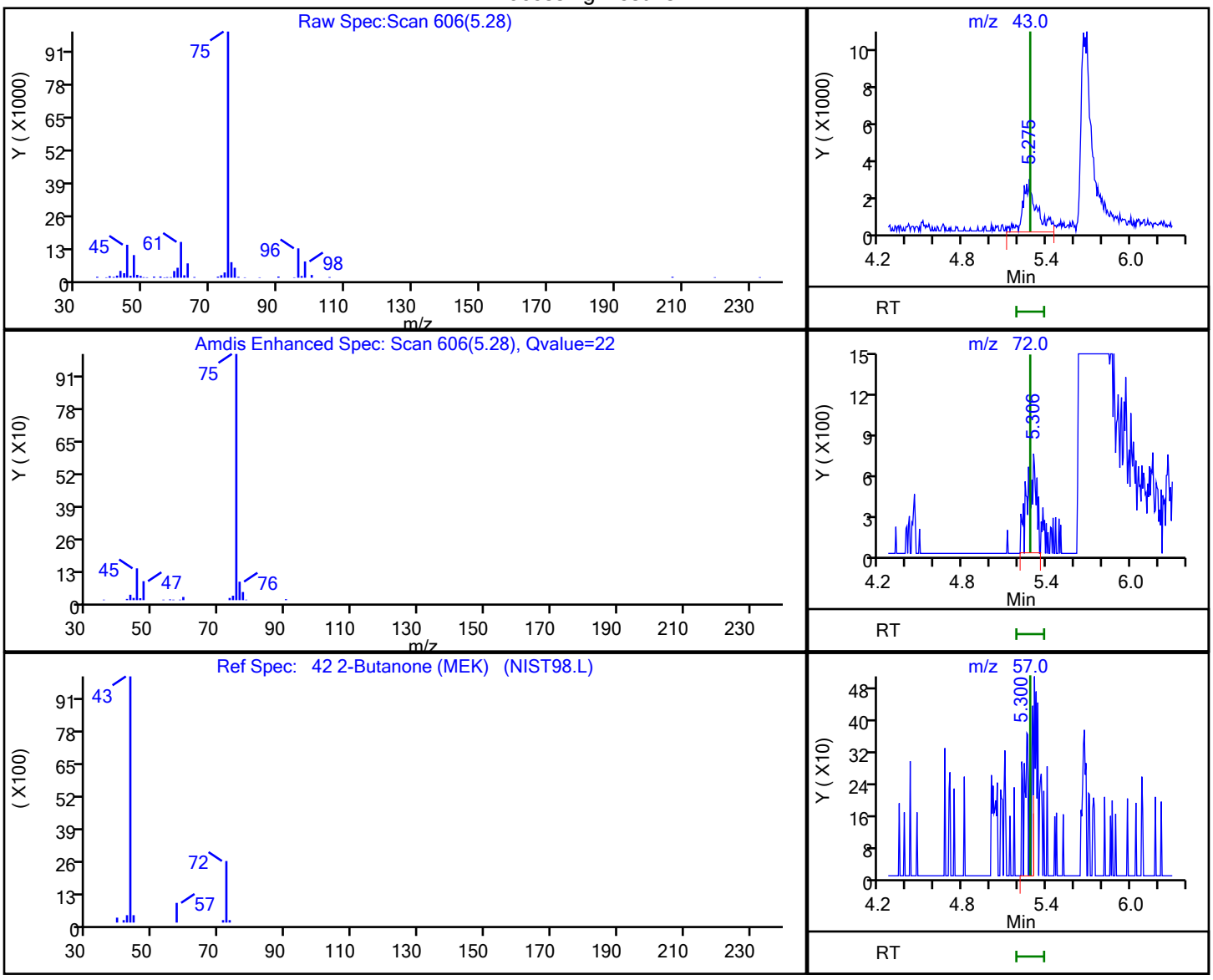
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D				
Injection Date:	09-Aug-2023 02:41:30	Instrument ID:	10193		
Lims ID:	410-136864-B-1	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	gaw91131	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

42 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.28	43.00	17774	0.753886
5.31	72.00	3198	
5.30	57.00	1280	

Reviewer: innoonk, 09-Aug-2023 14:58:19 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

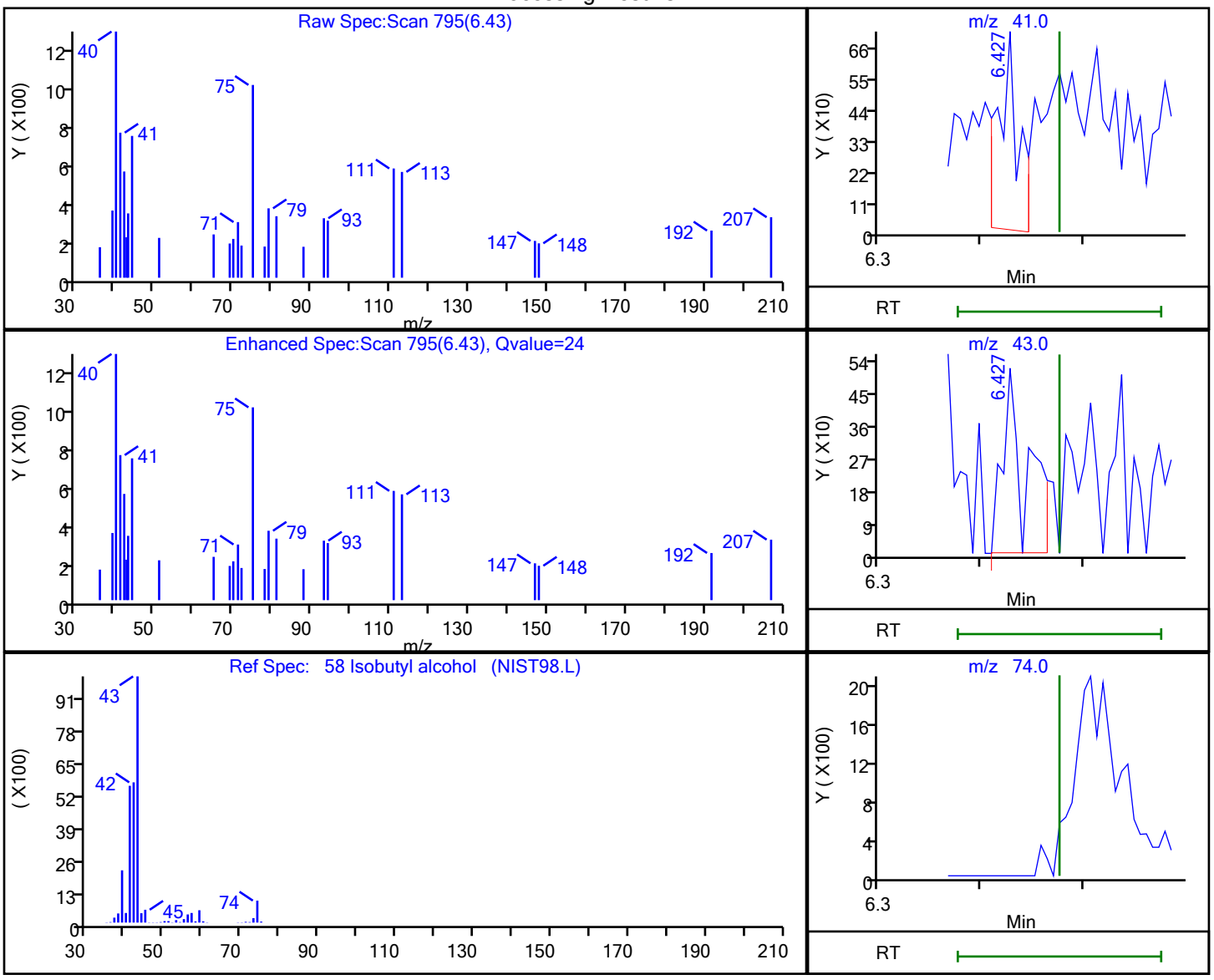
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D				
Injection Date:	09-Aug-2023 02:41:30	Instrument ID:	10193		
Lims ID:	410-136864-B-1	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	gaw91131	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
6.43	41.00	973	20.647320
6.43	43.00	854	
6.48	74.00	0	

Reviewer: innoonk, 09-Aug-2023 14:58:29 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

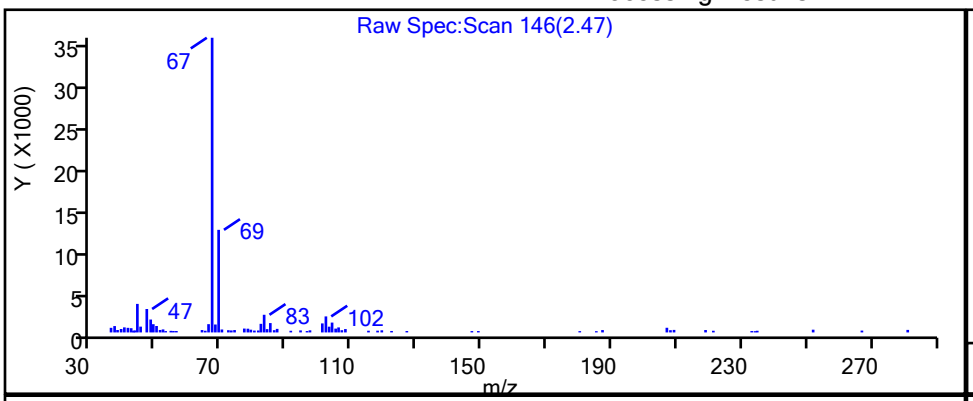
User Disabled Compound Report

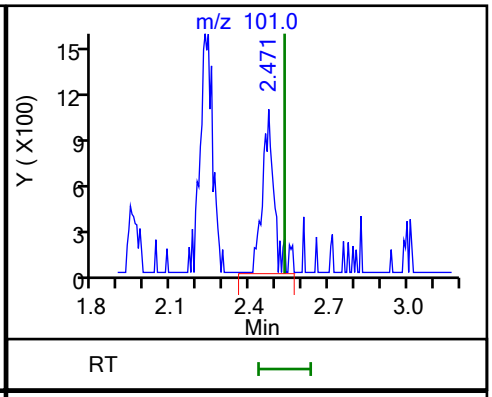
Eurofins Lancaster Laboratories Environment Testing, LLC

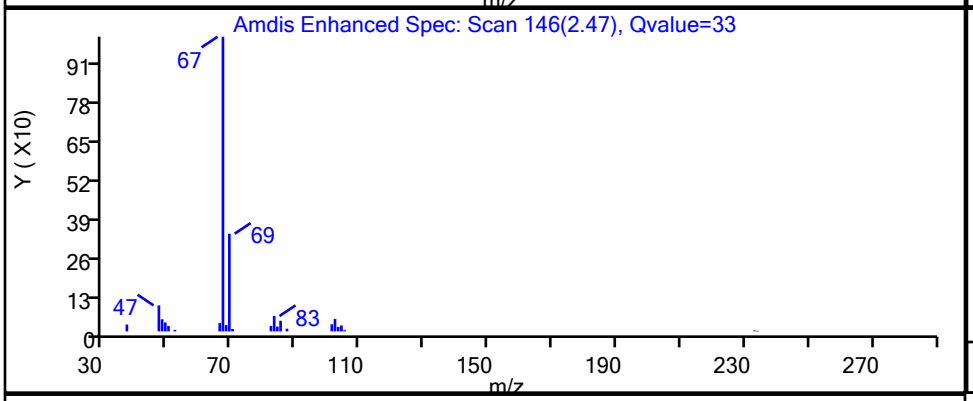
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X24.D				
Injection Date:	09-Aug-2023 02:41:30	Instrument ID:	10193		
Lims ID:	410-136864-B-1	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	gaw91131	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

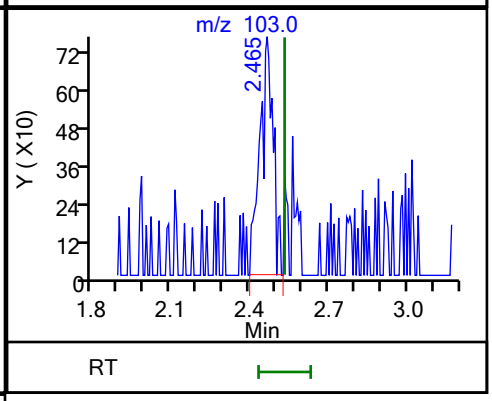
12 Trichlorofluoromethane, CAS: 75-69-4

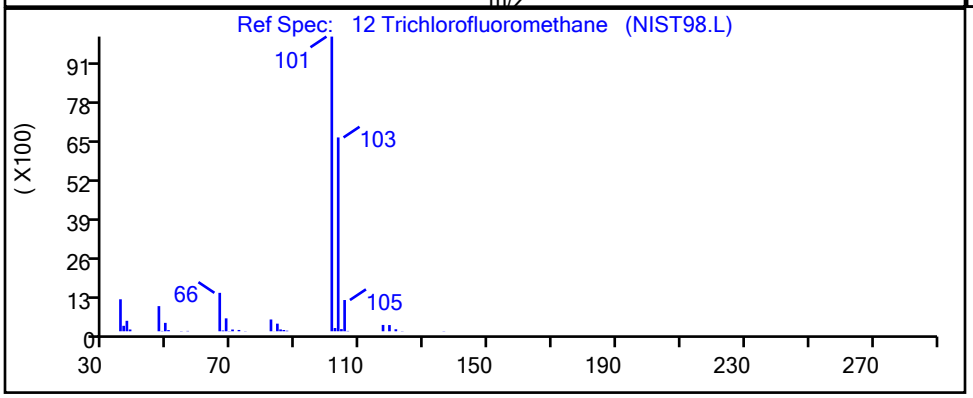
Processing Results











RT	Mass	Response	Amount
2.47	101.00	3398	0.026902
2.46	103.00	2689	

Reviewer: innoonk, 09-Aug-2023 14:58:04 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16C1 DL Lab Sample ID: 410-136864-1 DL

Matrix: Water Lab File ID: CG08X25.D

Analysis Method: 8260D Date Collected: 07/27/2023 12:45

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 03:03

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
60-29-7	Diethyl ether	33	J	40	4.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X25.D
Lims ID: 410-136864-C-1 DL
Client ID: 16C1
Sample Type: Client
Inject. Date: 09-Aug-2023 03:03:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 4.0000
Sample Info: 410-0090928-026
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 15:02:34 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 15:02:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85		1.684				ND	
4 Dimethyl ether	45	1.733	1.739	-0.006	88	223452	1.76	
5 Chloromethane	50		1.849				ND	7
6 Vinyl chloride	62		1.940				ND	7
9 Bromomethane	94		2.209				ND	7
10 Chloroethane	64	2.269	2.270	-0.001	99	47653	0.7271	
12 Trichlorofluoromethane	101		2.532				ND	
14 Ethyl ether	59	2.702	2.696	0.006	89	598819	8.35	
18 1,1-Dichloroethene	96	2.958	2.946	0.012	30	2859	0.0351	
20 Acetone	43	2.989	2.989	0.000	49	6504	0.5138	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.001				ND	
22 Iodomethane	142		3.111				ND	7
25 Carbon disulfide	76		3.196				ND	7
27 Acetonitrile	41		3.318				ND	
29 3-Chloro-1-propene	41		3.336				ND	7
30 Methylene Chloride	84	3.495	3.489	0.006	95	11762	0.1155	
* 31 t-Butyl alcohol-d10 (IS)	65	3.538	3.544	-0.006	96	266648	50.0	
33 Acrylonitrile	53		3.800				ND	7
35 trans-1,2-Dichloroethene	96		3.824				ND	7
37 1,1-Dichloroethane	63	4.446	4.434	0.012	96	196832	1.13	
38 Vinyl acetate	43		4.446				ND	7
40 2-Chloro-1,3-butadiene	53		4.550				ND	7
42 2-Butanone (MEK)	43		5.281				ND	7
45 Propionitrile	54		5.391				ND	
47 Methacrylonitrile	67		5.586				ND	
49 Tetrahydrofuran	71	5.708	5.659	0.049	90	19687	2.71	
50 Chloroform	83		5.799				ND	
53 1,1,1-Trichloroethane	97	6.031	6.025	0.006	35	6232	0.0431	
$ 54 Dibromofluoromethane (Surr)	113	6.031	6.025	0.006	95	905355	10.3	
56 Carbon tetrachloride	117		6.238				ND	
58 Isobutyl alcohol	41		6.476				ND	U
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.494	6.482	0.012	99	196616	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Benzene	78	6.519	6.507	0.012	94	31050	0.0751	
61 1,2-Dichloroethane	62		6.592				ND	7
* 65 Fluorobenzene (IS)	96	6.939	6.933	0.006	99	3745168	10.0	
68 Trichloroethene	95		7.427				ND	7
70 1,2-Dichloropropane	63		7.769				ND	7
72 Dibromomethane	93		7.884				ND	
74 1,4-Dioxane	88		7.890				ND	
73 Methyl methacrylate	69		7.890				ND	7
76 Dichlorobromomethane	83		8.134				ND	
82 4-Methyl-2-pentanone (MIBK)	43		8.915				ND	7
$ 83 Toluene-d8 (Surr)	98	9.049	9.043	0.006	93	3726397	9.67	
84 Toluene	92		9.134				ND	7
85 trans-1,3-Dichloropropene	75		9.451				ND	7
86 Ethyl methacrylate	69		9.536				ND	7
87 1,1,2-Trichloroethane	97		9.671				ND	
88 Tetrachloroethene	166		9.750				ND	7
89 1,3-Dichloropropane	76		9.841				ND	
106 2-Hexanone	43		9.921				ND	7
108 Chlorodibromomethane	129		10.073				ND	
110 Ethylene Dibromide	107		10.183				ND	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.652	0.006	83	2934203	10.0	
114 1,1,1,2-Tetrachloroethane	131		10.774				ND	
115 Ethylbenzene	91		10.780				ND	7
116 m-Xylene & p-Xylene	106		10.902				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
118 o-Xylene	106		11.250				ND	
119 Styrene	104		11.268				ND	7
120 Bromoform	173		11.426				ND	7
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1267564	9.19	M
126 1,1,2,2-Tetrachloroethane	83		11.829				ND	
128 1,2,3-Trichloropropane	110		11.871				ND	
134 Pentachloroethane	167		12.329				ND	
137 1,3-Dichlorobenzene	146		12.566				ND	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1598775	10.0	
140 1,4-Dichlorobenzene	146		12.640				ND	
144 1,2-Dichlorobenzene	146		12.902				ND	
148 1,2-Dibromo-3-Chloropropane	155		13.469				ND	
150 1,2,4-Trichlorobenzene	180		14.023				ND	
151 Hexachlorobutadiene	225		14.103				ND	
152 Naphthalene	128		14.200				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

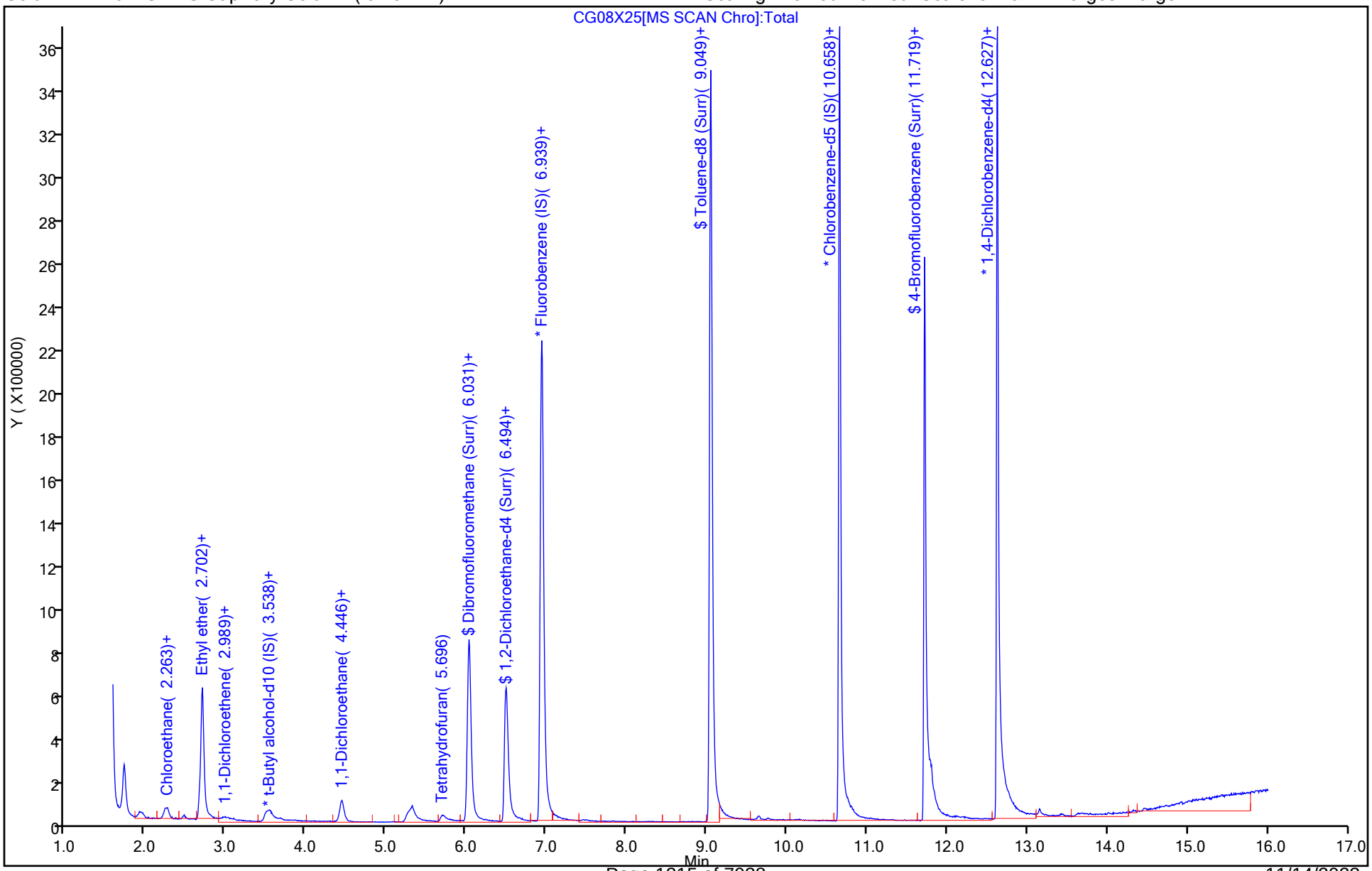
MSV_HP25_ISSS_00074 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Aug-2023 15:02:34 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X25.D				
Injection Date:	09-Aug-2023 03:03:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-C-1 DL	Lab Sample ID:	410-136864-1	Worklist Smp#:	26
Client ID:	16C1				
Purge Vol:	25.000 mL	Dil. Factor:	4.0000	ALS Bottle#:	25
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X25.D				
Lims ID:	410-136864-C-1 DL				
Client ID:	16C1				
Sample Type:	Client				
Inject. Date:	09-Aug-2023 03:03:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	4.0000		
Sample Info:	410-0090928-026				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 15:02:34	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

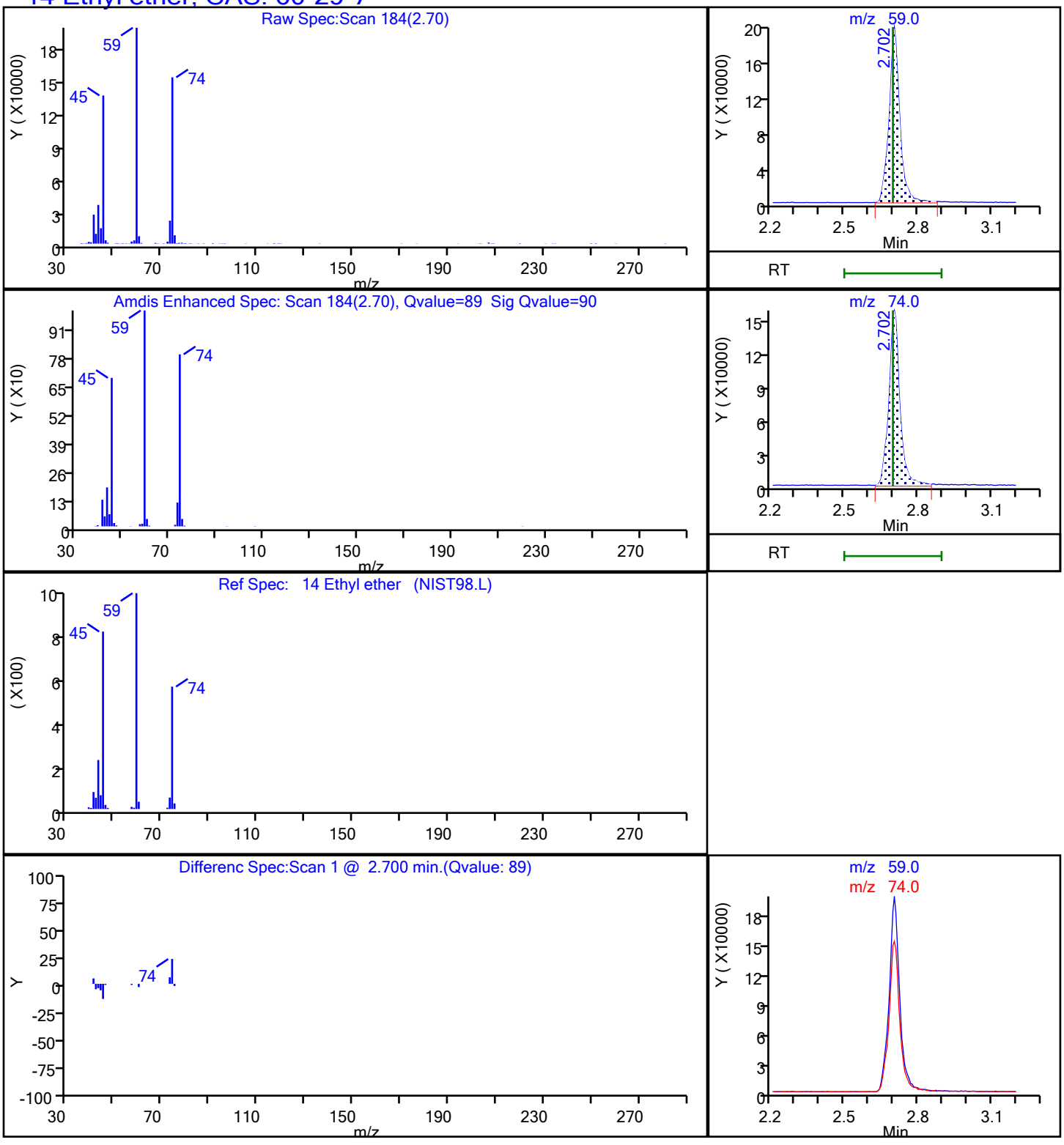
First Level Reviewer: innoonk Date: 09-Aug-2023 15:02:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	103.40
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	106.20
$ 83 Toluene-d8 (Surr)	10.0	9.67	96.66
$ 124 4-Bromofluorobenzene (Surr)	10.0	9.19	91.90

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X25.D				
Injection Date:	09-Aug-2023 03:03:30	Instrument ID:	10193		
Lims ID:	410-136864-C-1 DL	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	gaw91131	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	4.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

14 Ethyl ether, CAS: 60-29-7



Eurofins Lancaster Laboratories Environment Testing, LLC

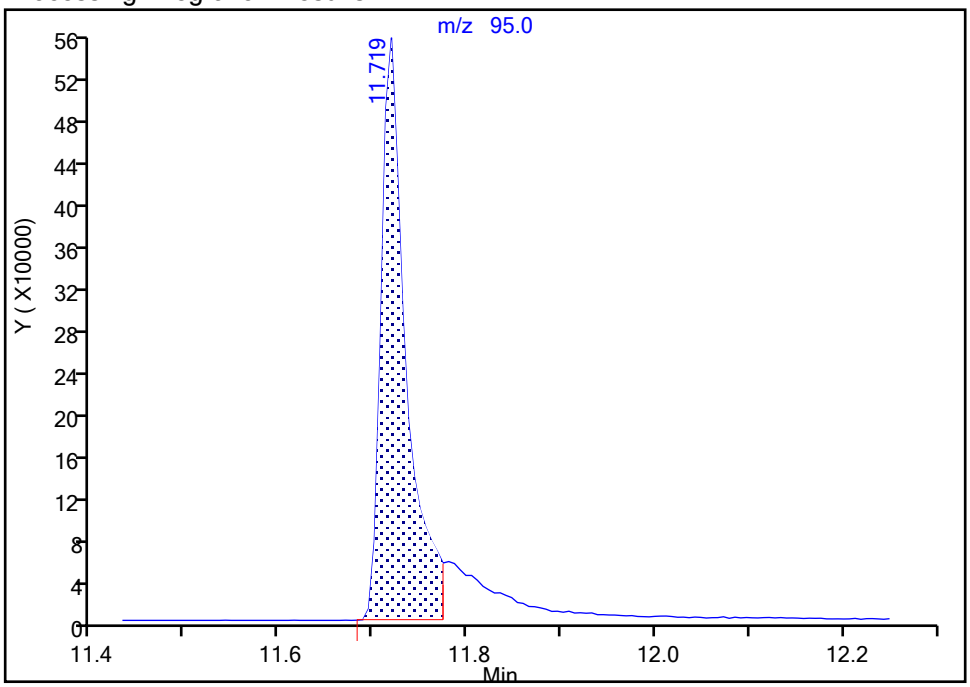
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X25.D				
Injection Date:	09-Aug-2023 03:03:30	Instrument ID:	10193		
Lims ID:	410-136864-C-1 DL	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	gaw91131	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	4.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

$ 124 4-Bromofluorobenzene (Surr), CAS: 460-00-4

Signal: 1

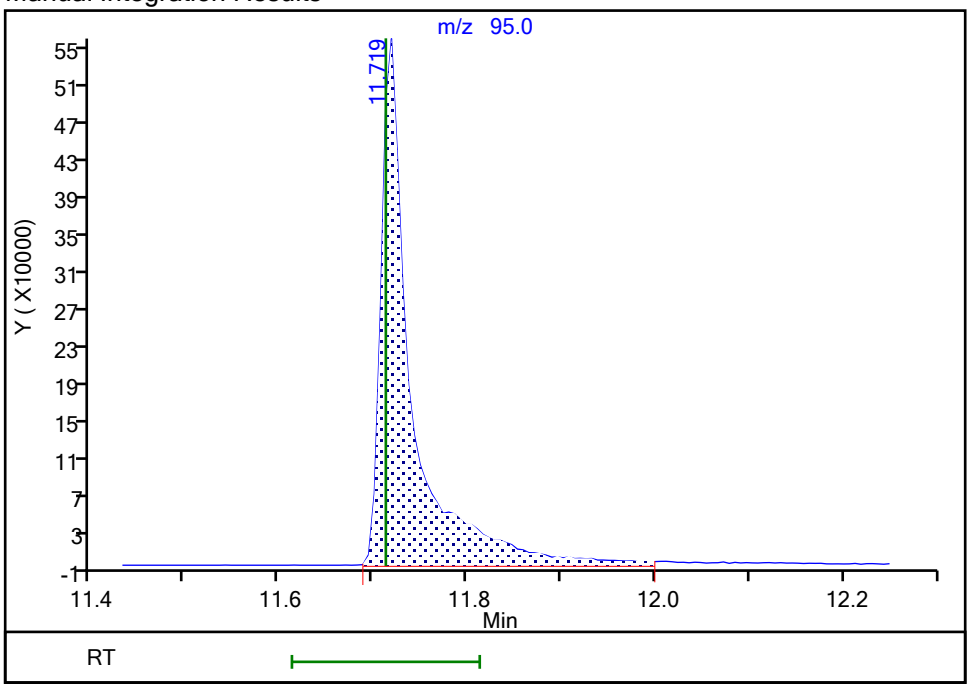
Processing Integration Results

RT: 11.72
Area: 1034809
Amount: 7.502308
Amount Units: ug/l



Manual Integration Results

RT: 11.72
Area: 1267564
Amount: 9.189769
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 15:00:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW8 Lab Sample ID: 410-136864-2

Matrix: Water Lab File ID: CG08X19.D

Analysis Method: 8260D Date Collected: 07/26/2023 10:05

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 00:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.30
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.30
75-34-3	1,1-Dichloroethane	ND		1.0	0.30
75-35-4	1,1-Dichloroethene	ND		1.0	0.30
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.40
106-93-4	1,2-Dibromoethane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.40
107-06-2	1,2-Dichloroethane	ND		1.0	0.30
78-87-5	1,2-Dichloropropane	ND		1.0	0.40
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.40
142-28-9	1,3-Dichloropropane	ND		1.0	0.40
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.40
123-91-1	1,4-Dioxane	ND		200	45
78-93-3	2-Butanone	ND		10	1.7
591-78-6	2-Hexanone	ND		10	2.0
108-10-1	4-Methyl-2-pentanone	ND		10	2.0
67-64-1	Acetone	ND		10	2.0
75-05-8	Acetonitrile	ND		100	31
107-13-1	Acrylonitrile	ND		10	1.1
107-05-1	Allyl chloride	ND		10	1.0
71-43-2	Benzene	ND		1.0	0.30
75-27-4	Bromodichloromethane	ND		1.0	0.30
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.54
75-15-0	Carbon disulfide	ND		10	0.40
56-23-5	Carbon tetrachloride	ND		1.0	0.30
75-00-3	Chloroethane	0.083	J	1.0	0.070
67-66-3	Chloroform	ND		1.0	0.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW8 Lab Sample ID: 410-136864-2

Matrix: Water Lab File ID: CG08X19.D

Analysis Method: 8260D Date Collected: 07/26/2023 10:05

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 00:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.10
126-99-8	Chloroprene	ND		10	0.46
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.30
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
60-29-7	Diethyl ether	9.6	J	10	1.1
97-63-2	Ethyl methacrylate	ND		10	0.81
100-41-4	Ethylbenzene	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		1.0	0.40
78-83-1	Isobutyl alcohol	ND		200	11
179601-23-1	m&p-Xylene	ND		2.0	0.40
126-98-7	Methacrylonitrile	ND		100	9.7
74-88-4	Methyl iodide	ND		10	0.58
80-62-6	Methyl methacrylate	ND		10	3.5
75-09-2	Methylene Chloride	ND		1.0	0.70
91-20-3	Naphthalene	ND		1.0	0.40
95-47-6	o-Xylene	ND		1.0	0.40
76-01-7	Pentachloroethane	ND		10	1.7
107-12-0	Propionitrile	ND	cn	100	10
100-42-5	Styrene	ND		1.0	0.30
127-18-4	Tetrachloroethene	ND		1.0	0.30
109-99-9	Tetrahydrofuran	ND		25	2.0
108-88-3	Toluene	ND		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.40
79-01-6	Trichloroethene	ND		1.0	0.30
75-69-4	Trichlorofluoromethane	ND		1.0	0.40
108-05-4	Vinyl acetate	ND		10	3.2
75-01-4	Vinyl chloride	ND		1.0	0.20
1330-20-7	Xylenes, Total	ND		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW8 Lab Sample ID: 410-136864-2

Matrix: Water Lab File ID: CG08X19.D

Analysis Method: 8260D Date Collected: 07/26/2023 10:05

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 00:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X19.D
Lims ID: 410-136864-B-2
Client ID: 16MW8
Sample Type: Client
Inject. Date: 09-Aug-2023 00:51:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-020
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 12:16:17 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 12:16:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85		1.684				ND	
4 Dimethyl ether	45	1.721	1.739	-0.018	69	36877	0.2881	
5 Chloromethane	50		1.849				ND	7
6 Vinyl chloride	62		1.940				ND	7
9 Bromomethane	94		2.209				ND	7
10 Chloroethane	64	2.270	2.270	0.000	38	5453	0.0826	
12 Trichlorofluoromethane	101		2.532				ND	7
14 Ethyl ether	59	2.696	2.696	0.000	89	692559	9.59	
18 1,1-Dichloroethene	96		2.946				ND	7
20 Acetone	43	3.007	2.989	0.018	61	11921	0.9287	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.001				ND	
22 Iodomethane	142		3.111				ND	
25 Carbon disulfide	76		3.196				ND	7
27 Acetonitrile	41		3.318				ND	7
29 3-Chloro-1-propene	41		3.336				ND	
30 Methylene Chloride	84	3.501	3.489	0.012	36	5283	0.0515	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.526	3.544	-0.018	97	270376	50.0	
33 Acrylonitrile	53		3.800				ND	7
35 trans-1,2-Dichloroethene	96		3.824				ND	
37 1,1-Dichloroethane	63	4.434	4.434	0.000	96	30783	0.1762	
38 Vinyl acetate	43		4.446				ND	7
40 2-Chloro-1,3-butadiene	53		4.550				ND	
42 2-Butanone (MEK)	43		5.281				ND	7
45 Propionitrile	54		5.391				ND	
47 Methacrylonitrile	67		5.586				ND	
49 Tetrahydrofuran	71	5.708	5.659	0.049	95	10366	1.40	
50 Chloroform	83		5.799				ND	7
53 1,1,1-Trichloroethane	97		6.025				ND	
$ 54 Dibromofluoromethane (Surr)	113	6.031	6.025	0.006	94	903020	10.2	
56 Carbon tetrachloride	117		6.238				ND	
58 Isobutyl alcohol	41		6.476				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.488	6.482	0.006	99	189378	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Benzene	78	6.519	6.507	0.012	93	21385	0.0514	
61 1,2-Dichloroethane	62		6.592				ND	7
* 65 Fluorobenzene (IS)	96	6.940	6.933	0.007	99	3772145	10.0	
68 Trichloroethene	95		7.427				ND	
70 1,2-Dichloropropane	63		7.769				ND	7
72 Dibromomethane	93		7.884				ND	
74 1,4-Dioxane	88		7.890				ND	
73 Methyl methacrylate	69		7.890				ND	
76 Dichlorobromomethane	83		8.134				ND	
82 4-Methyl-2-pentanone (MIBK)	43		8.915				ND	7
$ 83 Toluene-d8 (Surr)	98	9.049	9.043	0.006	93	3731019	9.64	
84 Toluene	92		9.134				ND	7
85 trans-1,3-Dichloropropene	75		9.451				ND	7
86 Ethyl methacrylate	69		9.536				ND	7
87 1,1,2-Trichloroethane	97		9.671				ND	
88 Tetrachloroethene	166	9.762	9.750	0.012	90	4234	0.0319	
89 1,3-Dichloropropane	76		9.841				ND	7
106 2-Hexanone	43		9.921				ND	7
108 Chlorodibromomethane	129		10.073				ND	
110 Ethylene Dibromide	107		10.183				ND	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.652	0.006	83	2947068	10.0	
114 1,1,1,2-Tetrachloroethane	131		10.774				ND	
115 Ethylbenzene	91		10.780				ND	
116 m-Xylene & p-Xylene	106		10.902				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
118 o-Xylene	106		11.250				ND	7
119 Styrene	104		11.268				ND	7
120 Bromoform	173		11.426				ND	7
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1242076	8.97	
126 1,1,2,2-Tetrachloroethane	83		11.829				ND	
128 1,2,3-Trichloropropane	110		11.871				ND	
134 Pentachloroethane	167		12.329				ND	
137 1,3-Dichlorobenzene	146		12.566				ND	7
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1566123	10.0	
140 1,4-Dichlorobenzene	146		12.640				ND	7
144 1,2-Dichlorobenzene	146		12.902				ND	
148 1,2-Dibromo-3-Chloropropane	155		13.469				ND	
150 1,2,4-Trichlorobenzene	180		14.023				ND	
151 Hexachlorobutadiene	225		14.103				ND	
152 Naphthalene	128		14.200				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

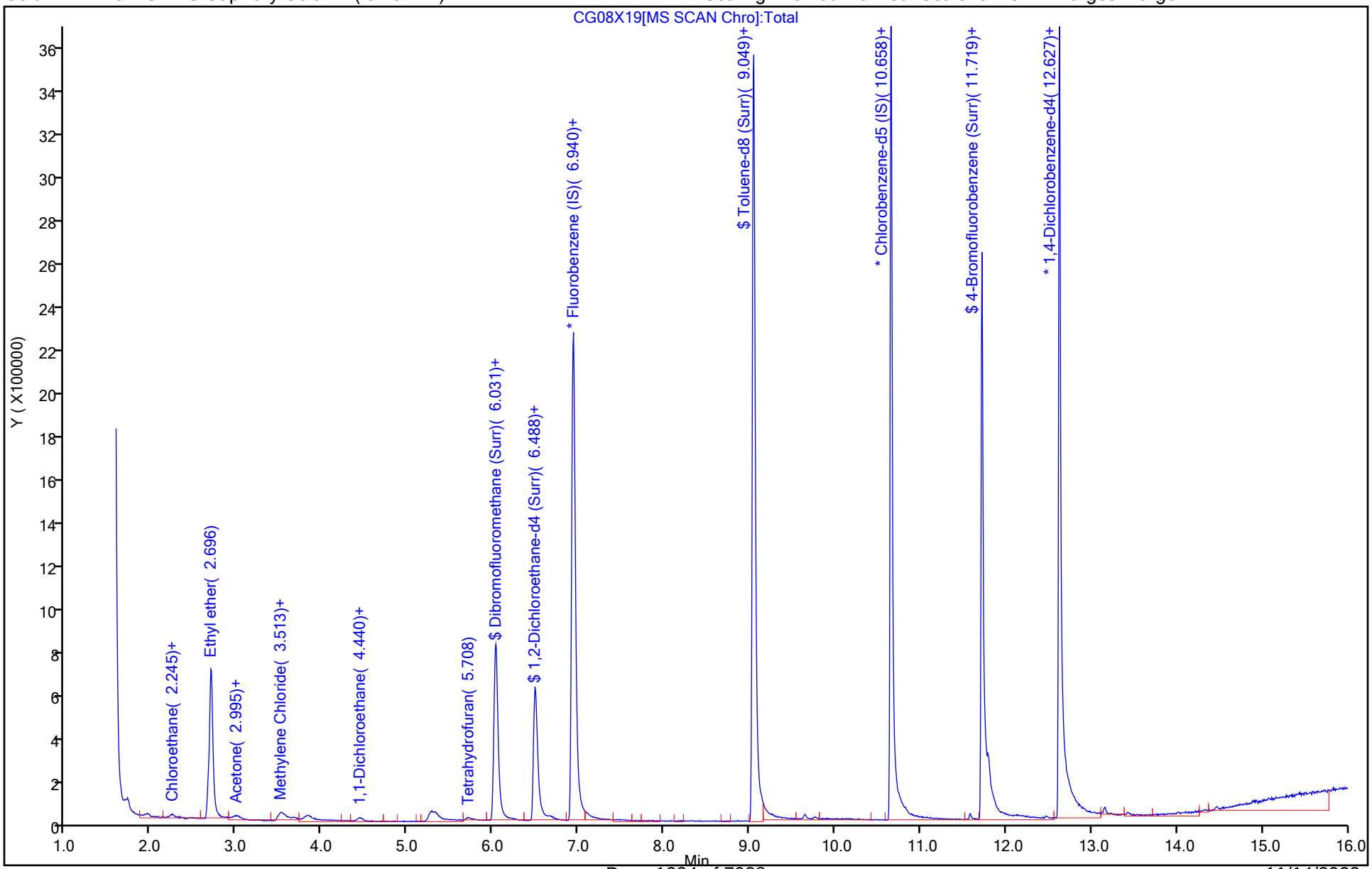
MSV_HP25_ISSS_00074 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Aug-2023 12:16:18 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X19.D				
Injection Date:	09-Aug-2023 00:51:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-B-2	Lab Sample ID:	410-136864-2	Worklist Smp#:	20
Client ID:	16MW8				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X19.D				
Lims ID:	410-136864-B-2				
Client ID:	16MW8				
Sample Type:	Client				
Inject. Date:	09-Aug-2023 00:51:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-020				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 12:16:17	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 12:16:17

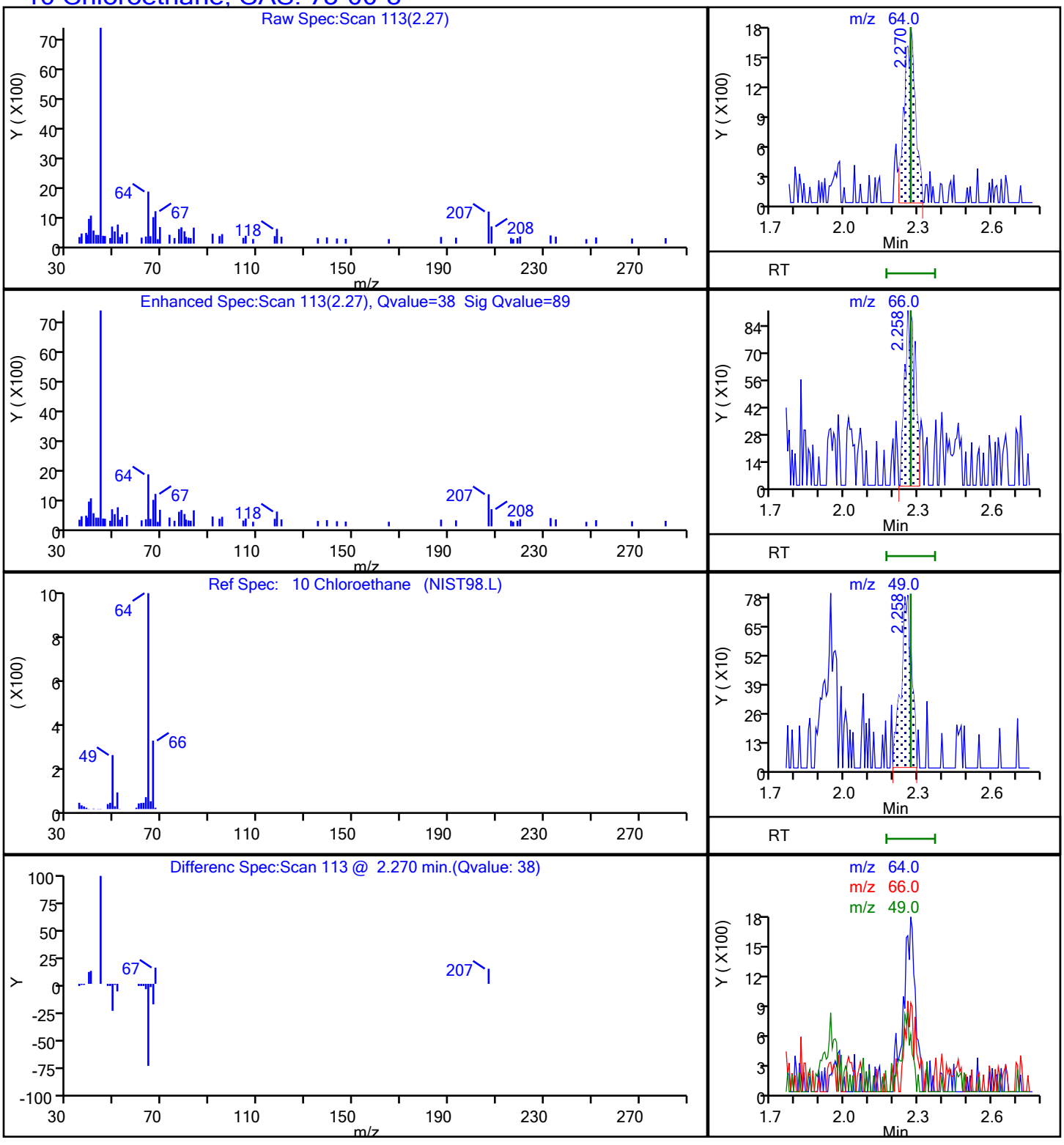
Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.2	102.39
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.56
$ 83 Toluene-d8 (Surr)	10.0	9.64	96.36
$ 124 4-Bromofluorobenzene (Surr)	10.0	8.97	89.66

Report Date: 09-Aug-2023 12:16:18 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X19.D				
Injection Date:	09-Aug-2023 00:51:30	Instrument ID:	10193		
Lims ID:	410-136864-B-2	Lab Sample ID:	410-136864-2		
Client ID:	16MW8				
Operator ID:	gaw91131	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

10 Chloroethane, CAS: 75-00-3



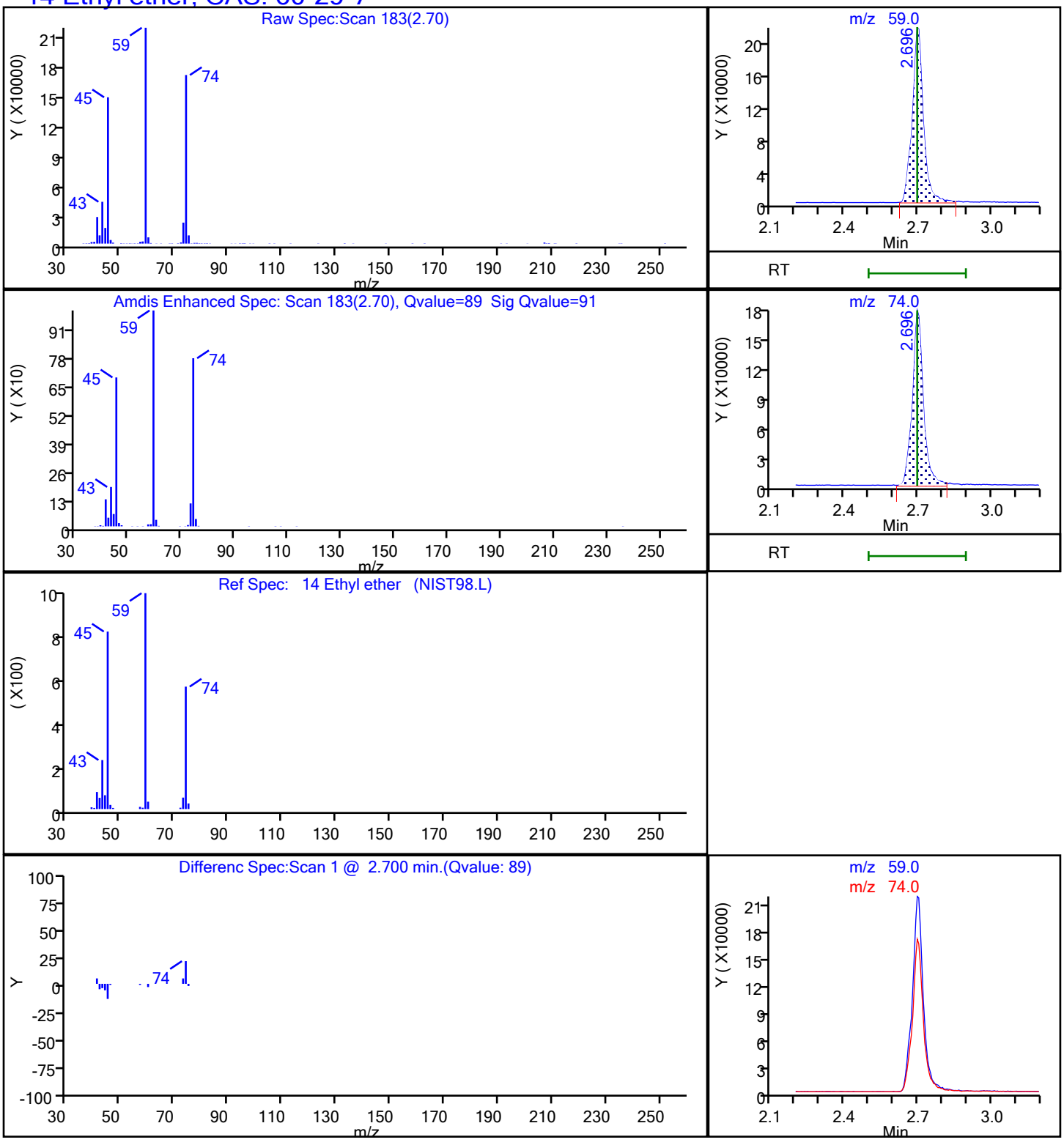
11/14/2023
11:12 AM

Report Date: 09-Aug-2023 12:16:18 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X19.D				
Injection Date:	09-Aug-2023 00:51:30	Instrument ID:	10193		
Lims ID:	410-136864-B-2	Lab Sample ID:	410-136864-2		
Client ID:	16MW8				
Operator ID:	gaw91131	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

14 Ethyl ether, CAS: 60-29-7



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

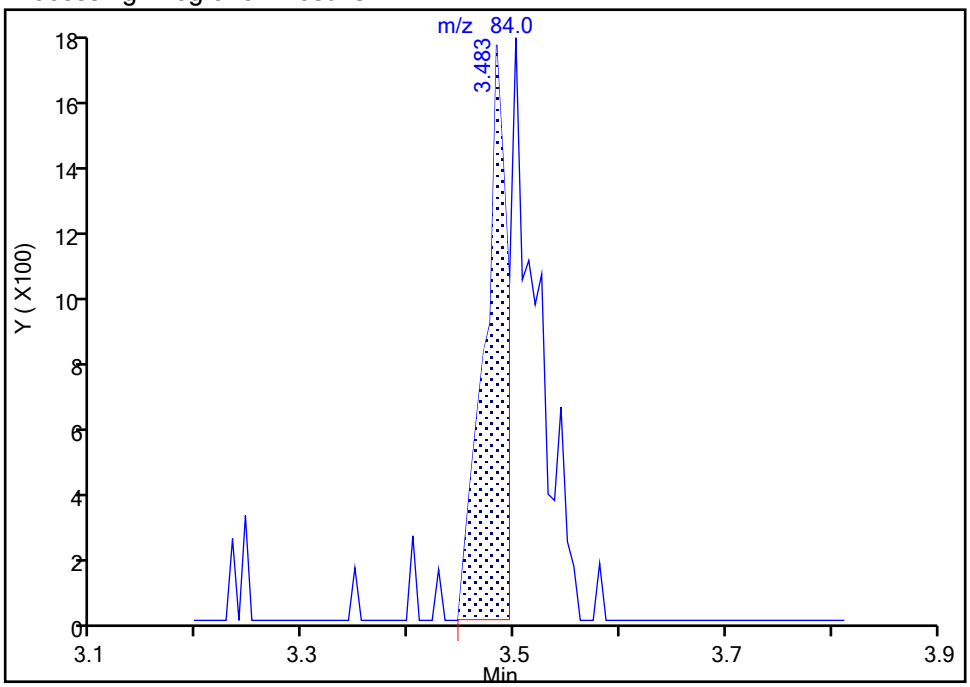
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X19.D				
Injection Date:	09-Aug-2023 00:51:30	Instrument ID:	10193		
Lims ID:	410-136864-B-2	Lab Sample ID:	410-136864-2		
Client ID:	16MW8				
Operator ID:	gaw91131	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

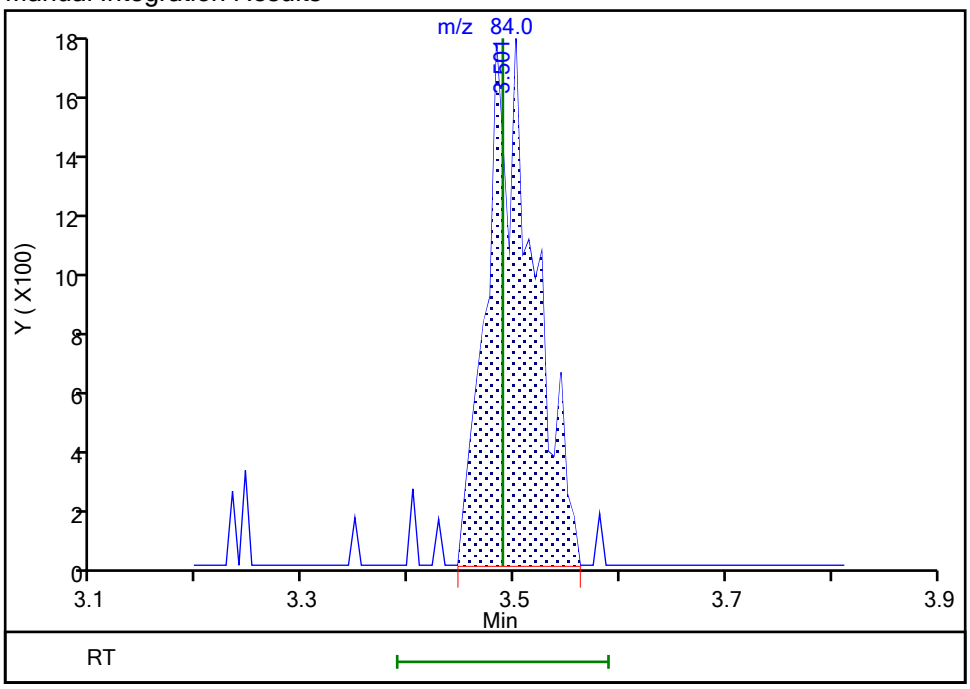
Processing Integration Results

RT: 3.48
Area: 2550
Amount: 0.024861
Amount Units: ug/l



Manual Integration Results

RT: 3.50
Area: 5283
Amount: 0.051505
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 12:15:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW9 Lab Sample ID: 410-136864-3

Matrix: Water Lab File ID: CG08X22.D

Analysis Method: 8260D Date Collected: 07/27/2023 11:25

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.30
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.30
75-34-3	1,1-Dichloroethane	5.1		1.0	0.30
75-35-4	1,1-Dichloroethene	ND		1.0	0.30
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.40
106-93-4	1,2-Dibromoethane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.40
107-06-2	1,2-Dichloroethane	ND		1.0	0.30
78-87-5	1,2-Dichloropropane	ND		1.0	0.40
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.40
142-28-9	1,3-Dichloropropane	ND		1.0	0.40
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.40
123-91-1	1,4-Dioxane	ND		200	45
78-93-3	2-Butanone	ND		10	1.7
591-78-6	2-Hexanone	ND		10	2.0
108-10-1	4-Methyl-2-pentanone	ND		10	2.0
67-64-1	Acetone	ND		10	2.0
75-05-8	Acetonitrile	ND		100	31
107-13-1	Acrylonitrile	ND		10	1.1
107-05-1	Allyl chloride	ND		10	1.0
71-43-2	Benzene	0.39	J	1.0	0.30
75-27-4	Bromodichloromethane	ND		1.0	0.30
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.54
75-15-0	Carbon disulfide	ND		10	0.40
56-23-5	Carbon tetrachloride	ND		1.0	0.30
75-00-3	Chloroethane	1.9		1.0	0.070
67-66-3	Chloroform	ND		1.0	0.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW9 Lab Sample ID: 410-136864-3

Matrix: Water Lab File ID: CG08X22.D

Analysis Method: 8260D Date Collected: 07/27/2023 11:25

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.10
126-99-8	Chloroprene	ND		10	0.46
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.30
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
97-63-2	Ethyl methacrylate	ND		10	0.81
100-41-4	Ethylbenzene	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		1.0	0.40
78-83-1	Isobutyl alcohol	ND		200	11
179601-23-1	m&p-Xylene	ND		2.0	0.40
126-98-7	Methacrylonitrile	ND		100	9.7
74-88-4	Methyl iodide	ND		10	0.58
80-62-6	Methyl methacrylate	ND		10	3.5
75-09-2	Methylene Chloride	ND		1.0	0.70
91-20-3	Naphthalene	ND		1.0	0.40
95-47-6	o-Xylene	ND		1.0	0.40
76-01-7	Pentachloroethane	ND		10	1.7
107-12-0	Propionitrile	ND	cn	100	10
100-42-5	Styrene	ND		1.0	0.30
127-18-4	Tetrachloroethene	ND		1.0	0.30
109-99-9	Tetrahydrofuran	ND		25	2.0
108-88-3	Toluene	ND		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.40
79-01-6	Trichloroethene	ND		1.0	0.30
75-69-4	Trichlorofluoromethane	ND		1.0	0.40
108-05-4	Vinyl acetate	ND		10	3.2
75-01-4	Vinyl chloride	ND		1.0	0.20
1330-20-7	Xylenes, Total	ND		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW9 Lab Sample ID: 410-136864-3

Matrix: Water Lab File ID: CG08X22.D

Analysis Method: 8260D Date Collected: 07/27/2023 11:25

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D
Lims ID: 410-136864-B-3
Client ID: 16MW9
Sample Type: Client
Inject. Date: 09-Aug-2023 01:56:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-023
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 13:38:42 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 13:36:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85		1.684				ND	
4 Dimethyl ether	45		1.739				ND	U
5 Chloromethane	50		1.849				ND	7
6 Vinyl chloride	62	1.941	1.940	0.001	46	12470	0.1102	
9 Bromomethane	94		2.209				ND	7
10 Chloroethane	64	2.258	2.270	-0.012	99	127945	1.92	
12 Trichlorofluoromethane	101		2.532				ND	7
14 Ethyl ether	59	2.690	2.696	-0.006	90	4825500	66.3	E
18 1,1-Dichloroethene	96	2.946	2.946	0.000	95	13834	0.1672	
20 Acetone	43	2.971	2.989	-0.018	33	7419	0.6160	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.001				ND	
22 Iodomethane	142		3.111				ND	
25 Carbon disulfide	76		3.196				ND	7
27 Acetonitrile	41		3.318				ND	
29 3-Chloro-1-propene	41		3.336				ND	
30 Methylene Chloride	84	3.483	3.489	-0.006	75	9057	0.0876	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.526	3.544	-0.018	97	253693	50.0	
33 Acrylonitrile	53		3.800				ND	7
35 trans-1,2-Dichloroethene	96	3.837	3.824	0.012	56	3397	0.0338	
37 1,1-Dichloroethane	63	4.434	4.434	0.000	96	899325	5.10	
38 Vinyl acetate	43		4.446				ND	U
40 2-Chloro-1,3-butadiene	53		4.550				ND	
42 2-Butanone (MEK)	43		5.281				ND	U
45 Propionitrile	54		5.391				ND	
47 Methacrylonitrile	67		5.586				ND	
49 Tetrahydrofuran	71		5.659				ND	
50 Chloroform	83		5.799				ND	
53 1,1,1-Trichloroethane	97		6.025				ND	
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	94	912008	10.3	
56 Carbon tetrachloride	117		6.238				ND	
58 Isobutyl alcohol	41		6.476				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.482	6.482	0.000	99	193706	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Benzene	78	6.507	6.507	0.000	95	164728	0.3923	
61 1,2-Dichloroethane	62		6.592				ND	7
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	99	3803984	10.0	
68 Trichloroethene	95	7.464	7.427	0.037	48	4836	0.0449	Ma
70 1,2-Dichloropropane	63		7.769				ND	7
72 Dibromomethane	93		7.884				ND	
74 1,4-Dioxane	88		7.890				ND	7
73 Methyl methacrylate	69		7.890				ND	
76 Dichlorobromomethane	83		8.134				ND	
82 4-Methyl-2-pentanone (MIBK)	43		8.915				ND	7
$ 83 Toluene-d8 (Surr)	98	9.043	9.043	0.000	93	3736362	9.87	
84 Toluene	92		9.134				ND	7
85 trans-1,3-Dichloropropene	75		9.451				ND	7
86 Ethyl methacrylate	69		9.536				ND	7
87 1,1,2-Trichloroethane	97		9.671				ND	
88 Tetrachloroethene	166	9.768	9.750	0.018	93	7307	0.0563	
89 1,3-Dichloropropane	76		9.841				ND	
106 2-Hexanone	43		9.921				ND	7
108 Chlorodibromomethane	129		10.073				ND	
110 Ethylene Dibromide	107		10.183				ND	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.652	0.006	83	2880847	10.0	
114 1,1,1,2-Tetrachloroethane	131		10.774				ND	
115 Ethylbenzene	91		10.780				ND	
116 m-Xylene & p-Xylene	106		10.902				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
118 o-Xylene	106		11.250				ND	7
119 Styrene	104		11.268				ND	
120 Bromoform	173		11.426				ND	7
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	97	1221934	9.02	
126 1,1,2,2-Tetrachloroethane	83		11.829				ND	
128 1,2,3-Trichloropropane	110		11.871				ND	
134 Pentachloroethane	167		12.329				ND	
137 1,3-Dichlorobenzene	146		12.566				ND	7
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	92	1552944	10.0	
140 1,4-Dichlorobenzene	146		12.640				ND	7
144 1,2-Dichlorobenzene	146		12.902				ND	
148 1,2-Dibromo-3-Chloropropane	155		13.469				ND	
150 1,2,4-Trichlorobenzene	180		14.023				ND	
151 Hexachlorobutadiene	225		14.103				ND	
152 Naphthalene	128		14.200				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

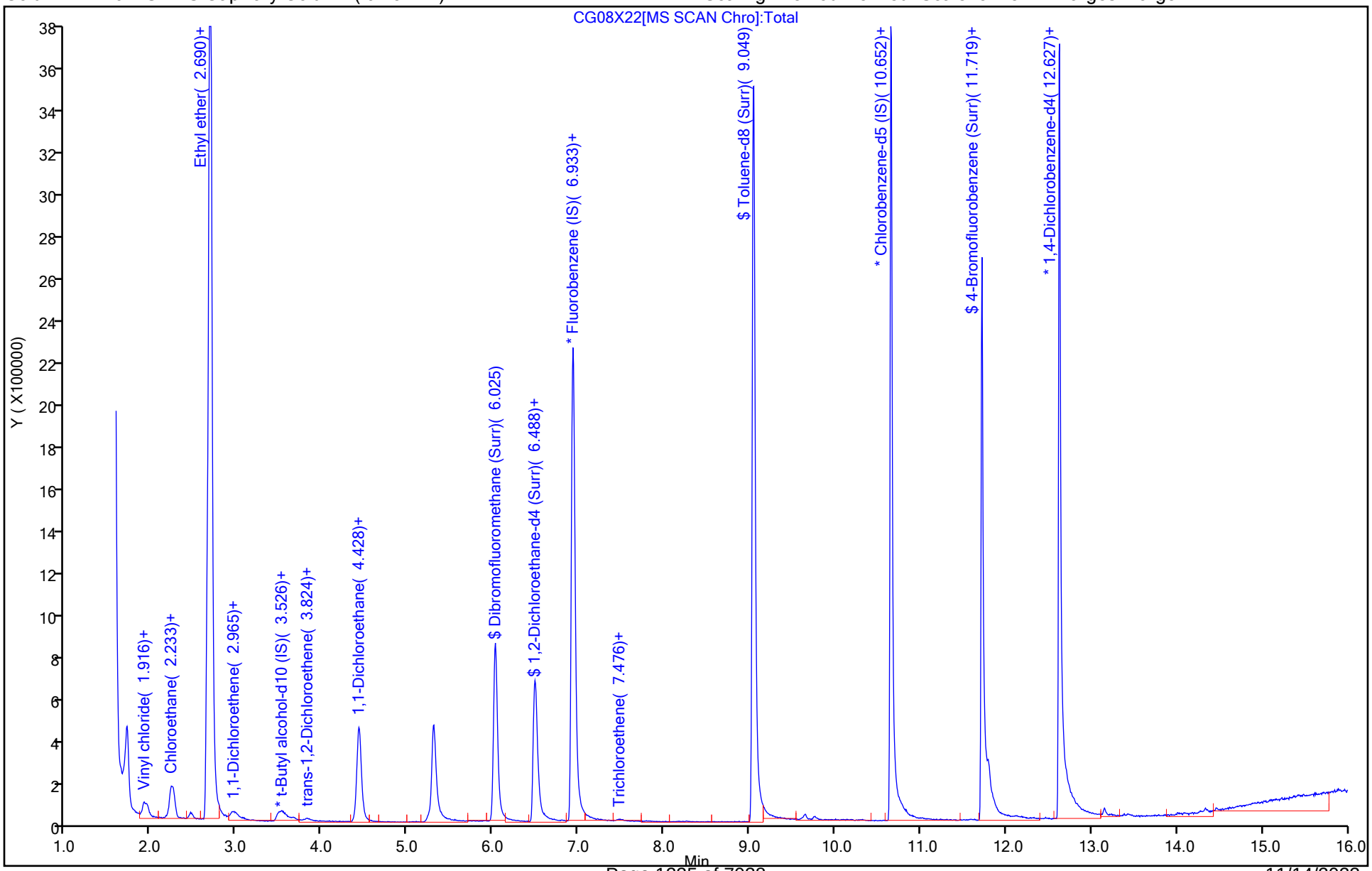
MSV_HP25_ISSS_00074 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Aug-2023 13:38:43 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D				
Injection Date:	09-Aug-2023 01:56:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-B-3	Lab Sample ID:	410-136864-3	Worklist Smp#:	23
Client ID:	16MW9				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D				
Lims ID:	410-136864-B-3				
Client ID:	16MW9				
Sample Type:	Client				
Inject. Date:	09-Aug-2023 01:56:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-023				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 13:38:42	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

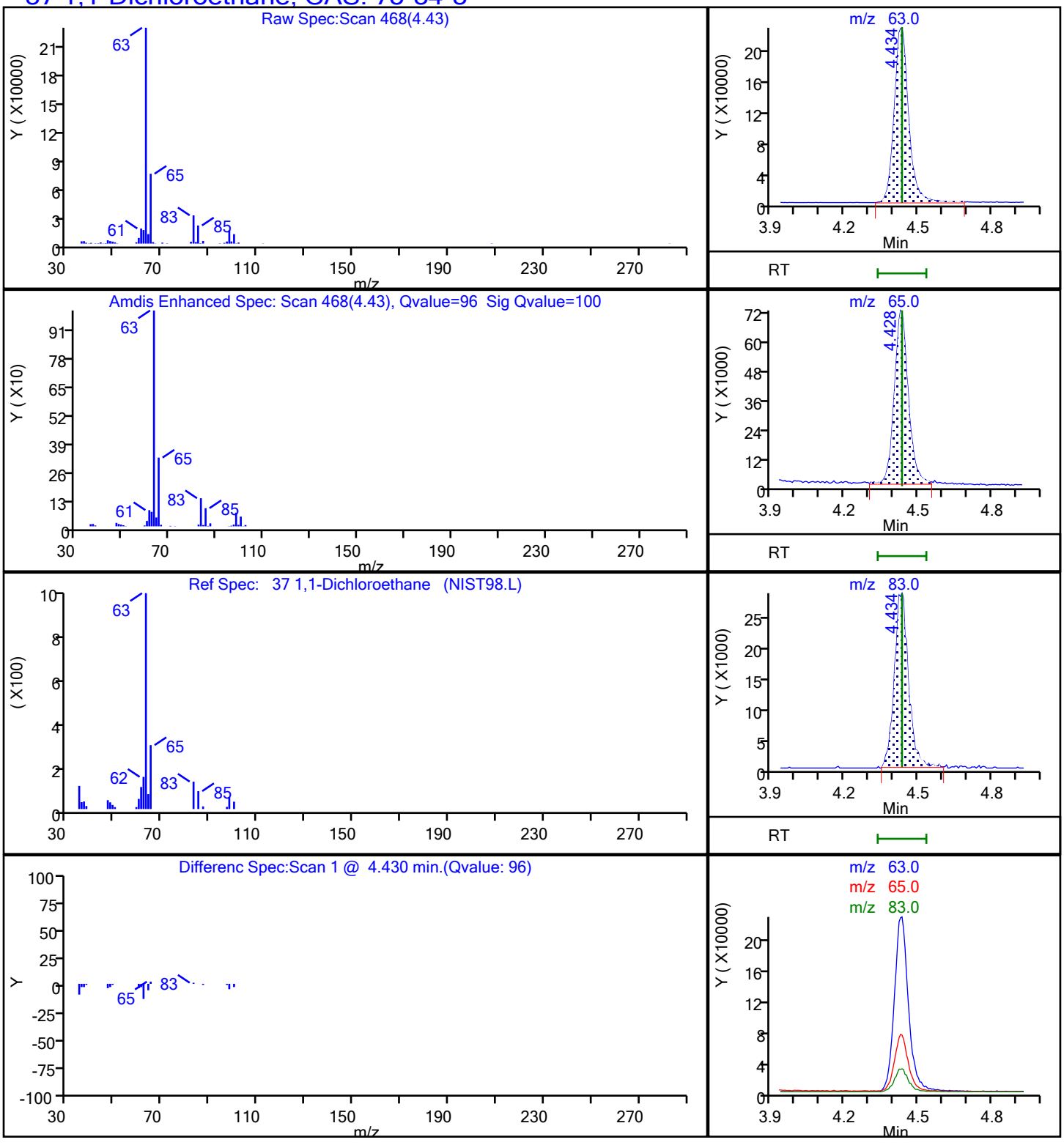
First Level Reviewer: innoonk Date: 09-Aug-2023 13:36:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	102.55
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.01
$ 83 Toluene-d8 (Surr)	10.0	9.87	98.71
$ 124 4-Bromofluorobenzene (Surr)	10.0	9.02	90.23

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D				
Injection Date:	09-Aug-2023 01:56:30	Instrument ID:	10193		
Lims ID:	410-136864-B-3	Lab Sample ID:	410-136864-3		
Client ID:	16MW9				
Operator ID:	gaw91131	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

37 1,1-Dichloroethane, CAS: 75-34-3

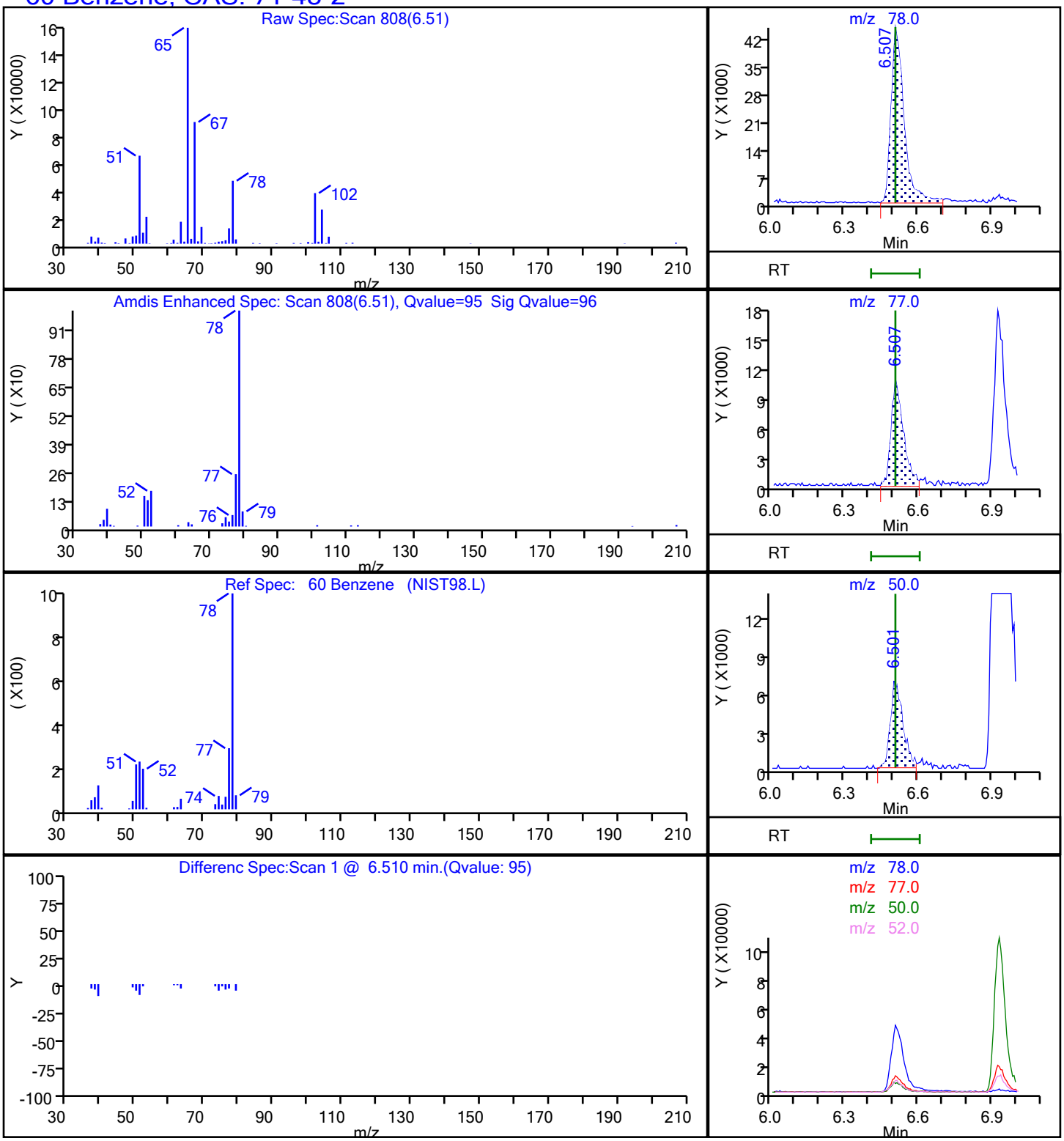


Report Date: 09-Aug-2023 13:38:43 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D				
Injection Date:	09-Aug-2023 01:56:30	Instrument ID:	10193		
Lims ID:	410-136864-B-3	Lab Sample ID:	410-136864-3		
Client ID:	16MW9				
Operator ID:	gaw91131	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

60 Benzene, CAS: 71-43-2

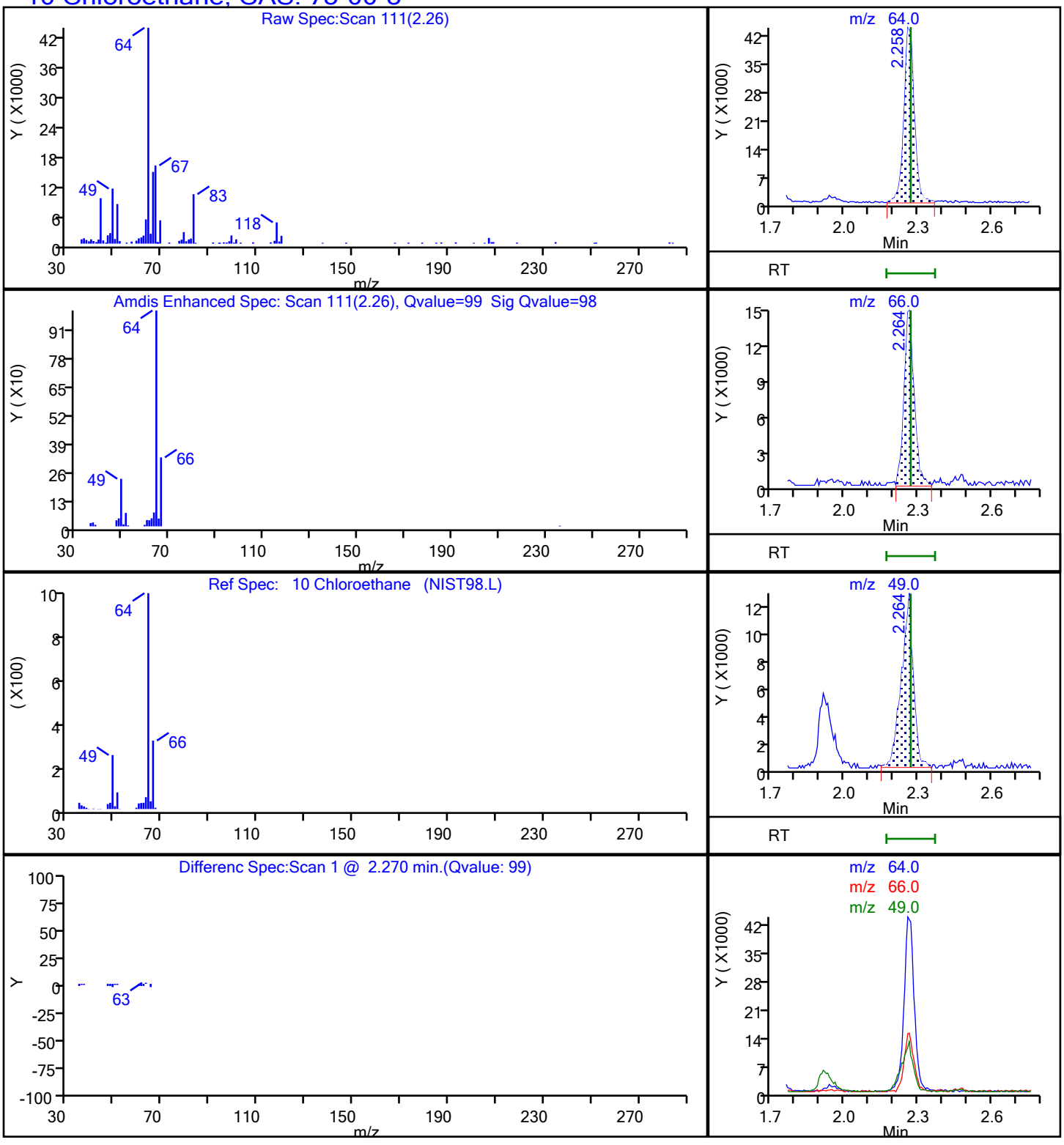


Report Date: 09-Aug-2023 13:38:43 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D				
Injection Date:	09-Aug-2023 01:56:30	Instrument ID:	10193		
Lims ID:	410-136864-B-3	Lab Sample ID:	410-136864-3		
Client ID:	16MW9				
Operator ID:	gaw91131	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

10 Chloroethane, CAS: 75-00-3



11/14/2023
11:12 AM

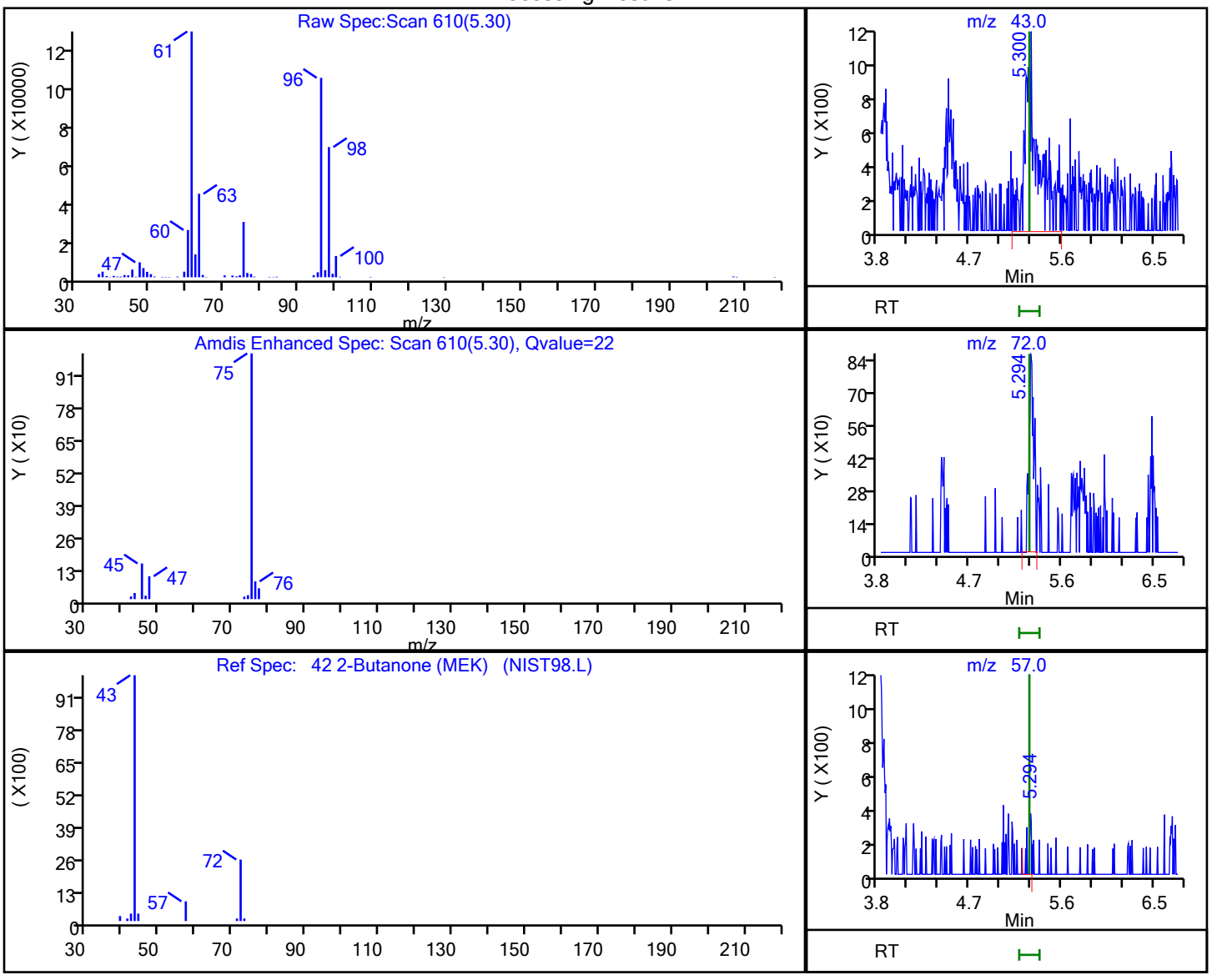
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D				
Injection Date:	09-Aug-2023 01:56:30	Instrument ID:	10193		
Lims ID:	410-136864-B-3	Lab Sample ID:	410-136864-3		
Client ID:	16MW9				
Operator ID:	gaw91131	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

42 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.30	43.00	9896	0.420536
5.29	72.00	2812	
5.29	57.00	626	

Reviewer: innoonk, 09-Aug-2023 13:37:51 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

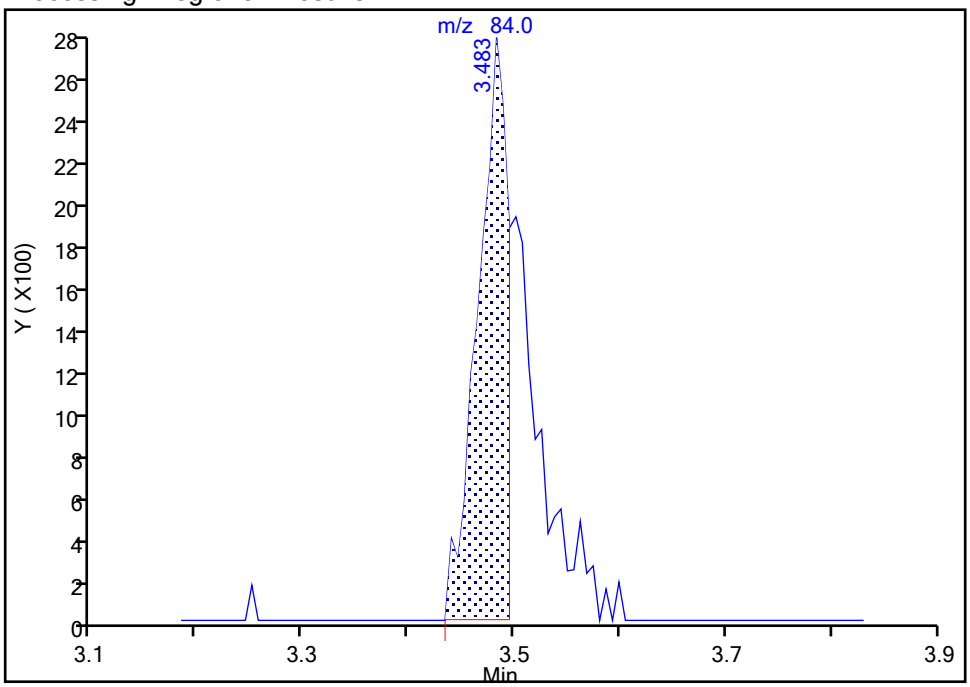
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D				
Injection Date:	09-Aug-2023 01:56:30	Instrument ID:	10193		
Lims ID:	410-136864-B-3	Lab Sample ID:	410-136864-3		
Client ID:	16MW9				
Operator ID:	gaw91131	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

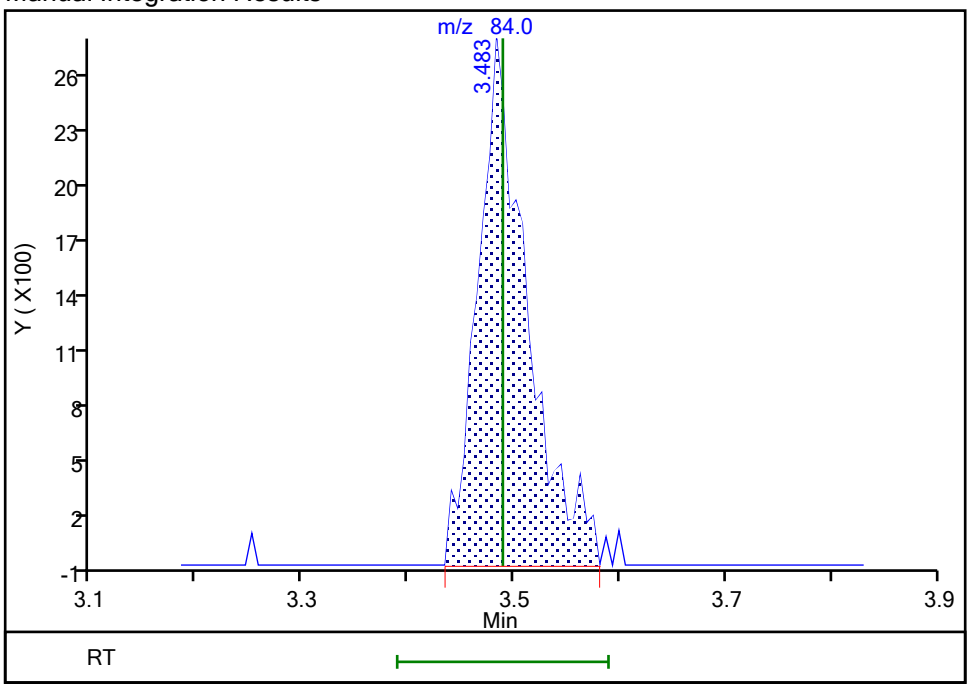
Processing Integration Results

RT: 3.48
Area: 5513
Amount: 0.053298
Amount Units: ug/l



Manual Integration Results

RT: 3.48
Area: 9057
Amount: 0.087560
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 13:37:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

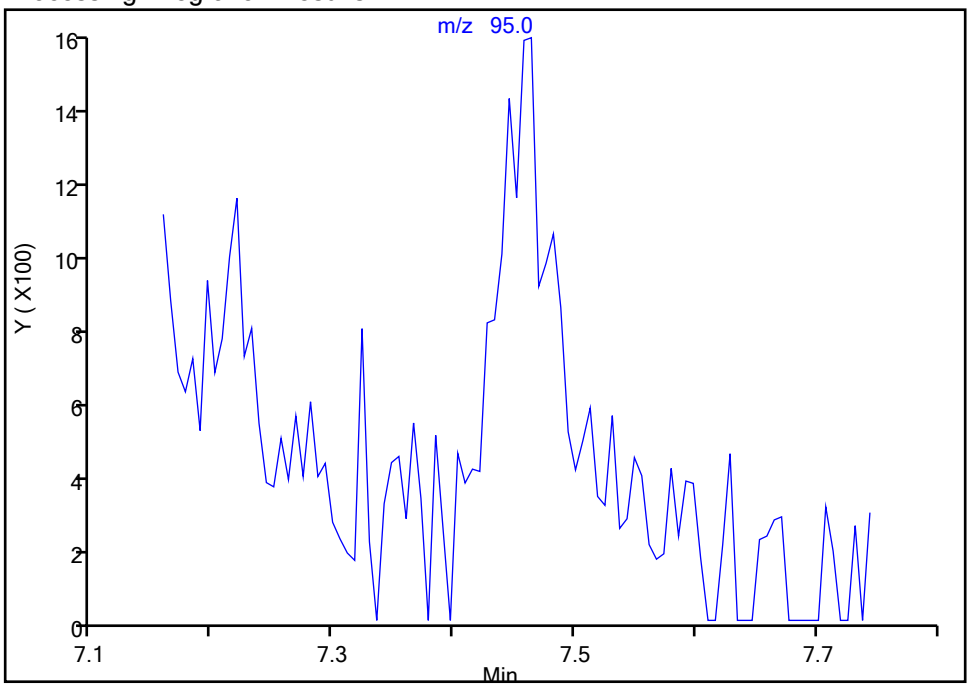
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D				
Injection Date:	09-Aug-2023 01:56:30	Instrument ID:	10193		
Lims ID:	410-136864-B-3	Lab Sample ID:	410-136864-3		
Client ID:	16MW9				
Operator ID:	gaw91131	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6

Signal: 1

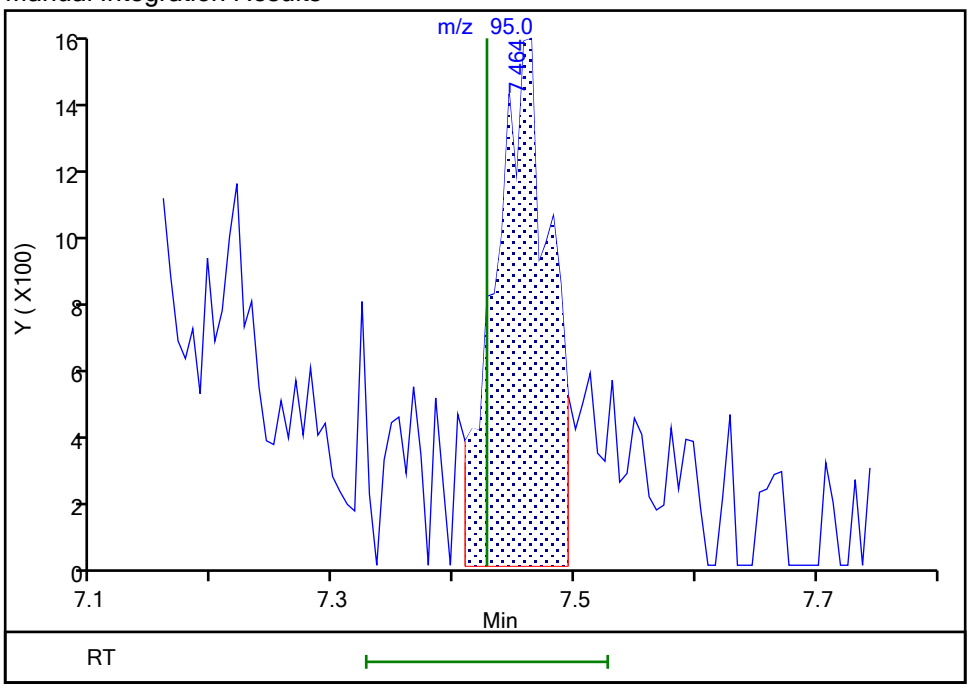
Not Detected
Expected RT: 7.43

Processing Integration Results



Manual Integration Results

RT: 7.46
Area: 4836
Amount: 0.044857
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 13:38:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

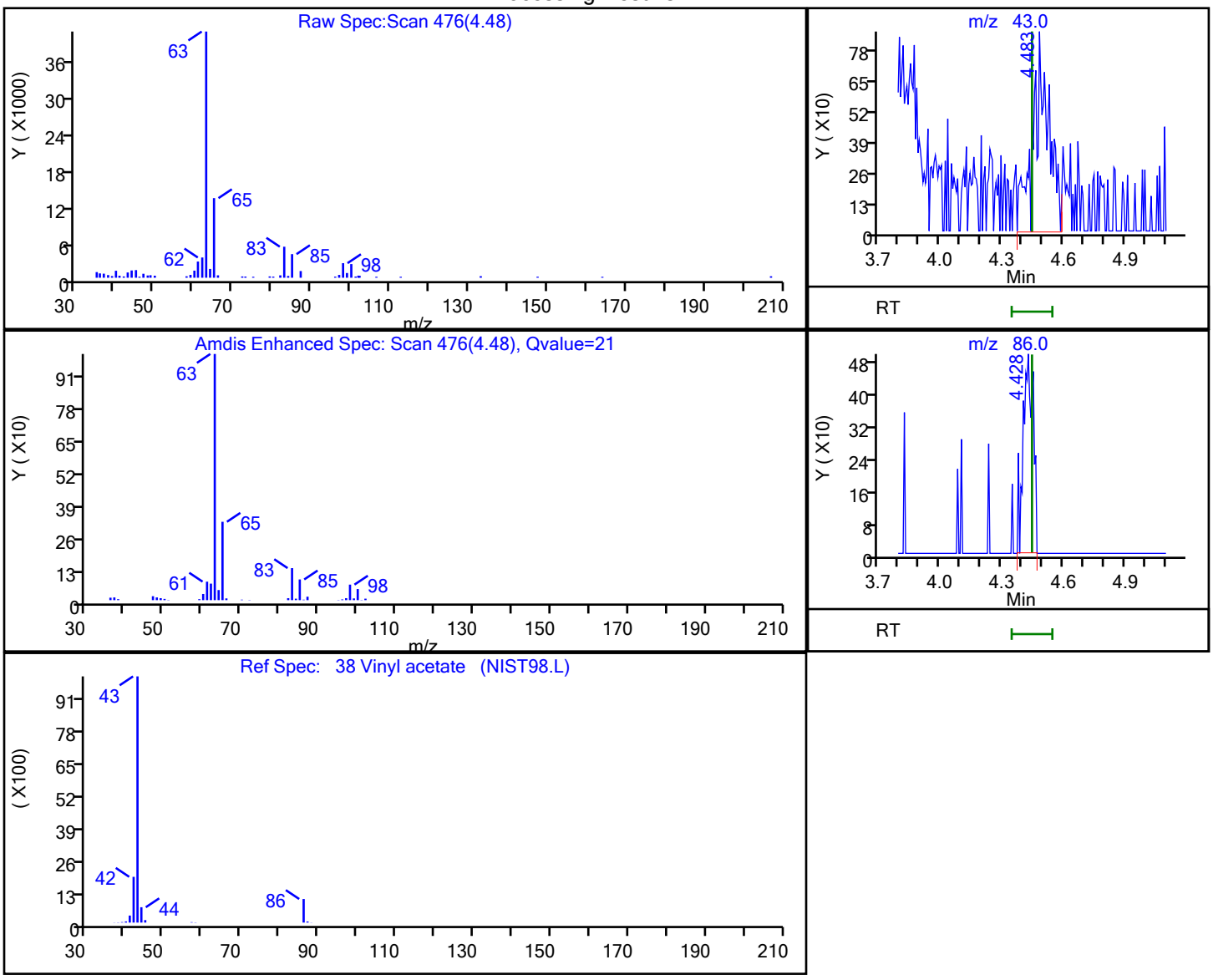
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X22.D				
Injection Date:	09-Aug-2023 01:56:30	Instrument ID:	10193		
Lims ID:	410-136864-B-3	Lab Sample ID:	410-136864-3		
Client ID:	16MW9				
Operator ID:	gaw91131	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

38 Vinyl acetate, CAS: 108-05-4

Processing Results



RT	Mass	Response	Amount
4.48	43.00	4579	0.036974
4.43	86.00	1689	

Reviewer: innoonk, 09-Aug-2023 13:37:46 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW9 DL Lab Sample ID: 410-136864-3 DL

Matrix: Water Lab File ID: CG08X23.D

Analysis Method: 8260D Date Collected: 07/27/2023 11:25

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 02:19

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
60-29-7	Diethyl ether	62		25	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X23.D
Lims ID: 410-136864-C-3 DL
Client ID: 16MW9
Sample Type: Client
Inject. Date: 09-Aug-2023 02:19:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 2.5000
Sample Info: 410-0090928-024
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 13:39:49 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 13:39:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85		1.684				ND	
4 Dimethyl ether	45		1.739				ND	U
5 Chloromethane	50		1.849				ND	7
6 Vinyl chloride	62		1.940				ND	7
9 Bromomethane	94		2.209				ND	7
10 Chloroethane	64	2.258	2.270	-0.012	99	43986	0.6648	
12 Trichlorofluoromethane	101		2.532				ND	
14 Ethyl ether	59	2.684	2.696	-0.012	90	1786858	24.7	
18 1,1-Dichloroethene	96	2.934	2.946	-0.012	48	3366	0.0409	
20 Acetone	43	2.989	2.989	0.000	47	6040	0.5087	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.001				ND	
22 Iodomethane	142		3.111				ND	
25 Carbon disulfide	76		3.196				ND	7
27 Acetonitrile	41		3.318				ND	
29 3-Chloro-1-propene	41		3.336				ND	
30 Methylene Chloride	84		3.489				ND	7
* 31 t-Butyl alcohol-d10 (IS)	65	3.520	3.544	-0.024	97	250113	50.0	
33 Acrylonitrile	53		3.800				ND	
35 trans-1,2-Dichloroethene	96		3.824				ND	
37 1,1-Dichloroethane	63	4.434	4.434	0.000	96	315899	1.80	
38 Vinyl acetate	43		4.446				ND	7
40 2-Chloro-1,3-butadiene	53		4.550				ND	
42 2-Butanone (MEK)	43		5.281				ND	7
45 Propionitrile	54		5.391				ND	
47 Methacrylonitrile	67		5.586				ND	
49 Tetrahydrofuran	71		5.659				ND	
50 Chloroform	83		5.799				ND	7
53 1,1,1-Trichloroethane	97		6.025				ND	
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	94	906331	10.3	
56 Carbon tetrachloride	117		6.238				ND	
58 Isobutyl alcohol	41		6.476				ND	U
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.482	6.482	0.000	99	194564	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Benzene	78	6.507	6.507	0.000	92	54556	0.1307	
61 1,2-Dichloroethane	62		6.592				ND	7
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	99	3781079	10.0	
68 Trichloroethene	95		7.427				ND	
70 1,2-Dichloropropane	63		7.769				ND	7
72 Dibromomethane	93		7.884				ND	
74 1,4-Dioxane	88		7.890				ND	
73 Methyl methacrylate	69		7.890				ND	7
76 Dichlorobromomethane	83		8.134				ND	7
82 4-Methyl-2-pentanone (MIBK)	43		8.915				ND	7
$ 83 Toluene-d8 (Surr)	98	9.043	9.043	0.000	93	3738144	9.66	
84 Toluene	92		9.134				ND	7
85 trans-1,3-Dichloropropene	75		9.451				ND	7
86 Ethyl methacrylate	69		9.536				ND	7
87 1,1,2-Trichloroethane	97		9.671				ND	
88 Tetrachloroethene	166		9.750				ND	7
89 1,3-Dichloropropane	76		9.841				ND	
106 2-Hexanone	43		9.921				ND	7
108 Chlorodibromomethane	129		10.073				ND	
110 Ethylene Dibromide	107		10.183				ND	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	83	2945278	10.0	
114 1,1,1,2-Tetrachloroethane	131		10.774				ND	
115 Ethylbenzene	91		10.780				ND	
116 m-Xylene & p-Xylene	106		10.902				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
118 o-Xylene	106		11.250				ND	
119 Styrene	104		11.268				ND	
120 Bromoform	173		11.426				ND	7
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1213956	8.77	
126 1,1,2,2-Tetrachloroethane	83		11.829				ND	
128 1,2,3-Trichloropropane	110		11.871				ND	
134 Pentachloroethane	167		12.329				ND	
137 1,3-Dichlorobenzene	146		12.566				ND	7
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1542545	10.0	
140 1,4-Dichlorobenzene	146		12.640				ND	7
144 1,2-Dichlorobenzene	146		12.902				ND	
148 1,2-Dibromo-3-Chloropropane	155		13.469				ND	
150 1,2,4-Trichlorobenzene	180		14.023				ND	
151 Hexachlorobutadiene	225		14.103				ND	
152 Naphthalene	128		14.200				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

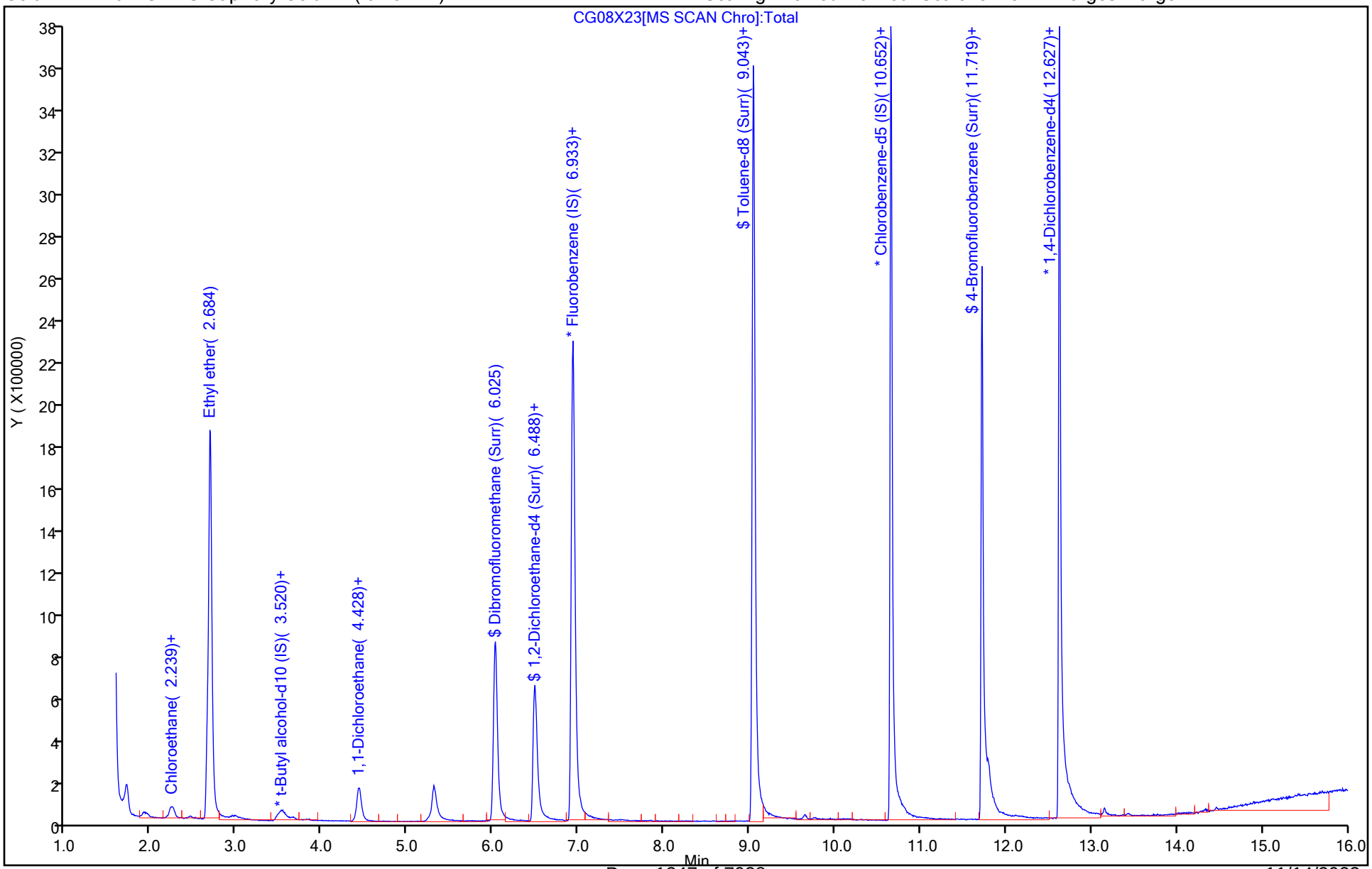
MSV_HP25_ISSS_00074 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Aug-2023 13:39:50 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X23.D				
Injection Date:	09-Aug-2023 02:19:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-C-3 DL	Lab Sample ID:	410-136864-3	Worklist Smp#:	24
Client ID:	16MW9				
Purge Vol:	25.000 mL	Dil. Factor:	2.5000	ALS Bottle#:	23
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X23.D				
Lims ID:	410-136864-C-3 DL				
Client ID:	16MW9				
Sample Type:	Client				
Inject. Date:	09-Aug-2023 02:19:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	2.5000		
Sample Info:	410-0090928-024				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 13:39:49	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

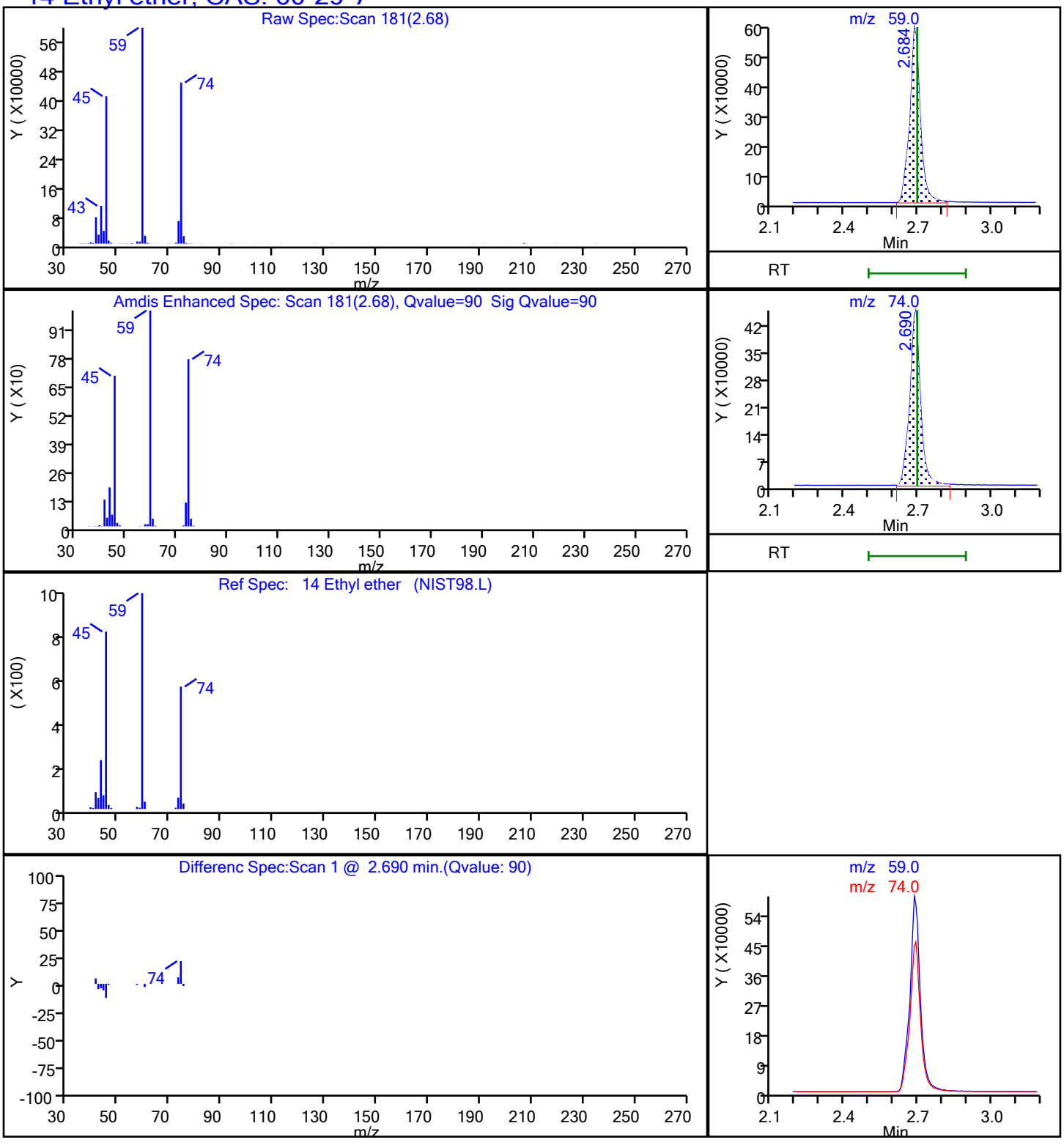
First Level Reviewer: innoonk Date: 09-Aug-2023 13:39:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	102.53
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.09
$ 83 Toluene-d8 (Surr)	10.0	9.66	96.60
$ 124 4-Bromofluorobenzene (Surr)	10.0	8.77	87.68

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X23.D				
Injection Date:	09-Aug-2023 02:19:30	Instrument ID:	10193		
Lims ID:	410-136864-C-3 DL	Lab Sample ID:	410-136864-3		
Client ID:	16MW9				
Operator ID:	gaw91131	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	2.5000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

14 Ethyl ether, CAS: 60-29-7



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A Lab Sample ID: 410-136864-4

Matrix: Water Lab File ID: CG08X13.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 22:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.30
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.30
75-34-3	1,1-Dichloroethane	4.2		1.0	0.30
75-35-4	1,1-Dichloroethene	ND		1.0	0.30
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.40
106-93-4	1,2-Dibromoethane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.40
107-06-2	1,2-Dichloroethane	ND		1.0	0.30
78-87-5	1,2-Dichloropropane	ND		1.0	0.40
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.40
142-28-9	1,3-Dichloropropane	ND		1.0	0.40
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.40
123-91-1	1,4-Dioxane	ND		200	45
78-93-3	2-Butanone	ND		10	1.7
591-78-6	2-Hexanone	ND		10	2.0
108-10-1	4-Methyl-2-pentanone	ND		10	2.0
67-64-1	Acetone	ND		10	2.0
75-05-8	Acetonitrile	ND		100	31
107-13-1	Acrylonitrile	ND		10	1.1
107-05-1	Allyl chloride	ND		10	1.0
71-43-2	Benzene	0.37	J	1.0	0.30
75-27-4	Bromodichloromethane	ND		1.0	0.30
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.54
75-15-0	Carbon disulfide	ND		10	0.40
56-23-5	Carbon tetrachloride	ND		1.0	0.30
75-00-3	Chloroethane	2.2		1.0	0.070
67-66-3	Chloroform	ND		1.0	0.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A Lab Sample ID: 410-136864-4

Matrix: Water Lab File ID: CG08X13.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 22:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.10
126-99-8	Chloroprene	ND		10	0.46
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.30
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
60-29-7	Diethyl ether	22		10	1.1
97-63-2	Ethyl methacrylate	ND		10	0.81
100-41-4	Ethylbenzene	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		1.0	0.40
78-83-1	Isobutyl alcohol	ND		200	11
179601-23-1	m&p-Xylene	ND		2.0	0.40
126-98-7	Methacrylonitrile	ND		100	9.7
74-88-4	Methyl iodide	ND		10	0.58
80-62-6	Methyl methacrylate	ND		10	3.5
75-09-2	Methylene Chloride	ND		1.0	0.70
91-20-3	Naphthalene	ND		1.0	0.40
95-47-6	o-Xylene	ND		1.0	0.40
76-01-7	Pentachloroethane	ND		10	1.7
107-12-0	Propionitrile	ND	cn	100	10
100-42-5	Styrene	ND		1.0	0.30
127-18-4	Tetrachloroethene	ND		1.0	0.30
109-99-9	Tetrahydrofuran	ND		25	2.0
108-88-3	Toluene	ND		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.40
79-01-6	Trichloroethene	ND		1.0	0.30
75-69-4	Trichlorofluoromethane	ND		1.0	0.40
108-05-4	Vinyl acetate	ND		10	3.2
75-01-4	Vinyl chloride	0.23	J	1.0	0.20
1330-20-7	Xylenes, Total	ND		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A Lab Sample ID: 410-136864-4

Matrix: Water Lab File ID: CG08X13.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 22:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D
Lims ID: 410-136864-B-4
Client ID: 16WC1A
Sample Type: Client
Inject. Date: 08-Aug-2023 22:39:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-014
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 10:57:43 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 10:57:43

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	1 Chlorotrifluoroethene	116		1.648				ND	
	2 Dichlorodifluoromethane	85	1.696	1.684	0.012	38	11251	0.1199	Ma
	3 Chlorodifluoromethane	51	1.709	1.697	0.013	97	909970	10.1	
	4 Dimethyl ether	45	1.721	1.739	-0.018	89	137919	1.06	
	5 Chloromethane	50		1.849				ND	
	6 Vinyl chloride	62	1.952	1.940	0.012	93	25853	0.2278	
	7 Butadiene	39		1.940				ND	7
	8 2-Chloro-1,1,1-Trifluoroethane	118		2.007				ND	
	9 Bromomethane	94		2.209				ND	7
	10 Chloroethane	64	2.269	2.270	-0.001	100	148314	2.22	
	11 Dichlorofluoromethane	67	2.471	2.471	0.000	97	70600	0.3895	
	13 Pentane	43	2.526	2.526	0.000	36	1440	0.0111	
	12 Trichlorofluoromethane	101		2.532				ND	7
	14 Ethyl ether	59	2.696	2.696	0.000	89	1627831	22.3	
	16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.788	2.794	-0.006	15	4985	0.0496	
T	15 Vinyl bromide TIC	106	2.861	2.830	0.031	1	221	0.000579	
	17 Acrolein	56		2.843				ND	7
	18 1,1-Dichloroethene	96	2.964	2.946	0.018	91	17478	0.2105	
	20 Acetone	43		2.989				ND	7
	21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.001				ND	
T	19 Ethanol TIC	45	3.099	3.099	0.000	23	442	0.001158	
	22 Iodomethane	142		3.111				ND	
	23 Ethyl bromide	108		3.129				ND	7
	24 Isopropyl alcohol	45		3.147				ND	U
	25 Carbon disulfide	76		3.196				ND	7
T	167 Isopropyl alcohol TIC	45	3.245	3.276	-0.031	38	453	0.001187	
	27 Acetonitrile	41		3.318				ND	
	26 Methyl acetate	43		3.324				ND	7
	29 3-Chloro-1-propene	41		3.336				ND	
T	28 Acetonitrile TIC	41	3.483	3.477	0.006	11	428	0.001121	
	30 Methylene Chloride	84	3.477	3.489	-0.012	59	7992	0.0770	M
*	31 t-Butyl alcohol-d10 (IS)	65	3.544	3.544	0.000	97	278187	50.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 2-Methyl-2-propanol	59	3.641	3.635	0.006	84	27168	4.65	
33 Acrylonitrile	53		3.800				ND	7
34 Methyl tert-butyl ether	73	3.830	3.824	0.006	88	14940	0.0559	
35 trans-1,2-Dichloroethene	96	3.855	3.824	0.031	86	4834	0.0480	
36 Hexane	57		4.196				ND	7
37 1,1-Dichloroethane	63	4.434	4.434	0.000	96	733920	4.15	
38 Vinyl acetate	43		4.446				ND	U
39 Isopropyl ether	45		4.507				ND	7
40 2-Chloro-1,3-butadiene	53		4.550				ND	
41 Tert-butyl ethyl ether	59		5.068				ND	7
42 2-Butanone (MEK)	43		5.281				ND	7
43 cis-1,2-Dichloroethene	96	5.312	5.299	0.013	79	348088	3.22	
44 2,2-Dichloropropane	77		5.312				ND	7
46 Ethyl acetate	43	5.446	5.379	0.067	1	969	0.3219	
45 Propionitrile	54		5.391				ND	7
47 Methacrylonitrile	67		5.586				ND	
48 Chlorobromomethane	128		5.641				ND	
49 Tetrahydrofuran	71	5.702	5.659	0.043	85	12298	1.62	a
50 Chloroform	83		5.799				ND	
51 Methyl acrylate	55		6.013				ND	
53 1,1,1-Trichloroethane	97		6.025				ND	
$ 54 Dibromofluoromethane (Surr)	113	6.031	6.025	0.006	94	915375	10.3	
55 Cyclohexane	56		6.122				ND	7
S 52 1,2-Dichloroethene, Total	100				0		3.27	
56 Carbon tetrachloride	117		6.238				ND	
57 1,1-Dichloropropene	75		6.244				ND	7
58 Isobutyl alcohol	41		6.476				ND	U
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.494	6.482	0.012	99	195697	10.4	
60 Benzene	78	6.519	6.507	0.012	94	154506	0.3667	
61 1,2-Dichloroethane	62		6.592				ND	7
63 Isopropyl acetate	43	6.647	6.647	0.000	4	369	0.003270	
64 Tert-amyl methyl ether	73		6.726				ND	
62 1-Chlorobutane	56	6.702	6.781	-0.079	18	68	NC	
* 65 Fluorobenzene (IS)	96	6.939	6.933	0.006	100	3816511	10.0	
66 n-Heptane	43		6.952				ND	7
67 n-Butanol	56	7.409	7.409	0.000	16	301	49.5	
68 Trichloroethene	95	7.451	7.427	0.024	91	20033	0.1852	Ma
69 Methylcyclohexane	83		7.732				ND	7
70 1,2-Dichloropropane	63		7.769				ND	7
71 2-ethoxy-2-methyl butane	87		7.799				ND	
72 Dibromomethane	93		7.884				ND	
74 1,4-Dioxane	88		7.890				ND	
73 Methyl methacrylate	69		7.890				ND	
75 n-Propyl acetate	61	7.994	7.994	0.000	1	59	0.2409	
76 Dichlorobromomethane	83		8.134				ND	7
77 2-Nitropropane	41		8.421				ND	7
78 1-Bromo-2-chloroethane	63		8.531				ND	7
79 2-Chloroethyl vinyl ether	63		8.543				ND	U
80 cis-1,3-Dichloropropene	75		8.713				ND	7
82 4-Methyl-2-pentanone (MIBK)	43		8.915				ND	7
$ 83 Toluene-d8 (Surr)	98	9.049	9.043	0.006	93	3730767	9.49	
81 Chloroacetonitrile	75	9.055	9.067	-0.012	36	1557	NC	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
84 Toluene	92		9.134				ND	7
85 trans-1,3-Dichloropropene	75		9.451				ND	7
86 Ethyl methacrylate	69		9.536				ND	7
87 1,1,2-Trichloroethane	97		9.671				ND	
88 Tetrachloroethene	166	9.756	9.750	0.006	94	17254	0.1280	M
89 1,3-Dichloropropane	76		9.841				ND	
106 2-Hexanone	43		9.921				ND	U
T 95 Vinyl acetate (TIC)	43	9.933	10.000	-0.067	13	591	0.001549	
T 98 Epichlorohydrin TIC	57	10.012	10.000	0.012	1	448	0.001174	
T 93 Monochloroacetic acid TIC	50		10.000				ND	
T 101 Ethylene oxide TIC	43		10.000				ND	
T 97 Decamethylcyclopentasiloxane TIC	73	9.994	10.000	-0.006	1	618	0.001619	
T 92 3-Chloro-1,2-propanediol TIC	43		10.000				ND	
T 94 2,3-Dibromo-1-propanol TIC	57		10.000				ND	
T 96 Nitrobenzene TIC	77	9.920	10.000	-0.080	1	600	0.001572	
T 100 2-Bromo-3-chloropropene TIC	75	10.134	10.000	0.134	1	547	0.001433	
T 102 Methyl acrylate TIC	55	9.573	10.000	-0.427	1	405	0.001061	
T 90 2-Bromoethanol TIC	45	10.128	10.000	0.128	1	486	0.001273	
T 91 Octamethylcyclotetrasiloxane TIC	281	11.804	10.000	1.804	86	52546	0.1377	
T 99 2,3-Dibromopropene TIC	119	9.768	10.000	-0.232	1	500	0.001310	
T 103 2-Chloroethanol TIC	44	10.128	10.000	0.128	1	840	0.002201	
T 104 Epibromohydrin TIC	57		10.000				ND	
T 105 Chloroacetaldehyde TIC	50	10.652	10.000	0.652	34	61788	0.1619	
S 107 1,3-Dichloropropene, Total	100		10.060				ND	7
109 n-Butyl acetate	43		10.073				ND	
108 Chlorodibromomethane	129		10.073				ND	
110 Ethylene Dibromide	107		10.183				ND	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.652	0.006	83	2990804	10.0	
112 1-Chlorohexane	91		10.676				ND	7
113 Chlorobenzene	112		10.683				ND	7
114 1,1,1,2-Tetrachloroethane	131		10.774				ND	
115 Ethylbenzene	91		10.780				ND	
116 m-Xylene & p-Xylene	106		10.902				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
118 o-Xylene	106		11.250				ND	7
119 Styrene	104		11.268				ND	7
120 Bromoform	173		11.426				ND	7
121 Isopropylbenzene	105		11.567				ND	7
122 cis-1,4-Dichloro-2-butene	88		11.627				ND	
123 Cyclohexanone	55		11.646				ND	U
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1258123	8.95	
125 Bromobenzene	156		11.829				ND	
126 1,1,2,2-Tetrachloroethane	83		11.829				ND	
127 trans-1,4-Dichloro-2-butene	53		11.859				ND	
128 1,2,3-Trichloropropane	110		11.871				ND	
129 N-Propylbenzene	91		11.908				ND	
130 2-Chlorotoluene	126		11.981				ND	7
131 1,3,5-Trimethylbenzene	105		12.054				ND	
132 4-Chlorotoluene	126		12.079				ND	7
133 tert-Butylbenzene	134		12.298				ND	7
134 Pentachloroethane	167		12.329				ND	
135 1,2,4-Trimethylbenzene	105		12.347				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
136 sec-Butylbenzene	105		12.469				ND	7
137 1,3-Dichlorobenzene	146		12.566				ND	7
138 4-Isopropyltoluene	119		12.579				ND	7
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1576674	10.0	
140 1,4-Dichlorobenzene	146		12.640				ND	7
141 1,2,3-Trimethylbenzene	120		12.652				ND	7
142 Benzyl chloride	126		12.725				ND	7
145 p-Diethylbenzene	119	12.889	12.859	0.030	1	315	0.001043	
143 n-Butylbenzene	92		12.877				ND	
144 1,2-Dichlorobenzene	146		12.902				ND	
T 146 Hexachloroethane TIC	117	13.444	13.444	0.000	1	326	0.000854	
147 Hexachloroethane	117		13.444				ND	
148 1,2-Dibromo-3-Chloropropane	155		13.469				ND	U
149 1,3,5-Trichlorobenzene	180		13.591				ND	
150 1,2,4-Trichlorobenzene	180		14.023				ND	
151 Hexachlorobutadiene	225		14.103				ND	
152 Naphthalene	128		14.200				ND	
153 1,2,3-Trichlorobenzene	180		14.346				ND	
154 2-Methylnaphthalene	142		14.950				ND	
155 Dodecane	57		0.000				ND	
156 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
157 tert-Butyl Formate	1		0.000				ND	
158 2-Bromo-1-chloropropane	1		0.000				ND	
159 1-Chloropropane	1		0.000				ND	
160 1,1-Dichloroacetone	1		0.000				ND	
161 Methylal	1		0.000				ND	
162 Propene oxide	1		0.000				ND	
163 t-Amyl alcohol	1		0.000				ND	
164 Ethanol	45		0.000				ND	
165 n-Decane	57		0.000				ND	
166 1-Bromo-3-Chloropropane	1		0.000				ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected
- a - User Assigned ID

Reagents:

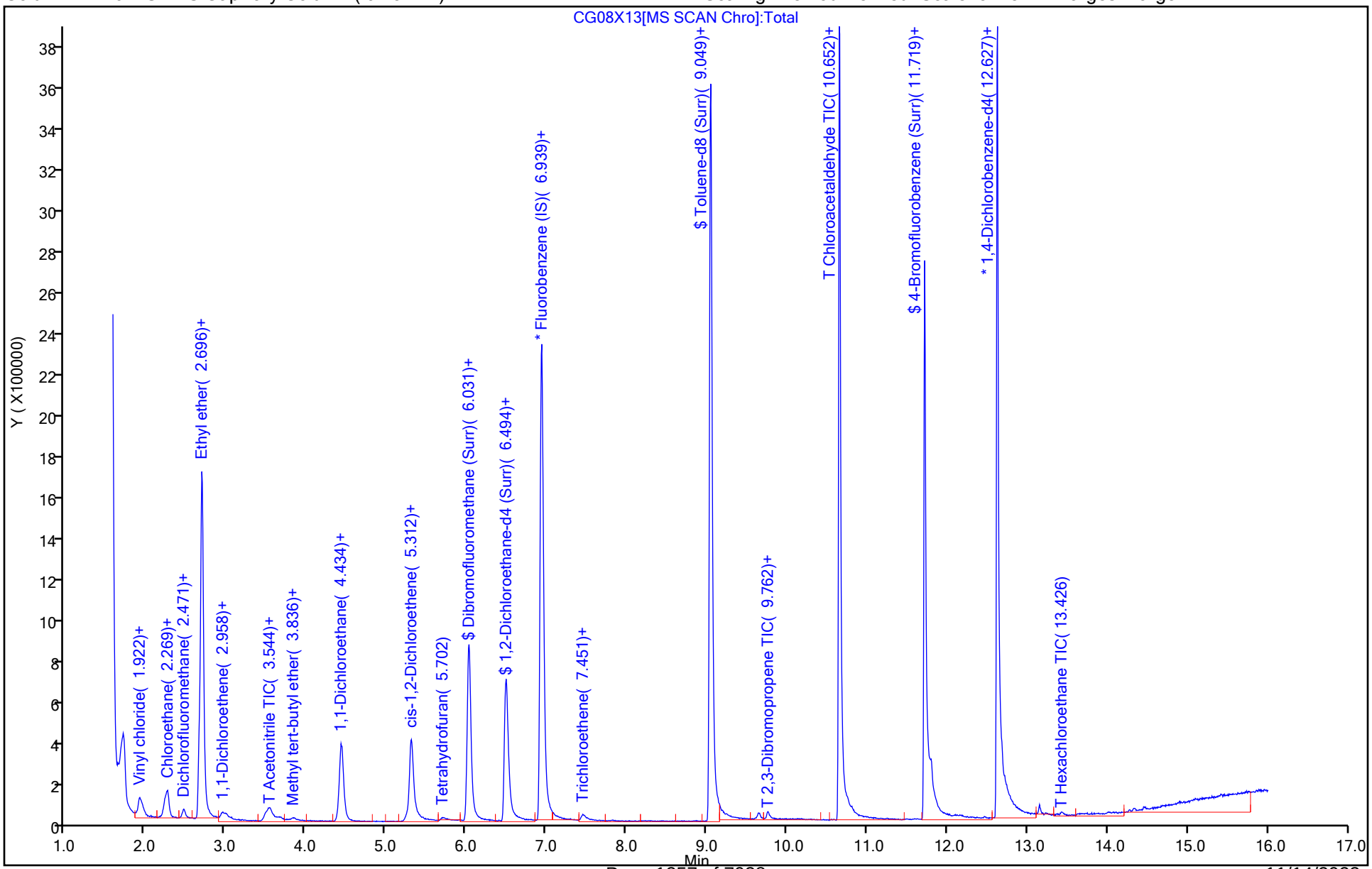
MSV_HP25_ISSS_00074 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Aug-2023 10:57:44 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4	Worklist Smp#:	14
Client ID:	16WC1A				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Lims ID:	410-136864-B-4				
Client ID:	16WC1A				
Sample Type:	Client				
Inject. Date:	08-Aug-2023 22:39:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-014				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 10:57:43	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 10:57:43

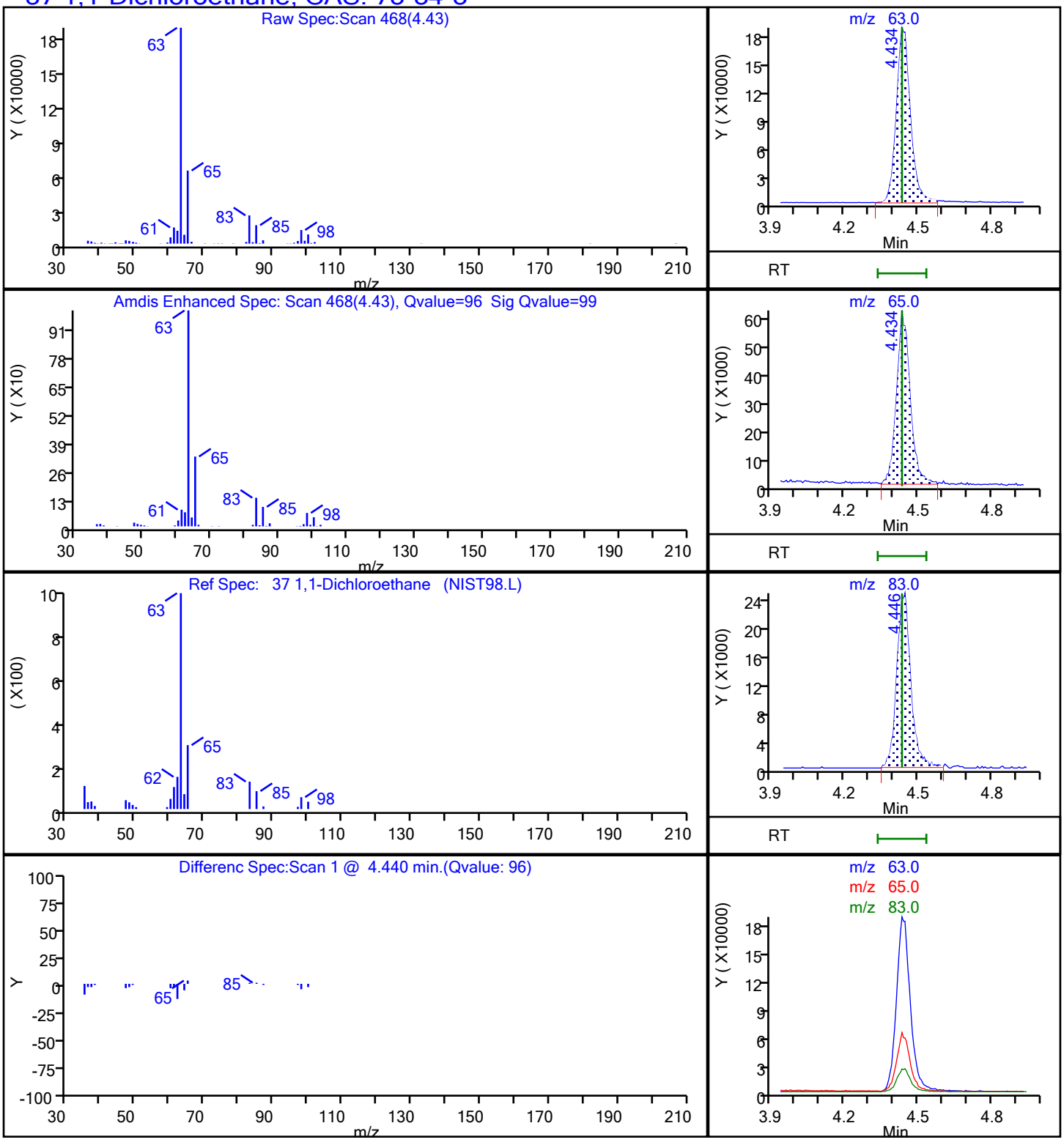
Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	102.59
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.72
$ 83 Toluene-d8 (Surr)	10.0	9.49	94.94
$ 124 4-Bromofluorobenzene (Surr)	10.0	8.95	89.49

Report Date: 09-Aug-2023 10:57:44 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

37 1,1-Dichloroethane, CAS: 75-34-3

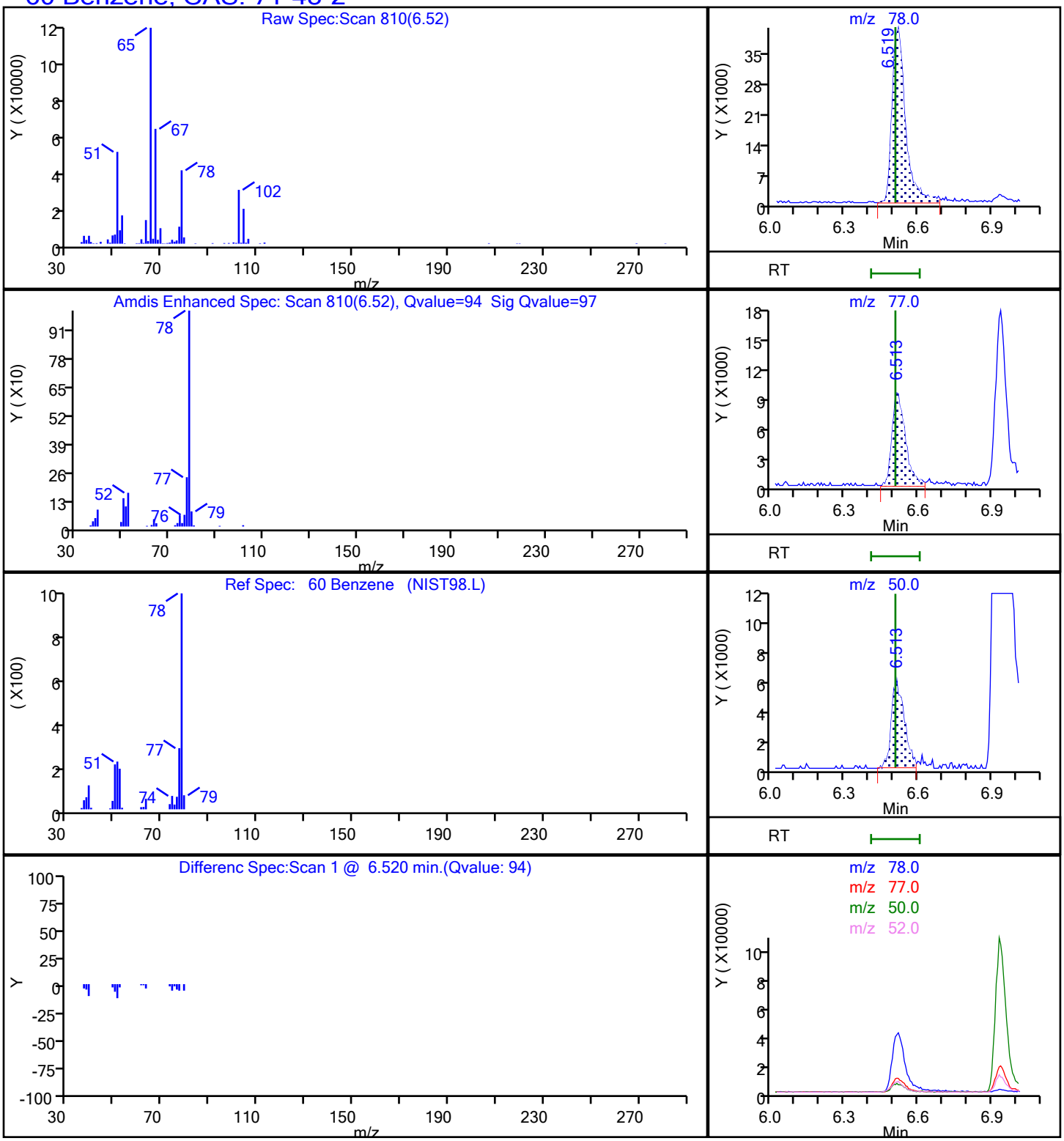


Report Date: 09-Aug-2023 10:57:45 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

60 Benzene, CAS: 71-43-2

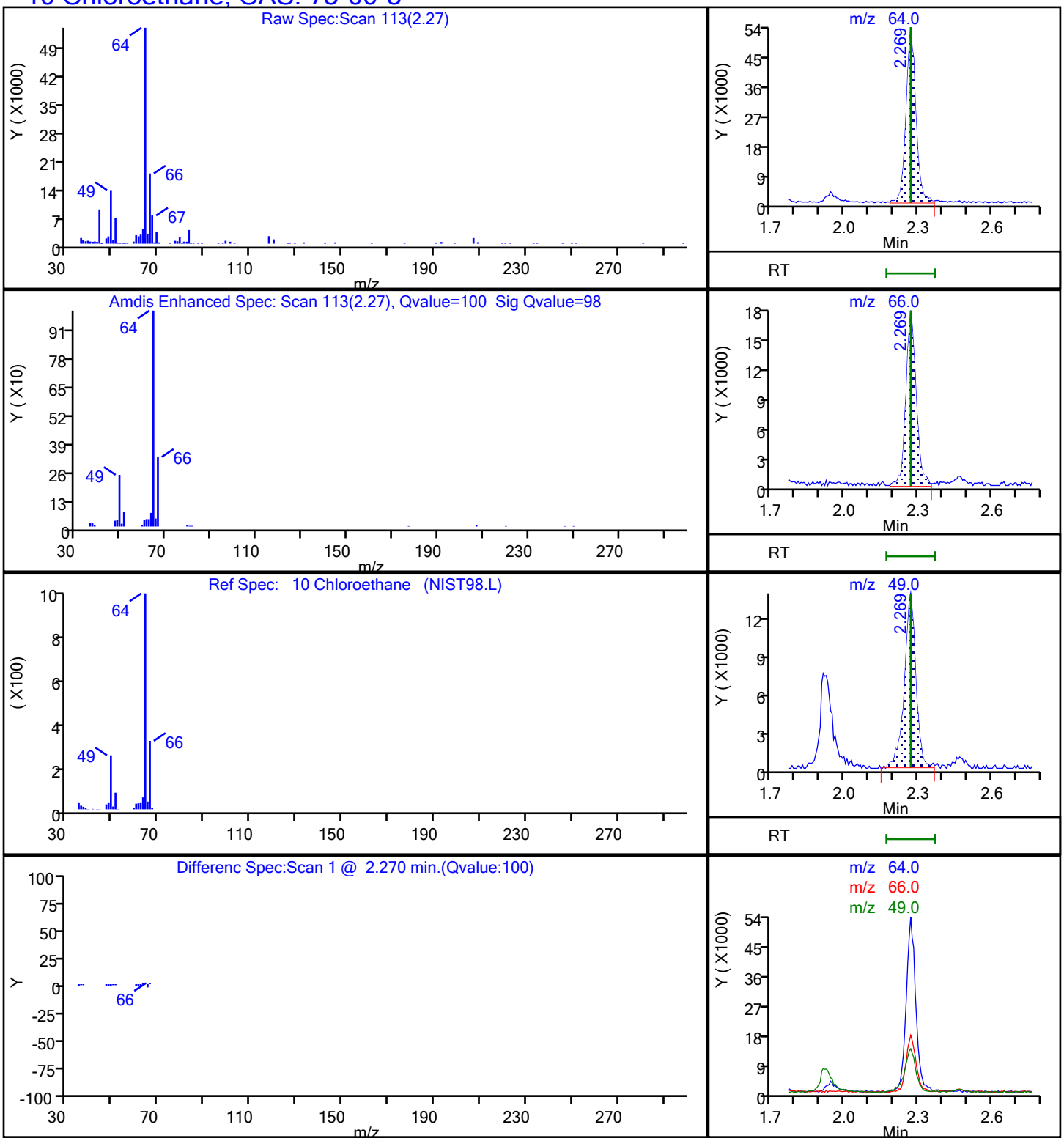


Report Date: 09-Aug-2023 10:57:44 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

10 Chloroethane, CAS: 75-00-3

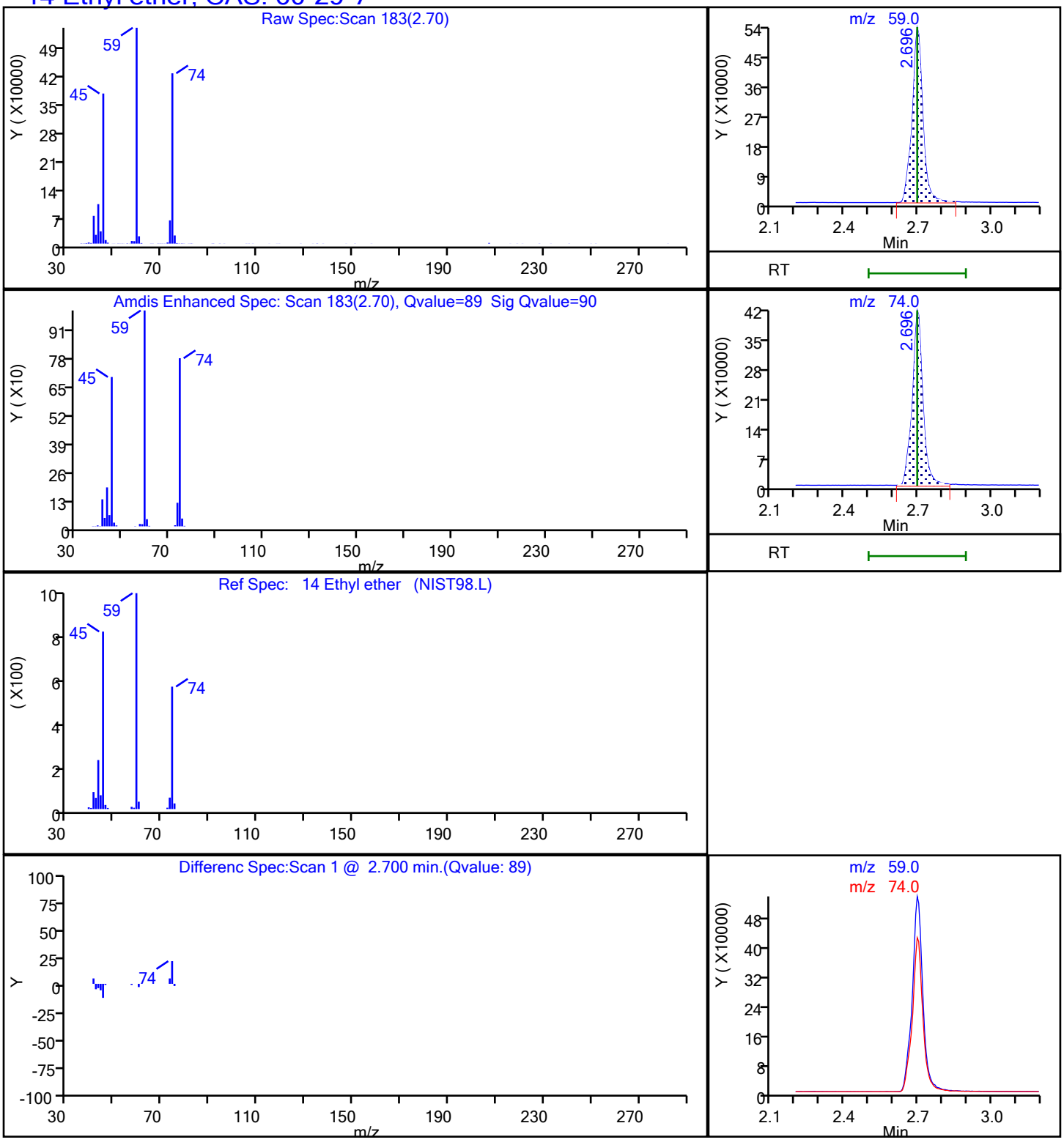


11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

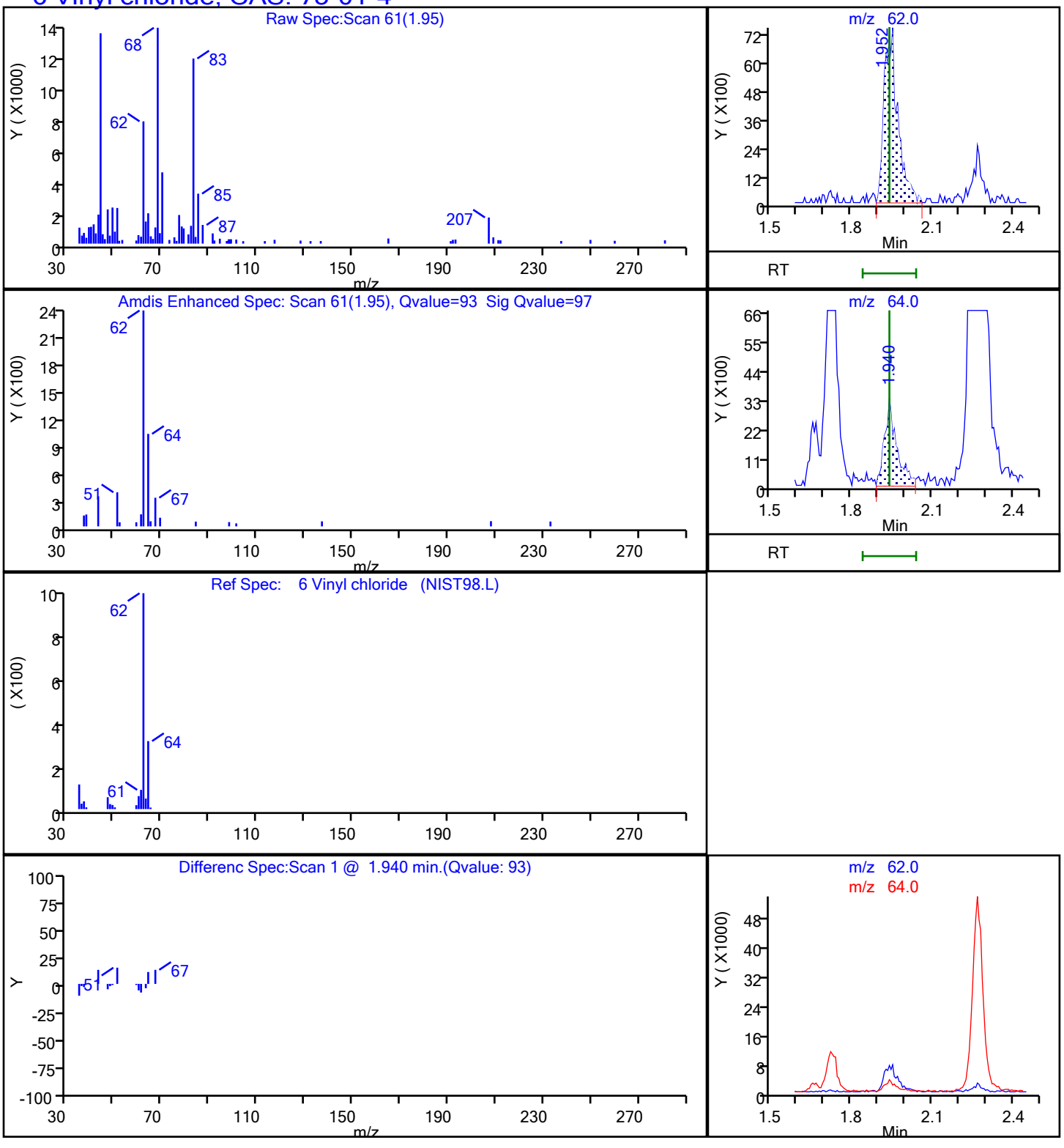
14 Ethyl ether, CAS: 60-29-7



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D
Injection Date: 08-Aug-2023 22:39:30 Instrument ID: 10193
Lims ID: 410-136864-B-4 Lab Sample ID: 410-136864-4
Client ID: 16WC1A
Operator ID: gaw91131 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

6 Vinyl chloride, CAS: 75-01-4



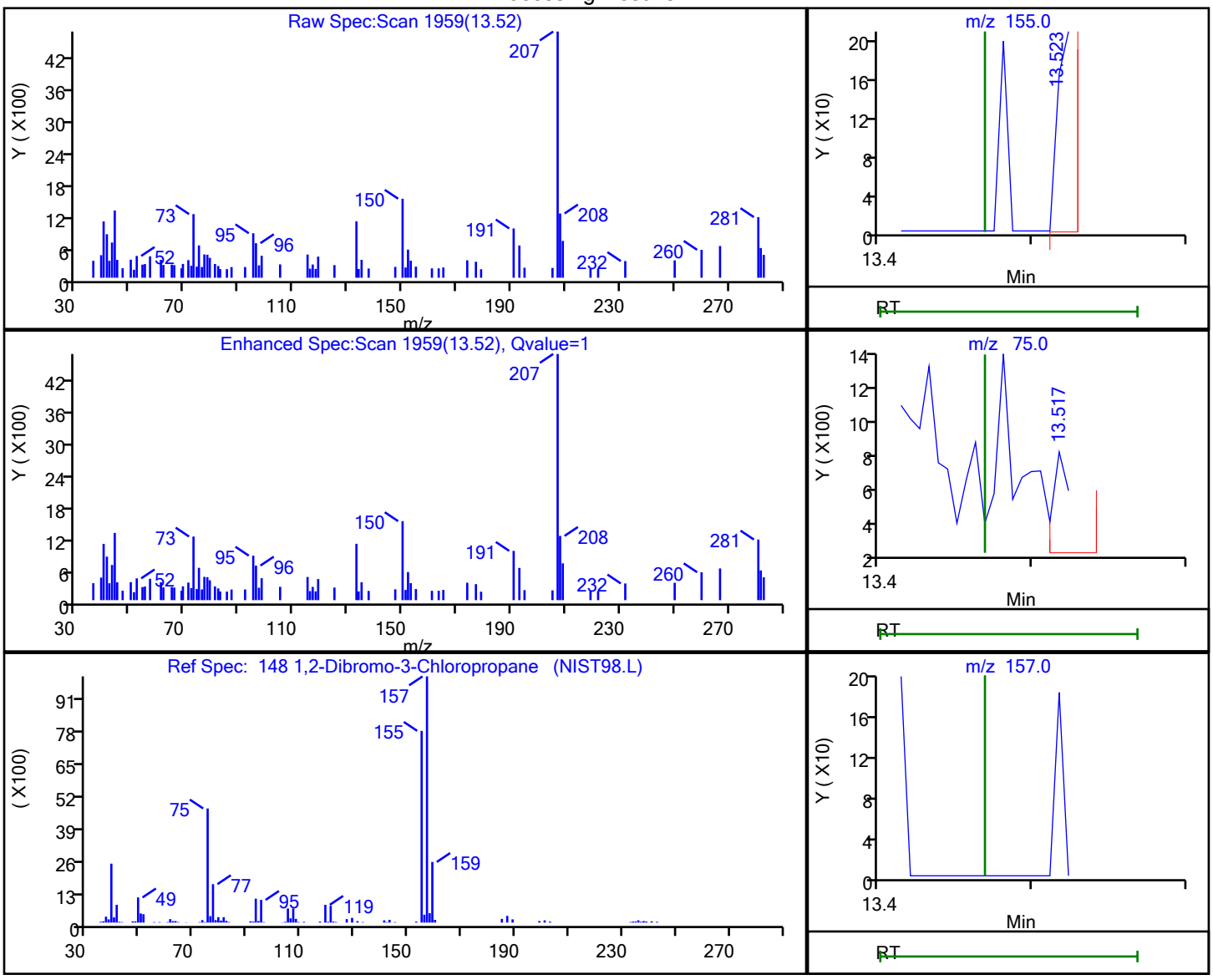
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

148 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Processing Results



RT	Mass	Response	Amount
13.52	155.00	136	0.096248
13.52	75.00	427	
13.47	157.00	0	
13.52	39.00	330	

Reviewer: innoonk, 09-Aug-2023 10:57:13 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

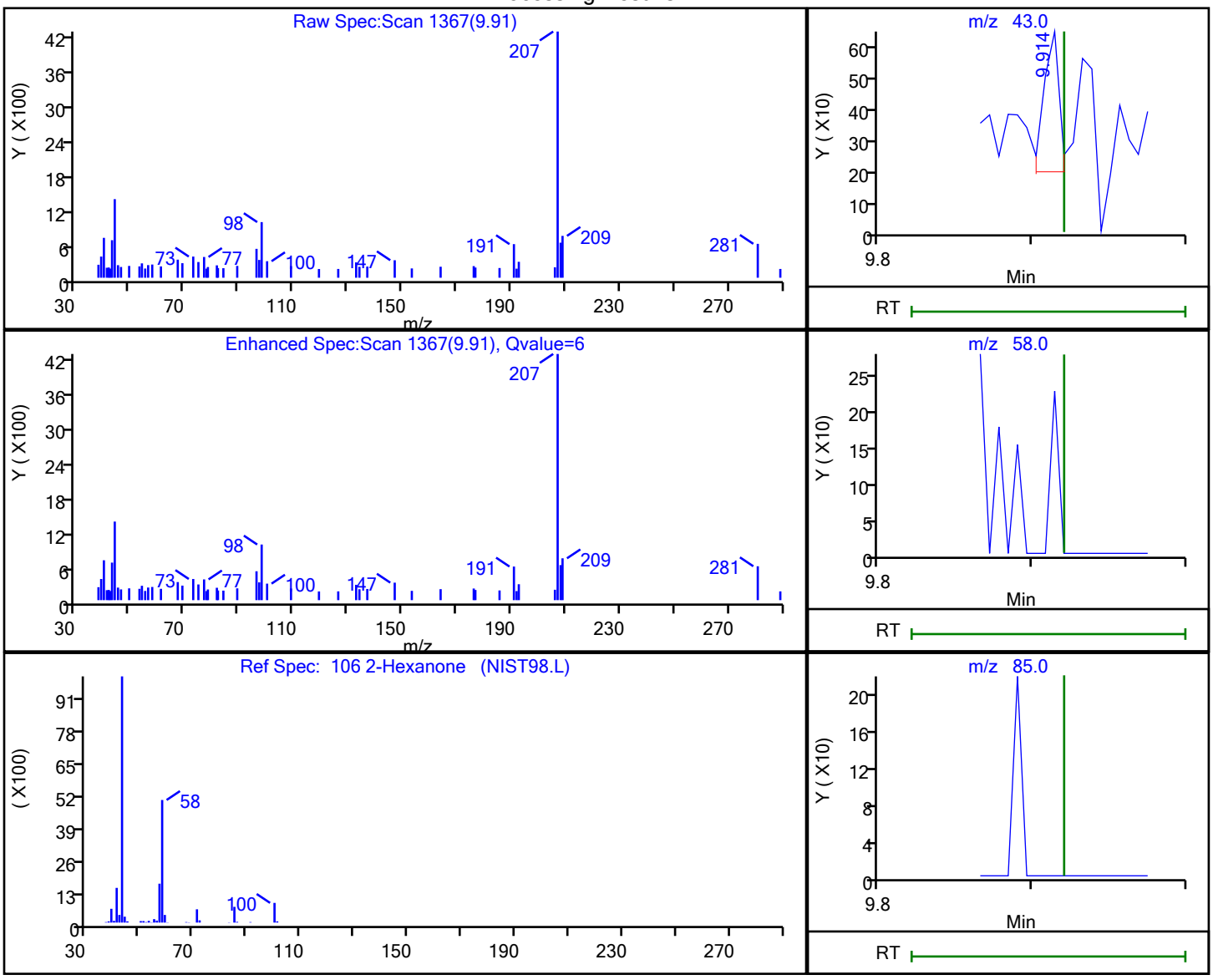
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

106 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.91	43.00	316	1.672417
9.92	58.00	0	
9.92	85.00	0	
9.92	100.00	0	

Reviewer: innoonk, 09-Aug-2023 10:56:56 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

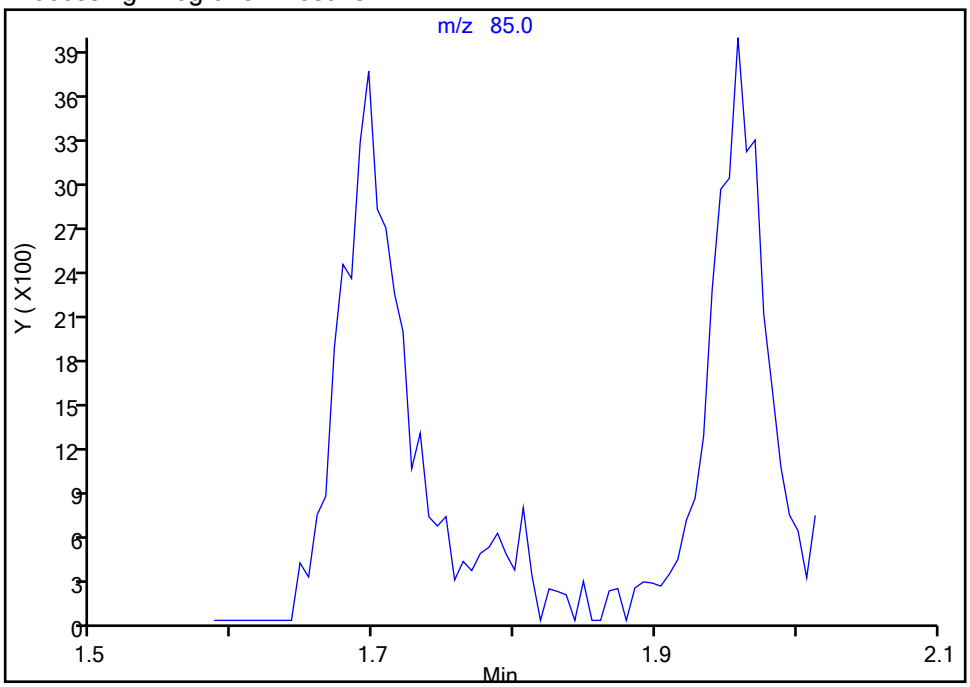
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

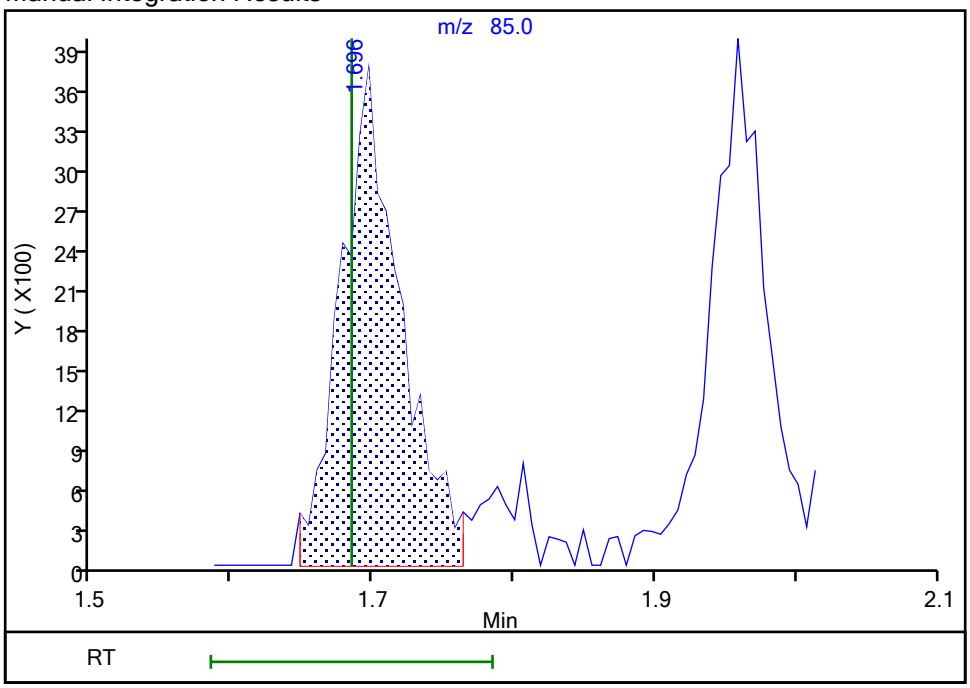
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.70
Area: 11251
Amount: 0.119869
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 10:54:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

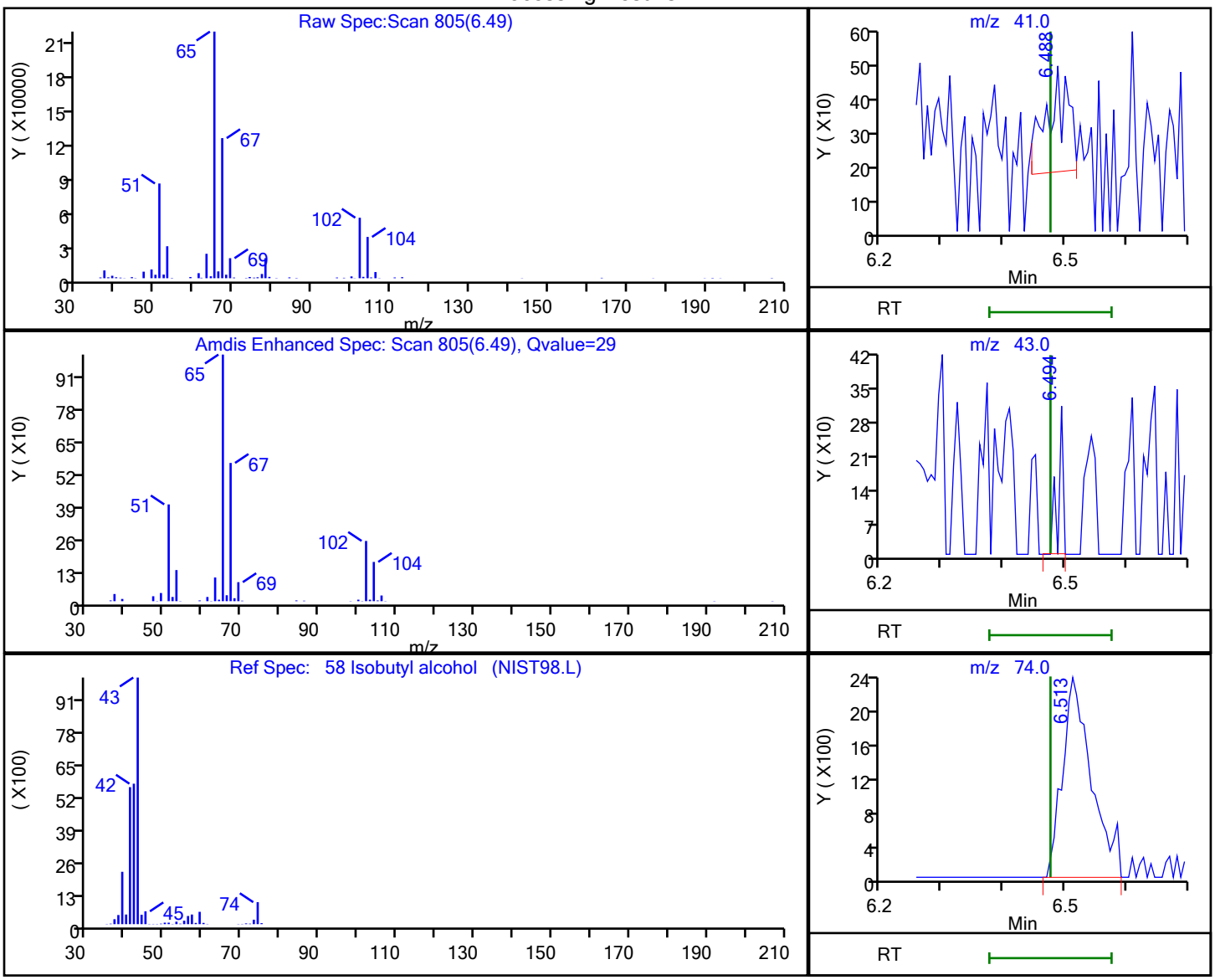
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
6.49	41.00	752	11.820861
6.49	43.00	173	
6.51	74.00	7720	

Reviewer: innoonk, 09-Aug-2023 10:56:01 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

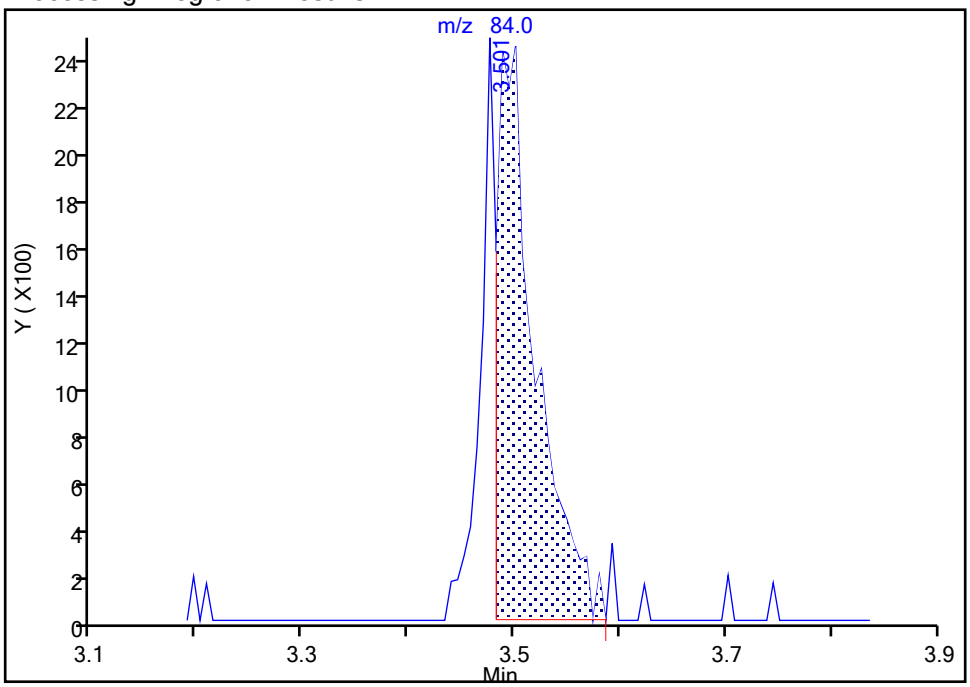
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

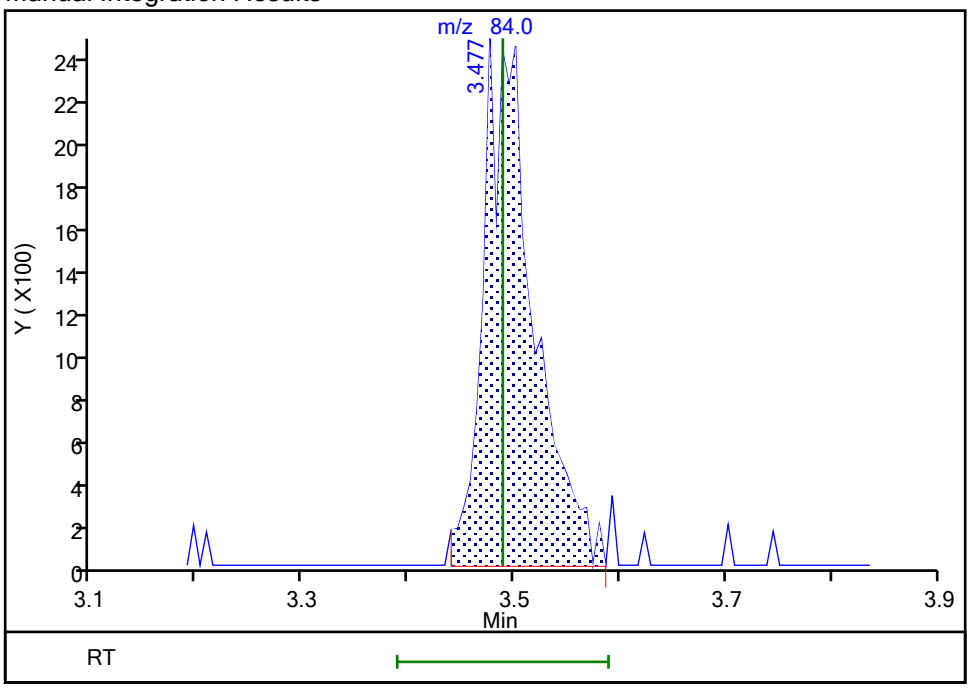
Processing Integration Results

RT: 3.50
Area: 6028
Amount: 0.058085
Amount Units: ug/l



Manual Integration Results

RT: 3.48
Area: 7992
Amount: 0.077010
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 10:55:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

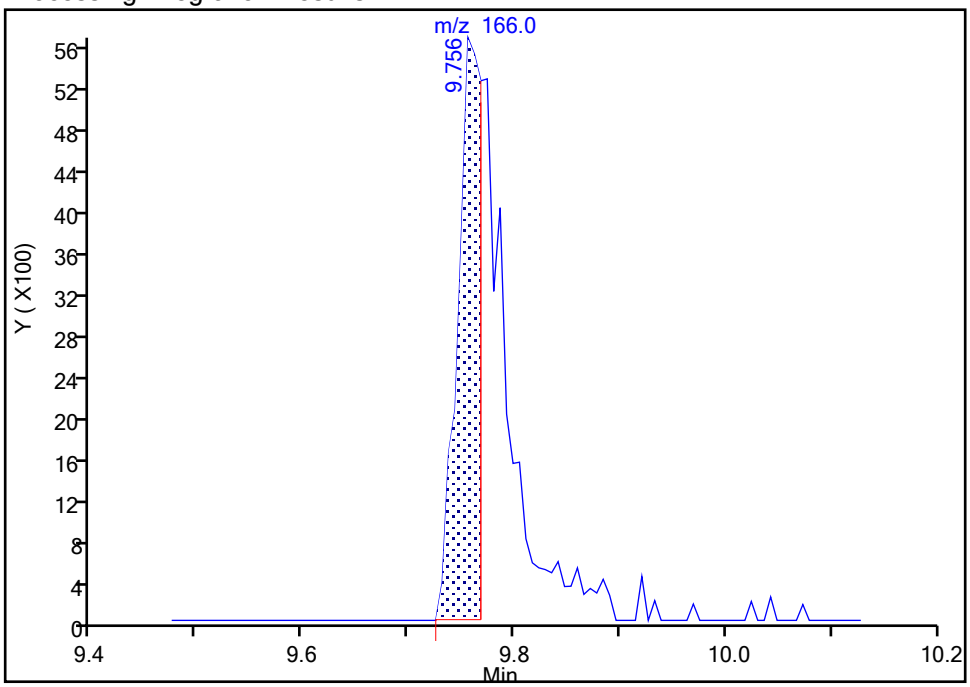
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

88 Tetrachloroethene, CAS: 127-18-4

Signal: 1

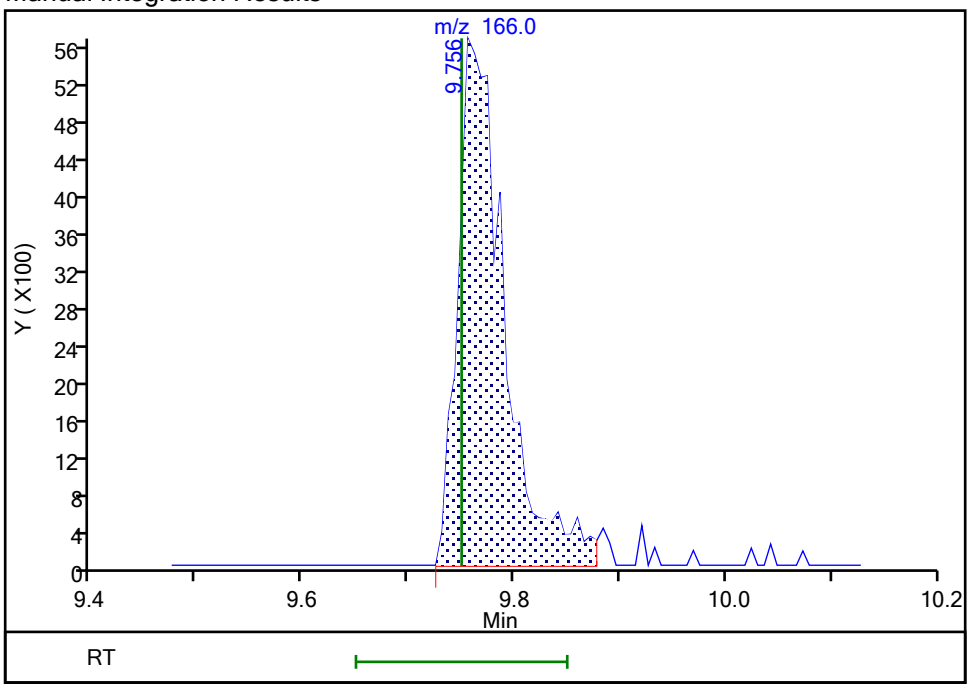
Processing Integration Results

RT: 9.76
Area: 8874
Amount: 0.065832
Amount Units: ug/l



Manual Integration Results

RT: 9.76
Area: 17254
Amount: 0.128000
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 10:56:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

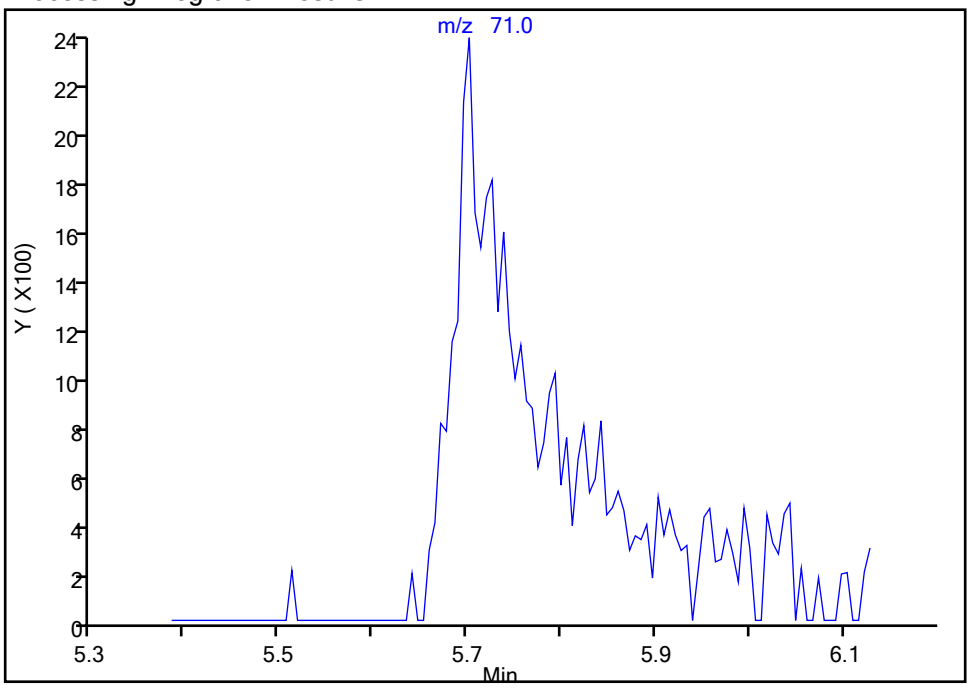
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

49 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

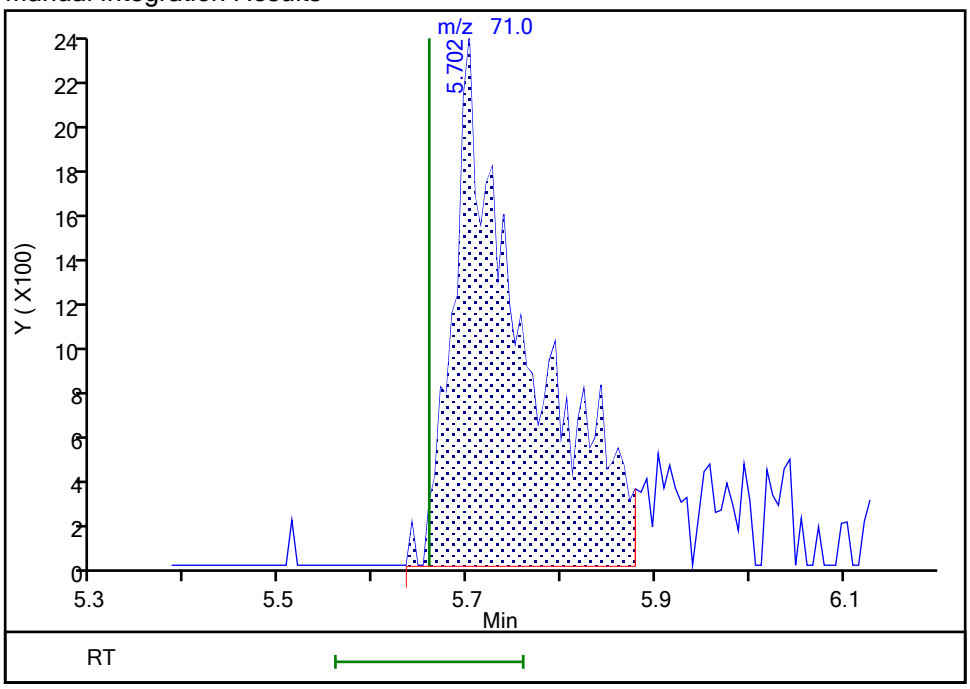
Not Detected
Expected RT: 5.66

Processing Integration Results



Manual Integration Results

RT: 5.70
Area: 12298
Amount: 1.619793
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 10:55:34 07:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

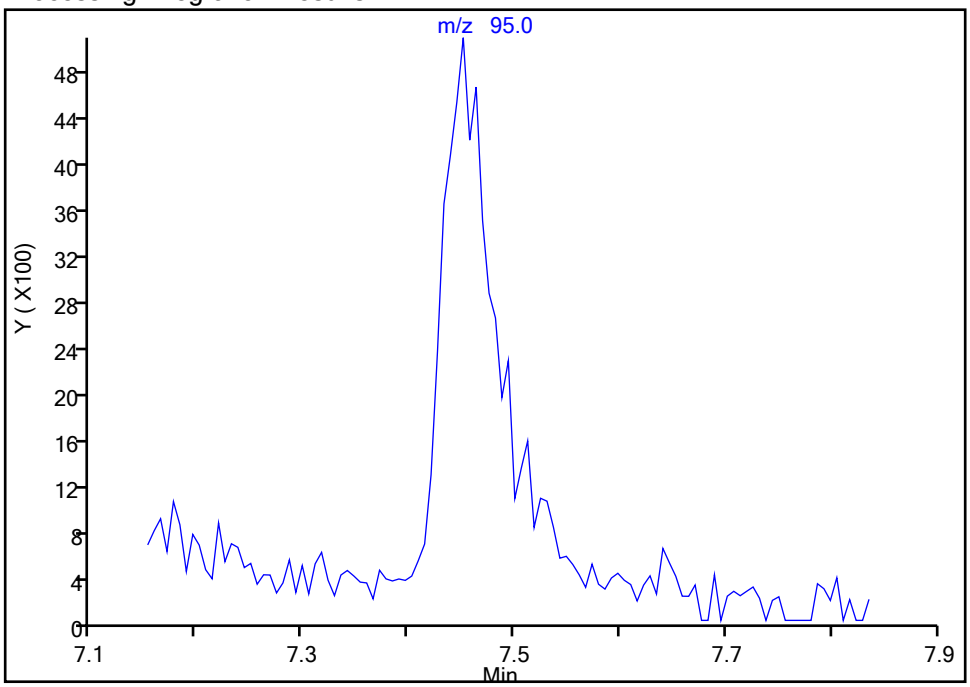
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6

Signal: 1

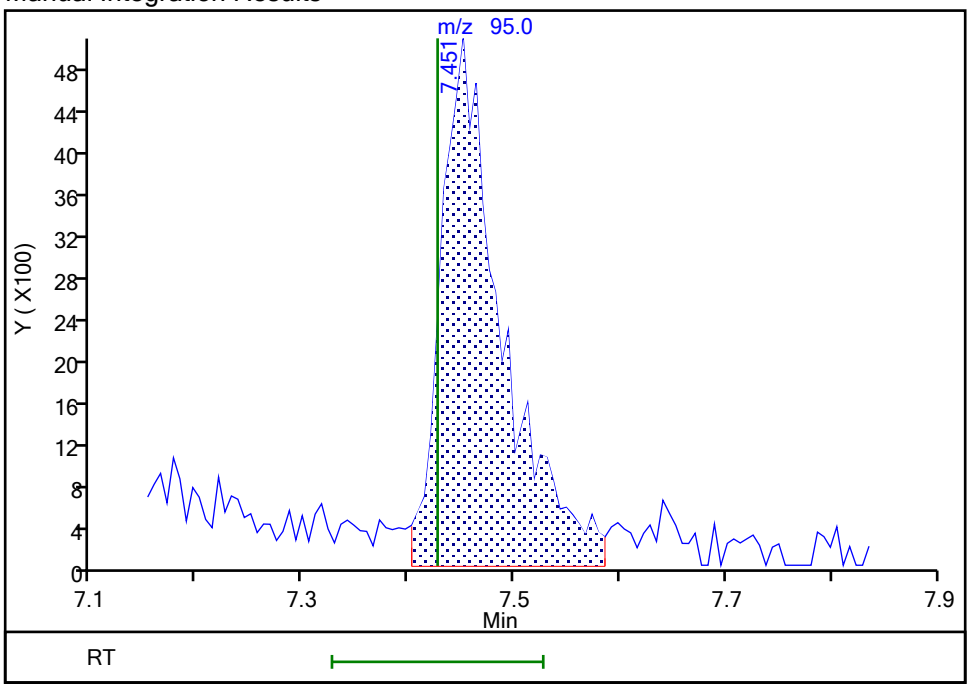
Not Detected
Expected RT: 7.43

Processing Integration Results



Manual Integration Results

RT: 7.45
Area: 20033
Amount: 0.185211
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 10:56:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

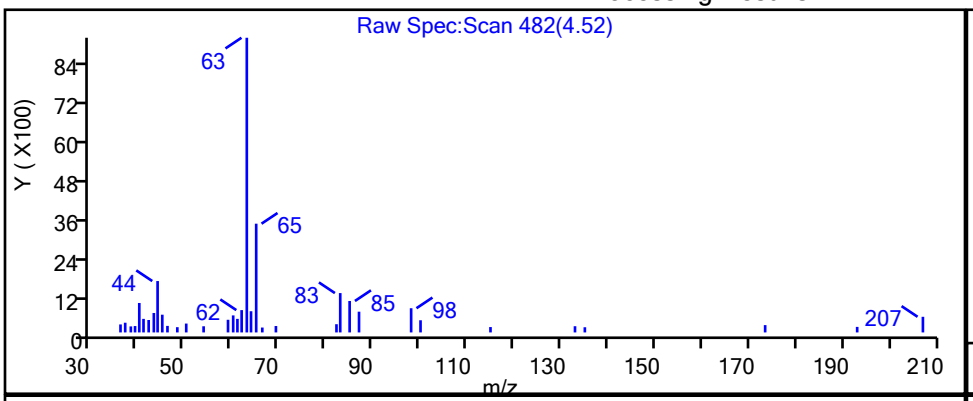
User Disabled Compound Report

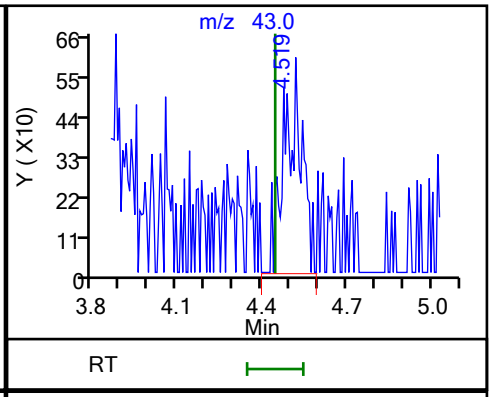
Eurofins Lancaster Laboratories Environment Testing, LLC

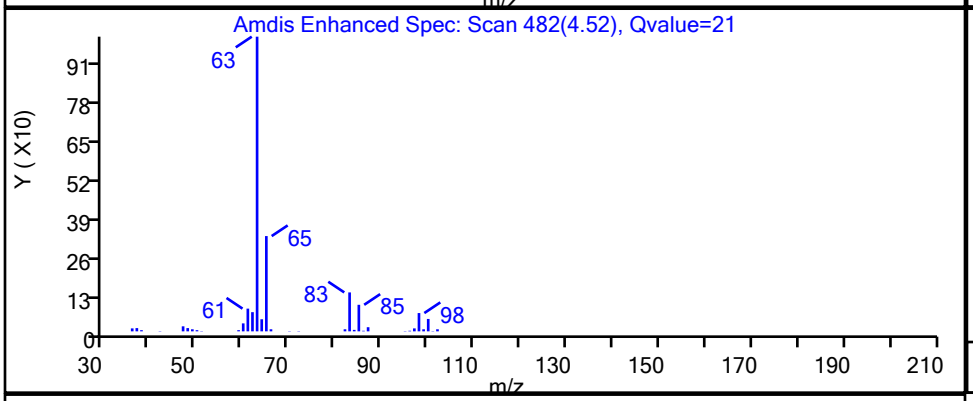
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X13.D				
Injection Date:	08-Aug-2023 22:39:30	Instrument ID:	10193		
Lims ID:	410-136864-B-4	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

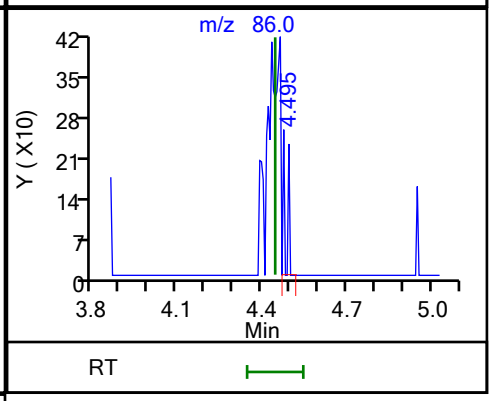
38 Vinyl acetate, CAS: 108-05-4

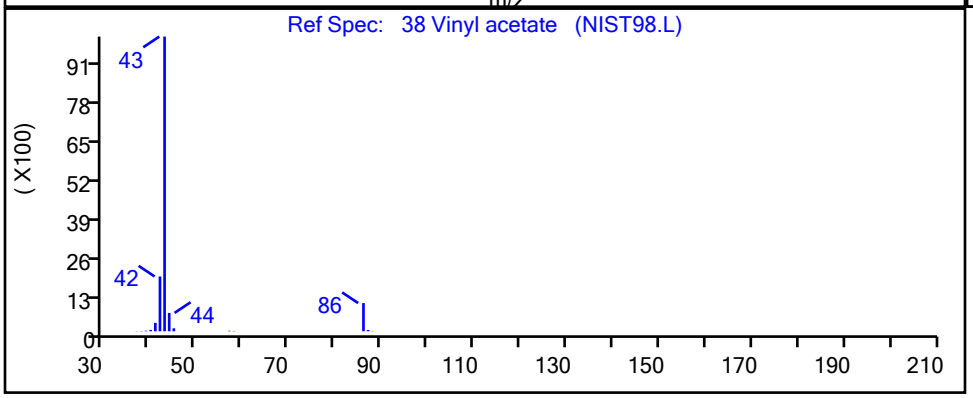
Processing Results











RT	Mass	Response	Amount
4.52	43.00	2609	0.020998
4.49	86.00	177	

Reviewer: innoonk, 09-Aug-2023 10:55:19 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WDUP Lab Sample ID: 410-136864-5

Matrix: Water Lab File ID: CG08X20.D

Analysis Method: 8260D Date Collected: 07/27/2023 10:20

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 01:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.30
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.30
75-34-3	1,1-Dichloroethane	3.9		1.0	0.30
75-35-4	1,1-Dichloroethene	ND		1.0	0.30
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.40
106-93-4	1,2-Dibromoethane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.40
107-06-2	1,2-Dichloroethane	ND		1.0	0.30
78-87-5	1,2-Dichloropropane	ND		1.0	0.40
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.40
142-28-9	1,3-Dichloropropane	ND		1.0	0.40
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.40
123-91-1	1,4-Dioxane	ND		200	45
78-93-3	2-Butanone	ND		10	1.7
591-78-6	2-Hexanone	ND		10	2.0
108-10-1	4-Methyl-2-pentanone	ND		10	2.0
67-64-1	Acetone	ND		10	2.0
75-05-8	Acetonitrile	ND		100	31
107-13-1	Acrylonitrile	ND		10	1.1
107-05-1	Allyl chloride	ND		10	1.0
71-43-2	Benzene	0.33	J	1.0	0.30
75-27-4	Bromodichloromethane	ND		1.0	0.30
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.54
75-15-0	Carbon disulfide	ND		10	0.40
56-23-5	Carbon tetrachloride	ND		1.0	0.30
75-00-3	Chloroethane	2.1		1.0	0.070
67-66-3	Chloroform	ND		1.0	0.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WDUP Lab Sample ID: 410-136864-5

Matrix: Water Lab File ID: CG08X20.D

Analysis Method: 8260D Date Collected: 07/27/2023 10:20

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 01:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.10
126-99-8	Chloroprene	ND		10	0.46
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.30
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
60-29-7	Diethyl ether	21		10	1.1
97-63-2	Ethyl methacrylate	ND		10	0.81
100-41-4	Ethylbenzene	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		1.0	0.40
78-83-1	Isobutyl alcohol	ND		200	11
179601-23-1	m&p-Xylene	ND		2.0	0.40
126-98-7	Methacrylonitrile	ND		100	9.7
74-88-4	Methyl iodide	ND		10	0.58
80-62-6	Methyl methacrylate	ND		10	3.5
75-09-2	Methylene Chloride	ND		1.0	0.70
91-20-3	Naphthalene	ND		1.0	0.40
95-47-6	o-Xylene	ND		1.0	0.40
76-01-7	Pentachloroethane	ND		10	1.7
107-12-0	Propionitrile	ND	cn	100	10
100-42-5	Styrene	ND		1.0	0.30
127-18-4	Tetrachloroethene	ND		1.0	0.30
109-99-9	Tetrahydrofuran	ND		25	2.0
108-88-3	Toluene	ND		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.40
79-01-6	Trichloroethene	ND		1.0	0.30
75-69-4	Trichlorofluoromethane	ND		1.0	0.40
108-05-4	Vinyl acetate	ND		10	3.2
75-01-4	Vinyl chloride	0.20	J	1.0	0.20
1330-20-7	Xylenes, Total	ND		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WDUP Lab Sample ID: 410-136864-5

Matrix: Water Lab File ID: CG08X20.D

Analysis Method: 8260D Date Collected: 07/27/2023 10:20

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 01:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	83		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D
Lims ID: 410-136864-B-5
Client ID: 16WDUP
Sample Type: Client
Inject. Date: 09-Aug-2023 01:12:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-021
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 13:36:44 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 13:34:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85		1.684				ND	MU
4 Dimethyl ether	45		1.739				ND	U
5 Chloromethane	50		1.849				ND	7
6 Vinyl chloride	62	1.928	1.940	-0.012	97	23084	0.2044	
9 Bromomethane	94		2.209				ND	7
10 Chloroethane	64	2.263	2.270	-0.007	98	138882	2.09	
12 Trichlorofluoromethane	101		2.532				ND	
14 Ethyl ether	59	2.690	2.696	-0.006	90	1536227	21.1	
18 1,1-Dichloroethene	96	2.940	2.946	-0.006	93	15530	0.1880	
20 Acetone	43		2.989				ND	7
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.001				ND	
22 Iodomethane	142		3.111				ND	
25 Carbon disulfide	76		3.196				ND	7
27 Acetonitrile	41		3.318				ND	
29 3-Chloro-1-propene	41		3.336				ND	7
30 Methylene Chloride	84	3.483	3.489	-0.006	41	6227	0.0603	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.532	3.544	-0.012	96	254967	50.0	
33 Acrylonitrile	53		3.800				ND	
35 trans-1,2-Dichloroethene	96	3.836	3.824	0.012	92	6320	0.0630	
37 1,1-Dichloroethane	63	4.434	4.434	0.000	96	684148	3.89	
38 Vinyl acetate	43		4.446				ND	7
40 2-Chloro-1,3-butadiene	53		4.550				ND	
42 2-Butanone (MEK)	43		5.281				ND	7
45 Propionitrile	54		5.391				ND	
47 Methacrylonitrile	67		5.586				ND	7
49 Tetrahydrofuran	71	5.702	5.659	0.043	91	11147	1.60	a
50 Chloroform	83		5.799				ND	
53 1,1,1-Trichloroethane	97		6.025				ND	7
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	94	916367	10.3	
56 Carbon tetrachloride	117		6.238				ND	
58 Isobutyl alcohol	41		6.476				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.488	6.482	0.006	99	193128	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Benzene	78	6.507	6.507	0.000	95	139657	0.3331	
61 1,2-Dichloroethane	62		6.592				ND	7
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	99	3798128	10.0	
68 Trichloroethene	95	7.445	7.427	0.018	93	14640	0.1360	a
70 1,2-Dichloropropane	63		7.769				ND	7
72 Dibromomethane	93		7.884				ND	
74 1,4-Dioxane	88		7.890				ND	
73 Methyl methacrylate	69		7.890				ND	7
76 Dichlorobromomethane	83		8.134				ND	7
82 4-Methyl-2-pentanone (MIBK)	43		8.915				ND	7
$ 83 Toluene-d8 (Surr)	98	9.043	9.043	0.000	93	3793263	9.64	
84 Toluene	92		9.134				ND	7
85 trans-1,3-Dichloropropene	75		9.451				ND	7
86 Ethyl methacrylate	69		9.536				ND	7
87 1,1,2-Trichloroethane	97		9.671				ND	
88 Tetrachloroethene	166	9.762	9.750	0.012	95	12568	0.0931	
89 1,3-Dichloropropane	76		9.841				ND	
106 2-Hexanone	43		9.921				ND	7
108 Chlorodibromomethane	129		10.073				ND	
110 Ethylene Dibromide	107		10.183				ND	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	83	2994118	10.0	
114 1,1,1,2-Tetrachloroethane	131		10.774				ND	
115 Ethylbenzene	91		10.780				ND	
116 m-Xylene & p-Xylene	106		10.902				ND	
S 117 Xylenes, Total	106		11.245				ND	7
118 o-Xylene	106		11.250				ND	7
119 Styrene	104		11.268				ND	
120 Bromoform	173		11.426				ND	7
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1173430	8.34	
126 1,1,2,2-Tetrachloroethane	83		11.829				ND	
128 1,2,3-Trichloropropane	110		11.871				ND	
134 Pentachloroethane	167		12.329				ND	
137 1,3-Dichlorobenzene	146		12.566				ND	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1611879	10.0	
140 1,4-Dichlorobenzene	146		12.640				ND	
144 1,2-Dichlorobenzene	146		12.902				ND	
148 1,2-Dibromo-3-Chloropropane	155		13.469				ND	
150 1,2,4-Trichlorobenzene	180		14.023				ND	
151 Hexachlorobutadiene	225		14.103				ND	
152 Naphthalene	128		14.200				ND	

QC Flag Legend

Processing Flags
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected
- a - User Assigned ID

Reagents:

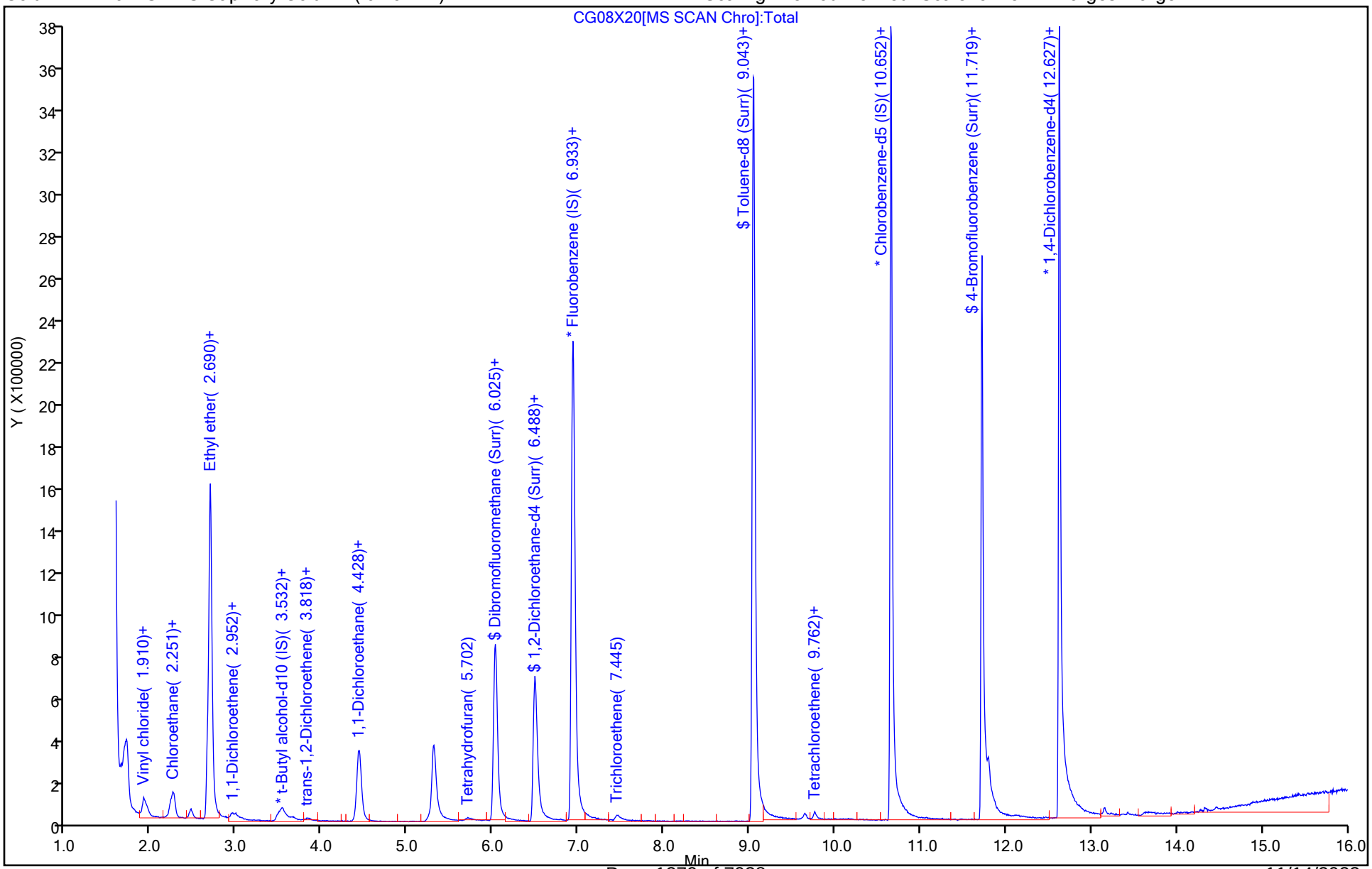
MSV_HP25_ISSS_00074 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Aug-2023 13:36:44 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5	Worklist Smp#:	21
Client ID:	16WDUP				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Lims ID:	410-136864-B-5				
Client ID:	16WDUP				
Sample Type:	Client				
Inject. Date:	09-Aug-2023 01:12:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-021				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 13:36:44	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 13:34:57

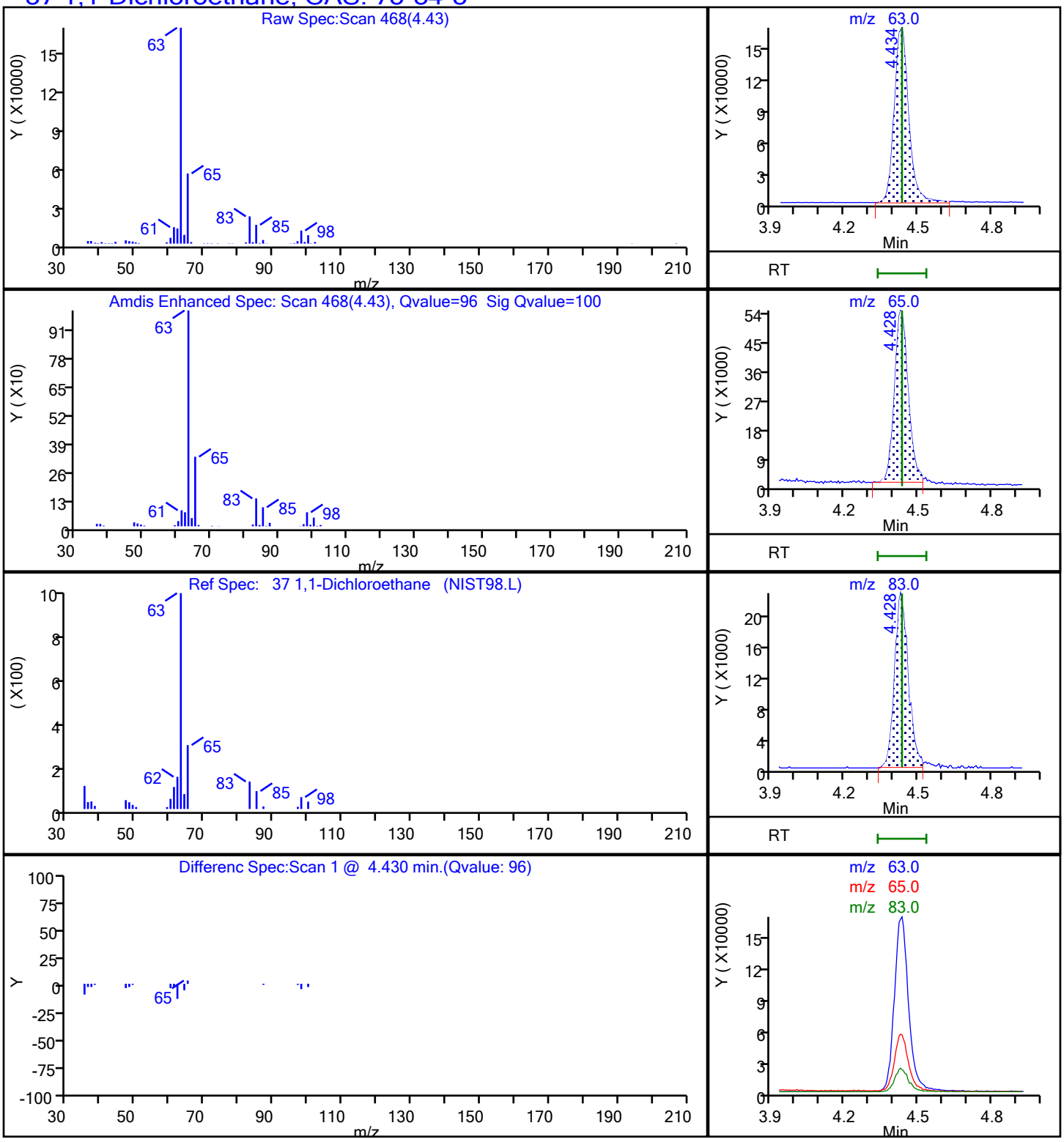
Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	103.20
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.86
$ 83 Toluene-d8 (Surr)	10.0	9.64	96.42
$ 124 4-Bromofluorobenzene (Surr)	10.0	8.34	83.37

Report Date: 09-Aug-2023 13:36:45 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193		
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	gaw91131	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

37 1,1-Dichloroethane, CAS: 75-34-3



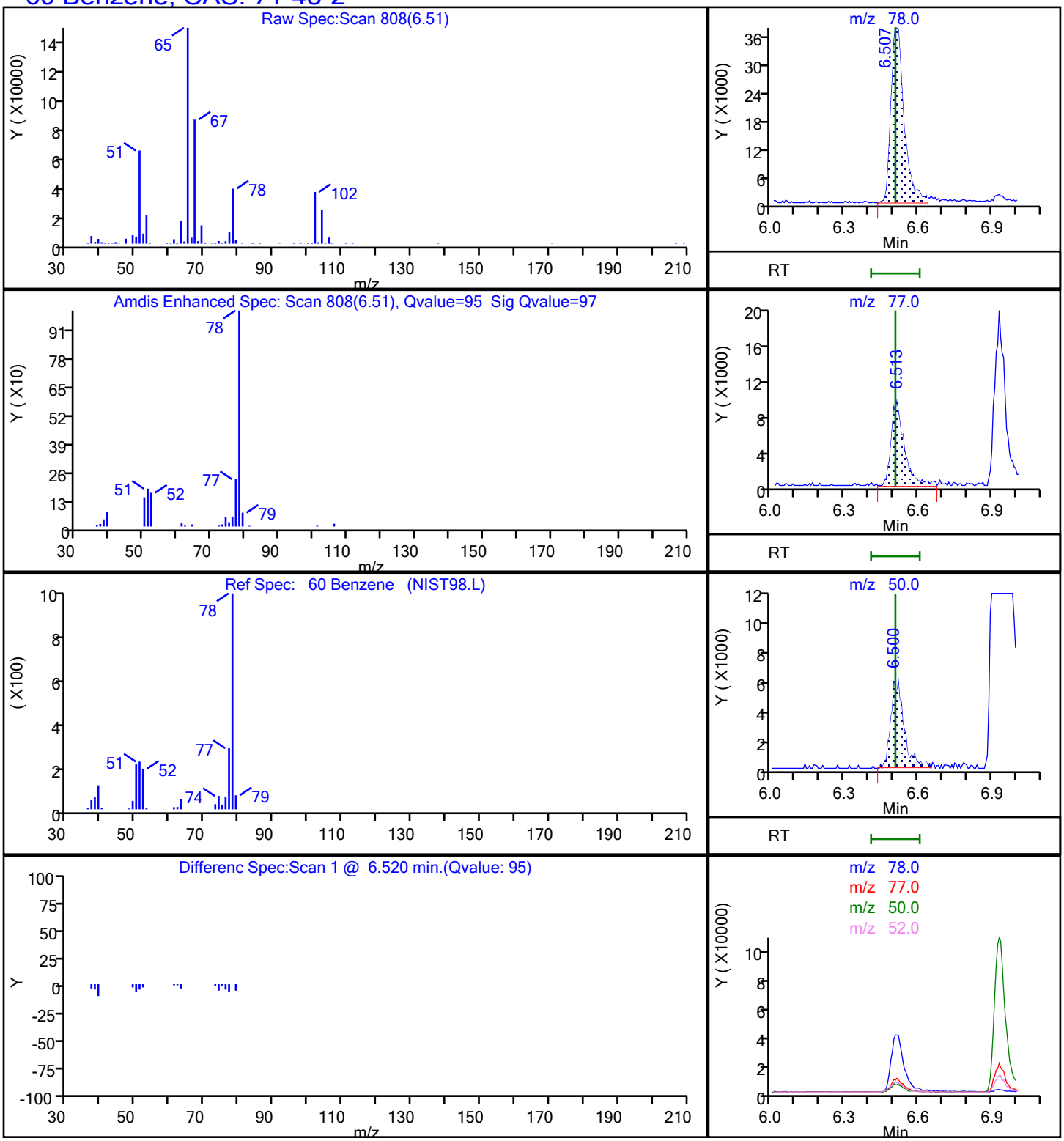
11/14/2023
11:12 AM

Report Date: 09-Aug-2023 13:36:45 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193		
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	gaw91131	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

60 Benzene, CAS: 71-43-2

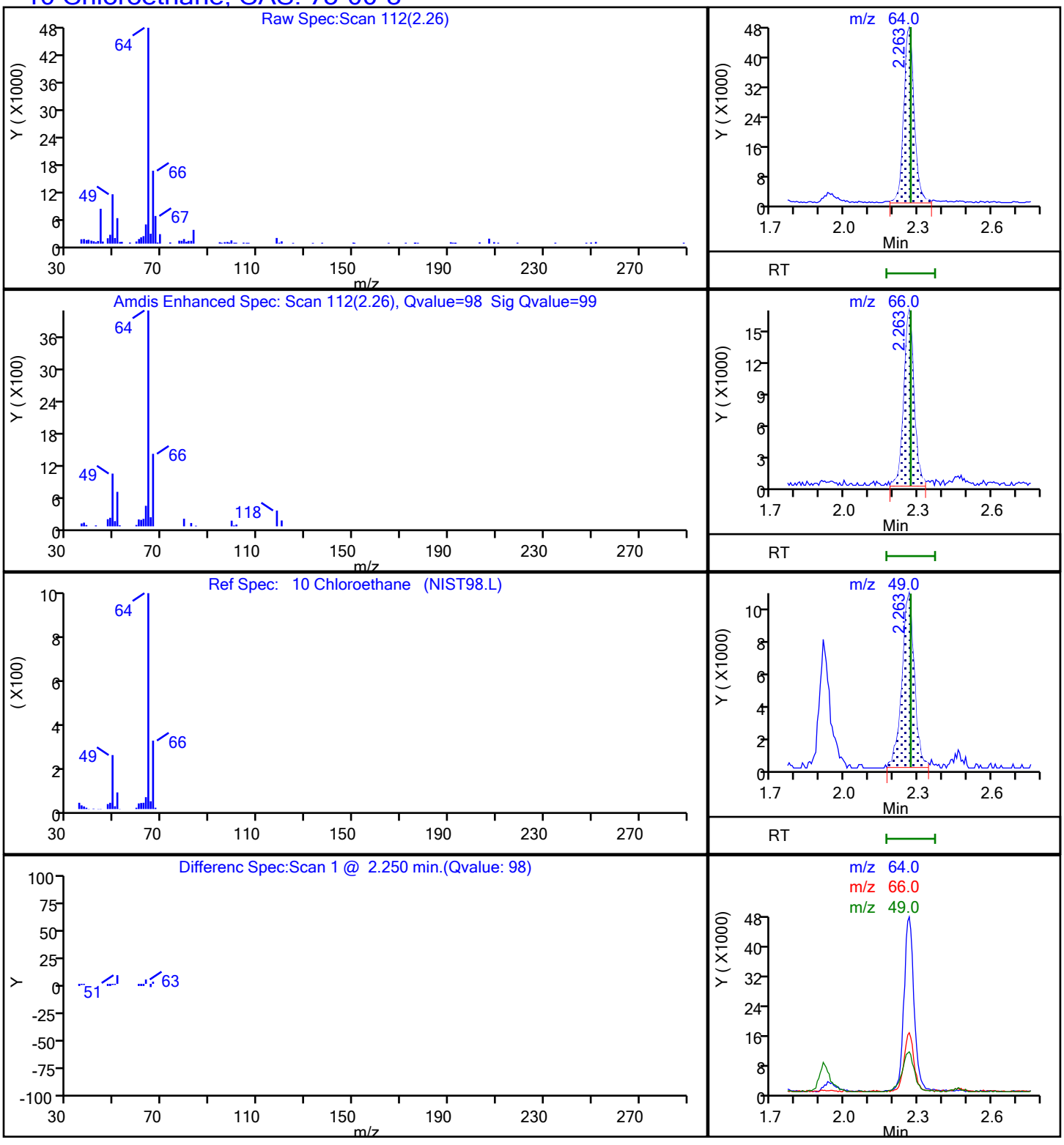


Report Date: 09-Aug-2023 13:36:45 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193		
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	gaw91131	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

10 Chloroethane, CAS: 75-00-3

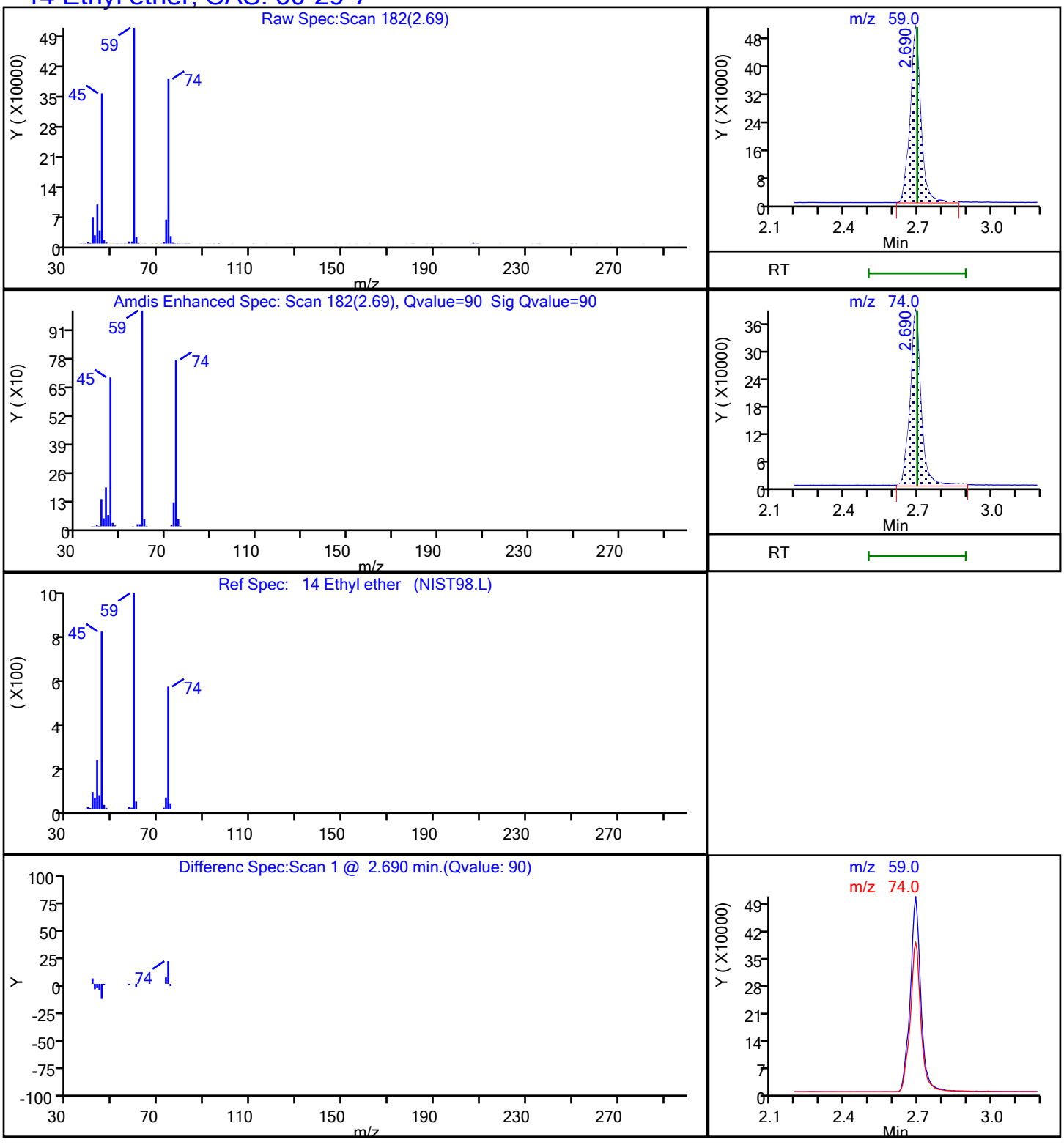


11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193		
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	gaw91131	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

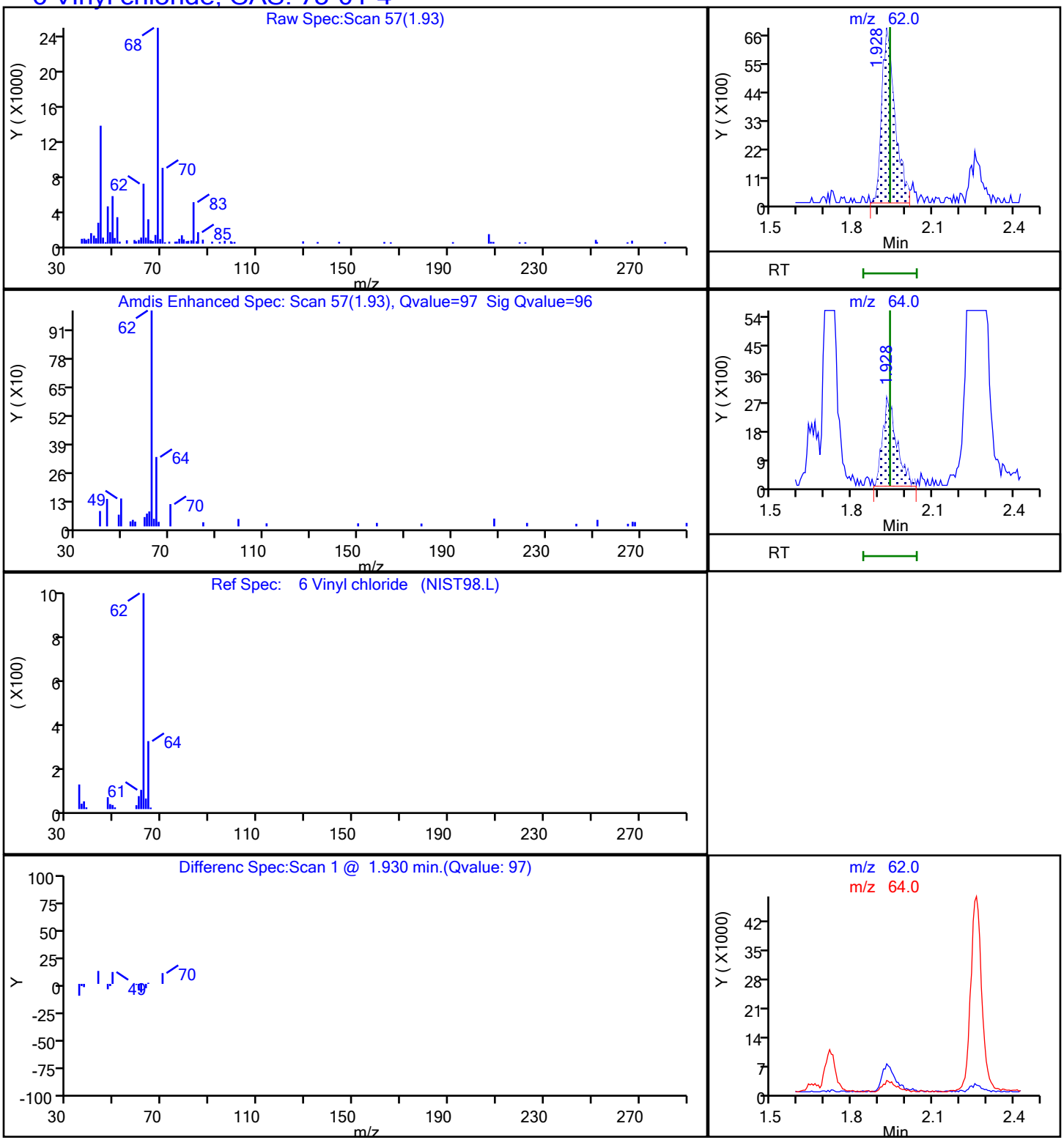
14 Ethyl ether, CAS: 60-29-7



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193		
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	gaw91131	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

6 Vinyl chloride, CAS: 75-01-4



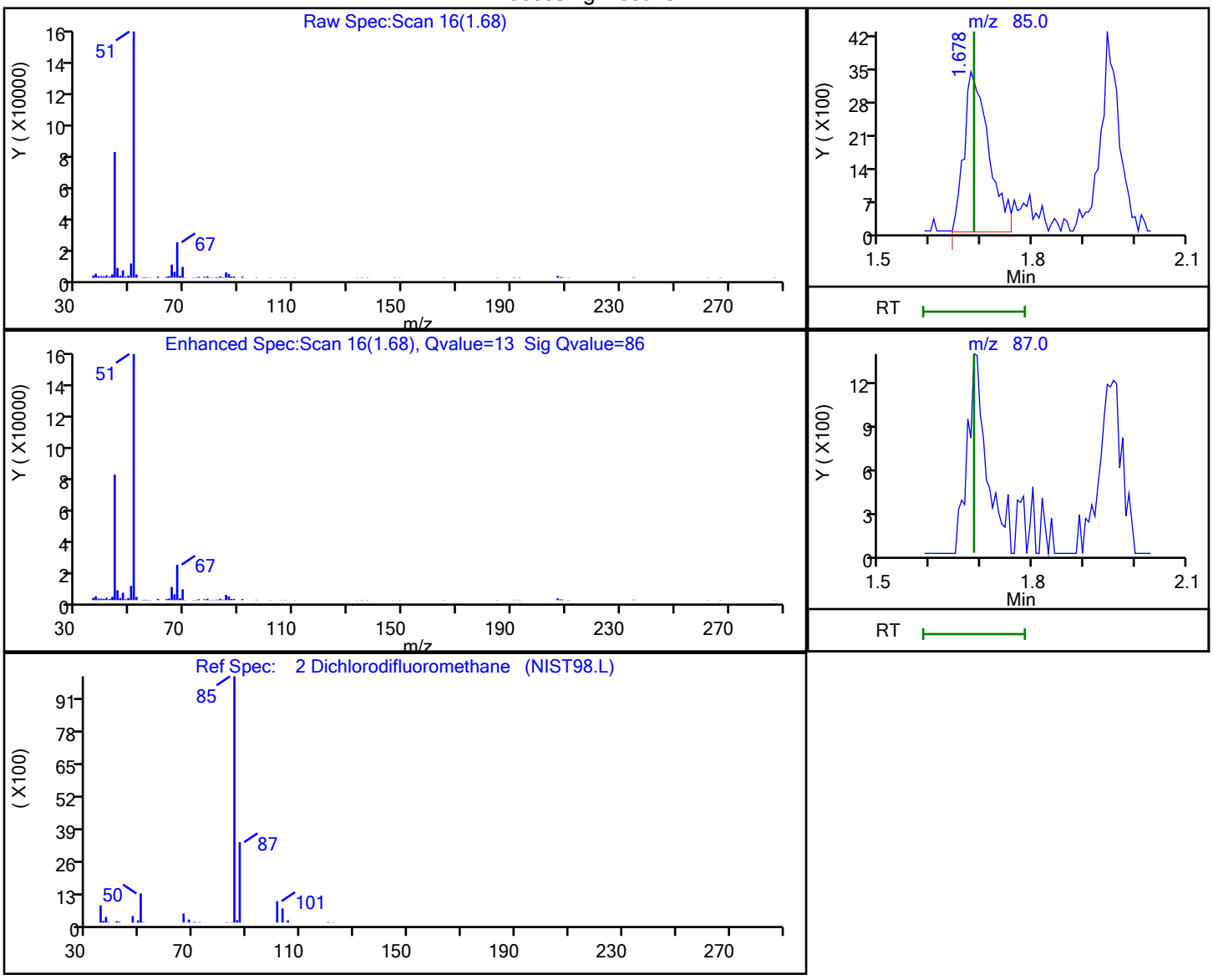
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193		
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	gaw91131	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.68	85.00	11298	0.120952
1.68	87.00	0	

Reviewer: innoonk, 09-Aug-2023 13:33:06 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

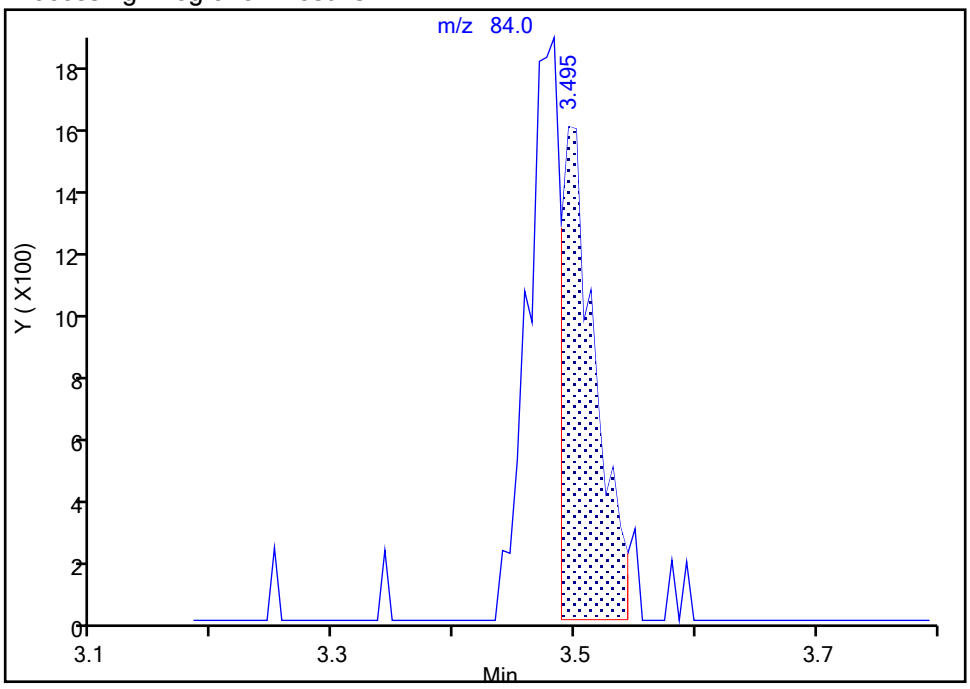
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193		
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	gaw91131	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

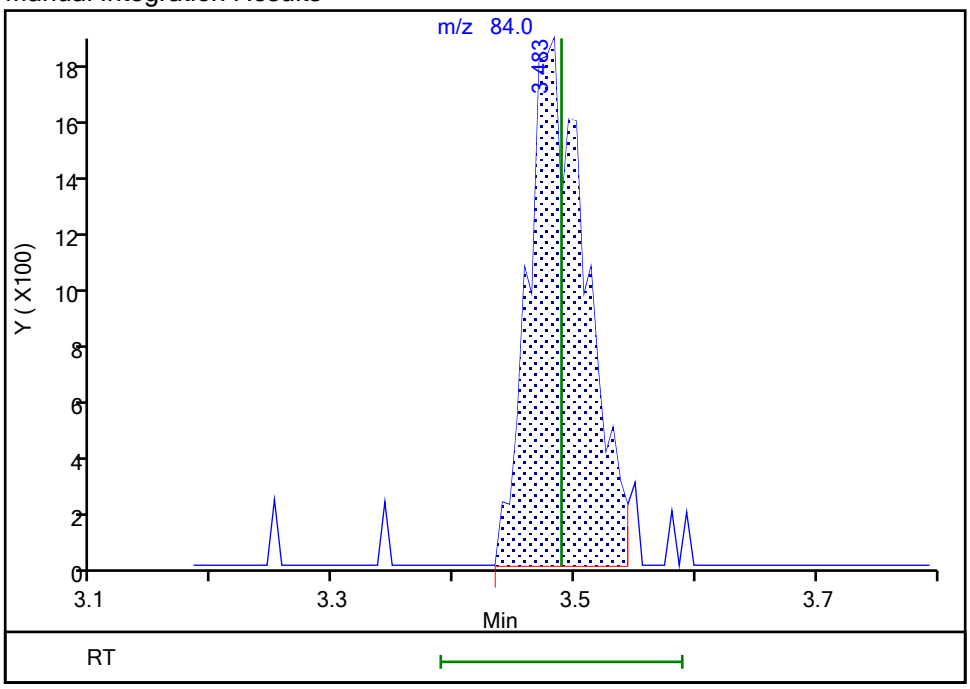
Processing Integration Results

RT: 3.49
Area: 3130
Amount: 0.030306
Amount Units: ug/l



Manual Integration Results

RT: 3.48
Area: 6227
Amount: 0.060293
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 13:34:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

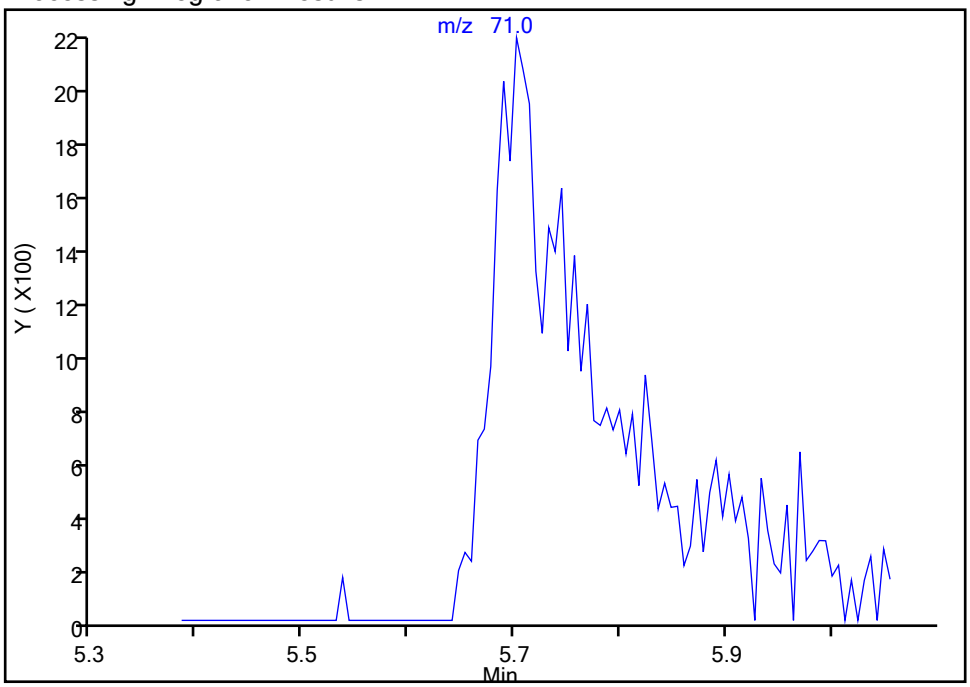
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193		
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	gaw91131	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

49 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

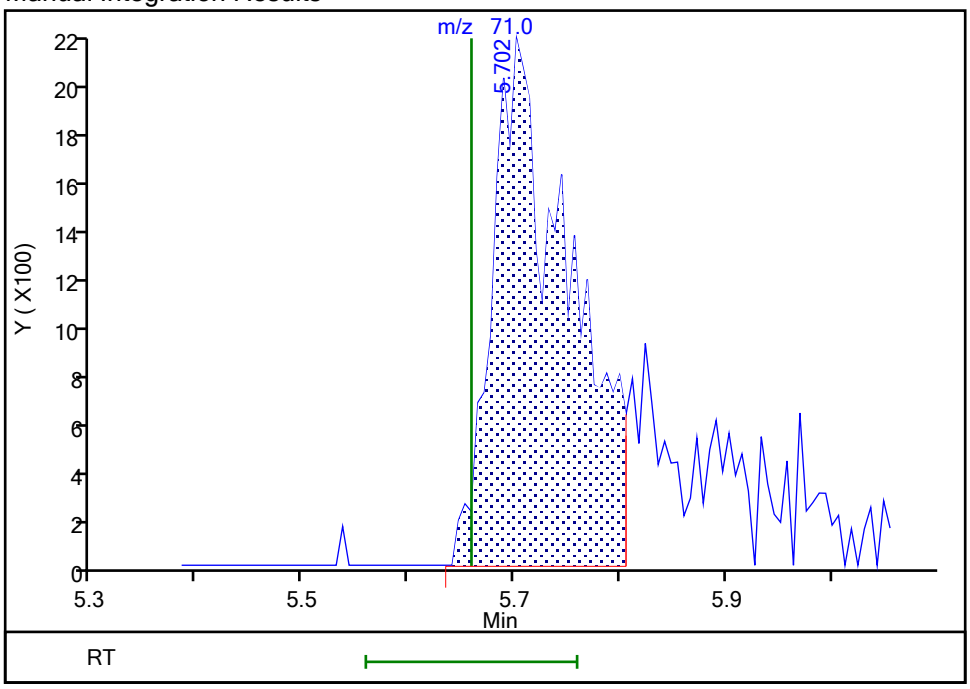
Not Detected
Expected RT: 5.66

Processing Integration Results



Manual Integration Results

RT: 5.70
Area: 11147
Amount: 1.601902
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 13:34:25 07:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

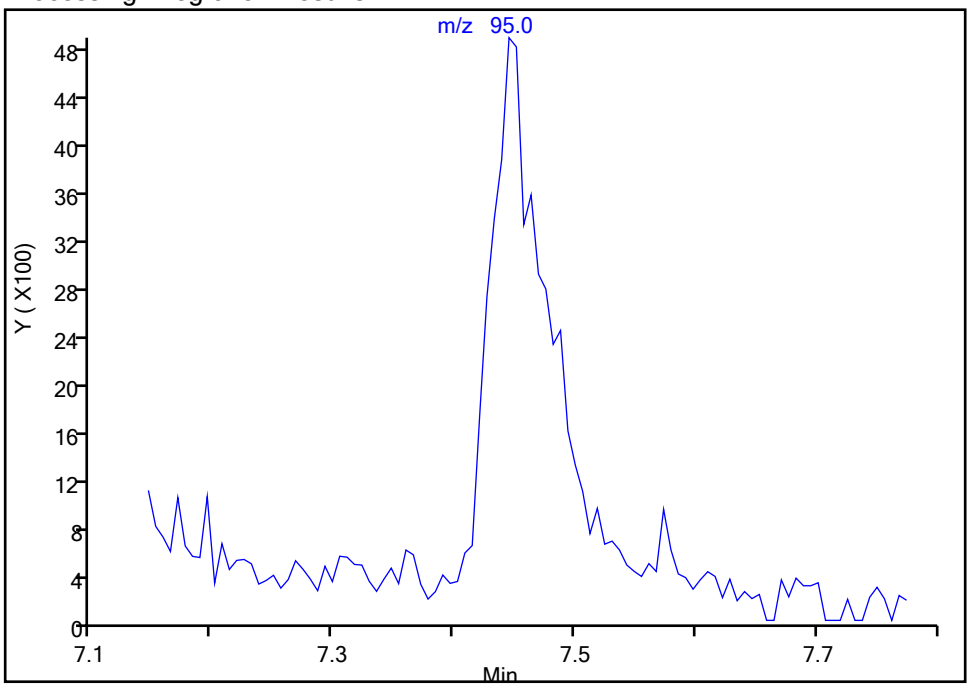
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X20.D				
Injection Date:	09-Aug-2023 01:12:30	Instrument ID:	10193		
Lims ID:	410-136864-B-5	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	gaw91131	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6

Signal: 1

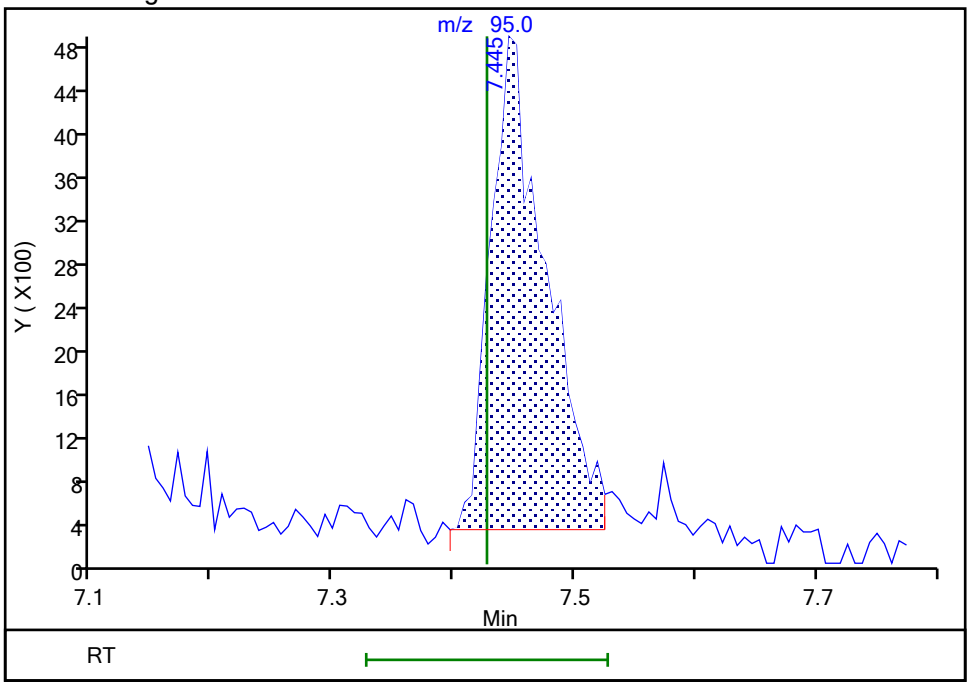
Not Detected
Expected RT: 7.43

Processing Integration Results



Manual Integration Results

RT: 7.45
Area: 14640
Amount: 0.136006
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 13:34:37 07:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1B Lab Sample ID: 410-136864-6

Matrix: Water Lab File ID: CG08X21.D

Analysis Method: 8260D Date Collected: 07/26/2023 12:05

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 01:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.30
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.30
75-34-3	1,1-Dichloroethane	ND		1.0	0.30
75-35-4	1,1-Dichloroethene	ND		1.0	0.30
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.40
106-93-4	1,2-Dibromoethane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.40
107-06-2	1,2-Dichloroethane	ND		1.0	0.30
78-87-5	1,2-Dichloropropane	ND		1.0	0.40
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.40
142-28-9	1,3-Dichloropropane	ND		1.0	0.40
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.40
123-91-1	1,4-Dioxane	ND		200	45
78-93-3	2-Butanone	ND		10	1.7
591-78-6	2-Hexanone	ND		10	2.0
108-10-1	4-Methyl-2-pentanone	ND		10	2.0
67-64-1	Acetone	ND		10	2.0
75-05-8	Acetonitrile	ND		100	31
107-13-1	Acrylonitrile	ND		10	1.1
107-05-1	Allyl chloride	ND		10	1.0
71-43-2	Benzene	ND		1.0	0.30
75-27-4	Bromodichloromethane	ND		1.0	0.30
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.54
75-15-0	Carbon disulfide	ND		10	0.40
56-23-5	Carbon tetrachloride	ND		1.0	0.30
75-00-3	Chloroethane	ND		1.0	0.070
67-66-3	Chloroform	ND		1.0	0.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1B Lab Sample ID: 410-136864-6

Matrix: Water Lab File ID: CG08X21.D

Analysis Method: 8260D Date Collected: 07/26/2023 12:05

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 01:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.10
126-99-8	Chloroprene	ND		10	0.46
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.30
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
60-29-7	Diethyl ether	ND		10	1.1
97-63-2	Ethyl methacrylate	ND		10	0.81
100-41-4	Ethylbenzene	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		1.0	0.40
78-83-1	Isobutyl alcohol	ND		200	11
179601-23-1	m&p-Xylene	ND		2.0	0.40
126-98-7	Methacrylonitrile	ND		100	9.7
74-88-4	Methyl iodide	ND		10	0.58
80-62-6	Methyl methacrylate	ND		10	3.5
75-09-2	Methylene Chloride	ND		1.0	0.70
91-20-3	Naphthalene	ND		1.0	0.40
95-47-6	o-Xylene	ND		1.0	0.40
76-01-7	Pentachloroethane	ND		10	1.7
107-12-0	Propionitrile	ND	cn	100	10
100-42-5	Styrene	ND		1.0	0.30
127-18-4	Tetrachloroethene	ND		1.0	0.30
109-99-9	Tetrahydrofuran	ND		25	2.0
108-88-3	Toluene	ND		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.40
79-01-6	Trichloroethene	ND		1.0	0.30
75-69-4	Trichlorofluoromethane	ND		1.0	0.40
108-05-4	Vinyl acetate	ND		10	3.2
75-01-4	Vinyl chloride	ND		1.0	0.20
1330-20-7	Xylenes, Total	ND		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1B Lab Sample ID: 410-136864-6

Matrix: Water Lab File ID: CG08X21.D

Analysis Method: 8260D Date Collected: 07/26/2023 12:05

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 01:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X21.D
Lims ID: 410-136864-B-6
Client ID: 16WC1B
Sample Type: Client
Inject. Date: 09-Aug-2023 01:34:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-022
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 13:36:34 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 13:36:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85		1.684				ND	
4 Dimethyl ether	45		1.739				ND	U
5 Chloromethane	50		1.849				ND	7
6 Vinyl chloride	62		1.940				ND	7
9 Bromomethane	94		2.209				ND	7
10 Chloroethane	64		2.270				ND	7
12 Trichlorofluoromethane	101		2.532				ND	
14 Ethyl ether	59	2.715	2.696	0.019	91	21901	0.3034	
18 1,1-Dichloroethene	96		2.946				ND	7
20 Acetone	43	3.001	2.989	0.012	64	10937	0.8855	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.001				ND	
22 Iodomethane	142		3.111				ND	7
25 Carbon disulfide	76		3.196				ND	7
27 Acetonitrile	41		3.318				ND	7
29 3-Chloro-1-propene	41		3.336				ND	7
30 Methylene Chloride	84		3.489				ND	7
* 31 t-Butyl alcohol-d10 (IS)	65	3.538	3.544	-0.006	98	260177	50.0	
33 Acrylonitrile	53		3.800				ND	
35 trans-1,2-Dichloroethene	96		3.824				ND	
37 1,1-Dichloroethane	63	4.440	4.434	0.006	8	5970	0.0342	
38 Vinyl acetate	43		4.446				ND	7
40 2-Chloro-1,3-butadiene	53		4.550				ND	
42 2-Butanone (MEK)	43		5.281				ND	7
45 Propionitrile	54		5.391				ND	
47 Methacrylonitrile	67		5.586				ND	
49 Tetrahydrofuran	71		5.659				ND	
50 Chloroform	83		5.799				ND	
53 1,1,1-Trichloroethane	97		6.025				ND	
$ 54 Dibromofluoromethane (Surr)	113	6.031	6.025	0.006	94	910947	10.3	
56 Carbon tetrachloride	117		6.238				ND	
58 Isobutyl alcohol	41		6.476				ND	U
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.500	6.482	0.018	99	191298	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Benzene	78		6.507				ND	7
61 1,2-Dichloroethane	62		6.592				ND	7
* 65 Fluorobenzene (IS)	96	6.939	6.933	0.006	99	3771859	10.0	
68 Trichloroethene	95		7.427				ND	7
70 1,2-Dichloropropane	63		7.769				ND	
72 Dibromomethane	93		7.884				ND	
74 1,4-Dioxane	88		7.890				ND	
73 Methyl methacrylate	69		7.890				ND	7
76 Dichlorobromomethane	83		8.134				ND	
82 4-Methyl-2-pentanone (MIBK)	43		8.915				ND	7
$ 83 Toluene-d8 (Surr)	98	9.049	9.043	0.006	93	3753252	9.53	
84 Toluene	92	9.146	9.134	0.012	96	7391	0.0263	
85 trans-1,3-Dichloropropene	75		9.451				ND	7
86 Ethyl methacrylate	69		9.536				ND	7
87 1,1,2-Trichloroethane	97		9.671				ND	
88 Tetrachloroethene	166		9.750				ND	7
89 1,3-Dichloropropane	76		9.841				ND	7
106 2-Hexanone	43		9.921				ND	7
108 Chlorodibromomethane	129		10.073				ND	
110 Ethylene Dibromide	107		10.183				ND	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.652	0.006	83	2997194	10.0	
114 1,1,1,2-Tetrachloroethane	131		10.774				ND	7
115 Ethylbenzene	91		10.780				ND	7
116 m-Xylene & p-Xylene	106		10.902				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
118 o-Xylene	106		11.250				ND	7
119 Styrene	104		11.268				ND	7
120 Bromoform	173		11.426				ND	7
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1250112	8.87	
126 1,1,2,2-Tetrachloroethane	83		11.829				ND	
128 1,2,3-Trichloropropane	110		11.871				ND	
134 Pentachloroethane	167		12.329				ND	
137 1,3-Dichlorobenzene	146		12.566				ND	7
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1606982	10.0	
140 1,4-Dichlorobenzene	146		12.640				ND	7
144 1,2-Dichlorobenzene	146		12.902				ND	
148 1,2-Dibromo-3-Chloropropane	155		13.469				ND	
150 1,2,4-Trichlorobenzene	180		14.023				ND	
151 Hexachlorobutadiene	225		14.103				ND	
152 Naphthalene	128		14.200				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

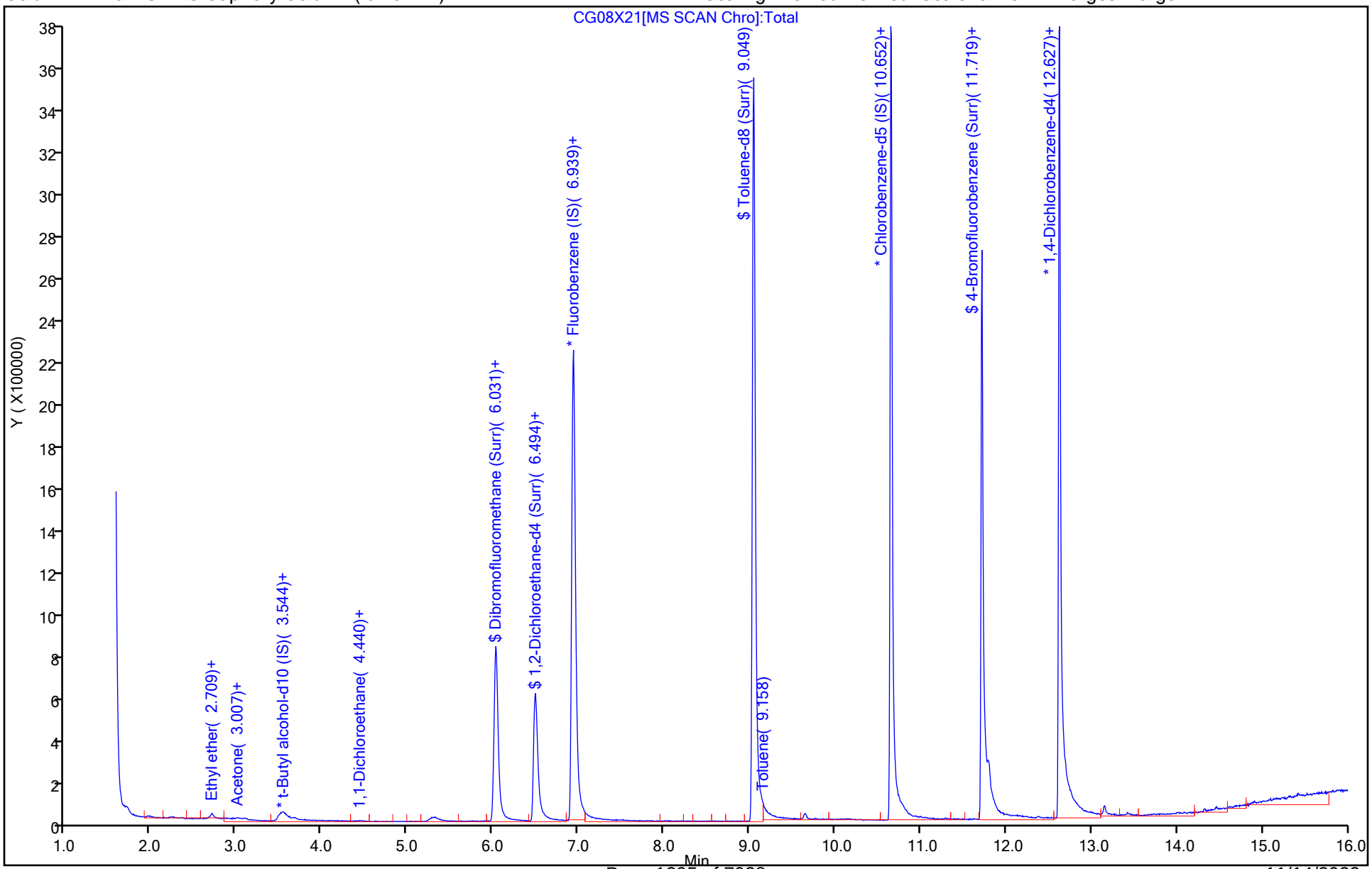
MSV_HP25_ISSS_00074 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Aug-2023 13:36:34 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X21.D				
Injection Date:	09-Aug-2023 01:34:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-B-6	Lab Sample ID:	410-136864-6	Worklist Smp#:	22
Client ID:	16WC1B				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X21.D				
Lims ID:	410-136864-B-6				
Client ID:	16WC1B				
Sample Type:	Client				
Inject. Date:	09-Aug-2023 01:34:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-022				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 13:36:34	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 13:36:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	103.30
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.59
$ 83 Toluene-d8 (Surr)	10.0	9.53	95.31
$ 124 4-Bromofluorobenzene (Surr)	10.0	8.87	88.73

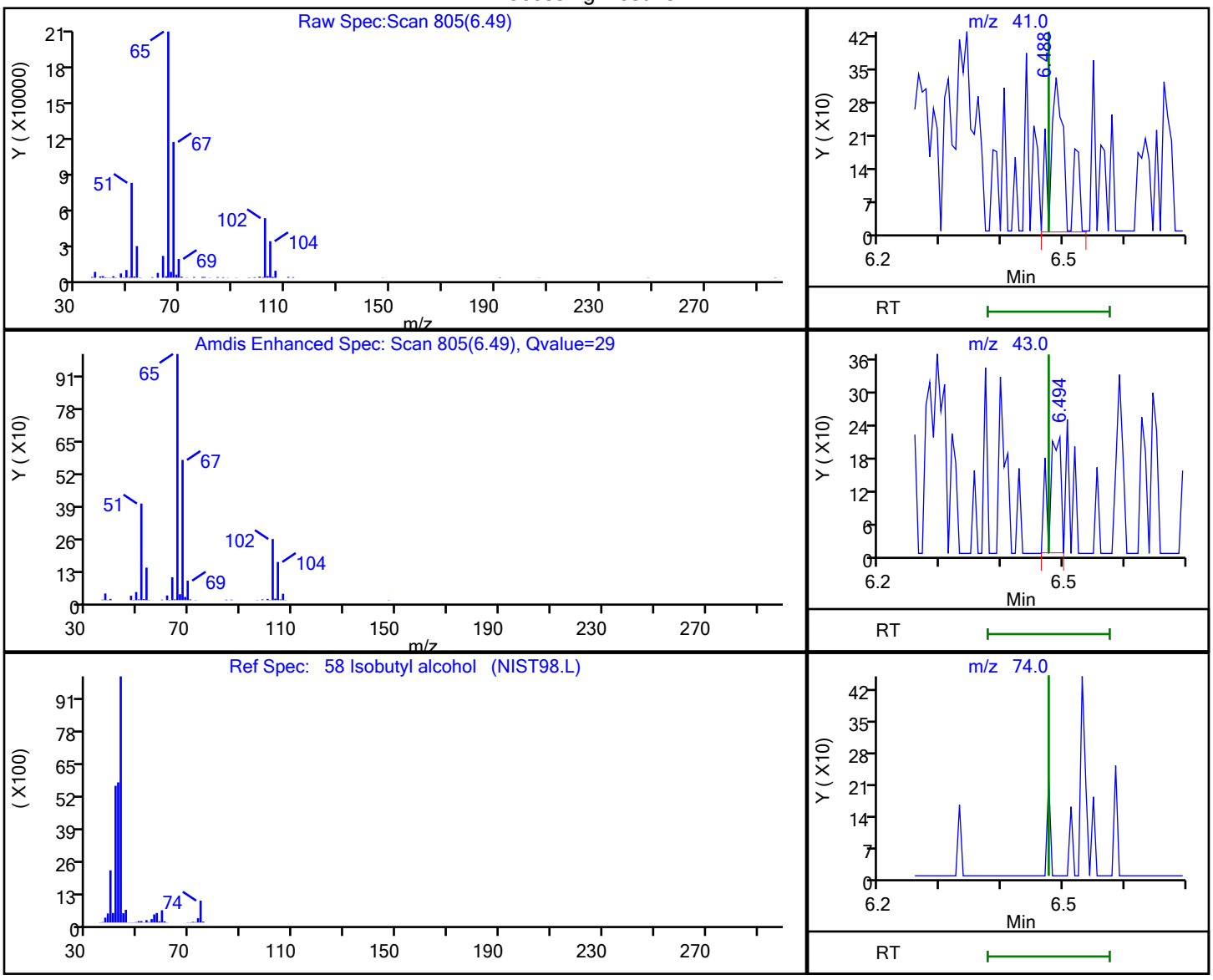
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X21.D				
Injection Date:	09-Aug-2023 01:34:30	Instrument ID:	10193		
Lims ID:	410-136864-B-6	Lab Sample ID:	410-136864-6		
Client ID:	16WC1B				
Operator ID:	gaw91131	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
6.49	41.00	579	20.395465
6.49	43.00	286	
6.48	74.00	0	

Reviewer: innoonk, 09-Aug-2023 13:35:53 07:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 15:50 Calibration End Date: 07/10/2023 18:02 Calibration ID: 51832

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-395211/3	CL10X02.D
Level 2	IC 410-395211/4	CL10X03.D
Level 3	IC 410-395211/5	CL10X04.D
Level 4	IC 410-395211/6	CL10X05.D
Level 5	IC 410-395211/7	CL10X06.D
Level 6	IC 410-395211/8	CL10X07.D
Level 7	IC 410-395211/9	CL10X08.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodifluoromethane	0.2665 0.2234	0.2269 0.2572	0.2143	0.2291	0.2344	Ave		0.2360				8.0		20.0			
Methoxymethane	0.3914 0.3402	0.2900 0.3406	0.3197	0.3424	0.3509	Ave		0.3393				9.1		20.0			
Acetonitrile	+++++ 0.0138	0.0172 0.0139	0.0147	0.0142	0.0139	Ave		0.0146				9.0		20.0			
Vinyl acetate	0.3107 0.3748	0.3087 0.3765	0.2551	0.3165	0.3366	Ave		0.3256				13.0		20.0			
Ethyl acetate	+++++ 0.1429	0.1086 0.1444	0.0758	0.0967	0.1269	Lin1	-0.044	0.1439							0.9950		0.9900
2-Chloroethyl vinyl ether	+++++ 0.1060	0.0721 0.1209	0.0811	0.0810	0.1032	Ave		0.0941				20.0		20.0			
cis-1,4-Dichloro-2-butene	+++++ 0.0994	0.0541 0.1099	0.0641	0.0732	0.0912	Lin1	-0.080	0.1075							0.9960		0.9900
Cyclohexanone	+++++ 0.4992	0.2954 0.5867	0.3938	0.4162	0.4988	Lin2	-6.256	0.5284							0.9920		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 15:50 Calibration End Date: 07/10/2023 18:02 Calibration ID: 51832

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-395211/3	CL10X02.D
Level 2	IC 410-395211/4	CL10X03.D
Level 3	IC 410-395211/5	CL10X04.D
Level 4	IC 410-395211/6	CL10X05.D
Level 5	IC 410-395211/7	CL10X06.D
Level 6	IC 410-395211/8	CL10X07.D
Level 7	IC 410-395211/9	CL10X08.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorodifluoromethane	FB	Ave	13791 553436	28432 1610422	54042	114741	289903	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methoxymethane	FB	Ave	20255 843017	36338 2132785	80626	171508	433934	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetonitrile	FB	Ave	+++++ 170772	10770 434651	18506	35452	86044	+++++ 50.0	2.50 125	5.00	10.0	25.0
Vinyl acetate	FB	Ave	16079 928699	38676 2357192	64342	158532	416325	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl acetate	FB	Lin1	+++++ 354124	13609 904142	19124	48415	156946	+++++ 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloroethyl vinyl ether	FB	Ave	+++++ 262749	9029 757238	20460	40570	127613	+++++ 10.0	0.500 25.0	1.00	2.00	5.00
cis-1,4-Dichloro-2-butene	CBZd5	Lin1	+++++ 386829	10743 1095177	25354	57720	177095	+++++ 20.0	1.000 50.0	2.00	4.00	10.00
Cyclohexanone	TBAd10	Lin2	+++++ 887459	24830 2469223	63315	132145	389481	+++++ 500	25.0 1250	50.0	100.0	250

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 15:50 Calibration End Date: 07/10/2023 18:02 Calibration ID: 51832

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-395211/3	CL10X02.D
Level 2	IC 410-395211/4	CL10X03.D
Level 3	IC 410-395211/5	CL10X04.D
Level 4	IC 410-395211/6	CL10X05.D
Level 5	IC 410-395211/7	CL10X06.D
Level 6	IC 410-395211/8	CL10X07.D
Level 7	IC 410-395211/9	CL10X08.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Chlorodifluoromethane	12.9 9.0	-3.8	-9.2	-2.9	-0.7	-5.3	50 30	30	30	30	30	30
Methoxymethane	15.3 0.4	-14.5	-5.8	0.9	3.4	0.3	50 30	30	30	30	30	30
Acetonitrile	+++++ -4.9	17.7	0.5	-3.0	-4.7	-5.6	 30	50	30	30	30	30
Vinyl acetate	-4.6 15.6	-5.2	-21.6	-2.8	3.4	15.1	50 30	30	30	30	30	30
Ethyl acetate	+++++ 1.6	36.3	-16.9	-17.6	-5.7	2.4	 30	50	30	30	30	30
2-Chloroethyl vinyl ether	+++++ 28.6	-23.4	-13.8	-13.9	9.7	12.7	 30	50	30	30	30	30
cis-1,4-Dichloro-2-butene	+++++ 3.8	24.4	-3.3	-13.4	-7.7	-3.8	 30	50	30	30	30	30
Cyclohexanone	+++++ 12.0	3.3	-1.8	-9.4	-0.9	-3.2	 30	50	30	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X02.D
Lims ID: IC STD.2 Sm
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Jul-2023 15:50:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-003
Misc. Info.: IC STD.2 SM
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub43

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:37:43 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:09:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.654	1.648	0.006	74	4873	0.2000	0.1837	M
3 Chlorodifluoromethane	51	1.697	1.697	0.001	29	13791	0.2000	0.2259	M
4 Dimethyl ether	45	1.727	1.739	-0.012	100	20255	0.2000	0.2307	
8 2-Chloro-1,1,1-Trifluoroethane	118	1.995	2.007	-0.012	34	12964	0.2000	0.1917	
27 Acetonitrile	41	3.355	3.318	0.037	66	5851	1.00	1.55	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.532	3.550	-0.018	96	177872	50.0	50.0	
38 Vinyl acetate	43	4.513	4.446	0.067	74	16079	0.2000	0.1909	M
46 Ethyl acetate	43	5.482	5.379	0.103	25	6549	0.2000	0.4801	M
63 Isopropyl acetate	43	6.671	6.647	0.024	84	12481	0.2000	0.1631	
* 65 Fluorobenzene (IS)	96	6.946	6.946	0.000	99	2587638	10.0	10.0	
75 n-Propyl acetate	61	8.128	7.994	0.134	37	1230	0.2000	0.2990	M
79 2-Chloroethyl vinyl ether	63	8.598	8.543	0.055	11	3132	0.2000	0.1287	M
109 n-Butyl acetate	43	10.122	10.073	0.049	68	8969	0.2000	0.4584	M
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	2005695	10.0	10.0	
122 cis-1,4-Dichloro-2-butene	88	11.719	11.627	0.092	40	39821	0.4000	2.59	a
123 Cyclohexanone	55	11.719	11.646	0.073	36	7250	10.0	15.7	M
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1194414	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_CCV_V5ACE_00026	Amount Added:	0.20	Units: uL
MSV_V_SMRV4_00060	Amount Added:	1.00	Units: uL
MSV_CCV_CYC_00006	Amount Added:	1.60	Units: uL
MSV_HP25_ISO_00008	Amount Added:	1.00	Units: uL
MSV_DME_00048	Amount Added:	0.20	Units: uL

Report Date: 11-Jul-2023 21:37:44 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X02.D

Injection Date: 10-Jul-2023 15:50:30 Instrument ID: 10193 Operator ID: knk41612

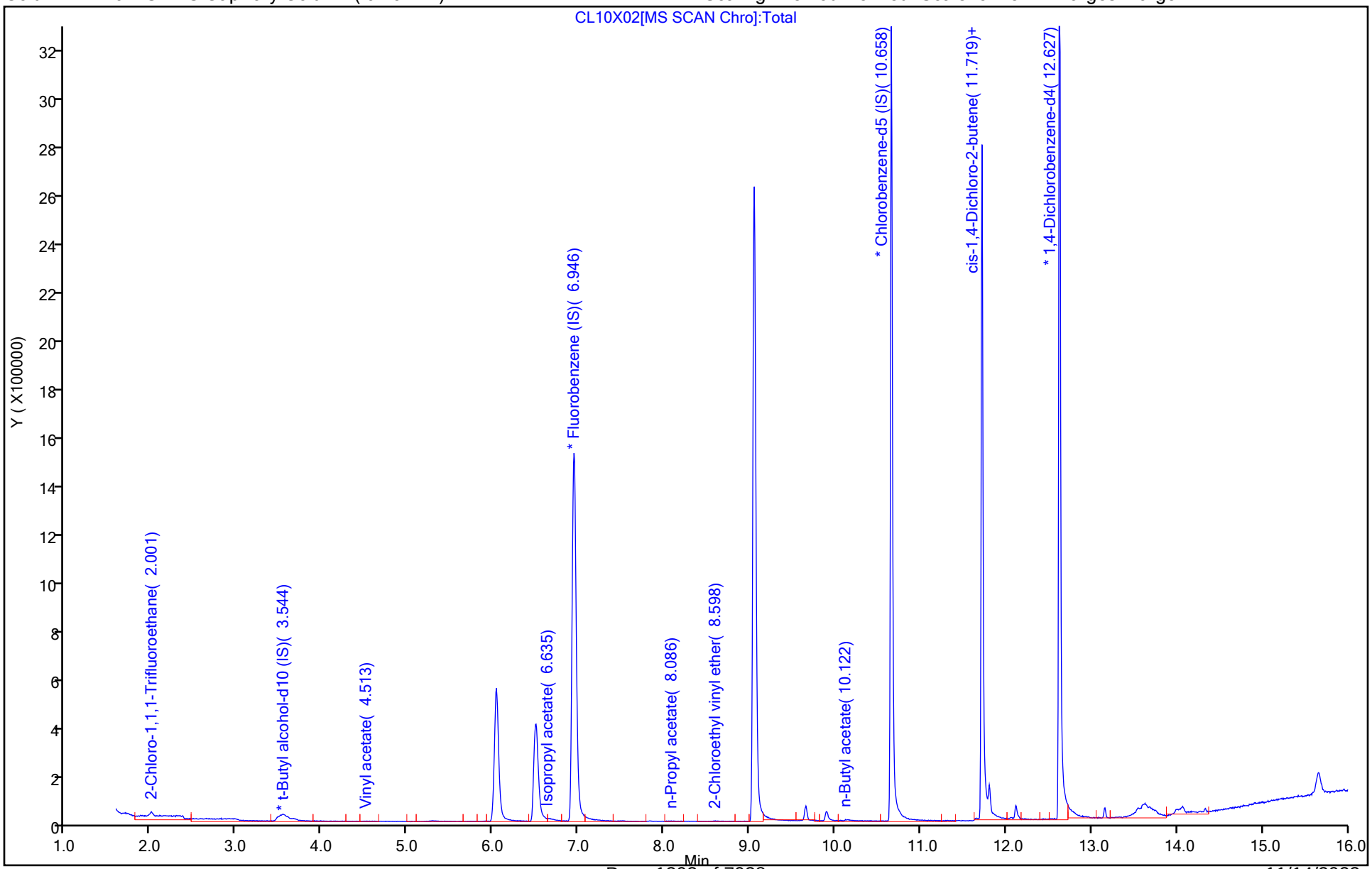
Lims ID: IC STD.2 Sm Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

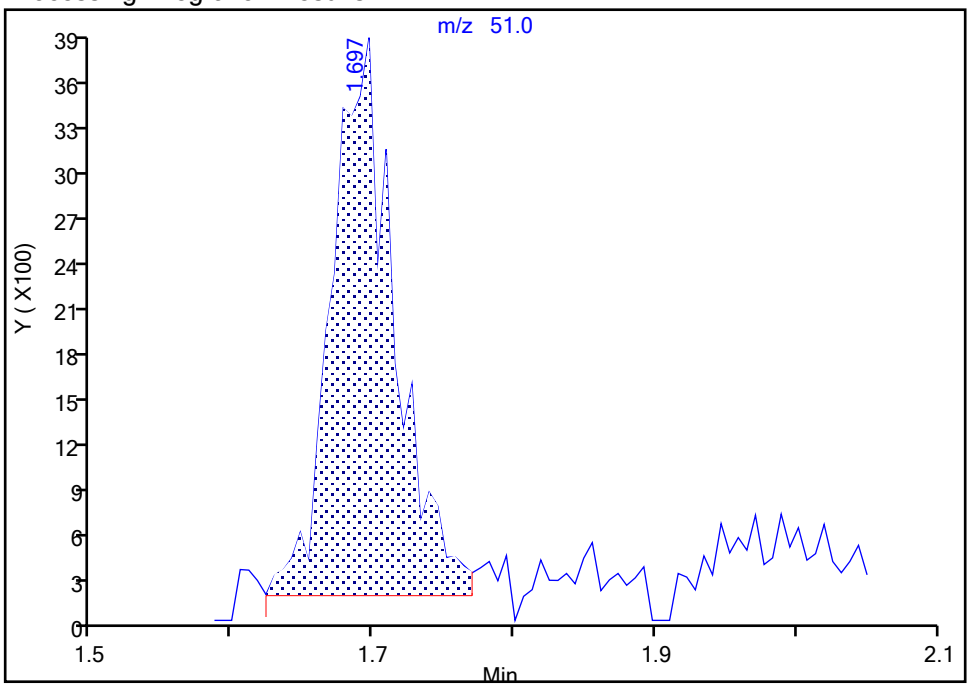
Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X02.D
Injection Date: 10-Jul-2023 15:50:30 Instrument ID: 10193
Lims ID: IC STD.2 Sm
Client ID:
Operator ID: knk41612 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

3 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

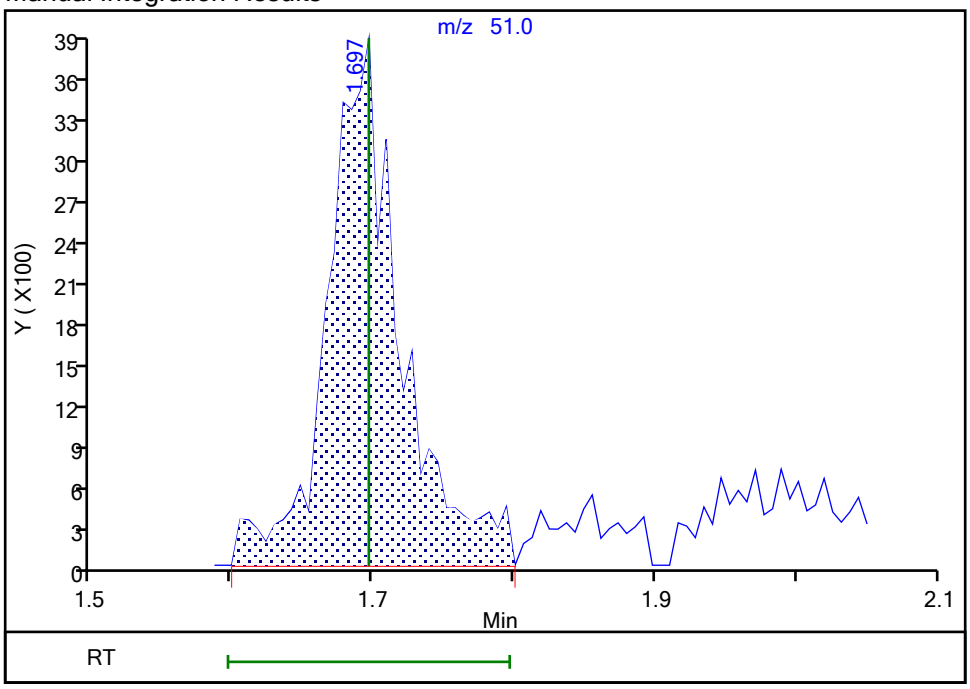
Processing Integration Results

RT: 1.70
Area: 11364
Amount: 0.191553
Amount Units: ug/l



Manual Integration Results

RT: 1.70
Area: 13791
Amount: 0.225863
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:09:13 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

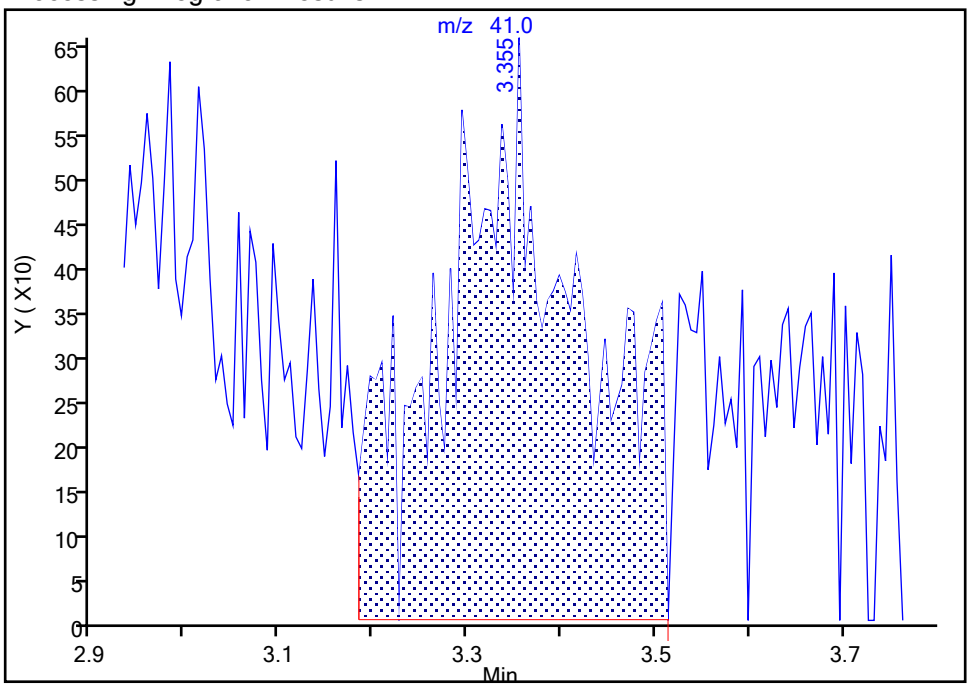
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X02.D				
Injection Date:	10-Jul-2023 15:50:30	Instrument ID:	10193		
Lims ID:	IC STD.2 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

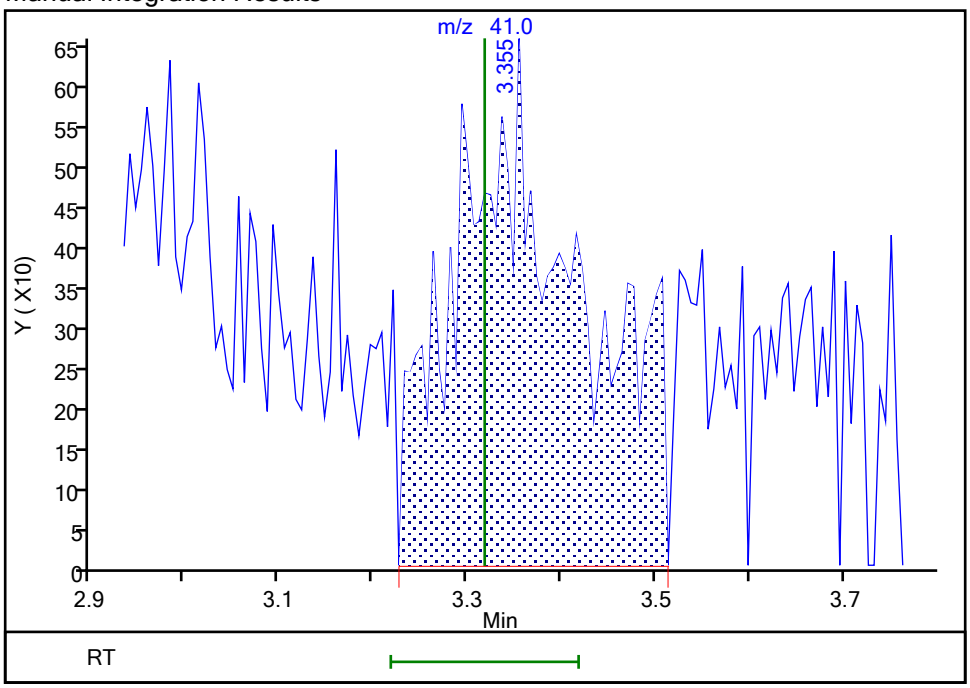
Processing Integration Results

RT: 3.35
Area: 6484
Amount: 1.624092
Amount Units: ug/l



Manual Integration Results

RT: 3.35
Area: 5851
Amount: 1.548604
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:11:17 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

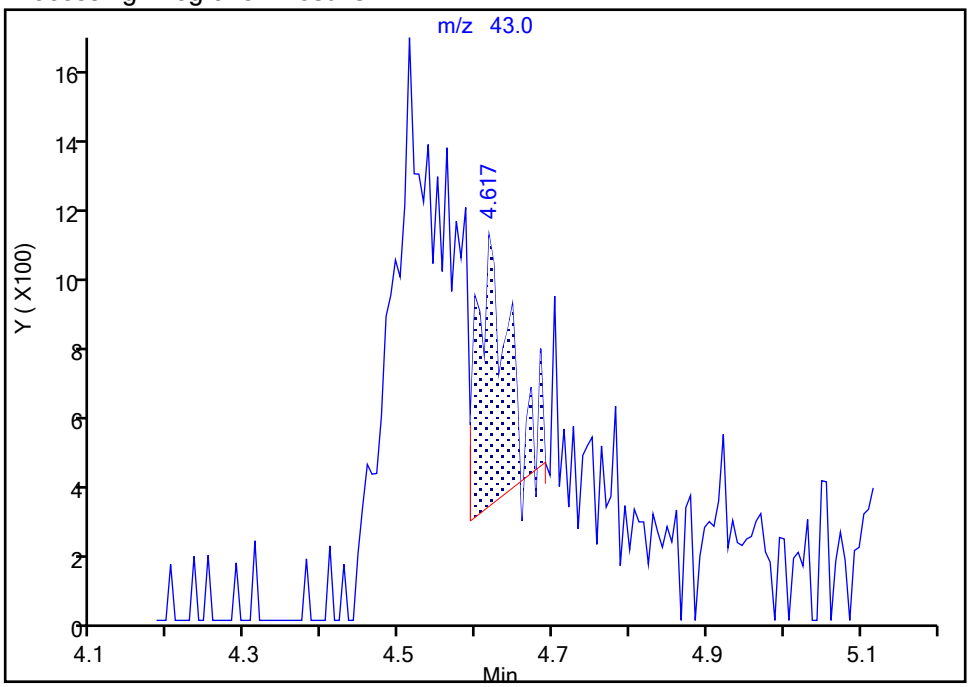
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X02.D				
Injection Date:	10-Jul-2023 15:50:30	Instrument ID:	10193		
Lims ID:	IC STD.2 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

38 Vinyl acetate, CAS: 108-05-4

Signal: 1

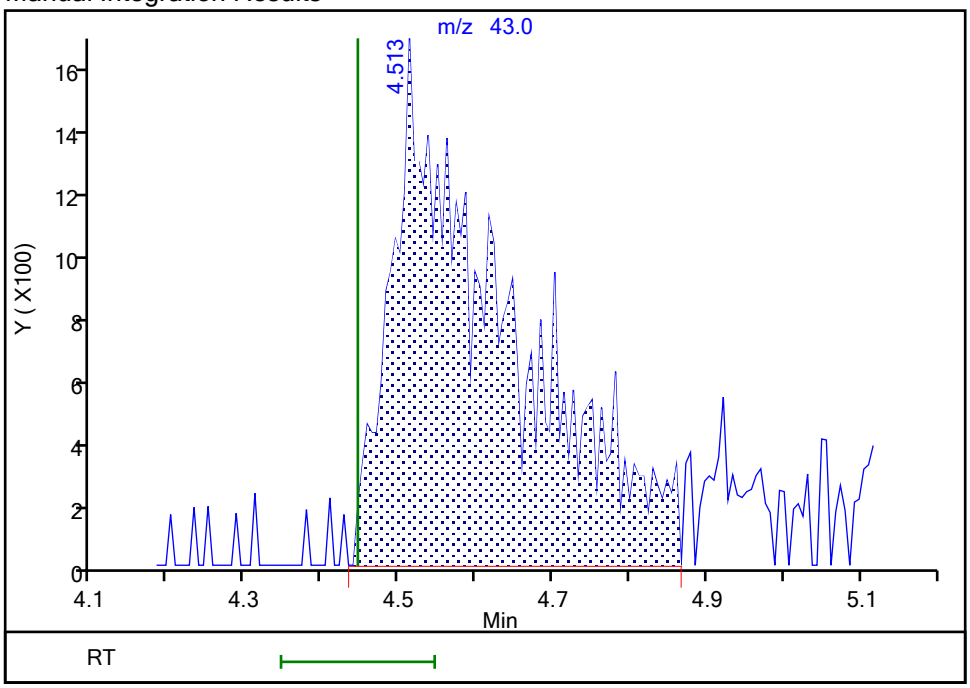
Processing Integration Results

RT: 4.62
Area: 2089
Amount: 0.028119
Amount Units: ug/l



Manual Integration Results

RT: 4.51
Area: 16079
Amount: 0.190862
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:11:24 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

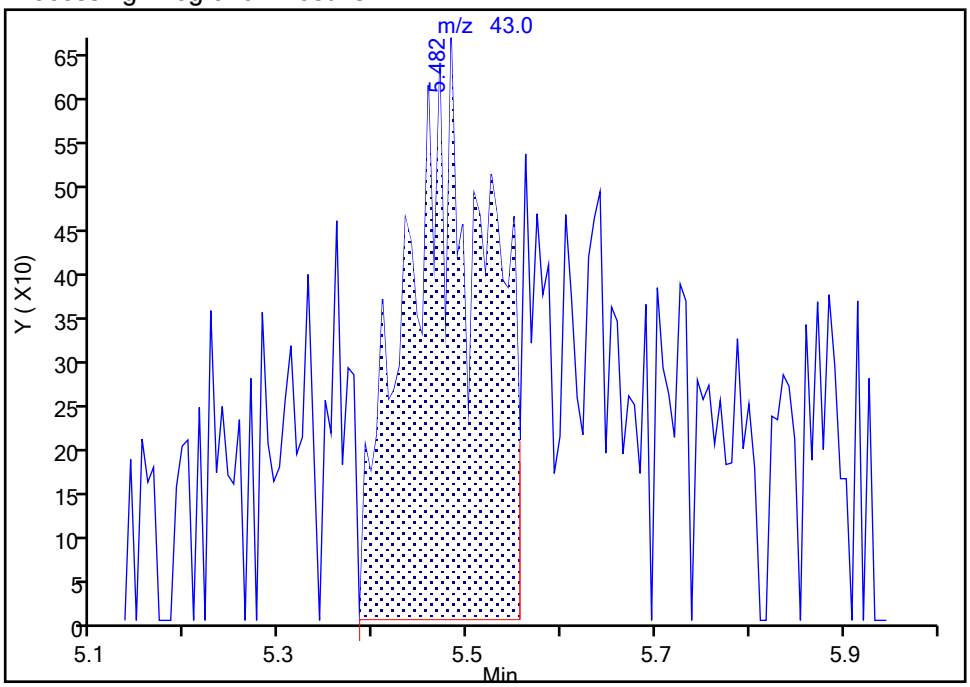
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X02.D				
Injection Date:	10-Jul-2023 15:50:30	Instrument ID:	10193		
Lims ID:	IC STD.2 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

46 Ethyl acetate, CAS: 141-78-6

Signal: 1

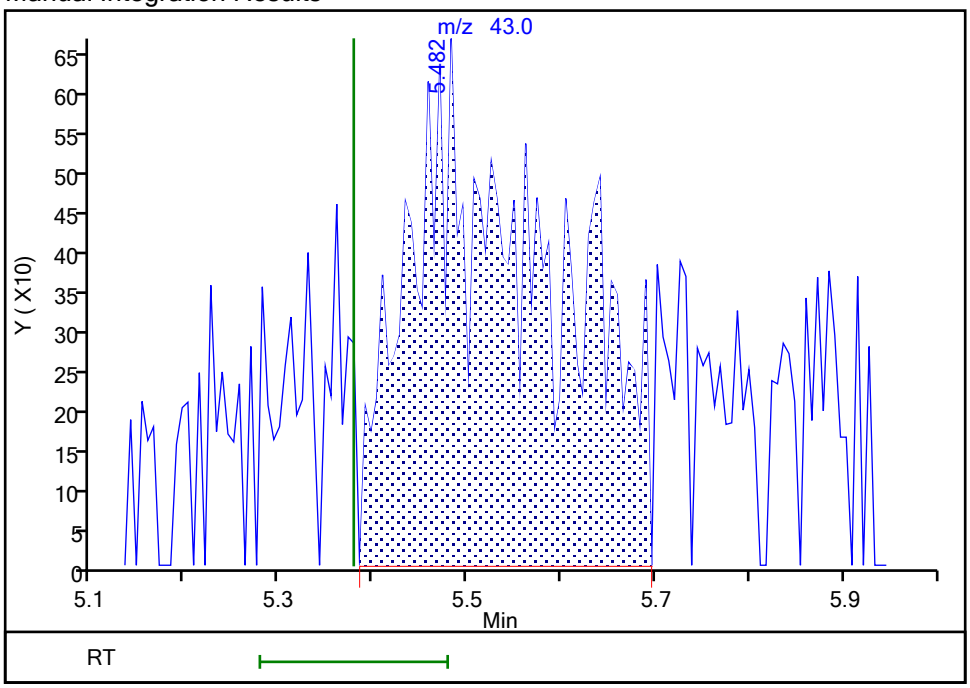
Processing Integration Results

RT: 5.48
Area: 3912
Amount: 0.157096
Amount Units: ug/l



Manual Integration Results

RT: 5.48
Area: 6549
Amount: 0.480078
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:11:32 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

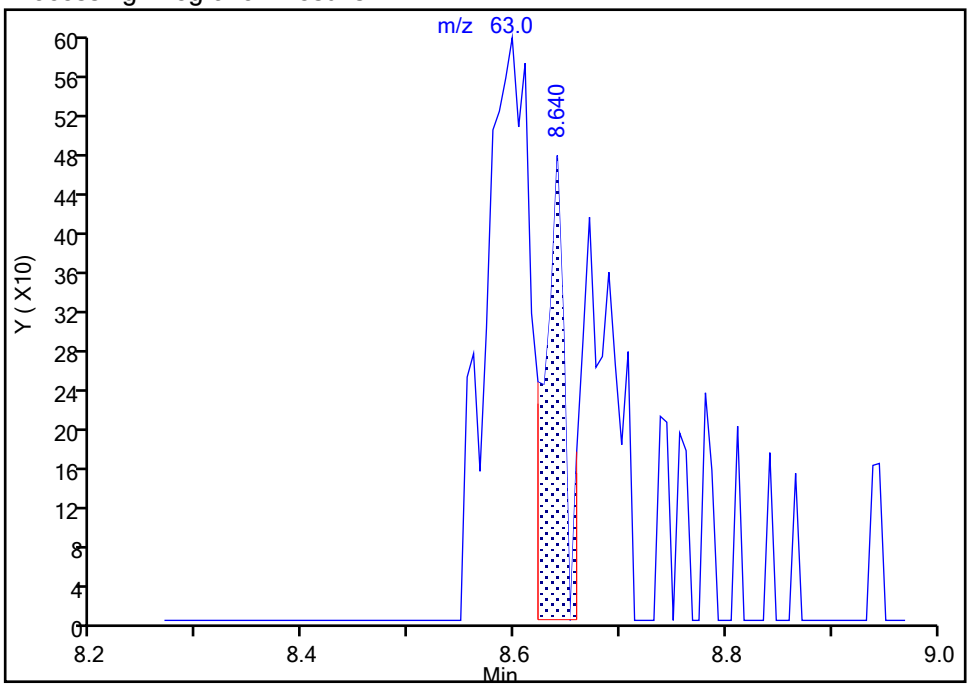
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X02.D				
Injection Date:	10-Jul-2023 15:50:30	Instrument ID:	10193		
Lims ID:	IC STD.2 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

79 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

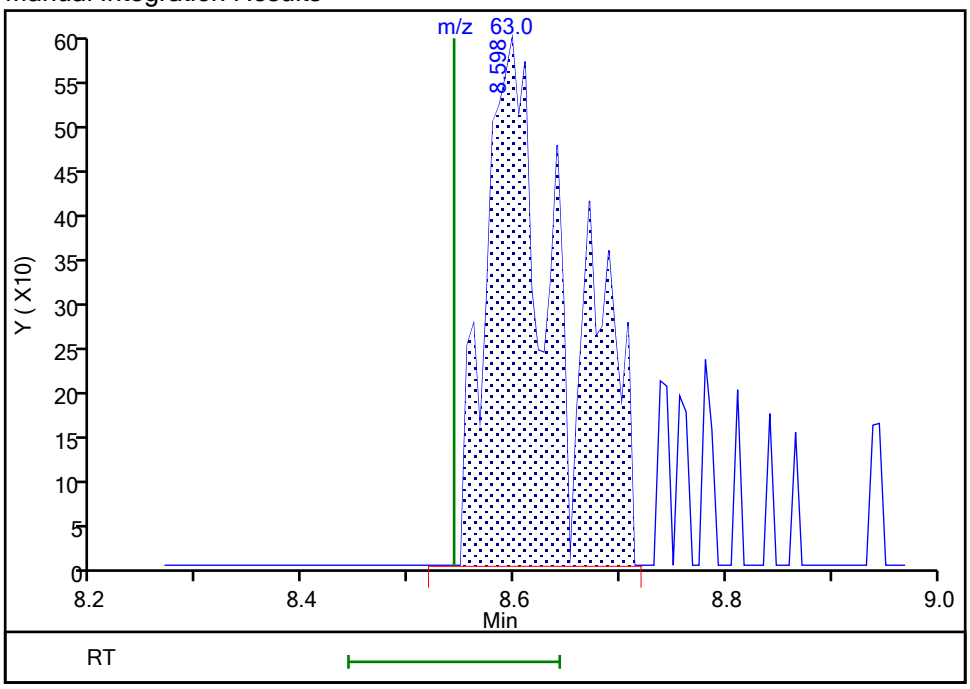
Processing Integration Results

RT: 8.64
Area: 639
Amount: 0.119613
Amount Units: ug/l



Manual Integration Results

RT: 8.60
Area: 3132
Amount: 0.128680
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:11:43 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

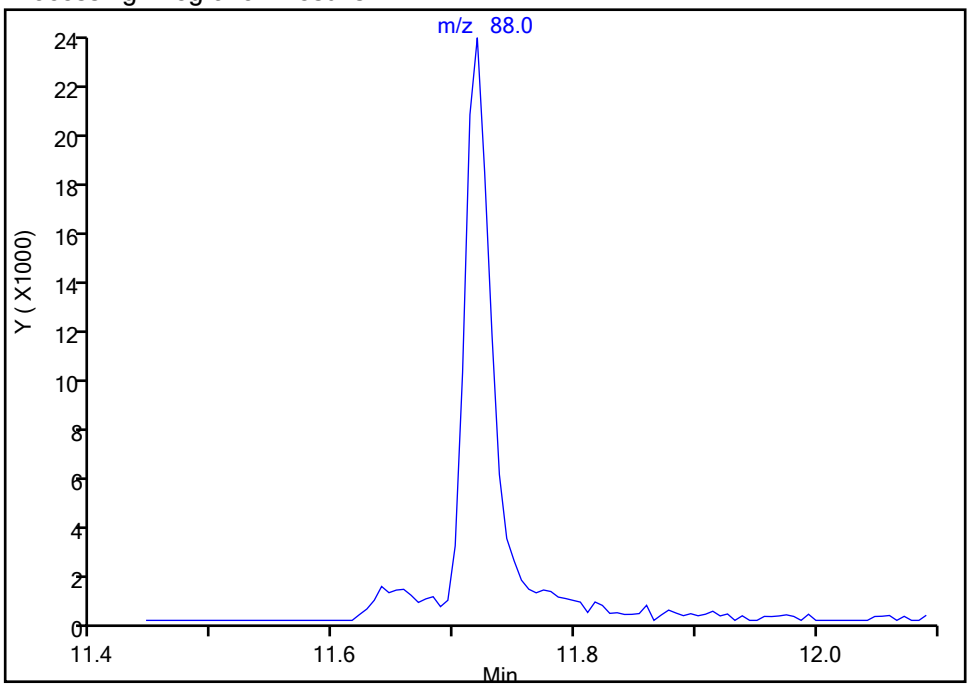
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X02.D				
Injection Date:	10-Jul-2023 15:50:30	Instrument ID:	10193		
Lims ID:	IC STD.2 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

122 cis-1,4-Dichloro-2-butene, CAS: 1476-11-5

Signal: 1

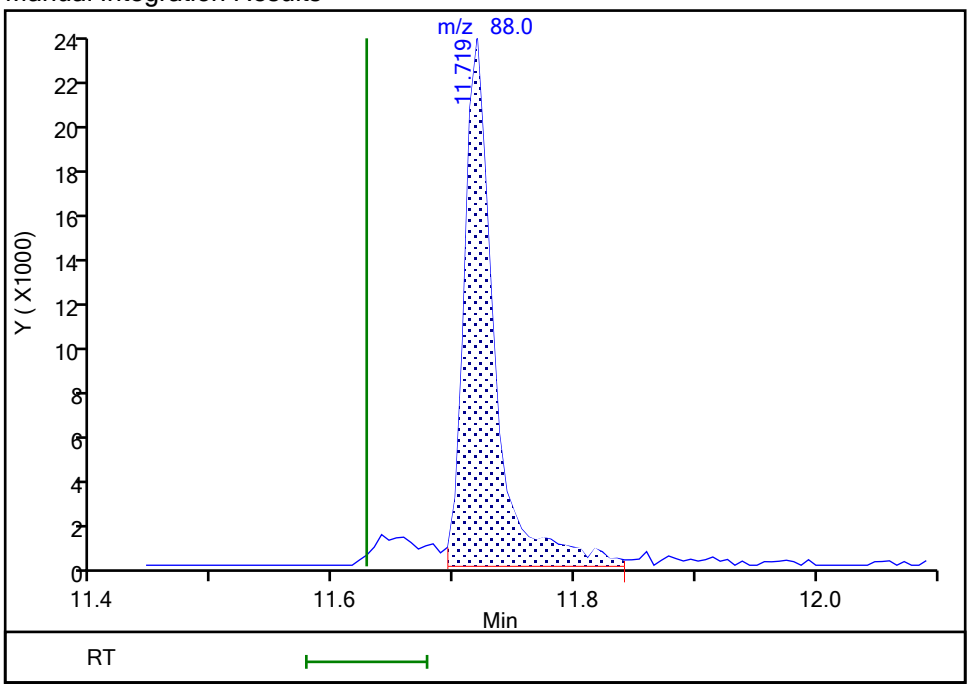
Not Detected
Expected RT: 11.63

Processing Integration Results



Manual Integration Results

RT: 11.72
Area: 39821
Amount: 2.588198
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:08:38 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

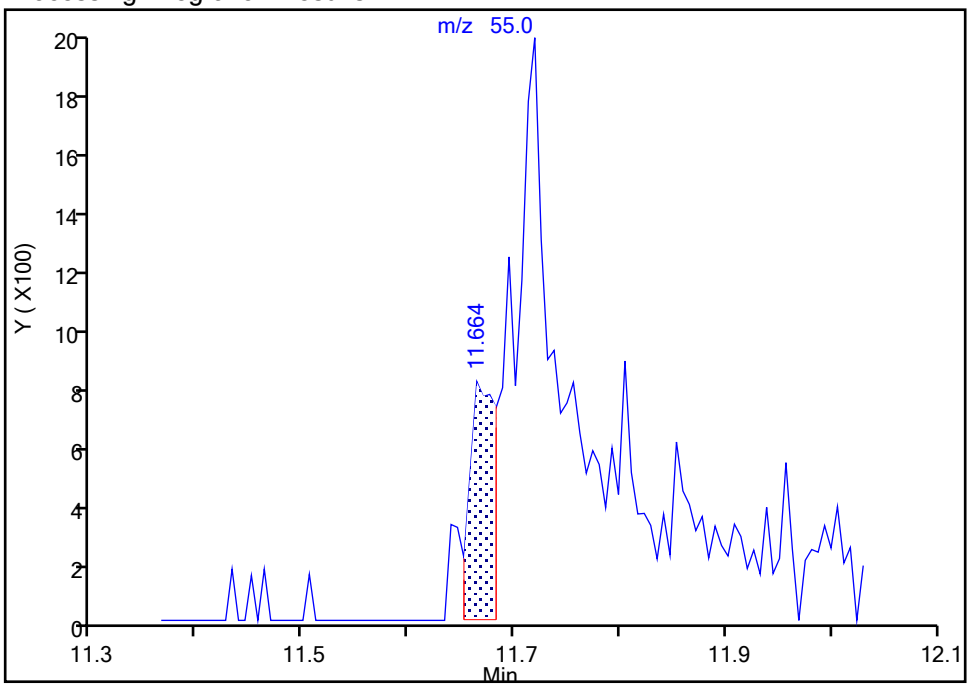
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X02.D				
Injection Date:	10-Jul-2023 15:50:30	Instrument ID:	10193		
Lims ID:	IC STD.2 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

123 Cyclohexanone, CAS: 108-94-1

Signal: 1

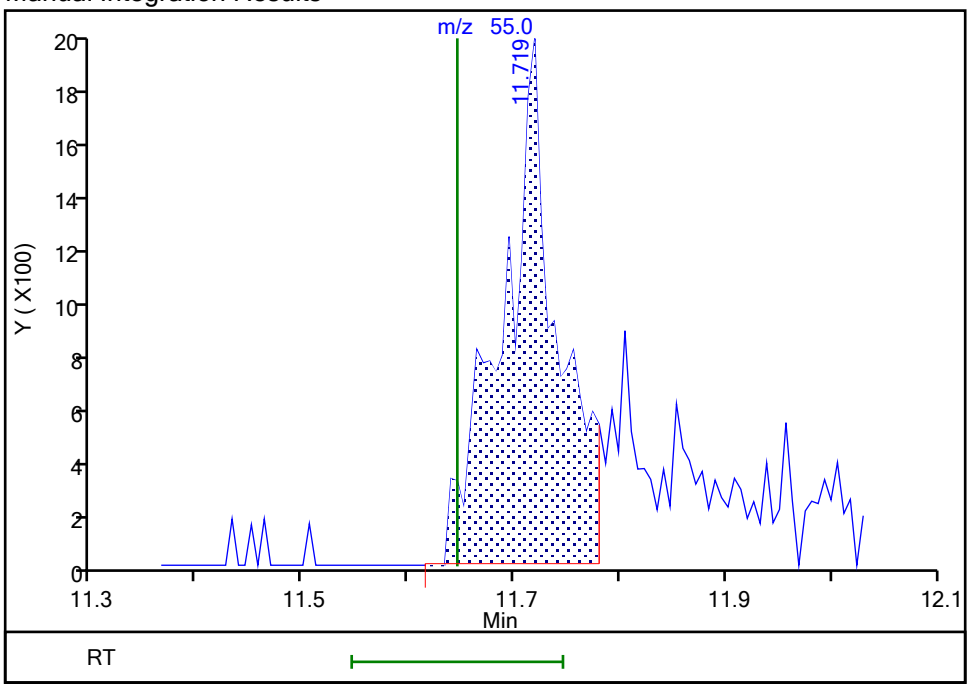
Processing Integration Results

RT: 11.66
Area: 1398
Amount: 1.007899
Amount Units: ug/l



Manual Integration Results

RT: 11.72
Area: 7250
Amount: 15.696128
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:12:28 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X03.D
Lims ID: IC STD.5 Sm
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Jul-2023 16:12:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-004
Misc. Info.: IC STD.5 SM
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub43

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:37:45 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:14:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.660	1.648	0.012	90	11711	0.5000	0.4559	M
3 Chlorodifluoromethane	51	1.690	1.697	-0.006	97	28432	0.5000	0.4808	
4 Dimethyl ether	45	1.733	1.739	-0.006	100	36338	0.5000	0.4273	
8 2-Chloro-1,1,1-Trifluoroethane	118	2.001	2.007	-0.006	33	30787	0.5000	0.4700	
27 Acetonitrile	41	3.349	3.318	0.031	19	10770	2.50	2.94	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.532	3.550	-0.018	95	168136	50.0	50.0	
38 Vinyl acetate	43	4.501	4.446	0.055	93	38676	0.5000	0.4740	M
46 Ethyl acetate	43	5.507	5.379	0.128	40	13609	0.5000	0.6816	M
63 Isopropyl acetate	43	6.653	6.647	0.006	97	33109	0.5000	0.4468	
* 65 Fluorobenzene (IS)	96	6.946	6.946	0.000	99	2506109	10.0	10.0	
75 n-Propyl acetate	61	8.061	7.994	0.067	98	5254	0.5000	0.5038	M
79 2-Chloroethyl vinyl ether	63	8.592	8.543	0.049	93	9029	0.5000	0.3830	
109 n-Butyl acetate	43	10.103	10.073	0.030	98	26991	0.5000	0.6762	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1987307	10.0	10.0	
122 cis-1,4-Dichloro-2-butene	88	11.640	11.627	0.013	94	10743	1.00	1.24	a
123 Cyclohexanone	55	11.664	11.646	0.018	90	24830	25.0	25.8	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1144085	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_CCV_V5ACE_00026	Amount Added:	0.50	Units: uL
MSV_CCV_CYC_00006	Amount Added:	4.00	Units: uL
MSV_V_SMRV4_00060	Amount Added:	2.50	Units: uL
MSV_HP25_ISO_00008	Amount Added:	1.00	Units: uL
MSV_DME_00048	Amount Added:	0.50	Units: uL

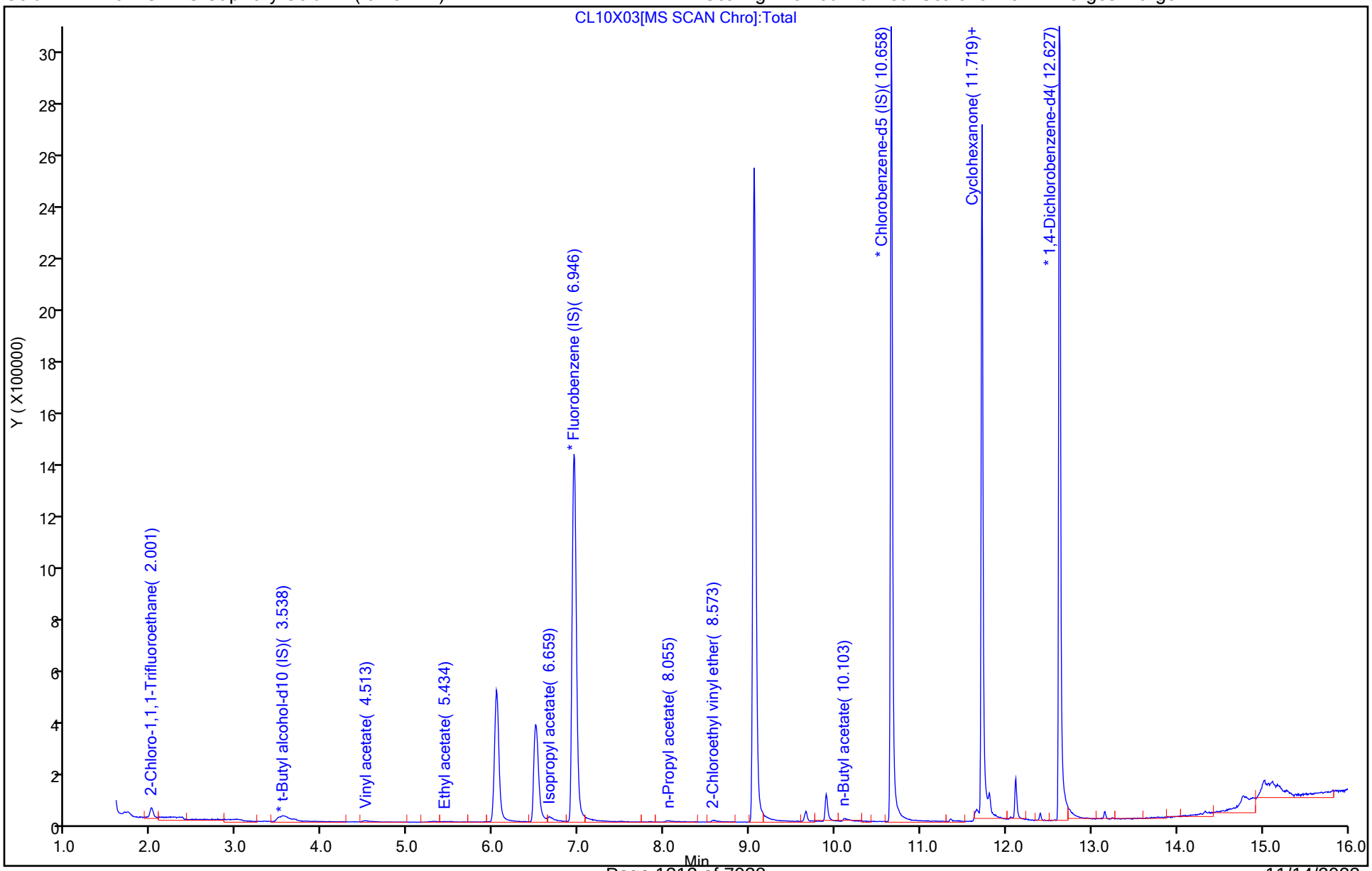
Report Date: 11-Jul-2023 21:37:45 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X03.D

Injection Date:	10-Jul-2023 16:12:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC STD.5 Sm			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

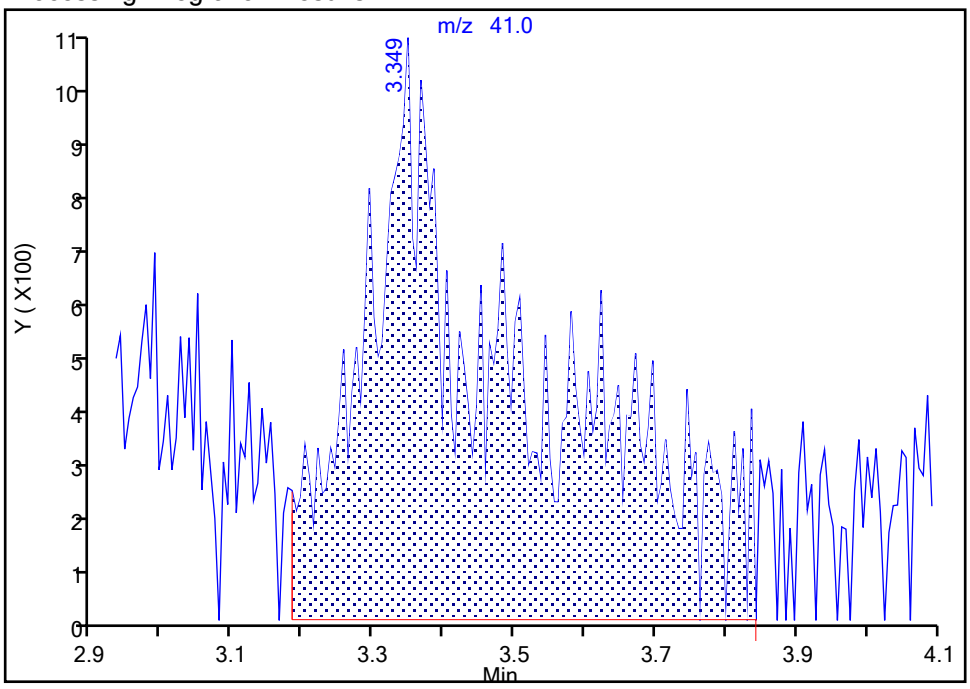
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X03.D				
Injection Date:	10-Jul-2023 16:12:30	Instrument ID:	10193		
Lims ID:	IC STD.5 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

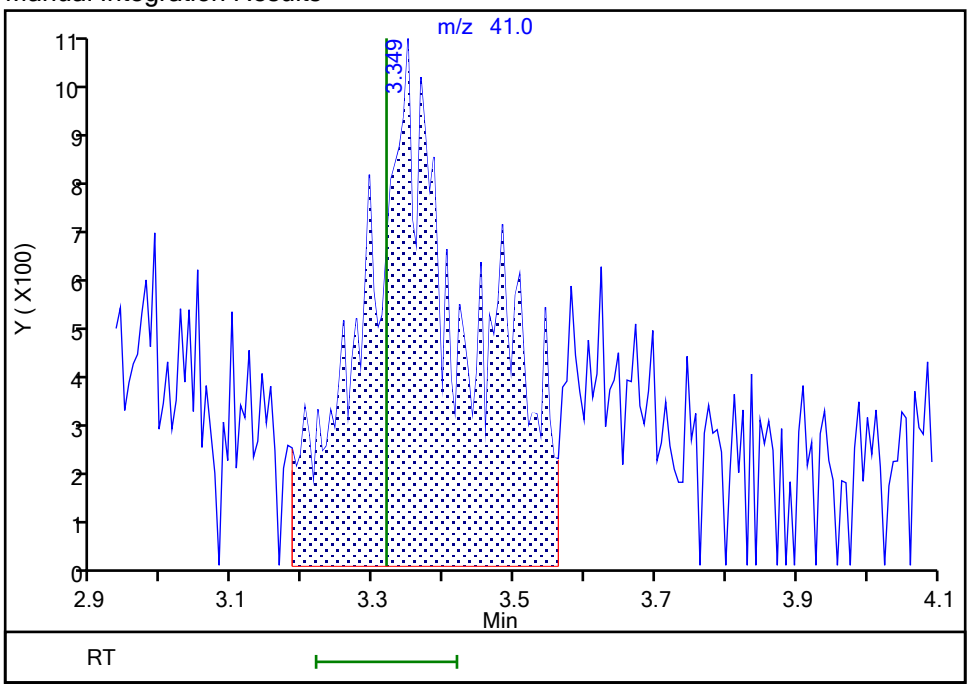
Processing Integration Results

RT: 3.35
Area: 15702
Amount: 4.155048
Amount Units: ug/l



Manual Integration Results

RT: 3.35
Area: 10770
Amount: 2.943267
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:13:01 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

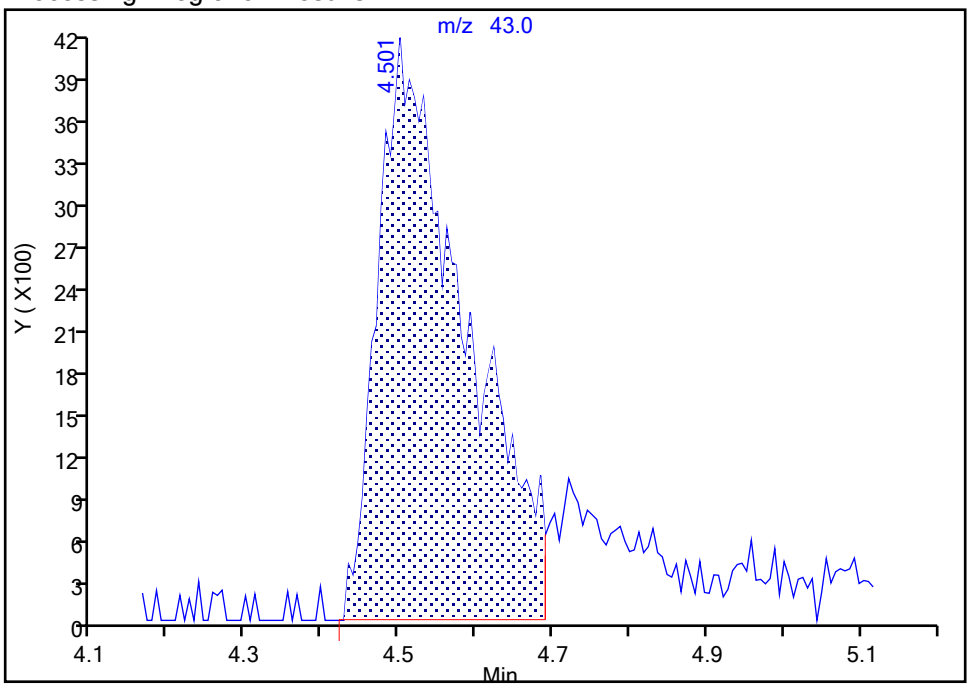
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X03.D				
Injection Date:	10-Jul-2023 16:12:30	Instrument ID:	10193		
Lims ID:	IC STD.5 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

38 Vinyl acetate, CAS: 108-05-4

Signal: 1

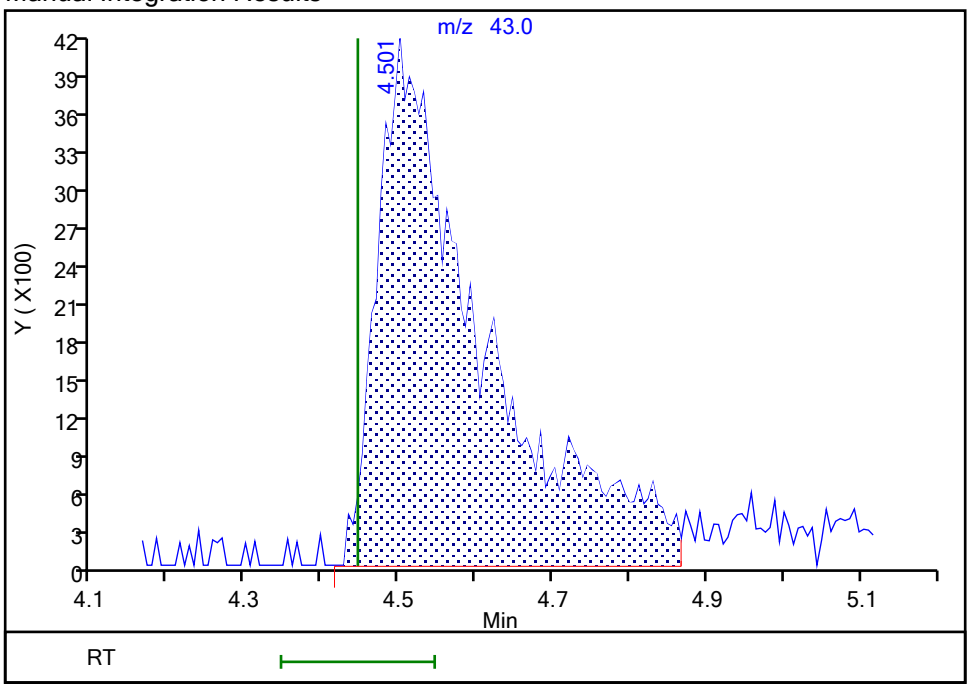
Processing Integration Results

RT: 4.50
Area: 32313
Amount: 0.395858
Amount Units: ug/l



Manual Integration Results

RT: 4.50
Area: 38676
Amount: 0.474030
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:13:17 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

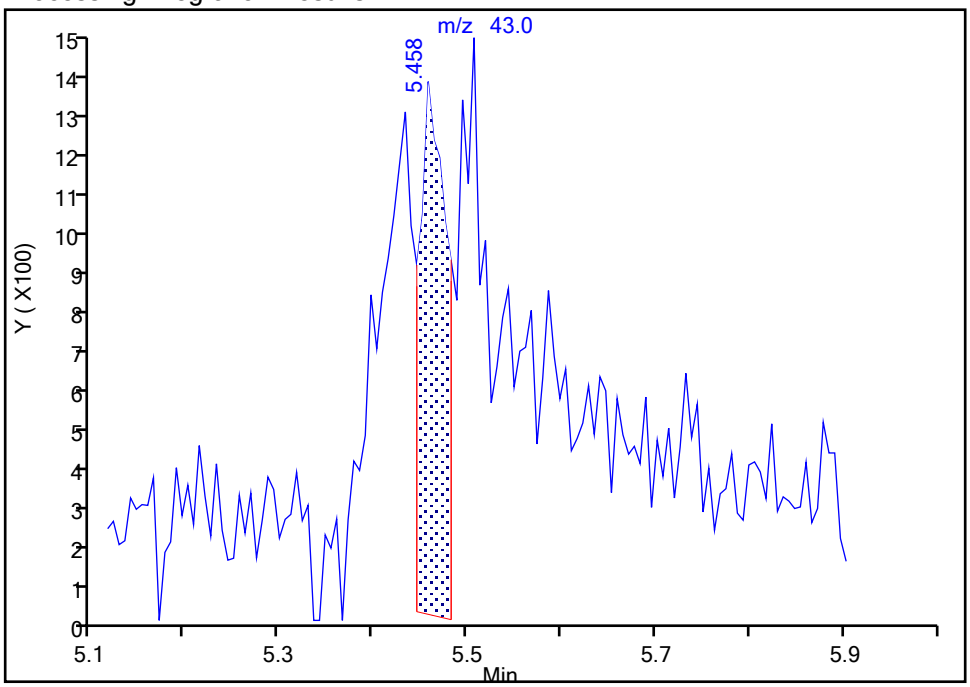
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X03.D				
Injection Date:	10-Jul-2023 16:12:30	Instrument ID:	10193		
Lims ID:	IC STD.5 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

46 Ethyl acetate, CAS: 141-78-6

Signal: 1

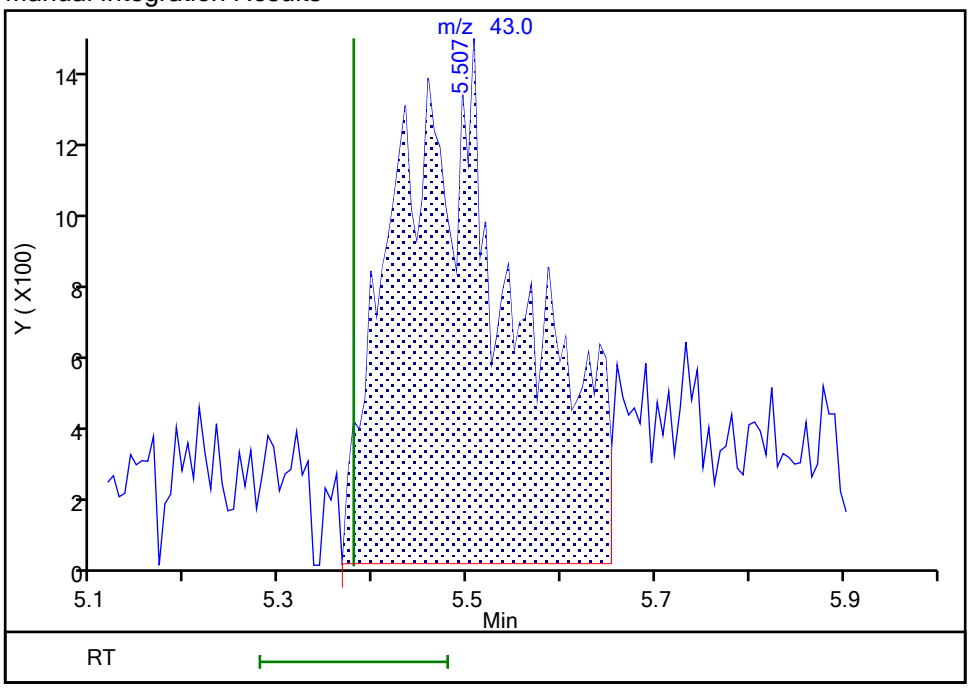
Processing Integration Results

RT: 5.46
Area: 2794
Amount: 0.107703
Amount Units: ug/l



Manual Integration Results

RT: 5.51
Area: 13609
Amount: 0.681557
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:13:33 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

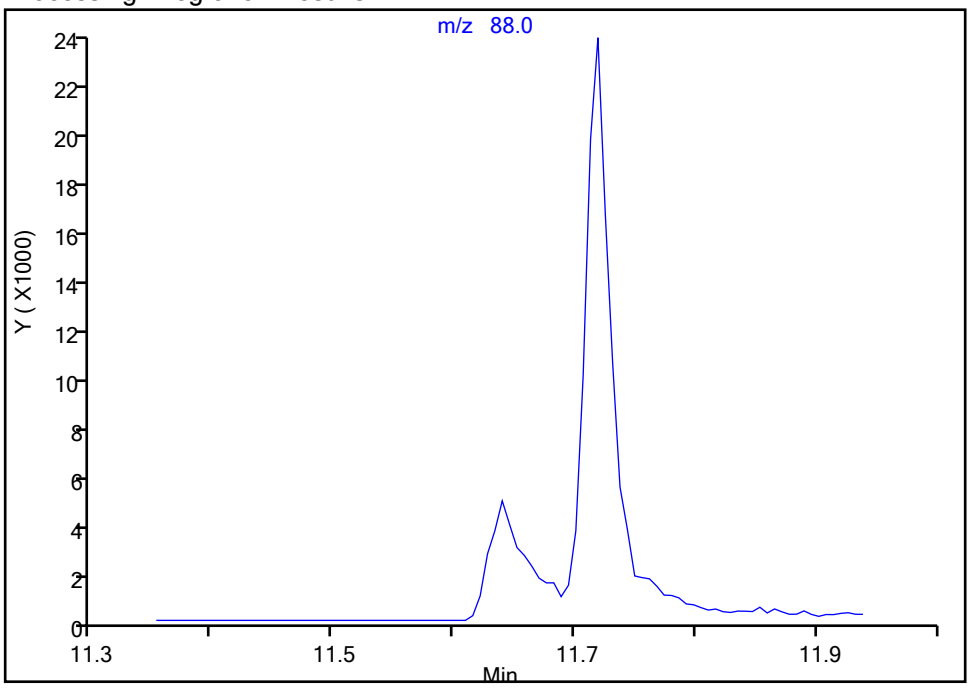
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X03.D				
Injection Date:	10-Jul-2023 16:12:30	Instrument ID:	10193		
Lims ID:	IC STD.5 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

122 cis-1,4-Dichloro-2-butene, CAS: 1476-11-5

Signal: 1

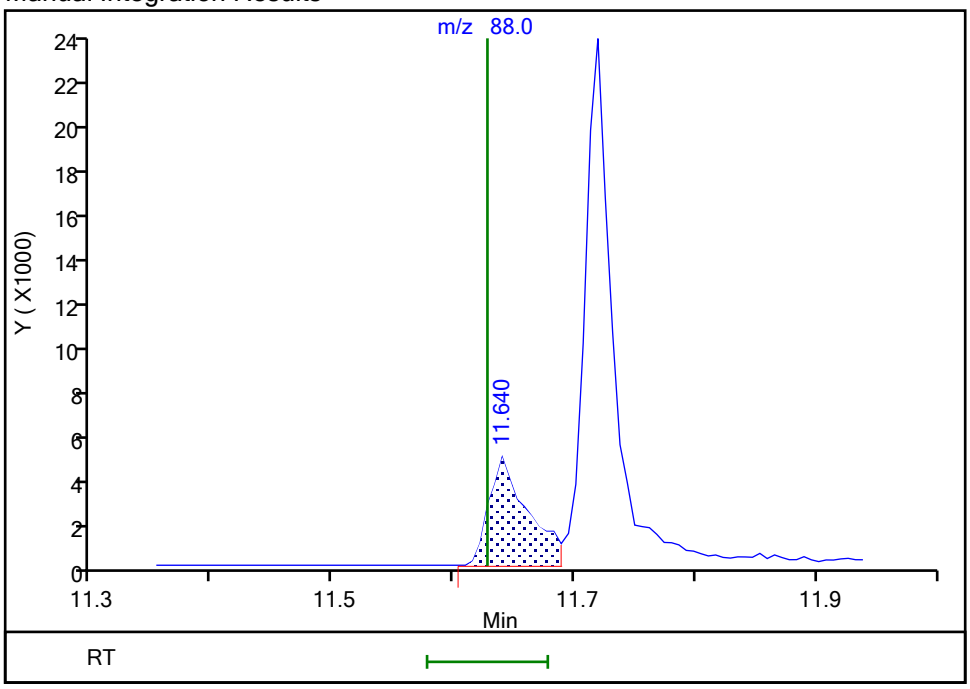
Not Detected
Expected RT: 11.63

Processing Integration Results



Manual Integration Results

RT: 11.64
Area: 10743
Amount: 1.243893
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:13:54 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X04.D
Lims ID: IC STD1 Sm
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Jul-2023 16:34:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-005
Misc. Info.: IC STD1 SM
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub43

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:37:47 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:15:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.648	1.648	0.000	92	24460	1.00	0.9462	M
3 Chlorodifluoromethane	51	1.697	1.697	0.001	97	54042	1.00	0.9081	
4 Dimethyl ether	45	1.739	1.739	0.000	100	80626	1.00	0.9421	
8 2-Chloro-1,1,1-Trifluoroethane	118	2.008	2.007	0.001	34	61489	1.00	0.9327	M
27 Acetonitrile	41	3.361	3.318	0.043	24	18506	5.00	5.03	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.550	3.550	0.000	97	160800	50.0	50.0	
38 Vinyl acetate	43	4.501	4.446	0.055	97	64342	1.00	0.7836	
46 Ethyl acetate	43	5.415	5.379	0.036	69	19124	1.00	0.8311	M
63 Isopropyl acetate	43	6.665	6.647	0.018	98	60694	1.00	0.8139	
* 65 Fluorobenzene (IS)	96	6.946	6.946	0.000	99	2522019	10.0	10.0	
75 n-Propyl acetate	61	8.037	7.994	0.043	99	10169	1.00	0.7483	
79 2-Chloroethyl vinyl ether	63	8.567	8.543	0.024	92	20460	1.00	0.8625	
109 n-Butyl acetate	43	10.097	10.073	0.024	98	38114	1.00	0.8125	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1976880	10.0	10.0	
122 cis-1,4-Dichloro-2-butene	88	11.640	11.627	0.013	98	25354	2.00	1.93	a
123 Cyclohexanone	55	11.664	11.646	0.018	89	63315	50.0	49.1	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1147765	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_CCV_V5ACE_00026	Amount Added:	0.50	Units: uL
MSV_CCV_CYC_00006	Amount Added:	4.00	Units: uL
MSV_V_SMRV4_00060	Amount Added:	2.50	Units: uL
MSV_HP25_ISO_00008	Amount Added:	1.00	Units: uL
MSV_DME_00048	Amount Added:	0.50	Units: uL

Report Date: 11-Jul-2023 21:37:47 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X04.D

Injection Date: 10-Jul-2023 16:34:30 Instrument ID: 10193 Operator ID: knk41612

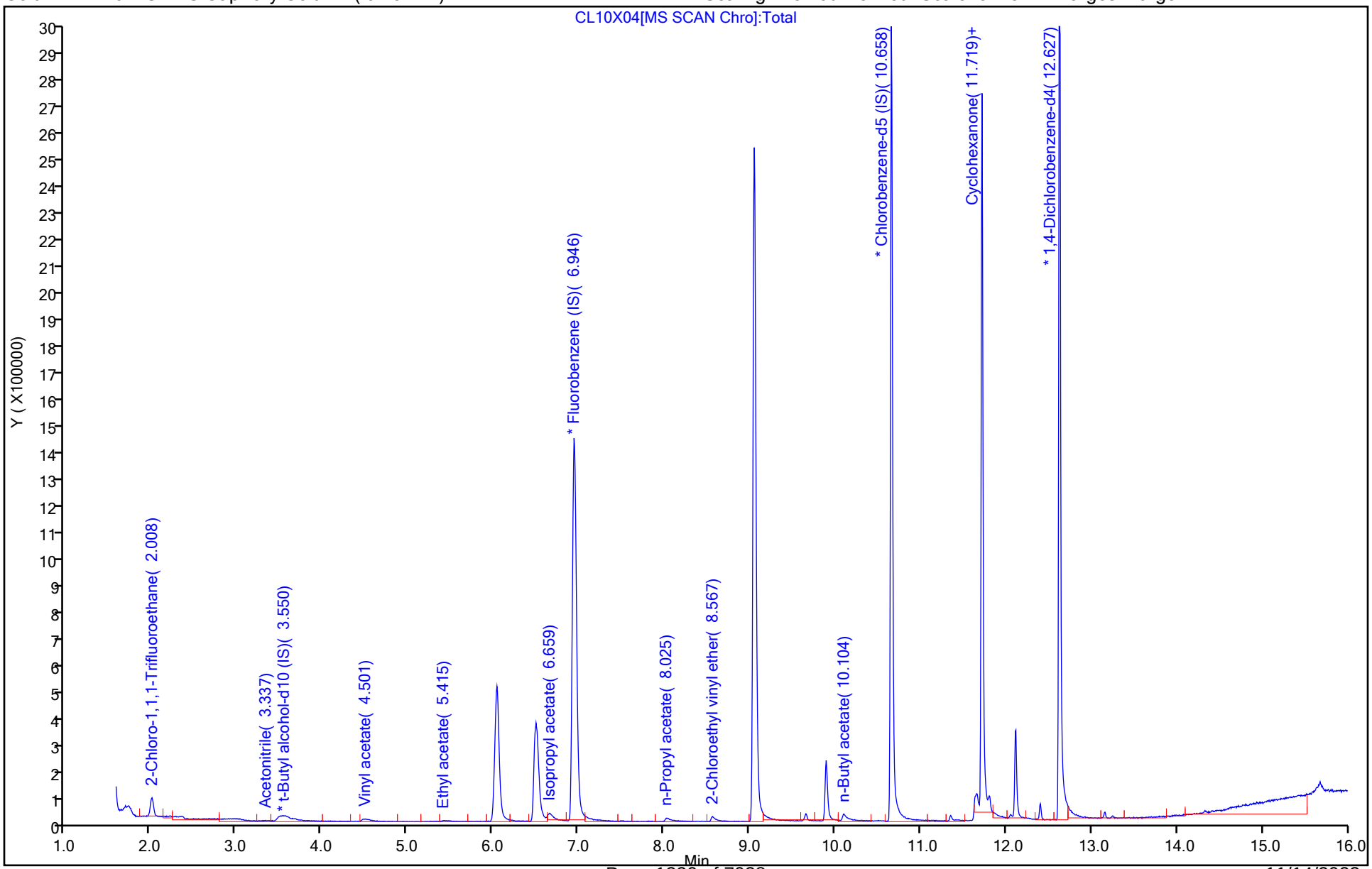
Lims ID: IC STD1 Sm Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

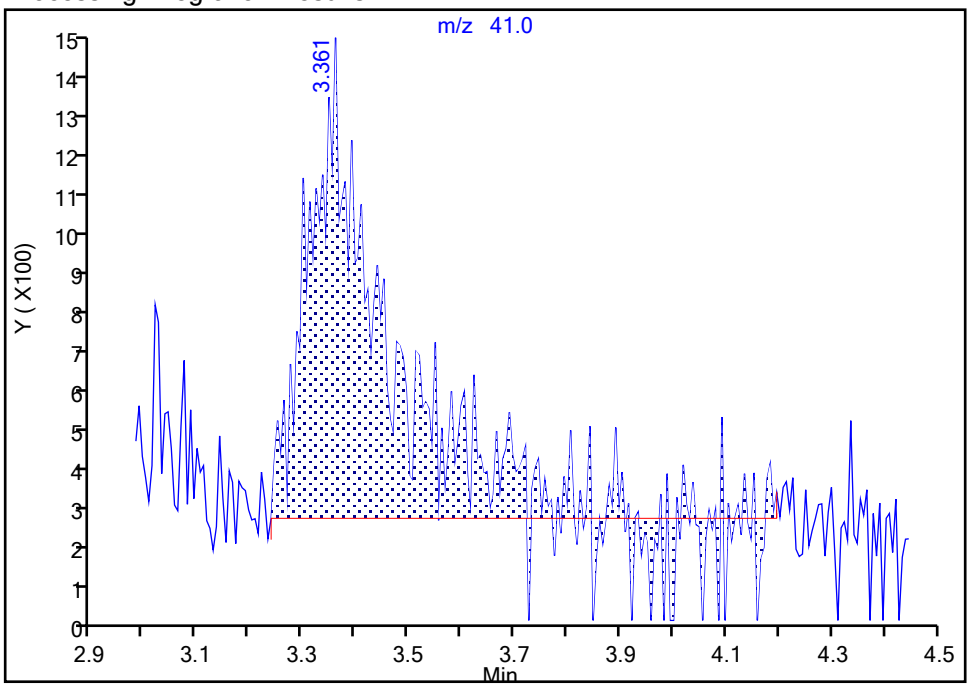
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X04.D				
Injection Date:	10-Jul-2023 16:34:30	Instrument ID:	10193		
Lims ID:	IC STD1 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

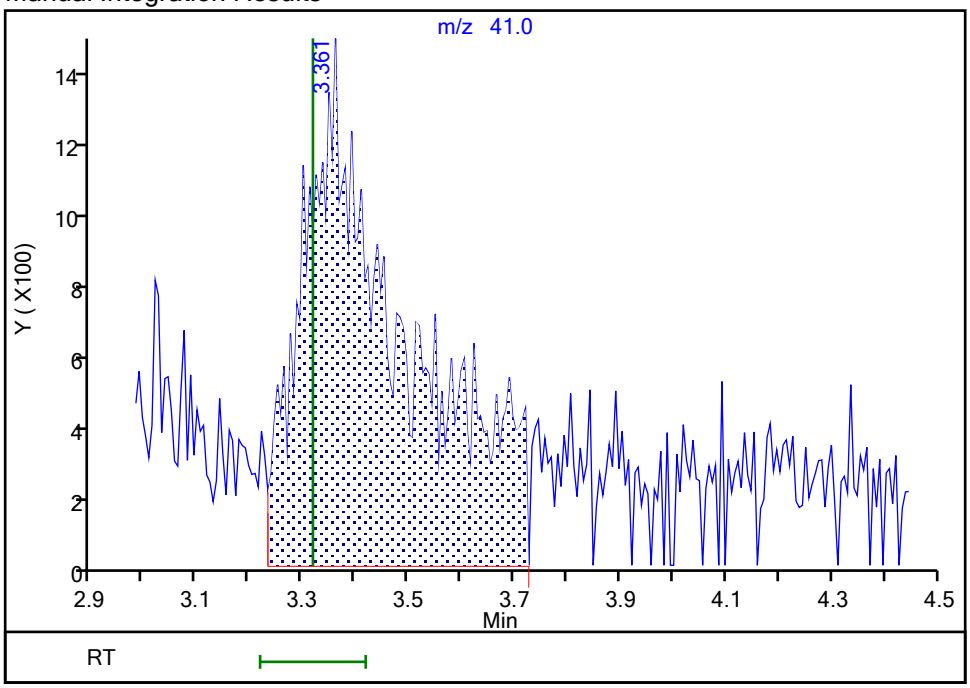
Processing Integration Results

RT: 3.36
Area: 10686
Amount: 3.036321
Amount Units: ug/l



Manual Integration Results

RT: 3.36
Area: 18506
Amount: 5.025486
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:15:08 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

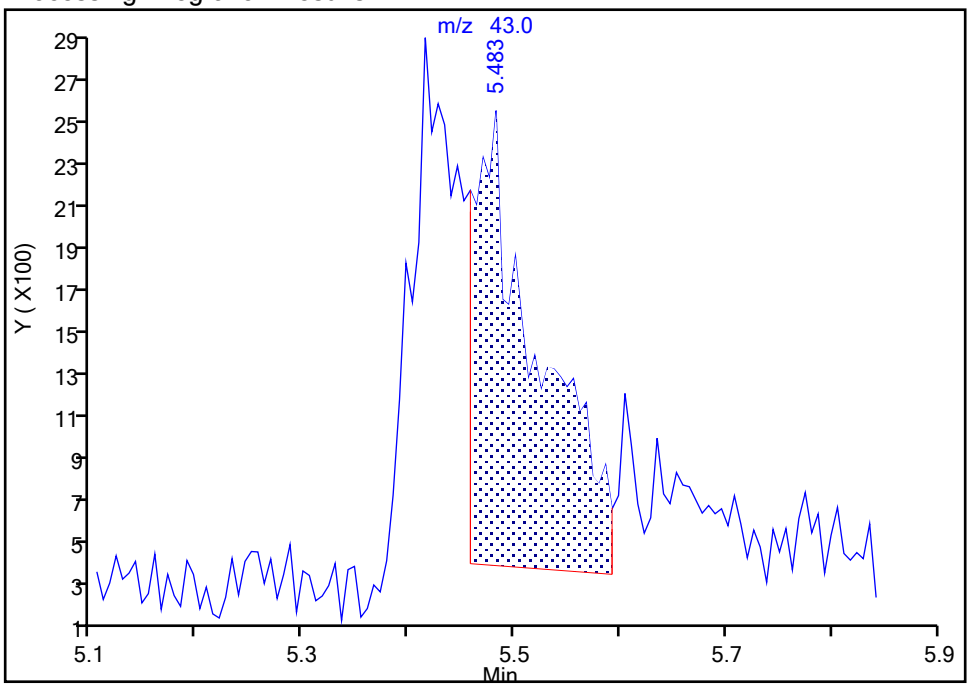
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X04.D				
Injection Date:	10-Jul-2023 16:34:30	Instrument ID:	10193		
Lims ID:	IC STD1 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

46 Ethyl acetate, CAS: 141-78-6

Signal: 1

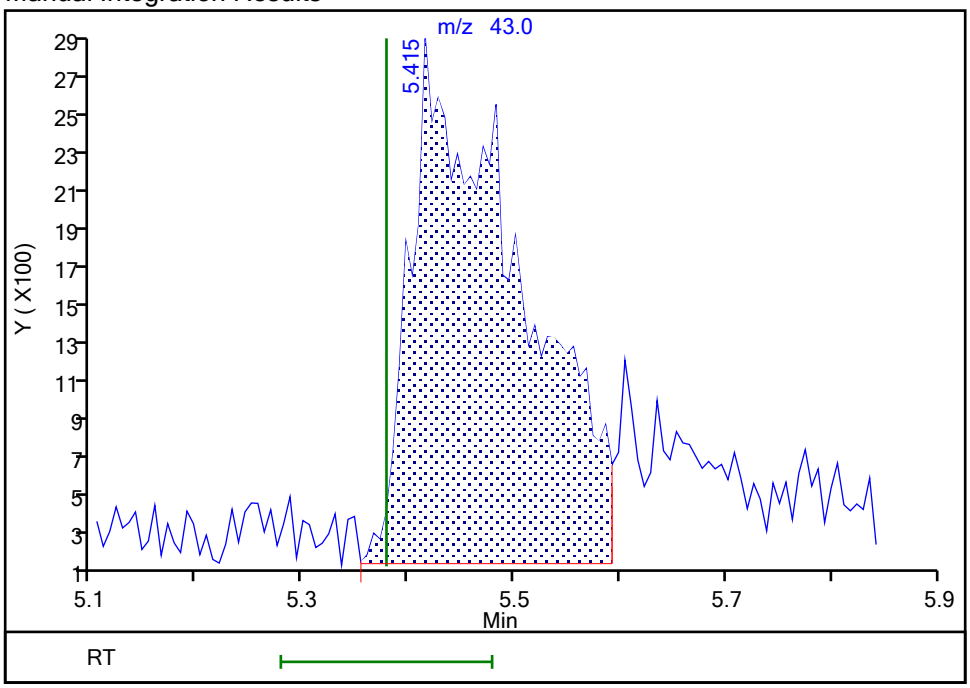
Processing Integration Results

RT: 5.48
Area: 8994
Amount: 0.307846
Amount Units: ug/l



Manual Integration Results

RT: 5.42
Area: 19124
Amount: 0.831130
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:15:25 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

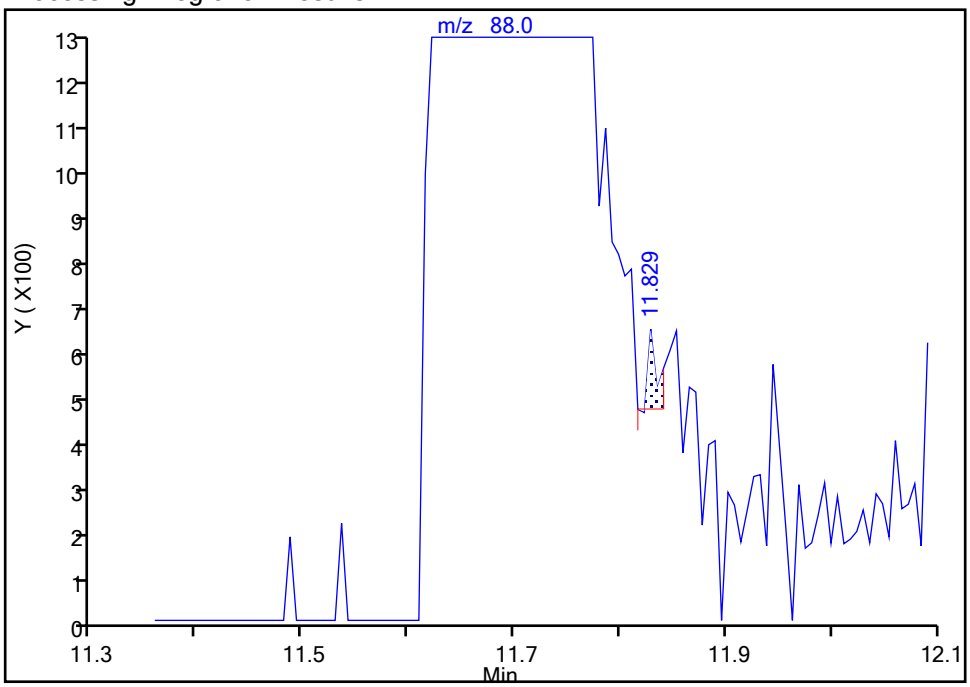
Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X04.D
Injection Date: 10-Jul-2023 16:34:30 Instrument ID: 10193
Lims ID: IC STD1 Sm
Client ID:
Operator ID: knk41612 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

122 cis-1,4-Dichloro-2-butene, CAS: 1476-11-5

Signal: 1

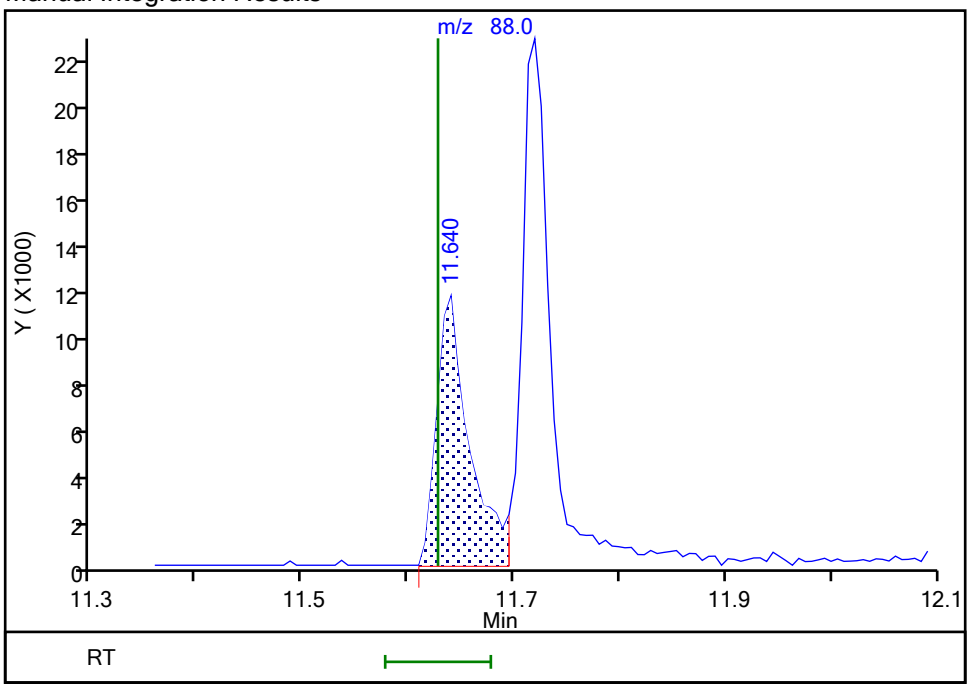
Processing Integration Results

RT: 11.83
Area: 112
Amount: 0.005865
Amount Units: ug/l



Manual Integration Results

RT: 11.64
Area: 25354
Amount: 1.934224
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:15:36 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X05.D
Lims ID: IC STD2 Sm
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Jul-2023 16:56:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-006
Misc. Info.: IC STD2 SM
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub43

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:37:49 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:16:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.642	1.648	-0.006	93	50807	2.00	1.98	M
3 Chlorodifluoromethane	51	1.697	1.697	0.001	97	114741	2.00	1.94	
4 Dimethyl ether	45	1.745	1.739	0.006	99	171508	2.00	2.02	
8 2-Chloro-1,1,1-Trifluoroethane	118	2.008	2.007	0.000	34	133824	2.00	2.04	a
27 Acetonitrile	41	3.343	3.318	0.025	95	35452	10.0	9.70	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.562	3.550	0.012	85	158768	50.0	50.0	
38 Vinyl acetate	43	4.470	4.446	0.024	97	158532	2.00	1.94	a
46 Ethyl acetate	43	5.415	5.379	0.036	99	48415	2.00	1.65	
63 Isopropyl acetate	43	6.653	6.647	0.006	98	148450	2.00	2.00	
* 65 Fluorobenzene (IS)	96	6.952	6.946	0.006	99	2504156	10.0	10.0	
75 n-Propyl acetate	61	8.019	7.994	0.025	98	25947	2.00	1.55	a
79 2-Chloroethyl vinyl ether	63	8.561	8.543	0.018	92	40570	2.00	1.72	
109 n-Butyl acetate	43	10.091	10.073	0.018	98	112554	2.00	1.72	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1971475	10.0	10.0	
122 cis-1,4-Dichloro-2-butene	88	11.634	11.627	0.007	95	57720	4.00	3.47	a
123 Cyclohexanone	55	11.658	11.646	0.012	91	132145	100.0	90.6	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1132550	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_CCV_V5ACE_00026	Amount Added:	1.00	Units: uL
MSV_CCV_CYC_00006	Amount Added:	8.00	Units: uL
MSV_V_SMRV4_00060	Amount Added:	5.00	Units: uL
MSV_HP25_ISO_00008	Amount Added:	1.00	Units: uL
MSV_DME_00048	Amount Added:	1.00	Units: uL

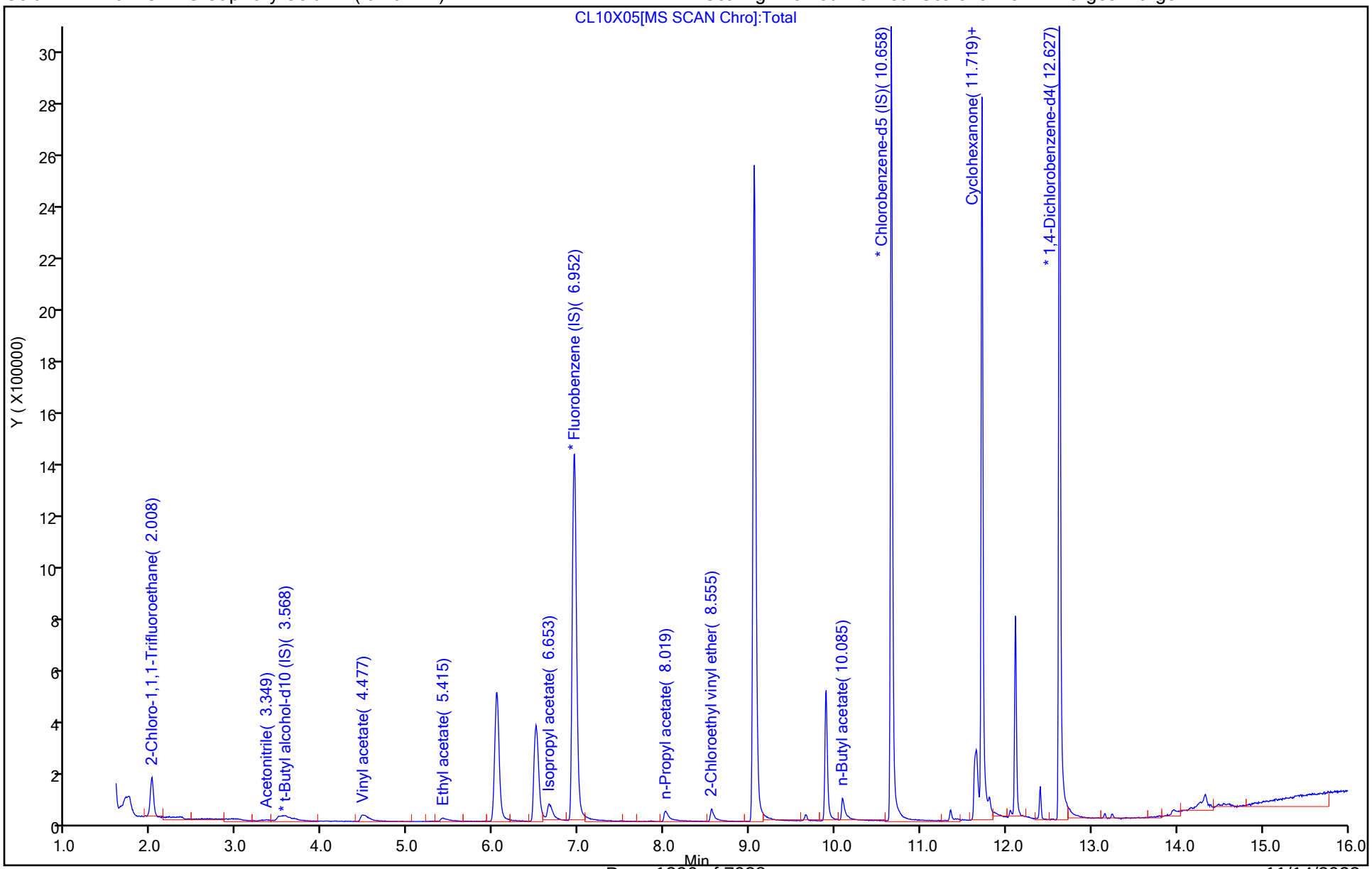
Report Date: 11-Jul-2023 21:37:49 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X05.D

Injection Date:	10-Jul-2023 16:56:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC STD2 Sm			Worklist Smp#:	6
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

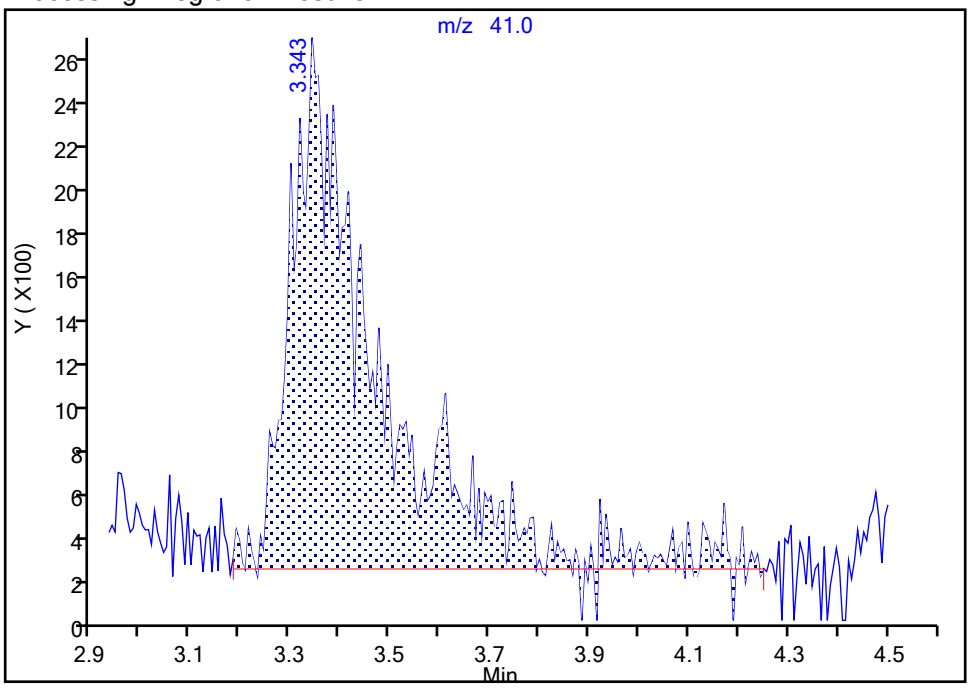
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X05.D				
Injection Date:	10-Jul-2023 16:56:30	Instrument ID:	10193		
Lims ID:	IC STD2 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

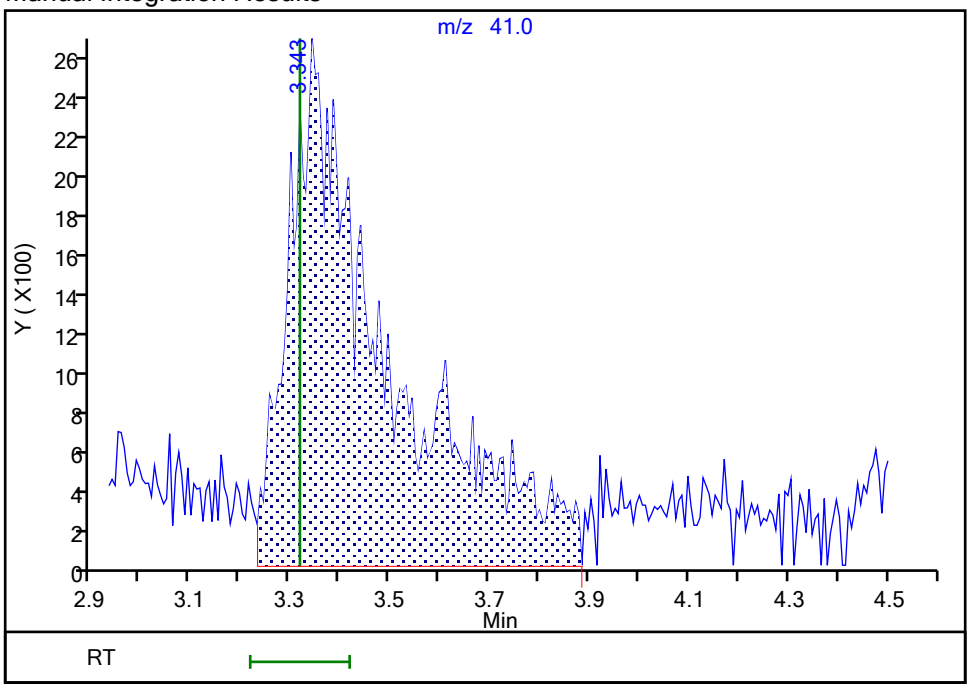
Processing Integration Results

RT: 3.34
Area: 27668
Amount: 7.445020
Amount Units: ug/l



Manual Integration Results

RT: 3.34
Area: 35452
Amount: 9.696013
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:16:29 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

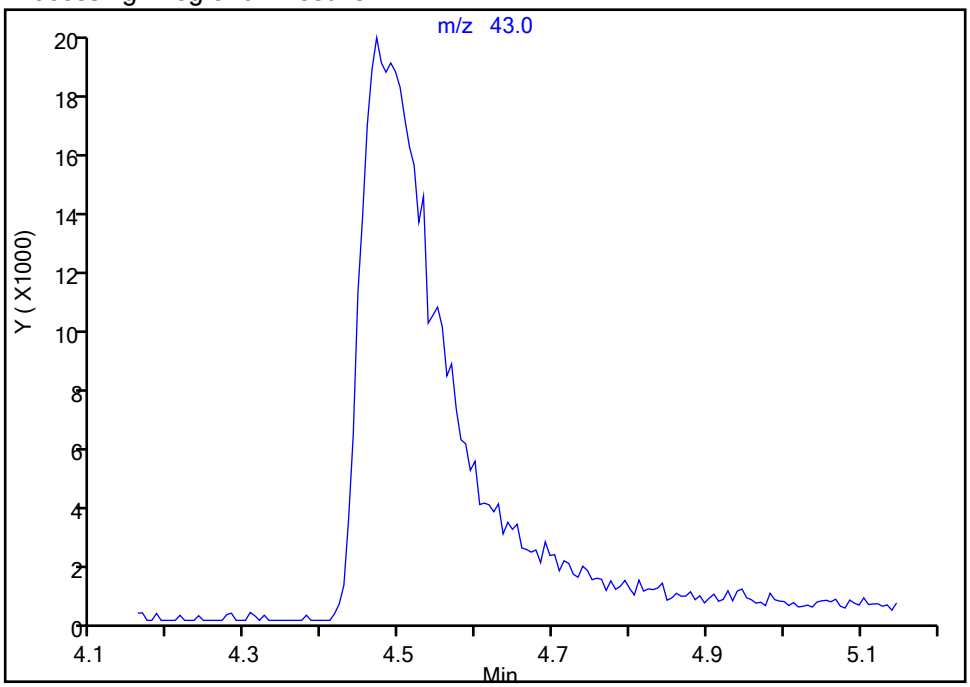
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X05.D				
Injection Date:	10-Jul-2023 16:56:30	Instrument ID:	10193		
Lims ID:	IC STD2 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

38 Vinyl acetate, CAS: 108-05-4

Signal: 1

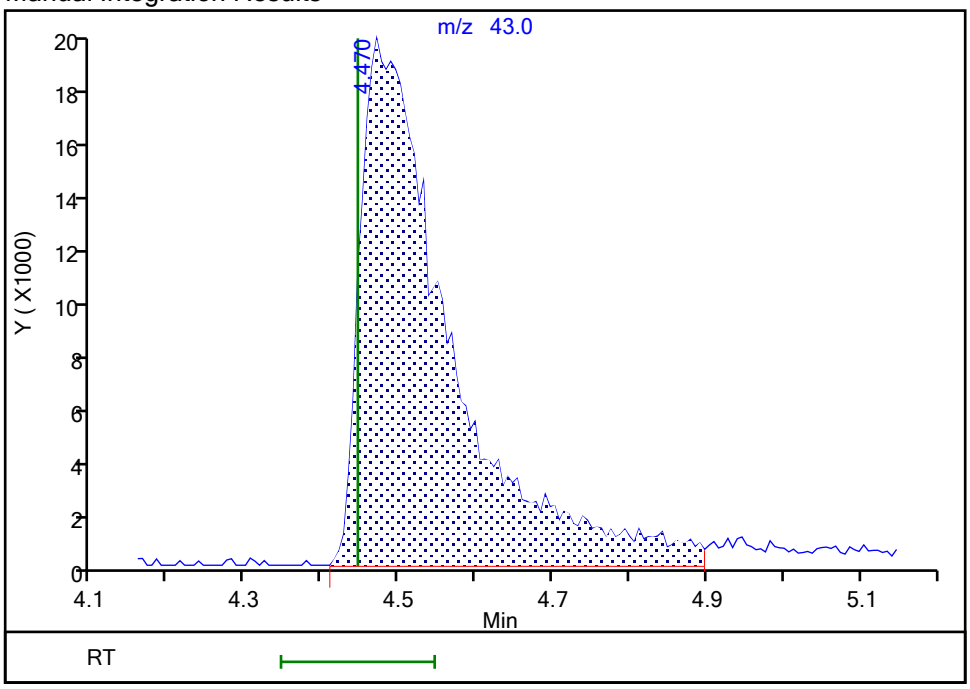
Not Detected
Expected RT: 4.45

Processing Integration Results



Manual Integration Results

RT: 4.47
Area: 158532
Amount: 1.944552
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:16:33 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

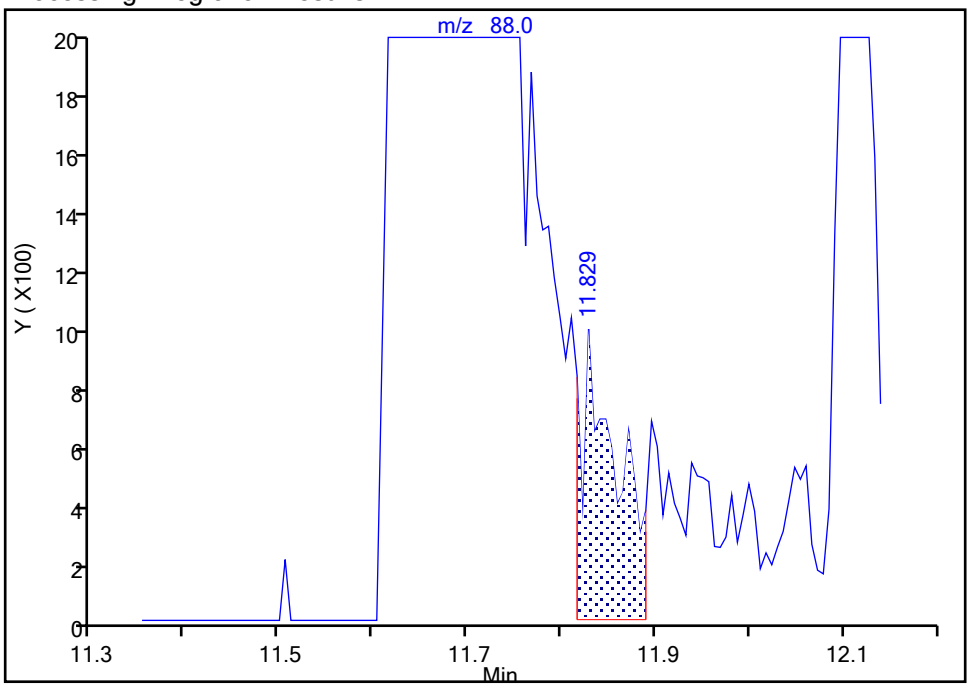
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X05.D				
Injection Date:	10-Jul-2023 16:56:30	Instrument ID:	10193		
Lims ID:	IC STD2 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

122 cis-1,4-Dichloro-2-butene, CAS: 1476-11-5

Signal: 1

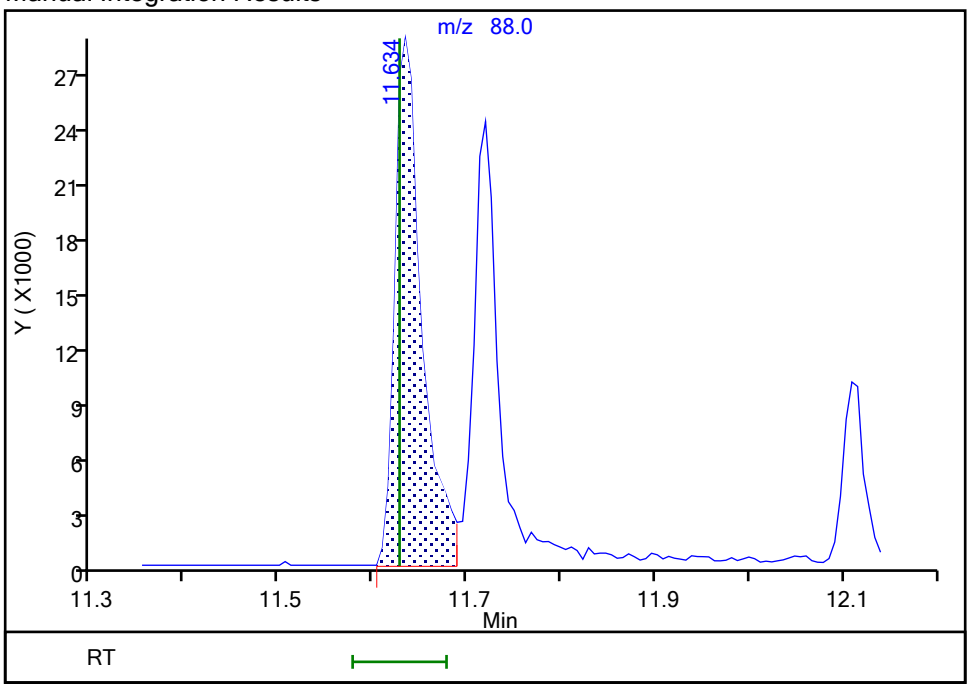
Processing Integration Results

RT: 11.83
Area: 2612
Amount: 0.125317
Amount Units: ug/l



Manual Integration Results

RT: 11.63
Area: 57720
Amount: 3.465002
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:16:45 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X06.D
Lims ID: IC STD5 Sm
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Jul-2023 17:18:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-007
Misc. Info.: IC STD5 SM
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub43

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:37:50 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:17:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.648	1.648	0.000	90	131589	5.00	5.19	M
3 Chlorodifluoromethane	51	1.696	1.697	0.000	97	289903	5.00	4.97	
4 Dimethyl ether	45	1.739	1.739	0.000	100	433934	5.00	5.17	
8 2-Chloro-1,1,1-Trifluoroethane	118	2.013	2.007	0.006	44	331522	5.00	5.13	
27 Acetonitrile	41	3.355	3.318	0.037	97	86044	25.0	23.8	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.562	3.550	0.012	95	156174	50.0	50.0	
38 Vinyl acetate	43	4.464	4.446	0.018	97	416325	5.00	5.17	a
46 Ethyl acetate	43	5.385	5.379	0.006	99	156946	5.00	4.71	Ma
63 Isopropyl acetate	43	6.647	6.647	0.000	98	417380	5.00	5.71	a
* 65 Fluorobenzene (IS)	96	6.951	6.946	0.005	99	2473404	10.0	10.0	
75 n-Propyl acetate	61	8.000	7.994	0.006	99	87973	5.00	4.73	
79 2-Chloroethyl vinyl ether	63	8.549	8.543	0.006	90	127613	5.00	5.49	
109 n-Butyl acetate	43	10.079	10.073	0.006	99	363054	5.00	4.82	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1941842	10.0	10.0	
122 cis-1,4-Dichloro-2-butene	88	11.634	11.627	0.007	96	177095	10.0	9.23	a
123 Cyclohexanone	55	11.652	11.646	0.006	91	389481	250.0	247.8	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1130040	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_CCV_V5ACE_00026	Amount Added:	1.00	Units: uL
MSV_CCV_CYC_00006	Amount Added:	8.00	Units: uL
MSV_V_SMRV4_00060	Amount Added:	5.00	Units: uL
MSV_HP25_ISO_00008	Amount Added:	1.00	Units: uL
MSV_DME_00048	Amount Added:	1.00	Units: uL

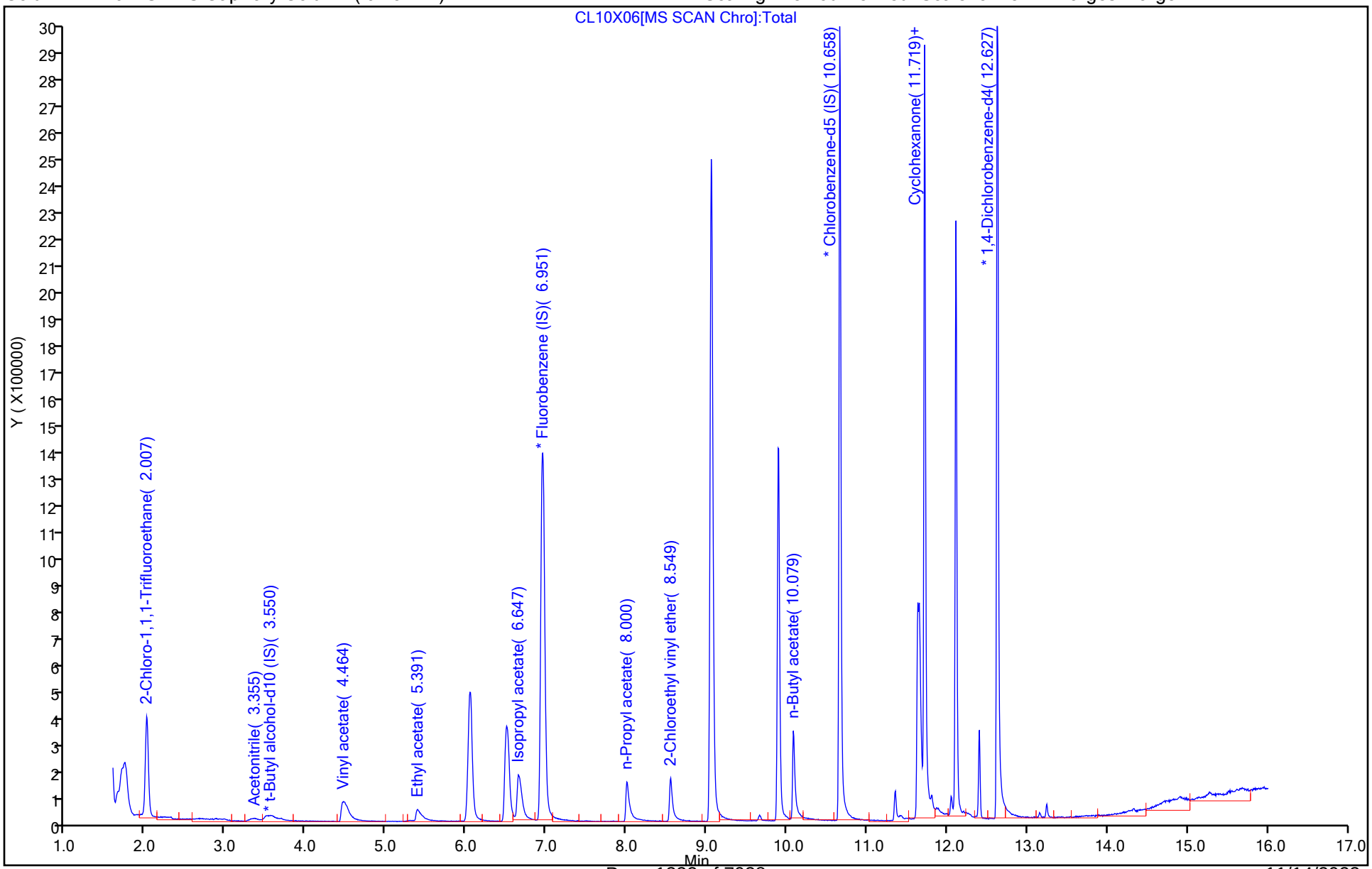
Report Date: 11-Jul-2023 21:37:51 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X06.D

Injection Date:	10-Jul-2023 17:18:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC STD5 Sm			Worklist Smp#:	7
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

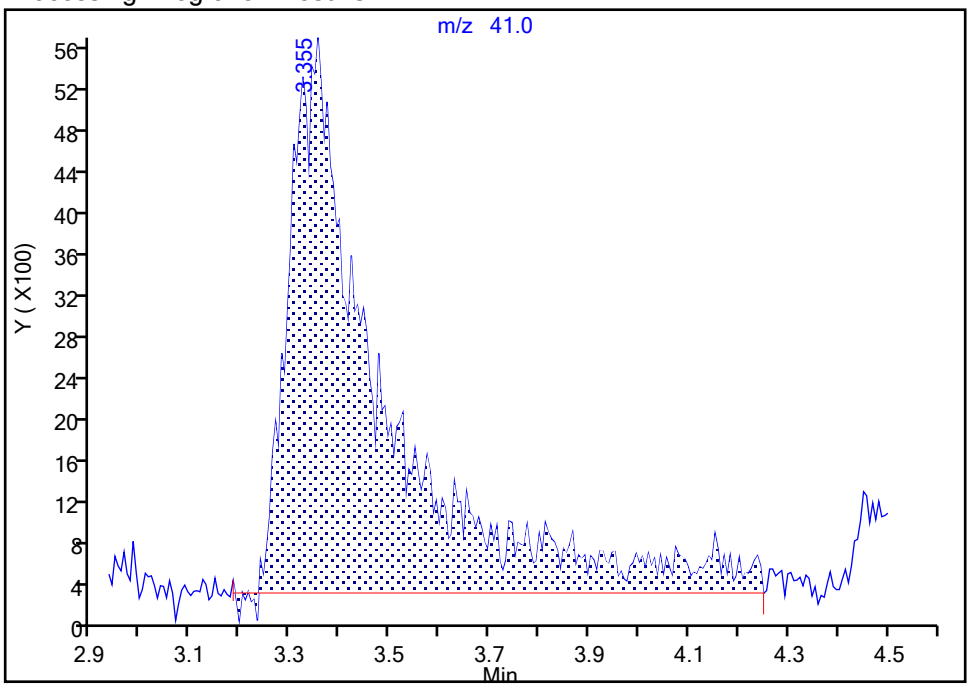
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X06.D				
Injection Date:	10-Jul-2023 17:18:30	Instrument ID:	10193		
Lims ID:	IC STD5 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

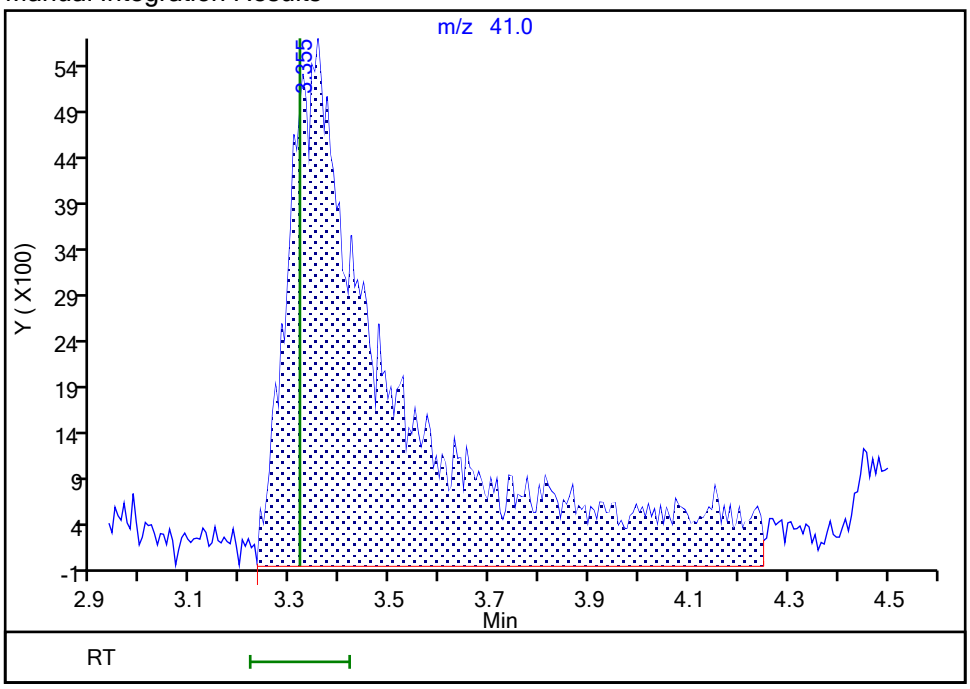
Processing Integration Results

RT: 3.35
Area: 69575
Amount: 18.403618
Amount Units: ug/l



Manual Integration Results

RT: 3.35
Area: 86044
Amount: 23.825355
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:17:19 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

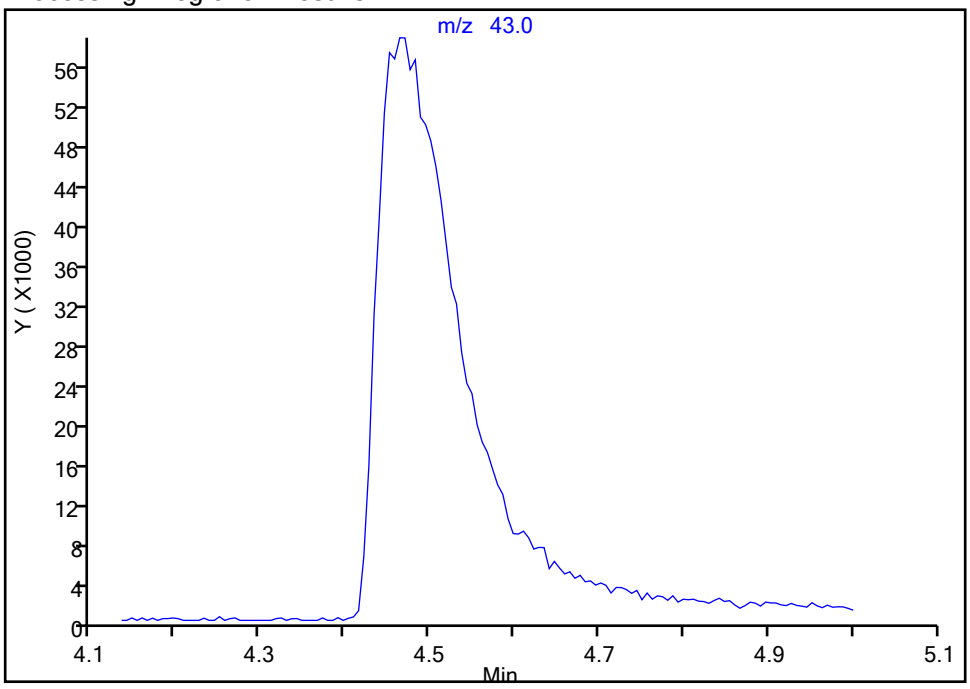
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X06.D				
Injection Date:	10-Jul-2023 17:18:30	Instrument ID:	10193		
Lims ID:	IC STD5 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

38 Vinyl acetate, CAS: 108-05-4

Signal: 1

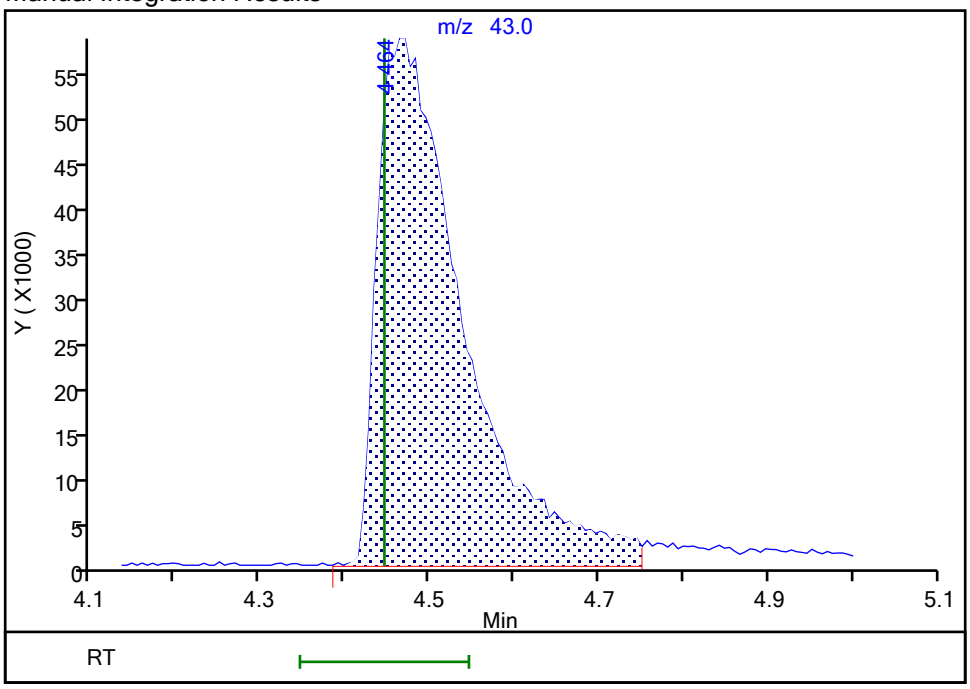
Not Detected
Expected RT: 4.45

Processing Integration Results



Manual Integration Results

RT: 4.46
Area: 416325
Amount: 5.170129
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:17:24 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

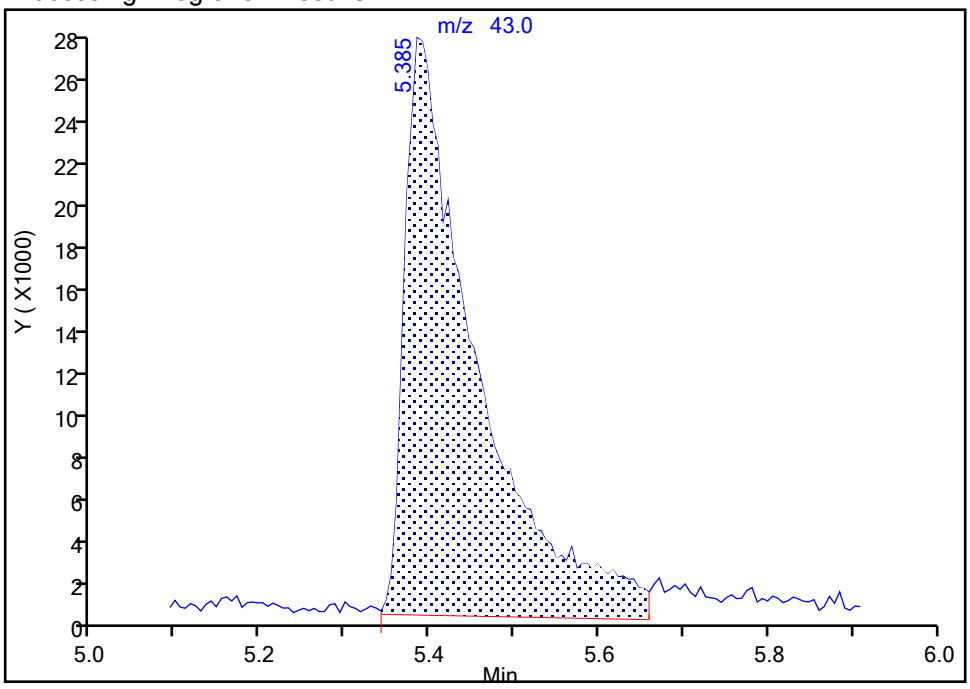
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X06.D				
Injection Date:	10-Jul-2023 17:18:30	Instrument ID:	10193		
Lims ID:	IC STD5 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

46 Ethyl acetate, CAS: 141-78-6

Signal: 1

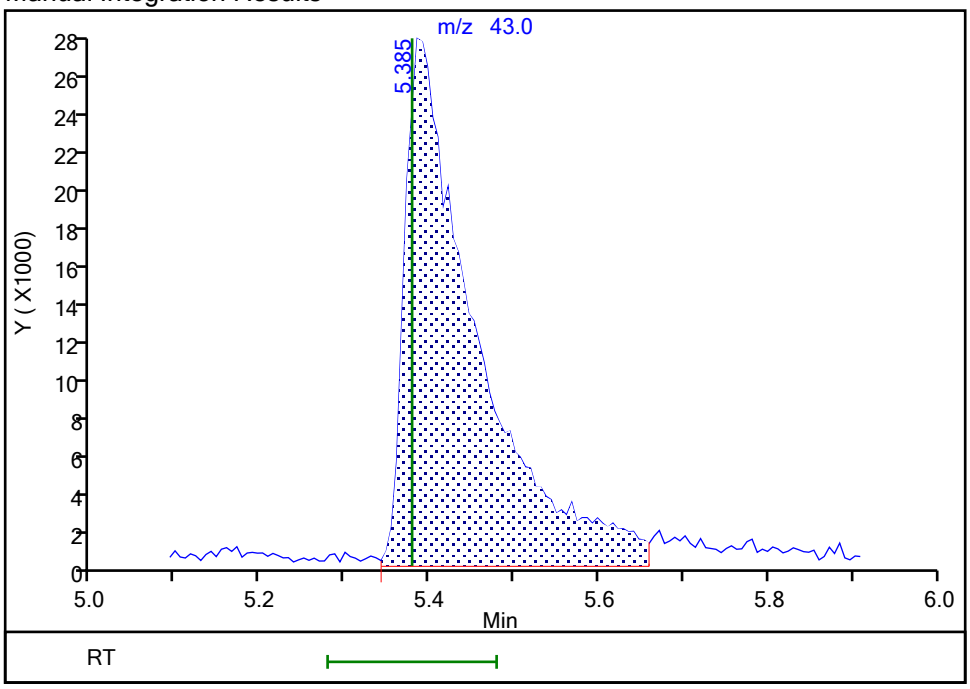
Processing Integration Results

RT: 5.38
Area: 158255
Amount: 4.746007
Amount Units: ug/l



Manual Integration Results

RT: 5.38
Area: 156946
Amount: 4.713505
Amount Units: ug/l



Reviewer: UKEK, 11-Jul-2023 20:33:55 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

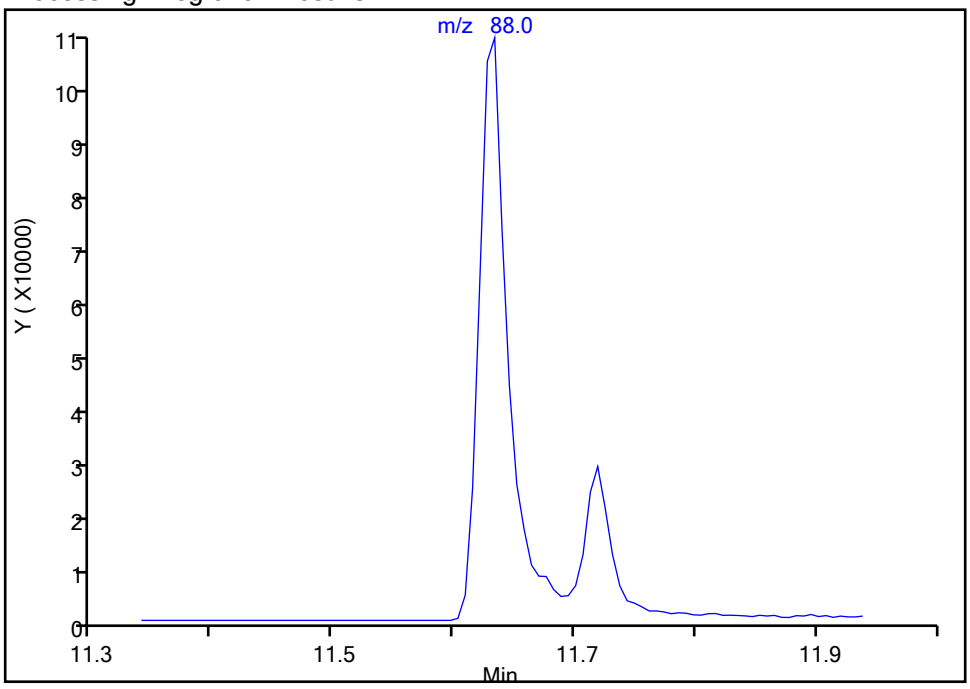
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X06.D				
Injection Date:	10-Jul-2023 17:18:30	Instrument ID:	10193		
Lims ID:	IC STD5 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

122 cis-1,4-Dichloro-2-butene, CAS: 1476-11-5

Signal: 1

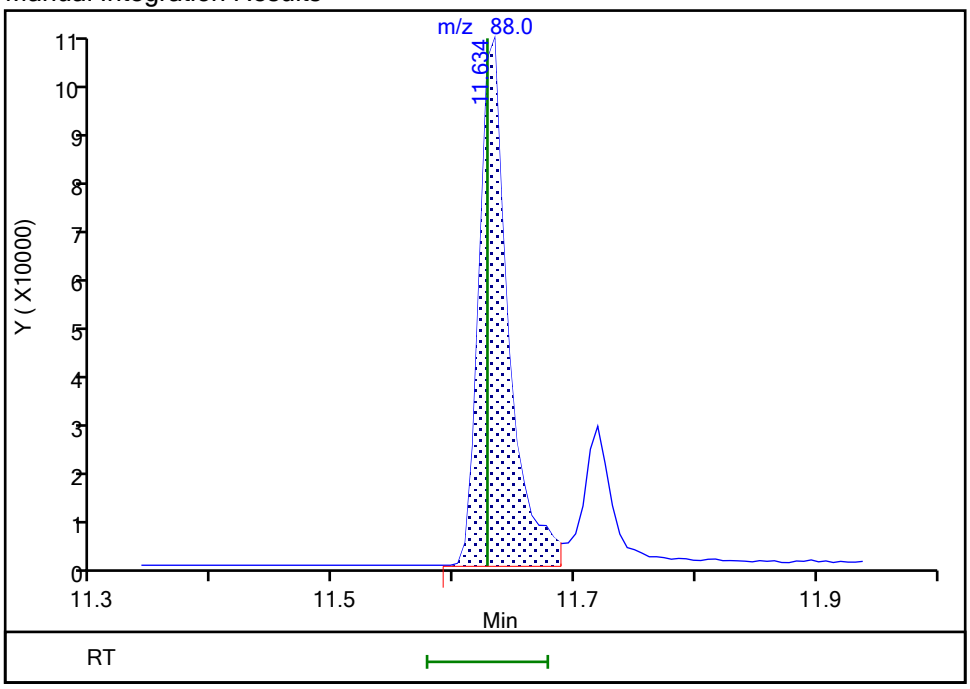
Not Detected
Expected RT: 11.63

Processing Integration Results



Manual Integration Results

RT: 11.63
Area: 177095
Amount: 9.226426
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:17:35 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X07.D
Lims ID: IC STD10 Sm
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Jul-2023 17:40:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-008
Misc. Info.: IC STD10 SM
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub43

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:37:52 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:10:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.648	1.648	0.000	92	258415	10.0	10.2	M
3 Chlorodifluoromethane	51	1.697	1.697	0.000	97	553436	10.0	9.47	
4 Dimethyl ether	45	1.739	1.739	0.000	99	843017	10.0	10.0	
8 2-Chloro-1,1,1-Trifluoroethane	118	2.007	2.007	0.000	33	640750	10.0	9.89	
27 Acetonitrile	41	3.318	3.318	0.000	97	170772	50.0	47.2	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.538	3.538	0.000	96	177770	50.0	50.0	
38 Vinyl acetate	43	4.446	4.446	0.000	97	928699	10.0	11.5	a
46 Ethyl acetate	43	5.379	5.379	0.000	99	354124	10.0	10.2	a
63 Isopropyl acetate	43	6.647	6.647	0.000	98	831763	10.0	11.4	a
* 65 Fluorobenzene (IS)	96	6.952	6.952	0.000	99	2477645	10.0	10.0	
75 n-Propyl acetate	61	7.994	7.994	0.000	98	189601	10.0	9.91	a
79 2-Chloroethyl vinyl ether	63	8.543	8.543	0.000	91	262749	10.0	11.3	a
109 n-Butyl acetate	43	10.073	10.073	0.000	99	775538	10.0	9.89	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1944939	10.0	10.0	
122 cis-1,4-Dichloro-2-butene	88	11.627	11.627	0.000	96	386829	20.0	19.2	a
123 Cyclohexanone	55	11.646	11.646	0.000	91	887459	500.0	484.2	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.627	0.000	93	1123298	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_CCV_V5ACE_00026	Amount Added:	1.00	Units: uL
MSV_CCV_CYC_00006	Amount Added:	8.00	Units: uL
MSV_V_SMRV4_00060	Amount Added:	5.00	Units: uL
MSV_HP25_ISO_00008	Amount Added:	1.00	Units: uL
MSV_DME_00048	Amount Added:	1.00	Units: uL

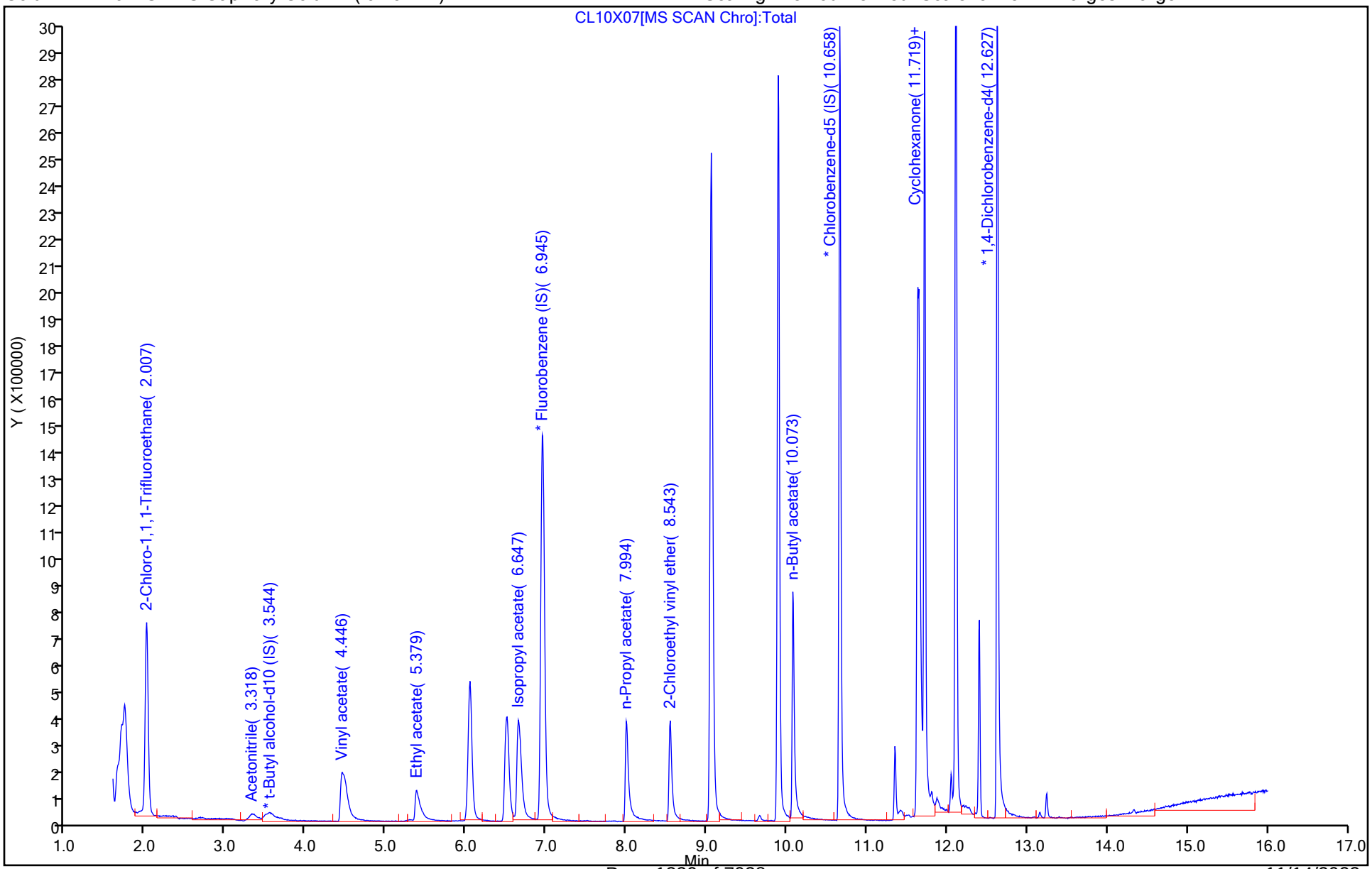
Report Date: 11-Jul-2023 21:37:53 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X07.D

Injection Date:	10-Jul-2023 17:40:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC STD10 Sm			Worklist Smp#:	8
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

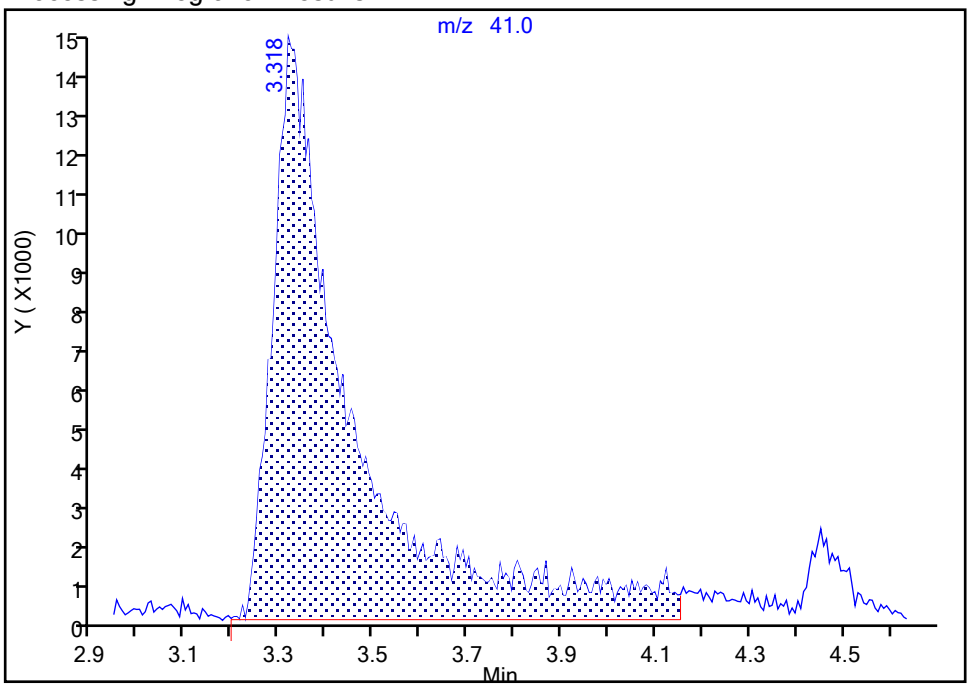
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X07.D				
Injection Date:	10-Jul-2023 17:40:30	Instrument ID:	10193		
Lims ID:	IC STD10 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

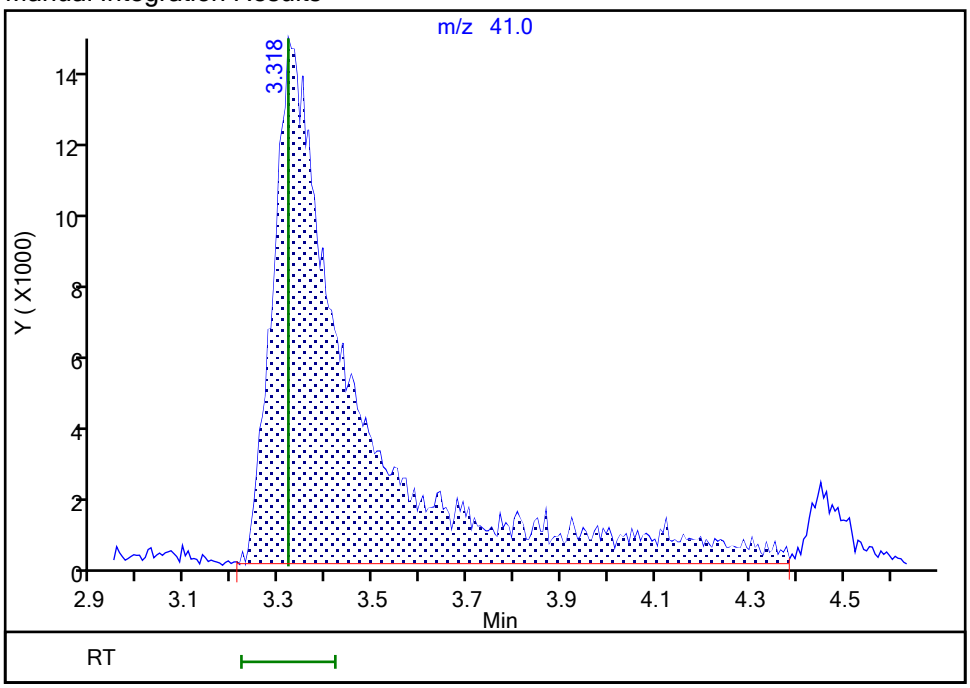
RT: 3.32
Area: 162141
Amount: 42.690917
Amount Units: ug/l

Processing Integration Results



Manual Integration Results

RT: 3.32
Area: 170772
Amount: 47.205373
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:09:49 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

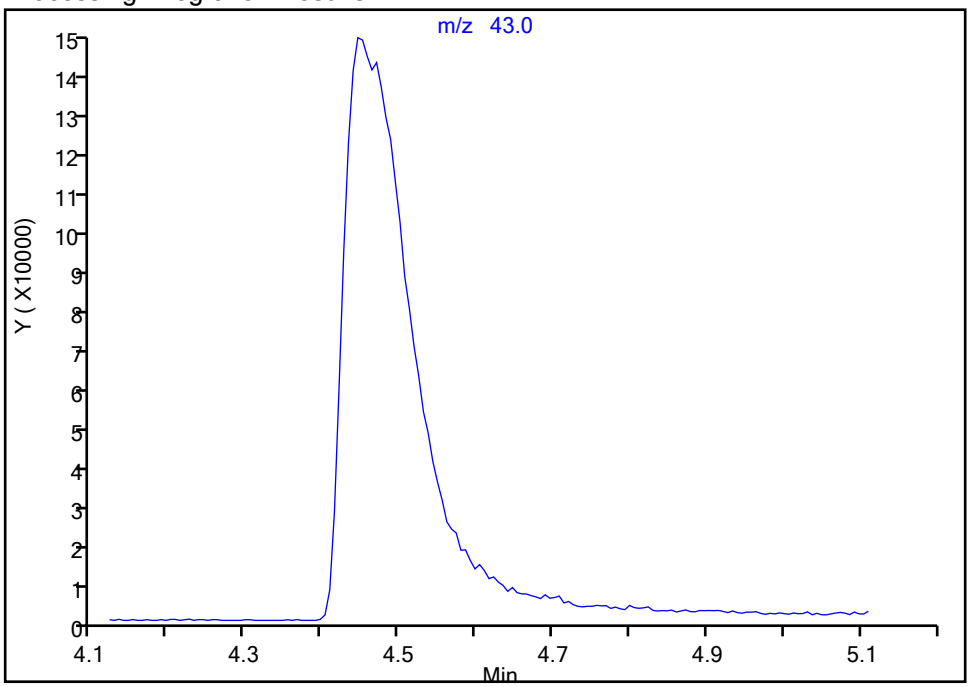
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X07.D				
Injection Date:	10-Jul-2023 17:40:30	Instrument ID:	10193		
Lims ID:	IC STD10 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

38 Vinyl acetate, CAS: 108-05-4

Signal: 1

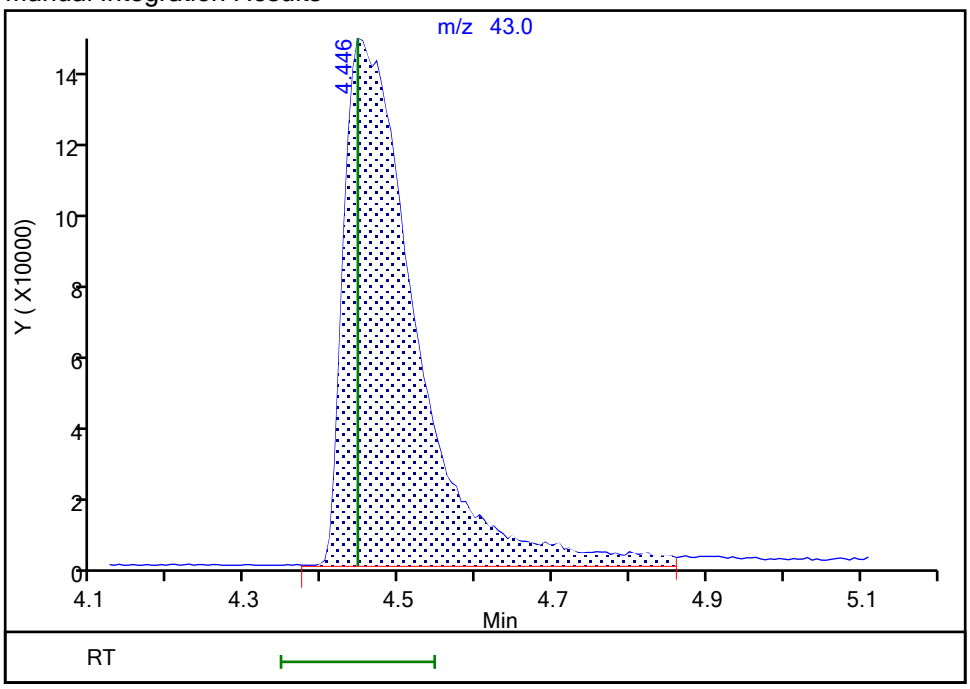
Not Detected
Expected RT: 4.45

Processing Integration Results



Manual Integration Results

RT: 4.45
Area: 928699
Amount: 11.513301
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:09:54 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

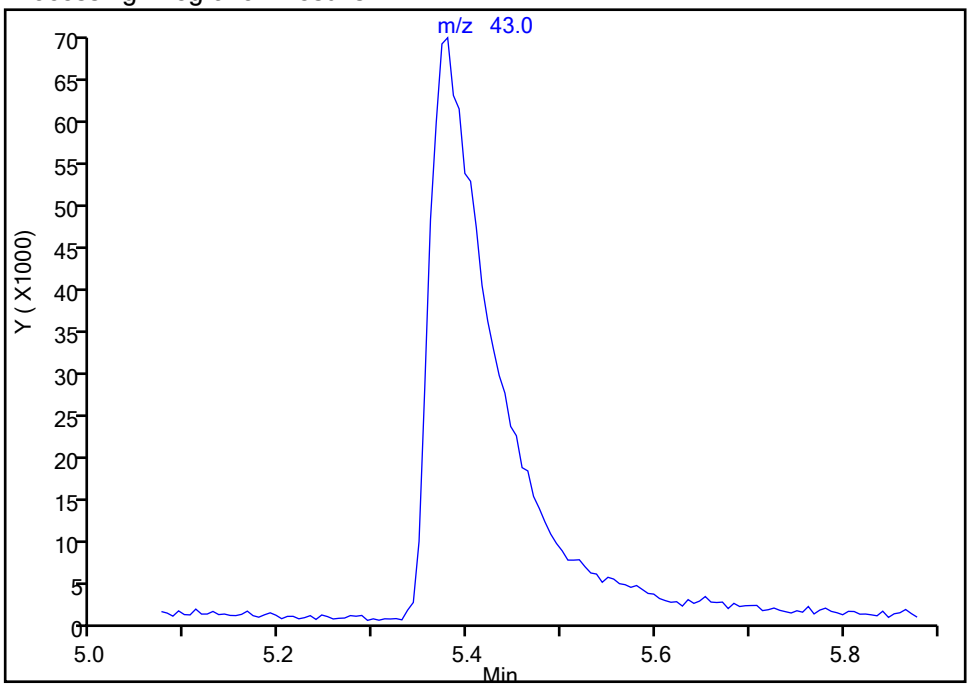
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X07.D				
Injection Date:	10-Jul-2023 17:40:30	Instrument ID:	10193		
Lims ID:	IC STD10 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

46 Ethyl acetate, CAS: 141-78-6

Signal: 1

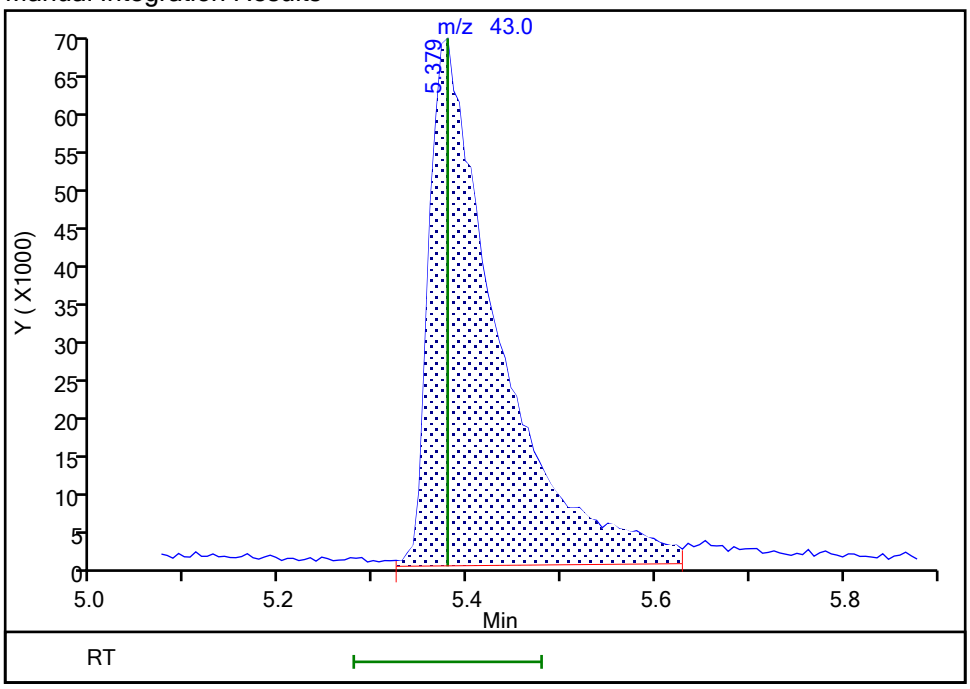
Not Detected
Expected RT: 5.38

Processing Integration Results



Manual Integration Results

RT: 5.38
Area: 354124
Amount: 10.236062
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:09:56 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

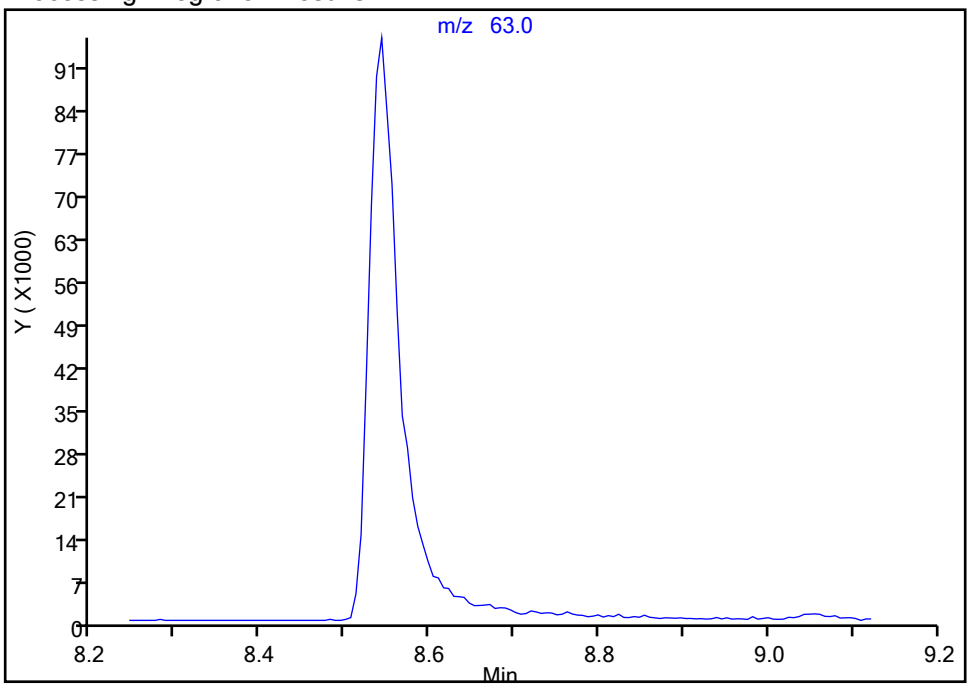
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X07.D				
Injection Date:	10-Jul-2023 17:40:30	Instrument ID:	10193		
Lims ID:	IC STD10 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

79 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

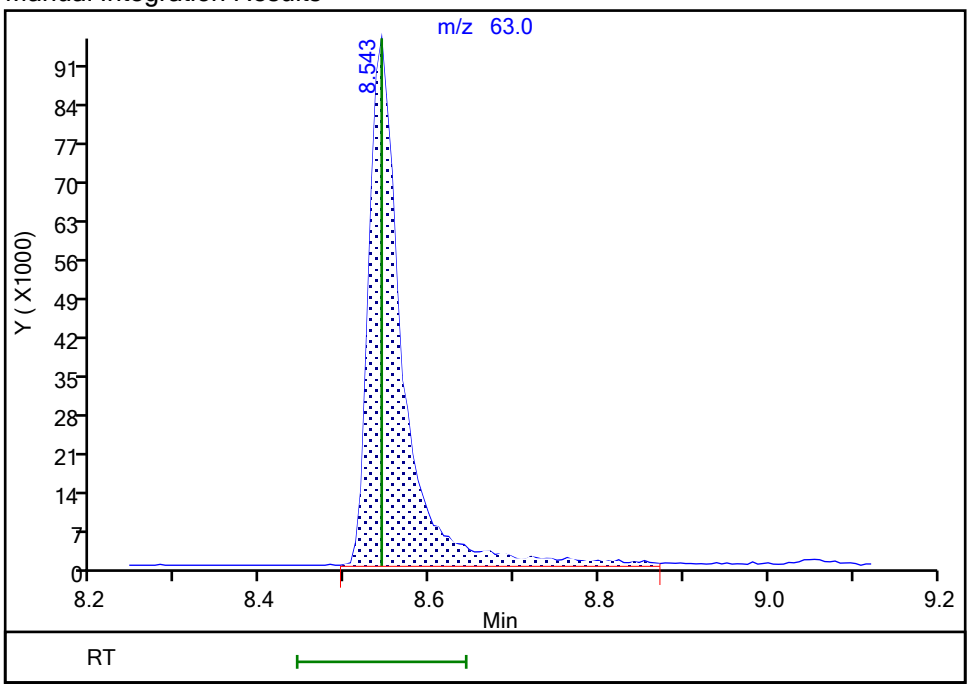
Not Detected
Expected RT: 8.54

Processing Integration Results



Manual Integration Results

RT: 8.54
Area: 262749
Amount: 11.274434
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:10:06 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

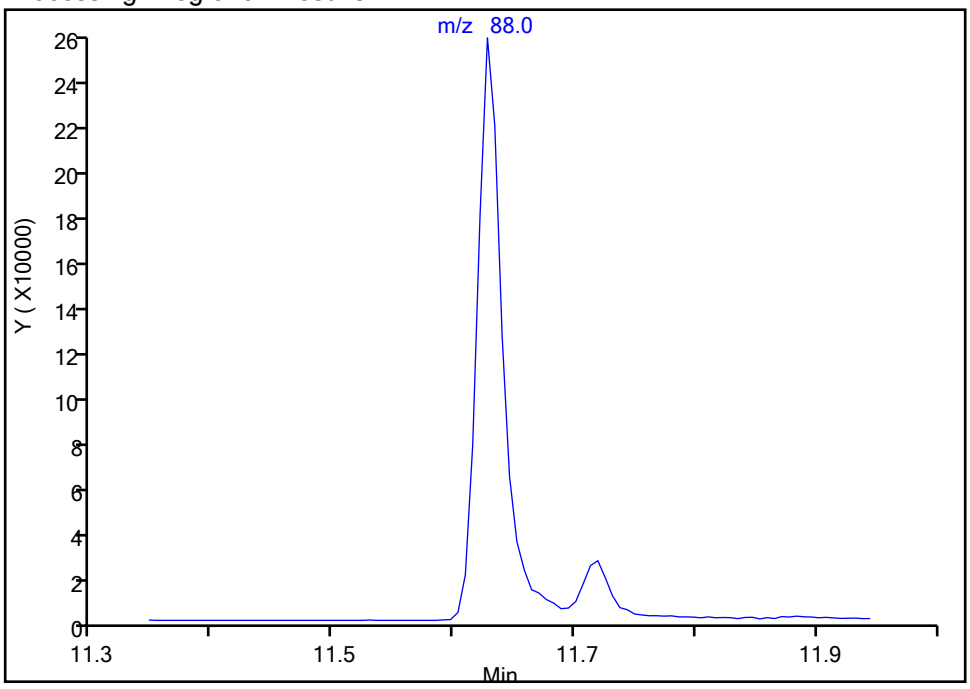
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X07.D				
Injection Date:	10-Jul-2023 17:40:30	Instrument ID:	10193		
Lims ID:	IC STD10 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

122 cis-1,4-Dichloro-2-butene, CAS: 1476-11-5

Signal: 1

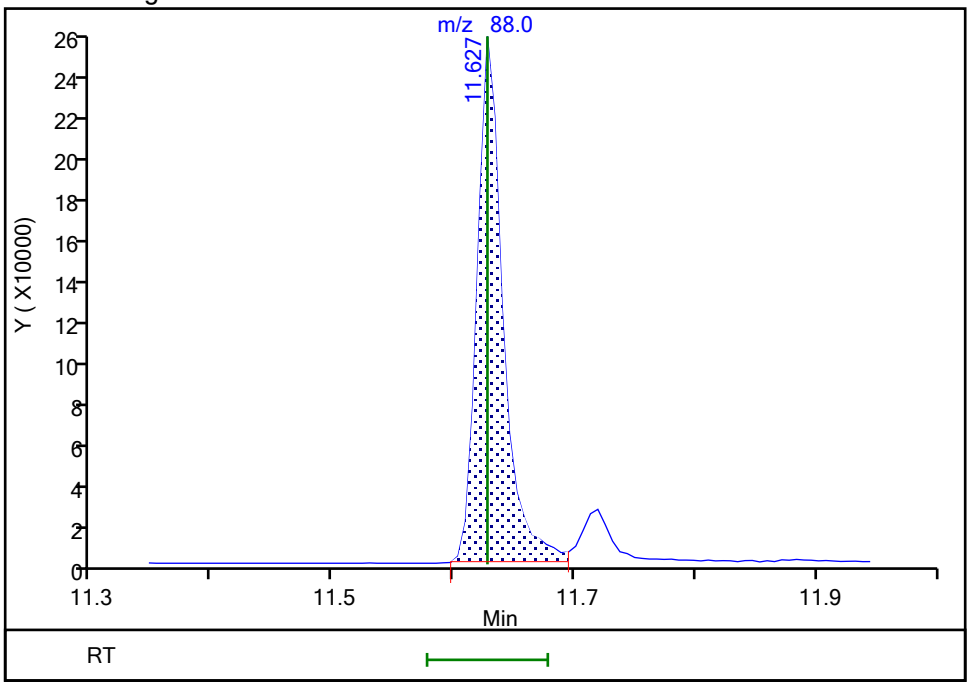
Not Detected
Expected RT: 11.63

Processing Integration Results



Manual Integration Results

RT: 11.63
Area: 386829
Amount: 19.246318
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:10:23 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X08.D
Lims ID: IC STD25 Sm
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Jul-2023 18:02:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-009
Misc. Info.: IC STD25 SM
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub43

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:37:54 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:18:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.648	1.648	0.000	91	756153	25.0	29.5	M
3 Chlorodifluoromethane	51	1.696	1.697	0.000	97	1610422	25.0	27.3	
4 Dimethyl ether	45	1.739	1.739	0.000	99	2132785	25.0	25.1	
8 2-Chloro-1,1,1-Trifluoroethane	118	2.007	2.007	0.000	33	1853041	25.0	28.3	
27 Acetonitrile	41	3.324	3.318	0.006	99	434651	125.0	118.9	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.550	3.538	0.012	96	168367	50.0	50.0	
38 Vinyl acetate	43	4.434	4.446	-0.012	97	2357192	25.0	28.9	a
46 Ethyl acetate	43	5.366	5.379	-0.013	99	904142	25.0	25.4	a
63 Isopropyl acetate	43	6.641	6.647	-0.006	98	2216821	25.0	29.9	a
* 65 Fluorobenzene (IS)	96	6.945	6.952	-0.007	99	2504505	10.0	10.0	
75 n-Propyl acetate	61	7.988	7.994	-0.006	98	510049	25.0	26.0	a
79 2-Chloroethyl vinyl ether	63	8.537	8.543	-0.006	91	757238	25.0	32.1	a
109 n-Butyl acetate	43	10.073	10.073	0.000	99	2102408	25.0	25.6	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1992506	10.0	10.0	
122 cis-1,4-Dichloro-2-butene	88	11.627	11.627	0.000	96	1095177	50.0	51.9	a
123 Cyclohexanone	55	11.646	11.646	0.000	91	2469223	1250.0	1399.6	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.627	0.000	93	1180497	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_CCV_V5ACE_00026	Amount Added:	2.50	Units: uL
MSV_CCV_CYC_00006	Amount Added:	20.00	Units: uL
MSV_V_SMRV4_00060	Amount Added:	12.50	Units: uL
MSV_HP25_ISO_00008	Amount Added:	1.00	Units: uL
MSV_DME_00048	Amount Added:	2.50	Units: uL

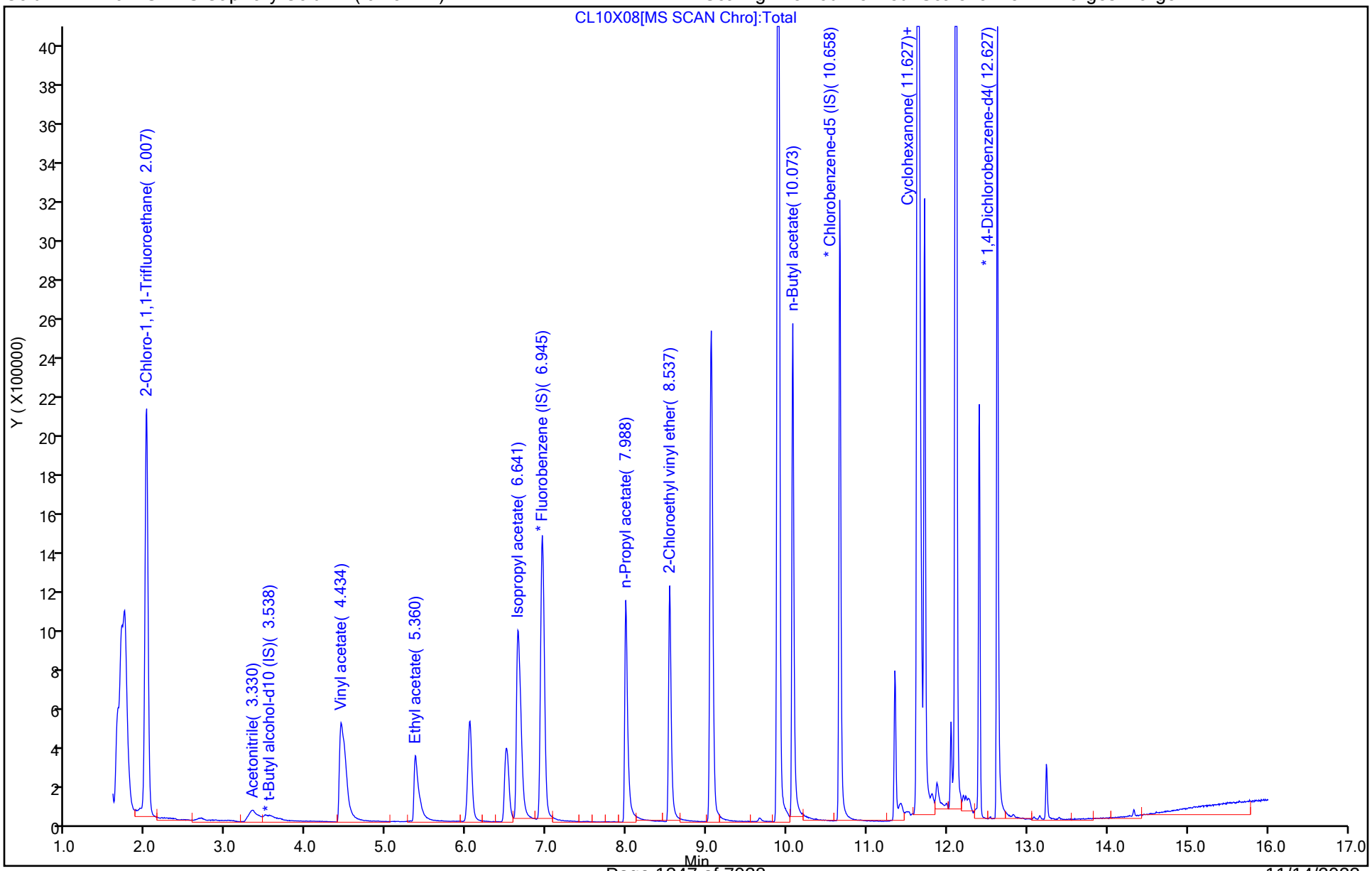
Report Date: 11-Jul-2023 21:37:54 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X08.D

Injection Date:	10-Jul-2023 18:02:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC STD25 Sm			Worklist Smp#:	9
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

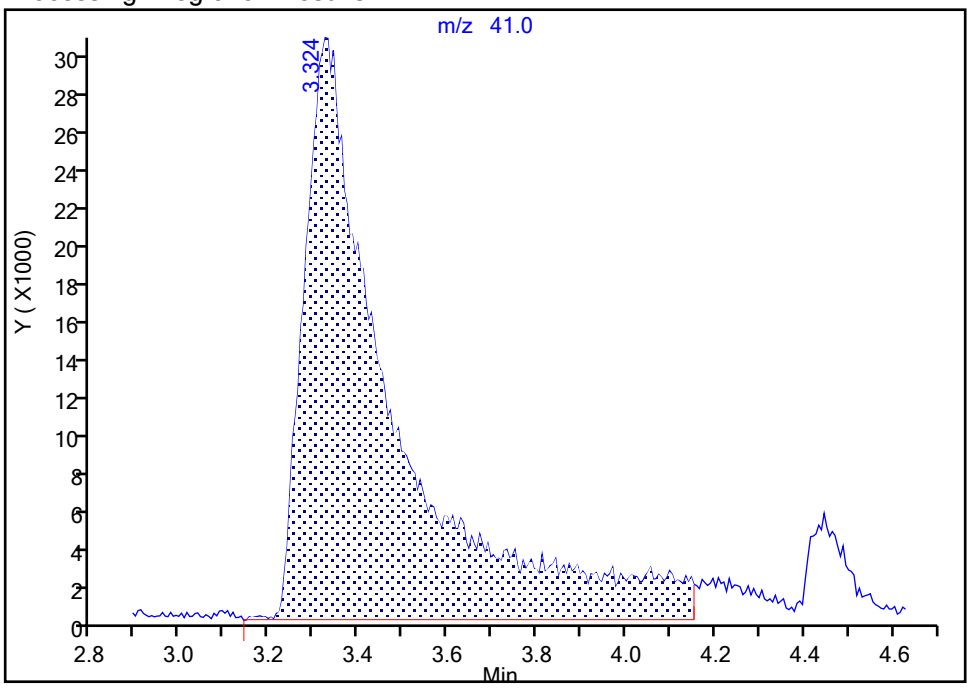
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X08.D				
Injection Date:	10-Jul-2023 18:02:30	Instrument ID:	10193		
Lims ID:	IC STD25 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

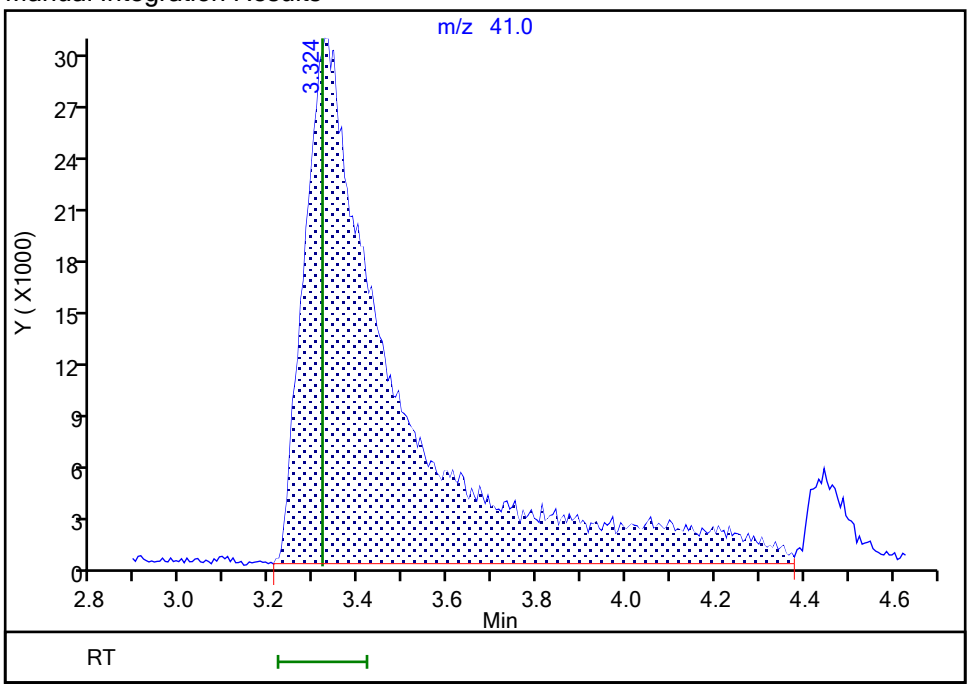
Processing Integration Results

RT: 3.32
Area: 417048
Amount: 106.2994
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 434651
Amount: 118.8592
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:18:30 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

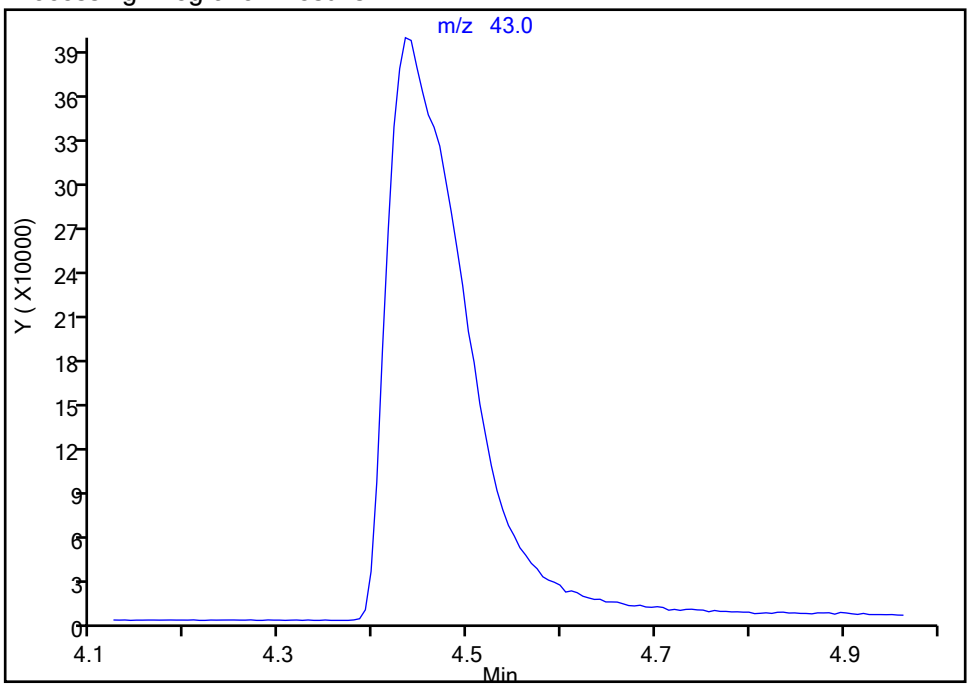
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X08.D				
Injection Date:	10-Jul-2023 18:02:30	Instrument ID:	10193		
Lims ID:	IC STD25 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

38 Vinyl acetate, CAS: 108-05-4

Signal: 1

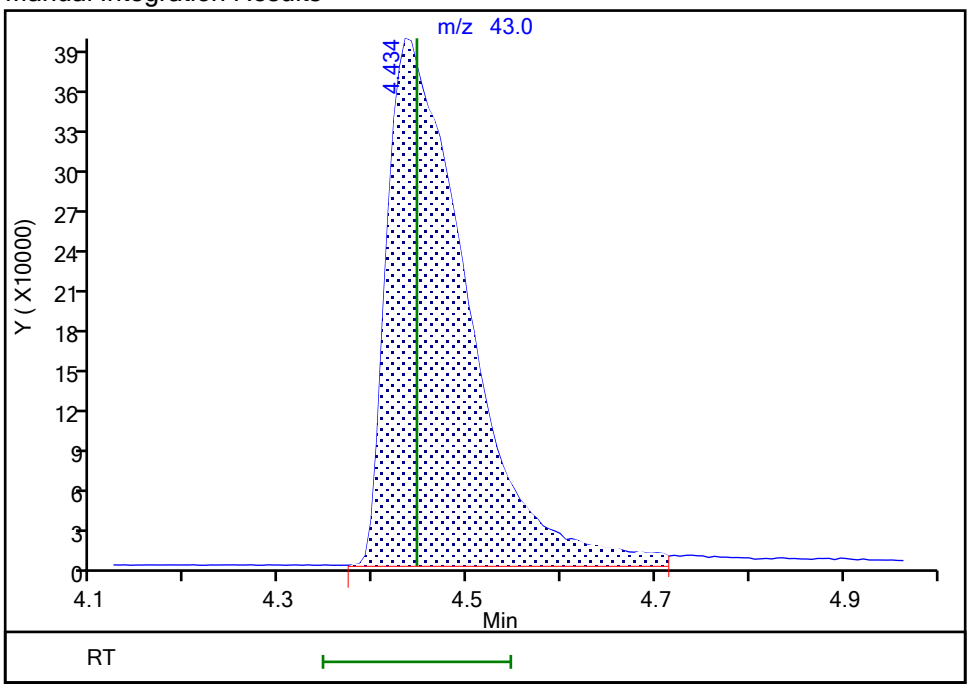
Not Detected
Expected RT: 4.45

Processing Integration Results



Manual Integration Results

RT: 4.43
Area: 2357192
Amount: 28.909262
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:18:36 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

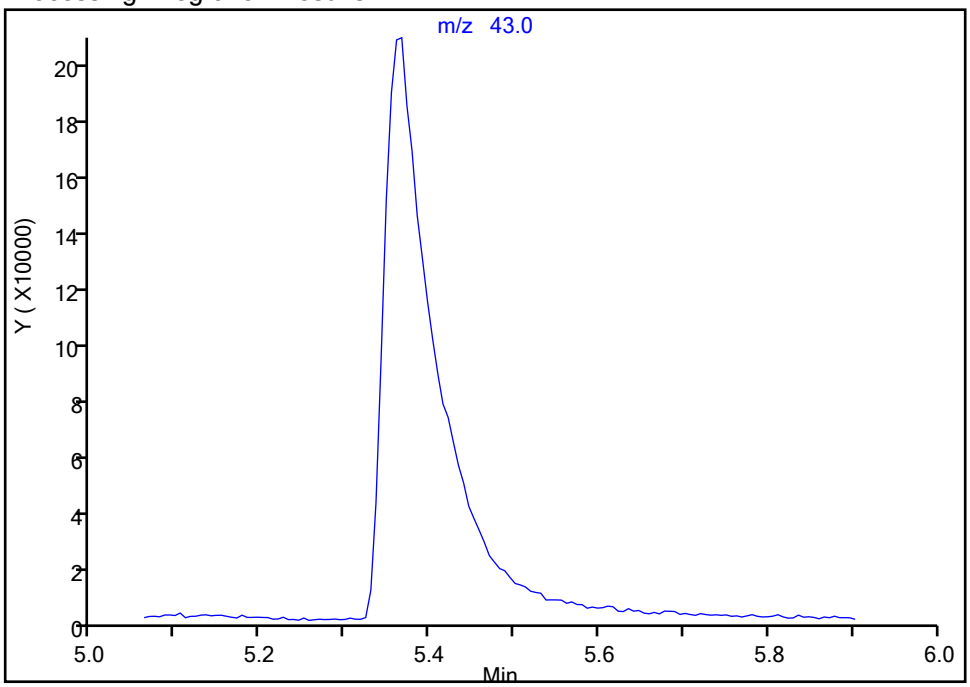
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X08.D				
Injection Date:	10-Jul-2023 18:02:30	Instrument ID:	10193		
Lims ID:	IC STD25 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

46 Ethyl acetate, CAS: 141-78-6

Signal: 1

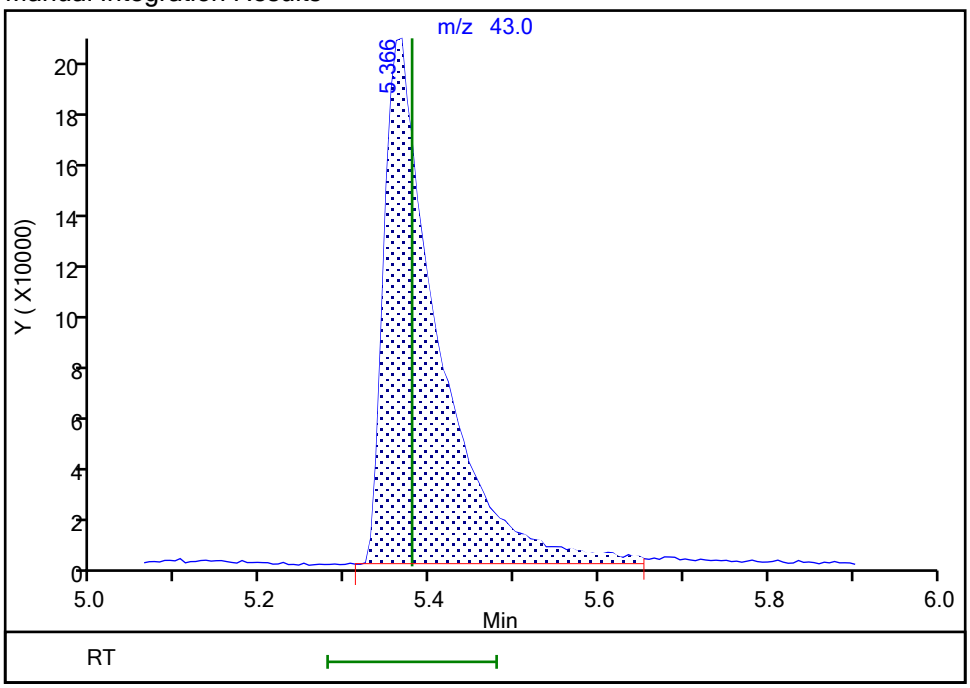
Not Detected
Expected RT: 5.38

Processing Integration Results



Manual Integration Results

RT: 5.37
Area: 904142
Amount: 25.390052
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:18:38 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

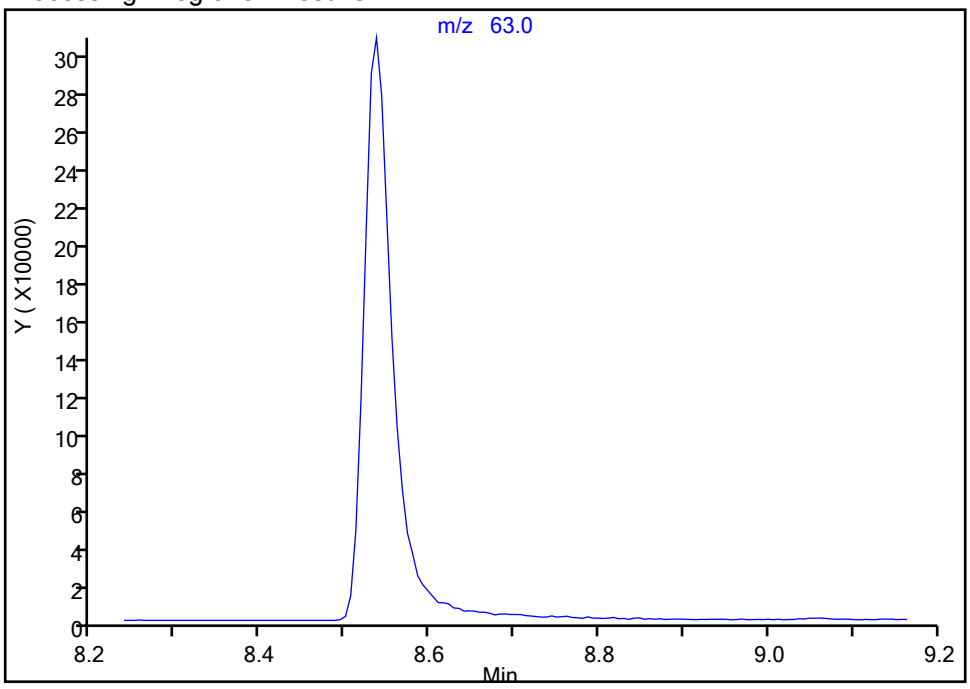
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X08.D				
Injection Date:	10-Jul-2023 18:02:30	Instrument ID:	10193		
Lims ID:	IC STD25 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

79 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

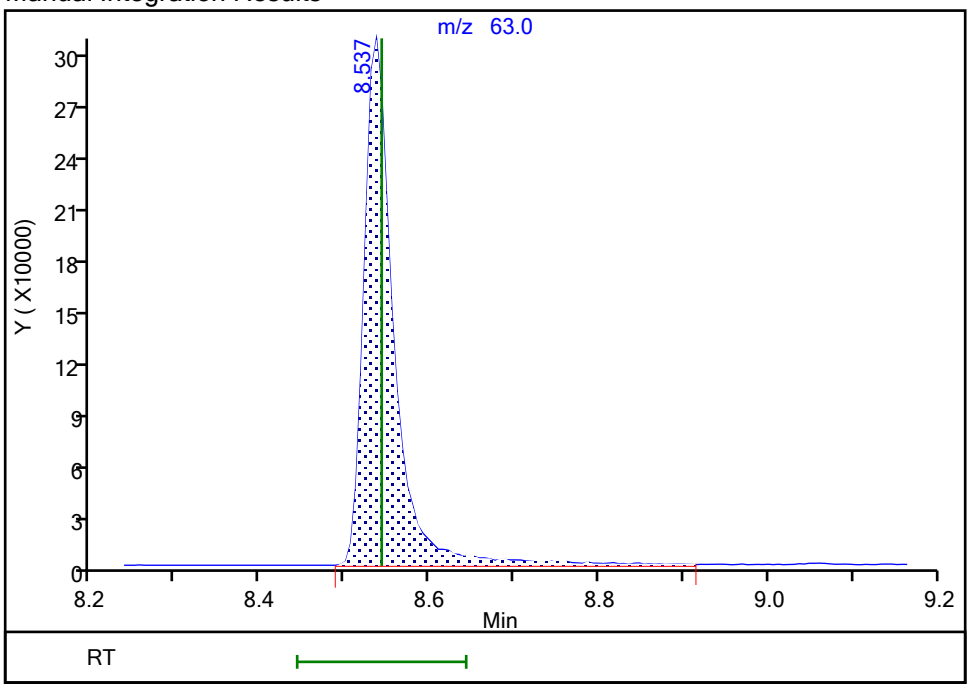
Not Detected
Expected RT: 8.54

Processing Integration Results



RT: 8.54
Area: 757238
Amount: 32.144248
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 11-Jul-2023 08:18:45 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

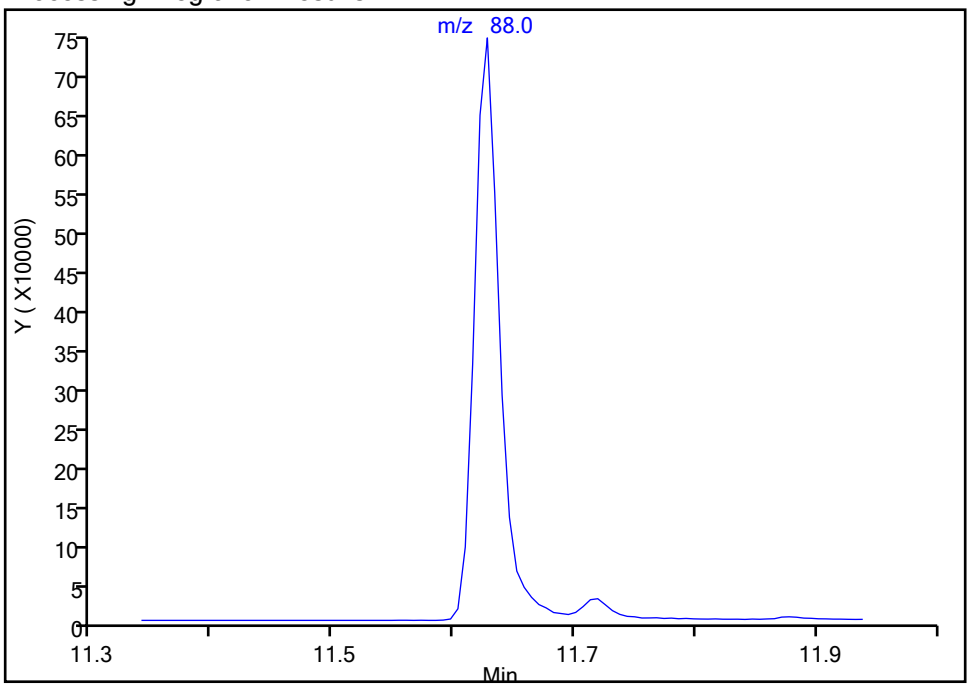
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X08.D				
Injection Date:	10-Jul-2023 18:02:30	Instrument ID:	10193		
Lims ID:	IC STD25 Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

122 cis-1,4-Dichloro-2-butene, CAS: 1476-11-5

Signal: 1

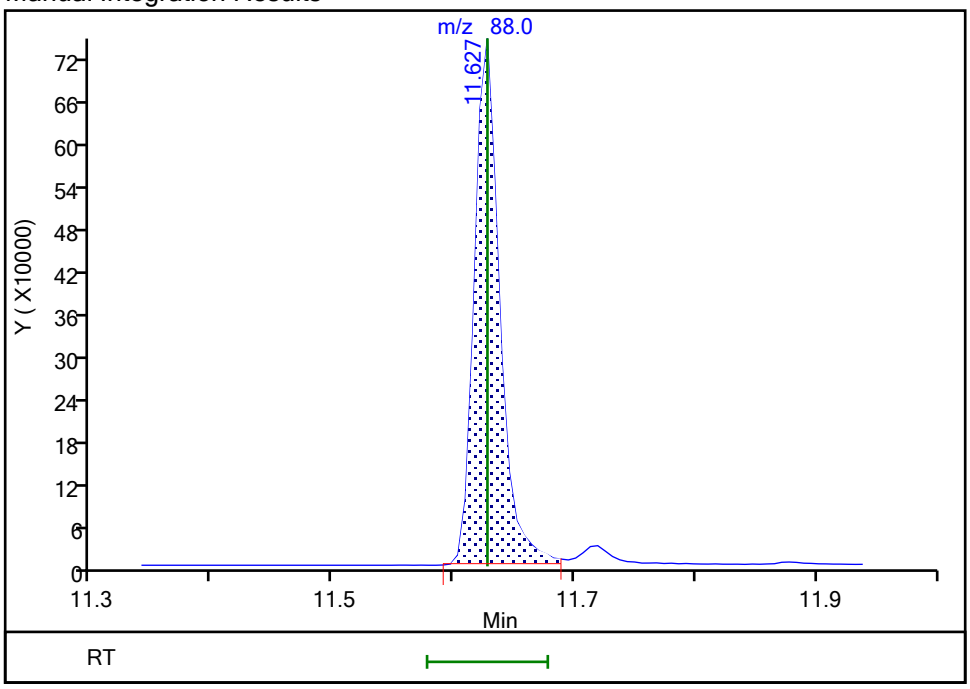
Not Detected
Expected RT: 11.63

Processing Integration Results



Manual Integration Results

RT: 11.63
Area: 1095177
Amount: 51.882023
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:18:48 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Calibration / Chlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

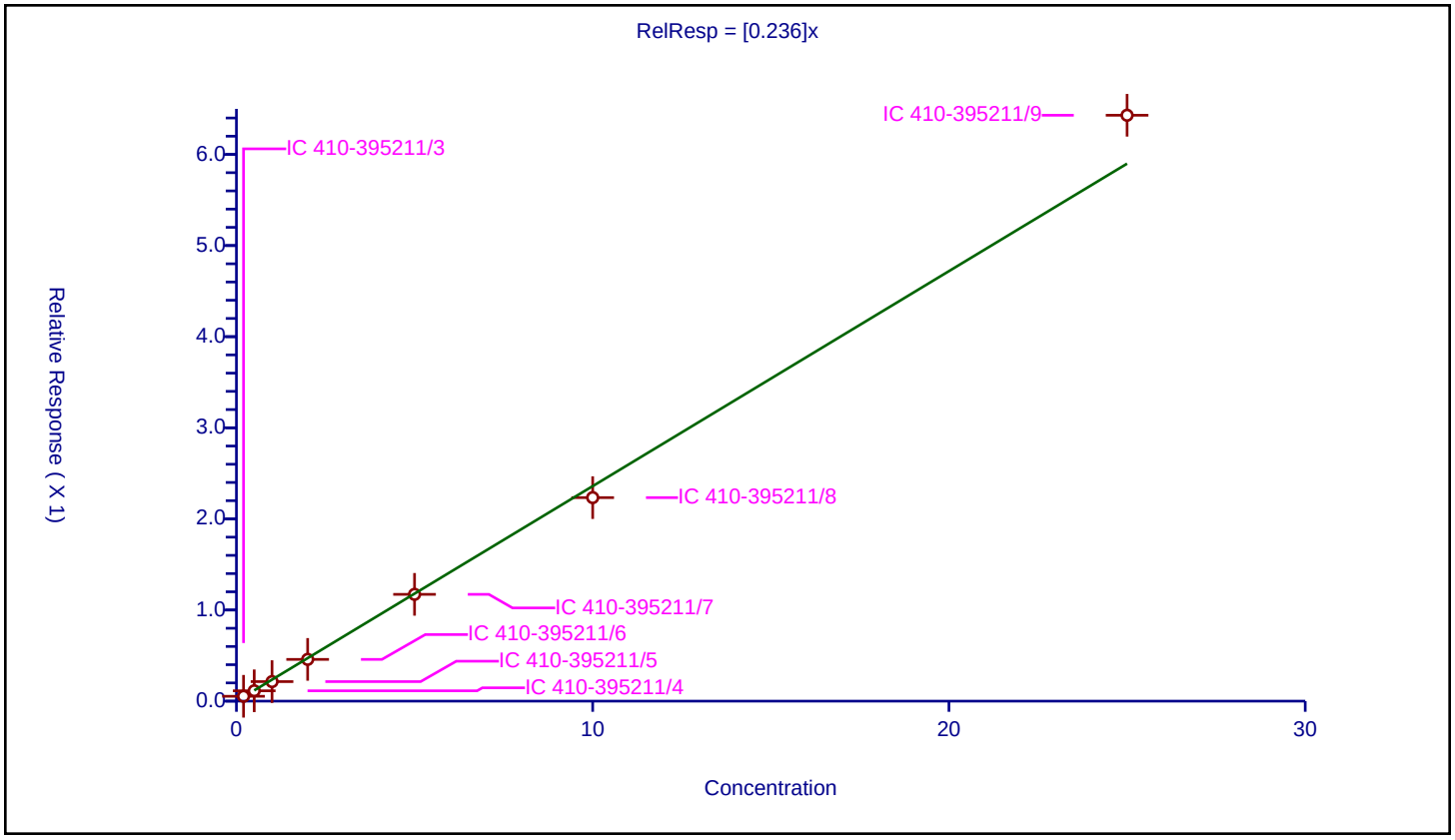
Curve Coefficients

Intercept:	0
Slope:	0.236

Error Coefficients

Standard Error:	707000
Relative Standard Error:	8.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/3	0.2	0.053296	10.0	2587638.0	0.266479	Y
2	IC 410-395211/4	0.5	0.113451	10.0	2506109.0	0.226902	Y
3	IC 410-395211/5	1.0	0.214281	10.0	2522019.0	0.214281	Y
4	IC 410-395211/6	2.0	0.458202	10.0	2504156.0	0.229101	Y
5	IC 410-395211/7	5.0	1.172081	10.0	2473404.0	0.234416	Y
6	IC 410-395211/8	10.0	2.233718	10.0	2477645.0	0.223372	Y
7	IC 410-395211/9	25.0	6.430101	10.0	2504505.0	0.257204	Y



Calibration / Dimethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

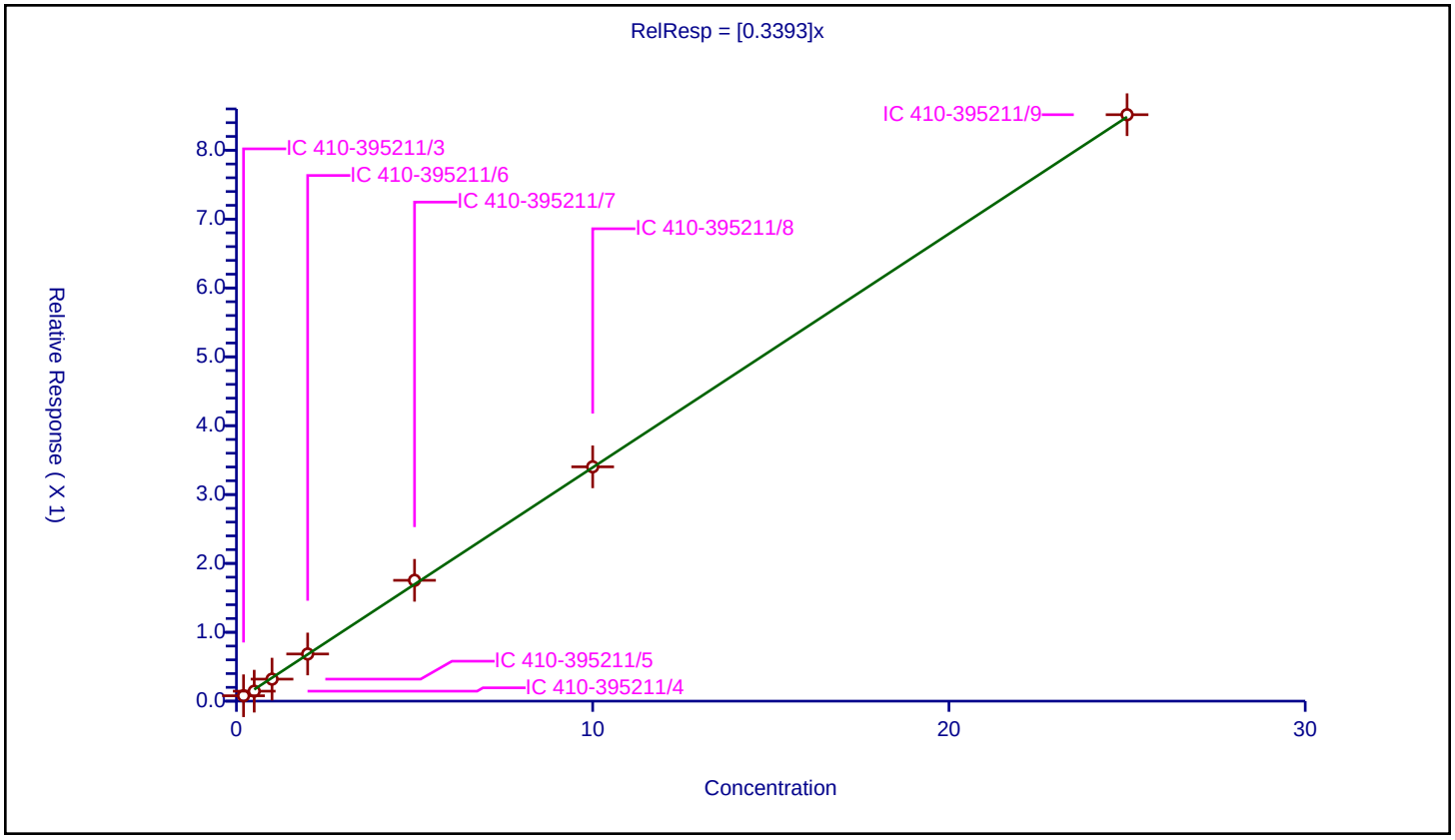
Curve Coefficients

Intercept:	0
Slope:	0.3393

Error Coefficients

Standard Error:	956000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/3	0.2	0.078276	10.0	2587638.0	0.39138	Y
2	IC 410-395211/4	0.5	0.144998	10.0	2506109.0	0.289995	Y
3	IC 410-395211/5	1.0	0.319688	10.0	2522019.0	0.319688	Y
4	IC 410-395211/6	2.0	0.684893	10.0	2504156.0	0.342447	Y
5	IC 410-395211/7	5.0	1.7544	10.0	2473404.0	0.35088	Y
6	IC 410-395211/8	10.0	3.402493	10.0	2477645.0	0.340249	Y
7	IC 410-395211/9	25.0	8.515795	10.0	2504505.0	0.340632	Y



11/14/2023
11:12 AM

Calibration / Acetonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

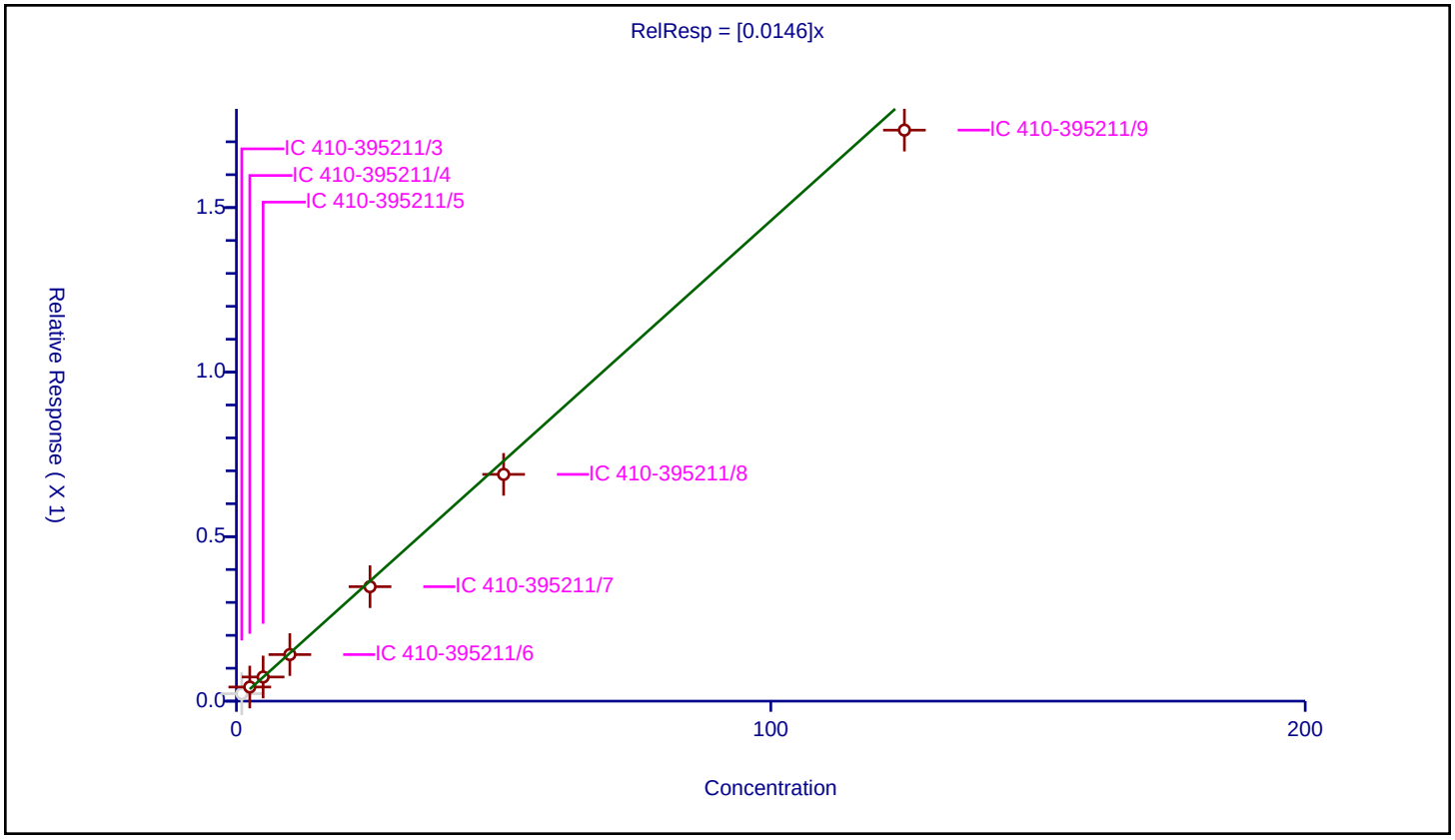
Curve Coefficients

Intercept:	0
Slope:	0.0146

Error Coefficients

Standard Error:	213000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/3	1.0	0.022611	10.0	2587638.0	0.022611	N
2	IC 410-395211/4	2.5	0.042975	10.0	2506109.0	0.01719	Y
3	IC 410-395211/5	5.0	0.073378	10.0	2522019.0	0.014676	Y
4	IC 410-395211/6	10.0	0.141573	10.0	2504156.0	0.014157	Y
5	IC 410-395211/7	25.0	0.347877	10.0	2473404.0	0.013915	Y
6	IC 410-395211/8	50.0	0.689251	10.0	2477645.0	0.013785	Y
7	IC 410-395211/9	125.0	1.735477	10.0	2504505.0	0.013884	Y



11/14/2023
11:12 AM

Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

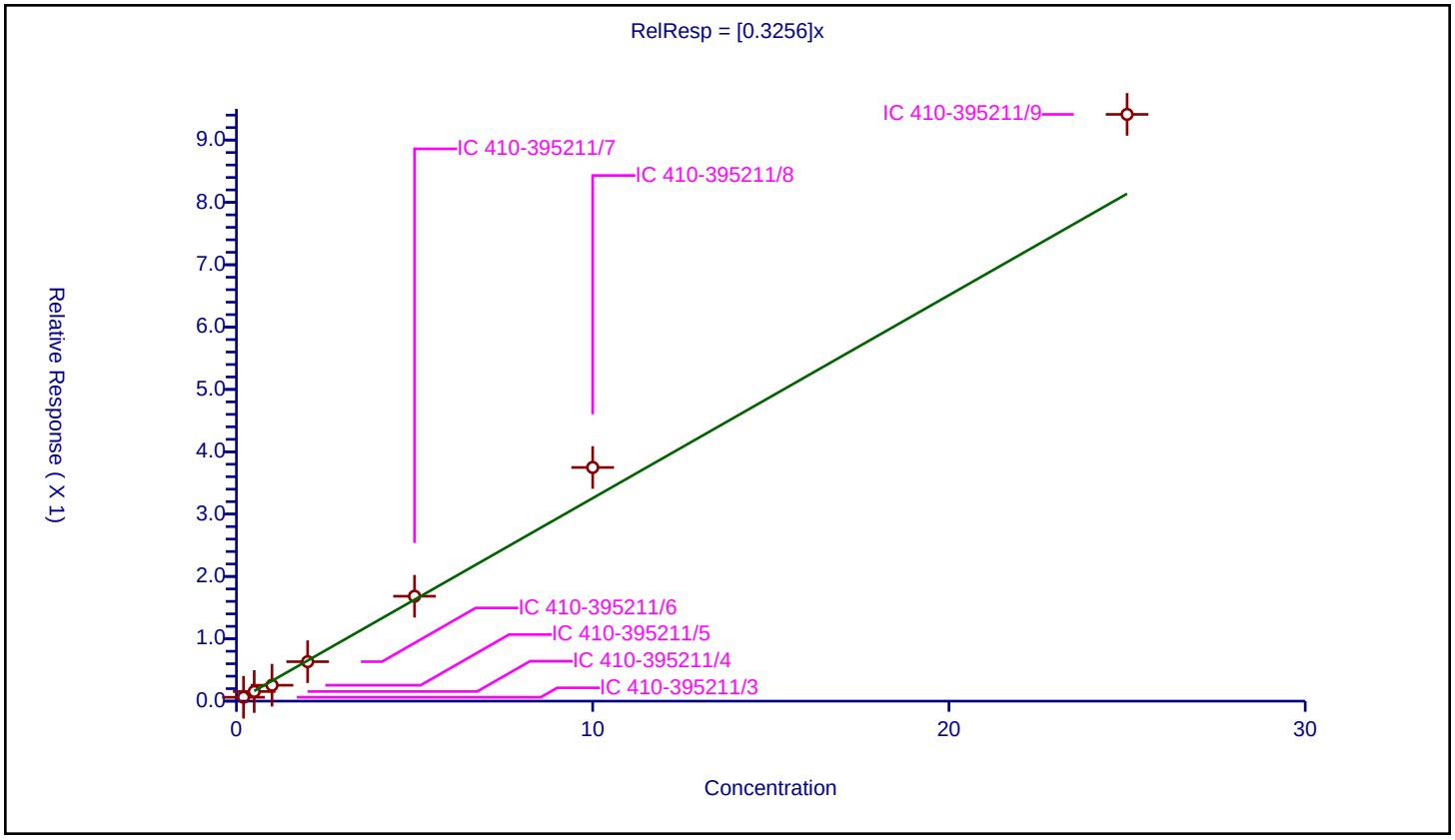
Curve Coefficients

Intercept:	0
Slope:	0.3256

Error Coefficients

Standard Error:	1050000
Relative Standard Error:	13.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/3	0.2	0.062138	10.0	2587638.0	0.310689	Y
2	IC 410-395211/4	0.5	0.154327	10.0	2506109.0	0.308654	Y
3	IC 410-395211/5	1.0	0.255121	10.0	2522019.0	0.255121	Y
4	IC 410-395211/6	2.0	0.633076	10.0	2504156.0	0.316538	Y
5	IC 410-395211/7	5.0	1.683207	10.0	2473404.0	0.336641	Y
6	IC 410-395211/8	10.0	3.748313	10.0	2477645.0	0.374831	Y
7	IC 410-395211/9	25.0	9.411808	10.0	2504505.0	0.376472	Y



11/14/2023
11:12 AM

Calibration / Ethyl acetate

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

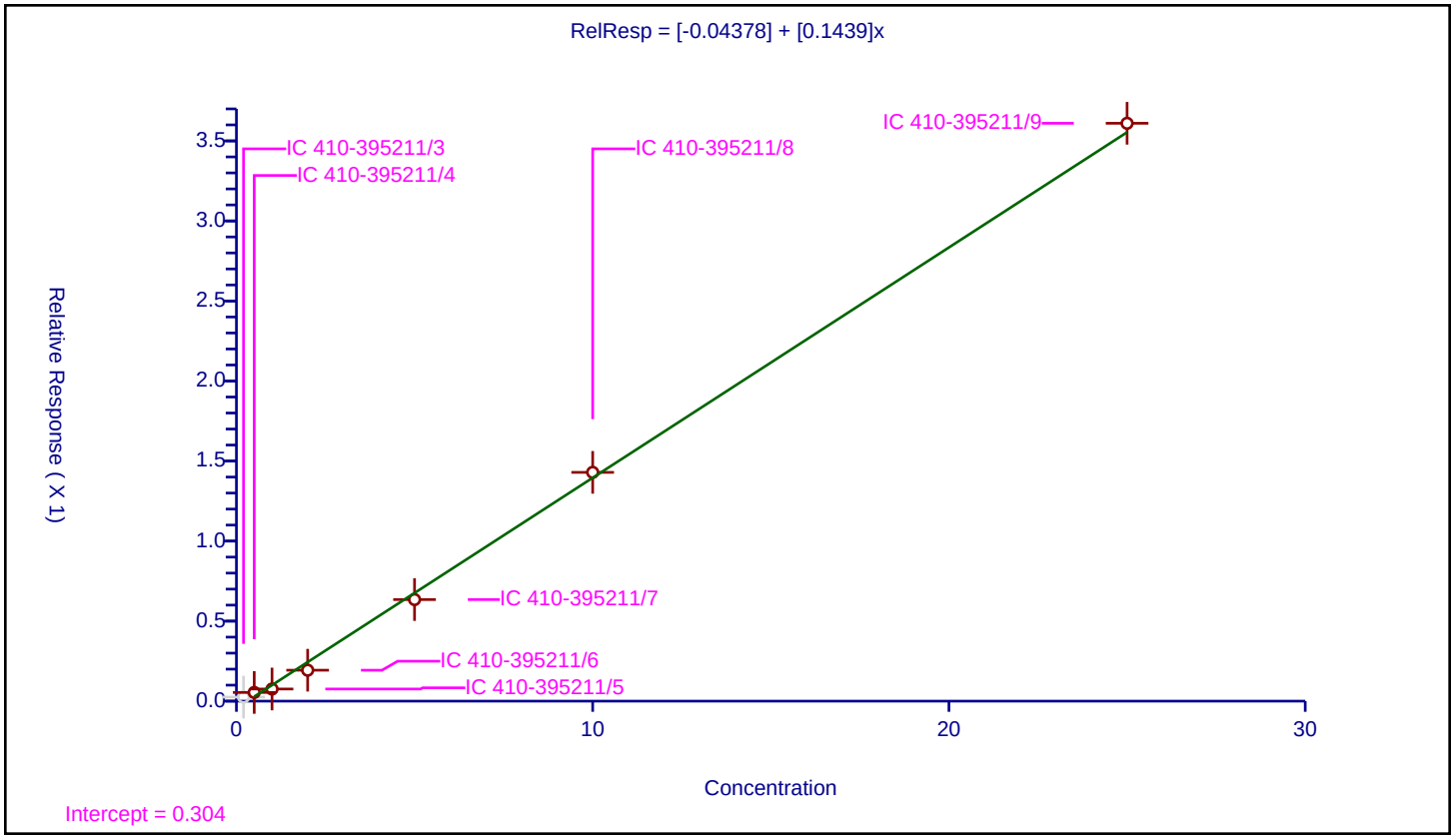
Curve Coefficients

Intercept:	-0.04378
Slope:	0.1439

Error Coefficients

Standard Error:	493000
Relative Standard Error:	22.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/3	0.2	0.025309	10.0	2587638.0	0.126544	N
2	IC 410-395211/4	0.5	0.054303	10.0	2506109.0	0.108607	Y
3	IC 410-395211/5	1.0	0.075828	10.0	2522019.0	0.075828	Y
4	IC 410-395211/6	2.0	0.193339	10.0	2504156.0	0.096669	Y
5	IC 410-395211/7	5.0	0.634534	10.0	2473404.0	0.126907	Y
6	IC 410-395211/8	10.0	1.429277	10.0	2477645.0	0.142928	Y
7	IC 410-395211/9	25.0	3.610063	10.0	2504505.0	0.144403	Y



11/14/2023
11:12 AM

Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

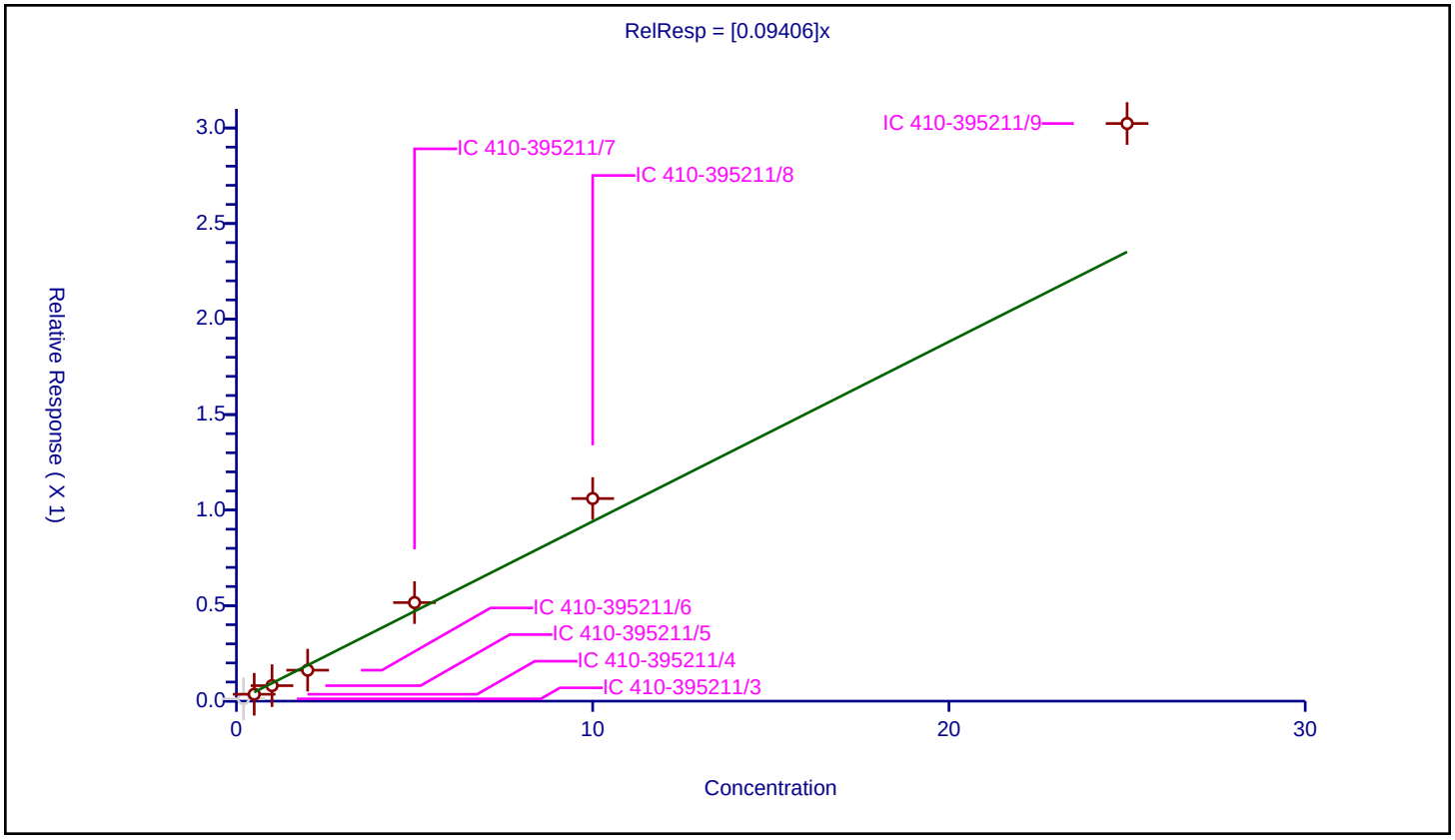
Curve Coefficients

Intercept:	0
Slope:	0.09406

Error Coefficients

Standard Error:	364000
Relative Standard Error:	20.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.953

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/3	0.2	0.012104	10.0	2587638.0	0.060519	N
2	IC 410-395211/4	0.5	0.036028	10.0	2506109.0	0.072056	Y
3	IC 410-395211/5	1.0	0.081125	10.0	2522019.0	0.081125	Y
4	IC 410-395211/6	2.0	0.162011	10.0	2504156.0	0.081005	Y
5	IC 410-395211/7	5.0	0.515941	10.0	2473404.0	0.103188	Y
6	IC 410-395211/8	10.0	1.060479	10.0	2477645.0	0.106048	Y
7	IC 410-395211/9	25.0	3.023504	10.0	2504505.0	0.12094	Y



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Calibration / cis-1,4-Dichloro-2-butene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

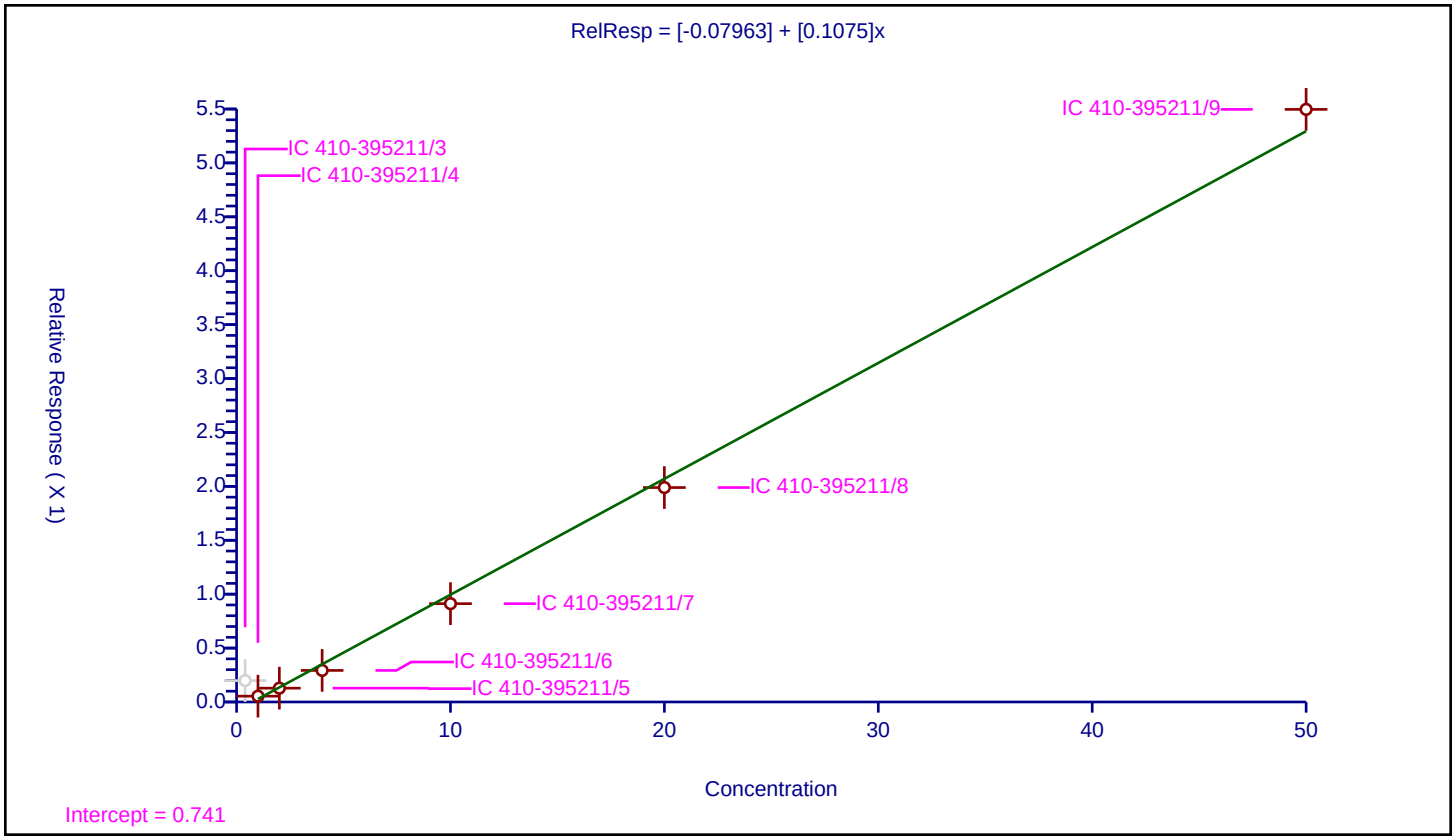
Curve Coefficients

Intercept:	-0.07963
Slope:	0.1075

Error Coefficients

Standard Error:	588000
Relative Standard Error:	14.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/3	0.39999	0.19854	10.0	2005695.0	0.496361	N
2	IC 410-395211/4	0.999976	0.054058	10.0	1987307.0	0.054059	Y
3	IC 410-395211/5	1.999951	0.128253	10.0	1976880.0	0.064128	Y
4	IC 410-395211/6	3.999903	0.292776	10.0	1971475.0	0.073196	Y
5	IC 410-395211/7	9.999757	0.911995	10.0	1941842.0	0.091202	Y
6	IC 410-395211/8	19.999514	1.9889	10.0	1944939.0	0.099447	Y
7	IC 410-395211/9	49.998785	5.49648	10.0	1992506.0	0.109932	Y



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Calibration / Cyclohexanone

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

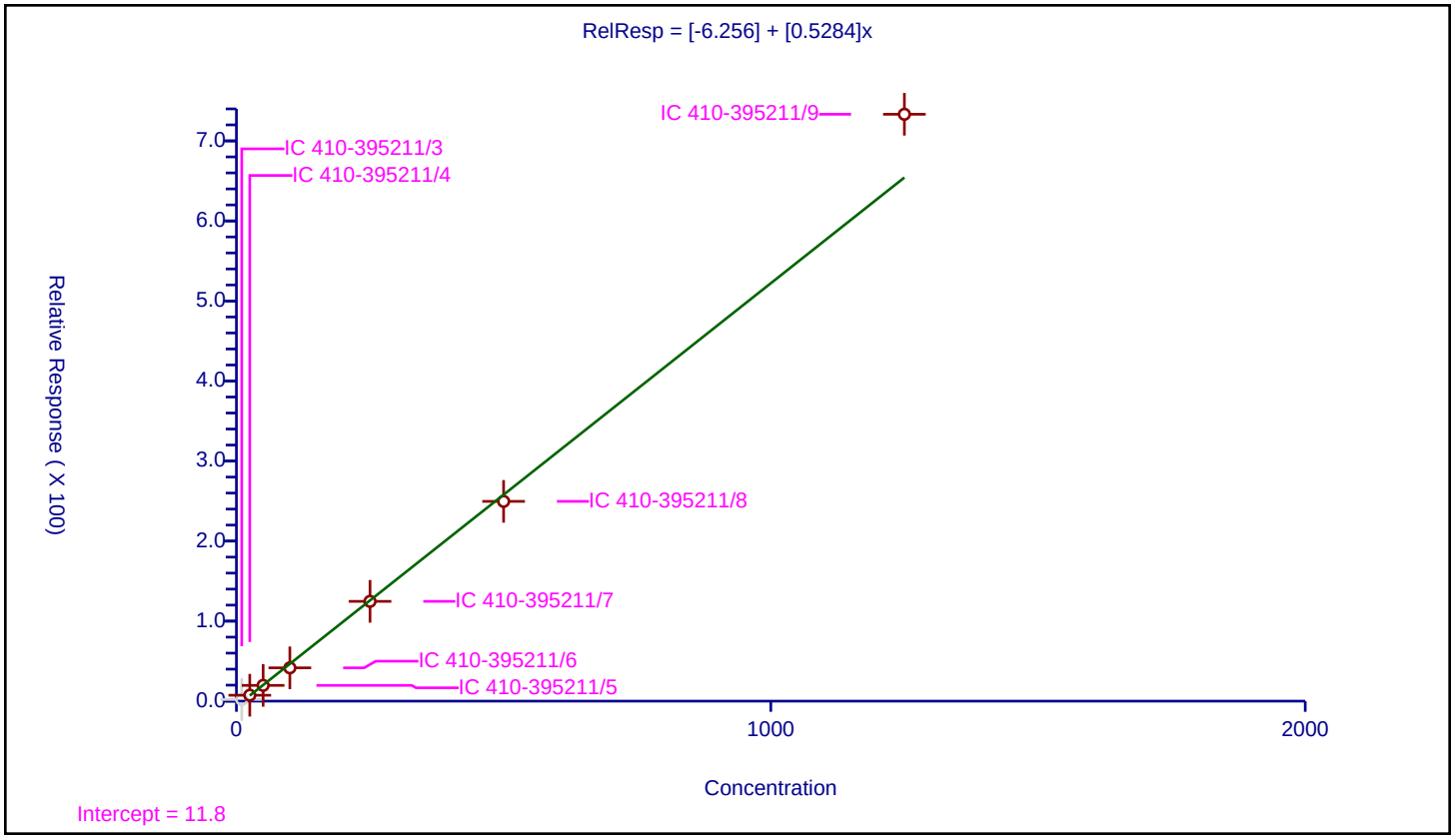
Curve Coefficients

Intercept:	-6.256
Slope:	0.5284

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	8.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/3	9.9996	2.037982	50.0	177872.0	0.203806	N
2	IC 410-395211/4	24.999	7.383904	50.0	168136.0	0.295368	Y
3	IC 410-395211/5	49.998	19.6875	50.0	160800.0	0.393766	Y
4	IC 410-395211/6	99.996	41.615754	50.0	158768.0	0.416174	Y
5	IC 410-395211/7	249.99	124.694571	50.0	156174.0	0.498798	Y
6	IC 410-395211/8	499.98	249.608764	50.0	177770.0	0.499237	Y
7	IC 410-395211/9	1249.95	733.285917	50.0	168367.0	0.586652	Y



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FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-395211/13	CL10X12.D
Level 2	IC 410-395211/14	CL10X13.D
Level 3	IC 410-395211/15	CL10X14.D
Level 4	IC 410-395211/16	CL10X15.D
Level 5	IC 410-395211/17	CL10X16.D
Level 6	ICIS 410-395211/18	CL10X17.D
Level 7	IC 410-395211/19	CL10X18.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2448 0.2624	0.1806 0.2527	0.2713	0.2652	0.2445	Ave		0.2459			0.1000	12.4		20.0			
Chloromethane	0.3325 0.3108	0.3202 0.2997	0.3037	0.3141	0.2993	Ave		0.3115			0.1000	3.9		20.0			
Vinyl chloride	0.2944 0.3029	0.2875 0.2895	0.3085	0.3006	0.2982	Ave		0.2974			0.1000	2.5		20.0			
1,3-Butadiene	0.2867 0.2996	0.2386 0.3002	0.3128	0.2893	0.2891	Ave		0.2881				8.2		20.0			
Bromomethane	0.2462 0.2321	0.2340 0.2194	0.2348	0.2368	0.2242	Ave		0.2325			0.1000	3.7		20.0			
Chloroethane	0.1763 0.1715	0.1788 0.1698	0.1835	0.1747	0.1703	Ave		0.1750			0.1000	2.9		20.0			
Dichlorofluoromethane	0.4805 0.4734	0.4798 0.4597	0.4863	0.4808	0.4636	Ave		0.4749			0.1000	2.1		20.0			
Trichlorofluoromethane	0.3089 0.3587	0.2708 0.3474	0.3659	0.3629	0.3364	Ave		0.3359			0.1000	10.4		20.0			
Diethyl ether	0.1887 0.1947	0.1886 0.1921	0.1850	0.1950	0.1955	Ave		0.1914				2.1		20.0			
Freon 123a	0.2839 0.2660	0.2558 0.2613	0.2690	0.2564	0.2523	Ave		0.2635				4.1		20.0			
Acrolein	1.9735 1.8110	1.8391 1.9535	1.7457	1.8910	1.8331	Ave		1.8639				4.3		20.0			
1,1-Dichloroethene	0.2375 0.2134	0.2165 0.2242	0.2205	0.1988	0.2118	Ave		0.2175			0.1000	5.5		20.0			
Acetone	3.2649 1.9936	2.5418 2.0612	2.3432	2.3068	2.1041	Ave		2.3737			0.1000	18.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2052 0.2187	0.1942 0.2287	0.2301	0.2098	0.2155	Ave		0.2146			0.1000	6.0		20.0			
Methyl iodide	0.4624 0.4736	0.4754 0.4853	0.4608	0.4413	0.4709	Ave		0.4671				3.0		20.0			
Carbon disulfide	0.7610 0.7894	0.7413 0.8202	0.7739	0.7261	0.7743	Ave		0.7694			0.1000	4.0		20.0			
Methyl acetate	8.5889 6.8617	6.9828 7.3888	7.6671	7.5121	7.3865	Ave		7.4840			0.1000	7.5		20.0			
Allyl chloride	0.3443 0.4019	0.3869 0.4145	0.3882	0.3595	0.3896	Ave		0.3836				6.3		20.0			
Methylene Chloride	0.2946 0.2655	0.2880 0.2648	0.2644	0.2600	0.2662	Ave		0.2719			0.1000	5.0		20.0			
t-Butyl alcohol	1.3477 0.8965	1.2251 0.9232	1.0500	0.9563	0.9499	Ave		1.0498				16.4		20.0			
Acrylonitrile	3.1809 3.3156	3.5538 3.3650	3.0563	3.6786	3.2244	Ave		3.3392				6.5		20.0			
Methyl tertiary butyl ether	0.6913 0.7050	0.7173 0.7043	0.6826	0.6891	0.7085	Ave		0.6997			0.1000	1.8		20.0			
trans-1,2-Dichloroethene	0.2653 0.2731	0.2630 0.2744	0.2587	0.2479	0.2658	Ave		0.2640			0.1000	3.4		20.0			
n-Hexane	0.3041 0.3437	0.3256 0.3714	0.3491	0.3163	0.3463	Ave		0.3367				6.8		20.0			
1,1-Dichloroethane	0.4361 0.4785	0.4787 0.4857	0.4509	0.4418	0.4702	Ave		0.4631			0.2000	4.3		20.0			
di-Isopropyl ether	0.8137 0.9053	0.8818 0.9216	0.8611	0.8331	0.8900	Ave		0.8724				4.4		20.0			
Chloroprene	0.3364 0.3757	0.3367 0.3987	0.3468	0.3253	0.3614	Ave		0.3544				7.3		20.0			
Ethyl t-butyl ether	0.7463 0.8432	0.8154 0.8499	0.7848	0.7850	0.8246	Ave		0.8070				4.6		20.0			
2-Butanone	4.3469 4.8545	4.2905 4.9730	4.4837	4.6718	4.8448	Ave		4.6379			0.1000	5.8		20.0			
cis-1,2-Dichloroethene	0.2528 0.2969	0.2855 0.3058	0.2832	0.2654	0.2928	Ave		0.2832			0.1000	6.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,2-Dichloropropane	0.4017 0.3702	0.3708 0.3806	0.3632	0.3400	0.3623	Ave		0.3698				5.1		20.0			
Propionitrile	0.6758 1.1032	1.0778 1.2580	0.9659	1.0129	1.1677	Ave		1.0373				17.9		20.0			
Methacrylonitrile	4.3167 5.2186	4.4559 5.3838	5.0816	4.7158	5.1933	Ave		4.9094				8.4		20.0			
Bromochloromethane	0.1243 0.1398	0.1420 0.1393	0.1375	0.1322	0.1371	Ave		0.1360				4.4		20.0			
Tetrahydrofuran	1.1543 1.4370	1.2485 1.4613	1.3746	1.4385	1.4381	Ave		1.3646				8.6		20.0			
Chloroform	0.4715 0.4637	0.4595 0.4700	0.4517	0.4372	0.4545	Ave		0.4583			0.2000	2.6		20.0			
1,1,1-Trichloroethane	0.3767 0.3945	0.3890 0.4074	0.3863	0.3595	0.3870	Ave		0.3858			0.1000	3.9		20.0			
Cyclohexane	0.4001 0.4494	0.4094 0.4833	0.4422	0.4076	0.4407	Ave		0.4332			0.1000	6.8		20.0			
Carbon tetrachloride	0.3219 0.3510	0.3205 0.3656	0.3313	0.3095	0.3402	Ave		0.3343			0.1000	5.8		20.0			
1,1-Dichloropropene	0.3498 0.3609	0.3357 0.3757	0.3334	0.3184	0.3466	Ave		0.3458				5.5		20.0			
Isobutyl alcohol	+++++ 0.2960	0.1278 0.3146	0.2226	0.2541	0.2913	Lin	-6.378	0.3182							1.0000		0.9900
Benzene	1.0633 1.1358	1.1104 1.1638	1.0984	1.0410	1.1152	Ave		1.1040			0.5000	3.8		20.0			
1,2-Dichloroethane	0.2931 0.2735	0.2941 0.2840	0.2711	0.2808	0.2748	Ave		0.2816			0.1000	3.3		20.0			
t-Amyl methyl ether	0.7213 0.7828	0.7393 0.7916	0.7337	0.7378	0.7705	Ave		0.7539				3.6		20.0			
n-Heptane	0.3463 0.3871	0.3354 0.4099	0.3617	0.3316	0.3768	Ave		0.3641				7.9		20.0			
Trichloroethene	0.2702 0.2925	0.2826 0.3015	0.2830	0.2669	0.2872	Ave		0.2834			0.2000	4.3		20.0			
n-Butanol	+++++ 0.2740	0.0390 0.3007	0.1034	0.1772	0.2523	Lin1	-14.76	0.2990							0.9970		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.4146 0.4827	0.4152 0.5192	0.4691	0.4416	0.4747	Ave		0.4596			0.1000	8.3		20.0			
1,2-Dichloropropane	0.2753 0.2969	0.2929 0.3075	0.2869	0.2858	0.2919	Ave		0.2910			0.1000	3.4		20.0			
Dibromomethane	0.1329 0.1392	0.1316 0.1381	0.1376	0.1292	0.1387	Ave		0.1353				3.0		20.0			
Methyl methacrylate	7.8802 10.558	8.3688 11.632	8.8913	9.4477	10.322	Ave		9.5858				13.8		20.0			
1,4-Dioxane	+++++ 0.0822	0.0767 0.0710	0.0826	0.0872	0.0839	Ave		0.0806			0.0050	7.2		20.0			
Bromodichloromethane	0.3099 0.3531	0.3357 0.3603	0.3299	0.3222	0.3429	Ave		0.3363			0.2000	5.2		20.0			
2-Nitropropane	2.4465 2.7218	2.2658 2.8725	2.6073	2.6082	2.7250	Ave		2.6067				7.7		20.0			
1-Bromo-2-chloroethane	0.2856 0.3076	0.2820 0.3034	0.2780	0.3026	0.3055	Ave		0.2950				4.3		20.0			
cis-1,3-Dichloropropene	0.3110 0.4682	0.3878 0.4713	0.4147	0.4076	0.4487	Ave		0.4156			0.2000	13.4		20.0			
4-Methyl-2-pentanone	10.627 14.222	11.665 14.883	13.111	13.473	14.390	Ave		13.196			0.1000	11.7		20.0			
Toluene	0.9002 0.9563	0.9684 0.9932	0.9255	0.8807	0.9344	Ave		0.9370			0.4000	4.2		20.0			
trans-1,3-Dichloropropene	0.3531 0.4976	0.3949 0.5135	0.4187	0.4109	0.4759	Ave		0.4378			0.1000	13.5		20.0			
Ethyl methacrylate	0.2405 0.4086	0.3070 0.4321	0.3200	0.3409	0.3918	Ave		0.3487				19.1		20.0			
1,1,2-Trichloroethane	0.2719 0.2772	0.2883 0.2795	0.2787	0.2721	0.2766	Ave		0.2777			0.1000	2.0		20.0			
Tetrachloroethene	0.4246 0.4586	0.4709 0.4769	0.4478	0.4228	0.4532	Ave		0.4507			0.2000	4.6		20.0			
1,3-Dichloropropane	0.3807 0.4676	0.4423 0.4746	0.4381	0.4439	0.4659	Ave		0.4447				7.1		20.0			
2-Hexanone	+++++ 10.193	6.4408 10.921	7.6381	8.9693	9.8027	Ave		8.9941			0.1000	18.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	0.2981 0.3569	0.3375 0.3687	0.3404	0.3321	0.3490	Ave		0.3404				6.6		20.0			
1,2-Dibromoethane	0.2046 0.2705	0.2450 0.2747	0.2355	0.2503	0.2618	Ave		0.2489			0.1000	9.7		20.0			
1-Chlorohexane	0.5455 0.5125	0.4918 0.5470	0.4984	0.4541	0.5049	Ave		0.5077				6.3		20.0			
Chlorobenzene	1.1256 1.1598	1.1276 1.1960	1.1142	1.0728	1.1440	Ave		1.1343			0.5000	3.4		20.0			
1,1,1,2-Tetrachloroethane	0.3475 0.3976	0.3636 0.4122	0.3716	0.3628	0.3913	Ave		0.3781				6.1		20.0			
Ethylbenzene	1.5872 1.8870	1.8122 1.9700	1.7902	1.6945	1.8468	Ave		1.7983			0.1000	7.0		20.0			
m&p-Xylene	0.6543 0.7617	0.6937 0.7961	0.7075	0.6858	0.7497	Ave		0.7213			0.1000	6.9		20.0			
o-Xylene	0.6699 0.7613	0.7267 0.7873	0.7018	0.6790	0.7392	Ave		0.7236			0.3000	5.9		20.0			
Styrene	0.8553 1.2686	1.0213 1.3306	1.0741	1.0978	1.2230	Ave		1.1244			0.3000	14.5		20.0			
Bromoform	0.1882 0.2350	0.2067 0.2390	0.2137	0.2087	0.2243	Ave		0.2165			0.1000	8.2		20.0			
Isopropylbenzene	1.6264 1.9274	1.8465 1.9697	1.7979	1.7173	1.8782	Ave		1.8234			0.1000	6.6		20.0			
Bromobenzene	0.7361 0.8590	0.8322 0.8663	0.8088	0.7937	0.8623	Ave		0.8226				5.7		20.0			
1,1,2,2-Tetrachloroethane	0.5335 0.6106	0.5980 0.6117	0.5922	0.5818	0.6196	Ave		0.5925			0.3000	4.9		20.0			
trans-1,4-Dichloro-2-butene	0.0883 0.1496	0.1183 0.1537	0.1210	0.1324	0.1470	Ave		0.1300				17.7		20.0			
1,2,3-Trichloropropane	0.1470 0.1550	0.1520 0.1557	0.1486	0.1458	0.1602	Ave		0.1521				3.4		20.0			
N-Propylbenzene	3.4795 3.8213	3.5725 3.7487	3.4819	3.3173	3.7804	Ave		3.6002				5.2		20.0			
2-Chlorotoluene	0.7189 0.8192	0.7622 0.8306	0.7941	0.7488	0.8160	Ave		0.7843				5.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,3,5-Trimethylbenzene	2.5130 2.8225	2.6496 2.8693	2.5557	2.5002	2.7833	Ave		2.6705				5.8		20.0			
4-Chlorotoluene	0.7019 0.8554	0.7305 0.8721	0.8067	0.7716	0.8350	Ave		0.7962				8.1		20.0			
tert-Butylbenzene	0.5655 0.6541	0.6328 0.6772	0.6124	0.5908	0.6549	Ave		0.6268				6.3		20.0			
Pentachloroethane	0.3904 0.5411	0.4781 0.5492	0.4761	0.4974	0.5454	Ave		0.4968				11.4		20.0			
1,2,4-Trimethylbenzene	2.4278 2.9661	2.6162 3.0200	2.6470	2.6212	2.8979	Ave		2.7423				8.0		20.0			
sec-Butylbenzene	3.2217 3.6003	3.2736 3.6291	3.3403	3.1746	3.5605	Ave		3.4000				5.6		20.0			
1,3-Dichlorobenzene	1.4994 1.7304	1.5903 1.7764	1.5669	1.5622	1.7118	Ave		1.6339			0.6000	6.4		20.0			
p-Isopropyltoluene	2.5756 3.2612	2.9186 3.2989	2.9701	2.8433	3.2238	Ave		3.0131				8.8		20.0			
1,4-Dichlorobenzene	1.6626 1.7072	1.6711 1.7480	1.6718	1.6118	1.7042	Ave		1.6824			0.5000	2.5		20.0			
1,2,3-Trimethylbenzene	1.2517 1.3689	1.2566 1.4142	1.2528	1.2530	1.3857	Ave		1.3119				5.6		20.0			
Benzyl chloride	+++++ 0.2675	0.1788 0.2782	0.2086	0.2227	0.2591	Ave		0.2358				16.4		20.0			
n-Butylbenzene	1.1783 1.5626	1.3178 1.6233	1.3326	1.3475	1.5369	Ave		1.4141				11.4		20.0			
1,2-Dichlorobenzene	1.3562 1.6401	1.5181 1.6588	1.5373	1.4729	1.6107	Ave		1.5420			0.4000	6.9		20.0			
1,2-Dibromo-3-Chloropropane	0.0533 0.0883	0.0605 0.0893	0.0656	0.0782	0.0875	Ave		0.0747			0.0500	19.8		20.0			
1,3,5-Trichlorobenzene	1.1056 1.3651	1.2487 1.3694	1.2191	1.1957	1.3596	Ave		1.2662				8.1		20.0			
1,2,4-Trichlorobenzene	0.6988 1.1158	0.8886 1.1146	0.9329	0.9159	1.0482	Ave		0.9593			0.2000	15.5		20.0			
Hexachlorobutadiene	0.4996 0.5641	0.5365 0.5741	0.5387	0.5007	0.5590	Ave		0.5390				5.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Naphthalene	+++++ 1.8126	1.2692 1.7999	1.3239	1.4687	1.7277	Ave		1.5670				15.6		20.0			
1,2,3-Trichlorobenzene	0.5167 0.8841	0.6128 0.8642	0.6820	0.7157	0.8128	Ave		0.7269				18.7		20.0			
Dibromofluoromethane (Surr)	0.2344 0.2338	0.2353 0.2318	0.2319	0.2350	0.2345	Ave		0.2338				0.6		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0511 0.0475	0.0498 0.0477	0.0494	0.0499	0.0506	Ave		0.0494				2.8		20.0			
Toluene-d8 (Surr)	1.3191 1.3018	1.3195 1.3244	1.3184	1.3120	1.3020	Ave		1.3139				0.7		20.0			
4-Bromofluorobenzene (Surr)	0.4589 0.4766	0.4681 0.4778	0.4686	0.4693	0.4714	Ave		0.4701				1.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-395211/13	CL10X12.D
Level 2	IC 410-395211/14	CL10X13.D
Level 3	IC 410-395211/15	CL10X14.D
Level 4	IC 410-395211/16	CL10X15.D
Level 5	IC 410-395211/17	CL10X16.D
Level 6	ICIS 410-395211/18	CL10X17.D
Level 7	IC 410-395211/19	CL10X18.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	11821 658785	22298 1677755	66700	130813	302610	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	16054 780425	39540 1989504	74670	154893	370453	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	14215 760607	35508 1921780	75846	148245	369078	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	13844 752244	29471 1992815	76904	142678	357835	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	11889 582711	28892 1456503	57728	116765	277506	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	8514 430518	22076 1127399	45126	86174	210795	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	23201 1188628	59252 3051651	119579	237128	573749	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	14916 900669	33437 2306108	89976	178987	416336	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Diethyl ether	FB	Ave	9113 488994	23296 1275360	45496	96175	241946	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	13705 667816	31592 1734729	66138	126477	312193	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd10	Ave	63076 3043605	162482 8304871	282347	622742	1532831	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	11468 535704	26740 1488376	54226	98047	262109	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd10	Ave	20869 670067	44911 1752462	75795	151932	351875	2.00 100	5.00 250	10.0	20.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	9907	23979	56573	103495	266636	0.200	0.500	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			549168	1518257				10.0	25.0			
Methyl iodide	FB	Ave	22324 1189155	58709 3221996	113310	217665	582776	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	36742 1981894	91539 5445163	190278	358109	958221	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd10	Ave	5490 230624	12338 628207	24801	49477	123525	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	16623 1009099	47777 2752062	95453	177309	482187	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	14224 666555	35568 1757899	65001	128206	329457	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd10	Ave	17229 602660	43294 1569784	67927	125966	317696	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd10	Ave	5083 278600	15698 715235	24716	60571	134803	0.500 25.0	1.25 62.5	2.50	5.00	12.5
Methyl tertiary butyl ether	FB	Ave	33374 1770056	88578 4676022	167827	339859	876866	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	12811 685758	32481 1821481	63602	122282	328931	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	14683 862976	40210 2465849	85835	156003	428626	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	21055 1201309	59118 3224585	110868	217910	581919	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	39288 2272827	108900 6118603	211714	410883	1101483	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroprene	FB	Ave	16240 943188	41584 2646828	85268	160443	447291	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	36032 2117027	100691 5642481	192959	387157	1020502	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone	TBAd10	Ave	27785 1631605	75809 4228096	145034	307697	810200	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,2-Dichloroethene	FB	Ave	12203 745504	35258 2030075	69642	130877	362337	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	19395 929524	45793 2527014	89305	167697	448320	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd10	Ave	8640	38088	62487	133423	390538	4.00	10.0	20.0	40.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			741560	2139112				200	500			
Methacrylonitrile	TBAd10	Ave	27592 1754007	78731 4577349	164374	310593	868473	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	6001 351013	17539 924552	33818	65221	169726	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd10	Ave	3689 241496	11030 621197	22233	47371	120244	1.00 50.0	2.50 125	5.00	10.0	25.0
Chloroform	FB	Ave	22763 1164324	56744 3120160	111067	215645	562498	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	18185 990464	48038 2704708	94975	177286	478983	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	19318 1128392	50561 3208600	108733	201009	545351	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	15543 881185	39575 2427242	81461	152638	421019	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	16888 906015	41451 2494003	81971	157047	428997	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd10	Lin	+++++ 497465	11292 1337202	36009	83688	243540	+++++ 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	51338 2851658	137128 7726211	270063	513413	1380101	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	14153 686799	36323 1885153	66663	138485	340102	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	34827 1965435	91298 5255245	180408	363871	953593	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	16720 971821	41417 2721424	88923	163522	466301	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichloroethene	FB	Ave	13043 734500	34902 2001612	69577	131625	355409	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butanol	TBAd10	Lin1	+++++ 805828	6030 2236914	29274	102118	369243	+++++ 875	43.8 2188	87.5	175	438
Methylcyclohexane	FB	Ave	20017 1211867	51270 3447065	115334	217814	587502	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	13293 745462	36176 2041344	70545	140956	361296	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromomethane	FB	Ave	6418 349503	16257 916525	33838	63721	171668	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Methyl methacrylate	TBAd10	Ave	5037 354852	14787 988980	28761	62225	172622	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd10	Ave	+++++ 138169	6777 302035	13360	28725	70163	+++++ 500	25.0 1250	50.0	100	250
Bromodichloromethane	FB	Ave	14960 886523	41451 2392101	81123	158910	424379	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd10	Ave	7819 457411	20017 1221117	42170	85892	227853	1.00 50.0	2.50 125	5.00	10.0	25.0
1-Bromo-2-chloroethane	FB	Ave	13791 772215	34825 2014153	68353	149262	378125	0.200 10.0	0.500 25.0	1.00	2.00	5.00
cis-1,3-Dichloropropene	FB	Ave	15014 1175478	47895 3128637	101962	201016	555330	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone	TBAd10	Ave	67927 4779944	206105 12653718	424094	887372	2406513	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd5	Ave	33741 1903875	93376 5167343	178853	343209	913320	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZd5	Ave	13236 990727	38075 2671634	80917	160124	465136	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd5	Ave	9013 813455	29604 2247899	61847	132868	382912	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2-Trichloroethane	CBZd5	Ave	10190 551790	27798 1454086	53864	106032	270361	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZd5	Ave	15916 913085	45407 2481115	86534	164773	442984	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZd5	Ave	14268 930970	42646 2468894	84655	173001	455385	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBAd10	Ave	+++++ 3425778	113803 9285508	247071	590741	1639299	+++++ 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZd5	Ave	11174 710622	32544 1918104	65784	129436	341079	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane	CBZd5	Ave	7667 538447	23619 1429329	45500	97526	255939	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZd5	Ave	20445 1020383	47421 2845729	96320	176964	493503	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZd5	Ave	42190 2309084	108725 6222003	215314	418067	1118156	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBZd5	Ave	13023 791480	35062 2144493	71811	141383	382509	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZd5	Ave	59492 3756735	174733 10248995	345945	660352	1805085	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZd5	Ave	49049 3032843	133774 8283558	273431	534517	1465581	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZd5	Ave	25108 1515690	70066 4095695	135623	264614	722471	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Styrene	CBZd5	Ave	32058 2525581	98475 6922505	207571	427822	1195356	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZd5	Ave	7055 467869	19931 1243518	41289	81349	219242	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZd5	Ave	60960 3837170	178043 10247430	347437	669252	1835799	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCBd4	Ave	16465 1042948	48327 2757895	95117	188542	504869	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCBd4	Ave	11933 741339	34730 1947529	69638	138193	362746	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,4-Dichloro-2-butene	DCBd4	Ave	19758 1816127	68695 4892765	142291	314499	860918	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd4	Ave	3288 188210	8828 495643	17478	34639	93804	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd4	Ave	77828 4639491	207468 11934156	409467	788008	2213293	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd4	Ave	16081 994645	44266 2644132	93392	177872	477751	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd4	Ave	56210 3426834	153872 9134558	300547	593907	1629513	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd4	Ave	15700 1038587	42421 2776349	94866	183284	488843	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd4	Ave	12650 794125	36751 2155920	72018	140340	383394	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Pentachloroethane	DCBd4	Ave	8733 656909	27762 1748479	55991	118146	319319	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd4	Ave	54305 3601162	151932 9614423	311294	622633	1696596	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd4	Ave	72062 4371114	190109 11553473	392818	754102	2084526	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd4	Ave	33538 2100857	92355 5655092	184273	371086	1002205	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
p-Isopropyltoluene	DCBd4	Ave	57610 3959393	169494 10502301	349290	675394	1887390	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd4	Ave	37188 2072743	97044 5564704	196607	382865	997771	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd4	Ave	27998 1662034	72977 4502274	147335	297647	811253	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd4	Ave	+++++ 324829	10383 885654	24527	52911	151722	+++++ 10.0	0.500 25.0	1.00	2.00	5.00
n-Butylbenzene	DCBd4	Ave	26355 1897152	76531 5167753	156711	320079	899820	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd4	Ave	30335 1991258	88158 5280700	180788	349881	943028	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd4	Ave	1193 107198	3516 284292	7710	18580	51208	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd4	Ave	24730 1657411	72517 4359430	143363	284029	795965	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trichlorobenzene	DCBd4	Ave	15630 1354713	51601 3548476	109715	217554	613674	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd4	Ave	11175 684876	31154 1827727	63348	118944	327298	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Naphthalene	DCBd4	Ave	+++++ 2200653	73709 5729904	155697	348868	1011522	+++++ 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd4	Ave	11558 1073428	35588 2751180	80201	170003	475874	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	565787 587053	581092 615441	570123	579440	580358	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	123369 119348	123072 126553	121568	123074	125165	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd5	Ave	2472076 2591778	2544562 2755994	2547837	2556434	2545267	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	859932 948762	902694 994283	905538	914439	921478	10.0 10.0	10.0 10.0	10.0	10.0	10.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-395211/13	CL10X12.D
Level 2	IC 410-395211/14	CL10X13.D
Level 3	IC 410-395211/15	CL10X14.D
Level 4	IC 410-395211/16	CL10X15.D
Level 5	IC 410-395211/17	CL10X16.D
Level 6	ICIS 410-395211/18	CL10X17.D
Level 7	IC 410-395211/19	CL10X18.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	-0.4 2.8	-26.6	10.3	7.8	-0.6	6.7	50 30	30	30	30	30	30
Chloromethane	6.8 -3.8	2.8	-2.5	0.8	-3.9	-0.2	50 30	30	30	30	30	30
Vinyl chloride	-1.0 -2.7	-3.3	3.7	1.1	0.3	1.9	50 30	30	30	30	30	30
1,3-Butadiene	-0.5 4.2	-17.2	8.6	0.4	0.4	4.0	50 30	30	30	30	30	30
Bromomethane	5.9 -5.6	0.6	1.0	1.8	-3.6	-0.2	50 30	30	30	30	30	30
Chloroethane	0.8 -3.0	2.2	4.9	-0.2	-2.7	-2.0	50 30	30	30	30	30	30
Dichlorofluoromethane	1.2 -3.2	1.0	2.4	1.2	-2.4	-0.3	50 30	30	30	30	30	30
Trichlorofluoromethane	-8.0 3.4	-19.4	9.0	8.1	0.2	6.8	50 30	30	30	30	30	30
Diethyl ether	-1.4 0.4	-1.4	-3.3	1.9	2.1	1.8	50 30	30	30	30	30	30
Freon 123a	7.7 -0.8	-2.9	2.1	-2.7	-4.3	0.9	50 30	30	30	30	30	30
Acrolein	5.9 4.8	-1.3	-6.3	1.5	-1.6	-2.8	50 30	30	30	30	30	30
1,1-Dichloroethene	9.2 3.1	-0.5	1.4	-8.6	-2.6	-1.9	50 30	30	30	30	30	30
Acetone	37.5 -13.2	7.1	-1.3	-2.8	-11.4	-16.0	50 30	30	30	30	30	30
1,1,2-Trichloro-1,2,2-trifluoroethane	-4.4 6.6	-9.5	7.2	-2.2	0.4	1.9	50 30	30	30	30	30	30
Methyl iodide	-1.0 3.9	1.8	-1.3	-5.5	0.8	1.4	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Carbon disulfide	-1.1 6.6	-3.7	0.6	-5.6	0.6	2.6	50 30	30	30	30	30	30
Methyl acetate	14.8 -1.3	-6.7	2.4	0.4	-1.3	-8.3	50 30	30	30	30	30	30
Allyl chloride	-10.2 8.1	0.9	1.2	-6.3	1.6	4.8	50 30	30	30	30	30	30
Methylene Chloride	8.3 -2.6	5.9	-2.8	-4.4	-2.1	-2.4	50 30	30	30	30	30	30
t-Butyl alcohol	28.4 -12.1	16.7	0.0	-8.9	-9.5	-14.6	50 30	30	30	30	30	30
Acrylonitrile	-4.7 0.8	6.4	-8.5	10.2	-3.4	-0.7	50 30	30	30	30	30	30
Methyl tertiary butyl ether	-1.2 0.7	2.5	-2.5	-1.5	1.3	0.8	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	0.5 3.9	-0.4	-2.0	-6.1	0.7	3.4	50 30	30	30	30	30	30
n-Hexane	-9.7 10.3	-3.3	3.7	-6.0	2.9	2.1	50 30	30	30	30	30	30
1,1-Dichloroethane	-5.8 4.9	3.4	-2.6	-4.6	1.5	3.3	50 30	30	30	30	30	30
di-Isopropyl ether	-6.7 5.6	1.1	-1.3	-4.5	2.0	3.8	50 30	30	30	30	30	30
Chloroprene	-5.1 12.5	-5.0	-2.2	-8.2	2.0	6.0	50 30	30	30	30	30	30
Ethyl t-butyl ether	-7.5 5.3	1.0	-2.8	-2.7	2.2	4.5	50 30	30	30	30	30	30
2-Butanone	-6.3 7.2	-7.5	-3.3	0.7	4.5	4.7	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-10.7 8.0	0.8	0.0	-6.3	3.4	4.8	50 30	30	30	30	30	30
2,2-Dichloropropane	8.6 2.9	0.3	-1.8	-8.1	-2.1	0.1	50 30	30	30	30	30	30
Propionitrile	-34.8 21.3	3.9	-6.9	-2.4	12.6	6.3	50 30	30	30	30	30	30
Methacrylonitrile	-12.1 9.7	-9.2	3.5	-3.9	5.8	6.3	50 30	30	30	30	30	30
Bromochloromethane	-8.6 2.4	4.4	1.1	-2.8	0.8	2.8	50 30	30	30	30	30	30
Tetrahydrofuran	-15.4 7.1	-8.5	0.7	5.4	5.4	5.3	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Chloroform	2.9 2.5	0.3	-1.4	-4.6	-0.8	1.2	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-2.4 5.6	0.8	0.1	-6.8	0.3	2.3	50 30	30	30	30	30	30
Cyclohexane	-7.6 11.6	-5.5	2.1	-5.9	1.7	3.7	50 30	30	30	30	30	30
Carbon tetrachloride	-3.7 9.4	-4.1	-0.9	-7.4	1.8	5.0	50 30	30	30	30	30	30
1,1-Dichloropropene	1.2 8.6	-2.9	-3.6	-7.9	0.3	4.4	50 30	30	30	30	30	30
Isobutyl alcohol	+++++ 0.5	20.4	10.1	-0.1	-0.4	-3.0	 30	50	30	30	30	30
Benzene	-3.7 5.4	0.6	-0.5	-5.7	1.0	2.9	50 30	30	30	30	30	30
1,2-Dichloroethane	4.1 0.8	4.4	-3.7	-0.3	-2.4	-2.9	50 30	30	30	30	30	30
t-Amyl methyl ether	-4.3 5.0	-1.9	-2.7	-2.1	2.2	3.8	50 30	30	30	30	30	30
n-Heptane	-4.9 12.6	-7.9	-0.7	-8.9	3.5	6.3	50 30	30	30	30	30	30
Trichloroethene	-4.7 6.4	-0.3	-0.2	-5.8	1.3	3.2	50 30	30	30	30	30	30
n-Butanol	+++++ 2.8	25.8	-9.0	-12.5	-4.3	-2.7	 30	50	30	30	30	30
Methylcyclohexane	-9.8 13.0	-9.7	2.1	-3.9	3.3	5.0	50 30	30	30	30	30	30
1,2-Dichloropropane	-5.4 5.6	0.7	-1.4	-1.8	0.3	2.0	50 30	30	30	30	30	30
Dibromomethane	-1.8 2.0	-2.7	1.7	-4.5	2.5	2.9	50 30	30	30	30	30	30
Methyl methacrylate	-17.8 21.3	-12.7	-7.2	-1.4	7.7	10.1	50 30	30	30	30	30	30
1,4-Dioxane	+++++ -11.9	-4.8	2.5	8.2	4.1	2.0	 30	50	30	30	30	30
Bromodichloromethane	-7.9 7.1	-0.2	-1.9	-4.2	2.0	5.0	50 30	30	30	30	30	30
2-Nitropropane	-6.1 10.2	-13.1	0.0	0.1	4.5	4.4	50 30	30	30	30	30	30
1-Bromo-2-chloroethane	-3.2 2.9	-4.4	-5.8	2.6	3.6	4.3	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
cis-1,3-Dichloropropene	-25.2 13.4	-6.7	-0.2	-1.9	8.0	12.7	50 30	30	30	30	30	30
4-Methyl-2-pentanone	-19.5 12.8	-11.6	-0.6	2.1	9.1	7.8	50 30	30	30	30	30	30
Toluene	-3.9 6.0	3.4	-1.2	-6.0	-0.3	2.1	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-19.3 17.3	-9.8	-4.4	-6.1	8.7	13.7	50 30	30	30	30	30	30
Ethyl methacrylate	-31.0 23.9	-12.0	-8.2	-2.2	12.3	17.2	50 30	30	30	30	30	30
1,1,2-Trichloroethane	-2.1 0.6	3.8	0.4	-2.0	-0.4	-0.2	50 30	30	30	30	30	30
Tetrachloroethene	-5.8 5.8	4.5	-0.6	-6.2	0.6	1.8	50 30	30	30	30	30	30
1,3-Dichloropropane	-14.4 6.7	-0.5	-1.5	-0.2	4.8	5.1	50 30	30	30	30	30	30
2-Hexanone	+++++ 21.4	-28.4	-15.1	-0.3	9.0	13.3	 30	50	30	30	30	30
Dibromochloromethane	-12.4 8.3	-0.8	0.0	-2.4	2.5	4.9	50 30	30	30	30	30	30
1,2-Dibromoethane	-17.8 10.4	-1.6	-5.4	0.5	5.2	8.7	50 30	30	30	30	30	30
1-Chlorohexane	7.4 7.7	-3.1	-1.8	-10.6	-0.6	0.9	50 30	30	30	30	30	30
Chlorobenzene	-0.8 5.4	-0.6	-1.8	-5.4	0.9	2.3	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-8.1 9.0	-3.8	-1.7	-4.0	3.5	5.2	50 30	30	30	30	30	30
Ethylbenzene	-11.7 9.6	0.8	-0.4	-5.8	2.7	4.9	50 30	30	30	30	30	30
m&p-Xylene	-9.3 10.4	-3.8	-1.9	-4.9	3.9	5.6	50 30	30	30	30	30	30
o-Xylene	-7.4 8.8	0.4	-3.0	-6.2	2.2	5.2	50 30	30	30	30	30	30
Styrene	-23.9 18.3	-9.2	-4.5	-2.4	8.8	12.8	50 30	30	30	30	30	30
Bromoform	-13.1 10.4	-4.5	-1.3	-3.6	3.6	8.5	50 30	30	30	30	30	30
Isopropylbenzene	-10.8 8.0	1.3	-1.4	-5.8	3.0	5.7	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromobenzene	-10.5 5.3	1.2	-1.7	-3.5	4.8	4.4	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-10.0 3.3	0.9	-0.1	-1.8	4.6	3.1	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-32.1 18.2	-9.0	-7.0	1.8	13.1	15.0	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-3.3 2.4	0.0	-2.3	-4.1	5.4	1.9	50 30	30	30	30	30	30
N-Propylbenzene	-3.4 4.1	-0.8	-3.3	-7.9	5.0	6.1	50 30	30	30	30	30	30
2-Chlorotoluene	-8.3 5.9	-2.8	1.3	-4.5	4.0	4.5	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-5.9 7.4	-0.8	-4.3	-6.4	4.2	5.7	50 30	30	30	30	30	30
4-Chlorotoluene	-11.8 9.5	-8.3	1.3	-3.1	4.9	7.4	50 30	30	30	30	30	30
tert-Butylbenzene	-9.8 8.0	1.0	-2.3	-5.7	4.5	4.3	50 30	30	30	30	30	30
Pentachloroethane	-21.4 10.6	-3.8	-4.2	0.1	9.8	8.9	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-11.5 10.1	-4.6	-3.5	-4.4	5.7	8.2	50 30	30	30	30	30	30
sec-Butylbenzene	-5.2 6.7	-3.7	-1.8	-6.6	4.7	5.9	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-8.2 8.7	-2.7	-4.1	-4.4	4.8	5.9	50 30	30	30	30	30	30
p-Isopropyltoluene	-14.5 9.5	-3.1	-1.4	-5.6	7.0	8.2	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-1.2 3.9	-0.7	-0.6	-4.2	1.3	1.5	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	-4.6 7.8	-4.2	-4.5	-4.5	5.6	4.4	50 30	30	30	30	30	30
Benzyl chloride	+++++ 18.0	-24.2	-11.6	-5.5	9.9	13.4	 30	50	30	30	30	30
n-Butylbenzene	-16.7 14.8	-6.8	-5.8	-4.7	8.7	10.5	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-12.1 7.6	-1.6	-0.3	-4.5	4.5	6.4	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-28.6 19.6	-18.9	-12.2	4.7	17.1	18.2	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 395211

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2023 19:29 Calibration End Date: 07/10/2023 21:40 Calibration ID: 51835

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
1,3,5-Trichlorobenzene	-12.7 8.2	-1.4	-3.7	-5.6	7.4	7.8	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-27.2 16.2	-7.4	-2.7	-4.5	9.3	16.3	50 30	30	30	30	30	30
Hexachlorobutadiene	-7.3 6.5	-0.5	-0.1	-7.1	3.7	4.7	50 30	30	30	30	30	30
Naphthalene	+++++ 14.9	-19.0	-15.5	-6.3	10.3	15.7	 30	50	30	30	30	30
1,2,3-Trichlorobenzene	-28.9 18.9	-15.7	-6.2	-1.5	11.8	21.6	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	0.2 -0.9	0.6	-0.8	0.5	0.3	0.0	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	3.4 -3.6	0.8	0.0	1.0	2.3	-3.8	50 30	30	30	30	30	30
Toluene-d8 (Surr)	0.4 0.8	0.4	0.3	-0.1	-0.9	-0.9	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	-2.4 1.6	-0.4	-0.3	-0.2	0.3	1.4	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D
Lims ID: IC std1 0.2
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Jul-2023 19:29:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-013
Misc. Info.: IC STD1 0.2
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:37:56 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:35:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.696	1.684	0.012	32	11821	0.2000	0.1991	M
5 Chloromethane	50	1.843	1.849	-0.006	98	16054	0.2000	0.2135	
6 Vinyl chloride	62	1.946	1.934	0.012	81	14215	0.2000	0.1980	
7 Butadiene	39	1.946	1.940	0.006	90	13844	0.2000	0.1991	M
9 Bromomethane	94	2.215	2.209	0.006	87	11889	0.2000	0.2118	M
10 Chloroethane	64	2.276	2.270	0.006	98	8514	0.2000	0.2015	
11 Dichlorofluoromethane	67	2.483	2.471	0.012	97	23201	0.2000	0.2024	
13 Pentane	43	2.538	2.526	0.012	95	15170	0.2000	0.1856	
12 Trichlorofluoromethane	101	2.538	2.532	0.006	54	14916	0.2000	0.1840	
14 Ethyl ether	59	2.715	2.702	0.013	83	9113	0.2000	0.1973	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.800	2.788	0.012	41	13705	0.2000	0.2154	M
17 Acrolein	56	2.867	2.843	0.024	98	63076	10.0	10.6	
18 1,1-Dichloroethene	96	2.964	2.952	0.012	95	11468	0.2000	0.2184	
20 Acetone	43	2.995	2.977	0.018	99	20869	2.00	2.75	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.001	3.001	0.000	87	9907	0.2000	0.1912	
22 Iodomethane	142	3.117	3.117	0.000	98	22324	0.2000	0.1980	
24 Isopropyl alcohol	45	3.141	3.117	0.024	46	13158	4.00	4.85	M
23 Ethyl bromide	108	3.147	3.135	0.012	94	9881	0.1998	0.1928	M
25 Carbon disulfide	76	3.214	3.202	0.012	97	36742	0.2000	0.1978	M
26 Methyl acetate	43	3.342	3.324	0.018	26	5490	0.2000	0.2295	M
29 3-Chloro-1-propene	41	3.355	3.336	0.019	88	16623	0.2000	0.1795	
30 Methylene Chloride	84	3.501	3.495	0.006	91	14224	0.2000	0.2167	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.550	3.538	0.012	94	159799	50.0	50.0	M
32 2-Methyl-2-propanol	59	3.684	3.653	0.031	57	17229	4.00	5.14	
33 Acrylonitrile	53	3.836	3.788	0.048	25	5083	0.5000	0.4763	
35 trans-1,2-Dichloroethene	96	3.855	3.830	0.025	98	12811	0.2000	0.2010	
34 Methyl tert-butyl ether	73	3.824	3.830	-0.006	86	33374	0.2000	0.1976	
36 Hexane	57	4.214	4.208	0.006	93	14683	0.2000	0.1807	
37 1,1-Dichloroethane	63	4.446	4.446	0.000	95	21055	0.2000	0.1883	M
39 Isopropyl ether	45	4.531	4.513	0.018	98	39288	0.2000	0.1866	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Chloro-1,3-butadiene	53	4.574	4.562	0.012	89	16240	0.2000	0.1898	M
41 Tert-butyl ethyl ether	59	5.080	5.074	0.006	99	36032	0.2000	0.1850	M
42 2-Butanone (MEK)	43	5.397	5.281	0.116	20	27785	2.00	1.87	a
43 cis-1,2-Dichloroethene	96	5.330	5.312	0.018	83	12203	0.2000	0.1785	
44 2,2-Dichloropropane	77	5.330	5.324	0.006	62	19395	0.2000	0.2172	M
45 Propionitrile	54	5.562	5.385	0.177	48	8640	4.00	2.61	M
47 Methacrylonitrile	67	5.653	5.592	0.061	83	27592	2.00	1.76	
49 Tetrahydrofuran	71	5.720	5.653	0.067	21	3689	1.00	0.8459	M
48 Chlorobromomethane	128	5.671	5.653	0.018	91	6001	0.2000	0.1827	
50 Chloroform	83	5.824	5.818	0.006	91	22763	0.2000	0.2057	
53 1,1,1-Trichloroethane	97	6.049	6.037	0.012	28	18185	0.2000	0.1953	M
$ 54 Dibromofluoromethane (Surr)	113	6.043	6.037	0.006	94	565787	10.0	10.0	
55 Cyclohexane	56	6.128	6.123	0.006	89	19318	0.2000	0.1847	
S 52 1,2-Dichloroethene, Total	100				0			0.3795	
56 Carbon tetrachloride	117	6.250	6.244	0.006	81	15543	0.2000	0.1926	
57 1,1-Dichloropropene	75	6.263	6.257	0.006	96	16888	0.2000	0.2023	
58 Isobutyl alcohol	41	6.500	6.482	0.018	14	1381	10.0	21.4	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.500	6.507	-0.007	99	123369	10.0	10.3	
60 Benzene	78	6.525	6.525	0.000	92	51338	0.2000	0.1926	
61 1,2-Dichloroethane	62	6.610	6.598	0.012	94	14153	0.2000	0.2082	
64 Tert-amyl methyl ether	73	6.732	6.738	-0.006	99	34827	0.2000	0.1914	
* 65 Fluorobenzene (IS)	96	6.952	6.952	0.000	99	2414017	10.0	10.0	
66 n-Heptane	43	6.964	6.964	0.000	36	16720	0.2000	0.1902	
67 n-Butanol	56		7.409				ND	ND	
68 Trichloroethene	95	7.451	7.439	0.012	95	13043	0.2000	0.1906	a
69 Methylcyclohexane	83	7.738	7.738	0.000	86	20017	0.2000	0.1804	
70 1,2-Dichloropropane	63	7.775	7.775	-0.001	81	13293	0.2000	0.1892	
71 2-ethoxy-2-methyl butane	87	7.817	7.811	0.006	91	19468	0.2000	0.1784	
72 Dibromomethane	93	7.903	7.890	0.013	90	6418	0.2000	0.1964	
74 1,4-Dioxane	88	7.957	7.890	0.067	1	1206	10.0	4.68	M
73 Methyl methacrylate	69	7.927	7.897	0.030	38	5037	0.2000	0.1644	M
76 Dichlorobromomethane	83	8.152	8.140	0.012	97	14960	0.2000	0.1843	
77 2-Nitropropane	41	8.433	8.427	0.006	96	7819	1.00	0.9385	M
78 1-Bromo-2-chloroethane	63	8.555	8.531	0.024	97	13791	0.2000	0.1937	M
80 cis-1,3-Dichloropropene	75	8.744	8.720	0.024	95	15014	0.2000	0.1496	
82 4-Methyl-2-pentanone (MIBK)	43	8.939	8.927	0.012	97	67927	2.00	1.61	
$ 83 Toluene-d8 (Surr)	98	9.055	9.055	0.000	93	2472076	10.0	10.0	
84 Toluene	92	9.152	9.140	0.012	97	33741	0.2000	0.1922	
85 trans-1,3-Dichloropropene	75	9.494	9.457	0.037	91	13236	0.2000	0.1613	M
86 Ethyl methacrylate	69	9.561	9.543	0.018	90	9013	0.2000	0.1379	M
87 1,1,2-Trichloroethane	97	9.683	9.677	0.006	90	10190	0.2000	0.1958	
88 Tetrachloroethene	166	9.762	9.756	0.006	94	15916	0.2000	0.1884	
89 1,3-Dichloropropane	76	9.872	9.847	0.025	90	14268	0.2000	0.1712	
106 2-Hexanone	43	9.963	9.927	0.036	93	31916	2.00	1.11	M
S 107 1,3-Dichloropropene, Total	100				0			0.3110	
108 Chlorodibromomethane	129	10.091	10.079	0.012	90	11174	0.2000	0.1752	
110 Ethylene Dibromide	107	10.207	10.189	0.018	99	7667	0.2000	0.1644	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1874080	10.0	10.0	
113 Chlorobenzene	112	10.689	10.683	0.006	96	42190	0.2000	0.1985	
112 1-Chlorohexane	91	10.689	10.683	0.006	58	20445	0.2000	0.2149	
114 1,1,1,2-Tetrachloroethane	131	10.780	10.780	0.000	88	13023	0.2000	0.1838	
115 Ethylbenzene	91	10.792	10.786	0.006	98	59492	0.2000	0.1765	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
116 m-Xylene & p-Xylene	106	10.914	10.908	0.006	97	49049	0.4000	0.3629	
S 117 Xylenes, Total	106				0			0.5480	
118 o-Xylene	106	11.262	11.256	0.006	96	25108	0.2000	0.1852	
119 Styrene	104	11.292	11.274	0.018	92	32058	0.2000	0.1521	
120 Bromoform	173	11.438	11.426	0.012	96	7055	0.2000	0.1739	
121 Isopropylbenzene	105	11.573	11.573	0.000	95	60960	0.2000	0.1784	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.719	0.000	96	859932	10.0	9.76	
125 Bromobenzene	156	11.841	11.829	0.012	86	16465	0.2000	0.1790	
126 1,1,2,2-Tetrachloroethane	83	11.847	11.835	0.012	74	11933	0.2000	0.1801	M
127 trans-1,4-Dichloro-2-butene	53	11.883	11.859	0.024	82	19758	2.00	1.36	M
128 1,2,3-Trichloropropane	110	11.890	11.877	0.013	77	3288	0.2000	0.1933	
129 N-Propylbenzene	91	11.920	11.914	0.006	99	77828	0.2000	0.1933	
130 2-Chlorotoluene	126	11.993	11.987	0.006	98	16081	0.2000	0.1833	
131 1,3,5-Trimethylbenzene	105	12.060	12.060	0.000	94	56210	0.2000	0.1882	
132 4-Chlorotoluene	126	12.097	12.085	0.012	96	15700	0.2000	0.1763	
133 tert-Butylbenzene	134	12.304	12.304	0.000	93	12650	0.2000	0.1804	
134 Pentachloroethane	167	12.335	12.329	0.006	79	8733	0.2000	0.1572	
135 1,2,4-Trimethylbenzene	105	12.359	12.347	0.012	95	54305	0.2000	0.1771	
136 sec-Butylbenzene	105	12.475	12.469	0.006	93	72062	0.2000	0.1895	
137 1,3-Dichlorobenzene	146	12.578	12.566	0.012	96	33538	0.2000	0.1835	
138 4-Isopropyltoluene	119	12.585	12.585	0.000	97	57610	0.2000	0.1710	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.627	0.000	93	1118395	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.646	12.640	0.006	91	37188	0.2000	0.1976	
141 1,2,3-Trimethylbenzene	120	12.664	12.658	0.006	94	27998	0.2000	0.1908	
142 Benzyl chloride	126	12.749	12.725	0.024	96	2594	0.2000	0.0983	
145 p-Diethylbenzene	119	12.871	12.865	0.006	93	36554	0.2000	0.1706	M
143 n-Butylbenzene	92	12.889	12.883	0.006	97	26355	0.2000	0.1666	
144 1,2-Dichlorobenzene	146	12.920	12.908	0.012	99	30335	0.2000	0.1759	
148 1,2-Dibromo-3-Chloropropane	155	13.487	13.469	0.018	1	1193	0.2000	0.1428	
149 1,3,5-Trichlorobenzene	180	13.609	13.591	0.018	98	24730	0.2000	0.1746	
150 1,2,4-Trichlorobenzene	180	14.042	14.023	0.019	88	15630	0.2000	0.1457	
151 Hexachlorobutadiene	225	14.109	14.103	0.006	94	11175	0.2000	0.1854	
152 Naphthalene	128	14.224	14.200	0.024	95	22074	0.2000	0.1260	
153 1,2,3-Trichlorobenzene	180	14.365	14.347	0.019	96	11558	0.2000	0.1422	
154 2-Methylnaphthalene	142	15.011	14.944	0.067	1	3310	0.2000	0.0803	M

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LL_#1_826_00084	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00095	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00159	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00073	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 11-Jul-2023 21:37:57 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D

Injection Date: 10-Jul-2023 19:29:30 Instrument ID: 10193 Operator ID: knk41612

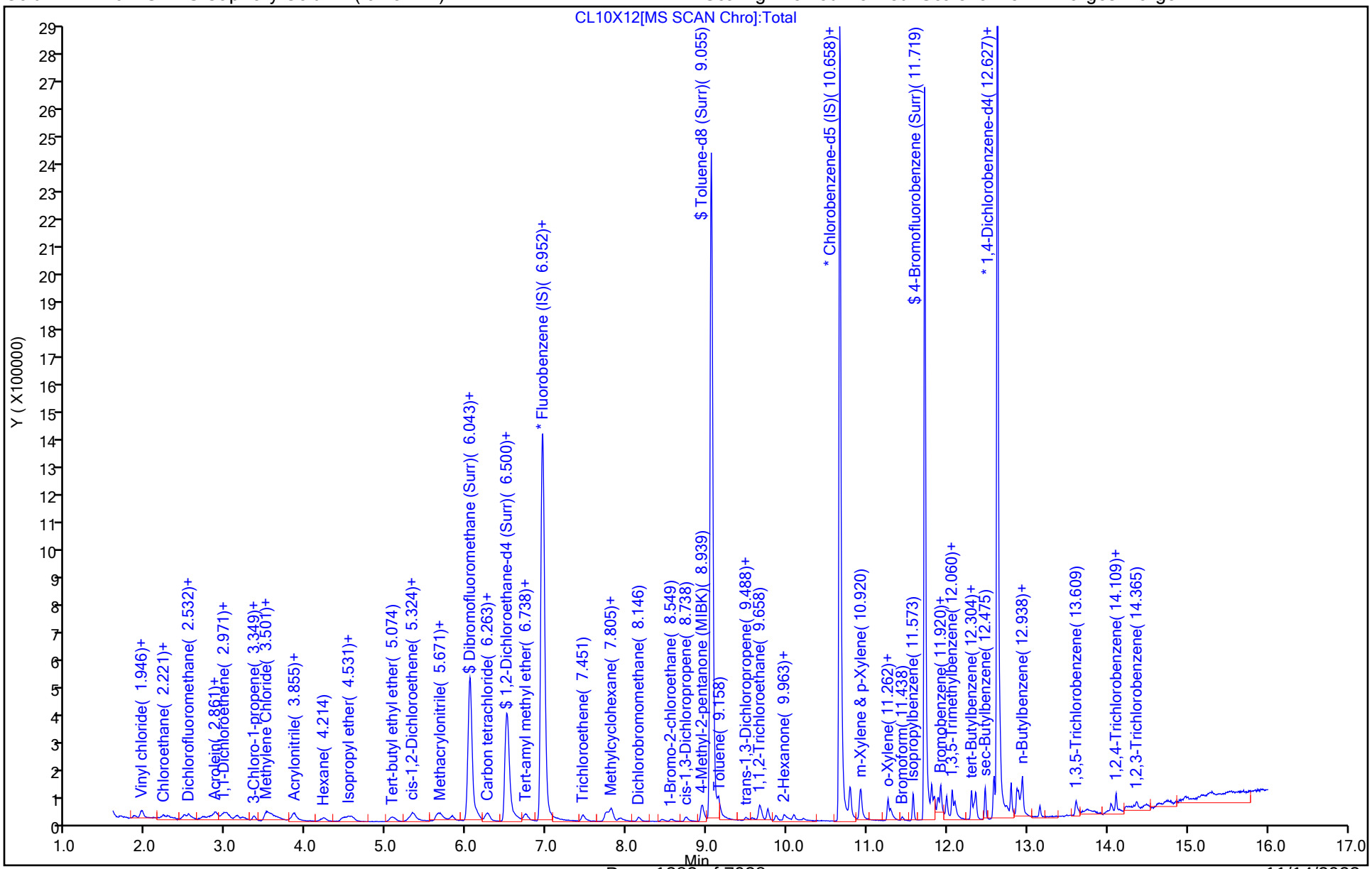
Lims ID: IC std1 0.2 Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 12

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

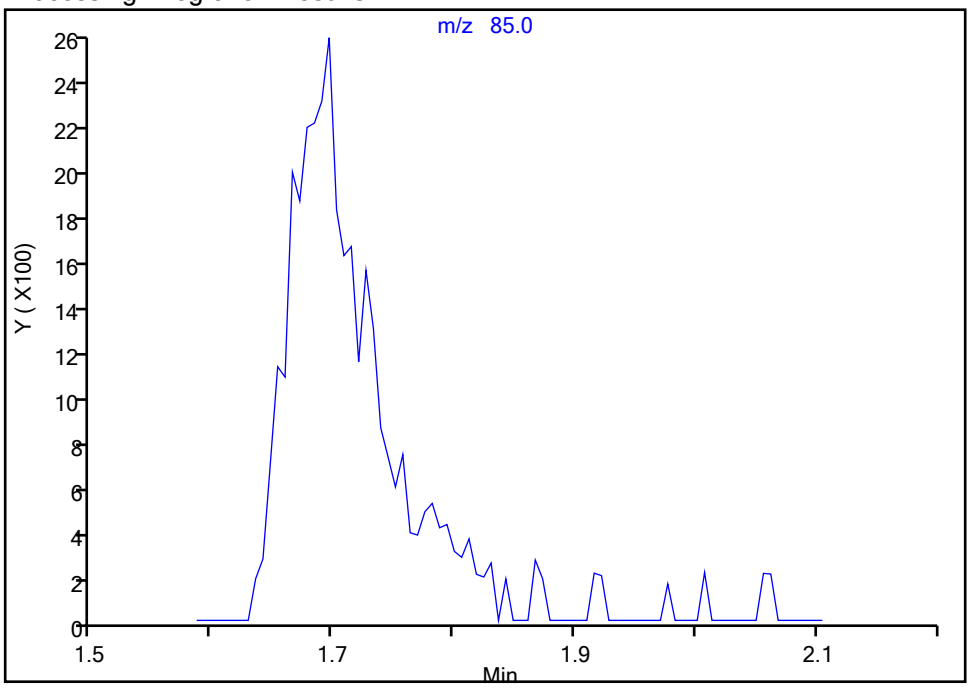
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

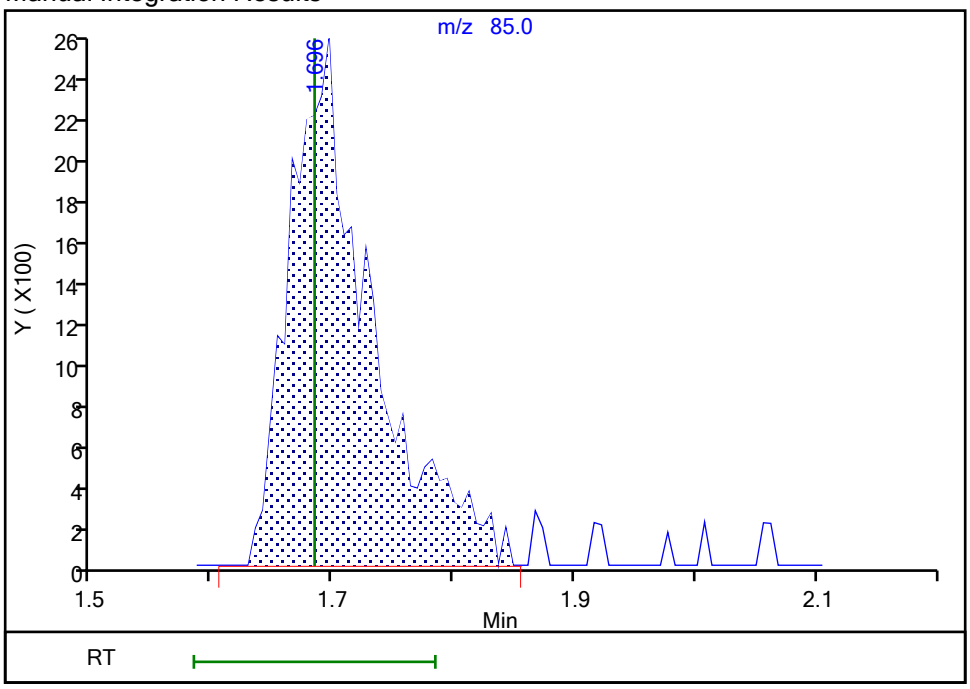
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.70
Area: 11821
Amount: 0.199111
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:26:00 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

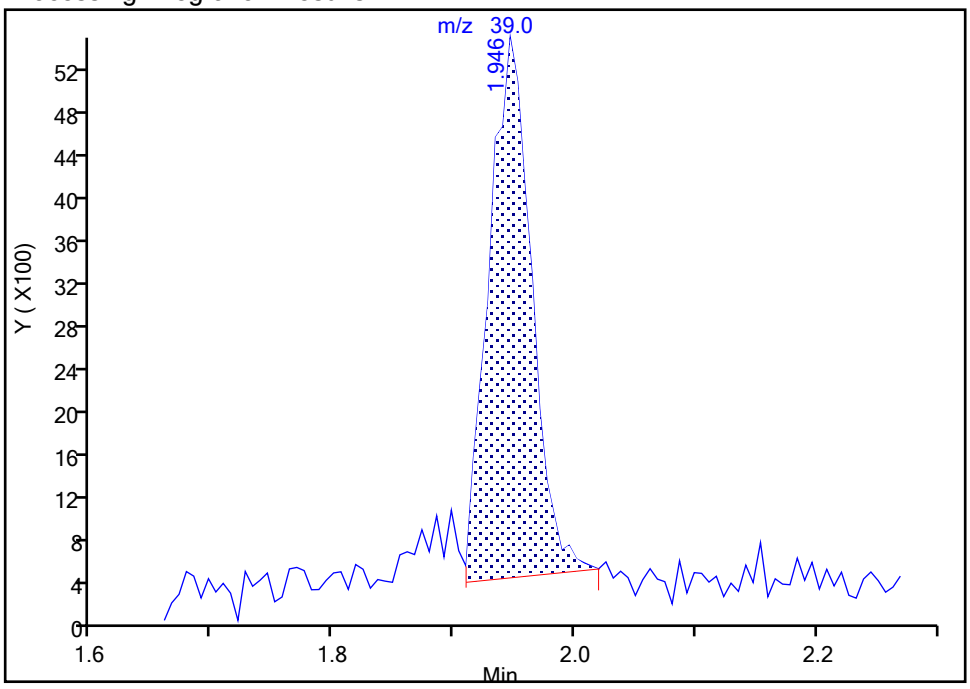
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

7 Butadiene, CAS: 106-99-0

Signal: 1

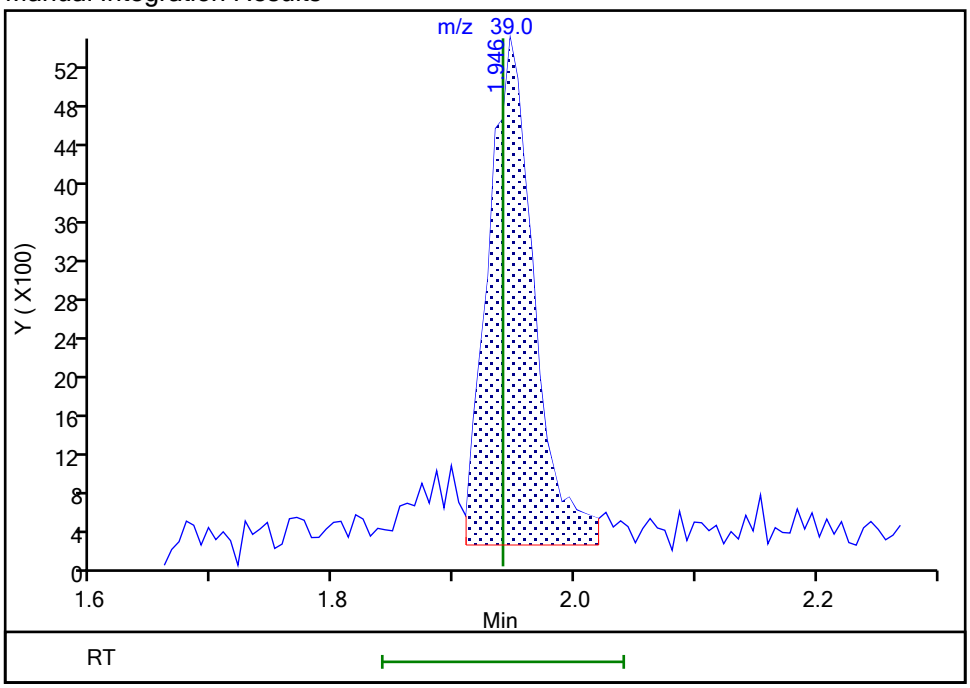
Processing Integration Results

RT: 1.95
Area: 12492
Amount: 0.182830
Amount Units: ug/l



Manual Integration Results

RT: 1.95
Area: 13844
Amount: 0.199088
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:26:11 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

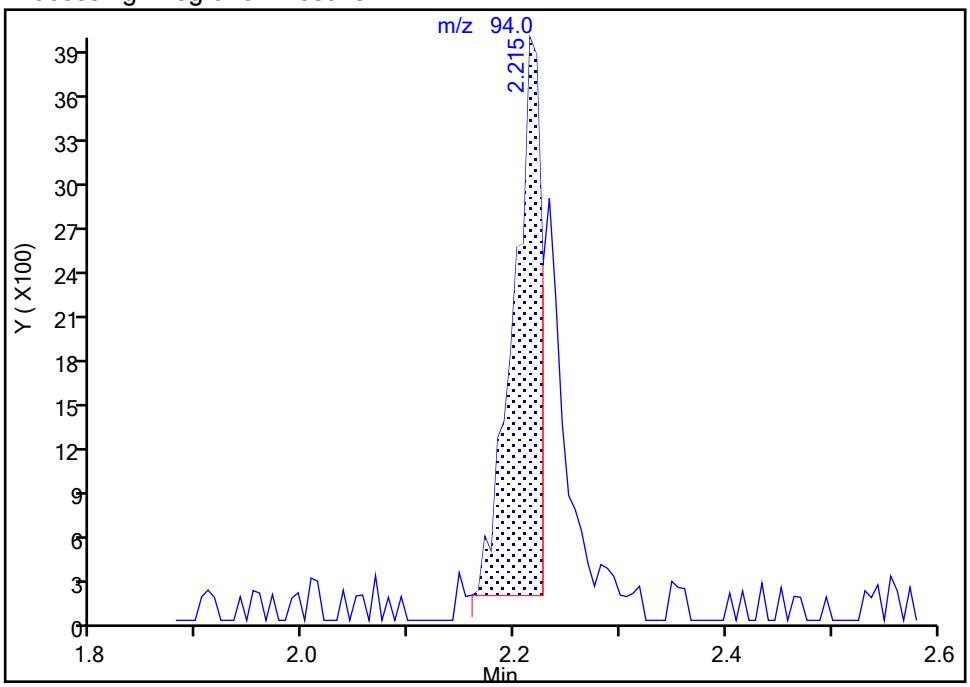
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

9 Bromomethane, CAS: 74-83-9

Signal: 1

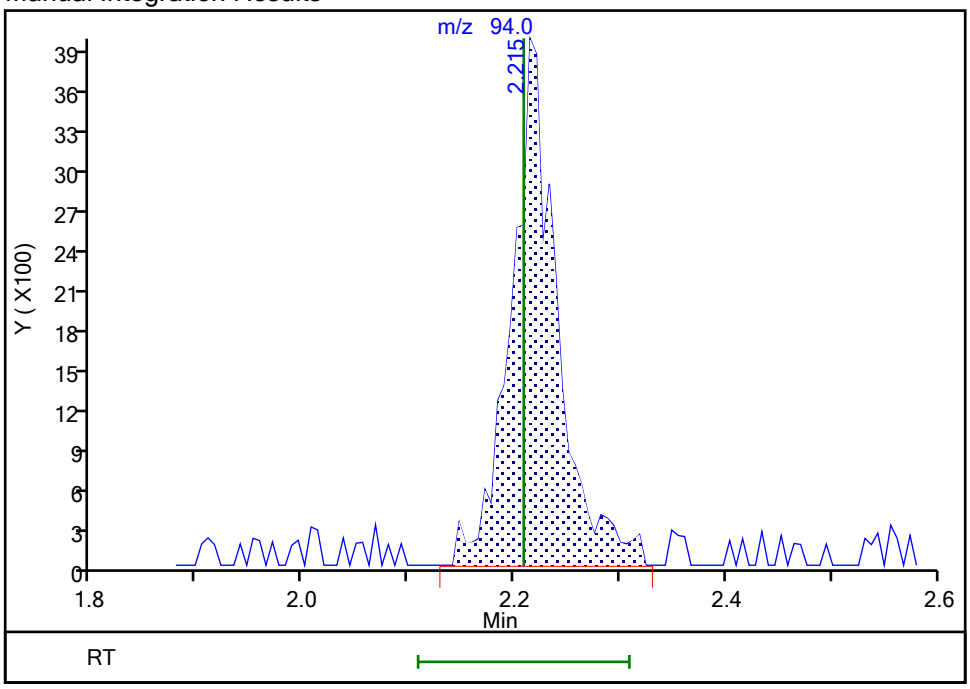
Processing Integration Results

RT: 2.21
Area: 6951
Amount: 0.132155
Amount Units: ug/l



Manual Integration Results

RT: 2.21
Area: 11889
Amount: 0.211833
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:26:18 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

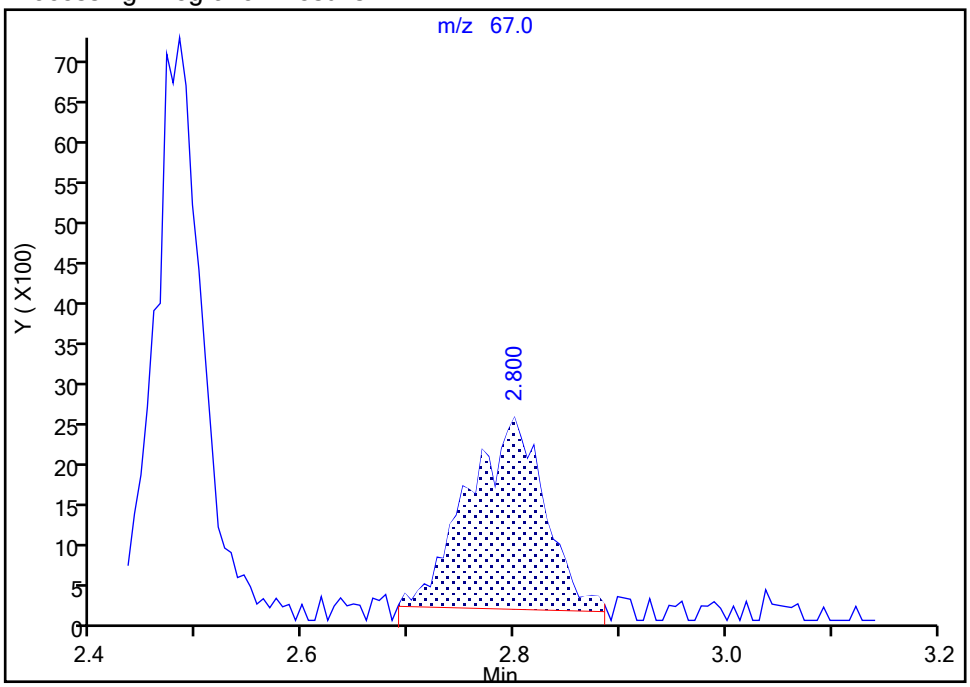
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

16 1,2-Dichloro-1,1,2-trifluoroetha, CAS: 354-23-4

Signal: 1

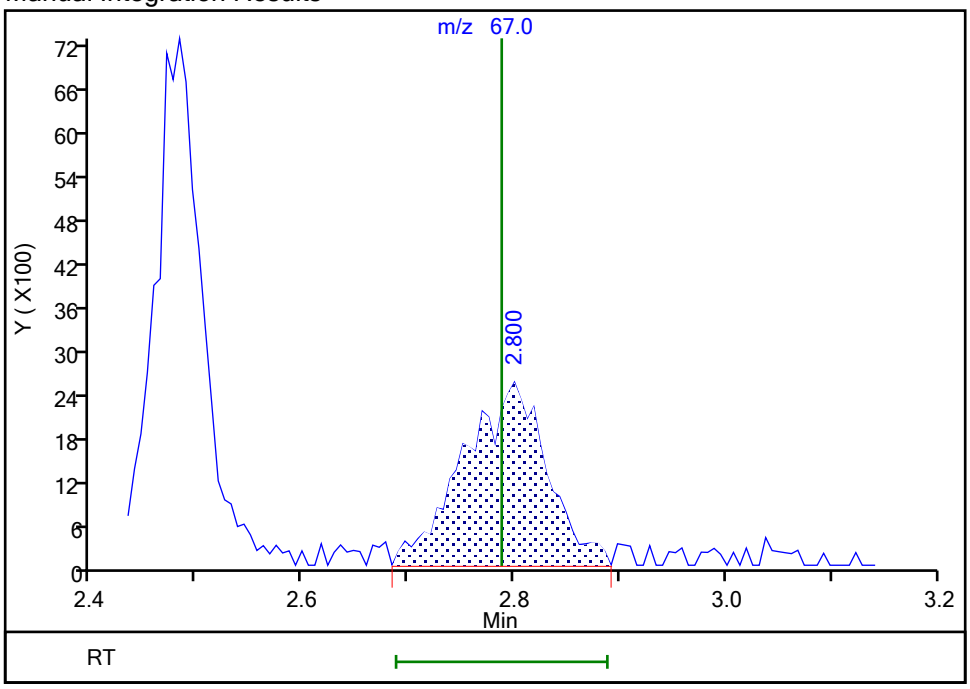
Processing Integration Results

RT: 2.80
Area: 11954
Amount: 0.191680
Amount Units: ug/l



Manual Integration Results

RT: 2.80
Area: 13705
Amount: 0.215436
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:26:38 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

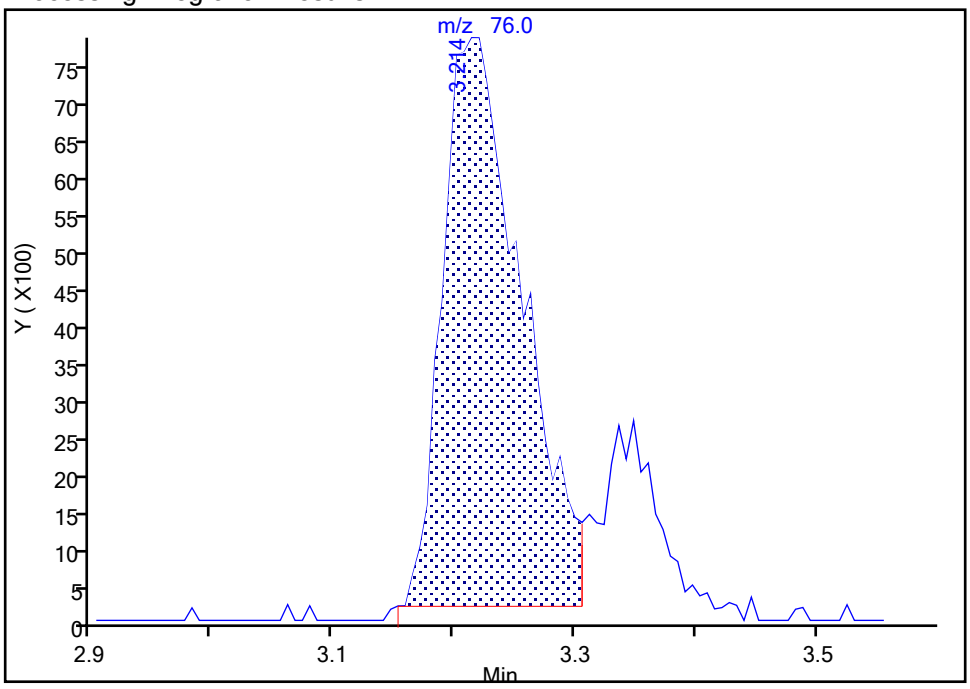
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

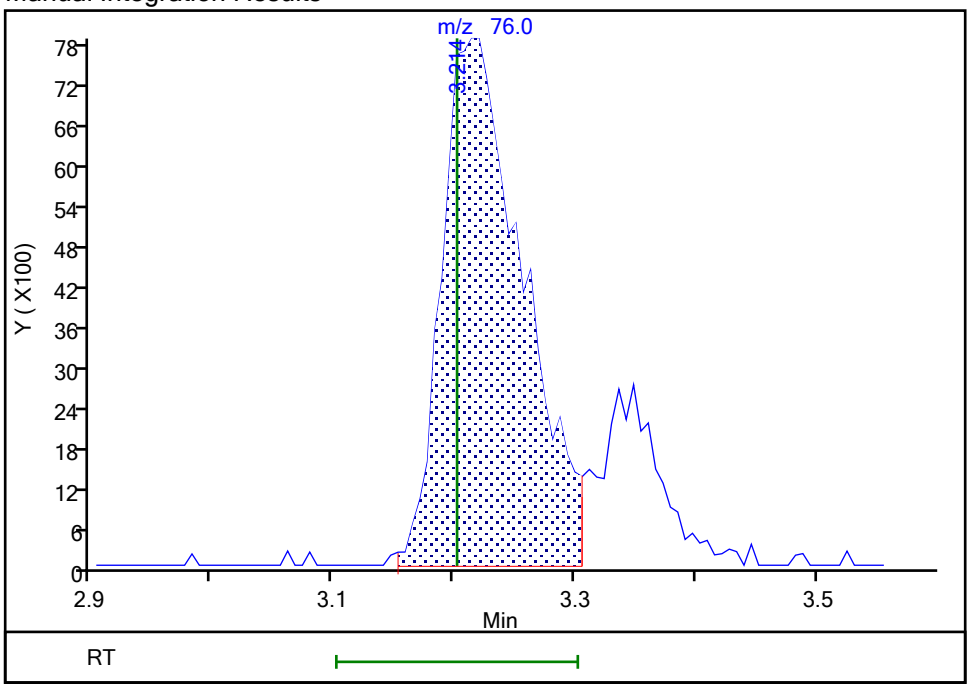
Processing Integration Results

RT: 3.21
Area: 34906
Amount: 0.189261
Amount Units: ug/l



Manual Integration Results

RT: 3.21
Area: 36742
Amount: 0.197809
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:27:01 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

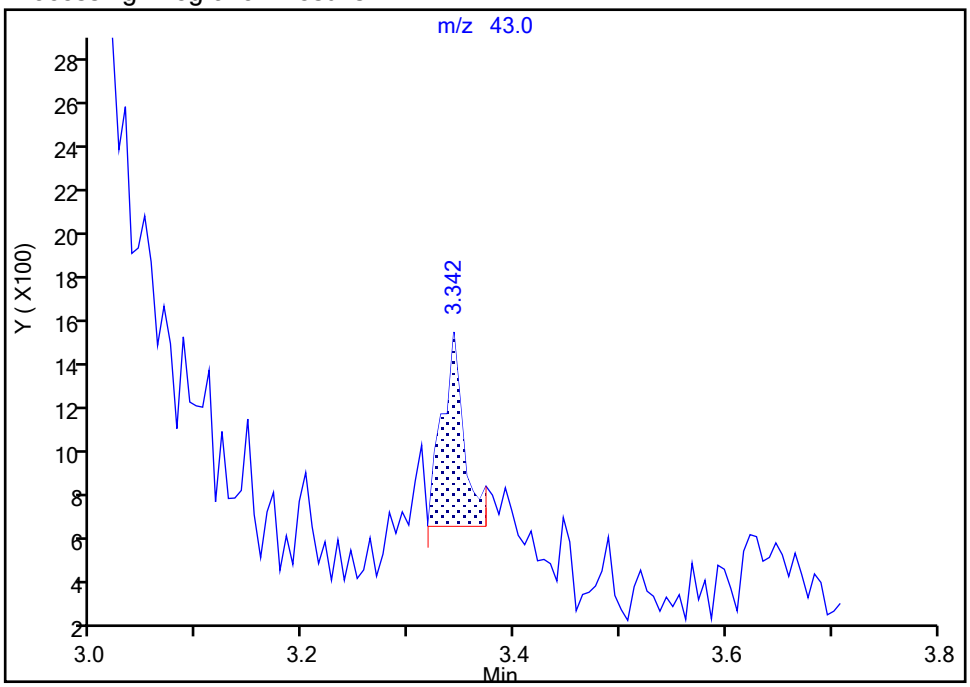
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

26 Methyl acetate, CAS: 79-20-9

Signal: 1

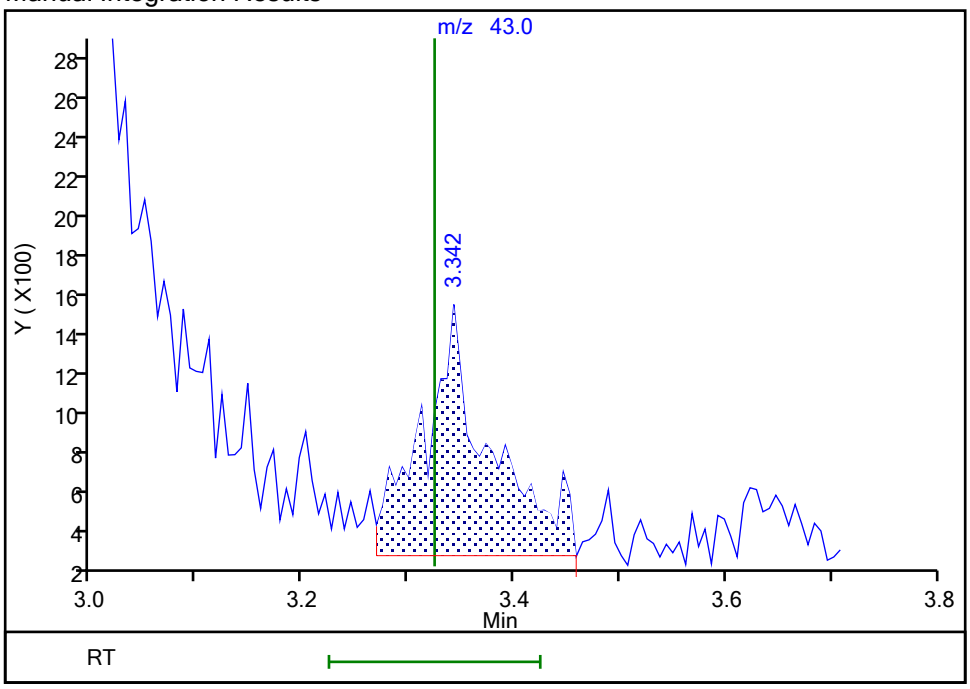
Processing Integration Results

RT: 3.34
Area: 1261
Amount: 0.056192
Amount Units: ug/l



Manual Integration Results

RT: 3.34
Area: 5490
Amount: 0.229527
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:27:19 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

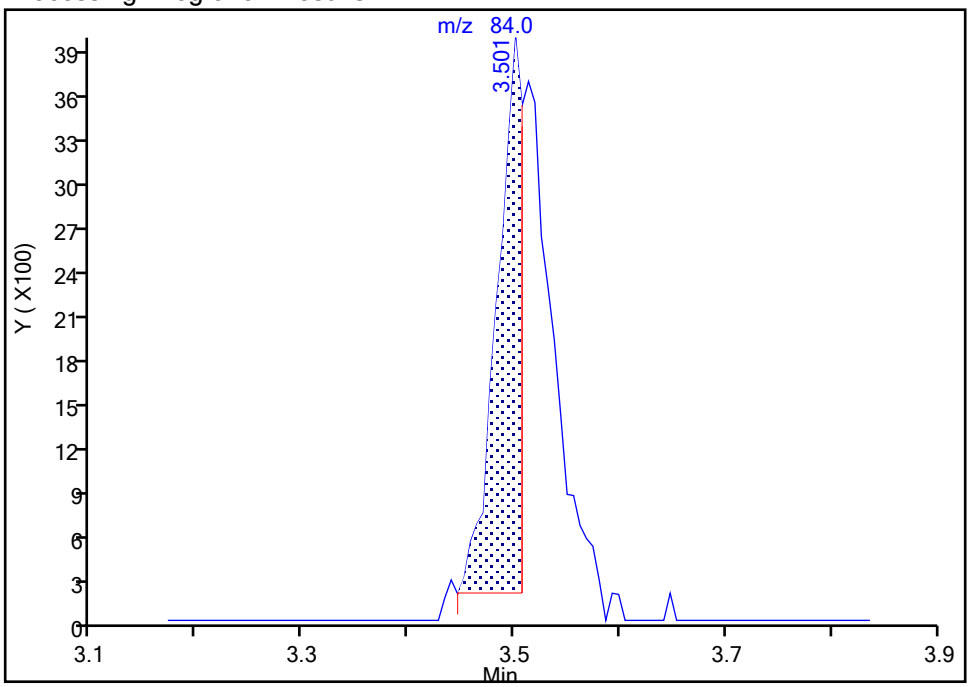
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

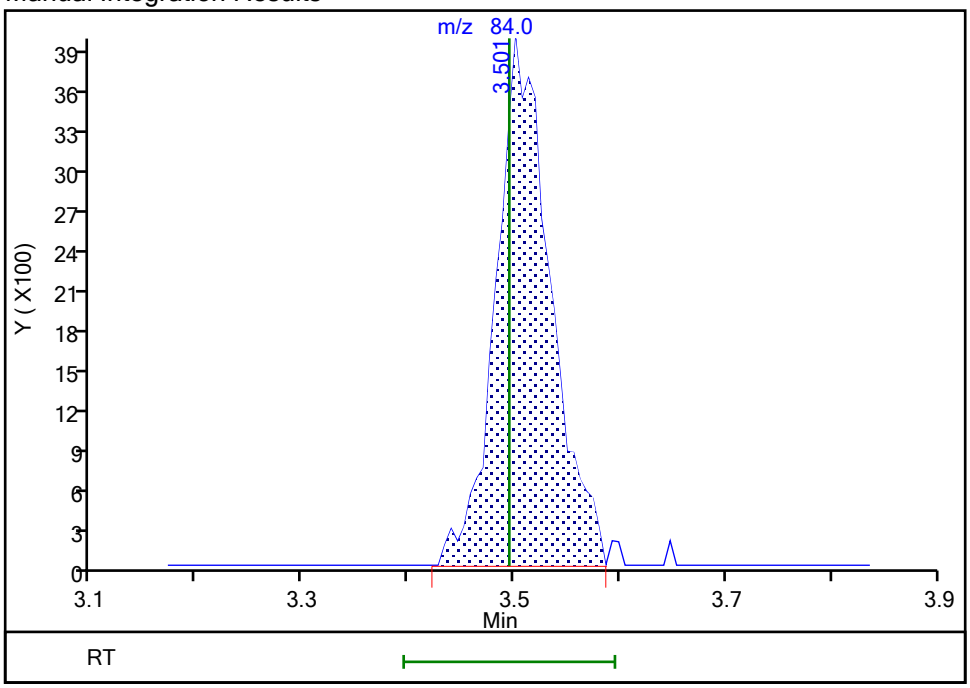
Processing Integration Results

RT: 3.50
Area: 6400
Amount: 0.113330
Amount Units: ug/l



Manual Integration Results

RT: 3.50
Area: 14224
Amount: 0.216692
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:27:26 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

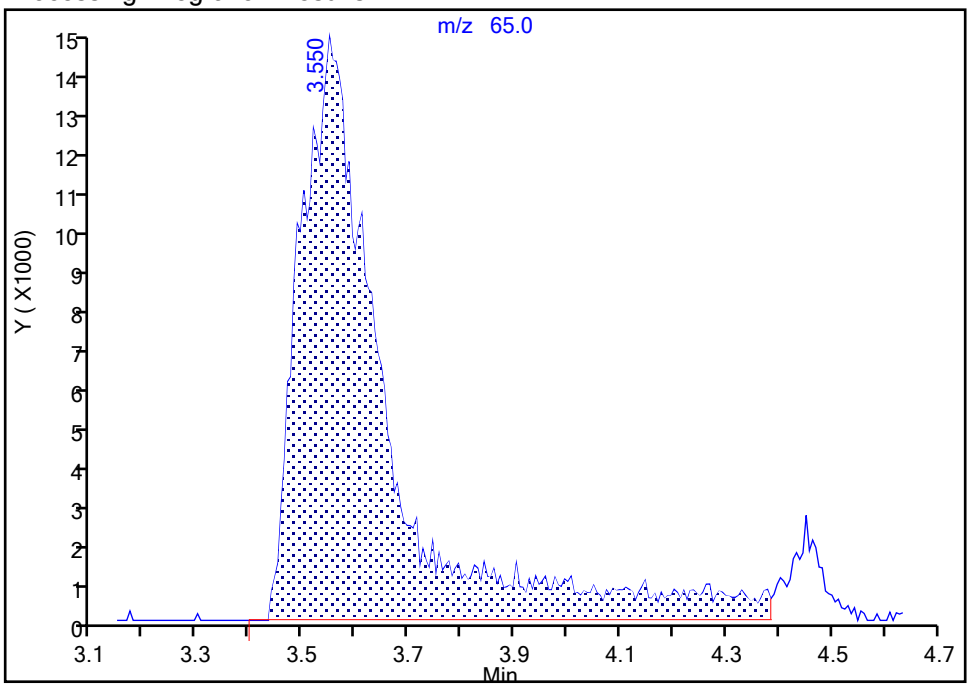
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

* 31 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

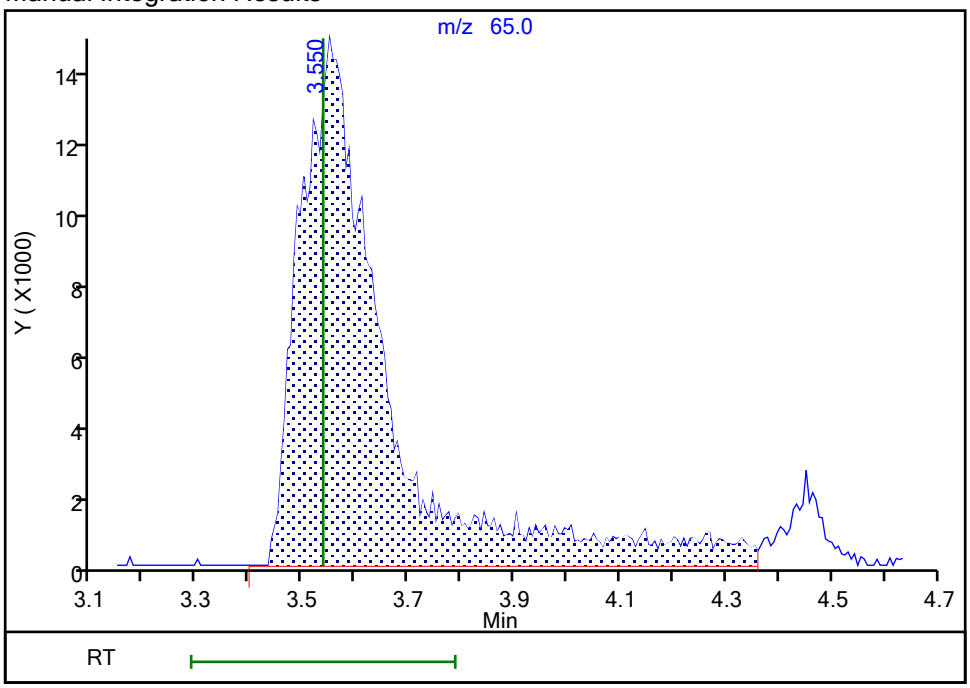
Processing Integration Results

RT: 3.55
Area: 160734
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 3.55
Area: 159799
Amount: 50.000000
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:45:46 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

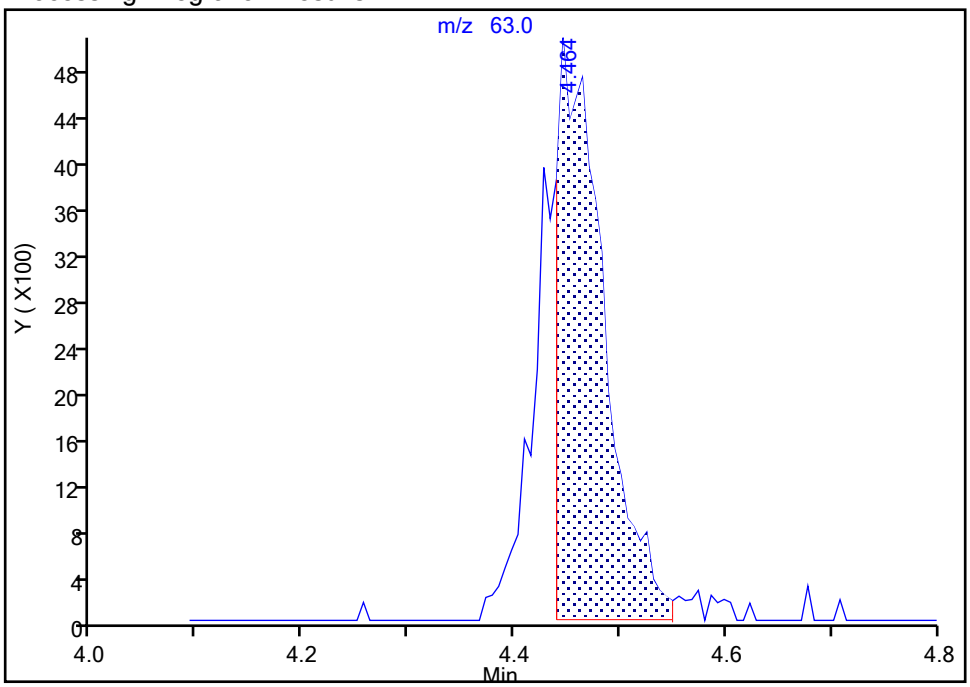
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

37 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

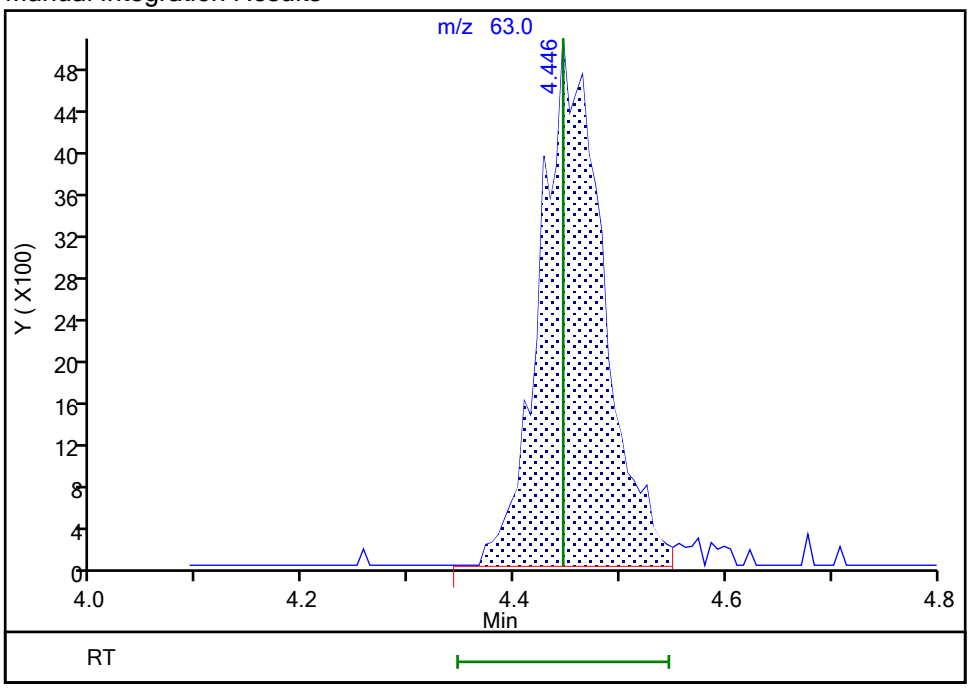
Processing Integration Results

RT: 4.46
Area: 15497
Amount: 0.143714
Amount Units: ug/l



Manual Integration Results

RT: 4.45
Area: 21055
Amount: 0.188324
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:28:05 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

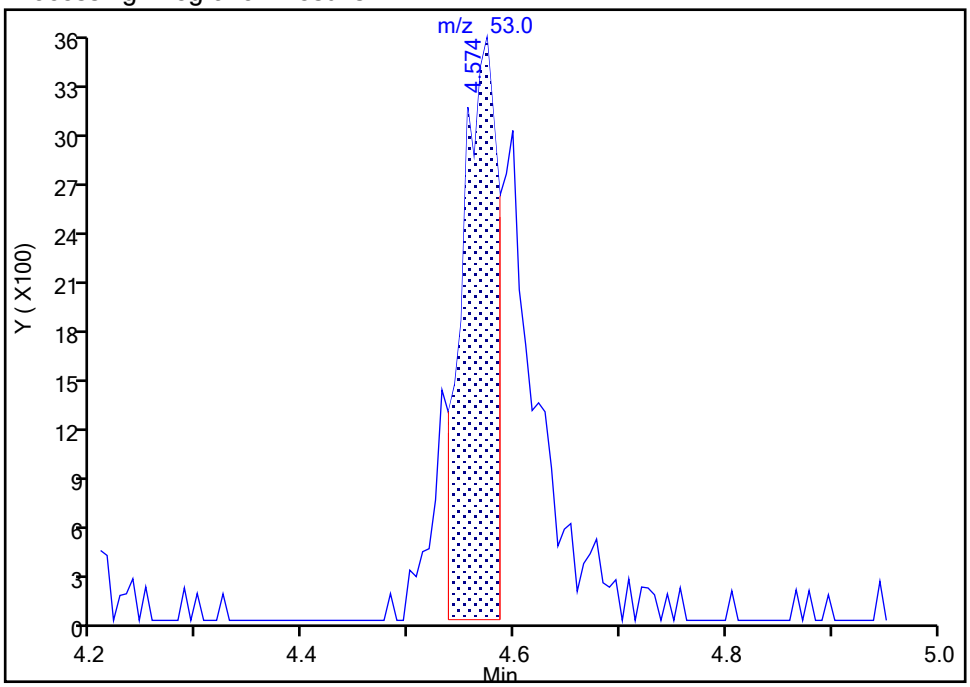
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

40 2-Chloro-1,3-butadiene, CAS: 126-99-8

Signal: 1

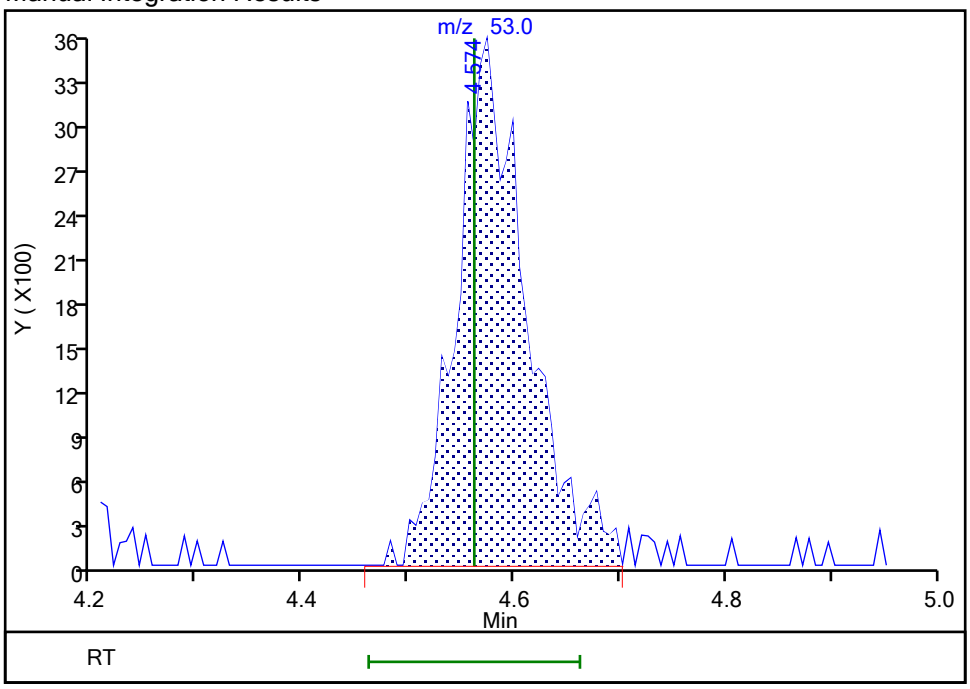
Processing Integration Results

RT: 4.57
Area: 8376
Amount: 0.205766
Amount Units: ug/l



Manual Integration Results

RT: 4.57
Area: 16240
Amount: 0.189810
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:28:11 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

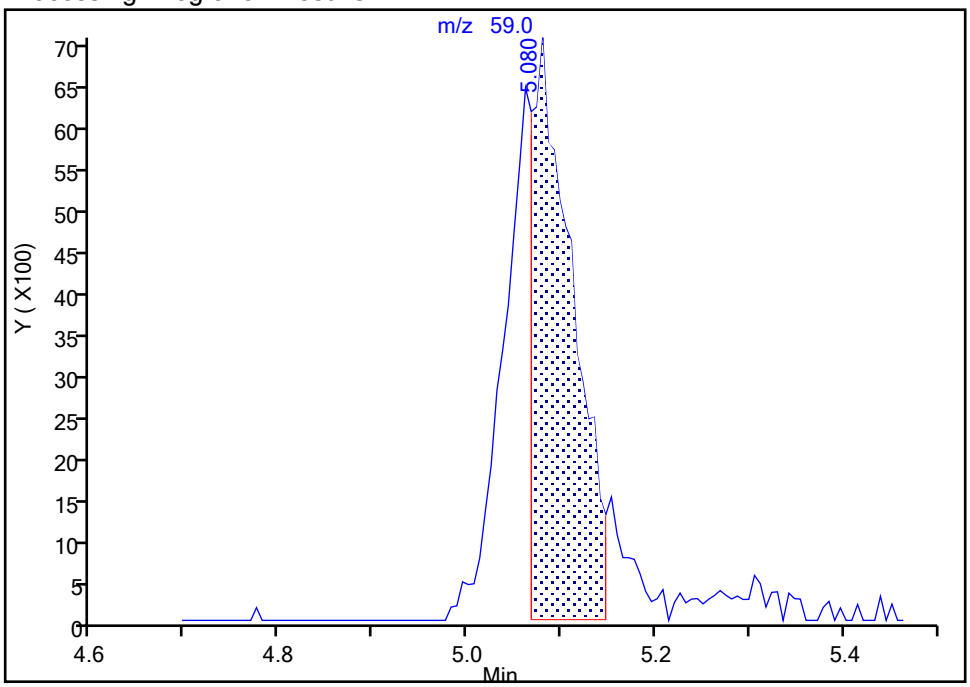
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

41 Tert-butyl ethyl ether, CAS: 637-92-3

Signal: 1

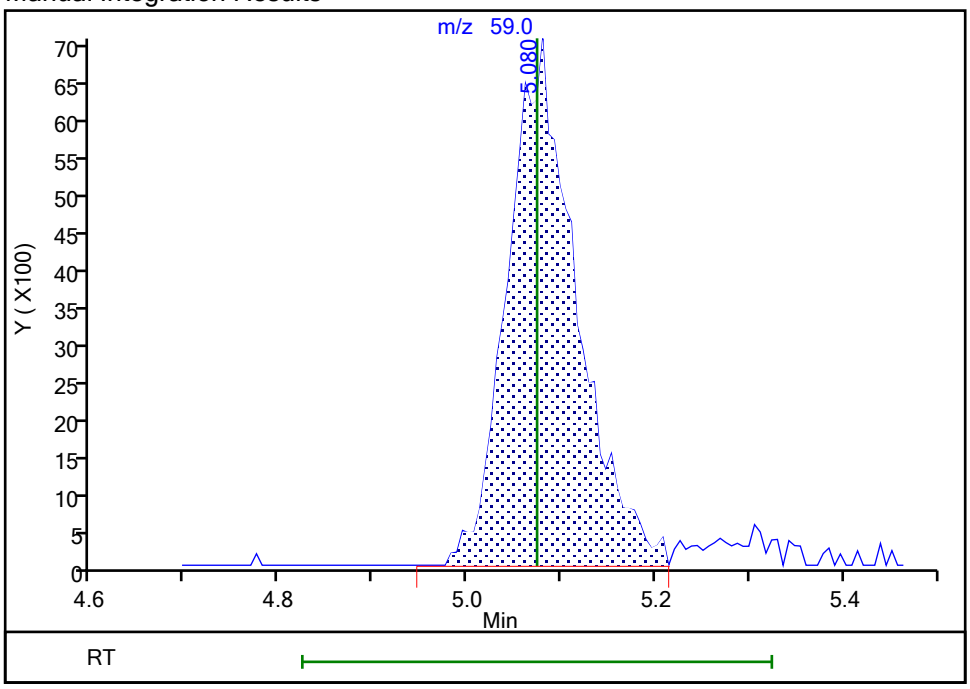
Processing Integration Results

RT: 5.08
Area: 21764
Amount: 0.117882
Amount Units: ug/l



Manual Integration Results

RT: 5.08
Area: 36032
Amount: 0.184953
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:28:16 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

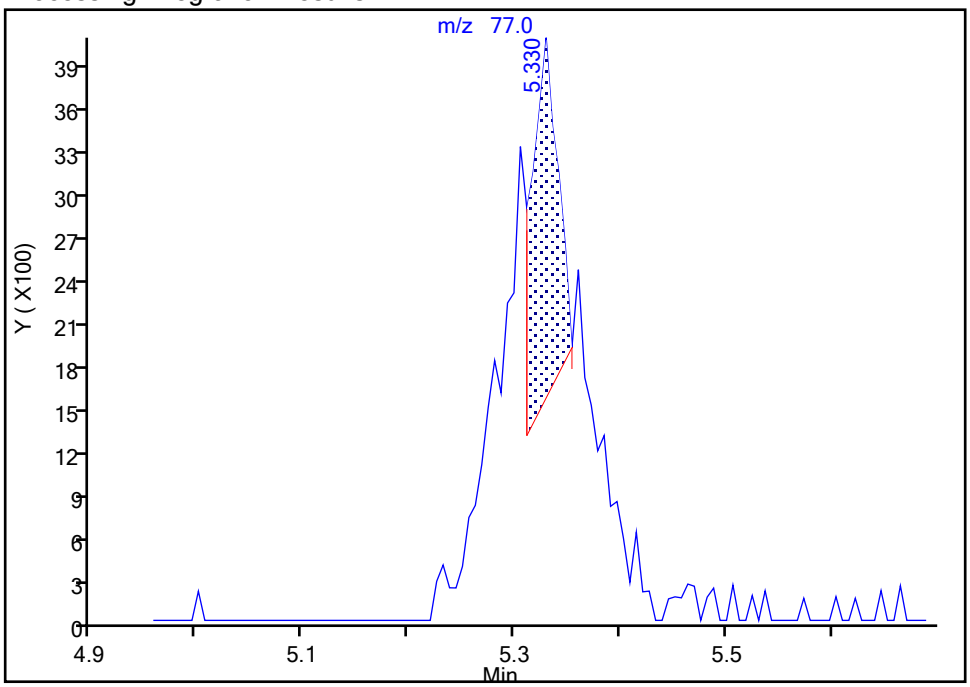
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

44 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

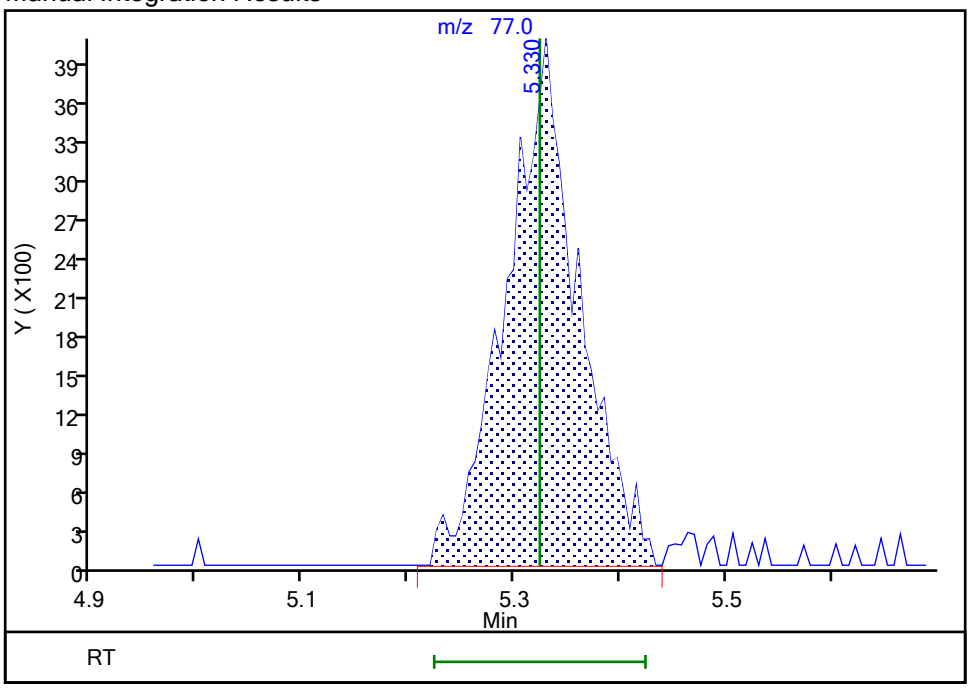
Processing Integration Results

RT: 5.33
Area: 4350
Amount: 0.261793
Amount Units: ug/l



Manual Integration Results

RT: 5.33
Area: 19395
Amount: 0.217237
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:28:26 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

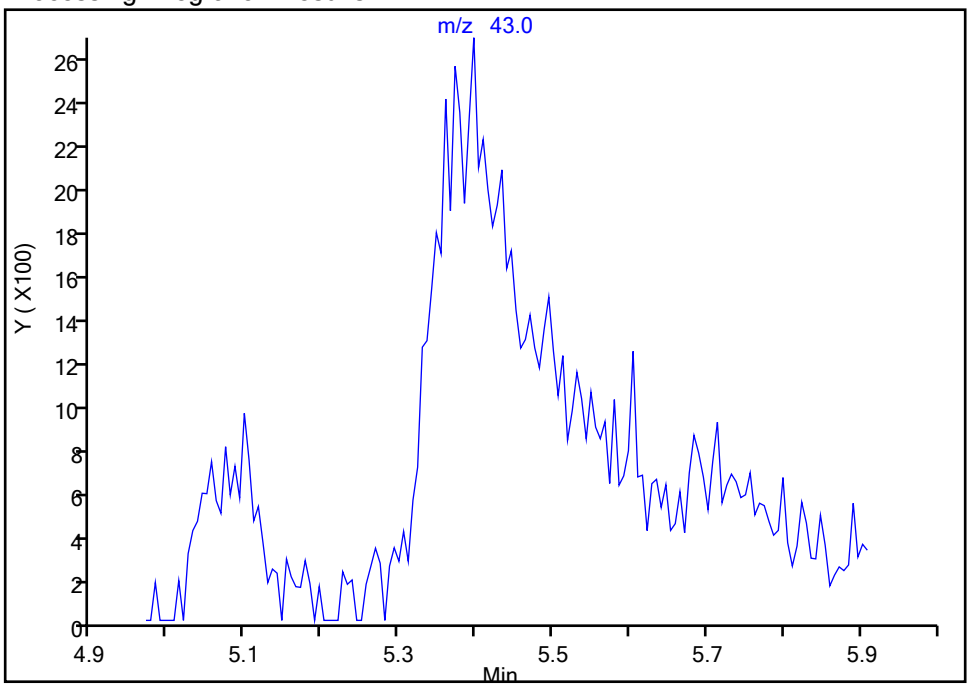
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

42 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

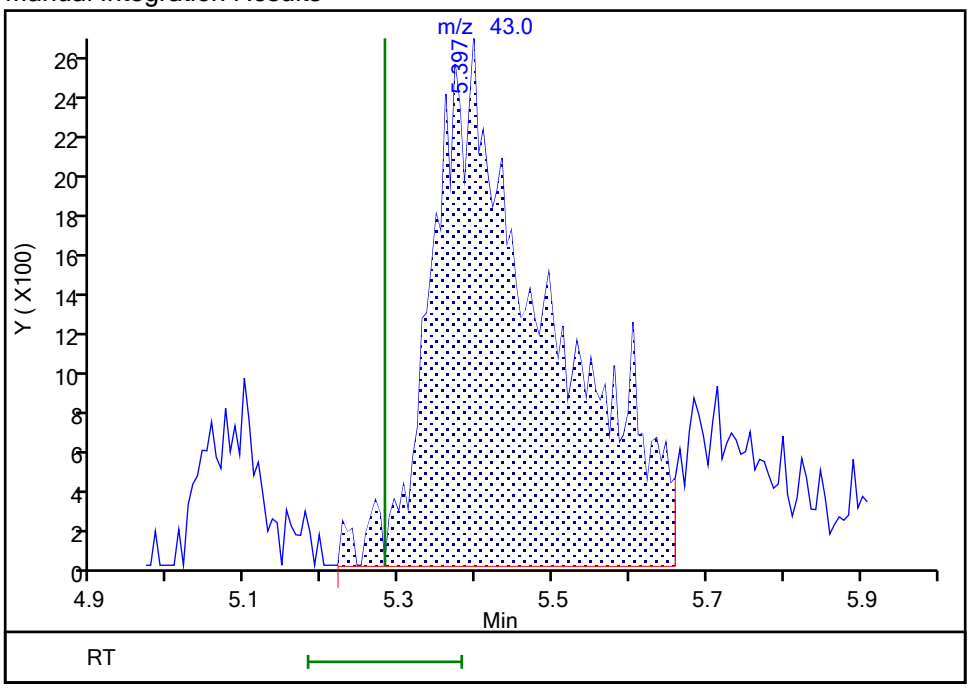
Not Detected
Expected RT: 5.28

Processing Integration Results



Manual Integration Results

RT: 5.40
Area: 27785
Amount: 1.874511
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:28:19 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

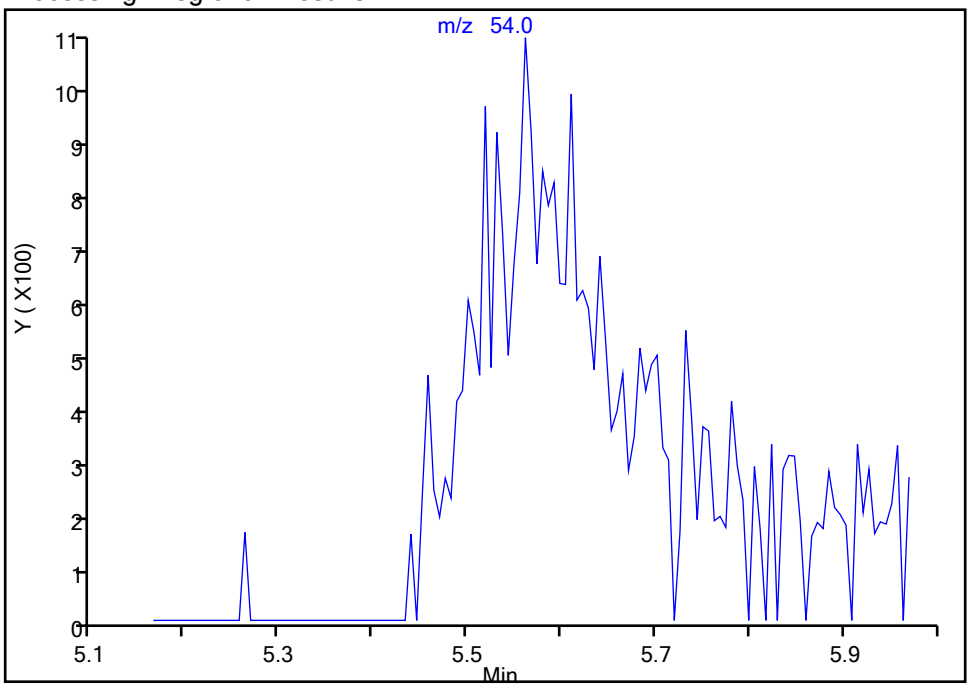
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

45 Propionitrile, CAS: 107-12-0

Signal: 1

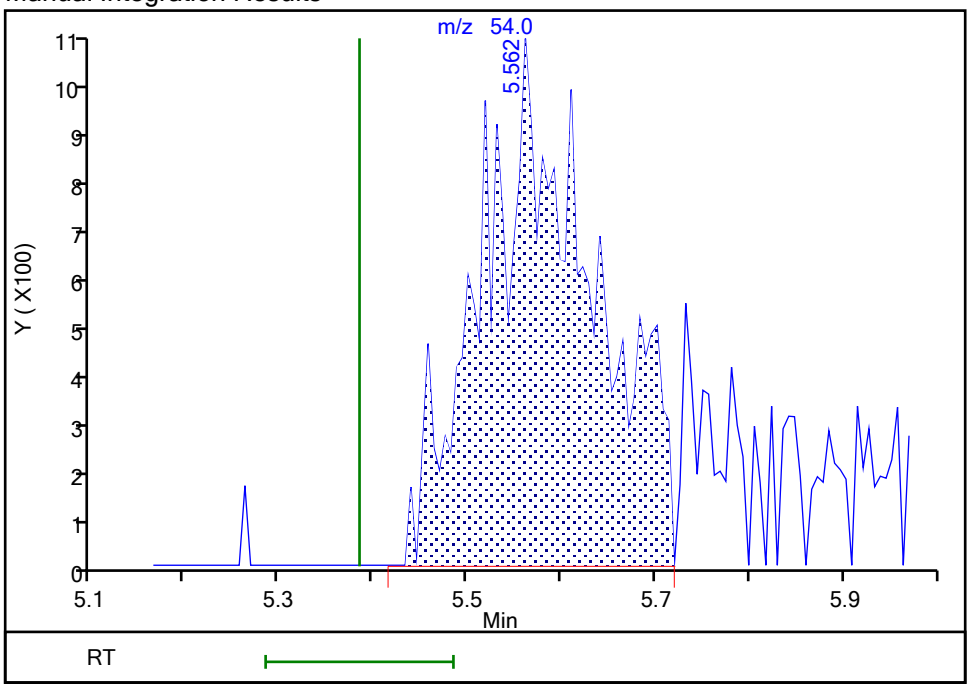
Not Detected
Expected RT: 5.38

Processing Integration Results



Manual Integration Results

RT: 5.56
Area: 8640
Amount: 2.606132
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:28:31 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

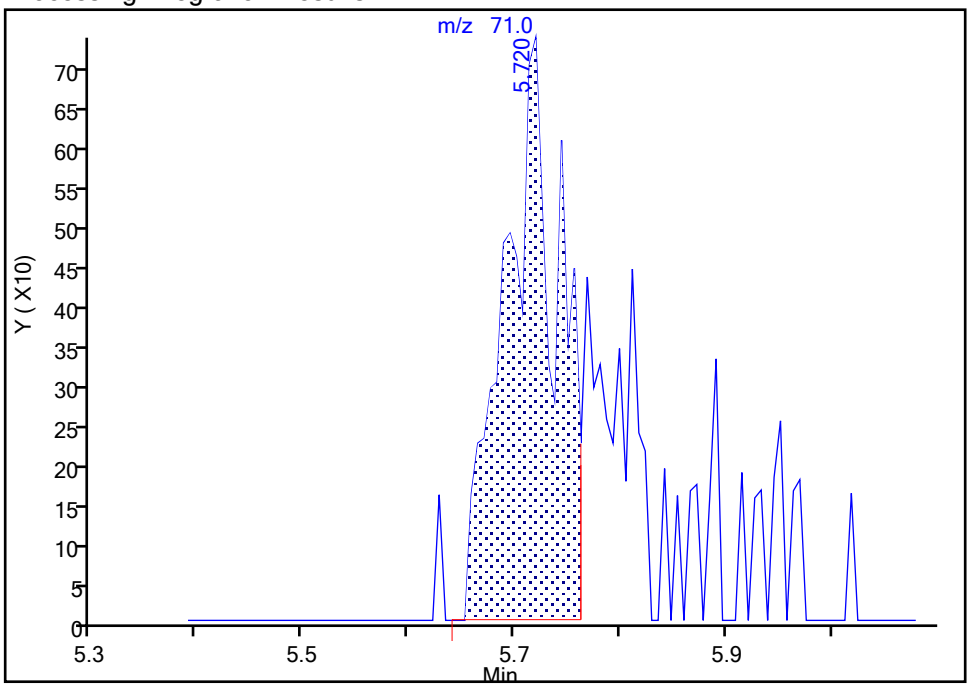
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

49 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

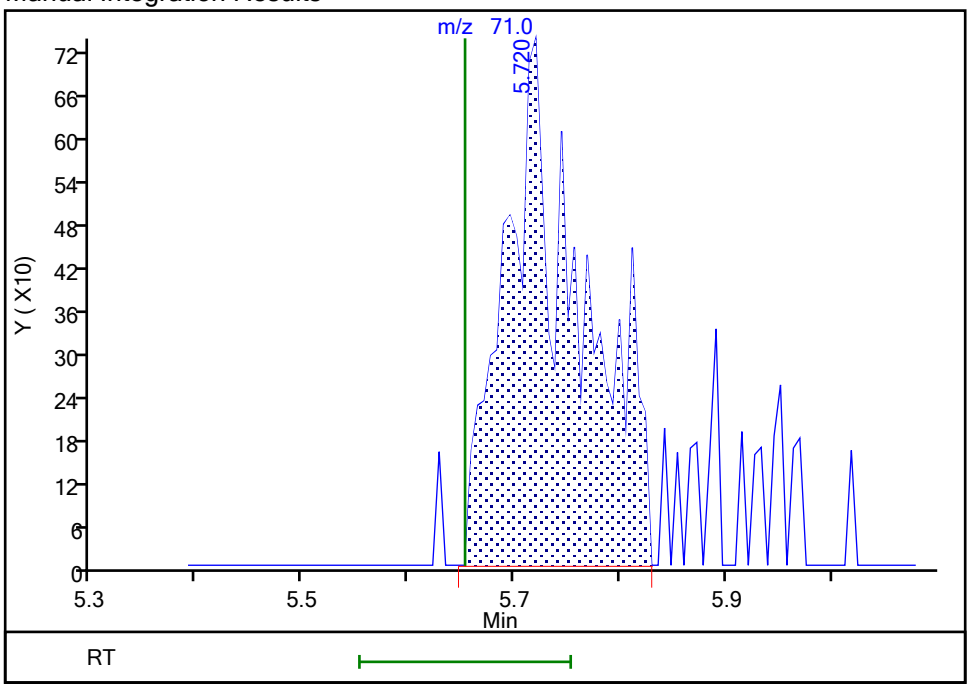
Processing Integration Results

RT: 5.72
Area: 2616
Amount: 0.562222
Amount Units: ug/l



Manual Integration Results

RT: 5.72
Area: 3689
Amount: 0.845856
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:28:38 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

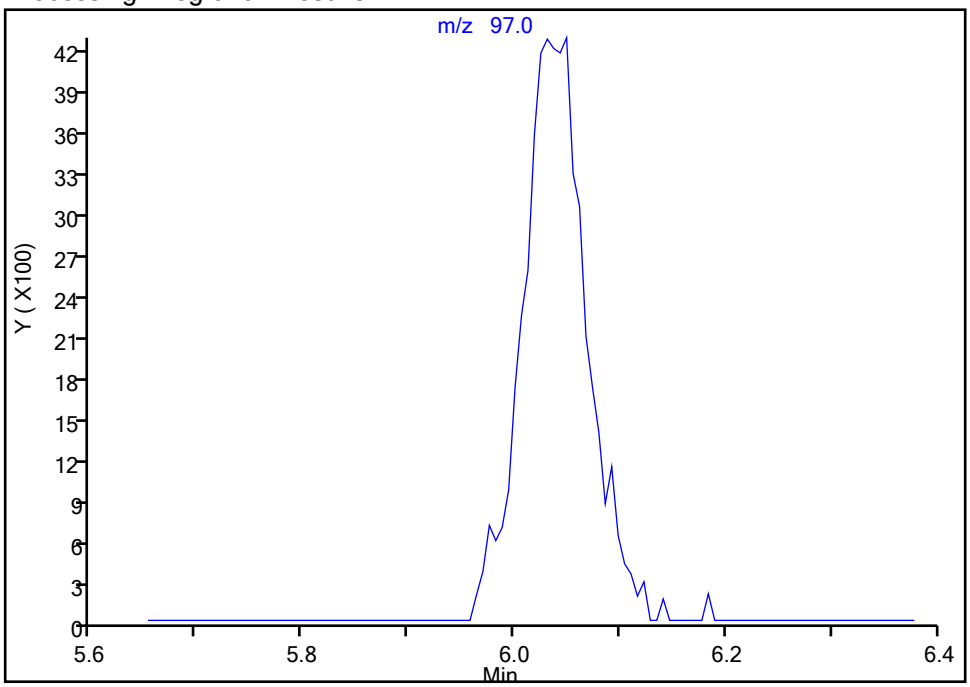
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

53 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

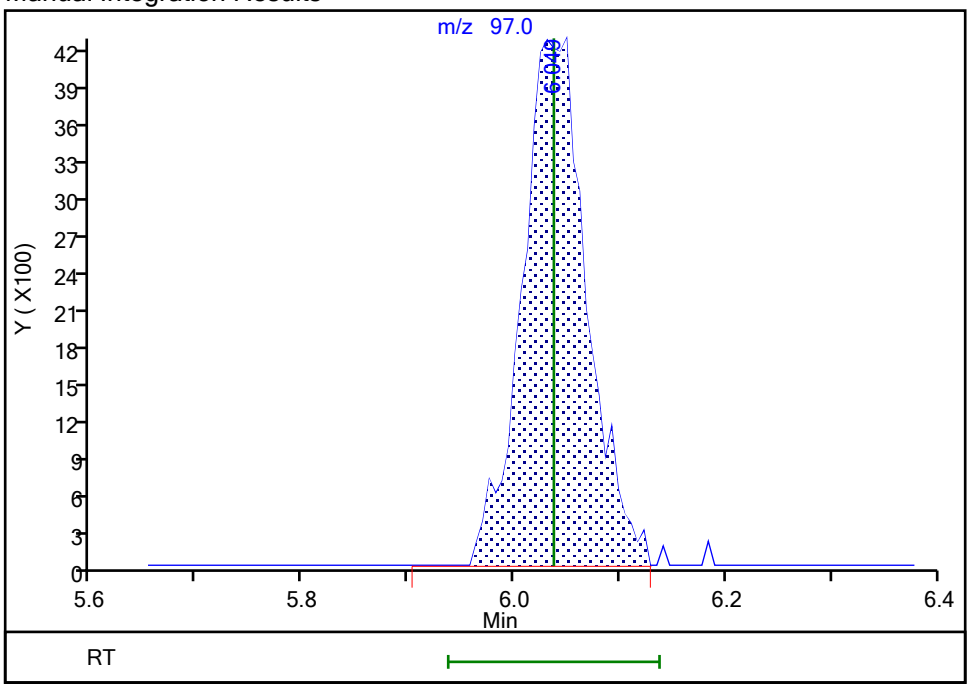
Not Detected
Expected RT: 6.04

Processing Integration Results



Manual Integration Results

RT: 6.05
Area: 18185
Amount: 0.195279
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:28:45 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

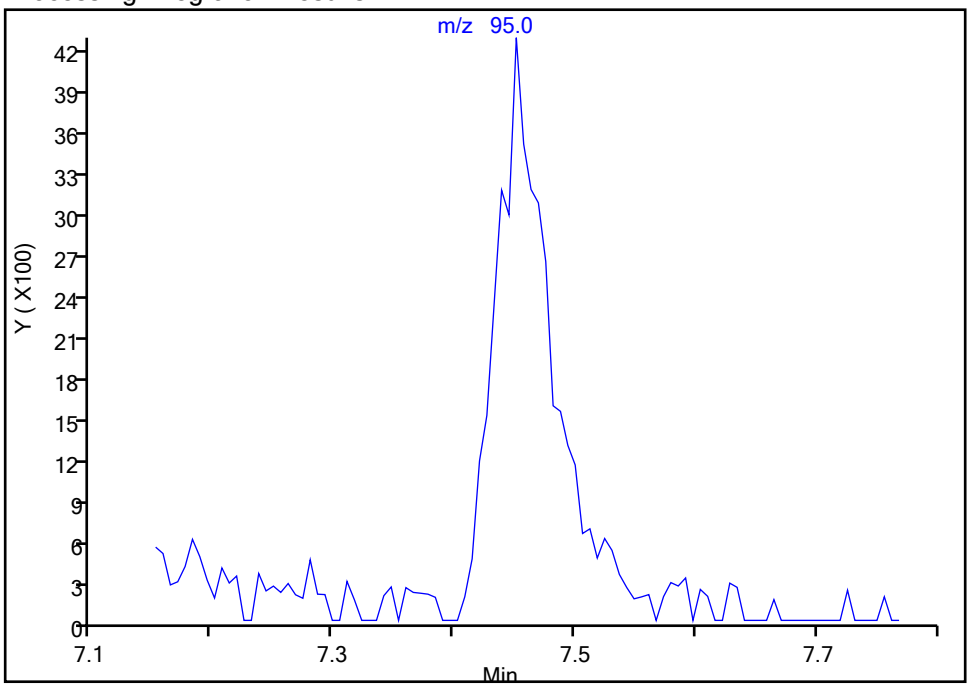
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6

Signal: 1

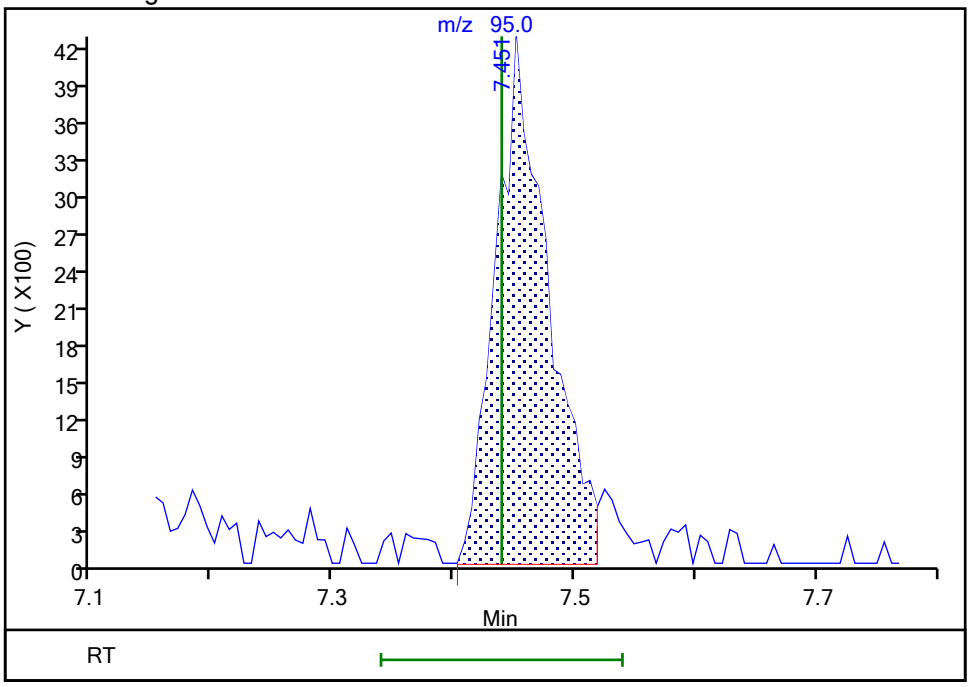
Not Detected
Expected RT: 7.44

Processing Integration Results



Manual Integration Results

RT: 7.45
Area: 13043
Amount: 0.190644
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:30:08 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

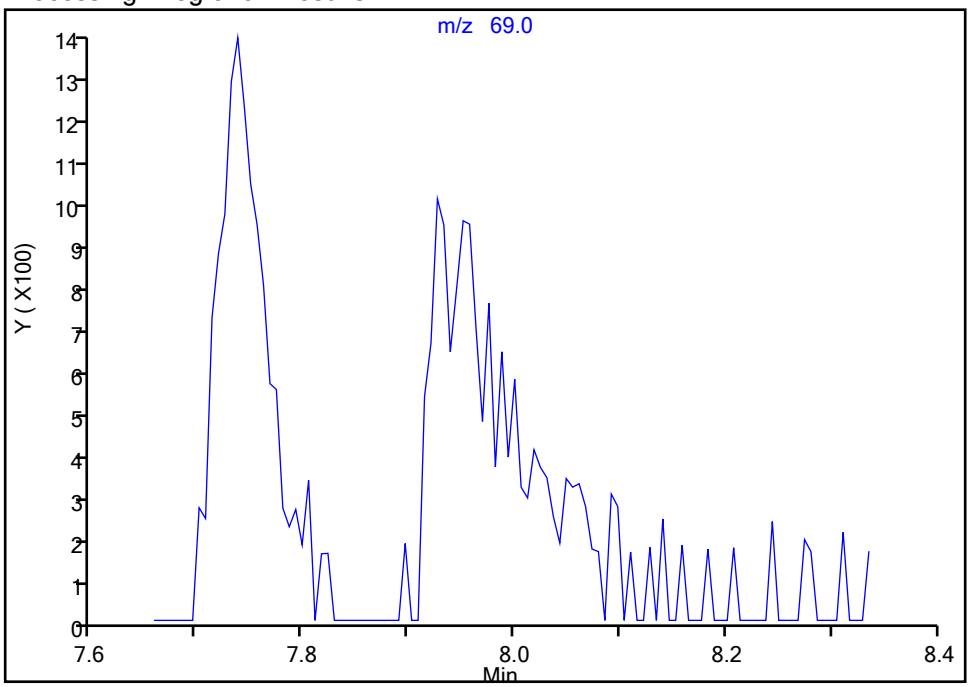
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

73 Methyl methacrylate, CAS: 80-62-6

Signal: 1

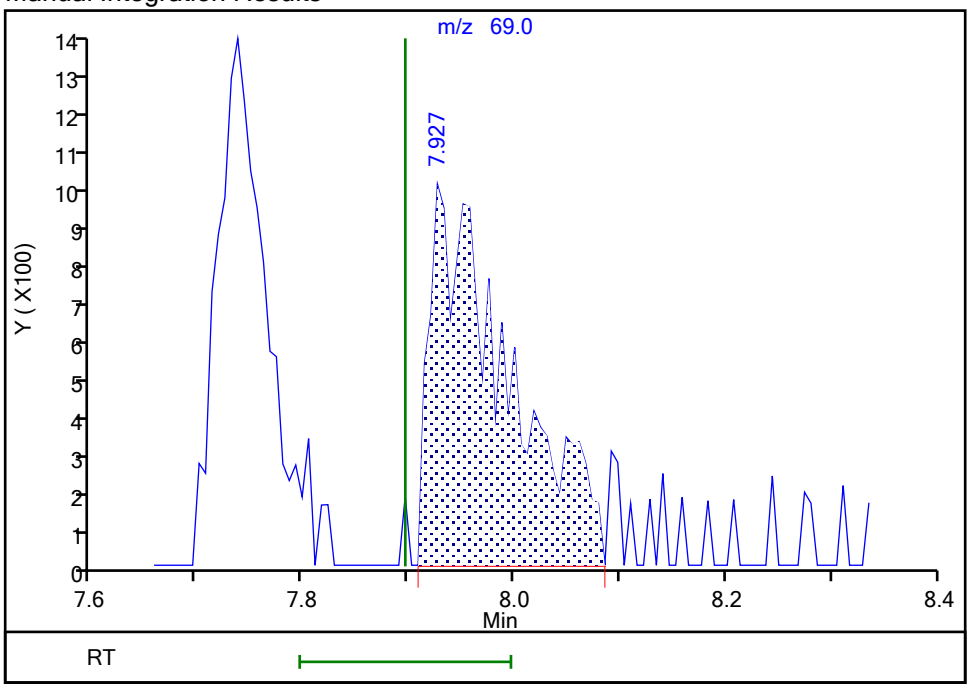
Not Detected
Expected RT: 7.90

Processing Integration Results



Manual Integration Results

RT: 7.93
Area: 5037
Amount: 0.164415
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:30:24 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

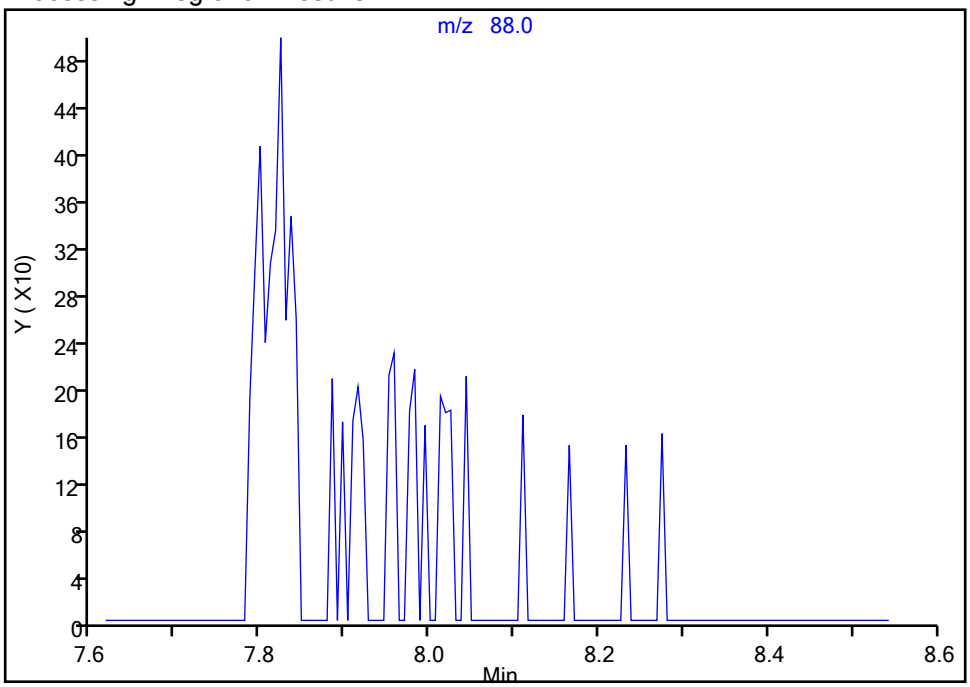
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

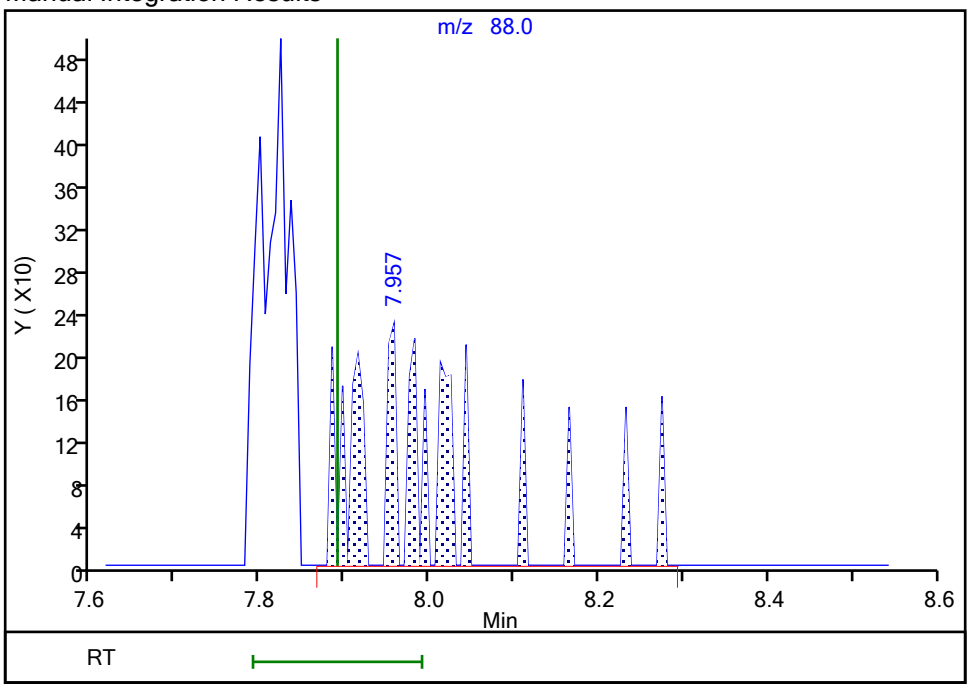
Not Detected
Expected RT: 7.89

Processing Integration Results



Manual Integration Results

RT: 7.96
Area: 1206
Amount: 4.680591
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:30:16 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

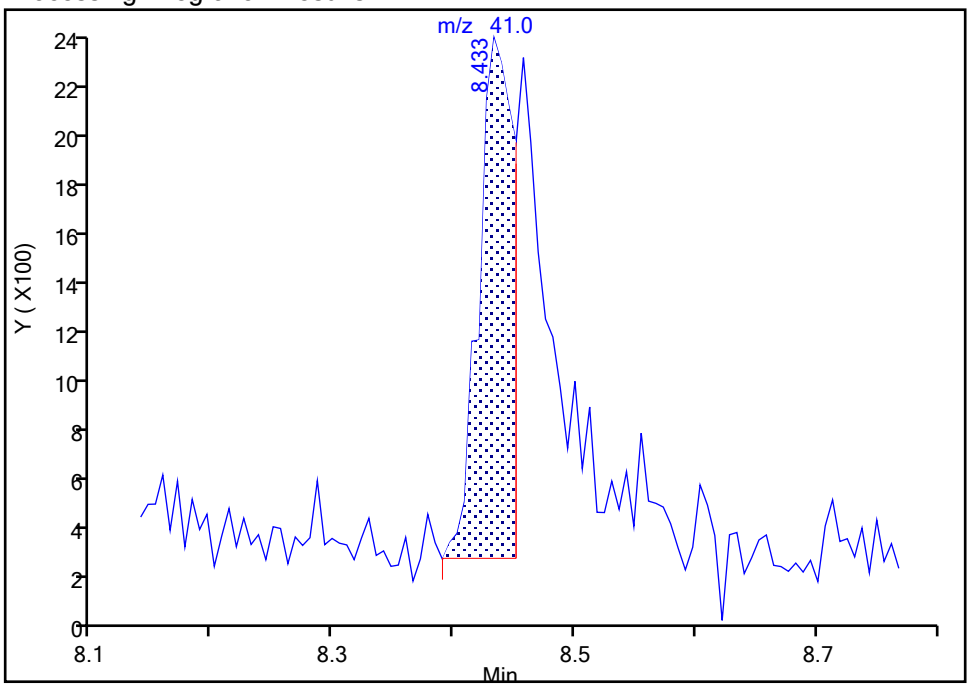
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

77 2-Nitropropane, CAS: 79-46-9

Signal: 1

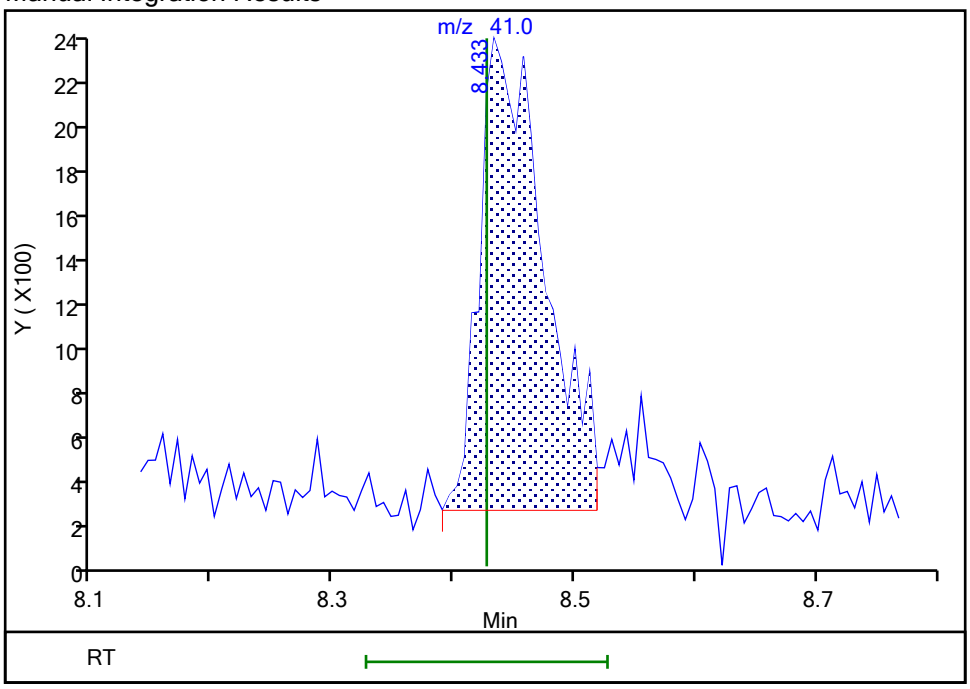
Processing Integration Results

RT: 8.43
Area: 4242
Amount: 0.998506
Amount Units: ug/l



Manual Integration Results

RT: 8.43
Area: 7819
Amount: 0.938533
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:30:42 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

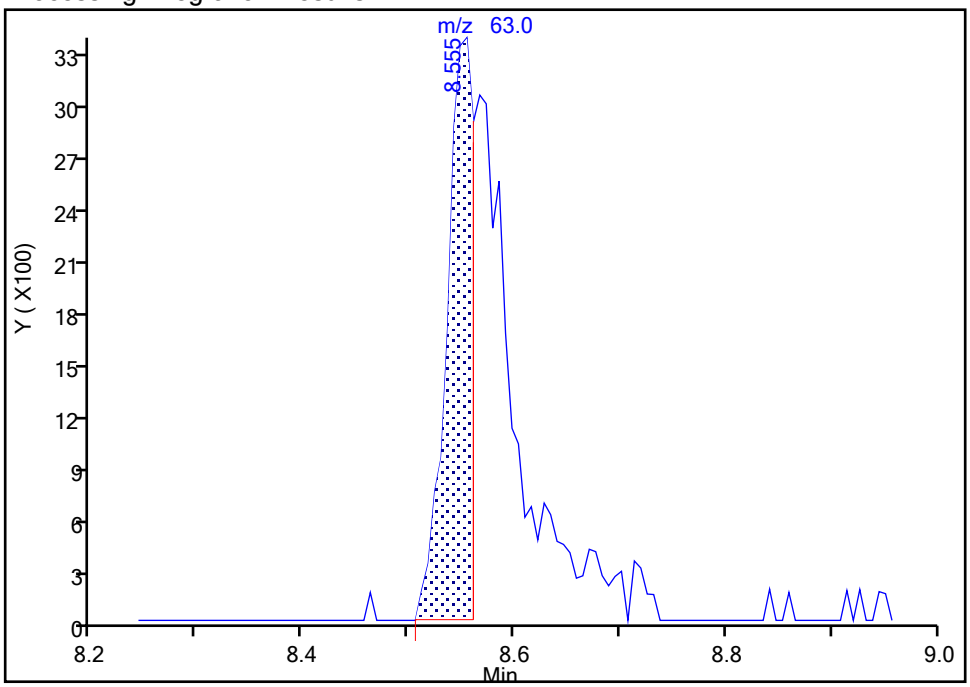
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

78 1-Bromo-2-chloroethane, CAS: 107-04-0

Signal: 1

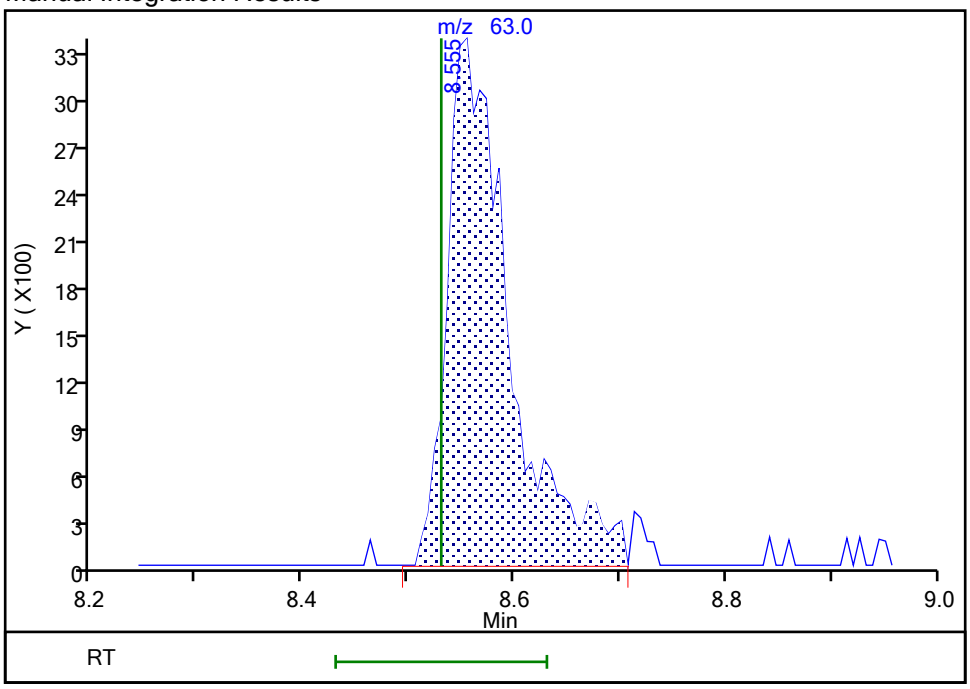
Processing Integration Results

RT: 8.55
Area: 5994
Amount: 0.115134
Amount Units: ug/l



Manual Integration Results

RT: 8.55
Area: 13791
Amount: 0.193678
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:30:48 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

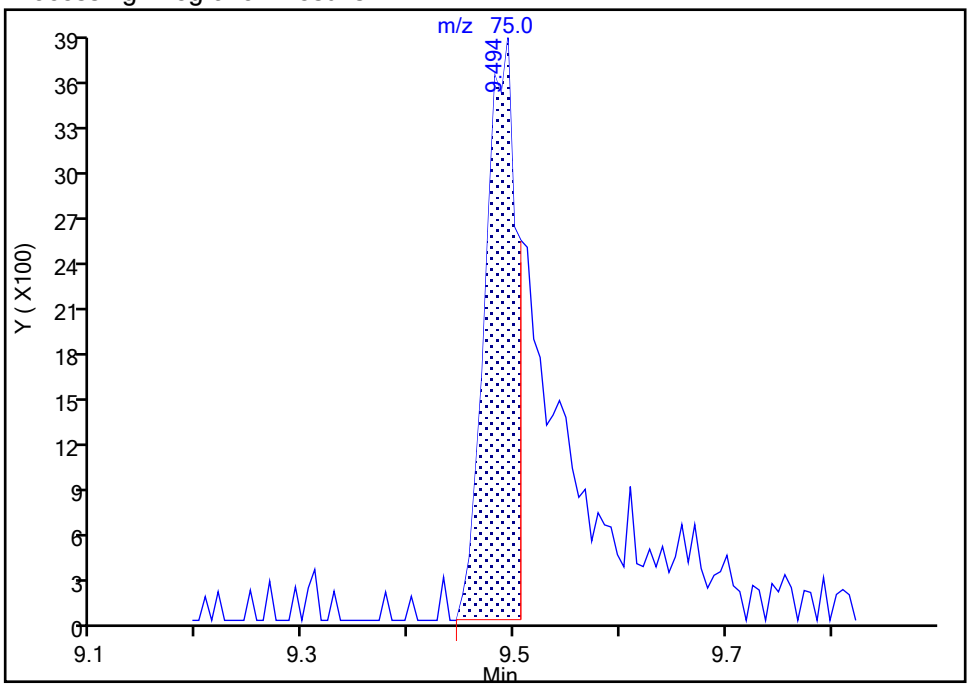
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

85 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

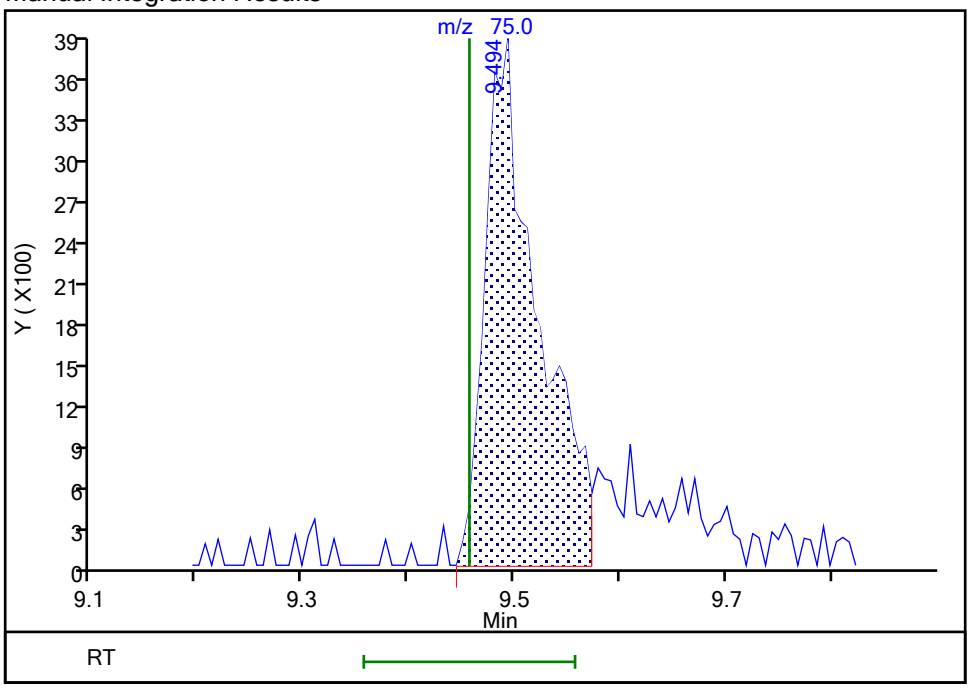
Processing Integration Results

RT: 9.49
Area: 7925
Amount: 0.199928
Amount Units: ug/l



Manual Integration Results

RT: 9.49
Area: 13236
Amount: 0.161318
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:31:12 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

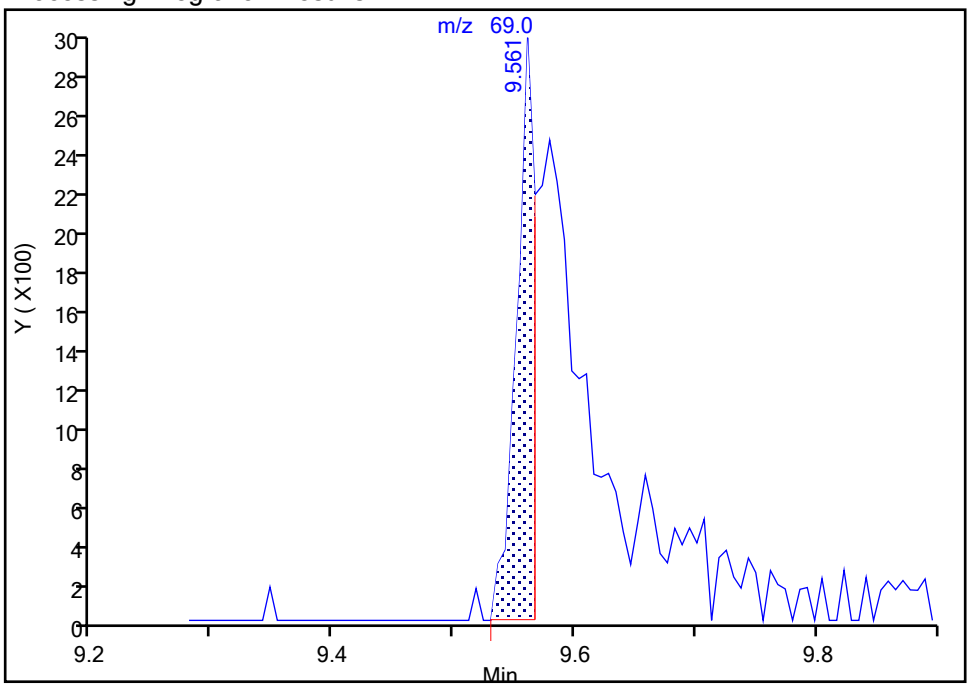
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

86 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

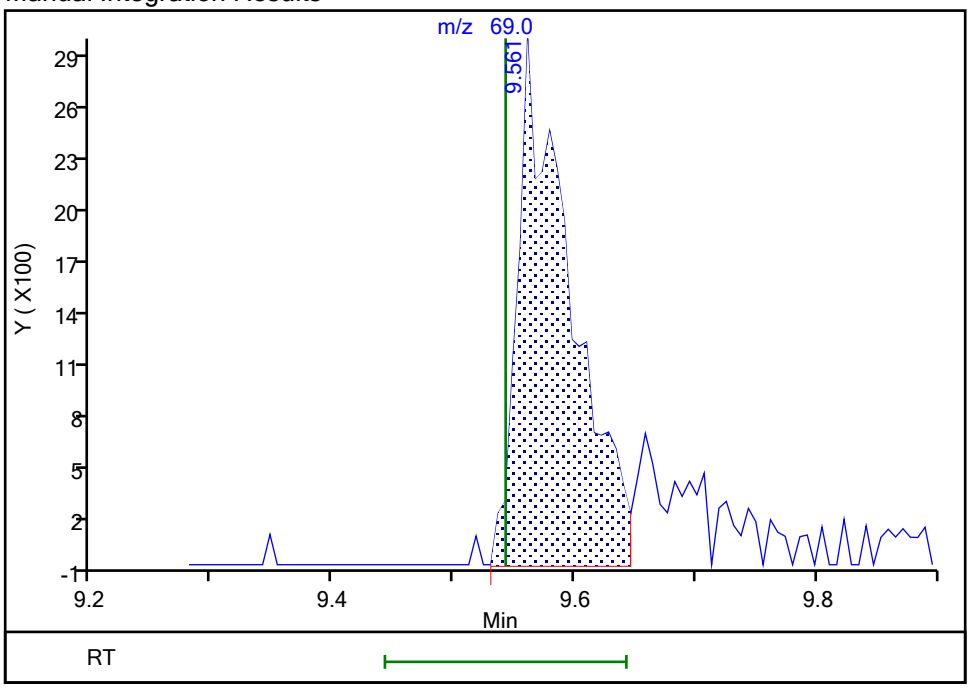
Processing Integration Results

RT: 9.56
Area: 3145
Amount: 0.198343
Amount Units: ug/l



Manual Integration Results

RT: 9.56
Area: 9013
Amount: 0.137920
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:31:30 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

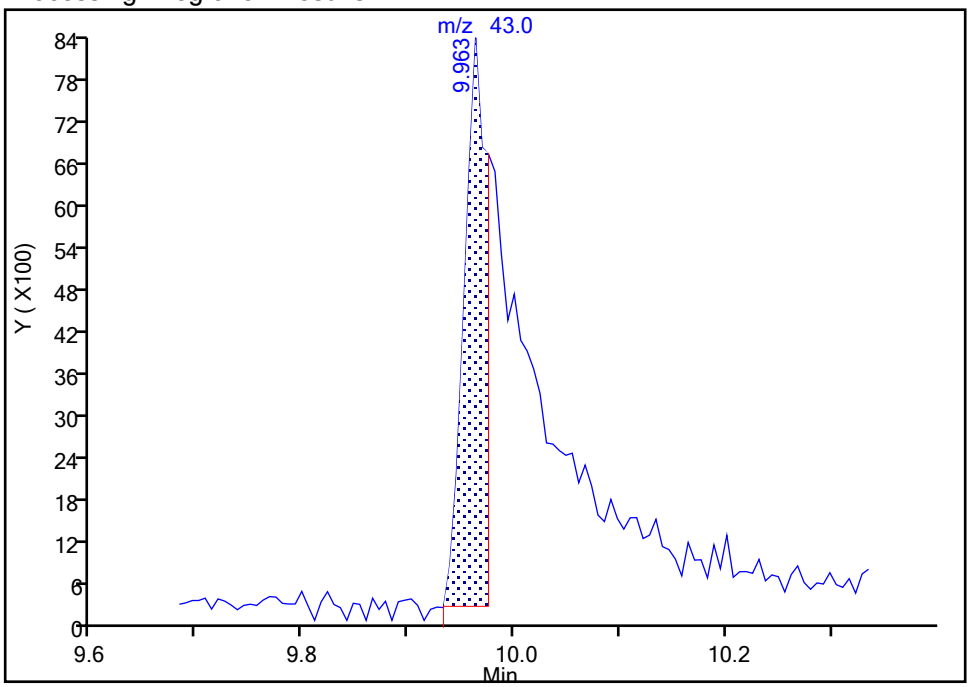
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

106 2-Hexanone, CAS: 591-78-6

Signal: 1

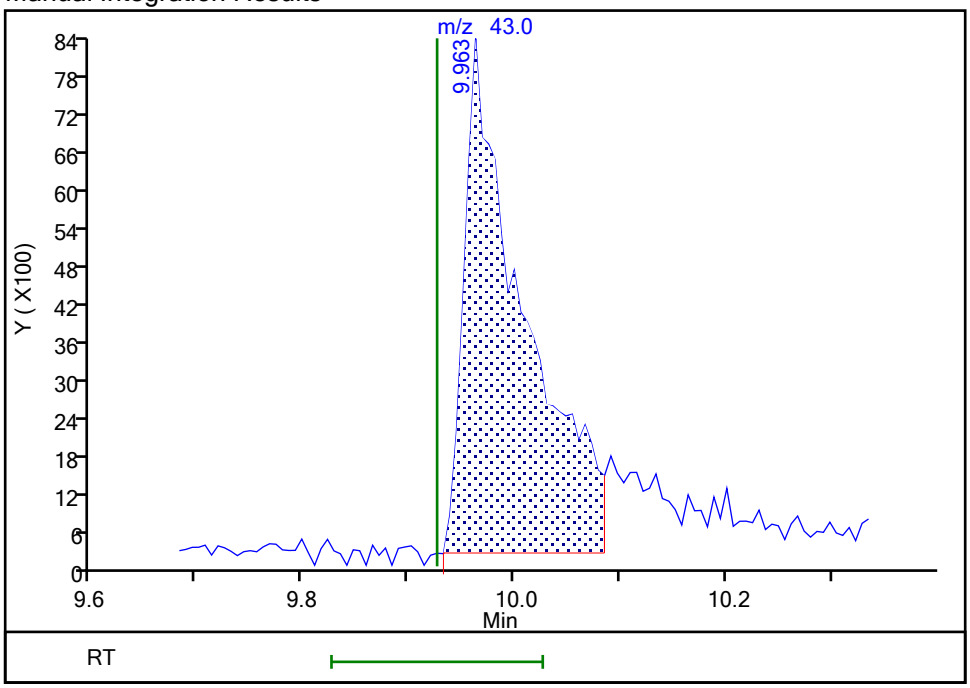
Processing Integration Results

RT: 9.96
Area: 12407
Amount: 2.074775
Amount Units: ug/l



Manual Integration Results

RT: 9.96
Area: 31916
Amount: 1.110312
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:31:56 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

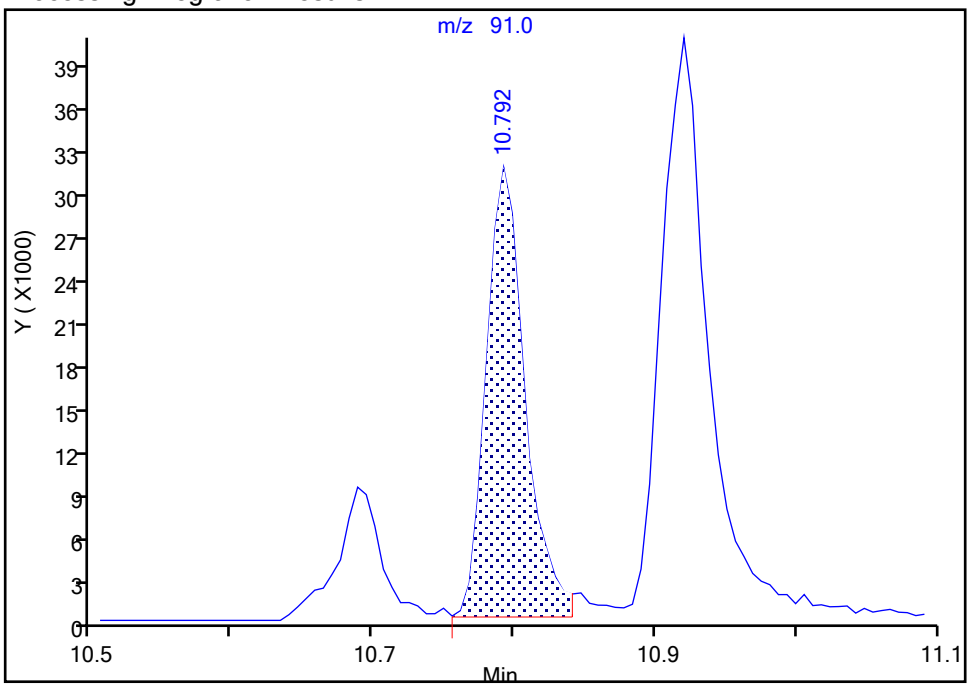
Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D
Injection Date: 10-Jul-2023 19:29:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

115 Ethylbenzene, CAS: 100-41-4

Signal: 1

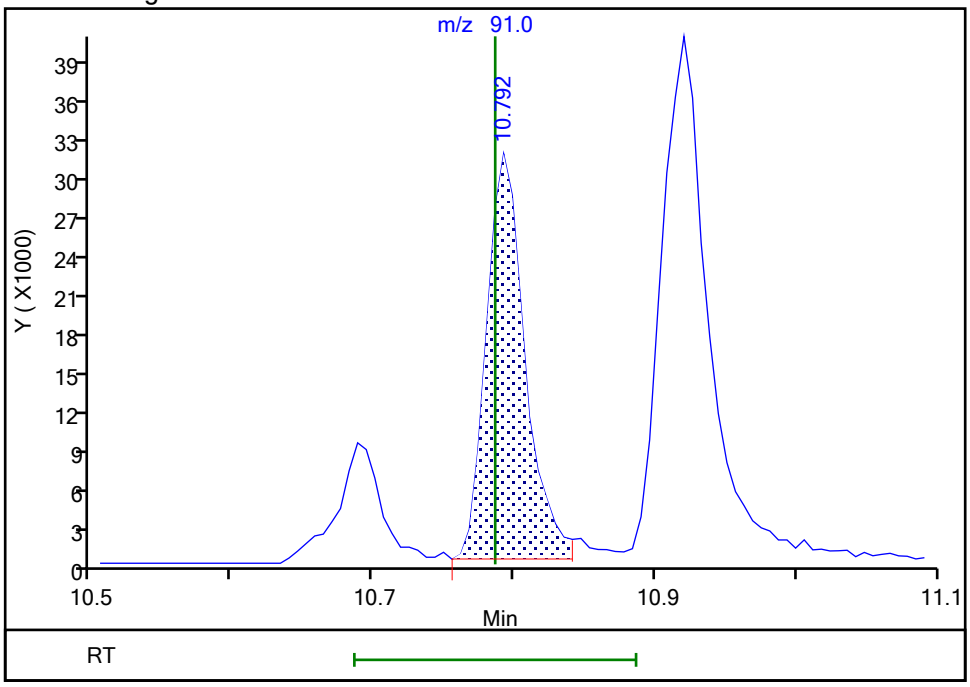
Processing Integration Results

RT: 10.79
Area: 59492
Amount: 0.162867
Amount Units: ug/l



Manual Integration Results

RT: 10.79
Area: 59492
Amount: 0.176529
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:39:21 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

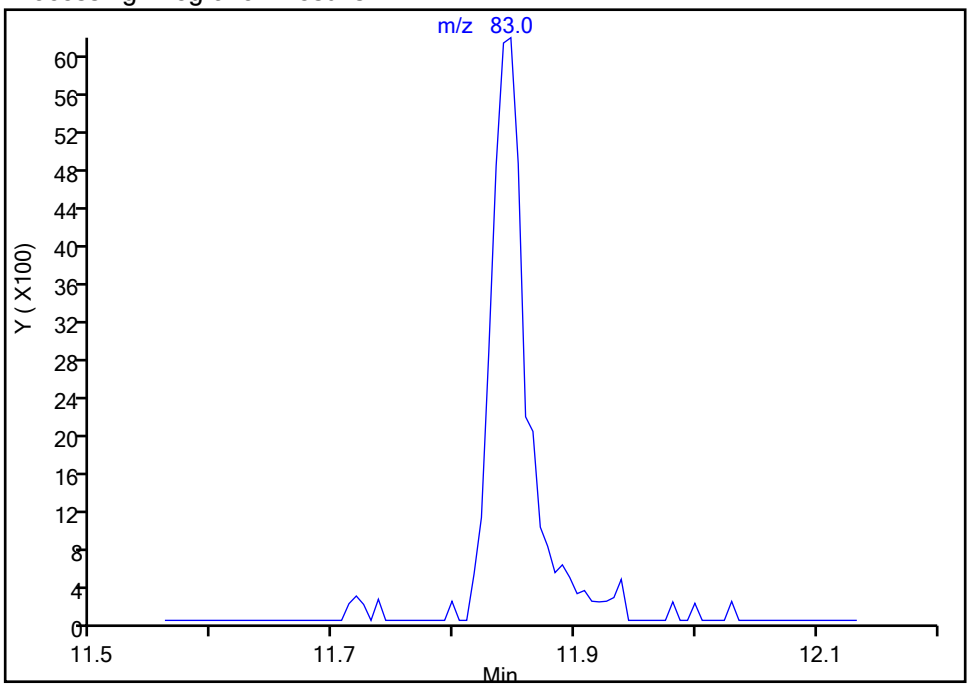
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

126 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Signal: 1

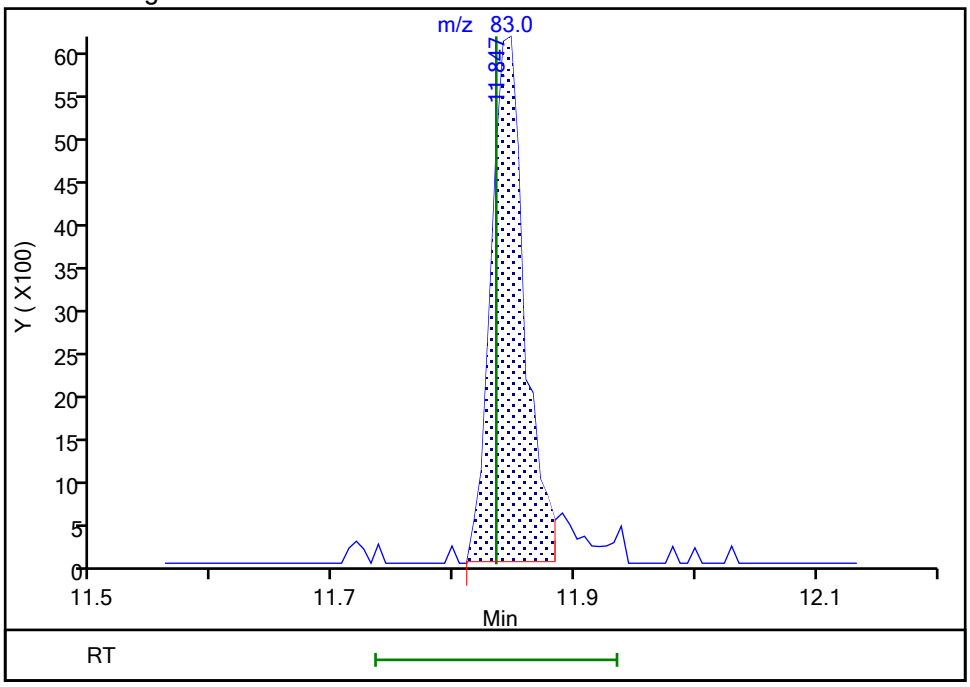
Not Detected
Expected RT: 11.83

Processing Integration Results



Manual Integration Results

RT: 11.85
Area: 11933
Amount: 0.180085
Amount Units: ug/l



Reviewer: UKEK, 11-Jul-2023 20:34:43 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

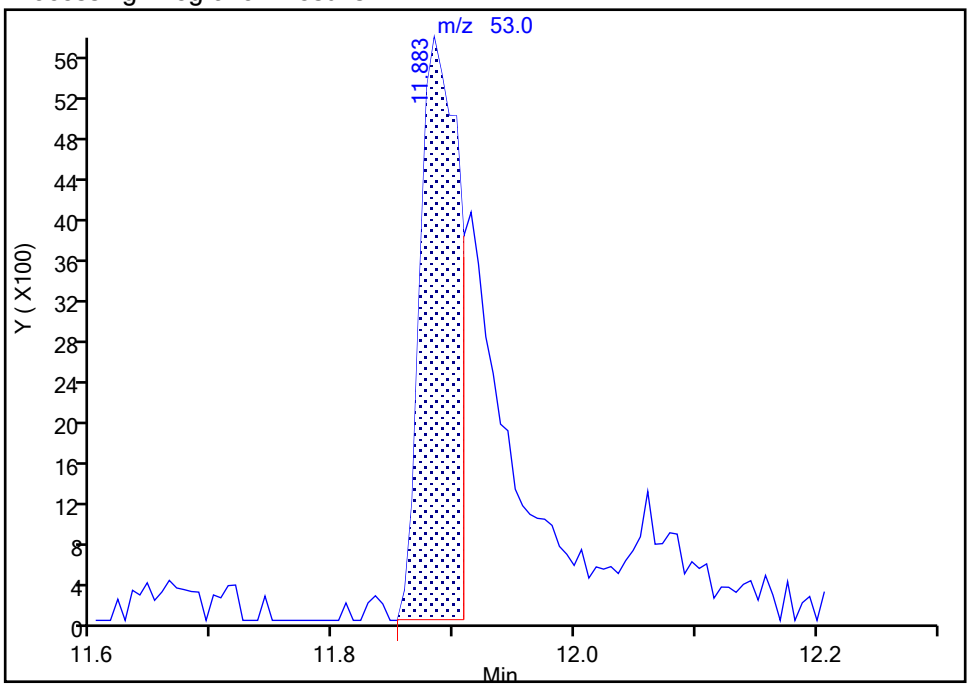
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X12.D				
Injection Date:	10-Jul-2023 19:29:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

127 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

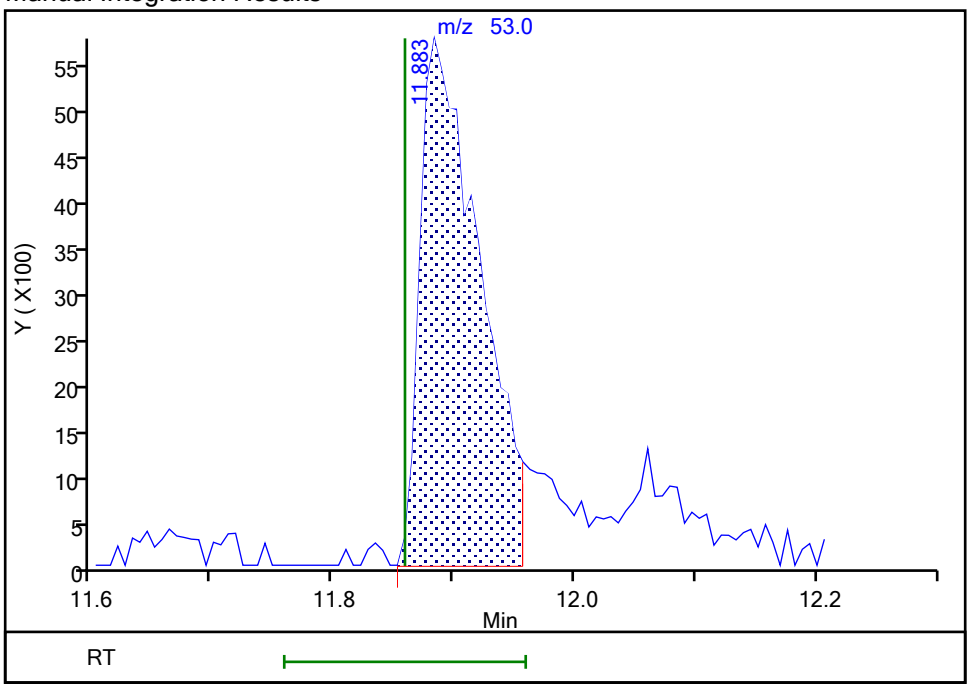
Processing Integration Results

RT: 11.88
Area: 12797
Amount: 2.845741
Amount Units: ug/l



Manual Integration Results

RT: 11.88
Area: 19758
Amount: 1.358446
Amount Units: ug/l



Reviewer: UKEK, 11-Jul-2023 20:35:21 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D
Lims ID: IC std2 0.5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Jul-2023 19:51:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-014
Misc. Info.: IC STD2 0.5
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:38:02 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:40:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.678	1.684	-0.006	52	22298	0.5000	0.3671	M
5 Chloromethane	50	1.837	1.849	-0.012	99	39540	0.5000	0.5140	
6 Vinyl chloride	62	1.928	1.934	-0.006	97	35508	0.5000	0.4834	
7 Butadiene	39	1.934	1.940	-0.006	90	29471	0.5000	0.4142	M
9 Bromomethane	94	2.203	2.209	-0.006	89	28892	0.5000	0.5031	
10 Chloroethane	64	2.264	2.270	-0.006	99	22076	0.5000	0.5108	
11 Dichlorofluoromethane	67	2.471	2.471	0.000	97	59252	0.5000	0.5052	
13 Pentane	43	2.526	2.526	0.000	95	43930	0.5000	0.5252	
12 Trichlorofluoromethane	101	2.532	2.532	0.000	49	33437	0.5000	0.4031	
14 Ethyl ether	59	2.709	2.702	0.007	92	23296	0.5001	0.4929	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.794	2.788	0.006	96	31592	0.5000	0.4854	
17 Acrolein	56	2.855	2.843	0.012	100	162482	25.0	24.7	
18 1,1-Dichloroethene	96	2.952	2.952	0.000	97	26740	0.5000	0.4977	
20 Acetone	43	3.013	2.977	0.036	93	44911	5.00	5.35	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.001	3.001	0.000	87	23979	0.5000	0.4524	
22 Iodomethane	142	3.111	3.117	-0.006	97	58709	0.5000	0.5089	
24 Isopropyl alcohol	45	3.111	3.117	-0.006	51	21501	10.0	8.69	
23 Ethyl bromide	108	3.135	3.135	0.000	97	27291	0.4995	0.5206	
25 Carbon disulfide	76	3.196	3.202	-0.006	99	91539	0.5000	0.4817	
26 Methyl acetate	43	3.343	3.324	0.019	27	12338	0.5000	0.4665	M
29 3-Chloro-1-propene	41	3.337	3.336	0.001	92	47777	0.5000	0.5043	
30 Methylene Chloride	84	3.495	3.495	0.000	90	35568	0.5000	0.5296	
* 31 t-Butyl alcohol-d10 (IS)	65	3.550	3.538	0.012	96	176691	50.0	50.0	M
32 2-Methyl-2-propanol	59	3.647	3.653	-0.006	34	43294	10.0	11.7	M
33 Acrylonitrile	53	3.843	3.788	0.055	23	15698	1.25	1.33	
35 trans-1,2-Dichloroethene	96	3.843	3.830	0.013	98	32481	0.5000	0.4981	
34 Methyl tert-butyl ether	73	3.824	3.830	-0.006	90	88578	0.5000	0.5125	
36 Hexane	57	4.208	4.208	0.000	93	40210	0.5000	0.4836	
37 1,1-Dichloroethane	63	4.446	4.446	0.000	96	59118	0.5000	0.5168	
39 Isopropyl ether	45	4.519	4.513	0.006	96	108900	0.5000	0.5054	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Chloro-1,3-butadiene	53	4.556	4.562	-0.006	90	41584	0.5000	0.4750	M
41 Tert-butyl ethyl ether	59	5.074	5.074	0.000	98	100691	0.5000	0.5052	
42 2-Butanone (MEK)	43	5.330	5.281	0.049	99	75809	5.00	4.63	
43 cis-1,2-Dichloroethene	96	5.318	5.312	0.006	81	35258	0.5000	0.5041	
44 2,2-Dichloropropane	77	5.318	5.324	-0.006	75	45793	0.5000	0.5013	M
45 Propionitrile	54	5.537	5.385	0.152	33	38088	10.0	10.4	a
47 Methacrylonitrile	67	5.617	5.592	0.025	91	78731	5.00	4.54	
49 Tetrahydrofuran	71	5.714	5.653	0.061	56	11030	2.50	2.29	M
48 Chlorobromomethane	128	5.653	5.653	0.000	89	17539	0.5000	0.5220	
50 Chloroform	83	5.818	5.818	0.000	92	56744	0.5000	0.5013	
53 1,1,1-Trichloroethane	97	6.043	6.037	0.006	39	48038	0.5000	0.5042	
$ 54 Dibromofluoromethane (Surr)	113	6.037	6.037	0.000	94	581092	10.0	10.1	
55 Cyclohexane	56	6.123	6.123	0.001	91	50561	0.5000	0.4725	
S 52 1,2-Dichloroethene, Total	100				0			1.00	
56 Carbon tetrachloride	117	6.238	6.244	-0.006	97	39575	0.5000	0.4793	
57 1,1-Dichloropropene	75	6.263	6.257	0.006	95	41451	0.5000	0.4854	
58 Isobutyl alcohol	41	6.555	6.482	0.073	34	11292	25.0	30.1	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.507	6.507	0.000	99	123072	10.0	10.1	
60 Benzene	78	6.519	6.525	-0.006	94	137128	0.5000	0.5029	
61 1,2-Dichloroethane	62	6.610	6.598	0.012	95	36323	0.5000	0.5222	
64 Tert-amyl methyl ether	73	6.738	6.738	0.000	98	91298	0.5000	0.4903	
* 65 Fluorobenzene (IS)	96	6.946	6.952	-0.006	99	2469842	10.0	10.0	
66 n-Heptane	43	6.964	6.964	0.000	93	41417	0.5000	0.4606	
67 n-Butanol	56	7.598	7.409	0.189	91	6030	43.8	55.0	Ma
68 Trichloroethene	95	7.445	7.439	0.006	96	34902	0.5000	0.4986	a
69 Methylcyclohexane	83	7.738	7.738	0.000	83	51270	0.5000	0.4517	M
70 1,2-Dichloropropane	63	7.775	7.775	0.000	97	36176	0.5000	0.5033	
71 2-ethoxy-2-methyl butane	87	7.805	7.811	-0.006	94	54534	0.5000	0.4884	
72 Dibromomethane	93	7.909	7.890	0.019	95	16257	0.5000	0.4864	
74 1,4-Dioxane	88	8.019	7.890	0.129	32	6777	25.0	23.8	M
73 Methyl methacrylate	69	7.927	7.897	0.030	91	14787	0.5000	0.4365	
76 Dichlorobromomethane	83	8.140	8.140	0.000	99	41451	0.5000	0.4991	
77 2-Nitropropane	41	8.433	8.427	0.006	96	20017	2.50	2.17	
78 1-Bromo-2-chloroethane	63	8.549	8.531	0.018	98	34825	0.5000	0.4780	
80 cis-1,3-Dichloropropene	75	8.726	8.720	0.006	97	47895	0.5000	0.4666	
82 4-Methyl-2-pentanone (MIBK)	43	8.933	8.927	0.006	97	206105	5.00	4.42	
$ 83 Toluene-d8 (Surr)	98	9.055	9.055	0.000	93	2544562	10.0	10.0	
84 Toluene	92	9.140	9.140	0.000	99	93376	0.5000	0.5168	
85 trans-1,3-Dichloropropene	75	9.476	9.457	0.019	92	38075	0.5000	0.4510	
86 Ethyl methacrylate	69	9.561	9.543	0.018	90	29604	0.5000	0.4402	
87 1,1,2-Trichloroethane	97	9.677	9.677	0.000	91	27798	0.5000	0.5190	
88 Tetrachloroethene	166	9.756	9.756	0.000	96	45407	0.5000	0.5224	
89 1,3-Dichloropropane	76	9.860	9.847	0.013	90	42646	0.5000	0.4973	
106 2-Hexanone	43	9.951	9.927	0.024	96	113803	5.00	3.58	
S 107 1,3-Dichloropropene, Total	100				0			0.9176	
108 Chlorodibromomethane	129	10.085	10.079	0.006	90	32544	0.5000	0.4958	
110 Ethylene Dibromide	107	10.195	10.189	0.006	100	23619	0.5000	0.4921	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1928405	10.0	10.0	
113 Chlorobenzene	112	10.689	10.683	0.006	95	108725	0.5000	0.4971	
112 1-Chlorohexane	91	10.689	10.683	0.006	61	47421	0.5000	0.4843	a
114 1,1,1,2-Tetrachloroethane	131	10.780	10.780	0.000	94	35062	0.5000	0.4809	
115 Ethylbenzene	91	10.792	10.786	0.006	98	174733	0.5000	0.5039	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
116 m-Xylene & p-Xylene	106	10.914	10.908	0.006	97	133774	1.00	0.9618	
S 117 Xylenes, Total	106				0			1.46	
118 o-Xylene	106	11.256	11.256	0.000	96	70066	0.5000	0.5021	
119 Styrene	104	11.286	11.274	0.012	95	98475	0.5000	0.4542	
120 Bromoform	173	11.439	11.426	0.013	98	19931	0.5000	0.4773	
121 Isopropylbenzene	105	11.573	11.573	0.000	94	178043	0.5000	0.5064	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.719	0.000	96	902694	10.0	9.96	
125 Bromobenzene	156	11.835	11.829	0.006	94	48327	0.5000	0.5058	
126 1,1,2,2-Tetrachloroethane	83	11.841	11.835	0.006	90	34730	0.5000	0.5047	
127 trans-1,4-Dichloro-2-butene	53	11.871	11.859	0.012	89	68695	5.00	4.55	
128 1,2,3-Trichloropropane	110	11.884	11.877	0.007	76	8828	0.5000	0.4999	
129 N-Propylbenzene	91	11.914	11.914	0.000	99	207468	0.5000	0.4962	
130 2-Chlorotoluene	126	11.987	11.987	0.000	98	44266	0.5000	0.4860	
131 1,3,5-Trimethylbenzene	105	12.060	12.060	0.000	94	153872	0.5000	0.4961	
132 4-Chlorotoluene	126	12.091	12.085	0.006	97	42421	0.5000	0.4587	
133 tert-Butylbenzene	134	12.304	12.304	0.000	92	36751	0.5000	0.5048	
134 Pentachloroethane	167	12.329	12.329	0.000	88	27762	0.5000	0.4811	
135 1,2,4-Trimethylbenzene	105	12.353	12.347	0.006	96	151932	0.5000	0.4770	
136 sec-Butylbenzene	105	12.475	12.469	0.006	93	190109	0.5000	0.4814	
137 1,3-Dichlorobenzene	146	12.573	12.566	0.007	98	92355	0.5000	0.4867	
138 4-Isopropyltoluene	119	12.585	12.585	0.000	97	169494	0.5000	0.4843	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.627	0.000	93	1161459	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.646	12.640	0.006	97	97044	0.5000	0.4966	
141 1,2,3-Trimethylbenzene	120	12.658	12.658	0.000	97	72977	0.5000	0.4790	
142 Benzyl chloride	126	12.737	12.725	0.012	97	10383	0.5000	0.3791	
145 p-Diethylbenzene	119	12.865	12.865	0.000	94	109301	0.5000	0.4913	M
143 n-Butylbenzene	92	12.890	12.883	0.007	96	76531	0.5000	0.4660	
144 1,2-Dichlorobenzene	146	12.914	12.908	0.006	99	88158	0.5000	0.4922	
148 1,2-Dibromo-3-Chloropropane	155	13.481	13.469	0.012	90	3516	0.5000	0.4054	
149 1,3,5-Trichlorobenzene	180	13.603	13.591	0.012	97	72517	0.5000	0.4931	
150 1,2,4-Trichlorobenzene	180	14.036	14.023	0.013	91	51601	0.5000	0.4632	
151 Hexachlorobutadiene	225	14.109	14.103	0.006	95	31154	0.5000	0.4977	
152 Naphthalene	128	14.219	14.200	0.019	96	73709	0.5000	0.4050	
153 1,2,3-Trichlorobenzene	180	14.359	14.347	0.013	95	35588	0.5000	0.4215	
154 2-Methylnaphthalene	142	14.987	14.944	0.043	84	8577	0.5000	0.2003	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LL_#1_826_00084	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00095	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00159	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00073	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 11-Jul-2023 21:38:03 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D

Injection Date: 10-Jul-2023 19:51:30 Instrument ID: 10193 Operator ID: knk41612

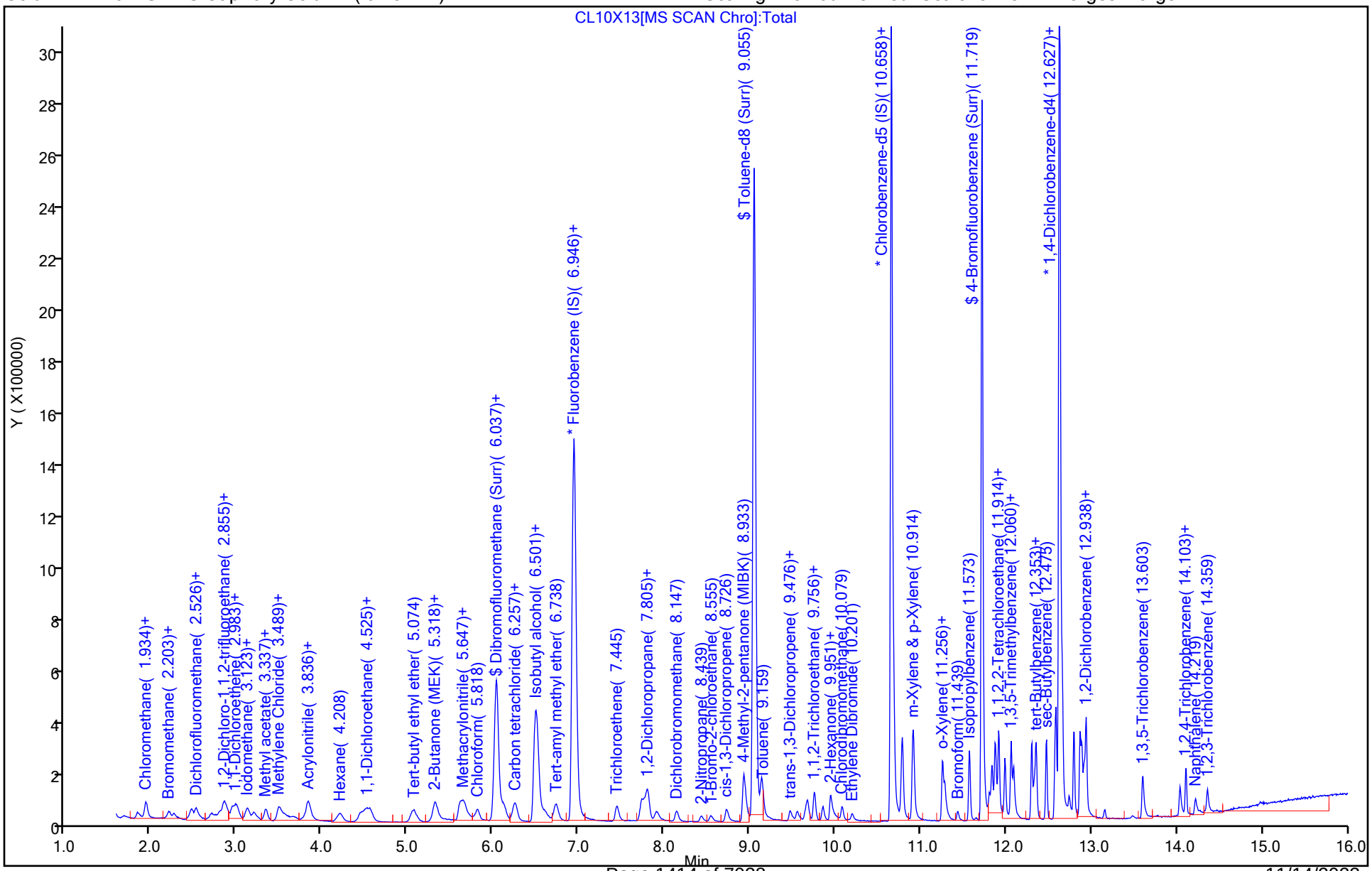
Lims ID: IC std2 0.5 Worklist Smp#: 14

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 13

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

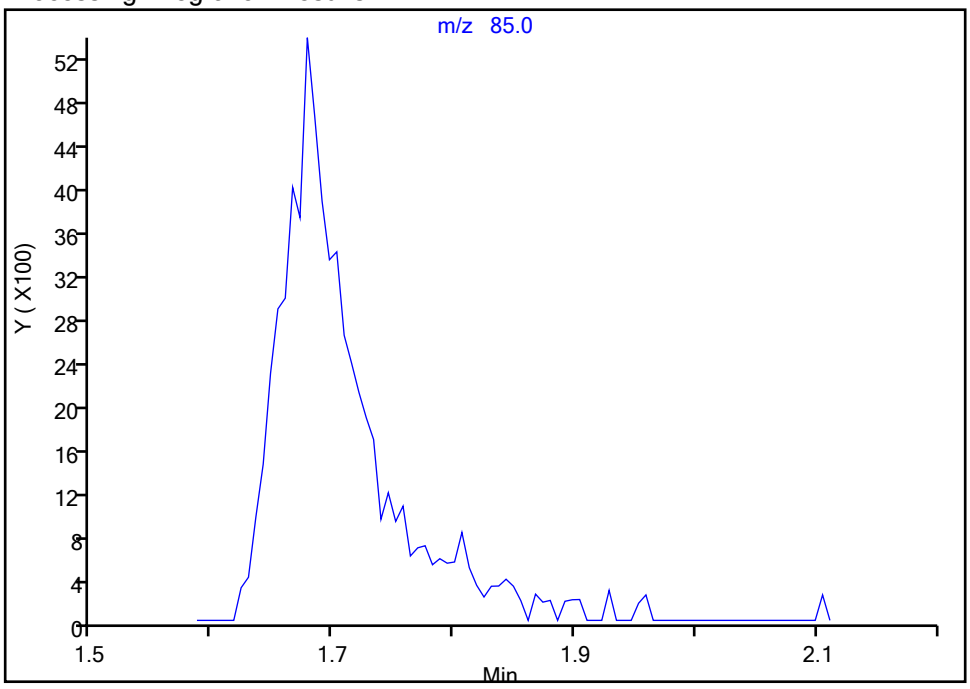
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

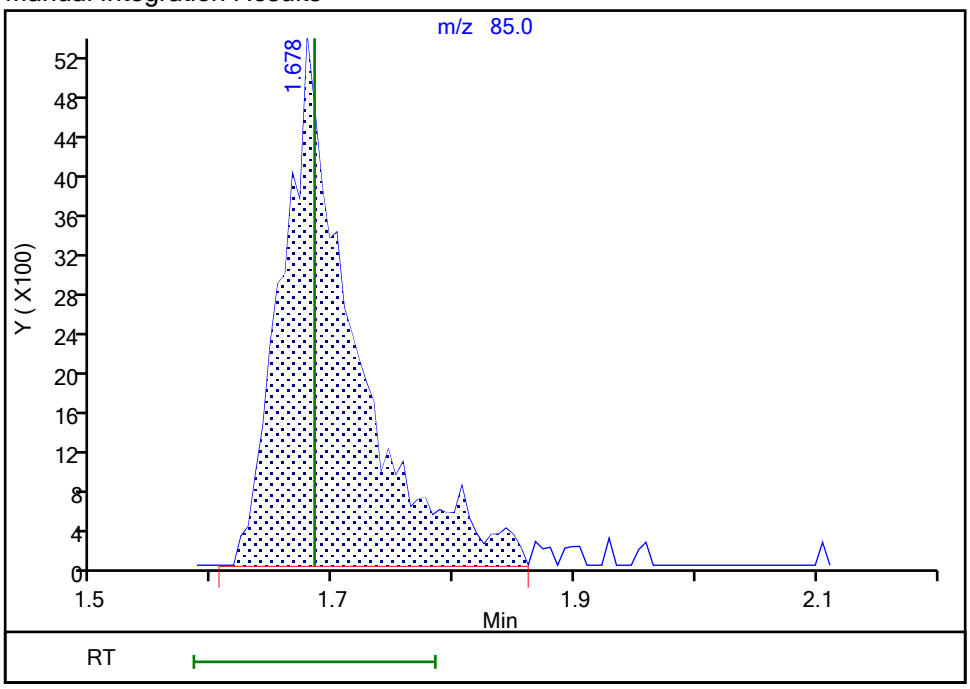
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.68
Area: 22298
Amount: 0.367095
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:39:45 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

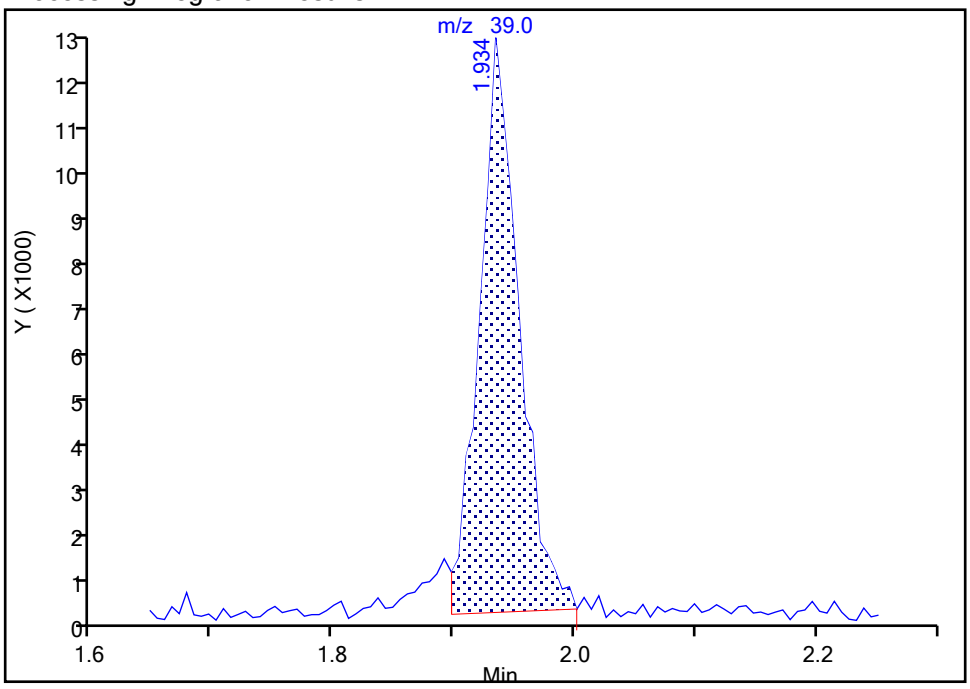
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

7 Butadiene, CAS: 106-99-0

Signal: 1

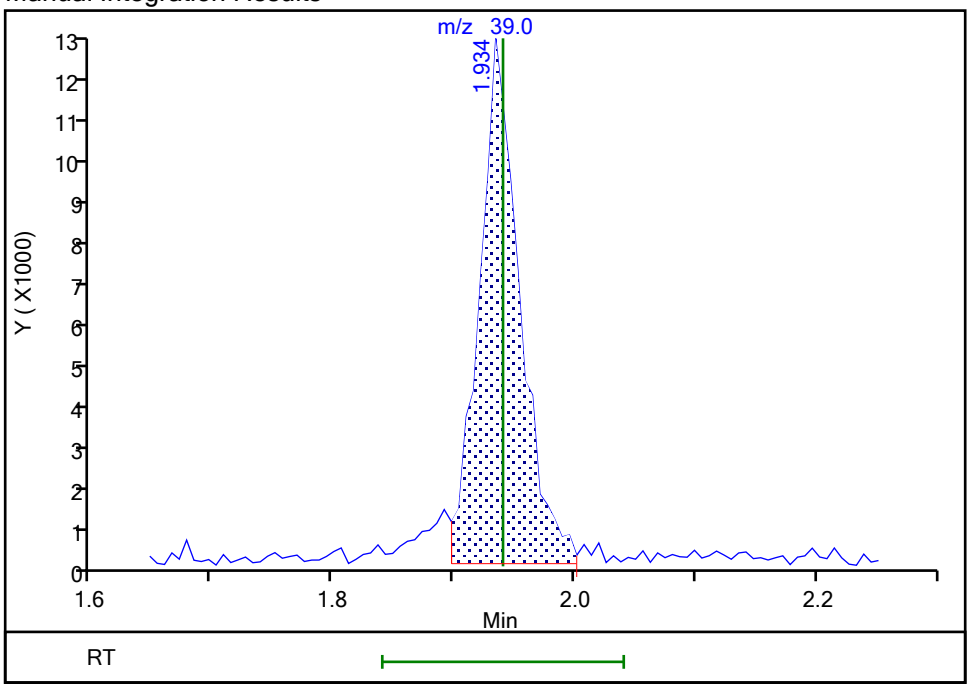
Processing Integration Results

RT: 1.93
Area: 28592
Amount: 0.403307
Amount Units: ug/l



Manual Integration Results

RT: 1.93
Area: 29471
Amount: 0.414238
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:39:54 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

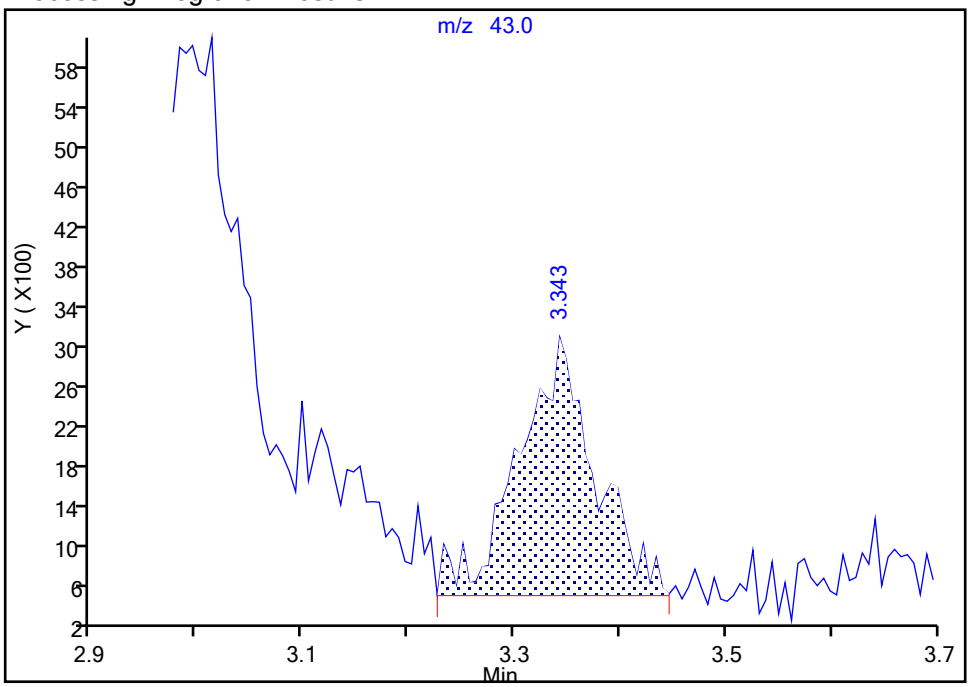
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

26 Methyl acetate, CAS: 79-20-9

Signal: 1

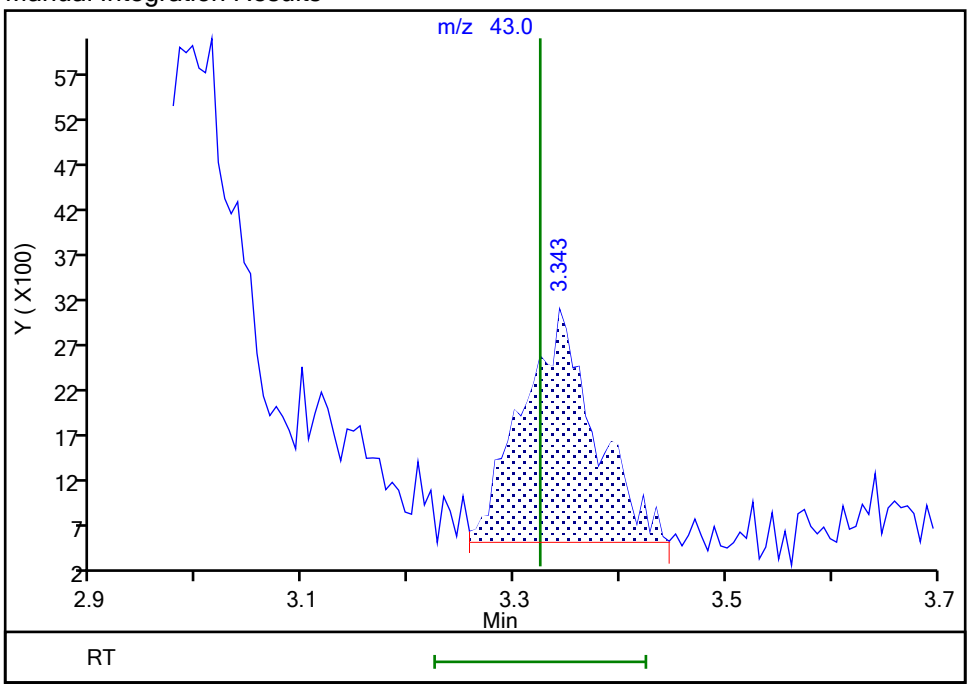
Processing Integration Results

RT: 3.34
Area: 12862
Amount: 0.462281
Amount Units: ug/l



Manual Integration Results

RT: 3.34
Area: 12338
Amount: 0.466516
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:40:13 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

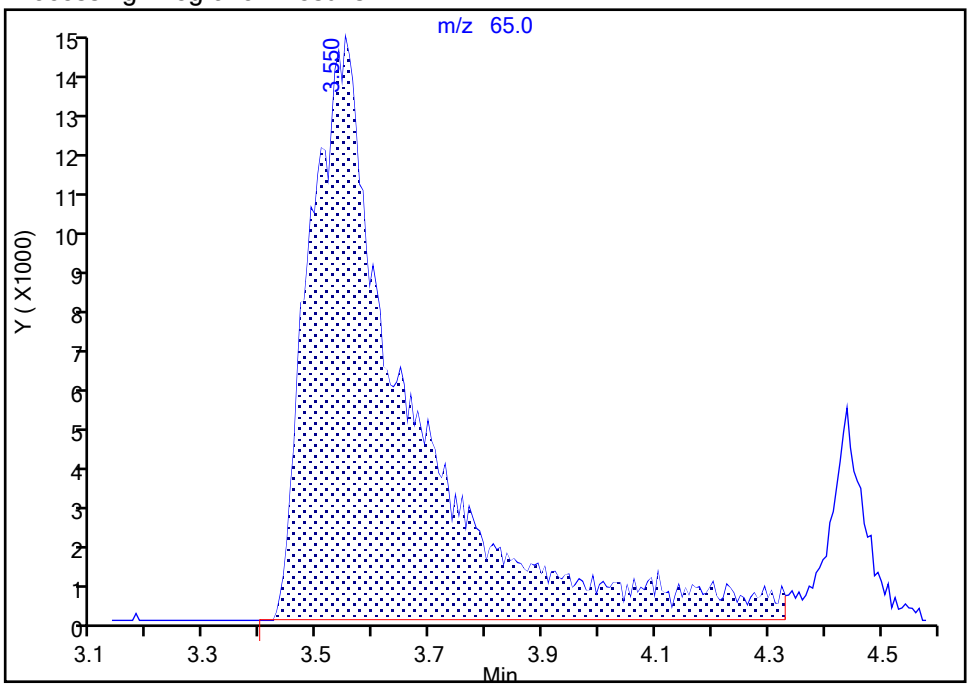
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

* 31 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

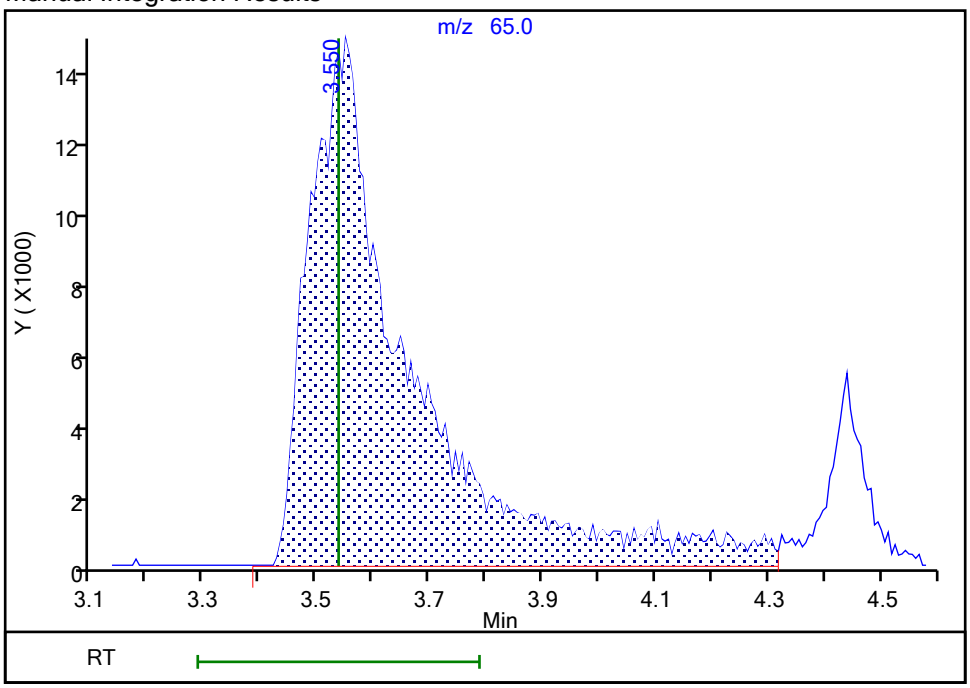
Processing Integration Results

RT: 3.55
Area: 177221
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 3.55
Area: 176691
Amount: 50.000000
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:45:34 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

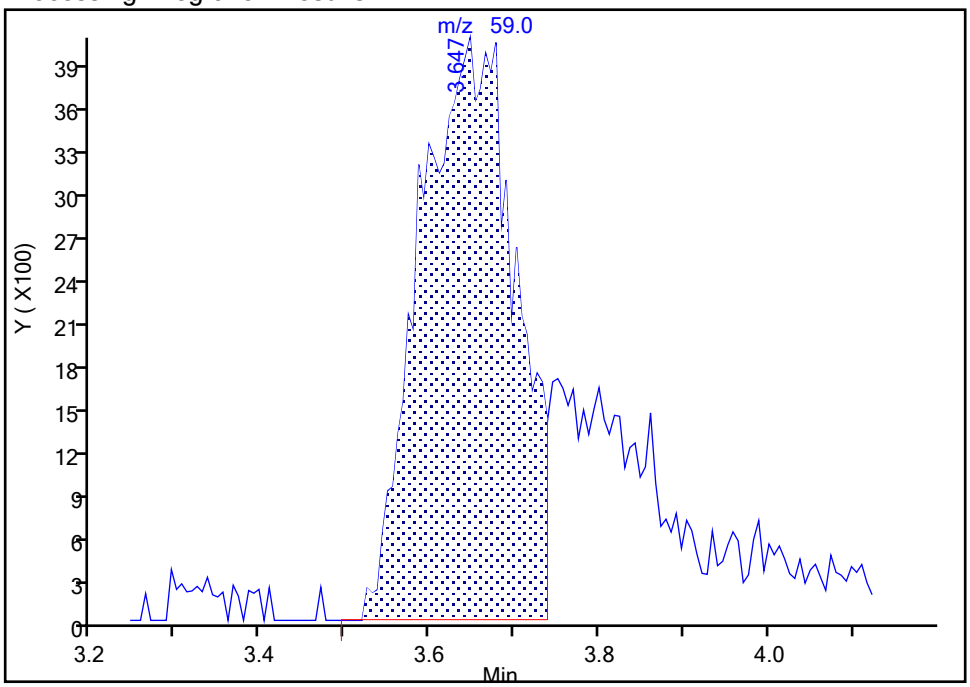
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

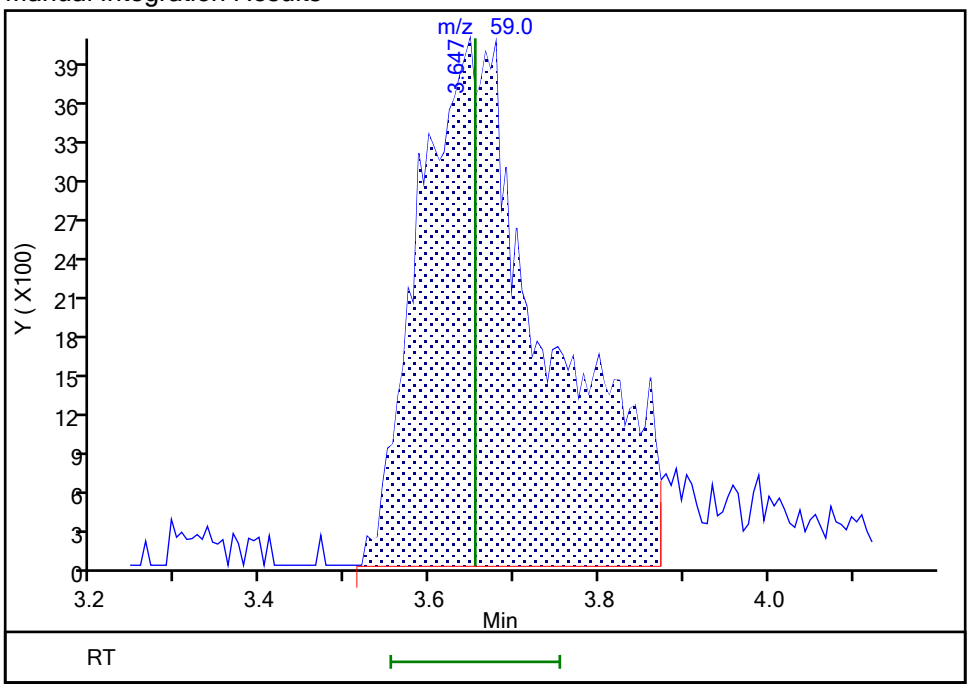
Processing Integration Results

RT: 3.65
Area: 32448
Amount: 7.907292
Amount Units: ug/l



Manual Integration Results

RT: 3.65
Area: 43294
Amount: 11.670048
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:41:01 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

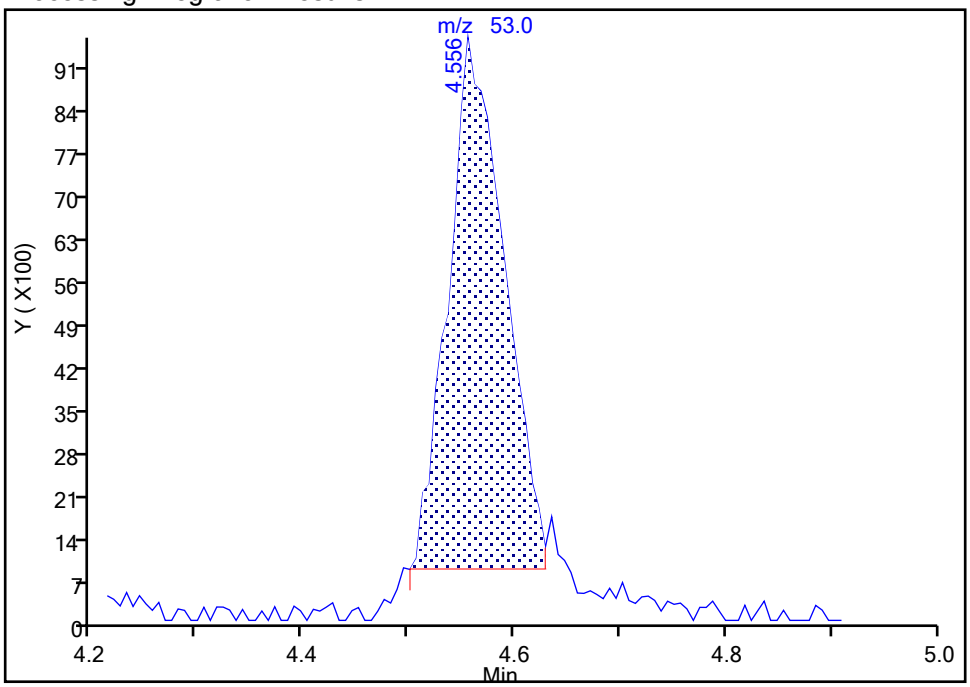
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

40 2-Chloro-1,3-butadiene, CAS: 126-99-8

Signal: 1

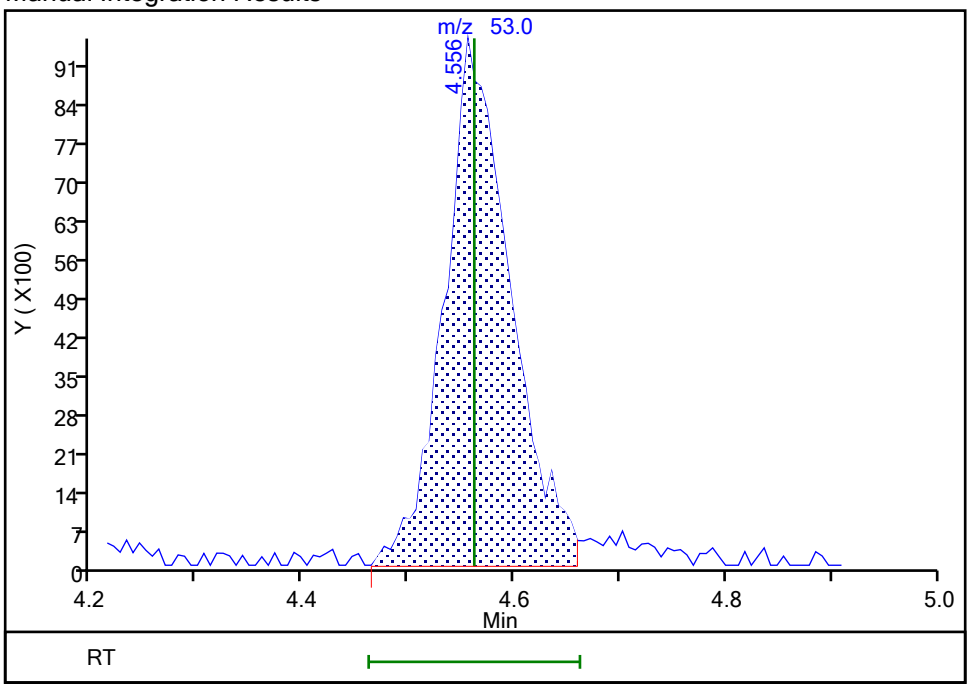
Processing Integration Results

RT: 4.56
Area: 32225
Amount: 0.379726
Amount Units: ug/l



Manual Integration Results

RT: 4.56
Area: 41584
Amount: 0.475041
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:41:23 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

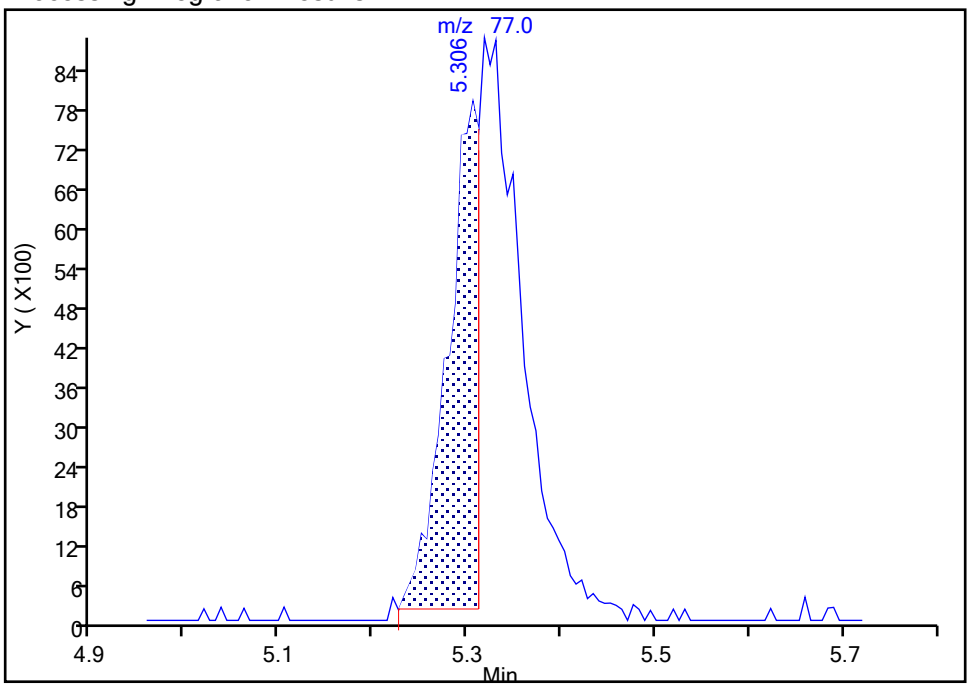
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

44 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

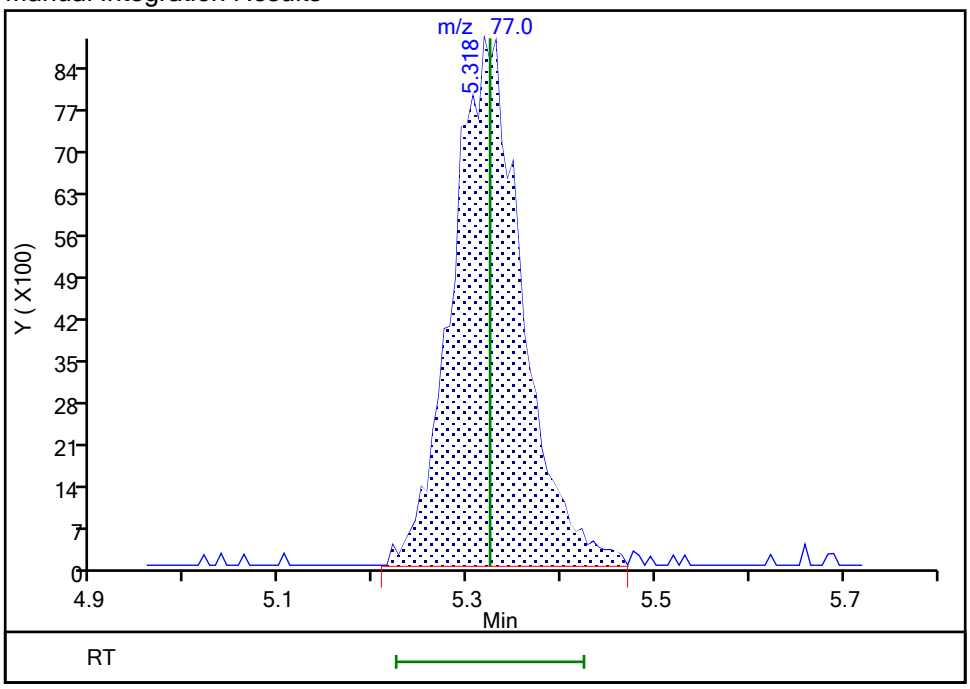
Processing Integration Results

RT: 5.31
Area: 18263
Amount: 0.218773
Amount Units: ug/l



Manual Integration Results

RT: 5.32
Area: 45793
Amount: 0.501320
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:41:32 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

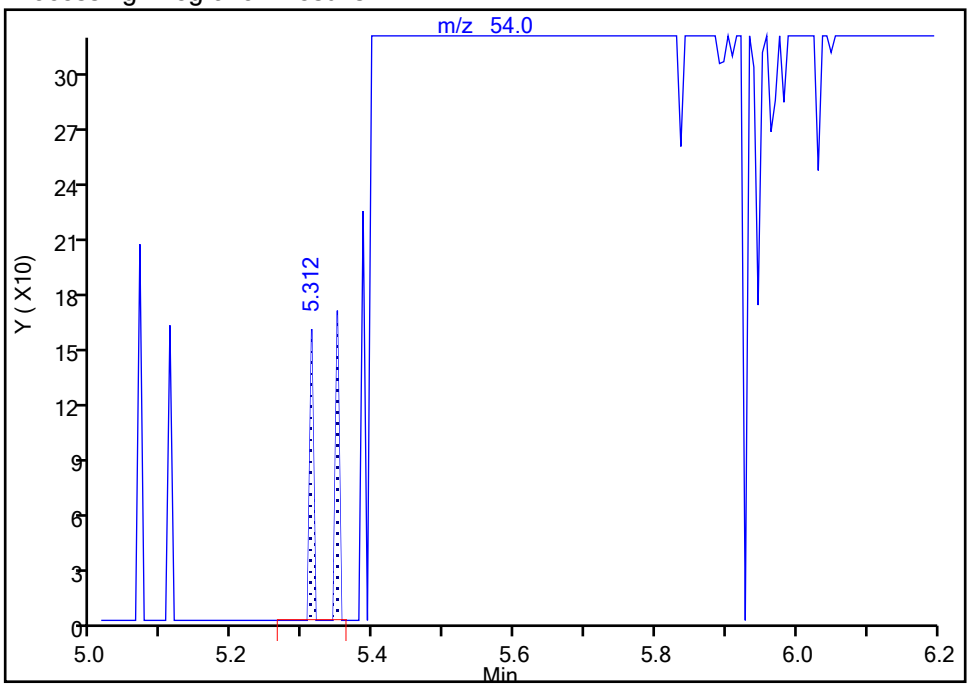
Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D
Injection Date: 10-Jul-2023 19:51:30 Instrument ID: 10193
Lims ID: IC std2 0.5
Client ID:
Operator ID: knk41612 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

45 Propionitrile, CAS: 107-12-0

Signal: 1

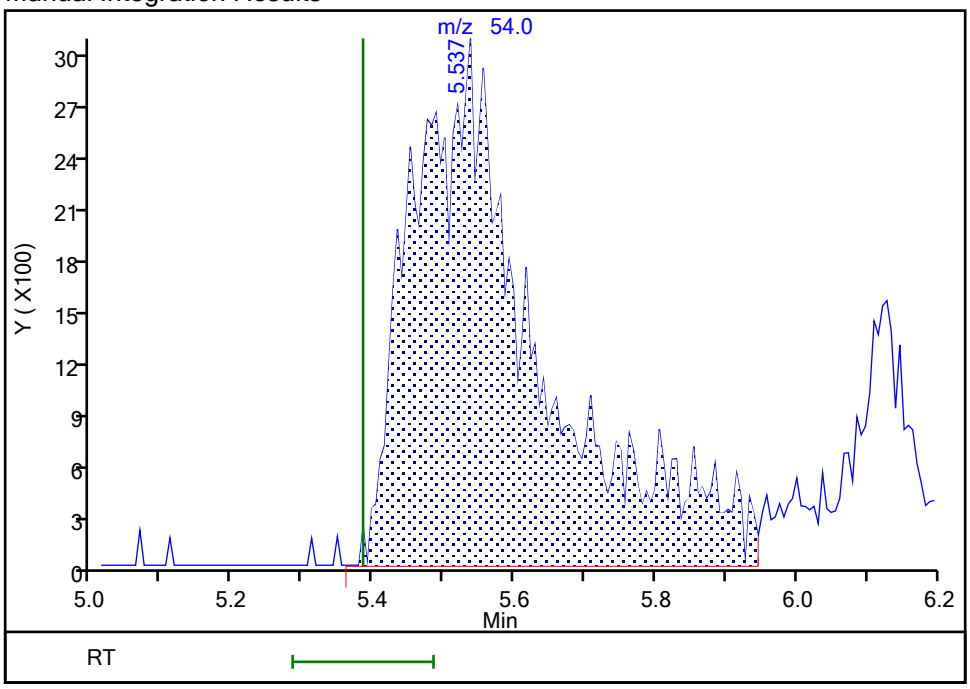
Processing Integration Results

RT: 5.31
Area: 119
Amount: 0.033122
Amount Units: ug/l



Manual Integration Results

RT: 5.54
Area: 38088
Amount: 10.390357
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:41:35 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

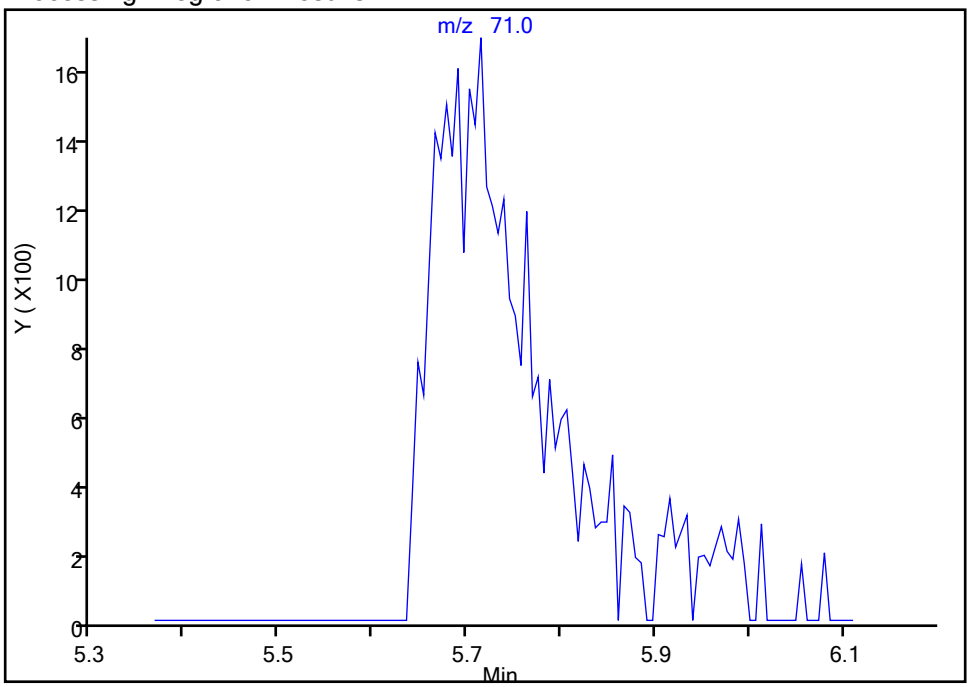
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

49 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

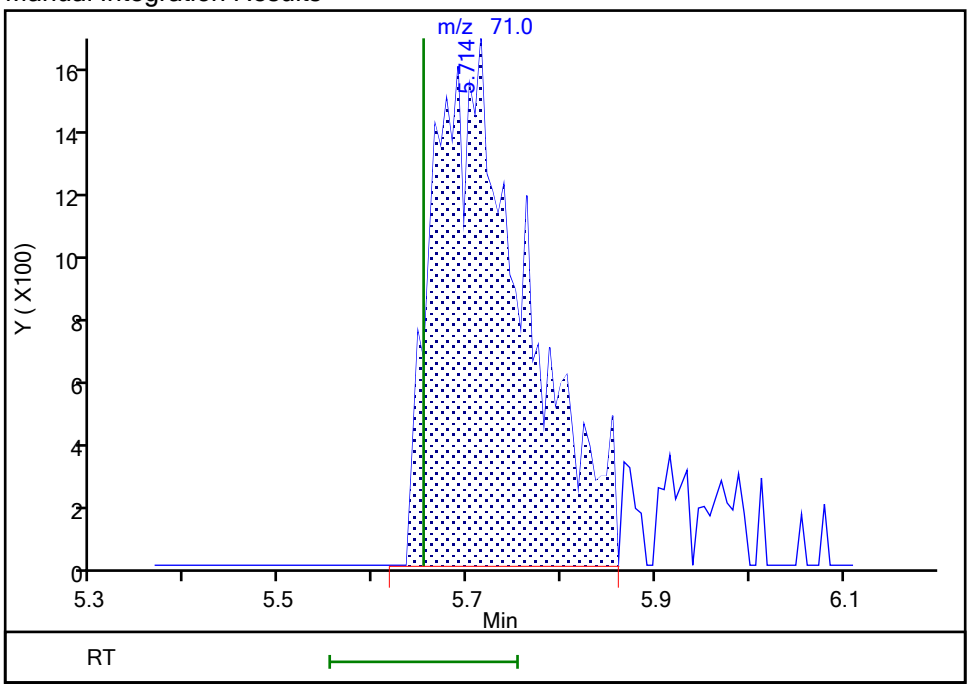
Not Detected
Expected RT: 5.65

Processing Integration Results



Manual Integration Results

RT: 5.71
Area: 11030
Amount: 2.287299
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:41:45 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

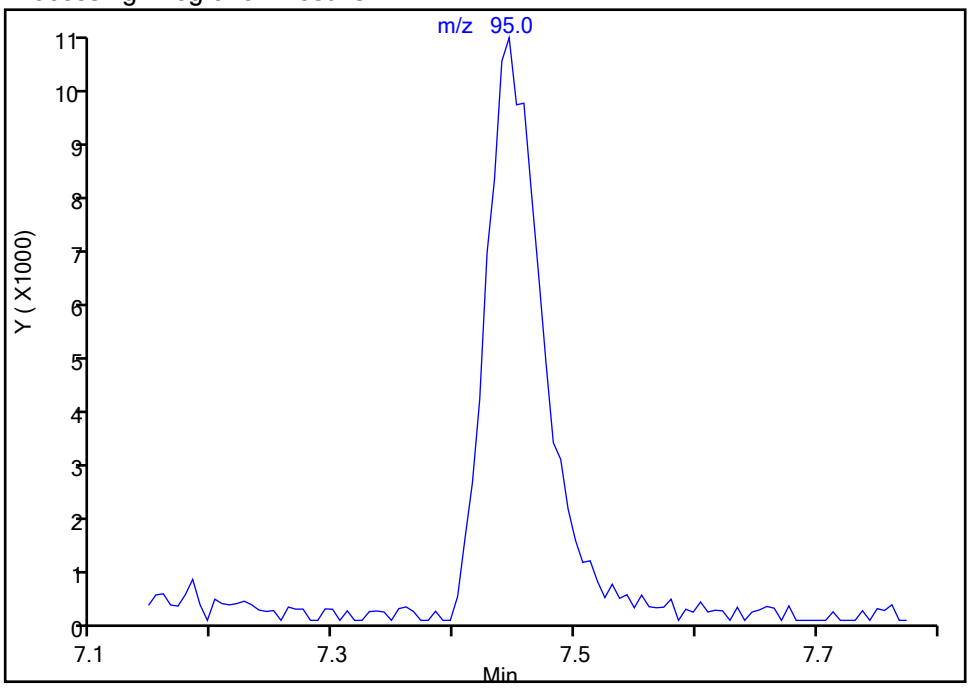
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6

Signal: 1

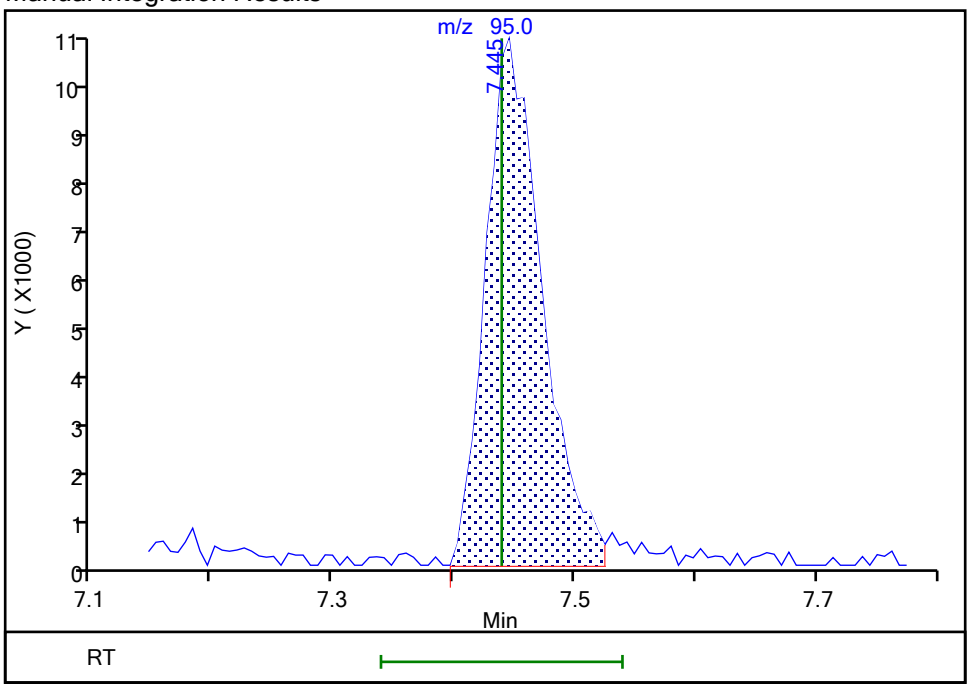
Not Detected
Expected RT: 7.44

Processing Integration Results



Manual Integration Results

RT: 7.45
Area: 34902
Amount: 0.498618
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:42:27 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

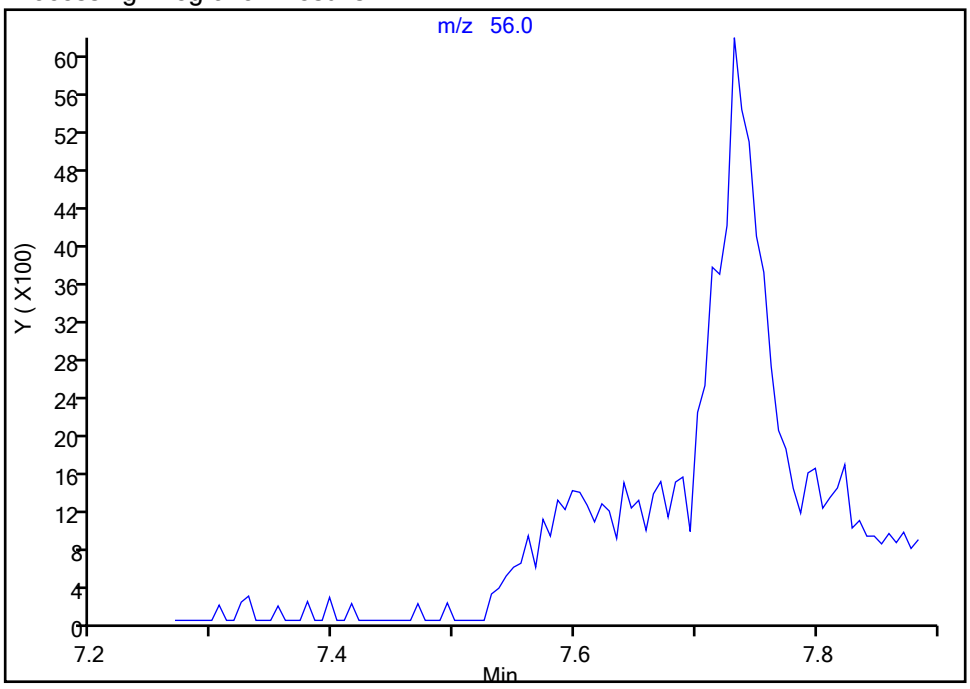
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 n-Butanol, CAS: 71-36-3

Signal: 1

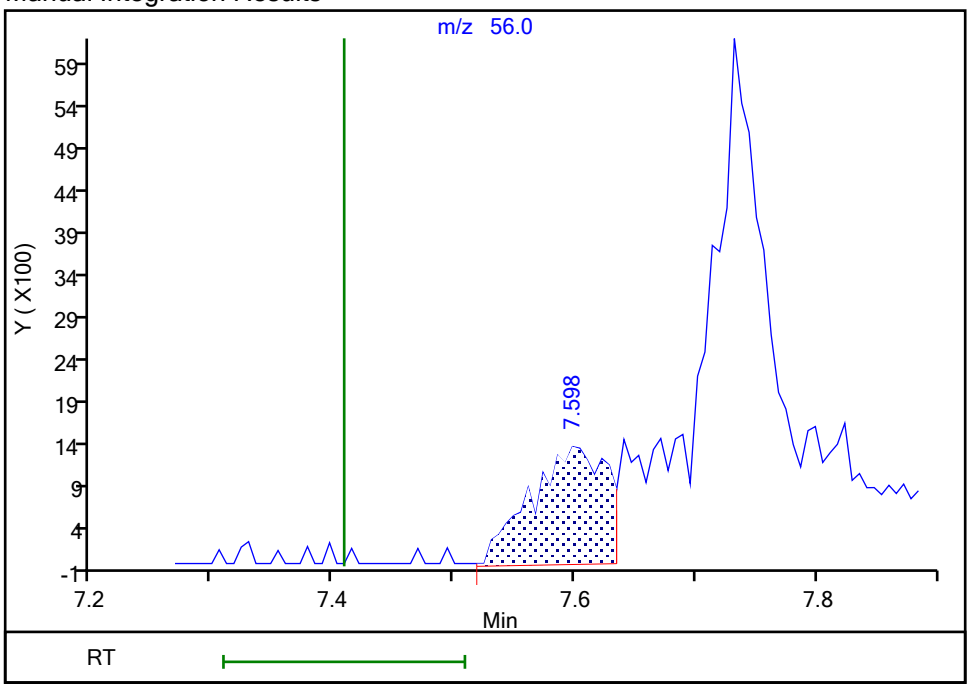
Not Detected
Expected RT: 7.41

Processing Integration Results



Manual Integration Results

RT: 7.60
Area: 6030
Amount: 55.049542
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:42:20 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

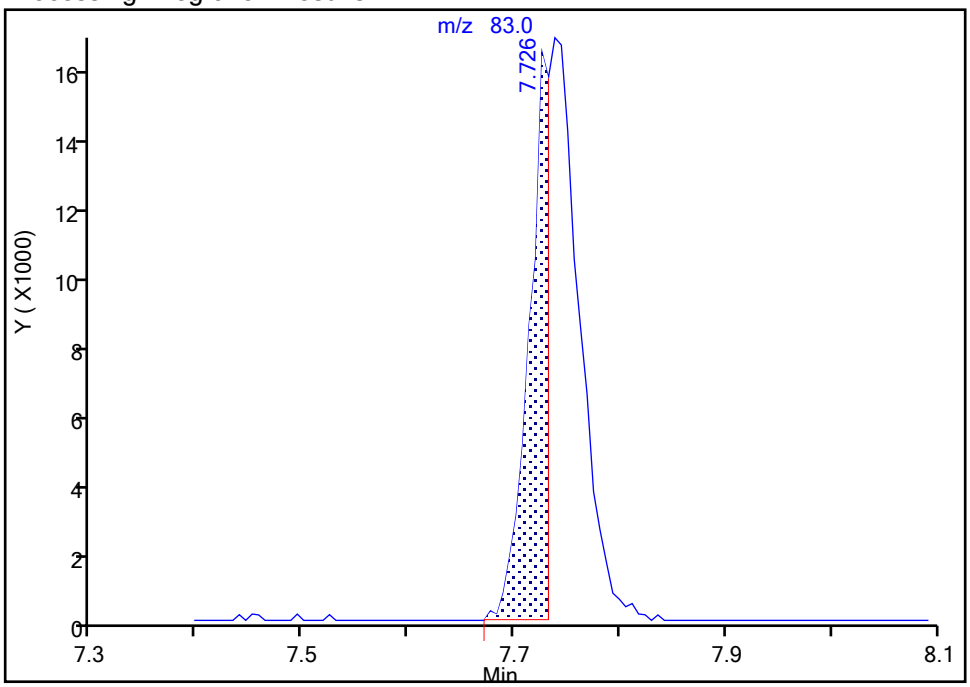
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

69 Methylcyclohexane, CAS: 108-87-2

Signal: 1

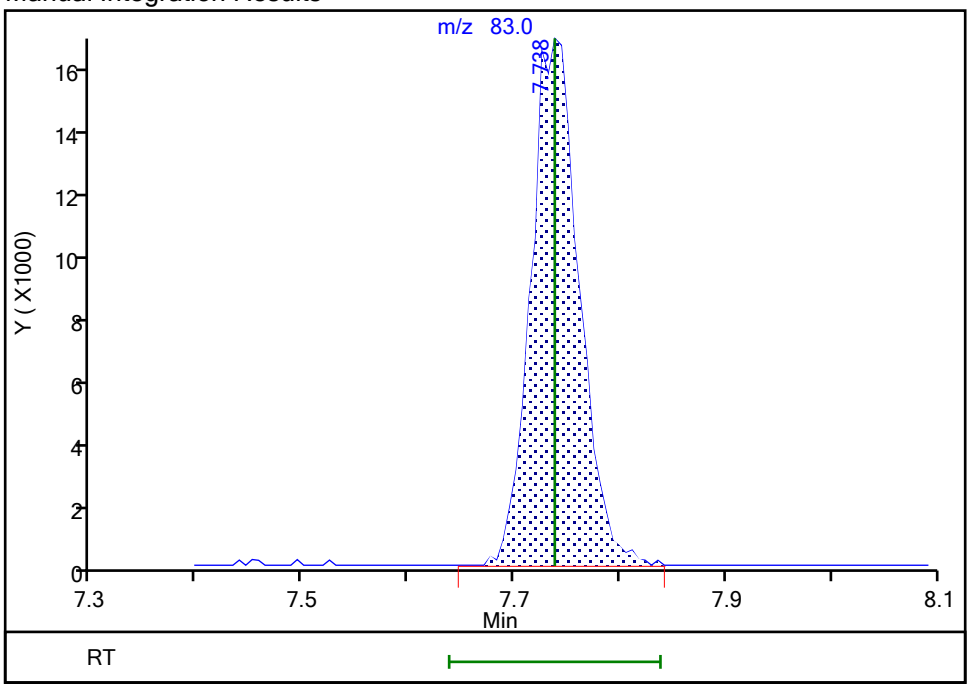
Processing Integration Results

RT: 7.73
Area: 21872
Amount: 0.208085
Amount Units: ug/l



Manual Integration Results

RT: 7.74
Area: 51270
Amount: 0.451676
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:42:34 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

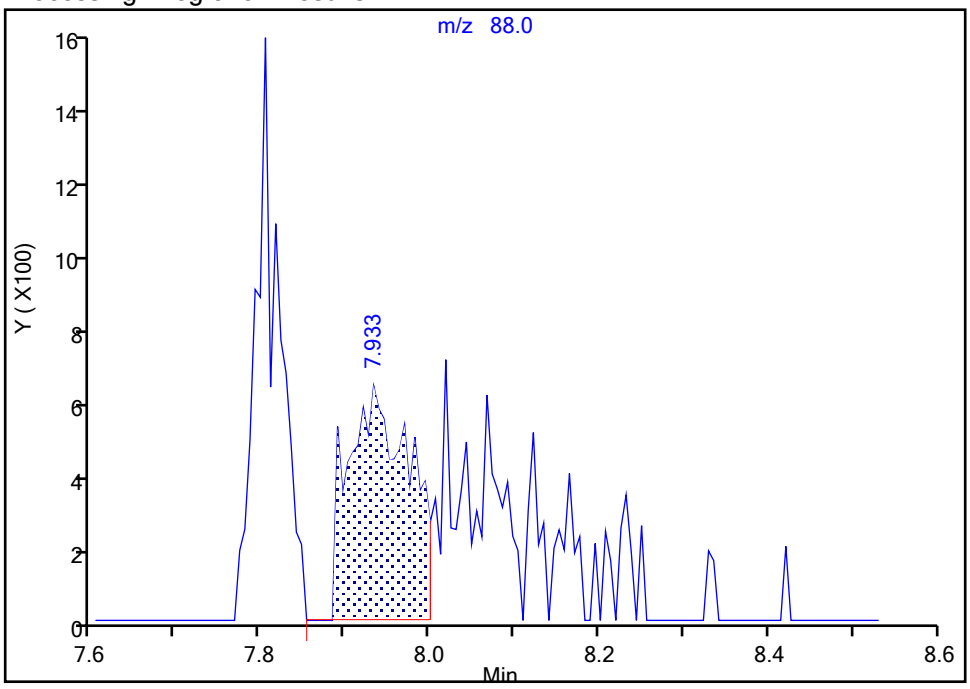
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

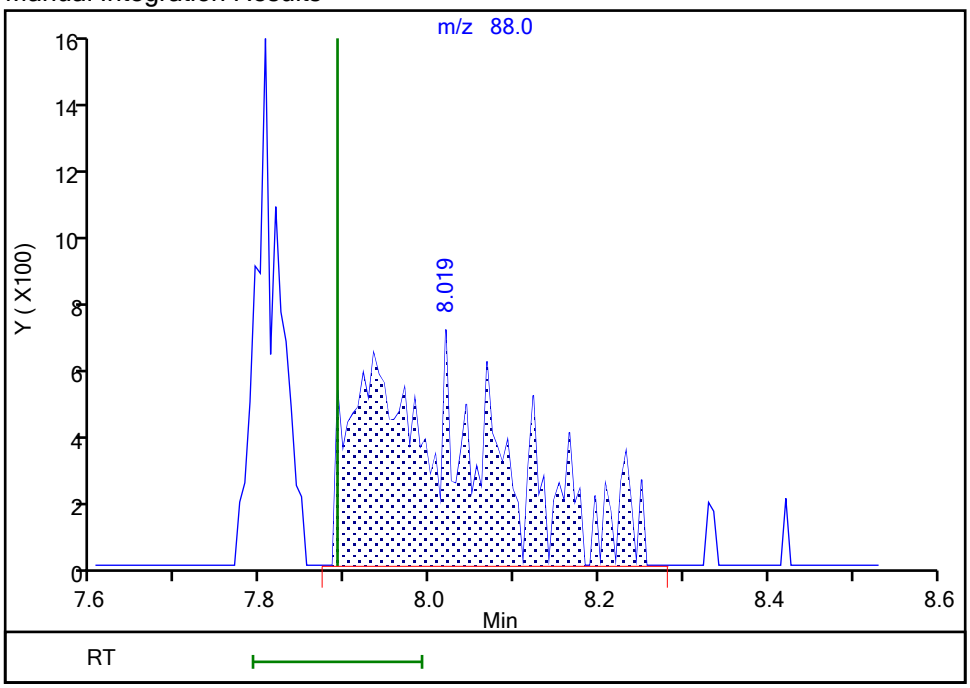
Processing Integration Results

RT: 7.93
Area: 3147
Amount: 11.599670
Amount Units: ug/l



Manual Integration Results

RT: 8.02
Area: 6777
Amount: 23.787591
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:42:40 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

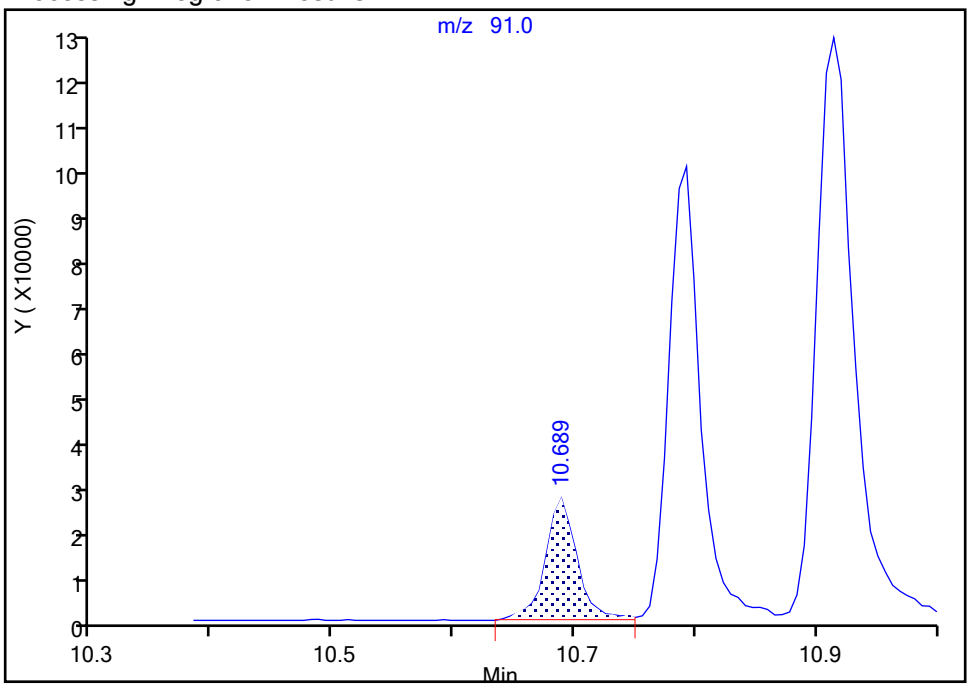
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X13.D				
Injection Date:	10-Jul-2023 19:51:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

112 1-Chlorohexane, CAS: 544-10-5

Signal: 1

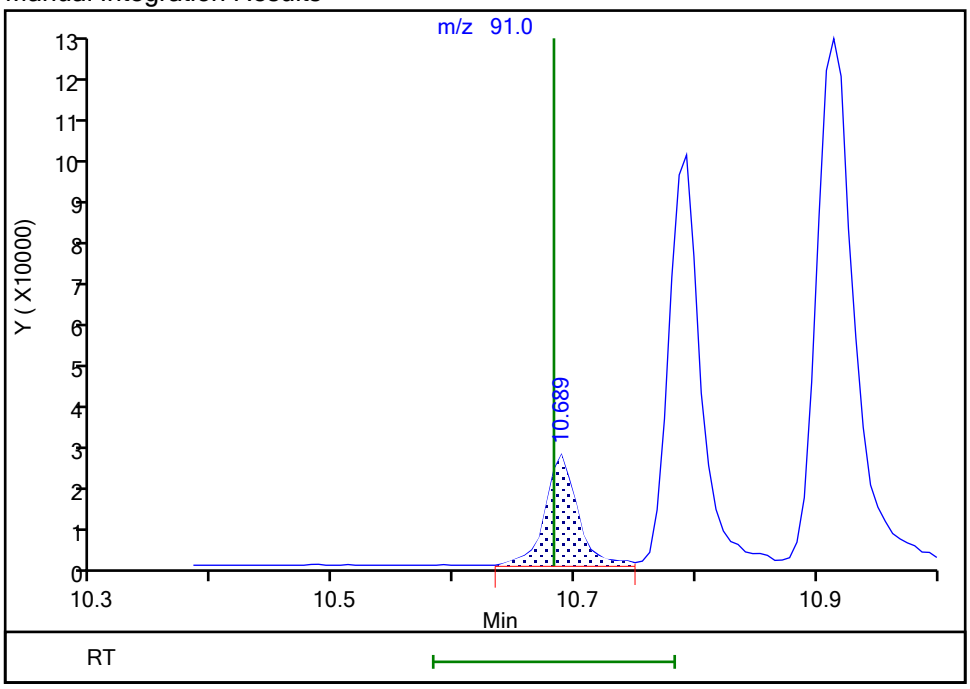
Processing Integration Results

RT: 10.69
Area: 47421
Amount: 0.484310
Amount Units: ug/l



Manual Integration Results

RT: 10.69
Area: 47421
Amount: 0.484310
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:43:14 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X14.D
Lims ID: IC std3 1
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Jul-2023 20:13:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-015
Misc. Info.: IC STD3 1
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:38:07 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:45:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.678	1.684	-0.006	100	66700	1.00	1.10	M
5 Chloromethane	50	1.843	1.849	-0.006	99	74670	1.00	0.9750	M
6 Vinyl chloride	62	1.928	1.934	-0.006	70	75846	1.00	1.04	
7 Butadiene	39	1.934	1.940	-0.006	91	76904	1.00	1.09	
9 Bromomethane	94	2.209	2.209	0.000	90	57728	1.00	1.01	
10 Chloroethane	64	2.264	2.270	-0.006	99	45126	1.00	1.05	
11 Dichlorofluoromethane	67	2.459	2.471	-0.012	97	119579	1.00	1.02	
13 Pentane	43	2.520	2.526	-0.006	96	85241	1.00	1.02	
12 Trichlorofluoromethane	101	2.532	2.532	0.000	96	89976	1.00	1.09	
14 Ethyl ether	59	2.696	2.702	-0.006	91	45496	1.00	0.9669	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.782	2.788	-0.006	90	66138	1.00	1.02	
17 Acrolein	56	2.849	2.843	0.006	99	282347	50.0	46.8	
18 1,1-Dichloroethene	96	2.952	2.952	0.000	95	54226	1.00	1.01	
20 Acetone	43	3.007	2.977	0.030	81	75795	10.0	9.87	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.001	3.001	0.000	89	56573	1.00	1.07	
22 Iodomethane	142	3.105	3.117	-0.012	97	113310	1.00	0.9866	
24 Isopropyl alcohol	45	3.099	3.117	-0.018	34	35308	20.0	18.1	
23 Ethyl bromide	108	3.129	3.135	-0.006	95	49690	1.00	0.9521	
25 Carbon disulfide	76	3.196	3.202	-0.006	100	190278	1.00	1.01	
26 Methyl acetate	43	3.330	3.324	0.006	24	24801	1.00	1.02	M
29 3-Chloro-1-propene	41	3.336	3.336	0.000	94	95453	1.00	1.01	
30 Methylene Chloride	84	3.489	3.495	-0.006	91	65001	1.00	0.9722	
* 31 t-Butyl alcohol-d10 (IS)	65	3.550	3.538	0.012	92	161736	50.0	50.0	
32 2-Methyl-2-propanol	59	3.635	3.653	-0.018	94	67927	20.0	20.0	
33 Acrylonitrile	53	3.818	3.788	0.030	29	24716	2.50	2.29	
35 trans-1,2-Dichloroethene	96	3.830	3.830	0.000	99	63602	1.00	0.9797	
34 Methyl tert-butyl ether	73	3.824	3.830	-0.006	91	167827	1.00	0.9755	
36 Hexane	57	4.202	4.208	-0.006	92	85835	1.00	1.04	
37 1,1-Dichloroethane	63	4.440	4.446	-0.006	95	110868	1.00	0.9736	
39 Isopropyl ether	45	4.507	4.513	-0.006	94	211714	1.00	0.9870	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Chloro-1,3-butadiene	53	4.556	4.562	-0.006	88	85268	1.00	0.9785	
41 Tert-butyl ethyl ether	59	5.062	5.074	-0.012	98	192959	1.00	0.9724	
42 2-Butanone (MEK)	43	5.306	5.281	0.025	97	145034	10.0	9.67	
43 cis-1,2-Dichloroethene	96	5.312	5.312	0.000	81	69642	1.00	1.00	
44 2,2-Dichloropropane	77	5.318	5.324	-0.006	73	89305	1.00	0.9821	
45 Propionitrile	54	5.434	5.385	0.049	92	62487	20.0	18.6	
47 Methacrylonitrile	67	5.610	5.592	0.018	91	164374	10.0	10.4	
49 Tetrahydrofuran	71	5.684	5.653	0.031	82	22233	5.00	5.04	
48 Chlorobromomethane	128	5.653	5.653	0.000	90	33818	1.00	1.01	
50 Chloroform	83	5.812	5.818	-0.006	93	111067	1.00	0.9856	
53 1,1,1-Trichloroethane	97	6.025	6.037	-0.012	43	94975	1.00	1.00	
$ 54 Dibromofluoromethane (Surr)	113	6.037	6.037	0.000	94	570123	10.0	9.92	
55 Cyclohexane	56	6.129	6.123	0.007	90	108733	1.00	1.02	
S 52 1,2-Dichloroethene, Total	100				0			1.98	
56 Carbon tetrachloride	117	6.238	6.244	-0.006	96	81461	1.00	0.99	
57 1,1-Dichloropropene	75	6.257	6.257	0.000	95	81971	1.00	0.9642	
58 Isobutyl alcohol	41	6.519	6.482	0.037	36	36009	50.0	55.0	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.501	6.507	-0.007	99	121568	10.0	10.0	
60 Benzene	78	6.525	6.525	0.000	93	270063	1.00	0.99	
61 1,2-Dichloroethane	62	6.598	6.598	0.000	96	66663	1.00	0.9626	
64 Tert-amyl methyl ether	73	6.732	6.738	-0.006	99	180408	1.00	0.9733	
* 65 Fluorobenzene (IS)	96	6.946	6.952	-0.006	99	2458760	10.0	10.0	
66 n-Heptane	43	6.958	6.964	-0.006	39	88923	1.00	0.99	
67 n-Butanol	56	7.531	7.409	0.122	89	29274	87.5	79.6	M
68 Trichloroethene	95	7.439	7.439	0.000	95	69577	1.00	1.00	
69 Methylcyclohexane	83	7.738	7.738	0.000	88	115334	1.00	1.02	
70 1,2-Dichloropropane	63	7.775	7.775	0.000	98	70545	1.00	0.9858	
71 2-ethoxy-2-methyl butane	87	7.811	7.811	0.000	94	108892	1.00	0.9796	
72 Dibromomethane	93	7.903	7.890	0.013	93	33838	1.00	1.02	
74 1,4-Dioxane	88	7.909	7.890	0.019	46	13360	50.0	51.2	M
73 Methyl methacrylate	69	7.915	7.897	0.018	92	28761	1.00	0.9276	
76 Dichlorobromomethane	83	8.147	8.140	0.007	99	81123	1.00	0.9811	
77 2-Nitropropane	41	8.427	8.427	0.000	98	42170	5.00	5.00	
78 1-Bromo-2-chloroethane	63	8.543	8.531	0.012	98	68353	1.00	0.9425	
80 cis-1,3-Dichloropropene	75	8.726	8.720	0.006	97	101962	1.00	1.00	
82 4-Methyl-2-pentanone (MIBK)	43	8.933	8.927	0.006	97	424094	10.0	9.94	
$ 83 Toluene-d8 (Surr)	98	9.055	9.055	0.000	93	2547837	10.0	10.0	
84 Toluene	92	9.140	9.140	0.000	98	178853	1.00	0.9878	
85 trans-1,3-Dichloropropene	75	9.469	9.457	0.012	91	80917	1.00	0.9564	
86 Ethyl methacrylate	69	9.549	9.543	0.006	89	61847	1.00	0.9178	
87 1,1,2-Trichloroethane	97	9.677	9.677	0.000	89	53864	1.00	1.00	
88 Tetrachloroethene	166	9.762	9.756	0.006	96	86534	1.00	0.99	
89 1,3-Dichloropropane	76	9.854	9.847	0.007	89	84655	1.00	0.9850	
106 2-Hexanone	43	9.939	9.927	0.012	96	247071	10.0	8.49	
S 107 1,3-Dichloropropene, Total	100				0			1.95	
108 Chlorodibromomethane	129	10.079	10.079	0.000	90	65784	1.00	1.00	
110 Ethylene Dibromide	107	10.195	10.189	0.006	100	45500	1.00	0.9460	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	85	1932452	10.0	10.0	
113 Chlorobenzene	112	10.689	10.683	0.006	96	215314	1.00	0.9823	
112 1-Chlorohexane	91	10.689	10.683	0.006	91	96320	1.00	0.9817	
114 1,1,1,2-Tetrachloroethane	131	10.780	10.780	0.000	95	71811	1.00	0.9829	
115 Ethylbenzene	91	10.786	10.786	0.000	97	345945	1.00	1.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
116 m-Xylene & p-Xylene	106	10.914	10.908	0.006	97	273431	2.00	1.96	
S 117 Xylenes, Total	106				0			2.93	
118 o-Xylene	106	11.256	11.256	0.000	96	135623	1.00	0.9699	
119 Styrene	104	11.280	11.274	0.006	94	207571	1.00	0.9553	
120 Bromoform	173	11.432	11.426	0.006	97	41289	1.00	0.9868	
121 Isopropylbenzene	105	11.573	11.573	0.000	95	347437	1.00	0.9860	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.719	0.000	96	905538	10.0	9.97	
125 Bromobenzene	156	11.835	11.829	0.006	95	95117	1.00	0.9832	
126 1,1,2,2-Tetrachloroethane	83	11.835	11.835	0.000	91	69638	1.00	1.00	
127 trans-1,4-Dichloro-2-butene	53	11.865	11.859	0.006	91	142291	10.0	9.30	
128 1,2,3-Trichloropropane	110	11.878	11.877	0.001	75	17478	1.00	0.9774	
129 N-Propylbenzene	91	11.914	11.914	0.000	99	409467	1.00	0.9671	
130 2-Chlorotoluene	126	11.987	11.987	0.000	98	93392	1.00	1.01	
131 1,3,5-Trimethylbenzene	105	12.060	12.060	0.000	94	300547	1.00	0.9570	
132 4-Chlorotoluene	126	12.091	12.085	0.006	96	94866	1.00	1.01	
133 tert-Butylbenzene	134	12.304	12.304	0.000	93	72018	1.00	0.9770	
134 Pentachloroethane	167	12.329	12.329	0.000	91	55991	1.00	0.9583	
135 1,2,4-Trimethylbenzene	105	12.353	12.347	0.006	96	311294	1.00	0.9653	
136 sec-Butylbenzene	105	12.475	12.469	0.006	93	392818	1.00	0.9824	
137 1,3-Dichlorobenzene	146	12.572	12.566	0.006	98	184273	1.00	0.9590	
138 4-Isopropyltoluene	119	12.585	12.585	0.000	97	349290	1.00	0.9858	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.627	0.000	92	1176004	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.646	12.640	0.006	96	196607	1.00	0.99	
141 1,2,3-Trimethylbenzene	120	12.658	12.658	0.000	96	147335	1.00	0.9550	
142 Benzyl chloride	126	12.737	12.725	0.012	97	24527	1.00	0.8844	
145 p-Diethylbenzene	119	12.865	12.865	0.000	94	219067	1.00	0.9725	M
143 n-Butylbenzene	92	12.883	12.883	0.000	97	156711	1.00	0.9423	
144 1,2-Dichlorobenzene	146	12.914	12.908	0.006	99	180788	1.00	1.00	
148 1,2-Dibromo-3-Chloropropane	155	13.481	13.469	0.012	88	7710	1.00	0.8780	
149 1,3,5-Trichlorobenzene	180	13.597	13.591	0.006	97	143363	1.00	0.9628	
150 1,2,4-Trichlorobenzene	180	14.030	14.023	0.007	93	109715	1.00	0.9726	
151 Hexachlorobutadiene	225	14.109	14.103	0.006	94	63348	1.00	1.00	
152 Naphthalene	128	14.212	14.200	0.012	96	155697	1.00	0.8449	
153 1,2,3-Trichlorobenzene	180	14.353	14.347	0.007	96	80201	1.00	0.9382	
154 2-Methylnaphthalene	142	14.968	14.944	0.024	94	27858	1.00	0.6425	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00084	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00095	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00159	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00073	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 11-Jul-2023 21:38:08 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X14.D

Injection Date: 10-Jul-2023 20:13:30 Instrument ID: 10193 Operator ID: knk41612

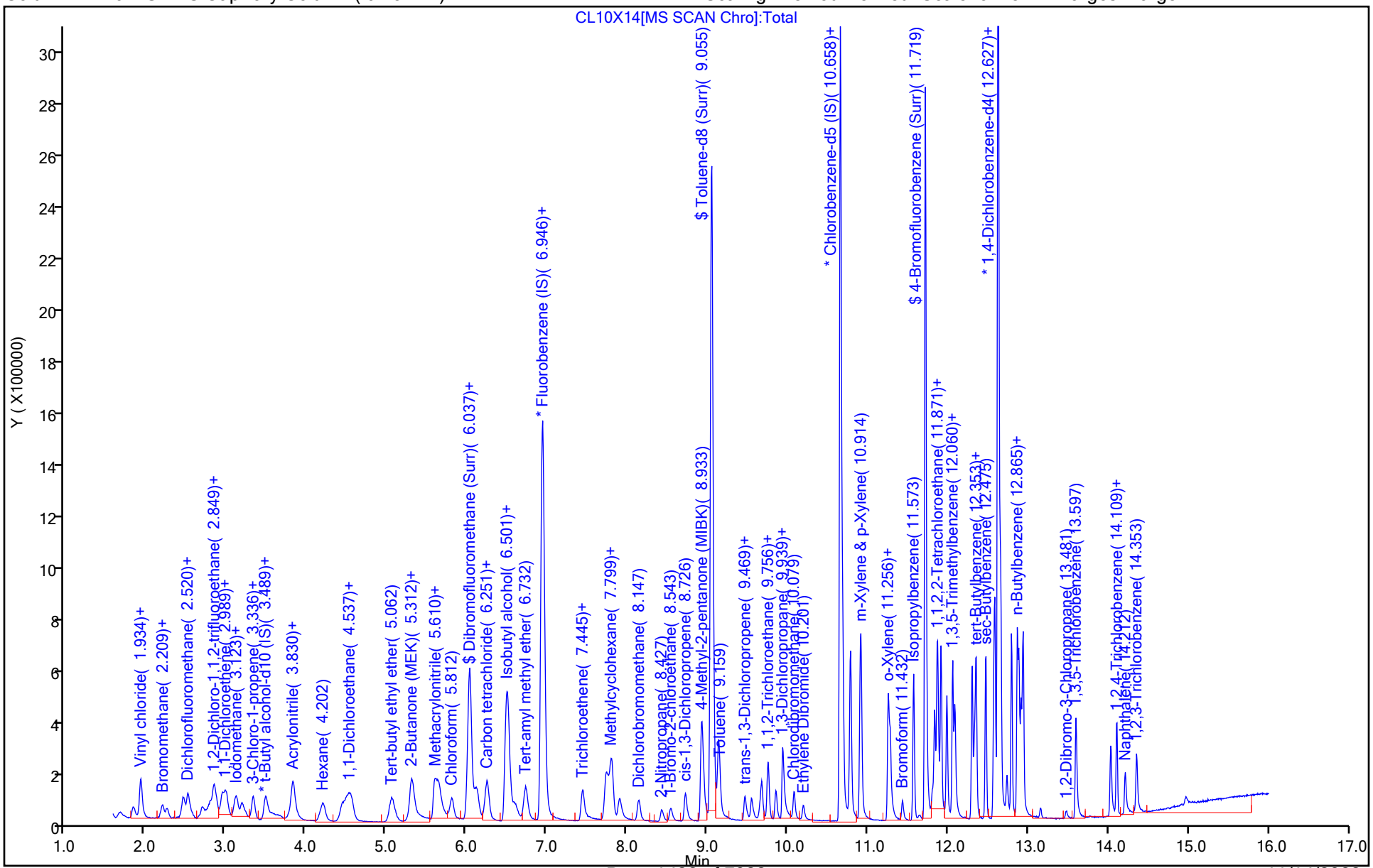
Lims ID: IC std3 1 Worklist Smp#: 15

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 14

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

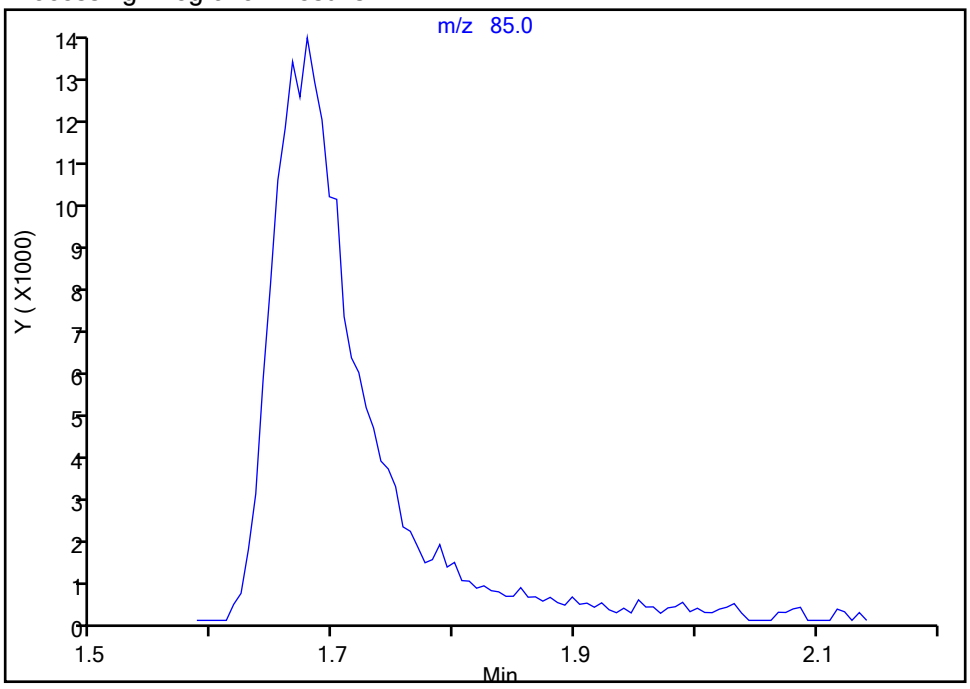
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X14.D				
Injection Date:	10-Jul-2023 20:13:30	Instrument ID:	10193		
Lims ID:	IC std3 1				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

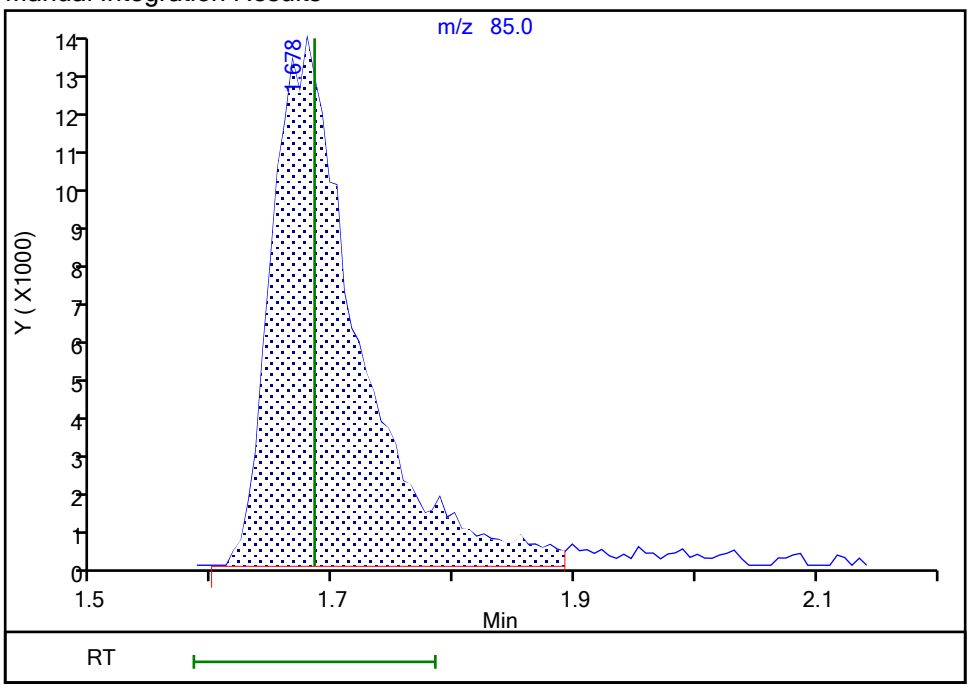
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.68
Area: 66700
Amount: 1.103039
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:44:32 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

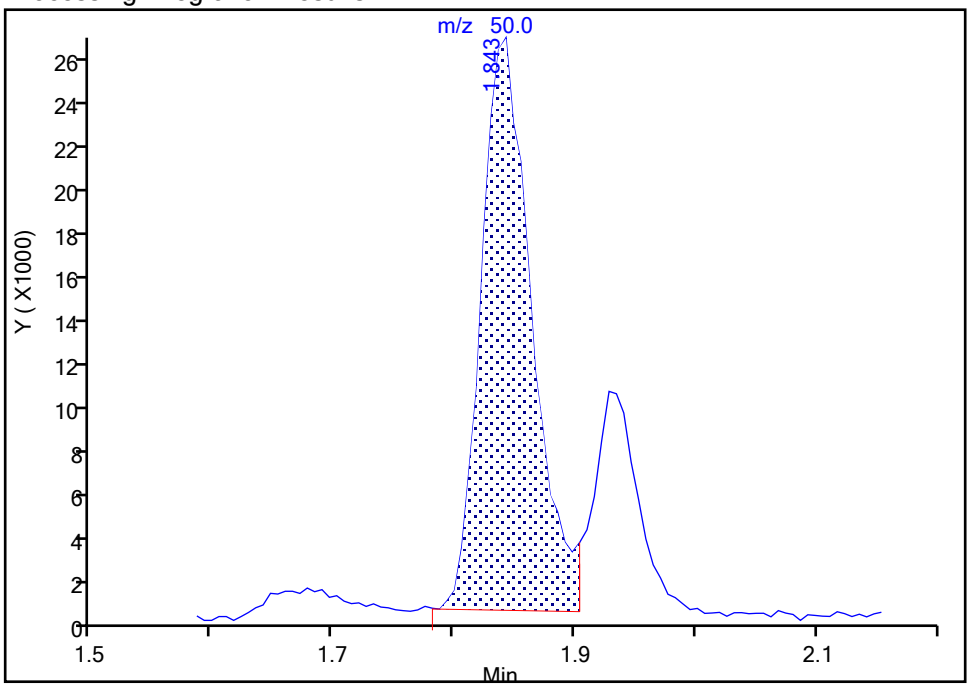
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X14.D				
Injection Date:	10-Jul-2023 20:13:30	Instrument ID:	10193		
Lims ID:	IC std3 1				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

5 Chloromethane, CAS: 74-87-3

Signal: 1

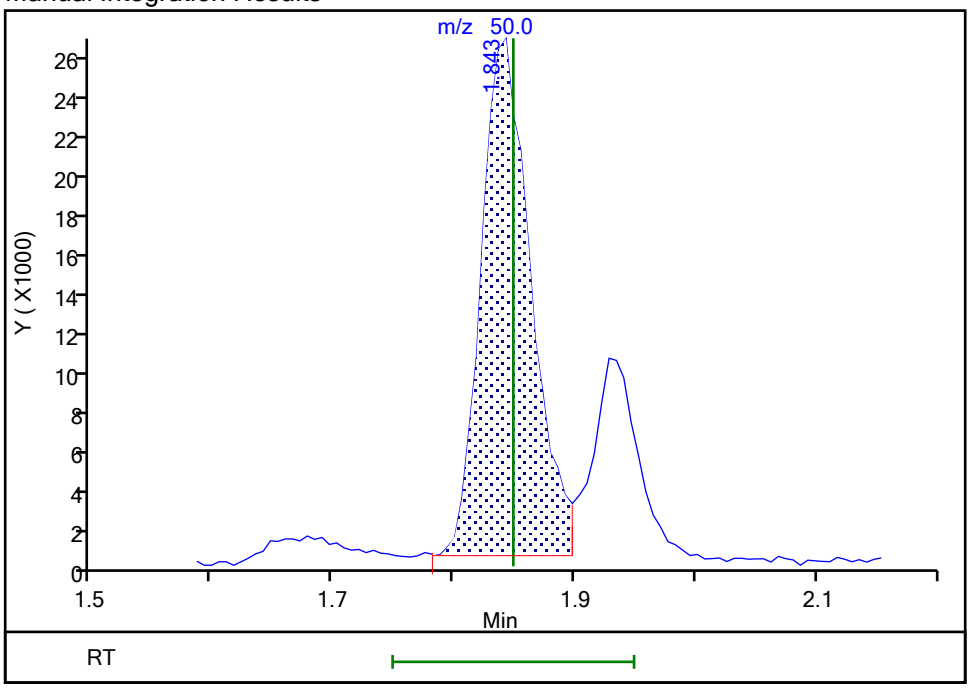
Processing Integration Results

RT: 1.84
Area: 75903
Amount: 0.988842
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 74670
Amount: 0.975016
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:44:46 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

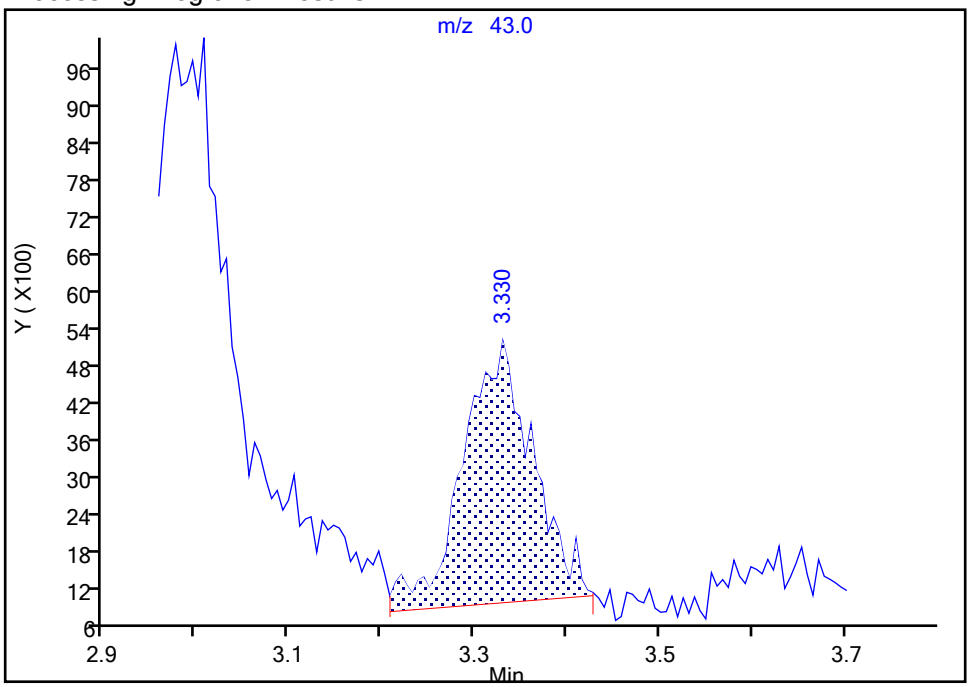
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X14.D				
Injection Date:	10-Jul-2023 20:13:30	Instrument ID:	10193		
Lims ID:	IC std3 1				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

26 Methyl acetate, CAS: 79-20-9

Signal: 1

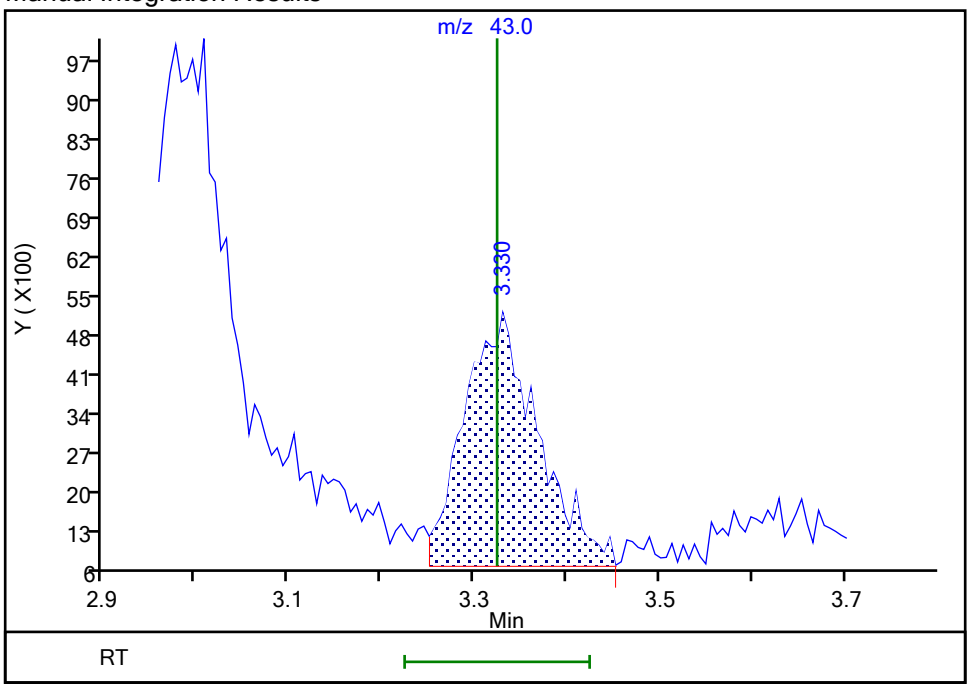
Processing Integration Results

RT: 3.33
Area: 22339
Amount: 0.897905
Amount Units: ug/l



Manual Integration Results

RT: 3.33
Area: 24801
Amount: 1.024469
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:45:16 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

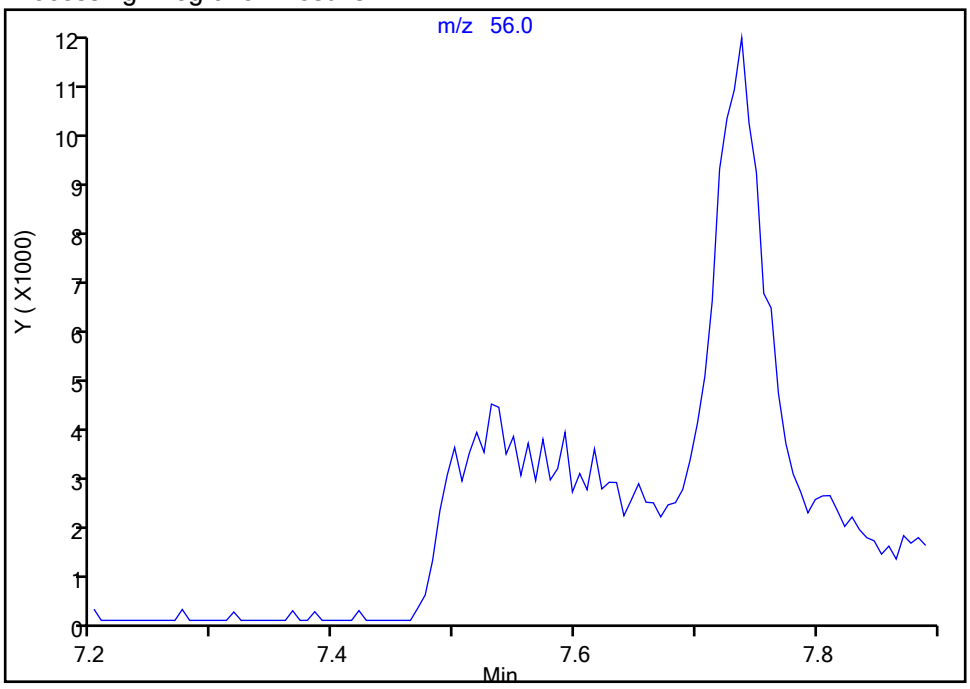
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X14.D				
Injection Date:	10-Jul-2023 20:13:30	Instrument ID:	10193		
Lims ID:	IC std3 1				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 n-Butanol, CAS: 71-36-3

Signal: 1

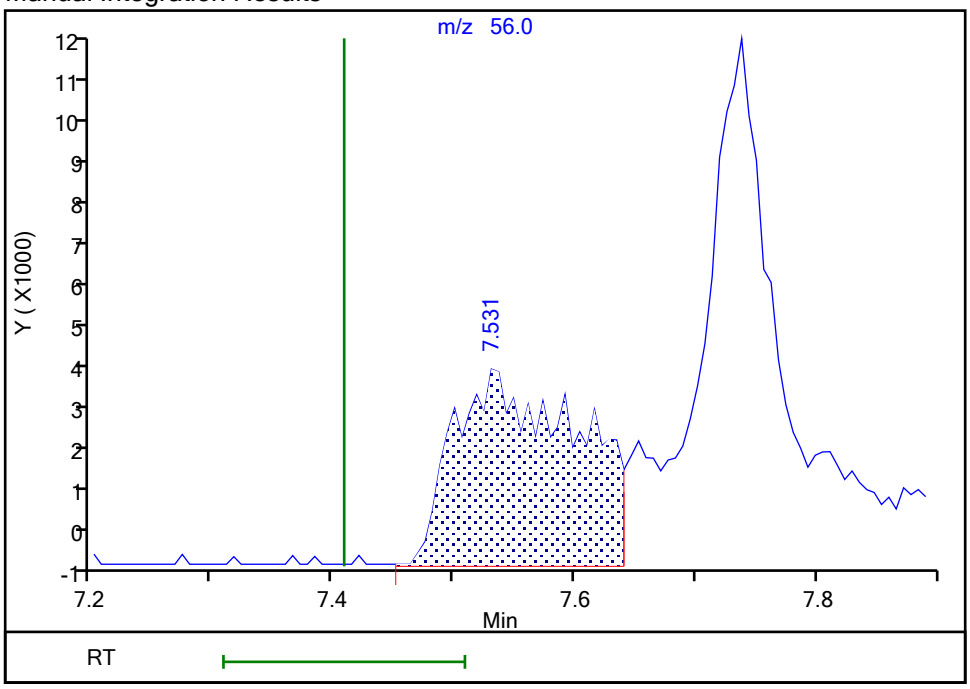
Not Detected
Expected RT: 7.41

Processing Integration Results



Manual Integration Results

RT: 7.53
Area: 29274
Amount: 79.607068
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:46:31 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

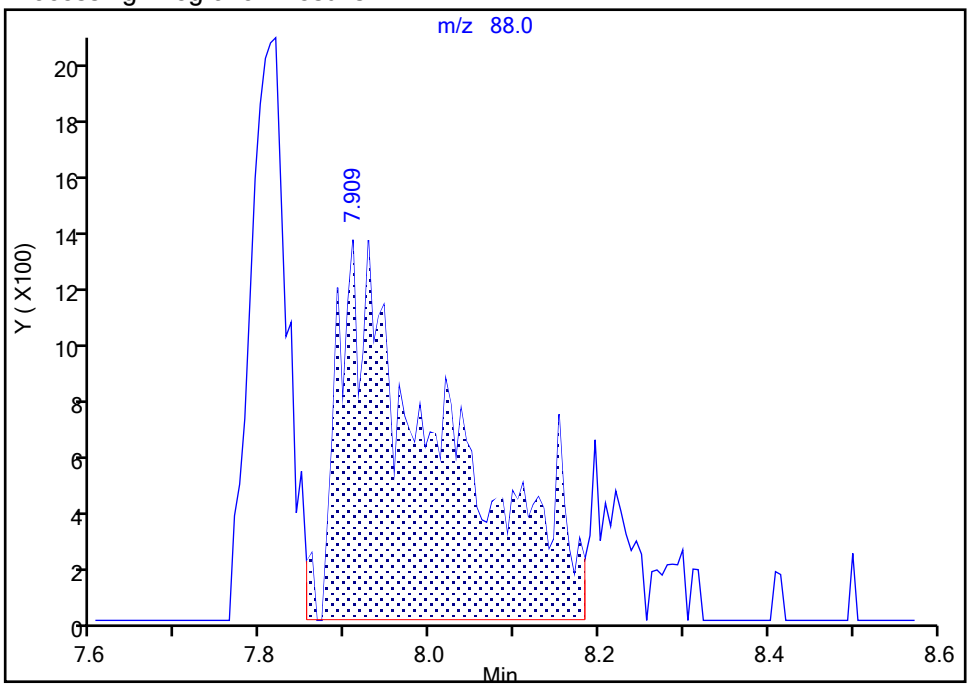
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X14.D				
Injection Date:	10-Jul-2023 20:13:30	Instrument ID:	10193		
Lims ID:	IC std3 1				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

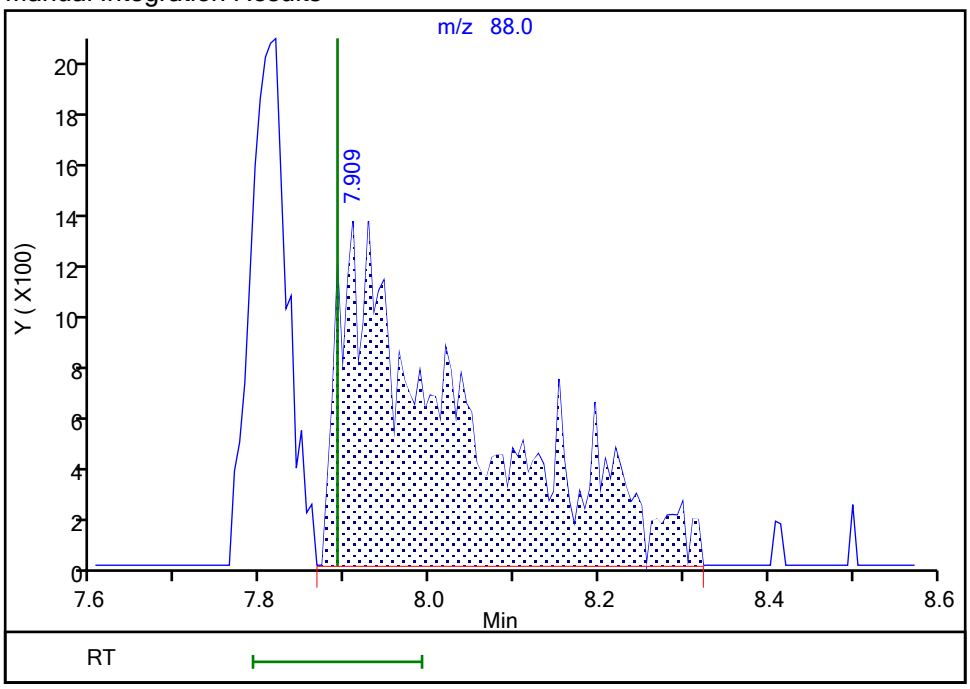
Processing Integration Results

RT: 7.91
Area: 11502
Amount: 47.785082
Amount Units: ug/l



Manual Integration Results

RT: 7.91
Area: 13360
Amount: 51.230331
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:46:47 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X15.D
Lims ID: IC std4 2
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Jul-2023 20:35:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-016
Misc. Info.: IC STD4 2
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:38:12 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:49:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.684	1.684	0.000	87	130813	2.00	2.16	M
5 Chloromethane	50	1.843	1.849	-0.006	99	154893	2.00	2.02	
6 Vinyl chloride	62	1.940	1.934	0.006	70	148245	2.00	2.02	
7 Butadiene	39	1.946	1.940	0.006	91	142678	2.00	2.01	
9 Bromomethane	94	2.215	2.209	0.006	89	116765	2.00	2.04	
10 Chloroethane	64	2.270	2.270	0.000	99	86174	2.00	2.00	
11 Dichlorofluoromethane	67	2.477	2.471	0.006	97	237128	2.00	2.02	
13 Pentane	43	2.532	2.526	0.006	96	154303	2.00	1.85	
12 Trichlorofluoromethane	101	2.532	2.532	0.000	93	178987	2.00	2.16	
14 Ethyl ether	59	2.708	2.702	0.006	90	96175	2.00	2.04	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.794	2.788	0.006	92	126477	2.00	1.95	
17 Acrolein	56	2.855	2.843	0.012	100	622742	100.0	101.5	
18 1,1-Dichloroethene	96	2.964	2.952	0.012	97	98047	2.00	1.83	
20 Acetone	43	2.989	2.977	0.012	97	151932	20.0	19.4	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.007	3.001	0.006	88	103495	2.00	1.96	
22 Iodomethane	142	3.123	3.117	0.006	98	217665	2.00	1.89	
24 Isopropyl alcohol	45	3.105	3.117	-0.012	40	70115	40.0	38.4	
23 Ethyl bromide	108	3.141	3.135	0.006	98	102958	2.00	1.97	
25 Carbon disulfide	76	3.208	3.202	0.006	99	358109	2.00	1.89	
26 Methyl acetate	43	3.336	3.324	0.012	34	49477	2.00	2.01	
29 3-Chloro-1-propene	41	3.342	3.336	0.006	94	177309	2.00	1.87	
30 Methylene Chloride	84	3.501	3.495	0.006	90	128206	2.00	1.91	
* 31 t-Butyl alcohol-d10 (IS)	65	3.568	3.538	0.030	94	164657	50.0	50.0	
32 2-Methyl-2-propanol	59	3.659	3.653	0.006	98	125966	40.0	36.4	
33 Acrylonitrile	53	3.800	3.788	0.012	92	60571	5.00	5.51	
35 trans-1,2-Dichloroethene	96	3.836	3.830	0.006	99	122282	2.00	1.88	
34 Methyl tert-butyl ether	73	3.836	3.830	0.006	94	339859	2.00	1.97	
36 Hexane	57	4.208	4.208	0.000	91	156003	2.00	1.88	
37 1,1-Dichloroethane	63	4.446	4.446	0.000	96	217910	2.00	1.91	
39 Isopropyl ether	45	4.519	4.513	0.006	94	410883	2.00	1.91	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Chloro-1,3-butadiene	53	4.562	4.562	0.000	90	160443	2.00	1.84	
41 Tert-butyl ethyl ether	59	5.074	5.074	0.000	97	387157	2.00	1.95	
42 2-Butanone (MEK)	43	5.299	5.281	0.018	99	307697	20.0	20.1	
43 cis-1,2-Dichloroethene	96	5.324	5.312	0.012	81	130877	2.00	1.87	
44 2,2-Dichloropropane	77	5.324	5.324	0.000	63	167697	2.00	1.84	
45 Propionitrile	54	5.446	5.385	0.061	97	133423	40.0	39.1	
47 Methacrylonitrile	67	5.592	5.592	0.000	91	310593	20.0	19.2	
49 Tetrahydrofuran	71	5.677	5.653	0.024	68	47371	10.0	10.5	
48 Chlorobromomethane	128	5.653	5.653	0.000	91	65221	2.00	1.94	
50 Chloroform	83	5.818	5.818	0.000	93	215645	2.00	1.91	
53 1,1,1-Trichloroethane	97	6.031	6.037	-0.006	98	177286	2.00	1.86	
$ 54 Dibromofluoromethane (Surr)	113	6.043	6.037	0.006	94	579440	10.0	10.1	
55 Cyclohexane	56	6.122	6.123	0.000	91	201009	2.00	1.88	
S 52 1,2-Dichloroethene, Total	100				0			3.75	
56 Carbon tetrachloride	117	6.250	6.244	0.006	96	152638	2.00	1.85	
57 1,1-Dichloropropene	75	6.263	6.257	0.006	98	157047	2.00	1.84	
58 Isobutyl alcohol	41	6.525	6.482	0.043	38	83688	100.0	99.9	a
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.494	6.507	-0.013	99	123074	10.0	10.1	
60 Benzene	78	6.525	6.525	0.000	96	513413	2.00	1.89	
61 1,2-Dichloroethane	62	6.610	6.598	0.012	97	138485	2.00	1.99	
64 Tert-amyl methyl ether	73	6.738	6.738	0.000	99	363871	2.00	1.96	
* 65 Fluorobenzene (IS)	96	6.945	6.952	-0.007	99	2465964	10.0	10.0	
66 n-Heptane	43	6.970	6.964	0.006	93	163522	2.00	1.82	
67 n-Butanol	56	7.464	7.409	0.055	22	102118	175.0	153.0	M
68 Trichloroethene	95	7.439	7.439	0.000	96	131625	2.00	1.88	
69 Methylcyclohexane	83	7.744	7.738	0.006	89	217814	2.00	1.92	
70 1,2-Dichloropropane	63	7.775	7.775	0.000	92	140956	2.00	1.96	
71 2-ethoxy-2-methyl butane	87	7.811	7.811	0.000	94	217047	2.00	1.95	
72 Dibromomethane	93	7.903	7.890	0.013	93	63721	2.00	1.91	
74 1,4-Dioxane	88	7.909	7.890	0.019	32	28725	100.0	108.2	M
73 Methyl methacrylate	69	7.903	7.897	0.006	90	62225	2.00	1.97	
76 Dichlorobromomethane	83	8.146	8.140	0.006	100	158910	2.00	1.92	
77 2-Nitropropane	41	8.433	8.427	0.006	99	85892	10.0	10.0	
78 1-Bromo-2-chloroethane	63	8.543	8.531	0.012	98	149262	2.00	2.05	
80 cis-1,3-Dichloropropene	75	8.726	8.720	0.006	97	201016	2.00	1.96	
82 4-Methyl-2-pentanone (MIBK)	43	8.927	8.927	0.000	96	887372	20.0	20.4	
$ 83 Toluene-d8 (Surr)	98	9.055	9.055	0.000	93	2556434	10.0	9.99	
84 Toluene	92	9.146	9.140	0.006	99	343209	2.00	1.88	
85 trans-1,3-Dichloropropene	75	9.463	9.457	0.006	91	160124	2.00	1.88	
86 Ethyl methacrylate	69	9.549	9.543	0.006	90	132868	2.00	1.96	
87 1,1,2-Trichloroethane	97	9.677	9.677	0.000	90	106032	2.00	1.96	
88 Tetrachloroethene	166	9.756	9.756	0.000	96	164773	2.00	1.88	
89 1,3-Dichloropropane	76	9.853	9.847	0.006	90	173001	2.00	2.00	
106 2-Hexanone	43	9.933	9.927	0.006	97	590741	20.0	19.9	
S 107 1,3-Dichloropropene, Total	100				0			3.84	
108 Chlorodibromomethane	129	10.079	10.079	0.000	90	129436	2.00	1.95	
110 Ethylene Dibromide	107	10.195	10.189	0.006	98	97526	2.00	2.01	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1948504	10.0	10.0	
113 Chlorobenzene	112	10.689	10.683	0.006	96	418067	2.00	1.89	
112 1-Chlorohexane	91	10.689	10.683	0.006	64	176964	2.00	1.79	
114 1,1,1,2-Tetrachloroethane	131	10.780	10.780	0.000	96	141383	2.00	1.92	
115 Ethylbenzene	91	10.786	10.786	0.000	98	660352	2.00	1.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
116 m-Xylene & p-Xylene	106	10.914	10.908	0.006	97	534517	4.00	3.80	
S 117 Xylenes, Total	106				0			5.68	
118 o-Xylene	106	11.256	11.256	0.000	96	264614	2.00	1.88	
119 Styrene	104	11.274	11.274	0.000	95	427822	2.00	1.95	
120 Bromoform	173	11.432	11.426	0.006	98	81349	2.00	1.93	
121 Isopropylbenzene	105	11.573	11.573	0.000	95	669252	2.00	1.88	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.719	0.000	96	914439	10.0	9.98	
125 Bromobenzene	156	11.835	11.829	0.006	94	188542	2.00	1.93	
126 1,1,2,2-Tetrachloroethane	83	11.835	11.835	0.000	92	138193	2.00	1.96	
127 trans-1,4-Dichloro-2-butene	53	11.865	11.859	0.006	91	314499	20.0	20.4	
128 1,2,3-Trichloropropane	110	11.877	11.877	0.000	76	34639	2.00	1.92	
129 N-Propylbenzene	91	11.914	11.914	0.000	98	788008	2.00	1.84	
130 2-Chlorotoluene	126	11.987	11.987	0.000	98	177872	2.00	1.91	
131 1,3,5-Trimethylbenzene	105	12.060	12.060	0.000	94	593907	2.00	1.87	
132 4-Chlorotoluene	126	12.085	12.085	0.000	97	183284	2.00	1.94	
133 tert-Butylbenzene	134	12.304	12.304	0.000	92	140340	2.00	1.89	
134 Pentachloroethane	167	12.335	12.329	0.006	88	118146	2.00	2.00	
135 1,2,4-Trimethylbenzene	105	12.353	12.347	0.006	96	622633	2.00	1.91	
136 sec-Butylbenzene	105	12.475	12.469	0.006	93	754102	2.00	1.87	
137 1,3-Dichlorobenzene	146	12.572	12.566	0.006	98	371086	2.00	1.91	
138 4-Isopropyltoluene	119	12.585	12.585	0.000	97	675394	2.00	1.89	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.627	0.000	93	1187709	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.646	12.640	0.006	96	382865	2.00	1.92	
141 1,2,3-Trimethylbenzene	120	12.658	12.658	0.000	98	297647	2.00	1.91	
142 Benzyl chloride	126	12.731	12.725	0.006	98	52911	2.00	1.89	
145 p-Diethylbenzene	119	12.865	12.865	0.000	95	430838	2.00	1.89	M
143 n-Butylbenzene	92	12.883	12.883	0.000	98	320079	2.00	1.91	
144 1,2-Dichlorobenzene	146	12.908	12.908	0.000	99	349881	2.00	1.91	
148 1,2-Dibromo-3-Chloropropane	155	13.475	13.469	0.006	89	18580	2.00	2.09	
149 1,3,5-Trichlorobenzene	180	13.597	13.591	0.006	98	284029	2.00	1.89	
150 1,2,4-Trichlorobenzene	180	14.029	14.023	0.006	94	217554	2.00	1.91	
151 Hexachlorobutadiene	225	14.109	14.103	0.006	95	118944	2.00	1.86	
152 Naphthalene	128	14.206	14.200	0.006	96	348868	2.00	1.87	
153 1,2,3-Trichlorobenzene	180	14.353	14.347	0.006	96	170003	2.00	1.97	
154 2-Methylnaphthalene	142	14.956	14.944	0.012	92	65373	2.00	1.49	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LL_#1_826_00084	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00095	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00159	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00073	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 11-Jul-2023 21:38:12 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X15.D

Injection Date: 10-Jul-2023 20:35:30 Instrument ID: 10193 Operator ID: knk41612

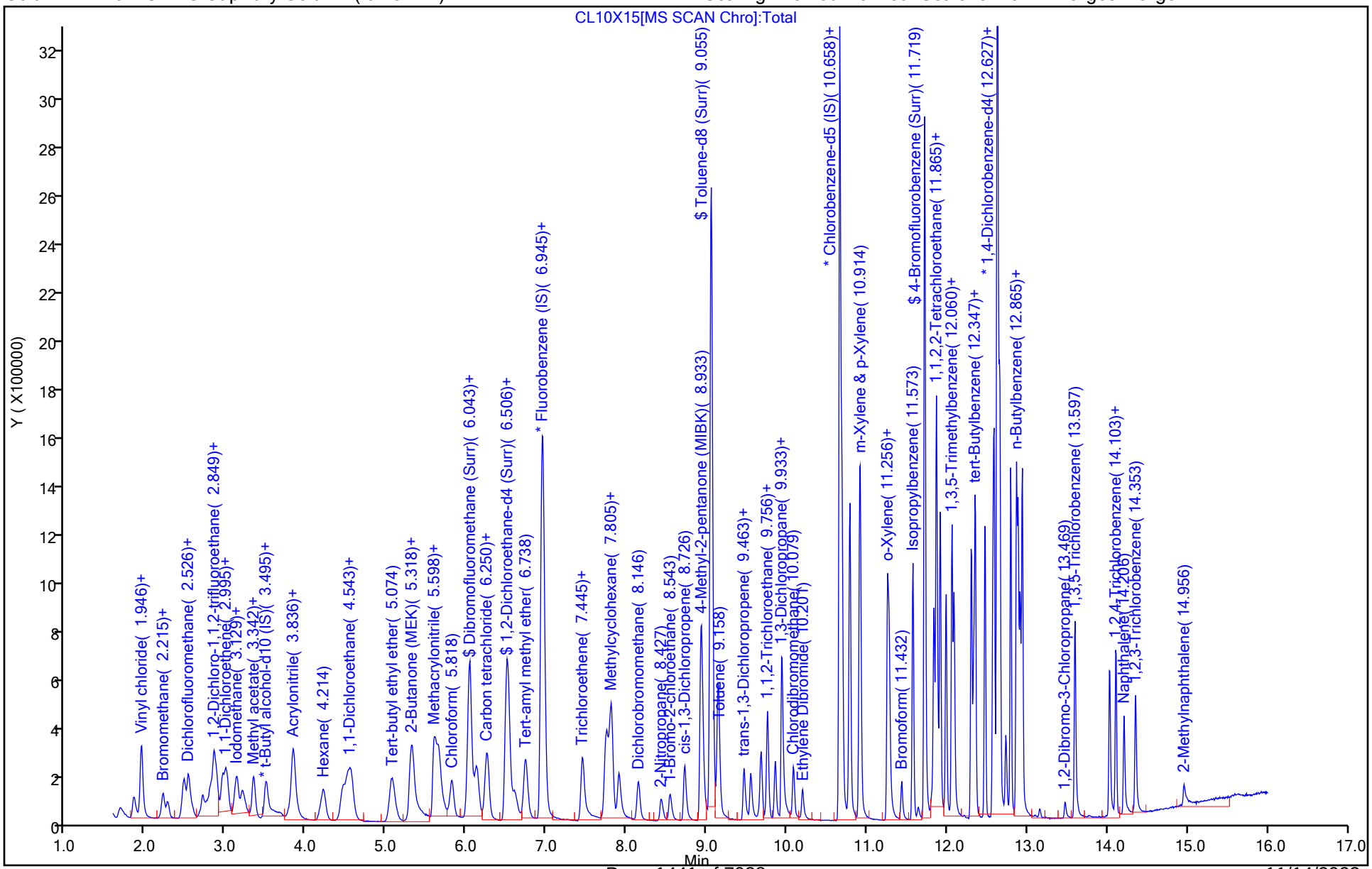
Lims ID: IC std4 2 Worklist Smp#: 16

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 15

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

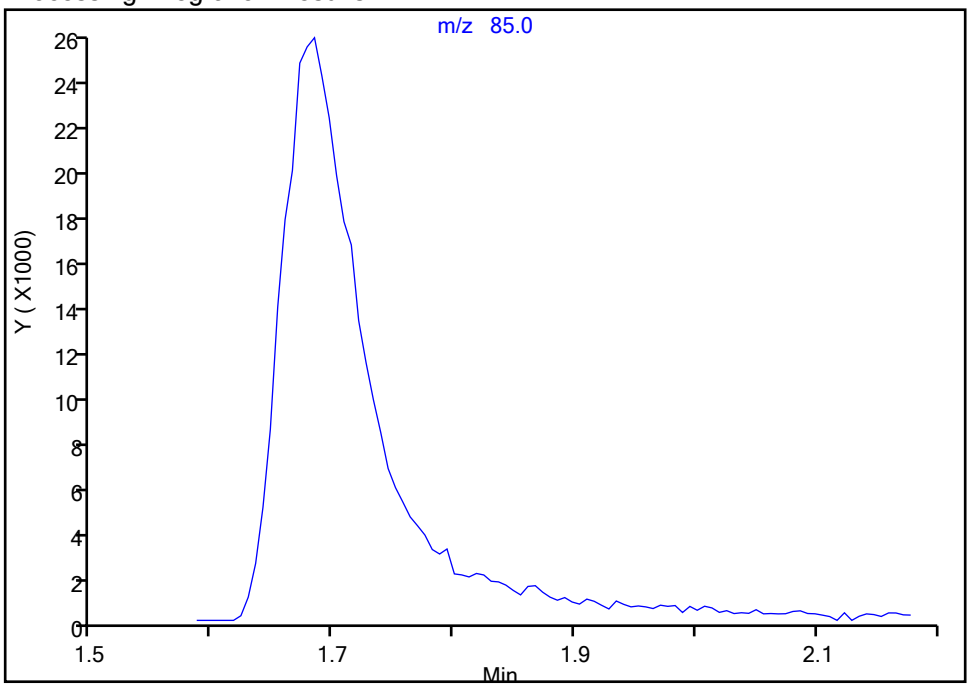
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X15.D				
Injection Date:	10-Jul-2023 20:35:30	Instrument ID:	10193		
Lims ID:	IC std4 2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

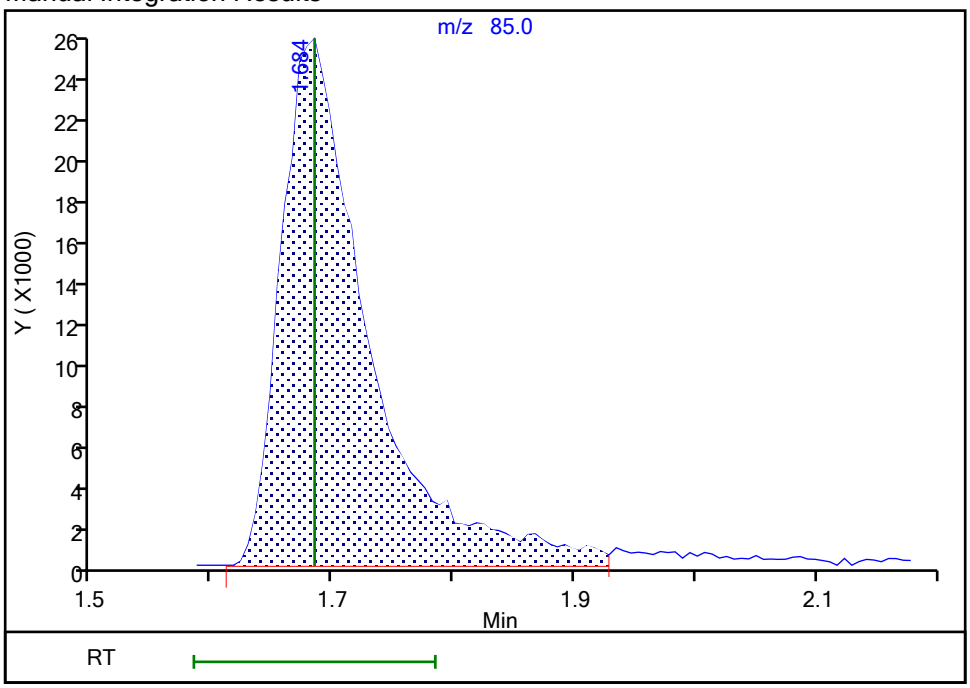
Not Detected
Expected RT: 1.68

Processing Integration Results



RT: 1.68
Area: 130813
Amount: 2.156976
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 11-Jul-2023 08:48:24 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

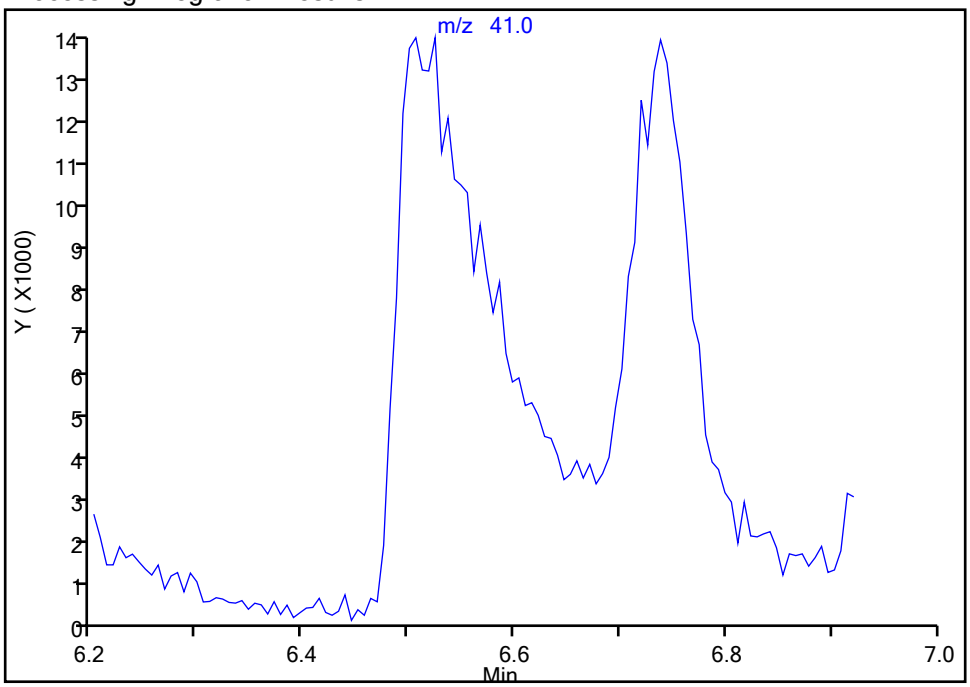
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X15.D				
Injection Date:	10-Jul-2023 20:35:30	Instrument ID:	10193		
Lims ID:	IC std4 2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

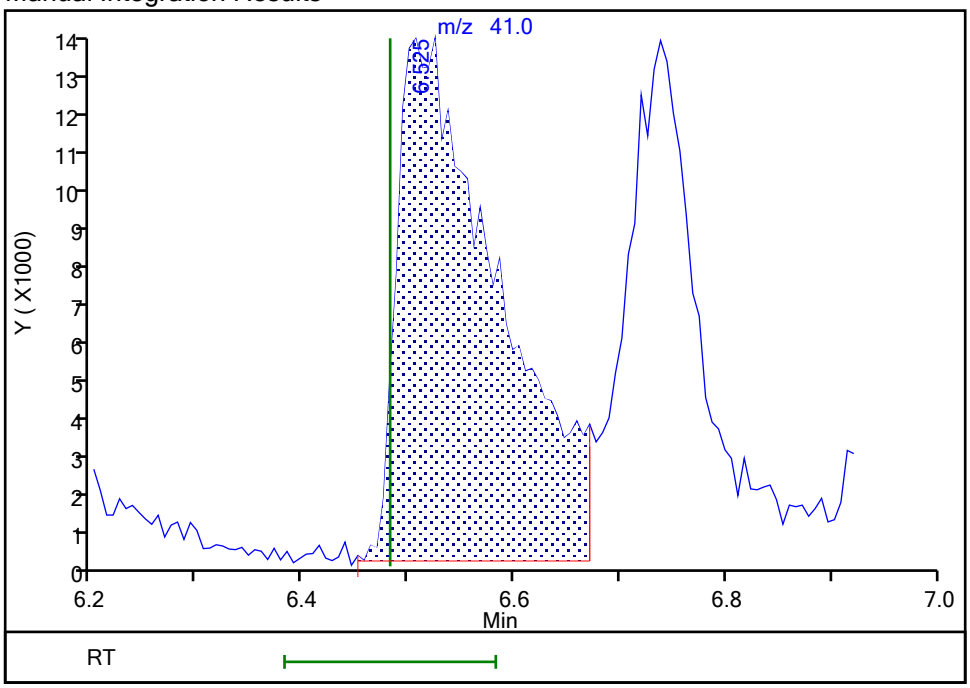
Not Detected
Expected RT: 6.48

Processing Integration Results



Manual Integration Results

RT: 6.52
Area: 83688
Amount: 99.916549
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:48:44 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

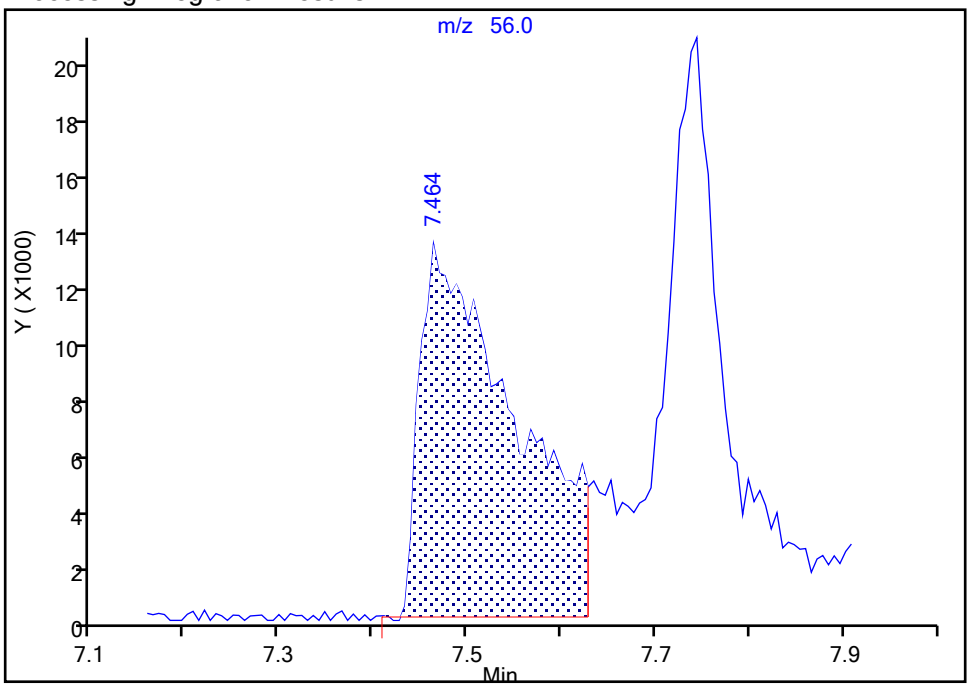
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X15.D				
Injection Date:	10-Jul-2023 20:35:30	Instrument ID:	10193		
Lims ID:	IC std4 2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 n-Butanol, CAS: 71-36-3

Signal: 1

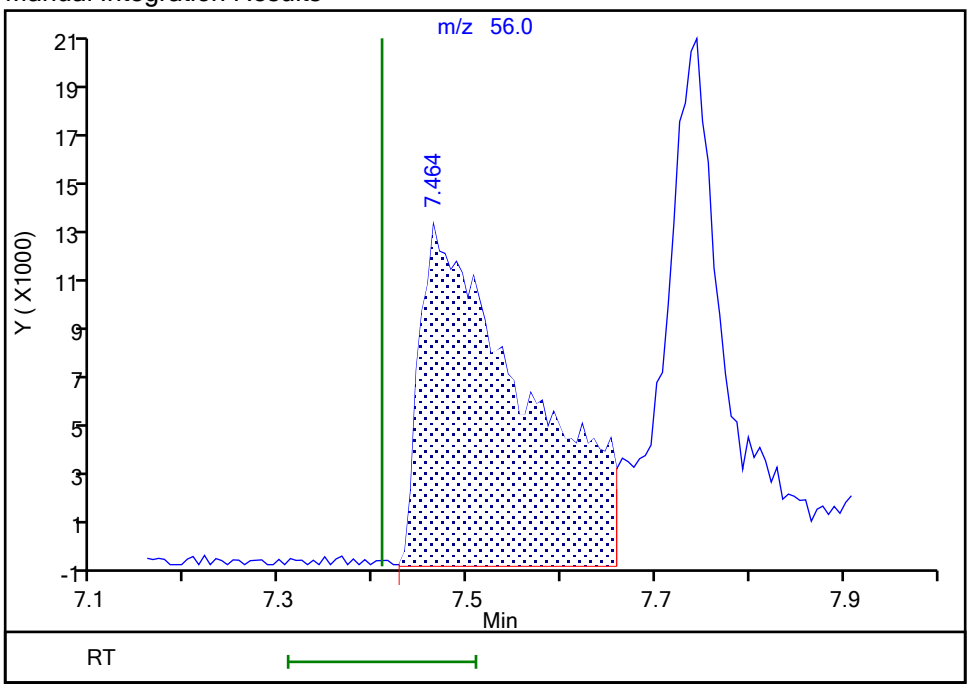
Processing Integration Results

RT: 7.46
Area: 91598
Amount: 141.2200
Amount Units: ug/l



Manual Integration Results

RT: 7.46
Area: 102118
Amount: 153.0412
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:49:09 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

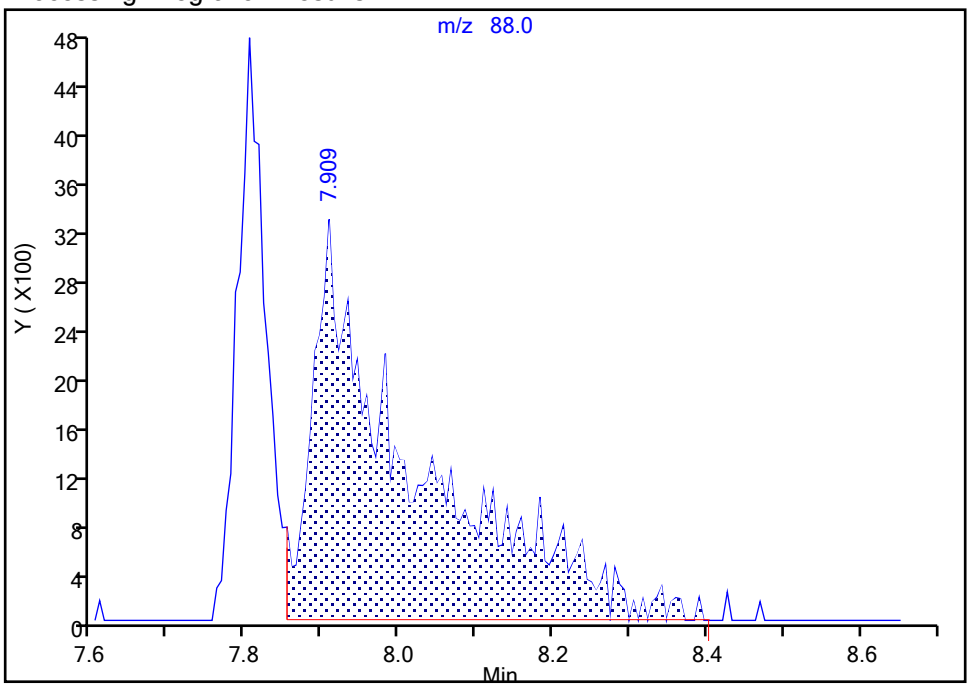
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X15.D				
Injection Date:	10-Jul-2023 20:35:30	Instrument ID:	10193		
Lims ID:	IC std4 2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

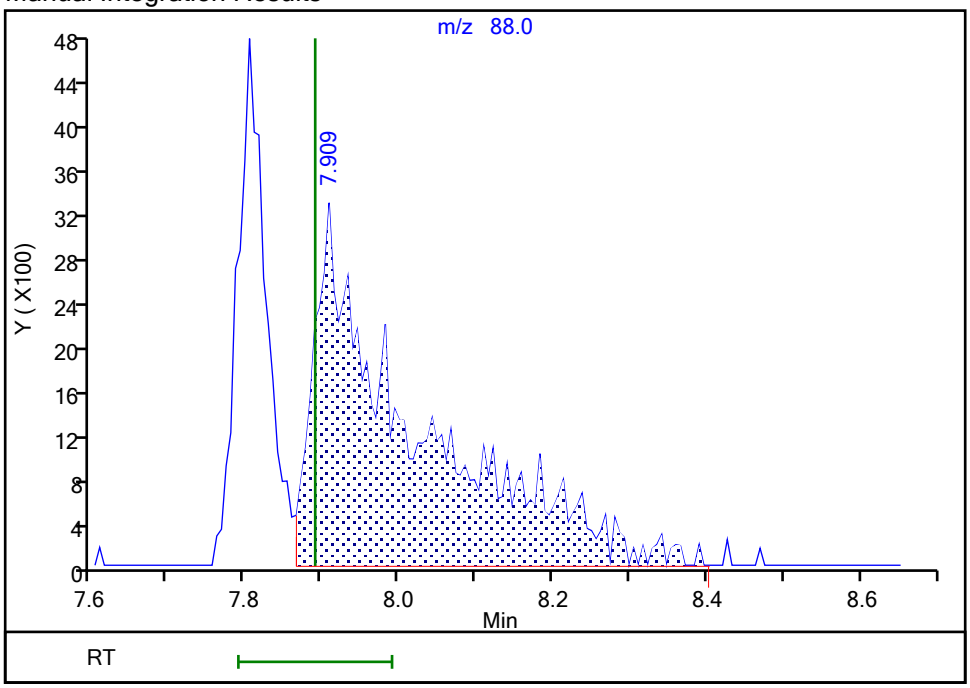
Processing Integration Results

RT: 7.91
Area: 29166
Amount: 116.4524
Amount Units: ug/l



Manual Integration Results

RT: 7.91
Area: 28725
Amount: 108.1950
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:49:21 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X16.D
Lims ID: IC std5 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Jul-2023 20:57:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-017
Misc. Info.: IC STD5 5
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:38:17 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:51:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.672	1.684	-0.012	88	302610	5.00	4.97	M
5 Chloromethane	50	1.843	1.849	-0.006	99	370453	5.00	4.81	
6 Vinyl chloride	62	1.928	1.934	-0.006	71	369078	5.00	5.01	
7 Butadiene	39	1.934	1.940	-0.006	91	357835	5.00	5.02	
9 Bromomethane	94	2.203	2.209	-0.006	91	277506	5.00	4.82	
10 Chloroethane	64	2.264	2.270	-0.006	99	210795	5.00	4.87	
11 Dichlorofluoromethane	67	2.465	2.471	-0.006	97	573749	5.00	4.88	
13 Pentane	43	2.520	2.526	-0.006	96	421812	5.00	5.03	
12 Trichlorofluoromethane	101	2.532	2.532	0.000	49	416336	5.00	5.01	
14 Ethyl ether	59	2.696	2.702	-0.006	90	241946	5.00	5.11	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.788	2.788	0.000	94	312193	5.00	4.79	
17 Acrolein	56	2.843	2.843	0.000	100	1532831	250.0	245.9	
18 1,1-Dichloroethene	96	2.946	2.952	-0.006	97	262109	5.00	4.87	
20 Acetone	43	2.983	2.977	0.006	98	351875	50.0	44.3	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.001	3.001	0.000	89	266636	5.00	5.02	
22 Iodomethane	142	3.111	3.117	-0.006	97	582776	5.00	5.04	
24 Isopropyl alcohol	45	3.111	3.117	-0.006	35	198243	100.0	112.5	
23 Ethyl bromide	108	3.135	3.135	0.000	97	271787	5.00	5.17	
25 Carbon disulfide	76	3.202	3.202	0.000	99	958221	5.00	5.03	
26 Methyl acetate	43	3.324	3.324	0.000	36	123525	5.00	4.93	
29 3-Chloro-1-propene	41	3.337	3.336	0.001	93	482187	5.00	5.08	
30 Methylene Chloride	84	3.489	3.495	-0.006	91	329457	5.00	4.90	
* 31 t-Butyl alcohol-d10 (IS)	65	3.550	3.538	0.012	95	167230	50.0	50.0	
32 2-Methyl-2-propanol	59	3.648	3.653	-0.005	99	317696	100.0	90.5	M
33 Acrylonitrile	53	3.794	3.788	0.006	53	134803	12.5	12.1	
35 trans-1,2-Dichloroethene	96	3.830	3.830	0.000	100	328931	5.00	5.03	
34 Methyl tert-butyl ether	73	3.830	3.830	0.000	93	876866	5.00	5.06	
36 Hexane	57	4.208	4.208	0.000	91	428626	5.00	5.14	
37 1,1-Dichloroethane	63	4.440	4.446	-0.006	96	581919	5.00	5.08	
39 Isopropyl ether	45	4.513	4.513	0.000	94	1101483	5.00	5.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Chloro-1,3-butadiene	53	4.556	4.562	-0.006	90	447291	5.00	5.10	
41 Tert-butyl ethyl ether	59	5.068	5.074	-0.006	97	1020502	5.00	5.11	
42 2-Butanone (MEK)	43	5.281	5.281	0.000	100	810200	50.0	52.2	
43 cis-1,2-Dichloroethene	96	5.312	5.312	0.000	81	362337	5.00	5.17	
44 2,2-Dichloropropane	77	5.318	5.324	-0.006	83	448320	5.00	4.90	
45 Propionitrile	54	5.385	5.385	0.000	99	390538	100.0	112.6	
47 Methacrylonitrile	67	5.592	5.592	0.000	91	868473	50.0	52.9	
49 Tetrahydrofuran	71	5.653	5.653	0.000	63	120244	25.0	26.3	
48 Chlorobromomethane	128	5.641	5.653	-0.012	91	169726	5.00	5.04	
50 Chloroform	83	5.812	5.818	-0.006	93	562498	5.00	4.96	
53 1,1,1-Trichloroethane	97	6.031	6.037	-0.006	98	478983	5.00	5.02	
$ 54 Dibromofluoromethane (Surr)	113	6.031	6.037	-0.006	94	580358	10.0	10.0	
55 Cyclohexane	56	6.123	6.123	0.001	91	545351	5.00	5.09	
S 52 1,2-Dichloroethene, Total	100				0			10.2	
56 Carbon tetrachloride	117	6.245	6.244	0.001	96	421019	5.00	5.09	
57 1,1-Dichloropropene	75	6.251	6.257	-0.006	98	428997	5.00	5.01	
58 Isobutyl alcohol	41	6.488	6.482	0.006	93	243540	250.0	248.9	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.488	6.507	-0.019	98	125165	10.0	10.2	
60 Benzene	78	6.519	6.525	-0.006	96	1380101	5.00	5.05	
61 1,2-Dichloroethane	62	6.604	6.598	0.006	97	340102	5.00	4.88	
64 Tert-amyl methyl ether	73	6.732	6.738	-0.006	99	953593	5.00	5.11	
* 65 Fluorobenzene (IS)	96	6.946	6.952	-0.006	98	2475137	10.0	10.0	
66 n-Heptane	43	6.964	6.964	0.000	92	466301	5.00	5.17	
67 n-Butanol	56	7.427	7.409	0.018	92	369243	437.5	418.5	
68 Trichloroethene	95	7.439	7.439	0.000	97	355409	5.00	5.07	
69 Methylcyclohexane	83	7.738	7.738	0.000	90	587502	5.00	5.16	
70 1,2-Dichloropropane	63	7.775	7.775	0.000	96	361296	5.00	5.02	
71 2-ethoxy-2-methyl butane	87	7.805	7.811	-0.006	93	579334	5.00	5.18	
72 Dibromomethane	93	7.891	7.890	0.001	93	171668	5.00	5.12	
74 1,4-Dioxane	88	7.897	7.890	0.007	34	70163	250.0	260.2	
73 Methyl methacrylate	69	7.897	7.897	0.000	93	172622	5.00	5.38	
76 Dichlorobromomethane	83	8.147	8.140	0.007	100	424379	5.00	5.10	
77 2-Nitropropane	41	8.427	8.427	0.000	98	227853	25.0	26.1	
78 1-Bromo-2-chloroethane	63	8.537	8.531	0.006	98	378125	5.00	5.18	
80 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	97	555330	5.00	5.40	
82 4-Methyl-2-pentanone (MIBK)	43	8.927	8.927	0.000	96	2406513	50.0	54.5	
$ 83 Toluene-d8 (Surr)	98	9.055	9.055	0.000	93	2545267	10.0	9.91	
84 Toluene	92	9.140	9.140	0.000	98	913320	5.00	4.99	
85 trans-1,3-Dichloropropene	75	9.457	9.457	0.000	91	465136	5.00	5.43	
86 Ethyl methacrylate	69	9.543	9.543	0.000	90	382912	5.00	5.62	
87 1,1,2-Trichloroethane	97	9.671	9.677	-0.006	89	270361	5.00	4.98	
88 Tetrachloroethene	166	9.756	9.756	0.000	97	442984	5.00	5.03	
89 1,3-Dichloropropane	76	9.848	9.847	0.001	89	455385	5.00	5.24	
106 2-Hexanone	43	9.933	9.927	0.006	96	1639299	50.0	54.5	
S 107 1,3-Dichloropropene, Total	100				0			10.8	
108 Chlorodibromomethane	129	10.079	10.079	0.000	90	341079	5.00	5.13	
110 Ethylene Dibromide	107	10.189	10.189	0.000	99	255939	5.00	5.26	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	83	1954853	10.0	10.0	
113 Chlorobenzene	112	10.683	10.683	0.000	97	1118156	5.00	5.04	
112 1-Chlorohexane	91	10.683	10.683	0.000	96	493503	5.00	4.97	
114 1,1,1,2-Tetrachloroethane	131	10.780	10.780	0.000	96	382509	5.00	5.18	
115 Ethylbenzene	91	10.786	10.786	0.000	98	1805085	5.00	5.13	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
116 m-Xylene & p-Xylene	106	10.908	10.908	0.000	97	1465581	10.0	10.4	
S 117 Xylenes, Total	106				0			15.5	
118 o-Xylene	106	11.256	11.256	0.000	96	722471	5.00	5.11	
119 Styrene	104	11.274	11.274	0.000	95	1195356	5.00	5.44	
120 Bromoform	173	11.433	11.426	0.007	99	219242	5.00	5.18	
121 Isopropylbenzene	105	11.573	11.573	0.000	95	1835799	5.00	5.15	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.719	0.000	97	921478	10.0	10.0	
125 Bromobenzene	156	11.829	11.829	0.000	94	504869	5.00	5.24	
126 1,1,2,2-Tetrachloroethane	83	11.835	11.835	0.000	93	362746	5.00	5.23	
127 trans-1,4-Dichloro-2-butene	53	11.859	11.859	0.000	90	860918	50.0	56.5	
128 1,2,3-Trichloropropane	110	11.878	11.877	0.001	77	93804	5.00	5.27	
129 N-Propylbenzene	91	11.914	11.914	0.000	98	2213293	5.00	5.25	
130 2-Chlorotoluene	126	11.987	11.987	0.000	98	477751	5.00	5.20	
131 1,3,5-Trimethylbenzene	105	12.061	12.060	0.001	94	1629513	5.00	5.21	
132 4-Chlorotoluene	126	12.085	12.085	0.000	96	488843	5.00	5.24	
133 tert-Butylbenzene	134	12.304	12.304	0.000	92	383394	5.00	5.22	
134 Pentachloroethane	167	12.329	12.329	0.000	91	319319	5.00	5.49	
135 1,2,4-Trimethylbenzene	105	12.347	12.347	0.000	97	1696596	5.00	5.28	
136 sec-Butylbenzene	105	12.469	12.469	0.000	94	2084526	5.00	5.24	
137 1,3-Dichlorobenzene	146	12.567	12.566	0.001	98	1002205	5.00	5.24	
138 4-Isopropyltoluene	119	12.585	12.585	0.000	97	1887390	5.00	5.35	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.627	0.000	92	1170924	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.646	12.640	0.006	96	997771	5.00	5.06	
141 1,2,3-Trimethylbenzene	120	12.658	12.658	0.000	98	811253	5.00	5.28	
142 Benzyl chloride	126	12.731	12.725	0.006	98	151722	5.00	5.49	
145 p-Diethylbenzene	119	12.865	12.865	0.000	94	1192272	5.00	5.32	M
143 n-Butylbenzene	92	12.884	12.883	0.001	97	899820	5.00	5.43	
144 1,2-Dichlorobenzene	146	12.908	12.908	0.000	99	943028	5.00	5.22	
148 1,2-Dibromo-3-Chloropropane	155	13.469	13.469	0.000	90	51208	5.00	5.86	
149 1,3,5-Trichlorobenzene	180	13.591	13.591	0.000	97	795965	5.00	5.37	
150 1,2,4-Trichlorobenzene	180	14.024	14.023	0.001	94	613674	5.00	5.46	
151 Hexachlorobutadiene	225	14.109	14.103	0.006	96	327298	5.00	5.19	
152 Naphthalene	128	14.200	14.200	0.000	96	1011522	5.00	5.51	
153 1,2,3-Trichlorobenzene	180	14.347	14.347	0.001	96	475874	5.00	5.59	
154 2-Methylnaphthalene	142	14.950	14.944	0.006	92	227150	5.00	5.26	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00084	Amount Added:	5.00	Units: uL	
MSV_LL_#2_826_00095	Amount Added:	5.00	Units: uL	
MSV_LL_GAS826_00159	Amount Added:	5.00	Units: uL	
MSV_HP25_ISSS_00073	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 11-Jul-2023 21:38:17 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X16.D

Injection Date: 10-Jul-2023 20:57:30 Instrument ID: 10193 Operator ID: knk41612

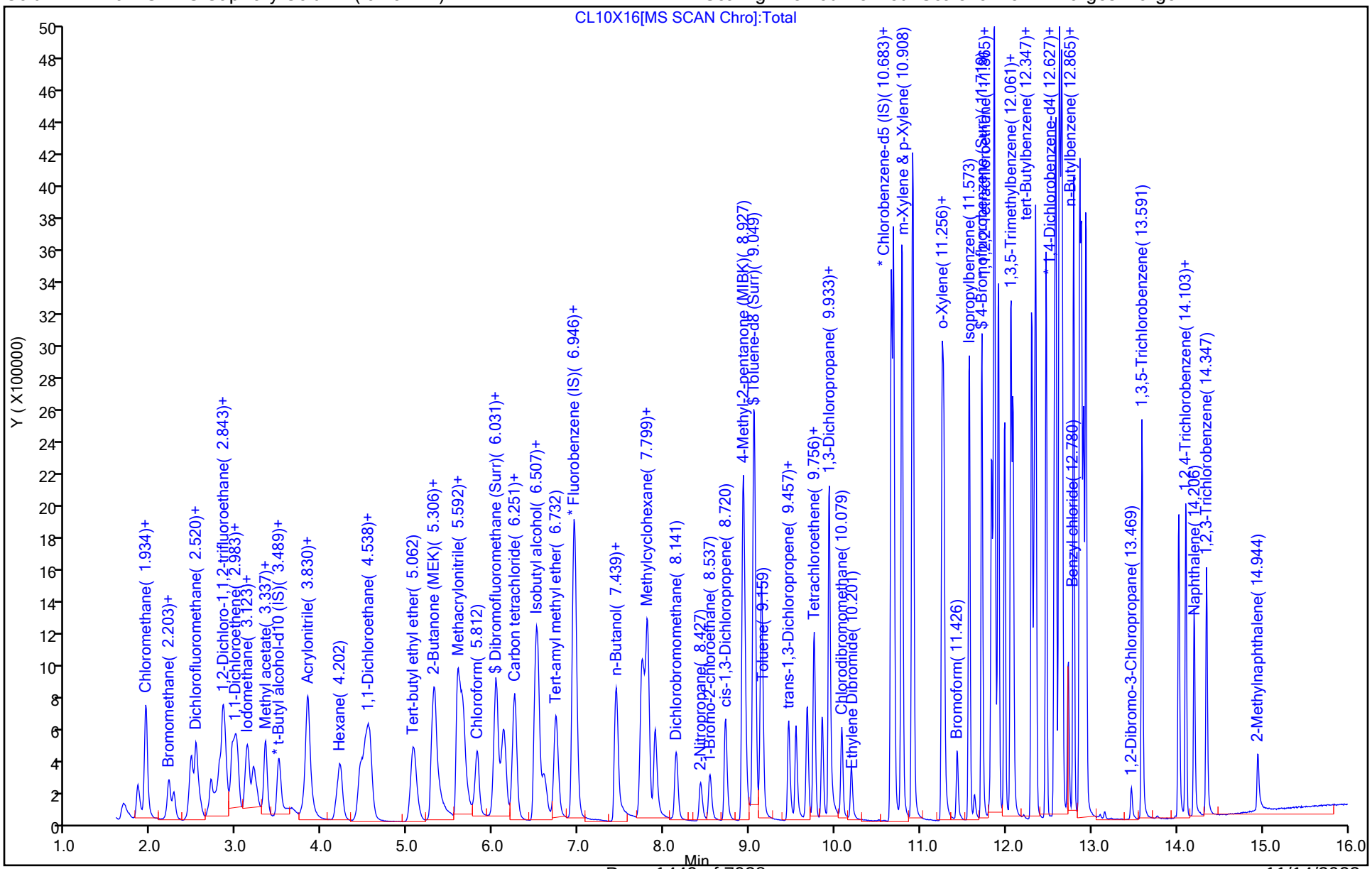
Lims ID: IC std5 5 Worklist Smp#: 17

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 16

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

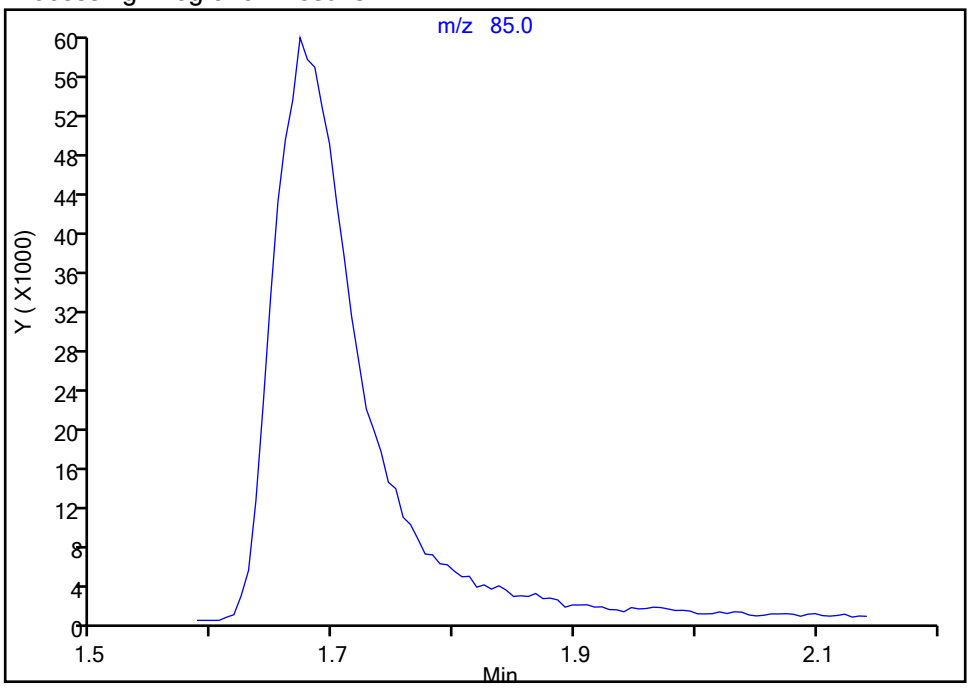
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X16.D				
Injection Date:	10-Jul-2023 20:57:30	Instrument ID:	10193		
Lims ID:	IC std5 5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

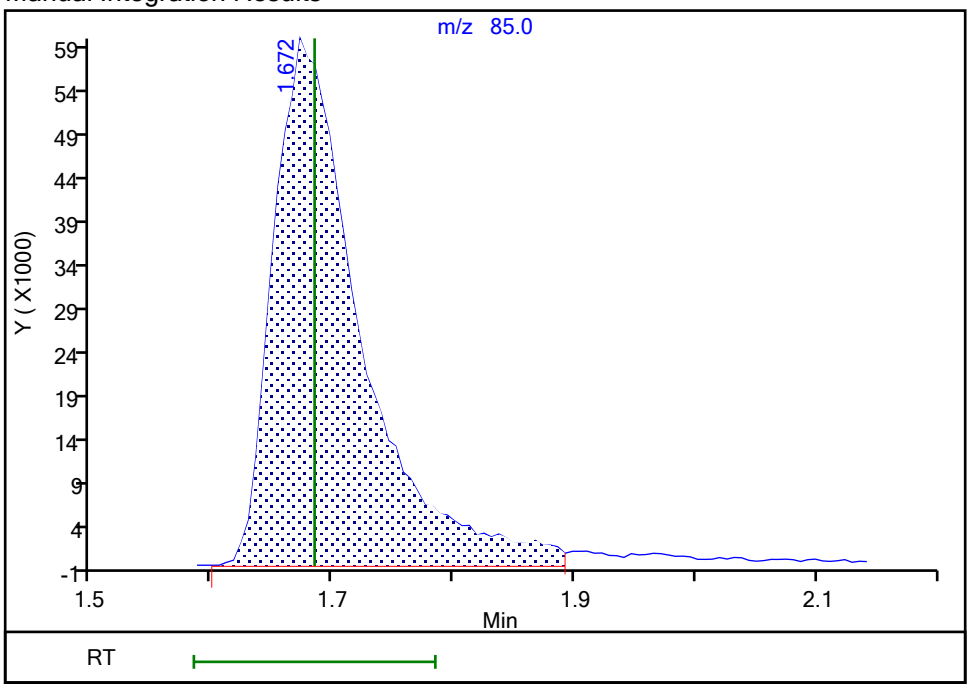
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.67
Area: 302610
Amount: 4.971246
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:50:11 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

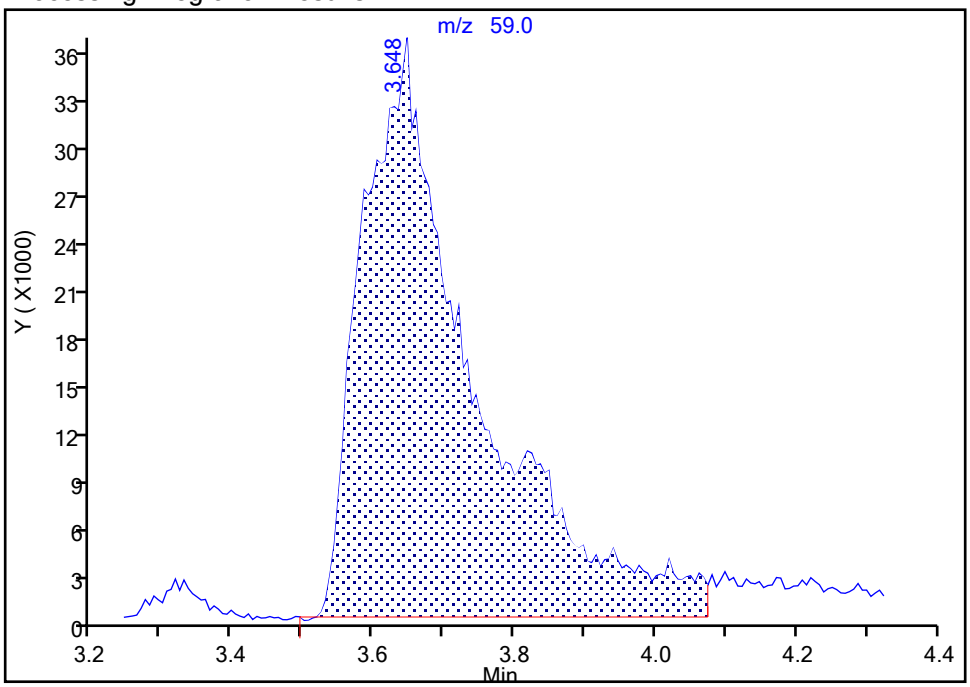
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X16.D				
Injection Date:	10-Jul-2023 20:57:30	Instrument ID:	10193		
Lims ID:	IC std5 5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

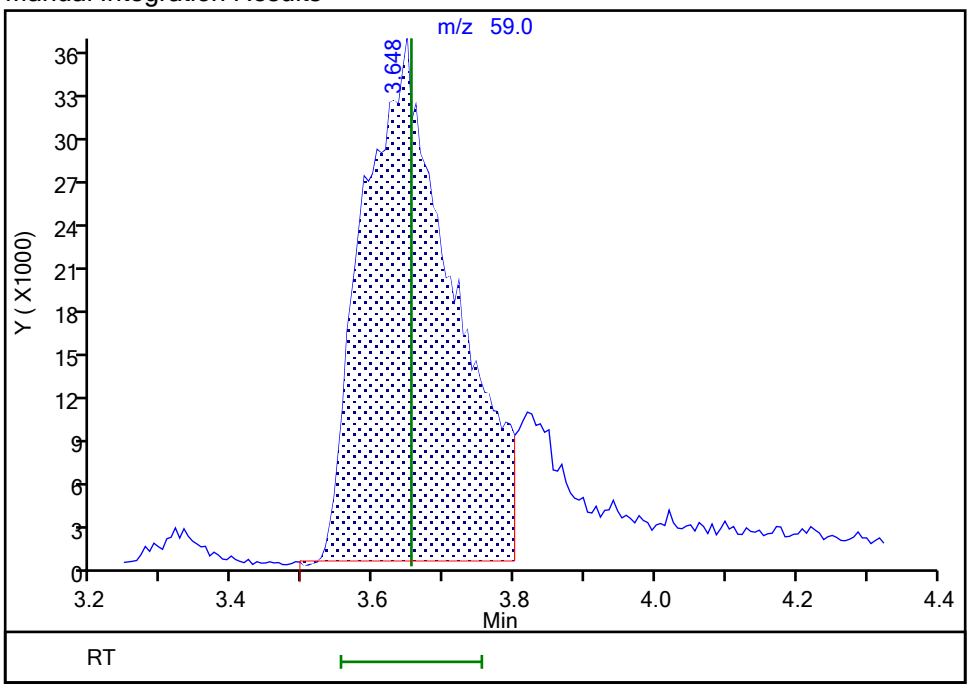
Processing Integration Results

RT: 3.65
Area: 391543
Amount: 108.3468
Amount Units: ug/l



Manual Integration Results

RT: 3.65
Area: 317696
Amount: 90.480900
Amount Units: ug/l



Reviewer: UKEK, 11-Jul-2023 19:43:00 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X17.D
Lims ID: ICIS 10
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 10-Jul-2023 21:18:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-018
Misc. Info.: ICIS 10
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:38:21 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:25:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.684	1.684	0.000	99	658785	10.0	10.7	Ma
5 Chloromethane	50	1.849	1.849	0.000	99	780425	10.0	9.98	
6 Vinyl chloride	62	1.934	1.934	0.000	98	760607	10.0	10.2	
7 Butadiene	39	1.940	1.940	0.000	90	752244	10.0	10.4	
9 Bromomethane	94	2.209	2.209	0.000	90	582711	10.0	9.98	
10 Chloroethane	64	2.270	2.270	0.000	100	430518	10.0	9.80	
11 Dichlorofluoromethane	67	2.471	2.471	0.000	97	1188628	10.0	9.97	
13 Pentane	43	2.526	2.526	0.000	96	839061	10.0	9.87	
12 Trichlorofluoromethane	101	2.532	2.532	0.000	98	900669	10.0	10.7	
14 Ethyl ether	59	2.702	2.702	0.000	91	488994	10.0	10.2	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.788	2.788	0.000	90	667816	10.0	10.1	
17 Acrolein	56	2.843	2.843	0.000	100	3043605	500.0	485.8	
18 1,1-Dichloroethene	96	2.952	2.952	0.000	97	535704	10.0	9.81	
20 Acetone	43	2.977	2.977	0.000	98	670067	100.0	84.0	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.001	3.001	0.000	89	549168	10.0	10.2	
22 Iodomethane	142	3.117	3.117	0.000	97	1189155	10.0	10.1	
24 Isopropyl alcohol	45	3.117	3.117	0.000	35	317521	200.0	181.2	
23 Ethyl bromide	108	3.135	3.135	0.000	98	538553	10.0	10.1	
25 Carbon disulfide	76	3.202	3.202	0.000	99	1981894	10.0	10.3	
26 Methyl acetate	43	3.324	3.324	0.000	36	230624	10.0	9.17	
29 3-Chloro-1-propene	41	3.336	3.336	0.000	93	1009099	10.0	10.5	
30 Methylene Chloride	84	3.495	3.495	0.000	92	666555	10.0	9.76	
* 31 t-Butyl alcohol-d10 (IS)	65	3.550	3.550	0.000	35	168052	50.0	50.0	M
32 2-Methyl-2-propanol	59	3.653	3.653	0.000	99	602660	200.0	170.8	
33 Acrylonitrile	53	3.788	3.788	0.000	100	278600	25.0	24.8	M
35 trans-1,2-Dichloroethene	96	3.830	3.830	0.000	100	685758	10.0	10.3	
34 Methyl tert-butyl ether	73	3.830	3.830	0.000	93	1770056	10.0	10.1	
36 Hexane	57	4.208	4.208	0.000	92	862976	10.0	10.2	
37 1,1-Dichloroethane	63	4.446	4.446	0.000	96	1201309	10.0	10.3	
39 Isopropyl ether	45	4.513	4.513	0.000	94	2272827	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Chloro-1,3-butadiene	53	4.562	4.562	0.000	89	943188	10.0	10.6	
41 Tert-butyl ethyl ether	59	5.074	5.074	0.000	98	2117027	10.0	10.4	
42 2-Butanone (MEK)	43	5.281	5.281	0.000	100	1631605	100.0	104.7	
43 cis-1,2-Dichloroethene	96	5.312	5.312	0.000	81	745504	10.0	10.5	
44 2,2-Dichloropropane	77	5.324	5.324	0.000	86	929524	10.0	10.0	
45 Propionitrile	54	5.385	5.385	0.000	99	741560	200.0	212.7	
47 Methacrylonitrile	67	5.592	5.592	0.000	91	1754007	100.0	106.3	
49 Tetrahydrofuran	71	5.653	5.653	0.000	77	241496	50.0	52.7	
48 Chlorobromomethane	128	5.653	5.653	0.000	93	351013	10.0	10.3	
50 Chloroform	83	5.818	5.818	0.000	93	1164324	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.037	6.037	0.000	98	990464	10.0	10.2	
$ 54 Dibromofluoromethane (Surr)	113	6.037	6.037	0.000	93	587053	10.0	10.0	
55 Cyclohexane	56	6.123	6.123	0.000	91	1128392	10.0	10.4	
56 Carbon tetrachloride	117	6.244	6.244	0.000	95	881185	10.0	10.5	
57 1,1-Dichloropropene	75	6.257	6.257	0.000	99	906015	10.0	10.4	
58 Isobutyl alcohol	41	6.482	6.482	0.000	94	497465	500.0	485.2	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.507	6.507	0.000	99	119348	10.0	9.62	
60 Benzene	78	6.525	6.525	0.000	97	2851658	10.0	10.3	
61 1,2-Dichloroethane	62	6.598	6.598	0.000	97	686799	10.0	9.71	
64 Tert-amyl methyl ether	73	6.738	6.738	0.000	99	1965435	10.0	10.4	
* 65 Fluorobenzene (IS)	96	6.946	6.946	0.000	97	2510713	10.0	10.0	
66 n-Heptane	43	6.964	6.964	0.000	90	971821	10.0	10.6	
67 n-Butanol	56	7.409	7.409	0.000	88	805828	875.0	851.1	
68 Trichloroethene	95	7.439	7.439	0.000	96	734500	10.0	10.3	
69 Methylcyclohexane	83	7.738	7.738	0.000	92	1211867	10.0	10.5	
70 1,2-Dichloropropane	63	7.775	7.775	0.000	96	745462	10.0	10.2	
71 2-ethoxy-2-methyl butane	87	7.811	7.811	0.000	94	1201346	10.0	10.6	
72 Dibromomethane	93	7.890	7.890	0.000	93	349503	10.0	10.3	
74 1,4-Dioxane	88	7.890	7.890	0.000	31	138169	500.0	509.9	M
73 Methyl methacrylate	69	7.897	7.897	0.000	92	354852	10.0	11.0	
76 Dichlorobromomethane	83	8.140	8.140	0.000	100	886523	10.0	10.5	
77 2-Nitropropane	41	8.427	8.427	0.000	98	457411	50.0	52.2	
78 1-Bromo-2-chloroethane	63	8.531	8.531	0.000	98	772215	10.0	10.4	
80 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	97	1175478	10.0	11.3	
82 4-Methyl-2-pentanone (MIBK)	43	8.927	8.927	0.000	96	4779944	100.0	107.8	
$ 83 Toluene-d8 (Surr)	98	9.055	9.055	0.000	93	2591778	10.0	9.91	
84 Toluene	92	9.140	9.140	0.000	98	1903875	10.0	10.2	
85 trans-1,3-Dichloropropene	75	9.457	9.457	0.000	91	990727	10.0	11.4	
86 Ethyl methacrylate	69	9.543	9.543	0.000	90	813455	10.0	11.7	
87 1,1,2-Trichloroethane	97	9.677	9.677	0.000	90	551790	10.0	9.98	
88 Tetrachloroethene	166	9.756	9.756	0.000	97	913085	10.0	10.2	
89 1,3-Dichloropropane	76	9.847	9.847	0.000	89	930970	10.0	10.5	
106 2-Hexanone	43	9.927	9.927	0.000	96	3425778	100.0	113.3	
108 Chlorodibromomethane	129	10.079	10.079	0.000	90	710622	10.0	10.5	
110 Ethylene Dibromide	107	10.189	10.189	0.000	98	538447	10.0	10.9	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	83	1990861	10.0	10.0	
113 Chlorobenzene	112	10.683	10.683	0.000	97	2309084	10.0	10.2	
112 1-Chlorohexane	91	10.683	10.683	0.000	96	1020383	10.0	10.1	
114 1,1,1,2-Tetrachloroethane	131	10.780	10.780	0.000	98	791480	10.0	10.5	
115 Ethylbenzene	91	10.786	10.786	0.000	97	3756735	10.0	10.5	a
116 m-Xylene & p-Xylene	106	10.908	10.908	0.000	96	3032843	20.0	21.1	a
118 o-Xylene	106	11.256	11.256	0.000	96	1515690	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 Styrene	104	11.274	11.274	0.000	95	2525581	10.0	11.3	
120 Bromoform	173	11.426	11.426	0.000	98	467869	10.0	10.9	
121 Isopropylbenzene	105	11.573	11.573	0.000	95	3837170	10.0	10.6	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.719	0.000	97	948762	10.0	10.1	
125 Bromobenzene	156	11.829	11.829	0.000	90	1042948	10.0	10.4	
126 1,1,2,2-Tetrachloroethane	83	11.835	11.835	0.000	92	741339	10.0	10.3	
127 trans-1,4-Dichloro-2-butene	53	11.859	11.859	0.000	90	1816127	100.0	115.0	
128 1,2,3-Trichloropropane	110	11.877	11.877	0.000	83	188210	10.0	10.2	
129 N-Propylbenzene	91	11.914	11.914	0.000	98	4639491	10.0	10.6	
130 2-Chlorotoluene	126	11.987	11.987	0.000	98	994645	10.0	10.4	
131 1,3,5-Trimethylbenzene	105	12.060	12.060	0.000	94	3426834	10.0	10.6	
132 4-Chlorotoluene	126	12.085	12.085	0.000	96	1038587	10.0	10.7	
133 tert-Butylbenzene	134	12.304	12.304	0.000	93	794125	10.0	10.4	
134 Pentachloroethane	167	12.329	12.329	0.000	94	656909	10.0	10.9	
135 1,2,4-Trimethylbenzene	105	12.347	12.347	0.000	96	3601162	10.0	10.8	
136 sec-Butylbenzene	105	12.469	12.469	0.000	93	4371114	10.0	10.6	
137 1,3-Dichlorobenzene	146	12.566	12.566	0.000	98	2100857	10.0	10.6	
138 4-Isopropyltoluene	119	12.585	12.585	0.000	97	3959393	10.0	10.8	
* 139 1,4-Dichlorobenzene-d4	152	12.621	12.621	0.000	93	1214109	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.640	12.640	0.000	96	2072743	10.0	10.1	
141 1,2,3-Trimethylbenzene	120	12.658	12.658	0.000	98	1662034	10.0	10.4	
142 Benzyl chloride	126	12.725	12.725	0.000	98	324829	10.0	11.3	
145 p-Diethylbenzene	119	12.865	12.865	0.000	94	2507150	10.0	10.8	M
143 n-Butylbenzene	92	12.883	12.883	0.000	96	1897152	10.0	11.0	
144 1,2-Dichlorobenzene	146	12.908	12.908	0.000	99	1991258	10.0	10.6	
148 1,2-Dibromo-3-Chloropropane	155	13.469	13.469	0.000	91	107198	10.0	11.8	
149 1,3,5-Trichlorobenzene	180	13.591	13.591	0.000	98	1657411	10.0	10.8	
150 1,2,4-Trichlorobenzene	180	14.023	14.023	0.000	94	1354713	10.0	11.6	
151 Hexachlorobutadiene	225	14.103	14.103	0.000	96	684876	10.0	10.5	
152 Naphthalene	128	14.200	14.200	0.000	96	2200653	10.0	11.6	
153 1,2,3-Trichlorobenzene	180	14.347	14.347	0.000	96	1073428	10.0	12.2	
154 2-Methylnaphthalene	142	14.944	14.944	0.000	92	862945	10.0	19.3	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LL_#1_826_00084	Amount Added: 10.00	Units: uL	
MSV_LL_#2_826_00095	Amount Added: 10.00	Units: uL	
MSV_LL_GAS826_00159	Amount Added: 10.00	Units: uL	
MSV_HP25_ISSS_00073	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 11-Jul-2023 21:38:22 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X17.D

Injection Date: 10-Jul-2023 21:18:30 Instrument ID: 10193 Operator ID: knk41612

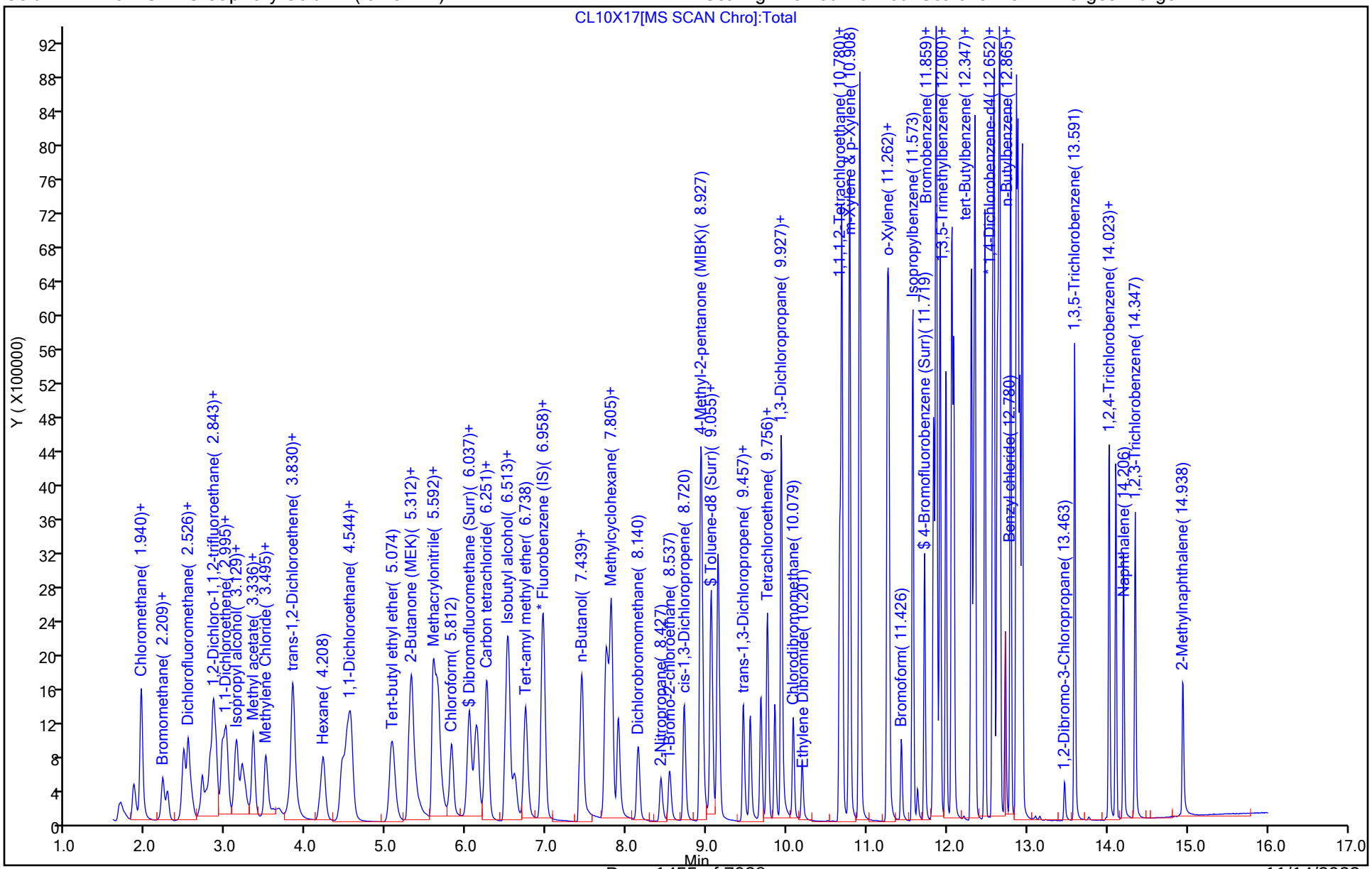
Lims ID: ICIS 10 Worklist Smp#: 18

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 17

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

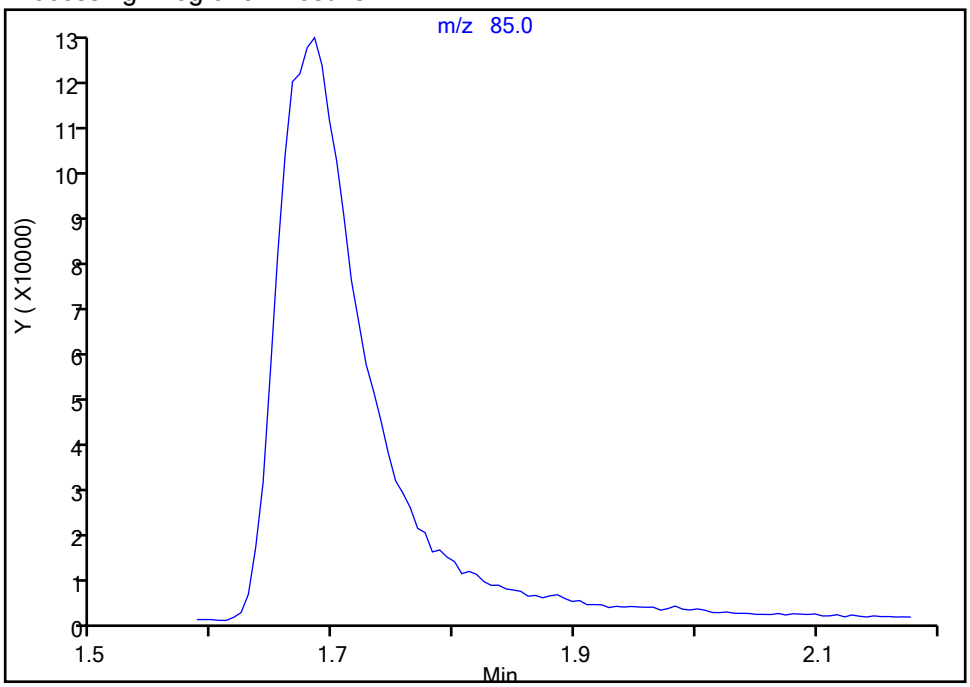
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X17.D				
Injection Date:	10-Jul-2023 21:18:30	Instrument ID:	10193		
Lims ID:	ICIS 10				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

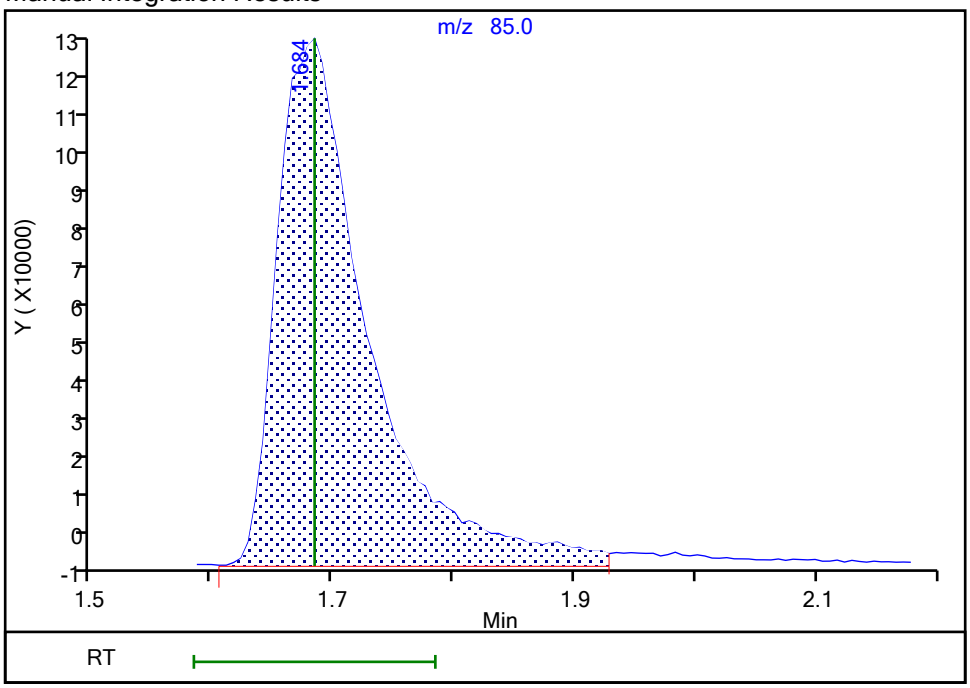
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.68
Area: 658785
Amount: 10.669101
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:21:43 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

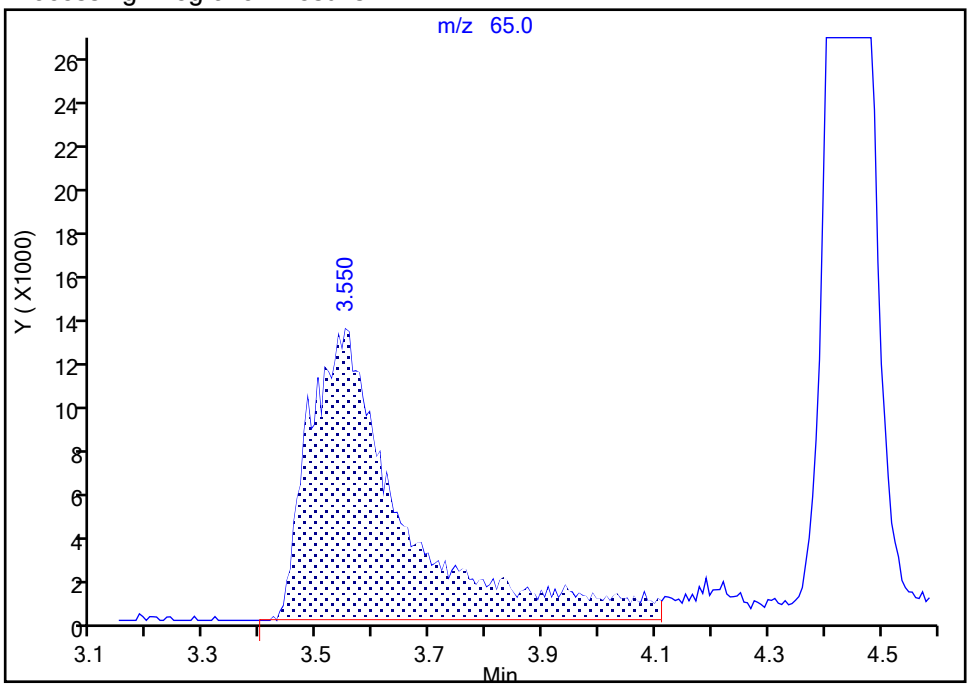
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X17.D				
Injection Date:	10-Jul-2023 21:18:30	Instrument ID:	10193		
Lims ID:	ICIS 10				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

* 31 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

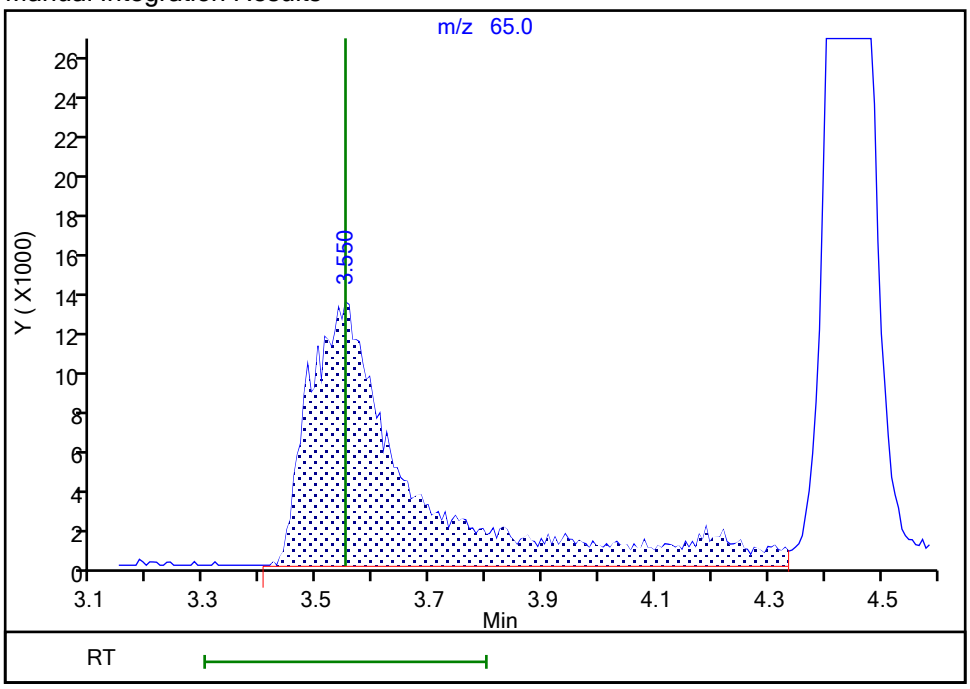
Processing Integration Results

RT: 3.55
Area: 153850
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 3.55
Area: 168052
Amount: 50.000000
Amount Units: ug/l



Reviewer: UKEK, 11-Jul-2023 20:39:26 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

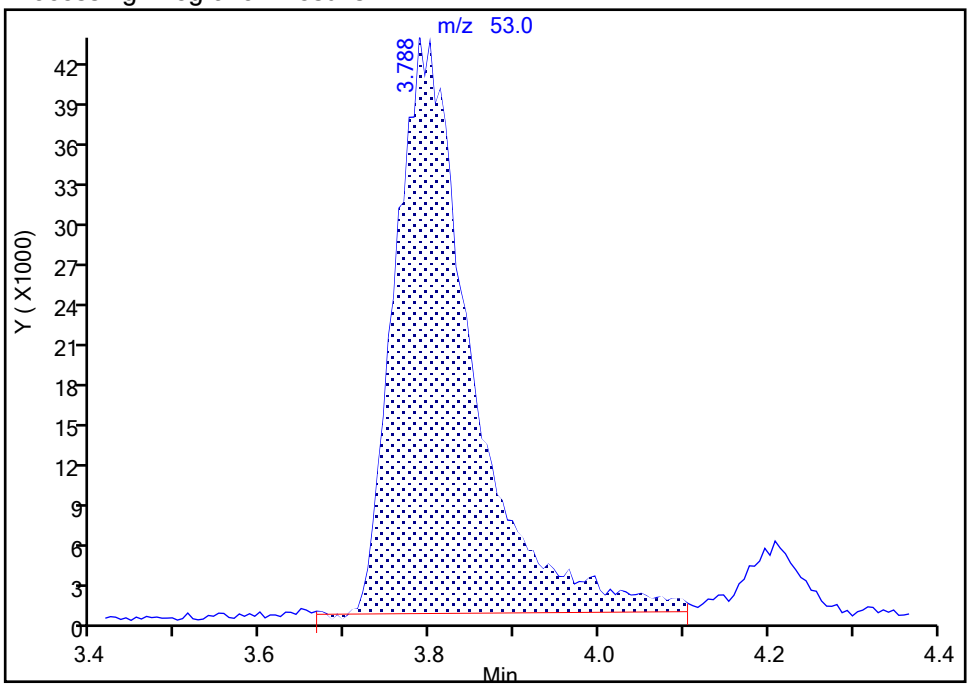
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X17.D				
Injection Date:	10-Jul-2023 21:18:30	Instrument ID:	10193		
Lims ID:	ICIS 10				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

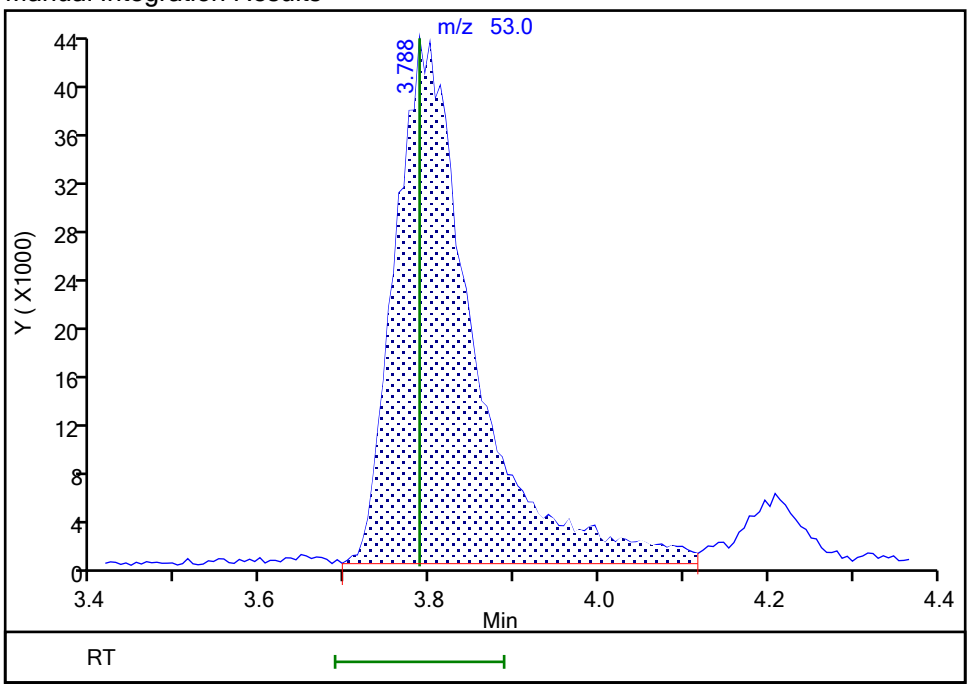
Processing Integration Results

RT: 3.79
Area: 267743
Amount: 23.558002
Amount Units: ug/l



Manual Integration Results

RT: 3.79
Area: 278600
Amount: 24.823427
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:22:22 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

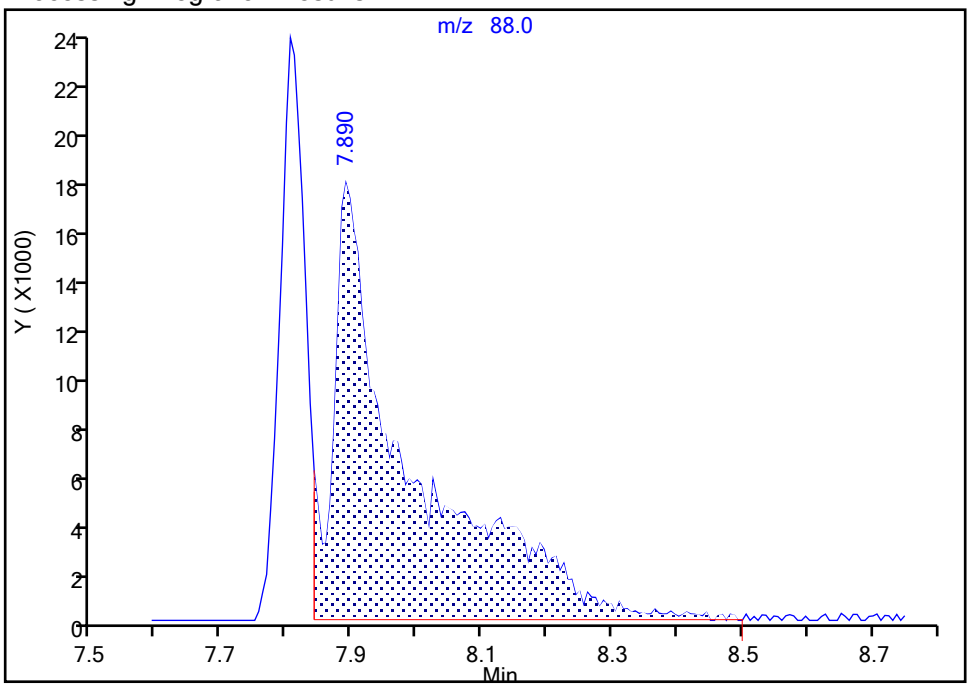
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X17.D				
Injection Date:	10-Jul-2023 21:18:30	Instrument ID:	10193		
Lims ID:	ICIS 10				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

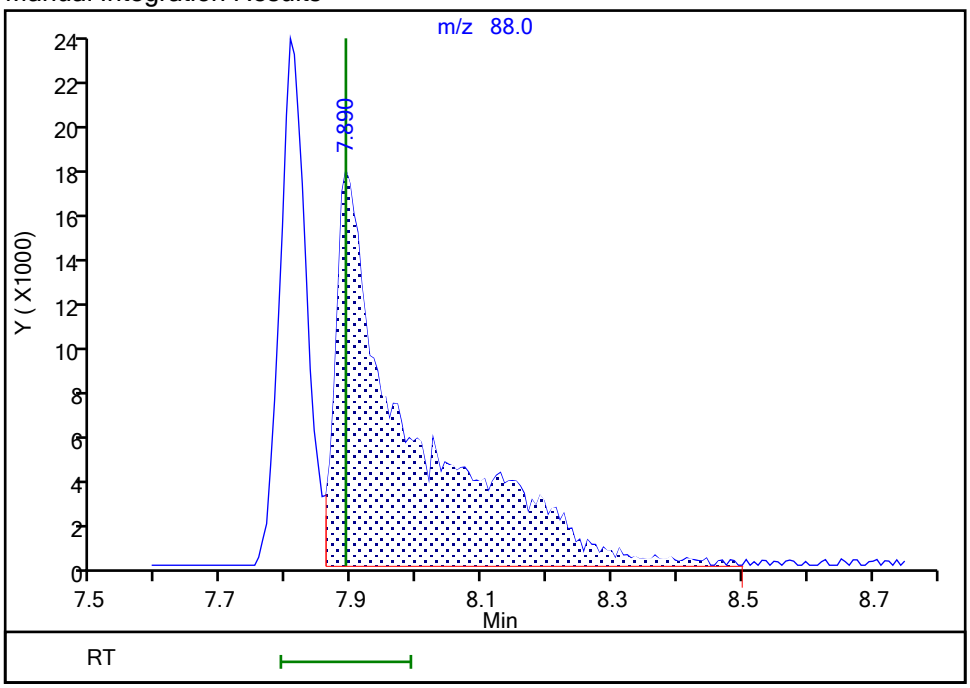
Processing Integration Results

RT: 7.89
Area: 143099
Amount: 571.1032
Amount Units: ug/l



Manual Integration Results

RT: 7.89
Area: 138169
Amount: 509.9109
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:22:45 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

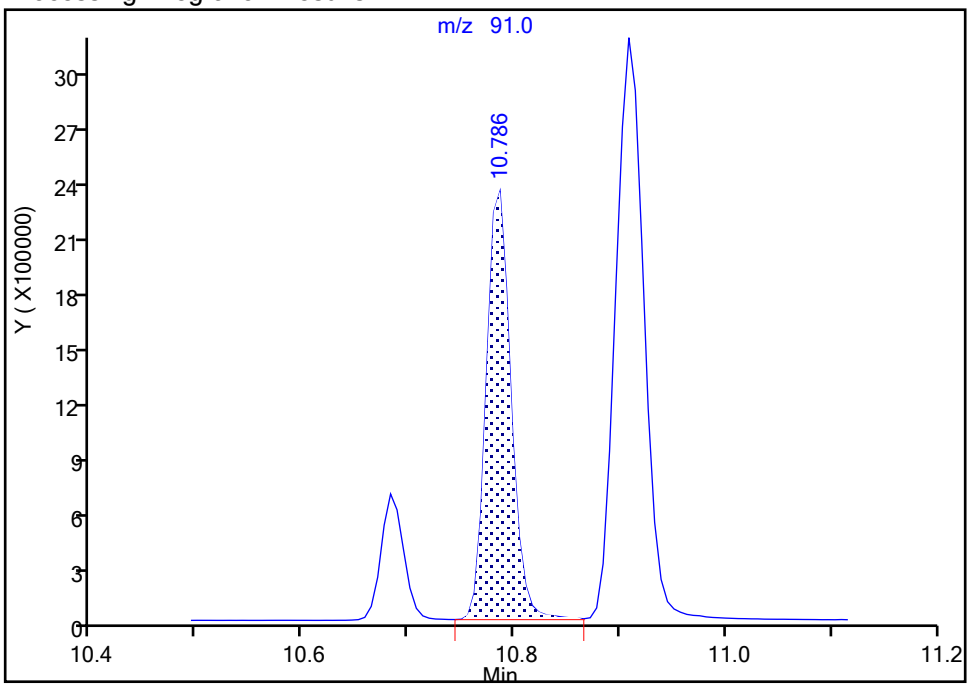
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X17.D				
Injection Date:	10-Jul-2023 21:18:30	Instrument ID:	10193		
Lims ID:	ICIS 10				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

115 Ethylbenzene, CAS: 100-41-4

Signal: 1

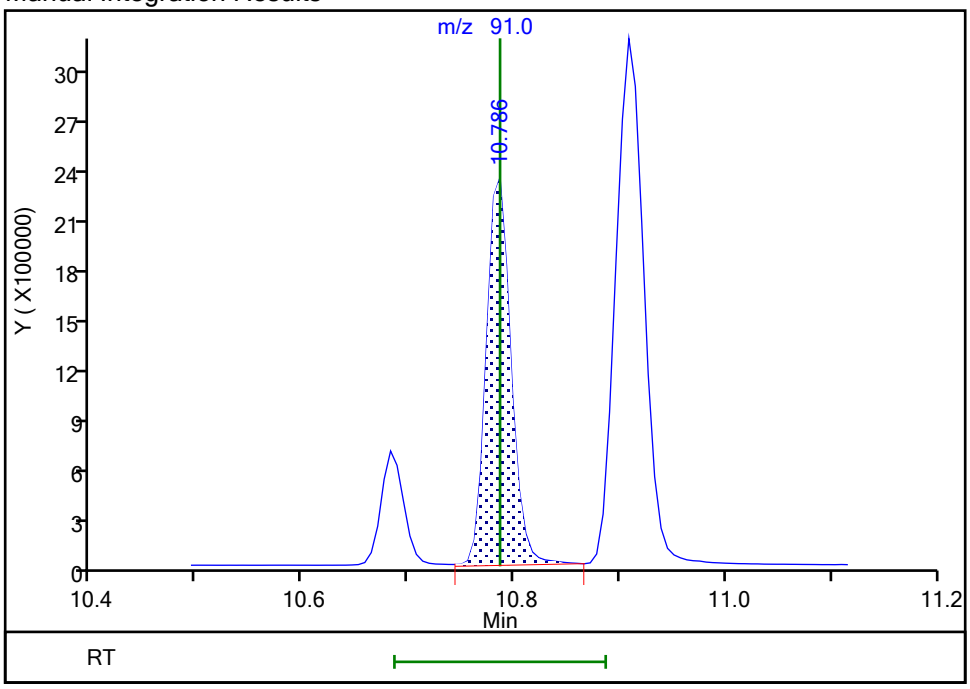
Processing Integration Results

RT: 10.79
Area: 3756735
Amount: 10.493354
Amount Units: ug/l



Manual Integration Results

RT: 10.79
Area: 3756735
Amount: 10.493354
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:37:02 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

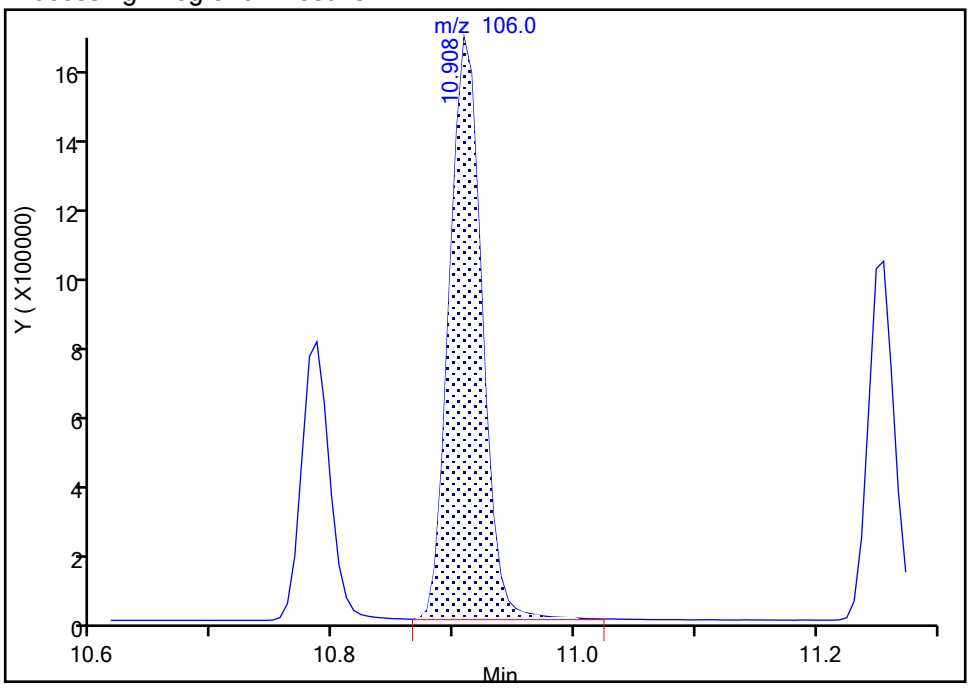
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X17.D				
Injection Date:	10-Jul-2023 21:18:30	Instrument ID:	10193		
Lims ID:	ICIS 10				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

116 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

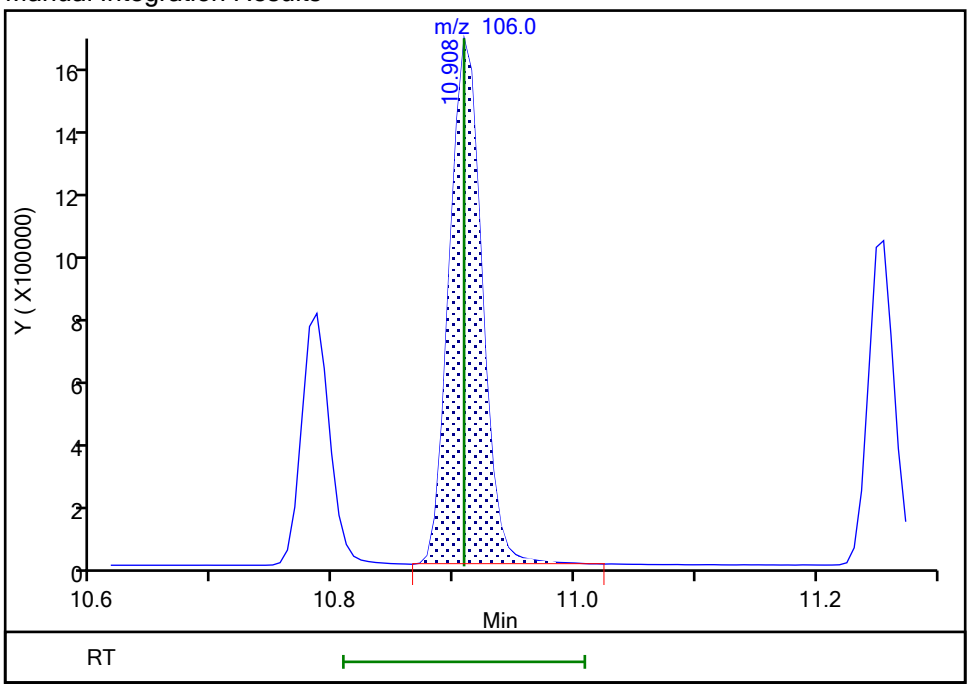
Processing Integration Results

RT: 10.91
Area: 3032843
Amount: 21.121203
Amount Units: ug/l



Manual Integration Results

RT: 10.91
Area: 3032843
Amount: 21.121203
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:25:08 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D
Lims ID: IC std7 25
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Jul-2023 21:40:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-019
Misc. Info.: IC STD7 25
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:38:26 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:53:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.678	1.684	-0.006	89	1677755	25.0	25.7	M
5 Chloromethane	50	1.849	1.849	0.000	99	1989504	25.0	24.1	
6 Vinyl chloride	62	1.934	1.934	0.000	98	1921780	25.0	24.3	
7 Butadiene	39	1.940	1.940	0.000	91	1992815	25.0	26.1	
9 Bromomethane	94	2.209	2.209	0.000	90	1456503	25.0	23.6	
10 Chloroethane	64	2.263	2.270	-0.007	100	1127399	25.0	24.3	
11 Dichlorofluoromethane	67	2.471	2.471	0.000	97	3051651	25.0	24.2	
13 Pentane	43	2.526	2.526	0.000	96	2430253	25.0	27.0	
12 Trichlorofluoromethane	101	2.532	2.532	0.000	98	2306108	25.0	25.9	
14 Ethyl ether	59	2.702	2.702	0.000	91	1275360	25.0	25.1	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.794	2.788	0.006	90	1734729	25.0	24.8	
17 Acrolein	56	2.843	2.843	0.000	100	8304871	1250.0	1310.2	
18 1,1-Dichloroethene	96	2.958	2.952	0.006	97	1488376	25.0	25.8	
20 Acetone	43	2.983	2.977	0.006	100	1752462	250.0	217.1	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.007	3.001	0.006	89	1518257	25.0	26.6	
22 Iodomethane	142	3.123	3.117	0.006	97	3221996	25.0	26.0	
24 Isopropyl alcohol	45	3.117	3.117	0.000	75	894507	500.0	510.2	
23 Ethyl bromide	108	3.135	3.135	0.000	98	1420040	25.0	25.2	
25 Carbon disulfide	76	3.202	3.202	0.000	99	5445163	25.0	26.6	
26 Methyl acetate	43	3.324	3.324	0.000	24	628207	25.0	24.7	M
29 3-Chloro-1-propene	41	3.336	3.336	0.000	93	2752062	25.0	27.0	
30 Methylene Chloride	84	3.495	3.495	0.000	91	1757899	25.0	24.3	
* 31 t-Butyl alcohol-d10 (IS)	65	3.550	3.550	0.000	36	170043	50.0	50.0	M
32 2-Methyl-2-propanol	59	3.647	3.653	-0.006	100	1569784	500.0	439.7	
33 Acrylonitrile	53	3.781	3.788	-0.007	99	715235	62.5	63.0	
35 trans-1,2-Dichloroethene	96	3.830	3.830	0.000	100	1821481	25.0	26.0	
34 Methyl tert-butyl ether	73	3.830	3.830	0.000	95	4676022	25.0	25.2	
36 Hexane	57	4.208	4.208	0.000	92	2465849	25.0	27.6	
37 1,1-Dichloroethane	63	4.440	4.446	-0.006	96	3224585	25.0	26.2	
39 Isopropyl ether	45	4.513	4.513	0.000	95	6118603	25.0	26.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Chloro-1,3-butadiene	53	4.556	4.562	-0.006	89	2646828	25.0	28.1	
41 Tert-butyl ethyl ether	59	5.074	5.074	0.000	98	5642481	25.0	26.3	
42 2-Butanone (MEK)	43	5.281	5.281	0.000	100	4228096	250.0	268.1	
43 cis-1,2-Dichloroethene	96	5.312	5.312	0.000	81	2030075	25.0	27.0	
44 2,2-Dichloropropane	77	5.324	5.324	0.000	87	2527014	25.0	25.7	
45 Propionitrile	54	5.373	5.385	-0.012	99	2139112	500.0	606.4	
47 Methacrylonitrile	67	5.592	5.592	0.000	92	4577349	250.0	274.2	
49 Tetrahydrofuran	71	5.659	5.653	0.006	90	621197	125.0	133.9	
48 Chlorobromomethane	128	5.653	5.653	0.000	93	924552	25.0	25.6	
50 Chloroform	83	5.812	5.818	-0.006	93	3120160	25.0	25.6	
53 1,1,1-Trichloroethane	97	6.037	6.037	0.000	98	2704708	25.0	26.4	
$ 54 Dibromofluoromethane (Surr)	113	6.037	6.037	0.000	95	615441	10.0	9.91	
55 Cyclohexane	56	6.129	6.123	0.007	91	3208600	25.0	27.9	
S 52 1,2-Dichloroethene, Total	100				0			53.0	
56 Carbon tetrachloride	117	6.244	6.244	0.000	96	2427242	25.0	27.3	
57 1,1-Dichloropropene	75	6.257	6.257	0.000	97	2494003	25.0	27.2	
58 Isobutyl alcohol	41	6.476	6.482	-0.006	95	1337202	1250.0	1255.8	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.500	6.507	-0.007	98	126553	10.0	9.64	
60 Benzene	78	6.519	6.525	-0.006	96	7726211	25.0	26.4	
61 1,2-Dichloroethane	62	6.604	6.598	0.006	97	1885153	25.0	25.2	
64 Tert-amyl methyl ether	73	6.738	6.738	0.000	99	5255245	25.0	26.3	
* 65 Fluorobenzene (IS)	96	6.946	6.946	0.000	96	2655574	10.0	10.0	
66 n-Heptane	43	6.964	6.964	0.000	92	2721424	25.0	28.1	
67 n-Butanol	56	7.397	7.409	-0.012	88	2236914	2187.5	2248.9	
68 Trichloroethene	95	7.439	7.439	0.000	96	2001612	25.0	26.6	
69 Methylcyclohexane	83	7.738	7.738	0.000	90	3447065	25.0	28.2	
70 1,2-Dichloropropane	63	7.775	7.775	0.000	95	2041344	25.0	26.4	
71 2-ethoxy-2-methyl butane	87	7.811	7.811	0.000	94	3254859	25.0	27.1	
72 Dibromomethane	93	7.897	7.890	0.007	94	916525	25.0	25.5	
74 1,4-Dioxane	88	7.884	7.890	-0.006	33	302035	1250.0	1101.6	M
73 Methyl methacrylate	69	7.897	7.897	0.000	91	988980	25.0	30.3	
76 Dichlorobromomethane	83	8.140	8.140	0.000	99	2392101	25.0	26.8	
77 2-Nitropropane	41	8.427	8.427	0.000	97	1221117	125.0	137.7	
78 1-Bromo-2-chloroethane	63	8.537	8.531	0.006	98	2014153	25.0	25.7	
80 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	97	3128637	25.0	28.3	
82 4-Methyl-2-pentanone (MIBK)	43	8.927	8.927	0.000	96	12653718	250.0	282.0	
$ 83 Toluene-d8 (Surr)	98	9.055	9.055	0.000	93	2755994	10.0	10.1	
84 Toluene	92	9.140	9.140	0.000	98	5167343	25.0	26.5	
85 trans-1,3-Dichloropropene	75	9.451	9.457	-0.006	91	2671634	25.0	29.3	
86 Ethyl methacrylate	69	9.543	9.543	0.000	90	2247899	25.0	31.0	
87 1,1,2-Trichloroethane	97	9.677	9.677	0.000	89	1454086	25.0	25.2	
88 Tetrachloroethene	166	9.756	9.756	0.000	97	2481115	25.0	26.5	
89 1,3-Dichloropropane	76	9.847	9.847	0.000	90	2468894	25.0	26.7	
106 2-Hexanone	43	9.927	9.927	0.000	96	9285508	250.0	303.6	
S 107 1,3-Dichloropropene, Total	100				0			57.7	
108 Chlorodibromomethane	129	10.079	10.079	0.000	90	1918104	25.0	27.1	
110 Ethylene Dibromide	107	10.189	10.189	0.000	99	1429329	25.0	27.6	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	83	2081007	10.0	10.0	
113 Chlorobenzene	112	10.689	10.683	0.006	96	6222003	25.0	26.4	
112 1-Chlorohexane	91	10.683	10.683	0.000	67	2845729	25.0	26.9	
114 1,1,1,2-Tetrachloroethane	131	10.780	10.780	0.000	97	2144493	25.0	27.3	
115 Ethylbenzene	91	10.786	10.786	0.000	98	10248995	25.0	27.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
116 m-Xylene & p-Xylene	106	10.908	10.908	0.000	97	8283558	50.0	55.2	
S 117 Xylenes, Total	106				0			82.4	
118 o-Xylene	106	11.256	11.256	0.000	95	4095695	25.0	27.2	
119 Styrene	104	11.274	11.274	0.000	95	6922505	25.0	29.6	
120 Bromoform	173	11.426	11.426	0.000	98	1243518	25.0	27.6	
121 Isopropylbenzene	105	11.573	11.573	0.000	95	10247430	25.0	27.0	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.719	0.000	97	994283	10.0	10.2	
125 Bromobenzene	156	11.829	11.829	0.000	91	2757895	25.0	26.3	
126 1,1,2,2-Tetrachloroethane	83	11.835	11.835	0.000	92	1947529	25.0	25.8	
127 trans-1,4-Dichloro-2-butene	53	11.859	11.859	0.000	89	4892765	250.0	295.4	
128 1,2,3-Trichloropropane	110	11.877	11.877	0.000	79	495643	25.0	25.6	
129 N-Propylbenzene	91	11.914	11.914	0.000	98	11934156	25.0	26.0	e
130 2-Chlorotoluene	126	11.987	11.987	0.000	98	2644132	25.0	26.5	
131 1,3,5-Trimethylbenzene	105	12.060	12.060	0.000	94	9134558	25.0	26.9	
132 4-Chlorotoluene	126	12.085	12.085	0.000	96	2776349	25.0	27.4	
133 tert-Butylbenzene	134	12.304	12.304	0.000	93	2155920	25.0	27.0	
134 Pentachloroethane	167	12.329	12.329	0.000	93	1748479	25.0	27.6	
135 1,2,4-Trimethylbenzene	105	12.347	12.347	0.000	96	9614423	25.0	27.5	
136 sec-Butylbenzene	105	12.469	12.469	0.000	96	11553473	25.0	26.7	e
137 1,3-Dichlorobenzene	146	12.566	12.566	0.000	98	5655092	25.0	27.2	
138 4-Isopropyltoluene	119	12.585	12.585	0.000	97	10502301	25.0	27.4	e
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	90	1273416	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.640	12.640	0.000	96	5564704	25.0	26.0	
141 1,2,3-Trimethylbenzene	120	12.658	12.658	0.000	98	4502274	25.0	27.0	
142 Benzyl chloride	126	12.725	12.725	0.000	98	885654	25.0	29.5	
145 p-Diethylbenzene	119	12.865	12.865	0.000	93	6730556	25.0	27.6	
143 n-Butylbenzene	92	12.883	12.883	0.000	97	5167753	25.0	28.7	
144 1,2-Dichlorobenzene	146	12.908	12.908	0.000	99	5280700	25.0	26.9	
148 1,2-Dibromo-3-Chloropropane	155	13.463	13.469	-0.006	90	284292	25.0	29.9	
149 1,3,5-Trichlorobenzene	180	13.591	13.591	0.000	98	4359430	25.0	27.0	
150 1,2,4-Trichlorobenzene	180	14.017	14.023	-0.006	94	3548476	25.0	29.0	
151 Hexachlorobutadiene	225	14.109	14.103	0.006	96	1827727	25.0	26.6	
152 Naphthalene	128	14.200	14.200	0.000	96	5729904	25.0	28.7	
153 1,2,3-Trichlorobenzene	180	14.347	14.347	0.000	96	2751180	25.0	29.7	
154 2-Methylnaphthalene	142	14.938	14.944	-0.006	93	2146389	25.0	45.7	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00084	Amount Added: 25.00	Units: uL	
MSV_LL_#2_826_00095	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00159	Amount Added: 25.00	Units: uL	
MSV_HP25_ISSS_00073	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 11-Jul-2023 21:38:27 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Injection Date: 10-Jul-2023 21:40:30 Instrument ID: 10193 Operator ID: knk41612

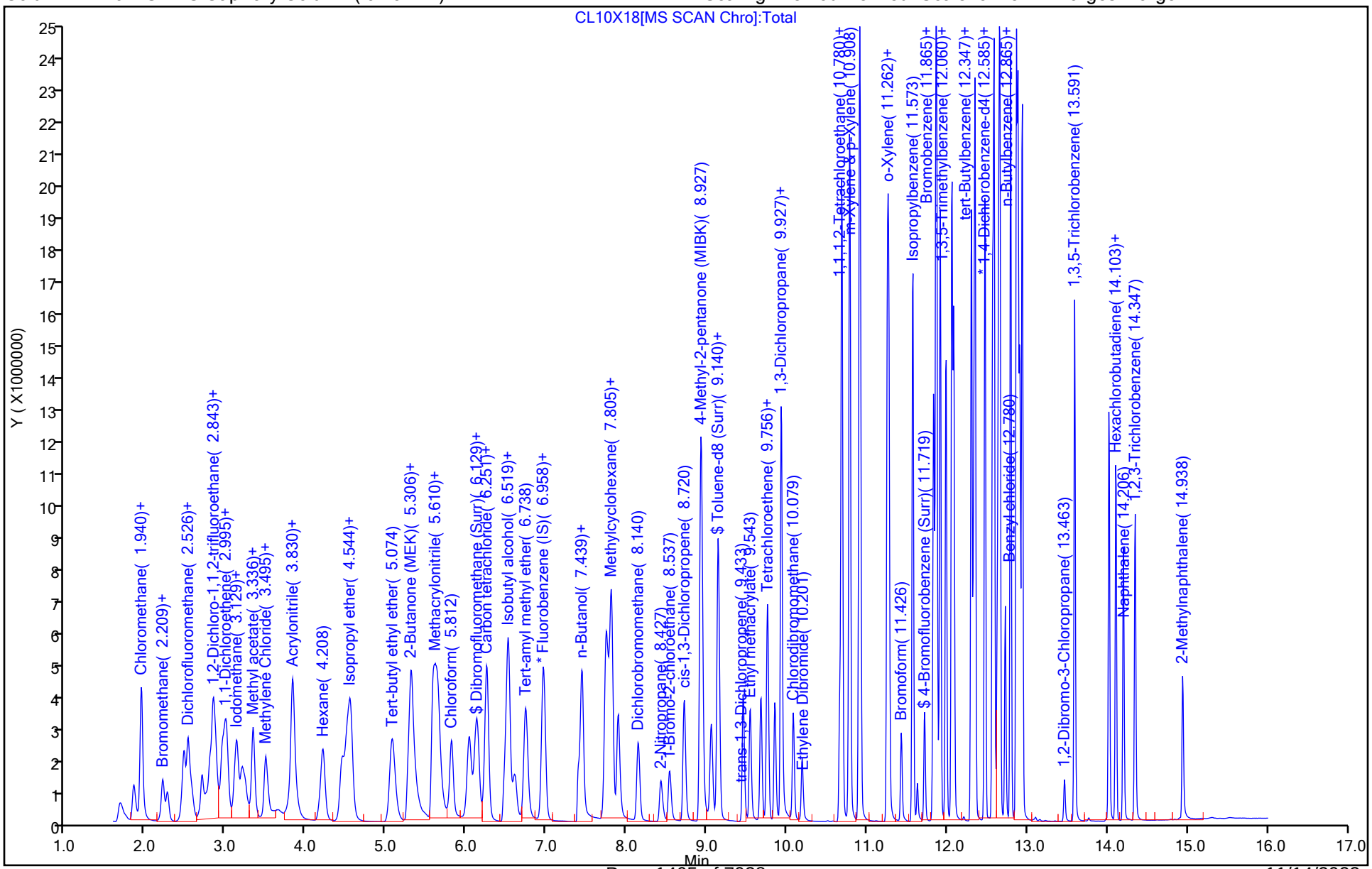
Lims ID: IC std7 25 Worklist Smp#: 19

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 18

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

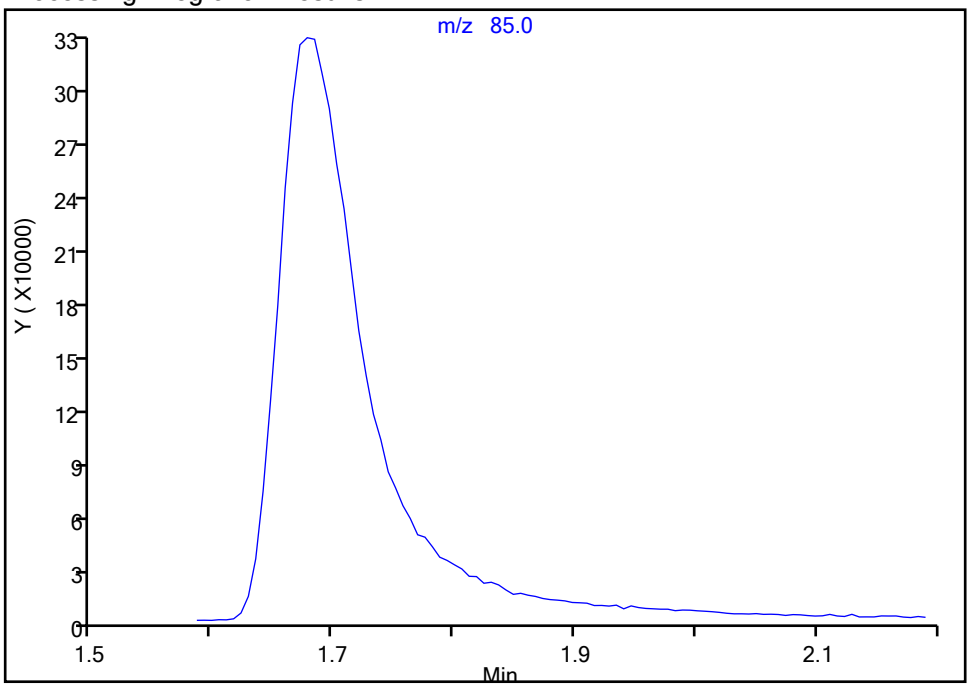
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Injection Date:	10-Jul-2023 21:40:30	Instrument ID:	10193		
Lims ID:	IC std7 25				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

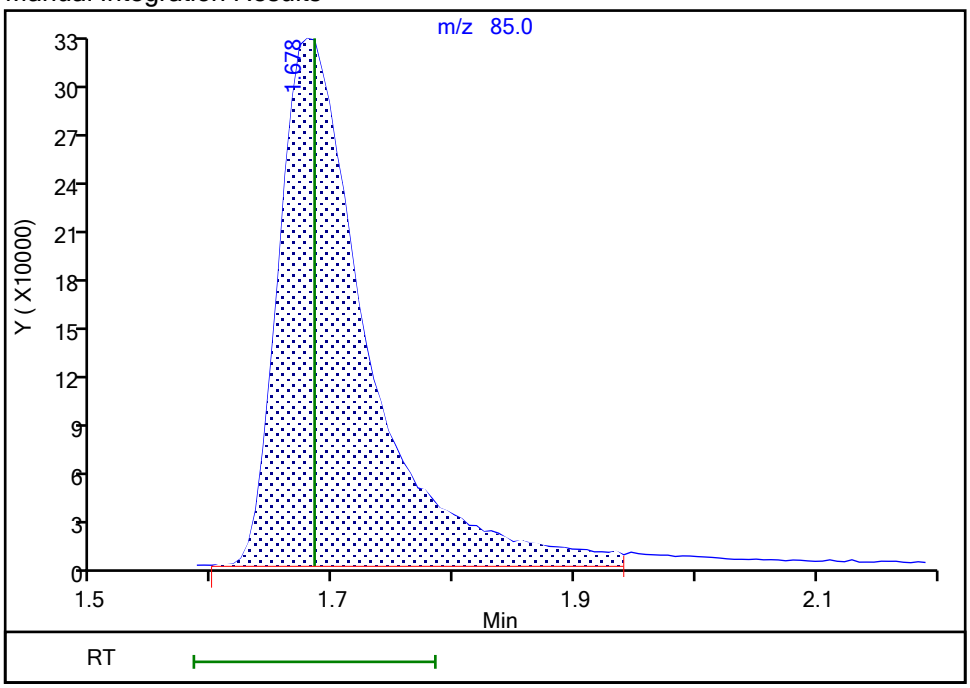
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.68
Area: 1677755
Amount: 25.689245
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:51:32 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

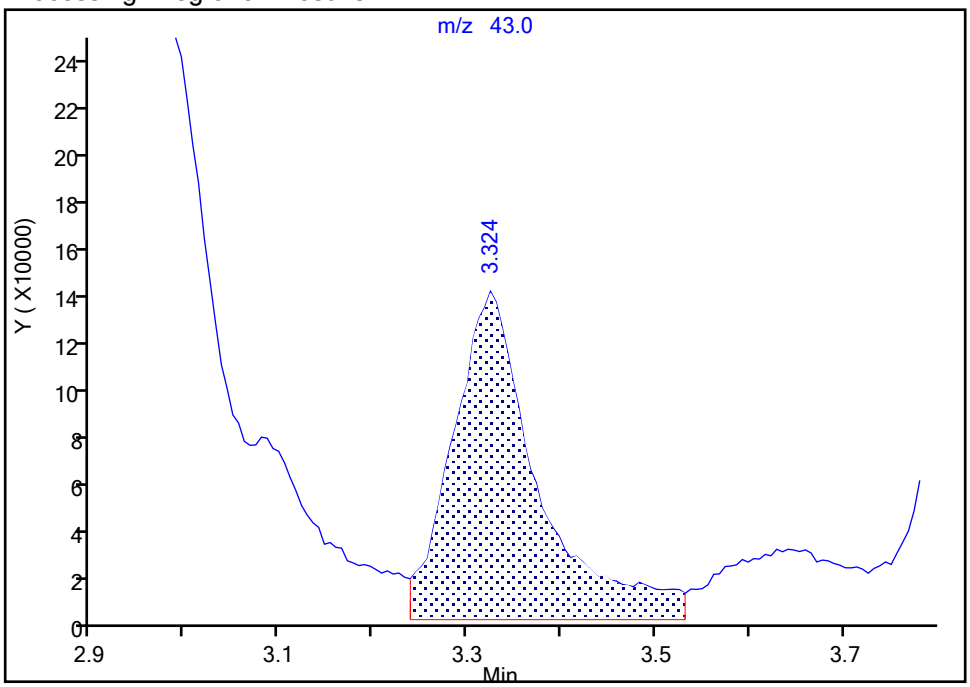
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Injection Date:	10-Jul-2023 21:40:30	Instrument ID:	10193		
Lims ID:	IC std7 25				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

26 Methyl acetate, CAS: 79-20-9

Signal: 1

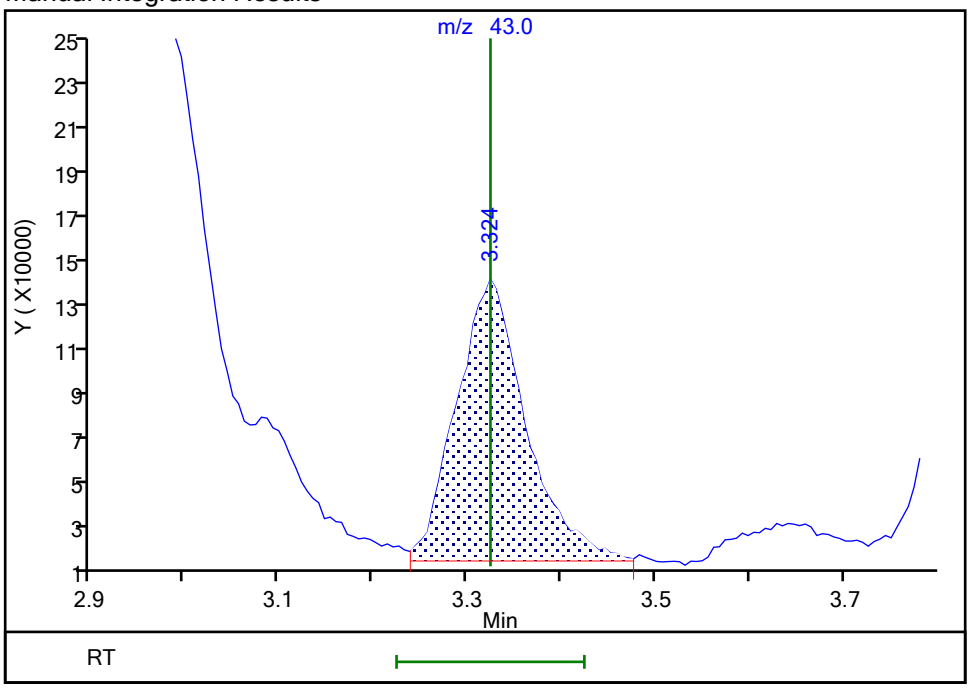
Processing Integration Results

RT: 3.32
Area: 850058
Amount: 34.441155
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 628207
Amount: 24.681992
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:51:58 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

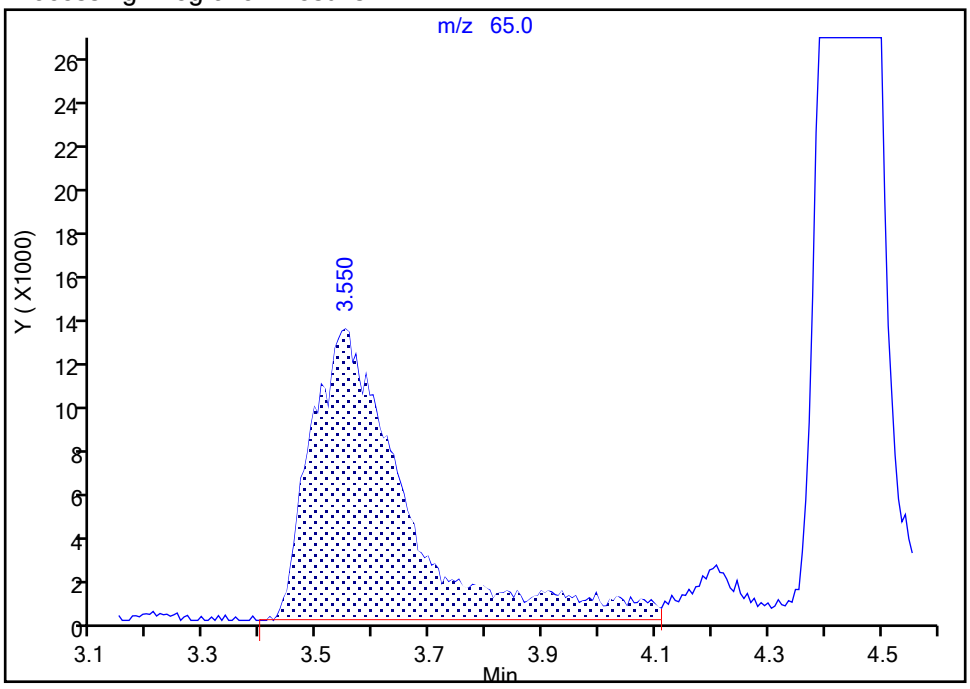
Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D
Injection Date: 10-Jul-2023 21:40:30 Instrument ID: 10193
Lims ID: IC std7 25
Client ID:
Operator ID: knk41612 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

* 31 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

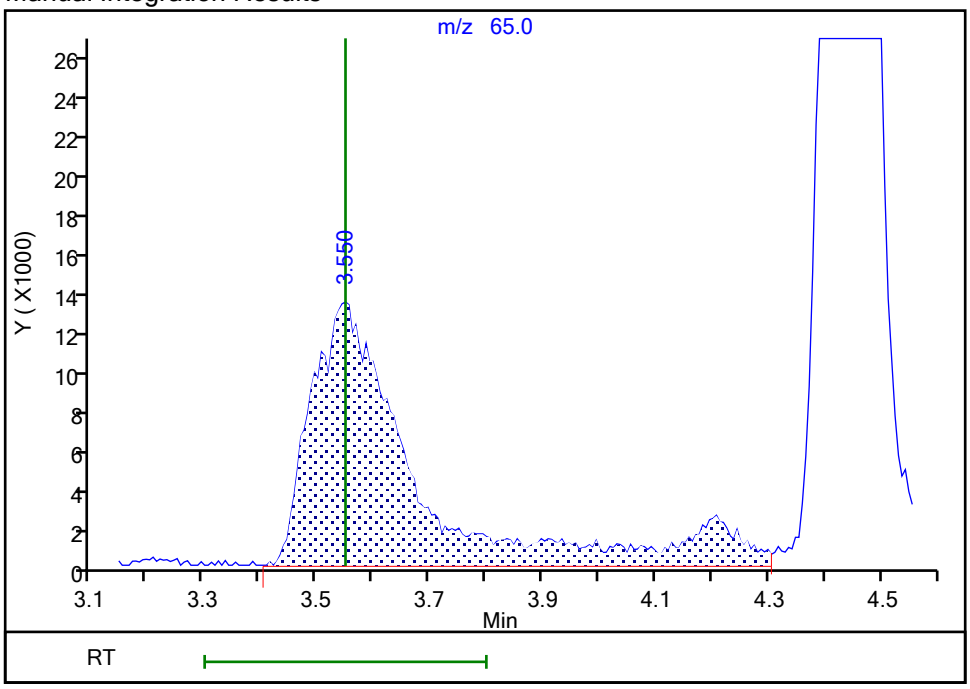
Processing Integration Results

RT: 3.55
Area: 154317
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 3.55
Area: 170043
Amount: 50.000000
Amount Units: ug/l



Reviewer: UKEK, 11-Jul-2023 20:40:54 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

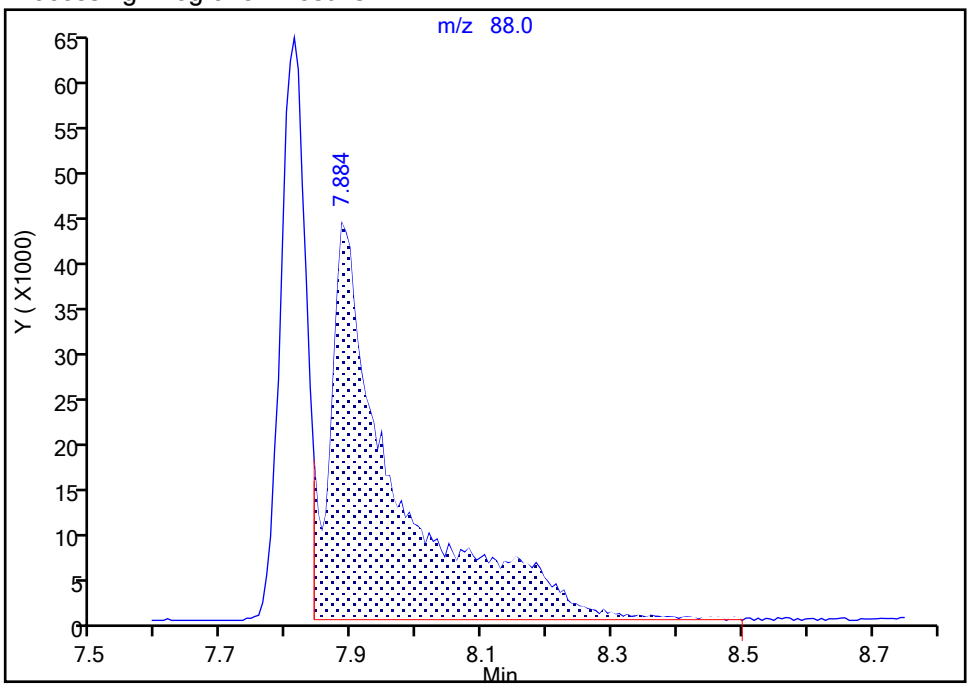
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Injection Date:	10-Jul-2023 21:40:30	Instrument ID:	10193		
Lims ID:	IC std7 25				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

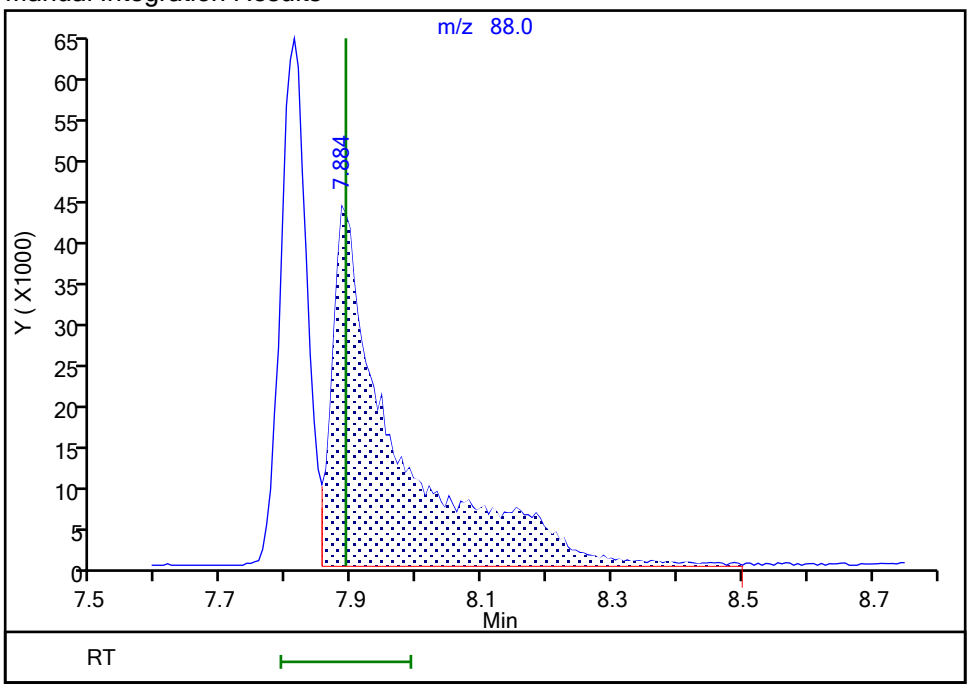
Processing Integration Results

RT: 7.88
Area: 312781
Amount: 1228.3445
Amount Units: ug/l



Manual Integration Results

RT: 7.88
Area: 302035
Amount: 1101.6050
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:52:47 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

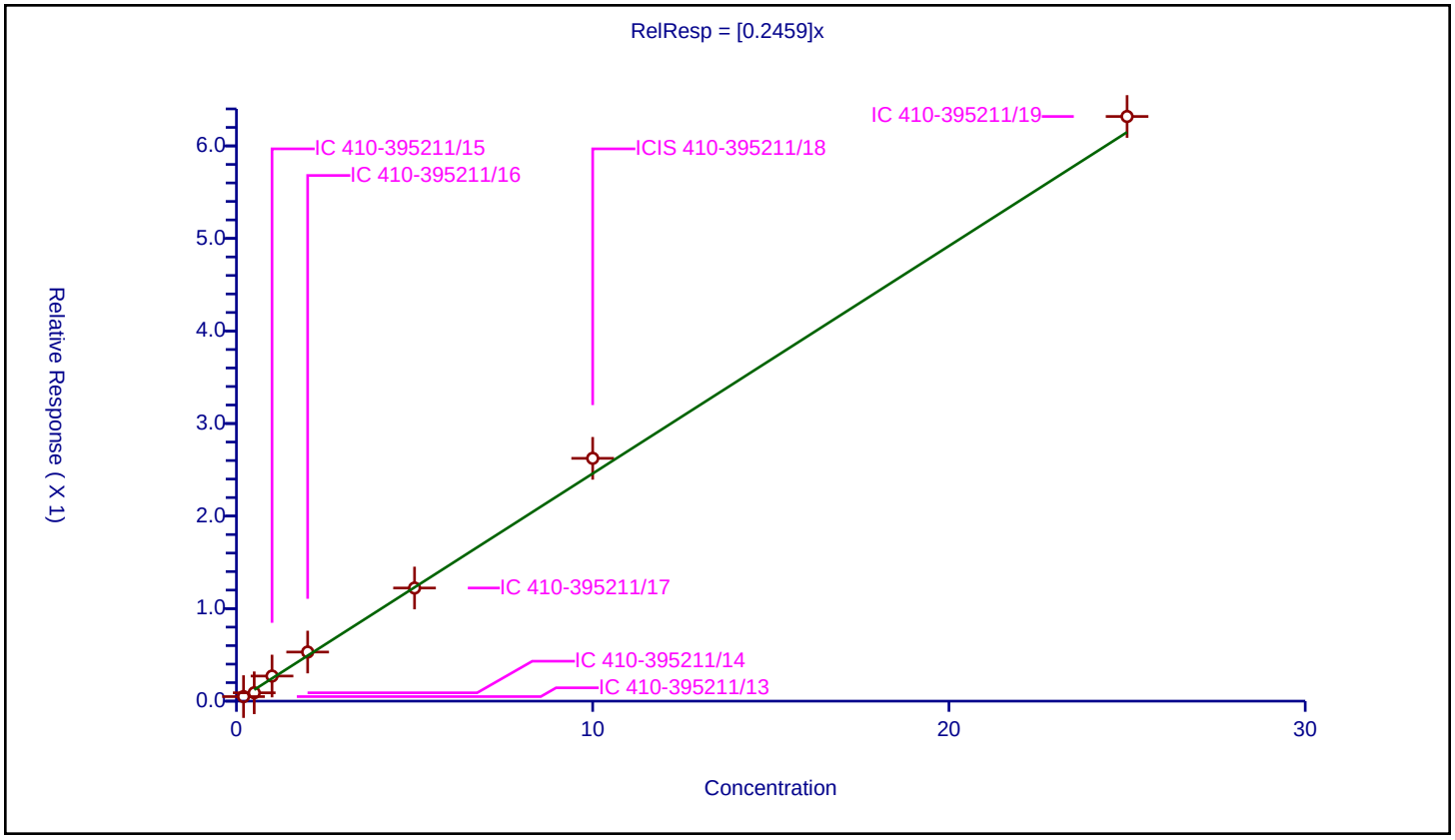
Curve Coefficients

Intercept:	0
Slope:	0.2459

Error Coefficients

Standard Error:	749000
Relative Standard Error:	12.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.048968	10.0	2414017.0	0.244841	Y
2	IC 410-395211/14	0.5	0.090281	10.0	2469842.0	0.180562	Y
3	IC 410-395211/15	1.0	0.271275	10.0	2458760.0	0.271275	Y
4	IC 410-395211/16	2.0	0.530474	10.0	2465964.0	0.265237	Y
5	IC 410-395211/17	5.0	1.222599	10.0	2475137.0	0.24452	Y
6	ICIS 410-395211/18	10.0	2.623896	10.0	2510713.0	0.26239	Y
7	IC 410-395211/19	25.0	6.317862	10.0	2655574.0	0.252714	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

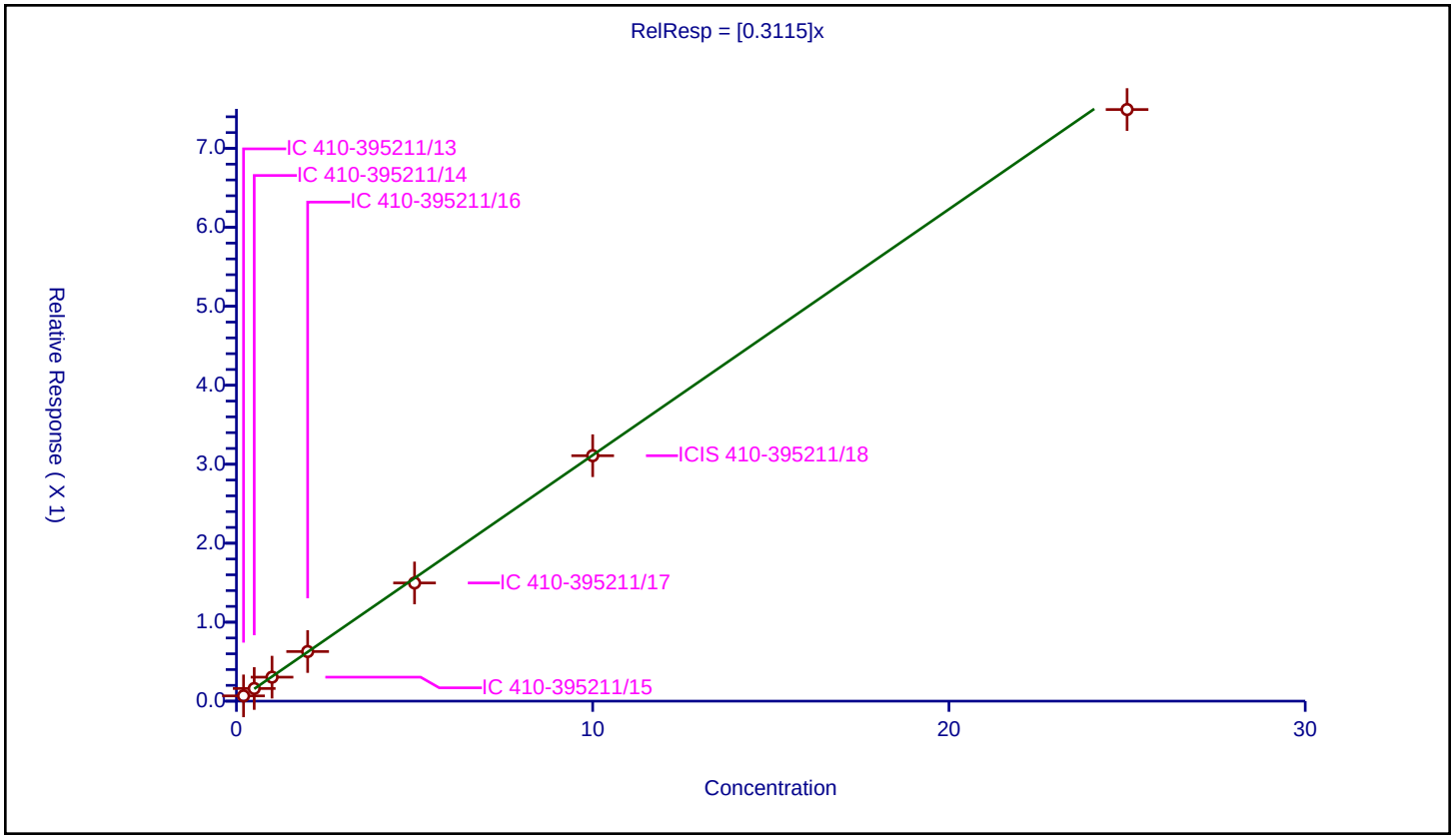
Curve Coefficients

Intercept:	0
Slope:	0.3115

Error Coefficients

Standard Error:	888000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.066503	10.0	2414017.0	0.332516	Y
2	IC 410-395211/14	0.5	0.160091	10.0	2469842.0	0.320182	Y
3	IC 410-395211/15	1.0	0.30369	10.0	2458760.0	0.30369	Y
4	IC 410-395211/16	2.0	0.628124	10.0	2465964.0	0.314062	Y
5	IC 410-395211/17	5.0	1.496697	10.0	2475137.0	0.299339	Y
6	ICIS 410-395211/18	10.0	3.10838	10.0	2510713.0	0.310838	Y
7	IC 410-395211/19	25.0	7.491804	10.0	2655574.0	0.299672	Y



11/14/2023
11:12 AM

Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

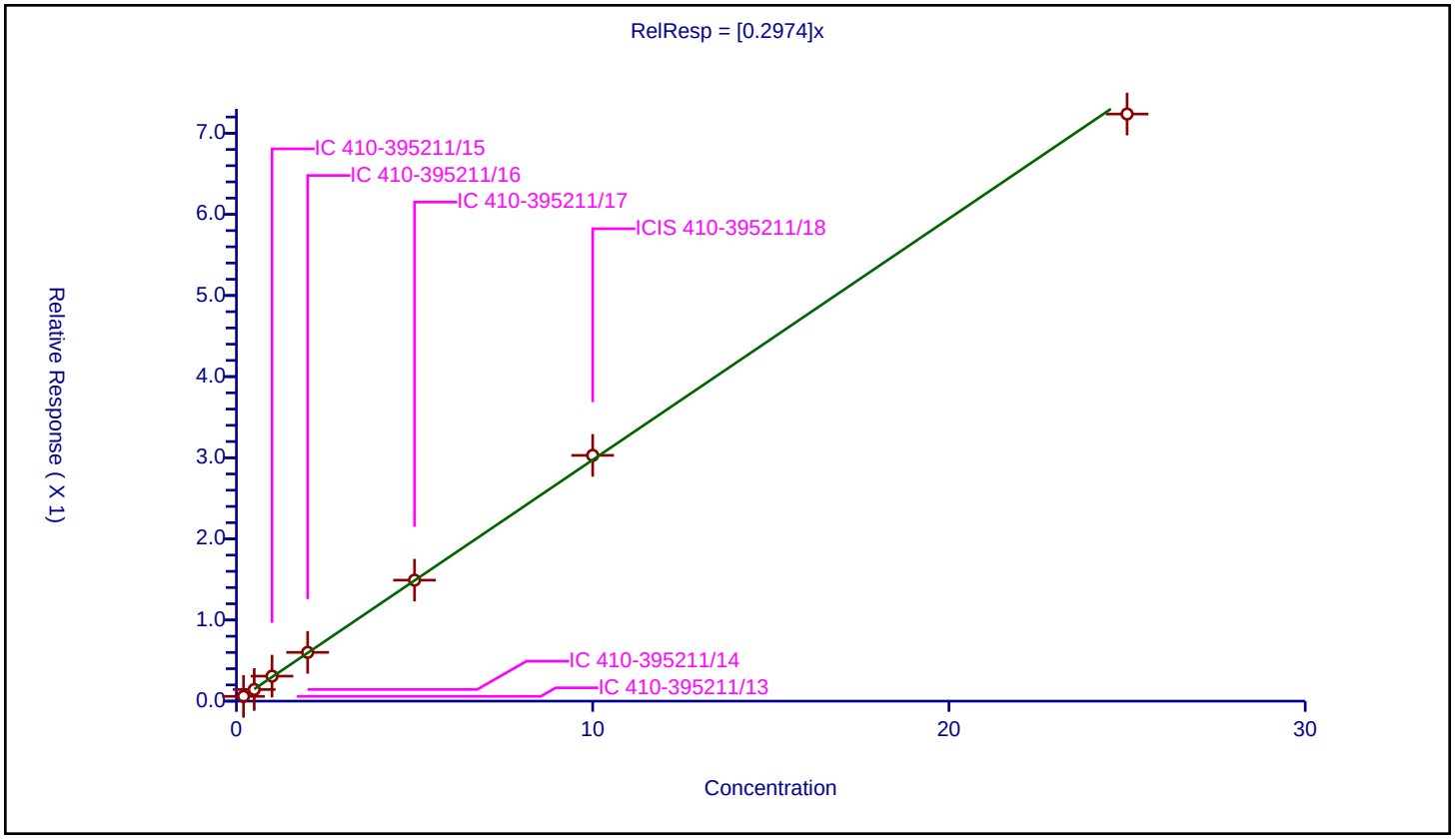
Curve Coefficients

Intercept:	0
Slope:	0.2974

Error Coefficients

Standard Error:	860000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.058885	10.0	2414017.0	0.294426	Y
2	IC 410-395211/14	0.5	0.143766	10.0	2469842.0	0.287533	Y
3	IC 410-395211/15	1.0	0.308473	10.0	2458760.0	0.308473	Y
4	IC 410-395211/16	2.0	0.601164	10.0	2465964.0	0.300582	Y
5	IC 410-395211/17	5.0	1.491142	10.0	2475137.0	0.298228	Y
6	ICIS 410-395211/18	10.0	3.029446	10.0	2510713.0	0.302945	Y
7	IC 410-395211/19	25.0	7.236778	10.0	2655574.0	0.289471	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

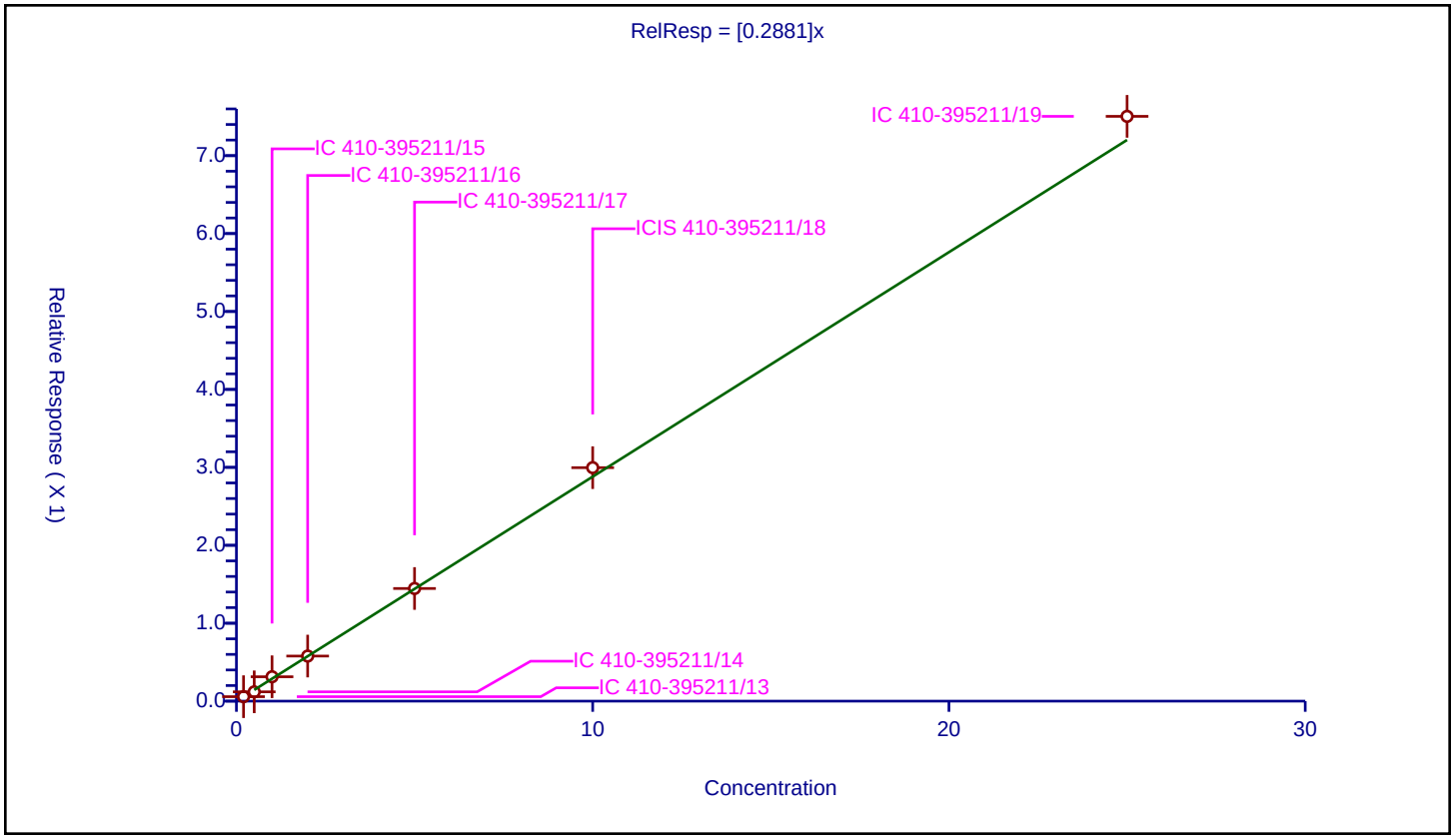
Curve Coefficients

Intercept:	0
Slope:	0.2881

Error Coefficients

Standard Error:	884000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.057348	10.0	2414017.0	0.286742	Y
2	IC 410-395211/14	0.5	0.119323	10.0	2469842.0	0.238647	Y
3	IC 410-395211/15	1.0	0.312776	10.0	2458760.0	0.312776	Y
4	IC 410-395211/16	2.0	0.578589	10.0	2465964.0	0.289295	Y
5	IC 410-395211/17	5.0	1.445718	10.0	2475137.0	0.289144	Y
6	ICIS 410-395211/18	10.0	2.996137	10.0	2510713.0	0.299614	Y
7	IC 410-395211/19	25.0	7.504272	10.0	2655574.0	0.300171	Y



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Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

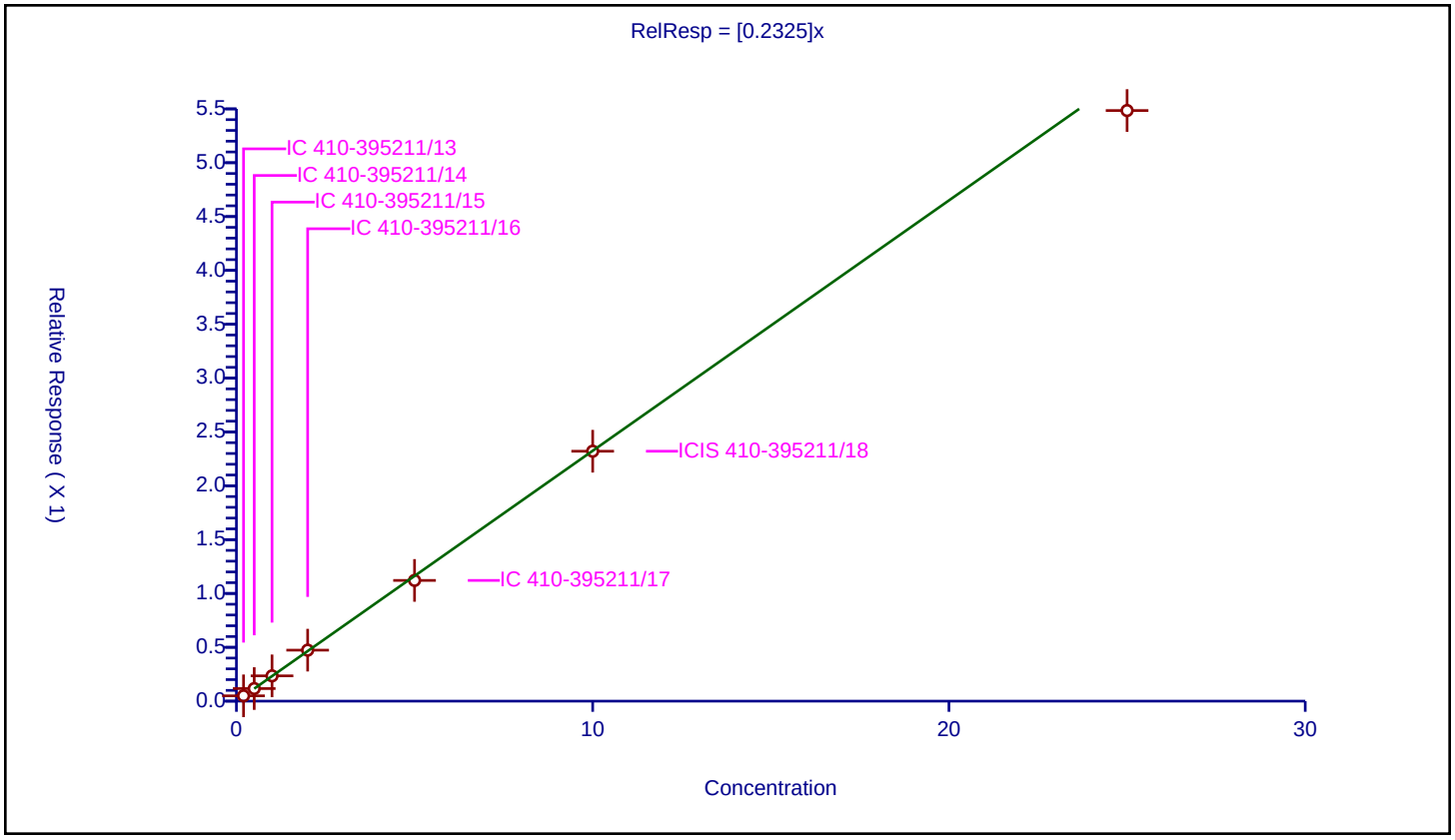
Curve Coefficients

Intercept:	0
Slope:	0.2325

Error Coefficients

Standard Error:	653000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.04925	10.0	2414017.0	0.246249	Y
2	IC 410-395211/14	0.5	0.116979	10.0	2469842.0	0.233958	Y
3	IC 410-395211/15	1.0	0.234785	10.0	2458760.0	0.234785	Y
4	IC 410-395211/16	2.0	0.473507	10.0	2465964.0	0.236753	Y
5	IC 410-395211/17	5.0	1.121174	10.0	2475137.0	0.224235	Y
6	ICIS 410-395211/18	10.0	2.320898	10.0	2510713.0	0.23209	Y
7	IC 410-395211/19	25.0	5.484701	10.0	2655574.0	0.219388	Y



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Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

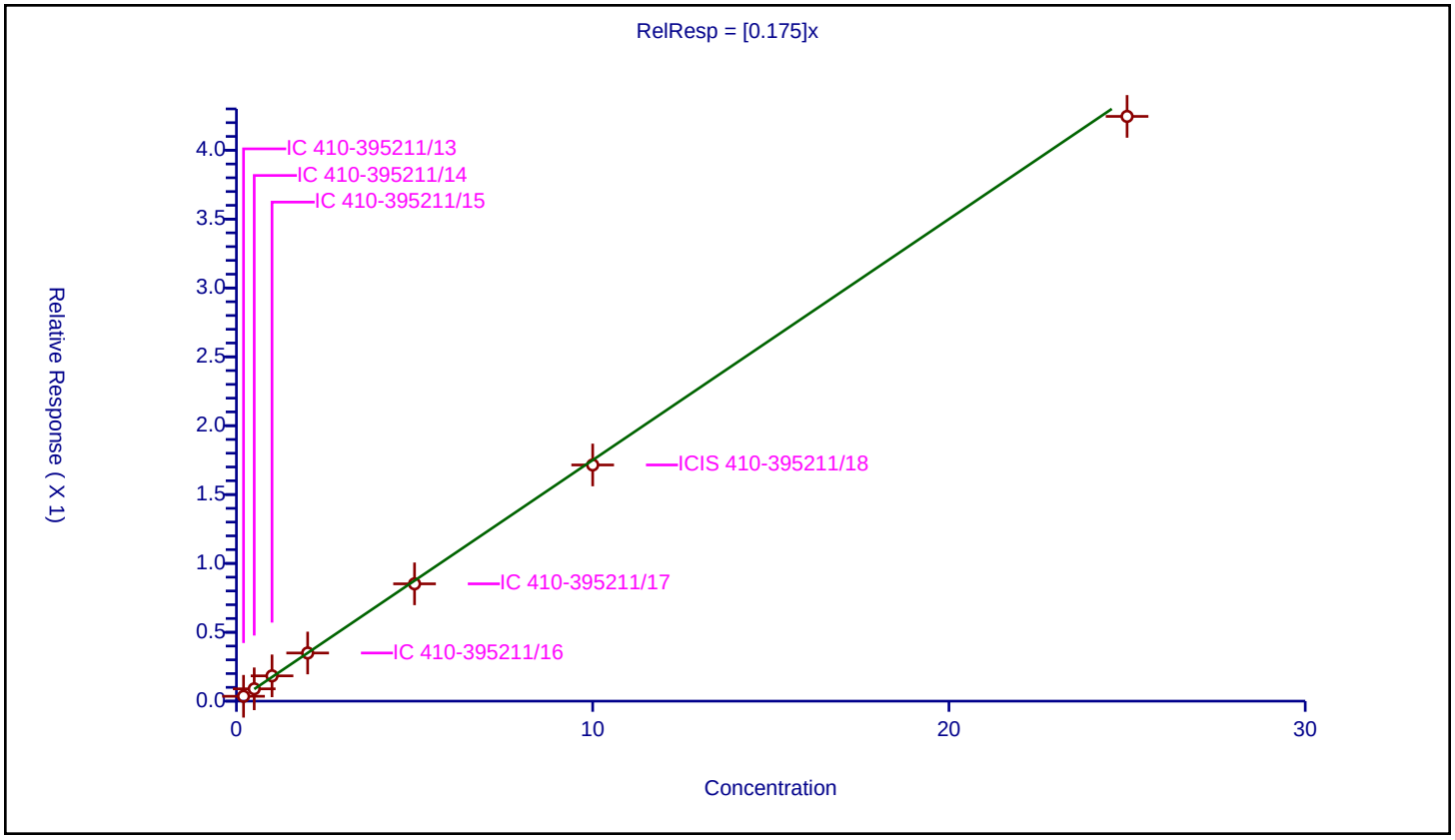
Curve Coefficients

Intercept:	0
Slope:	0.175

Error Coefficients

Standard Error:	502000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.035269	10.0	2414017.0	0.176345	Y
2	IC 410-395211/14	0.5	0.089382	10.0	2469842.0	0.178764	Y
3	IC 410-395211/15	1.0	0.183532	10.0	2458760.0	0.183532	Y
4	IC 410-395211/16	2.0	0.349454	10.0	2465964.0	0.174727	Y
5	IC 410-395211/17	5.0	0.85165	10.0	2475137.0	0.17033	Y
6	ICIS 410-395211/18	10.0	1.714724	10.0	2510713.0	0.171472	Y
7	IC 410-395211/19	25.0	4.245406	10.0	2655574.0	0.169816	Y



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Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

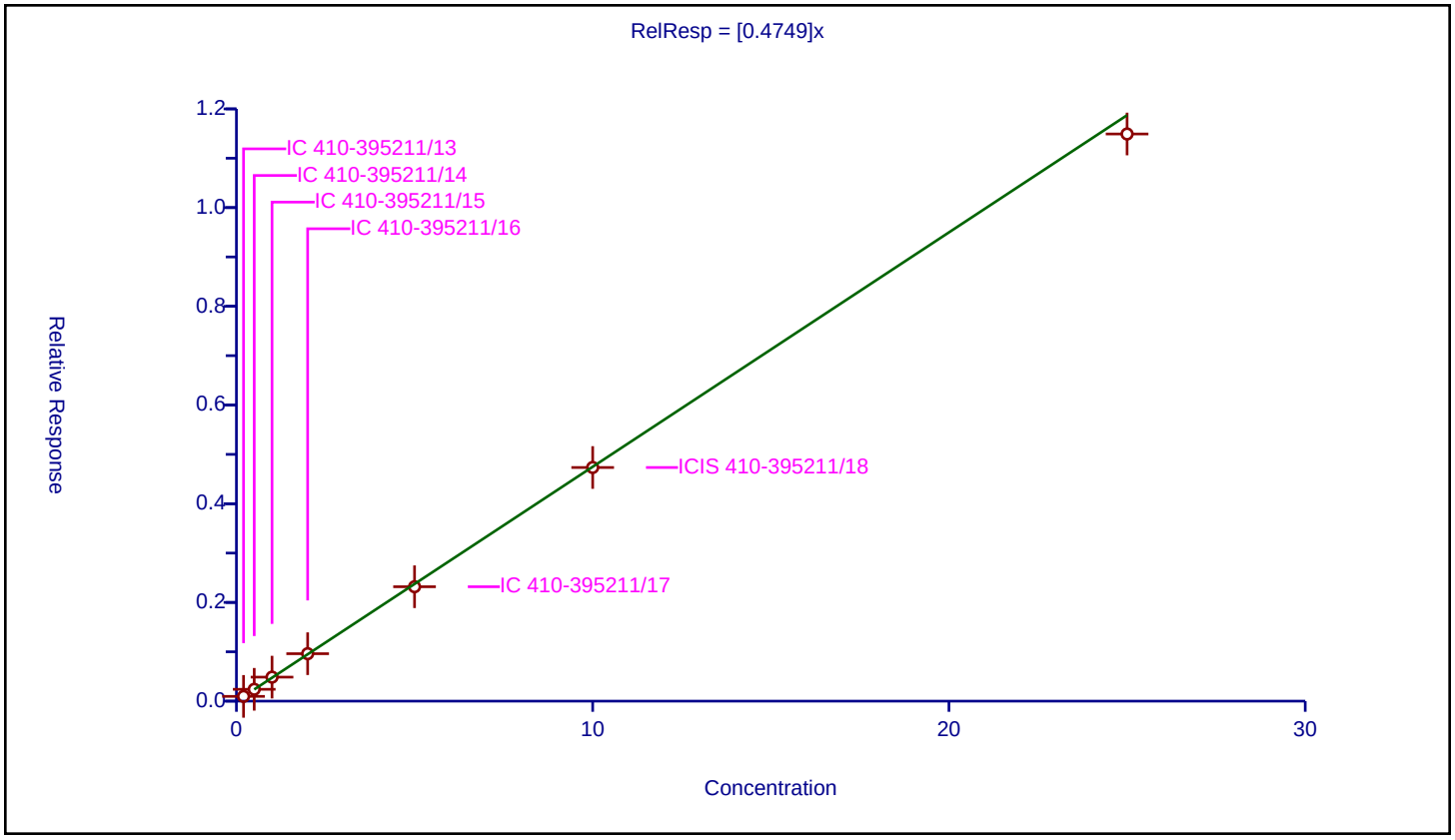
Curve Coefficients

Intercept:	0
Slope:	0.4749

Error Coefficients

Standard Error:	1360000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.09611	10.0	2414017.0	0.480548	Y
2	IC 410-395211/14	0.5	0.239902	10.0	2469842.0	0.479804	Y
3	IC 410-395211/15	1.0	0.486339	10.0	2458760.0	0.486339	Y
4	IC 410-395211/16	2.0	0.961604	10.0	2465964.0	0.480802	Y
5	IC 410-395211/17	5.0	2.318049	10.0	2475137.0	0.46361	Y
6	ICIS 410-395211/18	10.0	4.734225	10.0	2510713.0	0.473422	Y
7	IC 410-395211/19	25.0	11.491493	10.0	2655574.0	0.45966	Y



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Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

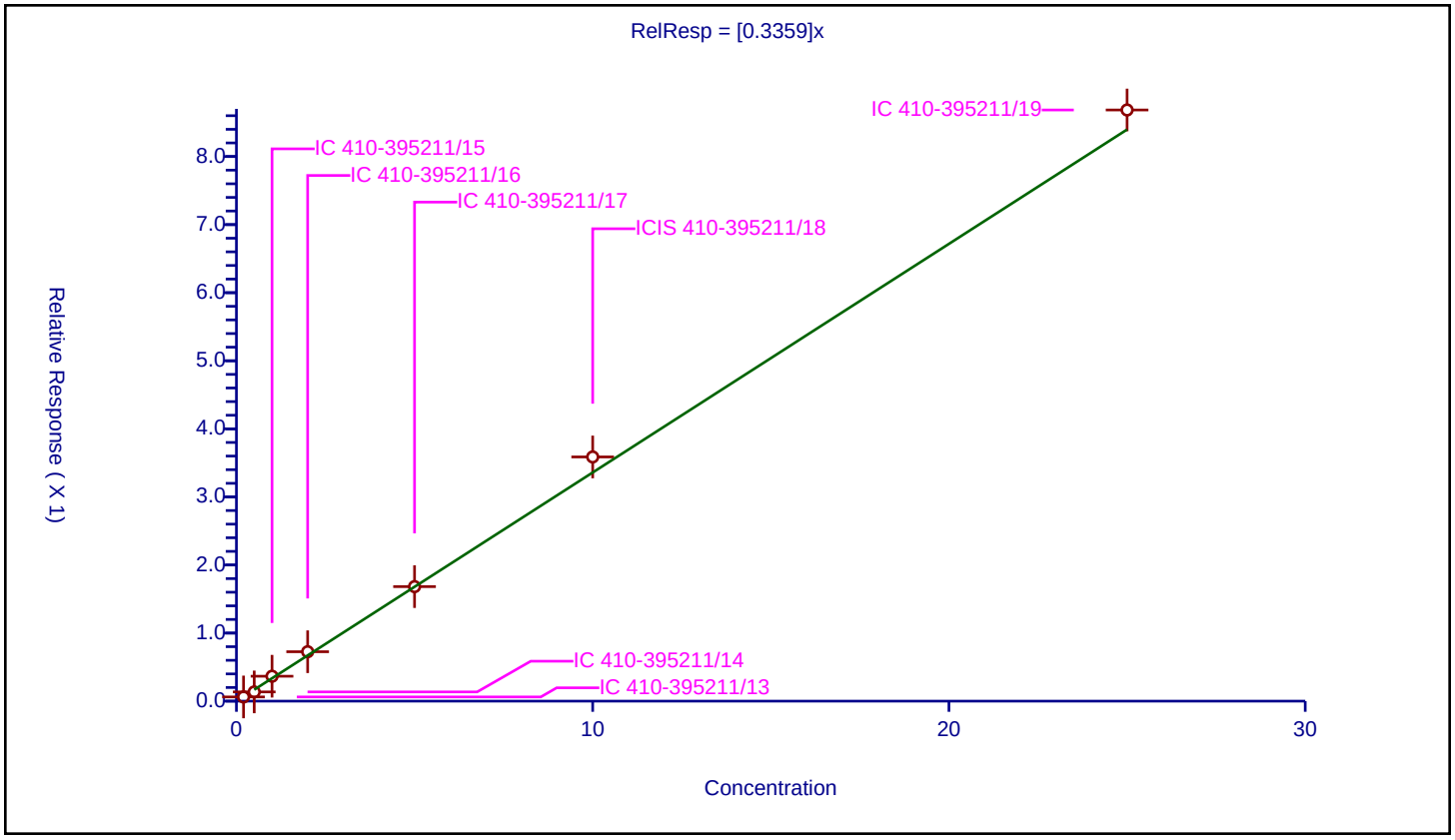
Curve Coefficients

Intercept:	0
Slope:	0.3359

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	10.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.061789	10.0	2414017.0	0.308946	Y
2	IC 410-395211/14	0.5	0.135381	10.0	2469842.0	0.270762	Y
3	IC 410-395211/15	1.0	0.365941	10.0	2458760.0	0.365941	Y
4	IC 410-395211/16	2.0	0.72583	10.0	2465964.0	0.362915	Y
5	IC 410-395211/17	5.0	1.682073	10.0	2475137.0	0.336415	Y
6	ICIS 410-395211/18	10.0	3.587304	10.0	2510713.0	0.35873	Y
7	IC 410-395211/19	25.0	8.684028	10.0	2655574.0	0.347361	Y



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Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

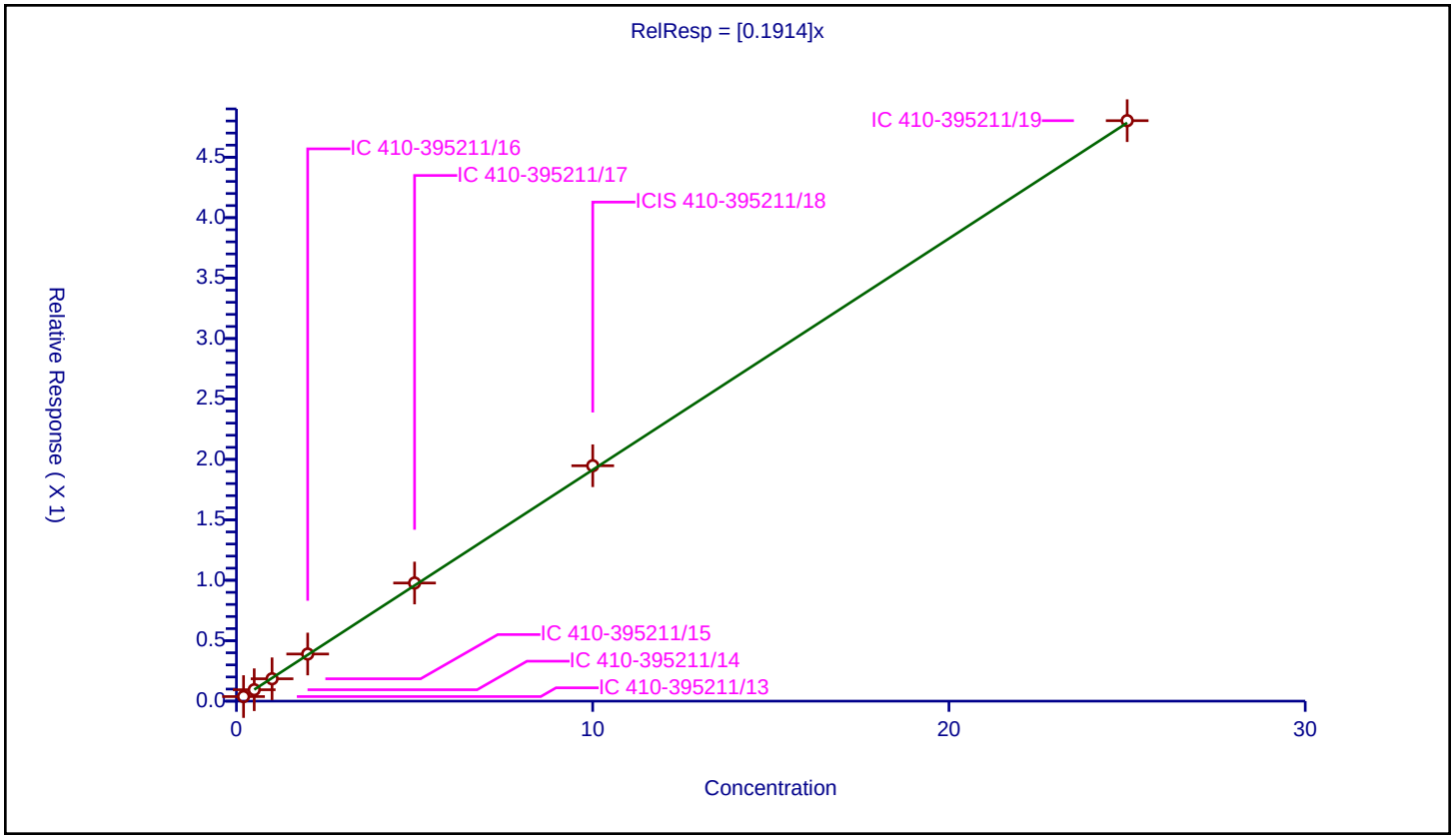
Curve Coefficients

Intercept:	0
Slope:	0.1914

Error Coefficients

Standard Error:	568000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.200027	0.03775	10.0	2414017.0	0.188726	Y
2	IC 410-395211/14	0.500068	0.094322	10.0	2469842.0	0.188618	Y
3	IC 410-395211/15	1.000135	0.185036	10.0	2458760.0	0.185011	Y
4	IC 410-395211/16	2.00027	0.39001	10.0	2465964.0	0.194979	Y
5	IC 410-395211/17	5.000676	0.977505	10.0	2475137.0	0.195475	Y
6	ICIS 410-395211/18	10.001352	1.94763	10.0	2510713.0	0.194737	Y
7	IC 410-395211/19	25.00338	4.802578	10.0	2655574.0	0.192077	Y



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Calibration / 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

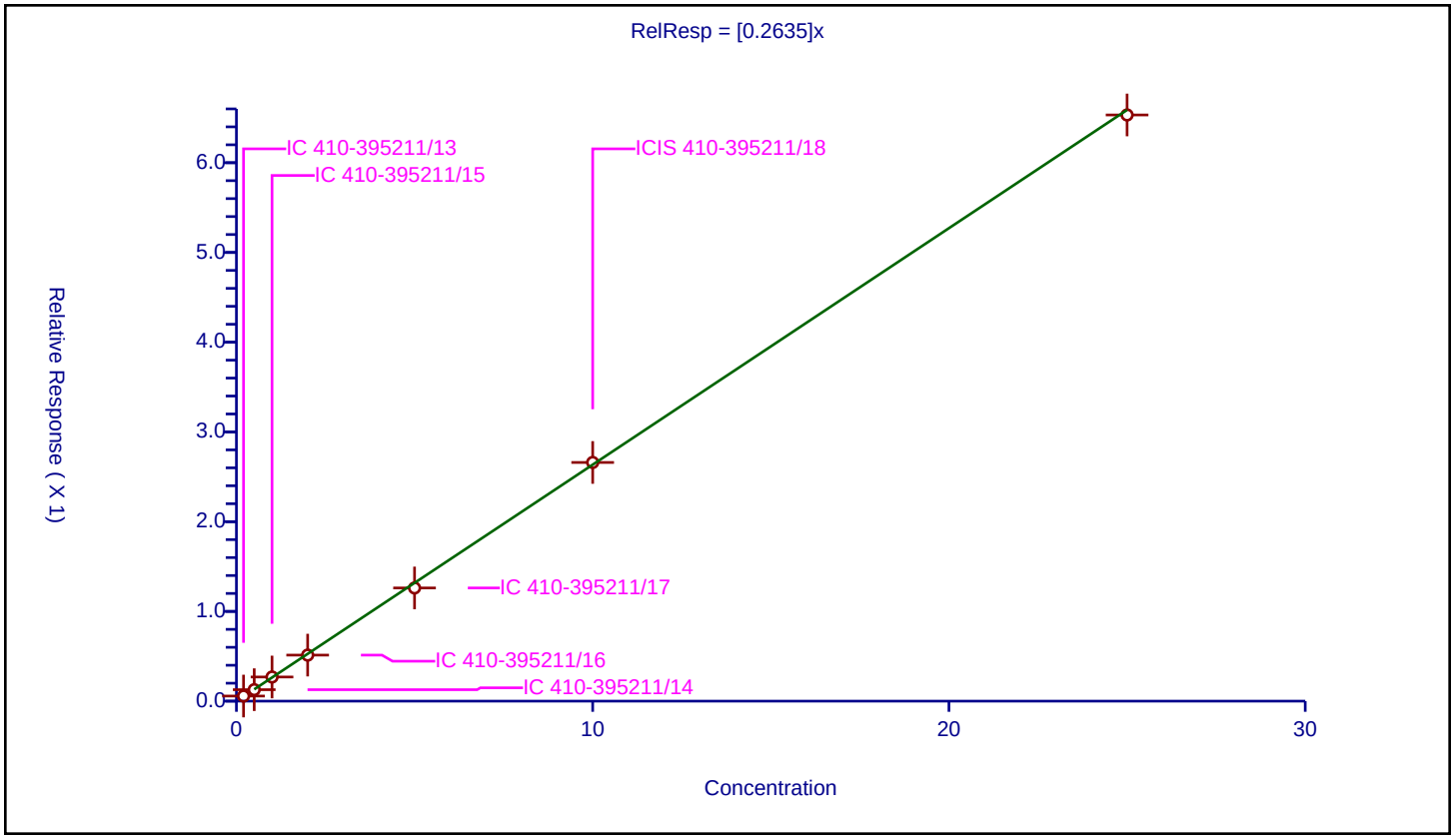
Curve Coefficients

Intercept:	0
Slope:	0.2635

Error Coefficients

Standard Error:	772000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.056773	10.0	2414017.0	0.283863	Y
2	IC 410-395211/14	0.5	0.127911	10.0	2469842.0	0.255822	Y
3	IC 410-395211/15	1.0	0.268989	10.0	2458760.0	0.268989	Y
4	IC 410-395211/16	2.0	0.512891	10.0	2465964.0	0.256445	Y
5	IC 410-395211/17	5.0	1.261316	10.0	2475137.0	0.252263	Y
6	ICIS 410-395211/18	10.0	2.659866	10.0	2510713.0	0.265987	Y
7	IC 410-395211/19	25.0	6.532407	10.0	2655574.0	0.261296	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

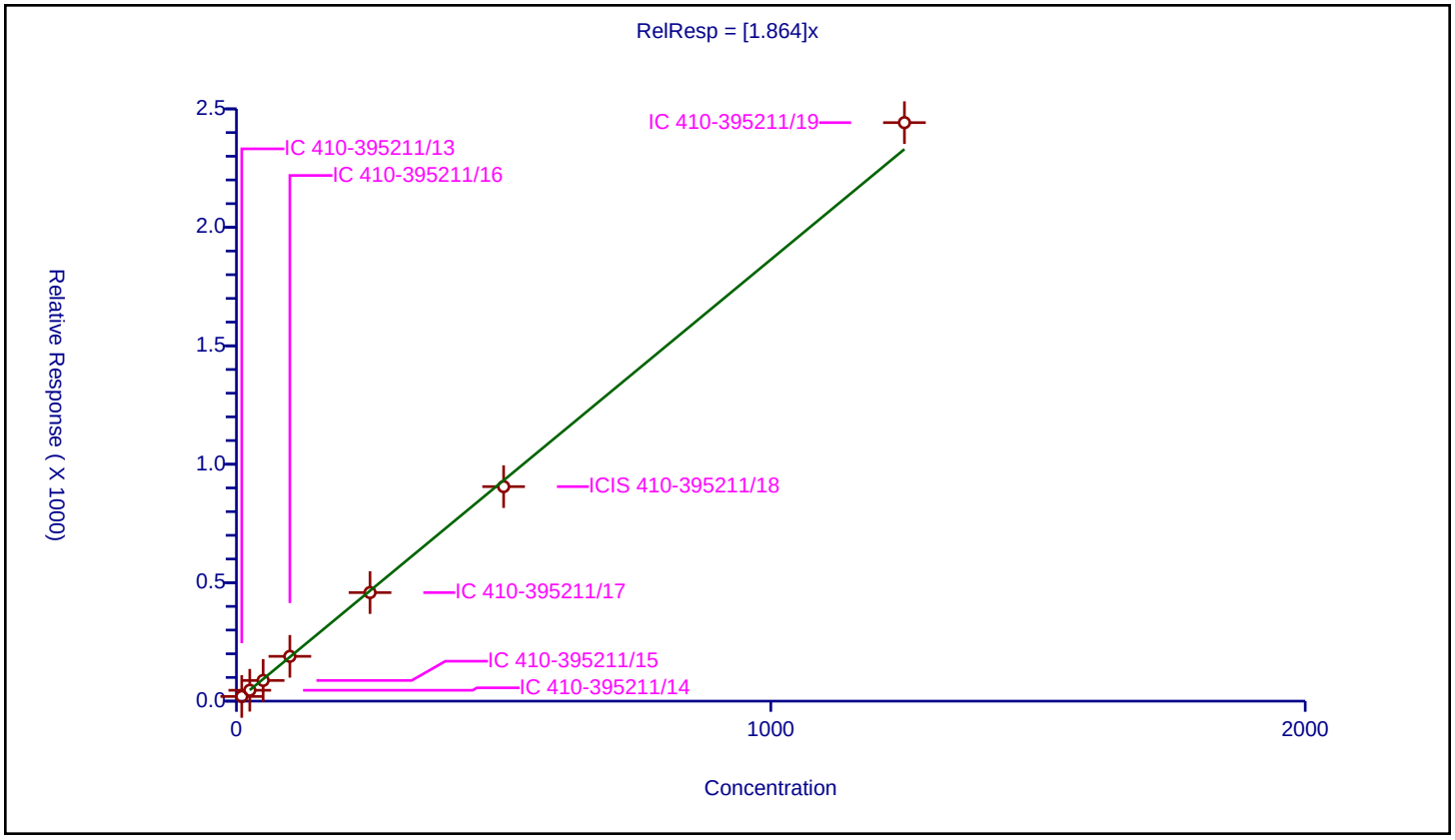
Curve Coefficients

Intercept:	0
Slope:	1.864

Error Coefficients

Standard Error:	3680000
Relative Standard Error:	4.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	10.000333	19.736043	50.0	159799.0	1.973539	Y
2	IC 410-395211/14	25.000833	45.979139	50.0	176691.0	1.839104	Y
3	IC 410-395211/15	50.001667	87.28638	50.0	161736.0	1.745669	Y
4	IC 410-395211/16	100.003333	189.102802	50.0	164657.0	1.890965	Y
5	IC 410-395211/17	250.008333	458.300245	50.0	167230.0	1.83314	Y
6	ICIS 410-395211/18	500.016666	905.554531	50.0	168052.0	1.811049	Y
7	IC 410-395211/19	1250.041665	2441.991437	50.0	170043.0	1.953528	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

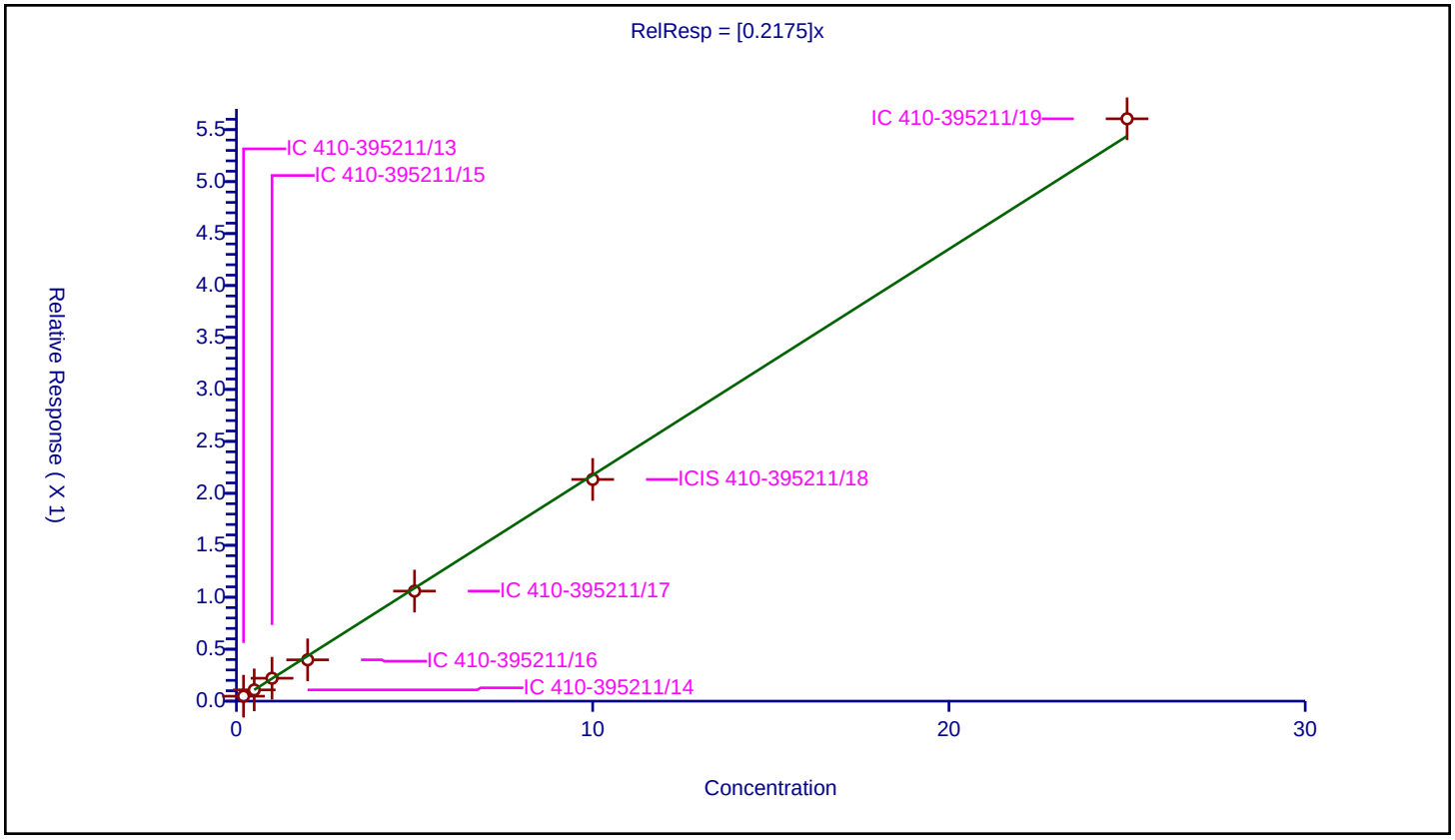
Curve Coefficients

Intercept:	0
Slope:	0.2175

Error Coefficients

Standard Error:	656000
Relative Standard Error:	5.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.047506	10.0	2414017.0	0.237529	Y
2	IC 410-395211/14	0.5	0.108266	10.0	2469842.0	0.216532	Y
3	IC 410-395211/15	1.0	0.220542	10.0	2458760.0	0.220542	Y
4	IC 410-395211/16	2.0	0.397601	10.0	2465964.0	0.198801	Y
5	IC 410-395211/17	5.0	1.058968	10.0	2475137.0	0.211794	Y
6	ICIS 410-395211/18	10.0	2.133673	10.0	2510713.0	0.213367	Y
7	IC 410-395211/19	25.0	5.604724	10.0	2655574.0	0.224189	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

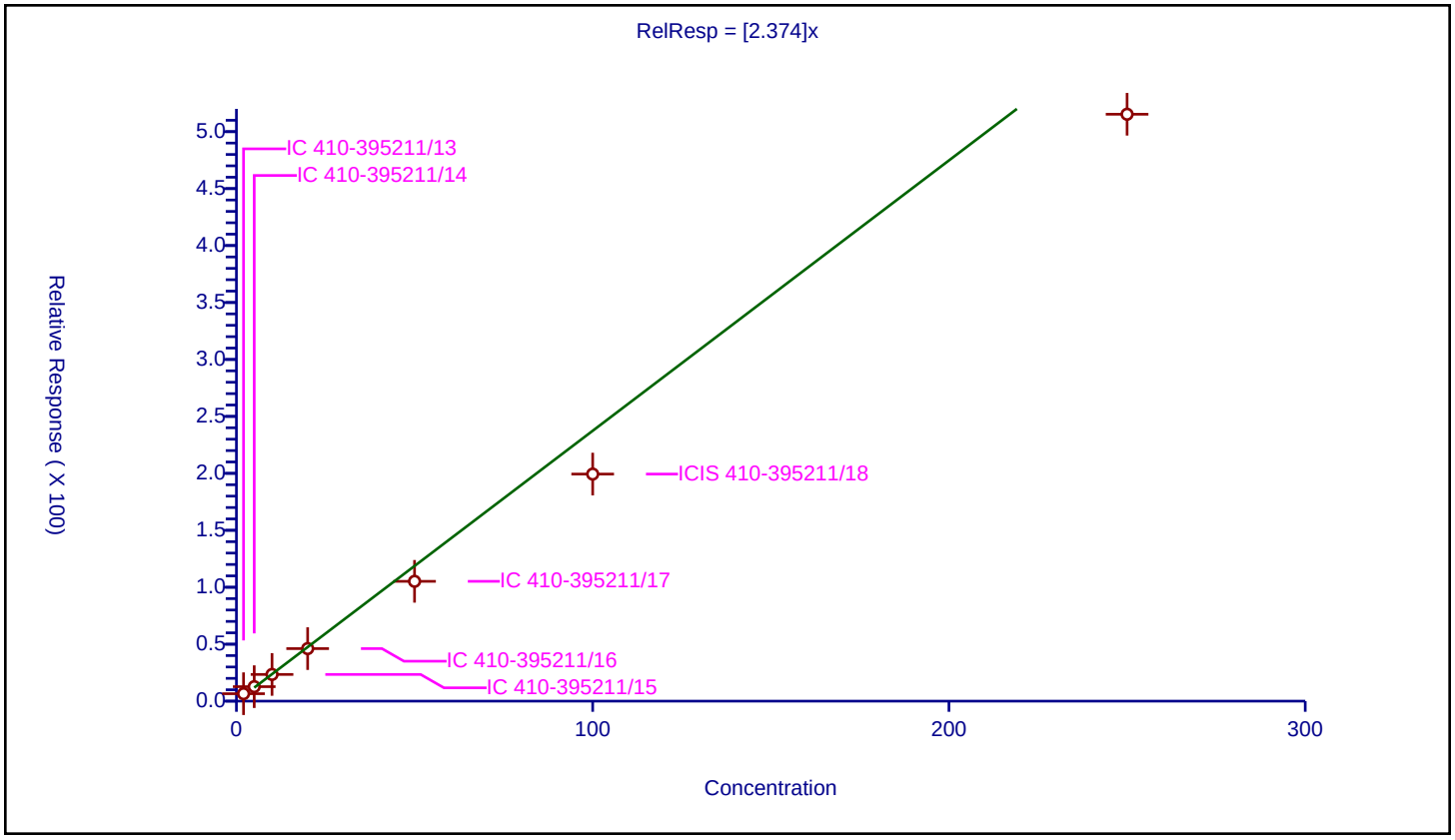
Curve Coefficients

Intercept:	0
Slope:	2.374

Error Coefficients

Standard Error:	782000
Relative Standard Error:	18.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.940

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	2.0	6.529766	50.0	159799.0	3.264883	Y
2	IC 410-395211/14	5.0	12.70891	50.0	176691.0	2.541782	Y
3	IC 410-395211/15	10.0	23.431704	50.0	161736.0	2.34317	Y
4	IC 410-395211/16	20.0	46.135907	50.0	164657.0	2.306795	Y
5	IC 410-395211/17	50.0	105.206901	50.0	167230.0	2.104138	Y
6	ICIS 410-395211/18	100.0	199.362995	50.0	168052.0	1.99363	Y
7	IC 410-395211/19	250.0	515.299659	50.0	170043.0	2.061199	Y



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Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

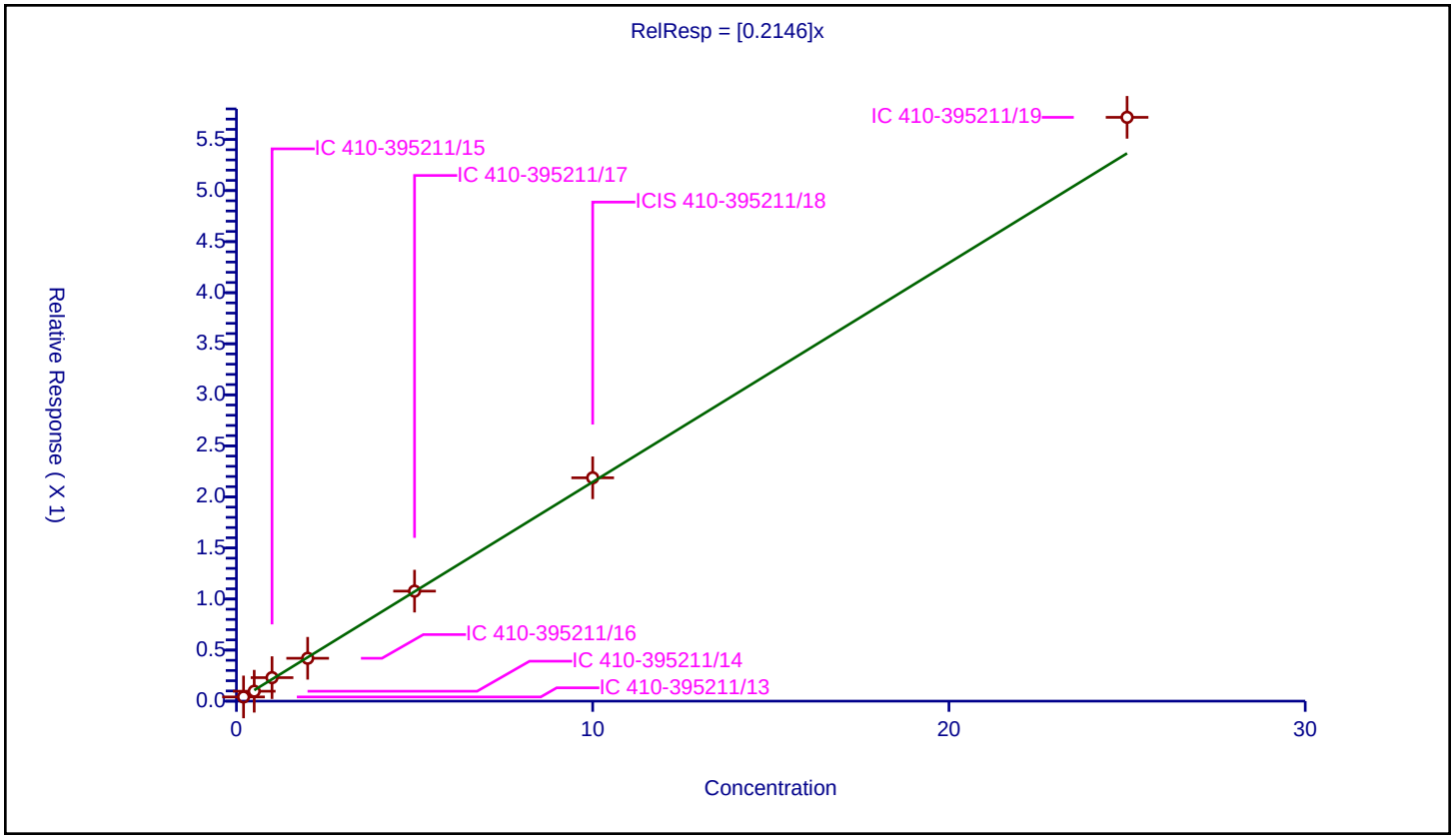
Curve Coefficients

Intercept:	0
Slope:	0.2146

Error Coefficients

Standard Error:	670000
Relative Standard Error:	6.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.041039	10.0	2414017.0	0.205197	Y
2	IC 410-395211/14	0.5	0.097087	10.0	2469842.0	0.194174	Y
3	IC 410-395211/15	1.0	0.230088	10.0	2458760.0	0.230088	Y
4	IC 410-395211/16	2.0	0.419694	10.0	2465964.0	0.209847	Y
5	IC 410-395211/17	5.0	1.077258	10.0	2475137.0	0.215452	Y
6	ICIS 410-395211/18	10.0	2.187299	10.0	2510713.0	0.21873	Y
7	IC 410-395211/19	25.0	5.717246	10.0	2655574.0	0.22869	Y



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Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

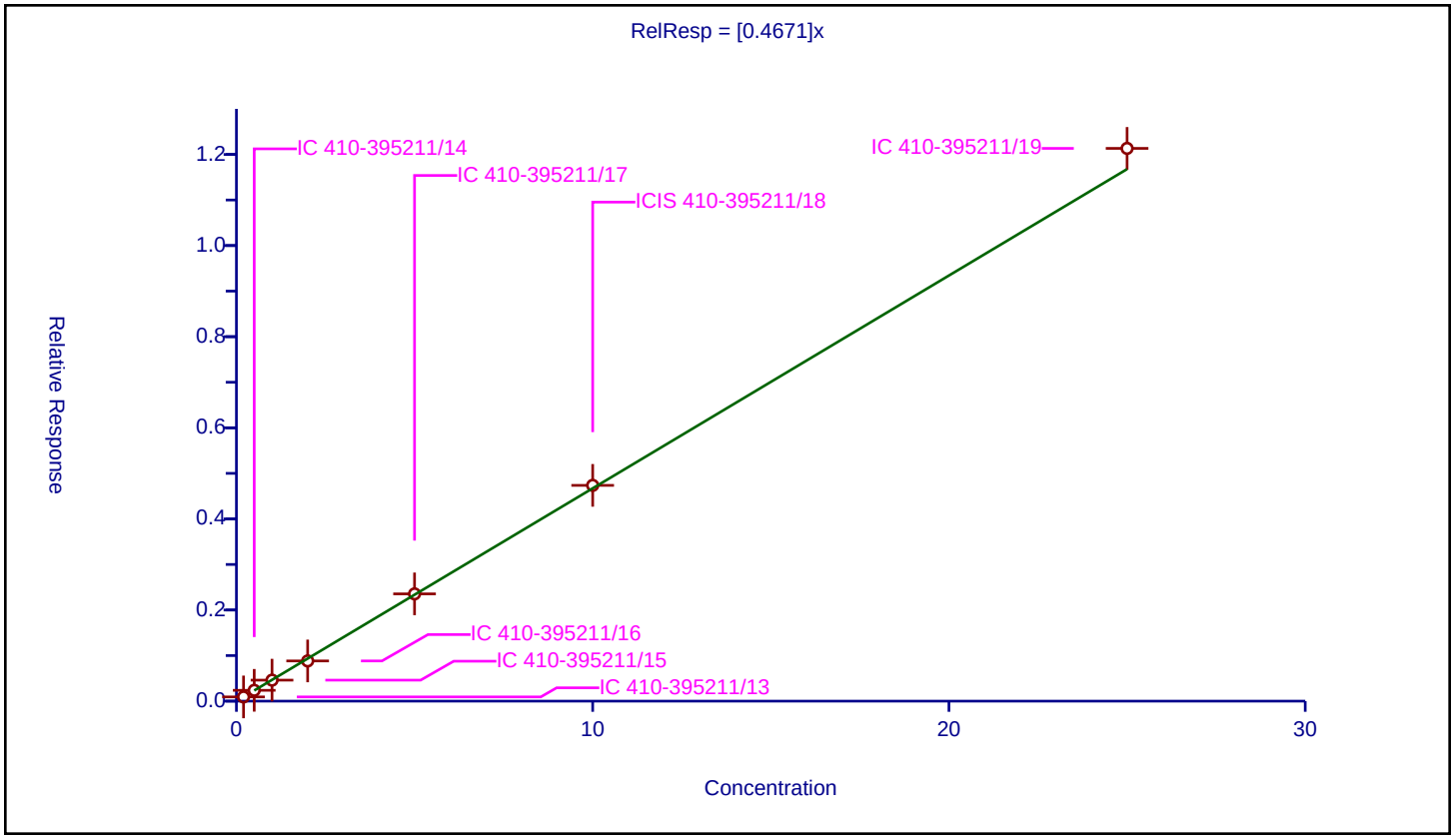
Curve Coefficients

Intercept:	0
Slope:	0.4671

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.092477	10.0	2414017.0	0.462383	Y
2	IC 410-395211/14	0.5	0.237703	10.0	2469842.0	0.475407	Y
3	IC 410-395211/15	1.0	0.460842	10.0	2458760.0	0.460842	Y
4	IC 410-395211/16	2.0	0.882677	10.0	2465964.0	0.441339	Y
5	IC 410-395211/17	5.0	2.35452	10.0	2475137.0	0.470904	Y
6	ICIS 410-395211/18	10.0	4.736324	10.0	2510713.0	0.473632	Y
7	IC 410-395211/19	25.0	12.132955	10.0	2655574.0	0.485318	Y



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Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

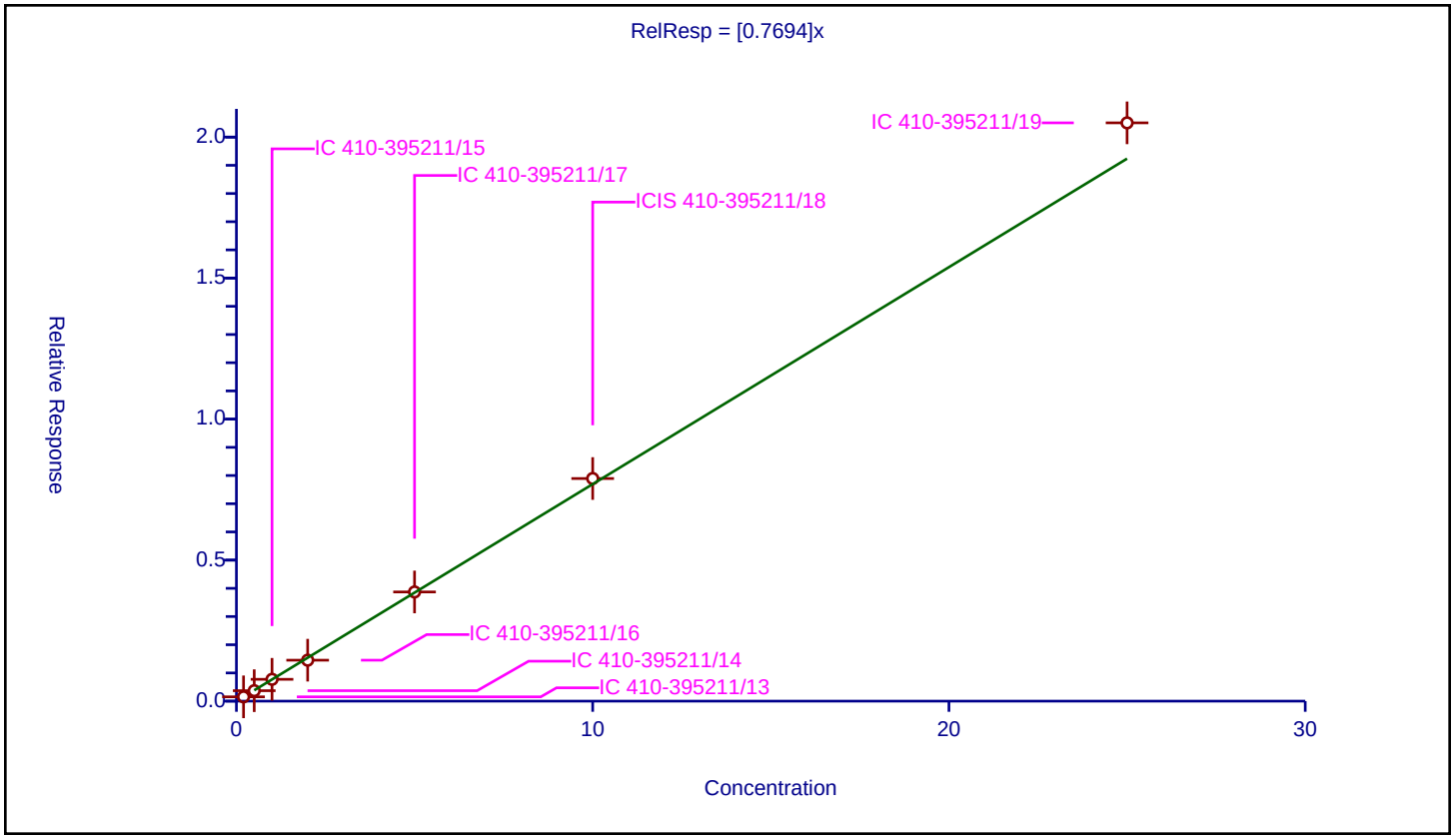
Curve Coefficients

Intercept:	0
Slope:	0.7694

Error Coefficients

Standard Error:	2400000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.152203	10.0	2414017.0	0.761014	Y
2	IC 410-395211/14	0.5	0.370627	10.0	2469842.0	0.741254	Y
3	IC 410-395211/15	1.0	0.773878	10.0	2458760.0	0.773878	Y
4	IC 410-395211/16	2.0	1.452207	10.0	2465964.0	0.726103	Y
5	IC 410-395211/17	5.0	3.871386	10.0	2475137.0	0.774277	Y
6	ICIS 410-395211/18	10.0	7.89375	10.0	2510713.0	0.789375	Y
7	IC 410-395211/19	25.0	20.504655	10.0	2655574.0	0.820186	Y



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Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

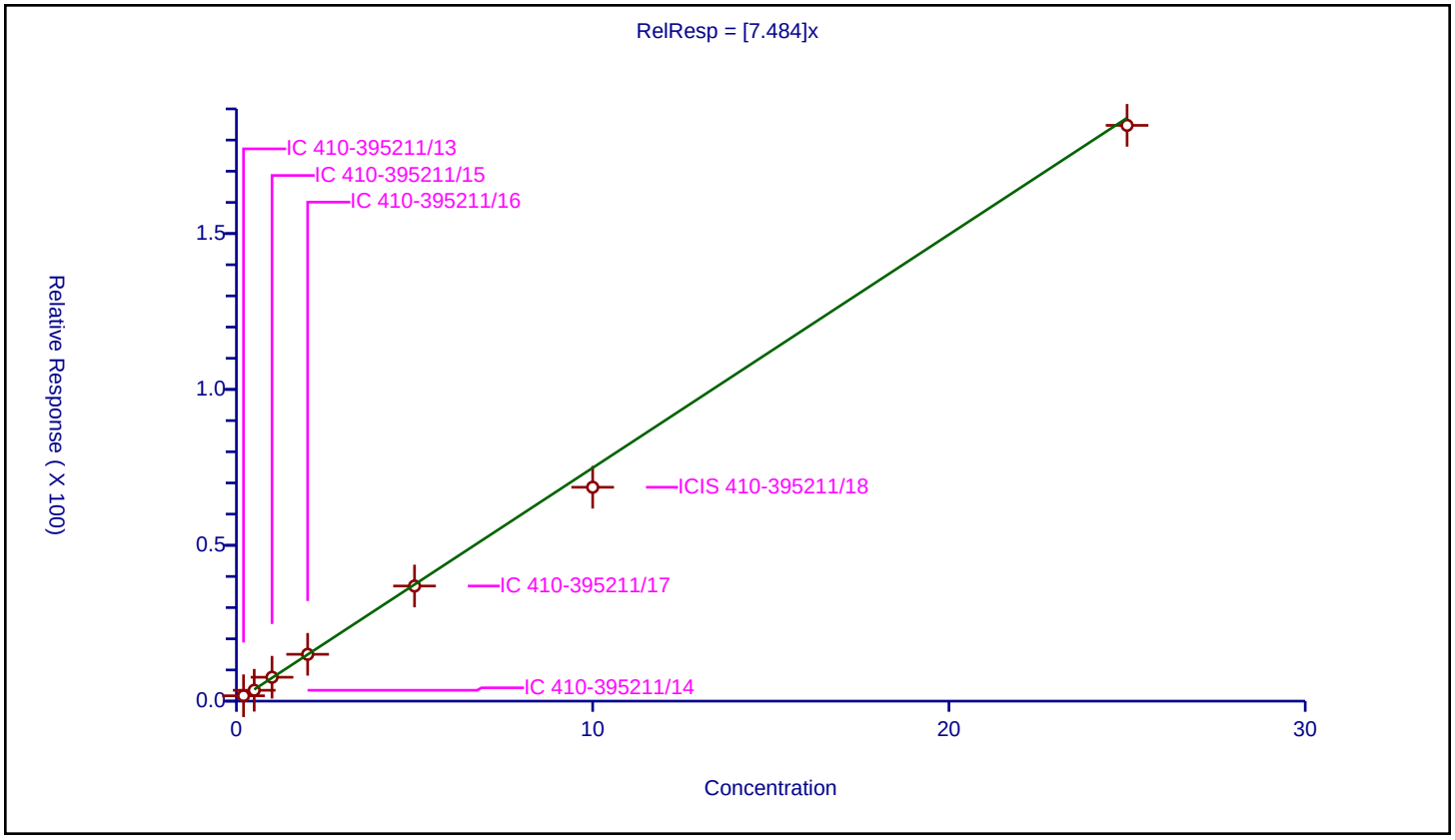
Curve Coefficients

Intercept:	0
Slope:	7.484

Error Coefficients

Standard Error:	279000
Relative Standard Error:	7.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	1.717783	50.0	159799.0	8.588915	Y
2	IC 410-395211/14	0.5	3.491406	50.0	176691.0	6.982812	Y
3	IC 410-395211/15	1.0	7.667124	50.0	161736.0	7.667124	Y
4	IC 410-395211/16	2.0	15.024263	50.0	164657.0	7.512131	Y
5	IC 410-395211/17	5.0	36.932668	50.0	167230.0	7.386534	Y
6	ICIS 410-395211/18	10.0	68.616857	50.0	168052.0	6.861686	Y
7	IC 410-395211/19	25.0	184.720041	50.0	170043.0	7.388802	Y



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Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

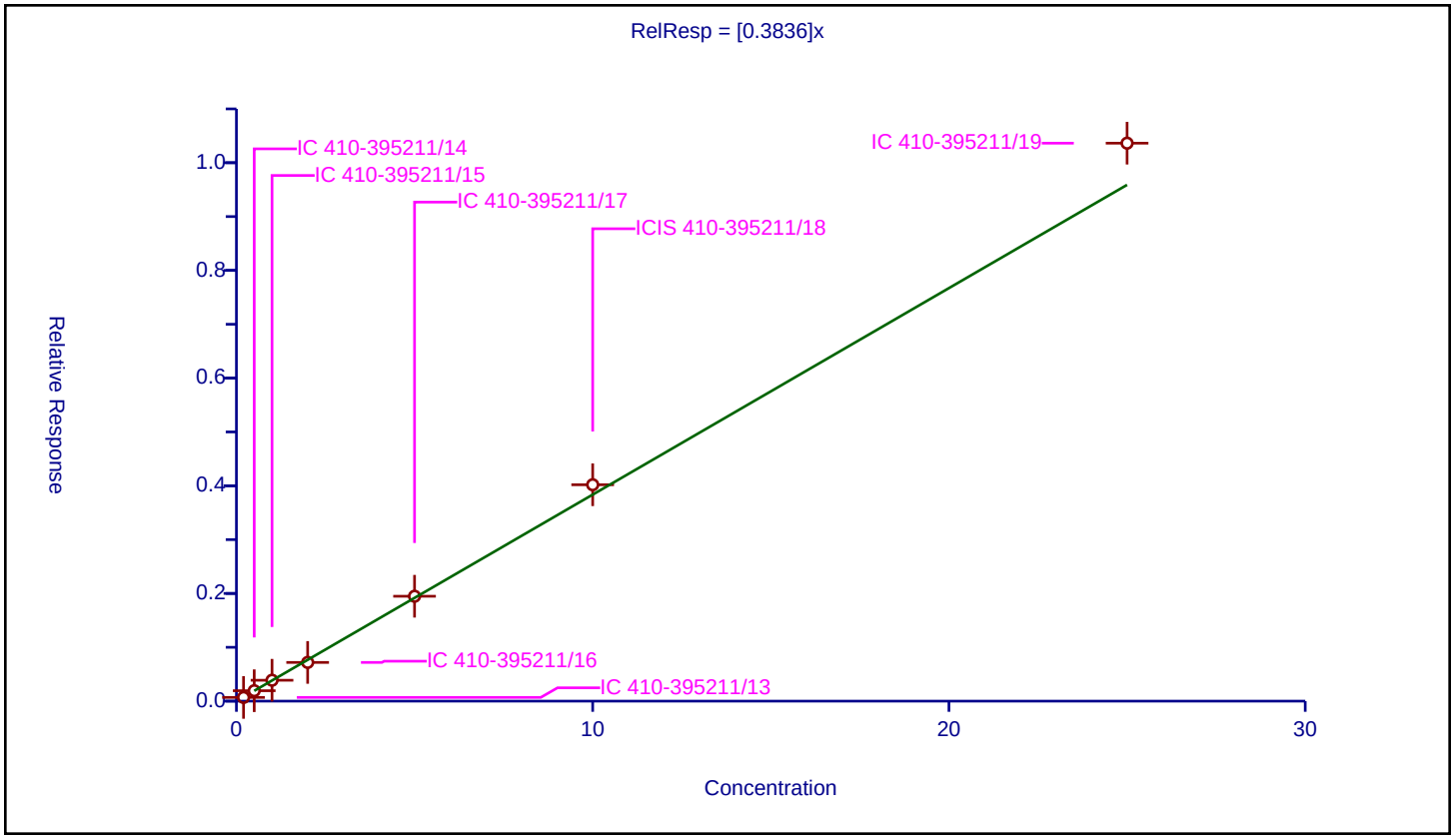
Curve Coefficients

Intercept:	0
Slope:	0.3836

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.06886	10.0	2414017.0	0.344302	Y
2	IC 410-395211/14	0.5	0.193442	10.0	2469842.0	0.386883	Y
3	IC 410-395211/15	1.0	0.388216	10.0	2458760.0	0.388216	Y
4	IC 410-395211/16	2.0	0.719025	10.0	2465964.0	0.359513	Y
5	IC 410-395211/17	5.0	1.948122	10.0	2475137.0	0.389624	Y
6	ICIS 410-395211/18	10.0	4.019173	10.0	2510713.0	0.401917	Y
7	IC 410-395211/19	25.0	10.363341	10.0	2655574.0	0.414534	Y



11/14/2023
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Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

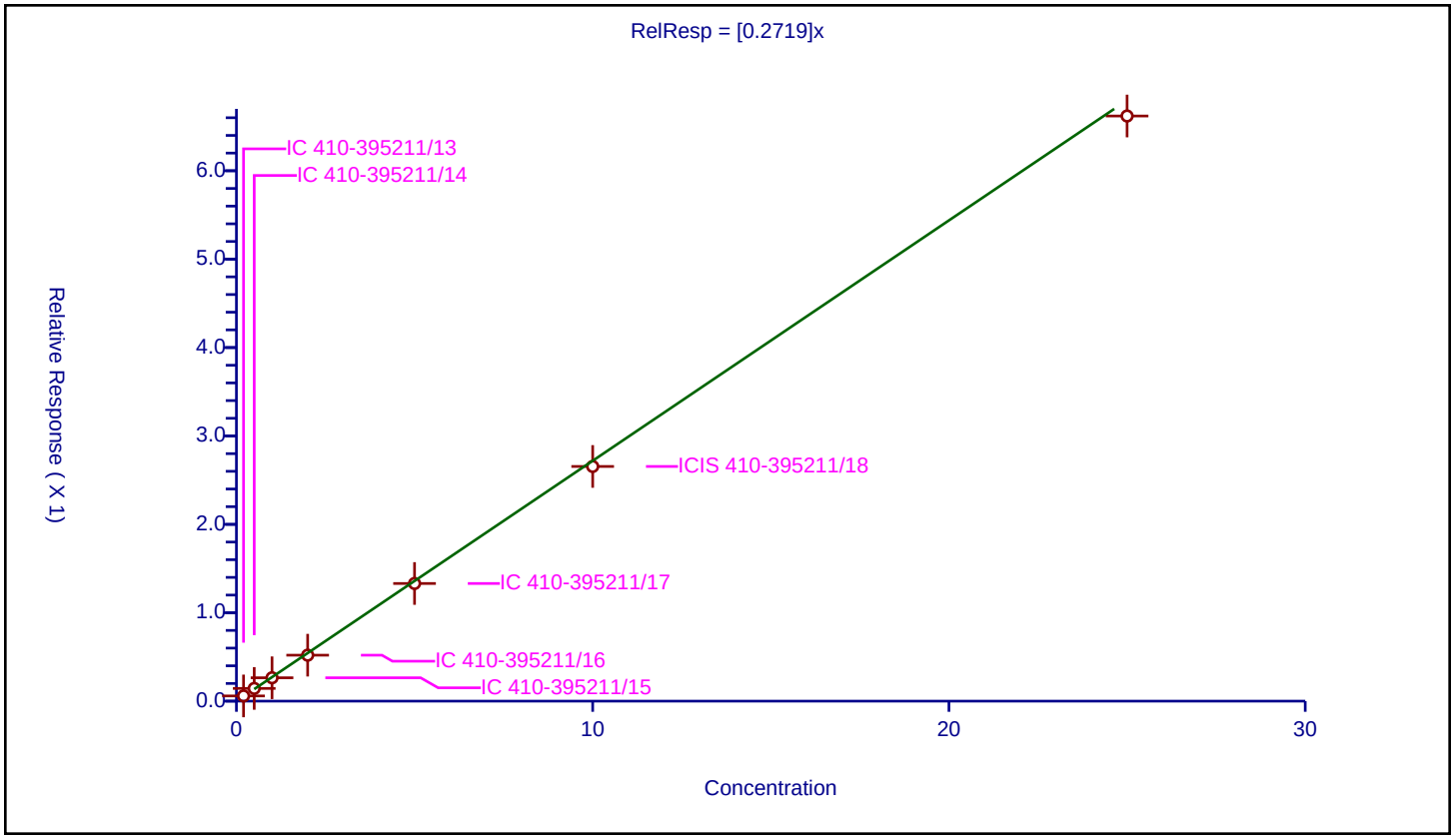
Curve Coefficients

Intercept:	0
Slope:	0.2719

Error Coefficients

Standard Error:	782000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.058923	10.0	2414017.0	0.294613	Y
2	IC 410-395211/14	0.5	0.144009	10.0	2469842.0	0.288018	Y
3	IC 410-395211/15	1.0	0.264365	10.0	2458760.0	0.264365	Y
4	IC 410-395211/16	2.0	0.519902	10.0	2465964.0	0.259951	Y
5	IC 410-395211/17	5.0	1.331066	10.0	2475137.0	0.266213	Y
6	ICIS 410-395211/18	10.0	2.654843	10.0	2510713.0	0.265484	Y
7	IC 410-395211/19	25.0	6.619657	10.0	2655574.0	0.264786	Y



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Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

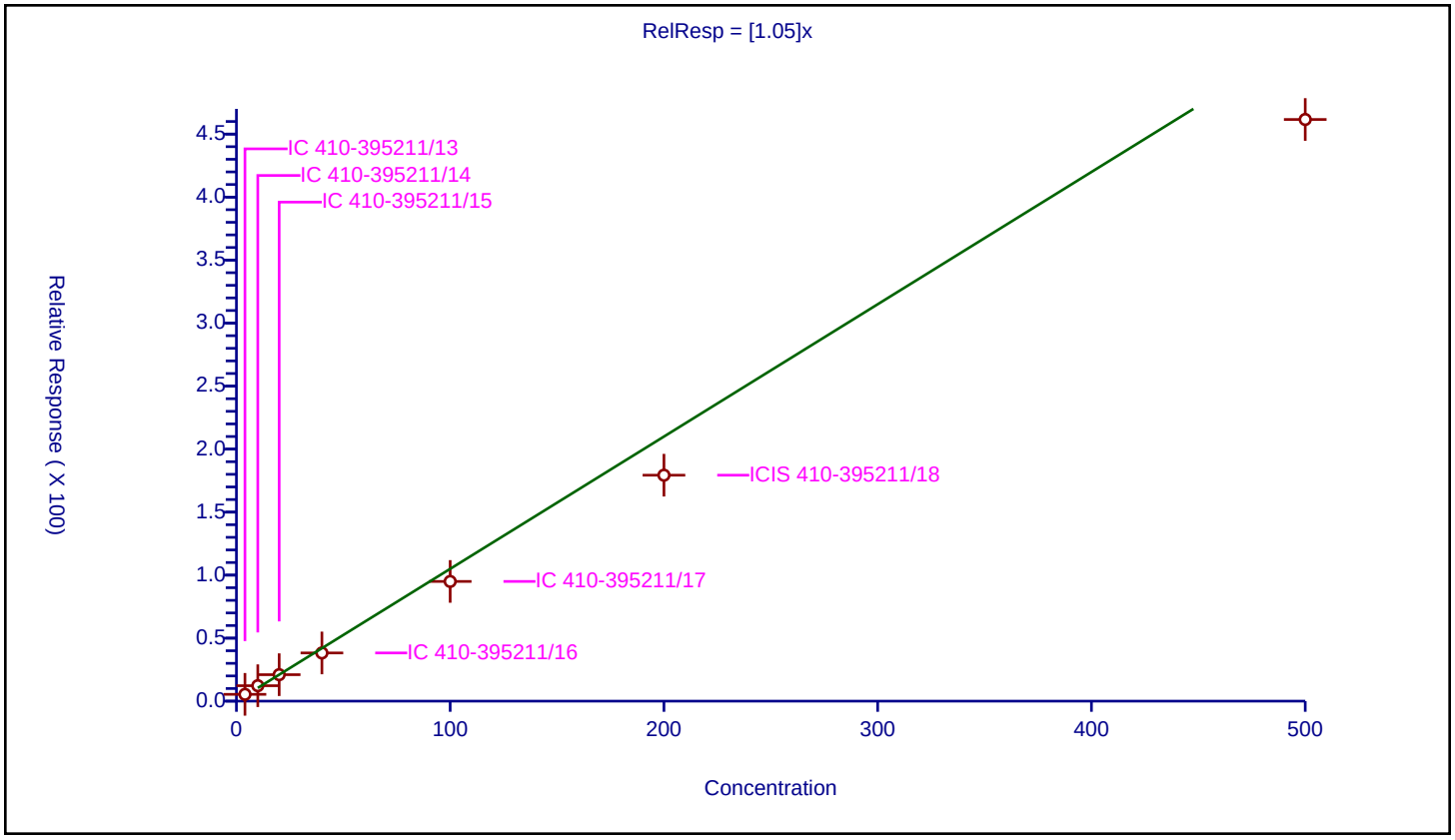
Curve Coefficients

Intercept:	0
Slope:	1.05

Error Coefficients

Standard Error:	701000
Relative Standard Error:	16.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.954

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	4.0	5.390835	50.0	159799.0	1.347709	Y
2	IC 410-395211/14	10.0	12.251331	50.0	176691.0	1.225133	Y
3	IC 410-395211/15	20.0	20.999345	50.0	161736.0	1.049967	Y
4	IC 410-395211/16	40.0	38.251031	50.0	164657.0	0.956276	Y
5	IC 410-395211/17	100.0	94.987741	50.0	167230.0	0.949877	Y
6	ICIS 410-395211/18	200.0	179.307595	50.0	168052.0	0.896538	Y
7	IC 410-395211/19	500.0	461.584423	50.0	170043.0	0.923169	Y



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Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

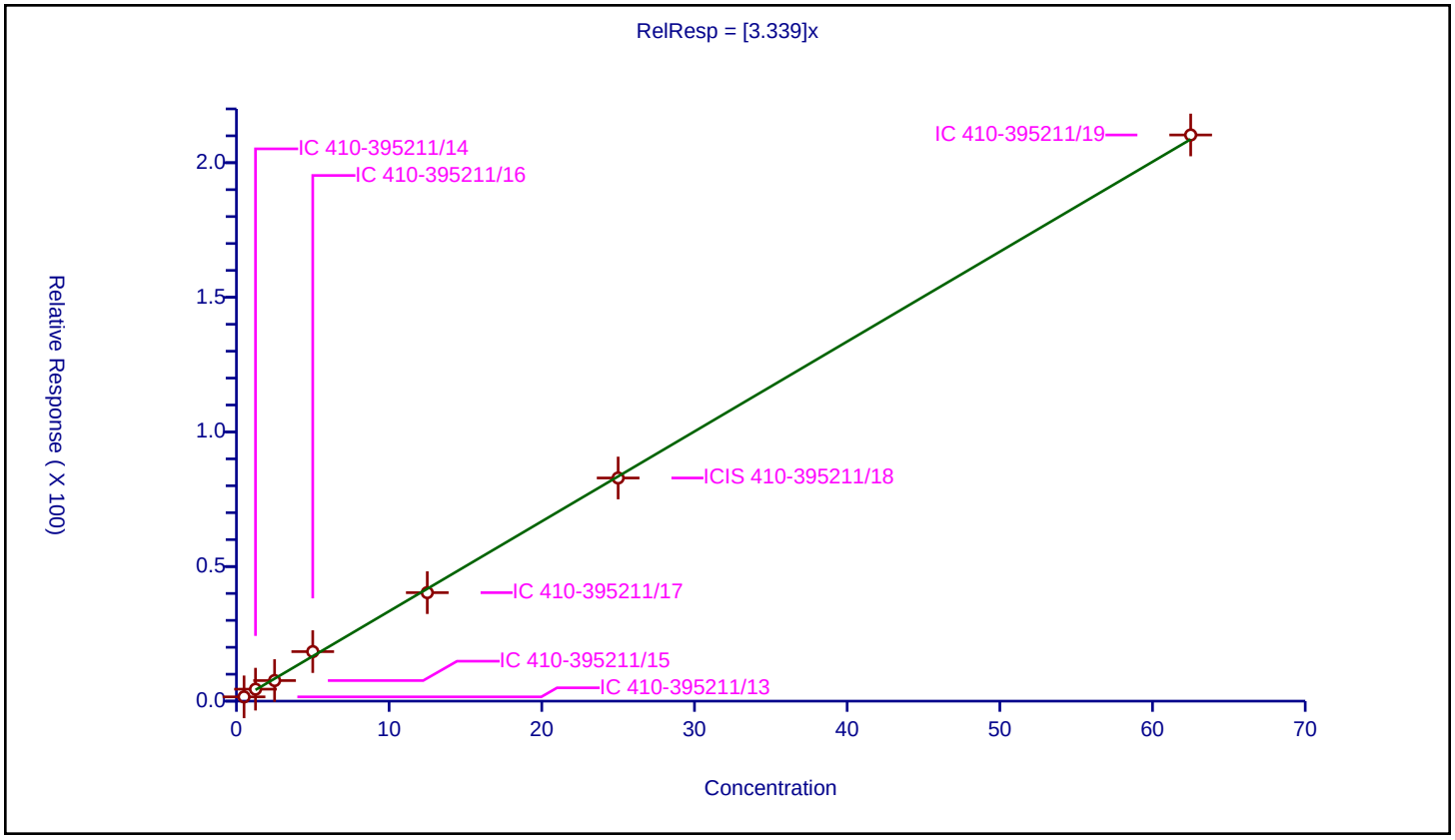
Curve Coefficients

Intercept:	0
Slope:	3.339

Error Coefficients

Standard Error:	319000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.5	1.590435	50.0	159799.0	3.180871	Y
2	IC 410-395211/14	1.25	4.442218	50.0	176691.0	3.553775	Y
3	IC 410-395211/15	2.5	7.640847	50.0	161736.0	3.056339	Y
4	IC 410-395211/16	5.0	18.393084	50.0	164657.0	3.678617	Y
5	IC 410-395211/17	12.5	40.30467	50.0	167230.0	3.224374	Y
6	ICIS 410-395211/18	25.0	82.89101	50.0	168052.0	3.31564	Y
7	IC 410-395211/19	62.5	210.310039	50.0	170043.0	3.364961	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

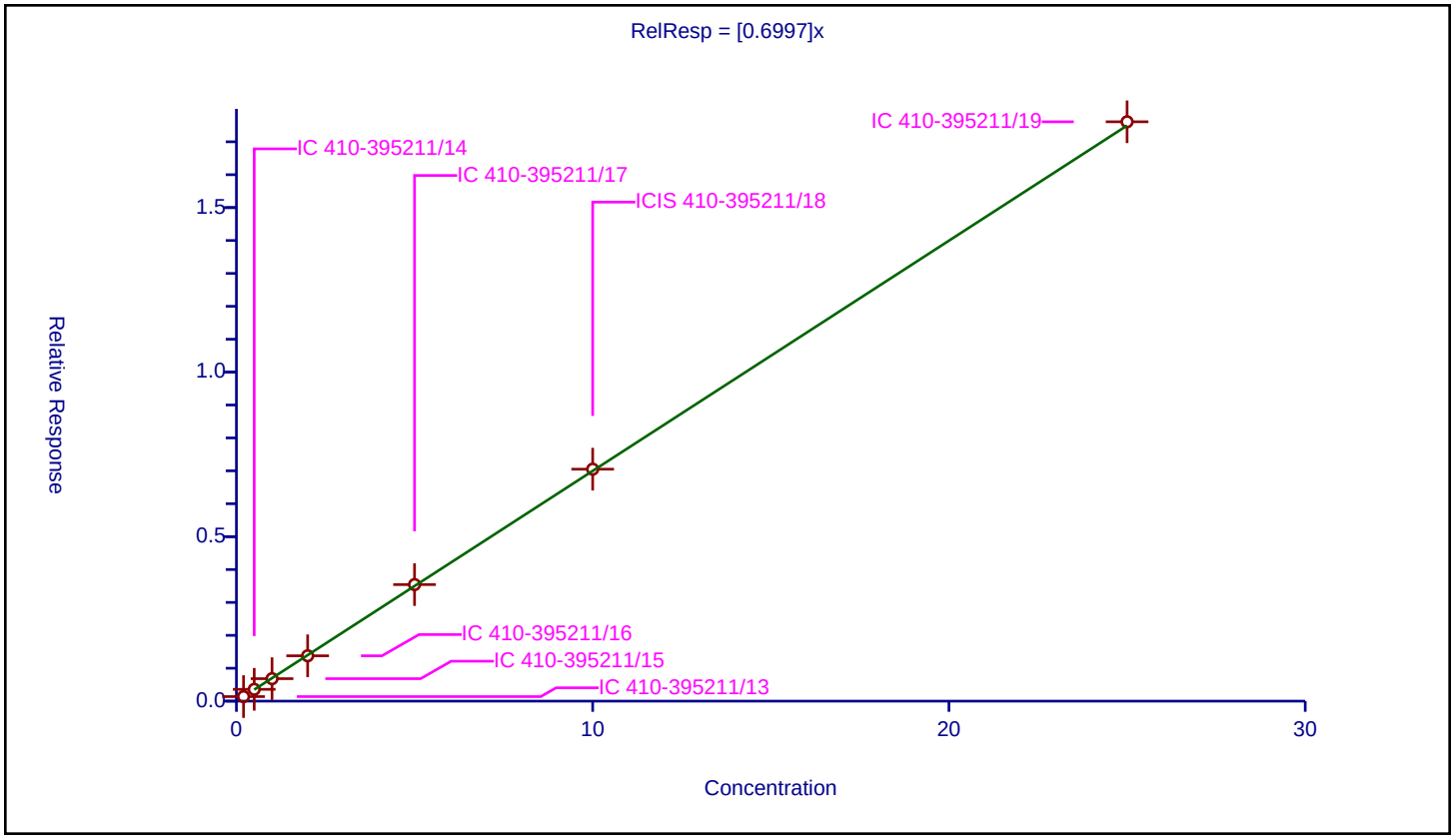
Curve Coefficients

Intercept:	0
Slope:	0.6997

Error Coefficients

Standard Error:	2080000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.138251	10.0	2414017.0	0.691254	Y
2	IC 410-395211/14	0.5	0.358638	10.0	2469842.0	0.717277	Y
3	IC 410-395211/15	1.0	0.682568	10.0	2458760.0	0.682568	Y
4	IC 410-395211/16	2.0	1.378199	10.0	2465964.0	0.6891	Y
5	IC 410-395211/17	5.0	3.542697	10.0	2475137.0	0.708539	Y
6	ICIS 410-395211/18	10.0	7.050013	10.0	2510713.0	0.705001	Y
7	IC 410-395211/19	25.0	17.608329	10.0	2655574.0	0.704333	Y



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Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

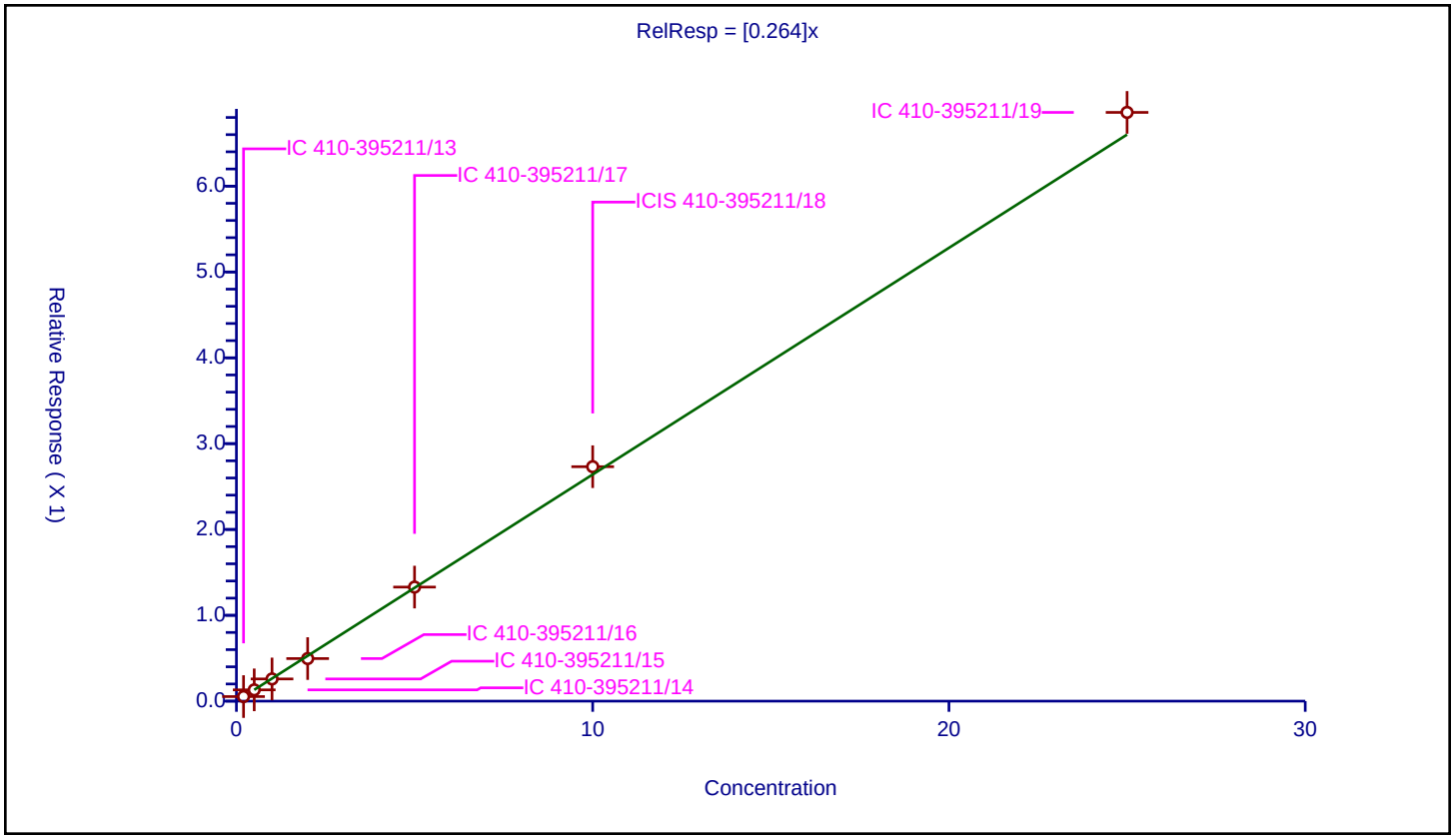
Curve Coefficients

Intercept:	0
Slope:	0.264

Error Coefficients

Standard Error:	808000
Relative Standard Error:	3.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.053069	10.0	2414017.0	0.265346	Y
2	IC 410-395211/14	0.5	0.13151	10.0	2469842.0	0.263021	Y
3	IC 410-395211/15	1.0	0.258675	10.0	2458760.0	0.258675	Y
4	IC 410-395211/16	2.0	0.495879	10.0	2465964.0	0.24794	Y
5	IC 410-395211/17	5.0	1.328941	10.0	2475137.0	0.265788	Y
6	ICIS 410-395211/18	10.0	2.731328	10.0	2510713.0	0.273133	Y
7	IC 410-395211/19	25.0	6.859086	10.0	2655574.0	0.274363	Y



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Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

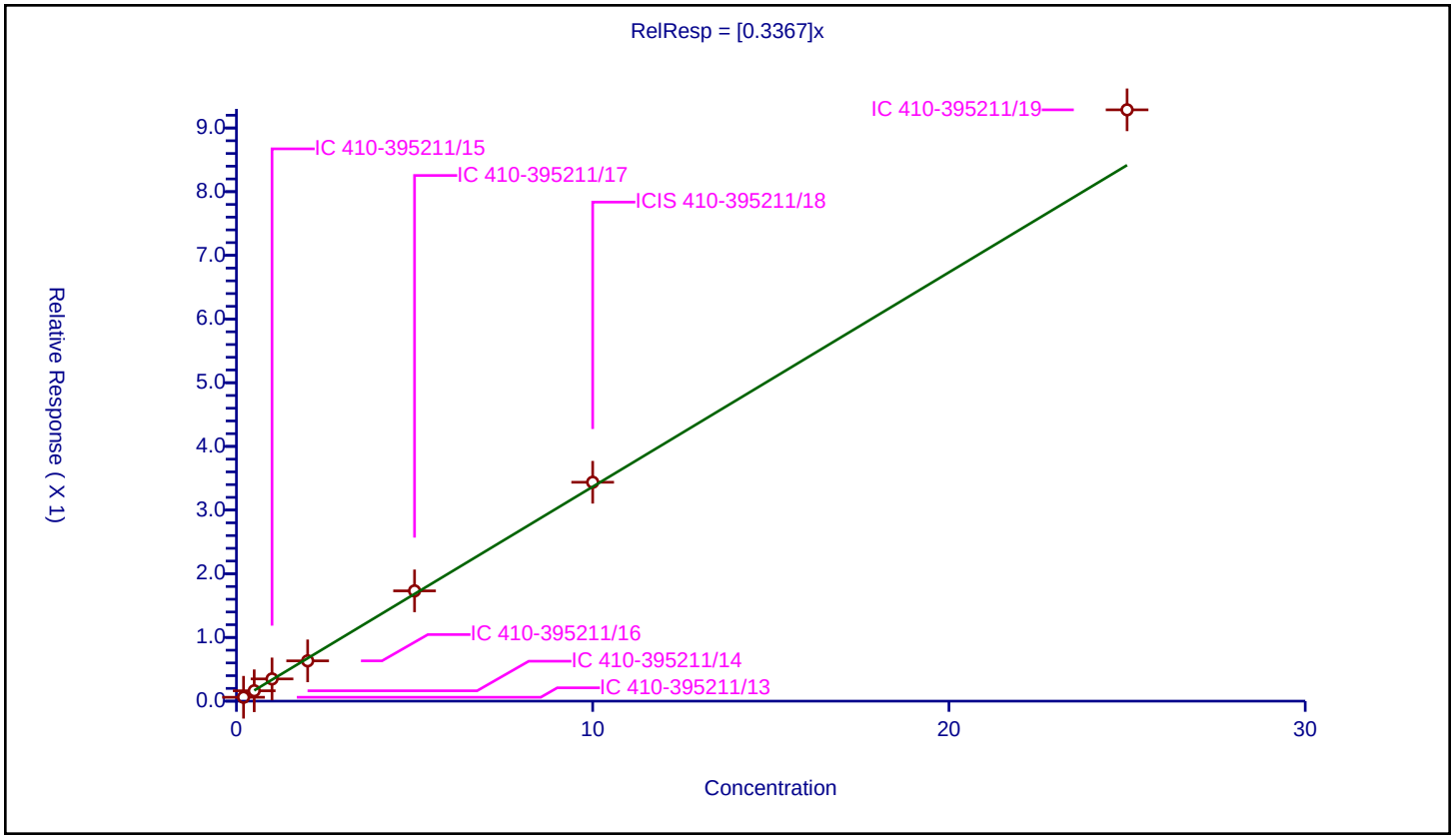
Curve Coefficients

Intercept:	0
Slope:	0.3367

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	6.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.060824	10.0	2414017.0	0.30412	Y
2	IC 410-395211/14	0.5	0.162804	10.0	2469842.0	0.325608	Y
3	IC 410-395211/15	1.0	0.349099	10.0	2458760.0	0.349099	Y
4	IC 410-395211/16	2.0	0.632625	10.0	2465964.0	0.316312	Y
5	IC 410-395211/17	5.0	1.731726	10.0	2475137.0	0.346345	Y
6	ICIS 410-395211/18	10.0	3.437175	10.0	2510713.0	0.343718	Y
7	IC 410-395211/19	25.0	9.285559	10.0	2655574.0	0.371422	Y



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Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

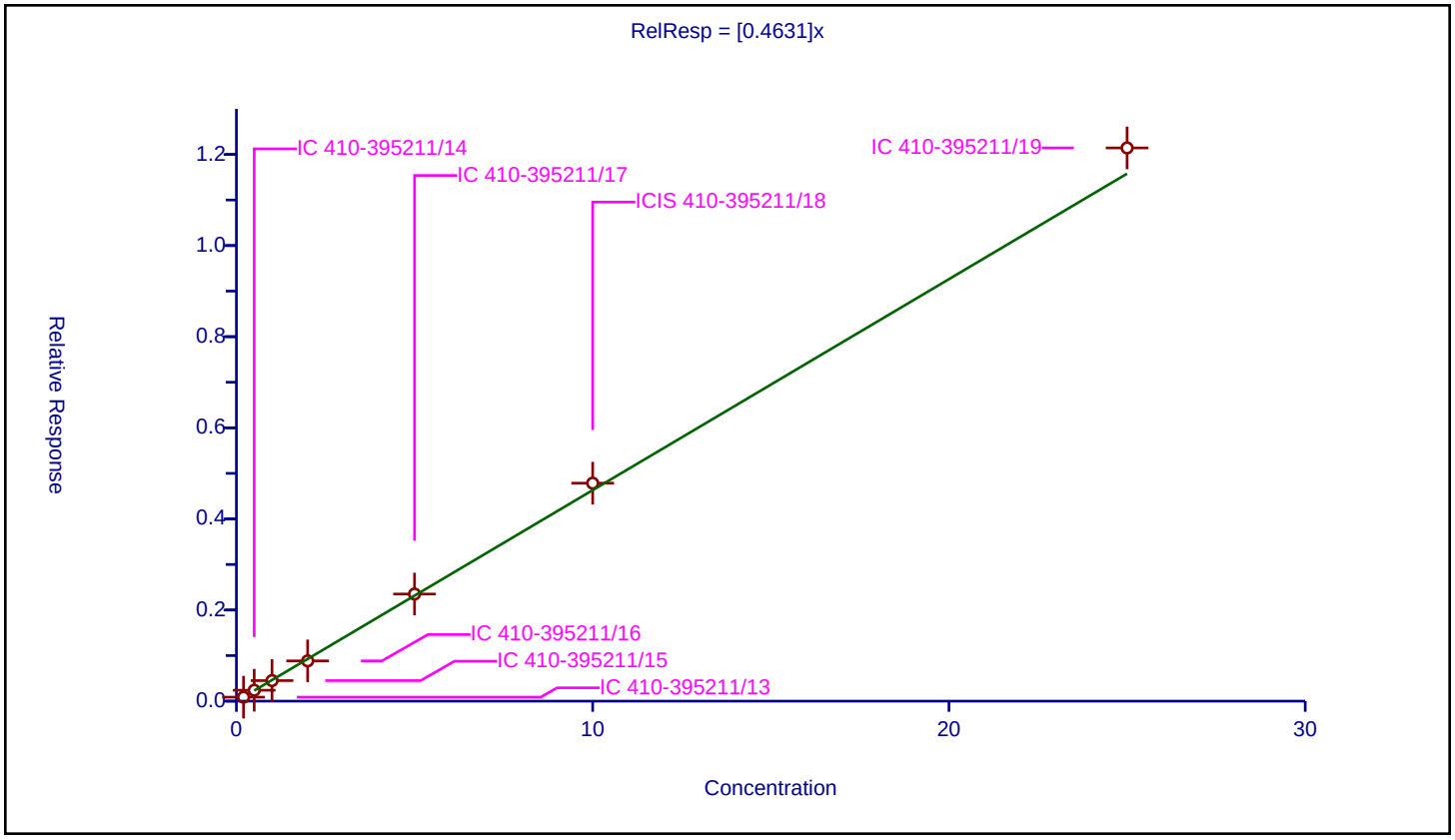
Curve Coefficients

Intercept:	0
Slope:	0.4631

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	4.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.08722	10.0	2414017.0	0.436099	Y
2	IC 410-395211/14	0.5	0.239359	10.0	2469842.0	0.478719	Y
3	IC 410-395211/15	1.0	0.45091	10.0	2458760.0	0.45091	Y
4	IC 410-395211/16	2.0	0.883671	10.0	2465964.0	0.441835	Y
5	IC 410-395211/17	5.0	2.351058	10.0	2475137.0	0.470212	Y
6	ICIS 410-395211/18	10.0	4.784732	10.0	2510713.0	0.478473	Y
7	IC 410-395211/19	25.0	12.142704	10.0	2655574.0	0.485708	Y



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Calibration / Isopropyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

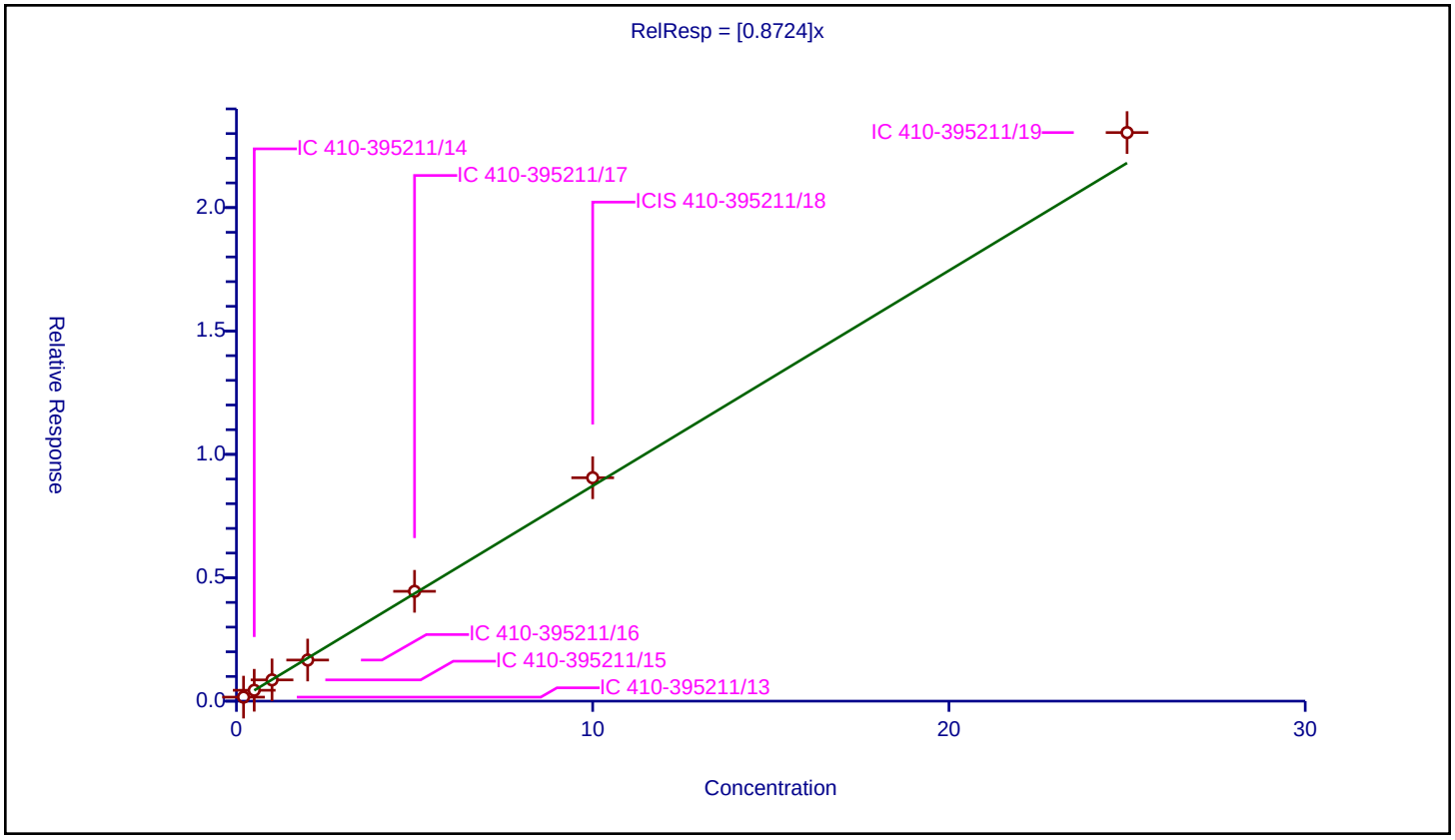
Curve Coefficients

Intercept:	0
Slope:	0.8724

Error Coefficients

Standard Error:	2710000
Relative Standard Error:	4.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.162749	10.0	2414017.0	0.813747	Y
2	IC 410-395211/14	0.5	0.440919	10.0	2469842.0	0.881838	Y
3	IC 410-395211/15	1.0	0.86106	10.0	2458760.0	0.86106	Y
4	IC 410-395211/16	2.0	1.666217	10.0	2465964.0	0.833108	Y
5	IC 410-395211/17	5.0	4.45019	10.0	2475137.0	0.890038	Y
6	ICIS 410-395211/18	10.0	9.052516	10.0	2510713.0	0.905252	Y
7	IC 410-395211/19	25.0	23.040604	10.0	2655574.0	0.921624	Y



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Calibration / 2-Chloro-1,3-butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

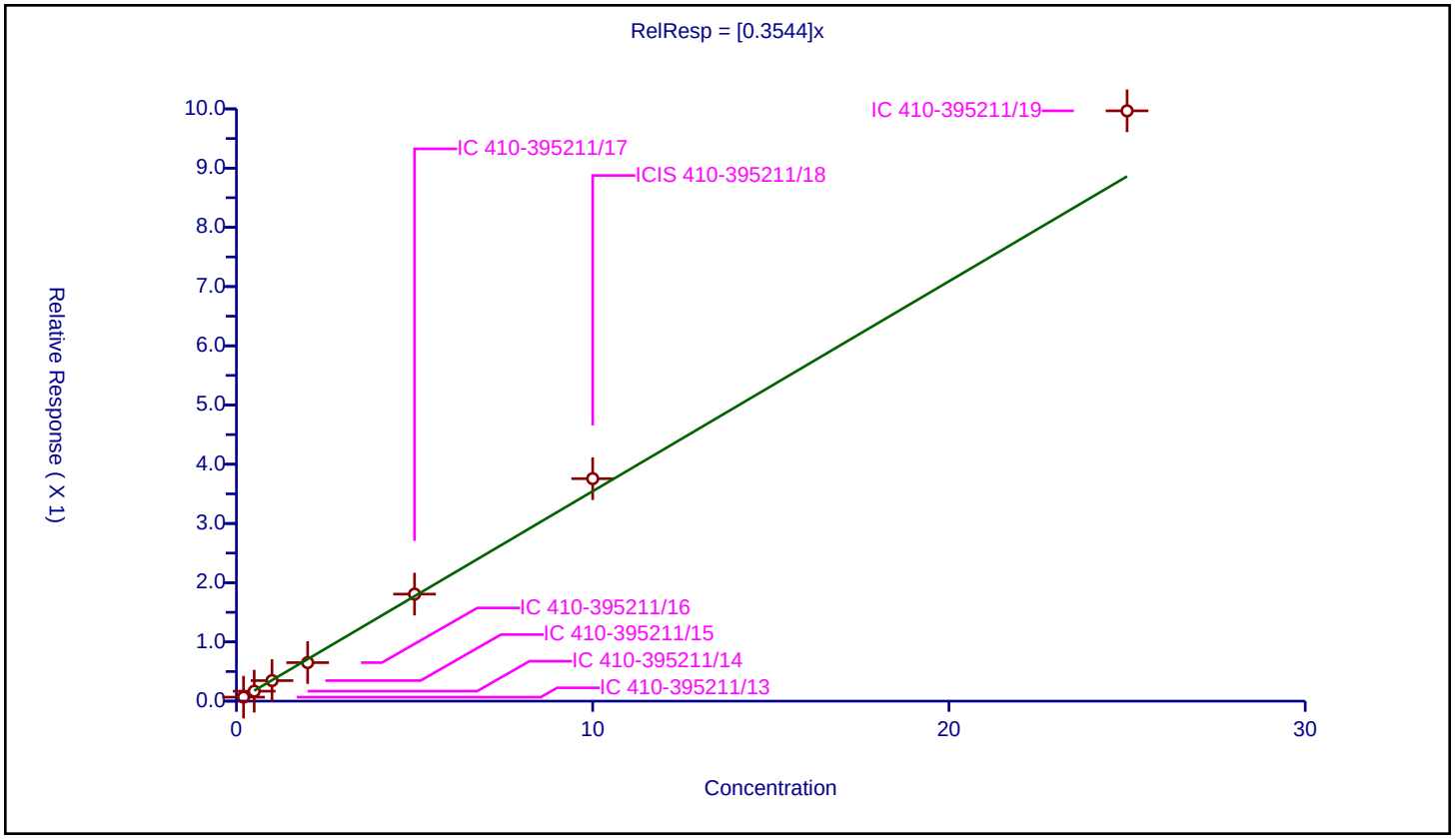
Curve Coefficients

Intercept:	0
Slope:	0.3544

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	7.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.067274	10.0	2414017.0	0.336369	Y
2	IC 410-395211/14	0.5	0.168367	10.0	2469842.0	0.336734	Y
3	IC 410-395211/15	1.0	0.346793	10.0	2458760.0	0.346793	Y
4	IC 410-395211/16	2.0	0.65063	10.0	2465964.0	0.325315	Y
5	IC 410-395211/17	5.0	1.807136	10.0	2475137.0	0.361427	Y
6	ICIS 410-395211/18	10.0	3.756654	10.0	2510713.0	0.375665	Y
7	IC 410-395211/19	25.0	9.967066	10.0	2655574.0	0.398683	Y



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Calibration / Tert-butyl ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

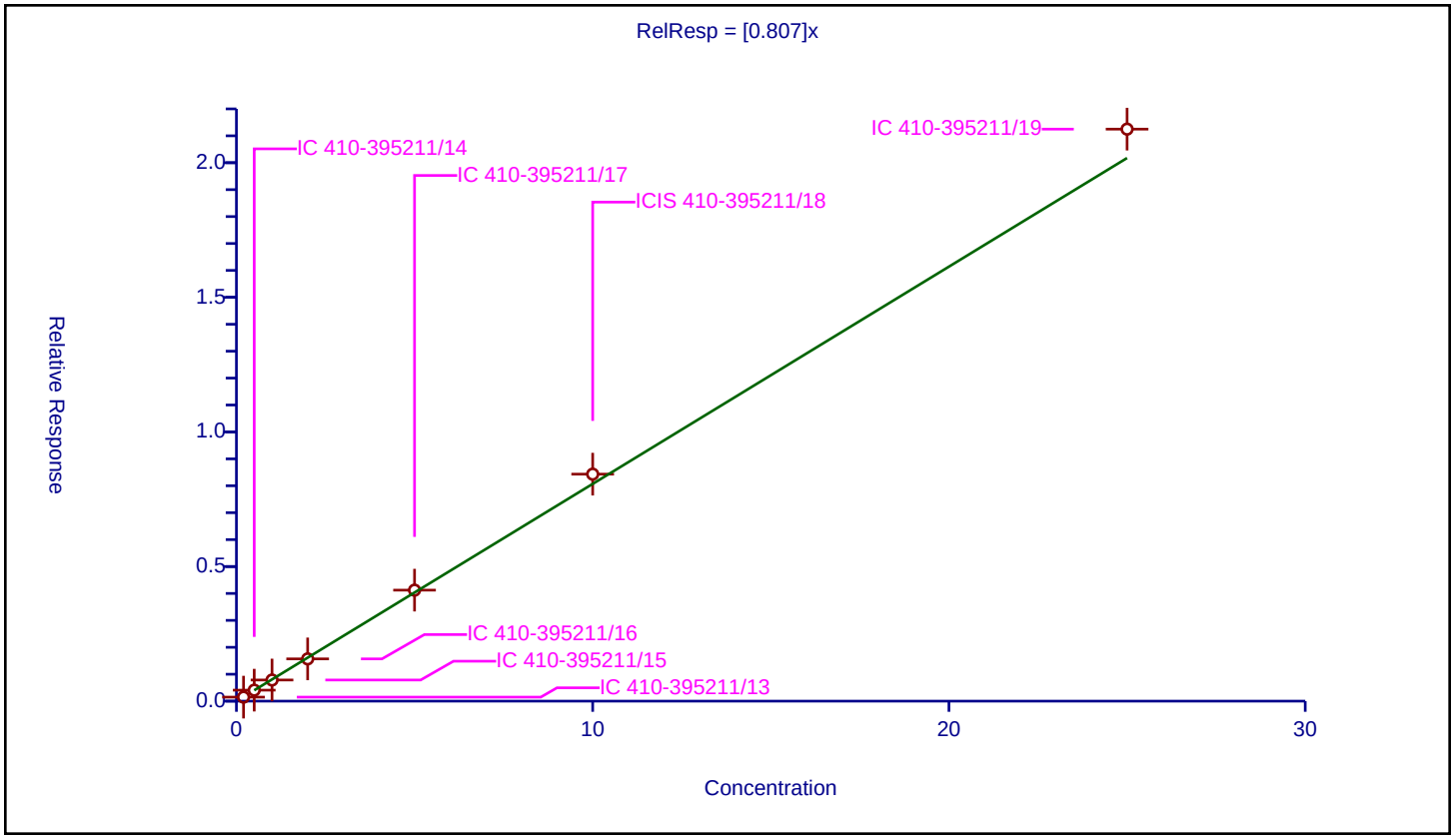
Curve Coefficients

Intercept:	0
Slope:	0.807

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.149262	10.0	2414017.0	0.746308	Y
2	IC 410-395211/14	0.5	0.407682	10.0	2469842.0	0.815364	Y
3	IC 410-395211/15	1.0	0.784782	10.0	2458760.0	0.784782	Y
4	IC 410-395211/16	2.0	1.570003	10.0	2465964.0	0.785001	Y
5	IC 410-395211/17	5.0	4.123012	10.0	2475137.0	0.824602	Y
6	ICIS 410-395211/18	10.0	8.431975	10.0	2510713.0	0.843198	Y
7	IC 410-395211/19	25.0	21.247689	10.0	2655574.0	0.849908	Y



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Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

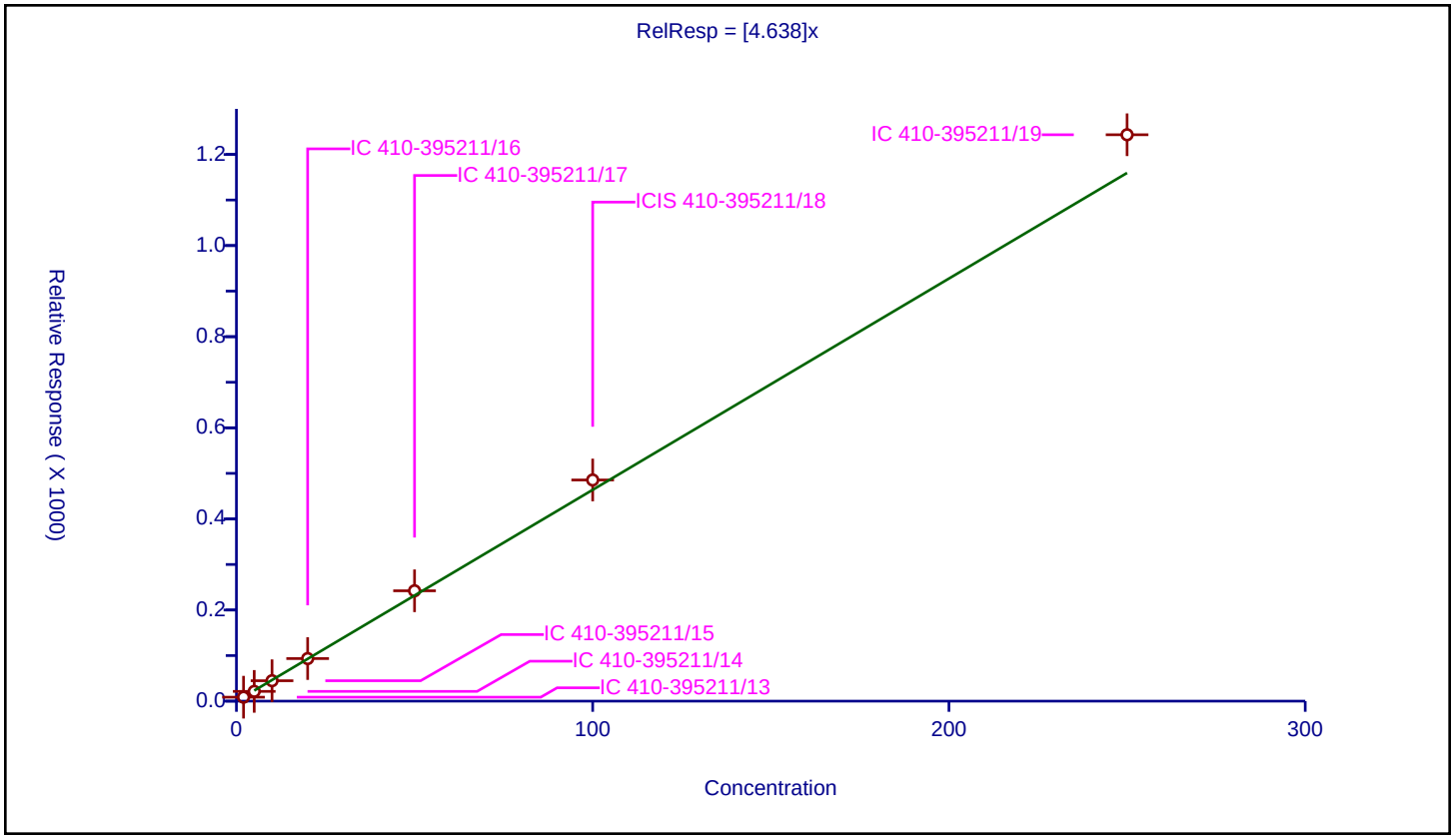
Curve Coefficients

Intercept:	0
Slope:	4.638

Error Coefficients

Standard Error:	1880000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	2.0	8.693734	50.0	159799.0	4.346867	Y
2	IC 410-395211/14	5.0	21.452423	50.0	176691.0	4.290485	Y
3	IC 410-395211/15	10.0	44.836647	50.0	161736.0	4.483665	Y
4	IC 410-395211/16	20.0	93.435748	50.0	164657.0	4.671787	Y
5	IC 410-395211/17	50.0	242.241225	50.0	167230.0	4.844824	Y
6	ICIS 410-395211/18	100.0	485.446469	50.0	168052.0	4.854465	Y
7	IC 410-395211/19	250.0	1243.24318	50.0	170043.0	4.972973	Y



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11:12 AM

Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

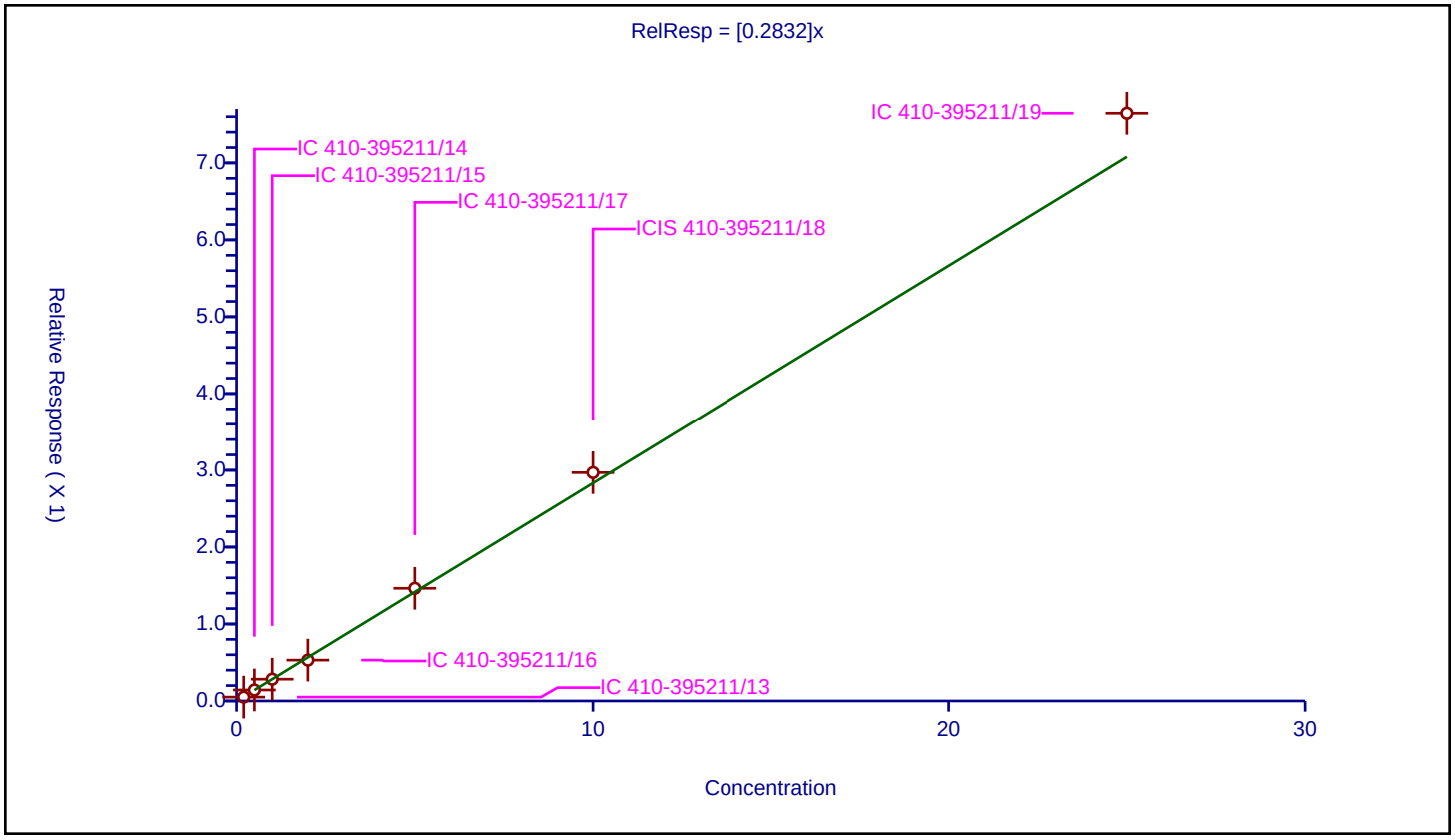
Curve Coefficients

Intercept:	0
Slope:	0.2832

Error Coefficients

Standard Error:	897000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.050551	10.0	2414017.0	0.252753	Y
2	IC 410-395211/14	0.5	0.142754	10.0	2469842.0	0.285508	Y
3	IC 410-395211/15	1.0	0.28324	10.0	2458760.0	0.28324	Y
4	IC 410-395211/16	2.0	0.530734	10.0	2465964.0	0.265367	Y
5	IC 410-395211/17	5.0	1.463907	10.0	2475137.0	0.292781	Y
6	ICIS 410-395211/18	10.0	2.969292	10.0	2510713.0	0.296929	Y
7	IC 410-395211/19	25.0	7.644581	10.0	2655574.0	0.305783	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

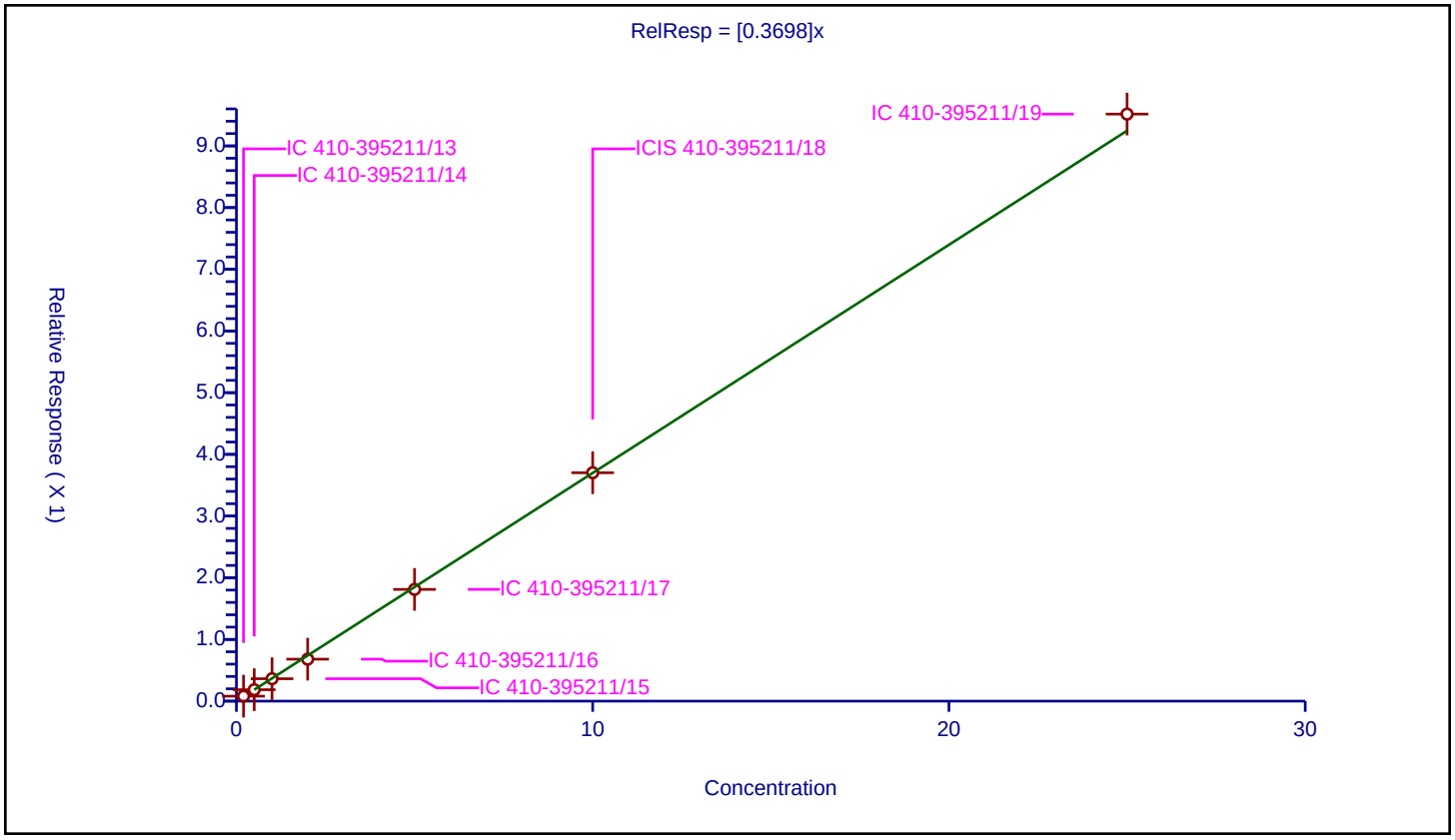
Curve Coefficients

Intercept:	0
Slope:	0.3698

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.080343	10.0	2414017.0	0.401716	Y
2	IC 410-395211/14	0.5	0.185409	10.0	2469842.0	0.370817	Y
3	IC 410-395211/15	1.0	0.363212	10.0	2458760.0	0.363212	Y
4	IC 410-395211/16	2.0	0.680046	10.0	2465964.0	0.340023	Y
5	IC 410-395211/17	5.0	1.811294	10.0	2475137.0	0.362259	Y
6	ICIS 410-395211/18	10.0	3.702231	10.0	2510713.0	0.370223	Y
7	IC 410-395211/19	25.0	9.515886	10.0	2655574.0	0.380635	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

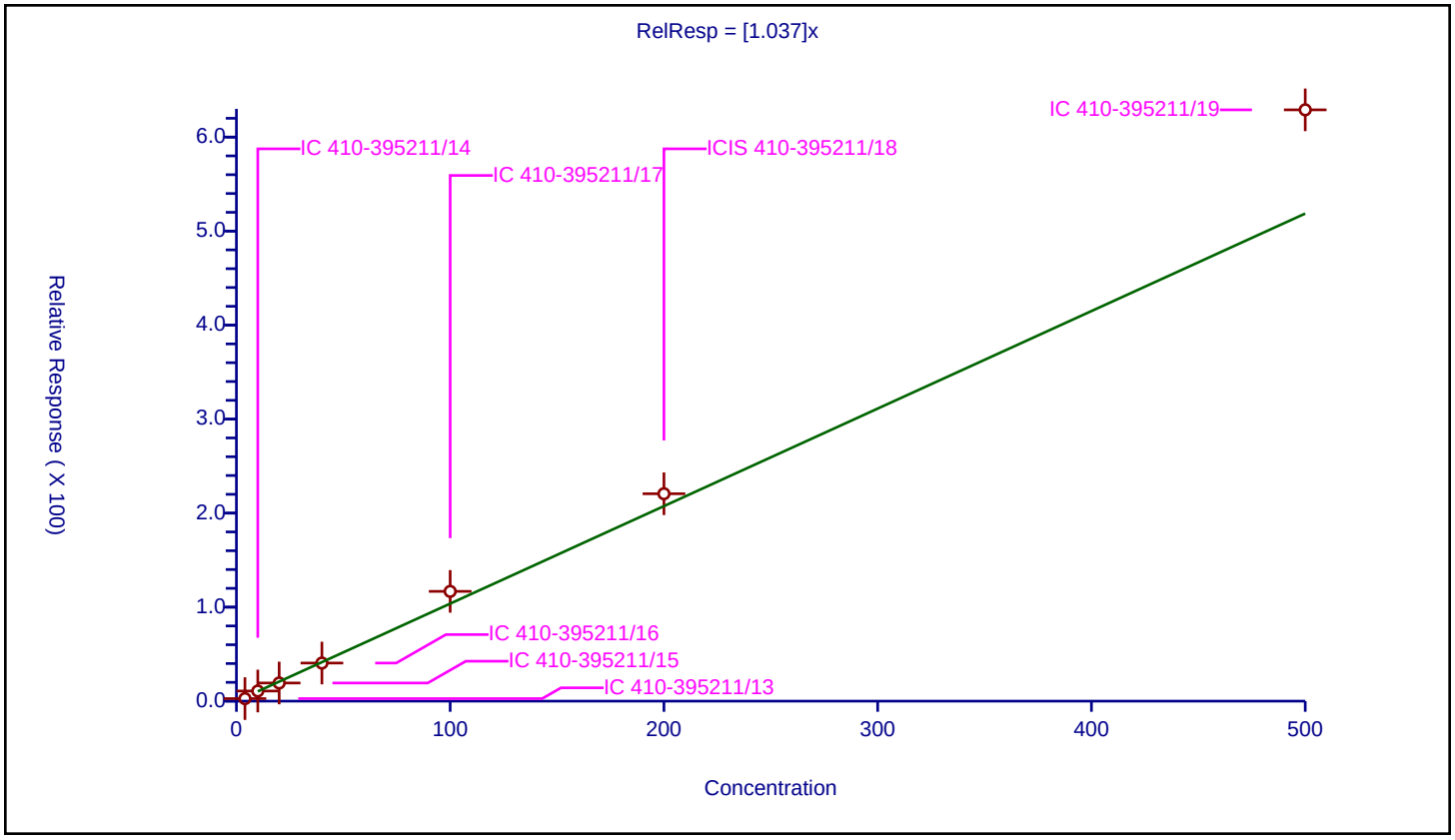
Curve Coefficients

Intercept:	0
Slope:	1.037

Error Coefficients

Standard Error:	940000
Relative Standard Error:	17.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	4.0	2.703396	50.0	159799.0	0.675849	Y
2	IC 410-395211/14	10.0	10.778138	50.0	176691.0	1.077814	Y
3	IC 410-395211/15	20.0	19.317592	50.0	161736.0	0.96588	Y
4	IC 410-395211/16	40.0	40.515435	50.0	164657.0	1.012886	Y
5	IC 410-395211/17	100.0	116.766728	50.0	167230.0	1.167667	Y
6	ICIS 410-395211/18	200.0	220.634089	50.0	168052.0	1.10317	Y
7	IC 410-395211/19	500.0	628.99149	50.0	170043.0	1.257983	Y



Calibration / Methacrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

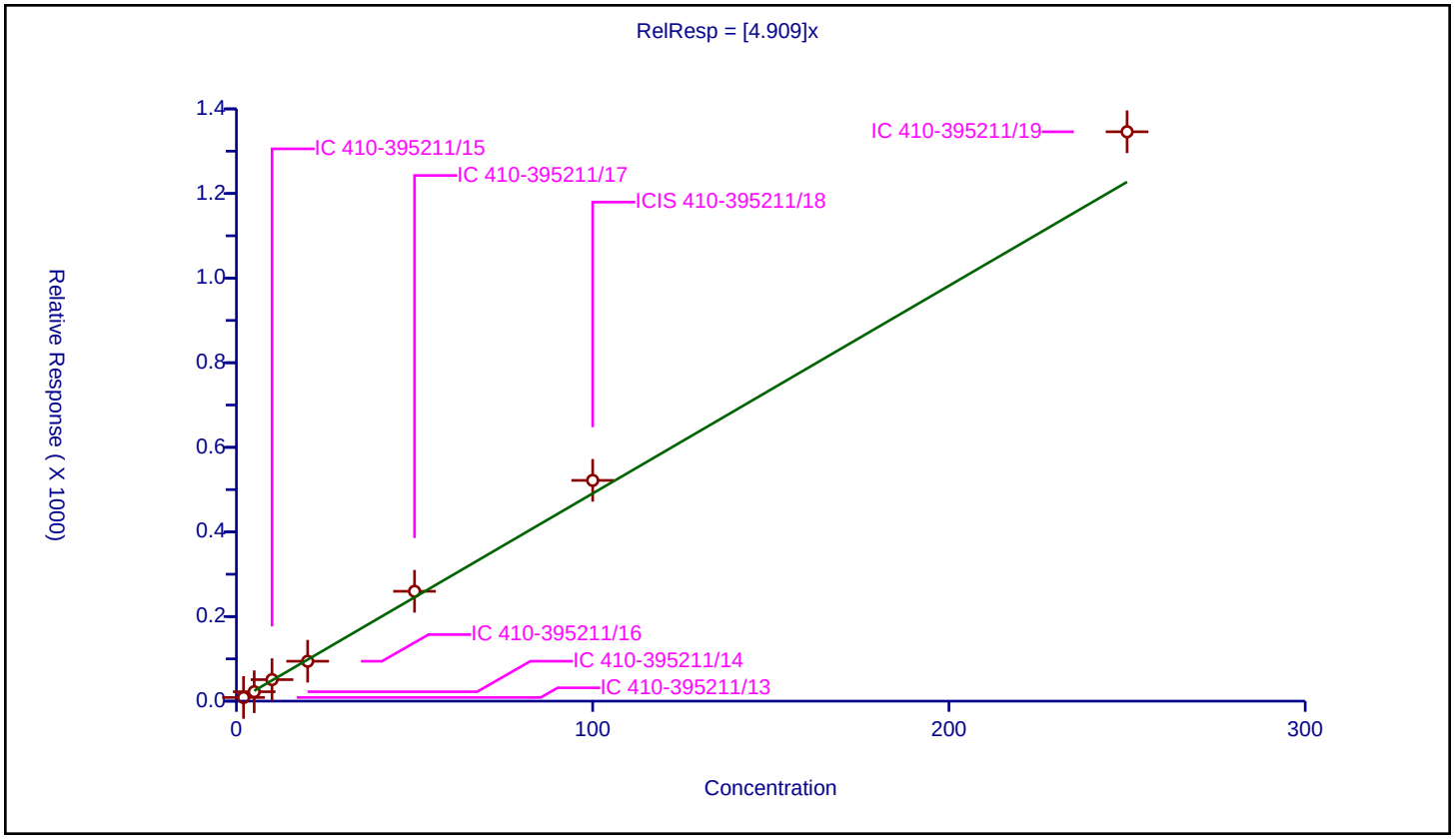
Curve Coefficients

Intercept:	0
Slope:	4.909

Error Coefficients

Standard Error:	2040000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	2.0	8.633346	50.0	159799.0	4.316673	Y
2	IC 410-395211/14	5.0	22.27929	50.0	176691.0	4.455858	Y
3	IC 410-395211/15	10.0	50.815527	50.0	161736.0	5.081553	Y
4	IC 410-395211/16	20.0	94.315152	50.0	164657.0	4.715758	Y
5	IC 410-395211/17	50.0	259.664235	50.0	167230.0	5.193285	Y
6	ICIS 410-395211/18	100.0	521.864363	50.0	168052.0	5.218644	Y
7	IC 410-395211/19	250.0	1345.938674	50.0	170043.0	5.383755	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

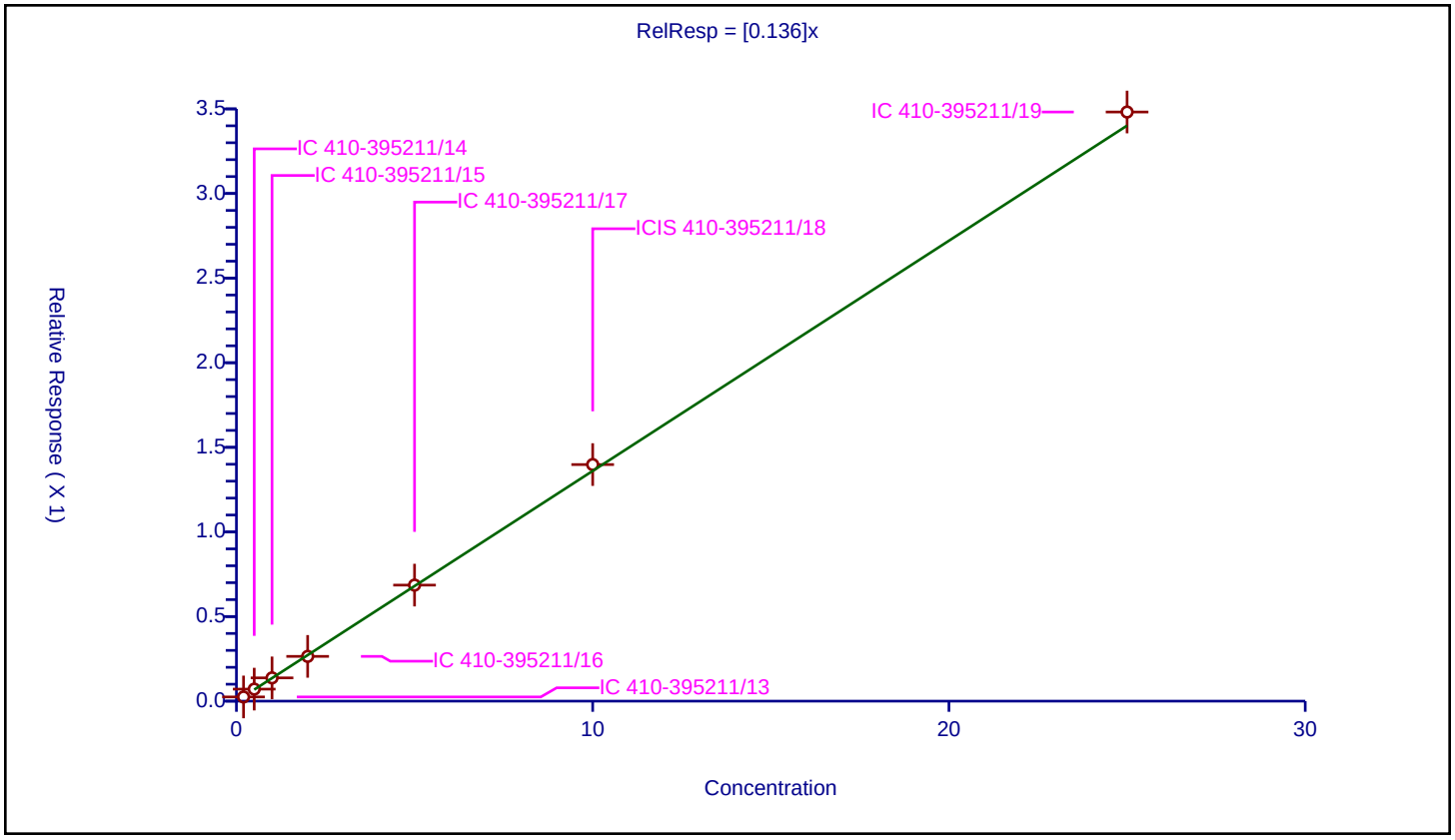
Curve Coefficients

Intercept:	0
Slope:	0.136

Error Coefficients

Standard Error:	411000
Relative Standard Error:	4.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.024859	10.0	2414017.0	0.124295	Y
2	IC 410-395211/14	0.5	0.071013	10.0	2469842.0	0.142025	Y
3	IC 410-395211/15	1.0	0.137541	10.0	2458760.0	0.137541	Y
4	IC 410-395211/16	2.0	0.264485	10.0	2465964.0	0.132242	Y
5	IC 410-395211/17	5.0	0.685724	10.0	2475137.0	0.137145	Y
6	ICIS 410-395211/18	10.0	1.398061	10.0	2510713.0	0.139806	Y
7	IC 410-395211/19	25.0	3.481552	10.0	2655574.0	0.139262	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

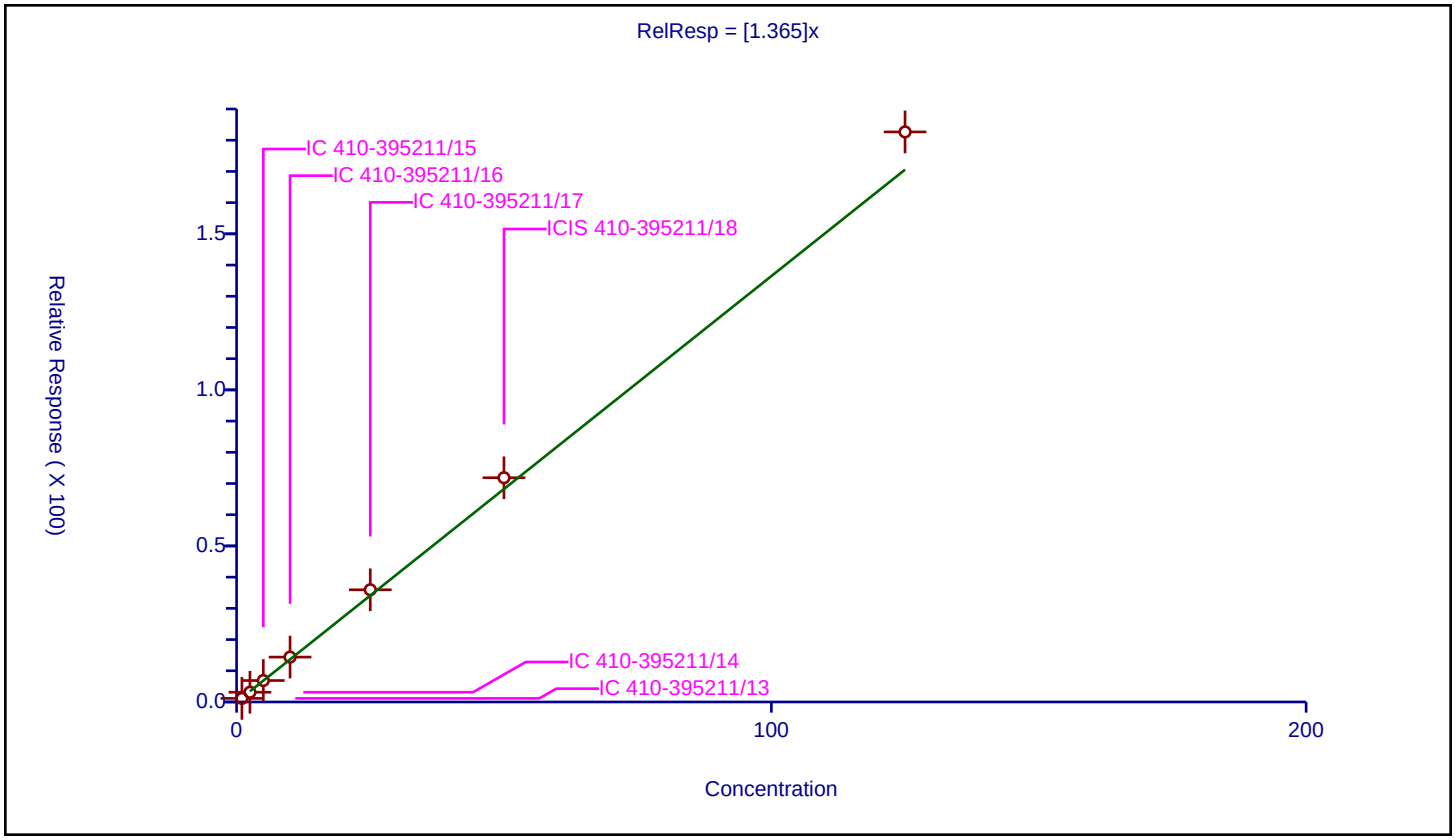
Curve Coefficients

Intercept:	0
Slope:	1.365

Error Coefficients

Standard Error:	277000
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	1.0	1.154263	50.0	159799.0	1.154263	Y
2	IC 410-395211/14	2.5	3.121268	50.0	176691.0	1.248507	Y
3	IC 410-395211/15	5.0	6.873238	50.0	161736.0	1.374648	Y
4	IC 410-395211/16	10.0	14.384751	50.0	164657.0	1.438475	Y
5	IC 410-395211/17	25.0	35.951683	50.0	167230.0	1.438067	Y
6	ICIS 410-395211/18	50.0	71.85157	50.0	168052.0	1.437031	Y
7	IC 410-395211/19	125.0	182.658798	50.0	170043.0	1.46127	Y



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Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

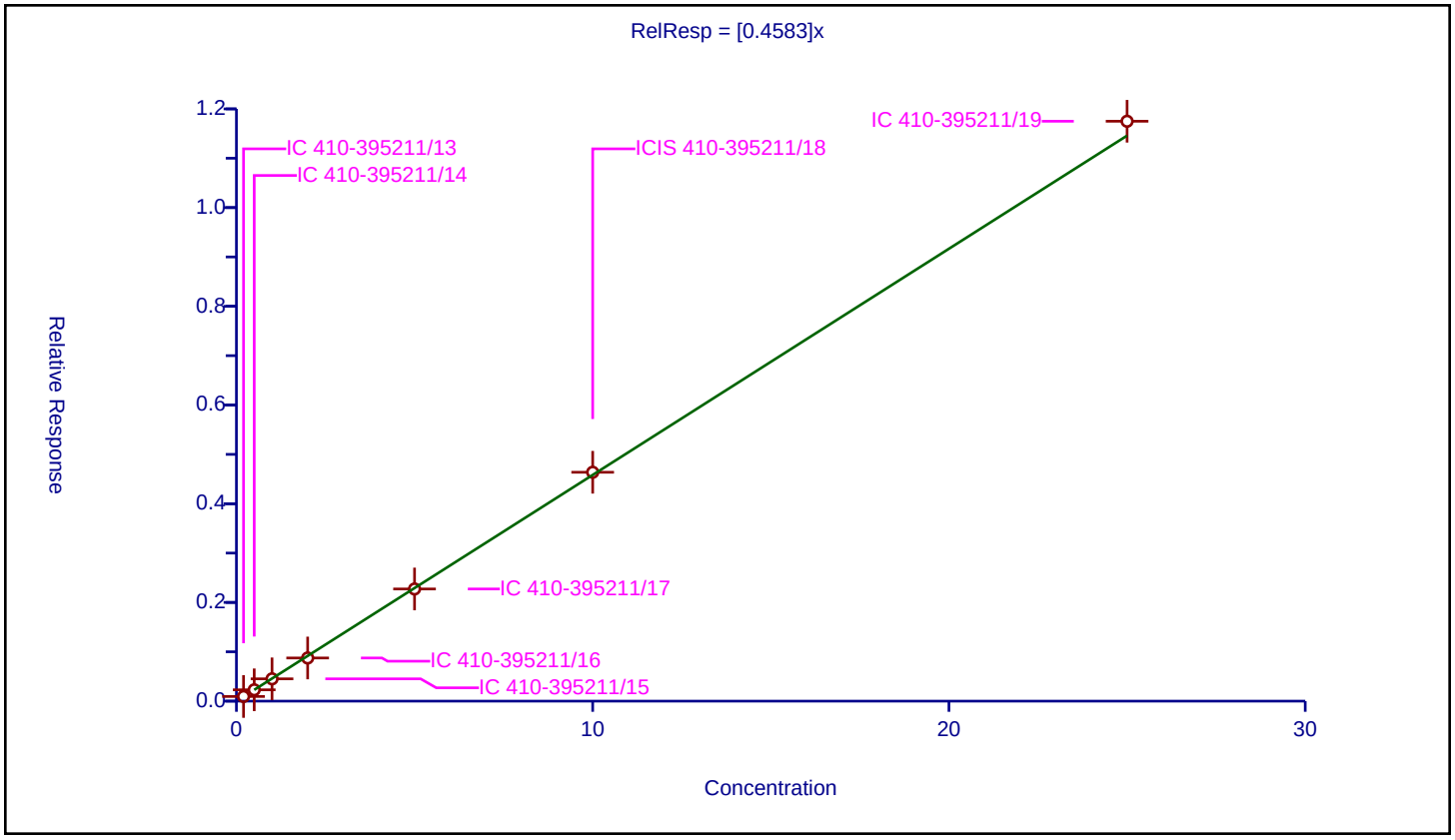
Curve Coefficients

Intercept:	0
Slope:	0.4583

Error Coefficients

Standard Error:	1380000
Relative Standard Error:	2.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.094295	10.0	2414017.0	0.471476	Y
2	IC 410-395211/14	0.5	0.229747	10.0	2469842.0	0.459495	Y
3	IC 410-395211/15	1.0	0.45172	10.0	2458760.0	0.45172	Y
4	IC 410-395211/16	2.0	0.874486	10.0	2465964.0	0.437243	Y
5	IC 410-395211/17	5.0	2.272593	10.0	2475137.0	0.454519	Y
6	ICIS 410-395211/18	10.0	4.637424	10.0	2510713.0	0.463742	Y
7	IC 410-395211/19	25.0	11.749475	10.0	2655574.0	0.469979	Y



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Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

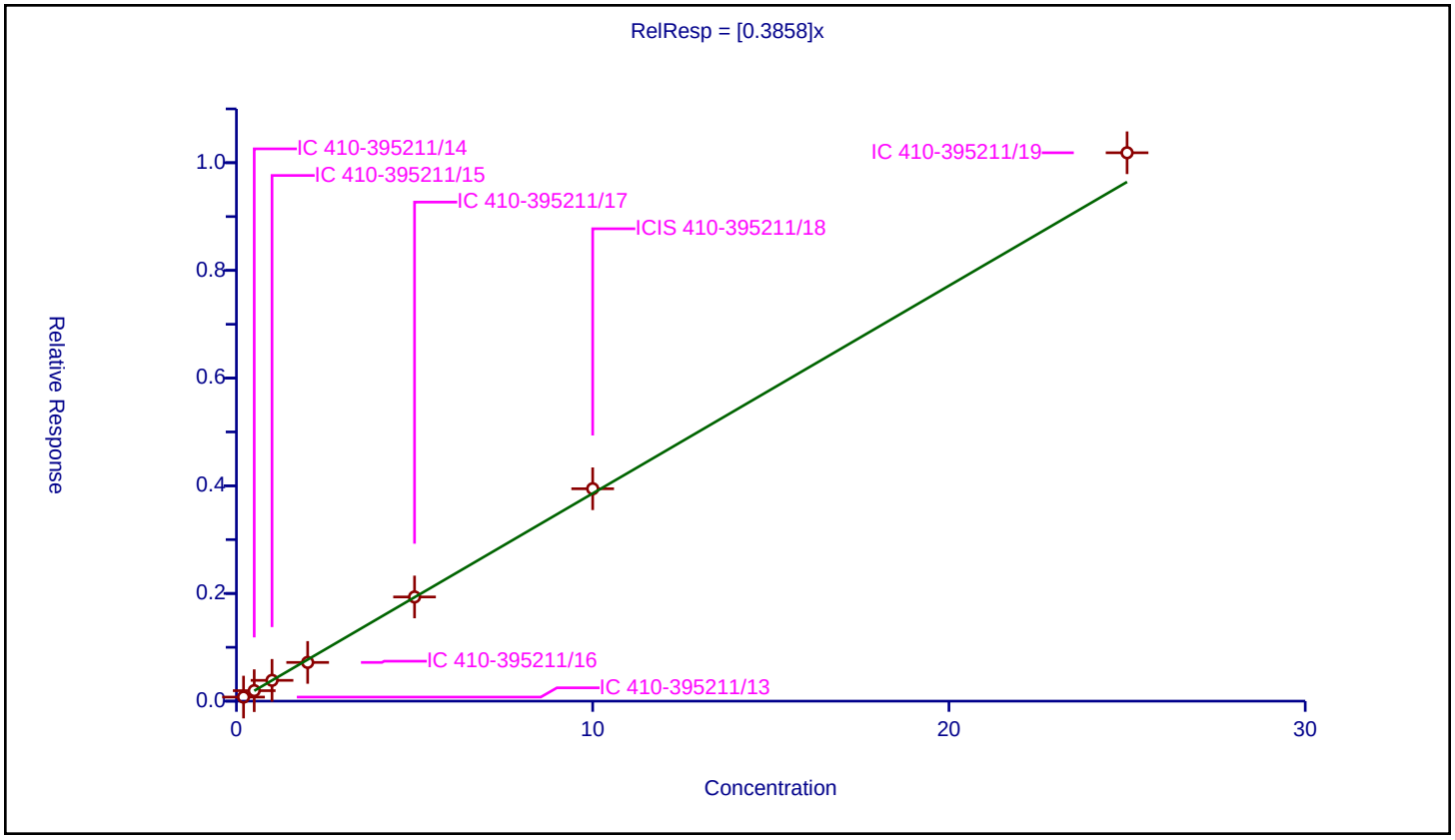
Curve Coefficients

Intercept:	0
Slope:	0.3858

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.075331	10.0	2414017.0	0.376654	Y
2	IC 410-395211/14	0.5	0.194498	10.0	2469842.0	0.388997	Y
3	IC 410-395211/15	1.0	0.386272	10.0	2458760.0	0.386272	Y
4	IC 410-395211/16	2.0	0.718932	10.0	2465964.0	0.359466	Y
5	IC 410-395211/17	5.0	1.935178	10.0	2475137.0	0.387036	Y
6	ICIS 410-395211/18	10.0	3.944951	10.0	2510713.0	0.394495	Y
7	IC 410-395211/19	25.0	10.185022	10.0	2655574.0	0.407401	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

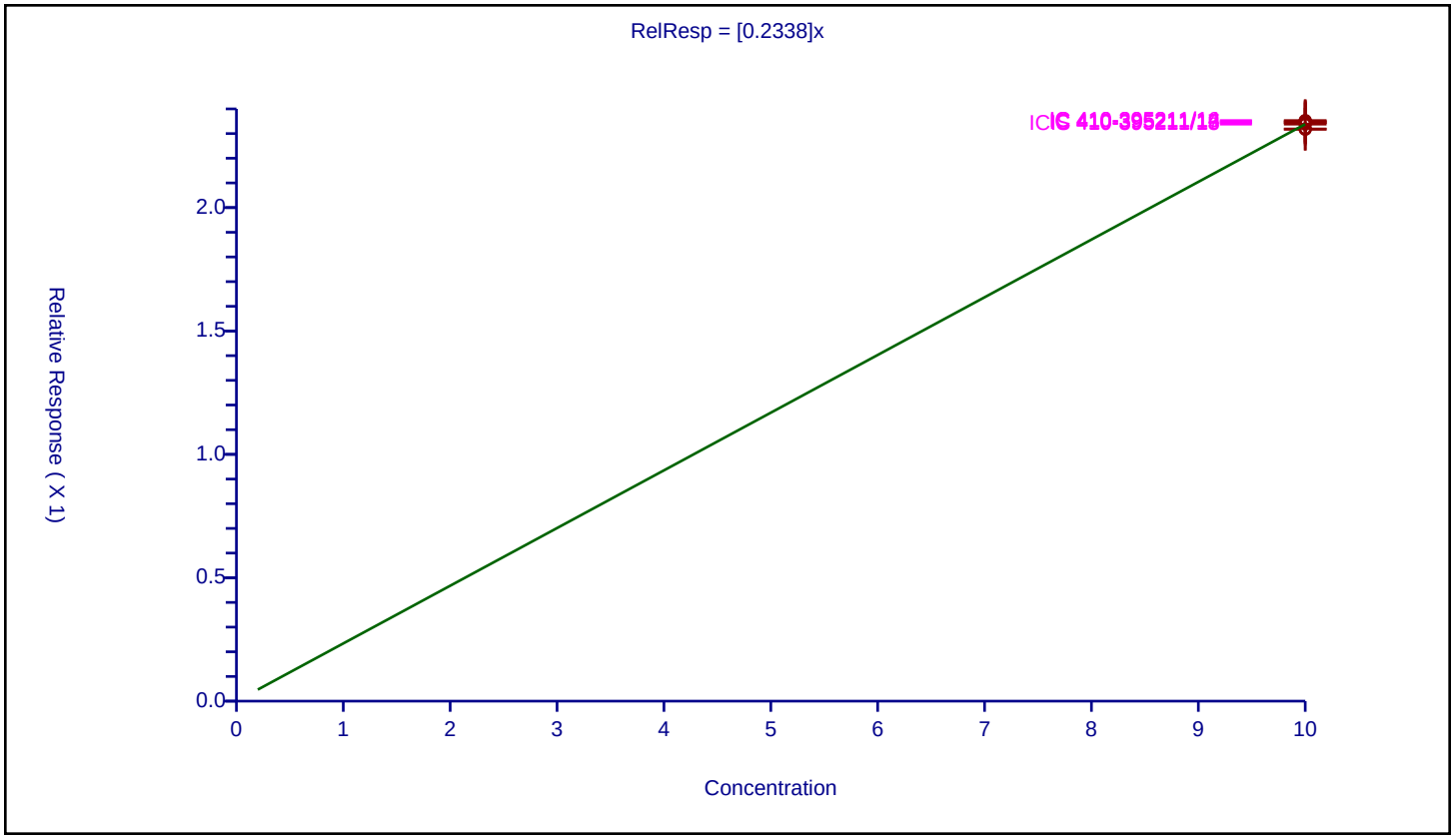
Curve Coefficients

Intercept:	0
Slope:	0.2338

Error Coefficients

Standard Error:	630000
Relative Standard Error:	0.6
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	10.0	2.343757	10.0	2414017.0	0.234376	Y
2	IC 410-395211/14	10.0	2.35275	10.0	2469842.0	0.235275	Y
3	IC 410-395211/15	10.0	2.318742	10.0	2458760.0	0.231874	Y
4	IC 410-395211/16	10.0	2.34975	10.0	2465964.0	0.234975	Y
5	IC 410-395211/17	10.0	2.344751	10.0	2475137.0	0.234475	Y
6	ICIS 410-395211/18	10.0	2.338192	10.0	2510713.0	0.233819	Y
7	IC 410-395211/19	10.0	2.317544	10.0	2655574.0	0.231754	Y



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Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

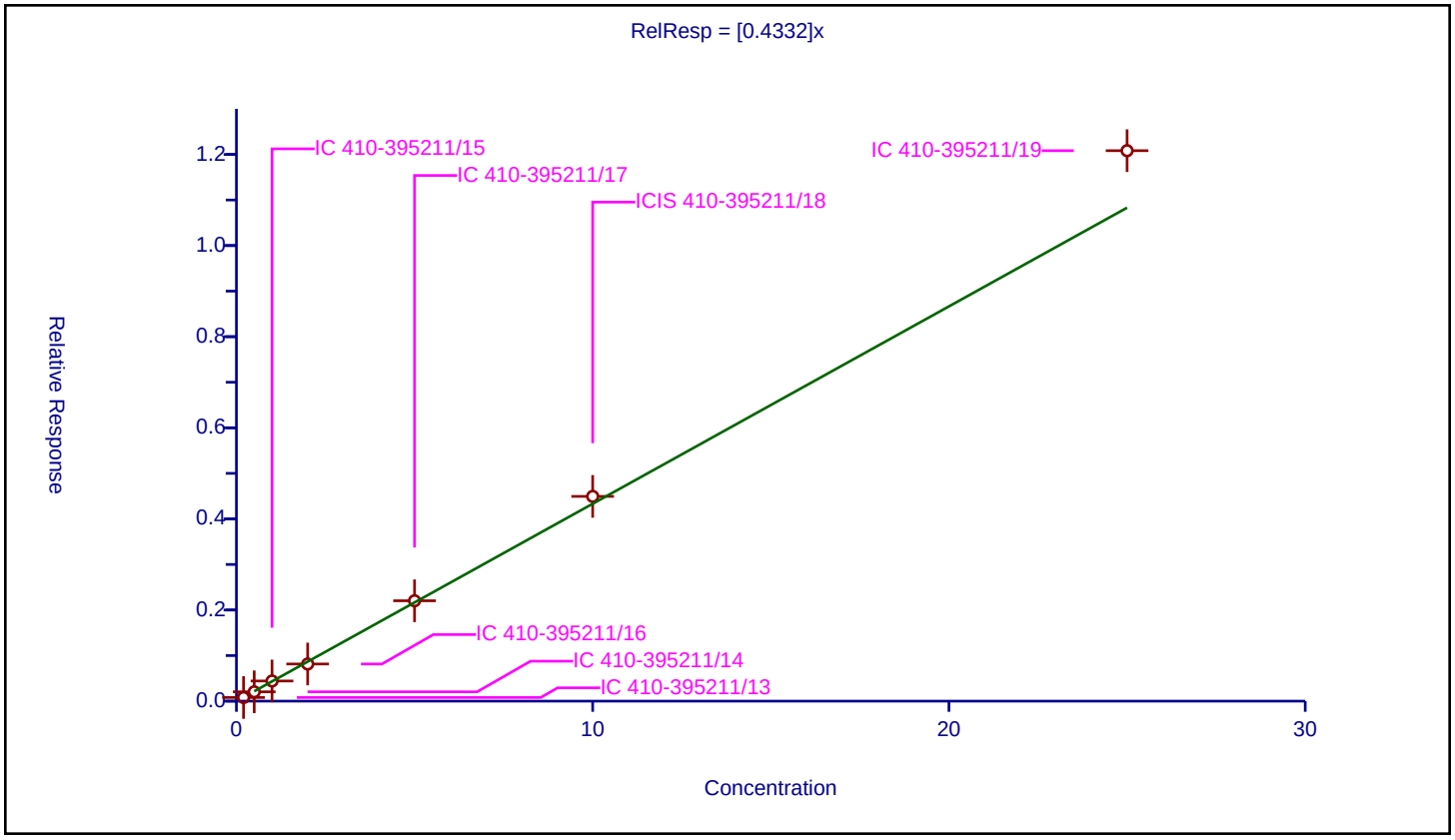
Curve Coefficients

Intercept:	0
Slope:	0.4332

Error Coefficients

Standard Error:	1410000
Relative Standard Error:	6.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.080024	10.0	2414017.0	0.400121	Y
2	IC 410-395211/14	0.5	0.204713	10.0	2469842.0	0.409427	Y
3	IC 410-395211/15	1.0	0.442227	10.0	2458760.0	0.442227	Y
4	IC 410-395211/16	2.0	0.815134	10.0	2465964.0	0.407567	Y
5	IC 410-395211/17	5.0	2.203316	10.0	2475137.0	0.440663	Y
6	ICIS 410-395211/18	10.0	4.494309	10.0	2510713.0	0.449431	Y
7	IC 410-395211/19	25.0	12.08251	10.0	2655574.0	0.4833	Y



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Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

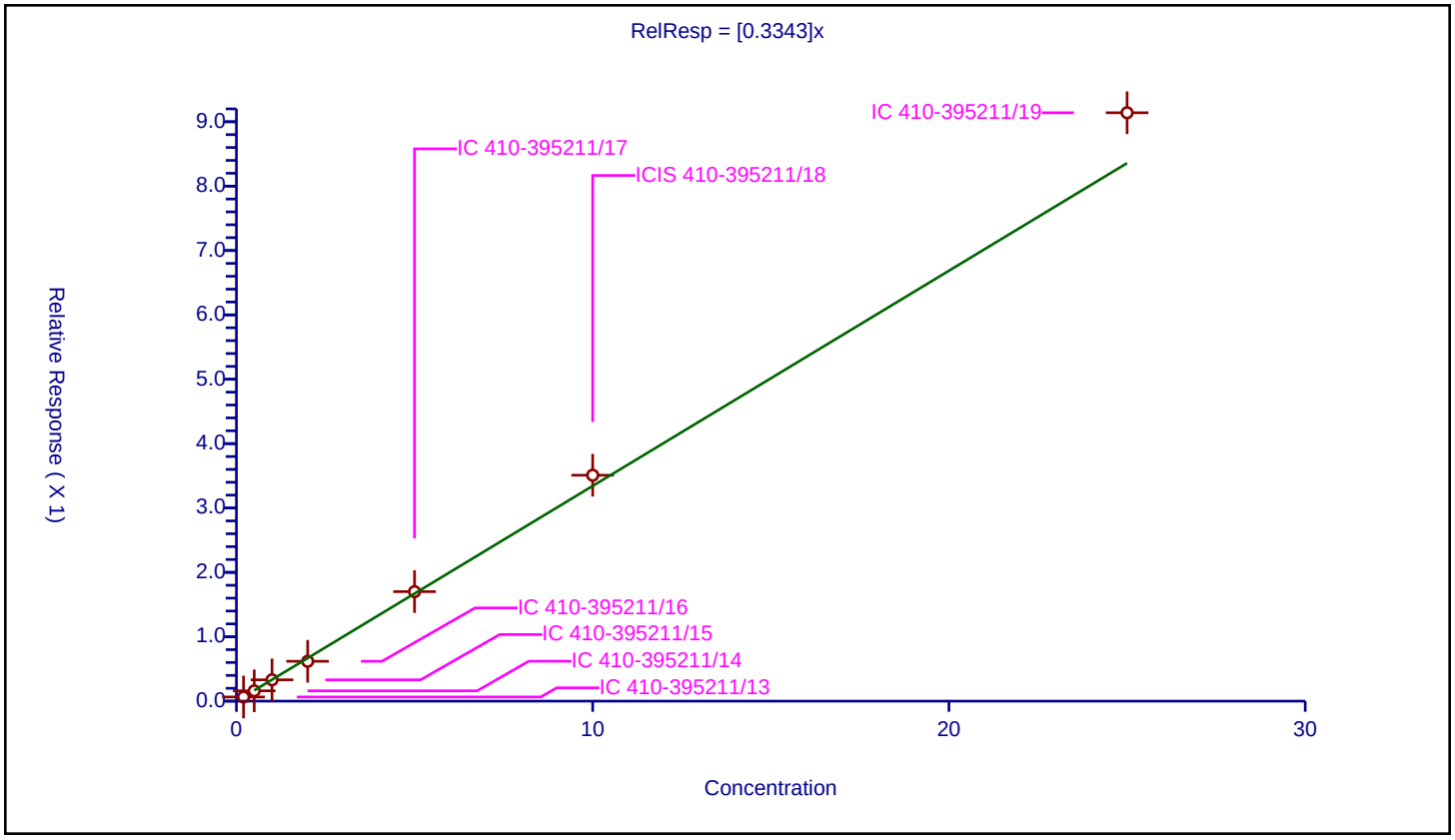
Curve Coefficients

Intercept:	0
Slope:	0.3343

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	5.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.064386	10.0	2414017.0	0.321932	Y
2	IC 410-395211/14	0.5	0.160233	10.0	2469842.0	0.320466	Y
3	IC 410-395211/15	1.0	0.331309	10.0	2458760.0	0.331309	Y
4	IC 410-395211/16	2.0	0.618979	10.0	2465964.0	0.30949	Y
5	IC 410-395211/17	5.0	1.700993	10.0	2475137.0	0.340199	Y
6	ICIS 410-395211/18	10.0	3.5097	10.0	2510713.0	0.35097	Y
7	IC 410-395211/19	25.0	9.140178	10.0	2655574.0	0.365607	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

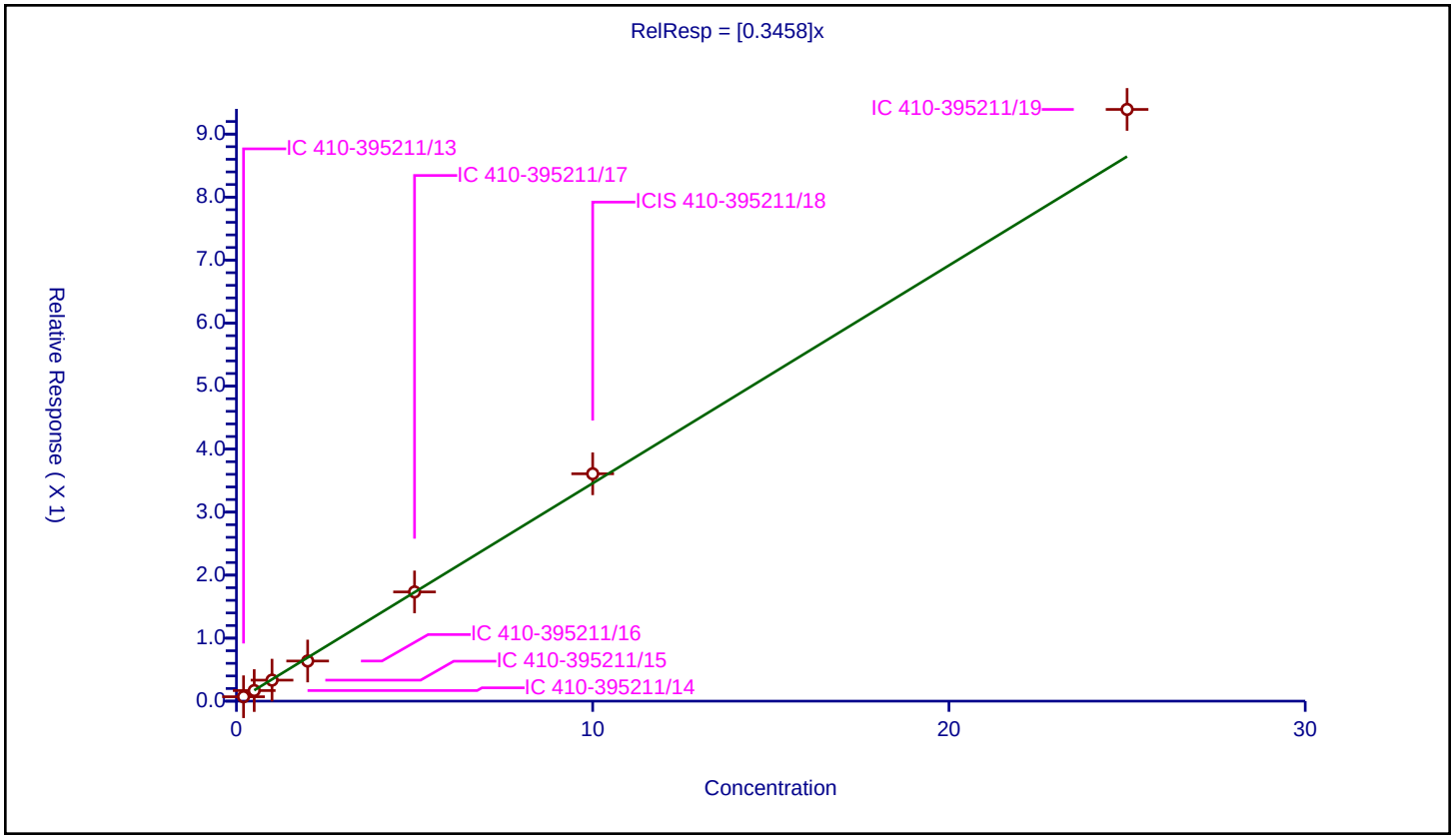
Curve Coefficients

Intercept:	0
Slope:	0.3458

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	5.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.069958	10.0	2414017.0	0.34979	Y
2	IC 410-395211/14	0.5	0.167829	10.0	2469842.0	0.335657	Y
3	IC 410-395211/15	1.0	0.333383	10.0	2458760.0	0.333383	Y
4	IC 410-395211/16	2.0	0.636858	10.0	2465964.0	0.318429	Y
5	IC 410-395211/17	5.0	1.733225	10.0	2475137.0	0.346645	Y
6	ICIS 410-395211/18	10.0	3.608596	10.0	2510713.0	0.36086	Y
7	IC 410-395211/19	25.0	9.391578	10.0	2655574.0	0.375663	Y



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Calibration / Isobutyl alcohol

Curve Type:	Linear
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

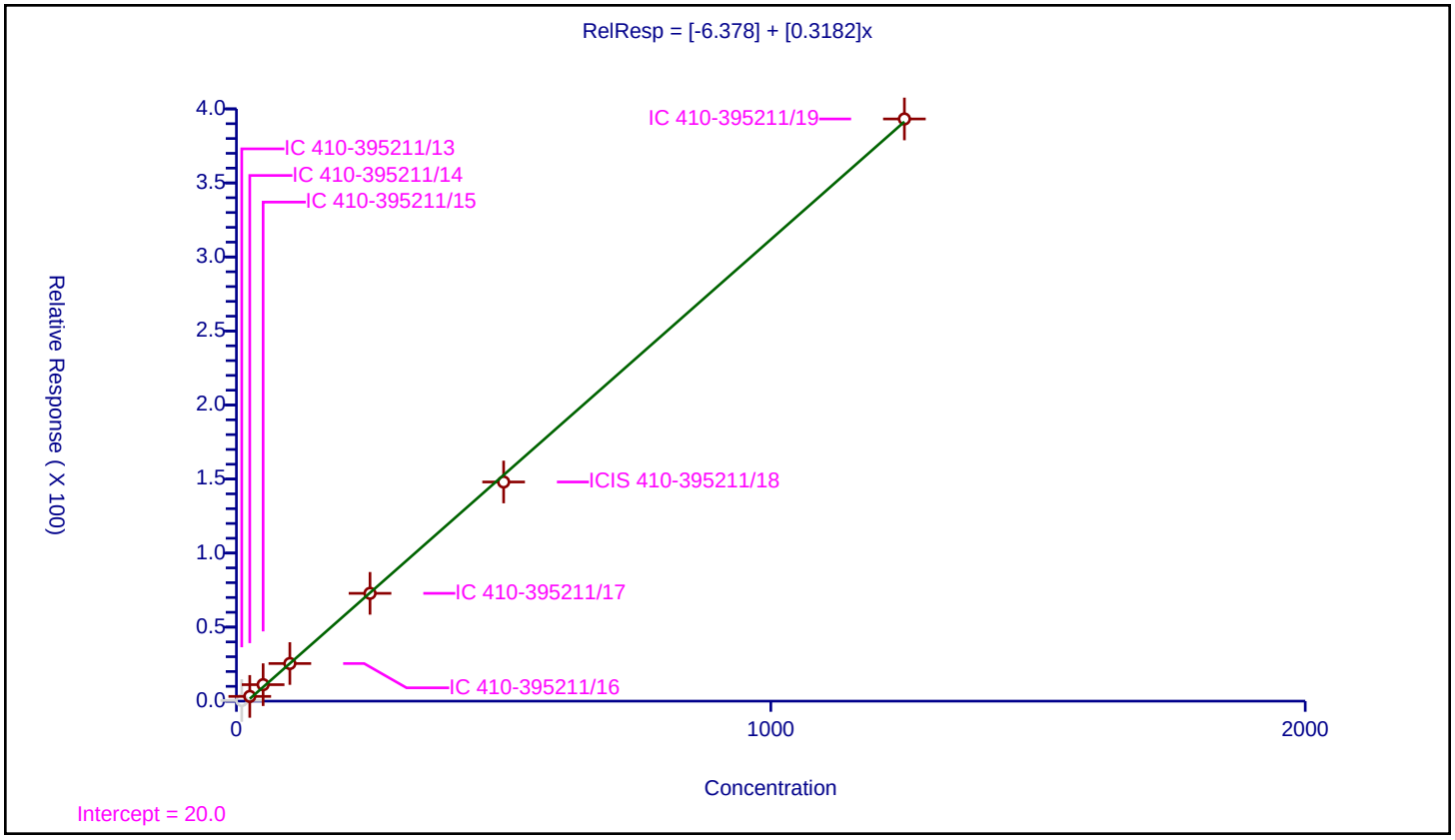
Curve Coefficients

Intercept:	-6.378
Slope:	0.3182

Error Coefficients

Standard Error:	725000
Relative Standard Error:	11.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	10.0	0.432105	50.0	159799.0	0.043211	N
2	IC 410-395211/14	25.0	3.195409	50.0	176691.0	0.127816	Y
3	IC 410-395211/15	50.0	11.13203	50.0	161736.0	0.222641	Y
4	IC 410-395211/16	100.0	25.412828	50.0	164657.0	0.254128	Y
5	IC 410-395211/17	250.0	72.815882	50.0	167230.0	0.291264	Y
6	ICIS 410-395211/18	500.0	148.009247	50.0	168052.0	0.296018	Y
7	IC 410-395211/19	1250.0	393.195251	50.0	170043.0	0.314556	Y



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Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

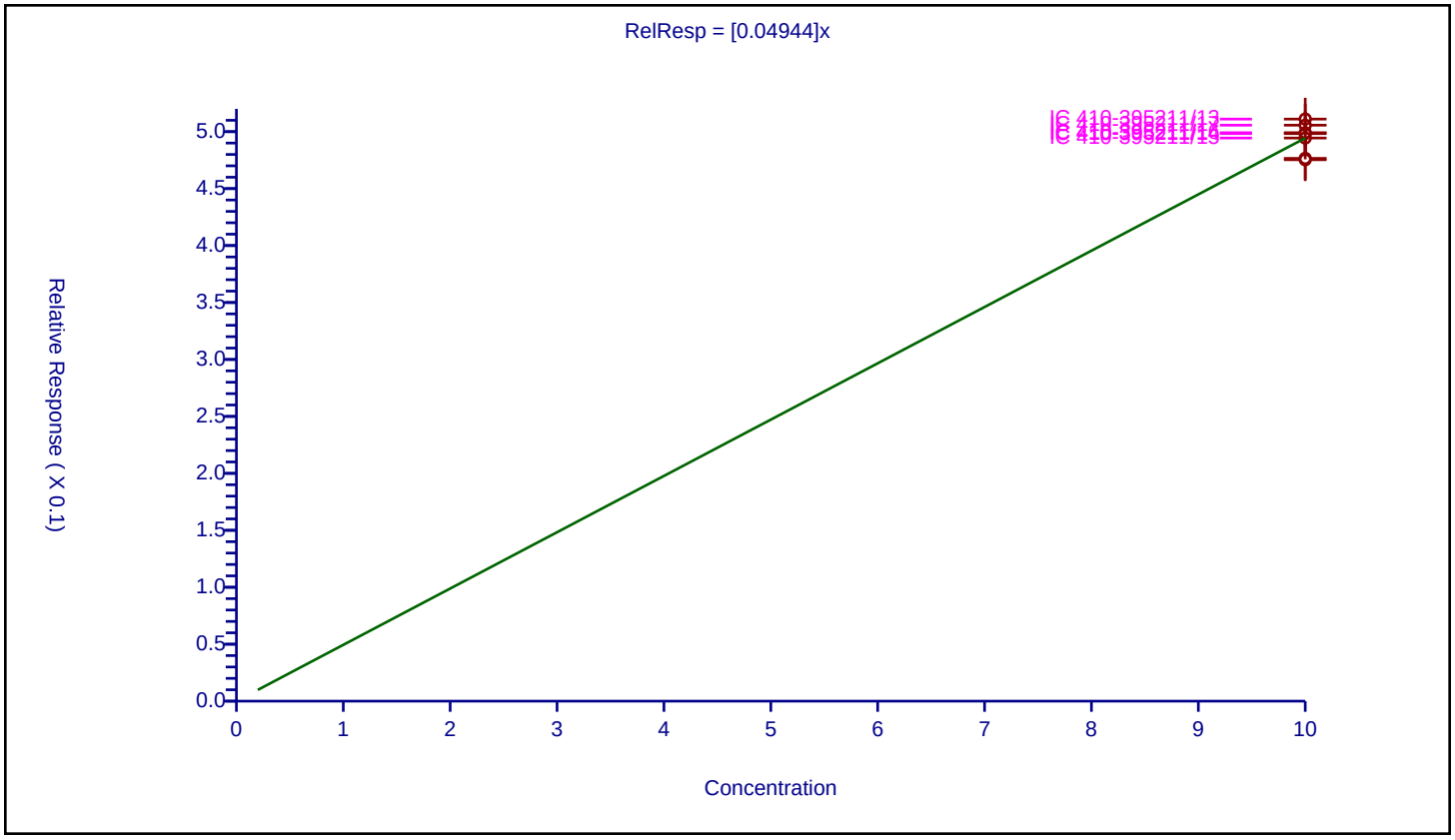
Curve Coefficients

Intercept:	0
Slope:	0.04944

Error Coefficients

Standard Error:	133000
Relative Standard Error:	2.8
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	10.0	0.511053	10.0	2414017.0	0.051105	Y
2	IC 410-395211/14	10.0	0.498299	10.0	2469842.0	0.04983	Y
3	IC 410-395211/15	10.0	0.494428	10.0	2458760.0	0.049443	Y
4	IC 410-395211/16	10.0	0.499091	10.0	2465964.0	0.049909	Y
5	IC 410-395211/17	10.0	0.505689	10.0	2475137.0	0.050569	Y
6	ICIS 410-395211/18	10.0	0.475355	10.0	2510713.0	0.047536	Y
7	IC 410-395211/19	10.0	0.476556	10.0	2655574.0	0.047656	Y



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Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

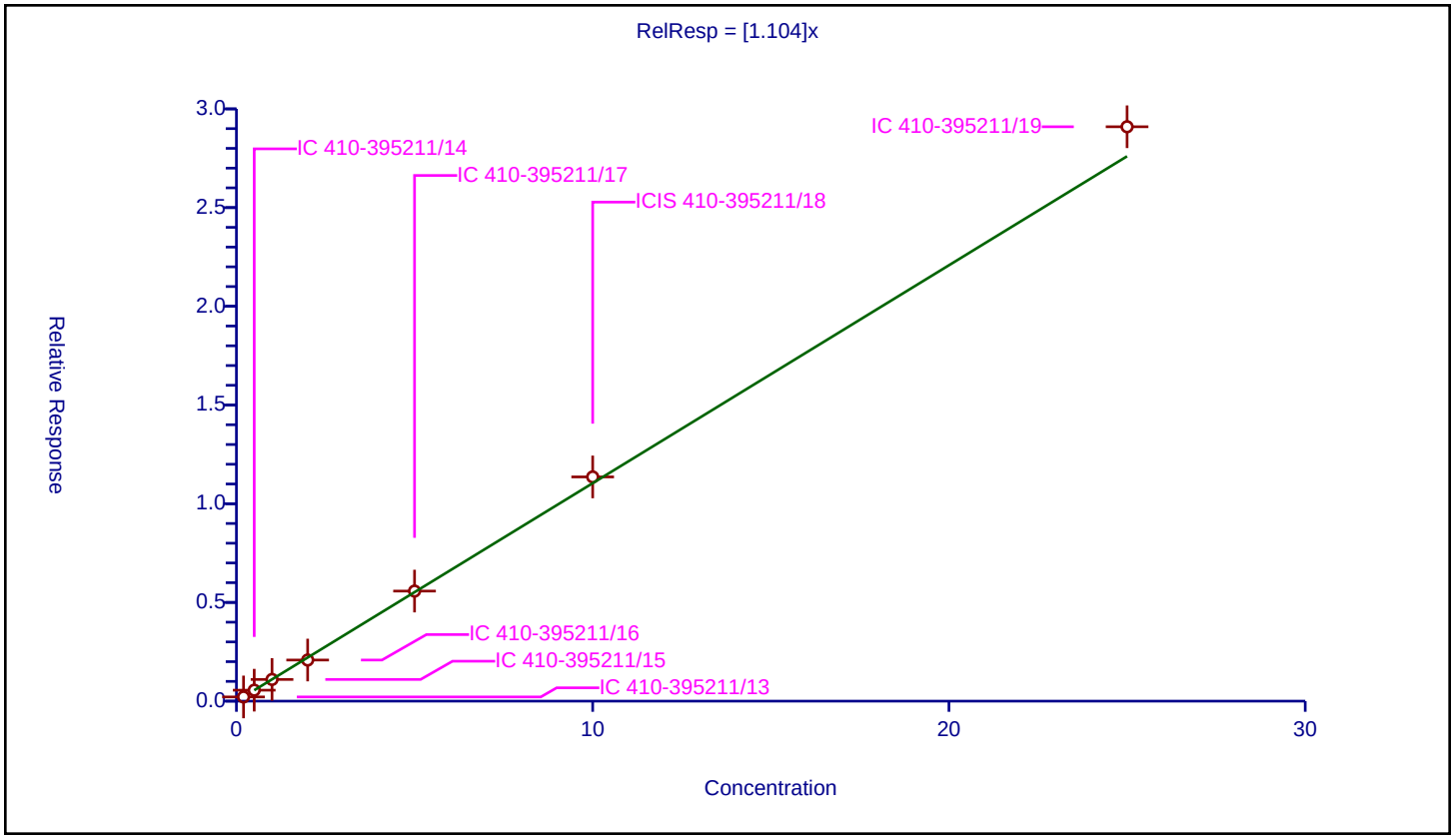
Curve Coefficients

Intercept:	0
Slope:	1.104

Error Coefficients

Standard Error:	3420000
Relative Standard Error:	3.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.212666	10.0	2414017.0	1.063331	Y
2	IC 410-395211/14	0.5	0.55521	10.0	2469842.0	1.110419	Y
3	IC 410-395211/15	1.0	1.098371	10.0	2458760.0	1.098371	Y
4	IC 410-395211/16	2.0	2.081997	10.0	2465964.0	1.040999	Y
5	IC 410-395211/17	5.0	5.575857	10.0	2475137.0	1.115171	Y
6	ICIS 410-395211/18	10.0	11.357961	10.0	2510713.0	1.135796	Y
7	IC 410-395211/19	25.0	29.094316	10.0	2655574.0	1.163773	Y



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Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

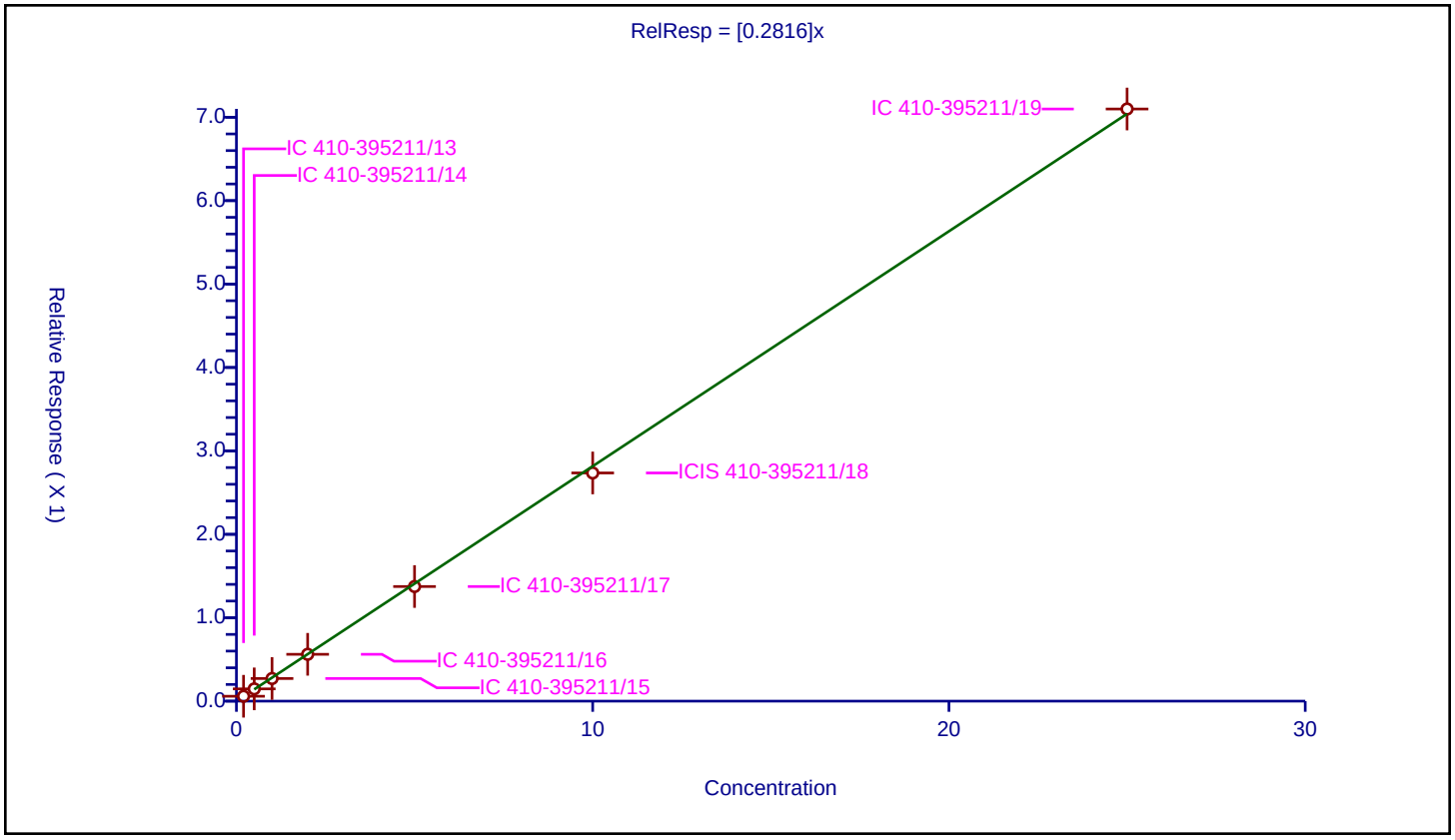
Curve Coefficients

Intercept:	0
Slope:	0.2816

Error Coefficients

Standard Error:	833000
Relative Standard Error:	3.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.058628	10.0	2414017.0	0.293142	Y
2	IC 410-395211/14	0.5	0.147066	10.0	2469842.0	0.294132	Y
3	IC 410-395211/15	1.0	0.271124	10.0	2458760.0	0.271124	Y
4	IC 410-395211/16	2.0	0.561586	10.0	2465964.0	0.280793	Y
5	IC 410-395211/17	5.0	1.374073	10.0	2475137.0	0.274815	Y
6	ICIS 410-395211/18	10.0	2.735474	10.0	2510713.0	0.273547	Y
7	IC 410-395211/19	25.0	7.098853	10.0	2655574.0	0.283954	Y



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Calibration / Tert-amyl methyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

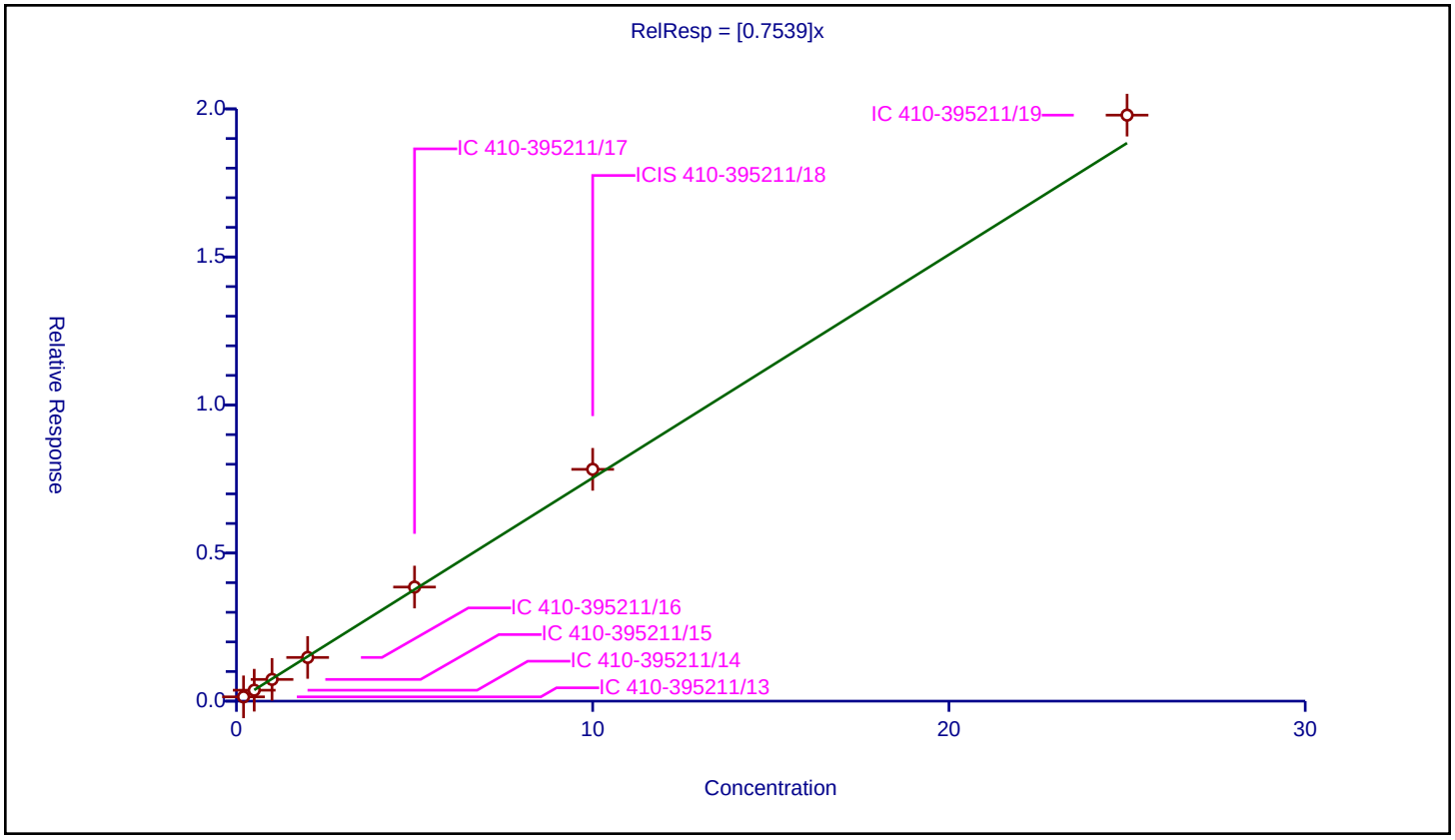
Curve Coefficients

Intercept:	0
Slope:	0.7539

Error Coefficients

Standard Error:	2330000
Relative Standard Error:	3.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.14427	10.0	2414017.0	0.72135	Y
2	IC 410-395211/14	0.5	0.369651	10.0	2469842.0	0.739302	Y
3	IC 410-395211/15	1.0	0.733736	10.0	2458760.0	0.733736	Y
4	IC 410-395211/16	2.0	1.475573	10.0	2465964.0	0.737787	Y
5	IC 410-395211/17	5.0	3.852688	10.0	2475137.0	0.770538	Y
6	ICIS 410-395211/18	10.0	7.828195	10.0	2510713.0	0.782819	Y
7	IC 410-395211/19	25.0	19.789488	10.0	2655574.0	0.79158	Y



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Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

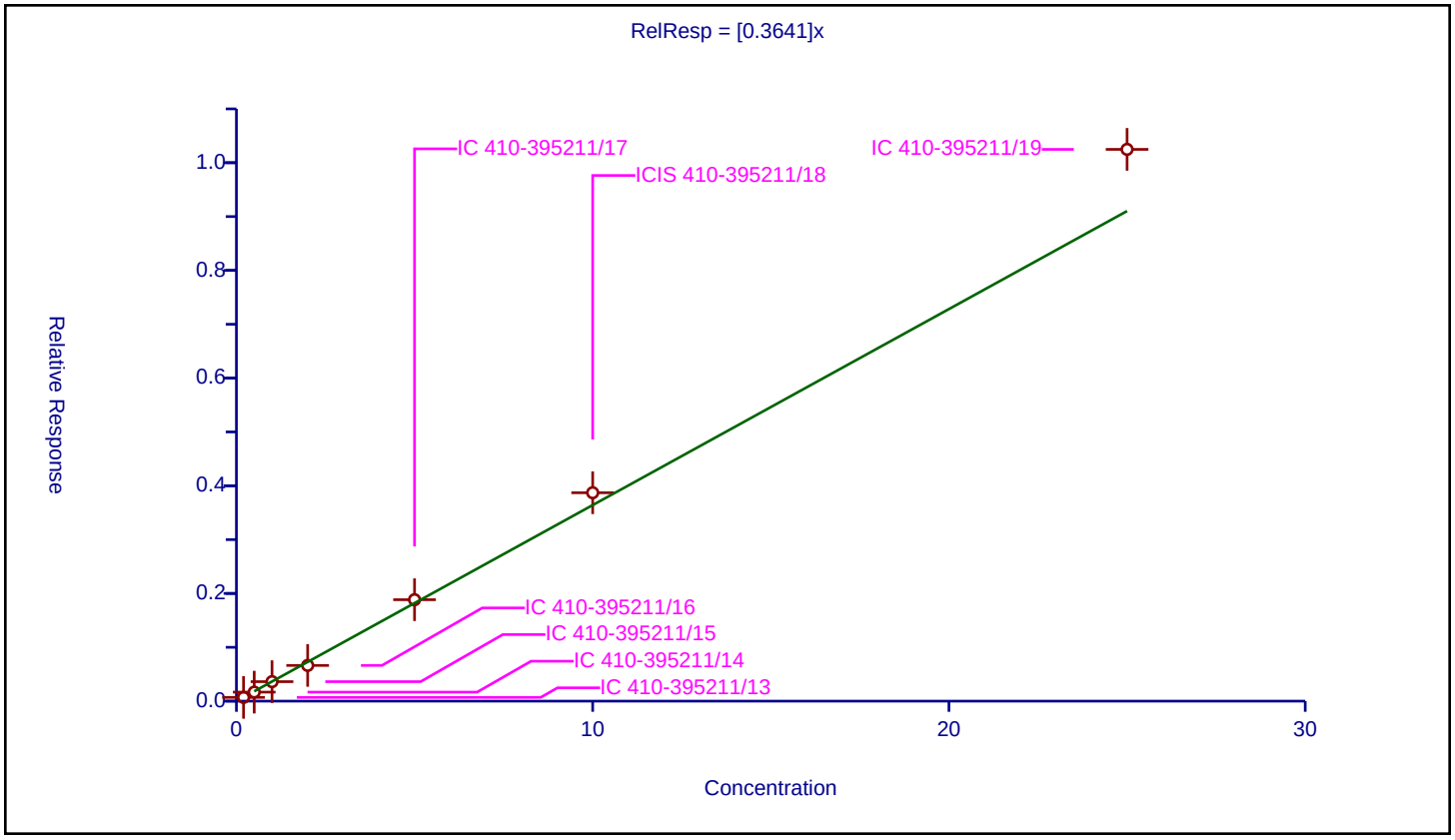
Curve Coefficients

Intercept:	0
Slope:	0.3641

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.069262	10.0	2414017.0	0.346311	Y
2	IC 410-395211/14	0.5	0.167691	10.0	2469842.0	0.335382	Y
3	IC 410-395211/15	1.0	0.361658	10.0	2458760.0	0.361658	Y
4	IC 410-395211/16	2.0	0.663116	10.0	2465964.0	0.331558	Y
5	IC 410-395211/17	5.0	1.88394	10.0	2475137.0	0.376788	Y
6	ICIS 410-395211/18	10.0	3.870697	10.0	2510713.0	0.38707	Y
7	IC 410-395211/19	25.0	10.247969	10.0	2655574.0	0.409919	Y



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Calibration / n-Butanol

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

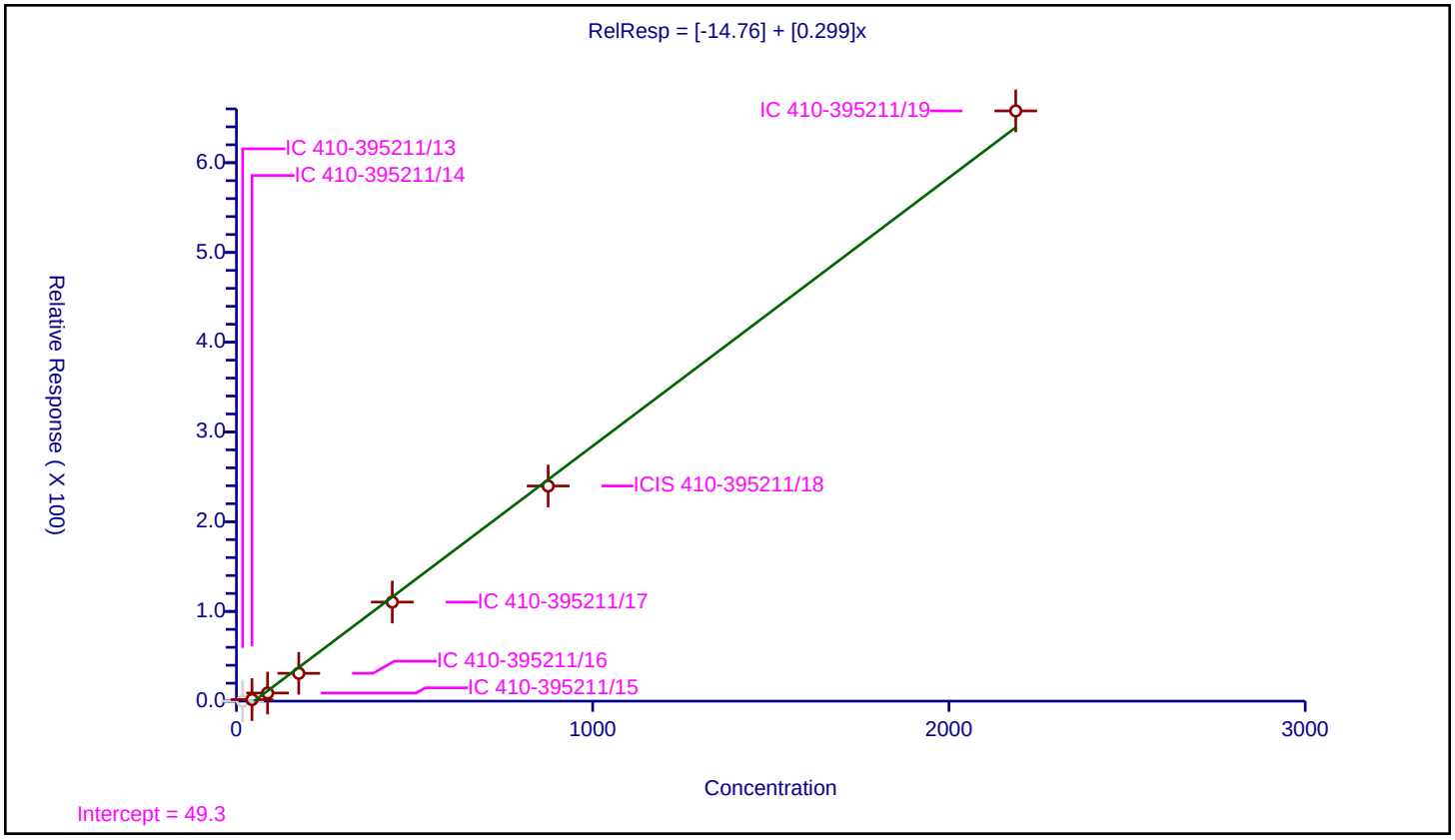
Curve Coefficients

Intercept:	-14.76
Slope:	0.299

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	15.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	17.5	0.0	50.0	159799.0	0.0	N
2	IC 410-395211/14	43.75	1.706369	50.0	176691.0	0.039003	Y
3	IC 410-395211/15	87.5	9.049933	50.0	161736.0	0.103428	Y
4	IC 410-395211/16	175.0	31.00931	50.0	164657.0	0.177196	Y
5	IC 410-395211/17	437.5	110.399749	50.0	167230.0	0.252342	Y
6	ICIS 410-395211/18	875.0	239.755552	50.0	168052.0	0.274006	Y
7	IC 410-395211/19	2187.5	657.74951	50.0	170043.0	0.300685	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

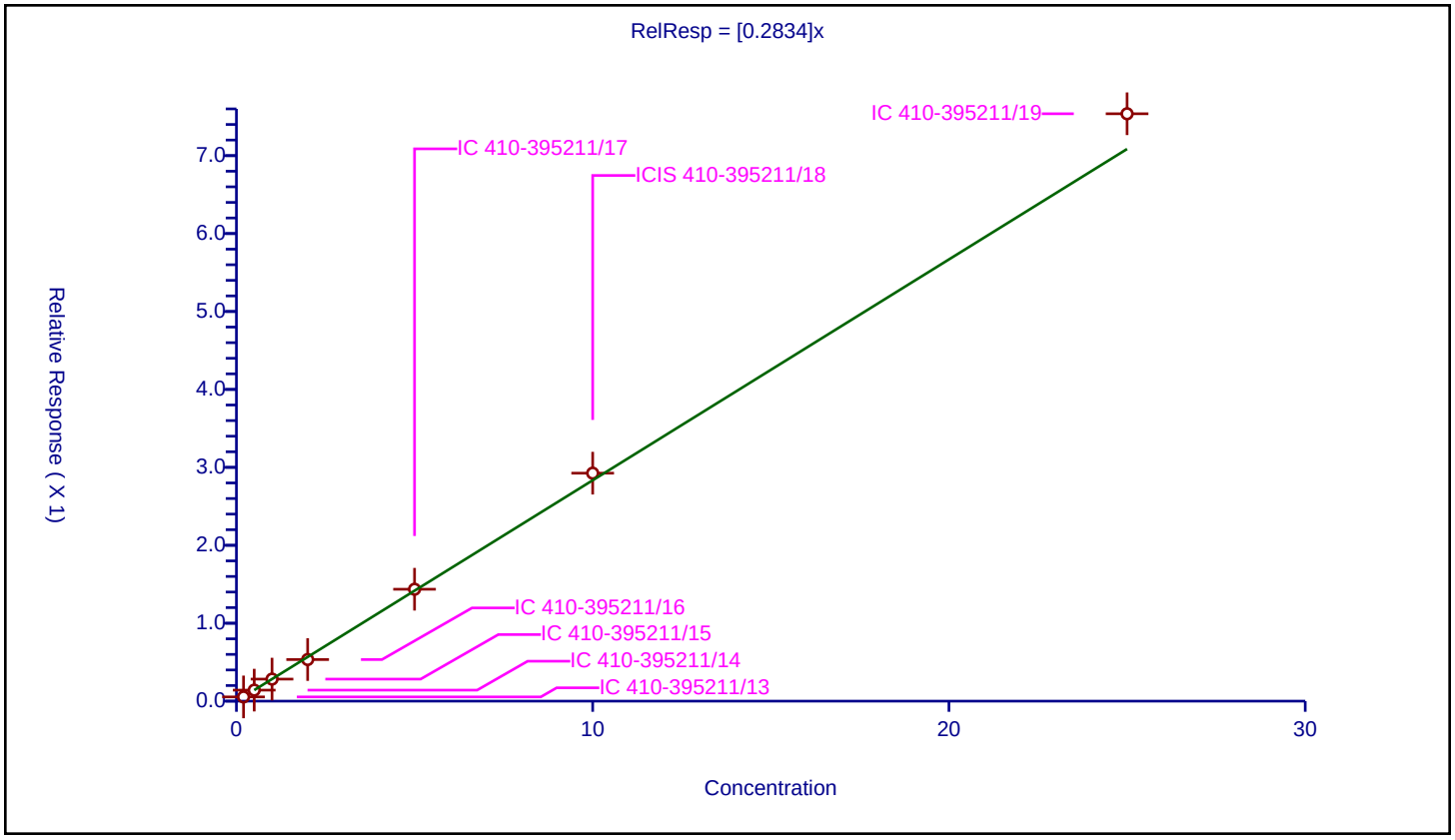
Curve Coefficients

Intercept:	0
Slope:	0.2834

Error Coefficients

Standard Error:	885000
Relative Standard Error:	4.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.05403	10.0	2414017.0	0.270151	Y
2	IC 410-395211/14	0.5	0.141313	10.0	2469842.0	0.282625	Y
3	IC 410-395211/15	1.0	0.282976	10.0	2458760.0	0.282976	Y
4	IC 410-395211/16	2.0	0.533767	10.0	2465964.0	0.266883	Y
5	IC 410-395211/17	5.0	1.435916	10.0	2475137.0	0.287183	Y
6	ICIS 410-395211/18	10.0	2.925464	10.0	2510713.0	0.292546	Y
7	IC 410-395211/19	25.0	7.537399	10.0	2655574.0	0.301496	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

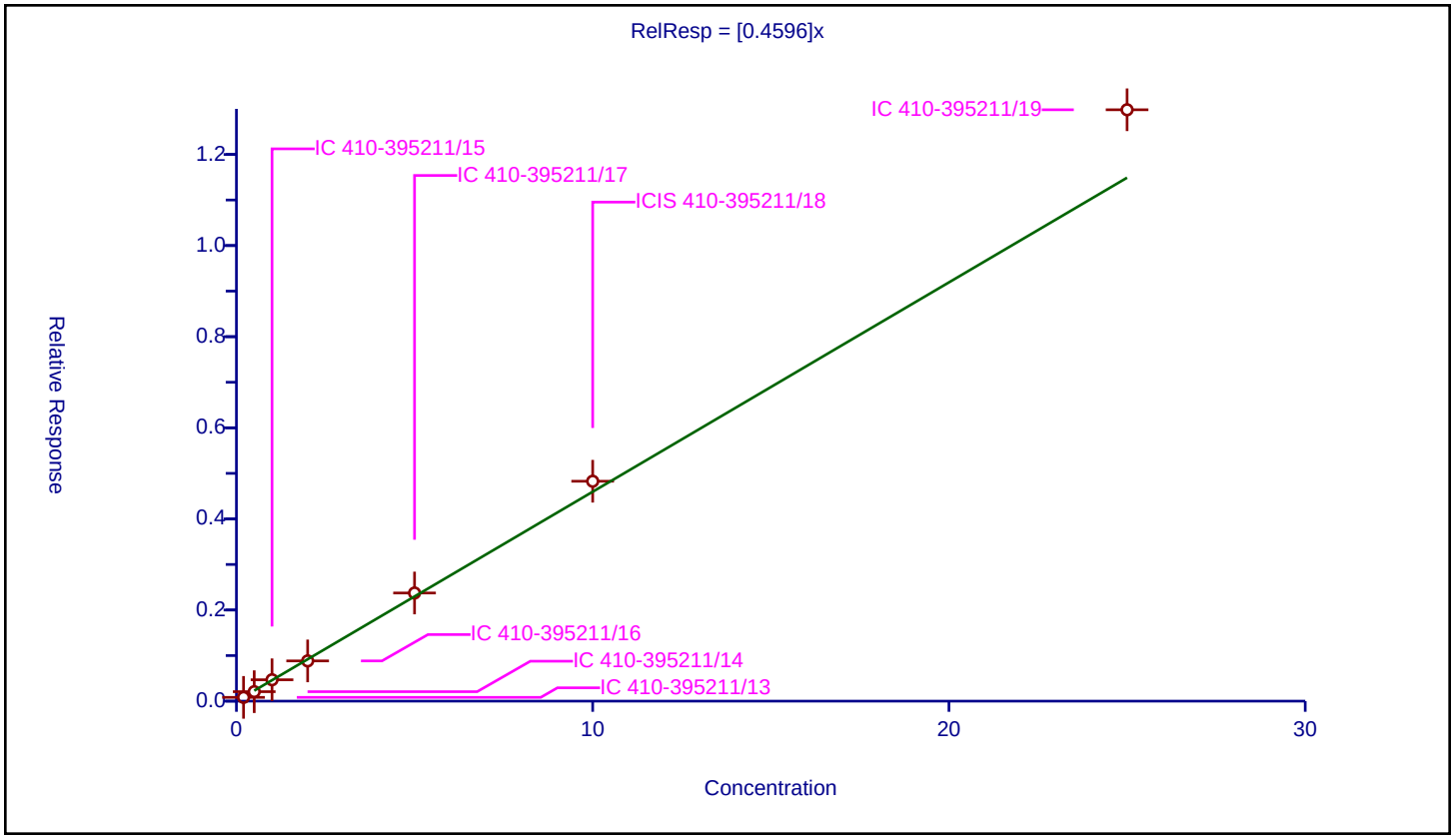
Curve Coefficients

Intercept:	0
Slope:	0.4596

Error Coefficients

Standard Error:	1510000
Relative Standard Error:	8.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.08292	10.0	2414017.0	0.414599	Y
2	IC 410-395211/14	0.5	0.207584	10.0	2469842.0	0.415168	Y
3	IC 410-395211/15	1.0	0.469074	10.0	2458760.0	0.469074	Y
4	IC 410-395211/16	2.0	0.883281	10.0	2465964.0	0.441641	Y
5	IC 410-395211/17	5.0	2.373614	10.0	2475137.0	0.474723	Y
6	ICIS 410-395211/18	10.0	4.826784	10.0	2510713.0	0.482678	Y
7	IC 410-395211/19	25.0	12.980489	10.0	2655574.0	0.51922	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

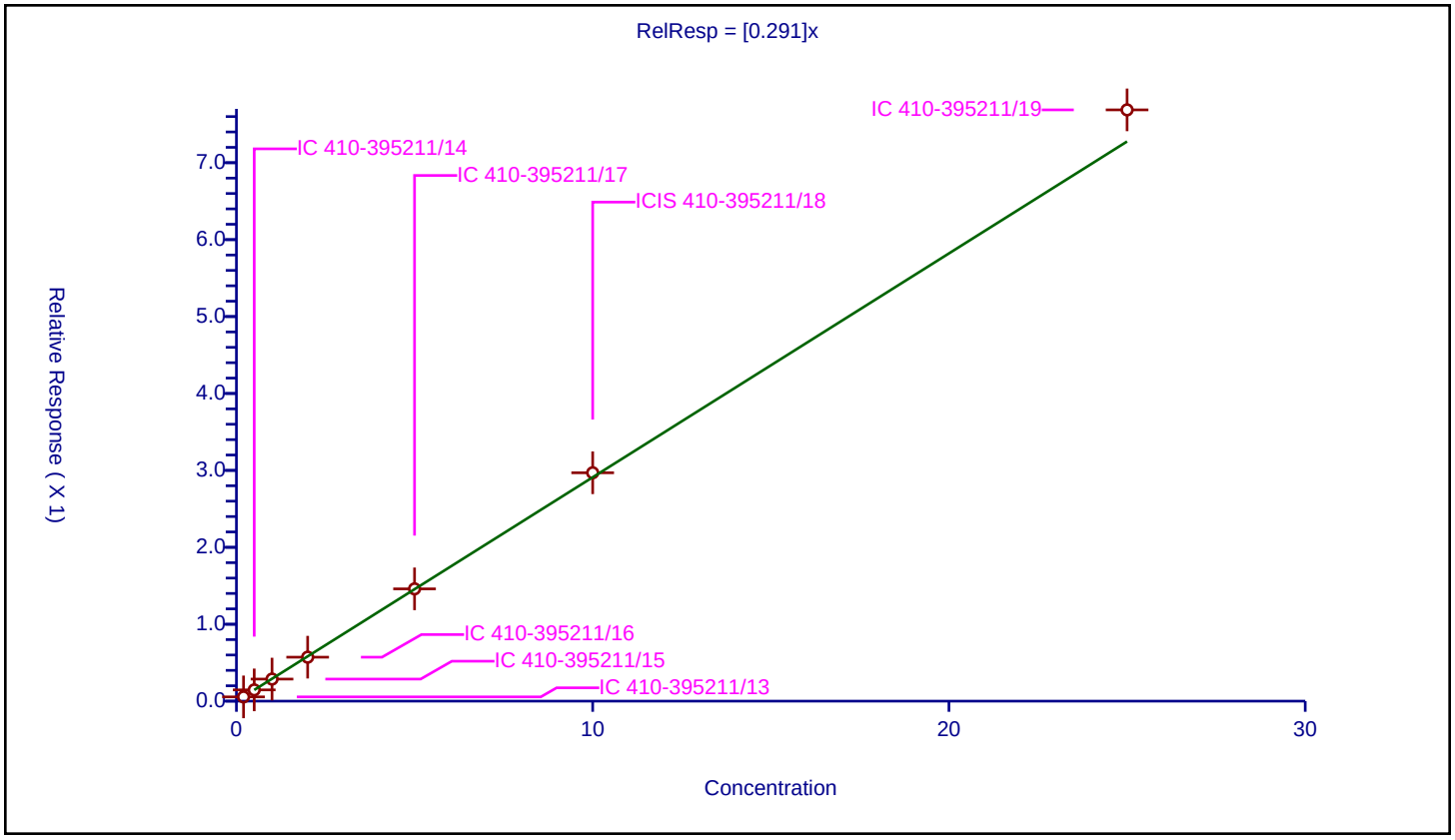
Curve Coefficients

Intercept:	0
Slope:	0.291

Error Coefficients

Standard Error:	902000
Relative Standard Error:	3.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.055066	10.0	2414017.0	0.275329	Y
2	IC 410-395211/14	0.5	0.146471	10.0	2469842.0	0.292942	Y
3	IC 410-395211/15	1.0	0.286913	10.0	2458760.0	0.286913	Y
4	IC 410-395211/16	2.0	0.571606	10.0	2465964.0	0.285803	Y
5	IC 410-395211/17	5.0	1.459701	10.0	2475137.0	0.29194	Y
6	ICIS 410-395211/18	10.0	2.969125	10.0	2510713.0	0.296912	Y
7	IC 410-395211/19	25.0	7.687016	10.0	2655574.0	0.307481	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

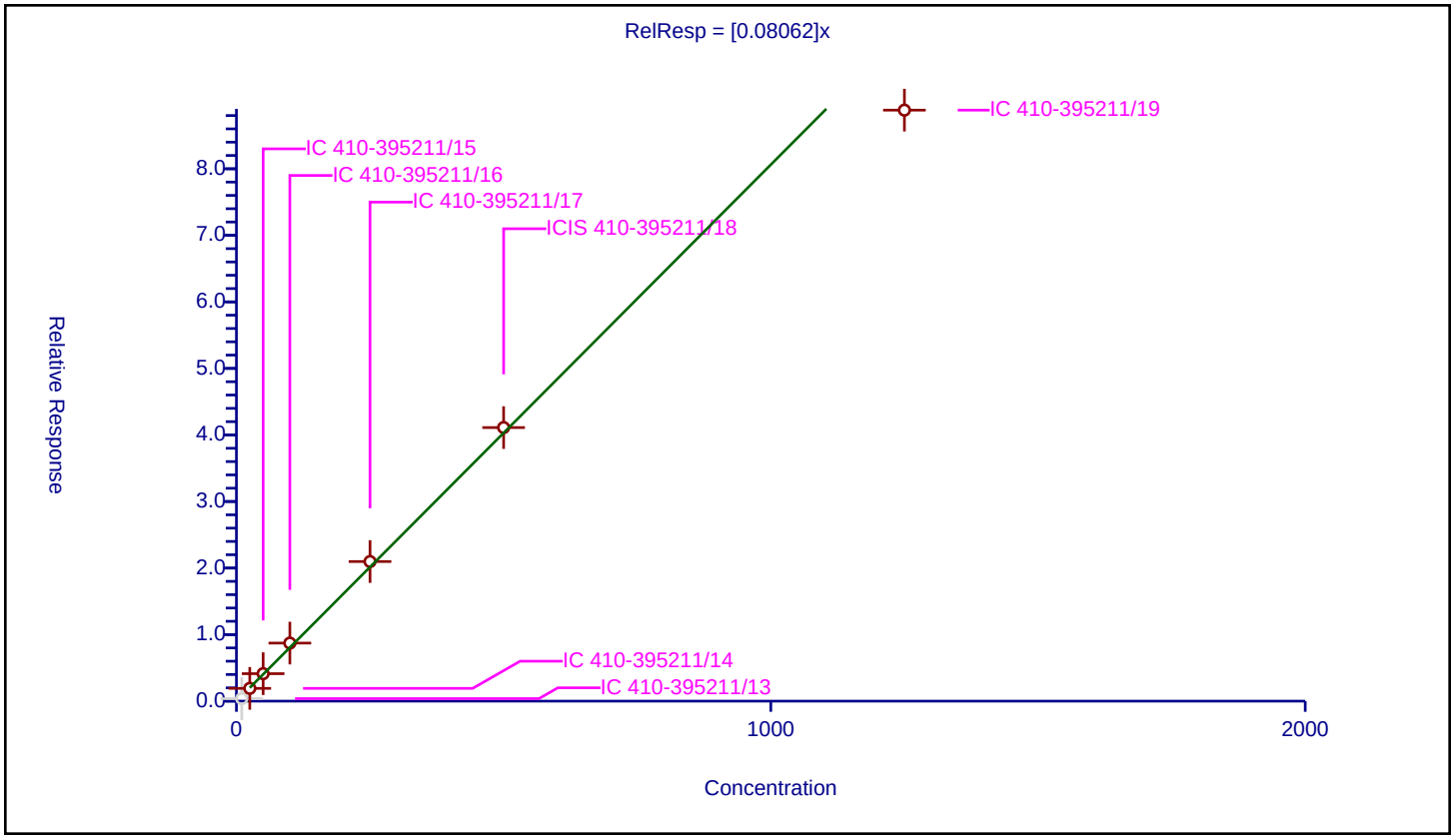
Curve Coefficients

Intercept:	0
Slope:	0.08062

Error Coefficients

Standard Error:	152000
Relative Standard Error:	7.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	10.0	0.377349	50.0	159799.0	0.037735	N
2	IC 410-395211/14	25.0	1.917755	50.0	176691.0	0.07671	Y
3	IC 410-395211/15	50.0	4.130187	50.0	161736.0	0.082604	Y
4	IC 410-395211/16	100.0	8.722678	50.0	164657.0	0.087227	Y
5	IC 410-395211/17	250.0	20.977994	50.0	167230.0	0.083912	Y
6	ICIS 410-395211/18	500.0	41.109002	50.0	168052.0	0.082218	Y
7	IC 410-395211/19	1250.0	88.811359	50.0	170043.0	0.071049	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

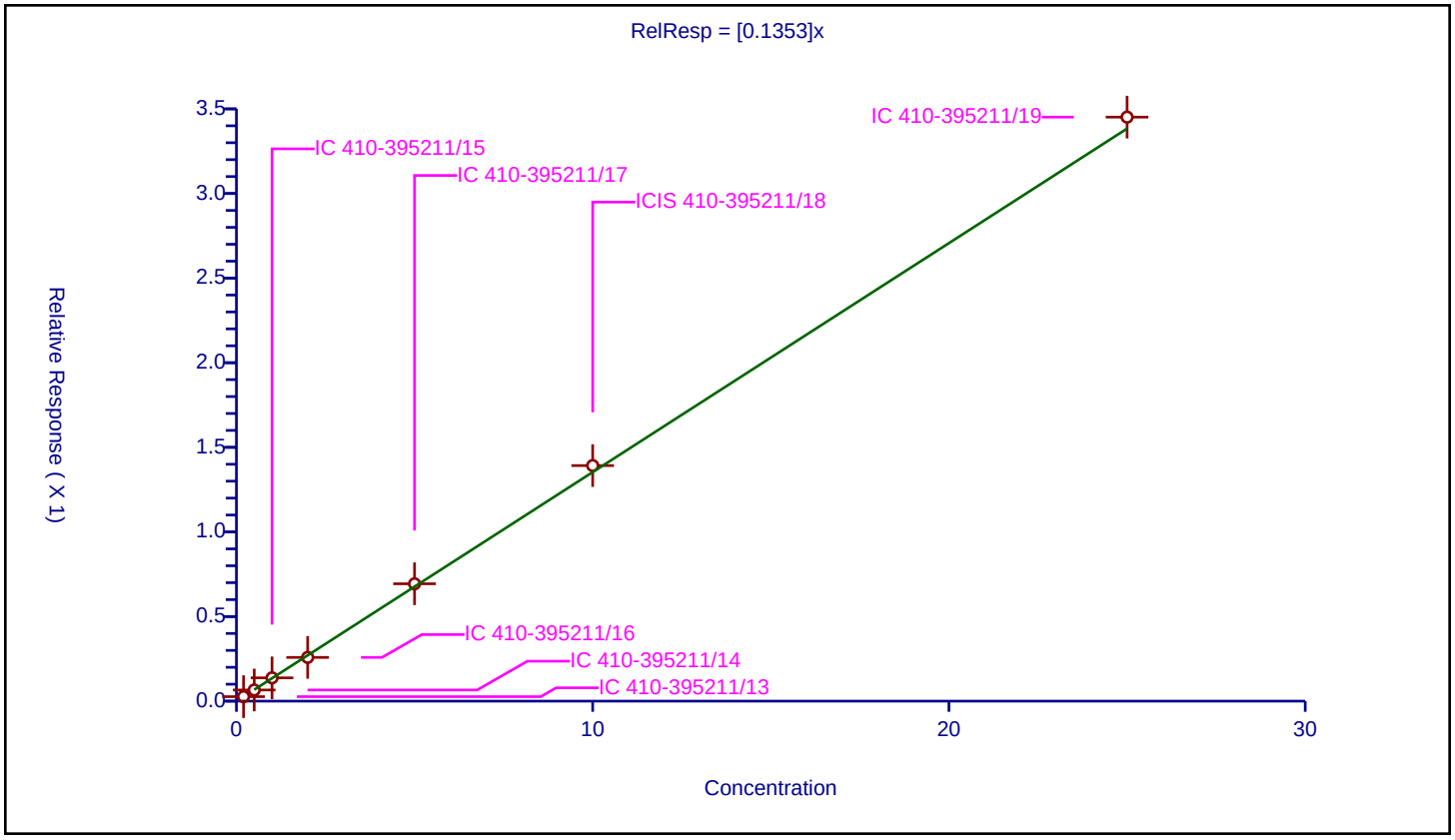
Curve Coefficients

Intercept:	0
Slope:	0.1353

Error Coefficients

Standard Error:	408000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.026586	10.0	2414017.0	0.132932	Y
2	IC 410-395211/14	0.5	0.065822	10.0	2469842.0	0.131644	Y
3	IC 410-395211/15	1.0	0.137622	10.0	2458760.0	0.137622	Y
4	IC 410-395211/16	2.0	0.258402	10.0	2465964.0	0.129201	Y
5	IC 410-395211/17	5.0	0.69357	10.0	2475137.0	0.138714	Y
6	ICIS 410-395211/18	10.0	1.392047	10.0	2510713.0	0.139205	Y
7	IC 410-395211/19	25.0	3.451325	10.0	2655574.0	0.138053	Y



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Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

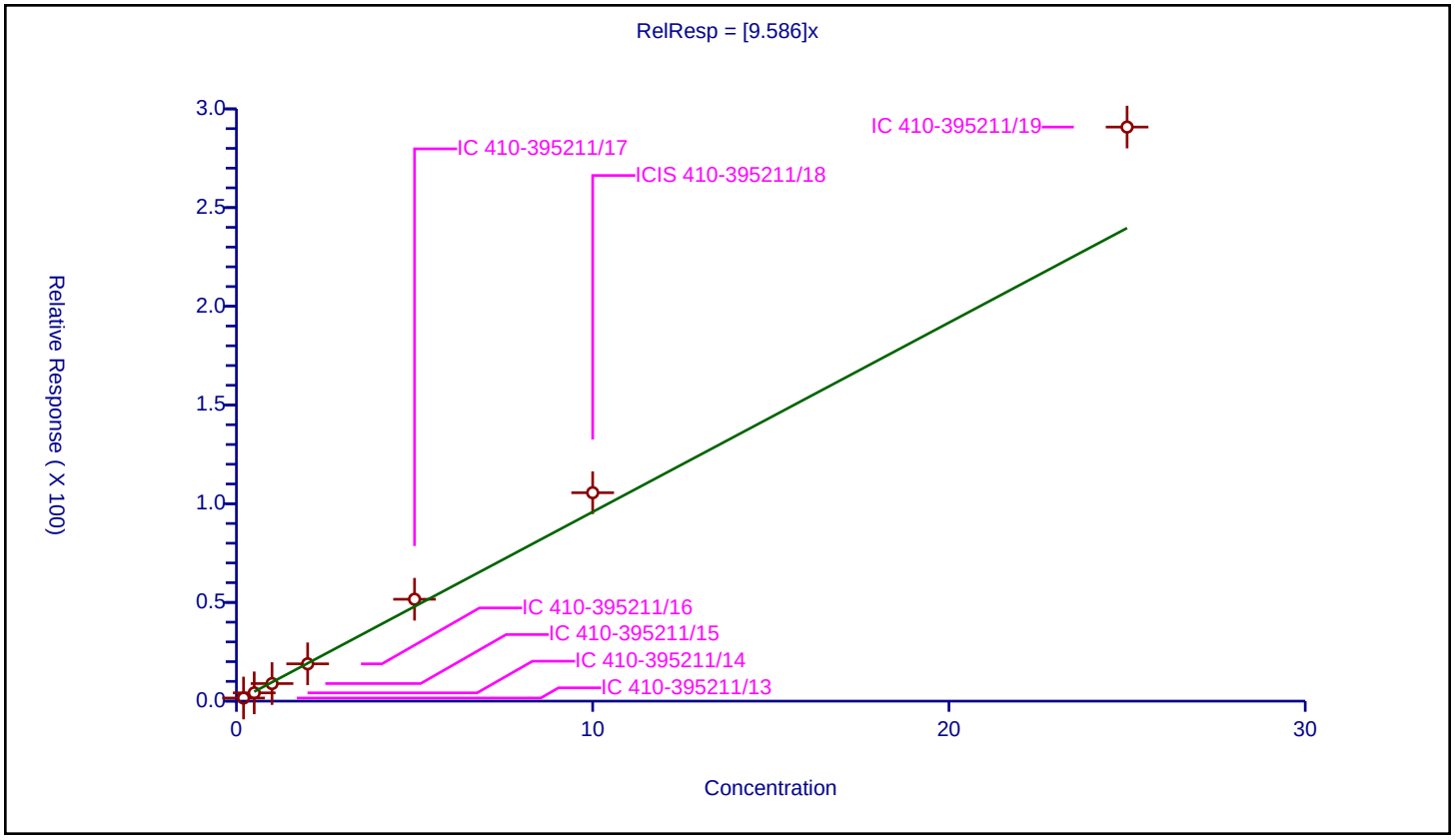
Curve Coefficients

Intercept:	0
Slope:	9.586

Error Coefficients

Standard Error:	436000
Relative Standard Error:	13.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	1.576042	50.0	159799.0	7.880212	Y
2	IC 410-395211/14	0.5	4.184424	50.0	176691.0	8.368847	Y
3	IC 410-395211/15	1.0	8.891341	50.0	161736.0	8.891341	Y
4	IC 410-395211/16	2.0	18.89534	50.0	164657.0	9.44767	Y
5	IC 410-395211/17	5.0	51.612151	50.0	167230.0	10.32243	Y
6	ICIS 410-395211/18	10.0	105.578035	50.0	168052.0	10.557804	Y
7	IC 410-395211/19	25.0	290.802915	50.0	170043.0	11.632117	Y



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Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

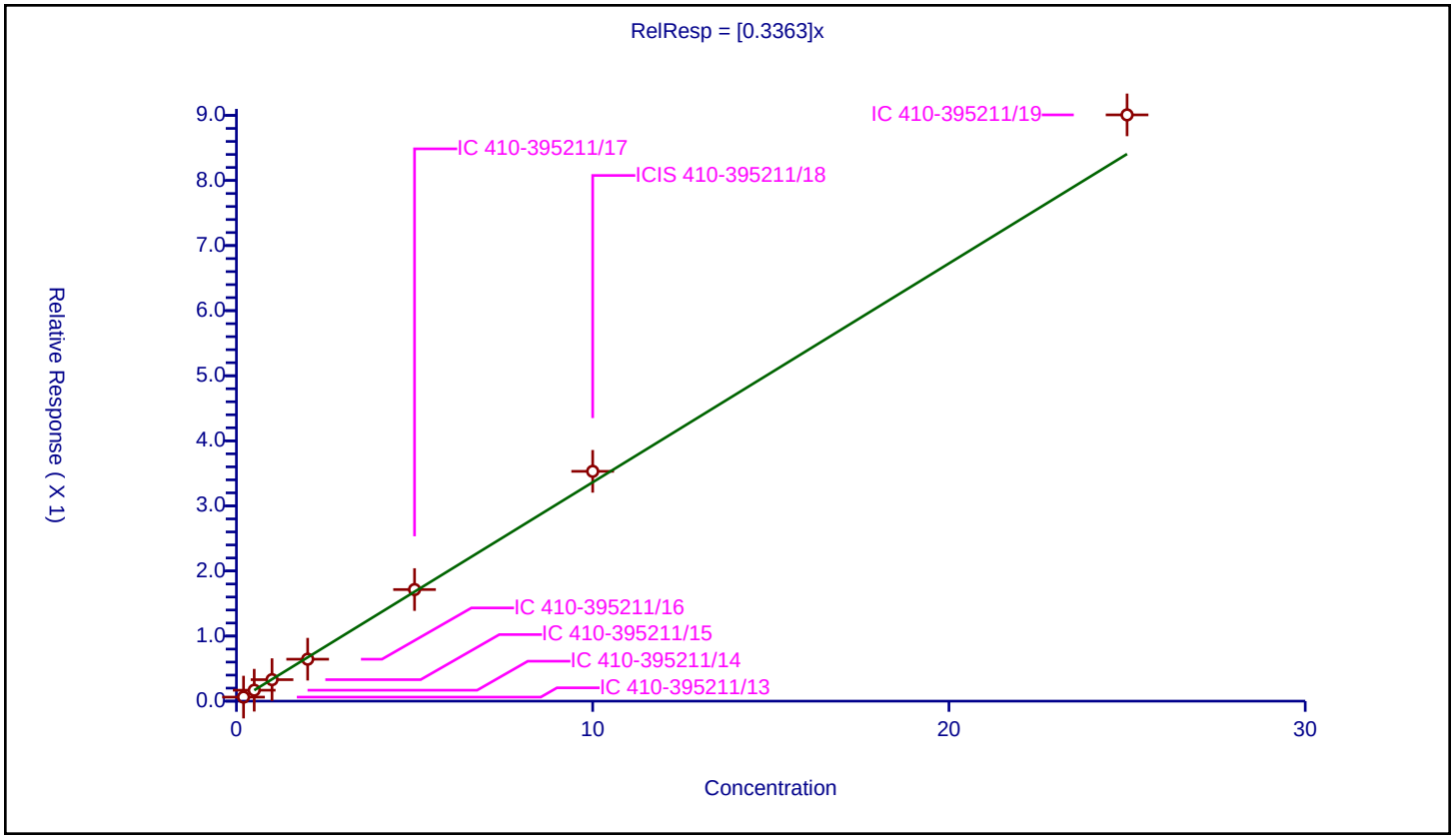
Curve Coefficients

Intercept:	0
Slope:	0.3363

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.061971	10.0	2414017.0	0.309857	Y
2	IC 410-395211/14	0.5	0.167829	10.0	2469842.0	0.335657	Y
3	IC 410-395211/15	1.0	0.329935	10.0	2458760.0	0.329935	Y
4	IC 410-395211/16	2.0	0.644413	10.0	2465964.0	0.322207	Y
5	IC 410-395211/17	5.0	1.714568	10.0	2475137.0	0.342914	Y
6	ICIS 410-395211/18	10.0	3.530961	10.0	2510713.0	0.353096	Y
7	IC 410-395211/19	25.0	9.007849	10.0	2655574.0	0.360314	Y



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Calibration / 2-Nitropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

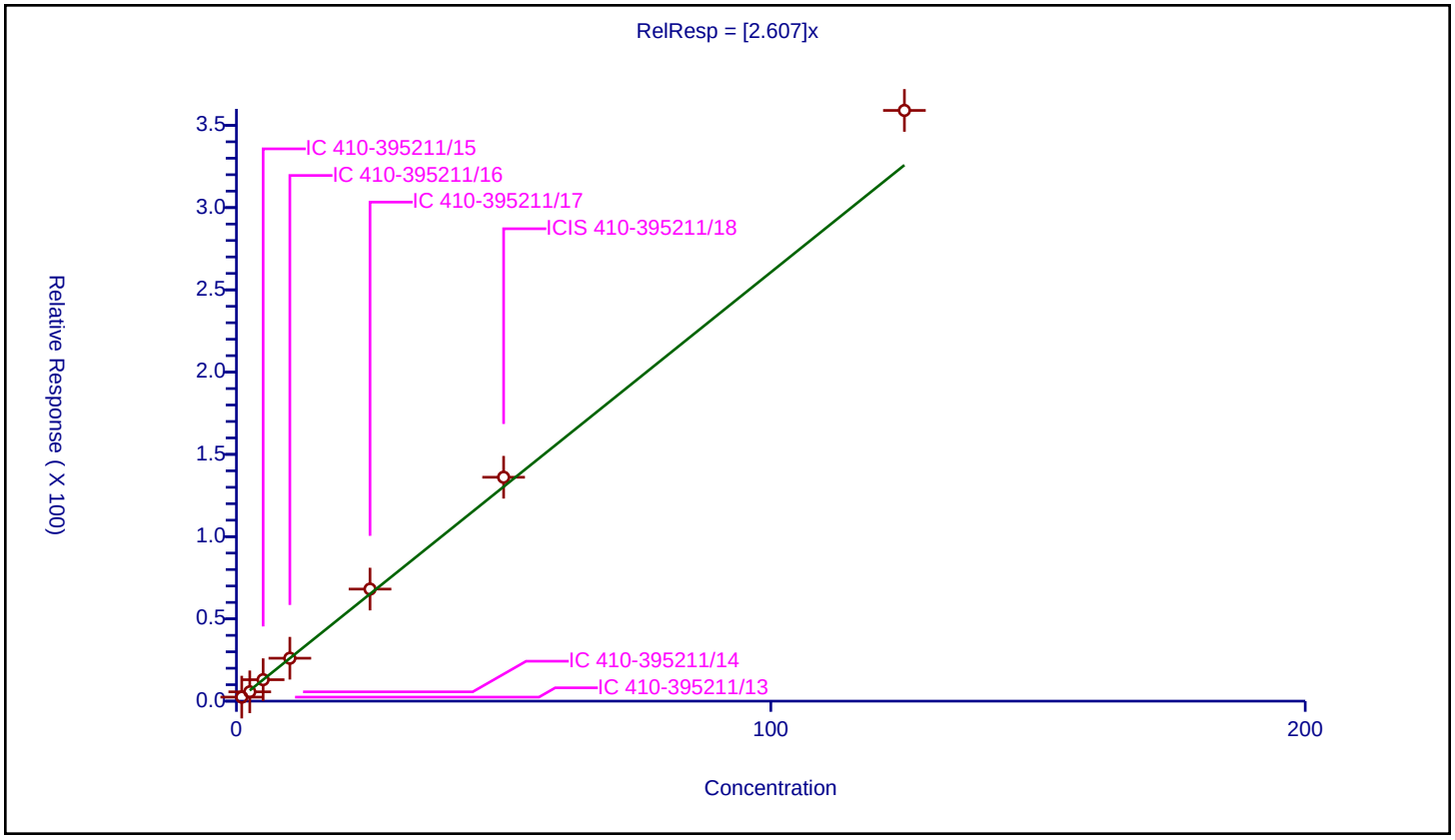
Curve Coefficients

Intercept:	0
Slope:	2.607

Error Coefficients

Standard Error:	542000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	1.0	2.446511	50.0	159799.0	2.446511	Y
2	IC 410-395211/14	2.5	5.664408	50.0	176691.0	2.265763	Y
3	IC 410-395211/15	5.0	13.036677	50.0	161736.0	2.607335	Y
4	IC 410-395211/16	10.0	26.082098	50.0	164657.0	2.60821	Y
5	IC 410-395211/17	25.0	68.125635	50.0	167230.0	2.725025	Y
6	ICIS 410-395211/18	50.0	136.092102	50.0	168052.0	2.721842	Y
7	IC 410-395211/19	125.0	359.061237	50.0	170043.0	2.87249	Y



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Calibration / 1-Bromo-2-chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

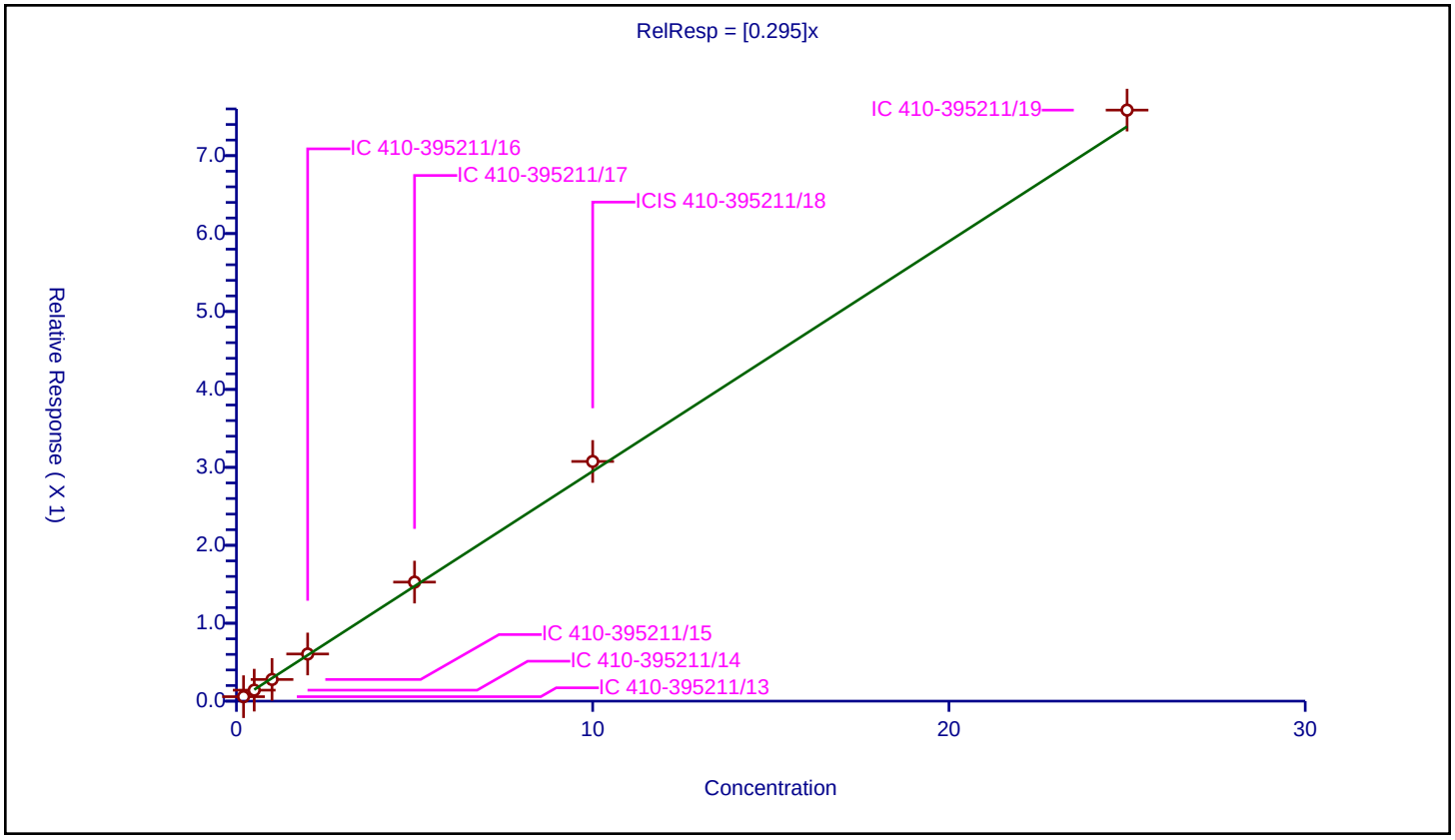
Curve Coefficients

Intercept:	0
Slope:	0.295

Error Coefficients

Standard Error:	897000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.057129	10.0	2414017.0	0.285644	Y
2	IC 410-395211/14	0.5	0.141001	10.0	2469842.0	0.282002	Y
3	IC 410-395211/15	1.0	0.277998	10.0	2458760.0	0.277998	Y
4	IC 410-395211/16	2.0	0.605289	10.0	2465964.0	0.302644	Y
5	IC 410-395211/17	5.0	1.527693	10.0	2475137.0	0.305539	Y
6	ICIS 410-395211/18	10.0	3.07568	10.0	2510713.0	0.307568	Y
7	IC 410-395211/19	25.0	7.584624	10.0	2655574.0	0.303385	Y



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Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

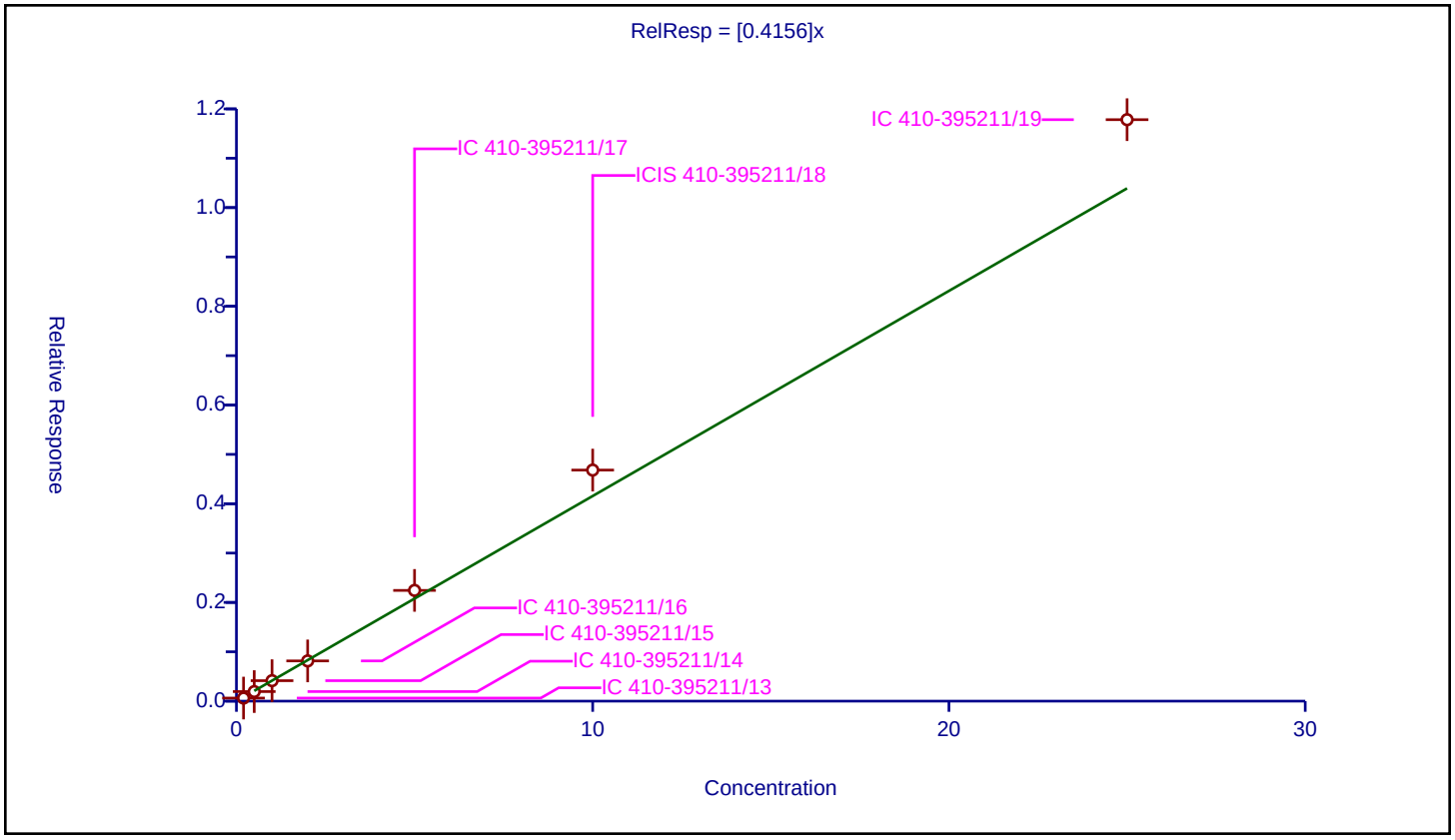
Curve Coefficients

Intercept:	0
Slope:	0.4156

Error Coefficients

Standard Error:	1390000
Relative Standard Error:	13.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.062195	10.0	2414017.0	0.310975	Y
2	IC 410-395211/14	0.5	0.193919	10.0	2469842.0	0.387839	Y
3	IC 410-395211/15	1.0	0.414689	10.0	2458760.0	0.414689	Y
4	IC 410-395211/16	2.0	0.815162	10.0	2465964.0	0.407581	Y
5	IC 410-395211/17	5.0	2.243633	10.0	2475137.0	0.448727	Y
6	ICIS 410-395211/18	10.0	4.681849	10.0	2510713.0	0.468185	Y
7	IC 410-395211/19	25.0	11.781396	10.0	2655574.0	0.471256	Y



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Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

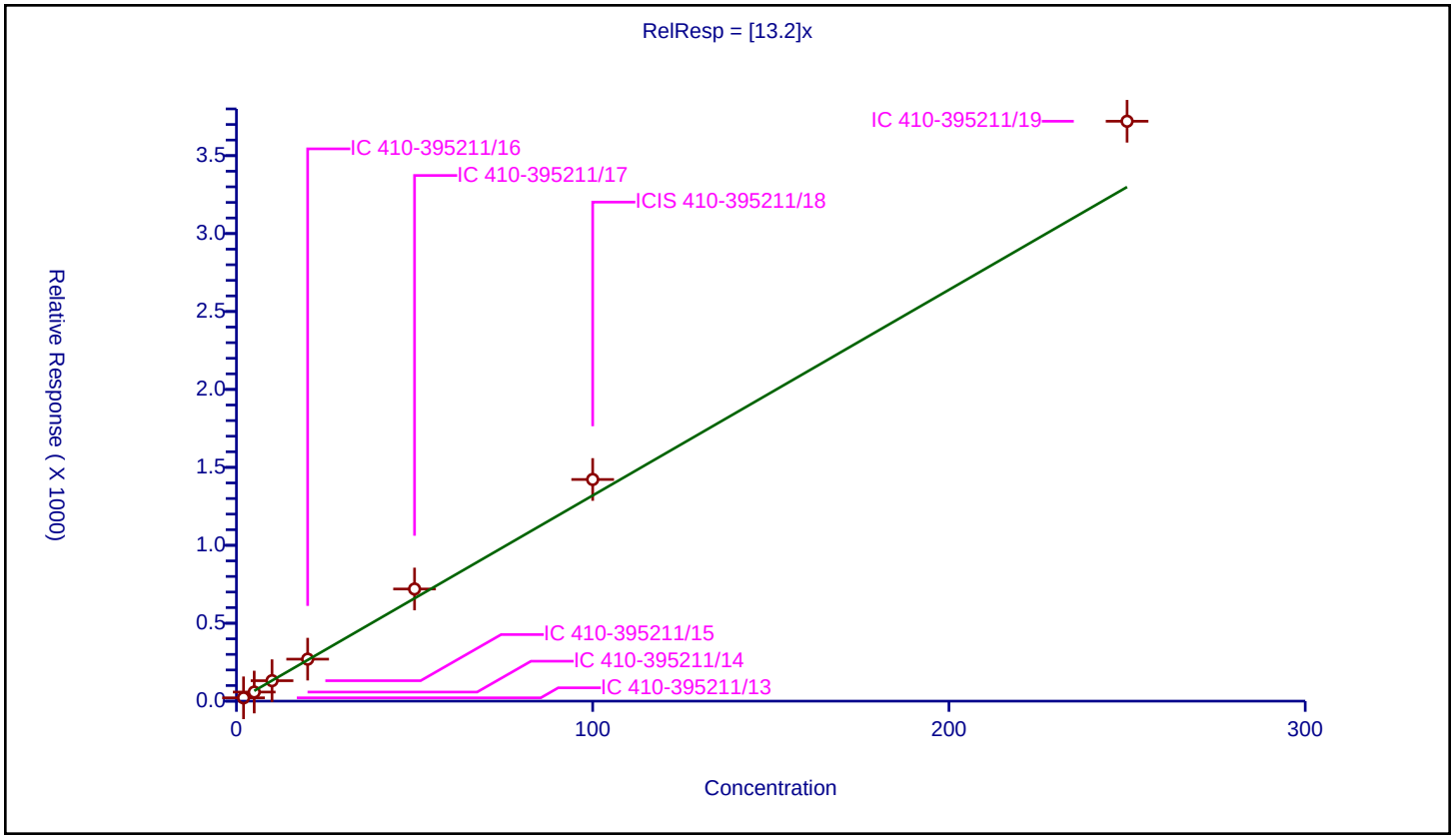
Curve Coefficients

Intercept:	0
Slope:	13.2

Error Coefficients

Standard Error:	5620000
Relative Standard Error:	11.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	2.0	21.253888	50.0	159799.0	10.626944	Y
2	IC 410-395211/14	5.0	58.323571	50.0	176691.0	11.664714	Y
3	IC 410-395211/15	10.0	131.106866	50.0	161736.0	13.110687	Y
4	IC 410-395211/16	20.0	269.460758	50.0	164657.0	13.473038	Y
5	IC 410-395211/17	50.0	719.521916	50.0	167230.0	14.390438	Y
6	ICIS 410-395211/18	100.0	1422.162188	50.0	168052.0	14.221622	Y
7	IC 410-395211/19	250.0	3720.740636	50.0	170043.0	14.882963	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

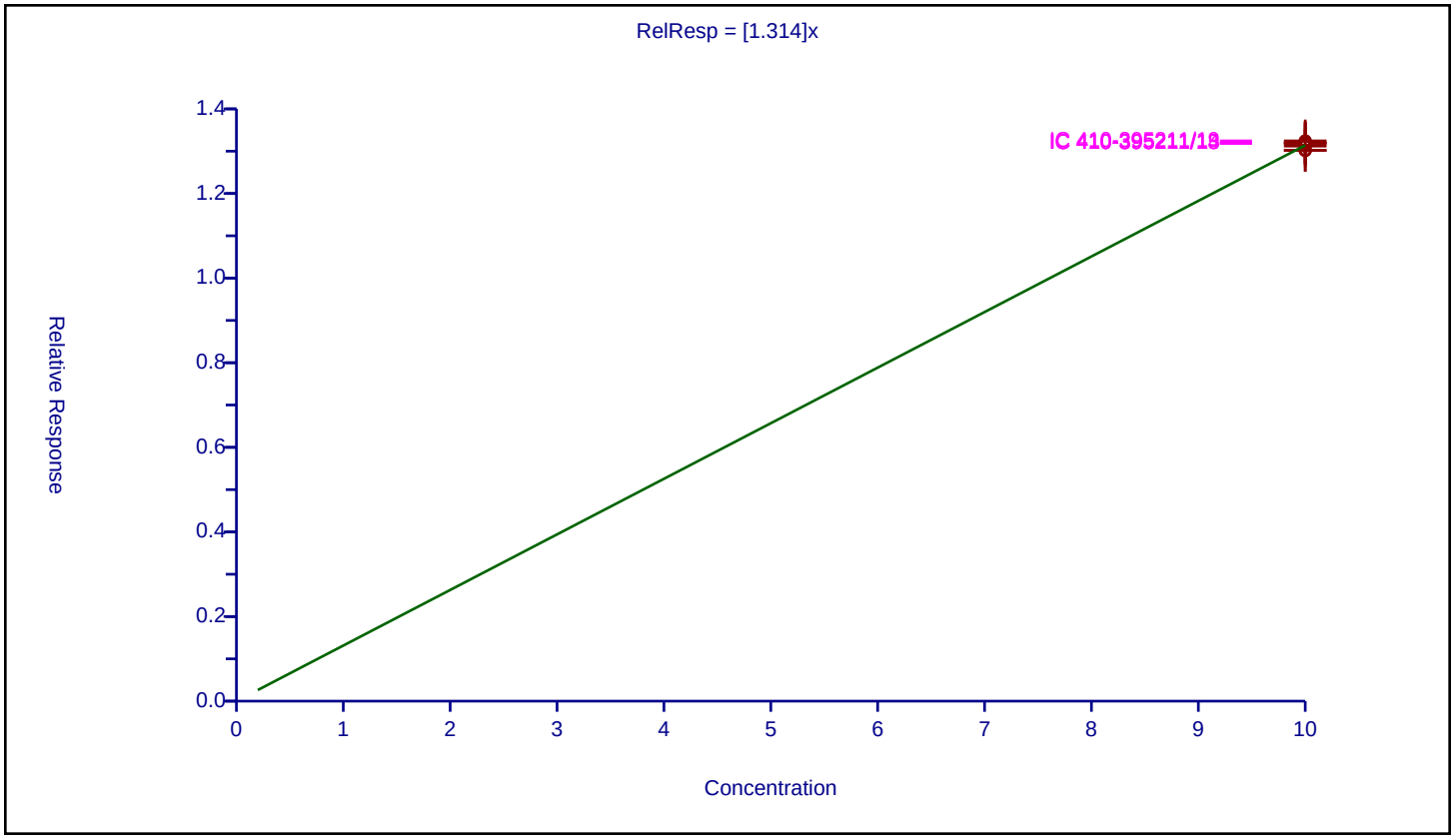
Curve Coefficients

Intercept:	0
Slope:	1.314

Error Coefficients

Standard Error:	2780000
Relative Standard Error:	0.7
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0.000000000000000111

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	10.0	13.190878	10.0	1874080.0	1.319088	Y
2	IC 410-395211/14	10.0	13.195164	10.0	1928405.0	1.319516	Y
3	IC 410-395211/15	10.0	13.184478	10.0	1932452.0	1.318448	Y
4	IC 410-395211/16	10.0	13.119983	10.0	1948504.0	1.311998	Y
5	IC 410-395211/17	10.0	13.020248	10.0	1954853.0	1.302025	Y
6	ICIS 410-395211/18	10.0	13.018377	10.0	1990861.0	1.301838	Y
7	IC 410-395211/19	10.0	13.243559	10.0	2081007.0	1.324356	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

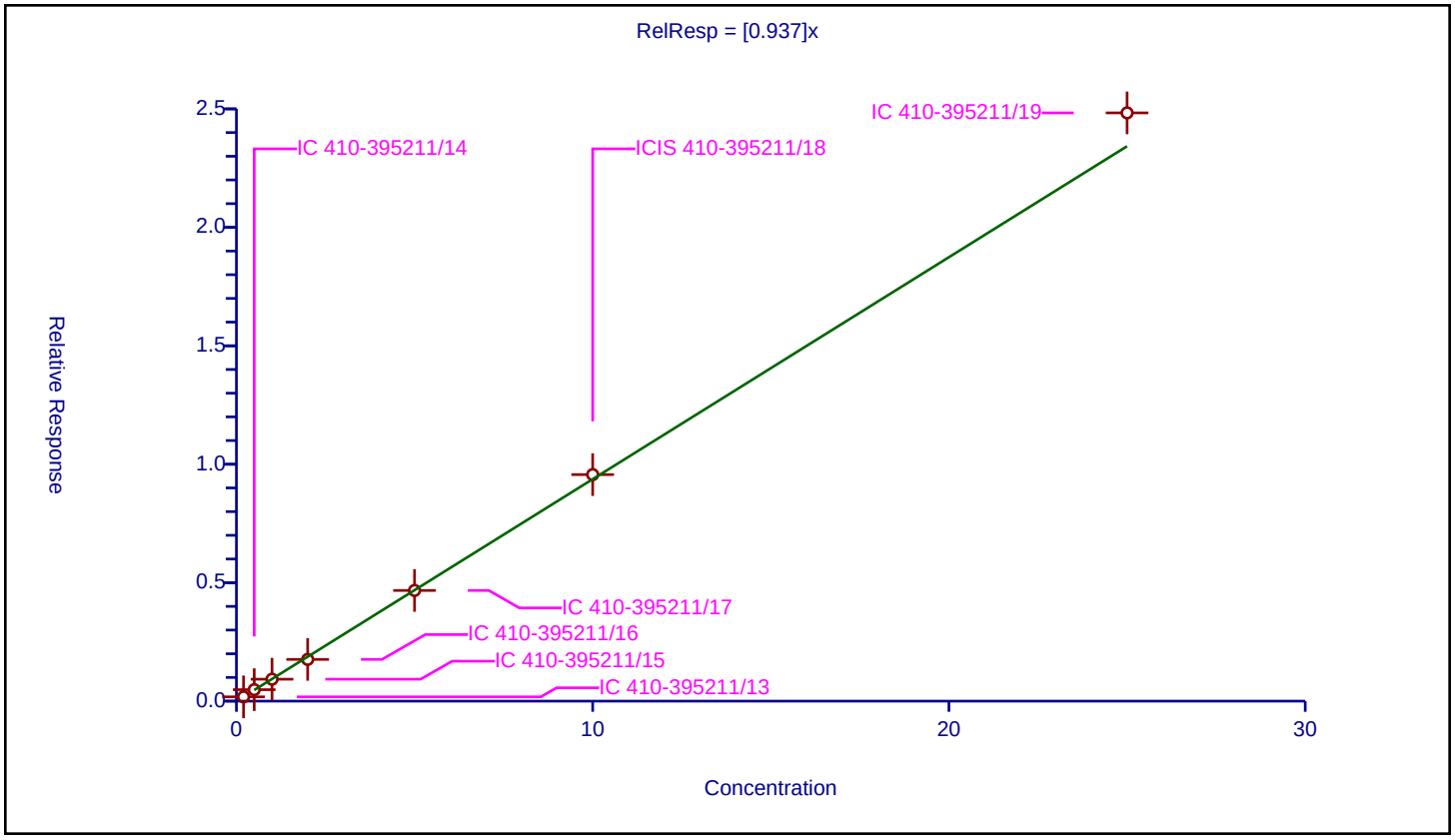
Curve Coefficients

Intercept:	0
Slope:	0.937

Error Coefficients

Standard Error:	2280000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.18004	10.0	1874080.0	0.900202	Y
2	IC 410-395211/14	0.5	0.484214	10.0	1928405.0	0.968427	Y
3	IC 410-395211/15	1.0	0.925524	10.0	1932452.0	0.925524	Y
4	IC 410-395211/16	2.0	1.761397	10.0	1948504.0	0.880699	Y
5	IC 410-395211/17	5.0	4.672065	10.0	1954853.0	0.934413	Y
6	ICIS 410-395211/18	10.0	9.563073	10.0	1990861.0	0.956307	Y
7	IC 410-395211/19	25.0	24.830974	10.0	2081007.0	0.993239	Y



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Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

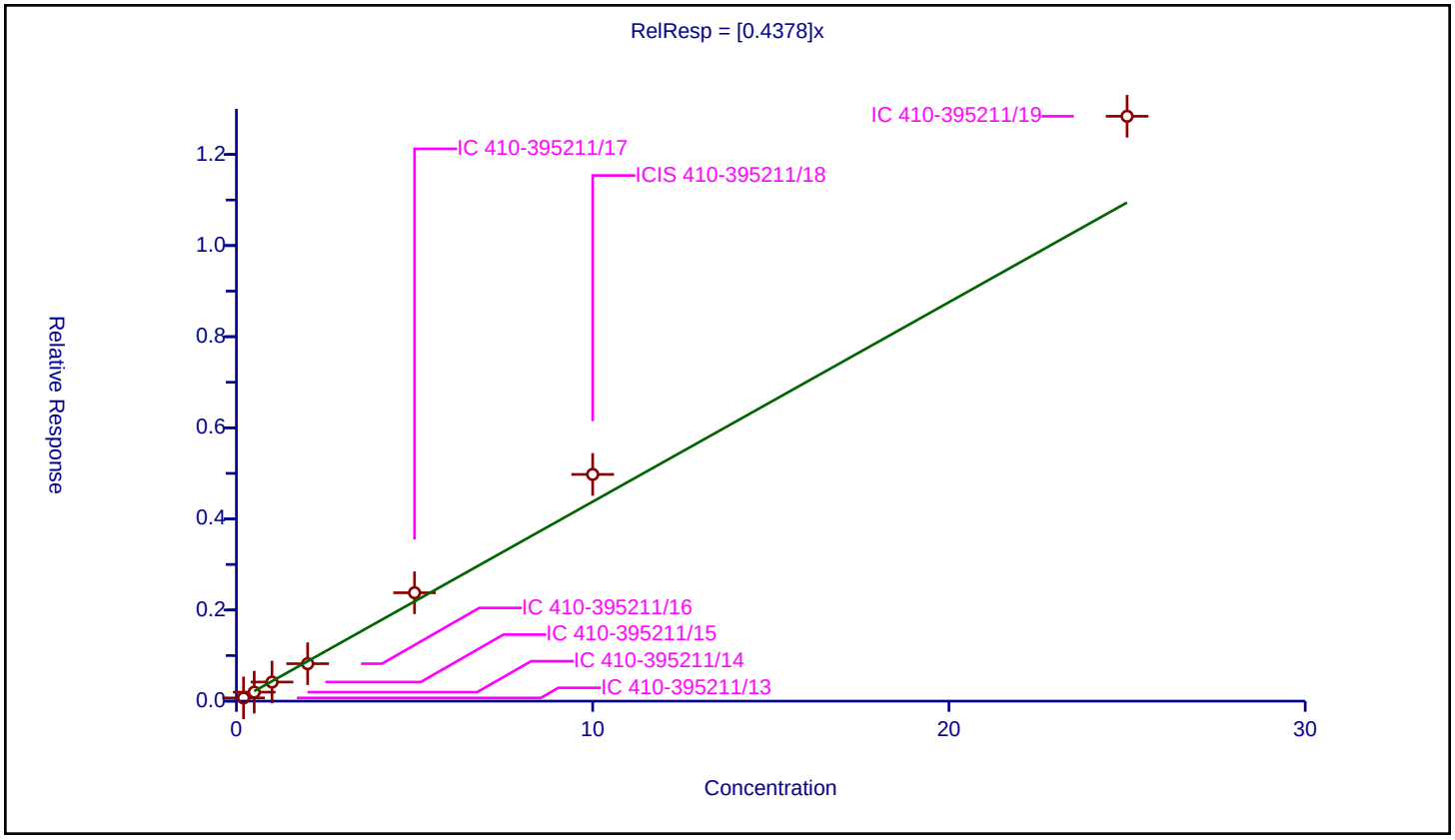
Curve Coefficients

Intercept:	0
Slope:	0.4378

Error Coefficients

Standard Error:	1180000
Relative Standard Error:	13.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.070627	10.0	1874080.0	0.353133	Y
2	IC 410-395211/14	0.5	0.197443	10.0	1928405.0	0.394886	Y
3	IC 410-395211/15	1.0	0.418727	10.0	1932452.0	0.418727	Y
4	IC 410-395211/16	2.0	0.821779	10.0	1948504.0	0.41089	Y
5	IC 410-395211/17	5.0	2.379391	10.0	1954853.0	0.475878	Y
6	ICIS 410-395211/18	10.0	4.976375	10.0	1990861.0	0.497637	Y
7	IC 410-395211/19	25.0	12.838179	10.0	2081007.0	0.513527	Y



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Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

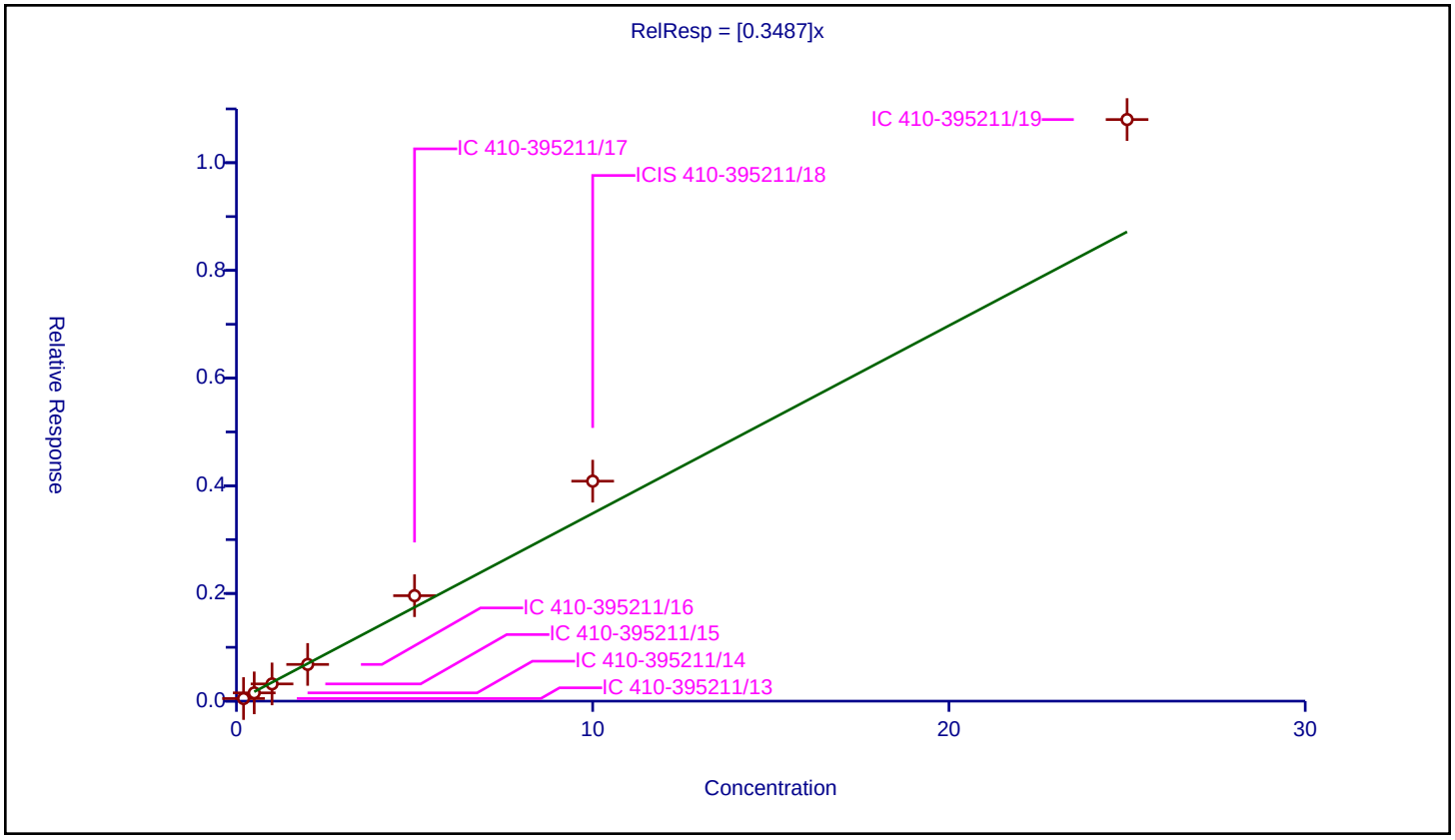
Curve Coefficients

Intercept:	0
Slope:	0.3487

Error Coefficients

Standard Error:	990000
Relative Standard Error:	19.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.961

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.048093	10.0	1874080.0	0.240465	Y
2	IC 410-395211/14	0.5	0.153515	10.0	1928405.0	0.307031	Y
3	IC 410-395211/15	1.0	0.320044	10.0	1932452.0	0.320044	Y
4	IC 410-395211/16	2.0	0.681897	10.0	1948504.0	0.340949	Y
5	IC 410-395211/17	5.0	1.958776	10.0	1954853.0	0.391755	Y
6	ICIS 410-395211/18	10.0	4.085946	10.0	1990861.0	0.408595	Y
7	IC 410-395211/19	25.0	10.801977	10.0	2081007.0	0.432079	Y



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Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

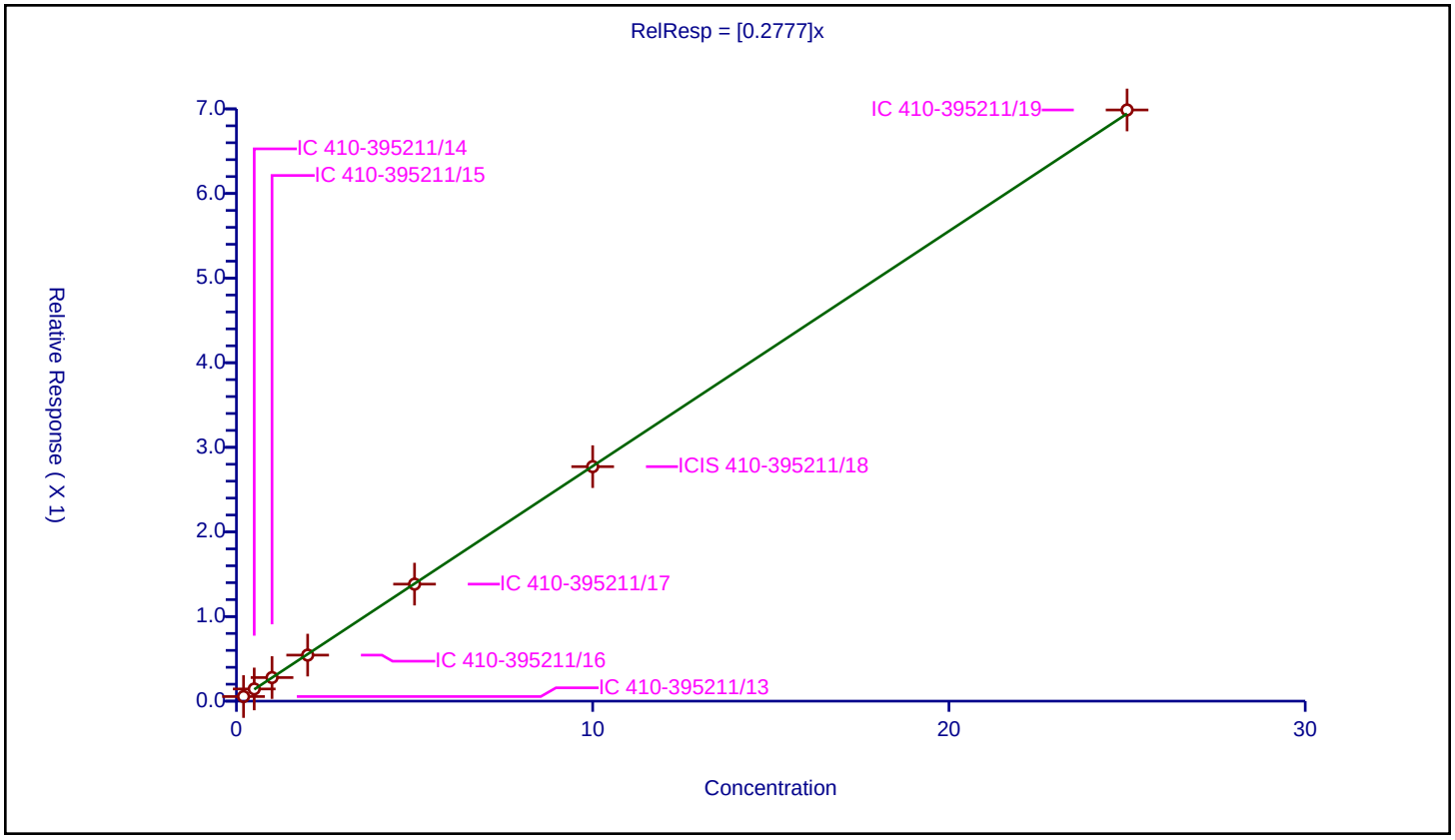
Curve Coefficients

Intercept:	0
Slope:	0.2777

Error Coefficients

Standard Error:	646000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.054373	10.0	1874080.0	0.271867	Y
2	IC 410-395211/14	0.5	0.14415	10.0	1928405.0	0.2883	Y
3	IC 410-395211/15	1.0	0.278734	10.0	1932452.0	0.278734	Y
4	IC 410-395211/16	2.0	0.544171	10.0	1948504.0	0.272086	Y
5	IC 410-395211/17	5.0	1.383025	10.0	1954853.0	0.276605	Y
6	ICIS 410-395211/18	10.0	2.771615	10.0	1990861.0	0.277161	Y
7	IC 410-395211/19	25.0	6.987415	10.0	2081007.0	0.279497	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

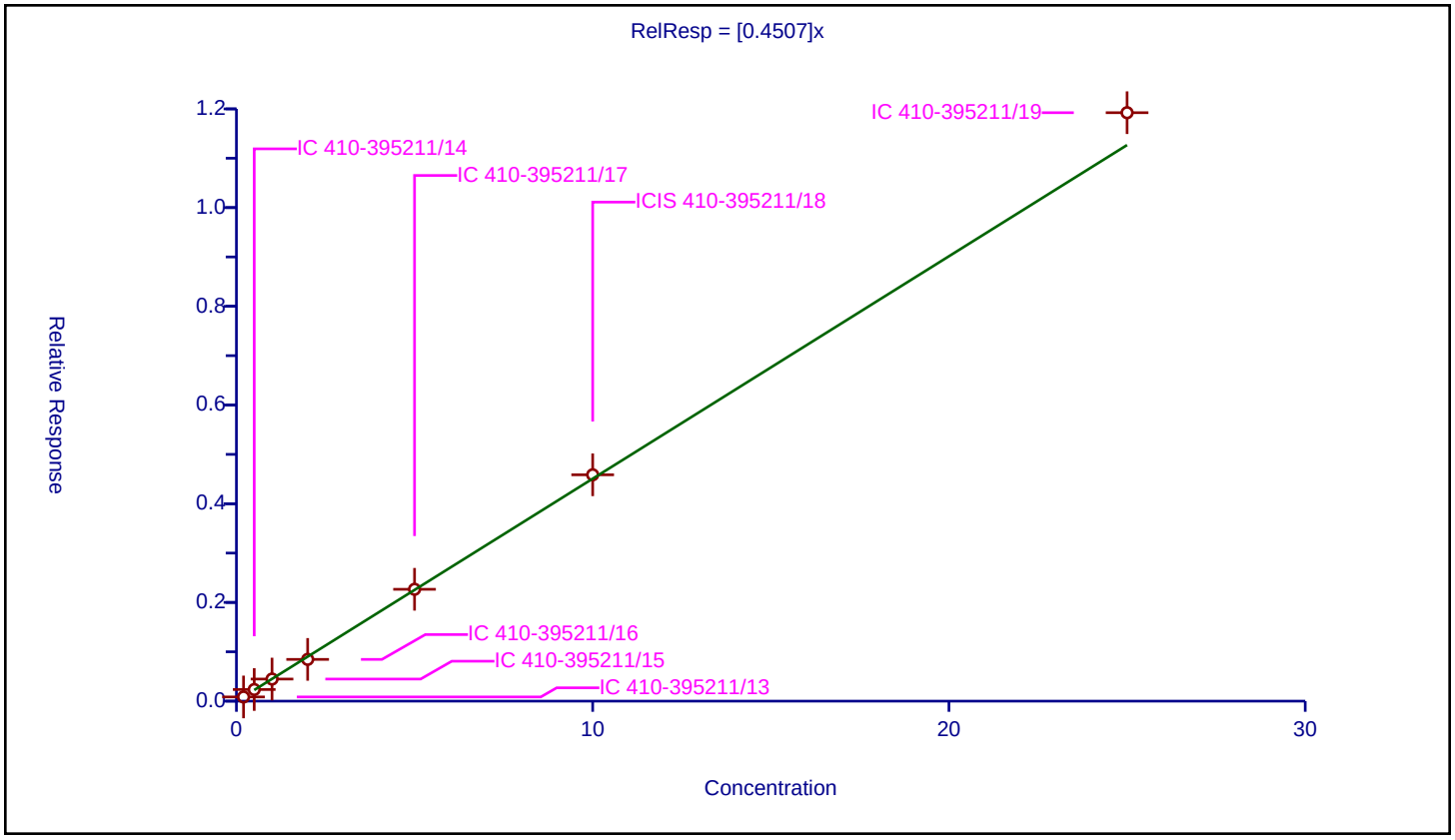
Curve Coefficients

Intercept:	0
Slope:	0.4507

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.084927	10.0	1874080.0	0.424635	Y
2	IC 410-395211/14	0.5	0.235464	10.0	1928405.0	0.470928	Y
3	IC 410-395211/15	1.0	0.447794	10.0	1932452.0	0.447794	Y
4	IC 410-395211/16	2.0	0.845639	10.0	1948504.0	0.422819	Y
5	IC 410-395211/17	5.0	2.266073	10.0	1954853.0	0.453215	Y
6	ICIS 410-395211/18	10.0	4.586382	10.0	1990861.0	0.458638	Y
7	IC 410-395211/19	25.0	11.922665	10.0	2081007.0	0.476907	Y



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Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

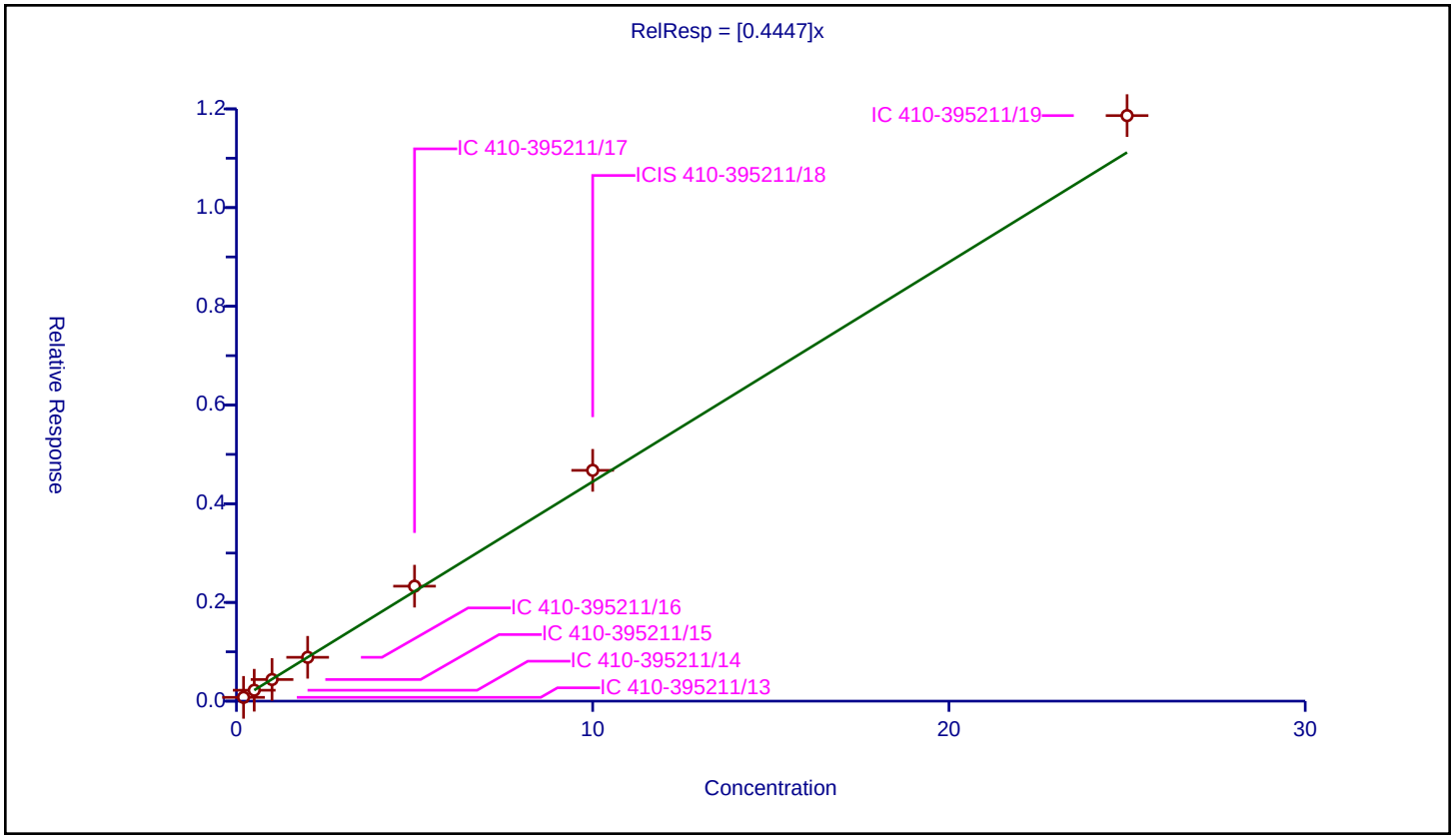
Curve Coefficients

Intercept:	0
Slope:	0.4447

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.076133	10.0	1874080.0	0.380667	Y
2	IC 410-395211/14	0.5	0.221146	10.0	1928405.0	0.442293	Y
3	IC 410-395211/15	1.0	0.43807	10.0	1932452.0	0.43807	Y
4	IC 410-395211/16	2.0	0.887866	10.0	1948504.0	0.443933	Y
5	IC 410-395211/17	5.0	2.32951	10.0	1954853.0	0.465902	Y
6	ICIS 410-395211/18	10.0	4.676218	10.0	1990861.0	0.467622	Y
7	IC 410-395211/19	25.0	11.863939	10.0	2081007.0	0.474558	Y



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Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

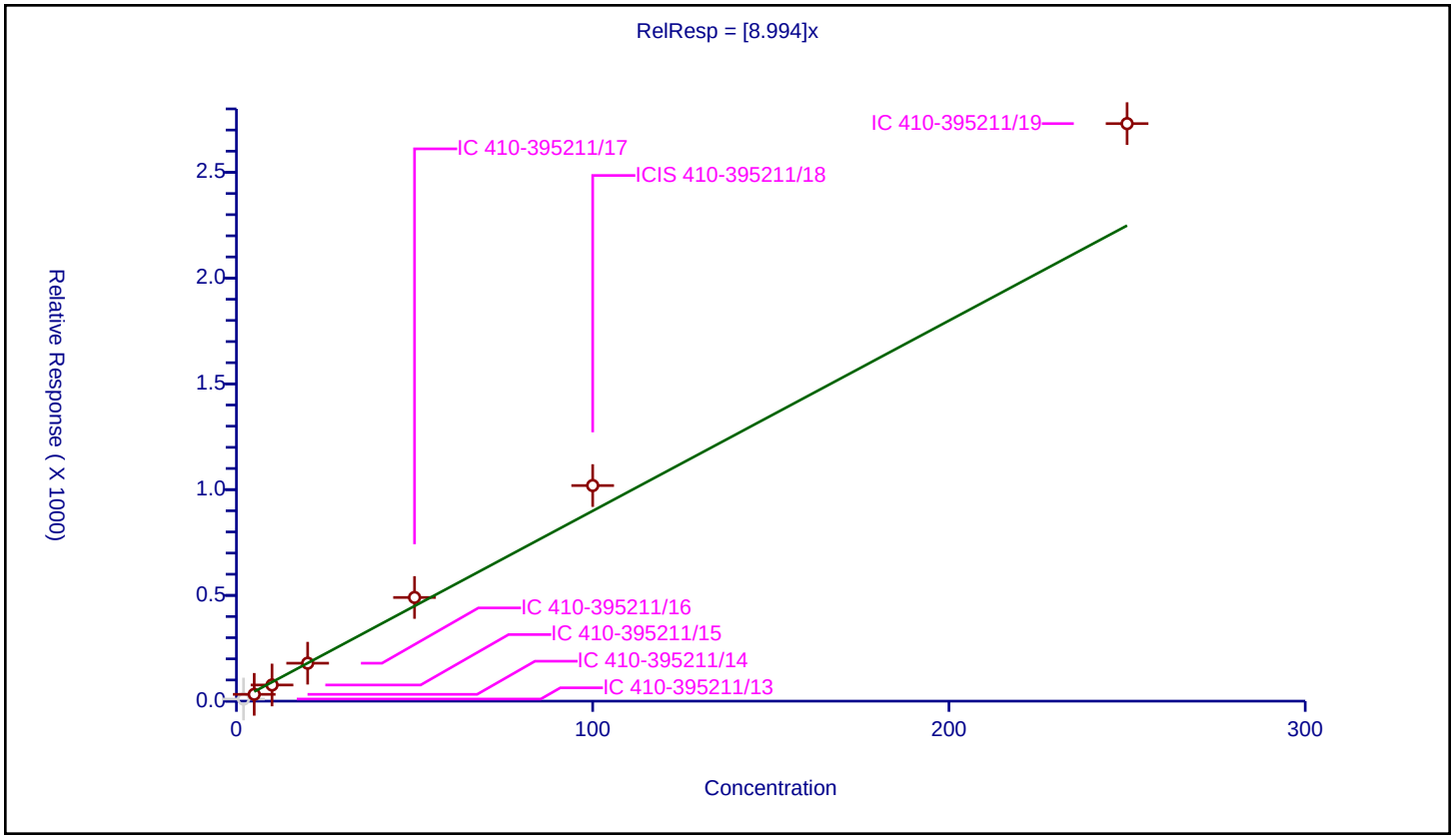
Curve Coefficients

Intercept:	0
Slope:	8.994

Error Coefficients

Standard Error:	4490000
Relative Standard Error:	18.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.959

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	2.0	9.986295	50.0	159799.0	4.993148	N
2	IC 410-395211/14	5.0	32.203961	50.0	176691.0	6.440792	Y
3	IC 410-395211/15	10.0	76.380954	50.0	161736.0	7.638095	Y
4	IC 410-395211/16	20.0	179.385328	50.0	164657.0	8.969266	Y
5	IC 410-395211/17	50.0	490.13305	50.0	167230.0	9.802661	Y
6	ICIS 410-395211/18	100.0	1019.2613	50.0	168052.0	10.192613	Y
7	IC 410-395211/19	250.0	2730.341149	50.0	170043.0	10.921365	Y



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Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

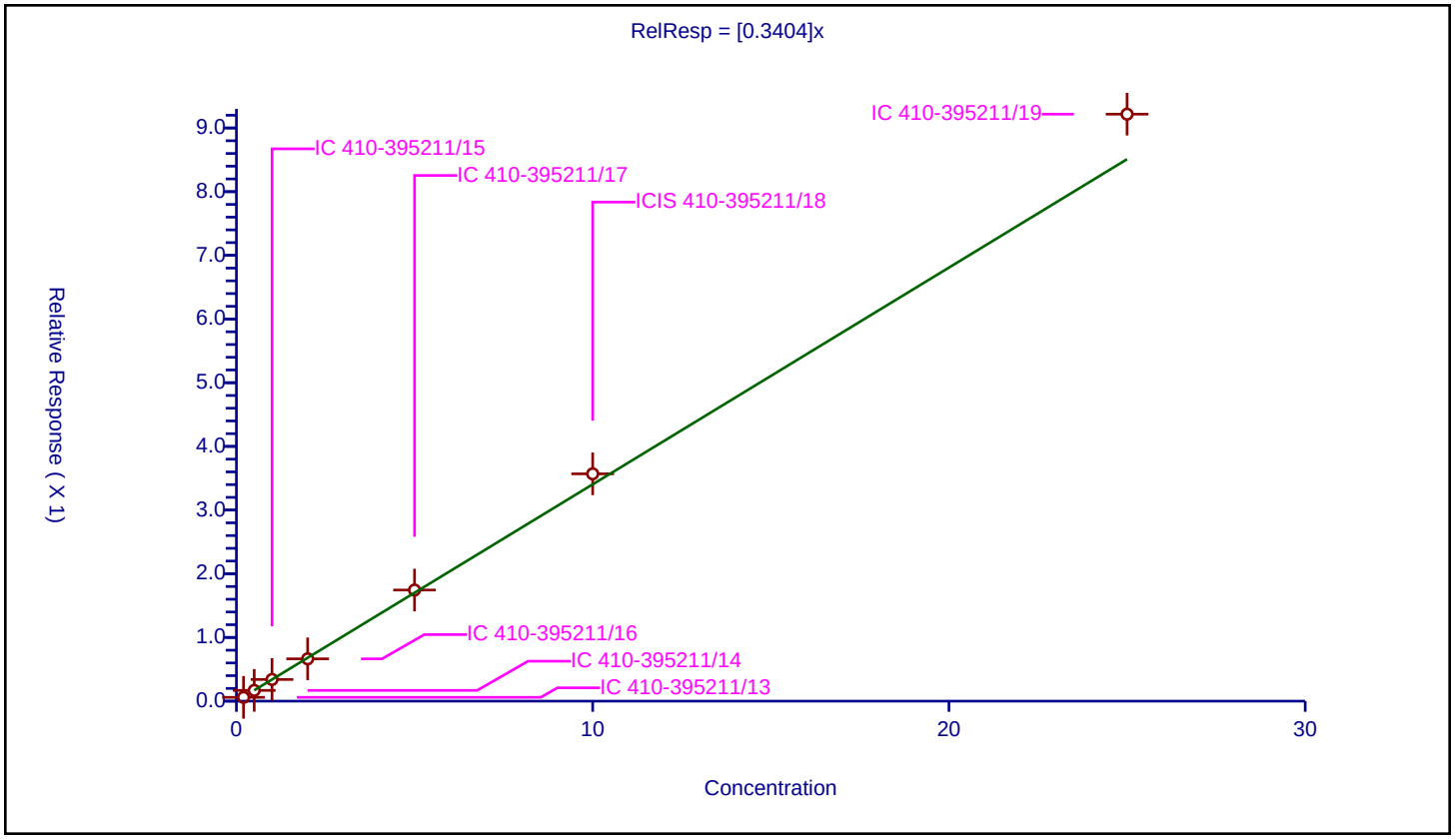
Curve Coefficients

Intercept:	0
Slope:	0.3404

Error Coefficients

Standard Error:	849000
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.059624	10.0	1874080.0	0.29812	Y
2	IC 410-395211/14	0.5	0.168761	10.0	1928405.0	0.337522	Y
3	IC 410-395211/15	1.0	0.340417	10.0	1932452.0	0.340417	Y
4	IC 410-395211/16	2.0	0.664284	10.0	1948504.0	0.332142	Y
5	IC 410-395211/17	5.0	1.744781	10.0	1954853.0	0.348956	Y
6	ICIS 410-395211/18	10.0	3.56942	10.0	1990861.0	0.356942	Y
7	IC 410-395211/19	25.0	9.217191	10.0	2081007.0	0.368688	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

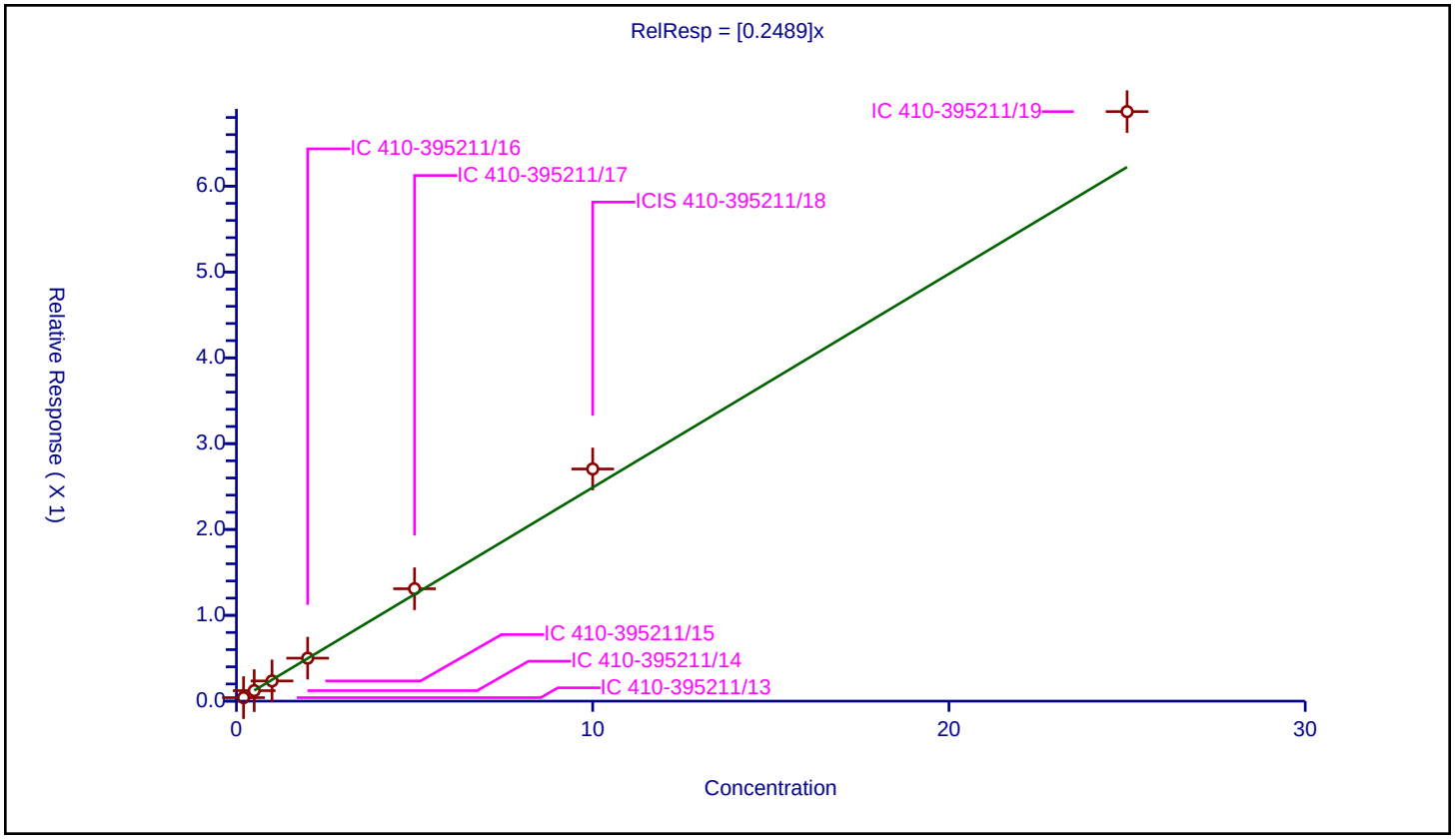
Curve Coefficients

Intercept:	0
Slope:	0.2489

Error Coefficients

Standard Error:	634000
Relative Standard Error:	9.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.040911	10.0	1874080.0	0.204554	Y
2	IC 410-395211/14	0.5	0.122479	10.0	1928405.0	0.244959	Y
3	IC 410-395211/15	1.0	0.235452	10.0	1932452.0	0.235452	Y
4	IC 410-395211/16	2.0	0.500517	10.0	1948504.0	0.250259	Y
5	IC 410-395211/17	5.0	1.309249	10.0	1954853.0	0.26185	Y
6	ICIS 410-395211/18	10.0	2.704594	10.0	1990861.0	0.270459	Y
7	IC 410-395211/19	25.0	6.868449	10.0	2081007.0	0.274738	Y



Calibration / 1-Chlorohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

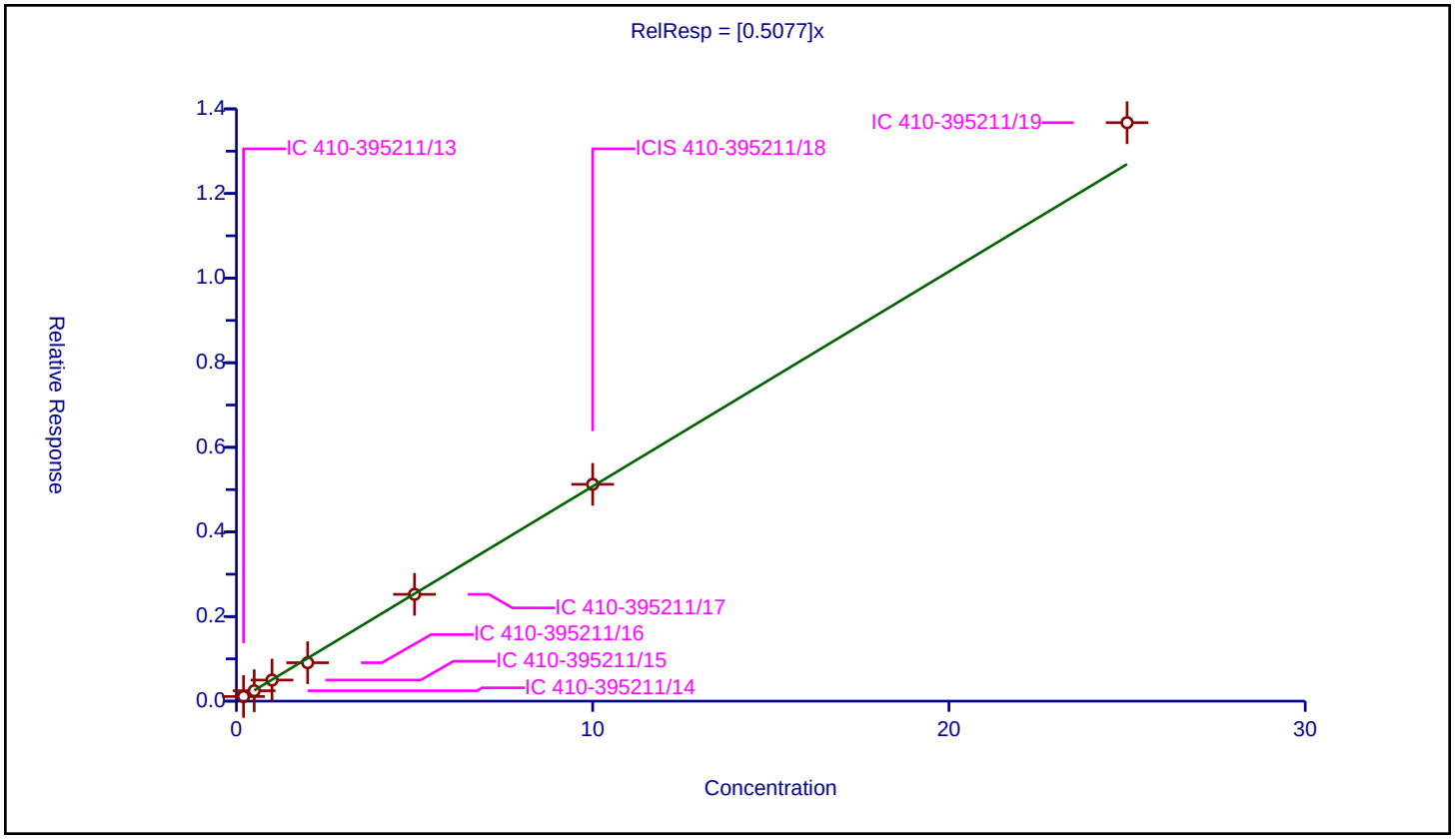
Curve Coefficients

Intercept:	0
Slope:	0.5077

Error Coefficients

Standard Error:	1250000
Relative Standard Error:	6.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.109094	10.0	1874080.0	0.545468	Y
2	IC 410-395211/14	0.5	0.245908	10.0	1928405.0	0.491816	Y
3	IC 410-395211/15	1.0	0.498434	10.0	1932452.0	0.498434	Y
4	IC 410-395211/16	2.0	0.908204	10.0	1948504.0	0.454102	Y
5	IC 410-395211/17	5.0	2.524502	10.0	1954853.0	0.5049	Y
6	ICIS 410-395211/18	10.0	5.125335	10.0	1990861.0	0.512534	Y
7	IC 410-395211/19	25.0	13.674769	10.0	2081007.0	0.546991	Y



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Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

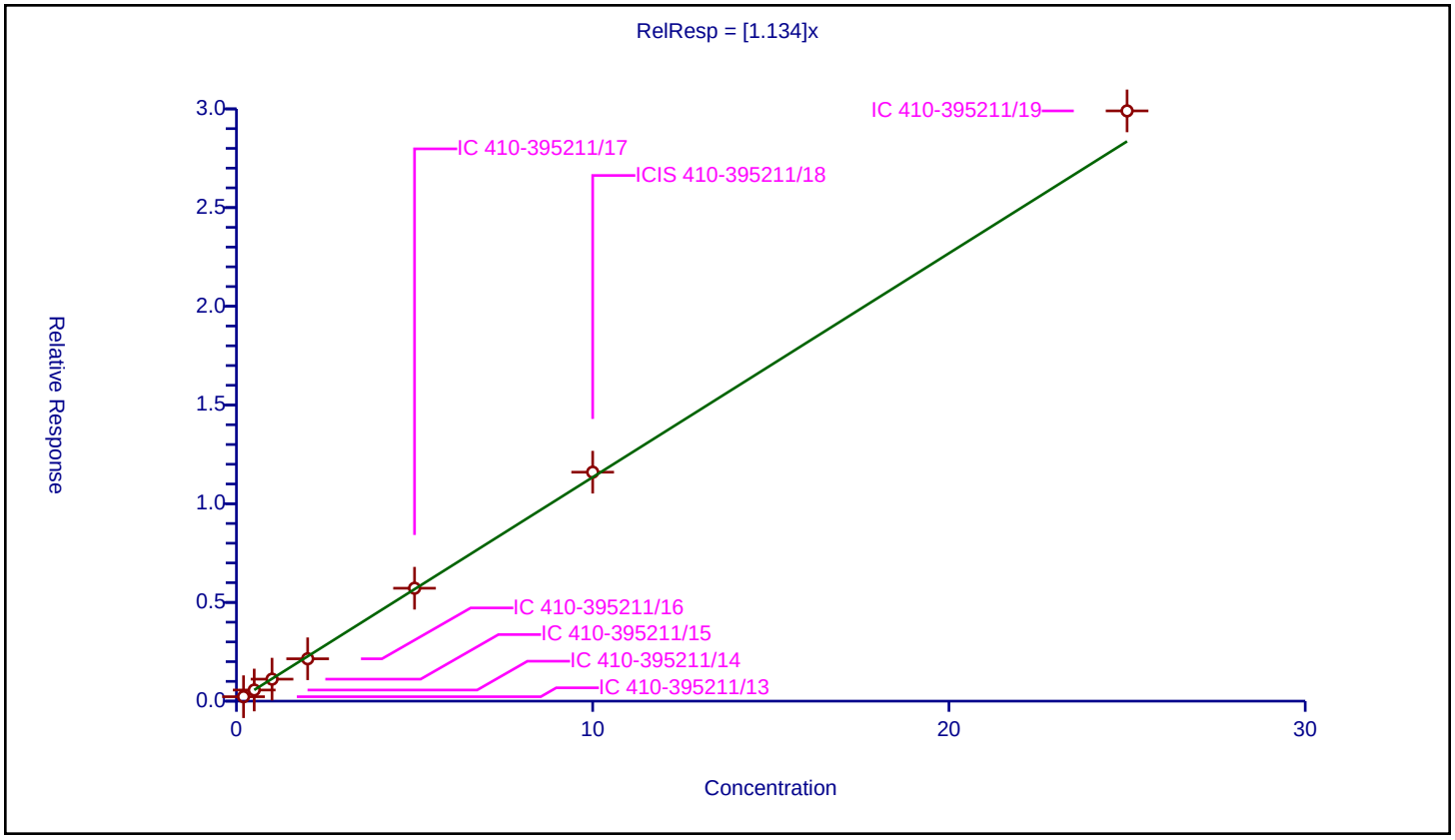
Curve Coefficients

Intercept:	0
Slope:	1.134

Error Coefficients

Standard Error:	2750000
Relative Standard Error:	3.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.225124	10.0	1874080.0	1.125619	Y
2	IC 410-395211/14	0.5	0.563808	10.0	1928405.0	1.127616	Y
3	IC 410-395211/15	1.0	1.114201	10.0	1932452.0	1.114201	Y
4	IC 410-395211/16	2.0	2.145579	10.0	1948504.0	1.07279	Y
5	IC 410-395211/17	5.0	5.719898	10.0	1954853.0	1.14398	Y
6	ICIS 410-395211/18	10.0	11.598419	10.0	1990861.0	1.159842	Y
7	IC 410-395211/19	25.0	29.899001	10.0	2081007.0	1.19596	Y



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Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

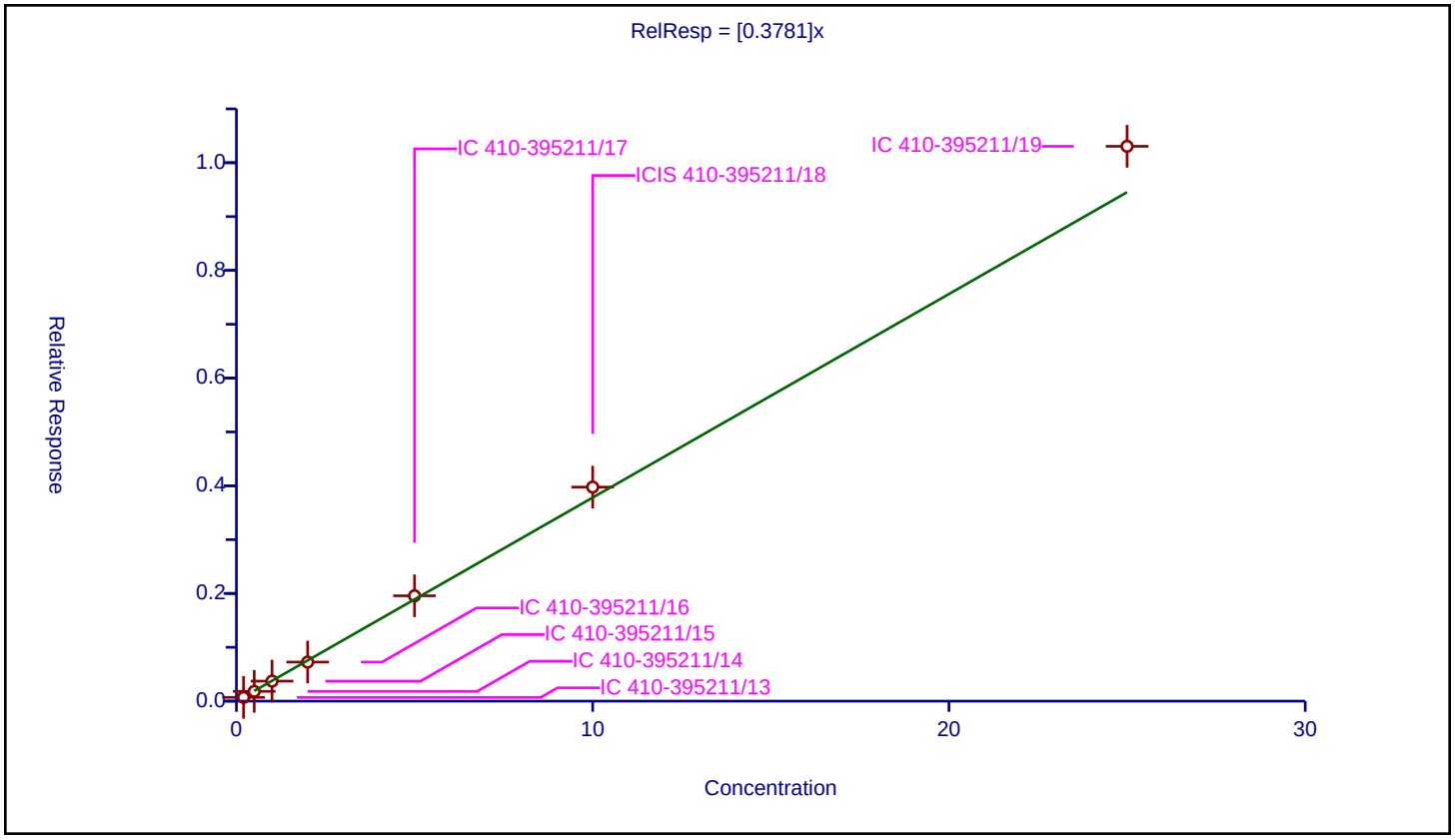
Curve Coefficients

Intercept:	0
Slope:	0.3781

Error Coefficients

Standard Error:	949000
Relative Standard Error:	6.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.06949	10.0	1874080.0	0.34745	Y
2	IC 410-395211/14	0.5	0.181819	10.0	1928405.0	0.363637	Y
3	IC 410-395211/15	1.0	0.371606	10.0	1932452.0	0.371606	Y
4	IC 410-395211/16	2.0	0.725598	10.0	1948504.0	0.362799	Y
5	IC 410-395211/17	5.0	1.956715	10.0	1954853.0	0.391343	Y
6	ICIS 410-395211/18	10.0	3.975566	10.0	1990861.0	0.397557	Y
7	IC 410-395211/19	25.0	10.305073	10.0	2081007.0	0.412203	Y



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Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

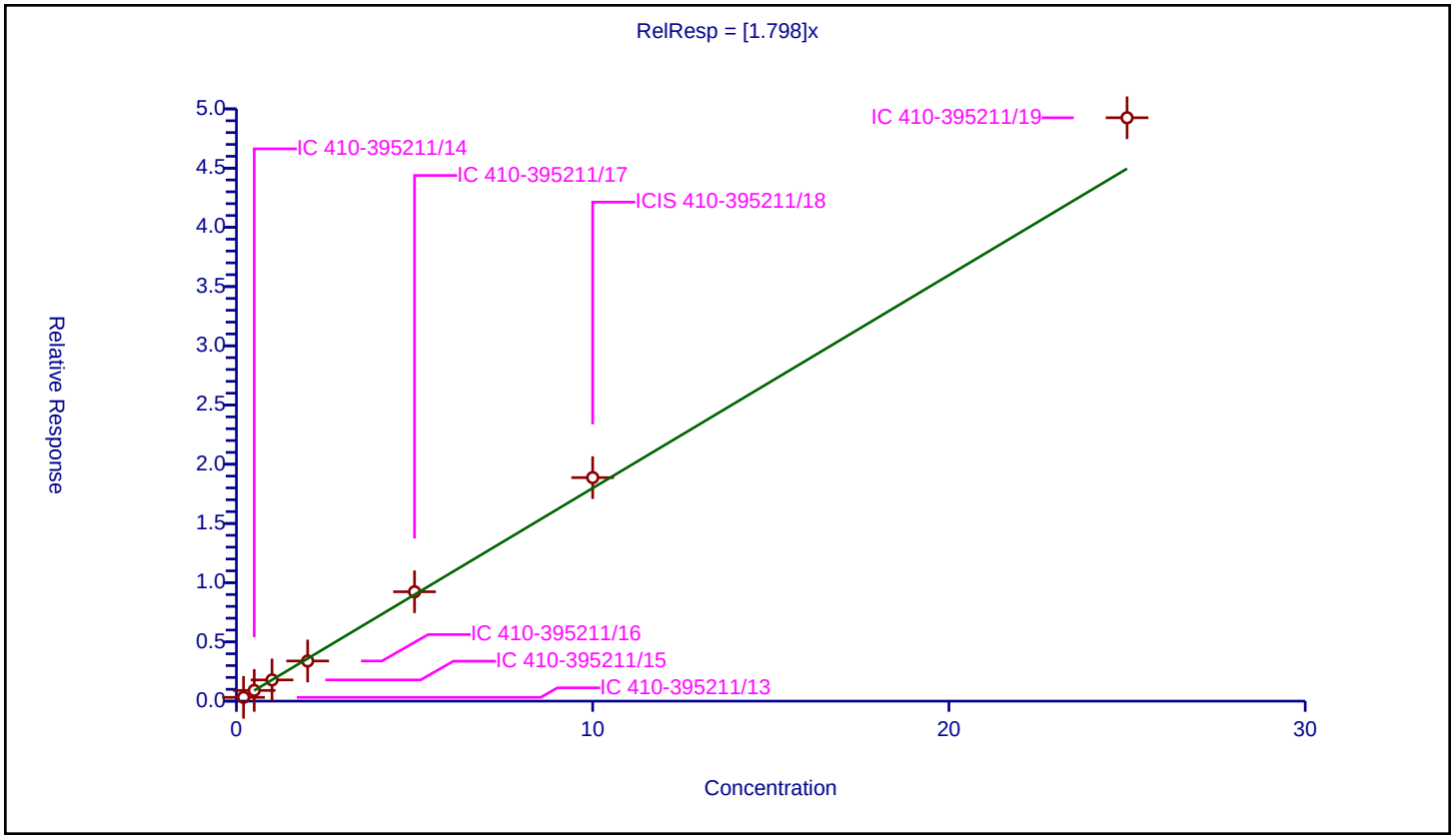
Curve Coefficients

Intercept:	0
Slope:	1.798

Error Coefficients

Standard Error:	4530000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.317446	10.0	1874080.0	1.587232	Y
2	IC 410-395211/14	0.5	0.906101	10.0	1928405.0	1.812202	Y
3	IC 410-395211/15	1.0	1.790187	10.0	1932452.0	1.790187	Y
4	IC 410-395211/16	2.0	3.38902	10.0	1948504.0	1.69451	Y
5	IC 410-395211/17	5.0	9.233866	10.0	1954853.0	1.846773	Y
6	ICIS 410-395211/18	10.0	18.869901	10.0	1990861.0	1.88699	Y
7	IC 410-395211/19	25.0	49.250171	10.0	2081007.0	1.970007	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

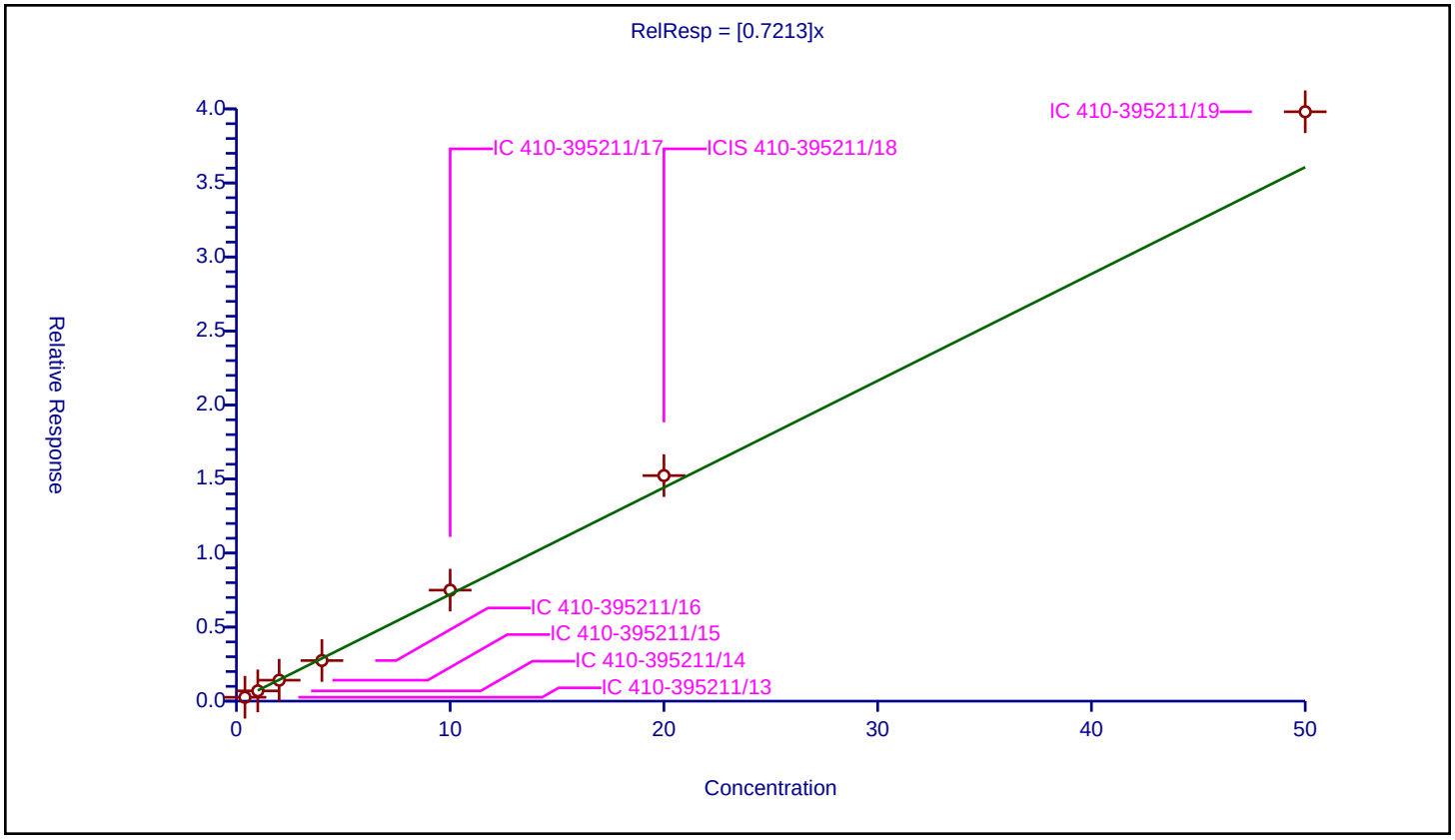
Curve Coefficients

Intercept:	0
Slope:	0.7213

Error Coefficients

Standard Error:	3660000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.4	0.261723	10.0	1874080.0	0.654308	Y
2	IC 410-395211/14	1.0	0.693703	10.0	1928405.0	0.693703	Y
3	IC 410-395211/15	2.0	1.414943	10.0	1932452.0	0.707472	Y
4	IC 410-395211/16	4.0	2.743217	10.0	1948504.0	0.685804	Y
5	IC 410-395211/17	10.0	7.497142	10.0	1954853.0	0.749714	Y
6	ICIS 410-395211/18	20.0	15.233826	10.0	1990861.0	0.761691	Y
7	IC 410-395211/19	50.0	39.805527	10.0	2081007.0	0.796111	Y



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Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

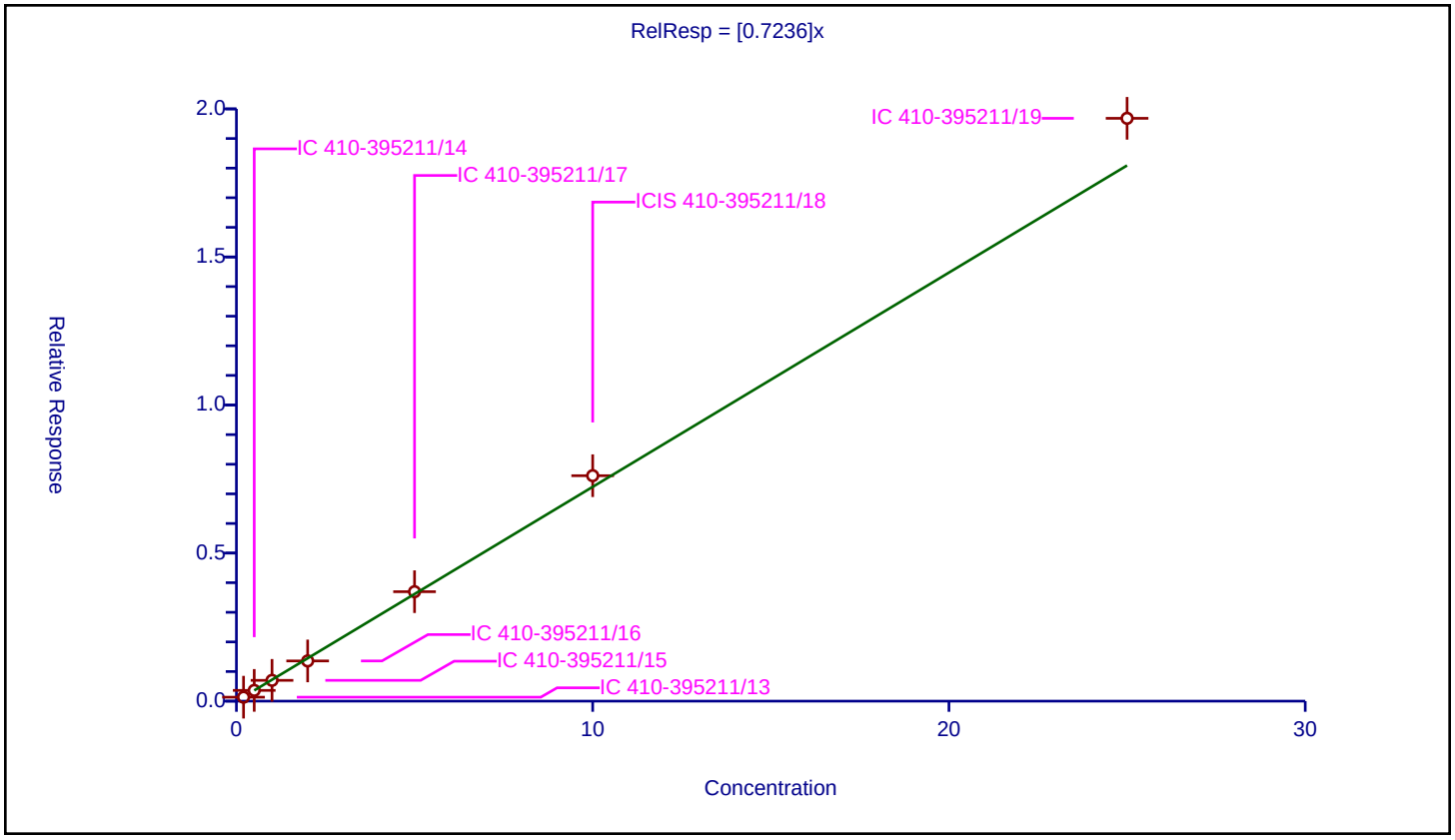
Curve Coefficients

Intercept:	0
Slope:	0.7236

Error Coefficients

Standard Error:	1810000
Relative Standard Error:	5.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.133975	10.0	1874080.0	0.669875	Y
2	IC 410-395211/14	0.5	0.363337	10.0	1928405.0	0.726673	Y
3	IC 410-395211/15	1.0	0.701818	10.0	1932452.0	0.701818	Y
4	IC 410-395211/16	2.0	1.358037	10.0	1948504.0	0.679018	Y
5	IC 410-395211/17	5.0	3.695782	10.0	1954853.0	0.739156	Y
6	ICIS 410-395211/18	10.0	7.613239	10.0	1990861.0	0.761324	Y
7	IC 410-395211/19	25.0	19.681313	10.0	2081007.0	0.787253	Y



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Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

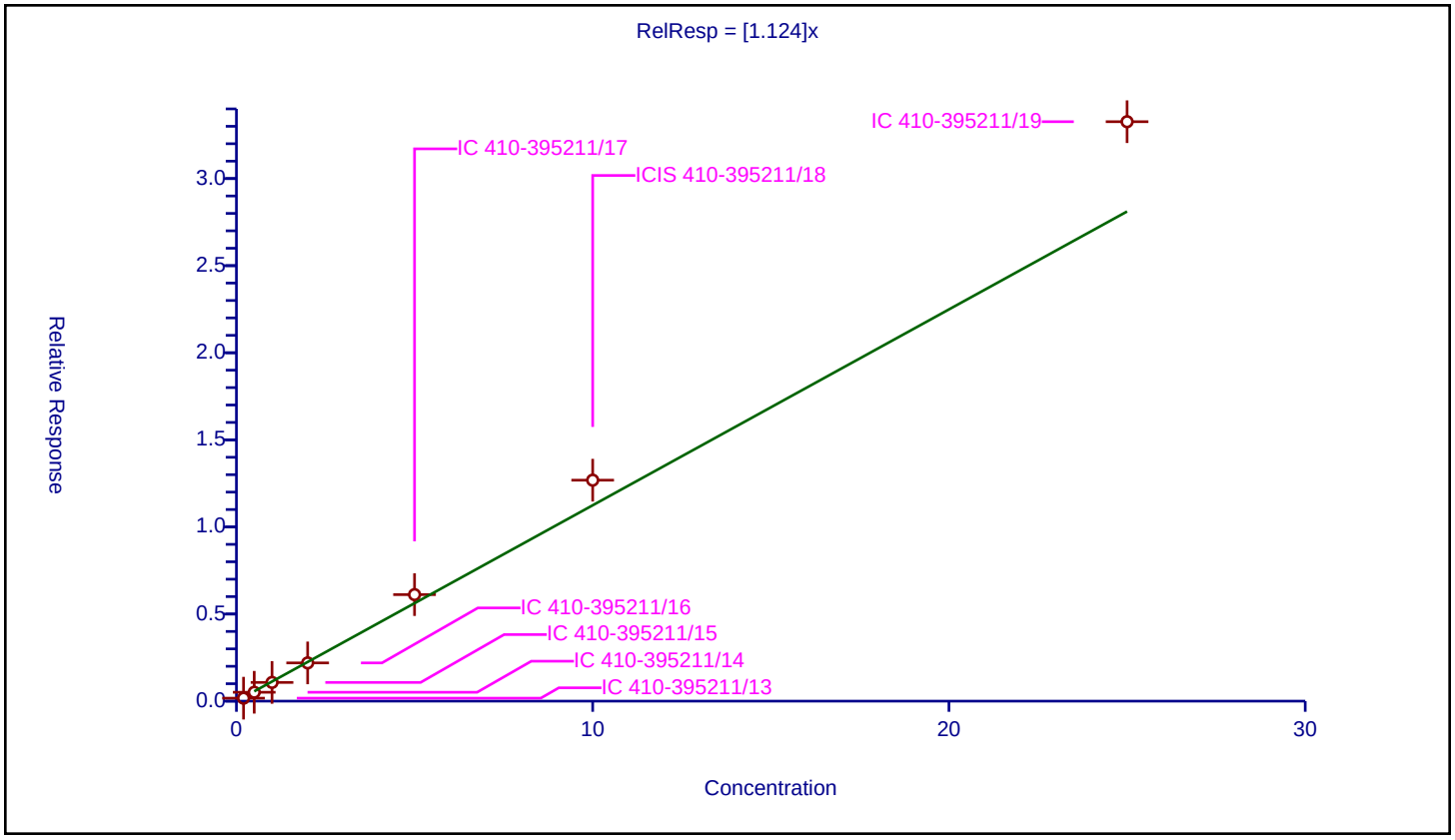
Curve Coefficients

Intercept:	0
Slope:	1.124

Error Coefficients

Standard Error:	3050000
Relative Standard Error:	14.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.17106	10.0	1874080.0	0.8553	Y
2	IC 410-395211/14	0.5	0.510655	10.0	1928405.0	1.02131	Y
3	IC 410-395211/15	1.0	1.074133	10.0	1932452.0	1.074133	Y
4	IC 410-395211/16	2.0	2.195643	10.0	1948504.0	1.097822	Y
5	IC 410-395211/17	5.0	6.114813	10.0	1954853.0	1.222963	Y
6	ICIS 410-395211/18	10.0	12.685873	10.0	1990861.0	1.268587	Y
7	IC 410-395211/19	25.0	33.265169	10.0	2081007.0	1.330607	Y



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Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

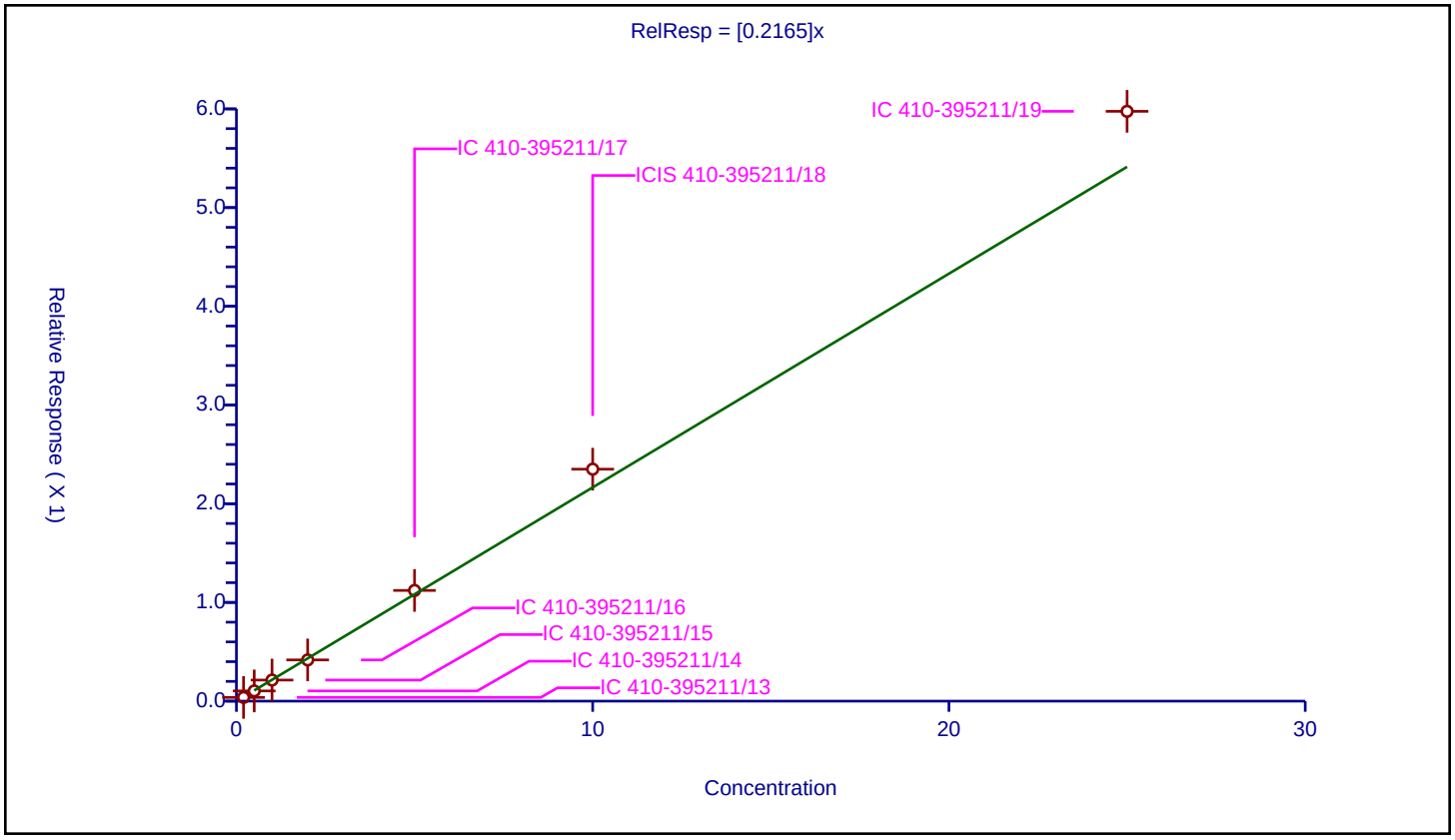
Curve Coefficients

Intercept:	0
Slope:	0.2165

Error Coefficients

Standard Error:	551000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.037645	10.0	1874080.0	0.188226	Y
2	IC 410-395211/14	0.5	0.103355	10.0	1928405.0	0.20671	Y
3	IC 410-395211/15	1.0	0.213661	10.0	1932452.0	0.213661	Y
4	IC 410-395211/16	2.0	0.417495	10.0	1948504.0	0.208747	Y
5	IC 410-395211/17	5.0	1.121527	10.0	1954853.0	0.224305	Y
6	ICIS 410-395211/18	10.0	2.350084	10.0	1990861.0	0.235008	Y
7	IC 410-395211/19	25.0	5.975559	10.0	2081007.0	0.239022	Y



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Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

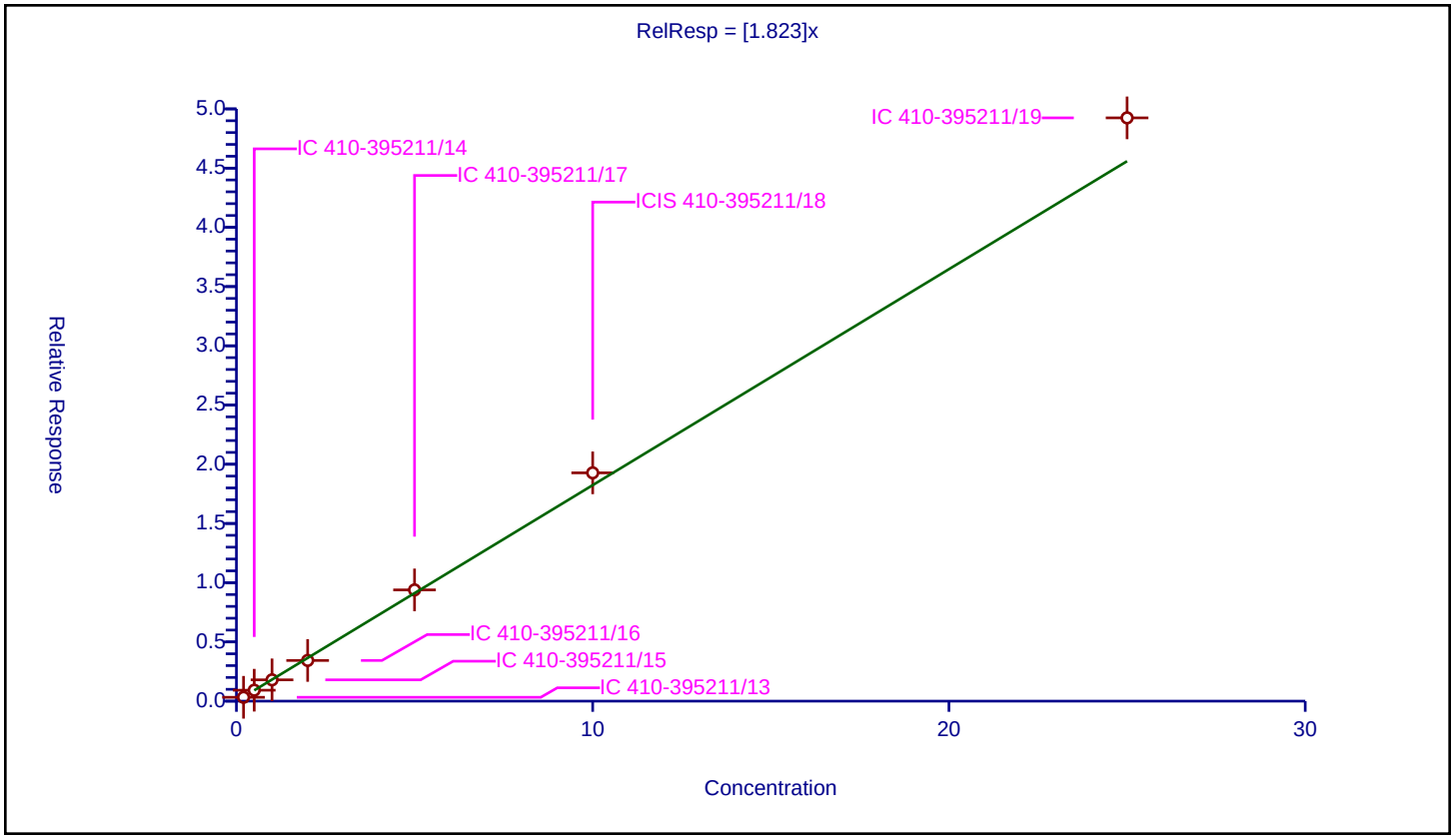
Curve Coefficients

Intercept:	0
Slope:	1.823

Error Coefficients

Standard Error:	4540000
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.32528	10.0	1874080.0	1.626398	Y
2	IC 410-395211/14	0.5	0.923266	10.0	1928405.0	1.846531	Y
3	IC 410-395211/15	1.0	1.797908	10.0	1932452.0	1.797908	Y
4	IC 410-395211/16	2.0	3.434697	10.0	1948504.0	1.717348	Y
5	IC 410-395211/17	5.0	9.390982	10.0	1954853.0	1.878196	Y
6	ICIS 410-395211/18	10.0	19.273922	10.0	1990861.0	1.927392	Y
7	IC 410-395211/19	25.0	49.24265	10.0	2081007.0	1.969706	Y



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Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

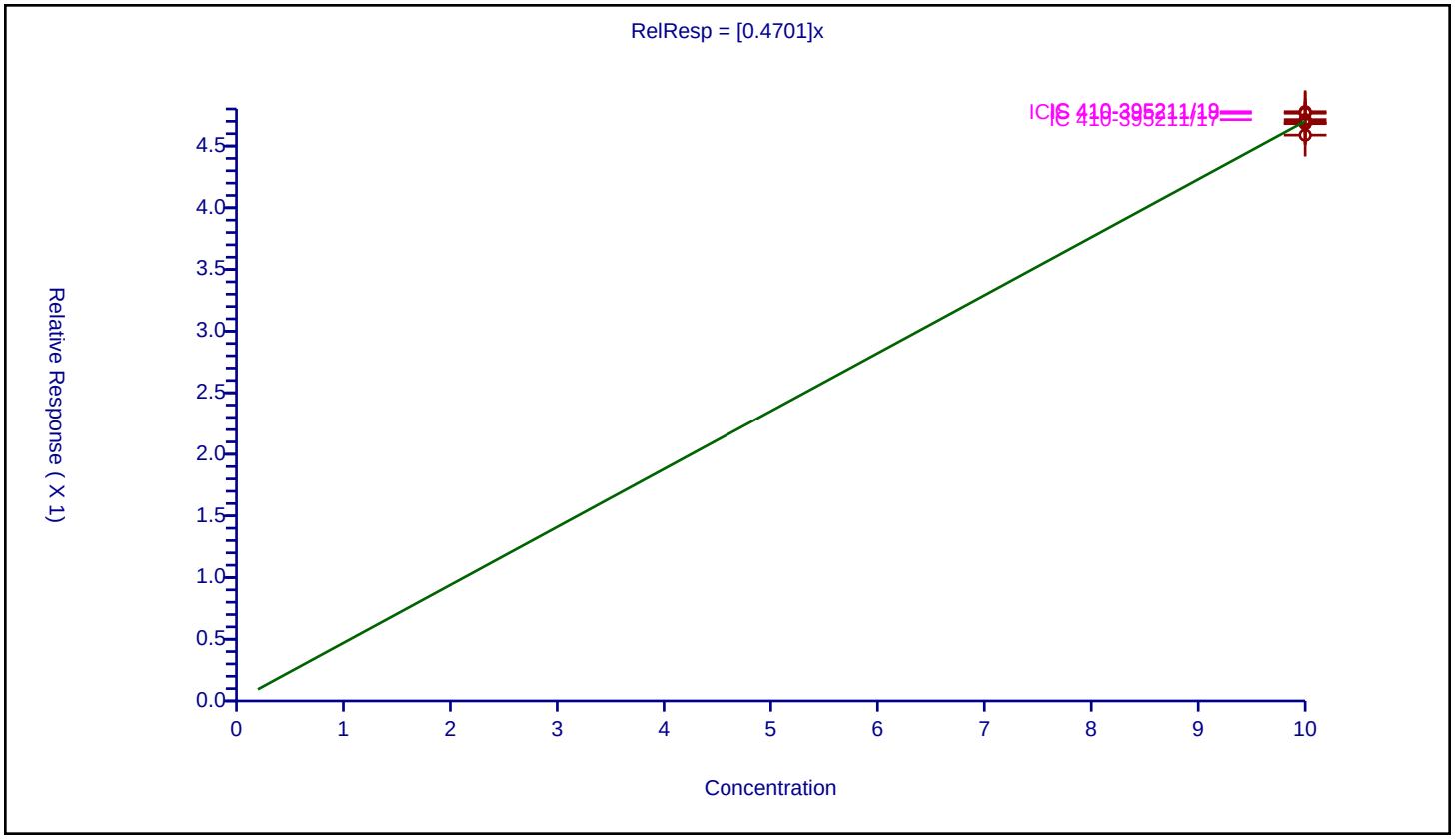
Curve Coefficients

Intercept:	0
Slope:	0.4701

Error Coefficients

Standard Error:	996000
Relative Standard Error:	1.3
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	10.0	4.588555	10.0	1874080.0	0.458856	Y
2	IC 410-395211/14	10.0	4.68104	10.0	1928405.0	0.468104	Y
3	IC 410-395211/15	10.0	4.685953	10.0	1932452.0	0.468595	Y
4	IC 410-395211/16	10.0	4.693031	10.0	1948504.0	0.469303	Y
5	IC 410-395211/17	10.0	4.713797	10.0	1954853.0	0.47138	Y
6	ICIS 410-395211/18	10.0	4.765586	10.0	1990861.0	0.476559	Y
7	IC 410-395211/19	10.0	4.777894	10.0	2081007.0	0.477789	Y



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Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

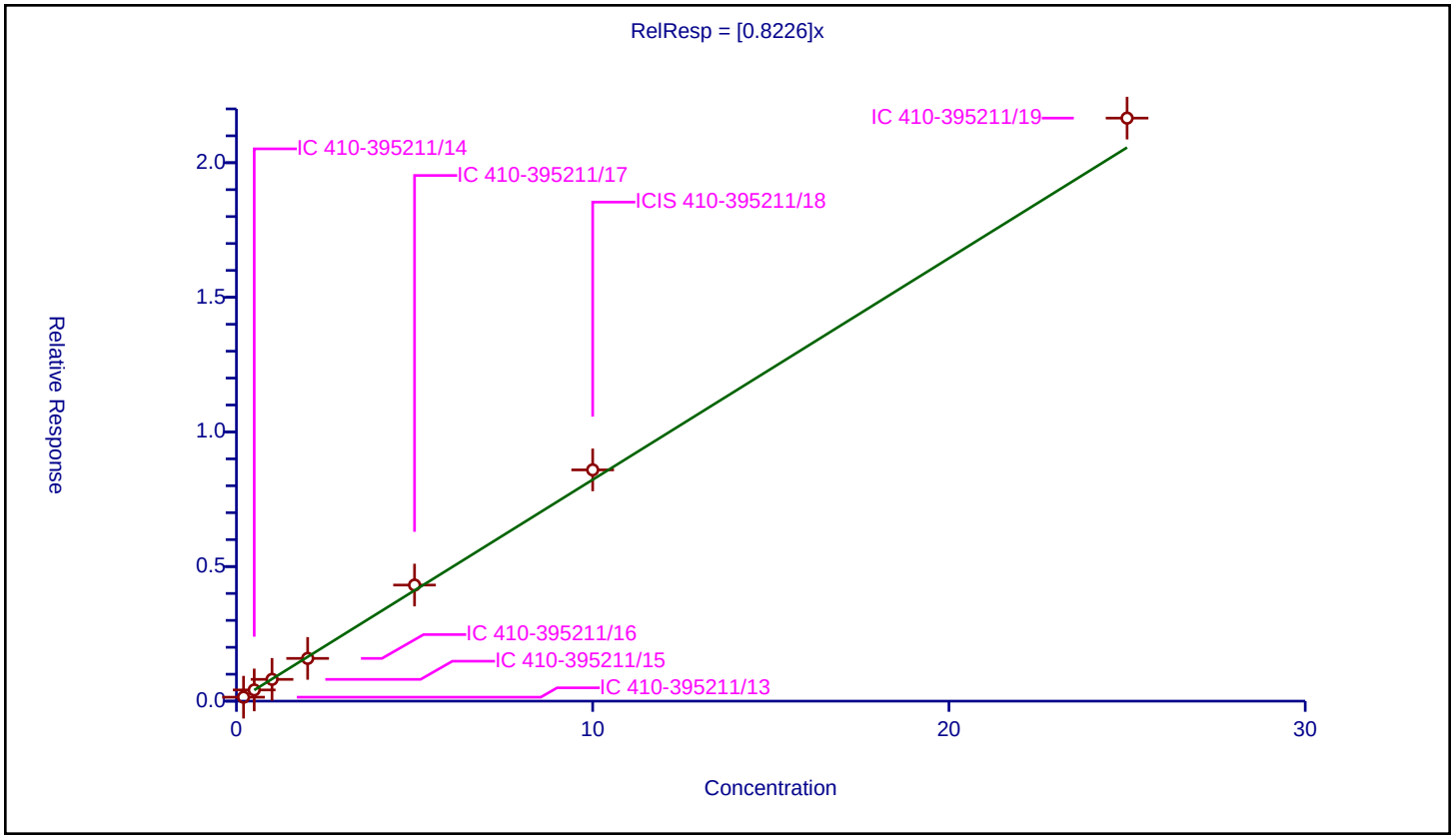
Curve Coefficients

Intercept:	0
Slope:	0.8226

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.14722	10.0	1118395.0	0.736099	Y
2	IC 410-395211/14	0.5	0.416089	10.0	1161459.0	0.832177	Y
3	IC 410-395211/15	1.0	0.808815	10.0	1176004.0	0.808815	Y
4	IC 410-395211/16	2.0	1.587443	10.0	1187709.0	0.793721	Y
5	IC 410-395211/17	5.0	4.311715	10.0	1170924.0	0.862343	Y
6	ICIS 410-395211/18	10.0	8.590234	10.0	1214109.0	0.859023	Y
7	IC 410-395211/19	25.0	21.657455	10.0	1273416.0	0.866298	Y



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Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

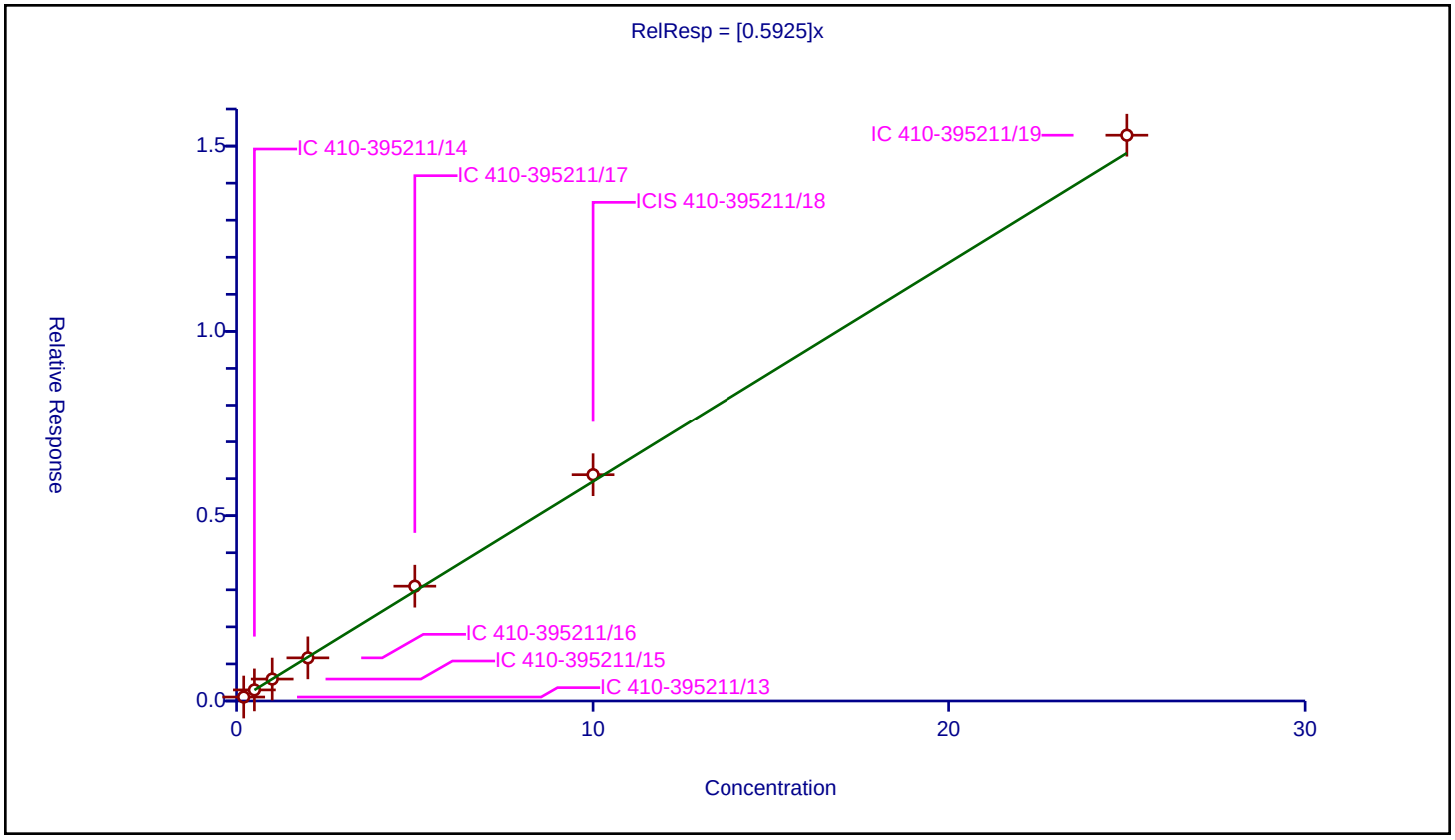
Curve Coefficients

Intercept:	0
Slope:	0.5925

Error Coefficients

Standard Error:	866000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.106698	10.0	1118395.0	0.533488	Y
2	IC 410-395211/14	0.5	0.29902	10.0	1161459.0	0.598041	Y
3	IC 410-395211/15	1.0	0.592158	10.0	1176004.0	0.592158	Y
4	IC 410-395211/16	2.0	1.163526	10.0	1187709.0	0.581763	Y
5	IC 410-395211/17	5.0	3.097947	10.0	1170924.0	0.619589	Y
6	ICIS 410-395211/18	10.0	6.106033	10.0	1214109.0	0.610603	Y
7	IC 410-395211/19	25.0	15.293737	10.0	1273416.0	0.611749	Y



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Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

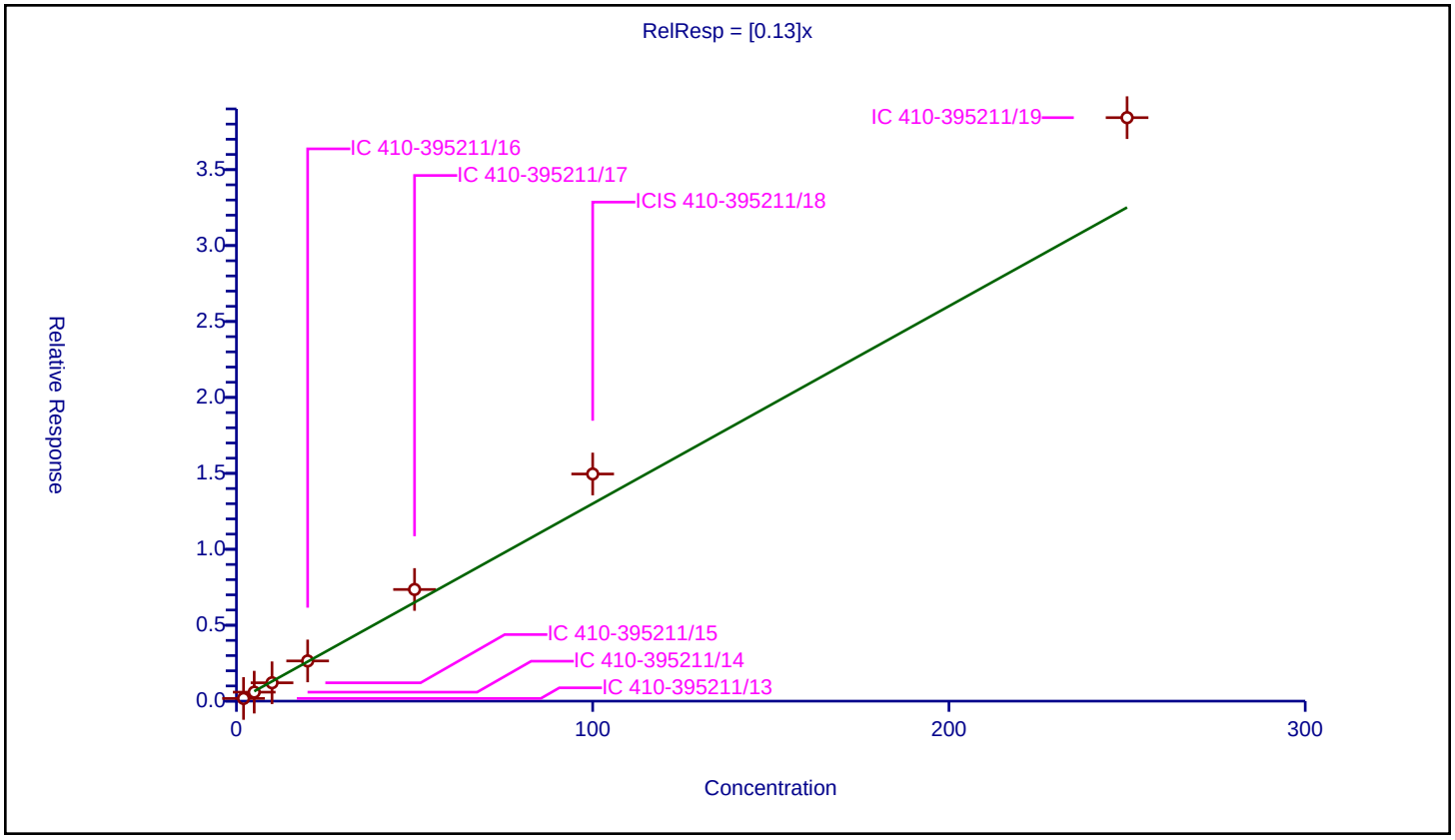
Curve Coefficients

Intercept:	0
Slope:	0.13

Error Coefficients

Standard Error:	2160000
Relative Standard Error:	17.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	2.0	0.176664	10.0	1118395.0	0.088332	Y
2	IC 410-395211/14	5.0	0.591454	10.0	1161459.0	0.118291	Y
3	IC 410-395211/15	10.0	1.209953	10.0	1176004.0	0.120995	Y
4	IC 410-395211/16	20.0	2.647947	10.0	1187709.0	0.132397	Y
5	IC 410-395211/17	50.0	7.352467	10.0	1170924.0	0.147049	Y
6	ICIS 410-395211/18	100.0	14.958517	10.0	1214109.0	0.149585	Y
7	IC 410-395211/19	250.0	38.422362	10.0	1273416.0	0.153689	Y



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Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

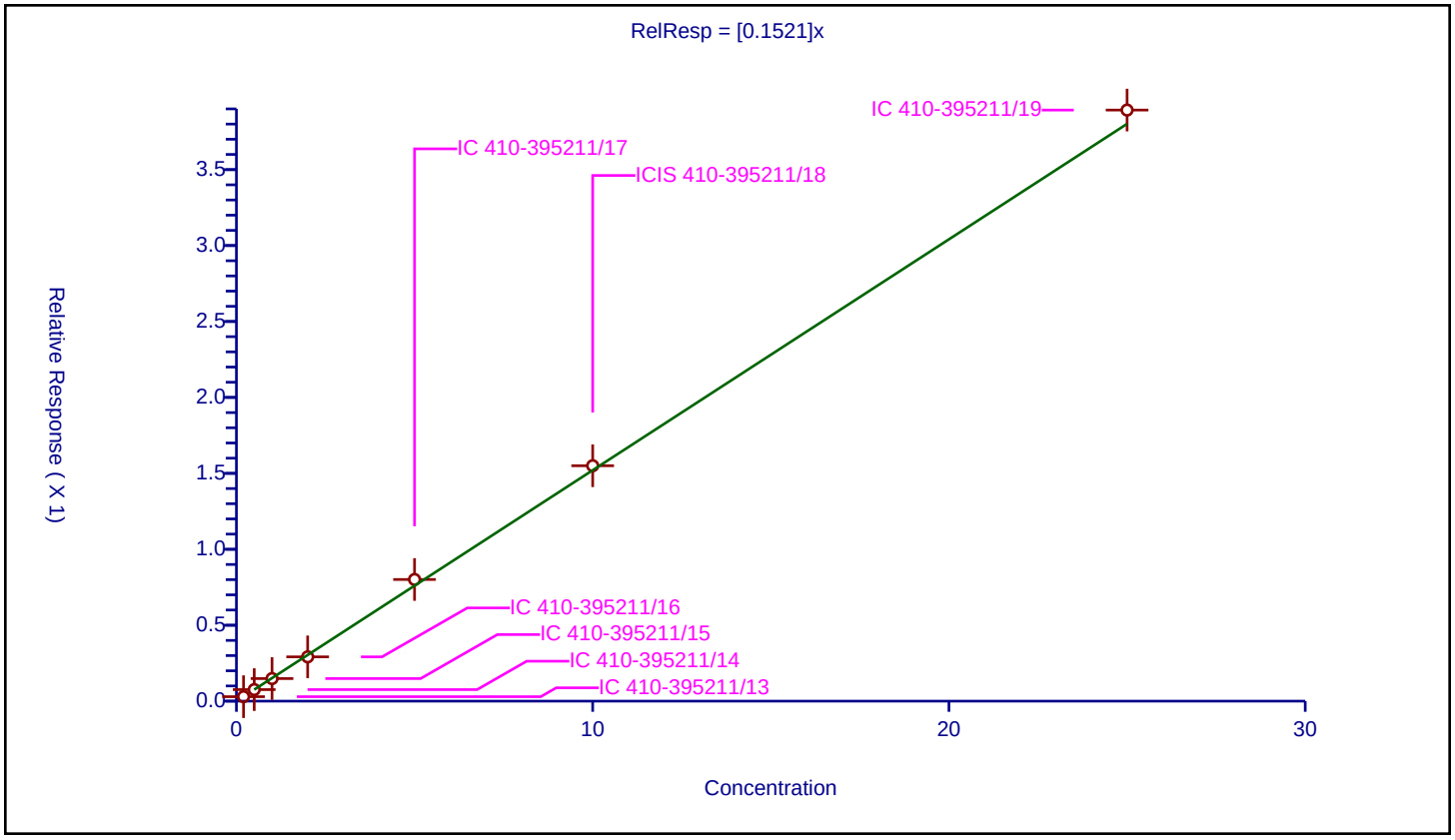
Curve Coefficients

Intercept:	0
Slope:	0.1521

Error Coefficients

Standard Error:	220000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.029399	10.0	1118395.0	0.146996	Y
2	IC 410-395211/14	0.5	0.076008	10.0	1161459.0	0.152016	Y
3	IC 410-395211/15	1.0	0.148622	10.0	1176004.0	0.148622	Y
4	IC 410-395211/16	2.0	0.291646	10.0	1187709.0	0.145823	Y
5	IC 410-395211/17	5.0	0.801111	10.0	1170924.0	0.160222	Y
6	ICIS 410-395211/18	10.0	1.55019	10.0	1214109.0	0.155019	Y
7	IC 410-395211/19	25.0	3.892232	10.0	1273416.0	0.155689	Y



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Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

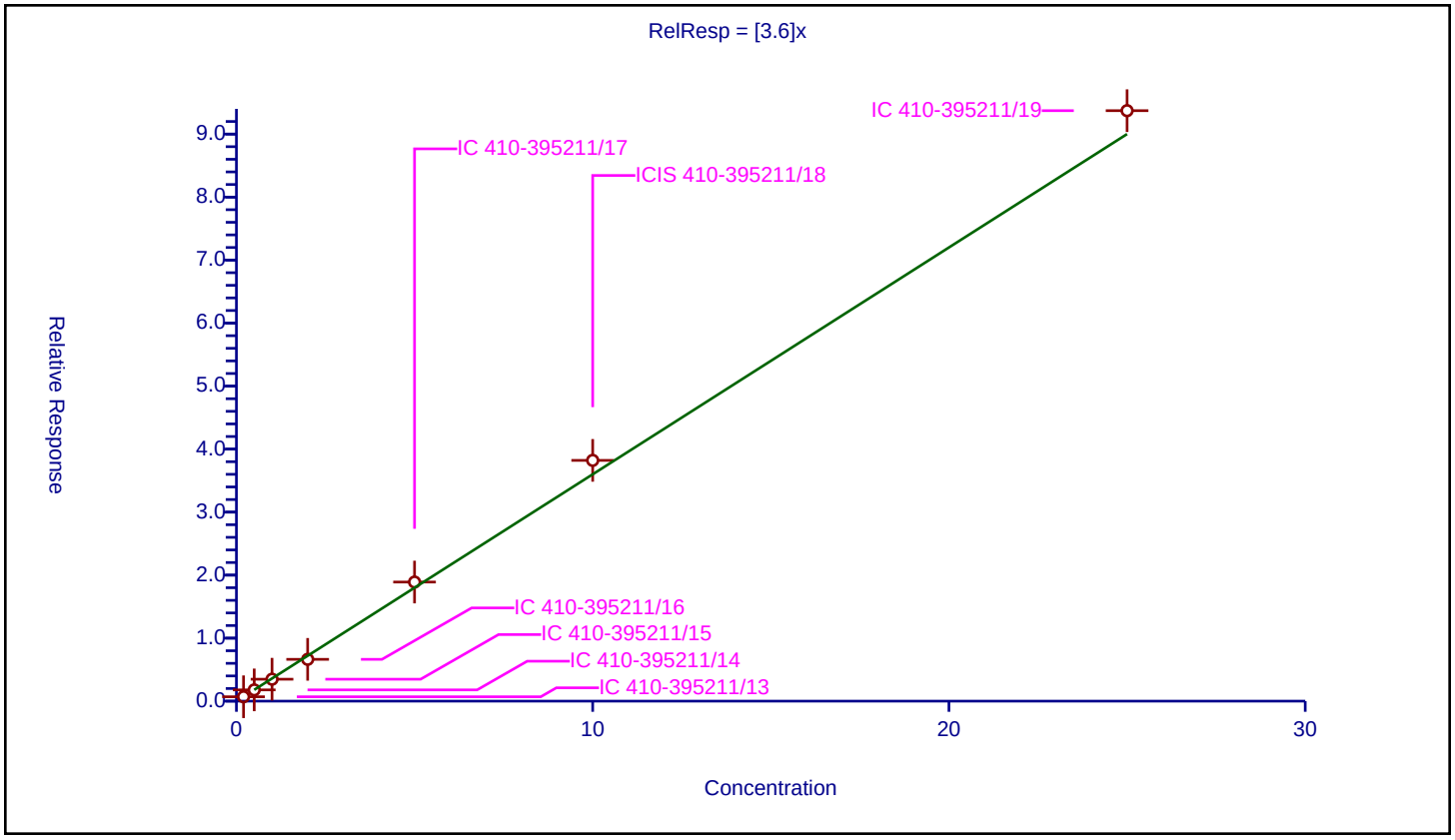
Curve Coefficients

Intercept:	0
Slope:	3.6

Error Coefficients

Standard Error:	5320000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.69589	10.0	1118395.0	3.47945	Y
2	IC 410-395211/14	0.5	1.786271	10.0	1161459.0	3.572541	Y
3	IC 410-395211/15	1.0	3.48185	10.0	1176004.0	3.48185	Y
4	IC 410-395211/16	2.0	6.634689	10.0	1187709.0	3.317345	Y
5	IC 410-395211/17	5.0	18.902106	10.0	1170924.0	3.780421	Y
6	ICIS 410-395211/18	10.0	38.213134	10.0	1214109.0	3.821313	Y
7	IC 410-395211/19	25.0	93.717654	10.0	1273416.0	3.748706	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

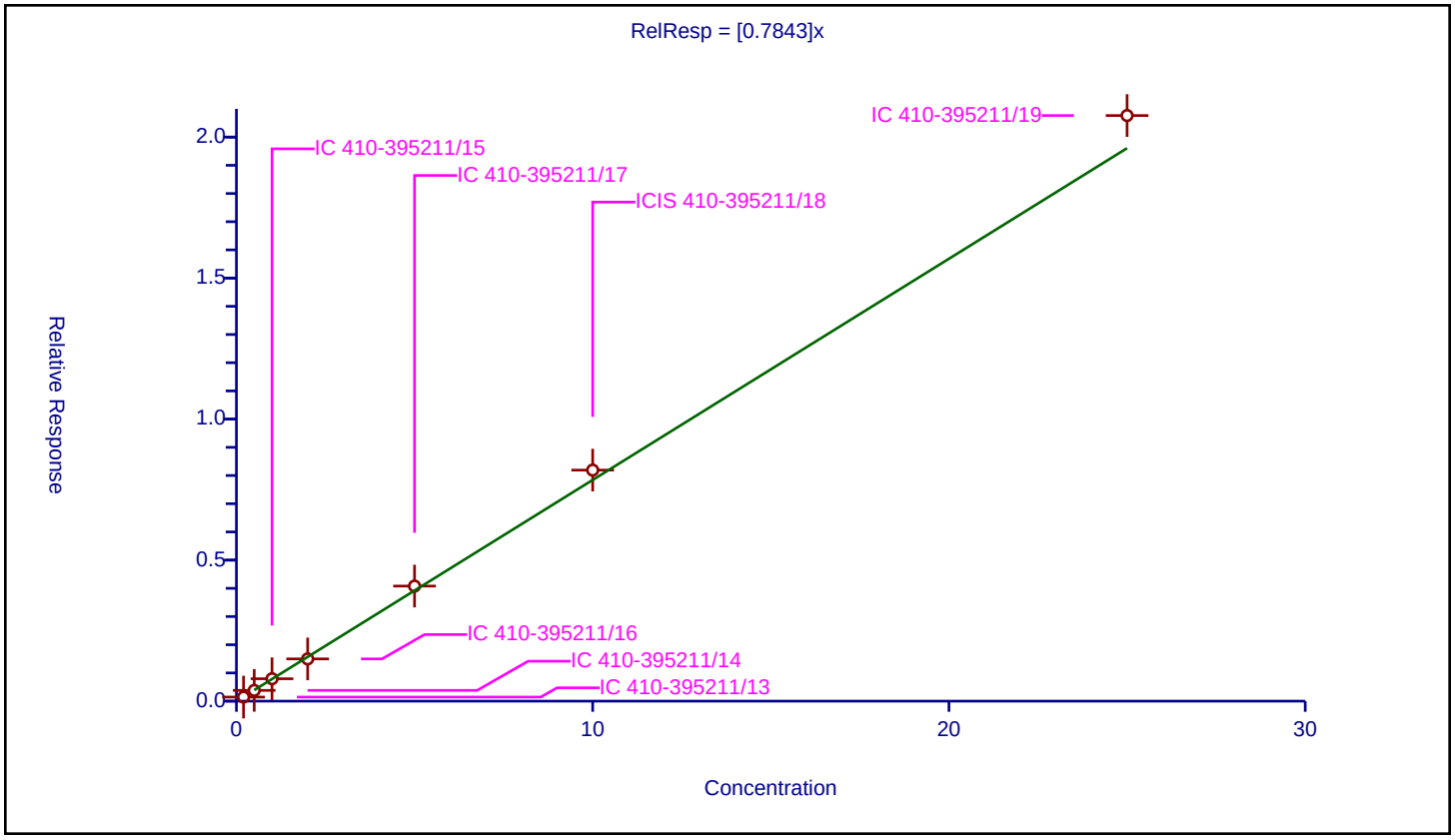
Curve Coefficients

Intercept:	0
Slope:	0.7843

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.143786	10.0	1118395.0	0.718932	Y
2	IC 410-395211/14	0.5	0.381124	10.0	1161459.0	0.762248	Y
3	IC 410-395211/15	1.0	0.794147	10.0	1176004.0	0.794147	Y
4	IC 410-395211/16	2.0	1.497606	10.0	1187709.0	0.748803	Y
5	IC 410-395211/17	5.0	4.08012	10.0	1170924.0	0.816024	Y
6	ICIS 410-395211/18	10.0	8.192386	10.0	1214109.0	0.819239	Y
7	IC 410-395211/19	25.0	20.764087	10.0	1273416.0	0.830563	Y



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Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

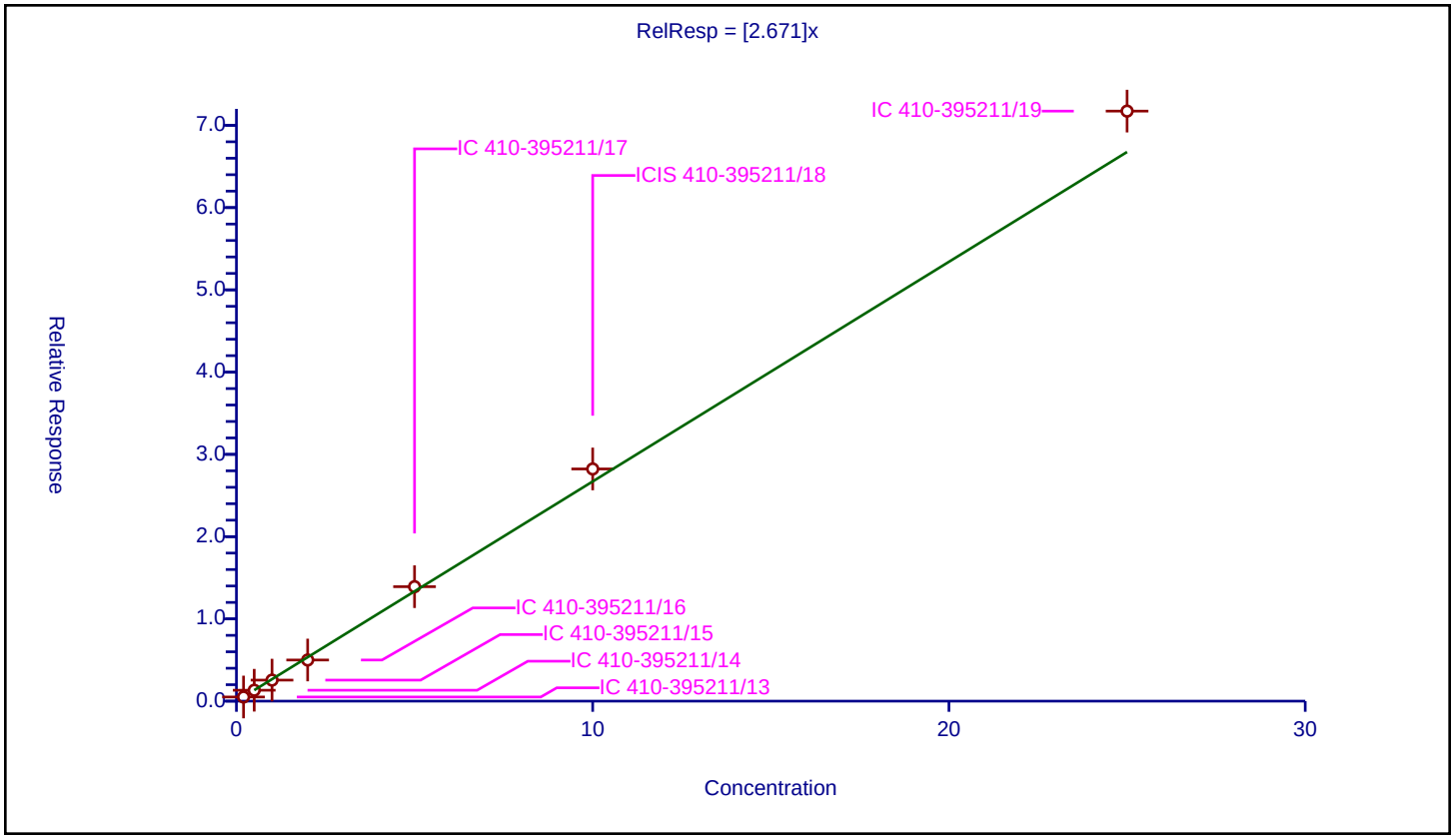
Curve Coefficients

Intercept:	0
Slope:	2.671

Error Coefficients

Standard Error:	4050000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.502595	10.0	1118395.0	2.512976	Y
2	IC 410-395211/14	0.5	1.324816	10.0	1161459.0	2.649633	Y
3	IC 410-395211/15	1.0	2.555663	10.0	1176004.0	2.555663	Y
4	IC 410-395211/16	2.0	5.000442	10.0	1187709.0	2.500221	Y
5	IC 410-395211/17	5.0	13.916471	10.0	1170924.0	2.783294	Y
6	ICIS 410-395211/18	10.0	28.225093	10.0	1214109.0	2.822509	Y
7	IC 410-395211/19	25.0	71.732709	10.0	1273416.0	2.869308	Y



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Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

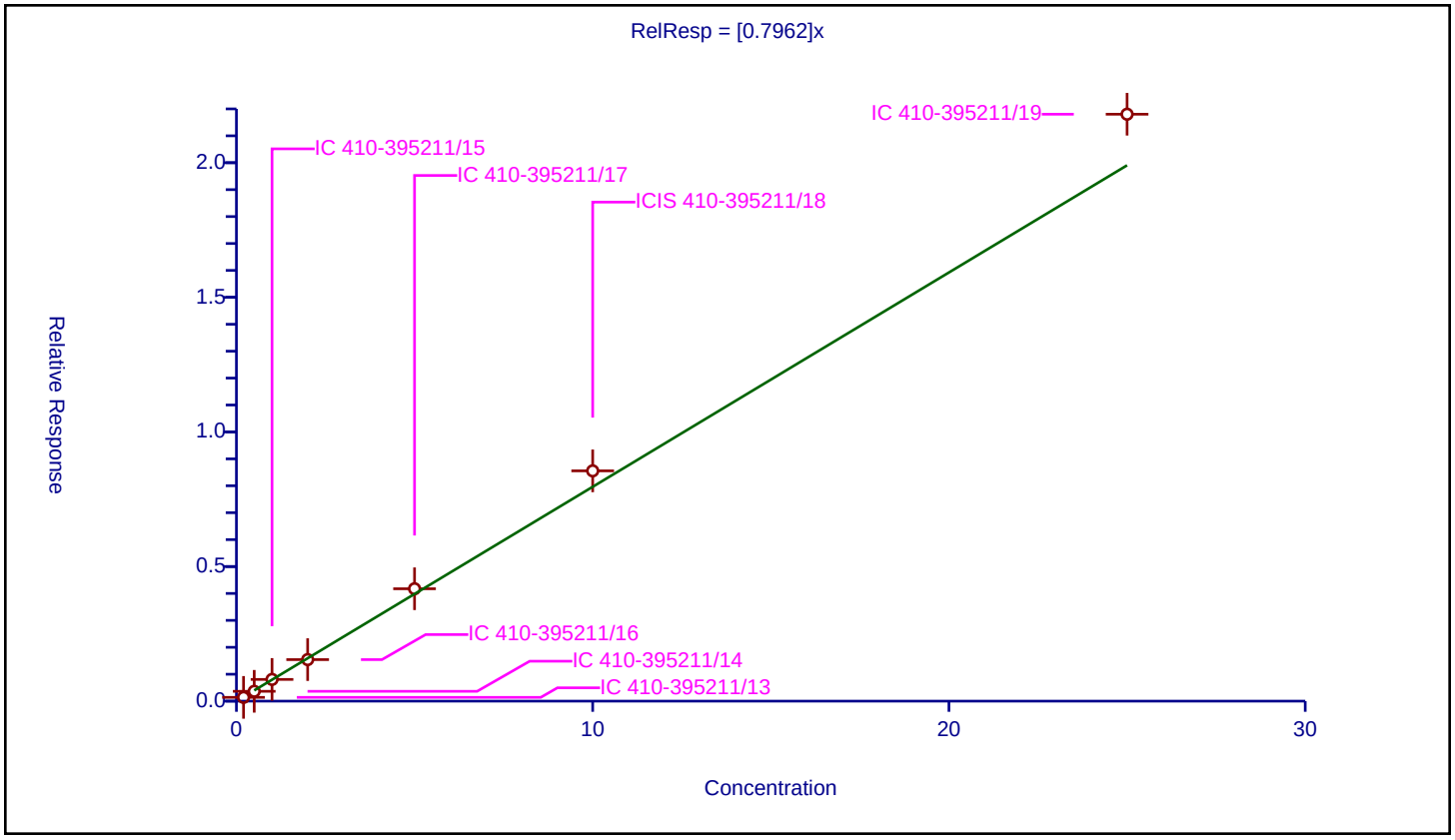
Curve Coefficients

Intercept:	0
Slope:	0.7962

Error Coefficients

Standard Error:	1230000
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.14038	10.0	1118395.0	0.701899	Y
2	IC 410-395211/14	0.5	0.365239	10.0	1161459.0	0.730478	Y
3	IC 410-395211/15	1.0	0.806681	10.0	1176004.0	0.806681	Y
4	IC 410-395211/16	2.0	1.543173	10.0	1187709.0	0.771586	Y
5	IC 410-395211/17	5.0	4.174848	10.0	1170924.0	0.83497	Y
6	ICIS 410-395211/18	10.0	8.554314	10.0	1214109.0	0.855431	Y
7	IC 410-395211/19	25.0	21.802373	10.0	1273416.0	0.872095	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

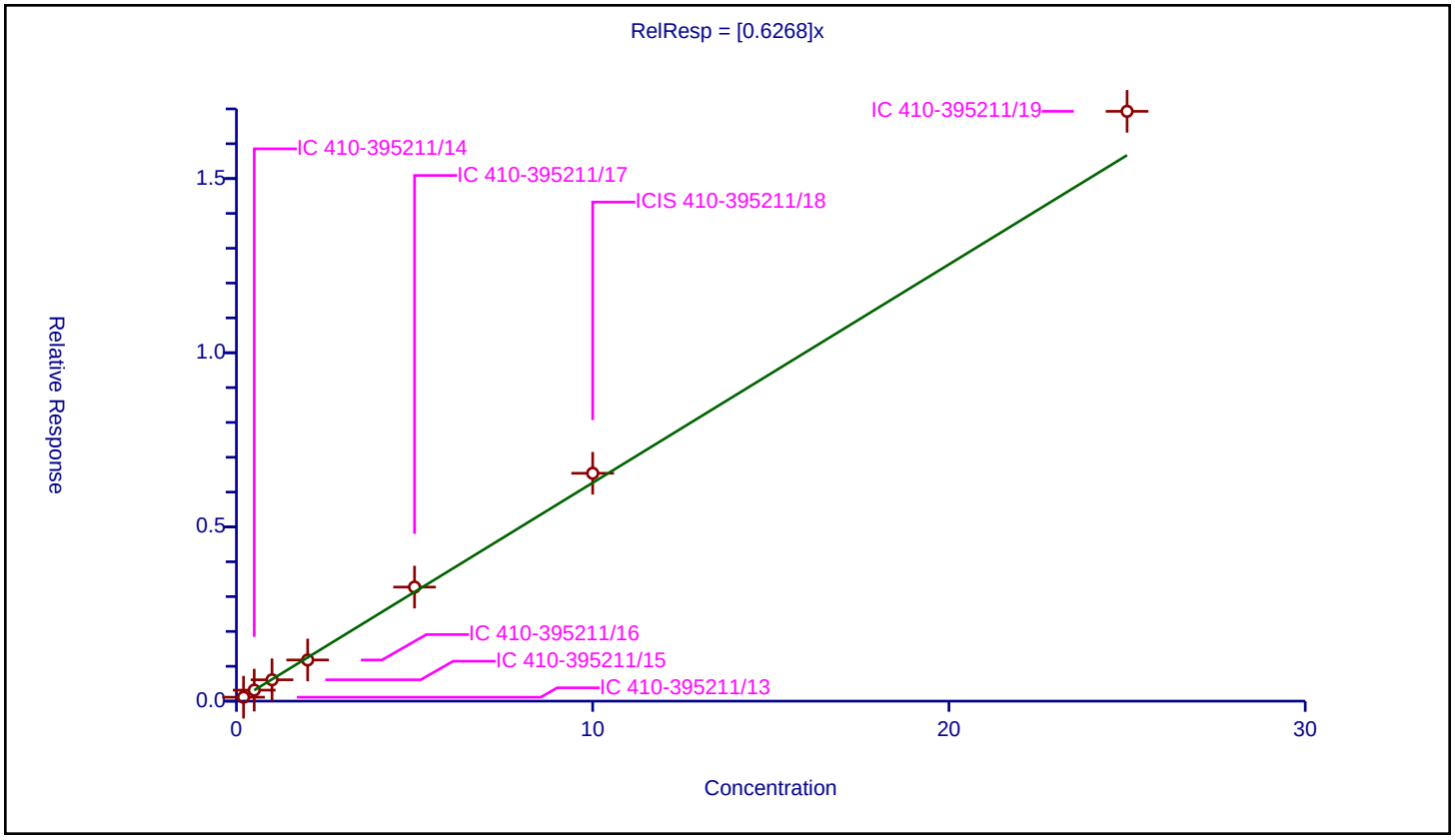
Curve Coefficients

Intercept:	0
Slope:	0.6268

Error Coefficients

Standard Error:	953000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.113109	10.0	1118395.0	0.565543	Y
2	IC 410-395211/14	0.5	0.316421	10.0	1161459.0	0.632842	Y
3	IC 410-395211/15	1.0	0.612396	10.0	1176004.0	0.612396	Y
4	IC 410-395211/16	2.0	1.181603	10.0	1187709.0	0.590801	Y
5	IC 410-395211/17	5.0	3.274286	10.0	1170924.0	0.654857	Y
6	ICIS 410-395211/18	10.0	6.540805	10.0	1214109.0	0.65408	Y
7	IC 410-395211/19	25.0	16.93021	10.0	1273416.0	0.677208	Y



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Calibration / Pentachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

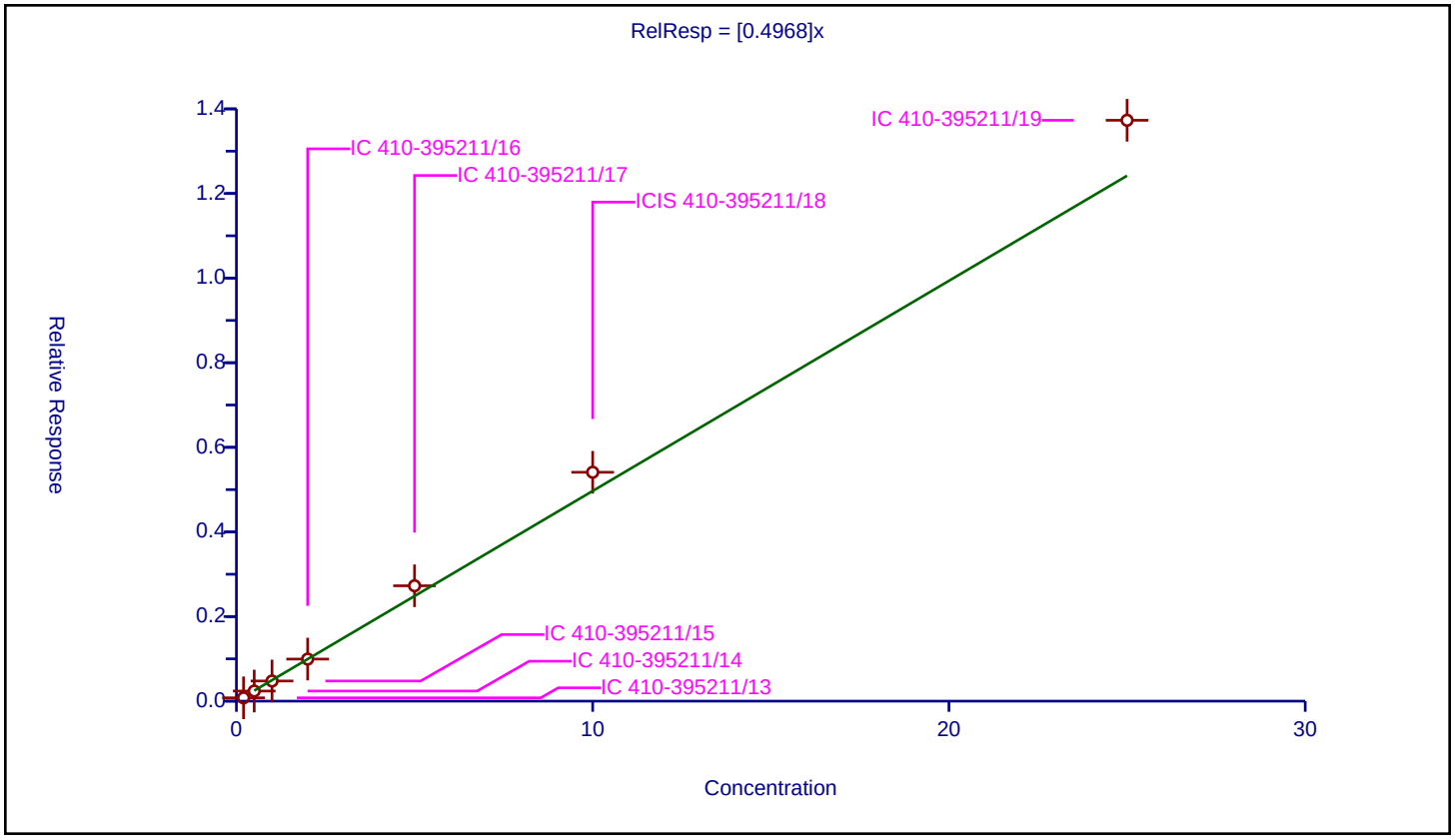
Curve Coefficients

Intercept:	0
Slope:	0.4968

Error Coefficients

Standard Error:	776000
Relative Standard Error:	11.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.078085	10.0	1118395.0	0.390426	Y
2	IC 410-395211/14	0.5	0.239027	10.0	1161459.0	0.478054	Y
3	IC 410-395211/15	1.0	0.476112	10.0	1176004.0	0.476112	Y
4	IC 410-395211/16	2.0	0.994739	10.0	1187709.0	0.497369	Y
5	IC 410-395211/17	5.0	2.727069	10.0	1170924.0	0.545414	Y
6	ICIS 410-395211/18	10.0	5.410626	10.0	1214109.0	0.541063	Y
7	IC 410-395211/19	25.0	13.730619	10.0	1273416.0	0.549225	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

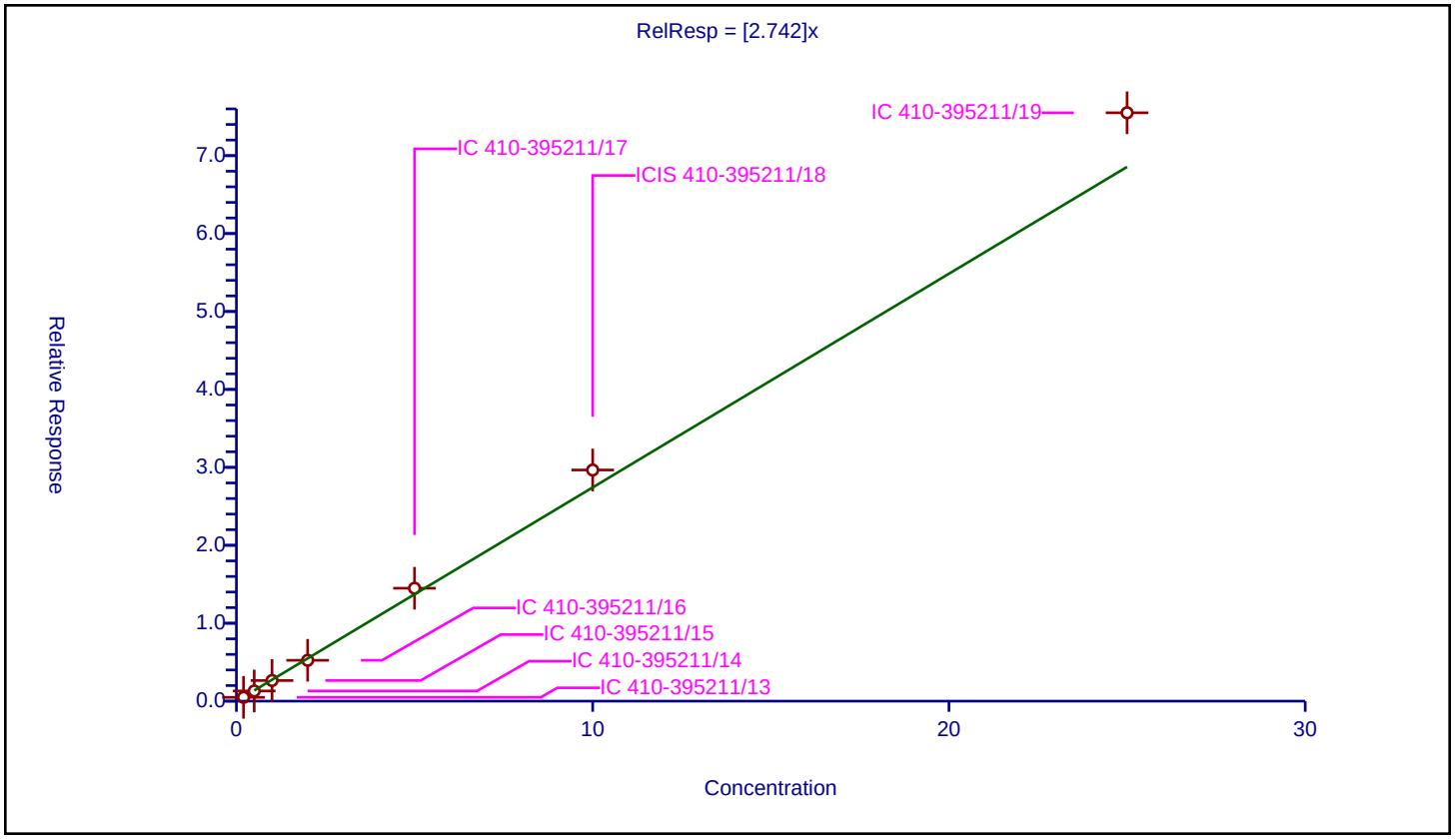
Curve Coefficients

Intercept:	0
Slope:	2.742

Error Coefficients

Standard Error:	4260000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.485562	10.0	1118395.0	2.427809	Y
2	IC 410-395211/14	0.5	1.308113	10.0	1161459.0	2.616227	Y
3	IC 410-395211/15	1.0	2.647049	10.0	1176004.0	2.647049	Y
4	IC 410-395211/16	2.0	5.242303	10.0	1187709.0	2.621151	Y
5	IC 410-395211/17	5.0	14.489378	10.0	1170924.0	2.897876	Y
6	ICIS 410-395211/18	10.0	29.660945	10.0	1214109.0	2.966094	Y
7	IC 410-395211/19	25.0	75.501038	10.0	1273416.0	3.020042	Y



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Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

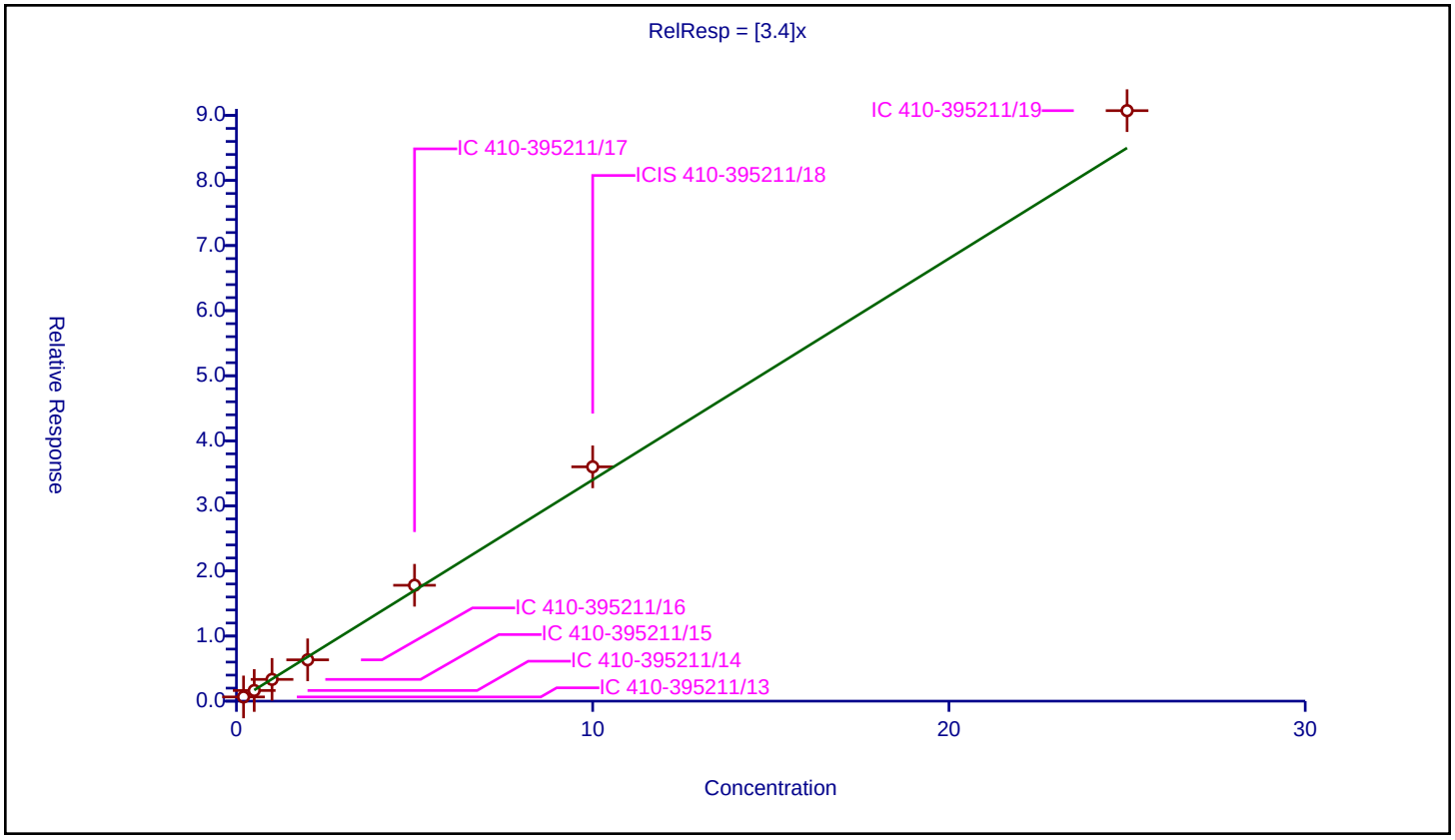
Curve Coefficients

Intercept:	0
Slope:	3.4

Error Coefficients

Standard Error:	5130000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.644334	10.0	1118395.0	3.22167	Y
2	IC 410-395211/14	0.5	1.636812	10.0	1161459.0	3.273624	Y
3	IC 410-395211/15	1.0	3.340278	10.0	1176004.0	3.340278	Y
4	IC 410-395211/16	2.0	6.349215	10.0	1187709.0	3.174608	Y
5	IC 410-395211/17	5.0	17.802402	10.0	1170924.0	3.56048	Y
6	ICIS 410-395211/18	10.0	36.002649	10.0	1214109.0	3.600265	Y
7	IC 410-395211/19	25.0	90.728191	10.0	1273416.0	3.629128	Y



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Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

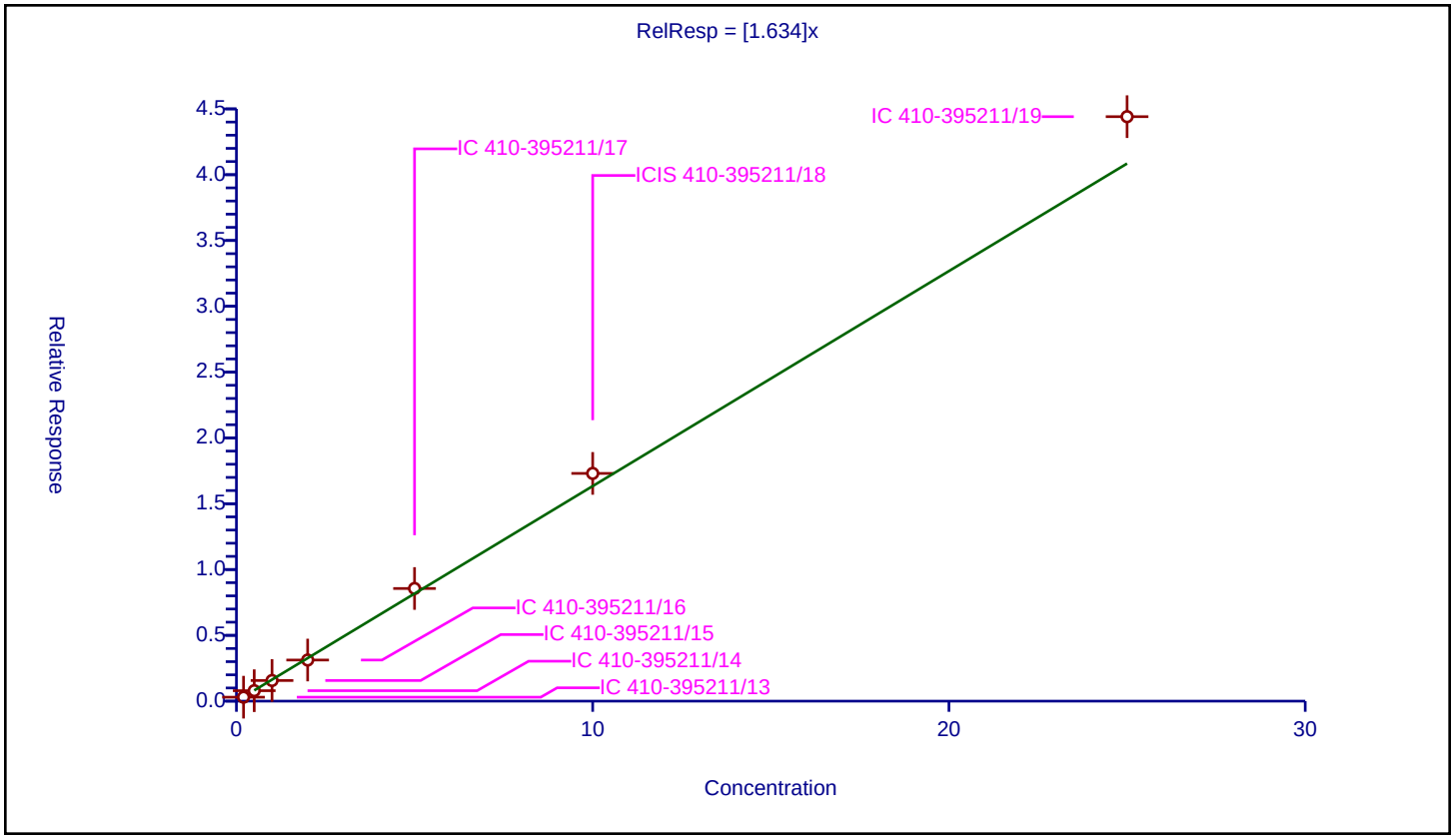
Curve Coefficients

Intercept:	0
Slope:	1.634

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.299876	10.0	1118395.0	1.499381	Y
2	IC 410-395211/14	0.5	0.795164	10.0	1161459.0	1.590327	Y
3	IC 410-395211/15	1.0	1.566942	10.0	1176004.0	1.566942	Y
4	IC 410-395211/16	2.0	3.124385	10.0	1187709.0	1.562192	Y
5	IC 410-395211/17	5.0	8.559095	10.0	1170924.0	1.711819	Y
6	ICIS 410-395211/18	10.0	17.303693	10.0	1214109.0	1.730369	Y
7	IC 410-395211/19	25.0	44.408834	10.0	1273416.0	1.776353	Y



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Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

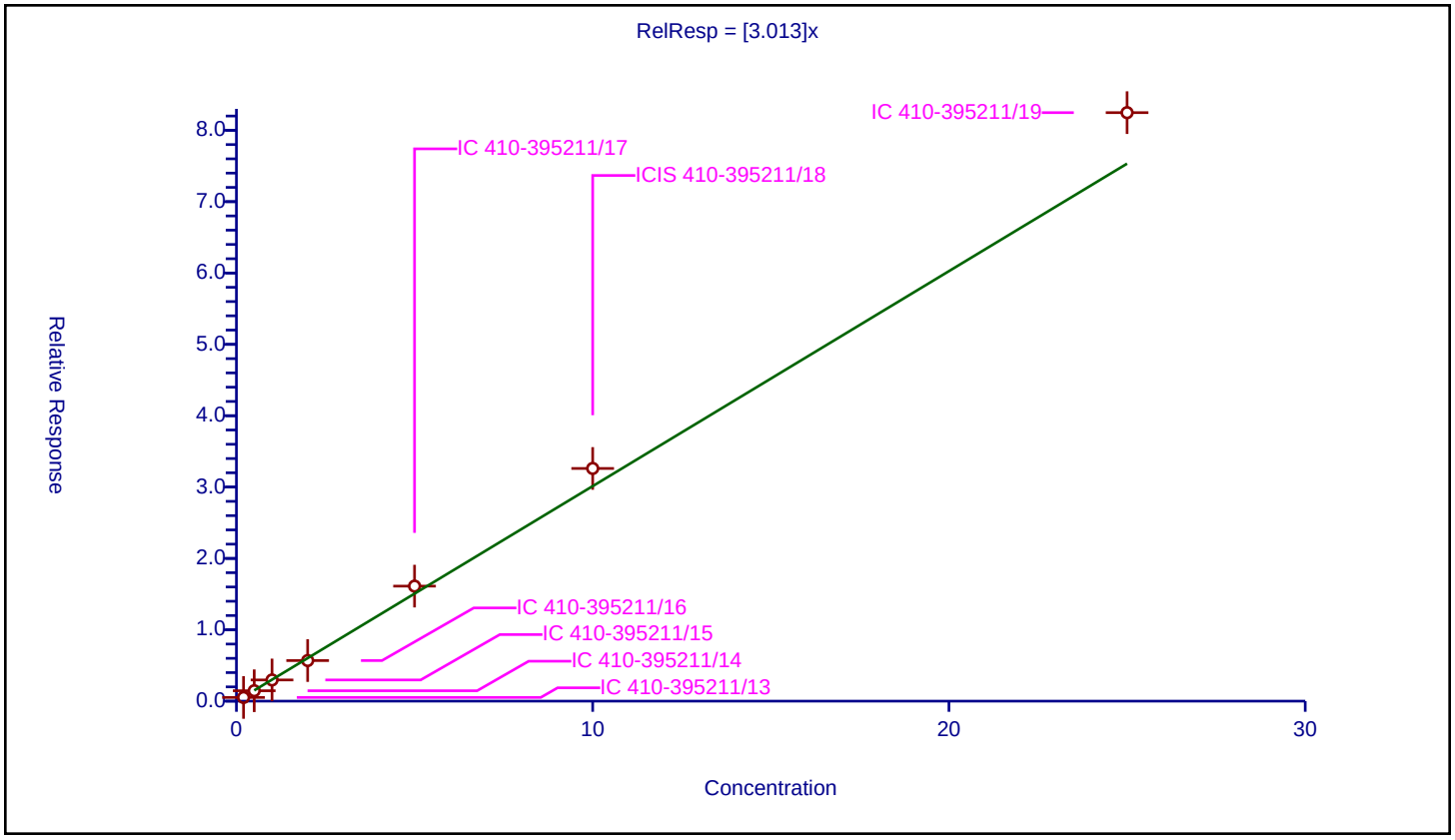
Curve Coefficients

Intercept:	0
Slope:	3.013

Error Coefficients

Standard Error:	4660000
Relative Standard Error:	8.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.515113	10.0	1118395.0	2.575566	Y
2	IC 410-395211/14	0.5	1.45932	10.0	1161459.0	2.918639	Y
3	IC 410-395211/15	1.0	2.970143	10.0	1176004.0	2.970143	Y
4	IC 410-395211/16	2.0	5.686528	10.0	1187709.0	2.843264	Y
5	IC 410-395211/17	5.0	16.118809	10.0	1170924.0	3.223762	Y
6	ICIS 410-395211/18	10.0	32.611512	10.0	1214109.0	3.261151	Y
7	IC 410-395211/19	25.0	82.473449	10.0	1273416.0	3.298938	Y



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Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

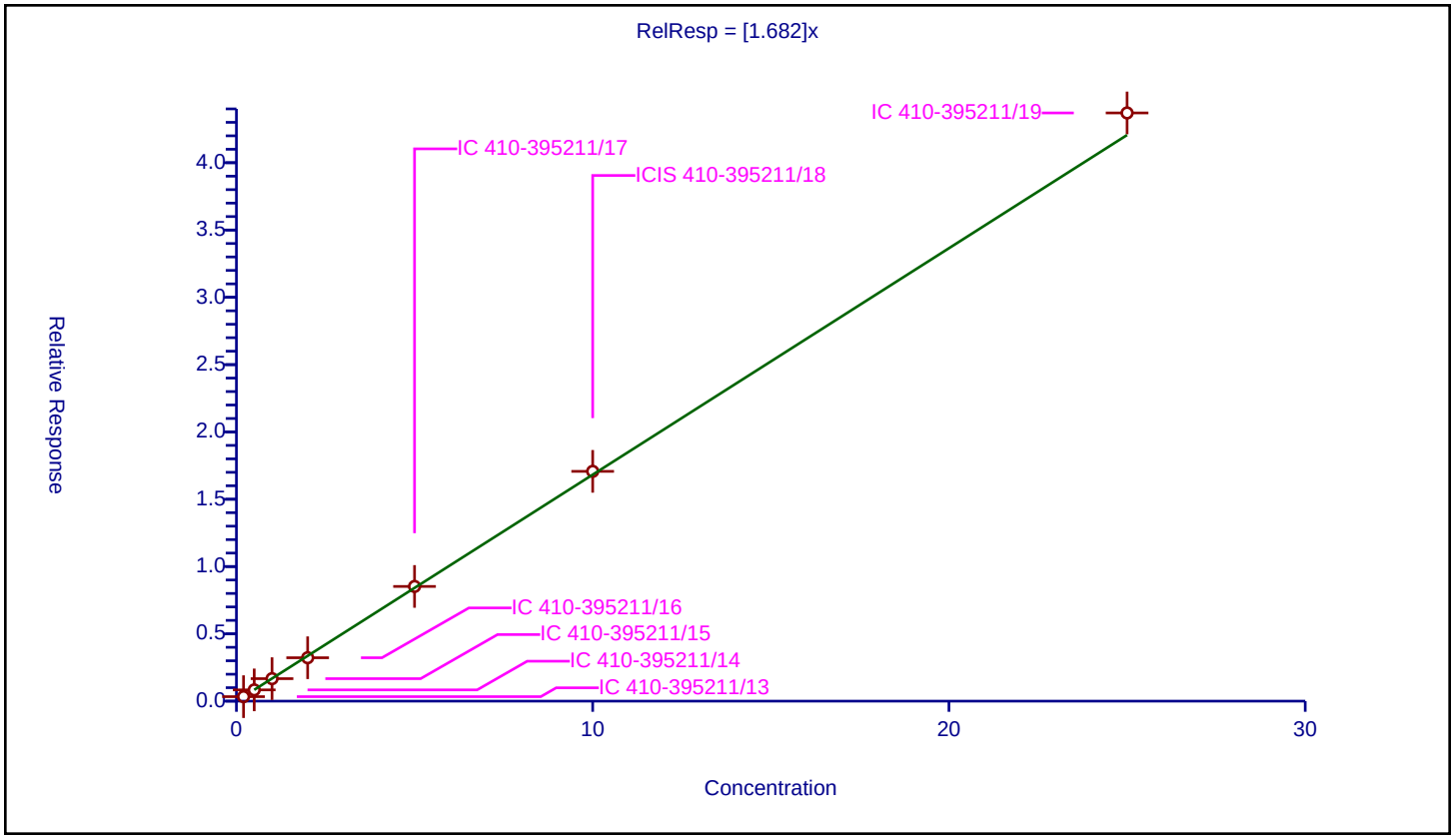
Curve Coefficients

Intercept:	0
Slope:	1.682

Error Coefficients

Standard Error:	2460000
Relative Standard Error:	2.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.332512	10.0	1118395.0	1.662561	Y
2	IC 410-395211/14	0.5	0.835535	10.0	1161459.0	1.671071	Y
3	IC 410-395211/15	1.0	1.671823	10.0	1176004.0	1.671823	Y
4	IC 410-395211/16	2.0	3.223559	10.0	1187709.0	1.611779	Y
5	IC 410-395211/17	5.0	8.521228	10.0	1170924.0	1.704246	Y
6	ICIS 410-395211/18	10.0	17.072133	10.0	1214109.0	1.707213	Y
7	IC 410-395211/19	25.0	43.699027	10.0	1273416.0	1.747961	Y



Calibration / 1,2,3-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

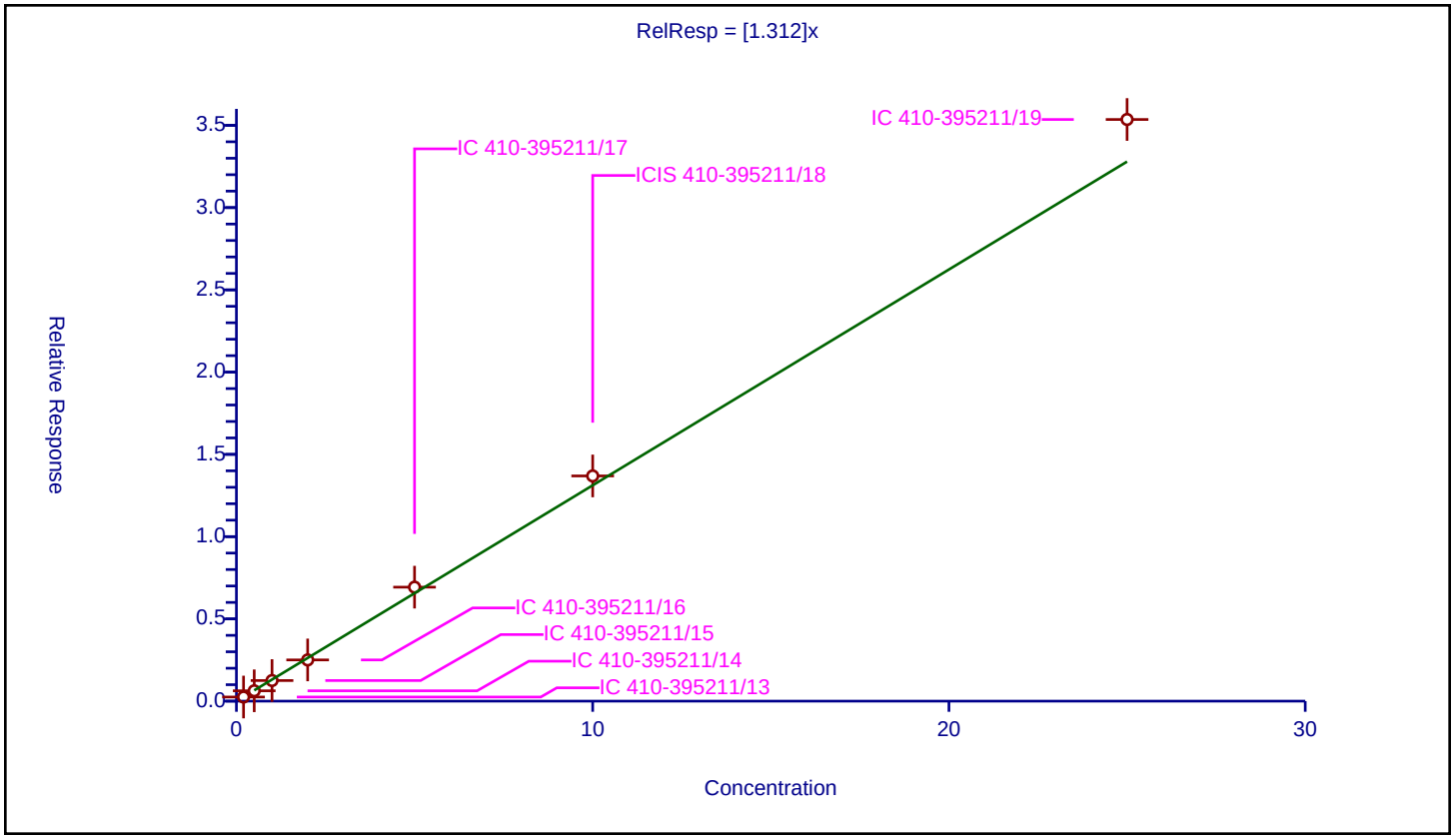
Curve Coefficients

Intercept:	0
Slope:	1.312

Error Coefficients

Standard Error:	1990000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.250341	10.0	1118395.0	1.251704	Y
2	IC 410-395211/14	0.5	0.628322	10.0	1161459.0	1.256644	Y
3	IC 410-395211/15	1.0	1.252844	10.0	1176004.0	1.252844	Y
4	IC 410-395211/16	2.0	2.50606	10.0	1187709.0	1.25303	Y
5	IC 410-395211/17	5.0	6.928315	10.0	1170924.0	1.385663	Y
6	ICIS 410-395211/18	10.0	13.689331	10.0	1214109.0	1.368933	Y
7	IC 410-395211/19	25.0	35.355877	10.0	1273416.0	1.414235	Y



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Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

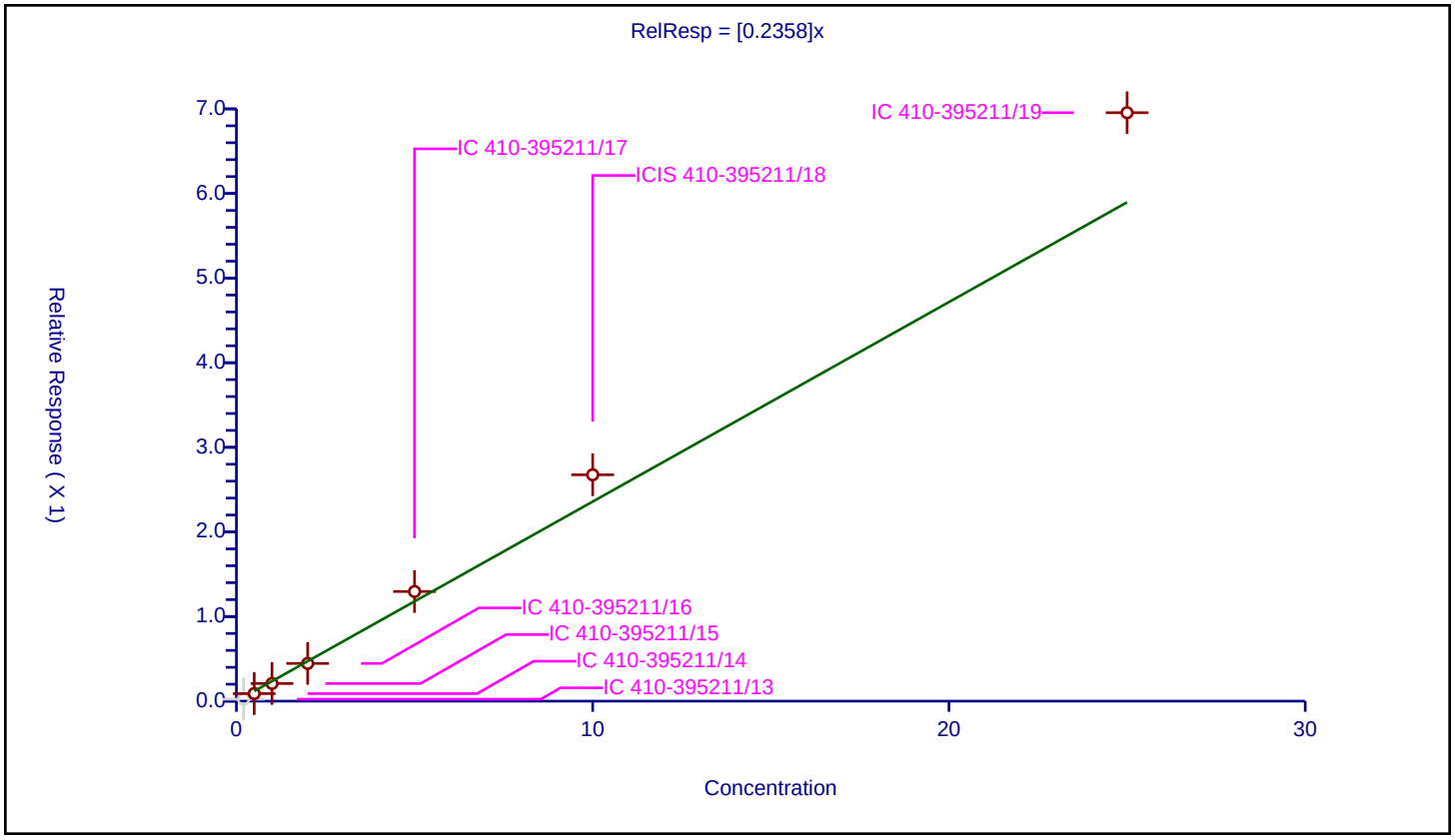
Curve Coefficients

Intercept:	0
Slope:	0.2358

Error Coefficients

Standard Error:	428000
Relative Standard Error:	16.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.967

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.023194	10.0	1118395.0	0.11597	N
2	IC 410-395211/14	0.5	0.089396	10.0	1161459.0	0.178792	Y
3	IC 410-395211/15	1.0	0.208562	10.0	1176004.0	0.208562	Y
4	IC 410-395211/16	2.0	0.445488	10.0	1187709.0	0.222744	Y
5	IC 410-395211/17	5.0	1.295746	10.0	1170924.0	0.259149	Y
6	ICIS 410-395211/18	10.0	2.675452	10.0	1214109.0	0.267545	Y
7	IC 410-395211/19	25.0	6.954946	10.0	1273416.0	0.278198	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

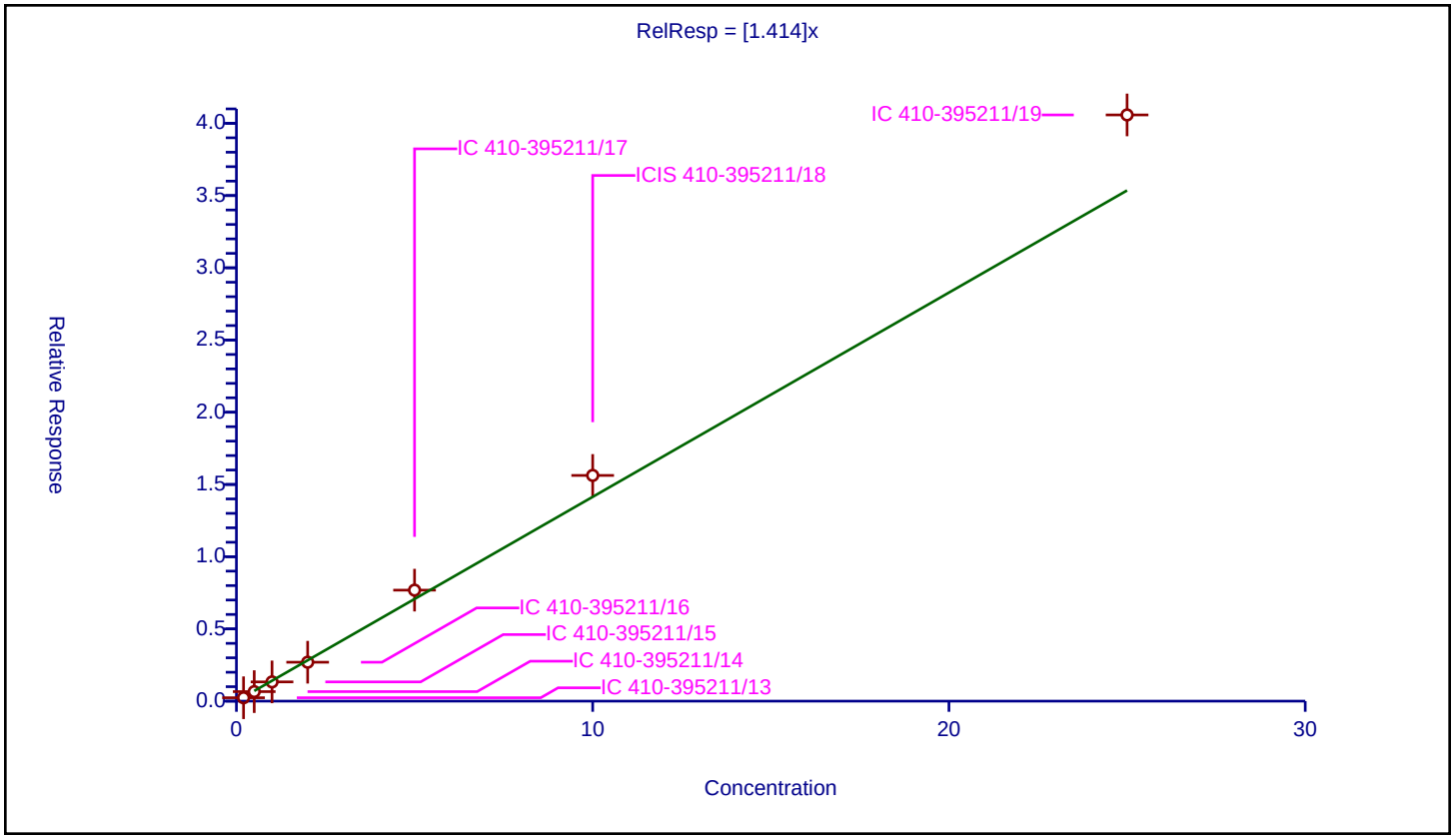
Curve Coefficients

Intercept:	0
Slope:	1.414

Error Coefficients

Standard Error:	2280000
Relative Standard Error:	11.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.23565	10.0	1118395.0	1.178251	Y
2	IC 410-395211/14	0.5	0.658921	10.0	1161459.0	1.317842	Y
3	IC 410-395211/15	1.0	1.332572	10.0	1176004.0	1.332572	Y
4	IC 410-395211/16	2.0	2.694928	10.0	1187709.0	1.347464	Y
5	IC 410-395211/17	5.0	7.6847	10.0	1170924.0	1.53694	Y
6	ICIS 410-395211/18	10.0	15.625879	10.0	1214109.0	1.562588	Y
7	IC 410-395211/19	25.0	40.581813	10.0	1273416.0	1.623273	Y



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Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

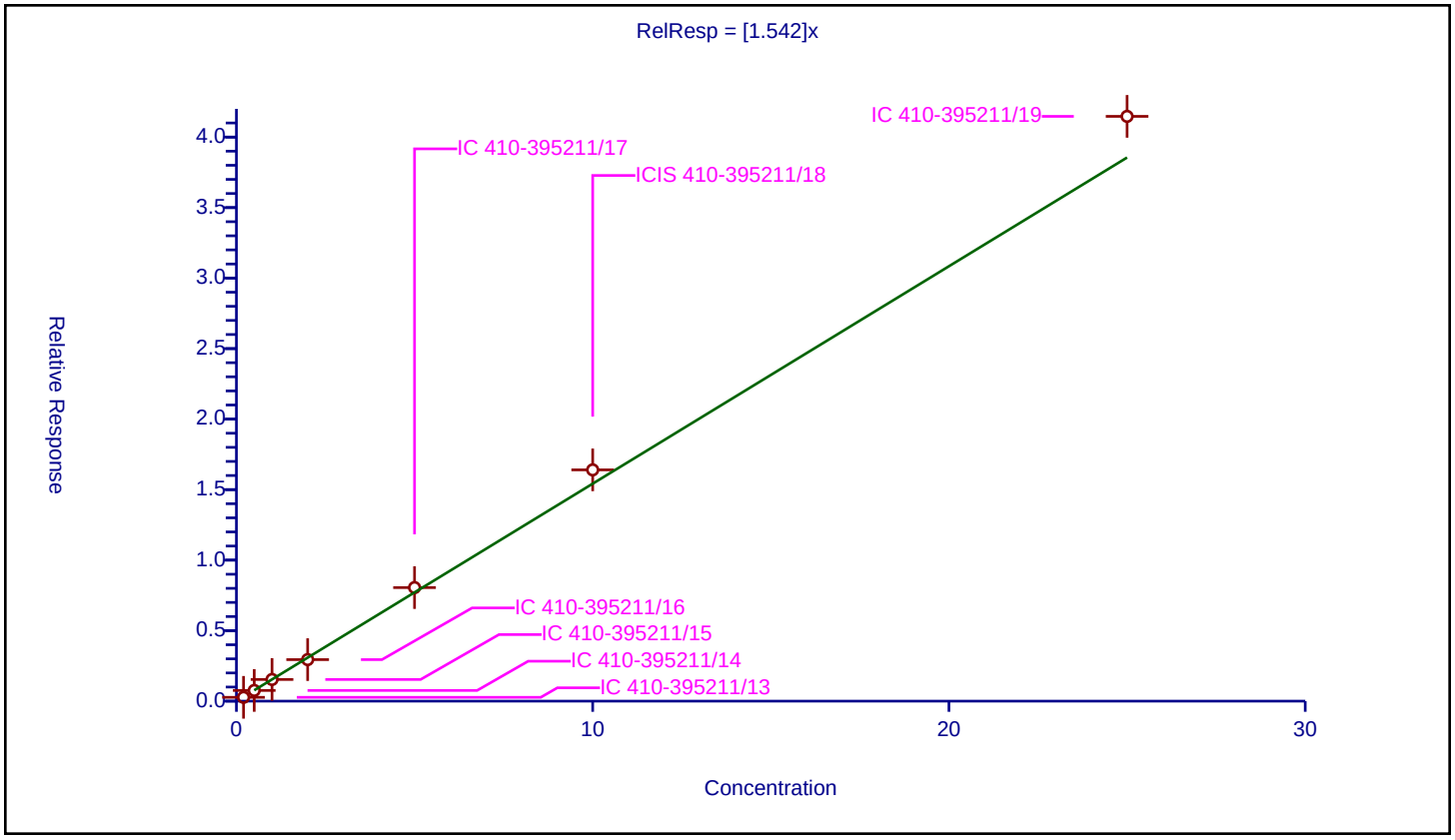
Curve Coefficients

Intercept:	0
Slope:	1.542

Error Coefficients

Standard Error:	2340000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.271237	10.0	1118395.0	1.356185	Y
2	IC 410-395211/14	0.5	0.759028	10.0	1161459.0	1.518056	Y
3	IC 410-395211/15	1.0	1.537308	10.0	1176004.0	1.537308	Y
4	IC 410-395211/16	2.0	2.945848	10.0	1187709.0	1.472924	Y
5	IC 410-395211/17	5.0	8.053708	10.0	1170924.0	1.610742	Y
6	ICIS 410-395211/18	10.0	16.400982	10.0	1214109.0	1.640098	Y
7	IC 410-395211/19	25.0	41.468774	10.0	1273416.0	1.658751	Y



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Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

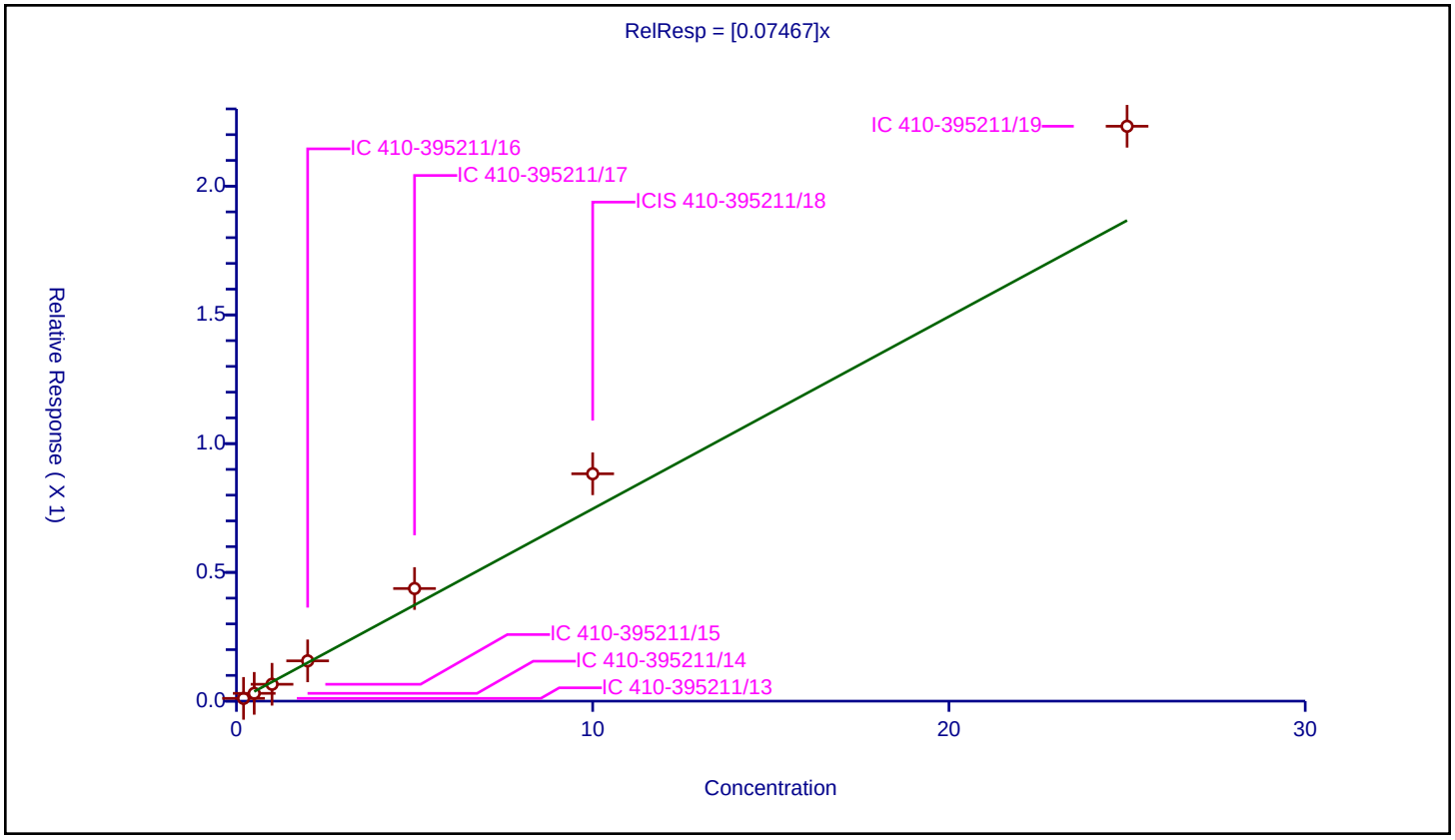
Curve Coefficients

Intercept:	0
Slope:	0.07467

Error Coefficients

Standard Error:	126000
Relative Standard Error:	19.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.958

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.010667	10.0	1118395.0	0.053335	Y
2	IC 410-395211/14	0.5	0.030272	10.0	1161459.0	0.060545	Y
3	IC 410-395211/15	1.0	0.065561	10.0	1176004.0	0.065561	Y
4	IC 410-395211/16	2.0	0.156436	10.0	1187709.0	0.078218	Y
5	IC 410-395211/17	5.0	0.43733	10.0	1170924.0	0.087466	Y
6	ICIS 410-395211/18	10.0	0.882936	10.0	1214109.0	0.088294	Y
7	IC 410-395211/19	25.0	2.232515	10.0	1273416.0	0.089301	Y



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Calibration / 1,3,5-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

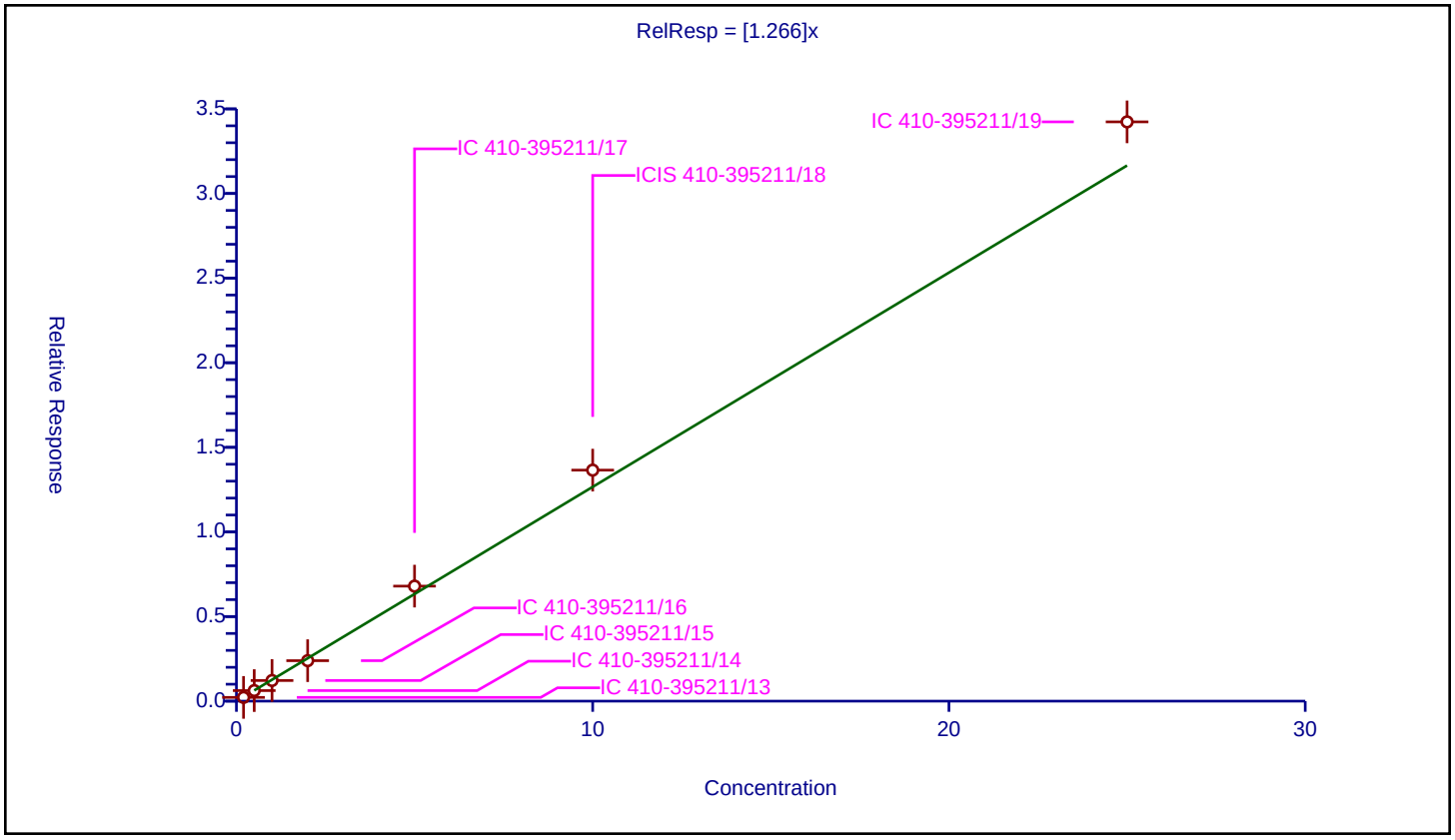
Curve Coefficients

Intercept:	0
Slope:	1.266

Error Coefficients

Standard Error:	1940000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.22112	10.0	1118395.0	1.105602	Y
2	IC 410-395211/14	0.5	0.624361	10.0	1161459.0	1.248723	Y
3	IC 410-395211/15	1.0	1.219069	10.0	1176004.0	1.219069	Y
4	IC 410-395211/16	2.0	2.391402	10.0	1187709.0	1.195701	Y
5	IC 410-395211/17	5.0	6.797751	10.0	1170924.0	1.35955	Y
6	ICIS 410-395211/18	10.0	13.651254	10.0	1214109.0	1.365125	Y
7	IC 410-395211/19	25.0	34.234139	10.0	1273416.0	1.369366	Y



11/14/2023
11:12 AM

Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

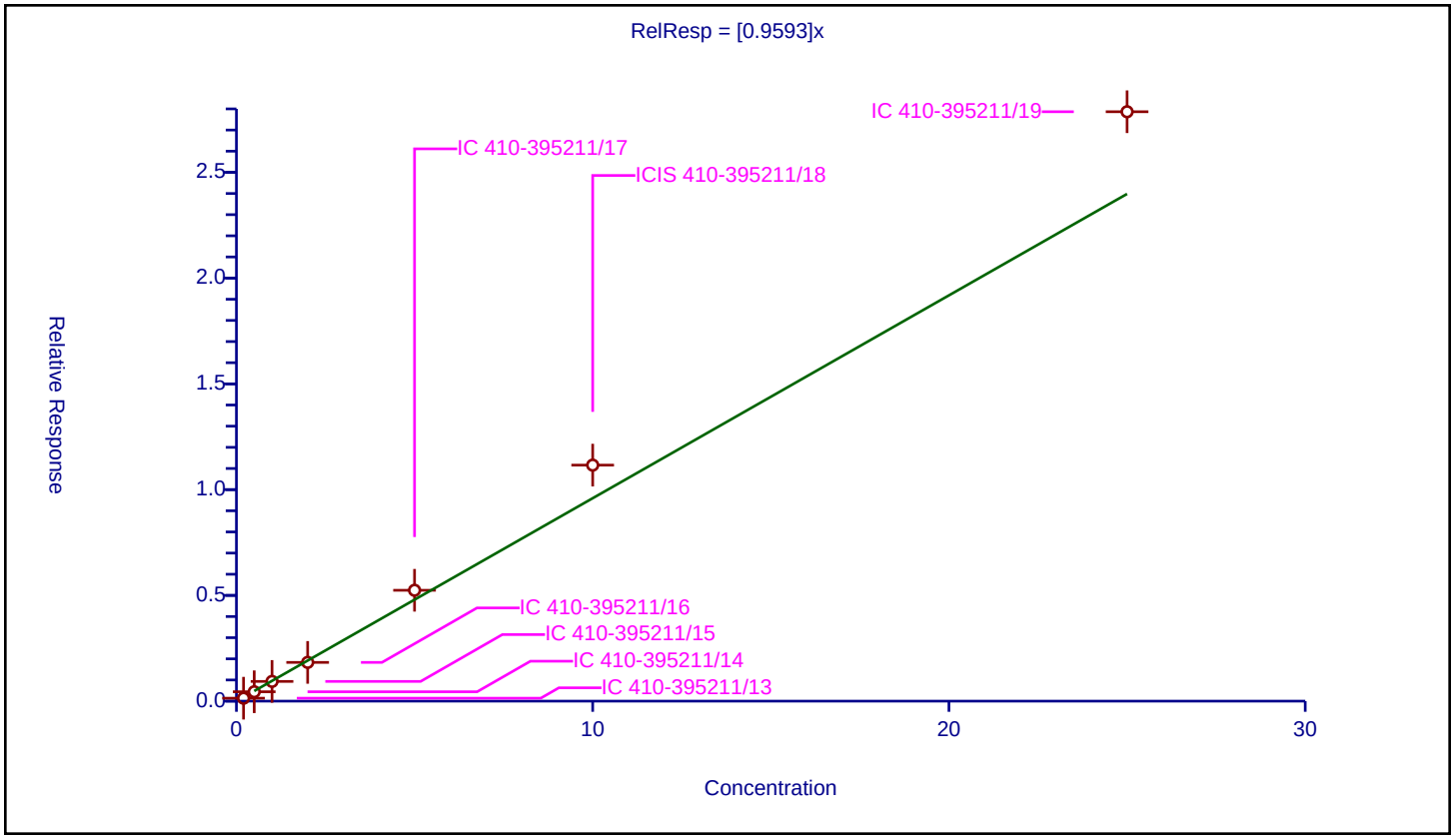
Curve Coefficients

Intercept:	0
Slope:	0.9593

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	15.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.139754	10.0	1118395.0	0.698769	Y
2	IC 410-395211/14	0.5	0.444277	10.0	1161459.0	0.888555	Y
3	IC 410-395211/15	1.0	0.932948	10.0	1176004.0	0.932948	Y
4	IC 410-395211/16	2.0	1.831711	10.0	1187709.0	0.915856	Y
5	IC 410-395211/17	5.0	5.240938	10.0	1170924.0	1.048188	Y
6	ICIS 410-395211/18	10.0	11.158084	10.0	1214109.0	1.115808	Y
7	IC 410-395211/19	25.0	27.865803	10.0	1273416.0	1.114632	Y



11/14/2023
11:12 AM

Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

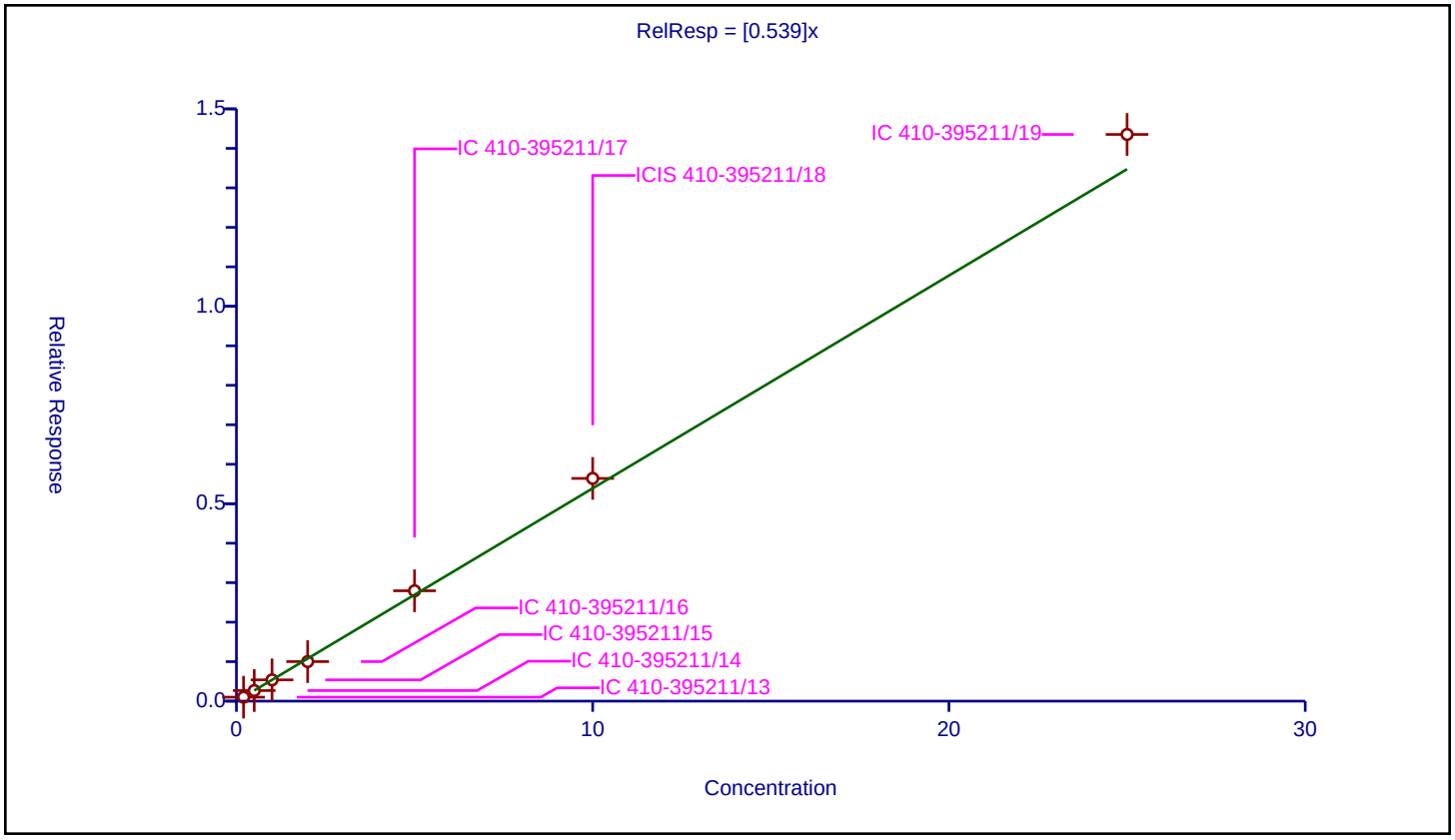
Curve Coefficients

Intercept:	0
Slope:	0.539

Error Coefficients

Standard Error:	810000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.09992	10.0	1118395.0	0.4996	Y
2	IC 410-395211/14	0.5	0.268232	10.0	1161459.0	0.536463	Y
3	IC 410-395211/15	1.0	0.538672	10.0	1176004.0	0.538672	Y
4	IC 410-395211/16	2.0	1.001457	10.0	1187709.0	0.500729	Y
5	IC 410-395211/17	5.0	2.795211	10.0	1170924.0	0.559042	Y
6	ICIS 410-395211/18	10.0	5.640976	10.0	1214109.0	0.564098	Y
7	IC 410-395211/19	25.0	14.352945	10.0	1273416.0	0.574118	Y



11/14/2023
11:12 AM

Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

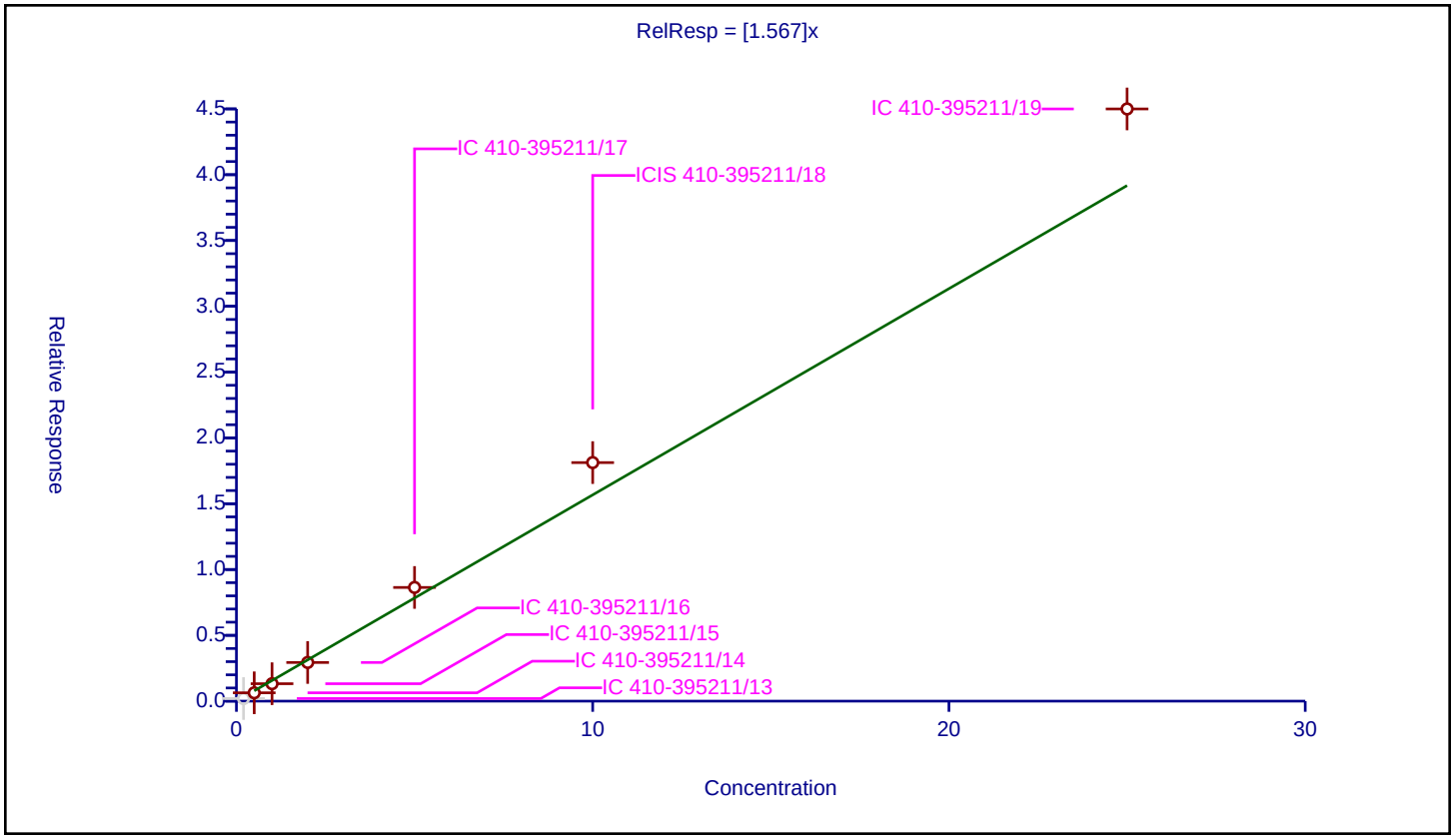
Curve Coefficients

Intercept:	0
Slope:	1.567

Error Coefficients

Standard Error:	2790000
Relative Standard Error:	15.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.197372	10.0	1118395.0	0.986861	N
2	IC 410-395211/14	0.5	0.634624	10.0	1161459.0	1.269248	Y
3	IC 410-395211/15	1.0	1.32395	10.0	1176004.0	1.32395	Y
4	IC 410-395211/16	2.0	2.937319	10.0	1187709.0	1.468659	Y
5	IC 410-395211/17	5.0	8.638665	10.0	1170924.0	1.727733	Y
6	ICIS 410-395211/18	10.0	18.125663	10.0	1214109.0	1.812566	Y
7	IC 410-395211/19	25.0	44.996325	10.0	1273416.0	1.799853	Y



11/14/2023
11:12 AM

Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

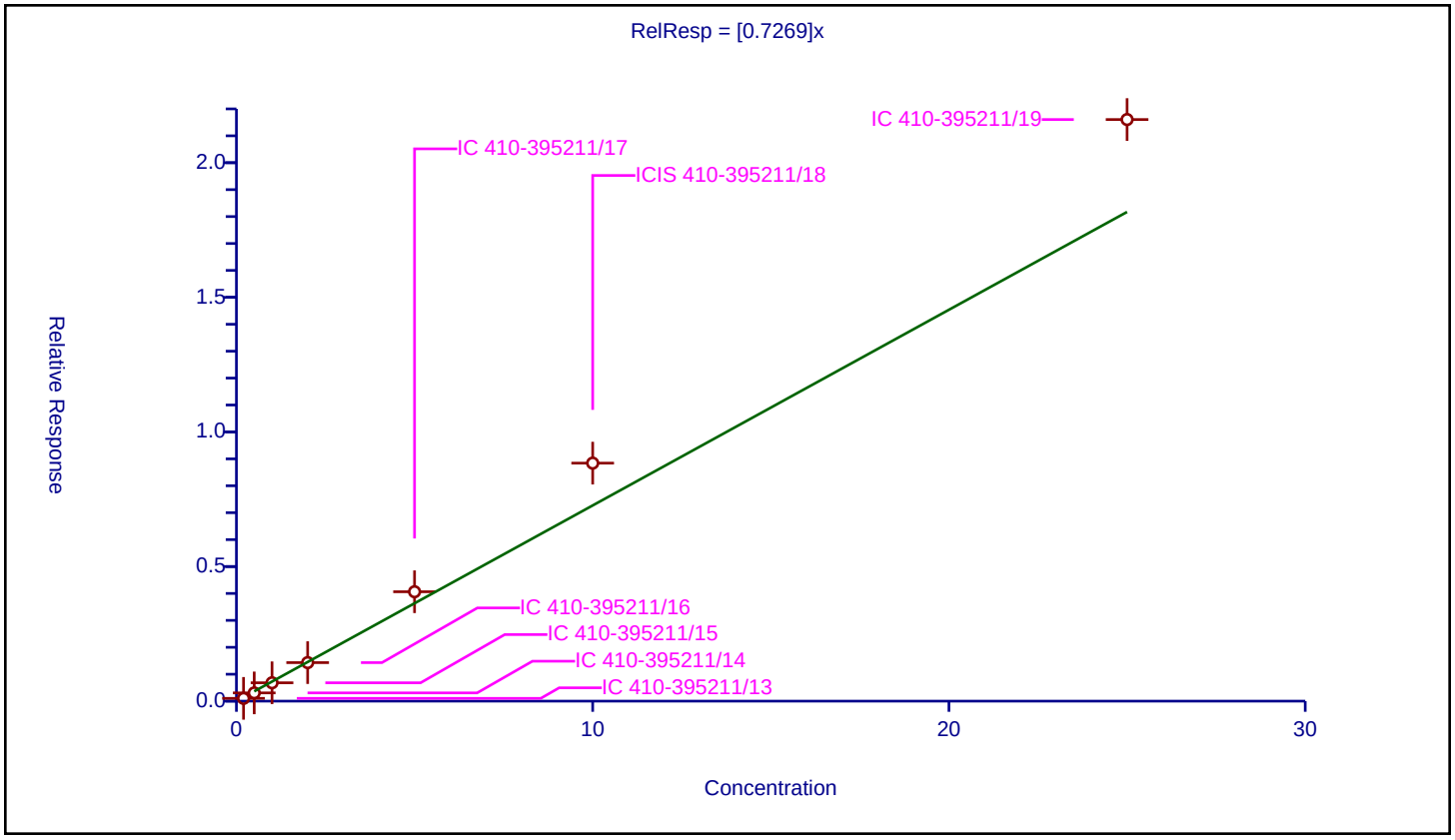
Curve Coefficients

Intercept:	0
Slope:	0.7269

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	18.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.962

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-395211/13	0.2	0.103345	10.0	1118395.0	0.516723	Y
2	IC 410-395211/14	0.5	0.306408	10.0	1161459.0	0.612815	Y
3	IC 410-395211/15	1.0	0.681979	10.0	1176004.0	0.681979	Y
4	IC 410-395211/16	2.0	1.431352	10.0	1187709.0	0.715676	Y
5	IC 410-395211/17	5.0	4.06409	10.0	1170924.0	0.812818	Y
6	ICIS 410-395211/18	10.0	8.841282	10.0	1214109.0	0.884128	Y
7	IC 410-395211/19	25.0	21.604723	10.0	1273416.0	0.864189	Y



11/14/2023
11:12 AM

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-395211/11 Calibration Date: 07/10/2023 18:45

Instrument ID: 10193 Calib Start Date: 07/10/2023 15:50

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/10/2023 18:02

Lab File ID: CL10X10.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	0.2360	0.3152		6.68	5.00	33.6*	30.0
Methoxymethane	Ave	0.3393	0.3226		4.75	5.00	-4.9	30.0
Acetonitrile	Ave	0.0146	0.0130		16.7	18.8	-10.8	30.0
Vinyl acetate	Ave	0.3256	0.3622		13.9	12.5	11.2	30.0
Ethyl acetate	Lin1		0.1018		2.07	2.50	-17.1	30.0
2-Chloroethyl vinyl ether	Ave	0.0941	0.1041		5.53	5.00	10.7	30.0
cis-1,4-Dichloro-2-butene	Lin1		0.0895		11.1	12.5	-10.8	30.0
Cyclohexanone	Lin2		0.2644		74.4	125	-40.5*	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X10.D
Lims ID: ICV Sm
Client ID:
Sample Type: ICV
Inject. Date: 10-Jul-2023 18:45:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-011
Misc. Info.: ICV SM
Operator ID: knk41612 Instrument ID: 10193
Sublist:

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:38:50 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.642	1.648	-0.006	91	197795	5.00	7.91	M
3 Chlorodifluoromethane	51	1.684	1.697	-0.012	97	384585	5.00	6.68	
4 Dimethyl ether	45	1.727	1.739	-0.012	100	393602	5.00	4.75	
8 2-Chloro-1,1,1-Trifluoroethane	118	1.995	2.007	-0.012	35	393885	5.00	6.18	
27 Acetonitrile	41	3.324	3.318	0.006	31	59579	18.8	16.7	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.538	3.550	-0.012	97	163935	50.0	50.0	
38 Vinyl acetate	43	4.428	4.446	-0.018	97	1104664	12.5	13.9	a
46 Ethyl acetate	43	5.385	5.379	0.006	98	62121	2.50	2.07	Ma
63 Isopropyl acetate	43	6.653	6.647	0.006	98	174201	2.50	2.41	a
* 65 Fluorobenzene (IS)	96	6.946	6.946	0.000	99	2440146	10.0	10.0	
75 n-Propyl acetate	61	8.006	7.994	0.012	99	37142	2.50	2.16	
79 2-Chloroethyl vinyl ether	63	8.543	8.543	0.000	91	127032	5.00	5.53	a
109 n-Butyl acetate	43	10.085	10.073	0.012	99	144708	2.50	2.12	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	84	1953617	10.0	10.0	
122 cis-1,4-Dichloro-2-butene	88	11.634	11.627	0.007	94	218459	12.5	11.1	a
123 Cyclohexanone	55	11.658	11.646	0.012	89	108381	125.0	74.4	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1131305	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_LCS_V5ACE_00027	Amount Added:	6.25	Units: uL
MSV_LCS_CYC_00004	Amount Added:	12.50	Units: uL
MSV_LCS_LKB_00008	Amount Added:	25.00	Units: uL
MSV_LCS_2CEVE_00123	Amount Added:	12.50	Units: uL
MSV_LCS_SMFre_00051	Amount Added:	12.50	Units: uL
MSV_Q_QDME_00033	Amount Added:	5.00	Units: uL
MSV_HP25_ISO_00008	Amount Added:	1.00	Units: uL

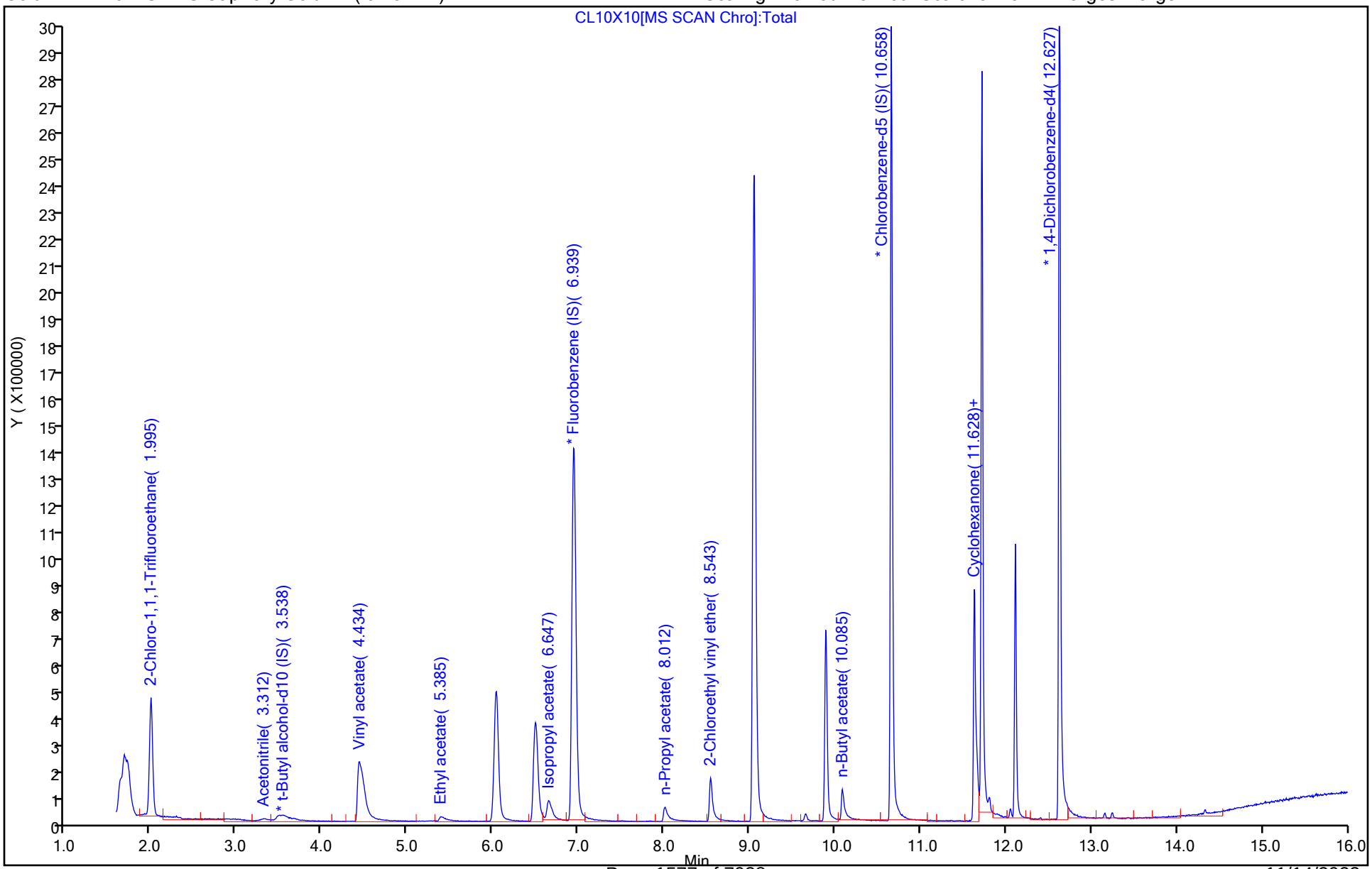
Report Date: 11-Jul-2023 21:38:50 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X10.D

Injection Date:	10-Jul-2023 18:45:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	ICV Sm			Worklist Smp#:	11
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

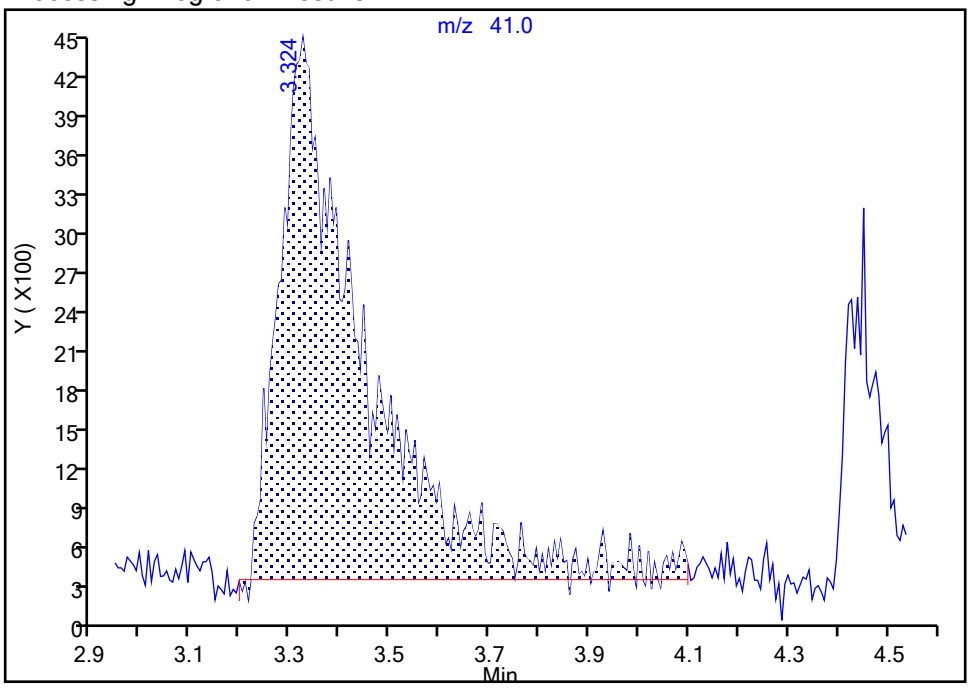
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X10.D				
Injection Date:	10-Jul-2023 18:45:30	Instrument ID:	10193		
Lims ID:	ICV Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

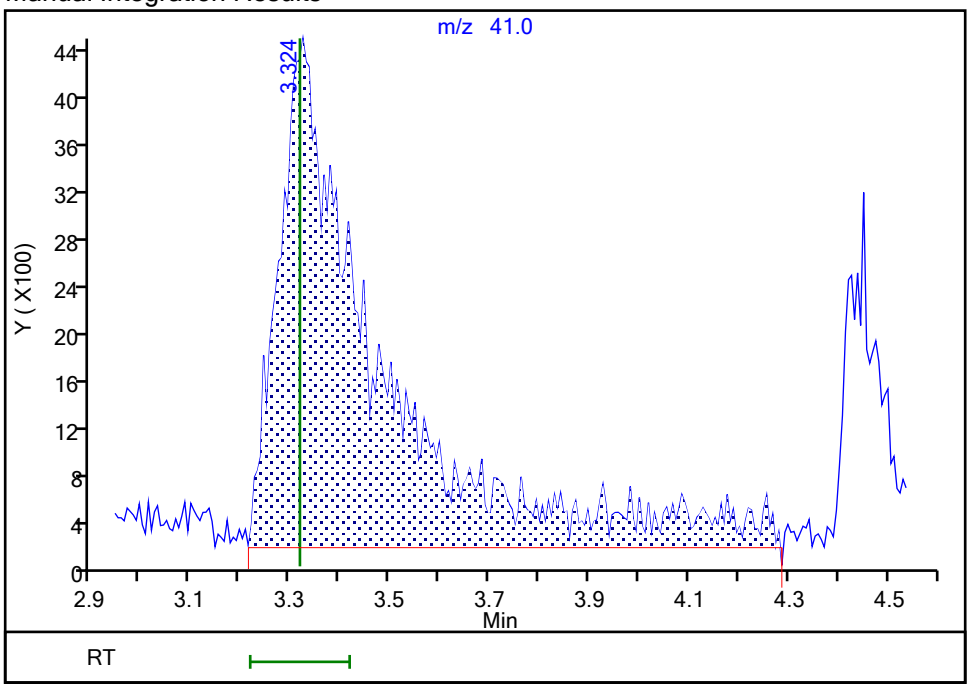
Processing Integration Results

RT: 3.32
Area: 48491
Amount: 12.620907
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 59579
Amount: 16.722117
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:20:05 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

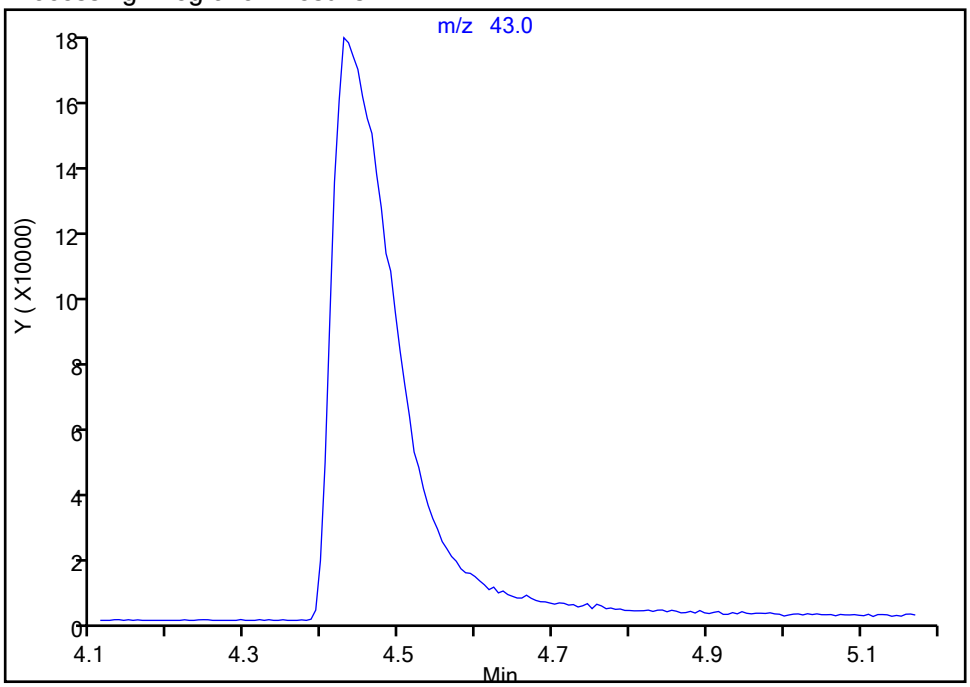
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X10.D				
Injection Date:	10-Jul-2023 18:45:30	Instrument ID:	10193		
Lims ID:	ICV Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

38 Vinyl acetate, CAS: 108-05-4

Signal: 1

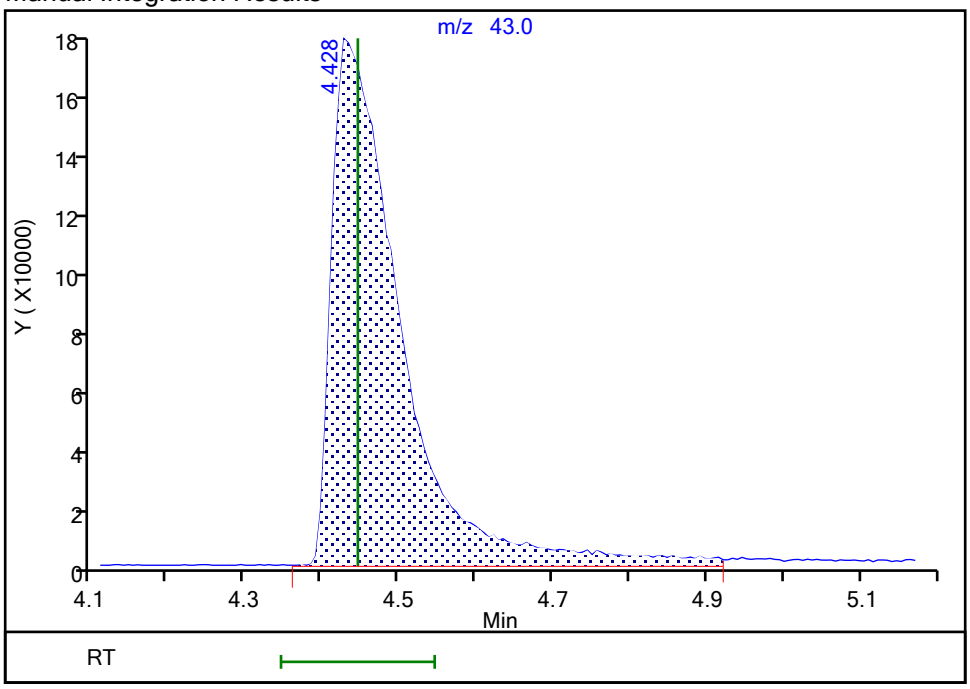
Not Detected
Expected RT: 4.45

Processing Integration Results



Manual Integration Results

RT: 4.43
Area: 1104664
Amount: 13.905235
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:07:43 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

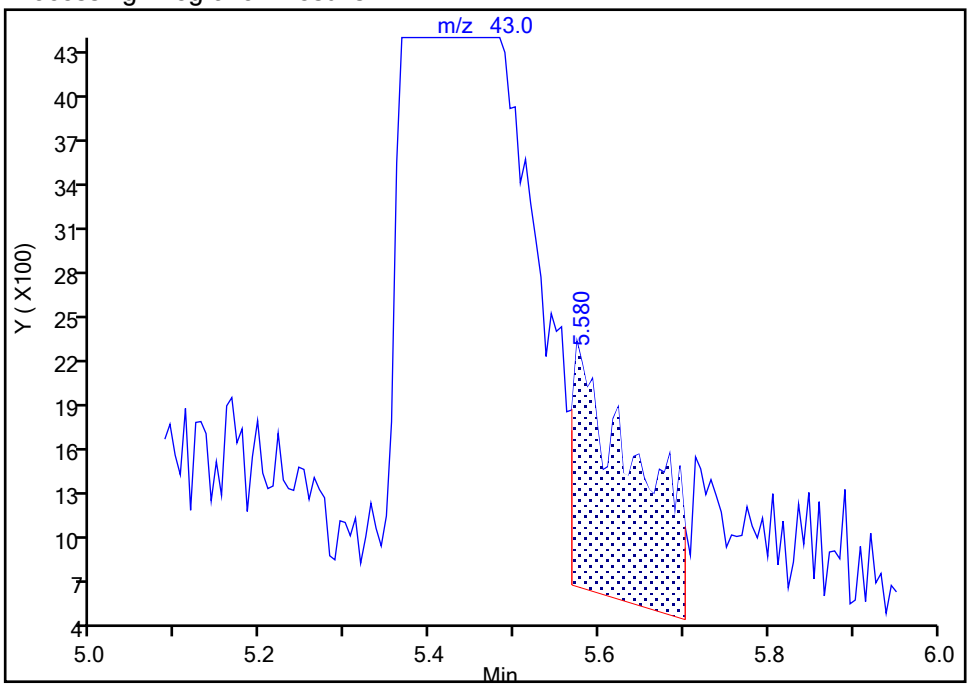
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X10.D				
Injection Date:	10-Jul-2023 18:45:30	Instrument ID:	10193		
Lims ID:	ICV Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

46 Ethyl acetate, CAS: 141-78-6

Signal: 1

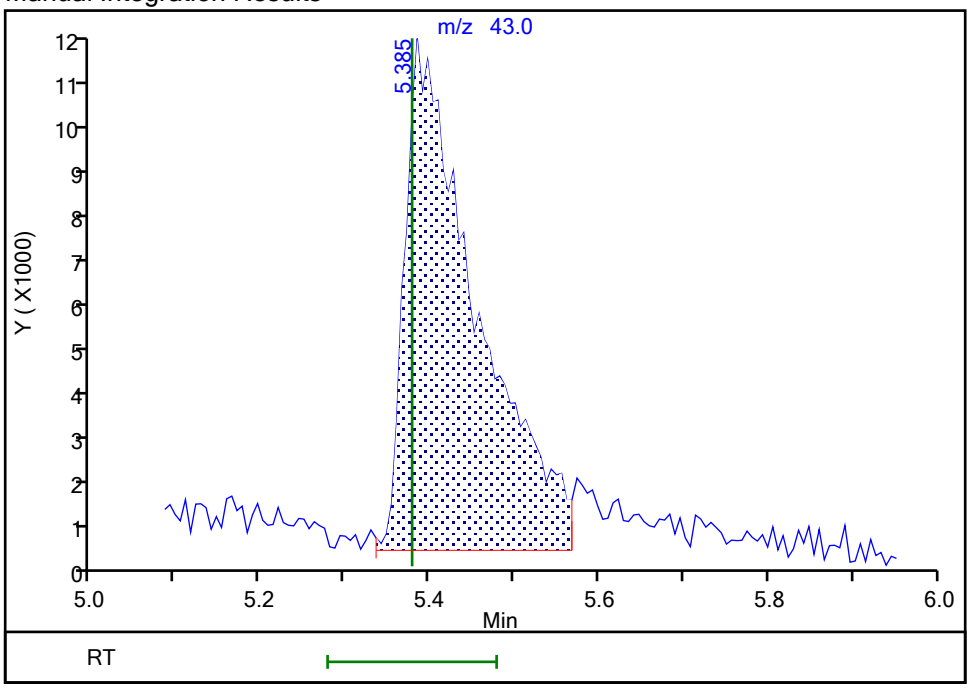
Processing Integration Results

RT: 5.58
Area: 8651
Amount: 0.301563
Amount Units: ug/l



Manual Integration Results

RT: 5.38
Area: 62121
Amount: 2.073246
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:20:44 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

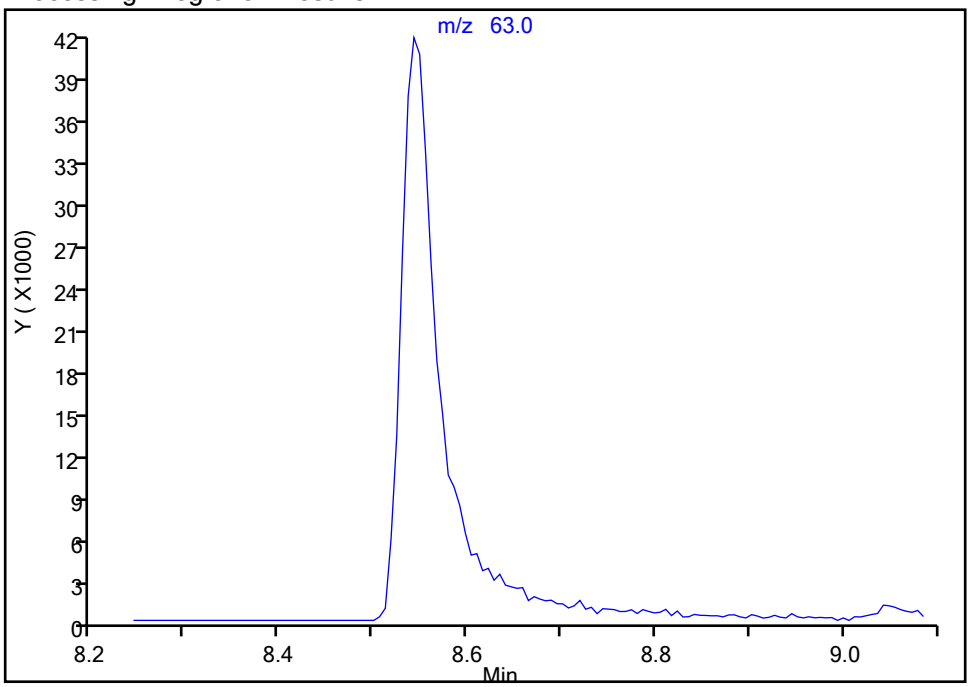
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X10.D				
Injection Date:	10-Jul-2023 18:45:30	Instrument ID:	10193		
Lims ID:	ICV Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

79 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

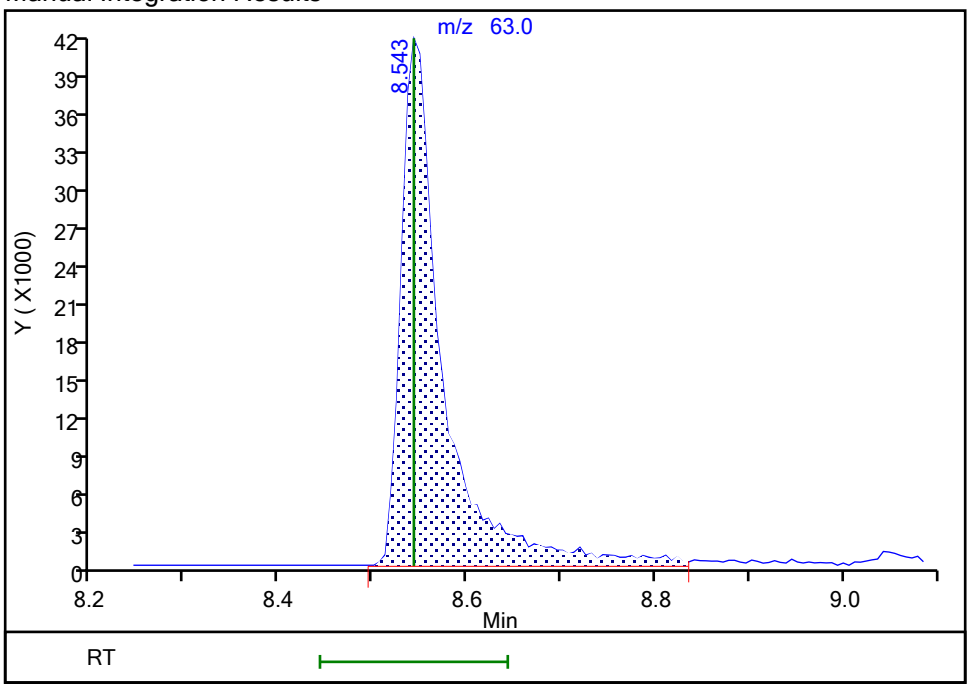
Not Detected
Expected RT: 8.54

Processing Integration Results



Manual Integration Results

RT: 8.54
Area: 127032
Amount: 5.534649
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:07:47 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

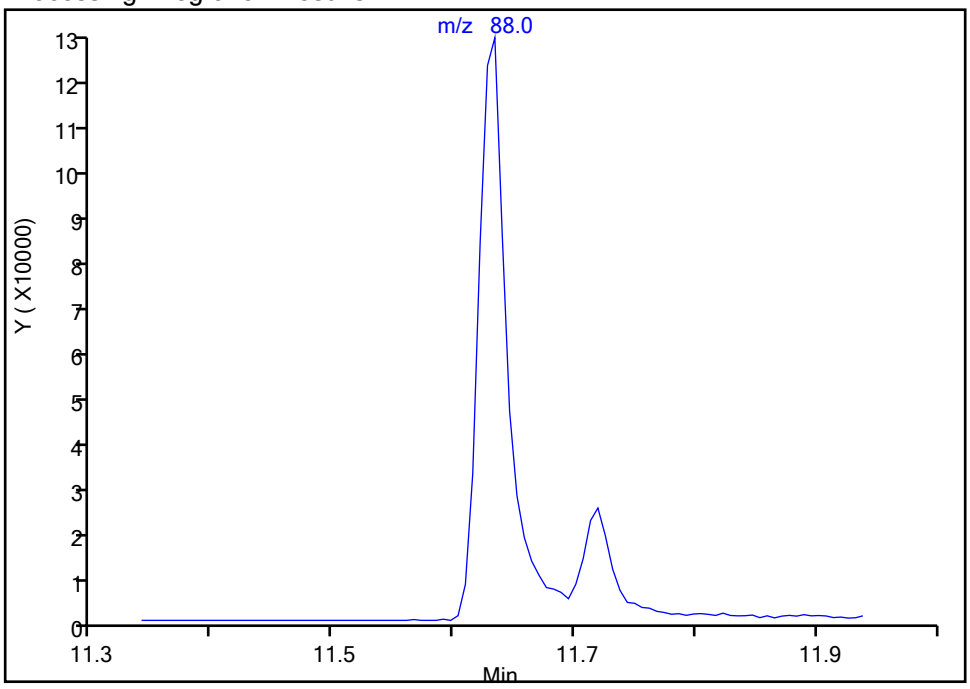
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X10.D				
Injection Date:	10-Jul-2023 18:45:30	Instrument ID:	10193		
Lims ID:	ICV Sm				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

122 cis-1,4-Dichloro-2-butene, CAS: 1476-11-5

Signal: 1

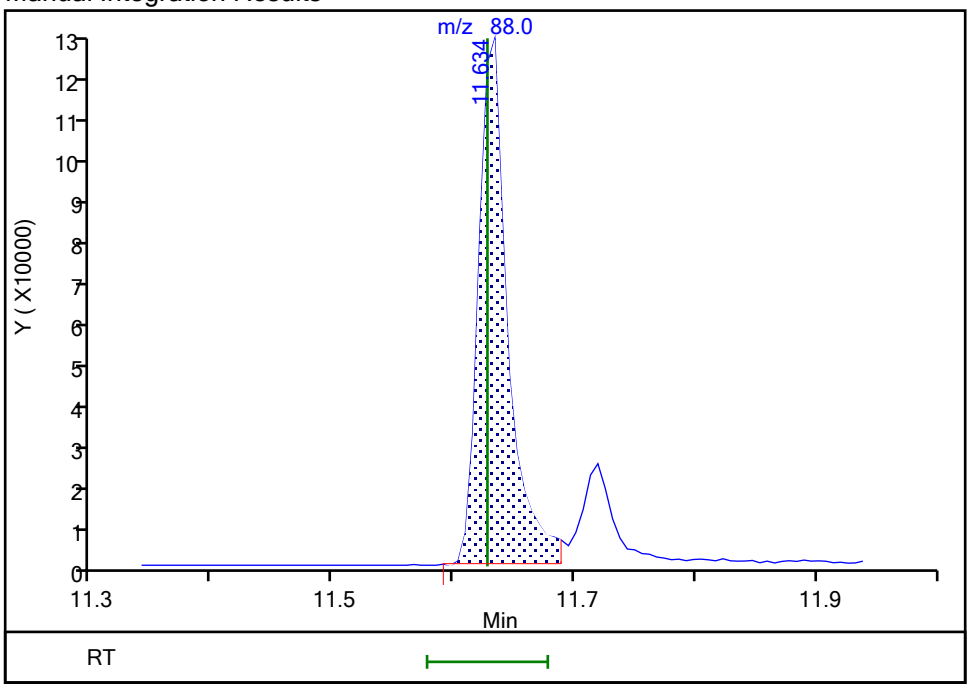
Not Detected
Expected RT: 11.63

Processing Integration Results



Manual Integration Results

RT: 11.63
Area: 218459
Amount: 11.145292
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:08:05 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-395211/21 Calibration Date: 07/10/2023 22:24

Instrument ID: 10193 Calib Start Date: 07/10/2023 19:29

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/10/2023 21:40

Lab File ID: CL10X20.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2459	0.2530	0.1000	5.14	5.00	2.9	30.0
Chloromethane	Ave	0.3115	0.3060	0.1000	4.91	5.00	-1.8	30.0
Vinyl chloride	Ave	0.2974	0.3081	0.1000	5.18	5.00	3.6	30.0
1,3-Butadiene	Ave	0.2881	0.2748		4.77	5.00	-4.6	30.0
Bromomethane	Ave	0.2325	0.2273	0.1000	4.89	5.00	-2.2	30.0
Chloroethane	Ave	0.1750	0.1800	0.1000	5.14	5.00	2.9	30.0
Dichlorofluoromethane	Ave	0.4749	0.4379		4.61	5.00	-7.8	30.0
Trichlorofluoromethane	Ave	0.3359	0.3560	0.1000	5.30	5.00	6.0	30.0
Diethyl ether	Ave	0.1914	0.1837		4.80	5.01	-4.0	30.0
Freon 123a	Ave	0.2635	0.2733		5.18	5.00	3.7	30.0
Acrolein	Ave	1.864	1.728		34.8	37.5	-7.3	30.0
1,1-Dichloroethene	Ave	0.2175	0.2334	0.1000	5.37	5.00	7.3	30.0
Acetone	Ave	2.374	1.974	0.1000	52.0	62.5	-16.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2146	0.2293	0.1000	5.34	5.00	6.8	30.0
Methyl iodide	Ave	0.4671	0.4663		4.99	5.00	-0.2	30.0
Ethyl bromide	Ave	0.2123	0.2204		5.25	5.06	3.8	30.0
Carbon disulfide	Ave	0.7694	0.8015	0.1000	5.21	5.00	4.2	30.0
Methyl acetate	Ave	7.484	6.804	0.1000	4.55	5.00	-9.1	30.0
Allyl chloride	Ave	0.3836	0.4118		5.37	5.00	7.4	30.0
Methylene Chloride	Ave	0.2719	0.2714	0.1000	4.99	5.00	-0.2	30.0
t-Butyl alcohol	Ave	1.050	0.9154		43.6	50.0	-12.8	30.0
Acrylonitrile	Ave	3.339	3.356		25.1	25.0	0.5	30.0
Methyl tertiary butyl ether	Ave	0.6997	0.6915	0.1000	4.94	5.00	-1.2	30.0
trans-1,2-Dichloroethene	Ave	0.2640	0.2765	0.1000	5.24	5.00	4.7	30.0
n-Hexane	Ave	0.3367	0.3592		5.33	5.00	6.7	30.0
1,1-Dichloroethane	Ave	0.4631	0.4815	0.2000	5.20	5.00	4.0	30.0
di-Isopropyl ether	Ave	0.8724	0.8914		5.11	5.00	2.2	30.0
Chloroprene	Ave	0.3544	0.3890		5.49	5.00	9.7	30.0
Ethyl t-butyl ether	Ave	0.8070	0.8382		5.19	5.00	3.9	30.0
2-Butanone	Ave	4.638	4.968	0.1000	66.9	62.5	7.1	30.0
cis-1,2-Dichloroethene	Ave	0.2832	0.3138	0.1000	5.54	5.00	10.8	30.0
2,2-Dichloropropane	Ave	0.3698	0.3935		5.32	5.00	6.4	30.0
Propionitrile	Ave	1.037	1.155		41.7	37.5	11.3	30.0
Methacrylonitrile	Ave	4.909	5.101		39.0	37.5	3.9	30.0
Bromochloromethane	Ave	0.1360	0.1383		5.08	5.00	1.6	30.0
Tetrahydrofuran	Ave	1.365	1.399		25.6	25.0	2.5	30.0
Chloroform	Ave	0.4583	0.4618	0.2000	5.04	5.00	0.8	30.0
1,1,1-Trichloroethane	Ave	0.3858	0.4129	0.1000	5.35	5.00	7.0	30.0
Cyclohexane	Ave	0.4332	0.4827	0.1000	5.57	5.00	11.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-395211/21 Calibration Date: 07/10/2023 22:24

Instrument ID: 10193 Calib Start Date: 07/10/2023 19:29

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/10/2023 21:40

Lab File ID: CL10X20.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3343	0.3615	0.1000	5.41	5.00	8.1	30.0
1,1-Dichloropropene	Ave	0.3458	0.3771		5.45	5.00	9.1	30.0
Isobutyl alcohol	Lin		0.2480		117	125	-6.0	30.0
Benzene	Ave	1.104	1.160	0.5000	5.25	5.00	5.1	30.0
1,2-Dichloroethane	Ave	0.2816	0.2708	0.1000	4.81	5.00	-3.8	30.0
t-Amyl methyl ether	Ave	0.7539	0.7806		5.18	5.00	3.5	30.0
n-Heptane	Ave	0.3641	0.3740		5.14	5.00	2.7	30.0
Trichloroethene	Ave	0.2834	0.2888	0.2000	5.09	5.00	1.9	30.0
n-Butanol	Lin1		0.1966		214	250	-14.5	30.0
Methylcyclohexane	Ave	0.4596	0.5059	0.1000	5.50	5.00	10.1	30.0
1,2-Dichloropropane	Ave	0.2910	0.2990	0.1000	5.14	5.00	2.7	30.0
Dibromomethane	Ave	0.1353	0.1389		5.13	5.00	2.6	30.0
Methyl methacrylate	Ave	9.586	9.940		5.18	5.00	3.7	30.0
1,4-Dioxane	Ave	0.0806	0.0819	0.0050	127	125	1.6	30.0
Bromodichloromethane	Ave	0.3363	0.3420	0.2000	5.09	5.00	1.7	30.0
2-Nitropropane	Ave	2.607	2.365		4.54	5.00	-9.3	30.0
1-Bromo-2-chloroethane	Ave	0.2950	0.3020		5.12	5.00	2.4	30.0
cis-1,3-Dichloropropene	Ave	0.4156	0.4376	0.2000	5.26	5.00	5.3	30.0
4-Methyl-2-pentanone	Ave	13.20	14.11	0.1000	66.8	62.5	6.9	30.0
Toluene	Ave	0.9370	0.9874	0.4000	5.27	5.00	5.4	30.0
trans-1,3-Dichloropropene	Ave	0.4378	0.4759	0.1000	5.43	5.00	8.7	30.0
Ethyl methacrylate	Ave	0.3487	0.3700		5.31	5.00	6.1	30.0
1,1,2-Trichloroethane	Ave	0.2777	0.2772	0.1000	4.99	5.00	-0.2	30.0
Tetrachloroethene	Ave	0.4507	0.4676	0.2000	5.19	5.00	3.8	30.0
1,3-Dichloropropane	Ave	0.4447	0.4657		5.24	5.00	4.7	30.0
2-Hexanone	Ave	8.994	10.08	0.1000	70.0	62.5	12.1	30.0
Dibromochloromethane	Ave	0.3404	0.3436		5.05	5.00	0.9	30.0
1,2-Dibromoethane	Ave	0.2489	0.2614	0.1000	5.25	5.00	5.0	30.0
1-Chlorohexane	Ave	0.5077	0.5228		5.15	5.00	3.0	30.0
Chlorobenzene	Ave	1.134	1.150	0.5000	5.07	5.00	1.4	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3781	0.3990		5.28	5.00	5.5	30.0
Ethylbenzene	Ave	1.798	1.907	0.1000	5.30	5.00	6.1	30.0
m&p-Xylene	Ave	0.7213	0.7720	0.1000	10.7	10.0	7.0	30.0
o-Xylene	Ave	0.7236	0.7649	0.3000	5.29	5.00	5.7	30.0
Styrene	Ave	1.124	1.246	0.3000	5.54	5.00	10.8	30.0
Bromoform	Ave	0.2165	0.2089	0.1000	4.82	5.00	-3.5	30.0
Isopropylbenzene	Ave	1.823	1.972	0.1000	5.41	5.00	8.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5925	0.5984	0.3000	5.05	5.00	1.0	30.0
Bromobenzene	Ave	0.8226	0.8496		5.16	5.00	3.3	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1300	0.1389		26.7	25.0	6.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-395211/21 Calibration Date: 07/10/2023 22:24

Instrument ID: 10193 Calib Start Date: 07/10/2023 19:29

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/10/2023 21:40

Lab File ID: CL10X20.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichloropropane	Ave	0.1521	0.1555		5.11	5.00	2.3	30.0
N-Propylbenzene	Ave	3.600	3.811		5.29	5.00	5.8	30.0
2-Chlorotoluene	Ave	0.7843	0.8189		5.22	5.00	4.4	30.0
1,3,5-Trimethylbenzene	Ave	2.671	2.784		5.21	5.00	4.3	30.0
4-Chlorotoluene	Ave	0.7962	0.8487		5.33	5.00	6.6	30.0
tert-Butylbenzene	Ave	0.6268	0.6621		5.28	5.00	5.6	30.0
Pentachloroethane	Ave	0.4968	0.5205		5.24	5.00	4.8	30.0
1,2,4-Trimethylbenzene	Ave	2.742	2.903		5.29	5.00	5.9	30.0
sec-Butylbenzene	Ave	3.400	3.669		5.40	5.00	7.9	30.0
1,3-Dichlorobenzene	Ave	1.634	1.651	0.6000	5.05	5.00	1.1	30.0
p-Isopropyltoluene	Ave	3.013	3.241		5.38	5.00	7.6	30.0
1,4-Dichlorobenzene	Ave	1.682	1.730	0.5000	5.14	5.00	2.8	30.0
1,2,3-Trimethylbenzene	Ave	1.312	1.313		5.00	5.00	0.0	30.0
Benzyl chloride	Ave	0.2358	0.2229		4.73	5.00	-5.5	30.0
n-Butylbenzene	Ave	1.414	1.512		5.35	5.00	6.9	30.0
1,2-Dichlorobenzene	Ave	1.542	1.540	0.4000	4.99	5.00	-0.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0747	0.0742	0.0500	4.97	5.00	-0.6	30.0
1,3,5-Trichlorobenzene	Ave	1.266	1.267		5.00	5.00	0.1	30.0
1,2,4-Trichlorobenzene	Ave	0.9593	1.033	0.2000	5.38	5.00	7.7	30.0
Hexachlorobutadiene	Ave	0.5390	0.5626		5.22	5.00	4.4	30.0
Naphthalene	Ave	1.567	1.635		5.22	5.00	4.3	30.0
1,2,3-Trichlorobenzene	Ave	0.7269	0.7892		5.43	5.00	8.6	30.0
Dibromofluoromethane (Surr)	Ave	0.2338	0.2301		9.84	10.0	-1.6	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0494	0.0499		10.1	10.0	0.9	30.0
Toluene-d8 (Surr)	Ave	1.314	1.317		10.0	10.0	0.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4701	0.4714		10.0	10.0	0.3	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X20.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 10-Jul-2023 22:24:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0088548-021
Misc. Info.: ICV
Operator ID: knk41612 Instrument ID: 10193
Sublist:

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 21:38:50 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1649

First Level Reviewer: DVW2 Date: 11-Jul-2023 08:55:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.691	1.684	0.007	99	331068	5.00	5.14	M
5 Chloromethane	50	1.849	1.849	0.000	99	400451	5.00	4.91	
6 Vinyl chloride	62	1.941	1.934	0.007	98	403185	5.00	5.18	
7 Butadiene	39	1.947	1.940	0.007	91	359677	5.00	4.77	
9 Bromomethane	94	2.215	2.209	0.006	90	297496	5.00	4.89	
10 Chloroethane	64	2.270	2.270	0.000	100	235546	5.00	5.14	
11 Dichlorofluoromethane	67	2.477	2.471	0.006	97	573092	5.00	4.61	
13 Pentane	43	2.532	2.526	0.006	97	465100	5.00	5.25	
12 Trichlorofluoromethane	101	2.544	2.532	0.012	97	465905	5.00	5.30	
14 Ethyl ether	59	2.703	2.702	0.001	91	240593	5.01	4.80	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.800	2.788	0.012	91	357616	5.00	5.18	
17 Acrolein	56	2.855	2.843	0.012	99	220592	37.5	34.8	
18 1,1-Dichloroethene	96	2.959	2.952	0.007	97	305481	5.00	5.37	
20 Acetone	43	2.989	2.977	0.012	100	420153	62.5	52.0	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.007	3.001	0.006	89	300061	5.00	5.34	
22 Iodomethane	142	3.123	3.117	0.006	97	610218	5.00	4.99	
24 Isopropyl alcohol	45	3.105	3.117	-0.012	50	71009	37.5	37.5	
23 Ethyl bromide	108	3.142	3.135	0.007	98	291834	5.06	5.25	
25 Carbon disulfide	76	3.215	3.202	0.013	99	1048934	5.00	5.21	
26 Methyl acetate	43	3.331	3.324	0.006	24	115851	5.00	4.55	M
29 3-Chloro-1-propene	41	3.343	3.336	0.007	93	538941	5.00	5.37	
30 Methylene Chloride	84	3.501	3.495	0.006	92	355215	5.00	4.99	
* 31 t-Butyl alcohol-d10 (IS)	65	3.556	3.550	0.006	73	170270	50.0	50.0	
32 2-Methyl-2-propanol	59	3.660	3.653	0.007	97	155870	50.0	43.6	
33 Acrylonitrile	53	3.800	3.788	0.012	99	285671	25.0	25.1	
35 trans-1,2-Dichloroethene	96	3.837	3.830	0.006	100	361856	5.00	5.24	
34 Methyl tert-butyl ether	73	3.837	3.830	0.006	94	905015	5.00	4.94	
36 Hexane	57	4.214	4.208	0.006	92	470081	5.00	5.33	
37 1,1-Dichloroethane	63	4.446	4.446	0.000	96	630102	5.00	5.20	
39 Isopropyl ether	45	4.513	4.513	0.000	95	1166541	5.00	5.11	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Chloro-1,3-butadiene	53	4.568	4.562	0.006	90	509026	5.00	5.49	
41 Tert-butyl ethyl ether	59	5.074	5.074	0.000	98	1096984	5.00	5.19	
42 2-Butanone (MEK)	43	5.287	5.281	0.006	100	1057286	62.5	66.9	
43 cis-1,2-Dichloroethene	96	5.318	5.312	0.006	80	410703	5.00	5.54	
44 2,2-Dichloropropane	77	5.324	5.324	0.000	65	514967	5.00	5.32	
45 Propionitrile	54	5.434	5.385	0.049	97	147444	37.5	41.7	
47 Methacrylonitrile	67	5.592	5.592	0.000	92	651422	37.5	39.0	
49 Tetrahydrofuran	71	5.659	5.653	0.006	72	119119	25.0	25.6	
48 Chlorobromomethane	128	5.653	5.653	0.000	92	180961	5.00	5.08	
50 Chloroform	83	5.818	5.818	0.000	93	604371	5.00	5.04	
53 1,1,1-Trichloroethane	97	6.031	6.037	-0.006	82	540310	5.00	5.35	
$ 54 Dibromofluoromethane (Surr)	113	6.037	6.037	0.000	94	602255	10.0	9.84	
55 Cyclohexane	56	6.129	6.123	0.007	90	631750	5.00	5.57	
56 Carbon tetrachloride	117	6.251	6.244	0.007	96	473028	5.00	5.41	
57 1,1-Dichloropropene	75	6.257	6.257	0.000	97	493513	5.00	5.45	
58 Isobutyl alcohol	41	6.513	6.482	0.031	40	105570	125.0	117.5	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.501	6.507	-0.006	99	130547	10.0	10.1	
60 Benzene	78	6.519	6.525	-0.006	96	1517750	5.00	5.25	
61 1,2-Dichloroethane	62	6.604	6.598	0.006	97	354412	5.00	4.81	
64 Tert-amyl methyl ether	73	6.738	6.738	0.000	99	1021544	5.00	5.18	
* 65 Fluorobenzene (IS)	96	6.946	6.946	0.000	99	2617359	10.0	10.0	
66 n-Heptane	43	6.970	6.964	0.006	92	489458	5.00	5.14	
67 n-Butanol	56	7.452	7.409	0.043	28	167387	250.0	213.7	Ma
68 Trichloroethene	95	7.439	7.439	0.000	96	377889	5.00	5.09	
69 Methylcyclohexane	83	7.738	7.738	0.000	90	662015	5.00	5.50	
70 1,2-Dichloropropane	63	7.775	7.775	0.000	96	391251	5.00	5.14	
71 2-ethoxy-2-methyl butane	87	7.811	7.811	0.000	93	583222	5.00	4.93	
72 Dibromomethane	93	7.897	7.890	0.007	93	181796	5.00	5.13	
74 1,4-Dioxane	88	7.915	7.890	0.025	32	34870	125.0	127.0	M
73 Methyl methacrylate	69	7.903	7.897	0.006	93	169247	5.00	5.18	
76 Dichlorobromomethane	83	8.147	8.140	0.007	99	447621	5.00	5.09	
77 2-Nitropropane	41	8.433	8.427	0.006	98	40274	5.00	4.54	
78 1-Bromo-2-chloroethane	63	8.537	8.531	0.006	98	395286	5.00	5.12	
80 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	97	572653	5.00	5.26	
82 4-Methyl-2-pentanone (MIBK)	43	8.927	8.927	0.000	96	3002518	62.5	66.8	
$ 83 Toluene-d8 (Surr)	98	9.055	9.055	0.000	93	2676279	10.0	10.0	
84 Toluene	92	9.140	9.140	0.000	98	1003259	5.00	5.27	
85 trans-1,3-Dichloropropene	75	9.457	9.457	0.000	91	483542	5.00	5.43	
86 Ethyl methacrylate	69	9.543	9.543	0.000	90	375964	5.00	5.31	
87 1,1,2-Trichloroethane	97	9.677	9.677	0.000	89	281622	5.00	4.99	
88 Tetrachloroethene	166	9.756	9.756	0.000	97	475146	5.00	5.19	
89 1,3-Dichloropropane	76	9.854	9.847	0.007	90	473165	5.00	5.24	
106 2-Hexanone	43	9.933	9.927	0.006	96	2145522	62.5	70.0	
108 Chlorodibromomethane	129	10.079	10.079	0.000	90	349116	5.00	5.05	
110 Ethylene Dibromide	107	10.195	10.189	0.006	99	265593	5.00	5.25	
* 111 Chlorobenzene-d5 (IS)	117	10.658	10.658	0.000	83	2032145	10.0	10.0	
113 Chlorobenzene	112	10.689	10.683	0.006	98	1168512	5.00	5.07	
112 1-Chlorohexane	91	10.683	10.683	0.000	96	531176	5.00	5.15	
114 1,1,1,2-Tetrachloroethane	131	10.780	10.780	0.000	97	405428	5.00	5.28	
115 Ethylbenzene	91	10.786	10.786	0.000	98	1937810	5.00	5.30	
116 m-Xylene & p-Xylene	106	10.908	10.908	0.000	97	1568906	10.0	10.7	
118 o-Xylene	106	11.256	11.256	0.000	96	777201	5.00	5.29	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 Styrene	104	11.274	11.274	0.000	95	1266166	5.00	5.54	
120 Bromoform	173	11.433	11.426	0.007	98	212284	5.00	4.82	
121 Isopropylbenzene	105	11.573	11.573	0.000	95	2004088	5.00	5.41	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.719	0.000	97	957893	10.0	10.0	
125 Bromobenzene	156	11.835	11.829	0.006	93	518985	5.00	5.16	
126 1,1,2,2-Tetrachloroethane	83	11.835	11.835	0.000	92	365535	5.00	5.05	
127 trans-1,4-Dichloro-2-butene	53	11.865	11.859	0.006	88	424156	25.0	26.7	
128 1,2,3-Trichloropropane	110	11.878	11.877	0.001	79	95014	5.00	5.11	
129 N-Propylbenzene	91	11.914	11.914	0.000	98	2327736	5.00	5.29	
130 2-Chlorotoluene	126	11.987	11.987	0.000	98	500219	5.00	5.22	
131 1,3,5-Trimethylbenzene	105	12.061	12.060	0.000	94	1700796	5.00	5.21	
132 4-Chlorotoluene	126	12.085	12.085	0.000	96	518455	5.00	5.33	
133 tert-Butylbenzene	134	12.304	12.304	0.000	93	404469	5.00	5.28	
134 Pentachloroethane	167	12.335	12.329	0.006	85	317928	5.00	5.24	
135 1,2,4-Trimethylbenzene	105	12.347	12.347	0.000	97	1773465	5.00	5.29	
136 sec-Butylbenzene	105	12.469	12.469	0.000	94	2241378	5.00	5.40	
137 1,3-Dichlorobenzene	146	12.567	12.566	0.000	98	1008743	5.00	5.05	
138 4-Isopropyltoluene	119	12.585	12.585	0.000	97	1979800	5.00	5.38	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	92	1221694	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.646	12.640	0.006	96	1056698	5.00	5.14	
141 1,2,3-Trimethylbenzene	120	12.658	12.658	0.000	98	802092	5.00	5.00	
142 Benzyl chloride	126	12.731	12.725	0.006	98	136140	5.00	4.73	
145 p-Diethylbenzene	119	12.938	12.865	0.073	87	981939	5.00	4.20	
143 n-Butylbenzene	92	12.884	12.883	0.001	97	923497	5.00	5.35	
144 1,2-Dichlorobenzene	146	12.908	12.908	0.000	99	940417	5.00	4.99	
148 1,2-Dibromo-3-Chloropropane	155	13.469	13.469	0.000	90	45346	5.00	4.97	
149 1,3,5-Trichlorobenzene	180	13.591	13.591	0.000	98	774189	5.00	5.00	
150 1,2,4-Trichlorobenzene	180	14.024	14.023	0.001	94	630940	5.00	5.38	
151 Hexachlorobutadiene	225	14.109	14.103	0.006	96	343634	5.00	5.22	
152 Naphthalene	128	14.206	14.200	0.006	96	998684	5.00	5.22	
153 1,2,3-Trichlorobenzene	180	14.347	14.347	0.001	96	482061	5.00	5.43	
154 2-Methylnaphthalene	142	14.950	14.944	0.006	92	252146	5.00	5.60	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LCS_VOC#1_00118	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00149	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00007	Amount Added: 12.50	Units: uL	
LCS_ETBR_00006	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00121	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00030	Amount Added: 12.50	Units: uL	
MSV_HP25_ISSS_00073	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 11-Jul-2023 21:38:53 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X20.D

Injection Date: 10-Jul-2023 22:24:30 Instrument ID: 10193 Operator ID: knk41612

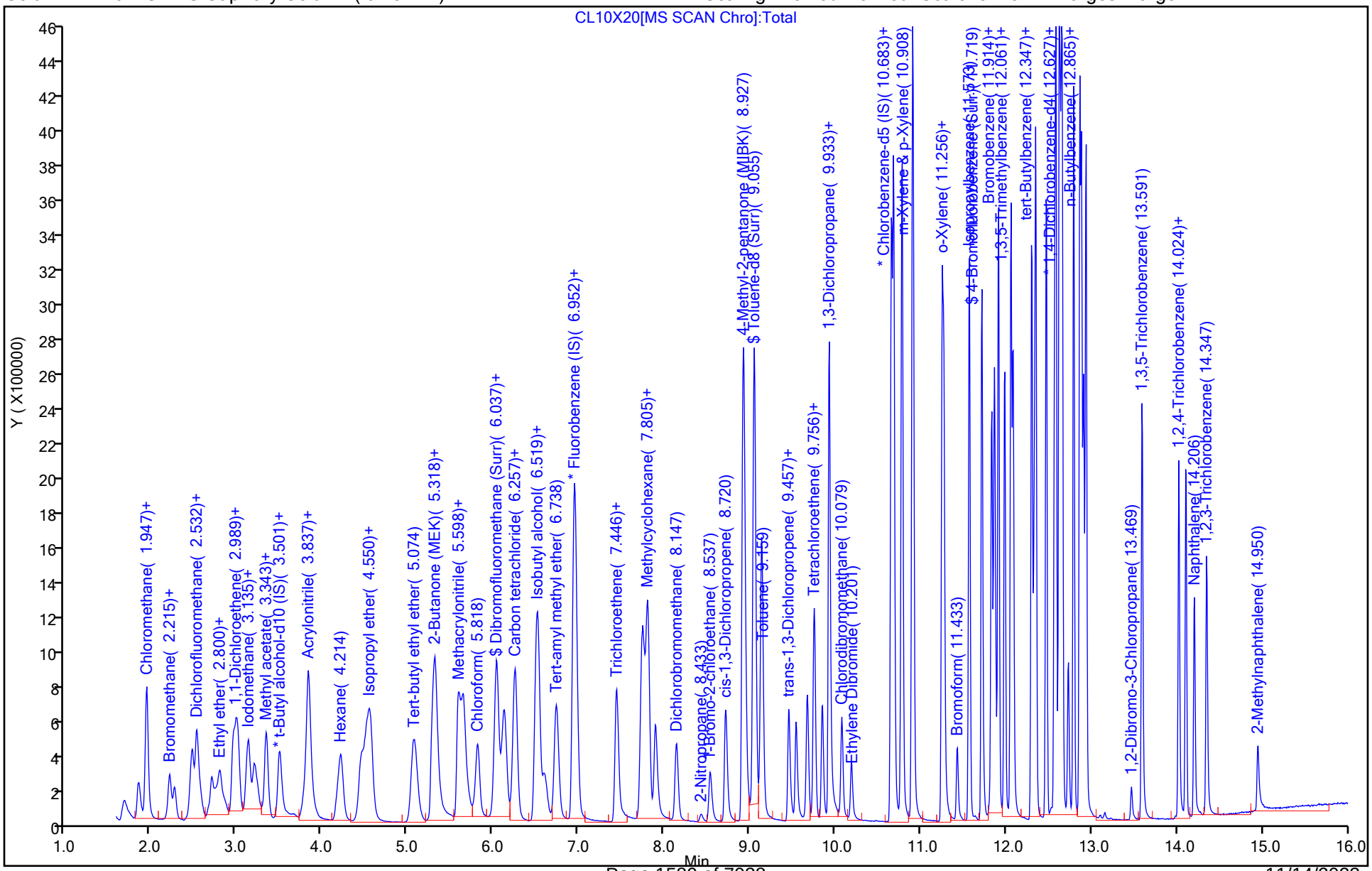
Lims ID: ICV Worklist Smp#: 21

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 20

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

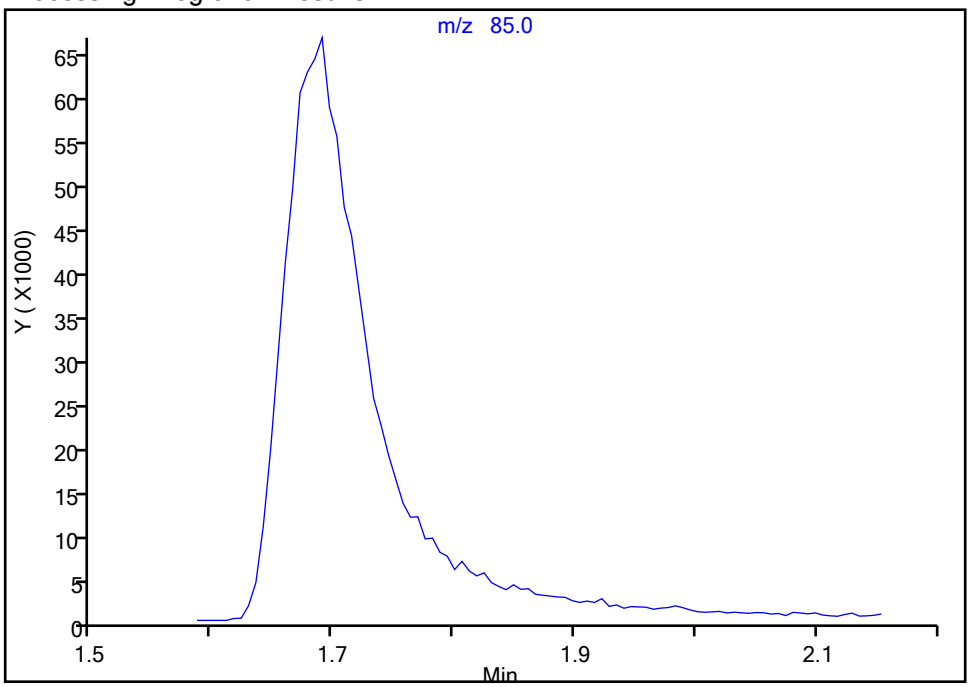
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X20.D				
Injection Date:	10-Jul-2023 22:24:30	Instrument ID:	10193		
Lims ID:	ICV				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

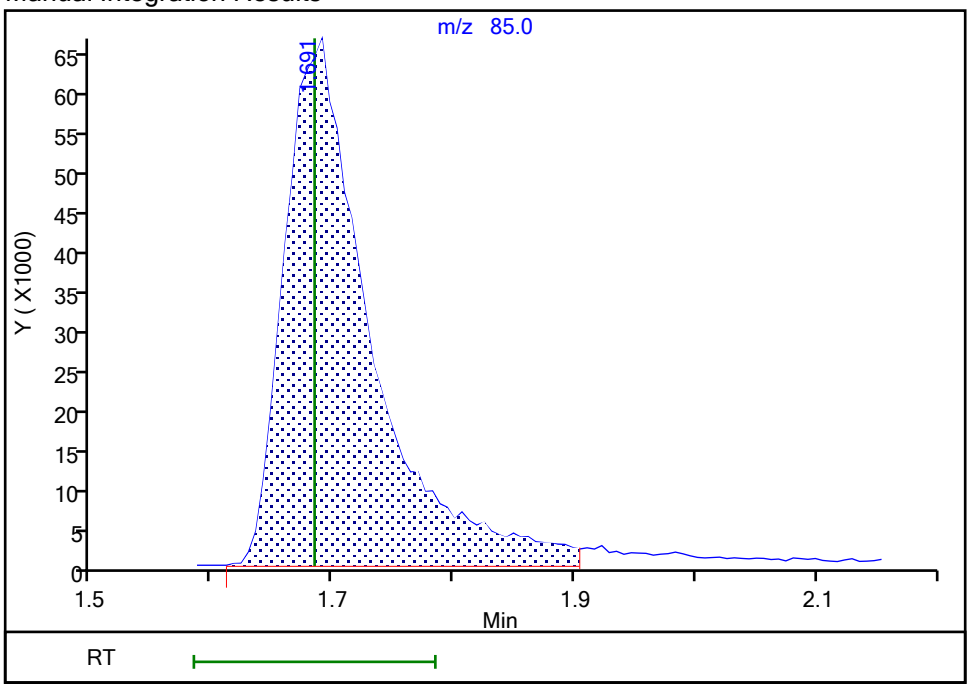
Not Detected
Expected RT: 1.68

Processing Integration Results



RT: 1.69
Area: 331068
Amount: 5.143220
Amount Units: ug/l

Manual Integration Results



Reviewer: UKEK, 11-Jul-2023 20:42:02 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

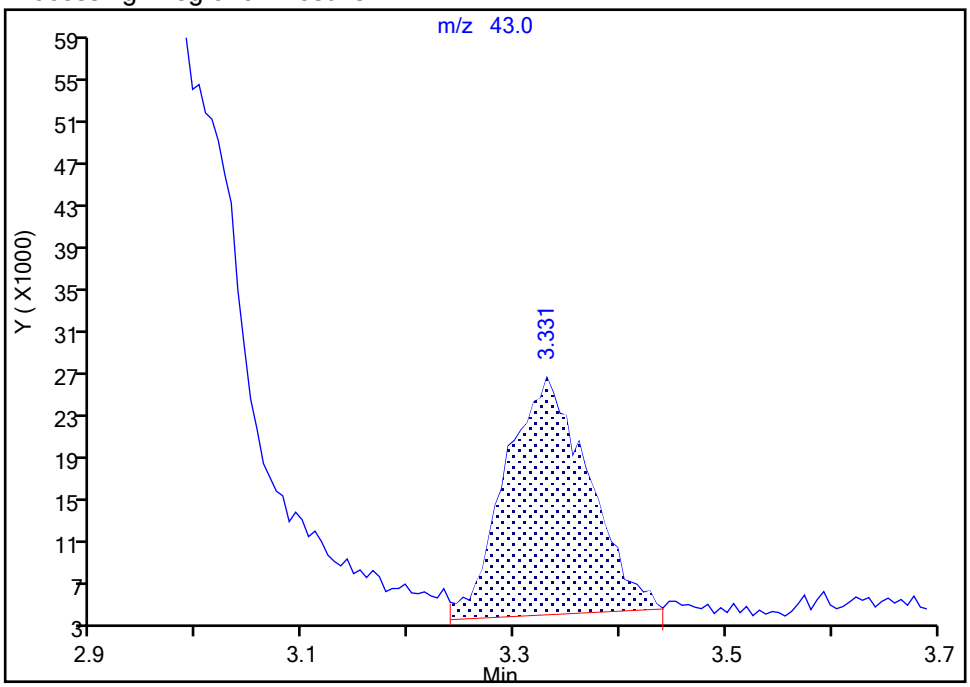
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X20.D				
Injection Date:	10-Jul-2023 22:24:30	Instrument ID:	10193		
Lims ID:	ICV				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

26 Methyl acetate, CAS: 79-20-9

Signal: 1

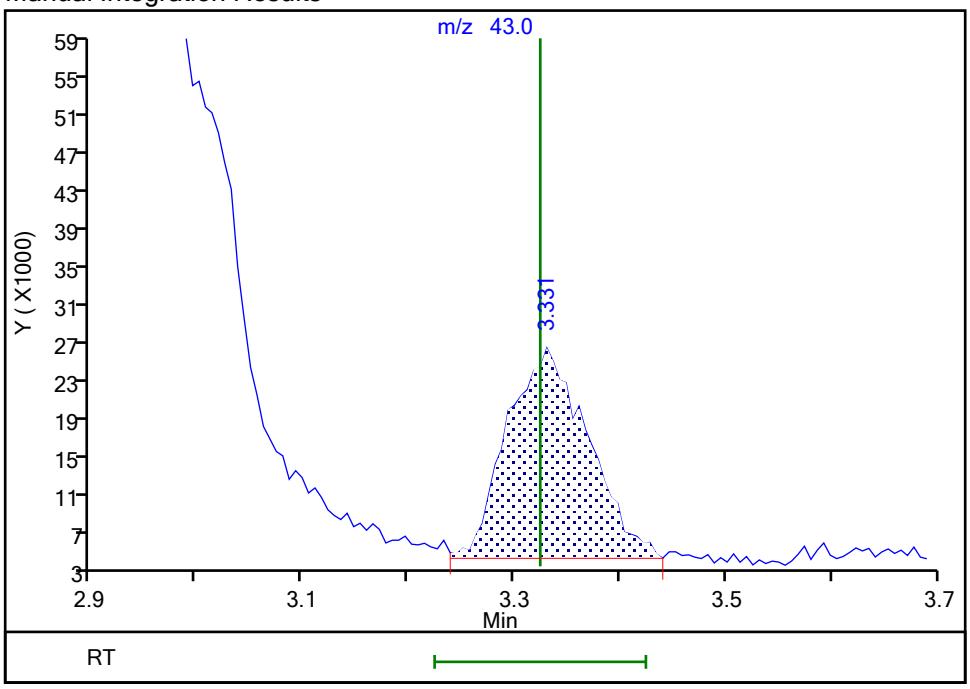
Processing Integration Results

RT: 3.33
Area: 122927
Amount: 4.827623
Amount Units: ug/l



Manual Integration Results

RT: 3.33
Area: 115851
Amount: 4.545669
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:54:00 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

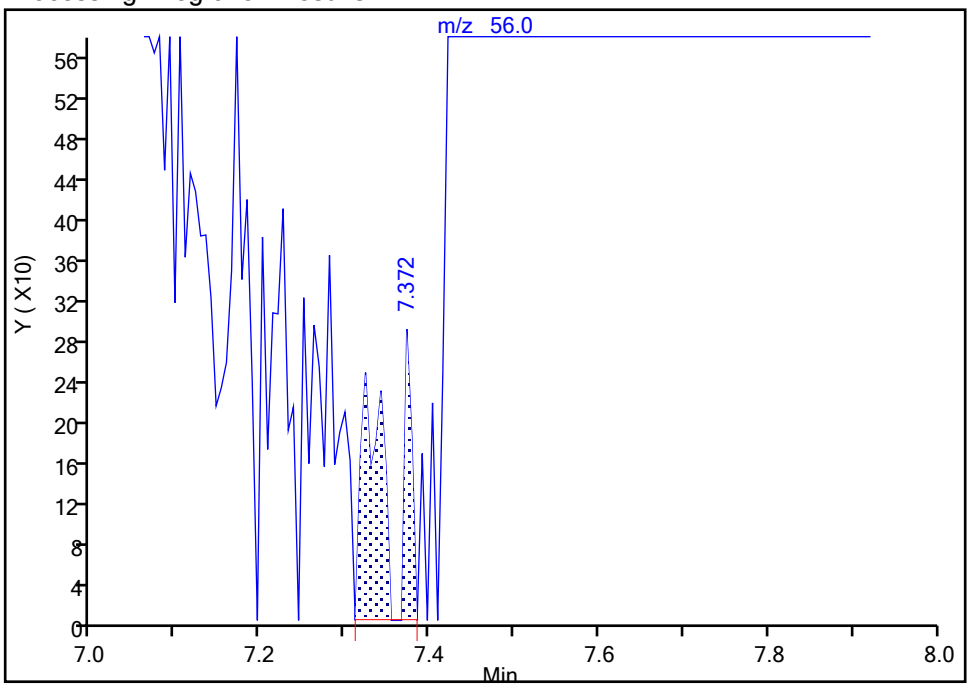
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X20.D				
Injection Date:	10-Jul-2023 22:24:30	Instrument ID:	10193		
Lims ID:	ICV				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 n-Butanol, CAS: 71-36-3

Signal: 1

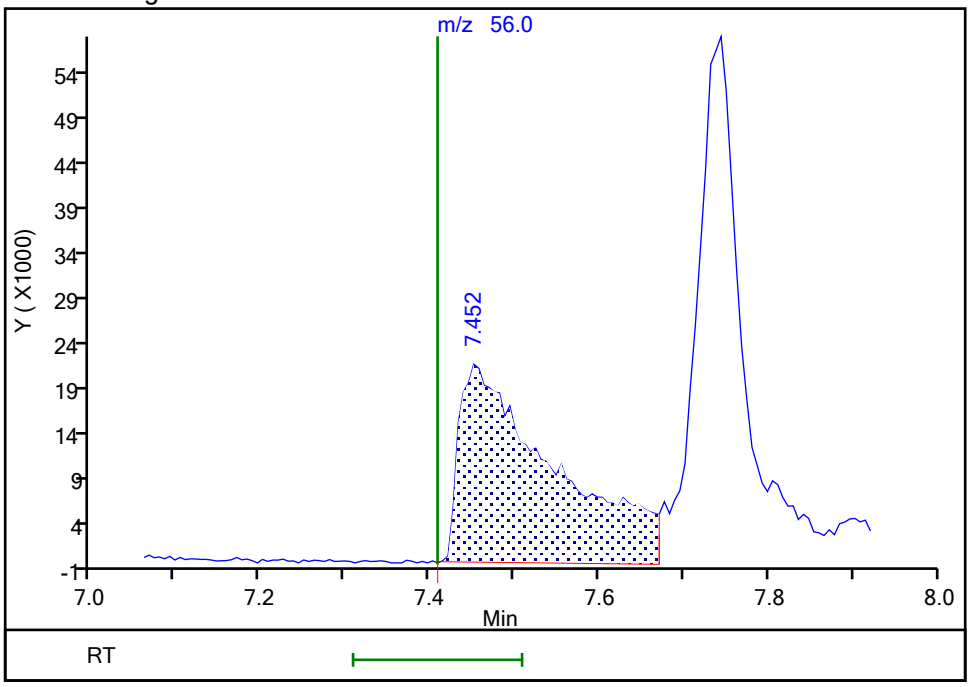
Processing Integration Results

RT: 7.37
Area: 578
Amount: 49.869523
Amount Units: ug/l



Manual Integration Results

RT: 7.45
Area: 167387
Amount: 213.7166
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:54:31 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

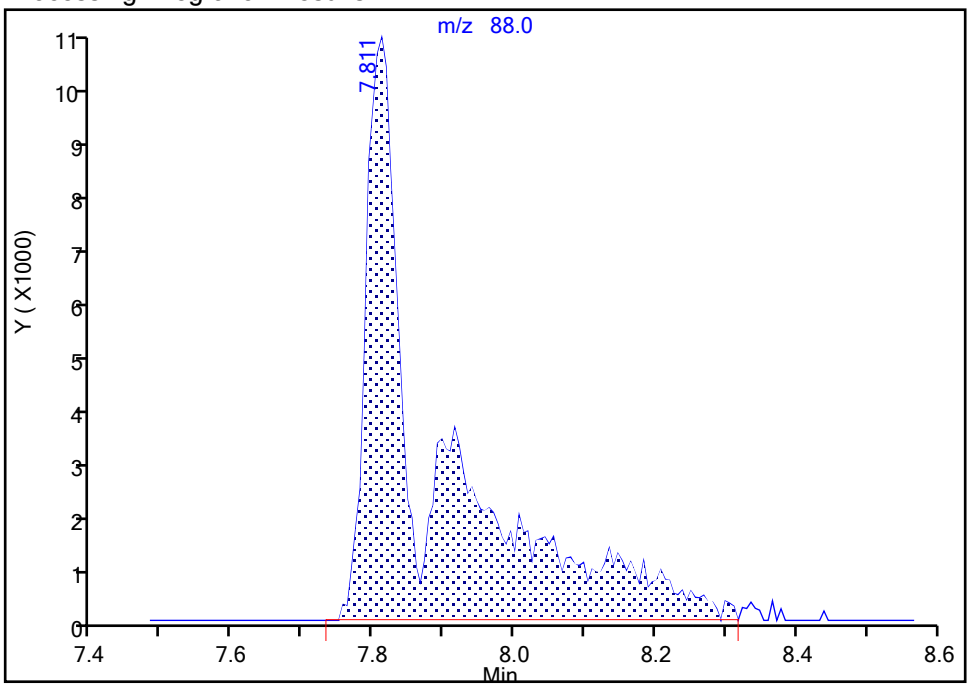
Data File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X20.D				
Injection Date:	10-Jul-2023 22:24:30	Instrument ID:	10193		
Lims ID:	ICV				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

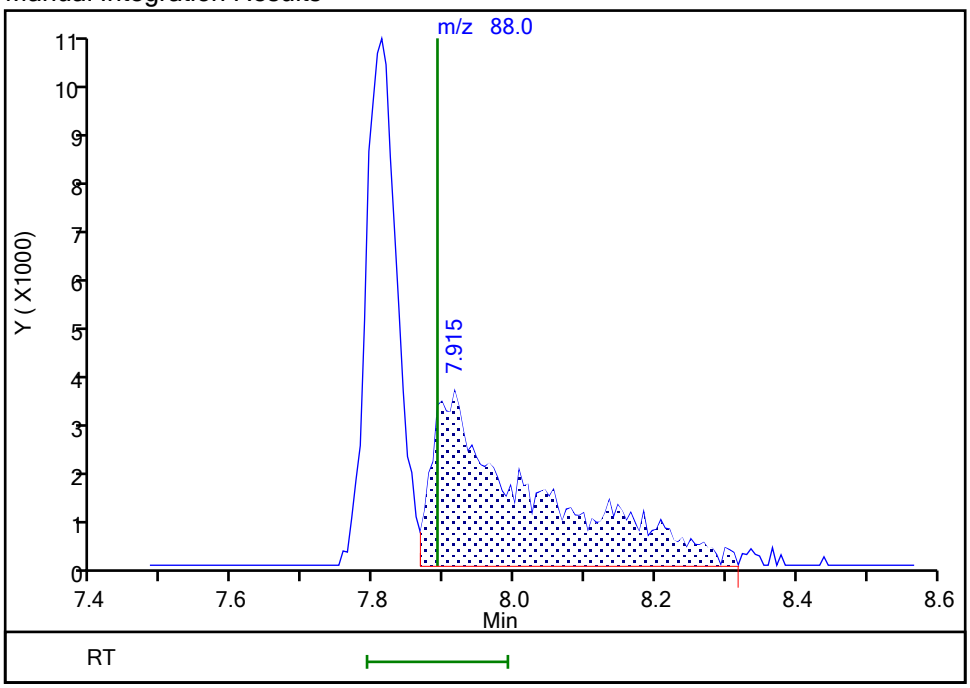
Processing Integration Results

RT: 7.81
Area: 67318
Amount: 265.6396
Amount Units: ug/l



Manual Integration Results

RT: 7.91
Area: 34870
Amount: 127.0110
Amount Units: ug/l



Reviewer: DVW2, 11-Jul-2023 08:54:43 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-405906/3 Calibration Date: 08/08/2023 18:38

Instrument ID: 10193 Calib Start Date: 07/10/2023 19:29

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/10/2023 21:40

Lab File ID: CG08X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2459	0.2455	0.1000	9.98	10.0	-0.2	20.0
Chloromethane	Ave	0.3115	0.2827	0.1000	9.08	10.0	-9.2	20.0
1,3-Butadiene	Ave	0.2881	0.2654		9.21	10.0	-7.9	20.0
Vinyl chloride	Ave	0.2974	0.2801	0.1000	9.42	10.0	-5.8	20.0
Bromomethane	Ave	0.2325	0.2076	0.1000	8.93	10.0	-10.7	20.0
Chloroethane	Ave	0.1750	0.1598	0.1000	9.13	10.0	-8.7	20.0
Dichlorofluoromethane	Ave	0.4749	0.4196		8.84	10.0	-11.6	20.0
Trichlorofluoromethane	Ave	0.3359	0.3279	0.1000	9.76	10.0	-2.4	20.0
Diethyl ether	Ave	0.1914	0.1765		9.22	10.0	-7.8	20.0
Freon 123a	Ave	0.2635	0.2510		9.53	10.0	-4.7	20.0
Acrolein	Ave	1.864	1.673		449	500	-10.3	20.0
1,1-Dichloroethene	Ave	0.2175	0.2038	0.1000	9.37	10.0	-6.3	20.0
Acetone	Ave	2.374	2.341	0.1000	98.6	100	-1.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2146	0.1924	0.1000	8.97	10.0	-10.3	20.0
Methyl iodide	Ave	0.4671	0.4634		9.92	10.0	-0.8	20.0
Ethyl bromide	Ave	0.2123	0.2029		9.55	9.99	-4.4	20.0
Carbon disulfide	Ave	0.7694	0.7468	0.1000	9.71	10.0	-2.9	20.0
Methyl acetate	Ave	7.484	8.862	0.1000	11.8	10.0	18.4	20.0
Allyl chloride	Ave	0.3836	0.3708		9.67	10.0	-3.3	20.0
Methylene Chloride	Ave	0.2719	0.2572	0.1000	9.46	10.0	-5.4	20.0
t-Butyl alcohol	Ave	1.050	0.9570		182	200	-8.8	20.0
Acrylonitrile	Ave	3.339	3.631		27.2	25.0	8.7	20.0
Methyl tertiary butyl ether	Ave	0.6997	0.6439	0.1000	9.20	10.0	-8.0	20.0
trans-1,2-Dichloroethene	Ave	0.2640	0.2608	0.1000	9.88	10.0	-1.2	20.0
n-Hexane	Ave	0.3367	0.3327		9.88	10.0	-1.2	20.0
1,1-Dichloroethane	Ave	0.4631	0.4510	0.2000	9.74	10.0	-2.6	20.0
di-Isopropyl ether	Ave	0.8724	0.7993		9.16	10.0	-8.4	20.0
Chloroprene	Ave	0.3544	0.3433		9.69	10.0	-3.1	20.0
Ethyl t-butyl ether	Ave	0.8070	0.7315		9.06	10.0	-9.4	20.0
2-Butanone	Ave	4.638	5.122	0.1000	110	100	10.4	20.0
cis-1,2-Dichloroethene	Ave	0.2832	0.2883	0.1000	10.2	10.0	1.8	20.0
2,2-Dichloropropane	Ave	0.3698	0.3598		9.73	10.0	-2.7	20.0
Propionitrile	Ave	1.037	1.364		263	200	31.5*	20.0
Methacrylonitrile	Ave	4.909	5.476		112	100	11.5	20.0
Bromochloromethane	Ave	0.1360	0.1413		10.4	10.0	3.9	20.0
Tetrahydrofuran	Ave	1.365	1.589		58.2	50.0	16.4	20.0
Chloroform	Ave	0.4583	0.4400	0.2000	9.60	10.0	-4.0	20.0
1,1,1-Trichloroethane	Ave	0.3858	0.3689	0.1000	9.56	10.0	-4.4	20.0
Cyclohexane	Ave	0.4332	0.4150	0.1000	9.58	10.0	-4.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-405906/3 Calibration Date: 08/08/2023 18:38

Instrument ID: 10193 Calib Start Date: 07/10/2023 19:29

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/10/2023 21:40

Lab File ID: CG08X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3343	0.3347	0.1000	10.0	10.0	0.1	20.0
1,1-Dichloropropene	Ave	0.3458	0.3380		9.77	10.0	-2.3	20.0
Isobutyl alcohol	Lin		0.3090		506	500	1.1	20.0
Benzene	Ave	1.104	1.085	0.5000	9.83	10.0	-1.7	20.0
1,2-Dichloroethane	Ave	0.2816	0.2675	0.1000	9.50	10.0	-5.0	20.0
t-Amyl methyl ether	Ave	0.7539	0.7229		9.59	10.0	-4.1	20.0
n-Heptane	Ave	0.3641	0.3553		9.76	10.0	-2.4	20.0
n-Butanol	Lin1		0.2589		807	875	-7.8	20.0
Trichloroethene	Ave	0.2834	0.2771	0.2000	9.78	10.0	-2.2	20.0
Methylcyclohexane	Ave	0.4596	0.4660	0.1000	10.1	10.0	1.4	20.0
1,2-Dichloropropane	Ave	0.2910	0.2882	0.1000	9.90	10.0	-1.0	20.0
Dibromomethane	Ave	0.1353	0.1382		10.2	10.0	2.1	20.0
1,4-Dioxane	Ave	0.0806	0.0752	0.0050	467	500	-6.7	20.0
Methyl methacrylate	Ave	9.586	9.543		9.96	10.0	-0.4	20.0
Bromodichloromethane	Ave	0.3363	0.3314	0.2000	9.85	10.0	-1.5	20.0
2-Nitropropane	Ave	2.607	2.769		53.1	50.0	6.2	20.0
1-Bromo-2-chloroethane	Ave	0.2950	0.3008		10.2	10.0	2.0	20.0
cis-1,3-Dichloropropene	Ave	0.4156	0.4251	0.2000	10.2	10.0	2.3	20.0
4-Methyl-2-pentanone	Ave	13.20	13.53	0.1000	102	100	2.5	20.0
Toluene	Ave	0.9370	0.9065	0.4000	9.67	10.0	-3.3	20.0
trans-1,3-Dichloropropene	Ave	0.4378	0.4547	0.1000	10.4	10.0	3.9	20.0
Ethyl methacrylate	Ave	0.3487	0.3721		10.7	10.0	6.7	20.0
1,1,2-Trichloroethane	Ave	0.2777	0.2692	0.1000	9.69	10.0	-3.1	20.0
Tetrachloroethene	Ave	0.4507	0.4407	0.2000	9.78	10.0	-2.2	20.0
1,3-Dichloropropane	Ave	0.4447	0.4425		9.95	10.0	-0.5	20.0
2-Hexanone	Ave	8.994	9.541	0.1000	106	100	6.1	20.0
Dibromochloromethane	Ave	0.3404	0.3536		10.4	10.0	3.9	20.0
1,2-Dibromoethane	Ave	0.2489	0.2612	0.1000	10.5	10.0	5.0	20.0
1-Chlorohexane	Ave	0.5077	0.4946		9.74	10.0	-2.6	20.0
Chlorobenzene	Ave	1.134	1.106	0.5000	9.75	10.0	-2.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3781	0.3846		10.2	10.0	1.7	20.0
Ethylbenzene	Ave	1.798	1.742	0.1000	9.69	10.0	-3.1	20.0
m&p-Xylene	Ave	0.7213	0.7269	0.1000	20.2	20.0	0.8	20.0
o-Xylene	Ave	0.7236	0.7143	0.3000	9.87	10.0	-1.3	20.0
Styrene	Ave	1.124	1.170	0.3000	10.4	10.0	4.0	20.0
Bromoform	Ave	0.2165	0.2283	0.1000	10.5	10.0	5.4	20.0
Isopropylbenzene	Ave	1.823	1.783	0.1000	9.78	10.0	-2.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5925	0.6040	0.3000	10.2	10.0	1.9	20.0
Bromobenzene	Ave	0.8226	0.8131		9.88	10.0	-1.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1300	0.1364		105	100	4.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-405906/3 Calibration Date: 08/08/2023 18:38

Instrument ID: 10193 Calib Start Date: 07/10/2023 19:29

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/10/2023 21:40

Lab File ID: CG08X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichloropropane	Ave	0.1521	0.1541		10.1	10.0	1.3	20.0
N-Propylbenzene	Ave	3.600	3.531		9.81	10.0	-1.9	20.0
2-Chlorotoluene	Ave	0.7843	0.7972		10.2	10.0	1.6	20.0
1,3,5-Trimethylbenzene	Ave	2.671	2.619		9.81	10.0	-1.9	20.0
4-Chlorotoluene	Ave	0.7962	0.8356		10.5	10.0	5.0	20.0
tert-Butylbenzene	Ave	0.6268	0.6312		10.1	10.0	0.7	20.0
Pentachloroethane	Ave	0.4968	0.5287		10.6	10.0	6.4	20.0
1,2,4-Trimethylbenzene	Ave	2.742	2.746		10.0	10.0	0.1	20.0
sec-Butylbenzene	Ave	3.400	3.419		10.1	10.0	0.6	20.0
1,3-Dichlorobenzene	Ave	1.634	1.627	0.6000	9.96	10.0	-0.4	20.0
p-Isopropyltoluene	Ave	3.013	3.071		10.2	10.0	1.9	20.0
1,4-Dichlorobenzene	Ave	1.682	1.608	0.5000	9.56	10.0	-4.4	20.0
1,2,3-Trimethylbenzene	Ave	1.312	1.330		10.1	10.0	1.4	20.0
Benzyl chloride	Ave	0.2358	0.2725		11.6	10.0	15.5	20.0
n-Butylbenzene	Ave	1.414	1.456		10.3	10.0	2.9	20.0
1,2-Dichlorobenzene	Ave	1.542	1.554	0.4000	10.1	10.0	0.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0747	0.0851	0.0500	11.4	10.0	13.9	20.0
1,3,5-Trichlorobenzene	Ave	1.266	1.259		9.94	10.0	-0.6	20.0
1,2,4-Trichlorobenzene	Ave	0.9593	0.9429	0.2000	9.83	10.0	-1.7	20.0
Hexachlorobutadiene	Ave	0.5390	0.5040		9.35	10.0	-6.5	20.0
Naphthalene	Ave	1.567	1.584		10.1	10.0	1.1	20.0
1,2,3-Trichlorobenzene	Ave	0.7269	0.7624		10.5	10.0	4.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2338	0.2366		10.1	10.0	1.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0494	0.0483		9.78	10.0	-2.2	20.0
Toluene-d8 (Surr)	Ave	1.314	1.308		9.95	10.0	-0.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4701	0.4637		9.86	10.0	-1.4	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X02.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Aug-2023 18:38:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-003
Misc. Info.: CCVIS
Operator ID: gaw91131 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 21:10:21 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1656

First Level Reviewer: JS6E Date: 08-Aug-2023 19:03:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.684	1.684	0.000	99	1052298	10.0	9.98	M
5 Chloromethane	50	1.849	1.849	0.000	99	1211674	10.0	9.08	
6 Vinyl chloride	62	1.940	1.940	0.000	98	1200489	10.0	9.42	
7 Butadiene	39	1.940	1.940	0.000	90	1137368	10.0	9.21	
9 Bromomethane	94	2.209	2.209	0.000	89	889729	10.0	8.93	
10 Chloroethane	64	2.270	2.270	0.000	100	684961	10.0	9.13	
11 Dichlorofluoromethane	67	2.471	2.471	0.000	97	1798572	10.0	8.84	
13 Pentane	43	2.526	2.526	0.000	97	1276599	10.0	8.80	
12 Trichlorofluoromethane	101	2.532	2.532	0.000	96	1405481	10.0	9.76	
14 Ethyl ether	59	2.696	2.696	0.000	90	756643	10.0	9.22	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.794	2.794	0.000	90	1075814	10.0	9.53	
17 Acrolein	56	2.843	2.843	0.000	100	4810884	500.0	448.7	
18 1,1-Dichloroethene	96	2.946	2.946	0.000	96	873529	10.0	9.37	
20 Acetone	43	2.989	2.989	0.000	100	1346413	100.0	98.6	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.001	3.001	0.000	88	824811	10.0	8.97	
22 Iodomethane	142	3.111	3.111	0.000	96	1986130	10.0	9.92	
23 Ethyl bromide	108	3.129	3.129	0.000	98	869012	10.0	9.55	
24 Isopropyl alcohol	45	3.147	3.147	0.000	97	585118	200.0	195.4	
25 Carbon disulfide	76	3.196	3.196	0.000	99	3200515	10.0	9.71	
26 Methyl acetate	43	3.324	3.324	0.000	38	509816	10.0	11.8	
29 3-Chloro-1-propene	41	3.336	3.336	0.000	95	1589372	10.0	9.67	
30 Methylene Chloride	84	3.489	3.489	0.000	90	1102354	10.0	9.46	
* 31 t-Butyl alcohol-d10 (IS)	65	3.544	3.544	0.000	96	287628	50.0	50.0	
32 2-Methyl-2-propanol	59	3.635	3.635	0.000	99	1101001	200.0	182.3	
33 Acrylonitrile	53	3.800	3.800	0.000	99	522242	25.0	27.2	
34 Methyl tert-butyl ether	73	3.824	3.824	0.000	95	2759784	10.0	9.20	
35 trans-1,2-Dichloroethene	96	3.824	3.824	0.000	99	1117750	10.0	9.88	
36 Hexane	57	4.196	4.196	0.000	92	1425962	10.0	9.88	
37 1,1-Dichloroethane	63	4.434	4.434	0.000	96	1932778	10.0	9.74	
39 Isopropyl ether	45	4.507	4.507	0.000	94	3425843	10.0	9.16	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Chloro-1,3-butadiene	53	4.550	4.550	0.000	89	1471501	10.0	9.69	
41 Tert-butyl ethyl ether	59	5.068	5.068	0.000	97	3135224	10.0	9.06	
42 2-Butanone (MEK)	43	5.281	5.281	0.000	99	2946646	100.0	110.4	
43 cis-1,2-Dichloroethene	96	5.299	5.299	0.000	79	1235654	10.0	10.2	
44 2,2-Dichloropropane	77	5.312	5.312	0.000	64	1541963	10.0	9.73	
45 Propionitrile	54	5.391	5.391	0.000	99	1569042	200.0	262.9	
47 Methacrylonitrile	67	5.586	5.586	0.000	90	3149964	100.0	111.5	
48 Chlorobromomethane	128	5.641	5.641	0.000	90	605528	10.0	10.4	
49 Tetrahydrofuran	71	5.659	5.659	0.000	78	456988	50.0	58.2	
50 Chloroform	83	5.799	5.799	0.000	93	1886010	10.0	9.60	
53 1,1,1-Trichloroethane	97	6.025	6.025	0.000	98	1581140	10.0	9.56	
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	88	1014223	10.0	10.1	
55 Cyclohexane	56	6.122	6.122	0.000	89	1778803	10.0	9.58	
56 Carbon tetrachloride	117	6.238	6.238	0.000	96	1434670	10.0	10.0	
57 1,1-Dichloropropene	75	6.244	6.244	0.000	96	1448440	10.0	9.77	
58 Isobutyl alcohol	41	6.476	6.476	0.000	93	888885	500.0	505.7	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.482	6.482	0.000	99	207177	10.0	9.78	
60 Benzene	78	6.507	6.507	0.000	97	4649106	10.0	9.83	
61 1,2-Dichloroethane	62	6.592	6.592	0.000	97	1146671	10.0	9.50	
64 Tert-amyl methyl ether	73	6.726	6.726	0.000	99	3098485	10.0	9.59	
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	98	4285906	10.0	10.0	
66 n-Heptane	43	6.952	6.952	0.000	89	1522905	10.0	9.76	
67 n-Butanol	56	7.409	7.409	0.000	90	1303202	875.0	806.9	
68 Trichloroethene	95	7.427	7.427	0.000	96	1187540	10.0	9.78	
69 Methylcyclohexane	83	7.732	7.732	0.000	89	1997089	10.0	10.1	
70 1,2-Dichloropropane	63	7.769	7.769	0.000	96	1235408	10.0	9.90	
71 2-ethoxy-2-methyl butane	87	7.799	7.799	0.000	94	1852093	10.0	9.56	
72 Dibromomethane	93	7.884	7.884	0.000	94	592517	10.0	10.2	
74 1,4-Dioxane	88	7.890	7.890	0.000	36	216431	500.0	466.7	
73 Methyl methacrylate	69	7.890	7.890	0.000	91	548986	10.0	9.96	
76 Dichlorobromomethane	83	8.134	8.134	0.000	100	1420248	10.0	9.85	
77 2-Nitropropane	41	8.421	8.421	0.000	98	796522	50.0	53.1	
78 1-Bromo-2-chloroethane	63	8.531	8.531	0.000	98	1289126	10.0	10.2	
80 cis-1,3-Dichloropropene	75	8.713	8.713	0.000	98	1822072	10.0	10.2	
82 4-Methyl-2-pentanone (MIBK)	43	8.915	8.915	0.000	96	7780522	100.0	102.5	
$ 83 Toluene-d8 (Surr)	98	9.043	9.043	0.000	93	4376170	10.0	9.95	
84 Toluene	92	9.134	9.134	0.000	98	3032842	10.0	9.67	
85 trans-1,3-Dichloropropene	75	9.451	9.451	0.000	91	1521228	10.0	10.4	
86 Ethyl methacrylate	69	9.536	9.536	0.000	89	1245122	10.0	10.7	
87 1,1,2-Trichloroethane	97	9.671	9.671	0.000	89	900533	10.0	9.69	
88 Tetrachloroethene	166	9.750	9.750	0.000	97	1474315	10.0	9.78	
89 1,3-Dichloropropane	76	9.841	9.841	0.000	88	1480594	10.0	9.95	
106 2-Hexanone	43	9.921	9.921	0.000	95	5488422	100.0	106.1	
108 Chlorodibromomethane	129	10.073	10.073	0.000	90	1182983	10.0	10.4	
110 Ethylene Dibromide	107	10.183	10.183	0.000	99	874006	10.0	10.5	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	82	3345755	10.0	10.0	
112 1-Chlorohexane	91	10.676	10.676	0.000	97	1654943	10.0	9.74	
113 Chlorobenzene	112	10.683	10.683	0.000	97	3699584	10.0	9.75	
114 1,1,1,2-Tetrachloroethane	131	10.774	10.774	0.000	97	1286757	10.0	10.2	
115 Ethylbenzene	91	10.780	10.780	0.000	97	5827783	10.0	9.69	
116 m-Xylene & p-Xylene	106	10.902	10.902	0.000	97	4863934	20.0	20.2	
118 o-Xylene	106	11.250	11.250	0.000	95	2390007	10.0	9.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 Styrene	104	11.268	11.268	0.000	95	3913863	10.0	10.4	
120 Bromoform	173	11.426	11.426	0.000	99	763860	10.0	10.5	
121 Isopropylbenzene	105	11.567	11.567	0.000	95	5963994	10.0	9.78	
$ 124 4-Bromofluorobenzene (Surr)	95	11.713	11.713	0.000	96	1551359	10.0	9.86	
125 Bromobenzene	156	11.829	11.829	0.000	93	1644322	10.0	9.88	
126 1,1,2,2-Tetrachloroethane	83	11.829	11.829	0.000	89	1221391	10.0	10.2	
127 trans-1,4-Dichloro-2-butene	53	11.859	11.859	0.000	89	2757348	100.0	104.8	
128 1,2,3-Trichloropropane	110	11.871	11.871	0.000	78	311638	10.0	10.1	
129 N-Propylbenzene	91	11.908	11.908	0.000	98	7140528	10.0	9.81	
130 2-Chlorotoluene	126	11.981	11.981	0.000	98	1612099	10.0	10.2	
131 1,3,5-Trimethylbenzene	105	12.054	12.054	0.000	94	5296128	10.0	9.81	
132 4-Chlorotoluene	126	12.079	12.079	0.000	96	1689771	10.0	10.5	
133 tert-Butylbenzene	134	12.298	12.298	0.000	92	1276427	10.0	10.1	
134 Pentachloroethane	167	12.329	12.329	0.000	95	1069049	10.0	10.6	
135 1,2,4-Trimethylbenzene	105	12.347	12.347	0.000	96	5552432	10.0	10.0	
136 sec-Butylbenzene	105	12.469	12.469	0.000	93	6913389	10.0	10.1	
137 1,3-Dichlorobenzene	146	12.566	12.566	0.000	98	3289526	10.0	9.96	
138 4-Isopropyltoluene	119	12.579	12.579	0.000	97	6211206	10.0	10.2	
* 139 1,4-Dichlorobenzene-d4	152	12.621	12.621	0.000	92	2022217	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.640	12.640	0.000	96	3252293	10.0	9.56	
141 1,2,3-Trimethylbenzene	120	12.652	12.652	0.000	98	2688820	10.0	10.1	
142 Benzyl chloride	126	12.725	12.725	0.000	97	551044	10.0	11.6	
145 p-Diethylbenzene	119	12.859	12.859	0.000	95	3921290	10.0	10.1	
143 n-Butylbenzene	92	12.877	12.877	0.000	96	2943911	10.0	10.3	
144 1,2-Dichlorobenzene	146	12.902	12.902	0.000	99	3142966	10.0	10.1	
148 1,2-Dibromo-3-Chloropropane	155	13.469	13.469	0.000	91	172013	10.0	11.4	
149 1,3,5-Trichlorobenzene	180	13.591	13.591	0.000	97	2545584	10.0	9.94	
150 1,2,4-Trichlorobenzene	180	14.023	14.023	0.000	94	1906748	10.0	9.83	
151 Hexachlorobutadiene	225	14.103	14.103	0.000	96	1019256	10.0	9.35	
152 Naphthalene	128	14.200	14.200	0.000	96	3203708	10.0	10.1	
153 1,2,3-Trichlorobenzene	180	14.346	14.346	0.000	96	1541685	10.0	10.5	
154 2-Methylnaphthalene	142	14.950	14.950	0.000	93	872413	10.0	11.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00088	Amount Added: 20.00	Units: uL	
MSV_LL_#2_826_00098	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00163	Amount Added: 20.00	Units: uL	
MSV_HP25_ISSS_00074	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 08-Aug-2023 21:10:21 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X02.D

Injection Date: 08-Aug-2023 18:38:30 Instrument ID: 10193 Operator ID: gaw91131

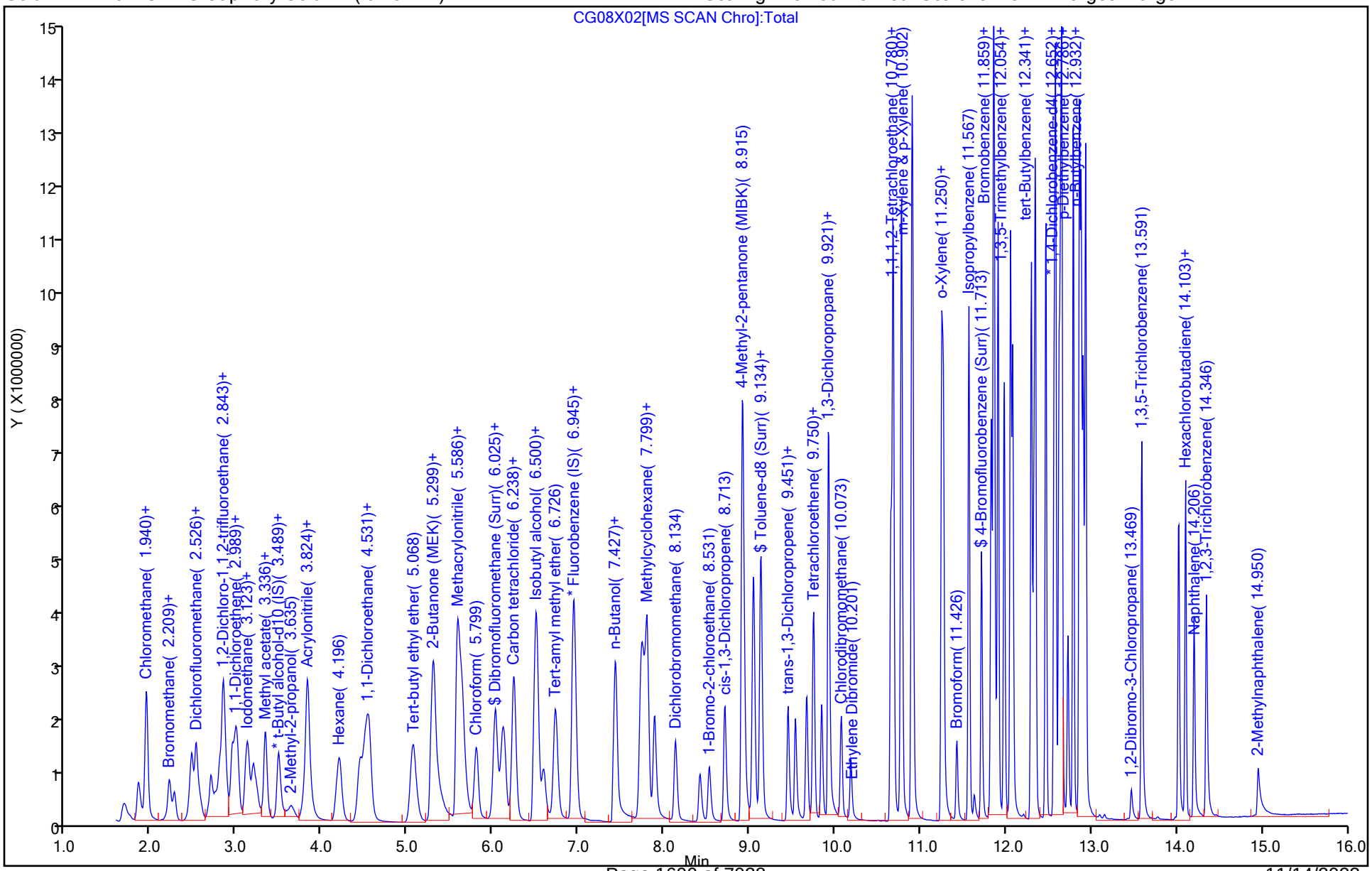
Lims ID: CCVIS VSTD10 Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

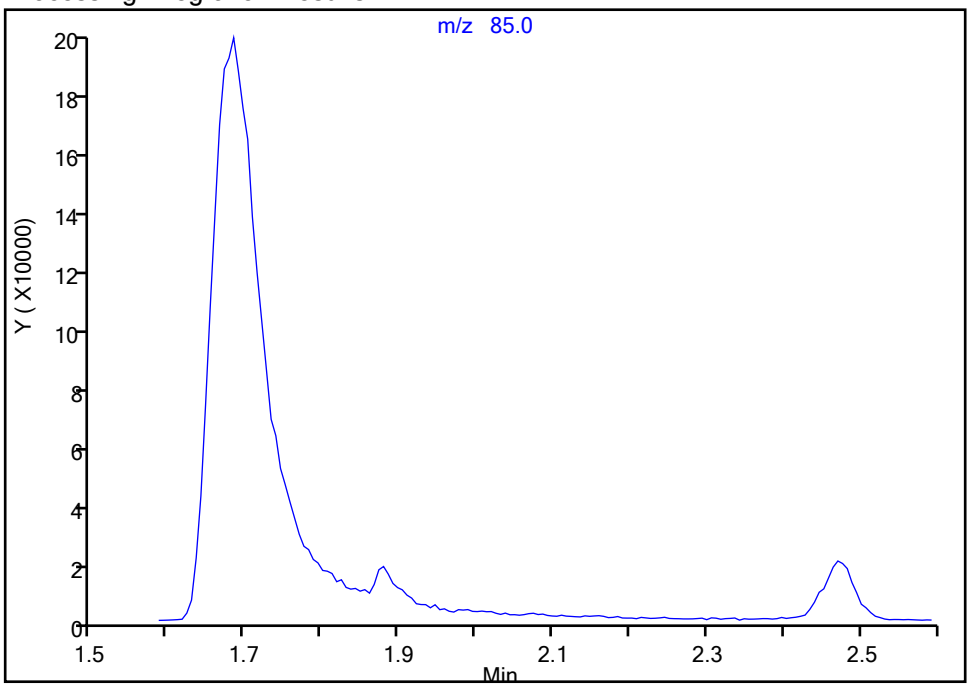
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X02.D				
Injection Date:	08-Aug-2023 18:38:30	Instrument ID:	10193		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	gaw91131	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

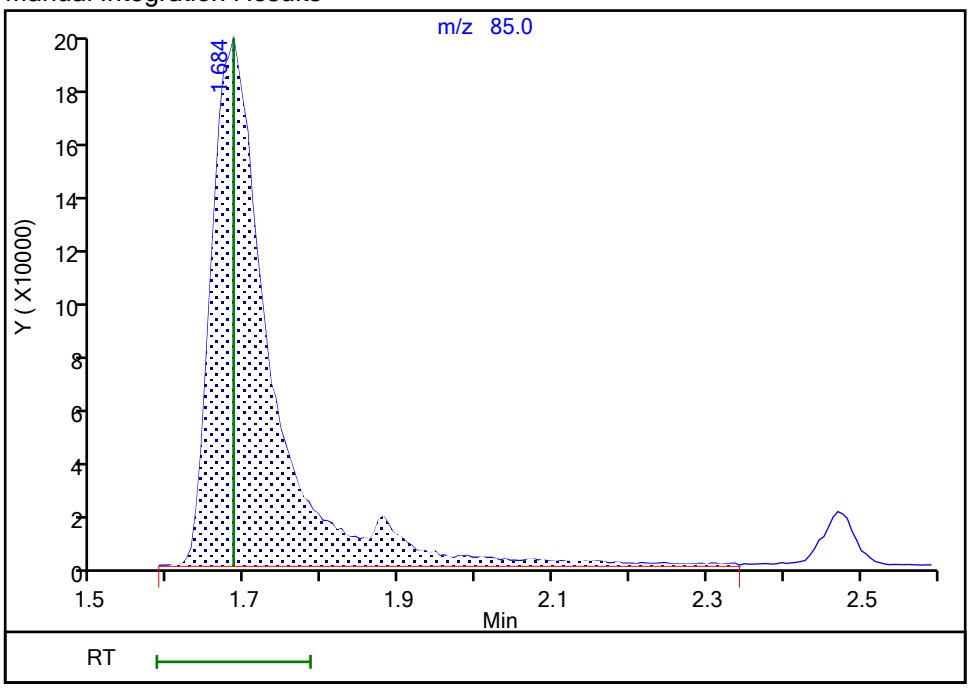
Not Detected
Expected RT: 1.68

Processing Integration Results



RT: 1.68
Area: 1052298
Amount: 9.983373
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 08-Aug-2023 19:00:10 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Missed Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCV 410-405906/4 Calibration Date: 08/08/2023 19:00

Instrument ID: 10193 Calib Start Date: 07/10/2023 15:50

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/10/2023 18:02

Lab File ID: CG08X03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methoxymethane	Ave	0.3393	0.3492		10.3	10.0	2.9	20.0
Acetonitrile	Ave	0.0146	0.0160		54.9	50.0	9.7	20.0
Vinyl acetate	Ave	0.3256	0.3868		11.9	10.0	18.8	20.0
Ethyl acetate	Lin1		0.1518		10.8	10.0	8.5	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X03.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 08-Aug-2023 19:00:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-004
Misc. Info.: CCV
Operator ID: gaw91131 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub45

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 21:10:26 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1656

First Level Reviewer: JS6E Date: 08-Aug-2023 19:30:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 Dimethyl ether	45	1.733	1.739	-0.006	99	1394022	10.0	10.3	
27 Acetonitrile	41	3.324	3.318	0.006	98	319758	50.0	54.9	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.538	3.544	-0.006	97	259411	50.0	50.0	
38 Vinyl acetate	43	4.452	4.446	0.006	97	1544401	10.0	11.9	
46 Ethyl acetate	43	5.379	5.379	0.000	99	605861	10.0	10.8	
$ 54 Dibromofluoromethane (Surr)	113	6.031	6.025	0.006	94	944232	10.0	10.1	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.488	6.482	0.006	99	202732	10.0	10.3	
63 Isopropyl acetate	43	6.641	6.647	-0.006	98	1402593	10.0	11.9	
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	99	3992365	10.0	10.0	
75 n-Propyl acetate	61	7.994	7.994	0.000	98	292786	10.0	9.50	
$ 83 Toluene-d8 (Surr)	98	9.049	9.043	0.006	93	3963879	10.0	9.79	
109 n-Butyl acetate	43	10.073	10.073	0.000	99	1030945	10.0	8.35	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	83	3082005	10.0	10.0	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1326899	10.0	9.16	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1676772	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

MSV_CCV_V5ACE_00027	Amount Added:	1.00	Units: uL	
MSV_DME_00053	Amount Added:	1.00	Units: uL	
MSV_HP25_ISSS_00074	Amount Added:	1.00	Units: uL	Run Reagent

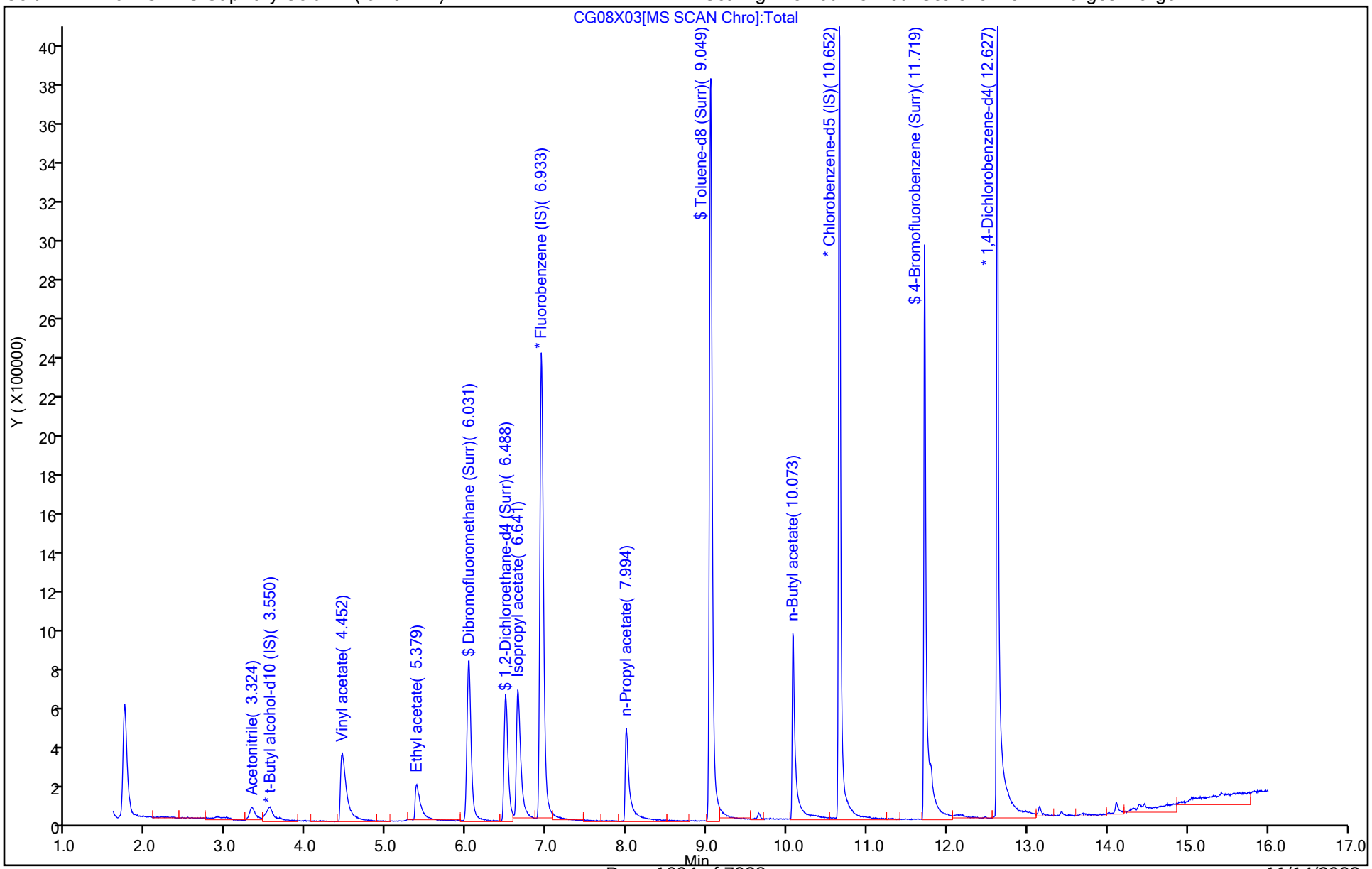
Report Date: 08-Aug-2023 21:10:26 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X03.D

Injection Date:	08-Aug-2023 19:00:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	CCV			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

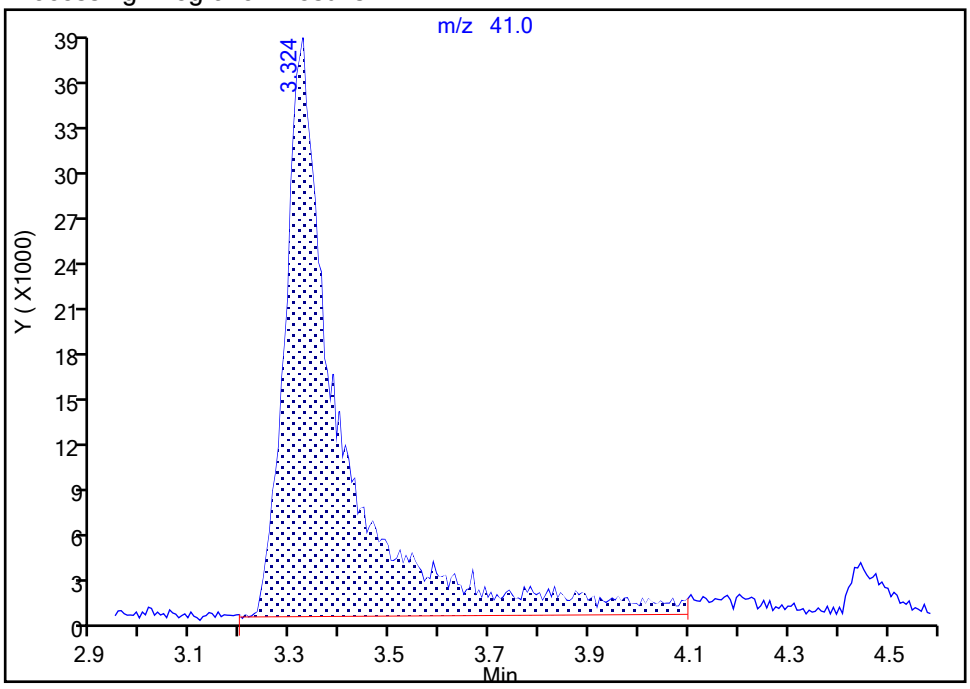
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X03.D				
Injection Date:	08-Aug-2023 19:00:30	Instrument ID:	10193		
Lims ID:	CCV				
Client ID:					
Operator ID:	gaw91131	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

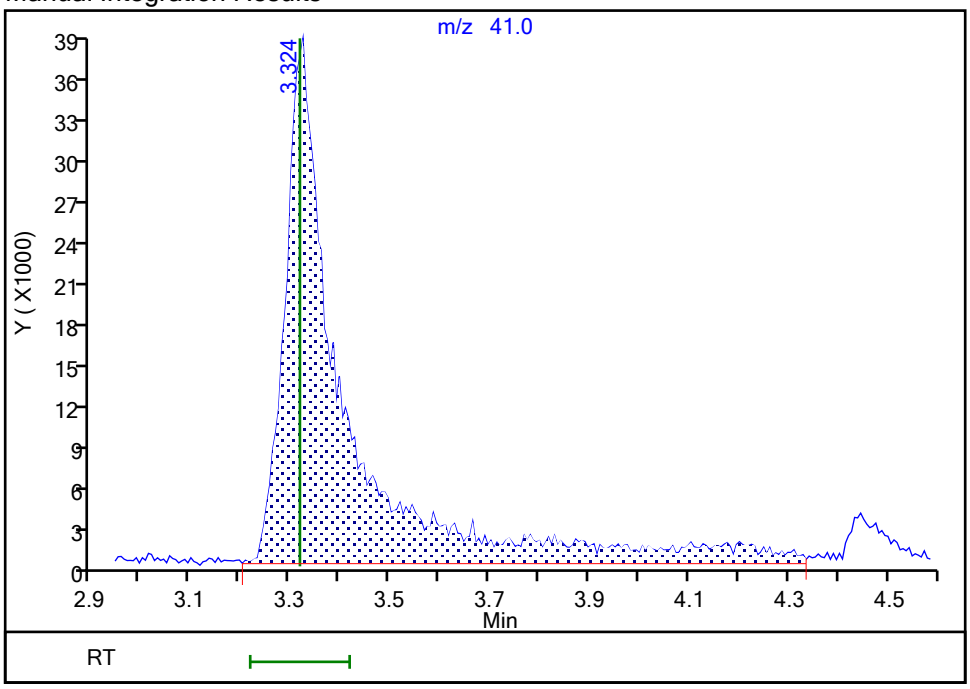
Processing Integration Results

RT: 3.32
Area: 293640
Amount: 50.373117
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 319758
Amount: 54.853586
Amount Units: ug/l



Reviewer: JS6E, 08-Aug-2023 19:29:53 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10T04.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 10-Jul-2023 15:13:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 410-0088548-001
Misc. Info.: BFB
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2023 11:20:08 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1613

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 168 BFB	95	4.818	4.818	0.000	90	175125	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

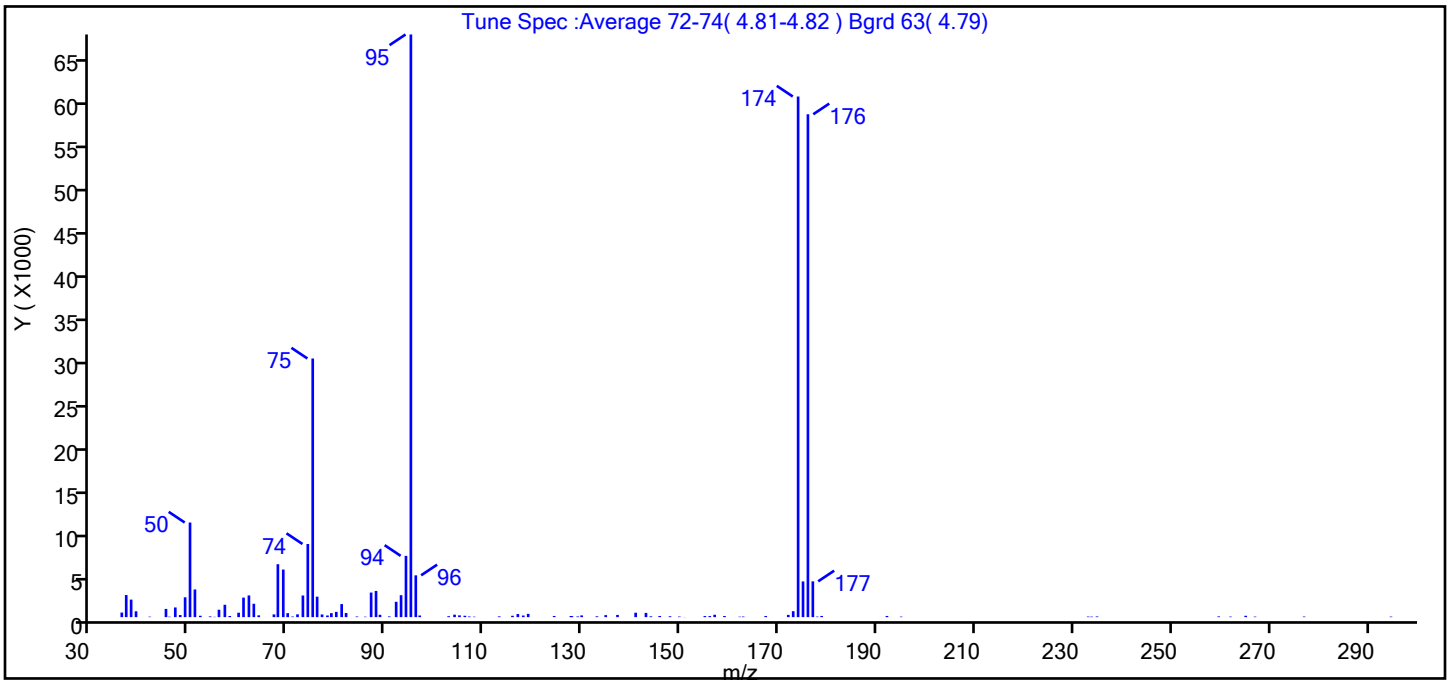
MSV_V_BFB_00012 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10T04.D
Injection Date: 10-Jul-2023 15:13:30 Instrument ID: 10193
Lims ID: BFB
Client ID:
Operator ID: knk41612 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 168 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.2
75	30 to 60% of m/z 95	44.4
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	1.0 (1.1)
174	50 to 120% of m/z 95	89.4
175	5 to 9% of m/z 174	6.1 (6.9)
176	Greater than 95% but less than 101% of m/z 174	86.3 (96.6)
177	5 to 9% of m/z 176	6.1 (7.1)

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10T04.D\MSV_10193_25mL.rslt\spectra.d
Injection Date: 10-Jul-2023 15:13:30
Spectrum: Tune Spec :Average 72-74(4.81-4.82) Bgrd 63(4.79)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	531	70.00	462	104.00	287	156.00	122
37.00	2561	71.00	70	105.00	207	157.00	277
38.00	2033	72.00	327	106.00	160	159.00	131
39.00	679	73.00	2509	107.00	76	162.00	51
42.00	55	74.00	8480	108.00	53	163.00	69
45.00	954	75.00	29984	113.00	89	167.00	128
46.00	50	76.00	2374	116.00	158	172.00	262
47.00	1123	77.00	312	117.00	359	173.00	692
48.00	243	78.00	191	118.00	187	174.00	60352
49.00	2299	79.00	466	119.00	381	175.00	4142
50.00	10970	80.00	611	124.00	136	176.00	58296
51.00	3210	81.00	1517	128.00	128	177.00	4150
52.00	162	82.00	477	128.00	121	178.00	62
54.00	85	84.00	74	129.00	80	179.00	139
55.00	32	86.00	53	130.00	200	192.00	136
56.00	860	87.00	2852	133.00	98	195.00	61
57.00	1434	88.00	3038	135.00	233	233.00	67
58.00	134	89.00	272	137.00	258	234.00	59
60.00	514	91.00	82	141.00	514	235.00	80
61.00	2265	92.00	1780	143.00	491	260.00	86
62.00	2517	93.00	2544	144.00	96	262.00	63
63.00	1552	94.00	7106	146.00	130	265.00	158
64.00	209	95.00	67544	148.00	101	267.00	63
67.00	319	96.00	4847	150.00	68	277.00	69
68.00	6136	97.00	190	151.00	13	295.00	65
69.00	5519	103.00	110	155.00	126		

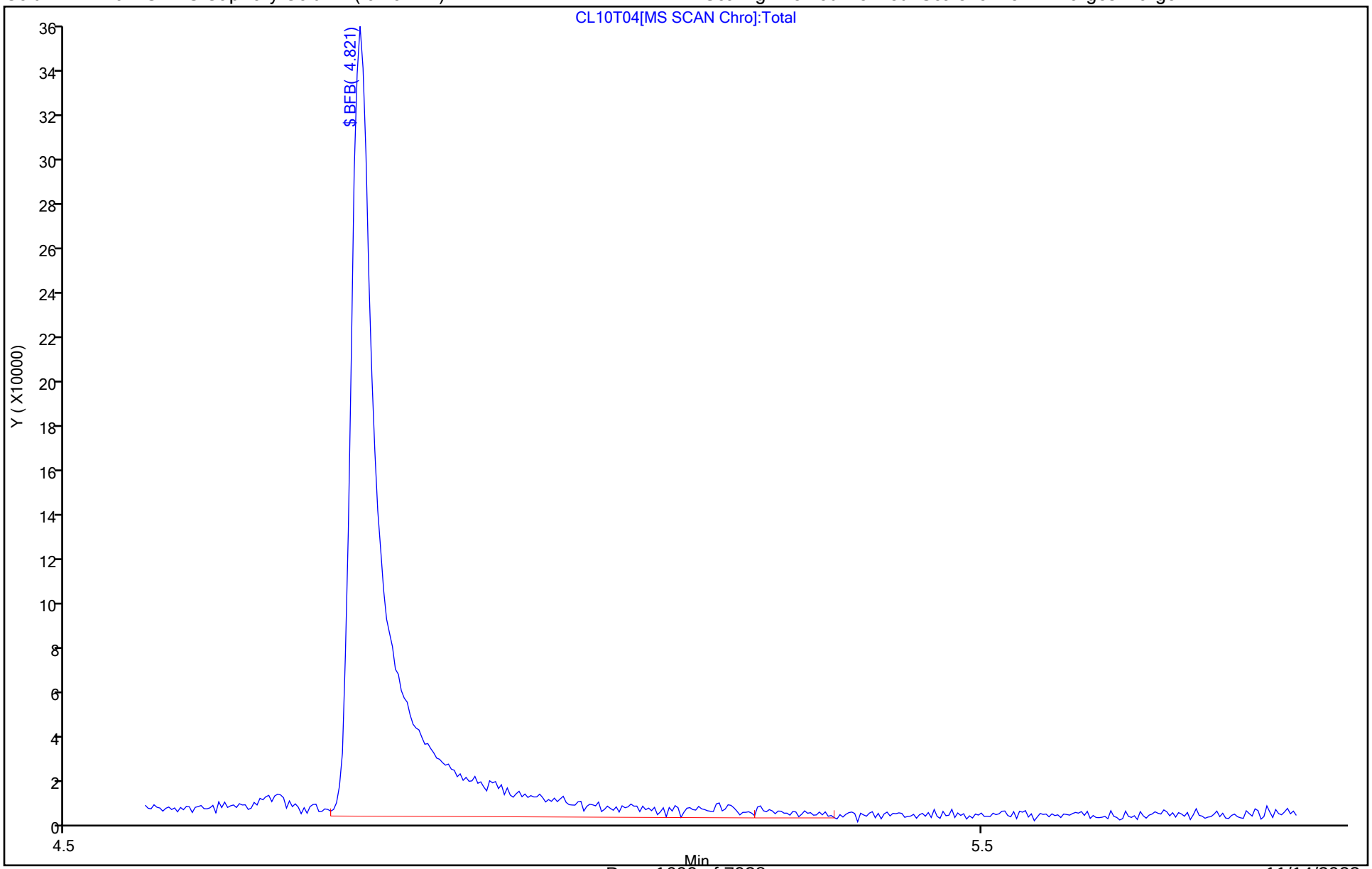
Report Date: 11-Jul-2023 11:20:09 Chrom Revision: 2.3 06-Jul-2023 17:41:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10T04.D

Injection Date:	10-Jul-2023 15:13:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08T01.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-Aug-2023 18:03:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 410-0090928-001
Misc. Info.: BFB
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 21:10:58 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1656

First Level Reviewer: JS6E Date: 08-Aug-2023 18:11:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 168 BFB	95	4.841	4.841	0.000	94	341408	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

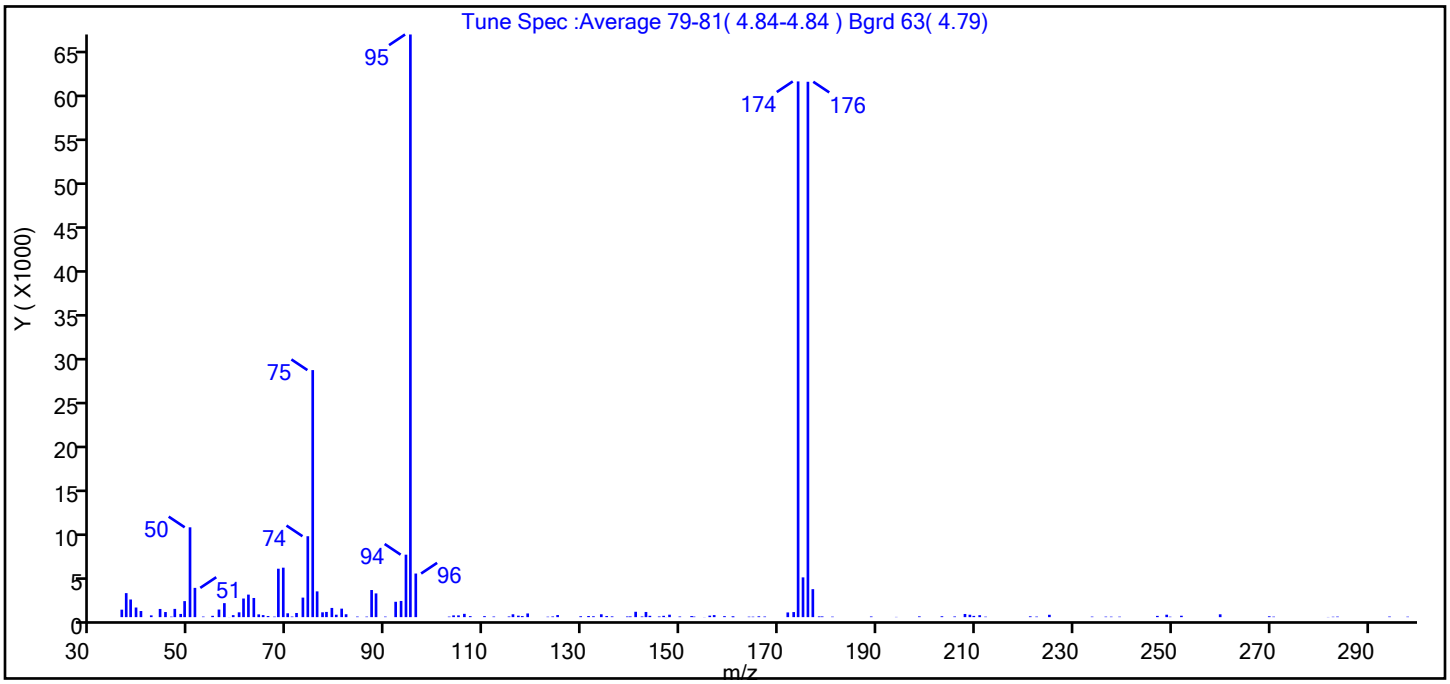
MSV_V_BFB_00012 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08T01.D				
Injection Date:	08-Aug-2023 18:03:30	Instrument ID:	10193		
Lims ID:	BFB				
Client ID:					
Operator ID:	gaw91131	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Tune Method:	BFB Method 8260				

$ 168 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.4
75	30 to 60% of m/z 95	42.4
96	5 to 9% of m/z 95	7.5
173	Less than 2% of m/z 174	0.9 (0.9)
174	50 to 120% of m/z 95	91.9
175	5 to 9% of m/z 174	6.8 (7.4)
176	Greater than 95% but less than 101% of m/z 174	91.9 (99.9)
177	5 to 9% of m/z 176	4.8 (5.2)

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08T01.D\MSV_10193_25mL.rslt\spectra.d
Injection Date: 08-Aug-2023 18:03:30
Spectrum: Tune Spec :Average 79-81(4.84-4.84) Bgrd 63(4.79)
Base Peak: 94.90
Minimum % Base Peak: 0
Number of Points: 135

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	858	74.00	9281	130.00	103	177.00	3210
37.00	2755	75.00	28336	131.00	128	178.00	84
38.00	2024	76.00	2955	132.00	102	179.00	83
39.00	1104	77.00	555	134.00	329	181.00	57
40.00	702	78.00	599	135.00	125	189.00	76
42.00	203	79.00	1057	136.00	86	194.00	26
44.00	939	80.00	280	139.00	76	199.00	89
45.00	586	81.00	976	140.00	84	203.00	102
46.00	58	82.00	333	141.00	616	206.00	78
47.00	947	84.00	66	142.00	78	208.00	364
48.00	368	86.00	61	143.00	593	209.00	275
49.00	1838	87.00	3111	144.00	153	210.00	144
50.00	10305	88.00	2723	146.00	76	211.00	225
51.00	3356	90.00	62	146.00	153	212.00	56
53.00	65	92.00	1763	147.00	10	221.00	95
55.00	152	93.00	1857	148.00	280	222.00	65
56.00	872	94.00	7166	150.00	73	225.00	271
57.00	1605	95.00	66832	152.00	122	234.00	61
58.00	10	96.00	5002	153.00	64	237.00	59
59.00	229	103.00	61	155.00	15	238.00	55
60.00	552	104.00	202	156.00	170	239.00	55
61.00	2135	105.00	202	157.00	235	247.00	144
62.00	2585	106.00	380	159.00	115	249.00	280
63.00	2199	107.00	113	161.00	88	250.00	51
64.00	317	110.00	115	161.00	53	252.00	162
65.00	234	112.00	70	164.00	55	260.00	324
66.00	128	115.00	78	165.00	54	270.00	98
67.00	59	116.00	330	166.00	97	271.00	57
68.00	5555	117.00	169	167.00	71	282.00	19
69.00	5674	118.00	121	172.00	540	283.00	47
70.00	443	119.00	424	173.00	581	284.00	63
71.00	69	123.00	50	174.00	61448	294.00	68
72.00	477	124.00	78	175.00	4561	298.00	53

Report Date: 08-Aug-2023 21:10:58 Chrom Revision: 2.3 01-Aug-2023 10:44:40
Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08T01.D\MSV_10193_25mL.rslt\spectra.d
Injection Date: 08-Aug-2023 18:03:30
Spectrum: Tune Spec :Average 79-81(4.84-4.84) Bgrd 63(4.79)
Base Peak: 94.90
Minimum % Base Peak: 0
Number of Points: 135

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	2240	125.00	240	176.00	61408		

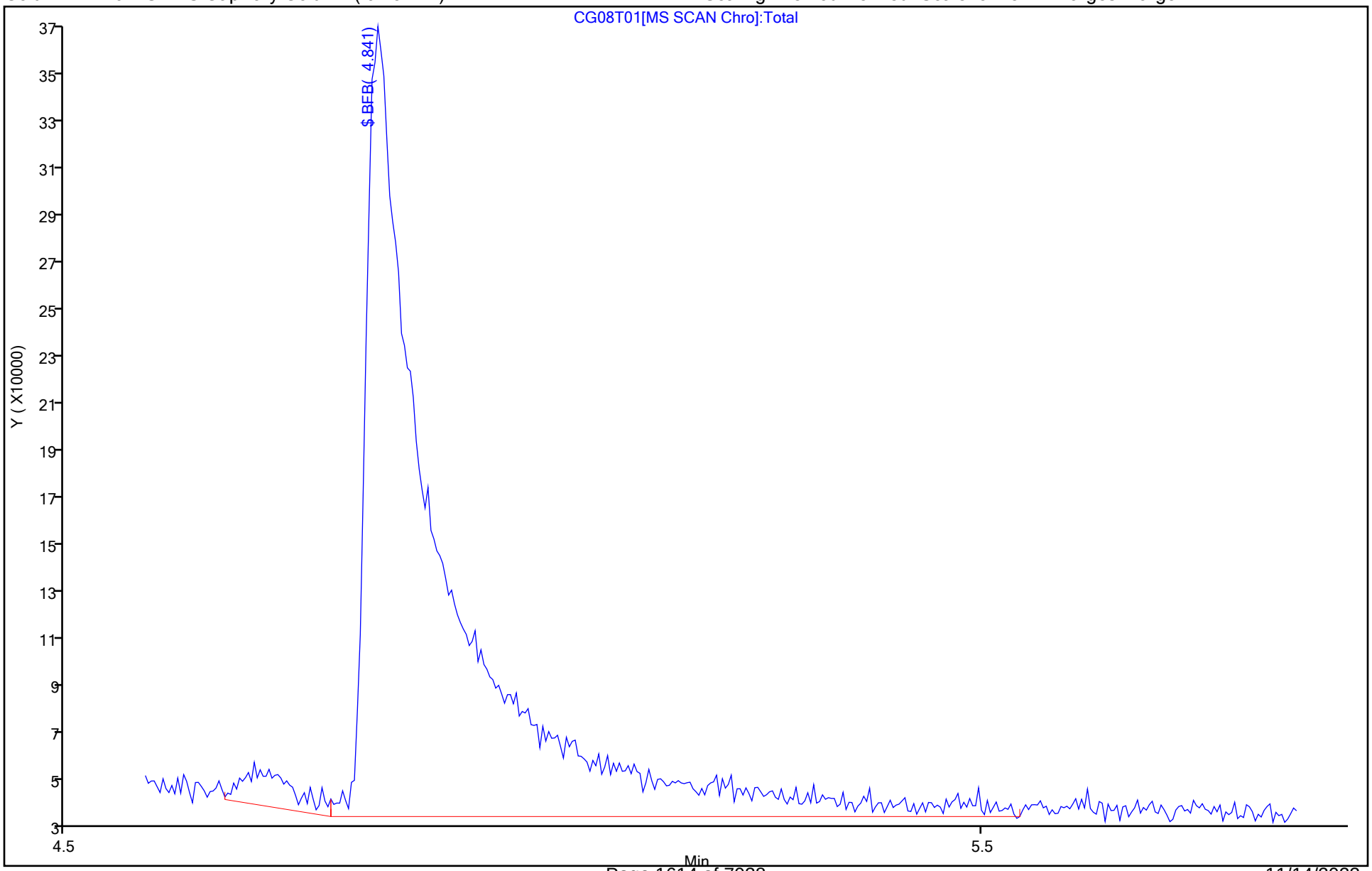
Report Date: 08-Aug-2023 21:10:58 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08T01.D

Injection Date:	08-Aug-2023 18:03:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-405906/8

Matrix: Water Lab File ID: CG08X07.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 20:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.30
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.40
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.30
75-34-3	1,1-Dichloroethane	ND		1.0	0.30
75-35-4	1,1-Dichloroethene	ND		1.0	0.30
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.40
106-93-4	1,2-Dibromoethane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.40
107-06-2	1,2-Dichloroethane	ND		1.0	0.30
78-87-5	1,2-Dichloropropane	ND		1.0	0.40
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.40
142-28-9	1,3-Dichloropropane	ND		1.0	0.40
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.40
123-91-1	1,4-Dioxane	ND		200	45
78-93-3	2-Butanone	ND		10	1.7
591-78-6	2-Hexanone	ND		10	2.0
108-10-1	4-Methyl-2-pentanone	ND		10	2.0
67-64-1	Acetone	ND		10	2.0
75-05-8	Acetonitrile	ND		100	31
107-13-1	Acrylonitrile	ND		10	1.1
107-05-1	Allyl chloride	ND		10	1.0
71-43-2	Benzene	ND		1.0	0.30
75-27-4	Bromodichloromethane	ND		1.0	0.30
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.54
75-15-0	Carbon disulfide	ND		10	0.40
56-23-5	Carbon tetrachloride	ND		1.0	0.30
75-00-3	Chloroethane	ND		1.0	0.070
67-66-3	Chloroform	ND		1.0	0.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-405906/8

Matrix: Water Lab File ID: CG08X07.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 20:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.10
126-99-8	Chloroprene	ND		10	0.46
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.30
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
60-29-7	Diethyl ether	ND		10	1.1
97-63-2	Ethyl methacrylate	ND		10	0.81
100-41-4	Ethylbenzene	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		1.0	0.40
78-83-1	Isobutyl alcohol	ND		200	11
179601-23-1	m&p-Xylene	ND		2.0	0.40
126-98-7	Methacrylonitrile	ND		100	9.7
74-88-4	Methyl iodide	ND		10	0.58
80-62-6	Methyl methacrylate	ND		10	3.5
75-09-2	Methylene Chloride	ND		1.0	0.70
91-20-3	Naphthalene	ND		1.0	0.40
95-47-6	o-Xylene	ND		1.0	0.40
76-01-7	Pentachloroethane	ND		10	1.7
107-12-0	Propionitrile	ND		100	10
100-42-5	Styrene	ND		1.0	0.30
127-18-4	Tetrachloroethene	ND		1.0	0.30
109-99-9	Tetrahydrofuran	ND		25	2.0
108-88-3	Toluene	ND		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.40
79-01-6	Trichloroethene	ND		1.0	0.30
75-69-4	Trichlorofluoromethane	ND		1.0	0.40
108-05-4	Vinyl acetate	ND		10	3.2
75-01-4	Vinyl chloride	ND		1.0	0.20
1330-20-7	Xylenes, Total	ND		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-405906/8

Matrix: Water Lab File ID: CG08X07.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 20:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X07.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-Aug-2023 20:27:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-008
Misc. Info.: MB
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 10:49:36 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 10:49:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.648					ND	
2 Dichlorodifluoromethane	85		1.684					ND	
3 Chlorodifluoromethane	51		1.697					ND	7
4 Dimethyl ether	45		1.739					ND	7
5 Chloromethane	50		1.849					ND	7
6 Vinyl chloride	62		1.940					ND	
7 Butadiene	39		1.940					ND	7
8 2-Chloro-1,1,1-Trifluoroethane	118		2.007					ND	U
9 Bromomethane	94		2.209					ND	7
10 Chloroethane	64		2.270					ND	7
11 Dichlorofluoromethane	67		2.471					ND	7
13 Pentane	43		2.526					ND	U
12 Trichlorofluoromethane	101		2.532					ND	7
14 Ethyl ether	59		2.696					ND	7
16 1,2-Dichloro-1,1,2-trifluoroetha	67		2.794					ND	7
17 Acrolein	56		2.843					ND	7
18 1,1-Dichloroethene	96		2.946					ND	7
20 Acetone	43	3.013	2.989	0.024	56	13213		0.9542	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.001					ND	
22 Iodomethane	142		3.111					ND	
23 Ethyl bromide	108		3.129					ND	
24 Isopropyl alcohol	45	3.166	3.147	0.019	80	27672		6.08	
25 Carbon disulfide	76		3.196					ND	7
27 Acetonitrile	41		3.318					ND	
26 Methyl acetate	43		3.324					ND	7
29 3-Chloro-1-propene	41		3.336					ND	
30 Methylene Chloride	84		3.489					ND	
* 31 t-Butyl alcohol-d10 (IS)	65	3.532	3.544	-0.012	96	291677	50.0	50.0	
32 2-Methyl-2-propanol	59	3.623	3.635	-0.012	29	4925		0.8042	
33 Acrylonitrile	53		3.800					ND	7
34 Methyl tert-butyl ether	73		3.824					ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 trans-1,2-Dichloroethene	96		3.824					ND	
36 Hexane	57		4.196					ND	
37 1,1-Dichloroethane	63		4.434					ND	
38 Vinyl acetate	43		4.446					ND	7
39 Isopropyl ether	45		4.507					ND	7
40 2-Chloro-1,3-butadiene	53		4.550					ND	
41 Tert-butyl ethyl ether	59		5.068					ND	7
42 2-Butanone (MEK)	43		5.281					ND	7
43 cis-1,2-Dichloroethene	96		5.299					ND	
44 2,2-Dichloropropane	77		5.312					ND	7
46 Ethyl acetate	43		5.379					ND	U
45 Propionitrile	54		5.391					ND	
47 Methacrylonitrile	67		5.586					ND	7
48 Chlorobromomethane	128		5.641					ND	
49 Tetrahydrofuran	71		5.659					ND	
50 Chloroform	83		5.799					ND	
51 Methyl acrylate	55		6.013					ND	
53 1,1,1-Trichloroethane	97		6.025					ND	
$ 54 Dibromofluoromethane (Surr)	113	6.031	6.025	0.006	94	918525	10.0	10.3	
55 Cyclohexane	56		6.122					ND	7
S 52 1,2-Dichloroethene, Total	100		6.155					ND	7
56 Carbon tetrachloride	117		6.238					ND	
57 1,1-Dichloropropene	75		6.244					ND	7
58 Isobutyl alcohol	41		6.476					ND	U
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.494	6.482	0.012	99	195890	10.0	10.4	
60 Benzene	78		6.507					ND	7
61 1,2-Dichloroethane	62		6.592					ND	7
63 Isopropyl acetate	43		6.647					ND	U
64 Tert-amyl methyl ether	73		6.726					ND	
62 1-Chlorobutane	56	6.933	6.781	0.152	26	10557		NC	
* 65 Fluorobenzene (IS)	96	6.939	6.933	0.006	99	3808276	10.0	10.0	
66 n-Heptane	43		6.952					ND	7
67 n-Butanol	56		7.409					ND	U
68 Trichloroethene	95		7.427					ND	
69 Methylcyclohexane	83		7.732					ND	
70 1,2-Dichloropropane	63		7.769					ND	7
71 2-ethoxy-2-methyl butane	87		7.799					ND	
72 Dibromomethane	93		7.884					ND	7
74 1,4-Dioxane	88		7.890					ND	
73 Methyl methacrylate	69		7.890					ND	7
75 n-Propyl acetate	61		7.994					ND	U
76 Dichlorobromomethane	83		8.134					ND	
77 2-Nitropropane	41		8.421					ND	7
78 1-Bromo-2-chloroethane	63		8.531					ND	7
79 2-Chloroethyl vinyl ether	63		8.543					ND	7
80 cis-1,3-Dichloropropene	75		8.713					ND	7
82 4-Methyl-2-pentanone (MIBK)	43		8.915					ND	7
$ 83 Toluene-d8 (Surr)	98	9.049	9.043	0.006	93	3786033	10.0	9.82	
81 Chloroacetonitrile	75	9.055	9.067	-0.012	31	401		NC	
84 Toluene	92		9.134					ND	7
85 trans-1,3-Dichloropropene	75		9.451					ND	7
86 Ethyl methacrylate	69		9.536					ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 1,1,2-Trichloroethane	97		9.671				ND		
88 Tetrachloroethene	166		9.750				ND		
89 1,3-Dichloropropane	76		9.841				ND		7
106 2-Hexanone	43		9.921				ND		7
S 107 1,3-Dichloropropene, Total	100		10.060				ND		7
109 n-Butyl acetate	43		10.073				ND		
108 Chlorodibromomethane	129		10.073				ND		
110 Ethylene Dibromide	107		10.183				ND		
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	83	2935252	10.0	10.0	
112 1-Chlorohexane	91		10.676				ND		7
113 Chlorobenzene	112		10.683				ND		
114 1,1,1,2-Tetrachloroethane	131		10.774				ND		
115 Ethylbenzene	91		10.780				ND		
116 m-Xylene & p-Xylene	106		10.902				ND		
S 117 Xylenes, Total	106		11.245				ND		7
118 o-Xylene	106		11.250				ND		
119 Styrene	104		11.268				ND		
120 Bromoform	173		11.426				ND		7
121 Isopropylbenzene	105		11.567				ND		
122 cis-1,4-Dichloro-2-butene	88		11.627				ND		U
123 Cyclohexanone	55		11.646				ND		U
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	97	1223924	10.0	8.87	
125 Bromobenzene	156		11.829				ND		
126 1,1,2,2-Tetrachloroethane	83		11.829				ND		
127 trans-1,4-Dichloro-2-butene	53		11.859				ND		
128 1,2,3-Trichloropropane	110		11.871				ND		
129 N-Propylbenzene	91		11.908				ND		
130 2-Chlorotoluene	126		11.981				ND		7
131 1,3,5-Trimethylbenzene	105		12.054				ND		
132 4-Chlorotoluene	126		12.079				ND		7
133 tert-Butylbenzene	134		12.298				ND		7
134 Pentachloroethane	167		12.329				ND		
135 1,2,4-Trimethylbenzene	105		12.347				ND		7
136 sec-Butylbenzene	105		12.469				ND		7
137 1,3-Dichlorobenzene	146		12.566				ND		7
138 4-Isopropyltoluene	119		12.579				ND		7
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1616490	10.0	10.0	
140 1,4-Dichlorobenzene	146		12.640				ND		7
141 1,2,3-Trimethylbenzene	120		12.652				ND		7
142 Benzyl chloride	126		12.725				ND		7
145 p-Diethylbenzene	119		12.859				ND		U
143 n-Butylbenzene	92		12.877				ND		
144 1,2-Dichlorobenzene	146		12.902				ND		
147 Hexachloroethane	117		13.444				ND		
148 1,2-Dibromo-3-Chloropropane	155		13.469				ND		
149 1,3,5-Trichlorobenzene	180		13.591				ND		
150 1,2,4-Trichlorobenzene	180		14.023				ND		
151 Hexachlorobutadiene	225		14.103				ND		
152 Naphthalene	128		14.200				ND		
153 1,2,3-Trichlorobenzene	180		14.346				ND		7
154 2-Methylnaphthalene	142		14.950				ND		
155 Dodecane	57		0.000				ND		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
156 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
157 tert-Butyl Formate	1		0.000					ND	
158 2-Bromo-1-chloropropane	1		0.000					ND	
159 1-Chloropropane	1		0.000					ND	
160 1,1-Dichloroacetone	1		0.000					ND	
161 Methylal	1		0.000					ND	
162 Propene oxide	1		0.000					ND	
163 t-Amyl alcohol	1		0.000					ND	
164 Ethanol	45		0.000					ND	
165 n-Decane	57		0.000					ND	
166 1-Bromo-3-Chloropropane	1		0.000					ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- 7 - Failed Limit of Detection

Review Flags
- U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00074 Amount Added: 1.00 Units: uL Run Reagent

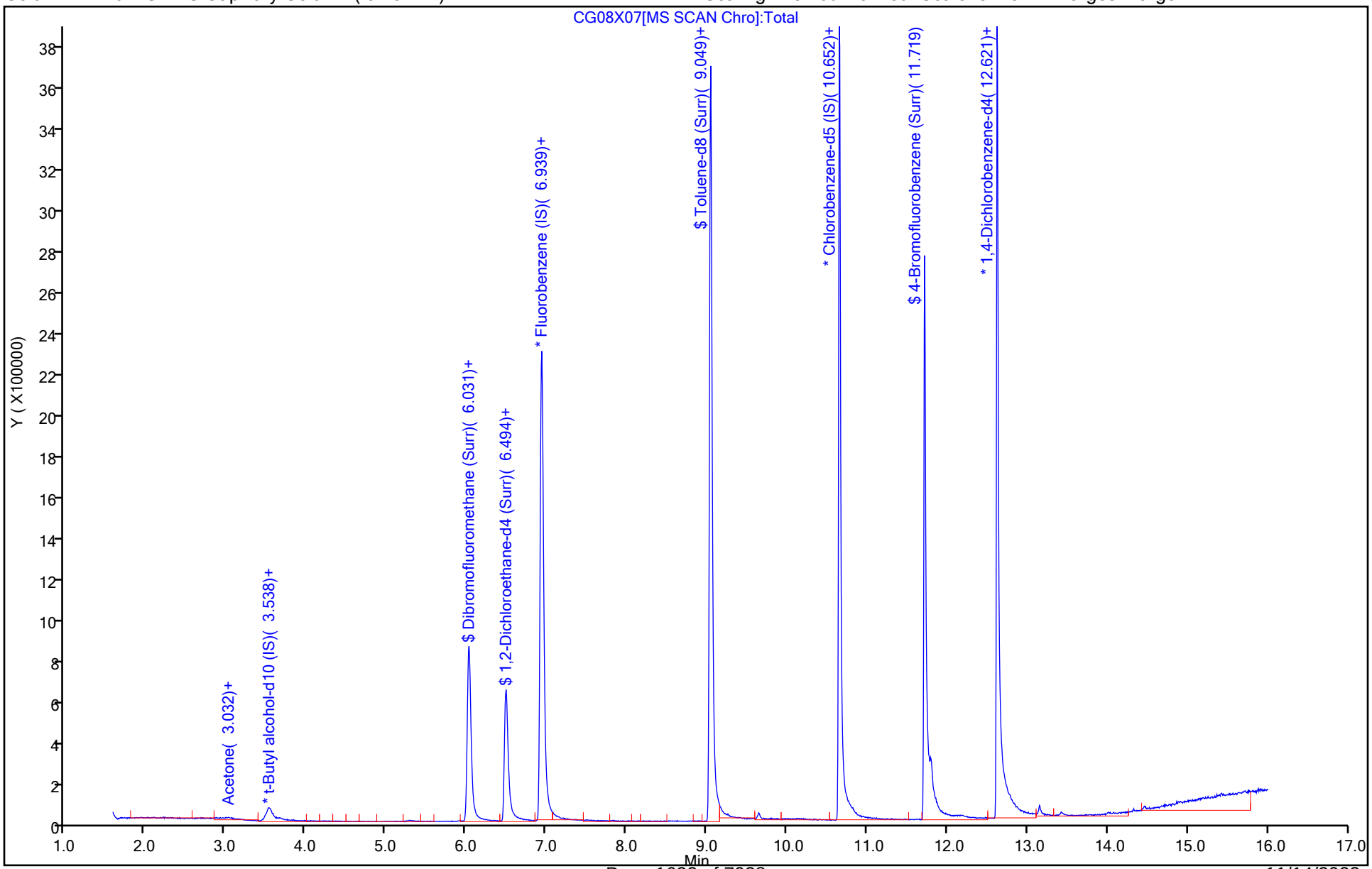
Report Date: 09-Aug-2023 10:49:36 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X07.D

Injection Date:	08-Aug-2023 20:27:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X07.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	08-Aug-2023 20:27:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-008				
Misc. Info.:	MB				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 10:49:36	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 10:49:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	103.16
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.05
$ 83 Toluene-d8 (Surr)	10.0	9.82	98.17
$ 124 4-Bromofluorobenzene (Surr)	10.0	8.87	88.70

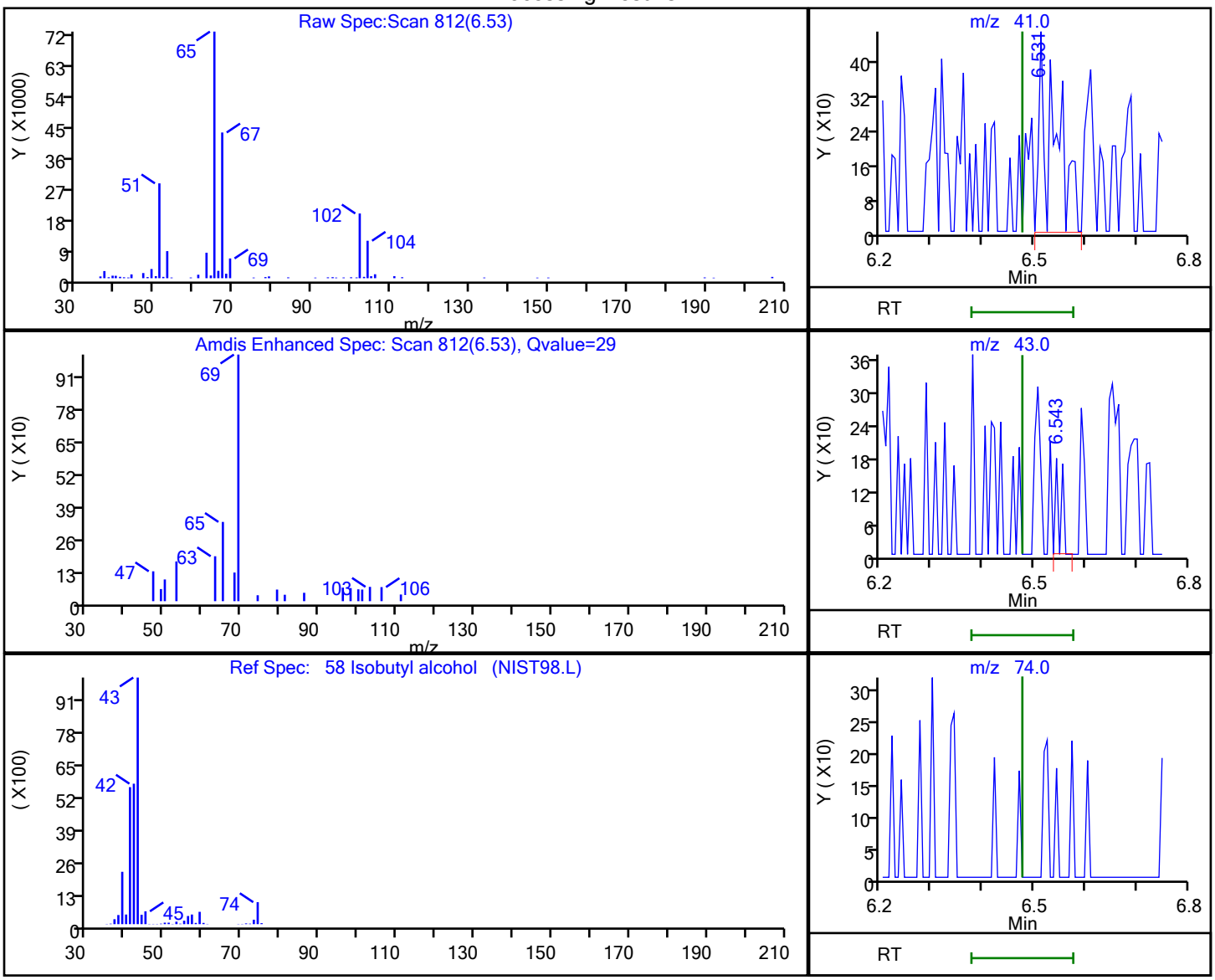
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X07.D				
Injection Date:	08-Aug-2023 20:27:30	Instrument ID:	10193		
Lims ID:	MB				
Client ID:					
Operator ID:	gaw91131	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
6.53	41.00	977	20.572127
6.54	43.00	124	
6.48	74.00	0	

Reviewer: JS6E, 08-Aug-2023 21:06:11 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-405906/5

Matrix: Water Lab File ID: CG08X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 19:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.37		1.0	0.30
71-55-6	1,1,1-Trichloroethane	5.06		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	5.12		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.73		1.0	0.40
79-00-5	1,1,2-Trichloroethane	5.09		1.0	0.30
75-34-3	1,1-Dichloroethane	4.95		1.0	0.30
75-35-4	1,1-Dichloroethene	4.95		1.0	0.30
96-18-4	1,2,3-Trichloropropane	5.16		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	4.72		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	5.11		1.0	0.40
106-93-4	1,2-Dibromoethane	5.25		1.0	0.30
95-50-1	1,2-Dichlorobenzene	4.90		1.0	0.40
107-06-2	1,2-Dichloroethane	4.74		1.0	0.30
78-87-5	1,2-Dichloropropane	5.05		1.0	0.40
541-73-1	1,3-Dichlorobenzene	4.82		1.0	0.40
142-28-9	1,3-Dichloropropane	5.16		1.0	0.40
106-46-7	1,4-Dichlorobenzene	4.95		1.0	0.40
123-91-1	1,4-Dioxane	118	J	200	45
78-93-3	2-Butanone	64.6		10	1.7
591-78-6	2-Hexanone	58.3		10	2.0
108-10-1	4-Methyl-2-pentanone	58.9		10	2.0
67-64-1	Acetone	60.2		10	2.0
107-13-1	Acrylonitrile	27.3		10	1.1
107-05-1	Allyl chloride	4.89	J	10	1.0
71-43-2	Benzene	5.08		1.0	0.30
75-27-4	Bromodichloromethane	4.99		1.0	0.30
75-25-2	Bromoform	5.06		1.0	0.40
74-83-9	Bromomethane	4.76		1.0	0.54
75-15-0	Carbon disulfide	4.95	J	10	0.40
56-23-5	Carbon tetrachloride	5.17		1.0	0.30
75-00-3	Chloroethane	4.91		1.0	0.070
67-66-3	Chloroform	4.95		1.0	0.30
74-87-3	Chloromethane	4.45		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-405906/5

Matrix: Water Lab File ID: CG08X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 19:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
126-99-8	Chloroprene	4.75	J	10	0.46
124-48-1	Dibromochloromethane	5.16		1.0	0.40
74-95-3	Dibromomethane	5.22		1.0	0.30
75-71-8	Dichlorodifluoromethane	5.01		1.0	0.40
60-29-7	Diethyl ether	4.54	J	10	1.1
97-63-2	Ethyl methacrylate	4.81	J	10	0.81
100-41-4	Ethylbenzene	4.95		1.0	0.30
87-68-3	Hexachlorobutadiene	4.86		1.0	0.40
78-83-1	Isobutyl alcohol	120	J	200	11
179601-23-1	m&p-Xylene	10.5		2.0	0.40
126-98-7	Methacrylonitrile	37.5	J	100	9.7
74-88-4	Methyl iodide	4.89	J	10	0.58
80-62-6	Methyl methacrylate	4.44	J	10	3.5
75-09-2	Methylene Chloride	4.90		1.0	0.70
91-20-3	Naphthalene	4.53		1.0	0.40
95-47-6	o-Xylene	5.02		1.0	0.40
76-01-7	Pentachloroethane	5.22	J	10	1.7
107-12-0	Propionitrile	41.4	J	100	10
100-42-5	Styrene	5.26		1.0	0.30
127-18-4	Tetrachloroethene	4.98		1.0	0.30
109-99-9	Tetrahydrofuran	25.6		25	2.0
108-88-3	Toluene	5.01		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	5.03		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	5.13		1.0	0.40
79-01-6	Trichloroethene	4.86		1.0	0.30
75-69-4	Trichlorofluoromethane	4.91		1.0	0.40
75-01-4	Vinyl chloride	4.77		1.0	0.20
1330-20-7	Xylenes, Total	15.5		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-405906/5

Matrix: Water Lab File ID: CG08X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 19:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X04.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Aug-2023 19:22:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-005
Misc. Info.: LCS
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 21:10:26 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1656

First Level Reviewer: JS6E Date: 08-Aug-2023 19:51:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.684	1.684	0.000	99	510221	5.00	5.01	M
5 Chloromethane	50	1.843	1.849	-0.006	99	574116	5.00	4.45	
6 Vinyl chloride	62	1.934	1.940	-0.006	75	586451	5.00	4.77	
7 Butadiene	39	1.940	1.940	0.000	90	490691	5.00	4.12	
9 Bromomethane	94	2.209	2.209	0.000	89	457675	5.00	4.76	
10 Chloroethane	64	2.270	2.270	0.000	100	355245	5.00	4.91	
11 Dichlorofluoromethane	67	2.471	2.471	0.000	97	844992	5.00	4.30	
13 Pentane	43	2.526	2.526	0.000	96	609829	5.00	4.35	
12 Trichlorofluoromethane	101	2.532	2.532	0.000	96	682928	5.00	4.91	
14 Ethyl ether	59	2.696	2.696	0.000	90	359762	5.01	4.54	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.794	2.794	0.000	93	527073	5.00	4.83	
18 1,1-Dichloroethene	96	2.952	2.946	0.006	95	445851	5.00	4.95	
20 Acetone	43	2.983	2.989	-0.006	100	849831	62.5	60.2	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.995	3.001	-0.006	86	419794	5.00	4.73	
22 Iodomethane	142	3.105	3.111	-0.006	96	945949	5.00	4.89	
24 Isopropyl alcohol	45	3.141	3.147	-0.006	37	130832	37.5	39.8	
25 Carbon disulfide	76	3.196	3.196	0.000	99	1577155	5.00	4.95	
26 Methyl acetate	43	3.324	3.324	0.000	40	222719	5.00	5.00	
29 3-Chloro-1-propene	41	3.337	3.336	0.001	94	775579	5.00	4.89	
30 Methylene Chloride	84	3.489	3.489	0.000	91	551165	5.00	4.90	
* 31 t-Butyl alcohol-d10 (IS)	65	3.526	3.544	-0.018	97	297302	50.0	50.0	
32 2-Methyl-2-propanol	59	3.635	3.635	0.000	100	305497	50.0	48.9	
33 Acrylonitrile	53	3.794	3.800	-0.006	99	542000	25.0	27.3	
34 Methyl tert-butyl ether	73	3.818	3.824	-0.006	94	1359860	5.00	4.70	
35 trans-1,2-Dichloroethene	96	3.830	3.824	0.006	99	549687	5.00	5.03	
36 Hexane	57	4.202	4.196	0.006	92	660439	5.00	4.74	
37 1,1-Dichloroethane	63	4.434	4.434	0.000	96	949465	5.00	4.95	
39 Isopropyl ether	45	4.501	4.507	-0.006	95	1650865	5.00	4.57	
40 2-Chloro-1,3-butadiene	53	4.550	4.550	0.000	89	696220	5.00	4.75	
41 Tert-butyl ethyl ether	59	5.056	5.068	-0.012	97	1571785	5.00	4.71	
42 2-Butanone (MEK)	43	5.287	5.281	0.006	100	1781586	62.5	64.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 cis-1,2-Dichloroethene	96	5.300	5.299	0.001	78	628623	5.00	5.36	
44 2,2-Dichloropropane	77	5.300	5.312	-0.012	56	813964	5.00	5.32	M
45 Propionitrile	54	5.428	5.391	0.037	98	255149	37.5	41.4	
47 Methacrylonitrile	67	5.592	5.586	0.006	91	1095390	37.5	37.5	
48 Chlorobromomethane	128	5.641	5.641	0.000	89	307679	5.00	5.47	
49 Tetrahydrofuran	71	5.665	5.659	0.006	79	207803	25.0	25.6	
50 Chloroform	83	5.806	5.799	0.007	93	938965	5.00	4.95	
53 1,1,1-Trichloroethane	97	6.025	6.025	0.000	72	807561	5.00	5.06	
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	94	993577	10.0	10.3	
55 Cyclohexane	56	6.123	6.122	0.001	89	859245	5.00	4.79	
56 Carbon tetrachloride	117	6.238	6.238	0.000	93	715524	5.00	5.17	
57 1,1-Dichloropropene	75	6.244	6.244	0.000	97	726608	5.00	5.08	
58 Isobutyl alcohol	41	6.519	6.476	0.043	86	189272	125.0	120.1	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.488	6.482	0.006	99	214109	10.0	10.5	
60 Benzene	78	6.507	6.507	0.000	97	2321621	5.00	5.08	
61 1,2-Dichloroethane	62	6.592	6.592	0.000	97	552933	5.00	4.74	
64 Tert-amyl methyl ether	73	6.726	6.726	0.000	99	1524670	5.00	4.89	
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	99	4137704	10.0	10.0	
66 n-Heptane	43	6.952	6.952	0.000	91	710744	5.00	4.72	
67 n-Butanol	56	7.464	7.409	0.055	91	244605	250.0	186.9	
68 Trichloroethene	95	7.433	7.427	0.006	96	570141	5.00	4.86	
69 Methylcyclohexane	83	7.732	7.732	0.000	90	938468	5.00	4.94	
70 1,2-Dichloropropane	63	7.762	7.769	-0.006	96	607586	5.00	5.05	
71 2-ethoxy-2-methyl butane	87	7.799	7.799	0.000	94	895494	5.00	4.79	
72 Dibromomethane	93	7.884	7.884	0.000	94	292208	5.00	5.22	
74 1,4-Dioxane	88	7.897	7.890	0.007	31	56641	125.0	118.2	
73 Methyl methacrylate	69	7.903	7.890	0.013	92	253298	5.00	4.44	
76 Dichlorobromomethane	83	8.134	8.134	0.000	100	693823	5.00	4.99	
77 2-Nitropropane	41	8.427	8.421	0.006	99	66676	5.00	4.30	
78 1-Bromo-2-chloroethane	63	8.531	8.531	0.000	98	624985	5.00	5.12	
80 cis-1,3-Dichloropropene	75	8.714	8.713	0.001	98	840515	5.00	4.89	
82 4-Methyl-2-pentanone (MIBK)	43	8.915	8.915	0.000	96	4622620	62.5	58.9	
$ 83 Toluene-d8 (Surr)	98	9.043	9.043	0.000	93	4249380	10.0	10.1	
84 Toluene	92	9.134	9.134	0.000	98	1505125	5.00	5.01	
85 trans-1,3-Dichloropropene	75	9.457	9.451	0.006	90	720173	5.00	5.13	
86 Ethyl methacrylate	69	9.543	9.536	0.007	89	537915	5.00	4.81	
87 1,1,2-Trichloroethane	97	9.671	9.671	0.000	89	453519	5.00	5.09	
88 Tetrachloroethene	166	9.750	9.750	0.000	96	720302	5.00	4.98	
89 1,3-Dichloropropane	76	9.847	9.841	0.006	89	735329	5.00	5.16	
106 2-Hexanone	43	9.927	9.921	0.006	96	3119826	62.5	58.3	
108 Chlorodibromomethane	129	10.073	10.073	0.000	89	563369	5.00	5.16	
110 Ethylene Dibromide	107	10.189	10.183	0.006	99	419309	5.00	5.25	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	82	3206275	10.0	10.0	
112 1-Chlorohexane	91	10.677	10.676	0.001	96	804974	5.00	4.94	
113 Chlorobenzene	112	10.683	10.683	0.000	98	1798417	5.00	4.95	
114 1,1,1,2-Tetrachloroethane	131	10.774	10.774	0.000	96	651548	5.00	5.37	
115 Ethylbenzene	91	10.780	10.780	0.000	97	2854419	5.00	4.95	
116 m-Xylene & p-Xylene	106	10.908	10.902	0.006	97	2432801	10.0	10.5	
118 o-Xylene	106	11.250	11.250	0.000	96	1164864	5.00	5.02	
119 Styrene	104	11.268	11.268	0.000	94	1894547	5.00	5.26	
120 Bromoform	173	11.426	11.426	0.000	98	351604	5.00	5.06	
121 Isopropylbenzene	105	11.567	11.567	0.000	95	2982614	5.00	5.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 124 4-Bromofluorobenzene (Surr)	95	11.713	11.713	0.000	96	1486407	10.0	9.86	
125 Bromobenzene	156	11.829	11.829	0.000	95	802290	5.00	4.97	
126 1,1,2,2-Tetrachloroethane	83	11.829	11.829	0.000	92	594240	5.00	5.12	
127 trans-1,4-Dichloro-2-butene	53	11.859	11.859	0.000	84	597004	25.0	23.4	
128 1,2,3-Trichloropropane	110	11.871	11.871	0.000	78	153932	5.00	5.16	
129 N-Propylbenzene	91	11.908	11.908	0.000	98	3453133	5.00	4.89	
130 2-Chlorotoluene	126	11.981	11.981	0.000	98	782771	5.00	5.09	
131 1,3,5-Trimethylbenzene	105	12.054	12.054	0.000	94	2549051	5.00	4.87	
132 4-Chlorotoluene	126	12.079	12.079	0.000	96	803217	5.00	5.15	
133 tert-Butylbenzene	134	12.298	12.298	0.000	92	616844	5.00	5.02	
134 Pentachloroethane	167	12.329	12.329	0.000	92	508042	5.00	5.22	
135 1,2,4-Trimethylbenzene	105	12.347	12.347	0.000	96	2652484	5.00	4.93	
136 sec-Butylbenzene	105	12.469	12.469	0.000	93	3352897	5.00	5.03	
137 1,3-Dichlorobenzene	146	12.566	12.566	0.000	98	1544851	5.00	4.82	
138 4-Isopropyltoluene	119	12.579	12.579	0.000	97	3010912	5.00	5.10	
* 139 1,4-Dichlorobenzene-d4	152	12.621	12.621	0.000	92	1960785	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.640	12.640	0.000	96	1632421	5.00	4.95	
141 1,2,3-Trimethylbenzene	120	12.652	12.652	0.000	98	1263390	5.00	4.91	
142 Benzyl chloride	126	12.731	12.725	0.006	97	230998	5.00	5.00	
145 p-Diethylbenzene	119	12.859	12.859	0.000	95	1855174	5.00	4.94	
143 n-Butylbenzene	92	12.877	12.877	0.000	97	1388378	5.00	5.01	
144 1,2-Dichlorobenzene	146	12.908	12.902	0.006	99	1482203	5.00	4.90	
148 1,2-Dibromo-3-Chloropropane	155	13.475	13.469	0.006	92	74857	5.00	5.11	
149 1,3,5-Trichlorobenzene	180	13.591	13.591	0.000	97	1169622	5.00	4.71	
150 1,2,4-Trichlorobenzene	180	14.023	14.023	0.000	93	888220	5.00	4.72	
151 Hexachlorobutadiene	225	14.103	14.103	0.000	96	513868	5.00	4.86	
152 Naphthalene	128	14.206	14.200	0.006	96	1391724	5.00	4.53	
153 1,2,3-Trichlorobenzene	180	14.353	14.346	0.007	96	715569	5.00	5.02	
154 2-Methylnaphthalene	142	14.974	14.950	0.024	93	229111	5.00	3.17	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_EE_00007	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00031	Amount Added: 12.50	Units: uL	
MSV_LCS_VOC#1_00124	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00154	Amount Added: 12.50	Units: uL	
MSV_HP25_ISSS_00074	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 08-Aug-2023 21:10:29 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X04.D

Injection Date: 08-Aug-2023 19:22:30 Instrument ID: 10193 Operator ID: gaw91131

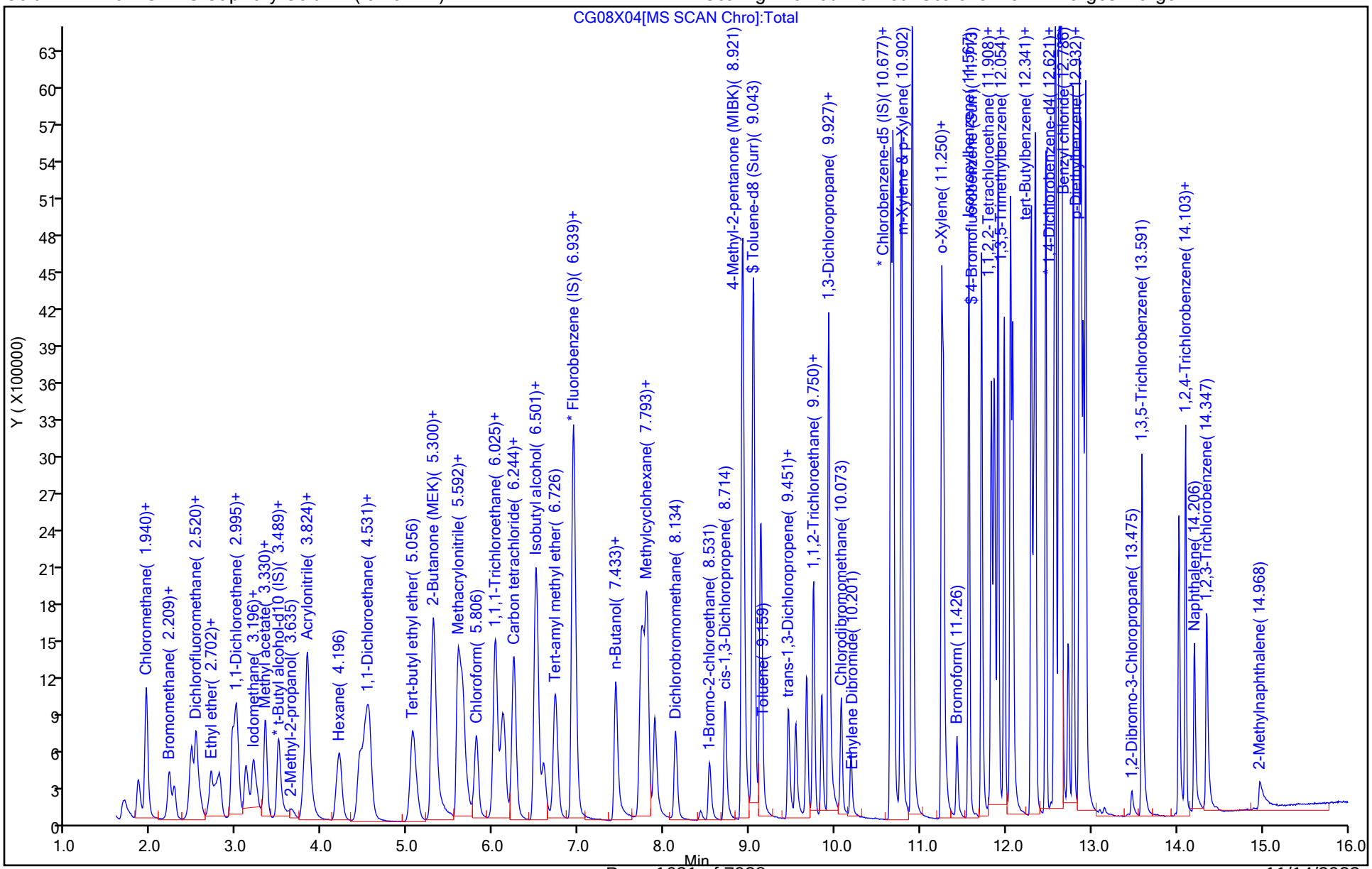
Lims ID: LCS Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X04.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	08-Aug-2023 19:22:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-005				
Misc. Info.:	LCS				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	08-Aug-2023 21:10:26	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1656				

First Level Reviewer: JS6E Date: 08-Aug-2023 19:51:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	102.71
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.67
$ 83 Toluene-d8 (Surr)	10.0	10.1	100.87
$ 124 4-Bromofluorobenzene (Surr)	10.0	9.86	98.62

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

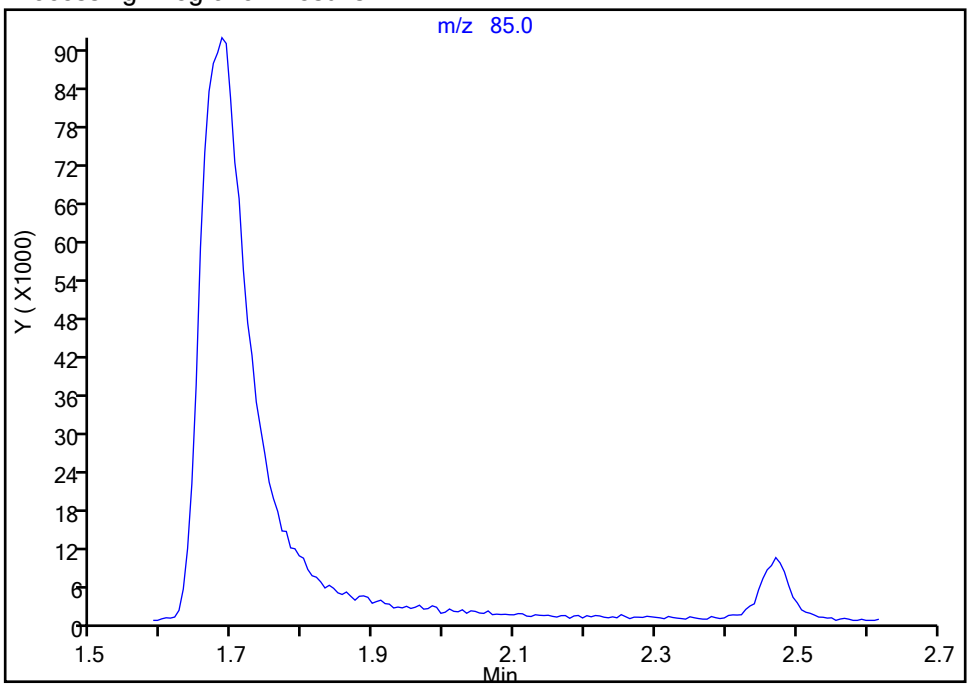
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X04.D				
Injection Date:	08-Aug-2023 19:22:30	Instrument ID:	10193		
Lims ID:	LCS				
Client ID:					
Operator ID:	gaw91131	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

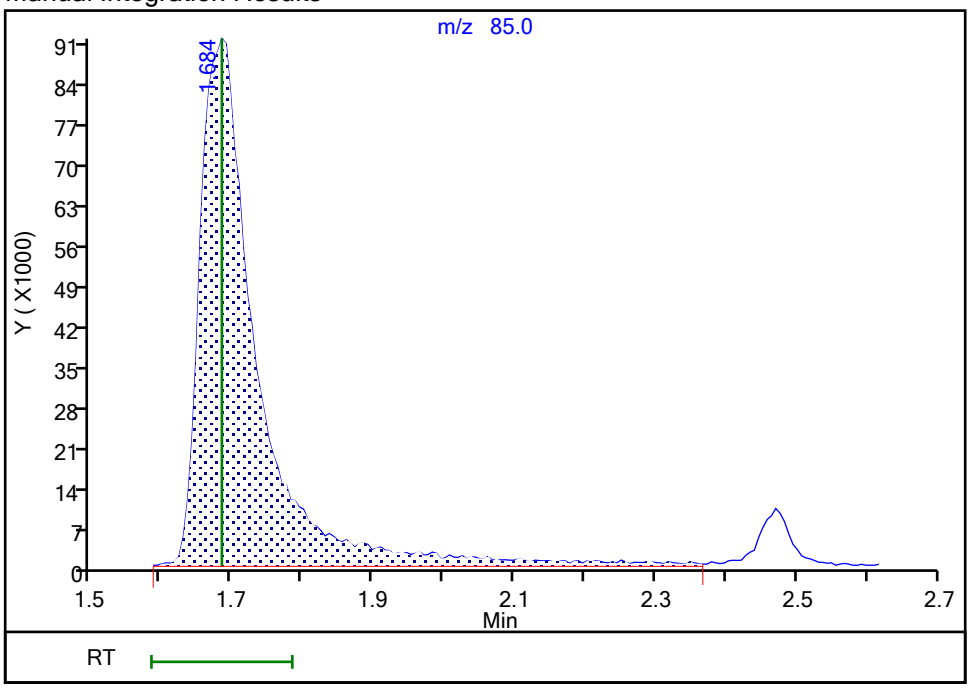
Not Detected
Expected RT: 1.68

Processing Integration Results



RT: 1.68
Area: 510221
Amount: 5.013951
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 08-Aug-2023 19:49:34 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Missed Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-405906/6

Matrix: Water Lab File ID: CG08X05.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 19:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	ND		100	31
108-05-4	Vinyl acetate	14.4		10	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X05.D
Lims ID: LCS SM
Client ID:
Sample Type: LCS
Inject. Date: 08-Aug-2023 19:44:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-006
Misc. Info.: LCS SM
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 21:10:26 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1656

First Level Reviewer: JS6E Date: 08-Aug-2023 20:15:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 Dimethyl ether	45	1.721	1.739	-0.018	100	666226	5.00	5.11	
27 Acetonitrile	41	3.300	3.318	-0.018	98	114764	18.8	20.5	M
* 31 t-Butyl alcohol-d10 (IS)	65	3.525	3.544	-0.019	97	247366	50.0	50.0	
38 Vinyl acetate	43	4.446	4.446	0.000	97	1798344	12.5	14.4	
46 Ethyl acetate	43	5.403	5.379	0.024	98	75860	2.50	1.68	
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	94	919364	10.0	10.2	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.488	6.482	0.006	99	187175	10.0	9.86	
63 Isopropyl acetate	43	6.647	6.647	0.000	98	277194	2.50	2.44	
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	99	3838621	10.0	10.0	
75 n-Propyl acetate	61	8.037	7.994	0.043	97	46393	2.50	1.77	
$ 83 Toluene-d8 (Surr)	98	9.043	9.043	0.000	92	3829809	10.0	9.70	
109 n-Butyl acetate	43	10.103	10.073	0.030	98	118992	2.50	1.30	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	83	3006172	10.0	10.0	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1269992	10.0	8.99	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1650467	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

MSV_LCS_V5ACE_00028	Amount Added:	6.25	Units: uL	
MSV_Q_QDME_00034	Amount Added:	5.00	Units: uL	
MSV_HP25_ISSS_00074	Amount Added:	1.00	Units: uL	Run Reagent

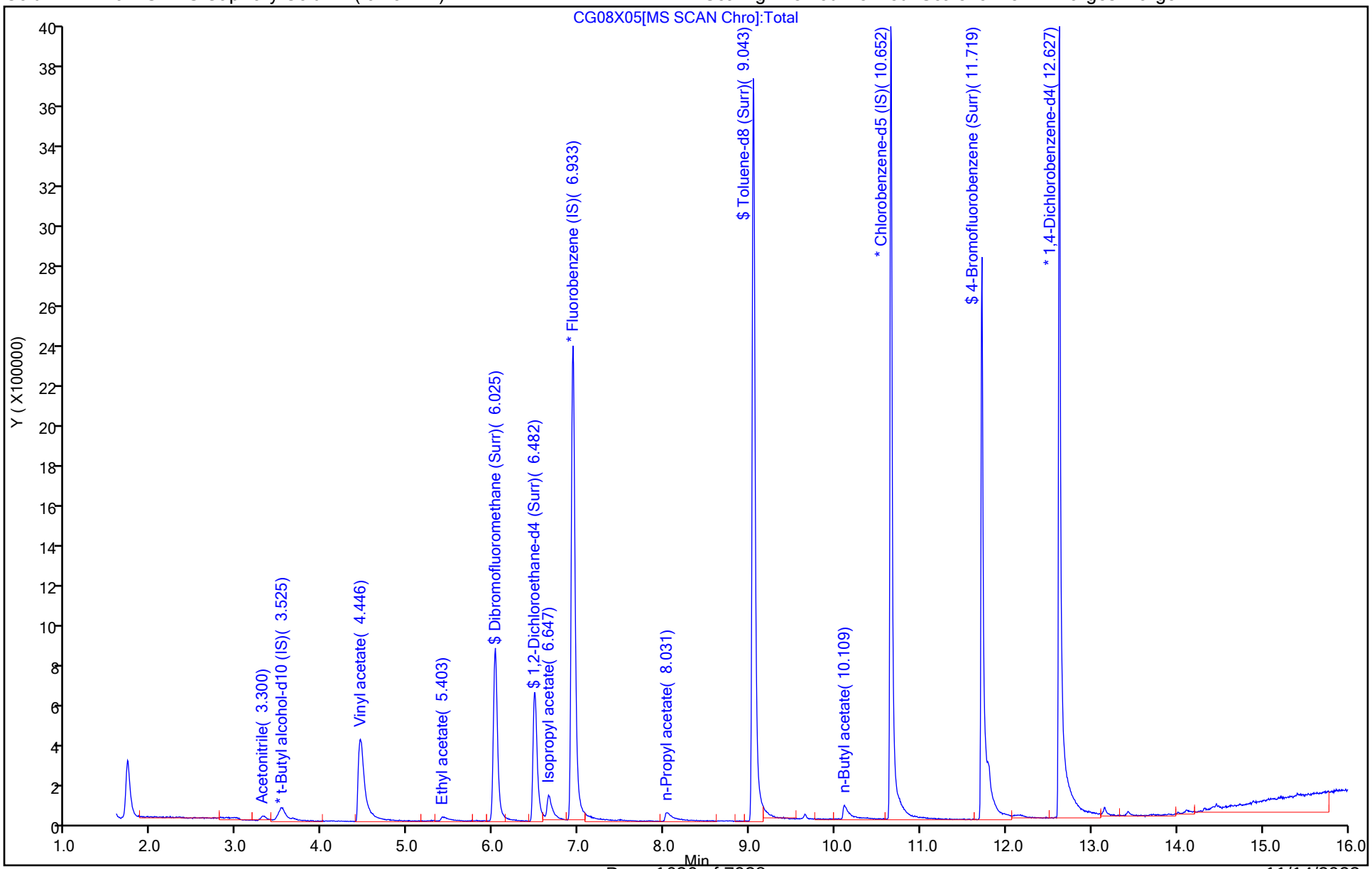
Report Date: 08-Aug-2023 21:10:45 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X05.D

Injection Date:	08-Aug-2023 19:44:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	LCS SM			Worklist Smp#:	6
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X05.D				
Lims ID:	LCS SM				
Client ID:					
Sample Type:	LCS				
Inject. Date:	08-Aug-2023 19:44:30	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-006				
Misc. Info.:	LCS SM				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	08-Aug-2023 21:10:26	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1656				

First Level Reviewer: JS6E Date: 08-Aug-2023 20:15:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.2	102.44
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.86	98.64
$ 83 Toluene-d8 (Surr)	10.0	9.70	96.96
$ 124 4-Bromofluorobenzene (Surr)	10.0	8.99	89.87

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

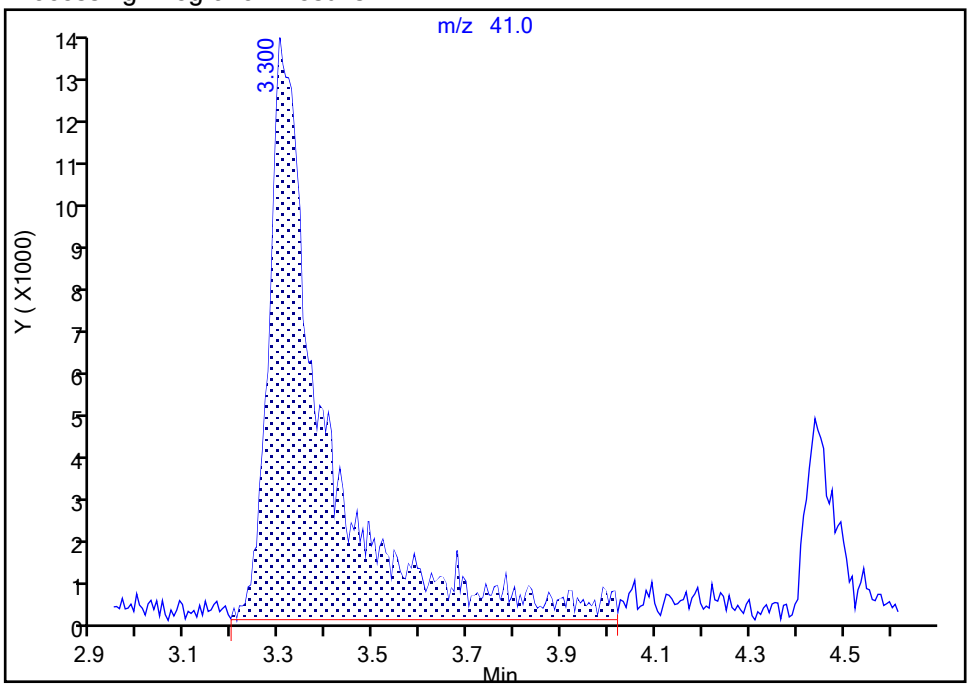
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X05.D				
Injection Date:	08-Aug-2023 19:44:30	Instrument ID:	10193		
Lims ID:	LCS SM				
Client ID:					
Operator ID:	gaw91131	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

27 Acetonitrile, CAS: 75-05-8

Signal: 1

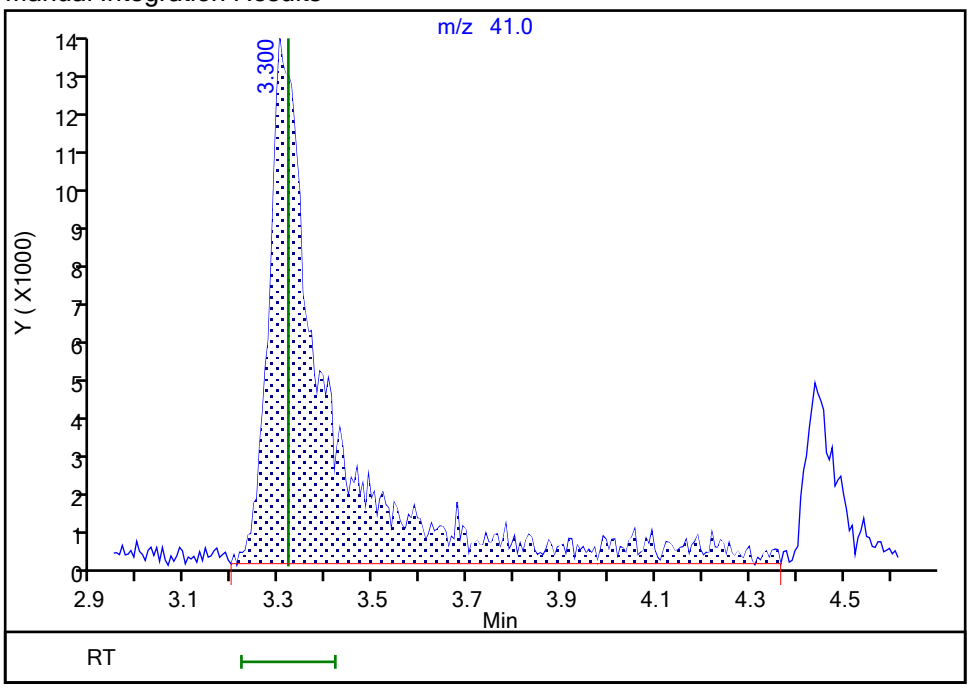
Processing Integration Results

RT: 3.30
Area: 106912
Amount: 19.075023
Amount Units: ug/l



Manual Integration Results

RT: 3.30
Area: 114764
Amount: 20.475961
Amount Units: ug/l



Reviewer: JS6E, 08-Aug-2023 20:14:34 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MS Lab Sample ID: 410-136864-4 MS

Matrix: Water Lab File ID: CG08X14.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 23:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.85		1.0	0.30
71-55-6	1,1,1-Trichloroethane	5.77		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	5.39		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.96		1.0	0.40
79-00-5	1,1,2-Trichloroethane	5.31		1.0	0.30
75-34-3	1,1-Dichloroethane	9.58		1.0	0.30
75-35-4	1,1-Dichloroethene	5.71		1.0	0.30
96-18-4	1,2,3-Trichloropropane	5.39		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	5.30		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	5.12		1.0	0.40
106-93-4	1,2-Dibromoethane	5.71		1.0	0.30
95-50-1	1,2-Dichlorobenzene	5.39		1.0	0.40
107-06-2	1,2-Dichloroethane	5.04		1.0	0.30
78-87-5	1,2-Dichloropropane	5.58		1.0	0.40
541-73-1	1,3-Dichlorobenzene	5.38		1.0	0.40
142-28-9	1,3-Dichloropropane	5.60		1.0	0.40
106-46-7	1,4-Dichlorobenzene	5.47		1.0	0.40
123-91-1	1,4-Dioxane	134	J	200	45
78-93-3	2-Butanone	69.6		10	1.7
591-78-6	2-Hexanone	63.2		10	2.0
108-10-1	4-Methyl-2-pentanone	65.5		10	2.0
67-64-1	Acetone	62.8		10	2.0
107-13-1	Acrylonitrile	29.0		10	1.1
107-05-1	Allyl chloride	5.38	J	10	1.0
71-43-2	Benzene	6.09		1.0	0.30
75-27-4	Bromodichloromethane	5.42		1.0	0.30
75-25-2	Bromoform	5.21		1.0	0.40
74-83-9	Bromomethane	5.22		1.0	0.54
75-15-0	Carbon disulfide	5.27	J	10	0.40
56-23-5	Carbon tetrachloride	5.99		1.0	0.30
75-00-3	Chloroethane	7.55		1.0	0.070
67-66-3	Chloroform	5.50		1.0	0.30
74-87-3	Chloromethane	5.23		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MS Lab Sample ID: 410-136864-4 MS

Matrix: Water Lab File ID: CG08X14.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 23:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
126-99-8	Chloroprene	5.52	J	10	0.46
124-48-1	Dibromochloromethane	5.44		1.0	0.40
74-95-3	Dibromomethane	5.54		1.0	0.30
75-71-8	Dichlorodifluoromethane	5.97		1.0	0.40
60-29-7	Diethyl ether	26.1		10	1.1
97-63-2	Ethyl methacrylate	5.21	J	10	0.81
100-41-4	Ethylbenzene	5.63		1.0	0.30
87-68-3	Hexachlorobutadiene	5.63		1.0	0.40
78-83-1	Isobutyl alcohol	129	J	200	11
179601-23-1	m&p-Xylene	11.7		2.0	0.40
126-98-7	Methacrylonitrile	41.8	J	100	9.7
74-88-4	Methyl iodide	5.35	J	10	0.58
80-62-6	Methyl methacrylate	5.01	J	10	3.5
75-09-2	Methylene Chloride	5.43		1.0	0.70
91-20-3	Naphthalene	4.99		1.0	0.40
95-47-6	o-Xylene	5.66		1.0	0.40
76-01-7	Pentachloroethane	5.76	J	10	1.7
107-12-0	Propionitrile	45.2	J	100	10
100-42-5	Styrene	5.86		1.0	0.30
127-18-4	Tetrachloroethene	5.91		1.0	0.30
109-99-9	Tetrahydrofuran	30.1		25	2.0
108-88-3	Toluene	5.69		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	5.72		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	5.37		1.0	0.40
79-01-6	Trichloroethene	5.80		1.0	0.30
75-69-4	Trichlorofluoromethane	6.02		1.0	0.40
75-01-4	Vinyl chloride	5.88		1.0	0.20
1330-20-7	Xylenes, Total	17.4		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MS Lab Sample ID: 410-136864-4 MS

Matrix: Water Lab File ID: CG08X14.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 23:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X14.D
Lims ID: 410-136864-C-4 MS
Client ID: 16WC1A
Sample Type: MS
Inject. Date: 08-Aug-2023 23:01:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-015
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 10:58:47 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 10:58:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.684	1.684	0.000	70	592308	5.00	5.97	M
5 Chloromethane	50	1.849	1.849	0.000	99	657813	5.00	5.23	
6 Vinyl chloride	62	1.934	1.940	-0.006	98	705814	5.00	5.88	
7 Butadiene	39	1.940	1.940	0.000	89	660354	5.00	5.68	
9 Bromomethane	94	2.209	2.209	0.000	90	489954	5.00	5.22	
10 Chloroethane	64	2.270	2.270	0.000	100	533104	5.00	7.55	
11 Dichlorofluoromethane	67	2.471	2.471	0.000	97	1005080	5.00	5.25	
13 Pentane	43	2.520	2.526	-0.006	95	684540	5.00	5.01	
12 Trichlorofluoromethane	101	2.526	2.532	-0.006	97	815570	5.00	6.02	
14 Ethyl ether	59	2.690	2.696	-0.006	90	2013944	5.01	26.1	E
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.788	2.794	-0.006	89	610934	5.00	5.75	
18 1,1-Dichloroethene	96	2.946	2.946	0.000	95	501578	5.00	5.71	
20 Acetone	43	2.983	2.989	-0.006	100	836966	62.6	62.8	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.001	3.001	0.000	88	515801	5.00	5.96	
22 Iodomethane	142	3.105	3.111	-0.006	96	1008708	5.00	5.35	
24 Isopropyl alcohol	45	3.148	3.147	0.001	38	115724	37.5	37.1	
25 Carbon disulfide	76	3.190	3.196	-0.006	99	1637472	5.00	5.27	
26 Methyl acetate	43	3.324	3.324	0.000	37	224511	5.00	5.34	
29 3-Chloro-1-propene	41	3.330	3.336	-0.006	94	832289	5.00	5.38	
30 Methylene Chloride	84	3.483	3.489	-0.006	90	596162	5.00	5.43	
* 31 t-Butyl alcohol-d10 (IS)	65	3.532	3.544	-0.012	97	280647	50.0	50.0	
32 2-Methyl-2-propanol	59	3.629	3.635	-0.006	99	319949	50.0	54.3	
33 Acrylonitrile	53	3.788	3.800	-0.012	99	542802	25.0	29.0	
34 Methyl tert-butyl ether	73	3.818	3.824	-0.006	92	1411307	5.00	5.00	
35 trans-1,2-Dichloroethene	96	3.824	3.824	0.000	99	609737	5.00	5.72	
36 Hexane	57	4.196	4.196	0.000	91	796027	5.00	5.86	
37 1,1-Dichloroethane	63	4.434	4.434	0.000	96	1790778	5.00	9.58	
39 Isopropyl ether	45	4.501	4.507	-0.006	94	1761380	5.00	5.00	
40 2-Chloro-1,3-butadiene	53	4.550	4.550	0.000	88	789995	5.00	5.52	
41 Tert-butyl ethyl ether	59	5.056	5.068	-0.012	97	1642048	5.00	5.04	
42 2-Butanone (MEK)	43	5.281	5.281	0.000	99	1813112	62.6	69.6	
43 cis-1,2-Dichloroethene	96	5.300	5.299	0.001	81	1064111	5.00	9.31	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2,2-Dichloropropane	77	5.306	5.312	-0.006	85	916742	5.00	6.14	M
45 Propionitrile	54	5.409	5.391	0.018	92	263109	37.5	45.2	
47 Methacrylonitrile	67	5.586	5.586	0.000	90	1152521	37.5	41.8	
48 Chlorobromomethane	128	5.635	5.641	-0.006	89	324801	5.00	5.92	
49 Tetrahydrofuran	71	5.665	5.659	0.006	78	230335	25.0	30.1	
50 Chloroform	83	5.799	5.799	0.000	93	1018007	5.00	5.50	
53 1,1,1-Trichloroethane	97	6.019	6.025	-0.006	79	897998	5.00	5.77	
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	94	968279	10.0	10.3	
55 Cyclohexane	56	6.116	6.122	-0.006	89	1034216	5.00	5.92	
56 Carbon tetrachloride	117	6.232	6.238	-0.006	96	807923	5.00	5.99	
57 1,1-Dichloropropene	75	6.244	6.244	0.000	98	823467	5.00	5.90	
58 Isobutyl alcohol	41	6.501	6.476	0.025	35	194246	125.1	128.8	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.488	6.482	0.006	99	211766	10.0	10.6	
60 Benzene	78	6.507	6.507	0.000	97	2714483	5.00	6.09	
61 1,2-Dichloroethane	62	6.592	6.592	0.000	97	572660	5.00	5.04	
64 Tert-amyl methyl ether	73	6.726	6.726	0.000	99	1588264	5.00	5.22	
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	98	4035088	10.0	10.0	
66 n-Heptane	43	6.958	6.952	0.006	87	893108	5.00	6.08	
67 n-Butanol	56	7.385	7.409	-0.025	64	754	250.2	49.8	
68 Trichloroethene	95	7.433	7.427	0.006	96	663104	5.00	5.80	
69 Methylcyclohexane	83	7.732	7.732	0.000	88	1169134	5.00	6.30	
70 1,2-Dichloropropane	63	7.762	7.769	-0.006	95	655564	5.00	5.58	
71 2-ethoxy-2-methyl butane	87	7.799	7.799	0.000	94	942368	5.00	5.17	
72 Dibromomethane	93	7.884	7.884	0.000	94	302581	5.00	5.54	
74 1,4-Dioxane	88	7.891	7.890	0.000	32	60601	125.1	133.9	
73 Methyl methacrylate	69	7.897	7.890	0.007	91	269375	5.00	5.01	
76 Dichlorobromomethane	83	8.134	8.134	0.000	100	735421	5.00	5.42	
77 2-Nitropropane	41	8.433	8.421	0.012	97	71374	5.00	4.88	
78 1-Bromo-2-chloroethane	63	8.531	8.531	0.000	98	667088	5.00	5.60	
80 cis-1,3-Dichloropropene	75	8.714	8.713	0.001	98	907156	5.00	5.41	
82 4-Methyl-2-pentanone (MIBK)	43	8.915	8.915	0.000	95	4849118	62.6	65.5	
$ 83 Toluene-d8 (Surr)	98	9.043	9.043	0.000	93	4093396	10.0	9.96	
84 Toluene	92	9.128	9.134	-0.006	99	1668027	5.00	5.69	
85 trans-1,3-Dichloropropene	75	9.451	9.451	0.000	90	735836	5.00	5.37	
86 Ethyl methacrylate	69	9.543	9.536	0.007	89	567735	5.00	5.21	
87 1,1,2-Trichloroethane	97	9.665	9.671	-0.006	89	461547	5.00	5.31	
88 Tetrachloroethene	166	9.750	9.750	0.000	96	833254	5.00	5.91	
89 1,3-Dichloropropane	76	9.841	9.841	0.000	88	778377	5.00	5.60	
106 2-Hexanone	43	9.927	9.921	0.006	95	3191294	62.6	63.2	
108 Chlorodibromomethane	129	10.073	10.073	0.000	90	578932	5.00	5.44	
110 Ethylene Dibromide	107	10.189	10.183	0.006	98	444741	5.00	5.71	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	82	3126956	10.0	10.0	
112 1-Chlorohexane	91	10.677	10.676	0.001	97	918938	5.00	5.79	
113 Chlorobenzene	112	10.683	10.683	0.000	98	1985175	5.00	5.60	
114 1,1,1,2-Tetrachloroethane	131	10.774	10.774	0.000	96	691892	5.00	5.85	
115 Ethylbenzene	91	10.780	10.780	0.000	97	3168531	5.00	5.63	
116 m-Xylene & p-Xylene	106	10.902	10.902	0.000	97	2628833	10.0	11.7	
118 o-Xylene	106	11.250	11.250	0.000	96	1280201	5.00	5.66	
119 Styrene	104	11.268	11.268	0.000	95	2061309	5.00	5.86	
120 Bromoform	173	11.426	11.426	0.000	98	352708	5.00	5.21	
121 Isopropylbenzene	105	11.567	11.567	0.000	95	3294538	5.00	5.78	
$ 124 4-Bromofluorobenzene (Surr)	95	11.713	11.713	0.000	97	1429754	10.0	9.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
125 Bromobenzene	156	11.829	11.829	0.000	93	872193	5.00	5.56	
126 1,1,2,2-Tetrachloroethane	83	11.829	11.829	0.000	94	609207	5.00	5.39	
127 trans-1,4-Dichloro-2-butene	53	11.859	11.859	0.000	87	517759	25.0	20.9	
128 1,2,3-Trichloropropane	110	11.871	11.871	0.000	78	156111	5.00	5.39	
129 N-Propylbenzene	91	11.908	11.908	0.000	98	3829576	5.00	5.58	
130 2-Chlorotoluene	126	11.981	11.981	0.000	98	865563	5.00	5.79	
131 1,3,5-Trimethylbenzene	105	12.054	12.054	0.000	94	2814837	5.00	5.53	
132 4-Chlorotoluene	126	12.079	12.079	0.000	96	858418	5.00	5.66	
133 tert-Butylbenzene	134	12.298	12.298	0.000	92	690196	5.00	5.78	
134 Pentachloroethane	167	12.329	12.329	0.000	90	545753	5.00	5.76	
135 1,2,4-Trimethylbenzene	105	12.347	12.347	0.000	96	2900162	5.00	5.55	
136 sec-Butylbenzene	105	12.469	12.469	0.000	93	3787248	5.00	5.84	
137 1,3-Dichlorobenzene	146	12.566	12.566	0.000	97	1675909	5.00	5.38	
138 4-Isopropyltoluene	119	12.579	12.579	0.000	98	3317235	5.00	5.78	
* 139 1,4-Dichlorobenzene-d4	152	12.621	12.621	0.000	92	1906091	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.640	12.640	0.000	96	1755334	5.00	5.47	
141 1,2,3-Trimethylbenzene	120	12.652	12.652	0.000	98	1339018	5.00	5.35	
142 Benzyl chloride	126	12.725	12.725	0.000	97	242215	5.00	5.39	
145 p-Diethylbenzene	119	12.859	12.859	0.000	95	2048128	5.00	5.61	
143 n-Butylbenzene	92	12.877	12.877	0.000	97	1534932	5.00	5.69	
144 1,2-Dichlorobenzene	146	12.908	12.902	0.006	100	1584295	5.00	5.39	
148 1,2-Dibromo-3-Chloropropane	155	13.469	13.469	0.000	90	72946	5.00	5.12	
149 1,3,5-Trichlorobenzene	180	13.591	13.591	0.000	97	1269076	5.00	5.26	
150 1,2,4-Trichlorobenzene	180	14.023	14.023	0.000	94	969831	5.00	5.30	
151 Hexachlorobutadiene	225	14.103	14.103	0.000	96	578680	5.00	5.63	
152 Naphthalene	128	14.206	14.200	0.006	96	1490429	5.00	4.99	
153 1,2,3-Trichlorobenzene	180	14.347	14.346	0.001	96	769750	5.00	5.56	
154 2-Methylnaphthalene	142	14.968	14.950	0.018	91	269567	5.00	3.84	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00124	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00154	Amount Added:	5.38	Units: uL	
MSV_LCS_EE_00007	Amount Added:	5.38	Units: uL	
MSV_LCS_Penta_00031	Amount Added:	5.38	Units: uL	
MSV_HP25_ISSS_00074	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 09-Aug-2023 10:58:47 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X14.D

Injection Date: 08-Aug-2023 23:01:30 Instrument ID: 10193 Operator ID: gaw91131

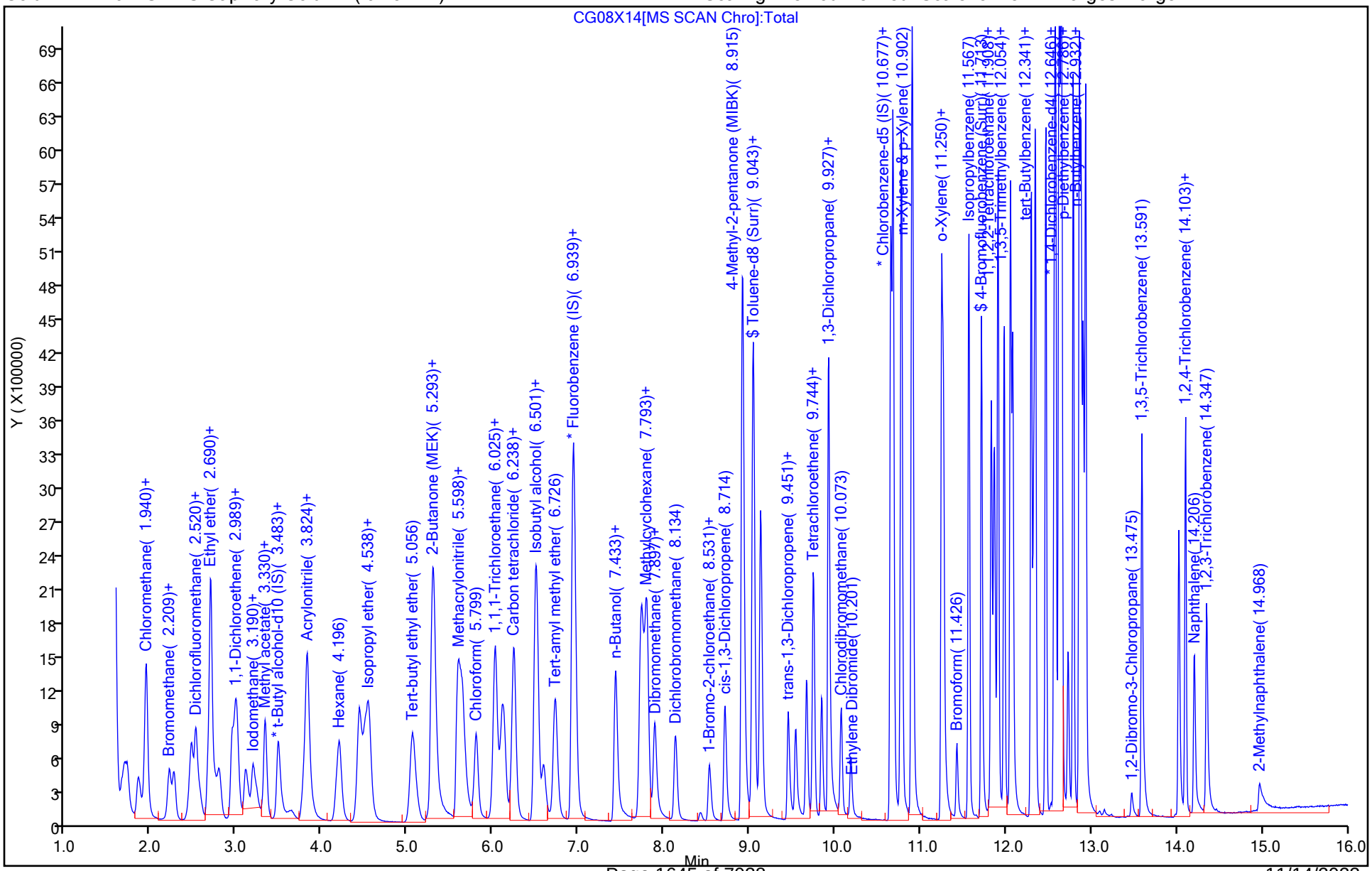
Lims ID: 410-136864-C-4 MS Worklist Smp#: 15

Client ID: 16WC1A

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 14

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X14.D				
Lims ID:	410-136864-C-4 MS				
Client ID:	16WC1A				
Sample Type:	MS				
Inject. Date:	08-Aug-2023 23:01:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-015				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 10:58:47	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 10:58:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	102.64
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	106.16
$ 83 Toluene-d8 (Surr)	10.0	9.96	99.63
$ 124 4-Bromofluorobenzene (Surr)	10.0	9.73	97.27

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

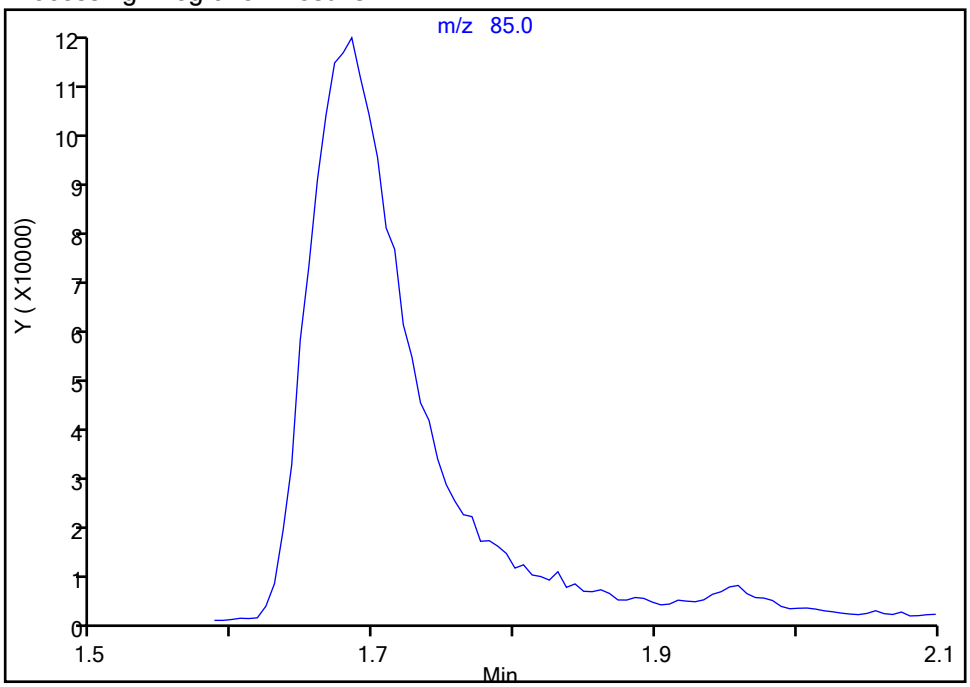
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X14.D				
Injection Date:	08-Aug-2023 23:01:30	Instrument ID:	10193		
Lims ID:	410-136864-C-4 MS				
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

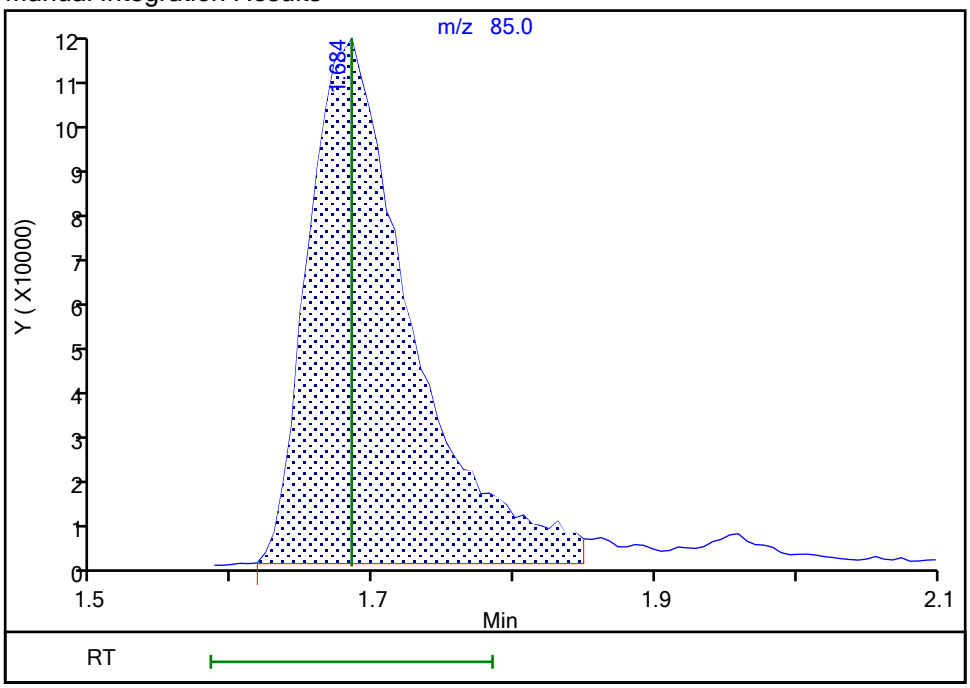
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.68
Area: 592308
Amount: 5.968646
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 10:58:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MS Lab Sample ID: 410-136864-4 MS

Matrix: Water Lab File ID: CG08X16.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 23:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	ND		100	31
108-05-4	Vinyl acetate	14.5		10	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X16.D
Lims ID: 410-136864-D-4 MS
Client ID: 16WC1A
Sample Type: MS
Inject. Date: 08-Aug-2023 23:45:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-017
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 22:47:13 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 12:00:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 Dimethyl ether	45	1.715	1.739	-0.024	100	763156	4.65	5.72	
27 Acetonitrile	41	3.306	3.318	-0.012	99	85558	18.8	14.9	
* 31 t-Butyl alcohol-d10 (IS)	65	3.526	3.544	-0.018	97	269840	50.0	50.0	
38 Vinyl acetate	43	4.440	4.446	-0.006	97	1850454	12.5	14.5	
46 Ethyl acetate	43	5.409	5.379	0.030	97	79695	2.50	1.71	
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	94	922817	10.0	10.0	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.488	6.482	0.006	99	194157	10.0	10.0	
63 Isopropyl acetate	43	6.653	6.647	0.006	99	289099	2.50	2.49	
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	99	3930075	10.0	10.0	
75 n-Propyl acetate	61	8.037	7.994	0.043	98	41271	2.50	1.57	
$ 83 Toluene-d8 (Surr)	98	9.043	9.043	0.000	93	3830128	10.0	9.53	
109 n-Butyl acetate	43	10.110	10.073	0.037	98	140161	2.50	1.45	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	83	3058566	10.0	10.0	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	97	1295307	10.0	9.01	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1608332	10.0	10.0	

QC Flag Legend

Processing Flags

Reagents:

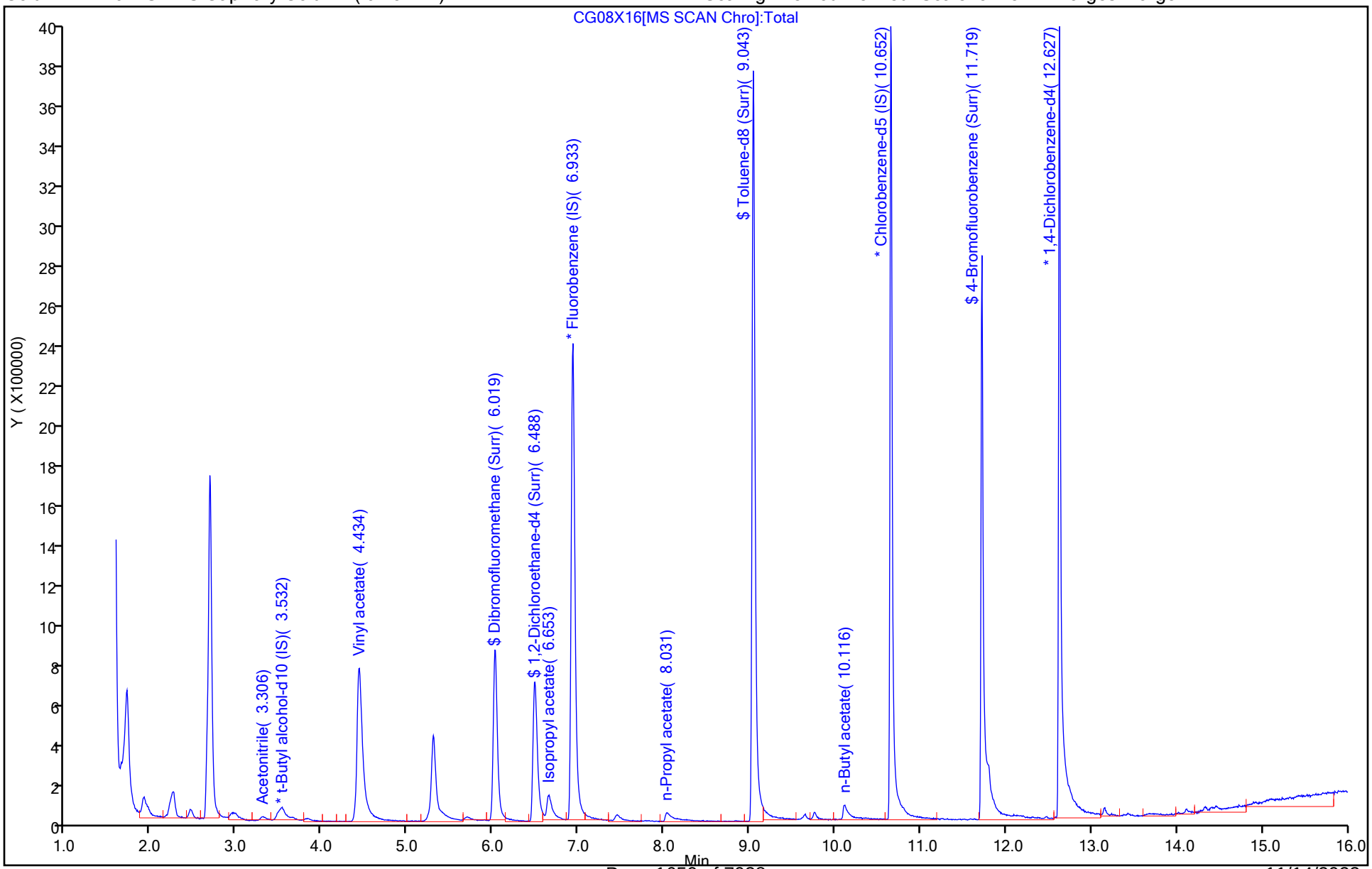
MSV_LCS_V5ACE_00028	Amount Added:	2.69	Units: uL	
MSV_Q_QDME_00034	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00074	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 09-Aug-2023 12:01:00 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X16.D				
Injection Date:	08-Aug-2023 23:45:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-D-4 MS			Worklist Smp#:	17
Client ID:	16WC1A				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X16.D				
Lims ID:	410-136864-D-4 MS				
Client ID:	16WC1A				
Sample Type:	MS				
Inject. Date:	08-Aug-2023 23:45:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-017				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	08-Aug-2023 22:47:13	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 12:00:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.0	100.43
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	99.93
$ 83 Toluene-d8 (Surr)	10.0	9.53	95.31
$ 124 4-Bromofluorobenzene (Surr)	10.0	9.01	90.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MSD Lab Sample ID: 410-136864-4 MSD

Matrix: Water Lab File ID: CG08X15.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 23:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.72		1.0	0.30
71-55-6	1,1,1-Trichloroethane	5.71		1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	5.35		1.0	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.80		1.0	0.40
79-00-5	1,1,2-Trichloroethane	5.37		1.0	0.30
75-34-3	1,1-Dichloroethane	9.55		1.0	0.30
75-35-4	1,1-Dichloroethene	5.66		1.0	0.30
96-18-4	1,2,3-Trichloropropane	5.44		1.0	0.30
120-82-1	1,2,4-Trichlorobenzene	5.27		1.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	5.28		1.0	0.40
106-93-4	1,2-Dibromoethane	5.55		1.0	0.30
95-50-1	1,2-Dichlorobenzene	5.36		1.0	0.40
107-06-2	1,2-Dichloroethane	5.00		1.0	0.30
78-87-5	1,2-Dichloropropane	5.49		1.0	0.40
541-73-1	1,3-Dichlorobenzene	5.32		1.0	0.40
142-28-9	1,3-Dichloropropane	5.46		1.0	0.40
106-46-7	1,4-Dichlorobenzene	5.40		1.0	0.40
123-91-1	1,4-Dioxane	133	J	200	45
78-93-3	2-Butanone	67.0		10	1.7
591-78-6	2-Hexanone	61.5		10	2.0
108-10-1	4-Methyl-2-pentanone	62.0		10	2.0
67-64-1	Acetone	58.8		10	2.0
107-13-1	Acrylonitrile	28.0		10	1.1
107-05-1	Allyl chloride	5.39	J	10	1.0
71-43-2	Benzene	5.93		1.0	0.30
75-27-4	Bromodichloromethane	5.40		1.0	0.30
75-25-2	Bromoform	4.99		1.0	0.40
74-83-9	Bromomethane	5.24		1.0	0.54
75-15-0	Carbon disulfide	5.20	J	10	0.40
56-23-5	Carbon tetrachloride	6.03		1.0	0.30
75-00-3	Chloroethane	7.48		1.0	0.070
67-66-3	Chloroform	5.43		1.0	0.30
74-87-3	Chloromethane	5.22		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MSD Lab Sample ID: 410-136864-4 MSD

Matrix: Water Lab File ID: CG08X15.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 23:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
126-99-8	Chloroprene	5.54	J	10	0.46
124-48-1	Dibromochloromethane	5.32		1.0	0.40
74-95-3	Dibromomethane	5.61		1.0	0.30
75-71-8	Dichlorodifluoromethane	5.78		1.0	0.40
60-29-7	Diethyl ether	26.4		10	1.1
97-63-2	Ethyl methacrylate	5.05	J	10	0.81
100-41-4	Ethylbenzene	5.56		1.0	0.30
87-68-3	Hexachlorobutadiene	5.59		1.0	0.40
78-83-1	Isobutyl alcohol	125	J	200	11
179601-23-1	m&p-Xylene	11.3		2.0	0.40
126-98-7	Methacrylonitrile	40.0	J	100	9.7
74-88-4	Methyl iodide	5.22	J	10	0.58
80-62-6	Methyl methacrylate	4.64	J	10	3.5
75-09-2	Methylene Chloride	5.33		1.0	0.70
91-20-3	Naphthalene	5.04		1.0	0.40
95-47-6	o-Xylene	5.53		1.0	0.40
76-01-7	Pentachloroethane	5.60	J	10	1.7
107-12-0	Propionitrile	42.7	J	100	10
100-42-5	Styrene	5.74		1.0	0.30
127-18-4	Tetrachloroethene	5.74		1.0	0.30
109-99-9	Tetrahydrofuran	30.5		25	2.0
108-88-3	Toluene	5.53		1.0	0.30
156-60-5	trans-1,2-Dichloroethene	5.67		1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	5.28		1.0	0.40
79-01-6	Trichloroethene	5.64		1.0	0.30
75-69-4	Trichlorofluoromethane	5.90		1.0	0.40
75-01-4	Vinyl chloride	5.71		1.0	0.20
1330-20-7	Xylenes, Total	16.8		3.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MSD Lab Sample ID: 410-136864-4 MSD

Matrix: Water Lab File ID: CG08X15.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/08/2023 23:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X15.D
Lims ID: 410-136864-E-4 MSD
Client ID: 16WC1A
Sample Type: MSD
Inject. Date: 08-Aug-2023 23:23:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-016
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 09-Aug-2023 10:59:41 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 10:59:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.672	1.684	-0.012	73	579835	5.00	5.78	M
5 Chloromethane	50	1.837	1.849	-0.012	98	663699	5.00	5.22	
6 Vinyl chloride	62	1.928	1.940	-0.012	97	693213	5.00	5.71	
7 Butadiene	39	1.934	1.940	-0.006	89	672191	5.00	5.72	
9 Bromomethane	94	2.196	2.209	-0.013	90	496872	5.00	5.24	
10 Chloroethane	64	2.263	2.270	-0.007	99	533880	5.00	7.48	
11 Dichlorofluoromethane	67	2.465	2.471	-0.006	97	985233	5.00	5.08	
13 Pentane	43	2.513	2.526	-0.013	97	694770	5.00	5.03	
12 Trichlorofluoromethane	101	2.519	2.532	-0.013	96	808534	5.00	5.90	
14 Ethyl ether	59	2.690	2.696	-0.006	90	2062021	5.01	26.4	E
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.782	2.794	-0.012	90	602444	5.00	5.60	
18 1,1-Dichloroethene	96	2.946	2.946	0.000	96	502462	5.00	5.66	
20 Acetone	43	2.977	2.989	-0.012	100	805645	62.6	58.8	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.989	3.001	-0.012	87	508062	5.00	5.80	
22 Iodomethane	142	3.099	3.111	-0.012	96	994491	5.00	5.22	
24 Isopropyl alcohol	45	3.141	3.147	-0.006	38	117746	37.5	36.6	
25 Carbon disulfide	76	3.184	3.196	-0.012	99	1631440	5.00	5.20	
26 Methyl acetate	43	3.318	3.324	-0.006	37	229210	5.00	5.30	
29 3-Chloro-1-propene	41	3.324	3.336	-0.012	94	844511	5.00	5.39	
30 Methylene Chloride	84	3.483	3.489	-0.006	91	591482	5.00	5.33	
* 31 t-Butyl alcohol-d10 (IS)	65	3.525	3.544	-0.019	96	288709	50.0	50.0	
32 2-Methyl-2-propanol	59	3.635	3.635	0.000	100	315671	50.0	52.1	
33 Acrylonitrile	53	3.781	3.800	-0.019	99	540667	25.0	28.0	
34 Methyl tert-butyl ether	73	3.812	3.824	-0.012	90	1414051	5.00	4.95	
35 trans-1,2-Dichloroethene	96	3.824	3.824	0.000	100	611311	5.00	5.67	
36 Hexane	57	4.190	4.196	-0.006	92	823522	5.00	5.99	
37 1,1-Dichloroethane	63	4.428	4.434	-0.006	96	1805456	5.00	9.55	
39 Isopropyl ether	45	4.501	4.507	-0.006	94	1792956	5.00	5.04	
40 2-Chloro-1,3-butadiene	53	4.537	4.550	-0.013	92	800850	5.00	5.54	
41 Tert-butyl ethyl ether	59	5.049	5.068	-0.019	97	1654334	5.00	5.02	
42 2-Butanone (MEK)	43	5.275	5.281	-0.006	100	1793130	62.6	67.0	
43 cis-1,2-Dichloroethene	96	5.293	5.299	-0.006	78	1076709	5.00	9.32	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2,2-Dichloropropane	77	5.299	5.312	-0.013	59	909290	5.00	6.02	
45 Propionitrile	54	5.397	5.391	0.006	98	255794	37.5	42.7	
47 Methacrylonitrile	67	5.586	5.586	0.000	90	1132897	37.5	40.0	
48 Chlorobromomethane	128	5.635	5.641	-0.006	90	322994	5.00	5.82	
49 Tetrahydrofuran	71	5.665	5.659	0.006	78	240338	25.0	30.5	
50 Chloroform	83	5.799	5.799	0.000	92	1015723	5.00	5.43	
53 1,1,1-Trichloroethane	97	6.019	6.025	-0.006	77	898757	5.00	5.71	
$ 54 Dibromofluoromethane (Surr)	113	6.019	6.025	-0.006	94	987104	10.0	10.3	
55 Cyclohexane	56	6.110	6.122	-0.012	90	1037102	5.00	5.87	
56 Carbon tetrachloride	117	6.232	6.238	-0.006	96	822197	5.00	6.03	
57 1,1-Dichloropropene	75	6.238	6.244	-0.006	98	825741	5.00	5.85	
58 Isobutyl alcohol	41	6.500	6.476	0.024	57	193508	125.1	125.4	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.482	6.482	0.000	99	204053	10.0	10.1	
60 Benzene	78	6.500	6.507	-0.007	96	2672604	5.00	5.93	
61 1,2-Dichloroethane	62	6.592	6.592	0.000	97	574496	5.00	5.00	
64 Tert-amyl methyl ether	73	6.726	6.726	0.000	99	1594397	5.00	5.18	
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	98	4081051	10.0	10.0	
66 n-Heptane	43	6.951	6.952	-0.001	87	899671	5.00	6.05	
67 n-Butanol	56	7.451	7.409	0.042	88	259043	250.2	199.4	
68 Trichloroethene	95	7.427	7.427	0.000	95	652114	5.00	5.64	
69 Methylcyclohexane	83	7.726	7.732	-0.006	88	1166860	5.00	6.22	
70 1,2-Dichloropropane	63	7.762	7.769	-0.006	94	652575	5.00	5.49	
71 2-ethoxy-2-methyl butane	87	7.799	7.799	0.000	94	944457	5.00	5.12	
72 Dibromomethane	93	7.884	7.884	0.000	93	309801	5.00	5.61	
74 1,4-Dioxane	88	7.909	7.890	0.019	34	61842	125.1	132.8	
73 Methyl methacrylate	69	7.896	7.890	0.006	91	256653	5.00	4.64	
76 Dichlorobromomethane	83	8.128	8.134	-0.006	100	740773	5.00	5.40	
77 2-Nitropropane	41	8.427	8.421	0.006	99	70404	5.00	4.68	
78 1-Bromo-2-chloroethane	63	8.524	8.531	-0.007	98	644980	5.00	5.36	
80 cis-1,3-Dichloropropene	75	8.707	8.713	-0.006	98	909199	5.00	5.36	
82 4-Methyl-2-pentanone (MIBK)	43	8.914	8.915	-0.001	96	4722298	62.6	62.0	
$ 83 Toluene-d8 (Surr)	98	9.043	9.043	-0.001	93	4157770	10.0	9.93	
84 Toluene	92	9.128	9.134	-0.006	98	1650189	5.00	5.53	
85 trans-1,3-Dichloropropene	75	9.451	9.451	0.000	90	736116	5.00	5.28	
86 Ethyl methacrylate	69	9.536	9.536	0.000	89	560462	5.00	5.05	
87 1,1,2-Trichloroethane	97	9.664	9.671	-0.007	89	475005	5.00	5.37	
88 Tetrachloroethene	166	9.750	9.750	0.000	97	823437	5.00	5.74	
89 1,3-Dichloropropane	76	9.841	9.841	0.000	89	774140	5.00	5.46	
106 2-Hexanone	43	9.920	9.921	-0.001	96	3192963	62.6	61.5	
108 Chlorodibromomethane	129	10.073	10.073	0.000	89	576454	5.00	5.32	
110 Ethylene Dibromide	107	10.189	10.183	0.006	98	440107	5.00	5.55	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	82	3185504	10.0	10.0	
112 1-Chlorohexane	91	10.676	10.676	0.000	68	922461	5.00	5.70	
113 Chlorobenzene	112	10.682	10.683	-0.001	96	1986954	5.00	5.50	
114 1,1,1,2-Tetrachloroethane	131	10.768	10.774	-0.006	96	689069	5.00	5.72	
115 Ethylbenzene	91	10.780	10.780	0.000	97	3187561	5.00	5.56	
116 m-Xylene & p-Xylene	106	10.902	10.902	0.000	97	2601626	10.0	11.3	
118 o-Xylene	106	11.249	11.250	-0.001	95	1273547	5.00	5.53	
119 Styrene	104	11.268	11.268	0.000	95	2056809	5.00	5.74	
120 Bromoform	173	11.426	11.426	0.000	98	344434	5.00	4.99	
121 Isopropylbenzene	105	11.566	11.567	-0.001	95	3313712	5.00	5.71	
$ 124 4-Bromofluorobenzene (Surr)	95	11.713	11.713	0.000	95	1452751	10.0	9.70	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
125 Bromobenzene	156	11.829	11.829	0.000	93	860319	5.00	5.44	
126 1,1,2,2-Tetrachloroethane	83	11.829	11.829	0.000	94	609995	5.00	5.35	
127 trans-1,4-Dichloro-2-butene	53	11.859	11.859	0.000	88	521130	25.0	20.8	
128 1,2,3-Trichloropropane	110	11.871	11.871	0.000	78	159049	5.00	5.44	
129 N-Propylbenzene	91	11.908	11.908	0.000	98	3828270	5.00	5.53	
130 2-Chlorotoluene	126	11.981	11.981	0.000	98	857691	5.00	5.68	
131 1,3,5-Trimethylbenzene	105	12.054	12.054	0.000	94	2814316	5.00	5.48	
132 4-Chlorotoluene	126	12.078	12.079	-0.001	96	874945	5.00	5.71	
133 tert-Butylbenzene	134	12.298	12.298	0.000	92	683791	5.00	5.67	
134 Pentachloroethane	167	12.322	12.329	-0.007	91	535010	5.00	5.60	
135 1,2,4-Trimethylbenzene	105	12.347	12.347	0.000	96	2885413	5.00	5.47	
136 sec-Butylbenzene	105	12.469	12.469	0.000	93	3774646	5.00	5.77	
137 1,3-Dichlorobenzene	146	12.566	12.566	0.000	97	1672504	5.00	5.32	
138 4-Isopropyltoluene	119	12.578	12.579	-0.001	97	3333475	5.00	5.75	
* 139 1,4-Dichlorobenzene-d4	152	12.621	12.621	0.000	92	1923821	10.0	10.0	
140 1,4-Dichlorobenzene	146	12.639	12.640	-0.001	96	1748755	5.00	5.40	
141 1,2,3-Trimethylbenzene	120	12.652	12.652	0.000	98	1359642	5.00	5.39	
142 Benzyl chloride	126	12.725	12.725	0.000	97	238140	5.00	5.25	
145 p-Diethylbenzene	119	12.859	12.859	0.000	94	2058331	5.00	5.59	
143 n-Butylbenzene	92	12.877	12.877	0.000	97	1540870	5.00	5.66	
144 1,2-Dichlorobenzene	146	12.902	12.902	0.000	99	1589591	5.00	5.36	
148 1,2-Dibromo-3-Chloropropane	155	13.468	13.469	-0.001	92	75877	5.00	5.28	
149 1,3,5-Trichlorobenzene	180	13.590	13.591	-0.001	97	1282849	5.00	5.27	
150 1,2,4-Trichlorobenzene	180	14.023	14.023	0.000	94	972771	5.00	5.27	
151 Hexachlorobutadiene	225	14.102	14.103	-0.001	96	579621	5.00	5.59	
152 Naphthalene	128	14.206	14.200	0.006	96	1519043	5.00	5.04	
153 1,2,3-Trichlorobenzene	180	14.346	14.346	0.000	95	769415	5.00	5.50	
154 2-Methylnaphthalene	142	14.962	14.950	0.012	93	361895	5.00	5.10	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00124	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00154	Amount Added:	5.38	Units: uL	
MSV_LCS_EE_00007	Amount Added:	5.38	Units: uL	
MSV_LCS_Penta_00031	Amount Added:	5.38	Units: uL	
MSV_HP25_ISSS_00074	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 09-Aug-2023 10:59:42 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X15.D

Injection Date: 08-Aug-2023 23:23:30 Instrument ID: 10193 Operator ID: gaw91131

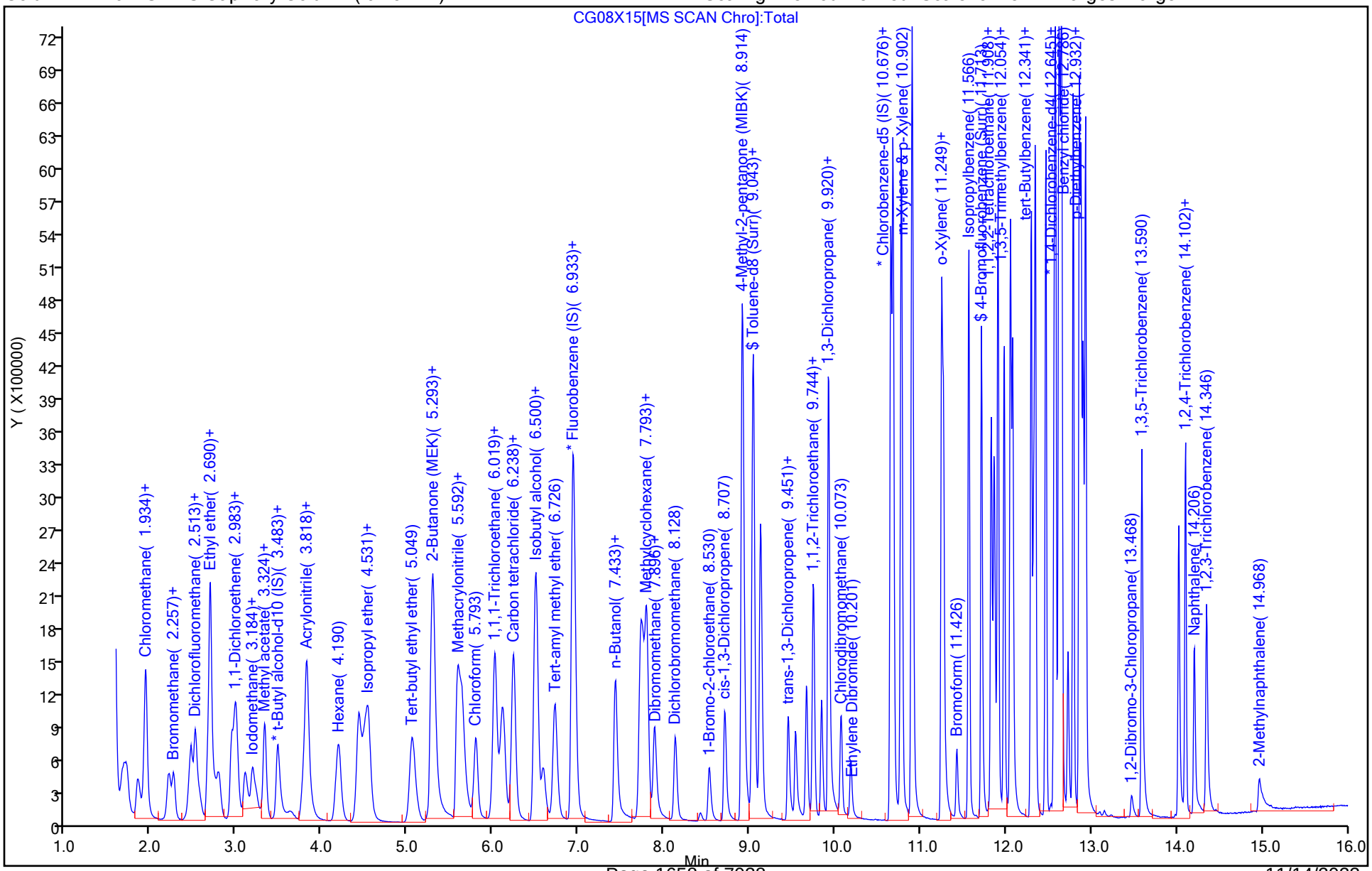
Lims ID: 410-136864-E-4 MSD Worklist Smp#: 16

Client ID: 16WC1A

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 15

Method: MSV_10193_25mL Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X15.D				
Lims ID:	410-136864-E-4 MSD				
Client ID:	16WC1A				
Sample Type:	MSD				
Inject. Date:	08-Aug-2023 23:23:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-016				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	09-Aug-2023 10:59:41	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 10:59:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.3	103.46
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.14
$ 83 Toluene-d8 (Surr)	10.0	9.93	99.34
$ 124 4-Bromofluorobenzene (Surr)	10.0	9.70	97.01

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

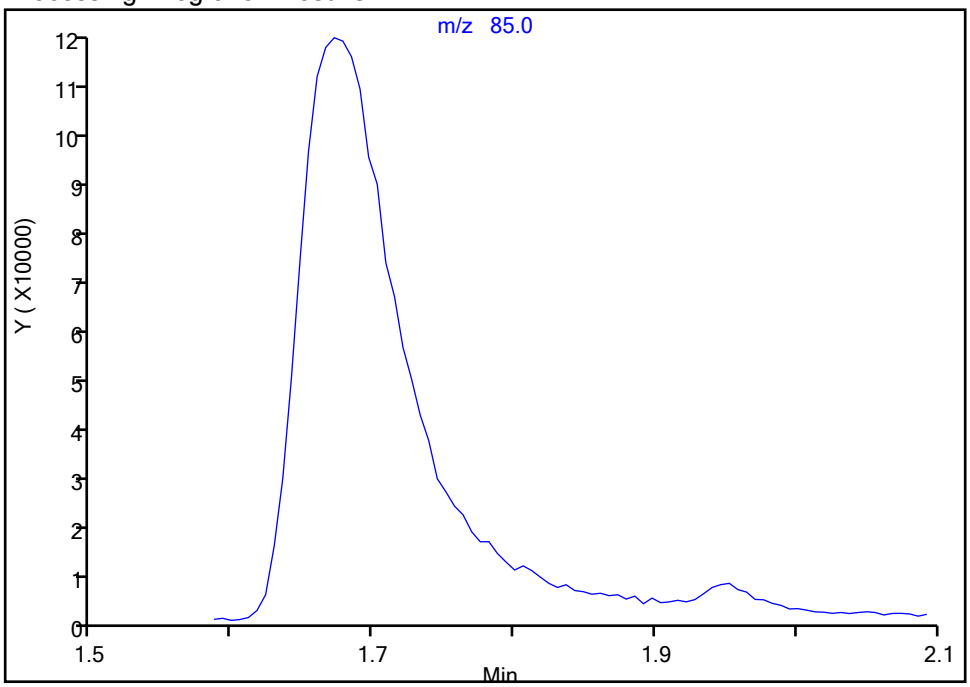
Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X15.D				
Injection Date:	08-Aug-2023 23:23:30	Instrument ID:	10193		
Lims ID:	410-136864-E-4 MSD				
Client ID:	16WC1A				
Operator ID:	gaw91131	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

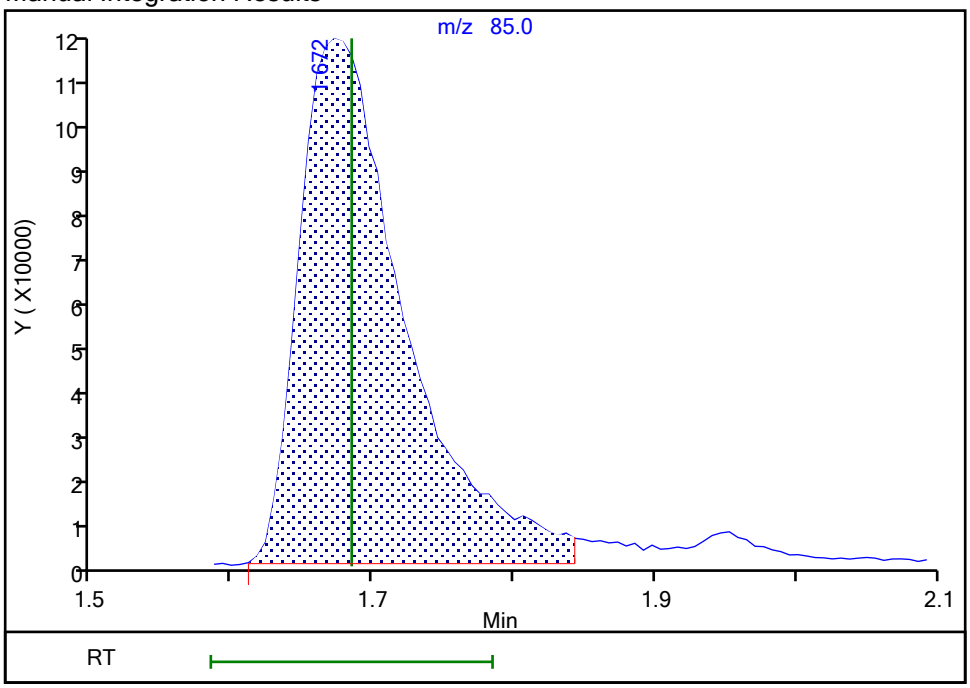
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.67
Area: 579835
Amount: 5.777149
Amount Units: ug/l



Reviewer: innoonk, 09-Aug-2023 10:59:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MSD Lab Sample ID: 410-136864-4 MSD

Matrix: Water Lab File ID: CG08X17.D

Analysis Method: 8260D Date Collected: 07/27/2023 09:55

Sample wt/vol: 25(mL) Date Analyzed: 08/09/2023 00:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25(mm)

Purge Volume: 25.0(mL) Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 405906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	ND		100	31
108-05-4	Vinyl acetate	14.4		10	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X17.D
Lims ID: 410-136864-D-4 MSD
Client ID: 16WC1A
Sample Type: MSD
Inject. Date: 09-Aug-2023 00:07:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0090928-018
Operator ID: gaw91131 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 08-Aug-2023 22:47:13 Calib Date: 10-Jul-2023 21:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: innoonk Date: 09-Aug-2023 12:01:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 Dimethyl ether	45	1.727	1.739	-0.012	100	725804	4.65	5.49	
27 Acetonitrile	41	3.306	3.318	-0.012	100	108519	18.8	19.1	
* 31 t-Butyl alcohol-d10 (IS)	65	3.544	3.544	0.000	96	289987	50.0	50.0	
38 Vinyl acetate	43	4.452	4.446	0.006	97	1830661	12.5	14.4	
46 Ethyl acetate	43	5.409	5.379	0.030	92	89737	2.50	1.90	
$ 54 Dibromofluoromethane (Surr)	113	6.025	6.025	0.000	94	932149	10.0	10.2	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	6.495	6.482	0.012	99	196712	10.0	10.2	
63 Isopropyl acetate	43	6.659	6.647	0.012	99	269721	2.50	2.34	
* 65 Fluorobenzene (IS)	96	6.933	6.933	0.000	99	3896733	10.0	10.0	
75 n-Propyl acetate	61	8.037	7.994	0.043	98	48198	2.50	1.80	
$ 83 Toluene-d8 (Surr)	98	9.049	9.043	0.006	93	3839669	10.0	9.61	
109 n-Butyl acetate	43	10.110	10.073	0.037	97	116919	2.50	1.27	
* 111 Chlorobenzene-d5 (IS)	117	10.652	10.652	0.000	83	3040955	10.0	10.0	
$ 124 4-Bromofluorobenzene (Surr)	95	11.719	11.713	0.006	96	1283996	10.0	8.98	
* 139 1,4-Dichlorobenzene-d4	152	12.627	12.621	0.006	93	1612741	10.0	10.0	

QC Flag Legend
Processing Flags

Reagents:

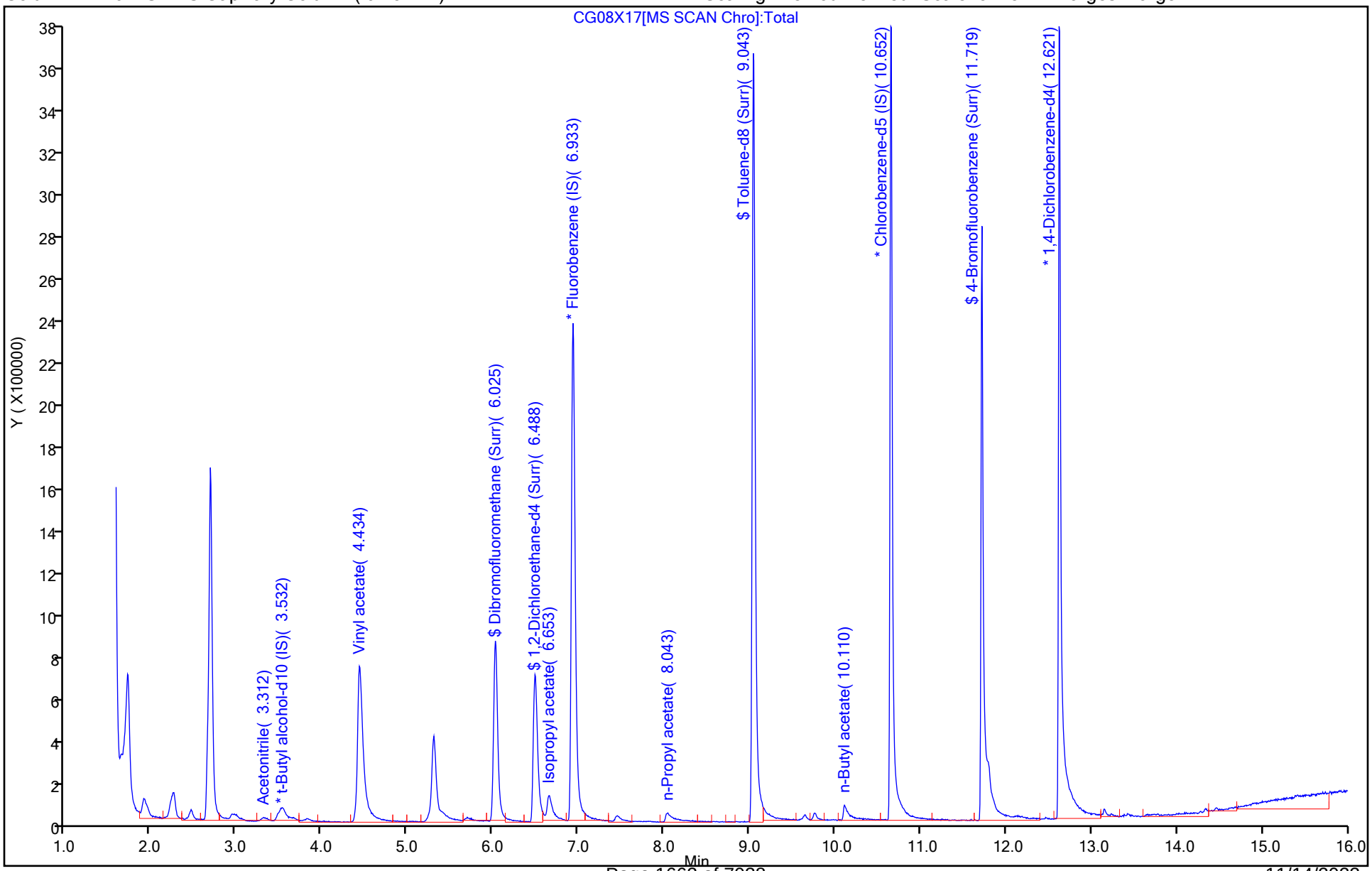
MSV_LCS_V5ACE_00028	Amount Added:	2.69	Units: uL	
MSV_Q_QDME_00034	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00074	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 09-Aug-2023 12:01:11 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X17.D				
Injection Date:	09-Aug-2023 00:07:30	Instrument ID:	10193	Operator ID:	gaw91131
Lims ID:	410-136864-D-4 MSD			Worklist Smp#:	18
Client ID:	16WC1A				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\CG08X17.D				
Lims ID:	410-136864-D-4 MSD				
Client ID:	16WC1A				
Sample Type:	MSD				
Inject. Date:	09-Aug-2023 00:07:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0090928-018				
Operator ID:	gaw91131	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20230808-90928.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	08-Aug-2023 22:47:13	Calib Date:	10-Jul-2023 21:40:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20230710-88548.b\CL10X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: innoonk Date: 09-Aug-2023 12:01:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 54 Dibromofluoromethane (Surr)	10.0	10.2	102.32
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.12
$ 83 Toluene-d8 (Surr)	10.0	9.61	96.10
$ 124 4-Bromofluorobenzene (Surr)	10.0	8.98	89.82

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Start Date: 07/10/2023 15:13

Analysis Batch Number: 395211 End Date: 07/10/2023 22:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-395211/1		07/10/2023 15:13	1	CL10T04.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/3		07/10/2023 15:50	1	CL10X02.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/4		07/10/2023 16:12	1	CL10X03.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/5		07/10/2023 16:34	1	CL10X04.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/6		07/10/2023 16:56	1	CL10X05.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/7		07/10/2023 17:18	1	CL10X06.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/8		07/10/2023 17:40	1	CL10X07.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/9		07/10/2023 18:02	1	CL10X08.D	R-624SilMS 30m 0.25(mm)
ICV 410-395211/11		07/10/2023 18:45	1	CL10X10.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/13		07/10/2023 19:29	1	CL10X12.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/14		07/10/2023 19:51	1	CL10X13.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/15		07/10/2023 20:13	1	CL10X14.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/16		07/10/2023 20:35	1	CL10X15.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/17		07/10/2023 20:57	1	CL10X16.D	R-624SilMS 30m 0.25(mm)
ICIS 410-395211/18		07/10/2023 21:18	1	CL10X17.D	R-624SilMS 30m 0.25(mm)
IC 410-395211/19		07/10/2023 21:40	1	CL10X18.D	R-624SilMS 30m 0.25(mm)
ICV 410-395211/21		07/10/2023 22:24	1	CL10X20.D	R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 10193 Start Date: 08/08/2023 18:03

Analysis Batch Number: 405906 End Date: 08/09/2023 03:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-405906/1		08/08/2023 18:03	1	CG08T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-405906/3		08/08/2023 18:38	1	CG08X02.D	R-624SilMS 30m 0.25(mm)
CCV 410-405906/4		08/08/2023 19:00	1	CG08X03.D	R-624SilMS 30m 0.25(mm)
LCS 410-405906/5		08/08/2023 19:22	1	CG08X04.D	R-624SilMS 30m 0.25(mm)
LCS 410-405906/6		08/08/2023 19:44	1	CG08X05.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		08/08/2023 20:06	1		R-624SilMS 30m 0.25(mm)
MB 410-405906/8		08/08/2023 20:27	1	CG08X07.D	R-624SilMS 30m 0.25(mm)
410-136864-4	16WC1A	08/08/2023 22:39	1	CG08X13.D	R-624SilMS 30m 0.25(mm)
410-136864-4 MS	16WC1A MS	08/08/2023 23:01	1	CG08X14.D	R-624SilMS 30m 0.25(mm)
410-136864-4 MSD	16WC1A MSD	08/08/2023 23:23	1	CG08X15.D	R-624SilMS 30m 0.25(mm)
410-136864-4 MS	16WC1A MS	08/08/2023 23:45	1	CG08X16.D	R-624SilMS 30m 0.25(mm)
410-136864-4 MSD	16WC1A MSD	08/09/2023 00:07	1	CG08X17.D	R-624SilMS 30m 0.25(mm)
410-136864-2	16MW8	08/09/2023 00:51	1	CG08X19.D	R-624SilMS 30m 0.25(mm)
410-136864-5	16WDUP	08/09/2023 01:12	1	CG08X20.D	R-624SilMS 30m 0.25(mm)
410-136864-6	16WC1B	08/09/2023 01:34	1	CG08X21.D	R-624SilMS 30m 0.25(mm)
410-136864-3	16MW9	08/09/2023 01:56	1	CG08X22.D	R-624SilMS 30m 0.25(mm)
410-136864-3 DL	16MW9 DL	08/09/2023 02:19	2.5	CG08X23.D	R-624SilMS 30m 0.25(mm)
410-136864-1	16C1	08/09/2023 02:41	1	CG08X24.D	R-624SilMS 30m 0.25(mm)
410-136864-1 DL	16C1 DL	08/09/2023 03:03	4	CG08X25.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		08/09/2023 03:25	200		R-624SilMS 30m 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 395211 Batch Start Date: 07/10/23 15:13 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	LCS_ETBR 00006	MSV_CCV_CYC 00006	MSV_CCV_V5ACE 00026
BFB 410-395211/1		8260D		1 uL	1 uL				
IC 410-395211/3		8260D		25 mL	25 mL	2705		1.6 uL	0.2 uL
IC 410-395211/4		8260D		25 mL	25 mL	2705		4 uL	0.5 uL
IC 410-395211/5		8260D		25 mL	25 mL	2705		4 uL	0.5 uL
IC 410-395211/6		8260D		25 mL	25 mL	2705		8 uL	1 uL
IC 410-395211/7		8260D		25 mL	25 mL	2705		8 uL	1 uL
IC 410-395211/8		8260D		25 mL	25 mL	2705		8 uL	1 uL
IC 410-395211/9		8260D		25 mL	25 mL	2705		20 uL	2.5 uL
ICV 410-395211/11		8260D		25 mL	25 mL	2705			
IC 410-395211/13		8260D		25 mL	25 mL	2705			
IC 410-395211/14		8260D		25 mL	25 mL	2705			
IC 410-395211/15		8260D		25 mL	25 mL	2705			
IC 410-395211/16		8260D		25 mL	25 mL	2705			
IC 410-395211/17		8260D		25 mL	25 mL	2705			
ICIS 410-395211/18		8260D		25 mL	25 mL	2705			
IC 410-395211/19		8260D		25 mL	25 mL	2705			
ICV 410-395211/21		8260D		25 mL	25 mL	2705	12.5 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_DME 00048	MSV_HP25_ISO 00008	MSV_HP25_ISSS 00073	MSV_LCS_2CEVE 00123	MSV_LCS_ACROL 00121	MSV_LCS_CYC 00004
BFB 410-395211/1		8260D							
IC 410-395211/3		8260D		0.2 uL	1 uL				
IC 410-395211/4		8260D		0.5 uL	1 uL				
IC 410-395211/5		8260D		0.5 uL	1 uL				
IC 410-395211/6		8260D		1 uL	1 uL				
IC 410-395211/7		8260D		1 uL	1 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 395211 Batch Start Date: 07/10/23 15:13 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_DME 00048	MSV_HP25_ISO 00008	MSV_HP25_ISSS 00073	MSV_LCS_2CEVE 00123	MSV_LCS_ACROL 00121	MSV_LCS_CYC 00004
IC 410-395211/8		8260D		1 uL	1 uL				
IC 410-395211/9		8260D		2.5 uL	1 uL				
ICV 410-395211/11		8260D			1 uL		12.5 uL		12.5 uL
IC 410-395211/13		8260D				1 uL			
IC 410-395211/14		8260D				1 uL			
IC 410-395211/15		8260D				1 uL			
IC 410-395211/16		8260D				1 uL			
IC 410-395211/17		8260D				1 uL			
ICIS 410-395211/18		8260D				1 uL			
IC 410-395211/19		8260D				1 uL			
ICV 410-395211/21		8260D				1 uL		12.5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_EE 00007	MSV_LCS_LKB 00008	MSV_LCS_Penta 00030	MSV_LCS_SMFre 00051	MSV_LCS_V5ACE 00027	MSV_LCS_VOC#1 00118
BFB 410-395211/1		8260D							
IC 410-395211/3		8260D							
IC 410-395211/4		8260D							
IC 410-395211/5		8260D							
IC 410-395211/6		8260D							
IC 410-395211/7		8260D							
IC 410-395211/8		8260D							
IC 410-395211/9		8260D							
ICV 410-395211/11		8260D			25 uL		12.5 uL	6.25 uL	
IC 410-395211/13		8260D							
IC 410-395211/14		8260D							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 395211 Batch Start Date: 07/10/23 15:13 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_EE 00007	MSV_LCS_LKB 00008	MSV_LCS_Penta 00030	MSV_LCS_SMFre 00051	MSV_LCS_V5ACE 00027	MSV_LCS_VOC#1 00118
IC 410-395211/15		8260D							
IC 410-395211/16		8260D							
IC 410-395211/17		8260D							
ICIS 410-395211/18		8260D							
IC 410-395211/19		8260D							
ICV 410-395211/21		8260D		12.5 uL		12.5 uL			12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#1_826 00084	MSV_LL_#2_826 00095	MSV_LL_GAS826 00159	MSV_Q_QDME 00033	MSV_QC_Gas826 00149	MSV_V_BFB 00012
BFB 410-395211/1		8260D							1 uL
IC 410-395211/3		8260D							
IC 410-395211/4		8260D							
IC 410-395211/5		8260D							
IC 410-395211/6		8260D							
IC 410-395211/7		8260D							
IC 410-395211/8		8260D							
IC 410-395211/9		8260D							
ICV 410-395211/11		8260D					5 uL		
IC 410-395211/13		8260D		2 uL	2 uL	2 uL			
IC 410-395211/14		8260D		2 uL	2 uL	2 uL			
IC 410-395211/15		8260D		2 uL	2 uL	2 uL			
IC 410-395211/16		8260D		2 uL	2 uL	2 uL			
IC 410-395211/17		8260D		5 uL	5 uL	5 uL			
ICIS 410-395211/18		8260D		10 uL	10 uL	10 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 395211 Batch Start Date: 07/10/23 15:13 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#1_826 00084	MSV_LL_#2_826 00095	MSV_LL_GAS826 00159	MSV_Q_QDME 00033	MSV_QC_Gas826 00149	MSV_V_BFB 00012
IC 410-395211/19		8260D		25 uL	25 uL	25 uL			
ICV 410-395211/21		8260D						12.5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_SMRV4 00060					
BFB 410-395211/1		8260D							
IC 410-395211/3		8260D		1 uL					
IC 410-395211/4		8260D		2.5 uL					
IC 410-395211/5		8260D		2.5 uL					
IC 410-395211/6		8260D		5 uL					
IC 410-395211/7		8260D		5 uL					
IC 410-395211/8		8260D		5 uL					
IC 410-395211/9		8260D		12.5 uL					
ICV 410-395211/11		8260D							
IC 410-395211/13		8260D							
IC 410-395211/14		8260D							
IC 410-395211/15		8260D							
IC 410-395211/16		8260D							
IC 410-395211/17		8260D							
ICIS 410-395211/18		8260D							
IC 410-395211/19		8260D							
ICV 410-395211/21		8260D							

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 395211 Batch Start Date: 07/10/23 15:13 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 405906 Batch Start Date: 08/08/23 18:03 Batch Analyst: Walmer, Gavin

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-405906/1		8260D		1 uL	1 uL				
CCVIS 410-405906/3		8260D		25 mL	25 mL				2705
CCV 410-405906/4		8260D		25 mL	25 mL				2705
LCS 410-405906/5		8260D		25 mL	25 mL				2705
LCS 410-405906/6		8260D		25 mL	25 mL				2705
MB 410-405906/8		8260D		25 mL	25 mL				2705
410-136864-B-4	16WC1A	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-C-4 MS	16WC1A	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-E-4 MSD	16WC1A	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-D-4 MS	16WC1A	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-D-4 MSD	16WC1A	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-B-2	16MW8	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-B-5	16WDUP	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-B-6	16WC1B	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-B-3	16MW9	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-C-3	16MW9	8260D	T	25 mL	25 mL	<2 SU	N	N	2705
410-136864-B-1	16C1	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-136864-C-1	16C1	8260D	T	25 mL	25 mL	<2 SU	N	N	2705

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_CCV_V5ACE 00027	MSV_DME 00053	MSV_HP25_ISSS 00074	MSV_LCS_EE 00007	MSV_LCS_Penta 00031	MSV_LCS_V5ACE 00028
BFB 410-405906/1		8260D							
CCVIS 410-405906/3		8260D				1 uL			
CCV 410-405906/4		8260D		1 uL	1 uL	1 uL			
LCS 410-405906/5		8260D				1 uL	12.5 uL	12.5 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 405906 Batch Start Date: 08/08/23 18:03 Batch Analyst: Walmer, Gavin

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_CCV_V5ACE 00027	MSV_DME 00053	MSV_HP25_ISSS 00074	MSV_LCS_EE 00007	MSV_LCS_Penta 00031	MSV_LCS_V5ACE 00028
LCS 410-405906/6		8260D				1 uL			6.25 uL
MB 410-405906/8		8260D				1 uL			
410-136864-B-4	16WC1A	8260D	T			1 uL			
410-136864-C-4 MS	16WC1A	8260D	T			1 uL	5.38 uL	5.38 uL	
410-136864-E-4 MSD	16WC1A	8260D	T			1 uL	5.38 uL	5.38 uL	
410-136864-D-4 MS	16WC1A	8260D	T			1 uL			2.69 uL
410-136864-D-4 MSD	16WC1A	8260D	T			1 uL			2.69 uL
410-136864-B-2	16MW8	8260D	T			1 uL			
410-136864-B-5	16WDUP	8260D	T			1 uL			
410-136864-B-6	16WC1B	8260D	T			1 uL			
410-136864-B-3	16MW9	8260D	T			1 uL			
410-136864-C-3	16MW9	8260D	T			1 uL			
410-136864-B-1	16C1	8260D	T			1 uL			
410-136864-C-1	16C1	8260D	T			1 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_VOC#1 00124	MSV_LL_#1_826 00088	MSV_LL_#2_826 00098	MSV_LL_GAS826 00163	MSV_Q_QDME 00034	MSV_QC_Gas826 00154
BFB 410-405906/1		8260D							
CCVIS 410-405906/3		8260D			20 uL	20 uL	20 uL		
CCV 410-405906/4		8260D							
LCS 410-405906/5		8260D		12.5 uL					12.5 uL
LCS 410-405906/6		8260D						5 uL	
MB 410-405906/8		8260D							
410-136864-B-4	16WC1A	8260D	T						
410-136864-C-4 MS	16WC1A	8260D	T	5.38 uL					5.38 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 405906 Batch Start Date: 08/08/23 18:03 Batch Analyst: Walmer, Gavin

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_VOC#1 00124	MSV_LL_#1_826 00088	MSV_LL_#2_826 00098	MSV_LL_GAS826 00163	MSV_Q_QDME 00034	MSV_QC_Gas826 00154
410-136864-E-4 MSD	16WC1A	8260D	T	5.38 uL					5.38 uL
410-136864-D-4 MS	16WC1A	8260D	T					2 uL	
410-136864-D-4 MSD	16WC1A	8260D	T					2 uL	
410-136864-B-2	16MW8	8260D	T						
410-136864-B-5	16WDUP	8260D	T						
410-136864-B-6	16WC1B	8260D	T						
410-136864-B-3	16MW9	8260D	T						
410-136864-C-3	16MW9	8260D	T						
410-136864-B-1	16C1	8260D	T						
410-136864-C-1	16C1	8260D	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00012					
BFB 410-405906/1		8260D		1 uL					
CCVIS 410-405906/3		8260D							
CCV 410-405906/4		8260D							
LCS 410-405906/5		8260D							
LCS 410-405906/6		8260D							
MB 410-405906/8		8260D							
410-136864-B-4	16WC1A	8260D	T						
410-136864-C-4 MS	16WC1A	8260D	T						
410-136864-E-4 MSD	16WC1A	8260D	T						
410-136864-D-4 MS	16WC1A	8260D	T						
410-136864-D-4 MSD	16WC1A	8260D	T						
410-136864-B-2	16MW8	8260D	T						
410-136864-B-5	16WDUP	8260D	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 405906 Batch Start Date: 08/08/23 18:03 Batch Analyst: Walmer, Gavin

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00012					
410-136864-B-6	16WC1B	8260D	T						
410-136864-B-3	16MW9	8260D	T						
410-136864-C-3	16MW9	8260D	T						
410-136864-B-1	16C1	8260D	T						
410-136864-C-1	16C1	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-5MS 30m ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHd14 #
16C1	410-136864-1	35	27	53	61	68	84
16MW8	410-136864-2	36	26	72	78	74	58
16MW9	410-136864-3	33	28	52	62	71	94
16WC1A	410-136864-4	14	22	74	83	41	93
16WDUP	410-136864-5	11	16	61	72	29	72
16WC1B	410-136864-6	31	22	69	75	59	62
	MB 410-403666/1-A	43	30	73	82	85	86
	MB 410-403918/1-A	44	26	64	69	81	98
	LCS 410-403666/2-A	53	39	74	78	79	83
	LCS 410-403666/4-A	48	33	70	76	83	79
	LCS 410-403918/2-A	48	33	58	65	69	77
	LCS 410-403918/3-A	60	40	73	81	87	97
	LCSD 410-403666/3-A	50	38	76	80	79	90
	LCSD 410-403666/5-A	45	30	71	79	82	83
	LCSD 410-403918/4-A	56	35	71	79	89	90
16WC1A MS	410-136864-4 MS	25	31	62	72	47	84
16WC1A MSD	410-136864-4 MSD	29	33	70	78	45	87

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-120
PHL = Phenol-d5 (Surr)	10-120
NBZ = Nitrobenzene-d5 (Surr)	31-120
FBP = 2-Fluorobiphenyl (Surr)	44-120
TBP = 2,4,6-Tribromophenol (Surr)	13-138
TPHd14 = p-Terphenyl-d14 (Surr)	30-125

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JH0260.D

Lab ID: LCS 410-403666/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,2,4,5-Tetrachlorobenzene	50.0	47.3	95	34-120	
1,3-Dinitrobenzene	50.0	47.0	94	61-125	
bis (2-chloroisopropyl) ether	50.0	45.8	92	43-121	
2,3,4,6-Tetrachlorophenol	50.0	47.2	94	60-126	
2,4,5-Trichlorophenol	50.0	53.0	106	60-136	
2,4,6-Trichlorophenol	50.0	52.0	104	63-133	
2,4-Dichlorophenol	50.0	52.7	105	60-127	
2,4-Dinitrotoluene	50.0	50.4	101	66-131	
2,6-Dichlorophenol	50.0	52.2	104	65-120	
2,6-Dinitrotoluene	50.0	51.6	103	66-129	
2-Chloronaphthalene	50.0	48.6	97	51-120	
2-Chlorophenol	50.0	47.0	94	57-120	
2-Methylnaphthalene	50.0	46.8	94	53-120	
o-Cresol	50.0	45.2	90	58-120	
2-Nitroaniline	50.0	48.1	96	63-134	
2-Nitrophenol	50.0	45.7	91	57-127	
4-Bromophenyl-phenylether	50.0	52.3	105	66-120	
4-Chloro-3-methylphenol	50.0	47.0	94	57-129	
4-Chlorophenyl-phenyl ether	50.0	49.4	99	59-120	
m & p-Cresol	50.0	40.9	82	49-120	
4-Nitroaniline	50.0	48.6	97	55-126	
Bis(2-ethylhexyl) phthalate	50.0	54.2	108	60-133	
Acenaphthene	50.0	48.3	97	59-120	
Acenaphthylene	50.0	51.1	102	61-121	
Anthracene	50.0	49.8	100	67-123	
Benzo[a]anthracene	50.0	54.7	109	66-133	
Benzo[a]pyrene	50.0	54.7	109	64-131	
Benzo[b]fluoranthene	50.0	47.6	95	64-124	
Benzo[g,h,i]perylene	50.0	48.8	98	60-136	
Benzo[k]fluoranthene	50.0	47.9	96	67-132	
Chrysene	50.0	58.5	117	70-128	
Dibenz(a,h)anthracene	50.0	46.8	94	59-135	
Dibenzofuran	50.0	46.7	93	63-120	
Diethyl phthalate	50.0	47.6	95	46-123	
Fluoranthene	50.0	48.6	97	70-128	
Fluorene	50.0	50.7	101	66-120	
Hexachlorobenzene	50.0	49.2	98	61-126	
Indeno[1,2,3-cd]pyrene	50.0	50.2	100	55-134	
N-Nitrosodimethylamine	50.0	31.3	63	26-120	
n-Nitrosodiphenylamine(as diphenylamine)	42.5	43.0	101	64-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JH0260.D

Lab ID: LCS 410-403666/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Nitrobenzene	50.0	45.4	91	59-120	
Pentachlorophenol	100	117	117	51-138	
Phenanthrene	50.0	48.5	97	66-120	
Phenol	50.0	24.8	50	22-120	
Pyrene	50.0	50.9	102	67-126	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JH0262.D

Lab ID: LCS 410-403666/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
5-Nitro-o-toluidine	50.0	46.1	92	51-120	
Hexachloropropene	50.0	31.3	63	10-120	
Diallate	50.0	41.9	84	60-120	
Dimethoate	50.0	35.6	71	10-120	
Ethyl methanesulfonate	50.0	40.1	80	61-120	
Isodrin	50.0	42.4	85	58-120	
Kepone	50.3	37.1 J	74	70-130	
Sulfotepp	50.0	43.4	87	38-120	
N-Nitrosodiethylamine	50.0	43.2	86	61-120	
N-Nitrosomorpholine	50.0	39.5	79	44-120	
N-Nitrosopiperidine	50.0	40.4	81	67-120	
o,o',o''-Triethylphosphorothioate	50.0	38.9	78	63-120	
Pentachlorobenzene	50.0	44.5	89	26-120	
Phenacetin	50.0	46.9	94	59-126	
Phorate	50.0	43.6	87	44-145	
Safrole, Total	50.0	43.5	87	62-120	
O,O-Diethyl O-2-pyrazinyl phosphorothioate	50.0	46.1	92	63-120	
a,a-Dimethylphenethylamine	50.0	ND	0	70-130	*-

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: DH0356.D

Lab ID: LCS 410-403918/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,2,4,5-Tetrachlorobenzene	50.0	31.2	62	34-120	
1,3-Dinitrobenzene	50.0	42.4	85	61-125	
bis (2-chloroisopropyl) ether	50.0	28.1	56	43-121	
2,3,4,6-Tetrachlorophenol	50.0	38.3	77	60-126	
2,4,5-Trichlorophenol	50.0	41.7	83	60-136	
2,4,6-Trichlorophenol	50.0	42.9	86	63-133	
2,4-Dichlorophenol	50.0	40.2	80	60-127	
2,4-Dinitrotoluene	50.0	43.4	87	66-131	
2,6-Dichlorophenol	50.0	41.8	84	65-120	
2,6-Dinitrotoluene	50.0	41.2	82	66-129	
2-Chloronaphthalene	50.0	37.0	74	51-120	
2-Chlorophenol	50.0	38.6	77	57-120	
2-Methylnaphthalene	50.0	36.3	73	53-120	
o-Cresol	50.0	35.7	71	58-120	
2-Nitroaniline	50.0	41.3	83	63-134	
2-Nitrophenol	50.0	41.2	82	57-127	
4-Bromophenyl-phenylether	50.0	37.6	75	66-120	
4-Chloro-3-methylphenol	50.0	34.5	69	57-129	
4-Chlorophenyl-phenyl ether	50.0	36.5	73	59-120	
m & p-Cresol	50.0	33.6	67	49-120	
4-Nitroaniline	50.0	37.1	74	55-126	
Bis(2-ethylhexyl) phthalate	50.0	42.2	84	60-133	
Acenaphthene	50.0	38.5	77	59-120	
Acenaphthylene	50.0	38.6	77	61-121	
Anthracene	50.0	41.7	83	67-123	
Benzo[a]anthracene	50.0	41.3	83	66-133	
Benzo[a]pyrene	50.0	45.1	90	64-131	
Benzo[b]fluoranthene	50.0	40.2	80	64-124	
Benzo[g,h,i]perylene	50.0	38.5	77	60-136	
Benzo[k]fluoranthene	50.0	44.3	89	67-132	
Chrysene	50.0	43.0	86	70-128	
Dibenz(a,h)anthracene	50.0	36.8	74	59-135	
Dibenzofuran	50.0	38.3	77	63-120	
Diethyl phthalate	50.0	39.4	79	46-123	
Fluoranthene	50.0	41.0	82	70-128	
Fluorene	50.0	38.5	77	66-120	
Hexachlorobenzene	50.0	37.5	75	61-126	
Indeno[1,2,3-cd]pyrene	50.0	37.5	75	55-134	
N-Nitrosodimethylamine	50.0	21.4	43	26-120	
n-Nitrosodiphenylamine(as diphenylamine)	42.5	36.4	86	64-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: DH0356.D

Lab ID: LCS 410-403918/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Nitrobenzene	50.0	33.5	67	59-120	
Pentachlorophenol	100	66.2	66	51-138	
Phenanthrene	50.0	40.7	81	66-120	
Phenol	50.0	22.5	45	22-120	
Pyrene	50.0	40.4	81	67-126	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: DH0357.D

Lab ID: LCS 410-403918/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
5-Nitro-o-toluidine	50.0	43.0	86	51-120	
Hexachloropropene	50.0	23.2	46	10-120	
Diallate	50.0	37.4	75	60-120	
Dimethoate	50.0	17.8	36	10-120	
Ethyl methanesulfonate	50.0	40.1	80	61-120	
Isodrin	50.0	42.5	85	58-120	
Kepone	50.3	ND	25	70-130	*-
Sulfotepp	50.0	38.5	77	38-120	
N-Nitrosodiethylamine	50.0	37.9	76	61-120	
N-Nitrosomorpholine	50.0	31.5	63	44-120	
N-Nitrosopiperidine	50.0	41.3	83	67-120	
o,o',o''-Triethylphosphorothioate	50.0	42.8	86	63-120	
Pentachlorobenzene	50.0	33.4	67	26-120	
Phenacetin	50.0	46.4	93	59-126	
Phorate	50.0	41.8	84	44-145	
Safrole, Total	50.0	41.5	83	62-120	
O,O-Diethyl O-2-pyrazinyl phosphorothioate	50.0	43.3	87	63-120	
a,a-Dimethylphenethylamine	50.0	ND	1	70-130	*-

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JH0261.D

Lab ID: LCSD 410-403666/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4,5-Tetrachlorobenzene	50.0	48.6	97	3	30	34-120	
1,3-Dinitrobenzene	50.0	51.0	102	8	30	61-125	
bis (2-chloroisopropyl) ether	50.0	46.6	93	2	30	43-121	
2,3,4,6-Tetrachlorophenol	50.0	44.1	88	7	30	60-126	
2,4,5-Trichlorophenol	50.0	50.7	101	4	30	60-136	
2,4,6-Trichlorophenol	50.0	51.5	103	1	30	63-133	
2,4-Dichlorophenol	50.0	48.3	97	9	30	60-127	
2,4-Dinitrotoluene	50.0	52.3	105	4	30	66-131	
2,6-Dichlorophenol	50.0	49.6	99	5	30	65-120	
2,6-Dinitrotoluene	50.0	49.3	99	4	30	66-129	
2-Chloronaphthalene	50.0	50.6	101	4	30	51-120	
2-Chlorophenol	50.0	43.2	86	8	30	57-120	
2-Methylnaphthalene	50.0	50.1	100	7	30	53-120	
o-Cresol	50.0	43.6	87	3	30	58-120	
2-Nitroaniline	50.0	52.8	106	9	30	63-134	
2-Nitrophenol	50.0	42.4	85	7	30	57-127	
4-Bromophenyl-phenylether	50.0	49.5	99	6	30	66-120	
4-Chloro-3-methylphenol	50.0	45.3	91	4	30	57-129	
4-Chlorophenyl-phenyl ether	50.0	46.1	92	7	30	59-120	
m & p-Cresol	50.0	36.7	73	11	30	49-120	
4-Nitroaniline	50.0	50.3	101	4	30	55-126	
Bis(2-ethylhexyl) phthalate	50.0	58.0	116	7	30	60-133	
Acenaphthene	50.0	48.9	98	1	30	59-120	
Acenaphthylene	50.0	51.5	103	1	30	61-121	
Anthracene	50.0	50.2	100	1	30	67-123	
Benzo[a]anthracene	50.0	59.8	120	9	30	66-133	
Benzo[a]pyrene	50.0	52.2	104	5	30	64-131	
Benzo[b]fluoranthene	50.0	47.4	95	1	30	64-124	
Benzo[g,h,i]perylene	50.0	51.7	103	6	30	60-136	
Benzo[k]fluoranthene	50.0	48.2	96	1	30	67-132	
Chrysene	50.0	59.1	118	1	30	70-128	
Dibenz(a,h)anthracene	50.0	46.3	93	1	30	59-135	
Dibenzofuran	50.0	48.4	97	3	30	63-120	
Diethyl phthalate	50.0	51.9	104	9	30	46-123	
Fluoranthene	50.0	54.1	108	11	30	70-128	
Fluorene	50.0	48.0	96	5	30	66-120	
Hexachlorobenzene	50.0	51.5	103	4	30	61-126	
Indeno[1,2,3-cd]pyrene	50.0	52.5	105	5	30	55-134	
N-Nitrosodimethylamine	50.0	28.8	58	9	30	26-120	
n-Nitrosodiphenylamine(as diphenylamine)	42.5	41.4	97	4	30	64-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JH0261.D

Lab ID: LCSD 410-403666/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Nitrobenzene	50.0	46.6	93	3	30	59-120	
Pentachlorophenol	100	113	113	4	30	51-138	
Phenanthrene	50.0	50.5	101	4	30	66-120	
Phenol	50.0	23.3	47	6	30	22-120	
Pyrene	50.0	50.3	101	1	30	67-126	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JH0263.D

Lab ID: LCSD 410-403666/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
5-Nitro-o-toluidine	50.0	40.7	81	12	30	51-120	
Hexachloropropene	50.0	33.6	67	7	30	10-120	
Diallate	50.0	40.8	82	3	30	60-120	
Dimethoate	50.0	32.9	66	8	30	10-120	
Ethyl methanesulfonate	50.0	43.8	88	9	30	61-120	
Isodrin	50.0	41.3	83	3	30	58-120	
Kepone	50.3	38.1 J	76	3	30	70-130	
Sulfotepp	50.0	43.3	87	0	30	38-120	
N-Nitrosodiethylamine	50.0	48.7	97	12	30	61-120	
N-Nitrosomorpholine	50.0	38.0	76	4	30	44-120	
N-Nitrosopiperidine	50.0	38.8	78	4	30	67-120	
o,o',o''-Triethylphosphorothioate	50.0	40.4	81	4	30	63-120	
Pentachlorobenzene	50.0	45.3	91	2	30	26-120	
Phenacetin	50.0	46.6	93	1	30	59-126	
Phorate	50.0	44.6	89	2	30	44-145	
Safrole, Total	50.0	41.0	82	6	30	62-120	
O,O-Diethyl O-2-pyrazinyl phosphorothioate	50.0	47.1	94	2	30	63-120	
a,a-Dimethylphenethylamine	50.0	ND	0	NC	30	70-130	*-

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: DH0358.D

Lab ID: LCSD 410-403918/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
5-Nitro-o-toluidine	50.0	42.0	84	3	30	51-120	
Hexachloropropene	50.0	24.7	49	6	30	10-120	
Diallate	50.0	37.7	75	1	30	60-120	
Dimethoate	50.0	26.0	52	37	30	10-120	*1
Ethyl methanesulfonate	50.0	38.8	78	3	30	61-120	
Isodrin	50.0	41.2	82	3	30	58-120	
Kepone	50.3	ND	40	45	30	70-130	*- *1
Sulfotepp	50.0	39.3	79	2	30	38-120	
N-Nitrosodiethylamine	50.0	38.4	77	1	30	61-120	
N-Nitrosomorpholine	50.0	30.7	61	3	30	44-120	
N-Nitrosopiperidine	50.0	40.3	81	2	30	67-120	
o,o',o''-Triethylphosphorothioate	50.0	42.7	85	0	30	63-120	
Pentachlorobenzene	50.0	34.9	70	4	30	26-120	
Phenacetin	50.0	45.0	90	3	30	59-126	
Phorate	50.0	39.7	79	5	30	44-145	
Safrole, Total	50.0	41.7	83	0	30	62-120	
O,O-Diethyl O-2-pyrazinyl phosphorothioate	50.0	42.8	86	1	30	63-120	
a,a-Dimethylphenethylamine	50.0	ND	1	24	30	70-130	*-

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: DH0360.D

Lab ID: 410-136864-4 MS Client ID: 16WC1A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,2,4,5-Tetrachlorobenzene	50.2	ND	37.3	74	34-120	
1,3-Dinitrobenzene	50.2	ND	47.2	94	61-125	
bis (2-chloroisopropyl) ether	50.2	ND	31.3	62	43-121	
2,3,4,6-Tetrachlorophenol	50.2	ND	29.9	60	60-126	
2,4,5-Trichlorophenol	50.2	ND	31.5	63	60-136	
2,4,6-Trichlorophenol	50.2	ND	27.7	55	63-133	F1
2,4-Dichlorophenol	50.2	ND	28.2	56	60-127	F1
2,4-Dinitrotoluene	50.2	ND	48.3	96	66-131	
2,6-Dichlorophenol	50.2	ND	28.1	56	65-120	F1
2,6-Dinitrotoluene	50.2	ND	45.1	90	66-129	
2-Chloronaphthalene	50.2	ND	42.6	85	51-120	
2-Chlorophenol	50.2	ND	27.7	55	57-120	F1
2-Methylnaphthalene	50.2	ND	41.1	82	53-120	
o-Cresol	50.2	ND	35.6	71	58-120	
2-Nitroaniline	50.2	ND	44.2	88	63-134	
2-Nitrophenol	50.2	ND	43.4	86	57-127	
4-Bromophenyl-phenylether	50.2	ND	41.4	82	66-120	
4-Chloro-3-methylphenol	50.2	ND	36.1	72	57-129	
4-Chlorophenyl-phenyl ether	50.2	ND	41.6	83	59-120	
m & p-Cresol	50.2	ND	34.6	69	49-120	
4-Nitroaniline	50.2	ND	40.2	80	55-126	
Bis(2-ethylhexyl) phthalate	50.2	ND	49.3	98	60-133	
Acenaphthene	50.2	ND	43.6	87	59-120	
Acenaphthylene	50.2	ND	42.6	85	61-121	
Anthracene	50.2	ND	44.5	89	67-123	
Benzo[a]anthracene	50.2	ND	45.4	90	66-133	
Benzo[a]pyrene	50.2	ND	48.7	97	64-131	
Benzo[b]fluoranthene	50.2	ND	44.8	89	64-124	
Benzo[g,h,i]perylene	50.2	ND	41.7	83	60-136	
Benzo[k]fluoranthene	50.2	ND	46.4	92	67-132	
Chrysene	50.2	ND	46.4	92	70-128	
Dibenz(a,h)anthracene	50.2	ND	41.4	82	59-135	
Dibenzofuran	50.2	ND	42.6	85	63-120	
Diethyl phthalate	50.2	ND	47.9	95	46-123	
Fluoranthene	50.2	ND	44.2	88	70-128	
Fluorene	50.2	ND	42.7	85	66-120	
Hexachlorobenzene	50.2	ND	40.5	81	61-126	
Indeno[1,2,3-cd]pyrene	50.2	ND	42.6	85	55-134	
N-Nitrosodimethylamine	50.2	ND	21.3	42	26-120	
n-Nitrosodiphenylamine(as diphenylamine)	42.7	ND	39.7	93	64-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: DH0360.D

Lab ID: 410-136864-4 MS Client ID: 16WC1A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Nitrobenzene	50.2	ND	35.5	71	59-120	
Pentachlorophenol	100	ND	77.7	77	51-138	
Phenanthrene	50.2	ND	44.0	88	66-120	
Phenol	50.2	ND	20.9	42	22-120	
Pyrene	50.2	ND	43.9	87	67-126	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: DH0361.D

Lab ID: 410-136864-4 MSD Client ID: 16WC1A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4,5-Tetrachlorobenzene	50.3	40.7	81	9	30	34-120	
1,3-Dinitrobenzene	50.3	51.5	102	9	30	61-125	
bis (2-chloroisopropyl) ether	50.3	34.6	69	10	30	43-121	
2,3,4,6-Tetrachlorophenol	50.3	30.6	61	2	30	60-126	
2,4,5-Trichlorophenol	50.3	34.2	68	8	30	60-136	
2,4,6-Trichlorophenol	50.3	29.5	59	6	30	63-133	F1
2,4-Dichlorophenol	50.3	30.5	61	8	30	60-127	
2,4-Dinitrotoluene	50.3	52.1	104	8	30	66-131	
2,6-Dichlorophenol	50.3	30.7	61	9	30	65-120	F1
2,6-Dinitrotoluene	50.3	48.8	97	8	30	66-129	
2-Chloronaphthalene	50.3	46.0	91	8	30	51-120	
2-Chlorophenol	50.3	30.3	60	9	30	57-120	
2-Methylnaphthalene	50.3	44.7	89	8	30	53-120	
o-Cresol	50.3	38.9	77	9	30	58-120	
2-Nitroaniline	50.3	49.7	99	12	30	63-134	
2-Nitrophenol	50.3	47.6	95	9	30	57-127	
4-Bromophenyl-phenylether	50.3	45.6	91	10	30	66-120	
4-Chloro-3-methylphenol	50.3	39.2	78	8	30	57-129	
4-Chlorophenyl-phenyl ether	50.3	43.8	87	5	30	59-120	
m & p-Cresol	50.3	37.0	74	7	30	49-120	
4-Nitroaniline	50.3	41.8	83	4	30	55-126	
Bis(2-ethylhexyl) phthalate	50.3	50.2	100	2	30	60-133	
Acenaphthene	50.3	46.7	93	7	30	59-120	
Acenaphthylene	50.3	46.6	93	9	30	61-121	
Anthracene	50.3	47.9	95	7	30	67-123	
Benzo[a]anthracene	50.3	47.2	94	4	30	66-133	
Benzo[a]pyrene	50.3	50.0	99	3	30	64-131	
Benzo[b]fluoranthene	50.3	48.0	95	7	30	64-124	
Benzo[g,h,i]perylene	50.3	43.5	87	4	30	60-136	
Benzo[k]fluoranthene	50.3	49.3	98	6	30	67-132	
Chrysene	50.3	48.7	97	5	30	70-128	
Dibenz(a,h)anthracene	50.3	43.9	87	6	30	59-135	
Dibenzofuran	50.3	46.0	92	8	30	63-120	
Diethyl phthalate	50.3	51.3	102	7	30	46-123	
Fluoranthene	50.3	46.7	93	5	30	70-128	
Fluorene	50.3	45.8	91	7	30	66-120	
Hexachlorobenzene	50.3	43.0	85	6	30	61-126	
Indeno[1,2,3-cd]pyrene	50.3	45.5	90	6	30	55-134	
N-Nitrosodimethylamine	50.3	23.1	46	8	30	26-120	
n-Nitrosodiphenylamine(as diphenylamine)	42.7	43.5	102	9	30	64-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: DH0361.D

Lab ID: 410-136864-4 MSD Client ID: 16WC1A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Nitrobenzene	50.3	40.4	80	13	30	59-120	
Pentachlorophenol	101	78.5	78	1	30	51-138	
Phenanthrene	50.3	47.7	95	8	30	66-120	
Phenol	50.3	22.5	45	7	30	22-120	
Pyrene	50.3	47.0	94	7	30	67-126	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: JH0259.D Lab Sample ID: MB 410-403666/1-A

Matrix: Water Date Extracted: 08/02/2023 15:28

Instrument ID: HP23264 Date Analyzed: 08/02/2023 23:30

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-403666/2-A	JH0260.D	08/02/2023 23:51
	LCSD 410-403666/3-A	JH0261.D	08/03/2023 00:12
	LCS 410-403666/4-A	JH0262.D	08/03/2023 00:33
	LCSD 410-403666/5-A	JH0263.D	08/03/2023 00:54
16MW8	410-136864-2	JH0270.D	08/03/2023 03:22
16WC1B	410-136864-6	JH0271.D	08/03/2023 03:43

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: DH0355a.D Lab Sample ID: MB 410-403918/1-A

Matrix: Water Date Extracted: 08/03/2023 08:20

Instrument ID: HP19760 Date Analyzed: 08/03/2023 16:22

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-403918/2-A	DH0356.D	08/03/2023 16:42
	LCS 410-403918/3-A	DH0357.D	08/03/2023 17:02
	LCSD 410-403918/4-A	DH0358.D	08/03/2023 17:21
16WC1A	410-136864-4	DH0359.D	08/03/2023 17:41
16WC1A MS	410-136864-4 MS	DH0360.D	08/03/2023 18:01
16WC1A MSD	410-136864-4 MSD	DH0361.D	08/03/2023 18:21
16C1	410-136864-1	DH0362a.D	08/03/2023 19:16
16MW9	410-136864-3	DH0363.D	08/03/2023 19:35
16WDUP	410-136864-5	DH0364.D	08/03/2023 19:55

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: DC2310.D DFTPP Injection Date: 03/23/2023

Instrument ID: HP19760 DFTPP Injection Time: 13:13

Analysis Batch No.: 356566

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2% of m/z 69	0.8 (1.6) 1
69	Present	52.1
70	Less than 2% of m/z 69	0.3 (0.5) 1
197	Less than 2% of m/z 198	1.0
198	Base Peak	100.0
199	5-9% of m/z 198	6.5
365	Greater than 1% of Base Peak	2.6
441	Less than 150% of m/z 443	10.4 (79.4) 3
442	Present	68.7
443	15-24% of m/z 442	13.1 (19.1) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 410-356566/2	DC2311.D	03/23/2023	13:34
	IC 410-356566/3	DC2312.D	03/23/2023	13:56
	IC 410-356566/5	DC2313.D	03/23/2023	14:18
	IC 410-356566/6	DC2314.D	03/23/2023	14:40
	IC 410-356566/7	DC2315.D	03/23/2023	15:02
	IC 410-356566/8	DC2316.D	03/23/2023	15:24
	IC 410-356566/9	DC2317.D	03/23/2023	15:46
	IC 410-356566/4	DC2318.D	03/23/2023	16:08
	ICV 410-356566/12	DC2321.D	03/23/2023	17:14
	ICV 410-356566/13	DC2322.D	03/23/2023	17:36
	ICV 410-356566/14	DC2323.D	03/23/2023	18:00
	ICV 410-356566/15	DC2324.D	03/23/2023	18:22

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: BFB Injection Date:

Instrument ID: BFB Injection Time:

Lab File ID: DFTPP Injection Date:

Instrument ID: DFTPP Injection Time:

Analysis Batch No.:

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE

NOTE: All ion abundances shall be normalized to m/z 95, the nominal base peak, even though the ion abundance of m/z 174 may be up to 120% that of m/z 95. Criteria based on EPA method 524.4.

NOTE: All ion abundances MUST be normalized to m/z 198, the nominal base peak, even though the ion abundance of m/z 442 may exceed that of m/z 198.

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-357445/3	DC2652.D	03/26/2023	14:52
	IC 410-357445/4	DC2653.D	03/26/2023	15:13
	IC 410-357445/5	DC2654a.D	03/26/2023	15:36
	IC 410-357445/6	DC2655.D	03/26/2023	15:57
	IC 410-357445/7	DC2656.D	03/26/2023	16:18
	IC 410-357445/8	DC2657.D	03/26/2023	16:38

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: BFB Injection Date:

Instrument ID: BFB Injection Time:

Lab File ID: DFTPP Injection Date:

Instrument ID: DFTPP Injection Time:

Analysis Batch No.:

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE

NOTE: All ion abundances shall be normalized to m/z 95, the nominal base peak, even though the ion abundance of m/z 174 may be up to 120% that of m/z 95. Criteria based on EPA method 524.4.

NOTE: All ion abundances MUST be normalized to m/z 198, the nominal base peak, even though the ion abundance of m/z 442 may exceed that of m/z 198.

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-362760/4	DD1053.D	04/10/2023	21:02

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: DH0350.D DFTPP Injection Date: 08/03/2023

Instrument ID: HP19760 DFTPP Injection Time: 14:29

Analysis Batch No.: 404152

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2% of m/z 69	1.0 (1.6) 1
69	Present	64.1
70	Less than 2% of m/z 69	0.5 (0.9) 1
197	Less than 2% of m/z 198	1.1
198	Base Peak	100.0
199	5-9% of m/z 198	7.0
365	Greater than 1% of Base Peak	2.4
441	Less than 150% of m/z 443	8.7 (73.0) 3
442	Present	58.2
443	15-24% of m/z 442	12.0 (20.6) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-404152/2	DH0351.D	08/03/2023	14:43
	CCV 410-404152/4	DH0352.D	08/03/2023	15:10
	IC 410-404152/5	DH0353.D	08/03/2023	15:30
	MB 410-403918/1-A	DH0355a.D	08/03/2023	16:22
	LCS 410-403918/2-A	DH0356.D	08/03/2023	16:42
	LCS 410-403918/3-A	DH0357.D	08/03/2023	17:02
	LCSD 410-403918/4-A	DH0358.D	08/03/2023	17:21
16WC1A	410-136864-4	DH0359.D	08/03/2023	17:41
16WC1A MS	410-136864-4 MS	DH0360.D	08/03/2023	18:01
16WC1A MSD	410-136864-4 MSD	DH0361.D	08/03/2023	18:21
16C1	410-136864-1	DH0362a.D	08/03/2023	19:16
16MW9	410-136864-3	DH0363.D	08/03/2023	19:35
16WDUP	410-136864-5	DH0364.D	08/03/2023	19:55

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: DH3150.D DFTPP Injection Date: 08/31/2023

Instrument ID: HP19760 DFTPP Injection Time: 15:57

Analysis Batch No.: 414994

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2% of m/z 69	0.5 (1.3) 1
69	Present	37.4
70	Less than 2% of m/z 69	0.2 (0.6) 1
197	Less than 2% of m/z 198	0.4
198	Base Peak	100.0
199	5-9% of m/z 198	6.5
365	Greater than 1% of Base Peak	2.5
441	Less than 150% of m/z 443	10.4 (75.6) 3
442	Present	72.2
443	15-24% of m/z 442	13.8 (19.1) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 410-414994/2	DH3151.D	08/31/2023	16:23
	IC 410-414994/4	DH3152.D	08/31/2023	17:16
	IC 410-414994/3	DH3153.D	08/31/2023	17:37
	IC 410-414994/5	DH3154.D	08/31/2023	17:58
	IC 410-414994/6	DH3155.D	08/31/2023	18:19
	IC 410-414994/7	DH3156.D	08/31/2023	18:40
	IC 410-414994/8	DH3157.D	08/31/2023	19:00
	IC 410-414994/9	DH3158.D	08/31/2023	19:21
	ICV 410-414994/12	DH3161.D	08/31/2023	20:24

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: DJ2600b.D DFTPP Injection Date: 10/26/2023

Instrument ID: HP19760 DFTPP Injection Time: 11:53

Analysis Batch No.: 435991

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2% of m/z 69	0.7 (2.0) 1
69	Present	36.3
70	Less than 2% of m/z 69	0.3 (0.9) 1
197	Less than 2% of m/z 198	0.4
198	Base Peak	100.0
199	5-9% of m/z 198	6.5
365	Greater than 1% of Base Peak	3.1
441	Less than 150% of m/z 443	11.8 (79.6) 3
442	Present	73.0
443	15-24% of m/z 442	14.9 (20.4) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 410-435991/2	DJ2601b.D	10/26/2023	12:12
	IC 410-435991/3	DJ2602.D	10/26/2023	12:44
	IC 410-435991/4	DJ2603.D	10/26/2023	13:04
	IC 410-435991/5	DJ2604.D	10/26/2023	13:25
	IC 410-435991/6	DJ2605.D	10/26/2023	13:46
	IC 410-435991/7	DJ2606.D	10/26/2023	14:06
	IC 410-435991/8	DJ2607.D	10/26/2023	14:27
	IC 410-435991/9	DJ2608.D	10/26/2023	14:48
	ICV 410-435991/12	DJ2611.D	10/26/2023	15:50

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: BFB Injection Date:

Instrument ID: BFB Injection Time:

Lab File ID: DFTPP Injection Date:

Instrument ID: DFTPP Injection Time:

Analysis Batch No.:

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE

NOTE: All ion abundances shall be normalized to m/z 95, the nominal base peak, even though the ion abundance of m/z 174 may be up to 120% that of m/z 95. Criteria based on EPA method 524.4.

NOTE: All ion abundances MUST be normalized to m/z 198, the nominal base peak, even though the ion abundance of m/z 442 may exceed that of m/z 198.

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-363143/3	JD1102.D	04/11/2023	14:51
	IC 410-363143/4	JD1103.D	04/11/2023	15:12
	IC 410-363143/5	JD1104.D	04/11/2023	15:34
	IC 410-363143/6	JD1105.D	04/11/2023	15:55
	IC 410-363143/7	JD1106.D	04/11/2023	16:16
	IC 410-363143/8	JD1107.D	04/11/2023	16:37

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: JG1800.D DFTPP Injection Date: 07/18/2023

Instrument ID: HP23264 DFTPP Injection Time: 07:23

Analysis Batch No.: 397829

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	65.2	
68	Less than 2% of mass 69	0.8	(1.4) 1
69	Mass 69 Relative abundance	61.4	
70	Less than 2% of mass 69	0.2	(0.3) 1
127	10-80% of Base Peak	57.9	
197	Less than 2% of mass 198	0.9	
198	Base peak	100.0	
199	5-9% of mass 198	7.0	
275	10-60% of Base Peak	21.5	
365	Greater than 1% of mass 198	2.6	
441	present but less than 24% of mass 442	13.3	(14.9) 2
442	Greater than 50% of mass 198	89.0	
443	15-24% of mass 442	17.4	(19.6) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 410-397829/2	JG1801a.D	07/18/2023	7:41
	IC 410-397829/3	JG1802.D	07/18/2023	8:07
	IC 410-397829/4	JG1803.D	07/18/2023	8:28
	IC 410-397829/5	JG1804.D	07/18/2023	8:49
	IC 410-397829/6	JG1805.D	07/18/2023	9:10
	IC 410-397829/7	JG1806.D	07/18/2023	9:31
	IC 410-397829/8	JG1807.D	07/18/2023	9:52
	IC 410-397829/9	JG1808.D	07/18/2023	10:14
	ICV 410-397829/12	JG1811.D	07/18/2023	11:17
	ICV 410-397829/13	JG1812.D	07/18/2023	11:38

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: JH0250.D DFTPP Injection Date: 08/02/2023

Instrument ID: HP23264 DFTPP Injection Time: 20:15

Analysis Batch No.: 403788

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	63.5	
68	Less than 2% of mass 69	1.0	(1.8) 1
69	Mass 69 Relative abundance	56.9	
70	Less than 2% of mass 69	0.3	(0.5) 1
127	10-80% of Base Peak	55.6	
197	Less than 2% of mass 198	0.5	
198	Base peak	100.0	
199	5-9% of mass 198	7.2	
275	10-60% of Base Peak	21.9	
365	Greater than 1% of mass 198	3.0	
441	present but less than 24% of mass 442	15.0	(14.9) 2
442	Greater than 50% of mass 198	100.9	
443	15-24% of mass 442	18.5	(18.3) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-403788/2	JH0251.D	08/02/2023	20:32
	CCV 410-403788/4	JH0252.D	08/02/2023	21:02
	IC 410-403788/5	JH0254.D	08/02/2023	21:45
	MB 410-403666/1-A	JH0259.D	08/02/2023	23:30
	LCS 410-403666/2-A	JH0260.D	08/02/2023	23:51
	LCSD 410-403666/3-A	JH0261.D	08/03/2023	0:12
	LCS 410-403666/4-A	JH0262.D	08/03/2023	0:33
	LCSD 410-403666/5-A	JH0263.D	08/03/2023	0:54
16MW8	410-136864-2	JH0270.D	08/03/2023	3:22
16WC1B	410-136864-6	JH0271.D	08/03/2023	3:43

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab File ID: JJ3100a.D DFTPP Injection Date: 10/31/2023

Instrument ID: HP23264 DFTPP Injection Time: 14:09

Analysis Batch No.: 437867

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	51.6	
68	Less than 2% of mass 69	0.8	(1.5) 1
69	Mass 69 Relative abundance	54.3	
70	Less than 2% of mass 69	0.3	(0.6) 1
127	10-80% of Base Peak	48.9	
197	Less than 2% of mass 198	1.0	
198	Base peak	100.0	
199	5-9% of mass 198	6.8	
275	10-60% of Base Peak	24.0	
365	Greater than 1% of mass 198	2.8	
441	present but less than 24% of mass 442	16.1	(15.6) 2
442	Greater than 50% of mass 198	103.4	
443	15-24% of mass 442	19.5	(18.8) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 410-437867/2	JJ3101e.D	10/31/2023	14:37
	IC 410-437867/3	JJ3102.D	10/31/2023	15:02
	IC 410-437867/4	JJ3103.D	10/31/2023	15:23
	IC 410-437867/5	JJ3104.D	10/31/2023	15:45
	IC 410-437867/6	JJ3105.D	10/31/2023	16:06
	IC 410-437867/7	JJ3106.D	10/31/2023	16:27
	IC 410-437867/8	JJ3107.D	10/31/2023	16:49
	IC 410-437867/9	JJ3108.D	10/31/2023	17:10
	ICV 410-437867/12	JJ3111.D	10/31/2023	18:13

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-356566/2 Date Analyzed: 03/23/2023 13:34

Instrument ID: HP19760 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): DC2311.D Heated Purge: (Y/N) N

Calibration ID: 48596

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		192517	4.59	711517	5.80	394814	7.46
UPPER LIMIT		385034	5.09	1423034	6.30	789628	7.96
LOWER LIMIT		96259	4.09	355759	5.30	197407	6.96
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-356566/12		199616	4.59	728907	5.80	413430	7.46
ICV 410-356566/13		220983	4.59	799996	5.80	439363	7.46
ICV 410-356566/14		150974	4.59	538664	5.80	295009	7.46
ICV 410-356566/15		153438	4.59	552674	5.80	295675	7.46
CCVIS 410-404152/2		135932	4.07*3	551921	5.29*3	307011	6.96

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

*3=ISTD response or retention time outside acceptable limits.

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-356566/2 Date Analyzed: 03/23/2023 13:34

Instrument ID: HP19760 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): DC2311.D Heated Purge: (Y/N) N

Calibration ID: 48596

		PHN		PYR10		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		755591	8.87	779979	10.22	651289	13.52
UPPER LIMIT		1511182	9.37	1559958	10.72	1302578	14.02
LOWER LIMIT		377796	8.37	389990	9.72	325645	13.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-356566/12		785961	8.87	822597	10.22	691313	13.52
ICV 410-356566/13		836377	8.87	846007	10.22	682309	13.52
ICV 410-356566/14		522652	8.87	514888	10.22	388304	13.52
ICV 410-356566/15		541069	8.87	542003	10.22	407670	13.52
CCVIS 410-404152/2		596922	8.37*3	620444	9.71*3	437111	12.73*3

PHN = Phenanthrene-d10
PYR10 = Pyrene-d10 (IS)
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

*3=ISTD response or retention time outside acceptable limits.

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: CCVIS 410-404152/2 Date Analyzed: 08/03/2023 14:43

Instrument ID: HP19760 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): DH0351.D Heated Purge: (Y/N) N

Calibration ID: 51440

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		135932	4.07*3	551921	5.29*3	307011	6.96
UPPER LIMIT		271864	4.57	1103842	5.79	614022	7.46
LOWER LIMIT		67966	3.57	275961	4.79	153506	6.46
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 410-404152/4		159763	4.07	627226	5.30	332188	6.97
MB 410-403918/1-A		166888	4.08	643455	5.30	356441	6.97
LCS 410-403918/2-A		152729	4.08	578830	5.30	324359	6.97
LCS 410-403918/3-A		130606	4.07	508337	5.30	274983	6.97
LCSD 410-403918/4-A		134519	4.07	525720	5.30	279694	6.97
410-136864-4	16WC1A	126921	4.07	498796	5.30	271289	6.97
410-136864-4 MS	16WC1A MS	148929	4.07	585913	5.30	322664	6.97
410-136864-4 MSD	16WC1A MSD	158810	4.07	605594	5.30	331050	6.97
410-136864-1	16C1	129223	4.07	504542	5.30	275980	6.97
410-136864-3	16MW9	137863	4.07	543206	5.30	296822	6.97
410-136864-5	16WDUP	129727	4.07	518305	5.30	280780	6.97

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

*3=ISTD response or retention time outside acceptable limits.

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: CCVIS 410-404152/2 Date Analyzed: 08/03/2023 14:43

Instrument ID: HP19760 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): DH0351.D Heated Purge: (Y/N) N

Calibration ID: 51440

		PHN		PYR10		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		596922	8.37*3	620444	9.71*3	437111	12.73*3
UPPER LIMIT		1193844	8.87	1240888	10.21	874222	13.23
LOWER LIMIT		298461	7.87	310222	9.21	218556	12.23
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 410-404152/4		630075	8.37	650262	9.72	390258	12.74
MB 410-403918/1-A		670686	8.38	654777	9.73	413481	12.75
LCS 410-403918/2-A		591796	8.37	581243	9.72	374694	12.74
LCS 410-403918/3-A		532921	8.37	508298	9.72	363274	12.73
LCSD 410-403918/4-A		543394	8.37	507798	9.71	361070	12.73
410-136864-4	16WC1A	520861	8.37	515904	9.71	318764	12.73
410-136864-4 MS	16WC1A MS	593035	8.37	571894	9.71	378468	12.73
410-136864-4 MSD	16WC1A MSD	592107	8.37	559947	9.72	364564	12.73
410-136864-1	16C1	528001	8.37	518356	9.71	340028	12.73
410-136864-3	16MW9	563227	8.37	556549	9.71	361201	12.73
410-136864-5	16WDUP	538120	8.37	507422	9.71	270942	12.73

PHN = Phenanthrene-d10
PYR10 = Pyrene-d10 (IS)
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

*3=ISTD response or retention time outside acceptable limits.

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-414994/2 Date Analyzed: 08/31/2023 16:23

Instrument ID: HP19760 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): DH3151.D Heated Purge: (Y/N) N

Calibration ID: 53326

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		176109	4.51	666962	5.72	402427	7.39
UPPER LIMIT		352218	5.01	1333924	6.22	804854	7.89
LOWER LIMIT		88055	4.01	333481	5.22	201214	6.89
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-414994/12		143550	4.51	524644	5.72	318023	7.38

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-414994/2 Date Analyzed: 08/31/2023 16:23

Instrument ID: HP19760 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): DH3151.D Heated Purge: (Y/N) N

Calibration ID: 53326

		PHN		PYR10		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		790639	8.79	849209	10.14	762782	13.41
UPPER LIMIT		1581278	9.29	1698418	10.64	1525564	13.91
LOWER LIMIT		395320	8.29	424605	9.64	381391	12.91
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-414994/12		626679	8.79	667790	10.14	600068	13.39

PHN = Phenanthrene-d10
PYR10 = Pyrene-d10 (IS)
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-435991/2 Date Analyzed: 10/26/2023 12:12

Instrument ID: HP19760 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): DJ2601b.D Heated Purge: (Y/N) N

Calibration ID: 55149

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		171514	4.44	599158	5.65	357876	7.32
UPPER LIMIT		343028	4.94	1198316	6.15	715752	7.82
LOWER LIMIT		85757	3.94	299579	5.15	178938	6.82
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-435991/12		196616	4.44	690223	5.65	415145	7.32

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-435991/2 Date Analyzed: 10/26/2023 12:12

Instrument ID: HP19760 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): DJ2601b.D Heated Purge: (Y/N) N

Calibration ID: 55149

		PHN		PYR10		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		704641	8.72	740287	10.07	639006	13.29
UPPER LIMIT		1409282	9.22	1480574	10.57	1278012	13.79
LOWER LIMIT		352321	8.22	370144	9.57	319503	12.79
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-435991/12		791545	8.73	843738	10.07	711146	13.29

PHN = Phenanthrene-d10
PYR10 = Pyrene-d10 (IS)
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-397829/2 Date Analyzed: 07/18/2023 07:41

Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): JG1801a.D Heated Purge: (Y/N) N

Calibration ID: 52063

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		212767	4.33	781685	5.55	392579	7.21
UPPER LIMIT		425534	4.83	1563370	6.05	785158	7.71
LOWER LIMIT		106384	3.83	390843	5.05	196290	6.71
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-397829/12		184810	4.33	712856	5.55	341549	7.21
ICV 410-397829/13		176950	4.33	678969	5.55	333229	7.21
CCVIS 410-403788/2		193417	4.33	753961	5.54	383345	7.21

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-397829/2 Date Analyzed: 07/18/2023 07:41

Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): JG1801a.D Heated Purge: (Y/N) N

Calibration ID: 52063

		PHN		PYR10		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		802857	8.62	698430	9.96	547299	13.13
UPPER LIMIT		1605714	9.12	1396860	10.46	1094598	13.63
LOWER LIMIT		401429	8.12	349215	9.46	273650	12.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-397829/12		628690	8.62	642170	9.96	471572	13.13
ICV 410-397829/13		652388	8.62	592780	9.96	469314	13.12
CCVIS 410-403788/2		743642	8.61	702598	9.96	570903	13.12

PHN = Phenanthrene-d10
PYR10 = Pyrene-d10 (IS)
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: CCVIS 410-403788/2 Date Analyzed: 08/02/2023 20:32

Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): JH0251.D Heated Purge: (Y/N) N

Calibration ID: 52063

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		193417	4.33	753961	5.54	383345	7.21
UPPER LIMIT		386834	4.83	1507922	6.04	766690	7.71
LOWER LIMIT		96709	3.83	376981	5.04	191673	6.71
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 410-403666/1-A		135972	4.33	520706	5.54	262215	7.21
LCS 410-403666/2-A		145029	4.32	573579	5.54	292405	7.21
LCSD 410-403666/3-A		137160	4.33	532198	5.54	274938	7.21
LCS 410-403666/4-A		131783	4.32	538500	5.54	270308	7.21
LCSD 410-403666/5-A		139884	4.33	592885	5.54	278179	7.21
410-136864-2	16MW8	140164	4.33	521452	5.54	260850	7.21
410-136864-6	16WC1B	149796	4.33	577668	5.54	282635	7.21

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: CCVIS 410-403788/2 Date Analyzed: 08/02/2023 20:32

Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): JH0251.D Heated Purge: (Y/N) N

Calibration ID: 52063

		PHN		PYR10		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		743642	8.61	702598	9.96	570903	13.12
UPPER LIMIT		1487284	9.11	1405196	10.46	1141806	13.62
LOWER LIMIT		371821	8.11	351299	9.46	285452	12.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 410-403666/1-A		548571	8.61	509539	9.96	380144	13.12
LCS 410-403666/2-A		549351	8.61	491276	9.96	414104	13.12
LCSD 410-403666/3-A		520905	8.61	494297	9.96	439036	13.12
LCS 410-403666/4-A		541959	8.61	525648	9.96	415412	13.12
LCSD 410-403666/5-A		548197	8.61	499411	9.96	400010	13.12
410-136864-2	16MW8	550934	8.61	509528	9.96	410303	13.12
410-136864-6	16WC1B	575286	8.61	533996	9.96	442651	13.12

PHN = Phenanthrene-d10
PYR10 = Pyrene-d10 (IS)
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-437867/2 Date Analyzed: 10/31/2023 14:37

Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): JJ3101e.D Heated Purge: (Y/N) N

Calibration ID: 55355

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		191661	4.00	634430	5.23	369667	6.90
UPPER LIMIT		383322	4.50	1268860	5.73	739334	7.40
LOWER LIMIT		95831	3.50	317215	4.73	184834	6.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-437867/12		172317	4.00	704004	5.23	383730	6.90

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Sample No.: ICIS 410-437867/2 Date Analyzed: 10/31/2023 14:37

Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

Lab File ID (Standard): JJ3101e.D Heated Purge: (Y/N) N

Calibration ID: 55355

		PHN		PYR10		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		711898	8.30	723852	9.64	572713	12.62
UPPER LIMIT		1423796	8.80	1447704	10.14	1145426	13.12
LOWER LIMIT		355949	7.80	361926	9.14	286357	12.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-437867/12		740293	8.30	762661	9.64	674496	12.61

PHN = Phenanthrene-d10
PYR10 = Pyrene-d10 (IS)
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16C1
Lab Sample ID: 410-136864-1

Matrix: Water
Lab File ID: DH0362a.D

Analysis Method: 8270D
Date Collected: 07/27/2023 12:45

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.6(mL)
Date Analyzed: 08/03/2023 19:16

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		10	2.0
99-65-0	1,3-Dinitrobenzene	ND		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	ND	cn	10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	ND		10	1.8
95-95-4	2,4,5-Trichlorophenol	ND		10	2.0
88-06-2	2,4,6-Trichlorophenol	ND		10	1.8
120-83-2	2,4-Dichlorophenol	ND		10	1.5
121-14-2	2,4-Dinitrotoluene	ND		10	2.1
87-65-0	2,6-Dichlorophenol	ND		10	1.4
606-20-2	2,6-Dinitrotoluene	ND		10	2.1
91-58-7	2-Chloronaphthalene	ND		10	0.50
95-57-8	2-Chlorophenol	ND		10	1.0
91-57-6	2-Methylnaphthalene	ND		10	0.29
95-48-7	o-Cresol	ND		10	0.80
88-74-4	2-Nitroaniline	ND		10	1.0
88-75-5	2-Nitrophenol	ND		10	1.2
101-55-3	4-Bromophenyl-phenylether	ND		10	0.56
59-50-7	4-Chloro-3-methylphenol	ND		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	ND		10	0.60
106-44-5	m & p-Cresol	ND		20	2.4
100-01-6	4-Nitroaniline	ND		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		10	2.0
83-32-9	Acenaphthene	ND		10	0.35
208-96-8	Acenaphthylene	ND		10	0.48
120-12-7	Anthracene	ND		10	0.52
56-55-3	Benzo[a]anthracene	ND		10	0.45
50-32-8	Benzo[a]pyrene	ND		10	1.5
205-99-2	Benzo[b]fluoranthene	ND		10	1.2
191-24-2	Benzo[g,h,i]perylene	ND		10	0.42
207-08-9	Benzo[k]fluoranthene	ND		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16C1
Lab Sample ID: 410-136864-1

Matrix: Water
Lab File ID: DH0362a.D

Analysis Method: 8270D
Date Collected: 07/27/2023 12:45

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.6(mL)
Date Analyzed: 08/03/2023 19:16

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	ND		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	ND		10	0.38
132-64-9	Dibenzofuran	ND		10	0.60
84-66-2	Diethyl phthalate	ND		10	2.0
60-51-5	Dimethoate	ND	*1	10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	ND		10	0.42
86-73-7	Fluorene	ND		10	0.38
118-74-1	Hexachlorobenzene	ND		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	ND		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND	*- *1 cn	50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	ND	cn	10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58
59-89-2	N-Nitrosomorpholine	ND		10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	ND		10	0.60
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	ND		10	3.0
85-01-8	Phenanthrene	ND		10	0.52
108-95-2	Phenol	ND		10	0.60
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	ND		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16C1
Lab Sample ID: 410-136864-1

Matrix: Water
Lab File ID: DH0362a.D

Analysis Method: 8270D
Date Collected: 07/27/2023 12:45

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.6(mL)
Date Analyzed: 08/03/2023 19:16

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
122-09-8	a,a-Dimethylphenethylamine	ND	*- cn	50	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	68		13-138
321-60-8	2-Fluorobiphenyl (Surr)	61		44-120
367-12-4	2-Fluorophenol (Surr)	35		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	53		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	84		30-125
4165-62-2	Phenol-d5 (Surr)	27		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0362a.D
Lims ID: 410-136864-I-1-A
Client ID: 16C1
Sample Type: Client
Inject. Date: 03-Aug-2023 19:16:04 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 410-136864-I-1-A
Misc. Info.: 410-0090557-013
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 14:21:25 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1655

First Level Reviewer: P7EB Date: 04-Aug-2023 14:08:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
3 N-Nitrosodimethylamine	74		1.728				ND	
$ 10 2-Fluorophenol	112	2.824	2.824	0.000	92	654945	17.3	
11 N-Nitrosodiethylamine	102		3.016				ND	
12 Ethyl methanesulfonate	109		3.314				ND	
$ 16 Phenol-d5	99	3.733	3.728	0.005	95	730536	13.4	
17 Phenol	94		3.739				ND	7
20 2-Chlorophenol	128		3.867				ND	7
* 22 1,4-Dichlorobenzene-d4	152	4.071	4.071	0.000	97	129223	5.00	
28 2-Methylphenol	108		4.328				ND	
29 2,2'-oxybis[1-chloropropane]	45		4.340				ND	
35 N-Nitrosomorpholine	56		4.479				ND	
32 4-Methylphenol	108		4.479				ND	
$ 39 Nitrobenzene-d5	82	4.608	4.602	0.006	89	705338	13.3	
40 Nitrobenzene	77		4.619				ND	U
42 N-Nitrosopiperidine	114		4.765				ND	
44 2-Nitrophenol	139		4.928				ND	
46 o,o',o''-Triethylphosphorothioat	198		5.051				ND	
48 2,4-Dichlorophenol	162		5.167				ND	
* 50 Naphthalene-d8	136	5.301	5.301	0.000	100	504542	5.00	
37 alpha,alpha-Dimethyl phenethylam	58		5.348				ND	7
54 2,6-Dichlorophenol	162		5.383				ND	
55 Hexachloropropene	213		5.395				ND	
64 4-Chloro-3-methylphenol	107		5.861				ND	
65 Safrole, Total	162		5.902				ND	
66 2-Methylnaphthalene	142		5.977				ND	
69 1,2,4,5-Tetrachlorobenzene	216		6.135				ND	
71 2,4,6-Trichlorophenol	196		6.251				ND	
72 2,4,5-Trichlorophenol	196		6.298				ND	
$ 73 2-Fluorobiphenyl (Surr)	172	6.339	6.333	0.006	100	1206971	15.4	
76 2-Chloronaphthalene	162		6.438				ND	
79 2-Nitroaniline	138		6.543				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
86 1,3-Dinitrobenzene	168		6.753				ND	
87 2,6-Dinitrotoluene	165		6.782				ND	
88 Acenaphthylene	152		6.828				ND	
* 90 Acenaphthene-d10	164	6.968	6.968	0.000	96	275980	5.00	
91 Acenaphthene	153		6.992				ND	
94 Pentachlorobenzene	250		7.120				ND	
95 2,4-Dinitrotoluene	165		7.161				ND	
96 Dibenzofuran	168		7.161				ND	
98 2,3,4,6-Tetrachlorophenol	232		7.283				ND	
100 Diethyl phthalate	149		7.400				ND	7
101 Thionazin	107		7.475				ND	
102 Fluorene	166		7.481				ND	
103 4-Chlorophenyl phenyl ether	204		7.493				ND	
104 N-Nitro-o-toluidine	152		7.505				ND	
105 4-Nitroaniline	138		7.516				ND	
107 N-Nitrosodiphenylamine	169		7.609				ND	
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	85	321377	33.8	
110 Sulfotepp	97		7.773				ND	7
113 cis-Diallate	86		7.883				ND	7
114 Phorate	75		7.895				ND	
115 Phenacetin	108		7.918				ND	
116 4-Bromophenyl phenyl ether	248		7.953				ND	
117 trans-Diallate	86		7.971				ND	7
118 Hexachlorobenzene	284		8.000				ND	
119 Dimethoate	87		8.052				ND	
121 Pentachlorophenol	266		8.198				ND	
* 126 Phenanthrene-d10	188	8.373	8.373	0.000	97	528001	5.00	
128 Phenanthrene	178		8.390				ND	7
129 Anthracene	178		8.437				ND	7
141 Isodrin	193		9.370				ND	7
143 Fluoranthene	202		9.515				ND	
S 136 Diallate	86		9.653				ND	7
* 149 Pyrene-d10 (IS)	212	9.714	9.719	-0.005	99	518356	5.00	
150 Pyrene	202		9.731				ND	7
$ 152 p-Terphenyl-d14	244	9.906	9.894	0.006	97	1791744	20.9	
153 Kepone	272		10.396				ND	
161 Benzo[a]anthracene	228		10.938				ND	
162 Chrysene	228		10.978				ND	
163 Bis(2-ethylhexyl) phthalate	149		11.037				ND	7
167 Benzo[b]fluoranthene	252		12.232				ND	
168 Benzo[k]fluoranthene	252		12.272				ND	
169 Benzo[a]pyrene	252		12.657				ND	U
* 170 Perylene-d12	264	12.733	12.739	-0.006	98	340028	5.00	
174 Indeno[1,2,3-cd]pyrene	276		14.196				ND	
175 Dibenz(a,h)anthracene	278		14.242				ND	
176 Benzo[g,h,i]perylene	276		14.551				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags
U - Marked Undetected

Reagents:

MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

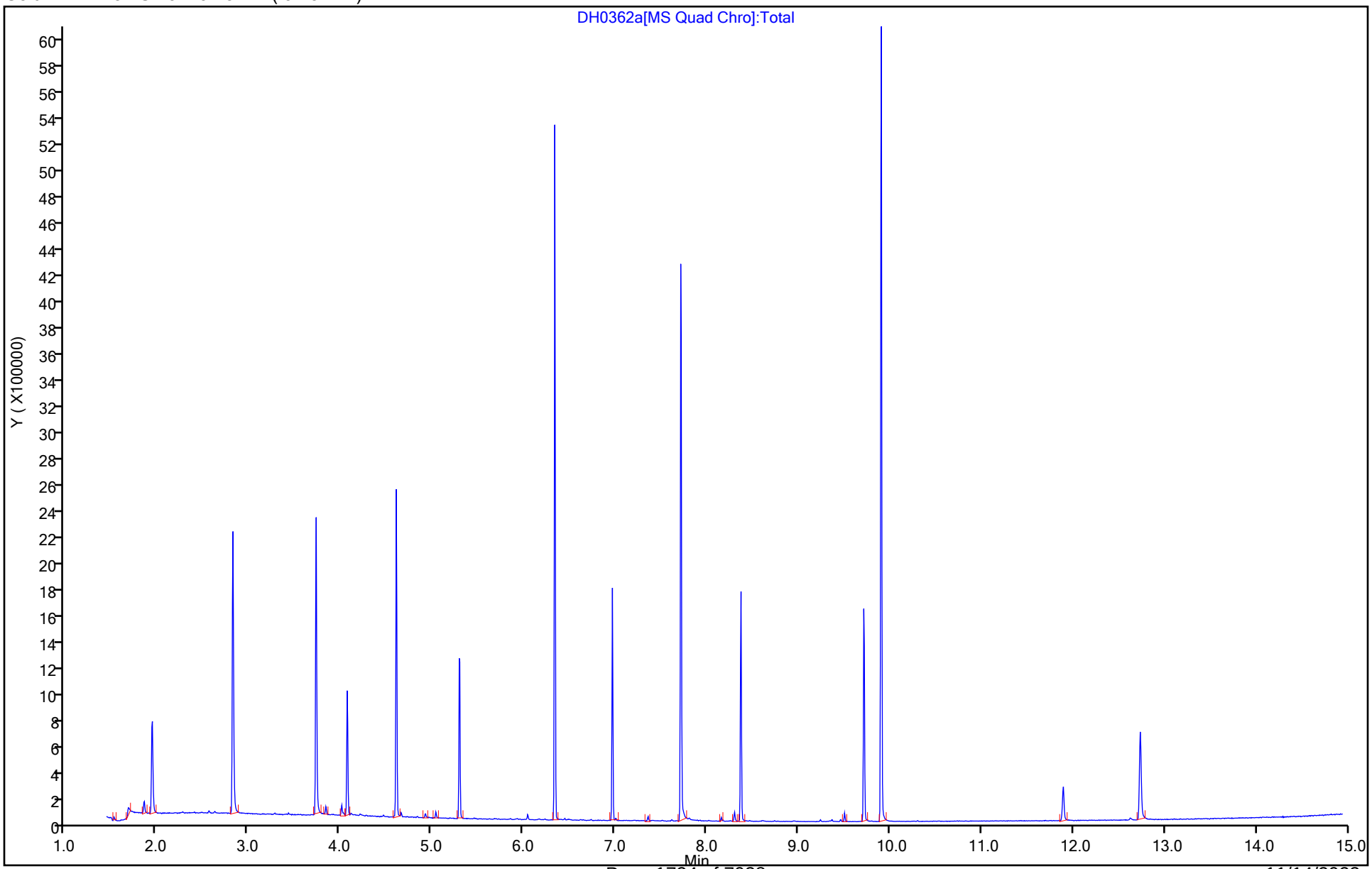
Report Date: 04-Aug-2023 14:22:09 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0362a.D

Injection Date:	03-Aug-2023 19:16:04	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	410-136864-I-1-A	Lab Sample ID:	410-136864-1	Worklist Smp#:	13
Client ID:	16C1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0362a.D				
Lims ID:	410-136864-I-1-A				
Client ID:	16C1				
Sample Type:	Client				
Inject. Date:	03-Aug-2023 19:16:04	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	410-136864-I-1-A				
Misc. Info.:	410-0090557-013				
Operator ID:	mem41592	Instrument ID:	HP19760		
Method:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	04-Aug-2023 14:21:25	Calib Date:	03-Aug-2023 15:30:40		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1655				

First Level Reviewer: P7EB Date: 04-Aug-2023 14:08:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	17.3	34.63
$ 16 Phenol-d5	50.0	13.4	26.83
$ 39 Nitrobenzene-d5	25.0	13.3	53.22
$ 73 2-Fluorobiphenyl (Surr)	25.0	15.4	61.49
$ 109 2,4,6-Tribromophenol	50.0	33.8	67.64
$ 152 p-Terphenyl-d14	25.0	20.9	83.72

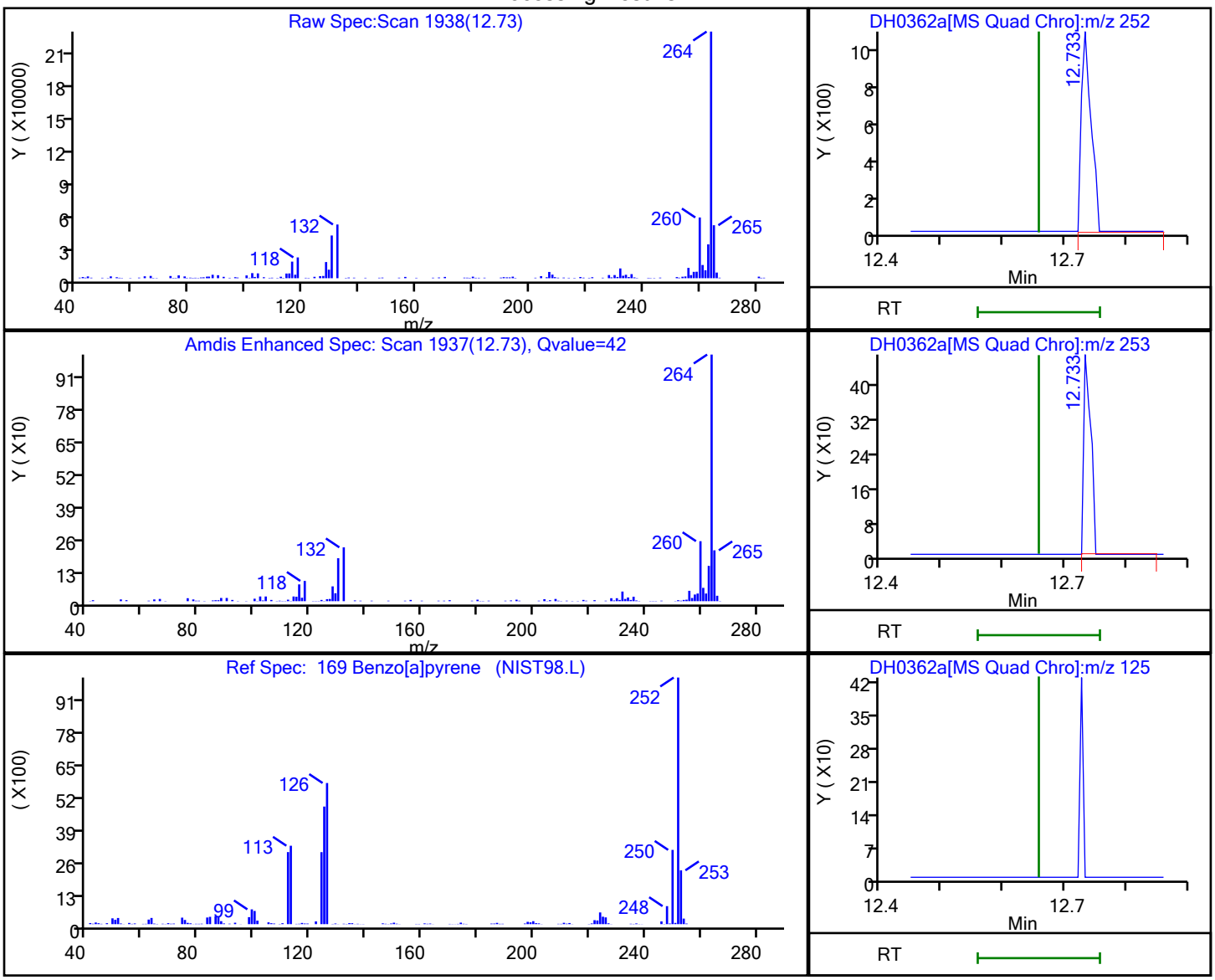
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0362a.D				
Injection Date:	03-Aug-2023 19:16:04	Instrument ID:	HP19760		
Lims ID:	410-136864-I-1-A	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

169 Benzo[a]pyrene, CAS: 50-32-8

Processing Results



RT	Mass	Response	Amount
12.73	252.00	1112	0.015185
12.73	253.00	377	
12.66	125.00	0	

Reviewer: P7EB, 04-Aug-2023 14:08:50 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

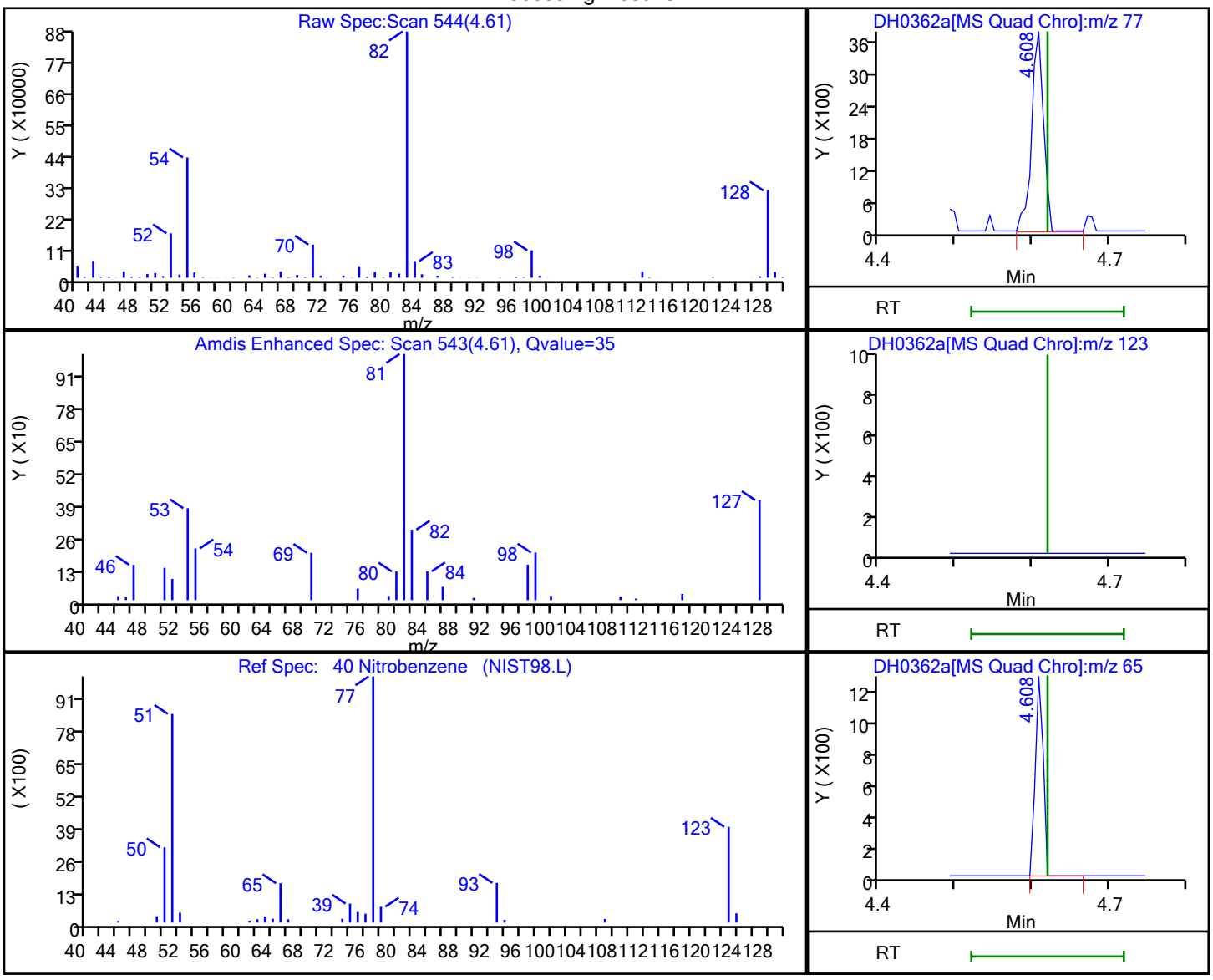
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0362a.D				
Injection Date:	03-Aug-2023 19:16:04	Instrument ID:	HP19760		
Lims ID:	410-136864-I-1-A	Lab Sample ID:	410-136864-1		
Client ID:	16C1				
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

40 Nitrobenzene, CAS: 98-95-3

Processing Results



RT	Mass	Response	Amount
4.61	77.00	4030	0.074562
4.62	123.00	0	
4.61	65.00	865	

Reviewer: P7EB, 04-Aug-2023 14:08:33 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW8
Lab Sample ID: 410-136864-2

Matrix: Water
Lab File ID: JH0270.D

Analysis Method: 8270D
Date Collected: 07/26/2023 10:05

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 248(mL)
Date Analyzed: 08/03/2023 03:22

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		10	2.0
99-65-0	1,3-Dinitrobenzene	ND		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	ND		10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	ND		10	1.8
95-95-4	2,4,5-Trichlorophenol	ND		10	2.0
88-06-2	2,4,6-Trichlorophenol	ND		10	1.8
120-83-2	2,4-Dichlorophenol	ND		10	1.5
121-14-2	2,4-Dinitrotoluene	ND		10	2.1
87-65-0	2,6-Dichlorophenol	ND		10	1.4
606-20-2	2,6-Dinitrotoluene	ND		10	2.1
91-58-7	2-Chloronaphthalene	ND		10	0.50
95-57-8	2-Chlorophenol	ND		10	1.0
91-57-6	2-Methylnaphthalene	ND		10	0.29
95-48-7	o-Cresol	ND		10	0.81
88-74-4	2-Nitroaniline	ND		10	1.0
88-75-5	2-Nitrophenol	ND		10	1.2
101-55-3	4-Bromophenyl-phenylether	ND		10	0.56
59-50-7	4-Chloro-3-methylphenol	ND		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	ND		10	0.60
106-44-5	m & p-Cresol	ND		20	2.4
100-01-6	4-Nitroaniline	ND		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		10	2.0
83-32-9	Acenaphthene	ND		10	0.35
208-96-8	Acenaphthylene	ND		10	0.48
120-12-7	Anthracene	ND		10	0.52
56-55-3	Benzo[a]anthracene	ND		10	0.45
50-32-8	Benzo[a]pyrene	ND		10	1.5
205-99-2	Benzo[b]fluoranthene	ND		10	1.2
191-24-2	Benzo[g,h,i]perylene	ND		10	0.42
207-08-9	Benzo[k]fluoranthene	ND		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW8
Lab Sample ID: 410-136864-2

Matrix: Water
Lab File ID: JH0270.D

Analysis Method: 8270D
Date Collected: 07/26/2023 10:05

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 248(mL)
Date Analyzed: 08/03/2023 03:22

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	ND		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	ND		10	0.38
132-64-9	Dibenzofuran	ND		10	0.60
84-66-2	Diethyl phthalate	ND		10	2.0
60-51-5	Dimethoate	ND		10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	ND		10	0.42
86-73-7	Fluorene	ND		10	0.38
118-74-1	Hexachlorobenzene	ND		10	0.71
193-39-5	Indeno[1,2,3-cd]pyrene	ND		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND		50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	ND		10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58
59-89-2	N-Nitrosomorpholine	ND		10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	ND		10	0.60
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	ND		10	3.0
85-01-8	Phenanthrene	ND		10	0.52
108-95-2	Phenol	ND		10	0.60
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	ND		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND	*- cn	50	5.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW8 Lab Sample ID: 410-136864-2

Matrix: Water Lab File ID: JH0270.D

Analysis Method: 8270D Date Collected: 07/26/2023 10:05

Extract. Method: 3510C Date Extracted: 08/02/2023 15:28

Sample wt/vol: 248(mL) Date Analyzed: 08/03/2023 03:22

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor: Level: (low/med) Low

Analysis Batch No.: 403788 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	74		13-138
321-60-8	2-Fluorobiphenyl (Surr)	78		44-120
367-12-4	2-Fluorophenol (Surr)	36		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	72		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	58		30-125
4165-62-2	Phenol-d5 (Surr)	26		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0270.D
Lims ID: 410-136864-G-2-A
Client ID: 16MW8
Sample Type: Client
Inject. Date: 03-Aug-2023 03:22:30 ALS Bottle#: 20 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 410-136864-G-2-A
Misc. Info.: 410-0090492-032
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 08:48:58 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:54:22

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
	2 N-Nitrosodimethylamine	74		1.928				ND	7
$	9 2-Fluorophenol	112	3.084	3.090	-0.006	96	768785	17.8	
	11 N-Nitrosodiethylamine	102		3.283				ND	
	12 Ethyl methanesulfonate	109		3.581				ND	
$	15 Phenol-d5	99	3.990	3.990	0.000	96	811299	13.1	
	16 Phenol	94		4.001				ND	7
	19 2-Chlorophenol	128		4.130				ND	7
*	22 1,4-Dichlorobenzene-d4	152	4.328	4.322	0.006	97	140164	5.00	
	29 2-Methylphenol	108		4.579				ND	
	30 2,2'-oxybis[1-chloropropane]	45		4.585				ND	7
	35 N-Nitrosomorpholine	56		4.731				ND	
	34 4-Methylphenol	108		4.731				ND	
$	39 Nitrobenzene-d5	82	4.854	4.854	0.000	94	1006648	18.0	
	40 Nitrobenzene	77		4.871				ND	U
	41 N-Nitrosopiperidine	114		5.017				ND	
	43 2-Nitrophenol	139		5.181				ND	7
	46 o,o',o''-Triethylphosphorothioat	198		5.286				ND	
	54 alpha,alpha-Dimethyl phenethylam	58		5.379				ND	7
	49 2,4-Dichlorophenol	162		5.420				ND	
*	52 Naphthalene-d8	136	5.543	5.543	0.000	99	521452	5.00	
	57 2,6-Dichlorophenol	162		5.630				ND	
	58 Hexachloropropene	213		5.648				ND	
	65 4-Chloro-3-methylphenol	107		6.103				ND	7
	66 Safrole, Total	162		6.144				ND	
	67 2-Methylnaphthalene	142		6.220				ND	7
	70 1,2,4,5-Tetrachlorobenzene	216		6.384				ND	
	79 2,4,6-Trichlorophenol	196		6.500				ND	
	80 2,4,5-Trichlorophenol	196		6.541				ND	
$	81 2-Fluorobiphenyl (Surr)	172	6.576	6.576	0.000	99	1615149	19.5	
	84 2-Chloronaphthalene	162		6.681				ND	
	87 2-Nitroaniline	138		6.786				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
91 1,3-Dinitrobenzene	168		6.991				ND	7
92 2,6-Dinitrotoluene	165		7.020				ND	
93 Acenaphthylene	152		7.078				ND	7
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	95	260850	5.00	
97 Acenaphthene	153		7.242				ND	7
99 Pentachlorobenzene	250		7.365				ND	7
102 2,4-Dinitrotoluene	165		7.400				ND	7
101 Dibenzofuran	168		7.405				ND	7
105 2,3,4,6-Tetrachlorophenol	232		7.528				ND	
107 Diethyl phthalate	149		7.633				ND	7
109 Thionazin	107		7.709				ND	7
108 Fluorene	166		7.727				ND	
110 4-Chlorophenyl phenyl ether	204		7.732				ND	
111 N-Nitro-o-toluidine	152		7.744				ND	
112 4-Nitroaniline	138		7.756				ND	
114 N-Nitrosodiphenylamine	169		7.849				ND	U
$ 116 2,4,6-Tribromophenol	330	7.954	7.960	-0.006	90	456647	37.0	
117 Sulfotepp	97		8.001				ND	7
120 cis-Diallate	86		8.118				ND	7
119 Phorate	75		8.129				ND	7
121 Phenacetin	108		8.147				ND	
122 4-Bromophenyl phenyl ether	248		8.194				ND	7
123 trans-Diallate	86		8.205				ND	7
124 Hexachlorobenzene	284		8.240				ND	
125 Dimethoate	87		8.287				ND	7
127 Pentachlorophenol	266		8.439				ND	7
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	96	550934	5.00	
132 Phenanthrene	178		8.637				ND	7
135 Anthracene	178		8.684				ND	7
143 Isodrin	193		9.618				ND	7
S 68 Diallate	86		9.653				ND	7
144 Fluoranthene	202		9.759				ND	7
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	97	509528	5.00	
147 Pyrene	202		9.975				ND	7
$ 148 p-Terphenyl-d14	244	10.132	10.132	0.000	96	1307308	14.5	
154 Kepone	272		10.646				ND	
156 Benzo[a]anthracene	228		11.224				ND	
159 Chrysene	228		11.265				ND	
160 Bis(2-ethylhexyl) phthalate	149		11.300				ND	7
164 Benzo[b]fluoranthene	252		12.590				ND	7
165 Benzo[k]fluoranthene	252		12.631				ND	7
166 Benzo[a]pyrene	252		13.040				ND	U
* 167 Perylene-d12	264	13.116	13.116	0.000	95	410303	5.00	
171 Indeno[1,2,3-cd]pyrene	276		14.622				ND	7
172 Dibenz(a,h)anthracene	278		14.663				ND	7
173 Benzo[g,h,i]perylene	276		14.973				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags
U - Marked Undetected

Reagents:

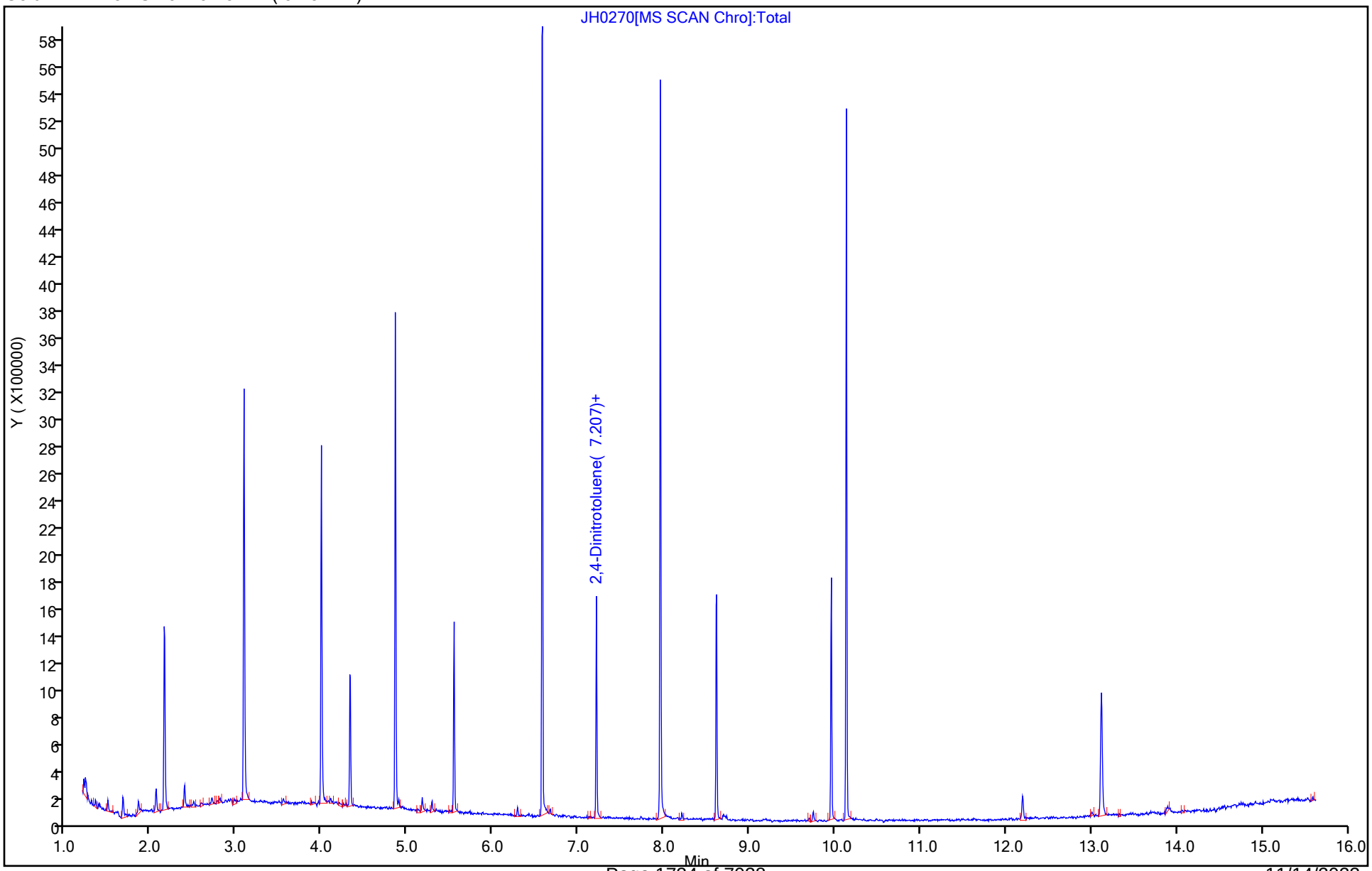
MSS_RV8270_IS_00059 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 03-Aug-2023 08:53:32 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0270.D				
Injection Date:	03-Aug-2023 03:22:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	410-136864-G-2-A	Lab Sample ID:	410-136864-2	Worklist Smp#:	32
Client ID:	16MW8				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0270.D				
Lims ID:	410-136864-G-2-A				
Client ID:	16MW8				
Sample Type:	Client				
Inject. Date:	03-Aug-2023 03:22:30	ALS Bottle#:	20	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	410-136864-G-2-A				
Misc. Info.:	410-0090492-032				
Operator ID:	mem41592	Instrument ID:	HP23264		
Method:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	03-Aug-2023 08:48:58	Calib Date:	02-Aug-2023 21:45:30		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1602				

First Level Reviewer: N5QU Date: 03-Aug-2023 07:54:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 2-Fluorophenol	50.0	17.8	35.69
$ 15 Phenol-d5	50.0	13.1	26.27
$ 39 Nitrobenzene-d5	25.0	18.0	72.14
$ 81 2-Fluorobiphenyl (Surr)	25.0	19.5	78.03
$ 116 2,4,6-Tribromophenol	50.0	37.0	73.91
$ 148 p-Terphenyl-d14	25.0	14.5	57.88

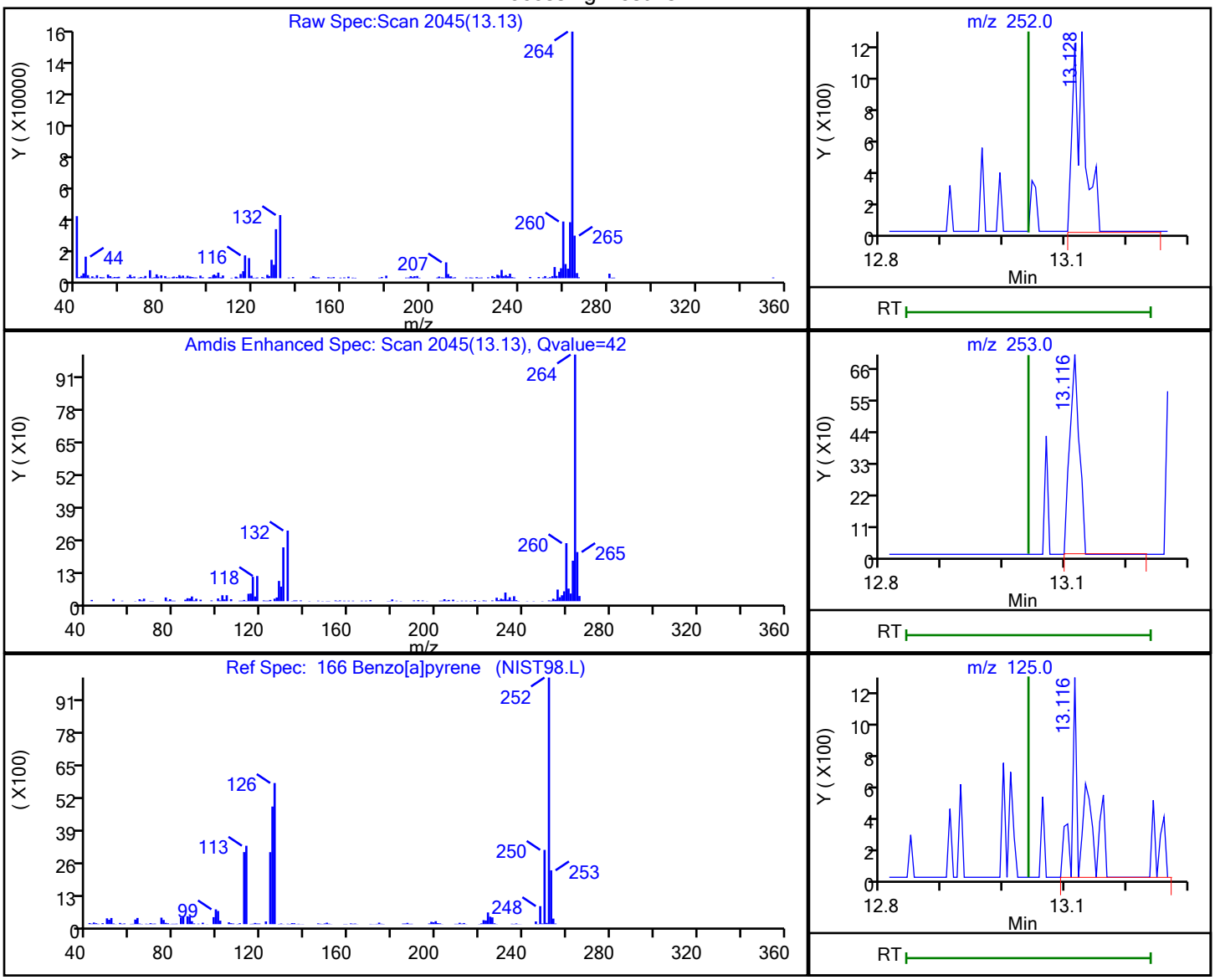
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0270.D				
Injection Date:	03-Aug-2023 03:22:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-2-A	Lab Sample ID:	410-136864-2		
Client ID:	16MW8				
Operator ID:	mem41592	ALS Bottle#:	20	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

166 Benzo[a]pyrene, CAS: 50-32-8

Processing Results



RT	Mass	Response	Amount
13.13	252.00	1688	0.019334
13.12	253.00	755	
13.12	125.00	1969	

Reviewer: N5QU, 03-Aug-2023 07:54:03 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

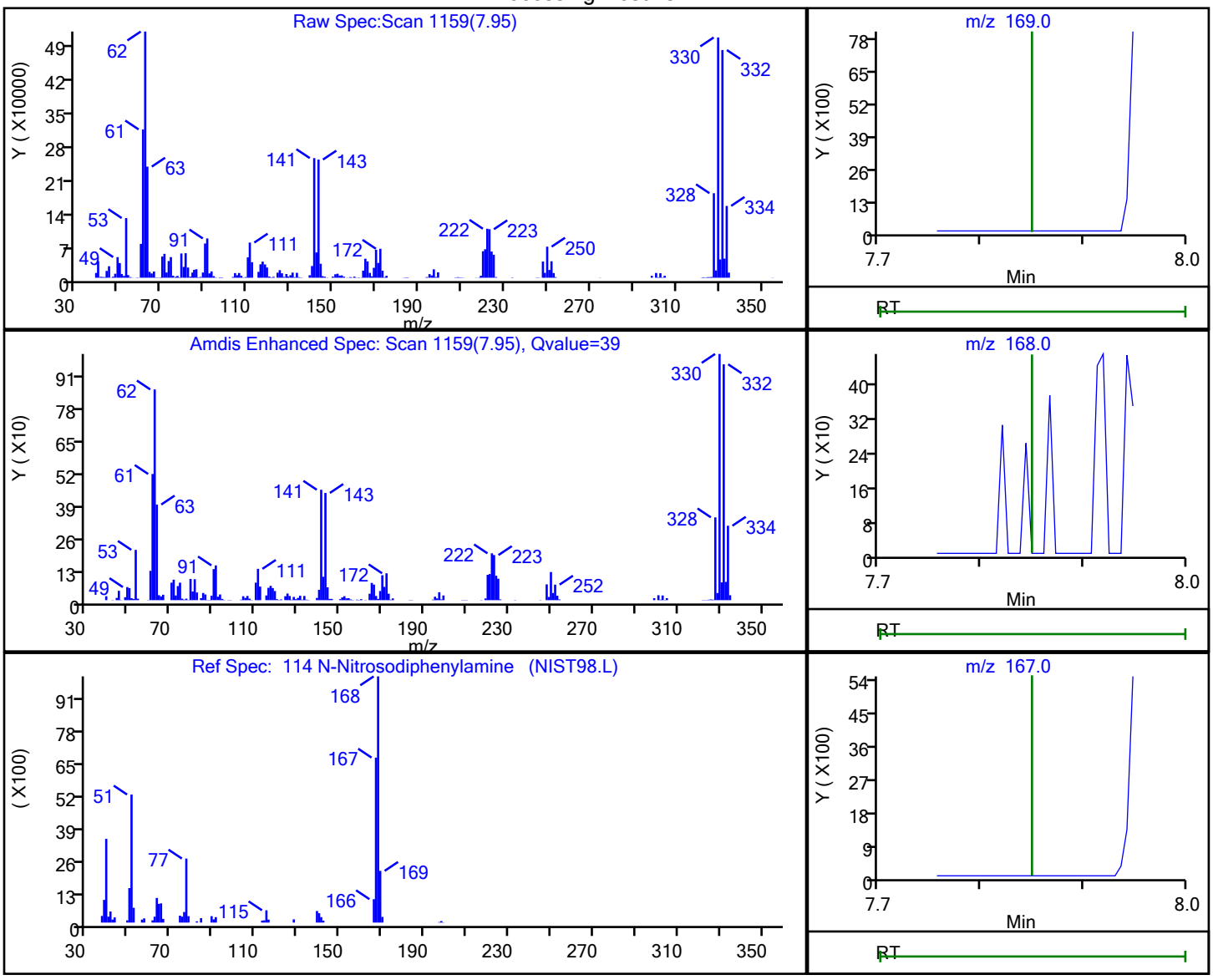
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0270.D				
Injection Date:	03-Aug-2023 03:22:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-2-A	Lab Sample ID:	410-136864-2		
Client ID:	16MW8				
Operator ID:	mem41592	ALS Bottle#:	20	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

114 N-Nitrosodiphenylamine, CAS: 86-30-6

Processing Results



RT	Mass	Response	Amount
7.95	169.00	16687	0.248616
7.98	168.00	603	
7.95	167.00	9337	

Reviewer: N5QU, 03-Aug-2023 07:53:22 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

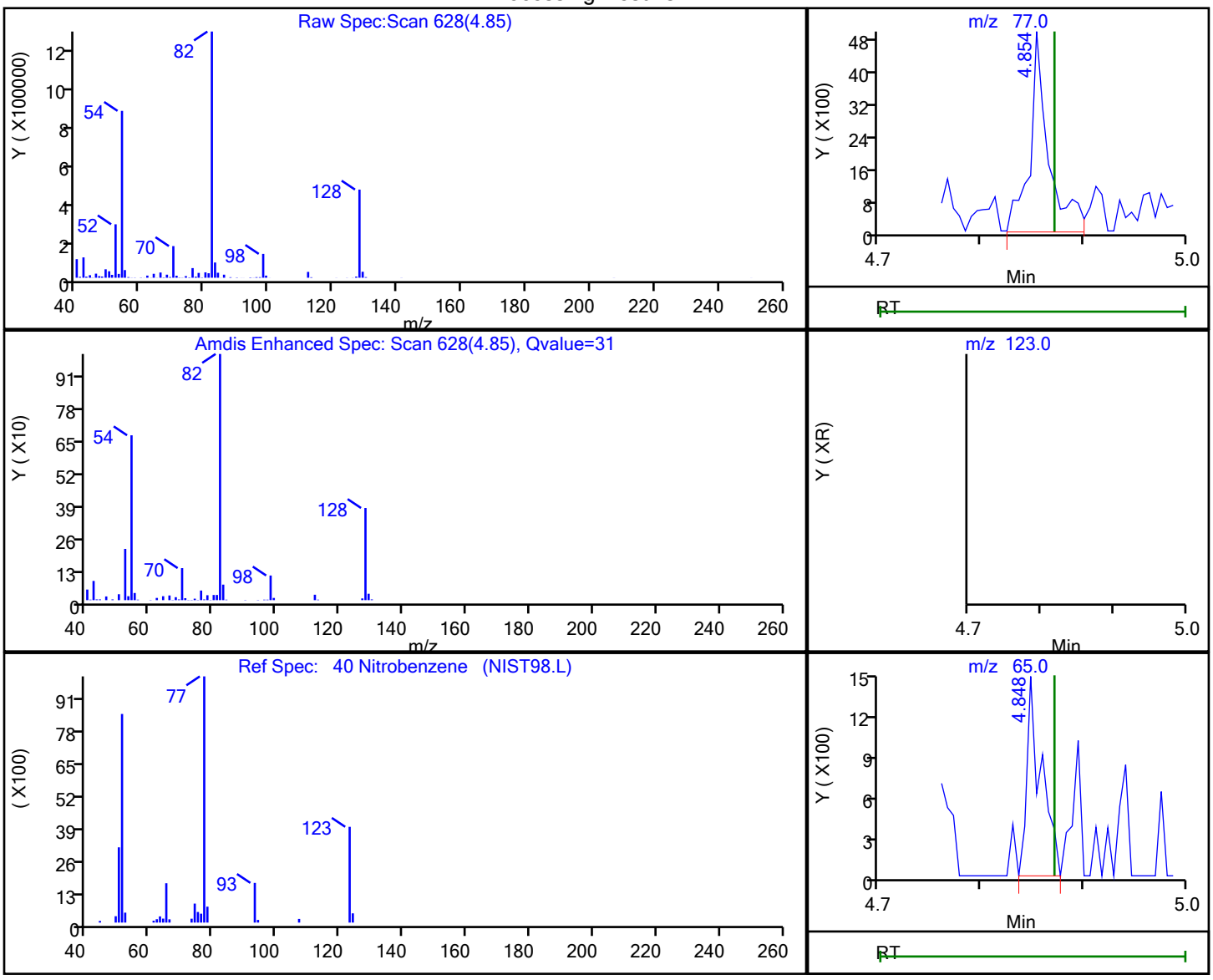
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0270.D				
Injection Date:	03-Aug-2023 03:22:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-2-A	Lab Sample ID:	410-136864-2		
Client ID:	16MW8				
Operator ID:	mem41592	ALS Bottle#:	20	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

40 Nitrobenzene, CAS: 98-95-3

Processing Results



RT	Mass	Response	Amount
4.85	77.00	6155	0.120722
4.87	123.00	0	
4.85	65.00	1391	

Reviewer: N5QU, 03-Aug-2023 07:52:54 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW9
Lab Sample ID: 410-136864-3

Matrix: Water
Lab File ID: DH0363.D

Analysis Method: 8270D
Date Collected: 07/27/2023 11:25

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.6(mL)
Date Analyzed: 08/03/2023 19:35

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		10	2.0
99-65-0	1,3-Dinitrobenzene	ND		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	ND	cn	10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	ND		10	1.8
95-95-4	2,4,5-Trichlorophenol	ND		10	2.0
88-06-2	2,4,6-Trichlorophenol	ND		10	1.8
120-83-2	2,4-Dichlorophenol	ND		10	1.5
121-14-2	2,4-Dinitrotoluene	ND		10	2.1
87-65-0	2,6-Dichlorophenol	ND		10	1.4
606-20-2	2,6-Dinitrotoluene	ND		10	2.1
91-58-7	2-Chloronaphthalene	ND		10	0.50
95-57-8	2-Chlorophenol	ND		10	1.0
91-57-6	2-Methylnaphthalene	ND		10	0.29
95-48-7	o-Cresol	ND		10	0.80
88-74-4	2-Nitroaniline	ND		10	1.0
88-75-5	2-Nitrophenol	ND		10	1.2
101-55-3	4-Bromophenyl-phenylether	ND		10	0.56
59-50-7	4-Chloro-3-methylphenol	ND		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	ND		10	0.60
106-44-5	m & p-Cresol	ND		20	2.4
100-01-6	4-Nitroaniline	ND		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		10	2.0
83-32-9	Acenaphthene	ND		10	0.35
208-96-8	Acenaphthylene	ND		10	0.48
120-12-7	Anthracene	ND		10	0.52
56-55-3	Benzo[a]anthracene	ND		10	0.45
50-32-8	Benzo[a]pyrene	ND		10	1.5
205-99-2	Benzo[b]fluoranthene	ND		10	1.2
191-24-2	Benzo[g,h,i]perylene	ND		10	0.42
207-08-9	Benzo[k]fluoranthene	ND		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW9
Lab Sample ID: 410-136864-3

Matrix: Water
Lab File ID: DH0363.D

Analysis Method: 8270D
Date Collected: 07/27/2023 11:25

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.6(mL)
Date Analyzed: 08/03/2023 19:35

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	ND		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	ND		10	0.38
132-64-9	Dibenzofuran	ND		10	0.60
84-66-2	Diethyl phthalate	ND		10	2.0
60-51-5	Dimethoate	ND	*1	10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	ND		10	0.42
86-73-7	Fluorene	ND		10	0.38
118-74-1	Hexachlorobenzene	ND		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	ND		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND	*- *1 cn	50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	ND	cn	10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58
59-89-2	N-Nitrosomorpholine	ND		10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	ND		10	0.60
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	ND		10	3.0
85-01-8	Phenanthrene	ND		10	0.52
108-95-2	Phenol	ND		10	0.60
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	ND		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16MW9
Lab Sample ID: 410-136864-3

Matrix: Water
Lab File ID: DH0363.D

Analysis Method: 8270D
Date Collected: 07/27/2023 11:25

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.6(mL)
Date Analyzed: 08/03/2023 19:35

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
122-09-8	a,a-Dimethylphenethylamine	ND	*- cn	50	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	71		13-138
321-60-8	2-Fluorobiphenyl (Surr)	62		44-120
367-12-4	2-Fluorophenol (Surr)	33		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	52		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	94		30-125
4165-62-2	Phenol-d5 (Surr)	28		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0363.D
Lims ID: 410-136864-I-3-A
Client ID: 16MW9
Sample Type: Client
Inject. Date: 03-Aug-2023 19:35:59 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 410-136864-I-3-A
Misc. Info.: 410-0090557-014
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 14:21:25 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1655

First Level Reviewer: P7EB Date: 04-Aug-2023 14:09:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
3 N-Nitrosodimethylamine	74		1.728				ND	
$ 10 2-Fluorophenol	112	2.824	2.824	0.000	92	673932	16.7	
11 N-Nitrosodiethylamine	102		3.016				ND	
12 Ethyl methanesulfonate	109		3.314				ND	
$ 16 Phenol-d5	99	3.733	3.728	0.005	95	821644	14.1	
17 Phenol	94		3.739				ND	7
20 2-Chlorophenol	128		3.867				ND	7
* 22 1,4-Dichlorobenzene-d4	152	4.071	4.071	0.000	97	137863	5.00	
28 2-Methylphenol	108		4.328				ND	
29 2,2'-oxybis[1-chloropropane]	45		4.340				ND	
35 N-Nitrosomorpholine	56		4.479				ND	
32 4-Methylphenol	108		4.479				ND	
$ 39 Nitrobenzene-d5	82	4.608	4.602	0.006	89	738068	12.9	
40 Nitrobenzene	77		4.619				ND	7
42 N-Nitrosopiperidine	114		4.765				ND	
44 2-Nitrophenol	139		4.928				ND	
46 o,o',o''-Triethylphosphorothioat	198		5.051				ND	
48 2,4-Dichlorophenol	162		5.167				ND	
* 50 Naphthalene-d8	136	5.295	5.301	-0.006	100	543206	5.00	
37 alpha,alpha-Dimethyl phenethylam	58		5.348				ND	7
54 2,6-Dichlorophenol	162		5.383				ND	
55 Hexachloropropene	213		5.395				ND	
64 4-Chloro-3-methylphenol	107		5.861				ND	
65 Safrole, Total	162		5.902				ND	
66 2-Methylnaphthalene	142		5.977				ND	
69 1,2,4,5-Tetrachlorobenzene	216		6.135				ND	
71 2,4,6-Trichlorophenol	196		6.251				ND	
72 2,4,5-Trichlorophenol	196		6.298				ND	
$ 73 2-Fluorobiphenyl (Surr)	172	6.339	6.333	0.006	100	1300237	15.4	
76 2-Chloronaphthalene	162		6.438				ND	
79 2-Nitroaniline	138		6.543				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
86 1,3-Dinitrobenzene	168		6.753				ND	
87 2,6-Dinitrotoluene	165		6.782				ND	
88 Acenaphthylene	152		6.828				ND	
* 90 Acenaphthene-d10	164	6.968	6.968	0.000	96	296822	5.00	
91 Acenaphthene	153		6.992				ND	
94 Pentachlorobenzene	250		7.120				ND	
95 2,4-Dinitrotoluene	165		7.161				ND	
96 Dibenzofuran	168		7.161				ND	
98 2,3,4,6-Tetrachlorophenol	232		7.283				ND	
100 Diethyl phthalate	149		7.400				ND	7
101 Thionazin	107		7.475				ND	
102 Fluorene	166		7.481				ND	
103 4-Chlorophenyl phenyl ether	204		7.493				ND	
104 N-Nitro-o-toluidine	152		7.505				ND	
105 4-Nitroaniline	138		7.516				ND	
107 N-Nitrosodiphenylamine	169		7.609				ND	7
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	85	362184	35.4	
110 Sulfotepp	97		7.773				ND	7
113 cis-Diallate	86		7.883				ND	7
114 Phorate	75		7.895				ND	
115 Phenacetin	108		7.918				ND	
116 4-Bromophenyl phenyl ether	248		7.953				ND	
117 trans-Diallate	86		7.971				ND	7
118 Hexachlorobenzene	284		8.000				ND	
119 Dimethoate	87		8.052				ND	
121 Pentachlorophenol	266		8.198				ND	
* 126 Phenanthrene-d10	188	8.373	8.373	0.000	97	563227	5.00	
128 Phenanthrene	178		8.390				ND	7
129 Anthracene	178		8.437				ND	7
141 Isodrin	193		9.370				ND	7
143 Fluoranthene	202		9.515				ND	
S 136 Diallate	86		9.653				ND	7
* 149 Pyrene-d10 (IS)	212	9.713	9.719	-0.006	99	556549	5.00	
150 Pyrene	202		9.731				ND	7
$ 152 p-Terphenyl-d14	244	9.906	9.894	0.006	97	2161637	23.5	
153 Kepone	272		10.396				ND	
161 Benzo[a]anthracene	228		10.938				ND	
162 Chrysene	228		10.978				ND	
163 Bis(2-ethylhexyl) phthalate	149		11.037				ND	7
167 Benzo[b]fluoranthene	252		12.232				ND	
168 Benzo[k]fluoranthene	252		12.272				ND	
169 Benzo[a]pyrene	252		12.657				ND	U
* 170 Perylene-d12	264	12.733	12.739	-0.006	98	361201	5.00	
174 Indeno[1,2,3-cd]pyrene	276		14.196				ND	
175 Dibenz(a,h)anthracene	278		14.242				ND	
176 Benzo[g,h,i]perylene	276		14.551				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags
U - Marked Undetected

Reagents:

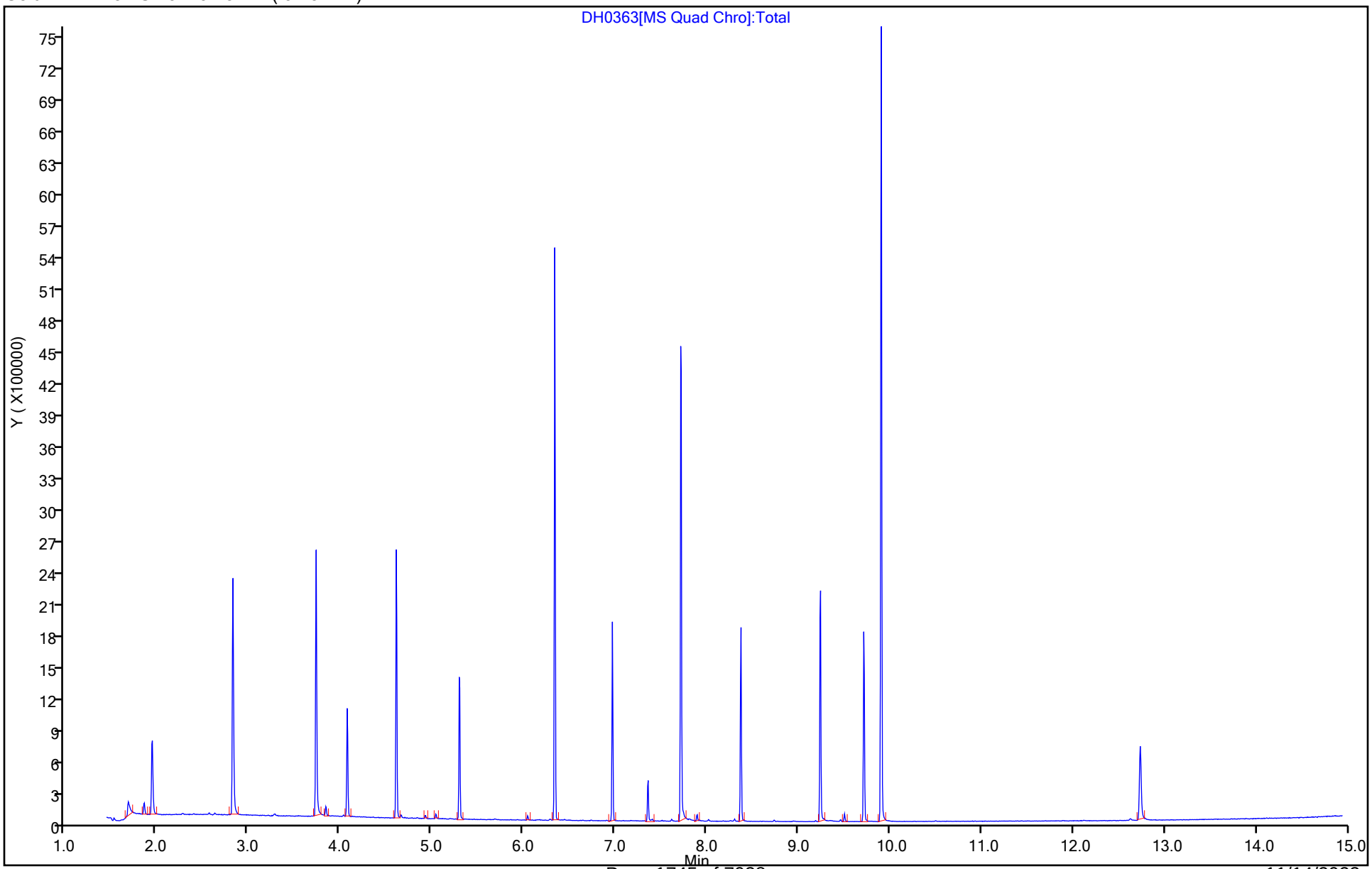
MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 04-Aug-2023 14:22:12 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0363.D				
Injection Date:	03-Aug-2023 19:35:59	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	410-136864-I-3-A	Lab Sample ID:	410-136864-3	Worklist Smp#:	14
Client ID:	16MW9				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0363.D				
Lims ID:	410-136864-I-3-A				
Client ID:	16MW9				
Sample Type:	Client				
Inject. Date:	03-Aug-2023 19:35:59	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	410-136864-I-3-A				
Misc. Info.:	410-0090557-014				
Operator ID:	mem41592	Instrument ID:	HP19760		
Method:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	04-Aug-2023 14:21:25	Calib Date:	03-Aug-2023 15:30:40		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1655				

First Level Reviewer: P7EB Date: 04-Aug-2023 14:09:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	16.7	33.40
$ 16 Phenol-d5	50.0	14.1	28.28
$ 39 Nitrobenzene-d5	25.0	12.9	51.72
$ 73 2-Fluorobiphenyl (Surr)	25.0	15.4	61.60
$ 109 2,4,6-Tribromophenol	50.0	35.4	70.88
$ 152 p-Terphenyl-d14	25.0	23.5	94.08

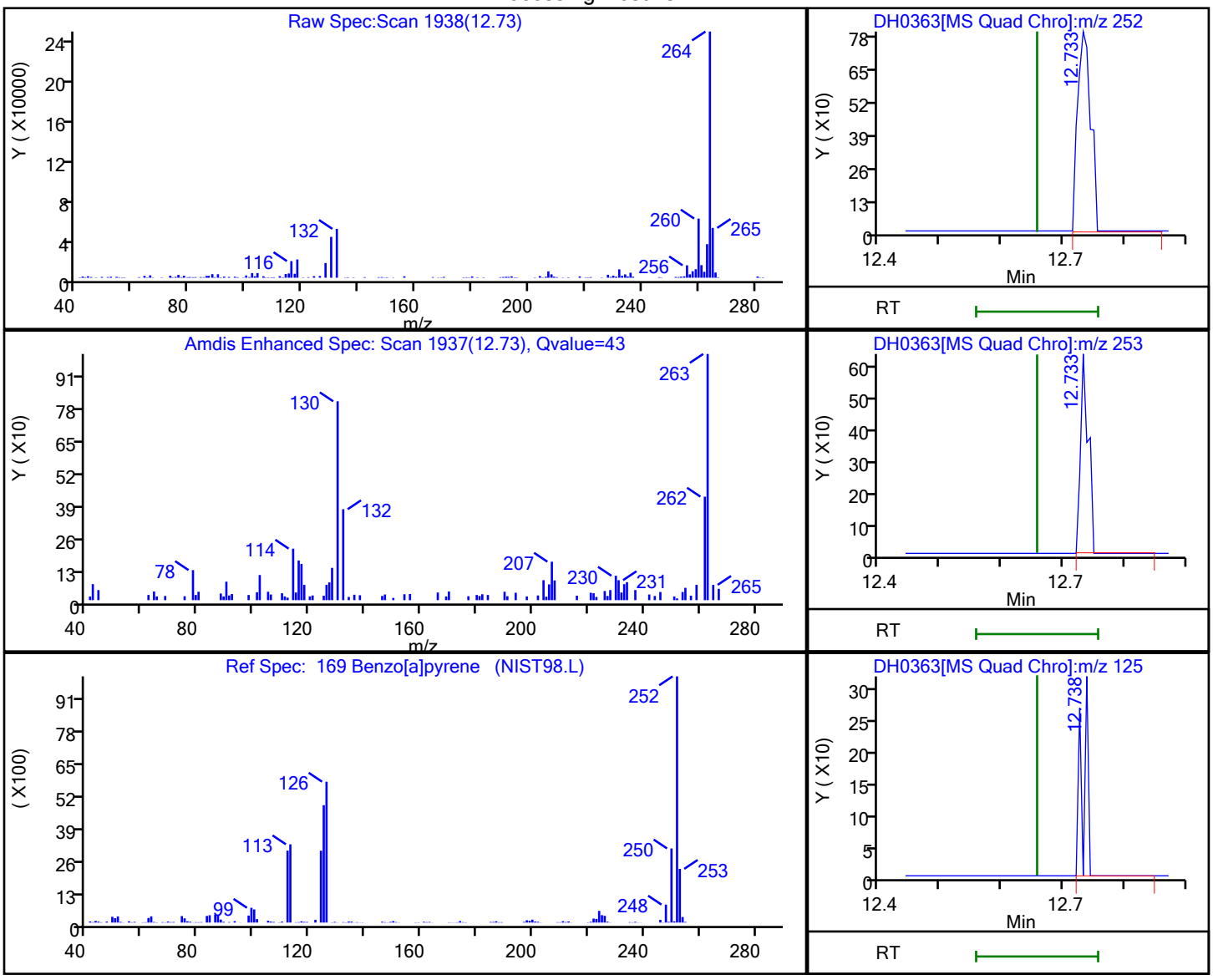
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0363.D				
Injection Date:	03-Aug-2023 19:35:59	Instrument ID:	HP19760		
Lims ID:	410-136864-I-3-A	Lab Sample ID:	410-136864-3		
Client ID:	16MW9				
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

169 Benzo[a]pyrene, CAS: 50-32-8

Processing Results



RT	Mass	Response	Amount
12.73	252.00	1179	0.015156
12.73	253.00	562	
12.74	125.00	203	

Reviewer: P7EB, 04-Aug-2023 14:09:20 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A
Lab Sample ID: 410-136864-4

Matrix: Water
Lab File ID: DH0359.D

Analysis Method: 8270D
Date Collected: 07/27/2023 09:55

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.2(mL)
Date Analyzed: 08/03/2023 17:41

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		10	2.0
99-65-0	1,3-Dinitrobenzene	ND		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	ND	cn	10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	ND		10	1.8
95-95-4	2,4,5-Trichlorophenol	ND		10	2.0
88-06-2	2,4,6-Trichlorophenol	ND	F1	10	1.8
120-83-2	2,4-Dichlorophenol	ND	F1	10	1.5
121-14-2	2,4-Dinitrotoluene	ND		10	2.1
87-65-0	2,6-Dichlorophenol	ND	F1	10	1.4
606-20-2	2,6-Dinitrotoluene	ND		10	2.1
91-58-7	2-Chloronaphthalene	ND		10	0.50
95-57-8	2-Chlorophenol	ND	F1	10	1.0
91-57-6	2-Methylnaphthalene	ND		10	0.29
95-48-7	o-Cresol	ND		10	0.81
88-74-4	2-Nitroaniline	ND		10	1.0
88-75-5	2-Nitrophenol	ND		10	1.2
101-55-3	4-Bromophenyl-phenylether	ND		10	0.56
59-50-7	4-Chloro-3-methylphenol	ND		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	ND		10	0.60
106-44-5	m & p-Cresol	ND		20	2.4
100-01-6	4-Nitroaniline	ND		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		10	2.0
83-32-9	Acenaphthene	ND		10	0.35
208-96-8	Acenaphthylene	ND		10	0.48
120-12-7	Anthracene	ND		10	0.52
56-55-3	Benzo[a]anthracene	ND		10	0.45
50-32-8	Benzo[a]pyrene	ND		10	1.5
205-99-2	Benzo[b]fluoranthene	ND		10	1.2
191-24-2	Benzo[g,h,i]perylene	ND		10	0.42
207-08-9	Benzo[k]fluoranthene	ND		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A
Lab Sample ID: 410-136864-4

Matrix: Water
Lab File ID: DH0359.D

Analysis Method: 8270D
Date Collected: 07/27/2023 09:55

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.2(mL)
Date Analyzed: 08/03/2023 17:41

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	ND		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	ND		10	0.38
132-64-9	Dibenzofuran	ND		10	0.60
84-66-2	Diethyl phthalate	ND		10	2.0
60-51-5	Dimethoate	ND	*1	10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	ND		10	0.42
86-73-7	Fluorene	ND		10	0.38
118-74-1	Hexachlorobenzene	ND		10	0.71
193-39-5	Indeno[1,2,3-cd]pyrene	ND		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND	*- *1 cn	50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	ND	cn	10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58
59-89-2	N-Nitrosomorpholine	ND		10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	ND		10	0.60
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	ND		10	3.0
85-01-8	Phenanthrene	ND		10	0.52
108-95-2	Phenol	ND		10	0.60
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	ND		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A
Lab Sample ID: 410-136864-4

Matrix: Water
Lab File ID: DH0359.D

Analysis Method: 8270D
Date Collected: 07/27/2023 09:55

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.2(mL)
Date Analyzed: 08/03/2023 17:41

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
122-09-8	a,a-Dimethylphenethylamine	ND	*- cn	50	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	41		13-138
321-60-8	2-Fluorobiphenyl (Surr)	83		44-120
367-12-4	2-Fluorophenol (Surr)	14		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	74		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	93		30-125
4165-62-2	Phenol-d5 (Surr)	22		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0359.D
Lims ID: 410-136864-G-4-C
Client ID: 16WC1A
Sample Type: Client
Inject. Date: 03-Aug-2023 17:41:40 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 410-136864-G-4-C
Misc. Info.: 410-0090557-010
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 14:21:25 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1655

First Level Reviewer: P7EB Date: 04-Aug-2023 14:06:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
3 N-Nitrosodimethylamine	74		1.728				ND	
$ 10 2-Fluorophenol	112	2.824	2.824	0.000	92	264279	7.11	
11 N-Nitrosodiethylamine	102		3.016				ND	
12 Ethyl methanesulfonate	109		3.314				ND	
$ 16 Phenol-d5	99	3.733	3.728	0.005	95	600417	11.2	
17 Phenol	94		3.739				ND	7
20 2-Chlorophenol	128		3.867				ND	U
* 22 1,4-Dichlorobenzene-d4	152	4.071	4.071	0.000	97	126921	5.00	
28 2-Methylphenol	108		4.328				ND	
29 2,2'-oxybis[1-chloropropane]	45		4.340				ND	7
35 N-Nitrosomorpholine	56		4.479				ND	
32 4-Methylphenol	108		4.479				ND	
$ 39 Nitrobenzene-d5	82	4.608	4.602	0.006	88	969743	18.5	
40 Nitrobenzene	77		4.619				ND	U
42 N-Nitrosopiperidine	114		4.765				ND	
44 2-Nitrophenol	139		4.928				ND	
46 o,o',o''-Triethylphosphorothioat	198		5.051				ND	
48 2,4-Dichlorophenol	162		5.167				ND	
* 50 Naphthalene-d8	136	5.295	5.301	-0.006	100	498796	5.00	
37 alpha,alpha-Dimethyl phenethylam	58		5.348				ND	
54 2,6-Dichlorophenol	162		5.383				ND	
55 Hexachloropropene	213		5.395				ND	
64 4-Chloro-3-methylphenol	107		5.861				ND	
65 Safrole, Total	162		5.902				ND	
66 2-Methylnaphthalene	142		5.977				ND	
69 1,2,4,5-Tetrachlorobenzene	216		6.135				ND	
71 2,4,6-Trichlorophenol	196		6.251				ND	
72 2,4,5-Trichlorophenol	196		6.298				ND	
$ 73 2-Fluorobiphenyl (Surr)	172	6.339	6.333	0.006	100	1609127	20.9	
76 2-Chloronaphthalene	162		6.438				ND	
79 2-Nitroaniline	138		6.543				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
86 1,3-Dinitrobenzene	168		6.753				ND	
87 2,6-Dinitrotoluene	165		6.782				ND	
88 Acenaphthylene	152		6.828				ND	
* 90 Acenaphthene-d10	164	6.968	6.968	0.000	96	271289	5.00	
91 Acenaphthene	153		6.992				ND	
94 Pentachlorobenzene	250		7.120				ND	
95 2,4-Dinitrotoluene	165		7.161				ND	
96 Dibenzofuran	168		7.161				ND	
98 2,3,4,6-Tetrachlorophenol	232		7.283				ND	
100 Diethyl phthalate	149		7.400				ND	7
101 Thionazin	107		7.475				ND	7
102 Fluorene	166		7.481				ND	
103 4-Chlorophenyl phenyl ether	204		7.493				ND	
104 N-Nitro-o-toluidine	152		7.505				ND	
105 4-Nitroaniline	138		7.516				ND	
107 N-Nitrosodiphenylamine	169		7.609				ND	7
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	84	190286	20.4	
110 Sulfotepp	97		7.773				ND	7
113 cis-Diallate	86		7.883				ND	7
114 Phorate	75		7.895				ND	7
115 Phenacetin	108		7.918				ND	7
116 4-Bromophenyl phenyl ether	248		7.953				ND	
117 trans-Diallate	86		7.971				ND	7
118 Hexachlorobenzene	284		8.000				ND	
119 Dimethoate	87		8.052				ND	7
121 Pentachlorophenol	266		8.198				ND	7
* 126 Phenanthrene-d10	188	8.373	8.373	0.000	97	520861	5.00	
128 Phenanthrene	178		8.390				ND	7
129 Anthracene	178		8.437				ND	7
141 Isodrin	193		9.370				ND	7
143 Fluoranthene	202		9.515				ND	
S 136 Diallate	86		9.653				ND	7
* 149 Pyrene-d10 (IS)	212	9.714	9.719	-0.005	99	515904	5.00	
150 Pyrene	202		9.731				ND	7
$ 152 p-Terphenyl-d14	244	9.906	9.894	0.006	97	1988782	23.3	
153 Kepone	272		10.396				ND	
161 Benzo[a]anthracene	228		10.938				ND	
162 Chrysene	228		10.978				ND	
163 Bis(2-ethylhexyl) phthalate	149		11.037				ND	7
167 Benzo[b]fluoranthene	252		12.232				ND	
168 Benzo[k]fluoranthene	252		12.272				ND	
169 Benzo[a]pyrene	252		12.657				ND	U
* 170 Perylene-d12	264	12.733	12.739	-0.006	97	318764	5.00	
174 Indeno[1,2,3-cd]pyrene	276		14.196				ND	
175 Dibenz(a,h)anthracene	278		14.242				ND	
176 Benzo[g,h,i]perylene	276		14.551				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags
U - Marked Undetected

Reagents:

MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

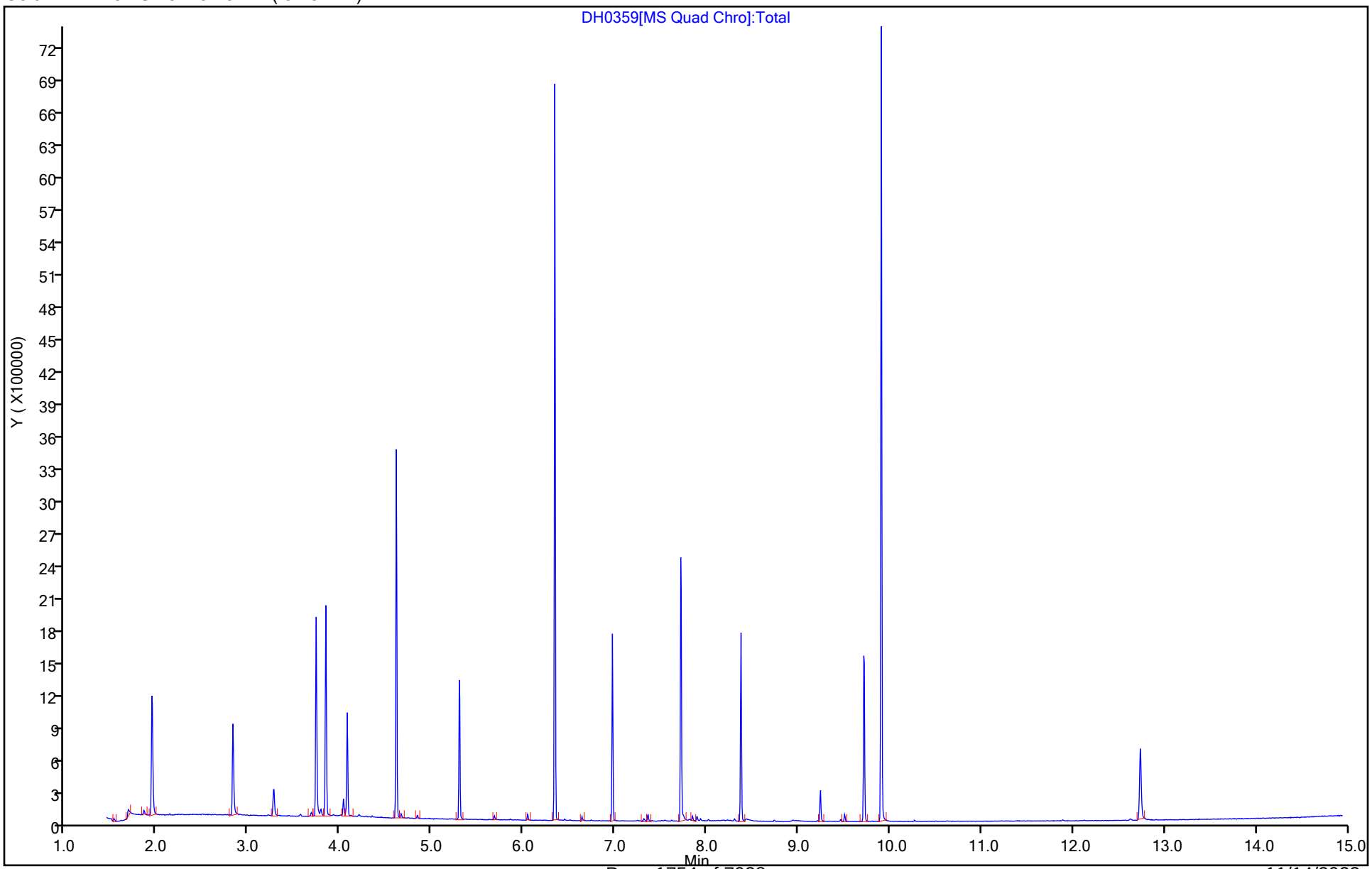
Report Date: 04-Aug-2023 14:21:58 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0359.D

Injection Date:	03-Aug-2023 17:41:40	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	410-136864-G-4-C	Lab Sample ID:	410-136864-4	Worklist Smp#:	10
Client ID:	16WC1A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0359.D				
Lims ID:	410-136864-G-4-C				
Client ID:	16WC1A				
Sample Type:	Client				
Inject. Date:	03-Aug-2023 17:41:40	ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	410-136864-G-4-C				
Misc. Info.:	410-0090557-010				
Operator ID:	mem41592	Instrument ID:	HP19760		
Method:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	04-Aug-2023 14:21:25	Calib Date:	03-Aug-2023 15:30:40		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1655				

First Level Reviewer: P7EB Date: 04-Aug-2023 14:06:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	7.11	14.23
$ 16 Phenol-d5	50.0	11.2	22.45
$ 39 Nitrobenzene-d5	25.0	18.5	74.01
$ 73 2-Fluorobiphenyl (Surr)	25.0	20.9	83.40
$ 109 2,4,6-Tribromophenol	50.0	20.4	40.74
$ 152 p-Terphenyl-d14	25.0	23.3	93.37

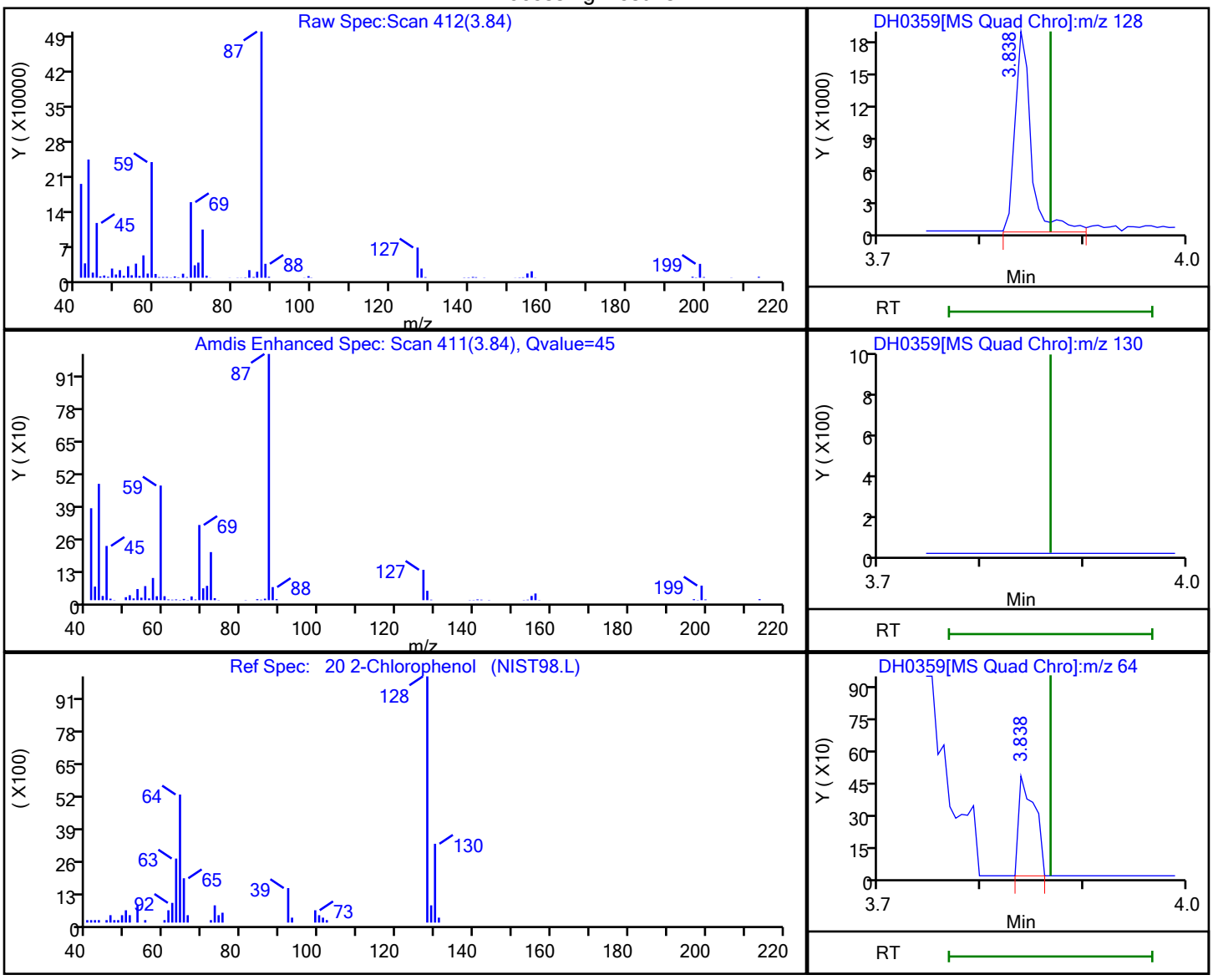
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0359.D				
Injection Date:	03-Aug-2023 17:41:40	Instrument ID:	HP19760		
Lims ID:	410-136864-G-4-C	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

20 2-Chlorophenol, CAS: 95-57-8

Processing Results



RT	Mass	Response	Amount
3.84	128.00	19937	0.597246
3.87	130.00	0	
3.84	64.00	515	

Reviewer: P7EB, 04-Aug-2023 14:05:52 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

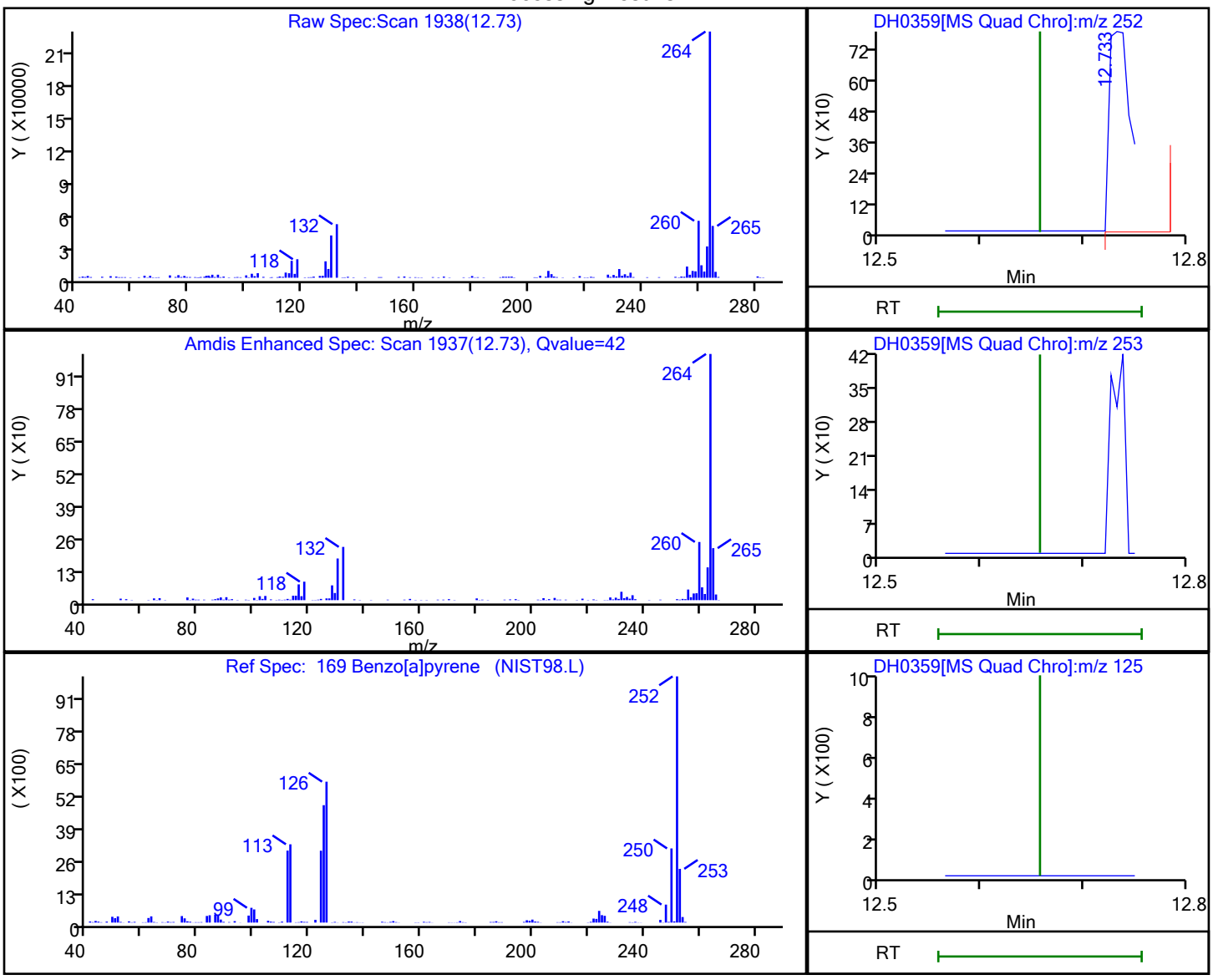
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0359.D				
Injection Date:	03-Aug-2023 17:41:40	Instrument ID:	HP19760		
Lims ID:	410-136864-G-4-C	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

169 Benzo[a]pyrene, CAS: 50-32-8

Processing Results



RT	Mass	Response	Amount
12.73	252.00	1294	0.018849
12.74	253.00	381	
12.66	125.00	0	

Reviewer: P7EB, 04-Aug-2023 14:06:29 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

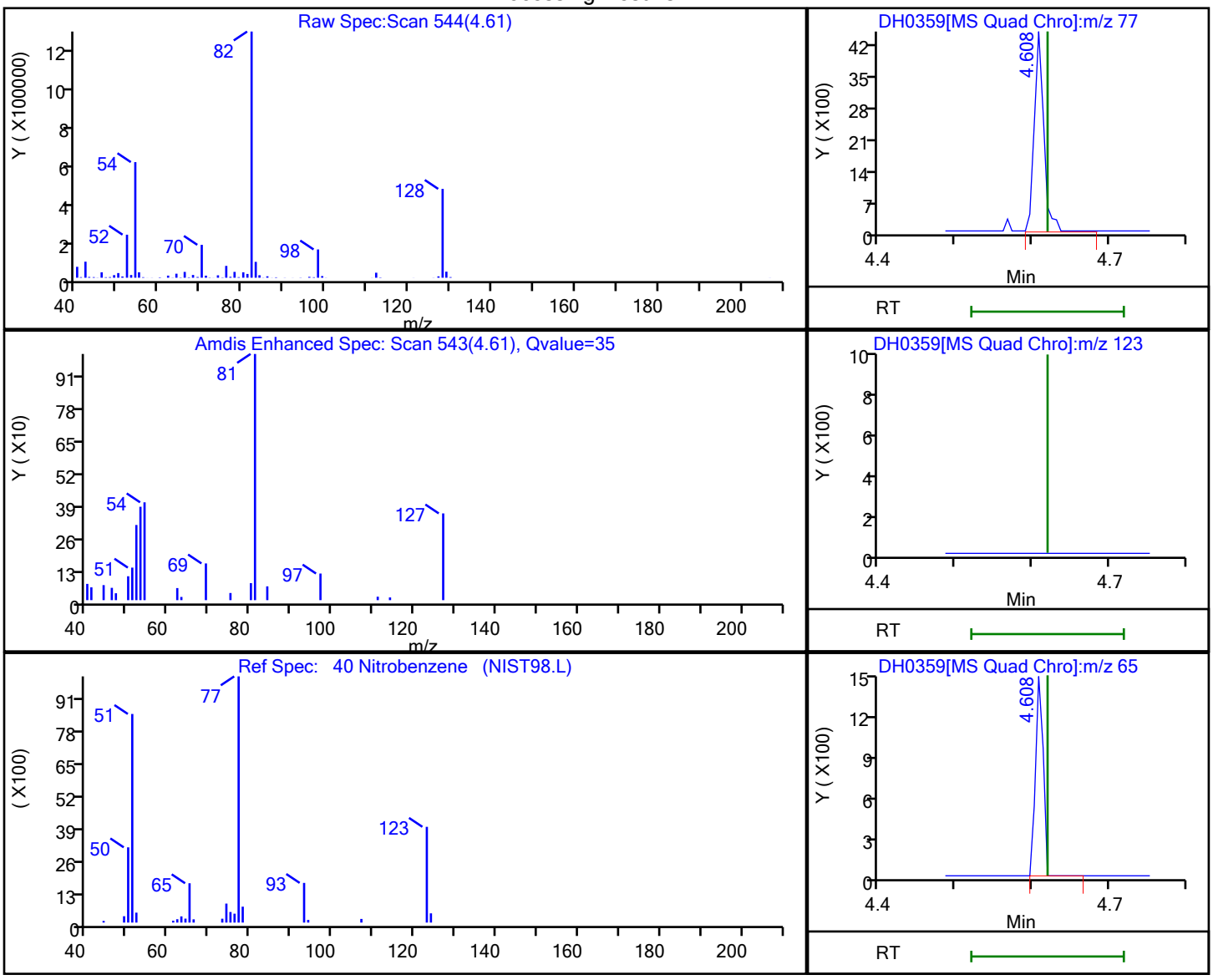
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0359.D				
Injection Date:	03-Aug-2023 17:41:40	Instrument ID:	HP19760		
Lims ID:	410-136864-G-4-C	Lab Sample ID:	410-136864-4		
Client ID:	16WC1A				
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

40 Nitrobenzene, CAS: 98-95-3

Processing Results



RT	Mass	Response	Amount
4.61	77.00	3831	0.071697
4.62	123.00	0	
4.61	65.00	1013	

Reviewer: P7EB, 04-Aug-2023 14:06:13 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WDUP
Lab Sample ID: 410-136864-5

Matrix: Water
Lab File ID: DH0364.D

Analysis Method: 8270D
Date Collected: 07/27/2023 10:20

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 247.8(mL)
Date Analyzed: 08/03/2023 19:55

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		10	2.0
99-65-0	1,3-Dinitrobenzene	ND		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	ND	cn	10	0.61
58-90-2	2,3,4,6-Tetrachlorophenol	ND		10	1.8
95-95-4	2,4,5-Trichlorophenol	ND		10	2.0
88-06-2	2,4,6-Trichlorophenol	ND		10	1.8
120-83-2	2,4-Dichlorophenol	ND		10	1.5
121-14-2	2,4-Dinitrotoluene	ND		10	2.1
87-65-0	2,6-Dichlorophenol	ND		10	1.4
606-20-2	2,6-Dinitrotoluene	ND		10	2.1
91-58-7	2-Chloronaphthalene	ND		10	0.50
95-57-8	2-Chlorophenol	ND		10	1.0
91-57-6	2-Methylnaphthalene	ND		10	0.29
95-48-7	o-Cresol	ND		10	0.81
88-74-4	2-Nitroaniline	ND		10	1.0
88-75-5	2-Nitrophenol	ND		10	1.2
101-55-3	4-Bromophenyl-phenylether	ND		10	0.56
59-50-7	4-Chloro-3-methylphenol	ND		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	ND		10	0.61
106-44-5	m & p-Cresol	ND		20	2.4
100-01-6	4-Nitroaniline	ND		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		10	2.0
83-32-9	Acenaphthene	ND		10	0.35
208-96-8	Acenaphthylene	ND		10	0.48
120-12-7	Anthracene	ND		10	0.52
56-55-3	Benzo[a]anthracene	ND		10	0.45
50-32-8	Benzo[a]pyrene	ND		10	1.5
205-99-2	Benzo[b]fluoranthene	ND		10	1.2
191-24-2	Benzo[g,h,i]perylene	ND		10	0.42
207-08-9	Benzo[k]fluoranthene	ND		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WDUP
Lab Sample ID: 410-136864-5

Matrix: Water
Lab File ID: DH0364.D

Analysis Method: 8270D
Date Collected: 07/27/2023 10:20

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 247.8(mL)
Date Analyzed: 08/03/2023 19:55

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	ND		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	ND		10	0.38
132-64-9	Dibenzofuran	ND		10	0.61
84-66-2	Diethyl phthalate	ND		10	2.0
60-51-5	Dimethoate	ND	*1	10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	ND		10	0.42
86-73-7	Fluorene	ND		10	0.38
118-74-1	Hexachlorobenzene	ND		10	0.71
193-39-5	Indeno[1,2,3-cd]pyrene	ND		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND	*- *1 cn	50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	ND	cn	10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.59
59-89-2	N-Nitrosomorpholine	ND		10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	ND		10	0.61
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	ND		10	3.0
85-01-8	Phenanthrene	ND		10	0.52
108-95-2	Phenol	ND		10	0.61
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	ND		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WDUP
Lab Sample ID: 410-136864-5

Matrix: Water
Lab File ID: DH0364.D

Analysis Method: 8270D
Date Collected: 07/27/2023 10:20

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 247.8(mL)
Date Analyzed: 08/03/2023 19:55

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
122-09-8	a,a-Dimethylphenethylamine	ND	*- cn	50	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	29		13-138
321-60-8	2-Fluorobiphenyl (Surr)	72		44-120
367-12-4	2-Fluorophenol (Surr)	11		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	61		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	72		30-125
4165-62-2	Phenol-d5 (Surr)	16		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0364.D
Lims ID: 410-136864-G-5-A
Client ID: 16WDUP
Sample Type: Client
Inject. Date: 03-Aug-2023 19:55:55 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 410-136864-G-5-A
Misc. Info.: 410-0090557-015
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 14:21:25 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1655

First Level Reviewer: P7EB Date: 04-Aug-2023 14:10:02

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
	3 N-Nitrosodimethylamine	74		1.728				ND	
$	10 2-Fluorophenol	112	2.824	2.824	0.000	92	200041	5.27	
	11 N-Nitrosodiethylamine	102		3.016				ND	
	12 Ethyl methanesulfonate	109		3.314				ND	
$	16 Phenol-d5	99	3.733	3.728	0.005	95	428361	7.83	
	17 Phenol	94		3.739				ND	7
	20 2-Chlorophenol	128		3.867				ND	U
*	22 1,4-Dichlorobenzene-d4	152	4.071	4.071	0.000	97	129727	5.00	
	28 2-Methylphenol	108		4.328				ND	
	29 2,2'-oxybis[1-chloropropane]	45		4.340				ND	7
	35 N-Nitrosomorpholine	56		4.479				ND	
	32 4-Methylphenol	108		4.479				ND	
$	39 Nitrobenzene-d5	82	4.608	4.602	0.006	89	834912	15.3	
	40 Nitrobenzene	77		4.619				ND	7
	42 N-Nitrosopiperidine	114		4.765				ND	
	44 2-Nitrophenol	139		4.928				ND	
	46 o,o',o''-Triethylphosphorothioat	198		5.051				ND	
	48 2,4-Dichlorophenol	162		5.167				ND	
*	50 Naphthalene-d8	136	5.301	5.301	0.000	100	518305	5.00	
	37 alpha,alpha-Dimethyl phenethylam	58		5.348				ND	7
	54 2,6-Dichlorophenol	162		5.383				ND	
	55 Hexachloropropene	213		5.395				ND	
	64 4-Chloro-3-methylphenol	107		5.861				ND	
	65 Safrole, Total	162		5.902				ND	
	66 2-Methylnaphthalene	142		5.977				ND	
	69 1,2,4,5-Tetrachlorobenzene	216		6.135				ND	
	71 2,4,6-Trichlorophenol	196		6.251				ND	
	72 2,4,5-Trichlorophenol	196		6.298				ND	
$	73 2-Fluorobiphenyl (Surr)	172	6.339	6.333	0.006	100	1443763	18.1	
	76 2-Chloronaphthalene	162		6.438				ND	
	79 2-Nitroaniline	138		6.543				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
86 1,3-Dinitrobenzene	168		6.753				ND	
87 2,6-Dinitrotoluene	165		6.782				ND	
88 Acenaphthylene	152		6.828				ND	
* 90 Acenaphthene-d10	164	6.968	6.968	0.000	96	280780	5.00	
91 Acenaphthene	153		6.992				ND	
94 Pentachlorobenzene	250		7.120				ND	
95 2,4-Dinitrotoluene	165		7.161				ND	
96 Dibenzofuran	168		7.161				ND	
98 2,3,4,6-Tetrachlorophenol	232		7.283				ND	
100 Diethyl phthalate	149		7.400				ND	7
101 Thionazin	107		7.475				ND	
102 Fluorene	166		7.481				ND	
103 4-Chlorophenyl phenyl ether	204		7.493				ND	
104 N-Nitro-o-toluidine	152		7.505				ND	
105 4-Nitroaniline	138		7.516				ND	
107 N-Nitrosodiphenylamine	169		7.609				ND	7
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	84	139160	14.4	
110 Sulfotepp	97		7.773				ND	7
113 cis-Diallate	86		7.883				ND	7
114 Phorate	75		7.895				ND	7
115 Phenacetin	108		7.918				ND	7
116 4-Bromophenyl phenyl ether	248		7.953				ND	
117 trans-Diallate	86		7.971				ND	7
118 Hexachlorobenzene	284		8.000				ND	
119 Dimethoate	87		8.052				ND	
121 Pentachlorophenol	266		8.198				ND	7
* 126 Phenanthrene-d10	188	8.373	8.373	0.000	97	538120	5.00	
128 Phenanthrene	178		8.390				ND	7
129 Anthracene	178		8.437				ND	7
141 Isodrin	193		9.370				ND	7
143 Fluoranthene	202		9.515				ND	
S 136 Diallate	86		9.653				ND	7
* 149 Pyrene-d10 (IS)	212	9.713	9.719	-0.006	99	507422	5.00	
150 Pyrene	202		9.731				ND	7
$ 152 p-Terphenyl-d14	244	9.906	9.894	0.006	97	1516602	18.1	
153 Kepone	272		10.396				ND	
161 Benzo[a]anthracene	228		10.938				ND	
162 Chrysene	228		10.978				ND	
163 Bis(2-ethylhexyl) phthalate	149		11.037				ND	
167 Benzo[b]fluoranthene	252		12.232				ND	
168 Benzo[k]fluoranthene	252		12.272				ND	
169 Benzo[a]pyrene	252		12.657				ND	U
* 170 Perylene-d12	264	12.733	12.739	-0.006	97	270942	5.00	
174 Indeno[1,2,3-cd]pyrene	276		14.196				ND	
175 Dibenz(a,h)anthracene	278		14.242				ND	
176 Benzo[g,h,i]perylene	276		14.551				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags
U - Marked Undetected

Reagents:

MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

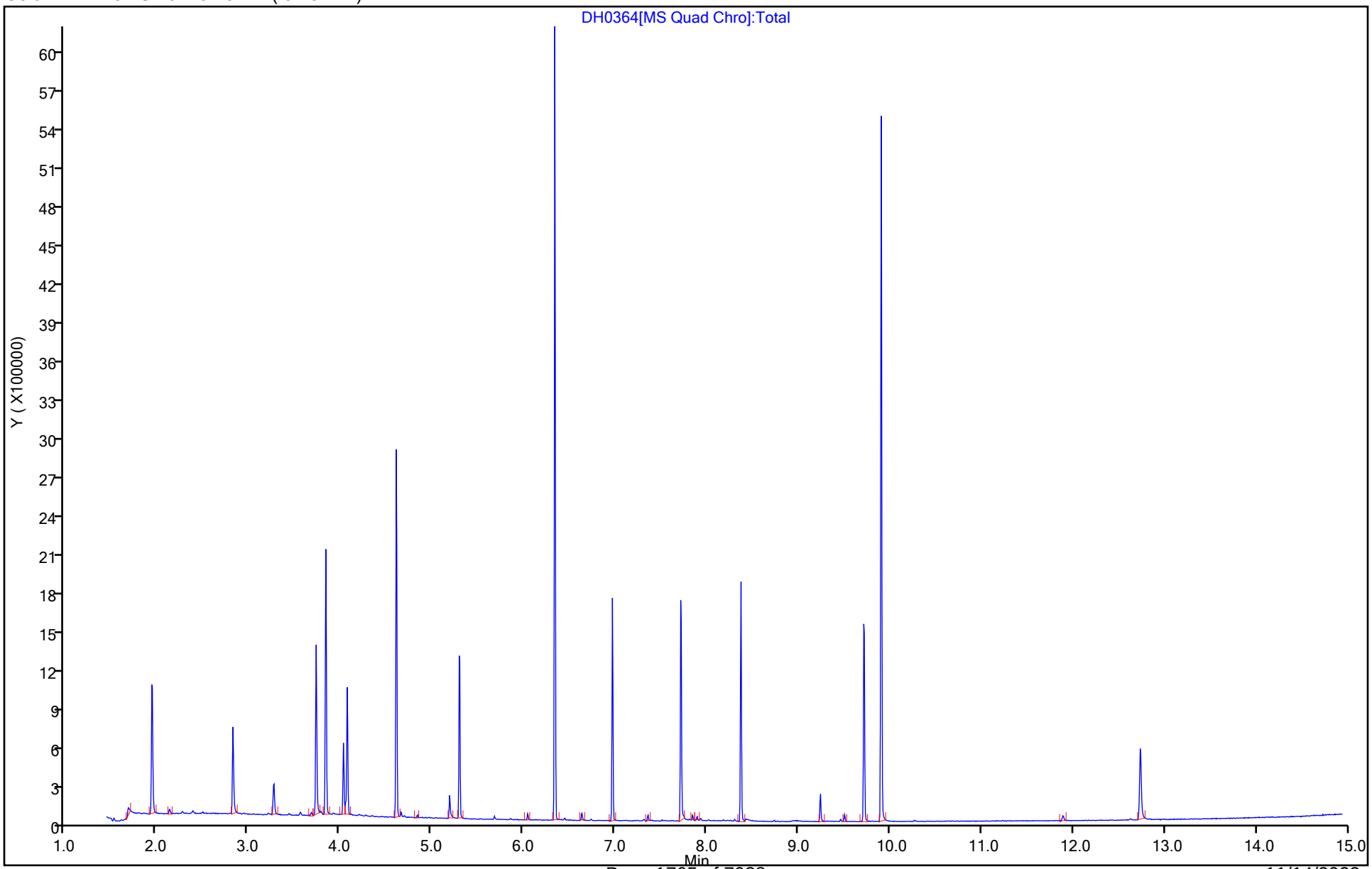
Report Date: 04-Aug-2023 14:22:15 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0364.D

Injection Date:	03-Aug-2023 19:55:55	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	410-136864-G-5-A	Lab Sample ID:	410-136864-5	Worklist Smp#:	15
Client ID:	16WDUP				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0364.D				
Lims ID:	410-136864-G-5-A				
Client ID:	16WDUP				
Sample Type:	Client				
Inject. Date:	03-Aug-2023 19:55:55	ALS Bottle#:	0	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	410-136864-G-5-A				
Misc. Info.:	410-0090557-015				
Operator ID:	mem41592	Instrument ID:	HP19760		
Method:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	04-Aug-2023 14:21:25	Calib Date:	03-Aug-2023 15:30:40		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1655				

First Level Reviewer: P7EB Date: 04-Aug-2023 14:10:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	5.27	10.54
$ 16 Phenol-d5	50.0	7.83	15.67
$ 39 Nitrobenzene-d5	25.0	15.3	61.32
$ 73 2-Fluorobiphenyl (Surr)	25.0	18.1	72.30
$ 109 2,4,6-Tribromophenol	50.0	14.4	28.79
$ 152 p-Terphenyl-d14	25.0	18.1	72.39

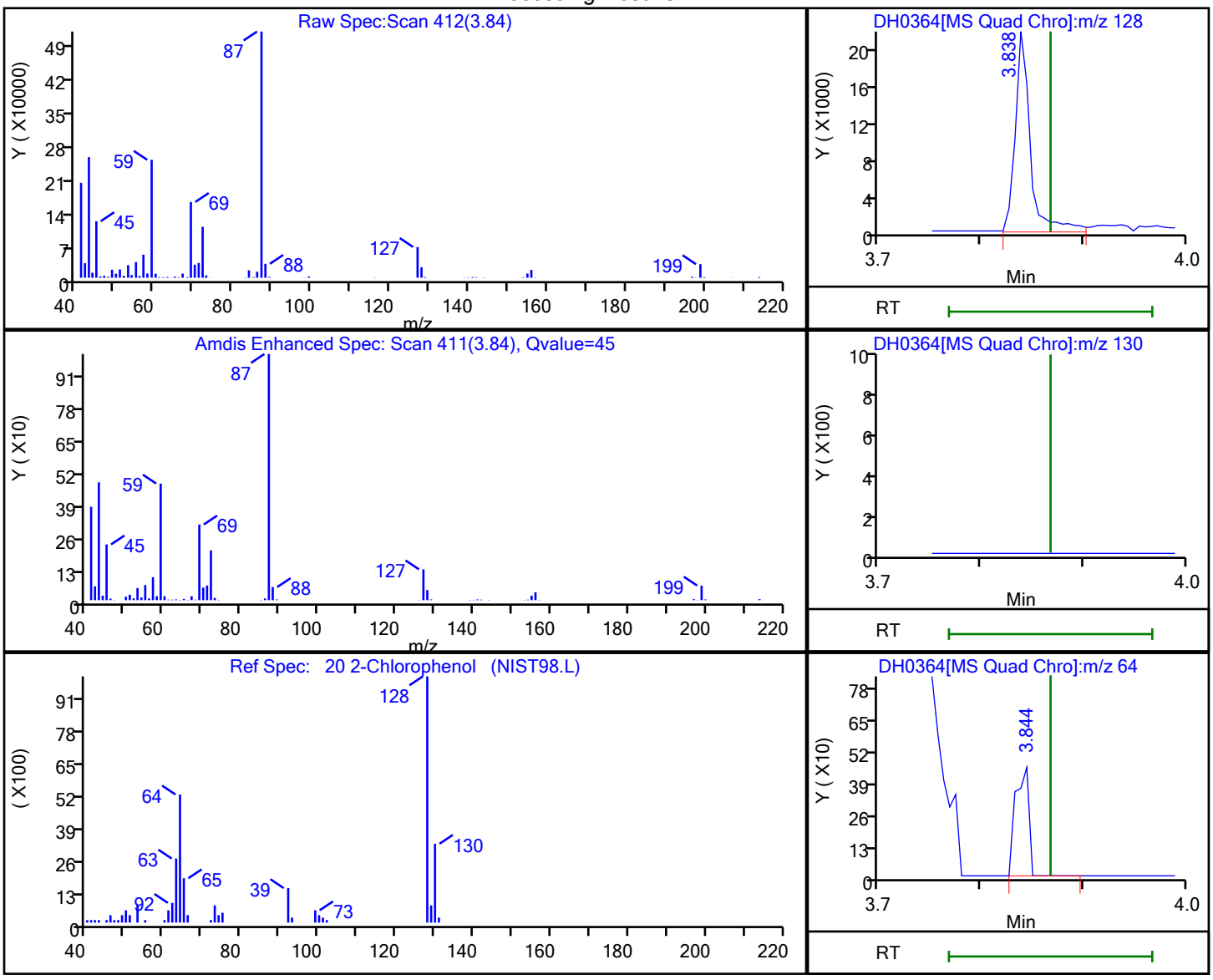
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0364.D				
Injection Date:	03-Aug-2023 19:55:55	Instrument ID:	HP19760		
Lims ID:	410-136864-G-5-A	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

20 2-Chlorophenol, CAS: 95-57-8

Processing Results



RT	Mass	Response	Amount
3.84	128.00	21899	0.641832
3.87	130.00	0	
3.84	64.00	405	

Reviewer: P7EB, 04-Aug-2023 14:09:35 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

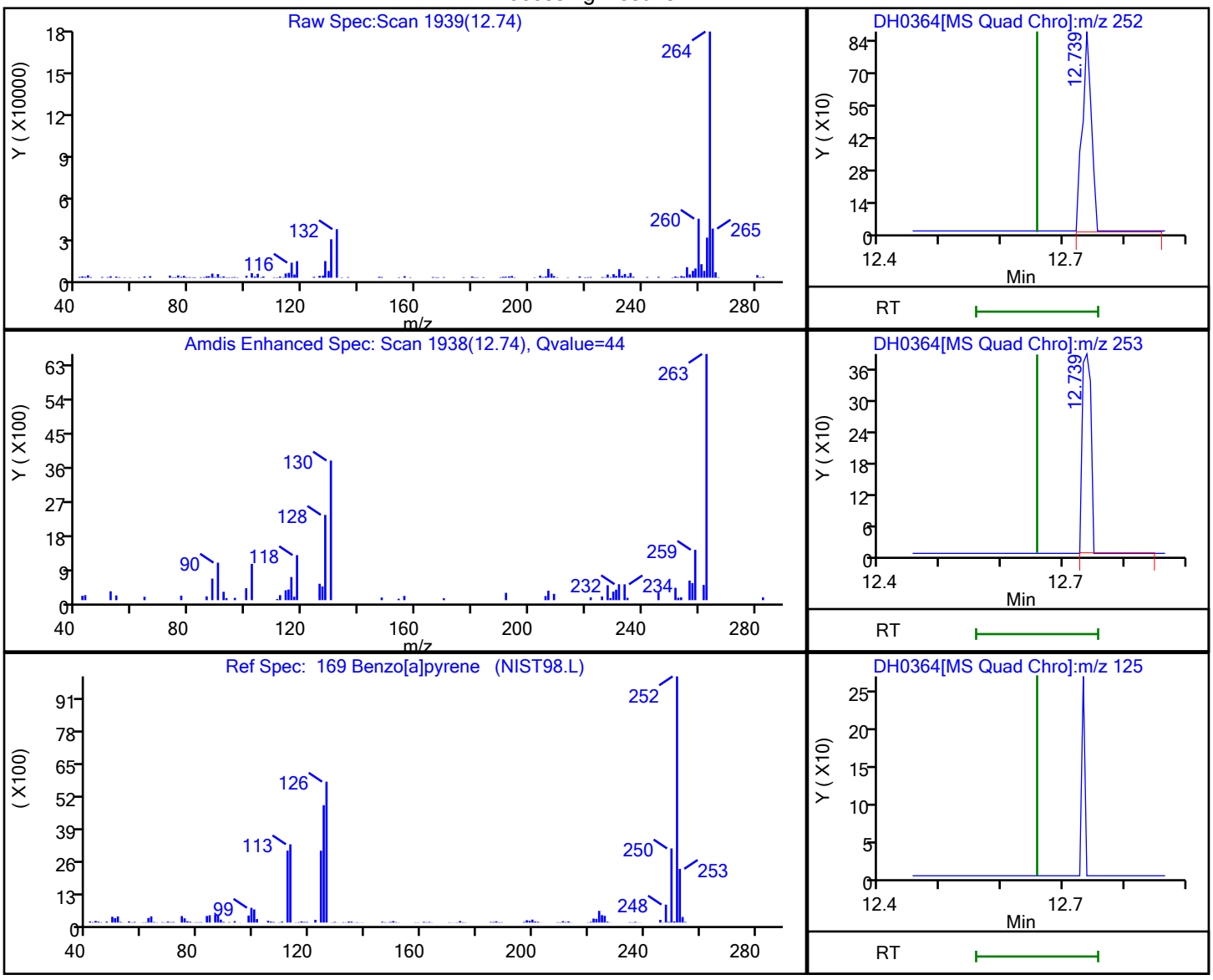
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0364.D				
Injection Date:	03-Aug-2023 19:55:55	Instrument ID:	HP19760		
Lims ID:	410-136864-G-5-A	Lab Sample ID:	410-136864-5		
Client ID:	16WDUP				
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

169 Benzo[a]pyrene, CAS: 50-32-8

Processing Results



RT	Mass	Response	Amount
12.74	252.00	894	0.015321
12.74	253.00	380	
12.66	125.00	0	

Reviewer: P7EB, 04-Aug-2023 14:09:55 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1B
Lab Sample ID: 410-136864-6

Matrix: Water
Lab File ID: JH0271.D

Analysis Method: 8270D
Date Collected: 07/26/2023 12:05

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 248.3(mL)
Date Analyzed: 08/03/2023 03:43

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		10	2.0
99-65-0	1,3-Dinitrobenzene	ND		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	ND		10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	ND		10	1.8
95-95-4	2,4,5-Trichlorophenol	ND		10	2.0
88-06-2	2,4,6-Trichlorophenol	ND		10	1.8
120-83-2	2,4-Dichlorophenol	ND		10	1.5
121-14-2	2,4-Dinitrotoluene	ND		10	2.1
87-65-0	2,6-Dichlorophenol	ND		10	1.4
606-20-2	2,6-Dinitrotoluene	ND		10	2.1
91-58-7	2-Chloronaphthalene	ND		10	0.50
95-57-8	2-Chlorophenol	ND		10	1.0
91-57-6	2-Methylnaphthalene	ND		10	0.29
95-48-7	o-Cresol	ND		10	0.81
88-74-4	2-Nitroaniline	ND		10	1.0
88-75-5	2-Nitrophenol	ND		10	1.2
101-55-3	4-Bromophenyl-phenylether	ND		10	0.56
59-50-7	4-Chloro-3-methylphenol	ND		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	ND		10	0.60
106-44-5	m & p-Cresol	ND		20	2.4
100-01-6	4-Nitroaniline	ND		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		10	2.0
83-32-9	Acenaphthene	ND		10	0.35
208-96-8	Acenaphthylene	ND		10	0.48
120-12-7	Anthracene	ND		10	0.52
56-55-3	Benzo[a]anthracene	ND		10	0.45
50-32-8	Benzo[a]pyrene	ND		10	1.5
205-99-2	Benzo[b]fluoranthene	ND		10	1.2
191-24-2	Benzo[g,h,i]perylene	ND		10	0.42
207-08-9	Benzo[k]fluoranthene	ND		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1B
Lab Sample ID: 410-136864-6

Matrix: Water
Lab File ID: JH0271.D

Analysis Method: 8270D
Date Collected: 07/26/2023 12:05

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 248.3(mL)
Date Analyzed: 08/03/2023 03:43

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	ND		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	ND		10	0.38
132-64-9	Dibenzofuran	ND		10	0.60
84-66-2	Diethyl phthalate	ND		10	2.0
60-51-5	Dimethoate	ND		10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	ND		10	0.42
86-73-7	Fluorene	ND		10	0.38
118-74-1	Hexachlorobenzene	ND		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	ND		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND		50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	ND		10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58
59-89-2	N-Nitrosomorpholine	ND		10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	ND		10	0.60
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	ND		10	3.0
85-01-8	Phenanthrene	ND		10	0.52
108-95-2	Phenol	ND		10	0.60
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	ND		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND	*- cn	50	5.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1B Lab Sample ID: 410-136864-6

Matrix: Water Lab File ID: JH0271.D

Analysis Method: 8270D Date Collected: 07/26/2023 12:05

Extract. Method: 3510C Date Extracted: 08/02/2023 15:28

Sample wt/vol: 248.3(mL) Date Analyzed: 08/03/2023 03:43

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor: Level: (low/med) Low

Analysis Batch No.: 403788 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	59		13-138
321-60-8	2-Fluorobiphenyl (Surr)	75		44-120
367-12-4	2-Fluorophenol (Surr)	31		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	69		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	62		30-125
4165-62-2	Phenol-d5 (Surr)	22		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D
Lims ID: 410-136864-G-6-A
Client ID: 16WC1B
Sample Type: Client
Inject. Date: 03-Aug-2023 03:43:30 ALS Bottle#: 21 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 410-136864-G-6-A
Misc. Info.: 410-0090492-033
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 08:48:58 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:57:50

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
	2 N-Nitrosodimethylamine	74		1.928				ND	7
$	9 2-Fluorophenol	112	3.084	3.090	-0.006	95	715086	15.5	
	11 N-Nitrosodiethylamine	102		3.283				ND	
	12 Ethyl methanesulfonate	109		3.581				ND	
$	15 Phenol-d5	99	3.990	3.990	0.000	95	715503	10.8	
	16 Phenol	94		4.001				ND	7
	19 2-Chlorophenol	128		4.130				ND	7
*	22 1,4-Dichlorobenzene-d4	152	4.328	4.322	0.006	96	149796	5.00	
	29 2-Methylphenol	108		4.579				ND	
	30 2,2'-oxybis[1-chloropropane]	45		4.585				ND	7
	35 N-Nitrosomorpholine	56		4.731				ND	
	34 4-Methylphenol	108		4.731				ND	7
$	39 Nitrobenzene-d5	82	4.854	4.854	0.000	94	1061709	17.2	
	40 Nitrobenzene	77		4.871				ND	U
	41 N-Nitrosopiperidine	114		5.017				ND	
	43 2-Nitrophenol	139		5.181				ND	7
	46 o,o',o''-Triethylphosphorothioat	198		5.286				ND	7
	54 alpha,alpha-Dimethyl phenethylam	58		5.379				ND	7
	49 2,4-Dichlorophenol	162		5.420				ND	
*	52 Naphthalene-d8	136	5.543	5.543	0.000	99	577668	5.00	
	57 2,6-Dichlorophenol	162		5.630				ND	
	58 Hexachloropropene	213		5.648				ND	
	65 4-Chloro-3-methylphenol	107		6.103				ND	7
	66 Safrole, Total	162		6.144				ND	
	67 2-Methylnaphthalene	142		6.220				ND	7
	70 1,2,4,5-Tetrachlorobenzene	216		6.384				ND	
	79 2,4,6-Trichlorophenol	196		6.500				ND	
	80 2,4,5-Trichlorophenol	196		6.541				ND	
$	81 2-Fluorobiphenyl (Surr)	172	6.576	6.576	0.000	99	1690290	18.8	
	84 2-Chloronaphthalene	162		6.681				ND	
	87 2-Nitroaniline	138		6.786				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
91 1,3-Dinitrobenzene	168		6.991				ND	7
92 2,6-Dinitrotoluene	165		7.020				ND	U
93 Acenaphthylene	152		7.078				ND	7
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	94	282635	5.00	
97 Acenaphthene	153		7.242				ND	U
99 Pentachlorobenzene	250		7.365				ND	
102 2,4-Dinitrotoluene	165		7.400				ND	
101 Dibenzofuran	168		7.405				ND	7
105 2,3,4,6-Tetrachlorophenol	232		7.528				ND	
107 Diethyl phthalate	149		7.633				ND	7
109 Thionazin	107		7.709				ND	7
108 Fluorene	166		7.727				ND	7
110 4-Chlorophenyl phenyl ether	204		7.732				ND	7
111 N-Nitro-o-toluidine	152		7.744				ND	7
112 4-Nitroaniline	138		7.756				ND	
114 N-Nitrosodiphenylamine	169		7.849				ND	7
$ 116 2,4,6-Tribromophenol	330	7.960	7.960	0.000	89	395074	29.5	
117 Sulfotepp	97		8.001				ND	7
120 cis-Diallate	86		8.118				ND	7
119 Phorate	75		8.129				ND	7
121 Phenacetin	108		8.147				ND	7
122 4-Bromophenyl phenyl ether	248		8.194				ND	7
123 trans-Diallate	86		8.205				ND	7
124 Hexachlorobenzene	284		8.240				ND	
125 Dimethoate	87		8.287				ND	7
127 Pentachlorophenol	266		8.439				ND	U
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	97	575286	5.00	
132 Phenanthrene	178		8.637				ND	MU
135 Anthracene	178		8.684				ND	7
143 Isodrin	193		9.618				ND	7
S 68 Diallate	86		9.653				ND	7
144 Fluoranthene	202		9.759				ND	7
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	97	533996	5.00	
147 Pyrene	202		9.975				ND	7
$ 148 p-Terphenyl-d14	244	10.132	10.132	0.000	96	1460750	15.4	
154 Kepone	272		10.646				ND	
156 Benzo[a]anthracene	228		11.224				ND	MU
159 Chrysene	228		11.265				ND	MU
160 Bis(2-ethylhexyl) phthalate	149		11.300				ND	7
164 Benzo[b]fluoranthene	252		12.590				ND	7
165 Benzo[k]fluoranthene	252		12.631				ND	7
166 Benzo[a]pyrene	252		13.040				ND	U
* 167 Perylene-d12	264	13.116	13.116	0.000	94	442651	5.00	
171 Indeno[1,2,3-cd]pyrene	276		14.622				ND	7
172 Dibenz(a,h)anthracene	278		14.663				ND	7
173 Benzo[g,h,i]perylene	276		14.973				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSS_RV8270_IS_00059 Amount Added: 20.00 Units: uL Run Reagent

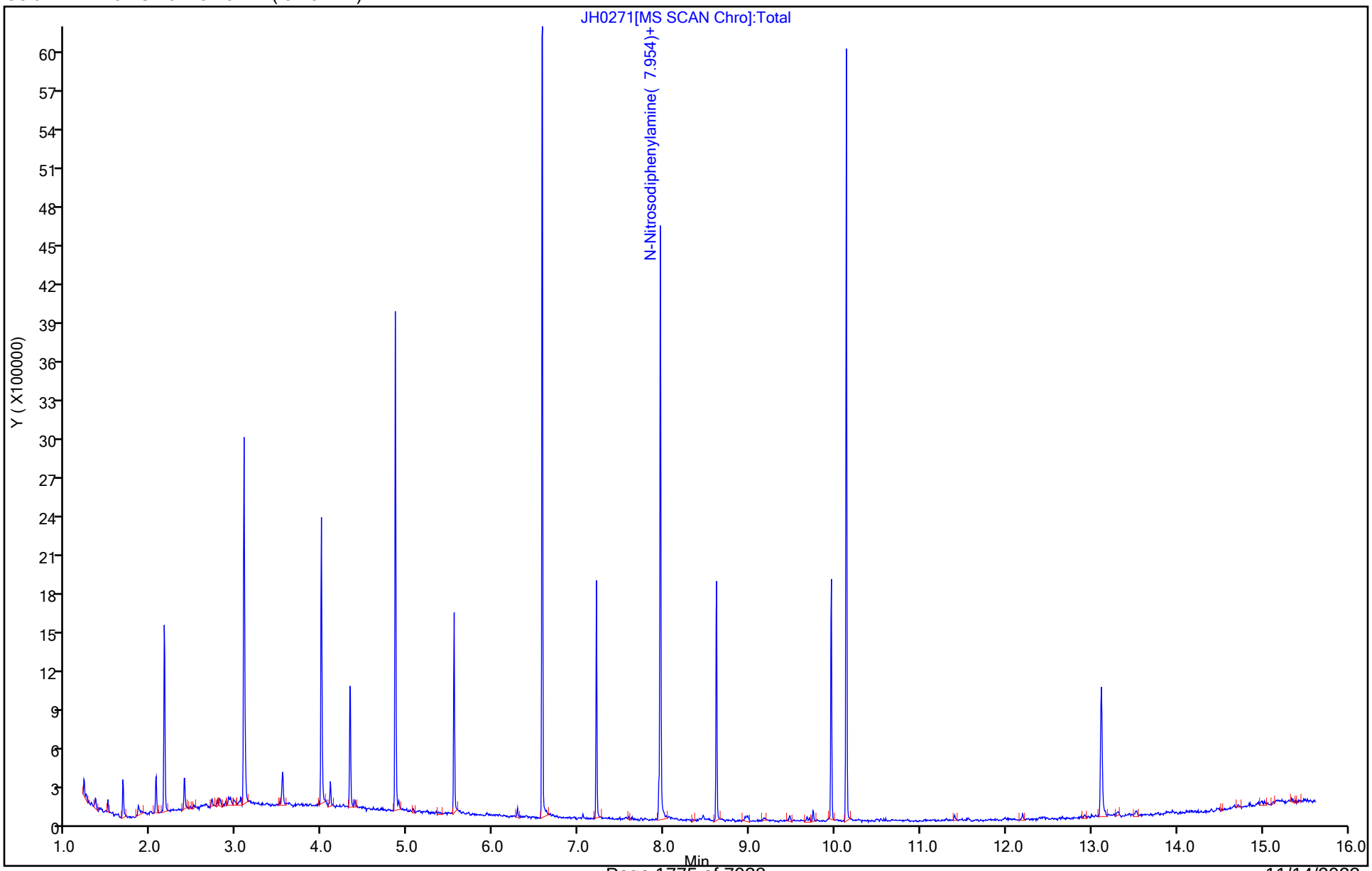
Report Date: 03-Aug-2023 08:53:34 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D

Injection Date:	03-Aug-2023 03:43:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	410-136864-G-6-A	Lab Sample ID:	410-136864-6	Worklist Smp#:	33
Client ID:	16WC1B				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D				
Lims ID:	410-136864-G-6-A				
Client ID:	16WC1B				
Sample Type:	Client				
Inject. Date:	03-Aug-2023 03:43:30	ALS Bottle#:	21	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	410-136864-G-6-A				
Misc. Info.:	410-0090492-033				
Operator ID:	mem41592	Instrument ID:	HP23264		
Method:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	03-Aug-2023 08:48:58	Calib Date:	02-Aug-2023 21:45:30		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1602				

First Level Reviewer: N5QU Date: 03-Aug-2023 07:57:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 2-Fluorophenol	50.0	15.5	31.07
$ 15 Phenol-d5	50.0	10.8	21.68
$ 39 Nitrobenzene-d5	25.0	17.2	68.68
$ 81 2-Fluorobiphenyl (Surr)	25.0	18.8	75.37
$ 116 2,4,6-Tribromophenol	50.0	29.5	59.02
$ 148 p-Terphenyl-d14	25.0	15.4	61.71

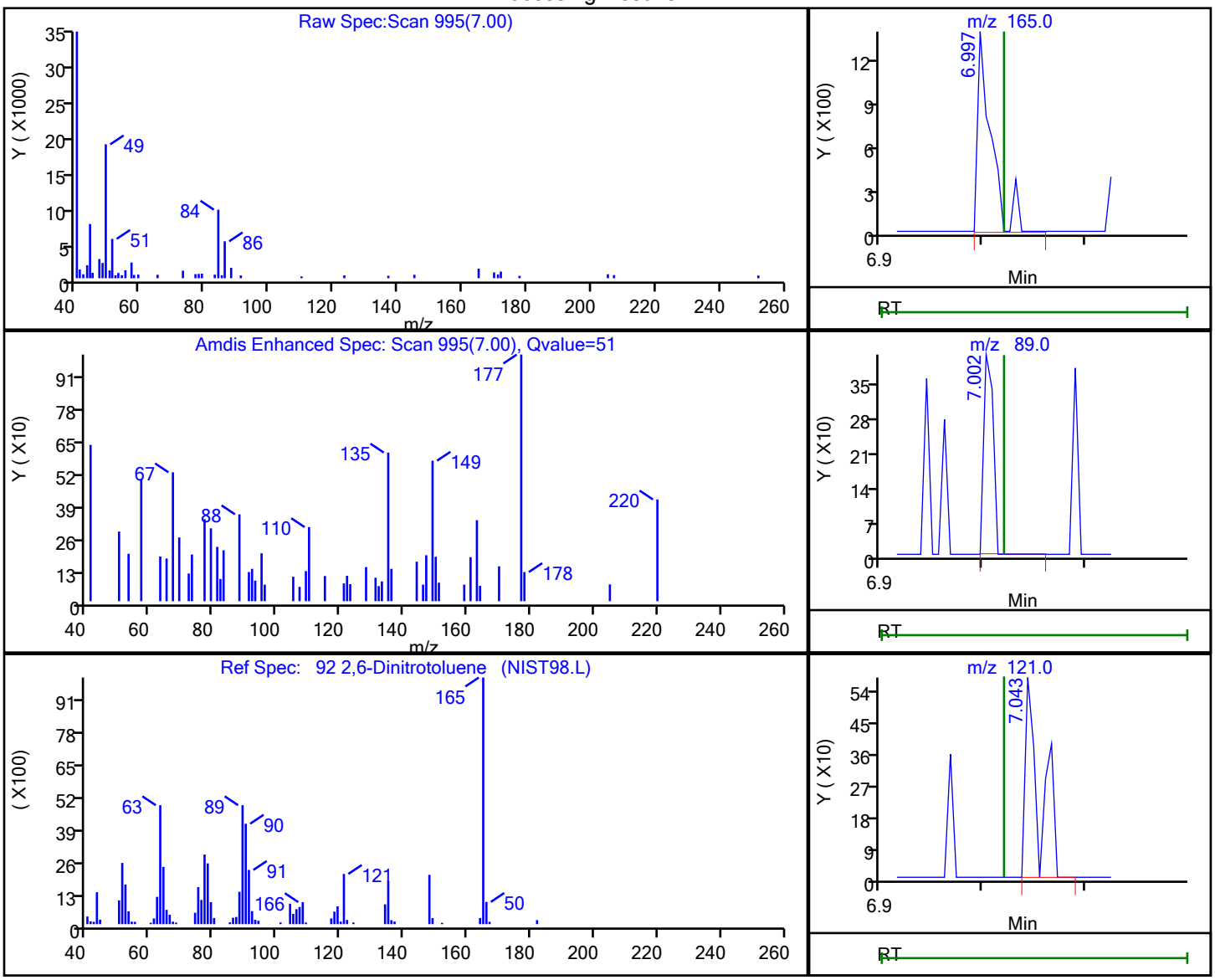
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D				
Injection Date:	03-Aug-2023 03:43:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-6-A	Lab Sample ID:	410-136864-6		
Client ID:	16WC1B				
Operator ID:	mem41592	ALS Bottle#:	21	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

92 2,6-Dinitrotoluene, CAS: 606-20-2

Processing Results



RT	Mass	Response	Amount
7.00	165.00	1223	0.073782
7.00	89.00	256	
7.04	121.00	568	
7.02	63.00	576	

Reviewer: N5QU, 03-Aug-2023 07:55:42 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

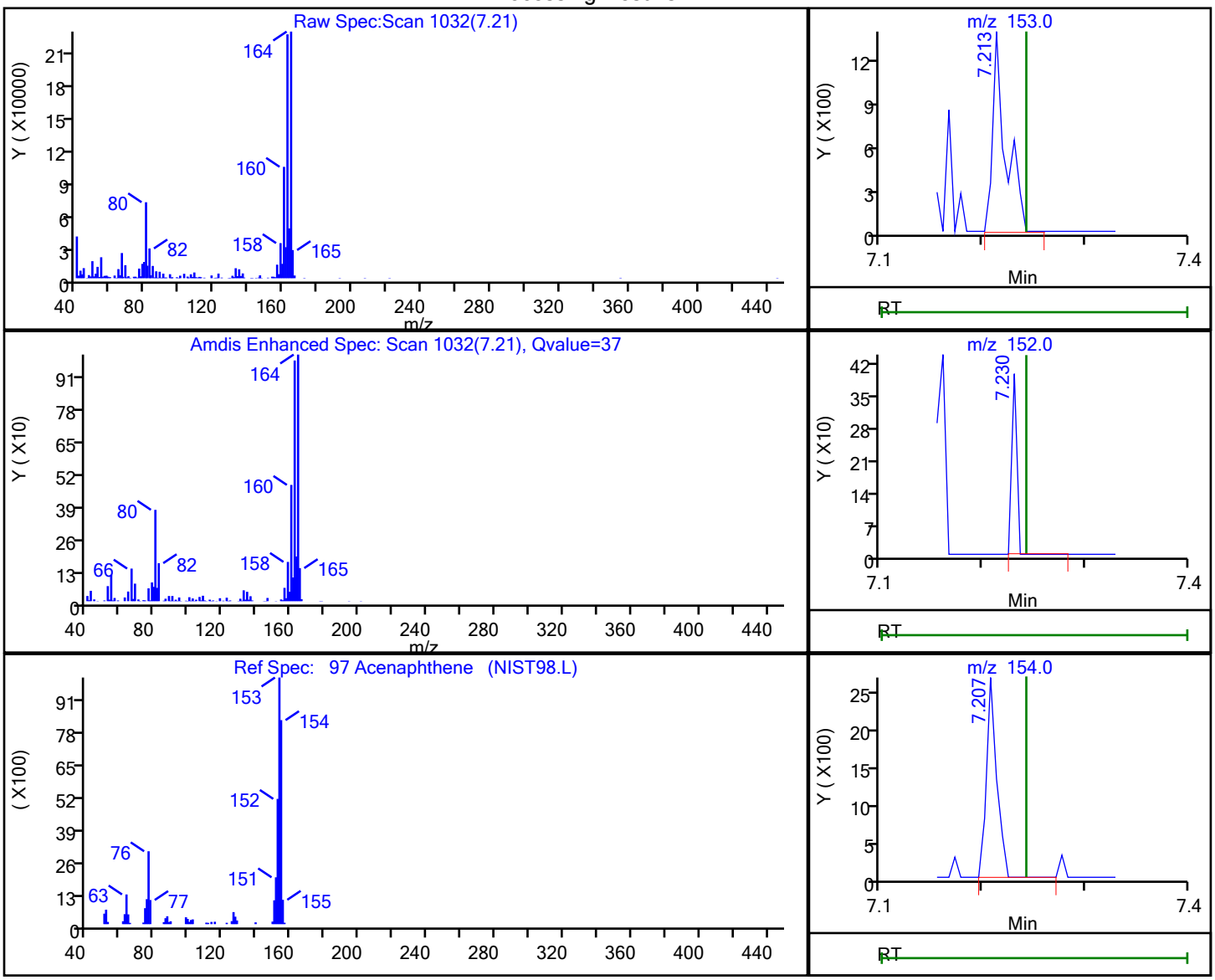
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D				
Injection Date:	03-Aug-2023 03:43:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-6-A	Lab Sample ID:	410-136864-6		
Client ID:	16WC1B				
Operator ID:	mem41592	ALS Bottle#:	21	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

97 Acenaphthene, CAS: 83-32-9

Processing Results



RT	Mass	Response	Amount
7.21	153.00	1249	0.016779
7.23	152.00	138	
7.21	154.00	1866	

Reviewer: N5QU, 03-Aug-2023 07:56:07 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

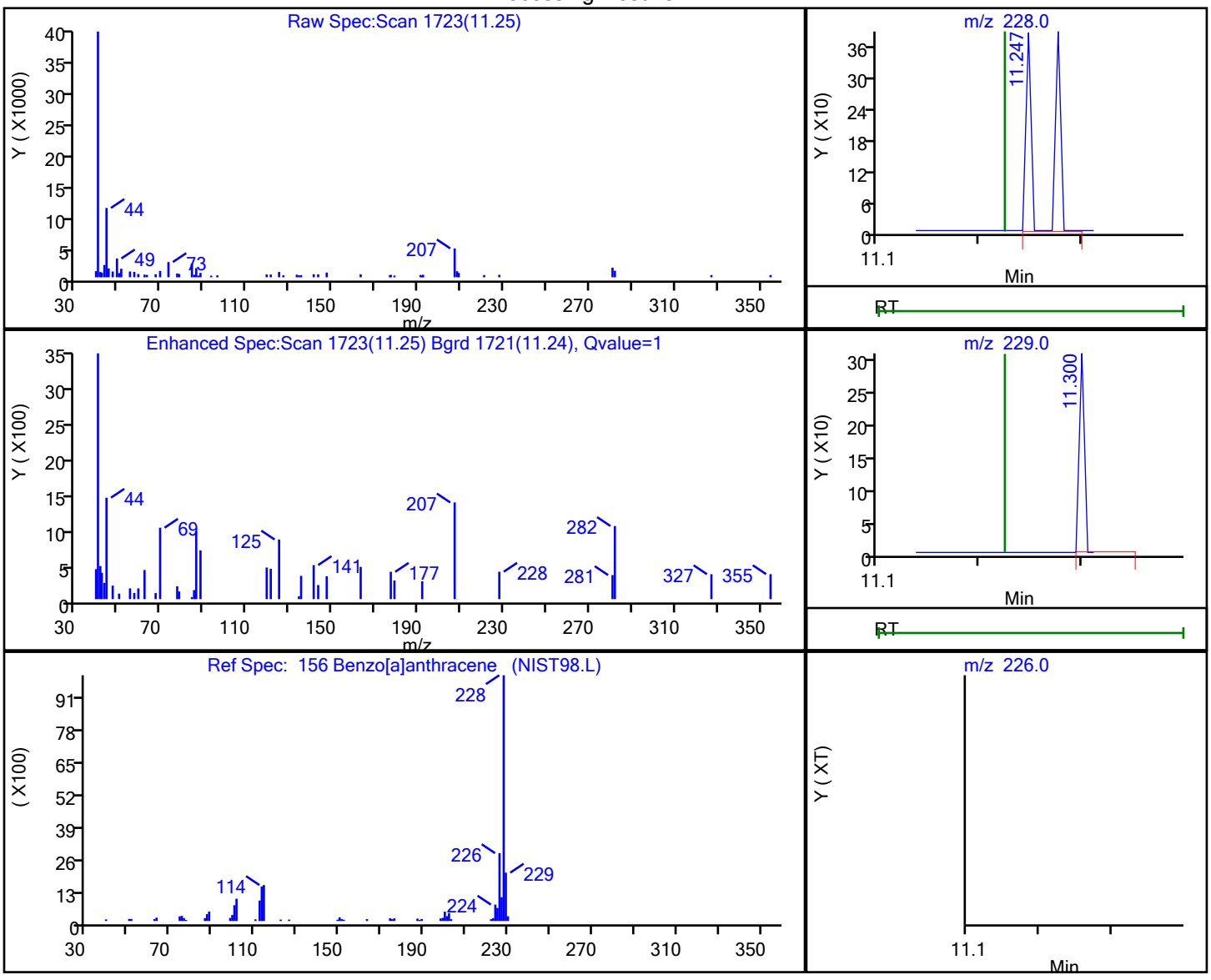
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D				
Injection Date:	03-Aug-2023 03:43:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-6-A	Lab Sample ID:	410-136864-6		
Client ID:	16WC1B				
Operator ID:	mem41592	ALS Bottle#:	21	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

156 Benzo[a]anthracene, CAS: 56-55-3

Processing Results



RT	Mass	Response	Amount
11.25	228.00	271	0.002676
11.30	229.00	108	
11.22	226.00	0	

Reviewer: N5QU, 03-Aug-2023 07:57:11 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

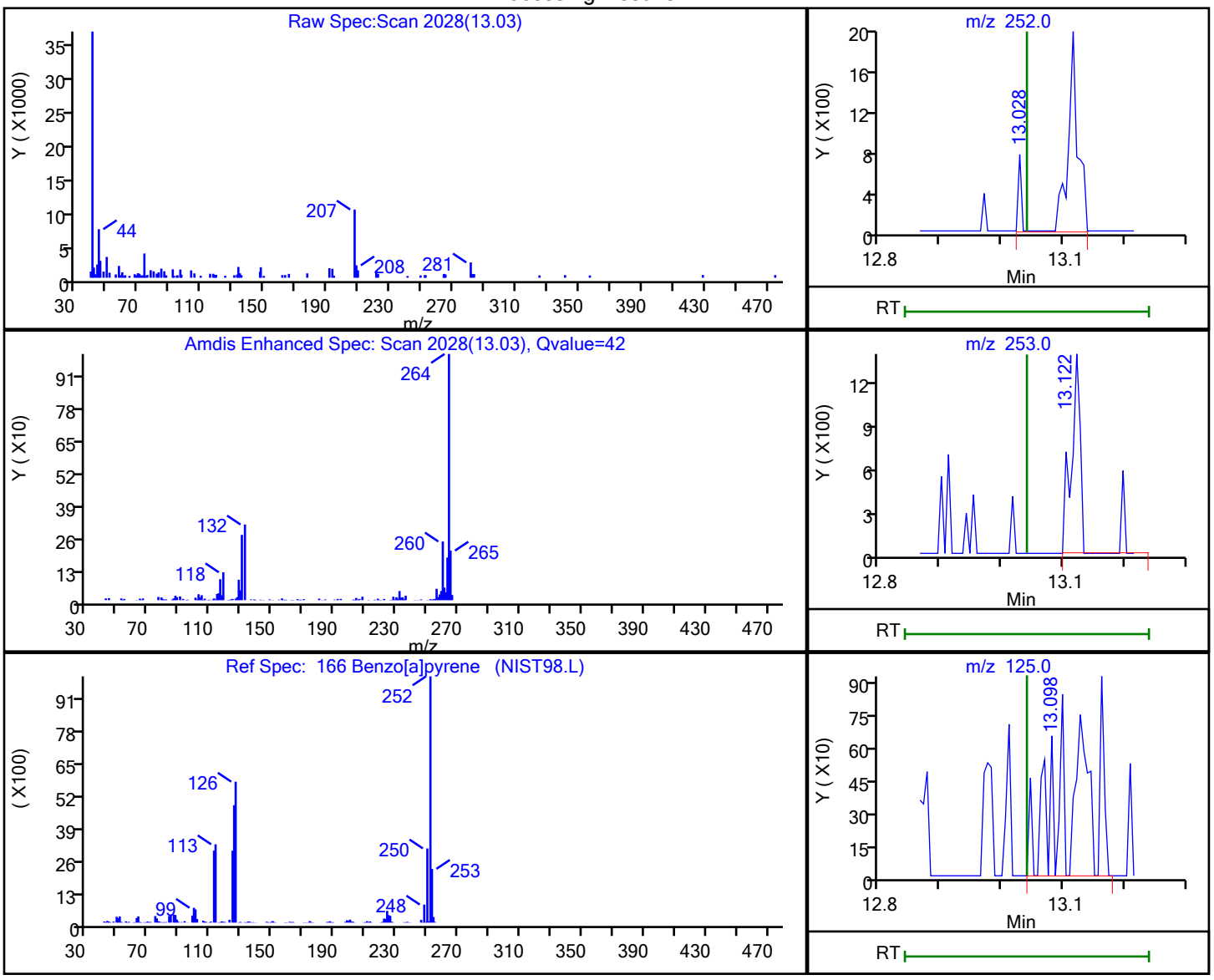
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D				
Injection Date:	03-Aug-2023 03:43:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-6-A	Lab Sample ID:	410-136864-6		
Client ID:	16WC1B				
Operator ID:	mem41592	ALS Bottle#:	21	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

166 Benzo[a]pyrene, CAS: 50-32-8

Processing Results



RT	Mass	Response	Amount
13.03	252.00	2423	0.025724
13.12	253.00	1519	
13.10	125.00	2637	

Reviewer: N5QU, 03-Aug-2023 07:57:32 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

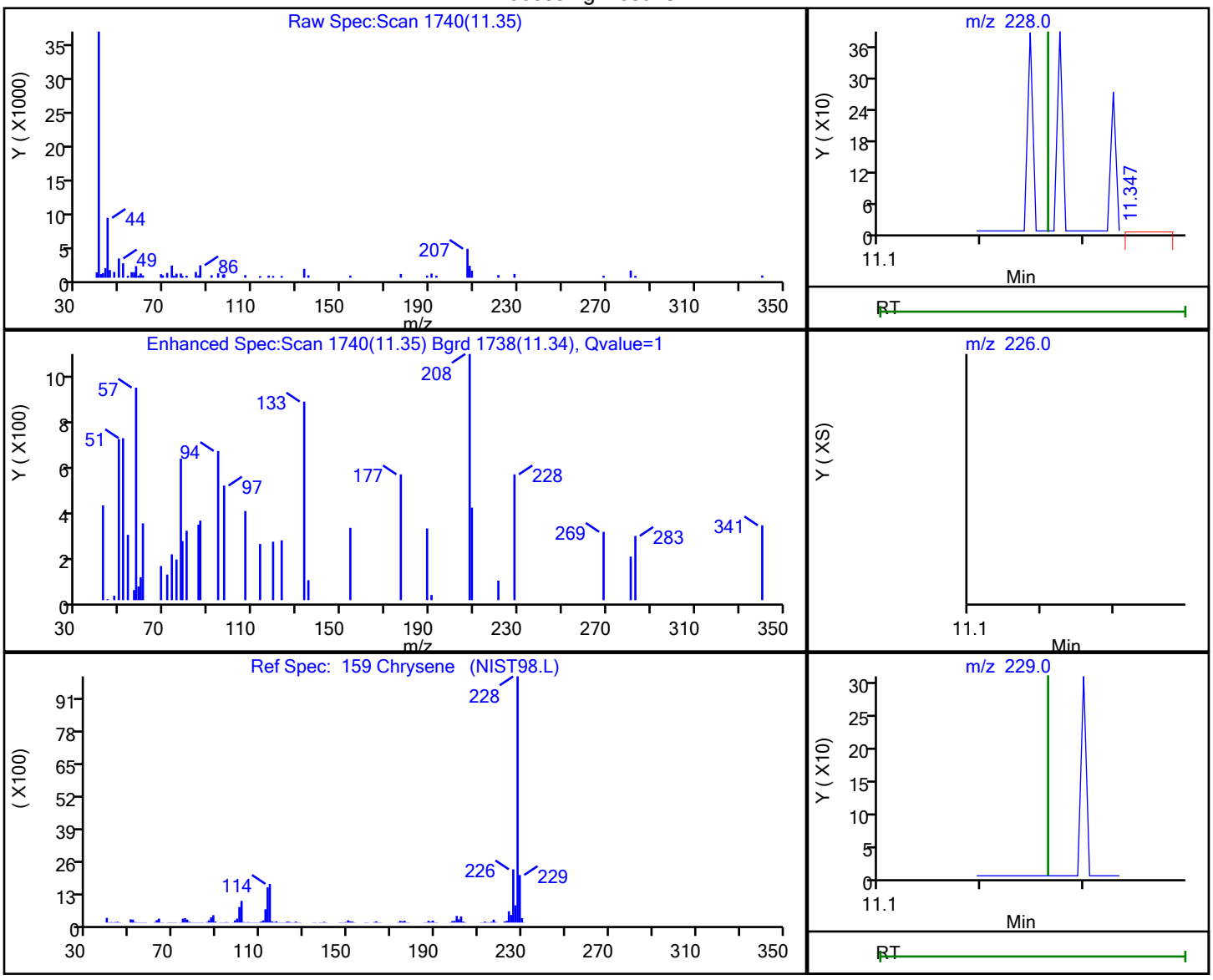
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D				
Injection Date:	03-Aug-2023 03:43:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-6-A	Lab Sample ID:	410-136864-6		
Client ID:	16WC1B				
Operator ID:	mem41592	ALS Bottle#:	21	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

159 Chrysene, CAS: 218-01-9

Processing Results



RT	Mass	Response	Amount
11.35	228.00	310	0.003096
11.36	226.00	117	
11.27	229.00	0	

Reviewer: N5QU, 03-Aug-2023 07:57:24 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

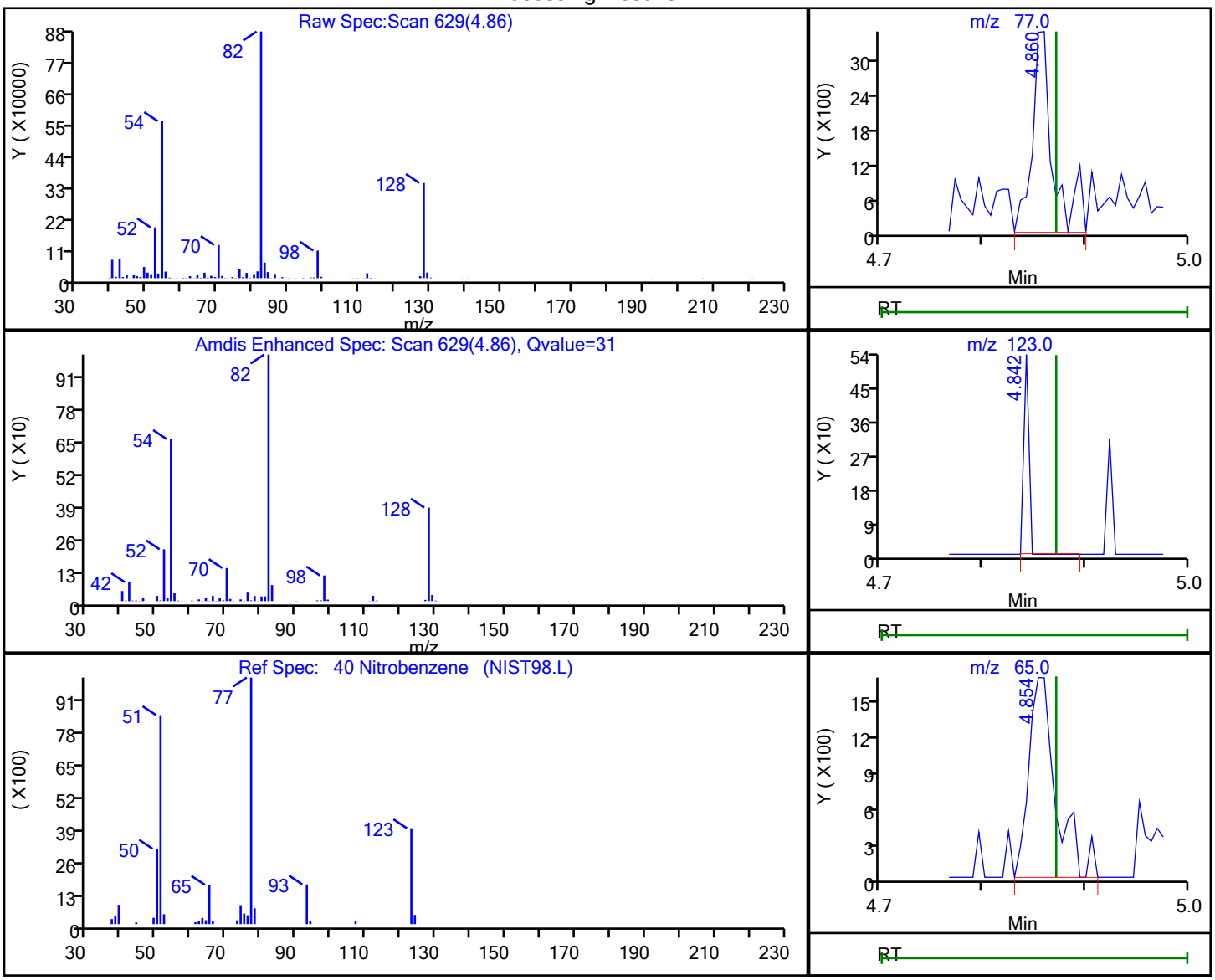
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D				
Injection Date:	03-Aug-2023 03:43:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-6-A	Lab Sample ID:	410-136864-6		
Client ID:	16WC1B				
Operator ID:	mem41592	ALS Bottle#:	21	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

40 Nitrobenzene, CAS: 98-95-3

Processing Results



RT	Mass	Response	Amount
4.86	77.00	4835	0.085603
4.84	123.00	186	
4.85	65.00	3069	

Reviewer: N5QU, 03-Aug-2023 07:55:14 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

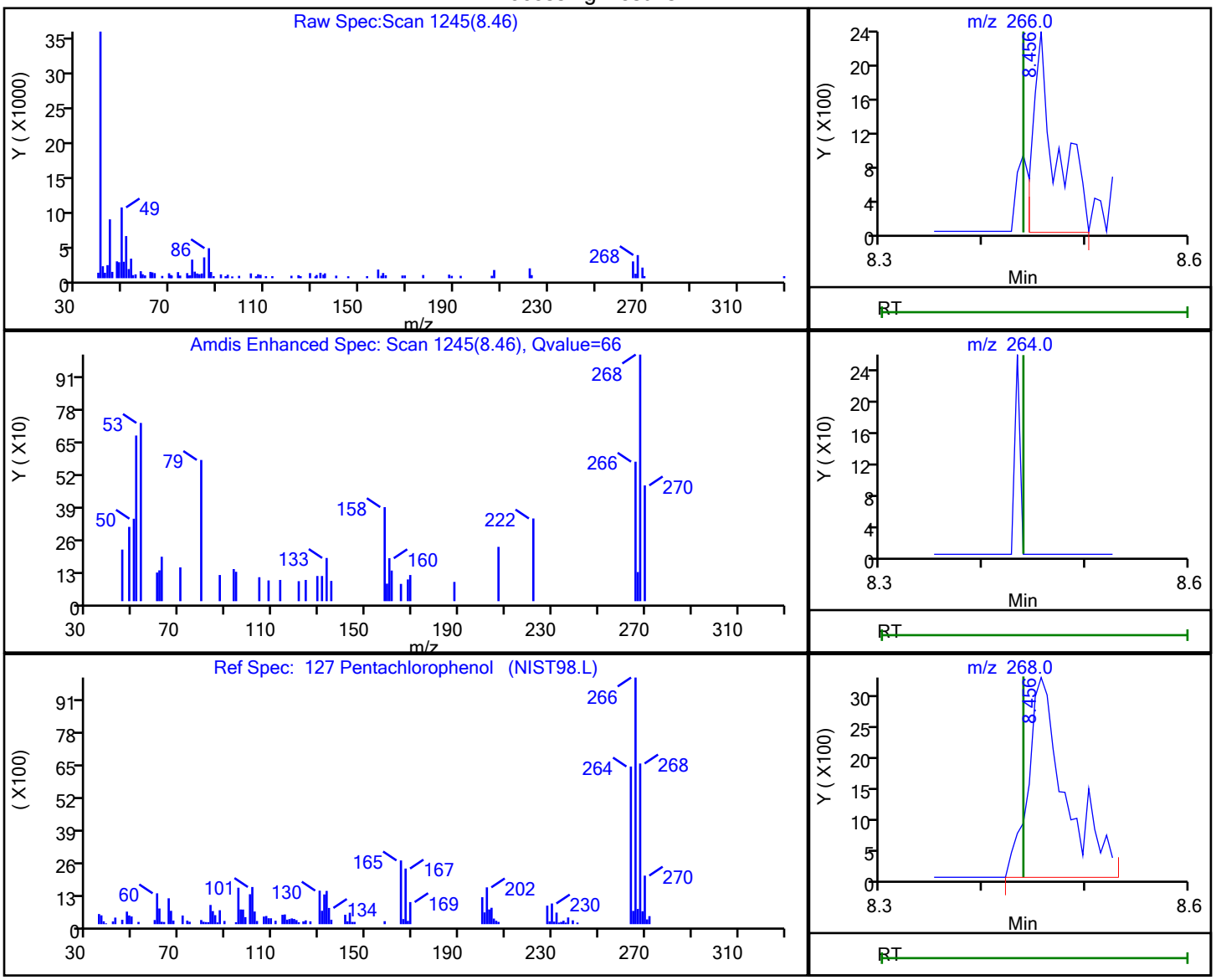
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D				
Injection Date:	03-Aug-2023 03:43:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-6-A	Lab Sample ID:	410-136864-6		
Client ID:	16WC1B				
Operator ID:	mem41592	ALS Bottle#:	21	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

127 Pentachlorophenol, CAS: 87-86-5

Processing Results



RT	Mass	Response	Amount
8.46	266.00	3622	0.283493
8.44	264.00	0	
8.46	268.00	8307	

Reviewer: N5QU, 03-Aug-2023 07:56:38 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

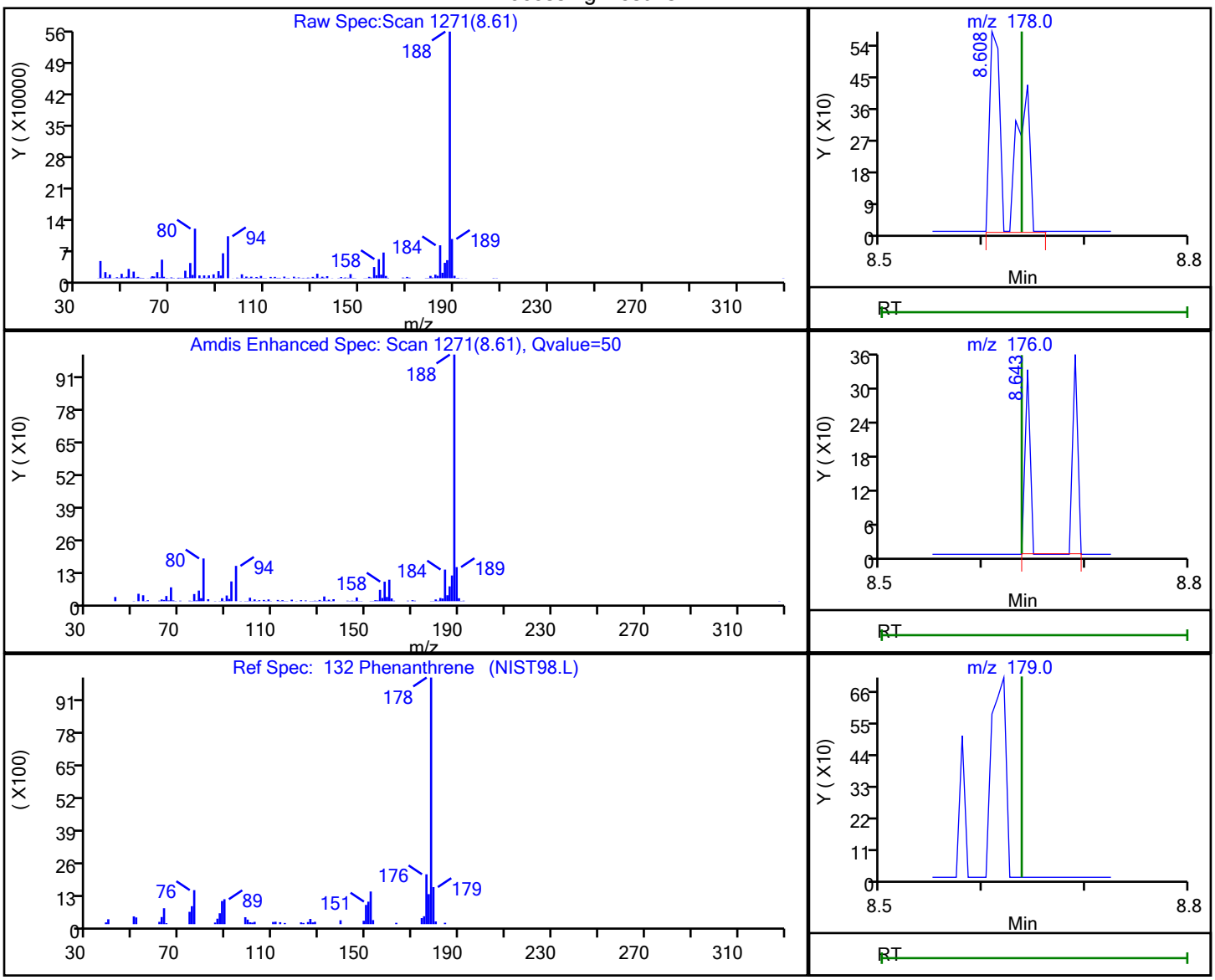
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0271.D				
Injection Date:	03-Aug-2023 03:43:30	Instrument ID:	HP23264		
Lims ID:	410-136864-G-6-A	Lab Sample ID:	410-136864-6		
Client ID:	16WC1B				
Operator ID:	mem41592	ALS Bottle#:	21	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

132 Phenanthrene, CAS: 85-01-8

Processing Results



RT	Mass	Response	Amount
8.61	178.00	742	0.006117
8.64	176.00	239	
8.64	179.00	0	

Reviewer: N5QU, 03-Aug-2023 07:56:52 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-356566/3	DC2312.D
Level 2	IC 410-356566/4	DC2318.D
Level 3	IC 410-356566/9	DC2317.D
Level 4	IC 410-356566/8	DC2316.D
Level 5	IC 410-356566/7	DC2315.D
Level 6	ICIS 410-356566/2	DC2311.D
Level 7	IC 410-356566/6	DC2314.D
Level 8	IC 410-356566/5	DC2313.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	1.1113 0.8262	0.8794 0.7253	0.8431 0.7657	0.6999	0.7935	Ave		0.8306				15.4		20.0			
N-Nitrosodimethylamine	1.5414 1.2696	1.3897 1.1487	1.2685 1.2170	1.1343	1.3197	Ave		1.2861				10.4		20.0			
Pyridine	2.3878 2.0413	2.3177 1.9071	2.0822 1.9807	1.9308	2.1483	Ave		2.0995				8.4		20.0			
N,N-dimethylformamide	+++++ 1.3125	+++++ 1.2298	1.5717 1.3162	1.1373	1.3590	Ave		1.3211				11.0		20.0			
2-Picoline	2.0040 2.0123	2.1956 1.8999	1.9382 1.9564	1.8800	2.0994	Ave		1.9982				5.3		20.0			
N-Nitrosomethylethylamine	+++++ 0.8884	+++++ 0.8367	0.9154 0.8535	0.8701	0.9171	Ave		0.8802				3.7		20.0			
Methyl methanesulfonate	1.2272 1.1316	1.1924 1.0546	1.1277 1.0900	1.0481	1.1728	Ave		1.1305				5.7		20.0			
N-Nitrosodiethylamine	0.8256 0.8249	0.7348 0.7875	0.7877 0.8114	0.7377	0.8583	Ave		0.7960				5.4		20.0			
Ethyl methanesulfonate	1.0556 0.8550	0.8754 0.8208	0.8034 0.8355	0.7978	0.9026	Ave		0.8682				9.6		20.0			
Benzaldehyde	1.5965	1.8083 1.5072	1.7396 1.4794	1.5478	1.6921	Ave		1.6244			0.0100	7.7		20.0			
Phenol	2.1692 2.2567	2.1418 2.0726	2.0280 2.1786	2.0866	2.3302	Ave		2.1580			0.8000	4.6		20.0			
Aniline	2.7269 2.7688	2.5891 2.5484	2.7053 2.6819	2.5123	2.8527	Ave		2.6732				4.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Bis(2-chloroethyl)ether	1.8483 1.7821	1.7582 1.6830	1.8931 1.7226	1.6697	1.9004	Ave		1.7822			0.7000	5.1		20.0			
2-Chlorophenol	1.2119 1.3770	1.2450 1.2912	1.3831 1.3490	1.2368	1.4264	Ave		1.3151			0.8000	6.0		20.0			
1,3-Dichlorobenzene	1.2451 1.5313	1.6183 1.4276	1.5454 1.4984	1.4798	1.6277	Ave		1.4967				8.1		20.0			
1,4-Dichlorobenzene	1.6059 1.5459	1.6560 1.4443	1.6852 1.5106	1.4670	1.6313	Ave		1.5683				5.7		20.0			
Benzyl alcohol	1.1374 1.0608	0.9043 0.9666	1.0432 1.0480	0.9325	1.0785	Ave		1.0214				7.8		20.0			
1,2-Dichlorobenzene	1.3962 1.4754	1.3546 1.3761	1.5590 1.4236	1.4218	1.5533	Ave		1.4450				5.4		20.0			
o-Cresol	1.4531 1.4804	1.3396 1.3718	1.3242 1.4422	1.3290	1.4826	Ave		1.4029			0.7000	4.9		20.0			
bis (2-chloroisopropyl) ether	2.8622 2.1900	2.5105 2.0074	2.2023 2.1153	2.0698	2.2660	Ave		2.2779			0.0100	12.3		20.0			
N-Nitrosopyrrolidine	0.8663 0.8774	0.8150 0.8442	0.7652 0.8851	0.7833	0.9210	Ave		0.8447				6.3		20.0			
m & p-Cresol	1.4754 1.5897	1.4145 1.4504	1.4353 1.5310	1.4064	1.5950	Ave		1.4872			0.6000	5.1		20.0			
N-Nitrosodi-n-propylamine	1.6411 1.4242	1.4387 1.3257	1.3660 1.4126	1.3238	1.5087	Ave		1.4301			0.5000	7.4		20.0			
Acetophenone	2.2889 2.3900	2.2891 2.2042	2.2674 2.3163	2.2000	2.4611	Ave		2.3021			0.0100	3.8		20.0			
N-Nitrosomorpholine	1.3463 1.0564	1.1408 0.9853	1.1381 1.0128	0.9643	1.1137	Ave		1.0947				11.2		20.0			
o-Toluidine	2.3517 2.6709	2.4432 2.5311	2.5795 2.5883	2.4121	2.8223	Ave		2.5499				6.0		20.0			
Hexachloroethane	0.6240 0.6576	0.6688 0.6320	0.6617 0.6480	0.6484	0.6960	Ave		0.6546			0.3000	3.4		20.0			
Nitrobenzene	0.6264 0.5480	0.4932 0.5457	0.5219 0.5351	0.5262	0.4886	Ave		0.5356			0.2000	8.0		20.0			
N-Nitrosopiperidine	0.1818 0.2136	0.1933 0.2110	0.1868 0.2101	0.1954	0.1891	Ave		0.1976				6.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isophorone	0.9124 0.9737	0.8885 0.9648	0.8938 0.9552	0.9164	0.8712	Ave		0.9220			0.4000	4.1		20.0			
2-Nitrophenol	0.1455 0.1819	0.1390 0.1782	0.1465 0.1826	0.1567	0.1593	Ave		0.1612			0.1000	10.9		20.0			
2,4-Dimethylphenol	0.3801 0.4350	0.3664 0.4360	0.3848 0.4347	0.3941	0.3897	Ave		0.4026			0.2000	7.0		20.0			
o,o',o''-Triethylphosphorothioate	0.1622 0.1863	0.1615 0.1893	0.1681 0.1883	0.1771	0.1700	Ave		0.1753				6.6		20.0			
Bis(2-chloroethoxy)methane	0.5410 0.5854	0.5855 0.5768	0.5600 0.5750	0.5575	0.5350	Ave		0.5645			0.3000	3.4		20.0			
2,4-Dichlorophenol	0.2458 0.3062	0.2366 0.3017	0.2602 0.3070	0.2839	0.2696	Ave		0.2764			0.2000	10.0		20.0			
1,2,4-Trichlorobenzene	0.3318 0.3421	0.3513 0.3405	0.3296 0.3402	0.3276	0.3111	Ave		0.3343				3.6		20.0			
Naphthalene	1.1337 1.0872	1.0934 1.0734	1.0847 1.0531	1.0517	0.9867	Ave		1.0705			0.7000	4.0		20.0			
a-Terpineol	0.3156 0.3667	0.3761 0.3680	0.3300 0.3703	0.3391	0.3244	Ave		0.3488				6.9		20.0			
4-Chloroaniline	0.3686 0.4627	0.3698 0.4516	0.4165 0.4604	0.4301	0.4197	Ave		0.4224			0.0100	8.8		20.0			
2,6-Dichlorophenol	0.2897 0.3094	0.2259 0.2963	0.2649 0.3035	0.2806	0.2749	Ave		0.2806				9.5		20.0			
Hexachloropropene	0.2089 0.2385	0.2031 0.2456	0.2328 0.2377	0.2237	0.2117	Ave		0.2253				7.0		20.0			
Hexachlorobutadiene	0.1827 0.1947	0.2080 0.1926	0.1856 0.1913	0.1911	0.1763	Ave		0.1903			0.0100	4.9		20.0			
Quinoline	0.7219 0.7121	0.6515 0.7172	0.6488 0.6950	0.6518	0.6452	Ave		0.6804				5.0		20.0			
Caprolactam	0.1190	0.1187 0.1197	0.0971 0.1178	0.1025	0.1050	Ave		0.1114			0.0100	8.6		20.0			
N-Nitrosodi-n-butylamine	+++++ 0.4460	+++++ 0.4487	0.3768 0.4431	0.3384	0.3344	Ave		0.3979				13.7		20.0			
1,4-phenylenediamine	+++++ 0.3772	+++++ 0.3789	0.2756 0.3673	0.3265	0.3399	Ave		0.3442				11.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.3796 0.3943	0.3070 0.3829	0.3221 0.3893	0.3409	0.3436	Ave		0.3575			0.2000	9.3		20.0			
Safrole, Total	0.2733 0.2842	0.2450 0.2892	0.2641 0.2861	0.2626	0.2545	Ave		0.2699				5.9		20.0			
2-Methylnaphthalene	0.6888 0.7078	0.6819 0.7027	0.6641 0.6945	0.6814	0.6374	Ave		0.6823			0.4000	3.3		20.0			
1-Methylnaphthalene	0.6348 0.6632	0.6217 0.6441	0.6430 0.6457	0.6191	0.5893	Ave		0.6326				3.5		20.0			
Hexachlorocyclopentadiene	0.3803 0.4090	0.3791 0.3994	0.3786 0.4120	0.3786	0.4261	Ave		0.3954			0.0500	4.8		20.0			
1,2,4,5-Tetrachlorobenzene	0.6643 0.6298	0.6264 0.6272	0.6418 0.6240	0.6194	0.6768	Ave		0.6387			0.0100	3.3		20.0			
Isosafrole Peak 1	+++++ 0.5665	0.6017 0.5827	0.5454 0.5778	0.5401	0.6046	Ave		0.5741				4.4		20.0			
2,4,6-Trichlorophenol	0.3304 0.3917	0.3283 0.3932	0.3527 0.3945	0.3542	0.4120	Ave		0.3696			0.2000	8.7		20.0			
2,4,5-Trichlorophenol	0.3466 0.4354	0.3687 0.4149	0.3647 0.4321	0.3919	0.4461	Ave		0.4000			0.2000	9.3		20.0			
Isosafrole Peak 2	0.5256 0.6296	0.6068 0.6346	0.5762 0.6275	0.5771	0.6701	Ave		0.6059				7.4		20.0			
1,1'-Biphenyl	1.5453 1.5895	1.4989 1.5128	1.6446 1.5090	1.5168	1.6762	Ave		1.5616			0.0100	4.3		20.0			
2-Chloronaphthalene	1.2519 1.1868	1.2154 1.1725	1.2328 1.1014	1.1846	1.3192	Ave		1.2081			0.8000	5.3		20.0			
1-Chloronaphthalene	1.1418 1.1895	1.1243 1.1521	1.1965 1.1868	1.1208	1.2306	Ave		1.1678				3.3		20.0			
Diphenyl ether	0.8020 0.8614	0.9288 0.8302	0.8962 0.8356	0.8260	0.9064	Ave		0.8608				5.2		20.0			
2-Nitroaniline	+++++ 0.3850	+++++ 0.3754	0.2862 0.3856	0.3240	0.3906	Ave		0.3578			0.0100	12.0		20.0			
1,4-Naphthoquinone	0.4270 0.4813	0.3695 0.4814	0.3883 0.4764	0.4176	0.4942	Ave		0.4420				10.8		20.0			
1,3-Dinitrobenzene	+++++ 0.1953	+++++ 0.1981	0.1400 0.2015	0.1622	0.1969	Ave		0.1823				13.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dimethyl phthalate	1.1380 1.4071	1.2913 1.3739	1.3258 1.3785	1.3334	1.4944	Ave		1.3428			0.0100	7.7		20.0			
1,4-Dinitrobenzene	+++++ 0.2193	0.1672 0.2172	0.1818 0.2246	0.1924	0.2219	Ave		0.2035				11.2		20.0			
2,6-Dinitrotoluene	+++++ 0.3107	0.2561 0.2956	0.2337 0.3050	0.2696	0.3146	Ave		0.2836			0.2000	10.9		20.0			
Acenaphthylene	1.8634 2.0211	1.8094 1.9519	1.8799 1.9453	1.8632	2.1171	Ave		1.9314			0.9000	5.2		20.0			
3-Nitroaniline	0.2537 0.3499	0.2613 0.3384	0.2617 0.3499	0.2948	0.3613	Ave		0.3089			0.0100	14.8		20.0			
Acenaphthene	1.0749 1.2671	1.3219 1.2247	1.2288 1.2304	1.1685	1.3505	Ave		1.2333			0.9000	7.0		20.0			
2,4-Dinitrophenol	+++++ 0.1993	+++++ 0.1939	0.1136 0.2147	0.1505	0.1966	Lin2	-0.537	0.2164			0.0100				0.9950		0.9900
4-Nitrophenol	0.1944 0.2457	0.1747 0.2375	0.2070 0.2426	0.2151	0.2567	Ave		0.2217			0.0100	12.9		20.0			
Pentachlorobenzene	0.5401 0.5241	0.5660 0.5275	0.5243 0.5172	0.5052	0.5595	Ave		0.5330				3.9		20.0			
2,4-Dinitrotoluene	+++++ 0.4276	0.3028 0.4138	0.3122 0.4238	0.3545	0.4345	Ave		0.3813			0.2000	14.9		20.0			
Dibenzofuran	1.6644 1.7370	1.6846 1.6834	1.7646 1.6576	1.6572	1.8372	Ave		1.7108			0.8000	3.8		20.0			
1-Naphthylamine	1.0444 1.1606	0.9554 1.1435	0.9759 1.1291	1.0480	1.2232	Ave		1.0850				8.7		20.0			
2,3,4,6-Tetrachlorophenol	0.2997 0.3639	0.3001 0.3513	0.3027 0.3658	0.3352	0.3841	Ave		0.3378			0.0100	9.9		20.0			
2-Naphthylamine	1.1430 1.3382	1.1097 1.3008	1.1466 1.2802	1.1739	1.3716	Ave		1.2330				8.2		20.0			
Diethyl phthalate	1.1022 1.3402	1.1804 1.2953	1.2248 1.3019	1.2457	1.4136	Ave		1.2630			0.0100	7.7		20.0			
O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.2956 0.2679	0.2381 0.2689	0.2142 0.2718	0.2302	0.2815	Ave		0.2585				10.8		20.0			
Fluorene	1.4233 1.4140	1.3734 1.3580	1.3426 1.3464	1.3175	1.4922	Ave		1.3834			0.9000	4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorophenyl-phenyl ether	0.6456 0.6967	0.6712 0.6596	0.7079 0.6676	0.6707	0.7320	Ave		0.6814			0.4000	4.2		20.0			
5-Nitro-o-toluidine	0.3749 0.4150	0.2639 0.4081	0.3255 0.3944	0.3523	0.4176	Ave		0.3690				14.5		20.0			
4-Nitroaniline	+++++ 0.3739	0.2395 0.3676	0.2958 0.3602	0.3308	0.3904	Ave		0.3369			0.0100	15.8		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1306	+++++ 0.1282	0.0931 0.1362	0.1064	0.1271	Ave		0.1203			0.0100	13.9		20.0			
n-Nitrosodiphenylamine(as diphenylamine)	0.5655 0.6101	0.5738 0.6070	0.5855 0.6202	0.6020	0.6519	Ave		0.6020			0.0100	4.6		20.0			
1,2-Diphenylhydrazine	1.1587 1.0307	0.9638 1.0101	0.9830 1.0109	0.9881	1.0853	Ave		1.0289				6.2		20.0			
Sulfotepp	0.1967 0.1545	0.1378 0.1575	0.1480 0.1574	0.1480	0.1620	Ave		0.1577				11.1		20.0			
1,3,5-Trinitrobenzene	+++++ 0.0803	+++++ 0.0784	+++++ 0.0862	0.0607	0.0781	Ave		0.0767				12.5		20.0			
cis-Diallate	0.4596 0.4203	0.5238 0.4084	0.4311 0.4166	0.3837	0.4355	Ave		0.4349				9.7		20.0			
Phorate	0.4614 0.6238	0.4912 0.6146	0.4877 0.6277	0.5747	0.6443	Ave		0.5657				13.1		20.0			
Phenacetin	0.3458 0.4416	0.3225 0.4271	0.3318 0.4350	0.3736	0.4424	Ave		0.3900				13.4		20.0			
4-Bromophenyl-phenylether	0.2301 0.2087	0.1761 0.2071	0.2137 0.2131	0.2064	0.2252	Ave		0.2100			0.1000	7.7		20.0			
trans-Diallate	+++++ 0.4316	0.5269 0.4117	0.5208 0.4189	0.3983	0.4585	Ave		0.4524				11.6		20.0			
Hexachlorobenzene	0.2520 0.2162	0.2314 0.2143	0.2134 0.2208	0.2210	0.2339	Ave		0.2254			0.1000	5.8		20.0			
Dimethoate	+++++ 0.3983	0.2826 0.3940	0.3029 0.3945	0.3358	0.4071	Ave		0.3593				14.3		20.0			
Atrazine	0.2225	0.1943 0.2149	0.1911 0.2125	0.2099	0.2374	Ave		0.2118			0.0100	7.5		20.0			
Pentachlorophenol	+++++ 0.1514	0.1041 0.1472	0.1109 0.1526	0.1239	0.1522	Ave		0.1346			0.0500	15.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Aminobiphenyl	0.7141 0.8724	0.7545 0.8504	0.7639 0.8447	0.8084	0.9032	Ave		0.8139				8.0		20.0			
Pentachloronitrobenzene	0.0817 0.1021	0.0859 0.1020	0.0898 0.1043	0.0948	0.1087	Ave		0.0962				10.0		20.0			
Pronamide	+++++ 0.3438	+++++ 0.3339	0.2685 0.3480	0.3013	0.3489	Ave		0.3241				10.0		20.0			
Dinoseb	+++++ 0.1826	+++++ 0.1846	0.1034 0.2058	0.1399	0.1742	Lin2	-0.119	0.1921							0.9940		0.9900
Disulfoton	+++++ 0.6310	0.8418 0.6276	0.5766 0.6316	0.5909	0.6678	Ave		0.6525				13.6		20.0			
Phenanthrene	1.1184 1.0842	1.1436 1.0429	1.0812 1.0412	1.0584	1.1477	Ave		1.0897			0.7000	3.9		20.0			
Anthracene	1.0702 1.1211	1.0173 1.0747	1.0476 1.0837	1.0723	1.1557	Ave		1.0803			0.7000	3.9		20.0			
Carbazole	0.8821 1.0201	0.8638 0.9939	0.9296 0.9975	0.9618	1.0808	Ave		0.9662			0.0100	7.5		20.0			
Methyl parathion	+++++ 0.2867	+++++ 0.2883	0.2049 0.3011	0.2449	0.2871	Ave		0.2688				13.6		20.0			
Di-n-butyl phthalate	0.8889 1.1502	0.9045 1.1184	0.9337 1.1541	1.0479	1.1742	Ave		1.0465			0.0100	11.5		20.0			
Parathion	+++++ 0.1745	+++++ 0.1733	0.1055 0.1830	0.1338	0.1738	Ave		0.1573				19.5		20.0			
4-Nitroquinoline-1-oxide	+++++ 0.0904	+++++ 0.0950	0.0501 0.1098	0.0581	0.0792	Qua2	-0.027	0.0684	0.0014603						0.9960		0.9900
Octachlorostyrene	0.0854 0.0843	0.0861 0.0831	0.0899 0.0855	0.0872	0.0889	Ave		0.0863				2.6		20.0			
Isodrin	+++++ 0.1261	0.1535 0.1284	0.1414 0.1287	0.1271	0.1345	Ave		0.1342				7.5		20.0			
Fluoranthene	1.0723 1.2201	1.0413 1.1717	1.1280 1.1830	1.1584	1.2553	Ave		1.1538			0.6000	6.2		20.0			
Benzidine	+++++ 0.8209	+++++ 0.7996	+++++ 0.6530	0.7088	0.8427	Ave		0.7650				10.6		20.0			
Pyrene	1.4065 1.2612	1.3077 1.2065	1.2504 1.2094	1.2122	1.3315	Ave		1.2732			0.6000	5.6		20.0			

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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
p-Dimethylamino azobenzene	+++++ 0.2154	+++++ 0.2090	0.1395 0.2208	0.1680	0.2110	Ave		0.1939				16.8		20.0			
Chlorobenzilate	+++++ 0.3524	0.2602 0.3521	0.2679 0.3547	0.2898	0.3532	Ave		0.3186				13.8		20.0			
3,3'-Dimethylbenzidine	+++++ 0.7254	+++++ 0.7047	0.5301 0.6993	0.6149	0.7381	Ave		0.6688				12.0		20.0			
Butylbenzylphthalate	+++++ 0.5027	+++++ 0.4845	0.3756 0.5000	0.4246	0.4959	Ave		0.4639			0.0100	11.2		20.0			
2-Acetylaminofluorene	+++++ 0.4153	0.1962 0.4149	0.2297 0.4483	0.2979	0.3826	Lin1	-0.111	0.4258							0.9930		0.9900
3,3'-Dichlorobenzidine	+++++ 0.4165	+++++ 0.4057	0.3071 0.4169	0.3551	0.4214	Ave		0.3871			0.0100	11.9		20.0			
4,4'-Methylene bis(2-chloroaniline)	+++++ 0.2367	+++++ 0.2302	0.1743 0.2301	0.1950	0.2373	Ave		0.2173				12.1		20.0			
Benzo[a]anthracene	0.8723 1.1005	0.8767 1.0756	0.9904 1.0658	1.0092	1.1551	Ave		1.0182			0.8000	10.0		20.0			
Chrysene	0.9272 1.0851	0.9498 1.0347	1.0389 1.0295	0.9824	1.1101	Ave		1.0197			0.7000	6.2		20.0			
Bis(2-ethylhexyl) phthalate	+++++ 0.6788	+++++ 0.6675	0.4721 0.6991	0.5452	0.6675	Ave		0.6217			0.0100	14.7		20.0			
6-Methylchrysene	0.6552 0.7498	0.5861 0.7435	0.6345 0.7507	0.6487	0.7611	Ave		0.6912				9.8		20.0			
Di-n-octyl phthalate	+++++ 1.3035	+++++ 1.2942	0.7618 1.4150	0.9969	1.2402	Lin2	-0.784	1.3467			0.0100				0.9950		0.9900
7,12-Dimethylbenz(a)anthracene	0.4285 0.5661	0.4166 0.5706	0.4476 0.5871	0.4804	0.5727	Ave		0.5087				14.3		20.0			
Benzo[b]fluoranthene	1.0165 1.3395	1.1434 1.2860	1.2277 1.3380	1.2446	1.3577	Ave		1.2442			0.7000	9.4		20.0			
Benzo[k]fluoranthene	1.2148 1.3789	1.1158 1.3813	1.2361 1.3707	1.2848	1.4362	Ave		1.3023			0.7000	8.3		20.0			
Benzo[a]pyrene	1.0641 1.1250	1.0287 1.1053	0.9335 1.1619	1.0323	1.1641	Ave		1.0769			0.7000	7.3		20.0			
3-Methylcholanthrene	0.5181 0.6081	0.4791 0.6024	0.4658 0.6366	0.5097	0.6125	Ave		0.5540				12.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibenz[a,h]acridine	0.7820 0.8891	0.6752 0.8807	0.7142 0.9062	0.7717	0.8791	Ave		0.8123				10.9		20.0			
Dibenz[a,j]acridine	0.7473 1.0174	0.7268 0.9819	0.7782 1.0383	0.9185	1.0124	Ave		0.9026				14.5		20.0			
Indeno[1,2,3-cd]pyrene	0.7508 0.9583	0.8050 0.9471	0.8212 1.0057	0.8692	0.9930	Ave		0.8938			0.5000	10.7		20.0			
Dibenz(a,h)anthracene	0.9871 1.1252	0.9013 1.0886	0.9927 1.1541	1.0254	1.1538	Ave		1.0535			0.4000	8.7		20.0			
Benzo[g,h,i]perylene	0.9604 1.1128	1.0334 1.0981	0.9916 1.1236	1.0224	1.1443	Ave		1.0608			0.5000	6.4		20.0			
2-Fluorophenol (Surr)	1.4226 1.5076	1.4285 1.4164	1.4802 1.4750	1.3985	1.5786	Ave		1.4634				4.1		20.0			
Phenol-d5 (Surr)	2.2687 2.1863	1.9862 2.0376	2.0675 2.0959	1.9534	2.2632	Ave		2.1073				5.7		20.0			
Nitrobenzene-d5 (Surr)	0.5494 0.5432	0.5141 0.5379	0.5177 0.5243	0.5175	0.4989	Ave		0.5254				3.2		20.0			
2-Fluorobiphenyl (Surr)	1.4154 1.4233	1.4772 1.3872	1.4422 1.3382	1.3765	1.5190	Ave		1.4224				4.0		20.0			
2,4,6-Tribromophenol (Surr)	0.1492 0.1917	0.1338 0.1825	0.1606 0.1910	0.1705	0.1980	Ave		0.1721				13.3		20.0			
p-Terphenyl-d14 (Surr)	0.7776 0.8367	0.8247 0.8089	0.8611 0.7985	0.8046	0.8935	Ave		0.8257				4.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-356566/3	DC2312.D
Level 2	IC 410-356566/4	DC2318.D
Level 3	IC 410-356566/9	DC2317.D
Level 4	IC 410-356566/8	DC2316.D
Level 5	IC 410-356566/7	DC2315.D
Level 6	ICIS 410-356566/2	DC2311.D
Level 7	IC 410-356566/6	DC2314.D
Level 8	IC 410-356566/5	DC2313.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCBd4	Ave	3788 397641	7323 428530	27228 932010	102312	212091	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodimethylamine	DCBd4	Ave	5254 611073	11572 678724	40963 1481343	165821	352740	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pyridine	DCBd4	Ave	16278 1964917	38599 2253576	134481 4821675	564496	1148447	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
N,N-dimethylformamide	DCBd4	Ave	+++++ 631689	+++++ 726618	50756 1602086	166247	363243	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2-Picoline	DCBd4	Ave	6831 968528	18283 1122563	62591 2381199	274828	561145	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomethylethylamine	DCBd4	Ave	+++++ 427595	+++++ 494375	29560 1038864	127188	245133	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Methyl methanesulfonate	DCBd4	Ave	4183 544639	9929 623080	36416 1326692	153209	313482	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodiethylamine	DCBd4	Ave	2814 397027	6119 465302	25438 987575	107835	229401	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Ethyl methanesulfonate	DCBd4	Ave	3598 411490	7290 484945	25944 1016902	116621	241253	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzaldehyde	DCBd4	Ave	 768383	15058 890549	56176 1800659	226258	452268	 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenol	DCBd4	Ave	7394 1086145	17835 1224589	65491 2651687	305019	622838	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Aniline	DCBd4	Ave	9295 1332624	21560 1505727	87364 3264274	367257	762498	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethyl)ether	DCBd4	Ave	6300 857720	14641 994404	61134 2096671	244085	507953	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chlorophenol	DCBd4	Ave	4131 662749	10367 762922	44665 1641953	180798	381248	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dichlorobenzene	DCBd4	Ave	4244	13476	49906	216317	435072	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			737003	843489	1823756			12.5	20.0	30.0		
1,4-Dichlorobenzene	DCBd4	Ave	5474 744046	13790 853343	54422 1838673	214457	436020	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzyl alcohol	DCBd4	Ave	3877 510575	7530 571121	33689 1275616	136310	288280	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,2-Dichlorobenzene	DCBd4	Ave	4759 710079	11280 813052	50344 1732739	207846	415180	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o-Cresol	DCBd4	Ave	4953 712514	11155 810542	42762 1755346	194279	396275	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
bis (2-chloroisopropyl) ether	DCBd4	Ave	9756 1054038	20905 1186064	71121 2574657	302576	605659	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopyrrolidine	DCBd4	Ave	2953 422263	6787 498797	24710 1077258	114504	246181	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
m & p-Cresol	DCBd4	Ave	5029 765105	11779 856993	46349 1863525	205591	426312	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-propylamine	DCBd4	Ave	5594 685460	11980 783313	44114 1719371	193518	403250	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acetophenone	DCBd4	Ave	7802 1150307	19062 1302350	73221 2819350	321605	657809	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomorpholine	DCBd4	Ave	4589 508430	9500 582182	36753 1232773	140968	297668	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o-Toluidine	DCBd4	Ave	8016 1285497	20345 1495518	83302 3150420	352611	754370	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloroethane	DCBd4	Ave	2127 316482	5569 373392	21368 788765	94791	186029	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Nitrobenzene	NPT	Ave	7761 974718	15166 1114434	64519 2381571	275737	555696	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopiperidine	NPT	Ave	2252 379876	5944 430883	23094 935104	102386	215054	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isophorone	NPT	Ave	11304 1731997	27325 1970524	110489 4251028	480253	990871	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitrophenol	NPT	Ave	1803 323630	4275 363877	18109 812623	82145	181237	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dimethylphenol	NPT	Ave	4709 773805	11267 890400	47568 1934591	206547	443208	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o,o',o''-Triethylphosphorothioate	NPT	Ave	2009 331448	4966 386529	20785 837818	92790	193410	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethoxy)methane	NPT	Ave	6703 1041343	18006 1178073	69232 2559050	292180	608519	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dichlorophenol	NPT	Ave	3045	7275	32172	148760	306671	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			544663	616109	1366389			12.5	20.0	30.0		
1,2,4-Trichlorobenzene	NPT	Ave	4111 608444	10803 695498	40743 1513990	171668	353840	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Naphthalene	NPT	Ave	14045 1933948	33625 2192393	134088 4686916	551132	1122275	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
a-Terpineol	NPT	Ave	3910 652215	11565 751570	40801 1648053	177706	369021	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloroaniline	NPT	Ave	4567 823117	11374 922408	51493 2049018	225383	477361	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dichlorophenol	NPT	Ave	3589 550336	6946 605123	32742 1350927	147038	312629	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloropropene	NPT	Ave	2588 424316	6245 501587	28781 1057706	117240	240808	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorobutadiene	NPT	Ave	2264 346418	6396 393263	22943 851202	100168	200566	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Quinoline	NPT	Ave	8944 1266695	20035 1464814	80204 3093112	341560	733804	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Caprolactam	NPT	Ave	 211715	3651 244506	12006 524173	53695	119376	 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-butylamine	NPT	Ave	+++++ 793257	+++++ 916509	46579 1972037	177330	380325	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
1,4-phenylenediamine	NPT	Ave	+++++ 671028	+++++ 773792	34070 1634586	171088	386655	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
4-Chloro-3-methylphenol	NPT	Ave	4703 701442	9440 782043	39818 1732558	178660	390789	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Safrole, Total	NPT	Ave	3386 505522	7536 590677	32647 1273161	137638	289524	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Methylnaphthalene	NPT	Ave	8534 1259036	20972 1435261	82095 3091023	357093	724956	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Methylnaphthalene	NPT	Ave	7865 1179717	19120 1315600	79488 2873541	324459	670326	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorocyclopentadiene	ANT	Ave	2581 403661	6257 459571	25192 1021424	109330	229655	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,2,4,5-Tetrachlorobenzene	ANT	Ave	4508 621656	10339 721726	42708 1547192	178866	364783	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isosafrole Peak 1	ANT	Ave	+++++ 89460	1589 107290	5807 229188	24954	52138	+++++ 2.00	0.0400 3.20	0.200 4.80	0.600	1.20
2,4,6-Trichlorophenol	ANT	Ave	2242 386600	5418 452435	23472 978069	102290	222069	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4,5-Trichlorophenol	ANT	Ave	2352	6085	24268	113184	240413	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			429747	477401	1071275			12.5	20.0	30.0		
Isosafrole Peak 2	ANT	Ave	2996 522034	8413 613381	32209 1306870	139988	303381	0.105 10.5	0.210 16.8	1.05 25.2	3.15	6.30
1,1'-Biphenyl	ANT	Ave	10487 1568850	24739 1740829	109433 3741308	438040	903429	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chloronaphthalene	ANT	Ave	8496 1171401	20060 1349266	82032 2730710	342113	711008	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Chloronaphthalene	ANT	Ave	7749 1174051	18556 1325796	79617 2942451	323675	663263	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diphenyl ether	ANT	Ave	5443 850245	15329 955363	59632 2071699	238545	488530	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitroaniline	ANT	Ave	+++++ 379979	+++++ 431951	19045 955942	93576	210531	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
1,4-Naphthoquinone	ANT	Ave	2898 475083	6099 553975	25841 1181011	120588	266364	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dinitrobenzene	ANT	Ave	+++++ 192764	+++++ 227977	9318 499639	46828	106132	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Dimethyl phthalate	ANT	Ave	7723 1388889	21313 1581047	88218 3417589	385085	805439	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Dinitrobenzene	ANT	Ave	+++++ 216442	2760 249972	12097 556745	55558	119597	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dinitrotoluene	ANT	Ave	+++++ 306672	4227 340208	15553 756063	77846	169573	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthylene	ANT	Ave	12646 1994870	29864 2246074	125089 4823008	538080	1141047	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Nitroaniline	ANT	Ave	1722 345381	4312 389414	17411 867445	85127	194758	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthene	ANT	Ave	7295 1250702	21817 1409310	81765 3050393	337447	727892	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrophenol	ANT	Lin2	+++++ 393527	+++++ 446344	30230 1064535	130348	247228	+++++ 25.0	+++++ 40.0	5.00 60.0	11.3	17.5
4-Nitrophenol	ANT	Ave	7917 485082	17305 546625	41316 1202855	124218	276683	0.750 25.0	1.50 40.0	3.75 60.0	7.50	15.0
Pentachlorobenzene	ANT	Ave	3665 517290	9342 607044	34886 1282296	145886	301569	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrotoluene	ANT	Ave	+++++ 422052	4997 476129	20772 1050646	102391	234199	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenzofuran	ANT	Ave	11295 1714488	27804 1937161	117422 4109714	478582	990195	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Naphthylamine	ANT	Ave	7088	15768	64936	302651	659274	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			1145531	1315889	2799279			12.5	20.0	30.0		
2,3,4,6-Tetrachlorophenol	ANT	Ave	2034 359188	4953 404215	20144 906813	96800	207036	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Naphthylamine	ANT	Ave	7757 1320862	18316 1496895	76297 3173916	339001	739264	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diethyl phthalate	ANT	Ave	7480 1322820	19483 1490539	81497 3227677	359760	761904	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ANT	Ave	2006 264443	3929 309380	14256 673979	66476	151718	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluorene	ANT	Ave	9659 1395663	22667 1562747	89338 3338091	380479	804250	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chlorophenyl-phenyl ether	ANT	Ave	4381 687621	11078 758979	47107 1655148	193689	394542	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
5-Nitro-o-toluidine	ANT	Ave	2544 409665	4355 469620	21656 977748	101748	225074	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitroaniline	ANT	Ave	+++++ 369082	3953 423052	19681 893053	95521	210421	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,6-Dinitro-2-methylphenol	PHN	Ave	+++++ 493251	+++++ 559060	34391 1246566	112535	260559	+++++ 25.0	+++++ 40.0	3.75 60.0	7.50	15.0
n-Nitrosodiphenylamine(as diphenylamine)	PHN	Ave	5718 979627	14794 1125153	61255 2411622	270495	568163	0.106 10.6	0.213 17.0	1.06 25.5	3.19	6.38
1,2-Diphenylhydrazine	PHN	Ave	13784 1947037	29233 2203026	120997 4624541	522349	1112876	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Sulfotepp	PHN	Ave	2340 291753	4178 343510	18223 720101	78223	166090	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3,5-Trinitrobenzene	PHN	Ave	+++++ 151662	+++++ 170943	+++++ 394562	32077	80104	+++++ 12.5	+++++ 20.0	+++++ 30.0	3.75	7.50
cis-Diallate	PHN	Ave	4046 587527	11757 659080	39270 1410225	150112	330439	0.0925 9.25	0.185 14.8	0.925 22.2	2.78	5.55
Phorate	PHN	Ave	5489 1178405	14899 1340313	60036 2871398	303783	660695	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenacetin	PHN	Ave	4113 834131	9781 931503	40838 1990116	197475	453636	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Bromophenyl-phenylether	PHN	Ave	2737 394232	5340 451733	26304 974859	109083	230929	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
trans-Diallate	PHN	Ave	+++++ 211990	4155 233455	16666 498253	54738	122243	+++++ 3.25	0.0650 5.20	0.325 7.80	0.975	1.95
Hexachlorobenzene	PHN	Ave	2998 408409	7018 467420	26262 1009932	116801	239838	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dimethoate	PHN	Ave	+++++ 752314	8572 859255	37289 1804593	177530	417475	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Atrazine	PHN	Ave	 420352	5894 468772	23527 971978	110966	243463	 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachlorophenol	PHN	Ave	+++++ 572112	15785 642123	27313 1395979	131014	312047	+++++ 25.0	1.25 40.0	2.50 60.0	7.50	15.0
4-Aminobiphenyl	PHN	Ave	8495 1647912	22883 1854571	94027 3864310	427343	926082	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachloronitrobenzene	PHN	Ave	972 192865	2606 222456	11056 476967	50111	111484	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pronamide	PHN	Ave	+++++ 649394	+++++ 728184	33049 1591871	159271	357742	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Dinoseb	PHN	Lin2	+++++ 344980	+++++ 402592	12731 941382	73944	178575	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Disulfoton	PHN	Ave	+++++ 1191853	25533 1368666	70969 2889187	312380	684797	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenanthrene	PHN	Ave	13304 2048058	34686 2274554	133089 4763338	559497	1176821	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Anthracene	PHN	Ave	12731 2117815	30856 2343744	128947 4957348	566832	1185022	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Carbazole	PHN	Ave	10493 1926934	26198 2167596	114418 4563253	508449	1108250	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Methyl parathion	PHN	Ave	+++++ 541573	+++++ 628850	25224 1377450	129457	294416	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Di-n-butyl phthalate	PHN	Ave	10574 2172684	27432 2439142	114928 5279551	553933	1203982	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Parathion	PHN	Ave	+++++ 329655	+++++ 378041	12981 837356	70719	178232	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
4-Nitroquinoline-1-oxide	PHN	Qua2	+++++ 170852	+++++ 207183	6162 502124	30726	81207	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Octachlorostyrene	PHN	Ave	1016 159293	2611 181291	11071 391269	46107	91194	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isodrin	PHN	Ave	+++++ 238177	4655 280032	17401 588963	67174	137942	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluoranthene	PHN	Ave	12756 2304816	31583 2555339	138838 5411719	612334	1287214	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzidine	PYR10	Ave	+++++ 4801859	+++++ 5332789	+++++ 9126120	1186380	2691871	+++++ 37.5	+++++ 60.0	+++++ 90.0	11.3	22.5
Pyrene	PYR10	Ave	16850 2459344	39924 2682124	155469 5634434	676379	1417720	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
p-Dimethylamino azobenzene	PYR10	Ave	+++++ 420000	+++++ 464672	17339 1028496	93753	224604	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Chlorobenzilate	PYR10	Ave	+++++ 687158	7944 782657	33314 1652637	161707	376053	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,3'-Dimethylbenzidine	PYR10	Ave	+++++ 1414492	+++++ 1566673	65912 3258109	343095	785843	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Butylbenzylphthalate	PYR10	Ave	+++++ 980151	+++++ 1076947	46705 2329489	236930	527989	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2-Acetylaminofluorene	PYR10	Lin1	+++++ 809780	5991 922342	28561 2088684	166192	407399	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,3'-Dichlorobenzidine	PYR10	Ave	+++++ 812239	+++++ 901856	38189 1942402	198112	448646	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
4,4'-Methylene bis(2-chloroaniline)	PYR10	Ave	+++++ 461557	+++++ 511801	21674 1072053	108829	252701	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Benzo[a]anthracene	PYR10	Ave	10451 2145975	26766 2391080	123139 4965481	563072	1229808	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Chrysene	PYR10	Ave	11108 2115931	28998 2300123	129175 4796552	548150	1181968	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-ethylhexyl) phthalate	PYR10	Ave	+++++ 1323665	+++++ 1483917	58702 3257127	304212	710689	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
6-Methylchrysene	PYR10	Ave	7850 1462100	17895 1652922	78885 3497407	361980	810336	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Di-n-octyl phthalate	PRY	Lin2	+++++ 2122314	+++++ 2361995	77819 5362138	447395	1083739	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
7,12-Dimethylbenz(a)anthracene	PRY	Ave	4065 921801	10377 1041376	45718 2224841	215590	500471	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[b]fluoranthene	PRY	Ave	9643 2181015	28483 2347128	125413 5070529	558588	1186410	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[k]fluoranthene	PRY	Ave	11524 2245125	27794 2521117	126269 5194201	576600	1255002	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]pyrene	PRY	Ave	10095 1831753	25624 2017273	95358 4403030	463285	1017219	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Methylcholanthrene	PRY	Ave	4915 990084	11935 1099527	47586 2412401	228764	535201	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,h]acridine	PRY	Ave	7419 1447574	16818 1607428	72956 3434148	346351	768193	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,j]acridine	PRY	Ave	7089 1656618	18104 1792004	79494 3934695	412244	884684	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Indeno[1,2,3-cd]pyrene	PRY	Ave	7123 1560367	20052 1728637	83890 3811308	390110	867686	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dibenz(a,h)anthracene	PRY	Ave	9364 1832017	22451 1986761	101408 4373334	460183	1008213	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[g,h,i]perylene	PRY	Ave	9111 1811937	25743 2004194	101293 4257857	458856	999938	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Fluorophenol (Surr)	DCBd4	Ave	9698 1451203	23791 1673802	95602 3590656	408861	843858	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Phenol-d5 (Surr)	DCBd4	Ave	15466 2104472	33079 2407771	133530 5102011	571106	1209856	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Nitrobenzene-d5 (Surr)	NPT	Ave	13614 1932537	31619 2197185	127985 4666829	542408	1134905	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2-Fluorobiphenyl (Surr)	ANT	Ave	19211 2809767	48760 3192496	191935 6635346	795030	1637420	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	2025 378372	4416 419922	21367 947174	98465	213482	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
p-Terphenyl-d14 (Surr)	PYR10	Ave	18633 3263036	50359 3596589	214129 7439984	897894	1902699	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua2 = Quadratic 1/conc^2 ISTD

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 356566

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2023 13:34 Calibration End Date: 03/23/2023 16:08 Calibration ID: 48596

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-356566/3	DC2312.D
Level 2	IC 410-356566/4	DC2318.D
Level 3	IC 410-356566/9	DC2317.D
Level 4	IC 410-356566/8	DC2316.D
Level 5	IC 410-356566/7	DC2315.D
Level 6	ICIS 410-356566/2	DC2311.D
Level 7	IC 410-356566/6	DC2314.D
Level 8	IC 410-356566/5	DC2313.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
2,4-Dinitrophenol	+++++ -4.2	+++++ 3.4	2.1	-8.4	5.0	2.1	30	30	50	30	30	30
Dinoseb	+++++ -0.8	+++++ 9.2	3.4	-10.7	-1.1	0.0	30	30	50	30	30	30
4-Nitroquinoline-1-oxide	+++++ -1.0	+++++ -1.0	2.5	-10.7	3.8	5.6	30	30	50	30	30	30
2-Acetylaminofluorene	+++++ -1.2	50.4 * 6.2	-25.2	-23.1	-6.7	-0.4	30	50 30	30	30	30	30
Di-n-octyl phthalate	+++++ -1.0	+++++ 7.0	3.1	-10.5	-0.1	1.4	30	30	50	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2311.D
Lims ID: ICIS L6
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 23-Mar-2023 13:34:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICIS L6
Misc. Info.: 410-0079683-002
Operator ID: em10340 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 17:56:00 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 14:53:39

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.965	1.965	0.000	95	397641	12.5	12.4	
	3 N-Nitrosodimethylamine	74	2.193	2.193	0.000	91	611073	12.5	12.3	
	4 Pyridine	79	2.233	2.233	0.000	98	1964917	25.0	24.3	
	6 Dimethylformamide	73	2.519	2.519	0.000	93	631689	12.5	12.4	
	7 2-Picoline	93	2.834	2.834	0.000	90	968528	12.5	12.6	
	8 N-Nitrosomethylethylamine	88	2.921	2.921	0.000	94	427595	12.5	12.6	
	9 Methyl methanesulfonate	80	3.189	3.189	0.000	85	544639	12.5	12.5	
$	10 2-Fluorophenol	112	3.347	3.347	0.000	94	1451203	25.0	25.8	
	11 N-Nitrosodiethylamine	102	3.574	3.574	0.000	95	397027	12.5	13.0	
	12 Ethyl methanesulfonate	109	3.848	3.848	0.000	97	411490	12.5	12.3	
	15 Benzaldehyde	77	4.180	4.180	0.000	94	768383	12.5	12.3	
$	16 Phenol-d5	99	4.215	4.215	0.000	95	2104472	25.0	25.9	
	17 Phenol	94	4.227	4.227	0.000	94	1086145	12.5	13.1	
	18 Aniline	93	4.279	4.279	0.000	95	1332624	12.5	12.9	
	19 Bis(2-chloroethyl)ether	93	4.332	4.332	0.000	93	857720	12.5	12.5	
	20 2-Chlorophenol	128	4.390	4.390	0.000	91	662749	12.5	13.1	
	21 1,3-Dichlorobenzene	146	4.541	4.541	0.000	93	737003	12.5	12.8	
*	22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	97	192517	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.611	4.611	0.000	89	744046	12.5	12.3	
	25 Benzyl alcohol	108	4.710	4.710	0.000	90	510575	12.5	13.0	
	26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	91	710079	12.5	12.8	
	28 2-Methylphenol	108	4.810	4.810	0.000	95	712514	12.5	13.2	
	29 2,2'-oxybis[1-chloropropane]	45	4.845	4.845	0.000	93	1054038	12.5	12.0	
	31 N-Nitrosopyrrolidine	100	4.944	4.944	0.000	91	422263	12.5	13.0	
	32 4-Methylphenol	108	4.955	4.955	0.000	97	765105	12.5	13.4	
	33 N-Nitrosodi-n-propylamine	70	4.967	4.967	0.000	73	685460	12.5	12.4	
	34 Acetophenone	105	4.967	4.967	0.000	92	1150307	12.5	13.0	
	35 N-Nitrosomorpholine	56	4.984	4.984	0.000	91	508430	12.5	12.1	
	36 2-Toluidine	106	5.002	5.002	0.000	95	1285497	12.5	13.1	
	38 Hexachloroethane	117	5.078	5.078	0.000	97	316482	12.5	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.113	5.113	0.000	87	1932537	25.0	25.8	
40 Nitrobenzene	77	5.130	5.130	0.000	85	974718	12.5	12.8	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	85	379876	12.5	13.5	
43 Isophorone	82	5.357	5.357	0.000	96	1731997	12.5	13.2	
44 2-Nitrophenol	139	5.433	5.433	0.000	89	323630	12.5	14.1	
45 2,4-Dimethylphenol	107	5.462	5.462	0.000	98	773805	12.5	13.5	
46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	93	331448	12.5	13.3	
47 Bis(2-chloroethoxy)methane	93	5.561	5.561	0.000	99	1041343	12.5	13.0	
48 2,4-Dichlorophenol	162	5.655	5.655	0.000	96	544663	12.5	13.8	
49 1,2,4-Trichlorobenzene	180	5.742	5.742	0.000	93	608444	12.5	12.8	
* 50 Naphthalene-d8	136	5.800	5.800	0.000	99	711517	5.00	5.00	
51 Naphthalene	128	5.818	5.818	0.000	98	1933948	12.5	12.7	
52 Alpha-Terpineol	59	5.824	5.824	0.000	92	652215	12.5	13.1	
53 4-Chloroaniline	127	5.865	5.865	0.000	93	823117	12.5	13.7	
54 2,6-Dichlorophenol	162	5.876	5.876	0.000	93	550336	12.5	13.8	
55 Hexachloropropene	213	5.905	5.905	0.000	89	424316	12.5	13.2	
56 Hexachlorobutadiene	225	5.940	5.940	0.000	96	346418	12.5	12.8	
60 Quinoline	129	6.133	6.133	0.000	94	1266695	12.5	13.1	
61 Caprolactam	113	6.173	6.173	0.000	79	211715	12.5	13.4	
62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	89	793257	12.5	14.0	
63 p-Phenylene diamine	108	6.197	6.197	0.000	94	671028	12.5	13.7	
64 4-Chloro-3-methylphenol	107	6.319	6.319	0.000	91	701442	12.5	13.8	
65 Safrole, Total	162	6.395	6.395	0.000	84	505522	12.5	13.2	
66 2-Methylnaphthalene	142	6.477	6.477	0.000	91	1259036	12.5	13.0	
67 1-Methylnaphthalene	142	6.570	6.570	0.000	92	1179717	12.5	13.1	
68 Hexachlorocyclopentadiene	237	6.628	6.628	0.000	97	403661	12.5	12.9	
69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	98	621656	12.5	12.3	
70 Isosafrole Peak 1	162	6.669	6.669	0.000	85	89460	2.00	1.97	
71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	80	386600	12.5	13.2	
72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	93	429747	12.5	13.6	
$ 73 2-Fluorobiphenyl (Surr)	172	6.826	6.826	0.000	99	2809767	25.0	25.0	
74 Isosafrole Peak 2	162	6.885	6.885	0.000	87	522034	10.5	10.9	
75 1,1'-Biphenyl	154	6.920	6.920	0.000	95	1568850	12.5	12.7	
76 2-Chloronaphthalene	162	6.937	6.937	0.000	96	1171401	12.5	12.3	
77 1-Chloronaphthalene	162	6.960	6.960	0.000	97	1174051	12.5	12.7	
78 Phenyl ether	170	7.024	7.024	0.000	88	850245	12.5	12.5	
79 2-Nitroaniline	138	7.030	7.030	0.000	82	379979	12.5	13.4	
81 1,4-Naphthoquinone	158	7.106	7.106	0.000	79	475083	12.5	13.6	
86 1,3-Dinitrobenzene	168	7.164	7.164	0.000	83	192764	12.5	13.4	
85 Dimethyl phthalate	163	7.205	7.205	0.000	97	1388889	12.5	13.1	
84 1,4-Dinitrobenzene	168	7.228	7.228	0.000	82	216442	12.5	13.5	
87 2,6-Dinitrotoluene	165	7.263	7.263	0.000	88	306672	12.5	13.7	
88 Acenaphthylene	152	7.333	7.333	0.000	99	1994870	12.5	13.1	
89 3-Nitroaniline	138	7.415	7.415	0.000	88	345381	12.5	14.2	
* 90 Acenaphthene-d10	164	7.462	7.462	0.000	95	394814	5.00	5.00	
91 Acenaphthene	153	7.497	7.497	0.000	97	1250702	12.5	12.8	
92 2,4-Dinitrophenol	184	7.514	7.514	0.000	78	393527	25.0	25.5	
93 4-Nitrophenol	109	7.567	7.567	0.000	82	485082	25.0	27.7	
94 Pentachlorobenzene	250	7.619	7.619	0.000	97	517290	12.5	12.3	
95 2,4-Dinitrotoluene	165	7.642	7.642	0.000	86	422052	12.5	14.0	
96 Dibenzofuran	168	7.660	7.660	0.000	97	1714488	12.5	12.7	
97 1-Naphthylamine	143	7.730	7.730	0.000	98	1145531	12.5	13.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.771	7.771	0.000	75	359188	12.5	13.5	
99 2-Naphthylamine	143	7.805	7.805	0.000	94	1320862	12.5	13.6	
100 Diethyl phthalate	149	7.875	7.875	0.000	97	1322820	12.5	13.3	
101 Thionazin	107	7.951	7.951	0.000	78	264443	12.5	13.0	
102 Fluorene	166	7.986	7.986	0.000	93	1395663	12.5	12.8	
103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	89	687621	12.5	12.8	
104 N-Nitro-o-toluidine	152	7.992	7.992	0.000	86	409665	12.5	14.1	
105 4-Nitroaniline	138	7.992	7.992	0.000	77	369082	12.5	13.9	
106 4,6-Dinitro-2-methylphenol	198	8.021	8.021	0.000	78	493251	25.0	27.1	
107 N-Nitrosodiphenylamine	169	8.097	8.097	0.000	75	979627	10.6	10.8	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	41	1947037	12.5	12.5	
$ 109 2,4,6-Tribromophenol	330	8.208	8.208	0.000	89	378372	25.0	27.8	
110 Sulfotepp	97	8.248	8.248	0.000	78	291753	12.5	12.2	
112 1,3,5-Trinitrobenzene	213	8.330	8.330	0.000	82	151662	12.5	13.1	
113 cis-Diallate	86	8.371	8.371	0.000	0	587527	9.25	8.94	
114 Phorate	75	8.383	8.383	0.000	95	1178405	12.5	13.8	
115 Phenacetin	108	8.383	8.383	0.000	87	834131	12.5	14.2	
116 4-Bromophenyl phenyl ether	248	8.447	8.447	0.000	72	394232	12.5	12.4	
117 trans-Diallate	86	8.458	8.458	0.000	0	211990	3.25	3.10	
118 Hexachlorobenzene	284	8.499	8.499	0.000	92	408409	12.5	12.0	
119 Dimethoate	87	8.534	8.534	0.000	97	752314	12.5	13.9	
120 Atrazine	200	8.598	8.598	0.000	90	420352	12.5	13.1	
121 Pentachlorophenol	266	8.686	8.686	0.000	92	572112	25.0	28.1	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	91	1647912	12.5	13.4	
123 Pentachloronitrobenzene	237	8.697	8.697	0.000	86	192865	12.5	13.3	
124 Pronamide	173	8.750	8.750	0.000	90	649394	12.5	13.3	
125 Dinoseb	211	8.860	8.860	0.000	94	344980	12.5	12.5	
* 126 Phenanthrene-d10	188	8.872	8.872	0.000	97	755591	5.00	5.00	
127 Disulfoton	88	8.878	8.878	0.000	96	1191853	12.5	12.1	
128 Phenanthrene	178	8.895	8.895	0.000	98	2048058	12.5	12.4	
129 Anthracene	178	8.942	8.942	0.000	99	2117815	12.5	13.0	
130 Carbazole	167	9.094	9.094	0.000	96	1926934	12.5	13.2	
131 Methyl parathion	109	9.228	9.228	0.000	90	541573	12.5	13.3	
133 Di-n-butyl phthalate	149	9.432	9.432	0.000	100	2172684	12.5	13.7	
134 Ethyl Parathion	109	9.601	9.601	0.000	83	329655	12.5	13.9	
135 4-Nitroquinoline-1-oxide	190	9.624	9.624	0.000	81	170852	12.5	13.2	
S 136 Diallate	86				0		12.5	12.0	
140 Octachlorostyrene	308	9.840	9.840	0.000	93	159293	12.5	12.2	
141 Isodrin	193	9.880	9.880	0.000	91	238177	12.5	11.7	
143 Fluoranthene	202	10.020	10.020	0.000	99	2304816	12.5	13.2	
147 Benzidine	184	10.154	10.154	0.000	99	4801859	37.5	40.2	
* 149 Pyrene-d10 (IS)	212	10.224	10.224	0.000	100	779979	5.00	5.00	
150 Pyrene	202	10.242	10.242	0.000	96	2459344	12.5	12.4	
$ 152 p-Terphenyl-d14	244	10.399	10.399	0.000	99	3263036	25.0	25.3	
154 p-Dimethylamino azobenzene	225	10.545	10.545	0.000	93	420000	12.5	13.9	
155 Chlorobenzilate	139	10.592	10.592	0.000	86	687158	12.5	13.8	
156 3,3'-Dimethylbenzidine	212	10.895	10.895	0.000	99	1414492	12.5	13.6	
157 Butyl benzyl phthalate	149	10.924	10.924	0.000	94	980151	12.5	13.5	
158 2-Acetylaminofluorene	181	11.174	11.174	0.000	94	809780	12.5	12.5	
159 3,3'-Dichlorobenzidine	252	11.518	11.518	0.000	78	812239	12.5	13.4	
160 4,4'-Methylene bis(2-chloroani	231	11.524	11.524	0.000	95	461557	12.5	13.6	
161 Benzo[a]anthracene	228	11.542	11.542	0.000	100	2145975	12.5	13.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.582	11.582	0.000	97	2115931	12.5	13.3	
163 Bis(2-ethylhexyl) phthalate	149	11.612	11.612	0.000	96	1323665	12.5	13.6	
164 6-Methylchrysene	242	12.165	12.165	0.000	99	1462100	12.5	13.6	
165 Di-n-octyl phthalate	149	12.498	12.498	0.000	99	2122314	12.5	12.7	
166 7,12-Dimethylbenz(a)anthracene	256	12.970	12.970	0.000	92	921801	12.5	13.9	
167 Benzo[b]fluoranthene	252	12.970	12.970	0.000	97	2181015	12.5	13.5	
168 Benzo[k]fluoranthene	252	13.010	13.010	0.000	100	2245125	12.5	13.2	
169 Benzo[a]pyrene	252	13.436	13.436	0.000	78	1831753	12.5	13.1	
* 170 Perylene-d12	264	13.518	13.518	0.000	98	651289	5.00	5.00	
171 3-Methylcholanthrene	268	13.966	13.966	0.000	92	990084	12.5	13.7	
172 Dibenz[a,h]acridine	279	14.759	14.759	0.000	91	1447574	12.5	13.7	
173 Dibenz[a,j]acridine	279	14.823	14.823	0.000	96	1656618	12.5	14.1	
174 Indeno[1,2,3-cd]pyrene	276	15.068	15.068	0.000	99	1560367	12.5	13.4	
175 Dibenz(a,h)anthracene	278	15.109	15.109	0.000	94	1832017	12.5	13.4	
176 Benzo[g,h,i]perylene	276	15.458	15.458	0.000	97	1811937	12.5	13.1	
S 182 Isosafrole	162				0		12.5	12.9	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_6_00042 Amount Added: 1.00 Units: mL

Report Date: 23-Mar-2023 17:56:01 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2311.D

Injection Date: 23-Mar-2023 13:34:30 Instrument ID: HP19760 Operator ID: em10340

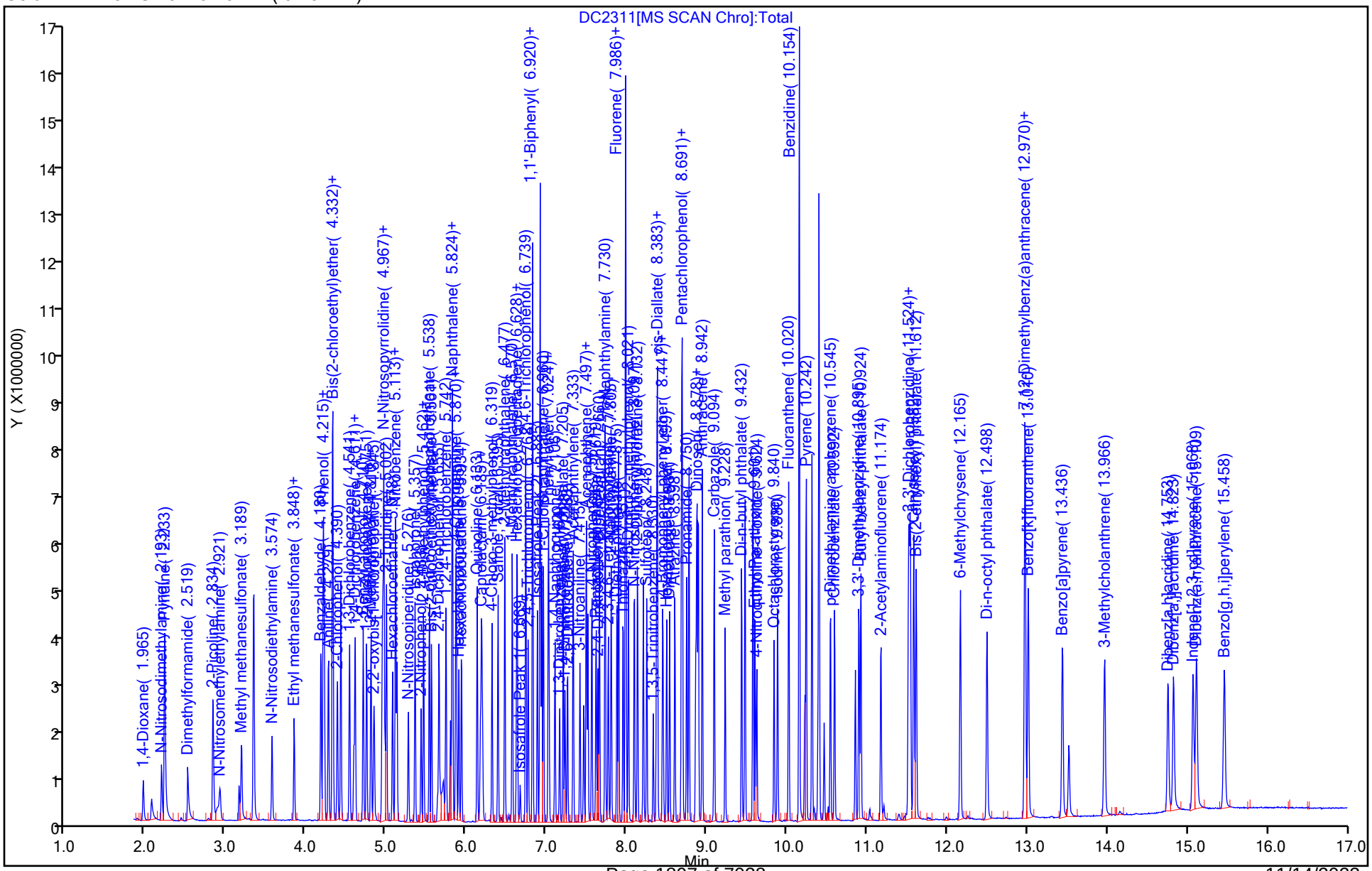
Lims ID: ICIS L6 Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 2

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 23-Mar-2023 13:56:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 410-0079683-003
Operator ID: em10340 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 17:56:07 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 14:52:20

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.965	1.965	0.000	55	3788	0.1250	0.1673	
	3 N-Nitrosodimethylamine	74	2.204	2.193	0.012	60	5254	0.1250	0.1498	
	4 Pyridine	79	2.245	2.233	0.012	92	16278	0.2500	0.2843	
	6 Dimethylformamide	73	2.478	2.519	-0.041	50	1073	0.1250	0.0298	
	7 2-Picoline	93	2.845	2.834	0.011	30	6831	0.1250	0.1254	
	8 N-Nitrosomethylethylamine	88	2.874	2.921	-0.047	0	12724	0.1250	0.5301	
	9 Methyl methanesulfonate	80	3.195	3.189	0.006	44	4183	0.1250	0.1357	
$	10 2-Fluorophenol	112	3.341	3.347	-0.006	91	9698	0.2500	0.2430	
	11 N-Nitrosodiethylamine	102	3.574	3.574	0.000	90	2814	0.1250	0.1296	
	12 Ethyl methanesulfonate	109	3.848	3.848	0.000	79	3598	0.1250	0.1520	
$	16 Phenol-d5	99	4.209	4.215	-0.006	94	15466	0.2500	0.2691	
	17 Phenol	94	4.221	4.227	-0.006	42	7394	0.1250	0.1257	a
	18 Aniline	93	4.279	4.279	0.000	94	9295	0.1250	0.1275	
	19 Bis(2-chloroethyl)ether	93	4.331	4.332	-0.001	95	6300	0.1250	0.1296	
	20 2-Chlorophenol	128	4.384	4.390	-0.006	43	4131	0.1250	0.1152	
	21 1,3-Dichlorobenzene	146	4.535	4.541	-0.006	81	4244	0.1250	0.1040	
*	22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	97	136344	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.605	4.611	-0.006	1	5474	0.1250	0.1280	
	25 Benzyl alcohol	108	4.710	4.710	0.000	90	3877	0.1250	0.1392	
	26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	76	4759	0.1250	0.1208	
	28 2-Methylphenol	108	4.804	4.810	-0.006	87	4953	0.1250	0.1295	
	29 2,2'-oxybis[1-chloropropane]	45	4.844	4.845	-0.001	90	9756	0.1250	0.1571	
	31 N-Nitrosopyrrolidine	100	4.943	4.944	-0.001	82	2953	0.1250	0.1282	
	32 4-Methylphenol	108	4.949	4.955	-0.006	69	5029	0.1250	0.1240	
	33 N-Nitrosodi-n-propylamine	70	4.961	4.967	-0.006	72	5594	0.1250	0.1434	
	34 Acetophenone	105	4.967	4.967	0.000	79	7802	0.1250	0.1243	
	35 N-Nitrosomorpholine	56	4.978	4.984	-0.006	38	4589	0.1250	0.1537	
	36 2-Toluidine	106	5.002	5.002	0.000	93	8016	0.1250	0.1153	
	38 Hexachloroethane	117	5.077	5.078	-0.001	88	2127	0.1250	0.1192	
$	39 Nitrobenzene-d5	82	5.112	5.113	-0.001	87	13614	0.2500	0.2615	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	5.130	5.130	0.000	82	7761	0.1250	0.1462	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	84	2252	0.1250	0.1150	
43 Isophorone	82	5.357	5.357	0.000	47	11304	0.1250	0.1237	
44 2-Nitrophenol	139	5.433	5.433	0.000	44	1803	0.1250	0.1128	
45 2,4-Dimethylphenol	107	5.462	5.462	0.000	94	4709	0.1250	0.1180	
46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	88	2009	0.1250	0.1156	
47 Bis(2-chloroethoxy)methane	93	5.561	5.561	0.000	93	6703	0.1250	0.1198	
48 2,4-Dichlorophenol	162	5.655	5.655	0.000	80	3045	0.1250	0.1112	
49 1,2,4-Trichlorobenzene	180	5.742	5.742	0.000	91	4111	0.1250	0.1241	
* 50 Naphthalene-d8	136	5.800	5.800	0.000	99	495556	5.00	5.00	
51 Naphthalene	128	5.818	5.818	0.000	97	14045	0.1250	0.1324	
52 Alpha-Terpineol	59	5.824	5.824	0.000	53	3910	0.1250	0.1131	
53 4-Chloroaniline	127	5.864	5.865	-0.001	82	4567	0.1250	0.1091	
54 2,6-Dichlorophenol	162	5.870	5.876	-0.006	80	3589	0.1250	0.1290	
55 Hexachloropropene	213	5.905	5.905	0.000	47	2588	0.1250	0.1159	
56 Hexachlorobutadiene	225	5.940	5.940	0.000	87	2264	0.1250	0.1200	
60 Quinoline	129	6.132	6.133	-0.001	93	8944	0.1250	0.1326	
62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	87	4664	0.1250	0.1183	
63 p-Phenylene diamine	108	6.197	6.197	0.000	40	2446	0.1250	0.0717	
64 4-Chloro-3-methylphenol	107	6.319	6.319	0.000	90	4703	0.1250	0.1327	
65 Safrole, Total	162	6.389	6.395	-0.006	86	3386	0.1250	0.1266	
66 2-Methylnaphthalene	142	6.476	6.477	-0.001	89	8534	0.1250	0.1262	
67 1-Methylnaphthalene	142	6.570	6.570	0.000	93	7865	0.1250	0.1254	
68 Hexachlorocyclopentadiene	237	6.622	6.628	-0.006	63	2581	0.1250	0.1202	
69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	91	4508	0.1250	0.1300	
70 Isosafrole Peak 1	162	6.669	6.669	0.000	1	980	0.0200	0.0314	a
71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	70	2242	0.1250	0.1117	
72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	85	2352	0.1250	0.1083	
$ 73 2-Fluorobiphenyl (Surr)	172	6.826	6.826	0.000	99	19211	0.2500	0.2488	
74 Isosafrole Peak 2	162	6.884	6.885	-0.001	78	2996	0.1050	0.0911	
75 1,1'-Biphenyl	154	6.919	6.920	-0.001	95	10487	0.1250	0.1237	
76 2-Chloronaphthalene	162	6.937	6.937	0.000	93	8496	0.1250	0.1295	M
77 1-Chloronaphthalene	162	6.954	6.960	-0.006	96	7749	0.1250	0.1222	Ma
78 Phenyl ether	170	7.018	7.024	-0.006	81	5443	0.1250	0.1165	
79 2-Nitroaniline	138	7.024	7.030	-0.006	52	1855	0.1250	0.0955	
81 1,4-Naphthoquinone	158	7.100	7.106	-0.006	82	2898	0.1250	0.1208	
86 1,3-Dinitrobenzene	168	7.164	7.164	0.000	32	1087	0.1250	0.1098	
85 Dimethyl phthalate	163	7.205	7.205	0.000	94	7723	0.1250	0.1059	
84 1,4-Dinitrobenzene	168	7.222	7.228	-0.006	22	929	0.1250	0.0841	
87 2,6-Dinitrotoluene	165	7.257	7.263	-0.006	19	1358	0.1250	0.0882	a
88 Acenaphthylene	152	7.327	7.333	-0.006	98	12646	0.1250	0.1206	
89 3-Nitroaniline	138	7.415	7.415	0.000	43	1722	0.1250	0.1027	
* 90 Acenaphthene-d10	164	7.461	7.462	-0.001	95	271456	5.00	5.00	
91 Acenaphthene	153	7.491	7.497	-0.006	90	7295	0.1250	0.1089	
92 2,4-Dinitrophenol	184	7.508	7.514	-0.006	71	7476	1.25	3.12	
93 4-Nitrophenol	109	7.555	7.567	-0.011	82	7917	0.7500	0.6577	
94 Pentachlorobenzene	250	7.613	7.619	-0.006	91	3665	0.1250	0.1267	
95 2,4-Dinitrotoluene	165	7.642	7.642	0.000	49	1747	0.1250	0.0844	
96 Dibenzofuran	168	7.660	7.660	0.000	96	11295	0.1250	0.1216	
97 1-Naphthylamine	143	7.730	7.730	0.000	96	7088	0.1250	0.1203	
98 2,3,4,6-Tetrachlorophenol	232	7.730	7.771	-0.040	49	2034	0.1250	0.1109	a
99 2-Naphthylamine	143	7.799	7.805	-0.006	93	7757	0.1250	0.1159	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 Diethyl phthalate	149	7.875	7.875	0.000	96	7480	0.1250	0.1091	
101 Thionazin	107	7.951	7.951	0.000	44	2006	0.1250	0.1429	
102 Fluorene	166	7.980	7.986	-0.006	95	9659	0.1250	0.1286	
103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	76	4381	0.1250	0.1184	
104 N-Nitro-o-toluidine	152	7.986	7.992	-0.006	69	2544	0.1250	0.1270	
105 4-Nitroaniline	138	7.986	7.992	-0.006	69	2015	0.1250	0.1102	
106 4,6-Dinitro-2-methylphenol	198	8.021	8.021	0.000	78	6012	0.7500	0.5253	
107 N-Nitrosodiphenylamine	169	8.091	8.097	-0.006	62	5718	0.1063	0.0998	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	42	13784	0.1250	0.1408	
$ 109 2,4,6-Tribromophenol	330	8.207	8.208	-0.001	85	2025	0.2500	0.2167	
110 Sulfotepp	97	8.248	8.248	0.000	75	2340	0.1250	0.1559	
112 1,3,5-Trinitrobenzene	213	8.324	8.330	-0.006	47	672	0.1250	0.0920	
113 cis-Diallate	86	8.365	8.371	-0.006	0	4046	0.0925	0.0978	
114 Phorate	75	8.377	8.383	-0.007	91	5489	0.1250	0.1020	
115 Phenacetin	108	8.377	8.383	-0.007	75	4113	0.1250	0.1108	
116 4-Bromophenyl phenyl ether	248	8.446	8.447	-0.001	63	2737	0.1250	0.1369	
117 trans-Diallate	86	8.441	8.458	-0.017	0	4099	0.0325	0.0952	
118 Hexachlorobenzene	284	8.499	8.499	0.000	90	2998	0.1250	0.1398	
119 Dimethoate	87	8.435	8.534	-0.099	50	367	0.1250	0.0107	
121 Pentachlorophenol	266	8.680	8.686	-0.006	85	5116	0.6250	0.3993	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	88	8495	0.1250	0.1097	
123 Pentachloronitrobenzene	237	8.691	8.697	-0.006	46	972	0.1250	0.1062	
124 Pronamide	173	8.744	8.750	-0.006	79	2453	0.1250	0.0795	
125 Dinoseb	211	8.854	8.860	-0.006	60	1051	0.1250	0.6772	
* 126 Phenanthrene-d10	188	8.866	8.872	-0.006	97	475833	5.00	5.00	
127 Disulfoton	88	8.872	8.878	-0.006	56	14692	0.1250	0.2366	
128 Phenanthrene	178	8.889	8.895	-0.006	94	13304	0.1250	0.1283	
129 Anthracene	178	8.942	8.942	0.000	96	12731	0.1250	0.1238	
130 Carbazole	167	9.088	9.094	-0.006	96	10493	0.1250	0.1141	
131 Methyl parathion	109	9.227	9.228	-0.001	64	1999	0.1250	0.0781	
133 Di-n-butyl phthalate	149	9.431	9.432	-0.001	98	10574	0.1250	0.1062	
134 Ethyl Parathion	109	9.536	9.601	-0.065	51	279	0.1250	0.0186	
135 4-Nitroquinoline-1-oxide	190	9.618	9.624	-0.006	15	351	0.1250	0.4507	
S 136 Diallate	86				0		0.1250	0.1930	
140 Octachlorostyrene	308	9.839	9.840	-0.001	43	1016	0.1250	0.1237	
141 Isodrin	193	9.880	9.880	0.000	81	3554	0.1250	0.2782	
143 Fluoranthene	202	10.020	10.020	0.000	98	12756	0.1250	0.1162	
147 Benzidine	184	10.148	10.154	-0.006	99	18060	0.3750	0.2463	
* 149 Pyrene-d10 (IS)	212	10.218	10.224	-0.006	100	479217	5.00	5.00	
150 Pyrene	202	10.236	10.242	-0.006	97	16850	0.1250	0.1381	
$ 152 p-Terphenyl-d14	244	10.399	10.399	0.000	98	18633	0.2500	0.2354	
154 p-Dimethylamino azobenzene	225	10.539	10.545	-0.006	56	1874	0.1250	0.1008	
155 Chlorobenzilate	139	10.591	10.592	-0.001	83	2537	0.1250	0.0831	
156 3,3'-Dimethylbenzidine	212	10.894	10.895	-0.001	49	5105	0.1250	0.0796	
157 Butyl benzyl phthalate	149	10.918	10.924	-0.006	82	4110	0.1250	0.0924	
158 2-Acetylaminofluorene	181	11.168	11.174	-0.006	47	3112	0.1250	0.3370	
159 3,3'-Dichlorobenzidine	252	11.512	11.518	-0.006	70	3720	0.1250	0.1003	
160 4,4'-Methylene bis(2-chloroani	231	11.524	11.524	0.000	76	1822	0.1250	0.0875	
161 Benzo[a]anthracene	228	11.536	11.542	-0.006	98	10451	0.1250	0.1071	
162 Chrysene	228	11.576	11.582	-0.006	96	11108	0.1250	0.1137	
163 Bis(2-ethylhexyl) phthalate	149	11.606	11.612	-0.006	90	5330	0.1250	0.0894	
164 6-Methylchrysene	242	12.159	12.165	-0.006	96	7850	0.1250	0.1185	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.492	12.498	-0.006	34	8207	0.1250	0.6624	
166 7,12-Dimethylbenz(a)anthracene	256	12.964	12.970	-0.006	70	4065	0.1250	0.1053	
167 Benzo[b]fluoranthene	252	12.964	12.970	-0.006	94	9643	0.1250	0.1021	
168 Benzo[k]fluoranthene	252	12.999	13.010	-0.011	95	11524	0.1250	0.1166	
169 Benzo[a]pyrene	252	13.430	13.436	-0.006	78	10095	0.1250	0.1235	
* 170 Perylene-d12	264	13.517	13.518	-0.001	97	379469	5.00	5.00	
171 3-Methylcholanthrene	268	13.955	13.966	-0.012	44	4915	0.1250	0.1169	
172 Dibenz[a,h]acridine	279	14.747	14.759	-0.012	22	7419	0.1250	0.1203	a
173 Dibenz[a,j]acridine	279	14.817	14.823	-0.006	92	7089	0.1250	0.1035	M
174 Indeno[1,2,3-cd]pyrene	276	15.062	15.068	-0.006	64	7123	0.1250	0.1050	M
175 Dibenz(a,h)anthracene	278	15.109	15.109	0.000	84	9364	0.1250	0.1171	
176 Benzo[g,h,i]perylene	276	15.452	15.458	-0.006	71	9111	0.1250	0.1132	
S 178 Dinitrotoluene	165				0			0.1726	
S 182 Isosafrole	162				0		0.1250	0.1225	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_1_00028 Amount Added: 1.00 Units: mL

Report Date: 23-Mar-2023 17:56:08 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D

Injection Date: 23-Mar-2023 13:56:30 Instrument ID: HP19760 Operator ID: em10340

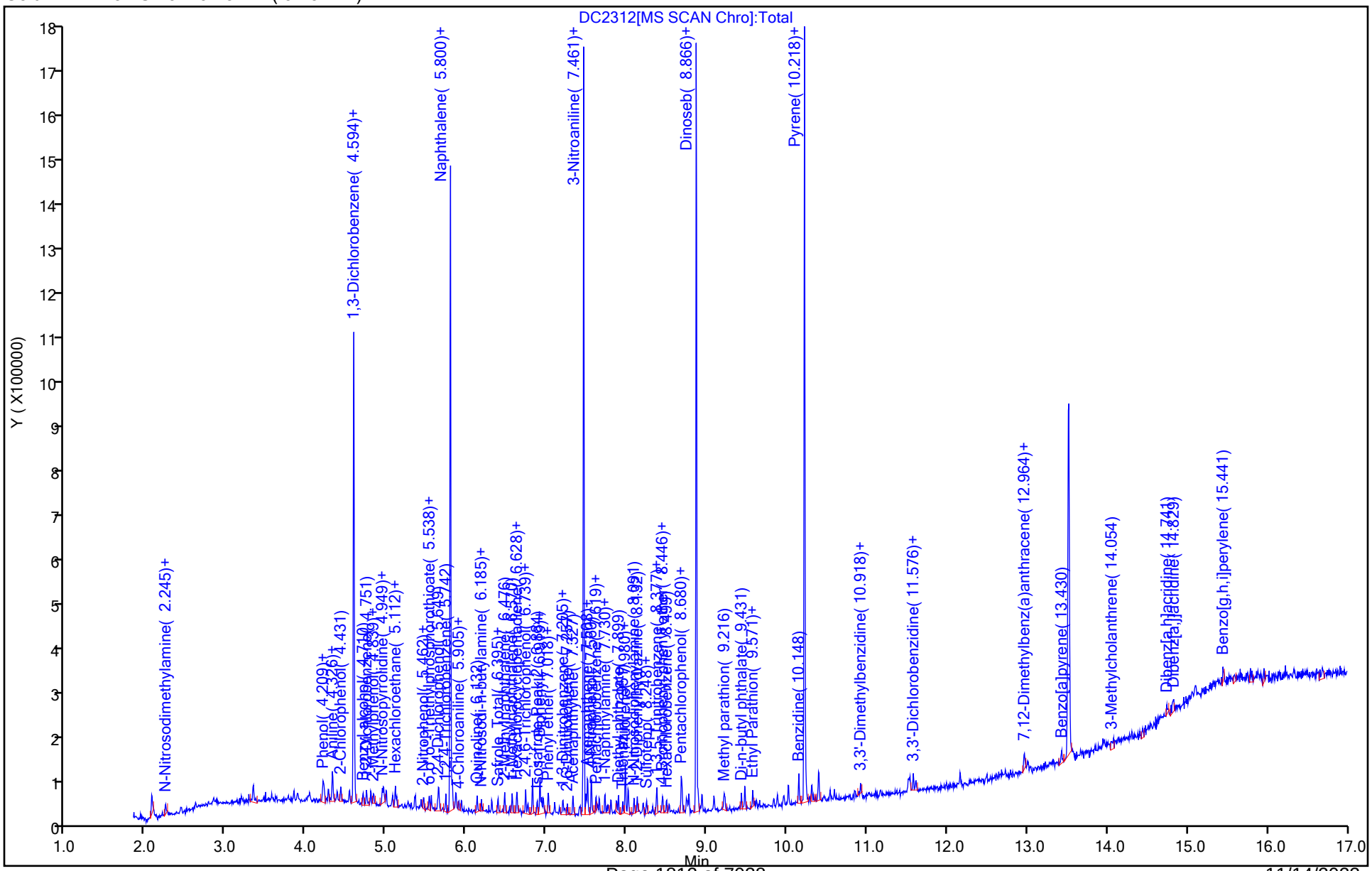
Lims ID: IC L1 Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 3

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

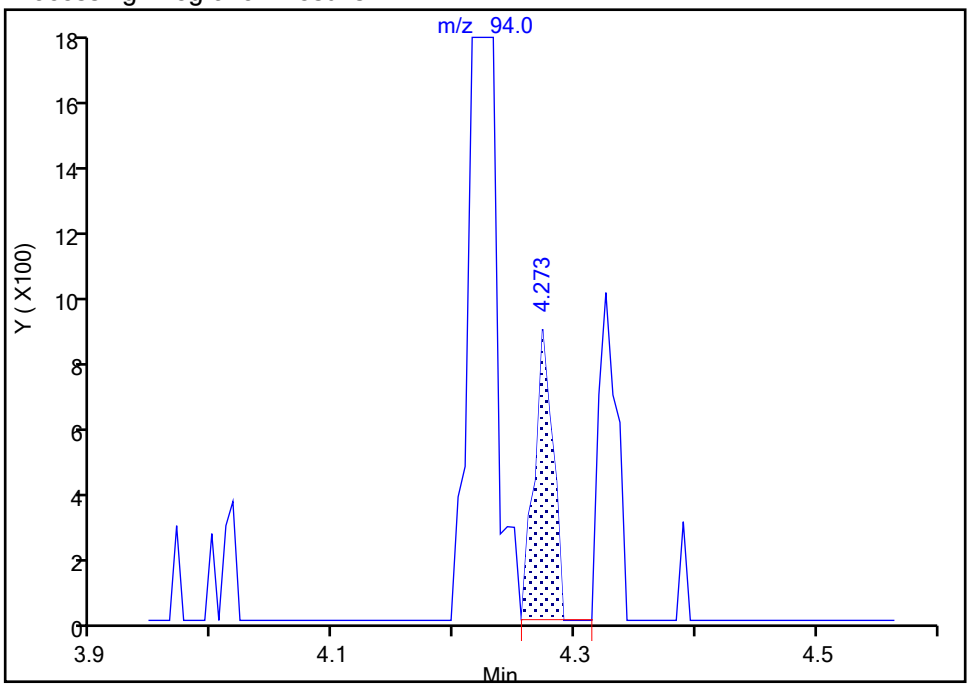
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D				
Injection Date:	23-Mar-2023 13:56:30	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

17 Phenol, CAS: 108-95-2

Signal: 1

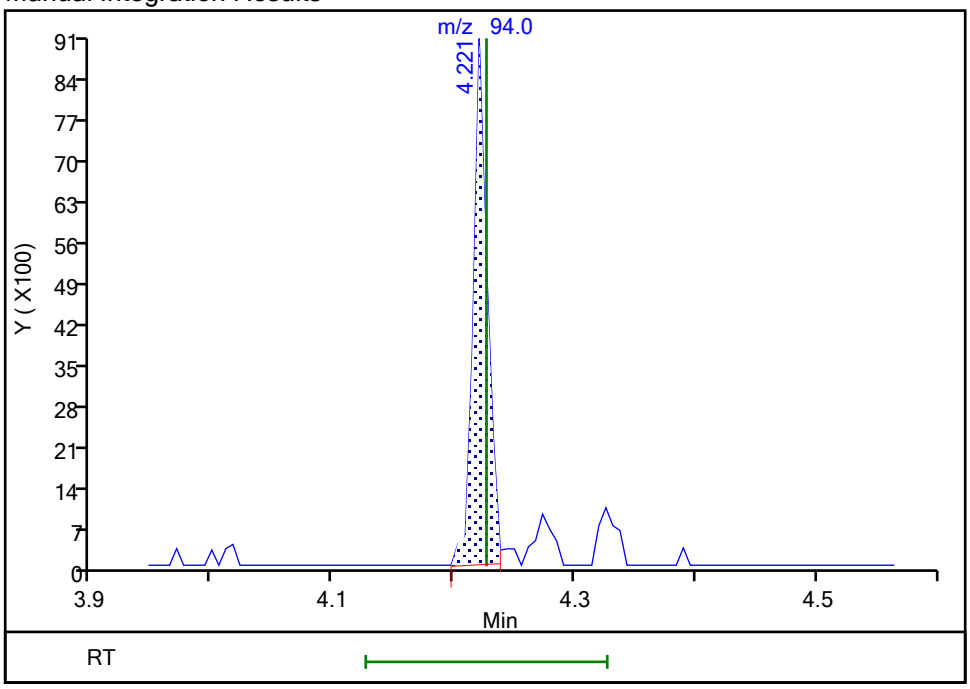
Processing Integration Results

RT: 4.27
Area: 932
Amount: 0.019906
Amount Units: ug/ml



Manual Integration Results

RT: 4.22
Area: 7394
Amount: 0.125652
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 14:51:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

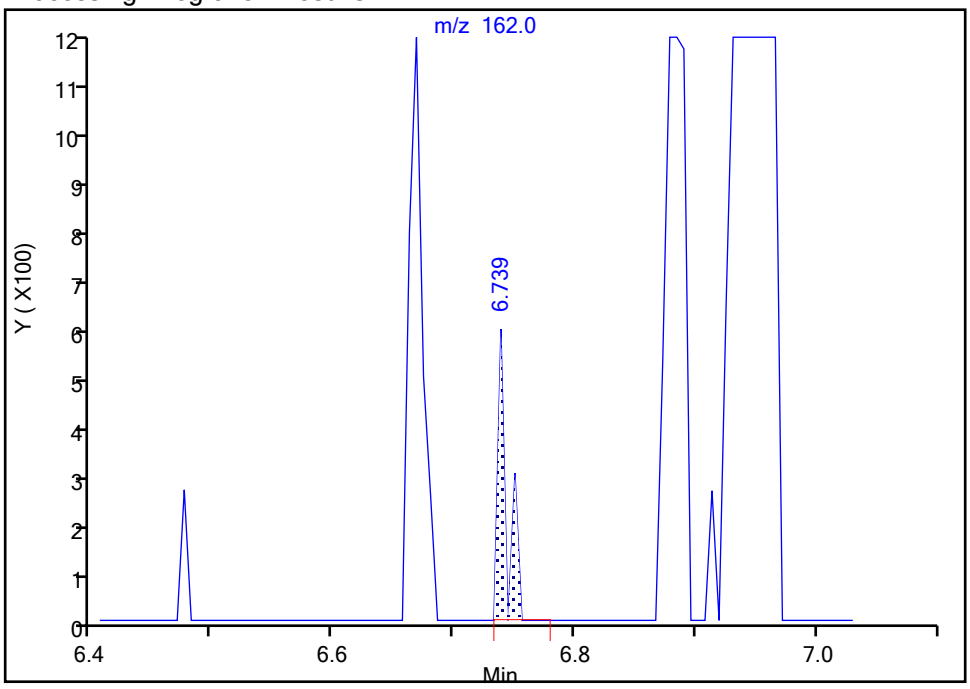
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D				
Injection Date:	23-Mar-2023 13:56:30	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

70 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

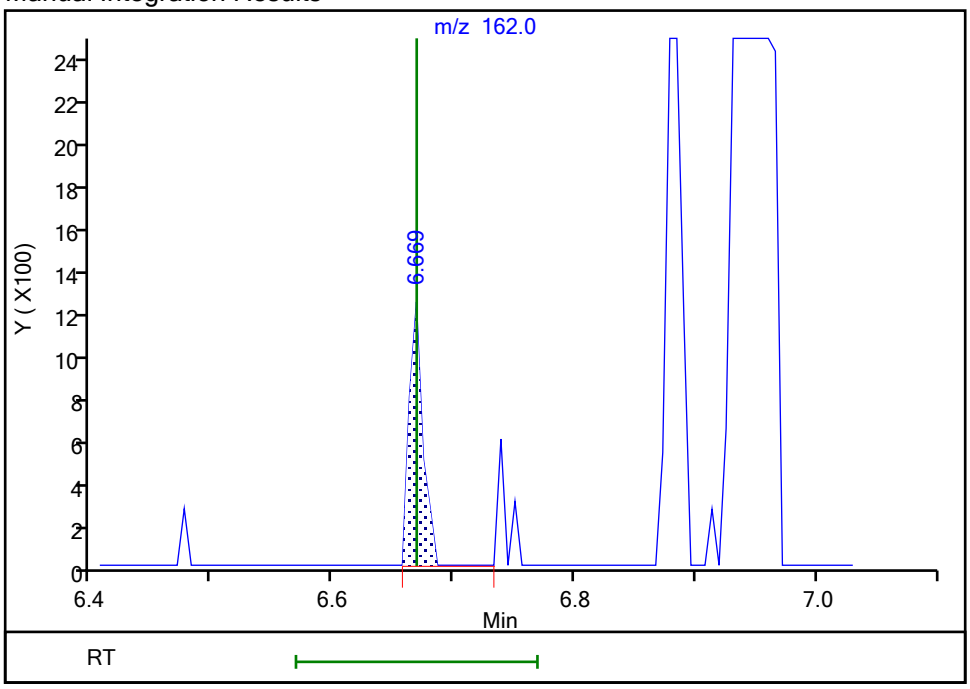
Processing Integration Results

RT: 6.74
Area: 314
Amount: 0.011605
Amount Units: ug/ml



Manual Integration Results

RT: 6.67
Area: 980
Amount: 0.031442
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 14:51:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

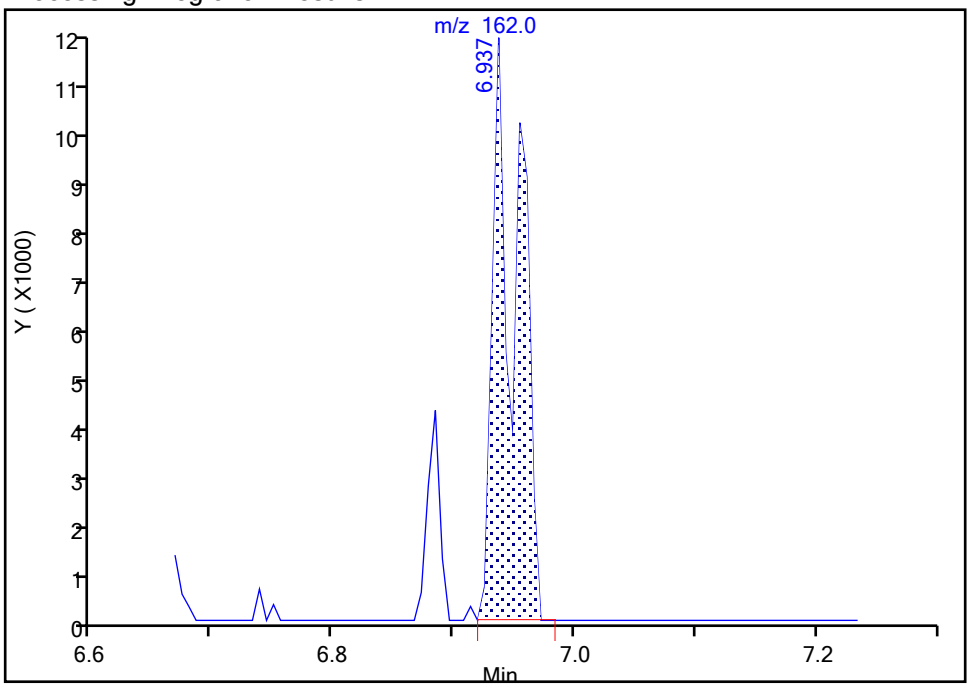
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D				
Injection Date:	23-Mar-2023 13:56:30	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

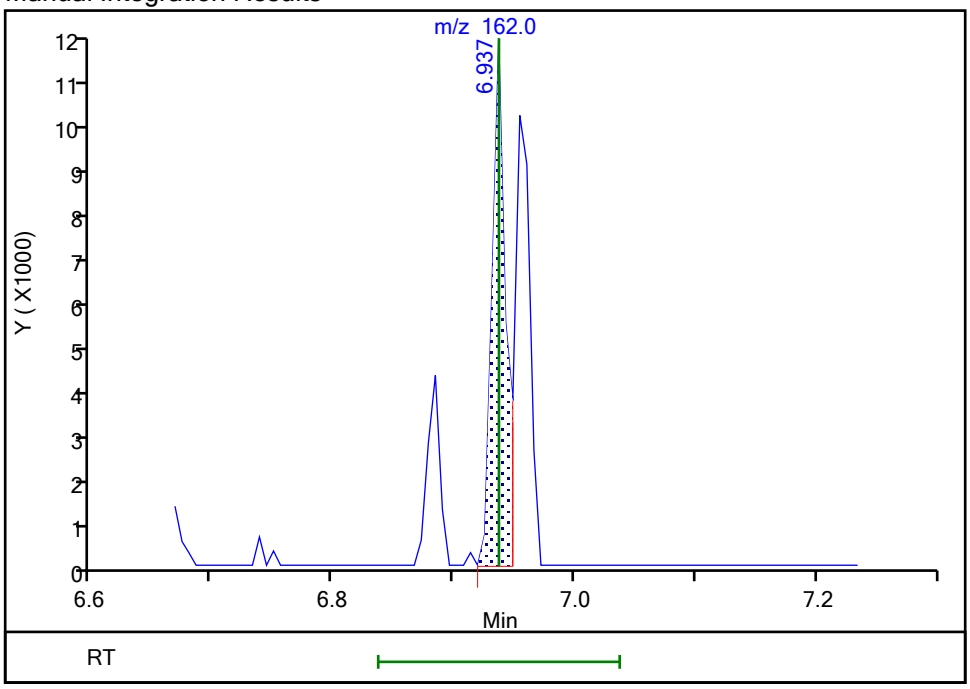
Processing Integration Results

RT: 6.94
Area: 16246
Amount: 0.205194
Amount Units: ug/ml



Manual Integration Results

RT: 6.94
Area: 8496
Amount: 0.129535
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 14:52:08
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

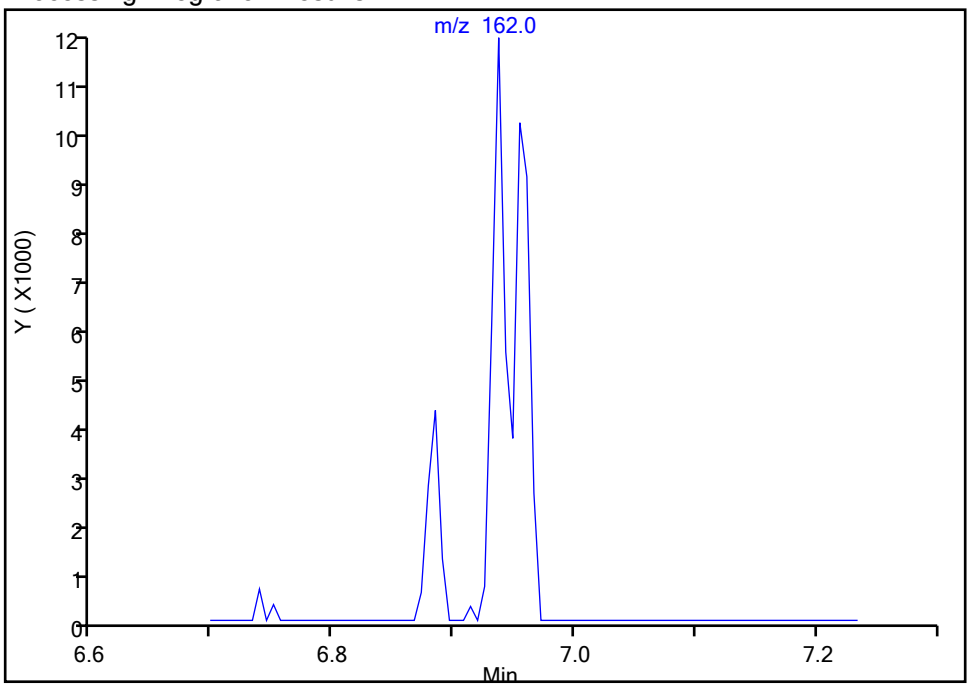
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D				
Injection Date:	23-Mar-2023 13:56:30	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

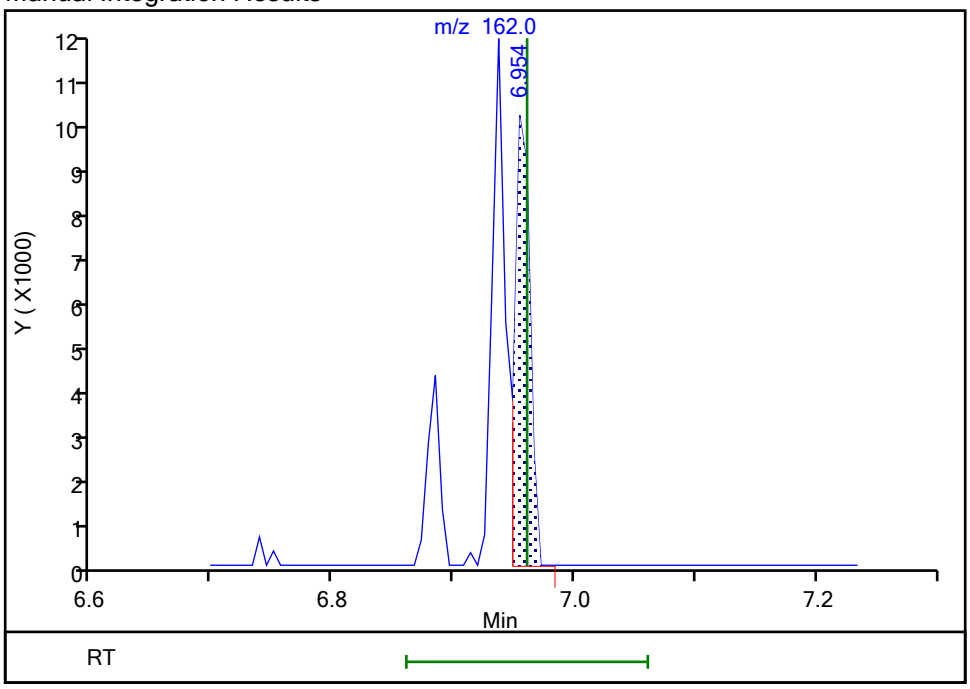
Not Detected
Expected RT: 6.96

Processing Integration Results



RT: 6.95
Area: 7749
Amount: 0.122221
Amount Units: ug/ml

Manual Integration Results



Reviewer: P7EB, 23-Mar-2023 14:52:15
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

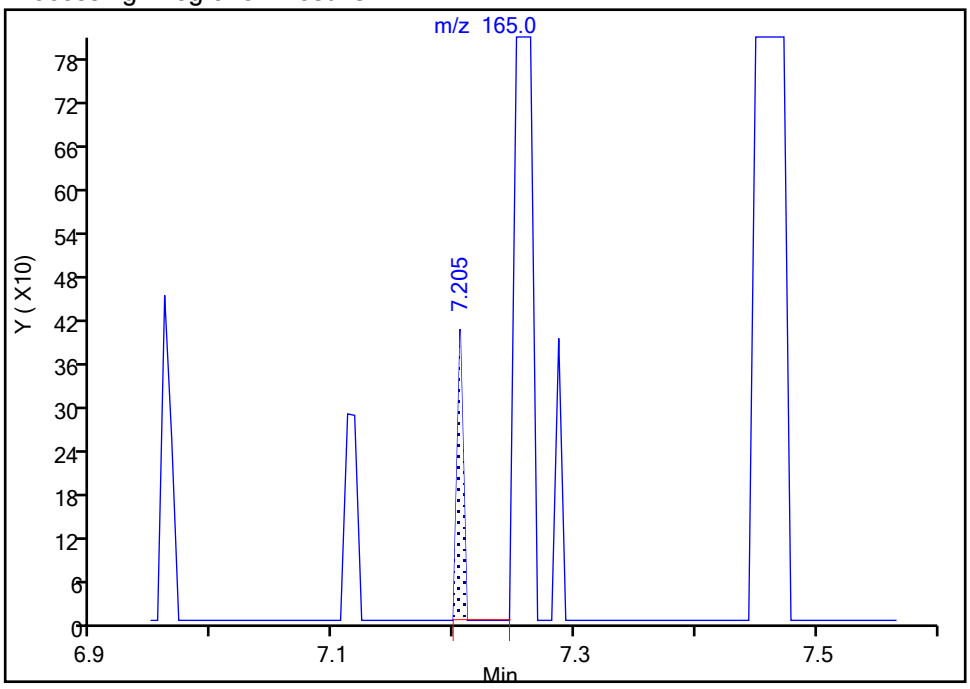
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D				
Injection Date:	23-Mar-2023 13:56:30	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

87 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

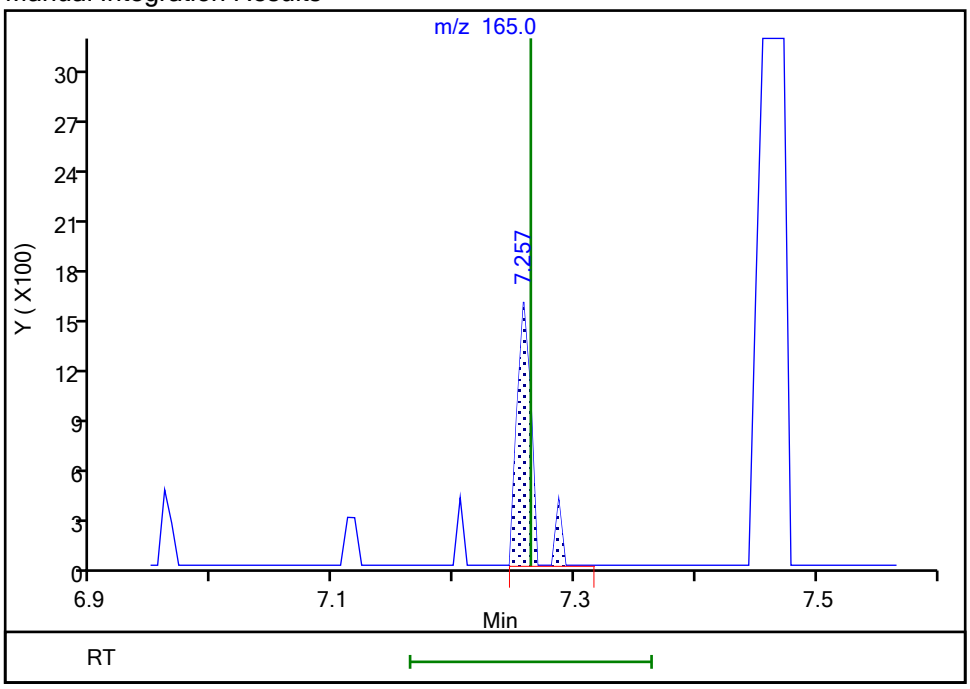
Processing Integration Results

RT: 7.20
Area: 141
Amount: 0.011029
Amount Units: ug/ml



Manual Integration Results

RT: 7.26
Area: 1358
Amount: 0.088194
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 14:54:00
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

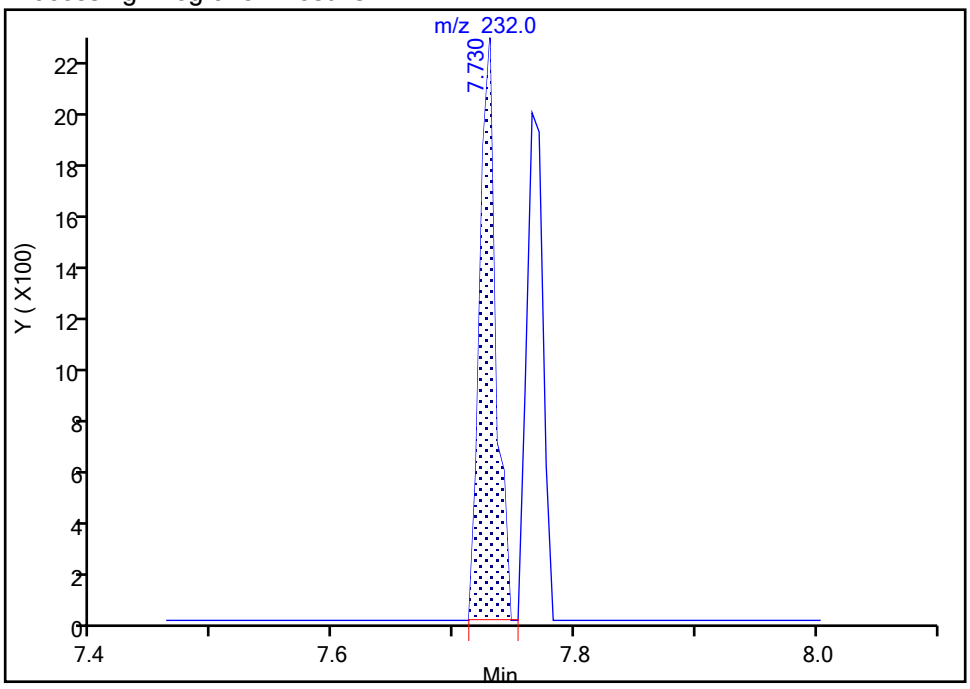
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D				
Injection Date:	23-Mar-2023 13:56:30	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

98 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

Signal: 1

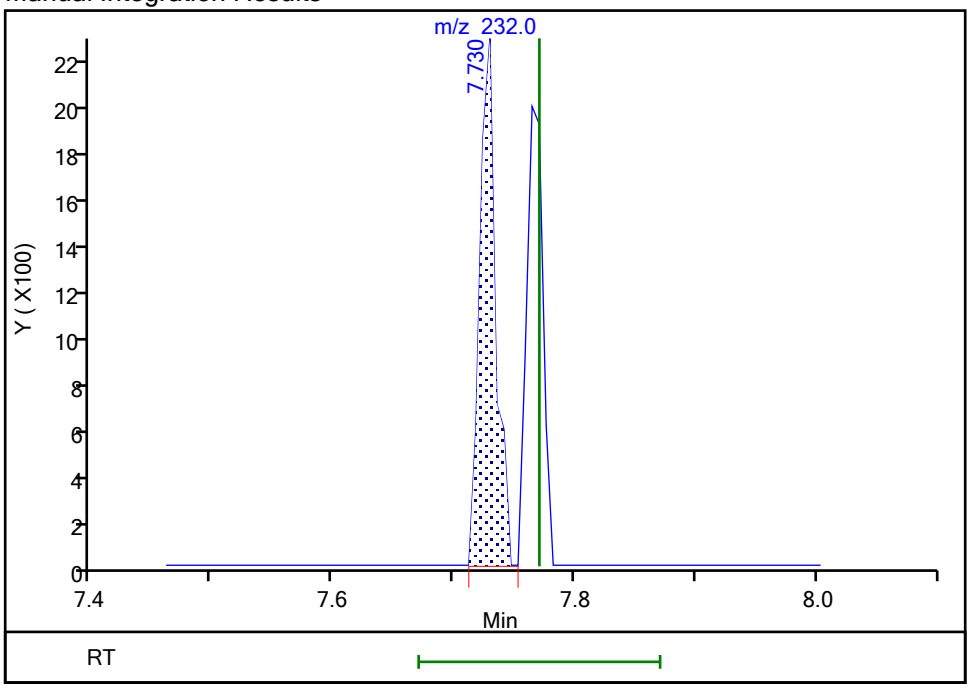
Processing Integration Results

RT: 7.73
Area: 2034
Amount: 0.108083
Amount Units: ug/ml



Manual Integration Results

RT: 7.73
Area: 2034
Amount: 0.110892
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 14:54:15
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

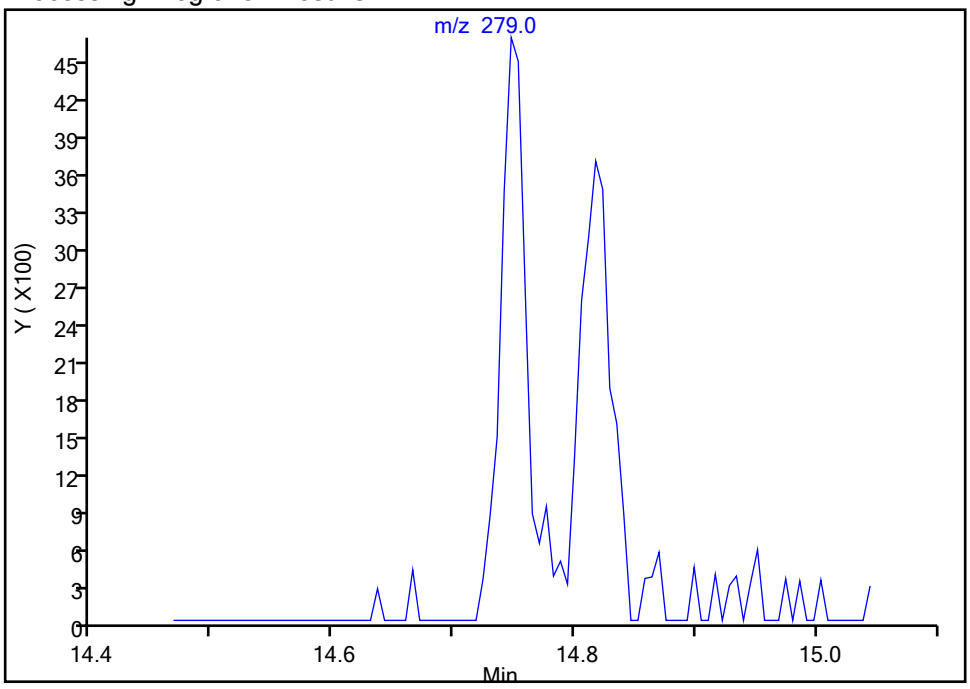
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D				
Injection Date:	23-Mar-2023 13:56:30	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

172 Dibenz[a,h]acridine, CAS: 226-36-8

Signal: 1

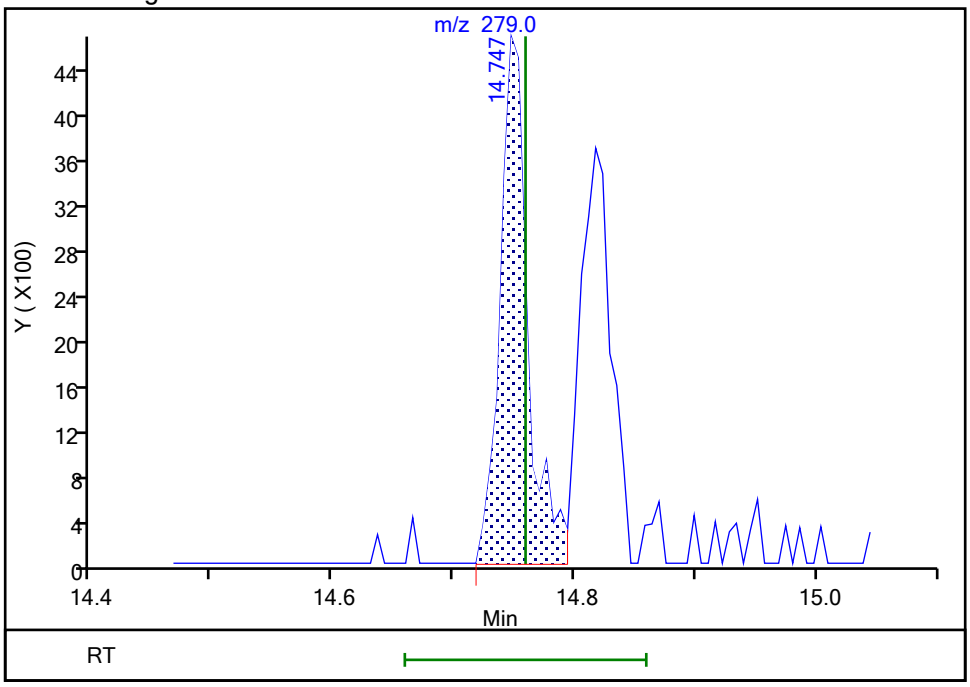
Not Detected
Expected RT: 14.76

Processing Integration Results



Manual Integration Results

RT: 14.75
Area: 7419
Amount: 0.120346
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 14:54:41
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

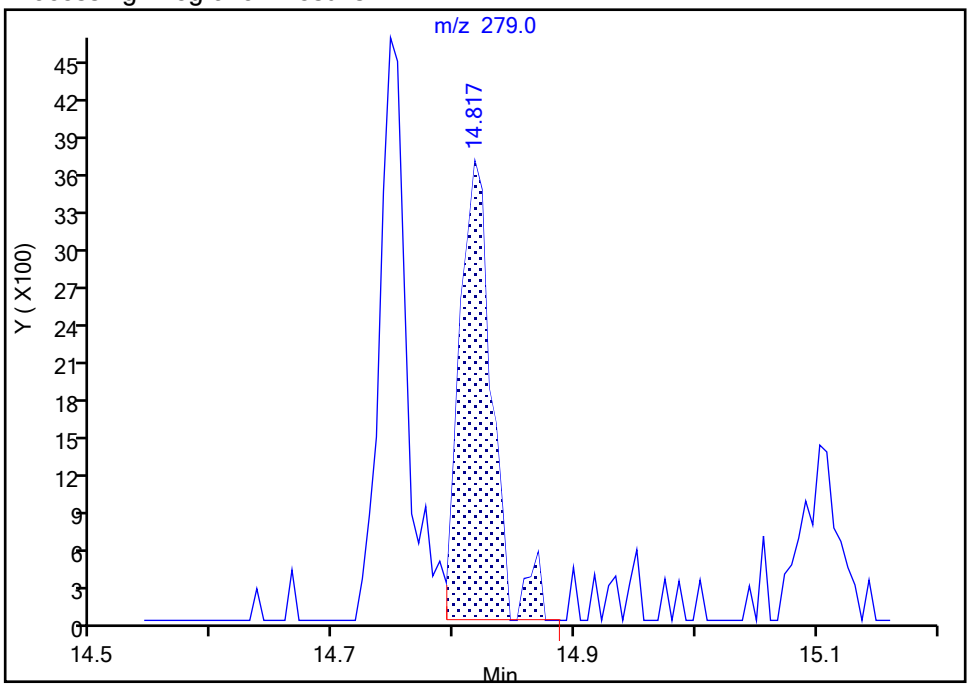
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D				
Injection Date:	23-Mar-2023 13:56:30	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

173 Dibenz[a,j]acridine, CAS: 224-42-0

Signal: 1

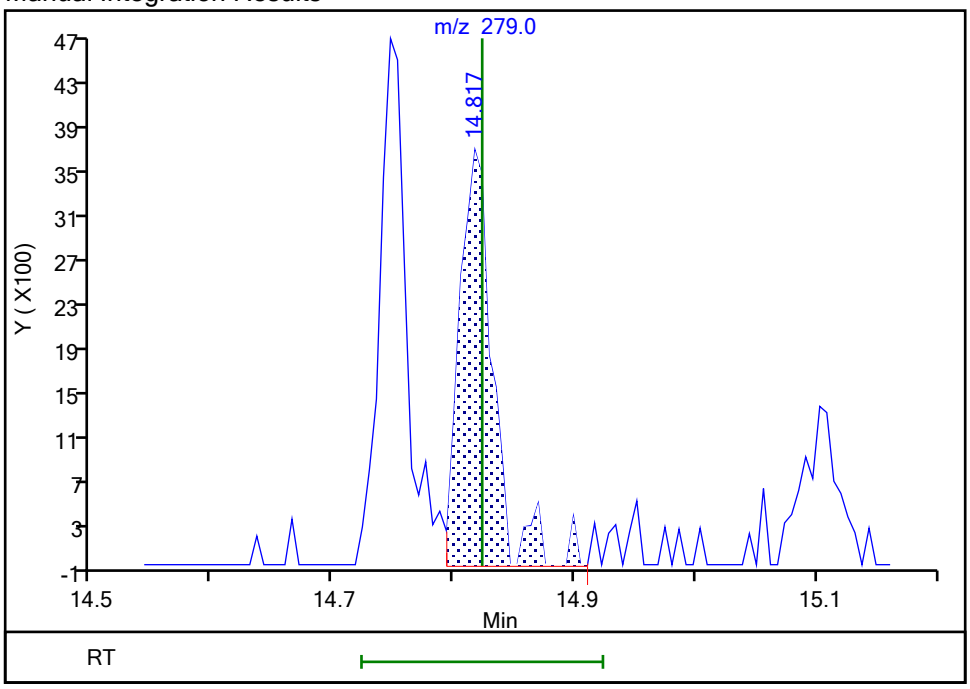
Processing Integration Results

RT: 14.82
Area: 6906
Amount: 0.096590
Amount Units: ug/ml



Manual Integration Results

RT: 14.82
Area: 7089
Amount: 0.103486
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 16:44:05

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

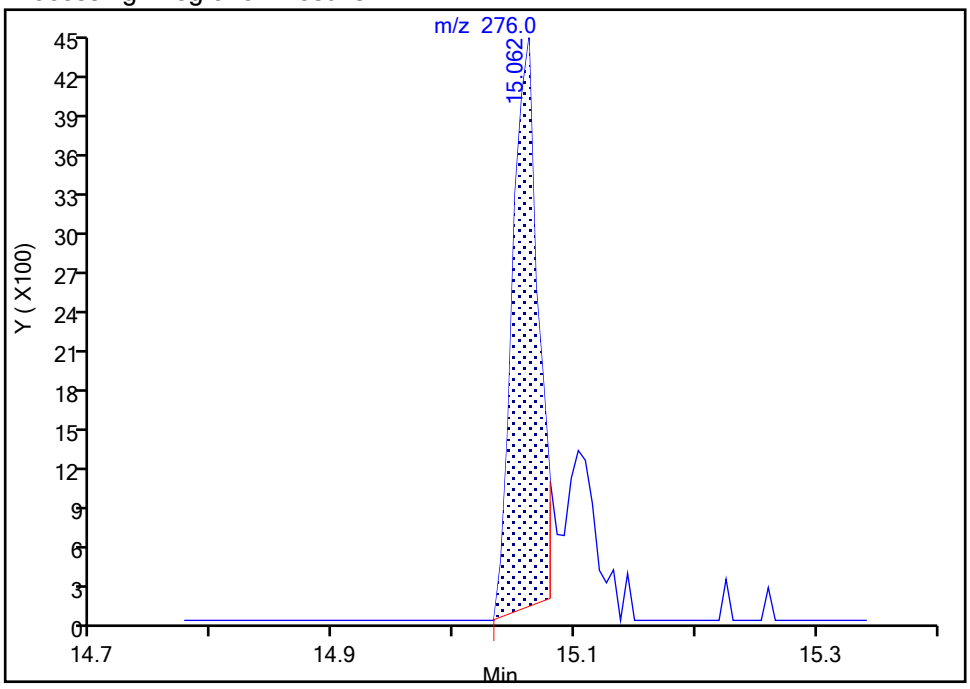
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2312.D				
Injection Date:	23-Mar-2023 13:56:30	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

174 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

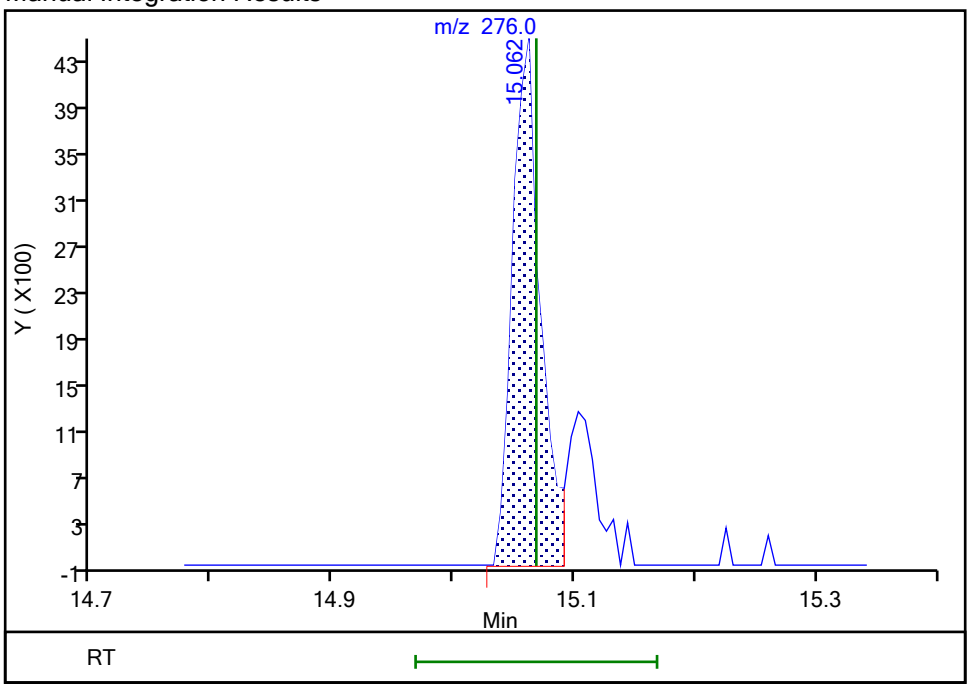
Processing Integration Results

RT: 15.06
Area: 6350
Amount: 0.092992
Amount Units: ug/ml



Manual Integration Results

RT: 15.06
Area: 7123
Amount: 0.105005
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 14:54:59

Audit Action: Manually Integrated Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 23-Mar-2023 16:08:30 ALS Bottle#: 9 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 410-0079683-004
Operator ID: em10340 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 17:56:15 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 16:39:20

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.971	1.965	0.006	84	7323	0.2500	0.2647	
	3 N-Nitrosodimethylamine	74	2.210	2.193	0.018	67	11572	0.2500	0.2701	
	4 Pyridine	79	2.251	2.233	0.018	97	38599	0.5000	0.5520	
	6 Dimethylformamide	73	2.606	2.519	0.087	76	4931	0.2500	0.1121	
	7 2-Picoline	93	2.851	2.834	0.017	89	18283	0.2500	0.2747	
	8 N-Nitrosomethylethylamine	88	2.979	2.921	0.058	1	2852	0.2500	0.0973	
	9 Methyl methanesulfonate	80	3.195	3.189	0.006	84	9929	0.2500	0.2637	
$	10 2-Fluorophenol	112	3.341	3.347	-0.006	93	23791	0.5000	0.4881	
	11 N-Nitrosodiethylamine	102	3.574	3.574	0.000	96	6119	0.2500	0.2308	
	12 Ethyl methanesulfonate	109	3.848	3.848	0.000	96	7290	0.2500	0.2521	
	15 Benzaldehyde	77	4.180	4.180	0.000	92	15058	0.2500	0.2783	
$	16 Phenol-d5	99	4.209	4.215	-0.006	95	33079	0.5000	0.4713	
	17 Phenol	94	4.227	4.227	0.000	91	17835	0.2500	0.2481	
	18 Aniline	93	4.279	4.279	0.000	96	21560	0.2500	0.2421	
	19 Bis(2-chloroethyl)ether	93	4.332	4.332	0.000	88	14641	0.2500	0.2466	
	20 2-Chlorophenol	128	4.390	4.390	0.000	92	10367	0.2500	0.2367	
	21 1,3-Dichlorobenzene	146	4.541	4.541	0.000	94	13476	0.2500	0.2703	
*	22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	97	166543	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.611	4.611	0.000	90	13790	0.2500	0.2640	
	25 Benzyl alcohol	108	4.710	4.710	0.000	86	7530	0.2500	0.2213	
	26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	88	11280	0.2500	0.2344	
	28 2-Methylphenol	108	4.804	4.810	-0.006	92	11155	0.2500	0.2387	
	29 2,2'-oxybis[1-chloropropane]	45	4.844	4.845	-0.001	93	20905	0.2500	0.2755	
	31 N-Nitrosopyrrolidine	100	4.944	4.944	0.000	65	6787	0.2500	0.2412	
	32 4-Methylphenol	108	4.949	4.955	-0.006	78	11779	0.2500	0.2378	
	33 N-Nitrosodi-n-propylamine	70	4.967	4.967	0.000	76	11980	0.2500	0.2515	
	34 Acetophenone	105	4.967	4.967	0.000	93	19062	0.2500	0.2486	
	35 N-Nitrosomorpholine	56	4.984	4.984	0.000	81	9500	0.2500	0.2605	
	36 2-Toluidine	106	5.002	5.002	0.000	93	20345	0.2500	0.2395	
	38 Hexachloroethane	117	5.078	5.078	0.000	88	5569	0.2500	0.2554	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.113	5.113	0.000	86	31619	0.5000	0.4892	
40 Nitrobenzene	77	5.130	5.130	0.000	86	15166	0.2500	0.2302	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	86	5944	0.2500	0.2445	
43 Isophorone	82	5.357	5.357	0.000	96	27325	0.2500	0.2409	
44 2-Nitrophenol	139	5.433	5.433	0.000	84	4275	0.2500	0.2156	
45 2,4-Dimethylphenol	107	5.462	5.462	0.000	93	11267	0.2500	0.2275	
46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	91	4966	0.2500	0.2302	
47 Bis(2-chloroethoxy)methane	93	5.561	5.561	0.000	98	18006	0.2500	0.2593	
48 2,4-Dichlorophenol	162	5.655	5.655	0.000	76	7275	0.2500	0.2140	
49 1,2,4-Trichlorobenzene	180	5.742	5.742	0.000	92	10803	0.2500	0.2627	
* 50 Naphthalene-d8	136	5.800	5.800	0.000	100	615065	5.00	5.00	
51 Naphthalene	128	5.818	5.818	0.000	97	33625	0.2500	0.2553	
52 Alpha-Terpineol	59	5.824	5.824	0.000	88	11565	0.2500	0.2696	
53 4-Chloroaniline	127	5.864	5.865	-0.001	87	11374	0.2500	0.2189	
54 2,6-Dichlorophenol	162	5.876	5.876	0.000	82	6946	0.2500	0.2012	
55 Hexachloropropene	213	5.905	5.905	0.000	88	6245	0.2500	0.2254	
56 Hexachlorobutadiene	225	5.940	5.940	0.000	93	6396	0.2500	0.2732	
60 Quinoline	129	6.133	6.133	0.000	93	20035	0.2500	0.2394	
61 Caprolactam	113	6.162	6.173	-0.011	40	3651	0.2500	0.2664	
62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	91	15960	0.2500	0.3261	
63 p-Phenylene diamine	108	6.197	6.197	0.000	61	3621	0.2500	0.0855	
64 4-Chloro-3-methylphenol	107	6.313	6.319	-0.006	88	9440	0.2500	0.2147	
65 Safrole, Total	162	6.395	6.395	0.000	76	7536	0.2500	0.2270	
66 2-Methylnaphthalene	142	6.476	6.477	-0.001	87	20972	0.2500	0.2499	
67 1-Methylnaphthalene	142	6.570	6.570	0.000	91	19120	0.2500	0.2457	
68 Hexachlorocyclopentadiene	237	6.622	6.628	-0.006	91	6257	0.2500	0.2397	
69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	96	10339	0.2500	0.2452	
70 Isosafrole Peak 1	162	6.669	6.669	0.000	27	1589	0.0400	0.0419	a
71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	77	5418	0.2500	0.2220	
72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	90	6085	0.2500	0.2304	
$ 73 2-Fluorobiphenyl (Surr)	172	6.826	6.826	0.000	99	48760	0.5000	0.5193	
74 Isosafrole Peak 2	162	6.884	6.885	-0.001	90	8413	0.2100	0.2103	
75 1,1'-Biphenyl	154	6.919	6.920	-0.001	95	24739	0.2500	0.2400	
76 2-Chloronaphthalene	162	6.937	6.937	0.000	96	20060	0.2500	0.2515	
77 1-Chloronaphthalene	162	6.960	6.960	0.000	96	18556	0.2500	0.2407	
78 Phenyl ether	170	7.019	7.024	-0.005	86	15329	0.2500	0.2697	
79 2-Nitroaniline	138	7.024	7.030	-0.006	51	4247	0.2500	0.1798	
81 1,4-Naphthoquinone	158	7.100	7.106	-0.006	81	6099	0.2500	0.2090	
86 1,3-Dinitrobenzene	168	7.164	7.164	0.000	79	1803	0.2500	0.1498	
85 Dimethyl phthalate	163	7.205	7.205	0.000	97	21313	0.2500	0.2404	
84 1,4-Dinitrobenzene	168	7.228	7.228	0.000	77	2760	0.2500	0.2055	
87 2,6-Dinitrotoluene	165	7.257	7.263	-0.006	85	4227	0.2500	0.2258	
88 Acenaphthylene	152	7.327	7.333	-0.006	99	29864	0.2500	0.2342	
89 3-Nitroaniline	138	7.415	7.415	0.000	85	4312	0.2500	0.2115	
* 90 Acenaphthene-d10	164	7.461	7.462	-0.001	94	330095	5.00	5.00	
91 Acenaphthene	153	7.491	7.497	-0.006	97	21817	0.2500	0.2679	
92 2,4-Dinitrophenol	184	7.514	7.514	0.000	77	19191	2.50	3.83	
93 4-Nitrophenol	109	7.561	7.567	-0.005	81	17305	1.50	1.18	
94 Pentachlorobenzene	250	7.613	7.619	-0.006	95	9342	0.2500	0.2655	
95 2,4-Dinitrotoluene	165	7.636	7.642	-0.006	81	4997	0.2500	0.1985	
96 Dibenzofuran	168	7.660	7.660	0.000	96	27804	0.2500	0.2462	
97 1-Naphthylamine	143	7.730	7.730	0.000	96	15768	0.2500	0.2201	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.770	7.771	0.000	73	4953	0.2500	0.2221	
99 2-Naphthylamine	143	7.805	7.805	0.000	95	18316	0.2500	0.2250	
100 Diethyl phthalate	149	7.875	7.875	0.000	96	19483	0.2500	0.2337	
101 Thionazin	107	7.951	7.951	0.000	77	3929	0.2500	0.2302	
102 Fluorene	166	7.980	7.986	-0.006	92	22667	0.2500	0.2482	
103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	76	11078	0.2500	0.2463	
104 N-Nitro-o-toluidine	152	7.986	7.992	-0.006	66	4355	0.2500	0.1788	
105 4-Nitroaniline	138	7.986	7.992	-0.006	68	3953	0.2500	0.1777	
106 4,6-Dinitro-2-methylphenol	198	8.015	8.021	-0.006	73	13906	1.50	0.9531	
107 N-Nitrosodiphenylamine	169	8.091	8.097	-0.006	63	14794	0.2125	0.2026	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	42	29233	0.2500	0.2342	
$ 109 2,4,6-Tribromophenol	330	8.208	8.208	0.000	88	4416	0.5000	0.3886	
110 Sulfotepp	97	8.248	8.248	0.000	73	4178	0.2500	0.2183	
112 1,3,5-Trinitrobenzene	213	8.324	8.330	-0.006	76	1485	0.2500	0.1595	
113 cis-Diallate	86	8.371	8.371	0.000	0	11757	0.1850	0.2228	
114 Phorate	75	8.377	8.383	-0.006	91	14899	0.2500	0.2171	
115 Phenacetin	108	8.377	8.383	-0.006	77	9781	0.2500	0.2067	
116 4-Bromophenyl phenyl ether	248	8.447	8.447	0.000	69	5340	0.2500	0.2096	
117 trans-Diallate	86	8.458	8.458	0.000	0	4155	0.0650	0.0757	
118 Hexachlorobenzene	284	8.499	8.499	0.000	90	7018	0.2500	0.2567	
119 Dimethoate	87	8.528	8.534	-0.006	95	8572	0.2500	0.1966	
120 Atrazine	200	8.598	8.598	0.000	86	5894	0.2500	0.2294	
121 Pentachlorophenol	266	8.680	8.686	-0.006	91	15785	1.25	0.9665	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	89	22883	0.2500	0.2317	
123 Pentachloronitrobenzene	237	8.697	8.697	0.000	83	2606	0.2500	0.2234	
124 Pronamide	173	8.744	8.750	-0.006	89	6754	0.2500	0.1718	
125 Dinoseb	211	8.860	8.860	0.000	61	2782	0.2500	0.7390	
* 126 Phenanthrene-d10	188	8.866	8.872	-0.006	97	606597	5.00	5.00	
127 Disulfoton	88	8.872	8.878	-0.006	90	25533	0.2500	0.3226	
128 Phenanthrene	178	8.890	8.895	-0.005	98	34686	0.2500	0.2624	
129 Anthracene	178	8.942	8.942	0.000	98	30856	0.2500	0.2354	
130 Carbazole	167	9.088	9.094	-0.006	97	26198	0.2500	0.2235	
131 Methyl parathion	109	9.228	9.228	0.000	88	5736	0.2500	0.1759	
133 Di-n-butyl phthalate	149	9.432	9.432	0.000	99	27432	0.2500	0.2161	
134 Ethyl Parathion	109	9.601	9.601	0.000	79	3586	0.2500	0.1879	
135 4-Nitroquinoline-1-oxide	190	9.618	9.624	-0.006	67	1356	0.2500	0.5579	
S 136 Diallate	86				0		0.2500	0.2985	
140 Octachlorostyrene	308	9.840	9.840	0.000	84	2611	0.2500	0.2493	
141 Isodrin	193	9.880	9.880	0.000	86	4655	0.2500	0.2858	
143 Fluoranthene	202	10.020	10.020	0.000	99	31583	0.2500	0.2256	
147 Benzidine	184	10.148	10.154	-0.006	99	49686	0.7500	0.5318	
* 149 Pyrene-d10 (IS)	212	10.218	10.224	-0.006	99	610606	5.00	5.00	
150 Pyrene	202	10.236	10.242	-0.006	97	39924	0.2500	0.2568	
$ 152 p-Terphenyl-d14	244	10.399	10.399	0.000	99	50359	0.5000	0.4994	
154 p-Dimethylamino azobenzene	225	10.539	10.545	-0.006	91	3599	0.2500	0.1520	
155 Chlorobenzilate	139	10.591	10.592	-0.001	85	7944	0.2500	0.2042	
156 3,3'-Dimethylbenzidine	212	10.895	10.895	0.000	97	13749	0.2500	0.1683	
157 Butyl benzyl phthalate	149	10.918	10.924	-0.006	92	9632	0.2500	0.1700	
158 2-Acetylaminofluorene	181	11.163	11.174	-0.011	93	5991	0.2500	0.3760	
159 3,3'-Dichlorobenzidine	252	11.512	11.518	-0.006	53	7927	0.2500	0.1677	
160 4,4'-Methylene bis(2-chloroani	231	11.518	11.524	-0.006	65	4808	0.2500	0.1812	
161 Benzo[a]anthracene	228	11.536	11.542	-0.006	95	26766	0.2500	0.2153	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.577	11.582	-0.006	96	28998	0.2500	0.2329	
163 Bis(2-ethylhexyl) phthalate	149	11.611	11.612	-0.001	91	11615	0.2500	0.1530	
164 6-Methylchrysene	242	12.159	12.165	-0.006	96	17895	0.2500	0.2120	
165 Di-n-octyl phthalate	149	12.492	12.498	-0.006	97	17253	0.2500	0.7107	
166 7,12-Dimethylbenz(a)anthracene	256	12.958	12.970	-0.012	67	10377	0.2500	0.2047	
167 Benzo[b]fluoranthene	252	12.964	12.970	-0.006	96	28483	0.2500	0.2298	
168 Benzo[k]fluoranthene	252	13.005	13.010	-0.005	99	27794	0.2500	0.2142	
169 Benzo[a]pyrene	252	13.436	13.436	0.000	78	25624	0.2500	0.2388	
* 170 Perylene-d12	264	13.512	13.518	-0.006	97	498198	5.00	5.00	
171 3-Methylcholanthrene	268	13.955	13.966	-0.011	89	11935	0.2500	0.2162	
172 Dibenz[a,h]acridine	279	14.747	14.759	-0.012	90	16818	0.2500	0.2078	
173 Dibenz[a,j]acridine	279	14.817	14.823	-0.006	35	18104	0.2500	0.2013	Ma
174 Indeno[1,2,3-cd]pyrene	276	15.062	15.068	-0.006	97	20052	0.2500	0.2252	
175 Dibenz(a,h)anthracene	278	15.103	15.109	-0.006	35	22451	0.2500	0.2139	
176 Benzo[g,h,i]perylene	276	15.447	15.458	-0.011	96	25743	0.2500	0.2435	
S 178 Dinitrotoluene	165				0			0.4243	
S 182 Isosafrole	162				0		0.2500	0.2522	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_2_00029 Amount Added: 1.00 Units: mL

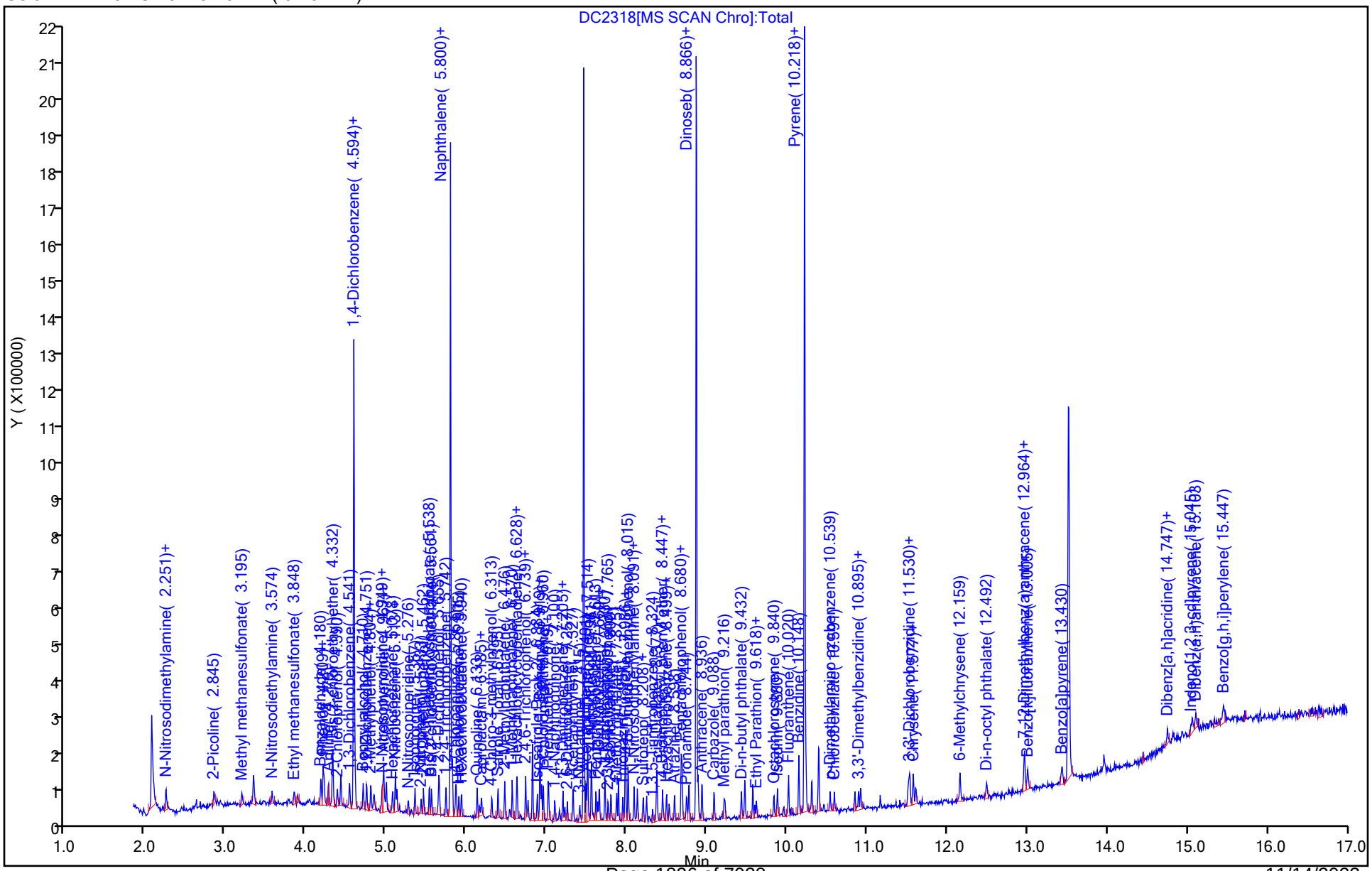
Report Date: 23-Mar-2023 17:56:16 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Injection Date:	23-Mar-2023 16:08:30	Instrument ID:	HP19760	Operator ID:	em10340
Lims ID:	IC L2			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

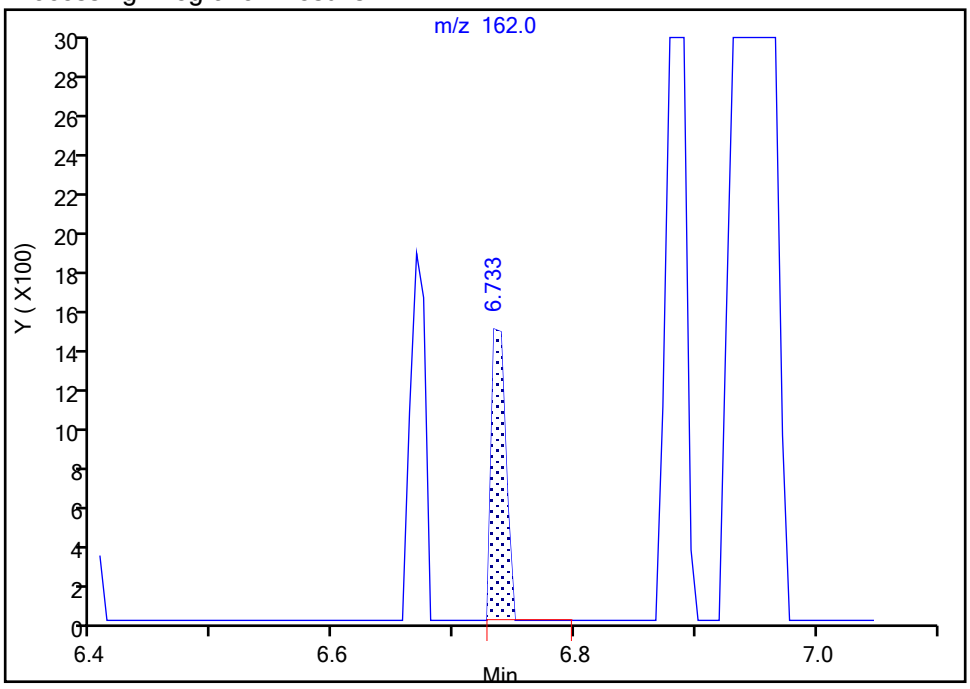
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D				
Injection Date:	23-Mar-2023 16:08:30	Instrument ID:	HP19760		
Lims ID:	IC L2				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	9	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

70 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

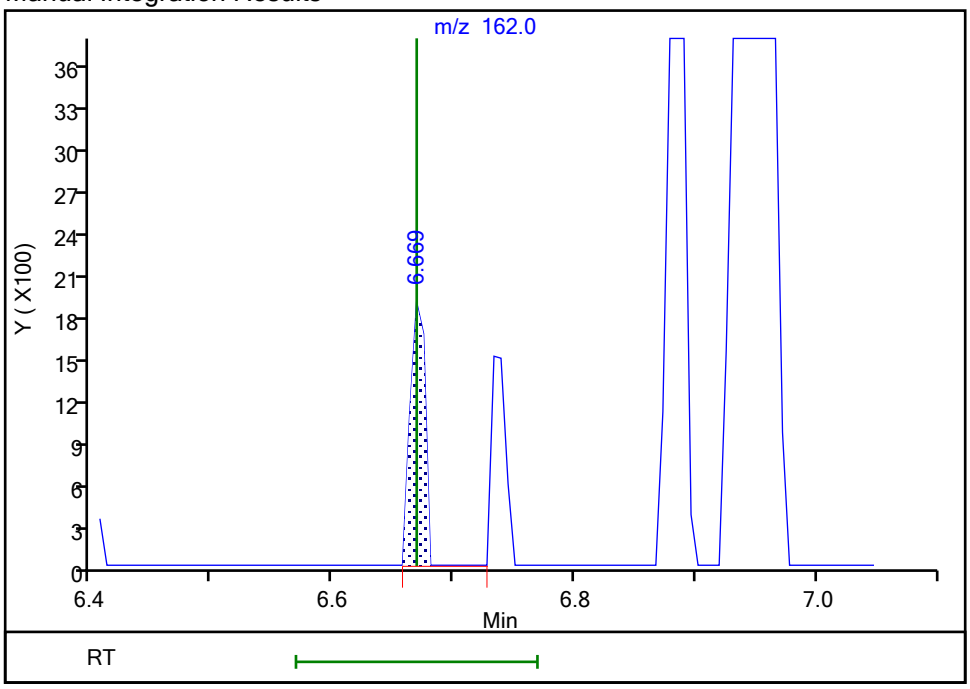
Processing Integration Results

RT: 6.73
Area: 1227
Amount: 0.028632
Amount Units: ug/ml



Manual Integration Results

RT: 6.67
Area: 1589
Amount: 0.041924
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 16:33:16
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

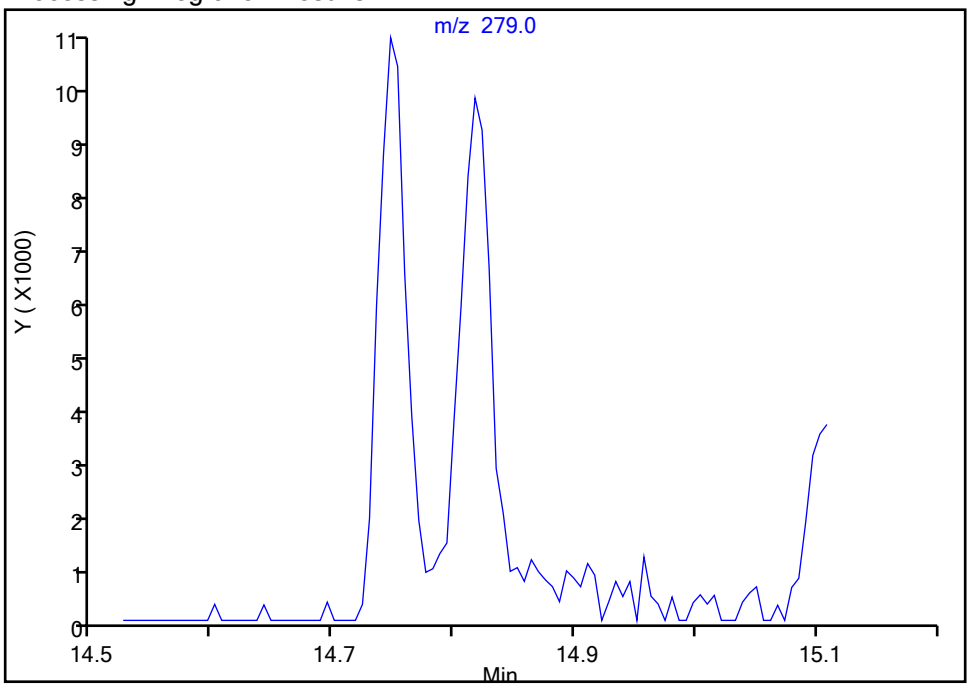
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D				
Injection Date:	23-Mar-2023 16:08:30	Instrument ID:	HP19760		
Lims ID:	IC L2				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	9	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

173 Dibenz[a,j]acridine, CAS: 224-42-0

Signal: 1

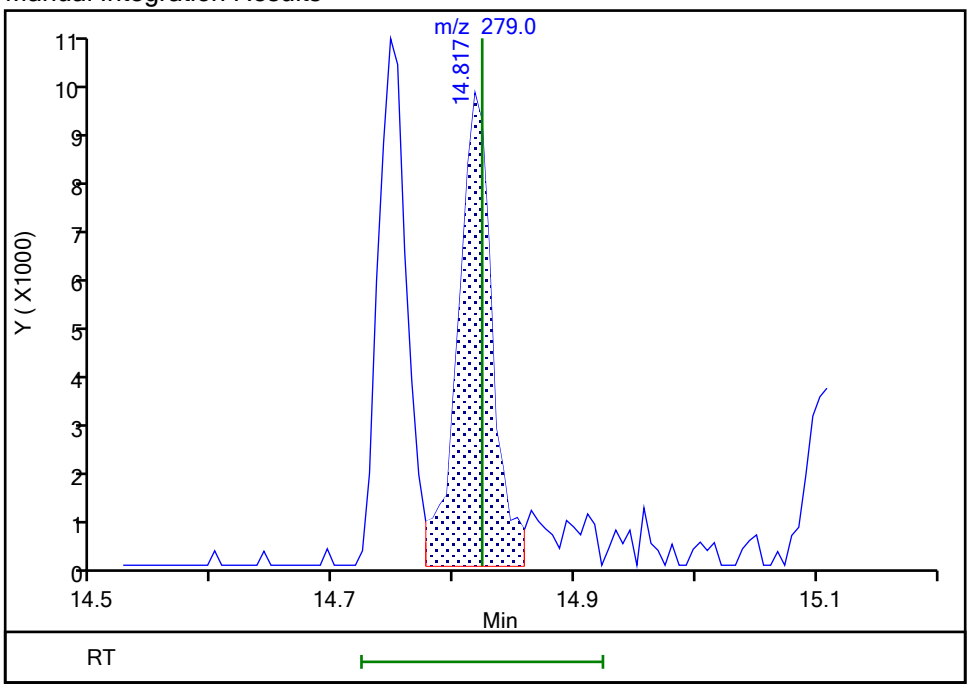
Not Detected
Expected RT: 14.82

Processing Integration Results



Manual Integration Results

RT: 14.82
Area: 18104
Amount: 0.201301
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 16:42:58
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2313.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 23-Mar-2023 14:18:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: 410-0079683-005
Operator ID: em10340 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 17:56:23 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 14:56:31

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.965	1.965	0.000	93	932010	30.0	27.7	
	3 N-Nitrosodimethylamine	74	2.192	2.193	0.000	92	1481343	30.0	28.4	
	4 Pyridine	79	2.227	2.233	-0.006	98	4821675	60.0	56.6	
	6 Dimethylformamide	73	2.513	2.519	-0.006	93	1602086	30.0	29.9	
	7 2-Picoline	93	2.834	2.834	0.000	90	2381199	30.0	29.4	
	8 N-Nitrosomethylethylamine	88	2.921	2.921	0.000	90	1038864	30.0	29.1	
	9 Methyl methanesulfonate	80	3.195	3.189	0.006	85	1326692	30.0	28.9	
$	10 2-Fluorophenol	112	3.352	3.347	0.005	94	3590656	60.0	60.5	
	11 N-Nitrosodiethylamine	102	3.574	3.574	0.000	96	987575	30.0	30.6	
	12 Ethyl methanesulfonate	109	3.854	3.848	0.006	98	1016902	30.0	28.9	
	15 Benzaldehyde	77	4.186	4.180	0.006	94	1800659	30.0	27.3	
$	16 Phenol-d5	99	4.215	4.215	0.000	96	5102011	60.0	59.7	
	17 Phenol	94	4.232	4.227	0.005	94	2651687	30.0	30.3	
	18 Aniline	93	4.279	4.279	0.000	95	3264274	30.0	30.1	
	19 Bis(2-chloroethyl)ether	93	4.337	4.332	0.005	96	2096671	30.0	29.0	
	20 2-Chlorophenol	128	4.390	4.390	0.000	91	1641953	30.0	30.8	
	21 1,3-Dichlorobenzene	146	4.541	4.541	0.000	94	1823756	30.0	30.0	
*	22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	84	202860	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.611	4.611	0.000	89	1838673	30.0	28.9	
	25 Benzyl alcohol	108	4.710	4.710	0.000	90	1275616	30.0	30.8	
	26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	92	1732739	30.0	29.6	
	28 2-Methylphenol	108	4.809	4.810	-0.001	96	1755346	30.0	30.8	
	29 2,2'-oxybis[1-chloropropane]	45	4.844	4.845	-0.001	93	2574657	30.0	27.9	
	31 N-Nitrosopyrrolidine	100	4.949	4.944	0.005	94	1077258	30.0	31.4	
	32 4-Methylphenol	108	4.961	4.955	0.006	95	1863525	30.0	30.9	
	33 N-Nitrosodi-n-propylamine	70	4.973	4.967	0.006	71	1719371	30.0	29.6	
	34 Acetophenone	105	4.973	4.967	0.006	93	2819350	30.0	30.2	
	35 N-Nitrosomorpholine	56	4.990	4.984	0.006	91	1232773	30.0	27.8	
	36 2-Toluidine	106	5.002	5.002	0.000	95	3150420	30.0	30.5	
	38 Hexachloroethane	117	5.078	5.078	0.000	96	788765	30.0	29.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.118	5.113	0.005	87	4666829	60.0	59.9	
40 Nitrobenzene	77	5.136	5.130	0.006	85	2381571	30.0	30.0	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	85	935104	30.0	31.9	
43 Isophorone	82	5.363	5.357	0.006	96	4251028	30.0	31.1	
44 2-Nitrophenol	139	5.433	5.433	0.000	89	812623	30.0	34.0	
45 2,4-Dimethylphenol	107	5.468	5.462	0.006	98	1934591	30.0	32.4	
46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	94	837818	30.0	32.2	
47 Bis(2-chloroethoxy)methane	93	5.567	5.561	0.006	99	2559050	30.0	30.6	
48 2,4-Dichlorophenol	162	5.660	5.655	0.005	97	1366389	30.0	33.3	
49 1,2,4-Trichlorobenzene	180	5.742	5.742	0.000	92	1513990	30.0	30.5	
* 50 Naphthalene-d8	136	5.800	5.800	0.000	99	741754	5.00	5.00	
51 Naphthalene	128	5.824	5.818	0.006	98	4686916	30.0	29.5	
52 Alpha-Terpineol	59	5.829	5.824	0.005	93	1648053	30.0	31.9	
53 4-Chloroaniline	127	5.870	5.865	0.005	92	2049018	30.0	32.7	
54 2,6-Dichlorophenol	162	5.876	5.876	0.000	93	1350927	30.0	32.4	
55 Hexachloropropene	213	5.905	5.905	0.000	89	1057706	30.0	31.7	
56 Hexachlorobutadiene	225	5.940	5.940	0.000	97	851202	30.0	30.2	
60 Quinoline	129	6.133	6.133	0.000	94	3093112	30.0	30.6	
61 Caprolactam	113	6.191	6.173	0.018	52	524173	30.0	31.7	
62 N-Nitrosodi-n-butylamine	84	6.191	6.185	0.006	88	1972037	30.0	33.4	
63 p-Phenylene diamine	108	6.202	6.197	0.005	94	1634586	30.0	32.0	
64 4-Chloro-3-methylphenol	107	6.325	6.319	0.006	91	1732558	30.0	32.7	
65 Safrole, Total	162	6.395	6.395	0.000	84	1273161	30.0	31.8	
66 2-Methylnaphthalene	142	6.476	6.477	-0.001	91	3091023	30.0	30.5	
67 1-Methylnaphthalene	142	6.570	6.570	0.000	92	2873541	30.0	30.6	
68 Hexachlorocyclopentadiene	237	6.628	6.628	0.000	95	1021424	30.0	31.3	
69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	98	1547192	30.0	29.3	
70 Isosafrole Peak 1	162	6.669	6.669	0.000	85	229188	4.80	4.83	
71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	93	978069	30.0	32.0	
72 2,4,5-Trichlorophenol	196	6.774	6.768	0.006	92	1071275	30.0	32.4	
$ 73 2-Fluorobiphenyl (Surr)	172	6.826	6.826	0.000	99	6635346	60.0	56.4	
74 Isosafrole Peak 2	162	6.884	6.885	-0.001	88	1306870	25.2	26.1	
75 1,1'-Biphenyl	154	6.919	6.920	-0.001	96	3741308	30.0	29.0	
76 2-Chloronaphthalene	162	6.943	6.937	0.006	92	2730710	30.0	27.4	
77 1-Chloronaphthalene	162	6.960	6.960	0.000	97	2942451	30.0	30.5	
78 Phenyl ether	170	7.024	7.024	0.000	87	2071699	30.0	29.1	
79 2-Nitroaniline	138	7.030	7.030	0.000	75	955942	30.0	32.3	
81 1,4-Naphthoquinone	158	7.106	7.106	0.000	79	1181011	30.0	32.3	
86 1,3-Dinitrobenzene	168	7.164	7.164	0.000	84	499639	30.0	33.2	
85 Dimethyl phthalate	163	7.211	7.205	0.006	97	3417589	30.0	30.8	
84 1,4-Dinitrobenzene	168	7.234	7.228	0.006	82	556745	30.0	33.1	
87 2,6-Dinitrotoluene	165	7.263	7.263	0.000	87	756063	30.0	32.3	
88 Acenaphthylene	152	7.333	7.333	0.000	99	4823008	30.0	30.2	
89 3-Nitroaniline	138	7.421	7.415	0.006	87	867445	30.0	34.0	
* 90 Acenaphthene-d10	164	7.461	7.462	-0.001	95	413214	5.00	5.00	
91 Acenaphthene	153	7.496	7.497	-0.001	97	3050393	30.0	29.9	
92 2,4-Dinitrophenol	184	7.520	7.514	0.006	81	1064535	60.0	62.0	
93 4-Nitrophenol	109	7.572	7.567	0.006	83	1202855	60.0	65.6	
94 Pentachlorobenzene	250	7.619	7.619	0.000	97	1282296	30.0	29.1	
95 2,4-Dinitrotoluene	165	7.642	7.642	0.000	88	1050646	30.0	33.3	
96 Dibenzofuran	168	7.660	7.660	0.000	96	4109714	30.0	29.1	
97 1-Naphthylamine	143	7.735	7.730	0.005	97	2799279	30.0	31.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.770	7.771	0.000	75	906813	30.0	32.5	
99 2-Naphthylamine	143	7.805	7.805	0.000	94	3173916	30.0	31.1	
100 Diethyl phthalate	149	7.881	7.875	0.006	97	3227677	30.0	30.9	
101 Thionazin	107	7.957	7.951	0.006	78	673979	30.0	31.5	
102 Fluorene	166	7.986	7.986	0.000	92	3338091	30.0	29.2	
103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	88	1655148	30.0	29.4	
104 N-Nitro-o-toluidine	152	7.992	7.992	0.000	84	977748	30.0	32.1	
105 4-Nitroaniline	138	7.998	7.992	0.006	78	893053	30.0	32.1	
106 4,6-Dinitro-2-methylphenol	198	8.027	8.021	0.006	78	1246566	60.0	68.0	
107 N-Nitrosodiphenylamine	169	8.097	8.097	0.000	63	2411622	25.5	26.3	
108 1,2-Diphenylhydrazine	77	8.138	8.132	0.006	41	4624541	30.0	29.5	
$ 109 2,4,6-Tribromophenol	330	8.208	8.208	0.000	89	947174	60.0	66.6	
110 Sulfotepp	97	8.248	8.248	0.000	78	720101	30.0	29.9	
112 1,3,5-Trinitrobenzene	213	8.336	8.330	0.006	82	394562	30.0	33.7	
113 cis-Diallate	86	8.371	8.371	0.000	0	1410225	22.2	21.3	
114 Phorate	75	8.382	8.383	-0.001	95	2871398	30.0	33.3	
115 Phenacetin	108	8.388	8.383	0.005	88	1990116	30.0	33.5	
116 4-Bromophenyl phenyl ether	248	8.452	8.447	0.005	69	974859	30.0	30.4	
117 trans-Diallate	86	8.458	8.458	0.000	0	498253	7.80	7.22	
118 Hexachlorobenzene	284	8.499	8.499	0.000	93	1009932	30.0	29.4	
119 Dimethoate	87	8.540	8.534	0.006	97	1804593	30.0	32.9	
120 Atrazine	200	8.604	8.598	0.006	90	971978	30.0	30.1	
121 Pentachlorophenol	266	8.685	8.686	-0.001	91	1395979	60.0	68.0	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	91	3864310	30.0	31.1	
123 Pentachloronitrobenzene	237	8.697	8.697	0.000	86	476967	30.0	32.5	
124 Pronamide	173	8.750	8.750	0.000	90	1591871	30.0	32.2	
125 Dinoseb	211	8.860	8.860	0.000	95	941382	30.0	32.8	
* 126 Phenanthrene-d10	188	8.872	8.872	0.000	96	762443	5.00	5.00	
127 Disulfoton	88	8.878	8.878	0.000	95	2889187	30.0	29.0	
128 Phenanthrene	178	8.895	8.895	0.000	98	4763338	30.0	28.7	
129 Anthracene	178	8.942	8.942	0.000	99	4957348	30.0	30.1	
130 Carbazole	167	9.093	9.094	-0.001	96	4563253	30.0	31.0	
131 Methyl parathion	109	9.228	9.228	0.000	90	1377450	30.0	33.6	
133 Di-n-butyl phthalate	149	9.432	9.432	0.000	100	5279551	30.0	33.1	
134 Ethyl Parathion	109	9.601	9.601	0.000	83	837356	30.0	34.9	
135 4-Nitroquinoline-1-oxide	190	9.624	9.624	0.000	87	502124	30.0	29.7	
S 136 Diallate	86				0		30.0	28.5	
140 Octachlorostyrene	308	9.840	9.840	0.000	93	391269	30.0	29.7	
141 Isodrin	193	9.880	9.880	0.000	91	588963	30.0	28.8	
143 Fluoranthene	202	10.020	10.020	0.000	99	5411719	30.0	30.8	
147 Benzidine	184	10.160	10.154	0.006	97	9126120	90.0	76.8	e
* 149 Pyrene-d10 (IS)	212	10.218	10.224	-0.006	100	776483	5.00	5.00	
150 Pyrene	202	10.242	10.242	0.000	96	5634434	30.0	28.5	
$ 152 p-Terphenyl-d14	244	10.399	10.399	0.000	99	7439984	60.0	58.0	
154 p-Dimethylamino azobenzene	225	10.545	10.545	0.000	93	1028496	30.0	34.1	
155 Chlorobenzilate	139	10.591	10.592	-0.001	88	1652637	30.0	33.4	
156 3,3'-Dimethylbenzidine	212	10.895	10.895	0.000	99	3258109	30.0	31.4	
157 Butyl benzyl phthalate	149	10.924	10.924	0.000	94	2329489	30.0	32.3	
158 2-Acetylaminofluorene	181	11.174	11.174	0.000	95	2088684	30.0	31.9	
159 3,3'-Dichlorobenzidine	252	11.518	11.518	0.000	77	1942402	30.0	32.3	
160 4,4'-Methylene bis(2-chloroani	231	11.524	11.524	0.000	95	1072053	30.0	31.8	
161 Benzo[a]anthracene	228	11.542	11.542	0.000	99	4965481	30.0	31.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.582	11.582	0.000	97	4796552	30.0	30.3	
163 Bis(2-ethylhexyl) phthalate	149	11.611	11.612	-0.001	96	3257127	30.0	33.7	
164 6-Methylchrysene	242	12.165	12.165	0.000	99	3497407	30.0	32.6	
165 Di-n-octyl phthalate	149	12.492	12.498	-0.006	99	5362138	30.0	32.1	
166 7,12-Dimethylbenz(a)anthracene	256	12.975	12.970	0.005	75	2224841	30.0	34.6	
167 Benzo[b]fluoranthene	252	12.975	12.970	0.005	97	5070529	30.0	32.3	
168 Benzo[k]fluoranthene	252	13.016	13.010	0.006	99	5194201	30.0	31.6	
169 Benzo[a]pyrene	252	13.436	13.436	0.000	78	4403030	30.0	32.4	
* 170 Perylene-d12	264	13.517	13.518	-0.001	98	631587	5.00	5.00	
171 3-Methylcholanthrene	268	13.966	13.966	0.000	91	2412401	30.0	34.5	
172 Dibenz[a,h]acridine	279	14.759	14.759	0.000	91	3434148	30.0	33.5	
173 Dibenz[a,j]acridine	279	14.829	14.823	0.006	96	3934695	30.0	34.5	
174 Indeno[1,2,3-cd]pyrene	276	15.074	15.068	0.006	99	3811308	30.0	33.8	
175 Dibenz(a,h)anthracene	278	15.114	15.109	0.005	93	4373334	30.0	32.9	
176 Benzo[g,h,i]perylene	276	15.464	15.458	0.006	98	4257857	30.0	31.8	
S 178 Dinitrotoluene	165				0			65.6	
S 182 Isosafrole	162				0		30.0	30.9	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

MSS_RV8270_8_00029 Amount Added: 1.00 Units: mL

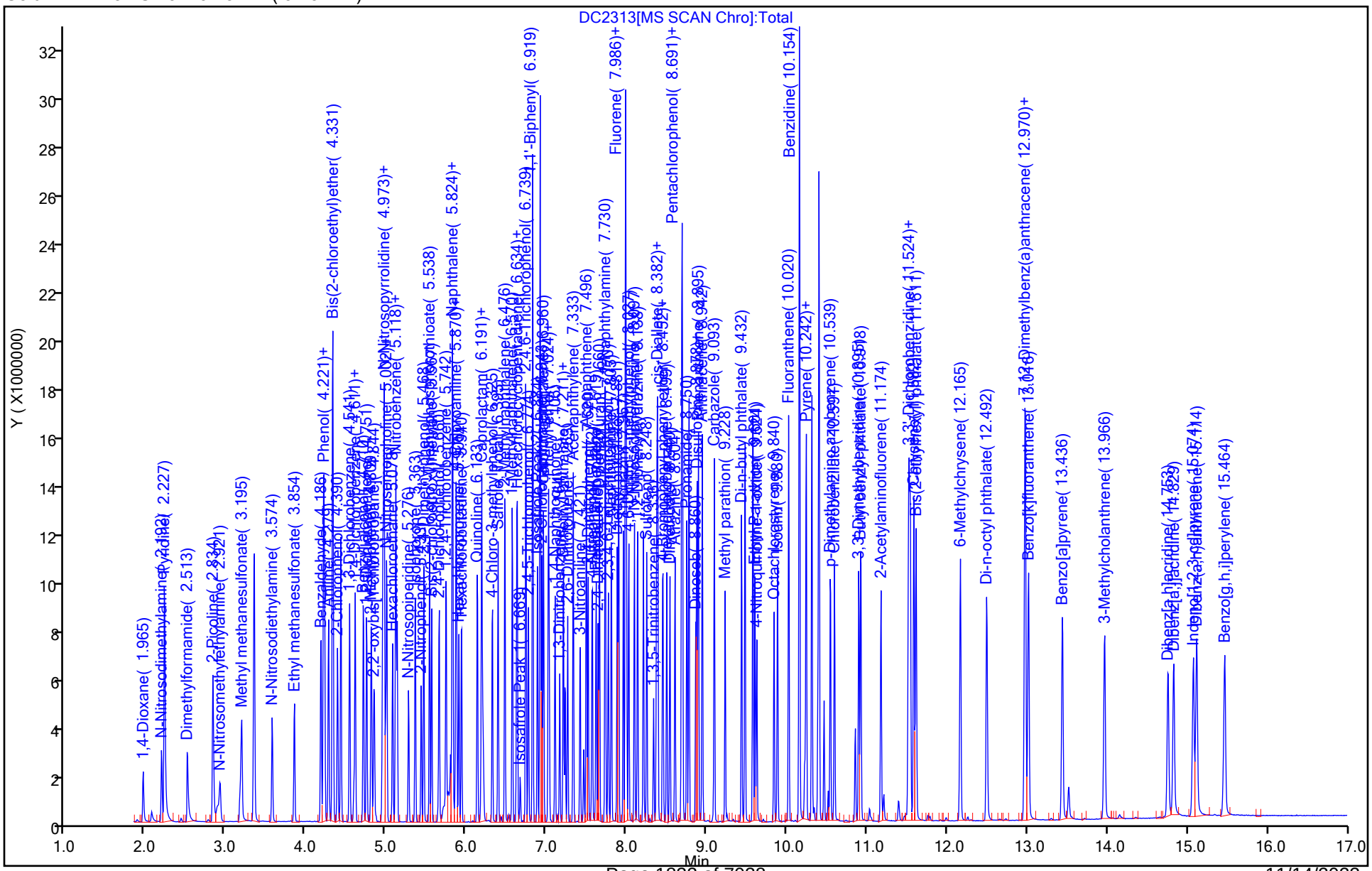
Report Date: 23-Mar-2023 17:56:24 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2313.D

Injection Date:	23-Mar-2023 14:18:30	Instrument ID:	HP19760	Operator ID:	em10340
Lims ID:	IC L8			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2314.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-Mar-2023 14:40:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 410-0079683-006
Operator ID: em10340 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 17:56:32 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 15:10:24

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.959	1.965	-0.006	94	428530	20.0	17.5	
	3 N-Nitrosodimethylamine	74	2.187	2.193	-0.005	92	678724	20.0	17.9	
	4 Pyridine	79	2.227	2.233	-0.006	98	2253576	40.0	36.3	
	6 Dimethylformamide	73	2.513	2.519	-0.006	92	726618	20.0	18.6	
	7 2-Picoline	93	2.834	2.834	0.000	90	1122563	20.0	19.0	
	8 N-Nitrosomethylethylamine	88	2.915	2.921	-0.006	91	494375	20.0	19.0	
	9 Methyl methanesulfonate	80	3.189	3.189	0.000	85	623080	20.0	18.7	
$	10 2-Fluorophenol	112	3.341	3.347	-0.006	94	1673802	40.0	38.7	
	11 N-Nitrosodiethylamine	102	3.568	3.574	-0.006	97	465302	20.0	19.8	
	12 Ethyl methanesulfonate	109	3.848	3.848	0.000	98	484945	20.0	18.9	
	15 Benzaldehyde	77	4.180	4.180	0.000	95	890549	20.0	18.6	
$	16 Phenol-d5	99	4.215	4.215	0.000	95	2407771	40.0	38.7	
	17 Phenol	94	4.227	4.227	0.000	94	1224589	20.0	19.2	
	18 Aniline	93	4.273	4.279	-0.006	95	1505727	20.0	19.1	
	19 Bis(2-chloroethyl)ether	93	4.332	4.332	0.000	95	994404	20.0	18.9	
	20 2-Chlorophenol	128	4.390	4.390	0.000	92	762922	20.0	19.6	
	21 1,3-Dichlorobenzene	146	4.541	4.541	0.000	93	843489	20.0	19.1	
*	22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	95	147712	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.611	4.611	0.000	89	853343	20.0	18.4	
	25 Benzyl alcohol	108	4.710	4.710	0.000	89	571121	20.0	18.9	
	26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	94	813052	20.0	19.0	
	28 2-Methylphenol	108	4.809	4.810	-0.001	96	810542	20.0	19.6	
	29 2,2'-oxybis[1-chloropropane]	45	4.844	4.845	-0.001	93	1186064	20.0	17.6	
	31 N-Nitrosopyrrolidine	100	4.944	4.944	0.000	93	498797	20.0	20.0	
	32 4-Methylphenol	108	4.955	4.955	0.000	96	856993	20.0	19.5	
	33 N-Nitrosodi-n-propylamine	70	4.967	4.967	0.000	72	783313	20.0	18.5	
	34 Acetophenone	105	4.967	4.967	0.000	92	1302350	20.0	19.1	
	35 N-Nitrosomorpholine	56	4.984	4.984	0.000	90	582182	20.0	18.0	
	36 2-Toluidine	106	5.002	5.002	0.000	95	1495518	20.0	19.9	
	38 Hexachloroethane	117	5.078	5.078	0.000	97	373392	20.0	19.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.113	5.113	0.000	87	2197185	40.0	41.0	
40 Nitrobenzene	77	5.130	5.130	0.000	86	1114434	20.0	20.4	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	84	430883	20.0	21.4	
43 Isophorone	82	5.357	5.357	0.000	96	1970524	20.0	20.9	
44 2-Nitrophenol	139	5.433	5.433	0.000	88	363877	20.0	22.1	
45 2,4-Dimethylphenol	107	5.462	5.462	0.000	98	890400	20.0	21.7	
46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	93	386529	20.0	21.6	
47 Bis(2-chloroethoxy)methane	93	5.561	5.561	0.000	99	1178073	20.0	20.4	
48 2,4-Dichlorophenol	162	5.655	5.655	0.000	96	616109	20.0	21.8	
49 1,2,4-Trichlorobenzene	180	5.742	5.742	0.000	92	695498	20.0	20.4	
* 50 Naphthalene-d8	136	5.800	5.800	0.000	99	510596	5.00	5.00	
51 Naphthalene	128	5.818	5.818	0.000	98	2192393	20.0	20.1	
52 Alpha-Terpineol	59	5.824	5.824	0.000	92	751570	20.0	21.1	
53 4-Chloroaniline	127	5.864	5.865	-0.001	93	922408	20.0	21.4	
54 2,6-Dichlorophenol	162	5.876	5.876	0.000	92	605123	20.0	21.1	
55 Hexachloropropene	213	5.905	5.905	0.000	89	501587	20.0	21.8	
56 Hexachlorobutadiene	225	5.934	5.940	-0.006	97	393263	20.0	20.2	
60 Quinoline	129	6.133	6.133	0.000	94	1464814	20.0	21.1	
61 Caprolactam	113	6.173	6.173	0.000	76	244506	20.0	21.5	
62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	90	916509	20.0	22.6	
63 p-Phenylene diamine	108	6.197	6.197	0.000	95	773792	20.0	22.0	
64 4-Chloro-3-methylphenol	107	6.319	6.319	0.000	91	782043	20.0	21.4	
65 Safrole, Total	162	6.395	6.395	0.000	85	590677	20.0	21.4	
66 2-Methylnaphthalene	142	6.476	6.477	-0.001	91	1435261	20.0	20.6	
67 1-Methylnaphthalene	142	6.570	6.570	0.000	91	1315600	20.0	20.4	
68 Hexachlorocyclopentadiene	237	6.628	6.628	0.000	95	459571	20.0	20.2	
69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	98	721726	20.0	19.6	
70 Isosafrole Peak 1	162	6.669	6.669	0.000	87	107290	3.20	3.25	
71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	81	452435	20.0	21.3	
72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	92	477401	20.0	20.7	
$ 73 2-Fluorobiphenyl (Surr)	172	6.826	6.826	0.000	100	3192496	40.0	39.0	
74 Isosafrole Peak 2	162	6.884	6.885	-0.001	88	613381	16.8	17.6	
75 1,1'-Biphenyl	154	6.919	6.920	-0.001	96	1740829	20.0	19.4	
76 2-Chloronaphthalene	162	6.937	6.937	0.000	96	1349266	20.0	19.4	
77 1-Chloronaphthalene	162	6.960	6.960	0.000	97	1325796	20.0	19.7	
78 Phenyl ether	170	7.019	7.024	-0.005	87	955363	20.0	19.3	
79 2-Nitroaniline	138	7.030	7.030	0.000	75	431951	20.0	21.0	
81 1,4-Naphthoquinone	158	7.106	7.106	0.000	80	553975	20.0	21.8	
86 1,3-Dinitrobenzene	168	7.164	7.164	0.000	84	227977	20.0	21.7	
85 Dimethyl phthalate	163	7.205	7.205	0.000	97	1581047	20.0	20.5	
84 1,4-Dinitrobenzene	168	7.228	7.228	0.000	82	249972	20.0	21.4	
87 2,6-Dinitrotoluene	165	7.258	7.263	-0.005	87	340208	20.0	20.8	
88 Acenaphthylene	152	7.333	7.333	0.000	99	2246074	20.0	20.2	
89 3-Nitroaniline	138	7.415	7.415	0.000	87	389414	20.0	21.9	
* 90 Acenaphthene-d10	164	7.462	7.462	0.000	95	287683	5.00	5.00	
91 Acenaphthene	153	7.496	7.497	-0.001	96	1409310	20.0	19.9	
92 2,4-Dinitrophenol	184	7.514	7.514	0.000	79	446344	40.0	38.3	
93 4-Nitrophenol	109	7.566	7.567	0.000	83	546625	40.0	42.9	
94 Pentachlorobenzene	250	7.619	7.619	0.000	98	607044	20.0	19.8	
95 2,4-Dinitrotoluene	165	7.642	7.642	0.000	89	476129	20.0	21.7	
96 Dibenzofuran	168	7.660	7.660	0.000	97	1937161	20.0	19.7	
97 1-Naphthylamine	143	7.730	7.730	0.000	97	1315889	20.0	21.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.770	7.771	0.000	82	404215	20.0	20.8	
99 2-Naphthylamine	143	7.805	7.805	0.000	94	1496895	20.0	21.1	
100 Diethyl phthalate	149	7.875	7.875	0.000	97	1490539	20.0	20.5	
101 Thionazin	107	7.951	7.951	0.000	78	309380	20.0	20.8	
102 Fluorene	166	7.980	7.986	-0.006	93	1562747	20.0	19.6	
103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	89	758979	20.0	19.4	
104 N-Nitro-o-toluidine	152	7.986	7.992	-0.006	81	469620	20.0	22.1	
105 4-Nitroaniline	138	7.992	7.992	0.000	78	423052	20.0	21.8	
106 4,6-Dinitro-2-methylphenol	198	8.021	8.021	0.000	77	559060	40.0	42.6	
107 N-Nitrosodiphenylamine	169	8.091	8.097	-0.006	63	1125153	17.0	17.1	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	42	2203026	20.0	19.6	
$ 109 2,4,6-Tribromophenol	330	8.208	8.208	0.000	88	419922	40.0	42.4	
110 Sulfotepp	97	8.248	8.248	0.000	79	343510	20.0	20.0	
112 1,3,5-Trinitrobenzene	213	8.330	8.330	0.000	82	170943	20.0	20.4	
113 cis-Diallate	86	8.371	8.371	0.000	0	659080	14.8	13.9	
114 Phorate	75	8.377	8.383	-0.006	95	1340313	20.0	21.7	
115 Phenacetin	108	8.382	8.383	-0.001	88	931503	20.0	21.9	
116 4-Bromophenyl phenyl ether	248	8.447	8.447	0.000	68	451733	20.0	19.7	
117 trans-Diallate	86	8.452	8.458	-0.006	0	233455	5.20	4.73	
118 Hexachlorobenzene	284	8.499	8.499	0.000	93	467420	20.0	19.0	
119 Dimethoate	87	8.534	8.534	0.000	97	859255	20.0	21.9	
120 Atrazine	200	8.598	8.598	0.000	90	468772	20.0	20.3	
121 Pentachlorophenol	266	8.686	8.686	0.000	92	642123	40.0	43.7	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	91	1854571	20.0	20.9	
123 Pentachloronitrobenzene	237	8.697	8.697	0.000	87	222456	20.0	21.2	
124 Pronamide	173	8.750	8.750	0.000	91	728184	20.0	20.6	
125 Dinoseb	211	8.860	8.860	0.000	96	402592	20.0	19.8	
* 126 Phenanthrene-d10	188	8.866	8.872	-0.006	96	545223	5.00	5.00	
127 Disulfoton	88	8.878	8.878	0.000	95	1368666	20.0	19.2	
128 Phenanthrene	178	8.890	8.895	-0.005	97	2274554	20.0	19.1	
129 Anthracene	178	8.942	8.942	0.000	99	2343744	20.0	19.9	
130 Carbazole	167	9.094	9.094	0.000	96	2167596	20.0	20.6	
131 Methyl parathion	109	9.228	9.228	0.000	90	628850	20.0	21.5	
133 Di-n-butyl phthalate	149	9.432	9.432	0.000	100	2439142	20.0	21.4	
134 Ethyl Parathion	109	9.601	9.601	0.000	84	378041	20.0	22.0	
135 4-Nitroquinoline-1-oxide	190	9.624	9.624	0.000	81	207183	20.0	19.8	
S 136 Diallate	86				0		20.0	18.6	
140 Octachlorostyrene	308	9.840	9.840	0.000	93	181291	20.0	19.3	
141 Isodrin	193	9.880	9.880	0.000	90	280032	20.0	19.1	
143 Fluoranthene	202	10.020	10.020	0.000	99	2555339	20.0	20.3	
147 Benzidine	184	10.154	10.154	0.000	99	5332789	60.0	62.7	
* 149 Pyrene-d10 (IS)	212	10.218	10.224	-0.006	100	555756	5.00	5.00	
150 Pyrene	202	10.236	10.242	-0.006	96	2682124	20.0	19.0	
$ 152 p-Terphenyl-d14	244	10.399	10.399	0.000	99	3596589	40.0	39.2	
154 p-Dimethylamino azobenzene	225	10.539	10.545	-0.006	93	464672	20.0	21.6	
155 Chlorobenzilate	139	10.591	10.592	-0.001	88	782657	20.0	22.1	
156 3,3'-Dimethylbenzidine	212	10.895	10.895	0.000	99	1566673	20.0	21.1	
157 Butyl benzyl phthalate	149	10.918	10.924	-0.006	94	1076947	20.0	20.9	
158 2-Acetylaminofluorene	181	11.169	11.174	-0.005	95	922342	20.0	19.8	
159 3,3'-Dichlorobenzidine	252	11.512	11.518	-0.006	77	901856	20.0	21.0	
160 4,4'-Methylene bis(2-chloroani	231	11.524	11.524	0.000	96	511801	20.0	21.2	
161 Benzo[a]anthracene	228	11.536	11.542	-0.006	99	2391080	20.0	21.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.582	11.582	0.000	98	2300123	20.0	20.3	
163 Bis(2-ethylhexyl) phthalate	149	11.611	11.612	-0.001	96	1483917	20.0	21.5	
164 6-Methylchrysene	242	12.165	12.165	0.000	99	1652922	20.0	21.5	
165 Di-n-octyl phthalate	149	12.492	12.498	-0.006	99	2361995	20.0	19.8	
166 7,12-Dimethylbenz(a)anthracene	256	12.970	12.970	0.000	74	1041376	20.0	22.4	
167 Benzo[b]fluoranthene	252	12.970	12.970	0.000	97	2347128	20.0	20.7	
168 Benzo[k]fluoranthene	252	13.010	13.010	0.000	100	2521117	20.0	21.2	
169 Benzo[a]pyrene	252	13.436	13.436	0.000	78	2017273	20.0	20.5	
* 170 Perylene-d12	264	13.517	13.518	-0.001	98	456281	5.00	5.00	
171 3-Methylcholanthrene	268	13.960	13.966	-0.006	91	1099527	20.0	21.7	
172 Dibenz[a,h]acridine	279	14.753	14.759	-0.006	91	1607428	20.0	21.7	
173 Dibenz[a,j]acridine	279	14.823	14.823	0.000	96	1792004	20.0	21.8	
174 Indeno[1,2,3-cd]pyrene	276	15.068	15.068	0.000	99	1728637	20.0	21.2	
175 Dibenz(a,h)anthracene	278	15.109	15.109	0.000	94	1986761	20.0	20.7	
176 Benzo[g,h,i]perylene	276	15.458	15.458	0.000	97	2004194	20.0	20.7	
S 178 Dinitrotoluene	165				0			42.6	
S 182 Isosafrole	162				0		20.0	20.8	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_7_00029 Amount Added: 1.00 Units: mL

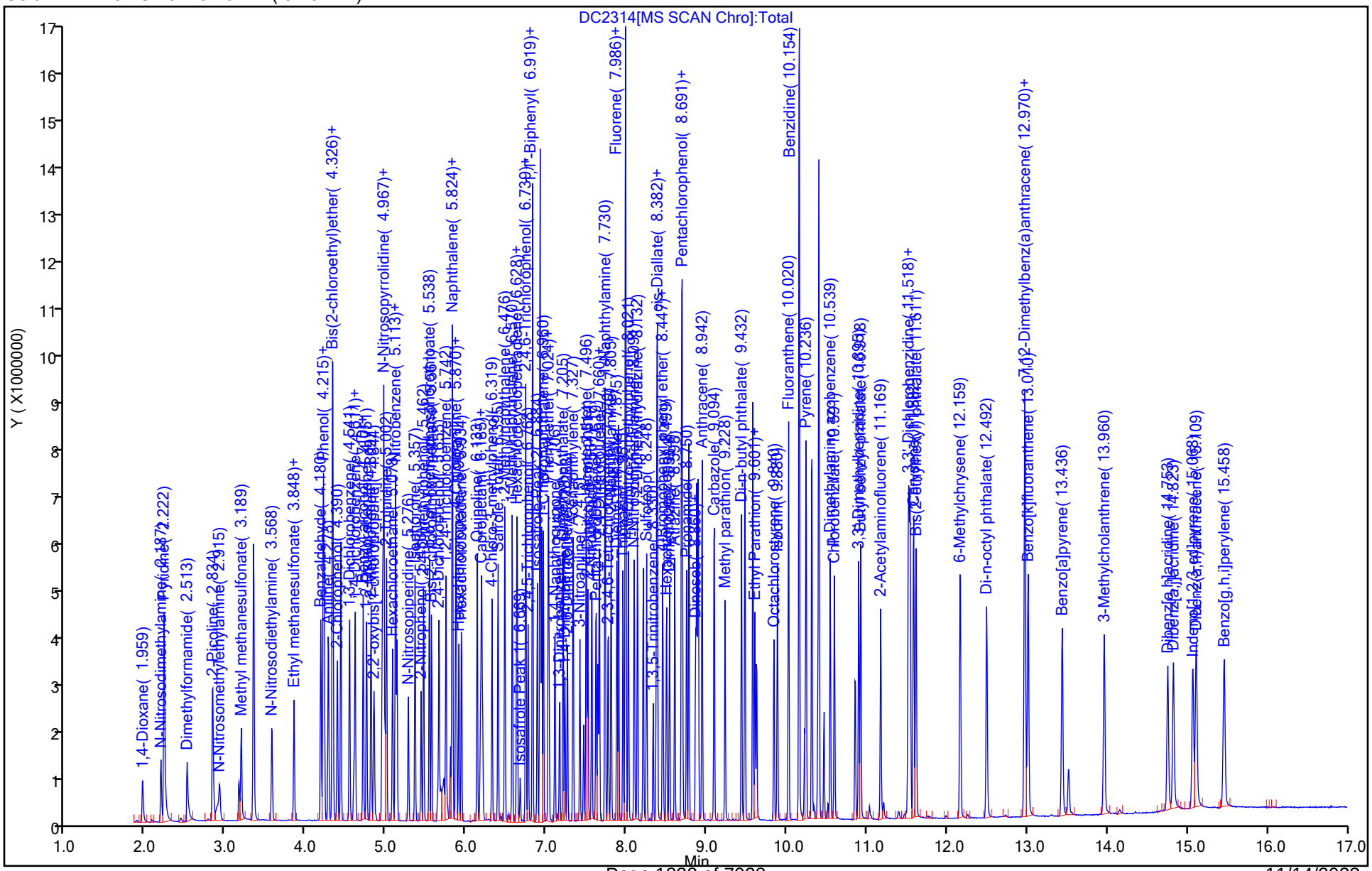
Report Date: 23-Mar-2023 17:56:33 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2314.D

Injection Date:	23-Mar-2023 14:40:30	Instrument ID:	HP19760	Operator ID:	em10340
Lims ID:	IC L7			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2315.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 23-Mar-2023 15:02:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L5
Misc. Info.: 410-0079683-007
Operator ID: em10340 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 17:56:40 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 16:01:47

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.965	1.965	0.000	94	212091	7.50	7.17	
	3 N-Nitrosodimethylamine	74	2.193	2.193	0.000	92	352740	7.50	7.70	
	4 Pyridine	79	2.233	2.233	0.000	98	1148447	15.0	15.3	
	6 Dimethylformamide	73	2.525	2.525	0.000	91	363243	7.50	7.72	
	7 2-Picoline	93	2.834	2.834	0.000	90	561145	7.50	7.88	
	8 N-Nitrosomethylethylamine	88	2.921	2.921	0.000	91	245133	7.50	7.81	
	9 Methyl methanesulfonate	80	3.189	3.189	0.000	84	313482	7.50	7.78	
$	10 2-Fluorophenol	112	3.341	3.341	0.000	93	843858	15.0	16.2	
	11 N-Nitrosodiethylamine	102	3.574	3.574	0.000	95	229401	7.50	8.09	
	12 Ethyl methanesulfonate	109	3.848	3.848	0.000	98	241253	7.50	7.80	
	15 Benzaldehyde	77	4.180	4.180	0.000	94	452268	7.50	7.81	
$	16 Phenol-d5	99	4.209	4.209	0.000	97	1209856	15.0	16.1	
	17 Phenol	94	4.227	4.227	0.000	94	622838	7.50	8.10	
	18 Aniline	93	4.279	4.279	0.000	95	762498	7.50	8.00	
	19 Bis(2-chloroethyl)ether	93	4.332	4.332	0.000	97	507953	7.50	8.00	
	20 2-Chlorophenol	128	4.390	4.390	0.000	91	381248	7.50	8.13	
	21 1,3-Dichlorobenzene	146	4.541	4.541	0.000	93	435072	7.50	8.16	
*	22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	96	178191	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.611	4.611	0.000	89	436020	7.50	7.80	
	25 Benzyl alcohol	108	4.710	4.710	0.000	90	288280	7.50	7.92	
	26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	92	415180	7.50	8.06	
	28 2-Methylphenol	108	4.810	4.810	0.000	95	396275	7.50	7.93	
	29 2,2'-oxybis[1-chloropropane]	45	4.845	4.845	0.000	93	605659	7.50	7.46	
	31 N-Nitrosopyrrolidine	100	4.944	4.944	0.000	92	246181	7.50	8.18	
	32 4-Methylphenol	108	4.955	4.955	0.000	93	426312	7.50	8.04	
	33 N-Nitrosodi-n-propylamine	70	4.967	4.967	0.000	72	403250	7.50	7.91	
	34 Acetophenone	105	4.967	4.967	0.000	88	657809	7.50	8.02	
	35 N-Nitrosomorpholine	56	4.984	4.984	0.000	88	297668	7.50	7.63	
	36 2-Toluidine	106	5.002	5.002	0.000	95	754370	7.50	8.30	
	38 Hexachloroethane	117	5.078	5.078	0.000	97	186029	7.50	7.97	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.113	5.113	0.000	87	1134905	15.0	14.2	
40 Nitrobenzene	77	5.130	5.130	0.000	86	555696	7.50	6.84	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	84	215054	7.50	7.18	
43 Isophorone	82	5.357	5.357	0.000	96	990871	7.50	7.09	
44 2-Nitrophenol	139	5.433	5.433	0.000	88	181237	7.50	7.41	
45 2,4-Dimethylphenol	107	5.462	5.462	0.000	97	443208	7.50	7.26	
46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	93	193410	7.50	7.27	
47 Bis(2-chloroethoxy)methane	93	5.561	5.561	0.000	98	608519	7.50	7.11	
48 2,4-Dichlorophenol	162	5.655	5.655	0.000	96	306671	7.50	7.32	
49 1,2,4-Trichlorobenzene	180	5.742	5.742	0.000	92	353840	7.50	6.98	
* 50 Naphthalene-d8	136	5.800	5.800	0.000	99	758269	5.00	5.00	
51 Naphthalene	128	5.818	5.818	0.000	98	1122275	7.50	6.91	
52 Alpha-Terpineol	59	5.824	5.824	0.000	93	369021	7.50	6.98	
53 4-Chloroaniline	127	5.865	5.865	0.000	93	477361	7.50	7.45	
54 2,6-Dichlorophenol	162	5.876	5.876	0.000	93	312629	7.50	7.35	
55 Hexachloropropene	213	5.905	5.905	0.000	90	240808	7.50	7.05	
56 Hexachlorobutadiene	225	5.935	5.935	0.000	96	200566	7.50	6.95	
60 Quinoline	129	6.133	6.133	0.000	94	733804	7.50	7.11	
61 Caprolactam	113	6.168	6.168	0.000	79	119376	7.50	7.07	
62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	88	380325	7.50	6.30	
63 p-Phenylene diamine	108	6.197	6.197	0.000	94	386655	7.50	7.41	
64 4-Chloro-3-methylphenol	107	6.319	6.319	0.000	91	390789	7.50	7.21	
65 Safrole, Total	162	6.395	6.395	0.000	84	289524	7.50	7.07	
66 2-Methylnaphthalene	142	6.477	6.477	0.000	90	724956	7.50	7.01	
67 1-Methylnaphthalene	142	6.570	6.570	0.000	92	670326	7.50	6.99	
68 Hexachlorocyclopentadiene	237	6.628	6.628	0.000	95	229655	7.50	8.08	
69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	98	364783	7.50	7.95	
70 Isosafrole Peak 1	162	6.669	6.669	0.000	86	52138	1.20	1.26	
71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	78	222069	7.50	8.36	
72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	93	240413	7.50	8.36	
$ 73 2-Fluorobiphenyl (Surr)	172	6.826	6.826	0.000	100	1637420	15.0	16.0	
74 Isosafrole Peak 2	162	6.885	6.885	0.000	87	303381	6.30	6.97	
75 1,1'-Biphenyl	154	6.920	6.920	0.000	95	903429	7.50	8.05	
76 2-Chloronaphthalene	162	6.937	6.937	0.000	96	711008	7.50	8.19	
77 1-Chloronaphthalene	162	6.960	6.960	0.000	97	663263	7.50	7.90	
78 Phenyl ether	170	7.019	7.019	0.000	87	488530	7.50	7.90	
79 2-Nitroaniline	138	7.030	7.030	0.000	76	210531	7.50	8.19	
81 1,4-Naphthoquinone	158	7.100	7.100	0.000	78	266364	7.50	8.39	
86 1,3-Dinitrobenzene	168	7.164	7.164	0.000	83	106132	7.50	8.10	
85 Dimethyl phthalate	163	7.205	7.205	0.000	97	805439	7.50	8.35	
84 1,4-Dinitrobenzene	168	7.228	7.228	0.000	79	119597	7.50	8.18	
87 2,6-Dinitrotoluene	165	7.258	7.258	0.000	85	169573	7.50	8.32	
88 Acenaphthylene	152	7.328	7.328	0.000	99	1141047	7.50	8.22	
89 3-Nitroaniline	138	7.415	7.415	0.000	87	194758	7.50	8.77	
* 90 Acenaphthene-d10	164	7.462	7.462	0.000	95	359317	5.00	5.00	
91 Acenaphthene	153	7.497	7.497	0.000	96	727892	7.50	8.21	
92 2,4-Dinitrophenol	184	7.514	7.514	0.000	74	247228	17.5	18.4	
93 4-Nitrophenol	109	7.561	7.561	0.000	82	276683	15.0	17.4	
94 Pentachlorobenzene	250	7.619	7.619	0.000	97	301569	7.50	7.87	
95 2,4-Dinitrotoluene	165	7.636	7.636	0.000	87	234199	7.50	8.55	
96 Dibenzofuran	168	7.660	7.660	0.000	96	990195	7.50	8.05	
97 1-Naphthylamine	143	7.730	7.730	0.000	98	659274	7.50	8.46	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.765	7.765	0.000	75	207036	7.50	8.53	
99 2-Naphthylamine	143	7.805	7.805	0.000	94	739264	7.50	8.34	
100 Diethyl phthalate	149	7.875	7.875	0.000	97	761904	7.50	8.39	
101 Thionazin	107	7.951	7.951	0.000	78	151718	7.50	8.17	
102 Fluorene	166	7.980	7.980	0.000	92	804250	7.50	8.09	
103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	90	394542	7.50	8.06	
104 N-Nitro-o-toluidine	152	7.986	7.986	0.000	82	225074	7.50	8.49	
105 4-Nitroaniline	138	7.992	7.992	0.000	78	210421	7.50	8.69	
106 4,6-Dinitro-2-methylphenol	198	8.021	8.021	0.000	76	260559	15.0	15.8	
107 N-Nitrosodiphenylamine	169	8.091	8.091	0.000	63	568163	6.38	6.90	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	41	1112876	7.50	7.91	
$ 109 2,4,6-Tribromophenol	330	8.208	8.208	0.000	88	213482	15.0	17.3	
110 Sulfotepp	97	8.248	8.248	0.000	79	166090	7.50	7.70	
112 1,3,5-Trinitrobenzene	213	8.330	8.330	0.000	81	80104	7.50	7.63	
113 cis-Diallate	86	8.371	8.371	0.000	0	330439	5.55	5.56	
114 Phorate	75	8.377	8.377	0.000	93	660695	7.50	8.54	
115 Phenacetin	108	8.377	8.377	0.000	87	453636	7.50	8.51	
116 4-Bromophenyl phenyl ether	248	8.447	8.447	0.000	69	230929	7.50	8.04	
117 trans-Diallate	86	8.458	8.458	0.000	0	122243	1.95	1.98	
118 Hexachlorobenzene	284	8.499	8.499	0.000	92	239838	7.50	7.78	
119 Dimethoate	87	8.534	8.534	0.000	96	417475	7.50	8.50	
120 Atrazine	200	8.598	8.598	0.000	90	243463	7.50	8.41	
121 Pentachlorophenol	266	8.680	8.680	0.000	92	312047	15.0	17.0	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	91	926082	7.50	8.32	
123 Pentachloronitrobenzene	237	8.697	8.697	0.000	86	111484	7.50	8.48	
124 Pronamide	173	8.744	8.744	0.000	90	357742	7.50	8.07	
125 Dinoseb	211	8.860	8.860	0.000	95	178575	7.50	7.42	
* 126 Phenanthrene-d10	188	8.866	8.866	0.000	97	683593	5.00	5.00	
127 Disulfoton	88	8.872	8.872	0.000	95	684797	7.50	7.68	
128 Phenanthrene	178	8.890	8.890	0.000	97	1176821	7.50	7.90	
129 Anthracene	178	8.942	8.942	0.000	99	1185022	7.50	8.02	
130 Carbazole	167	9.088	9.088	0.000	96	1108250	7.50	8.39	
131 Methyl parathion	109	9.228	9.228	0.000	90	294416	7.50	8.01	
133 Di-n-butyl phthalate	149	9.432	9.432	0.000	100	1203982	7.50	8.42	
134 Ethyl Parathion	109	9.601	9.601	0.000	83	178232	7.50	8.29	
135 4-Nitroquinoline-1-oxide	190	9.618	9.618	0.000	78	81207	7.50	7.79	
S 136 Diallate	86				0		7.50	7.53	
140 Octachlorostyrene	308	9.840	9.840	0.000	93	91194	7.50	7.73	
141 Isodrin	193	9.880	9.880	0.000	91	137942	7.50	7.52	
143 Fluoranthene	202	10.020	10.020	0.000	99	1287214	7.50	8.16	
147 Benzidine	184	10.149	10.149	0.000	99	2691871	22.5	24.8	
* 149 Pyrene-d10 (IS)	212	10.219	10.219	0.000	100	709812	5.00	5.00	
150 Pyrene	202	10.236	10.236	0.000	97	1417720	7.50	7.84	
$ 152 p-Terphenyl-d14	244	10.399	10.399	0.000	99	1902699	15.0	16.2	
154 p-Dimethylamino azobenzene	225	10.539	10.539	0.000	93	224604	7.50	8.16	
155 Chlorobenzilate	139	10.592	10.592	0.000	87	376053	7.50	8.31	
156 3,3'-Dimethylbenzidine	212	10.895	10.895	0.000	99	785843	7.50	8.28	
157 Butyl benzyl phthalate	149	10.918	10.918	0.000	94	527989	7.50	8.02	
158 2-Acetylaminofluorene	181	11.169	11.169	0.000	94	407399	7.50	7.00	
159 3,3'-Dichlorobenzidine	252	11.513	11.513	0.000	76	448646	7.50	8.16	
160 4,4'-Methylene bis(2-chloroani	231	11.524	11.524	0.000	96	252701	7.50	8.19	
161 Benzo[a]anthracene	228	11.536	11.536	0.000	99	1229808	7.50	8.51	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.582	11.582	0.000	98	1181968	7.50	8.16	
163 Bis(2-ethylhexyl) phthalate	149	11.612	11.612	0.000	96	710689	7.50	8.05	
164 6-Methylchrysene	242	12.159	12.159	0.000	99	810336	7.50	8.26	
165 Di-n-octyl phthalate	149	12.492	12.492	0.000	99	1083739	7.50	7.49	M
166 7,12-Dimethylbenz(a)anthracene	256	12.970	12.970	0.000	71	500471	7.50	8.44	
167 Benzo[b]fluoranthene	252	12.970	12.970	0.000	97	1186410	7.50	8.18	
168 Benzo[k]fluoranthene	252	13.010	13.010	0.000	100	1255002	7.50	8.27	
169 Benzo[a]pyrene	252	13.436	13.436	0.000	78	1017219	7.50	8.11	
* 170 Perylene-d12	264	13.518	13.518	0.000	98	582541	5.00	5.00	
171 3-Methylcholanthrene	268	13.961	13.961	0.000	91	535201	7.50	8.29	
172 Dibenz[a,h]acridine	279	14.753	14.753	0.000	91	768193	7.50	8.12	
173 Dibenz[a,j]acridine	279	14.823	14.823	0.000	96	884684	7.50	8.41	
174 Indeno[1,2,3-cd]pyrene	276	15.062	15.062	0.000	99	867686	7.50	8.33	
175 Dibenz(a,h)anthracene	278	15.109	15.109	0.000	94	1008213	7.50	8.21	
176 Benzo[g,h,i]perylene	276	15.453	15.453	0.000	98	999938	7.50	8.09	
S 178 Dinitrotoluene	165				0			16.9	
S 182 Isosafrole	162				0		7.50	8.23	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_5_00036 Amount Added: 1.00 Units: mL

Report Date: 23-Mar-2023 17:56:41 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2315.D

Injection Date: 23-Mar-2023 15:02:30 Instrument ID: HP19760 Operator ID: em10340

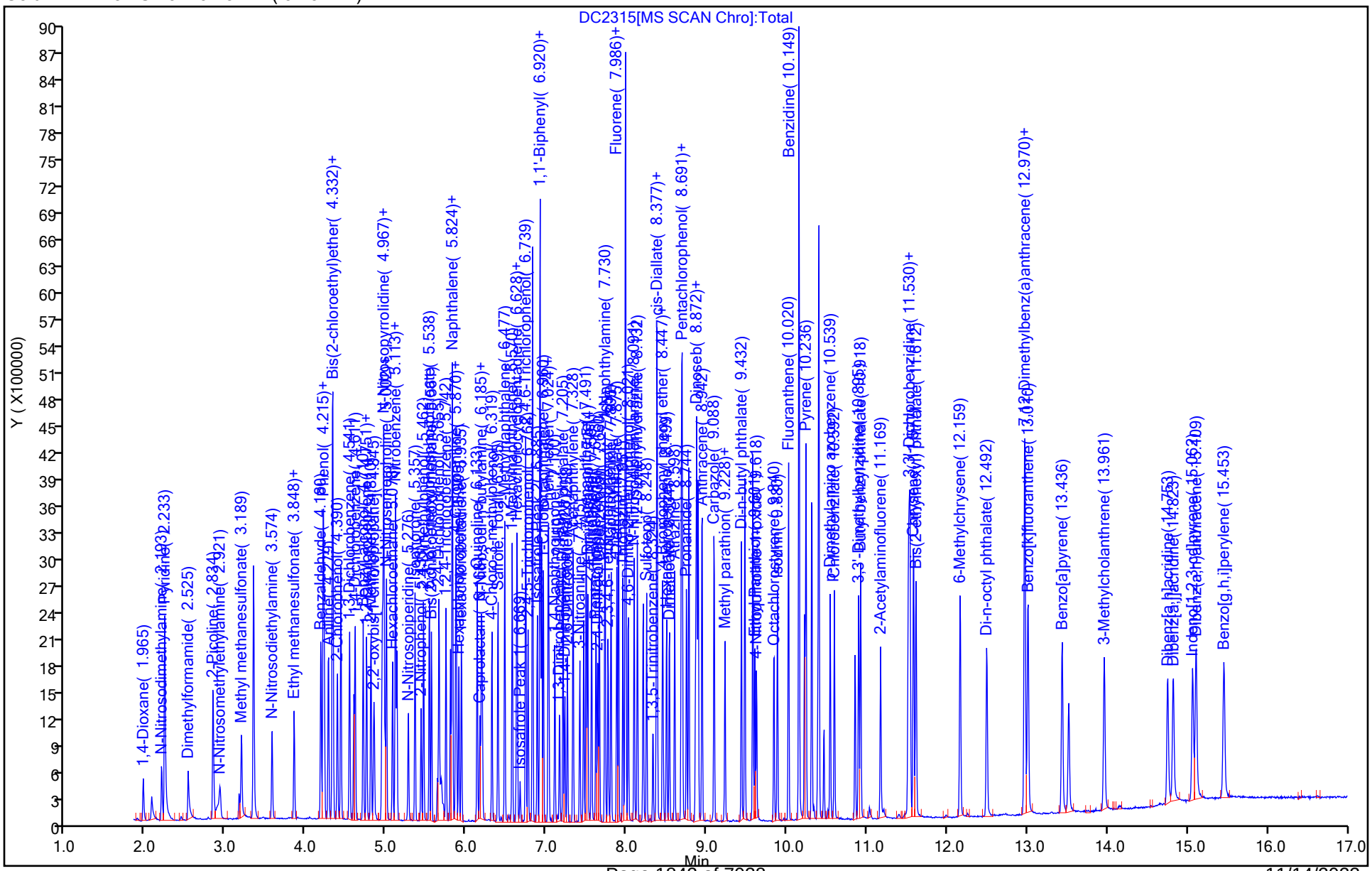
Lims ID: IC L5 Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 6

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

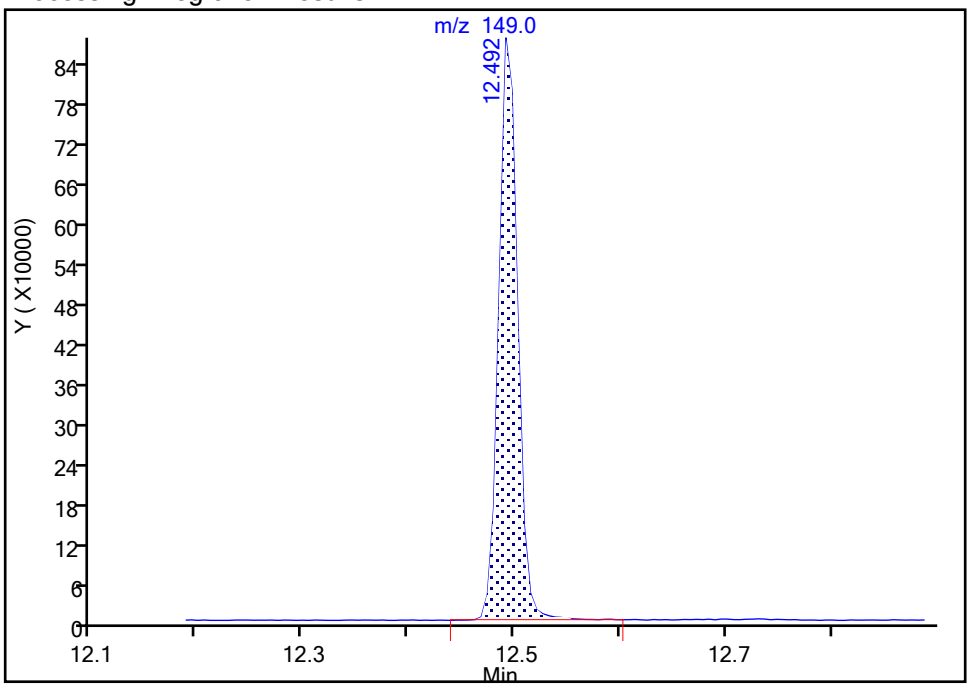
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2315.D				
Injection Date:	23-Mar-2023 15:02:30	Instrument ID:	HP19760		
Lims ID:	IC L5				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

165 Di-n-octyl phthalate, CAS: 117-84-0

Signal: 1

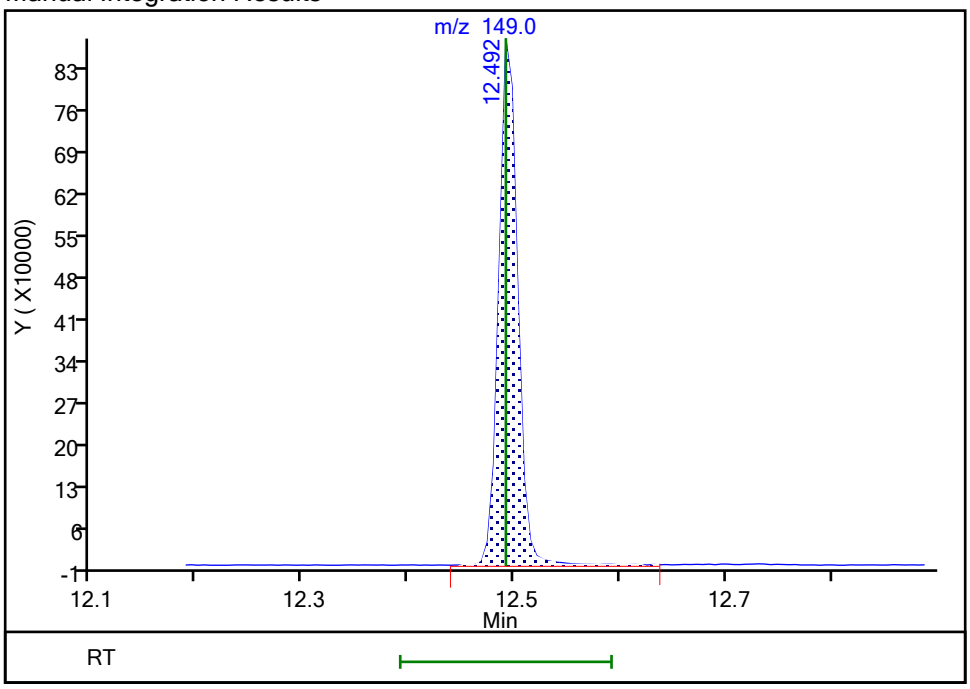
Processing Integration Results

RT: 12.49
Area: 1080809
Amount: 7.474002
Amount Units: ug/ml



Manual Integration Results

RT: 12.49
Area: 1083739
Amount: 7.489194
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 17:11:21
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2316.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 23-Mar-2023 15:24:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L4
Misc. Info.: 410-0079683-008
Operator ID: em10340 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 17:56:47 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 16:03:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.965	1.965	0.000	94	102312	3.75	3.16	
3 N-Nitrosodimethylamine	74	2.198	2.193	0.005	93	165821	3.75	3.31	
4 Pyridine	79	2.233	2.233	0.000	98	564496	7.50	6.90	
6 Dimethylformamide	73	2.536	2.525	0.011	93	166247	3.75	3.23	
7 2-Picoline	93	2.839	2.834	0.005	90	274828	3.75	3.53	
8 N-Nitrosomethylethylamine	88	2.927	2.921	0.006	92	127188	3.75	3.71	
9 Methyl methanesulfonate	80	3.195	3.189	0.006	85	153209	3.75	3.48	
$ 10 2-Fluorophenol	112	3.341	3.341	0.000	93	408861	7.50	7.17	
11 N-Nitrosodiethylamine	102	3.574	3.574	0.000	96	107835	3.75	3.48	
12 Ethyl methanesulfonate	109	3.848	3.848	0.000	98	116621	3.75	3.45	
15 Benzaldehyde	77	4.180	4.180	0.000	95	226258	3.75	3.57	
$ 16 Phenol-d5	99	4.209	4.209	0.000	95	571106	7.50	6.95	
17 Phenol	94	4.226	4.227	-0.001	94	305019	3.75	3.63	
18 Aniline	93	4.279	4.279	0.000	95	367257	3.75	3.52	
19 Bis(2-chloroethyl)ether	93	4.331	4.332	-0.001	94	244085	3.75	3.51	
20 2-Chlorophenol	128	4.390	4.390	0.000	91	180798	3.75	3.53	
21 1,3-Dichlorobenzene	146	4.541	4.541	0.000	93	216317	3.75	3.71	
* 22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	96	194911	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.611	4.611	0.000	90	214457	3.75	3.51	
25 Benzyl alcohol	108	4.710	4.710	0.000	90	136310	3.75	3.42	
26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	92	207846	3.75	3.69	
28 2-Methylphenol	108	4.809	4.810	-0.001	95	194279	3.75	3.55	
29 2,2'-oxybis[1-chloropropane]	45	4.844	4.845	-0.001	93	302576	3.75	3.41	
31 N-Nitrosopyrrolidine	100	4.943	4.944	-0.001	92	114504	3.75	3.48	
32 4-Methylphenol	108	4.949	4.955	-0.006	96	205591	3.75	3.55	
33 N-Nitrosodi-n-propylamine	70	4.967	4.967	0.000	78	193518	3.75	3.47	
34 Acetophenone	105	4.967	4.967	0.000	95	321605	3.75	3.58	
35 N-Nitrosomorpholine	56	4.984	4.984	0.000	89	140968	3.75	3.30	
36 2-Toluidine	106	5.002	5.002	0.000	95	352611	3.75	3.55	
38 Hexachloroethane	117	5.077	5.078	-0.001	97	94791	3.75	3.71	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.112	5.113	-0.001	87	542408	7.50	7.39	
40 Nitrobenzene	77	5.130	5.130	0.000	84	275737	3.75	3.68	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	85	102386	3.75	3.71	
43 Isophorone	82	5.357	5.357	0.000	96	480253	3.75	3.73	
44 2-Nitrophenol	139	5.433	5.433	0.000	88	82145	3.75	3.65	
45 2,4-Dimethylphenol	107	5.462	5.462	0.000	98	206547	3.75	3.67	
46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	93	92790	3.75	3.79	
47 Bis(2-chloroethoxy)methane	93	5.561	5.561	0.000	99	292180	3.75	3.70	
48 2,4-Dichlorophenol	162	5.654	5.655	-0.001	97	148760	3.75	3.85	
49 1,2,4-Trichlorobenzene	180	5.742	5.742	0.000	93	171668	3.75	3.67	
* 50 Naphthalene-d8	136	5.800	5.800	0.000	100	698743	5.00	5.00	
51 Naphthalene	128	5.818	5.818	0.000	98	551132	3.75	3.68	
52 Alpha-Terpineol	59	5.824	5.824	0.000	91	177706	3.75	3.65	
53 4-Chloroaniline	127	5.864	5.865	-0.001	92	225383	3.75	3.82	
54 2,6-Dichlorophenol	162	5.870	5.876	-0.006	94	147038	3.75	3.75	
55 Hexachloropropene	213	5.905	5.905	0.000	90	117240	3.75	3.72	
56 Hexachlorobutadiene	225	5.940	5.935	0.006	97	100168	3.75	3.77	
60 Quinoline	129	6.132	6.133	-0.001	95	341560	3.75	3.59	
61 Caprolactam	113	6.162	6.168	-0.006	82	53695	3.75	3.45	
62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	90	177330	3.75	3.19	
63 p-Phenylene diamine	108	6.197	6.197	0.000	95	171088	3.75	3.56	
64 4-Chloro-3-methylphenol	107	6.319	6.319	0.000	91	178660	3.75	3.58	
65 Safrole, Total	162	6.395	6.395	0.000	84	137638	3.75	3.65	
66 2-Methylnaphthalene	142	6.476	6.477	-0.001	91	357093	3.75	3.74	
67 1-Methylnaphthalene	142	6.570	6.570	0.000	91	324459	3.75	3.67	
68 Hexachlorocyclopentadiene	237	6.628	6.628	0.000	97	109330	3.75	3.59	
69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	98	178866	3.75	3.64	
70 Isosafrole Peak 1	162	6.669	6.669	0.000	86	24954	0.6000	0.5644	
71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	93	102290	3.75	3.59	
72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	91	113184	3.75	3.67	
$ 73 2-Fluorobiphenyl (Surr)	172	6.826	6.826	0.000	99	795030	7.50	7.26	
74 Isosafrole Peak 2	162	6.884	6.885	-0.001	88	139988	3.15	3.00	
75 1,1'-Biphenyl	154	6.919	6.920	-0.001	96	438040	3.75	3.64	
76 2-Chloronaphthalene	162	6.937	6.937	0.000	96	342113	3.75	3.68	
77 1-Chloronaphthalene	162	6.960	6.960	0.000	97	323675	3.75	3.60	
78 Phenyl ether	170	7.018	7.019	-0.001	87	238545	3.75	3.60	
79 2-Nitroaniline	138	7.030	7.030	0.000	75	93576	3.75	3.40	
81 1,4-Naphthoquinone	158	7.106	7.100	0.006	80	120588	3.75	3.54	
86 1,3-Dinitrobenzene	168	7.158	7.164	-0.006	83	46828	3.75	3.33	
85 Dimethyl phthalate	163	7.205	7.205	0.000	97	385085	3.75	3.72	
84 1,4-Dinitrobenzene	168	7.228	7.228	0.000	82	55558	3.75	3.55	
87 2,6-Dinitrotoluene	165	7.257	7.258	-0.001	86	77846	3.75	3.56	
88 Acenaphthylene	152	7.327	7.328	-0.001	99	538080	3.75	3.62	
89 3-Nitroaniline	138	7.415	7.415	0.000	86	85127	3.75	3.58	
* 90 Acenaphthene-d10	164	7.461	7.462	-0.001	94	385056	5.00	5.00	
91 Acenaphthene	153	7.496	7.497	-0.001	96	337447	3.75	3.55	
92 2,4-Dinitrophenol	184	7.514	7.514	0.000	74	130348	11.3	10.3	
93 4-Nitrophenol	109	7.560	7.561	-0.001	82	124218	7.50	7.28	
94 Pentachlorobenzene	250	7.619	7.619	0.000	97	145886	3.75	3.55	
95 2,4-Dinitrotoluene	165	7.636	7.636	0.000	85	102391	3.75	3.49	
96 Dibenzofuran	168	7.660	7.660	0.000	97	478582	3.75	3.63	
97 1-Naphthylamine	143	7.729	7.730	-0.001	98	302651	3.75	3.62	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.770	7.765	0.005	75	96800	3.75	3.72	
99 2-Naphthylamine	143	7.805	7.805	0.000	94	339001	3.75	3.57	
100 Diethyl phthalate	149	7.875	7.875	0.000	97	359760	3.75	3.70	
101 Thionazin	107	7.951	7.951	0.000	78	66476	3.75	3.34	
102 Fluorene	166	7.980	7.980	0.000	91	380479	3.75	3.57	
103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	80	193689	3.75	3.69	
104 N-Nitro-o-toluidine	152	7.986	7.986	0.000	73	101748	3.75	3.58	
105 4-Nitroaniline	138	7.986	7.992	-0.006	74	95521	3.75	3.68	
106 4,6-Dinitro-2-methylphenol	198	8.021	8.021	0.000	76	112535	7.50	6.64	
107 N-Nitrosodiphenylamine	169	8.091	8.091	0.000	62	270495	3.19	3.19	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	42	522349	3.75	3.60	
$ 109 2,4,6-Tribromophenol	330	8.207	8.208	-0.001	89	98465	7.50	7.43	
110 Sulfotepp	97	8.248	8.248	0.000	80	78223	3.75	3.52	
112 1,3,5-Trinitrobenzene	213	8.330	8.330	0.000	81	32077	3.75	2.97	
113 cis-Diallate	86	8.371	8.371	0.000	0	150112	2.78	2.45	
114 Phorate	75	8.376	8.377	-0.001	93	303783	3.75	3.81	
115 Phenacetin	108	8.376	8.377	-0.001	73	197475	3.75	3.59	
116 4-Bromophenyl phenyl ether	248	8.446	8.447	-0.001	70	109083	3.75	3.68	
117 trans-Diallate	86	8.452	8.458	-0.006	0	54738	0.9750	0.8584	
118 Hexachlorobenzene	284	8.499	8.499	0.000	93	116801	3.75	3.68	
119 Dimethoate	87	8.528	8.534	-0.006	96	177530	3.75	3.50	
120 Atrazine	200	8.598	8.598	0.000	90	110966	3.75	3.72	
121 Pentachlorophenol	266	8.680	8.680	0.000	90	131014	7.50	6.90	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	92	427343	3.75	3.72	
123 Pentachloronitrobenzene	237	8.691	8.697	-0.006	85	50111	3.75	3.70	
124 Pronamide	173	8.744	8.744	0.000	91	159271	3.75	3.49	
125 Dinoseb	211	8.860	8.860	0.000	95	73944	3.75	3.35	
* 126 Phenanthrene-d10	188	8.866	8.866	0.000	97	704829	5.00	5.00	
127 Disulfoton	88	8.872	8.872	0.000	95	312380	3.75	3.40	
128 Phenanthrene	178	8.889	8.890	-0.001	98	559497	3.75	3.64	
129 Anthracene	178	8.942	8.942	0.000	99	566832	3.75	3.72	
130 Carbazole	167	9.088	9.088	0.000	96	508449	3.75	3.73	
131 Methyl parathion	109	9.227	9.228	-0.001	90	129457	3.75	3.42	
133 Di-n-butyl phthalate	149	9.431	9.432	-0.001	100	553933	3.75	3.76	
134 Ethyl Parathion	109	9.600	9.601	-0.001	82	70719	3.75	3.19	
135 4-Nitroquinoline-1-oxide	190	9.618	9.618	0.000	73	30726	3.75	3.35	
S 136 Diallate	86				0		3.75	3.31	
140 Octachlorostyrene	308	9.839	9.840	-0.001	92	46107	3.75	3.79	
141 Isodrin	193	9.880	9.880	0.000	91	67174	3.75	3.55	
143 Fluoranthene	202	10.020	10.020	0.000	99	612334	3.75	3.76	
147 Benzidine	184	10.148	10.149	-0.001	99	1186380	11.3	10.4	
* 149 Pyrene-d10 (IS)	212	10.218	10.219	-0.001	100	743954	5.00	5.00	
150 Pyrene	202	10.236	10.236	0.000	96	676379	3.75	3.57	
$ 152 p-Terphenyl-d14	244	10.399	10.399	0.000	99	897894	7.50	7.31	
154 p-Dimethylamino azobenzene	225	10.539	10.539	0.000	93	93753	3.75	3.25	
155 Chlorobenzilate	139	10.591	10.592	-0.001	86	161707	3.75	3.41	
156 3,3'-Dimethylbenzidine	212	10.894	10.895	-0.001	99	343095	3.75	3.45	
157 Butyl benzyl phthalate	149	10.918	10.918	0.000	94	236930	3.75	3.43	
158 2-Acetylaminofluorene	181	11.168	11.169	-0.001	96	166192	3.75	2.88	
159 3,3'-Dichlorobenzidine	252	11.512	11.513	0.000	74	198112	3.75	3.44	
160 4,4'-Methylene bis(2-chloroani	231	11.524	11.524	0.000	96	108829	3.75	3.37	
161 Benzo[a]anthracene	228	11.536	11.536	0.000	99	563072	3.75	3.72	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.576	11.582	-0.006	98	548150	3.75	3.61	
163 Bis(2-ethylhexyl) phthalate	149	11.611	11.612	-0.001	96	304212	3.75	3.29	
164 6-Methylchrysene	242	12.159	12.159	0.000	99	361980	3.75	3.52	
165 Di-n-octyl phthalate	149	12.491	12.492	-0.001	99	447395	3.75	3.36	M
166 7,12-Dimethylbenz(a)anthracene	256	12.964	12.970	-0.006	69	215590	3.75	3.54	
167 Benzo[b]fluoranthene	252	12.964	12.970	-0.006	97	558588	3.75	3.75	
168 Benzo[k]fluoranthene	252	13.004	13.010	-0.006	100	576600	3.75	3.70	
169 Benzo[a]pyrene	252	13.436	13.436	0.000	78	463285	3.75	3.59	
* 170 Perylene-d12	264	13.517	13.518	-0.001	97	598403	5.00	5.00	
171 3-Methylcholanthrene	268	13.960	13.961	-0.001	91	228764	3.75	3.45	
172 Dibenz[a,h]acridine	279	14.747	14.753	-0.006	91	346351	3.75	3.56	
173 Dibenz[a,j]acridine	279	14.817	14.823	-0.006	96	412244	3.75	3.82	
174 Indeno[1,2,3-cd]pyrene	276	15.062	15.062	0.000	99	390110	3.75	3.65	
175 Dibenz(a,h)anthracene	278	15.103	15.109	-0.006	92	460183	3.75	3.65	
176 Benzo[g,h,i]perylene	276	15.452	15.453	-0.001	98	458856	3.75	3.61	
S 178 Dinitrotoluene	165				0			7.05	
S 182 Isosafrole	162				0		3.75	3.56	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_4_00026 Amount Added: 1.00 Units: mL

Report Date: 23-Mar-2023 17:56:48 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2316.D

Injection Date: 23-Mar-2023 15:24:30 Instrument ID: HP19760 Operator ID: em10340

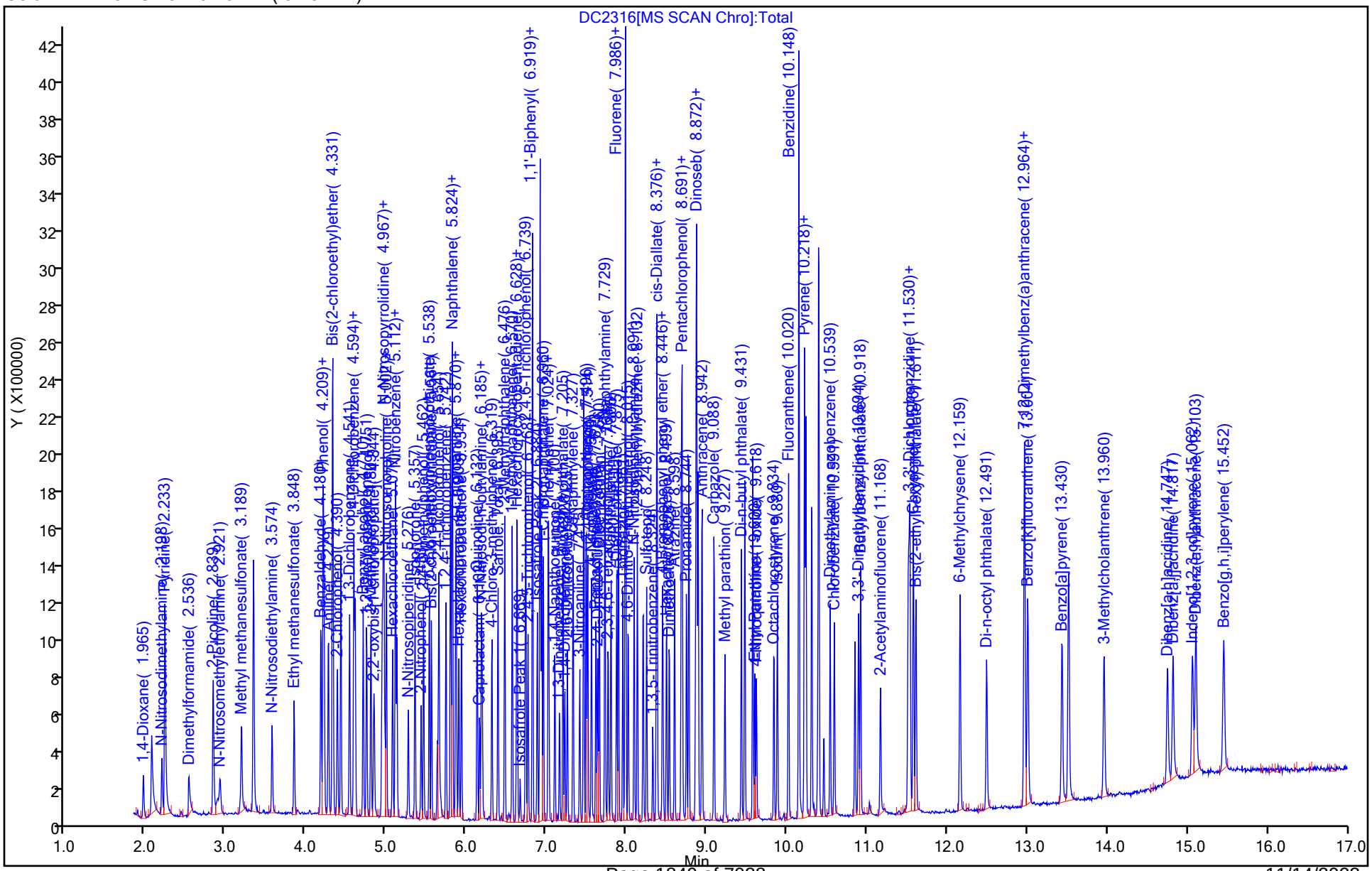
Lims ID: IC L4 Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 7

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

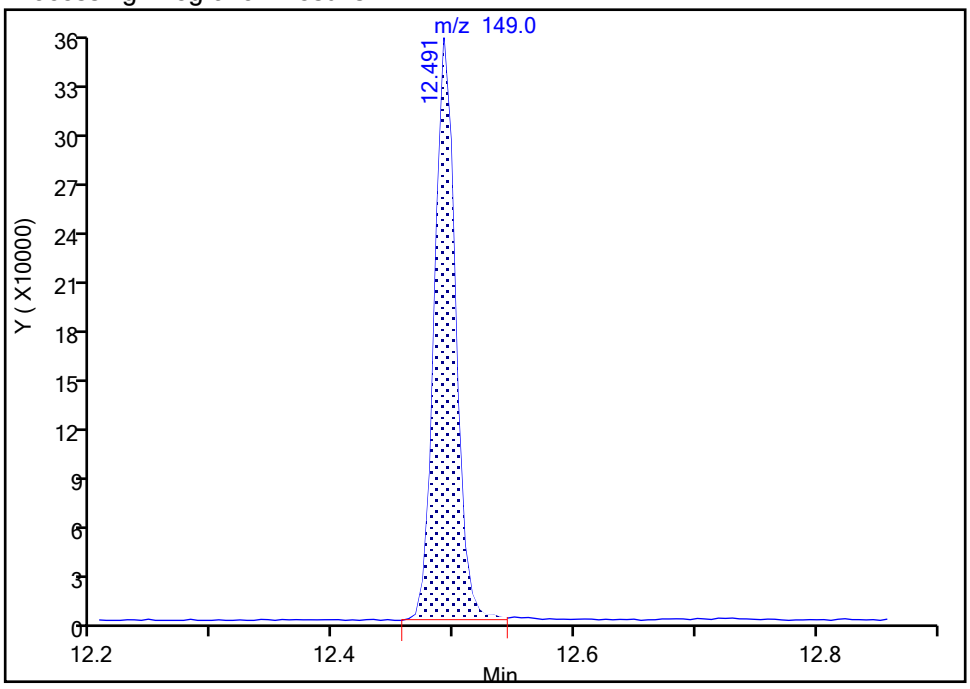
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2316.D				
Injection Date:	23-Mar-2023 15:24:30	Instrument ID:	HP19760		
Lims ID:	IC L4				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

165 Di-n-octyl phthalate, CAS: 117-84-0

Signal: 1

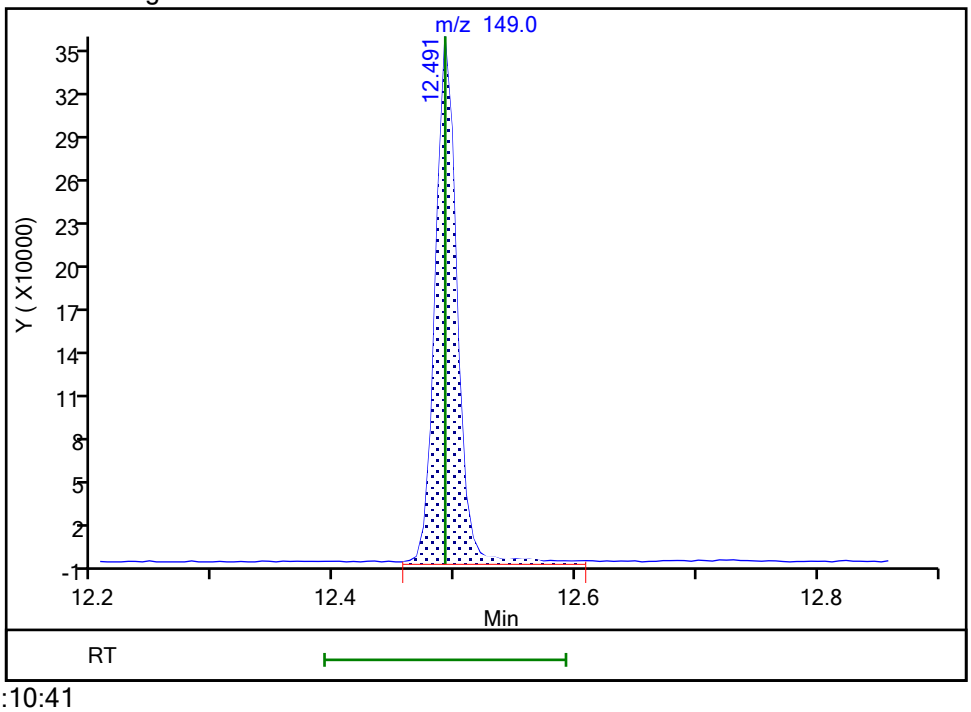
Processing Integration Results

RT: 12.49
Area: 435390
Amount: 3.296043
Amount Units: ug/ml



Manual Integration Results

RT: 12.49
Area: 447395
Amount: 3.357927
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 17:10:41
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2317.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 23-Mar-2023 15:46:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 410-0079683-009
Operator ID: em10340 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 17:56:53 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 16:28:04

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.959	1.965	-0.006	96	27228	1.25	1.27	
	3 N-Nitrosodimethylamine	74	2.192	2.193	-0.001	93	40963	1.25	1.23	
	4 Pyridine	79	2.233	2.233	0.000	98	134481	2.50	2.48	
	6 Dimethylformamide	73	2.554	2.525	0.029	95	50756	1.25	1.49	M
	7 2-Picoline	93	2.839	2.834	0.005	89	62591	1.25	1.21	
	8 N-Nitrosomethylethylamine	88	2.921	2.921	0.000	90	29560	1.25	1.30	
	9 Methyl methanesulfonate	80	3.189	3.189	0.000	85	36416	1.25	1.25	
$	10 2-Fluorophenol	112	3.341	3.341	0.000	93	95602	2.50	2.53	
	11 N-Nitrosodiethylamine	102	3.568	3.574	-0.006	92	25438	1.25	1.24	
	12 Ethyl methanesulfonate	109	3.848	3.848	0.000	97	25944	1.25	1.16	
	15 Benzaldehyde	77	4.180	4.180	0.000	93	56176	1.25	1.34	
$	16 Phenol-d5	99	4.209	4.209	0.000	95	133530	2.50	2.45	
	17 Phenol	94	4.221	4.227	-0.006	92	65491	1.25	1.17	
	18 Aniline	93	4.273	4.279	-0.006	95	87364	1.25	1.27	
	19 Bis(2-chloroethyl)ether	93	4.332	4.332	0.000	91	61134	1.25	1.33	
	20 2-Chlorophenol	128	4.390	4.390	0.000	92	44665	1.25	1.31	
	21 1,3-Dichlorobenzene	146	4.541	4.541	0.000	92	49906	1.25	1.29	
*	22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	97	129173	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.611	4.611	0.000	95	54422	1.25	1.34	
	25 Benzyl alcohol	108	4.710	4.710	0.000	90	33689	1.25	1.28	
	26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	92	50344	1.25	1.35	
	28 2-Methylphenol	108	4.804	4.810	-0.006	93	42762	1.25	1.18	
	29 2,2'-oxybis[1-chloropropane]	45	4.844	4.845	-0.001	93	71121	1.25	1.21	
	31 N-Nitrosopyrrolidine	100	4.938	4.944	-0.006	89	24710	1.25	1.13	
	32 4-Methylphenol	108	4.949	4.955	-0.006	96	46349	1.25	1.21	
	33 N-Nitrosodi-n-propylamine	70	4.961	4.967	-0.006	70	44114	1.25	1.19	
	34 Acetophenone	105	4.967	4.967	0.000	94	73221	1.25	1.23	
	35 N-Nitrosomorpholine	56	4.979	4.984	-0.005	93	36753	1.25	1.30	
	36 2-Toluidine	106	5.002	5.002	0.000	93	83302	1.25	1.26	
	38 Hexachloroethane	117	5.078	5.078	0.000	94	21368	1.25	1.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.113	5.113	0.000	86	127985	2.50	2.46	
40 Nitrobenzene	77	5.130	5.130	0.000	87	64519	1.25	1.22	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	85	23094	1.25	1.18	
43 Isophorone	82	5.357	5.357	0.000	96	110489	1.25	1.21	
44 2-Nitrophenol	139	5.433	5.433	0.000	88	18109	1.25	1.14	
45 2,4-Dimethylphenol	107	5.462	5.462	0.000	97	47568	1.25	1.19	
46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	94	20785	1.25	1.20	
47 Bis(2-chloroethoxy)methane	93	5.561	5.561	0.000	98	69232	1.25	1.24	
48 2,4-Dichlorophenol	162	5.655	5.655	0.000	96	32172	1.25	1.18	
49 1,2,4-Trichlorobenzene	180	5.742	5.742	0.000	91	40743	1.25	1.23	
* 50 Naphthalene-d8	136	5.800	5.800	0.000	100	494483	5.00	5.00	
51 Naphthalene	128	5.818	5.818	0.000	97	134088	1.25	1.27	
52 Alpha-Terpineol	59	5.824	5.824	0.000	88	40801	1.25	1.18	
53 4-Chloroaniline	127	5.864	5.865	-0.001	92	51493	1.25	1.23	
54 2,6-Dichlorophenol	162	5.870	5.876	-0.006	87	32742	1.25	1.18	
55 Hexachloropropene	213	5.905	5.905	0.000	89	28781	1.25	1.29	
56 Hexachlorobutadiene	225	5.934	5.935	0.000	94	22943	1.25	1.22	
60 Quinoline	129	6.133	6.133	0.000	94	80204	1.25	1.19	
61 Caprolactam	113	6.162	6.168	-0.006	82	12006	1.25	1.09	
62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	93	46579	1.25	1.18	M
63 p-Phenylene diamine	108	6.197	6.197	0.000	93	34070	1.25	1.00	
64 4-Chloro-3-methylphenol	107	6.313	6.319	-0.006	92	39818	1.25	1.13	
65 Safrole, Total	162	6.395	6.395	0.000	83	32647	1.25	1.22	
66 2-Methylnaphthalene	142	6.476	6.477	-0.001	89	82095	1.25	1.22	
67 1-Methylnaphthalene	142	6.570	6.570	0.000	92	79488	1.25	1.27	
68 Hexachlorocyclopentadiene	237	6.628	6.628	0.000	94	25192	1.25	1.20	
69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	98	42708	1.25	1.26	
70 Isosafrole Peak 1	162	6.669	6.669	0.000	85	5807	0.2000	0.1900	
71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	92	23472	1.25	1.19	
72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	91	24268	1.25	1.14	
$ 73 2-Fluorobiphenyl (Surr)	172	6.826	6.826	0.000	99	191935	2.50	2.53	
74 Isosafrole Peak 2	162	6.884	6.885	-0.001	88	32209	1.05	1.00	
75 1,1'-Biphenyl	154	6.919	6.920	-0.001	94	109433	1.25	1.32	
76 2-Chloronaphthalene	162	6.937	6.937	0.000	95	82032	1.25	1.28	
77 1-Chloronaphthalene	162	6.960	6.960	0.000	98	79617	1.25	1.28	
78 Phenyl ether	170	7.019	7.019	0.000	86	59632	1.25	1.30	
79 2-Nitroaniline	138	7.024	7.030	-0.006	72	19045	1.25	1.00	
81 1,4-Naphthoquinone	158	7.100	7.100	0.000	78	25841	1.25	1.10	
86 1,3-Dinitrobenzene	168	7.158	7.164	-0.006	83	9318	1.25	0.9600	
85 Dimethyl phthalate	163	7.205	7.205	0.000	97	88218	1.25	1.23	
84 1,4-Dinitrobenzene	168	7.228	7.228	0.000	81	12097	1.25	1.12	
87 2,6-Dinitrotoluene	165	7.258	7.258	0.000	82	15553	1.25	1.03	
88 Acenaphthylene	152	7.327	7.328	-0.001	99	125089	1.25	1.22	
89 3-Nitroaniline	138	7.415	7.415	0.000	87	17411	1.25	1.06	
* 90 Acenaphthene-d10	164	7.462	7.462	0.000	94	266166	5.00	5.00	
91 Acenaphthene	153	7.491	7.497	-0.006	96	81765	1.25	1.25	
92 2,4-Dinitrophenol	184	7.514	7.514	0.000	70	30230	5.00	5.11	
93 4-Nitrophenol	109	7.561	7.561	0.000	82	41316	3.75	3.50	
94 Pentachlorobenzene	250	7.619	7.619	0.000	95	34886	1.25	1.23	
95 2,4-Dinitrotoluene	165	7.636	7.636	0.000	83	20772	1.25	1.02	
96 Dibenzofuran	168	7.660	7.660	0.000	97	117422	1.25	1.29	
97 1-Naphthylamine	143	7.730	7.730	0.000	97	64936	1.25	1.12	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.770	7.765	0.005	76	20144	1.25	1.12	
99 2-Naphthylamine	143	7.805	7.805	0.000	94	76297	1.25	1.16	
100 Diethyl phthalate	149	7.875	7.875	0.000	97	81497	1.25	1.21	
101 Thionazin	107	7.951	7.951	0.000	75	14256	1.25	1.04	
102 Fluorene	166	7.980	7.980	0.000	92	89338	1.25	1.21	
103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	77	47107	1.25	1.30	
104 N-Nitro-o-toluidine	152	7.986	7.986	0.000	68	21656	1.25	1.10	
105 4-Nitroaniline	138	7.986	7.992	-0.006	70	19681	1.25	1.10	
106 4,6-Dinitro-2-methylphenol	198	8.021	8.021	0.000	74	34391	3.75	2.90	
107 N-Nitrosodiphenylamine	169	8.091	8.091	0.000	62	61255	1.06	1.03	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	42	120997	1.25	1.19	
$ 109 2,4,6-Tribromophenol	330	8.208	8.208	0.000	89	21367	2.50	2.33	
110 Sulfotepp	97	8.248	8.248	0.000	77	18223	1.25	1.17	
112 1,3,5-Trinitrobenzene	213	8.324	8.330	-0.006	81	6610	1.25	0.8747	
113 cis-Diallate	86	8.371	8.371	0.000	0	39270	0.9250	0.9170	
114 Phorate	75	8.377	8.377	0.000	92	60036	1.25	1.08	
115 Phenacetin	108	8.377	8.377	0.000	72	40838	1.25	1.06	
116 4-Bromophenyl phenyl ether	248	8.447	8.447	0.000	67	26304	1.25	1.27	
117 trans-Diallate	86	8.452	8.458	-0.006	0	16666	0.3250	0.3741	
118 Hexachlorobenzene	284	8.499	8.499	0.000	89	26262	1.25	1.18	
119 Dimethoate	87	8.528	8.534	-0.006	96	37289	1.25	1.05	
120 Atrazine	200	8.598	8.598	0.000	90	23527	1.25	1.13	
121 Pentachlorophenol	266	8.680	8.680	0.000	91	27313	2.50	2.06	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	91	94027	1.25	1.17	
123 Pentachloronitrobenzene	237	8.691	8.697	-0.006	84	11056	1.25	1.17	
124 Pronamide	173	8.744	8.744	0.000	90	33049	1.25	1.04	
125 Dinoseb	211	8.860	8.860	0.000	92	12731	1.25	1.29	M
* 126 Phenanthrene-d10	188	8.866	8.866	0.000	97	492354	5.00	5.00	
127 Disulfoton	88	8.872	8.872	0.000	94	70969	1.25	1.10	
128 Phenanthrene	178	8.890	8.890	0.000	98	133089	1.25	1.24	
129 Anthracene	178	8.936	8.942	-0.006	98	128947	1.25	1.21	
130 Carbazole	167	9.088	9.088	0.000	95	114418	1.25	1.20	
131 Methyl parathion	109	9.228	9.228	0.000	91	25224	1.25	0.9528	
133 Di-n-butyl phthalate	149	9.432	9.432	0.000	100	114928	1.25	1.12	
134 Ethyl Parathion	109	9.595	9.601	-0.006	80	12981	1.25	0.8379	
135 4-Nitroquinoline-1-oxide	190	9.624	9.618	0.006	72	6162	1.25	1.28	
S 136 Diallate	86				0		1.25	1.29	
140 Octachlorostyrene	308	9.834	9.840	-0.006	91	11071	1.25	1.30	
141 Isodrin	193	9.880	9.880	0.000	90	17401	1.25	1.32	
143 Fluoranthene	202	10.020	10.020	0.000	98	138838	1.25	1.22	
147 Benzidine	184	10.149	10.149	0.000	99	235470	3.75	3.09	
* 149 Pyrene-d10 (IS)	212	10.218	10.219	-0.001	99	497336	5.00	5.00	
150 Pyrene	202	10.236	10.236	0.000	96	155469	1.25	1.23	
$ 152 p-Terphenyl-d14	244	10.393	10.399	-0.006	99	214129	2.50	2.61	
154 p-Dimethylamino azobenzene	225	10.539	10.539	0.000	92	17339	1.25	0.8989	
155 Chlorobenzilate	139	10.591	10.592	-0.001	86	33314	1.25	1.05	
156 3,3'-Dimethylbenzidine	212	10.895	10.895	0.000	99	65912	1.25	0.99	
157 Butyl benzyl phthalate	149	10.918	10.918	0.000	94	46705	1.25	1.01	
158 2-Acetylaminofluorene	181	11.169	11.169	0.000	94	28561	1.25	0.9352	
159 3,3'-Dichlorobenzidine	252	11.512	11.513	0.000	74	38189	1.25	0.99	
160 4,4'-Methylene bis(2-chloroani	231	11.524	11.524	0.000	93	21674	1.25	1.00	
161 Benzo[a]anthracene	228	11.536	11.536	0.000	99	123139	1.25	1.22	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.577	11.582	-0.005	98	129175	1.25	1.27	
163 Bis(2-ethylhexyl) phthalate	149	11.612	11.612	0.000	95	58702	1.25	0.9492	M
164 6-Methylchrysene	242	12.159	12.159	0.000	99	78885	1.25	1.15	
165 Di-n-octyl phthalate	149	12.492	12.492	0.000	99	77819	1.25	1.29	M
166 7,12-Dimethylbenz(a)anthracene	256	12.964	12.970	-0.006	85	45718	1.25	1.10	M
167 Benzo[b]fluoranthene	252	12.964	12.970	-0.006	96	125413	1.25	1.23	
168 Benzo[k]fluoranthene	252	13.005	13.010	-0.005	99	126269	1.25	1.19	
169 Benzo[a]pyrene	252	13.430	13.436	-0.006	79	95358	1.25	1.08	
* 170 Perylene-d12	264	13.512	13.518	-0.006	98	408603	5.00	5.00	
171 3-Methylcholanthrene	268	13.955	13.961	-0.006	90	47586	1.25	1.05	
172 Dibenz[a,h]acridine	279	14.747	14.753	-0.006	91	72956	1.25	1.10	
173 Dibenz[a,j]acridine	279	14.817	14.823	-0.006	96	79494	1.25	1.08	
174 Indeno[1,2,3-cd]pyrene	276	15.056	15.062	-0.006	98	83890	1.25	1.15	M
175 Dibenz(a,h)anthracene	278	15.103	15.109	-0.006	91	101408	1.25	1.18	
176 Benzo[g,h,i]perylene	276	15.447	15.453	-0.006	98	101293	1.25	1.17	
S 178 Dinitrotoluene	165				0			2.05	
S 182 Isosafrole	162				0		1.25	1.19	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_3_00026 Amount Added: 1.00 Units: mL

Report Date: 23-Mar-2023 17:56:54 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2317.D

Injection Date: 23-Mar-2023 15:46:30 Instrument ID: HP19760 Operator ID: em10340

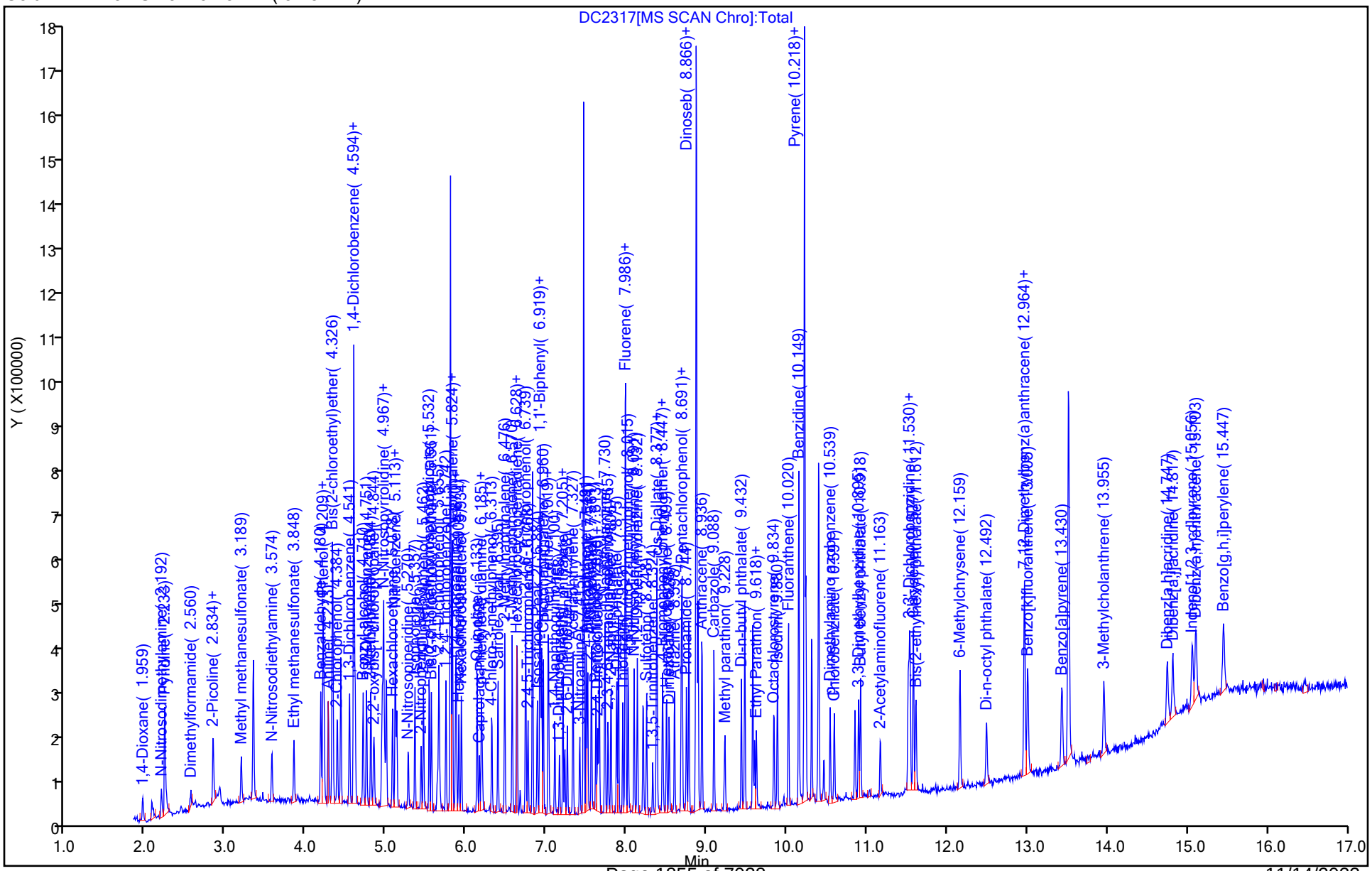
Lims ID: IC L3 Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 8

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

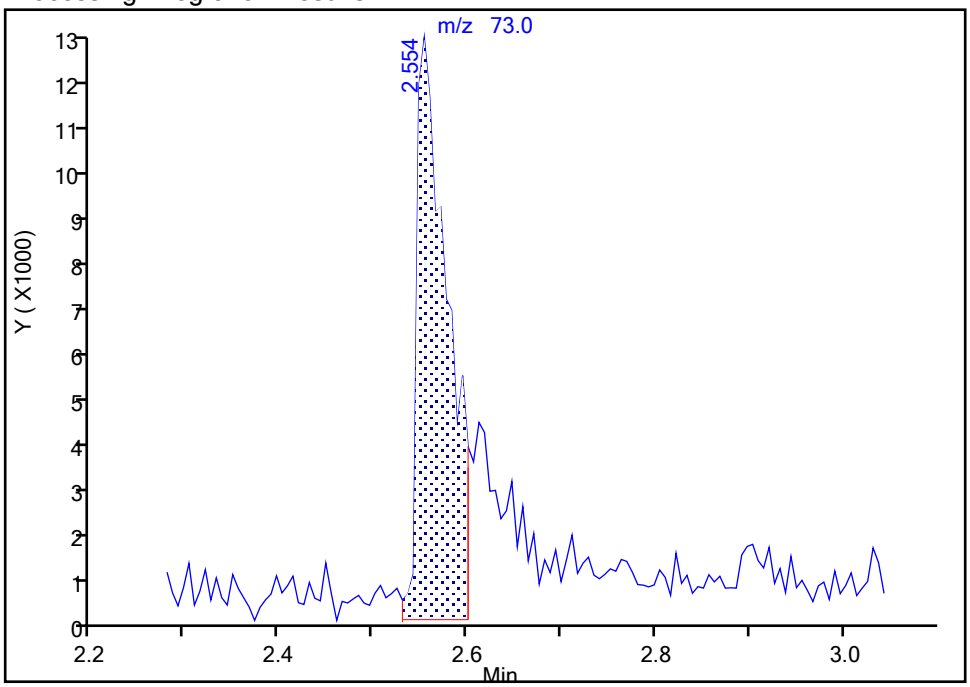
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2317.D				
Injection Date:	23-Mar-2023 15:46:30	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

6 Dimethylformamide, CAS: 68-12-2

Signal: 1

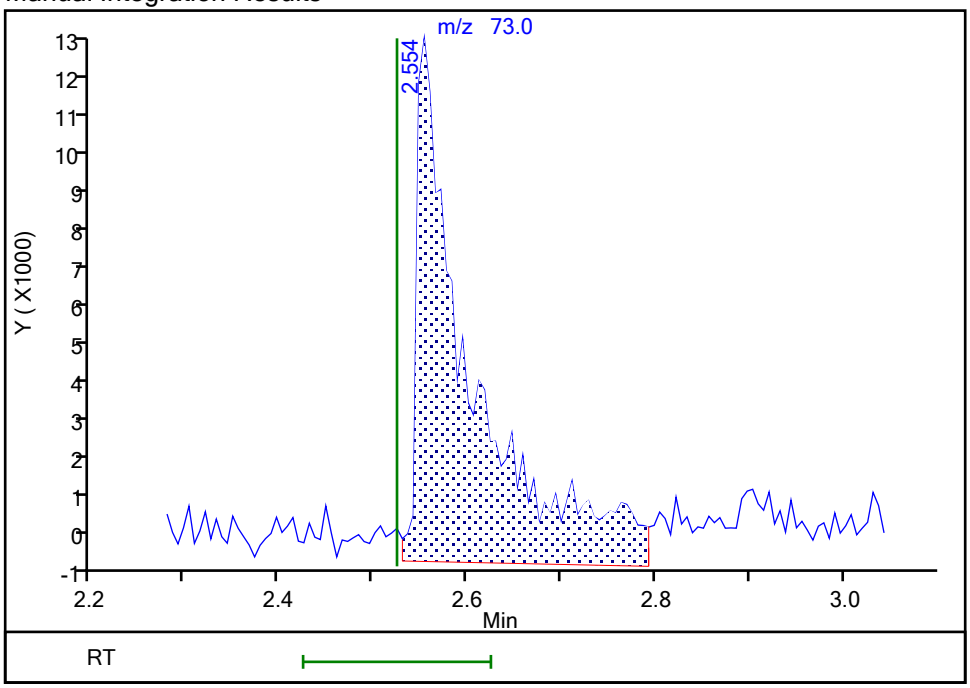
Processing Integration Results

RT: 2.55
Area: 28117
Amount: 0.966346
Amount Units: ug/ml



Manual Integration Results

RT: 2.55
Area: 50756
Amount: 1.487153
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 16:26:53

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

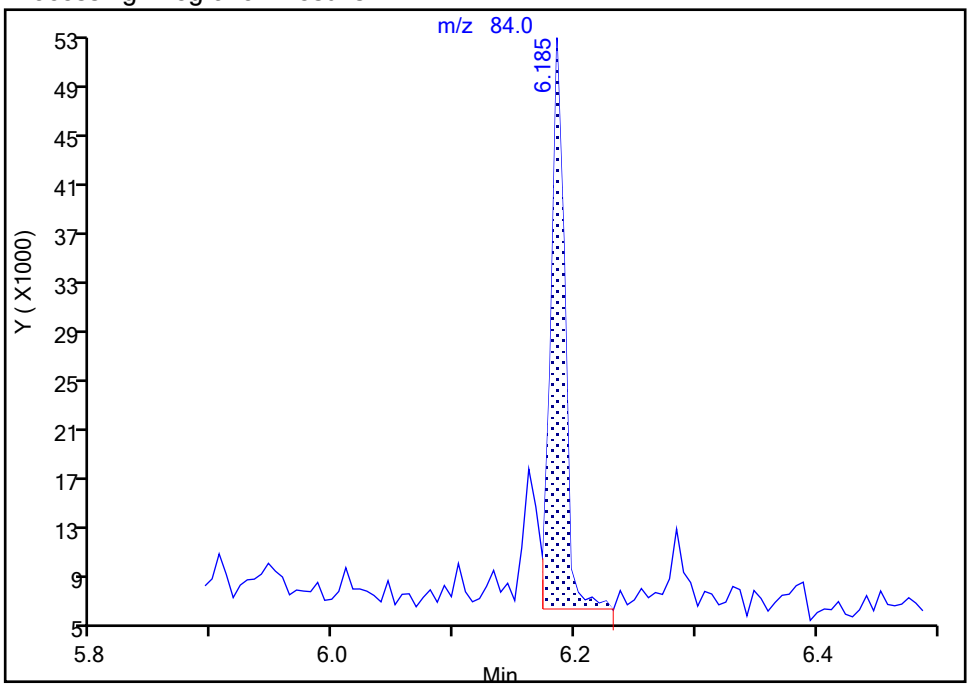
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2317.D				
Injection Date:	23-Mar-2023 15:46:30	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

62 N-Nitrosodi-n-butylamine, CAS: 924-16-3

Signal: 1

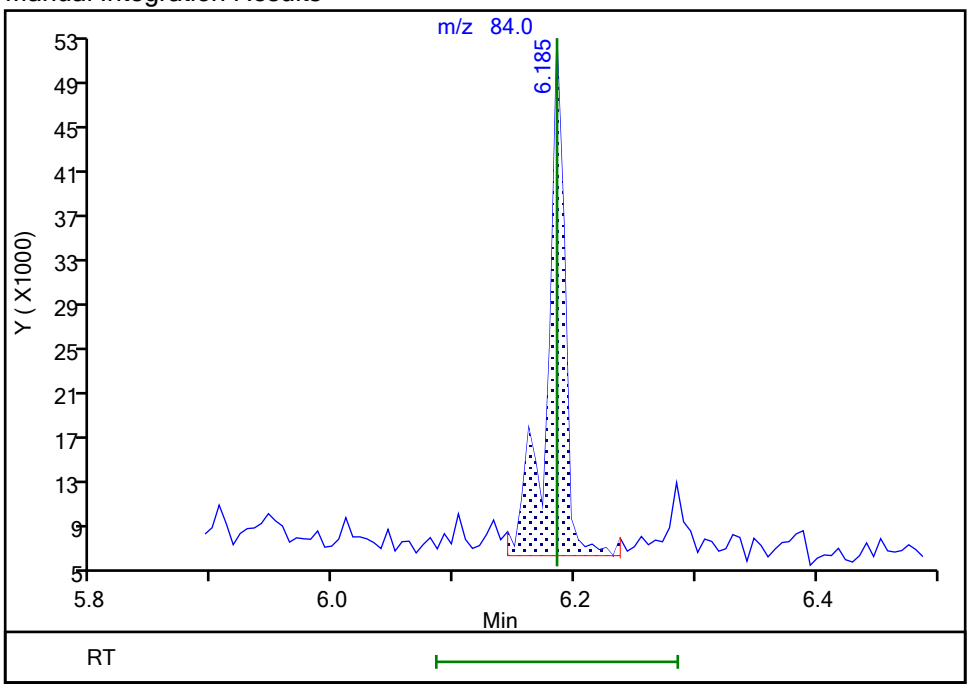
Processing Integration Results

RT: 6.19
Area: 36744
Amount: 0.927914
Amount Units: ug/ml



Manual Integration Results

RT: 6.19
Area: 46579
Amount: 1.183707
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 16:40:29

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

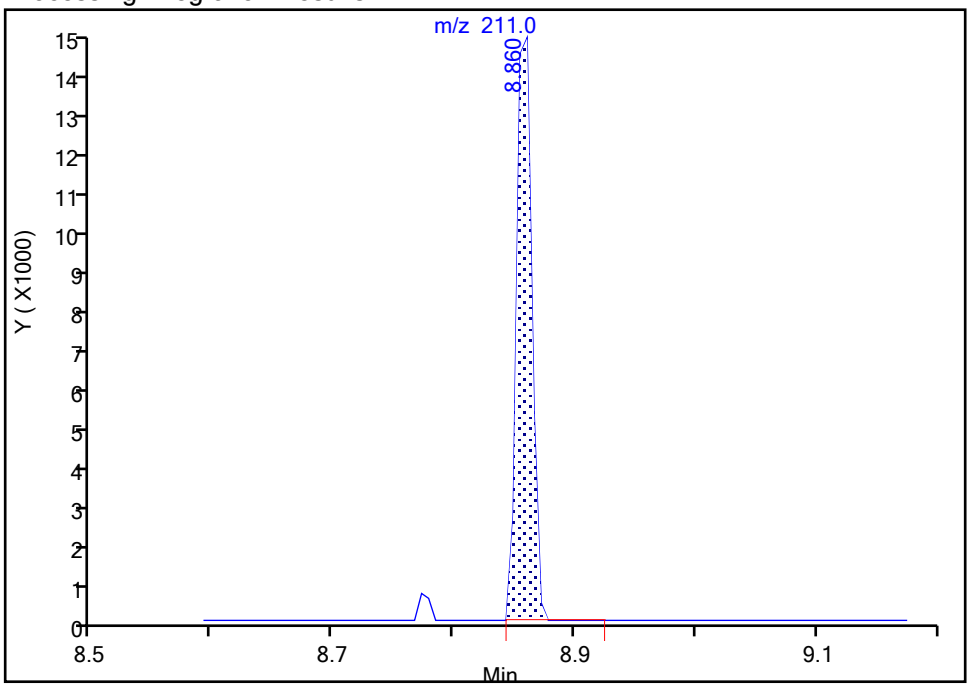
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2317.D				
Injection Date:	23-Mar-2023 15:46:30	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

125 Dinoseb, CAS: 88-85-7

Signal: 1

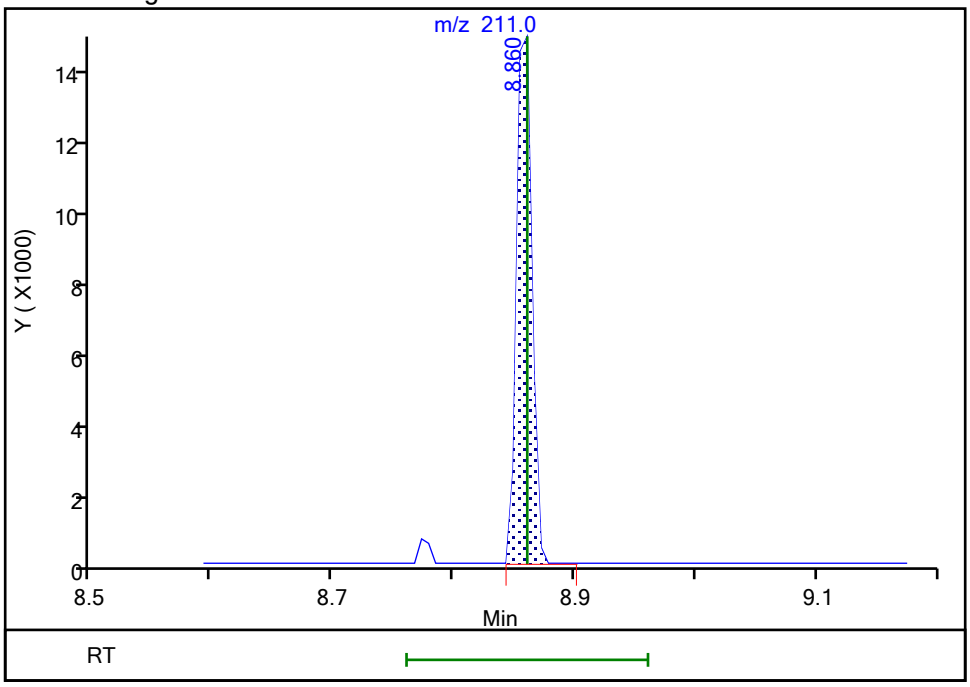
Processing Integration Results

RT: 8.86
Area: 12731
Amount: 0.927842
Amount Units: ug/ml



Manual Integration Results

RT: 8.86
Area: 12731
Amount: 1.292596
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 16:54:23
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

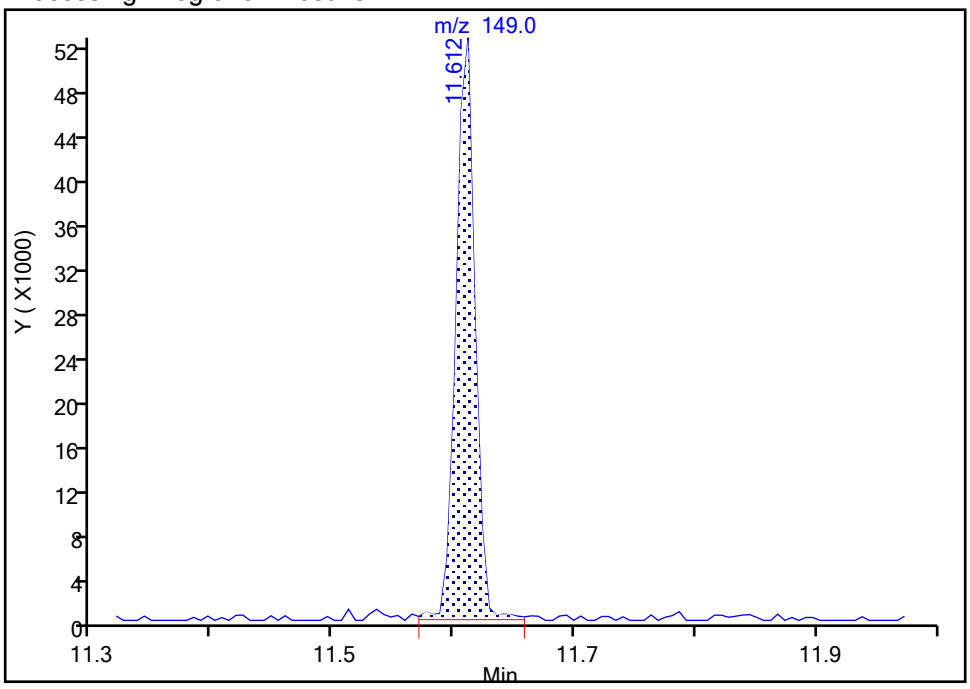
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2317.D				
Injection Date:	23-Mar-2023 15:46:30	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

163 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

Signal: 1

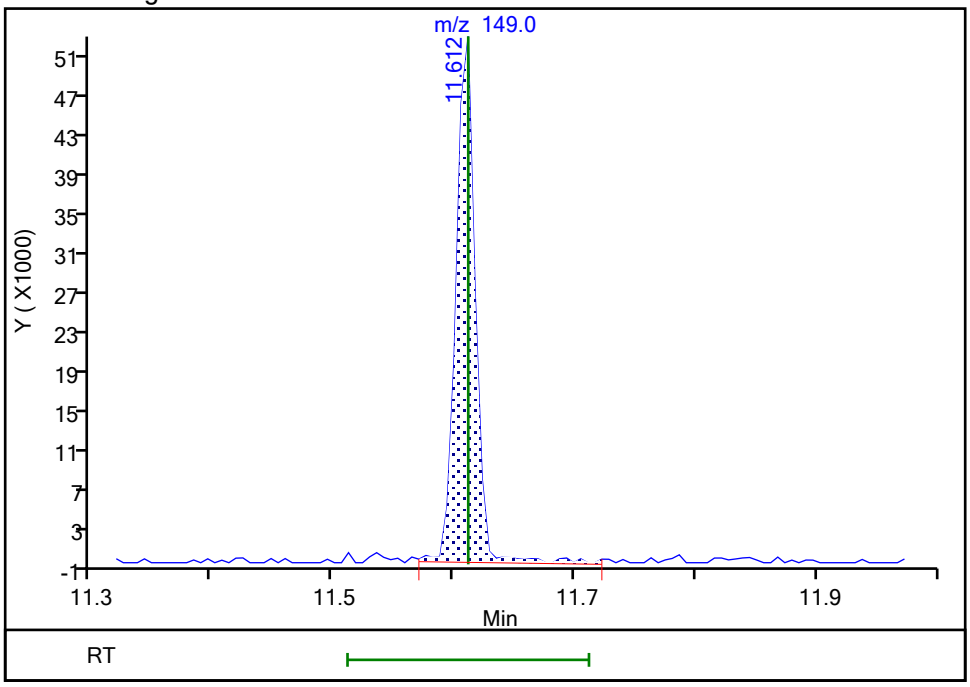
Processing Integration Results

RT: 11.61
Area: 57568
Amount: 0.950405
Amount Units: ug/ml



Manual Integration Results

RT: 11.61
Area: 58702
Amount: 0.949250
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 17:07:38

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

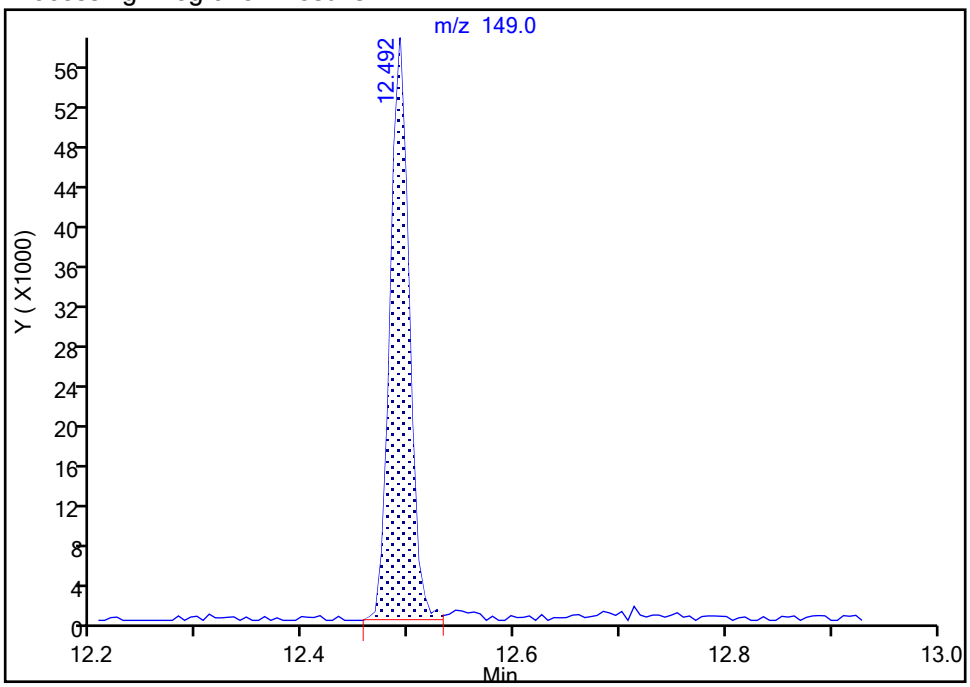
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2317.D				
Injection Date:	23-Mar-2023 15:46:30	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

165 Di-n-octyl phthalate, CAS: 117-84-0

Signal: 1

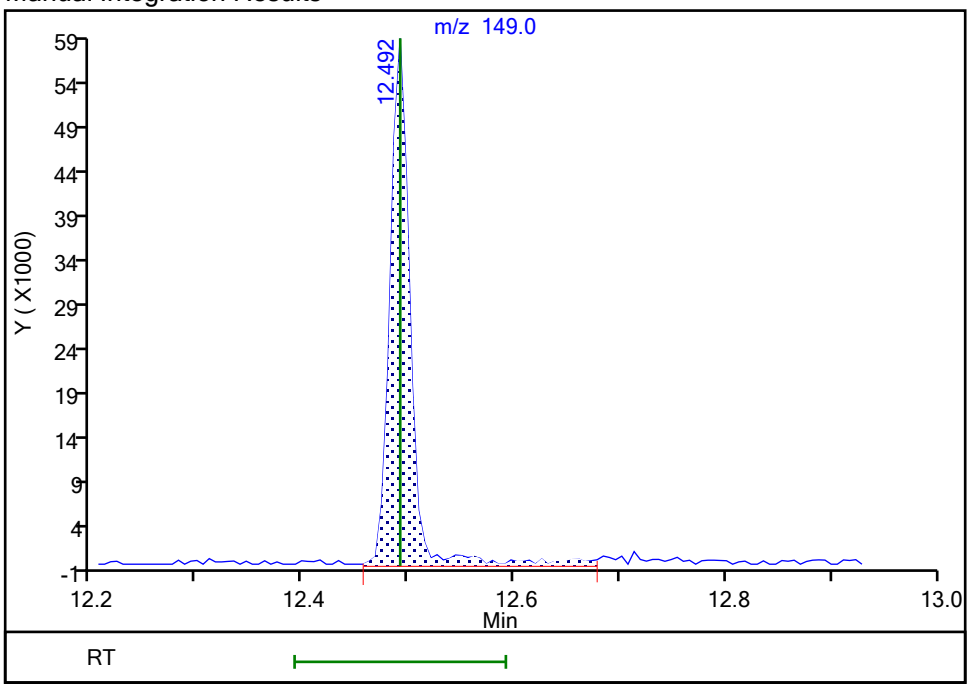
Processing Integration Results

RT: 12.49
Area: 72676
Amount: 0.879167
Amount Units: ug/ml



Manual Integration Results

RT: 12.49
Area: 77819
Amount: 1.289180
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 17:09:58

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

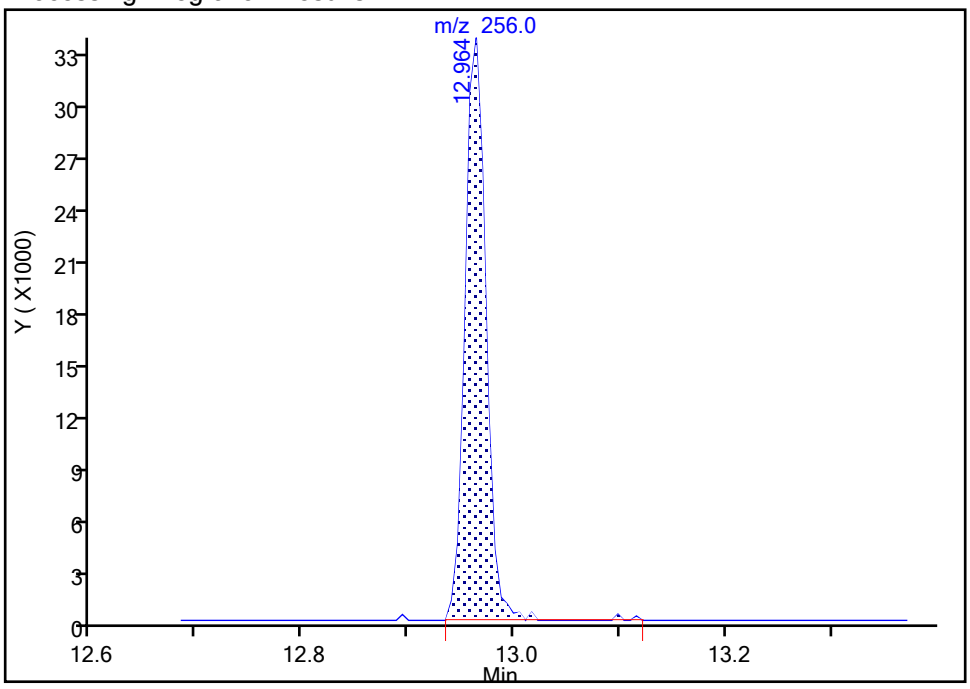
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2317.D				
Injection Date:	23-Mar-2023 15:46:30	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

166 7,12-Dimethylbenz(a)anthracene, CAS: 57-97-6

Signal: 1

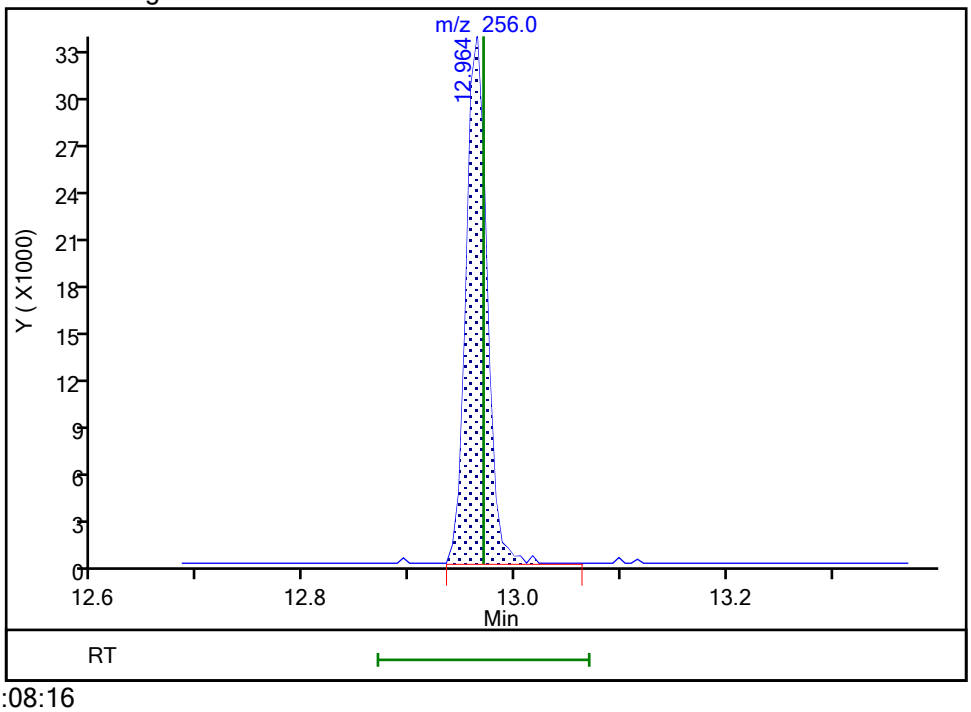
Processing Integration Results

RT: 12.96
Area: 45935
Amount: 1.104404
Amount Units: ug/ml



Manual Integration Results

RT: 12.96
Area: 45718
Amount: 1.099760
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 17:08:16

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

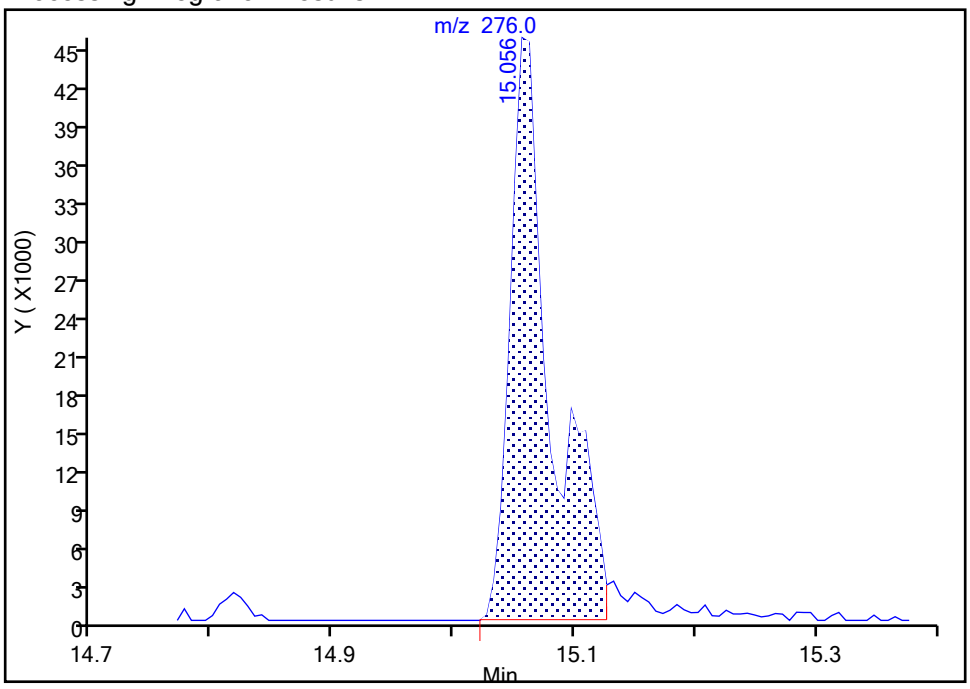
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2317.D				
Injection Date:	23-Mar-2023 15:46:30	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

174 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

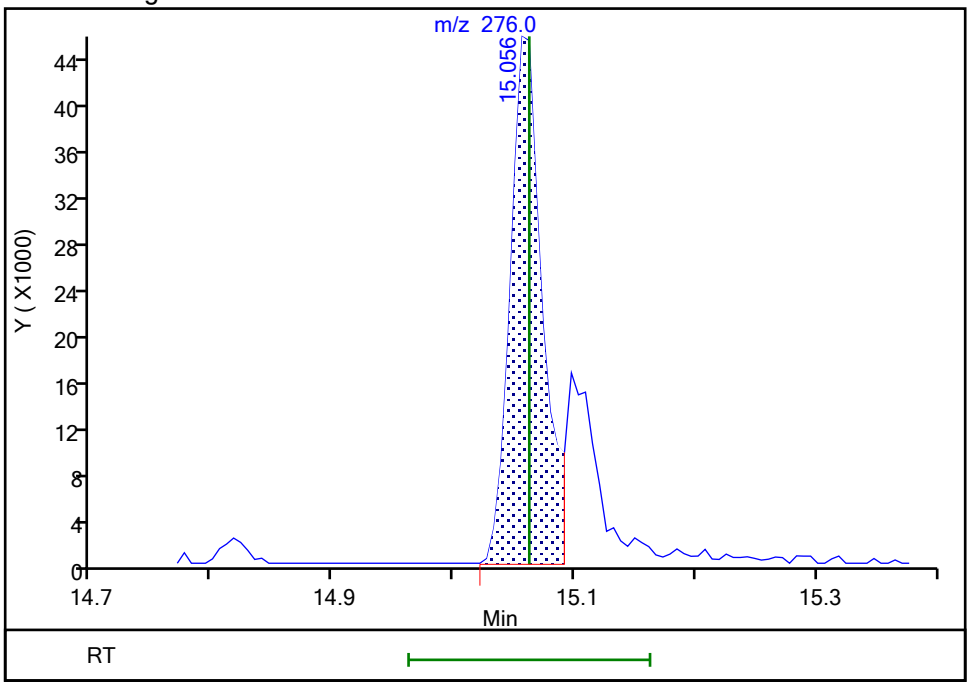
Processing Integration Results

RT: 15.06
Area: 108238
Amount: 1.408206
Amount Units: ug/ml



Manual Integration Results

RT: 15.06
Area: 83890
Amount: 1.148506
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 16:27:51

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

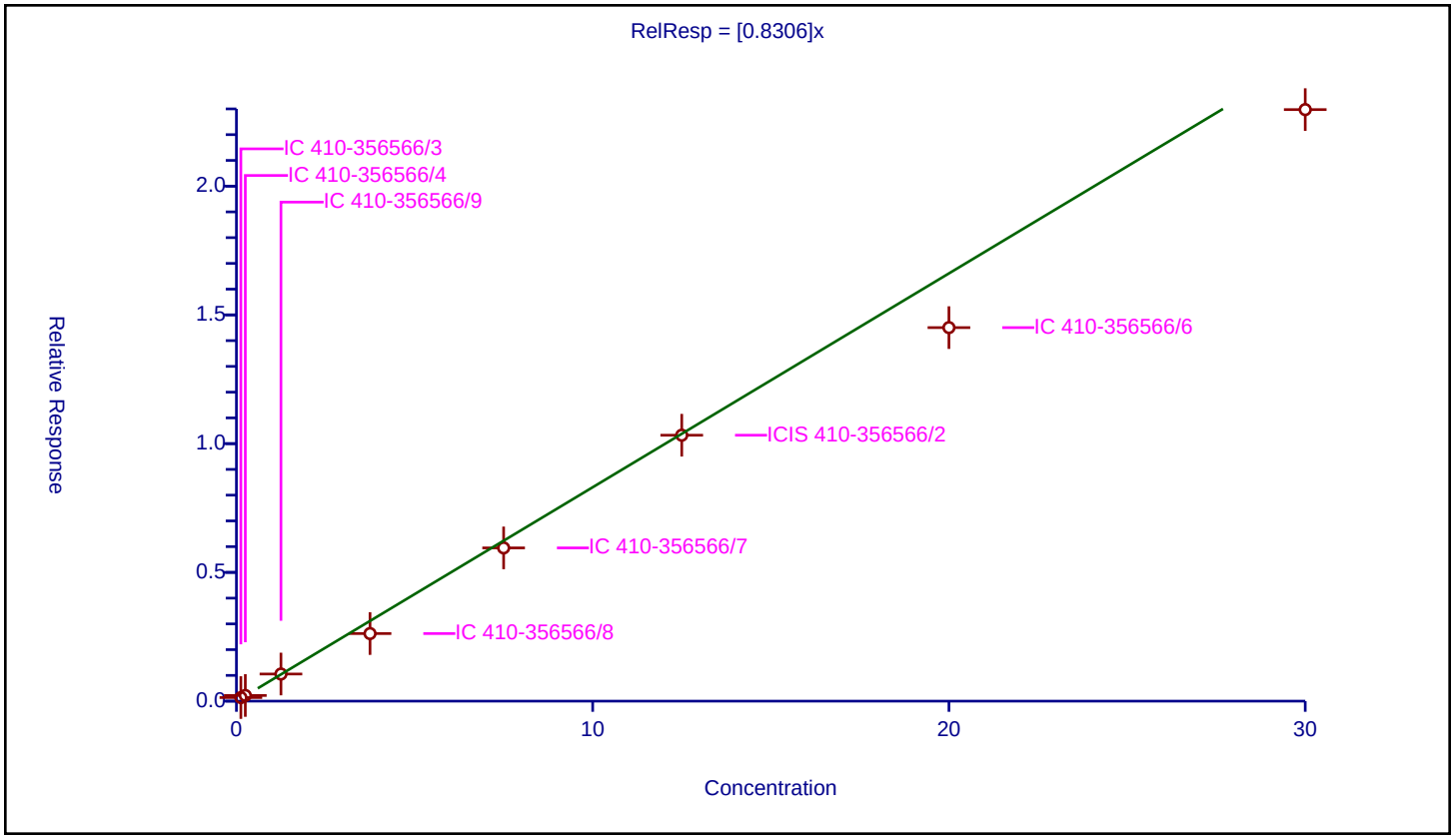
Curve Coefficients

Intercept:	0
Slope:	0.8306

Error Coefficients

Standard Error:	425000
Relative Standard Error:	15.4
Correlation Coefficient:	0.961
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.138913	5.0	136344.0	1.111307	Y
2	IC 410-356566/4	0.25	0.219853	5.0	166543.0	0.879413	Y
3	IC 410-356566/9	1.25	1.053935	5.0	129173.0	0.843148	Y
4	IC 410-356566/8	3.75	2.624583	5.0	194911.0	0.699889	Y
5	IC 410-356566/7	7.5	5.951226	5.0	178191.0	0.793497	Y
6	ICIS 410-356566/2	12.5	10.327426	5.0	192517.0	0.826194	Y
7	IC 410-356566/6	20.0	14.505592	5.0	147712.0	0.72528	Y
8	IC 410-356566/5	30.0	22.971754	5.0	202860.0	0.765725	Y



11/14/2023
11:12 AM

Calibration / N-Nitrosodimethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

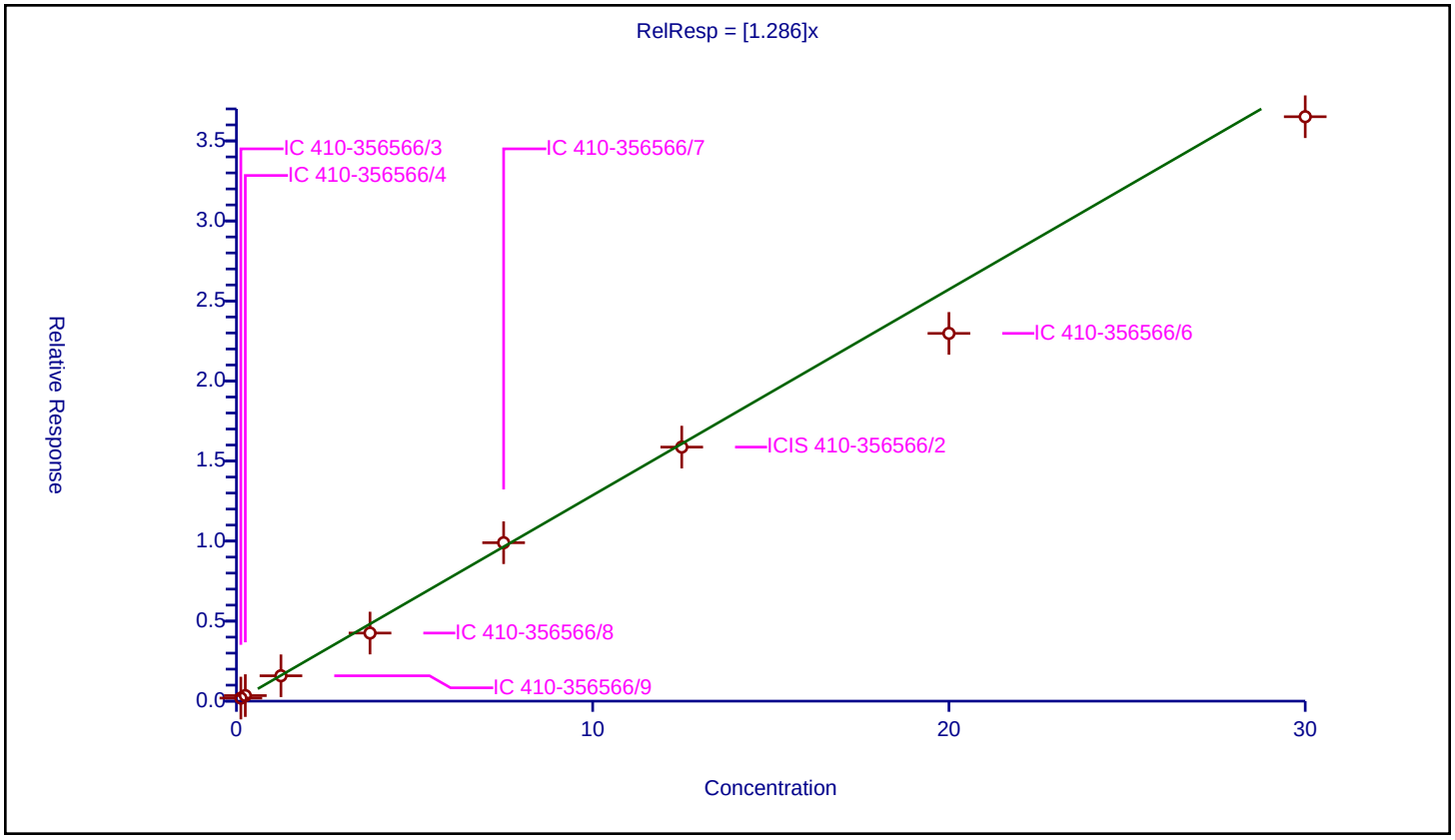
Curve Coefficients

Intercept:	0
Slope:	1.286

Error Coefficients

Standard Error:	674000
Relative Standard Error:	10.4
Correlation Coefficient:	0.962
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.192674	5.0	136344.0	1.541395	Y
2	IC 410-356566/4	0.25	0.347418	5.0	166543.0	1.389671	Y
3	IC 410-356566/9	1.25	1.585587	5.0	129173.0	1.268469	Y
4	IC 410-356566/8	3.75	4.253762	5.0	194911.0	1.134337	Y
5	IC 410-356566/7	7.5	9.897806	5.0	178191.0	1.319708	Y
6	ICIS 410-356566/2	12.5	15.870624	5.0	192517.0	1.26965	Y
7	IC 410-356566/6	20.0	22.974572	5.0	147712.0	1.148729	Y
8	IC 410-356566/5	30.0	36.511461	5.0	202860.0	1.217049	Y



Calibration / Pyridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

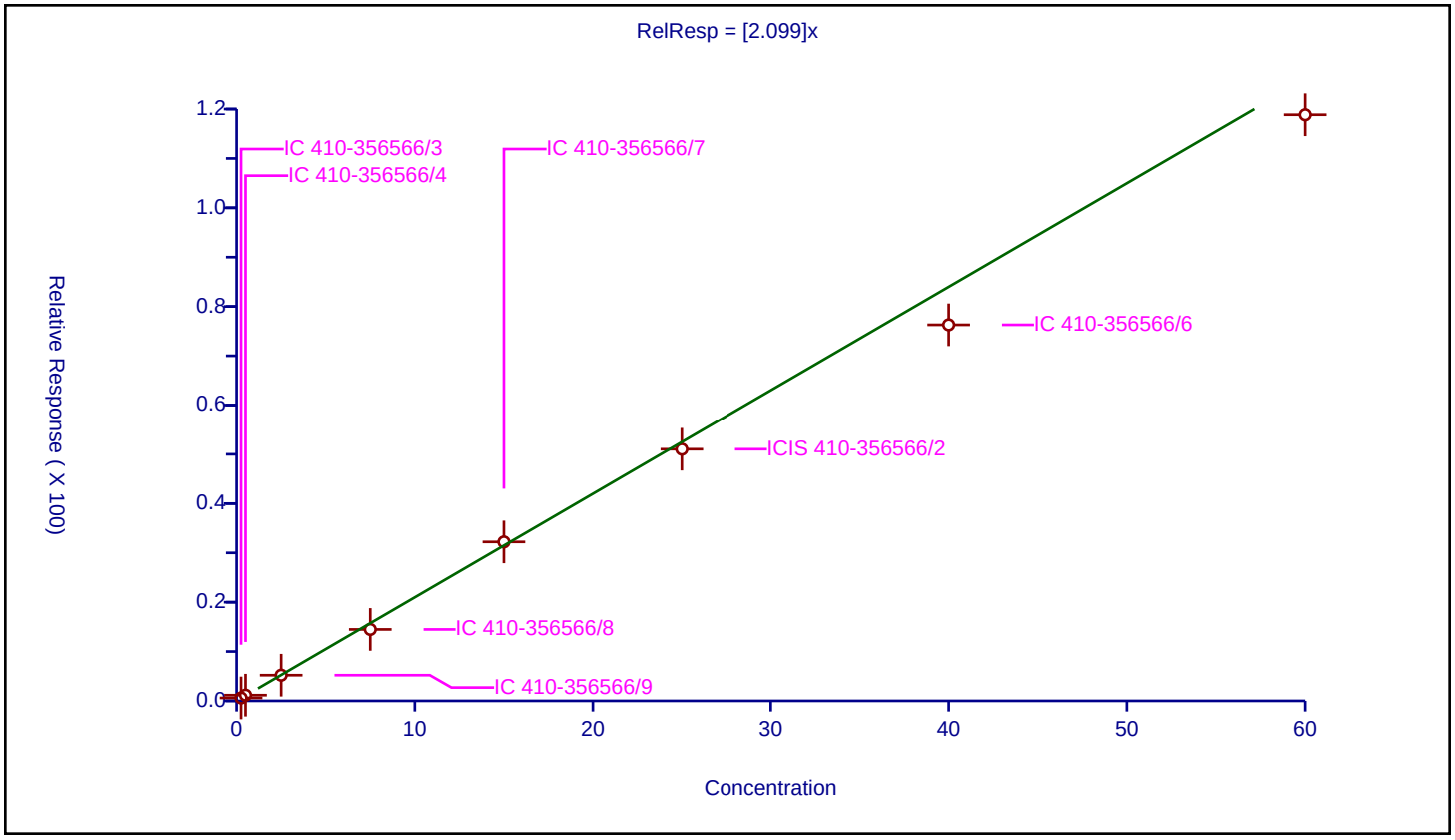
Curve Coefficients

Intercept:	0
Slope:	2.099

Error Coefficients

Standard Error:	2200000
Relative Standard Error:	8.4
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.25	0.596946	5.0	136344.0	2.387784	Y
2	IC 410-356566/4	0.5	1.15883	5.0	166543.0	2.31766	Y
3	IC 410-356566/9	2.5	5.205461	5.0	129173.0	2.082184	Y
4	IC 410-356566/8	7.5	14.480866	5.0	194911.0	1.930782	Y
5	IC 410-356566/7	15.0	32.225168	5.0	178191.0	2.148345	Y
6	ICIS 410-356566/2	25.0	51.032298	5.0	192517.0	2.041292	Y
7	IC 410-356566/6	40.0	76.282766	5.0	147712.0	1.907069	Y
8	IC 410-356566/5	60.0	118.842428	5.0	202860.0	1.980707	Y



11/14/2023
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Calibration / Dimethylformamide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

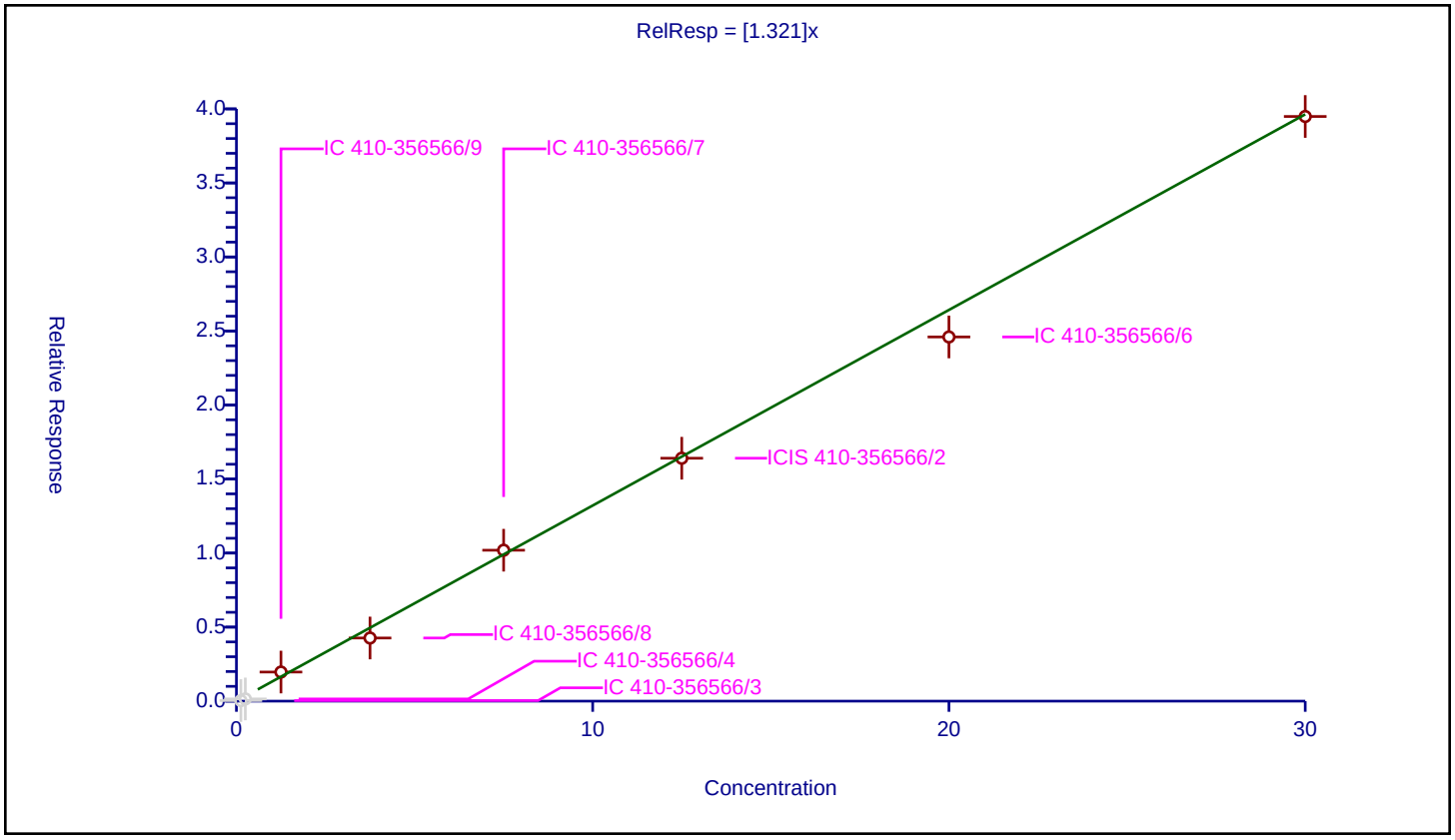
Curve Coefficients

Intercept:	0
Slope:	1.321

Error Coefficients

Standard Error:	855000
Relative Standard Error:	11.0
Correlation Coefficient:	0.950
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.039349	5.0	136344.0	0.314792	N
2	IC 410-356566/4	0.25	0.14804	5.0	166543.0	0.592159	N
3	IC 410-356566/9	1.25	1.964652	5.0	129173.0	1.571722	Y
4	IC 410-356566/8	3.75	4.26469	5.0	194911.0	1.137251	Y
5	IC 410-356566/7	7.5	10.192518	5.0	178191.0	1.359002	Y
6	ICIS 410-356566/2	12.5	16.406058	5.0	192517.0	1.312485	Y
7	IC 410-356566/6	20.0	24.595767	5.0	147712.0	1.229788	Y
8	IC 410-356566/5	30.0	39.487479	5.0	202860.0	1.316249	Y



Calibration / 2-Picoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

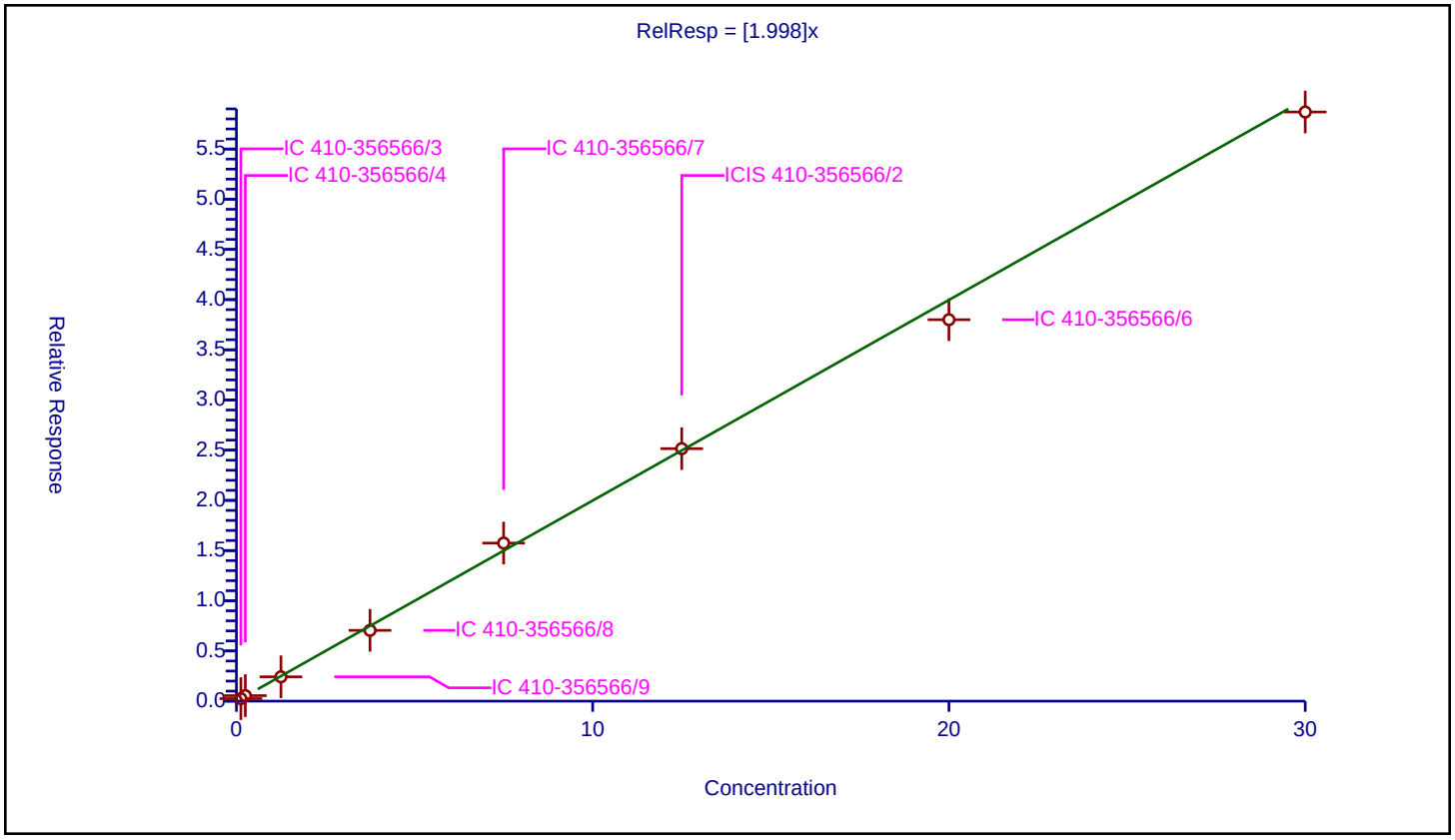
Curve Coefficients

Intercept:	0
Slope:	1.998

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	5.3
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.250506	5.0	136344.0	2.004049	Y
2	IC 410-356566/4	0.25	0.548897	5.0	166543.0	2.195589	Y
3	IC 410-356566/9	1.25	2.422759	5.0	129173.0	1.938207	Y
4	IC 410-356566/8	3.75	7.05009	5.0	194911.0	1.880024	Y
5	IC 410-356566/7	7.5	15.745604	5.0	178191.0	2.099414	Y
6	ICIS 410-356566/2	12.5	25.15435	5.0	192517.0	2.012348	Y
7	IC 410-356566/6	20.0	37.998368	5.0	147712.0	1.899918	Y
8	IC 410-356566/5	30.0	58.690698	5.0	202860.0	1.956357	Y



11/14/2023
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Calibration / N-Nitrosomethylethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

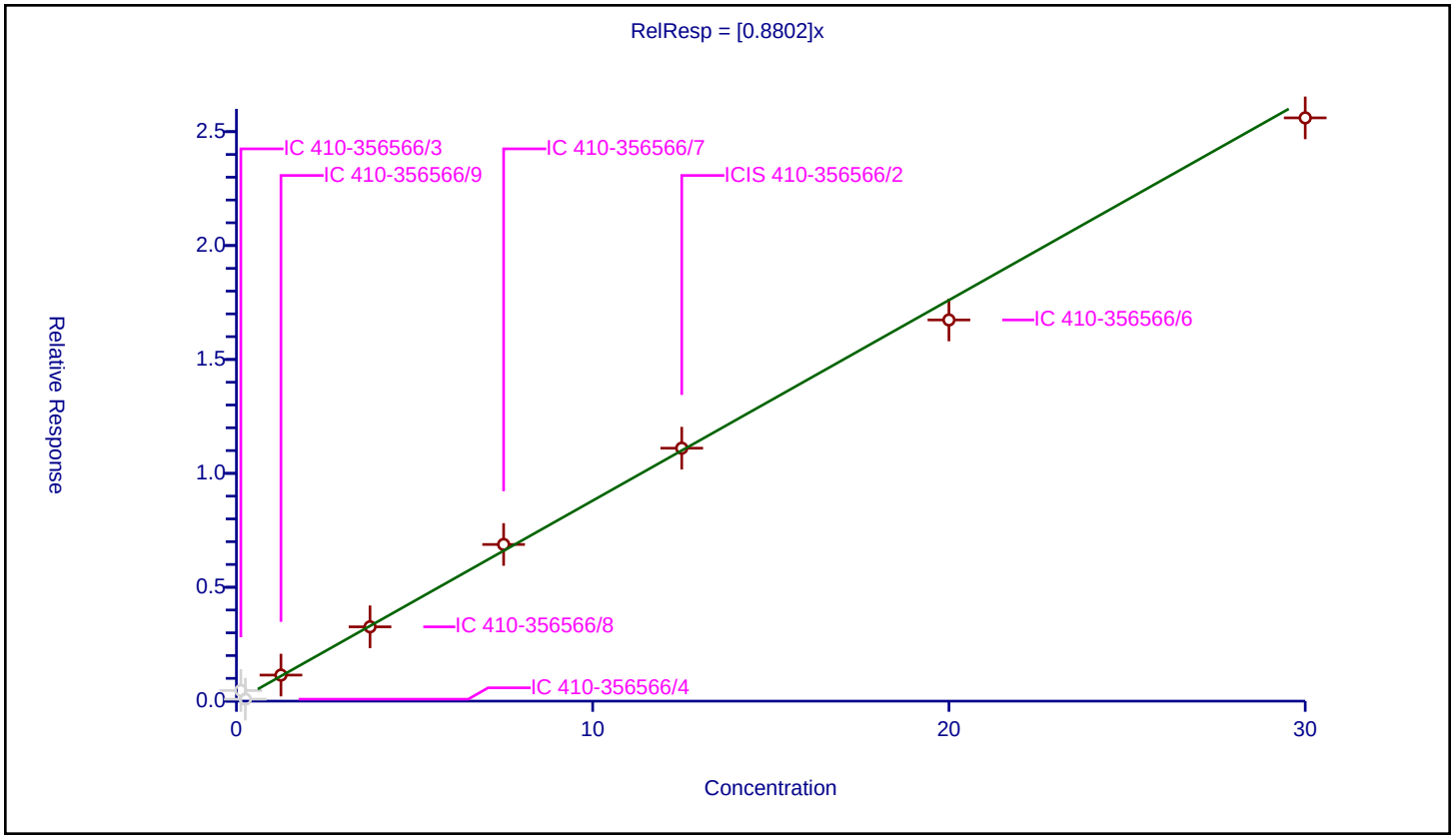
Curve Coefficients

Intercept:	0
Slope:	0.8802

Error Coefficients

Standard Error:	563000
Relative Standard Error:	3.7
Correlation Coefficient:	0.957
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.466614	5.0	136344.0	3.732911	N
2	IC 410-356566/4	0.25	0.085624	5.0	166543.0	0.342494	N
3	IC 410-356566/9	1.25	1.144202	5.0	129173.0	0.915362	Y
4	IC 410-356566/8	3.75	3.26272	5.0	194911.0	0.870059	Y
5	IC 410-356566/7	7.5	6.878378	5.0	178191.0	0.917117	Y
6	ICIS 410-356566/2	12.5	11.105383	5.0	192517.0	0.888431	Y
7	IC 410-356566/6	20.0	16.734422	5.0	147712.0	0.836721	Y
8	IC 410-356566/5	30.0	25.605442	5.0	202860.0	0.853515	Y



11/14/2023
11:12 AM

Calibration / Methyl methanesulfonate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

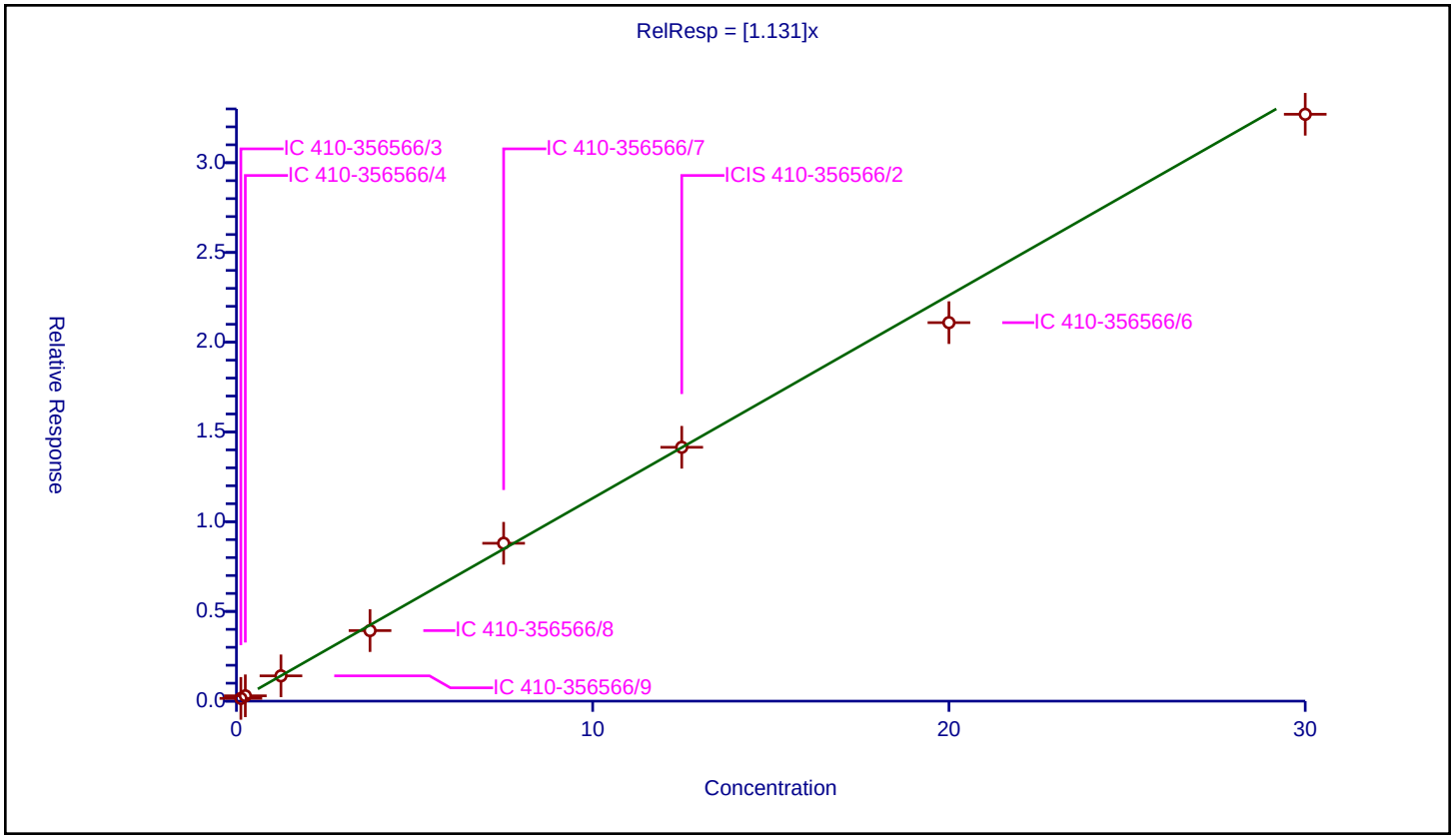
Curve Coefficients

Intercept:	0
Slope:	1.131

Error Coefficients

Standard Error:	606000
Relative Standard Error:	5.7
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.153399	5.0	136344.0	1.22719	Y
2	IC 410-356566/4	0.25	0.298091	5.0	166543.0	1.192365	Y
3	IC 410-356566/9	1.25	1.409582	5.0	129173.0	1.127666	Y
4	IC 410-356566/8	3.75	3.93023	5.0	194911.0	1.048061	Y
5	IC 410-356566/7	7.5	8.796236	5.0	178191.0	1.172831	Y
6	ICIS 410-356566/2	12.5	14.145218	5.0	192517.0	1.131617	Y
7	IC 410-356566/6	20.0	21.091042	5.0	147712.0	1.054552	Y
8	IC 410-356566/5	30.0	32.699694	5.0	202860.0	1.08999	Y



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Calibration / 2-Fluorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

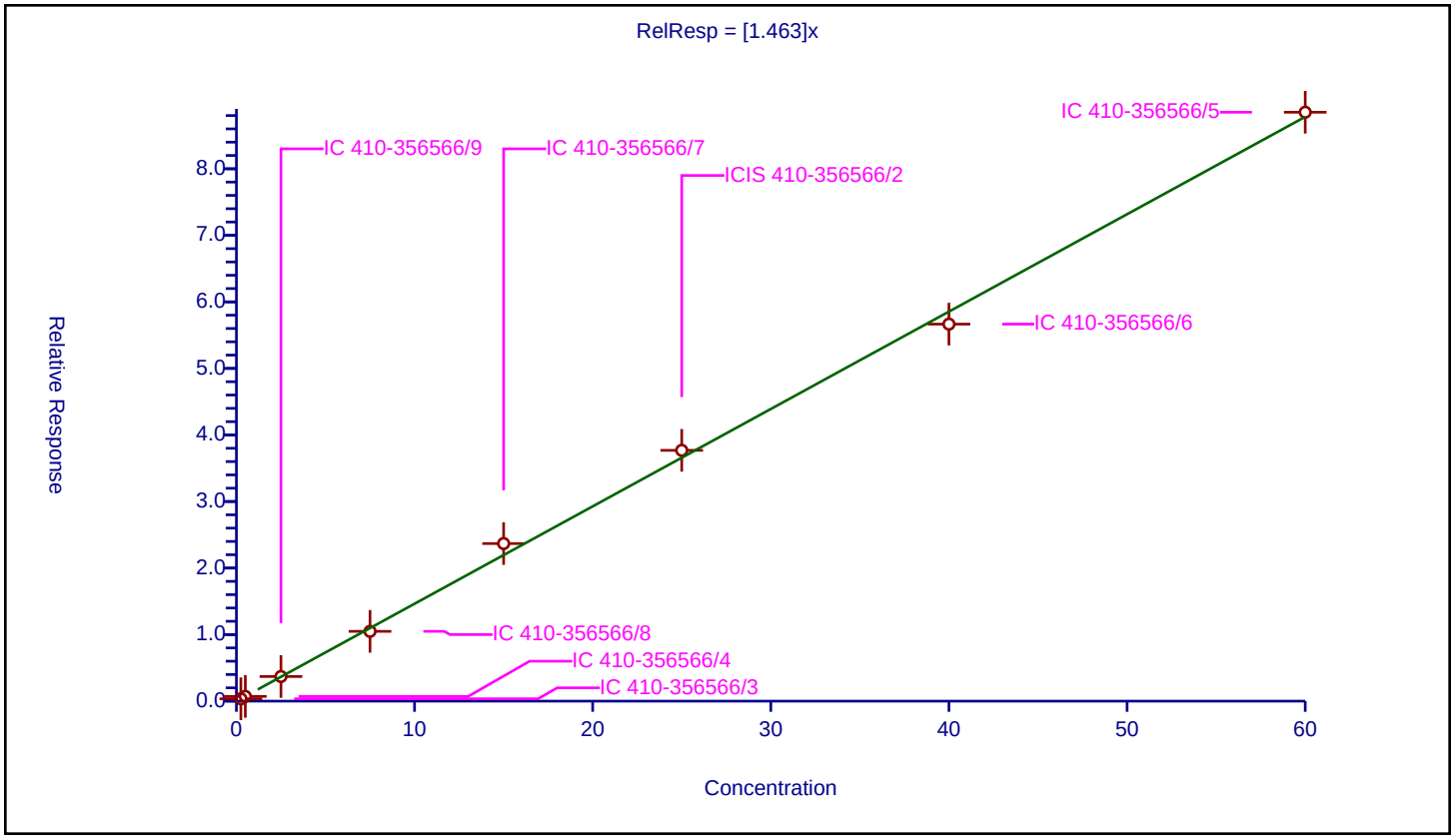
Curve Coefficients

Intercept:	0
Slope:	1.463

Error Coefficients

Standard Error:	1630000
Relative Standard Error:	4.1
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.25	0.355645	5.0	136344.0	1.422578	Y
2	IC 410-356566/4	0.5	0.71426	5.0	166543.0	1.42852	Y
3	IC 410-356566/9	2.5	3.700541	5.0	129173.0	1.480216	Y
4	IC 410-356566/8	7.5	10.488402	5.0	194911.0	1.398454	Y
5	IC 410-356566/7	15.0	23.678469	5.0	178191.0	1.578565	Y
6	ICIS 410-356566/2	25.0	37.690256	5.0	192517.0	1.50761	Y
7	IC 410-356566/6	40.0	56.657618	5.0	147712.0	1.41644	Y
8	IC 410-356566/5	60.0	88.500838	5.0	202860.0	1.475014	Y



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Calibration / N-Nitrosodiethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

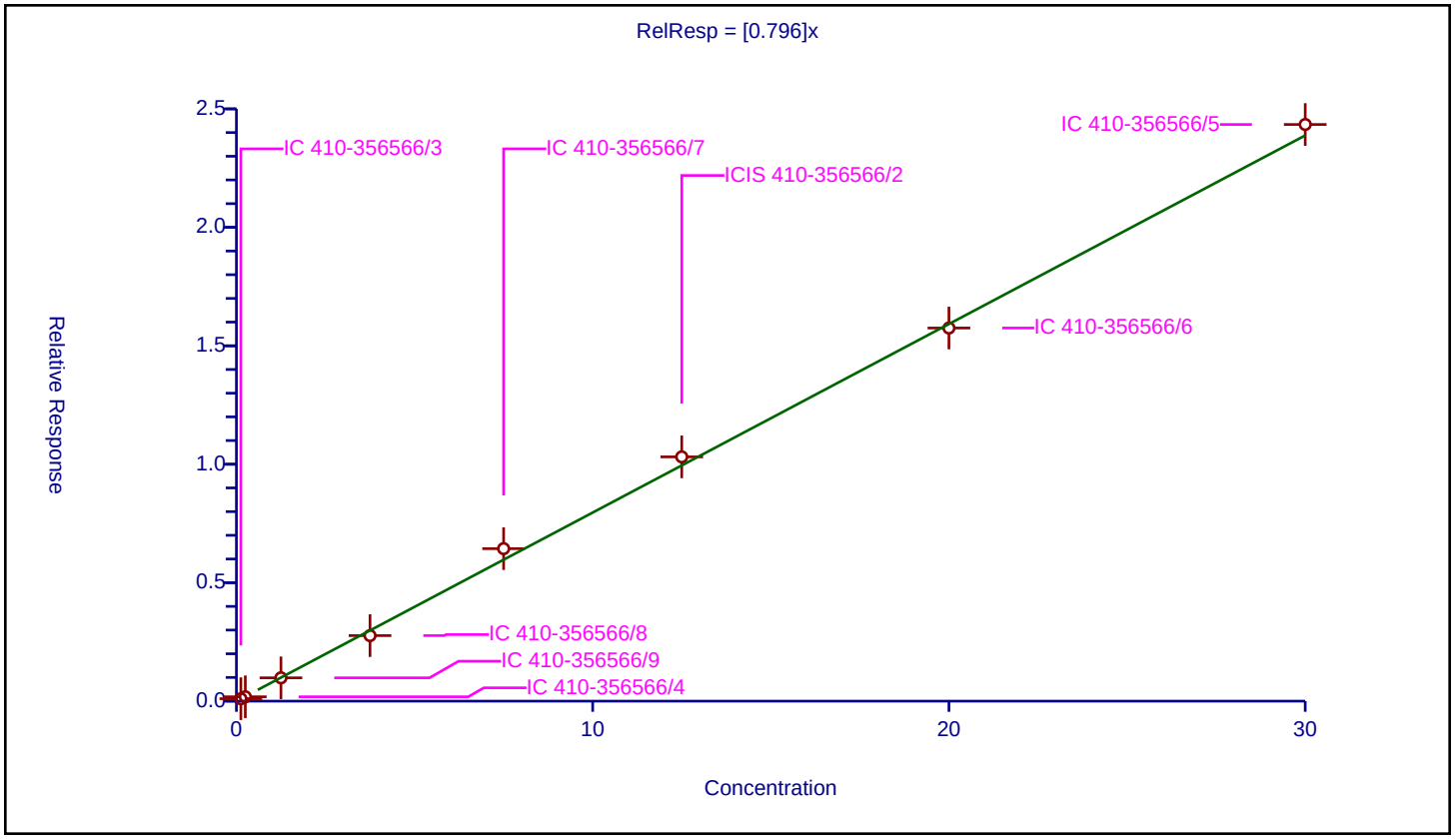
Curve Coefficients

Intercept:	0
Slope:	0.796

Error Coefficients

Standard Error:	449000
Relative Standard Error:	5.4
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.103195	5.0	136344.0	0.825559	Y
2	IC 410-356566/4	0.25	0.183706	5.0	166543.0	0.734825	Y
3	IC 410-356566/9	1.25	0.984648	5.0	129173.0	0.787719	Y
4	IC 410-356566/8	3.75	2.766263	5.0	194911.0	0.73767	Y
5	IC 410-356566/7	7.5	6.436941	5.0	178191.0	0.858259	Y
6	ICIS 410-356566/2	12.5	10.311479	5.0	192517.0	0.824918	Y
7	IC 410-356566/6	20.0	15.750311	5.0	147712.0	0.787516	Y
8	IC 410-356566/5	30.0	24.341294	5.0	202860.0	0.811376	Y



Calibration / Ethyl methanesulfonate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

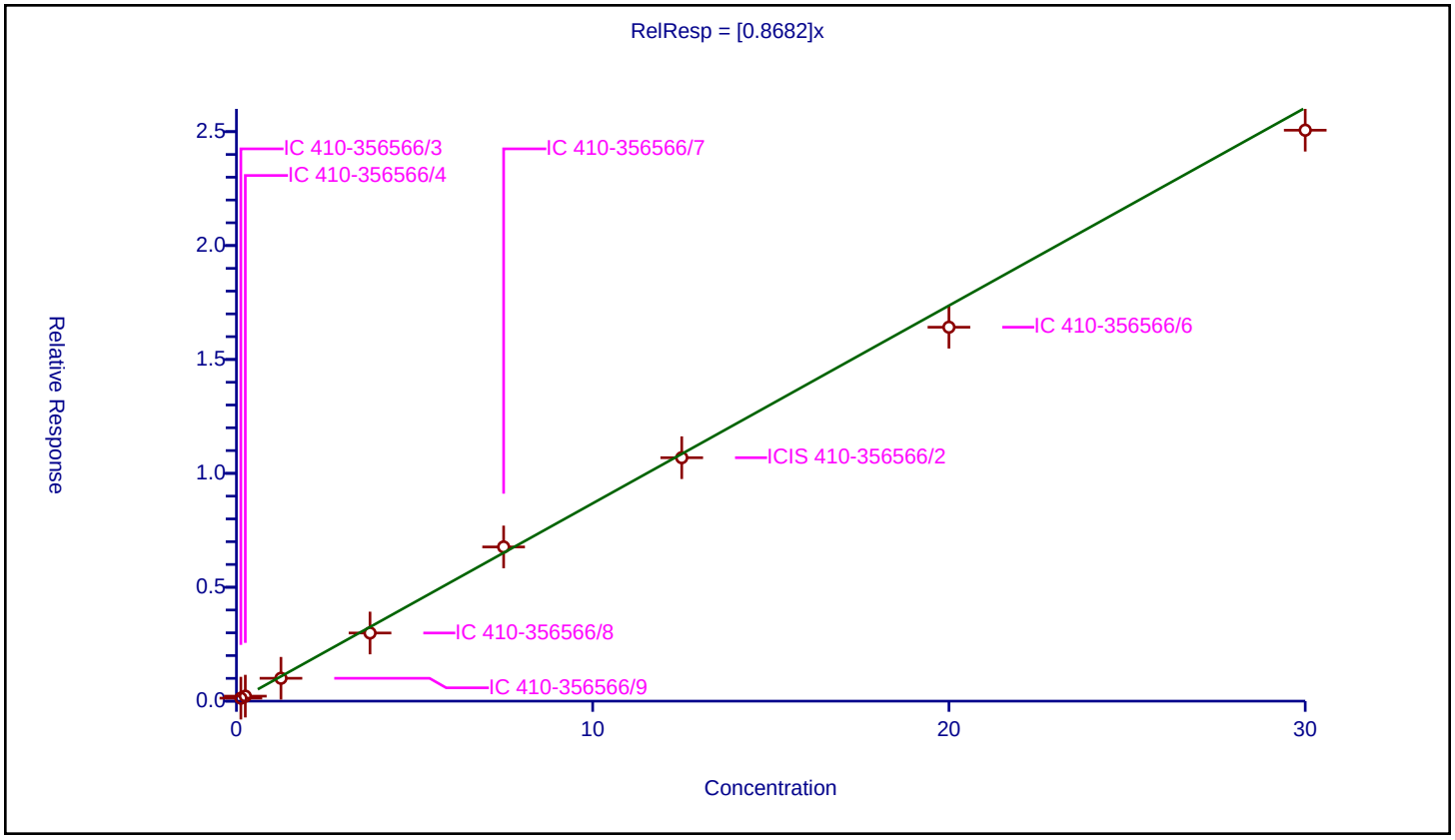
Curve Coefficients

Intercept:	0
Slope:	0.8682

Error Coefficients

Standard Error:	465000
Relative Standard Error:	9.6
Correlation Coefficient:	0.969
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.131946	5.0	136344.0	1.055565	Y
2	IC 410-356566/4	0.25	0.218862	5.0	166543.0	0.87545	Y
3	IC 410-356566/9	1.25	1.004235	5.0	129173.0	0.803388	Y
4	IC 410-356566/8	3.75	2.991647	5.0	194911.0	0.797773	Y
5	IC 410-356566/7	7.5	6.769506	5.0	178191.0	0.902601	Y
6	ICIS 410-356566/2	12.5	10.687108	5.0	192517.0	0.854969	Y
7	IC 410-356566/6	20.0	16.41522	5.0	147712.0	0.820761	Y
8	IC 410-356566/5	30.0	25.064133	5.0	202860.0	0.835471	Y



11/14/2023
11:12 AM

Calibration / Benzaldehyde

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

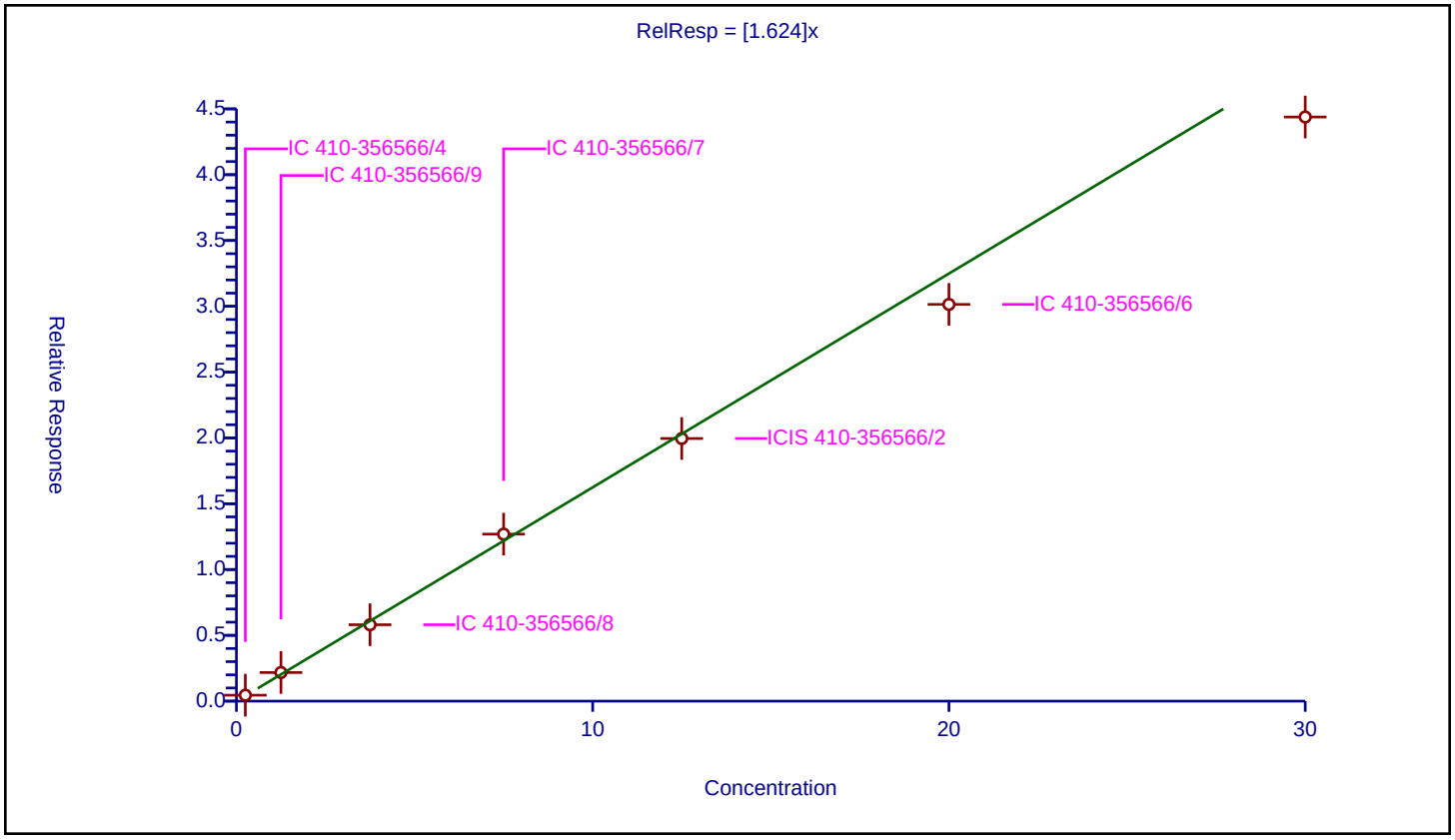
Curve Coefficients

Intercept:	0
Slope:	1.624

Error Coefficients

Standard Error:	902000
Relative Standard Error:	7.7
Correlation Coefficient:	0.969
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/4	0.25	0.452075	5.0	166543.0	1.808302	Y
2	IC 410-356566/9	1.25	2.174448	5.0	129173.0	1.739559	Y
3	IC 410-356566/8	3.75	5.804136	5.0	194911.0	1.54777	Y
4	IC 410-356566/7	7.5	12.69054	5.0	178191.0	1.692072	Y
5	ICIS 410-356566/2	12.5	19.956238	5.0	192517.0	1.596499	Y
6	IC 410-356566/6	20.0	30.144775	5.0	147712.0	1.507239	Y
7	IC 410-356566/5	30.0	44.381815	5.0	202860.0	1.479394	Y



11/14/2023
11:12 AM

Calibration / Phenol-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

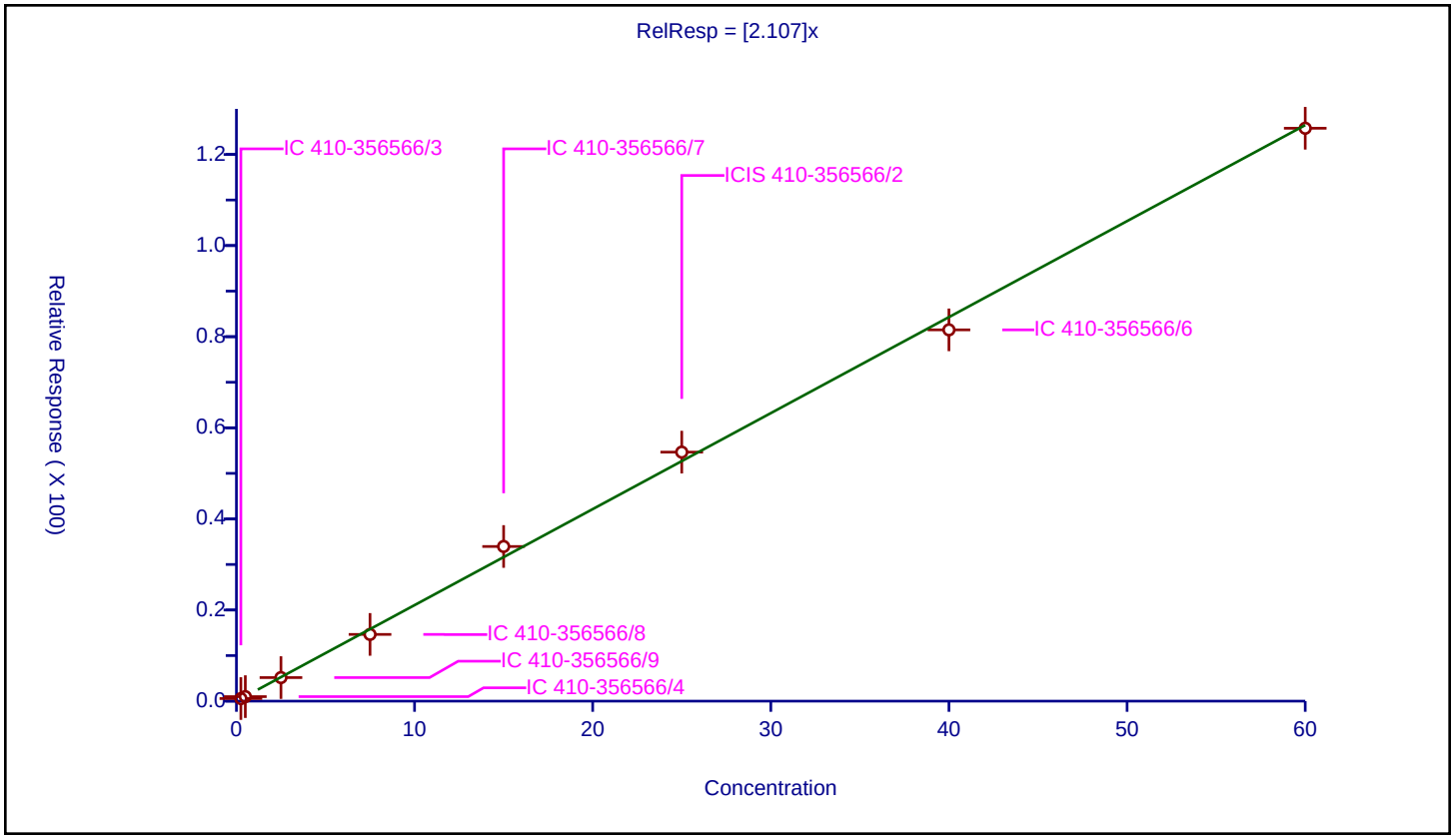
Curve Coefficients

Intercept:	0
Slope:	2.107

Error Coefficients

Standard Error:	2330000
Relative Standard Error:	5.7
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.25	0.567168	5.0	136344.0	2.268673	Y
2	IC 410-356566/4	0.5	0.993107	5.0	166543.0	1.986214	Y
3	IC 410-356566/9	2.5	5.16865	5.0	129173.0	2.06746	Y
4	IC 410-356566/8	7.5	14.65043	5.0	194911.0	1.953391	Y
5	IC 410-356566/7	15.0	33.948291	5.0	178191.0	2.263219	Y
6	ICIS 410-356566/2	25.0	54.656784	5.0	192517.0	2.186271	Y
7	IC 410-356566/6	40.0	81.502214	5.0	147712.0	2.037555	Y
8	IC 410-356566/5	60.0	125.752021	5.0	202860.0	2.095867	Y



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Calibration / Phenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

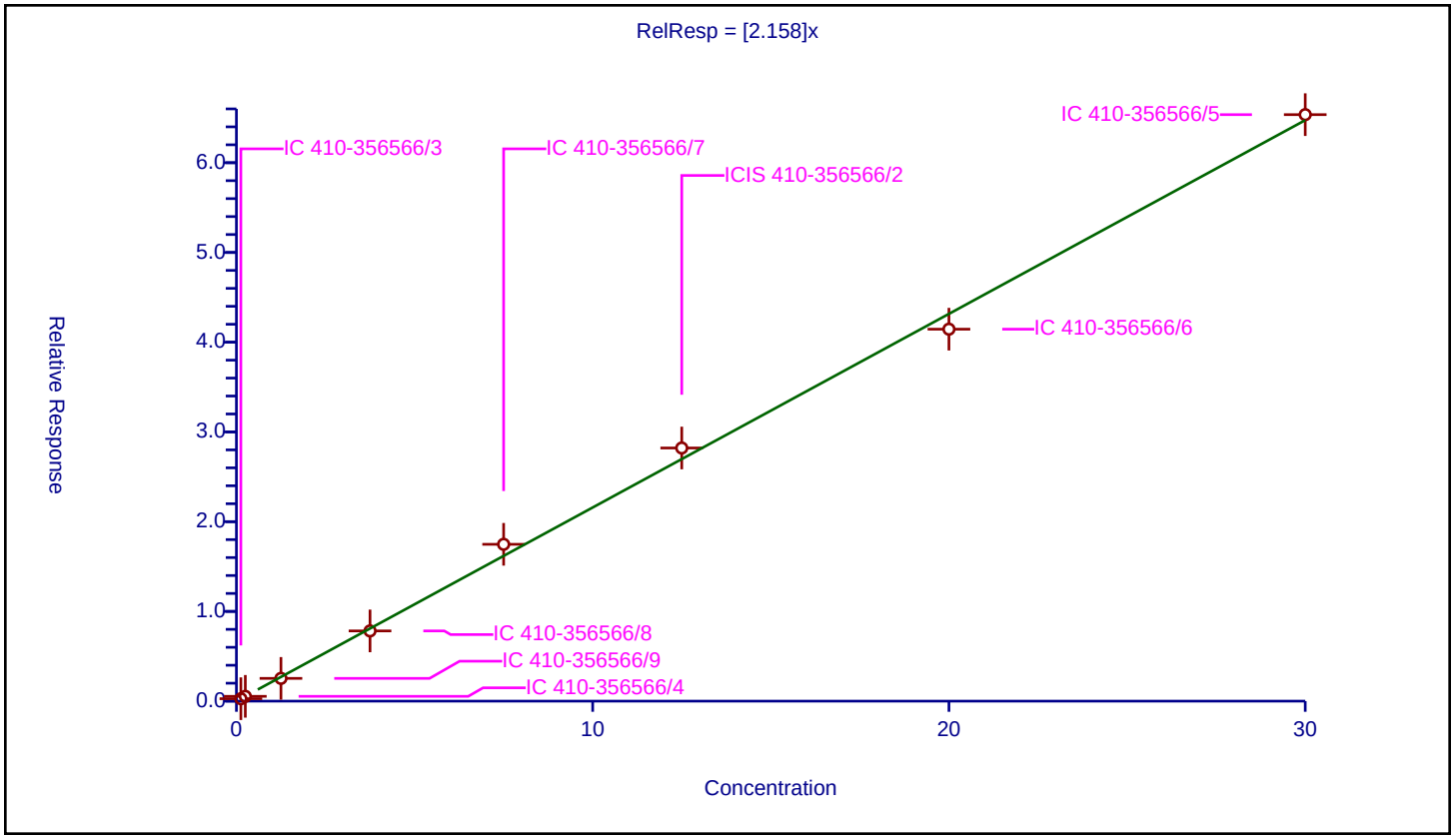
Curve Coefficients

Intercept:	0
Slope:	2.158

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	4.6
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.271152	5.0	136344.0	2.169219	Y
2	IC 410-356566/4	0.25	0.535447	5.0	166543.0	2.141789	Y
3	IC 410-356566/9	1.25	2.535011	5.0	129173.0	2.028009	Y
4	IC 410-356566/8	3.75	7.824571	5.0	194911.0	2.086552	Y
5	IC 410-356566/7	7.5	17.476696	5.0	178191.0	2.330226	Y
6	ICIS 410-356566/2	12.5	28.209067	5.0	192517.0	2.256725	Y
7	IC 410-356566/6	20.0	41.451913	5.0	147712.0	2.072596	Y
8	IC 410-356566/5	30.0	65.357562	5.0	202860.0	2.178585	Y



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Calibration / Aniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

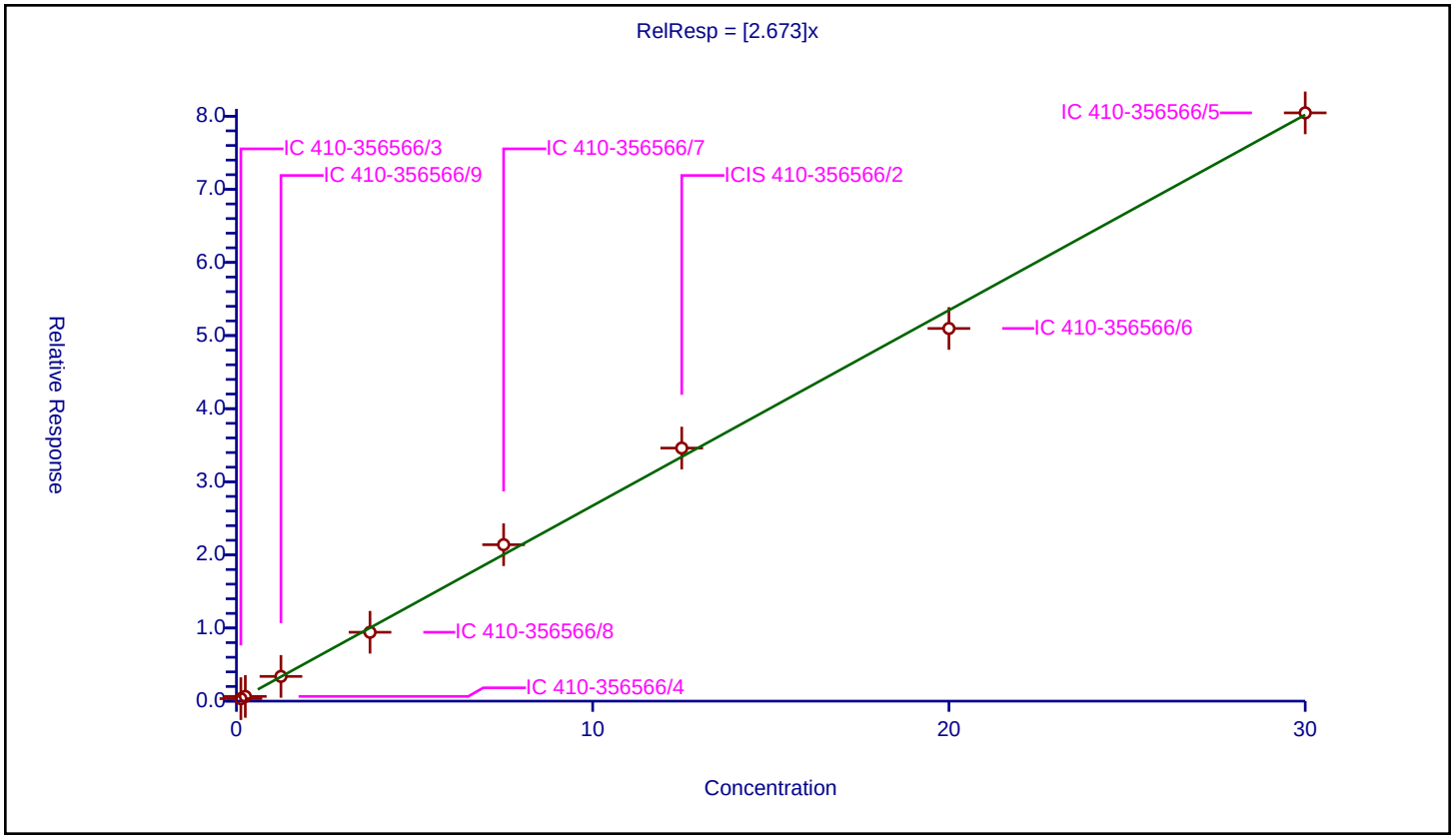
Curve Coefficients

Intercept:	0
Slope:	2.673

Error Coefficients

Standard Error:	1480000
Relative Standard Error:	4.3
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.340866	5.0	136344.0	2.726926	Y
2	IC 410-356566/4	0.25	0.64728	5.0	166543.0	2.589121	Y
3	IC 410-356566/9	1.25	3.381666	5.0	129173.0	2.705333	Y
4	IC 410-356566/8	3.75	9.421146	5.0	194911.0	2.512306	Y
5	IC 410-356566/7	7.5	21.395525	5.0	178191.0	2.852737	Y
6	ICIS 410-356566/2	12.5	34.610554	5.0	192517.0	2.768844	Y
7	IC 410-356566/6	20.0	50.968337	5.0	147712.0	2.548417	Y
8	IC 410-356566/5	30.0	80.456325	5.0	202860.0	2.681877	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

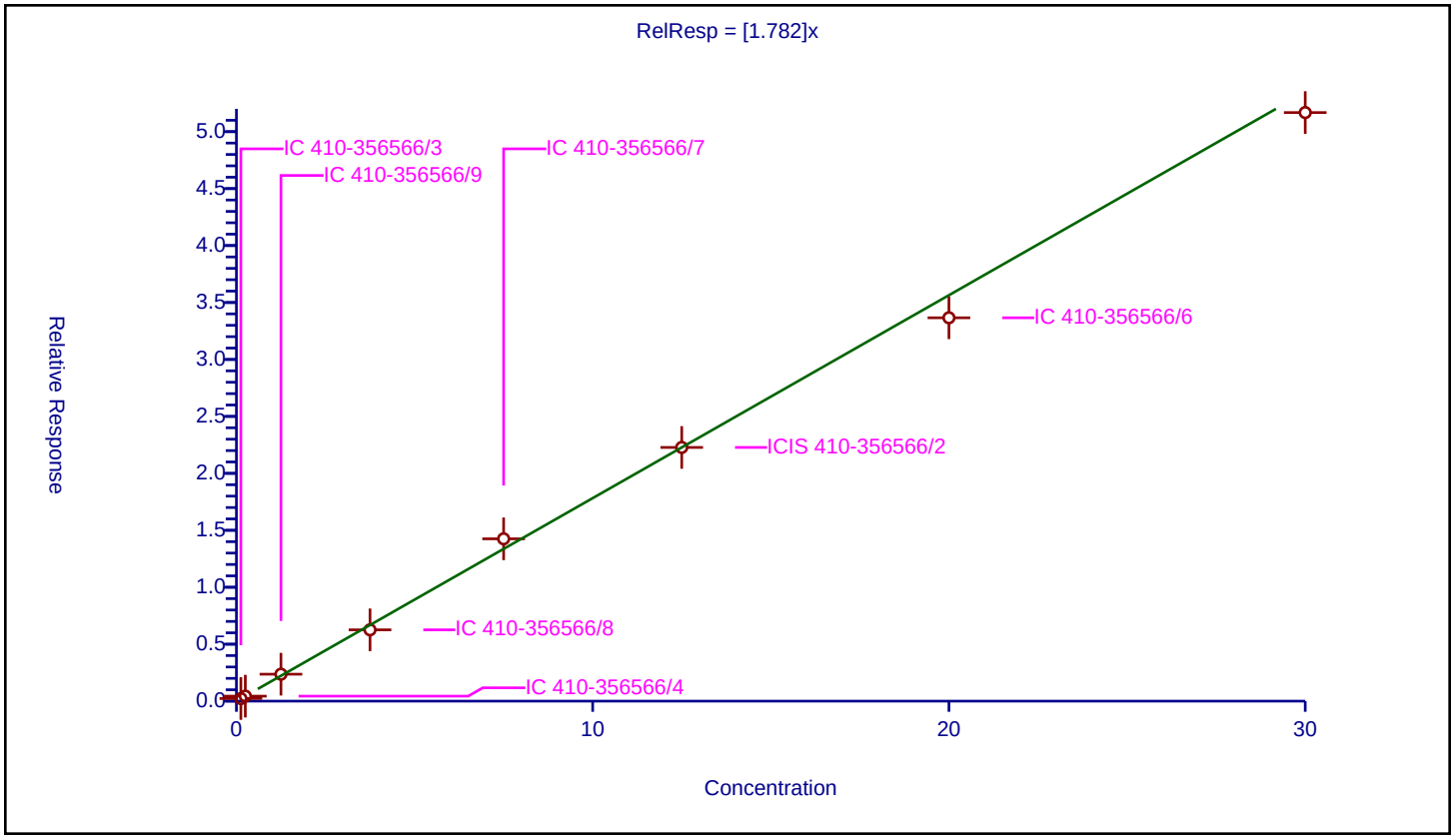
Curve Coefficients

Intercept:	0
Slope:	1.782

Error Coefficients

Standard Error:	959000
Relative Standard Error:	5.1
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.231033	5.0	136344.0	1.848266	Y
2	IC 410-356566/4	0.25	0.439556	5.0	166543.0	1.758225	Y
3	IC 410-356566/9	1.25	2.366361	5.0	129173.0	1.893089	Y
4	IC 410-356566/8	3.75	6.261448	5.0	194911.0	1.669719	Y
5	IC 410-356566/7	7.5	14.253049	5.0	178191.0	1.900406	Y
6	ICIS 410-356566/2	12.5	22.276474	5.0	192517.0	1.782118	Y
7	IC 410-356566/6	20.0	33.660231	5.0	147712.0	1.683012	Y
8	IC 410-356566/5	30.0	51.677783	5.0	202860.0	1.722593	Y



Calibration / 2-Chlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

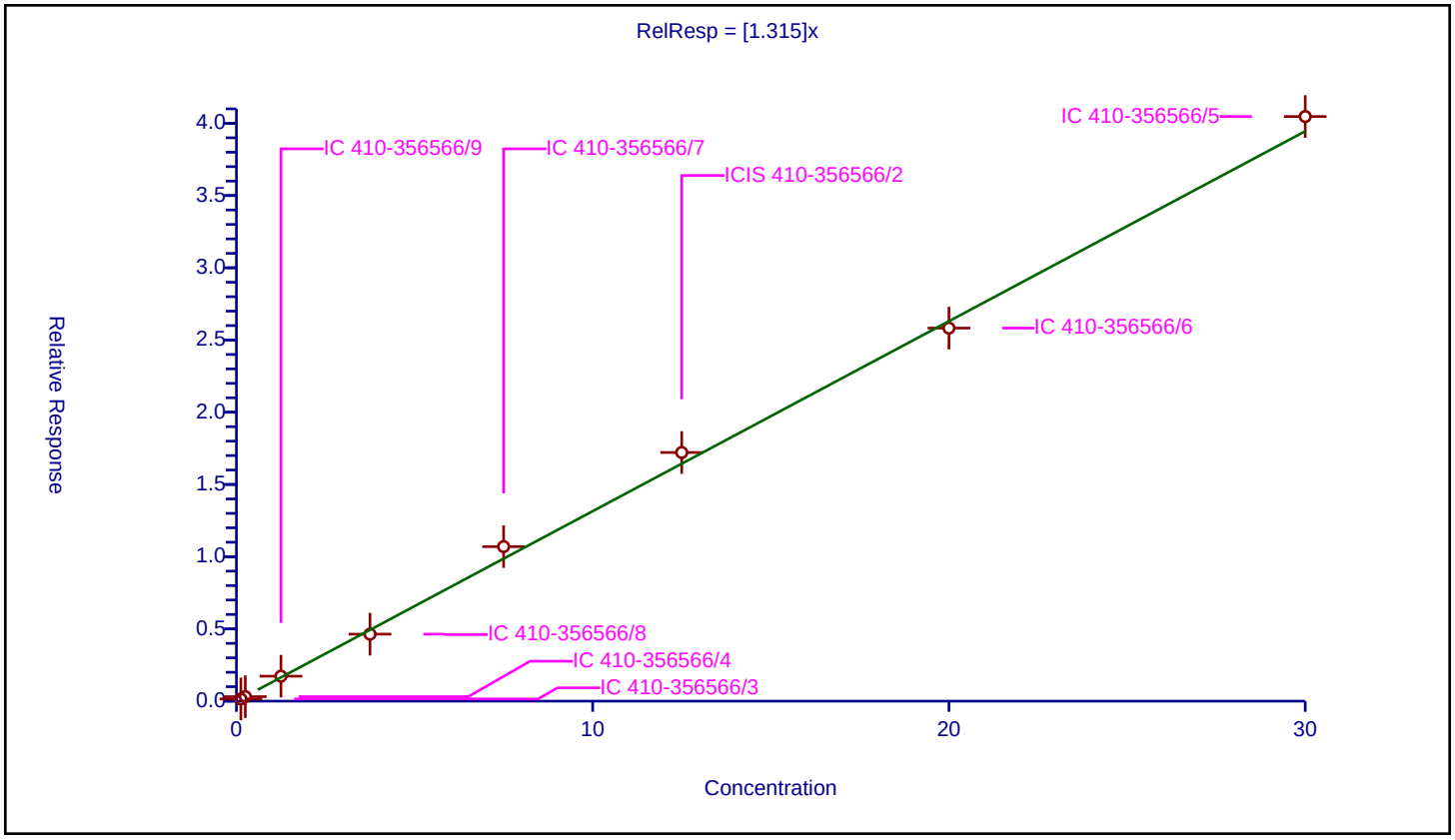
Curve Coefficients

Intercept:	0
Slope:	1.315

Error Coefficients

Standard Error:	746000
Relative Standard Error:	6.0
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.151492	5.0	136344.0	1.211935	Y
2	IC 410-356566/4	0.25	0.311241	5.0	166543.0	1.244964	Y
3	IC 410-356566/9	1.25	1.728883	5.0	129173.0	1.383106	Y
4	IC 410-356566/8	3.75	4.637963	5.0	194911.0	1.23679	Y
5	IC 410-356566/7	7.5	10.697734	5.0	178191.0	1.426365	Y
6	ICIS 410-356566/2	12.5	17.21274	5.0	192517.0	1.377019	Y
7	IC 410-356566/6	20.0	25.824645	5.0	147712.0	1.291232	Y
8	IC 410-356566/5	30.0	40.470103	5.0	202860.0	1.349003	Y



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Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

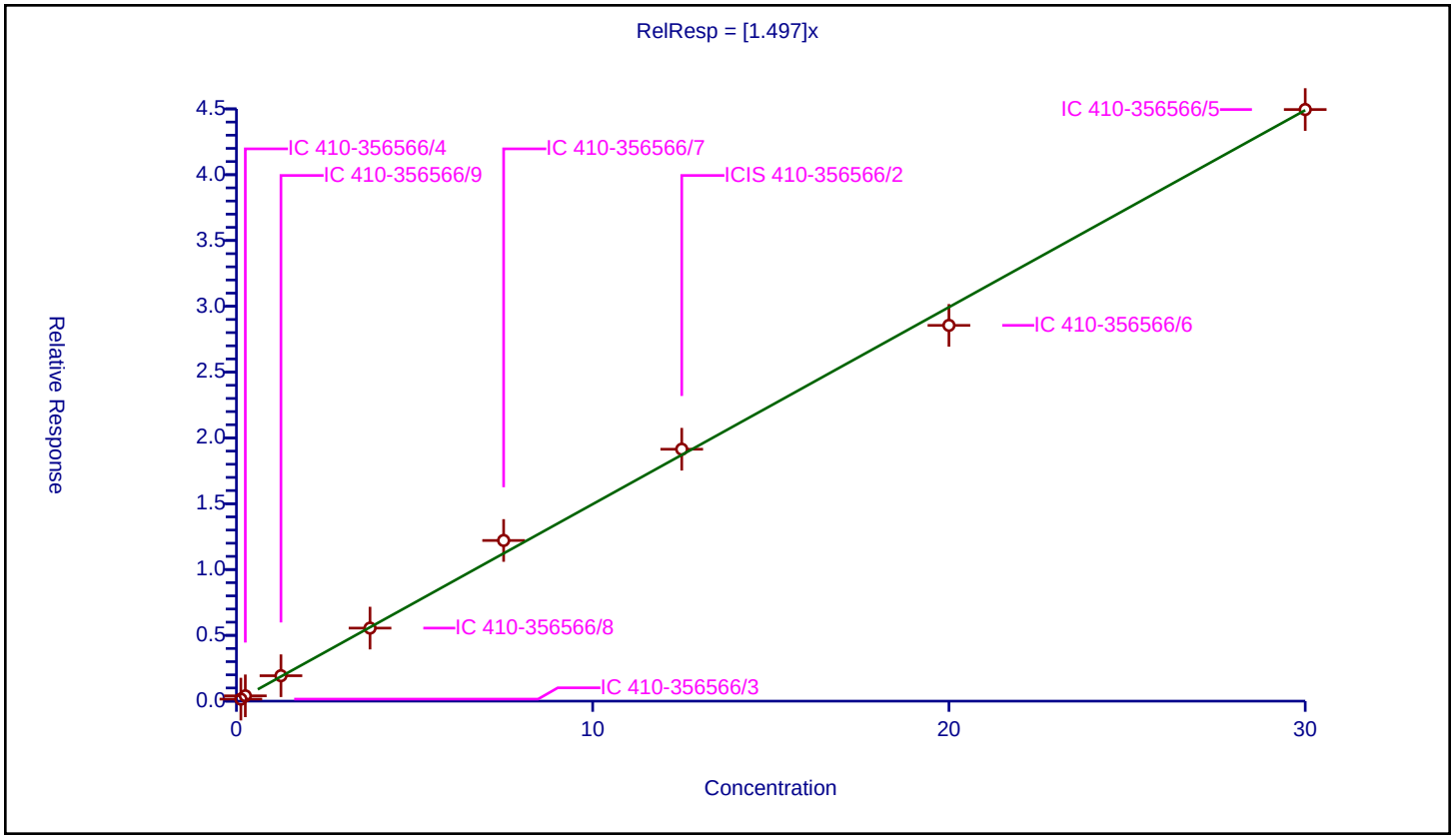
Curve Coefficients

Intercept:	0
Slope:	1.497

Error Coefficients

Standard Error:	830000
Relative Standard Error:	8.1
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.155636	5.0	136344.0	1.245086	Y
2	IC 410-356566/4	0.25	0.40458	5.0	166543.0	1.618321	Y
3	IC 410-356566/9	1.25	1.93175	5.0	129173.0	1.5454	Y
4	IC 410-356566/8	3.75	5.549122	5.0	194911.0	1.479766	Y
5	IC 410-356566/7	7.5	12.208024	5.0	178191.0	1.627737	Y
6	ICIS 410-356566/2	12.5	19.141245	5.0	192517.0	1.5313	Y
7	IC 410-356566/6	20.0	28.55181	5.0	147712.0	1.427591	Y
8	IC 410-356566/5	30.0	44.951099	5.0	202860.0	1.49837	Y



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Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

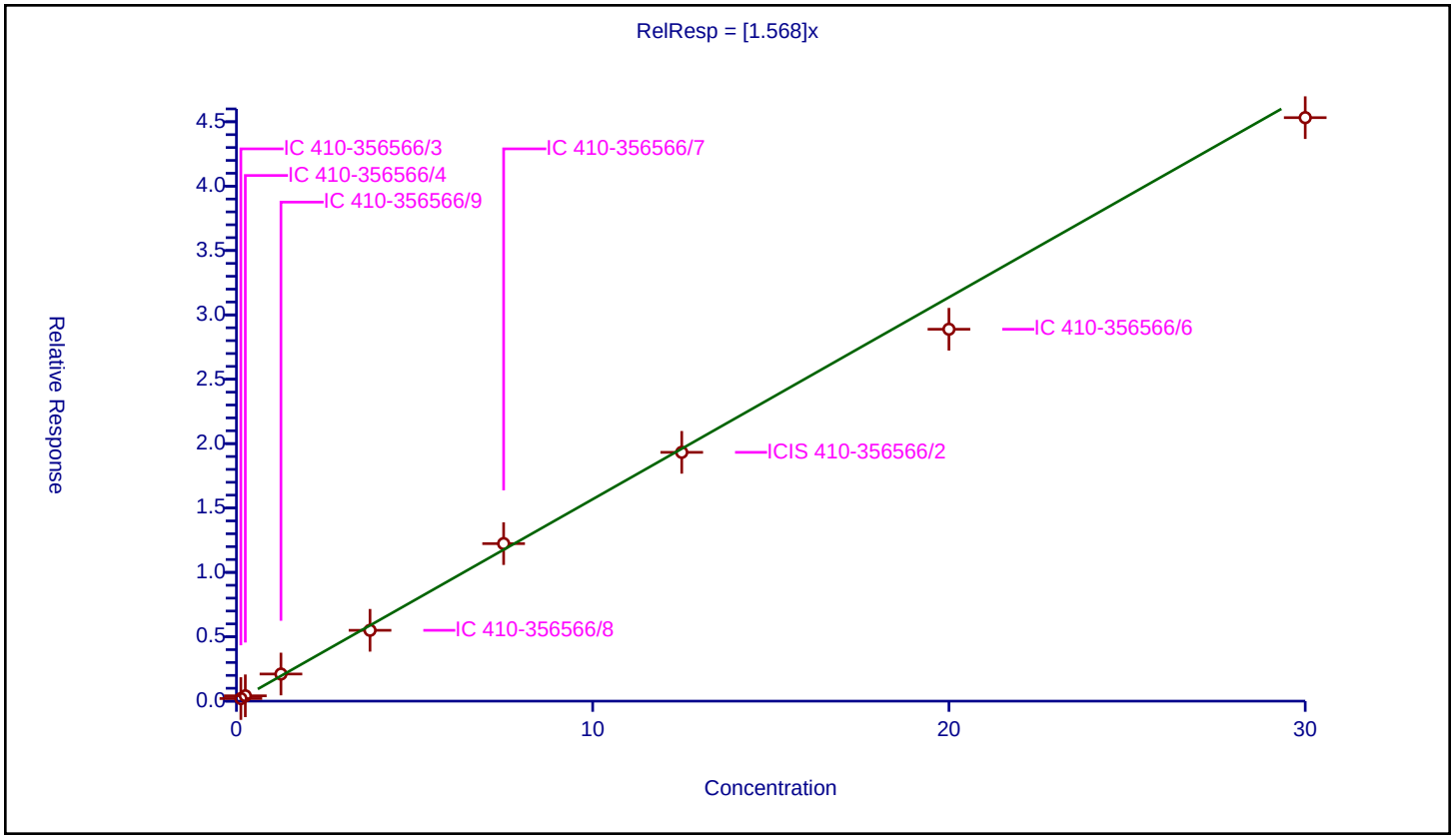
Curve Coefficients

Intercept:	0
Slope:	1.568

Error Coefficients

Standard Error:	837000
Relative Standard Error:	5.7
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.200742	5.0	136344.0	1.605938	Y
2	IC 410-356566/4	0.25	0.414007	5.0	166543.0	1.656029	Y
3	IC 410-356566/9	1.25	2.106555	5.0	129173.0	1.685244	Y
4	IC 410-356566/8	3.75	5.501408	5.0	194911.0	1.467042	Y
5	IC 410-356566/7	7.5	12.234625	5.0	178191.0	1.631283	Y
6	ICIS 410-356566/2	12.5	19.324164	5.0	192517.0	1.545933	Y
7	IC 410-356566/6	20.0	28.885365	5.0	147712.0	1.444268	Y
8	IC 410-356566/5	30.0	45.318767	5.0	202860.0	1.510626	Y



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Calibration / Benzyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

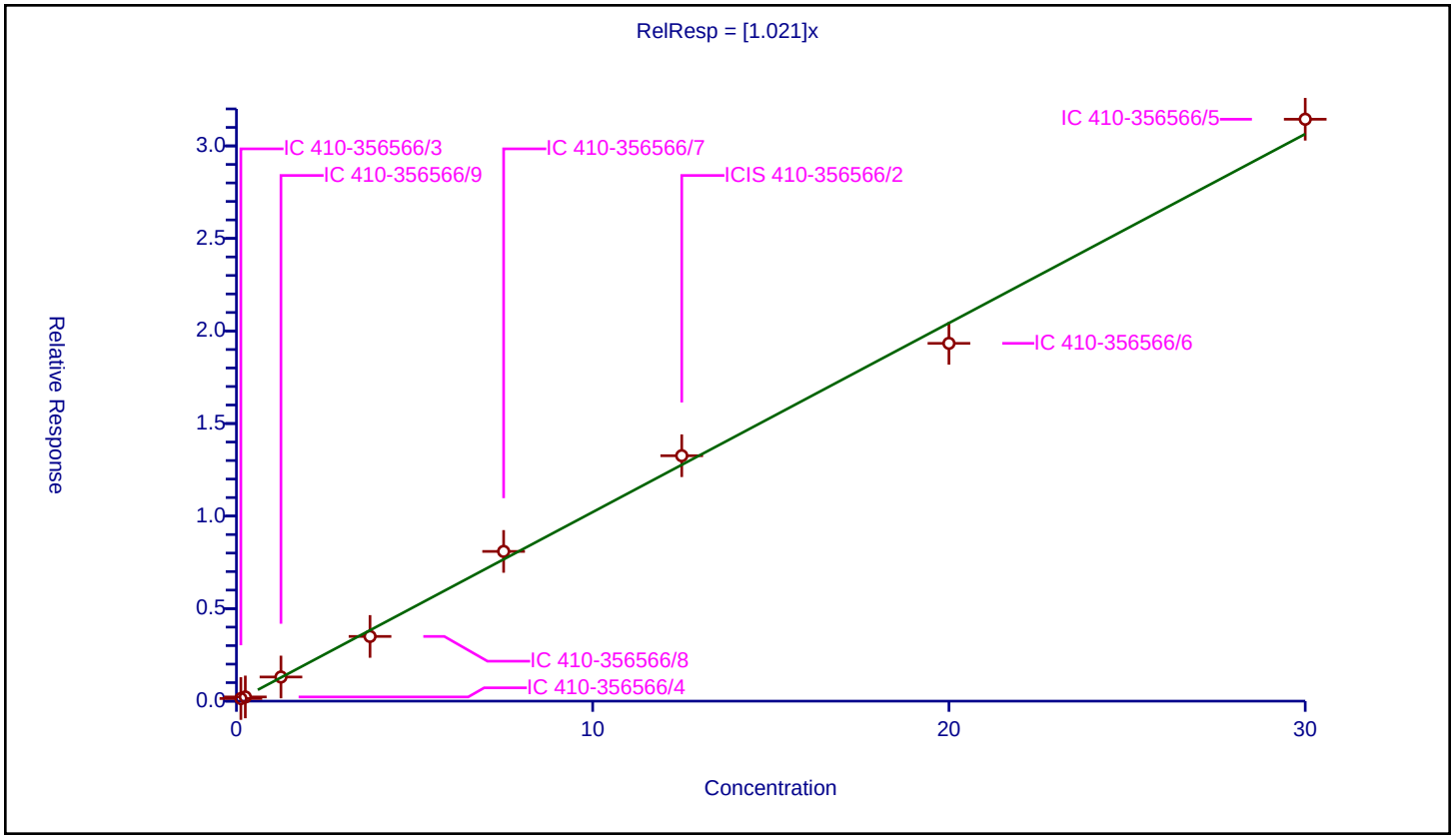
Curve Coefficients

Intercept:	0
Slope:	1.021

Error Coefficients

Standard Error:	575000
Relative Standard Error:	7.8
Correlation Coefficient:	0.959
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.142177	5.0	136344.0	1.137417	Y
2	IC 410-356566/4	0.25	0.226068	5.0	166543.0	0.904271	Y
3	IC 410-356566/9	1.25	1.304026	5.0	129173.0	1.043221	Y
4	IC 410-356566/8	3.75	3.496724	5.0	194911.0	0.93246	Y
5	IC 410-356566/7	7.5	8.089073	5.0	178191.0	1.078543	Y
6	ICIS 410-356566/2	12.5	13.260517	5.0	192517.0	1.060841	Y
7	IC 410-356566/6	20.0	19.332248	5.0	147712.0	0.966612	Y
8	IC 410-356566/5	30.0	31.440797	5.0	202860.0	1.048027	Y



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Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

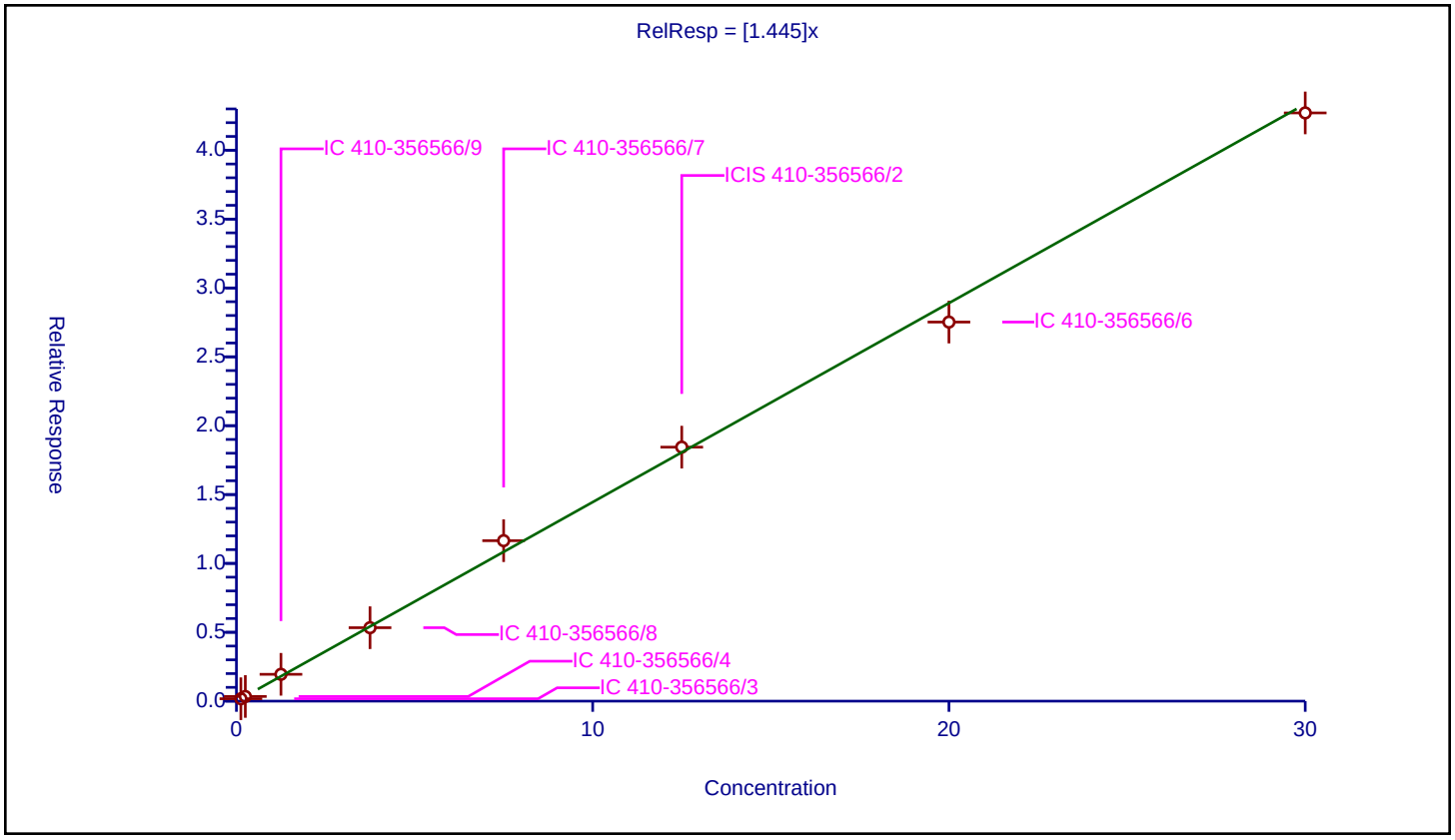
Curve Coefficients

Intercept:	0
Slope:	1.445

Error Coefficients

Standard Error:	792000
Relative Standard Error:	5.4
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.174522	5.0	136344.0	1.396174	Y
2	IC 410-356566/4	0.25	0.338651	5.0	166543.0	1.354605	Y
3	IC 410-356566/9	1.25	1.948704	5.0	129173.0	1.558964	Y
4	IC 410-356566/8	3.75	5.331818	5.0	194911.0	1.421818	Y
5	IC 410-356566/7	7.5	11.649859	5.0	178191.0	1.553315	Y
6	ICIS 410-356566/2	12.5	18.441982	5.0	192517.0	1.475359	Y
7	IC 410-356566/6	20.0	27.521528	5.0	147712.0	1.376076	Y
8	IC 410-356566/5	30.0	42.707754	5.0	202860.0	1.423592	Y



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Calibration / 2-Methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

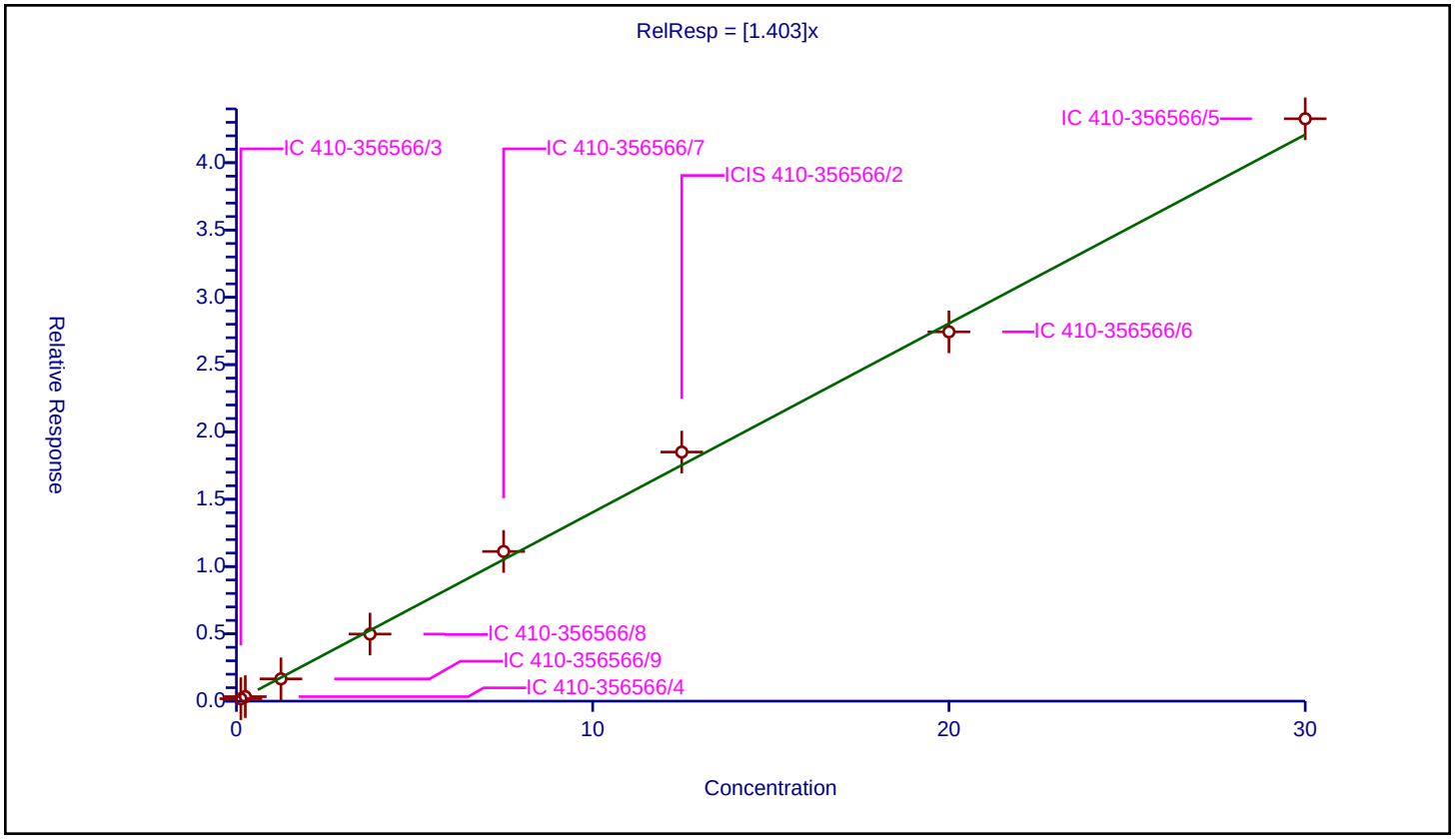
Curve Coefficients

Intercept:	0
Slope:	1.403

Error Coefficients

Standard Error:	797000
Relative Standard Error:	4.9
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.181636	5.0	136344.0	1.453089	Y
2	IC 410-356566/4	0.25	0.334898	5.0	166543.0	1.339594	Y
3	IC 410-356566/9	1.25	1.655222	5.0	129173.0	1.324178	Y
4	IC 410-356566/8	3.75	4.983787	5.0	194911.0	1.32901	Y
5	IC 410-356566/7	7.5	11.119389	5.0	178191.0	1.482585	Y
6	ICIS 410-356566/2	12.5	18.505223	5.0	192517.0	1.480418	Y
7	IC 410-356566/6	20.0	27.436566	5.0	147712.0	1.371828	Y
8	IC 410-356566/5	30.0	43.264961	5.0	202860.0	1.442165	Y



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Calibration / 2,2'-oxybis[1-chloropropane]

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

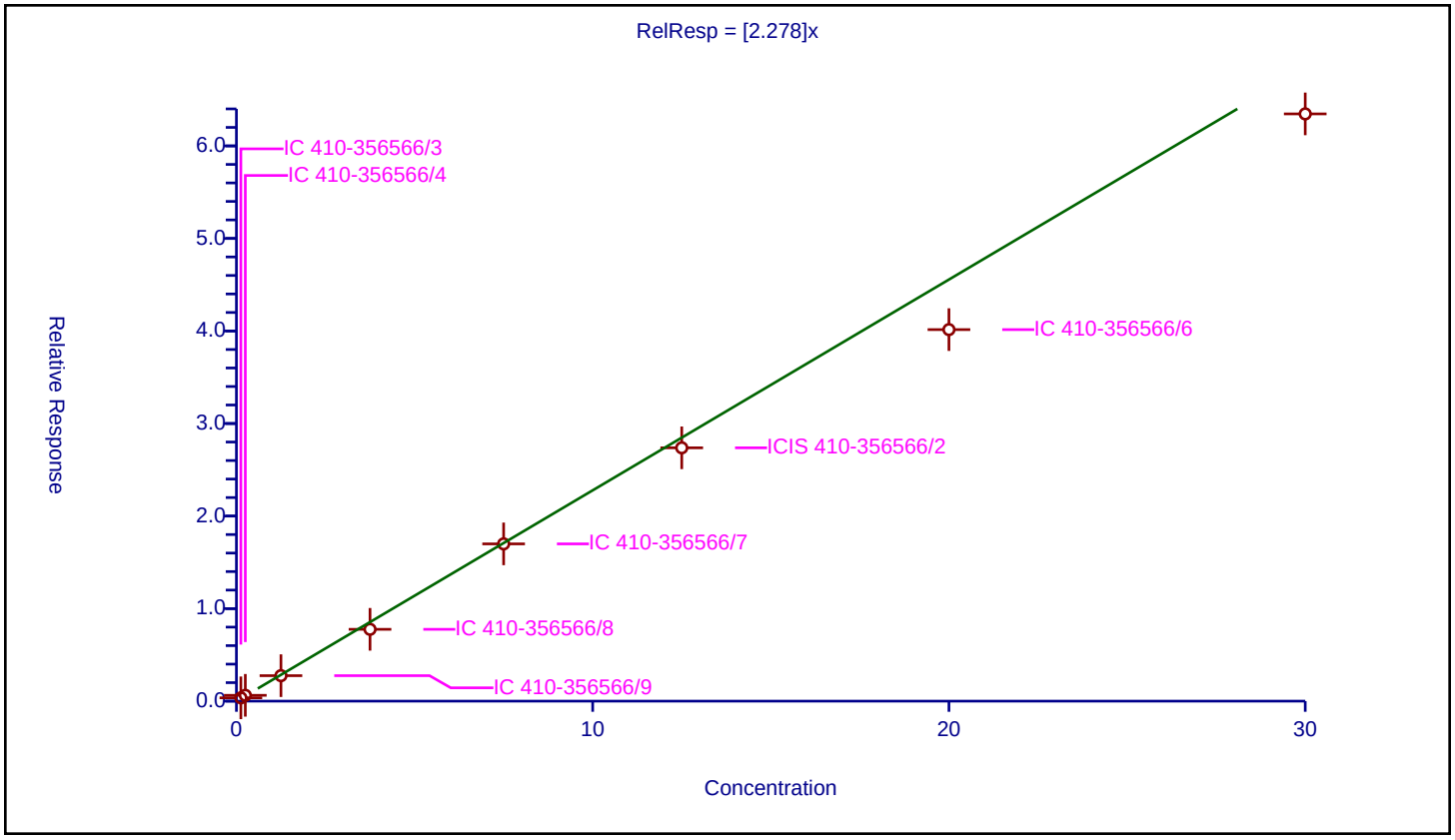
Curve Coefficients

Intercept:	0
Slope:	2.278

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	12.3
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.357772	5.0	136344.0	2.862172	Y
2	IC 410-356566/4	0.25	0.627616	5.0	166543.0	2.510463	Y
3	IC 410-356566/9	1.25	2.752936	5.0	129173.0	2.202349	Y
4	IC 410-356566/8	3.75	7.761902	5.0	194911.0	2.06984	Y
5	IC 410-356566/7	7.5	16.994657	5.0	178191.0	2.265954	Y
6	ICIS 410-356566/2	12.5	27.375193	5.0	192517.0	2.190015	Y
7	IC 410-356566/6	20.0	40.147855	5.0	147712.0	2.007393	Y
8	IC 410-356566/5	30.0	63.458962	5.0	202860.0	2.115299	Y



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Calibration / N-Nitrosopyrrolidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

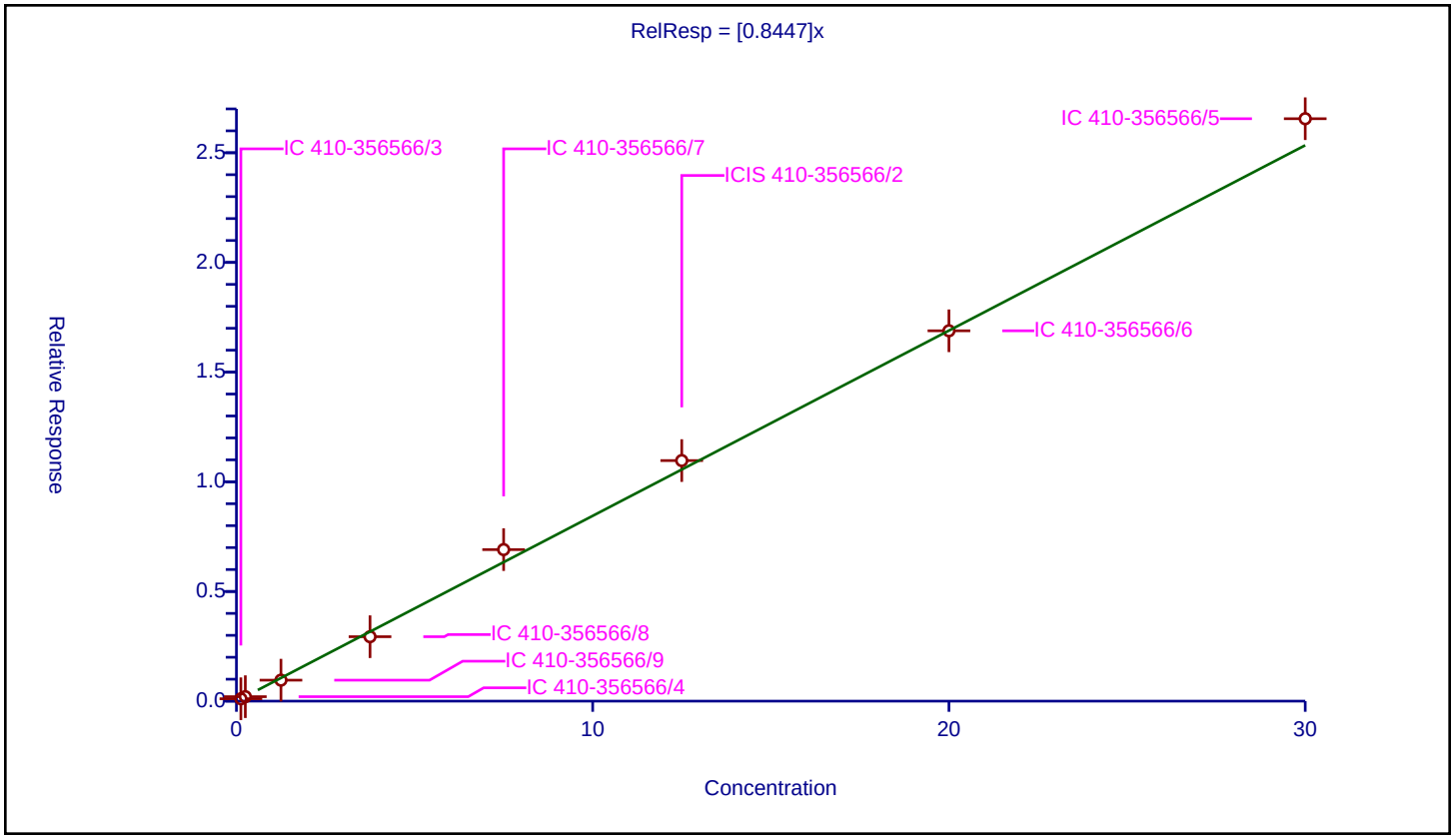
Curve Coefficients

Intercept:	0
Slope:	0.8447

Error Coefficients

Standard Error:	487000
Relative Standard Error:	6.3
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.108292	5.0	136344.0	0.866338	Y
2	IC 410-356566/4	0.25	0.203761	5.0	166543.0	0.815045	Y
3	IC 410-356566/9	1.25	0.956469	5.0	129173.0	0.765175	Y
4	IC 410-356566/8	3.75	2.937341	5.0	194911.0	0.783291	Y
5	IC 410-356566/7	7.5	6.907784	5.0	178191.0	0.921038	Y
6	ICIS 410-356566/2	12.5	10.966902	5.0	192517.0	0.877352	Y
7	IC 410-356566/6	20.0	16.884106	5.0	147712.0	0.844205	Y
8	IC 410-356566/5	30.0	26.55176	5.0	202860.0	0.885059	Y



Calibration / 4-Methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

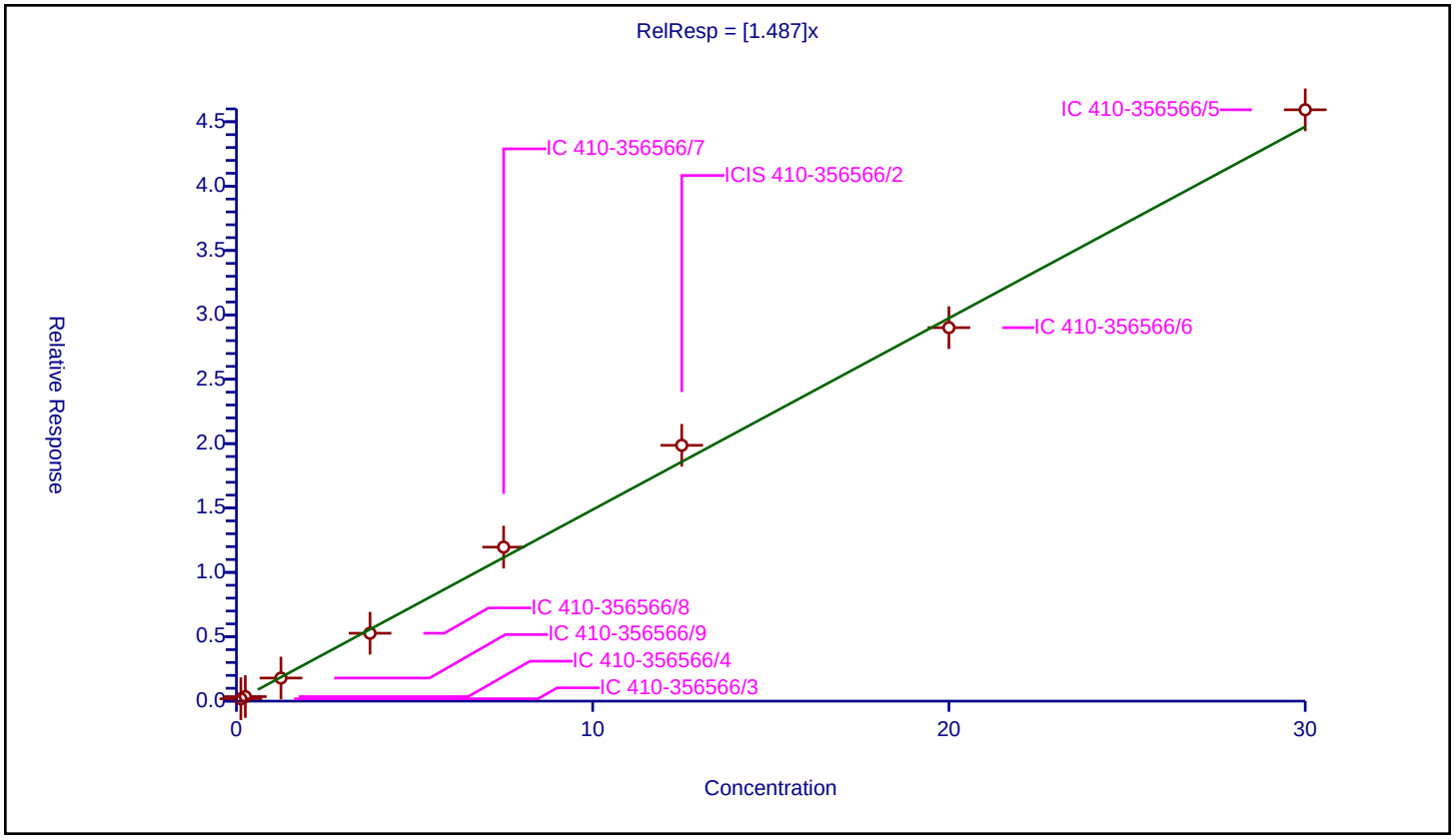
Curve Coefficients

Intercept:	0
Slope:	1.487

Error Coefficients

Standard Error:	847000
Relative Standard Error:	5.1
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.184423	5.0	136344.0	1.475386	Y
2	IC 410-356566/4	0.25	0.353632	5.0	166543.0	1.41453	Y
3	IC 410-356566/9	1.25	1.794067	5.0	129173.0	1.435253	Y
4	IC 410-356566/8	3.75	5.273971	5.0	194911.0	1.406392	Y
5	IC 410-356566/7	7.5	11.96222	5.0	178191.0	1.594963	Y
6	ICIS 410-356566/2	12.5	19.871102	5.0	192517.0	1.589688	Y
7	IC 410-356566/6	20.0	29.008916	5.0	147712.0	1.450446	Y
8	IC 410-356566/5	30.0	45.931307	5.0	202860.0	1.531044	Y



Calibration / N-Nitrosodi-n-propylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

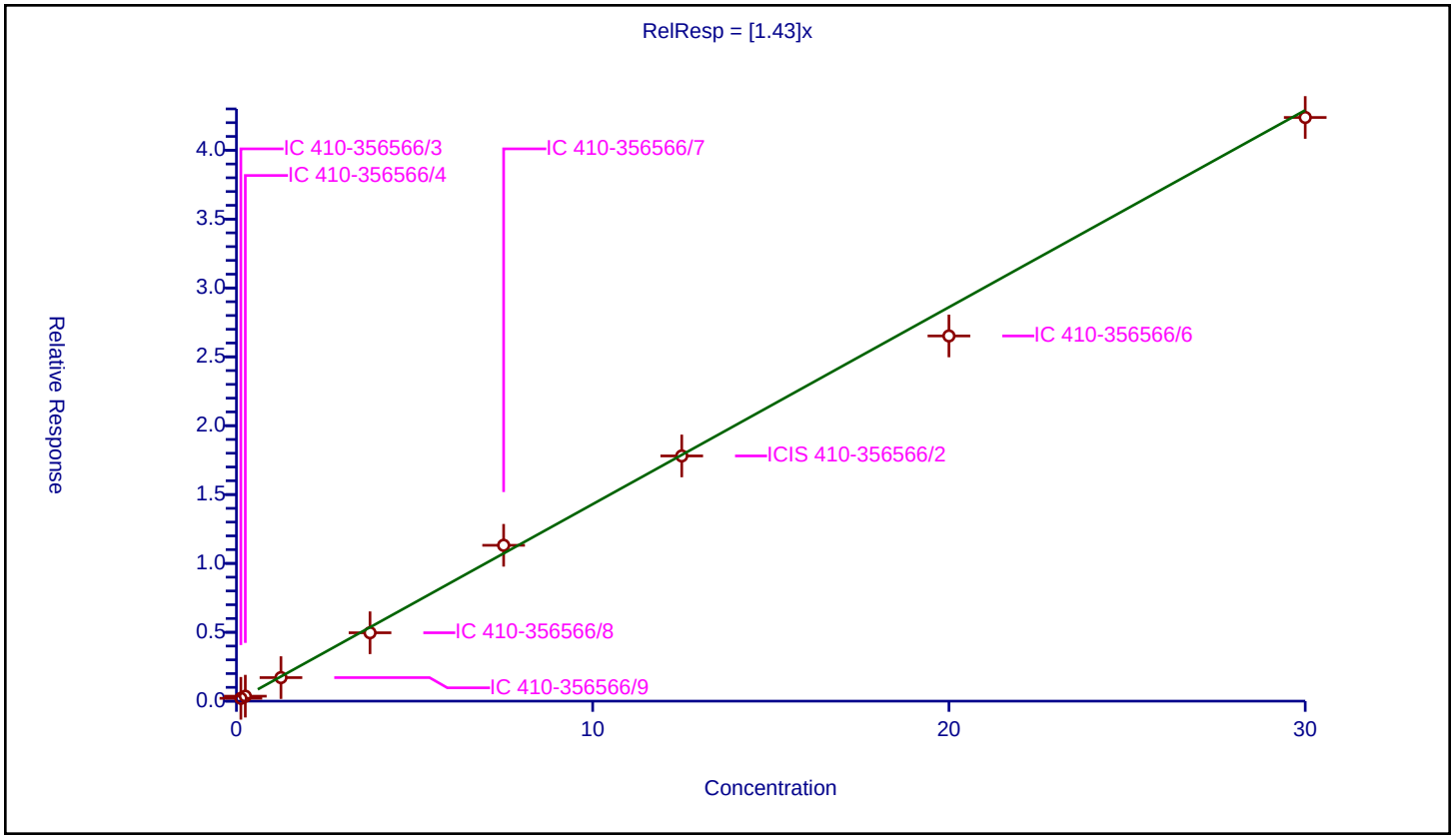
Curve Coefficients

Intercept:	0
Slope:	1.43

Error Coefficients

Standard Error:	778000
Relative Standard Error:	7.4
Correlation Coefficient:	0.962
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.205143	5.0	136344.0	1.641143	Y
2	IC 410-356566/4	0.25	0.359667	5.0	166543.0	1.438667	Y
3	IC 410-356566/9	1.25	1.707555	5.0	129173.0	1.366044	Y
4	IC 410-356566/8	3.75	4.964266	5.0	194911.0	1.323804	Y
5	IC 410-356566/7	7.5	11.315106	5.0	178191.0	1.508681	Y
6	ICIS 410-356566/2	12.5	17.802584	5.0	192517.0	1.424207	Y
7	IC 410-356566/6	20.0	26.514874	5.0	147712.0	1.325744	Y
8	IC 410-356566/5	30.0	42.378266	5.0	202860.0	1.412609	Y



Calibration / Acetophenone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

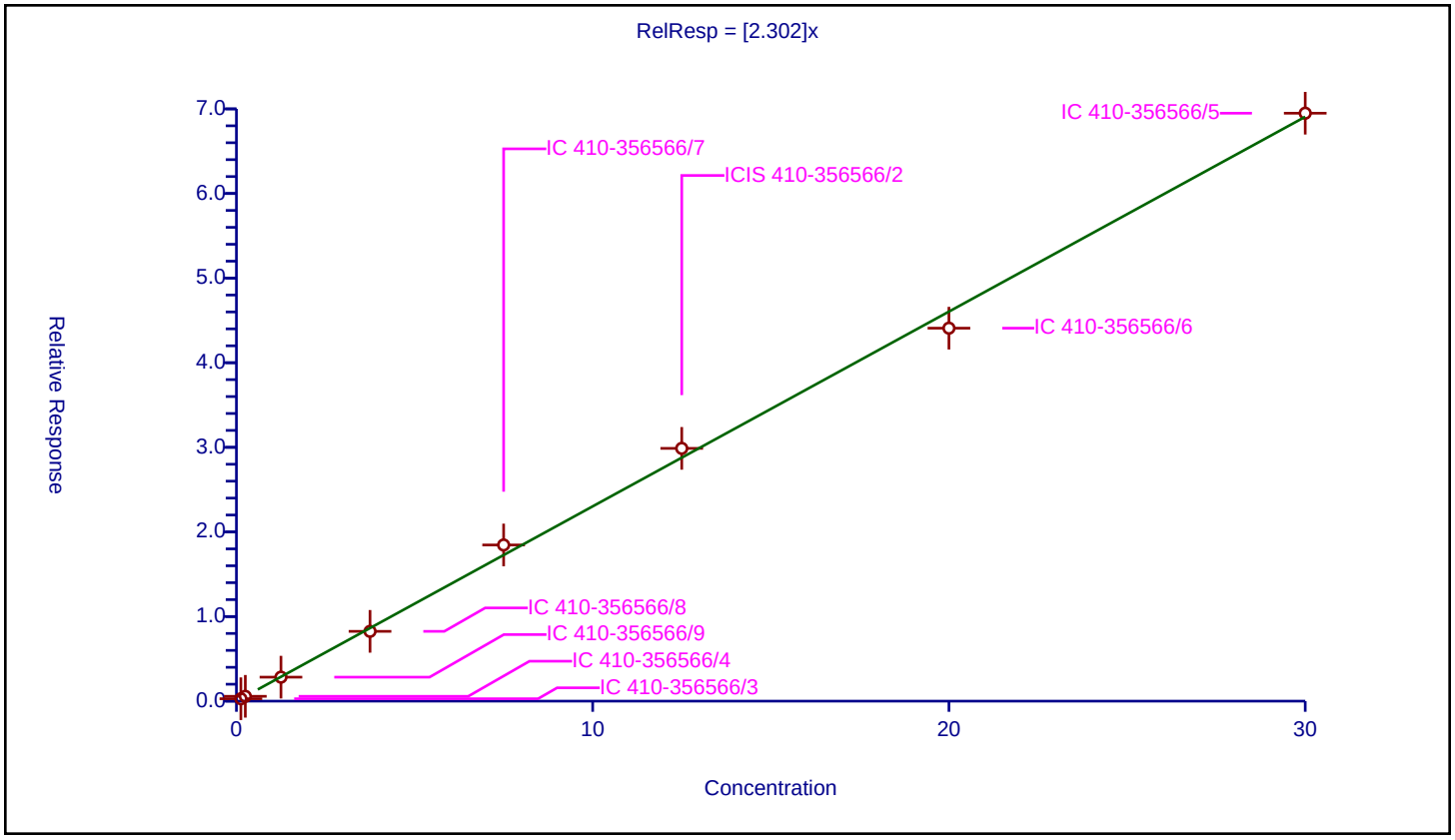
Curve Coefficients

Intercept:	0
Slope:	2.302

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	3.8
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.286115	5.0	136344.0	2.288916	Y
2	IC 410-356566/4	0.25	0.572285	5.0	166543.0	2.289139	Y
3	IC 410-356566/9	1.25	2.834222	5.0	129173.0	2.267378	Y
4	IC 410-356566/8	3.75	8.250047	5.0	194911.0	2.200013	Y
5	IC 410-356566/7	7.5	18.457975	5.0	178191.0	2.461063	Y
6	ICIS 410-356566/2	12.5	29.875466	5.0	192517.0	2.390037	Y
7	IC 410-356566/6	20.0	44.084096	5.0	147712.0	2.204205	Y
8	IC 410-356566/5	30.0	69.490042	5.0	202860.0	2.316335	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

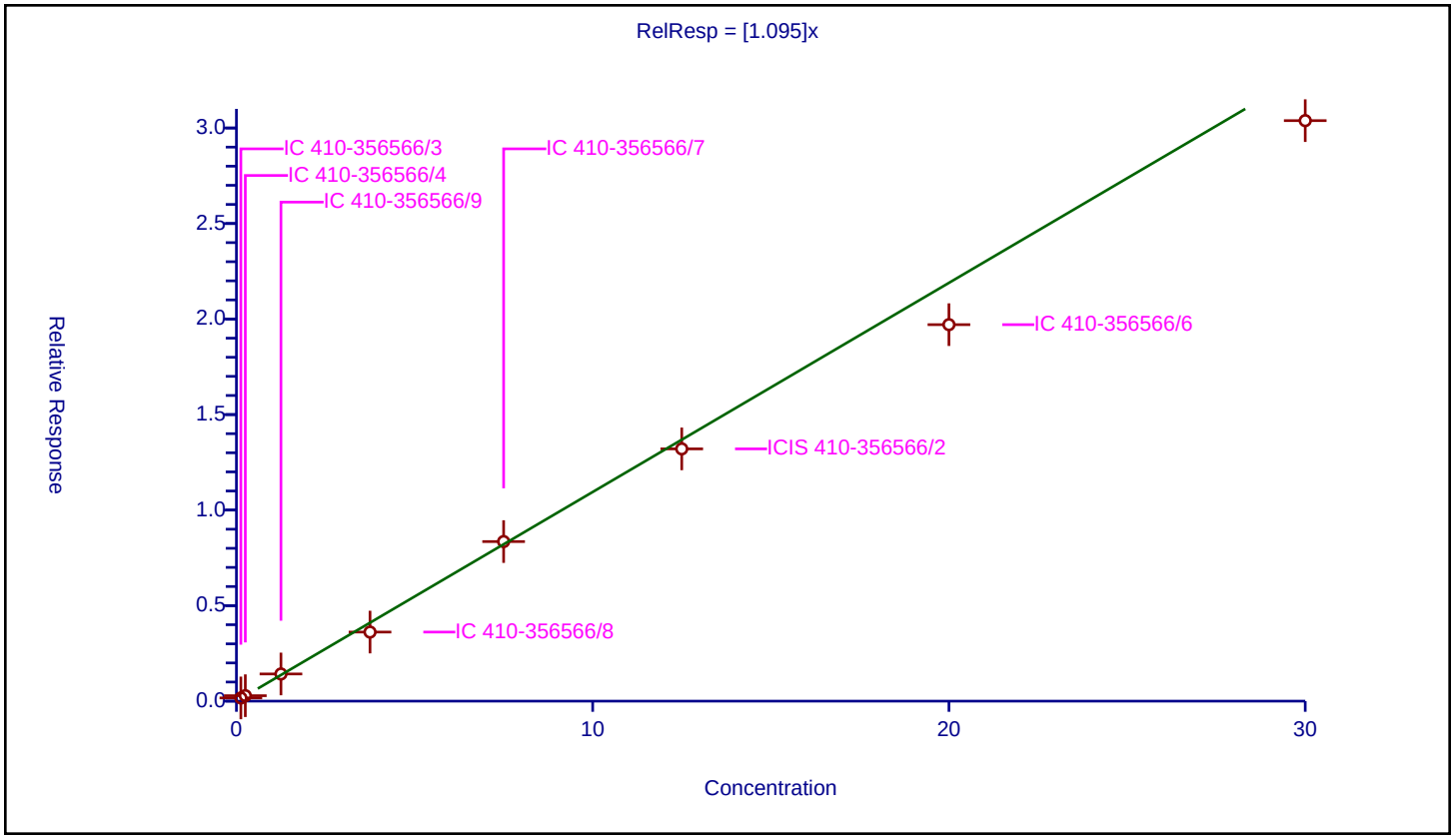
Curve Coefficients

Intercept:	0
Slope:	1.095

Error Coefficients

Standard Error:	564000
Relative Standard Error:	11.2
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.168288	5.0	136344.0	1.346301	Y
2	IC 410-356566/4	0.25	0.285212	5.0	166543.0	1.140847	Y
3	IC 410-356566/9	1.25	1.422627	5.0	129173.0	1.138102	Y
4	IC 410-356566/8	3.75	3.616215	5.0	194911.0	0.964324	Y
5	IC 410-356566/7	7.5	8.352498	5.0	178191.0	1.113666	Y
6	ICIS 410-356566/2	12.5	13.204808	5.0	192517.0	1.056385	Y
7	IC 410-356566/6	20.0	19.706659	5.0	147712.0	0.985333	Y
8	IC 410-356566/5	30.0	30.384822	5.0	202860.0	1.012827	Y



Calibration / 2-Toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

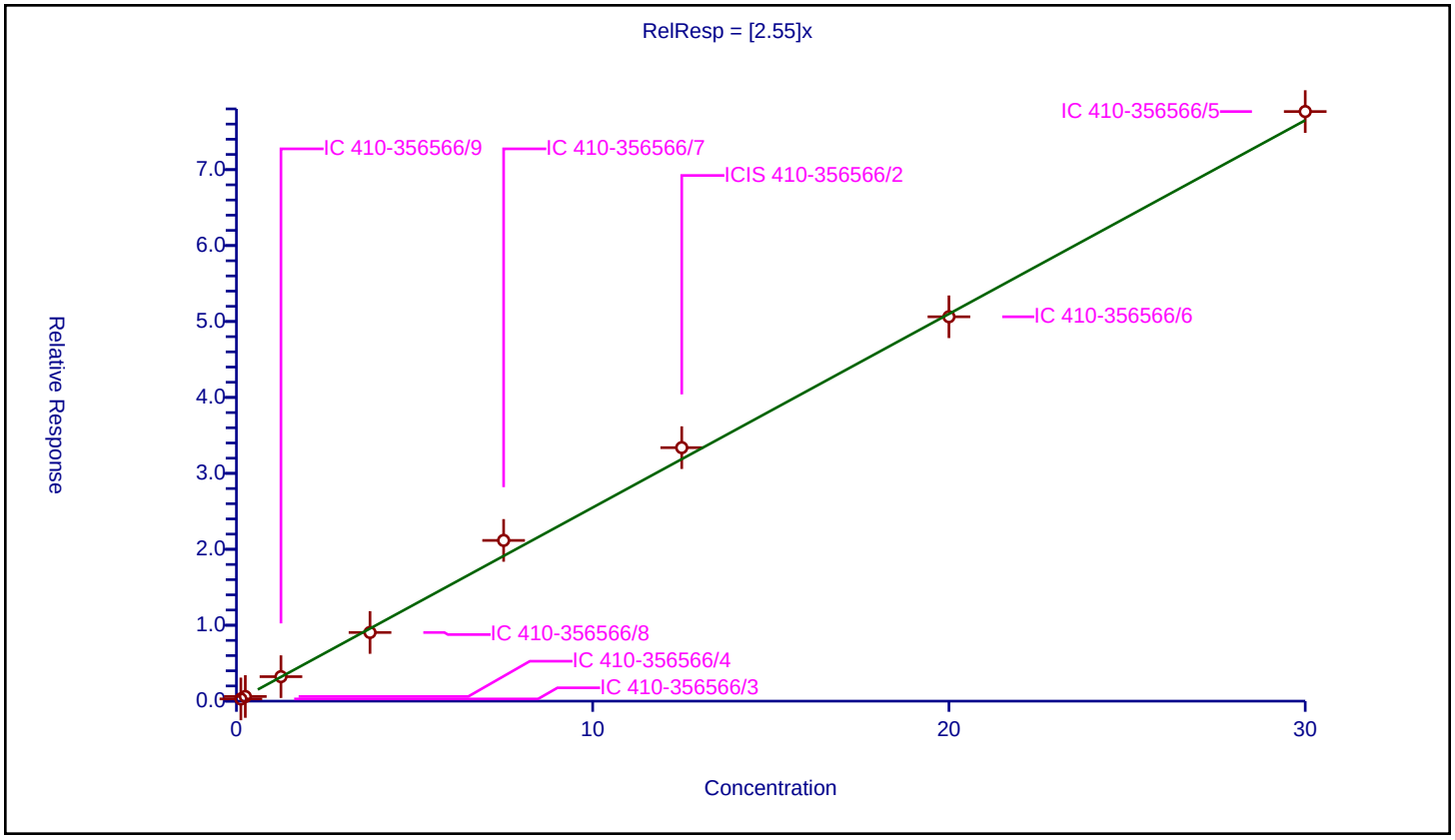
Curve Coefficients

Intercept:	0
Slope:	2.55

Error Coefficients

Standard Error:	1440000
Relative Standard Error:	6.0
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.293962	5.0	136344.0	2.351699	Y
2	IC 410-356566/4	0.25	0.610803	5.0	166543.0	2.443213	Y
3	IC 410-356566/9	1.25	3.224435	5.0	129173.0	2.579548	Y
4	IC 410-356566/8	3.75	9.045436	5.0	194911.0	2.412116	Y
5	IC 410-356566/7	7.5	21.167455	5.0	178191.0	2.822327	Y
6	ICIS 410-356566/2	12.5	33.386584	5.0	192517.0	2.670927	Y
7	IC 410-356566/6	20.0	50.622766	5.0	147712.0	2.531138	Y
8	IC 410-356566/5	30.0	77.650104	5.0	202860.0	2.588337	Y



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Calibration / Hexachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

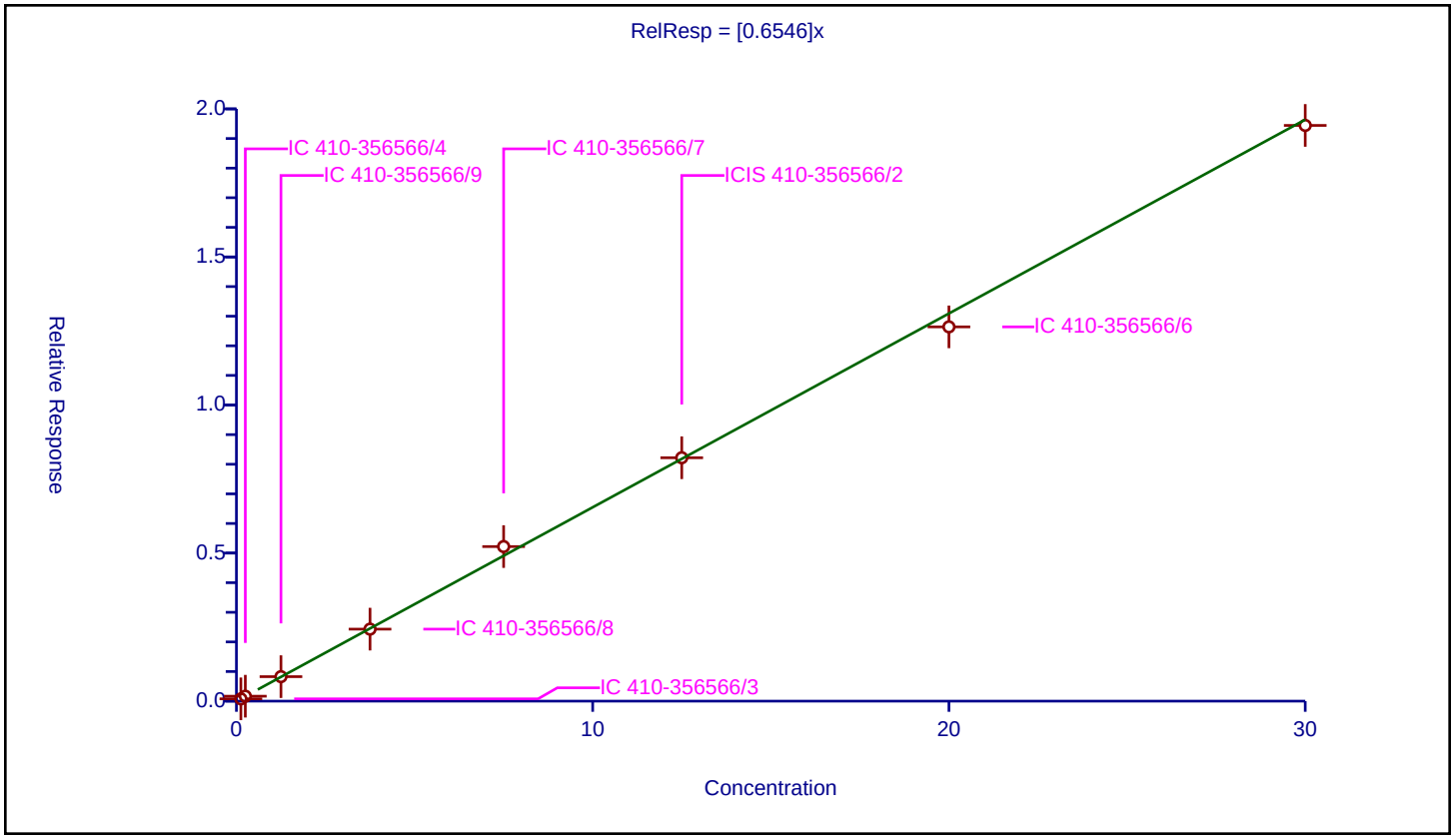
Curve Coefficients

Intercept:	0
Slope:	0.6546

Error Coefficients

Standard Error:	360000
Relative Standard Error:	3.4
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.078001	5.0	136344.0	0.62401	Y
2	IC 410-356566/4	0.25	0.167194	5.0	166543.0	0.668776	Y
3	IC 410-356566/9	1.25	0.827108	5.0	129173.0	0.661686	Y
4	IC 410-356566/8	3.75	2.431648	5.0	194911.0	0.64844	Y
5	IC 410-356566/7	7.5	5.219933	5.0	178191.0	0.695991	Y
6	ICIS 410-356566/2	12.5	8.219586	5.0	192517.0	0.657567	Y
7	IC 410-356566/6	20.0	12.63919	5.0	147712.0	0.631959	Y
8	IC 410-356566/5	30.0	19.441117	5.0	202860.0	0.648037	Y



Calibration / Nitrobenzene-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

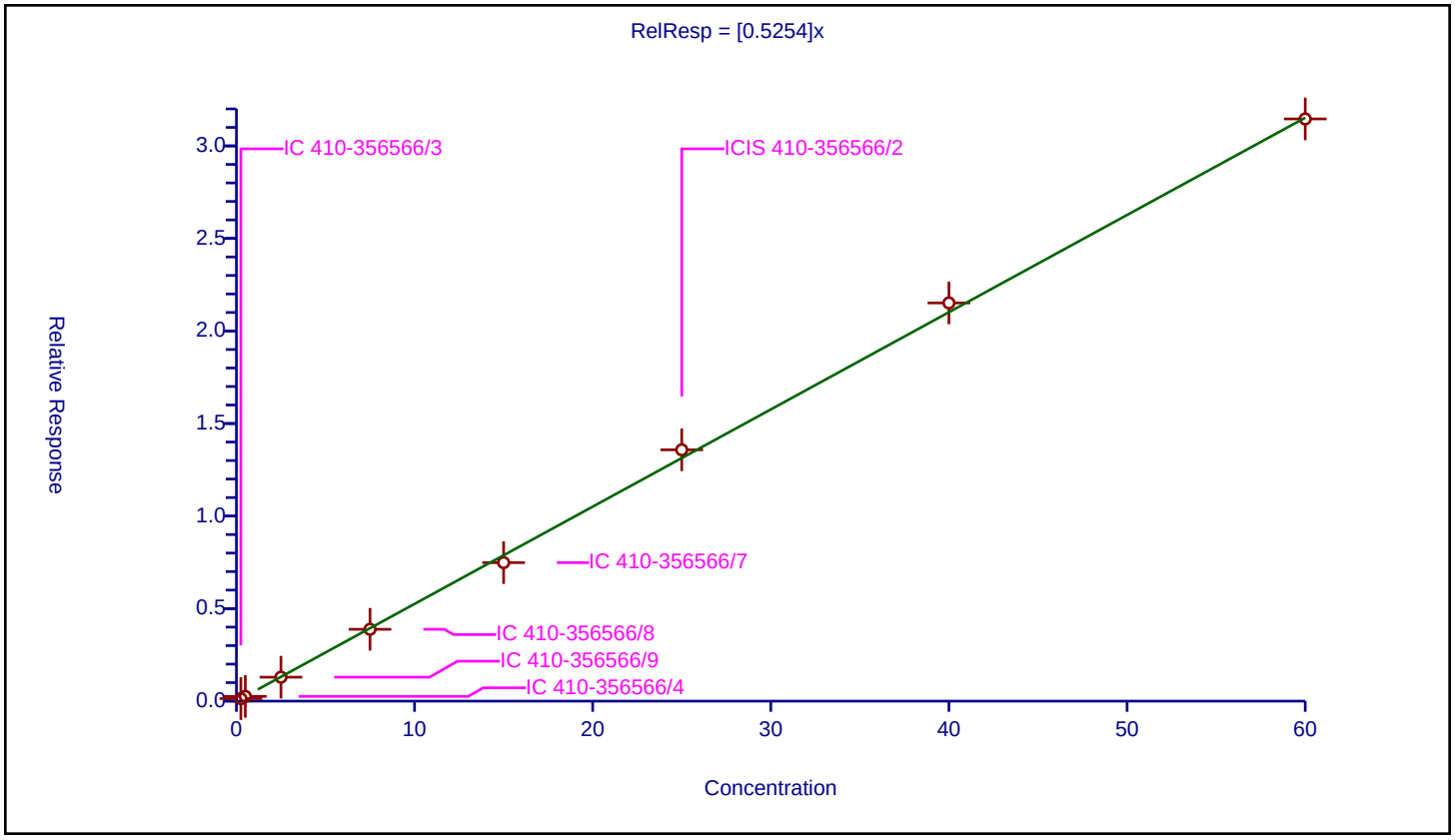
Curve Coefficients

Intercept:	0
Slope:	0.5254

Error Coefficients

Standard Error:	2140000
Relative Standard Error:	3.2
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.25	0.137361	5.0	495556.0	0.549443	Y
2	IC 410-356566/4	0.5	0.257038	5.0	615065.0	0.514076	Y
3	IC 410-356566/9	2.5	1.294129	5.0	494483.0	0.517652	Y
4	IC 410-356566/8	7.5	3.881313	5.0	698743.0	0.517508	Y
5	IC 410-356566/7	15.0	7.483525	5.0	758269.0	0.498902	Y
6	ICIS 410-356566/2	25.0	13.580399	5.0	711517.0	0.543216	Y
7	IC 410-356566/6	40.0	21.515885	5.0	510596.0	0.537897	Y
8	IC 410-356566/5	60.0	31.458064	5.0	741754.0	0.524301	Y



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Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

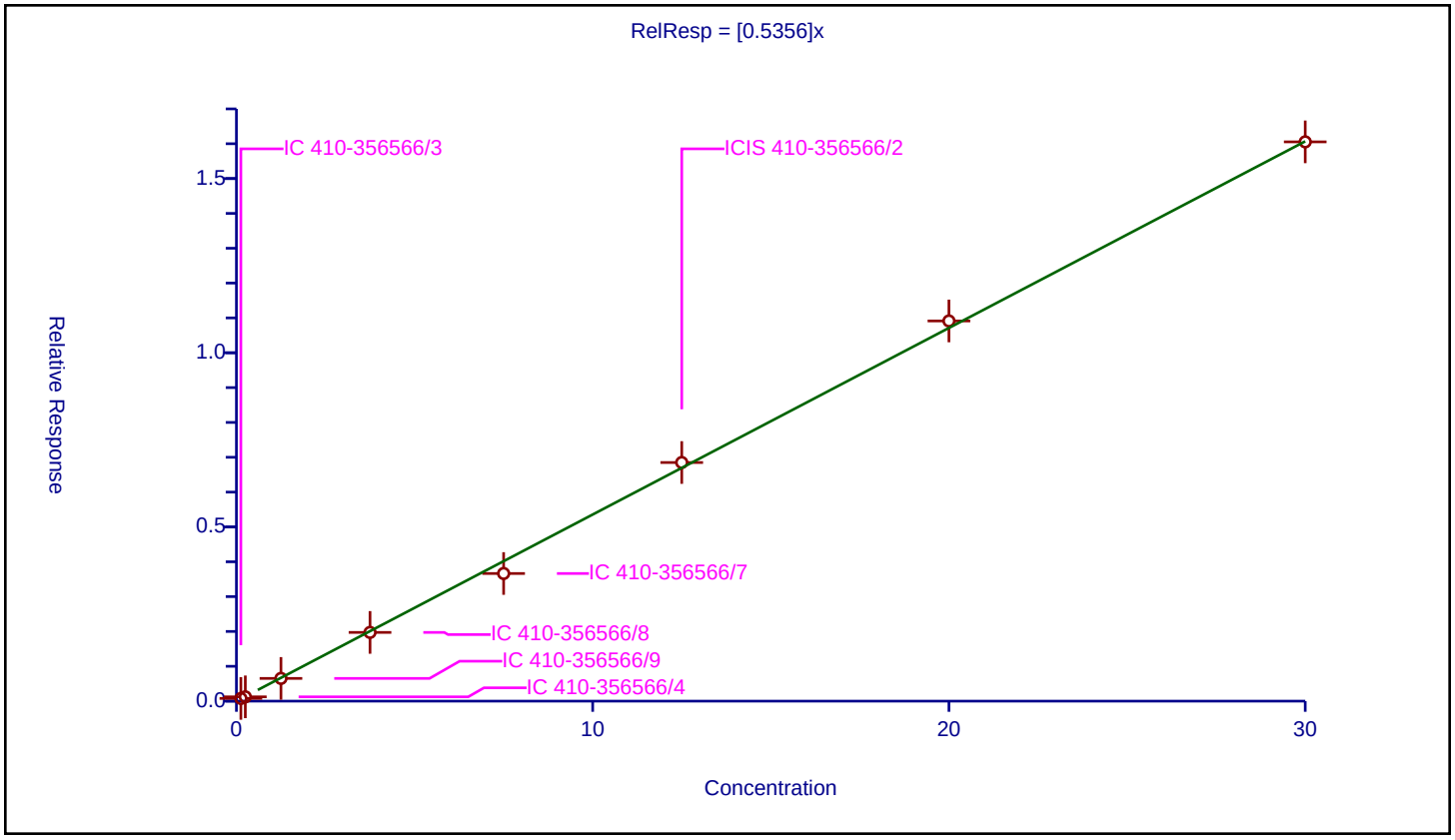
Curve Coefficients

Intercept:	0
Slope:	0.5356

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	8.0
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.078306	5.0	495556.0	0.626448	Y
2	IC 410-356566/4	0.25	0.123288	5.0	615065.0	0.493151	Y
3	IC 410-356566/9	1.25	0.652388	5.0	494483.0	0.521911	Y
4	IC 410-356566/8	3.75	1.973093	5.0	698743.0	0.526158	Y
5	IC 410-356566/7	7.5	3.664241	5.0	758269.0	0.488565	Y
6	ICIS 410-356566/2	12.5	6.849576	5.0	711517.0	0.547966	Y
7	IC 410-356566/6	20.0	10.91307	5.0	510596.0	0.545654	Y
8	IC 410-356566/5	30.0	16.053644	5.0	741754.0	0.535121	Y



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Calibration / N-Nitrosopiperidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

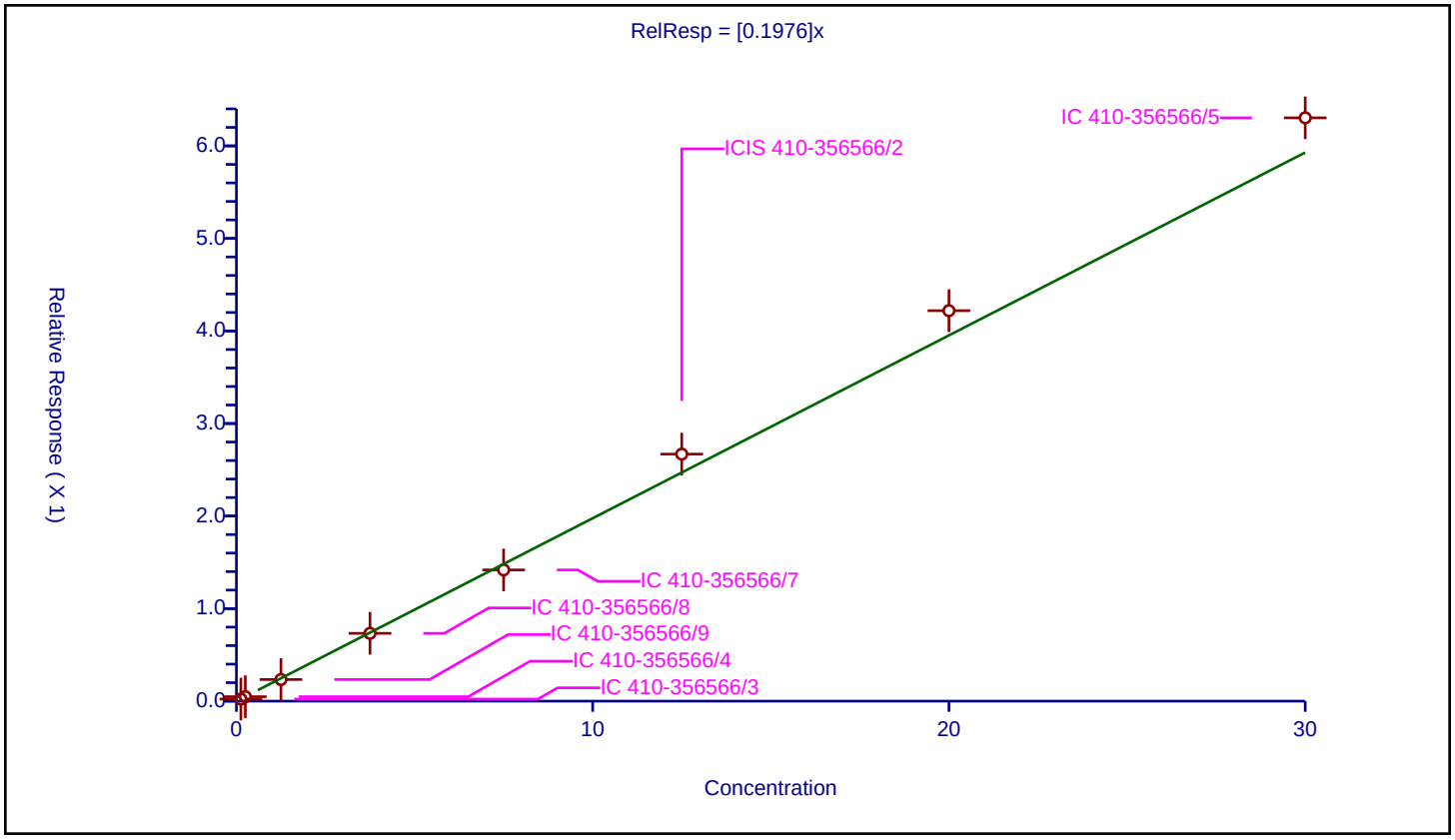
Curve Coefficients

Intercept:	0
Slope:	0.1976

Error Coefficients

Standard Error:	425000
Relative Standard Error:	6.2
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.022722	5.0	495556.0	0.181776	Y
2	IC 410-356566/4	0.25	0.04832	5.0	615065.0	0.19328	Y
3	IC 410-356566/9	1.25	0.233517	5.0	494483.0	0.186813	Y
4	IC 410-356566/8	3.75	0.732644	5.0	698743.0	0.195372	Y
5	IC 410-356566/7	7.5	1.418059	5.0	758269.0	0.189075	Y
6	ICIS 410-356566/2	12.5	2.669479	5.0	711517.0	0.213558	Y
7	IC 410-356566/6	20.0	4.219412	5.0	510596.0	0.210971	Y
8	IC 410-356566/5	30.0	6.30333	5.0	741754.0	0.210111	Y



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Calibration / Isophorone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

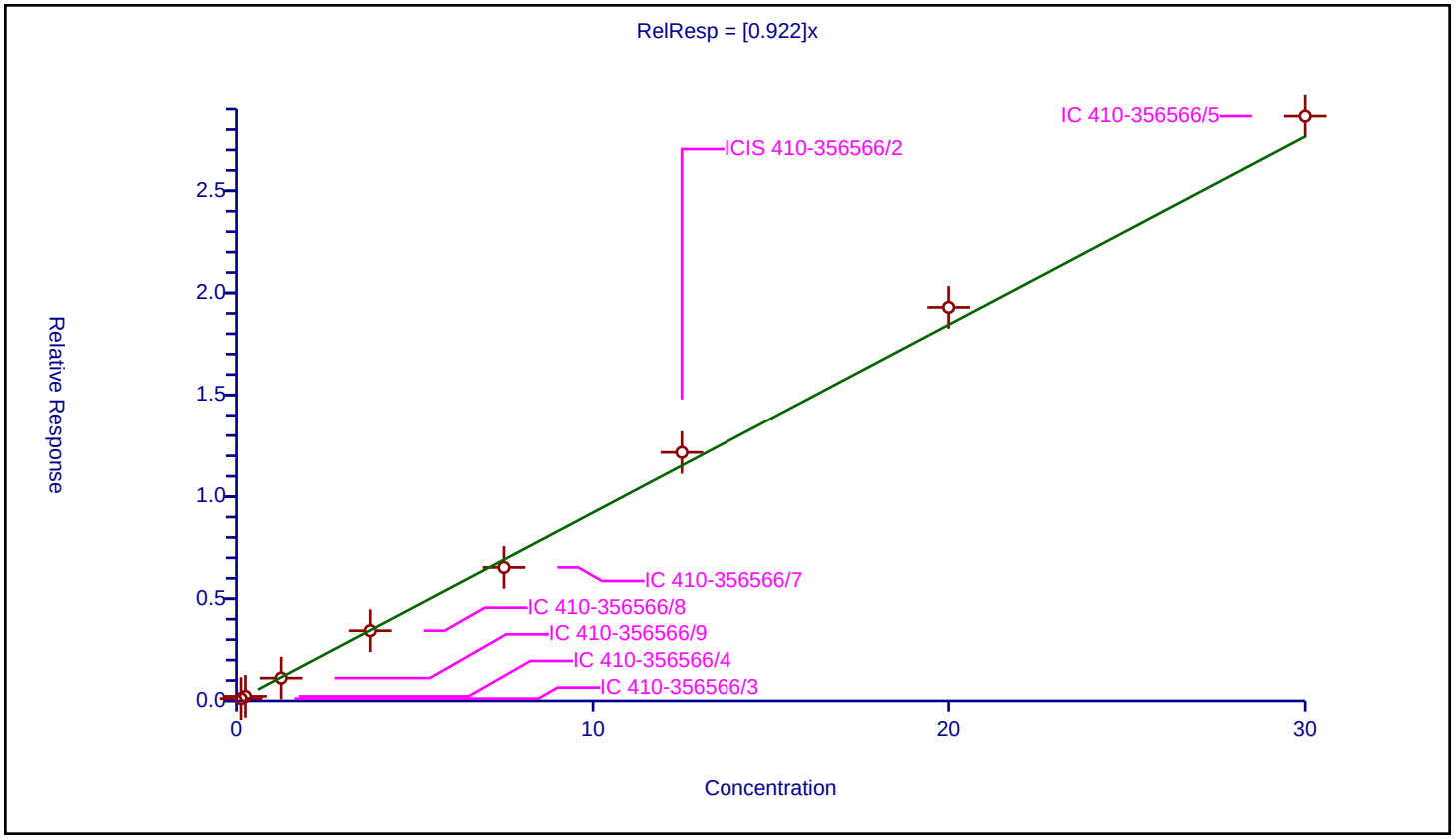
Curve Coefficients

Intercept:	0
Slope:	0.922

Error Coefficients

Standard Error:	1930000
Relative Standard Error:	4.1
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.114054	5.0	495556.0	0.91243	Y
2	IC 410-356566/4	0.25	0.222131	5.0	615065.0	0.888524	Y
3	IC 410-356566/9	1.25	1.117217	5.0	494483.0	0.893774	Y
4	IC 410-356566/8	3.75	3.43655	5.0	698743.0	0.916413	Y
5	IC 410-356566/7	7.5	6.53377	5.0	758269.0	0.871169	Y
6	ICIS 410-356566/2	12.5	12.171157	5.0	711517.0	0.973693	Y
7	IC 410-356566/6	20.0	19.296313	5.0	510596.0	0.964816	Y
8	IC 410-356566/5	30.0	28.655241	5.0	741754.0	0.955175	Y



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Calibration / 2-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

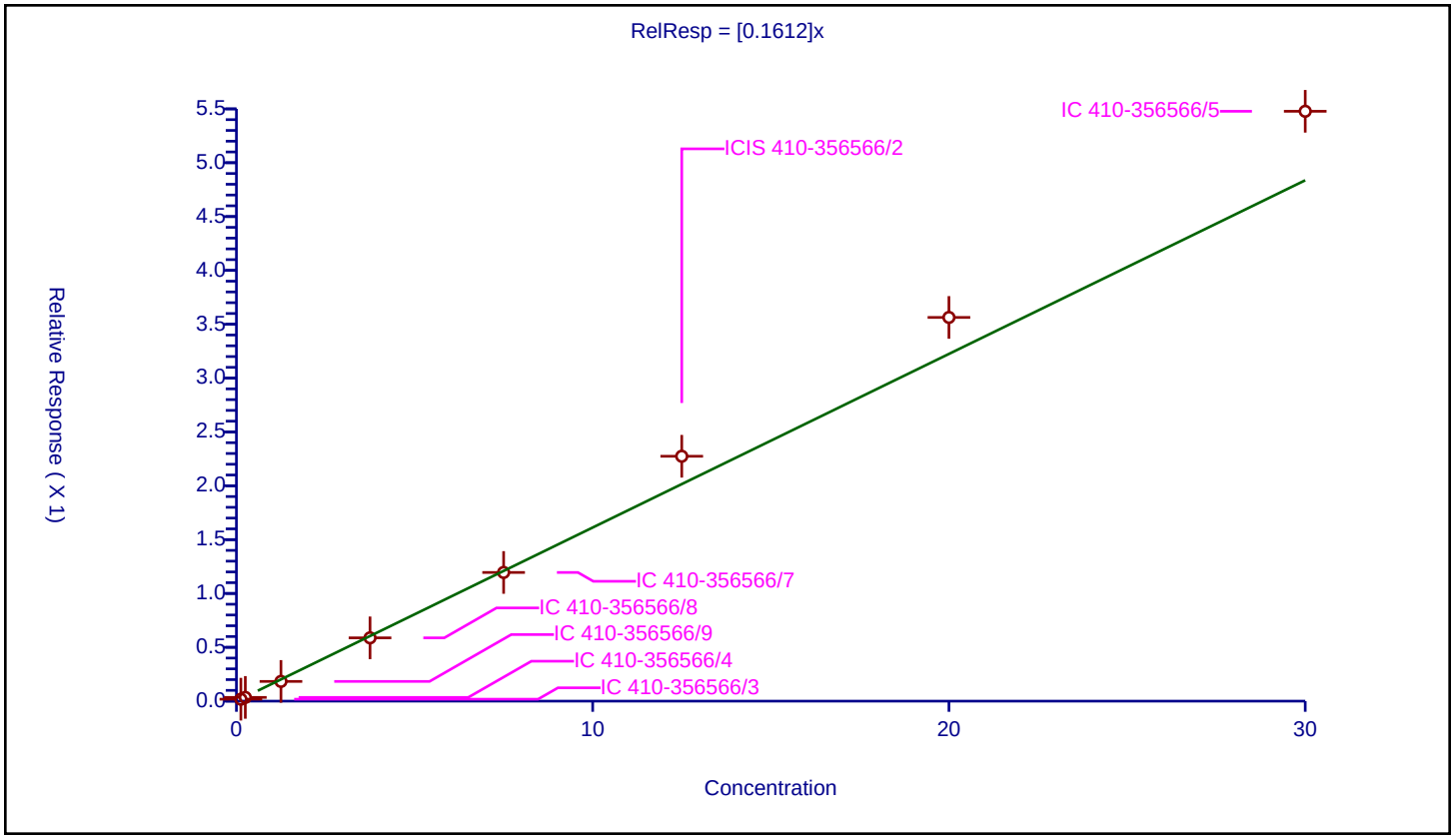
Curve Coefficients

Intercept:	0
Slope:	0.1612

Error Coefficients

Standard Error:	366000
Relative Standard Error:	10.9
Correlation Coefficient:	0.960
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.018192	5.0	495556.0	0.145534	Y
2	IC 410-356566/4	0.25	0.034752	5.0	615065.0	0.13901	Y
3	IC 410-356566/9	1.25	0.18311	5.0	494483.0	0.146488	Y
4	IC 410-356566/8	3.75	0.587806	5.0	698743.0	0.156748	Y
5	IC 410-356566/7	7.5	1.195071	5.0	758269.0	0.159343	Y
6	ICIS 410-356566/2	12.5	2.274225	5.0	711517.0	0.181938	Y
7	IC 410-356566/6	20.0	3.563257	5.0	510596.0	0.178163	Y
8	IC 410-356566/5	30.0	5.477712	5.0	741754.0	0.18259	Y



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Calibration / 2,4-Dimethylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

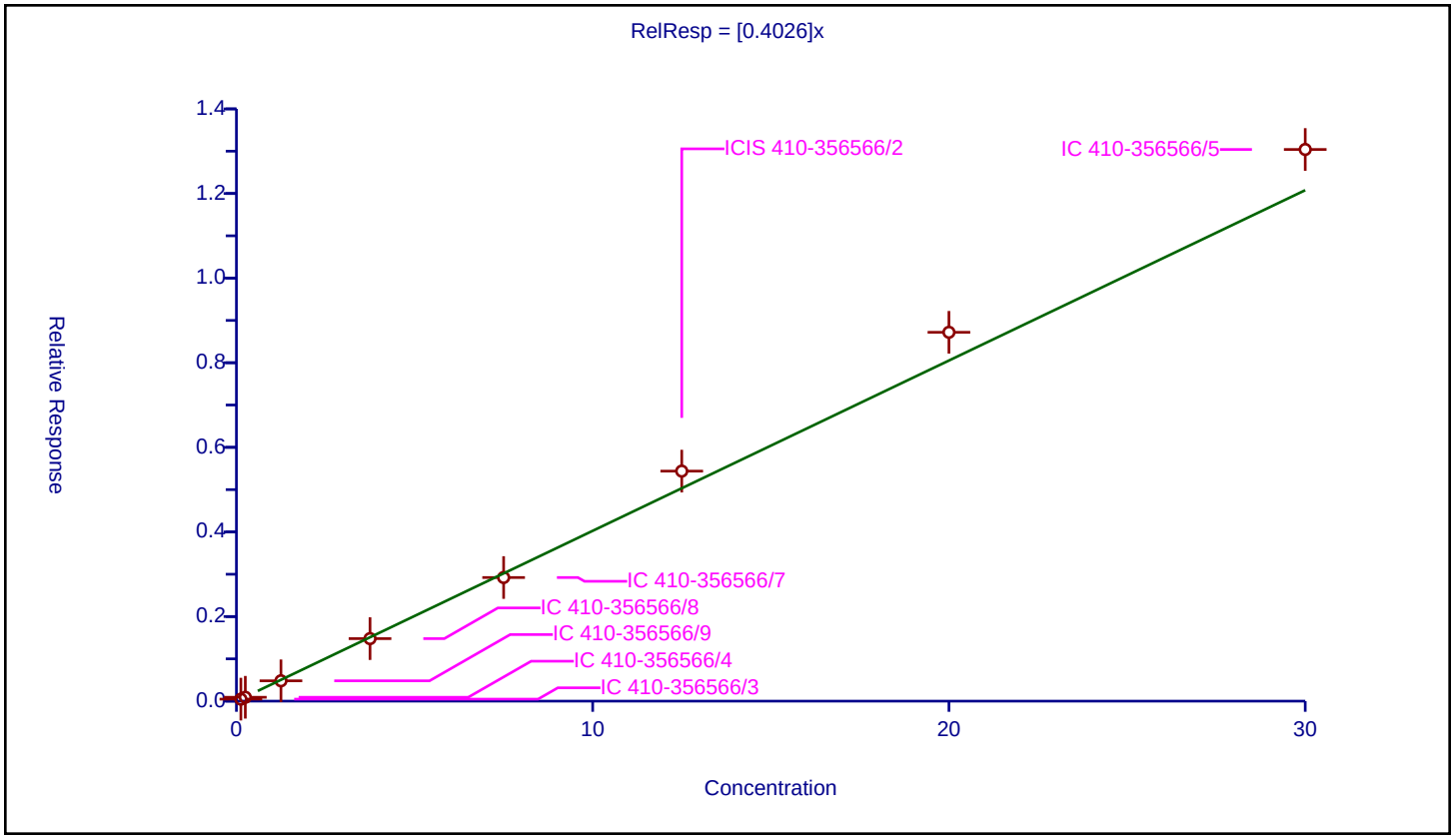
Curve Coefficients

Intercept:	0
Slope:	0.4026

Error Coefficients

Standard Error:	876000
Relative Standard Error:	7.0
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.047512	5.0	495556.0	0.380098	Y
2	IC 410-356566/4	0.25	0.091592	5.0	615065.0	0.366368	Y
3	IC 410-356566/9	1.25	0.480987	5.0	494483.0	0.38479	Y
4	IC 410-356566/8	3.75	1.47799	5.0	698743.0	0.394131	Y
5	IC 410-356566/7	7.5	2.922498	5.0	758269.0	0.389666	Y
6	ICIS 410-356566/2	12.5	5.437713	5.0	711517.0	0.435017	Y
7	IC 410-356566/6	20.0	8.719222	5.0	510596.0	0.435961	Y
8	IC 410-356566/5	30.0	13.040651	5.0	741754.0	0.434688	Y



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Calibration / o,o',o''-Triethylphosphorothioate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

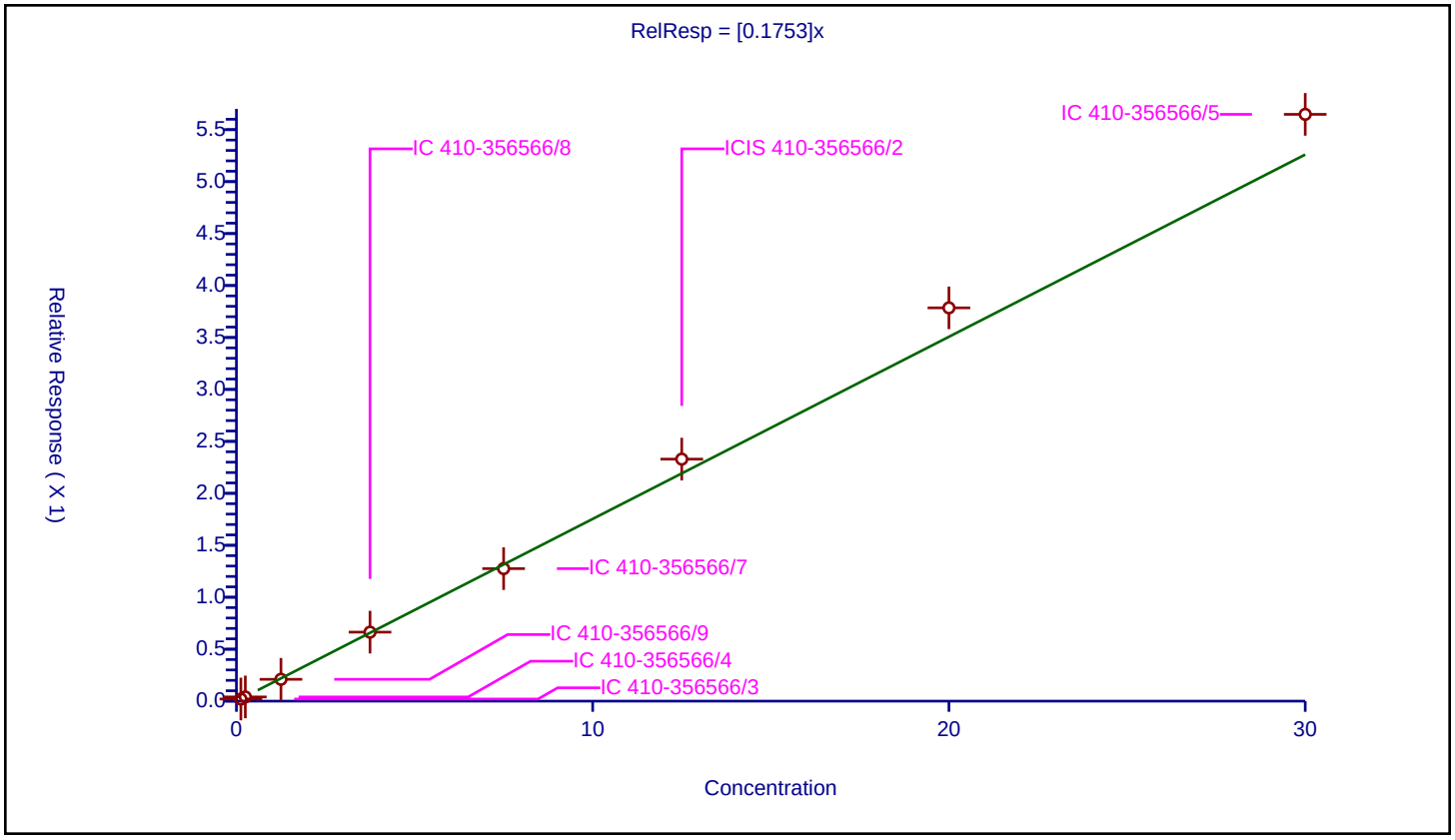
Curve Coefficients

Intercept:	0
Slope:	0.1753

Error Coefficients

Standard Error:	379000
Relative Standard Error:	6.6
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.02027	5.0	495556.0	0.162161	Y
2	IC 410-356566/4	0.25	0.04037	5.0	615065.0	0.161479	Y
3	IC 410-356566/9	1.25	0.210169	5.0	494483.0	0.168135	Y
4	IC 410-356566/8	3.75	0.663978	5.0	698743.0	0.177061	Y
5	IC 410-356566/7	7.5	1.275339	5.0	758269.0	0.170045	Y
6	ICIS 410-356566/2	12.5	2.329164	5.0	711517.0	0.186333	Y
7	IC 410-356566/6	20.0	3.785077	5.0	510596.0	0.189254	Y
8	IC 410-356566/5	30.0	5.647546	5.0	741754.0	0.188252	Y



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Calibration / Bis(2-chloroethoxy)methane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

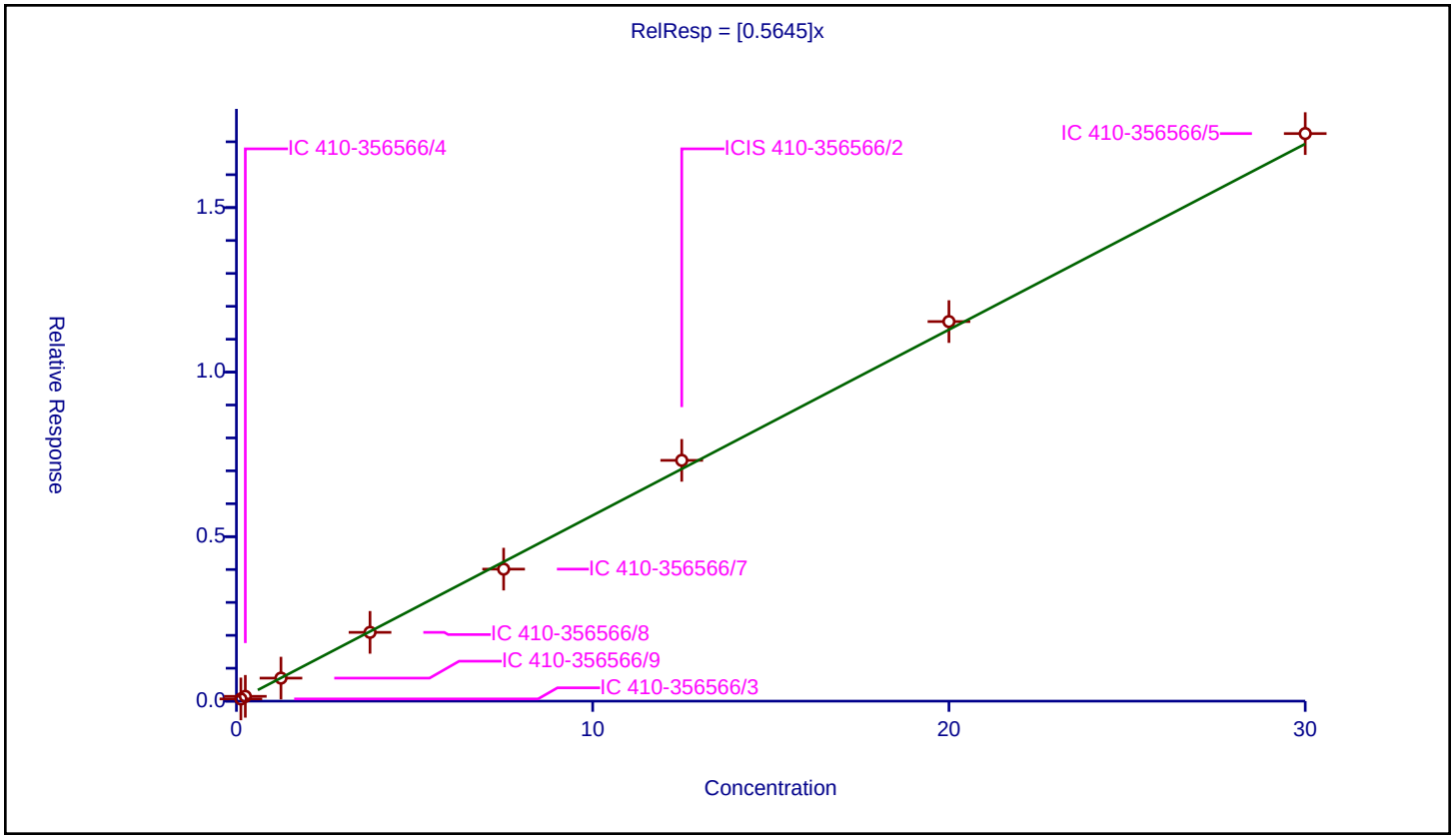
Curve Coefficients

Intercept:	0
Slope:	0.5645

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	3.4
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.067631	5.0	495556.0	0.541049	Y
2	IC 410-356566/4	0.25	0.146375	5.0	615065.0	0.585499	Y
3	IC 410-356566/9	1.25	0.700044	5.0	494483.0	0.560035	Y
4	IC 410-356566/8	3.75	2.090754	5.0	698743.0	0.557535	Y
5	IC 410-356566/7	7.5	4.012554	5.0	758269.0	0.535007	Y
6	ICIS 410-356566/2	12.5	7.317766	5.0	711517.0	0.585421	Y
7	IC 410-356566/6	20.0	11.536254	5.0	510596.0	0.576813	Y
8	IC 410-356566/5	30.0	17.249991	5.0	741754.0	0.575	Y



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Calibration / 2,4-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

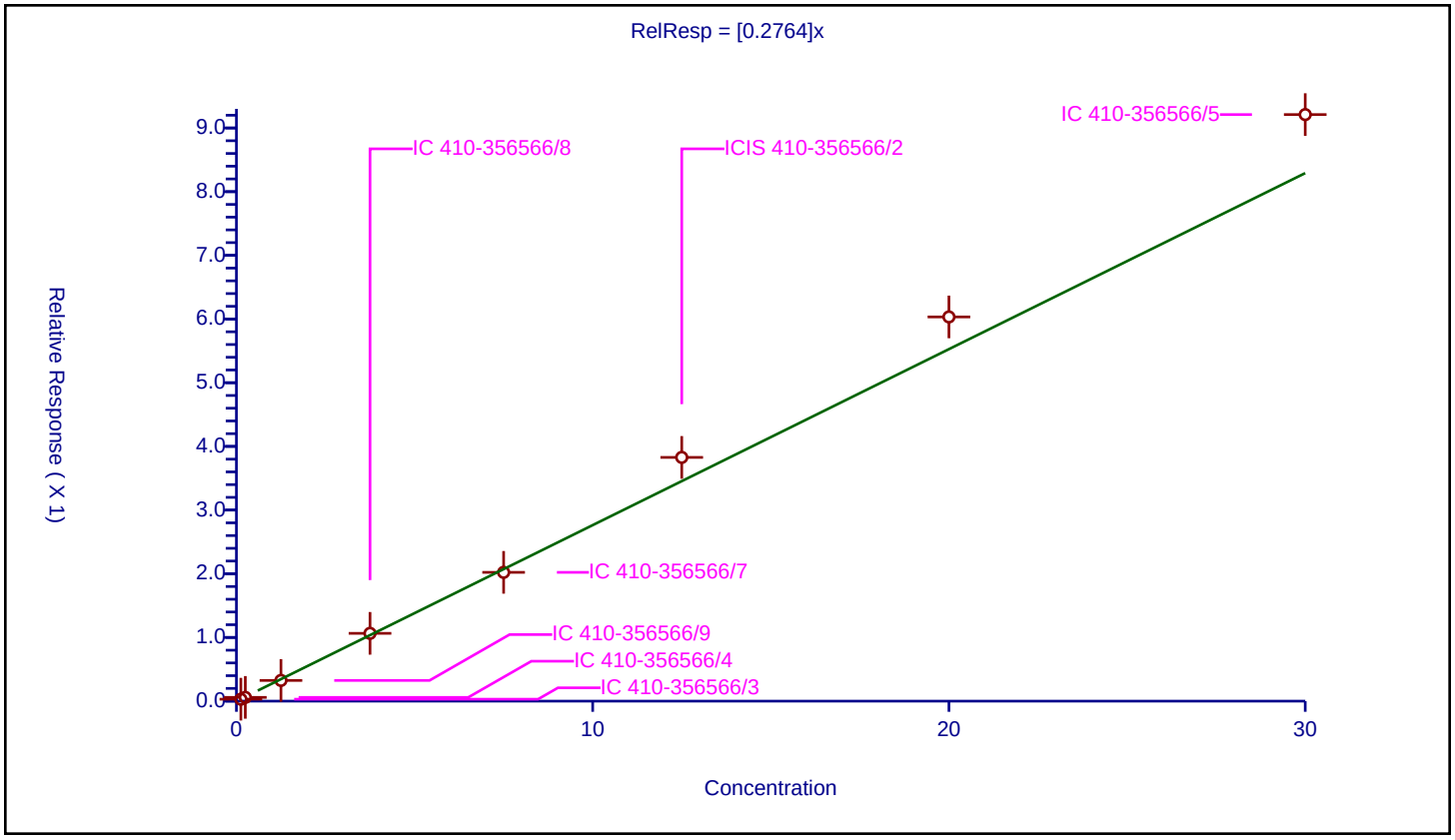
Curve Coefficients

Intercept:	0
Slope:	0.2764

Error Coefficients

Standard Error:	617000
Relative Standard Error:	10.0
Correlation Coefficient:	0.961
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.030723	5.0	495556.0	0.245785	Y
2	IC 410-356566/4	0.25	0.05914	5.0	615065.0	0.23656	Y
3	IC 410-356566/9	1.25	0.325309	5.0	494483.0	0.260248	Y
4	IC 410-356566/8	3.75	1.064483	5.0	698743.0	0.283862	Y
5	IC 410-356566/7	7.5	2.022178	5.0	758269.0	0.269624	Y
6	ICIS 410-356566/2	12.5	3.827477	5.0	711517.0	0.306198	Y
7	IC 410-356566/6	20.0	6.033234	5.0	510596.0	0.301662	Y
8	IC 410-356566/5	30.0	9.210527	5.0	741754.0	0.307018	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

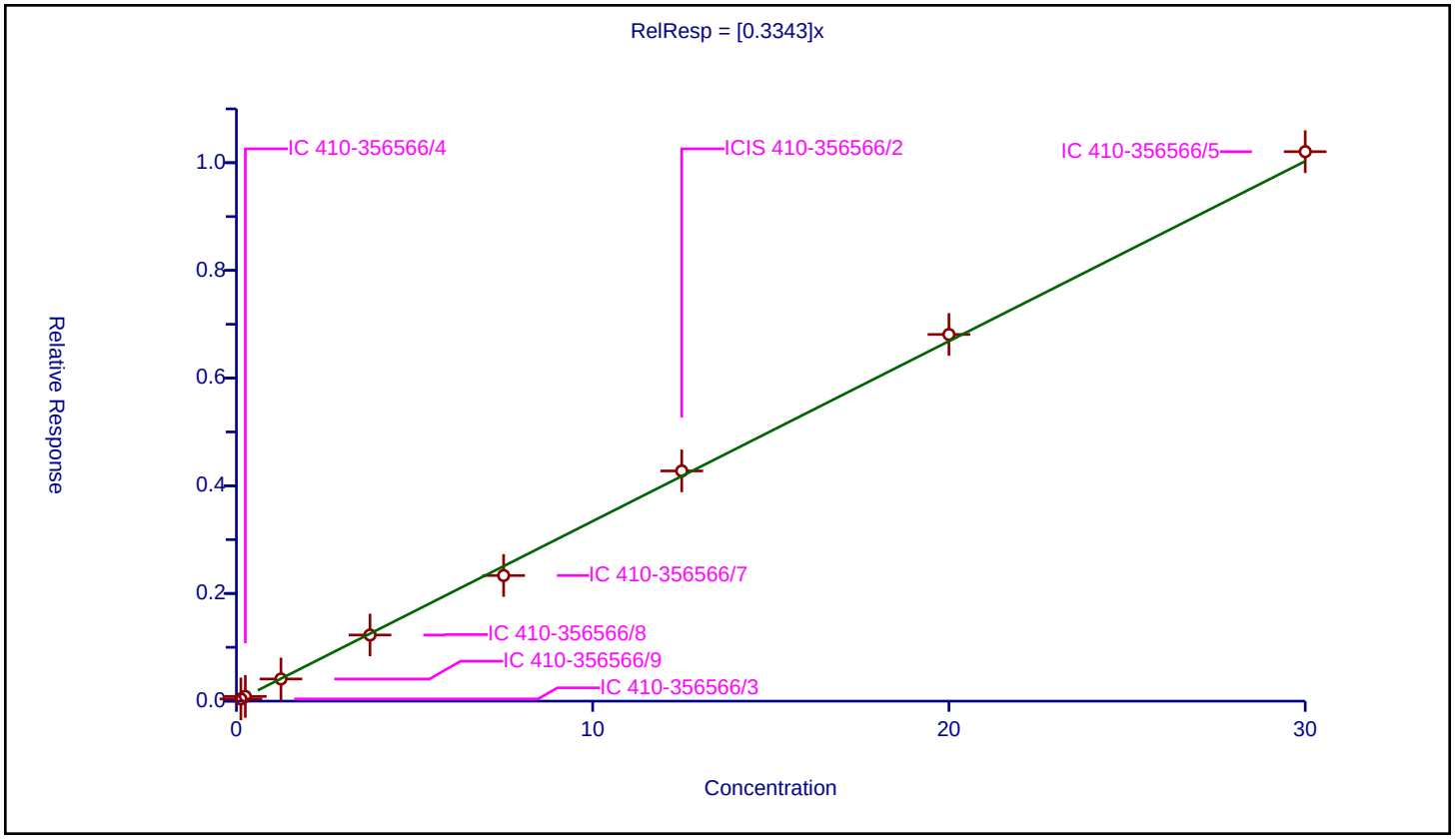
Curve Coefficients

Intercept:	0
Slope:	0.3343

Error Coefficients

Standard Error:	687000
Relative Standard Error:	3.6
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.041479	5.0	495556.0	0.331829	Y
2	IC 410-356566/4	0.25	0.08782	5.0	615065.0	0.35128	Y
3	IC 410-356566/9	1.25	0.411976	5.0	494483.0	0.329581	Y
4	IC 410-356566/8	3.75	1.228406	5.0	698743.0	0.327575	Y
5	IC 410-356566/7	7.5	2.333209	5.0	758269.0	0.311095	Y
6	ICIS 410-356566/2	12.5	4.275681	5.0	711517.0	0.342055	Y
7	IC 410-356566/6	20.0	6.810649	5.0	510596.0	0.340532	Y
8	IC 410-356566/5	30.0	10.205472	5.0	741754.0	0.340182	Y



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Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

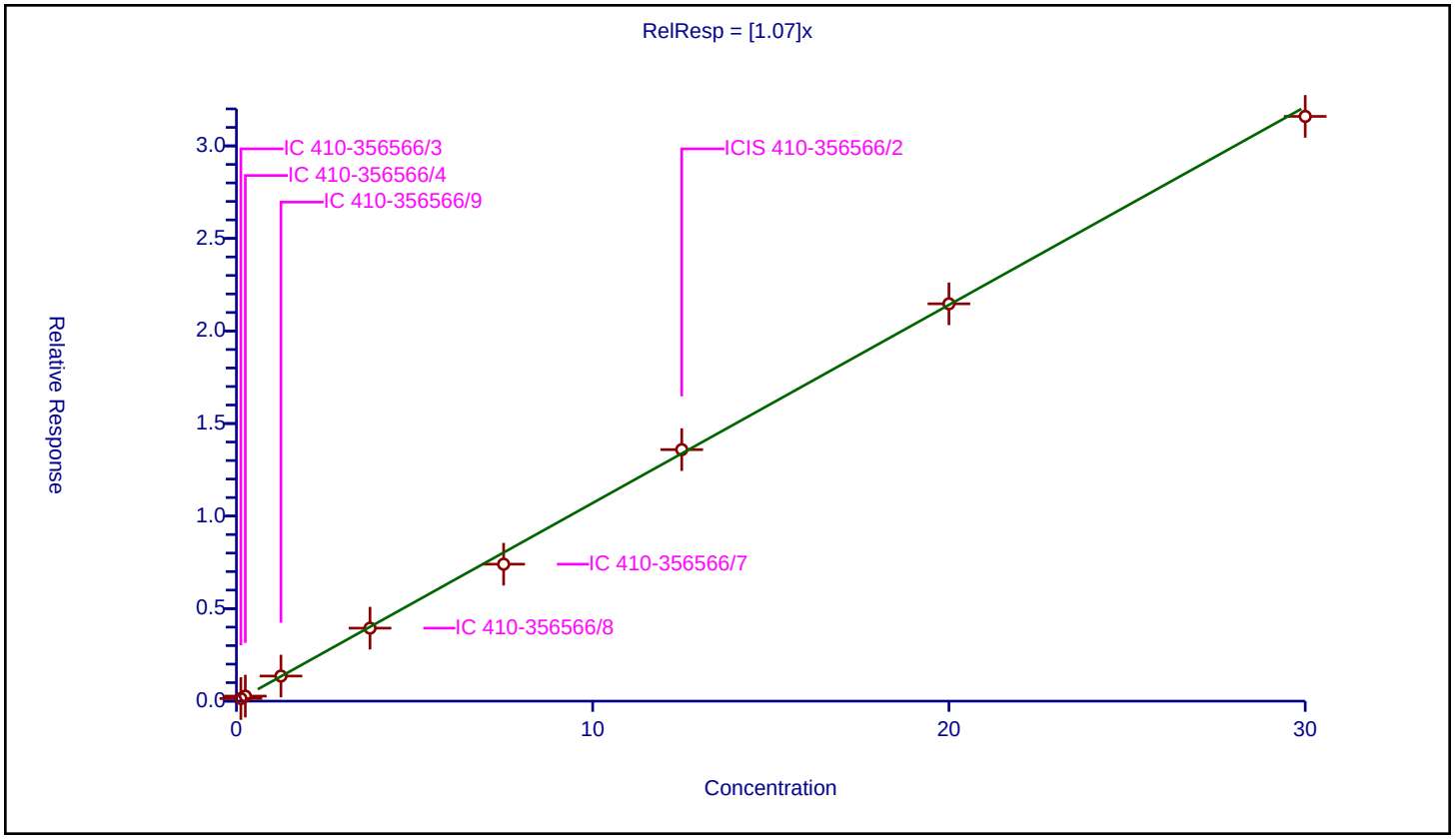
Curve Coefficients

Intercept:	0
Slope:	1.07

Error Coefficients

Standard Error:	2140000
Relative Standard Error:	4.0
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.14171	5.0	495556.0	1.133676	Y
2	IC 410-356566/4	0.25	0.273345	5.0	615065.0	1.09338	Y
3	IC 410-356566/9	1.25	1.35584	5.0	494483.0	1.084672	Y
4	IC 410-356566/8	3.75	3.943739	5.0	698743.0	1.051664	Y
5	IC 410-356566/7	7.5	7.400243	5.0	758269.0	0.986699	Y
6	ICIS 410-356566/2	12.5	13.590315	5.0	711517.0	1.087225	Y
7	IC 410-356566/6	20.0	21.46896	5.0	510596.0	1.073448	Y
8	IC 410-356566/5	30.0	31.593466	5.0	741754.0	1.053116	Y



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Calibration / Alpha-Terpineol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

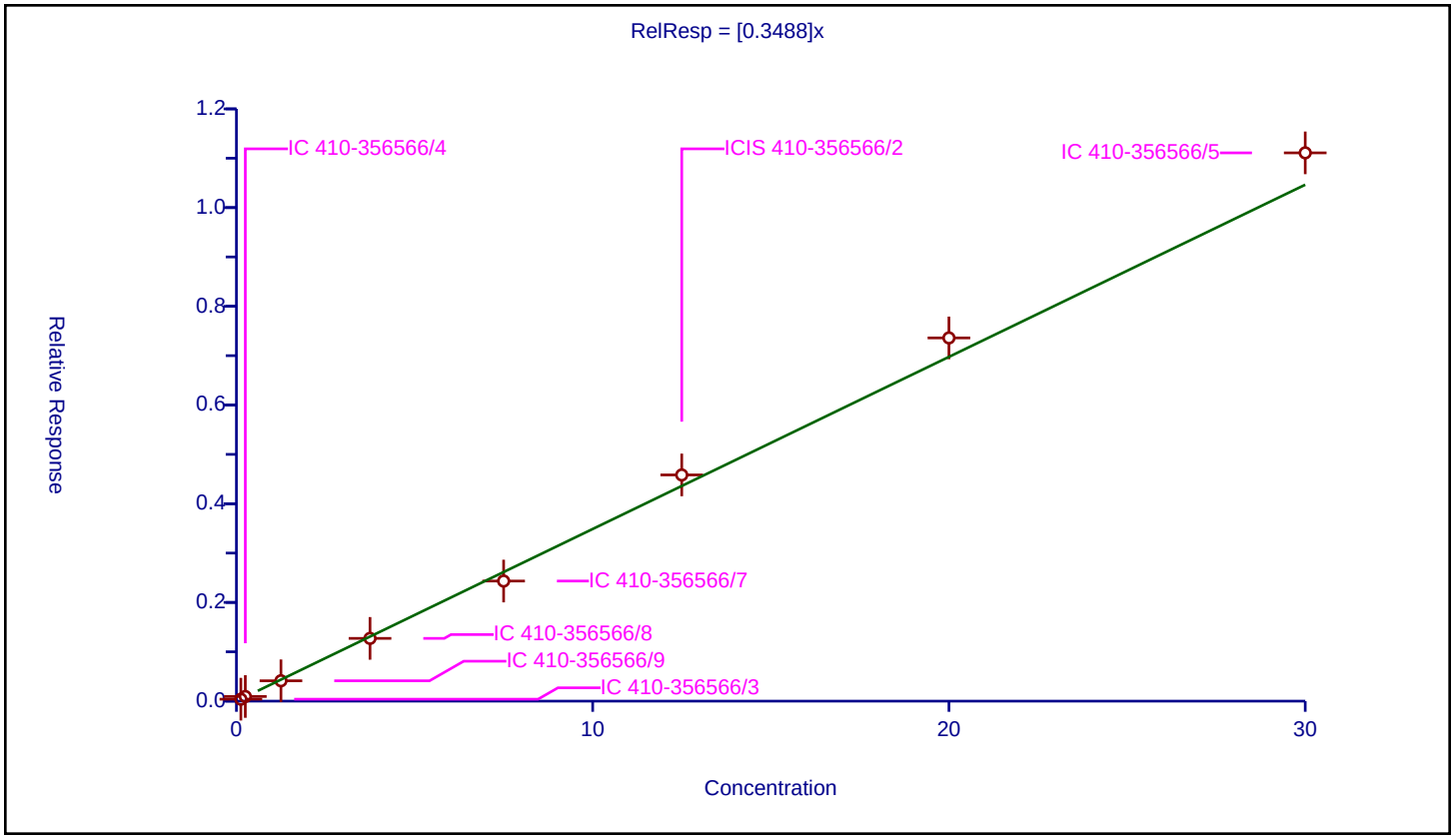
Curve Coefficients

Intercept:	0
Slope:	0.3488

Error Coefficients

Standard Error:	744000
Relative Standard Error:	6.9
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.039451	5.0	495556.0	0.315605	Y
2	IC 410-356566/4	0.25	0.094014	5.0	615065.0	0.376058	Y
3	IC 410-356566/9	1.25	0.412562	5.0	494483.0	0.33005	Y
4	IC 410-356566/8	3.75	1.271612	5.0	698743.0	0.339097	Y
5	IC 410-356566/7	7.5	2.433312	5.0	758269.0	0.324442	Y
6	ICIS 410-356566/2	12.5	4.583271	5.0	711517.0	0.366662	Y
7	IC 410-356566/6	20.0	7.359733	5.0	510596.0	0.367987	Y
8	IC 410-356566/5	30.0	11.109162	5.0	741754.0	0.370305	Y



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Calibration / 4-Chloroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

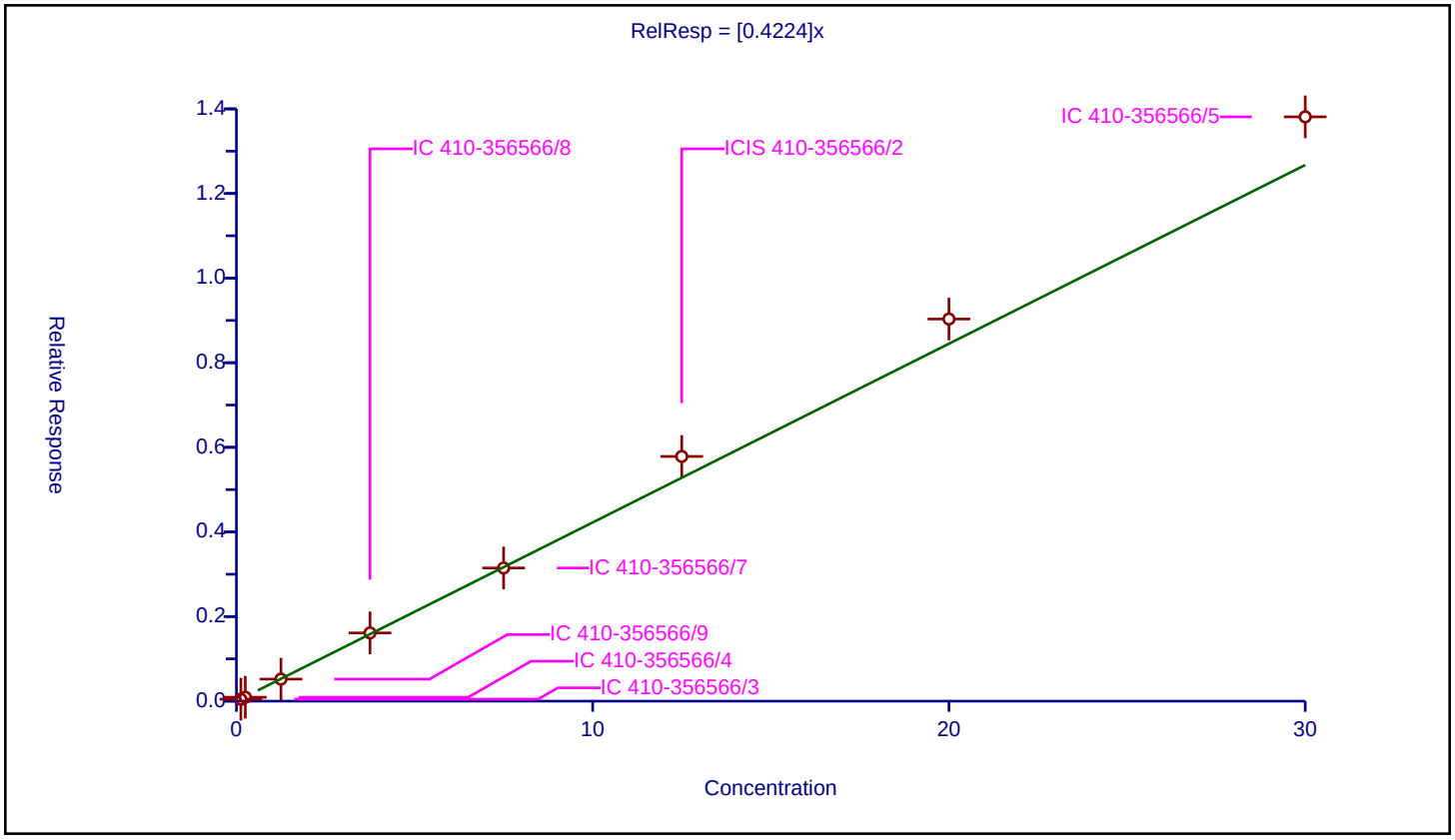
Curve Coefficients

Intercept:	0
Slope:	0.4224

Error Coefficients

Standard Error:	926000
Relative Standard Error:	8.8
Correlation Coefficient:	0.960
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.04608	5.0	495556.0	0.368636	Y
2	IC 410-356566/4	0.25	0.092462	5.0	615065.0	0.369847	Y
3	IC 410-356566/9	1.25	0.520675	5.0	494483.0	0.41654	Y
4	IC 410-356566/8	3.75	1.612775	5.0	698743.0	0.430073	Y
5	IC 410-356566/7	7.5	3.147702	5.0	758269.0	0.419694	Y
6	ICIS 410-356566/2	12.5	5.78424	5.0	711517.0	0.462739	Y
7	IC 410-356566/6	20.0	9.03266	5.0	510596.0	0.451633	Y
8	IC 410-356566/5	30.0	13.811978	5.0	741754.0	0.460399	Y



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Calibration / 2,6-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

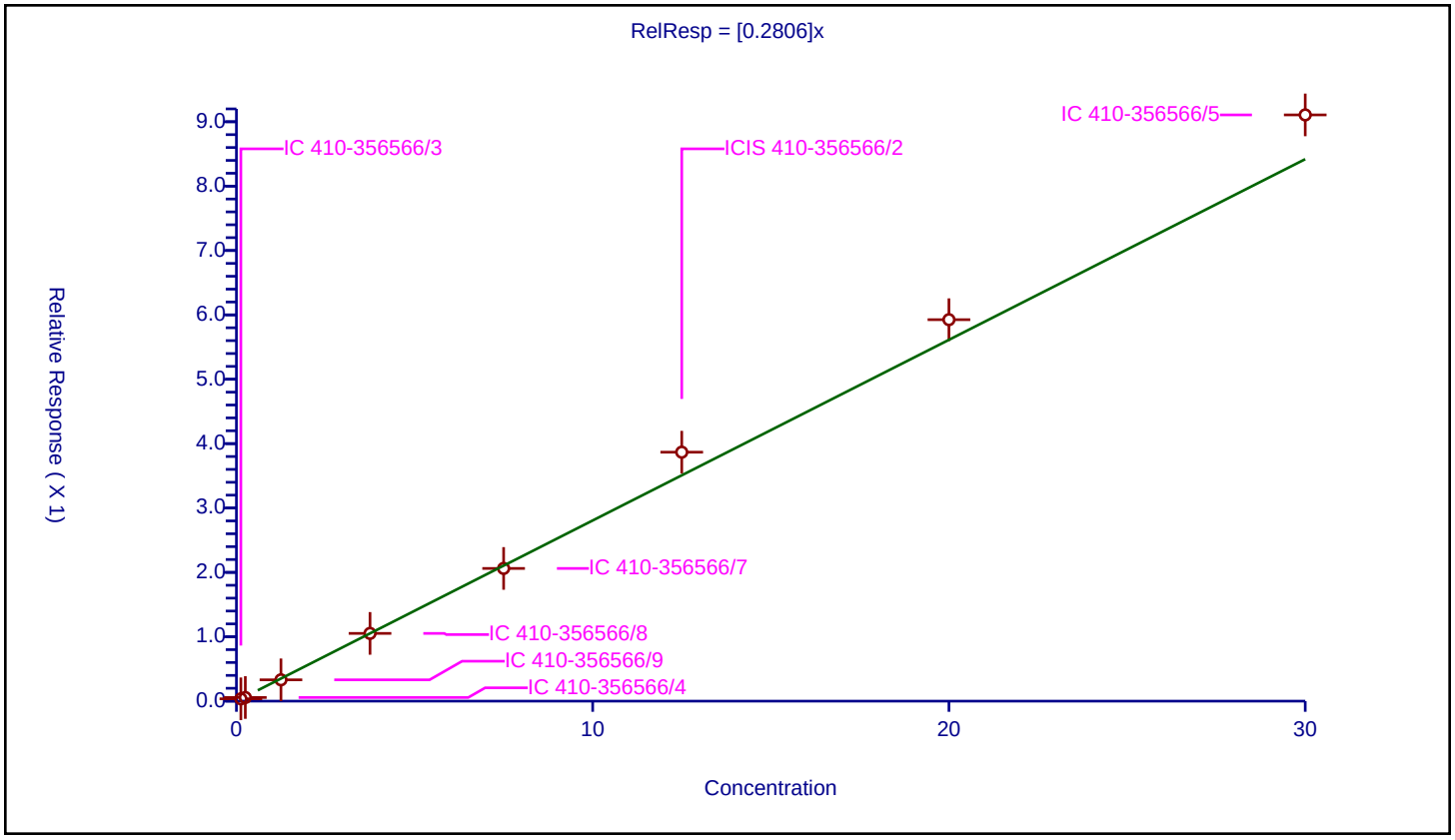
Curve Coefficients

Intercept:	0
Slope:	0.2806

Error Coefficients

Standard Error:	611000
Relative Standard Error:	9.5
Correlation Coefficient:	0.959
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.036212	5.0	495556.0	0.289695	Y
2	IC 410-356566/4	0.25	0.056466	5.0	615065.0	0.225862	Y
3	IC 410-356566/9	1.25	0.331073	5.0	494483.0	0.264858	Y
4	IC 410-356566/8	3.75	1.052161	5.0	698743.0	0.280576	Y
5	IC 410-356566/7	7.5	2.061465	5.0	758269.0	0.274862	Y
6	ICIS 410-356566/2	12.5	3.867343	5.0	711517.0	0.309387	Y
7	IC 410-356566/6	20.0	5.925654	5.0	510596.0	0.296283	Y
8	IC 410-356566/5	30.0	9.106301	5.0	741754.0	0.303543	Y



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Calibration / Hexachloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

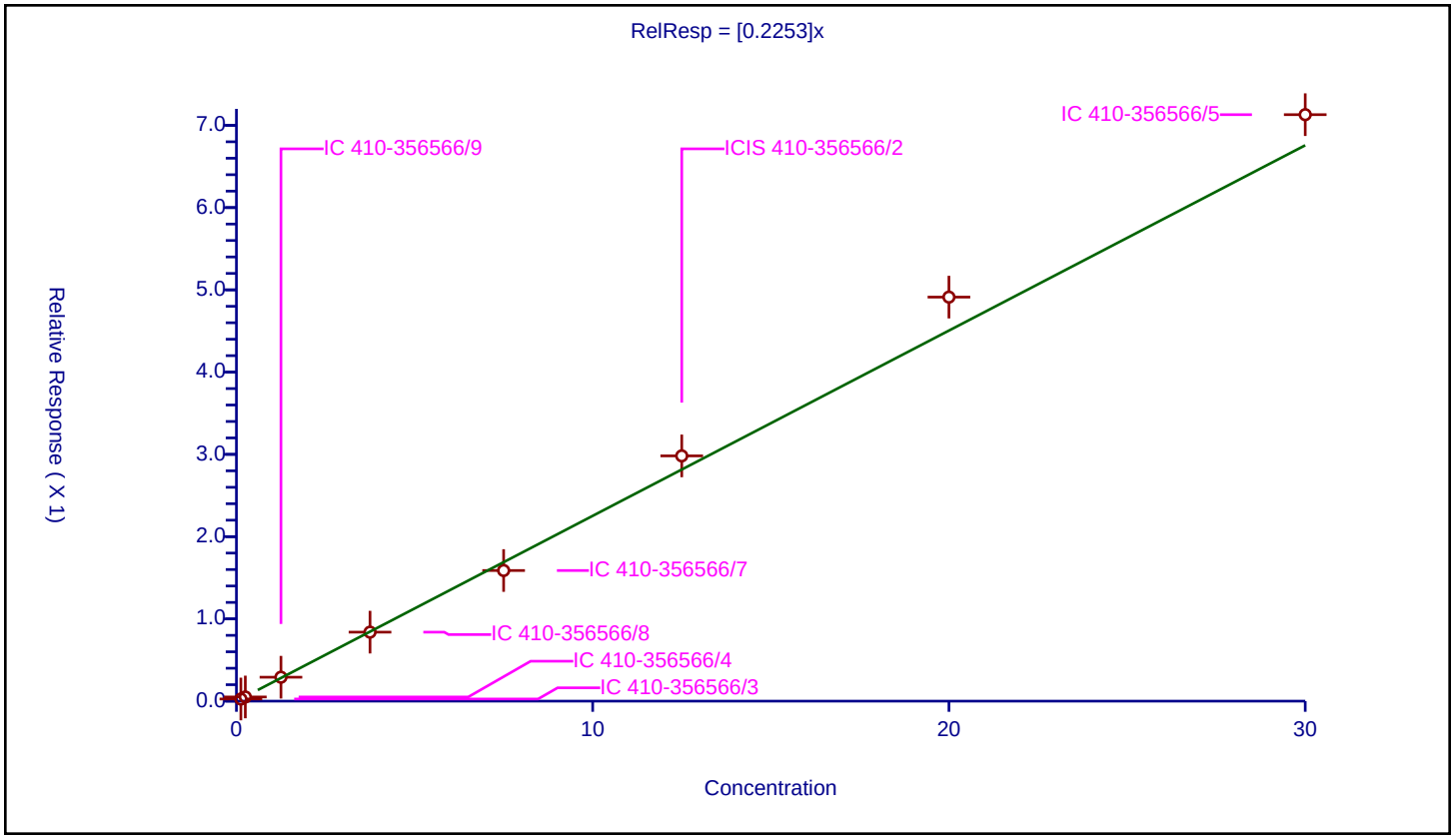
Curve Coefficients

Intercept:	0
Slope:	0.2253

Error Coefficients

Standard Error:	482000
Relative Standard Error:	7.0
Correlation Coefficient:	0.969
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.026112	5.0	495556.0	0.208897	Y
2	IC 410-356566/4	0.25	0.050767	5.0	615065.0	0.203068	Y
3	IC 410-356566/9	1.25	0.291021	5.0	494483.0	0.232817	Y
4	IC 410-356566/8	3.75	0.838935	5.0	698743.0	0.223716	Y
5	IC 410-356566/7	7.5	1.58788	5.0	758269.0	0.211717	Y
6	ICIS 410-356566/2	12.5	2.98177	5.0	711517.0	0.238542	Y
7	IC 410-356566/6	20.0	4.91178	5.0	510596.0	0.245589	Y
8	IC 410-356566/5	30.0	7.129763	5.0	741754.0	0.237659	Y



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Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

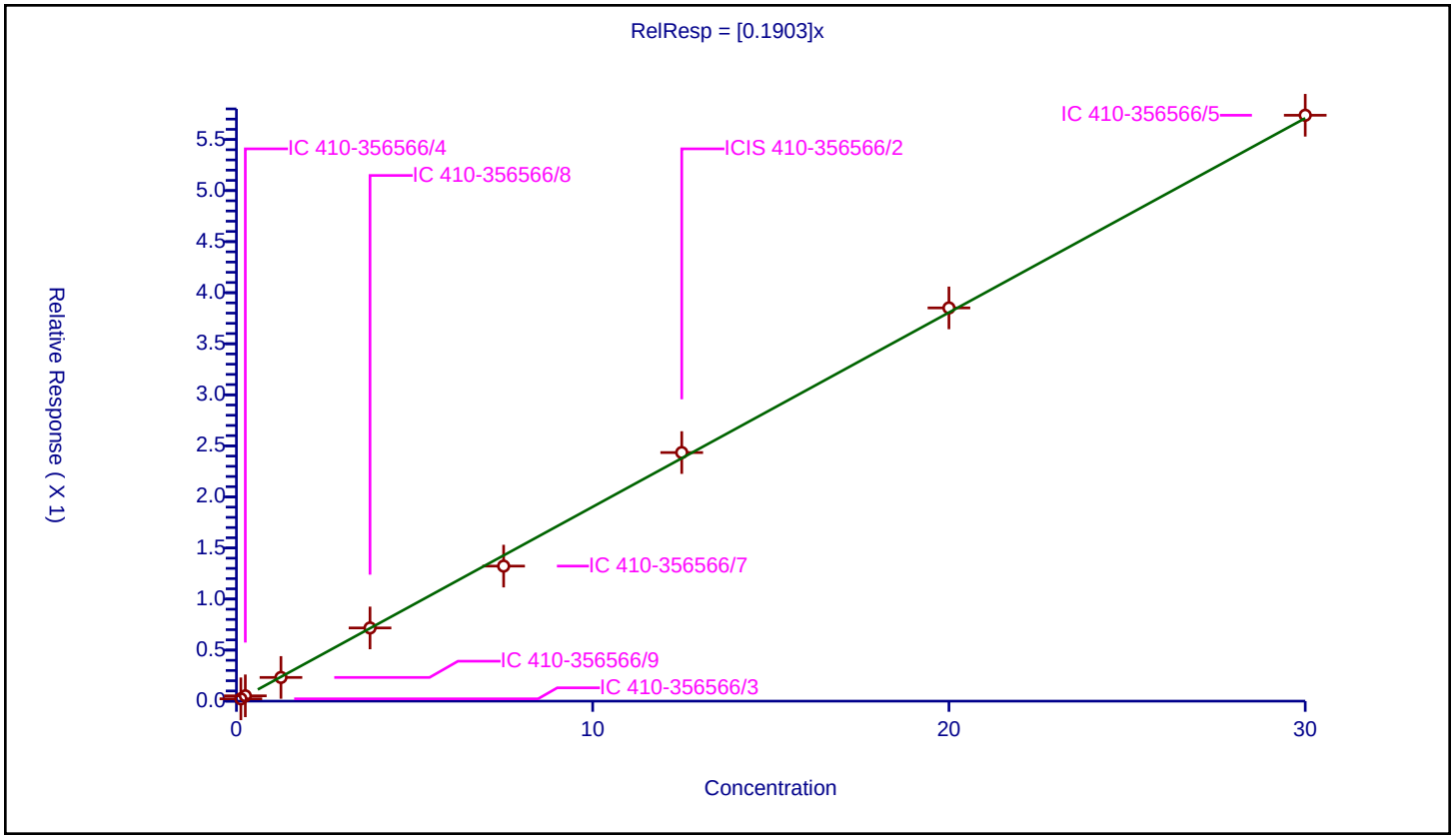
Curve Coefficients

Intercept:	0
Slope:	0.1903

Error Coefficients

Standard Error:	387000
Relative Standard Error:	4.9
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.022843	5.0	495556.0	0.182744	Y
2	IC 410-356566/4	0.25	0.051995	5.0	615065.0	0.207978	Y
3	IC 410-356566/9	1.25	0.23199	5.0	494483.0	0.185592	Y
4	IC 410-356566/8	3.75	0.716773	5.0	698743.0	0.191139	Y
5	IC 410-356566/7	7.5	1.322525	5.0	758269.0	0.176337	Y
6	ICIS 410-356566/2	12.5	2.434362	5.0	711517.0	0.194749	Y
7	IC 410-356566/6	20.0	3.851019	5.0	510596.0	0.192551	Y
8	IC 410-356566/5	30.0	5.737765	5.0	741754.0	0.191259	Y



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Calibration / Quinoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

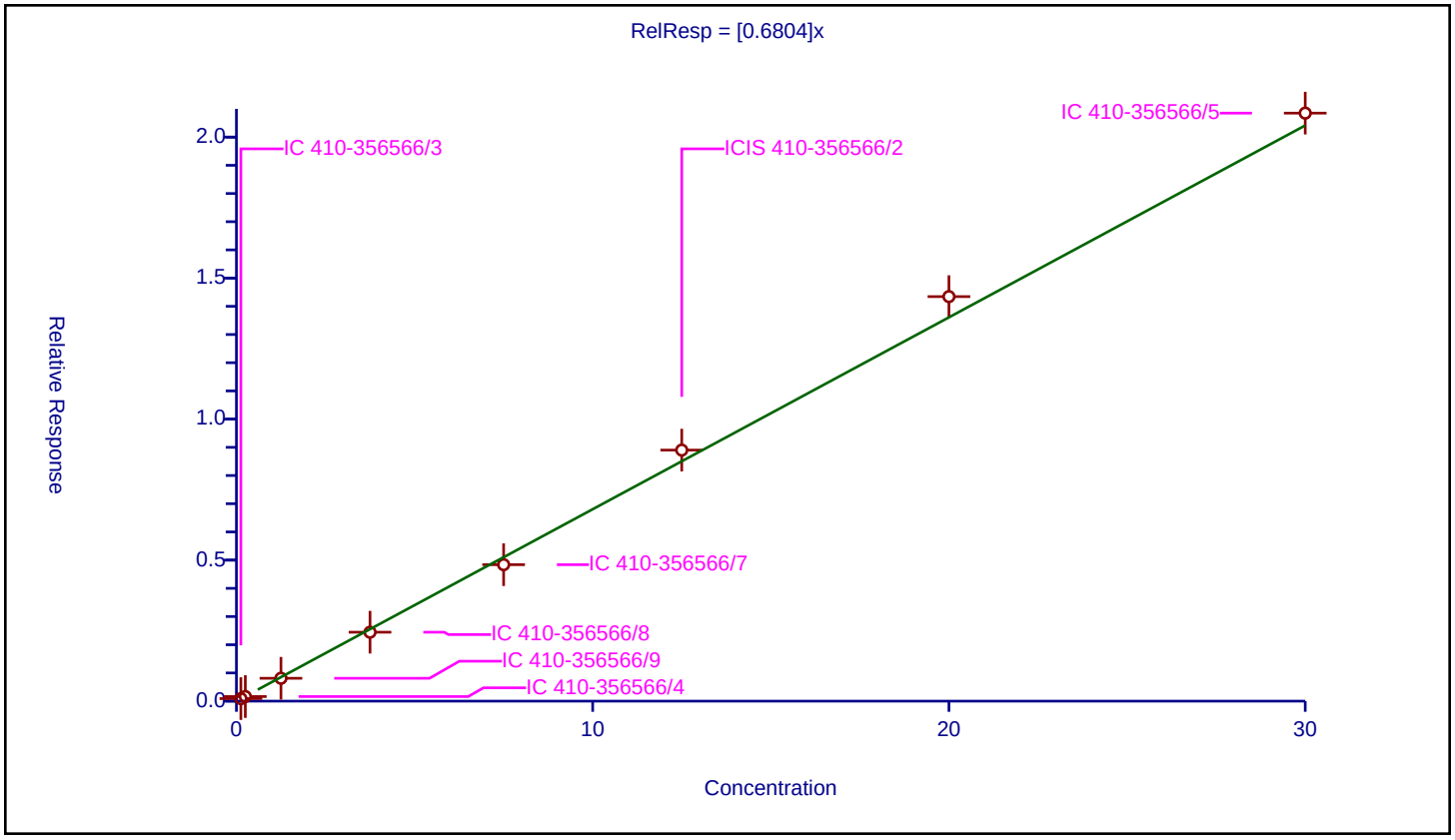
Curve Coefficients

Intercept:	0
Slope:	0.6804

Error Coefficients

Standard Error:	1410000
Relative Standard Error:	5.0
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.090242	5.0	495556.0	0.721937	Y
2	IC 410-356566/4	0.25	0.162869	5.0	615065.0	0.651476	Y
3	IC 410-356566/9	1.25	0.810988	5.0	494483.0	0.648791	Y
4	IC 410-356566/8	3.75	2.444103	5.0	698743.0	0.651761	Y
5	IC 410-356566/7	7.5	4.838679	5.0	758269.0	0.645157	Y
6	ICIS 410-356566/2	12.5	8.901368	5.0	711517.0	0.712109	Y
7	IC 410-356566/6	20.0	14.344159	5.0	510596.0	0.717208	Y
8	IC 410-356566/5	30.0	20.849985	5.0	741754.0	0.695	Y



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Calibration / Caprolactam

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

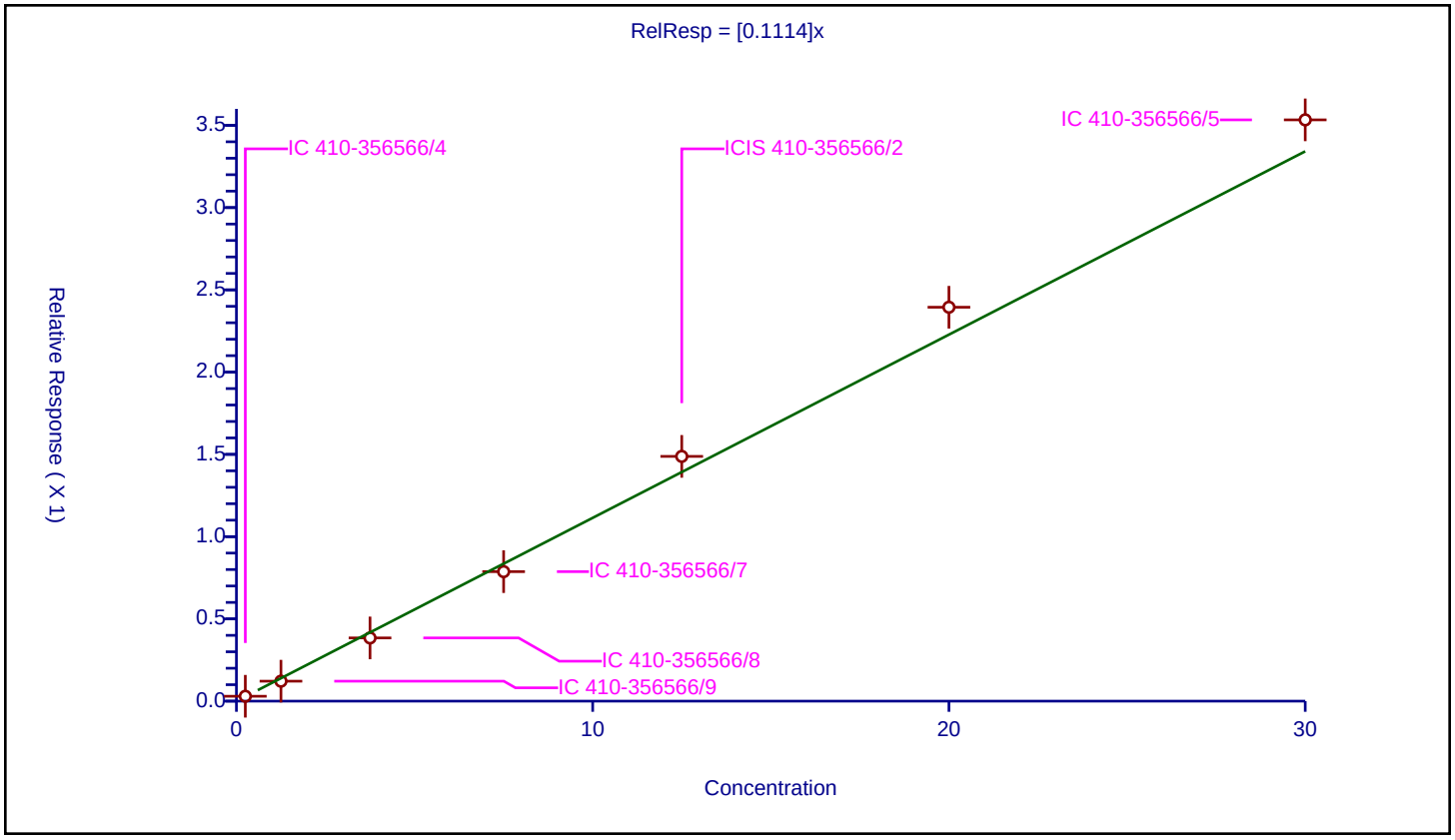
Curve Coefficients

Intercept:	0
Slope:	0.1114

Error Coefficients

Standard Error:	257000
Relative Standard Error:	8.6
Correlation Coefficient:	0.962
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/4	0.25	0.02968	5.0	615065.0	0.118719	Y
2	IC 410-356566/9	1.25	0.1214	5.0	494483.0	0.09712	Y
3	IC 410-356566/8	3.75	0.384226	5.0	698743.0	0.10246	Y
4	IC 410-356566/7	7.5	0.787161	5.0	758269.0	0.104955	Y
5	ICIS 410-356566/2	12.5	1.487772	5.0	711517.0	0.119022	Y
6	IC 410-356566/6	20.0	2.39432	5.0	510596.0	0.119716	Y
7	IC 410-356566/5	30.0	3.533335	5.0	741754.0	0.117778	Y



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Calibration / N-Nitrosodi-n-butylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

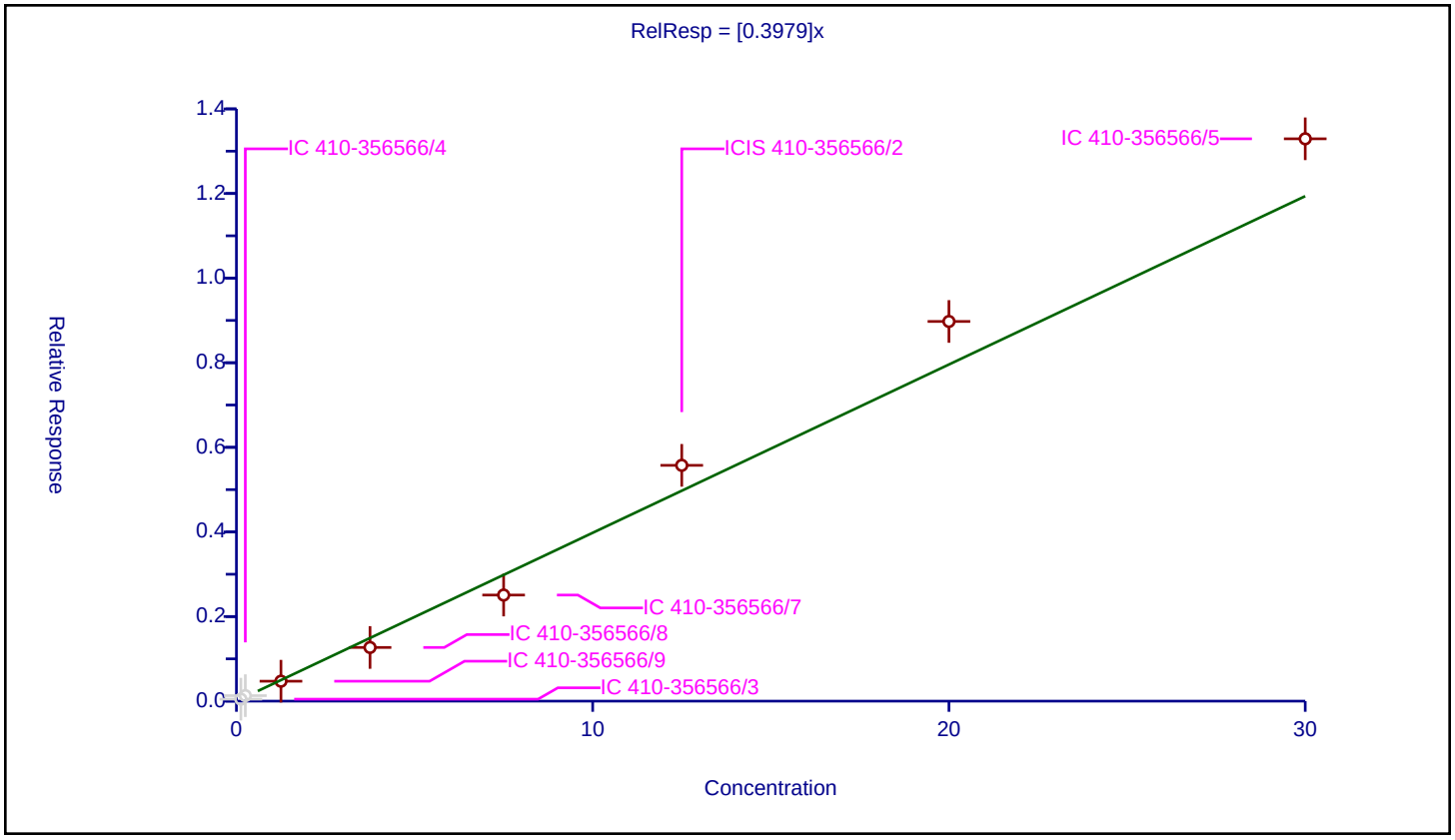
Curve Coefficients

Intercept:	0
Slope:	0.3979

Error Coefficients

Standard Error:	1050000
Relative Standard Error:	13.7
Correlation Coefficient:	0.957
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.047058	5.0	495556.0	0.376466	N
2	IC 410-356566/4	0.25	0.129742	5.0	615065.0	0.51897	N
3	IC 410-356566/9	1.25	0.470987	5.0	494483.0	0.376789	Y
4	IC 410-356566/8	3.75	1.268921	5.0	698743.0	0.338379	Y
5	IC 410-356566/7	7.5	2.50785	5.0	758269.0	0.33438	Y
6	ICIS 410-356566/2	12.5	5.574407	5.0	711517.0	0.445953	Y
7	IC 410-356566/6	20.0	8.974894	5.0	510596.0	0.448745	Y
8	IC 410-356566/5	30.0	13.293066	5.0	741754.0	0.443102	Y



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Calibration / p-Phenylene diamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

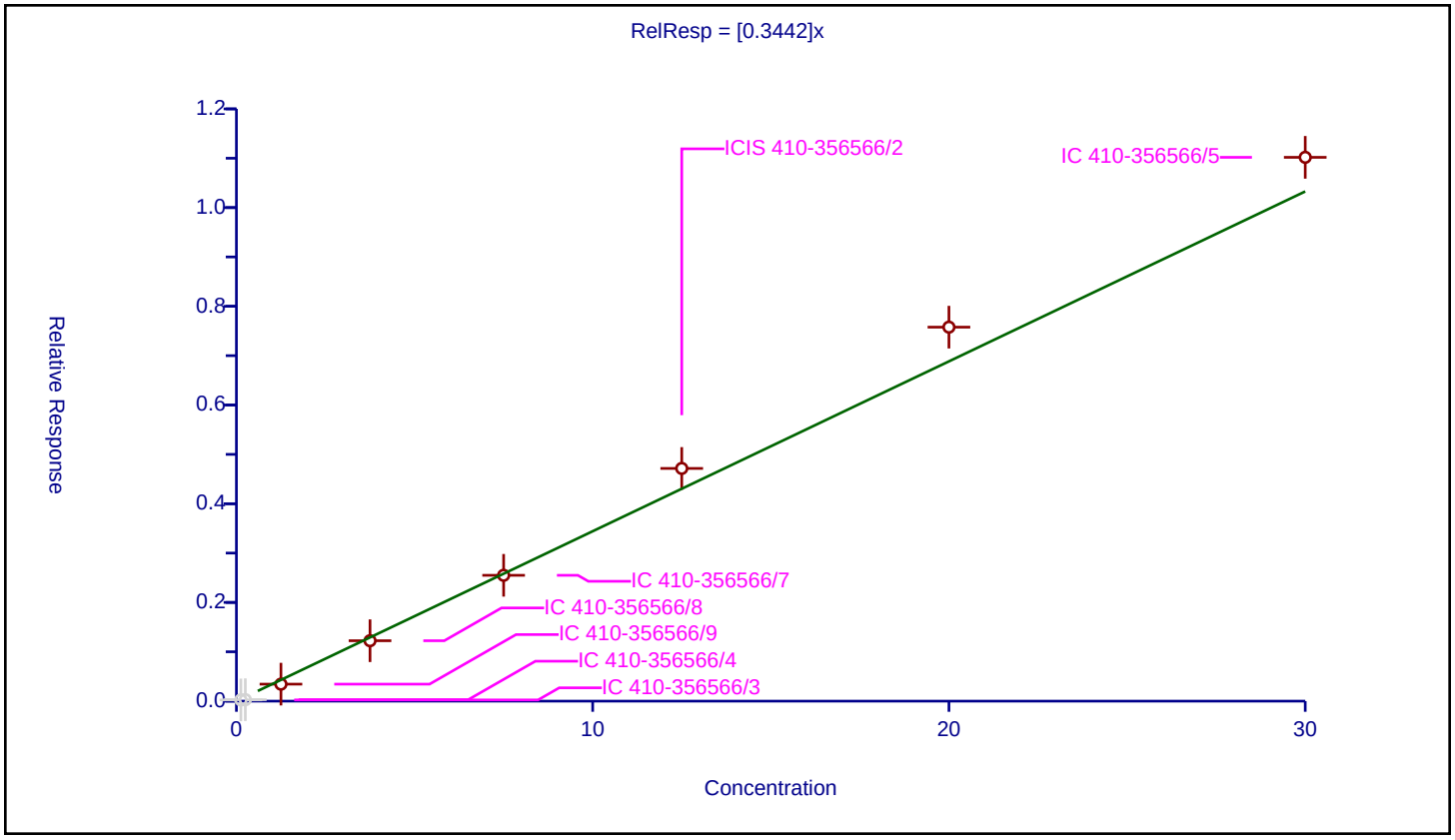
Curve Coefficients

Intercept:	0
Slope:	0.3442

Error Coefficients

Standard Error:	883000
Relative Standard Error:	11.5
Correlation Coefficient:	0.958
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.024679	5.0	495556.0	0.197435	N
2	IC 410-356566/4	0.25	0.029436	5.0	615065.0	0.117744	N
3	IC 410-356566/9	1.25	0.344501	5.0	494483.0	0.275601	Y
4	IC 410-356566/8	3.75	1.224256	5.0	698743.0	0.326468	Y
5	IC 410-356566/7	7.5	2.54959	5.0	758269.0	0.339945	Y
6	ICIS 410-356566/2	12.5	4.715474	5.0	711517.0	0.377238	Y
7	IC 410-356566/6	20.0	7.577341	5.0	510596.0	0.378867	Y
8	IC 410-356566/5	30.0	11.018383	5.0	741754.0	0.367279	Y



Calibration / 4-Chloro-3-methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

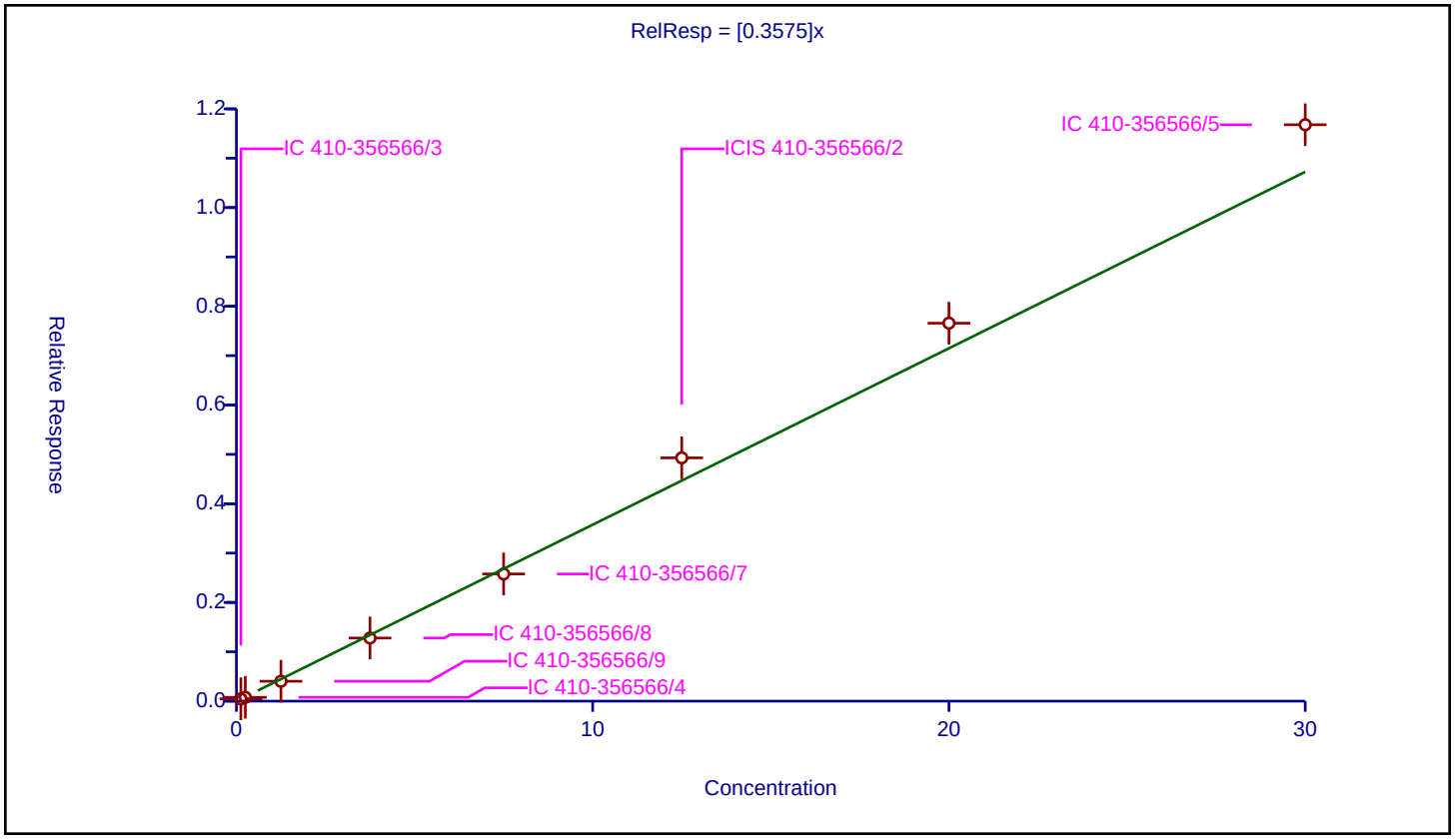
Curve Coefficients

Intercept:	0
Slope:	0.3575

Error Coefficients

Standard Error:	783000
Relative Standard Error:	9.3
Correlation Coefficient:	0.960
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.047452	5.0	495556.0	0.379614	Y
2	IC 410-356566/4	0.25	0.07674	5.0	615065.0	0.306959	Y
3	IC 410-356566/9	1.25	0.402623	5.0	494483.0	0.322098	Y
4	IC 410-356566/8	3.75	1.278439	5.0	698743.0	0.340917	Y
5	IC 410-356566/7	7.5	2.576849	5.0	758269.0	0.34358	Y
6	ICIS 410-356566/2	12.5	4.929201	5.0	711517.0	0.394336	Y
7	IC 410-356566/6	20.0	7.658139	5.0	510596.0	0.382907	Y
8	IC 410-356566/5	30.0	11.678791	5.0	741754.0	0.389293	Y



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Calibration / Safrole, Total

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

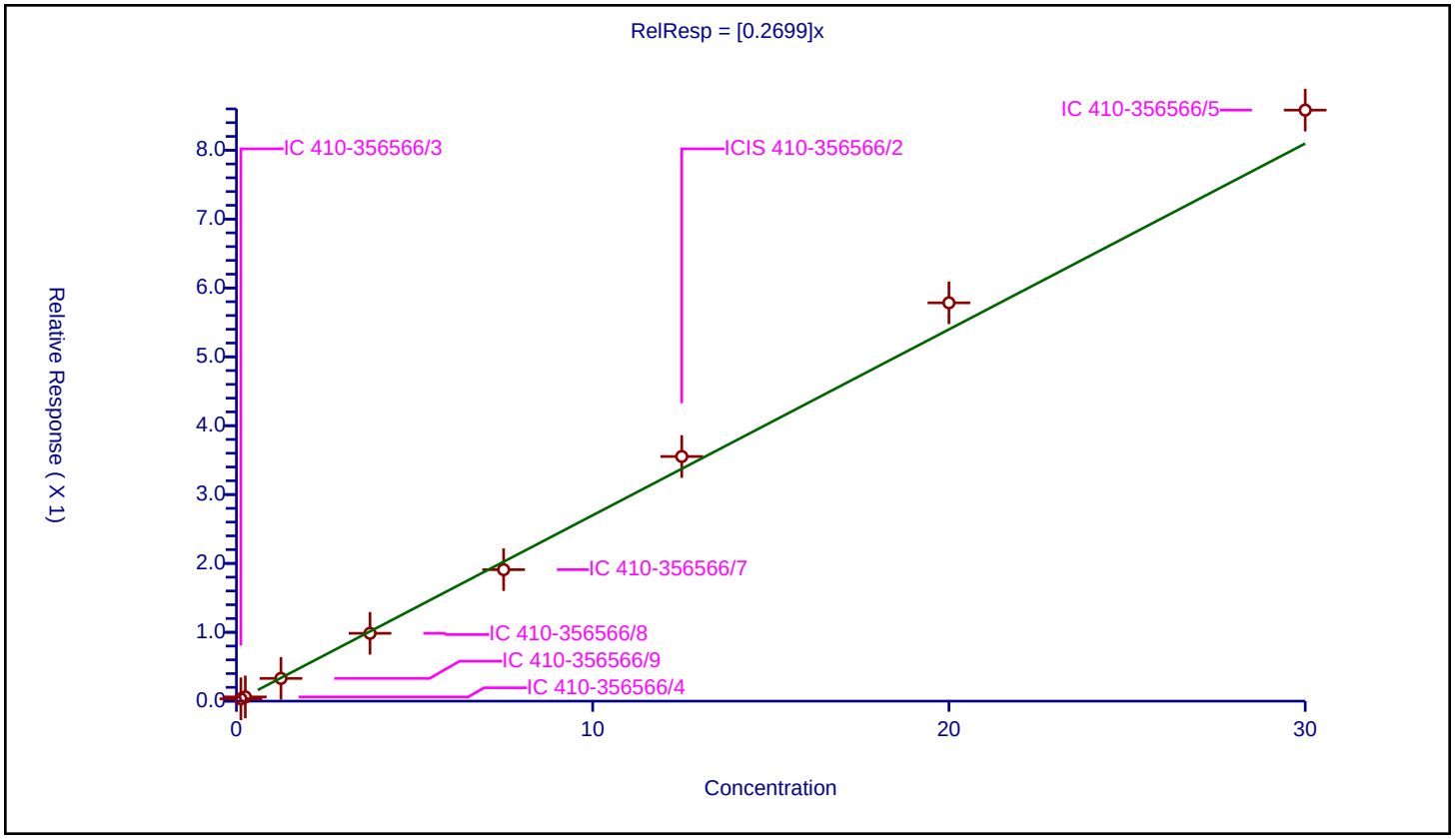
Curve Coefficients

Intercept:	0
Slope:	0.2699

Error Coefficients

Standard Error:	577000
Relative Standard Error:	5.9
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.034164	5.0	495556.0	0.273309	Y
2	IC 410-356566/4	0.25	0.061262	5.0	615065.0	0.245047	Y
3	IC 410-356566/9	1.25	0.330112	5.0	494483.0	0.26409	Y
4	IC 410-356566/8	3.75	0.984897	5.0	698743.0	0.262639	Y
5	IC 410-356566/7	7.5	1.909111	5.0	758269.0	0.254548	Y
6	ICIS 410-356566/2	12.5	3.552424	5.0	711517.0	0.284194	Y
7	IC 410-356566/6	20.0	5.784191	5.0	510596.0	0.28921	Y
8	IC 410-356566/5	30.0	8.582097	5.0	741754.0	0.28607	Y



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Calibration / 2-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

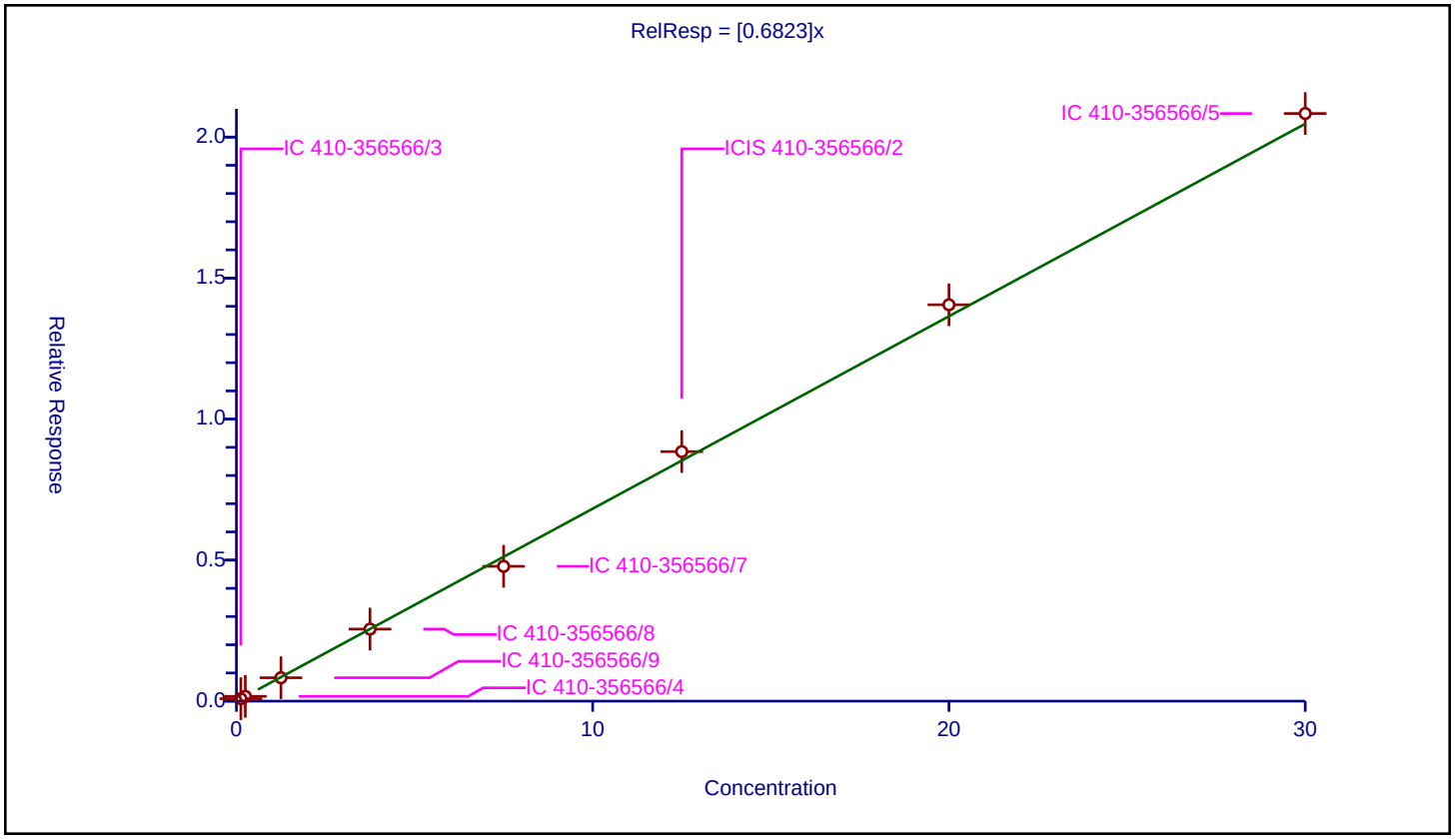
Curve Coefficients

Intercept:	0
Slope:	0.6823

Error Coefficients

Standard Error:	1410000
Relative Standard Error:	3.3
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.086105	5.0	495556.0	0.688842	Y
2	IC 410-356566/4	0.25	0.170486	5.0	615065.0	0.681944	Y
3	IC 410-356566/9	1.25	0.830109	5.0	494483.0	0.664088	Y
4	IC 410-356566/8	3.75	2.555253	5.0	698743.0	0.681401	Y
5	IC 410-356566/7	7.5	4.780335	5.0	758269.0	0.637378	Y
6	ICIS 410-356566/2	12.5	8.847547	5.0	711517.0	0.707804	Y
7	IC 410-356566/6	20.0	14.054761	5.0	510596.0	0.702738	Y
8	IC 410-356566/5	30.0	20.835904	5.0	741754.0	0.69453	Y



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Calibration / 1-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

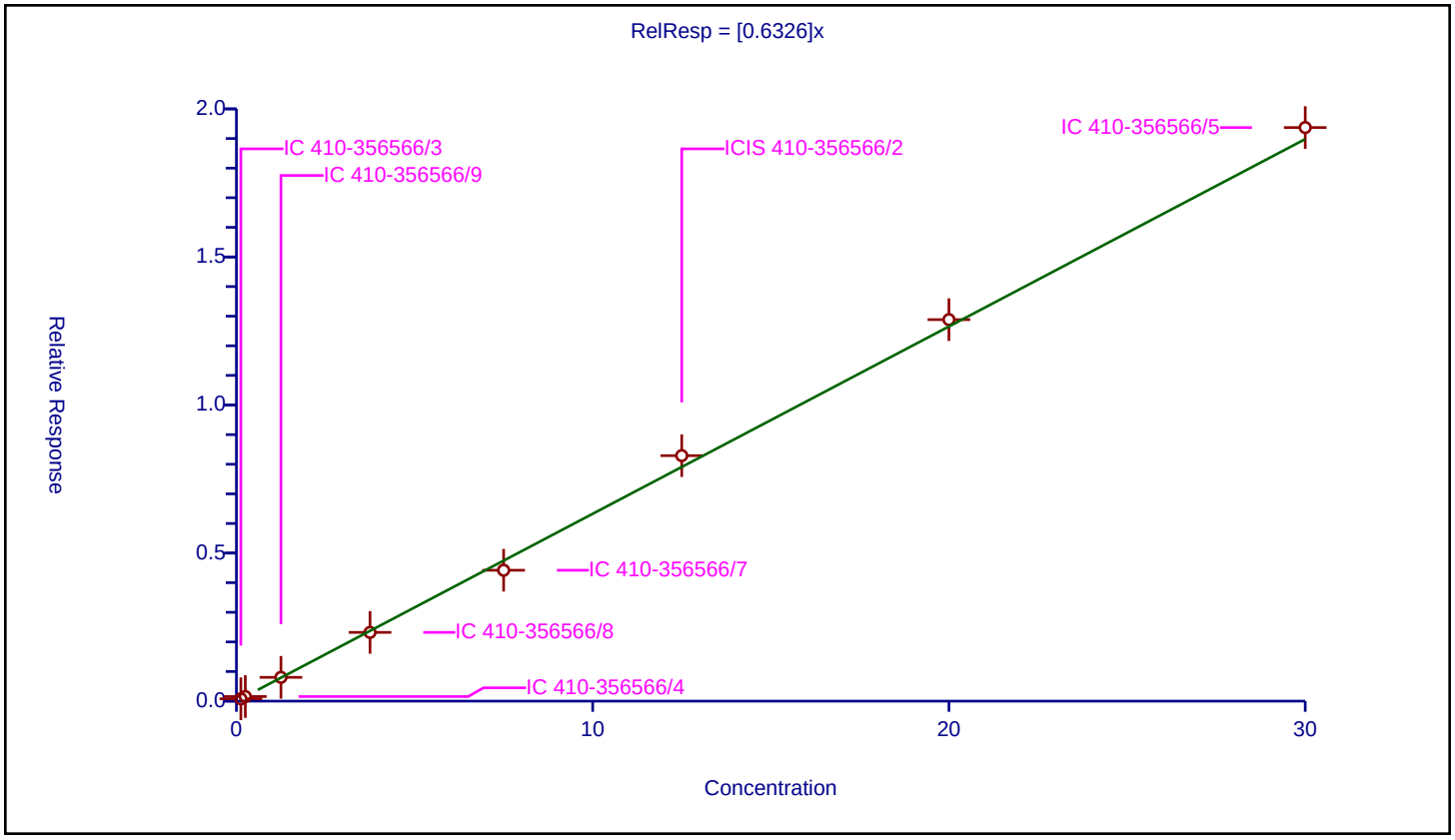
Curve Coefficients

Intercept:	0
Slope:	0.6326

Error Coefficients

Standard Error:	1310000
Relative Standard Error:	3.5
Correlation Coefficient:	0.962
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.079355	5.0	495556.0	0.634842	Y
2	IC 410-356566/4	0.25	0.155431	5.0	615065.0	0.621723	Y
3	IC 410-356566/9	1.25	0.803749	5.0	494483.0	0.642999	Y
4	IC 410-356566/8	3.75	2.321733	5.0	698743.0	0.619129	Y
5	IC 410-356566/7	7.5	4.420107	5.0	758269.0	0.589348	Y
6	ICIS 410-356566/2	12.5	8.290153	5.0	711517.0	0.663212	Y
7	IC 410-356566/6	20.0	12.882984	5.0	510596.0	0.644149	Y
8	IC 410-356566/5	30.0	19.369906	5.0	741754.0	0.645664	Y



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Calibration / Hexachlorocyclopentadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

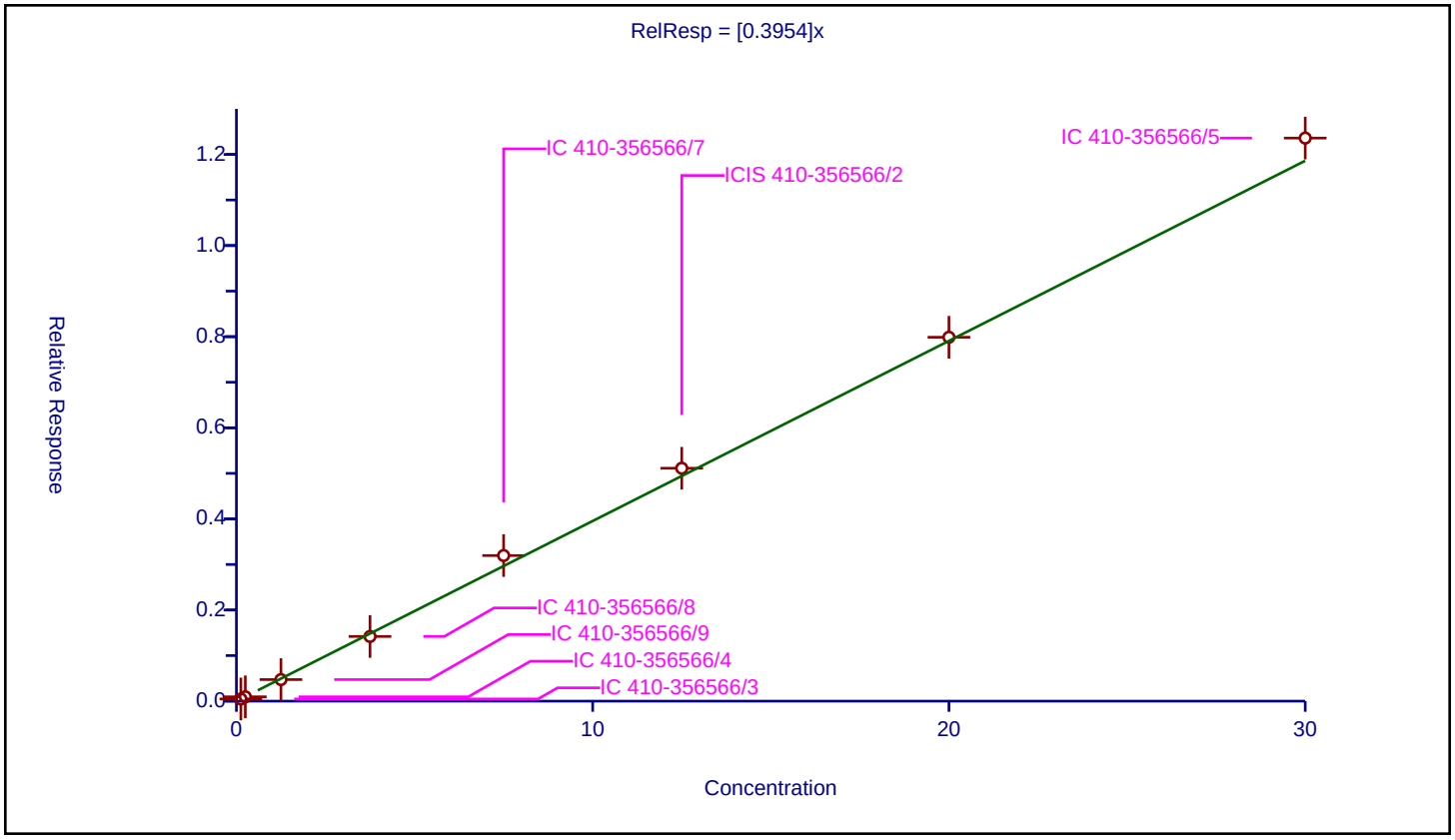
Curve Coefficients

Intercept:	0
Slope:	0.3954

Error Coefficients

Standard Error:	460000
Relative Standard Error:	4.8
Correlation Coefficient:	0.960
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.04754	5.0	271456.0	0.380319	Y
2	IC 410-356566/4	0.25	0.094776	5.0	330095.0	0.379103	Y
3	IC 410-356566/9	1.25	0.473239	5.0	266166.0	0.378591	Y
4	IC 410-356566/8	3.75	1.419664	5.0	385056.0	0.378577	Y
5	IC 410-356566/7	7.5	3.195716	5.0	359317.0	0.426095	Y
6	ICIS 410-356566/2	12.5	5.11204	5.0	394814.0	0.408963	Y
7	IC 410-356566/6	20.0	7.987455	5.0	287683.0	0.399373	Y
8	IC 410-356566/5	30.0	12.359504	5.0	413214.0	0.411983	Y



Calibration / 1,2,4,5-Tetrachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

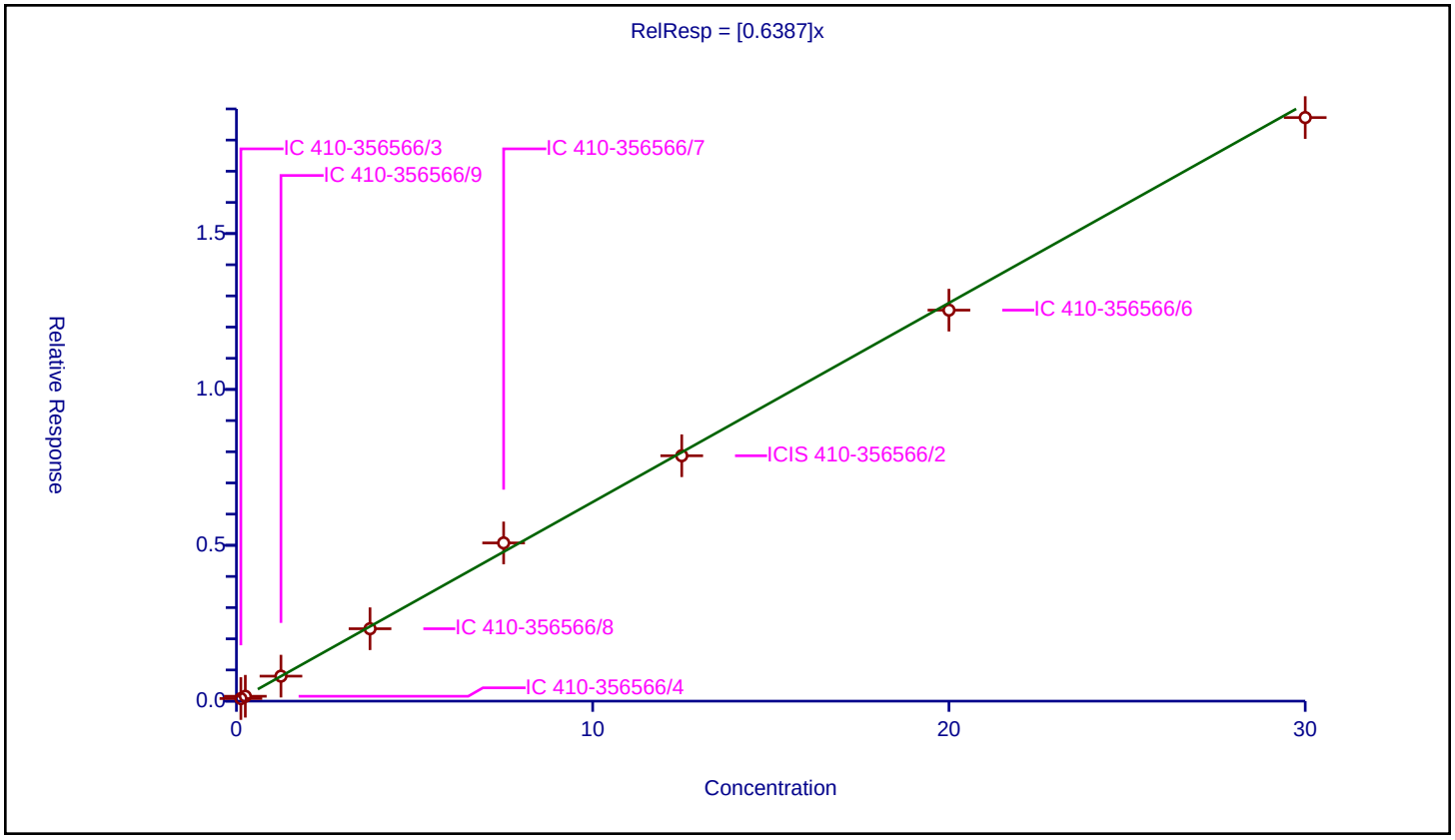
Curve Coefficients

Intercept:	0
Slope:	0.6387

Error Coefficients

Standard Error:	704000
Relative Standard Error:	3.3
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.083034	5.0	271456.0	0.66427	Y
2	IC 410-356566/4	0.25	0.156606	5.0	330095.0	0.626426	Y
3	IC 410-356566/9	1.25	0.802281	5.0	266166.0	0.641825	Y
4	IC 410-356566/8	3.75	2.322597	5.0	385056.0	0.619359	Y
5	IC 410-356566/7	7.5	5.076061	5.0	359317.0	0.676808	Y
6	ICIS 410-356566/2	12.5	7.87277	5.0	394814.0	0.629822	Y
7	IC 410-356566/6	20.0	12.543772	5.0	287683.0	0.627189	Y
8	IC 410-356566/5	30.0	18.721437	5.0	413214.0	0.624048	Y



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Calibration / Isosafrole Peak 1

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

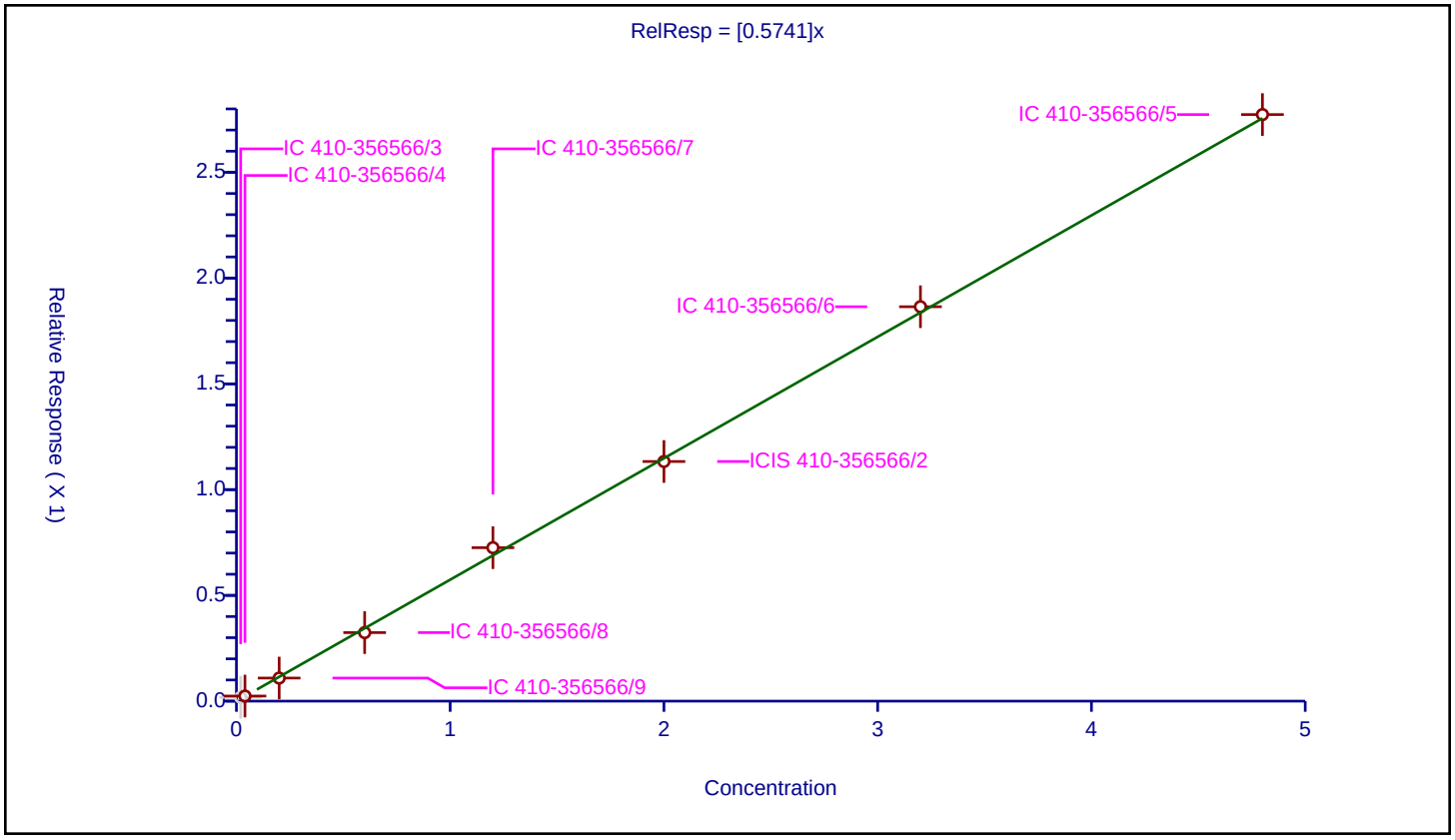
Curve Coefficients

Intercept:	0
Slope:	0.5741

Error Coefficients

Standard Error:	112000
Relative Standard Error:	4.4
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.02	0.018051	5.0	271456.0	0.90254	N
2	IC 410-356566/4	0.04	0.024069	5.0	330095.0	0.601721	Y
3	IC 410-356566/9	0.2	0.109086	5.0	266166.0	0.54543	Y
4	IC 410-356566/8	0.6	0.324031	5.0	385056.0	0.540051	Y
5	IC 410-356566/7	1.2	0.725515	5.0	359317.0	0.604596	Y
6	ICIS 410-356566/2	2.0	1.132939	5.0	394814.0	0.566469	Y
7	IC 410-356566/6	3.2	1.864726	5.0	287683.0	0.582727	Y
8	IC 410-356566/5	4.8	2.773236	5.0	413214.0	0.577758	Y



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Calibration / 2,4,6-Trichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

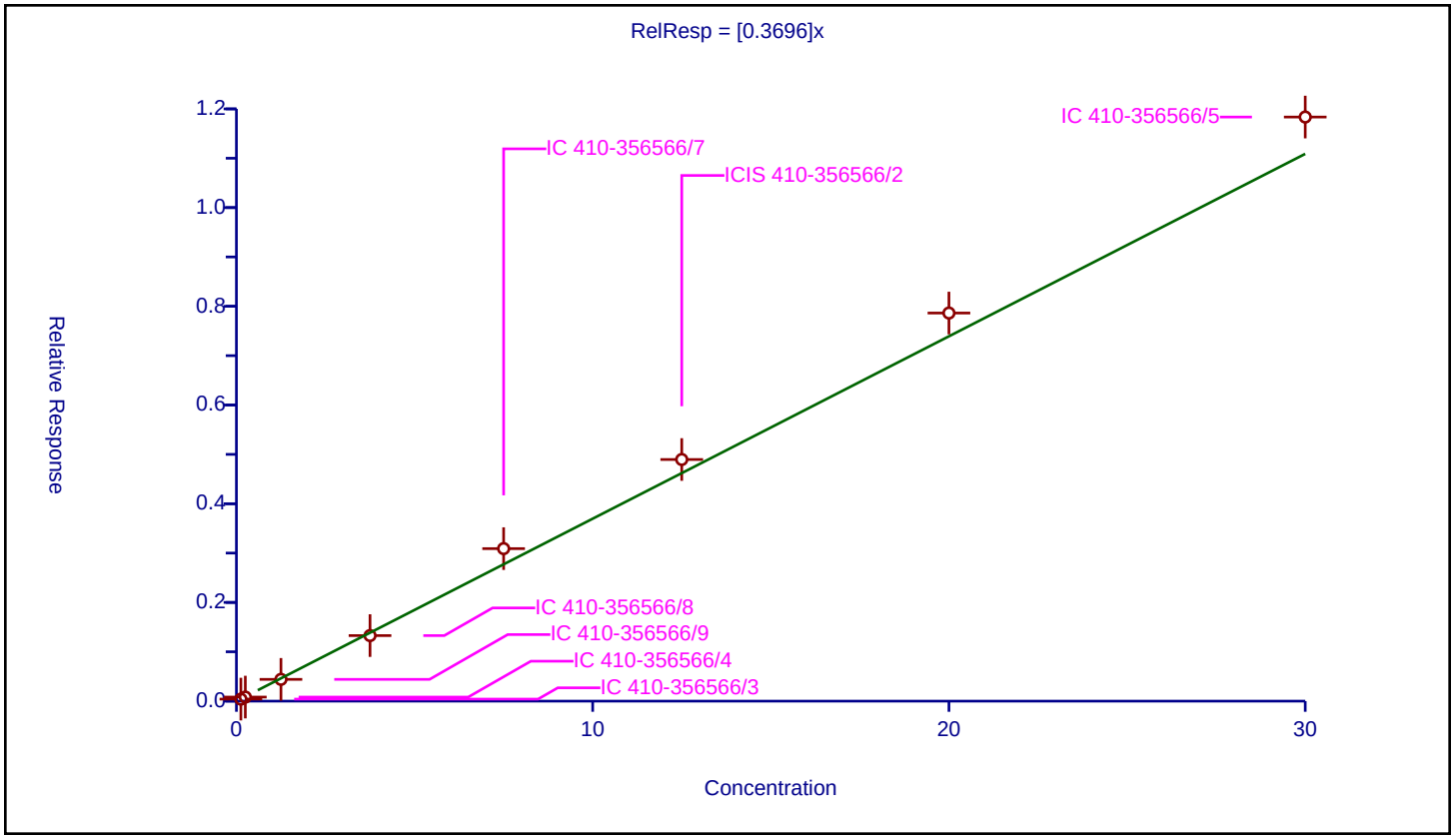
Curve Coefficients

Intercept:	0
Slope:	0.3696

Error Coefficients

Standard Error:	443000
Relative Standard Error:	8.7
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.041296	5.0	271456.0	0.330367	Y
2	IC 410-356566/4	0.25	0.082067	5.0	330095.0	0.328269	Y
3	IC 410-356566/9	1.25	0.440928	5.0	266166.0	0.352742	Y
4	IC 410-356566/8	3.75	1.328248	5.0	385056.0	0.3542	Y
5	IC 410-356566/7	7.5	3.090154	5.0	359317.0	0.412021	Y
6	ICIS 410-356566/2	12.5	4.895976	5.0	394814.0	0.391678	Y
7	IC 410-356566/6	20.0	7.86343	5.0	287683.0	0.393171	Y
8	IC 410-356566/5	30.0	11.834897	5.0	413214.0	0.394497	Y



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Calibration / 2,4,5-Trichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

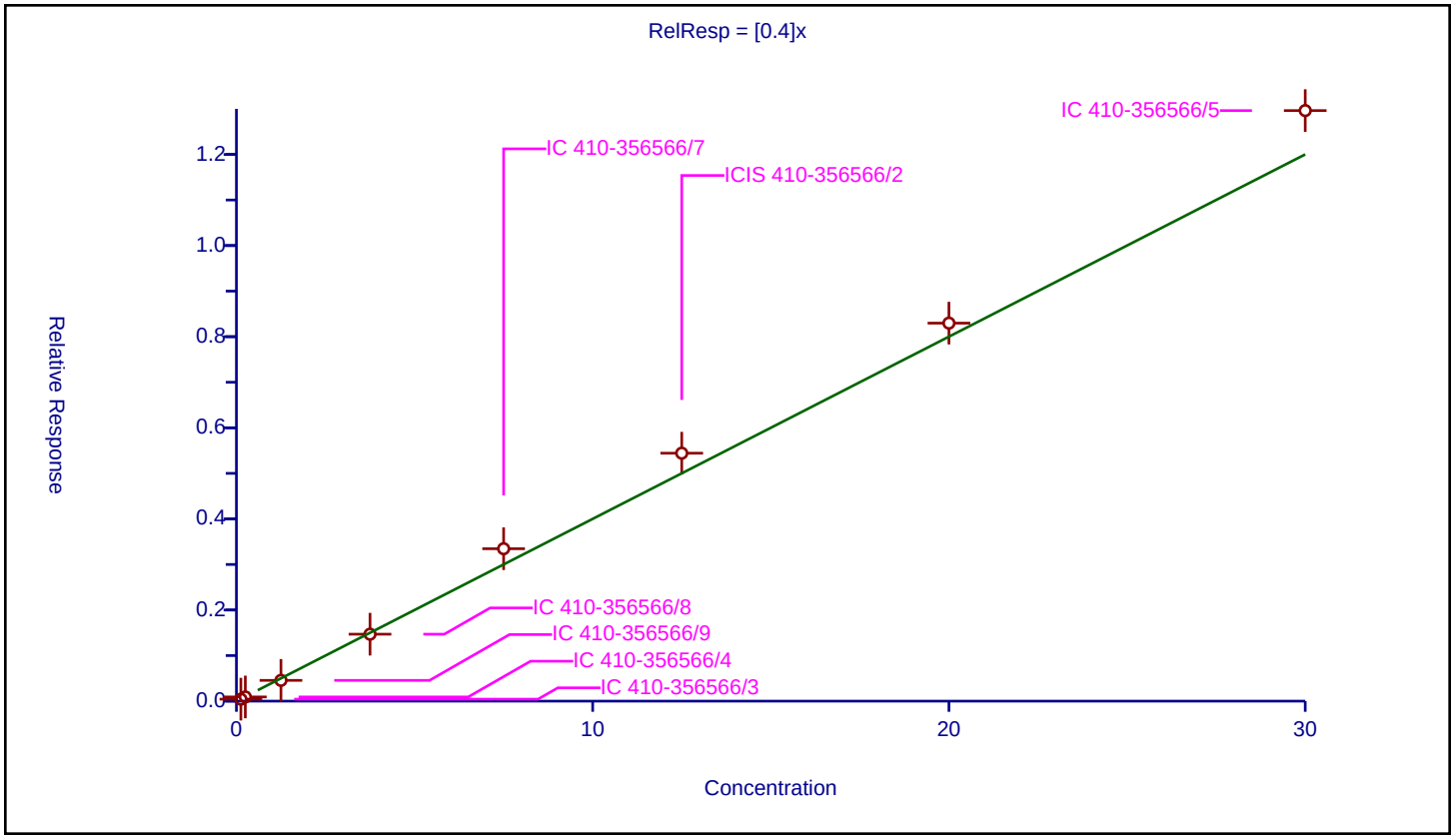
Curve Coefficients

Intercept:	0
Slope:	0.4

Error Coefficients

Standard Error:	483000
Relative Standard Error:	9.3
Correlation Coefficient:	0.958
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.043322	5.0	271456.0	0.346576	Y
2	IC 410-356566/4	0.25	0.09217	5.0	330095.0	0.368682	Y
3	IC 410-356566/9	1.25	0.455881	5.0	266166.0	0.364705	Y
4	IC 410-356566/8	3.75	1.469708	5.0	385056.0	0.391922	Y
5	IC 410-356566/7	7.5	3.345416	5.0	359317.0	0.446056	Y
6	ICIS 410-356566/2	12.5	5.442398	5.0	394814.0	0.435392	Y
7	IC 410-356566/6	20.0	8.297345	5.0	287683.0	0.414867	Y
8	IC 410-356566/5	30.0	12.962714	5.0	413214.0	0.43209	Y



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Calibration / 2-Fluorobiphenyl (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

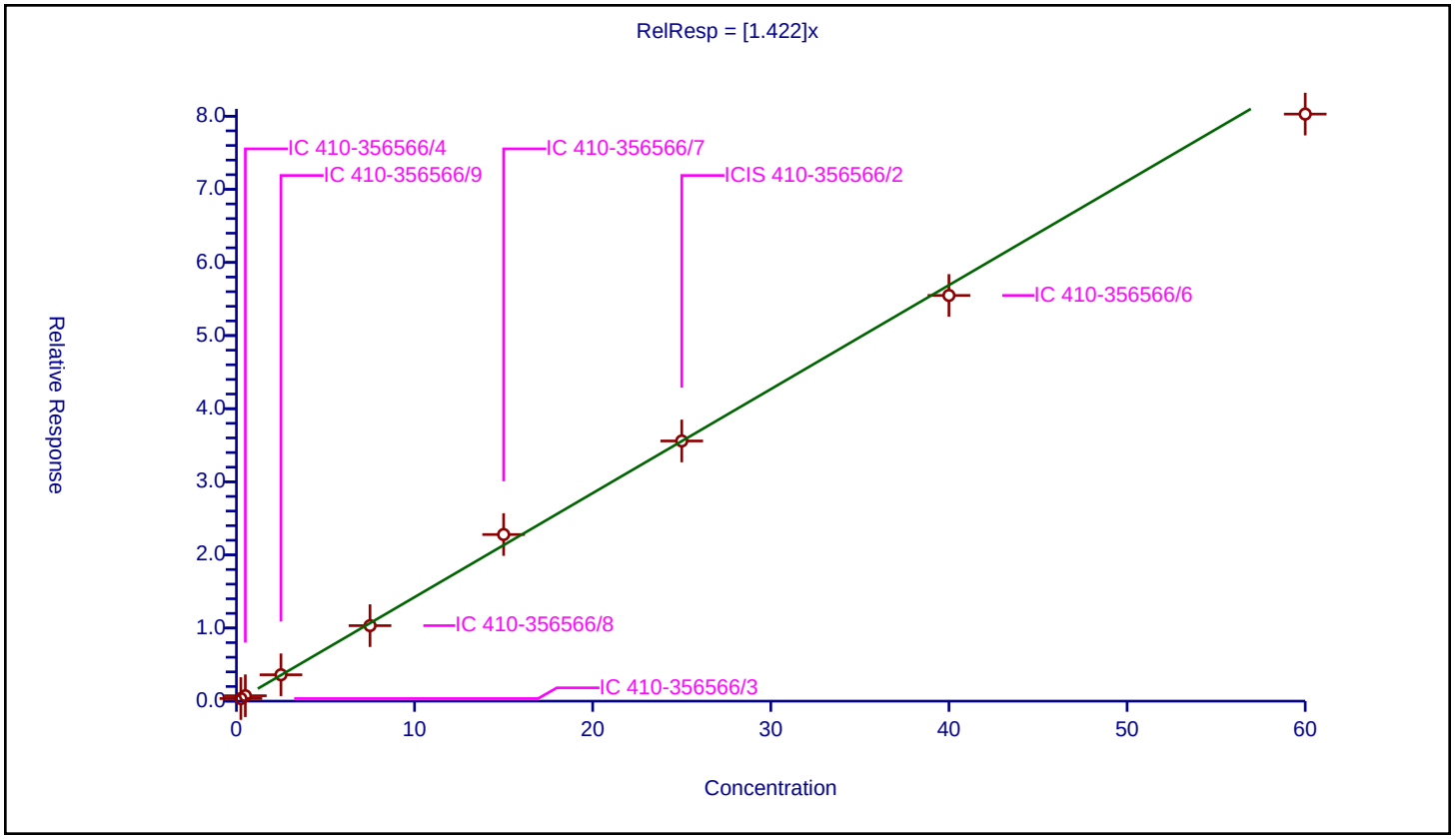
Curve Coefficients

Intercept:	0
Slope:	1.422

Error Coefficients

Standard Error:	3060000
Relative Standard Error:	4.0
Correlation Coefficient:	0.969
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.25	0.353851	5.0	271456.0	1.415404	Y
2	IC 410-356566/4	0.5	0.738575	5.0	330095.0	1.477151	Y
3	IC 410-356566/9	2.5	3.605551	5.0	266166.0	1.44222	Y
4	IC 410-356566/8	7.5	10.323563	5.0	385056.0	1.376475	Y
5	IC 410-356566/7	15.0	22.785173	5.0	359317.0	1.519012	Y
6	ICIS 410-356566/2	25.0	35.583427	5.0	394814.0	1.423337	Y
7	IC 410-356566/6	40.0	55.486351	5.0	287683.0	1.387159	Y
8	IC 410-356566/5	60.0	80.289463	5.0	413214.0	1.338158	Y



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Calibration / Isosafrole Peak 2

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

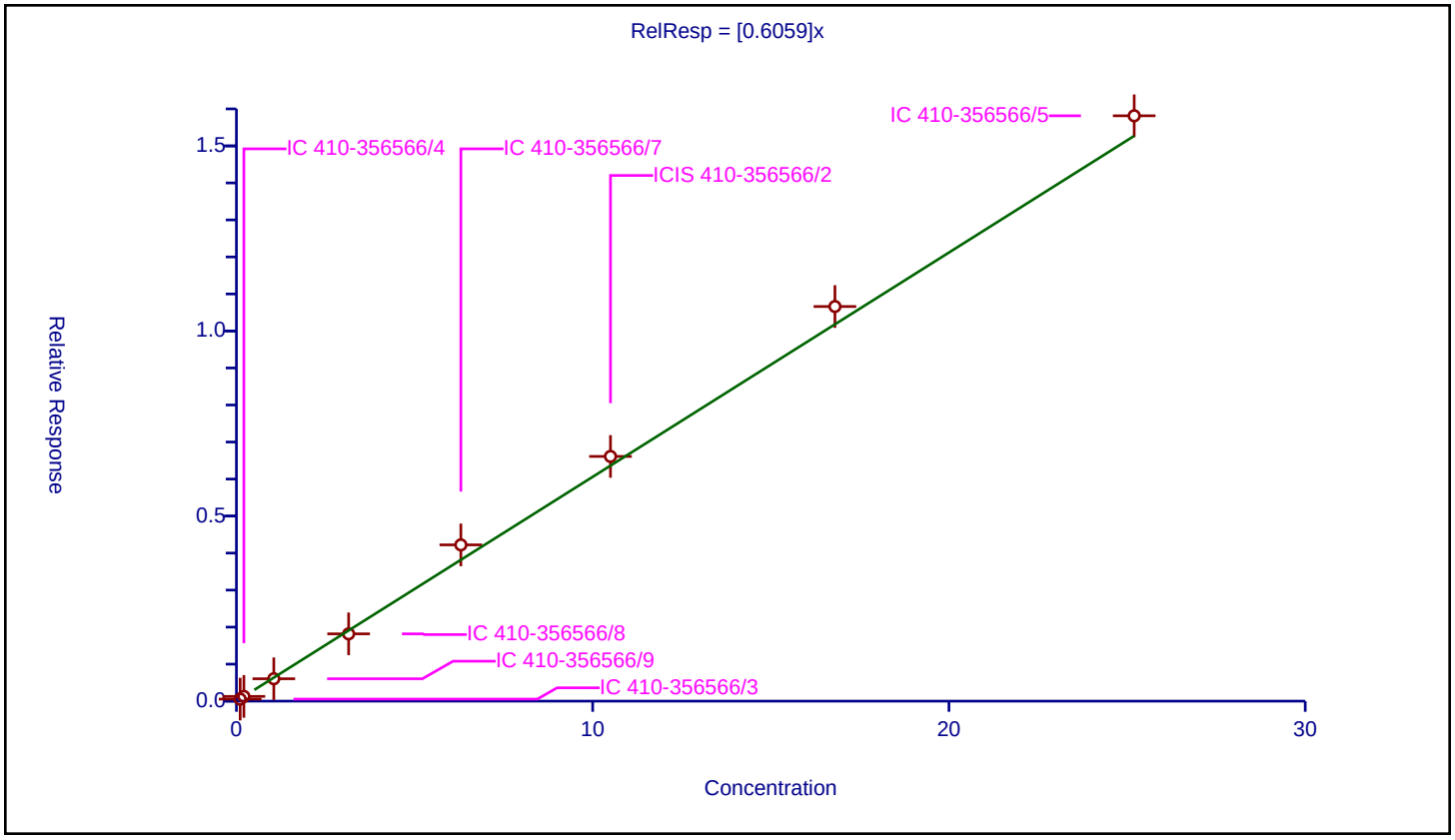
Curve Coefficients

Intercept:	0
Slope:	0.6059

Error Coefficients

Standard Error:	594000
Relative Standard Error:	7.4
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.105	0.055184	5.0	271456.0	0.525561	Y
2	IC 410-356566/4	0.21	0.127433	5.0	330095.0	0.606824	Y
3	IC 410-356566/9	1.05	0.605055	5.0	266166.0	0.576243	Y
4	IC 410-356566/8	3.15	1.817762	5.0	385056.0	0.577067	Y
5	IC 410-356566/7	6.3	4.221634	5.0	359317.0	0.670101	Y
6	ICIS 410-356566/2	10.5	6.611138	5.0	394814.0	0.629632	Y
7	IC 410-356566/6	16.8	10.66071	5.0	287683.0	0.634566	Y
8	IC 410-356566/5	25.2	15.813477	5.0	413214.0	0.627519	Y



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Calibration / 1,1'-Biphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

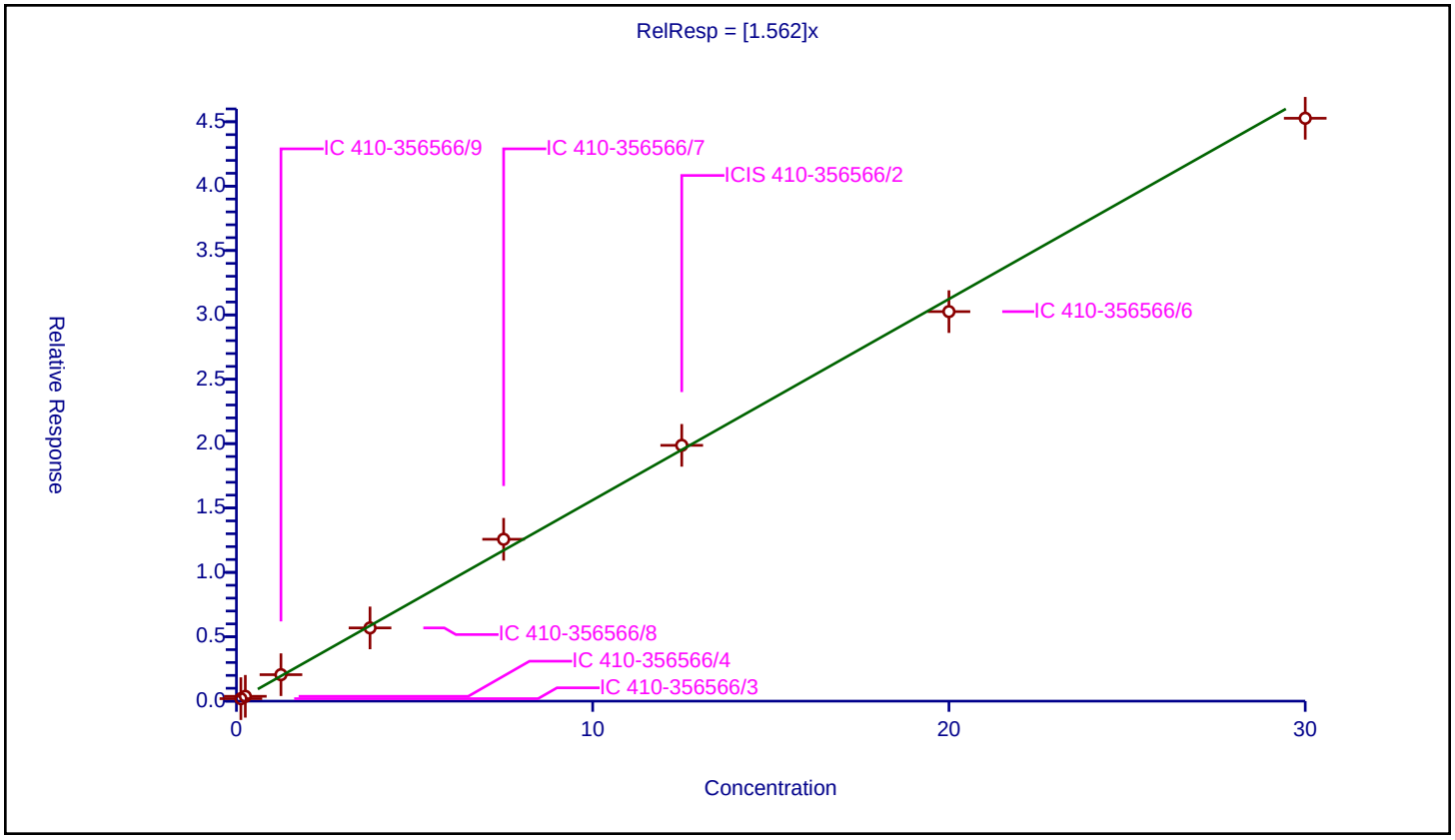
Curve Coefficients

Intercept:	0
Slope:	1.562

Error Coefficients

Standard Error:	1710000
Relative Standard Error:	4.3
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.193162	5.0	271456.0	1.545296	Y
2	IC 410-356566/4	0.25	0.374725	5.0	330095.0	1.498902	Y
3	IC 410-356566/9	1.25	2.055728	5.0	266166.0	1.644583	Y
4	IC 410-356566/8	3.75	5.688004	5.0	385056.0	1.516801	Y
5	IC 410-356566/7	7.5	12.571476	5.0	359317.0	1.676197	Y
6	ICIS 410-356566/2	12.5	19.868216	5.0	394814.0	1.589457	Y
7	IC 410-356566/6	20.0	30.256028	5.0	287683.0	1.512801	Y
8	IC 410-356566/5	30.0	45.270828	5.0	413214.0	1.509028	Y



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Calibration / 2-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

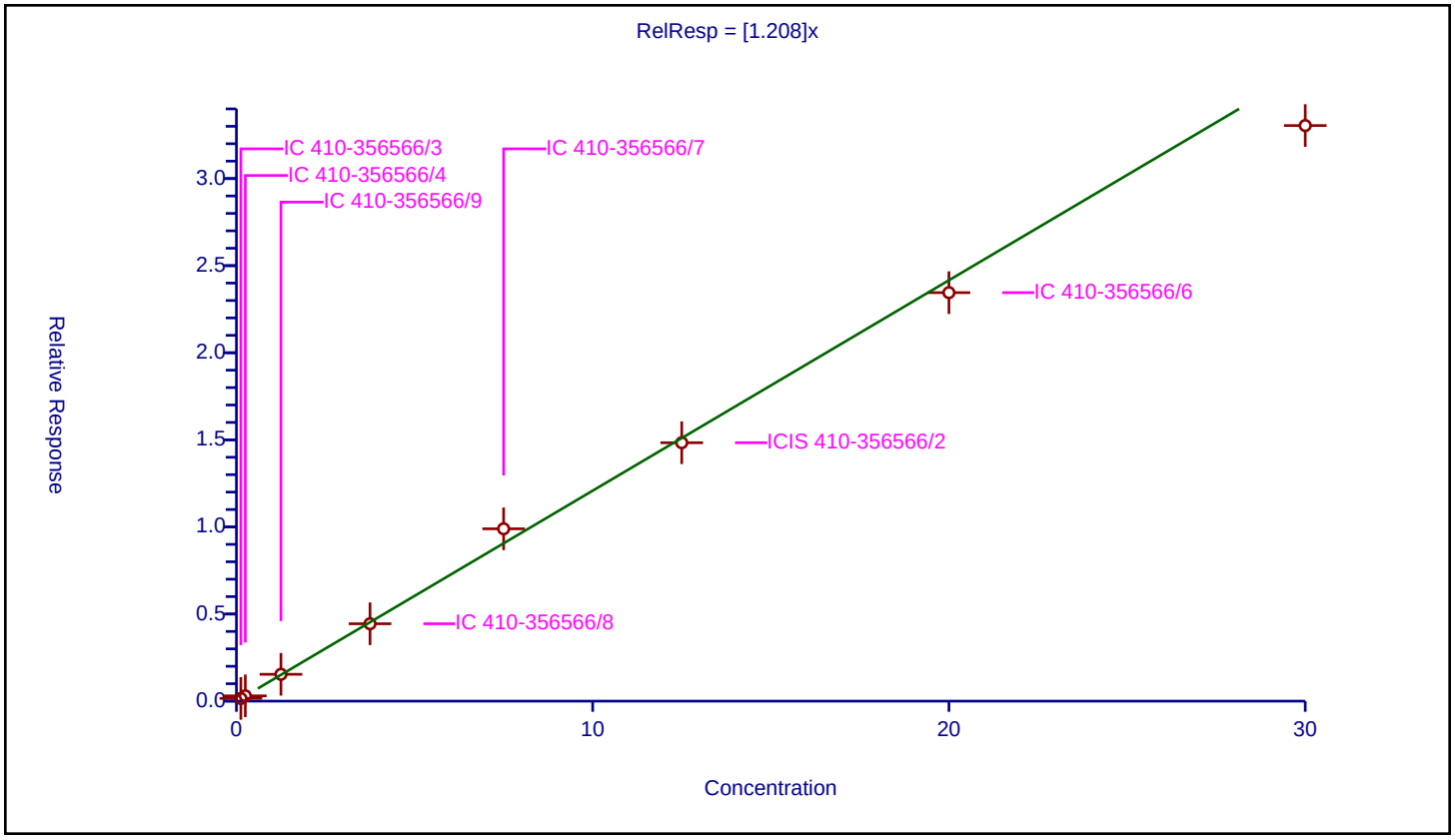
Curve Coefficients

Intercept:	0
Slope:	1.208

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	5.3
Correlation Coefficient:	0.972
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.156489	5.0	271456.0	1.251916	Y
2	IC 410-356566/4	0.25	0.303852	5.0	330095.0	1.215408	Y
3	IC 410-356566/9	1.25	1.540993	5.0	266166.0	1.232795	Y
4	IC 410-356566/8	3.75	4.44238	5.0	385056.0	1.184635	Y
5	IC 410-356566/7	7.5	9.893882	5.0	359317.0	1.319184	Y
6	ICIS 410-356566/2	12.5	14.834846	5.0	394814.0	1.186788	Y
7	IC 410-356566/6	20.0	23.450569	5.0	287683.0	1.172528	Y
8	IC 410-356566/5	30.0	33.042322	5.0	413214.0	1.101411	Y



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Calibration / 1-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

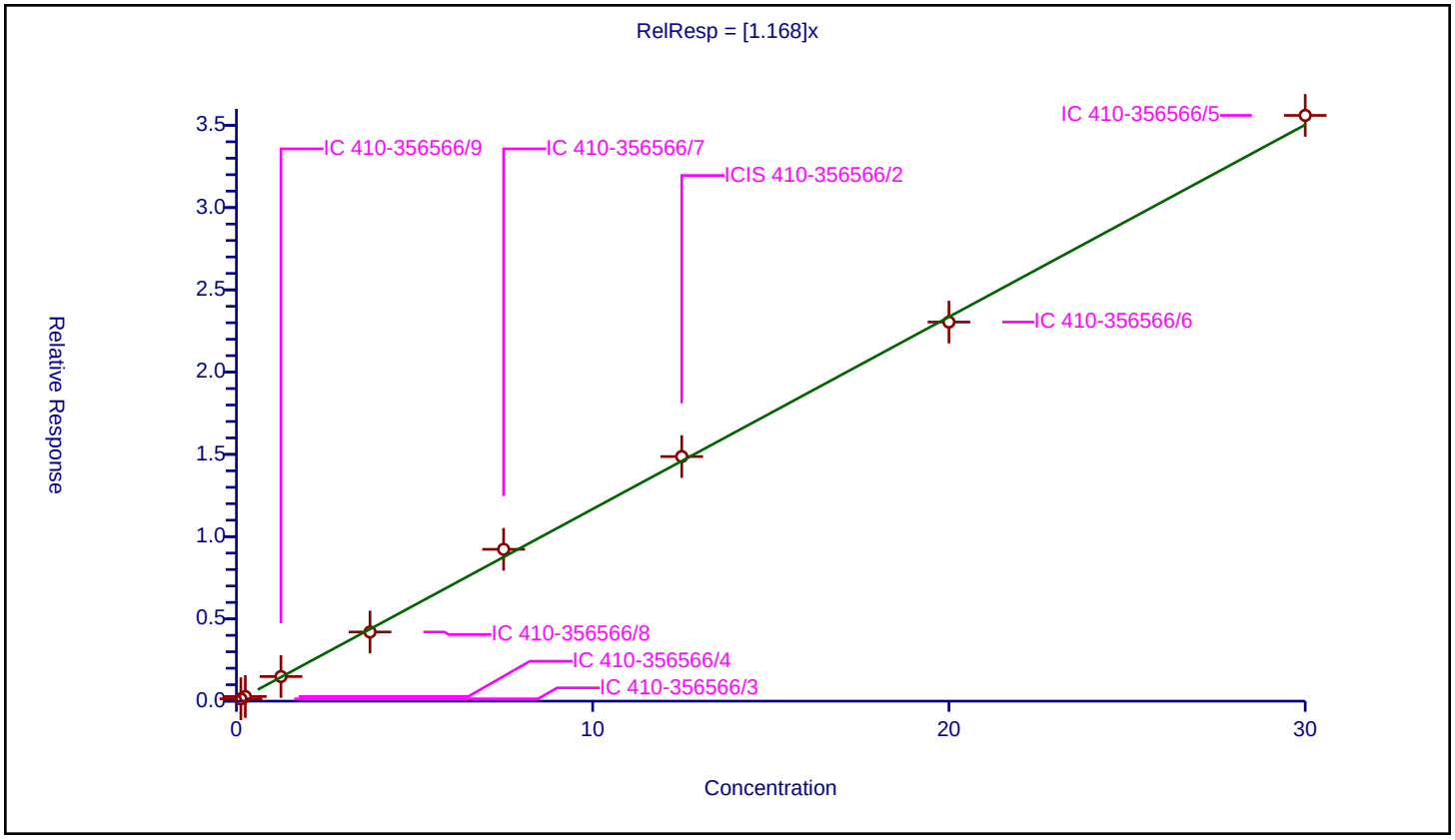
Curve Coefficients

Intercept:	0
Slope:	1.168

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	3.3
Correlation Coefficient:	0.960
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.14273	5.0	271456.0	1.141843	Y
2	IC 410-356566/4	0.25	0.281071	5.0	330095.0	1.124282	Y
3	IC 410-356566/9	1.25	1.495627	5.0	266166.0	1.196501	Y
4	IC 410-356566/8	3.75	4.20296	5.0	385056.0	1.120789	Y
5	IC 410-356566/7	7.5	9.229497	5.0	359317.0	1.2306	Y
6	ICIS 410-356566/2	12.5	14.868406	5.0	394814.0	1.189473	Y
7	IC 410-356566/6	20.0	23.042655	5.0	287683.0	1.152133	Y
8	IC 410-356566/5	30.0	35.604445	5.0	413214.0	1.186815	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

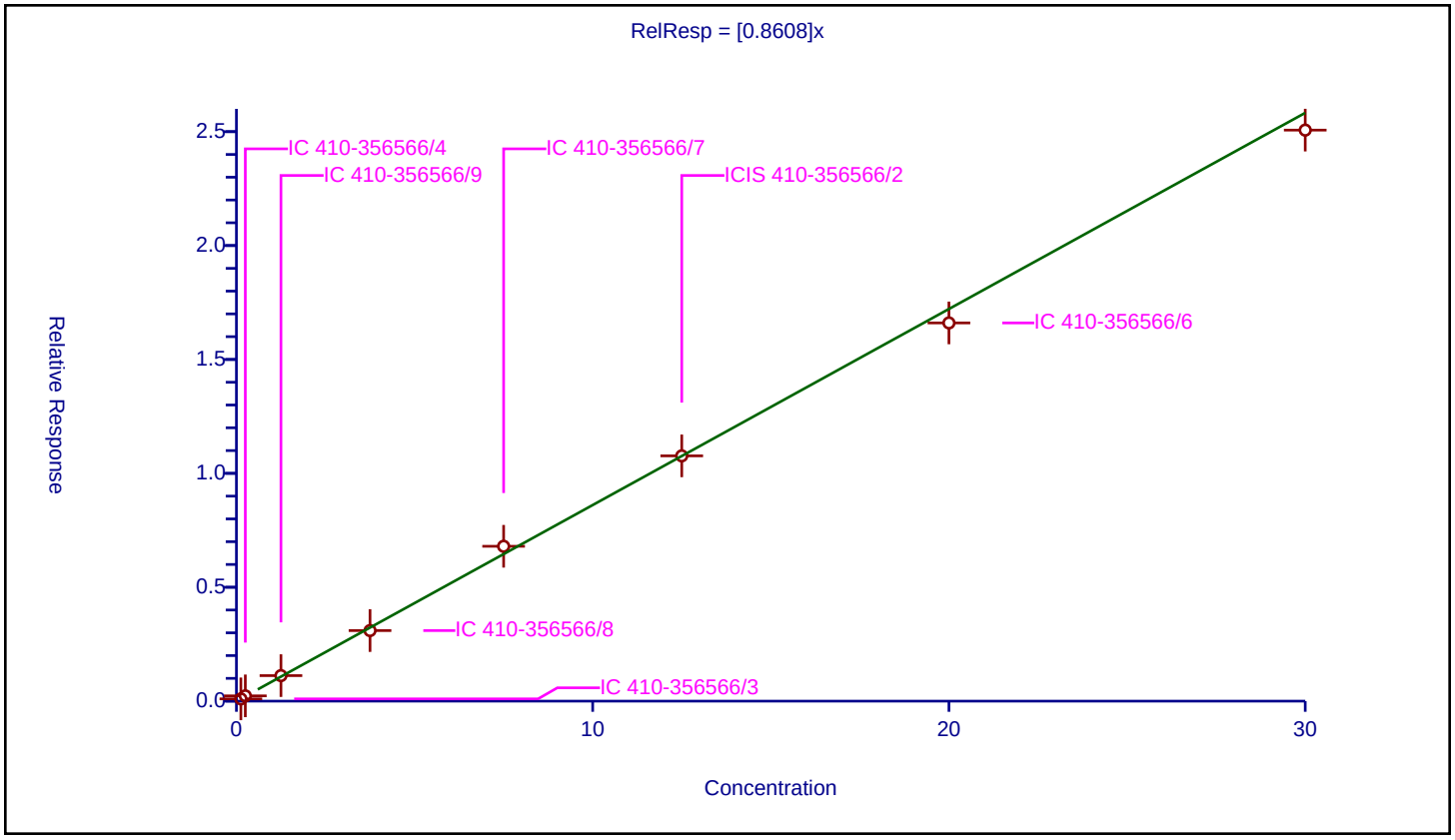
Curve Coefficients

Intercept:	0
Slope:	0.8608

Error Coefficients

Standard Error:	943000
Relative Standard Error:	5.2
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.100256	5.0	271456.0	0.802045	Y
2	IC 410-356566/4	0.25	0.232191	5.0	330095.0	0.928763	Y
3	IC 410-356566/9	1.25	1.120203	5.0	266166.0	0.896163	Y
4	IC 410-356566/8	3.75	3.097536	5.0	385056.0	0.82601	Y
5	IC 410-356566/7	7.5	6.798036	5.0	359317.0	0.906405	Y
6	ICIS 410-356566/2	12.5	10.767665	5.0	394814.0	0.861413	Y
7	IC 410-356566/6	20.0	16.60444	5.0	287683.0	0.830222	Y
8	IC 410-356566/5	30.0	25.068112	5.0	413214.0	0.835604	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

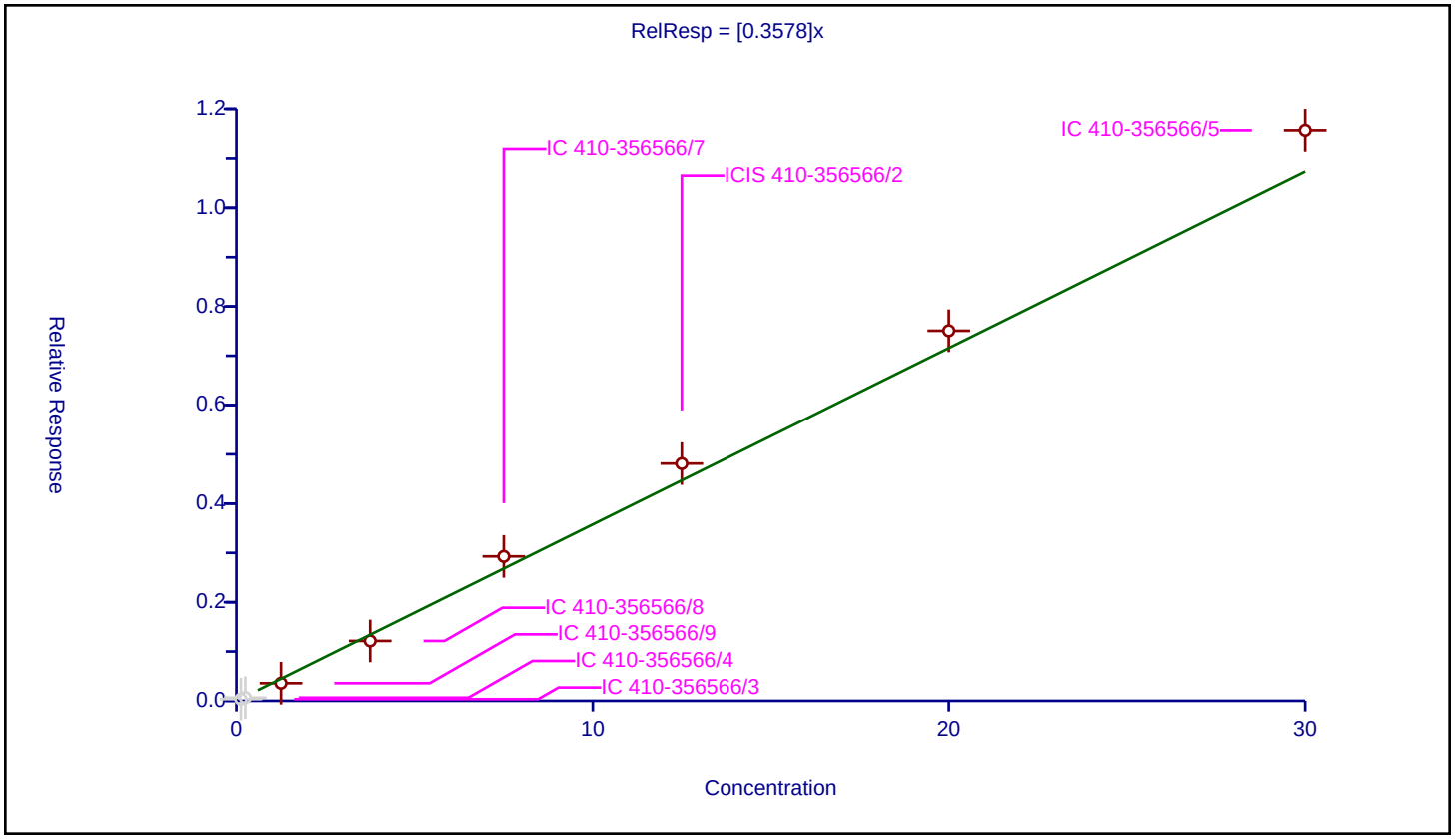
Curve Coefficients

Intercept:	0
Slope:	0.3578

Error Coefficients

Standard Error:	510000
Relative Standard Error:	12.0
Correlation Coefficient:	0.951
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.034168	5.0	271456.0	0.273341	N
2	IC 410-356566/4	0.25	0.06433	5.0	330095.0	0.25732	N
3	IC 410-356566/9	1.25	0.357765	5.0	266166.0	0.286212	Y
4	IC 410-356566/8	3.75	1.215096	5.0	385056.0	0.324026	Y
5	IC 410-356566/7	7.5	2.9296	5.0	359317.0	0.390613	Y
6	ICIS 410-356566/2	12.5	4.812127	5.0	394814.0	0.38497	Y
7	IC 410-356566/6	20.0	7.507413	5.0	287683.0	0.375371	Y
8	IC 410-356566/5	30.0	11.567154	5.0	413214.0	0.385572	Y



Calibration / 1,4-Naphthoquinone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

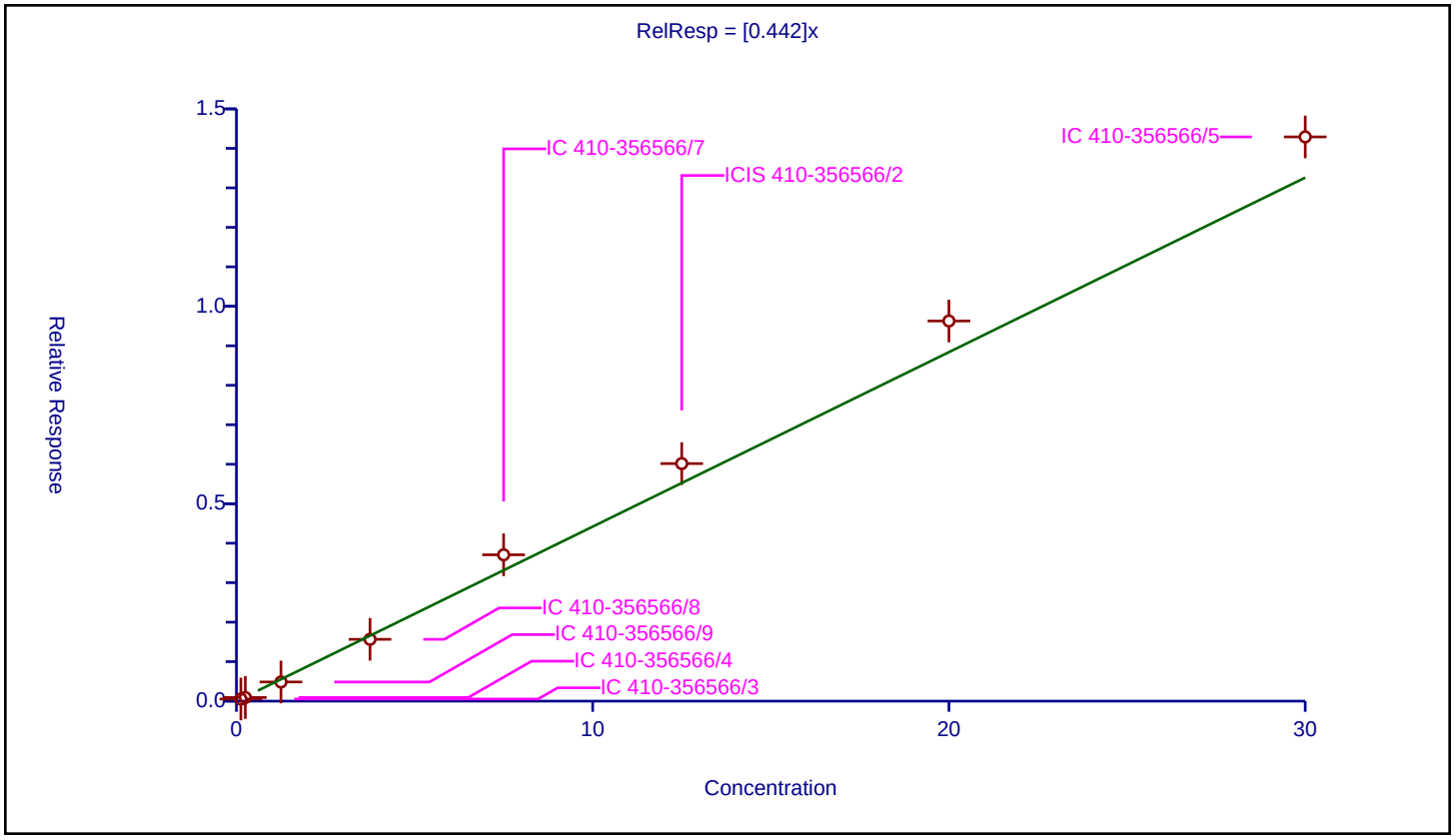
Curve Coefficients

Intercept:	0
Slope:	0.442

Error Coefficients

Standard Error:	536000
Relative Standard Error:	10.8
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.053379	5.0	271456.0	0.427031	Y
2	IC 410-356566/4	0.25	0.092382	5.0	330095.0	0.36953	Y
3	IC 410-356566/9	1.25	0.48543	5.0	266166.0	0.388344	Y
4	IC 410-356566/8	3.75	1.56585	5.0	385056.0	0.41756	Y
5	IC 410-356566/7	7.5	3.706532	5.0	359317.0	0.494204	Y
6	ICIS 410-356566/2	12.5	6.016542	5.0	394814.0	0.481323	Y
7	IC 410-356566/6	20.0	9.628219	5.0	287683.0	0.481411	Y
8	IC 410-356566/5	30.0	14.290549	5.0	413214.0	0.476352	Y



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Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

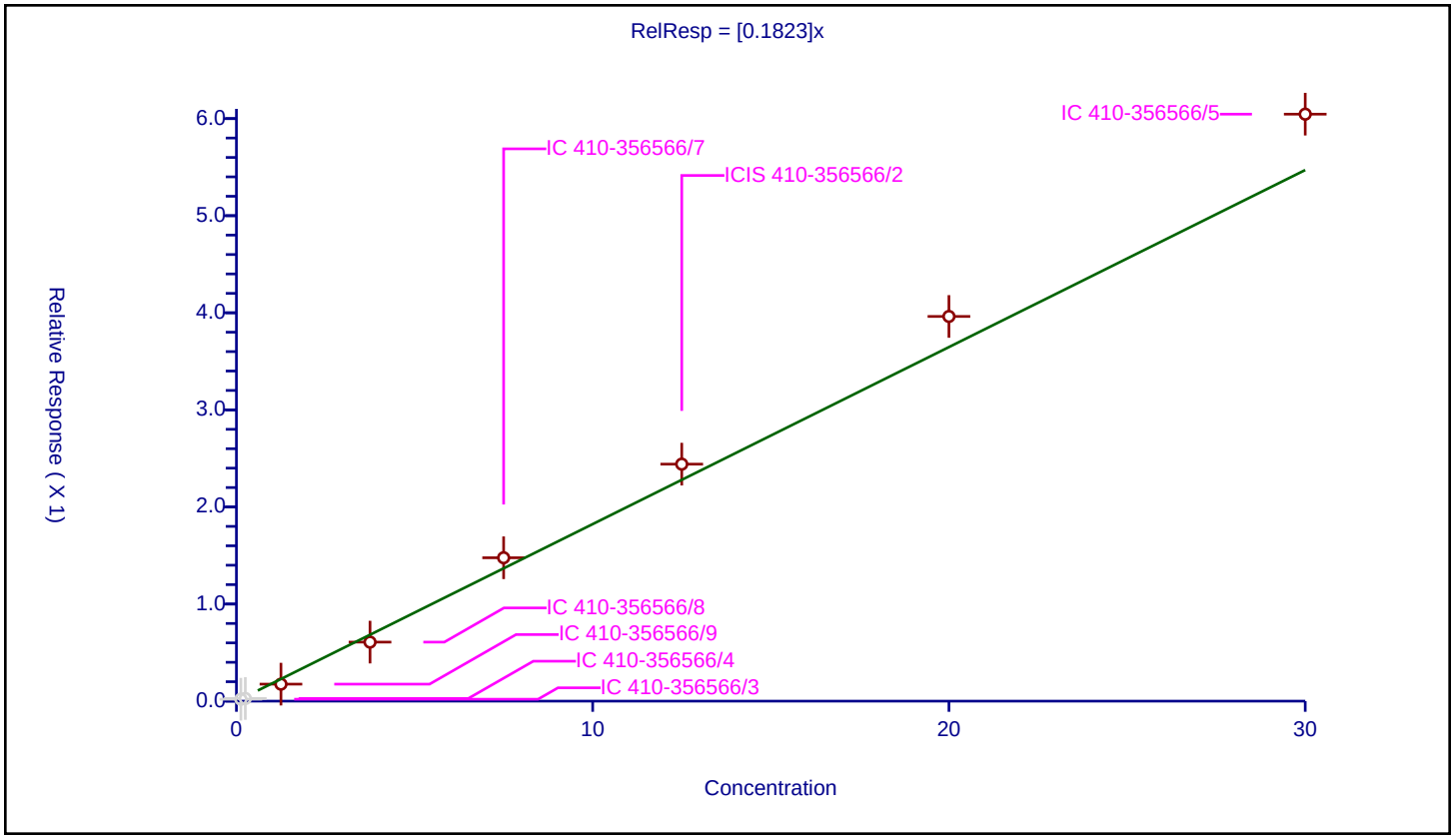
Curve Coefficients

Intercept:	0
Slope:	0.1823

Error Coefficients

Standard Error:	265000
Relative Standard Error:	13.9
Correlation Coefficient:	0.955
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.020022	5.0	271456.0	0.160173	N
2	IC 410-356566/4	0.25	0.02731	5.0	330095.0	0.109241	N
3	IC 410-356566/9	1.25	0.175041	5.0	266166.0	0.140033	Y
4	IC 410-356566/8	3.75	0.608067	5.0	385056.0	0.162151	Y
5	IC 410-356566/7	7.5	1.476857	5.0	359317.0	0.196914	Y
6	ICIS 410-356566/2	12.5	2.4412	5.0	394814.0	0.195296	Y
7	IC 410-356566/6	20.0	3.962295	5.0	287683.0	0.198115	Y
8	IC 410-356566/5	30.0	6.045766	5.0	413214.0	0.201526	Y



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Calibration / Dimethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

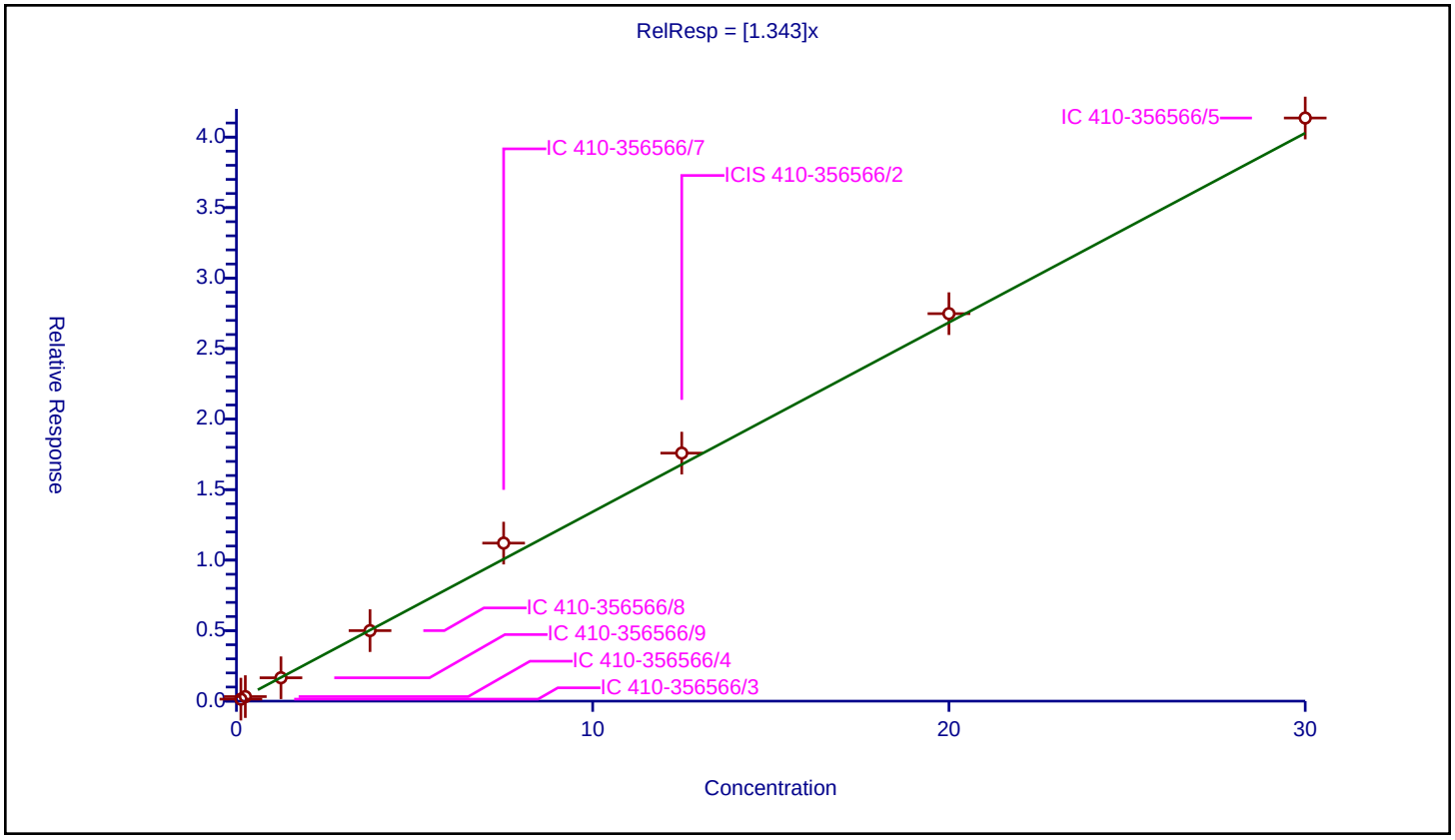
Curve Coefficients

Intercept:	0
Slope:	1.343

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	7.7
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.142251	5.0	271456.0	1.138011	Y
2	IC 410-356566/4	0.25	0.322831	5.0	330095.0	1.291325	Y
3	IC 410-356566/9	1.25	1.657199	5.0	266166.0	1.325759	Y
4	IC 410-356566/8	3.75	5.000377	5.0	385056.0	1.333434	Y
5	IC 410-356566/7	7.5	11.207917	5.0	359317.0	1.494389	Y
6	ICIS 410-356566/2	12.5	17.589156	5.0	394814.0	1.407132	Y
7	IC 410-356566/6	20.0	27.478979	5.0	287683.0	1.373949	Y
8	IC 410-356566/5	30.0	41.353742	5.0	413214.0	1.378458	Y



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Calibration / 1,4-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

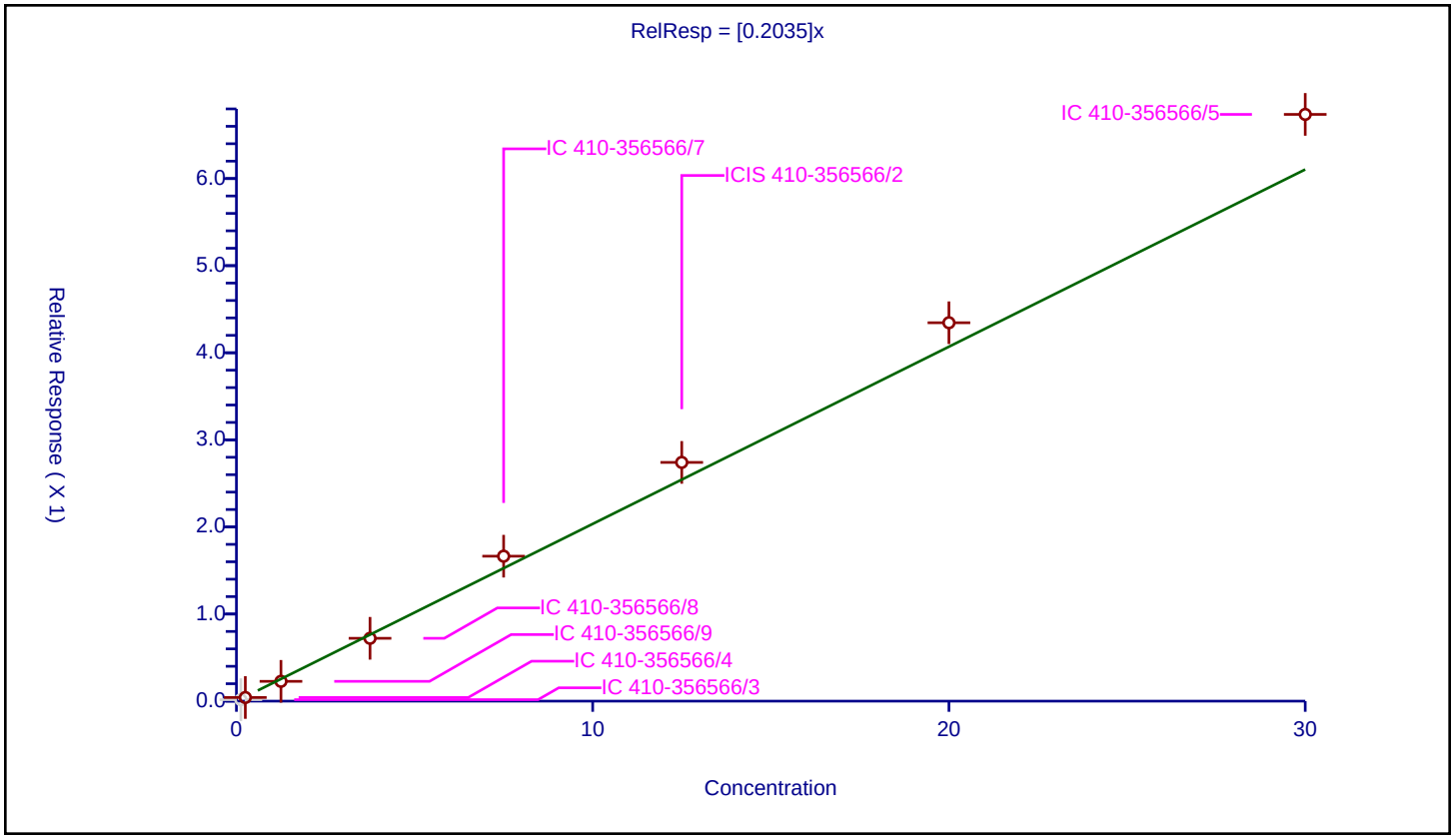
Curve Coefficients

Intercept:	0
Slope:	0.2035

Error Coefficients

Standard Error:	270000
Relative Standard Error:	11.2
Correlation Coefficient:	0.957
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.017111	5.0	271456.0	0.136891	N
2	IC 410-356566/4	0.25	0.041806	5.0	330095.0	0.167225	Y
3	IC 410-356566/9	1.25	0.227245	5.0	266166.0	0.181796	Y
4	IC 410-356566/8	3.75	0.721428	5.0	385056.0	0.192381	Y
5	IC 410-356566/7	7.5	1.664227	5.0	359317.0	0.221897	Y
6	ICIS 410-356566/2	12.5	2.741063	5.0	394814.0	0.219285	Y
7	IC 410-356566/6	20.0	4.344574	5.0	287683.0	0.217229	Y
8	IC 410-356566/5	30.0	6.736764	5.0	413214.0	0.224559	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

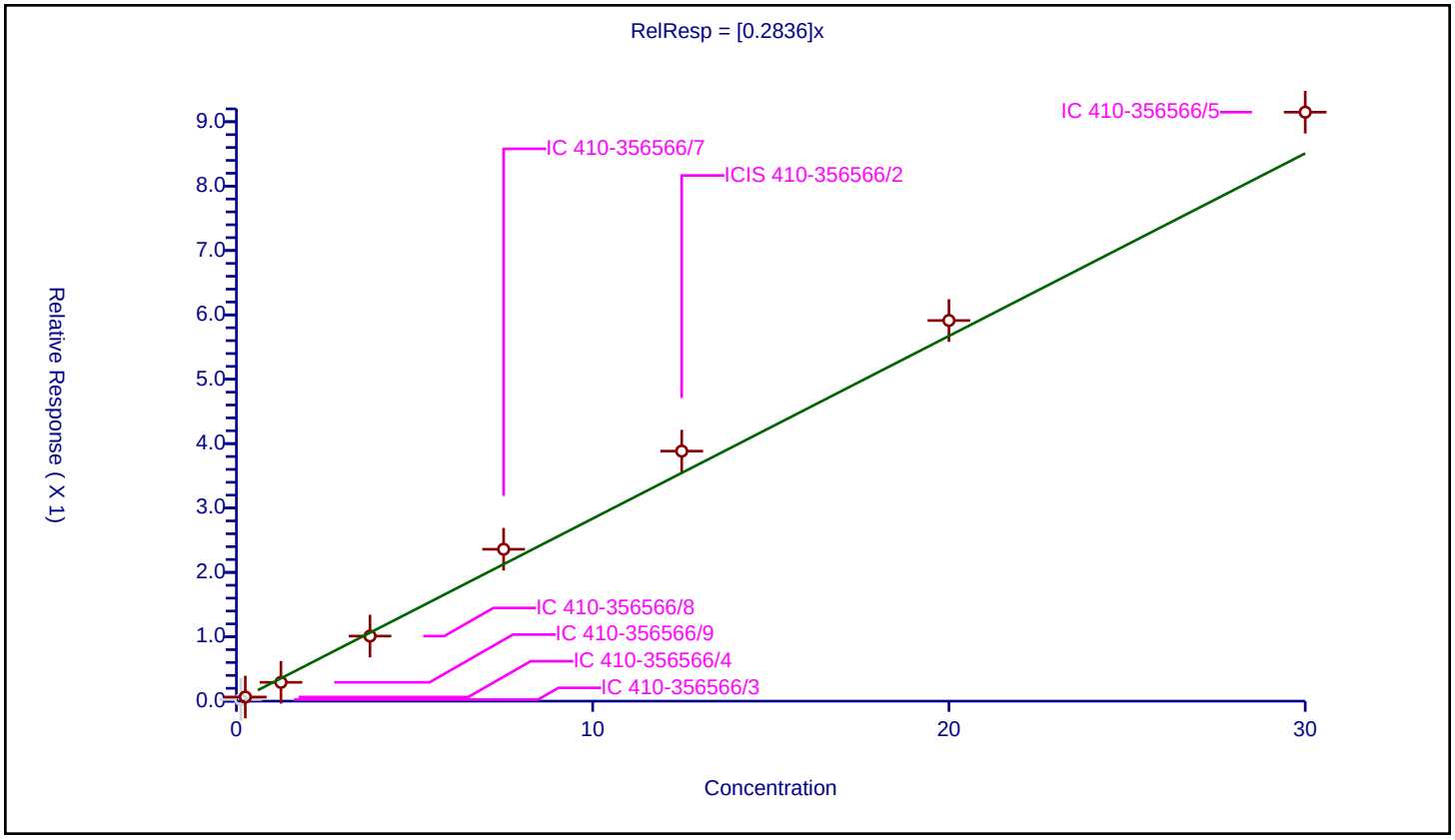
Curve Coefficients

Intercept:	0
Slope:	0.2836

Error Coefficients

Standard Error:	369000
Relative Standard Error:	10.9
Correlation Coefficient:	0.956
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.025013	5.0	271456.0	0.200106	N
2	IC 410-356566/4	0.25	0.064027	5.0	330095.0	0.256108	Y
3	IC 410-356566/9	1.25	0.292167	5.0	266166.0	0.233734	Y
4	IC 410-356566/8	3.75	1.01084	5.0	385056.0	0.269557	Y
5	IC 410-356566/7	7.5	2.359657	5.0	359317.0	0.314621	Y
6	ICIS 410-356566/2	12.5	3.883753	5.0	394814.0	0.3107	Y
7	IC 410-356566/6	20.0	5.912897	5.0	287683.0	0.295645	Y
8	IC 410-356566/5	30.0	9.148565	5.0	413214.0	0.304952	Y



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Calibration / Acenaphthylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

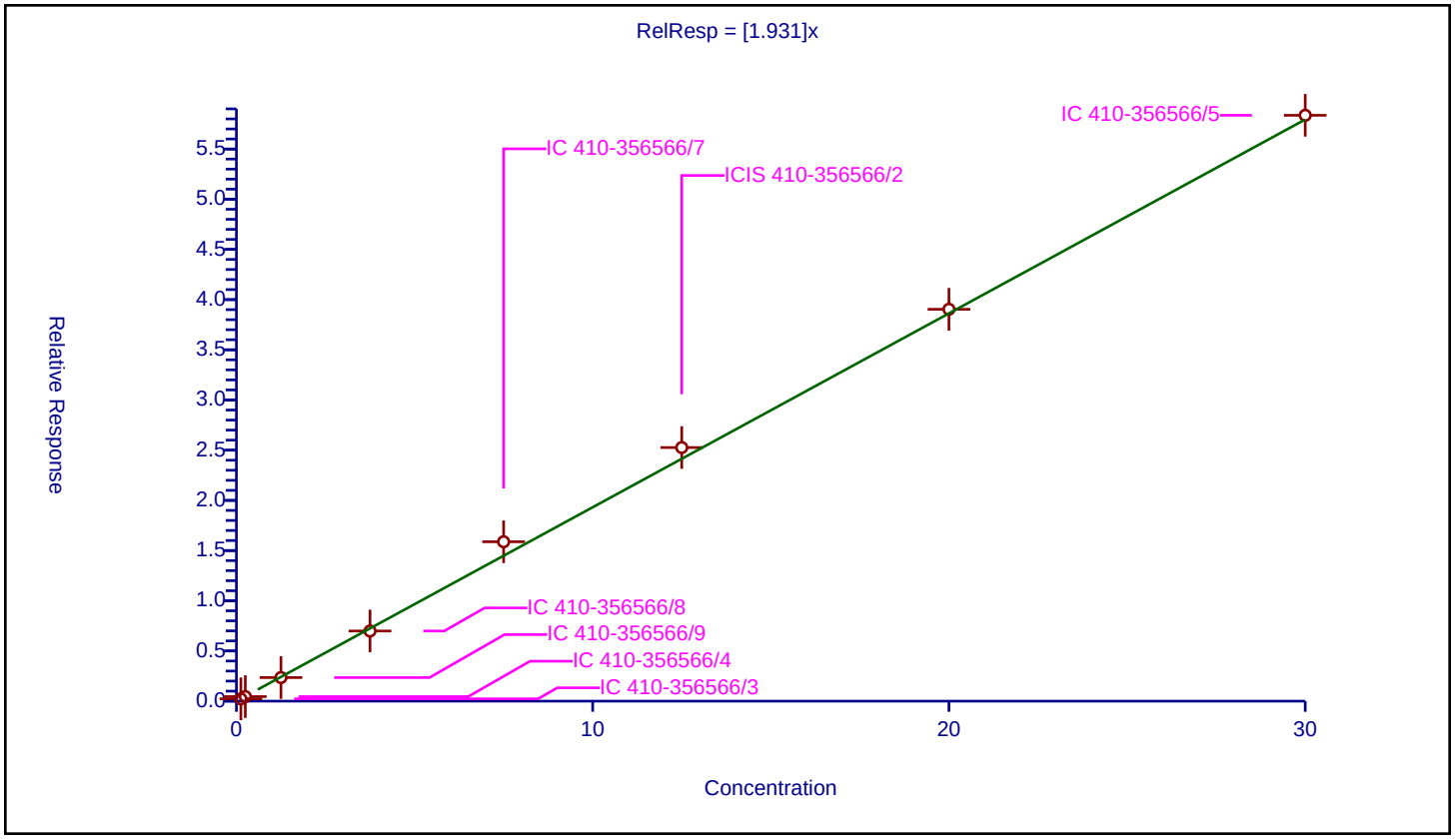
Curve Coefficients

Intercept:	0
Slope:	1.931

Error Coefficients

Standard Error:	2200000
Relative Standard Error:	5.2
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.232929	5.0	271456.0	1.863433	Y
2	IC 410-356566/4	0.25	0.452355	5.0	330095.0	1.809419	Y
3	IC 410-356566/9	1.25	2.349831	5.0	266166.0	1.879864	Y
4	IC 410-356566/8	3.75	6.987036	5.0	385056.0	1.86321	Y
5	IC 410-356566/7	7.5	15.877999	5.0	359317.0	2.117067	Y
6	ICIS 410-356566/2	12.5	25.263415	5.0	394814.0	2.021073	Y
7	IC 410-356566/6	20.0	39.037308	5.0	287683.0	1.951865	Y
8	IC 410-356566/5	30.0	58.359688	5.0	413214.0	1.945323	Y



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Calibration / 3-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

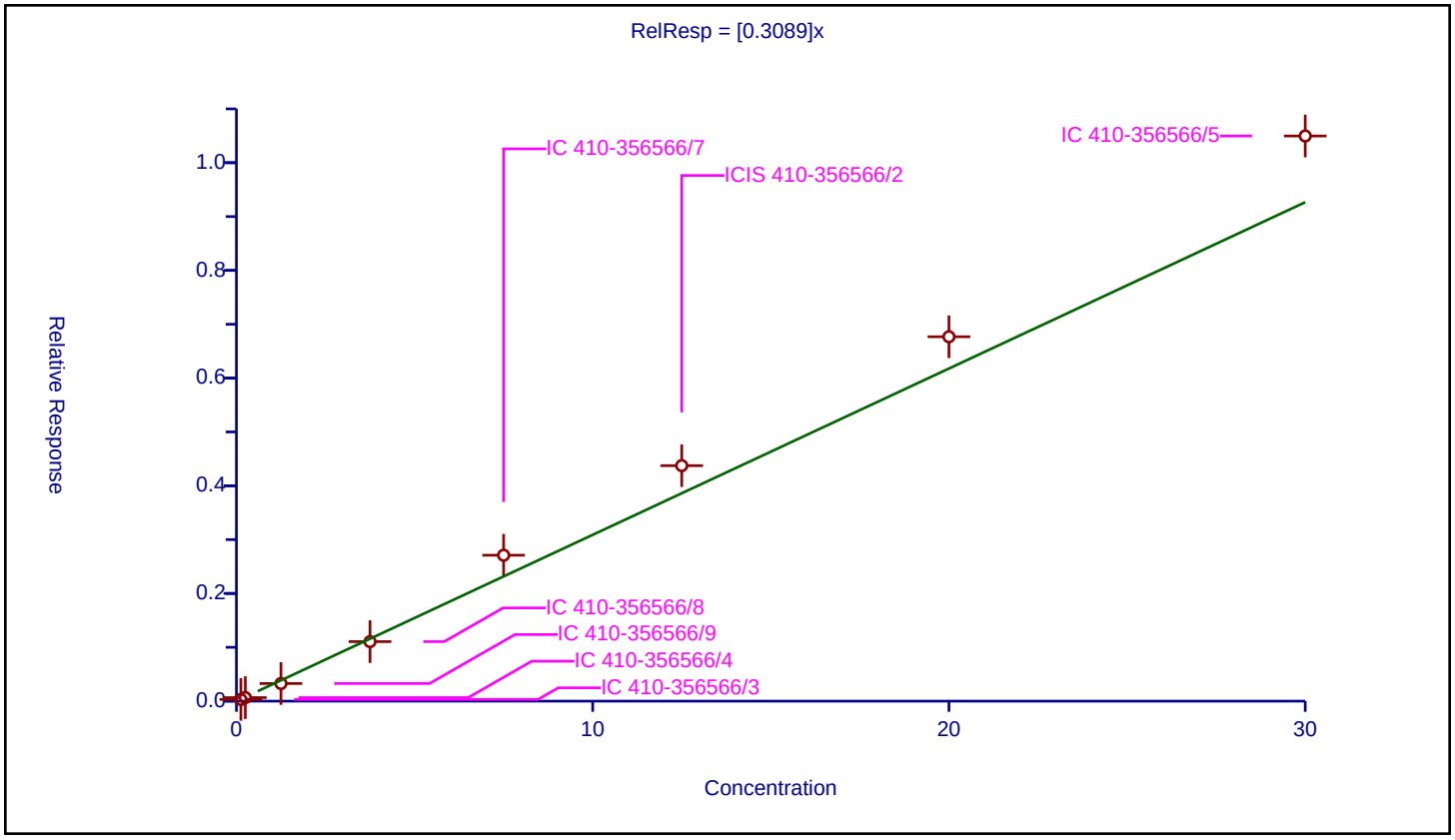
Curve Coefficients

Intercept:	0
Slope:	0.3089

Error Coefficients

Standard Error:	391000
Relative Standard Error:	14.8
Correlation Coefficient:	0.960
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.031718	5.0	271456.0	0.253743	Y
2	IC 410-356566/4	0.25	0.065315	5.0	330095.0	0.261258	Y
3	IC 410-356566/9	1.25	0.32707	5.0	266166.0	0.261656	Y
4	IC 410-356566/8	3.75	1.105385	5.0	385056.0	0.294769	Y
5	IC 410-356566/7	7.5	2.710114	5.0	359317.0	0.361349	Y
6	ICIS 410-356566/2	12.5	4.373971	5.0	394814.0	0.349918	Y
7	IC 410-356566/6	20.0	6.768109	5.0	287683.0	0.338405	Y
8	IC 410-356566/5	30.0	10.496317	5.0	413214.0	0.349877	Y



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Calibration / Acenaphthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

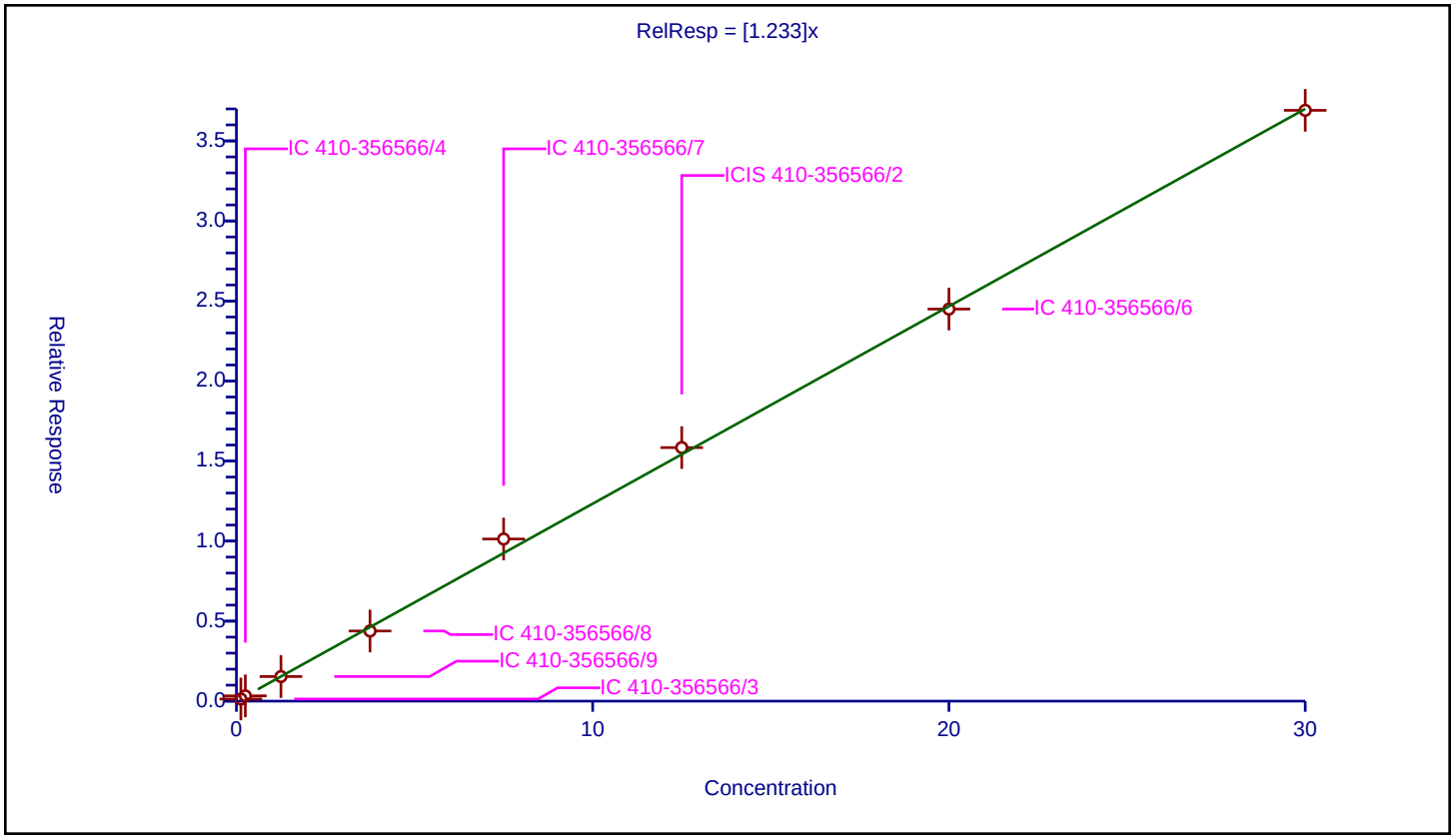
Curve Coefficients

Intercept:	0
Slope:	1.233

Error Coefficients

Standard Error:	1390000
Relative Standard Error:	7.0
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.134368	5.0	271456.0	1.074944	Y
2	IC 410-356566/4	0.25	0.330465	5.0	330095.0	1.321862	Y
3	IC 410-356566/9	1.25	1.535978	5.0	266166.0	1.228782	Y
4	IC 410-356566/8	3.75	4.381791	5.0	385056.0	1.168478	Y
5	IC 410-356566/7	7.5	10.128828	5.0	359317.0	1.35051	Y
6	ICIS 410-356566/2	12.5	15.839129	5.0	394814.0	1.26713	Y
7	IC 410-356566/6	20.0	24.494148	5.0	287683.0	1.224707	Y
8	IC 410-356566/5	30.0	36.910572	5.0	413214.0	1.230352	Y



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Calibration / 2,4-Dinitrophenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

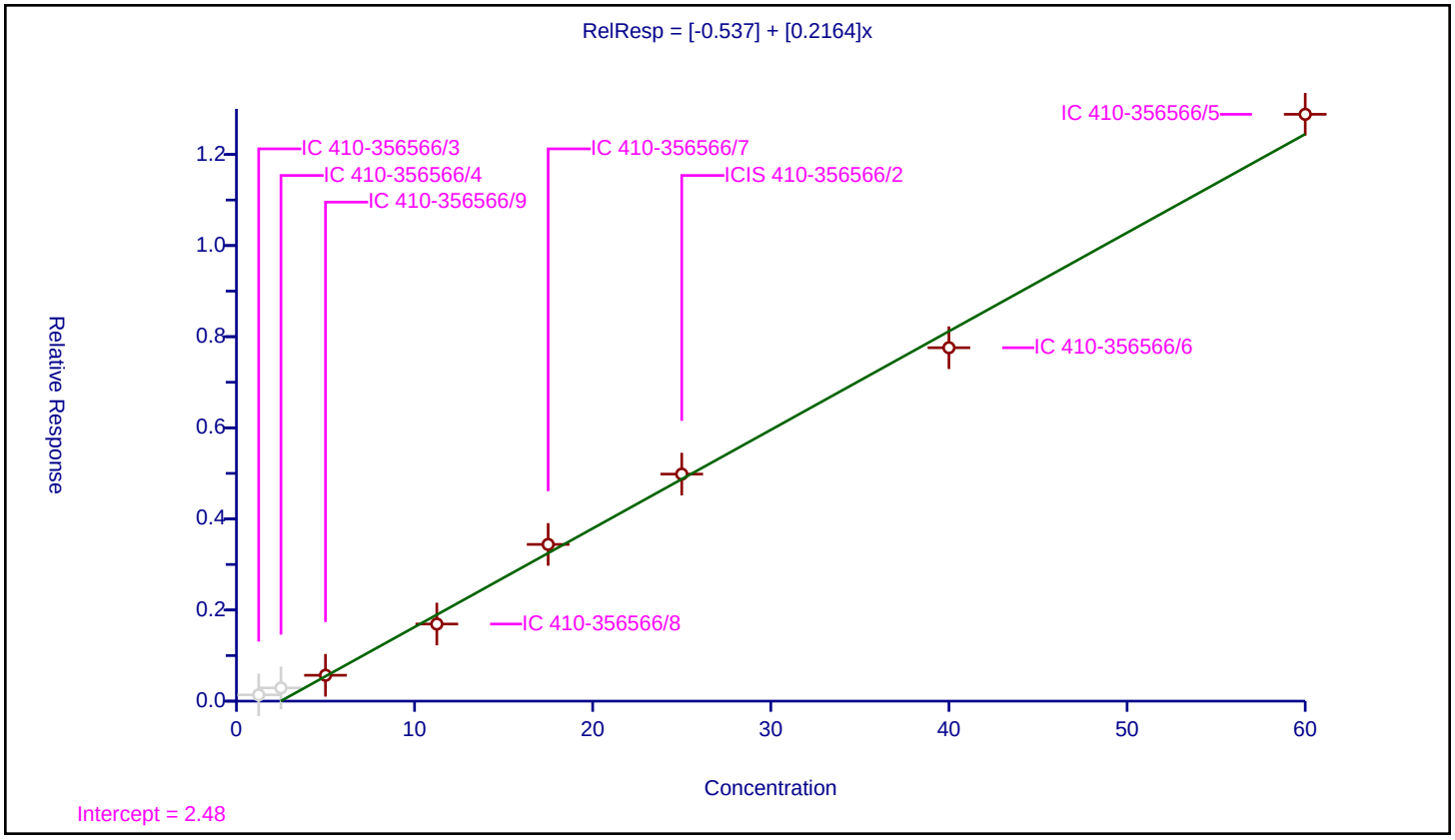
Curve Coefficients

Intercept:	-0.537
Slope:	0.2164

Error Coefficients

Standard Error:	626000
Relative Standard Error:	5.8
Correlation Coefficient:	0.939
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	1.25	0.137702	5.0	271456.0	0.110161	N
2	IC 410-356566/4	2.5	0.290689	5.0	330095.0	0.116276	N
3	IC 410-356566/9	5.0	0.567879	5.0	266166.0	0.113576	Y
4	IC 410-356566/8	11.25	1.692585	5.0	385056.0	0.150452	Y
5	IC 410-356566/7	17.5	3.440249	5.0	359317.0	0.196586	Y
6	ICIS 410-356566/2	25.0	4.983701	5.0	394814.0	0.199348	Y
7	IC 410-356566/6	40.0	7.757566	5.0	287683.0	0.193939	Y
8	IC 410-356566/5	60.0	12.881158	5.0	413214.0	0.214686	Y



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Calibration / 4-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

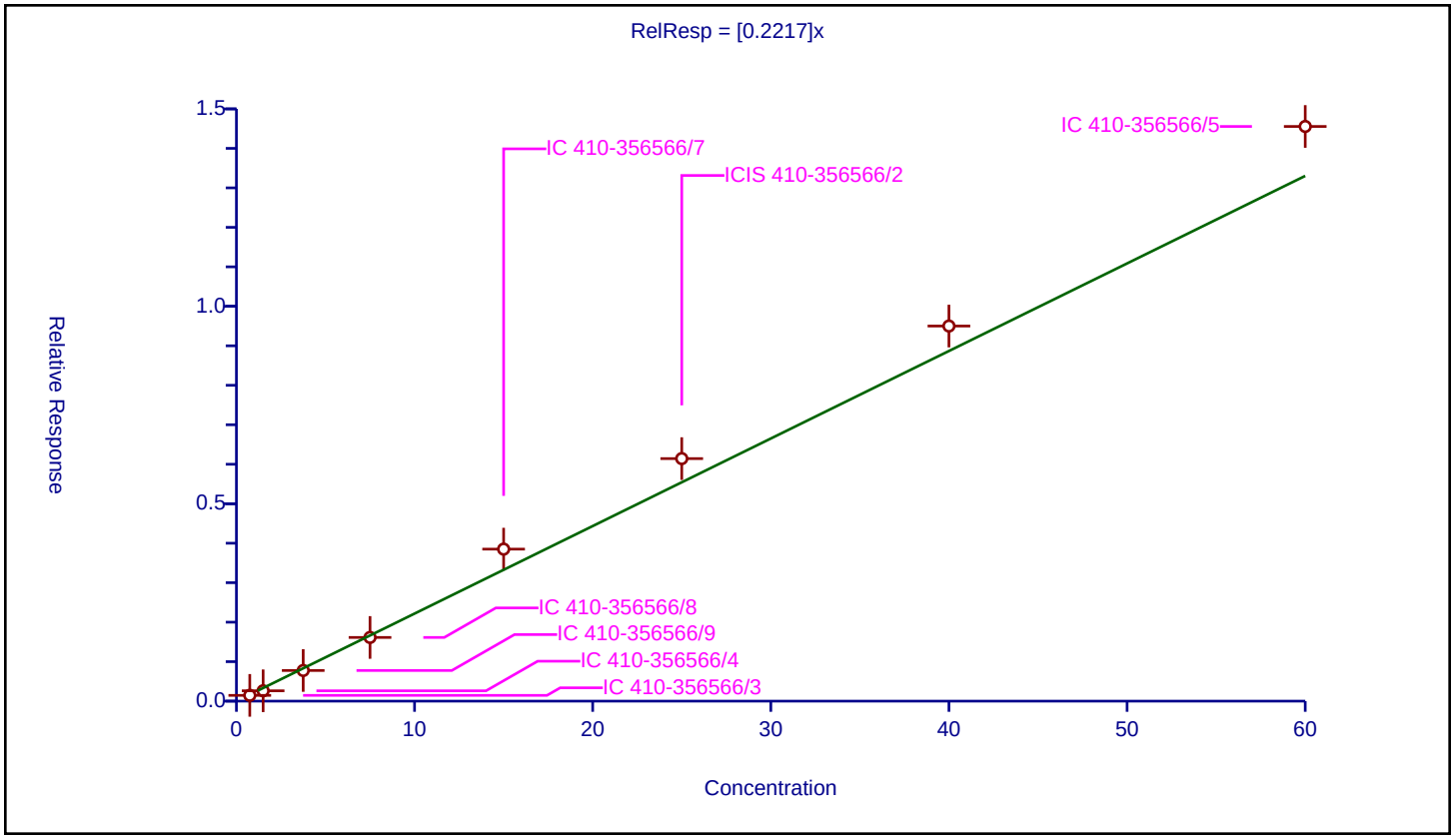
Curve Coefficients

Intercept:	0
Slope:	0.2217

Error Coefficients

Standard Error:	544000
Relative Standard Error:	12.9
Correlation Coefficient:	0.961
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.75	0.145825	5.0	271456.0	0.194433	Y
2	IC 410-356566/4	1.5	0.262122	5.0	330095.0	0.174748	Y
3	IC 410-356566/9	3.75	0.776132	5.0	266166.0	0.206969	Y
4	IC 410-356566/8	7.5	1.612986	5.0	385056.0	0.215065	Y
5	IC 410-356566/7	15.0	3.850124	5.0	359317.0	0.256675	Y
6	ICIS 410-356566/2	25.0	6.143171	5.0	394814.0	0.245727	Y
7	IC 410-356566/6	40.0	9.500474	5.0	287683.0	0.237512	Y
8	IC 410-356566/5	60.0	14.554867	5.0	413214.0	0.242581	Y



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Calibration / Pentachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

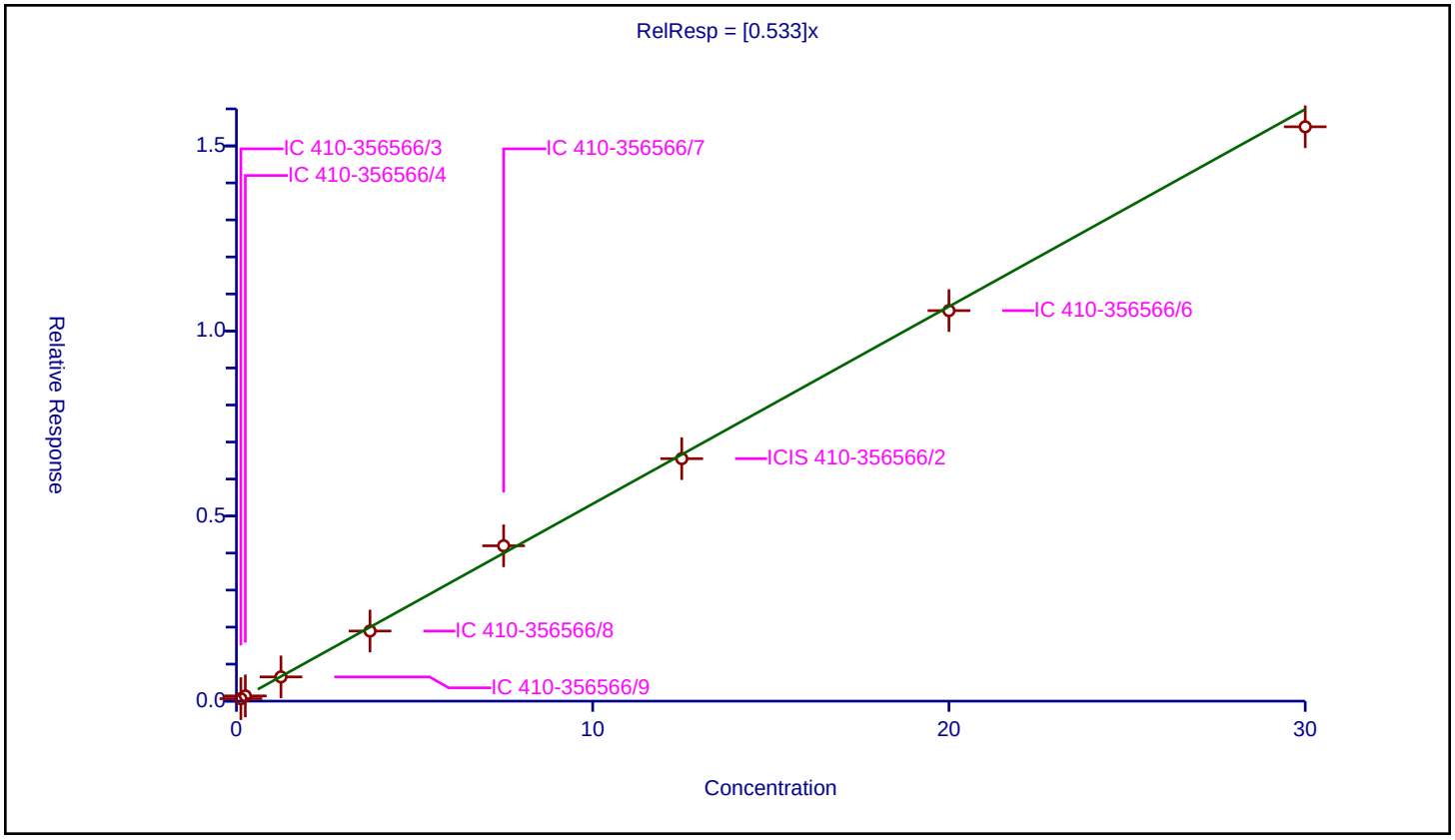
Curve Coefficients

Intercept:	0
Slope:	0.533

Error Coefficients

Standard Error:	585000
Relative Standard Error:	3.9
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.067506	5.0	271456.0	0.540051	Y
2	IC 410-356566/4	0.25	0.141505	5.0	330095.0	0.566019	Y
3	IC 410-356566/9	1.25	0.655343	5.0	266166.0	0.524274	Y
4	IC 410-356566/8	3.75	1.894348	5.0	385056.0	0.505159	Y
5	IC 410-356566/7	7.5	4.19642	5.0	359317.0	0.559523	Y
6	ICIS 410-356566/2	12.5	6.551059	5.0	394814.0	0.524085	Y
7	IC 410-356566/6	20.0	10.550571	5.0	287683.0	0.527529	Y
8	IC 410-356566/5	30.0	15.516125	5.0	413214.0	0.517204	Y



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Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

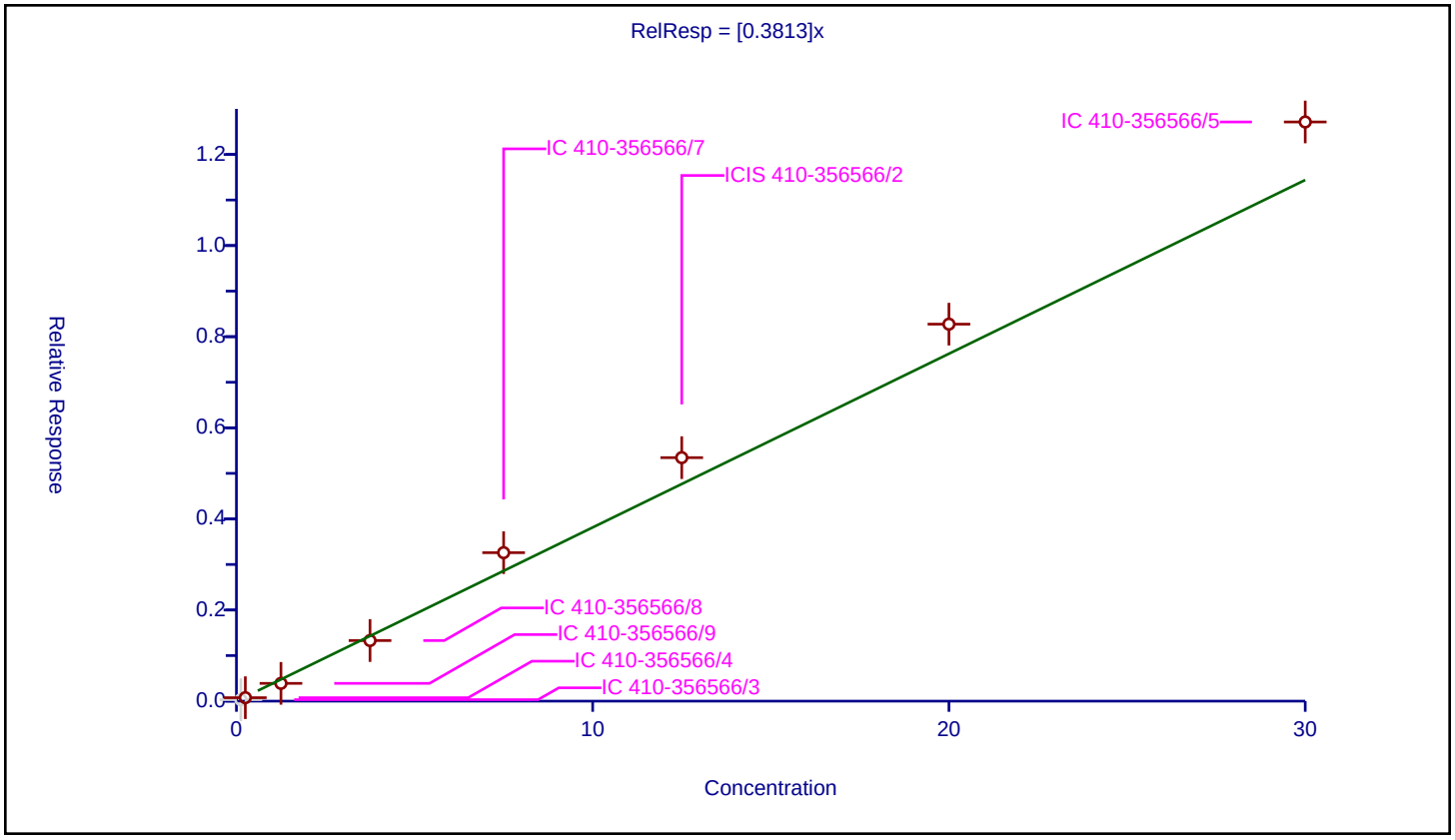
Curve Coefficients

Intercept:	0
Slope:	0.3813

Error Coefficients

Standard Error:	512000
Relative Standard Error:	14.9
Correlation Coefficient:	0.958
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.032178	5.0	271456.0	0.257427	N
2	IC 410-356566/4	0.25	0.07569	5.0	330095.0	0.302761	Y
3	IC 410-356566/9	1.25	0.390208	5.0	266166.0	0.312166	Y
4	IC 410-356566/8	3.75	1.32956	5.0	385056.0	0.354549	Y
5	IC 410-356566/7	7.5	3.258947	5.0	359317.0	0.434526	Y
6	ICIS 410-356566/2	12.5	5.344947	5.0	394814.0	0.427596	Y
7	IC 410-356566/6	20.0	8.275237	5.0	287683.0	0.413762	Y
8	IC 410-356566/5	30.0	12.713098	5.0	413214.0	0.42377	Y



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Calibration / Dibenzofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

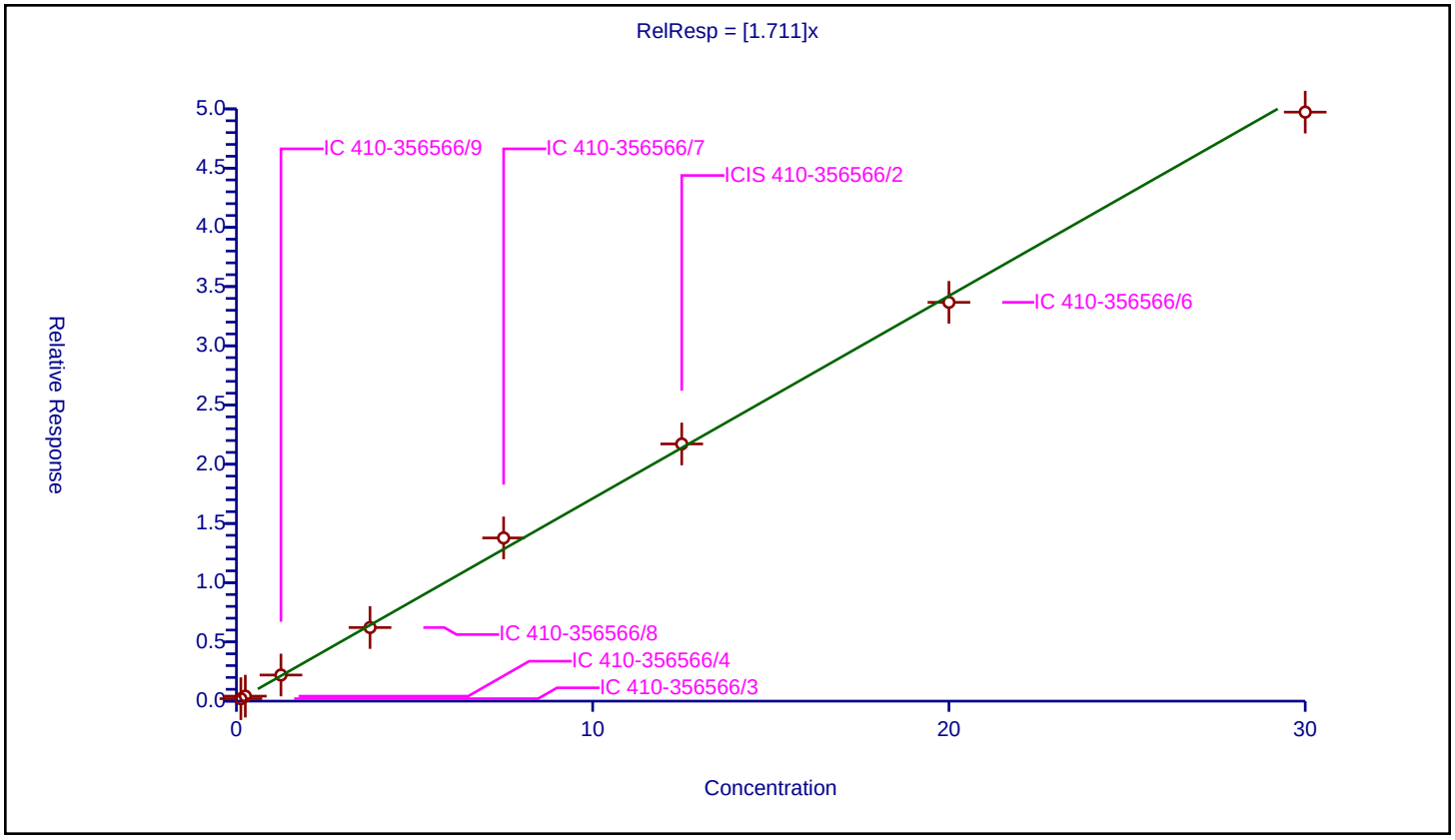
Curve Coefficients

Intercept:	0
Slope:	1.711

Error Coefficients

Standard Error:	1880000
Relative Standard Error:	3.8
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.208045	5.0	271456.0	1.664358	Y
2	IC 410-356566/4	0.25	0.421151	5.0	330095.0	1.684606	Y
3	IC 410-356566/9	1.25	2.205804	5.0	266166.0	1.764643	Y
4	IC 410-356566/8	3.75	6.214447	5.0	385056.0	1.657186	Y
5	IC 410-356566/7	7.5	13.77885	5.0	359317.0	1.83718	Y
6	ICIS 410-356566/2	12.5	21.712604	5.0	394814.0	1.737008	Y
7	IC 410-356566/6	20.0	33.668326	5.0	287683.0	1.683416	Y
8	IC 410-356566/5	30.0	49.728639	5.0	413214.0	1.657621	Y



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Calibration / 1-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

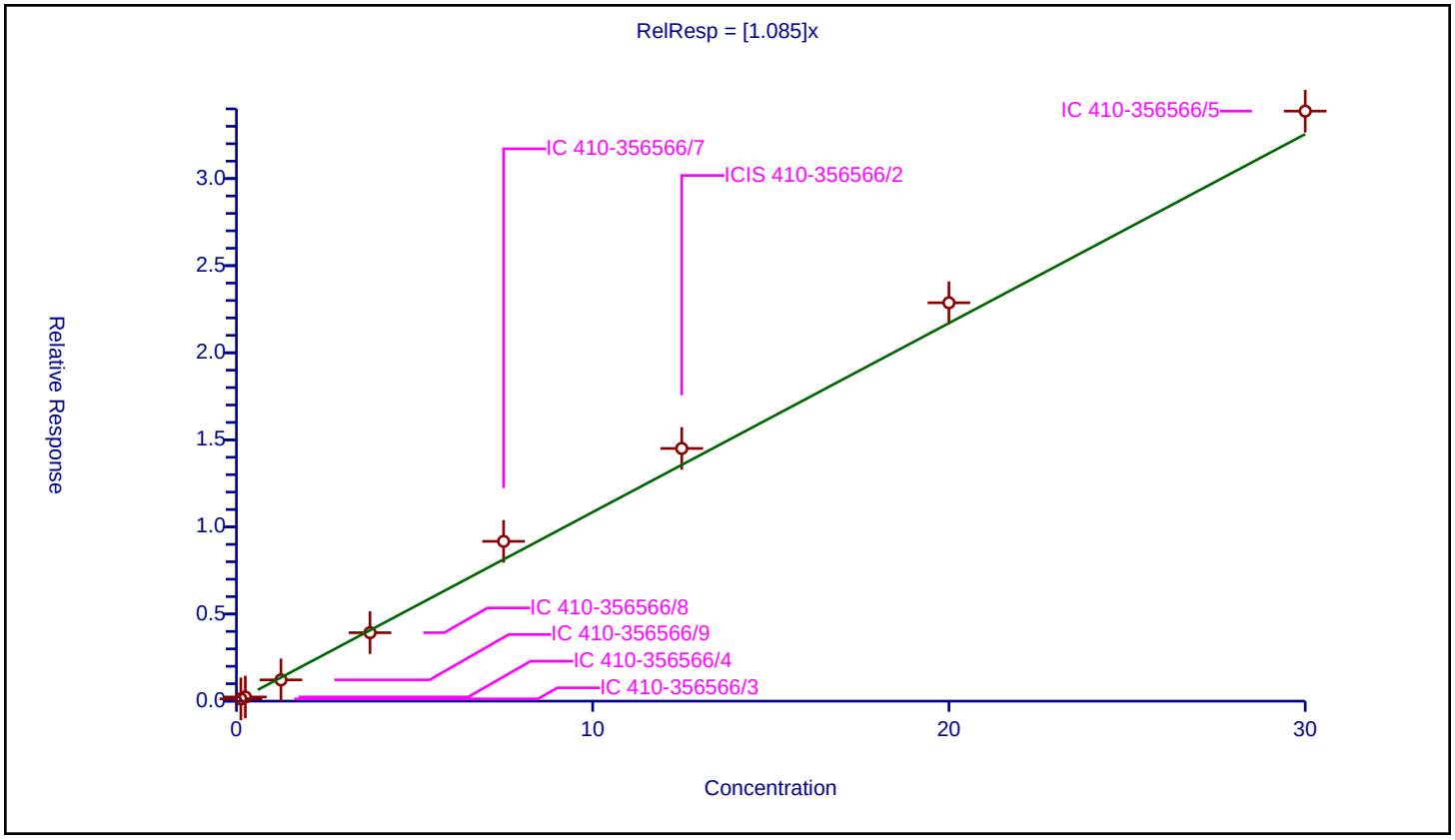
Curve Coefficients

Intercept:	0
Slope:	1.085

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	8.7
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.130555	5.0	271456.0	1.044442	Y
2	IC 410-356566/4	0.25	0.23884	5.0	330095.0	0.955361	Y
3	IC 410-356566/9	1.25	1.21984	5.0	266166.0	0.975872	Y
4	IC 410-356566/8	3.75	3.929961	5.0	385056.0	1.04799	Y
5	IC 410-356566/7	7.5	9.173988	5.0	359317.0	1.223198	Y
6	ICIS 410-356566/2	12.5	14.507224	5.0	394814.0	1.160578	Y
7	IC 410-356566/6	20.0	22.870469	5.0	287683.0	1.143523	Y
8	IC 410-356566/5	30.0	33.872025	5.0	413214.0	1.129068	Y



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Calibration / 2,3,4,6-Tetrachlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

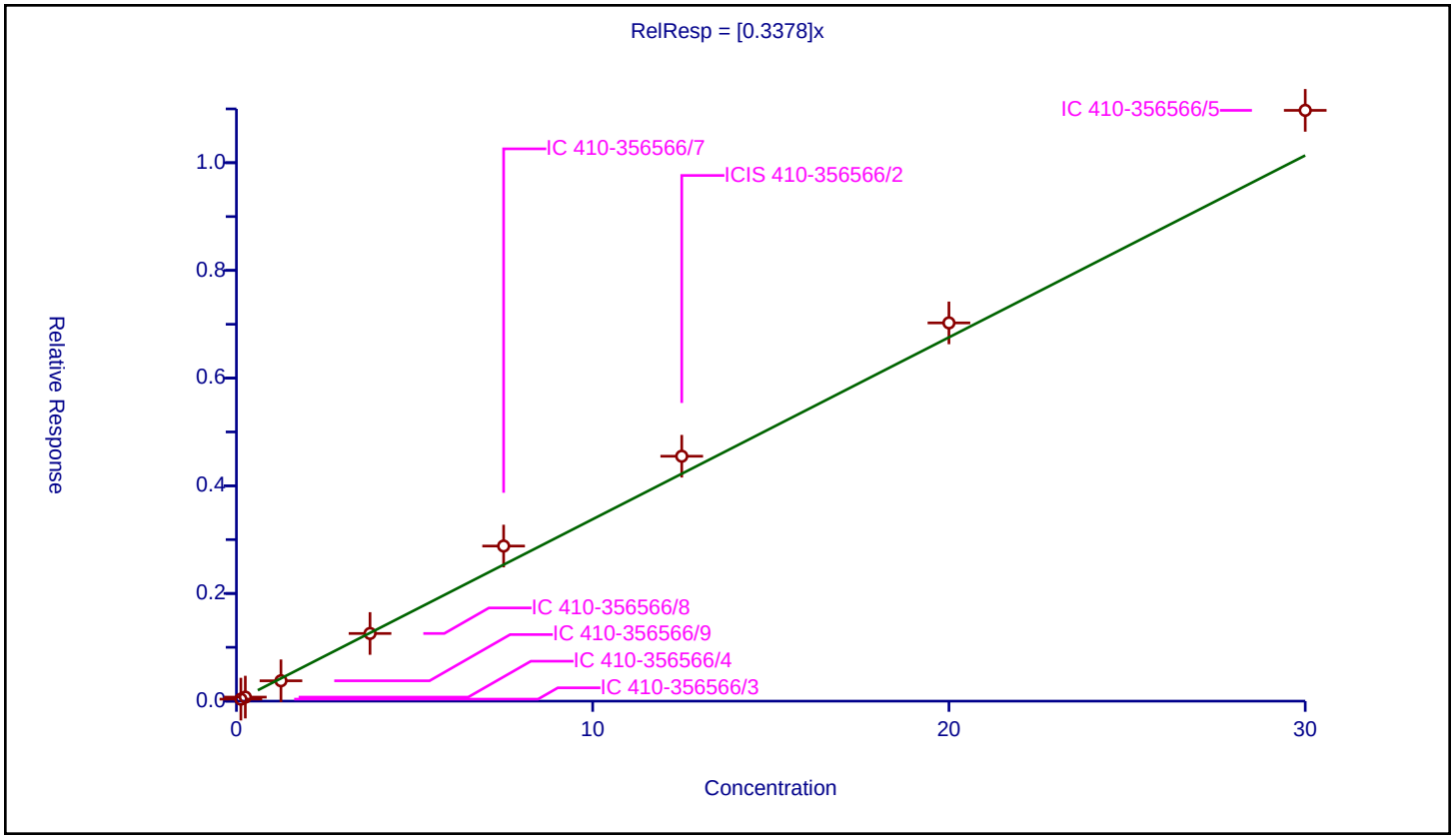
Curve Coefficients

Intercept:	0
Slope:	0.3378

Error Coefficients

Standard Error:	408000
Relative Standard Error:	9.9
Correlation Coefficient:	0.959
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.037465	5.0	271456.0	0.299717	Y
2	IC 410-356566/4	0.25	0.075024	5.0	330095.0	0.300095	Y
3	IC 410-356566/9	1.25	0.37841	5.0	266166.0	0.302728	Y
4	IC 410-356566/8	3.75	1.25696	5.0	385056.0	0.335189	Y
5	IC 410-356566/7	7.5	2.880966	5.0	359317.0	0.384129	Y
6	ICIS 410-356566/2	12.5	4.548826	5.0	394814.0	0.363906	Y
7	IC 410-356566/6	20.0	7.025354	5.0	287683.0	0.351268	Y
8	IC 410-356566/5	30.0	10.97268	5.0	413214.0	0.365756	Y



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Calibration / 2-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

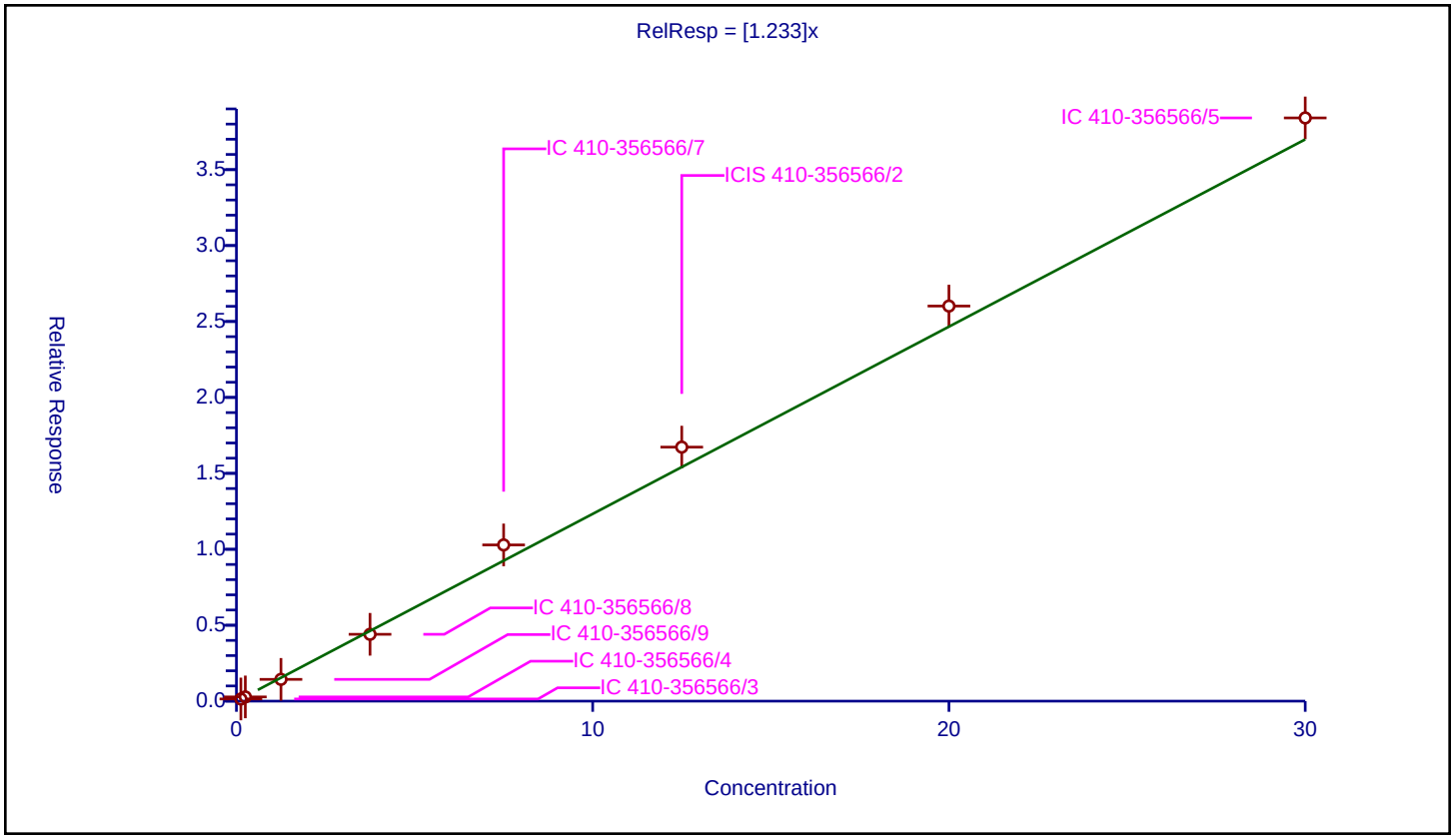
Curve Coefficients

Intercept:	0
Slope:	1.233

Error Coefficients

Standard Error:	1450000
Relative Standard Error:	8.2
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.142878	5.0	271456.0	1.143021	Y
2	IC 410-356566/4	0.25	0.277435	5.0	330095.0	1.109741	Y
3	IC 410-356566/9	1.25	1.43326	5.0	266166.0	1.146608	Y
4	IC 410-356566/8	3.75	4.40197	5.0	385056.0	1.173859	Y
5	IC 410-356566/7	7.5	10.287072	5.0	359317.0	1.37161	Y
6	ICIS 410-356566/2	12.5	16.727649	5.0	394814.0	1.338212	Y
7	IC 410-356566/6	20.0	26.016397	5.0	287683.0	1.30082	Y
8	IC 410-356566/5	30.0	38.405233	5.0	413214.0	1.280174	Y



Calibration / Diethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

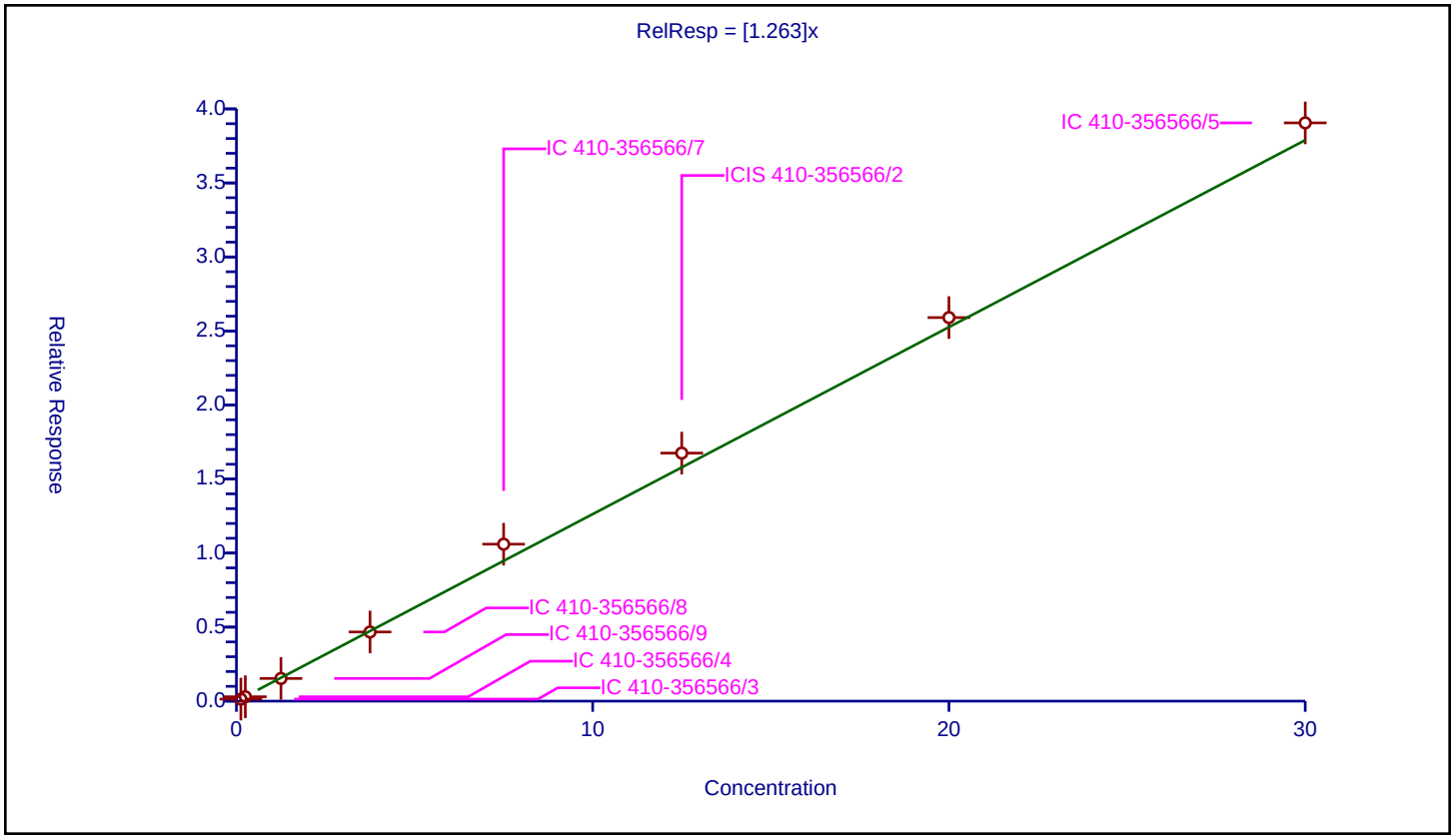
Curve Coefficients

Intercept:	0
Slope:	1.263

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	7.7
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.137776	5.0	271456.0	1.102204	Y
2	IC 410-356566/4	0.25	0.295112	5.0	330095.0	1.180448	Y
3	IC 410-356566/9	1.25	1.530943	5.0	266166.0	1.224754	Y
4	IC 410-356566/8	3.75	4.671528	5.0	385056.0	1.245741	Y
5	IC 410-356566/7	7.5	10.602115	5.0	359317.0	1.413615	Y
6	ICIS 410-356566/2	12.5	16.752445	5.0	394814.0	1.340196	Y
7	IC 410-356566/6	20.0	25.905928	5.0	287683.0	1.295296	Y
8	IC 410-356566/5	30.0	39.055756	5.0	413214.0	1.301859	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

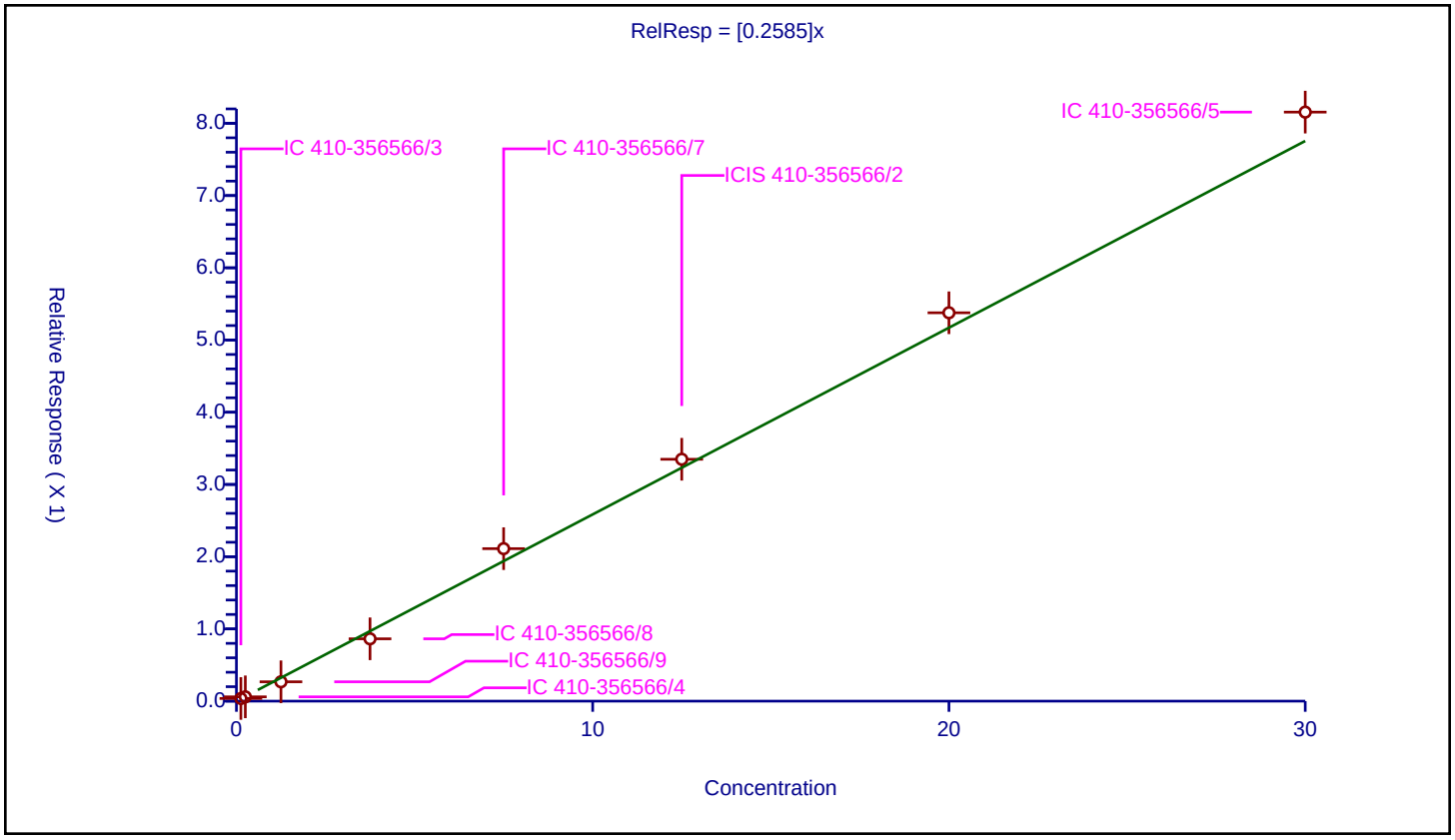
Curve Coefficients

Intercept:	0
Slope:	0.2585

Error Coefficients

Standard Error:	304000
Relative Standard Error:	10.8
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.036949	5.0	271456.0	0.295591	Y
2	IC 410-356566/4	0.25	0.059513	5.0	330095.0	0.238053	Y
3	IC 410-356566/9	1.25	0.267803	5.0	266166.0	0.214242	Y
4	IC 410-356566/8	3.75	0.863199	5.0	385056.0	0.230186	Y
5	IC 410-356566/7	7.5	2.1112	5.0	359317.0	0.281493	Y
6	ICIS 410-356566/2	12.5	3.348957	5.0	394814.0	0.267917	Y
7	IC 410-356566/6	20.0	5.377099	5.0	287683.0	0.268855	Y
8	IC 410-356566/5	30.0	8.155326	5.0	413214.0	0.271844	Y



Calibration / Fluorene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

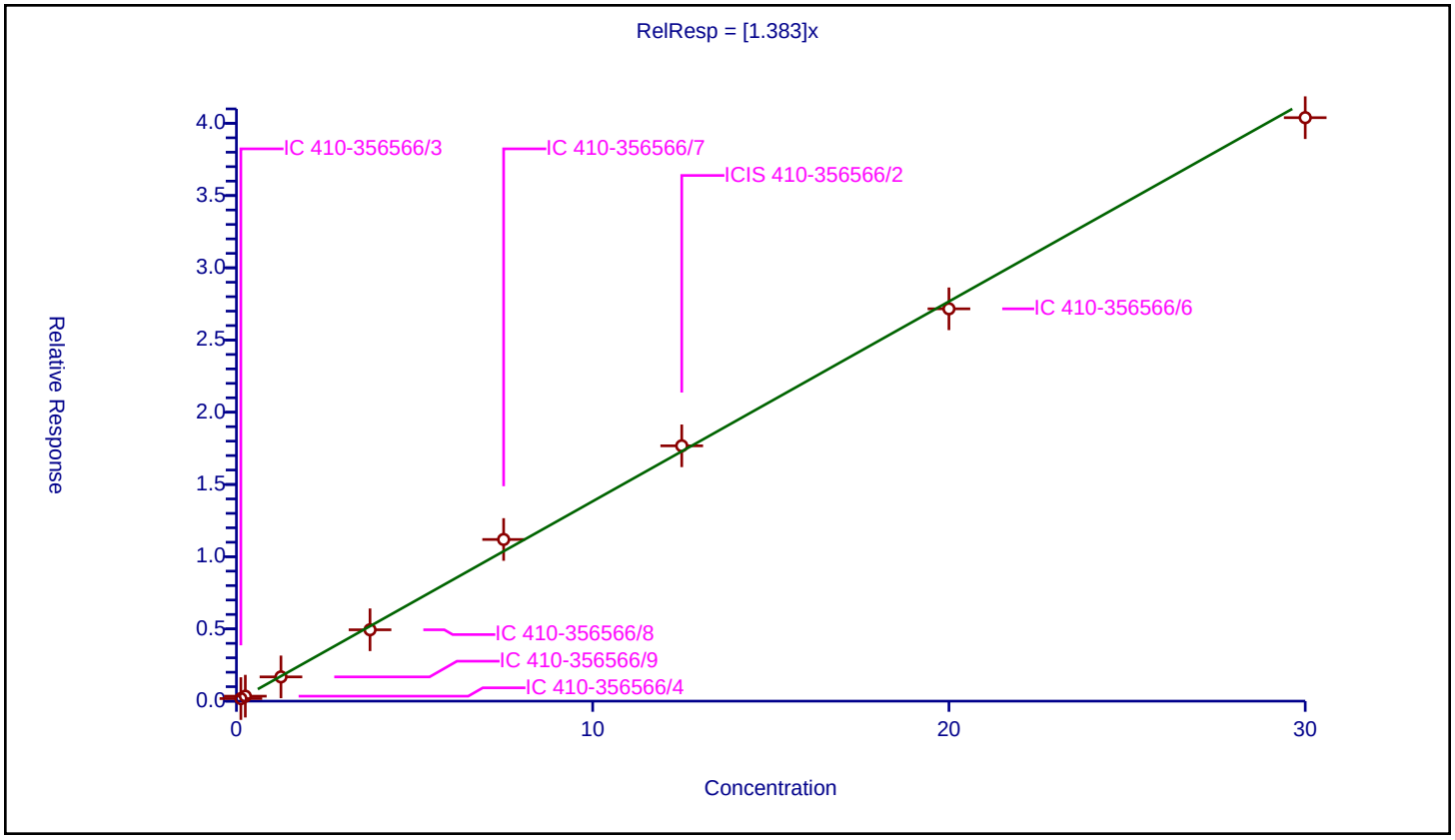
Curve Coefficients

Intercept:	0
Slope:	1.383

Error Coefficients

Standard Error:	1530000
Relative Standard Error:	4.1
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.177911	5.0	271456.0	1.423288	Y
2	IC 410-356566/4	0.25	0.343341	5.0	330095.0	1.373362	Y
3	IC 410-356566/9	1.25	1.678238	5.0	266166.0	1.342591	Y
4	IC 410-356566/8	3.75	4.940567	5.0	385056.0	1.317485	Y
5	IC 410-356566/7	7.5	11.191371	5.0	359317.0	1.492183	Y
6	ICIS 410-356566/2	12.5	17.674943	5.0	394814.0	1.413995	Y
7	IC 410-356566/6	20.0	27.16092	5.0	287683.0	1.358046	Y
8	IC 410-356566/5	30.0	40.391795	5.0	413214.0	1.346393	Y



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Calibration / 4-Chlorophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

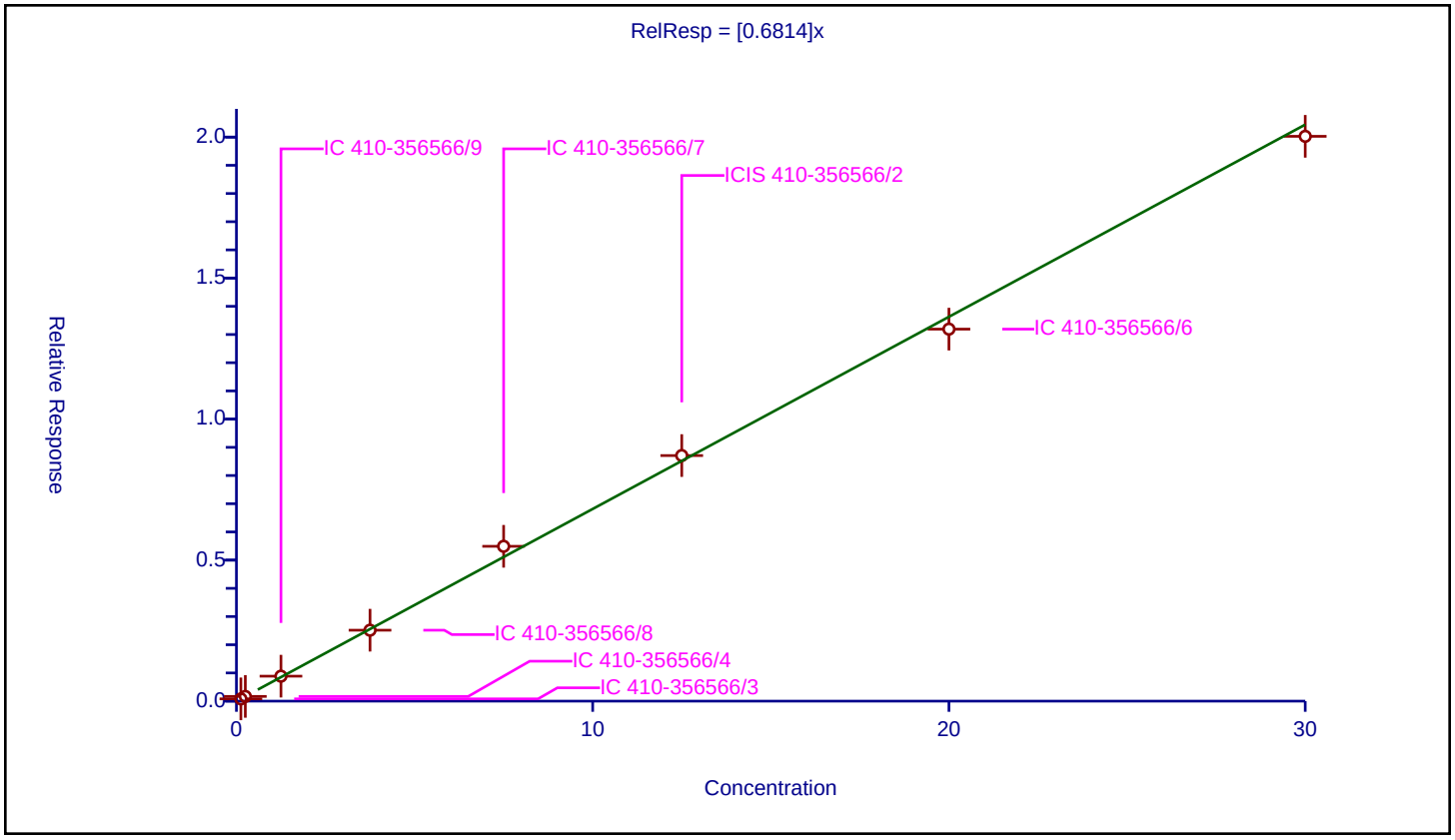
Curve Coefficients

Intercept:	0
Slope:	0.6814

Error Coefficients

Standard Error:	754000
Relative Standard Error:	4.2
Correlation Coefficient:	0.961
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.080694	5.0	271456.0	0.645556	Y
2	IC 410-356566/4	0.25	0.1678	5.0	330095.0	0.671201	Y
3	IC 410-356566/9	1.25	0.884918	5.0	266166.0	0.707934	Y
4	IC 410-356566/8	3.75	2.515076	5.0	385056.0	0.670687	Y
5	IC 410-356566/7	7.5	5.490166	5.0	359317.0	0.732022	Y
6	ICIS 410-356566/2	12.5	8.708164	5.0	394814.0	0.696653	Y
7	IC 410-356566/6	20.0	13.191238	5.0	287683.0	0.659562	Y
8	IC 410-356566/5	30.0	20.027734	5.0	413214.0	0.667591	Y



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Calibration / 4-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

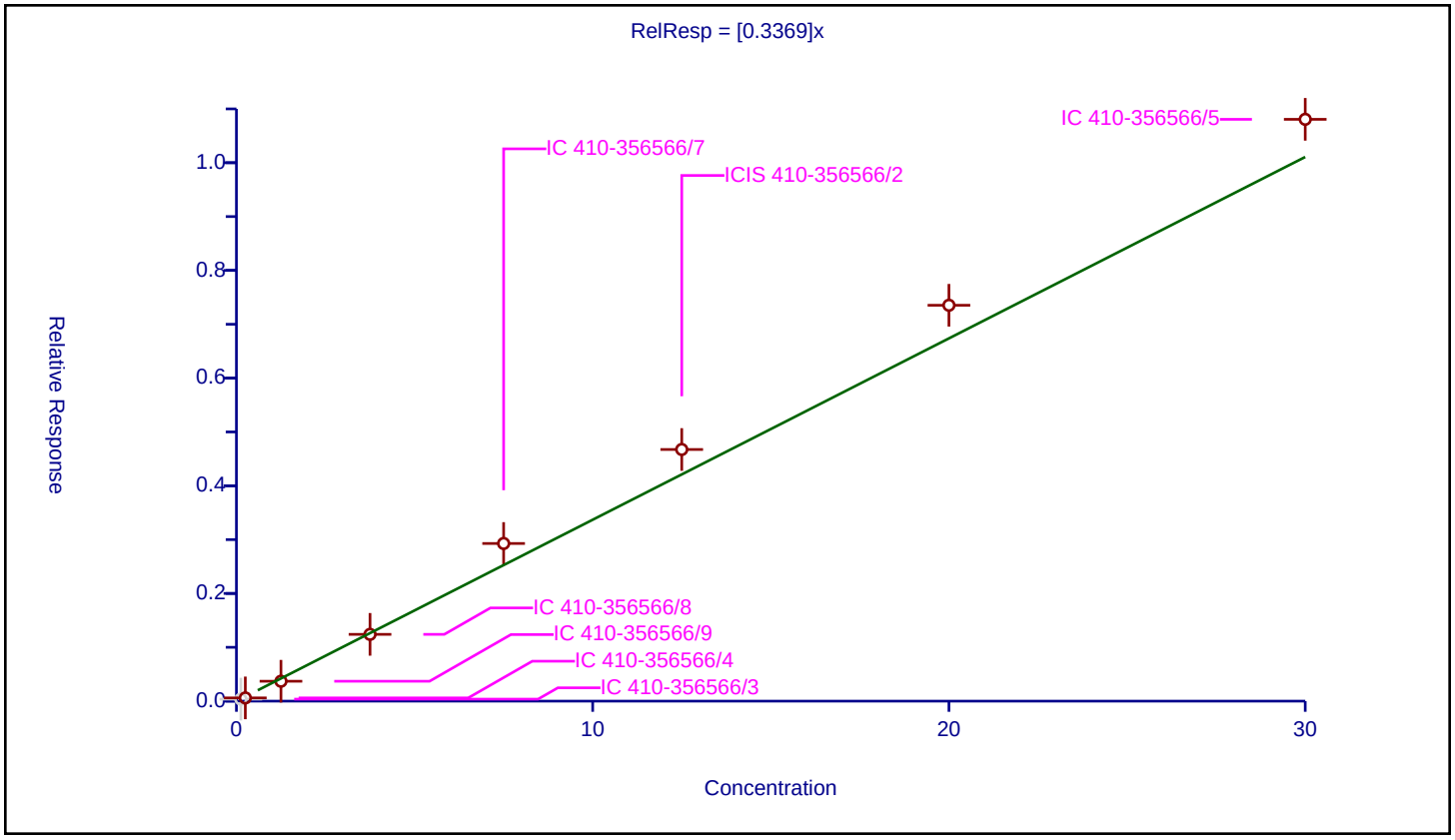
Curve Coefficients

Intercept:	0
Slope:	0.3369

Error Coefficients

Standard Error:	441000
Relative Standard Error:	15.8
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.037115	5.0	271456.0	0.296917	N
2	IC 410-356566/4	0.25	0.059877	5.0	330095.0	0.239507	Y
3	IC 410-356566/9	1.25	0.369713	5.0	266166.0	0.29577	Y
4	IC 410-356566/8	3.75	1.240352	5.0	385056.0	0.330761	Y
5	IC 410-356566/7	7.5	2.928069	5.0	359317.0	0.390409	Y
6	ICIS 410-356566/2	12.5	4.674125	5.0	394814.0	0.37393	Y
7	IC 410-356566/6	20.0	7.352746	5.0	287683.0	0.367637	Y
8	IC 410-356566/5	30.0	10.80618	5.0	413214.0	0.360206	Y



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Calibration / N-Nitro-o-toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

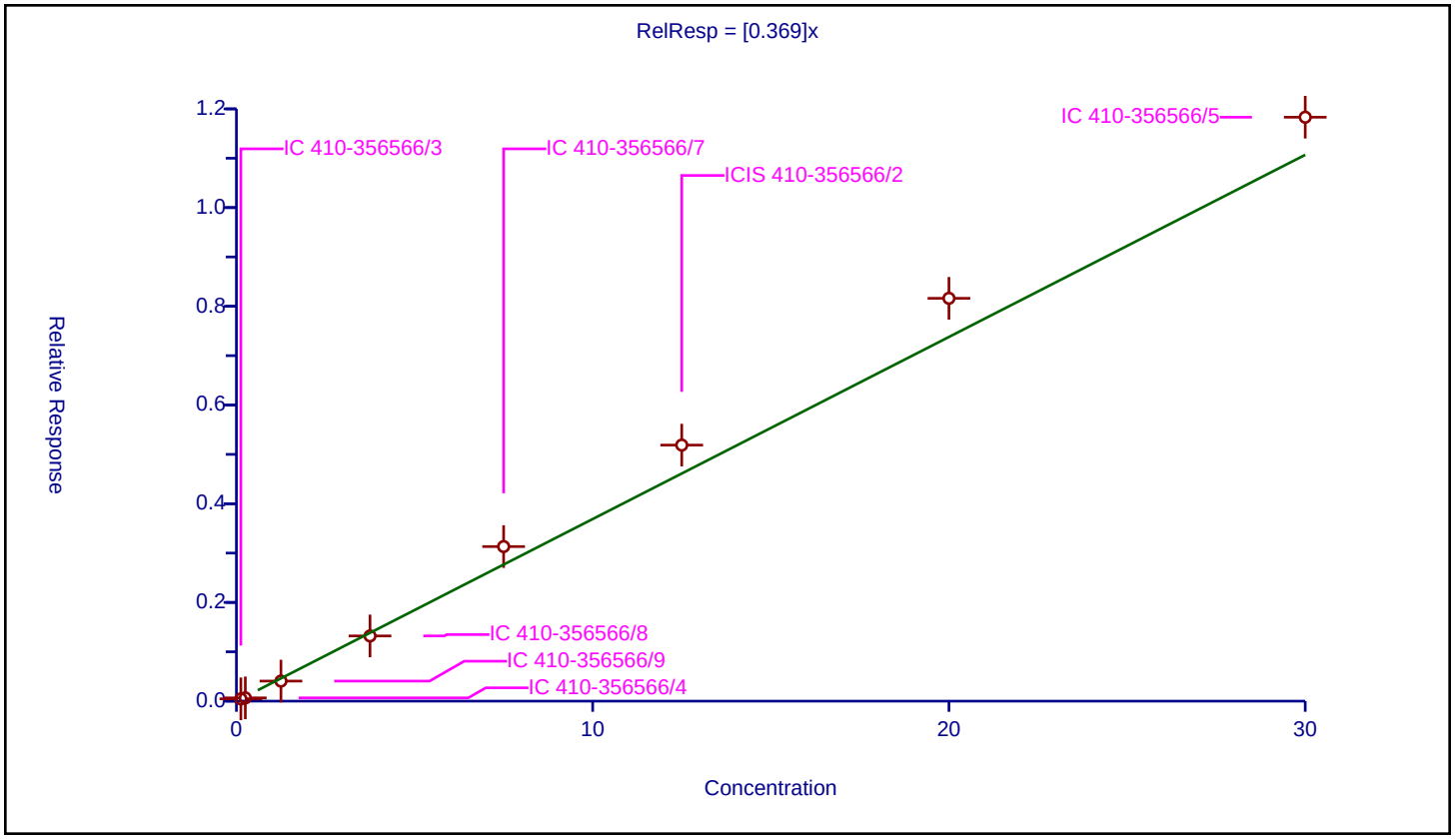
Curve Coefficients

Intercept:	0
Slope:	0.369

Error Coefficients

Standard Error:	448000
Relative Standard Error:	14.5
Correlation Coefficient:	0.970
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.046858	5.0	271456.0	0.374867	Y
2	IC 410-356566/4	0.25	0.065966	5.0	330095.0	0.263863	Y
3	IC 410-356566/9	1.25	0.406814	5.0	266166.0	0.325451	Y
4	IC 410-356566/8	3.75	1.32121	5.0	385056.0	0.352323	Y
5	IC 410-356566/7	7.5	3.13197	5.0	359317.0	0.417596	Y
6	ICIS 410-356566/2	12.5	5.188076	5.0	394814.0	0.415046	Y
7	IC 410-356566/6	20.0	8.162109	5.0	287683.0	0.408105	Y
8	IC 410-356566/5	30.0	11.831013	5.0	413214.0	0.394367	Y



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Calibration / 4,6-Dinitro-2-methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

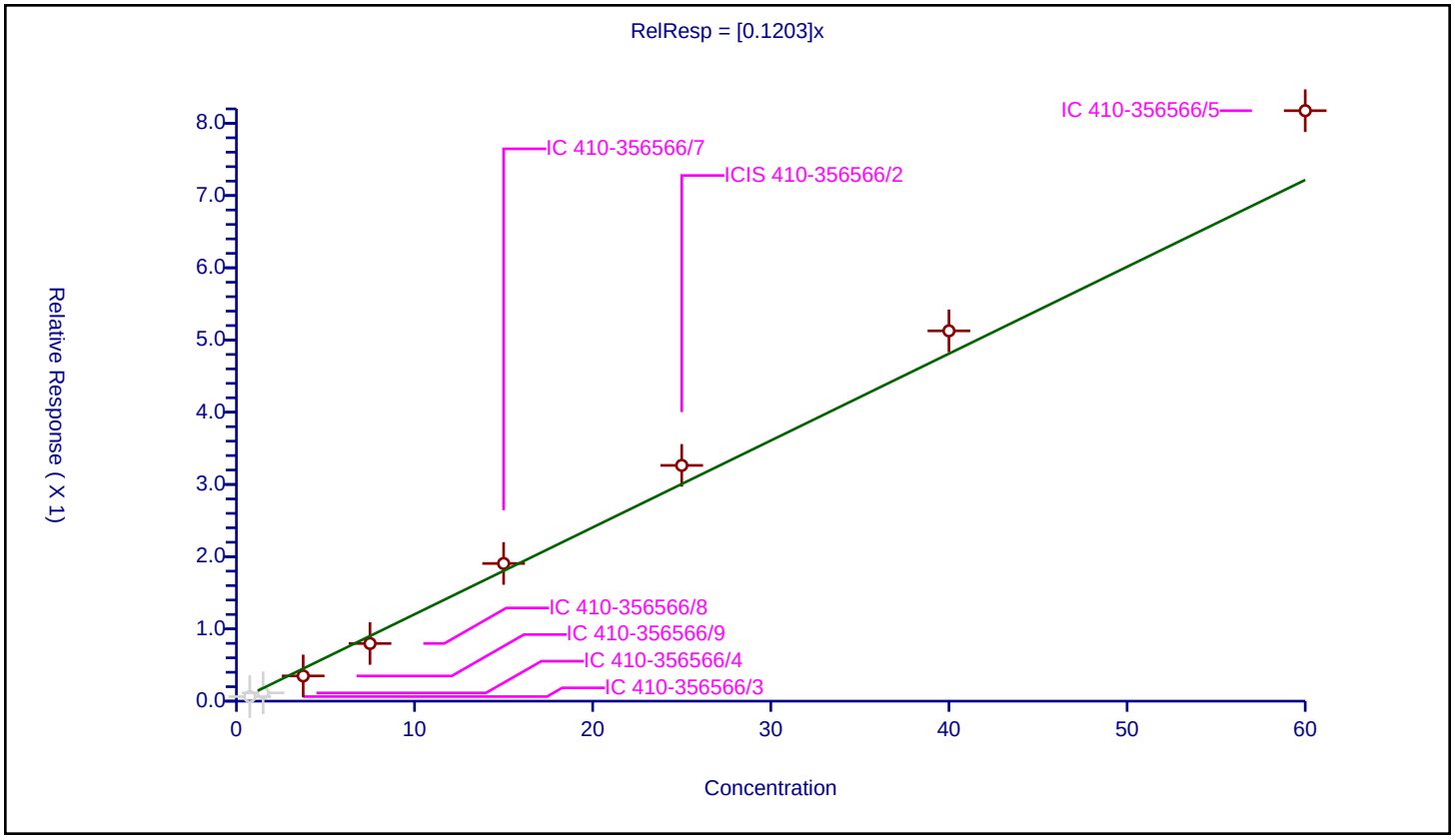
Curve Coefficients

Intercept:	0
Slope:	0.1203

Error Coefficients

Standard Error:	662000
Relative Standard Error:	13.9
Correlation Coefficient:	0.951
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.75	0.063173	5.0	475833.0	0.084231	N
2	IC 410-356566/4	1.5	0.114623	5.0	606597.0	0.076415	N
3	IC 410-356566/9	3.75	0.349251	5.0	492354.0	0.093134	Y
4	IC 410-356566/8	7.5	0.798314	5.0	704829.0	0.106442	Y
5	IC 410-356566/7	15.0	1.905805	5.0	683593.0	0.127054	Y
6	ICIS 410-356566/2	25.0	3.264008	5.0	755591.0	0.13056	Y
7	IC 410-356566/6	40.0	5.126893	5.0	545223.0	0.128172	Y
8	IC 410-356566/5	60.0	8.174814	5.0	762443.0	0.136247	Y



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Calibration / N-Nitrosodiphenylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

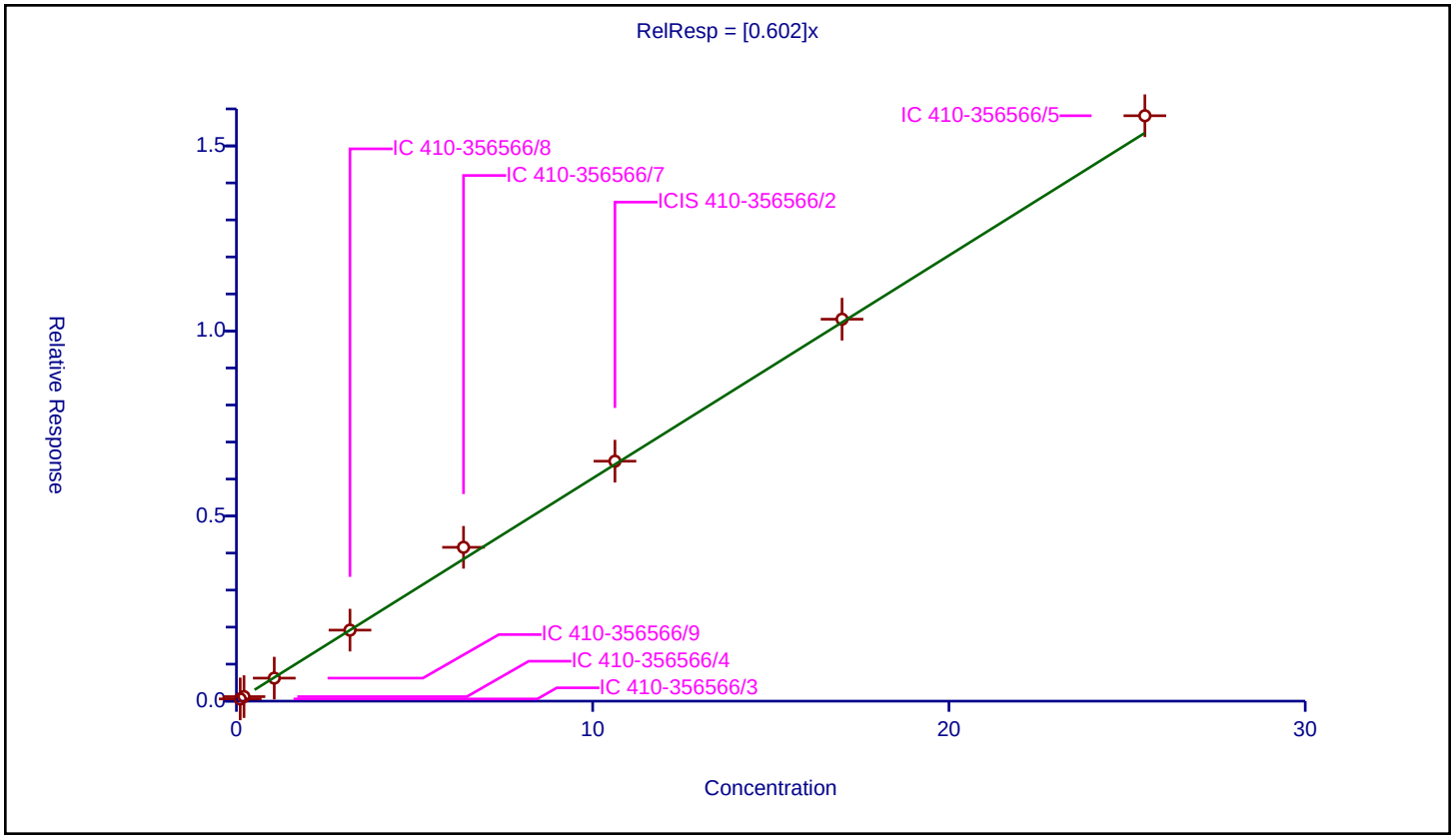
Curve Coefficients

Intercept:	0
Slope:	0.602

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	4.6
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.10625	0.060084	5.0	475833.0	0.565497	Y
2	IC 410-356566/4	0.2125	0.121943	5.0	606597.0	0.573847	Y
3	IC 410-356566/9	1.0625	0.622063	5.0	492354.0	0.585471	Y
4	IC 410-356566/8	3.1875	1.91887	5.0	704829.0	0.601998	Y
5	IC 410-356566/7	6.375	4.155711	5.0	683593.0	0.651876	Y
6	ICIS 410-356566/2	10.625	6.482522	5.0	755591.0	0.61012	Y
7	IC 410-356566/6	17.0	10.318283	5.0	545223.0	0.606958	Y
8	IC 410-356566/5	25.5	15.815097	5.0	762443.0	0.6202	Y



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Calibration / 1,2-Diphenylhydrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

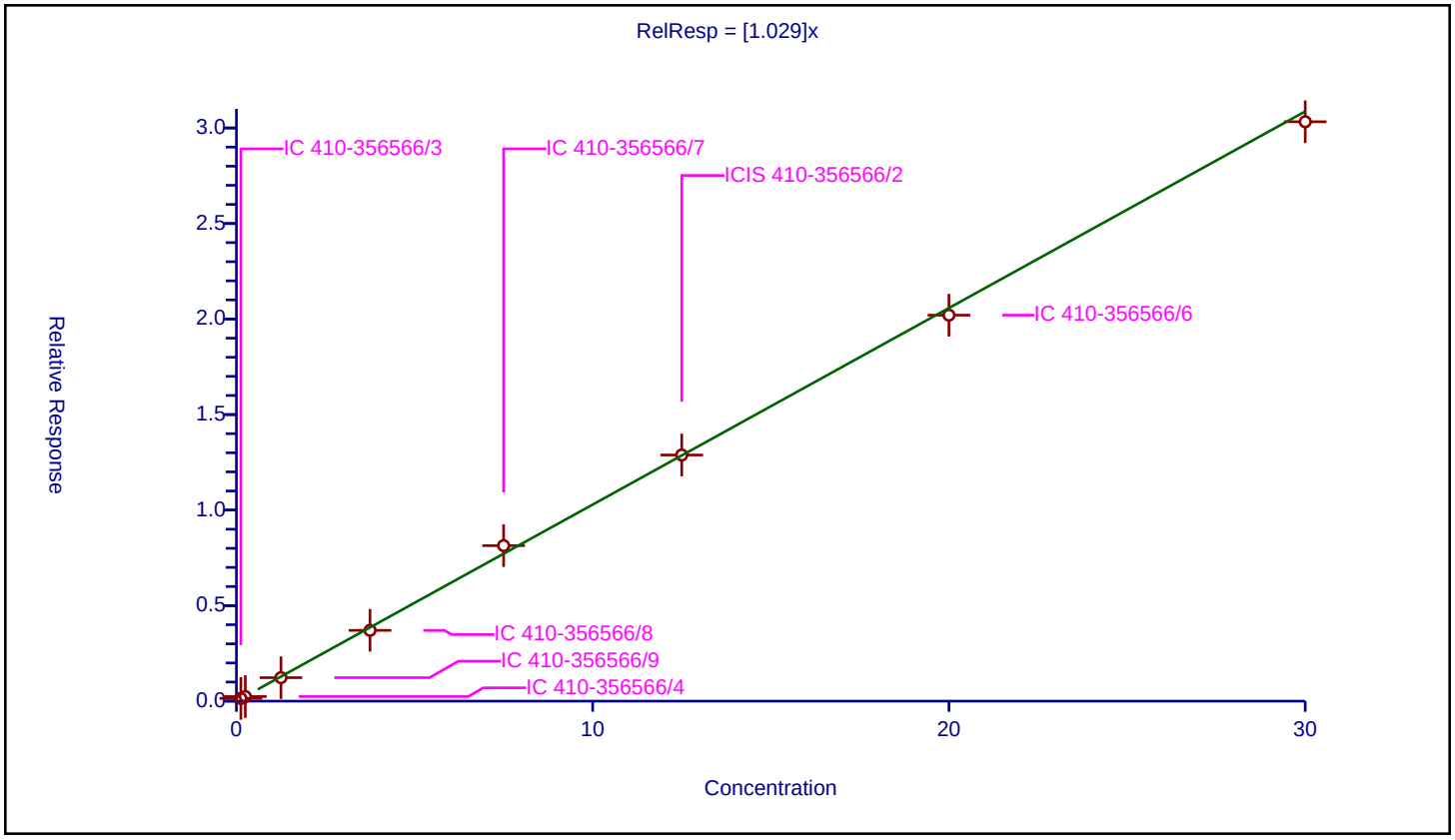
Curve Coefficients

Intercept:	0
Slope:	1.029

Error Coefficients

Standard Error:	2120000
Relative Standard Error:	6.2
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.144841	5.0	475833.0	1.158726	Y
2	IC 410-356566/4	0.25	0.240959	5.0	606597.0	0.963836	Y
3	IC 410-356566/9	1.25	1.22876	5.0	492354.0	0.983008	Y
4	IC 410-356566/8	3.75	3.705502	5.0	704829.0	0.988134	Y
5	IC 410-356566/7	7.5	8.139902	5.0	683593.0	1.08532	Y
6	ICIS 410-356566/2	12.5	12.884199	5.0	755591.0	1.030736	Y
7	IC 410-356566/6	20.0	20.202981	5.0	545223.0	1.010149	Y
8	IC 410-356566/5	30.0	30.327126	5.0	762443.0	1.010904	Y



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Calibration / 2,4,6-Tribromophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

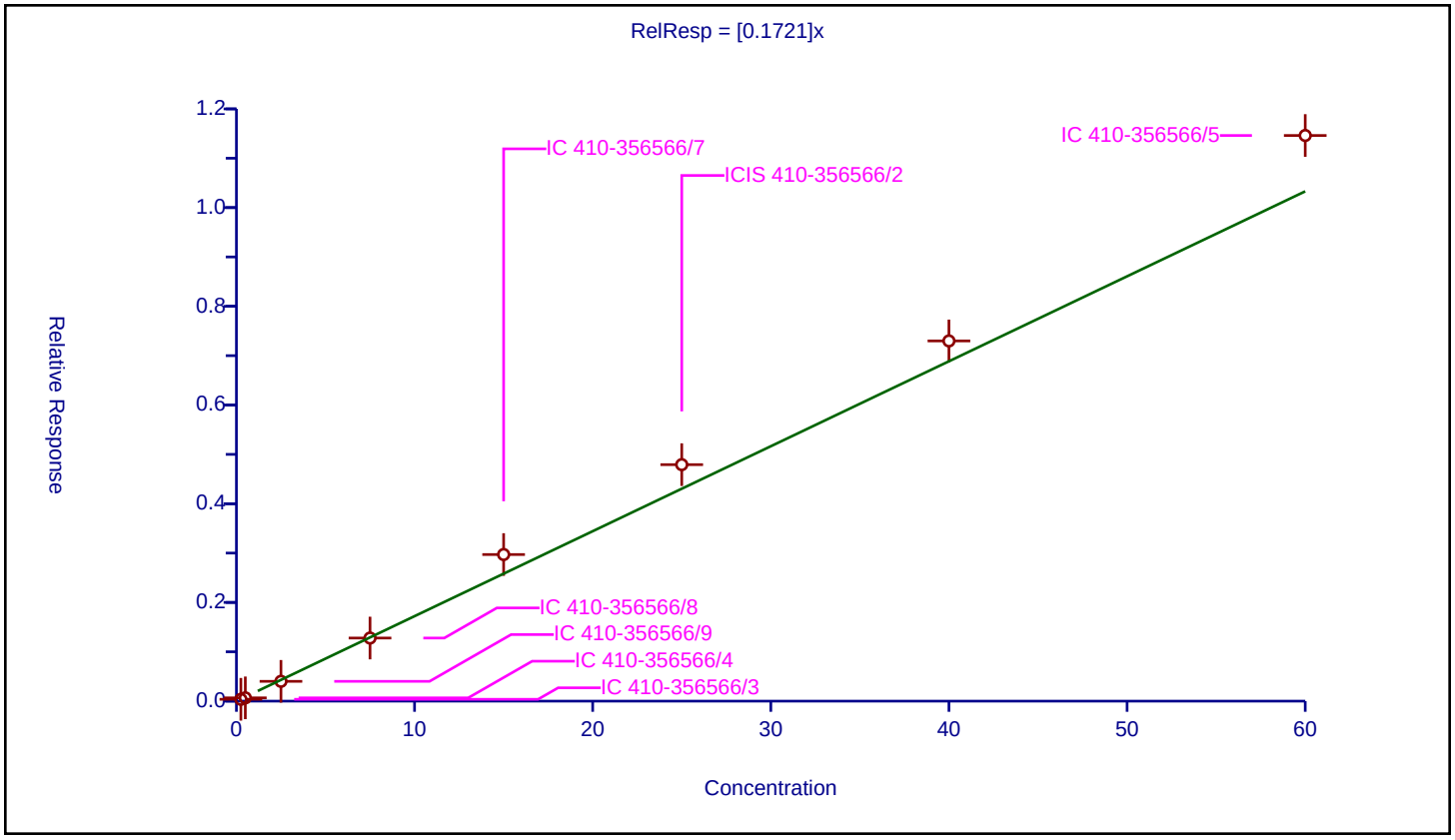
Curve Coefficients

Intercept:	0
Slope:	0.1721

Error Coefficients

Standard Error:	426000
Relative Standard Error:	13.3
Correlation Coefficient:	0.958
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.25	0.037299	5.0	271456.0	0.149195	Y
2	IC 410-356566/4	0.5	0.06689	5.0	330095.0	0.13378	Y
3	IC 410-356566/9	2.5	0.401385	5.0	266166.0	0.160554	Y
4	IC 410-356566/8	7.5	1.27858	5.0	385056.0	0.170477	Y
5	IC 410-356566/7	15.0	2.970664	5.0	359317.0	0.198044	Y
6	ICIS 410-356566/2	25.0	4.791775	5.0	394814.0	0.191671	Y
7	IC 410-356566/6	40.0	7.298346	5.0	287683.0	0.182459	Y
8	IC 410-356566/5	60.0	11.461059	5.0	413214.0	0.191018	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

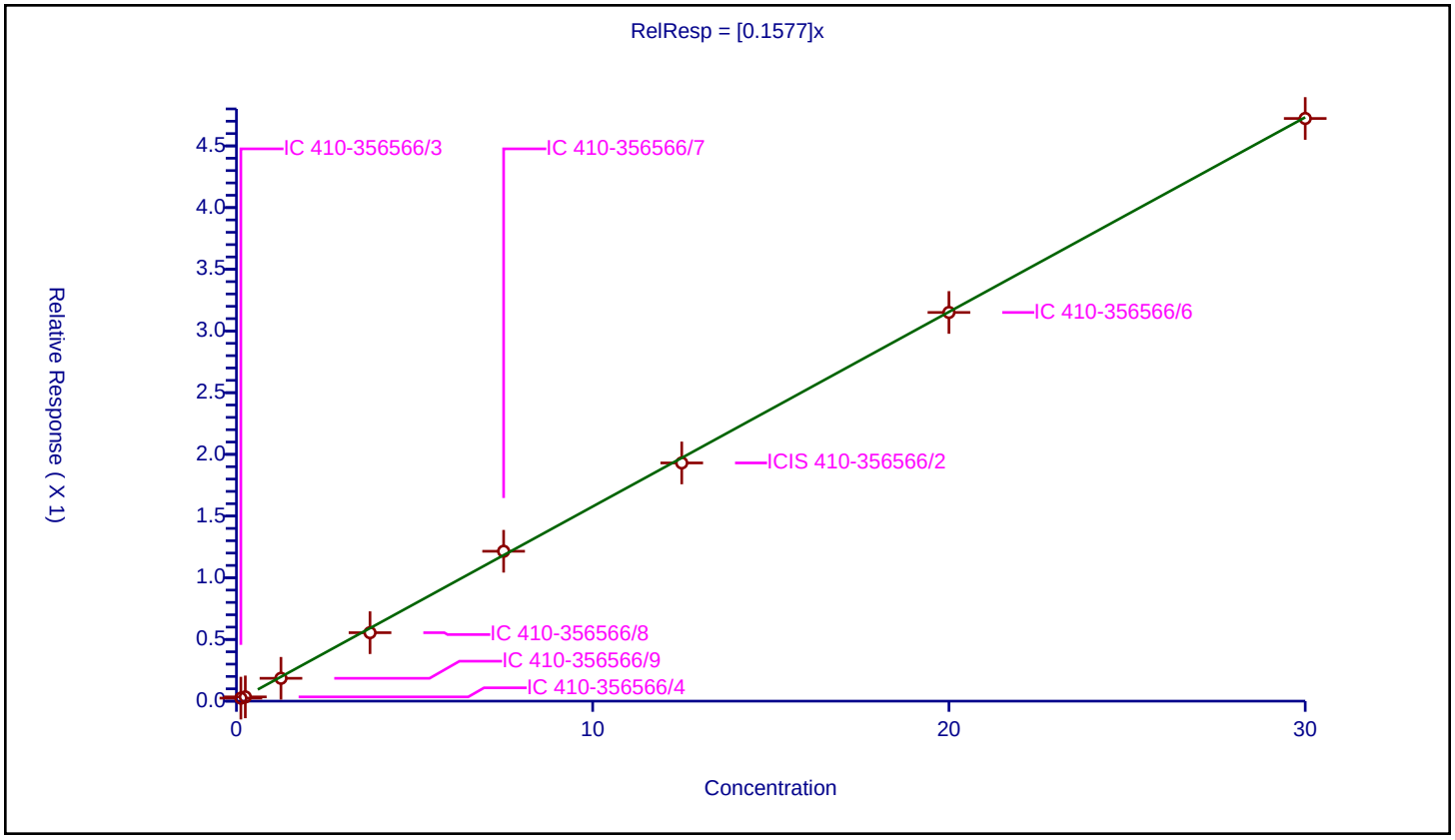
Curve Coefficients

Intercept:	0
Slope:	0.1577

Error Coefficients

Standard Error:	329000
Relative Standard Error:	11.1
Correlation Coefficient:	0.969
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.024588	5.0	475833.0	0.196708	Y
2	IC 410-356566/4	0.25	0.034438	5.0	606597.0	0.137752	Y
3	IC 410-356566/9	1.25	0.18506	5.0	492354.0	0.148048	Y
4	IC 410-356566/8	3.75	0.554908	5.0	704829.0	0.147975	Y
5	IC 410-356566/7	7.5	1.214831	5.0	683593.0	0.161977	Y
6	ICIS 410-356566/2	12.5	1.930628	5.0	755591.0	0.15445	Y
7	IC 410-356566/6	20.0	3.150179	5.0	545223.0	0.157509	Y
8	IC 410-356566/5	30.0	4.722327	5.0	762443.0	0.157411	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

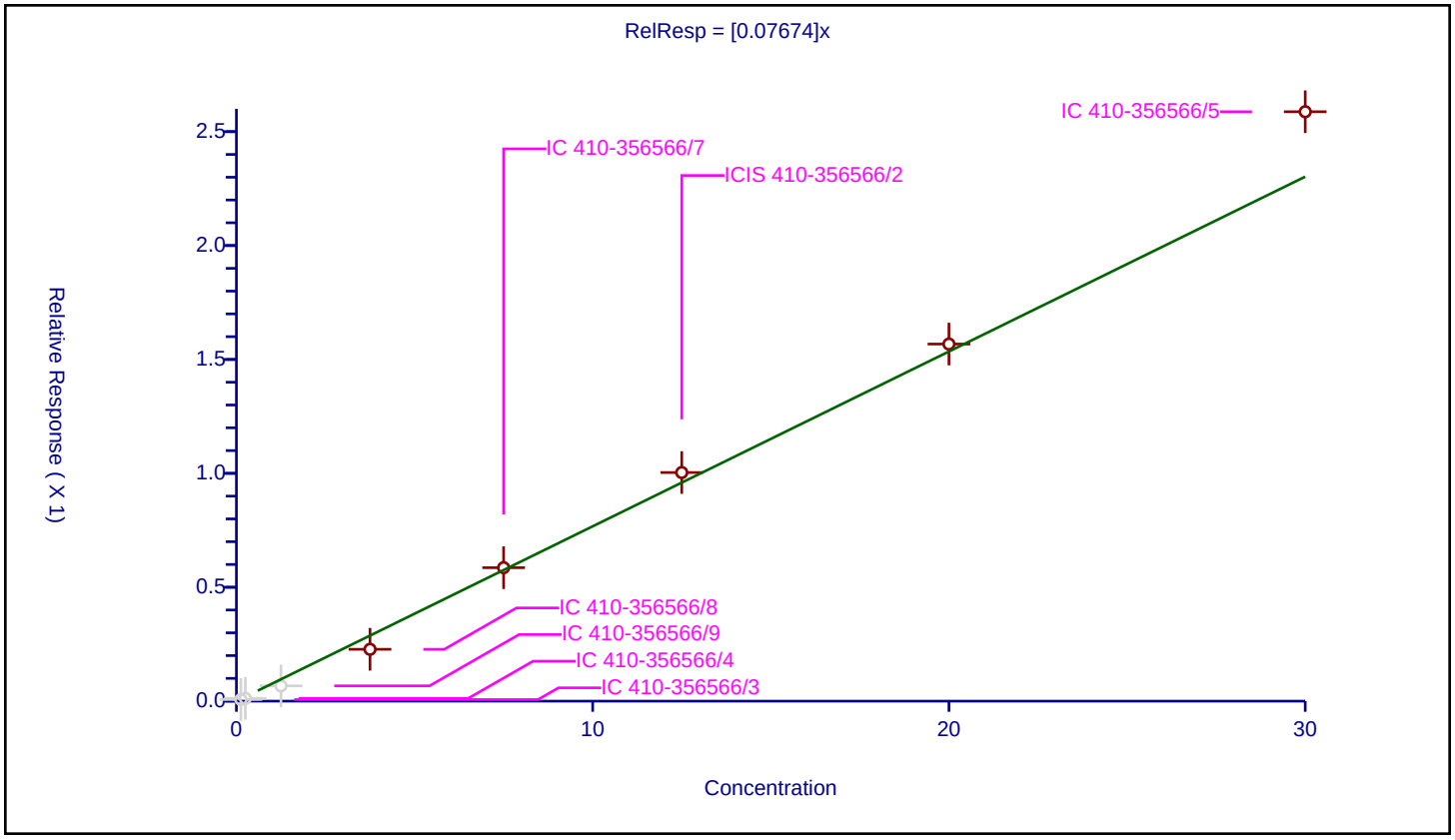
Curve Coefficients

Intercept:	0
Slope:	0.07674

Error Coefficients

Standard Error:	232000
Relative Standard Error:	12.5
Correlation Coefficient:	0.932
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.007061	5.0	475833.0	0.05649	N
2	IC 410-356566/4	0.25	0.01224	5.0	606597.0	0.048962	N
3	IC 410-356566/9	1.25	0.067126	5.0	492354.0	0.053701	N
4	IC 410-356566/8	3.75	0.227552	5.0	704829.0	0.06068	Y
5	IC 410-356566/7	7.5	0.585904	5.0	683593.0	0.078121	Y
6	ICIS 410-356566/2	12.5	1.003599	5.0	755591.0	0.080288	Y
7	IC 410-356566/6	20.0	1.567643	5.0	545223.0	0.078382	Y
8	IC 410-356566/5	30.0	2.587485	5.0	762443.0	0.08625	Y



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Calibration / cis-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

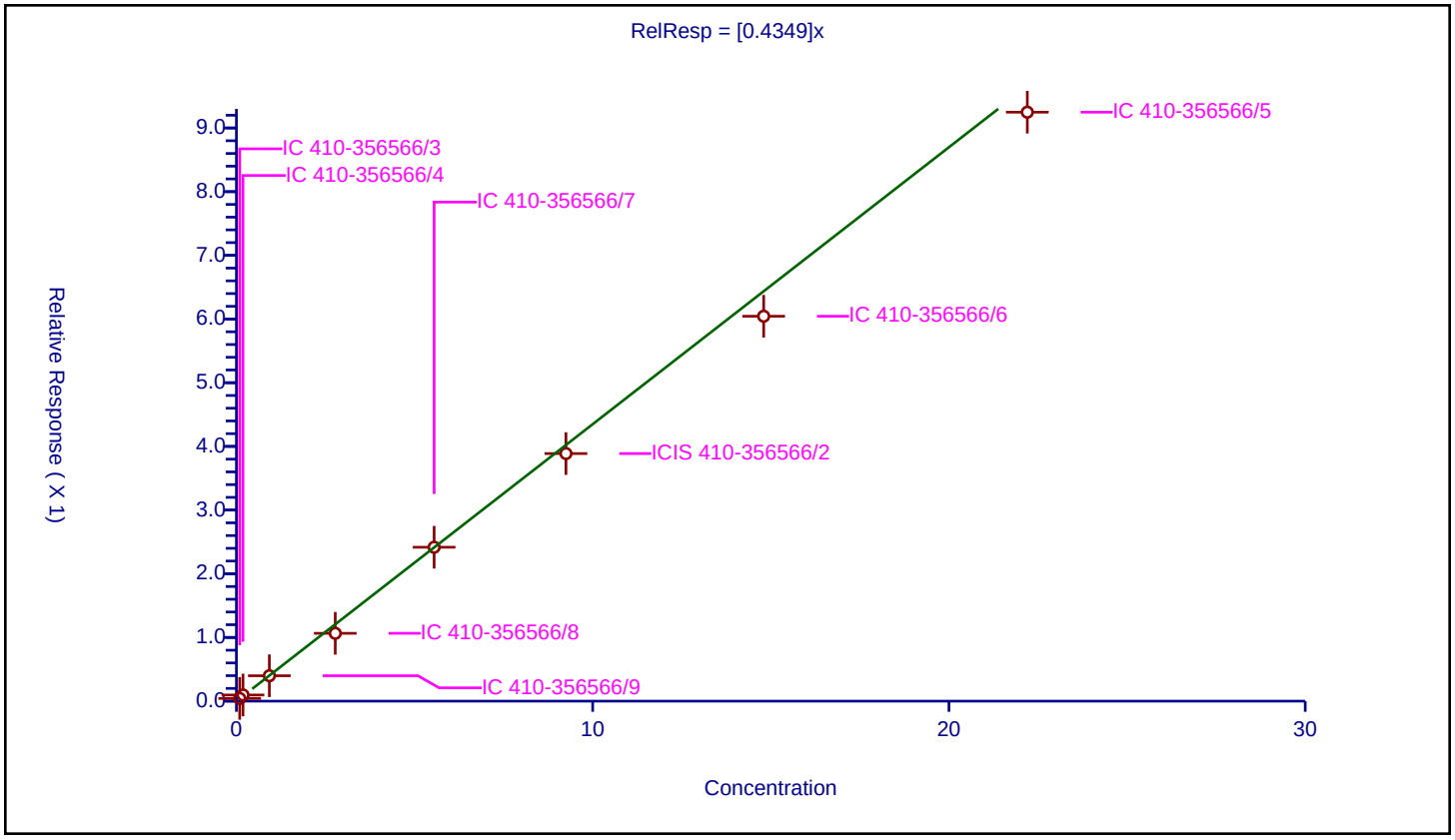
Curve Coefficients

Intercept:	0
Slope:	0.4349

Error Coefficients

Standard Error:	644000
Relative Standard Error:	9.7
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.0925	0.042515	5.0	475833.0	0.459621	Y
2	IC 410-356566/4	0.185	0.096909	5.0	606597.0	0.523835	Y
3	IC 410-356566/9	0.925	0.398798	5.0	492354.0	0.431133	Y
4	IC 410-356566/8	2.775	1.064882	5.0	704829.0	0.383741	Y
5	IC 410-356566/7	5.55	2.416928	5.0	683593.0	0.435483	Y
6	ICIS 410-356566/2	9.25	3.887864	5.0	755591.0	0.42031	Y
7	IC 410-356566/6	14.8	6.044132	5.0	545223.0	0.408387	Y
8	IC 410-356566/5	22.2	9.248068	5.0	762443.0	0.41658	Y



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Calibration / Phenacetin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

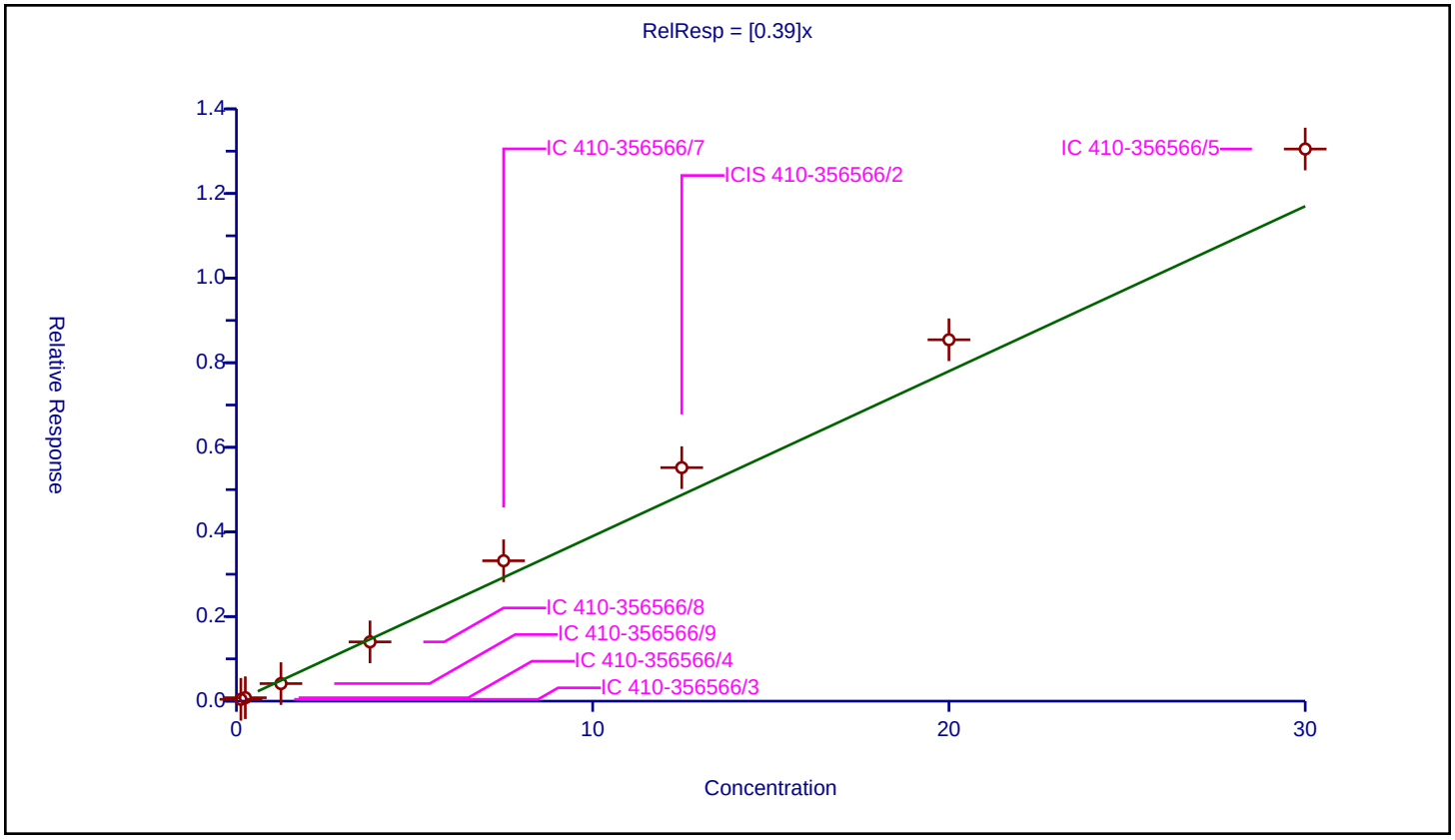
Curve Coefficients

Intercept:	0
Slope:	0.39

Error Coefficients

Standard Error:	908000
Relative Standard Error:	13.4
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.043219	5.0	475833.0	0.345752	Y
2	IC 410-356566/4	0.25	0.080622	5.0	606597.0	0.322488	Y
3	IC 410-356566/9	1.25	0.414722	5.0	492354.0	0.331778	Y
4	IC 410-356566/8	3.75	1.400872	5.0	704829.0	0.373566	Y
5	IC 410-356566/7	7.5	3.318027	5.0	683593.0	0.442404	Y
6	ICIS 410-356566/2	12.5	5.519726	5.0	755591.0	0.441578	Y
7	IC 410-356566/6	20.0	8.542404	5.0	545223.0	0.42712	Y
8	IC 410-356566/5	30.0	13.050917	5.0	762443.0	0.435031	Y



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Calibration / Phorate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

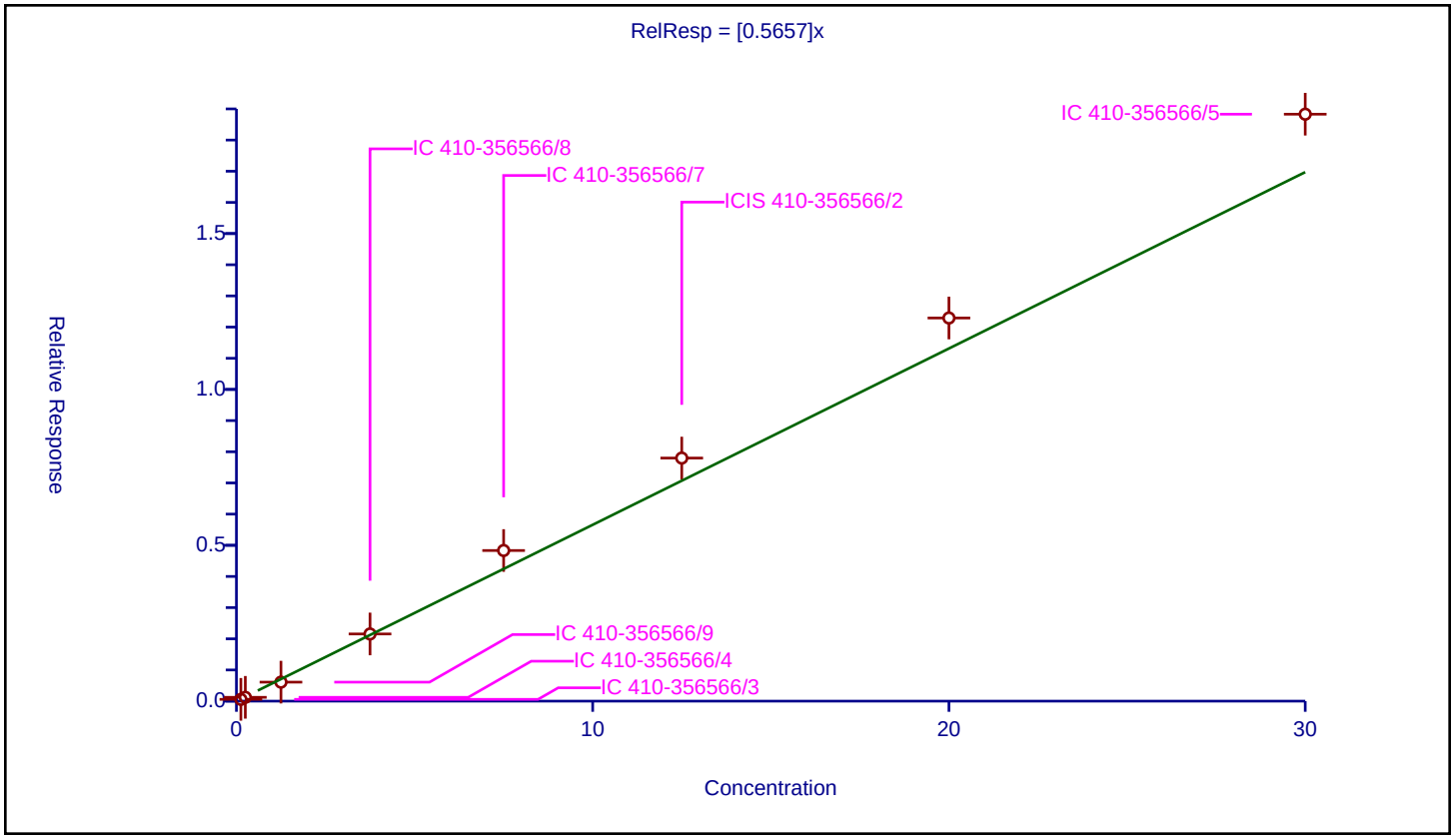
Curve Coefficients

Intercept:	0
Slope:	0.5657

Error Coefficients

Standard Error:	1310000
Relative Standard Error:	13.1
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.057678	5.0	475833.0	0.461422	Y
2	IC 410-356566/4	0.25	0.122808	5.0	606597.0	0.491232	Y
3	IC 410-356566/9	1.25	0.609683	5.0	492354.0	0.487747	Y
4	IC 410-356566/8	3.75	2.155012	5.0	704829.0	0.57467	Y
5	IC 410-356566/7	7.5	4.832517	5.0	683593.0	0.644336	Y
6	ICIS 410-356566/2	12.5	7.797903	5.0	755591.0	0.623832	Y
7	IC 410-356566/6	20.0	12.29142	5.0	545223.0	0.614571	Y
8	IC 410-356566/5	30.0	18.830247	5.0	762443.0	0.627675	Y



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Calibration / Dimethoate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

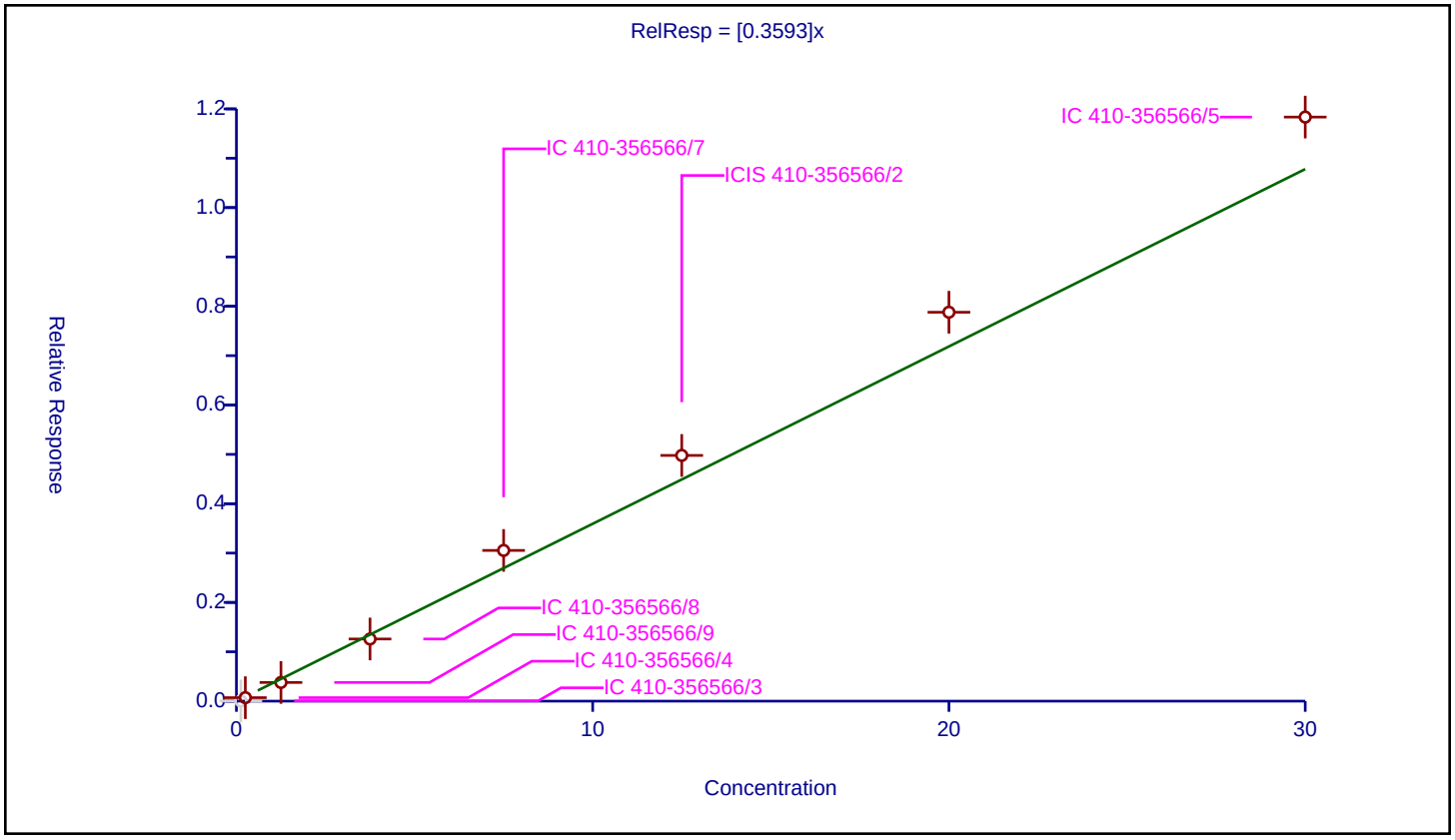
Curve Coefficients

Intercept:	0
Slope:	0.3593

Error Coefficients

Standard Error:	891000
Relative Standard Error:	14.3
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.003856	5.0	475833.0	0.030851	N
2	IC 410-356566/4	0.25	0.070656	5.0	606597.0	0.282626	Y
3	IC 410-356566/9	1.25	0.378681	5.0	492354.0	0.302945	Y
4	IC 410-356566/8	3.75	1.259383	5.0	704829.0	0.335836	Y
5	IC 410-356566/7	7.5	3.053535	5.0	683593.0	0.407138	Y
6	ICIS 410-356566/2	12.5	4.978315	5.0	755591.0	0.398265	Y
7	IC 410-356566/6	20.0	7.879849	5.0	545223.0	0.393992	Y
8	IC 410-356566/5	30.0	11.834281	5.0	762443.0	0.394476	Y



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Calibration / trans-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

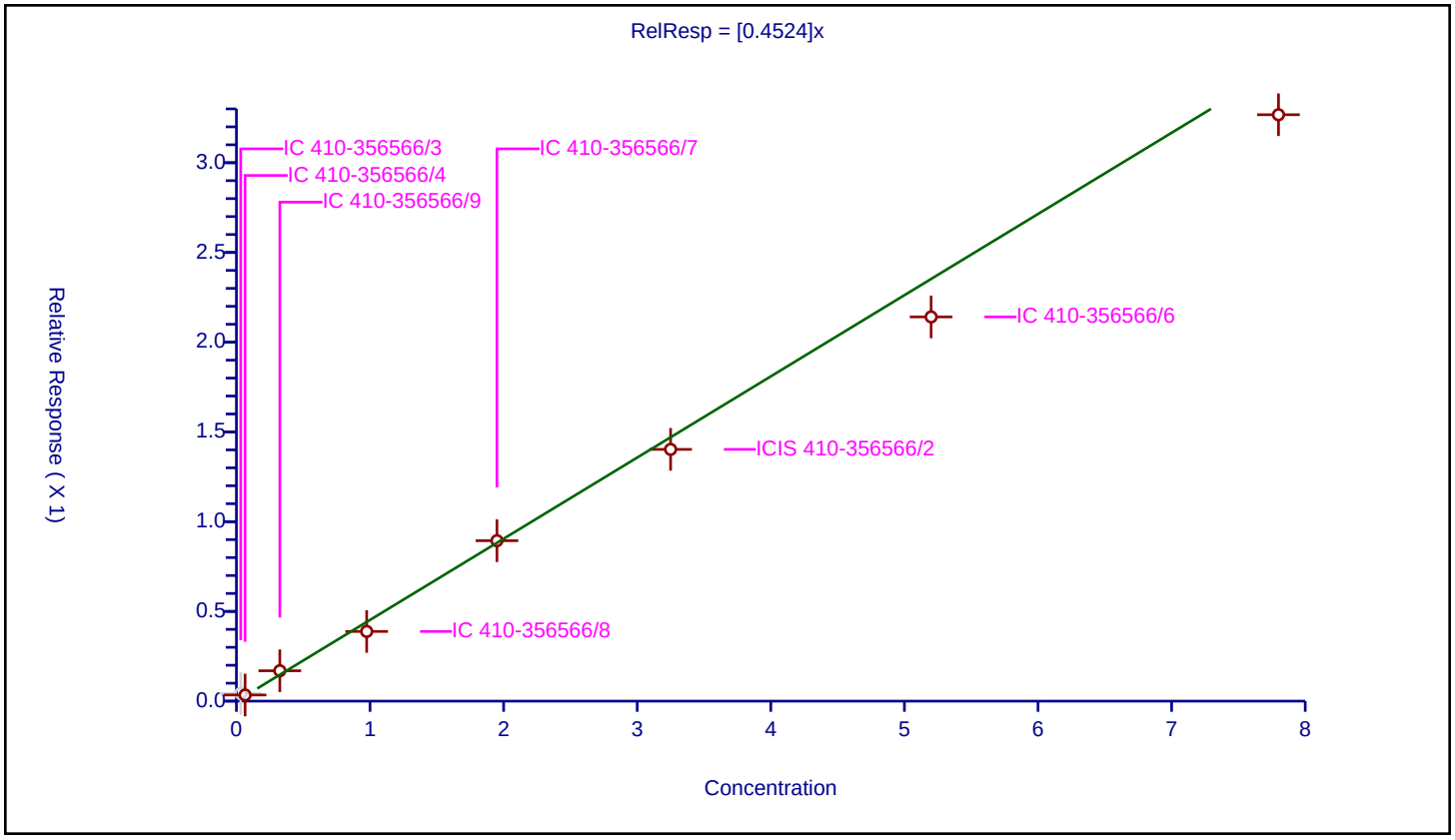
Curve Coefficients

Intercept:	0
Slope:	0.4524

Error Coefficients

Standard Error:	247000
Relative Standard Error:	11.6
Correlation Coefficient:	0.960
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.0325	0.043072	5.0	475833.0	1.325287	N
2	IC 410-356566/4	0.065	0.034248	5.0	606597.0	0.526899	Y
3	IC 410-356566/9	0.325	0.169248	5.0	492354.0	0.520764	Y
4	IC 410-356566/8	0.975	0.388307	5.0	704829.0	0.398264	Y
5	IC 410-356566/7	1.95	0.894121	5.0	683593.0	0.458524	Y
6	ICIS 410-356566/2	3.25	1.402809	5.0	755591.0	0.431634	Y
7	IC 410-356566/6	5.2	2.140913	5.0	545223.0	0.411714	Y
8	IC 410-356566/5	7.8	3.267477	5.0	762443.0	0.418907	Y



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Calibration / 4-Bromophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

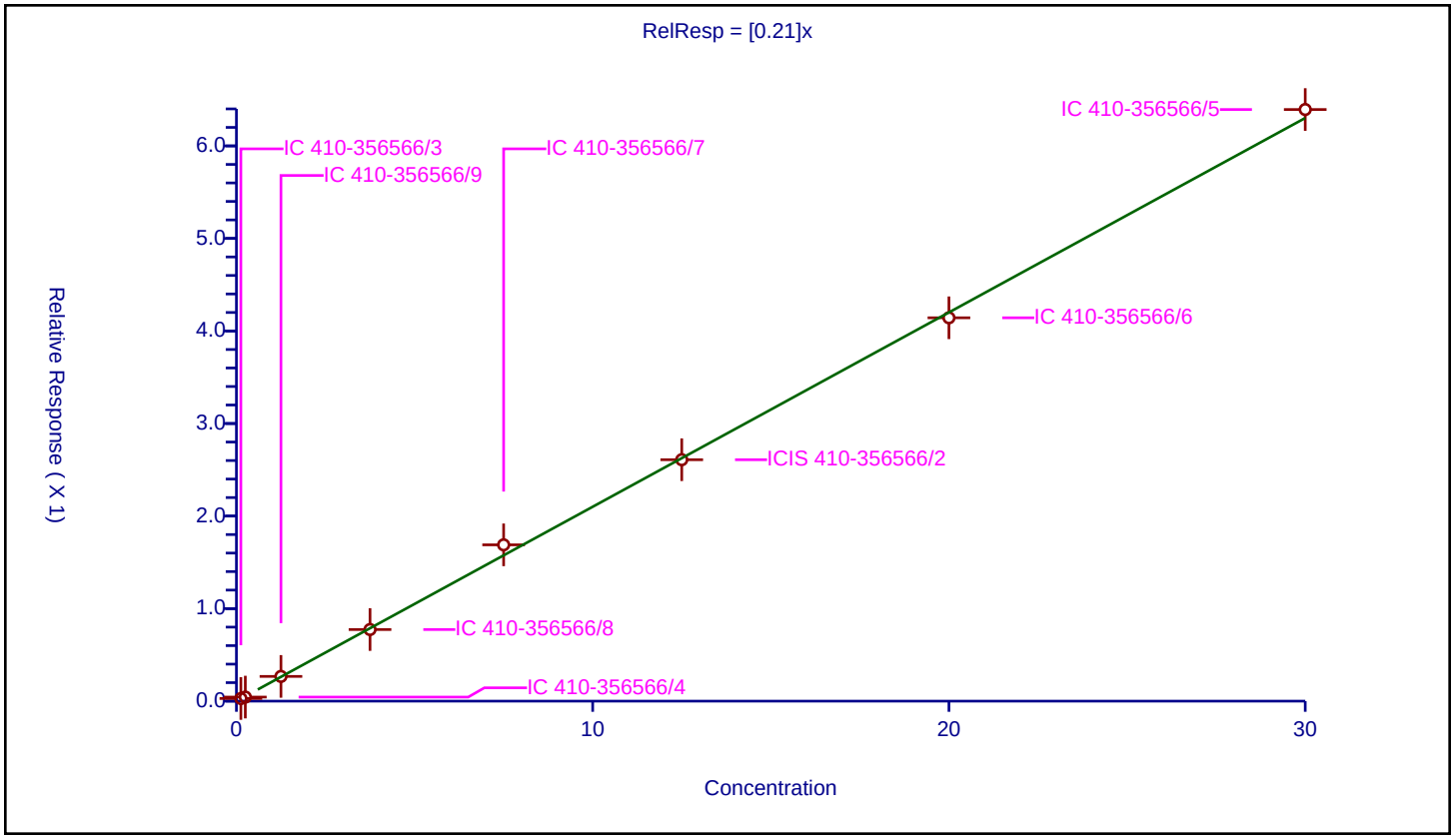
Curve Coefficients

Intercept:	0
Slope:	0.21

Error Coefficients

Standard Error:	443000
Relative Standard Error:	7.7
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.02876	5.0	475833.0	0.230081	Y
2	IC 410-356566/4	0.25	0.044016	5.0	606597.0	0.176064	Y
3	IC 410-356566/9	1.25	0.267125	5.0	492354.0	0.2137	Y
4	IC 410-356566/8	3.75	0.773826	5.0	704829.0	0.206354	Y
5	IC 410-356566/7	7.5	1.689083	5.0	683593.0	0.225211	Y
6	ICIS 410-356566/2	12.5	2.608766	5.0	755591.0	0.208701	Y
7	IC 410-356566/6	20.0	4.142644	5.0	545223.0	0.207132	Y
8	IC 410-356566/5	30.0	6.392996	5.0	762443.0	0.2131	Y



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Calibration / Hexachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

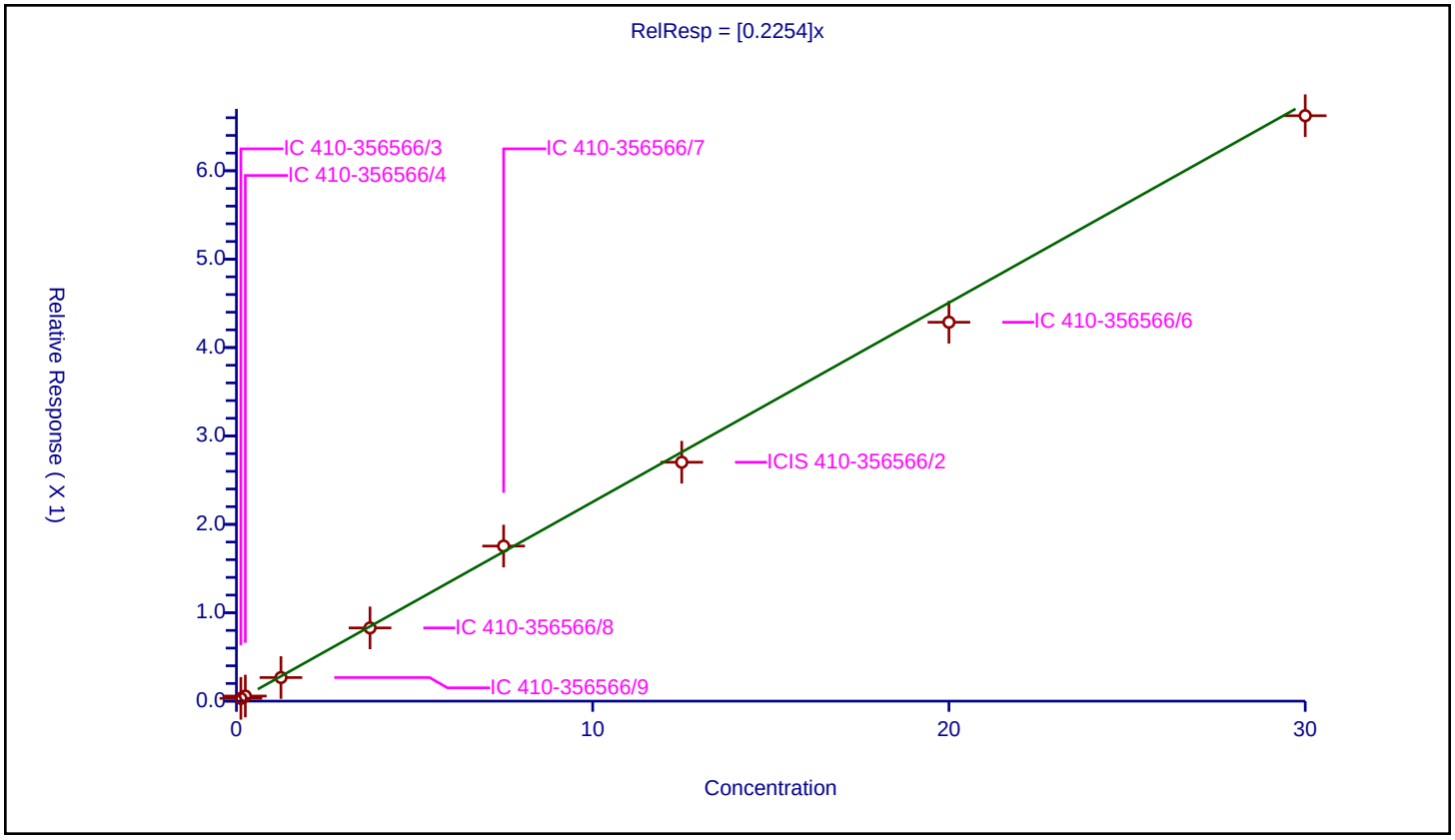
Curve Coefficients

Intercept:	0
Slope:	0.2254

Error Coefficients

Standard Error:	459000
Relative Standard Error:	5.8
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.031503	5.0	475833.0	0.252021	Y
2	IC 410-356566/4	0.25	0.057847	5.0	606597.0	0.231389	Y
3	IC 410-356566/9	1.25	0.266698	5.0	492354.0	0.213359	Y
4	IC 410-356566/8	3.75	0.828577	5.0	704829.0	0.220954	Y
5	IC 410-356566/7	7.5	1.754246	5.0	683593.0	0.233899	Y
6	ICIS 410-356566/2	12.5	2.70258	5.0	755591.0	0.216206	Y
7	IC 410-356566/6	20.0	4.286503	5.0	545223.0	0.214325	Y
8	IC 410-356566/5	30.0	6.623	5.0	762443.0	0.220767	Y



Calibration / Atrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

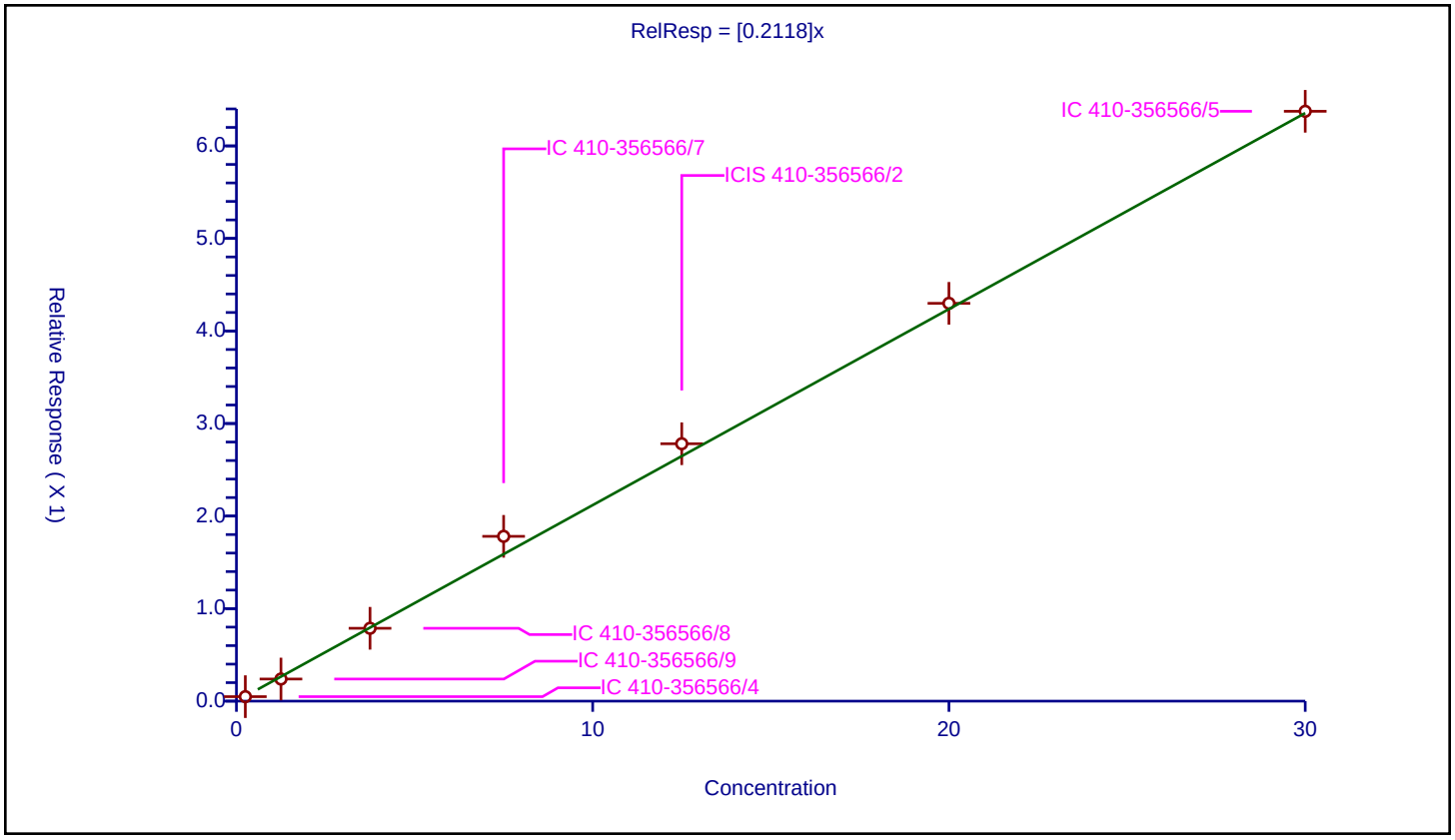
Curve Coefficients

Intercept:	0
Slope:	0.2118

Error Coefficients

Standard Error:	485000
Relative Standard Error:	7.5
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/4	0.25	0.048583	5.0	606597.0	0.19433	Y
2	IC 410-356566/9	1.25	0.238924	5.0	492354.0	0.191139	Y
3	IC 410-356566/8	3.75	0.787184	5.0	704829.0	0.209916	Y
4	IC 410-356566/7	7.5	1.78076	5.0	683593.0	0.237435	Y
5	ICIS 410-356566/2	12.5	2.781611	5.0	755591.0	0.222529	Y
6	IC 410-356566/6	20.0	4.298902	5.0	545223.0	0.214945	Y
7	IC 410-356566/5	30.0	6.374103	5.0	762443.0	0.21247	Y



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Calibration / Pentachlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

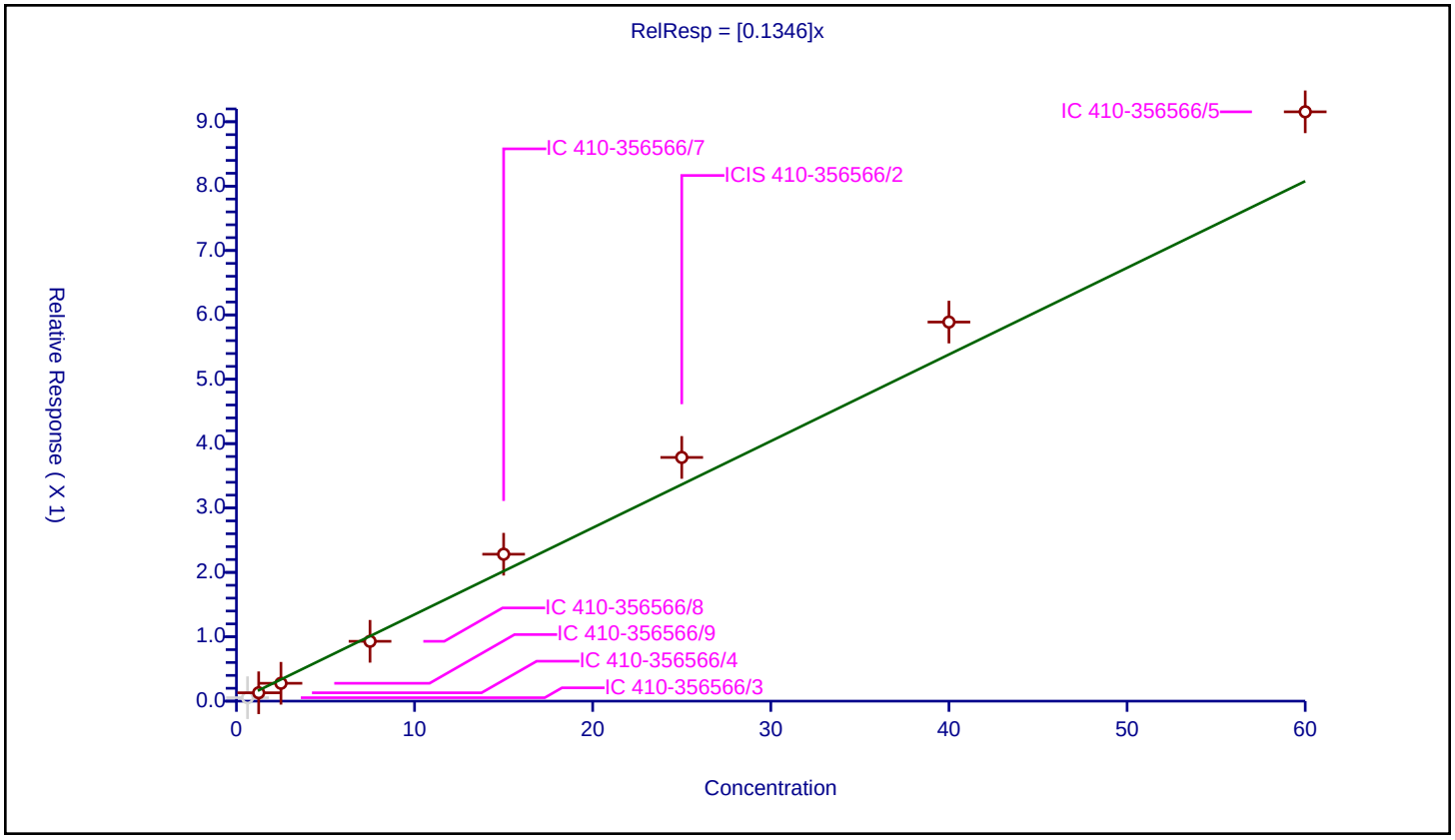
Curve Coefficients

Intercept:	0
Slope:	0.1346

Error Coefficients

Standard Error:	684000
Relative Standard Error:	15.7
Correlation Coefficient:	0.960
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.625	0.053758	5.0	475833.0	0.086013	N
2	IC 410-356566/4	1.25	0.130111	5.0	606597.0	0.104089	Y
3	IC 410-356566/9	2.5	0.277372	5.0	492354.0	0.110949	Y
4	IC 410-356566/8	7.5	0.929403	5.0	704829.0	0.12392	Y
5	IC 410-356566/7	15.0	2.282403	5.0	683593.0	0.15216	Y
6	ICIS 410-356566/2	25.0	3.785858	5.0	755591.0	0.151434	Y
7	IC 410-356566/6	40.0	5.888627	5.0	545223.0	0.147216	Y
8	IC 410-356566/5	60.0	9.154645	5.0	762443.0	0.152577	Y



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Calibration / 4-Aminobiphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

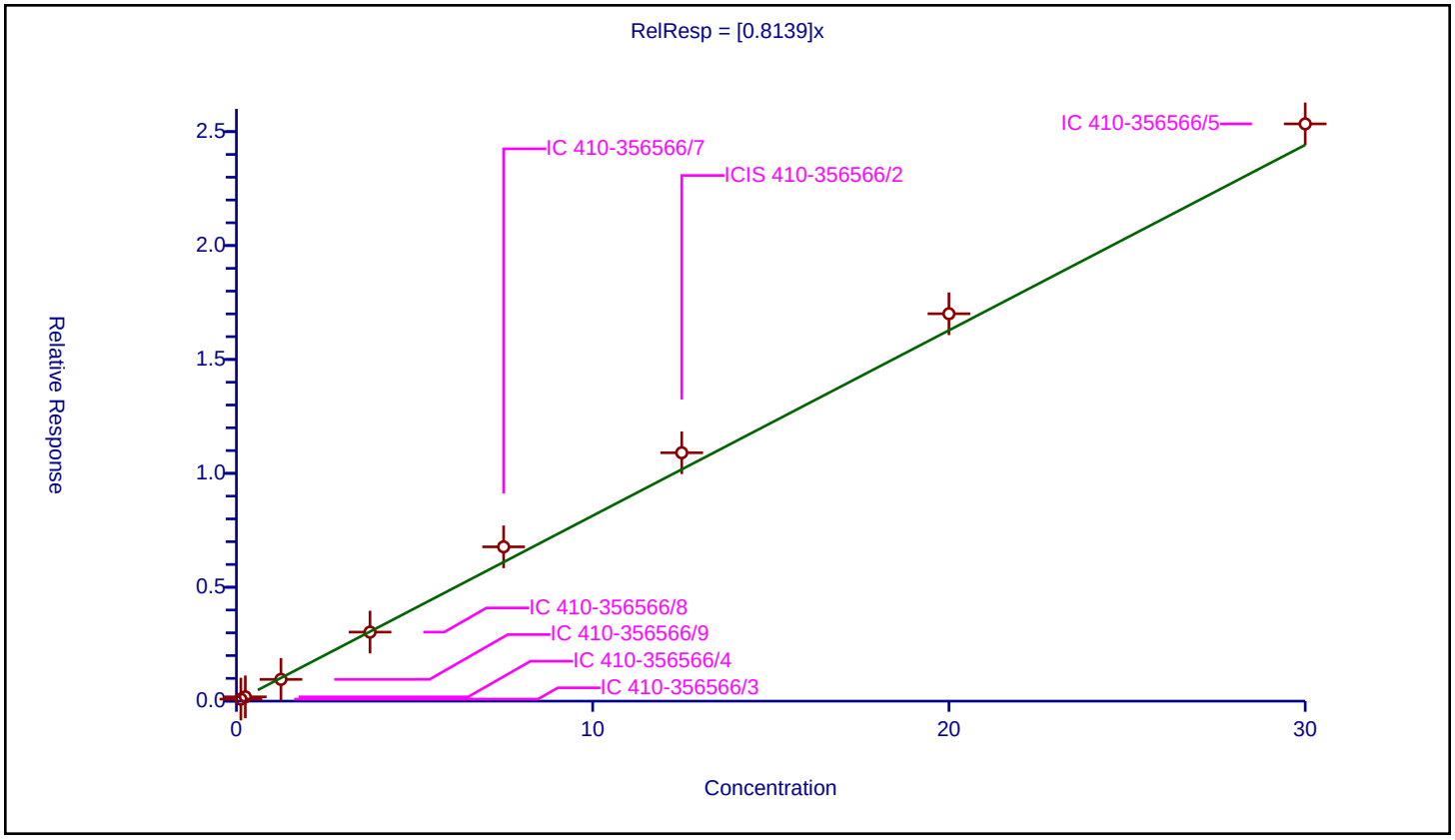
Curve Coefficients

Intercept:	0
Slope:	0.8139

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	8.0
Correlation Coefficient:	0.969
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.089265	5.0	475833.0	0.714116	Y
2	IC 410-356566/4	0.25	0.188618	5.0	606597.0	0.754471	Y
3	IC 410-356566/9	1.25	0.954872	5.0	492354.0	0.763898	Y
4	IC 410-356566/8	3.75	3.031537	5.0	704829.0	0.80841	Y
5	IC 410-356566/7	7.5	6.773636	5.0	683593.0	0.903151	Y
6	ICIS 410-356566/2	12.5	10.904788	5.0	755591.0	0.872383	Y
7	IC 410-356566/6	20.0	17.007454	5.0	545223.0	0.850373	Y
8	IC 410-356566/5	30.0	25.341632	5.0	762443.0	0.844721	Y



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Calibration / Pentachloronitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

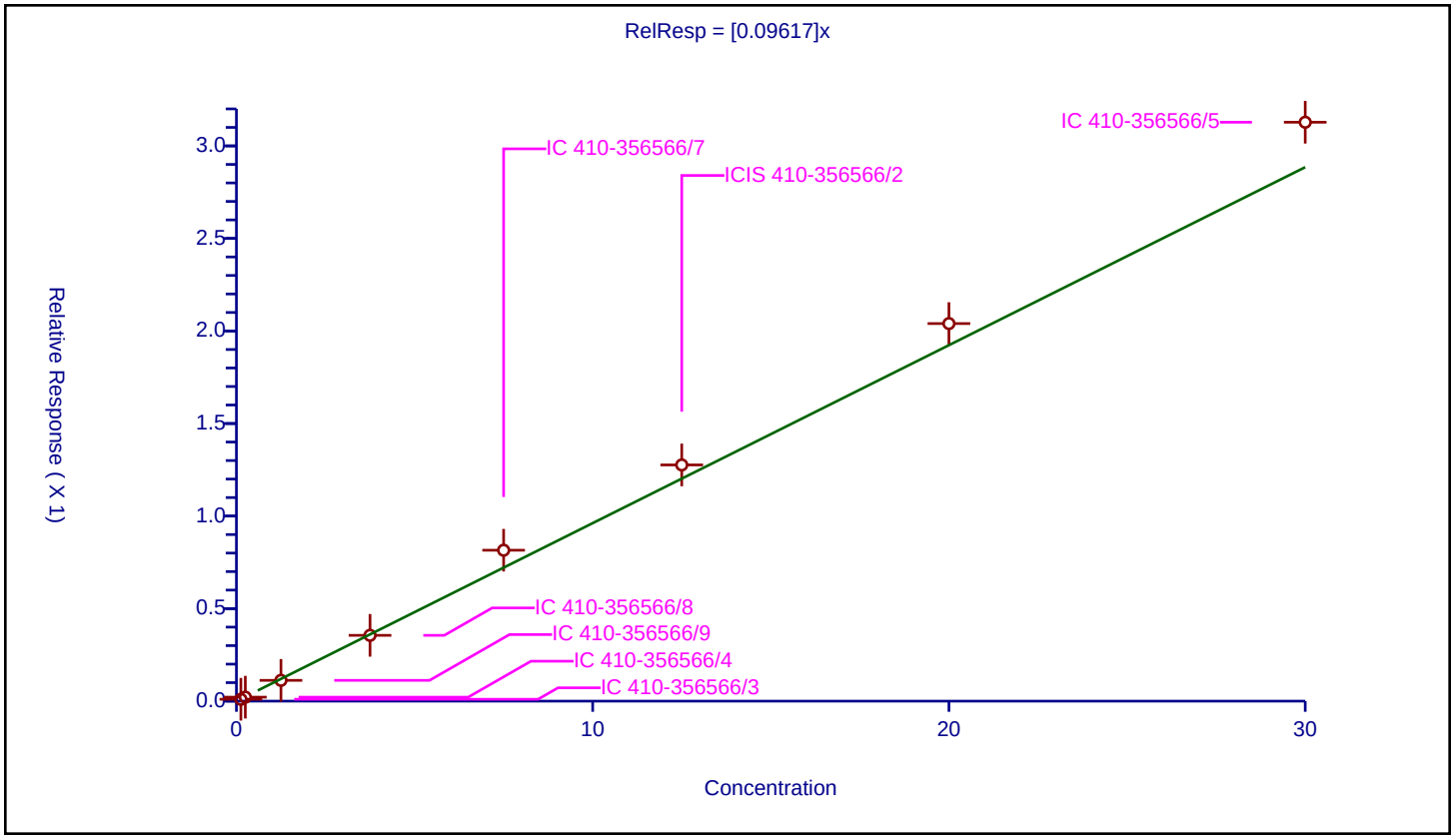
Curve Coefficients

Intercept:	0
Slope:	0.09617

Error Coefficients

Standard Error:	217000
Relative Standard Error:	10.0
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.010214	5.0	475833.0	0.081709	Y
2	IC 410-356566/4	0.25	0.02148	5.0	606597.0	0.085922	Y
3	IC 410-356566/9	1.25	0.112277	5.0	492354.0	0.089822	Y
4	IC 410-356566/8	3.75	0.355483	5.0	704829.0	0.094796	Y
5	IC 410-356566/7	7.5	0.815427	5.0	683593.0	0.108724	Y
6	ICIS 410-356566/2	12.5	1.276253	5.0	755591.0	0.1021	Y
7	IC 410-356566/6	20.0	2.040046	5.0	545223.0	0.102002	Y
8	IC 410-356566/5	30.0	3.127886	5.0	762443.0	0.104263	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

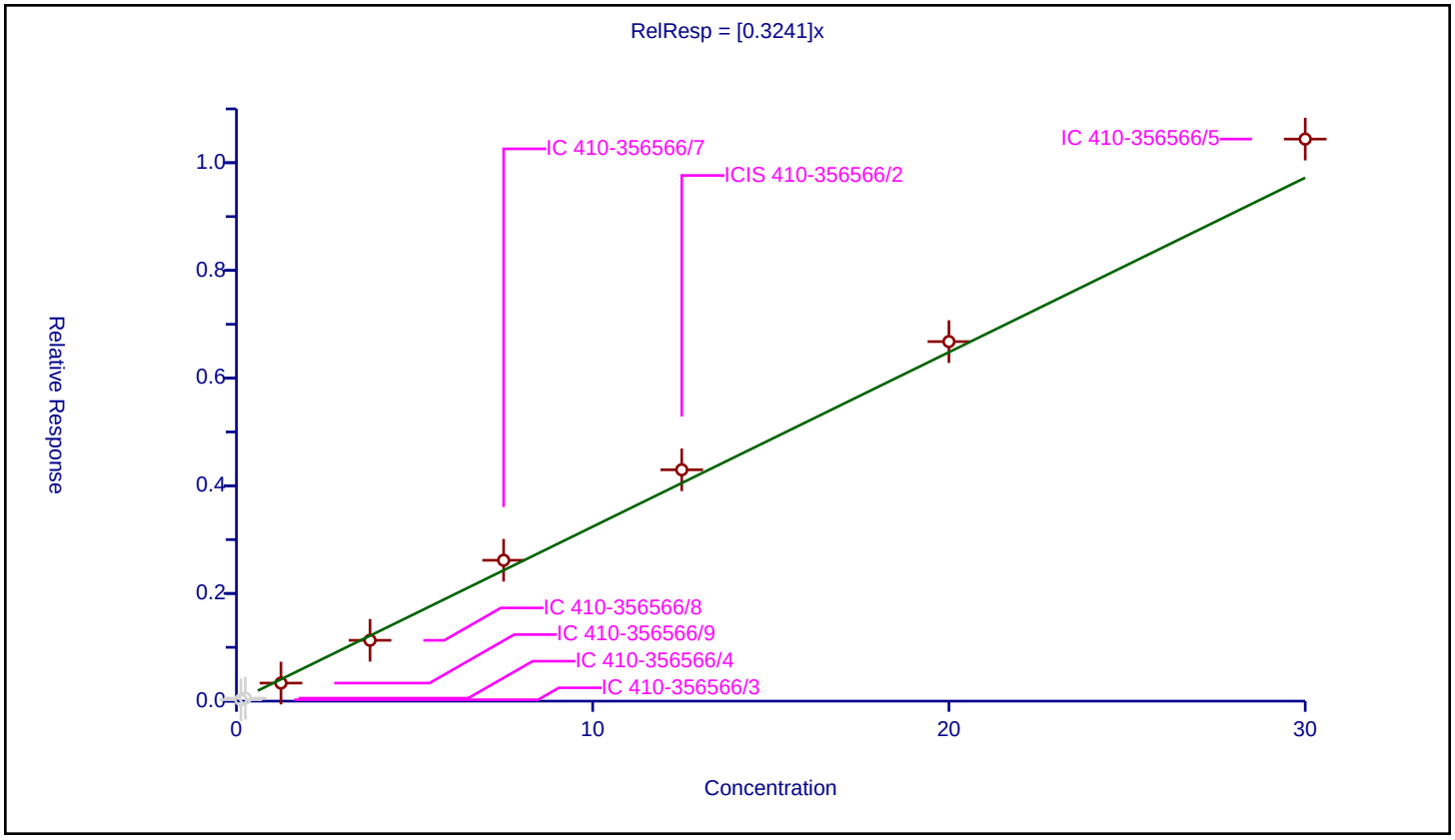
Curve Coefficients

Intercept:	0
Slope:	0.3241

Error Coefficients

Standard Error:	853000
Relative Standard Error:	10.0
Correlation Coefficient:	0.952
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.025776	5.0	475833.0	0.206207	N
2	IC 410-356566/4	0.25	0.055671	5.0	606597.0	0.222685	N
3	IC 410-356566/9	1.25	0.335622	5.0	492354.0	0.268498	Y
4	IC 410-356566/8	3.75	1.129856	5.0	704829.0	0.301295	Y
5	IC 410-356566/7	7.5	2.61663	5.0	683593.0	0.348884	Y
6	ICIS 410-356566/2	12.5	4.297259	5.0	755591.0	0.343781	Y
7	IC 410-356566/6	20.0	6.677855	5.0	545223.0	0.333893	Y
8	IC 410-356566/5	30.0	10.439279	5.0	762443.0	0.347976	Y



Calibration / Dinoseb

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

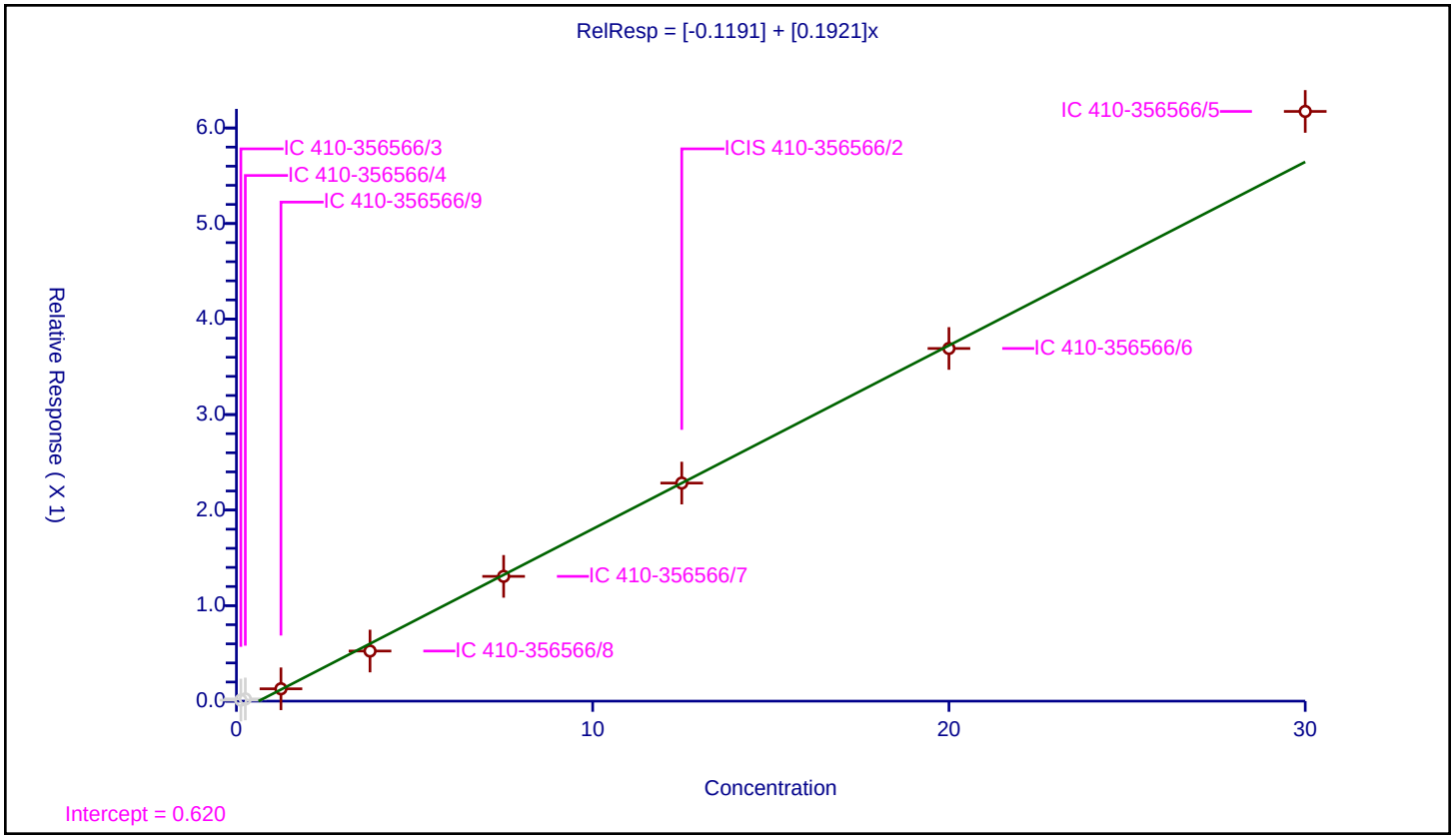
Curve Coefficients

Intercept:	-0.1191
Slope:	0.1921

Error Coefficients

Standard Error:	549000
Relative Standard Error:	7.3
Correlation Coefficient:	0.945
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.011044	5.0	475833.0	0.08835	N
2	IC 410-356566/4	0.25	0.022931	5.0	606597.0	0.091725	N
3	IC 410-356566/9	1.25	0.129287	5.0	492354.0	0.10343	Y
4	IC 410-356566/8	3.75	0.524553	5.0	704829.0	0.139881	Y
5	IC 410-356566/7	7.5	1.30615	5.0	683593.0	0.174153	Y
6	ICIS 410-356566/2	12.5	2.282849	5.0	755591.0	0.182628	Y
7	IC 410-356566/6	20.0	3.691994	5.0	545223.0	0.1846	Y
8	IC 410-356566/5	30.0	6.173458	5.0	762443.0	0.205782	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

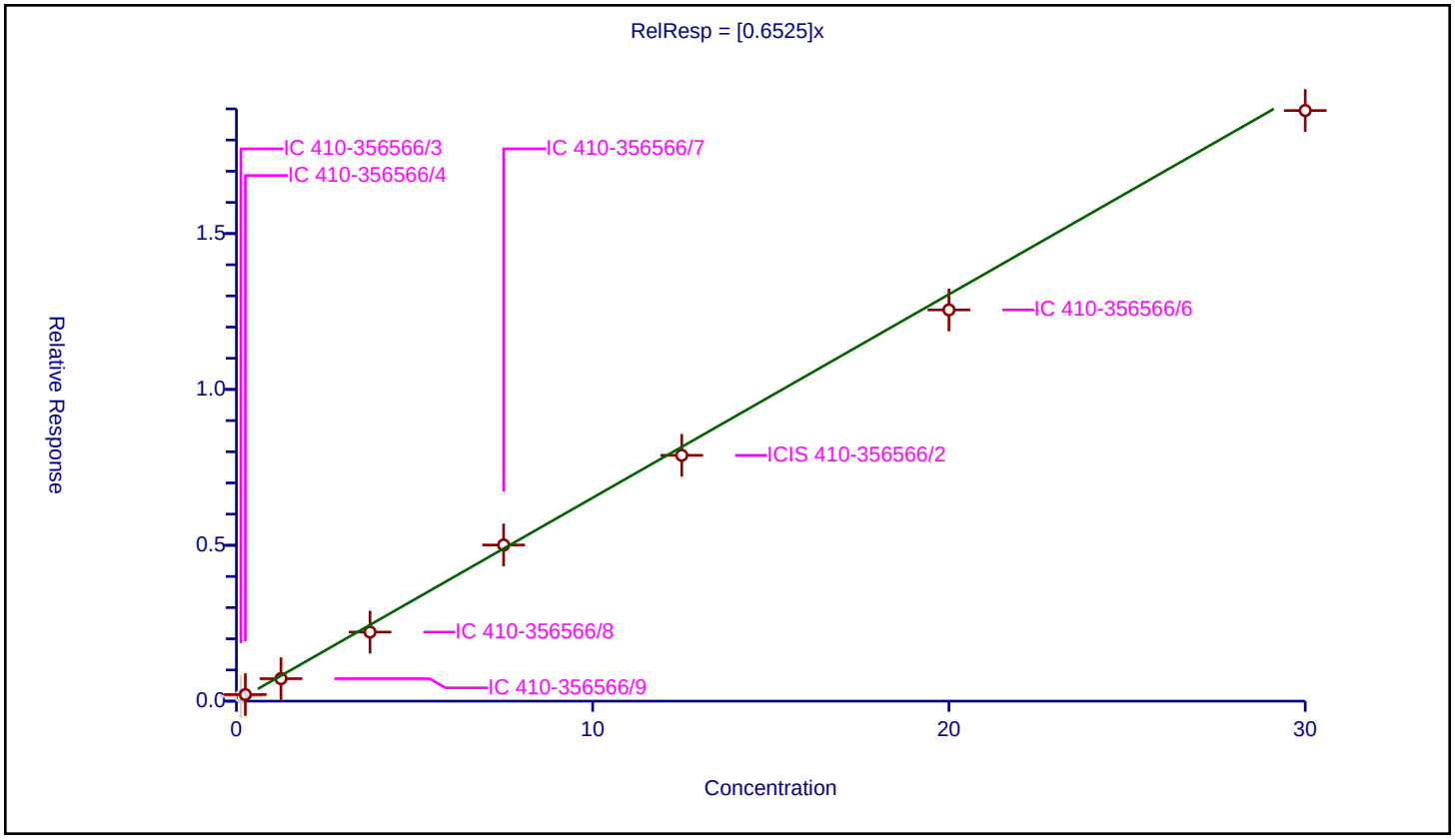
Curve Coefficients

Intercept:	0
Slope:	0.6525

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	13.6
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.154382	5.0	475833.0	1.235055	N
2	IC 410-356566/4	0.25	0.210461	5.0	606597.0	0.841844	Y
3	IC 410-356566/9	1.25	0.720711	5.0	492354.0	0.576569	Y
4	IC 410-356566/8	3.75	2.215998	5.0	704829.0	0.590933	Y
5	IC 410-356566/7	7.5	5.008806	5.0	683593.0	0.667841	Y
6	ICIS 410-356566/2	12.5	7.886893	5.0	755591.0	0.630951	Y
7	IC 410-356566/6	20.0	12.551433	5.0	545223.0	0.627572	Y
8	IC 410-356566/5	30.0	18.946905	5.0	762443.0	0.631563	Y



Calibration / Phenanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

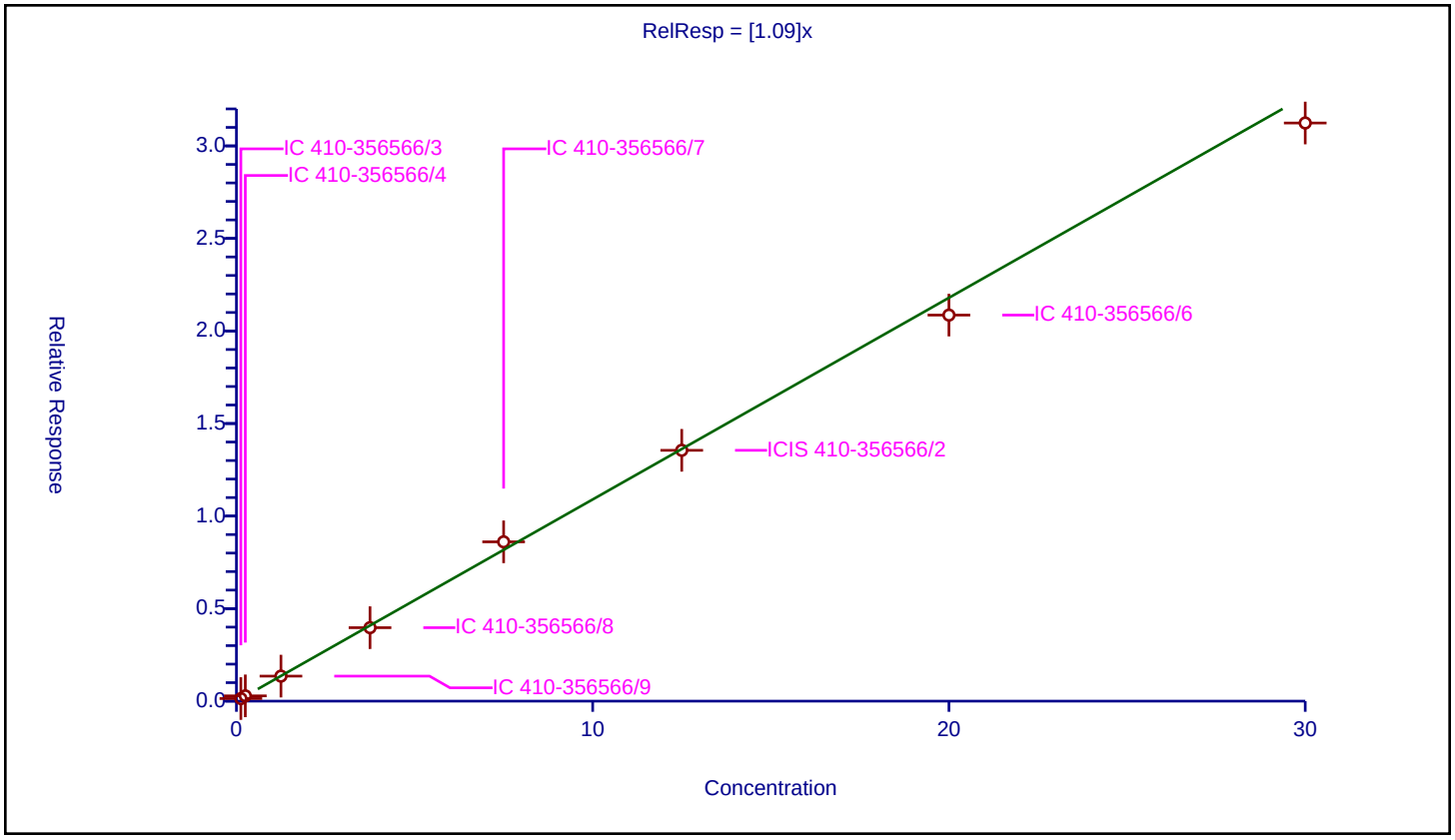
Curve Coefficients

Intercept:	0
Slope:	1.09

Error Coefficients

Standard Error:	2200000
Relative Standard Error:	3.9
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.139797	5.0	475833.0	1.118376	Y
2	IC 410-356566/4	0.25	0.285906	5.0	606597.0	1.143626	Y
3	IC 410-356566/9	1.25	1.351558	5.0	492354.0	1.081246	Y
4	IC 410-356566/8	3.75	3.969027	5.0	704829.0	1.058407	Y
5	IC 410-356566/7	7.5	8.607614	5.0	683593.0	1.147682	Y
6	ICIS 410-356566/2	12.5	13.552689	5.0	755591.0	1.084215	Y
7	IC 410-356566/6	20.0	20.858933	5.0	545223.0	1.042947	Y
8	IC 410-356566/5	30.0	31.237338	5.0	762443.0	1.041245	Y



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Calibration / Anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

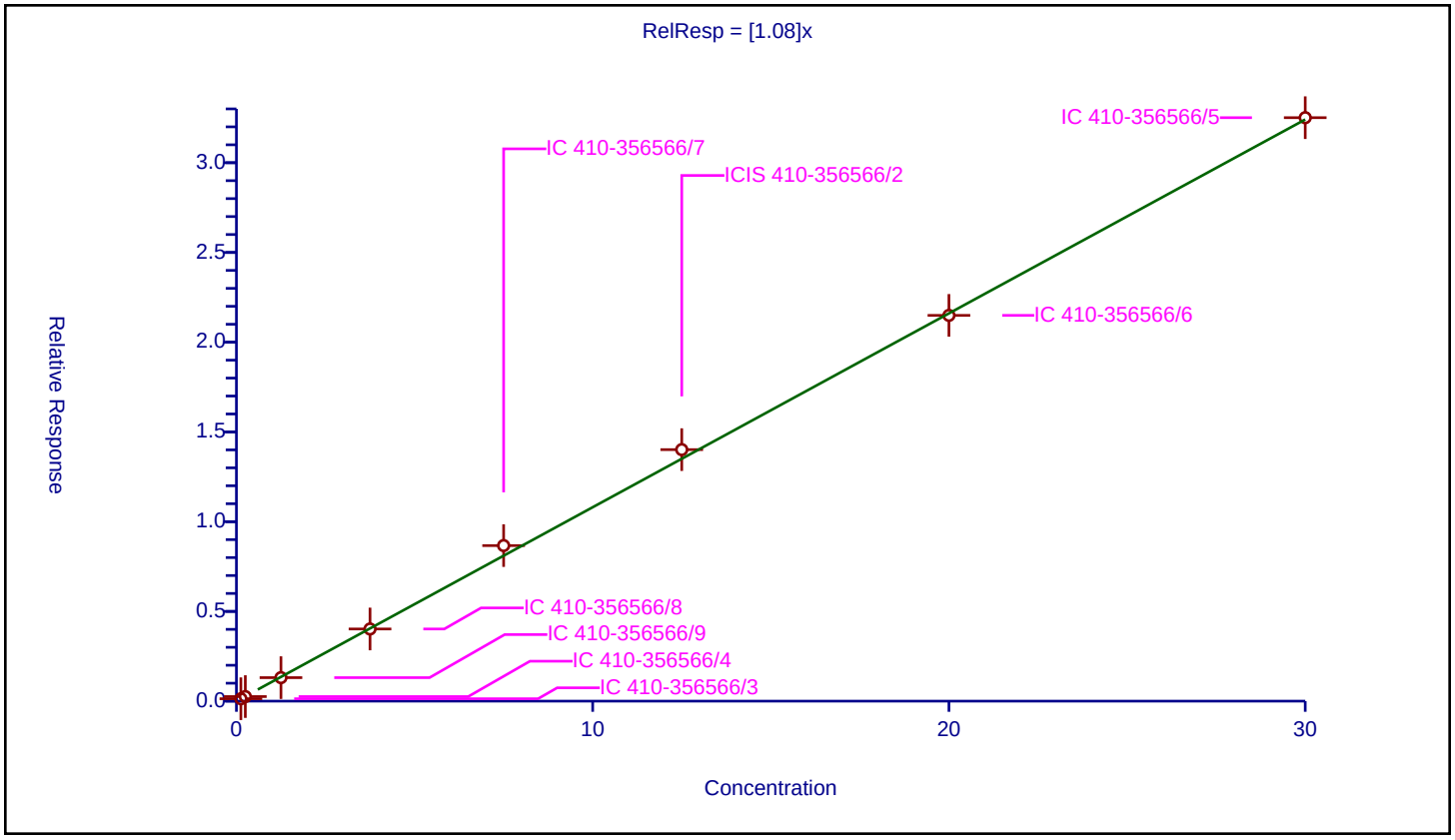
Curve Coefficients

Intercept:	0
Slope:	1.08

Error Coefficients

Standard Error:	2280000
Relative Standard Error:	3.9
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.133776	5.0	475833.0	1.070207	Y
2	IC 410-356566/4	0.25	0.254337	5.0	606597.0	1.017348	Y
3	IC 410-356566/9	1.25	1.309495	5.0	492354.0	1.047596	Y
4	IC 410-356566/8	3.75	4.02106	5.0	704829.0	1.072283	Y
5	IC 410-356566/7	7.5	8.667599	5.0	683593.0	1.15568	Y
6	ICIS 410-356566/2	12.5	14.014295	5.0	755591.0	1.121144	Y
7	IC 410-356566/6	20.0	21.493444	5.0	545223.0	1.074672	Y
8	IC 410-356566/5	30.0	32.50963	5.0	762443.0	1.083654	Y



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Calibration / Carbazole

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

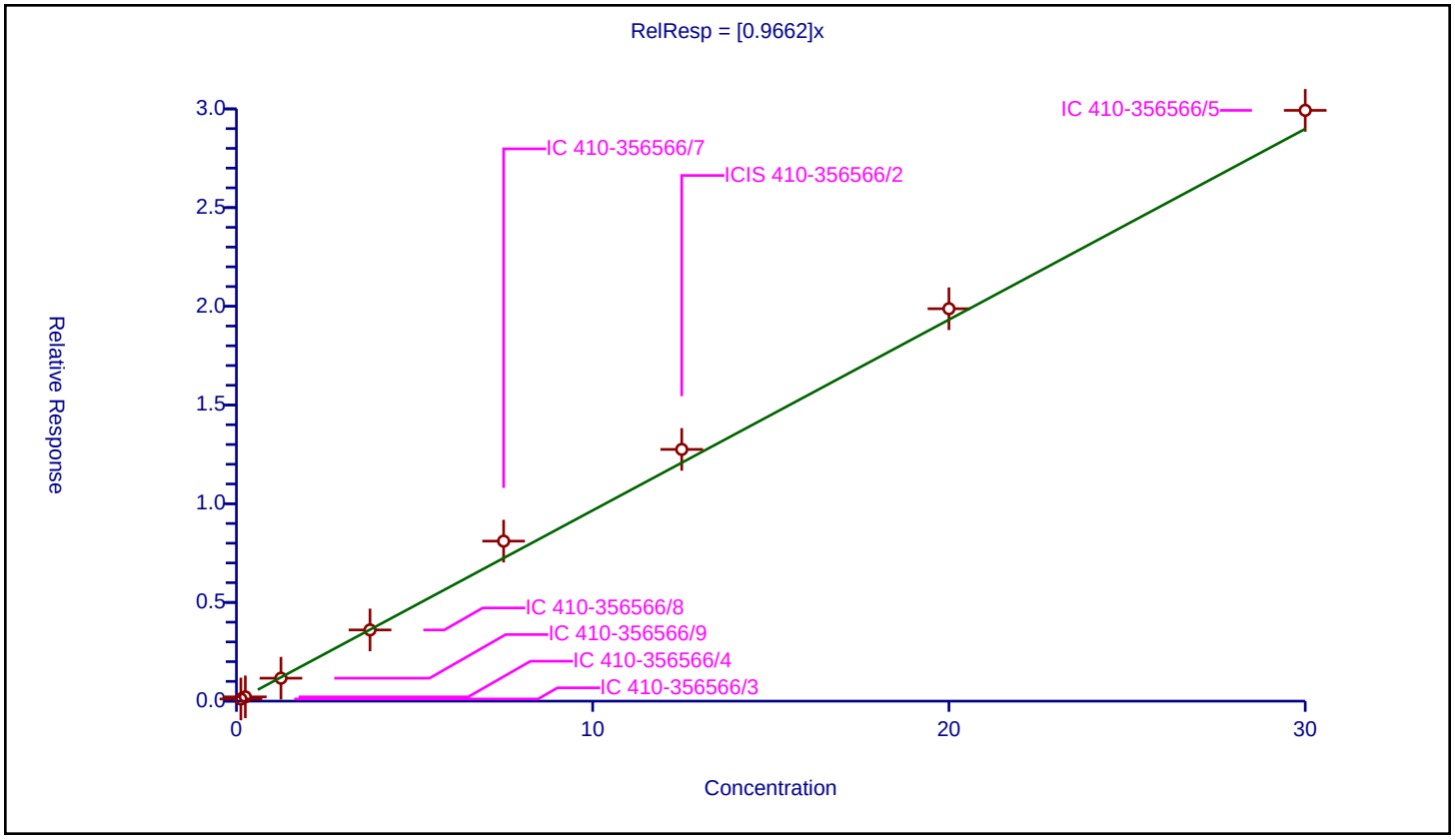
Curve Coefficients

Intercept:	0
Slope:	0.9662

Error Coefficients

Standard Error:	2100000
Relative Standard Error:	7.5
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.110259	5.0	475833.0	0.882074	Y
2	IC 410-356566/4	0.25	0.215942	5.0	606597.0	0.86377	Y
3	IC 410-356566/9	1.25	1.161949	5.0	492354.0	0.929559	Y
4	IC 410-356566/8	3.75	3.606896	5.0	704829.0	0.961839	Y
5	IC 410-356566/7	7.5	8.106066	5.0	683593.0	1.080809	Y
6	ICIS 410-356566/2	12.5	12.751171	5.0	755591.0	1.020094	Y
7	IC 410-356566/6	20.0	19.878068	5.0	545223.0	0.993903	Y
8	IC 410-356566/5	30.0	29.925208	5.0	762443.0	0.997507	Y



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Calibration / Methyl parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

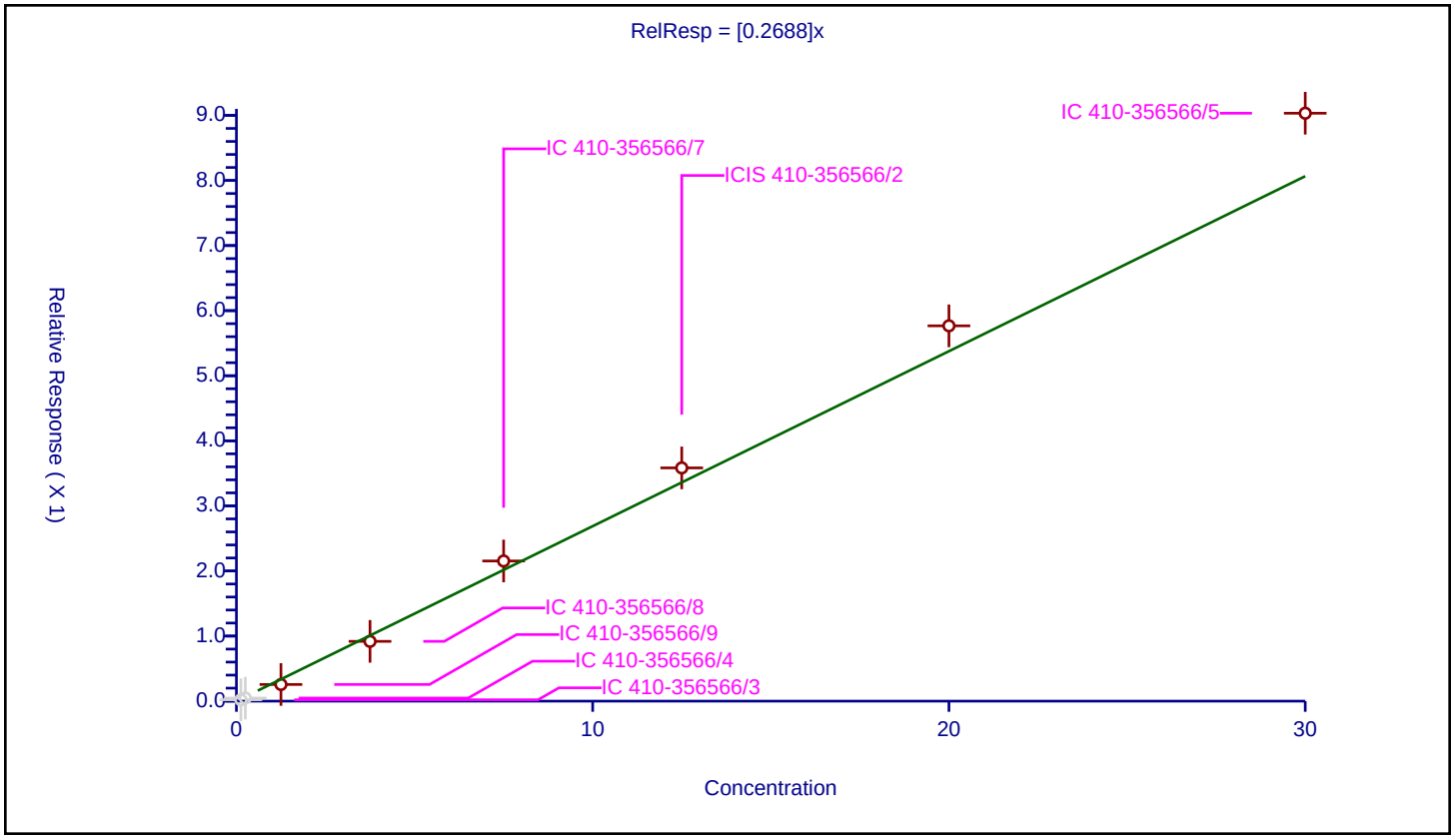
Curve Coefficients

Intercept:	0
Slope:	0.2688

Error Coefficients

Standard Error:	734000
Relative Standard Error:	13.6
Correlation Coefficient:	0.954
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.021005	5.0	475833.0	0.168042	N
2	IC 410-356566/4	0.25	0.04728	5.0	606597.0	0.189121	N
3	IC 410-356566/9	1.25	0.256157	5.0	492354.0	0.204926	Y
4	IC 410-356566/8	3.75	0.918358	5.0	704829.0	0.244895	Y
5	IC 410-356566/7	7.5	2.153445	5.0	683593.0	0.287126	Y
6	ICIS 410-356566/2	12.5	3.583771	5.0	755591.0	0.286702	Y
7	IC 410-356566/6	20.0	5.766906	5.0	545223.0	0.288345	Y
8	IC 410-356566/5	30.0	9.033134	5.0	762443.0	0.301104	Y



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Calibration / Di-n-butyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

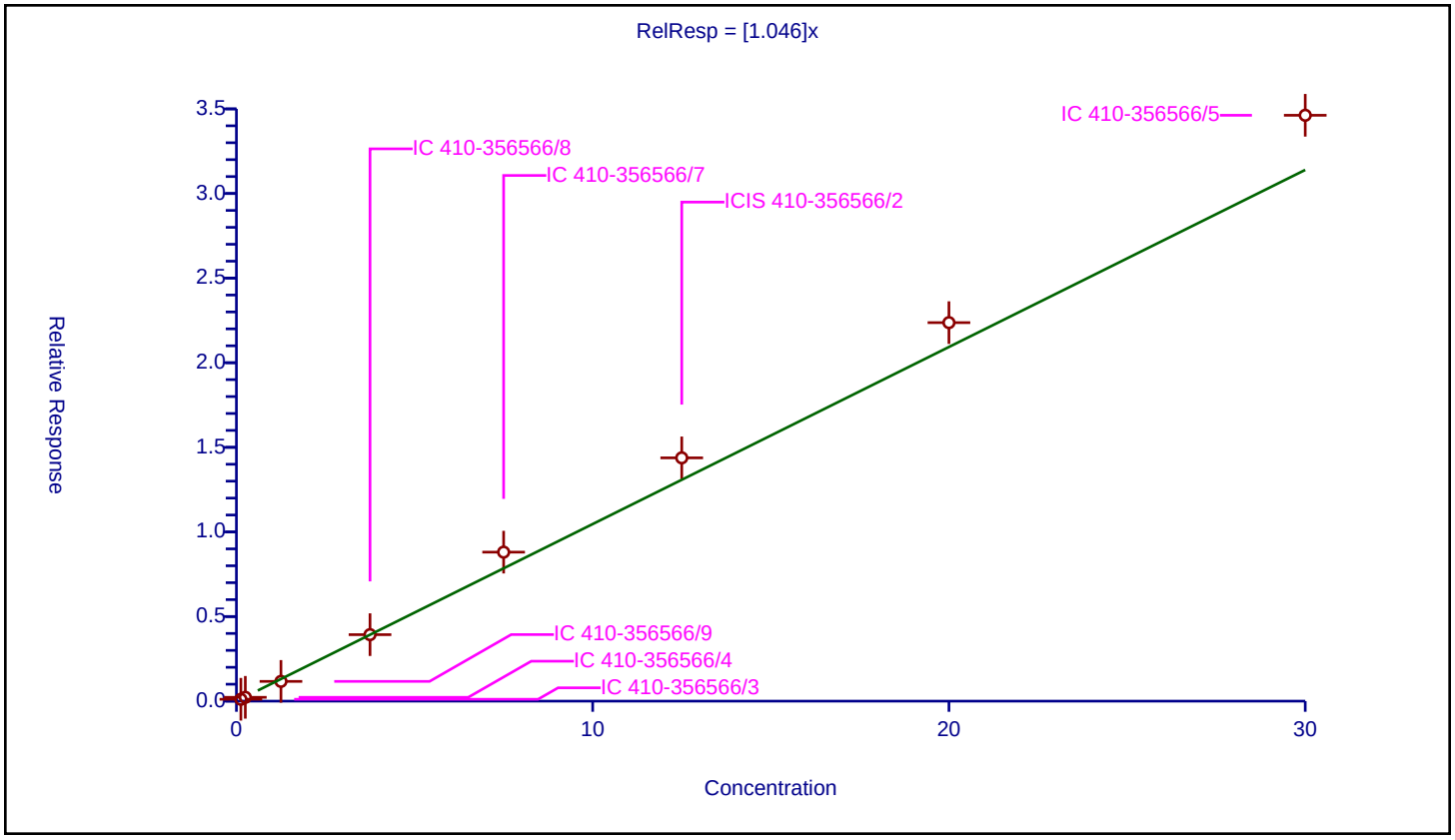
Curve Coefficients

Intercept:	0
Slope:	1.046

Error Coefficients

Standard Error:	2400000
Relative Standard Error:	11.5
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.11111	5.0	475833.0	0.888883	Y
2	IC 410-356566/4	0.25	0.226114	5.0	606597.0	0.904456	Y
3	IC 410-356566/9	1.25	1.167128	5.0	492354.0	0.933702	Y
4	IC 410-356566/8	3.75	3.929556	5.0	704829.0	1.047882	Y
5	IC 410-356566/7	7.5	8.806278	5.0	683593.0	1.17417	Y
6	ICIS 410-356566/2	12.5	14.377381	5.0	755591.0	1.150191	Y
7	IC 410-356566/6	20.0	22.368297	5.0	545223.0	1.118415	Y
8	IC 410-356566/5	30.0	34.622595	5.0	762443.0	1.154086	Y



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Calibration / Ethyl Parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

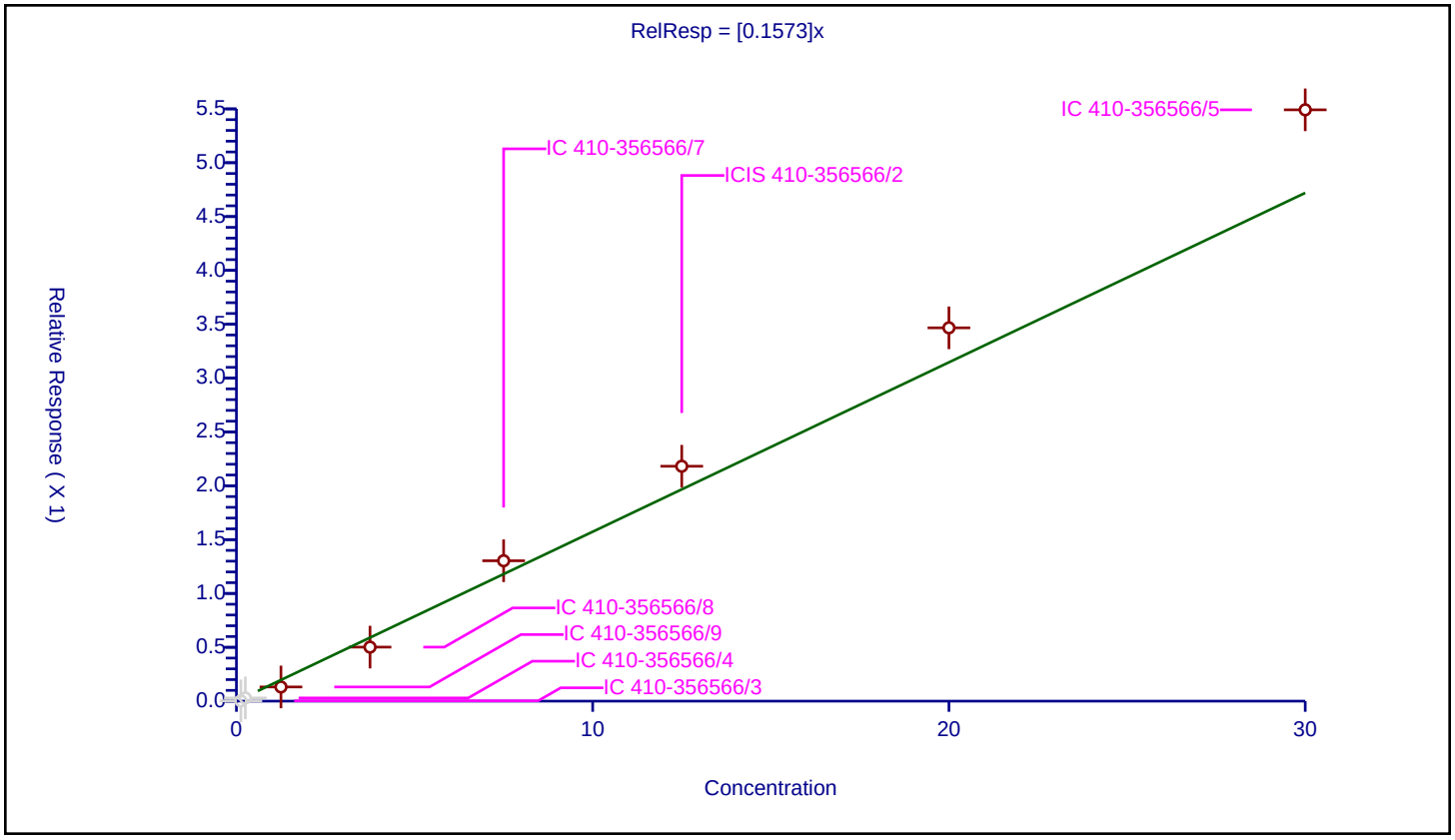
Curve Coefficients

Intercept:	0
Slope:	0.1573

Error Coefficients

Standard Error:	445000
Relative Standard Error:	19.5
Correlation Coefficient:	0.953
Coefficient of Determination (Adjusted):	0.958

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.002932	5.0	475833.0	0.023454	N
2	IC 410-356566/4	0.25	0.029558	5.0	606597.0	0.118233	N
3	IC 410-356566/9	1.25	0.131826	5.0	492354.0	0.105461	Y
4	IC 410-356566/8	3.75	0.501675	5.0	704829.0	0.13378	Y
5	IC 410-356566/7	7.5	1.303641	5.0	683593.0	0.173819	Y
6	ICIS 410-356566/2	12.5	2.181438	5.0	755591.0	0.174515	Y
7	IC 410-356566/6	20.0	3.466848	5.0	545223.0	0.173342	Y
8	IC 410-356566/5	30.0	5.49127	5.0	762443.0	0.183042	Y



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Calibration / 4-Nitroquinoline-1-oxide

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

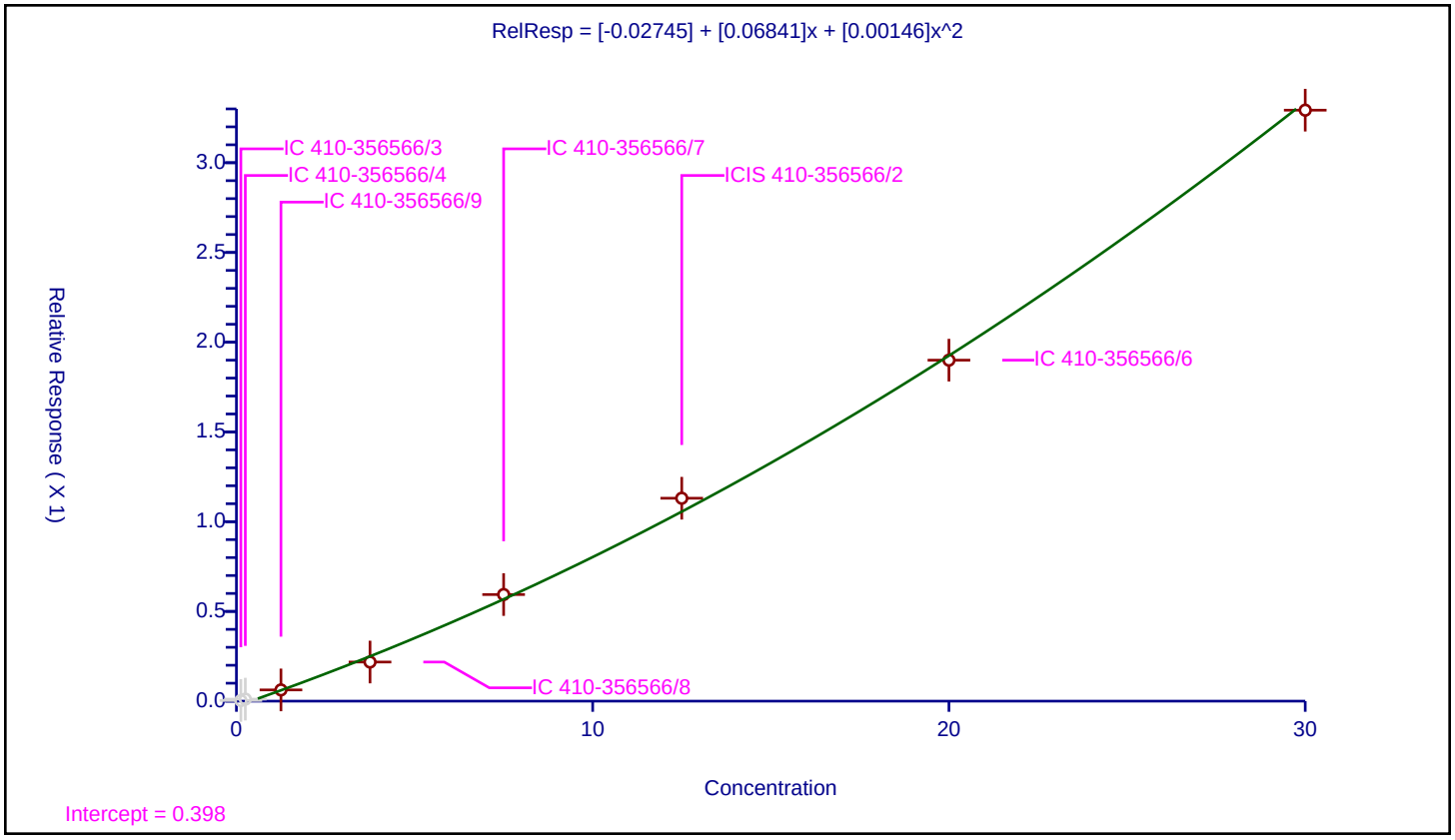
Curve Coefficients

Intercept:	-0.02745
Slope:	0.06841
Second Order:	0.00146

Error Coefficients

Standard Error:	333000
Relative Standard Error:	7.5
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.003688	5.0	475833.0	0.029506	N
2	IC 410-356566/4	0.25	0.011177	5.0	606597.0	0.044708	N
3	IC 410-356566/9	1.25	0.062577	5.0	492354.0	0.050062	Y
4	IC 410-356566/8	3.75	0.217968	5.0	704829.0	0.058125	Y
5	IC 410-356566/7	7.5	0.593972	5.0	683593.0	0.079196	Y
6	ICIS 410-356566/2	12.5	1.130585	5.0	755591.0	0.090447	Y
7	IC 410-356566/6	20.0	1.899984	5.0	545223.0	0.094999	Y
8	IC 410-356566/5	30.0	3.292863	5.0	762443.0	0.109762	Y



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Calibration / Octachlorostyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

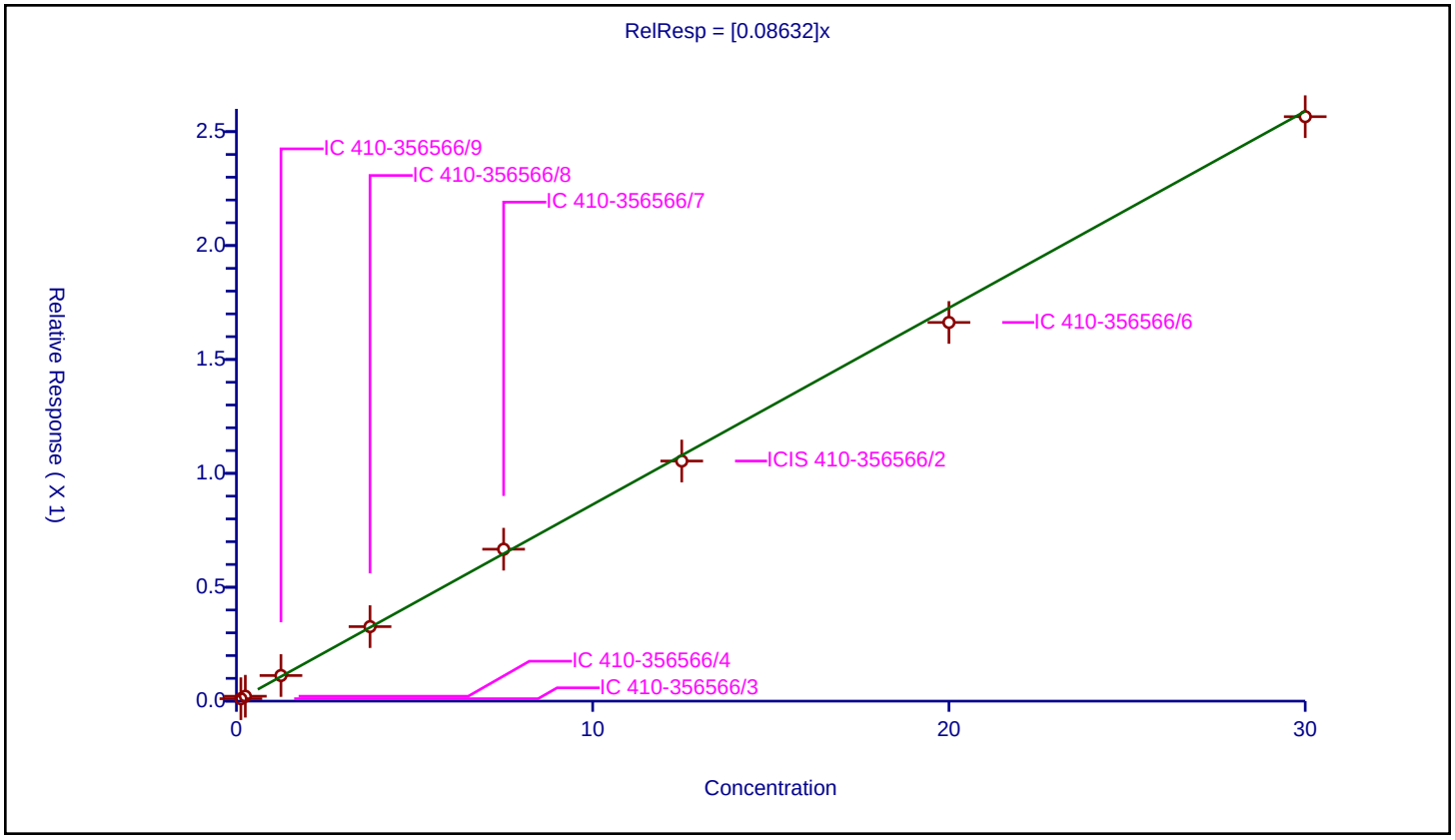
Curve Coefficients

Intercept:	0
Slope:	0.08632

Error Coefficients

Standard Error:	178000
Relative Standard Error:	2.6
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.010676	5.0	475833.0	0.085408	Y
2	IC 410-356566/4	0.25	0.021522	5.0	606597.0	0.086087	Y
3	IC 410-356566/9	1.25	0.112429	5.0	492354.0	0.089943	Y
4	IC 410-356566/8	3.75	0.327079	5.0	704829.0	0.087221	Y
5	IC 410-356566/7	7.5	0.66702	5.0	683593.0	0.088936	Y
6	ICIS 410-356566/2	12.5	1.054095	5.0	755591.0	0.084328	Y
7	IC 410-356566/6	20.0	1.66254	5.0	545223.0	0.083127	Y
8	IC 410-356566/5	30.0	2.56589	5.0	762443.0	0.08553	Y



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Calibration / Isodrin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

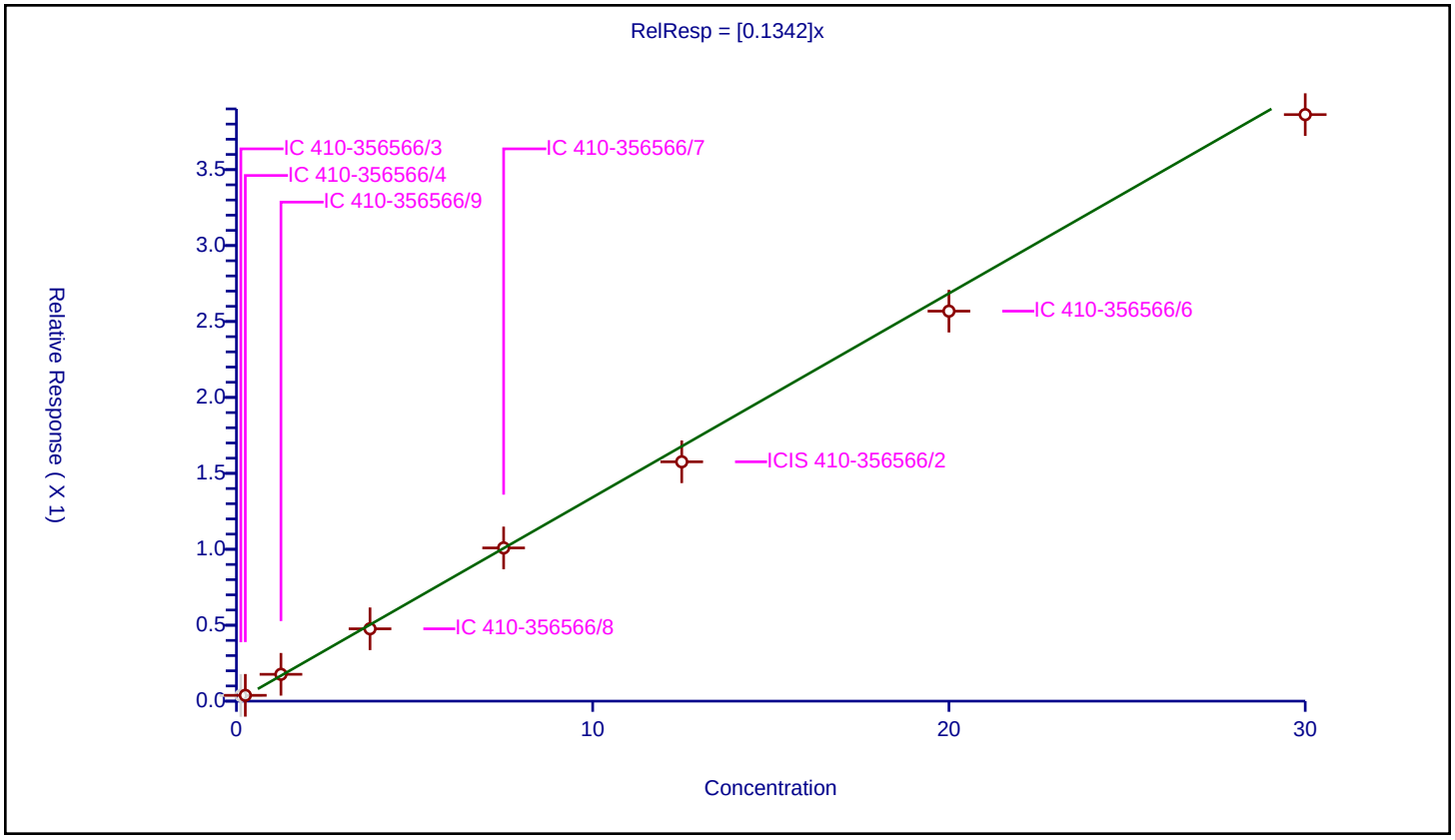
Curve Coefficients

Intercept:	0
Slope:	0.1342

Error Coefficients

Standard Error:	290000
Relative Standard Error:	7.5
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.037345	5.0	475833.0	0.29876	N
2	IC 410-356566/4	0.25	0.03837	5.0	606597.0	0.153479	Y
3	IC 410-356566/9	1.25	0.176712	5.0	492354.0	0.14137	Y
4	IC 410-356566/8	3.75	0.476527	5.0	704829.0	0.127074	Y
5	IC 410-356566/7	7.5	1.008948	5.0	683593.0	0.134526	Y
6	ICIS 410-356566/2	12.5	1.576097	5.0	755591.0	0.126088	Y
7	IC 410-356566/6	20.0	2.56805	5.0	545223.0	0.128403	Y
8	IC 410-356566/5	30.0	3.862341	5.0	762443.0	0.128745	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

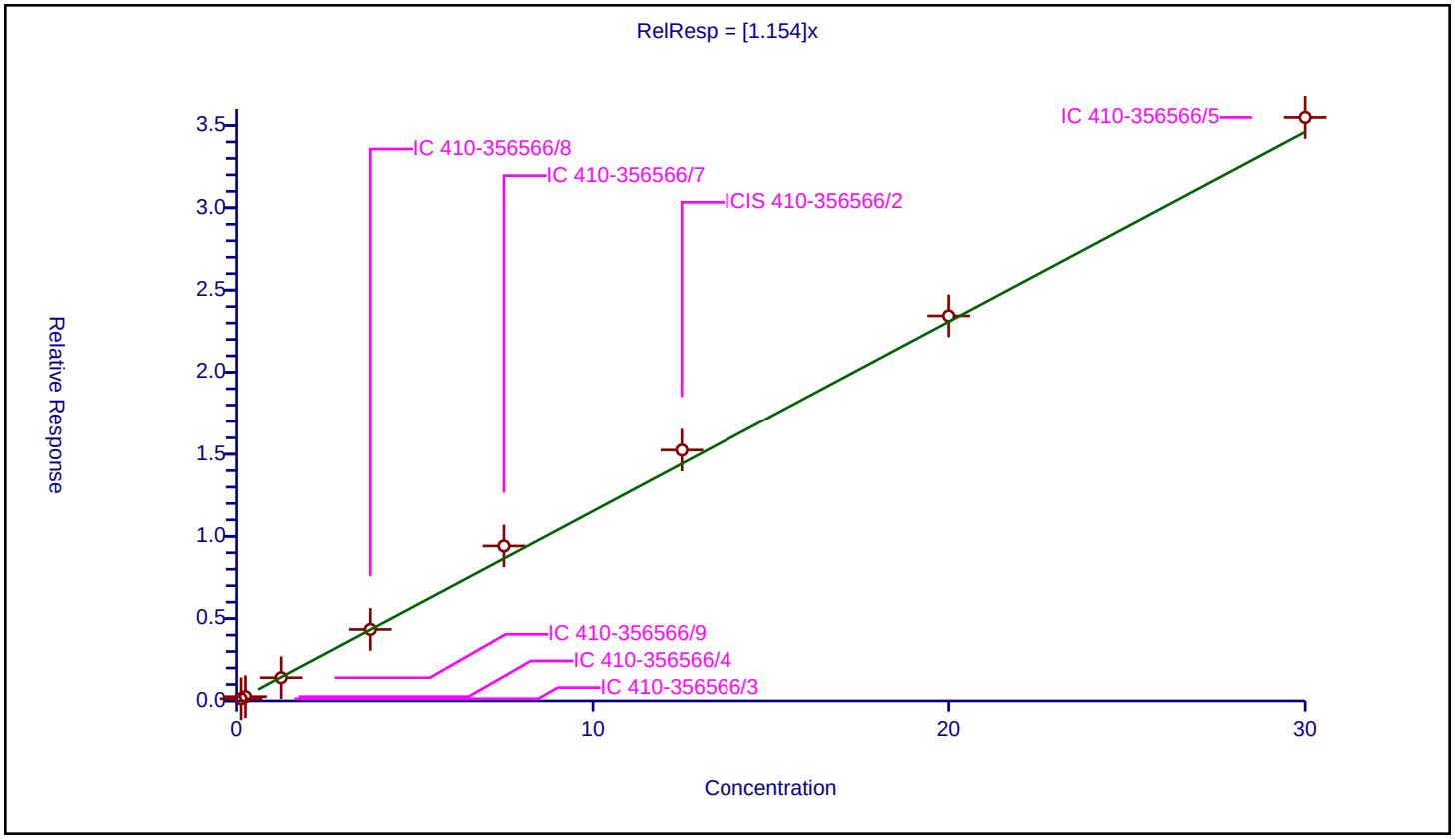
Curve Coefficients

Intercept:	0
Slope:	1.154

Error Coefficients

Standard Error:	2480000
Relative Standard Error:	6.2
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.134039	5.0	475833.0	1.072309	Y
2	IC 410-356566/4	0.25	0.260329	5.0	606597.0	1.041317	Y
3	IC 410-356566/9	1.25	1.409941	5.0	492354.0	1.127953	Y
4	IC 410-356566/8	3.75	4.343848	5.0	704829.0	1.158359	Y
5	IC 410-356566/7	7.5	9.415061	5.0	683593.0	1.255342	Y
6	ICIS 410-356566/2	12.5	15.251743	5.0	755591.0	1.220139	Y
7	IC 410-356566/6	20.0	23.433889	5.0	545223.0	1.171694	Y
8	IC 410-356566/5	30.0	35.489335	5.0	762443.0	1.182978	Y



Calibration / Benzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

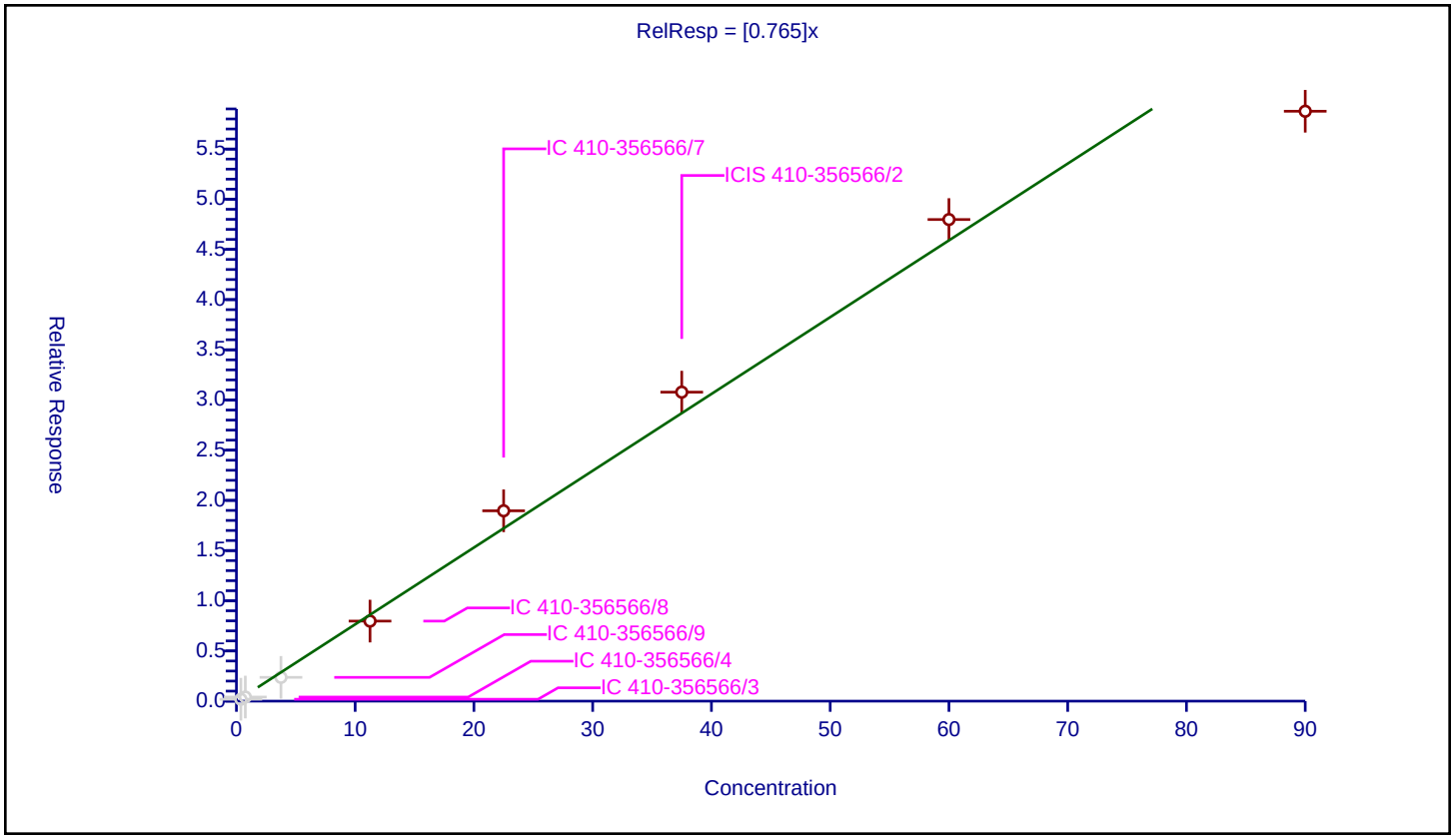
Curve Coefficients

Intercept:	0
Slope:	0.765

Error Coefficients

Standard Error:	5990000
Relative Standard Error:	10.6
Correlation Coefficient:	0.961
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.375	0.188432	5.0	479217.0	0.502486	N
2	IC 410-356566/4	0.75	0.406858	5.0	610606.0	0.542477	N
3	IC 410-356566/9	3.75	2.367313	5.0	497336.0	0.631283	N
4	IC 410-356566/8	11.25	7.973477	5.0	743954.0	0.708753	Y
5	IC 410-356566/7	22.5	18.961859	5.0	709812.0	0.842749	Y
6	ICIS 410-356566/2	37.5	30.781976	5.0	779979.0	0.820853	Y
7	IC 410-356566/6	60.0	47.977791	5.0	555756.0	0.79963	Y
8	IC 410-356566/5	90.0	58.765742	5.0	776483.0	0.652953	Y



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Calibration / Pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

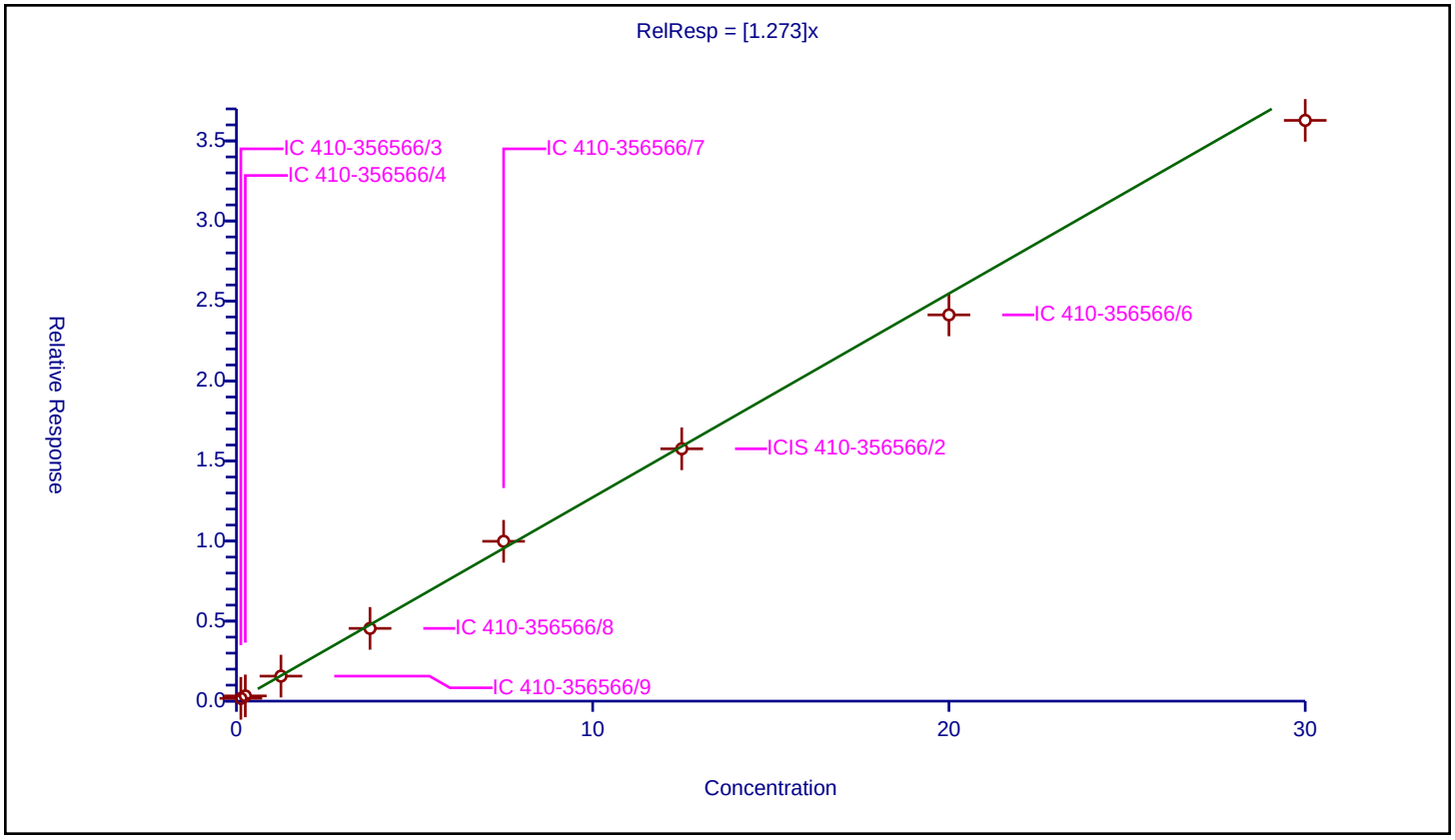
Curve Coefficients

Intercept:	0
Slope:	1.273

Error Coefficients

Standard Error:	2600000
Relative Standard Error:	5.6
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.175808	5.0	479217.0	1.406461	Y
2	IC 410-356566/4	0.25	0.326921	5.0	610606.0	1.307684	Y
3	IC 410-356566/9	1.25	1.563018	5.0	497336.0	1.250414	Y
4	IC 410-356566/8	3.75	4.545839	5.0	743954.0	1.212224	Y
5	IC 410-356566/7	7.5	9.986588	5.0	709812.0	1.331545	Y
6	ICIS 410-356566/2	12.5	15.76545	5.0	779979.0	1.261236	Y
7	IC 410-356566/6	20.0	24.13041	5.0	555756.0	1.20652	Y
8	IC 410-356566/5	30.0	36.28176	5.0	776483.0	1.209392	Y



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Calibration / p-Terphenyl-d14

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

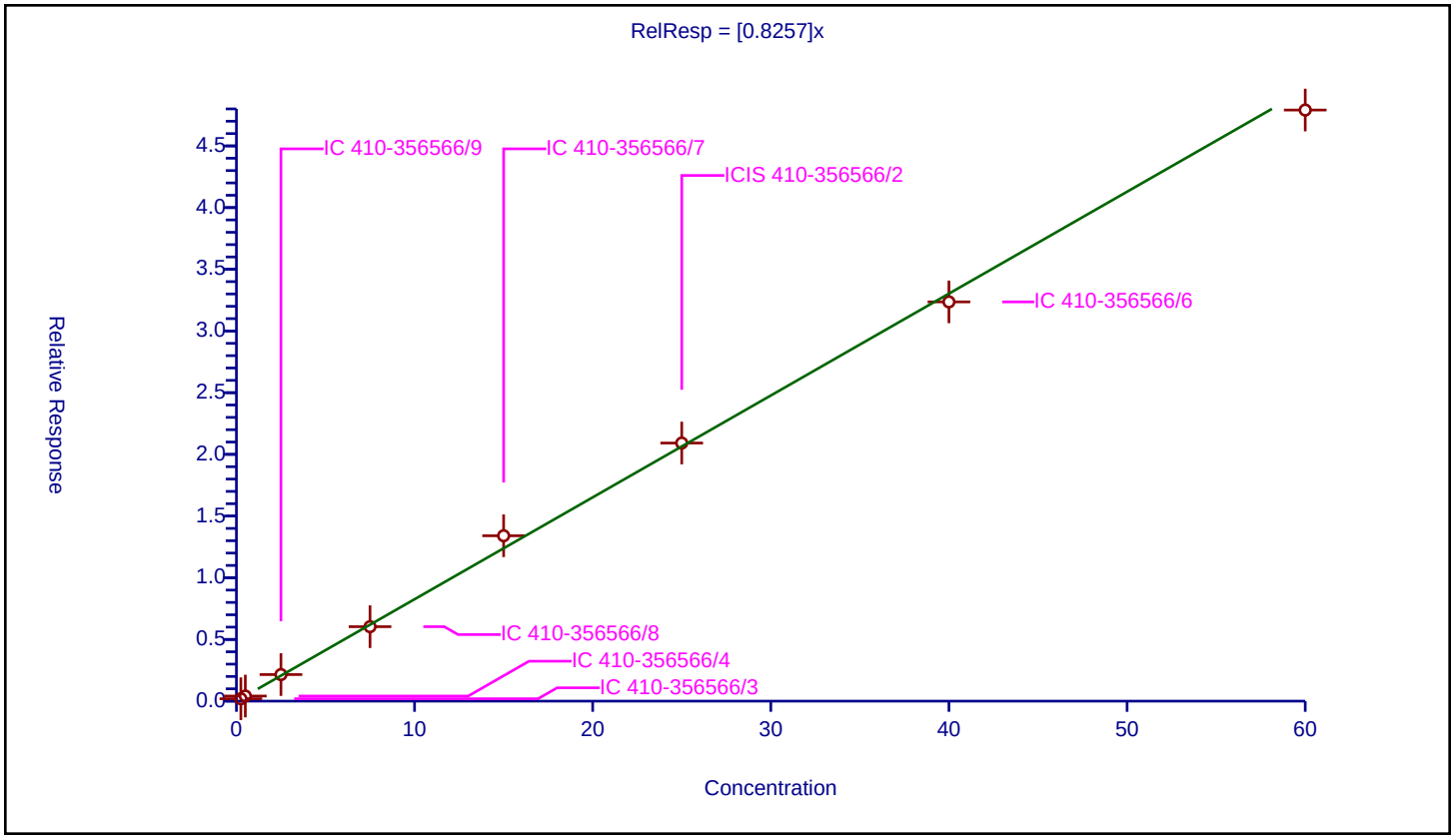
Curve Coefficients

Intercept:	0
Slope:	0.8257

Error Coefficients

Standard Error:	3450000
Relative Standard Error:	4.5
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.25	0.194411	5.0	479217.0	0.777644	Y
2	IC 410-356566/4	0.5	0.412369	5.0	610606.0	0.824738	Y
3	IC 410-356566/9	2.5	2.15276	5.0	497336.0	0.861104	Y
4	IC 410-356566/8	7.5	6.034607	5.0	743954.0	0.804614	Y
5	IC 410-356566/7	15.0	13.402838	5.0	709812.0	0.893523	Y
6	ICIS 410-356566/2	25.0	20.917461	5.0	779979.0	0.836698	Y
7	IC 410-356566/6	40.0	32.357626	5.0	555756.0	0.808941	Y
8	IC 410-356566/5	60.0	47.908222	5.0	776483.0	0.79847	Y



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Calibration / p-Dimethylamino azobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

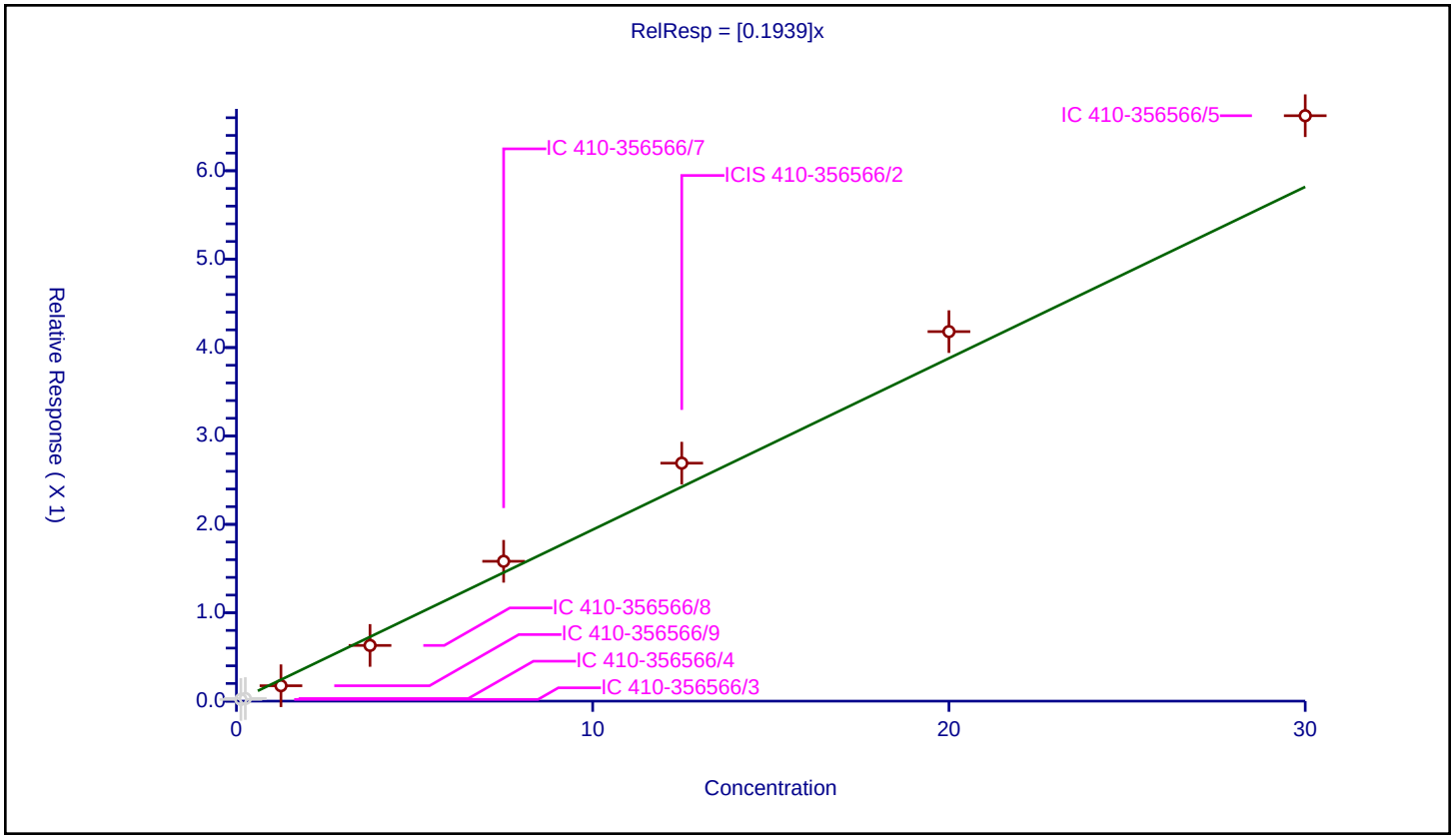
Curve Coefficients

Intercept:	0
Slope:	0.1939

Error Coefficients

Standard Error:	549000
Relative Standard Error:	16.8
Correlation Coefficient:	0.950
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.019553	5.0	479217.0	0.156422	N
2	IC 410-356566/4	0.25	0.029471	5.0	610606.0	0.117883	N
3	IC 410-356566/9	1.25	0.174319	5.0	497336.0	0.139455	Y
4	IC 410-356566/8	3.75	0.630099	5.0	743954.0	0.168027	Y
5	IC 410-356566/7	7.5	1.582137	5.0	709812.0	0.210952	Y
6	ICIS 410-356566/2	12.5	2.69238	5.0	779979.0	0.21539	Y
7	IC 410-356566/6	20.0	4.18054	5.0	555756.0	0.209027	Y
8	IC 410-356566/5	30.0	6.622785	5.0	776483.0	0.22076	Y



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Calibration / Chlorobenzilate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

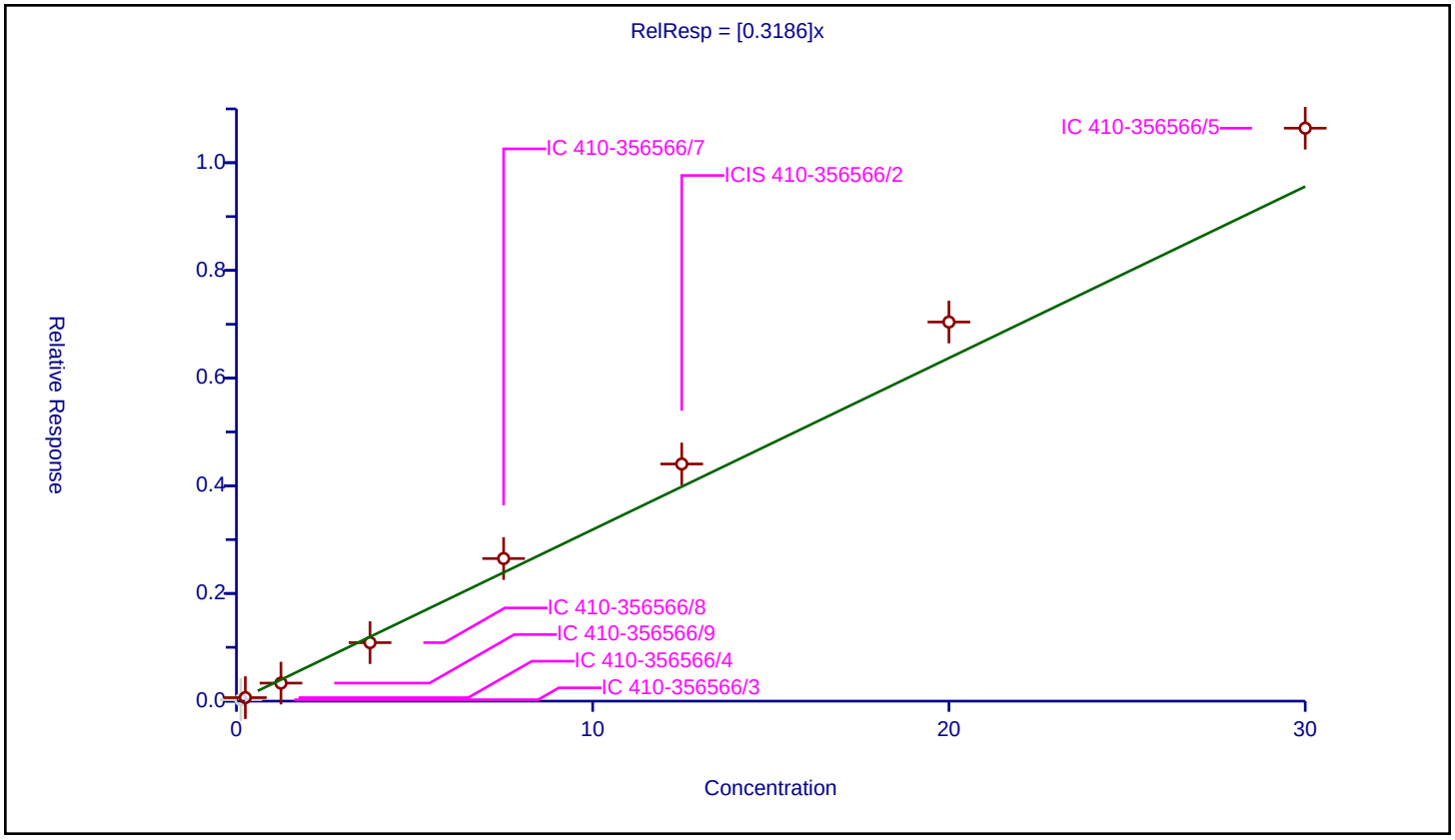
Curve Coefficients

Intercept:	0
Slope:	0.3186

Error Coefficients

Standard Error:	815000
Relative Standard Error:	13.8
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.02647	5.0	479217.0	0.211762	N
2	IC 410-356566/4	0.25	0.06505	5.0	610606.0	0.260201	Y
3	IC 410-356566/9	1.25	0.334924	5.0	497336.0	0.26794	Y
4	IC 410-356566/8	3.75	1.086808	5.0	743954.0	0.289815	Y
5	IC 410-356566/7	7.5	2.648962	5.0	709812.0	0.353195	Y
6	ICIS 410-356566/2	12.5	4.404978	5.0	779979.0	0.352398	Y
7	IC 410-356566/6	20.0	7.041372	5.0	555756.0	0.352069	Y
8	IC 410-356566/5	30.0	10.641811	5.0	776483.0	0.354727	Y



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Calibration / 3,3'-Dimethylbenzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

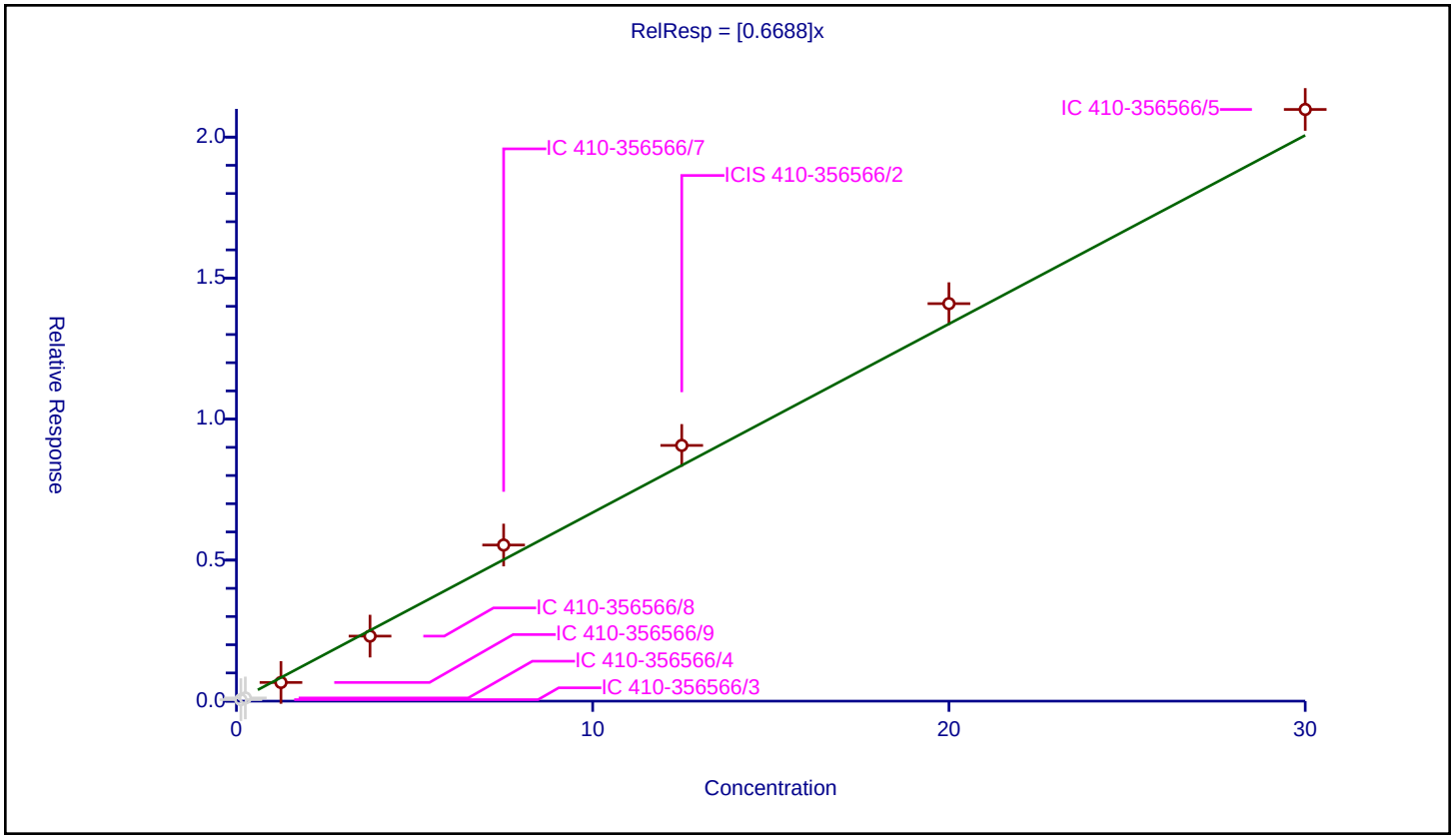
Curve Coefficients

Intercept:	0
Slope:	0.6688

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	12.0
Correlation Coefficient:	0.958
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.053264	5.0	479217.0	0.426112	N
2	IC 410-356566/4	0.25	0.112585	5.0	610606.0	0.450339	N
3	IC 410-356566/9	1.25	0.662651	5.0	497336.0	0.53012	Y
4	IC 410-356566/8	3.75	2.305889	5.0	743954.0	0.614904	Y
5	IC 410-356566/7	7.5	5.535571	5.0	709812.0	0.738076	Y
6	ICIS 410-356566/2	12.5	9.067501	5.0	779979.0	0.7254	Y
7	IC 410-356566/6	20.0	14.094972	5.0	555756.0	0.704749	Y
8	IC 410-356566/5	30.0	20.979912	5.0	776483.0	0.69933	Y



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Calibration / Butyl benzyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

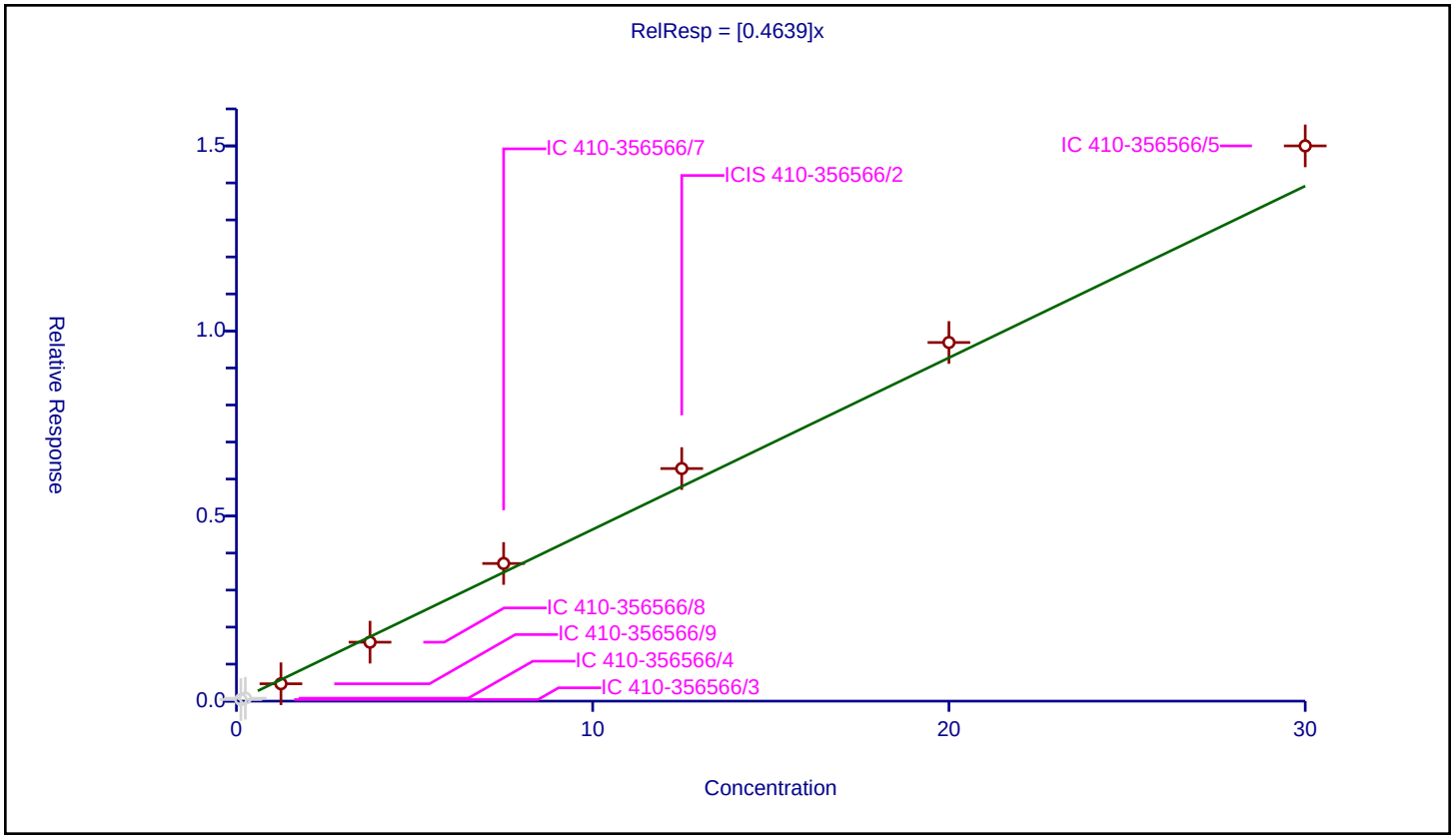
Curve Coefficients

Intercept:	0
Slope:	0.4639

Error Coefficients

Standard Error:	1260000
Relative Standard Error:	11.2
Correlation Coefficient:	0.952
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.042882	5.0	479217.0	0.34306	N
2	IC 410-356566/4	0.25	0.078872	5.0	610606.0	0.31549	N
3	IC 410-356566/9	1.25	0.469552	5.0	497336.0	0.375641	Y
4	IC 410-356566/8	3.75	1.59237	5.0	743954.0	0.424632	Y
5	IC 410-356566/7	7.5	3.719217	5.0	709812.0	0.495896	Y
6	ICIS 410-356566/2	12.5	6.283188	5.0	779979.0	0.502655	Y
7	IC 410-356566/6	20.0	9.689027	5.0	555756.0	0.484451	Y
8	IC 410-356566/5	30.0	15.000258	5.0	776483.0	0.500009	Y



Calibration / 2-Acetylaminofluorene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

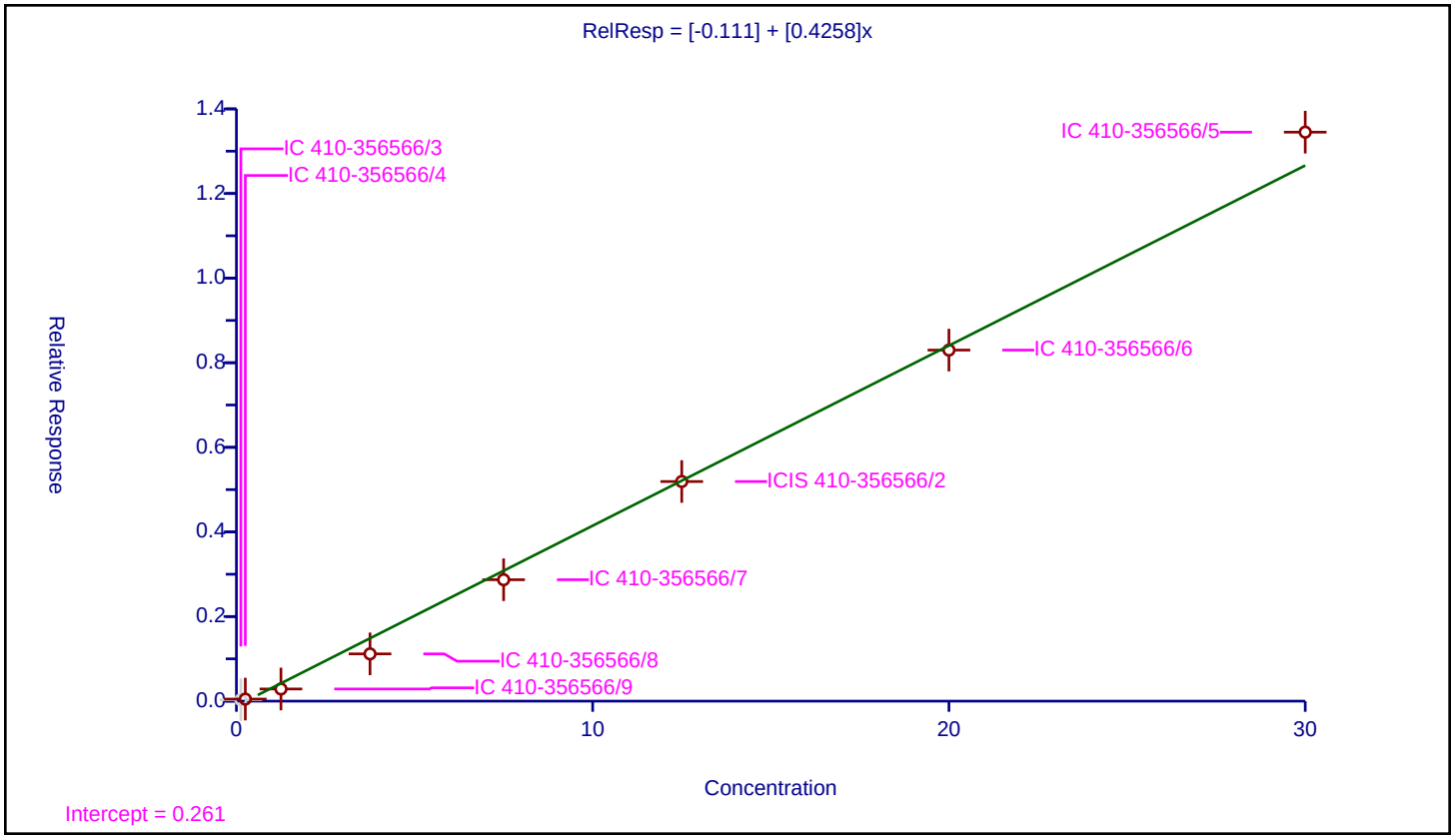
Curve Coefficients

Intercept:	-0.111
Slope:	0.4258

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	27.5
Correlation Coefficient:	0.955
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.03247	5.0	479217.0	0.259757	N
2	IC 410-356566/4	0.25	0.049058	5.0	610606.0	0.196231	Y
3	IC 410-356566/9	1.25	0.28714	5.0	497336.0	0.229712	Y
4	IC 410-356566/8	3.75	1.116951	5.0	743954.0	0.297854	Y
5	IC 410-356566/7	7.5	2.869767	5.0	709812.0	0.382636	Y
6	ICIS 410-356566/2	12.5	5.191037	5.0	779979.0	0.415283	Y
7	IC 410-356566/6	20.0	8.298084	5.0	555756.0	0.414904	Y
8	IC 410-356566/5	30.0	13.449644	5.0	776483.0	0.448321	Y



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Calibration / 3,3'-Dichlorobenzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

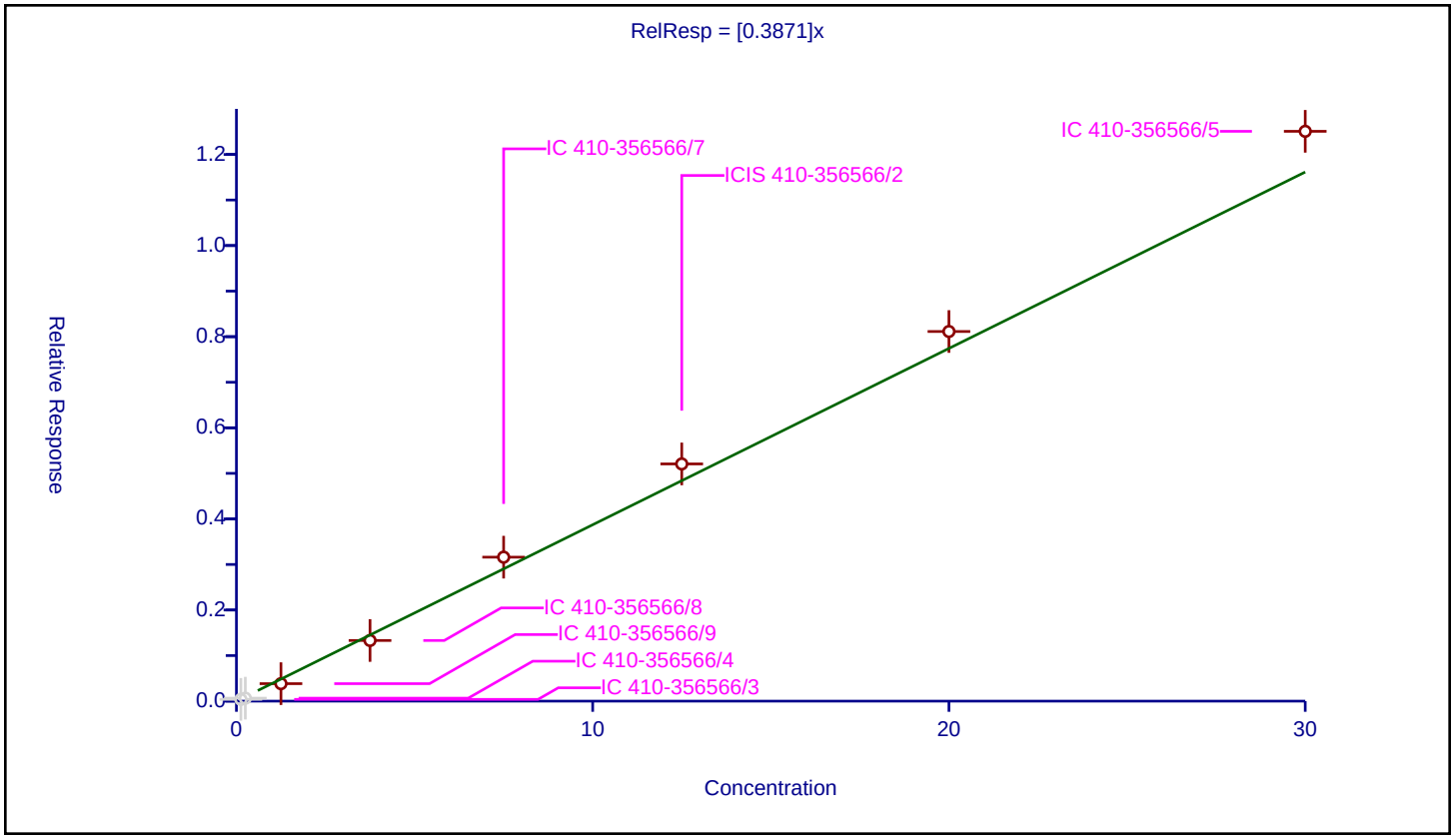
Curve Coefficients

Intercept:	0
Slope:	0.3871

Error Coefficients

Standard Error:	1050000
Relative Standard Error:	11.9
Correlation Coefficient:	0.953
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.038813	5.0	479217.0	0.310507	N
2	IC 410-356566/4	0.25	0.064911	5.0	610606.0	0.259644	N
3	IC 410-356566/9	1.25	0.383936	5.0	497336.0	0.307148	Y
4	IC 410-356566/8	3.75	1.33148	5.0	743954.0	0.355061	Y
5	IC 410-356566/7	7.5	3.160316	5.0	709812.0	0.421375	Y
6	ICIS 410-356566/2	12.5	5.2068	5.0	779979.0	0.416544	Y
7	IC 410-356566/6	20.0	8.113777	5.0	555756.0	0.405689	Y
8	IC 410-356566/5	30.0	12.507692	5.0	776483.0	0.416923	Y



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Calibration / 4,4'-Methylene bis(2-chloroaniline)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

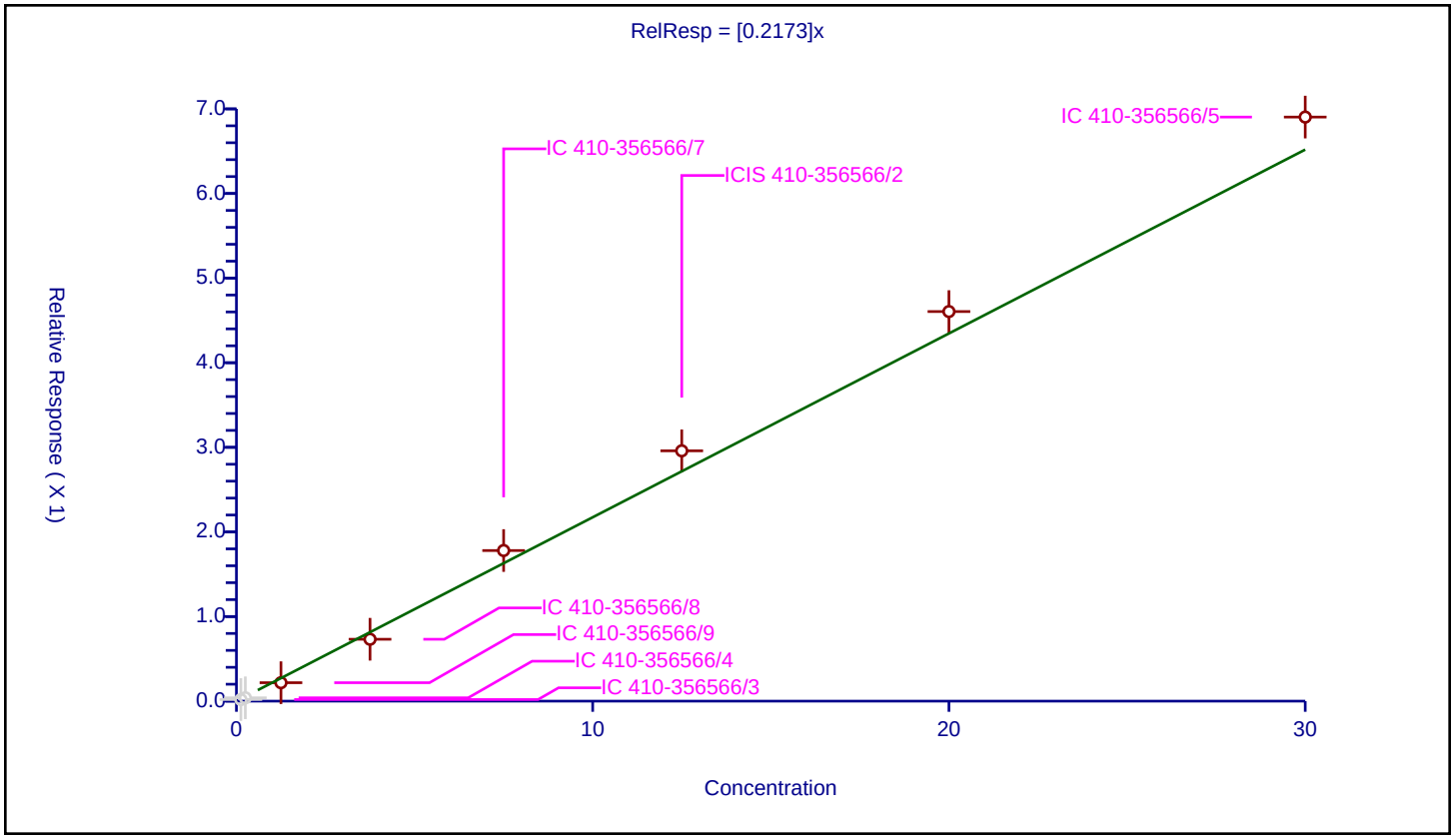
Curve Coefficients

Intercept:	0
Slope:	0.2173

Error Coefficients

Standard Error:	583000
Relative Standard Error:	12.1
Correlation Coefficient:	0.957
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.01901	5.0	479217.0	0.152081	N
2	IC 410-356566/4	0.25	0.039371	5.0	610606.0	0.157483	N
3	IC 410-356566/9	1.25	0.217901	5.0	497336.0	0.174321	Y
4	IC 410-356566/8	3.75	0.731423	5.0	743954.0	0.195046	Y
5	IC 410-356566/7	7.5	1.780056	5.0	709812.0	0.237341	Y
6	ICIS 410-356566/2	12.5	2.958778	5.0	779979.0	0.236702	Y
7	IC 410-356566/6	20.0	4.604548	5.0	555756.0	0.230227	Y
8	IC 410-356566/5	30.0	6.903261	5.0	776483.0	0.230109	Y



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Calibration / Benzo[a]anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

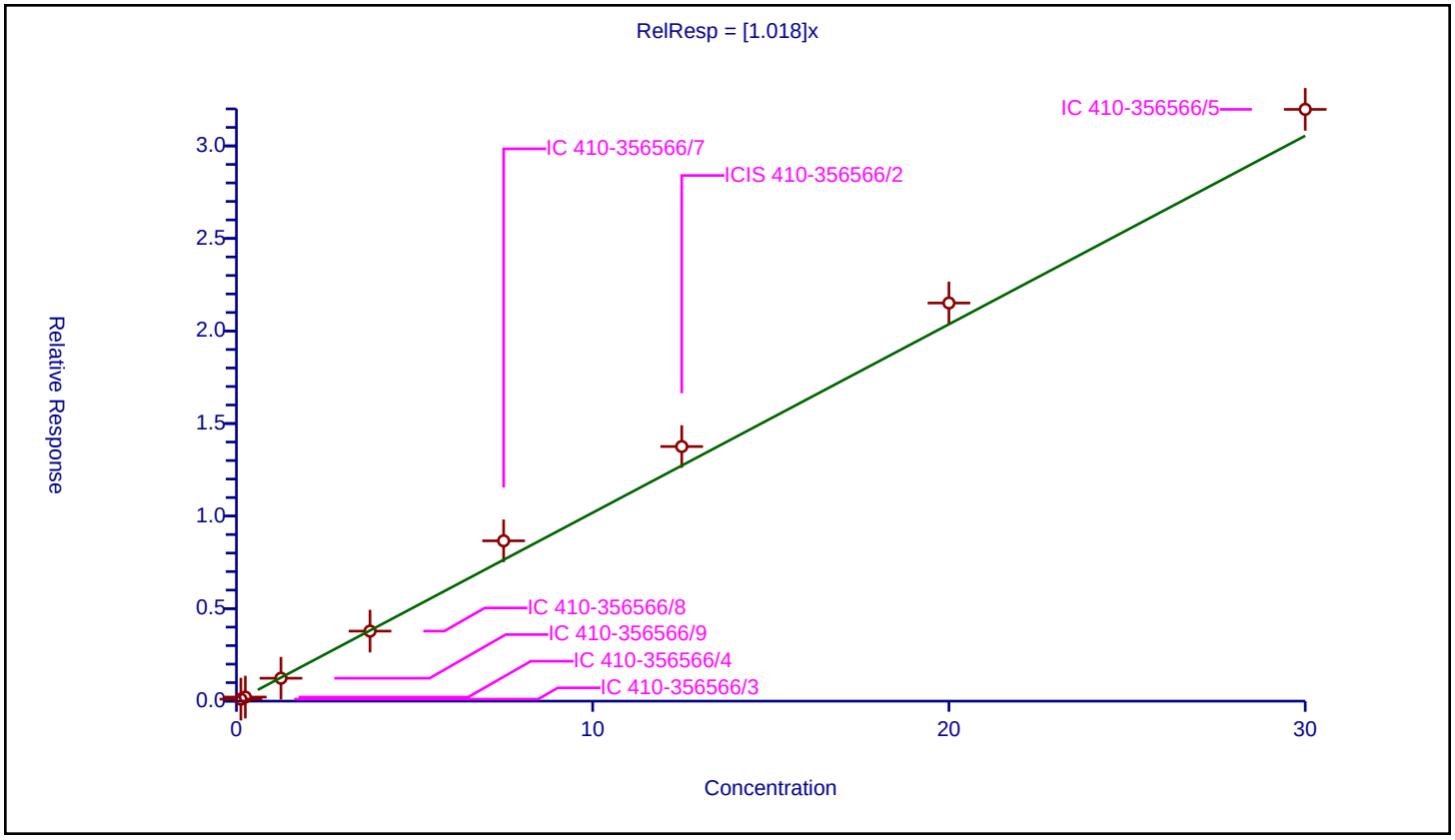
Curve Coefficients

Intercept:	0
Slope:	1.018

Error Coefficients

Standard Error:	2290000
Relative Standard Error:	10.0
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.109042	5.0	479217.0	0.87234	Y
2	IC 410-356566/4	0.25	0.219176	5.0	610606.0	0.876703	Y
3	IC 410-356566/9	1.25	1.237986	5.0	497336.0	0.990389	Y
4	IC 410-356566/8	3.75	3.78432	5.0	743954.0	1.009152	Y
5	IC 410-356566/7	7.5	8.662914	5.0	709812.0	1.155055	Y
6	ICIS 410-356566/2	12.5	13.75662	5.0	779979.0	1.10053	Y
7	IC 410-356566/6	20.0	21.511958	5.0	555756.0	1.075598	Y
8	IC 410-356566/5	30.0	31.974177	5.0	776483.0	1.065806	Y



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Calibration / Chrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

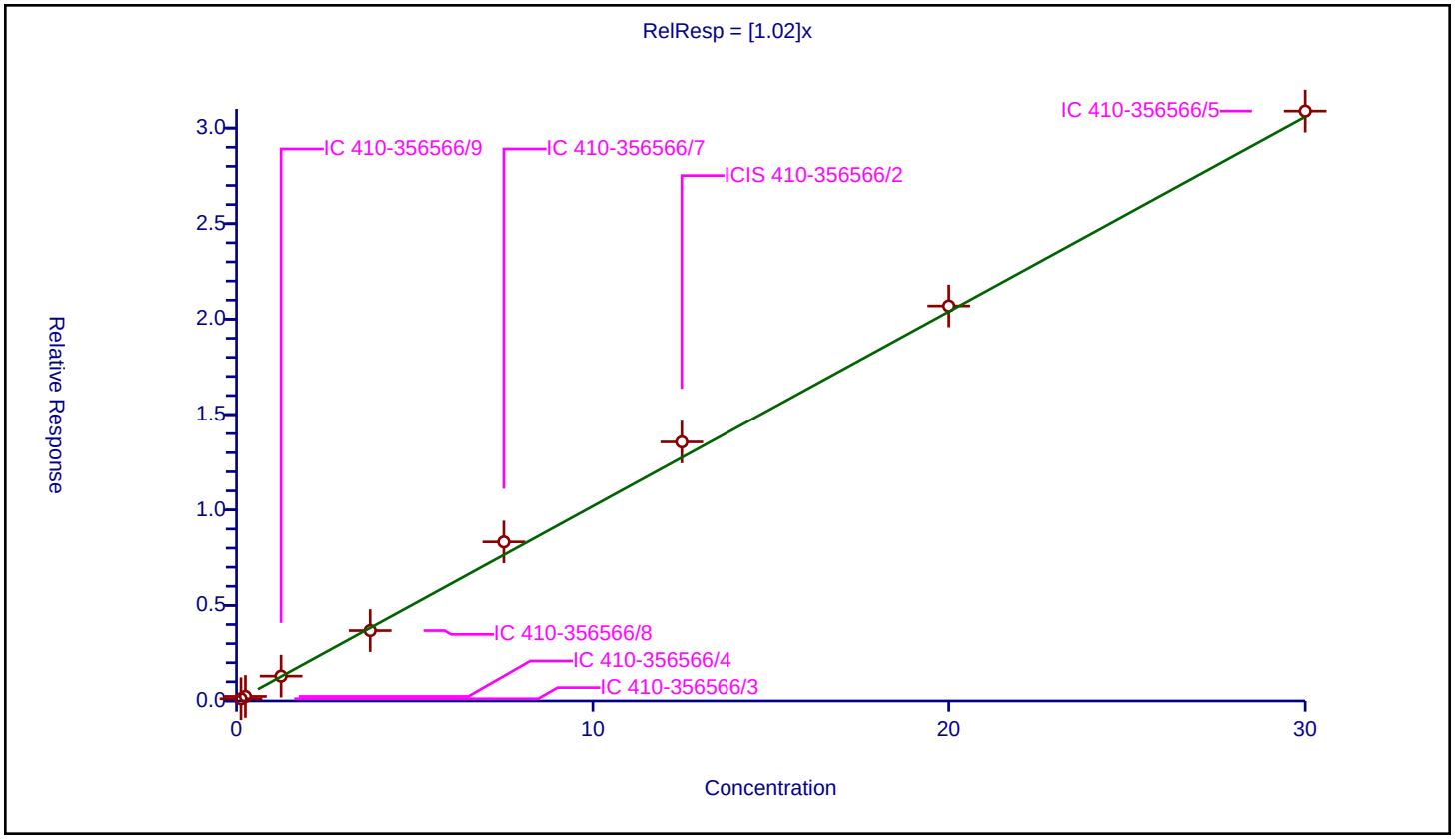
Curve Coefficients

Intercept:	0
Slope:	1.02

Error Coefficients

Standard Error:	2220000
Relative Standard Error:	6.2
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.115897	5.0	479217.0	0.927179	Y
2	IC 410-356566/4	0.25	0.237453	5.0	610606.0	0.949811	Y
3	IC 410-356566/9	1.25	1.298669	5.0	497336.0	1.038935	Y
4	IC 410-356566/8	3.75	3.684032	5.0	743954.0	0.982408	Y
5	IC 410-356566/7	7.5	8.325923	5.0	709812.0	1.110123	Y
6	ICIS 410-356566/2	12.5	13.564025	5.0	779979.0	1.085122	Y
7	IC 410-356566/6	20.0	20.693641	5.0	555756.0	1.034682	Y
8	IC 410-356566/5	30.0	30.886394	5.0	776483.0	1.029546	Y



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Calibration / Bis(2-ethylhexyl) phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

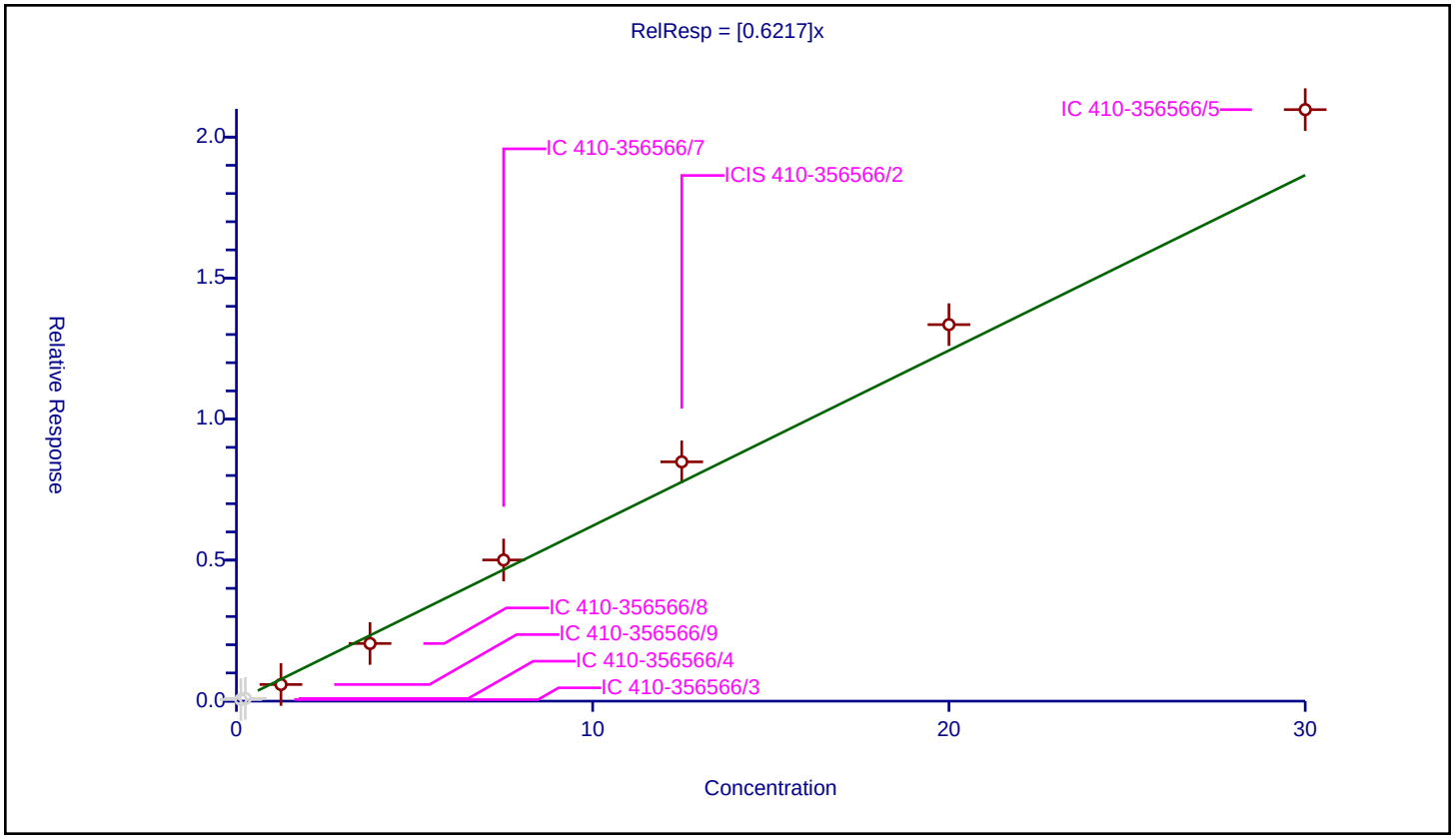
Curve Coefficients

Intercept:	0
Slope:	0.6217

Error Coefficients

Standard Error:	1740000
Relative Standard Error:	14.7
Correlation Coefficient:	0.952
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.055612	5.0	479217.0	0.444892	N
2	IC 410-356566/4	0.25	0.09511	5.0	610606.0	0.380442	N
3	IC 410-356566/9	1.25	0.590164	5.0	497336.0	0.472132	Y
4	IC 410-356566/8	3.75	2.044562	5.0	743954.0	0.545217	Y
5	IC 410-356566/7	7.5	5.006178	5.0	709812.0	0.66749	Y
6	ICIS 410-356566/2	12.5	8.485261	5.0	779979.0	0.678821	Y
7	IC 410-356566/6	20.0	13.350436	5.0	555756.0	0.667522	Y
8	IC 410-356566/5	30.0	20.973589	5.0	776483.0	0.69912	Y



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Calibration / 6-Methylchrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

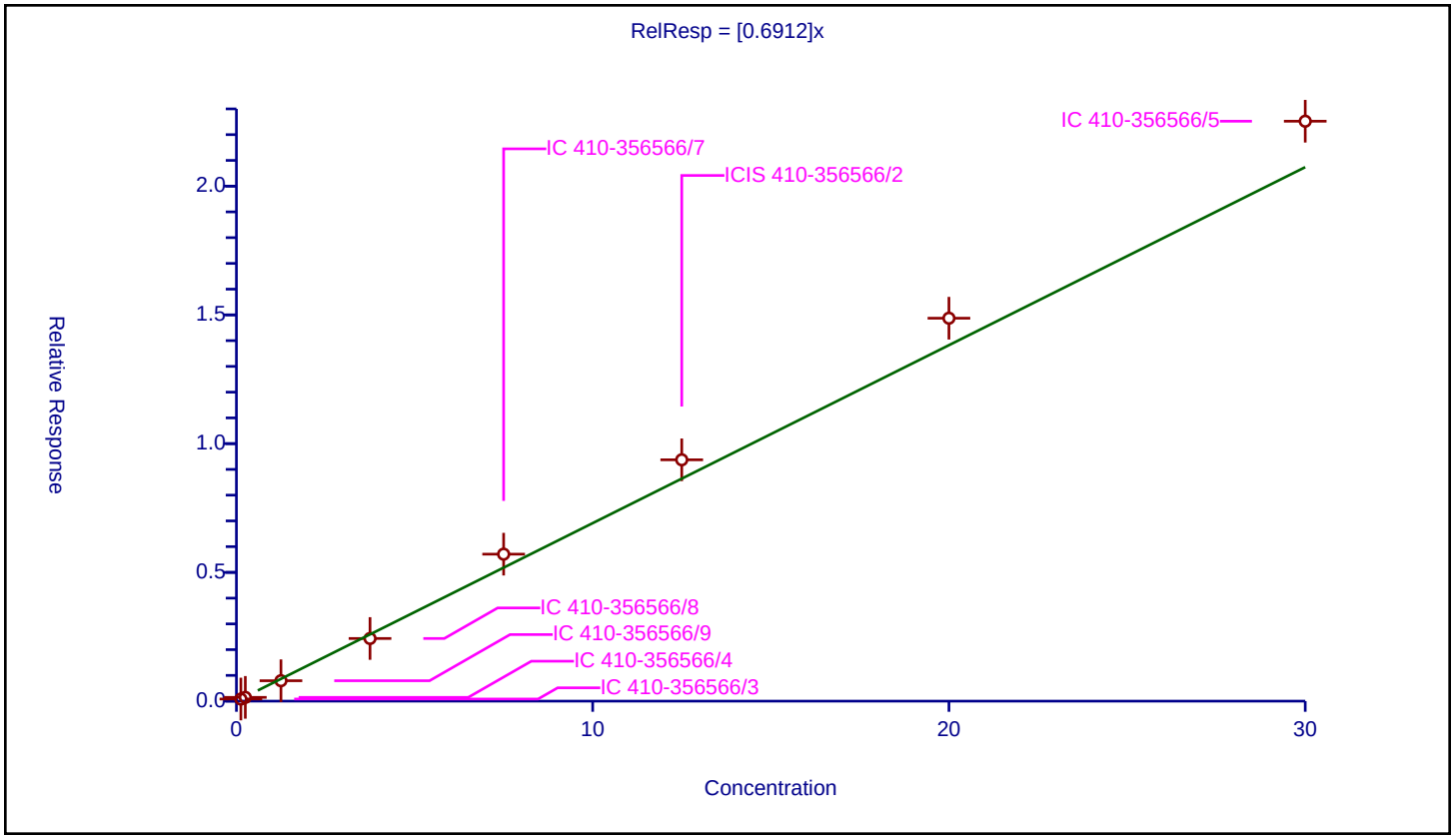
Curve Coefficients

Intercept:	0
Slope:	0.6912

Error Coefficients

Standard Error:	1600000
Relative Standard Error:	9.8
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.081904	5.0	479217.0	0.655236	Y
2	IC 410-356566/4	0.25	0.146535	5.0	610606.0	0.586139	Y
3	IC 410-356566/9	1.25	0.793076	5.0	497336.0	0.63446	Y
4	IC 410-356566/8	3.75	2.432812	5.0	743954.0	0.64875	Y
5	IC 410-356566/7	7.5	5.708103	5.0	709812.0	0.76108	Y
6	ICIS 410-356566/2	12.5	9.372688	5.0	779979.0	0.749815	Y
7	IC 410-356566/6	20.0	14.870933	5.0	555756.0	0.743547	Y
8	IC 410-356566/5	30.0	22.520821	5.0	776483.0	0.750694	Y



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Calibration / Di-n-octyl phthalate

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

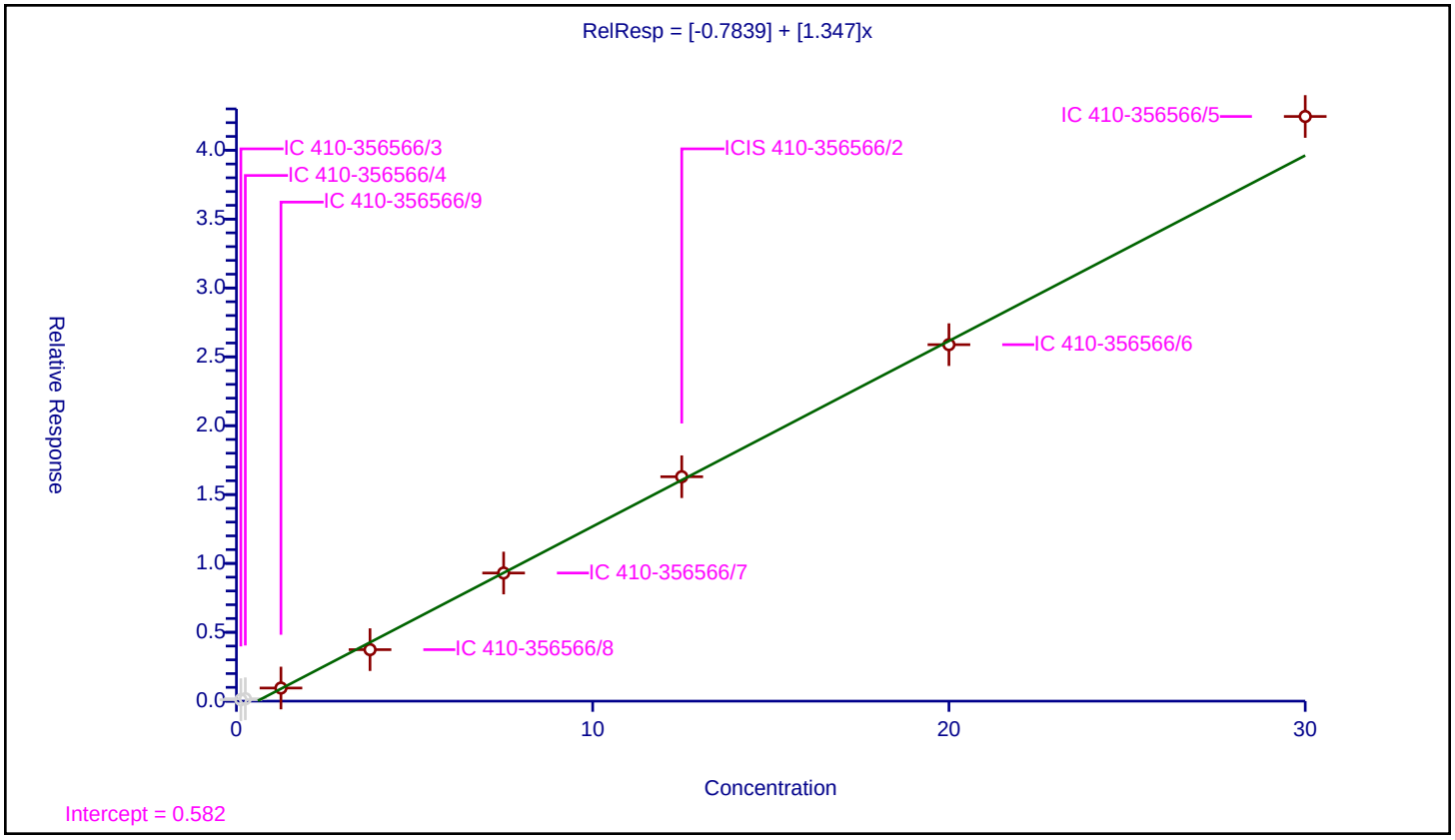
Curve Coefficients

Intercept:	-0.7839
Slope:	1.347

Error Coefficients

Standard Error:	3170000
Relative Standard Error:	6.5
Correlation Coefficient:	0.948
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.108138	5.0	379469.0	0.865104	N
2	IC 410-356566/4	0.25	0.173154	5.0	498198.0	0.692616	N
3	IC 410-356566/9	1.25	0.952257	5.0	408603.0	0.761805	Y
4	IC 410-356566/8	3.75	3.738242	5.0	598403.0	0.996864	Y
5	IC 410-356566/7	7.5	9.301826	5.0	582541.0	1.240243	Y
6	ICIS 410-356566/2	12.5	16.293182	5.0	651289.0	1.303455	Y
7	IC 410-356566/6	20.0	25.883118	5.0	456281.0	1.294156	Y
8	IC 410-356566/5	30.0	42.449718	5.0	631587.0	1.414991	Y



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Calibration / 7,12-Dimethylbenz(a)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

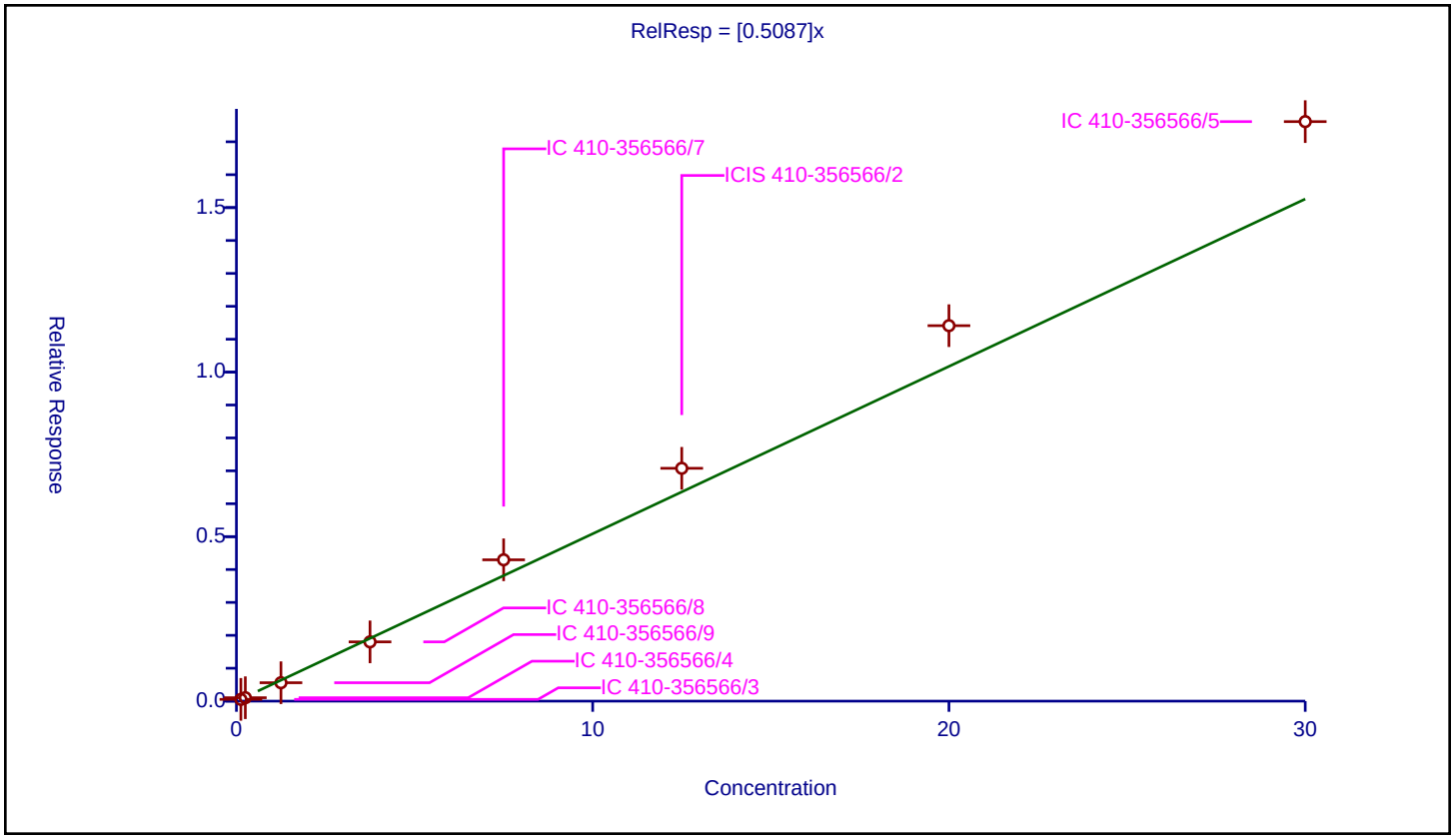
Curve Coefficients

Intercept:	0
Slope:	0.5087

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	14.3
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.053562	5.0	379469.0	0.428494	Y
2	IC 410-356566/4	0.25	0.104145	5.0	498198.0	0.416581	Y
3	IC 410-356566/9	1.25	0.559443	5.0	408603.0	0.447554	Y
4	IC 410-356566/8	3.75	1.801378	5.0	598403.0	0.480367	Y
5	IC 410-356566/7	7.5	4.295586	5.0	582541.0	0.572745	Y
6	ICIS 410-356566/2	12.5	7.076743	5.0	651289.0	0.566139	Y
7	IC 410-356566/6	20.0	11.411564	5.0	456281.0	0.570578	Y
8	IC 410-356566/5	30.0	17.6131	5.0	631587.0	0.587103	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

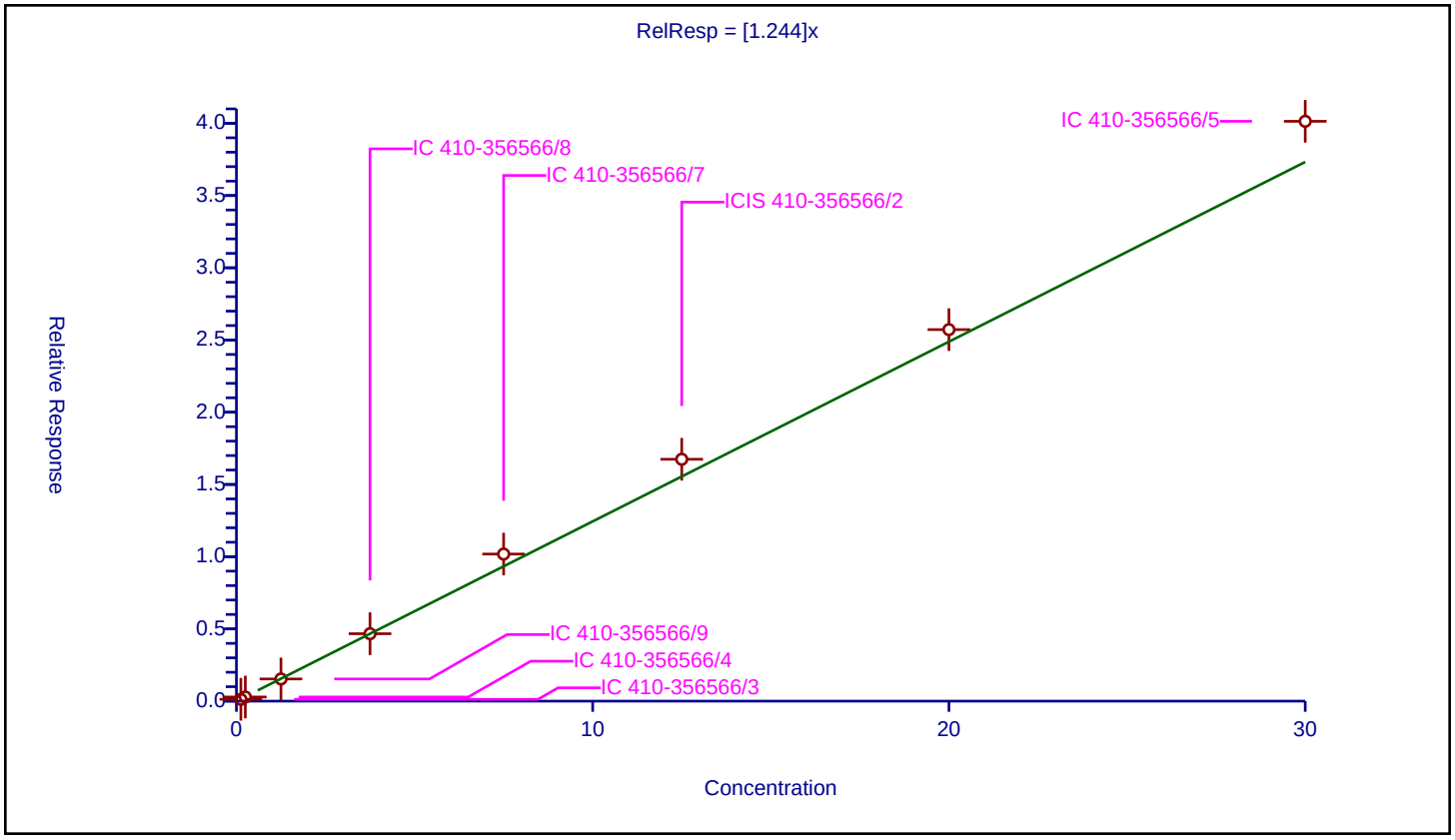
Curve Coefficients

Intercept:	0
Slope:	1.244

Error Coefficients

Standard Error:	2320000
Relative Standard Error:	9.4
Correlation Coefficient:	0.962
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.127059	5.0	379469.0	1.016473	Y
2	IC 410-356566/4	0.25	0.28586	5.0	498198.0	1.143441	Y
3	IC 410-356566/9	1.25	1.534656	5.0	408603.0	1.227725	Y
4	IC 410-356566/8	3.75	4.667323	5.0	598403.0	1.244619	Y
5	IC 410-356566/7	7.5	10.18306	5.0	582541.0	1.357741	Y
6	ICIS 410-356566/2	12.5	16.743834	5.0	651289.0	1.339507	Y
7	IC 410-356566/6	20.0	25.720203	5.0	456281.0	1.28601	Y
8	IC 410-356566/5	30.0	40.141176	5.0	631587.0	1.338039	Y



Calibration / Benzo[k]fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

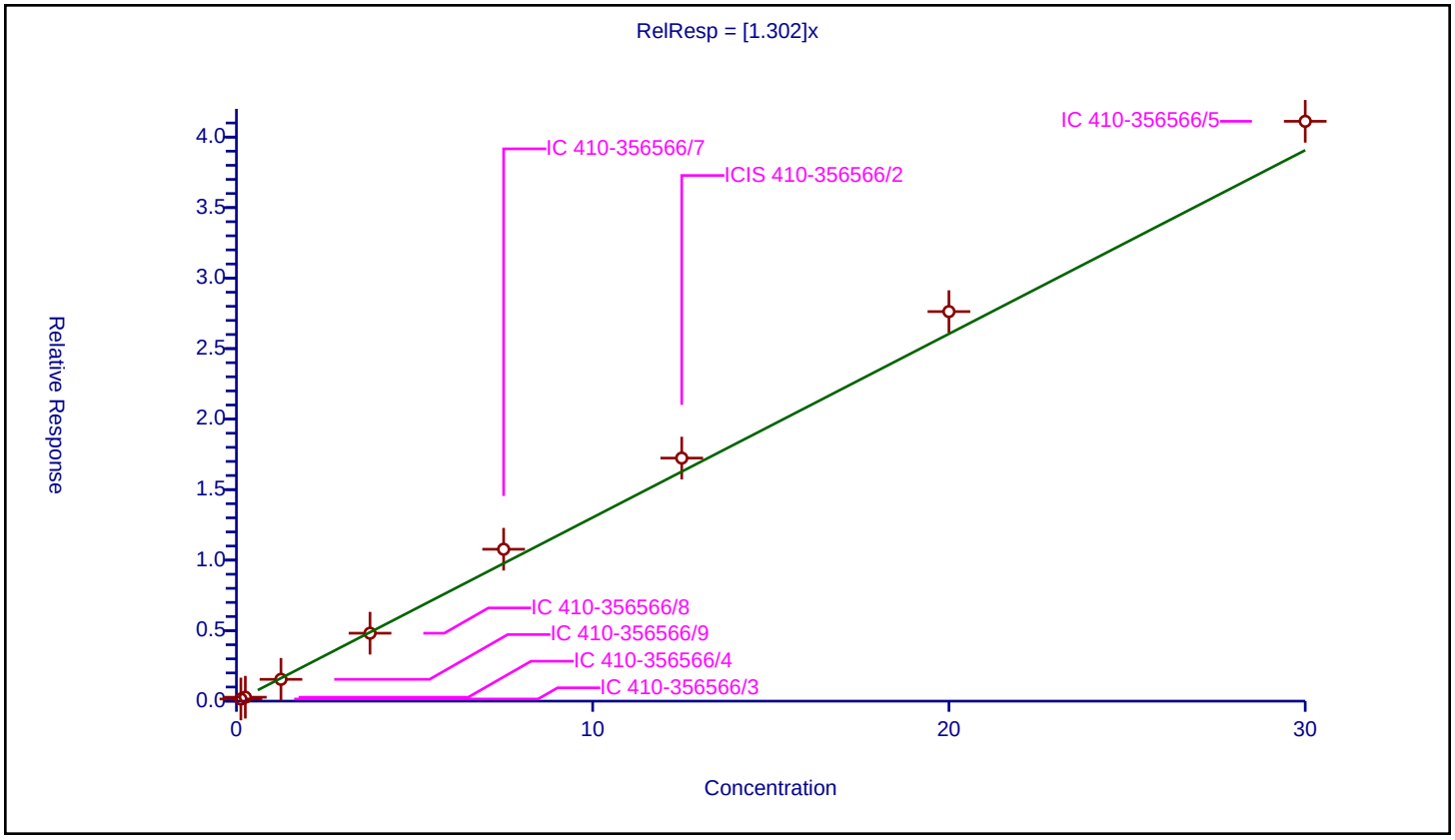
Curve Coefficients

Intercept:	0
Slope:	1.302

Error Coefficients

Standard Error:	2400000
Relative Standard Error:	8.3
Correlation Coefficient:	0.970
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.151844	5.0	379469.0	1.21475	Y
2	IC 410-356566/4	0.25	0.278945	5.0	498198.0	1.115781	Y
3	IC 410-356566/9	1.25	1.545131	5.0	408603.0	1.236104	Y
4	IC 410-356566/8	3.75	4.817823	5.0	598403.0	1.284753	Y
5	IC 410-356566/7	7.5	10.771791	5.0	582541.0	1.436239	Y
6	ICIS 410-356566/2	12.5	17.236012	5.0	651289.0	1.378881	Y
7	IC 410-356566/6	20.0	27.626802	5.0	456281.0	1.38134	Y
8	IC 410-356566/5	30.0	41.120234	5.0	631587.0	1.370674	Y



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Calibration / Benzo[a]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

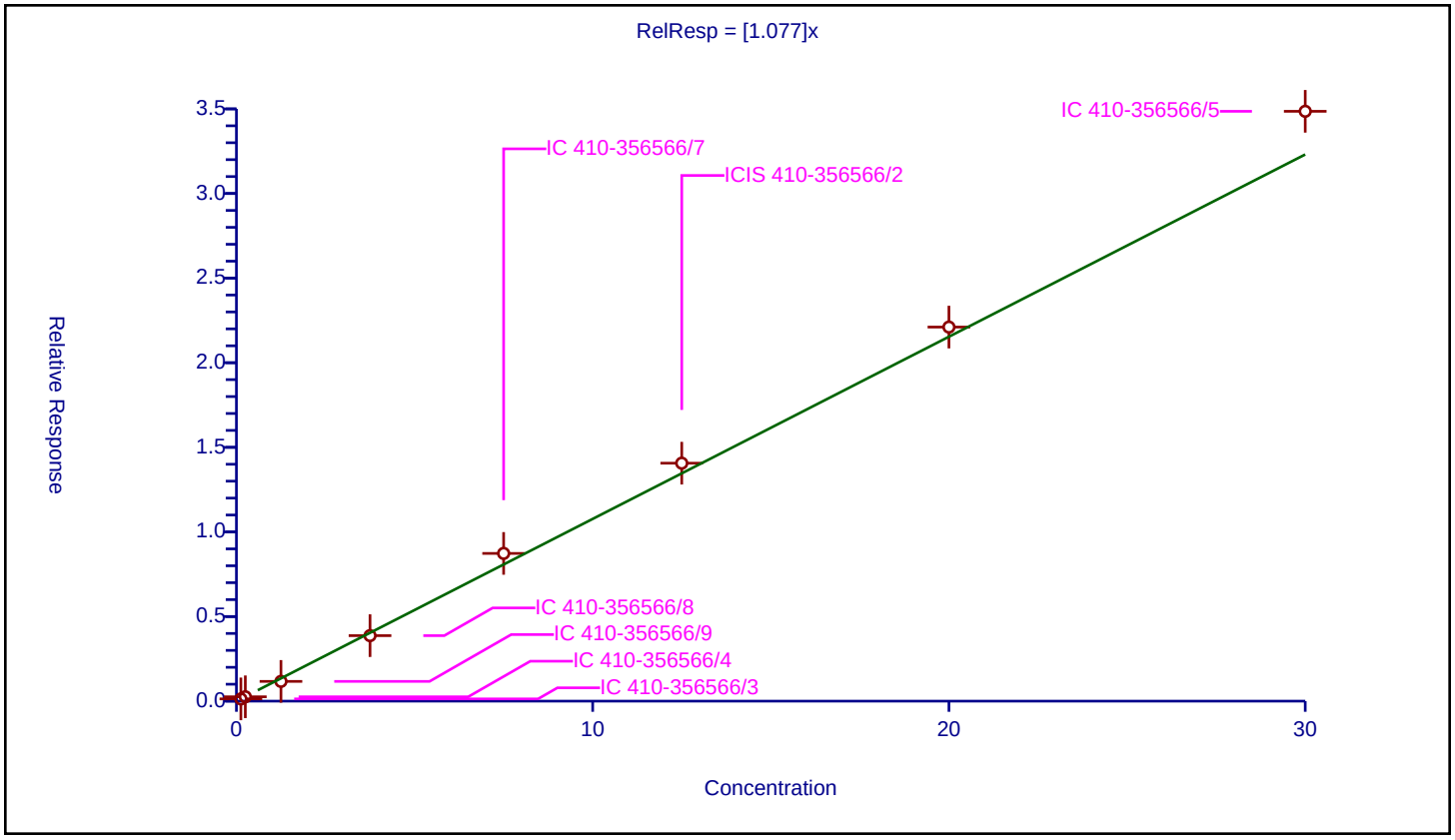
Curve Coefficients

Intercept:	0
Slope:	1.077

Error Coefficients

Standard Error:	2000000
Relative Standard Error:	7.3
Correlation Coefficient:	0.962
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.133015	5.0	379469.0	1.064119	Y
2	IC 410-356566/4	0.25	0.257167	5.0	498198.0	1.028667	Y
3	IC 410-356566/9	1.25	1.166878	5.0	408603.0	0.933503	Y
4	IC 410-356566/8	3.75	3.871012	5.0	598403.0	1.03227	Y
5	IC 410-356566/7	7.5	8.730879	5.0	582541.0	1.164117	Y
6	ICIS 410-356566/2	12.5	14.062521	5.0	651289.0	1.125002	Y
7	IC 410-356566/6	20.0	22.105599	5.0	456281.0	1.10528	Y
8	IC 410-356566/5	30.0	34.856876	5.0	631587.0	1.161896	Y



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Calibration / 3-Methylcholanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

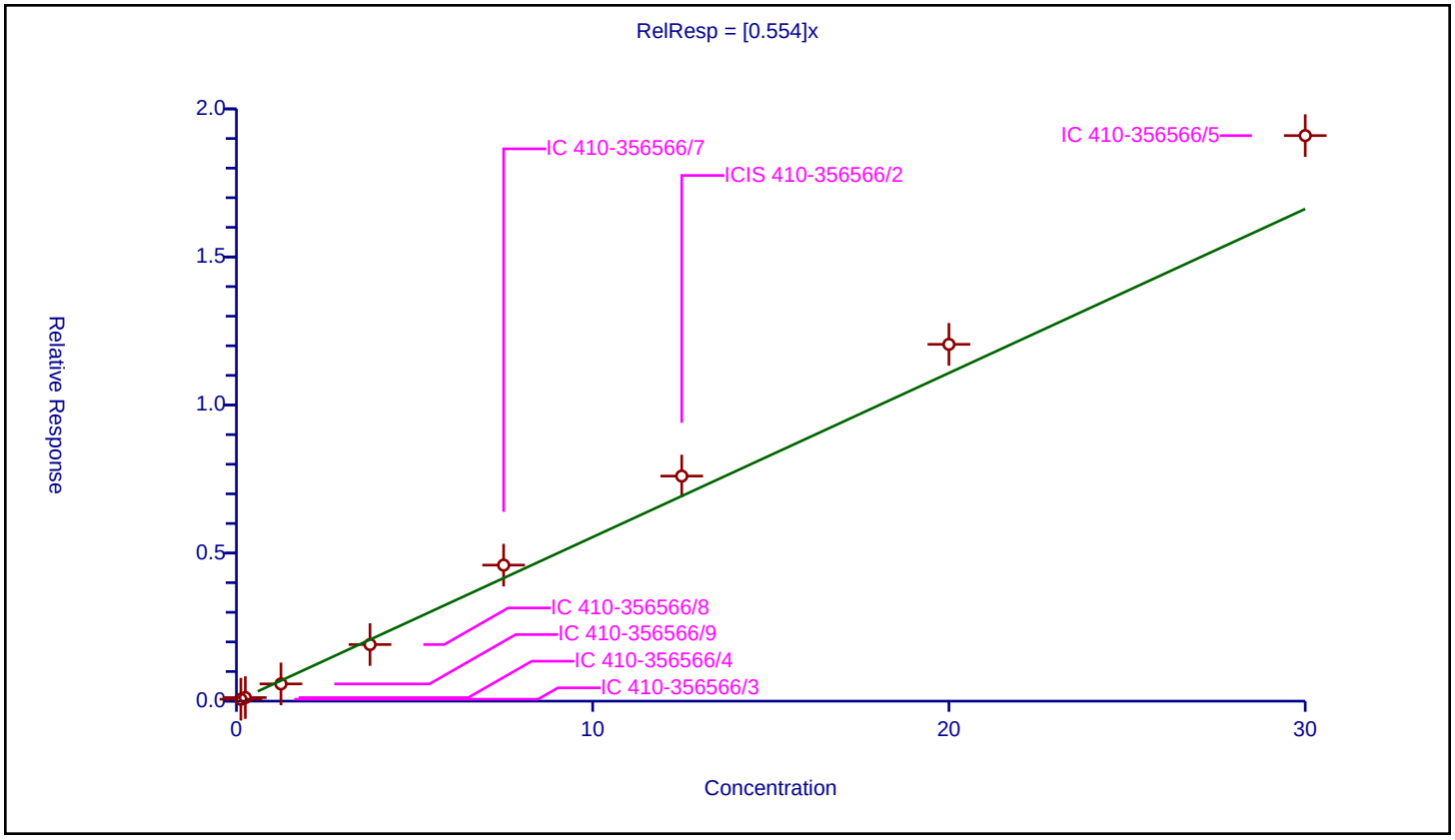
Curve Coefficients

Intercept:	0
Slope:	0.554

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	12.2
Correlation Coefficient:	0.962
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.064762	5.0	379469.0	0.518092	Y
2	IC 410-356566/4	0.25	0.119782	5.0	498198.0	0.479127	Y
3	IC 410-356566/9	1.25	0.582301	5.0	408603.0	0.465841	Y
4	IC 410-356566/8	3.75	1.911454	5.0	598403.0	0.509721	Y
5	IC 410-356566/7	7.5	4.593677	5.0	582541.0	0.61249	Y
6	ICIS 410-356566/2	12.5	7.600957	5.0	651289.0	0.608077	Y
7	IC 410-356566/6	20.0	12.048792	5.0	456281.0	0.60244	Y
8	IC 410-356566/5	30.0	19.097931	5.0	631587.0	0.636598	Y



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Calibration / Dibenz[a,h]acridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

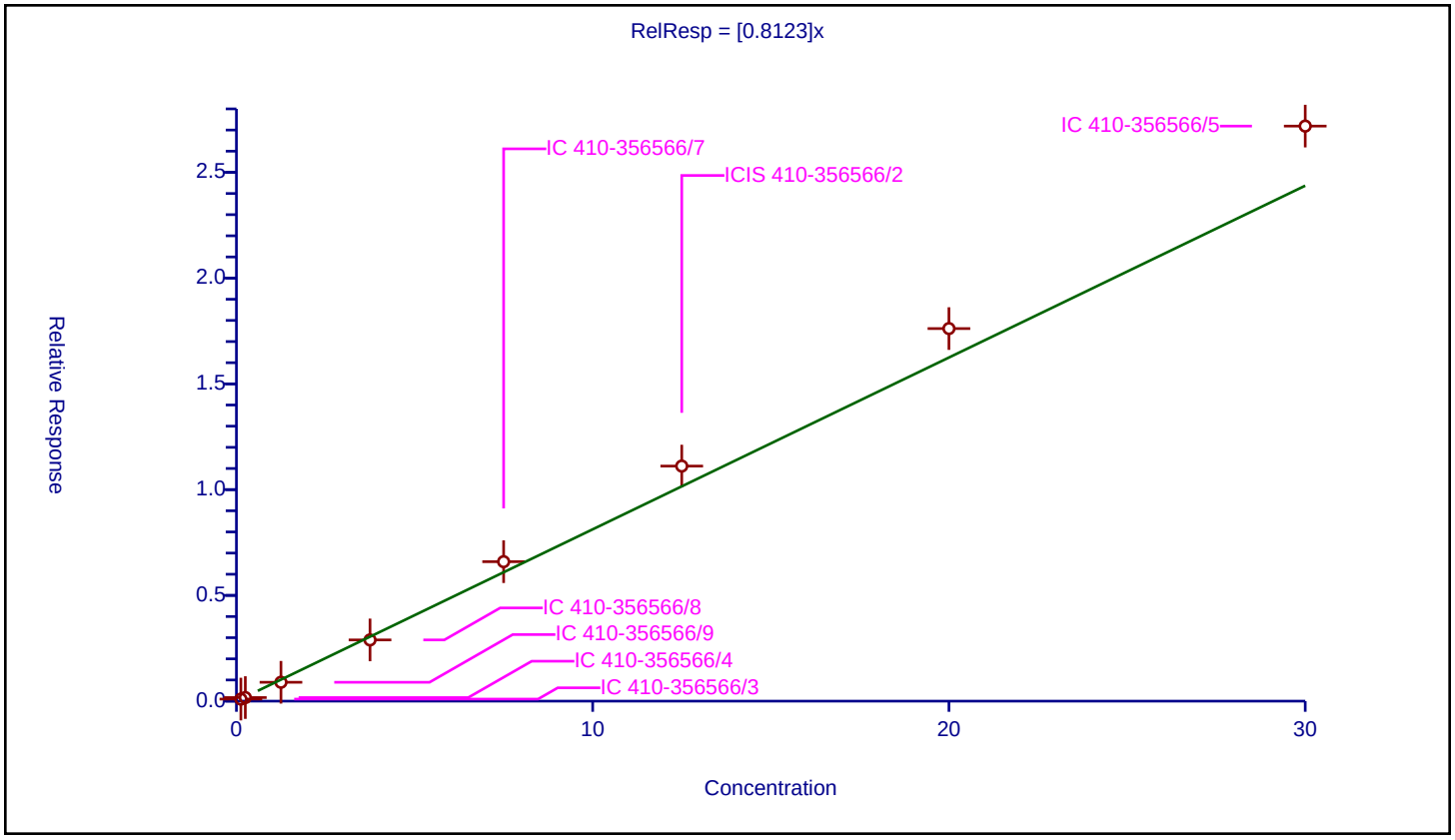
Curve Coefficients

Intercept:	0
Slope:	0.8123

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	10.9
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.097755	5.0	379469.0	0.78204	Y
2	IC 410-356566/4	0.25	0.168788	5.0	498198.0	0.675153	Y
3	IC 410-356566/9	1.25	0.892749	5.0	408603.0	0.714199	Y
4	IC 410-356566/8	3.75	2.893961	5.0	598403.0	0.771723	Y
5	IC 410-356566/7	7.5	6.593467	5.0	582541.0	0.879129	Y
6	ICIS 410-356566/2	12.5	11.113146	5.0	651289.0	0.889052	Y
7	IC 410-356566/6	20.0	17.614452	5.0	456281.0	0.880723	Y
8	IC 410-356566/5	30.0	27.186658	5.0	631587.0	0.906222	Y



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Calibration / Dibenz[a,j]acridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

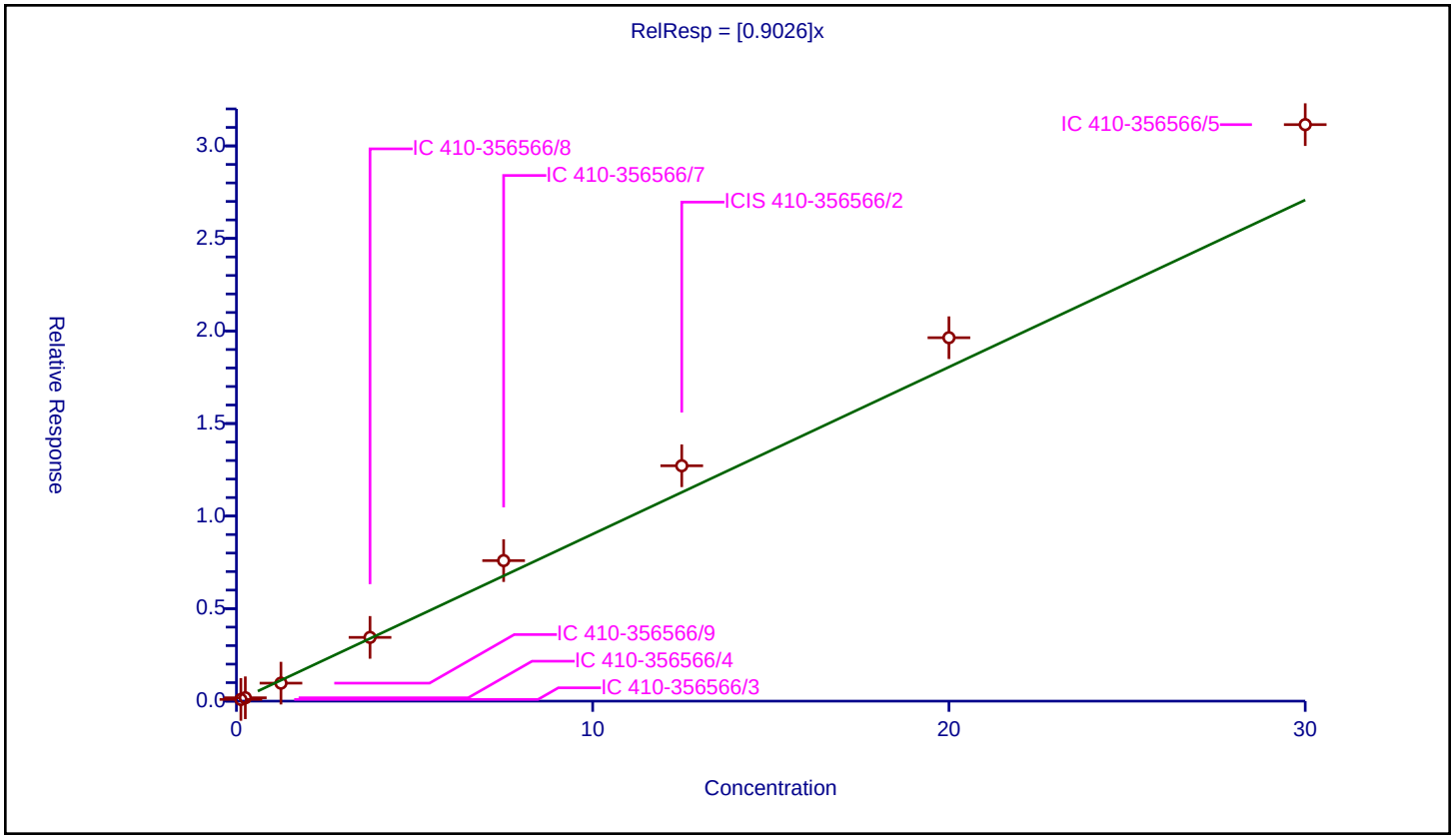
Curve Coefficients

Intercept:	0
Slope:	0.9026

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	14.5
Correlation Coefficient:	0.961
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.093407	5.0	379469.0	0.747255	Y
2	IC 410-356566/4	0.25	0.181695	5.0	498198.0	0.726779	Y
3	IC 410-356566/9	1.25	0.972754	5.0	408603.0	0.778203	Y
4	IC 410-356566/8	3.75	3.444535	5.0	598403.0	0.918543	Y
5	IC 410-356566/7	7.5	7.59332	5.0	582541.0	1.012443	Y
6	ICIS 410-356566/2	12.5	12.717995	5.0	651289.0	1.01744	Y
7	IC 410-356566/6	20.0	19.637066	5.0	456281.0	0.981853	Y
8	IC 410-356566/5	30.0	31.149272	5.0	631587.0	1.038309	Y



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Calibration / Indeno[1,2,3-cd]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

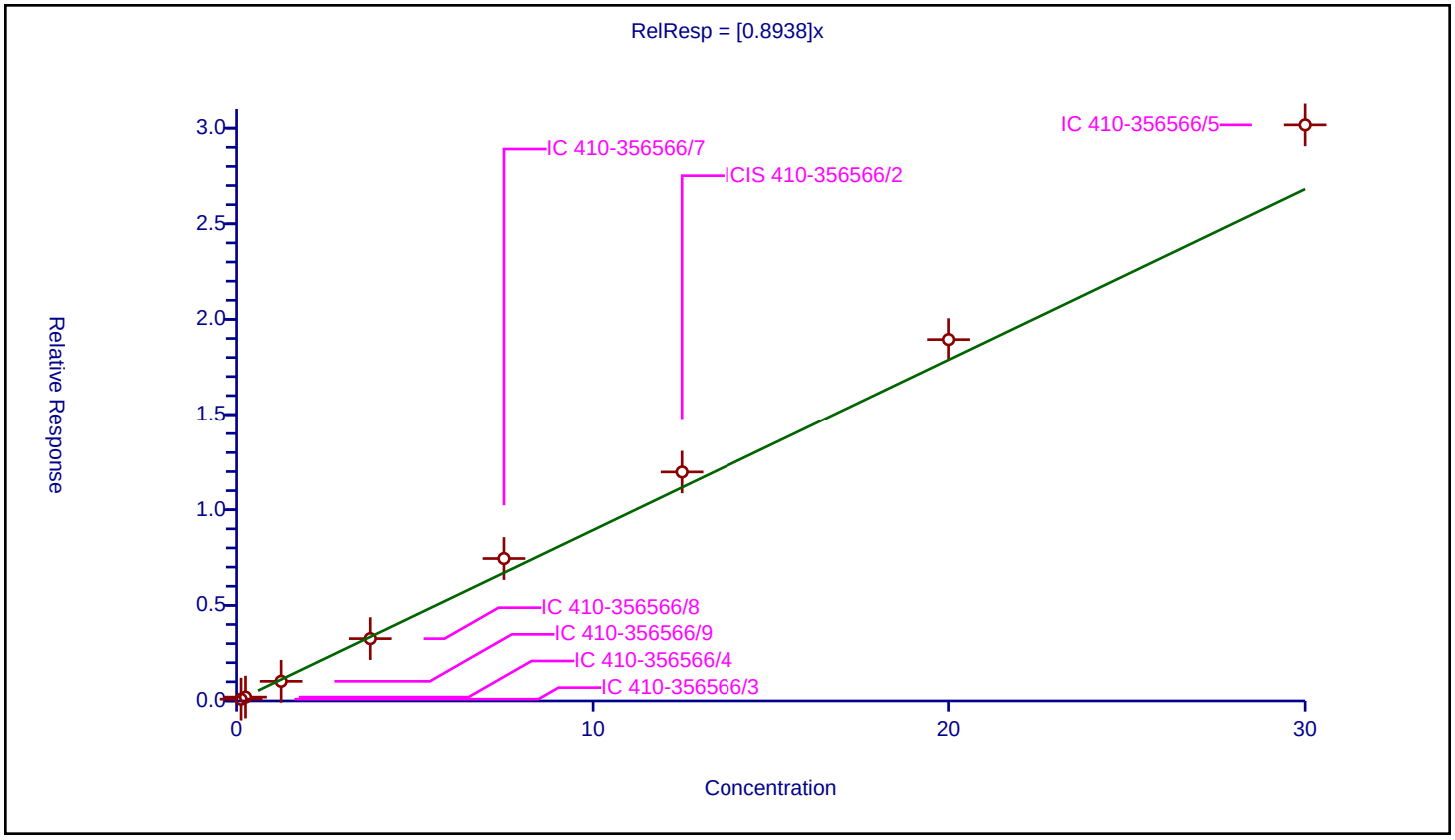
Curve Coefficients

Intercept:	0
Slope:	0.8938

Error Coefficients

Standard Error:	1730000
Relative Standard Error:	10.7
Correlation Coefficient:	0.961
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.093855	5.0	379469.0	0.750839	Y
2	IC 410-356566/4	0.25	0.201245	5.0	498198.0	0.804981	Y
3	IC 410-356566/9	1.25	1.026547	5.0	408603.0	0.821237	Y
4	IC 410-356566/8	3.75	3.259593	5.0	598403.0	0.869225	Y
5	IC 410-356566/7	7.5	7.447424	5.0	582541.0	0.99299	Y
6	ICIS 410-356566/2	12.5	11.979068	5.0	651289.0	0.958325	Y
7	IC 410-356566/6	20.0	18.94268	5.0	456281.0	0.947134	Y
8	IC 410-356566/5	30.0	30.17247	5.0	631587.0	1.005749	Y



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Calibration / Dibenz(a,h)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

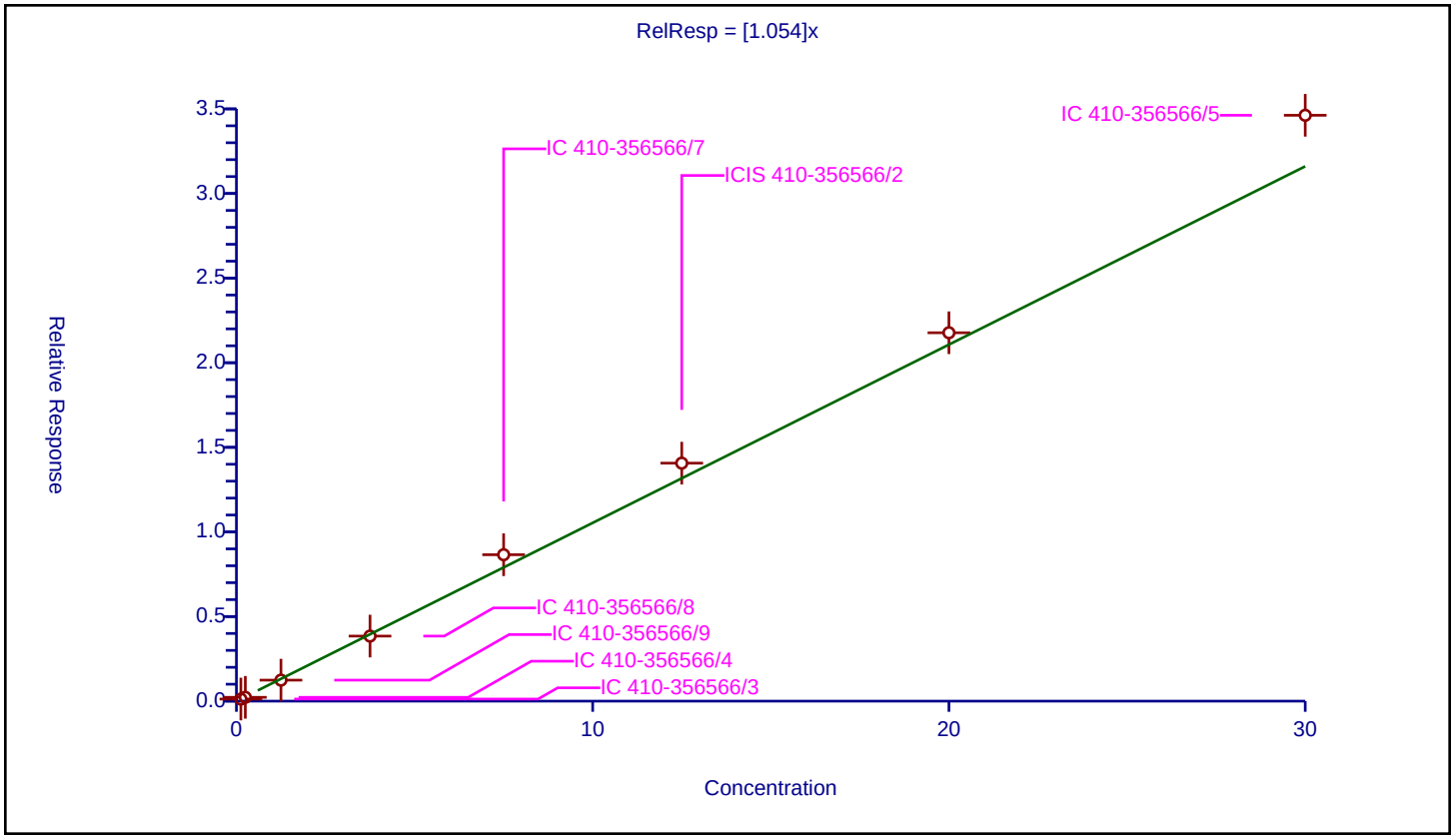
Curve Coefficients

Intercept:	0
Slope:	1.054

Error Coefficients

Standard Error:	1990000
Relative Standard Error:	8.7
Correlation Coefficient:	0.960
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.123383	5.0	379469.0	0.987064	Y
2	IC 410-356566/4	0.25	0.225322	5.0	498198.0	0.901288	Y
3	IC 410-356566/9	1.25	1.240911	5.0	408603.0	0.992729	Y
4	IC 410-356566/8	3.75	3.845093	5.0	598403.0	1.025358	Y
5	IC 410-356566/7	7.5	8.65358	5.0	582541.0	1.153811	Y
6	ICIS 410-356566/2	12.5	14.064547	5.0	651289.0	1.125164	Y
7	IC 410-356566/6	20.0	21.771244	5.0	456281.0	1.088562	Y
8	IC 410-356566/5	30.0	34.621786	5.0	631587.0	1.15406	Y



Calibration / Benzo[g,h,i]perylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

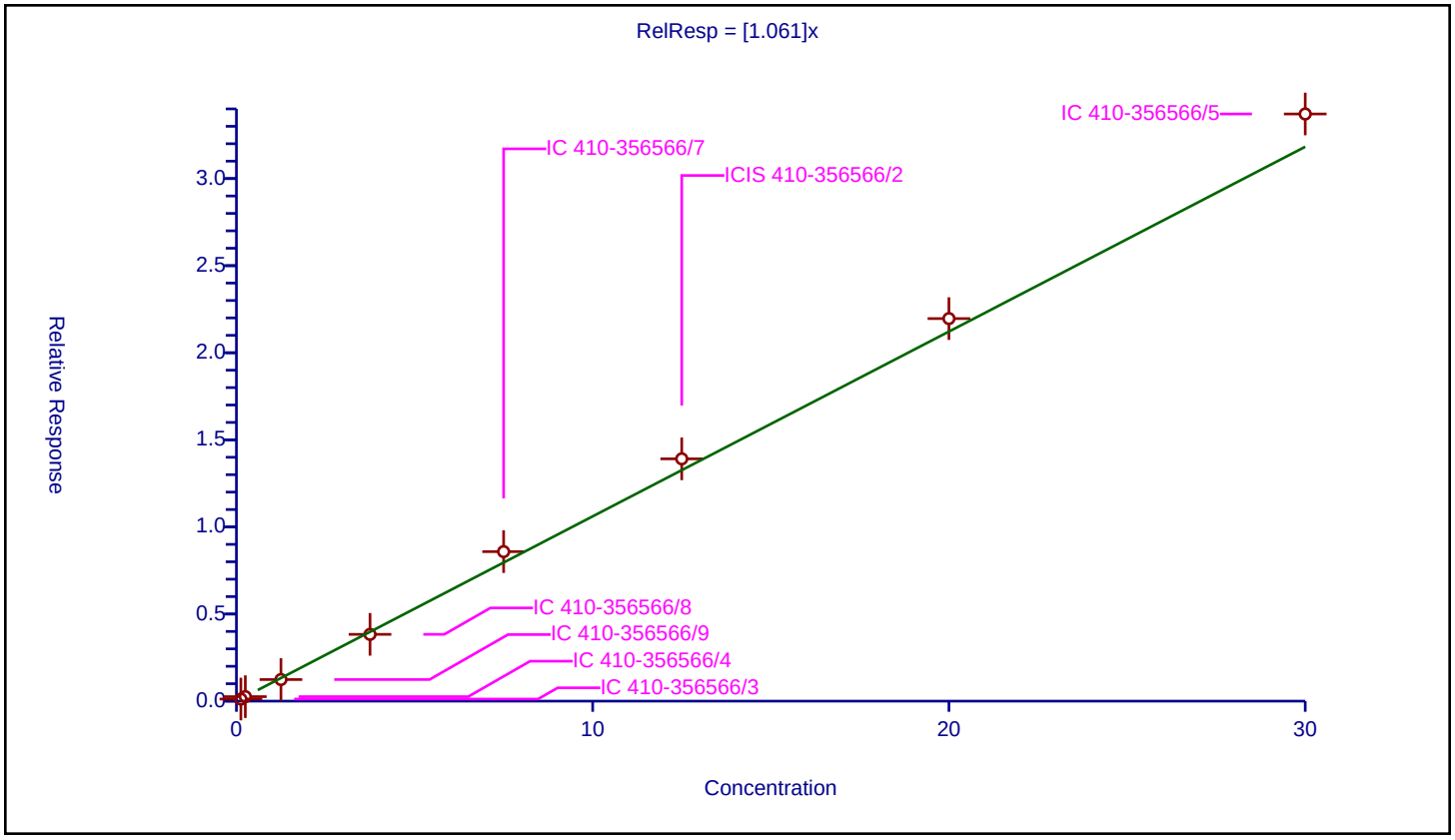
Curve Coefficients

Intercept:	0
Slope:	1.061

Error Coefficients

Standard Error:	1950000
Relative Standard Error:	6.4
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-356566/3	0.125	0.120049	5.0	379469.0	0.960395	Y
2	IC 410-356566/4	0.25	0.258361	5.0	498198.0	1.033445	Y
3	IC 410-356566/9	1.25	1.239504	5.0	408603.0	0.991603	Y
4	IC 410-356566/8	3.75	3.834005	5.0	598403.0	1.022401	Y
5	IC 410-356566/7	7.5	8.582555	5.0	582541.0	1.144341	Y
6	ICIS 410-356566/2	12.5	13.910392	5.0	651289.0	1.112831	Y
7	IC 410-356566/6	20.0	21.962278	5.0	456281.0	1.098114	Y
8	IC 410-356566/5	30.0	33.707605	5.0	631587.0	1.123587	Y



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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 357445

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/26/2023 14:52 Calibration End Date: 03/26/2023 16:38 Calibration ID: 48767

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-357445/8	DC2657.D
Level 2	IC 410-357445/7	DC2656.D
Level 3	IC 410-357445/6	DC2655.D
Level 4	IC 410-357445/5	DC2654a.D
Level 5	IC 410-357445/4	DC2653.D
Level 6	IC 410-357445/3	DC2652.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methapyrilene	+++++ 0.4194	0.2447	0.3020	0.3441	0.3786	Ave		0.3377				20.0		20.0			
Famphur	+++++ 0.3942	0.2438	0.3107	0.3456	0.3713	Ave		0.3331				17.6		20.0			
Kepone	0.0875 0.1047	0.1236	0.1023	0.1035	0.0996	Ave		0.1035				11.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 357445

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/26/2023 14:52 Calibration End Date: 03/26/2023 16:38 Calibration ID: 48767

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-357445/8	DC2657.D
Level 2	IC 410-357445/7	DC2656.D
Level 3	IC 410-357445/6	DC2655.D
Level 4	IC 410-357445/5	DC2654a.D
Level 5	IC 410-357445/4	DC2653.D
Level 6	IC 410-357445/3	DC2652.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methapyrilene	PHN	Ave	+++++ 1223237	95578	326260	422885	776607	+++++ 30.0	3.75	7.50	12.5	20.0
Famphur	PYR10	Ave	+++++ 1218815	93700	345780	438120	789918	+++++ 30.0	3.75	7.50	12.5	20.0
Kepone	PYR10	Ave	117056 1079242	253219	607296	629851	847576	12.5 100	20.0	40.0	60.0	80.0

Curve Type Legend:
Ave = Average ISTD

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2652.D
Lims ID: IC L8 ABC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 26-Mar-2023 14:52:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L8 ABC
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub23

Method: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 26-Mar-2023 17:09:55 Calib Date: 26-Mar-2023 16:38:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2657.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1673

First Level Reviewer: P7EB Date: 26-Mar-2023 16:01:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.588	4.588	0.000	96	138003	5.00	5.00	
* 50 Naphthalene-d8	136	5.800	5.800	0.000	99	493448	5.00	5.00	
* 90 Acenaphthene-d10	164	7.461	7.461	0.000	95	270042	5.00	5.00	
* 126 Phenanthrene-d10	188	8.866	8.866	0.000	97	486120	5.00	5.00	
132 Methapyrilene	97	9.705	9.705	0.000	96	1223237	30.0	37.3	
* 149 Pyrene-d10 (IS)	212	10.218	10.218	0.000	100	515315	5.00	5.00	
151 Famphur	218	10.854	10.854	0.000	86	1218815	30.0	35.5	
153 Kepone	272	10.947	10.947	0.000	94	1079242	100.0	101.1	
* 170 Perylene-d12	264	13.517	13.517	0.000	97	376747	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_8_00012 Amount Added: 1.00 Units: mL

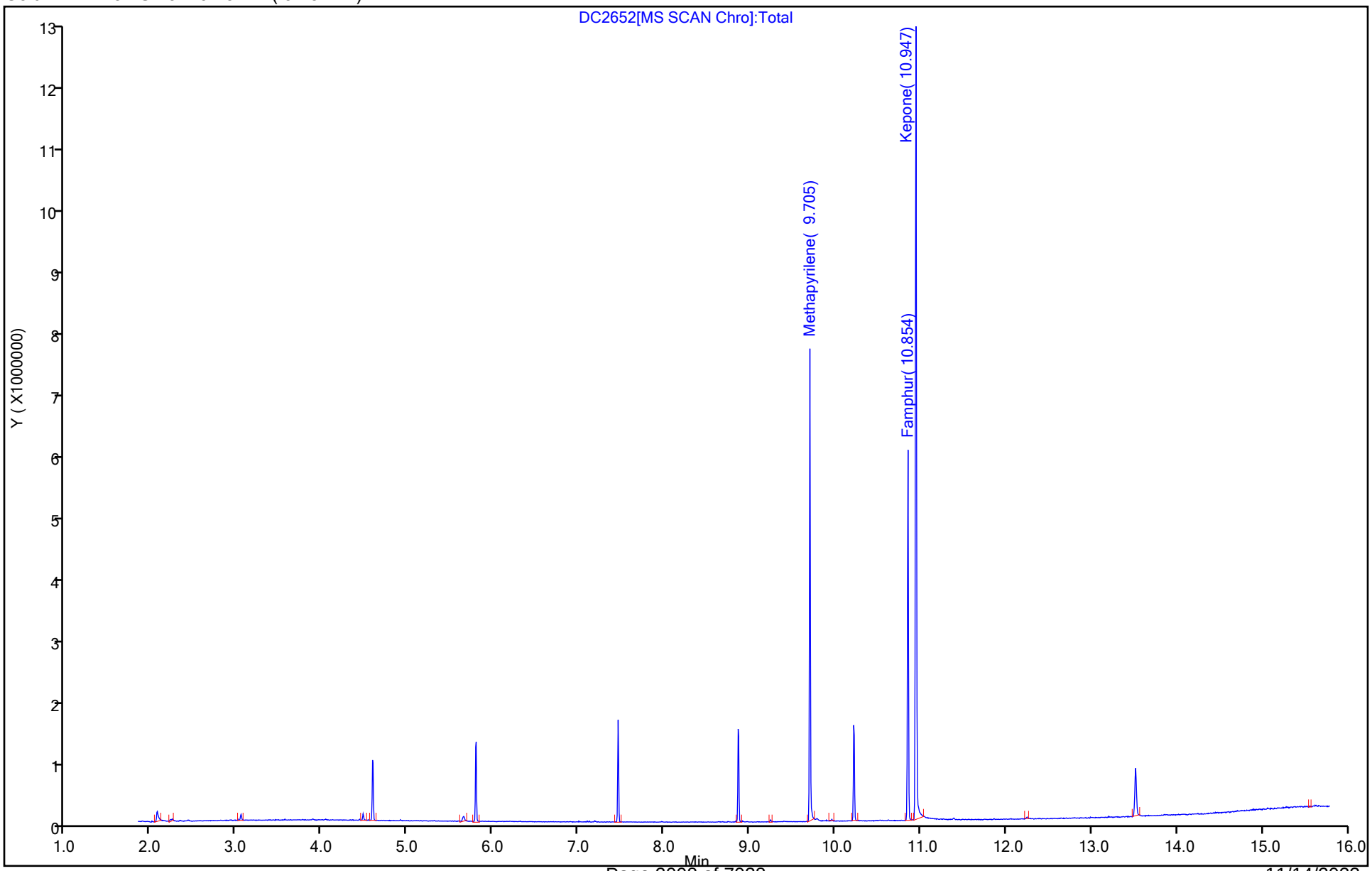
Report Date: 26-Mar-2023 17:09:55 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2652.D

Injection Date:	26-Mar-2023 14:52:30	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC L8 ABC			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2653.D
Lims ID: IC L7 ABC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Mar-2023 15:13:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L7 ABC
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub23

Method: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 26-Mar-2023 17:09:56 Calib Date: 26-Mar-2023 16:38:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2657.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1673

First Level Reviewer: P7EB Date: 26-Mar-2023 16:01:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.588	4.588	0.000	97	143127	5.00	5.00	
* 50 Naphthalene-d8	136	5.794	5.800	-0.006	100	523887	5.00	5.00	
* 90 Acenaphthene-d10	164	7.461	7.461	0.000	95	280973	5.00	5.00	
* 126 Phenanthrene-d10	188	8.866	8.866	0.000	97	512881	5.00	5.00	
132 Methapyrilene	97	9.700	9.705	-0.005	96	776607	20.0	22.4	
* 149 Pyrene-d10 (IS)	212	10.218	10.218	0.000	100	531812	5.00	5.00	
151 Famphur	218	10.848	10.854	-0.006	86	789918	20.0	22.3	
153 Kepone	272	10.941	10.947	-0.006	94	847576	80.0	77.0	
* 170 Perylene-d12	264	13.512	13.517	-0.005	98	384725	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_7_00011 Amount Added: 1.00 Units: mL

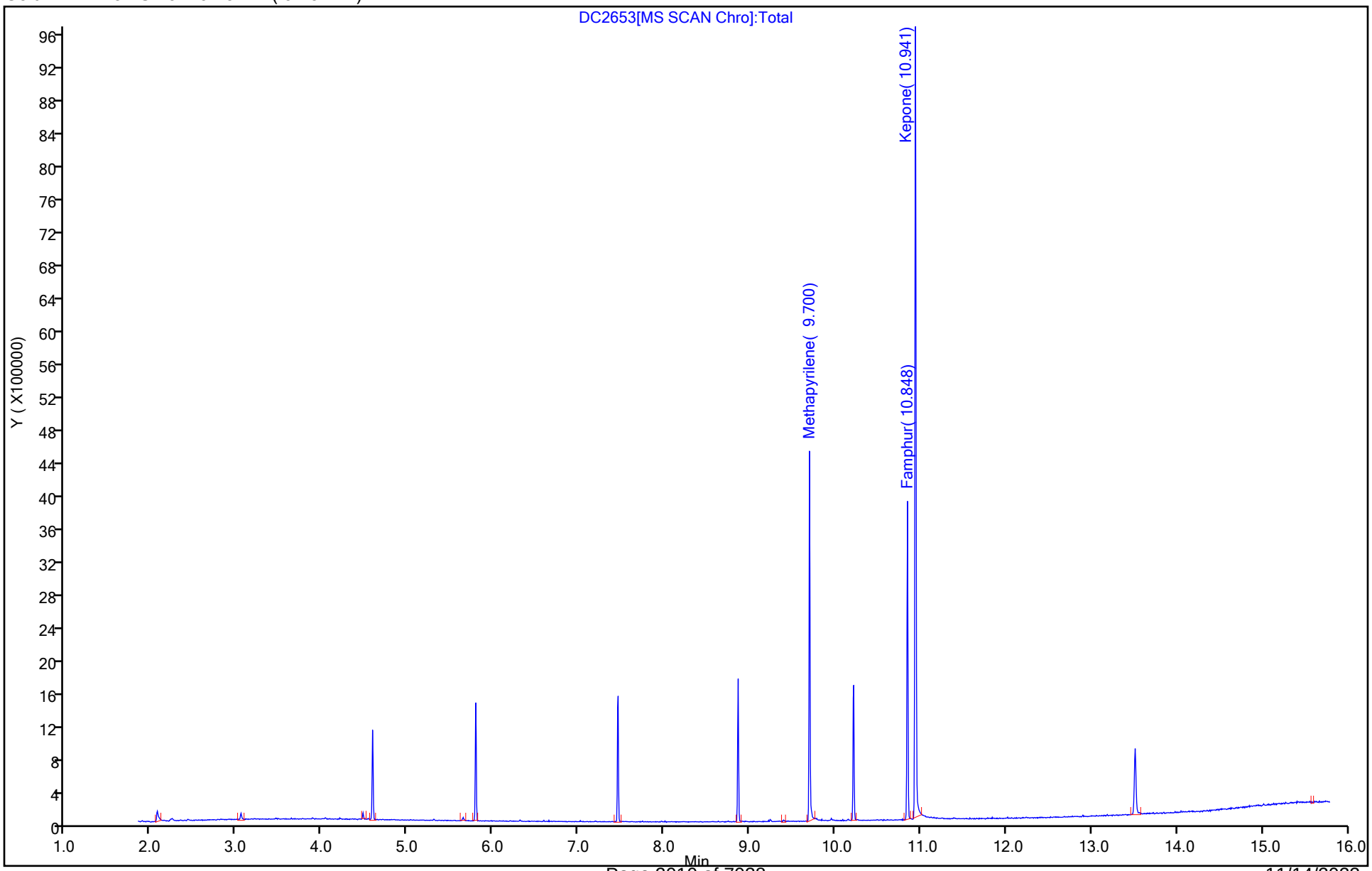
Report Date: 26-Mar-2023 17:09:56 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2653.D

Injection Date:	26-Mar-2023 15:13:30	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC L7 ABC			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2654a.D
Lims ID: IC L6 ABC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Mar-2023 15:36:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L6 ABC
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub23

Method: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 26-Mar-2023 17:09:57 Calib Date: 26-Mar-2023 16:38:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2657.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1673

First Level Reviewer: P7EB Date: 26-Mar-2023 16:01:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.588	4.588	0.000	97	139548	5.00	5.00	
* 50 Naphthalene-d8	136	5.795	5.800	-0.005	100	498596	5.00	5.00	
* 90 Acenaphthene-d10	164	7.462	7.461	0.001	95	265407	5.00	5.00	
* 126 Phenanthrene-d10	188	8.866	8.866	0.000	97	491652	5.00	5.00	
132 Methapyrilene	97	9.700	9.705	-0.005	95	422885	12.5	12.7	
* 149 Pyrene-d10 (IS)	212	10.219	10.218	0.001	99	507097	5.00	5.00	
151 Famphur	218	10.848	10.854	-0.006	87	438120	12.5	13.0	
153 Kepone	272	10.941	10.947	-0.006	95	629851	60.0	60.0	
* 170 Perylene-d12	264	13.512	13.517	-0.005	98	359213	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_6_00015 Amount Added: 1.00 Units: mL

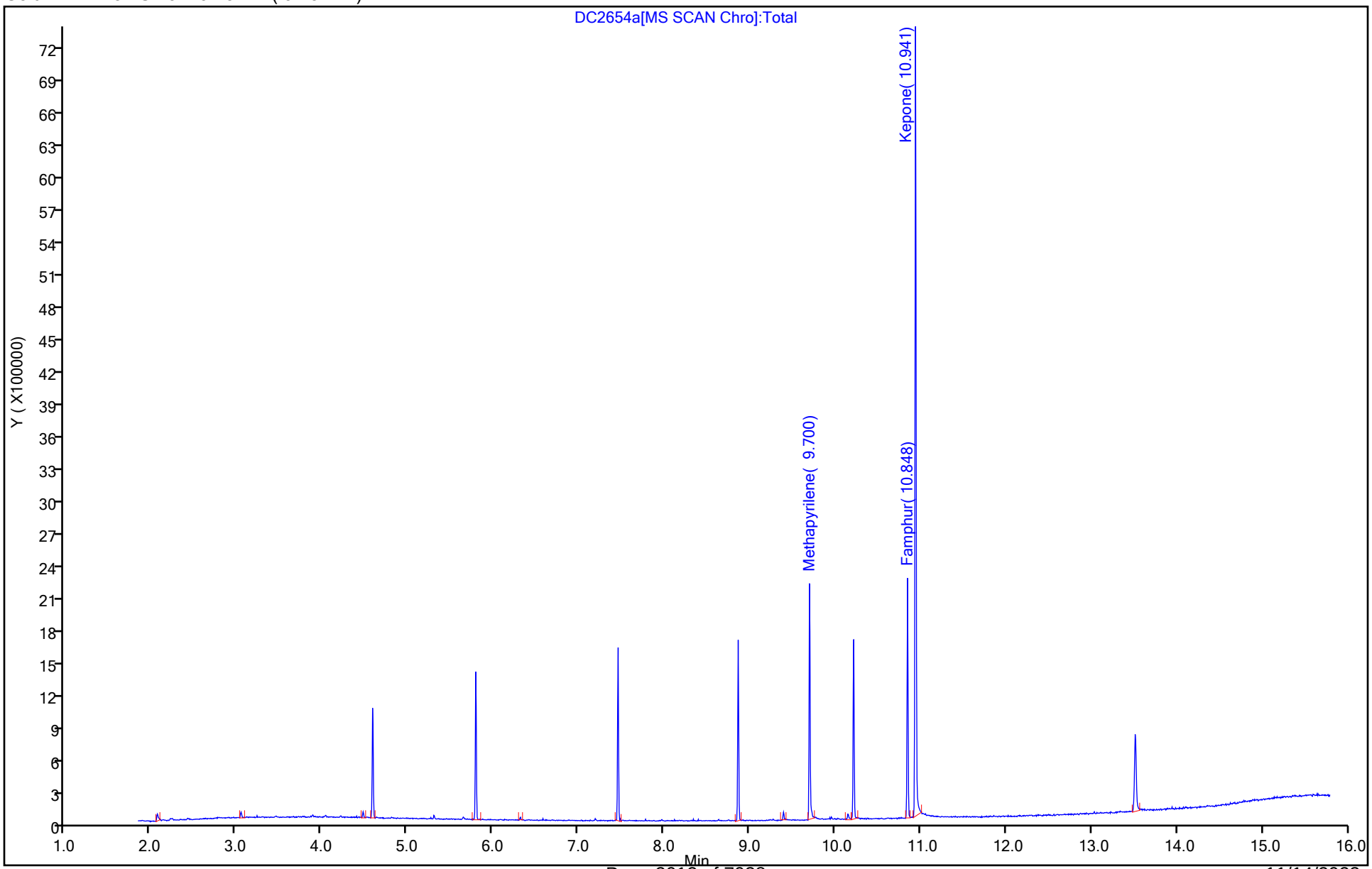
Report Date: 26-Mar-2023 17:09:57 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2654a.D

Injection Date:	26-Mar-2023 15:36:30	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC L6 ABC			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2655.D
Lims ID: IC L5 ABC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Mar-2023 15:57:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L5 ABC
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub23

Method: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 26-Mar-2023 17:09:58 Calib Date: 26-Mar-2023 16:38:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2657.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1673

First Level Reviewer: P7EB Date: 26-Mar-2023 16:31:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.588	4.588	0.000	96	199103	5.00	5.00	
* 50 Naphthalene-d8	136	5.795	5.795	0.000	99	704528	5.00	5.00	
* 90 Acenaphthene-d10	164	7.462	7.462	0.000	95	382519	5.00	5.00	
* 126 Phenanthrene-d10	188	8.866	8.866	0.000	97	720280	5.00	5.00	
132 Methapyrilene	97	9.700	9.700	0.000	95	326260	7.50	6.71	
* 149 Pyrene-d10 (IS)	212	10.218	10.218	0.000	100	741964	5.00	5.00	
151 Famphur	218	10.848	10.848	0.000	86	345780	7.50	6.99	
153 Kepone	272	10.941	10.941	0.000	95	607296	40.0	39.5	
* 170 Perylene-d12	264	13.512	13.512	0.000	98	538933	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_5_00010 Amount Added: 1.00 Units: mL

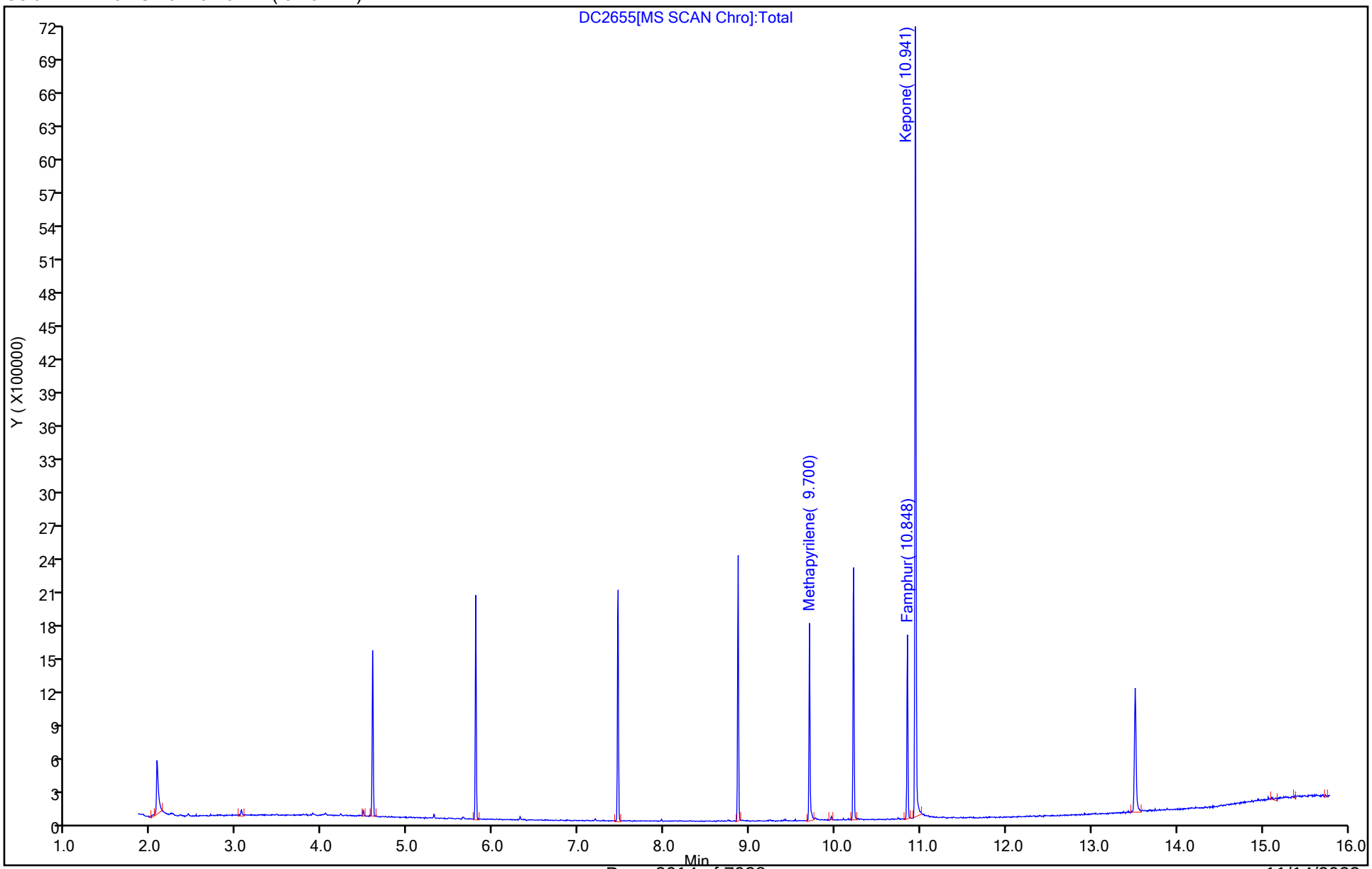
Report Date: 26-Mar-2023 17:09:59 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2655.D

Injection Date:	26-Mar-2023 15:57:30	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC L5 ABC			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2656.D
Lims ID: IC L4 ABC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 26-Mar-2023 16:18:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L4 ABC
Misc. Info.: 410-0079885-007
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub23

Method: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 26-Mar-2023 17:11:38 Calib Date: 26-Mar-2023 16:38:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2657.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1673

First Level Reviewer: P7EB Date: 26-Mar-2023 17:11:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.588	4.588	0.000	97	155042	5.00	5.00	
* 50 Naphthalene-d8	136	5.795	5.795	0.001	99	530045	5.00	5.00	
* 90 Acenaphthene-d10	164	7.462	7.462	0.000	95	277914	5.00	5.00	
* 126 Phenanthrene-d10	188	8.866	8.866	0.000	97	520808	5.00	5.00	
132 Methapyrilene	97	9.700	9.700	0.000	95	95578	3.75	2.72	M
* 149 Pyrene-d10 (IS)	212	10.213	10.218	-0.005	100	512365	5.00	5.00	
151 Famphur	218	10.848	10.848	0.000	88	93700	3.75	2.74	
153 Kepone	272	10.941	10.941	0.000	94	253219	20.0	23.9	
* 170 Perylene-d12	264	13.512	13.512	0.000	97	355952	5.00	5.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

MSS_RVABC_4_00010 Amount Added: 1.00 Units: mL

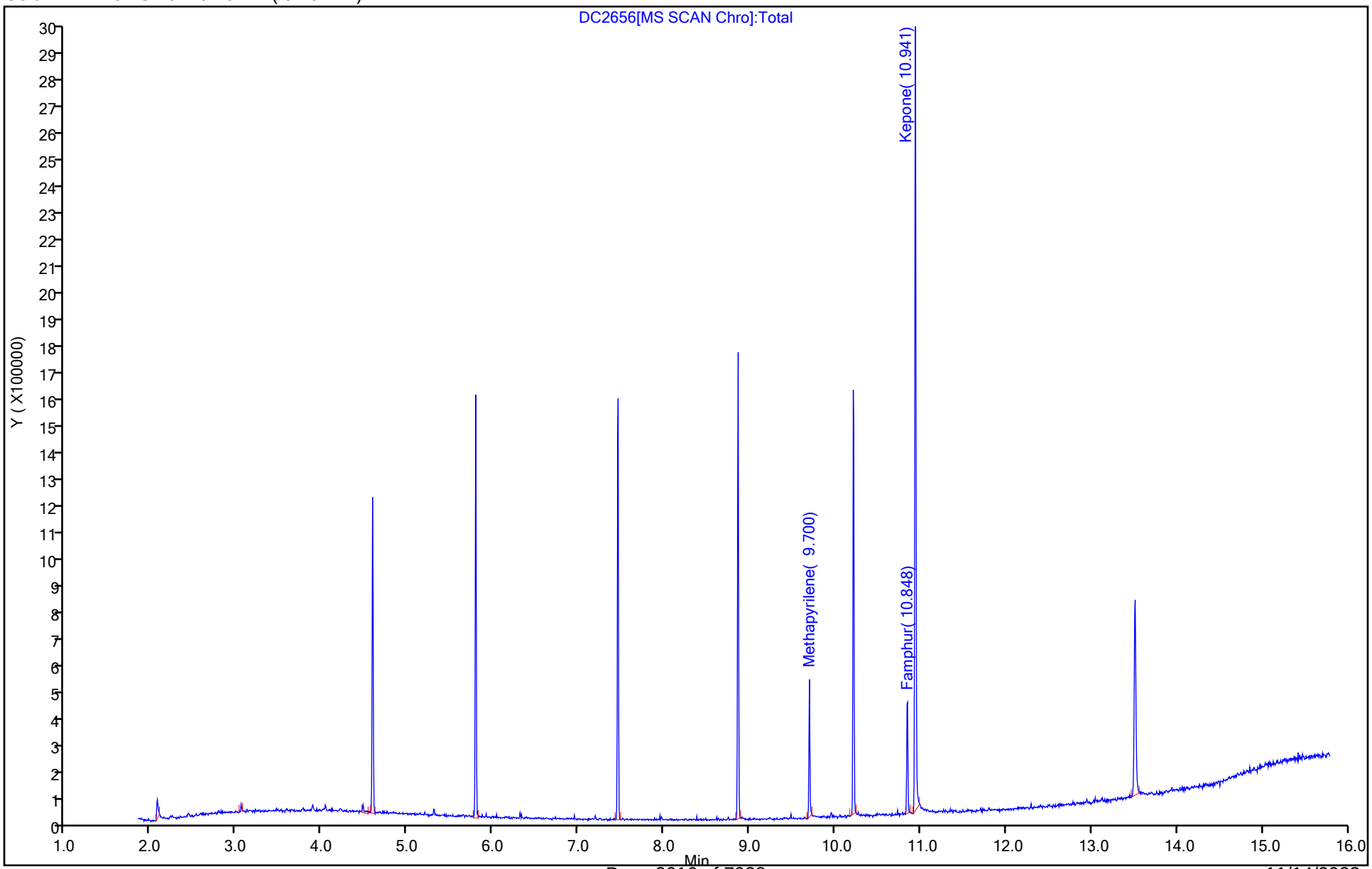
Report Date: 26-Mar-2023 17:11:38 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2656.D

Injection Date:	26-Mar-2023 16:18:30	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC L4 ABC			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



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Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

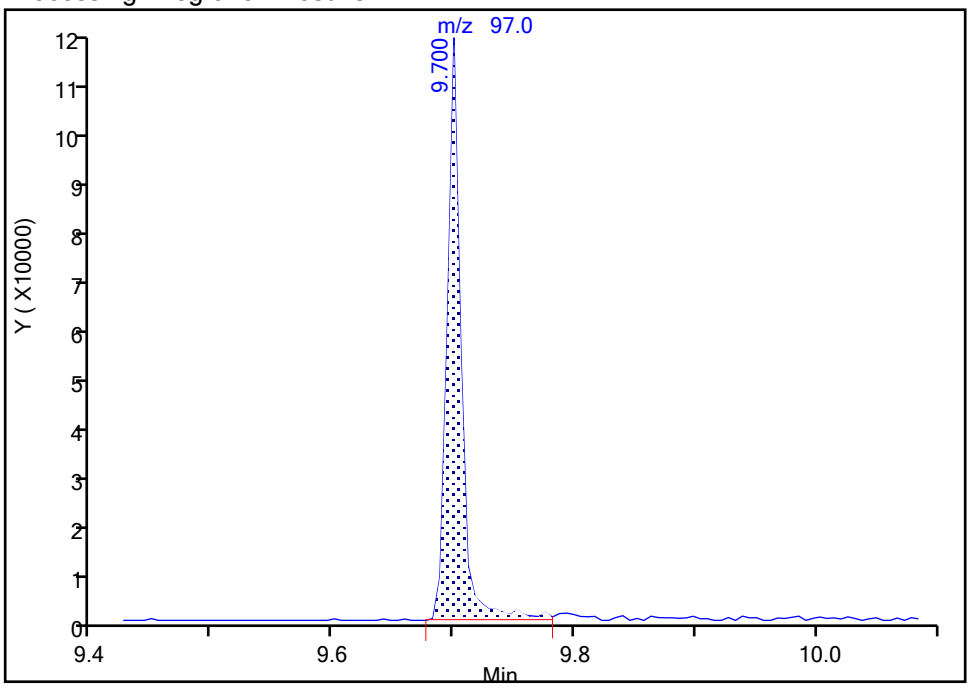
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2656.D				
Injection Date:	26-Mar-2023 16:18:30	Instrument ID:	HP19760		
Lims ID:	IC L4 ABC				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

132 Methapyrilene, CAS: 91-80-5

Signal: 1

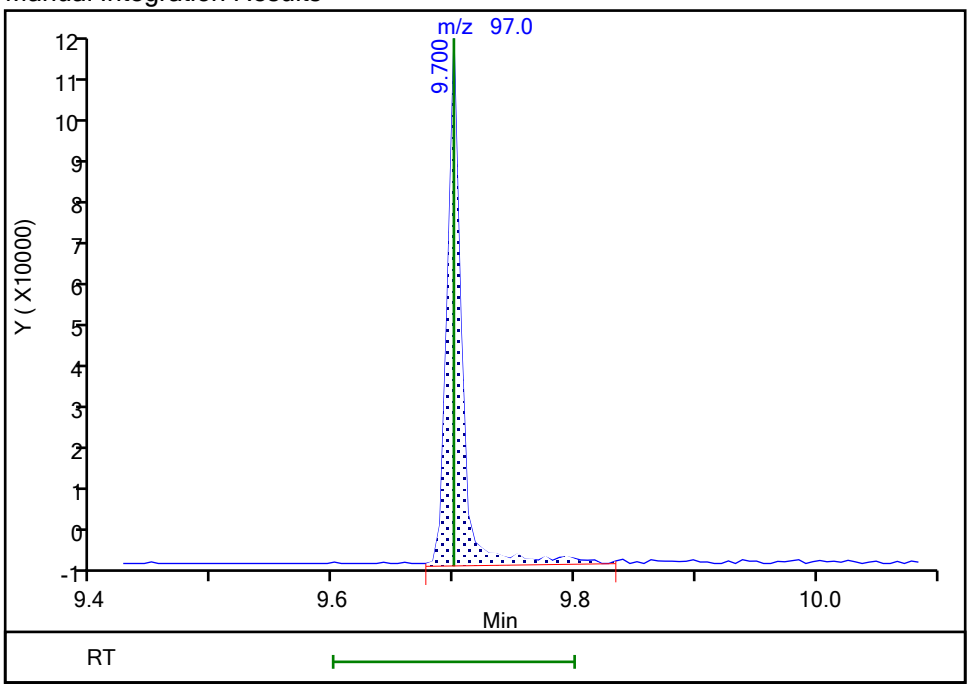
Processing Integration Results

RT: 9.70
Area: 91101
Amount: 3.196308
Amount Units: ug/ml



Manual Integration Results

RT: 9.70
Area: 95578
Amount: 2.716931
Amount Units: ug/ml



Reviewer: P7EB, 26-Mar-2023 17:08:40

Audit Action: Manually Integrated Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2657.D
Lims ID: IC L3 ABC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Mar-2023 16:38:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L3 ABC
Misc. Info.: 410-0079885-008
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub23

Method: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 26-Mar-2023 17:10:00 Calib Date: 26-Mar-2023 16:38:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2657.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1673

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.588	4.588	0.000	96	157938	5.00	5.00	
* 50 Naphthalene-d8	136	5.794	5.795	0.000	99	558208	5.00	5.00	
* 90 Acenaphthene-d10	164	7.461	7.462	-0.001	96	294280	5.00	5.00	
* 126 Phenanthrene-d10	188	8.866	8.866	0.000	97	542349	5.00	5.00	
132 Methapyrilene	97	9.700	9.700	0.000	95	24298	1.25	0.6633	
* 149 Pyrene-d10 (IS)	212	10.218	10.218	0.000	100	534934	5.00	5.00	
151 Famphur	218	10.848	10.848	0.000	89	26939	1.25	0.7559	
153 Kepone	272	10.941	10.941	0.000	94	117056	12.5	10.6	
* 170 Perylene-d12	264	13.512	13.512	0.000	97	370881	5.00	5.00	

Reagents:

MSS_RVABC_3_00011 Amount Added: 1.00 Units: mL

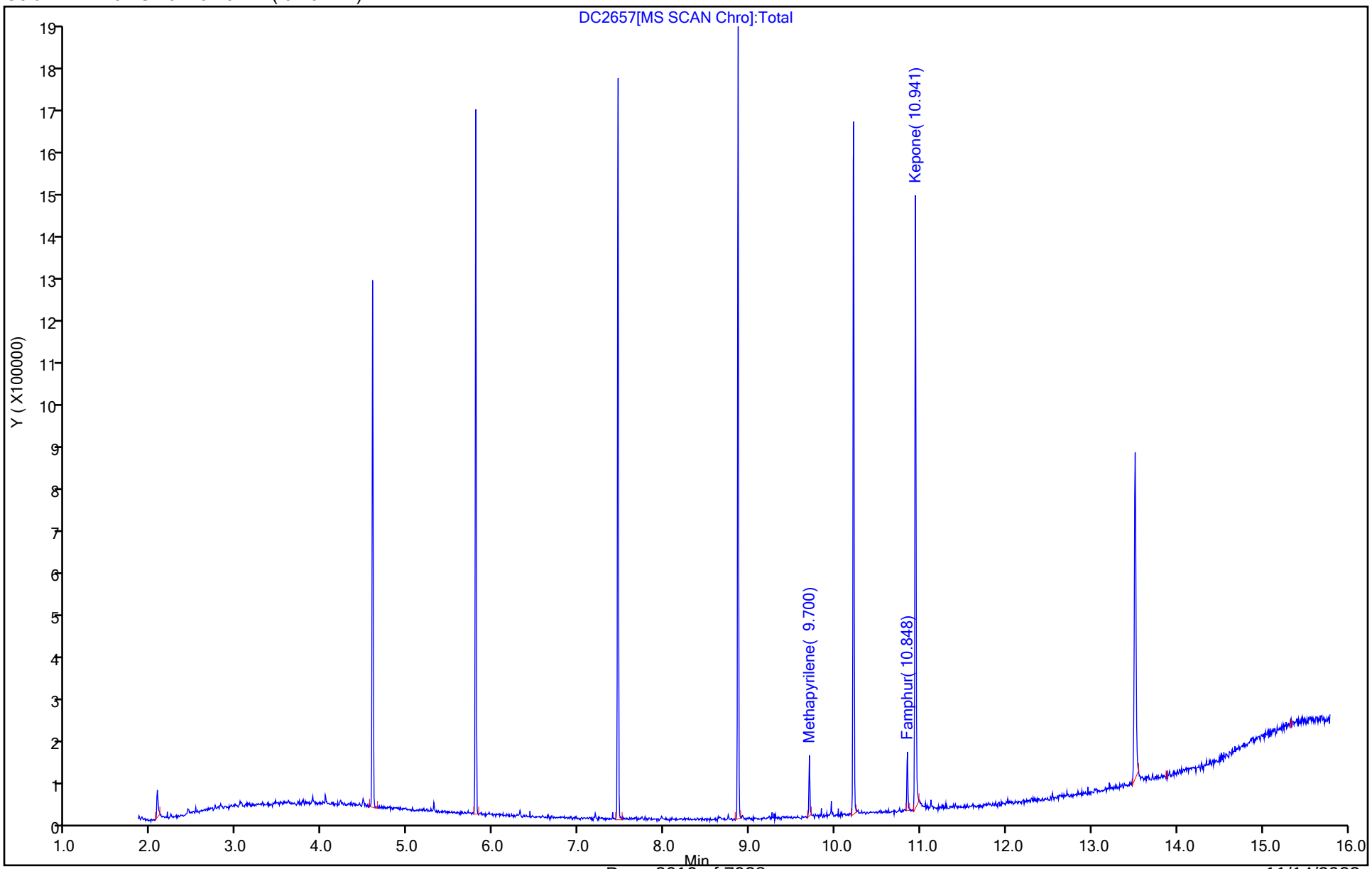
Report Date: 26-Mar-2023 17:10:00 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230325-79885.b\DC2657.D

Injection Date:	26-Mar-2023 16:38:30	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC L3 ABC			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Calibration / Methapyrilene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

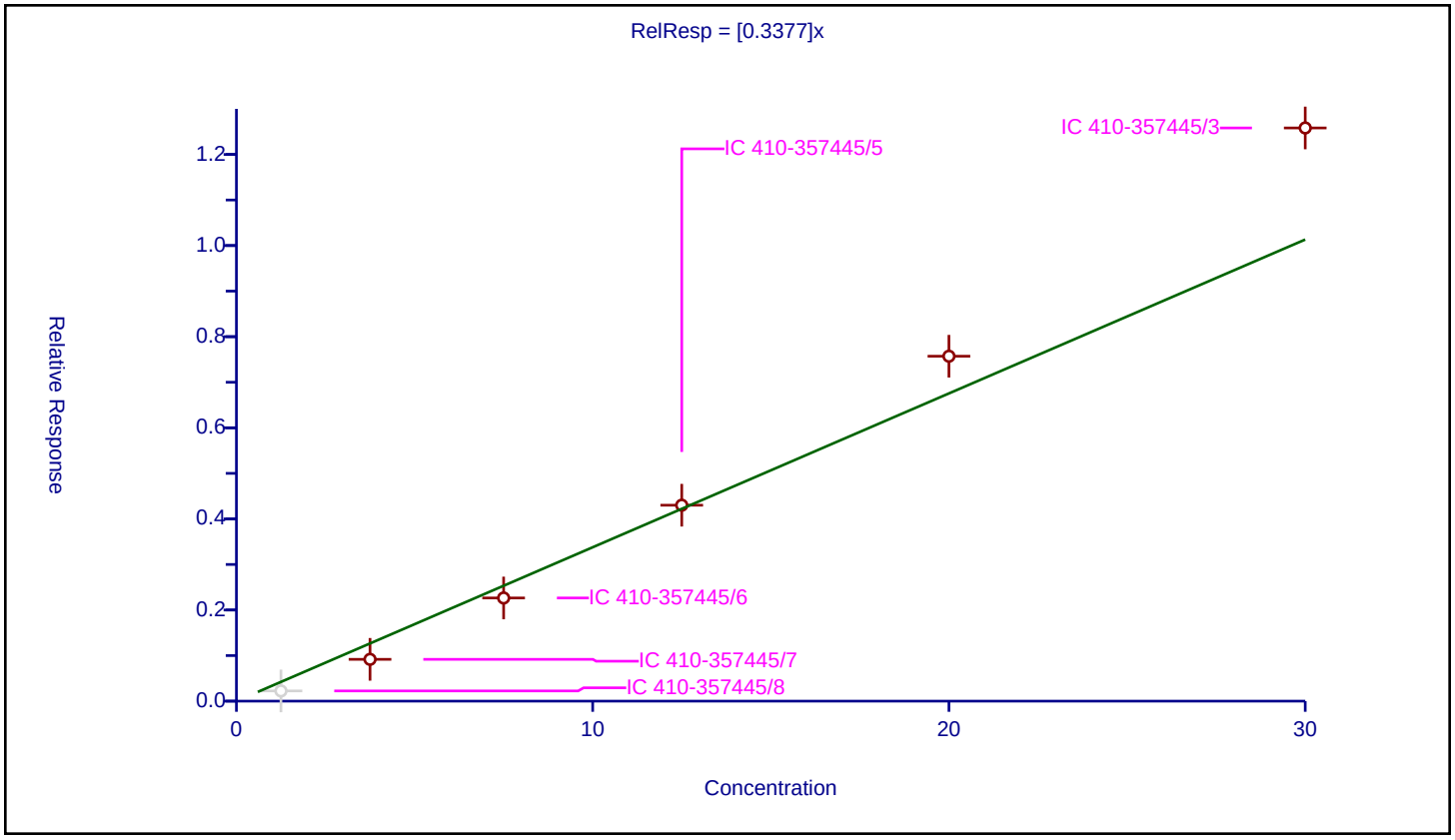
Curve Coefficients

Intercept:	0
Slope:	0.3377

Error Coefficients

Standard Error:	774000
Relative Standard Error:	20.0
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.941

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-357445/8	1.25	0.224007	5.0	542349.0	0.179206	N
2	IC 410-357445/7	3.75	0.917593	5.0	520808.0	0.244692	Y
3	IC 410-357445/6	7.5	2.264814	5.0	720280.0	0.301975	Y
4	IC 410-357445/5	12.5	4.300654	5.0	491652.0	0.344052	Y
5	IC 410-357445/4	20.0	7.571025	5.0	512881.0	0.378551	Y
6	IC 410-357445/3	30.0	12.581636	5.0	486120.0	0.419388	Y



11/14/2023
11:12 AM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

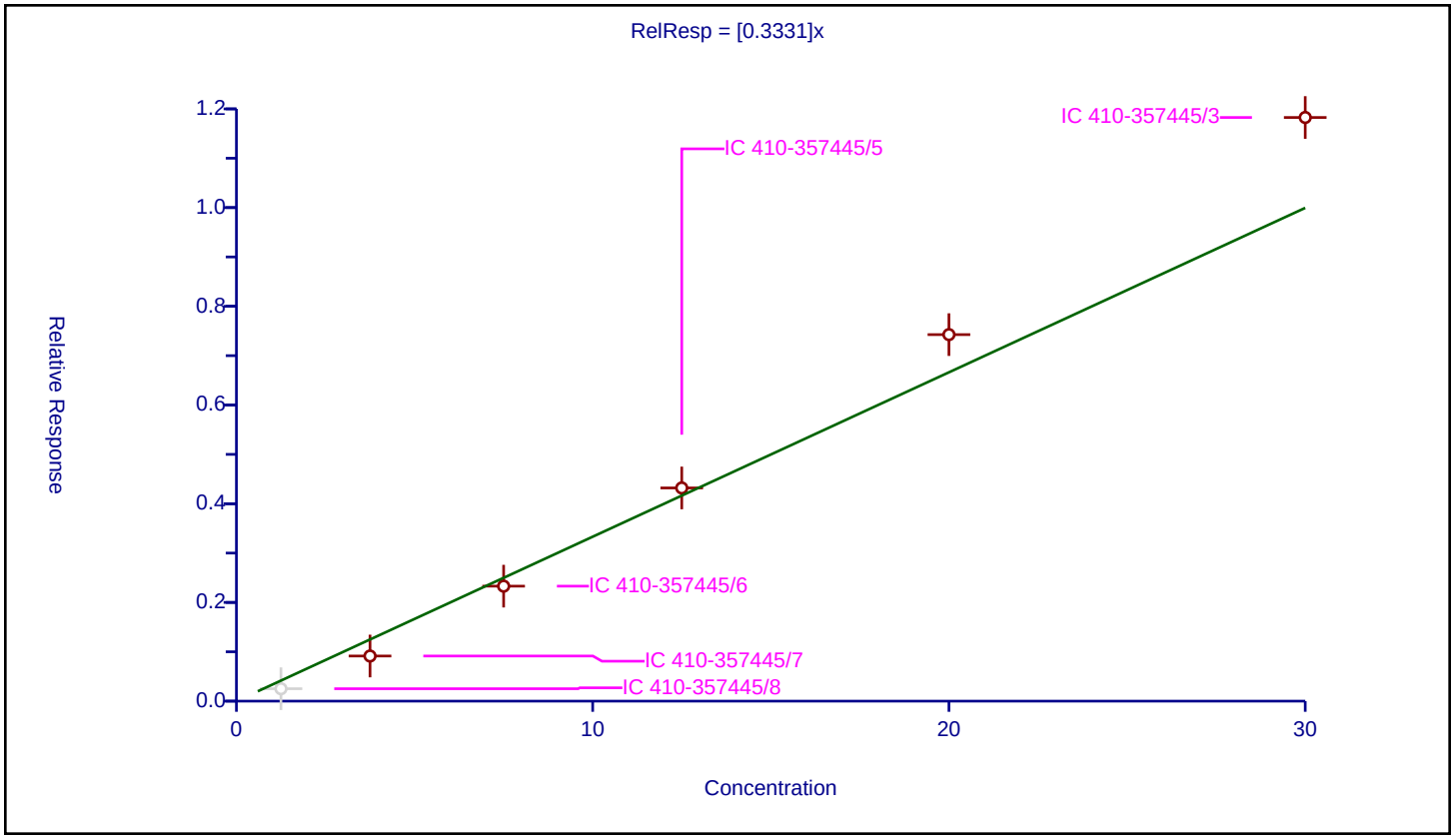
Curve Coefficients

Intercept:	0
Slope:	0.3331

Error Coefficients

Standard Error:	779000
Relative Standard Error:	17.6
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.952

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-357445/8	1.25	0.251797	5.0	534934.0	0.201438	N
2	IC 410-357445/7	3.75	0.914387	5.0	512365.0	0.243837	Y
3	IC 410-357445/6	7.5	2.330167	5.0	741964.0	0.310689	Y
4	IC 410-357445/5	12.5	4.319884	5.0	507097.0	0.345591	Y
5	IC 410-357445/4	20.0	7.426666	5.0	531812.0	0.371333	Y
6	IC 410-357445/3	30.0	11.825922	5.0	515315.0	0.394197	Y



Calibration / Kepone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

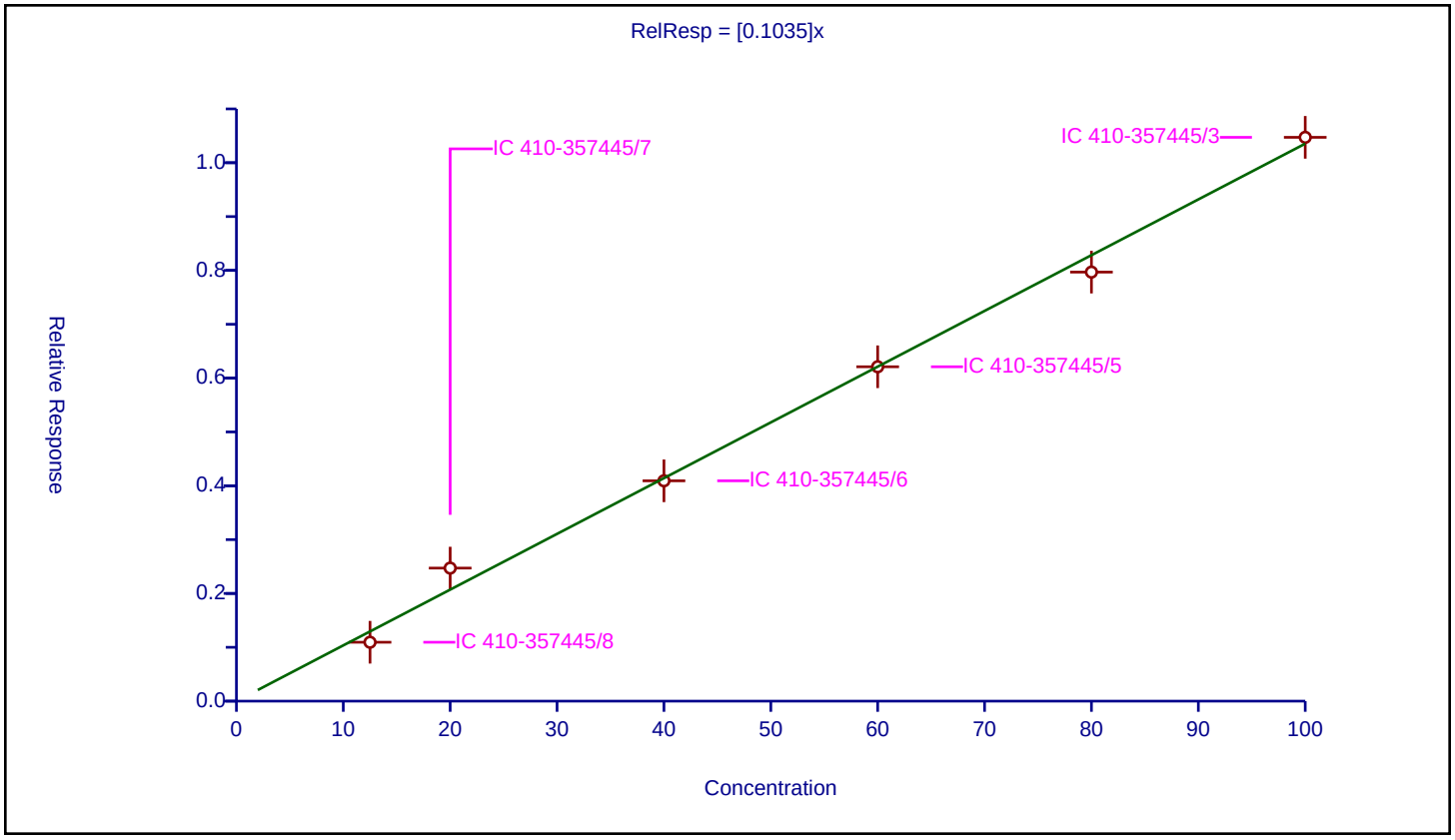
Curve Coefficients

Intercept:	0
Slope:	0.1035

Error Coefficients

Standard Error:	738000
Relative Standard Error:	11.2
Correlation Coefficient:	0.958
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-357445/8	12.5	1.094116	5.0	534934.0	0.087529	Y
2	IC 410-357445/7	20.0	2.47108	5.0	512365.0	0.123554	Y
3	IC 410-357445/6	40.0	4.09249	5.0	741964.0	0.102312	Y
4	IC 410-357445/5	60.0	6.21036	5.0	507097.0	0.103506	Y
5	IC 410-357445/4	80.0	7.968756	5.0	531812.0	0.099609	Y
6	IC 410-357445/3	100.0	10.471673	5.0	515315.0	0.104717	Y



FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 362760

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2023 21:02 Calibration End Date: 04/10/2023 21:02 Calibration ID: 49080

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-362760/4	DD1053.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
a,a-Dimethylphenethylamine	0.7121					Ave		0.7121						20.0			
Aramite Peak 1	0.0220					Ave		0.0220						20.0			
Aramite Peak 2	0.0248					Ave		0.0248						20.0			
Aramite Peak 3	0.0818					Ave		0.0818						20.0			
Aramite Peak 4	0.1220					Ave		0.1220						20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 362760

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2023 21:02 Calibration End Date: 04/10/2023 21:02 Calibration ID: 49080

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-362760/4	DD1053.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1					LVL 1				
a,a-Dimethylphenethylamine	NPT	Ave	1104495					12.5				
Aramite Peak 1	PYR10	Ave	3444					1.25				
Aramite Peak 2	PYR10	Ave	3878					1.25				
Aramite Peak 3	PYR10	Ave	51158					5.00				
Aramite Peak 4	PYR10	Ave	76306					5.00				

Curve Type Legend:

Ave = Average ISTD

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230410-81094.b\DD1053.D
Lims ID: IC AAP
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2023 21:02:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC AAP
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub10

Method: \\chromfs\Lancaster\ChromData\HP19760\20230410-81094.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 10-Apr-2023 22:35:03 Calib Date: 10-Apr-2023 21:02:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230410-81094.b\DD1053.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1672

First Level Reviewer: P7EB Date: 10-Apr-2023 22:35:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.530	4.530	0.000	97	172823	5.00	5.00	
37 alpha,alpha-Dimethyl phenethylam	58	5.573	5.573	0.000	97	1104495	12.5	12.5	
* 50 Naphthalene-d8	136	5.742	5.742	0.000	100	620381	5.00	5.00	
* 90 Acenaphthene-d10	164	7.403	7.403	0.000	95	322672	5.00	5.00	
* 126 Phenanthrene-d10	188	8.814	8.814	0.000	97	616282	5.00	5.00	
137 Aramite Peak 1	185	10.265	10.265	0.000	0	3444	1.25	1.25	a
138 Aramite Peak 2	185	10.282	10.282	0.000	0	3878	1.25	1.25	a
* 149 Pyrene-d10 (IS)	212	10.166	10.166	0.000	99	625637	5.00	5.00	
139 Aramite Peak 3	185	10.329	10.329	0.000	0	51158	5.00	5.00	a
142 Aramite Peak 4	185	10.405	10.405	0.000	0	76306	5.00	5.00	a
* 170 Perylene-d12	264	13.436	13.436	0.000	97	399642	5.00	5.00	
S 177 Aramite, Total	185				0		12.5	12.5	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

MSS_RVAAP_SP_00008 Amount Added: 1.00 Units: mL

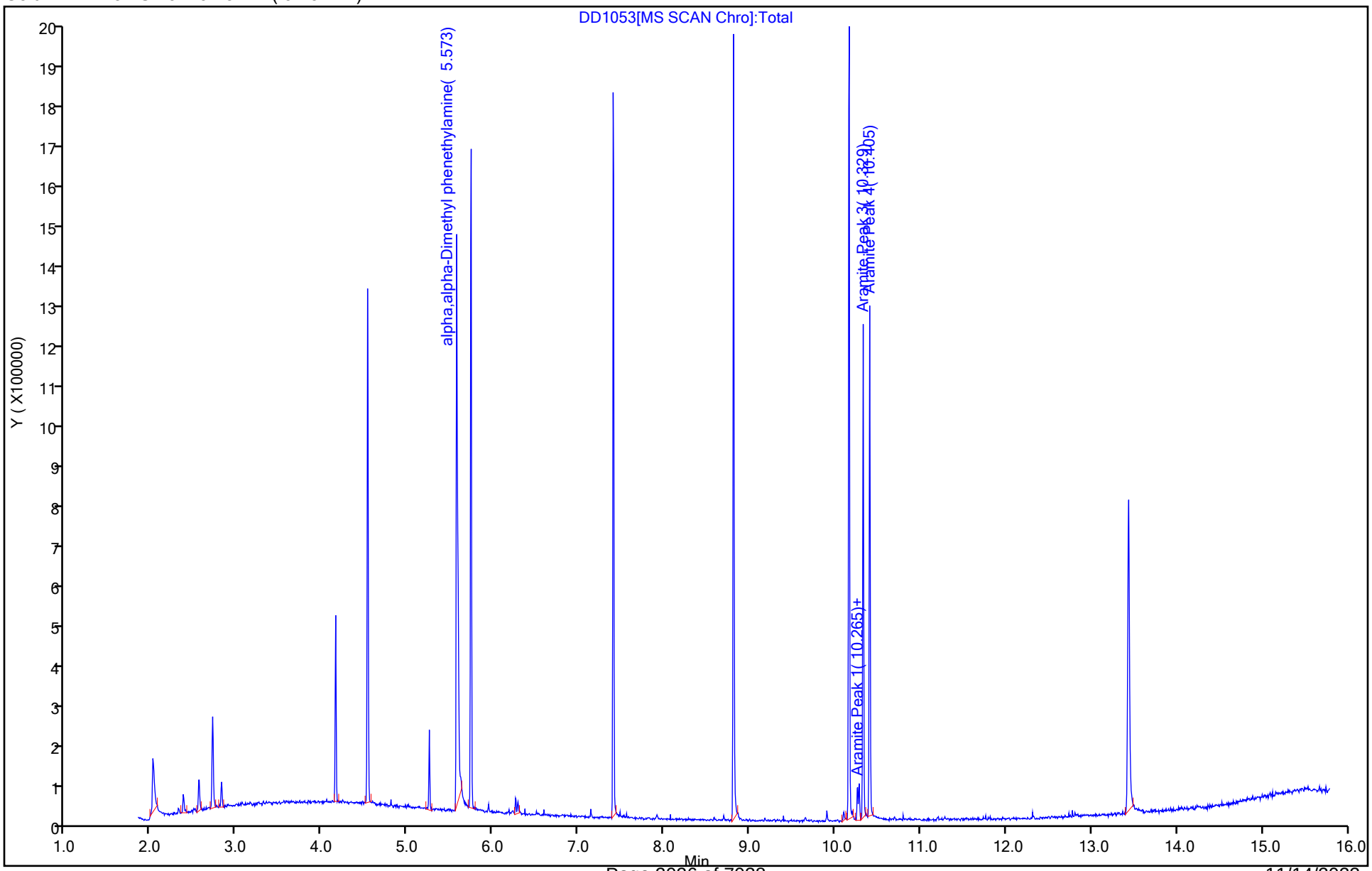
Report Date: 10-Apr-2023 22:35:03 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230410-81094.b\DD1053.D

Injection Date:	10-Apr-2023 21:02:30	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC AAP			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

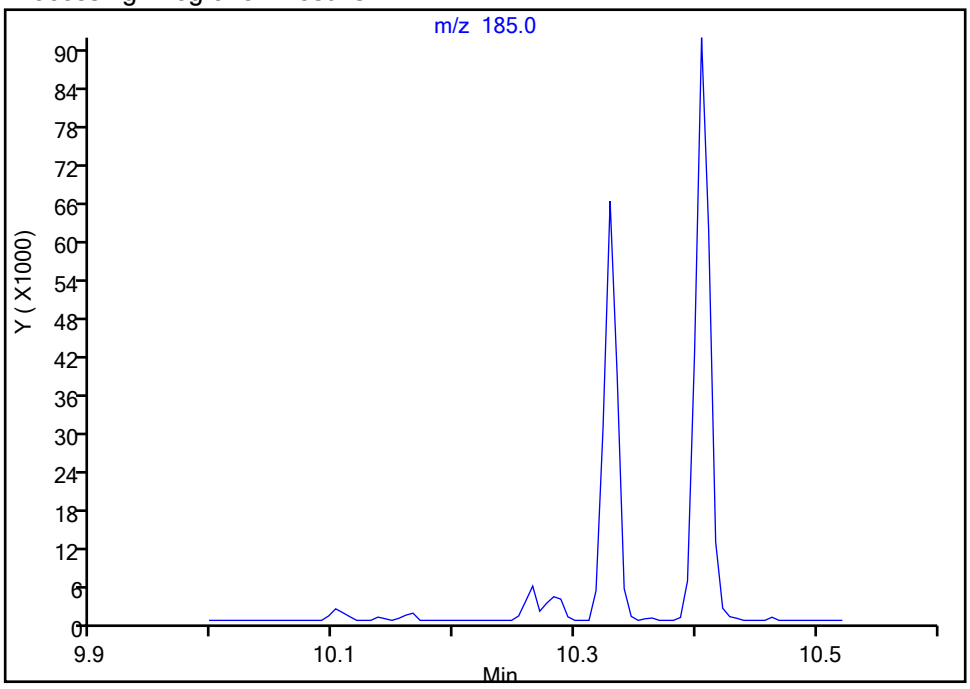
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230410-81094.b\DD1053.D				
Injection Date:	10-Apr-2023 21:02:30	Instrument ID:	HP19760		
Lims ID:	IC AAP				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

137 Aramite Peak 1, CAS: STL00690

Signal: 1

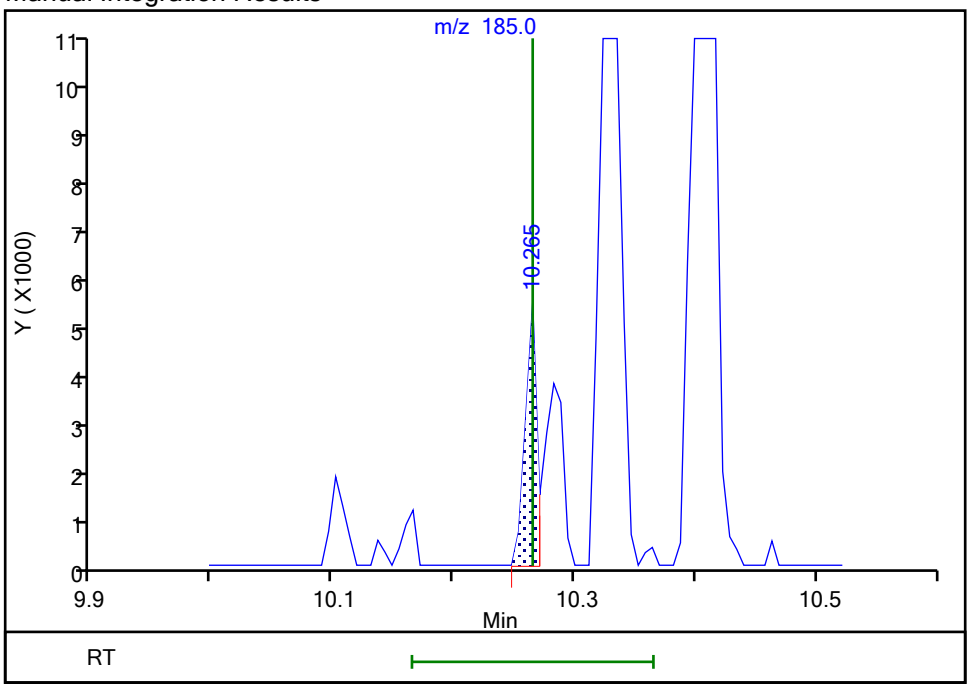
Not Detected
Expected RT: 10.26

Processing Integration Results



Manual Integration Results

RT: 10.26
Area: 3444
Amount: 1.250000
Amount Units: ug/ml



Reviewer: P7EB, 10-Apr-2023 22:34:47
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

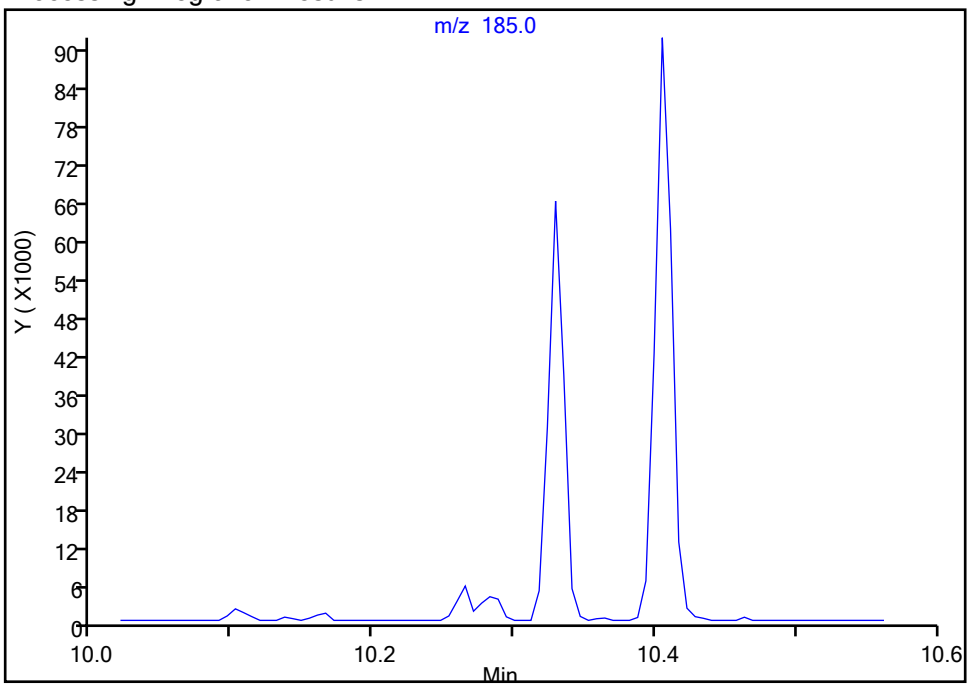
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230410-81094.b\DD1053.D				
Injection Date:	10-Apr-2023 21:02:30	Instrument ID:	HP19760		
Lims ID:	IC AAP				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

138 Aramite Peak 2, CAS: STL00691

Signal: 1

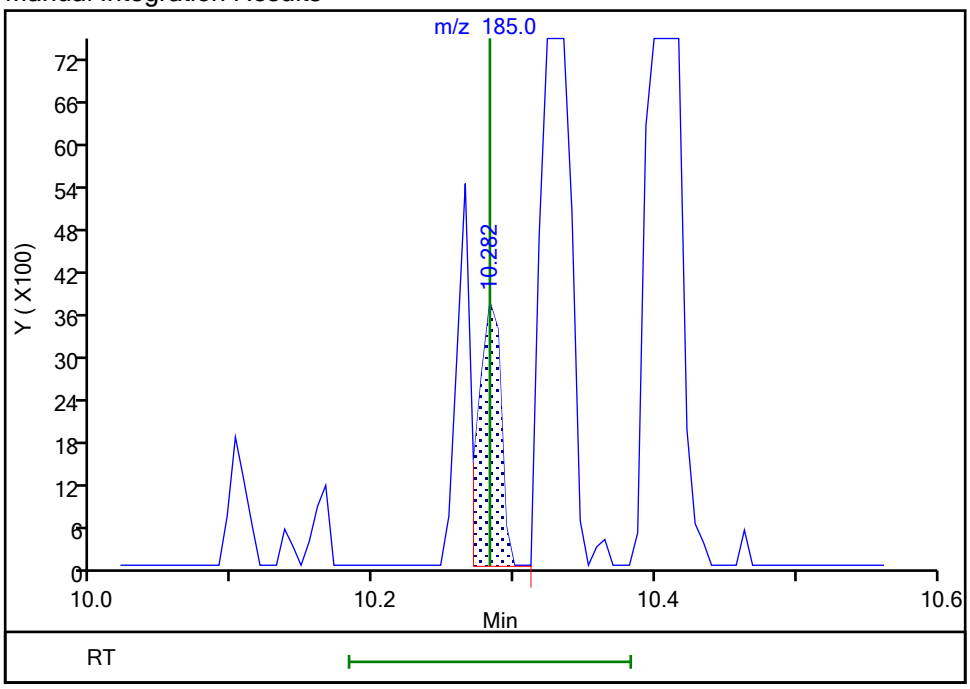
Not Detected
Expected RT: 10.28

Processing Integration Results



Manual Integration Results

RT: 10.28
Area: 3878
Amount: 1.250000
Amount Units: ug/ml



Reviewer: P7EB, 10-Apr-2023 22:34:50
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

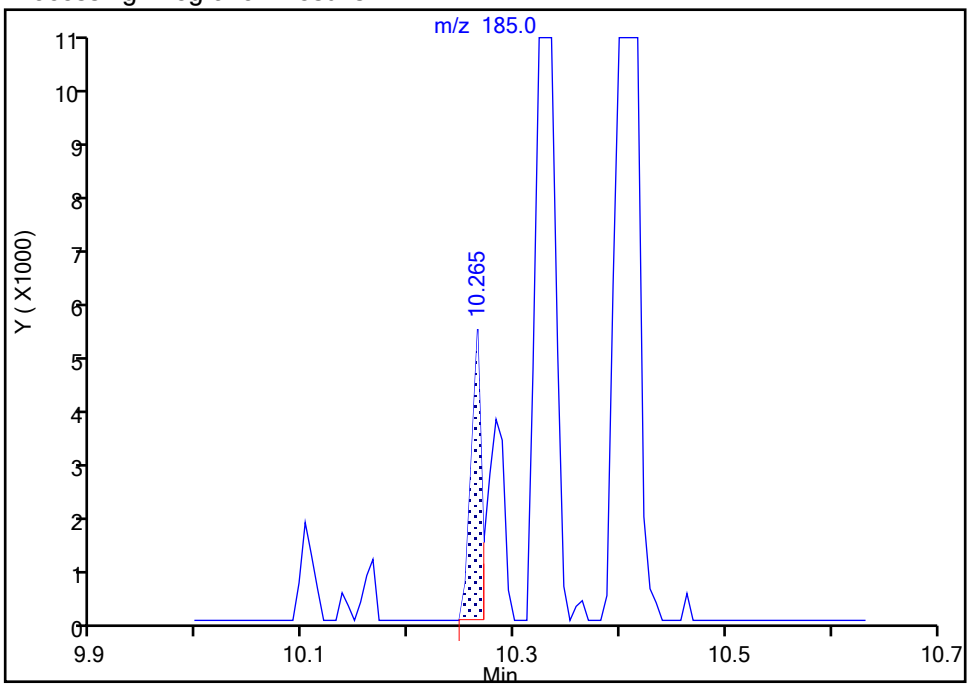
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230410-81094.b\DD1053.D				
Injection Date:	10-Apr-2023 21:02:30	Instrument ID:	HP19760		
Lims ID:	IC AAP				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

139 Aramite Peak 3, CAS: STL02688

Signal: 1

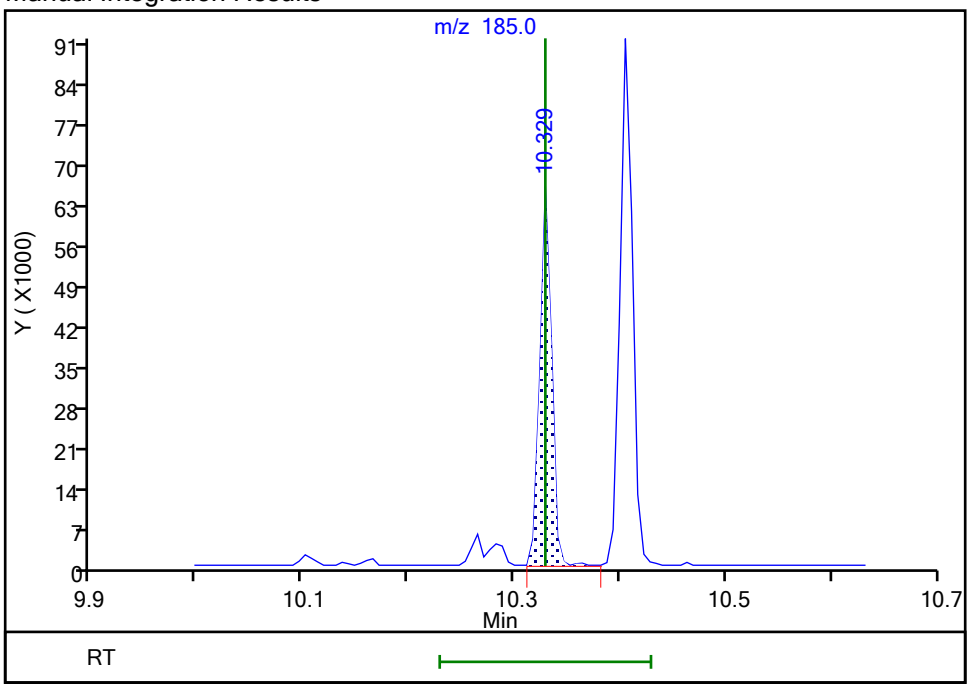
Processing Integration Results

RT: 10.26
Area: 3444
Amount: 5.000000
Amount Units: ug/ml



Manual Integration Results

RT: 10.33
Area: 51158
Amount: 5.000000
Amount Units: ug/ml



Reviewer: P7EB, 10-Apr-2023 22:34:53
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

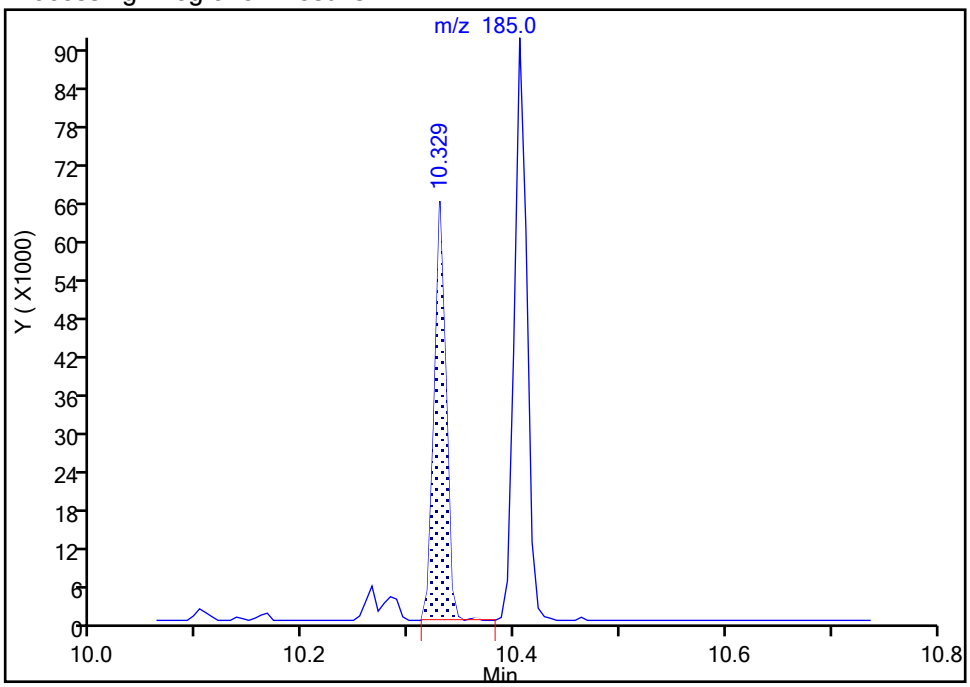
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230410-81094.b\DD1053.D				
Injection Date:	10-Apr-2023 21:02:30	Instrument ID:	HP19760		
Lims ID:	IC AAP				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

142 Aramite Peak 4, CAS: STL02689

Signal: 1

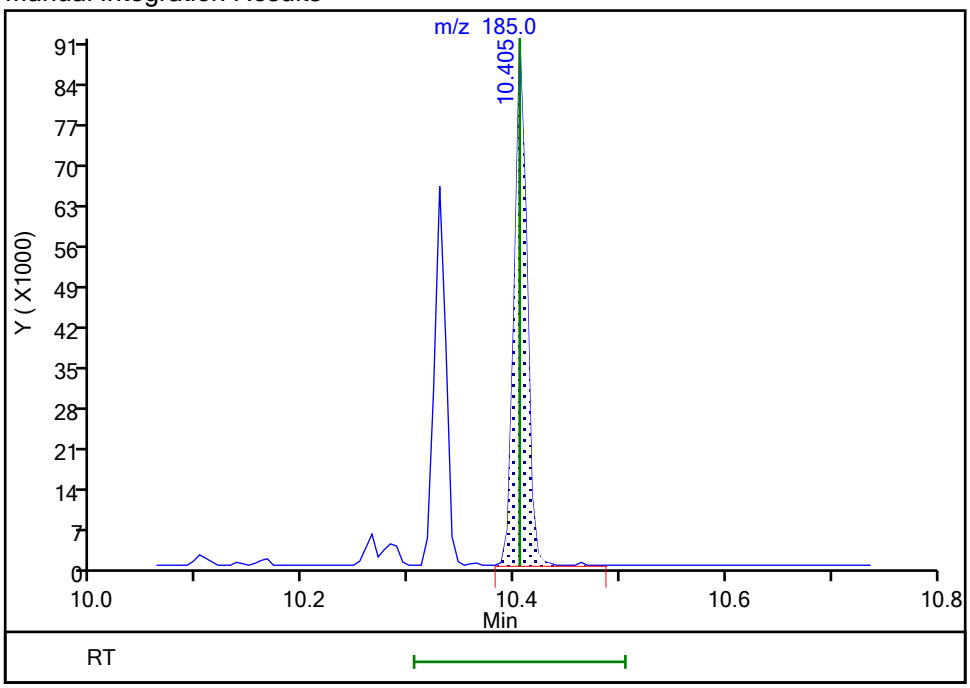
Processing Integration Results

RT: 10.33
Area: 51158
Amount: 5.000000
Amount Units: ug/ml



Manual Integration Results

RT: 10.40
Area: 76306
Amount: 5.000000
Amount Units: ug/ml



Reviewer: P7EB, 10-Apr-2023 22:34:54
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Calibration / alpha,alpha-Dimethyl phenethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

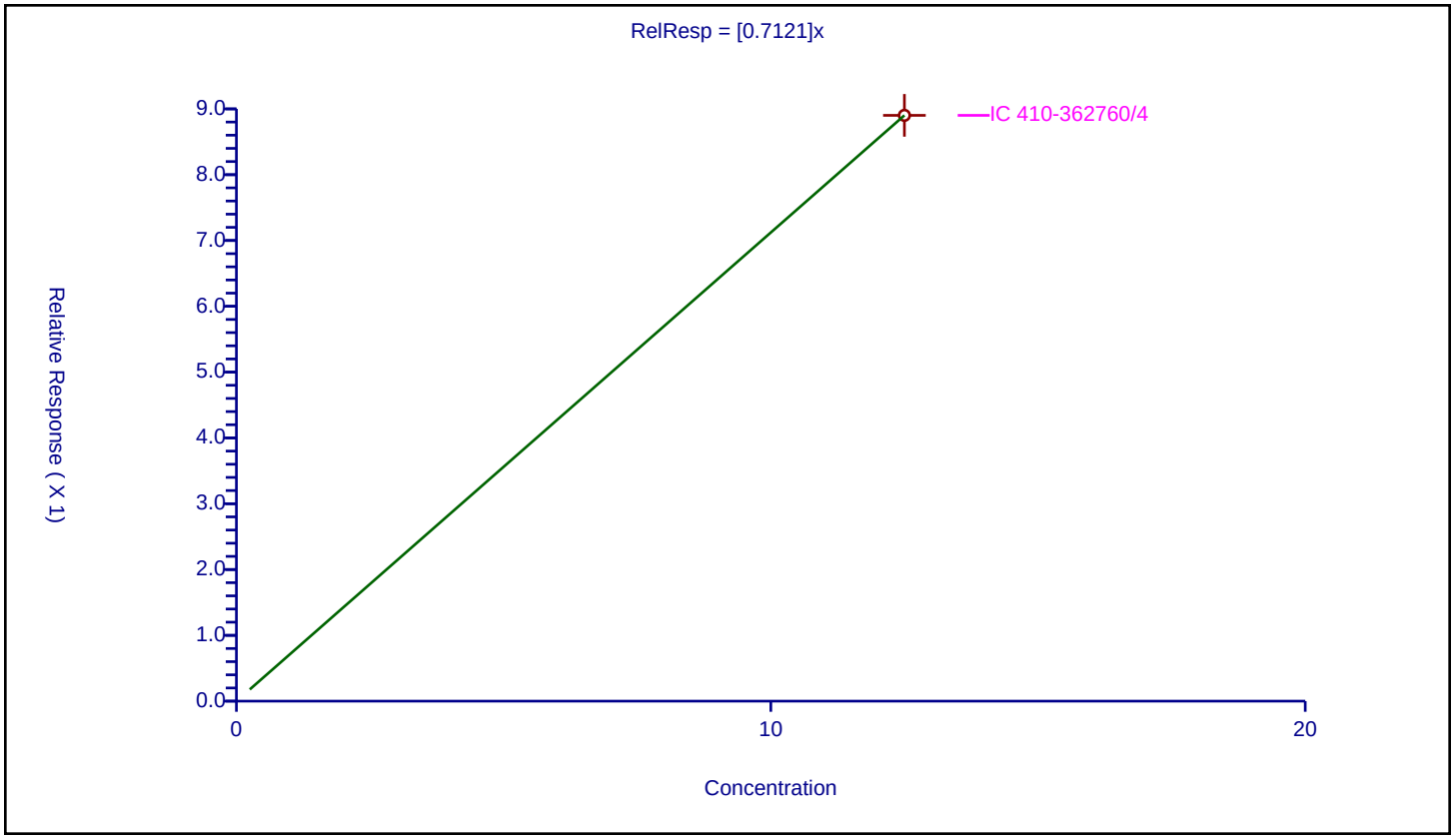
Curve Coefficients

Intercept:	0
Slope:	0.7121

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-362760/4	12.5	8.901747	5.0	620381.0	0.71214	Y



Calibration / Aramite Peak 1

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

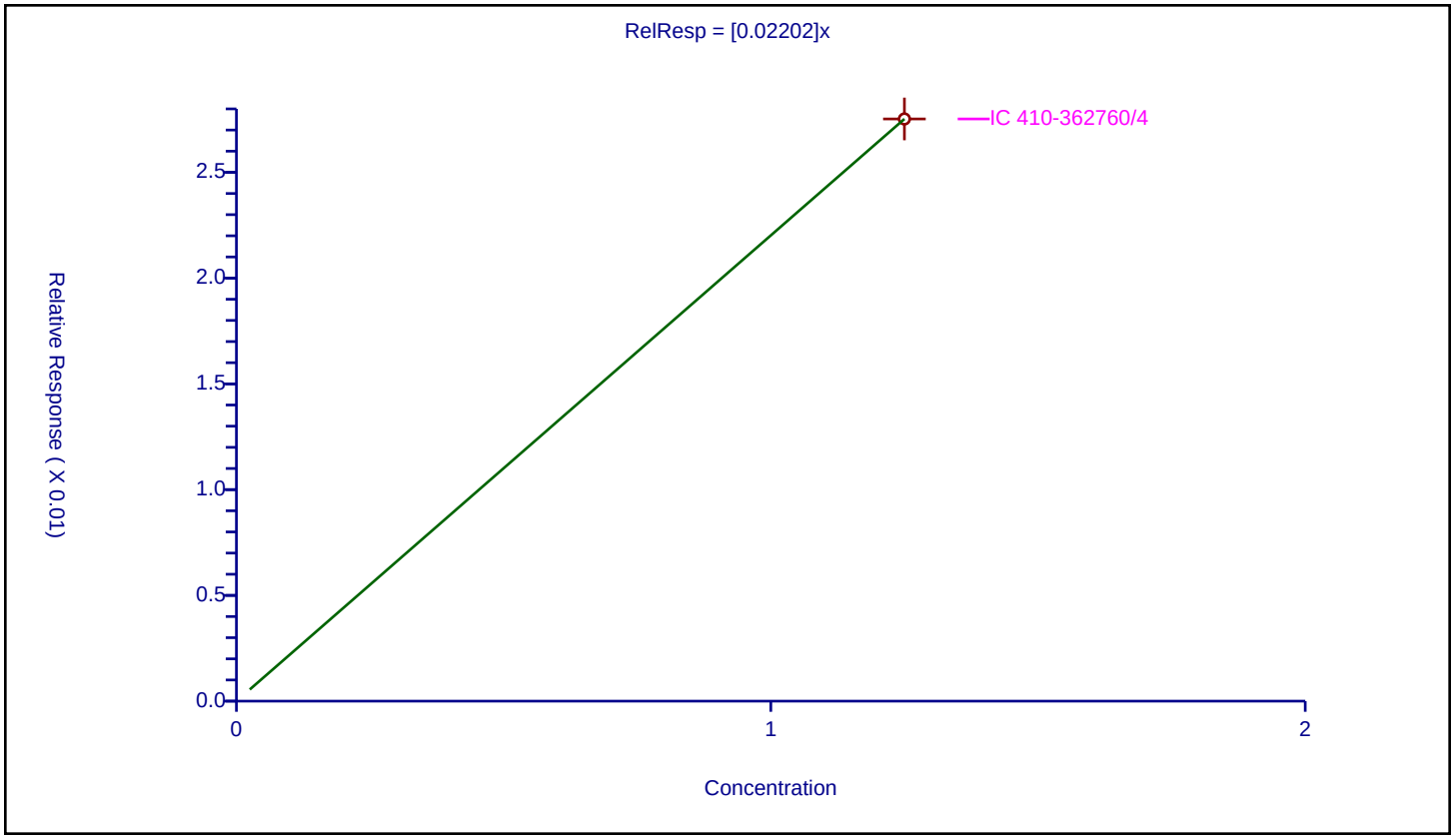
Curve Coefficients

Intercept:	0
Slope:	0.02202

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	1.00

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-362760/4	1.25	0.027524	5.0	625637.0	0.022019	Y



Calibration / Aramite Peak 2

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

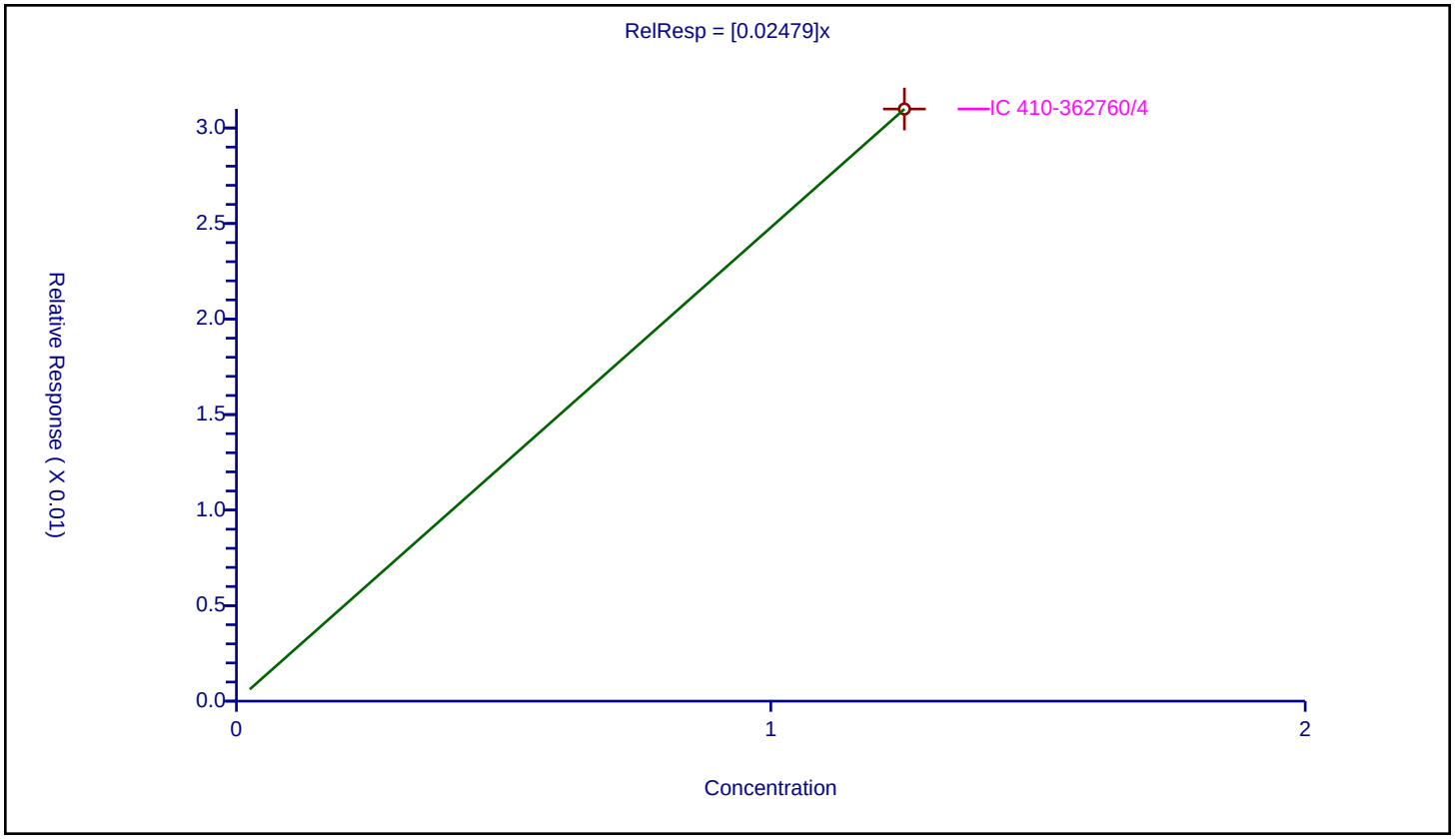
Curve Coefficients

Intercept:	0
Slope:	0.02479

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	1.00

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-362760/4	1.25	0.030992	5.0	625637.0	0.024794	Y



11/14/2023
11:12 AM

Calibration / Aramite Peak 3

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

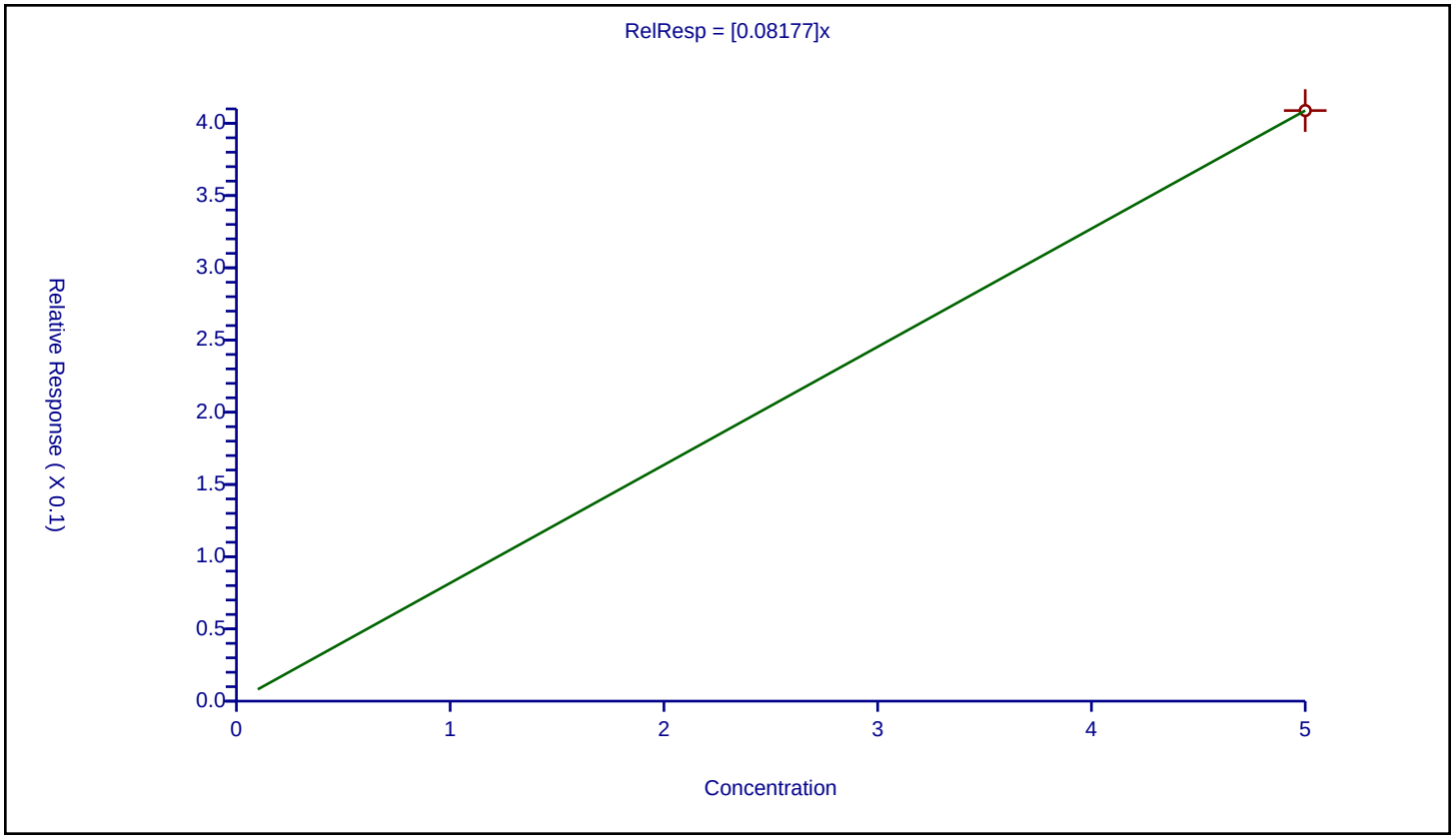
Curve Coefficients

Intercept:	0
Slope:	0.08177

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-362760/4	5.0	0.408847	5.0	625637.0	0.081769	Y



11/14/2023
11:12 AM

Calibration / Aramite Peak 4

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

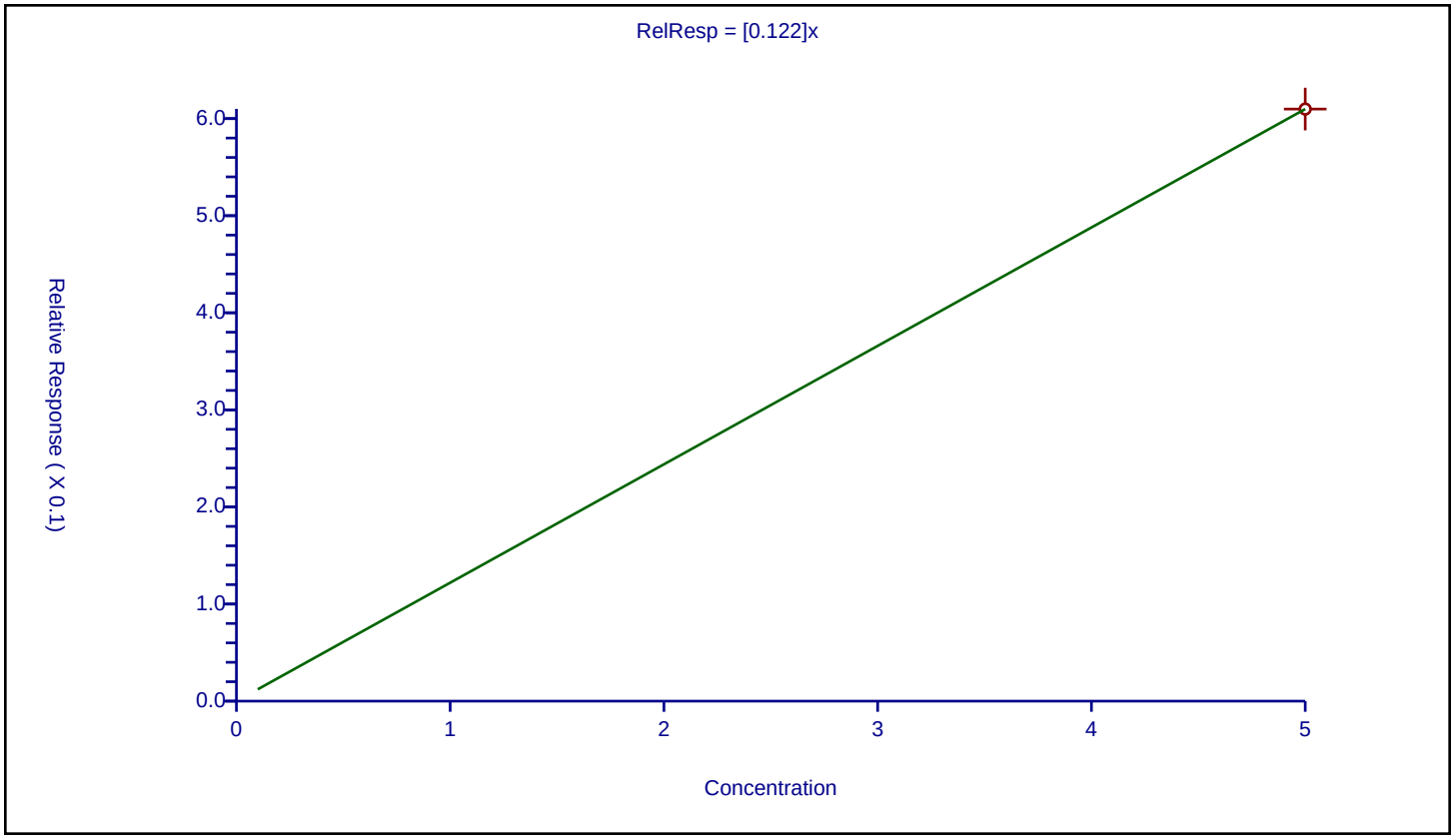
Curve Coefficients

Intercept:	0
Slope:	0.122

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-362760/4	5.0	0.609826	5.0	625637.0	0.121965	Y



11/14/2023
11:12 AM

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 404152

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/03/2023 15:30 Calibration End Date: 08/03/2023 15:30 Calibration ID: 52392

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-404152/5	DH0353.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
a,a-Dimethylphenethylamine	0.6503					Ave		0.6503						20.0			
Aramite Peak 1	0.0260					Ave		0.0260						20.0			
Aramite Peak 2	0.0249					Ave		0.0249						20.0			
Aramite Peak 3	0.0904					Ave		0.0904						20.0			
Aramite Peak 4	0.1255					Ave		0.1255						20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 404152

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/03/2023 15:30 Calibration End Date: 08/03/2023 15:30 Calibration ID: 52392

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-404152/5	DH0353.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1					LVL 1				
a,a-Dimethylphenethylamine	NPT	Ave	998240					12.5				
Aramite Peak 1	PYR10	Ave	4017					1.25				
Aramite Peak 2	PYR10	Ave	3850					1.25				
Aramite Peak 3	PYR10	Ave	55835					5.00				
Aramite Peak 4	PYR10	Ave	77509					5.00				

Curve Type Legend:
Ave = Average ISTD

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D
Lims ID: IC AAP
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Aug-2023 15:30:40 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC AAP
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub10

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 15:49:06 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: P7EB Date: 03-Aug-2023 15:49:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.072	4.072	0.000	97	156100	5.00	5.00	
37 alpha,alpha-Dimethyl phenethylam	58	5.138	5.138	0.000	98	998240	12.5	12.5	a
* 50 Naphthalene-d8	136	5.296	5.296	0.000	100	613980	5.00	5.00	
* 90 Acenaphthene-d10	164	6.968	6.968	0.000	96	334236	5.00	5.00	
* 126 Phenanthrene-d10	188	8.373	8.373	0.000	97	631215	5.00	5.00	
* 149 Pyrene-d10 (IS)	212	9.719	9.719	0.000	99	617515	5.00	5.00	
137 Aramite Peak 1	185	9.842	9.842	0.000	0	4017	1.25	1.25	a
138 Aramite Peak 2	185	9.865	9.865	0.000	0	3850	1.25	1.25	a
139 Aramite Peak 3	185	9.906	9.906	0.000	0	55835	5.00	5.00	a
142 Aramite Peak 4	185	9.982	9.982	0.000	0	77509	5.00	5.00	a
* 170 Perylene-d12	264	12.739	12.739	0.000	98	391798	5.00	5.00	
S 177 Aramite, Total	185				0		12.5	12.5	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

MSS_RVAAP_SP_00010 Amount Added: 1.00 Units: mL

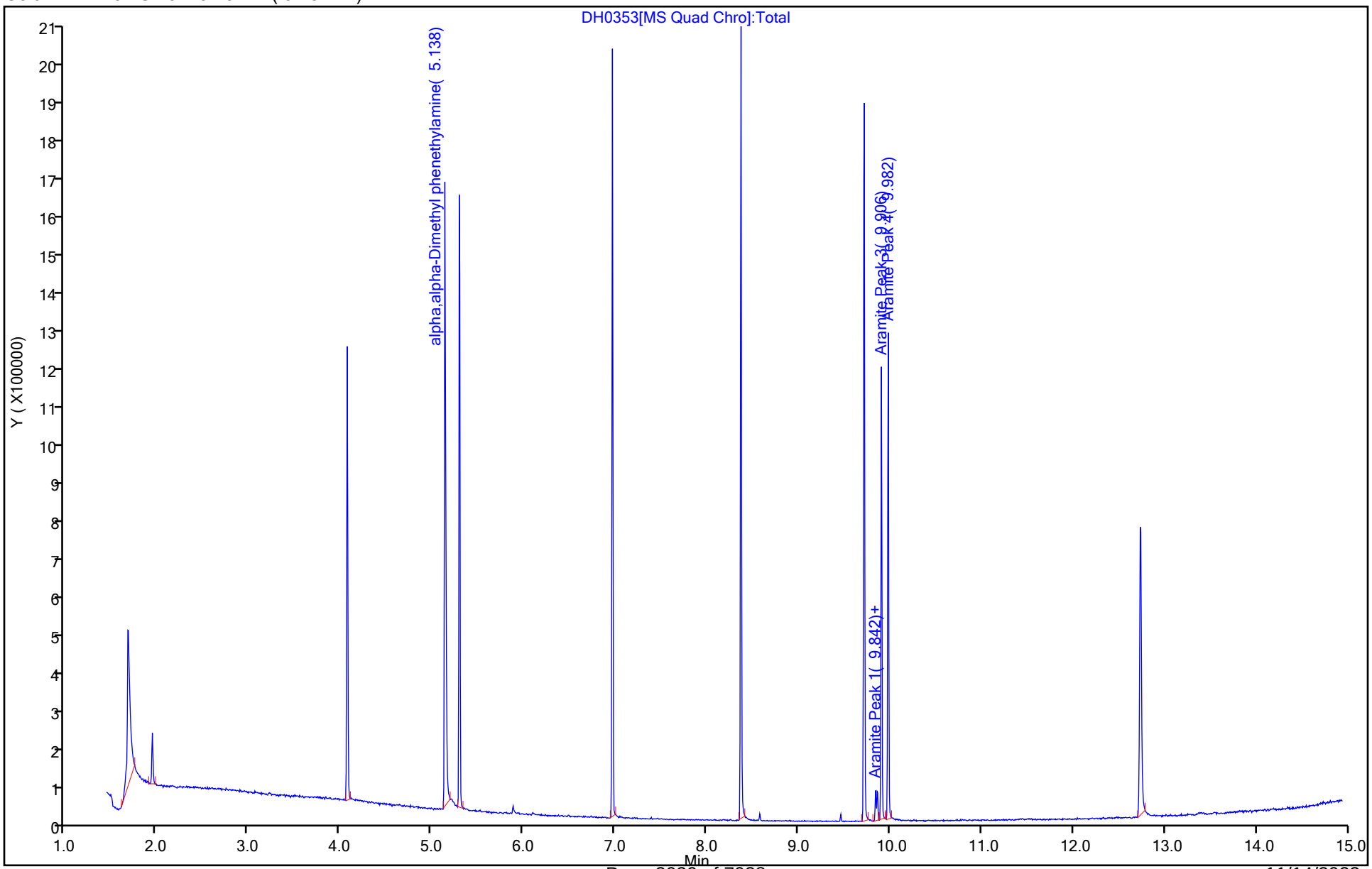
Report Date: 03-Aug-2023 15:49:06 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Injection Date:	03-Aug-2023 15:30:40	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC AAP			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

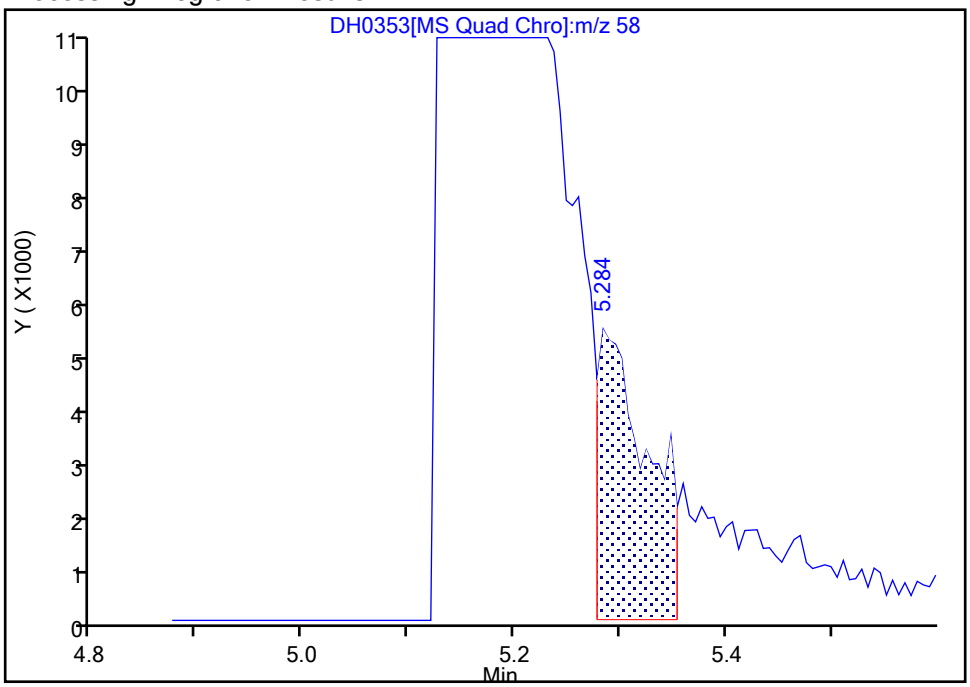
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Injection Date:	03-Aug-2023 15:30:40	Instrument ID:	HP19760		
Lims ID:	IC AAP				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

37 alpha,alpha-Dimethyl phenethylam, CAS: 122-09-8

Signal: 1

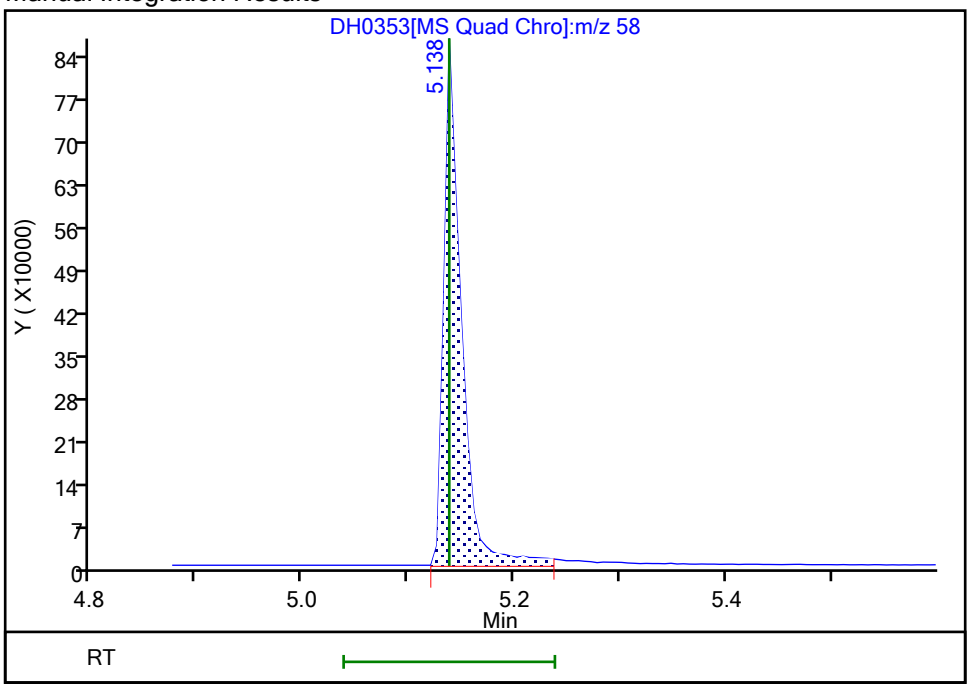
Processing Integration Results

RT: 5.28
Area: 16487
Amount: 12.500000
Amount Units: ug/ml



Manual Integration Results

RT: 5.14
Area: 998240
Amount: 12.500000
Amount Units: ug/ml



Reviewer: P7EB, 03-Aug-2023 15:48:14 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

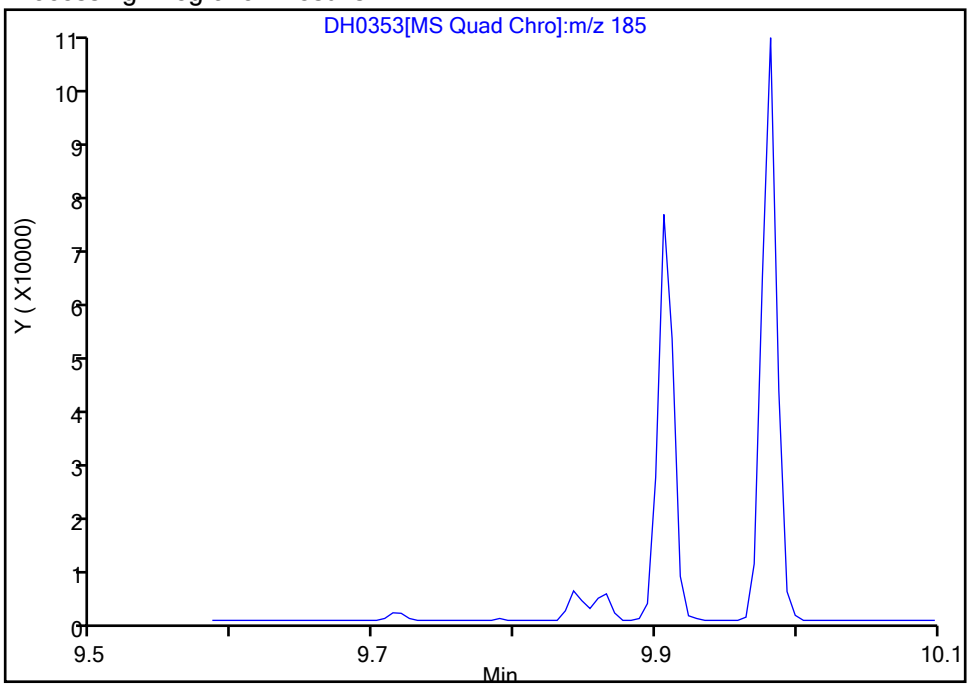
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Injection Date:	03-Aug-2023 15:30:40	Instrument ID:	HP19760		
Lims ID:	IC AAP				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

137 Aramite Peak 1, CAS: STL00690

Signal: 1

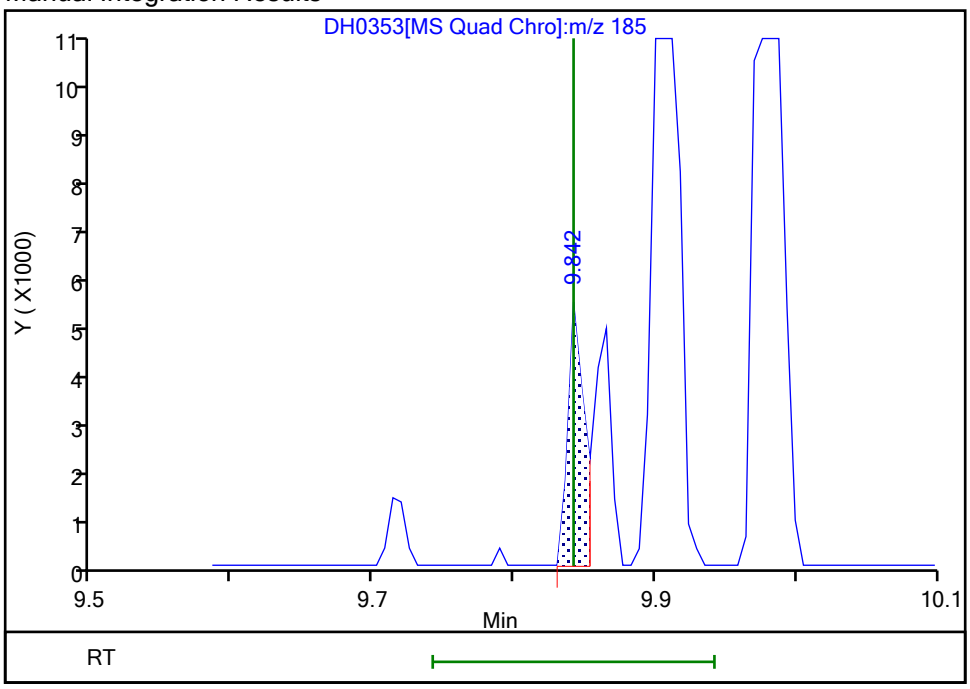
Not Detected
Expected RT: 9.84

Processing Integration Results



Manual Integration Results

RT: 9.84
Area: 4017
Amount: 1.250000
Amount Units: ug/ml



Reviewer: P7EB, 03-Aug-2023 15:48:20 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

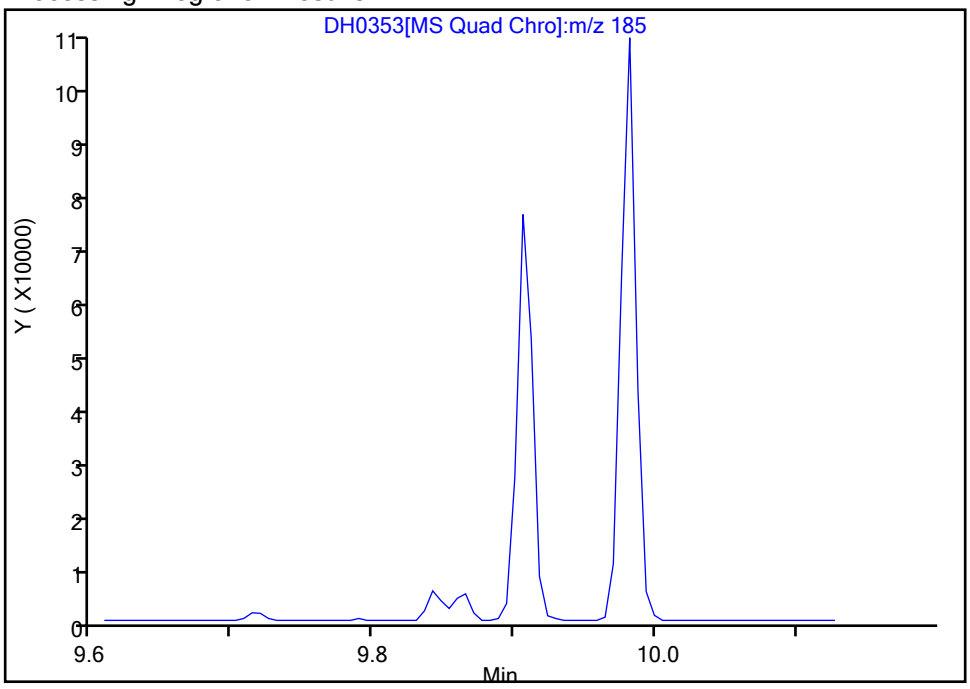
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Injection Date:	03-Aug-2023 15:30:40	Instrument ID:	HP19760		
Lims ID:	IC AAP				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

138 Aramite Peak 2, CAS: STL00691

Signal: 1

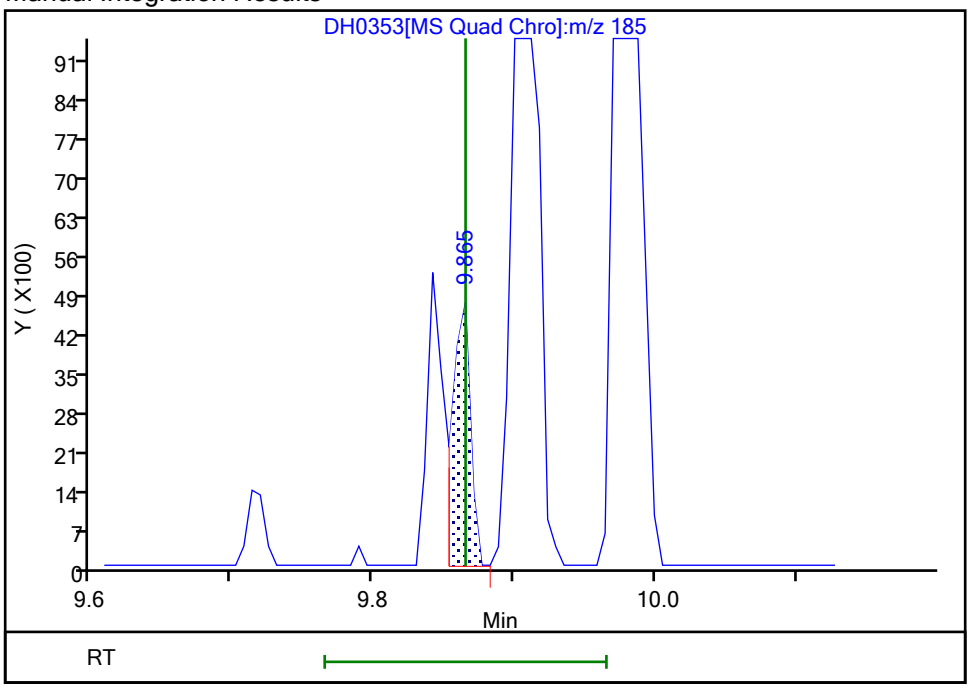
Not Detected
Expected RT: 9.87

Processing Integration Results



Manual Integration Results

RT: 9.87
Area: 3850
Amount: 1.250000
Amount Units: ug/ml



Reviewer: P7EB, 03-Aug-2023 15:48:26 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

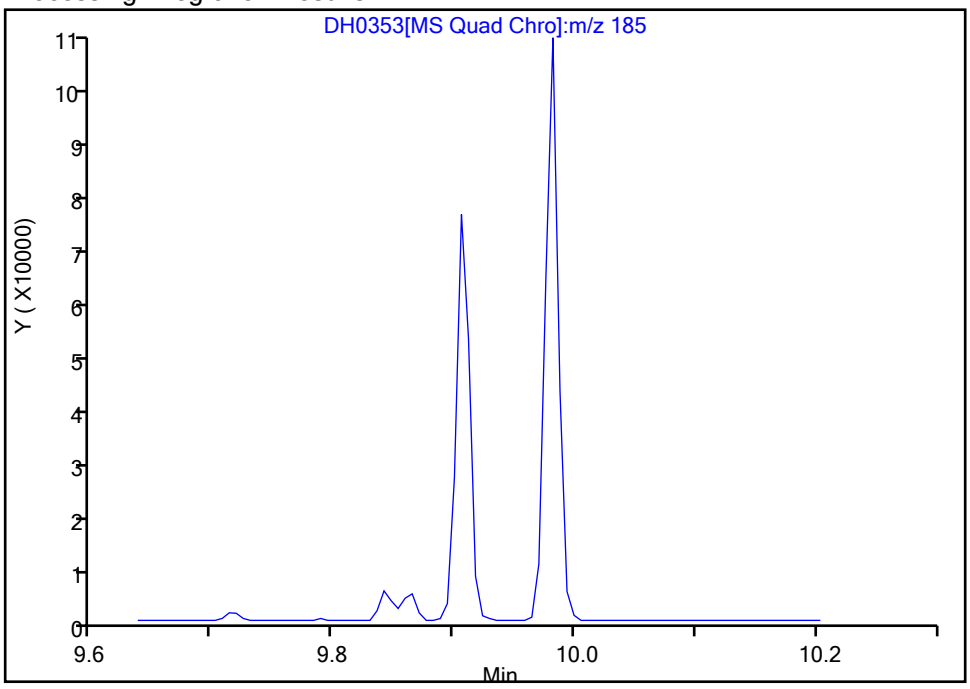
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Injection Date:	03-Aug-2023 15:30:40	Instrument ID:	HP19760		
Lims ID:	IC AAP				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

139 Aramite Peak 3, CAS: STL02688

Signal: 1

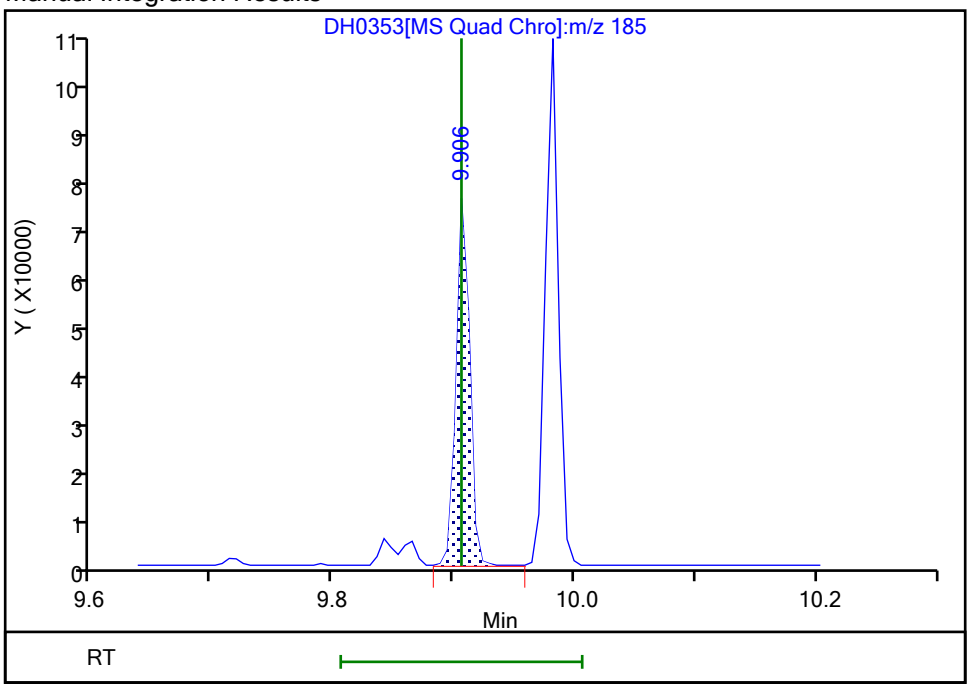
Not Detected
Expected RT: 9.91

Processing Integration Results



Manual Integration Results

RT: 9.91
Area: 55835
Amount: 5.000000
Amount Units: ug/ml



Reviewer: P7EB, 03-Aug-2023 15:48:32 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

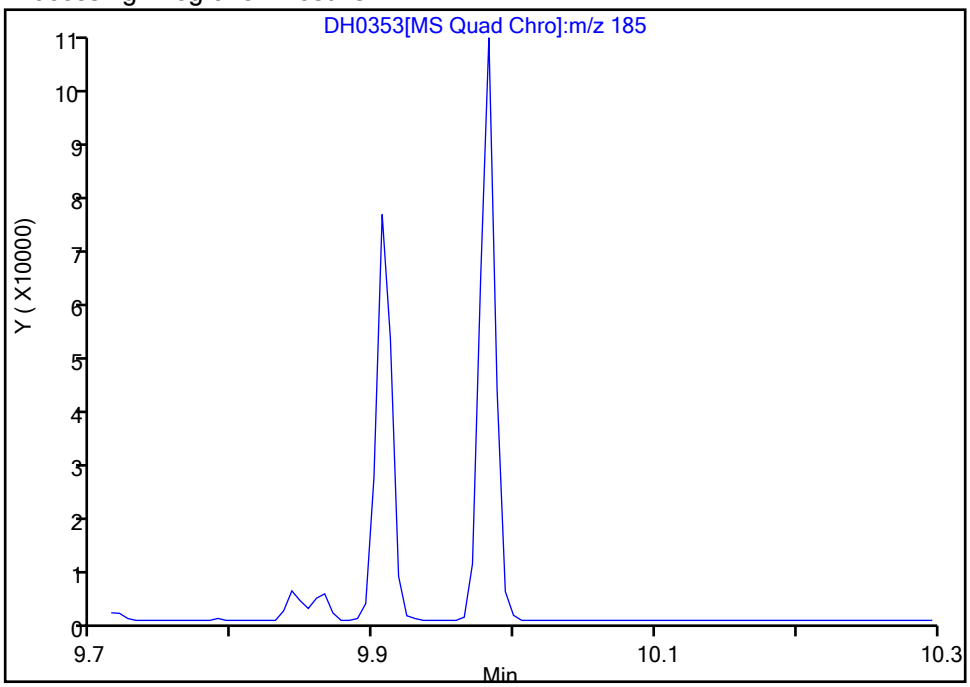
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Injection Date:	03-Aug-2023 15:30:40	Instrument ID:	HP19760		
Lims ID:	IC AAP				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

142 Aramite Peak 4, CAS: STL02689

Signal: 1

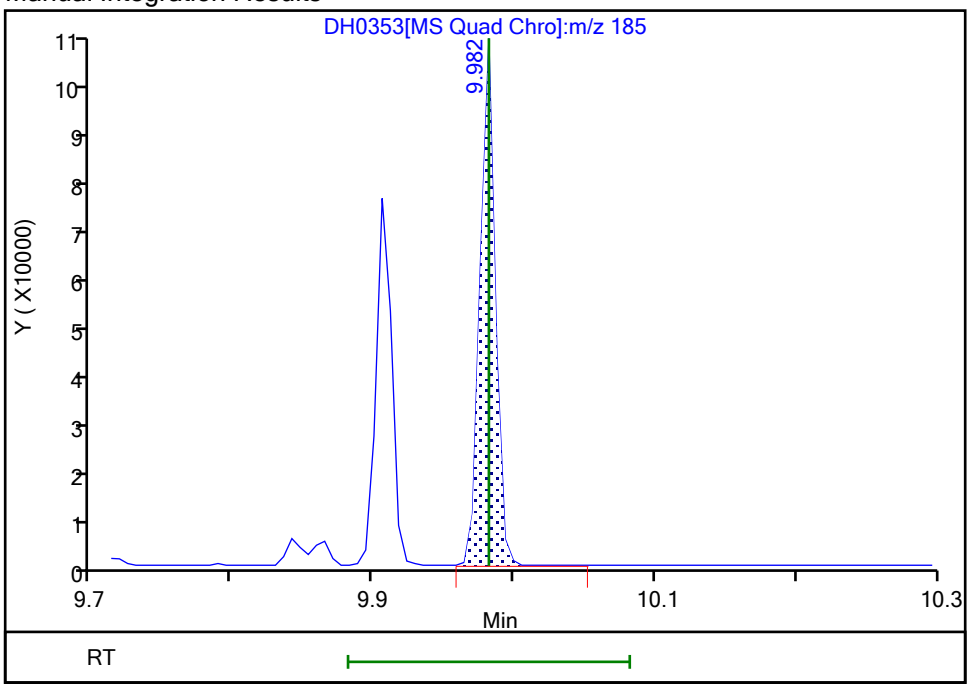
Not Detected
Expected RT: 9.98

Processing Integration Results



Manual Integration Results

RT: 9.98
Area: 77509
Amount: 5.000000
Amount Units: ug/ml



Reviewer: P7EB, 03-Aug-2023 15:48:36 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Calibration / alpha,alpha-Dimethyl phenethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

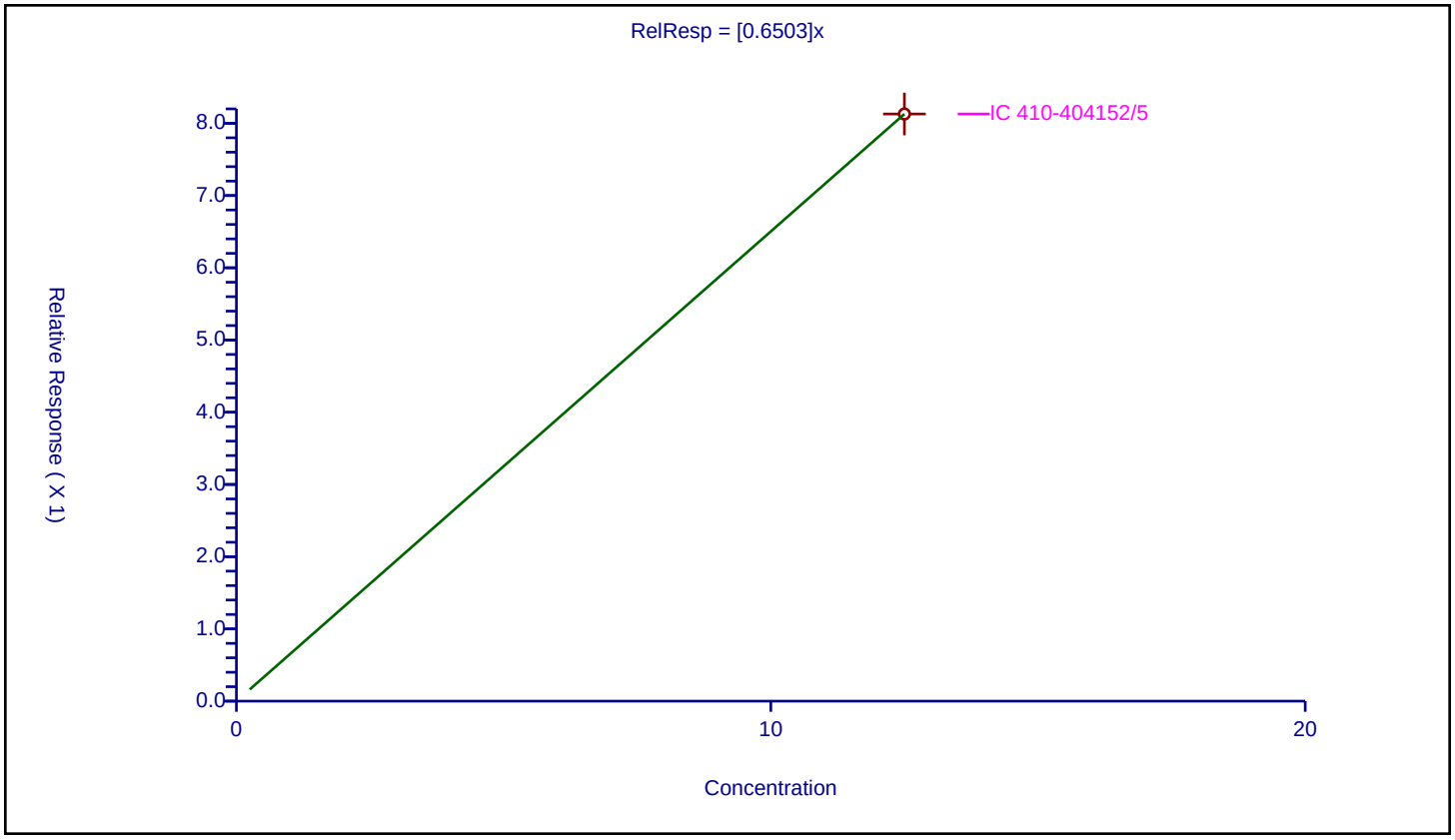
Curve Coefficients

Intercept:	0
Slope:	0.6503

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-404152/5	12.5	8.129255	5.0	613980.0	0.65034	Y



Calibration / Aramite Peak 1

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

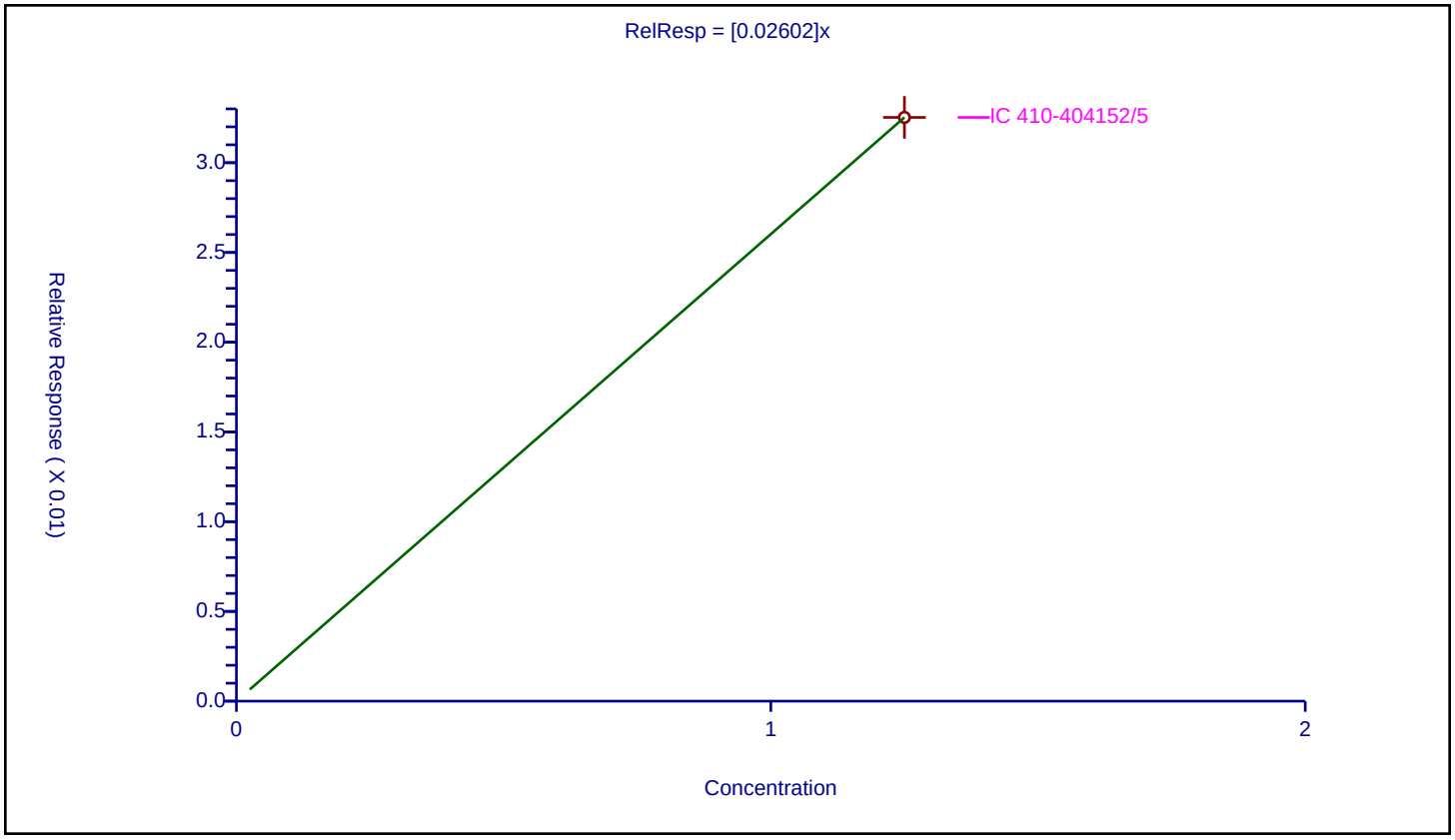
Curve Coefficients

Intercept:	0
Slope:	0.02602

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-404152/5	1.25	0.032526	5.0	617515.0	0.02602	Y



11/14/2023
11:12 AM

Calibration / Aramite Peak 2

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

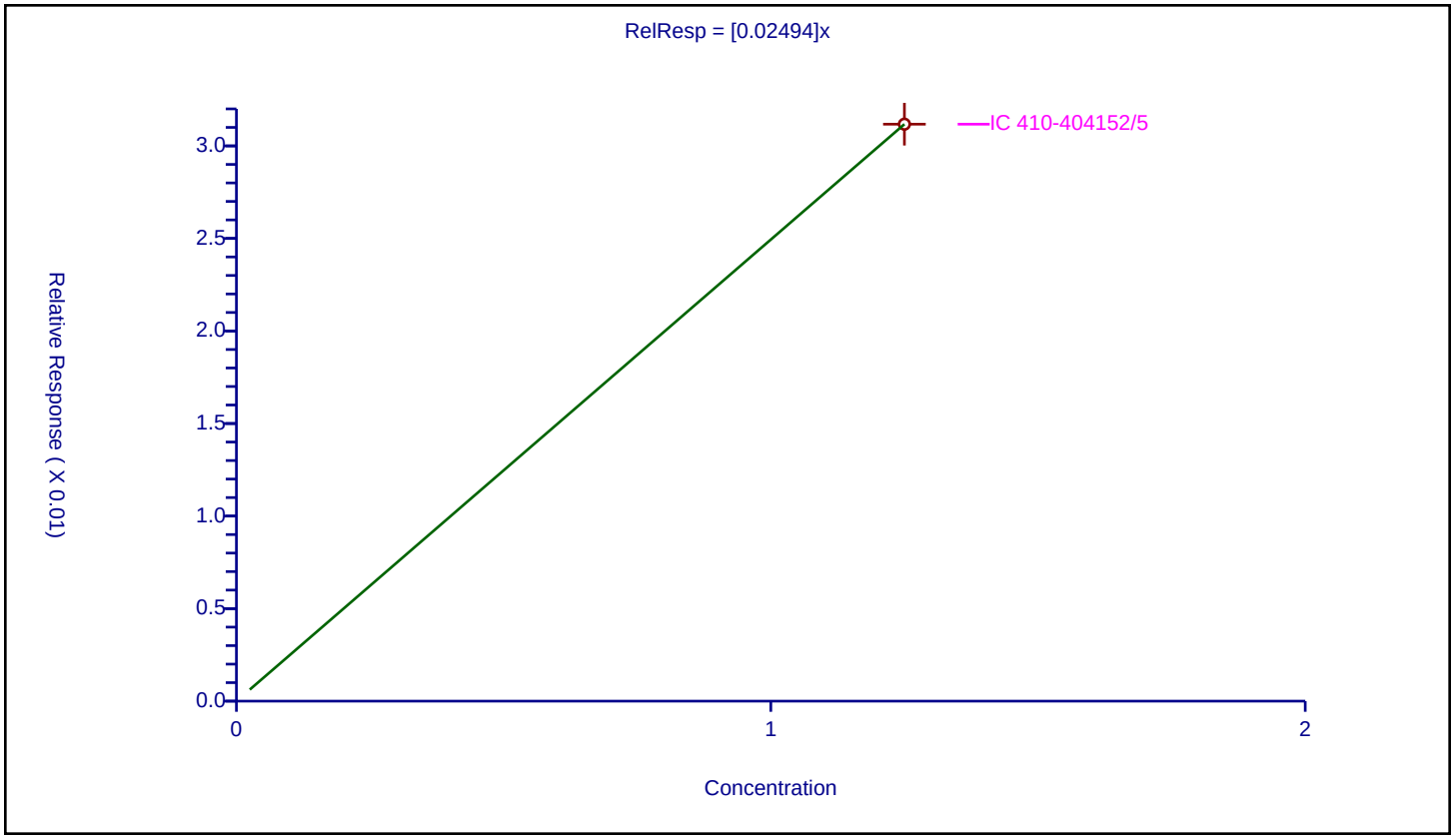
Curve Coefficients

Intercept:	0
Slope:	0.02494

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-404152/5	1.25	0.031173	5.0	617515.0	0.024939	Y



11/14/2023
11:12 AM

Calibration / Aramite Peak 3

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

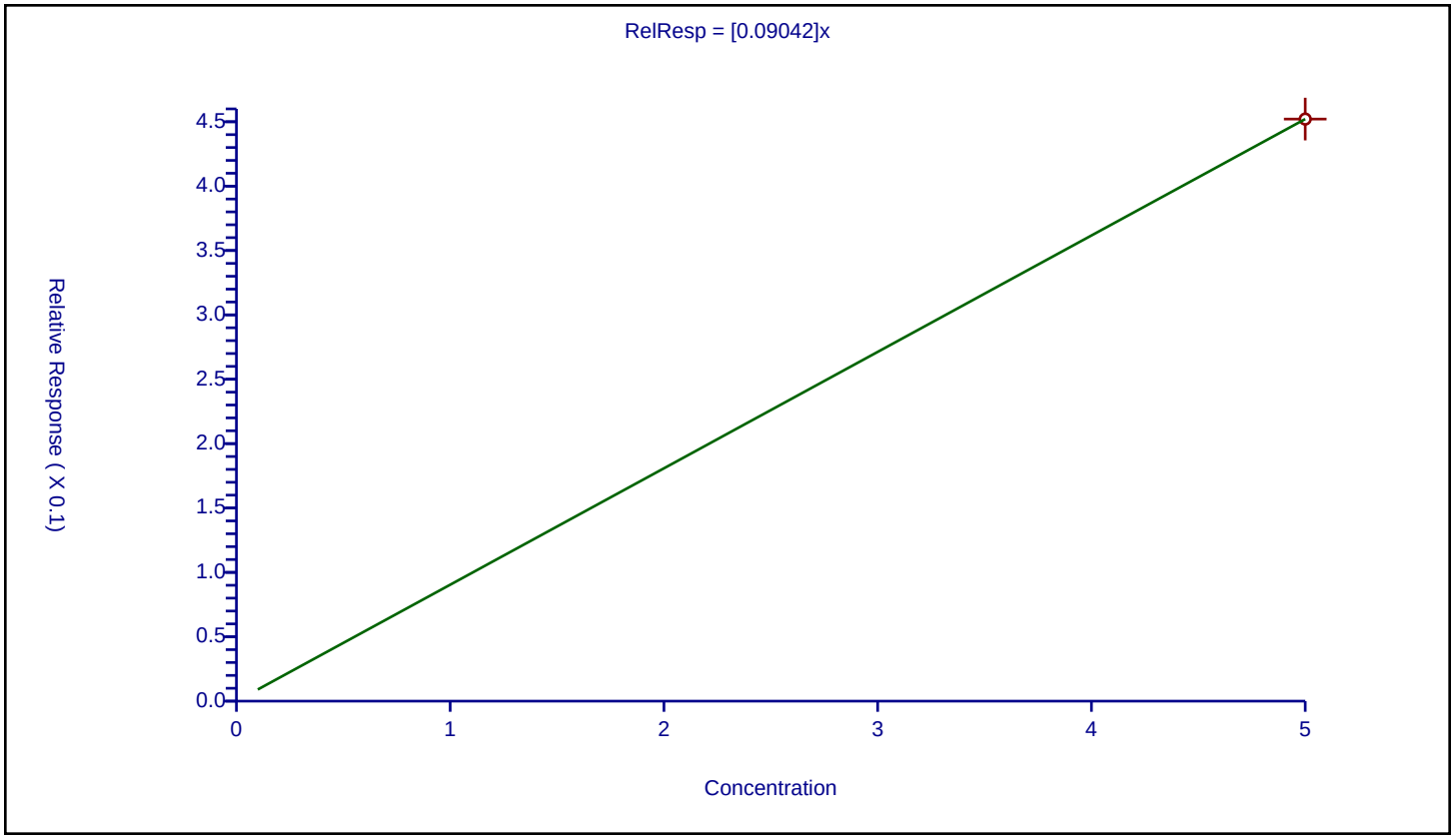
Curve Coefficients

Intercept:	0
Slope:	0.09042

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-404152/5	5.0	0.452094	5.0	617515.0	0.090419	Y



Calibration / Aramite Peak 4

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

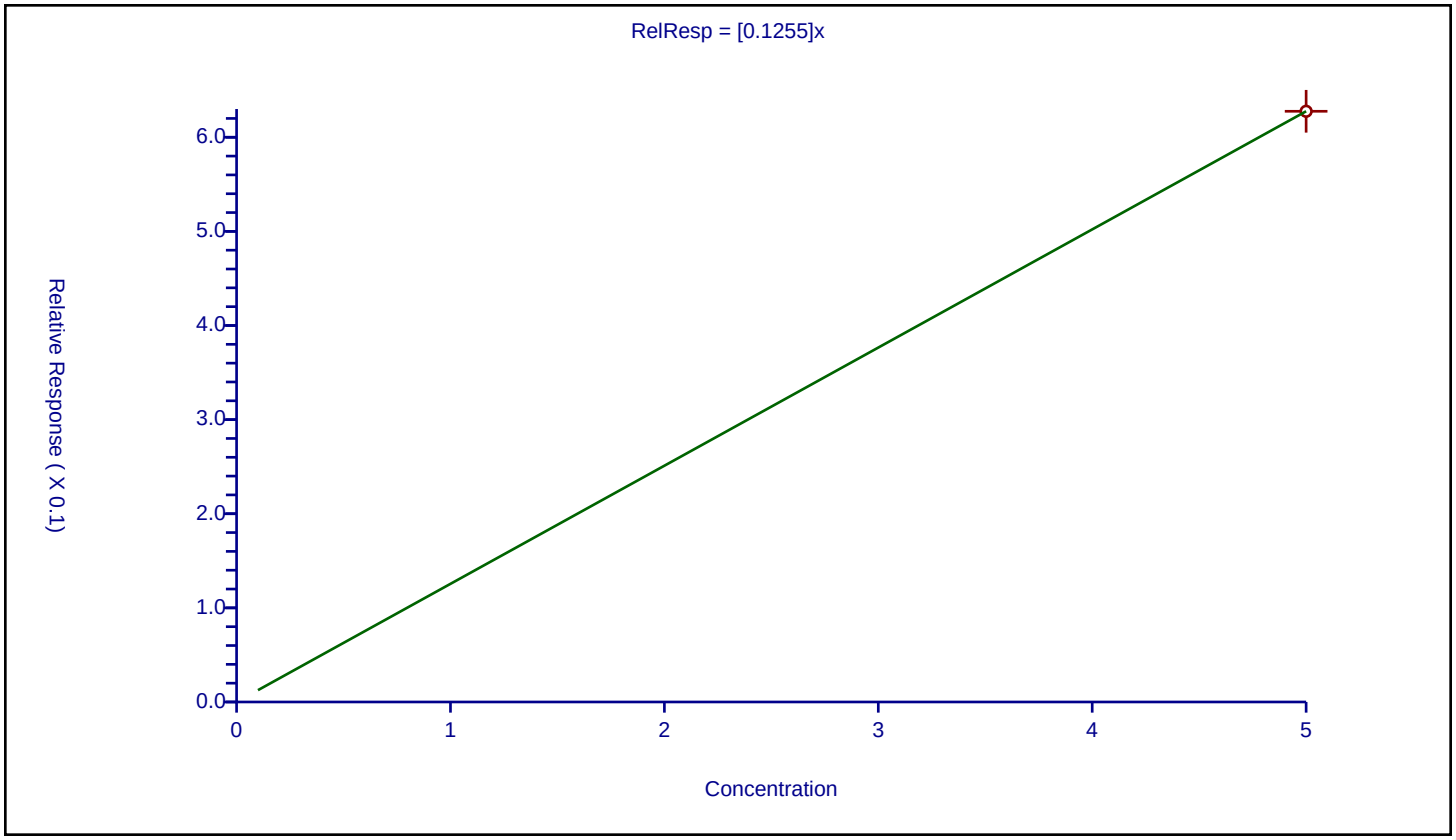
Curve Coefficients

Intercept:	0
Slope:	0.1255

Error Coefficients

Standard Error:	
Relative Standard Error:	0.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-404152/5	5.0	0.627588	5.0	617515.0	0.125518	Y



FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-414994/3	DH3153.D
Level 2	IC 410-414994/9	DH3158.D
Level 3	IC 410-414994/8	DH3157.D
Level 4	IC 410-414994/7	DH3156.D
Level 5	IC 410-414994/6	DH3155.D
Level 6	ICIS 410-414994/2	DH3151.D
Level 7	IC 410-414994/5	DH3154.D
Level 8	IC 410-414994/4	DH3152.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 0.5999	0.6672 0.6072	0.6104 0.6190	0.5880	0.5778	Ave		0.6099				4.7		20.0			
N-Nitrosodimethylamine	1.0282 0.9857	0.7995 0.9650	0.9238 0.9979	0.9475	0.9507	Ave		0.9498				7.3		20.0			
Pyridine	1.7447 1.5560	1.4876 1.5561	1.5078 1.5921	1.5323	1.5085	Ave		1.5606				5.2		20.0			
N,N-dimethylformamide	0.7439 1.0746	0.9605 1.0616	0.9837 1.1039	0.9909	1.0386	Ave		0.9947				11.3		20.0			
2-Picoline	1.6738 1.6476	1.5387 1.6741	1.6456 1.7015	1.6150	1.6211	Ave		1.6397				3.0		20.0			
N-Nitrosomethylethylamine	+++++ 0.7169	+++++ 0.7042	0.6972 0.7192	0.6749	0.6975	Ave		0.7016				2.3		20.0			
Methyl methanesulfonate	0.8635 0.8701	0.7526 0.8594	0.8366 0.8629	0.8403	0.8550	Ave		0.8425				4.5		20.0			
N-Nitrosodiethylamine	0.6916 0.6883	0.5840 0.6902	0.6595 0.7171	0.6641	0.6728	Ave		0.6709				5.9		20.0			
Ethyl methanesulfonate	0.7573 0.7527	0.7240 0.7592	0.7130 0.7783	0.7294	0.7351	Ave		0.7436				2.9		20.0			
Benzaldehyde	1.0403	1.1636 0.7866	1.1732 +++++	1.2625	1.1002	Ave		1.0877			0.0100	15.2		20.0			
Phenol	1.8000 1.9084	1.6137 1.8707	1.8097 1.9306	1.8366	1.8400	Ave		1.8262			0.8000	5.3		20.0			
Aniline	2.5315 2.3126	2.0117 2.2989	2.2002 2.3565	2.2277	2.2562	Ave		2.2744				6.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Bis(2-chloroethyl)ether	1.7903 1.5857	1.4364 1.5314	1.5069 1.5770	1.5121	1.5171	Ave		1.5571			0.7000	6.7		20.0			
2-Chlorophenol	1.3560 1.3869	1.2416 1.3728	1.3007 1.3941	1.3210	1.3288	Ave		1.3377			0.8000	3.8		20.0			
1,3-Dichlorobenzene	1.7525 1.5899	1.4800 1.5801	1.5888 1.6042	1.5640	1.5363	Ave		1.5870				4.9		20.0			
1,4-Dichlorobenzene	1.6996 1.6133	1.6051 1.6087	1.5727 1.6306	1.5725	1.5457	Ave		1.6060				2.9		20.0			
Benzyl alcohol	0.9759 0.9523	0.7542 0.9328	0.8789 0.9619	0.8850	0.8993	Ave		0.9050				7.8		20.0			
1,2-Dichlorobenzene	1.7000 1.5419	1.4357 1.5215	1.5041 1.5460	1.5021	1.4877	Ave		1.5299				5.0		20.0			
2-Methylphenol	1.2829 1.3511	1.1344 1.3309	1.2725 1.3505	1.2764	1.3050	Ave		1.2879			0.7000	5.4		20.0			
2,2'-oxybis[1-chloropropane]	1.7099 1.6842	1.4957 1.5775	1.5483 1.6365	1.5759	1.5681	Ave		1.5995			0.0100	4.5		20.0			
N-Nitrosopyrrolidine	0.7210 0.7806	0.6164 0.7780	0.6972 0.8076	0.7359	0.7569	Ave		0.7367				8.2		20.0			
3,4-Methylphenol	1.2617 1.4092	1.1300 1.3972	1.3120 1.4391	1.3324	1.3759	Ave		1.3322			0.6000	7.5		20.0			
Acetophenone	2.2766 2.1567	1.9861 2.0845	2.0172 2.1462	2.0626	2.0559	Ave		2.0982			0.0100	4.4		20.0			
N-Nitrosodi-n-propylamine	1.1312 1.2126	1.0574 1.1609	1.0944 1.2126	1.1215	1.1358	Ave		1.1408			0.5000	4.7		20.0			
N-Nitrosomorpholine	0.9201 0.8560	0.6927 0.8011	0.7885 0.8337	0.8103	0.8136	Ave		0.8145				7.9		20.0			
o-Toluidine	2.3794 2.3940	1.9539 2.3158	2.1844 2.3872	2.2408	2.2689	Ave		2.2655				6.5		20.0			
Hexachloroethane	0.6355 0.6397	0.5083 0.6421	0.6117 0.6447	0.6334	0.6122	Ave		0.6159			0.3000	7.4		20.0			
Nitrobenzene	0.4505 0.4449	0.4077 0.4524	0.4244 0.4491	0.4413	0.4424	Ave		0.4391			0.2000	3.5		20.0			
N-Nitrosopiperidine	0.1543 0.1857	0.1650 0.1902	0.1719 0.1900	0.1816	0.1908	Ave		0.1787				7.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isophorone	0.8510 0.8290	0.7178 0.8304	0.7610 0.8284	0.7910	0.8241	Ave		0.8041			0.4000	5.6		20.0			
2-Nitrophenol	0.1573 0.1554	0.1021 0.1643	0.1230 0.1688	0.1422	0.1577	Ave		0.1463			0.1000	15.7		20.0			
2,4-Dimethylphenol	0.3353 0.3785	0.3091 0.3798	0.3279 0.3798	0.3537	0.3727	Ave		0.3546			0.2000	7.8		20.0			
o,o',o''-Triethylphosphorothioate	0.2096 0.2062	0.1804 0.2157	0.1954 0.2150	0.2047	0.2096	Ave		0.2046				5.7		20.0			
Bis(2-chloroethoxy)methane	0.5281 0.5178	0.4598 0.5078	0.4770 0.5056	0.4971	0.4962	Ave		0.4987			0.3000	4.4		20.0			
2,4-Dichlorophenol	0.2817 0.3153	0.2482 0.3223	0.2801 0.3196	0.3073	0.3193	Ave		0.2992			0.2000	8.9		20.0			
1,2,4-Trichlorobenzene	0.3997 0.3629	0.3492 0.3675	0.3600 0.3650	0.3685	0.3628	Ave		0.3670				4.0		20.0			
Naphthalene	1.2437 1.0983	1.0471 1.1031	1.0518 1.0795	1.0915	1.0831	Ave		1.0998			0.7000	5.6		20.0			
a-Terpineol	0.2734 0.2984	0.2211 0.3006	0.2526 0.3061	0.2775	0.2894	Ave		0.2774				10.3		20.0			
4-Chloroaniline	0.4459 0.4622	0.4119 0.4666	0.4249 0.4617	0.4506	0.4667	Ave		0.4488			0.0100	4.6		20.0			
2,6-Dichlorophenol	0.3170 0.3189	0.2593 0.3265	0.2821 0.3231	0.3035	0.3181	Ave		0.3061				7.7		20.0			
Hexachloropropene	0.2364 0.2450	0.2272 0.2591	0.2249 0.2593	0.2452	0.2558	Ave		0.2441				5.6		20.0			
Hexachlorobutadiene	0.2339 0.2249	0.2403 0.2317	0.2200 0.2268	0.2253	0.2249	Ave		0.2285			0.0100	2.8		20.0			
Quinoline	0.7125 0.7094	0.6184 0.7167	0.6410 0.7018	0.6786	0.7120	Ave		0.6863				5.4		20.0			
Caprolactam	0.0956	+++++ 0.1079	0.0796 0.1042	0.0971	0.1084	Ave		0.0988			0.0100	11.0		20.0			
N-Nitrosodi-n-butylamine	+++++ 0.3724	+++++ 0.3799	0.3289 0.3757	0.3011	0.3866	Ave		0.3574				9.6		20.0			
1,4-phenylenediamine	0.2415 0.2895	0.2249 0.2365	0.2494 0.2157	0.2825	0.2598	Ave		0.2500				10.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.2840 0.3332	0.2540 0.3362	0.2964 0.3393	0.3173	0.3338	Ave		0.3118			0.2000	9.9		20.0			
Safrole, Total	0.2901 0.2977	0.2482 0.3029	0.2696 0.3017	0.2815	0.2957	Ave		0.2859				6.6		20.0			
2-Methylnaphthalene	0.7275 0.7253	0.6444 0.7219	0.6689 0.7150	0.7041	0.7133	Ave		0.7025			0.4000	4.3		20.0			
1-Methylnaphthalene	0.6745 0.6667	0.6251 0.6706	0.6167 0.6585	0.6527	0.6675	Ave		0.6540				3.3		20.0			
Hexachlorocyclopentadiene	0.3744 0.3670	0.3207 0.3559	0.3662 0.3343	0.3909	0.3730	Ave		0.3603			0.0500	6.3		20.0			
1,2,4,5-Tetrachlorobenzene	0.7975 0.7070	0.6754 0.7289	0.7085 0.7260	0.7216	0.7071	Ave		0.7215			0.0100	4.8		20.0			
Isosafrole Peak 1	0.5622 0.5586	0.6499 0.5709	0.5711 0.5671	0.5542	0.5694	Ave		0.5754				5.3		20.0			
2,4,6-Trichlorophenol	0.2708 0.3878	0.2609 0.4151	0.3253 0.4183	0.3595	0.3897	Ave		0.3534			0.2000	17.5		20.0			
2,4,5-Trichlorophenol	0.3651 0.4496	0.3253 0.4660	0.4025 0.4676	0.4448	0.4397	Ave		0.4201			0.2000	12.3		20.0			
Isosafrole Peak 2	0.6672 0.6150	0.5715 0.6407	0.5867 0.6386	0.6110	0.6071	Ave		0.6172				5.0		20.0			
1,1'-Biphenyl	1.7532 1.5682	1.5496 1.6020	1.5862 1.5925	1.5949	1.5571	Ave		1.6004			0.0100	4.0		20.0			
2-Chloronaphthalene	1.4353 1.3065	1.1513 1.2194	1.3083 1.2533	1.3101	1.2478	Ave		1.2790			0.8000	6.5		20.0			
1-Chloronaphthalene	1.2863 1.0517	1.1889 1.2080	1.0520 1.1636	1.0942	1.1034	Ave		1.1435				7.2		20.0			
Diphenyl ether	0.9348 0.8805	0.8186 0.8946	0.8710 0.8883	0.8820	0.8725	Ave		0.8803				3.6		20.0			
2-Nitroaniline	0.3047 0.3388	0.2758 0.3652	0.2958 0.3673	0.3162	0.3471	Ave		0.3263			0.0100	10.2		20.0			
1,4-Naphthoquinone	0.4360 0.4720	0.3698 0.5049	0.4161 0.4897	0.4643	0.4853	Ave		0.4548				9.9		20.0			
1,3-Dinitrobenzene	0.1106 0.1548	0.1147 0.1750	0.1272 0.1812	0.1451	0.1645	Ave		0.1466				18.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dimethyl phthalate	1.3859 1.3752	1.2957 1.4219	1.3813 1.4033	1.3805	1.3980	Ave		1.3802			0.0100	2.7		20.0			
1,4-Dinitrobenzene	0.1472 0.1968	0.1204 0.2125	0.1558 0.2147	0.1789	0.2051	Ave		0.1789				19.3		20.0			
2,6-Dinitrotoluene	0.2453 0.2822	0.1939 0.2989	0.2524 0.2973	0.2747	0.2889	Ave		0.2667			0.2000	13.2		20.0			
Acenaphthylene	1.9859 1.9080	1.6424 1.9648	1.8072 1.9288	1.8973	1.8992	Ave		1.8792			0.9000	5.8		20.0			
3-Nitroaniline	0.2441 0.3132	0.2263 0.3315	0.2737 0.3258	0.2909	0.3142	Ave		0.2900			0.0100	13.4		20.0			
Acenaphthene	1.4294 1.2558	1.1790 1.2987	1.2445 1.2758	1.2628	1.2415	Ave		1.2734			0.9000	5.6		20.0			
2,4-Dinitrophenol	+++++ 0.1138	+++++ 0.1388	0.0819 0.1499	0.0999	0.1200	Lin1	-0.449	0.1494			0.0100				0.9910		0.9900
4-Nitrophenol	0.1490 0.1982	0.1334 0.2079	0.1677 0.2103	0.1820	0.1960	Ave		0.1805			0.0100	15.6		20.0			
Pentachlorobenzene	0.7472 0.6110	0.6146 0.6404	0.6089 0.6344	0.6146	0.6222	Ave		0.6367				7.2		20.0			
2,4-Dinitrotoluene	0.3065 0.3731	0.2374 0.4040	0.3276 0.4013	0.3580	0.3798	Ave		0.3485			0.2000	16.1		20.0			
Dibenzofuran	1.9513 1.8061	1.7407 1.8339	1.7978 1.8102	1.7745	1.7810	Ave		1.8119			0.8000	3.5		20.0			
1-Naphthylamine	1.0758 1.0895	0.9295 1.1272	1.0229 1.0998	1.0454	1.0661	Ave		1.0570				5.7		20.0			
2,3,4,6-Tetrachlorophenol	0.3078 0.3893	0.2534 0.4155	0.3499 0.4112	0.3801	0.3923	Ave		0.3624			0.0100	15.5		20.0			
2-Naphthylamine	1.1848 1.2248	1.0453 1.2878	1.1664 1.2618	1.2080	1.2235	Ave		1.2003				6.1		20.0			
Diethyl phthalate	1.4130 1.3301	1.1851 1.3776	1.3181 1.3571	1.3299	1.3301	Ave		1.3301			0.0100	5.0		20.0			
Thionazin	0.2576 0.2118	0.1811 0.2259	0.1969 0.2287	0.2114	0.2241	Ave		0.2172				10.5		20.0			
Fluorene	1.4531 1.4392	1.2504 1.4672	1.3840 1.4523	1.4406	1.4243	Ave		1.4139			0.9000	5.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorophenyl-phenyl ether	0.8427 0.7591	0.7247 0.7730	0.7609 0.7722	0.7575	0.7395	Ave		0.7662			0.4000	4.6		20.0			
5-Nitro-o-toluidine	0.3066 0.3615	0.2710 0.3831	0.3138 0.3790	0.3393	0.3641	Ave		0.3398				11.7		20.0			
4-Nitroaniline	0.2718 0.3425	0.2132 0.3540	0.3033 0.3525	0.3243	0.3437	Ave		0.3132			0.0100	15.7		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.0893	+++++ 0.1040	0.0623 0.1107	0.0727	0.0908	Lin2	-0.1766	0.1044			0.0100				0.9920		0.9900
N-Nitrosodiphenylamine	0.6053 0.6180	0.5298 0.6258	0.5887 0.6187	0.6105	0.6153	Ave		0.6015			0.0100	5.2		20.0			
1,2-Diphenylhydrazine	0.8973 0.8442	0.7469 0.8327	0.7904 0.8300	0.8221	0.8215	Ave		0.8232				5.2		20.0			
Sulfotepp	0.1204 0.1246	0.0976 0.1300	0.1164 0.1302	0.1182	0.1249	Ave		0.1203				8.7		20.0			
1,3,5-Trinitrobenzene	+++++ 0.0618	+++++ 0.0705	0.0447 0.0738	0.0528	0.0638	Ave		0.0612				17.8		20.0			
cis-Diallate	0.4053 0.3155	0.3249 0.3198	0.3160 0.3202	0.3018	0.3131	Ave		0.3271				9.9		20.0			
Phorate	0.3555 0.4531	0.2838 0.4549	0.3937 0.4604	0.4201	0.4533	Ave		0.4094				15.3		20.0			
Phenacetin	+++++ 0.3356	+++++ 0.3551	0.2595 0.3540	0.3004	0.3390	Ave		0.3239				11.5		20.0			
4-Bromophenyl-phenylether	0.2517 0.2395	0.2605 0.2422	0.2310 0.2442	0.2406	0.2379	Ave		0.2435			0.1000	3.7		20.0			
trans-Diallate	+++++ 0.3154	+++++ 0.3265	0.3232 0.3210	0.3216	0.3107	Ave		0.3197				1.8		20.0			
Hexachlorobenzene	0.3147 0.2618	0.2761 0.2656	0.2644 0.2654	0.2712	0.2649	Ave		0.2730			0.1000	6.4		20.0			
Dimethoate	+++++ 0.2568	+++++ 0.2697	0.2086 0.2669	0.2391	0.2628	Ave		0.2506				9.3		20.0			
Atrazine	0.1915	0.1409 0.2088	0.1891 0.1858	0.2160	0.2080	Ave		0.1914			0.0100	13.1		20.0			
Pentachlorophenol	+++++ 0.1428	0.0811 0.1522	0.1111 0.1599	0.1262	0.1441	Lin2	-0.0900	0.1502			0.0500				0.9970		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Aminobiphenyl	0.7376 0.8535	0.6729 0.8652	0.7718 0.8542	0.8119	0.8415	Ave		0.8011				8.5		20.0			
Pentachloronitrobenzene	0.0631 0.1026	0.0794 0.1091	0.0897 0.1094	0.0976	0.1036	Ave		0.0943				17.1		20.0			
Pronamide	0.2667 0.3236	0.2442 0.3344	0.2882 0.3360	0.3111	0.3240	Ave		0.3035				11.1		20.0			
Dinoseb	+++++ 0.1178	+++++ 0.1422	0.0744 0.1507	0.0892	0.1205	Lin1	-0.134	0.1464							0.9900		0.9900
Disulfoton	+++++ 0.4563	0.5657 0.4526	0.4606 0.4458	0.4440	0.4553	Ave		0.4686				9.2		20.0			
Phenanthrene	1.2261 1.0884	1.1006 1.0870	1.0798 1.0650	1.0902	1.0884	Ave		1.1032			0.7000	4.6		20.0			
Anthracene	1.1532 1.1299	0.9862 1.1287	1.0888 1.0984	1.1030	1.1182	Ave		1.1008			0.7000	4.6		20.0			
Carbazole	0.9901 0.9724	0.8496 0.9681	0.9322 0.9599	0.9421	0.9601	Ave		0.9468			0.0100	4.6		20.0			
Methyl parathion	+++++ 0.2098	+++++ 0.2220	0.1481 0.2223	0.1806	0.2114	Ave		0.1990				14.7		20.0			
Di-n-butyl phthalate	0.8189 1.1204	0.7350 1.1300	0.9273 1.1158	1.0159	1.0948	Ave		0.9948			0.0100	15.3		20.0			
Parathion	+++++ 0.1304	+++++ 0.1407	0.0893 0.1437	0.1059	0.1295	Ave		0.1232				17.3		20.0			
4-Nitroquinoline-1-oxide	0.0329 0.0801	0.0325 0.0957	0.0457 0.1018	0.0557	0.0789	Qua1	-0.007	0.0650	0.0013079						0.9970		0.9900
Octachlorostyrene	0.1139 0.1055	0.1117 0.1100	0.1091 0.1082	0.1034	0.1052	Ave		0.1084				3.3		20.0			
Isodrin	0.1913 0.1288	0.1250 0.1286	0.1255 0.1289	0.1249	0.1303	Ave		0.1354				16.8		20.0			
Fluoranthene	1.1644 1.2290	1.0561 1.2496	1.1708 1.2088	1.1814	1.2210	Ave		1.1851			0.6000	5.1		20.0			
Benzidine	+++++ 0.7204	+++++ 0.7148	0.5556 0.6487	0.6801	0.7006	Ave		0.6700				9.2		20.0			
Pyrene	1.4369 1.2249	1.2216 1.2302	1.2069 1.1790	1.2148	1.1879	Ave		1.2378			0.6000	6.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
p-Dimethylamino azobenzene	+++++ 0.2104	0.1213 0.2233	0.1614 0.2163	0.1865	0.2043	Ave		0.1891				19.3		20.0			
Chlorobenzilate	+++++ 0.3142	0.1807 0.3299	0.2412 0.3288	0.2709	0.3049	Ave		0.2815				19.5		20.0			
3,3'-Dimethylbenzidine	+++++ 0.6604	+++++ 0.6616	0.4859 0.6588	0.5916	0.6401	Ave		0.6164				11.2		20.0			
Butylbenzylphthalate	+++++ 0.4249	+++++ 0.4509	0.2999 0.4528	0.3674	0.4242	Ave		0.4034			0.0100	14.7		20.0			
2-Acetylaminofluorene	+++++ 0.3287	0.1158 0.3708	0.1786 0.3870	0.2421	0.3278	Qua2	-0.035	0.2453	0.0055866						0.9900		0.9900
3,3'-Dichlorobenzidine	+++++ 0.4352	+++++ 0.4594	0.3517 0.4501	0.3914	0.4275	Ave		0.4192			0.0100	9.7		20.0			
4,4'-Methylene bis(2-chloroaniline)	+++++ 0.2295	+++++ 0.2407	0.1870 0.2395	0.2084	0.2278	Ave		0.2222				9.4		20.0			
Benzo[a]anthracene	0.9336 1.1516	0.8114 1.1813	1.0143 1.1474	1.0975	1.1160	Ave		1.0566			0.8000	12.1		20.0			
Chrysene	0.9690 1.0864	0.9073 1.1047	1.0175 1.0661	1.0541	1.0738	Ave		1.0349			0.7000	6.5		20.0			
Bis(2-ethylhexyl) phthalate	+++++ 0.6128	+++++ 0.6483	0.4040 0.6607	0.4989	0.5775	Ave		0.5670			0.0100	17.4		20.0			
6-Methylchrysene	0.5844 0.7661	0.5294 0.8000	0.6598 0.7948	0.7010	0.7479	Ave		0.6979				14.3		20.0			
Di-n-octyl phthalate	+++++ 1.0514	+++++ 1.1568	0.5824 1.2188	0.8075	0.9822	Lin2	-0.752	1.1375			0.0100				0.9920		0.9900
7,12-Dimethylbenz(a)anthracene	0.3922 0.5254	0.3274 0.5806	0.4373 0.5908	0.4969	0.5166	Ave		0.4834				19.0		20.0			
Benzo[b]fluoranthene	1.1403 1.2611	0.9478 1.3262	1.1724 1.3690	1.2486	1.2867	Ave		1.2190			0.7000	10.9		20.0			
Benzo[k]fluoranthene	1.2494 1.3557	1.0937 1.4099	1.2289 1.3590	1.3007	1.2796	Ave		1.2846			0.7000	7.6		20.0			
Benzo[a]pyrene	0.8905 1.0833	0.7100 1.1535	0.9182 1.1459	0.9971	1.0345	Ave		0.9916			0.7000	15.0		20.0			
3-Methylcholanthrene	+++++ 0.4850	+++++ 0.5291	0.3679 0.5436	0.4389	0.4735	Ave		0.4730				13.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibenz[a,h]acridine	+++++ 0.7974	+++++ 0.8804	0.6366 0.8997	0.7442	0.7874	Ave		0.7910				12.1		20.0			
Dibenz[a,j]acridine	0.7621 0.9646	0.5291 1.0383	0.8160 1.0672	0.9066	0.9223	Ave		0.8758				19.8		20.0			
Indeno[1,2,3-cd]pyrene	0.6393 0.8989	0.5691 0.9719	0.7503 1.0051	0.8364	0.8815	Ave		0.8191			0.5000	18.9		20.0			
Dibenz(a,h)anthracene	0.8123 1.0726	0.6876 1.1312	0.8946 1.1698	0.9939	1.0405	Ave		0.9753			0.4000	17.0		20.0			
Benzo[g,h,i]perylene	0.9115 1.0538	0.7433 1.1180	0.9274 1.1430	0.9986	1.0361	Ave		0.9915			0.5000	13.0		20.0			
2-Fluorophenol (Surr)	1.6571 1.6094	1.3790 1.6382	1.5555 1.6684	1.5841	1.5770	Ave		1.5836				5.8		20.0			
Phenol-d5 (Surr)	2.1478 2.1830	1.6756 2.1489	2.0100 2.1959	2.0476	2.0988	Ave		2.0635				8.2		20.0			
Nitrobenzene-d5 (Surr)	0.5177 0.5113	0.4515 0.5185	0.4712 0.5172	0.5012	0.5079	Ave		0.4995				5.0		20.0			
2-Fluorobiphenyl (Surr)	1.8256 1.6631	1.6035 1.6598	1.6437 1.5785	1.6903	1.6530	Ave		1.6647				4.4		20.0			
2,4,6-Tribromophenol (Surr)	0.2160 0.2613	0.1883 0.2893	0.2454 0.2876	0.2555	0.2705	Ave		0.2517				13.8		20.0			
p-Terphenyl-d14 (Surr)	1.0435 1.0540	0.9272 1.0312	1.0161 0.9046	1.0470	1.0548	Ave		1.0098				5.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1 | Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 | GC Column: DB-5MS 30m ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 | Calibration End Date: 08/31/2023 19:21 | Calibration ID: 53326

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-414994/3	DH3153.D
Level 2	IC 410-414994/9	DH3158.D
Level 3	IC 410-414994/8	DH3157.D
Level 4	IC 410-414994/7	DH3156.D
Level 5	IC 410-414994/6	DH3155.D
Level 6	ICIS 410-414994/2	DH3151.D
Level 7	IC 410-414994/5	DH3154.D
Level 8	IC 410-414994/4	DH3152.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCBd4	Ave	+++++ 264100	5812 405808	30335 600189	66383	175594	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodimethylamine	DCBd4	Ave	4271 433977	6965 644941	45906 967609	106966	288924	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pyridine	DCBd4	Ave	14495 1370141	25917 2079913	149858 3087499	345956	916846	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
N,N-dimethylformamide	DCBd4	Ave	3090 473096	8367 709467	48885 1070414	111865	315622	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Picoline	DCBd4	Ave	6953 725371	13404 1118864	81778 1649885	182316	492648	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomethylethylamine	DCBd4	Ave	+++++ 315623	+++++ 470609	34648 697414	76184	211964	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Methyl methanesulfonate	DCBd4	Ave	3587 383075	6556 574369	41574 836694	94859	259822	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodiethylamine	DCBd4	Ave	2873 303054	5087 461254	32774 695307	74970	204451	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Ethyl methanesulfonate	DCBd4	Ave	3146 331384	6307 507396	35431 754651	82347	223383	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzaldehyde	DCBd4	Ave	 458027	10136 525722	58302 +++++	142526	334363	 12.5	0.250 20.0	1.25 +++++	3.75	7.50
Phenol	DCBd4	Ave	7477 840236	14057 1250267	89933 1872037	207331	559181	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Aniline	DCBd4	Ave	10516 1018193	17524 1536399	109340 2285015	251479	685664	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethyl)ether	DCBd4	Ave	7437 698143	12513 1023500	74883 1529191	170704	461041	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chlorophenol	DCBd4	Ave	5633 610611	10816 917454	64638 1351755	149122	403822	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dichlorobenzene	DCBd4	Ave	7280	12893	78953	176562	466866	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			699979	1056016	1555514			12.5	20.0	30.0		
1,4-Dichlorobenzene	DCBd4	Ave	7060 710283	13982 1075113	78154 1581149	177522	469727	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzyl alcohol	DCBd4	Ave	4054 419262	6570 623399	43677 932706	99902	273308	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,2-Dichlorobenzene	DCBd4	Ave	7062 678862	12507 1016882	74747 1499063	169566	452123	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Methylphenol	DCBd4	Ave	5329 594839	9882 889447	63237 1309472	144096	396592	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,2'-oxybis[1-chloropropane]	DCBd4	Ave	7103 741520	13029 1054294	76944 1586851	177900	476543	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopyrrolidine	DCBd4	Ave	2995 343668	5370 519991	34645 783073	83077	230019	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,4-Methylphenol	DCBd4	Ave	5241 620420	9844 933814	65200 1395406	150414	418134	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acetophenone	DCBd4	Ave	9457 949554	17301 1393131	100245 2081091	232843	624786	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-propylamine	DCBd4	Ave	4699 533874	9211 775888	54388 1175843	126606	345159	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomorpholine	DCBd4	Ave	3822 376879	6034 535387	39185 808435	91474	247245	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o-Toluidine	DCBd4	Ave	9884 1054014	17021 1547717	108553 2314712	252963	689523	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloroethane	DCBd4	Ave	2640 281622	4428 429157	30399 625138	71501	186038	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Nitrobenzene	NPT	Ave	6924 741908	12823 1107986	78521 1647267	182409	491599	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopiperidine	NPT	Ave	2372 309578	5191 465831	31796 697066	75067	211984	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isophorone	NPT	Ave	13079 1382301	22577 2033608	140796 3038787	326973	915786	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitrophenol	NPT	Ave	2418 259097	3211 402268	22761 619140	58767	175243	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dimethylphenol	NPT	Ave	5153 631133	9722 930071	60663 1393296	146210	414124	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o,o',o''-Triethylphosphorothioate	NPT	Ave	3221 343859	5673 528218	36161 788755	84613	232872	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethoxy)methane	NPT	Ave	8116 863415	14462 1243698	88249 1854583	205479	551374	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dichlorophenol	NPT	Ave	4330	7808	51824	127011	354771	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			525750	789287	1172287			12.5	20.0	30.0		
1,2,4-Trichlorobenzene	NPT	Ave	6142 605159	10983 900041	66603 1338889	152342	403177	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Naphthalene	NPT	Ave	19114 1831383	32935 2701606	194596 3960077	451166	1203595	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
a-Terpineol	NPT	Ave	4202 497619	6954 736131	46744 1122843	114724	321608	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloroaniline	NPT	Ave	6852 770663	12955 1142741	78607 1693468	186271	518555	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dichlorophenol	NPT	Ave	4871 531755	8155 799515	52197 1185110	125467	353461	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloropropene	NPT	Ave	3633 408529	7147 634472	41613 951089	101352	284245	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorobutadiene	NPT	Ave	3595 374935	7559 567527	40703 831829	93146	249892	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Quinoline	NPT	Ave	10950 1182878	19451 1755122	118598 2574315	280500	791222	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Caprolactam	NPT	Ave	 159466	+++++ 264171	14720 382134	40122	120409	 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-butylamine	NPT	Ave	+++++ 621003	+++++ 930450	60844 1378218	124457	429556	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
1,4-phenylenediamine	NPT	Ave	3711 482682	7073 579200	46152 791252	116773	288729	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloro-3-methylphenol	NPT	Ave	4364 555657	7989 823328	54845 1244523	131153	370911	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Safrole, Total	NPT	Ave	4459 496381	7807 741752	49885 1106749	116363	328601	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Methylnaphthalene	NPT	Ave	11181 1209433	20268 1767870	123751 2622760	291034	792658	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Methylnaphthalene	NPT	Ave	10366 1111731	19662 1642358	114092 2415477	269799	741703	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorocyclopentadiene	ANT	Ave	3259 369212	5736 513489	38794 719195	94638	252126	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,2,4,5-Tetrachlorobenzene	ANT	Ave	6942 711276	12082 1051682	75064 1561823	174701	477960	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isosafrole Peak 1	ANT	Ave	783 89916	1860 131812	9681 195206	21467	61583	0.0200 2.00	0.0400 3.20	0.200 4.80	0.600	1.20
2,4,6-Trichlorophenol	ANT	Ave	2357 390132	4667 598893	34467 899811	87021	263432	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4,5-Trichlorophenol	ANT	Ave	3178	5819	42649	107676	297199	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			452353	672389	1006055			12.5	20.0	30.0		
Isosafrole Peak 2	ANT	Ave	4878 519701	8587 776598	52216 1154001	124255	344701	0.105 10.5	0.210 16.8	1.05 25.2	3.15	6.30
1,1'-Biphenyl	ANT	Ave	15260 1577667	27718 2311536	168053 3425948	386111	1052533	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chloronaphthalene	ANT	Ave	12493 1314449	20594 1759554	138609 2696235	317150	843501	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Chloronaphthalene	ANT	Ave	11196 1058077	21267 1743045	111458 2503325	264897	745877	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diphenyl ether	ANT	Ave	8137 885879	14642 1290894	92275 1910959	213511	589777	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitroaniline	ANT	Ave	2652 340852	4934 526917	31338 790113	76538	234628	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Naphthoquinone	ANT	Ave	3795 474889	6615 728519	44085 1053467	112393	328021	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dinitrobenzene	ANT	Ave	963 155706	2051 252476	13478 389719	35121	111213	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dimethyl phthalate	ANT	Ave	12063 1383571	23177 2051770	146350 3019045	334196	945018	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Dinitrobenzene	ANT	Ave	1281 197997	2153 306597	16511 461812	43303	138663	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dinitrotoluene	ANT	Ave	2135 283887	3469 431284	26746 639660	66490	195260	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthylene	ANT	Ave	17286 1919549	29378 2835052	191469 4149392	459310	1283792	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Nitroaniline	ANT	Ave	2125 315076	4048 478349	28994 700901	70412	212395	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthene	ANT	Ave	12442 1263381	21089 1873914	131847 2744599	305720	839186	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrophenol	ANT	Lin1	+++++ 228994	+++++ 400613	34729 644857	72551	189232	+++++ 25.0	+++++ 40.0	5.00 60.0	11.3	17.5
4-Nitrophenol	ANT	Ave	7780 398857	14315 599887	53299 904810	88112	264917	0.750 25.0	1.50 40.0	3.75 60.0	7.50	15.0
Pentachlorobenzene	ANT	Ave	6504 614757	10994 924122	64513 1364821	148776	420583	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrotoluene	ANT	Ave	2668 375388	4247 582992	34704 863283	86656	256709	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenzofuran	ANT	Ave	16985 1817057	31136 2646126	190475 3894405	429579	1203932	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Naphthylamine	ANT	Ave	9364	16626	108372	253081	720671	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			1096139	1626533	2366011			12.5	20.0	30.0		
2,3,4,6-Tetrachlorophenol	ANT	Ave	2679 391656	4533 599529	37073 884679	92028	265161	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Naphthylamine	ANT	Ave	10313 1232249	18698 1858228	123575 2714555	292444	827055	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diethyl phthalate	ANT	Ave	12299 1338150	21199 1987706	139649 2919609	321964	899130	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Thionazin	ANT	Ave	2242 213109	3240 326001	20857 492099	51176	151493	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluorene	ANT	Ave	12648 1447974	22366 2117110	146635 3124452	348746	962755	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chlorophenyl-phenyl ether	ANT	Ave	7335 763686	12964 1115395	80610 1661272	183386	499852	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
5-Nitro-o-toluidine	ANT	Ave	2669 363663	4847 552800	33246 815400	82142	246117	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitroaniline	ANT	Ave	2366 344585	3814 510850	32133 758377	78518	232310	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,6-Dinitro-2-methylphenol	PHN	Lin2	+++++ 353097	+++++ 601931	39909 946506	70110	243040	+++++ 25.0	+++++ 40.0	3.75 60.0	7.50	15.0
N-Nitrosodiphenylamine	PHN	Ave	8857 1038305	16094 1539199	106860 2249018	250179	700218	0.106 10.6	0.213 17.0	1.06 25.5	3.19	6.38
1,2-Diphenylhydrazine	PHN	Ave	15448 1668722	26693 2409529	168785 3549739	396372	1099957	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Sulfotepp	PHN	Ave	2073 246357	3489 376199	24848 556684	57000	167200	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3,5-Trinitrobenzene	PHN	Ave	+++++ 122170	+++++ 203962	9551 315634	25442	85449	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
cis-Diallate	PHN	Ave	5163 461451	8592 684790	49931 1013291	107671	310242	0.0925 9.25	0.185 14.8	0.925 22.2	2.78	5.55
Phorate	PHN	Ave	6121 895558	10141 1316277	84074 1968900	202561	606990	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenacetin	PHN	Ave	+++++ 663400	+++++ 1027418	55416 1513886	144817	453881	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
4-Bromophenyl-phenylether	PHN	Ave	4334 473367	9309 700857	49336 1044442	116014	318534	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
trans-Diallate	PHN	Ave	+++++ 162100	+++++ 245652	17943 356972	40312	108145	+++++ 3.25	+++++ 5.20	0.325 7.80	0.975	1.95
Hexachlorobenzene	PHN	Ave	5418 517435	9866 768638	56466 1134940	130756	354628	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dimethoate	PHN	Ave	+++++	+++++	44549	115279	351822	+++++	+++++	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			507573	780402	1141367			12.5	20.0	30.0		
Atrazine	PHN	Ave	378585	5034 604138	40392 794726	104130	278509	12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachlorophenol	PHN	Lin2	+++++ 564640	14490 880870	47451 1367551	121675	385817	+++++ 25.0	1.25 40.0	2.50 60.0	7.50	15.0
4-Aminobiphenyl	PHN	Ave	12699 1687038	24048 2503510	164806 3653042	391431	1126768	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachloronitrobenzene	PHN	Ave	1086 202830	2839 315798	19153 467703	47039	138700	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pronamide	PHN	Ave	4592 639569	8728 967734	61548 1436948	150010	433769	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dinoseb	PHN	Lin1	+++++ 232852	+++++ 411610	15883 644485	43009	161403	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Disulfoton	PHN	Ave	+++++ 901914	20219 1309661	98367 1906483	214042	609571	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenanthrene	PHN	Ave	21109 2151302	39335 3145506	230586 4554670	525585	1457314	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Anthracene	PHN	Ave	19853 2233348	35244 3266022	232520 4697365	531775	1497254	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Carbazole	PHN	Ave	17045 1921969	30364 2801315	199063 4105292	454219	1285547	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Methyl parathion	PHN	Ave	+++++ 414706	+++++ 642455	31616 950748	87088	283061	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Di-n-butyl phthalate	PHN	Ave	14098 2214515	26269 3269945	198029 4771779	489779	1465915	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Parathion	PHN	Ave	+++++ 257683	+++++ 407244	19077 614622	51042	173343	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
4-Nitroquinoline-1-oxide	PHN	Qua1	567 158397	1160 277014	9756 435490	26873	105666	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Octachlorostyrene	PHN	Ave	1961 208524	3991 318166	23302 462645	49868	140874	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isodrin	PHN	Ave	3294 254590	4469 372070	26790 551394	60196	174429	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluoranthene	PHN	Ave	20046 2429252	37745 3615874	250011 5169600	569594	1634814	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzidine	PYR10	Ave	+++++ 4588031	+++++ 6629510	389244 8949766	1060488	3086251	+++++ 37.5	+++++ 60.0	3.75 90.0	11.3	22.5
Pyrene	PYR10	Ave	26696 2600566	47610 3803346	281830 5422104	631402	1744216	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
p-Dimethylamino azobenzene	PYR10	Ave	+++++	4729	37686	96957	299934	+++++	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			446780	690314	994645			12.5	20.0	30.0		
Chlorobenzilate	PYR10	Ave	+++++ 667099	7041 1019953	56330 1511899	140791	447657	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,3'-Dimethylbenzidine	PYR10	Ave	+++++ 1402147	+++++ 2045398	113463 3029740	307475	939862	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Butylbenzylphthalate	PYR10	Ave	+++++ 902163	+++++ 1394089	70027 2082096	190956	622915	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2-Acetylaminofluorene	PYR10	Qua2	+++++ 697865	4514 1146316	41713 1779524	125814	481324	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,3'-Dichlorobenzidine	PYR10	Ave	+++++ 924012	+++++ 1420319	82126 2070078	203453	627741	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
4,4'-Methylene bis(2-chloroaniline)	PYR10	Ave	+++++ 487335	+++++ 744235	43666 1101553	108293	334426	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Benzo[a]anthracene	PYR10	Ave	17345 2444814	31623 3652301	236851 5276644	570434	1638631	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Chrysene	PYR10	Ave	18003 2306536	35358 3415330	237605 4902727	547889	1576779	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-ethylhexyl) phthalate	PYR10	Ave	+++++ 1300984	+++++ 2004430	94330 3038440	259286	847920	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
6-Methylchrysene	PYR10	Ave	10858 1626488	20633 2473354	154060 3655021	364356	1098132	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Di-n-octyl phthalate	PRY	Lin2	+++++ 2004909	+++++ 3160062	115618 4867477	355247	1282949	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
7,12-Dimethylbenz(a)anthracene	PRY	Ave	6008 1001943	10469 1586020	86802 2359311	218597	674808	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[b]fluoranthene	PRY	Ave	17468 2404864	30306 3622820	232739 5467171	549256	1680791	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[k]fluoranthene	PRY	Ave	19140 2585325	34969 3851643	243949 5427375	572176	1671438	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]pyrene	PRY	Ave	13641 2065742	22702 3151006	182266 4576385	438647	1351355	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Methylcholanthrene	PRY	Ave	+++++ 924854	+++++ 1445312	73036 2170886	193063	618497	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Dibenz[a,h]acridine	PRY	Ave	+++++ 1520650	+++++ 2405191	126363 3593184	327369	1028524	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Dibenz[a,j]acridine	PRY	Ave	11674 1839479	16918 2836407	161980 4262003	398822	1204772	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Indeno[1,2,3-cd]pyrene	PRY	Ave	9793 1714211	18196 2654938	148952 4014141	367946	1151511	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz(a,h)anthracene	PRY	Ave	12443	21986	177583	437239	1359131	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			2045436	3090159	4671904			12.5	20.0	30.0		
Benzo[g,h,i]perylene	PRY	Ave	13963 2009554	23765 3054200	184102 4564626	439304	1353341	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Fluorophenol (Surr)	DCBd4	Ave	13767 1417183	24025 2189722	154606 3235597	357654	958474	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Phenol-d5 (Surr)	DCBd4	Ave	17844 1922242	29194 2872359	199770 4258546	462310	1275644	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Nitrobenzene-d5 (Surr)	NPT	Ave	15911 1704985	28401 2539431	174349 3794539	414355	1128673	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2-Fluorobiphenyl (Surr)	ANT	Ave	31781 3346308	57366 4789842	348294 6791938	818411	2234797	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	3760 525688	6737 834754	51996 1237599	123707	365762	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
p-Terphenyl-d14 (Surr)	PYR10	Ave	38774 4475129	72268 6376101	474523 8319846	1088316	3097677	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua1 = Quadratic 1/conc ISTD
Qua2 = Quadratic 1/conc^2 ISTD

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 414994

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2023 16:23 Calibration End Date: 08/31/2023 19:21 Calibration ID: 53326

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-414994/3	DH3153.D
Level 2	IC 410-414994/9	DH3158.D
Level 3	IC 410-414994/8	DH3157.D
Level 4	IC 410-414994/7	DH3156.D
Level 5	IC 410-414994/6	DH3155.D
Level 6	ICIS 410-414994/2	DH3151.D
Level 7	IC 410-414994/5	DH3154.D
Level 8	IC 410-414994/4	DH3152.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
2,4-Dinitrophenol	+++++ 0.4	+++++ 5.3	15.0	-6.4	-2.5	-11.8	30	30	50	30	30	30
4,6-Dinitro-2-methylphenol	+++++ 3.9	+++++ 8.8	4.6	-7.9	-1.8	-7.7	30	30	50	30	30	30
Pentachlorophenol	+++++ 2.8	2.2 7.4	-1.9	-8.0	-0.1	-2.5	30	50 30	30	30	30	30
Dinoseb	+++++ 1.8	+++++ 6.0	24.3	-14.6	-5.4	-12.2	30	30	50	30	30	30
4-Nitroquinoline-1-oxide	37.8 4.2	-6.7 -1.5	-22.5	-16.6	5.9	-0.7	50 30	30 30	30	30	30	30
2-Acetylaminofluorene	+++++ 3.3	3.4 -4.3	-17.8	-5.2	13.5	4.2	30	50 30	30	30	30	30
Di-n-octyl phthalate	+++++ 5.0	+++++ 9.4	4.1	-11.4	-4.8	-2.3	30	30	50	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3151.D
Lims ID: ICIS L6
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 31-Aug-2023 16:23:35 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:29:07 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: SJ89 Date: 01-Sep-2023 07:58:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.908	1.908	0.000	92	264100	12.5	12.3	
3 N-Nitrosodimethylamine	74	2.130	2.130	0.000	94	433977	12.5	13.0	
4 Pyridine	79	2.165	2.165	0.000	97	1370141	25.0	24.9	
6 Dimethylformamide	73	2.445	2.445	0.000	92	473096	12.5	13.5	
7 2-Picoline	93	2.759	2.759	0.000	91	725371	12.5	12.6	
8 N-Nitrosomethylethylamine	88	2.847	2.847	0.000	92	315623	12.5	12.8	
9 Methyl methanesulfonate	80	3.109	3.109	0.000	85	383075	12.5	12.9	
$ 10 2-Fluorophenol	112	3.266	3.266	0.000	91	1417183	25.0	25.4	
11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	93	303054	12.5	12.8	
12 Ethyl methanesulfonate	109	3.768	3.768	0.000	99	331384	12.5	12.7	
15 Benzaldehyde	77	4.100	4.100	0.000	97	458027	12.5	12.0	
$ 16 Phenol-d5	99	4.135	4.135	0.000	96	1922242	25.0	26.4	
17 Phenol	94	4.147	4.147	0.000	94	840236	12.5	13.1	
18 Aniline	93	4.193	4.193	0.000	96	1018193	12.5	12.7	
19 Bis(2-chloroethyl)ether	93	4.252	4.252	0.000	97	698143	12.5	12.7	
20 2-Chlorophenol	128	4.310	4.310	0.000	94	610611	12.5	13.0	
21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	96	699979	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.514	4.514	0.000	96	176109	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.525	4.525	0.000	92	710283	12.5	12.6	
25 Benzyl alcohol	108	4.630	4.630	0.000	91	419262	12.5	13.2	
26 1,2-Dichlorobenzene	146	4.671	4.671	0.000	96	678862	12.5	12.6	
28 2-Methylphenol	108	4.729	4.729	0.000	95	594839	12.5	13.1	
29 2,2'-oxybis[1-chloropropane]	45	4.764	4.764	0.000	92	741520	12.5	13.2	
31 N-Nitrosopyrrolidine	100	4.864	4.864	0.000	91	343668	12.5	13.2	
32 4-Methylphenol	108	4.875	4.875	0.000	96	620420	12.5	13.2	
33 N-Nitrosodi-n-propylamine	70	4.893	4.893	0.000	84	533874	12.5	13.3	
34 Acetophenone	105	4.887	4.887	0.000	93	949554	12.5	12.8	
35 N-Nitrosomorpholine	56	4.904	4.904	0.000	90	376879	12.5	13.1	
36 2-Toluidine	106	4.922	4.922	0.000	94	1054014	12.5	13.2	
38 Hexachloroethane	117	4.998	4.998	0.000	93	281622	12.5	13.0	
$ 39 Nitrobenzene-d5	82	5.033	5.033	0.000	87	1704985	25.0	25.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	5.050	5.050	0.000	86	741908	12.5	12.7	
42 N-Nitrosopiperidine	114	5.196	5.196	0.000	85	309578	12.5	13.0	
43 Isophorone	82	5.277	5.277	0.000	97	1382301	12.5	12.9	
44 2-Nitrophenol	139	5.353	5.353	0.000	91	259097	12.5	13.3	
45 2,4-Dimethylphenol	107	5.388	5.388	0.000	96	631133	12.5	13.3	
46 o,o',o''-Triethylphosphorothioat	198	5.458	5.458	0.000	86	343859	12.5	12.6	
47 Bis(2-chloroethoxy)methane	93	5.487	5.487	0.000	98	863415	12.5	13.0	
48 2,4-Dichlorophenol	162	5.580	5.580	0.000	94	525750	12.5	13.2	
49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	605159	12.5	12.4	
* 50 Naphthalene-d8	136	5.720	5.720	0.000	100	666962	5.00	5.00	
51 Naphthalene	128	5.744	5.744	0.000	98	1831383	12.5	12.5	
52 Alpha-Terpineol	59	5.749	5.749	0.000	92	497619	12.5	13.4	
53 4-Chloroaniline	127	5.790	5.790	0.000	94	770663	12.5	12.9	
54 2,6-Dichlorophenol	162	5.796	5.796	0.000	96	531755	12.5	13.0	
55 Hexachloropropene	213	5.825	5.825	0.000	89	408529	12.5	12.5	
56 Hexachlorobutadiene	225	5.860	5.860	0.000	95	374935	12.5	12.3	
60 Quinoline	129	6.053	6.053	0.000	96	1182878	12.5	12.9	
61 Caprolactam	113	6.105	6.105	0.000	78	159466	12.5	12.1	
62 N-Nitrosodi-n-butylamine	84	6.111	6.111	0.000	89	621003	12.5	13.0	
63 p-Phenylene diamine	108	6.123	6.123	0.000	96	482682	12.5	14.5	
64 4-Chloro-3-methylphenol	107	6.245	6.245	0.000	93	555657	12.5	13.4	
65 Safrole, Total	162	6.315	6.315	0.000	89	496381	12.5	13.0	
66 2-Methylnaphthalene	142	6.396	6.396	0.000	91	1209433	12.5	12.9	
67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	1111731	12.5	12.7	
68 Hexachlorocyclopentadiene	237	6.548	6.548	0.000	95	369212	12.5	12.7	
69 1,2,4,5-Tetrachlorobenzene	216	6.554	6.554	0.000	97	711276	12.5	12.2	
70 Isosafrole Peak 1	162	6.595	6.595	0.000	90	89916	2.00	1.94	
71 2,4,6-Trichlorophenol	196	6.665	6.665	0.000	77	390132	12.5	13.7	
72 2,4,5-Trichlorophenol	196	6.694	6.694	0.000	93	452353	12.5	13.4	
$ 73 2-Fluorobiphenyl (Surr)	172	6.752	6.752	0.000	100	3346308	25.0	25.0	
74 Isosafrole Peak 2	162	6.810	6.810	0.000	92	519701	10.5	10.5	
75 1,1'-Biphenyl	154	6.845	6.845	0.000	93	1577667	12.5	12.2	
76 2-Chloronaphthalene	162	6.863	6.863	0.000	94	1314449	12.5	12.8	M
77 1-Chloronaphthalene	162	6.880	6.880	0.000	99	1058077	12.5	11.5	Ma
78 Phenyl ether	170	6.944	6.944	0.000	86	885879	12.5	12.5	
79 2-Nitroaniline	138	6.956	6.956	0.000	84	340852	12.5	13.0	
81 1,4-Naphthoquinone	158	7.026	7.026	0.000	85	474889	12.5	13.0	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	87	155706	12.5	13.2	
85 Dimethyl phthalate	163	7.131	7.131	0.000	99	1383571	12.5	12.5	
84 1,4-Dinitrobenzene	168	7.154	7.154	0.000	84	197997	12.5	13.7	
87 2,6-Dinitrotoluene	165	7.183	7.183	0.000	93	283887	12.5	13.2	
88 Acenaphthylene	152	7.253	7.253	0.000	98	1919549	12.5	12.7	
89 3-Nitroaniline	138	7.341	7.341	0.000	89	315076	12.5	13.5	
* 90 Acenaphthene-d10	164	7.387	7.387	0.000	94	402427	5.00	5.00	
91 Acenaphthene	153	7.416	7.416	0.000	95	1263381	12.5	12.3	
92 2,4-Dinitrophenol	184	7.440	7.440	0.000	86	228994	25.0	22.0	
93 4-Nitrophenol	109	7.492	7.492	0.000	85	398857	25.0	27.4	
94 Pentachlorobenzene	250	7.539	7.539	0.000	98	614757	12.5	12.0	
95 2,4-Dinitrotoluene	165	7.568	7.568	0.000	92	375388	12.5	13.4	
96 Dibenzofuran	168	7.580	7.580	0.000	97	1817057	12.5	12.5	
97 1-Naphthylamine	143	7.655	7.655	0.000	98	1096139	12.5	12.9	
98 2,3,4,6-Tetrachlorophenol	232	7.696	7.696	0.000	71	391656	12.5	13.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
99 2-Naphthylamine	143	7.731	7.731	0.000	96	1232249	12.5	12.8	
100 Diethyl phthalate	149	7.807	7.807	0.000	98	1338150	12.5	12.5	
101 Thionazin	107	7.883	7.883	0.000	79	213109	12.5	12.2	
102 Fluorene	166	7.906	7.906	0.000	93	1447974	12.5	12.7	
103 4-Chlorophenyl phenyl ether	204	7.912	7.912	0.000	89	763686	12.5	12.4	
104 N-Nitro-o-toluidine	152	7.918	7.918	0.000	79	363663	12.5	13.3	
105 4-Nitroaniline	138	7.918	7.918	0.000	77	344585	12.5	13.7	
106 4,6-Dinitro-2-methylphenol	198	7.947	7.947	0.000	87	353097	25.0	23.1	
107 N-Nitrosodiphenylamine	169	8.017	8.017	0.000	62	1038305	10.6	10.9	
108 1,2-Diphenylhydrazine	77	8.058	8.058	0.000	41	1668722	12.5	12.8	a
$ 109 2,4,6-Tribromophenol	330	8.133	8.133	0.000	93	525688	25.0	25.9	
110 Sulfotepp	97	8.174	8.174	0.000	78	246357	12.5	13.0	
112 1,3,5-Trinitrobenzene	213	8.262	8.262	0.000	83	122170	12.5	12.6	
113 cis-Diallate	86	8.297	8.297	0.000	0	461451	9.25	8.92	
114 Phorate	75	8.302	8.302	0.000	96	895558	12.5	13.8	
115 Phenacetin	108	8.314	8.314	0.000	90	663400	12.5	13.0	
116 4-Bromophenyl phenyl ether	248	8.372	8.372	0.000	63	473367	12.5	12.3	
117 trans-Diallate	86	8.384	8.384	0.000	0	162100	3.25	3.21	
118 Hexachlorobenzene	284	8.425	8.425	0.000	95	517435	12.5	12.0	
119 Dimethoate	87	8.460	8.460	0.000	95	507573	12.5	12.8	
120 Atrazine	200	8.530	8.530	0.000	94	378585	12.5	12.5	
121 Pentachlorophenol	266	8.611	8.611	0.000	93	564640	25.0	24.4	
122 4-Aminobiphenyl	169	8.617	8.617	0.000	90	1687038	12.5	13.3	
123 Pentachloronitrobenzene	237	8.623	8.623	0.000	87	202830	12.5	13.6	
124 Pronamide	173	8.675	8.675	0.000	90	639569	12.5	13.3	
125 Dinoseb	211	8.786	8.786	0.000	97	232852	12.5	11.0	
* 126 Phenanthrene-d10	188	8.792	8.792	0.000	97	790639	5.00	5.00	
127 Disulfoton	88	8.804	8.804	0.000	96	901914	12.5	12.2	
128 Phenanthrene	178	8.815	8.815	0.000	96	2151302	12.5	12.3	
129 Anthracene	178	8.868	8.868	0.000	97	2233348	12.5	12.8	
130 Carbazole	167	9.019	9.019	0.000	96	1921969	12.5	12.8	
131 Methyl parathion	109	9.153	9.153	0.000	93	414706	12.5	13.2	
133 Di-n-butyl phthalate	149	9.363	9.363	0.000	100	2214515	12.5	14.1	
134 Ethyl Parathion	109	9.526	9.526	0.000	85	257683	12.5	13.2	
135 4-Nitroquinoline-1-oxide	190	9.550	9.550	0.000	85	158397	12.5	12.4	
S 136 Diallate	86				0		12.5	12.1	
140 Octachlorostyrene	308	9.765	9.765	0.000	90	208524	12.5	12.2	
141 Isodrin	193	9.806	9.806	0.000	93	254590	12.5	11.9	
143 Fluoranthene	202	9.946	9.946	0.000	97	2429252	12.5	13.0	
147 Benzidine	184	10.080	10.080	0.000	99	4588031	37.5	40.3	
* 149 Pyrene-d10 (IS)	212	10.144	10.144	0.000	98	849209	5.00	5.00	
150 Pyrene	202	10.162	10.162	0.000	98	2600566	12.5	12.4	
$ 152 p-Terphenyl-d14	244	10.325	10.325	0.000	99	4475129	25.0	26.1	
154 p-Dimethylamino azobenzene	225	10.465	10.465	0.000	92	446780	12.5	13.9	
155 Chlorobenzilate	139	10.517	10.517	0.000	91	667099	12.5	14.0	
156 3,3'-Dimethylbenzidine	212	10.820	10.820	0.000	99	1402147	12.5	13.4	
157 Butyl benzyl phthalate	149	10.844	10.844	0.000	96	902163	12.5	13.2	
158 2-Acetylaminofluorene	181	11.094	11.094	0.000	93	697865	12.5	13.0	
159 3,3'-Dichlorobenzidine	252	11.432	11.432	0.000	75	924012	12.5	13.0	
160 4,4'-Methylene bis(2-chloroani	231	11.444	11.444	0.000	97	487335	12.5	12.9	
161 Benzo[a]anthracene	228	11.450	11.450	0.000	98	2444814	12.5	13.6	
162 Chrysene	228	11.497	11.497	0.000	96	2306536	12.5	13.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
163 Bis(2-ethylhexyl) phthalate	149	11.531	11.531	0.000	97	1300984	12.5	13.5	
164 6-Methylchrysene	242	12.068	12.068	0.000	98	1626488	12.5	13.7	
165 Di-n-octyl phthalate	149	12.406	12.406	0.000	99	2004909	12.5	12.2	
167 Benzo[b]fluoranthene	252	12.866	12.866	0.000	96	2404864	12.5	12.9	
166 7,12-Dimethylbenz(a)anthracene	256	12.866	12.866	0.000	72	1001943	12.5	13.6	
168 Benzo[k]fluoranthene	252	12.907	12.907	0.000	98	2585325	12.5	13.2	
169 Benzo[a]pyrene	252	13.327	13.327	0.000	76	2065742	12.5	13.7	
* 170 Perylene-d12	264	13.408	13.408	0.000	99	762782	5.00	5.00	
171 3-Methylcholanthrene	268	13.845	13.845	0.000	90	924854	12.5	12.8	
172 Dibenz[a,h]acridine	279	14.673	14.673	0.000	90	1520650	12.5	12.6	
173 Dibenz[a,j]acridine	279	14.755	14.755	0.000	96	1839479	12.5	13.8	
174 Indeno[1,2,3-cd]pyrene	276	15.035	15.035	0.000	99	1714211	12.5	13.7	
175 Dibenz(a,h)anthracene	278	15.087	15.087	0.000	91	2045436	12.5	13.7	
176 Benzo[g,h,i]perylene	276	15.495	15.495	0.000	98	2009554	12.5	13.3	
S 182 Isosafrole	162				0		12.5	12.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_6_00045 Amount Added: 1.00 Units: mL

Report Date: 05-Sep-2023 16:29:08 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3151.D

Injection Date: 31-Aug-2023 16:23:35 Instrument ID: HP19760 Operator ID: mem41592

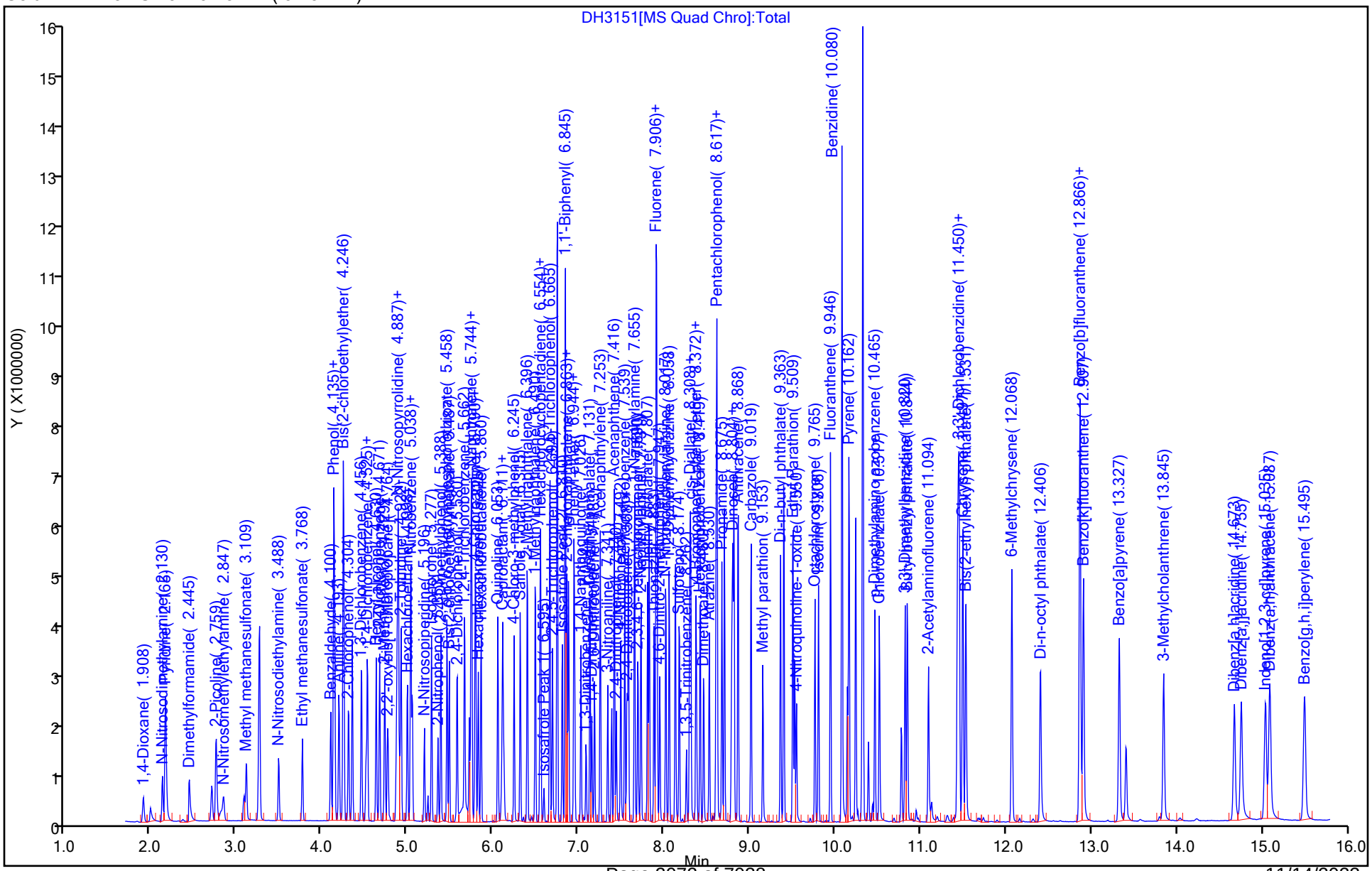
Lims ID: ICIS L6 Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

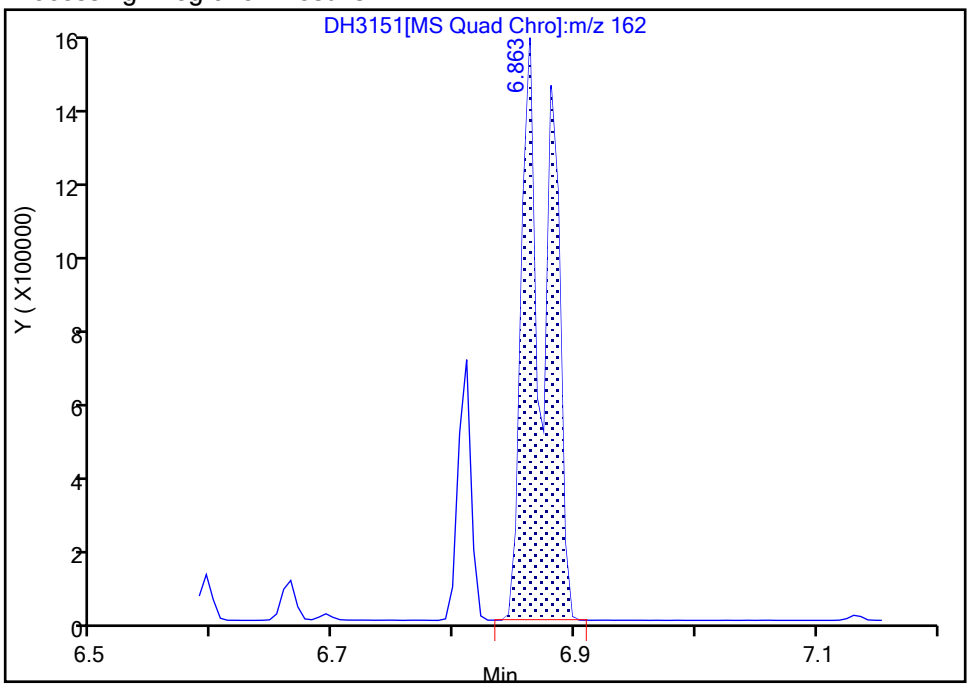
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3151.D				
Injection Date:	31-Aug-2023 16:23:35	Instrument ID:	HP19760		
Lims ID:	ICIS L6				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

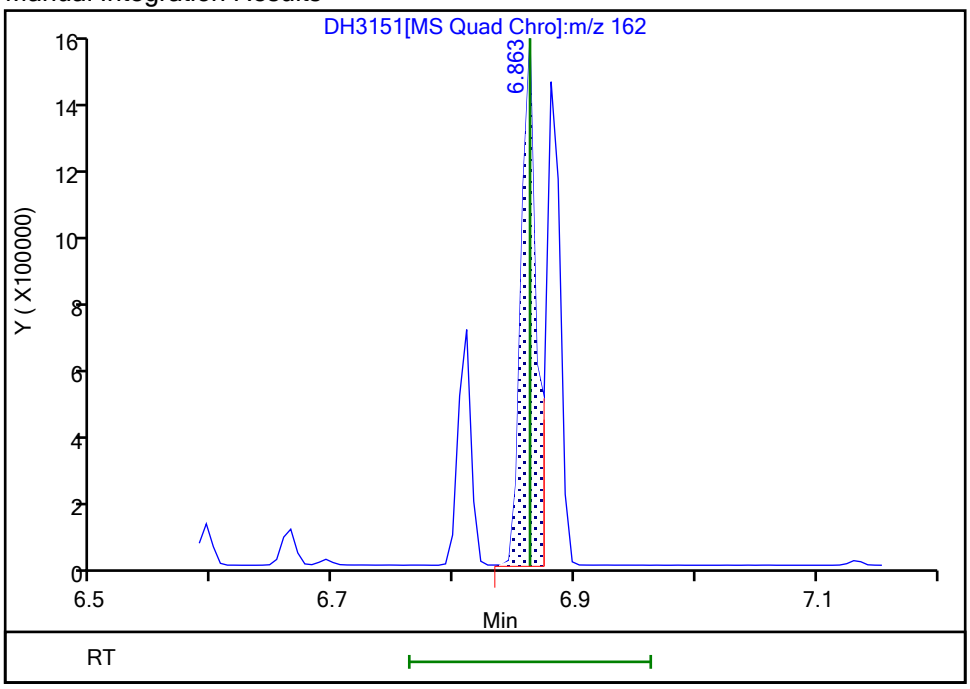
Processing Integration Results

RT: 6.86
Area: 2372526
Amount: 16.024637
Amount Units: ug/ml



Manual Integration Results

RT: 6.86
Area: 1314449
Amount: 12.768979
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 07:57:53 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

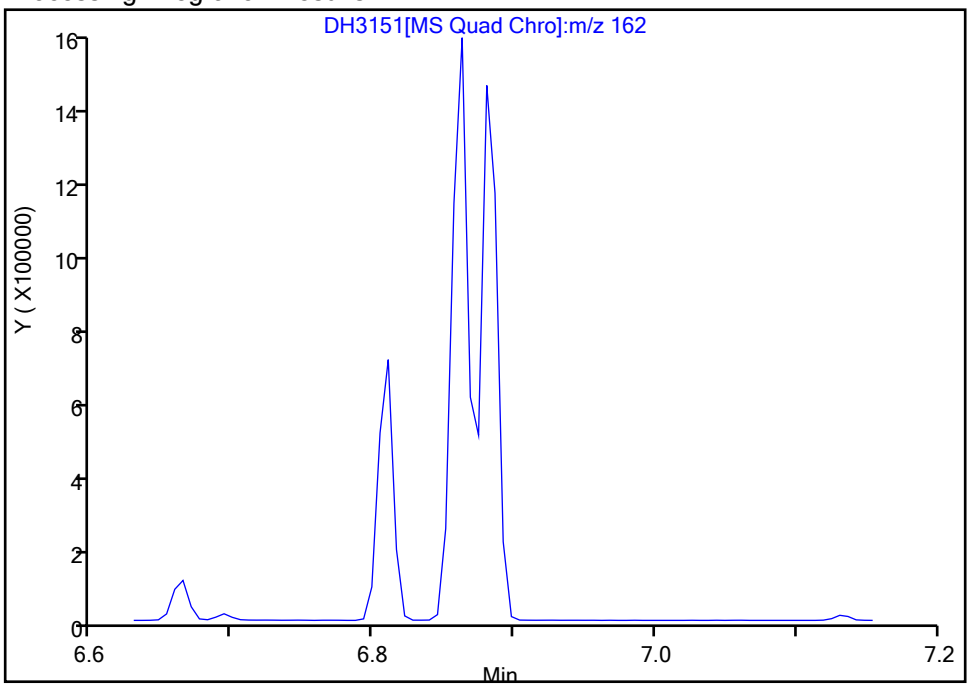
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3151.D				
Injection Date:	31-Aug-2023 16:23:35	Instrument ID:	HP19760		
Lims ID:	ICIS L6				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

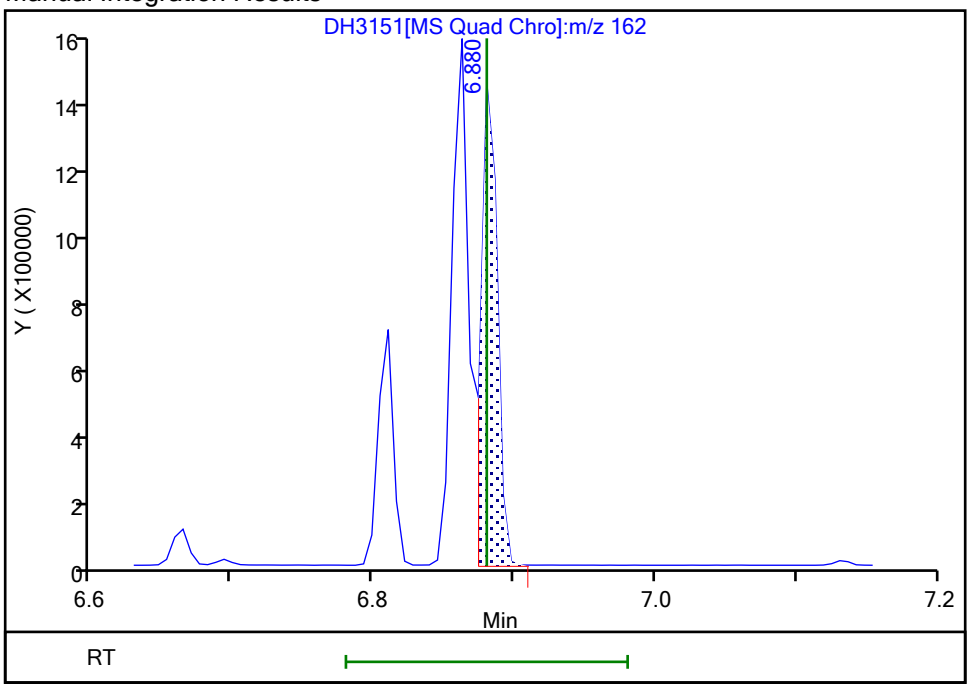
Not Detected
Expected RT: 6.88

Processing Integration Results



Manual Integration Results

RT: 6.88
Area: 1058077
Amount: 11.496275
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 07:58:00 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

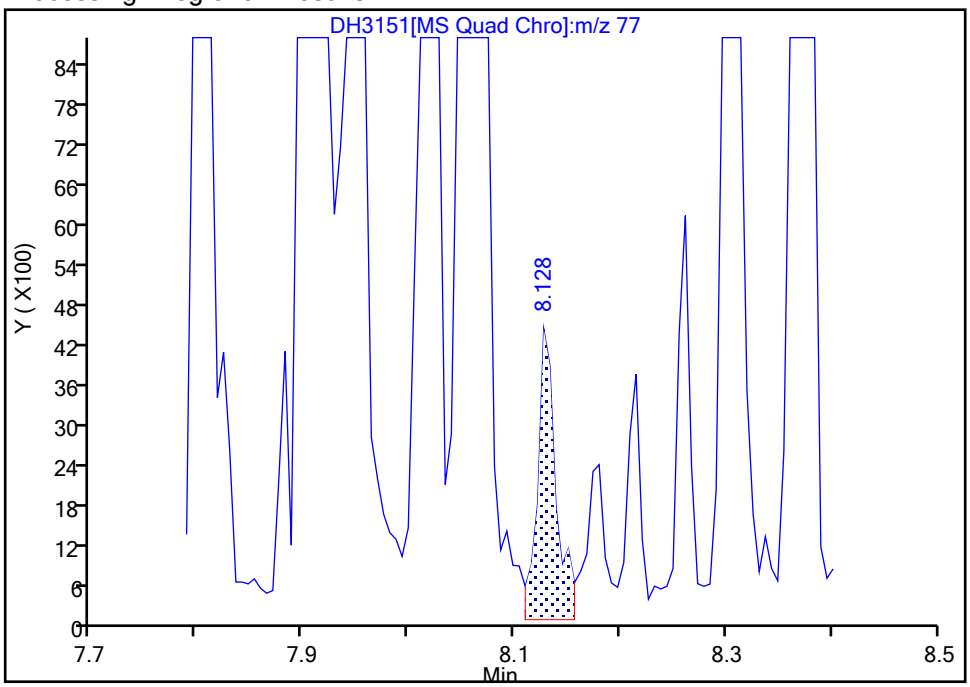
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3151.D				
Injection Date:	31-Aug-2023 16:23:35	Instrument ID:	HP19760		
Lims ID:	ICIS L6				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

108 1,2-Diphenylhydrazine, CAS: 122-66-7

Signal: 1

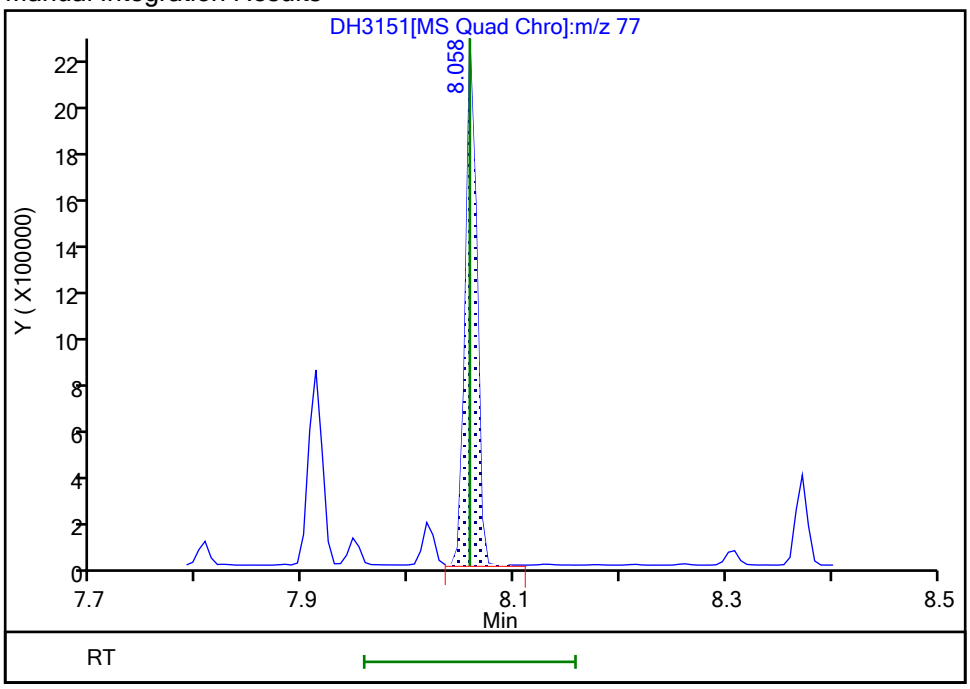
Processing Integration Results

RT: 8.13
Area: 5208
Amount: 0.064499
Amount Units: ug/ml



Manual Integration Results

RT: 8.06
Area: 1668722
Amount: 12.820239
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 07:58:11 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 31-Aug-2023 17:37:33 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICL1
Misc. Info.: 410-0092991-003
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:29:28 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: SJ89 Date: 01-Sep-2023 08:04:02

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.903	1.908	-0.005	81	4907	0.1250	0.2421	
	3 N-Nitrosodimethylamine	74	2.142	2.130	0.012	93	4271	0.1250	0.1353	
	4 Pyridine	79	2.182	2.165	0.017	95	14495	0.2500	0.2795	
	6 Dimethylformamide	73	2.520	2.445	0.075	34	3090	0.1250	0.0935	
	7 2-Picoline	93	2.765	2.759	0.006	86	6953	0.1250	0.1276	
	8 N-Nitrosomethylethylamine	88		2.847				ND	ND	U
	9 Methyl methanesulfonate	80	3.109	3.109	0.000	82	3587	0.1250	0.1281	
$	10 2-Fluorophenol	112	3.255	3.266	-0.011	90	13767	0.2500	0.2616	
	11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	97	2873	0.1250	0.1289	
	12 Ethyl methanesulfonate	109	3.768	3.768	0.000	98	3146	0.1250	0.1273	
$	16 Phenol-d5	99	4.129	4.135	-0.006	96	17844	0.2500	0.2602	
	17 Phenol	94	4.141	4.147	-0.006	92	7477	0.1250	0.1232	
	18 Aniline	93	4.193	4.193	0.000	96	10516	0.1250	0.1391	
	19 Bis(2-chloroethyl)ether	93	4.252	4.252	0.000	97	7437	0.1250	0.1437	
	20 2-Chlorophenol	128	4.304	4.310	-0.006	94	5633	0.1250	0.1267	
	21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	92	7280	0.1250	0.1380	
*	22 1,4-Dichlorobenzene-d4	152	4.508	4.514	-0.006	96	166160	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.526	4.525	0.001	95	7060	0.1250	0.1323	
	25 Benzyl alcohol	108	4.625	4.630	-0.005	89	4054	0.1250	0.1348	
	26 1,2-Dichlorobenzene	146	4.665	4.671	-0.006	95	7062	0.1250	0.1389	
	28 2-Methylphenol	108	4.724	4.729	-0.005	95	5329	0.1250	0.1245	
	29 2,2'-oxybis[1-chloropropane]	45	4.764	4.764	0.000	88	7103	0.1250	0.1336	
	31 N-Nitrosopyrrolidine	100	4.858	4.864	-0.006	88	2995	0.1250	0.1223	
	32 4-Methylphenol	108	4.869	4.875	-0.006	95	5241	0.1250	0.1184	
	34 Acetophenone	105	4.881	4.887	-0.006	92	9457	0.1250	0.1356	
	33 N-Nitrosodi-n-propylamine	70	4.881	4.893	-0.012	80	4699	0.1250	0.1239	
	35 N-Nitrosomorpholine	56	4.899	4.904	-0.005	80	3822	0.1250	0.1412	
	36 2-Toluidine	106	4.916	4.922	-0.006	92	9884	0.1250	0.1313	
	38 Hexachloroethane	117	4.992	4.998	-0.006	87	2640	0.1250	0.1290	
$	39 Nitrobenzene-d5	82	5.027	5.033	-0.006	85	15911	0.2500	0.2591	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	5.044	5.050	-0.006	84	6924	0.1250	0.1283	
42 N-Nitrosopiperidine	114	5.190	5.196	-0.006	85	2372	0.1250	0.1080	
43 Isophorone	82	5.272	5.277	-0.005	96	13079	0.1250	0.1323	
44 2-Nitrophenol	139	5.353	5.353	0.000	82	2418	0.1250	0.1344	
45 2,4-Dimethylphenol	107	5.382	5.388	-0.006	92	5153	0.1250	0.1182	
46 o,o',o''-Triethylphosphorothioat	198	5.458	5.458	0.000	84	3221	0.1250	0.1281	
47 Bis(2-chloroethoxy)methane	93	5.481	5.487	-0.006	96	8116	0.1250	0.1324	
48 2,4-Dichlorophenol	162	5.575	5.580	-0.005	93	4330	0.1250	0.1177	
49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	91	6142	0.1250	0.1361	
* 50 Naphthalene-d8	136	5.715	5.720	-0.005	100	614734	5.00	5.00	
51 Naphthalene	128	5.738	5.744	-0.006	96	19114	0.1250	0.1414	
52 Alpha-Terpineol	59	5.744	5.749	-0.005	83	4202	0.1250	0.1232	
53 4-Chloroaniline	127	5.785	5.790	-0.006	94	6852	0.1250	0.1242	
54 2,6-Dichlorophenol	162	5.790	5.796	-0.006	91	4871	0.1250	0.1295	
55 Hexachloropropene	213	5.819	5.825	-0.006	85	3633	0.1250	0.1210	
56 Hexachlorobutadiene	225	5.854	5.860	-0.006	91	3595	0.1250	0.1280	
60 Quinoline	129	6.047	6.053	-0.006	95	10950	0.1250	0.1298	
62 N-Nitrosodi-n-butylamine	84	6.105	6.111	-0.006	90	5165	0.1250	0.1175	M
63 p-Phenylene diamine	108	6.117	6.123	-0.005	91	3711	0.1250	0.1207	
64 4-Chloro-3-methylphenol	107	6.239	6.245	-0.006	90	4364	0.1250	0.1139	
65 Safrole, Total	162	6.315	6.315	0.000	88	4459	0.1250	0.1268	
66 2-Methylnaphthalene	142	6.397	6.396	0.000	92	11181	0.1250	0.1294	
67 1-Methylnaphthalene	142	6.490	6.490	0.000	89	10366	0.1250	0.1289	
68 Hexachlorocyclopentadiene	237	6.542	6.548	-0.006	91	3259	0.1250	0.1299	
69 1,2,4,5-Tetrachlorobenzene	216	6.554	6.554	0.000	95	6942	0.1250	0.1382	
70 Isosafrole Peak 1	162	6.659	6.595	0.064	50	783	0.0200	0.0195	
71 2,4,6-Trichlorophenol	196	6.659	6.665	-0.006	72	2357	0.1250	0.0958	
72 2,4,5-Trichlorophenol	196	6.688	6.694	-0.006	89	3178	0.1250	0.1086	
$ 73 2-Fluorobiphenyl (Surr)	172	6.746	6.752	-0.006	99	31781	0.2500	0.2742	
74 Isosafrole Peak 2	162	6.805	6.810	-0.006	90	4878	0.1050	0.1135	
75 1,1'-Biphenyl	154	6.839	6.845	-0.006	97	15260	0.1250	0.1369	
76 2-Chloronaphthalene	162	6.857	6.863	-0.006	96	12493	0.1250	0.1403	M
77 1-Chloronaphthalene	162	6.874	6.880	-0.006	97	11196	0.1250	0.1406	Ma
78 Phenyl ether	170	6.939	6.944	-0.005	84	8137	0.1250	0.1327	
79 2-Nitroaniline	138	6.944	6.956	-0.012	73	2652	0.1250	0.1167	
81 1,4-Naphthoquinone	158	7.020	7.026	-0.006	84	3795	0.1250	0.1198	
86 1,3-Dinitrobenzene	168	7.078	7.090	-0.012	81	963	0.1250	0.0943	
85 Dimethyl phthalate	163	7.125	7.131	-0.006	97	12063	0.1250	0.1255	
84 1,4-Dinitrobenzene	168	7.148	7.154	-0.006	78	1281	0.1250	0.1028	
87 2,6-Dinitrotoluene	165	7.178	7.183	-0.005	88	2135	0.1250	0.1150	
88 Acenaphthylene	152	7.247	7.253	-0.006	98	17286	0.1250	0.1321	
89 3-Nitroaniline	138	7.335	7.341	-0.006	88	2125	0.1250	0.1052	
* 90 Acenaphthene-d10	164	7.382	7.387	-0.005	96	348171	5.00	5.00	
91 Acenaphthene	153	7.411	7.416	-0.005	96	12442	0.1250	0.1403	
92 2,4-Dinitrophenol	184	7.434	7.440	-0.006	84	5658	1.25	3.55	
93 4-Nitrophenol	109	7.481	7.492	-0.011	84	7780	0.7500	0.6188	
94 Pentachlorobenzene	250	7.533	7.539	-0.006	95	6504	0.1250	0.1467	
95 2,4-Dinitrotoluene	165	7.556	7.568	-0.012	90	2668	0.1250	0.1100	
96 Dibenzofuran	168	7.574	7.580	-0.006	95	16985	0.1250	0.1346	
97 1-Naphthylamine	143	7.650	7.655	-0.005	96	9364	0.1250	0.1272	
98 2,3,4,6-Tetrachlorophenol	232	7.690	7.696	-0.006	71	2679	0.1250	0.1061	
99 2-Naphthylamine	143	7.725	7.731	-0.006	94	10313	0.1250	0.1234	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 Diethyl phthalate	149	7.795	7.807	-0.012	97	12299	0.1250	0.1328	
101 Thionazin	107	7.871	7.883	-0.012	76	2242	0.1250	0.1482	
102 Fluorene	166	7.900	7.906	-0.006	95	12648	0.1250	0.1285	
103 4-Chlorophenyl phenyl ether	204	7.906	7.912	-0.006	88	7335	0.1250	0.1375	
104 N-Nitro-o-toluidine	152	7.906	7.918	-0.012	73	2669	0.1250	0.1128	
105 4-Nitroaniline	138	7.906	7.918	-0.012	71	2366	0.1250	0.1085	
106 4,6-Dinitro-2-methylphenol	198	7.941	7.947	-0.006	81	4741	0.7500	2.01	
107 N-Nitrosodiphenylamine	169	8.011	8.017	-0.006	64	8857	0.1063	0.1069	
108 1,2-Diphenylhydrazine	77	8.052	8.058	-0.006	41	15448	0.1250	0.1363	
$ 109 2,4,6-Tribromophenol	330	8.128	8.133	-0.005	92	3760	0.2500	0.2145	
110 Sulfotepp	97	8.168	8.174	-0.006	79	2073	0.1250	0.1251	
112 1,3,5-Trinitrobenzene	213	8.250	8.262	-0.012	77	418	0.1250	0.0496	
113 cis-Diallate	86	8.291	8.297	-0.006	0	5163	0.0925	0.1146	
114 Phorate	75	8.302	8.302	0.000	93	6121	0.1250	0.1086	
115 Phenacetin	108	8.297	8.314	-0.017	64	3777	0.1250	0.0847	
116 4-Bromophenyl phenyl ether	248	8.367	8.372	-0.005	62	4334	0.1250	0.1293	
117 trans-Diallate	86	8.378	8.384	-0.006	0	3379	0.0325	0.0767	M
118 Hexachlorobenzene	284	8.413	8.425	-0.012	93	5418	0.1250	0.1441	
119 Dimethoate	87	8.448	8.460	-0.012	91	2723	0.1250	0.0789	
121 Pentachlorophenol	266	8.606	8.611	-0.005	90	6363	0.6250	0.9100	
122 4-Aminobiphenyl	169	8.611	8.617	-0.006	89	12699	0.1250	0.1151	
123 Pentachloronitrobenzene	237	8.611	8.623	-0.012	47	1086	0.1250	0.0836	
124 Pronamide	173	8.670	8.675	-0.005	87	4592	0.1250	0.1098	
125 Dinoseb	211	8.780	8.786	-0.006	61	1009	0.1250	0.9684	
* 126 Phenanthrene-d10	188	8.786	8.792	-0.006	97	688634	5.00	5.00	
127 Disulfoton	88	8.786	8.804	-0.018	92	15912	0.1250	0.2465	
128 Phenanthrene	178	8.810	8.815	-0.005	94	21109	0.1250	0.1389	
129 Anthracene	178	8.856	8.868	-0.012	97	19853	0.1250	0.1309	
130 Carbazole	167	9.008	9.019	-0.011	96	17045	0.1250	0.1307	
131 Methyl parathion	109	9.148	9.153	-0.005	83	1862	0.1250	0.0679	
133 Di-n-butyl phthalate	149	9.357	9.363	-0.006	100	14098	0.1250	0.1029	
134 Ethyl Parathion	109	9.521	9.526	-0.005	76	1041	0.1250	0.0613	
135 4-Nitroquinoline-1-oxide	190	9.538	9.550	-0.012	71	567	0.1250	0.1723	
S 136 Diallate	86				0		0.1250	0.1914	
140 Octachlorostyrene	308	9.760	9.765	-0.005	88	1961	0.1250	0.1314	
141 Isodrin	193	9.800	9.806	-0.006	89	3294	0.1250	0.1766	
143 Fluoranthene	202	9.940	9.946	-0.006	97	20046	0.1250	0.1228	
147 Benzidine	184	10.069	10.080	-0.011	99	17352	0.3750	0.1742	
* 149 Pyrene-d10 (IS)	212	10.138	10.144	-0.006	98	743168	5.00	5.00	
150 Pyrene	202	10.156	10.162	-0.006	98	26696	0.1250	0.1451	
$ 152 p-Terphenyl-d14	244	10.319	10.325	-0.006	99	38774	0.2500	0.2583	
154 p-Dimethylamino azobenzene	225	10.459	10.465	-0.006	89	2152	0.1250	0.0766	
155 Chlorobenzilate	139	10.512	10.517	-0.005	88	3658	0.1250	0.0874	
156 3,3'-Dimethylbenzidine	212	10.815	10.820	-0.005	97	4968	0.1250	0.0542	
157 Butyl benzyl phthalate	149	10.838	10.844	-0.006	95	4334	0.1250	0.0723	
158 2-Acetylaminofluorene	181	11.077	11.094	-0.017	80	2099	0.1250	0.1985	
159 3,3'-Dichlorobenzidine	252	11.421	11.432	-0.011	72	4812	0.1250	0.0772	
160 4,4'-Methylene bis(2-chloroani	231	11.432	11.444	-0.012	62	2448	0.1250	0.0741	
161 Benzo[a]anthracene	228	11.444	11.450	-0.006	97	17345	0.1250	0.1104	
162 Chrysene	228	11.485	11.497	-0.012	97	18003	0.1250	0.1170	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.531	-0.011	93	4751	0.1250	0.0564	
164 6-Methylchrysene	242	12.056	12.068	-0.012	97	10858	0.1250	0.1047	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.388	12.406	-0.018	96	7362	0.1250	0.7143	
167 Benzo[b]fluoranthene	252	12.849	12.866	-0.017	96	17468	0.1250	0.1169	
166 7,12-Dimethylbenz(a)anthracene	256	12.849	12.866	-0.017	67	6008	0.1250	0.1014	
168 Benzo[k]fluoranthene	252	12.890	12.907	-0.017	97	19140	0.1250	0.1216	
169 Benzo[a]pyrene	252	13.309	13.327	-0.018	77	13641	0.1250	0.1122	M
* 170 Perylene-d12	264	13.397	13.408	-0.011	99	612760	5.00	5.00	
171 3-Methylcholanthrene	268	13.840	13.845	-0.005	90	5490	0.1250	0.0947	
172 Dibenz[a,h]acridine	279	14.656	14.673	-0.017	89	9491	0.1250	0.0979	
173 Dibenz[a,j]acridine	279	14.737	14.755	-0.018	62	11674	0.1250	0.1088	
174 Indeno[1,2,3-cd]pyrene	276	15.017	15.035	-0.017	96	9793	0.1250	0.0976	
175 Dibenz(a,h)anthracene	278	15.064	15.087	-0.023	89	12443	0.1250	0.1041	M
176 Benzo[g,h,i]perylene	276	15.466	15.495	-0.029	96	13963	0.1250	0.1149	M
S 178 Dinitrotoluene	165				0			0.2249	
S 182 Isosafrole	162				0		0.1250	0.1330	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270_1_00030 Amount Added: 1.00 Units: mL

Report Date: 05-Sep-2023 16:29:29 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D

Injection Date: 31-Aug-2023 17:37:33 Instrument ID: HP19760 Operator ID: mem41592

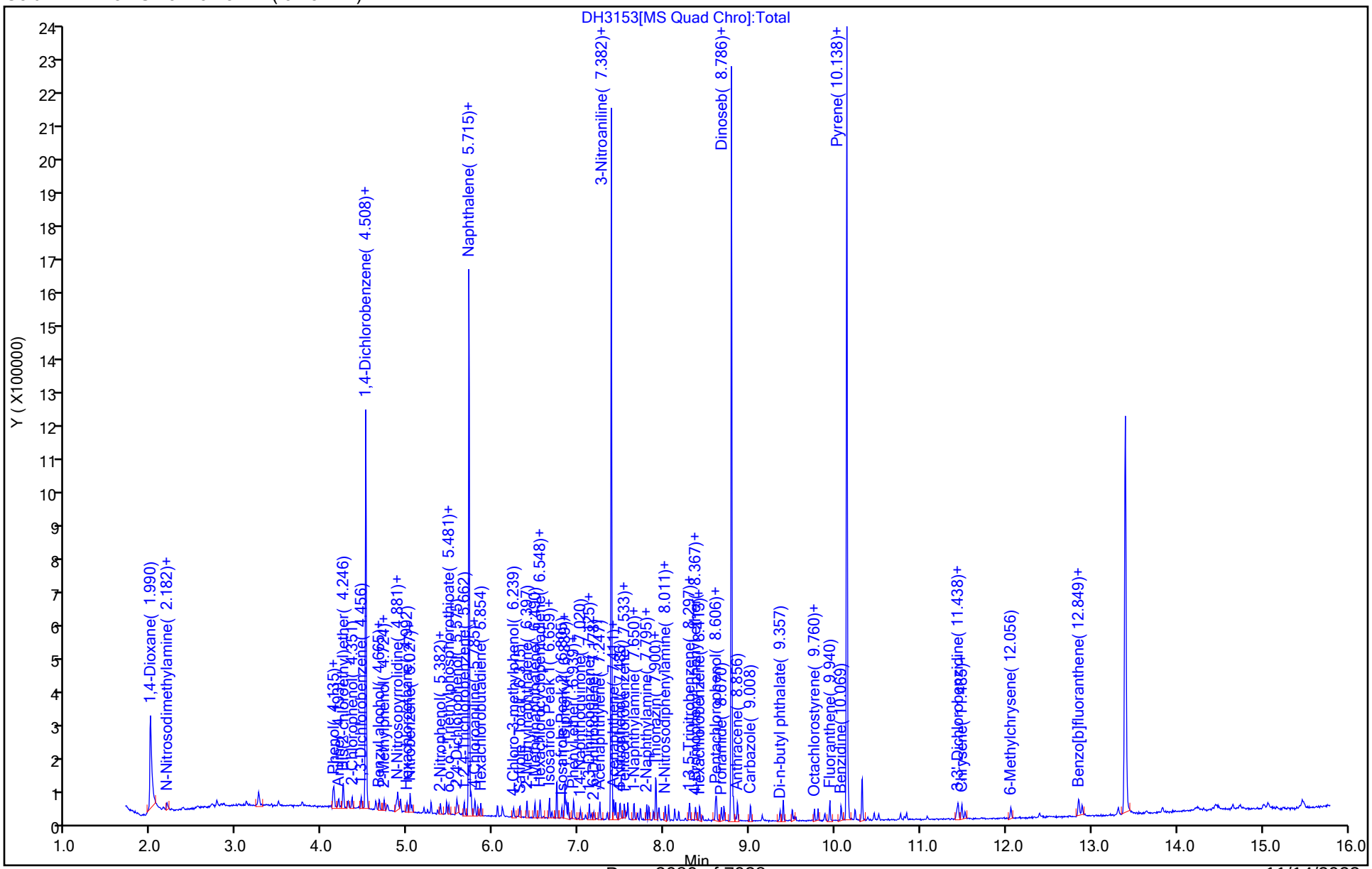
Lims ID: IC L1 Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

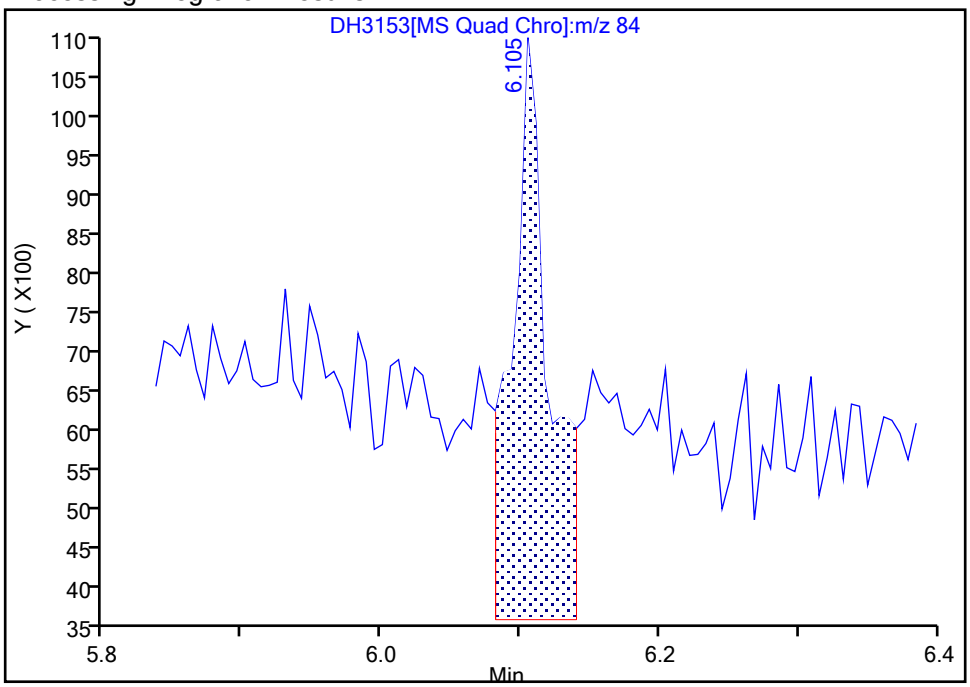
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D				
Injection Date:	31-Aug-2023 17:37:33	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

62 N-Nitrosodi-n-butylamine, CAS: 924-16-3

Signal: 1

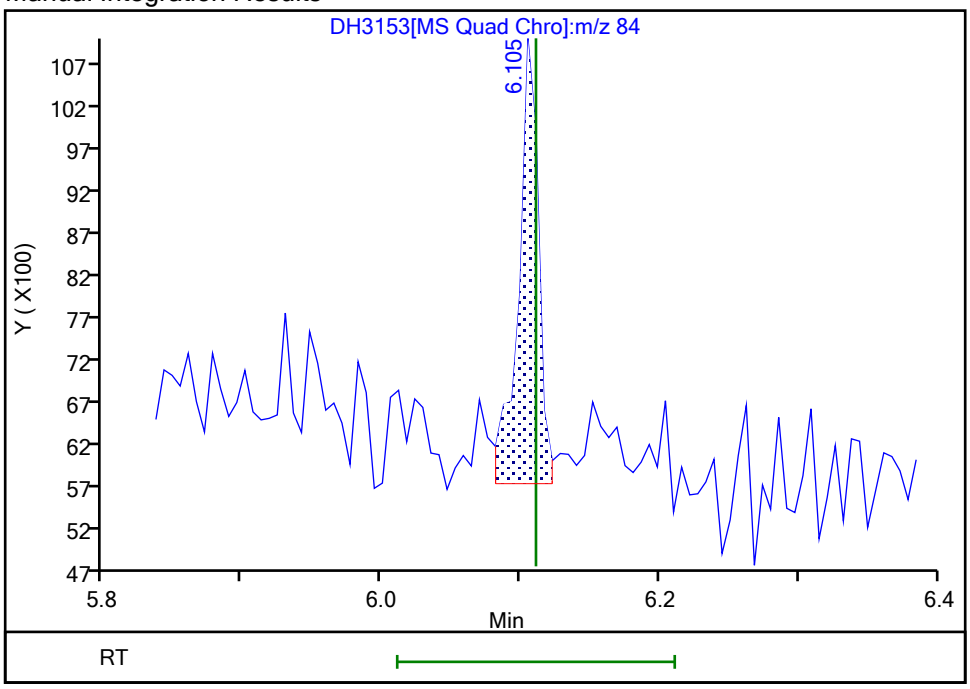
Processing Integration Results

RT: 6.11
Area: 13313
Amount: 0.232338
Amount Units: ug/ml



Manual Integration Results

RT: 6.11
Area: 5165
Amount: 0.117534
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:02:12 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

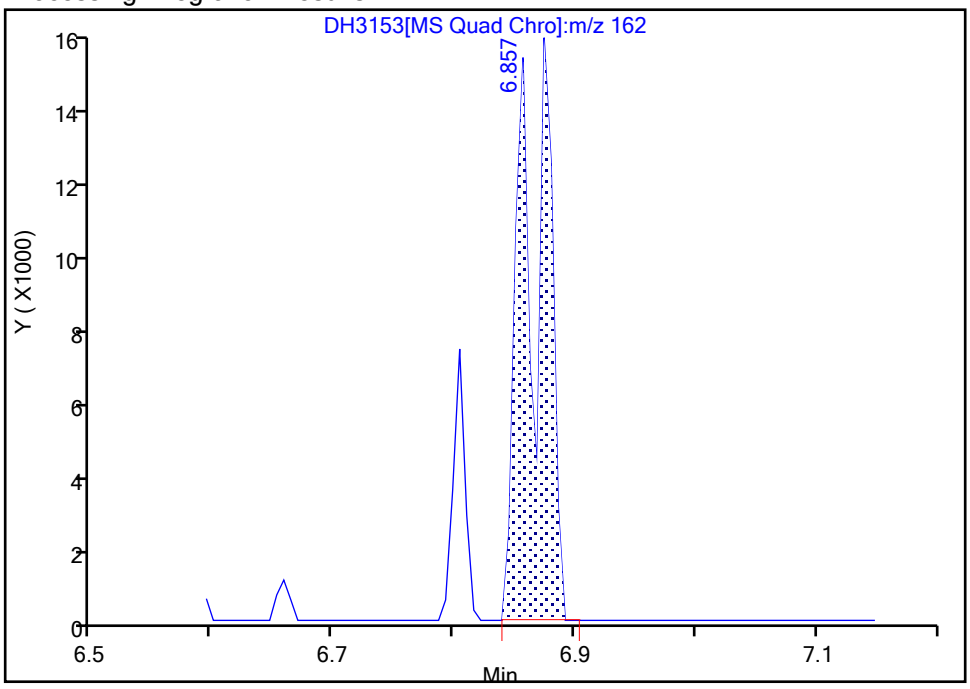
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D				
Injection Date:	31-Aug-2023 17:37:33	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

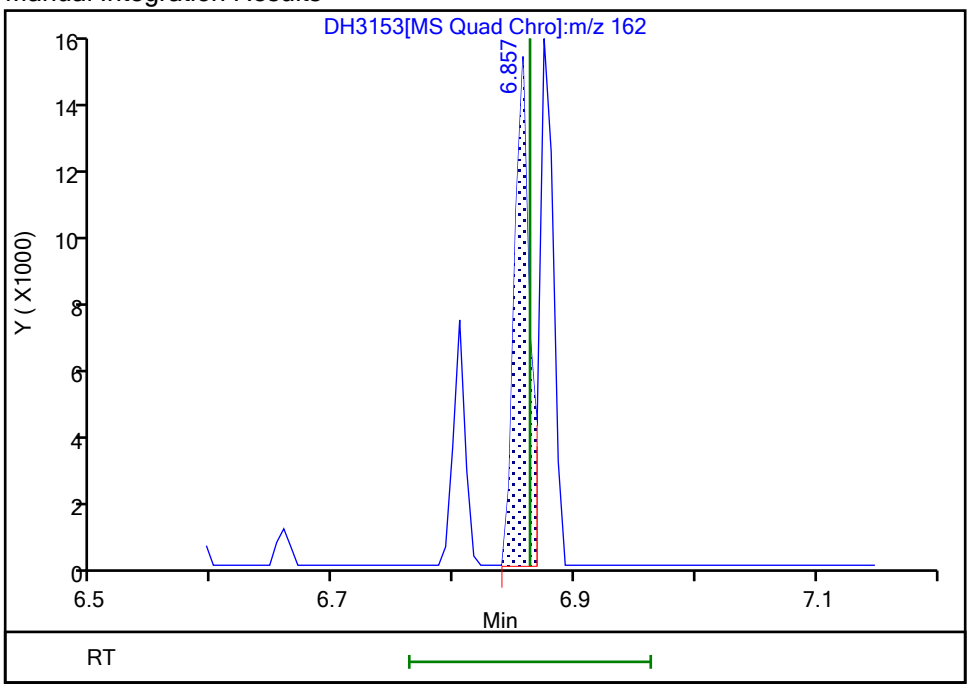
Processing Integration Results

RT: 6.86
Area: 23689
Amount: 0.199168
Amount Units: ug/ml



Manual Integration Results

RT: 6.86
Area: 12493
Amount: 0.140273
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:02:25 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

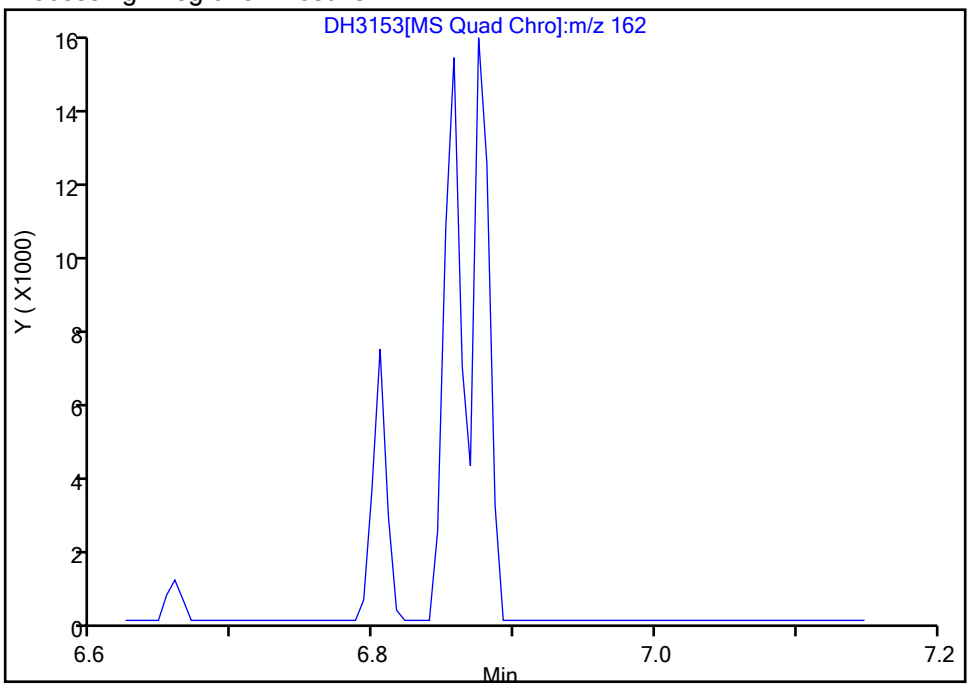
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D				
Injection Date:	31-Aug-2023 17:37:33	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

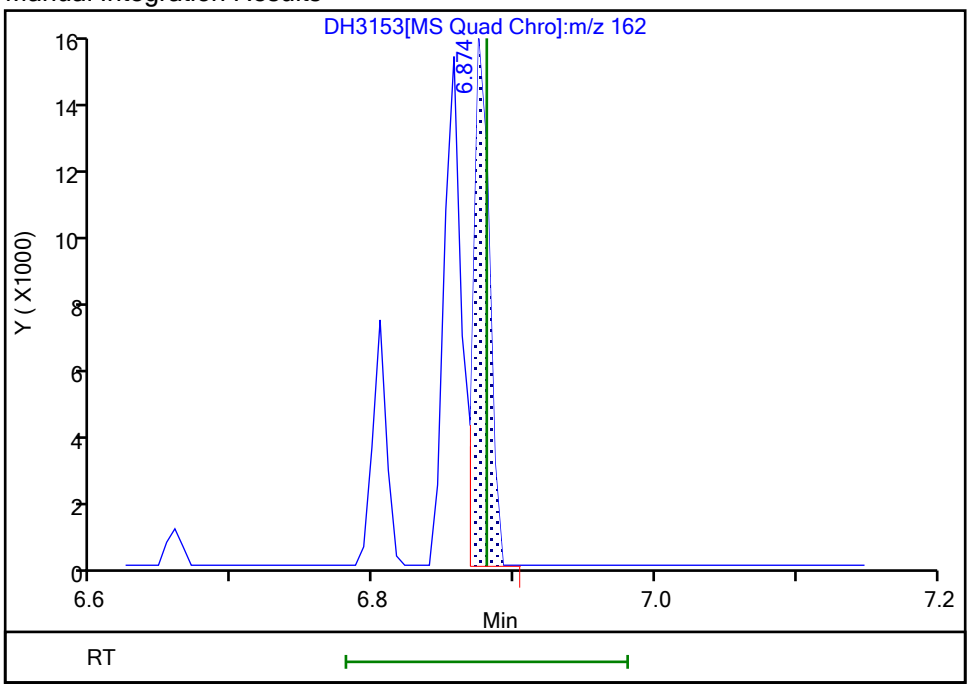
Not Detected
Expected RT: 6.88

Processing Integration Results



Manual Integration Results

RT: 6.87
Area: 11196
Amount: 0.140604
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:02:31 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

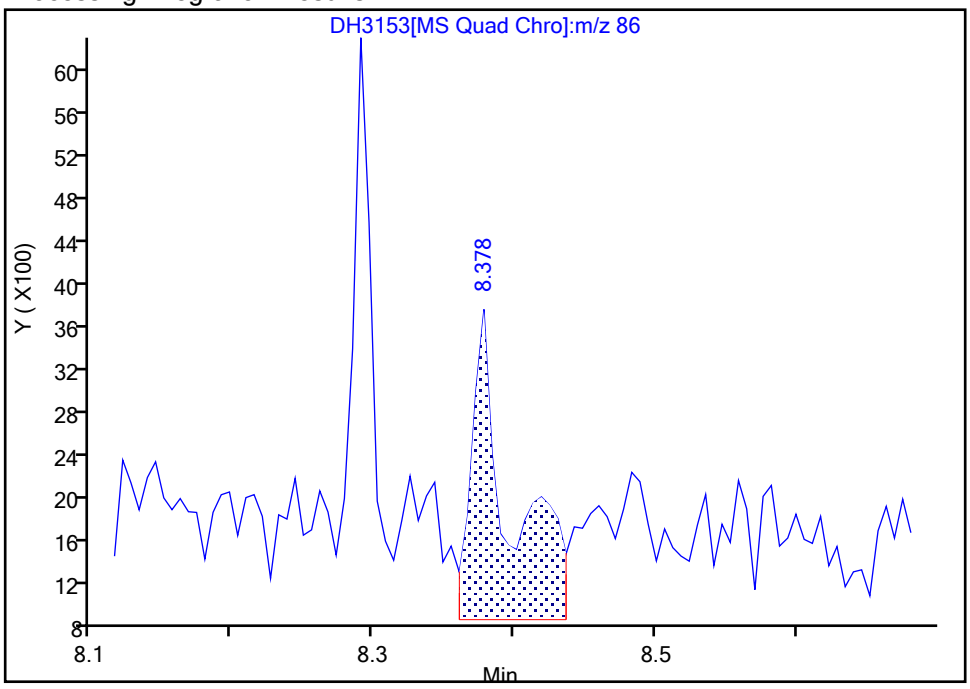
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D				
Injection Date:	31-Aug-2023 17:37:33	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

117 trans-Diallate, CAS: 17708-58-6

Signal: 1

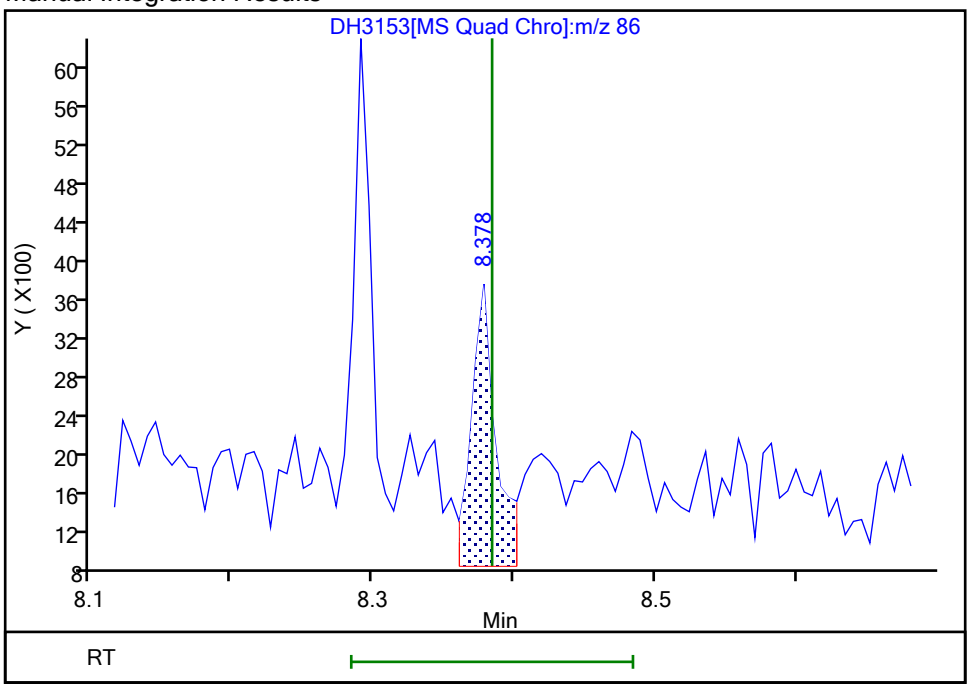
Processing Integration Results

RT: 8.38
Area: 5433
Amount: 0.034868
Amount Units: ug/ml



Manual Integration Results

RT: 8.38
Area: 3379
Amount: 0.076734
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:02:54 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

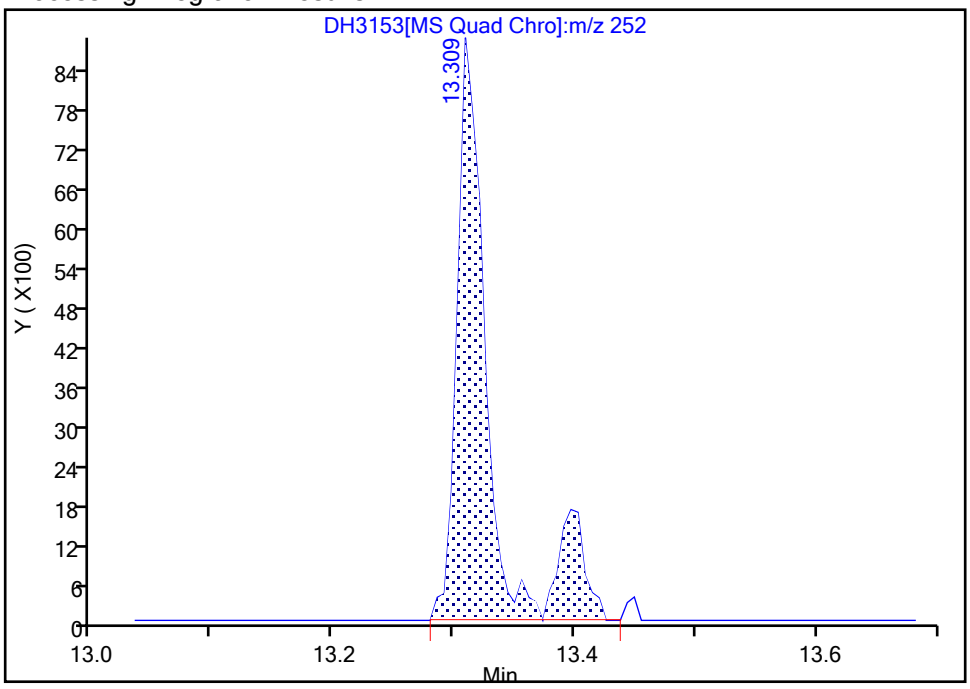
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D				
Injection Date:	31-Aug-2023 17:37:33	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

169 Benzo[a]pyrene, CAS: 50-32-8

Signal: 1

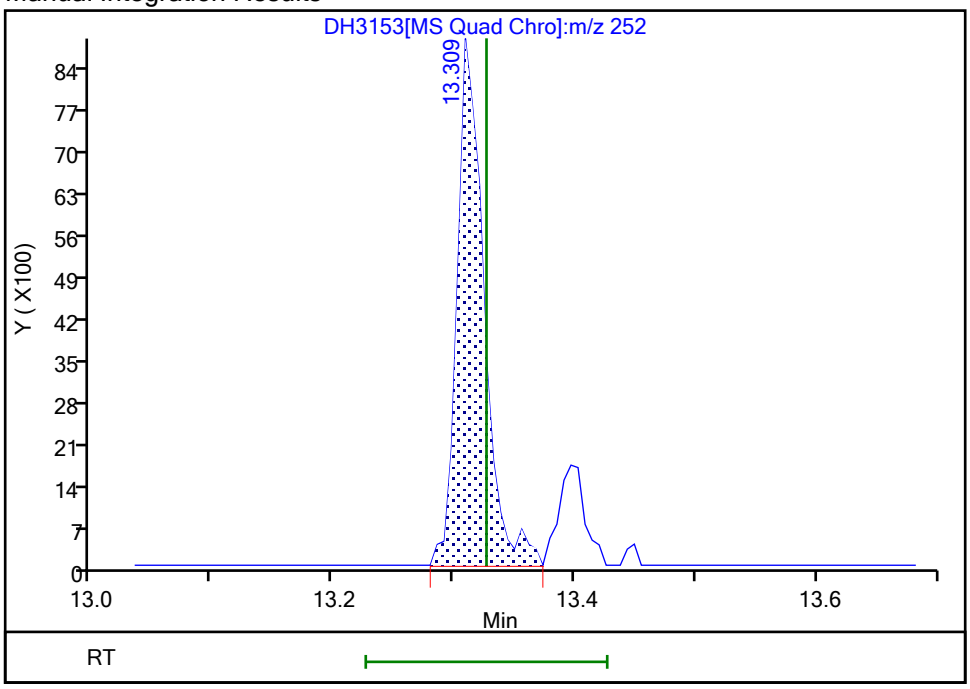
Processing Integration Results

RT: 13.31
Area: 16218
Amount: 0.130683
Amount Units: ug/ml



Manual Integration Results

RT: 13.31
Area: 13641
Amount: 0.112249
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:03:19 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

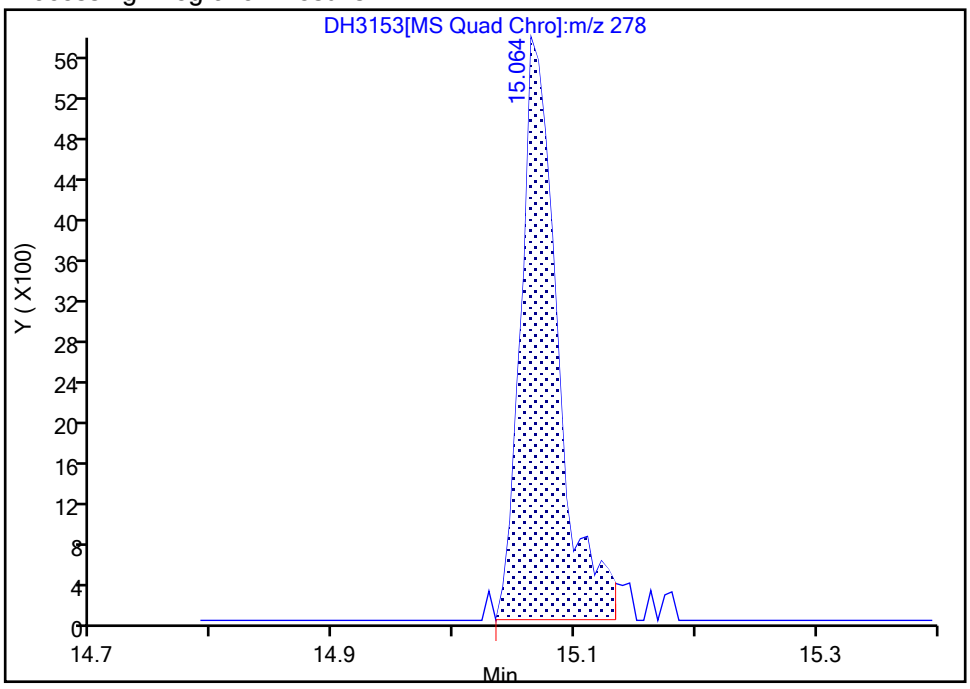
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D				
Injection Date:	31-Aug-2023 17:37:33	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

175 Dibenz(a,h)anthracene, CAS: 53-70-3

Signal: 1

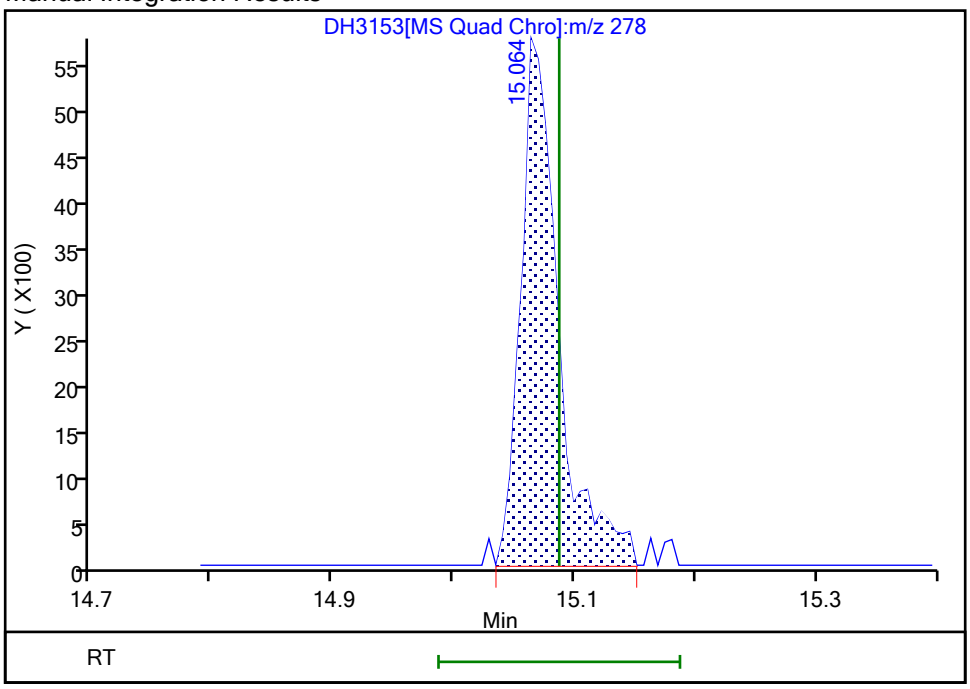
Processing Integration Results

RT: 15.06
Area: 12138
Amount: 0.101810
Amount Units: ug/ml



Manual Integration Results

RT: 15.06
Area: 12443
Amount: 0.104102
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:03:55 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

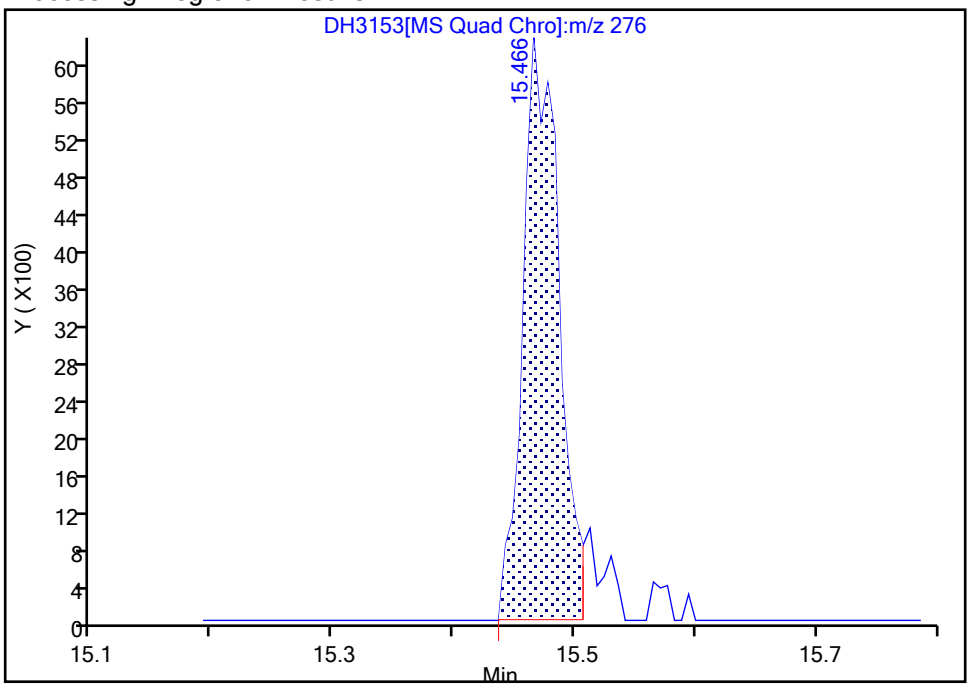
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D				
Injection Date:	31-Aug-2023 17:37:33	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

176 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

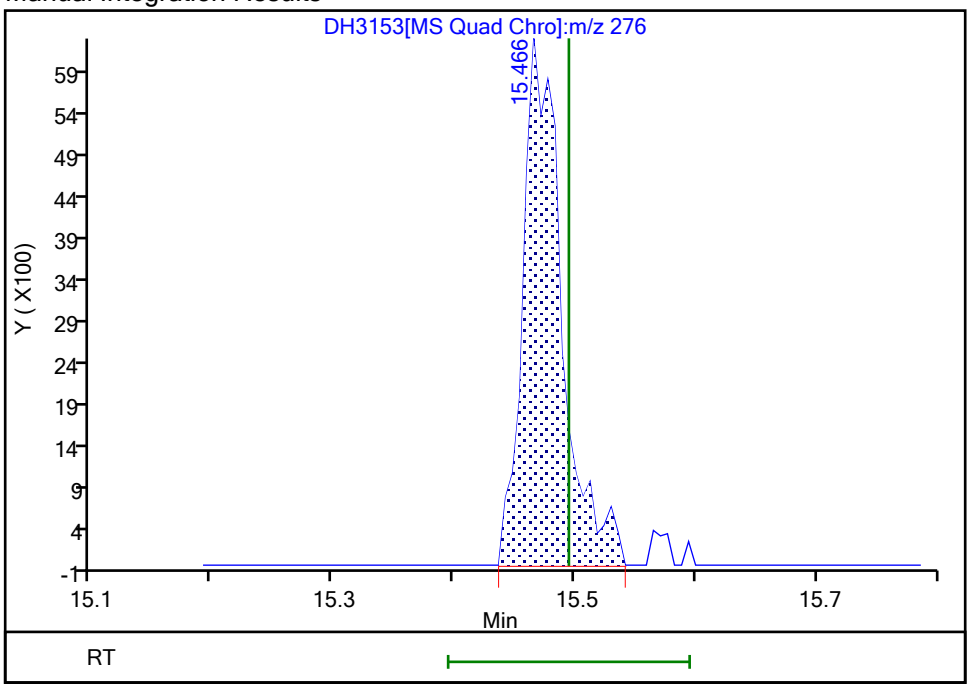
Processing Integration Results

RT: 15.47
Area: 12806
Amount: 0.106408
Amount Units: ug/ml



Manual Integration Results

RT: 15.47
Area: 13963
Amount: 0.114917
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:03:41 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

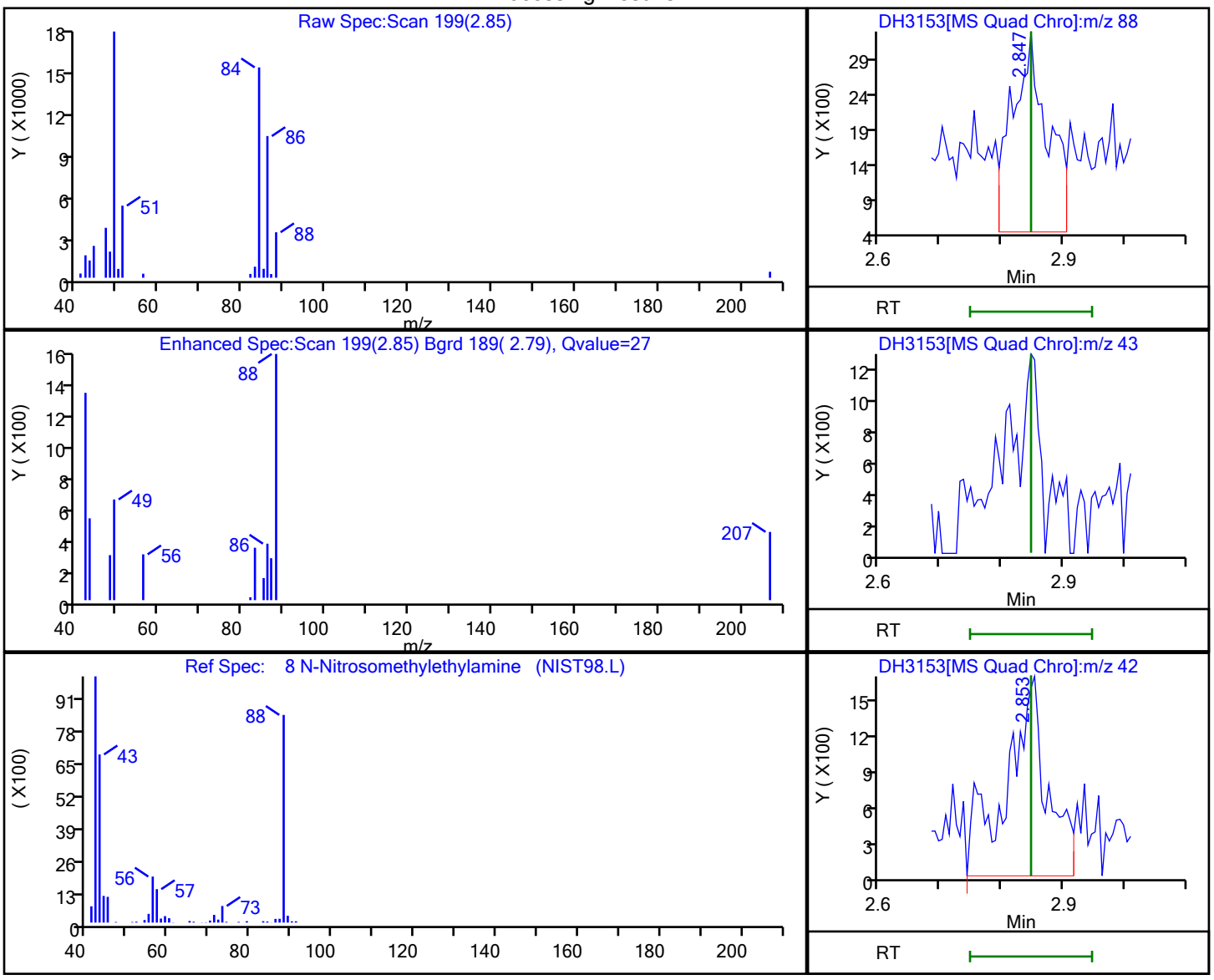
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3153.D				
Injection Date:	31-Aug-2023 17:37:33	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

8 N-Nitrosomethylethylamine, CAS: 10595-95-6

Processing Results



RT	Mass	Response	Amount
2.85	88.00	10831	0.122854
2.85	42.00	7756	
2.85	43.00	0	

Reviewer: SJ89, 01-Sep-2023 08:01:46 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3152.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 31-Aug-2023 17:16:53 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICL8
Misc. Info.: 410-0092991-004
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:29:49 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: SJ89 Date: 01-Sep-2023 08:05:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.908	1.908	0.000	91	600189	30.0	30.4	
3 N-Nitrosodimethylamine	74	2.130	2.130	0.000	95	967609	30.0	31.5	
4 Pyridine	79	2.165	2.165	0.000	97	3087499	60.0	61.2	
6 Dimethylformamide	73	2.439	2.445	-0.006	93	1070414	30.0	33.3	
7 2-Picoline	93	2.759	2.759	0.000	91	1649885	30.0	31.1	
8 N-Nitrosomethylethylamine	88	2.847	2.847	0.000	91	697414	30.0	30.8	
9 Methyl methanesulfonate	80	3.115	3.109	0.006	85	836694	30.0	30.7	
$ 10 2-Fluorophenol	112	3.272	3.266	0.006	92	3235597	60.0	63.2	
11 N-Nitrosodiethylamine	102	3.494	3.488	0.006	92	695307	30.0	32.1	
12 Ethyl methanesulfonate	109	3.773	3.768	0.005	99	754651	30.0	31.4	
15 Benzaldehyde	77	4.100	4.100	0.000	97	636620	30.0	18.1	
$ 16 Phenol-d5	99	4.141	4.135	0.006	96	4258546	60.0	63.9	
17 Phenol	94	4.152	4.147	0.005	94	1872037	30.0	31.7	
18 Aniline	93	4.199	4.193	0.006	96	2285015	30.0	31.1	
19 Bis(2-chloroethyl)ether	93	4.257	4.252	0.005	98	1529191	30.0	30.4	
20 2-Chlorophenol	128	4.310	4.310	0.000	94	1351755	30.0	31.3	
21 1,3-Dichlorobenzene	146	4.461	4.456	0.005	96	1555514	30.0	30.3	
* 22 1,4-Dichlorobenzene-d4	152	4.514	4.514	0.000	96	161609	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.531	4.525	0.006	92	1581149	30.0	30.5	
25 Benzyl alcohol	108	4.636	4.630	0.006	91	932706	30.0	31.9	
26 1,2-Dichlorobenzene	146	4.671	4.671	0.000	95	1499063	30.0	30.3	
28 2-Methylphenol	108	4.735	4.729	0.006	95	1309472	30.0	31.5	
29 2,2'-oxybis[1-chloropropane]	45	4.764	4.764	0.000	93	1586851	30.0	30.7	
31 N-Nitrosopyrrolidine	100	4.875	4.864	0.011	90	783073	30.0	32.9	
32 4-Methylphenol	108	4.881	4.875	0.006	97	1395406	30.0	32.4	
34 Acetophenone	105	4.893	4.887	0.005	95	2081091	30.0	30.7	
33 N-Nitrosodi-n-propylamine	70	4.898	4.893	0.005	78	1175843	30.0	31.9	
35 N-Nitrosomorpholine	56	4.916	4.904	0.012	91	808435	30.0	30.7	
36 2-Toluidine	106	4.927	4.922	0.005	94	2314712	30.0	31.6	
38 Hexachloroethane	117	4.997	4.998	-0.001	92	625138	30.0	31.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.038	5.033	0.005	87	3794539	60.0	62.1	
40 Nitrobenzene	77	5.056	5.050	0.006	85	1647267	30.0	30.7	
42 N-Nitrosopiperidine	114	5.201	5.196	0.005	86	697066	30.0	31.9	
43 Isophorone	82	5.283	5.277	0.006	97	3038787	30.0	30.9	
44 2-Nitrophenol	139	5.359	5.353	0.006	91	619140	30.0	34.6	
45 2,4-Dimethylphenol	107	5.388	5.388	0.000	97	1393296	30.0	32.1	
46 o,o',o''-Triethylphosphorothioat	198	5.464	5.458	0.006	81	788755	30.0	31.5	
47 Bis(2-chloroethoxy)methane	93	5.487	5.487	0.000	97	1854583	30.0	30.4	
48 2,4-Dichlorophenol	162	5.580	5.580	0.000	94	1172287	30.0	32.0	
49 1,2,4-Trichlorobenzene	180	5.668	5.662	0.006	93	1338889	30.0	29.8	
* 50 Naphthalene-d8	136	5.720	5.720	0.000	100	611379	5.00	5.00	
51 Naphthalene	128	5.743	5.744	-0.001	98	3960077	30.0	29.4	
52 Alpha-Terpineol	59	5.755	5.749	0.006	92	1122843	30.0	33.1	
53 4-Chloroaniline	127	5.790	5.790	0.000	95	1693468	30.0	30.9	
54 2,6-Dichlorophenol	162	5.802	5.796	0.006	97	1185110	30.0	31.7	
55 Hexachloropropene	213	5.825	5.825	0.000	87	951089	30.0	31.9	
56 Hexachlorobutadiene	225	5.860	5.860	0.000	95	831829	30.0	29.8	
60 Quinoline	129	6.058	6.053	0.005	96	2574315	30.0	30.7	
61 Caprolactam	113	6.122	6.105	0.017	78	382134	30.0	31.6	
62 N-Nitrosodi-n-butylamine	84	6.117	6.111	0.006	90	1378218	30.0	31.5	
63 p-Phenylene diamine	108	6.134	6.123	0.012	96	791252	30.0	25.9	
64 4-Chloro-3-methylphenol	107	6.251	6.245	0.006	93	1244523	30.0	32.6	
65 Safrole, Total	162	6.321	6.315	0.006	90	1106749	30.0	31.7	
66 2-Methylnaphthalene	142	6.402	6.396	0.006	90	2622760	30.0	30.5	
67 1-Methylnaphthalene	142	6.495	6.490	0.005	92	2415477	30.0	30.2	
68 Hexachlorocyclopentadiene	237	6.548	6.548	0.000	93	719195	30.0	27.8	
69 1,2,4,5-Tetrachlorobenzene	216	6.559	6.554	0.005	97	1561823	30.0	30.2	
70 Isosafrole Peak 1	162	6.594	6.595	-0.001	91	195206	4.80	4.73	
71 2,4,6-Trichlorophenol	196	6.664	6.665	-0.001	80	899811	30.0	35.5	
72 2,4,5-Trichlorophenol	196	6.699	6.694	0.005	94	1006055	30.0	33.4	
$ 73 2-Fluorobiphenyl (Surr)	172	6.752	6.752	0.000	98	6791938	60.0	56.9	
74 Isosafrole Peak 2	162	6.810	6.810	0.000	91	1154001	25.2	26.1	
75 1,1'-Biphenyl	154	6.845	6.845	0.000	93	3425948	30.0	29.9	
76 2-Chloronaphthalene	162	6.863	6.863	0.000	94	2696235	30.0	29.4	
77 1-Chloronaphthalene	162	6.886	6.880	0.006	99	2503325	30.0	30.5	
78 Phenyl ether	170	6.944	6.944	0.000	86	1910959	30.0	30.3	
79 2-Nitroaniline	138	6.956	6.956	0.000	87	790113	30.0	33.8	
81 1,4-Naphthoquinone	158	7.032	7.026	0.006	87	1053467	30.0	32.3	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	87	389719	30.0	37.1	
85 Dimethyl phthalate	163	7.137	7.131	0.006	98	3019045	30.0	30.5	
84 1,4-Dinitrobenzene	168	7.160	7.154	0.006	85	461812	30.0	36.0	
87 2,6-Dinitrotoluene	165	7.189	7.183	0.006	93	639660	30.0	33.4	
88 Acenaphthylene	152	7.259	7.253	0.006	98	4149392	30.0	30.8	
89 3-Nitroaniline	138	7.346	7.341	0.005	90	700901	30.0	33.7	
* 90 Acenaphthene-d10	164	7.387	7.387	0.000	95	358556	5.00	5.00	
91 Acenaphthene	153	7.422	7.416	0.006	95	2744599	30.0	30.1	
92 2,4-Dinitrophenol	184	7.445	7.440	0.005	87	644857	60.0	63.2	
93 4-Nitrophenol	109	7.504	7.492	0.012	85	904810	60.0	69.9	
94 Pentachlorobenzene	250	7.545	7.539	0.006	98	1364821	30.0	29.9	
95 2,4-Dinitrotoluene	165	7.574	7.568	0.006	92	863283	30.0	34.5	
96 Dibenzofuran	168	7.585	7.580	0.005	96	3894405	30.0	30.0	
97 1-Naphthylamine	143	7.661	7.655	0.006	98	2366011	30.0	31.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.696	7.696	0.000	71	884679	30.0	34.0	
99 2-Naphthylamine	143	7.731	7.731	0.000	96	2714555	30.0	31.5	
100 Diethyl phthalate	149	7.813	7.807	0.006	98	2919609	30.0	30.6	
101 Thionazin	107	7.888	7.883	0.005	79	492099	30.0	31.6	
102 Fluorene	166	7.912	7.906	0.006	93	3124452	30.0	30.8	
103 4-Chlorophenyl phenyl ether	204	7.912	7.912	0.000	90	1661272	30.0	30.2	
104 N-Nitro-o-toluidine	152	7.918	7.918	0.000	90	815400	30.0	33.5	
105 4-Nitroaniline	138	7.929	7.918	0.011	78	758377	30.0	33.8	
106 4,6-Dinitro-2-methylphenol	198	7.958	7.947	0.011	89	946506	60.0	65.3	
107 N-Nitrosodiphenylamine	169	8.022	8.017	0.005	62	2249018	25.5	26.2	
108 1,2-Diphenylhydrazine	77	8.063	8.058	0.005	41	3549739	30.0	30.3	a
$ 109 2,4,6-Tribromophenol	330	8.133	8.133	0.000	93	1237599	60.0	68.6	
110 Sulfotepp	97	8.180	8.174	0.006	78	556684	30.0	32.5	
112 1,3,5-Trinitrobenzene	213	8.267	8.262	0.005	83	315634	30.0	36.2	
113 cis-Diallate	86	8.302	8.297	0.005	0	1013291	22.2	21.7	
114 Phorate	75	8.308	8.302	0.006	96	1968900	30.0	33.7	
115 Phenacetin	108	8.320	8.314	0.006	90	1513886	30.0	32.8	
116 4-Bromophenyl phenyl ether	248	8.378	8.372	0.006	68	1044442	30.0	30.1	
117 trans-Diallate	86	8.384	8.384	0.000	0	356972	7.80	7.83	
118 Hexachlorobenzene	284	8.425	8.425	0.000	96	1134940	30.0	29.2	
119 Dimethoate	87	8.471	8.460	0.011	96	1141367	30.0	31.9	
120 Atrazine	200	8.535	8.530	0.005	94	794726	30.0	29.1	
121 Pentachlorophenol	266	8.611	8.611	0.000	93	1367551	60.0	64.5	
122 4-Aminobiphenyl	169	8.623	8.617	0.006	90	3653042	30.0	32.0	
123 Pentachloronitrobenzene	237	8.623	8.623	0.000	89	467703	30.0	34.8	
124 Pronamide	173	8.681	8.675	0.006	90	1436948	30.0	33.2	
125 Dinoseb	211	8.792	8.786	0.006	97	644485	30.0	31.8	
* 126 Phenanthrene-d10	188	8.798	8.792	0.006	97	712778	5.00	5.00	
127 Disulfoton	88	8.804	8.804	0.000	96	1906483	30.0	28.5	
128 Phenanthrene	178	8.821	8.815	0.006	96	4554670	30.0	29.0	
129 Anthracene	178	8.868	8.868	0.000	97	4697365	30.0	29.9	
130 Carbazole	167	9.019	9.019	0.000	96	4105292	30.0	30.4	
131 Methyl parathion	109	9.159	9.153	0.006	94	950748	30.0	33.5	
133 Di-n-butyl phthalate	149	9.363	9.363	0.000	100	4771779	30.0	33.6	
134 Ethyl Parathion	109	9.532	9.526	0.006	86	614622	30.0	35.0	
135 4-Nitroquinoline-1-oxide	190	9.555	9.550	0.005	95	435490	30.0	29.5	
S 136 Diallate	86				0		30.0	29.6	
140 Octachlorostyrene	308	9.765	9.765	0.000	90	462645	30.0	29.9	
141 Isodrin	193	9.806	9.806	0.000	93	551394	30.0	28.6	
143 Fluoranthene	202	9.952	9.946	0.006	98	5169600	30.0	30.6	
147 Benzidine	184	10.086	10.080	0.006	98	8949766	90.0	87.1	e
* 149 Pyrene-d10 (IS)	212	10.144	10.144	0.000	98	766457	5.00	5.00	
150 Pyrene	202	10.167	10.162	0.005	97	5422104	30.0	28.6	
$ 152 p-Terphenyl-d14	244	10.331	10.325	0.006	98	8319846	60.0	53.7	e
154 p-Dimethylamino azobenzene	225	10.471	10.465	0.005	92	994645	30.0	34.3	
155 Chlorobenzilate	139	10.523	10.517	0.006	93	1511899	30.0	35.0	
156 3,3'-Dimethylbenzidine	212	10.826	10.820	0.006	99	3029740	30.0	32.1	
157 Butyl benzyl phthalate	149	10.849	10.844	0.005	97	2082096	30.0	33.7	
158 2-Acetylaminofluorene	181	11.100	11.094	0.006	93	1779524	30.0	28.7	
159 3,3'-Dichlorobenzidine	252	11.432	11.432	0.000	75	2070078	30.0	32.2	
160 4,4'-Methylene bis(2-chloroani	231	11.444	11.444	0.000	96	1101553	30.0	32.3	
161 Benzo[a]anthracene	228	11.456	11.450	0.006	98	5276644	30.0	32.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.502	11.497	0.005	97	4902727	30.0	30.9	
163 Bis(2-ethylhexyl) phthalate	149	11.531	11.531	0.000	97	3038440	30.0	35.0	
164 6-Methylchrysene	242	12.073	12.068	0.005	98	3655021	30.0	34.2	
165 Di-n-octyl phthalate	149	12.406	12.406	0.000	99	4867477	30.0	32.8	
167 Benzo[b]fluoranthene	252	12.878	12.866	0.012	96	5467171	30.0	33.7	
166 7,12-Dimethylbenz(a)anthracene	256	12.872	12.866	0.006	79	2359311	30.0	36.7	
168 Benzo[k]fluoranthene	252	12.913	12.907	0.006	98	5427375	30.0	31.7	
169 Benzo[a]pyrene	252	13.332	13.327	0.005	76	4576385	30.0	34.7	
* 170 Perylene-d12	264	13.408	13.408	0.000	99	665600	5.00	5.00	
171 3-Methylcholanthrene	268	13.851	13.845	0.006	90	2170886	30.0	34.5	
172 Dibenz[a,h]acridine	279	14.679	14.673	0.006	90	3593184	30.0	34.1	
173 Dibenz[a,j]acridine	279	14.766	14.755	0.011	96	4262003	30.0	36.6	
174 Indeno[1,2,3-cd]pyrene	276	15.052	15.035	0.018	98	4014141	30.0	36.8	
175 Dibenz(a,h)anthracene	278	15.098	15.087	0.011	91	4671904	30.0	36.0	
176 Benzo[g,h,i]perylene	276	15.506	15.495	0.011	98	4564626	30.0	34.6	
S 178 Dinitrotoluene	165				0			68.0	
S 182 Isosafrole	162				0		30.0	30.8	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

a - User Assigned ID

Reagents:

MSS_RV8270_8_00030 Amount Added: 1.00 Units: mL

Report Date: 05-Sep-2023 16:29:50 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3152.D

Injection Date: 31-Aug-2023 17:16:53 Instrument ID: HP19760 Operator ID: mem41592

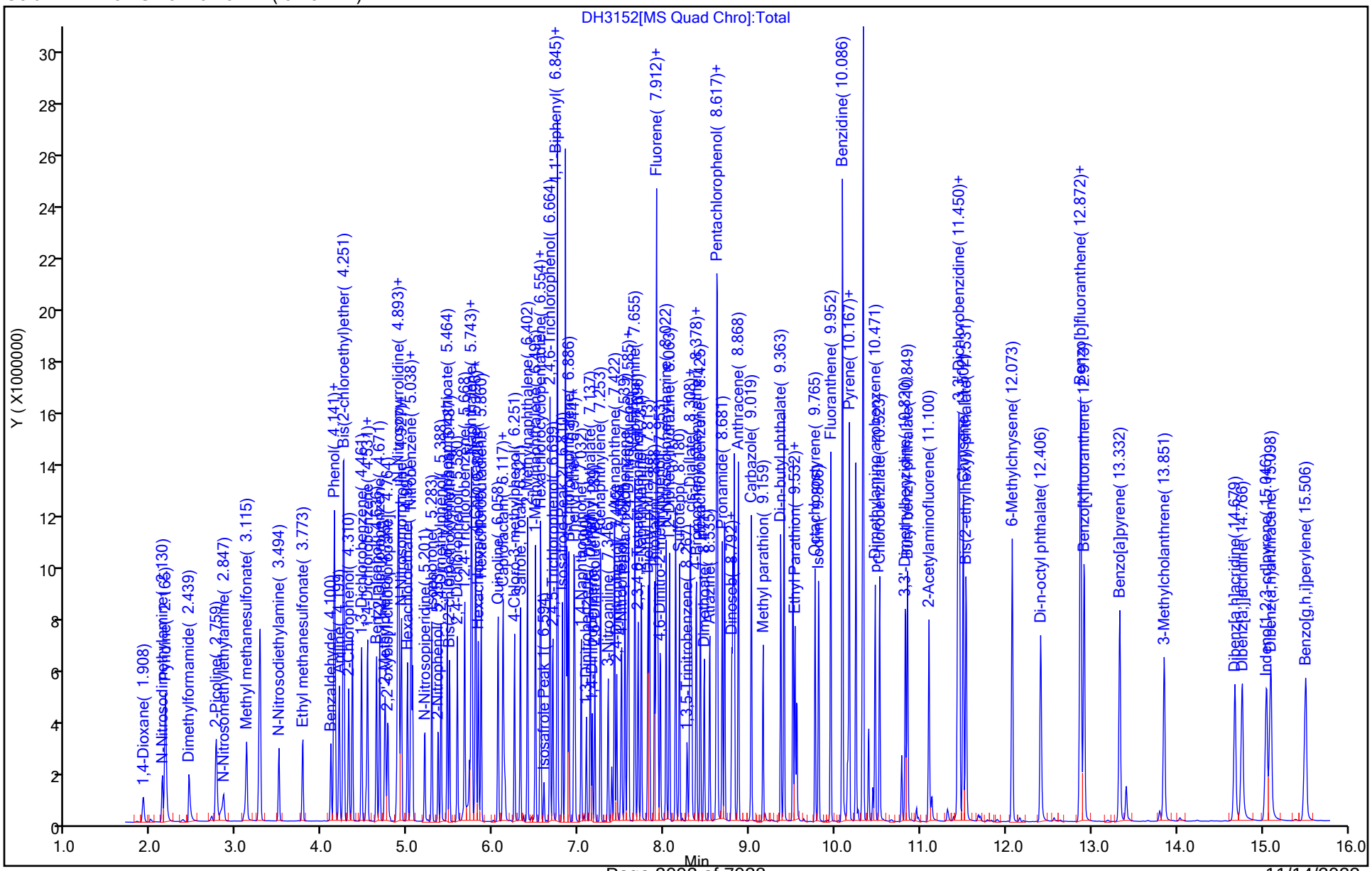
Lims ID: IC L8 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

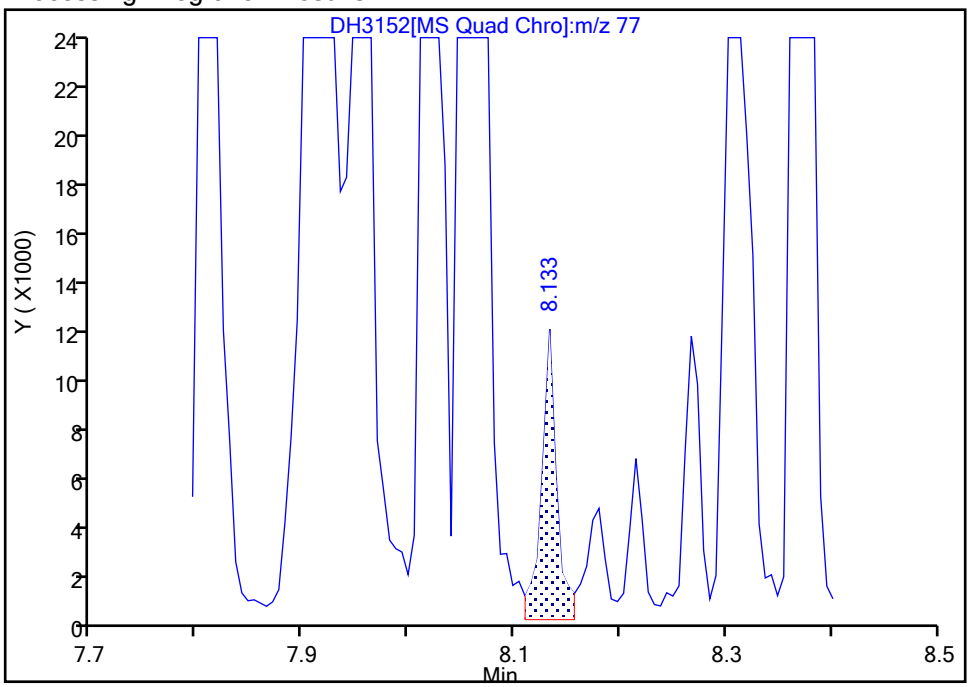
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3152.D				
Injection Date:	31-Aug-2023 17:16:53	Instrument ID:	HP19760		
Lims ID:	IC L8				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

108 1,2-Diphenylhydrazine, CAS: 122-66-7

Signal: 1

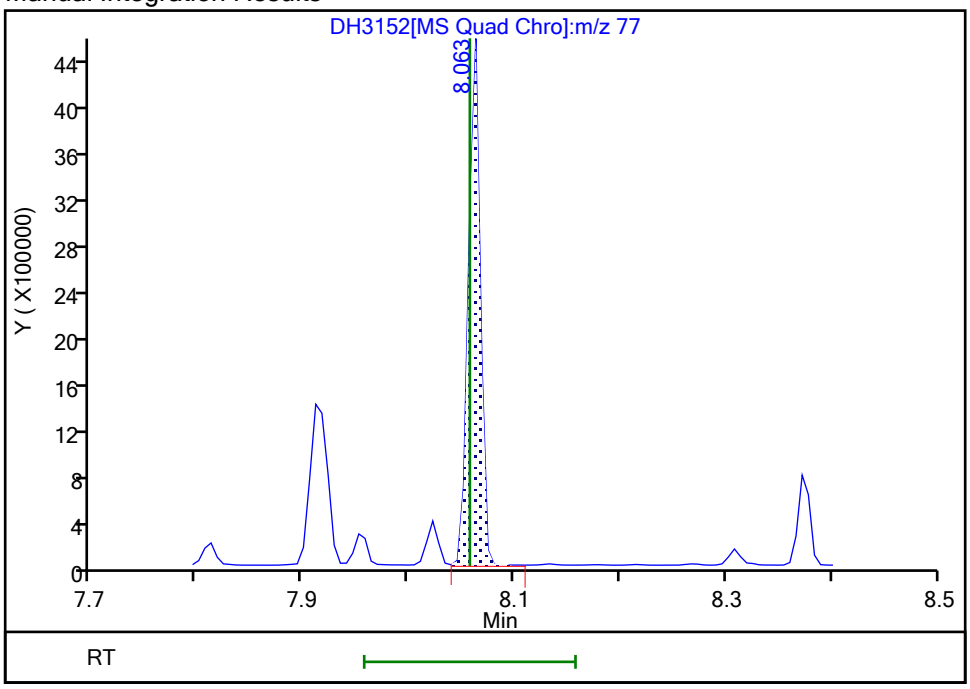
Processing Integration Results

RT: 8.13
Area: 11647
Amount: 0.132669
Amount Units: ug/ml



Manual Integration Results

RT: 8.06
Area: 3549739
Amount: 30.250496
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:05:02 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3154.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 31-Aug-2023 17:58:19 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 410-0092991-005
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:30:11 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: SJ89 Date: 01-Sep-2023 08:06:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.908	1.908	0.000	92	405808	20.0	19.9	
3 N-Nitrosodimethylamine	74	2.130	2.130	0.000	95	644941	20.0	20.3	
4 Pyridine	79	2.165	2.165	0.000	97	2079913	40.0	39.9	
6 Dimethylformamide	73	2.445	2.445	0.000	92	709467	20.0	21.3	
7 2-Picoline	93	2.759	2.759	0.000	91	1118864	20.0	20.4	
8 N-Nitrosomethylethylamine	88	2.847	2.847	0.000	91	470609	20.0	20.1	
9 Methyl methanesulfonate	80	3.115	3.109	0.006	85	574369	20.0	20.4	
$ 10 2-Fluorophenol	112	3.267	3.266	0.001	91	2189722	40.0	41.4	
11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	93	461254	20.0	20.6	
12 Ethyl methanesulfonate	109	3.768	3.768	0.000	100	507396	20.0	20.4	
15 Benzaldehyde	77	4.100	4.100	0.000	97	525722	20.0	14.5	
$ 16 Phenol-d5	99	4.135	4.135	0.000	96	2872359	40.0	41.7	
17 Phenol	94	4.147	4.147	0.000	94	1250267	20.0	20.5	
18 Aniline	93	4.193	4.193	0.000	96	1536399	20.0	20.2	
19 Bis(2-chloroethyl)ether	93	4.252	4.252	0.000	97	1023500	20.0	19.7	
20 2-Chlorophenol	128	4.304	4.310	-0.006	94	917454	20.0	20.5	
21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	96	1056016	20.0	19.9	
* 22 1,4-Dichlorobenzene-d4	152	4.508	4.514	-0.006	94	167082	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.526	4.525	0.001	92	1075113	20.0	20.0	
25 Benzyl alcohol	108	4.630	4.630	0.000	91	623399	20.0	20.6	
26 1,2-Dichlorobenzene	146	4.671	4.671	0.000	95	1016882	20.0	19.9	
28 2-Methylphenol	108	4.730	4.729	0.001	95	889447	20.0	20.7	
29 2,2'-oxybis[1-chloropropane]	45	4.765	4.764	0.000	92	1054294	20.0	19.7	
31 N-Nitrosopyrrolidine	100	4.869	4.864	0.005	91	519991	20.0	21.1	
32 4-Methylphenol	108	4.875	4.875	0.000	97	933814	20.0	21.0	
34 Acetophenone	105	4.887	4.887	0.000	95	1393131	20.0	19.9	
33 N-Nitrosodi-n-propylamine	70	4.893	4.893	0.000	79	775888	20.0	20.4	
35 N-Nitrosomorpholine	56	4.904	4.904	0.000	91	535387	20.0	19.7	
36 2-Toluidine	106	4.922	4.922	0.000	94	1547717	20.0	20.4	
38 Hexachloroethane	117	4.992	4.998	-0.006	92	429157	20.0	20.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.033	5.033	0.000	87	2539431	40.0	41.5	
40 Nitrobenzene	77	5.050	5.050	0.000	84	1107986	20.0	20.6	
42 N-Nitrosopiperidine	114	5.196	5.196	0.000	86	465831	20.0	21.3	
43 Isophorone	82	5.277	5.277	0.000	97	2033608	20.0	20.7	
44 2-Nitrophenol	139	5.353	5.353	0.000	91	402268	20.0	22.4	
45 2,4-Dimethylphenol	107	5.388	5.388	0.000	97	930071	20.0	21.4	
46 o,o',o''-Triethylphosphorothioat	198	5.458	5.458	0.000	82	528218	20.0	21.1	
47 Bis(2-chloroethoxy)methane	93	5.487	5.487	0.000	97	1243698	20.0	20.4	
48 2,4-Dichlorophenol	162	5.575	5.580	-0.005	93	789287	20.0	21.5	
49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	900041	20.0	20.0	
* 50 Naphthalene-d8	136	5.720	5.720	0.000	99	612262	5.00	5.00	
51 Naphthalene	128	5.738	5.744	-0.006	98	2701606	20.0	20.1	
52 Alpha-Terpineol	59	5.750	5.749	0.001	92	736131	20.0	21.7	
53 4-Chloroaniline	127	5.785	5.790	-0.006	95	1142741	20.0	20.8	
54 2,6-Dichlorophenol	162	5.796	5.796	0.000	97	799515	20.0	21.3	
55 Hexachloropropene	213	5.825	5.825	0.000	88	634472	20.0	21.2	
56 Hexachlorobutadiene	225	5.854	5.860	-0.006	95	567527	20.0	20.3	
60 Quinoline	129	6.053	6.053	0.000	96	1755122	20.0	20.9	
61 Caprolactam	113	6.111	6.105	0.006	50	264171	20.0	21.8	
62 N-Nitrosodi-n-butylamine	84	6.111	6.111	0.000	90	930450	20.0	21.3	
63 p-Phenylene diamine	108	6.128	6.123	0.006	96	579200	20.0	18.9	
64 4-Chloro-3-methylphenol	107	6.245	6.245	0.000	93	823328	20.0	21.6	
65 Safrole, Total	162	6.315	6.315	0.000	90	741752	20.0	21.2	
66 2-Methylnaphthalene	142	6.397	6.396	0.001	91	1767870	20.0	20.5	
67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	1642358	20.0	20.5	
68 Hexachlorocyclopentadiene	237	6.548	6.548	0.000	93	513489	20.0	19.8	
69 1,2,4,5-Tetrachlorobenzene	216	6.554	6.554	0.000	96	1051682	20.0	20.2	
70 Isosafrole Peak 1	162	6.589	6.595	-0.006	90	131812	3.20	3.18	
71 2,4,6-Trichlorophenol	196	6.659	6.665	-0.006	80	598893	20.0	23.5	
72 2,4,5-Trichlorophenol	196	6.694	6.694	0.000	93	672389	20.0	22.2	
$ 73 2-Fluorobiphenyl (Surr)	172	6.746	6.752	-0.006	99	4789842	40.0	39.9	
74 Isosafrole Peak 2	162	6.805	6.810	-0.005	92	776598	16.8	17.4	
75 1,1'-Biphenyl	154	6.839	6.845	-0.006	93	2311536	20.0	20.0	
76 2-Chloronaphthalene	162	6.857	6.863	-0.006	94	1759554	20.0	19.1	
77 1-Chloronaphthalene	162	6.880	6.880	0.000	99	1743045	20.0	21.1	
78 Phenyl ether	170	6.944	6.944	0.000	86	1290894	20.0	20.3	
79 2-Nitroaniline	138	6.950	6.956	-0.006	86	526917	20.0	22.4	
81 1,4-Naphthoquinone	158	7.026	7.026	0.000	86	728519	20.0	22.2	
86 1,3-Dinitrobenzene	168	7.084	7.090	-0.006	86	252476	20.0	23.9	
85 Dimethyl phthalate	163	7.131	7.131	0.000	98	2051770	20.0	20.6	
84 1,4-Dinitrobenzene	168	7.154	7.154	0.000	85	306597	20.0	23.8	
87 2,6-Dinitrotoluene	165	7.183	7.183	0.000	93	431284	20.0	22.4	
88 Acenaphthylene	152	7.253	7.253	0.000	98	2835052	20.0	20.9	
89 3-Nitroaniline	138	7.341	7.341	0.000	90	478349	20.0	22.9	
* 90 Acenaphthene-d10	164	7.382	7.387	-0.005	95	360732	5.00	5.00	
91 Acenaphthene	153	7.417	7.416	0.001	95	1873914	20.0	20.4	
92 2,4-Dinitrophenol	184	7.440	7.440	0.000	87	400613	40.0	40.2	
93 4-Nitrophenol	109	7.492	7.492	0.000	85	599887	40.0	46.1	
94 Pentachlorobenzene	250	7.539	7.539	0.000	98	924122	20.0	20.1	
95 2,4-Dinitrotoluene	165	7.562	7.568	-0.006	91	582992	20.0	23.2	
96 Dibenzofuran	168	7.580	7.580	0.000	97	2646126	20.0	20.2	
97 1-Naphthylamine	143	7.656	7.655	0.001	98	1626533	20.0	21.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.690	7.696	-0.006	71	599529	20.0	22.9	
99 2-Naphthylamine	143	7.725	7.731	-0.006	96	1858228	20.0	21.5	
100 Diethyl phthalate	149	7.807	7.807	0.000	98	1987706	20.0	20.7	
101 Thionazin	107	7.883	7.883	0.000	80	326001	20.0	20.8	
102 Fluorene	166	7.906	7.906	0.000	93	2117110	20.0	20.8	
103 4-Chlorophenyl phenyl ether	204	7.906	7.912	-0.006	90	1115395	20.0	20.2	
104 N-Nitro-o-toluidine	152	7.912	7.918	-0.006	87	552800	20.0	22.5	
105 4-Nitroaniline	138	7.918	7.918	0.000	82	510850	20.0	22.6	
106 4,6-Dinitro-2-methylphenol	198	7.947	7.947	0.000	87	601931	40.0	41.5	
107 N-Nitrosodiphenylamine	169	8.017	8.017	0.000	62	1539199	17.0	17.7	
108 1,2-Diphenylhydrazine	77	8.058	8.058	0.000	41	2409529	20.0	20.2	a
$ 109 2,4,6-Tribromophenol	330	8.128	8.133	-0.005	93	834754	40.0	46.0	
110 Sulfotepp	97	8.174	8.174	0.000	78	376199	20.0	21.6	
112 1,3,5-Trinitrobenzene	213	8.262	8.262	0.000	84	203962	20.0	23.0	
113 cis-Diallate	86	8.291	8.297	-0.006	0	684790	14.8	14.5	
114 Phorate	75	8.302	8.302	0.000	96	1316277	20.0	22.2	
115 Phenacetin	108	8.314	8.314	0.000	89	1027418	20.0	21.9	
116 4-Bromophenyl phenyl ether	248	8.372	8.372	0.000	62	700857	20.0	19.9	
117 trans-Diallate	86	8.378	8.384	-0.006	0	245652	5.20	5.31	
118 Hexachlorobenzene	284	8.419	8.425	-0.006	95	768638	20.0	19.5	
119 Dimethoate	87	8.460	8.460	0.000	96	780402	20.0	21.5	
120 Atrazine	200	8.530	8.530	0.000	94	604138	20.0	21.8	
121 Pentachlorophenol	266	8.606	8.611	-0.005	93	880870	40.0	41.1	
122 4-Aminobiphenyl	169	8.611	8.617	-0.006	90	2503510	20.0	21.6	
123 Pentachloronitrobenzene	237	8.617	8.623	-0.006	90	315798	20.0	23.1	
124 Pronamide	173	8.676	8.675	0.001	90	967734	20.0	22.0	
125 Dinoseb	211	8.786	8.786	0.000	98	411610	20.0	20.4	
* 126 Phenanthrene-d10	188	8.792	8.792	0.000	97	723425	5.00	5.00	
127 Disulfoton	88	8.798	8.804	-0.006	96	1309661	20.0	19.3	
128 Phenanthrene	178	8.815	8.815	0.000	96	3145506	20.0	19.7	
129 Anthracene	178	8.862	8.868	-0.006	97	3266022	20.0	20.5	
130 Carbazole	167	9.014	9.019	-0.005	96	2801315	20.0	20.4	
131 Methyl parathion	109	9.148	9.153	-0.005	94	642455	20.0	22.3	
133 Di-n-butyl phthalate	149	9.357	9.363	-0.006	100	3269945	20.0	22.7	
134 Ethyl Parathion	109	9.521	9.526	-0.005	86	407244	20.0	22.8	
135 4-Nitroquinoline-1-oxide	190	9.544	9.550	-0.006	93	277014	20.0	20.8	
S 136 Diallate	86				0		20.0	19.8	
140 Octachlorostyrene	308	9.760	9.765	-0.005	89	318166	20.0	20.3	
141 Isodrin	193	9.800	9.806	-0.006	92	372070	20.0	19.0	
143 Fluoranthene	202	9.940	9.946	-0.006	97	3615874	20.0	21.1	
147 Benzidine	184	10.080	10.080	0.000	99	6629510	60.0	64.0	
* 149 Pyrene-d10 (IS)	212	10.139	10.144	-0.006	98	772934	5.00	5.00	
150 Pyrene	202	10.156	10.162	-0.006	97	3803346	20.0	19.9	
$ 152 p-Terphenyl-d14	244	10.319	10.325	-0.006	99	6376101	40.0	40.8	
154 p-Dimethylamino azobenzene	225	10.459	10.465	-0.006	92	690314	20.0	23.6	
155 Chlorobenzilate	139	10.512	10.517	-0.005	93	1019953	20.0	23.4	
156 3,3'-Dimethylbenzidine	212	10.815	10.820	-0.005	99	2045398	20.0	21.5	
157 Butyl benzyl phthalate	149	10.838	10.844	-0.006	96	1394089	20.0	22.4	
158 2-Acetylaminofluorene	181	11.089	11.094	-0.005	93	1146316	20.0	20.7	
159 3,3'-Dichlorobenzidine	252	11.427	11.432	-0.005	75	1420319	20.0	21.9	
160 4,4'-Methylene bis(2-chloroani	231	11.432	11.444	-0.012	97	744235	20.0	21.7	
161 Benzo[a]anthracene	228	11.444	11.450	-0.006	98	3652301	20.0	22.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.491	11.497	-0.006	96	3415330	20.0	21.3	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.531	-0.011	97	2004430	20.0	22.9	
164 6-Methylchrysene	242	12.062	12.068	-0.006	98	2473354	20.0	22.9	
165 Di-n-octyl phthalate	149	12.394	12.406	-0.012	99	3160062	20.0	21.0	
167 Benzo[b]fluoranthene	252	12.860	12.866	-0.006	97	3622820	20.0	21.8	
166 7,12-Dimethylbenz(a)anthracene	256	12.860	12.866	-0.006	79	1586020	20.0	24.0	
168 Benzo[k]fluoranthene	252	12.901	12.907	-0.006	98	3851643	20.0	22.0	
169 Benzo[a]pyrene	252	13.321	13.327	-0.006	76	3151006	20.0	23.3	
* 170 Perylene-d12	264	13.397	13.408	-0.011	99	682947	5.00	5.00	
171 3-Methylcholanthrene	268	13.840	13.845	-0.005	90	1445312	20.0	22.4	
172 Dibenz[a,h]acridine	279	14.667	14.673	-0.006	90	2405191	20.0	22.3	
173 Dibenz[a,j]acridine	279	14.749	14.755	-0.006	96	2836407	20.0	23.7	
174 Indeno[1,2,3-cd]pyrene	276	15.035	15.035	0.001	98	2654938	20.0	23.7	
175 Dibenz(a,h)anthracene	278	15.081	15.087	-0.006	92	3090159	20.0	23.2	
176 Benzo[g,h,i]perylene	276	15.489	15.495	-0.006	98	3054200	20.0	22.6	
S 178 Dinitrotoluene	165				0			45.6	
S 182 Isosafrole	162				0		20.0	20.6	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MSS_RV8270_7_00030 Amount Added: 1.00 Units: mL

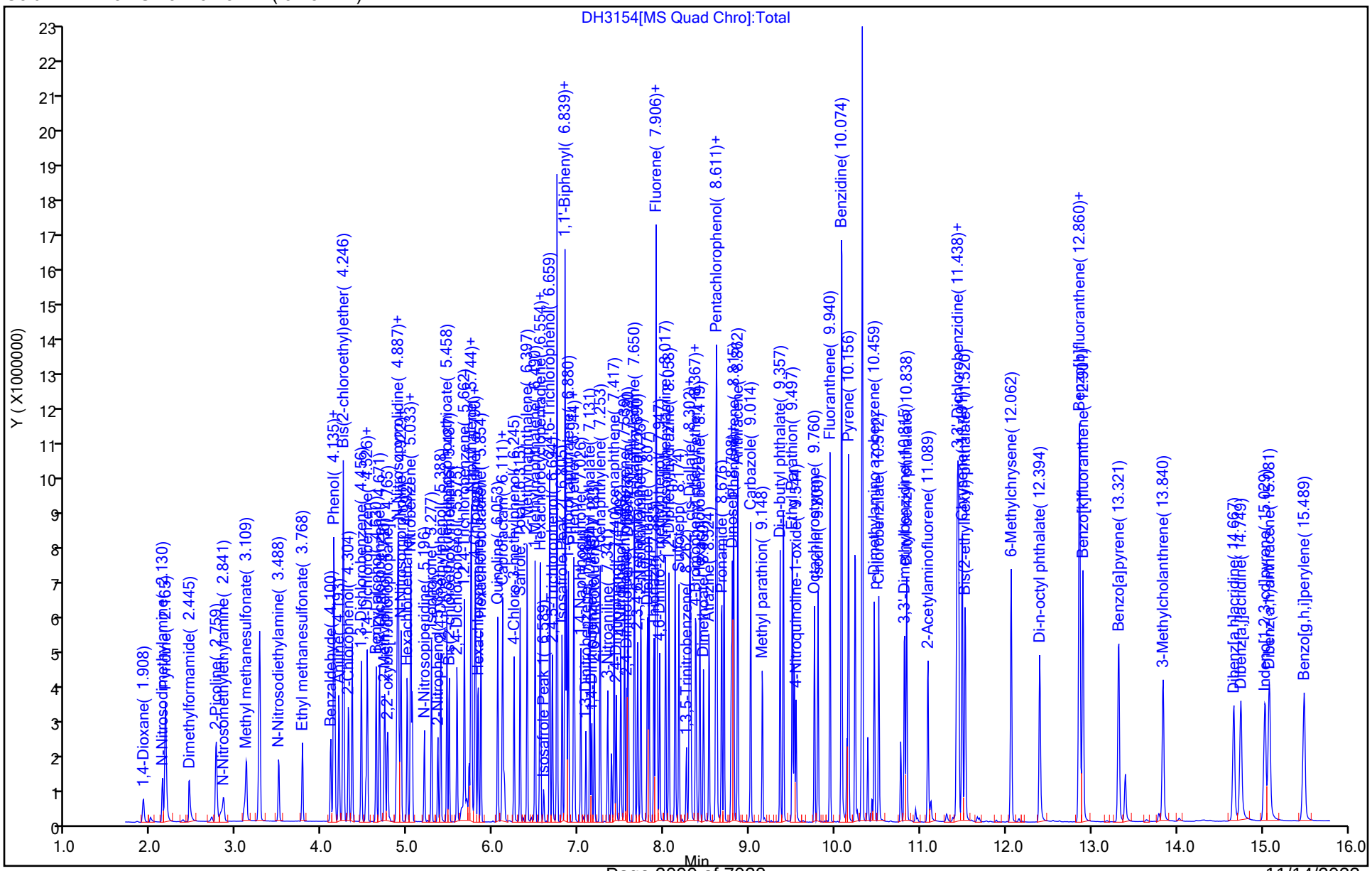
Report Date: 05-Sep-2023 16:30:12 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3154.D

Injection Date:	31-Aug-2023 17:58:19	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC L7			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

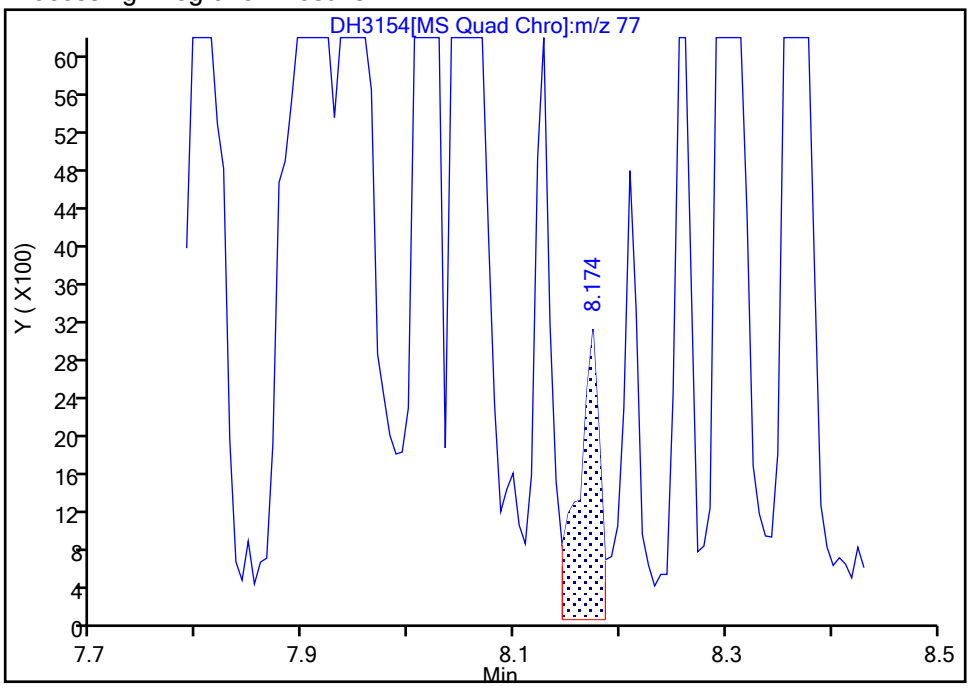
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3154.D				
Injection Date:	31-Aug-2023 17:58:19	Instrument ID:	HP19760		
Lims ID:	IC L7				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

108 1,2-Diphenylhydrazine, CAS: 122-66-7

Signal: 1

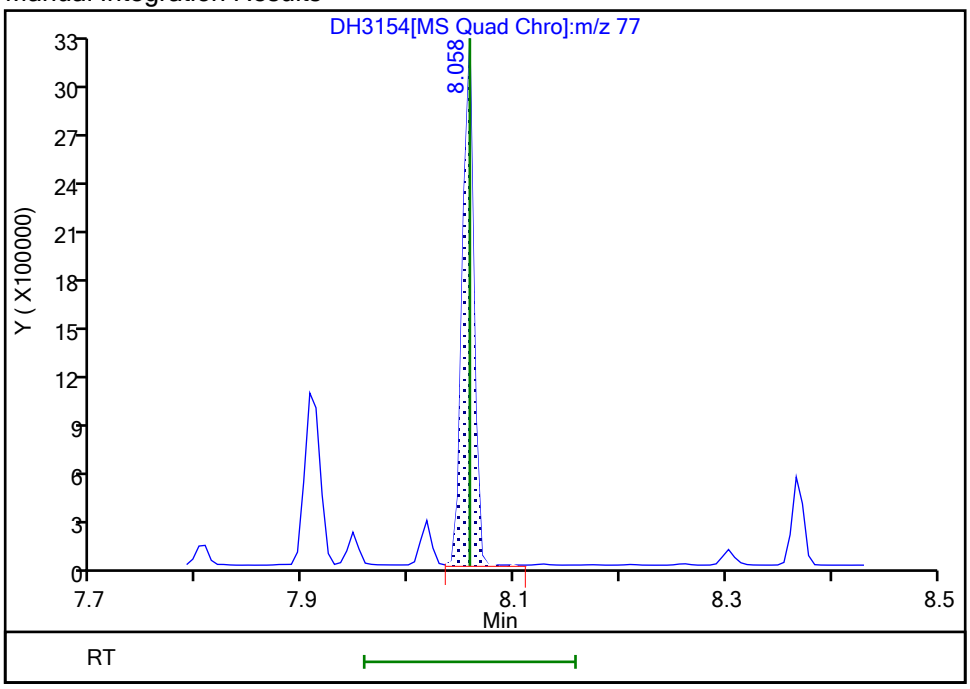
Processing Integration Results

RT: 8.17
Area: 4105
Amount: 0.039447
Amount Units: ug/ml



Manual Integration Results

RT: 8.06
Area: 2409529
Amount: 20.231543
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:06:20 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3155.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 31-Aug-2023 18:19:12 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L5
Misc. Info.: 410-0092991-006
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:30:34 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: SJ89 Date: 01-Sep-2023 08:15:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.908	1.908	0.000	91	175594	7.50	7.11	
3 N-Nitrosodimethylamine	74	2.130	2.130	0.000	93	288924	7.50	7.51	
4 Pyridine	79	2.165	2.165	0.000	96	916846	15.0	14.5	
6 Dimethylformamide	73	2.445	2.445	0.000	93	315622	7.50	7.83	
7 2-Picoline	93	2.759	2.759	0.000	91	492648	7.50	7.42	
8 N-Nitrosomethylethylamine	88	2.841	2.841	0.000	92	211964	7.50	7.46	
9 Methyl methanesulfonate	80	3.109	3.109	0.000	84	259822	7.50	7.61	
$ 10 2-Fluorophenol	112	3.261	3.261	0.000	91	958474	15.0	14.9	
11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	93	204451	7.50	7.52	
12 Ethyl methanesulfonate	109	3.768	3.768	0.000	99	223383	7.50	7.41	
15 Benzaldehyde	77	4.094	4.094	0.000	97	334363	7.50	7.59	
$ 16 Phenol-d5	99	4.129	4.129	0.000	96	1275644	15.0	15.3	
17 Phenol	94	4.141	4.141	0.000	94	559181	7.50	7.56	
18 Aniline	93	4.193	4.193	0.000	97	685664	7.50	7.44	
19 Bis(2-chloroethyl)ether	93	4.252	4.252	0.000	99	461041	7.50	7.31	
20 2-Chlorophenol	128	4.304	4.304	0.000	94	403822	7.50	7.45	
21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	96	466866	7.50	7.26	
* 22 1,4-Dichlorobenzene-d4	152	4.508	4.508	0.000	96	202599	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.526	4.526	0.000	92	469727	7.50	7.22	
25 Benzyl alcohol	108	4.630	4.630	0.000	92	273308	7.50	7.45	
26 1,2-Dichlorobenzene	146	4.671	4.671	0.000	95	452123	7.50	7.29	
28 2-Methylphenol	108	4.724	4.724	0.000	95	396592	7.50	7.60	
29 2,2'-oxybis[1-chloropropane]	45	4.765	4.765	0.000	92	476543	7.50	7.35	
31 N-Nitrosopyrrolidine	100	4.864	4.864	0.000	93	230019	7.50	7.71	
32 4-Methylphenol	108	4.875	4.875	0.000	97	418134	7.50	7.75	
34 Acetophenone	105	4.887	4.887	0.000	93	624786	7.50	7.35	
33 N-Nitrosodi-n-propylamine	70	4.887	4.887	0.000	65	345159	7.50	7.47	
35 N-Nitrosomorpholine	56	4.899	4.899	0.000	86	247245	7.50	7.49	
36 2-Toluidine	106	4.916	4.916	0.000	94	689523	7.50	7.51	
38 Hexachloroethane	117	4.992	4.992	0.000	92	186038	7.50	7.45	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.033	5.033	0.000	87	1128673	15.0	15.2	
40 Nitrobenzene	77	5.050	5.050	0.000	85	491599	7.50	7.56	
42 N-Nitrosopiperidine	114	5.190	5.190	0.000	89	211984	7.50	8.01	
43 Isophorone	82	5.277	5.277	0.000	97	915786	7.50	7.69	
44 2-Nitrophenol	139	5.353	5.353	0.000	91	175243	7.50	8.08	
45 2,4-Dimethylphenol	107	5.382	5.382	0.000	96	414124	7.50	7.88	
46 o,o',o''-Triethylphosphorothioat	198	5.458	5.458	0.000	81	232872	7.50	7.68	
47 Bis(2-chloroethoxy)methane	93	5.481	5.481	0.000	98	551374	7.50	7.46	
48 2,4-Dichlorophenol	162	5.575	5.575	0.000	94	354771	7.50	8.00	
49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	403177	7.50	7.42	
* 50 Naphthalene-d8	136	5.715	5.715	0.000	100	740811	5.00	5.00	
51 Naphthalene	128	5.738	5.738	0.000	98	1203595	7.50	7.39	
52 Alpha-Terpineol	59	5.744	5.744	0.000	91	321608	7.50	7.82	
53 4-Chloroaniline	127	5.785	5.785	0.000	95	518555	7.50	7.80	
54 2,6-Dichlorophenol	162	5.790	5.790	0.000	95	353461	7.50	7.79	
55 Hexachloropropene	213	5.819	5.819	0.000	88	284245	7.50	7.86	
56 Hexachlorobutadiene	225	5.854	5.854	0.000	95	249892	7.50	7.38	
60 Quinoline	129	6.053	6.053	0.000	96	791222	7.50	7.78	
61 Caprolactam	113	6.093	6.093	0.000	80	120409	7.50	8.23	
62 N-Nitrosodi-n-butylamine	84	6.105	6.105	0.000	89	429556	7.50	8.11	
63 p-Phenylene diamine	108	6.123	6.123	0.000	96	288729	7.50	7.80	
64 4-Chloro-3-methylphenol	107	6.239	6.239	0.000	93	370911	7.50	8.03	
65 Safrole, Total	162	6.315	6.315	0.000	89	328601	7.50	7.76	
66 2-Methylnaphthalene	142	6.397	6.397	0.000	91	792658	7.50	7.62	
67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	741703	7.50	7.65	
68 Hexachlorocyclopentadiene	237	6.542	6.542	0.000	95	252126	7.50	7.76	
69 1,2,4,5-Tetrachlorobenzene	216	6.554	6.554	0.000	96	477960	7.50	7.35	
70 Isosafrole Peak 1	162	6.589	6.589	0.000	89	61583	1.20	1.19	
71 2,4,6-Trichlorophenol	196	6.659	6.659	0.000	77	263432	7.50	8.27	
72 2,4,5-Trichlorophenol	196	6.688	6.688	0.000	93	297199	7.50	7.85	
$ 73 2-Fluorobiphenyl (Surr)	172	6.746	6.746	0.000	100	2234797	15.0	14.9	
74 Isosafrole Peak 2	162	6.805	6.805	0.000	91	344701	6.30	6.20	
75 1,1'-Biphenyl	154	6.840	6.840	0.000	93	1052533	7.50	7.30	
76 2-Chloronaphthalene	162	6.857	6.857	0.000	94	843501	7.50	7.32	
77 1-Chloronaphthalene	162	6.880	6.880	0.000	99	745877	7.50	7.24	
78 Phenyl ether	170	6.939	6.939	0.000	86	589777	7.50	7.43	
79 2-Nitroaniline	138	6.950	6.950	0.000	83	234628	7.50	7.98	
81 1,4-Naphthoquinone	158	7.020	7.020	0.000	86	328021	7.50	8.00	
86 1,3-Dinitrobenzene	168	7.084	7.084	0.000	86	111213	7.50	8.42	
85 Dimethyl phthalate	163	7.125	7.125	0.000	98	945018	7.50	7.60	
84 1,4-Dinitrobenzene	168	7.148	7.148	0.000	85	138663	7.50	8.60	
87 2,6-Dinitrotoluene	165	7.183	7.183	0.000	94	195260	7.50	8.12	
88 Acenaphthylene	152	7.248	7.248	0.000	98	1283792	7.50	7.58	
89 3-Nitroaniline	138	7.335	7.335	0.000	90	212395	7.50	8.13	
* 90 Acenaphthene-d10	164	7.382	7.382	0.000	95	450646	5.00	5.00	
91 Acenaphthene	153	7.411	7.411	0.000	95	839186	7.50	7.31	
92 2,4-Dinitrophenol	184	7.434	7.434	0.000	86	189232	17.5	17.1	
93 4-Nitrophenol	109	7.486	7.486	0.000	85	264917	15.0	16.3	
94 Pentachlorobenzene	250	7.533	7.533	0.000	98	420583	7.50	7.33	
95 2,4-Dinitrotoluene	165	7.562	7.562	0.000	92	256709	7.50	8.17	
96 Dibenzofuran	168	7.580	7.580	0.000	97	1203932	7.50	7.37	
97 1-Naphthylamine	143	7.650	7.650	0.000	98	720671	7.50	7.56	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.690	7.690	0.000	71	265161	7.50	8.12	
99 2-Naphthylamine	143	7.725	7.725	0.000	96	827055	7.50	7.64	
100 Diethyl phthalate	149	7.801	7.801	0.000	98	899130	7.50	7.50	
101 Thionazin	107	7.877	7.877	0.000	80	151493	7.50	7.74	
102 Fluorene	166	7.900	7.900	0.000	93	962755	7.50	7.56	
103 4-Chlorophenyl phenyl ether	204	7.906	7.906	0.000	89	499852	7.50	7.24	
104 N-Nitro-o-toluidine	152	7.906	7.906	0.000	88	246117	7.50	8.04	
105 4-Nitroaniline	138	7.912	7.912	0.000	78	232310	7.50	8.23	
106 4,6-Dinitro-2-methylphenol	198	7.941	7.941	0.000	86	243040	15.0	14.7	
107 N-Nitrosodiphenylamine	169	8.017	8.017	0.000	62	700218	6.38	6.52	
108 1,2-Diphenylhydrazine	77	8.052	8.052	0.000	41	1099957	7.50	7.49	
$ 109 2,4,6-Tribromophenol	330	8.128	8.128	0.000	94	365762	15.0	16.1	
110 Sulfotepp	97	8.168	8.168	0.000	79	167200	7.50	7.79	
112 1,3,5-Trinitrobenzene	213	8.256	8.256	0.000	84	85449	7.50	7.82	
113 cis-Diallate	86	8.291	8.291	0.000	0	310242	5.55	5.31	
114 Phorate	75	8.302	8.302	0.000	96	606990	7.50	8.31	
115 Phenacetin	108	8.308	8.308	0.000	90	453881	7.50	7.85	
116 4-Bromophenyl phenyl ether	248	8.367	8.367	0.000	63	318534	7.50	7.33	
117 trans-Diallate	86	8.378	8.378	0.000	0	108145	1.95	1.89	
118 Hexachlorobenzene	284	8.419	8.419	0.000	96	354628	7.50	7.28	
119 Dimethoate	87	8.454	8.454	0.000	95	351822	7.50	7.86	
120 Atrazine	200	8.524	8.524	0.000	94	278509	7.50	8.15	
121 Pentachlorophenol	266	8.606	8.606	0.000	93	385817	15.0	15.0	
122 4-Aminobiphenyl	169	8.611	8.611	0.000	90	1126768	7.50	7.88	
123 Pentachloronitrobenzene	237	8.617	8.617	0.000	90	138700	7.50	8.24	
124 Pronamide	173	8.670	8.670	0.000	90	433769	7.50	8.00	
125 Dinoseb	211	8.780	8.780	0.000	96	161403	7.50	7.10	
* 126 Phenanthrene-d10	188	8.786	8.786	0.000	97	892618	5.00	5.00	
127 Disulfoton	88	8.798	8.798	0.000	96	609571	7.50	7.29	
128 Phenanthrene	178	8.810	8.810	0.000	96	1457314	7.50	7.40	
129 Anthracene	178	8.862	8.862	0.000	97	1497254	7.50	7.62	
130 Carbazole	167	9.014	9.014	0.000	96	1285547	7.50	7.61	
131 Methyl parathion	109	9.148	9.148	0.000	94	283061	7.50	7.97	
133 Di-n-butyl phthalate	149	9.357	9.357	0.000	100	1465915	7.50	8.25	
134 Ethyl Parathion	109	9.521	9.521	0.000	85	173343	7.50	7.88	
135 4-Nitroquinoline-1-oxide	190	9.544	9.544	0.000	85	105666	7.50	7.94	
S 136 Diallate	86				0		7.50	7.21	
140 Octachlorostyrene	308	9.760	9.760	0.000	90	140874	7.50	7.28	
141 Isodrin	193	9.800	9.800	0.000	94	174429	7.50	7.22	
143 Fluoranthene	202	9.940	9.940	0.000	97	1634814	7.50	7.73	
147 Benzidine	184	10.074	10.074	0.000	99	3086251	22.5	23.5	
* 149 Pyrene-d10 (IS)	212	10.139	10.139	0.000	98	978895	5.00	5.00	
150 Pyrene	202	10.156	10.156	0.000	98	1744216	7.50	7.20	
$ 152 p-Terphenyl-d14	244	10.319	10.319	0.000	99	3097677	15.0	15.7	
154 p-Dimethylamino azobenzene	225	10.459	10.459	0.000	92	299934	7.50	8.10	
155 Chlorobenzilate	139	10.512	10.512	0.000	92	447657	7.50	8.12	
156 3,3'-Dimethylbenzidine	212	10.809	10.809	0.000	99	939862	7.50	7.79	
157 Butyl benzyl phthalate	149	10.838	10.838	0.000	96	622915	7.50	7.89	
158 2-Acetylaminofluorene	181	11.083	11.083	0.000	93	481324	7.50	8.51	
159 3,3'-Dichlorobenzidine	252	11.421	11.421	0.000	80	627741	7.50	7.65	
160 4,4'-Methylene bis(2-chloroani	231	11.432	11.432	0.000	96	334426	7.50	7.69	
161 Benzo[a]anthracene	228	11.444	11.444	0.000	98	1638631	7.50	7.92	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.485	11.485	0.000	96	1576779	7.50	7.78	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.520	0.000	97	847920	7.50	7.64	
164 6-Methylchrysene	242	12.062	12.062	0.000	98	1098132	7.50	8.04	
165 Di-n-octyl phthalate	149	12.394	12.394	0.000	99	1282949	7.50	7.14	
167 Benzo[b]fluoranthene	252	12.855	12.855	0.000	96	1680791	7.50	7.92	
166 7,12-Dimethylbenz(a)anthracene	256	12.855	12.855	0.000	75	674808	7.50	8.02	
168 Benzo[k]fluoranthene	252	12.895	12.895	0.000	98	1671438	7.50	7.47	
169 Benzo[a]pyrene	252	13.315	13.315	0.000	76	1351355	7.50	7.82	
* 170 Perylene-d12	264	13.397	13.397	0.000	99	870828	5.00	5.00	
171 3-Methylcholanthrene	268	13.834	13.834	0.000	90	618497	7.50	7.51	
172 Dibenz[a,h]acridine	279	14.662	14.662	0.000	90	1028524	7.50	7.47	
173 Dibenz[a,j]acridine	279	14.743	14.743	0.000	97	1204772	7.50	7.90	
174 Indeno[1,2,3-cd]pyrene	276	15.023	15.023	0.000	98	1151511	7.50	8.07	
175 Dibenz(a,h)anthracene	278	15.075	15.075	0.000	93	1359131	7.50	8.00	
176 Benzo[g,h,i]perylene	276	15.478	15.478	0.000	98	1353341	7.50	7.84	
S 178 Dinitrotoluene	165				0			16.3	
S 182 Isosafrole	162				0		7.50	7.38	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_5_00037 Amount Added: 1.00 Units: mL

Report Date: 05-Sep-2023 16:30:35 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3155.D

Injection Date: 31-Aug-2023 18:19:12 Instrument ID: HP19760 Operator ID: mem41592

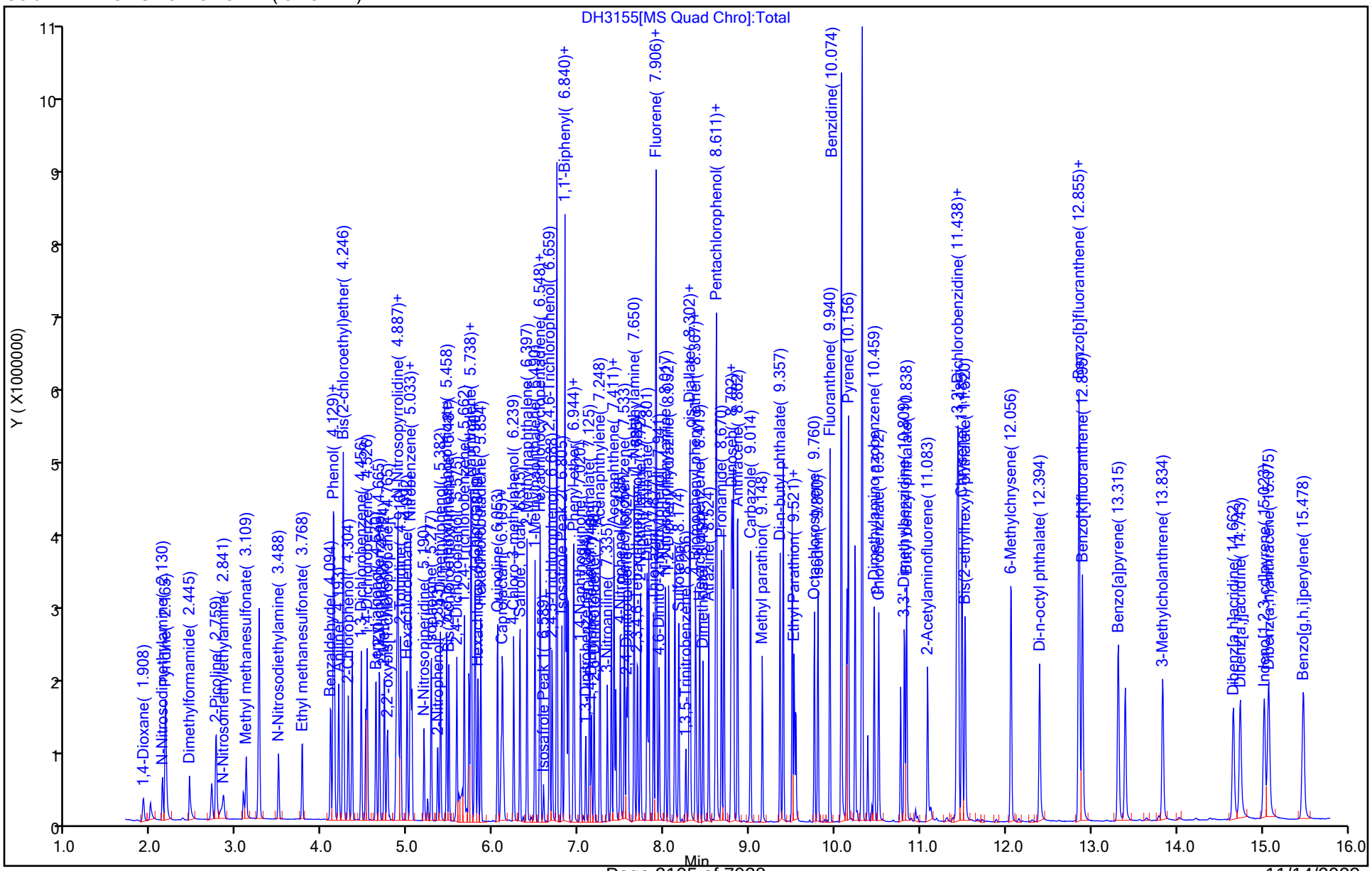
Lims ID: IC L5 Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3156.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 31-Aug-2023 18:40:02 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L4
Misc. Info.: 410-0092991-007
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:30:57 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: SJ89 Date: 01-Sep-2023 08:17:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.903	1.908	-0.005	94	66383	3.75	3.62	
3 N-Nitrosodimethylamine	74	2.124	2.130	-0.006	95	106966	3.75	3.74	
4 Pyridine	79	2.165	2.165	0.000	96	345956	7.50	7.36	
6 Dimethylformamide	73	2.450	2.445	0.005	93	111865	3.75	3.74	
7 2-Picoline	93	2.754	2.759	-0.005	91	182316	3.75	3.69	
8 N-Nitrosomethylethylamine	88	2.841	2.841	0.000	95	76184	3.75	3.61	M
9 Methyl methanesulfonate	80	3.103	3.109	-0.006	85	94859	3.75	3.74	
$ 10 2-Fluorophenol	112	3.255	3.261	-0.006	91	357654	7.50	7.50	
11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	91	74970	3.75	3.71	
12 Ethyl methanesulfonate	109	3.762	3.768	-0.006	99	82347	3.75	3.68	
15 Benzaldehyde	77	4.094	4.094	0.000	97	142526	3.75	4.35	
$ 16 Phenol-d5	99	4.129	4.129	0.000	95	462310	7.50	7.44	
17 Phenol	94	4.141	4.141	0.000	94	207331	3.75	3.77	
18 Aniline	93	4.193	4.193	0.000	96	251479	3.75	3.67	
19 Bis(2-chloroethyl)ether	93	4.251	4.252	-0.001	97	170704	3.75	3.64	
20 2-Chlorophenol	128	4.304	4.304	0.000	94	149122	3.75	3.70	
21 1,3-Dichlorobenzene	146	4.455	4.456	-0.001	96	176562	3.75	3.70	
* 22 1,4-Dichlorobenzene-d4	152	4.508	4.508	0.000	96	150519	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.525	4.526	-0.001	94	177522	3.75	3.67	
25 Benzyl alcohol	108	4.625	4.630	-0.006	91	99902	3.75	3.67	
26 1,2-Dichlorobenzene	146	4.665	4.671	-0.006	95	169566	3.75	3.68	
28 2-Methylphenol	108	4.724	4.724	0.000	95	144096	3.75	3.72	
29 2,2'-oxybis[1-chloropropane]	45	4.764	4.765	0.000	92	177900	3.75	3.69	
31 N-Nitrosopyrrolidine	100	4.858	4.864	-0.006	93	83077	3.75	3.75	
32 4-Methylphenol	108	4.869	4.875	-0.006	97	150414	3.75	3.75	
34 Acetophenone	105	4.881	4.887	-0.006	94	232843	3.75	3.69	
33 N-Nitrosodi-n-propylamine	70	4.881	4.887	-0.006	81	126606	3.75	3.69	
35 N-Nitrosomorpholine	56	4.898	4.899	-0.001	90	91474	3.75	3.73	
36 2-Toluidine	106	4.916	4.916	0.000	94	252963	3.75	3.71	
38 Hexachloroethane	117	4.992	4.992	0.000	93	71501	3.75	3.86	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.027	5.033	-0.006	87	414355	7.50	7.53	
40 Nitrobenzene	77	5.044	5.050	-0.006	85	182409	3.75	3.77	
42 N-Nitrosopiperidine	114	5.190	5.190	0.000	85	75067	3.75	3.81	
43 Isophorone	82	5.271	5.277	-0.006	97	326973	3.75	3.69	
44 2-Nitrophenol	139	5.353	5.353	0.000	92	58767	3.75	3.64	
45 2,4-Dimethylphenol	107	5.382	5.382	0.000	96	146210	3.75	3.74	
46 o,o',o''-Triethylphosphorothioat	198	5.452	5.458	-0.006	86	84613	3.75	3.75	
47 Bis(2-chloroethoxy)methane	93	5.481	5.481	0.000	98	205479	3.75	3.74	
48 2,4-Dichlorophenol	162	5.575	5.575	0.000	93	127011	3.75	3.85	
49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	152342	3.75	3.77	
* 50 Naphthalene-d8	136	5.714	5.715	-0.001	99	551145	5.00	5.00	
51 Naphthalene	128	5.738	5.738	0.000	97	451166	3.75	3.72	
52 Alpha-Terpineol	59	5.744	5.744	0.000	91	114724	3.75	3.75	
53 4-Chloroaniline	127	5.784	5.785	-0.001	94	186271	3.75	3.77	
54 2,6-Dichlorophenol	162	5.790	5.790	0.000	96	125467	3.75	3.72	
55 Hexachloropropene	213	5.819	5.819	0.000	88	101352	3.75	3.77	
56 Hexachlorobutadiene	225	5.854	5.854	0.000	95	93146	3.75	3.70	
60 Quinoline	129	6.047	6.053	-0.006	96	280500	3.75	3.71	
61 Caprolactam	113	6.082	6.093	-0.011	83	40122	3.75	3.68	
62 N-Nitrosodi-n-butylamine	84	6.105	6.105	0.000	90	124457	3.75	3.16	
63 p-Phenylene diamine	108	6.117	6.123	-0.006	96	116773	3.75	4.24	
64 4-Chloro-3-methylphenol	107	6.239	6.239	0.000	93	131153	3.75	3.82	
65 Safrole, Total	162	6.315	6.315	0.000	89	116363	3.75	3.69	
66 2-Methylnaphthalene	142	6.396	6.397	-0.001	91	291034	3.75	3.76	
67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	269799	3.75	3.74	
68 Hexachlorocyclopentadiene	237	6.542	6.542	0.000	96	94638	3.75	4.07	
69 1,2,4,5-Tetrachlorobenzene	216	6.548	6.554	-0.006	97	174701	3.75	3.75	
70 Isosafrole Peak 1	162	6.589	6.589	0.000	91	21467	0.6000	0.5779	
71 2,4,6-Trichlorophenol	196	6.659	6.659	0.000	75	87021	3.75	3.81	
72 2,4,5-Trichlorophenol	196	6.688	6.688	0.000	93	107676	3.75	3.97	
$ 73 2-Fluorobiphenyl (Surr)	172	6.746	6.746	0.000	100	818411	7.50	7.62	
74 Isosafrole Peak 2	162	6.804	6.805	-0.001	92	124255	3.15	3.12	
75 1,1'-Biphenyl	154	6.839	6.840	-0.001	93	386111	3.75	3.74	
76 2-Chloronaphthalene	162	6.857	6.857	0.000	94	317150	3.75	3.84	M
77 1-Chloronaphthalene	162	6.874	6.880	-0.006	98	264897	3.75	3.59	Ma
78 Phenyl ether	170	6.938	6.939	-0.001	86	213511	3.75	3.76	
79 2-Nitroaniline	138	6.944	6.950	-0.006	79	76538	3.75	3.63	
81 1,4-Naphthoquinone	158	7.020	7.020	0.000	85	112393	3.75	3.83	
86 1,3-Dinitrobenzene	168	7.078	7.084	-0.006	86	35121	3.75	3.71	
85 Dimethyl phthalate	163	7.125	7.125	0.000	98	334196	3.75	3.75	
84 1,4-Dinitrobenzene	168	7.148	7.148	0.000	83	43303	3.75	3.75	
87 2,6-Dinitrotoluene	165	7.177	7.183	-0.006	91	66490	3.75	3.86	
88 Acenaphthylene	152	7.247	7.248	-0.001	99	459310	3.75	3.79	
89 3-Nitroaniline	138	7.335	7.335	0.000	89	70412	3.75	3.76	
* 90 Acenaphthene-d10	164	7.381	7.382	-0.001	95	322784	5.00	5.00	
91 Acenaphthene	153	7.411	7.411	0.000	95	305720	3.75	3.72	
92 2,4-Dinitrophenol	184	7.434	7.434	0.000	83	72551	11.3	10.5	
93 4-Nitrophenol	109	7.481	7.486	-0.005	85	88112	7.50	7.56	
94 Pentachlorobenzene	250	7.533	7.533	0.000	97	148776	3.75	3.62	
95 2,4-Dinitrotoluene	165	7.556	7.562	-0.006	89	86656	3.75	3.85	
96 Dibenzofuran	168	7.574	7.580	-0.006	97	429579	3.75	3.67	
97 1-Naphthylamine	143	7.650	7.650	0.000	98	253081	3.75	3.71	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.690	7.690	0.000	71	92028	3.75	3.93	
99 2-Naphthylamine	143	7.725	7.725	0.000	96	292444	3.75	3.77	
100 Diethyl phthalate	149	7.795	7.801	-0.006	98	321964	3.75	3.75	
101 Thionazin	107	7.871	7.877	-0.006	79	51176	3.75	3.65	
102 Fluorene	166	7.900	7.900	0.000	94	348746	3.75	3.82	
103 4-Chlorophenyl phenyl ether	204	7.906	7.906	0.000	88	183386	3.75	3.71	
104 N-Nitro-o-toluidine	152	7.906	7.906	0.000	80	82142	3.75	3.74	
105 4-Nitroaniline	138	7.906	7.912	-0.006	77	78518	3.75	3.88	
106 4,6-Dinitro-2-methylphenol	198	7.941	7.941	0.000	87	70110	7.50	6.91	
107 N-Nitrosodiphenylamine	169	8.011	8.017	-0.006	62	250179	3.19	3.24	
108 1,2-Diphenylhydrazine	77	8.052	8.052	0.000	41	396372	3.75	3.75	
$ 109 2,4,6-Tribromophenol	330	8.128	8.128	0.000	94	123707	7.50	7.61	
110 Sulfotepp	97	8.168	8.168	0.000	77	57000	3.75	3.69	
112 1,3,5-Trinitrobenzene	213	8.250	8.256	-0.006	84	25442	3.75	3.23	
113 cis-Diallate	86	8.291	8.291	0.000	0	107671	2.78	2.56	
114 Phorate	75	8.297	8.302	-0.005	96	202561	3.75	3.85	
115 Phenacetin	108	8.302	8.308	-0.006	92	144817	3.75	3.48	
116 4-Bromophenyl phenyl ether	248	8.366	8.367	-0.001	63	116014	3.75	3.71	
117 trans-Diallate	86	8.378	8.378	0.000	0	40312	0.9750	0.9807	
118 Hexachlorobenzene	284	8.413	8.419	-0.006	96	130756	3.75	3.73	
119 Dimethoate	87	8.454	8.454	0.000	96	115279	3.75	3.58	
120 Atrazine	200	8.518	8.524	-0.006	94	104130	3.75	4.23	
121 Pentachlorophenol	266	8.600	8.606	-0.006	94	121675	7.50	6.90	
122 4-Aminobiphenyl	169	8.611	8.611	0.000	90	391431	3.75	3.80	
123 Pentachloronitrobenzene	237	8.611	8.617	-0.006	88	47039	3.75	3.88	
124 Pronamide	173	8.670	8.670	0.000	90	150010	3.75	3.84	
125 Dinoseb	211	8.780	8.780	0.000	96	43009	3.75	3.20	
* 126 Phenanthrene-d10	188	8.786	8.786	0.000	98	642827	5.00	5.00	
127 Disulfoton	88	8.798	8.798	0.000	95	214042	3.75	3.55	
128 Phenanthrene	178	8.809	8.810	-0.001	96	525585	3.75	3.71	
129 Anthracene	178	8.856	8.862	-0.006	97	531775	3.75	3.76	
130 Carbazole	167	9.008	9.014	-0.006	96	454219	3.75	3.73	
131 Methyl parathion	109	9.148	9.148	0.000	94	87088	3.75	3.40	
133 Di-n-butyl phthalate	149	9.352	9.357	-0.005	100	489779	3.75	3.83	
134 Ethyl Parathion	109	9.521	9.521	0.000	86	51042	3.75	3.22	
135 4-Nitroquinoline-1-oxide	190	9.538	9.544	-0.006	78	26873	3.75	3.13	
S 136 Diallate	86				0		3.75	3.54	
140 Octachlorostyrene	308	9.760	9.760	0.000	92	49868	3.75	3.58	
141 Isodrin	193	9.800	9.800	0.000	93	60196	3.75	3.46	
143 Fluoranthene	202	9.940	9.940	0.000	97	569594	3.75	3.74	
147 Benzidine	184	10.068	10.074	-0.006	99	1060488	11.3	11.4	
* 149 Pyrene-d10 (IS)	212	10.138	10.139	0.000	98	693006	5.00	5.00	
150 Pyrene	202	10.156	10.156	0.000	98	631402	3.75	3.68	
$ 152 p-Terphenyl-d14	244	10.313	10.319	-0.006	99	1088316	7.50	7.78	
154 p-Dimethylamino azobenzene	225	10.459	10.459	0.000	92	96957	3.75	3.70	
155 Chlorobenzilate	139	10.511	10.512	-0.001	92	140791	3.75	3.61	
156 3,3'-Dimethylbenzidine	212	10.809	10.809	0.000	99	307475	3.75	3.60	
157 Butyl benzyl phthalate	149	10.838	10.838	0.000	96	190956	3.75	3.42	
158 2-Acetylaminofluorene	181	11.077	11.083	-0.006	94	125814	3.75	3.55	
159 3,3'-Dichlorobenzidine	252	11.421	11.421	0.000	73	203453	3.75	3.50	
160 4,4'-Methylene bis(2-chloroani	231	11.432	11.432	0.000	96	108293	3.75	3.52	
161 Benzo[a]anthracene	228	11.438	11.444	-0.006	97	570434	3.75	3.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.485	11.485	0.000	96	547889	3.75	3.82	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.520	0.000	97	259286	3.75	3.30	
164 6-Methylchrysene	242	12.056	12.062	-0.006	98	364356	3.75	3.77	
165 Di-n-octyl phthalate	149	12.394	12.394	0.000	99	355247	3.75	3.32	
167 Benzo[b]fluoranthene	252	12.849	12.855	-0.006	96	549256	3.75	3.84	
166 7,12-Dimethylbenz(a)anthracene	256	12.849	12.855	-0.006	71	218597	3.75	3.85	
168 Benzo[k]fluoranthene	252	12.890	12.895	-0.005	98	572176	3.75	3.80	
169 Benzo[a]pyrene	252	13.309	13.315	-0.006	76	438647	3.75	3.77	
* 170 Perylene-d12	264	13.391	13.397	-0.006	99	586552	5.00	5.00	
171 3-Methylcholanthrene	268	13.834	13.834	0.000	90	193063	3.75	3.48	
172 Dibenz[a,h]acridine	279	14.656	14.662	-0.006	90	327369	3.75	3.53	
173 Dibenz[a,j]acridine	279	14.737	14.743	-0.006	96	398822	3.75	3.88	
174 Indeno[1,2,3-cd]pyrene	276	15.017	15.023	-0.006	98	367946	3.75	3.83	
175 Dibenz(a,h)anthracene	278	15.069	15.075	-0.006	91	437239	3.75	3.82	
176 Benzo[g,h,i]perylene	276	15.472	15.478	-0.006	98	439304	3.75	3.78	
S 178 Dinitrotoluene	165				0			7.71	
S 182 Isosafrole	162				0		3.75	3.70	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_4_00027 Amount Added: 1.00 Units: mL

Report Date: 05-Sep-2023 16:30:57 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3156.D

Injection Date: 31-Aug-2023 18:40:02 Instrument ID: HP19760 Operator ID: mem41592

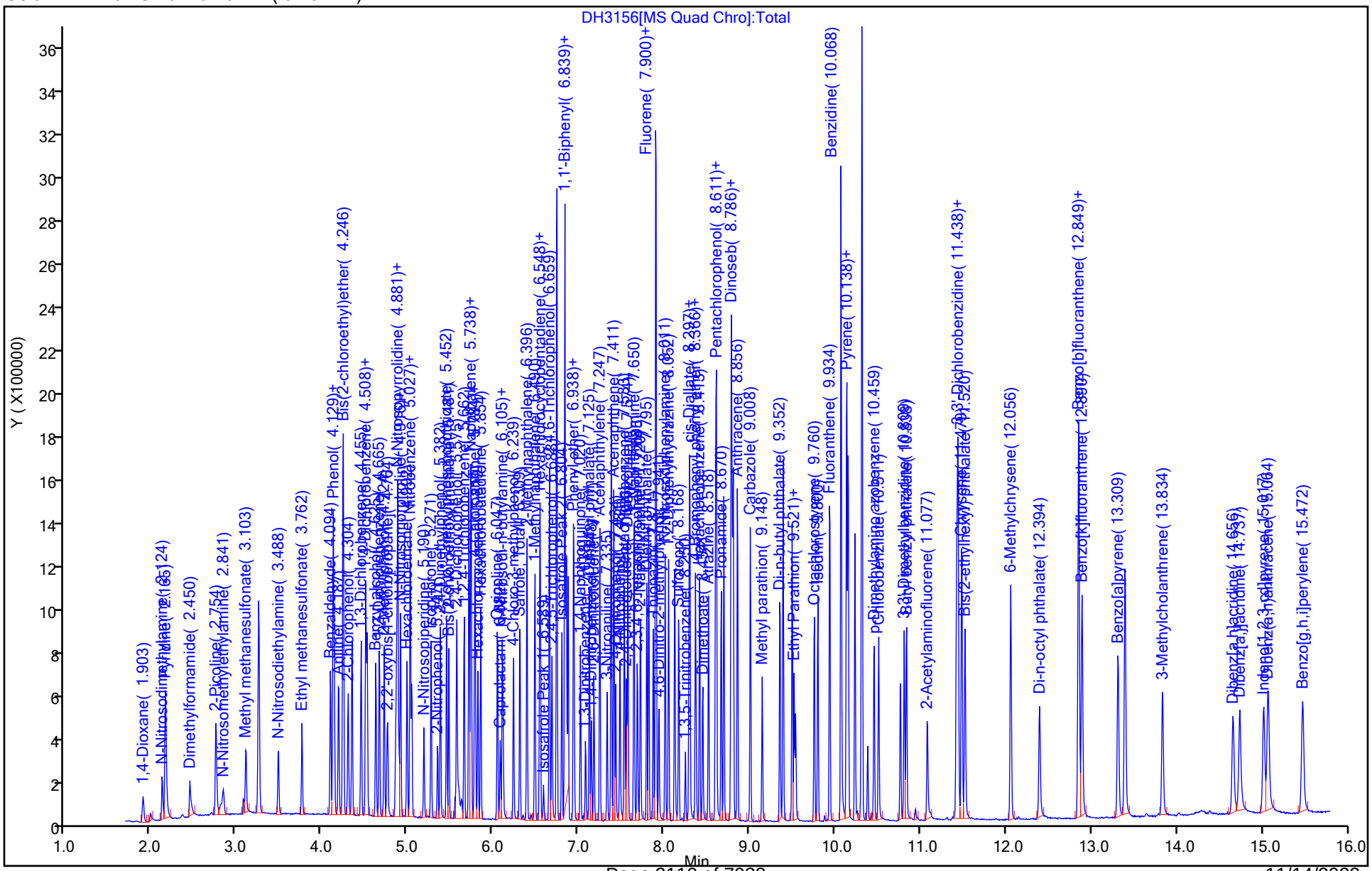
Lims ID: IC L4 Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

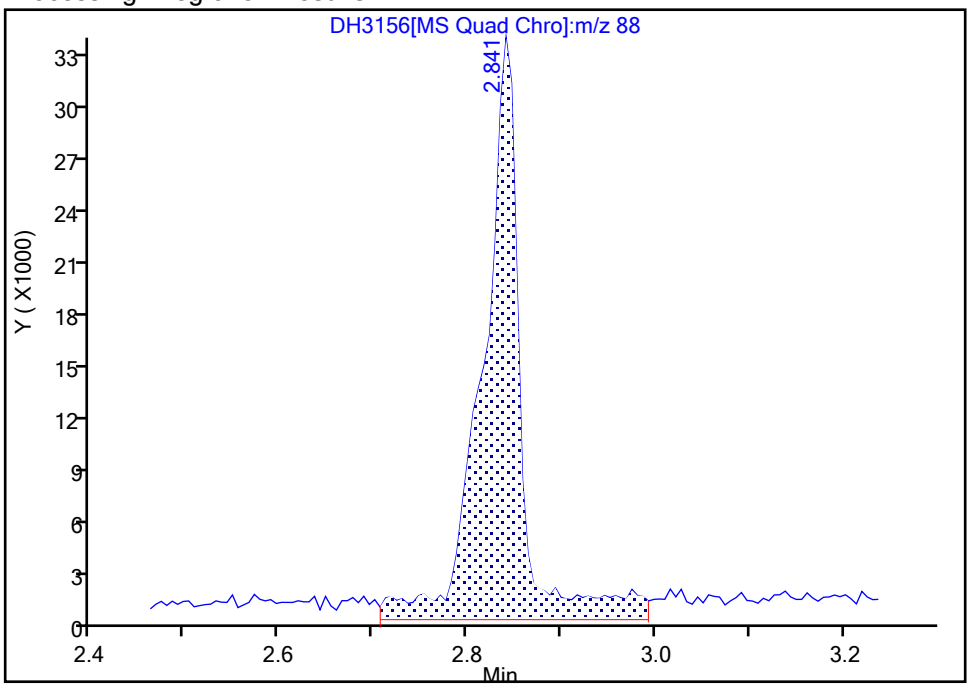
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3156.D				
Injection Date:	31-Aug-2023 18:40:02	Instrument ID:	HP19760		
Lims ID:	IC L4				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

8 N-Nitrosomethylethylamine, CAS: 10595-95-6

Signal: 1

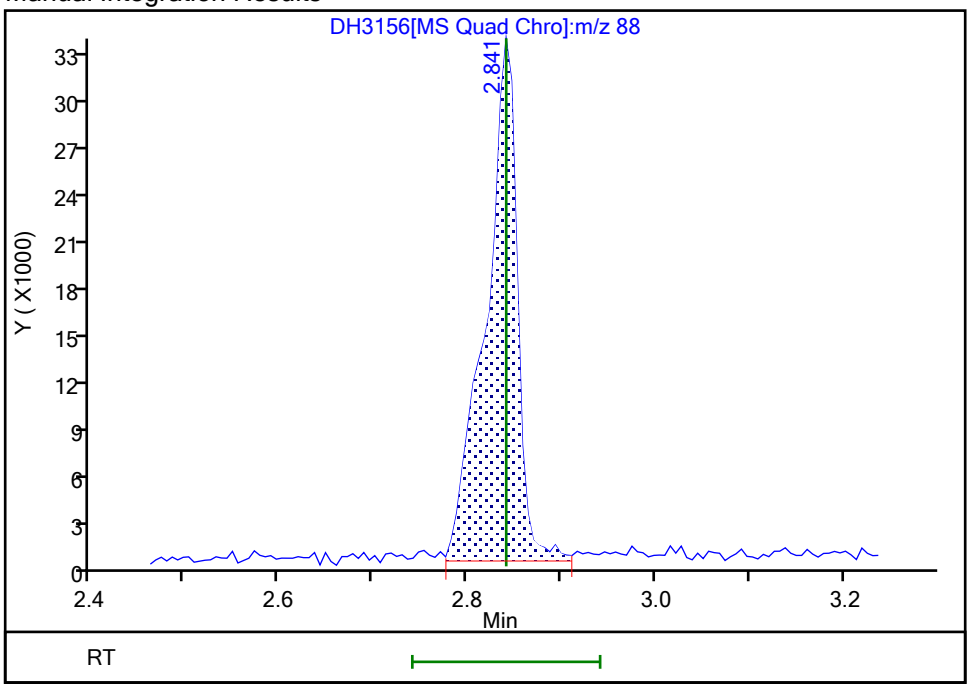
Processing Integration Results

RT: 2.84
Area: 94510
Amount: 4.155864
Amount Units: ug/ml



Manual Integration Results

RT: 2.84
Area: 76184
Amount: 3.606857
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:16:41 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

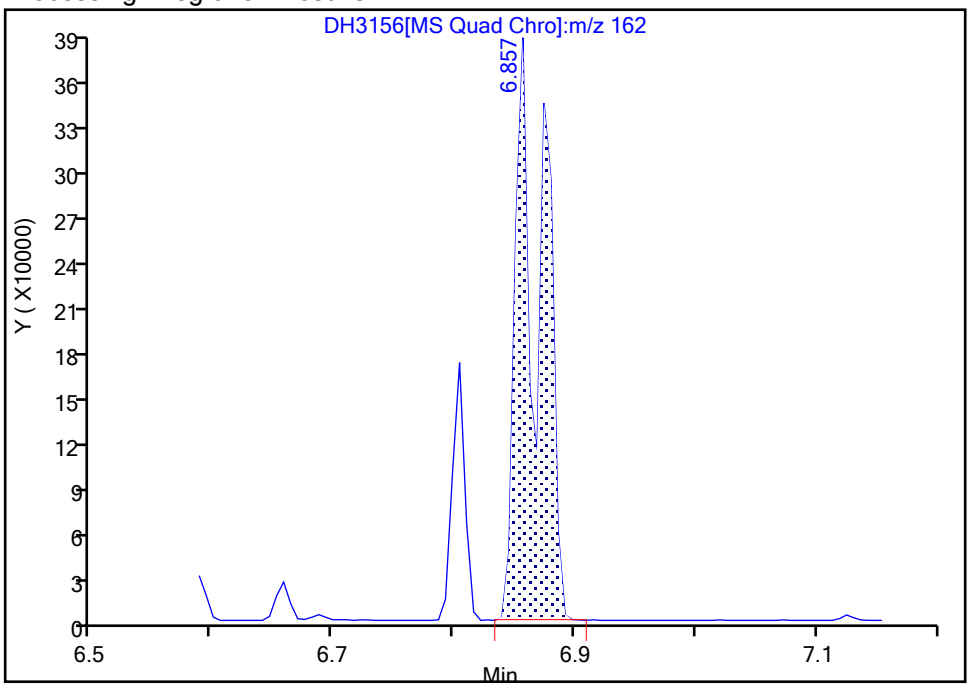
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3156.D				
Injection Date:	31-Aug-2023 18:40:02	Instrument ID:	HP19760		
Lims ID:	IC L4				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

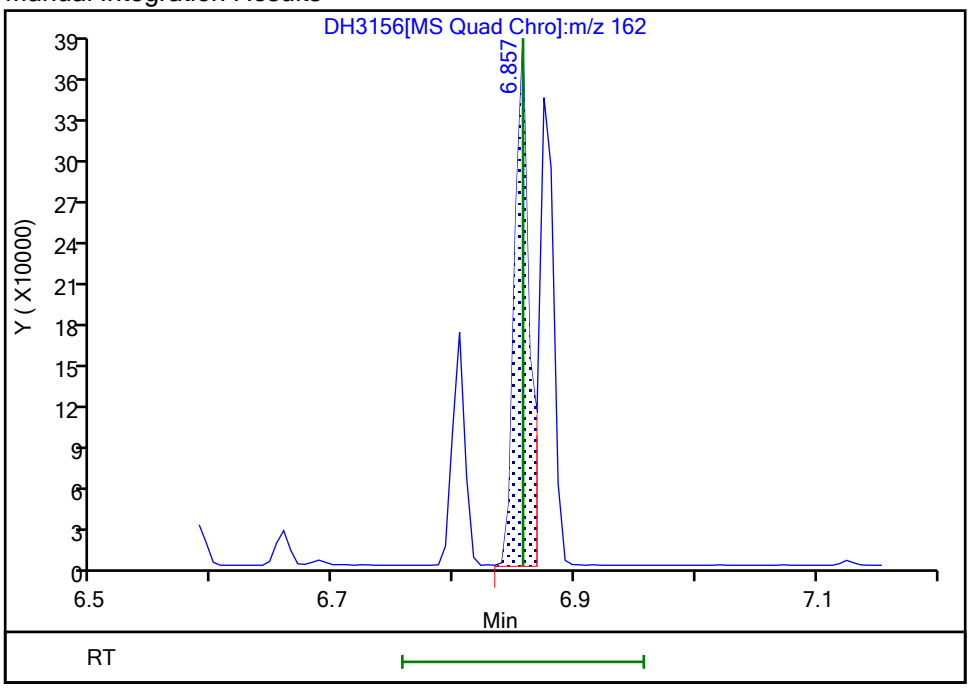
Processing Integration Results

RT: 6.86
Area: 582047
Amount: 5.827029
Amount Units: ug/ml



Manual Integration Results

RT: 6.86
Area: 317150
Amount: 3.841070
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:17:02 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

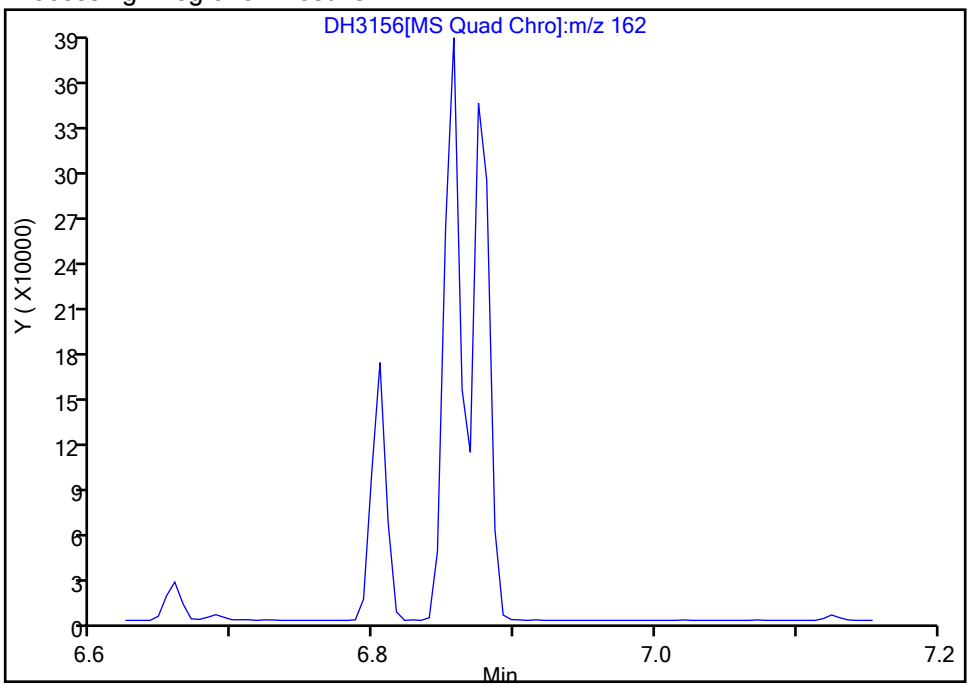
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3156.D				
Injection Date:	31-Aug-2023 18:40:02	Instrument ID:	HP19760		
Lims ID:	IC L4				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

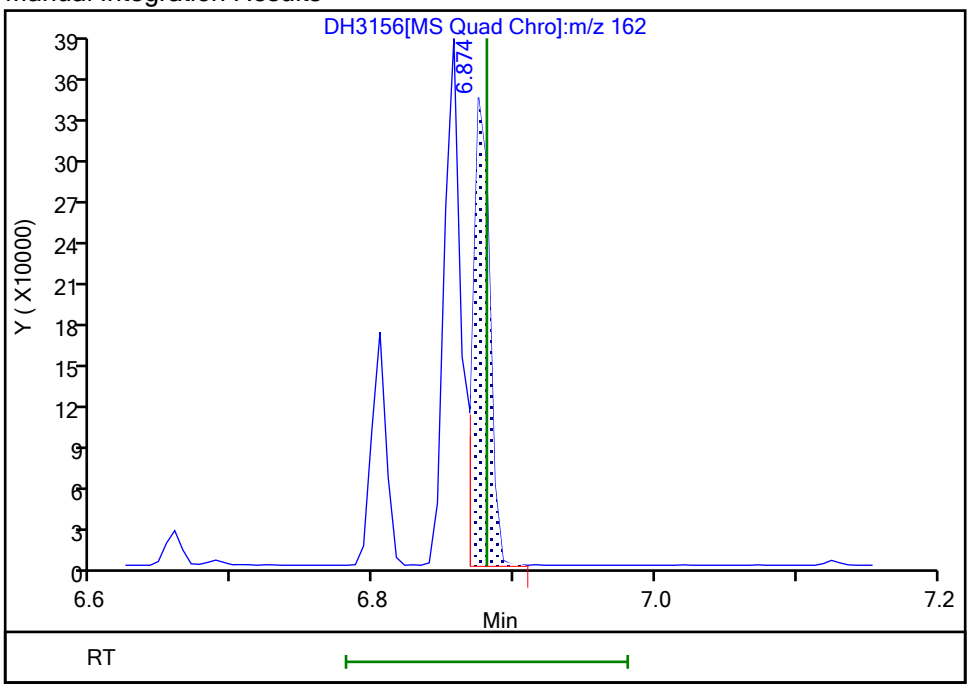
Not Detected
Expected RT: 6.88

Processing Integration Results



Manual Integration Results

RT: 6.87
Area: 264897
Amount: 3.588327
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:17:08 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3157.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 31-Aug-2023 19:00:54 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 410-0092991-008
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:31:19 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: SJ89 Date: 01-Sep-2023 08:19:26

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.908	1.908	0.000	92	30335	1.25	1.25	
	3 N-Nitrosodimethylamine	74	2.130	2.130	0.000	95	45906	1.25	1.22	
	4 Pyridine	79	2.171	2.165	0.006	97	149858	2.50	2.42	
	6 Dimethylformamide	73	2.462	2.445	0.017	91	48885	1.25	1.24	
	7 2-Picoline	93	2.759	2.759	0.000	91	81778	1.25	1.25	
	8 N-Nitrosomethylethylamine	88	2.841	2.841	0.000	91	34648	1.25	1.24	M
	9 Methyl methanesulfonate	80	3.109	3.109	0.000	85	41574	1.25	1.24	
$	10 2-Fluorophenol	112	3.255	3.261	-0.006	91	154606	2.50	2.46	
	11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	91	32774	1.25	1.23	
	12 Ethyl methanesulfonate	109	3.762	3.768	-0.006	99	35431	1.25	1.20	
	15 Benzaldehyde	77	4.094	4.094	0.000	98	58302	1.25	1.35	
$	16 Phenol-d5	99	4.129	4.129	0.000	96	199770	2.50	2.44	
	17 Phenol	94	4.141	4.141	0.000	91	89933	1.25	1.24	
	18 Aniline	93	4.187	4.193	-0.006	97	109340	1.25	1.21	
	19 Bis(2-chloroethyl)ether	93	4.246	4.252	-0.006	96	74883	1.25	1.21	
	20 2-Chlorophenol	128	4.304	4.304	0.000	94	64638	1.25	1.22	
	21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	96	78953	1.25	1.25	
*	22 1,4-Dichlorobenzene-d4	152	4.508	4.508	0.000	96	198780	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.526	4.526	0.000	95	78154	1.25	1.22	
	25 Benzyl alcohol	108	4.625	4.630	-0.005	91	43677	1.25	1.21	
	26 1,2-Dichlorobenzene	146	4.665	4.671	-0.006	96	74747	1.25	1.23	
	28 2-Methylphenol	108	4.724	4.724	0.000	95	63237	1.25	1.24	
	29 2,2'-oxybis[1-chloropropane]	45	4.764	4.765	0.000	93	76944	1.25	1.21	
	31 N-Nitrosopyrrolidine	100	4.858	4.864	-0.006	92	34645	1.25	1.18	
	32 4-Methylphenol	108	4.869	4.875	-0.006	96	65200	1.25	1.23	
	34 Acetophenone	105	4.881	4.887	-0.006	96	100245	1.25	1.20	
	33 N-Nitrosodi-n-propylamine	70	4.881	4.887	-0.006	81	54388	1.25	1.20	
	35 N-Nitrosomorpholine	56	4.899	4.899	0.000	88	39185	1.25	1.21	
	36 2-Toluidine	106	4.916	4.916	0.000	95	108553	1.25	1.21	
	38 Hexachloroethane	117	4.992	4.992	0.000	92	30399	1.25	1.24	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.027	5.033	-0.006	87	174349	2.50	2.36	
40 Nitrobenzene	77	5.044	5.050	-0.006	86	78521	1.25	1.21	
42 N-Nitrosopiperidine	114	5.190	5.190	0.000	85	31796	1.25	1.20	
43 Isophorone	82	5.272	5.277	-0.005	97	140796	1.25	1.18	
44 2-Nitrophenol	139	5.353	5.353	0.000	92	22761	1.25	1.05	
45 2,4-Dimethylphenol	107	5.382	5.382	0.000	96	60663	1.25	1.16	
46 o,o',o''-Triethylphosphorothioat	198	5.458	5.458	0.000	80	36161	1.25	1.19	
47 Bis(2-chloroethoxy)methane	93	5.481	5.481	0.000	99	88249	1.25	1.20	
48 2,4-Dichlorophenol	162	5.575	5.575	0.000	93	51824	1.25	1.17	
49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	66603	1.25	1.23	
* 50 Naphthalene-d8	136	5.715	5.715	0.000	100	740073	5.00	5.00	
51 Naphthalene	128	5.738	5.738	0.000	97	194596	1.25	1.20	
52 Alpha-Terpineol	59	5.744	5.744	0.000	88	46744	1.25	1.14	
53 4-Chloroaniline	127	5.784	5.785	-0.001	95	78607	1.25	1.18	
54 2,6-Dichlorophenol	162	5.790	5.790	0.000	96	52197	1.25	1.15	
55 Hexachloropropene	213	5.819	5.819	0.000	88	41613	1.25	1.15	
56 Hexachlorobutadiene	225	5.854	5.854	0.000	96	40703	1.25	1.20	
60 Quinoline	129	6.047	6.053	-0.006	96	118598	1.25	1.17	
61 Caprolactam	113	6.082	6.093	-0.011	81	14720	1.25	1.01	
62 N-Nitrosodi-n-butylamine	84	6.105	6.105	0.000	90	60844	1.25	1.15	
63 p-Phenylene diamine	108	6.117	6.123	-0.006	95	46152	1.25	1.25	
64 4-Chloro-3-methylphenol	107	6.233	6.239	-0.006	93	54845	1.25	1.19	
65 Safrole, Total	162	6.315	6.315	0.000	90	49885	1.25	1.18	
66 2-Methylnaphthalene	142	6.397	6.397	-0.001	91	123751	1.25	1.19	
67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	114092	1.25	1.18	
68 Hexachlorocyclopentadiene	237	6.542	6.542	0.000	93	38794	1.25	1.27	
69 1,2,4,5-Tetrachlorobenzene	216	6.554	6.554	0.000	96	75064	1.25	1.23	
70 Isosafrole Peak 1	162	6.589	6.589	0.000	92	9681	0.2000	0.1985	
71 2,4,6-Trichlorophenol	196	6.659	6.659	0.000	73	34467	1.25	1.15	
72 2,4,5-Trichlorophenol	196	6.688	6.688	0.000	93	42649	1.25	1.20	
$ 73 2-Fluorobiphenyl (Surr)	172	6.746	6.746	0.000	100	348294	2.50	2.47	
74 Isosafrole Peak 2	162	6.805	6.805	-0.001	93	52216	1.05	1.00	
75 1,1'-Biphenyl	154	6.839	6.840	-0.001	93	168053	1.25	1.24	
76 2-Chloronaphthalene	162	6.857	6.857	0.000	94	138609	1.25	1.28	M
77 1-Chloronaphthalene	162	6.874	6.880	-0.006	98	111458	1.25	1.15	Ma
78 Phenyl ether	170	6.939	6.939	0.000	85	92275	1.25	1.24	
79 2-Nitroaniline	138	6.944	6.950	-0.006	82	31338	1.25	1.13	
81 1,4-Naphthoquinone	158	7.020	7.020	0.000	86	44085	1.25	1.14	
86 1,3-Dinitrobenzene	168	7.078	7.084	-0.006	85	13478	1.25	1.08	
85 Dimethyl phthalate	163	7.125	7.125	0.000	98	146350	1.25	1.25	
84 1,4-Dinitrobenzene	168	7.148	7.148	0.000	81	16511	1.25	1.09	
87 2,6-Dinitrotoluene	165	7.178	7.183	-0.005	91	26746	1.25	1.18	
88 Acenaphthylene	152	7.247	7.248	-0.001	98	191469	1.25	1.20	
89 3-Nitroaniline	138	7.335	7.335	0.000	88	28994	1.25	1.18	
* 90 Acenaphthene-d10	164	7.382	7.382	0.000	96	423789	5.00	5.00	
91 Acenaphthene	153	7.411	7.411	0.000	95	131847	1.25	1.22	
92 2,4-Dinitrophenol	184	7.434	7.434	0.000	84	34729	5.00	5.75	
93 4-Nitrophenol	109	7.481	7.486	-0.005	85	53299	3.75	3.48	
94 Pentachlorobenzene	250	7.533	7.533	0.000	98	64513	1.25	1.20	
95 2,4-Dinitrotoluene	165	7.556	7.562	-0.006	90	34704	1.25	1.18	
96 Dibenzofuran	168	7.574	7.580	-0.006	97	190475	1.25	1.24	
97 1-Naphthylamine	143	7.650	7.650	0.000	98	108372	1.25	1.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.685	7.690	-0.005	71	37073	1.25	1.21	
99 2-Naphthylamine	143	7.720	7.725	-0.005	96	123575	1.25	1.21	
100 Diethyl phthalate	149	7.795	7.801	-0.006	98	139649	1.25	1.24	
101 Thionazin	107	7.871	7.877	-0.006	79	20857	1.25	1.13	
102 Fluorene	166	7.900	7.900	0.000	93	146635	1.25	1.22	
103 4-Chlorophenyl phenyl ether	204	7.906	7.906	0.000	87	80610	1.25	1.24	
104 N-Nitro-o-toluidine	152	7.906	7.906	0.000	70	33246	1.25	1.15	
105 4-Nitroaniline	138	7.906	7.912	-0.006	76	32133	1.25	1.21	
106 4,6-Dinitro-2-methylphenol	198	7.941	7.941	0.000	87	39909	3.75	3.92	
107 N-Nitrosodiphenylamine	169	8.011	8.017	-0.006	62	106860	1.06	1.04	
108 1,2-Diphenylhydrazine	77	8.052	8.052	0.000	41	168785	1.25	1.20	
$ 109 2,4,6-Tribromophenol	330	8.128	8.128	0.000	93	51996	2.50	2.44	
110 Sulfotepp	97	8.168	8.168	0.000	80	24848	1.25	1.21	
112 1,3,5-Trinitrobenzene	213	8.250	8.256	-0.006	83	9551	1.25	0.9130	
113 cis-Diallate	86	8.291	8.291	0.000	0	49931	0.9250	0.8936	
114 Phorate	75	8.297	8.302	-0.005	94	84074	1.25	1.20	
115 Phenacetin	108	8.297	8.308	-0.011	71	55416	1.25	1.00	
116 4-Bromophenyl phenyl ether	248	8.367	8.367	0.000	63	49336	1.25	1.19	
117 trans-Diallate	86	8.378	8.378	0.000	0	17943	0.3250	0.3285	
118 Hexachlorobenzene	284	8.413	8.419	-0.006	95	56466	1.25	1.21	
119 Dimethoate	87	8.448	8.454	-0.006	95	44549	1.25	1.04	
120 Atrazine	200	8.518	8.524	-0.006	94	40392	1.25	1.23	
121 Pentachlorophenol	266	8.600	8.606	-0.006	93	47451	2.50	2.45	
122 4-Aminobiphenyl	169	8.611	8.611	0.000	90	164806	1.25	1.20	
123 Pentachloronitrobenzene	237	8.611	8.617	-0.006	86	19153	1.25	1.19	
124 Pronamide	173	8.670	8.670	0.000	89	61548	1.25	1.19	
125 Dinoseb	211	8.780	8.780	0.000	95	15883	1.25	1.55	
* 126 Phenanthrene-d10	188	8.786	8.786	0.000	97	854186	5.00	5.00	
127 Disulfoton	88	8.798	8.798	0.000	96	98367	1.25	1.23	
128 Phenanthrene	178	8.810	8.810	0.000	96	230586	1.25	1.22	
129 Anthracene	178	8.856	8.862	-0.006	97	232520	1.25	1.24	
130 Carbazole	167	9.008	9.014	-0.006	96	199063	1.25	1.23	
131 Methyl parathion	109	9.148	9.148	0.000	93	31616	1.25	0.9298	
133 Di-n-butyl phthalate	149	9.357	9.357	0.000	100	198029	1.25	1.17	
134 Ethyl Parathion	109	9.521	9.521	0.000	82	19077	1.25	0.9060	
135 4-Nitroquinoline-1-oxide	190	9.538	9.544	-0.006	72	9756	1.25	0.9692	
S 136 Diallate	86				0		1.25	1.22	
140 Octachlorostyrene	308	9.760	9.760	0.000	88	23302	1.25	1.26	
141 Isodrin	193	9.800	9.800	0.000	93	26790	1.25	1.16	
143 Fluoranthene	202	9.934	9.940	-0.006	97	250011	1.25	1.23	
147 Benzidine	184	10.069	10.074	-0.005	99	389244	3.75	3.11	
* 149 Pyrene-d10 (IS)	212	10.133	10.139	-0.005	98	934048	5.00	5.00	
150 Pyrene	202	10.150	10.156	-0.006	98	281830	1.25	1.22	
$ 152 p-Terphenyl-d14	244	10.313	10.319	-0.006	99	474523	2.50	2.52	
154 p-Dimethylamino azobenzene	225	10.459	10.459	0.000	92	37686	1.25	1.07	
155 Chlorobenzilate	139	10.512	10.512	0.000	90	56330	1.25	1.07	
156 3,3'-Dimethylbenzidine	212	10.809	10.809	0.000	99	113463	1.25	0.9854	
157 Butyl benzyl phthalate	149	10.838	10.838	0.000	96	70027	1.25	0.9294	
158 2-Acetylaminofluorene	181	11.077	11.083	-0.006	92	41713	1.25	1.03	
159 3,3'-Dichlorobenzidine	252	11.421	11.421	0.000	73	82126	1.25	1.05	
160 4,4'-Methylene bis(2-chloroani	231	11.427	11.432	-0.005	94	43666	1.25	1.05	
161 Benzo[a]anthracene	228	11.438	11.444	-0.006	97	236851	1.25	1.20	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.479	11.485	-0.006	96	237605	1.25	1.23	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.520	0.000	96	94330	1.25	0.8905	
164 6-Methylchrysene	242	12.056	12.062	-0.006	98	154060	1.25	1.18	
165 Di-n-octyl phthalate	149	12.388	12.394	-0.006	99	115618	1.25	1.30	
167 Benzo[b]fluoranthene	252	12.849	12.855	-0.006	96	232739	1.25	1.20	
166 7,12-Dimethylbenz(a)anthracene	256	12.849	12.855	-0.006	70	86802	1.25	1.13	
168 Benzo[k]fluoranthene	252	12.890	12.895	-0.005	98	243949	1.25	1.20	
169 Benzo[a]pyrene	252	13.309	13.315	-0.006	76	182266	1.25	1.16	
* 170 Perylene-d12	264	13.391	13.397	-0.006	99	794041	5.00	5.00	
171 3-Methylcholanthrene	268	13.834	13.834	0.000	90	73036	1.25	0.9723	
172 Dibenz[a,h]acridine	279	14.656	14.662	-0.006	90	126363	1.25	1.01	
173 Dibenz[a,j]acridine	279	14.737	14.743	-0.006	96	161980	1.25	1.16	
174 Indeno[1,2,3-cd]pyrene	276	15.017	15.023	-0.006	99	148952	1.25	1.15	
175 Dibenz(a,h)anthracene	278	15.070	15.075	-0.005	91	177583	1.25	1.15	
176 Benzo[g,h,i]perylene	276	15.472	15.478	-0.006	98	184102	1.25	1.17	
S 178 Dinitrotoluene	165				0			2.36	
S 182 Isosafrole	162				0		1.25	1.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_3_00028 Amount Added: 1.00 Units: mL

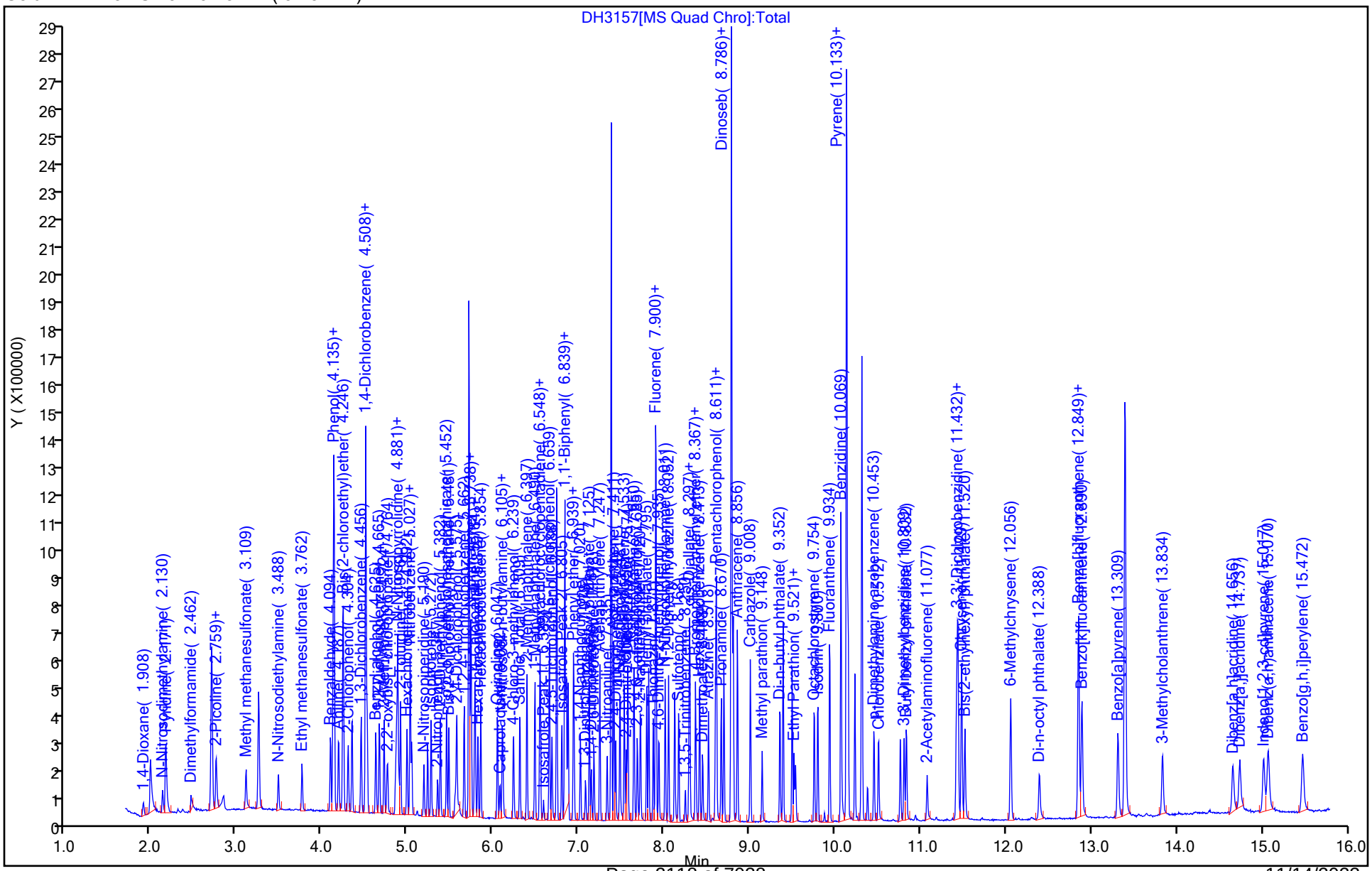
Report Date: 05-Sep-2023 16:31:20 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3157.D

Injection Date:	31-Aug-2023 19:00:54	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	IC L3			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

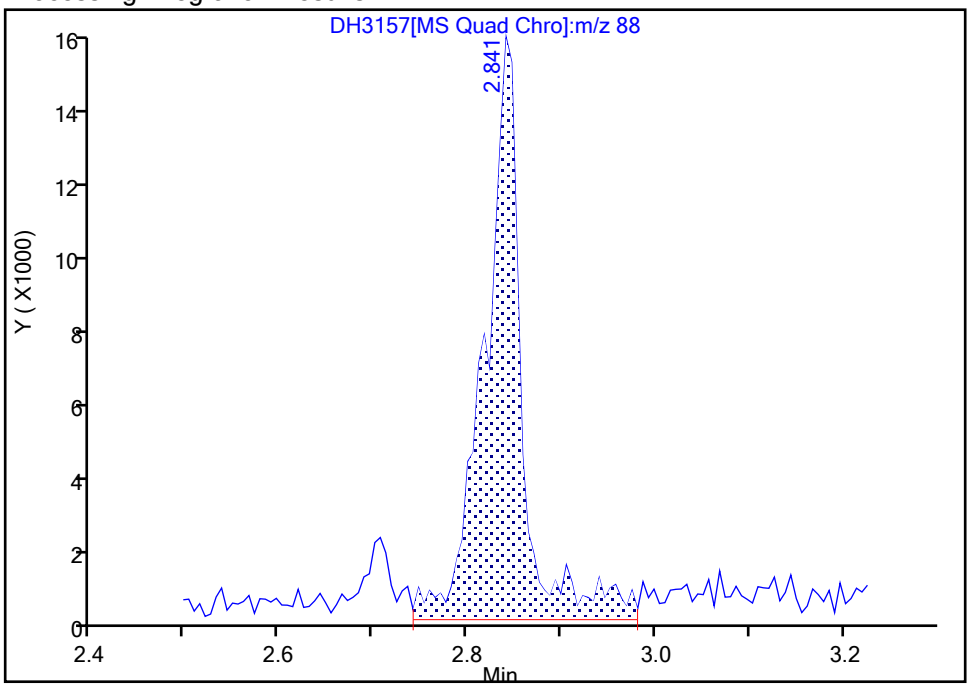
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3157.D				
Injection Date:	31-Aug-2023 19:00:54	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

8 N-Nitrosomethylethylamine, CAS: 10595-95-6

Signal: 1

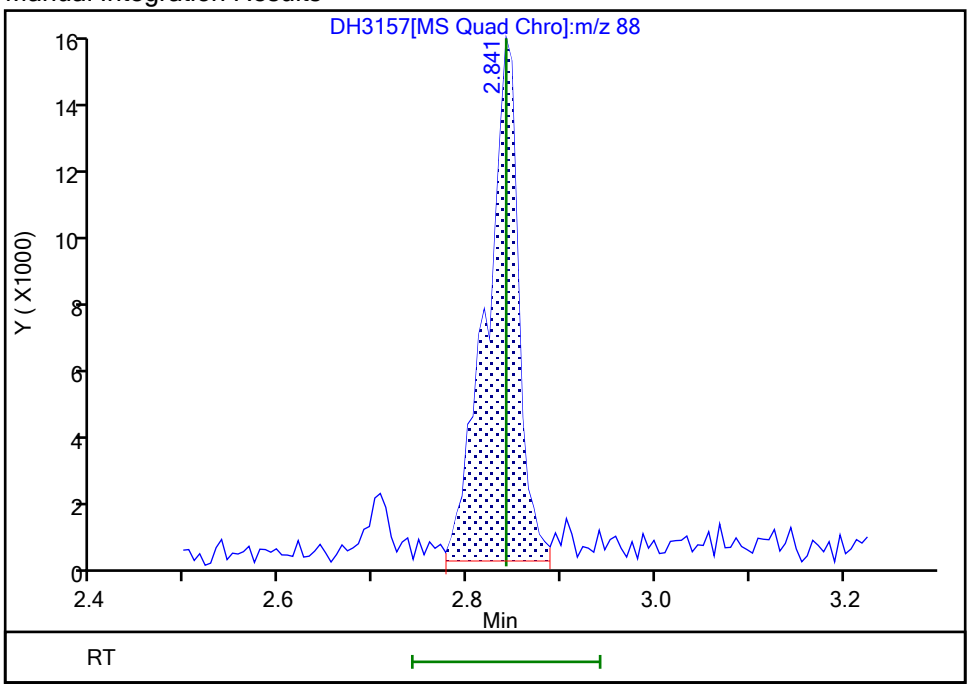
Processing Integration Results

RT: 2.84
Area: 41194
Amount: 1.172137
Amount Units: ug/ml



Manual Integration Results

RT: 2.84
Area: 34648
Amount: 1.242116
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:18:28 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

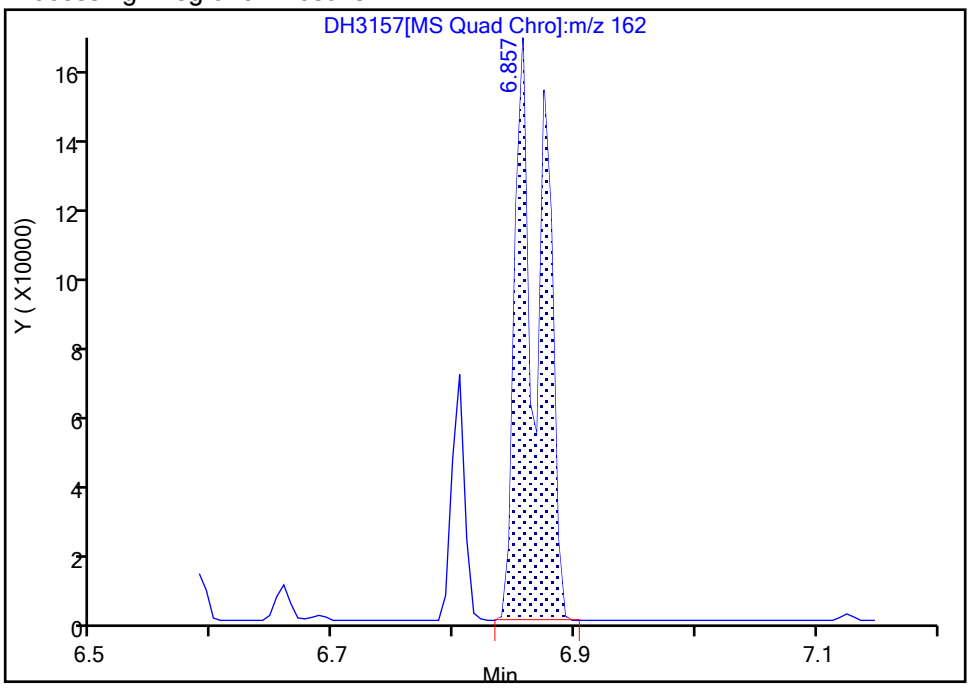
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3157.D				
Injection Date:	31-Aug-2023 19:00:54	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

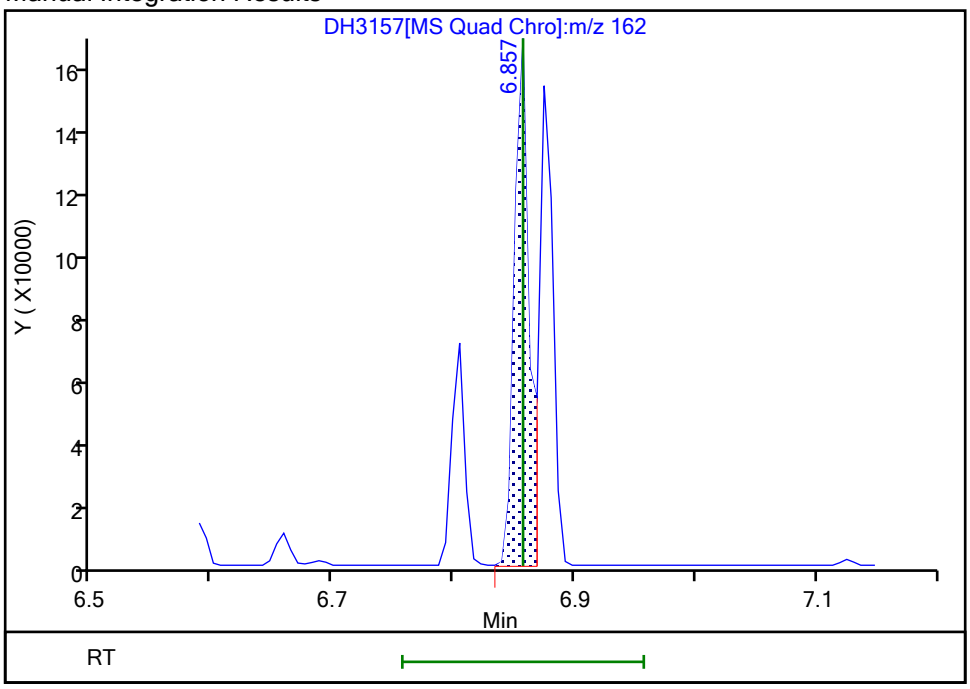
Processing Integration Results

RT: 6.86
Area: 250068
Amount: 2.091725
Amount Units: ug/ml



Manual Integration Results

RT: 6.86
Area: 138609
Amount: 1.278619
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:18:50 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

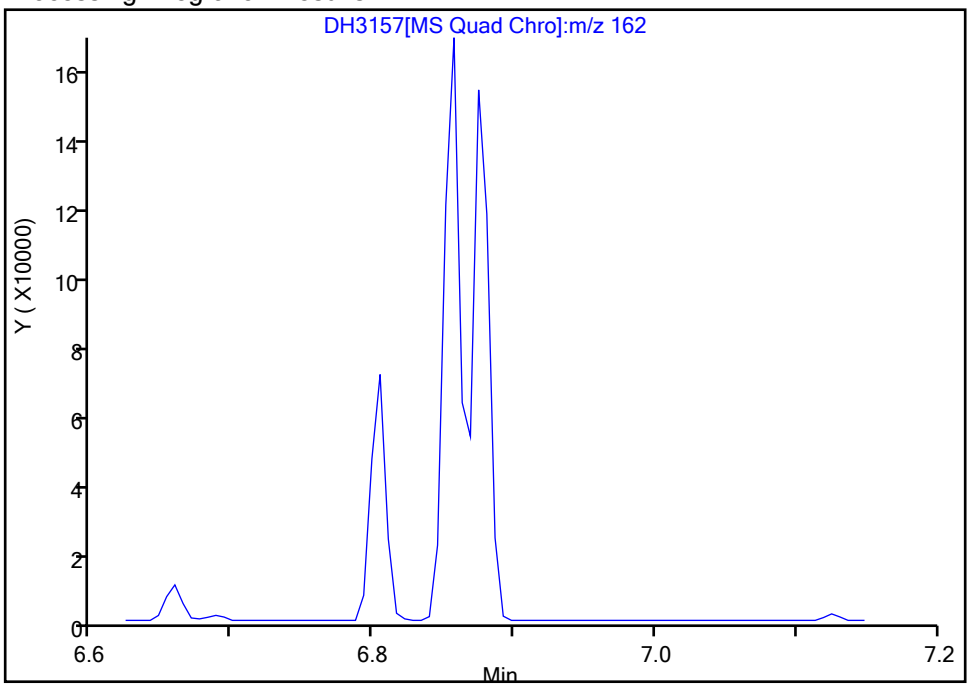
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3157.D				
Injection Date:	31-Aug-2023 19:00:54	Instrument ID:	HP19760		
Lims ID:	IC L3				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

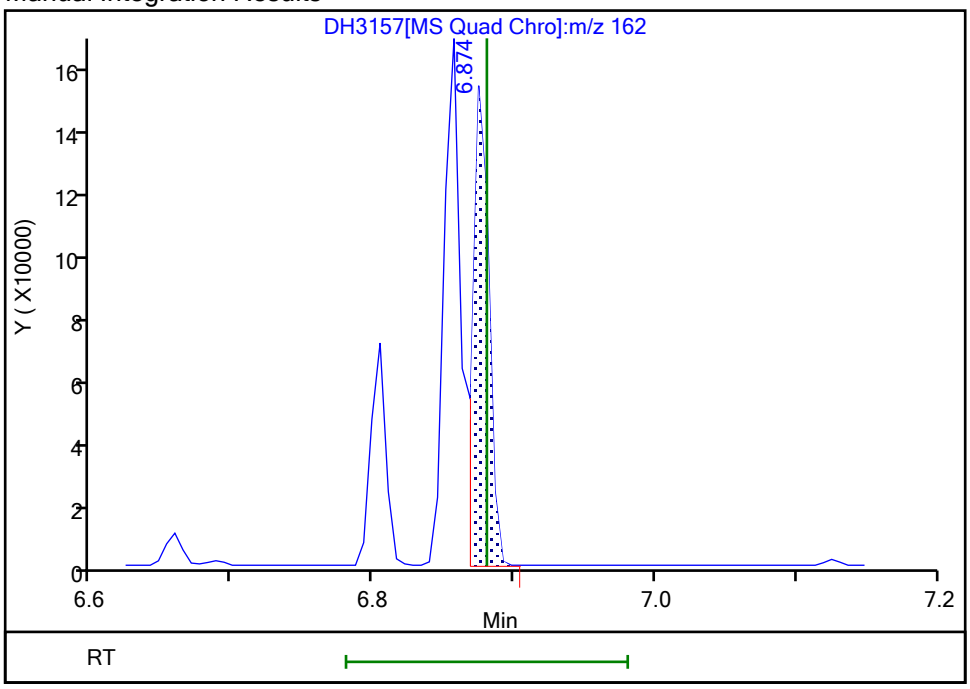
Not Detected
Expected RT: 6.88

Processing Integration Results



Manual Integration Results

RT: 6.87
Area: 111458
Amount: 1.149975
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:18:57 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 31-Aug-2023 19:21:44 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 410-0092991-009
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:31:43 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: SJ89 Date: 01-Sep-2023 08:23:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.903	1.908	-0.005	82	5812	0.2500	0.2735	
3 N-Nitrosodimethylamine	74	2.136	2.130	0.006	91	6965	0.2500	0.2105	
4 Pyridine	79	2.177	2.165	0.012	97	25917	0.5000	0.4766	
6 Dimethylformamide	73	2.509	2.445	0.064	81	8367	0.2500	0.2414	M
7 2-Picoline	93	2.759	2.759	0.000	90	13404	0.2500	0.2346	
8 N-Nitrosomethylethylamine	88	2.847	2.841	0.006	83	14742	0.2500	0.6030	
9 Methyl methanesulfonate	80	3.109	3.109	0.000	83	6556	0.2500	0.2233	
$ 10 2-Fluorophenol	112	3.255	3.261	-0.006	91	24025	0.5000	0.4354	
11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	87	5087	0.2500	0.2176	
12 Ethyl methanesulfonate	109	3.762	3.768	-0.006	97	6307	0.2500	0.2434	
15 Benzaldehyde	77	4.094	4.094	0.000	96	10136	0.2500	0.2674	
$ 16 Phenol-d5	99	4.123	4.129	-0.006	95	29194	0.5000	0.4060	
17 Phenol	94	4.141	4.141	0.000	91	14057	0.2500	0.2209	M
18 Aniline	93	4.187	4.193	-0.006	96	17524	0.2500	0.2211	
19 Bis(2-chloroethyl)ether	93	4.246	4.252	-0.006	93	12513	0.2500	0.2306	
20 2-Chlorophenol	128	4.304	4.304	0.000	92	10816	0.2500	0.2320	
21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	95	12893	0.2500	0.2332	
* 22 1,4-Dichlorobenzene-d4	152	4.508	4.508	0.000	96	174225	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.526	4.526	0.000	93	13982	0.2500	0.2499	
25 Benzyl alcohol	108	4.625	4.630	-0.005	91	6570	0.2500	0.2083	
26 1,2-Dichlorobenzene	146	4.665	4.671	-0.006	95	12507	0.2500	0.2346	
28 2-Methylphenol	108	4.724	4.724	0.000	92	9882	0.2500	0.2202	
29 2,2'-oxybis[1-chloropropane]	45	4.759	4.765	-0.005	92	13029	0.2500	0.2338	
31 N-Nitrosopyrrolidine	100	4.858	4.864	-0.006	82	5370	0.2500	0.2092	
32 4-Methylphenol	108	4.869	4.875	-0.006	94	9844	0.2500	0.2121	M
34 Acetophenone	105	4.881	4.887	-0.006	97	17301	0.2500	0.2366	
33 N-Nitrosodi-n-propylamine	70	4.881	4.887	-0.006	73	9211	0.2500	0.2317	
35 N-Nitrosomorpholine	56	4.899	4.899	0.000	89	6034	0.2500	0.2126	
36 2-Toluidine	106	4.916	4.916	0.000	96	17021	0.2500	0.2156	
38 Hexachloroethane	117	4.992	4.992	0.000	88	4428	0.2500	0.2063	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	5.027	5.033	-0.006	87	28401	0.5000	0.4519	
40 Nitrobenzene	77	5.044	5.050	-0.006	91	12823	0.2500	0.2321	
42 N-Nitrosopiperidine	114	5.190	5.190	0.000	83	5191	0.2500	0.2309	
43 Isophorone	82	5.272	5.277	-0.005	97	22577	0.2500	0.2232	
44 2-Nitrophenol	139	5.347	5.353	-0.006	89	3211	0.2500	0.1744	
45 2,4-Dimethylphenol	107	5.382	5.382	0.000	94	9722	0.2500	0.2179	
46 o,o',o''-Triethylphosphorothioat	198	5.452	5.458	-0.006	86	5673	0.2500	0.2204	
47 Bis(2-chloroethoxy)methane	93	5.481	5.481	0.000	97	14462	0.2500	0.2305	
48 2,4-Dichlorophenol	162	5.575	5.575	0.000	92	7808	0.2500	0.2074	
49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	10983	0.2500	0.2379	
* 50 Naphthalene-d8	136	5.715	5.715	0.000	100	629061	5.00	5.00	
51 Naphthalene	128	5.738	5.738	0.000	96	32935	0.2500	0.2380	
52 Alpha-Terpineol	59	5.744	5.744	0.000	82	6954	0.2500	0.1993	
53 4-Chloroaniline	127	5.785	5.785	0.000	94	12955	0.2500	0.2294	
54 2,6-Dichlorophenol	162	5.790	5.790	0.000	94	8155	0.2500	0.2118	
55 Hexachloropropene	213	5.820	5.819	0.001	87	7147	0.2500	0.2327	
56 Hexachlorobutadiene	225	5.854	5.854	0.000	92	7559	0.2500	0.2630	
60 Quinoline	129	6.047	6.053	-0.006	95	19451	0.2500	0.2253	
61 Caprolactam	113	6.076	6.093	-0.017	81	1750	0.2500	0.1408	
62 N-Nitrosodi-n-butylamine	84	6.105	6.105	0.000	93	22571	0.2500	0.5019	
63 p-Phenylene diamine	108	6.117	6.123	-0.006	96	7073	0.2500	0.2249	
64 4-Chloro-3-methylphenol	107	6.239	6.239	0.000	93	7989	0.2500	0.2037	
65 Safrole, Total	162	6.309	6.315	-0.006	88	7807	0.2500	0.2170	
66 2-Methylnaphthalene	142	6.397	6.397	0.000	89	20268	0.2500	0.2293	
67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	19662	0.2500	0.2389	
68 Hexachlorocyclopentadiene	237	6.542	6.542	0.000	95	5736	0.2500	0.2225	
69 1,2,4,5-Tetrachlorobenzene	216	6.548	6.554	-0.006	95	12082	0.2500	0.2340	
70 Isosafrole Peak 1	162	6.589	6.589	0.000	88	1860	0.0400	0.0452	
71 2,4,6-Trichlorophenol	196	6.659	6.659	0.000	88	4667	0.2500	0.1846	
72 2,4,5-Trichlorophenol	196	6.688	6.688	0.000	92	5819	0.2500	0.1936	
$ 73 2-Fluorobiphenyl (Surr)	172	6.740	6.746	-0.006	99	57366	0.5000	0.4816	
74 Isosafrole Peak 2	162	6.805	6.805	0.000	91	8587	0.2100	0.1944	
75 1,1'-Biphenyl	154	6.840	6.840	0.000	95	27718	0.2500	0.2421	
76 2-Chloronaphthalene	162	6.857	6.857	0.000	81	20594	0.2500	0.2250	
77 1-Chloronaphthalene	162	6.874	6.880	-0.006	97	21267	0.2500	0.2599	
78 Phenyl ether	170	6.939	6.939	0.000	85	14642	0.2500	0.2325	
79 2-Nitroaniline	138	6.944	6.950	-0.006	78	4934	0.2500	0.2113	
81 1,4-Naphthoquinone	158	7.020	7.020	0.000	86	6615	0.2500	0.2033	
86 1,3-Dinitrobenzene	168	7.078	7.084	-0.006	85	2051	0.2500	0.1955	
85 Dimethyl phthalate	163	7.125	7.125	0.000	98	23177	0.2500	0.2347	
84 1,4-Dinitrobenzene	168	7.148	7.148	0.000	78	2153	0.2500	0.1682	
87 2,6-Dinitrotoluene	165	7.178	7.183	-0.005	87	3469	0.2500	0.1818	
88 Acenaphthylene	152	7.248	7.248	0.000	98	29378	0.2500	0.2185	
89 3-Nitroaniline	138	7.335	7.335	0.000	90	4048	0.2500	0.1951	
* 90 Acenaphthene-d10	164	7.382	7.382	0.000	96	357751	5.00	5.00	
91 Acenaphthene	153	7.411	7.411	0.000	96	21089	0.2500	0.2315	
92 2,4-Dinitrophenol	184	7.434	7.434	0.000	86	11053	2.50	4.04	
93 4-Nitrophenol	109	7.481	7.486	-0.005	84	14315	1.50	1.11	
94 Pentachlorobenzene	250	7.533	7.533	0.000	96	10994	0.2500	0.2413	
95 2,4-Dinitrotoluene	165	7.556	7.562	-0.006	89	4247	0.2500	0.1703	
96 Dibenzofuran	168	7.574	7.580	-0.006	96	31136	0.2500	0.2402	
97 1-Naphthylamine	143	7.650	7.650	0.000	99	16626	0.2500	0.2198	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.685	7.690	-0.005	75	4533	0.2500	0.1748	
99 2-Naphthylamine	143	7.720	7.725	-0.005	96	18698	0.2500	0.2177	
100 Diethyl phthalate	149	7.795	7.801	-0.006	98	21199	0.2500	0.2227	
101 Thionazin	107	7.871	7.877	-0.006	77	3240	0.2500	0.2085	
102 Fluorene	166	7.900	7.900	0.000	93	22366	0.2500	0.2211	
103 4-Chlorophenyl phenyl ether	204	7.906	7.906	0.000	87	12964	0.2500	0.2365	
104 N-Nitro-o-toluidine	152	7.900	7.906	-0.006	67	4847	0.2500	0.1994	
105 4-Nitroaniline	138	7.906	7.912	-0.006	75	3814	0.2500	0.1702	
106 4,6-Dinitro-2-methylphenol	198	7.935	7.941	-0.006	87	9790	1.50	2.34	
107 N-Nitrosodiphenylamine	169	8.011	8.017	-0.006	62	16094	0.2125	0.1872	
108 1,2-Diphenylhydrazine	77	8.052	8.052	0.000	41	26693	0.2500	0.2268	
$ 109 2,4,6-Tribromophenol	330	8.122	8.128	-0.006	93	6737	0.5000	0.3740	
110 Sulfotepp	97	8.168	8.168	0.000	79	3489	0.2500	0.2029	
112 1,3,5-Trinitrobenzene	213	8.250	8.256	-0.006	83	1073	0.2500	0.1226	
113 cis-Diallate	86	8.291	8.291	0.000	0	8592	0.1850	0.1838	
114 Phorate	75	8.297	8.302	-0.005	91	10141	0.2500	0.1733	
115 Phenacetin	108	8.297	8.308	-0.011	70	6743	0.2500	0.1456	
116 4-Bromophenyl phenyl ether	248	8.367	8.367	0.000	62	9309	0.2500	0.2675	
117 trans-Diallate	86	8.378	8.378	0.000	0	7739	0.0650	0.1693	
118 Hexachlorobenzene	284	8.413	8.419	-0.006	94	9866	0.2500	0.2528	
119 Dimethoate	87	8.448	8.454	-0.006	88	4954	0.2500	0.1383	
120 Atrazine	200	8.518	8.524	-0.006	91	5034	0.2500	0.1839	
121 Pentachlorophenol	266	8.600	8.606	-0.006	93	14490	1.25	1.28	
122 4-Aminobiphenyl	169	8.611	8.611	0.000	90	24048	0.2500	0.2100	
123 Pentachloronitrobenzene	237	8.611	8.617	-0.006	48	2839	0.2500	0.2106	
124 Pronamide	173	8.670	8.670	0.000	89	8728	0.2500	0.2011	
125 Dinoseb	211	8.780	8.780	0.000	60	2389	0.2500	1.03	
* 126 Phenanthrene-d10	188	8.786	8.786	0.000	97	714770	5.00	5.00	
127 Disulfoton	88	8.792	8.798	-0.006	93	20219	0.2500	0.3018	
128 Phenanthrene	178	8.810	8.810	0.000	97	39335	0.2500	0.2494	
129 Anthracene	178	8.856	8.862	-0.006	97	35244	0.2500	0.2240	
130 Carbazole	167	9.008	9.014	-0.006	95	30364	0.2500	0.2243	
131 Methyl parathion	109	9.148	9.148	0.000	89	3486	0.2500	0.1225	
133 Di-n-butyl phthalate	149	9.357	9.357	0.000	100	26269	0.2500	0.1847	
134 Ethyl Parathion	109	9.521	9.521	0.000	81	2222	0.2500	0.1261	
135 4-Nitroquinoline-1-oxide	190	9.538	9.544	-0.006	70	1160	0.2500	0.2333	
S 136 Diallate	86				0		0.2500	0.3531	
140 Octachlorostyrene	308	9.760	9.760	0.000	89	3991	0.2500	0.2576	
141 Isodrin	193	9.795	9.800	-0.005	88	4469	0.2500	0.2309	
143 Fluoranthene	202	9.935	9.940	-0.005	97	37745	0.2500	0.2228	
147 Benzidine	184	10.069	10.074	-0.005	99	37804	0.7500	0.3619	
* 149 Pyrene-d10 (IS)	212	10.139	10.139	0.001	98	779444	5.00	5.00	
150 Pyrene	202	10.150	10.156	-0.006	98	47610	0.2500	0.2467	
$ 152 p-Terphenyl-d14	244	10.313	10.319	-0.006	98	72268	0.5000	0.4591	
154 p-Dimethylamino azobenzene	225	10.459	10.459	0.000	90	4729	0.2500	0.1604	
155 Chlorobenzilate	139	10.506	10.512	-0.006	88	7041	0.2500	0.1604	
156 3,3'-Dimethylbenzidine	212	10.809	10.809	0.000	98	10342	0.2500	0.1076	
157 Butyl benzyl phthalate	149	10.832	10.838	-0.006	95	7345	0.2500	0.1168	
158 2-Acetylaminofluorene	181	11.077	11.083	-0.006	90	4514	0.2500	0.2584	
159 3,3'-Dichlorobenzidine	252	11.421	11.421	0.000	72	8989	0.2500	0.1375	
160 4,4'-Methylene bis(2-chloroani	231	11.427	11.432	-0.005	88	3916	0.2500	0.1131	
161 Benzo[a]anthracene	228	11.438	11.444	-0.006	98	31623	0.2500	0.1920	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.479	11.485	-0.006	95	35358	0.2500	0.2192	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.520	0.000	95	9071	0.2500	0.1026	
164 6-Methylchrysene	242	12.056	12.062	-0.006	98	20633	0.2500	0.1896	
165 Di-n-octyl phthalate	149	12.388	12.394	-0.006	98	11597	0.2500	0.7412	
167 Benzo[b]fluoranthene	252	12.849	12.855	-0.006	95	30306	0.2500	0.1944	
166 7,12-Dimethylbenz(a)anthracene	256	12.849	12.855	-0.006	67	10469	0.2500	0.1693	
168 Benzo[k]fluoranthene	252	12.890	12.895	-0.005	98	34969	0.2500	0.2128	
169 Benzo[a]pyrene	252	13.309	13.315	-0.006	75	22702	0.2500	0.1790	
* 170 Perylene-d12	264	13.391	13.397	-0.006	99	639480	5.00	5.00	
171 3-Methylcholanthrene	268	13.828	13.834	-0.006	91	8589	0.2500	0.1420	
172 Dibenz[a,h]acridine	279	14.650	14.662	-0.012	90	14478	0.2500	0.1431	
173 Dibenz[a,j]acridine	279	14.731	14.743	-0.012	95	16918	0.2500	0.1510	
174 Indeno[1,2,3-cd]pyrene	276	15.011	15.023	-0.012	96	18196	0.2500	0.1737	
175 Dibenz(a,h)anthracene	278	15.070	15.075	-0.005	92	21986	0.2500	0.1763	
176 Benzo[g,h,i]perylene	276	15.472	15.478	-0.006	96	23765	0.2500	0.1874	
S 178 Dinitrotoluene	165				0			0.3521	
S 182 Isosafrole	162				0		0.2500	0.2396	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_2_00031 Amount Added: 1.00 Units: mL

Report Date: 05-Sep-2023 16:31:44 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Injection Date: 31-Aug-2023 19:21:44 Instrument ID: HP19760 Operator ID: mem41592

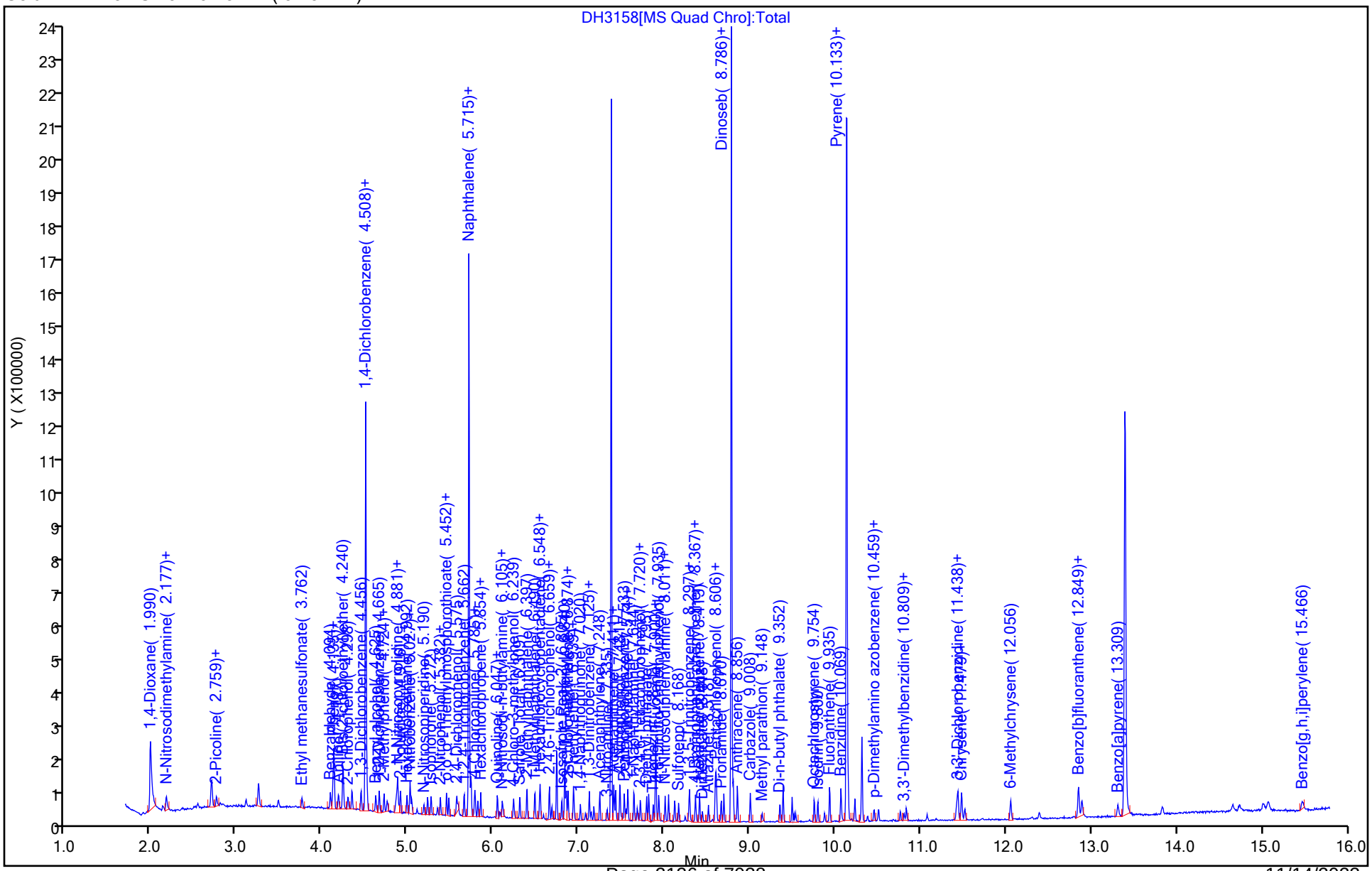
Lims ID: IC L2 Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

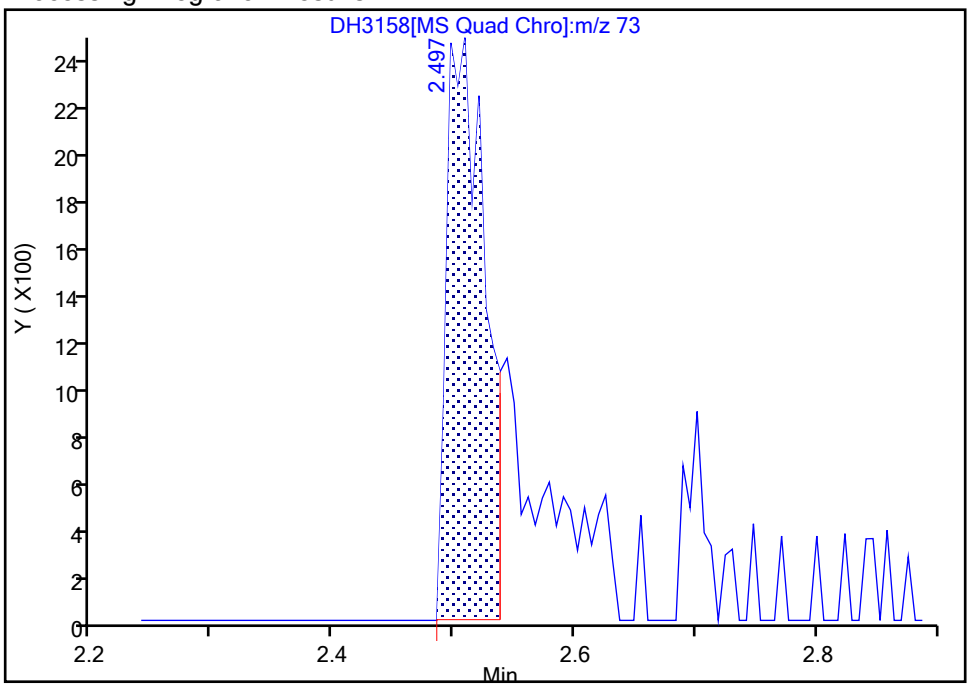
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D				
Injection Date:	31-Aug-2023 19:21:44	Instrument ID:	HP19760		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

6 Dimethylformamide, CAS: 68-12-2

Signal: 1

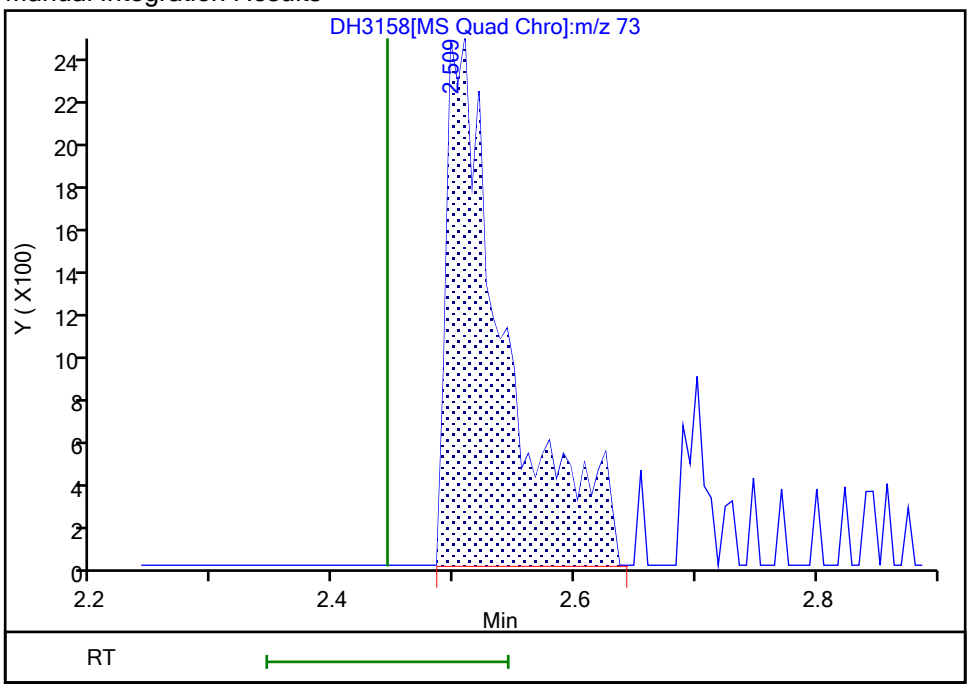
Processing Integration Results

RT: 2.50
Area: 5291
Amount: 0.159742
Amount Units: ug/ml



Manual Integration Results

RT: 2.51
Area: 8367
Amount: 0.241401
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:20:05 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

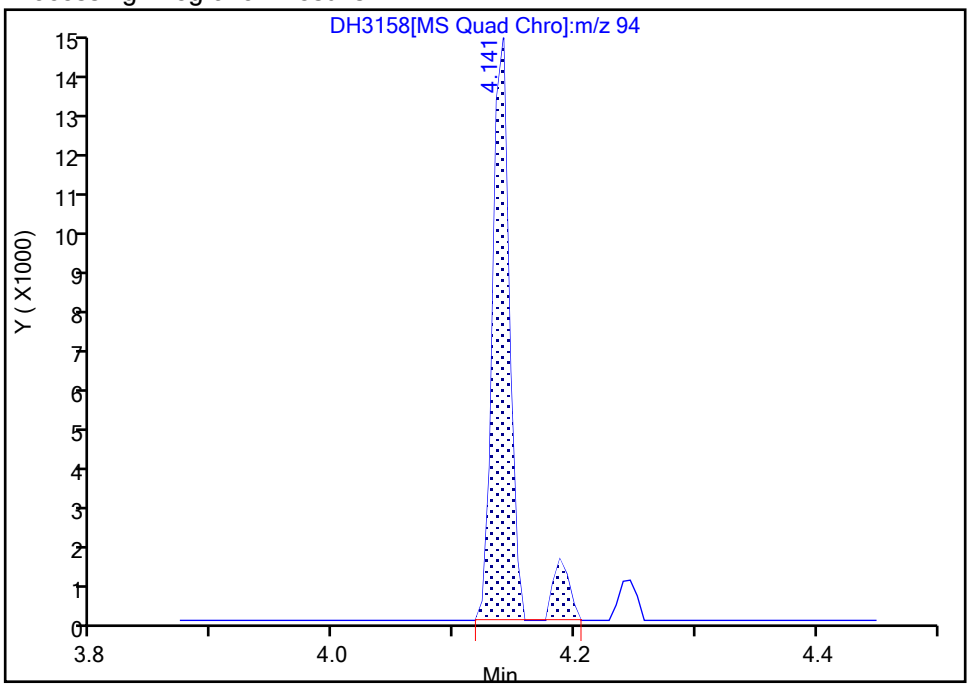
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D				
Injection Date:	31-Aug-2023 19:21:44	Instrument ID:	HP19760		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

17 Phenol, CAS: 108-95-2

Signal: 1

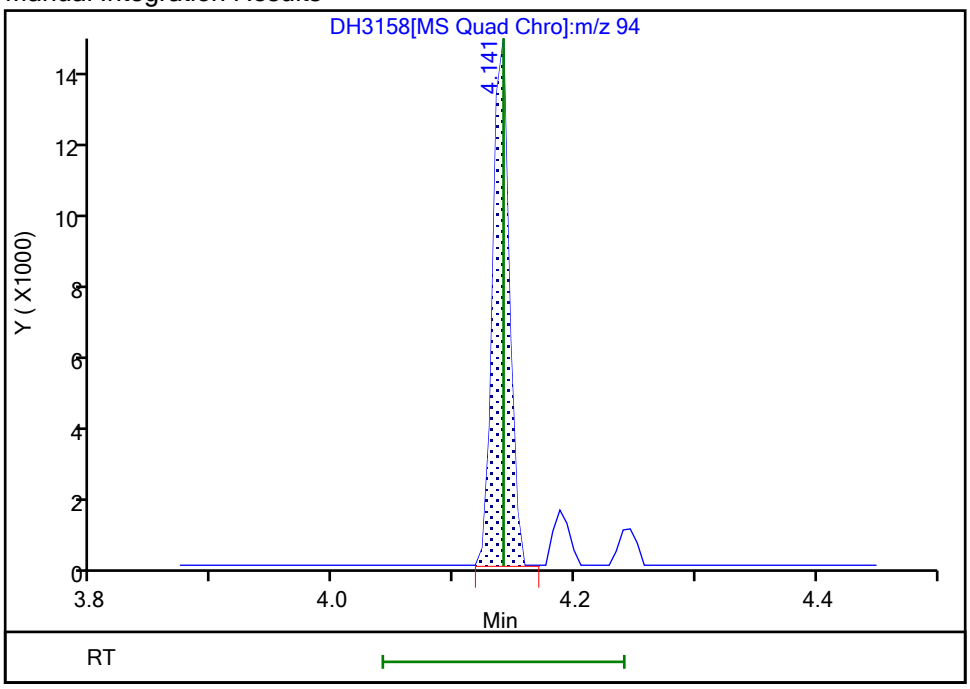
Processing Integration Results

RT: 4.14
Area: 15492
Amount: 0.240738
Amount Units: ug/ml



Manual Integration Results

RT: 4.14
Area: 14057
Amount: 0.220902
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:20:31 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

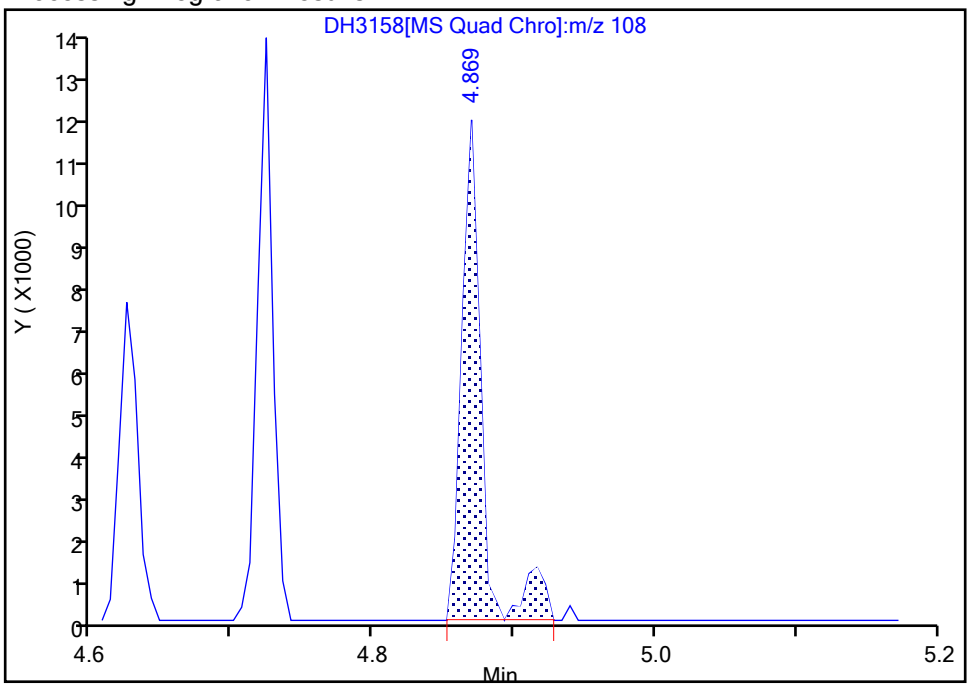
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D				
Injection Date:	31-Aug-2023 19:21:44	Instrument ID:	HP19760		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

32 4-Methylphenol, CAS: 106-44-5

Signal: 1

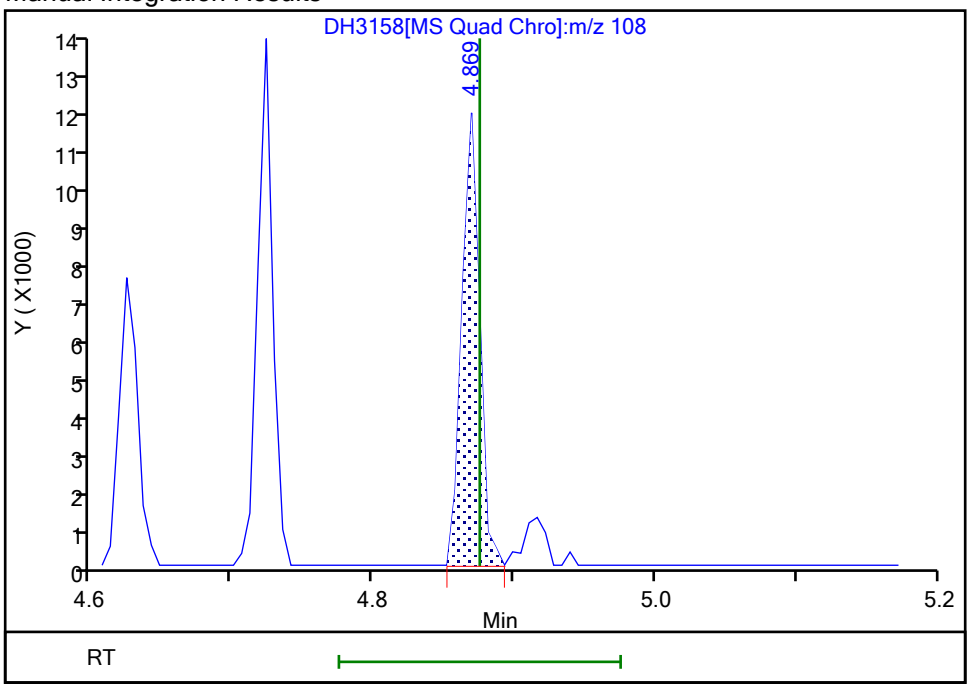
Processing Integration Results

RT: 4.87
Area: 11139
Amount: 0.236660
Amount Units: ug/ml



Manual Integration Results

RT: 4.87
Area: 9844
Amount: 0.212063
Amount Units: ug/ml



Reviewer: SJ89, 01-Sep-2023 08:20:40 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

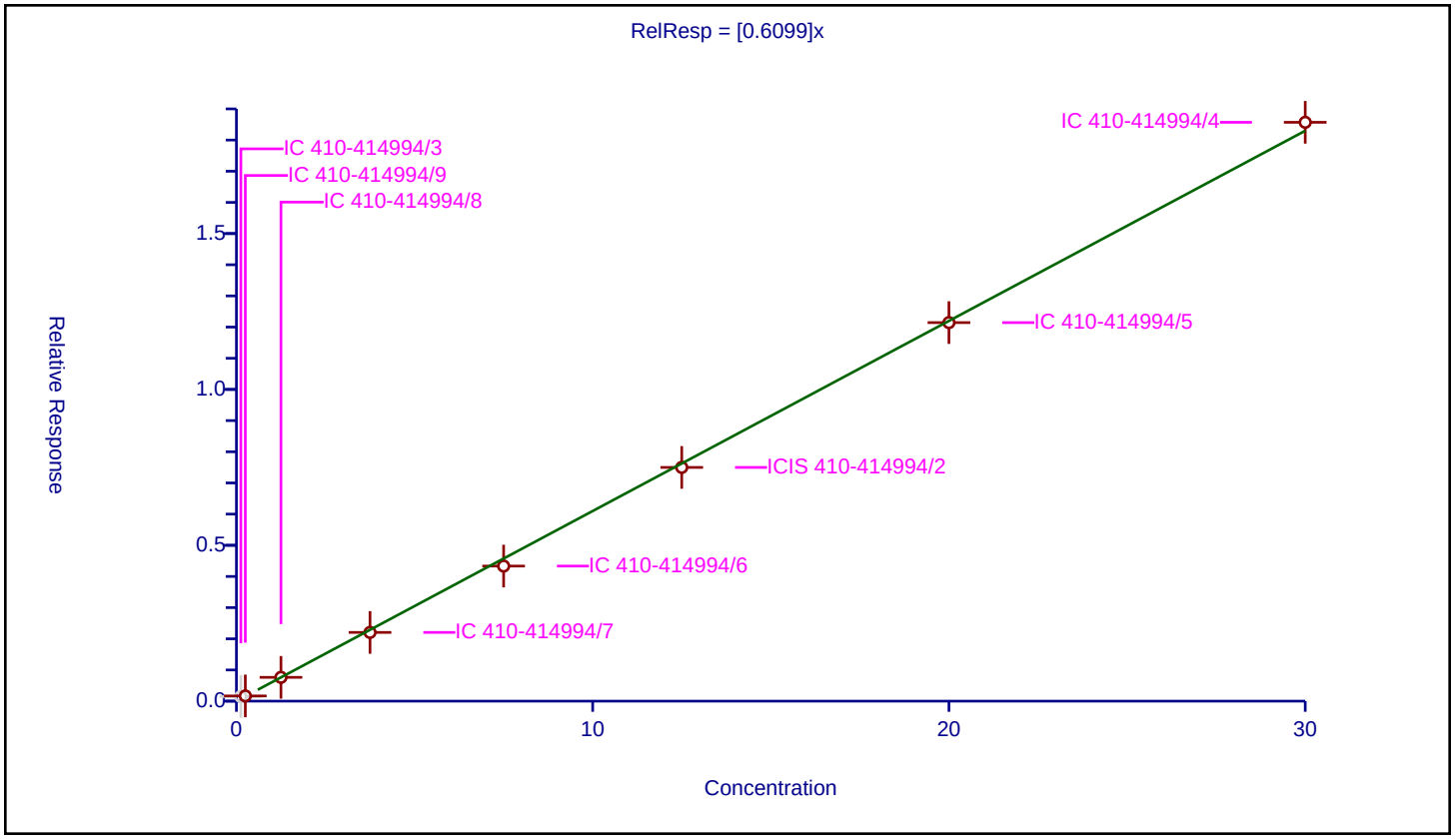
Curve Coefficients

Intercept:	0
Slope:	0.6099

Error Coefficients

Standard Error:	324000
Relative Standard Error:	4.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.147659	5.0	166160.0	1.181271	N
2	IC 410-414994/9	0.25	0.166796	5.0	174225.0	0.667183	Y
3	IC 410-414994/8	1.25	0.763029	5.0	198780.0	0.610424	Y
4	IC 410-414994/7	3.75	2.205137	5.0	150519.0	0.588037	Y
5	IC 410-414994/6	7.5	4.333536	5.0	202599.0	0.577805	Y
6	ICIS 410-414994/2	12.5	7.498197	5.0	176109.0	0.599856	Y
7	IC 410-414994/5	20.0	12.143977	5.0	167082.0	0.607199	Y
8	IC 410-414994/4	30.0	18.56917	5.0	161609.0	0.618972	Y



11/14/2023
11:12 AM

Calibration / N-Nitrosodimethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

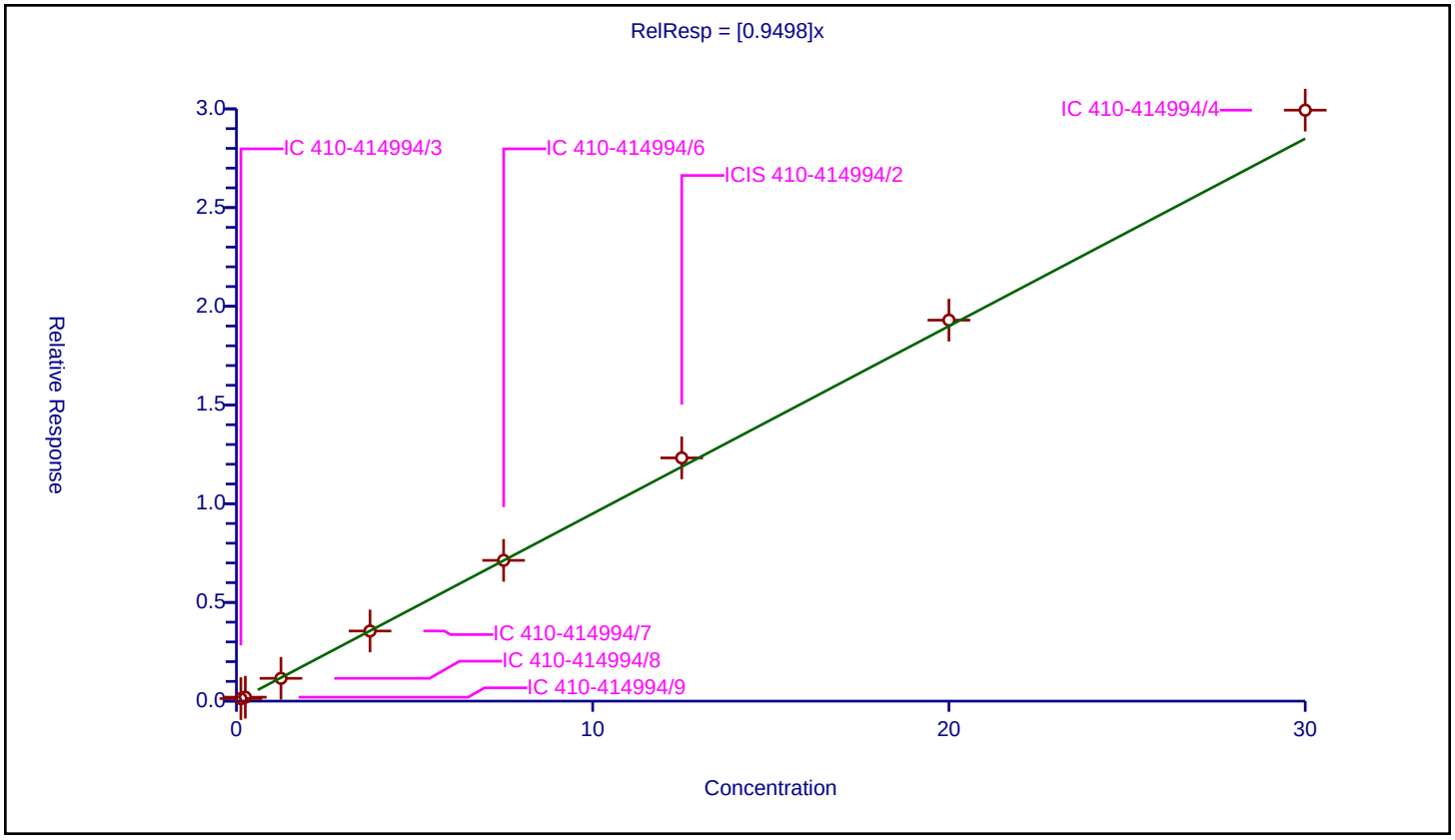
Curve Coefficients

Intercept:	0
Slope:	0.9498

Error Coefficients

Standard Error:	484000
Relative Standard Error:	7.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.128521	5.0	166160.0	1.028166	Y
2	IC 410-414994/9	0.25	0.199885	5.0	174225.0	0.799541	Y
3	IC 410-414994/8	1.25	1.154694	5.0	198780.0	0.923755	Y
4	IC 410-414994/7	3.75	3.553239	5.0	150519.0	0.94753	Y
5	IC 410-414994/6	7.5	7.13044	5.0	202599.0	0.950725	Y
6	ICIS 410-414994/2	12.5	12.321261	5.0	176109.0	0.985701	Y
7	IC 410-414994/5	20.0	19.300134	5.0	167082.0	0.965007	Y
8	IC 410-414994/4	30.0	29.93673	5.0	161609.0	0.997891	Y



Calibration / Pyridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

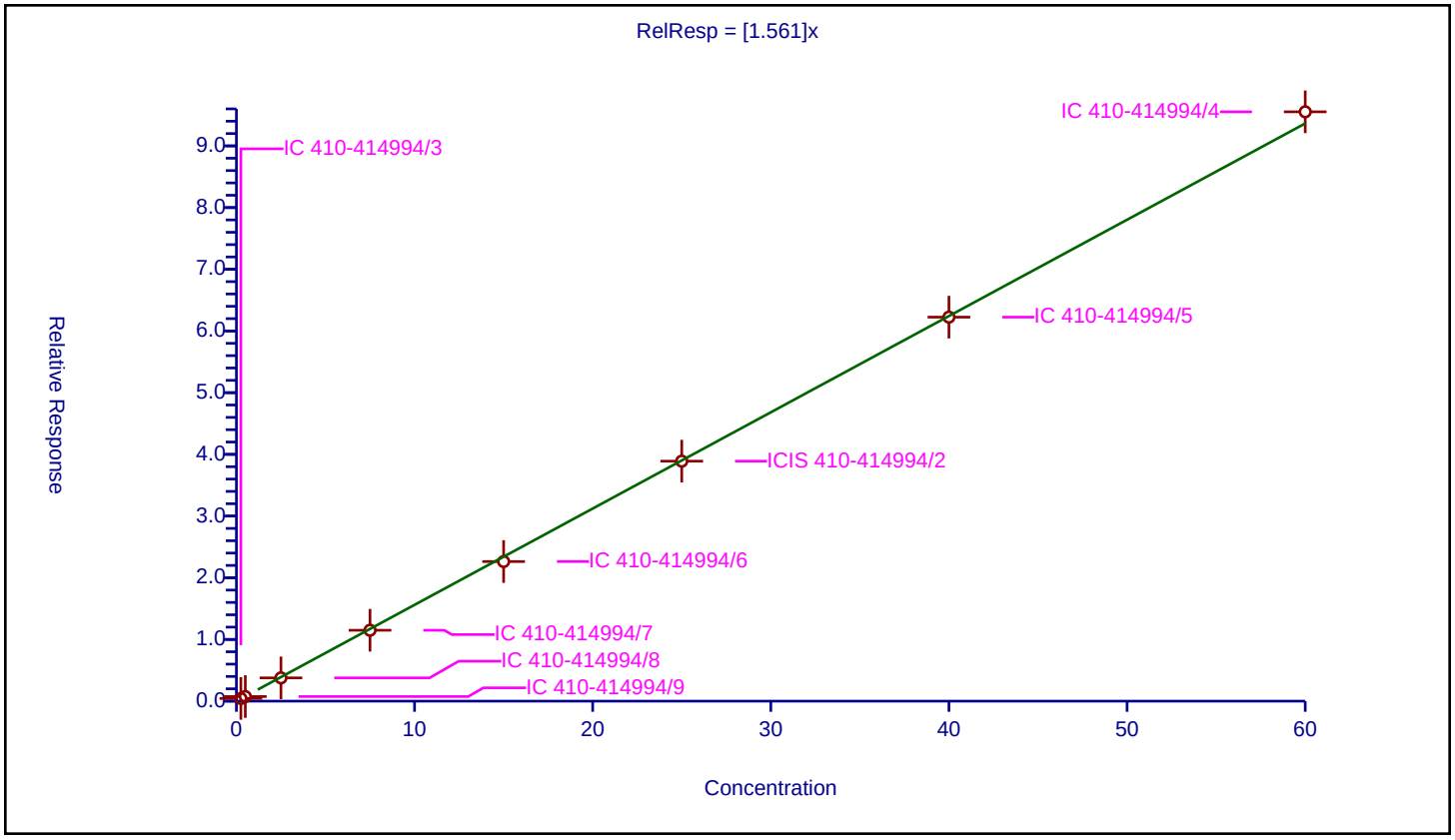
Curve Coefficients

Intercept:	0
Slope:	1.561

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	5.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.25	0.436176	5.0	166160.0	1.744704	Y
2	IC 410-414994/9	0.5	0.74378	5.0	174225.0	1.487559	Y
3	IC 410-414994/8	2.5	3.769444	5.0	198780.0	1.507777	Y
4	IC 410-414994/7	7.5	11.492104	5.0	150519.0	1.532281	Y
5	IC 410-414994/6	15.0	22.627111	5.0	202599.0	1.508474	Y
6	ICIS 410-414994/2	25.0	38.900369	5.0	176109.0	1.556015	Y
7	IC 410-414994/5	40.0	62.242282	5.0	167082.0	1.556057	Y
8	IC 410-414994/4	60.0	95.523733	5.0	161609.0	1.592062	Y



11/14/2023
11:12 AM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

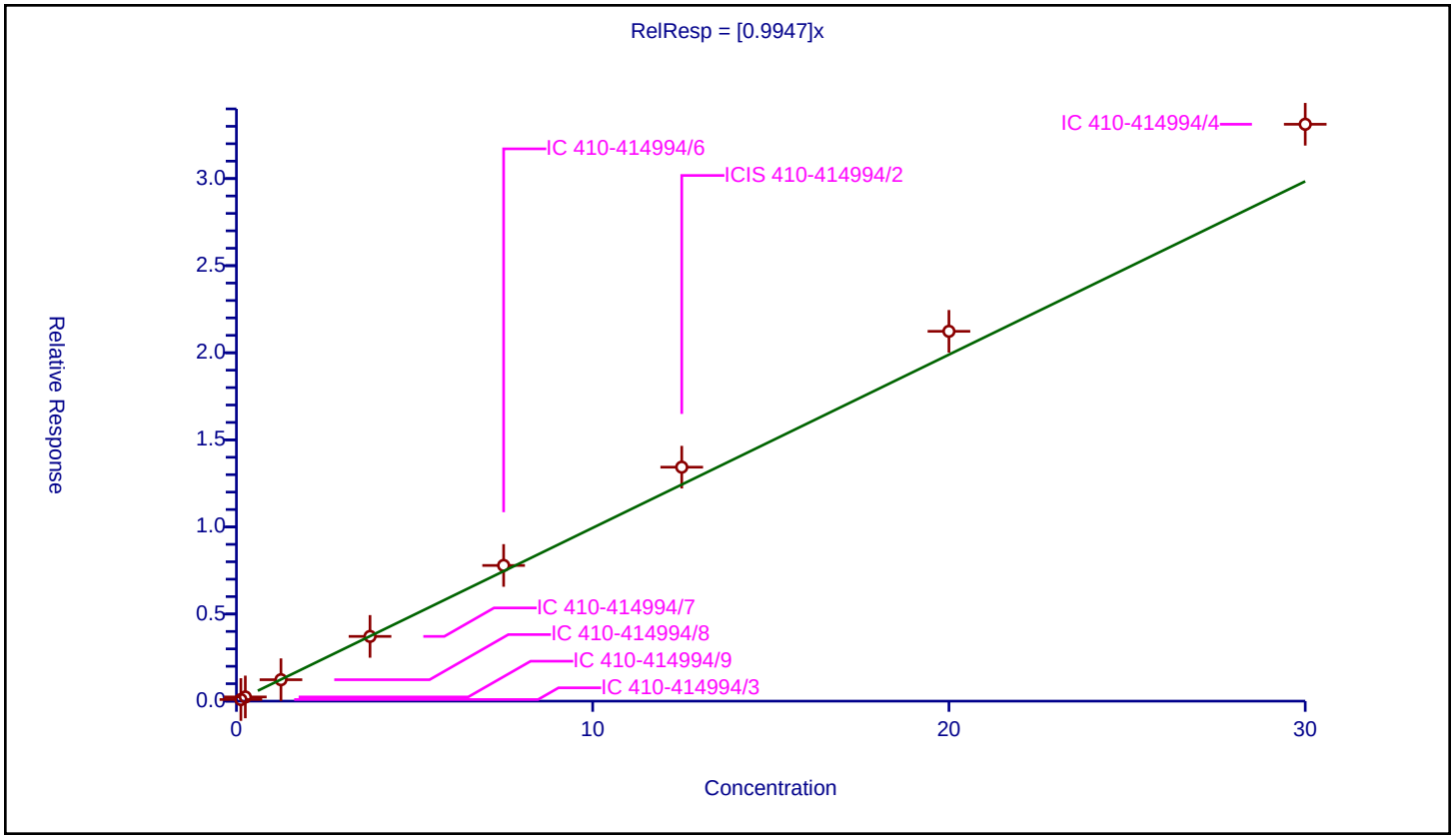
Curve Coefficients

Intercept:	0
Slope:	0.9947

Error Coefficients

Standard Error:	533000
Relative Standard Error:	11.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.092983	5.0	166160.0	0.743861	Y
2	IC 410-414994/9	0.25	0.240121	5.0	174225.0	0.960482	Y
3	IC 410-414994/8	1.25	1.229626	5.0	198780.0	0.983701	Y
4	IC 410-414994/7	3.75	3.715976	5.0	150519.0	0.990927	Y
5	IC 410-414994/6	7.5	7.789328	5.0	202599.0	1.038577	Y
6	ICIS 410-414994/2	12.5	13.431909	5.0	176109.0	1.074553	Y
7	IC 410-414994/5	20.0	21.231102	5.0	167082.0	1.061555	Y
8	IC 410-414994/4	30.0	33.117401	5.0	161609.0	1.103913	Y



Calibration / 2-Picoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

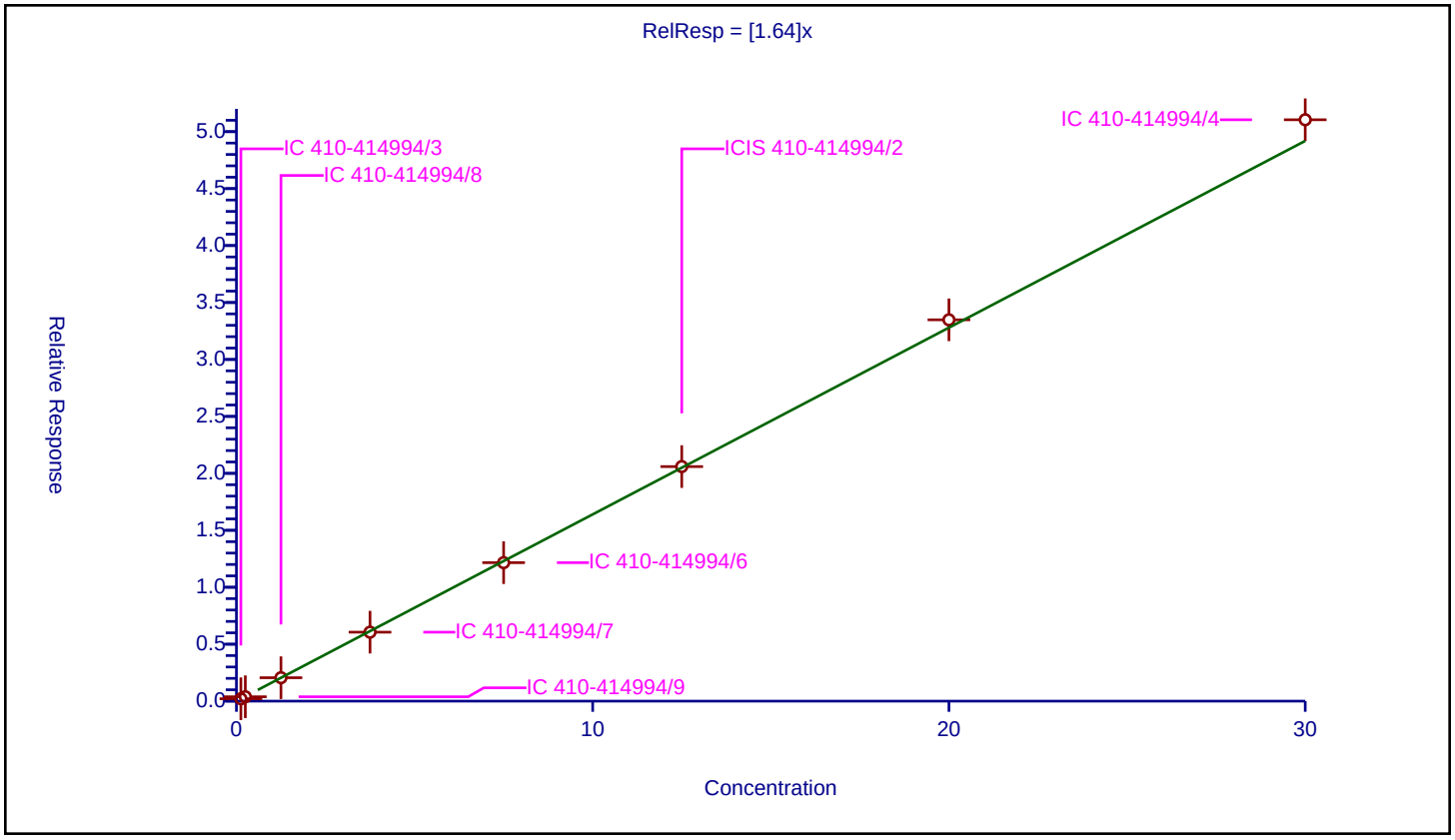
Curve Coefficients

Intercept:	0
Slope:	1.64

Error Coefficients

Standard Error:	827000
Relative Standard Error:	3.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.209226	5.0	166160.0	1.673808	Y
2	IC 410-414994/9	0.25	0.384675	5.0	174225.0	1.5387	Y
3	IC 410-414994/8	1.25	2.056998	5.0	198780.0	1.645598	Y
4	IC 410-414994/7	3.75	6.056245	5.0	150519.0	1.614999	Y
5	IC 410-414994/6	7.5	12.158204	5.0	202599.0	1.621094	Y
6	ICIS 410-414994/2	12.5	20.594376	5.0	176109.0	1.64755	Y
7	IC 410-414994/5	20.0	33.482482	5.0	167082.0	1.674124	Y
8	IC 410-414994/4	30.0	51.045579	5.0	161609.0	1.701519	Y



11/14/2023
11:12 AM

Calibration / N-Nitrosomethylethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

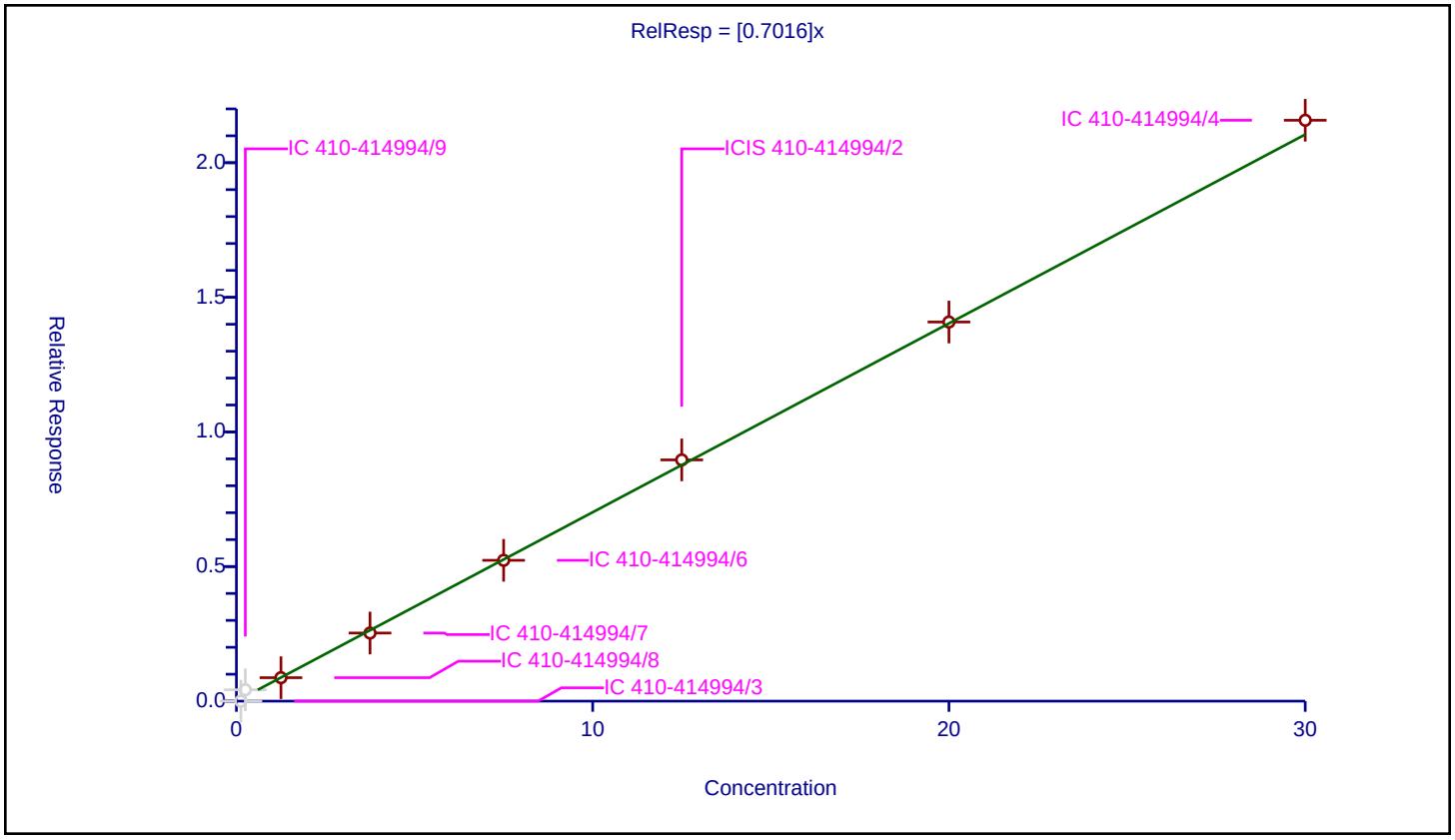
Curve Coefficients

Intercept:	0
Slope:	0.7016

Error Coefficients

Standard Error:	415000
Relative Standard Error:	2.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.0	5.0	166160.0	0.0	N
2	IC 410-414994/9	0.25	0.423074	5.0	174225.0	1.692294	N
3	IC 410-414994/8	1.25	0.871516	5.0	198780.0	0.697213	Y
4	IC 410-414994/7	3.75	2.53071	5.0	150519.0	0.674856	Y
5	IC 410-414994/6	7.5	5.231122	5.0	202599.0	0.697483	Y
6	ICIS 410-414994/2	12.5	8.961013	5.0	176109.0	0.716881	Y
7	IC 410-414994/5	20.0	14.083175	5.0	167082.0	0.704159	Y
8	IC 410-414994/4	30.0	21.577202	5.0	161609.0	0.71924	Y



Calibration / Methyl methanesulfonate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

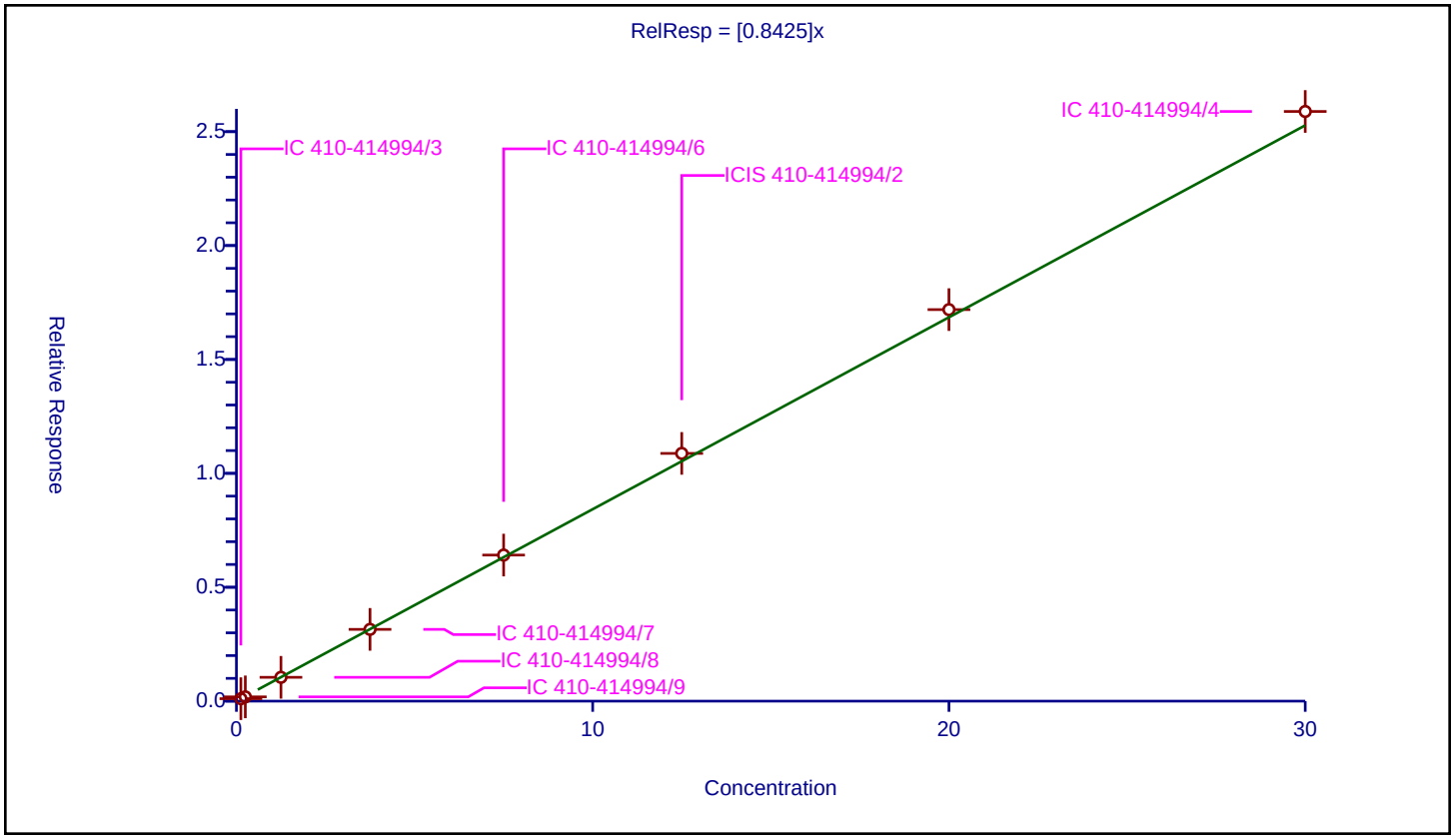
Curve Coefficients

Intercept:	0
Slope:	0.8425

Error Coefficients

Standard Error:	423000
Relative Standard Error:	4.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.107938	5.0	166160.0	0.863505	Y
2	IC 410-414994/9	0.25	0.188148	5.0	174225.0	0.75259	Y
3	IC 410-414994/8	1.25	1.045729	5.0	198780.0	0.836583	Y
4	IC 410-414994/7	3.75	3.151064	5.0	150519.0	0.840284	Y
5	IC 410-414994/6	7.5	6.412223	5.0	202599.0	0.854963	Y
6	ICIS 410-414994/2	12.5	10.876077	5.0	176109.0	0.870086	Y
7	IC 410-414994/5	20.0	17.188237	5.0	167082.0	0.859412	Y
8	IC 410-414994/4	30.0	25.886368	5.0	161609.0	0.862879	Y



Calibration / 2-Fluorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

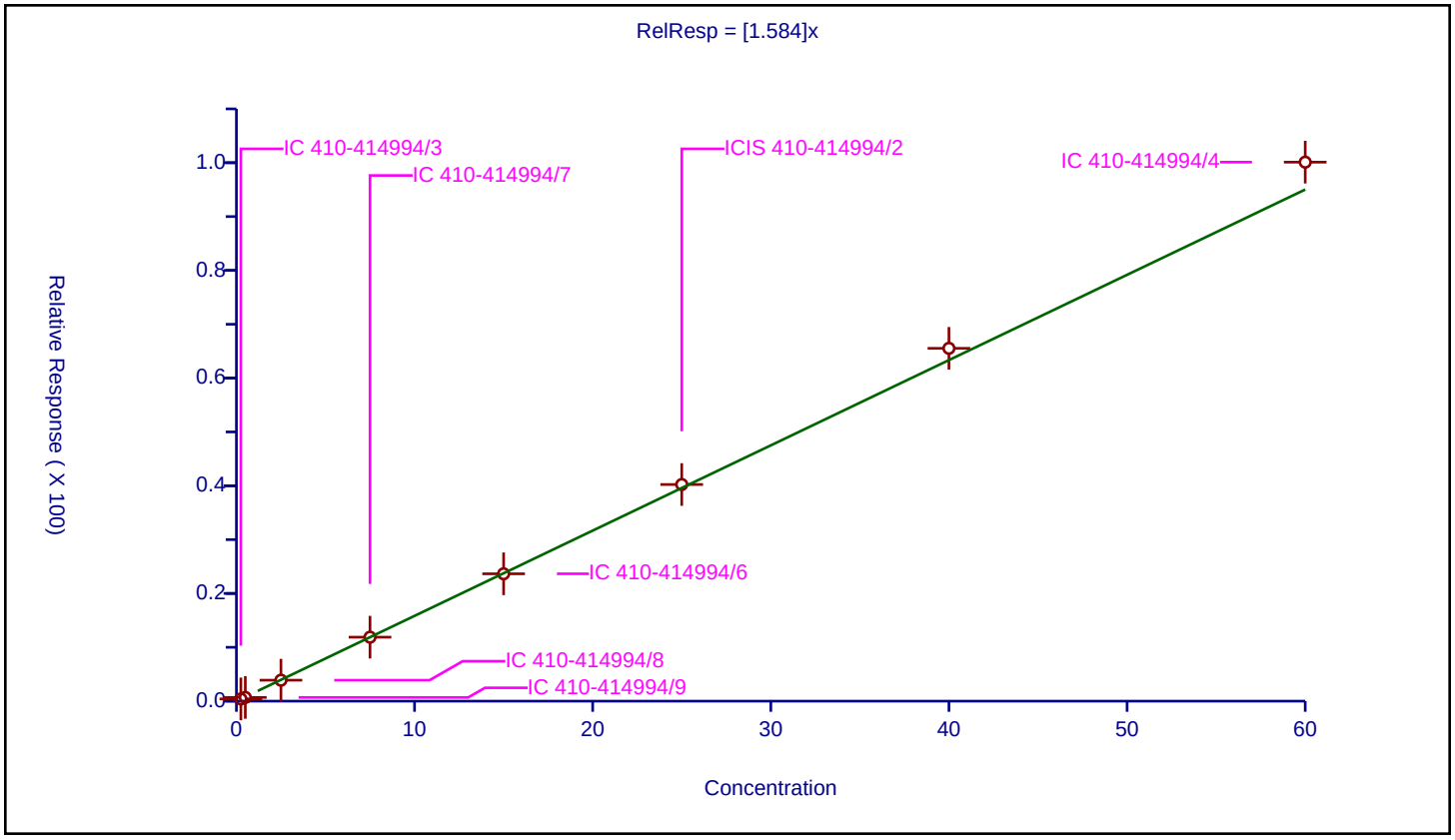
Curve Coefficients

Intercept:	0
Slope:	1.584

Error Coefficients

Standard Error:	1620000
Relative Standard Error:	5.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.25	0.414269	5.0	166160.0	1.657078	Y
2	IC 410-414994/9	0.5	0.689482	5.0	174225.0	1.378964	Y
3	IC 410-414994/8	2.5	3.888872	5.0	198780.0	1.555549	Y
4	IC 410-414994/7	7.5	11.880693	5.0	150519.0	1.584092	Y
5	IC 410-414994/6	15.0	23.65446	5.0	202599.0	1.576964	Y
6	ICIS 410-414994/2	25.0	40.235962	5.0	176109.0	1.609438	Y
7	IC 410-414994/5	40.0	65.528363	5.0	167082.0	1.638209	Y
8	IC 410-414994/4	60.0	100.105718	5.0	161609.0	1.668429	Y



Calibration / N-Nitrosodiethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

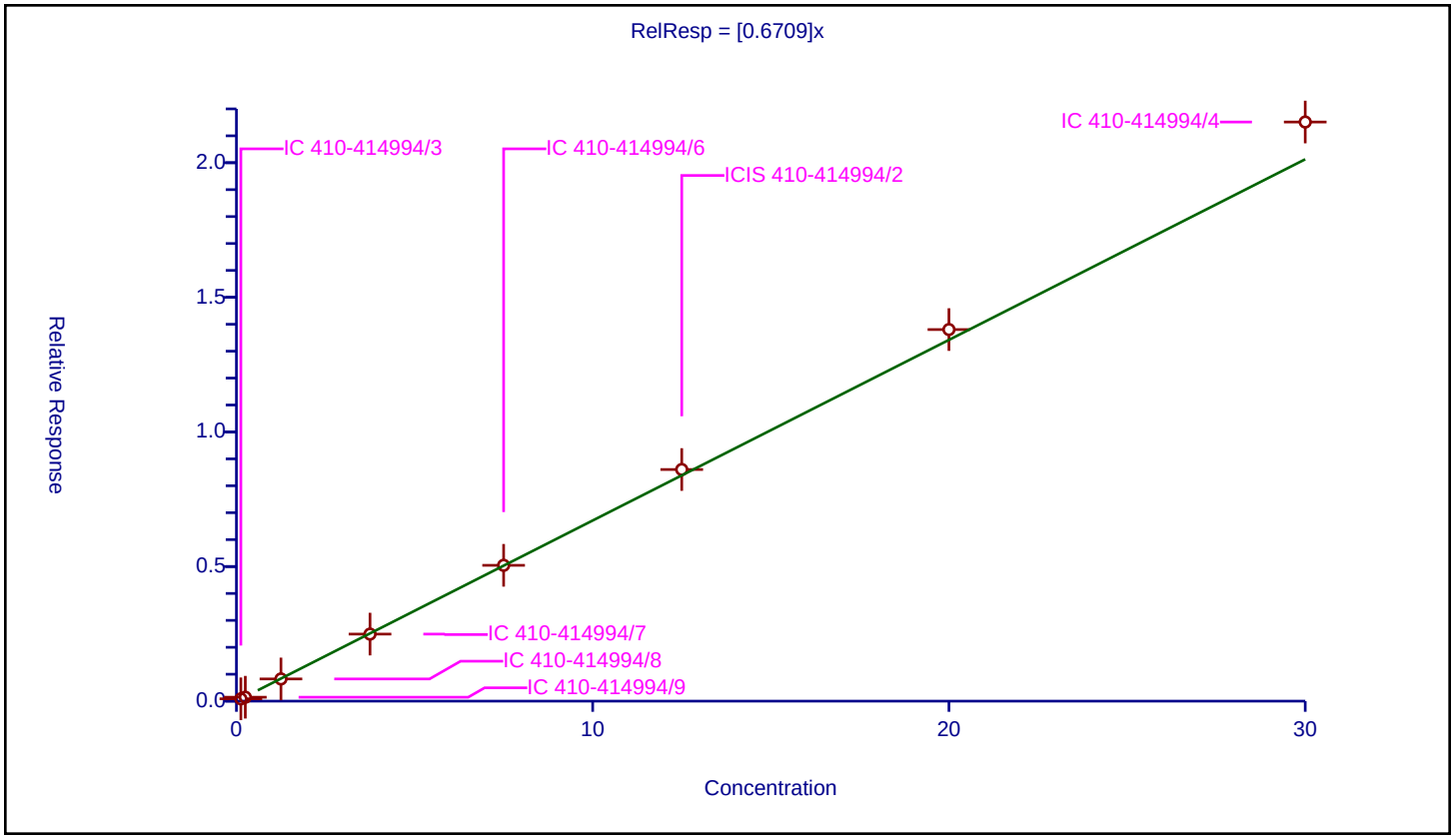
Curve Coefficients

Intercept:	0
Slope:	0.6709

Error Coefficients

Standard Error:	346000
Relative Standard Error:	5.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.086453	5.0	166160.0	0.691623	Y
2	IC 410-414994/9	0.25	0.145989	5.0	174225.0	0.583958	Y
3	IC 410-414994/8	1.25	0.824379	5.0	198780.0	0.659503	Y
4	IC 410-414994/7	3.75	2.490383	5.0	150519.0	0.664102	Y
5	IC 410-414994/6	7.5	5.045706	5.0	202599.0	0.672761	Y
6	ICIS 410-414994/2	12.5	8.60416	5.0	176109.0	0.688333	Y
7	IC 410-414994/5	20.0	13.803222	5.0	167082.0	0.690161	Y
8	IC 410-414994/4	30.0	21.512014	5.0	161609.0	0.717067	Y



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Calibration / Ethyl methanesulfonate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

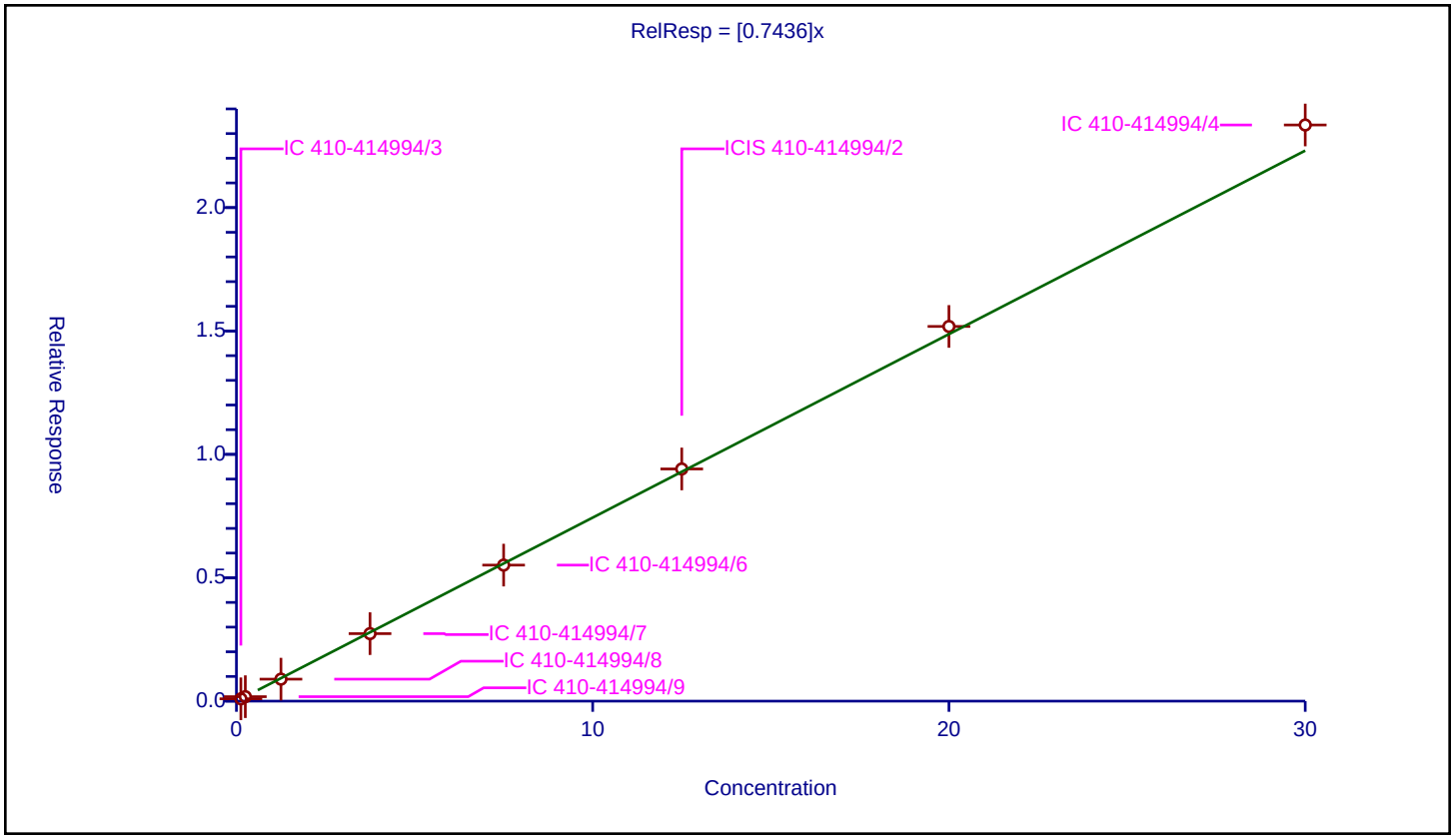
Curve Coefficients

Intercept:	0
Slope:	0.7436

Error Coefficients

Standard Error:	377000
Relative Standard Error:	2.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.094668	5.0	166160.0	0.757342	Y
2	IC 410-414994/9	0.25	0.181002	5.0	174225.0	0.724006	Y
3	IC 410-414994/8	1.25	0.891211	5.0	198780.0	0.712969	Y
4	IC 410-414994/7	3.75	2.735435	5.0	150519.0	0.729449	Y
5	IC 410-414994/6	7.5	5.512934	5.0	202599.0	0.735058	Y
6	ICIS 410-414994/2	12.5	9.408491	5.0	176109.0	0.752679	Y
7	IC 410-414994/5	20.0	15.184041	5.0	167082.0	0.759202	Y
8	IC 410-414994/4	30.0	23.34805	5.0	161609.0	0.778268	Y



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Calibration / Benzaldehyde

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

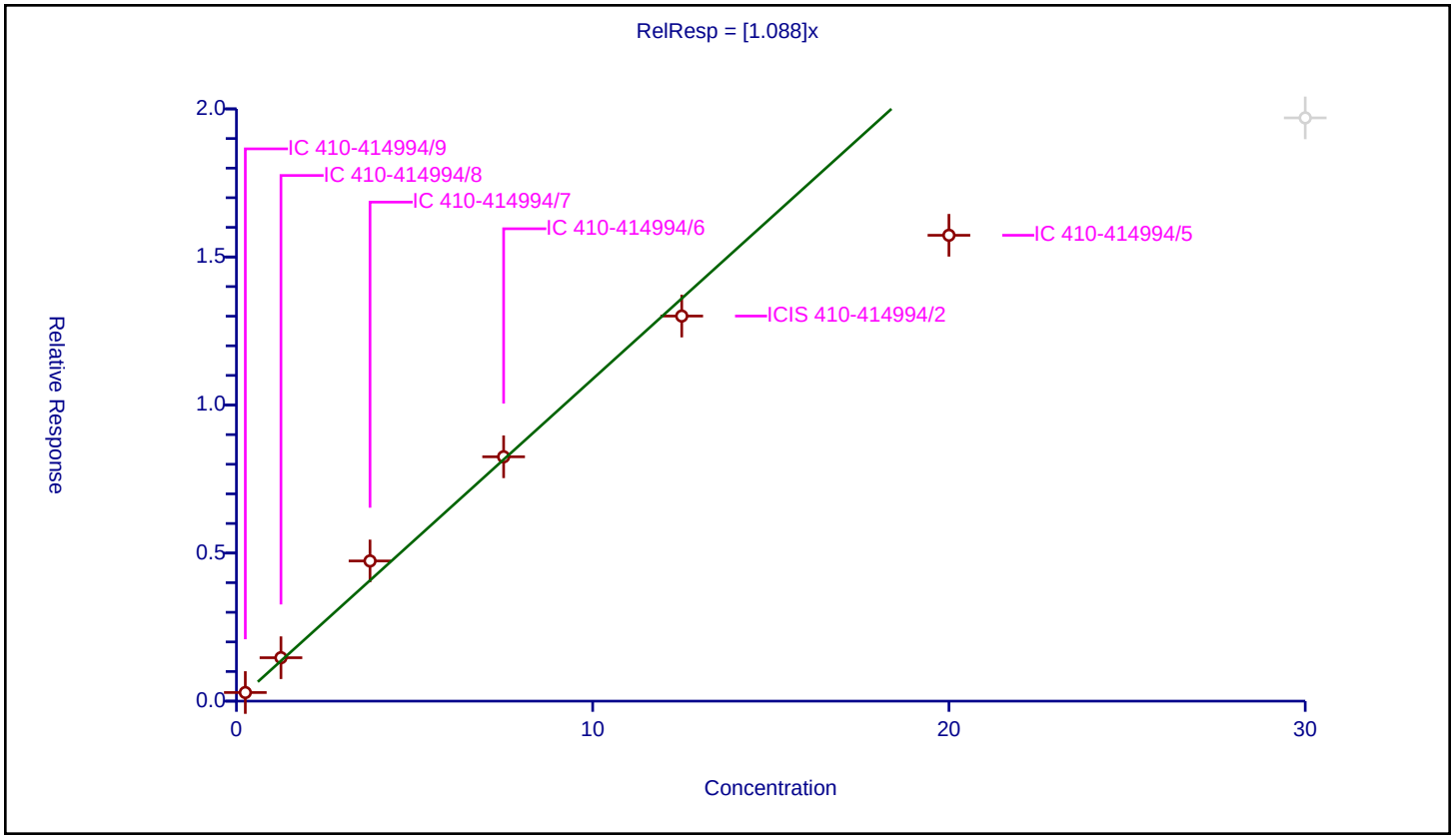
Curve Coefficients

Intercept:	0
Slope:	1.088

Error Coefficients

Standard Error:	353000
Relative Standard Error:	15.2
Correlation Coefficient:	0.920
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/9	0.25	0.290888	5.0	174225.0	1.163553	Y
2	IC 410-414994/8	1.25	1.466496	5.0	198780.0	1.173196	Y
3	IC 410-414994/7	3.75	4.734485	5.0	150519.0	1.262529	Y
4	IC 410-414994/6	7.5	8.251842	5.0	202599.0	1.100246	Y
5	ICIS 410-414994/2	12.5	13.004077	5.0	176109.0	1.040326	Y
6	IC 410-414994/5	20.0	15.732455	5.0	167082.0	0.786623	Y
7	IC 410-414994/4	30.0	19.696304	5.0	161609.0	0.656543	N



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Calibration / Phenol-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

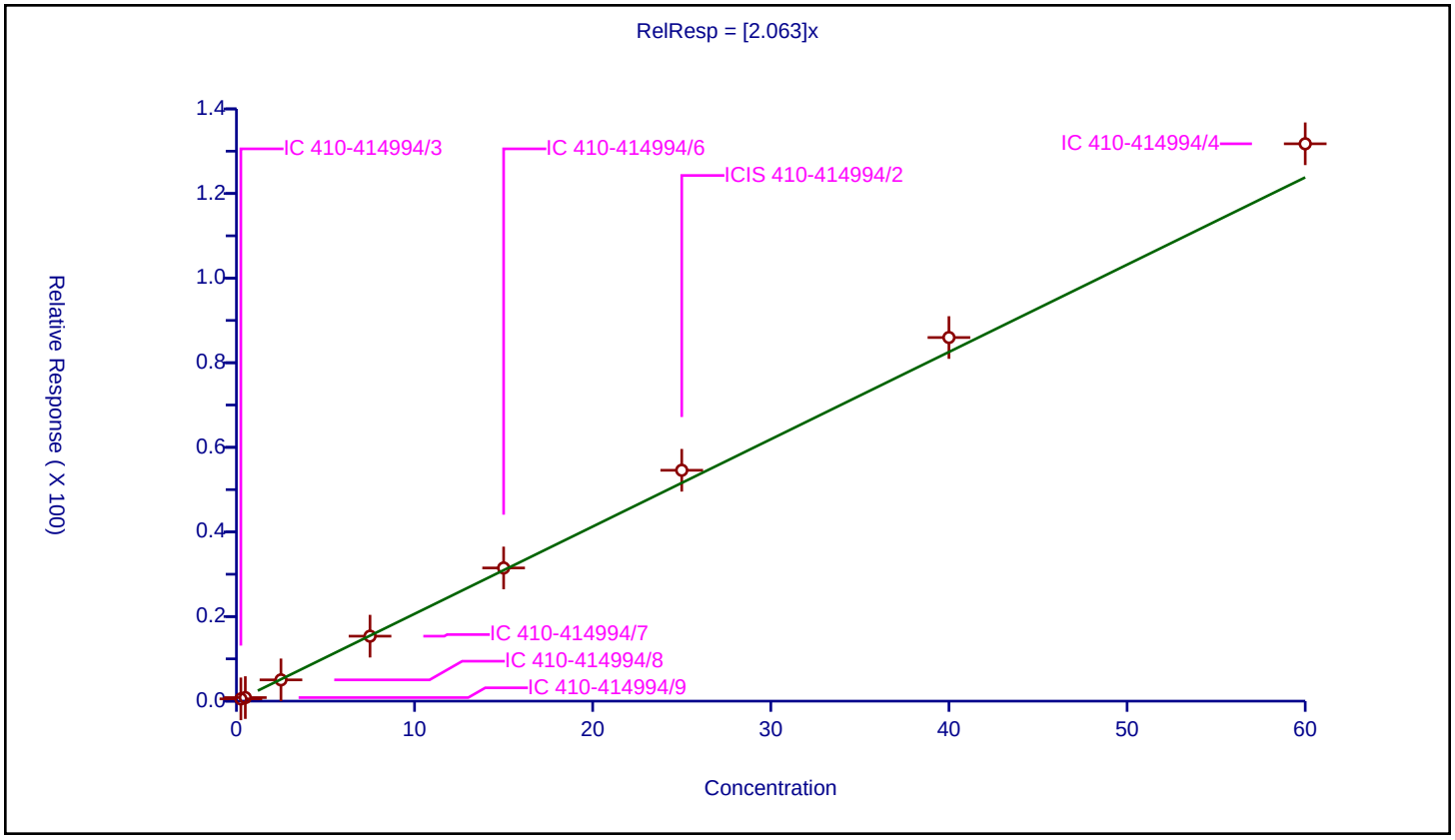
Curve Coefficients

Intercept:	0
Slope:	2.063

Error Coefficients

Standard Error:	2140000
Relative Standard Error:	8.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.25	0.536952	5.0	166160.0	2.147809	Y
2	IC 410-414994/9	0.5	0.837825	5.0	174225.0	1.675649	Y
3	IC 410-414994/8	2.5	5.024902	5.0	198780.0	2.009961	Y
4	IC 410-414994/7	7.5	15.357197	5.0	150519.0	2.047626	Y
5	IC 410-414994/6	15.0	31.481992	5.0	202599.0	2.098799	Y
6	ICIS 410-414994/2	25.0	54.575348	5.0	176109.0	2.183014	Y
7	IC 410-414994/5	40.0	85.956566	5.0	167082.0	2.148914	Y
8	IC 410-414994/4	60.0	131.754605	5.0	161609.0	2.19591	Y



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Calibration / Phenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

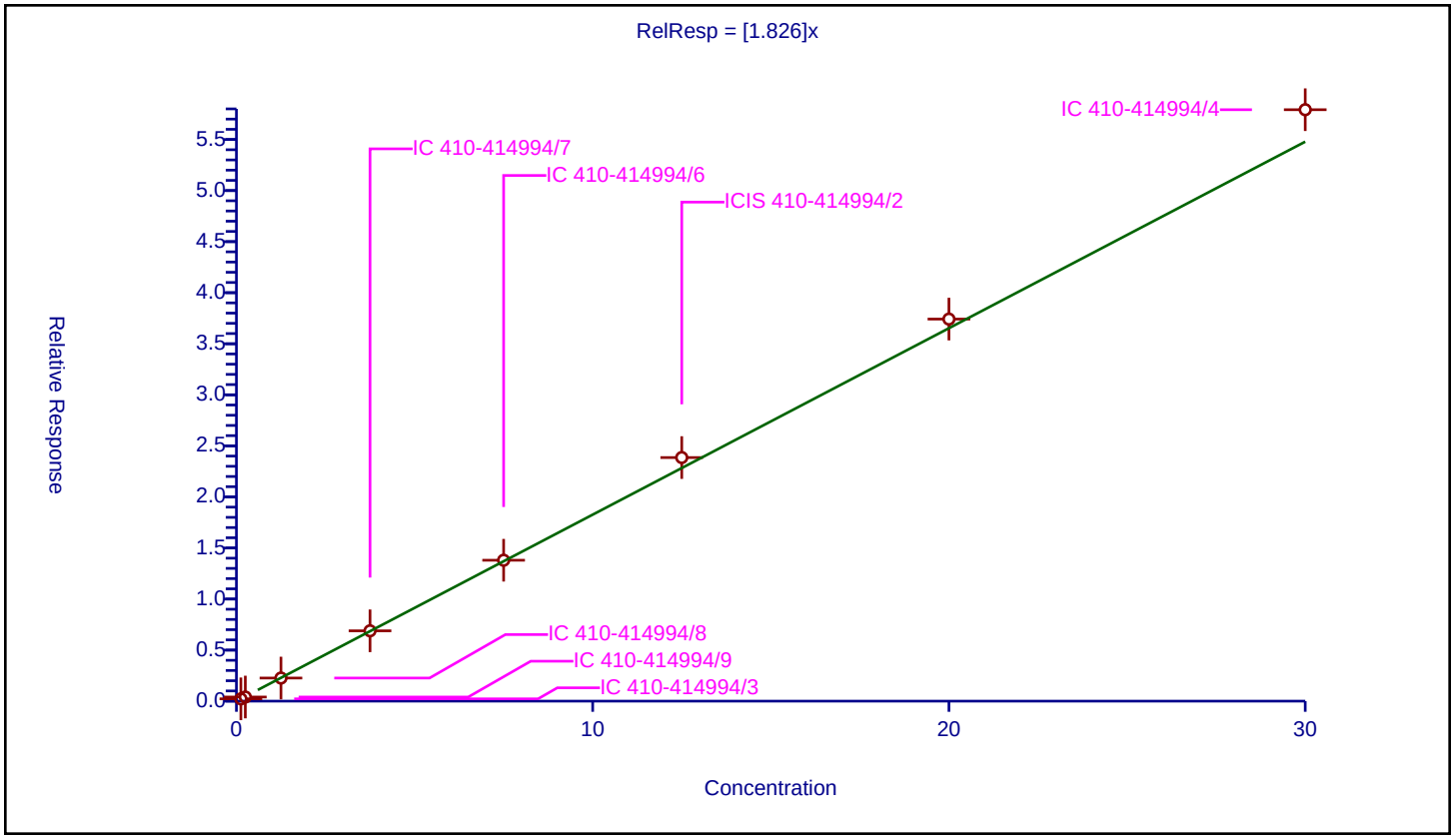
Curve Coefficients

Intercept:	0
Slope:	1.826

Error Coefficients

Standard Error:	936000
Relative Standard Error:	5.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.224994	5.0	166160.0	1.799952	Y
2	IC 410-414994/9	0.25	0.403415	5.0	174225.0	1.61366	Y
3	IC 410-414994/8	1.25	2.262124	5.0	198780.0	1.809699	Y
4	IC 410-414994/7	3.75	6.887204	5.0	150519.0	1.836588	Y
5	IC 410-414994/6	7.5	13.800192	5.0	202599.0	1.840026	Y
6	ICIS 410-414994/2	12.5	23.855567	5.0	176109.0	1.908445	Y
7	IC 410-414994/5	20.0	37.414772	5.0	167082.0	1.870739	Y
8	IC 410-414994/4	30.0	57.918711	5.0	161609.0	1.930624	Y



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Calibration / Aniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

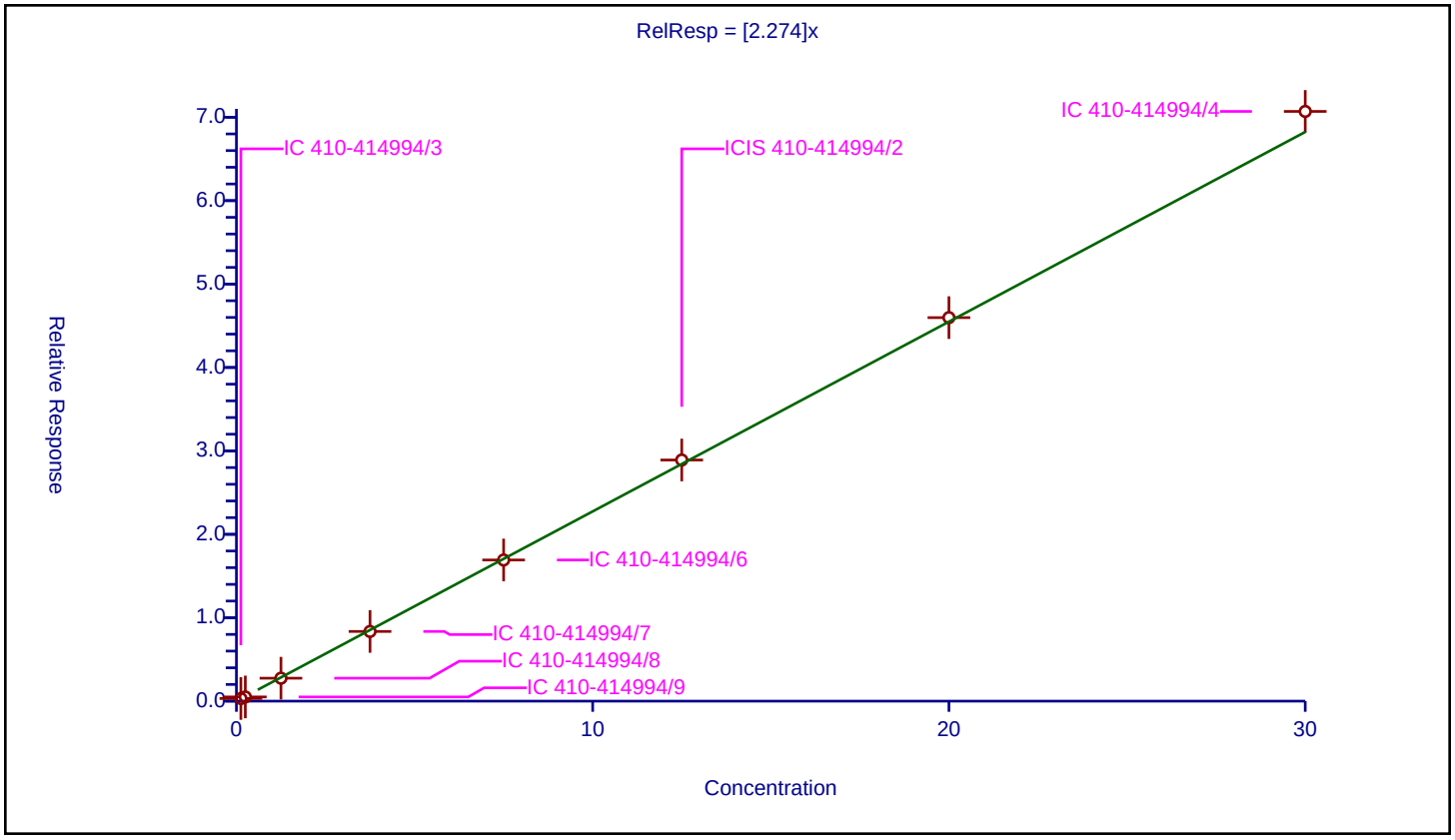
Curve Coefficients

Intercept:	0
Slope:	2.274

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	6.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.316442	5.0	166160.0	2.531536	Y
2	IC 410-414994/9	0.25	0.502913	5.0	174225.0	2.011652	Y
3	IC 410-414994/8	1.25	2.750277	5.0	198780.0	2.200221	Y
4	IC 410-414994/7	3.75	8.353729	5.0	150519.0	2.227661	Y
5	IC 410-414994/6	7.5	16.921702	5.0	202599.0	2.256227	Y
6	ICIS 410-414994/2	12.5	28.908034	5.0	176109.0	2.312643	Y
7	IC 410-414994/5	20.0	45.977394	5.0	167082.0	2.29887	Y
8	IC 410-414994/4	30.0	70.695784	5.0	161609.0	2.356526	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

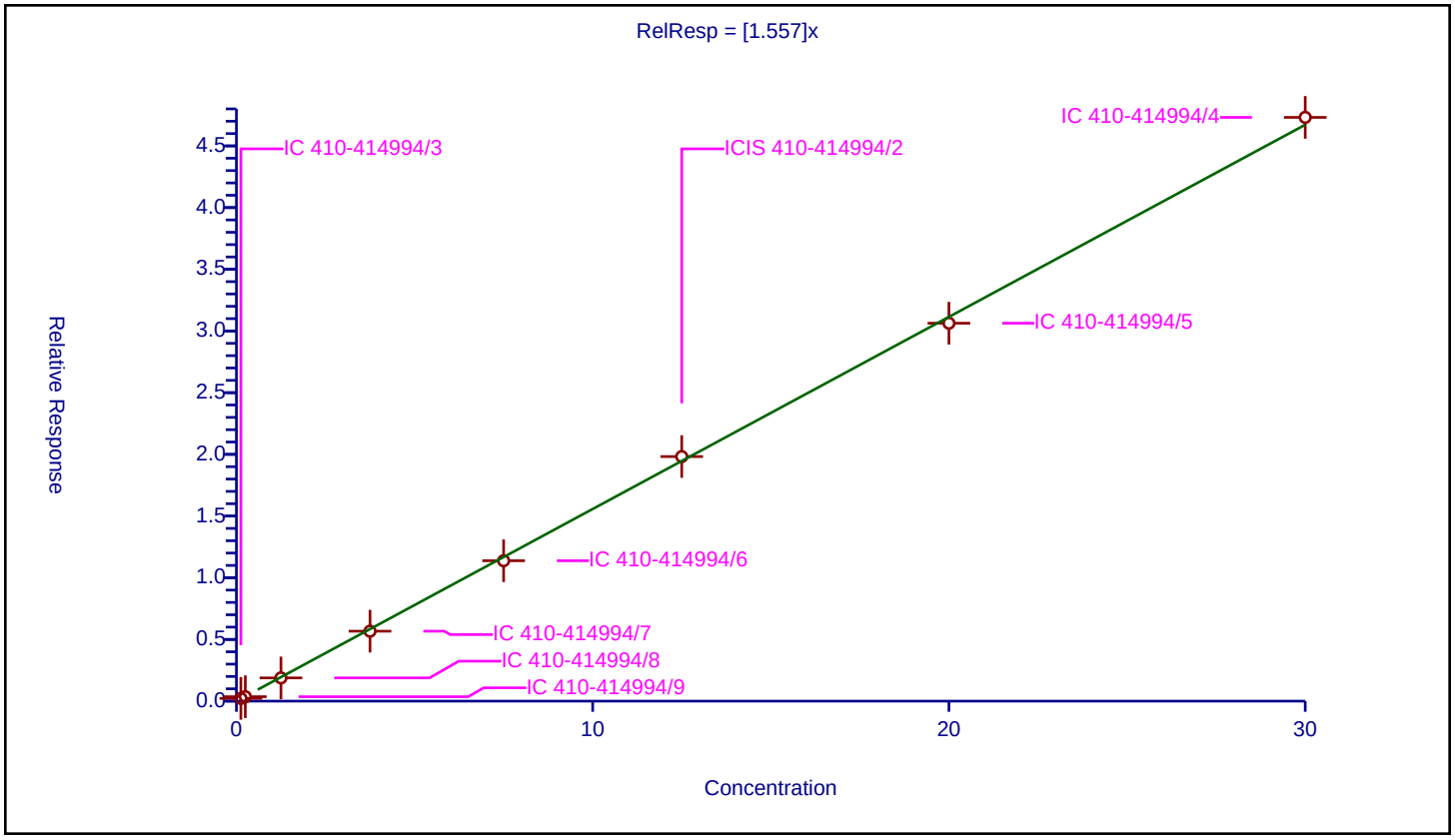
Curve Coefficients

Intercept:	0
Slope:	1.557

Error Coefficients

Standard Error:	767000
Relative Standard Error:	6.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.22379	5.0	166160.0	1.790323	Y
2	IC 410-414994/9	0.25	0.359105	5.0	174225.0	1.436418	Y
3	IC 410-414994/8	1.25	1.883565	5.0	198780.0	1.506852	Y
4	IC 410-414994/7	3.75	5.670513	5.0	150519.0	1.512137	Y
5	IC 410-414994/6	7.5	11.378166	5.0	202599.0	1.517089	Y
6	ICIS 410-414994/2	12.5	19.821332	5.0	176109.0	1.585707	Y
7	IC 410-414994/5	20.0	30.628673	5.0	167082.0	1.531434	Y
8	IC 410-414994/4	30.0	47.311443	5.0	161609.0	1.577048	Y



Calibration / 2-Chlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

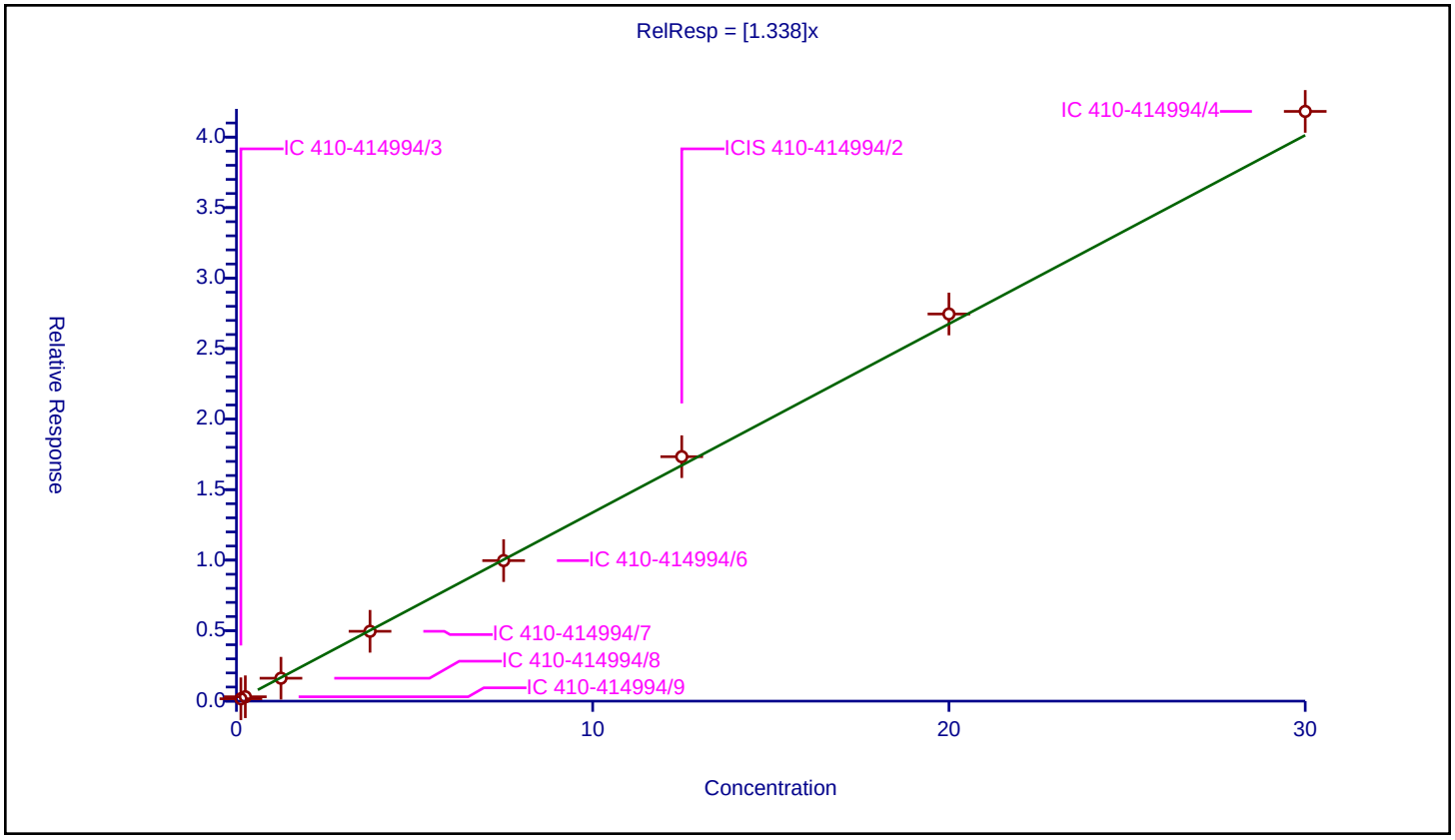
Curve Coefficients

Intercept:	0
Slope:	1.338

Error Coefficients

Standard Error:	679000
Relative Standard Error:	3.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.169505	5.0	166160.0	1.356042	Y
2	IC 410-414994/9	0.25	0.310403	5.0	174225.0	1.241613	Y
3	IC 410-414994/8	1.25	1.625868	5.0	198780.0	1.300694	Y
4	IC 410-414994/7	3.75	4.953594	5.0	150519.0	1.320958	Y
5	IC 410-414994/6	7.5	9.966041	5.0	202599.0	1.328806	Y
6	ICIS 410-414994/2	12.5	17.336167	5.0	176109.0	1.386893	Y
7	IC 410-414994/5	20.0	27.455202	5.0	167082.0	1.37276	Y
8	IC 410-414994/4	30.0	41.821774	5.0	161609.0	1.394059	Y



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Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

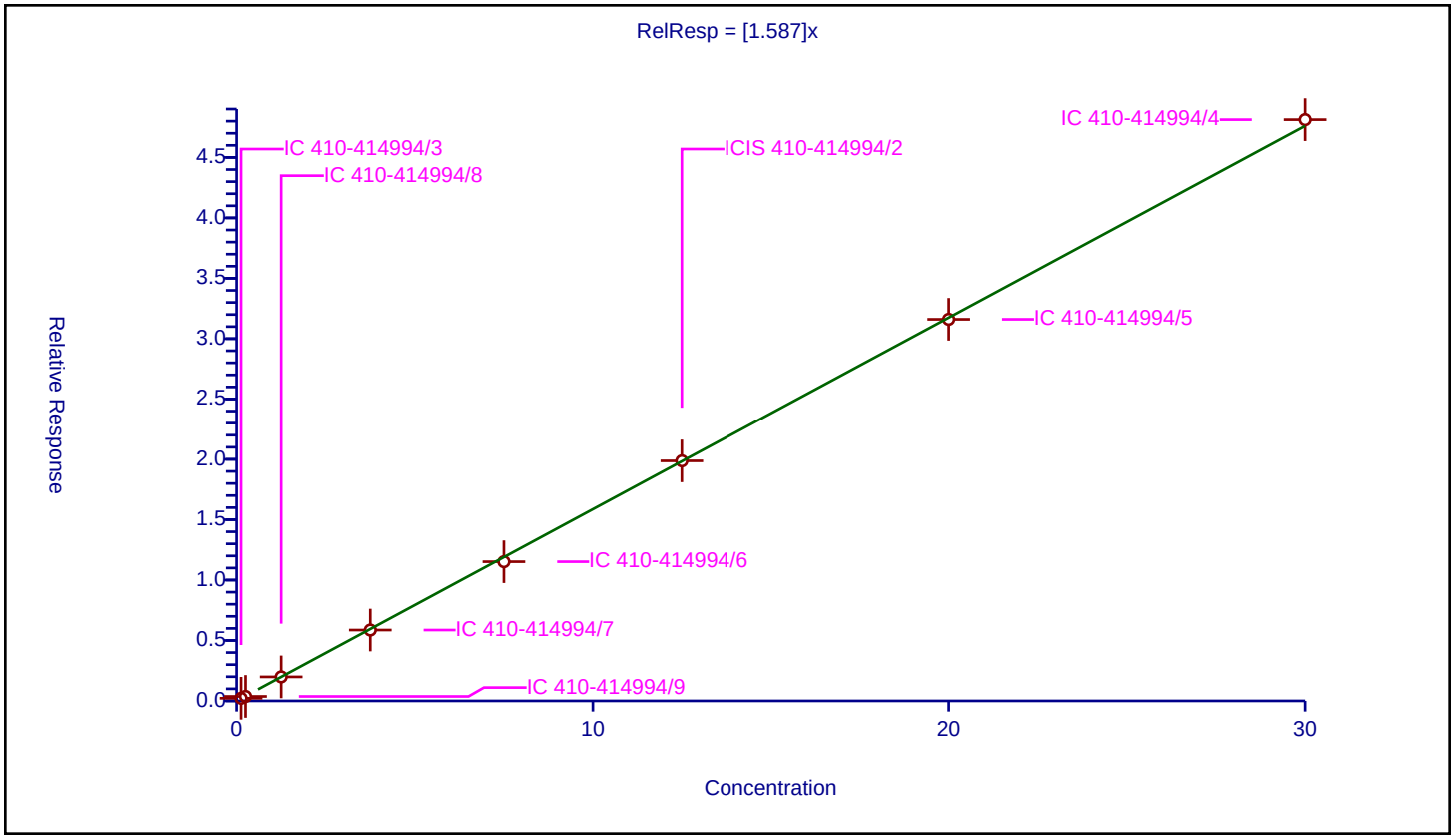
Curve Coefficients

Intercept:	0
Slope:	1.587

Error Coefficients

Standard Error:	782000
Relative Standard Error:	4.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.219066	5.0	166160.0	1.752528	Y
2	IC 410-414994/9	0.25	0.37001	5.0	174225.0	1.48004	Y
3	IC 410-414994/8	1.25	1.985939	5.0	198780.0	1.588751	Y
4	IC 410-414994/7	3.75	5.865107	5.0	150519.0	1.564028	Y
5	IC 410-414994/6	7.5	11.521923	5.0	202599.0	1.536256	Y
6	ICIS 410-414994/2	12.5	19.873459	5.0	176109.0	1.589877	Y
7	IC 410-414994/5	20.0	31.601728	5.0	167082.0	1.580086	Y
8	IC 410-414994/4	30.0	48.125847	5.0	161609.0	1.604195	Y



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Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

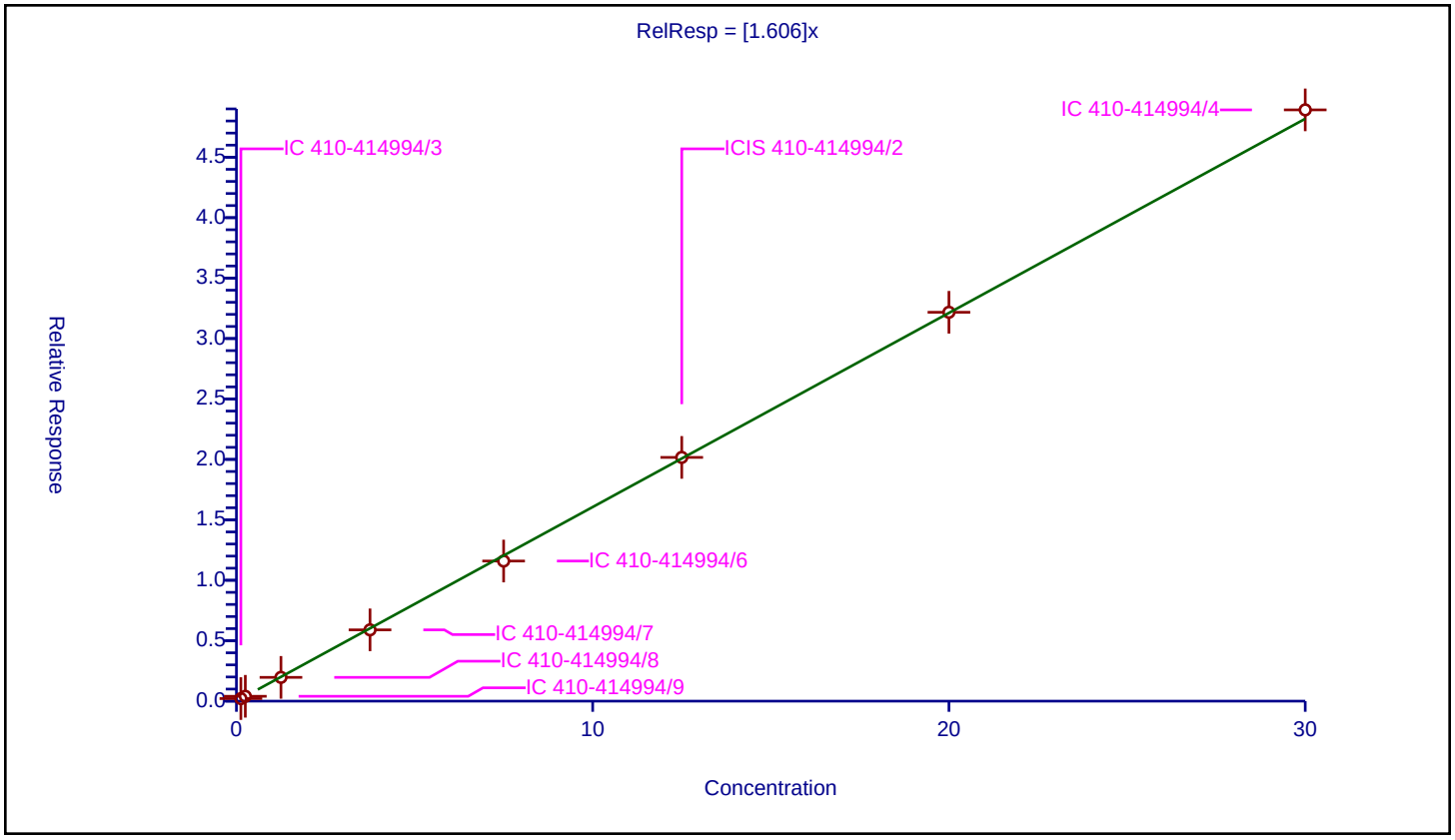
Curve Coefficients

Intercept:	0
Slope:	1.606

Error Coefficients

Standard Error:	795000
Relative Standard Error:	2.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.212446	5.0	166160.0	1.699567	Y
2	IC 410-414994/9	0.25	0.401263	5.0	174225.0	1.605051	Y
3	IC 410-414994/8	1.25	1.965842	5.0	198780.0	1.572673	Y
4	IC 410-414994/7	3.75	5.896996	5.0	150519.0	1.572532	Y
5	IC 410-414994/6	7.5	11.59253	5.0	202599.0	1.545671	Y
6	ICIS 410-414994/2	12.5	20.166005	5.0	176109.0	1.61328	Y
7	IC 410-414994/5	20.0	32.173214	5.0	167082.0	1.608661	Y
8	IC 410-414994/4	30.0	48.918965	5.0	161609.0	1.630632	Y



Calibration / Benzyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

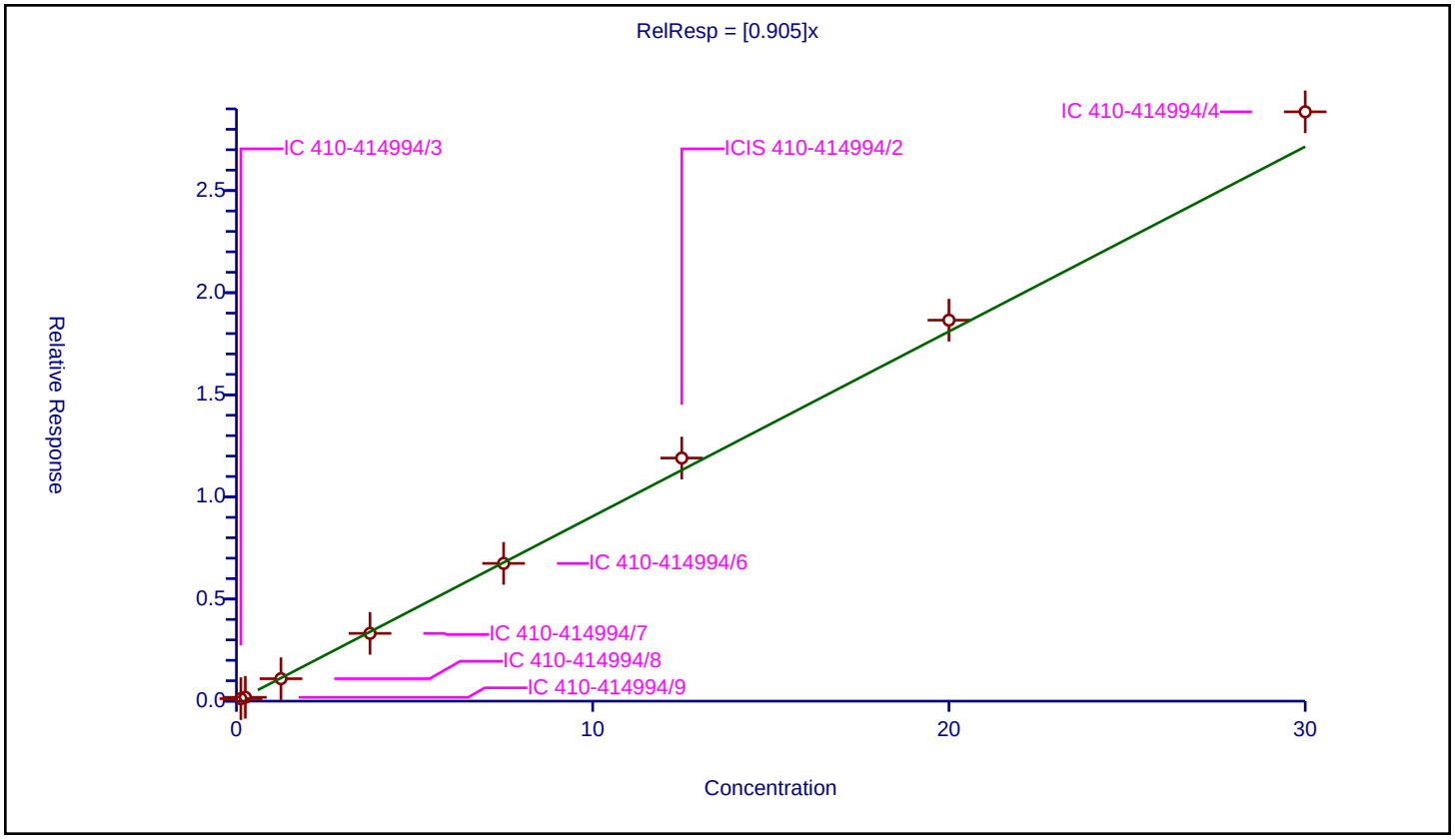
Curve Coefficients

Intercept:	0
Slope:	0.905

Error Coefficients

Standard Error:	466000
Relative Standard Error:	7.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.121991	5.0	166160.0	0.975927	Y
2	IC 410-414994/9	0.25	0.188549	5.0	174225.0	0.754197	Y
3	IC 410-414994/8	1.25	1.098627	5.0	198780.0	0.878901	Y
4	IC 410-414994/7	3.75	3.318584	5.0	150519.0	0.884956	Y
5	IC 410-414994/6	7.5	6.745048	5.0	202599.0	0.89934	Y
6	ICIS 410-414994/2	12.5	11.90348	5.0	176109.0	0.952278	Y
7	IC 410-414994/5	20.0	18.655481	5.0	167082.0	0.932774	Y
8	IC 410-414994/4	30.0	28.856871	5.0	161609.0	0.961896	Y



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Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

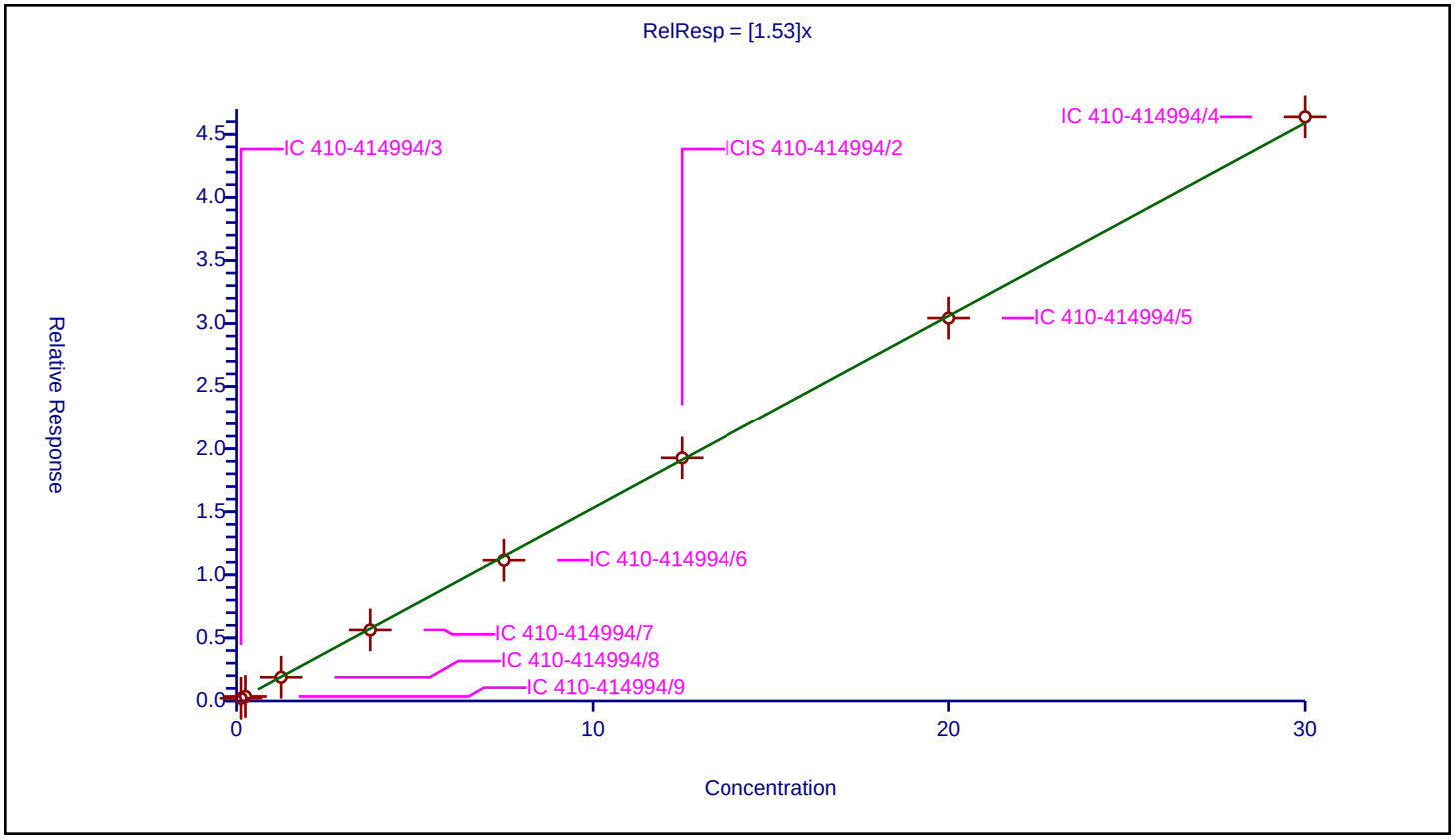
Curve Coefficients

Intercept:	0
Slope:	1.53

Error Coefficients

Standard Error:	754000
Relative Standard Error:	5.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.212506	5.0	166160.0	1.700048	Y
2	IC 410-414994/9	0.25	0.358932	5.0	174225.0	1.43573	Y
3	IC 410-414994/8	1.25	1.880144	5.0	198780.0	1.504115	Y
4	IC 410-414994/7	3.75	5.632711	5.0	150519.0	1.502056	Y
5	IC 410-414994/6	7.5	11.158076	5.0	202599.0	1.487743	Y
6	ICIS 410-414994/2	12.5	19.273916	5.0	176109.0	1.541913	Y
7	IC 410-414994/5	20.0	30.430627	5.0	167082.0	1.521531	Y
8	IC 410-414994/4	30.0	46.379317	5.0	161609.0	1.545977	Y



Calibration / 2-Methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

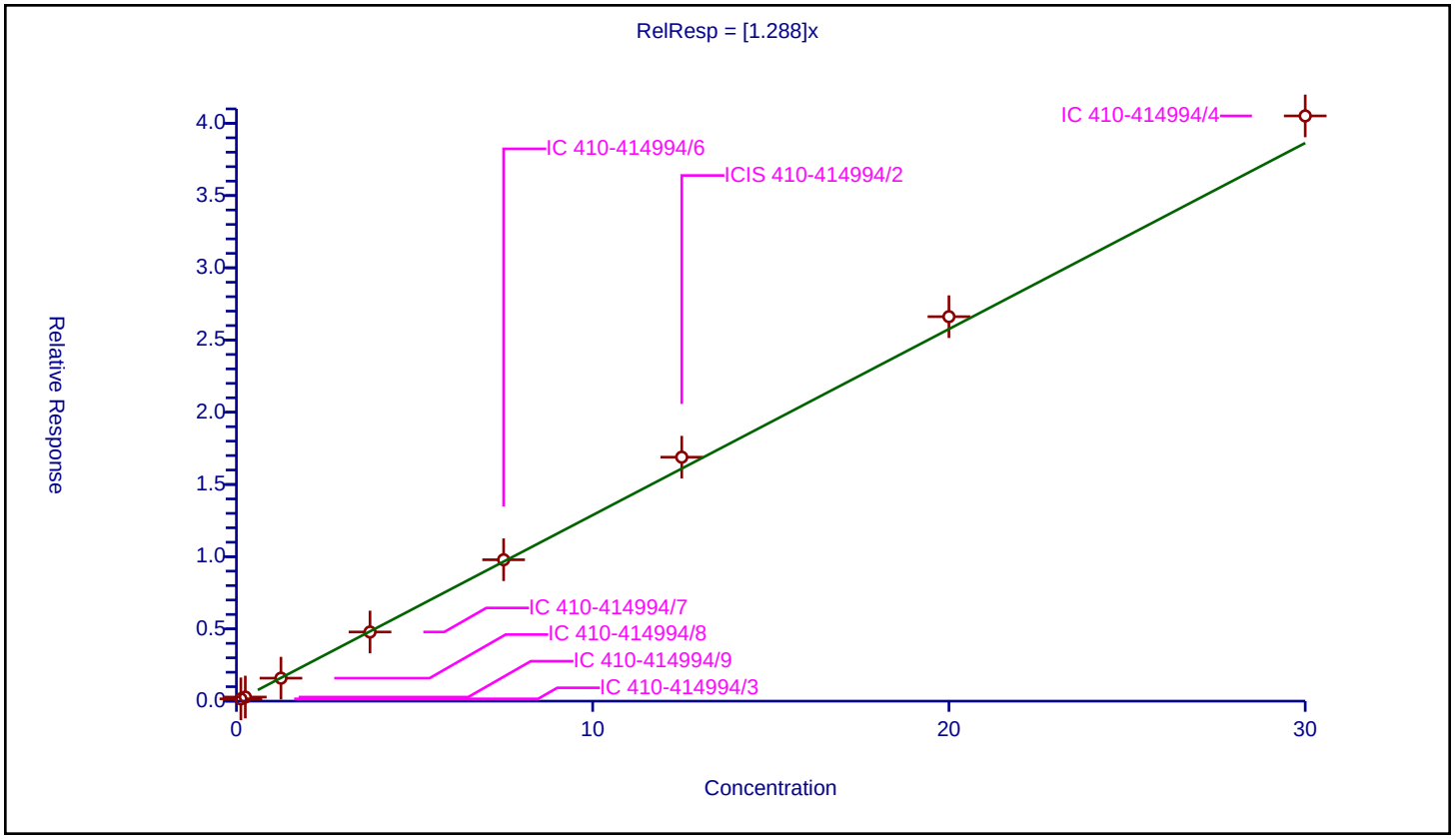
Curve Coefficients

Intercept:	0
Slope:	1.288

Error Coefficients

Standard Error:	659000
Relative Standard Error:	5.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.160357	5.0	166160.0	1.28286	Y
2	IC 410-414994/9	0.25	0.283599	5.0	174225.0	1.134395	Y
3	IC 410-414994/8	1.25	1.590628	5.0	198780.0	1.272502	Y
4	IC 410-414994/7	3.75	4.786638	5.0	150519.0	1.276437	Y
5	IC 410-414994/6	7.5	9.78761	5.0	202599.0	1.305015	Y
6	ICIS 410-414994/2	12.5	16.888376	5.0	176109.0	1.35107	Y
7	IC 410-414994/5	20.0	26.61708	5.0	167082.0	1.330854	Y
8	IC 410-414994/4	30.0	40.513585	5.0	161609.0	1.350453	Y



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Calibration / 2,2'-oxybis[1-chloropropane]

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

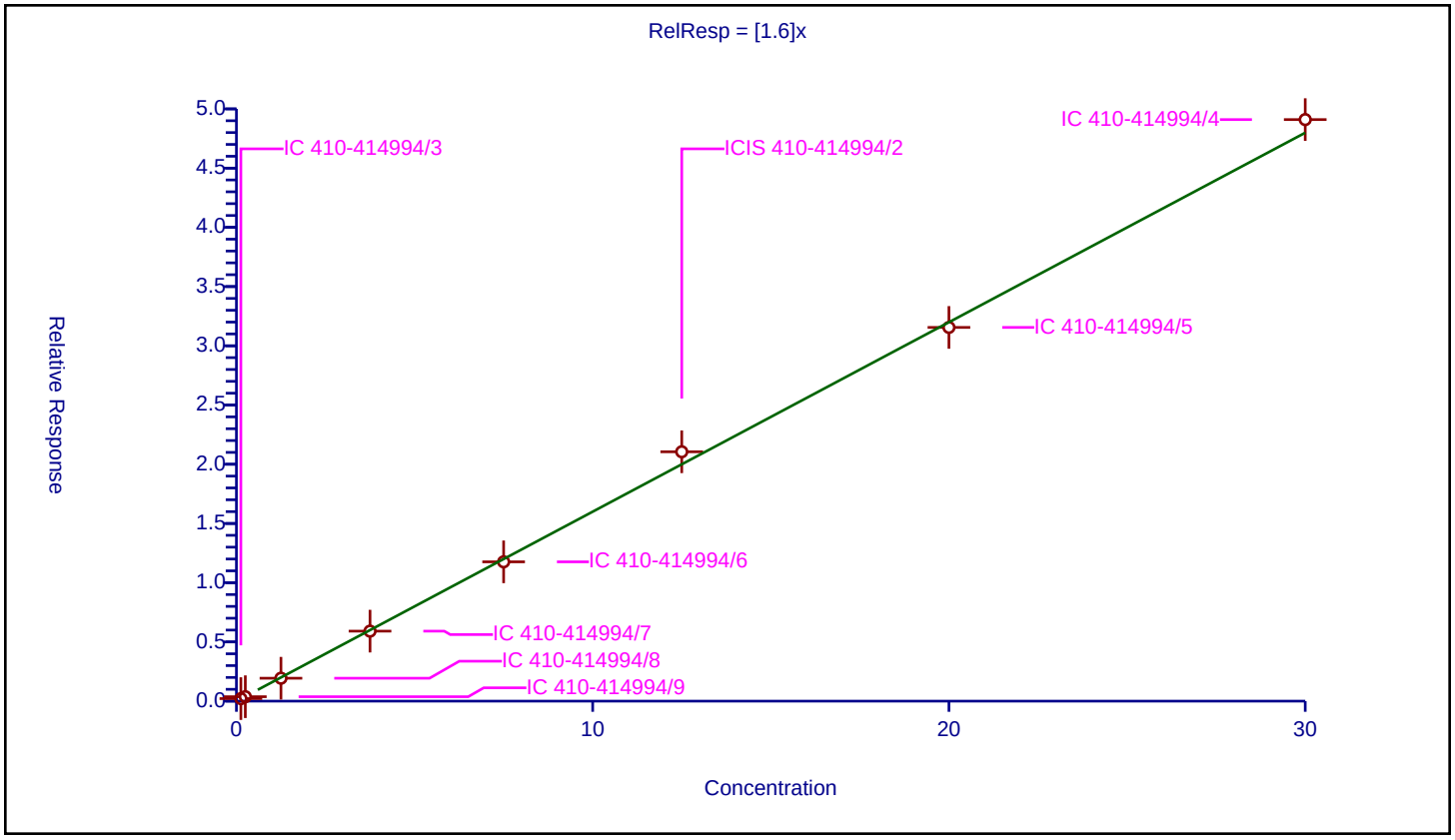
Curve Coefficients

Intercept:	0
Slope:	1.6

Error Coefficients

Standard Error:	797000
Relative Standard Error:	4.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.21374	5.0	166160.0	1.709918	Y
2	IC 410-414994/9	0.25	0.373913	5.0	174225.0	1.495652	Y
3	IC 410-414994/8	1.25	1.935406	5.0	198780.0	1.548325	Y
4	IC 410-414994/7	3.75	5.909553	5.0	150519.0	1.575881	Y
5	IC 410-414994/6	7.5	11.760744	5.0	202599.0	1.568099	Y
6	ICIS 410-414994/2	12.5	21.052871	5.0	176109.0	1.68423	Y
7	IC 410-414994/5	20.0	31.550197	5.0	167082.0	1.57751	Y
8	IC 410-414994/4	30.0	49.095378	5.0	161609.0	1.636513	Y



Calibration / N-Nitrosopyrrolidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

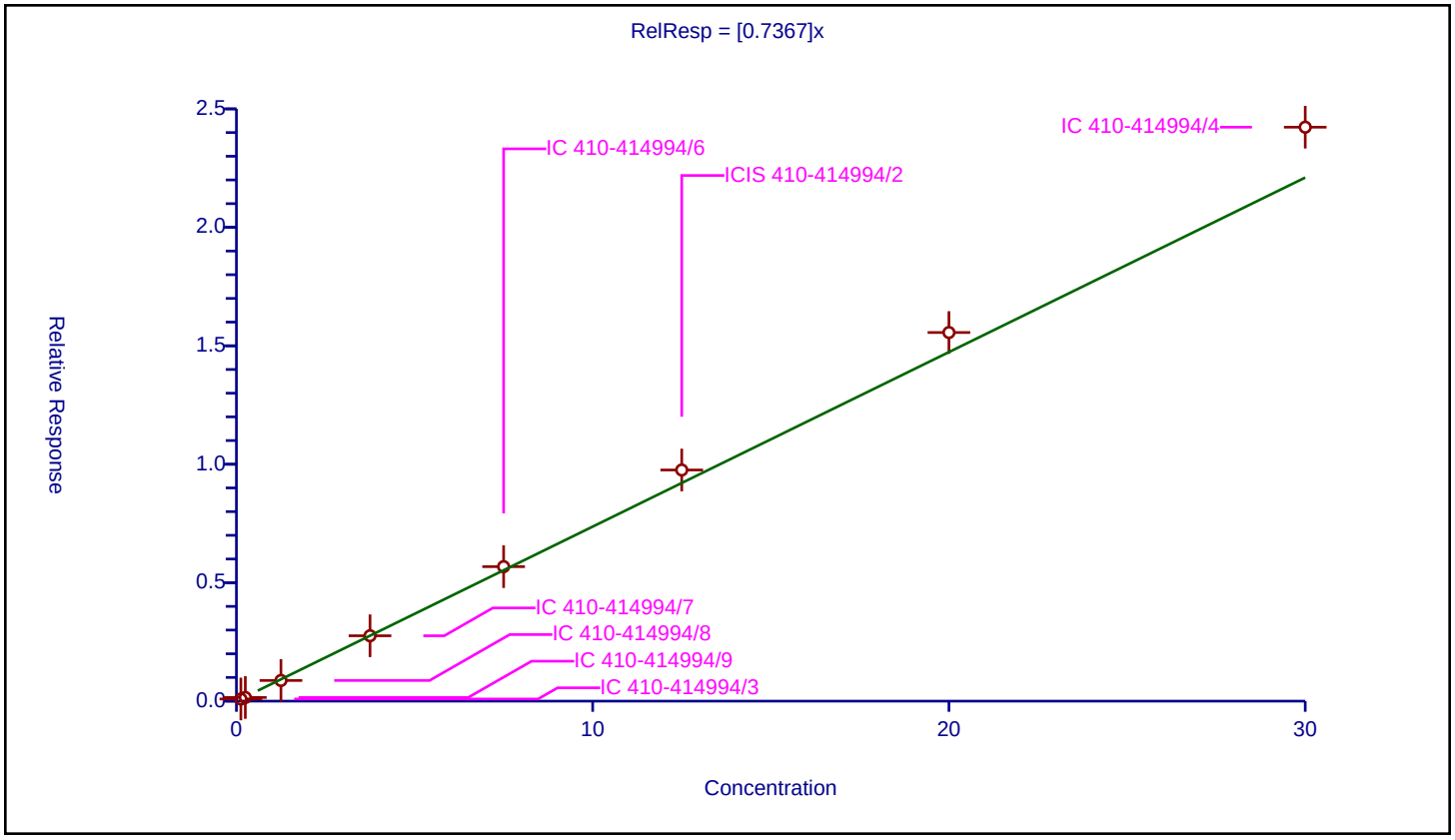
Curve Coefficients

Intercept:	0
Slope:	0.7367

Error Coefficients

Standard Error:	390000
Relative Standard Error:	8.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.090124	5.0	166160.0	0.720992	Y
2	IC 410-414994/9	0.25	0.154111	5.0	174225.0	0.616444	Y
3	IC 410-414994/8	1.25	0.871441	5.0	198780.0	0.697153	Y
4	IC 410-414994/7	3.75	2.759685	5.0	150519.0	0.735916	Y
5	IC 410-414994/6	7.5	5.676706	5.0	202599.0	0.756894	Y
6	ICIS 410-414994/2	12.5	9.757253	5.0	176109.0	0.78058	Y
7	IC 410-414994/5	20.0	15.560952	5.0	167082.0	0.778048	Y
8	IC 410-414994/4	30.0	24.227395	5.0	161609.0	0.80758	Y



Calibration / 4-Methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

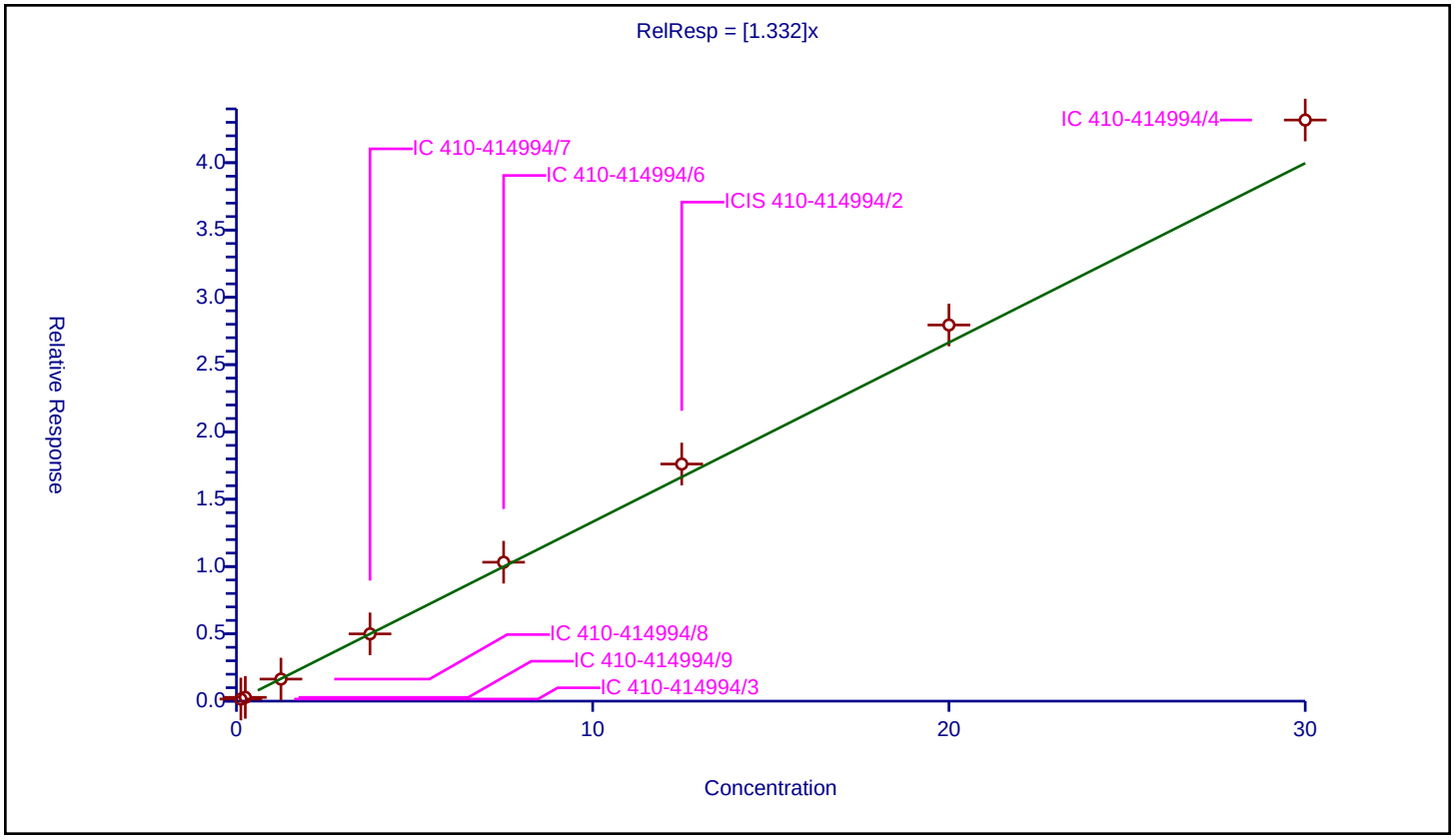
Curve Coefficients

Intercept:	0
Slope:	1.332

Error Coefficients

Standard Error:	698000
Relative Standard Error:	7.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.157709	5.0	166160.0	1.261675	Y
2	IC 410-414994/9	0.25	0.282508	5.0	174225.0	1.130033	Y
3	IC 410-414994/8	1.25	1.640004	5.0	198780.0	1.312003	Y
4	IC 410-414994/7	3.75	4.996512	5.0	150519.0	1.332403	Y
5	IC 410-414994/6	7.5	10.319251	5.0	202599.0	1.3759	Y
6	ICIS 410-414994/2	12.5	17.614659	5.0	176109.0	1.409173	Y
7	IC 410-414994/5	20.0	27.944782	5.0	167082.0	1.397239	Y
8	IC 410-414994/4	30.0	43.172286	5.0	161609.0	1.439076	Y



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Calibration / Acetophenone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

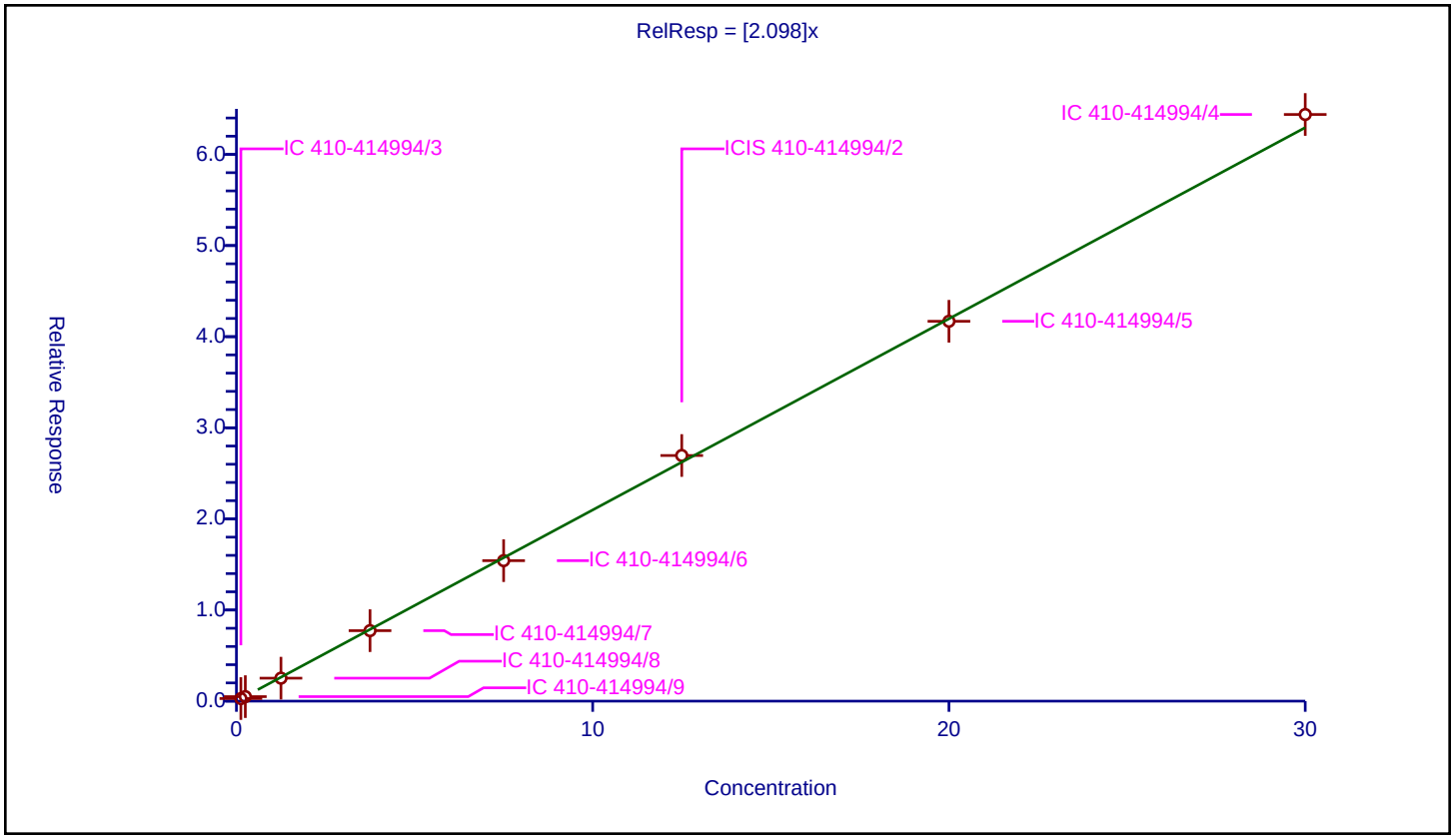
Curve Coefficients

Intercept:	0
Slope:	2.098

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	4.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.284575	5.0	166160.0	2.276601	Y
2	IC 410-414994/9	0.25	0.496513	5.0	174225.0	1.986053	Y
3	IC 410-414994/8	1.25	2.521506	5.0	198780.0	2.017205	Y
4	IC 410-414994/7	3.75	7.734671	5.0	150519.0	2.062579	Y
5	IC 410-414994/6	7.5	15.419277	5.0	202599.0	2.055904	Y
6	ICIS 410-414994/2	12.5	26.95927	5.0	176109.0	2.156742	Y
7	IC 410-414994/5	20.0	41.690038	5.0	167082.0	2.084502	Y
8	IC 410-414994/4	30.0	64.386606	5.0	161609.0	2.14622	Y



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Calibration / N-Nitrosodi-n-propylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

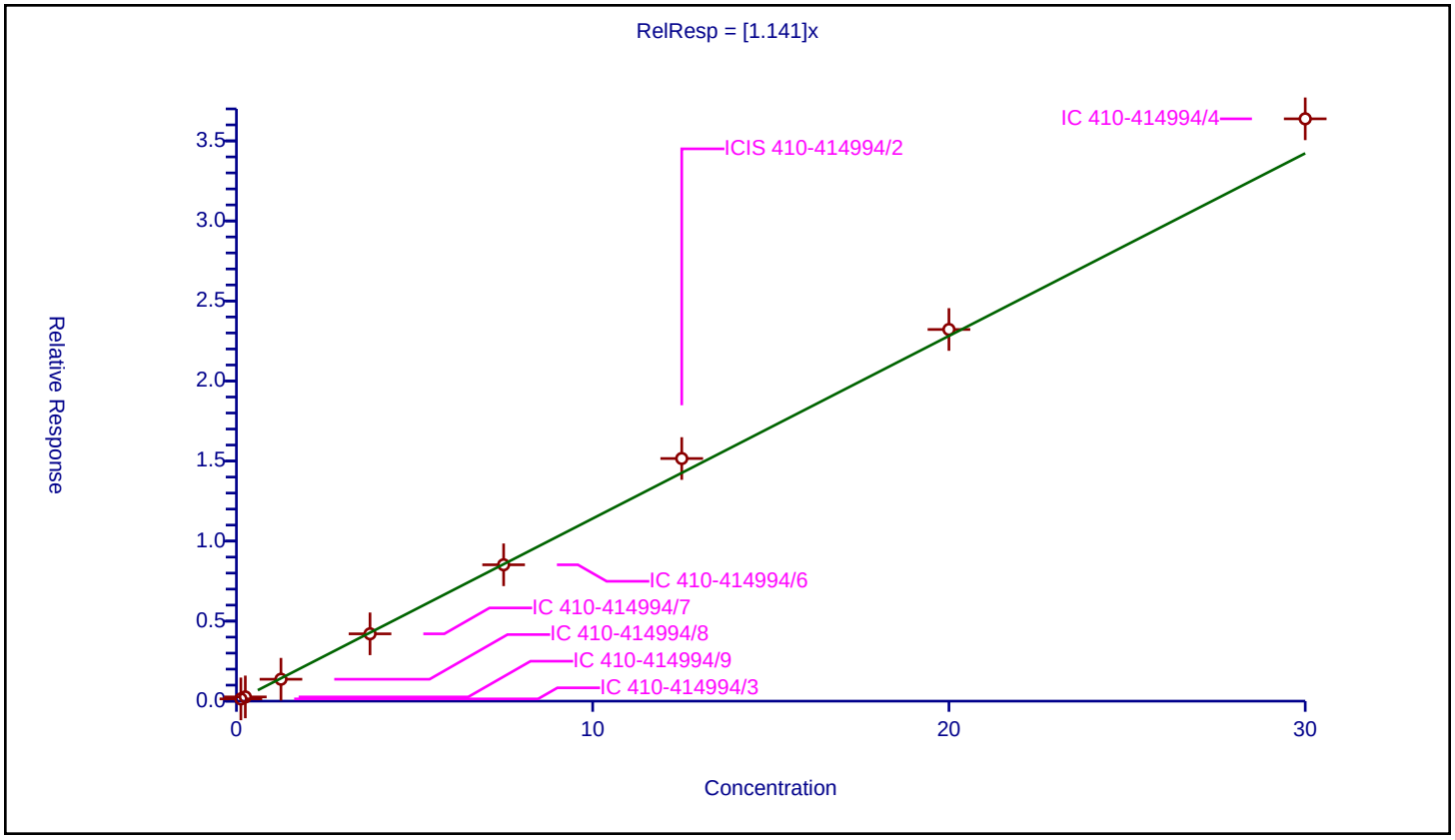
Curve Coefficients

Intercept:	0
Slope:	1.141

Error Coefficients

Standard Error:	586000
Relative Standard Error:	4.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.1414	5.0	166160.0	1.131199	Y
2	IC 410-414994/9	0.25	0.264342	5.0	174225.0	1.057368	Y
3	IC 410-414994/8	1.25	1.368045	5.0	198780.0	1.094436	Y
4	IC 410-414994/7	3.75	4.205648	5.0	150519.0	1.121506	Y
5	IC 410-414994/6	7.5	8.51828	5.0	202599.0	1.135771	Y
6	ICIS 410-414994/2	12.5	15.157488	5.0	176109.0	1.212599	Y
7	IC 410-414994/5	20.0	23.218779	5.0	167082.0	1.160939	Y
8	IC 410-414994/4	30.0	36.379255	5.0	161609.0	1.212642	Y



Calibration / N-Nitrosomorpholine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

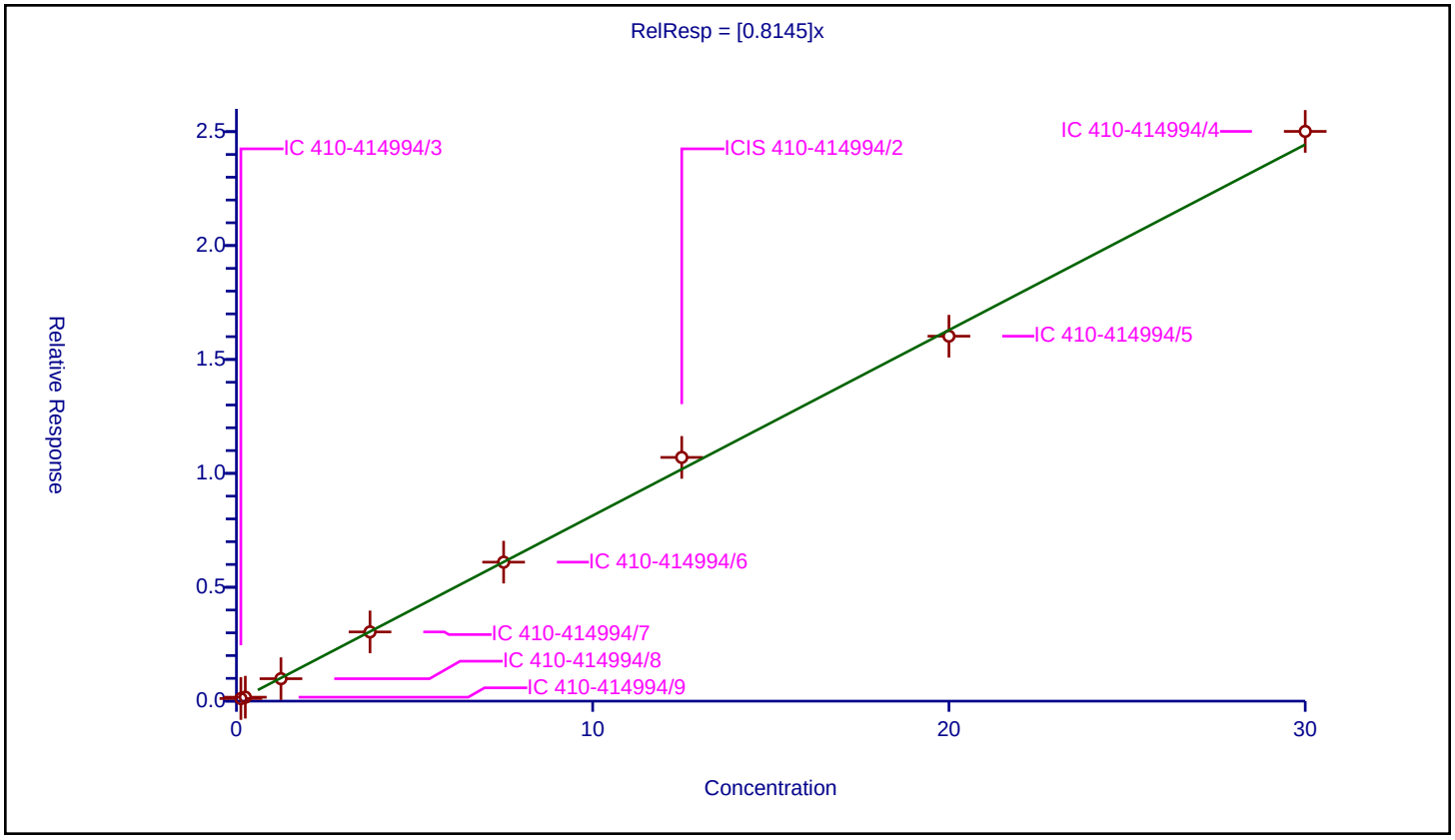
Curve Coefficients

Intercept:	0
Slope:	0.8145

Error Coefficients

Standard Error:	406000
Relative Standard Error:	7.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.11501	5.0	166160.0	0.920077	Y
2	IC 410-414994/9	0.25	0.173167	5.0	174225.0	0.692668	Y
3	IC 410-414994/8	1.25	0.985637	5.0	198780.0	0.78851	Y
4	IC 410-414994/7	3.75	3.03862	5.0	150519.0	0.810299	Y
5	IC 410-414994/6	7.5	6.101832	5.0	202599.0	0.813578	Y
6	ICIS 410-414994/2	12.5	10.700163	5.0	176109.0	0.856013	Y
7	IC 410-414994/5	20.0	16.021684	5.0	167082.0	0.801084	Y
8	IC 410-414994/4	30.0	25.012066	5.0	161609.0	0.833736	Y



Calibration / 2-Toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

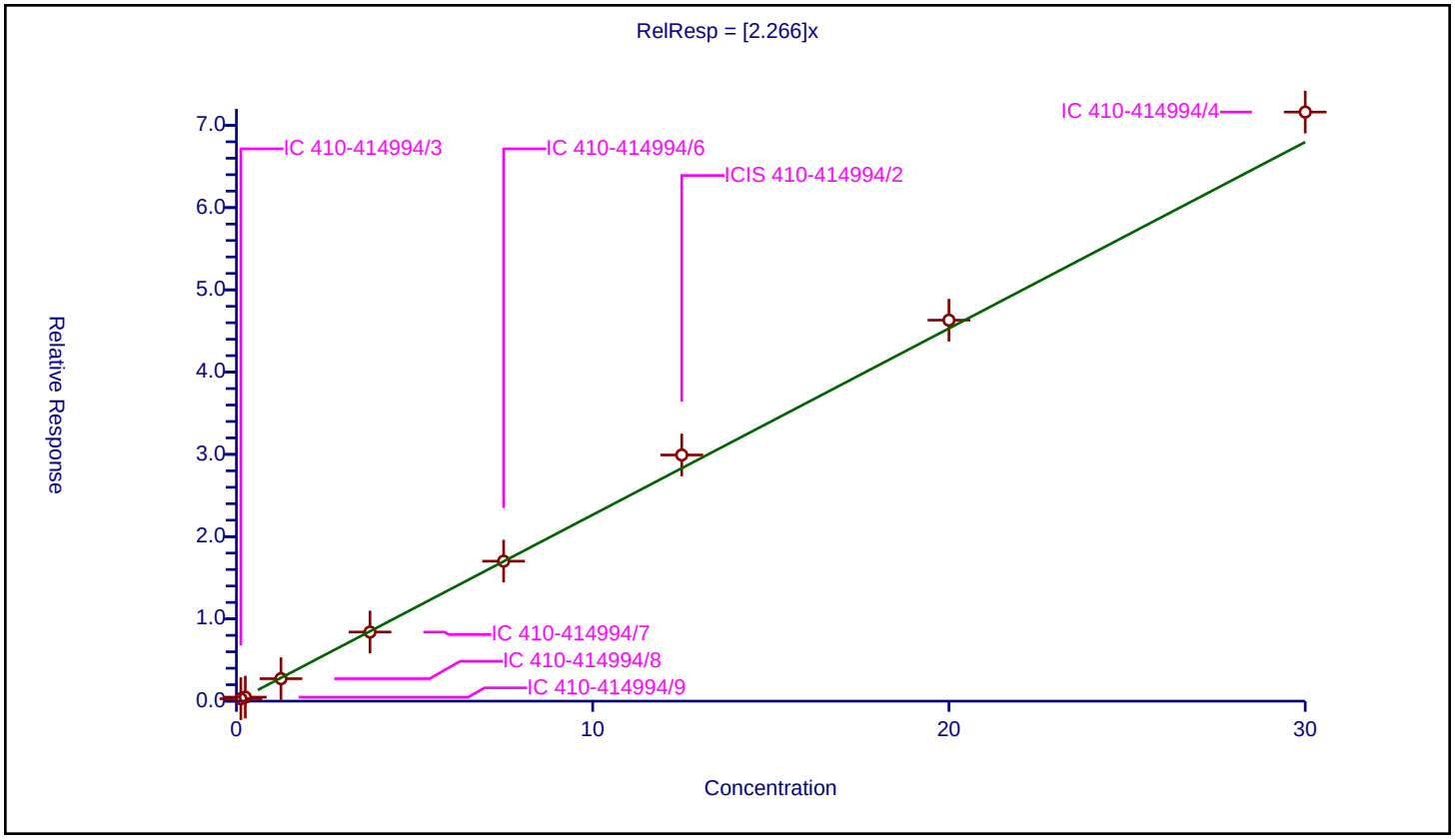
Curve Coefficients

Intercept:	0
Slope:	2.266

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	6.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.297424	5.0	166160.0	2.379393	Y
2	IC 410-414994/9	0.25	0.488478	5.0	174225.0	1.95391	Y
3	IC 410-414994/8	1.25	2.730481	5.0	198780.0	2.184385	Y
4	IC 410-414994/7	3.75	8.403026	5.0	150519.0	2.240807	Y
5	IC 410-414994/6	7.5	17.01694	5.0	202599.0	2.268925	Y
6	ICIS 410-414994/2	12.5	29.925046	5.0	176109.0	2.394004	Y
7	IC 410-414994/5	20.0	46.31609	5.0	167082.0	2.315805	Y
8	IC 410-414994/4	30.0	71.614576	5.0	161609.0	2.387153	Y



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Calibration / Hexachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

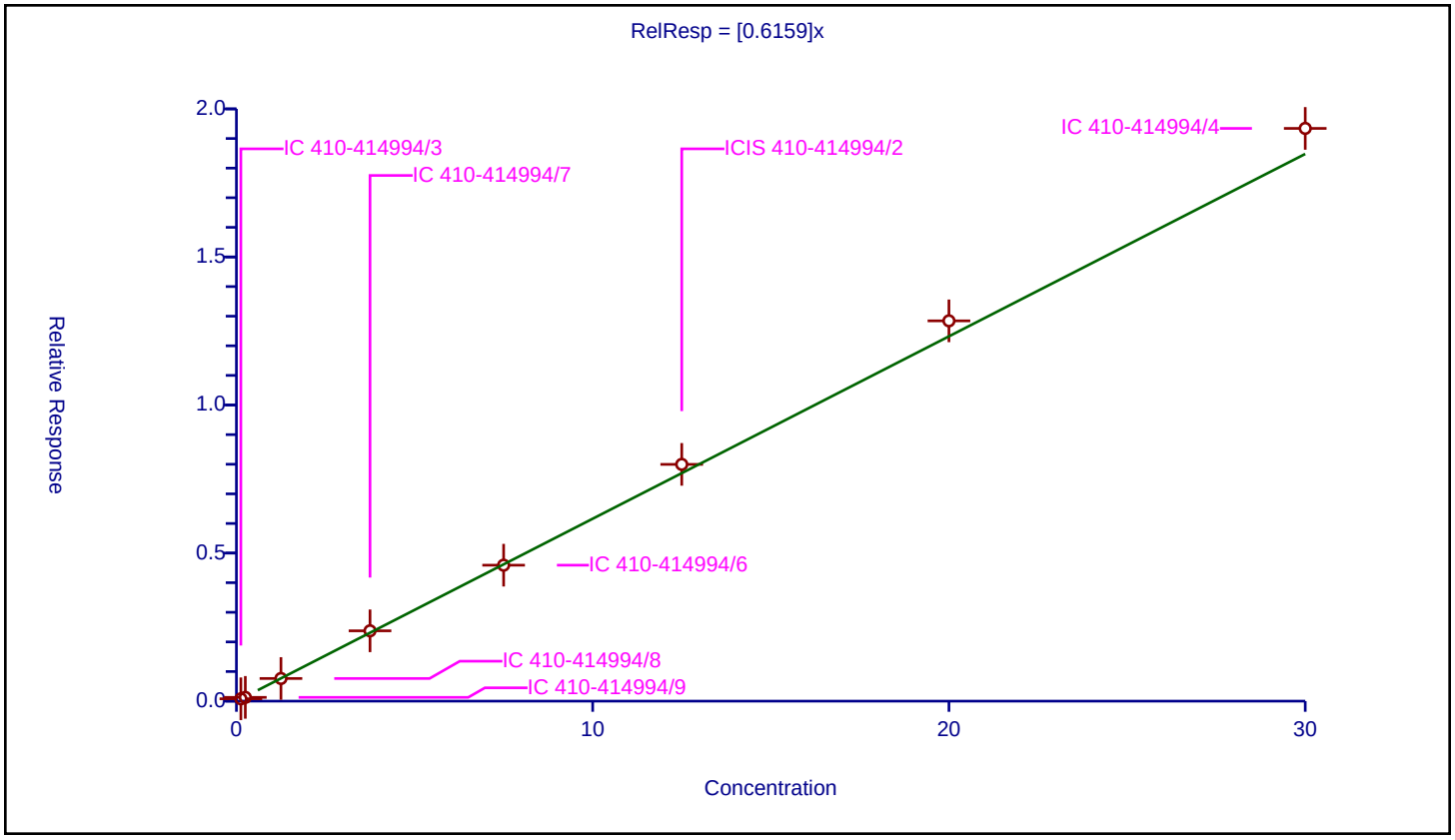
Curve Coefficients

Intercept:	0
Slope:	0.6159

Error Coefficients

Standard Error:	315000
Relative Standard Error:	7.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.079442	5.0	166160.0	0.635532	Y
2	IC 410-414994/9	0.25	0.127077	5.0	174225.0	0.508308	Y
3	IC 410-414994/8	1.25	0.764639	5.0	198780.0	0.611711	Y
4	IC 410-414994/7	3.75	2.375149	5.0	150519.0	0.633373	Y
5	IC 410-414994/6	7.5	4.591286	5.0	202599.0	0.612171	Y
6	ICIS 410-414994/2	12.5	7.995673	5.0	176109.0	0.639654	Y
7	IC 410-414994/5	20.0	12.842706	5.0	167082.0	0.642135	Y
8	IC 410-414994/4	30.0	19.341064	5.0	161609.0	0.644702	Y



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Calibration / Nitrobenzene-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

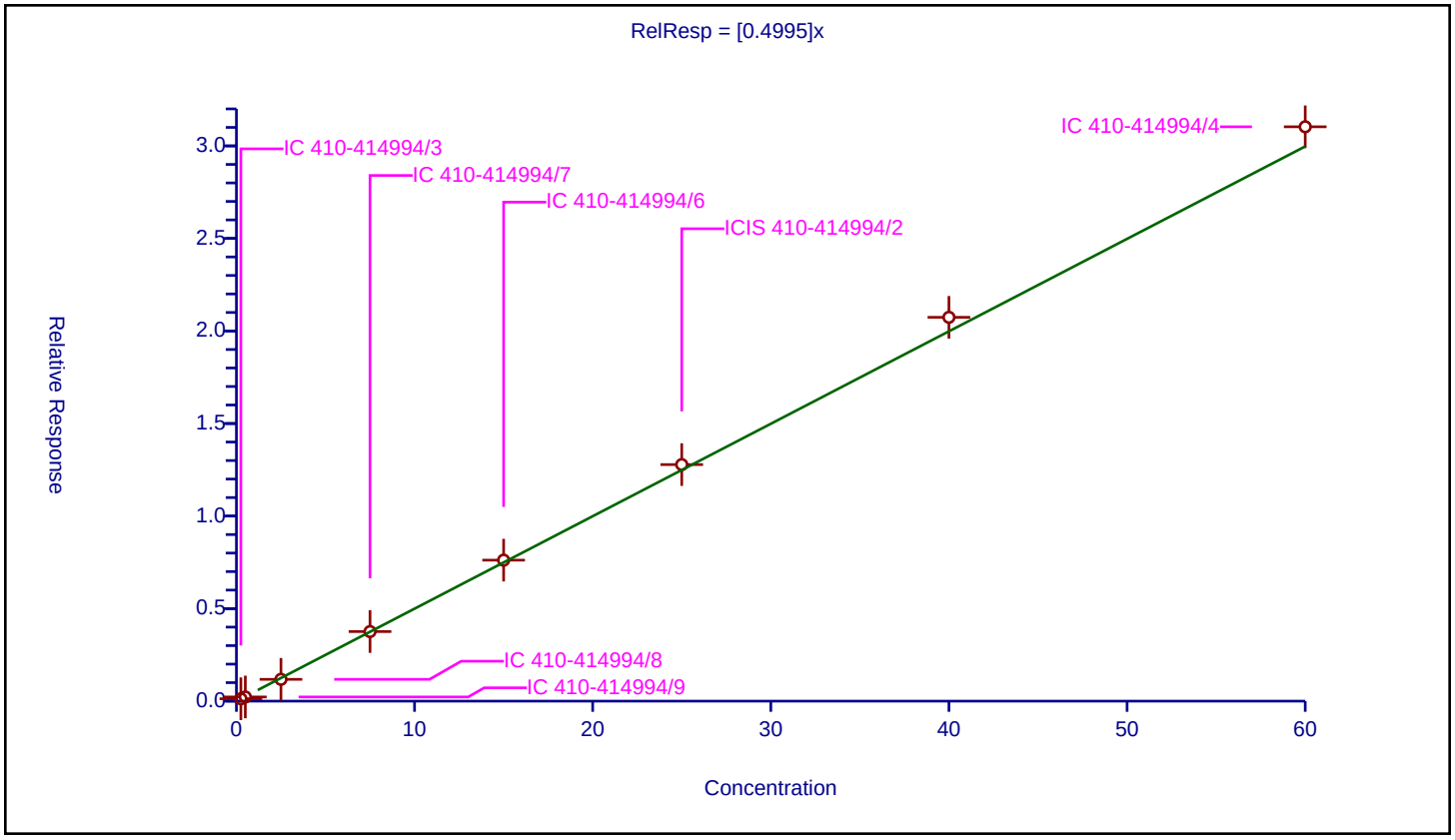
Curve Coefficients

Intercept:	0
Slope:	0.4995

Error Coefficients

Standard Error:	1900000
Relative Standard Error:	5.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.25	0.129414	5.0	614734.0	0.517655	Y
2	IC 410-414994/9	0.5	0.225741	5.0	629061.0	0.451482	Y
3	IC 410-414994/8	2.5	1.177918	5.0	740073.0	0.471167	Y
4	IC 410-414994/7	7.5	3.759038	5.0	551145.0	0.501205	Y
5	IC 410-414994/6	15.0	7.61782	5.0	740811.0	0.507855	Y
6	ICIS 410-414994/2	25.0	12.781725	5.0	666962.0	0.511269	Y
7	IC 410-414994/5	40.0	20.738107	5.0	612262.0	0.518453	Y
8	IC 410-414994/4	60.0	31.032625	5.0	611379.0	0.51721	Y



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Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

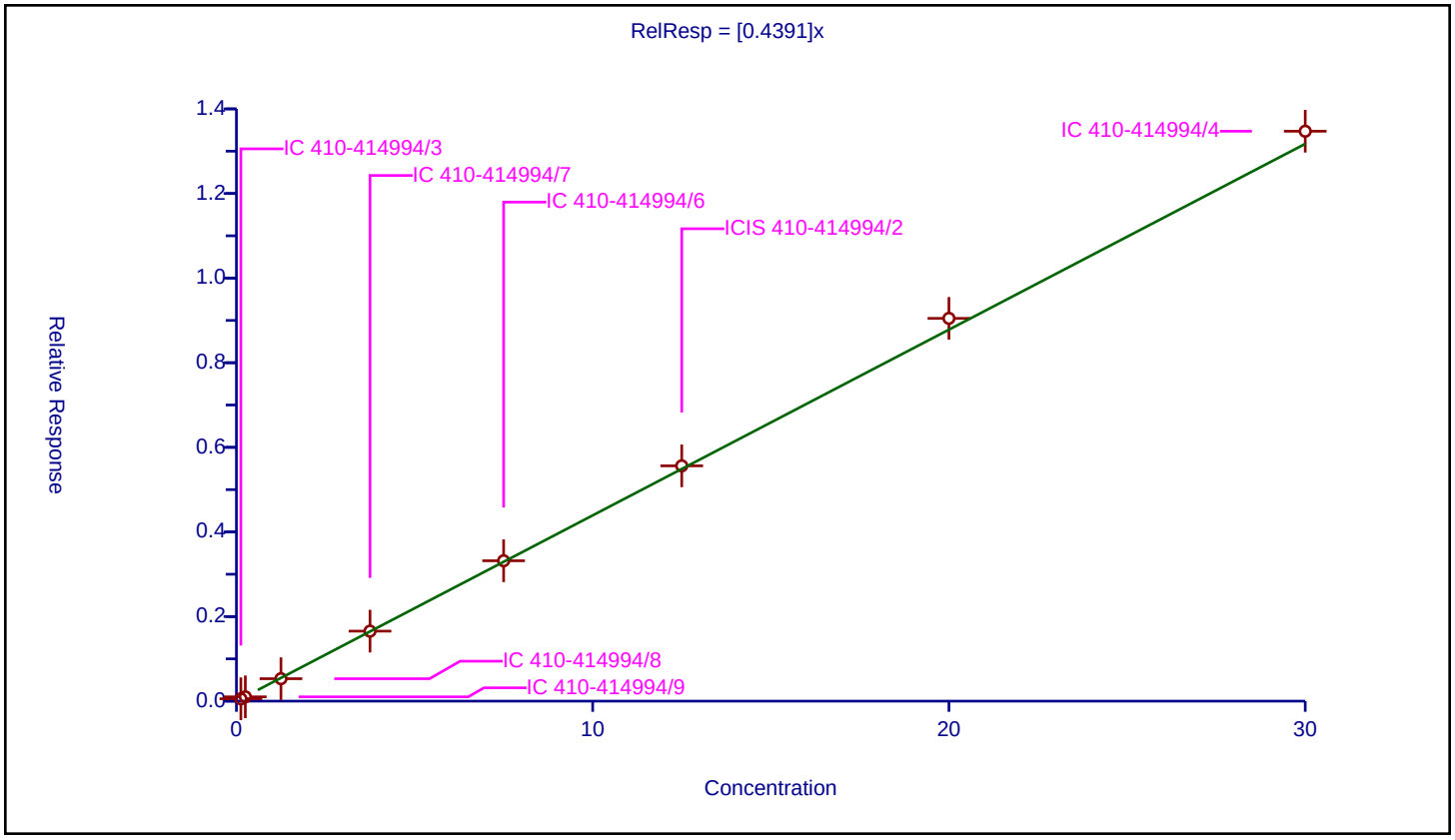
Curve Coefficients

Intercept:	0
Slope:	0.4391

Error Coefficients

Standard Error:	826000
Relative Standard Error:	3.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.056317	5.0	614734.0	0.450536	Y
2	IC 410-414994/9	0.25	0.101922	5.0	629061.0	0.407687	Y
3	IC 410-414994/8	1.25	0.530495	5.0	740073.0	0.424396	Y
4	IC 410-414994/7	3.75	1.654819	5.0	551145.0	0.441285	Y
5	IC 410-414994/6	7.5	3.317979	5.0	740811.0	0.442397	Y
6	ICIS 410-414994/2	12.5	5.561846	5.0	666962.0	0.444948	Y
7	IC 410-414994/5	20.0	9.0483	5.0	612262.0	0.452415	Y
8	IC 410-414994/4	30.0	13.471734	5.0	611379.0	0.449058	Y



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Calibration / N-Nitrosopiperidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

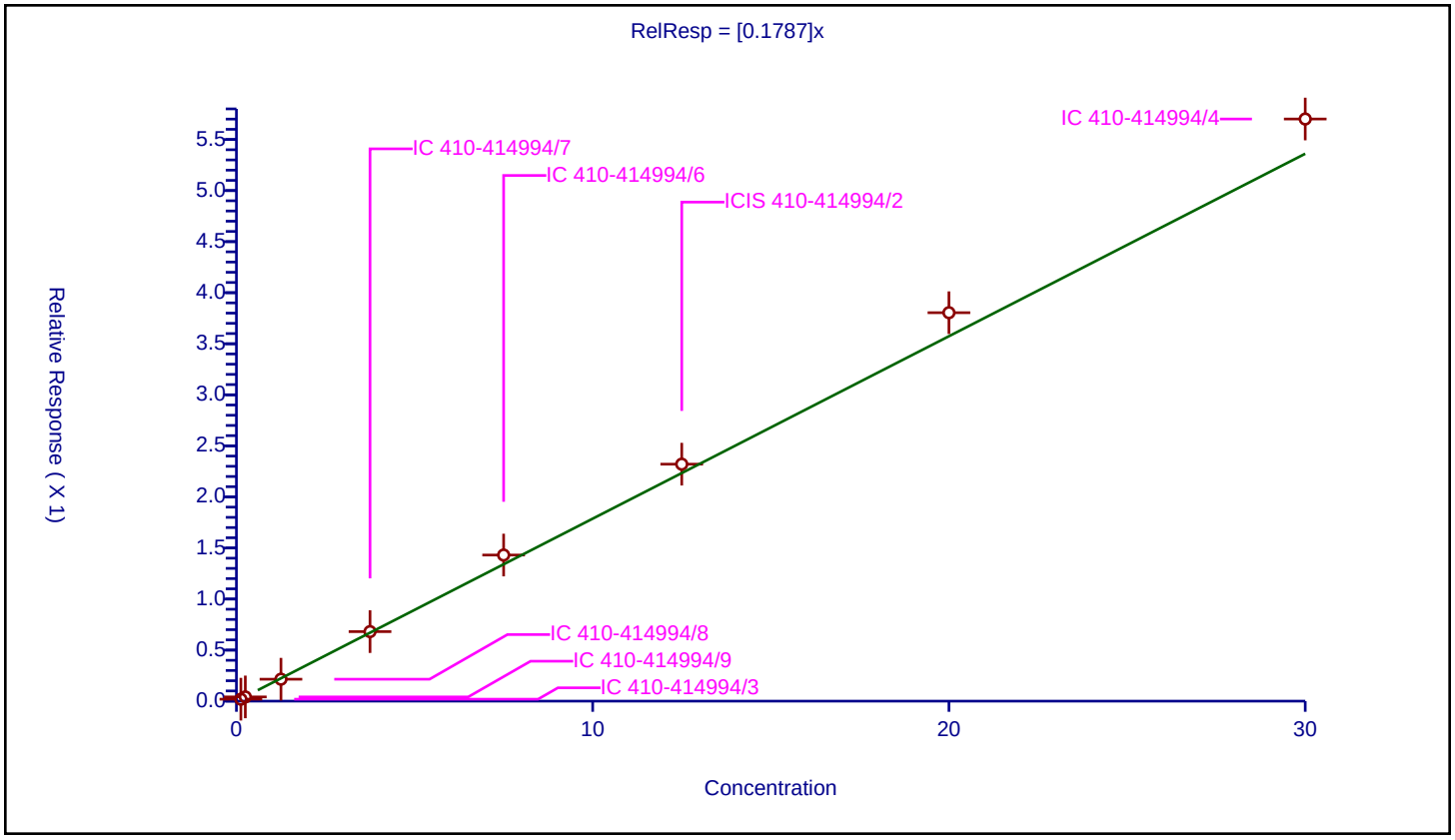
Curve Coefficients

Intercept:	0
Slope:	0.1787

Error Coefficients

Standard Error:	349000
Relative Standard Error:	7.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.019293	5.0	614734.0	0.154343	Y
2	IC 410-414994/9	0.25	0.04126	5.0	629061.0	0.16504	Y
3	IC 410-414994/8	1.25	0.214817	5.0	740073.0	0.171853	Y
4	IC 410-414994/7	3.75	0.68101	5.0	551145.0	0.181603	Y
5	IC 410-414994/6	7.5	1.430756	5.0	740811.0	0.190768	Y
6	ICIS 410-414994/2	12.5	2.320807	5.0	666962.0	0.185665	Y
7	IC 410-414994/5	20.0	3.80418	5.0	612262.0	0.190209	Y
8	IC 410-414994/4	30.0	5.700768	5.0	611379.0	0.190026	Y



Calibration / Isophorone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

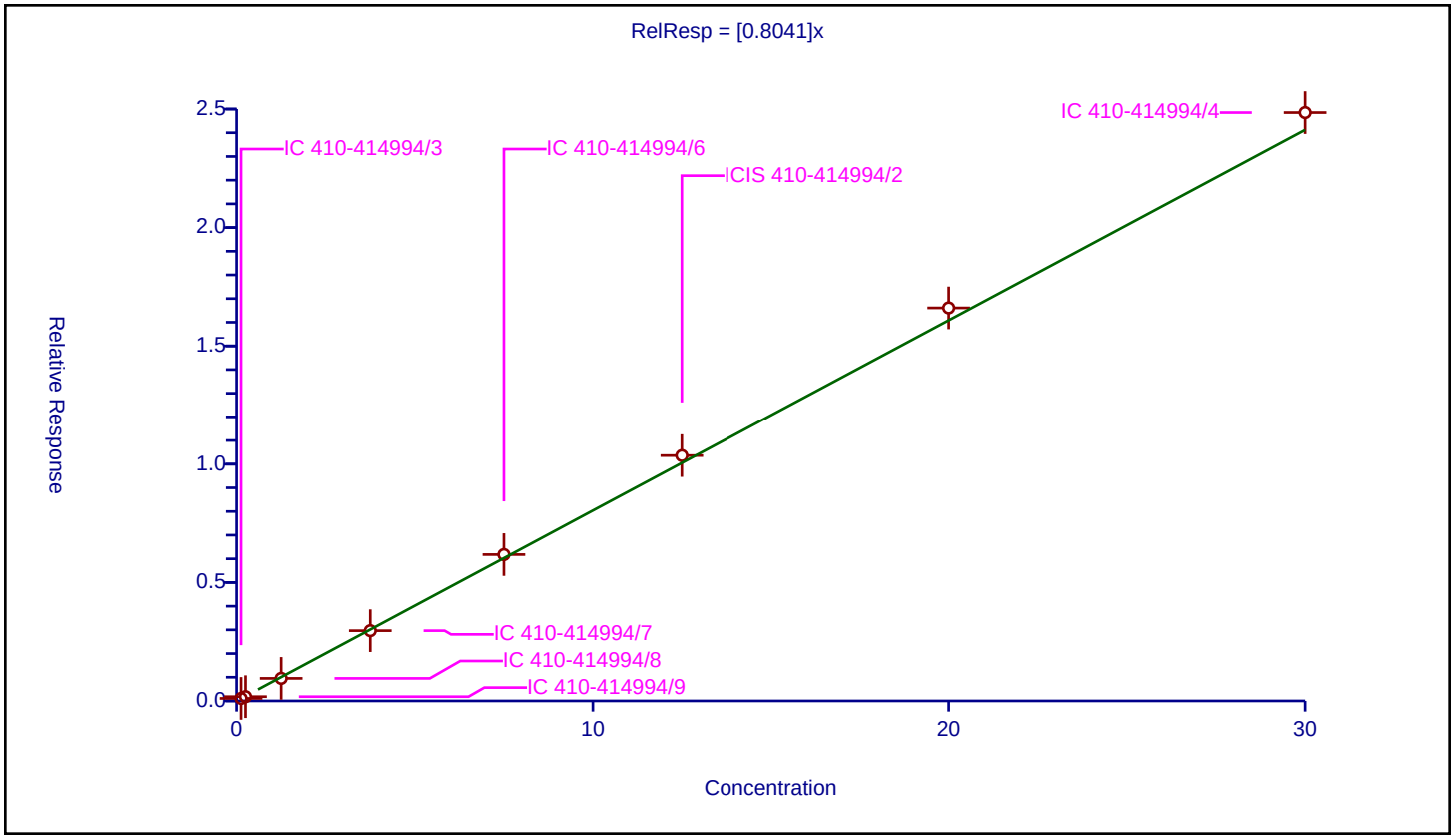
Curve Coefficients

Intercept:	0
Slope:	0.8041

Error Coefficients

Standard Error:	1520000
Relative Standard Error:	5.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.106379	5.0	614734.0	0.851035	Y
2	IC 410-414994/9	0.25	0.17945	5.0	629061.0	0.7178	Y
3	IC 410-414994/8	1.25	0.95123	5.0	740073.0	0.760984	Y
4	IC 410-414994/7	3.75	2.966307	5.0	551145.0	0.791015	Y
5	IC 410-414994/6	7.5	6.180969	5.0	740811.0	0.824129	Y
6	ICIS 410-414994/2	12.5	10.362667	5.0	666962.0	0.829013	Y
7	IC 410-414994/5	20.0	16.607335	5.0	612262.0	0.830367	Y
8	IC 410-414994/4	30.0	24.851909	5.0	611379.0	0.828397	Y



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Calibration / 2-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

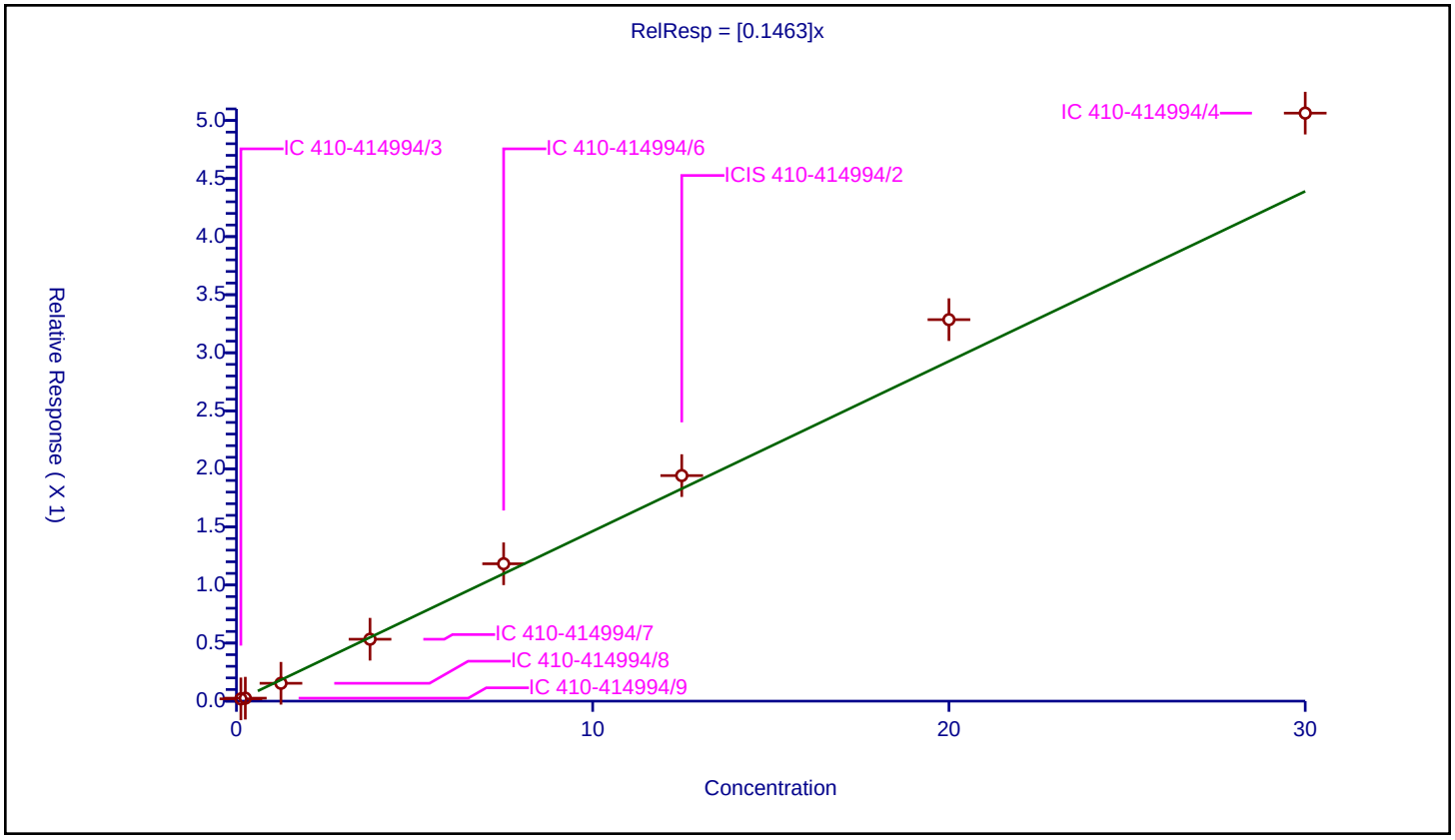
Curve Coefficients

Intercept:	0
Slope:	0.1463

Error Coefficients

Standard Error:	304000
Relative Standard Error:	15.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.019667	5.0	614734.0	0.157336	Y
2	IC 410-414994/9	0.25	0.025522	5.0	629061.0	0.102089	Y
3	IC 410-414994/8	1.25	0.153775	5.0	740073.0	0.12302	Y
4	IC 410-414994/7	3.75	0.533136	5.0	551145.0	0.142169	Y
5	IC 410-414994/6	7.5	1.182778	5.0	740811.0	0.157704	Y
6	ICIS 410-414994/2	12.5	1.942367	5.0	666962.0	0.155389	Y
7	IC 410-414994/5	20.0	3.285097	5.0	612262.0	0.164255	Y
8	IC 410-414994/4	30.0	5.063471	5.0	611379.0	0.168782	Y



Calibration / 2,4-Dimethylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

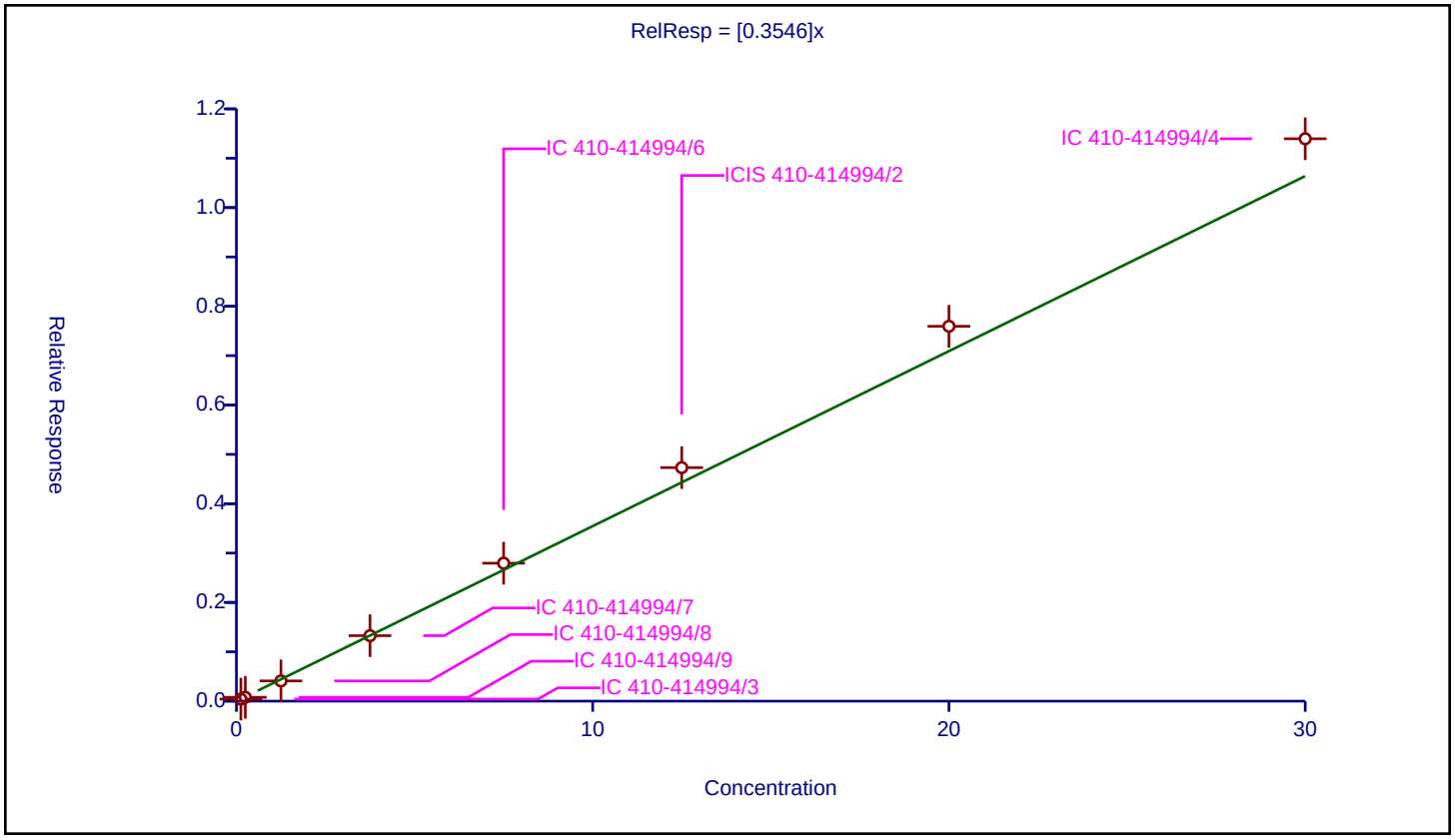
Curve Coefficients

Intercept:	0
Slope:	0.3546

Error Coefficients

Standard Error:	697000
Relative Standard Error:	7.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.041912	5.0	614734.0	0.335299	Y
2	IC 410-414994/9	0.25	0.077274	5.0	629061.0	0.309096	Y
3	IC 410-414994/8	1.25	0.409845	5.0	740073.0	0.327876	Y
4	IC 410-414994/7	3.75	1.32642	5.0	551145.0	0.353712	Y
5	IC 410-414994/6	7.5	2.795072	5.0	740811.0	0.372676	Y
6	ICIS 410-414994/2	12.5	4.731401	5.0	666962.0	0.378512	Y
7	IC 410-414994/5	20.0	7.595368	5.0	612262.0	0.379768	Y
8	IC 410-414994/4	30.0	11.3947	5.0	611379.0	0.379823	Y



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Calibration / o,o',o''-Triethylphosphorothioate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

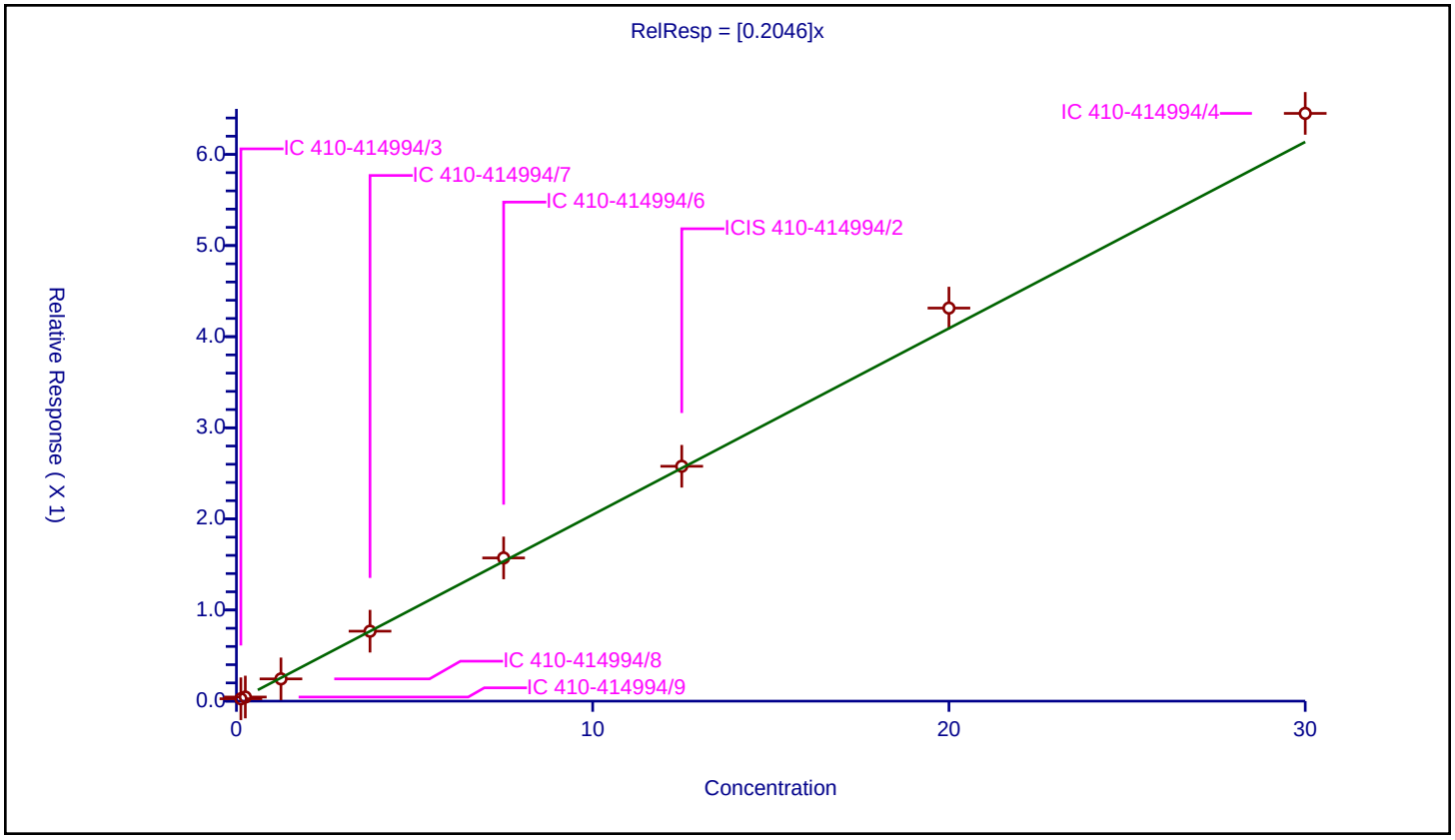
Curve Coefficients

Intercept:	0
Slope:	0.2046

Error Coefficients

Standard Error:	393000
Relative Standard Error:	5.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.026198	5.0	614734.0	0.209587	Y
2	IC 410-414994/9	0.25	0.045091	5.0	629061.0	0.180364	Y
3	IC 410-414994/8	1.25	0.244307	5.0	740073.0	0.195446	Y
4	IC 410-414994/7	3.75	0.767611	5.0	551145.0	0.204696	Y
5	IC 410-414994/6	7.5	1.571737	5.0	740811.0	0.209565	Y
6	ICIS 410-414994/2	12.5	2.577801	5.0	666962.0	0.206224	Y
7	IC 410-414994/5	20.0	4.31366	5.0	612262.0	0.215683	Y
8	IC 410-414994/4	30.0	6.450622	5.0	611379.0	0.215021	Y



Calibration / Bis(2-chloroethoxy)methane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

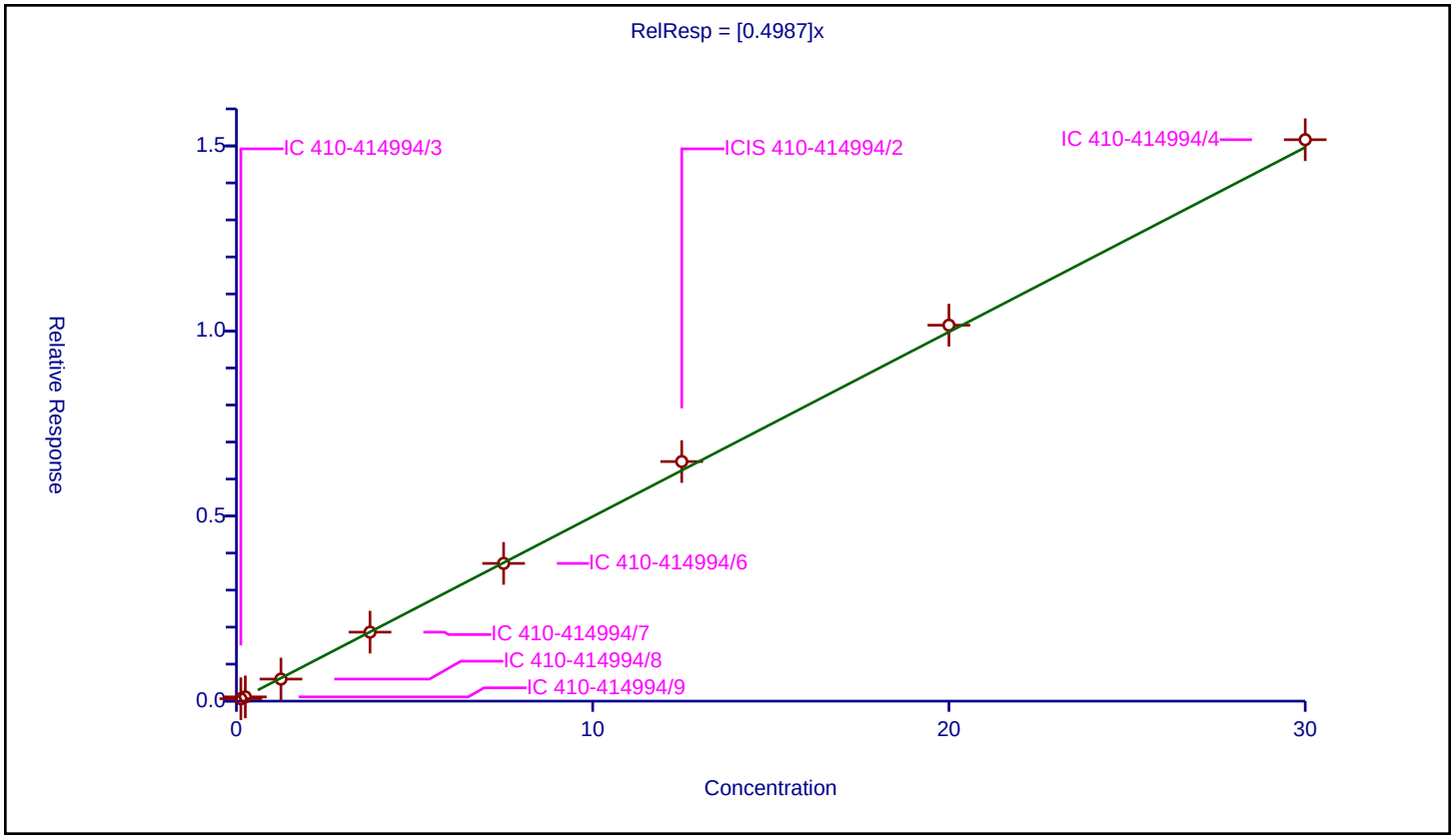
Curve Coefficients

Intercept:	0
Slope:	0.4987

Error Coefficients

Standard Error:	932000
Relative Standard Error:	4.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.066012	5.0	614734.0	0.528098	Y
2	IC 410-414994/9	0.25	0.114949	5.0	629061.0	0.459796	Y
3	IC 410-414994/8	1.25	0.596218	5.0	740073.0	0.476975	Y
4	IC 410-414994/7	3.75	1.86411	5.0	551145.0	0.497096	Y
5	IC 410-414994/6	7.5	3.721422	5.0	740811.0	0.49619	Y
6	ICIS 410-414994/2	12.5	6.472745	5.0	666962.0	0.51782	Y
7	IC 410-414994/5	20.0	10.156583	5.0	612262.0	0.507829	Y
8	IC 410-414994/4	30.0	15.167212	5.0	611379.0	0.505574	Y



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Calibration / 2,4-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

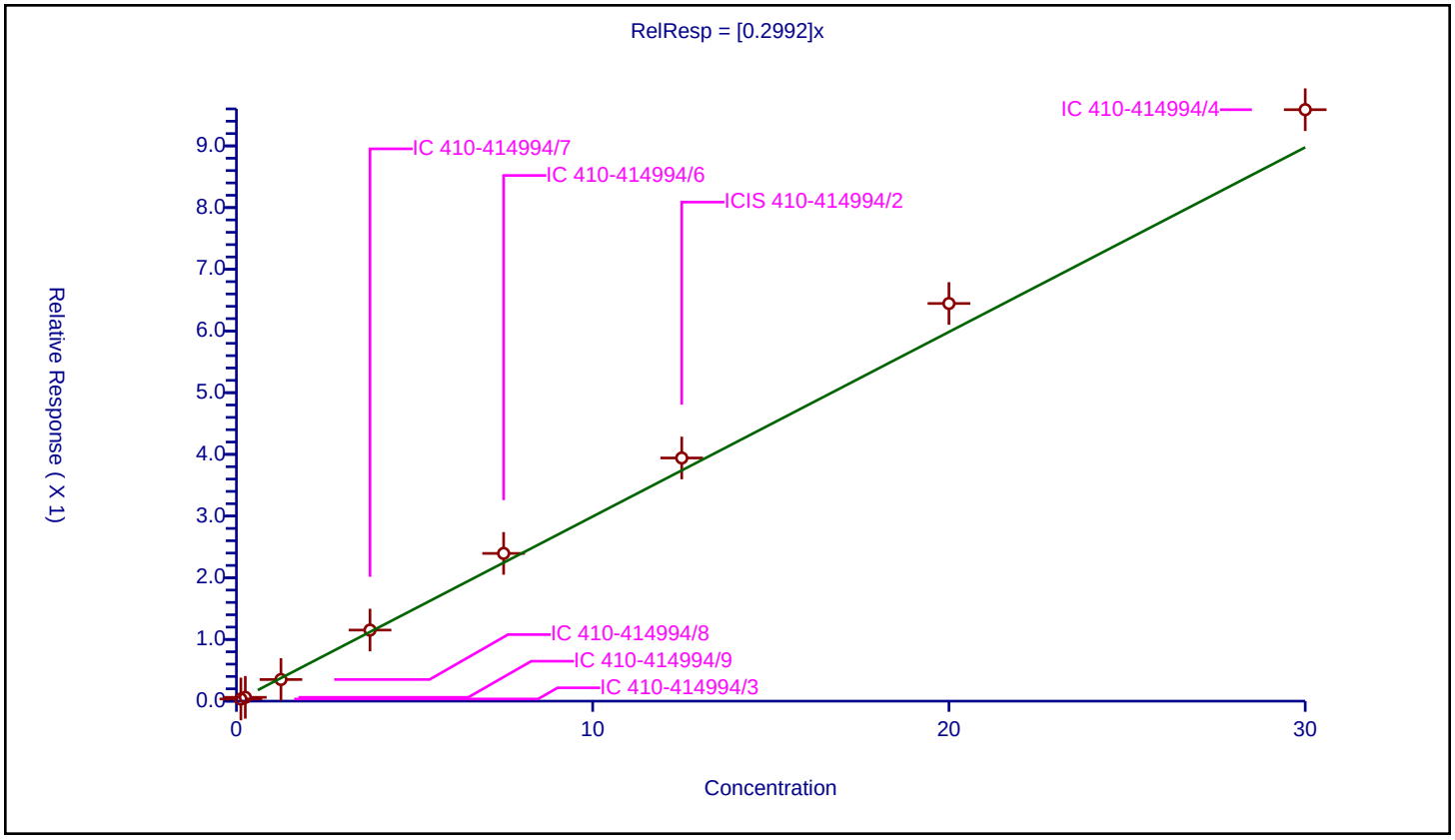
Curve Coefficients

Intercept:	0
Slope:	0.2992

Error Coefficients

Standard Error:	588000
Relative Standard Error:	8.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.035218	5.0	614734.0	0.281748	Y
2	IC 410-414994/9	0.25	0.062061	5.0	629061.0	0.248243	Y
3	IC 410-414994/8	1.25	0.350128	5.0	740073.0	0.280102	Y
4	IC 410-414994/7	3.75	1.152247	5.0	551145.0	0.307266	Y
5	IC 410-414994/6	7.5	2.394477	5.0	740811.0	0.319264	Y
6	ICIS 410-414994/2	12.5	3.941379	5.0	666962.0	0.31531	Y
7	IC 410-414994/5	20.0	6.445664	5.0	612262.0	0.322283	Y
8	IC 410-414994/4	30.0	9.587236	5.0	611379.0	0.319575	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

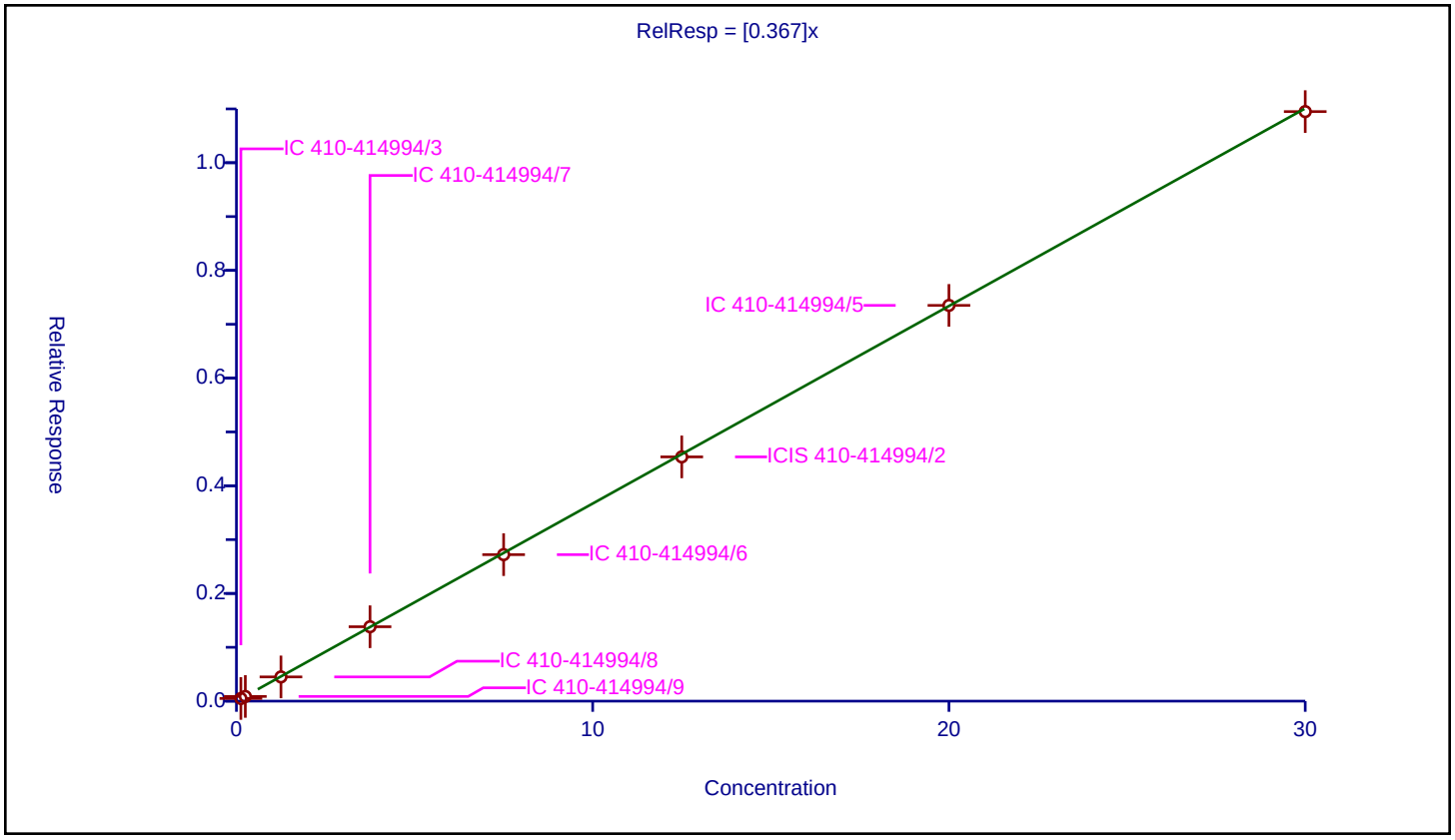
Curve Coefficients

Intercept:	0
Slope:	0.367

Error Coefficients

Standard Error:	672000
Relative Standard Error:	4.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.049957	5.0	614734.0	0.399653	Y
2	IC 410-414994/9	0.25	0.087297	5.0	629061.0	0.349187	Y
3	IC 410-414994/8	1.25	0.449976	5.0	740073.0	0.359981	Y
4	IC 410-414994/7	3.75	1.38205	5.0	551145.0	0.368547	Y
5	IC 410-414994/6	7.5	2.721187	5.0	740811.0	0.362825	Y
6	ICIS 410-414994/2	12.5	4.536683	5.0	666962.0	0.362935	Y
7	IC 410-414994/5	20.0	7.35013	5.0	612262.0	0.367506	Y
8	IC 410-414994/4	30.0	10.949746	5.0	611379.0	0.364992	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

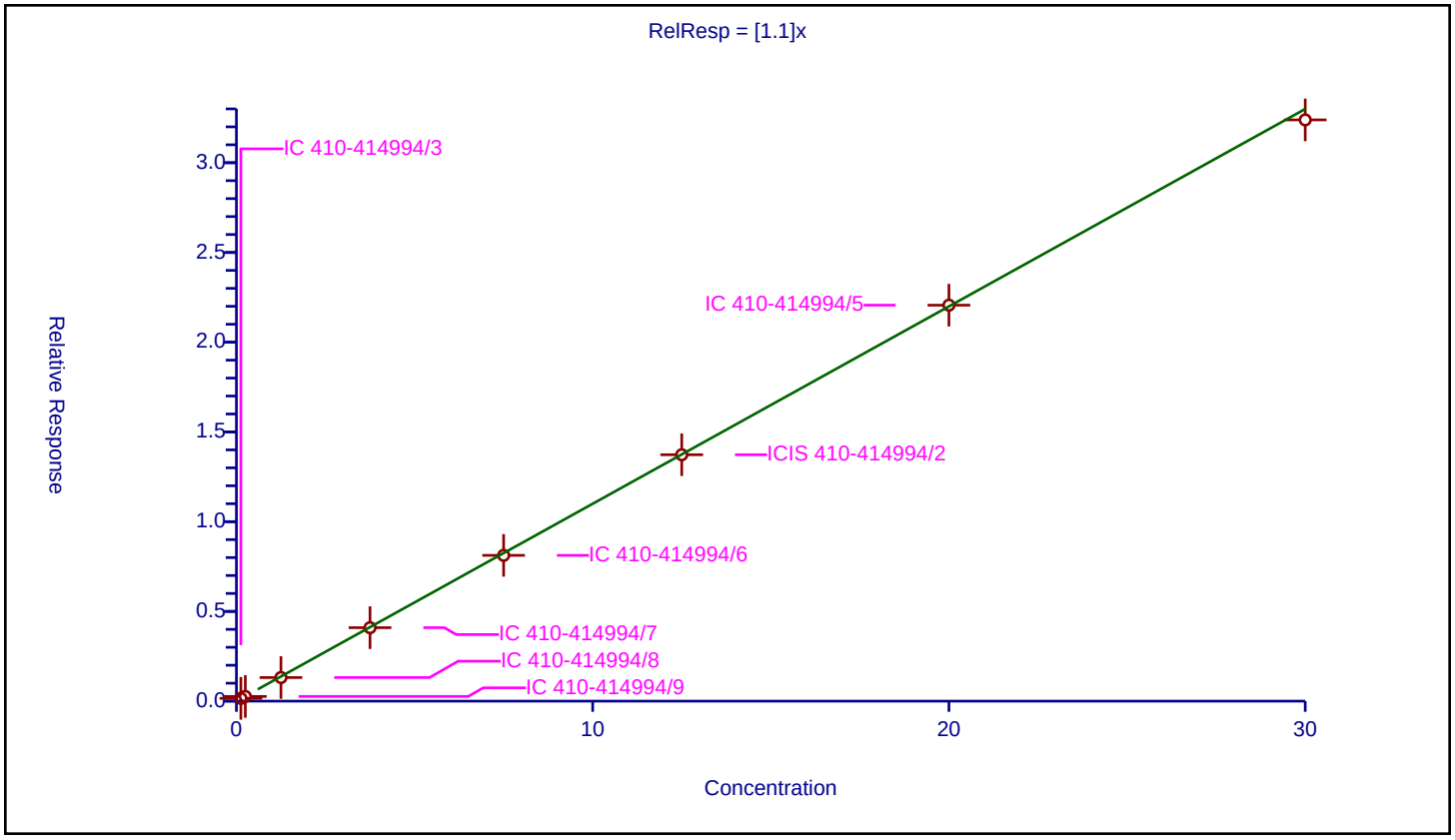
Curve Coefficients

Intercept:	0
Slope:	1.1

Error Coefficients

Standard Error:	2000000
Relative Standard Error:	5.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.155466	5.0	614734.0	1.243725	Y
2	IC 410-414994/9	0.25	0.261779	5.0	629061.0	1.047116	Y
3	IC 410-414994/8	1.25	1.314708	5.0	740073.0	1.051767	Y
4	IC 410-414994/7	3.75	4.092988	5.0	551145.0	1.091464	Y
5	IC 410-414994/6	7.5	8.123496	5.0	740811.0	1.083133	Y
6	ICIS 410-414994/2	12.5	13.72929	5.0	666962.0	1.098343	Y
7	IC 410-414994/5	20.0	22.062499	5.0	612262.0	1.103125	Y
8	IC 410-414994/4	30.0	32.386433	5.0	611379.0	1.079548	Y



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Calibration / Alpha-Terpineol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

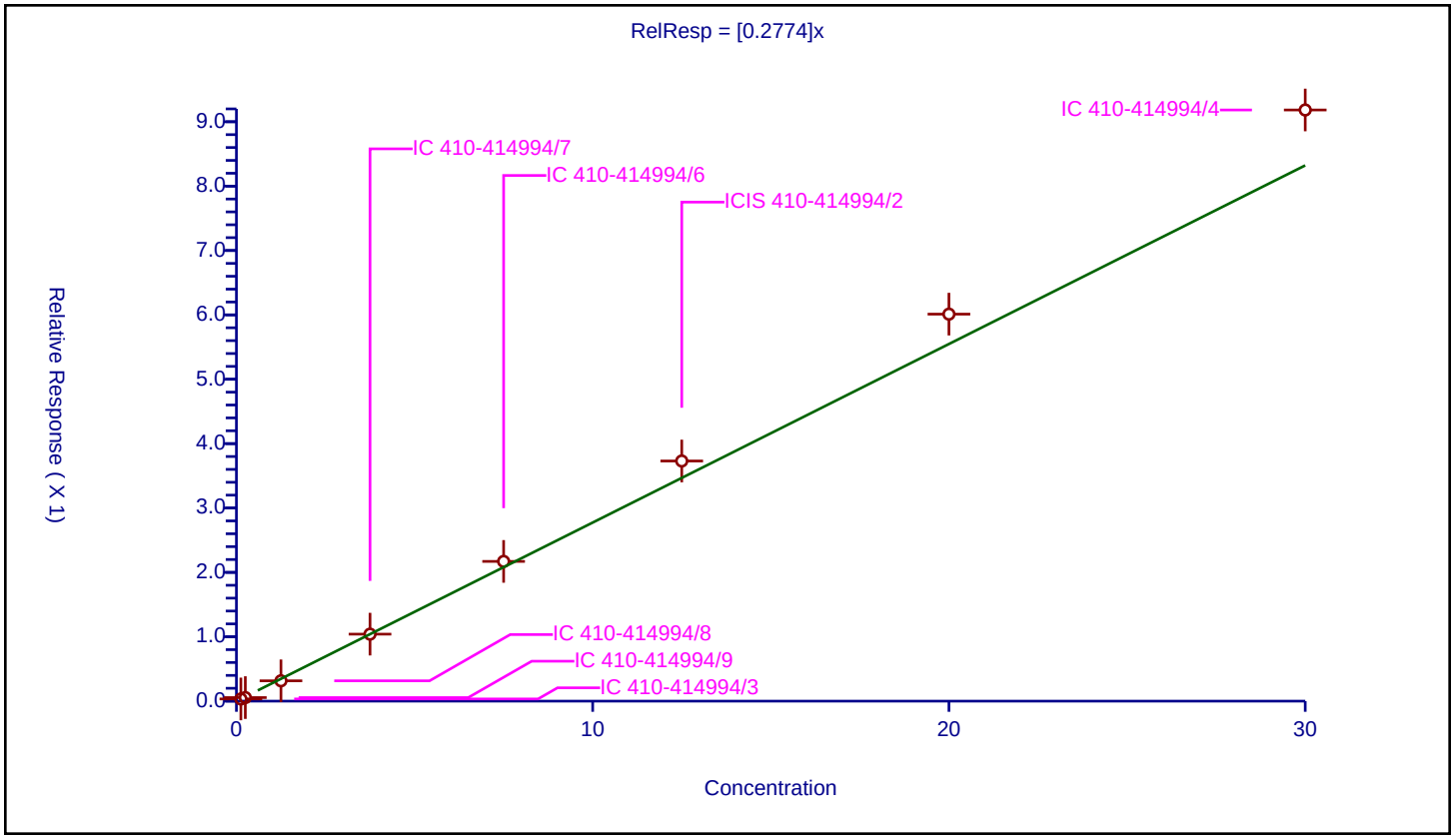
Curve Coefficients

Intercept:	0
Slope:	0.2774

Error Coefficients

Standard Error:	557000
Relative Standard Error:	10.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.034177	5.0	614734.0	0.273419	Y
2	IC 410-414994/9	0.25	0.055273	5.0	629061.0	0.221091	Y
3	IC 410-414994/8	1.25	0.315807	5.0	740073.0	0.252645	Y
4	IC 410-414994/7	3.75	1.040779	5.0	551145.0	0.277541	Y
5	IC 410-414994/6	7.5	2.170648	5.0	740811.0	0.28942	Y
6	ICIS 410-414994/2	12.5	3.73049	5.0	666962.0	0.298439	Y
7	IC 410-414994/5	20.0	6.011569	5.0	612262.0	0.300578	Y
8	IC 410-414994/4	30.0	9.182872	5.0	611379.0	0.306096	Y



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Calibration / 4-Chloroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

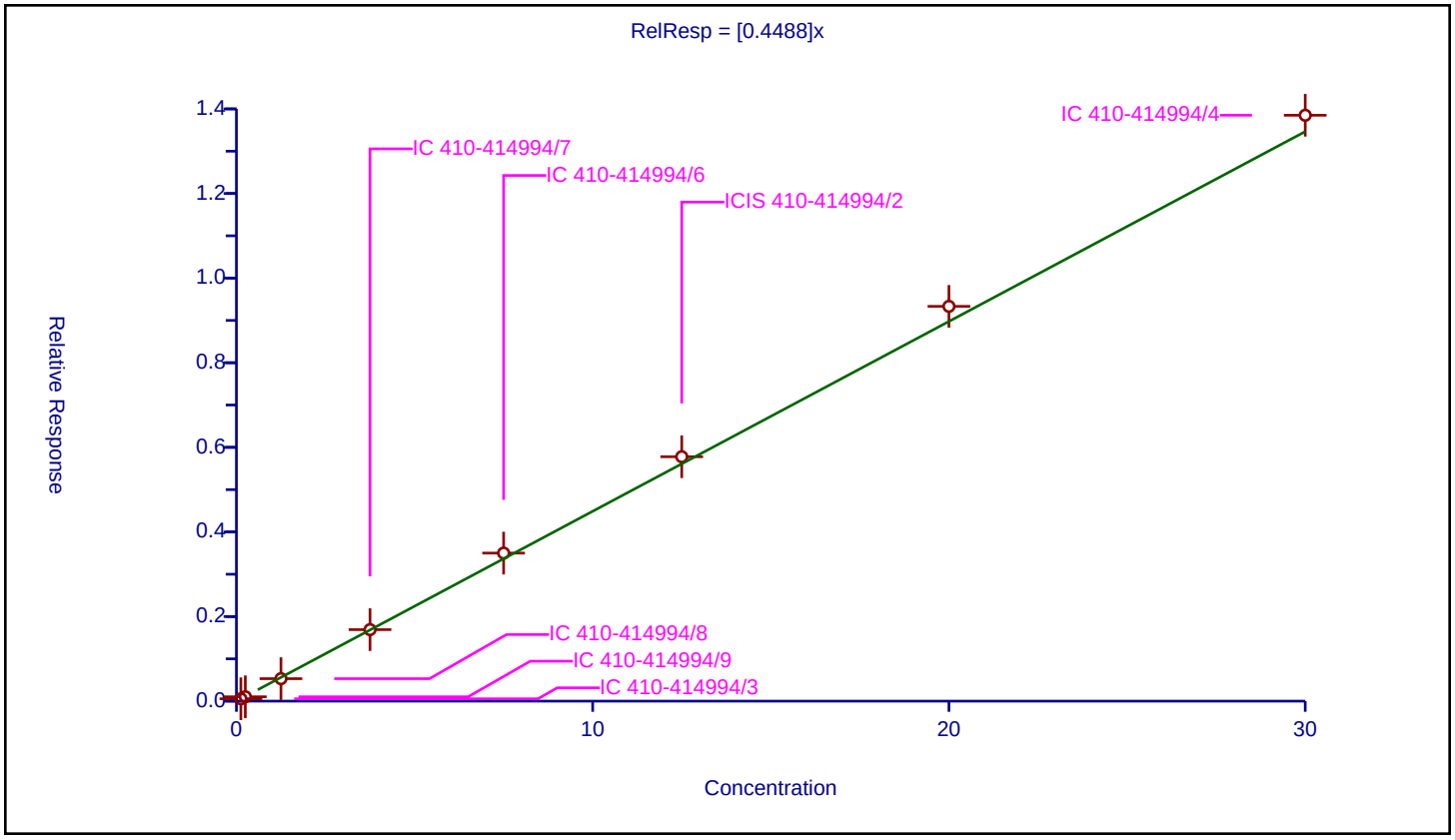
Curve Coefficients

Intercept:	0
Slope:	0.4488

Error Coefficients

Standard Error:	852000
Relative Standard Error:	4.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.055731	5.0	614734.0	0.445851	Y
2	IC 410-414994/9	0.25	0.102971	5.0	629061.0	0.411884	Y
3	IC 410-414994/8	1.25	0.531076	5.0	740073.0	0.424861	Y
4	IC 410-414994/7	3.75	1.689855	5.0	551145.0	0.450628	Y
5	IC 410-414994/6	7.5	3.499914	5.0	740811.0	0.466655	Y
6	ICIS 410-414994/2	12.5	5.777413	5.0	666962.0	0.462193	Y
7	IC 410-414994/5	20.0	9.332124	5.0	612262.0	0.466606	Y
8	IC 410-414994/4	30.0	13.849576	5.0	611379.0	0.461653	Y



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Calibration / 2,6-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

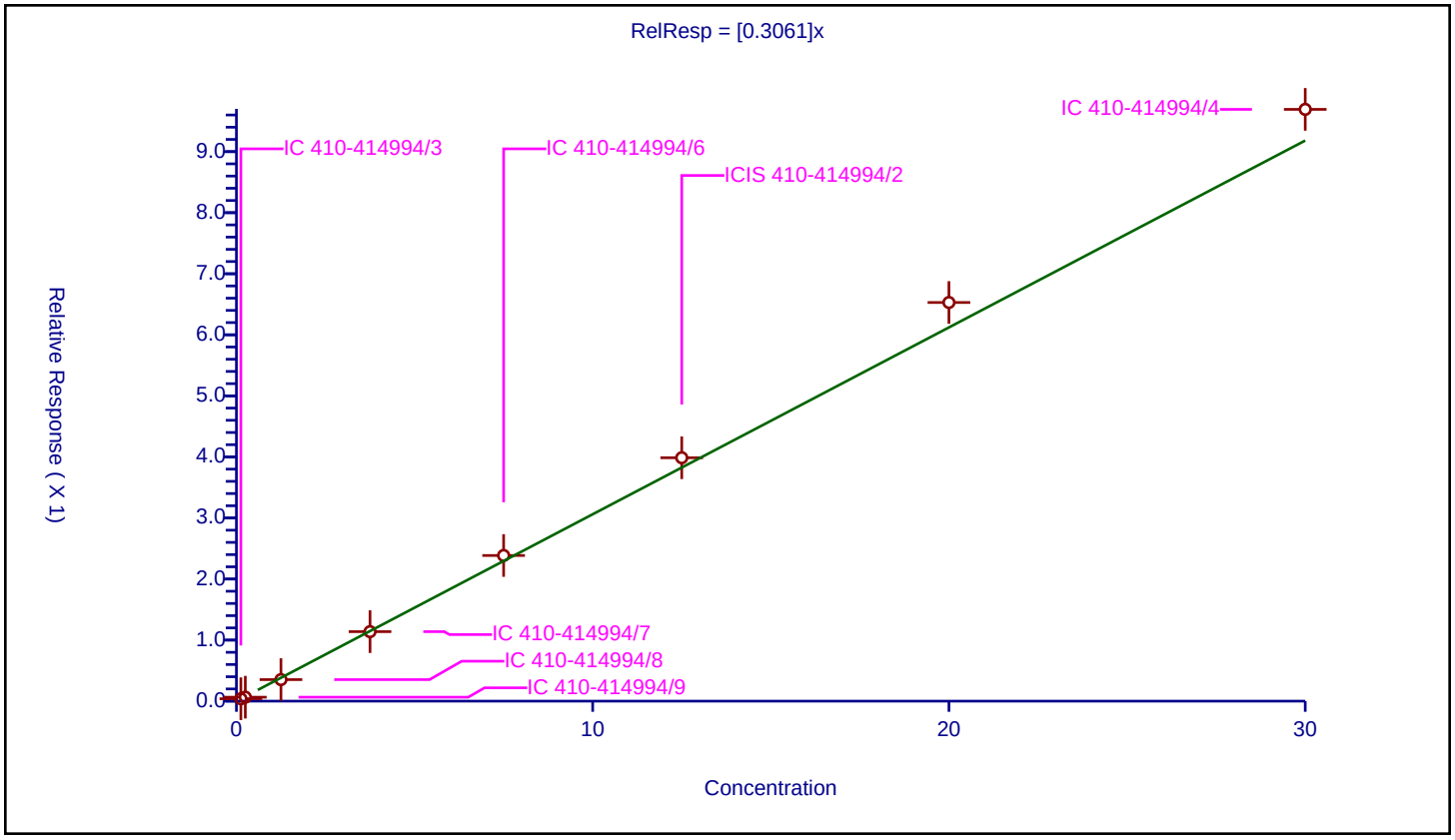
Curve Coefficients

Intercept:	0
Slope:	0.3061

Error Coefficients

Standard Error:	594000
Relative Standard Error:	7.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.039619	5.0	614734.0	0.31695	Y
2	IC 410-414994/9	0.25	0.064819	5.0	629061.0	0.259275	Y
3	IC 410-414994/8	1.25	0.352648	5.0	740073.0	0.282118	Y
4	IC 410-414994/7	3.75	1.138239	5.0	551145.0	0.303531	Y
5	IC 410-414994/6	7.5	2.385635	5.0	740811.0	0.318085	Y
6	ICIS 410-414994/2	12.5	3.986397	5.0	666962.0	0.318912	Y
7	IC 410-414994/5	20.0	6.52919	5.0	612262.0	0.32646	Y
8	IC 410-414994/4	30.0	9.692106	5.0	611379.0	0.32307	Y



Calibration / Hexachloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

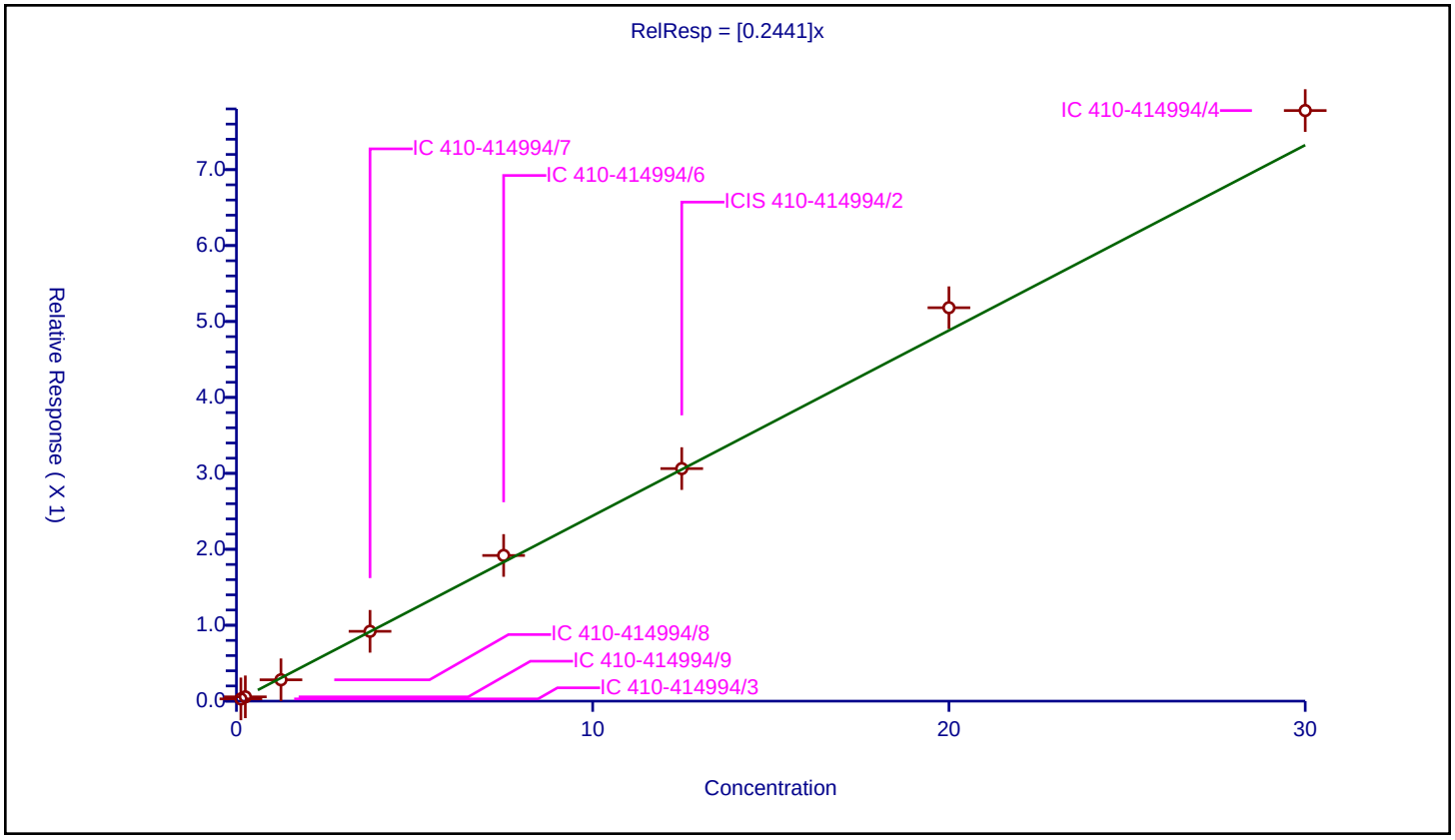
Curve Coefficients

Intercept:	0
Slope:	0.2441

Error Coefficients

Standard Error:	473000
Relative Standard Error:	5.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.029549	5.0	614734.0	0.236395	Y
2	IC 410-414994/9	0.25	0.056807	5.0	629061.0	0.227228	Y
3	IC 410-414994/8	1.25	0.281141	5.0	740073.0	0.224913	Y
4	IC 410-414994/7	3.75	0.919468	5.0	551145.0	0.245191	Y
5	IC 410-414994/6	7.5	1.918472	5.0	740811.0	0.255796	Y
6	ICIS 410-414994/2	12.5	3.062611	5.0	666962.0	0.245009	Y
7	IC 410-414994/5	20.0	5.181377	5.0	612262.0	0.259069	Y
8	IC 410-414994/4	30.0	7.778228	5.0	611379.0	0.259274	Y



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Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

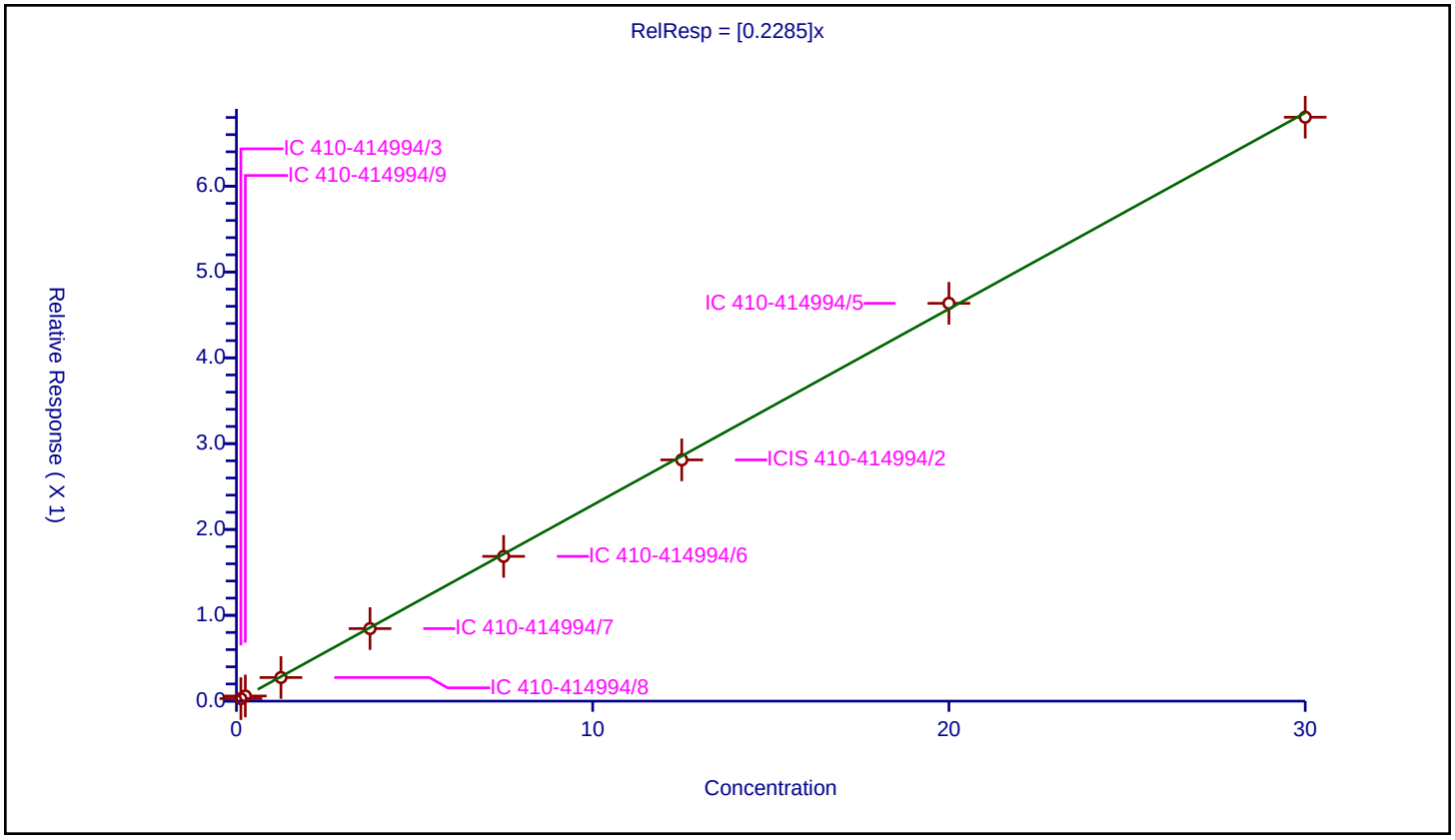
Curve Coefficients

Intercept:	0
Slope:	0.2285

Error Coefficients

Standard Error:	419000
Relative Standard Error:	2.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.02924	5.0	614734.0	0.233922	Y
2	IC 410-414994/9	0.25	0.060082	5.0	629061.0	0.240326	Y
3	IC 410-414994/8	1.25	0.274993	5.0	740073.0	0.219995	Y
4	IC 410-414994/7	3.75	0.845023	5.0	551145.0	0.225339	Y
5	IC 410-414994/6	7.5	1.686611	5.0	740811.0	0.224881	Y
6	ICIS 410-414994/2	12.5	2.810767	5.0	666962.0	0.224861	Y
7	IC 410-414994/5	20.0	4.634674	5.0	612262.0	0.231734	Y
8	IC 410-414994/4	30.0	6.802891	5.0	611379.0	0.226763	Y



Calibration / Quinoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

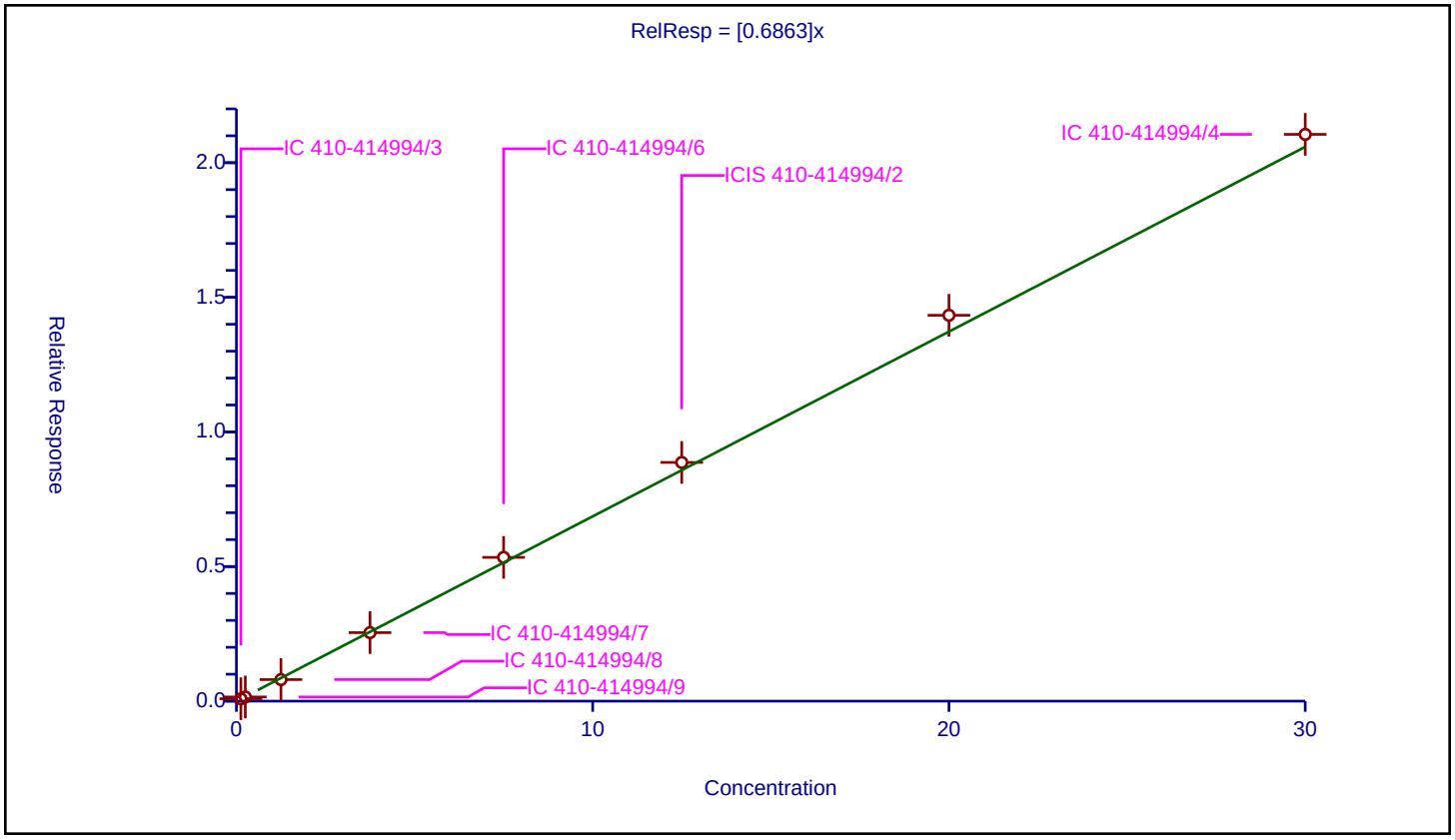
Curve Coefficients

Intercept:	0
Slope:	0.6863

Error Coefficients

Standard Error:	1300000
Relative Standard Error:	5.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.089063	5.0	614734.0	0.712503	Y
2	IC 410-414994/9	0.25	0.154603	5.0	629061.0	0.618414	Y
3	IC 410-414994/8	1.25	0.801259	5.0	740073.0	0.641007	Y
4	IC 410-414994/7	3.75	2.544702	5.0	551145.0	0.678587	Y
5	IC 410-414994/6	7.5	5.340242	5.0	740811.0	0.712032	Y
6	ICIS 410-414994/2	12.5	8.867657	5.0	666962.0	0.709413	Y
7	IC 410-414994/5	20.0	14.333096	5.0	612262.0	0.716655	Y
8	IC 410-414994/4	30.0	21.053348	5.0	611379.0	0.701778	Y



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Calibration / Caprolactam

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

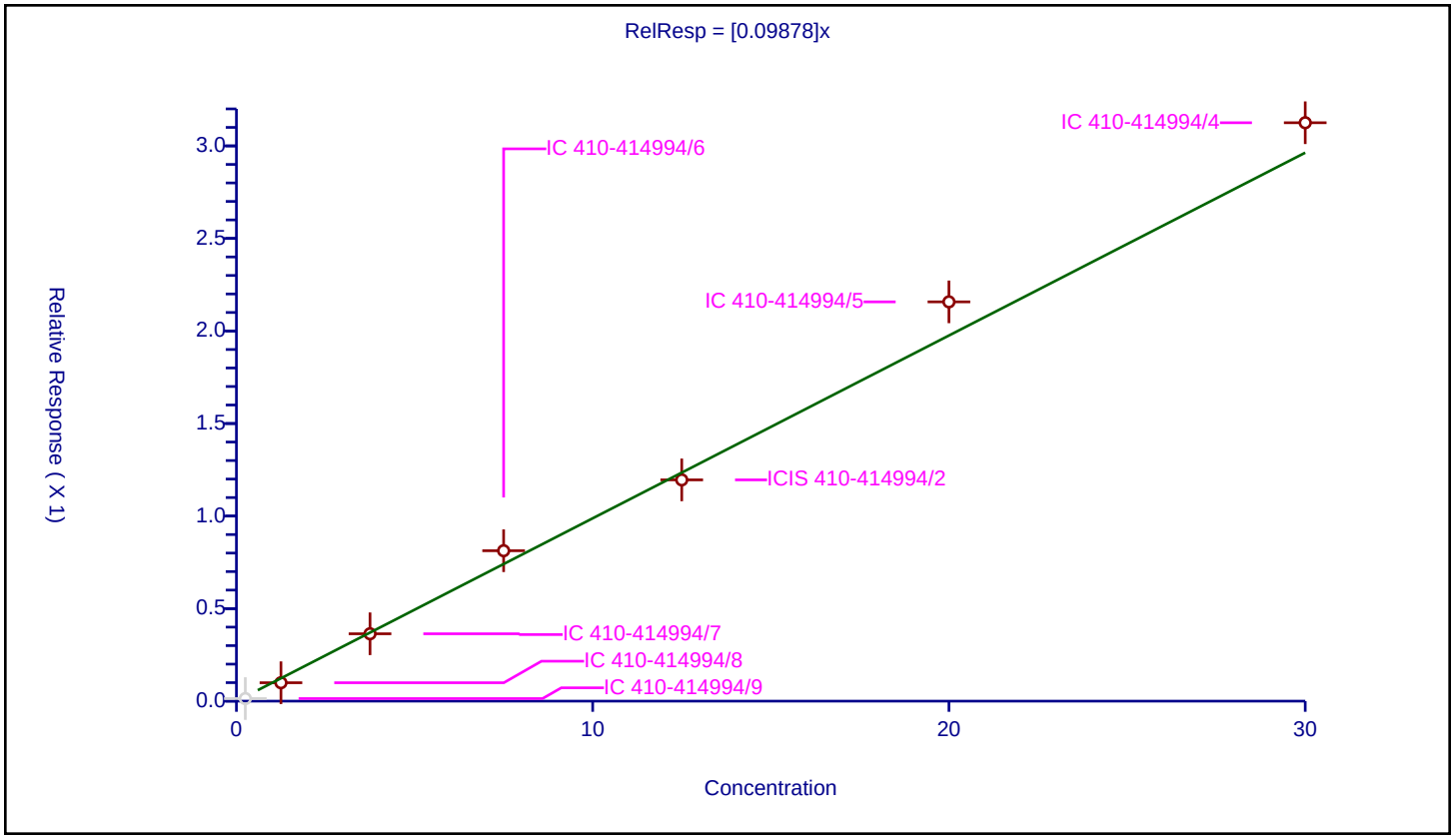
Curve Coefficients

Intercept:	0
Slope:	0.09878

Error Coefficients

Standard Error:	227000
Relative Standard Error:	11.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/9	0.25	0.01391	5.0	629061.0	0.055638	N
2	IC 410-414994/8	1.25	0.09945	5.0	740073.0	0.07956	Y
3	IC 410-414994/7	3.75	0.363988	5.0	551145.0	0.097063	Y
4	IC 410-414994/6	7.5	0.812684	5.0	740811.0	0.108358	Y
5	ICIS 410-414994/2	12.5	1.195465	5.0	666962.0	0.095637	Y
6	IC 410-414994/5	20.0	2.157336	5.0	612262.0	0.107867	Y
7	IC 410-414994/4	30.0	3.125181	5.0	611379.0	0.104173	Y



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Calibration / N-Nitrosodi-n-butylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

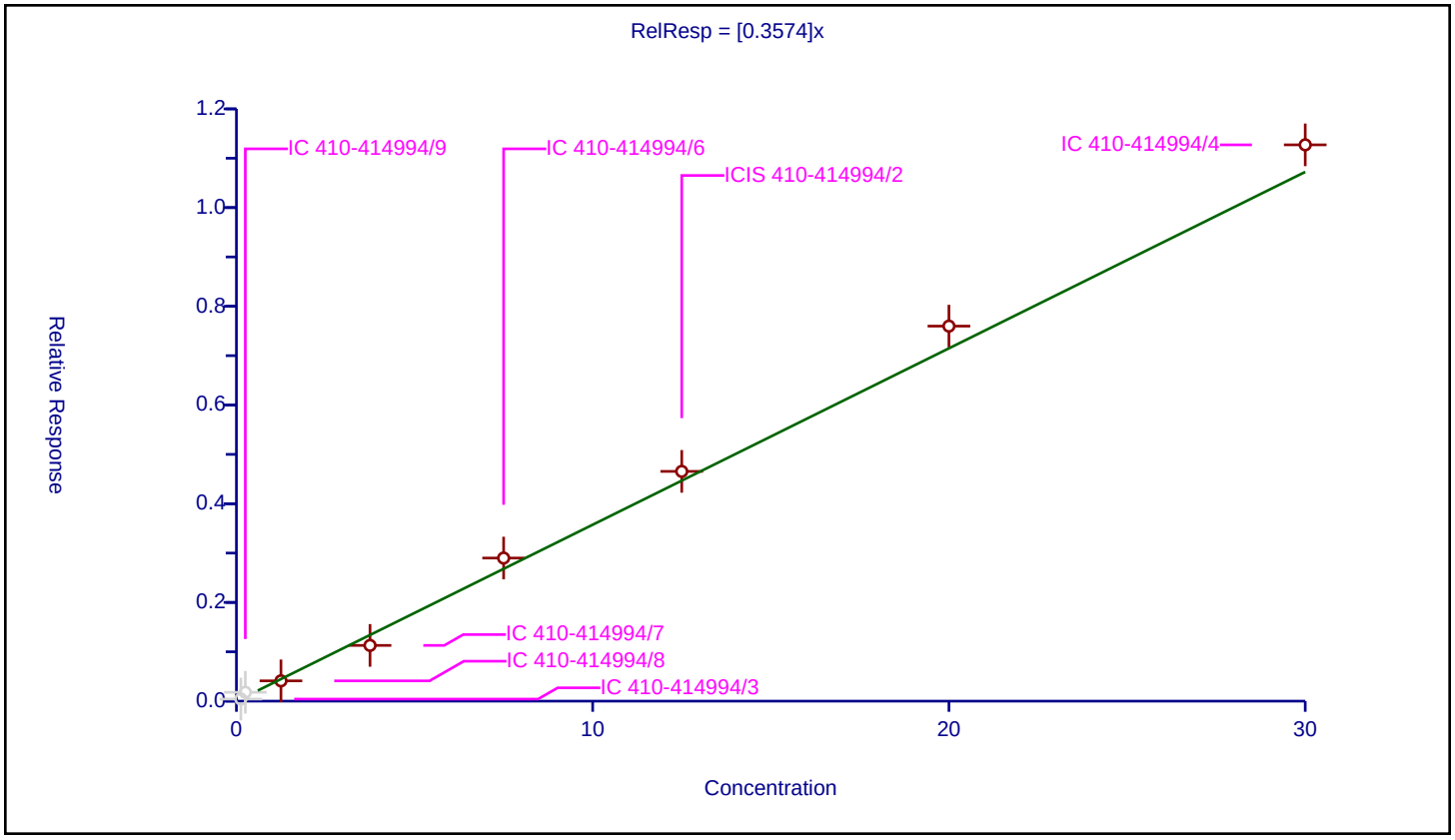
Curve Coefficients

Intercept:	0
Slope:	0.3574

Error Coefficients

Standard Error:	819000
Relative Standard Error:	9.6
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.04201	5.0	614734.0	0.33608	N
2	IC 410-414994/9	0.25	0.179402	5.0	629061.0	0.717609	N
3	IC 410-414994/8	1.25	0.411068	5.0	740073.0	0.328854	Y
4	IC 410-414994/7	3.75	1.129077	5.0	551145.0	0.301087	Y
5	IC 410-414994/6	7.5	2.899228	5.0	740811.0	0.386564	Y
6	ICIS 410-414994/2	12.5	4.65546	5.0	666962.0	0.372437	Y
7	IC 410-414994/5	20.0	7.598463	5.0	612262.0	0.379923	Y
8	IC 410-414994/4	30.0	11.271388	5.0	611379.0	0.375713	Y



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Calibration / p-Phenylene diamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

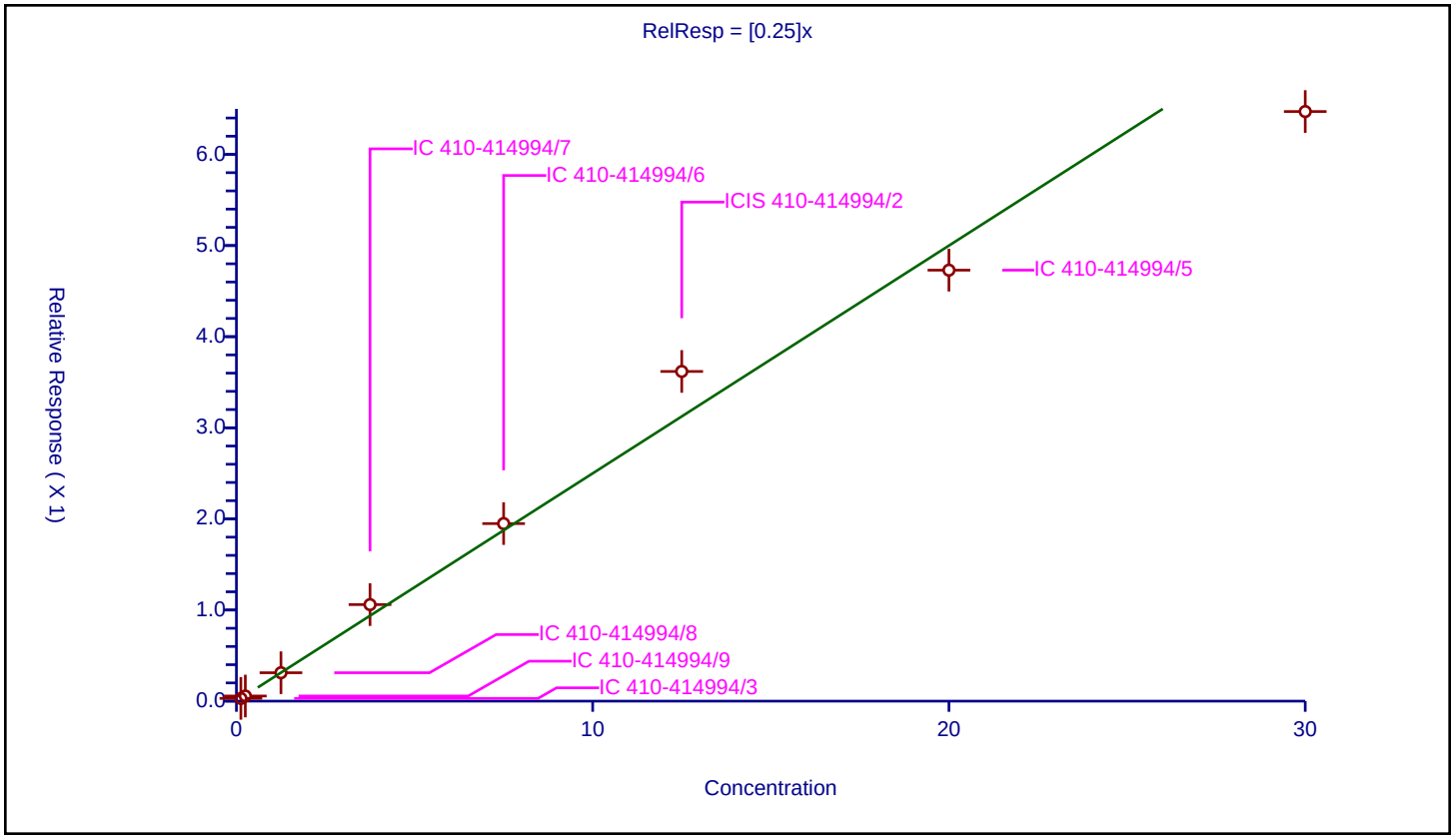
Curve Coefficients

Intercept:	0
Slope:	0.25

Error Coefficients

Standard Error:	430000
Relative Standard Error:	10.4
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.030184	5.0	614734.0	0.24147	Y
2	IC 410-414994/9	0.25	0.056219	5.0	629061.0	0.224875	Y
3	IC 410-414994/8	1.25	0.311807	5.0	740073.0	0.249446	Y
4	IC 410-414994/7	3.75	1.059367	5.0	551145.0	0.282498	Y
5	IC 410-414994/6	7.5	1.948736	5.0	740811.0	0.259831	Y
6	ICIS 410-414994/2	12.5	3.618512	5.0	666962.0	0.289481	Y
7	IC 410-414994/5	20.0	4.730001	5.0	612262.0	0.2365	Y
8	IC 410-414994/4	30.0	6.471043	5.0	611379.0	0.215701	Y



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Calibration / 4-Chloro-3-methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

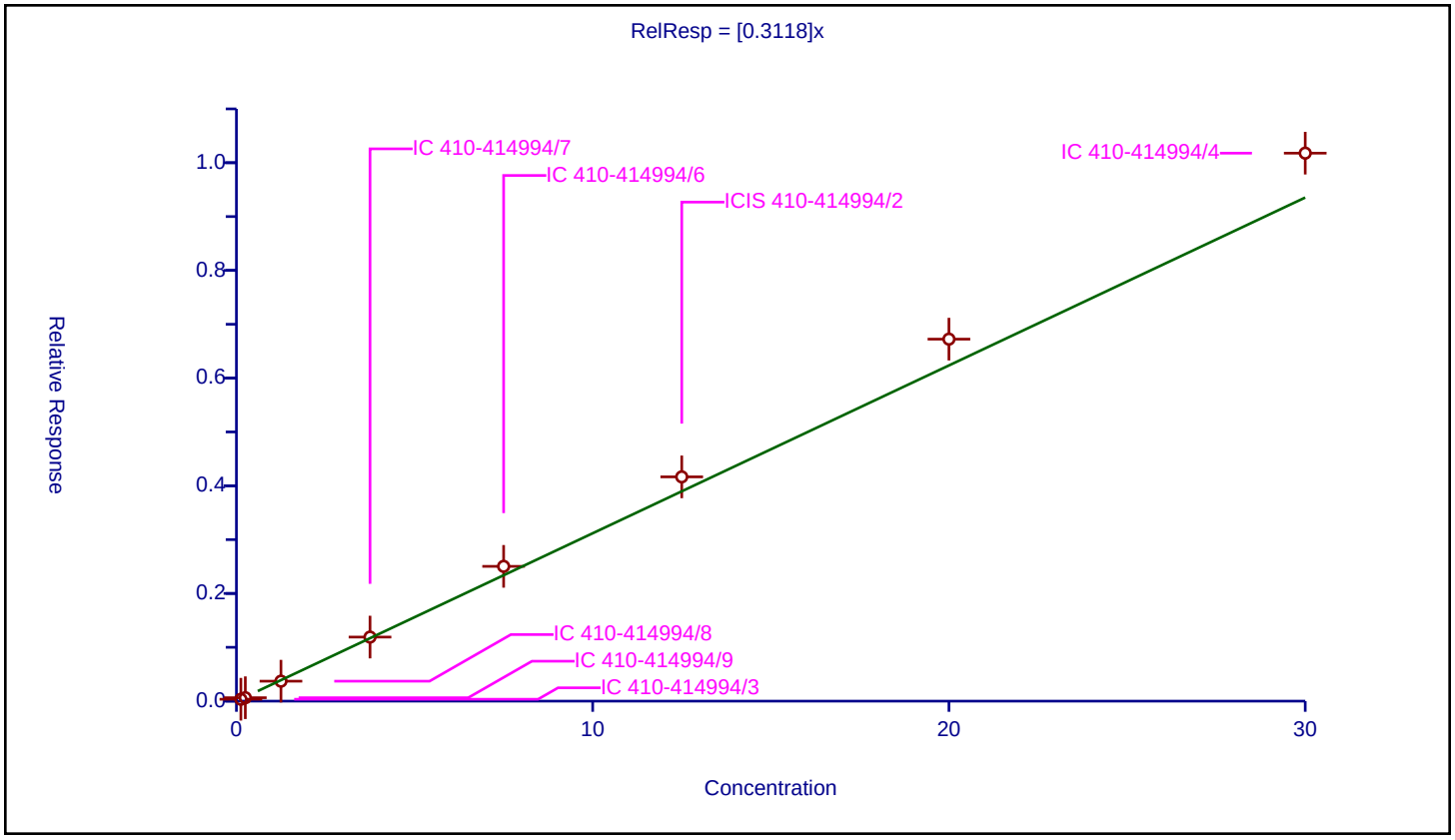
Curve Coefficients

Intercept:	0
Slope:	0.3118

Error Coefficients

Standard Error:	620000
Relative Standard Error:	9.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.035495	5.0	614734.0	0.28396	Y
2	IC 410-414994/9	0.25	0.063499	5.0	629061.0	0.253998	Y
3	IC 410-414994/8	1.25	0.370538	5.0	740073.0	0.29643	Y
4	IC 410-414994/7	3.75	1.189823	5.0	551145.0	0.317286	Y
5	IC 410-414994/6	7.5	2.503412	5.0	740811.0	0.333788	Y
6	ICIS 410-414994/2	12.5	4.165582	5.0	666962.0	0.333247	Y
7	IC 410-414994/5	20.0	6.723658	5.0	612262.0	0.336183	Y
8	IC 410-414994/4	30.0	10.177999	5.0	611379.0	0.339267	Y



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Calibration / Safrole, Total

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

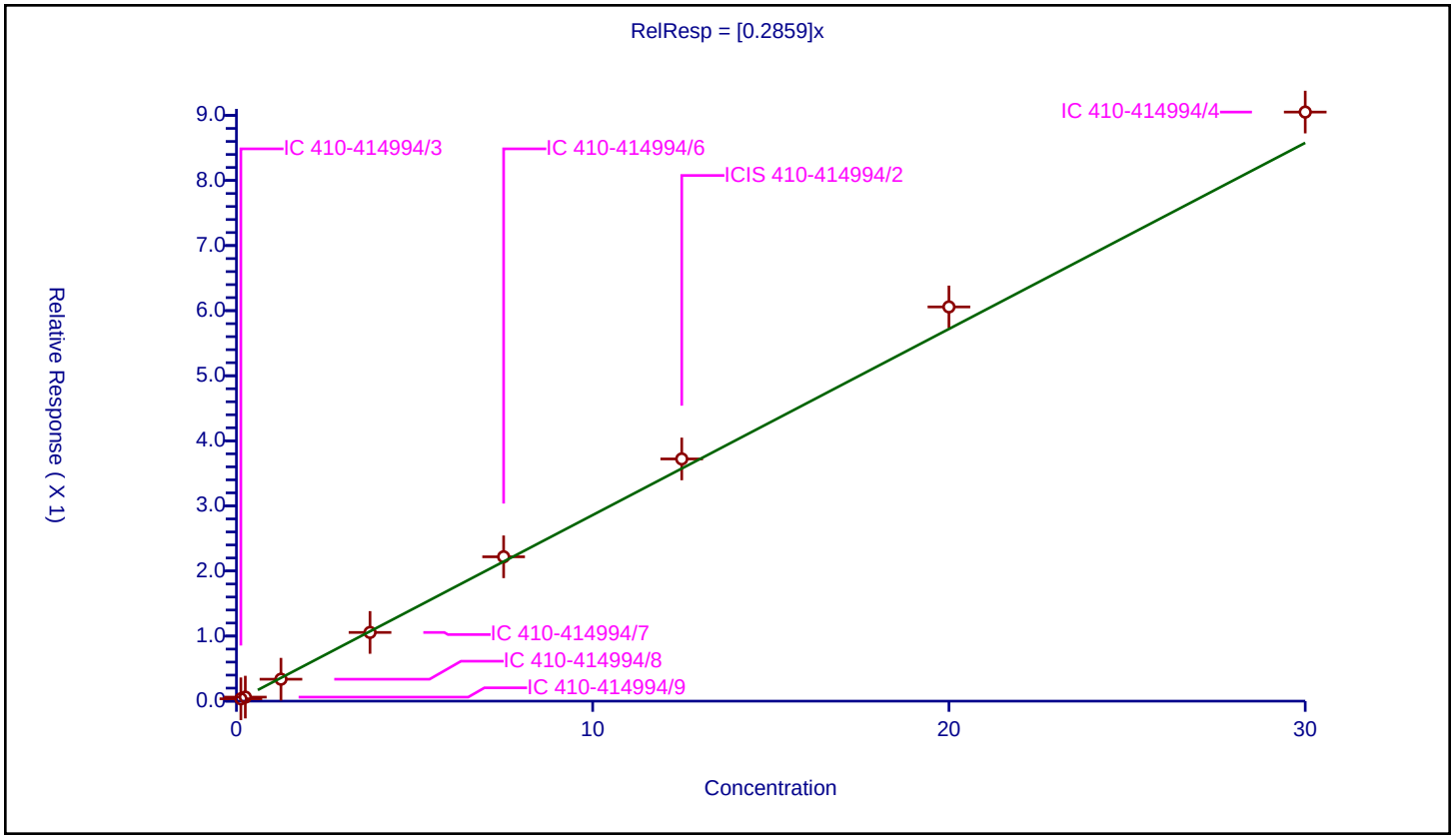
Curve Coefficients

Intercept:	0
Slope:	0.2859

Error Coefficients

Standard Error:	554000
Relative Standard Error:	6.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.036268	5.0	614734.0	0.290142	Y
2	IC 410-414994/9	0.25	0.062053	5.0	629061.0	0.248211	Y
3	IC 410-414994/8	1.25	0.337028	5.0	740073.0	0.269622	Y
4	IC 410-414994/7	3.75	1.055648	5.0	551145.0	0.281506	Y
5	IC 410-414994/6	7.5	2.217846	5.0	740811.0	0.295713	Y
6	ICIS 410-414994/2	12.5	3.721209	5.0	666962.0	0.297697	Y
7	IC 410-414994/5	20.0	6.057472	5.0	612262.0	0.302874	Y
8	IC 410-414994/4	30.0	9.051251	5.0	611379.0	0.301708	Y



Calibration / 2-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

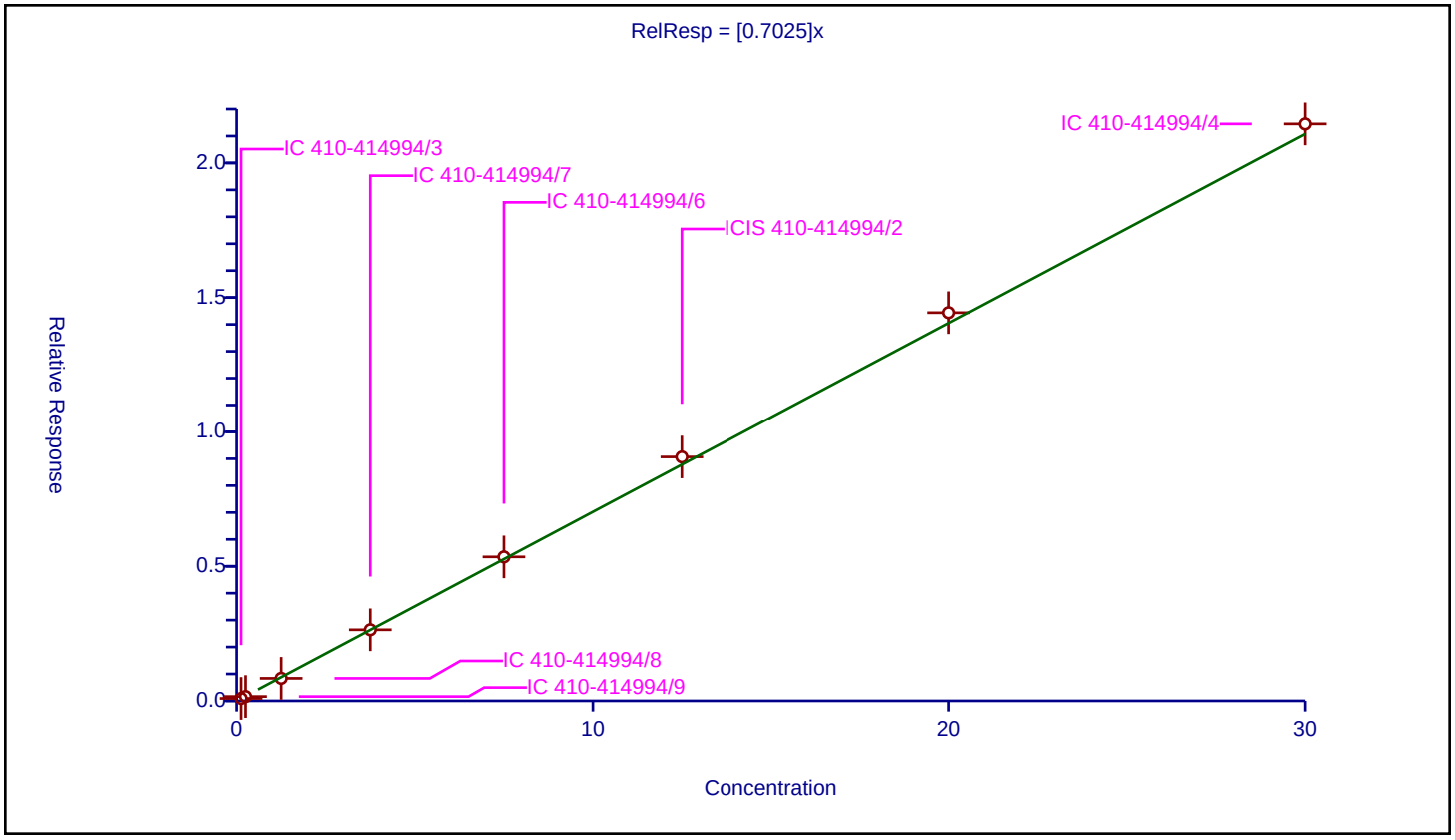
Curve Coefficients

Intercept:	0
Slope:	0.7025

Error Coefficients

Standard Error:	1320000
Relative Standard Error:	4.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.090942	5.0	614734.0	0.727534	Y
2	IC 410-414994/9	0.25	0.161097	5.0	629061.0	0.644389	Y
3	IC 410-414994/8	1.25	0.836073	5.0	740073.0	0.668858	Y
4	IC 410-414994/7	3.75	2.640267	5.0	551145.0	0.704071	Y
5	IC 410-414994/6	7.5	5.349934	5.0	740811.0	0.713325	Y
6	ICIS 410-414994/2	12.5	9.066731	5.0	666962.0	0.725338	Y
7	IC 410-414994/5	20.0	14.437202	5.0	612262.0	0.72186	Y
8	IC 410-414994/4	30.0	21.449543	5.0	611379.0	0.714985	Y



Calibration / 1-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

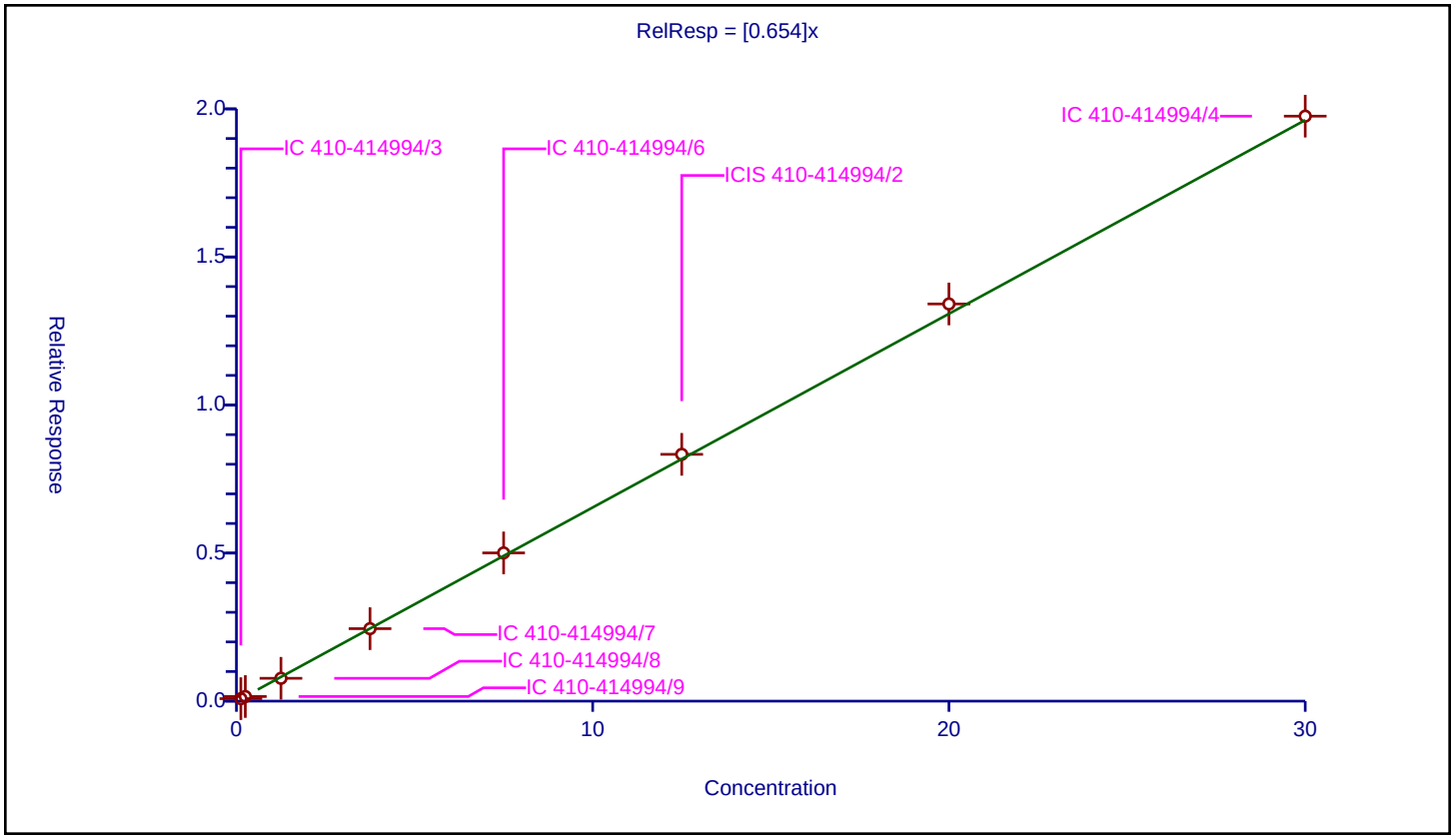
Curve Coefficients

Intercept:	0
Slope:	0.654

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	3.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.084313	5.0	614734.0	0.674503	Y
2	IC 410-414994/9	0.25	0.156281	5.0	629061.0	0.625122	Y
3	IC 410-414994/8	1.25	0.770816	5.0	740073.0	0.616653	Y
4	IC 410-414994/7	3.75	2.447623	5.0	551145.0	0.652699	Y
5	IC 410-414994/6	7.5	5.00602	5.0	740811.0	0.667469	Y
6	ICIS 410-414994/2	12.5	8.33429	5.0	666962.0	0.666743	Y
7	IC 410-414994/5	20.0	13.412216	5.0	612262.0	0.670611	Y
8	IC 410-414994/4	30.0	19.754334	5.0	611379.0	0.658478	Y



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Calibration / Hexachlorocyclopentadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

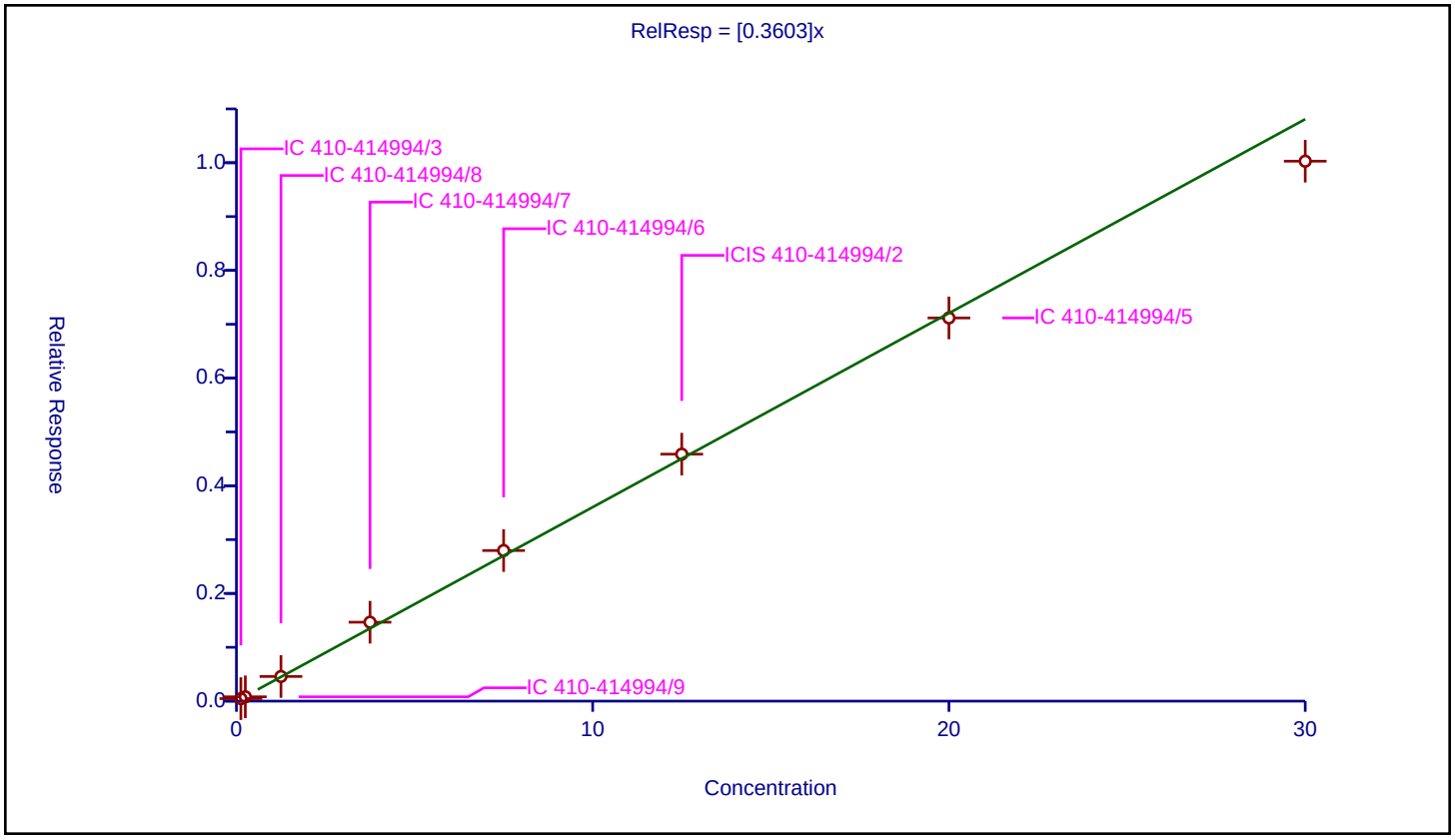
Curve Coefficients

Intercept:	0
Slope:	0.3603

Error Coefficients

Standard Error:	376000
Relative Standard Error:	6.3
Correlation Coefficient:	0.986
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.046802	5.0	348171.0	0.374414	Y
2	IC 410-414994/9	0.25	0.080167	5.0	357751.0	0.32067	Y
3	IC 410-414994/8	1.25	0.457704	5.0	423789.0	0.366163	Y
4	IC 410-414994/7	3.75	1.465965	5.0	322784.0	0.390924	Y
5	IC 410-414994/6	7.5	2.797384	5.0	450646.0	0.372985	Y
6	ICIS 410-414994/2	12.5	4.587316	5.0	402427.0	0.366985	Y
7	IC 410-414994/5	20.0	7.11732	5.0	360732.0	0.355866	Y
8	IC 410-414994/4	30.0	10.029047	5.0	358556.0	0.334302	Y



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Calibration / 1,2,4,5-Tetrachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

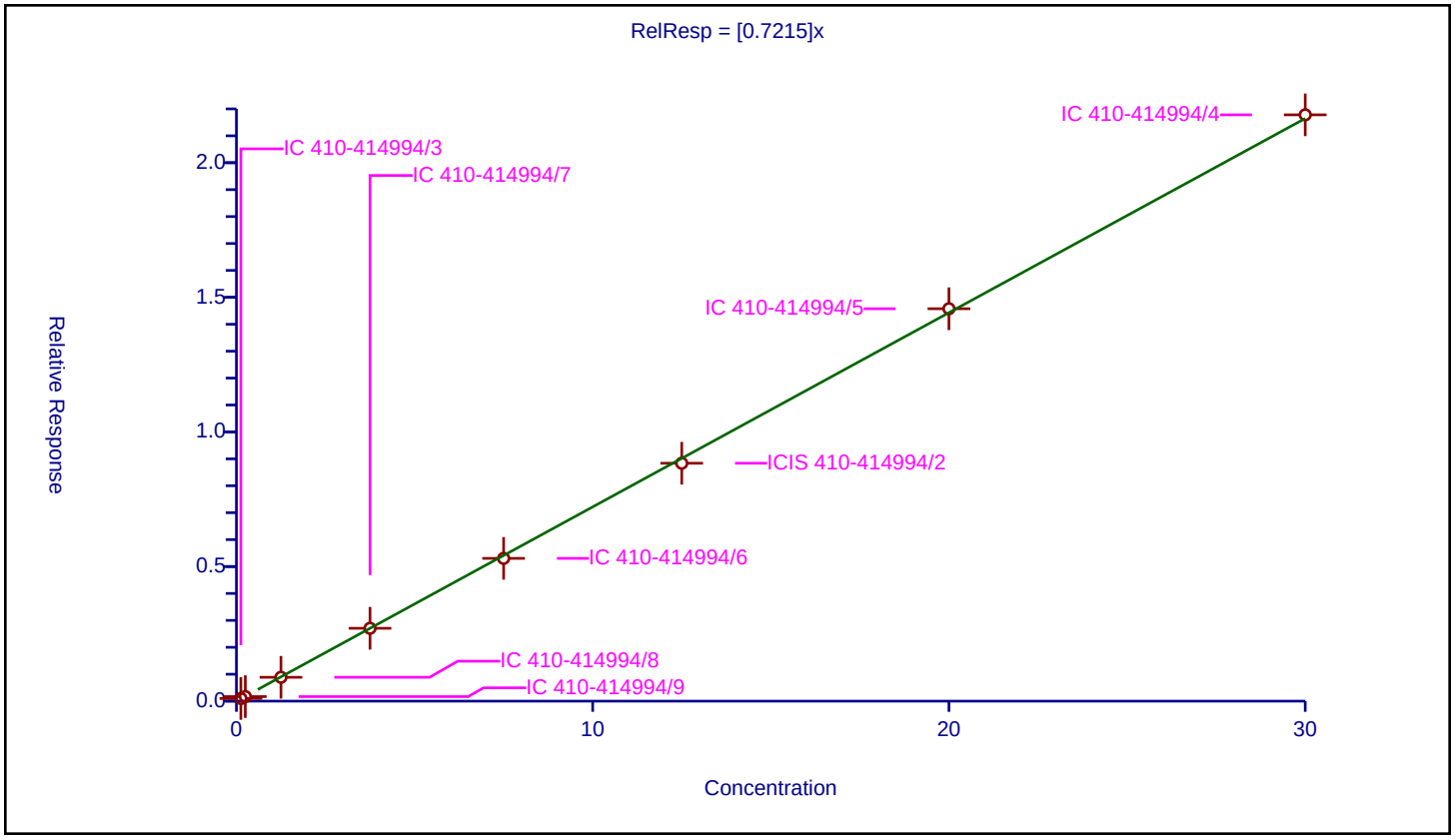
Curve Coefficients

Intercept:	0
Slope:	0.7215

Error Coefficients

Standard Error:	785000
Relative Standard Error:	4.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.099692	5.0	348171.0	0.797539	Y
2	IC 410-414994/9	0.25	0.16886	5.0	357751.0	0.675442	Y
3	IC 410-414994/8	1.25	0.885629	5.0	423789.0	0.708504	Y
4	IC 410-414994/7	3.75	2.70616	5.0	322784.0	0.721643	Y
5	IC 410-414994/6	7.5	5.303054	5.0	450646.0	0.707074	Y
6	ICIS 410-414994/2	12.5	8.83733	5.0	402427.0	0.706986	Y
7	IC 410-414994/5	20.0	14.577054	5.0	360732.0	0.728853	Y
8	IC 410-414994/4	30.0	21.779345	5.0	358556.0	0.725978	Y



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Calibration / Isosafrole Peak 1

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

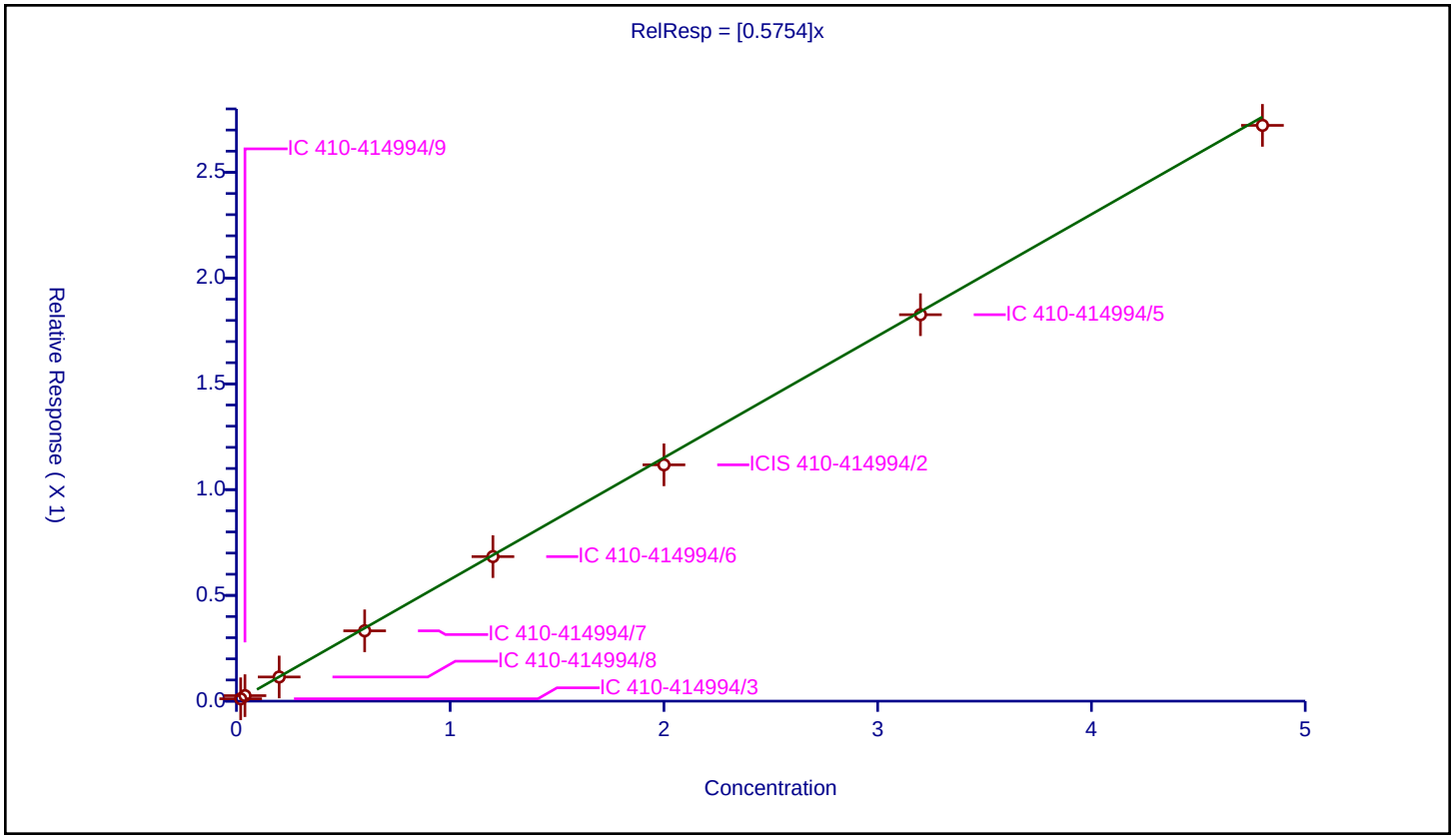
Curve Coefficients

Intercept:	0
Slope:	0.5754

Error Coefficients

Standard Error:	98500
Relative Standard Error:	5.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.02	0.011244	5.0	348171.0	0.562224	Y
2	IC 410-414994/9	0.04	0.025996	5.0	357751.0	0.649893	Y
3	IC 410-414994/8	0.2	0.11422	5.0	423789.0	0.571098	Y
4	IC 410-414994/7	0.6	0.332529	5.0	322784.0	0.554215	Y
5	IC 410-414994/6	1.2	0.683275	5.0	450646.0	0.569396	Y
6	ICIS 410-414994/2	2.0	1.117172	5.0	402427.0	0.558586	Y
7	IC 410-414994/5	3.2	1.827007	5.0	360732.0	0.57094	Y
8	IC 410-414994/4	4.8	2.722113	5.0	358556.0	0.567107	Y



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Calibration / 2,4,6-Trichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

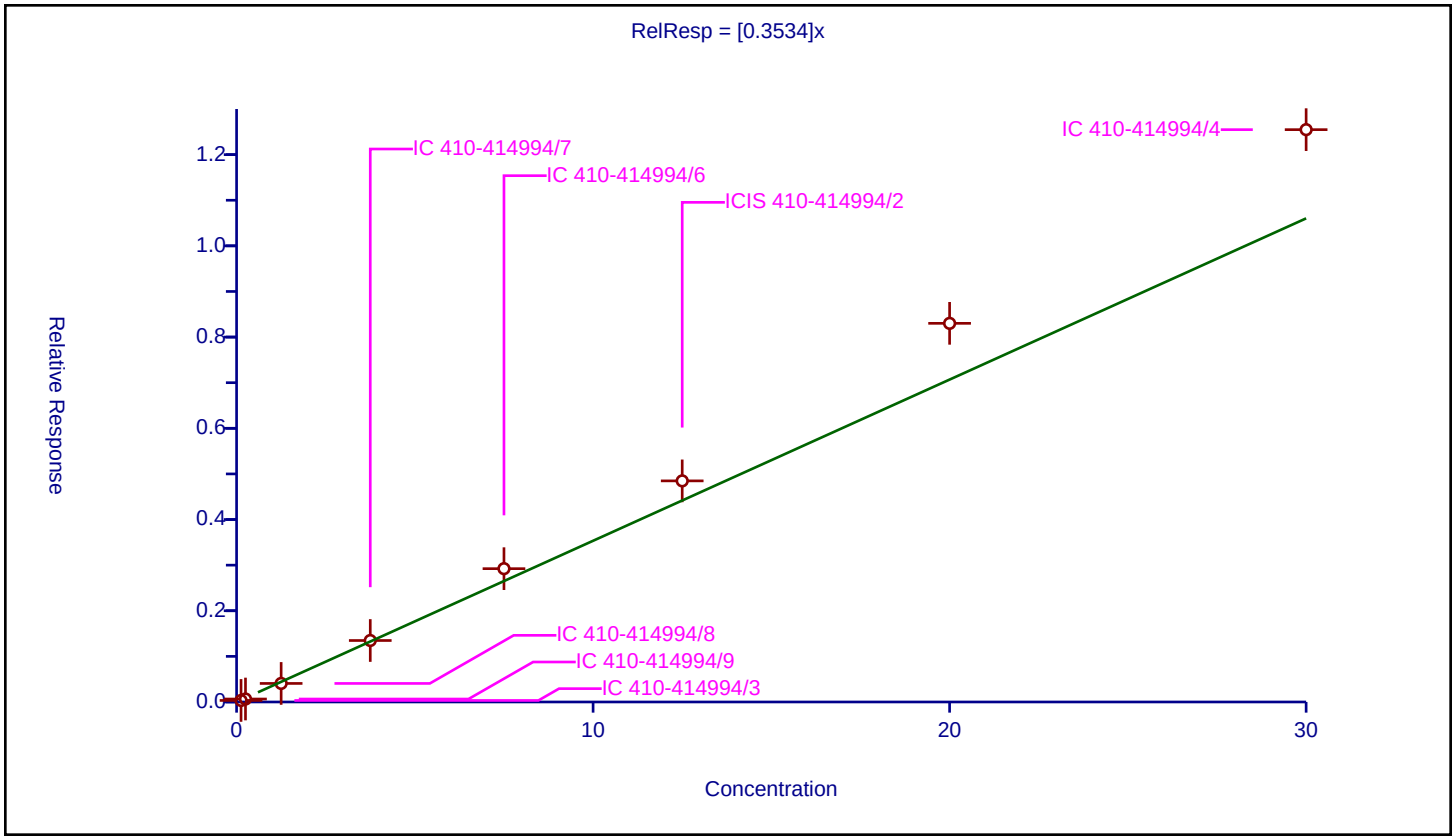
Curve Coefficients

Intercept:	0
Slope:	0.3534

Error Coefficients

Standard Error:	447000
Relative Standard Error:	17.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.033848	5.0	348171.0	0.270786	Y
2	IC 410-414994/9	0.25	0.065227	5.0	357751.0	0.260908	Y
3	IC 410-414994/8	1.25	0.406653	5.0	423789.0	0.325322	Y
4	IC 410-414994/7	3.75	1.347976	5.0	322784.0	0.35946	Y
5	IC 410-414994/6	7.5	2.922826	5.0	450646.0	0.38971	Y
6	ICIS 410-414994/2	12.5	4.847239	5.0	402427.0	0.387779	Y
7	IC 410-414994/5	20.0	8.301079	5.0	360732.0	0.415054	Y
8	IC 410-414994/4	30.0	12.547705	5.0	358556.0	0.418257	Y



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Calibration / 2,4,5-Trichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

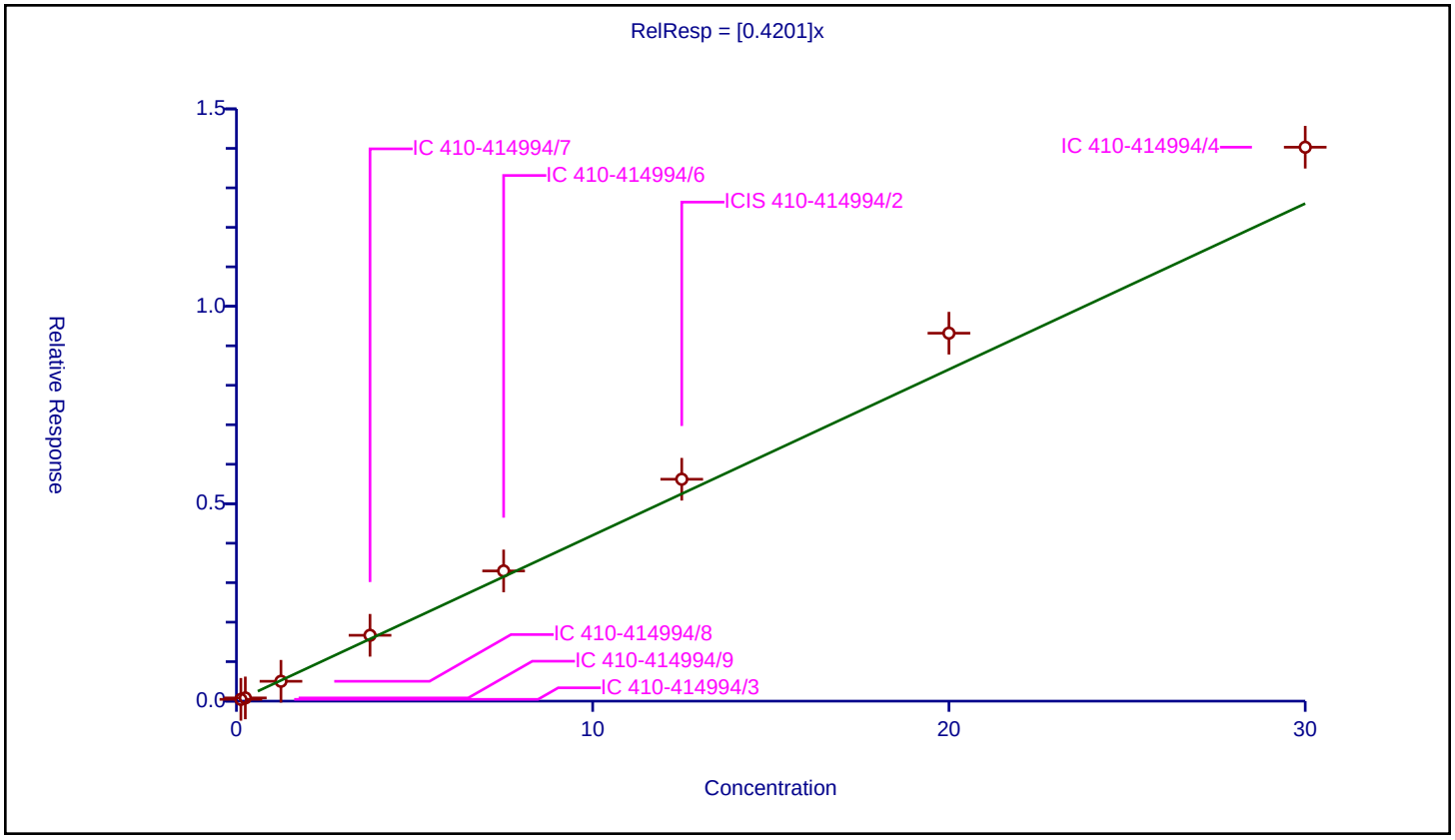
Curve Coefficients

Intercept:	0
Slope:	0.4201

Error Coefficients

Standard Error:	503000
Relative Standard Error:	12.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.045638	5.0	348171.0	0.365108	Y
2	IC 410-414994/9	0.25	0.081328	5.0	357751.0	0.32531	Y
3	IC 410-414994/8	1.25	0.503187	5.0	423789.0	0.402549	Y
4	IC 410-414994/7	3.75	1.667927	5.0	322784.0	0.44478	Y
5	IC 410-414994/6	7.5	3.297477	5.0	450646.0	0.439664	Y
6	ICIS 410-414994/2	12.5	5.620311	5.0	402427.0	0.449625	Y
7	IC 410-414994/5	20.0	9.319786	5.0	360732.0	0.465989	Y
8	IC 410-414994/4	30.0	14.029259	5.0	358556.0	0.467642	Y



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Calibration / 2-Fluorobiphenyl (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

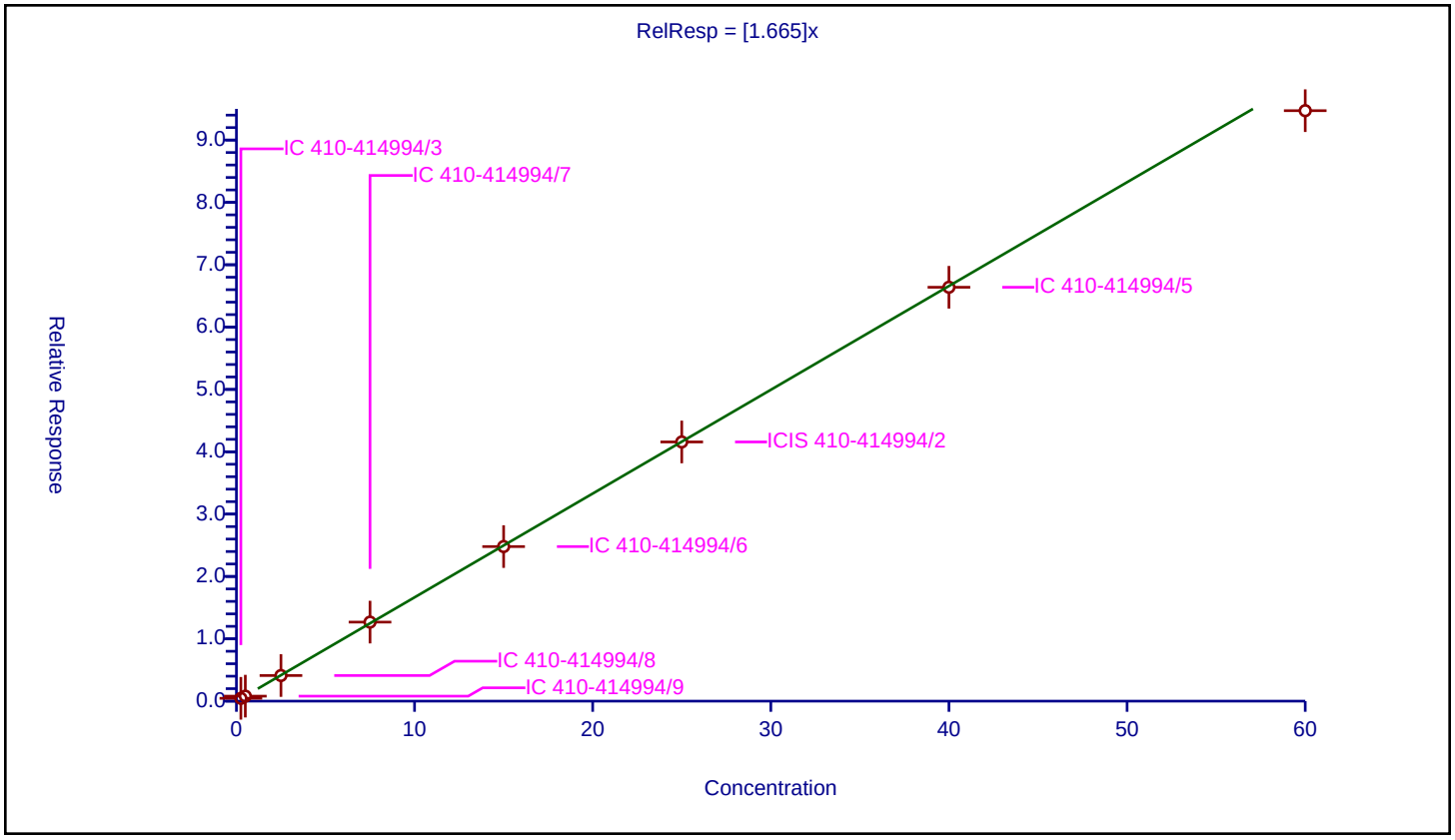
Curve Coefficients

Intercept:	0
Slope:	1.665

Error Coefficients

Standard Error:	3510000
Relative Standard Error:	4.4
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.25	0.456399	5.0	348171.0	1.825597	Y
2	IC 410-414994/9	0.5	0.801759	5.0	357751.0	1.603518	Y
3	IC 410-414994/8	2.5	4.109286	5.0	423789.0	1.643714	Y
4	IC 410-414994/7	7.5	12.677379	5.0	322784.0	1.690317	Y
5	IC 410-414994/6	15.0	24.795482	5.0	450646.0	1.653032	Y
6	ICIS 410-414994/2	25.0	41.576584	5.0	402427.0	1.663063	Y
7	IC 410-414994/5	40.0	66.390589	5.0	360732.0	1.659765	Y
8	IC 410-414994/4	60.0	94.712374	5.0	358556.0	1.57854	Y



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Calibration / Isosafrole Peak 2

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

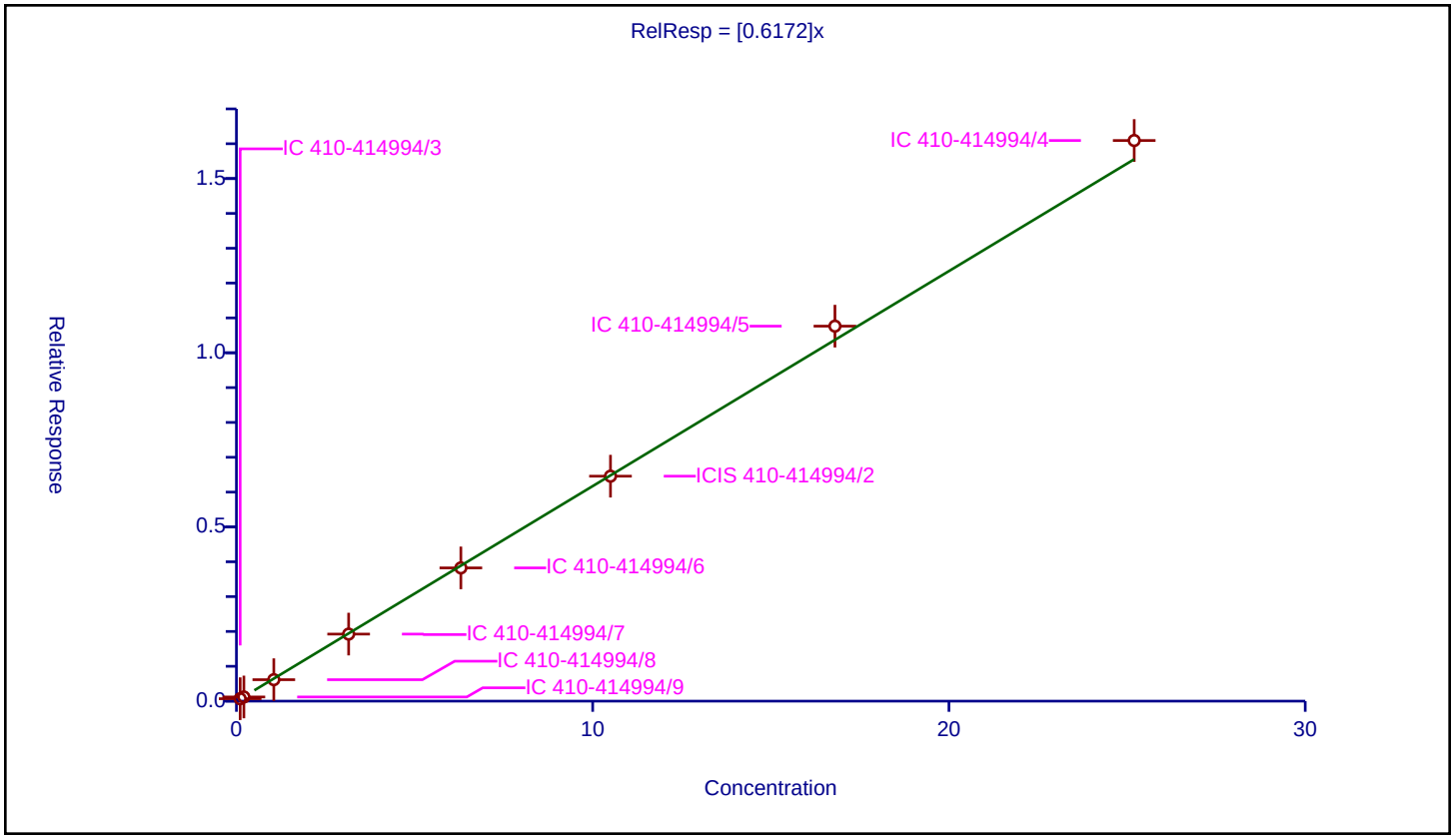
Curve Coefficients

Intercept:	0
Slope:	0.6172

Error Coefficients

Standard Error:	578000
Relative Standard Error:	5.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.105	0.070052	5.0	348171.0	0.66716	Y
2	IC 410-414994/9	0.21	0.120014	5.0	357751.0	0.571494	Y
3	IC 410-414994/8	1.05	0.616061	5.0	423789.0	0.586725	Y
4	IC 410-414994/7	3.15	1.924739	5.0	322784.0	0.611028	Y
5	IC 410-414994/6	6.3	3.824521	5.0	450646.0	0.607067	Y
6	ICIS 410-414994/2	10.5	6.457084	5.0	402427.0	0.61496	Y
7	IC 410-414994/5	16.8	10.764196	5.0	360732.0	0.640726	Y
8	IC 410-414994/4	25.2	16.09234	5.0	358556.0	0.638585	Y



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Calibration / 1,1'-Biphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

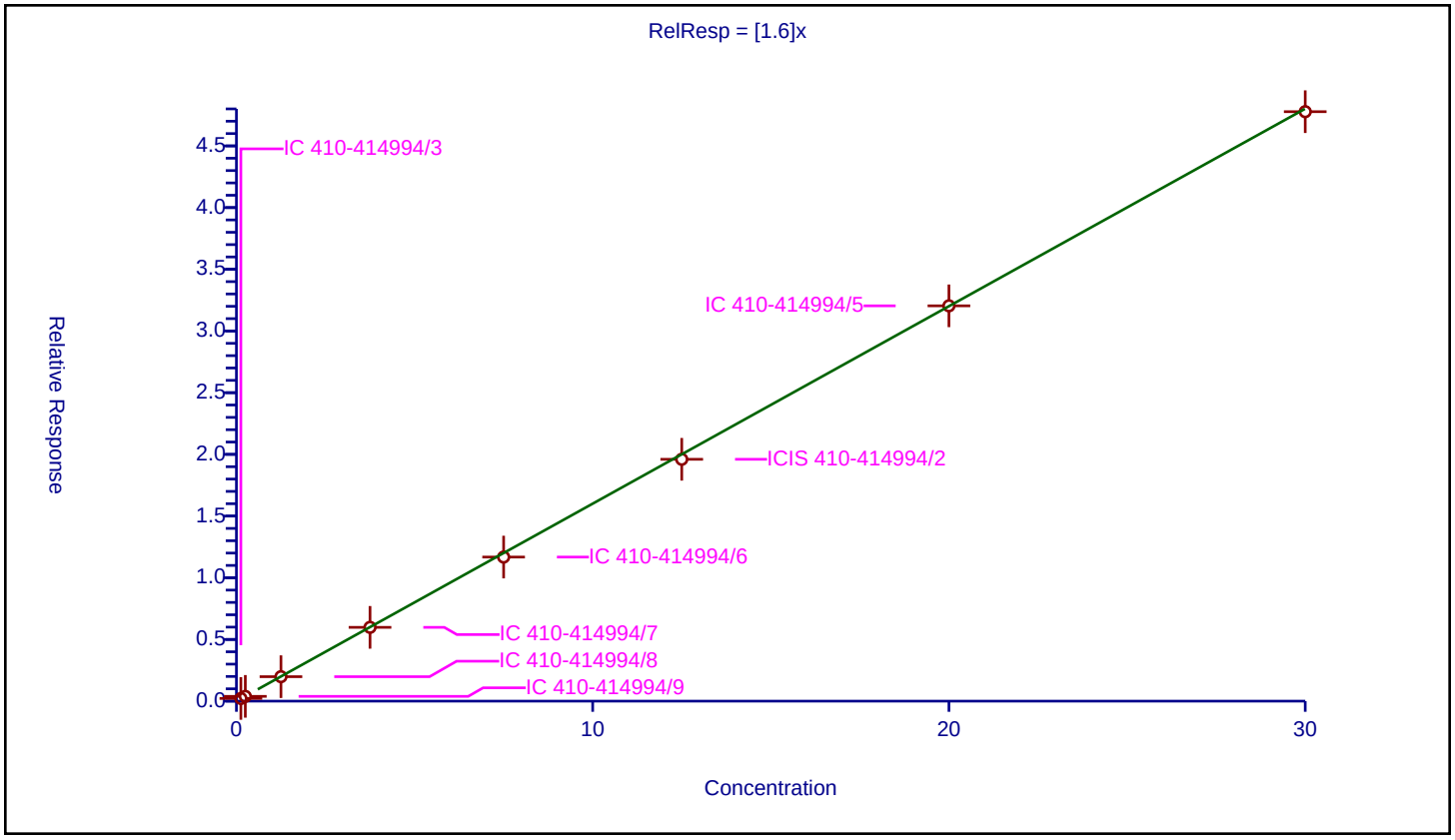
Curve Coefficients

Intercept:	0
Slope:	1.6

Error Coefficients

Standard Error:	1730000
Relative Standard Error:	4.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.219145	5.0	348171.0	1.753162	Y
2	IC 410-414994/9	0.25	0.387392	5.0	357751.0	1.549569	Y
3	IC 410-414994/8	1.25	1.982744	5.0	423789.0	1.586195	Y
4	IC 410-414994/7	3.75	5.98095	5.0	322784.0	1.59492	Y
5	IC 410-414994/6	7.5	11.678047	5.0	450646.0	1.557073	Y
6	ICIS 410-414994/2	12.5	19.601903	5.0	402427.0	1.568152	Y
7	IC 410-414994/5	20.0	32.03952	5.0	360732.0	1.601976	Y
8	IC 410-414994/4	30.0	47.774239	5.0	358556.0	1.592475	Y



Calibration / 2-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

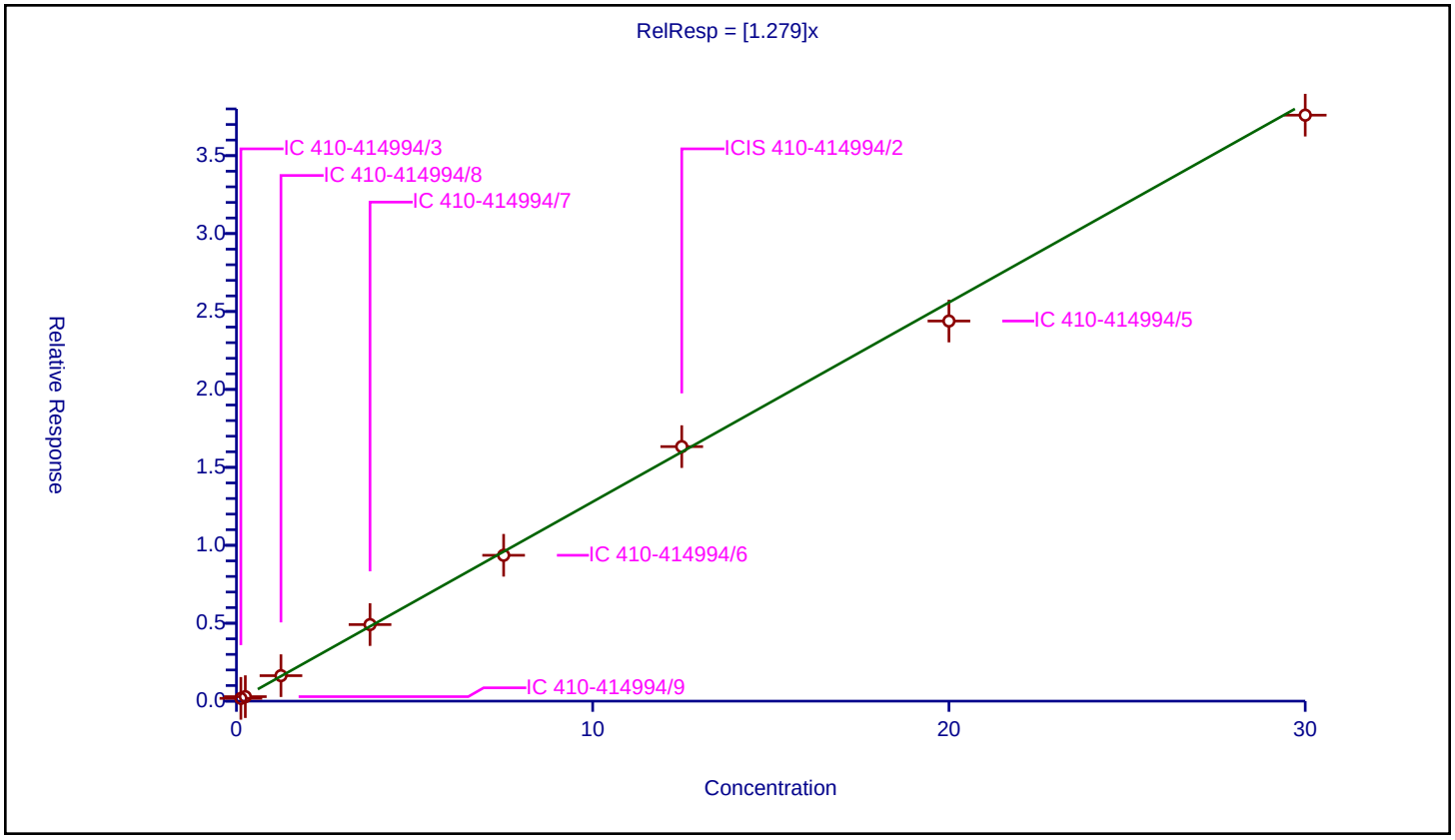
Curve Coefficients

Intercept:	0
Slope:	1.279

Error Coefficients

Standard Error:	1360000
Relative Standard Error:	6.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.179409	5.0	348171.0	1.435272	Y
2	IC 410-414994/9	0.25	0.287826	5.0	357751.0	1.151304	Y
3	IC 410-414994/8	1.25	1.635354	5.0	423789.0	1.308283	Y
4	IC 410-414994/7	3.75	4.912728	5.0	322784.0	1.310061	Y
5	IC 410-414994/6	7.5	9.358798	5.0	450646.0	1.24784	Y
6	ICIS 410-414994/2	12.5	16.331521	5.0	402427.0	1.306522	Y
7	IC 410-414994/5	20.0	24.38866	5.0	360732.0	1.219433	Y
8	IC 410-414994/4	30.0	37.59852	5.0	358556.0	1.253284	Y



Calibration / 1-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

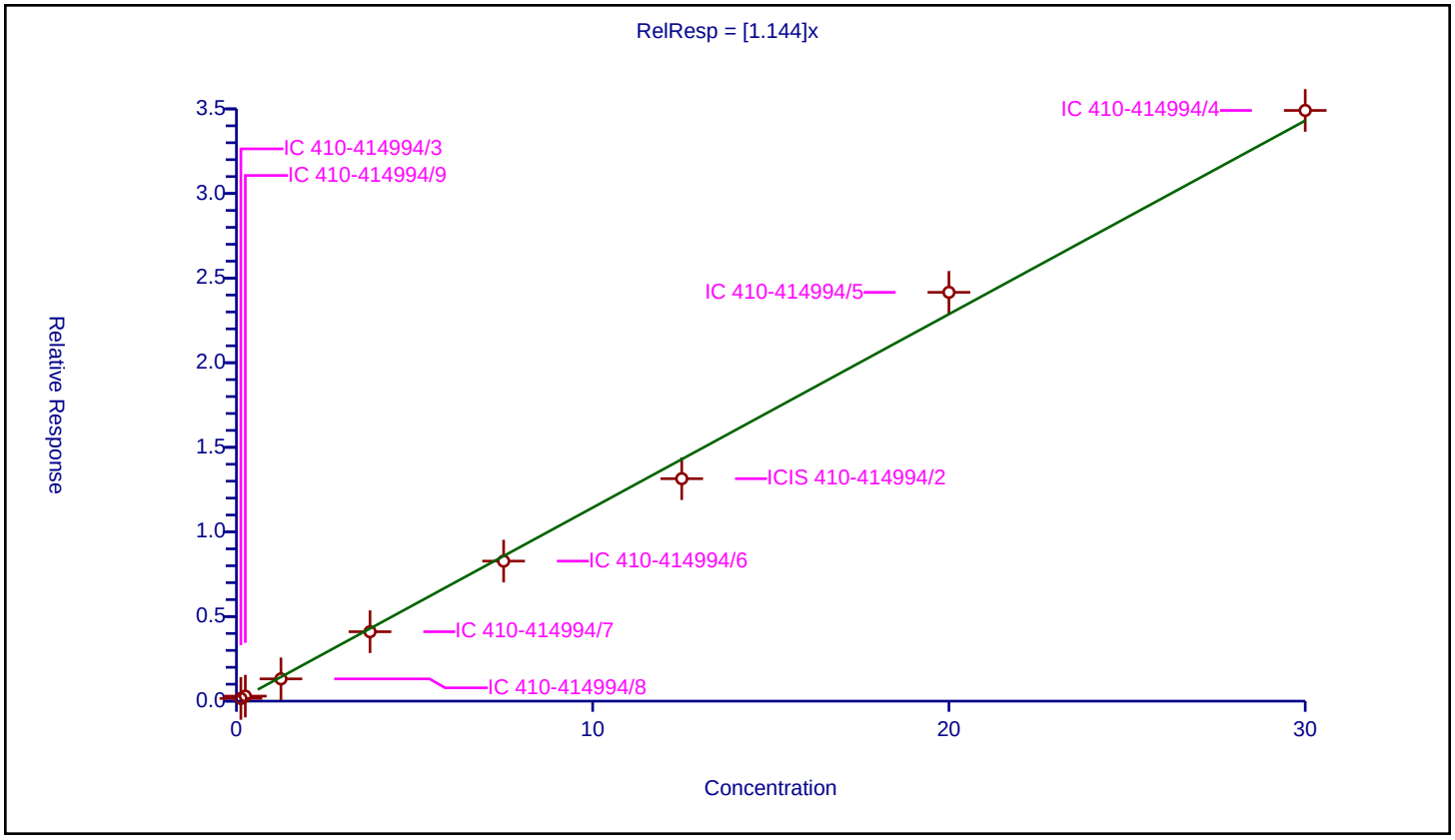
Curve Coefficients

Intercept:	0
Slope:	1.144

Error Coefficients

Standard Error:	1260000
Relative Standard Error:	7.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.160783	5.0	348171.0	1.286265	Y
2	IC 410-414994/9	0.25	0.297232	5.0	357751.0	1.188927	Y
3	IC 410-414994/8	1.25	1.315018	5.0	423789.0	1.052014	Y
4	IC 410-414994/7	3.75	4.103317	5.0	322784.0	1.094218	Y
5	IC 410-414994/6	7.5	8.275642	5.0	450646.0	1.103419	Y
6	ICIS 410-414994/2	12.5	13.146198	5.0	402427.0	1.051696	Y
7	IC 410-414994/5	20.0	24.159833	5.0	360732.0	1.207992	Y
8	IC 410-414994/4	30.0	34.908424	5.0	358556.0	1.163614	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

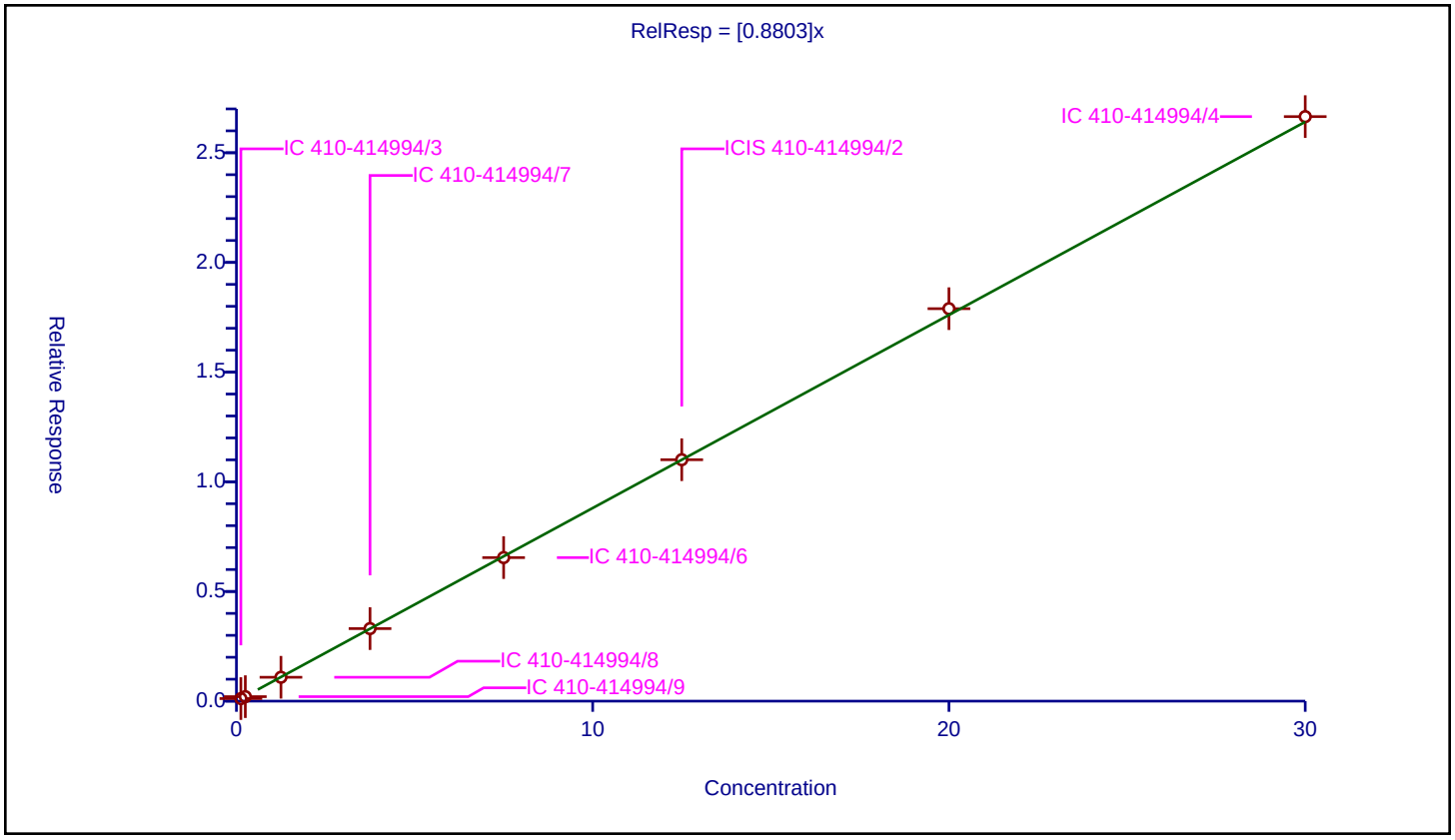
Curve Coefficients

Intercept:	0
Slope:	0.8803

Error Coefficients

Standard Error:	964000
Relative Standard Error:	3.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.116854	5.0	348171.0	0.934828	Y
2	IC 410-414994/9	0.25	0.20464	5.0	357751.0	0.818558	Y
3	IC 410-414994/8	1.25	1.08869	5.0	423789.0	0.870952	Y
4	IC 410-414994/7	3.75	3.307336	5.0	322784.0	0.881956	Y
5	IC 410-414994/6	7.5	6.543684	5.0	450646.0	0.872491	Y
6	ICIS 410-414994/2	12.5	11.006704	5.0	402427.0	0.880536	Y
7	IC 410-414994/5	20.0	17.892702	5.0	360732.0	0.894635	Y
8	IC 410-414994/4	30.0	26.647985	5.0	358556.0	0.888266	Y



Calibration / 2-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

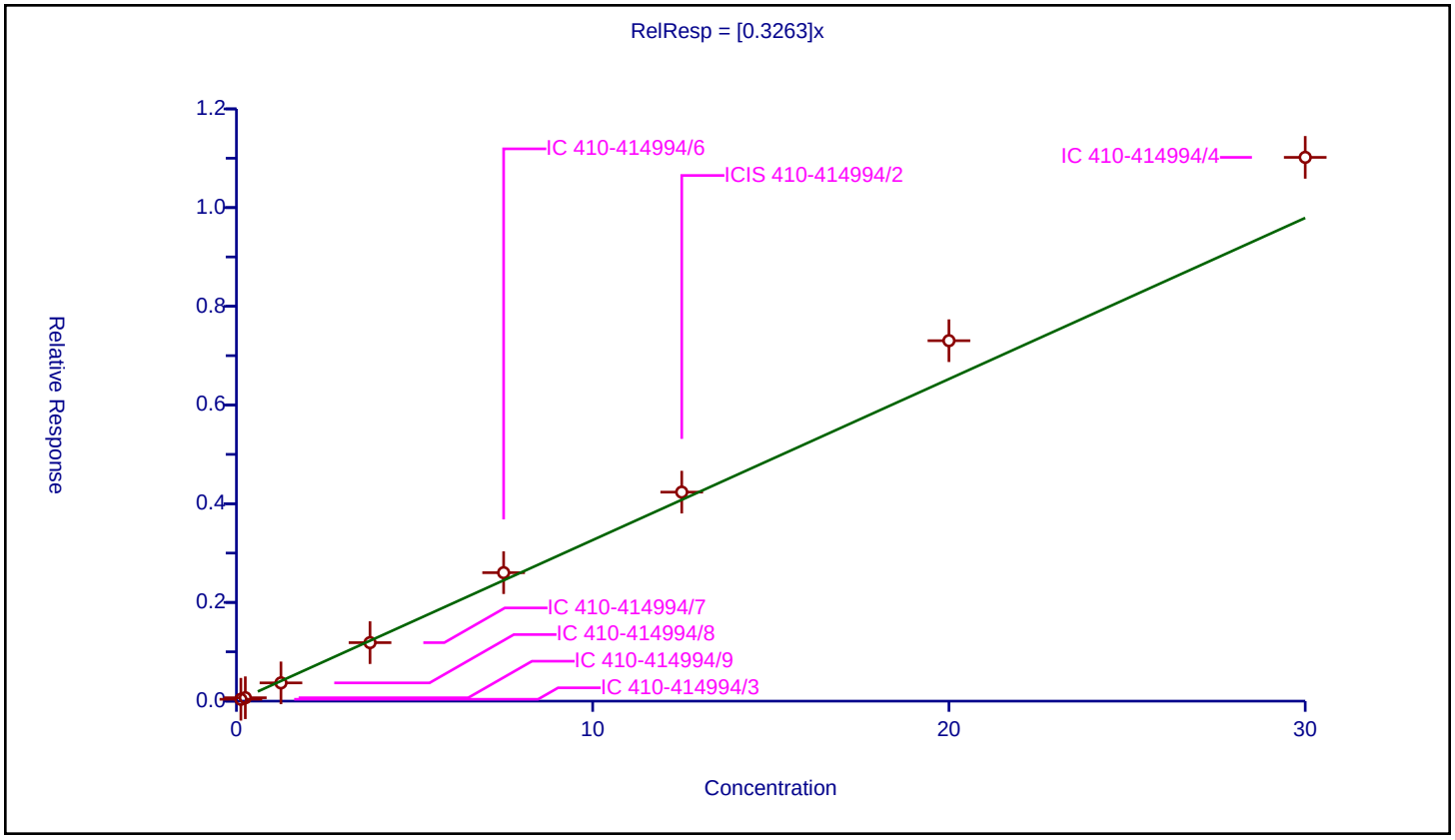
Curve Coefficients

Intercept:	0
Slope:	0.3263

Error Coefficients

Standard Error:	393000
Relative Standard Error:	10.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.038085	5.0	348171.0	0.304678	Y
2	IC 410-414994/9	0.25	0.068959	5.0	357751.0	0.275834	Y
3	IC 410-414994/8	1.25	0.369736	5.0	423789.0	0.295789	Y
4	IC 410-414994/7	3.75	1.185592	5.0	322784.0	0.316158	Y
5	IC 410-414994/6	7.5	2.603241	5.0	450646.0	0.347099	Y
6	ICIS 410-414994/2	12.5	4.234954	5.0	402427.0	0.338796	Y
7	IC 410-414994/5	20.0	7.303441	5.0	360732.0	0.365172	Y
8	IC 410-414994/4	30.0	11.017986	5.0	358556.0	0.367266	Y



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Calibration / 1,4-Naphthoquinone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

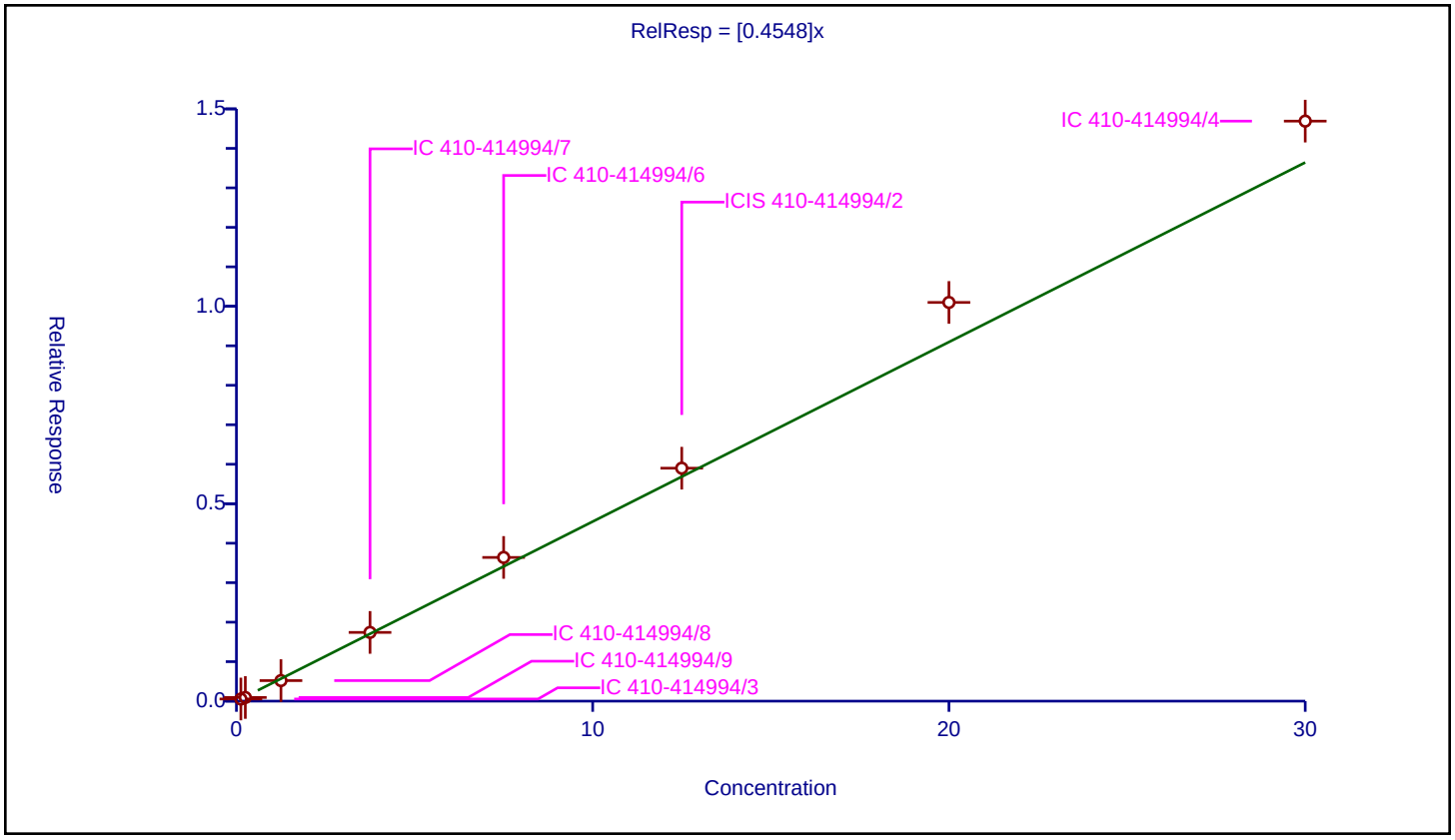
Curve Coefficients

Intercept:	0
Slope:	0.4548

Error Coefficients

Standard Error:	533000
Relative Standard Error:	9.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.054499	5.0	348171.0	0.435993	Y
2	IC 410-414994/9	0.25	0.092453	5.0	357751.0	0.36981	Y
3	IC 410-414994/8	1.25	0.520129	5.0	423789.0	0.416103	Y
4	IC 410-414994/7	3.75	1.740994	5.0	322784.0	0.464265	Y
5	IC 410-414994/6	7.5	3.639453	5.0	450646.0	0.48526	Y
6	ICIS 410-414994/2	12.5	5.900312	5.0	402427.0	0.472025	Y
7	IC 410-414994/5	20.0	10.097787	5.0	360732.0	0.504889	Y
8	IC 410-414994/4	30.0	14.690411	5.0	358556.0	0.48968	Y



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Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

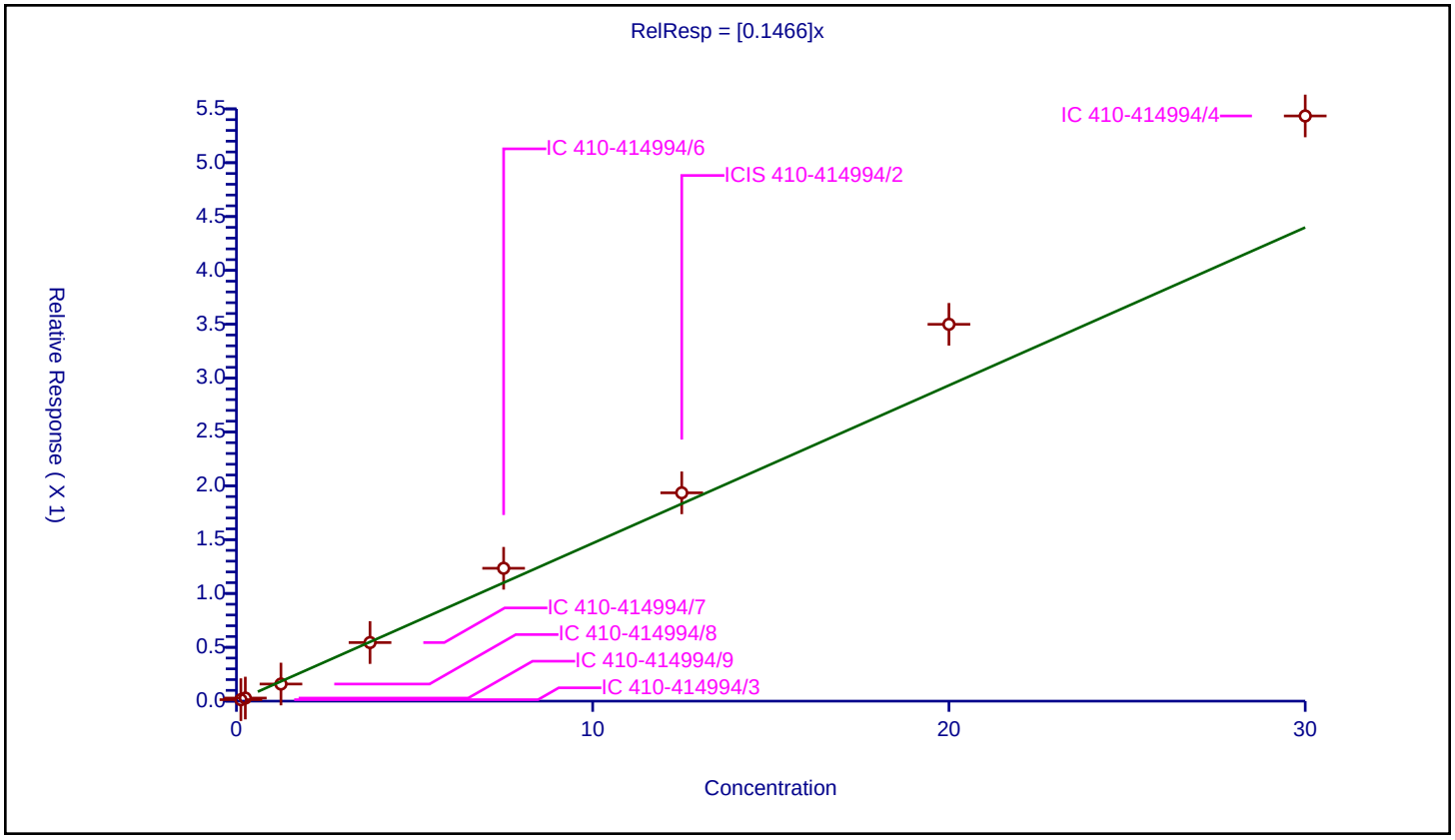
Curve Coefficients

Intercept:	0
Slope:	0.1466

Error Coefficients

Standard Error:	190000
Relative Standard Error:	18.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.013829	5.0	348171.0	0.110635	Y
2	IC 410-414994/9	0.25	0.028665	5.0	357751.0	0.114661	Y
3	IC 410-414994/8	1.25	0.159018	5.0	423789.0	0.127214	Y
4	IC 410-414994/7	3.75	0.544033	5.0	322784.0	0.145075	Y
5	IC 410-414994/6	7.5	1.233929	5.0	450646.0	0.164524	Y
6	ICIS 410-414994/2	12.5	1.934587	5.0	402427.0	0.154767	Y
7	IC 410-414994/5	20.0	3.499495	5.0	360732.0	0.174975	Y
8	IC 410-414994/4	30.0	5.434563	5.0	358556.0	0.181152	Y



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Calibration / Dimethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

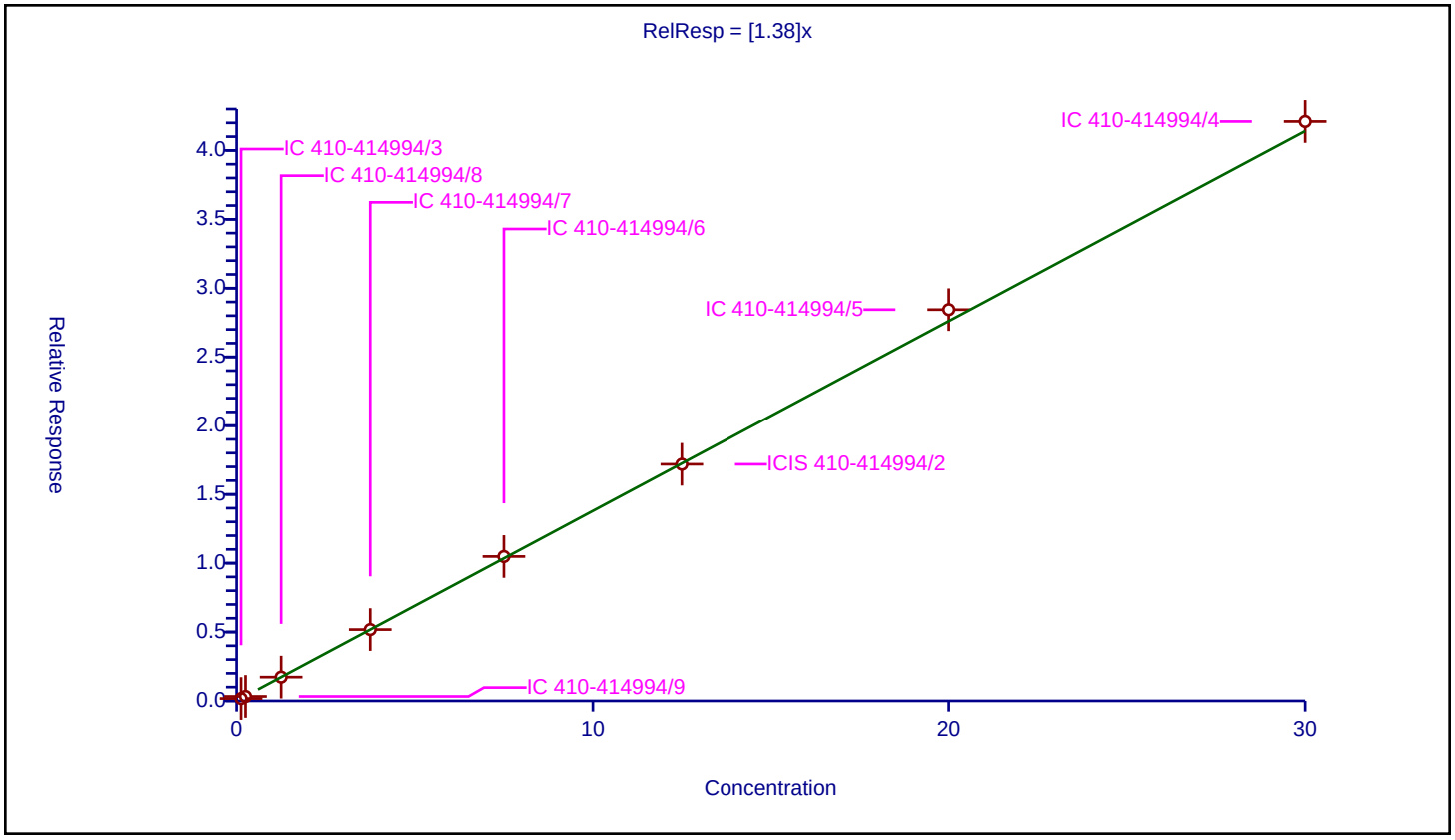
Curve Coefficients

Intercept:	0
Slope:	1.38

Error Coefficients

Standard Error:	1520000
Relative Standard Error:	2.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.173234	5.0	348171.0	1.385871	Y
2	IC 410-414994/9	0.25	0.323926	5.0	357751.0	1.295706	Y
3	IC 410-414994/8	1.25	1.726685	5.0	423789.0	1.381348	Y
4	IC 410-414994/7	3.75	5.176775	5.0	322784.0	1.380473	Y
5	IC 410-414994/6	7.5	10.485148	5.0	450646.0	1.39802	Y
6	ICIS 410-414994/2	12.5	17.190335	5.0	402427.0	1.375227	Y
7	IC 410-414994/5	20.0	28.43898	5.0	360732.0	1.421949	Y
8	IC 410-414994/4	30.0	42.100049	5.0	358556.0	1.403335	Y



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Calibration / 1,4-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

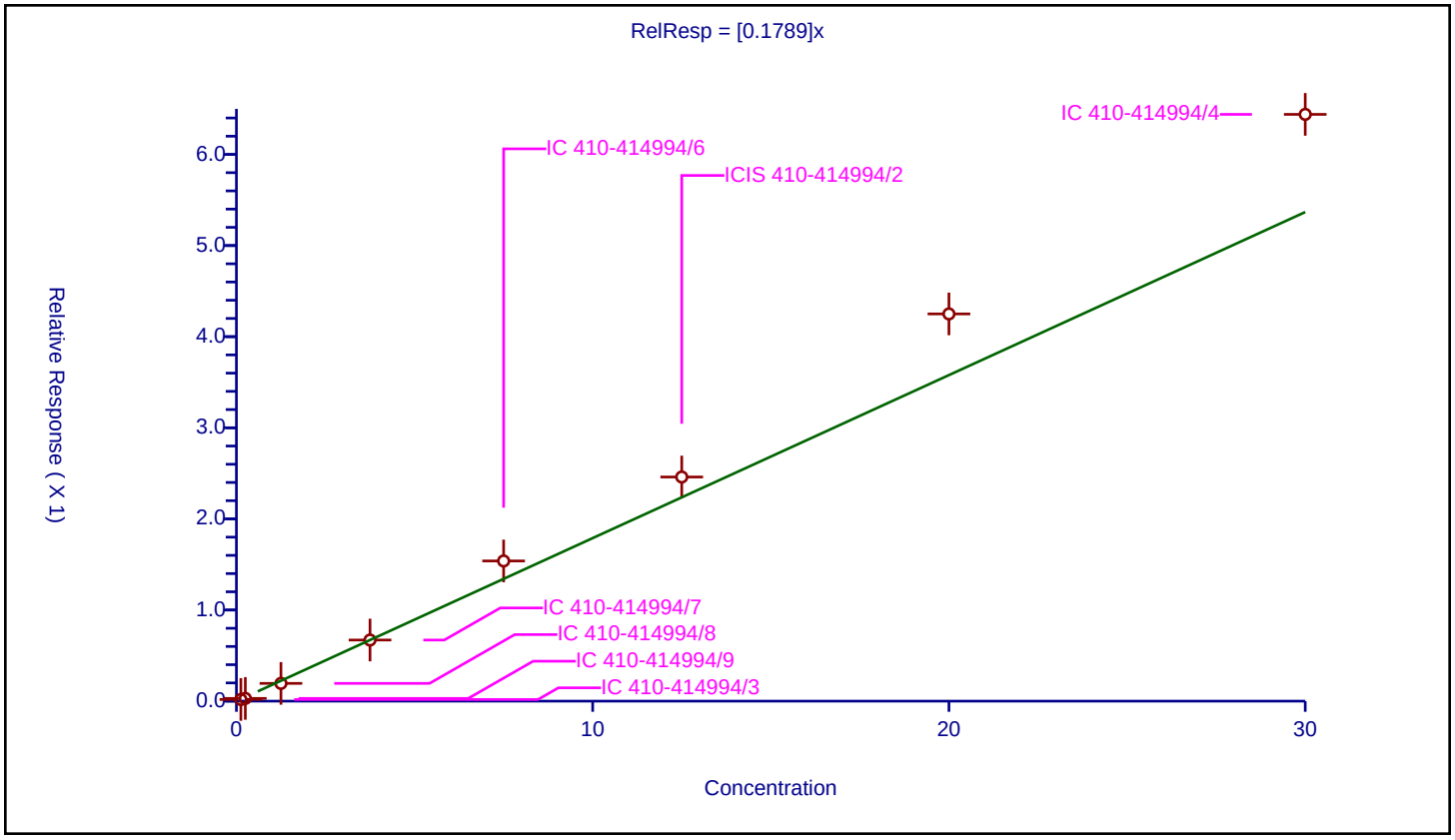
Curve Coefficients

Intercept:	0
Slope:	0.1789

Error Coefficients

Standard Error:	229000
Relative Standard Error:	19.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.962

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.018396	5.0	348171.0	0.147169	Y
2	IC 410-414994/9	0.25	0.030091	5.0	357751.0	0.120363	Y
3	IC 410-414994/8	1.25	0.194802	5.0	423789.0	0.155842	Y
4	IC 410-414994/7	3.75	0.670774	5.0	322784.0	0.178873	Y
5	IC 410-414994/6	7.5	1.538491	5.0	450646.0	0.205132	Y
6	ICIS 410-414994/2	12.5	2.460036	5.0	402427.0	0.196803	Y
7	IC 410-414994/5	20.0	4.249651	5.0	360732.0	0.212483	Y
8	IC 410-414994/4	30.0	6.439887	5.0	358556.0	0.214663	Y



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Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

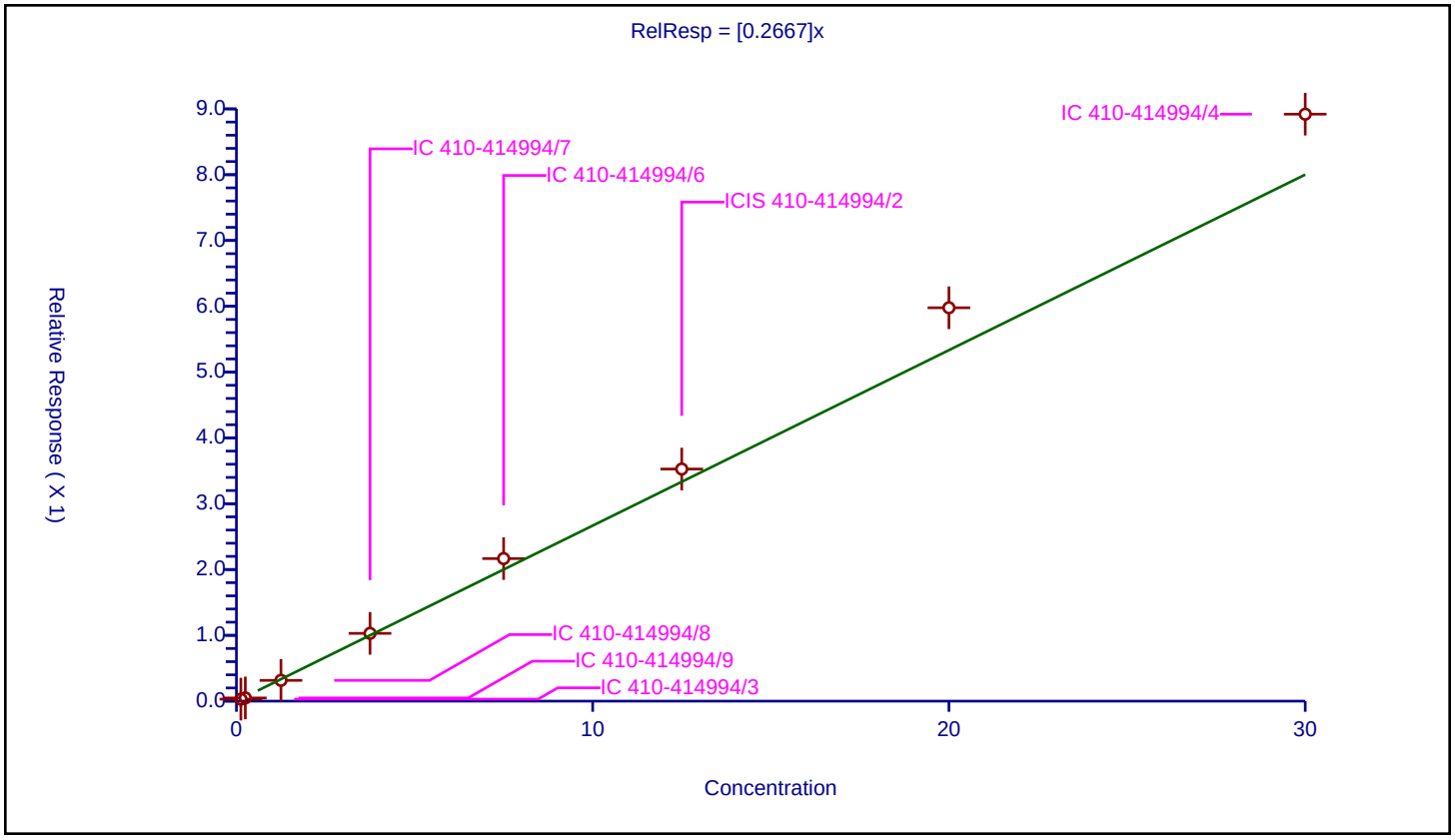
Curve Coefficients

Intercept:	0
Slope:	0.2667

Error Coefficients

Standard Error:	320000
Relative Standard Error:	13.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.03066	5.0	348171.0	0.245282	Y
2	IC 410-414994/9	0.25	0.048483	5.0	357751.0	0.193934	Y
3	IC 410-414994/8	1.25	0.315558	5.0	423789.0	0.252446	Y
4	IC 410-414994/7	3.75	1.029946	5.0	322784.0	0.274652	Y
5	IC 410-414994/6	7.5	2.166446	5.0	450646.0	0.288859	Y
6	ICIS 410-414994/2	12.5	3.527186	5.0	402427.0	0.282175	Y
7	IC 410-414994/5	20.0	5.9779	5.0	360732.0	0.298895	Y
8	IC 410-414994/4	30.0	8.919946	5.0	358556.0	0.297332	Y



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Calibration / Acenaphthylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

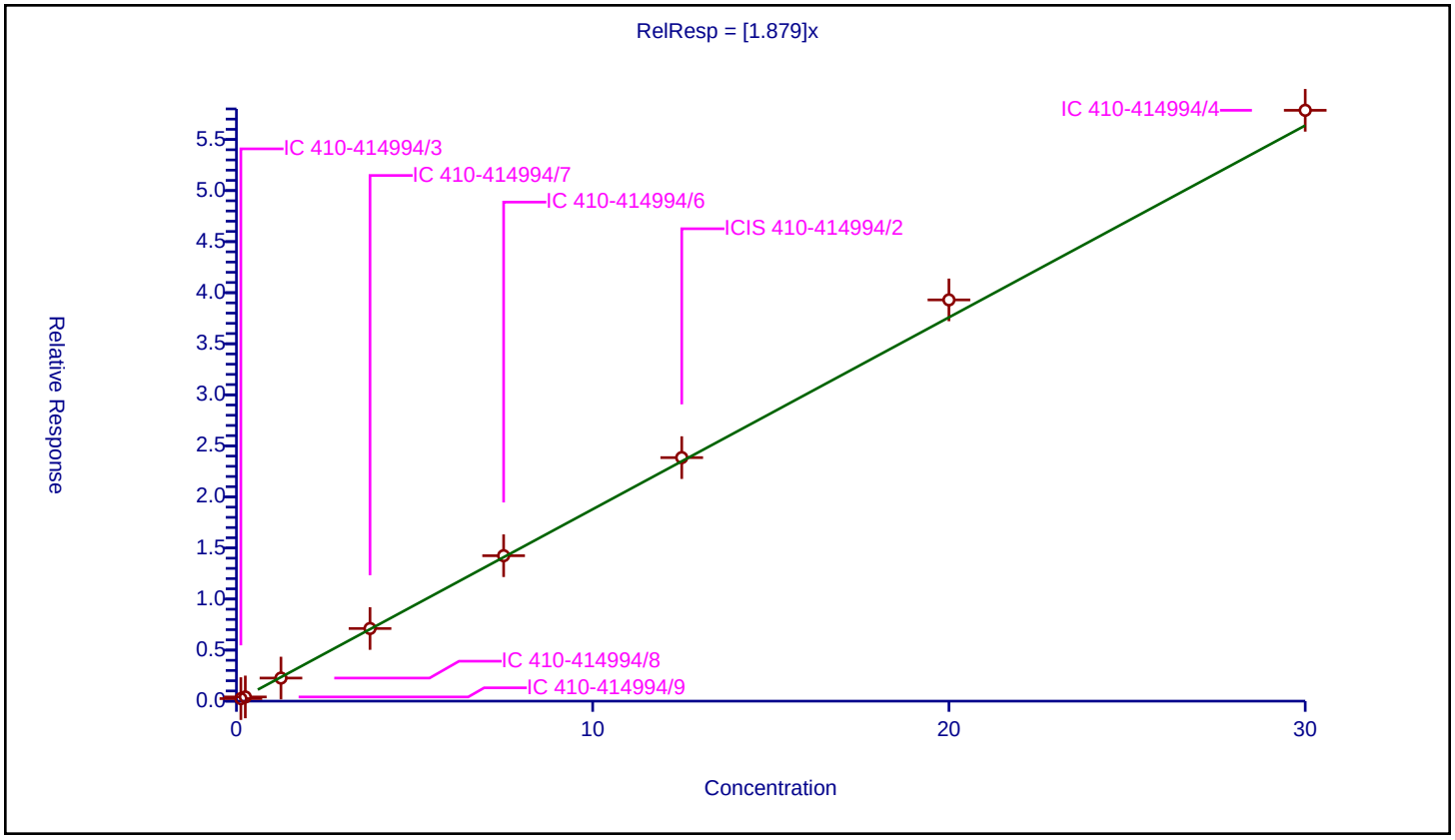
Curve Coefficients

Intercept:	0
Slope:	1.879

Error Coefficients

Standard Error:	2100000
Relative Standard Error:	5.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.24824	5.0	348171.0	1.985921	Y
2	IC 410-414994/9	0.25	0.410593	5.0	357751.0	1.642371	Y
3	IC 410-414994/8	1.25	2.259013	5.0	423789.0	1.807211	Y
4	IC 410-414994/7	3.75	7.11482	5.0	322784.0	1.897285	Y
5	IC 410-414994/6	7.5	14.243908	5.0	450646.0	1.899188	Y
6	ICIS 410-414994/2	12.5	23.849655	5.0	402427.0	1.907972	Y
7	IC 410-414994/5	20.0	39.295821	5.0	360732.0	1.964791	Y
8	IC 410-414994/4	30.0	57.862538	5.0	358556.0	1.928751	Y



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Calibration / 3-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

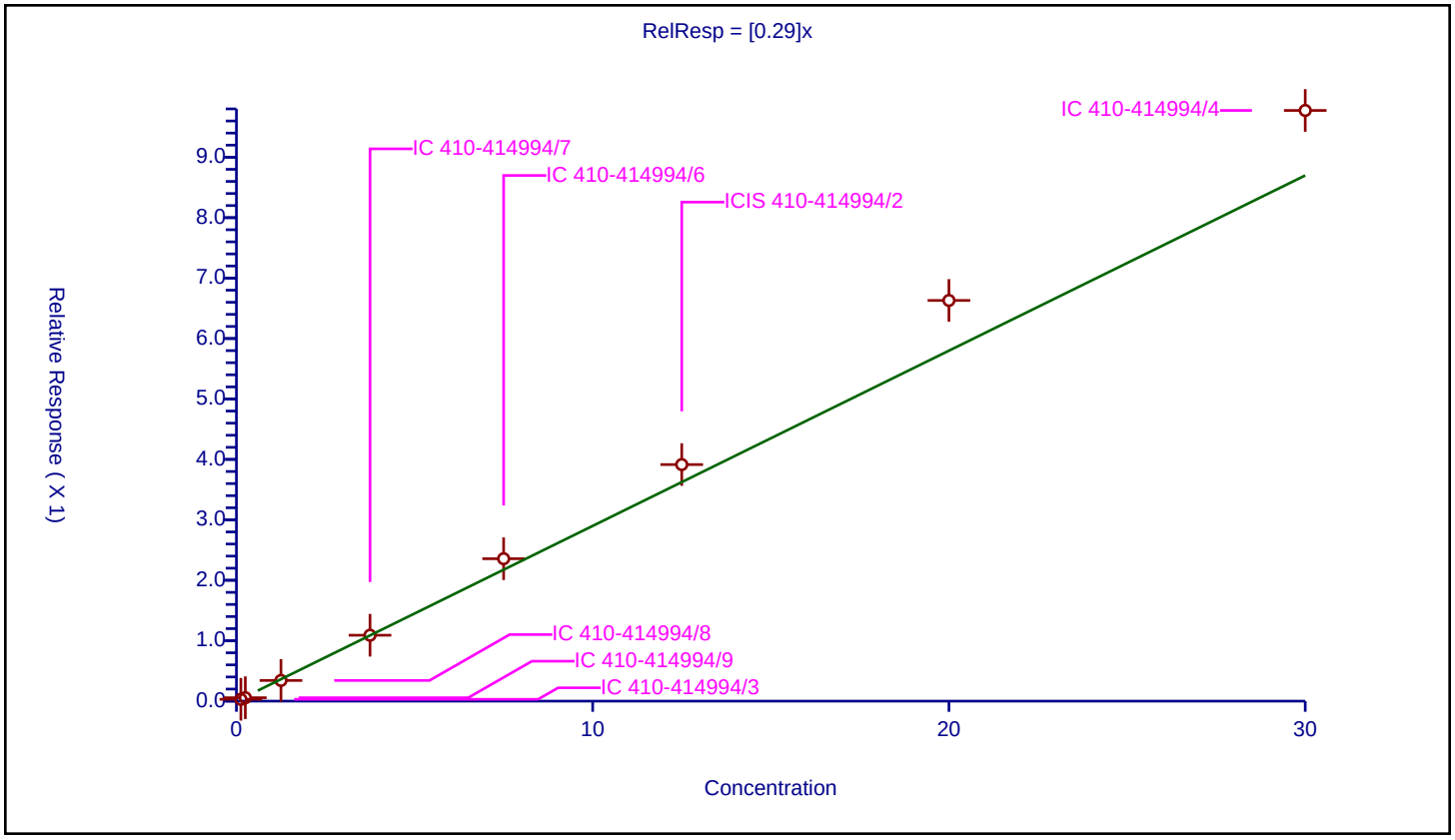
Curve Coefficients

Intercept:	0
Slope:	0.29

Error Coefficients

Standard Error:	353000
Relative Standard Error:	13.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.030517	5.0	348171.0	0.244133	Y
2	IC 410-414994/9	0.25	0.056576	5.0	357751.0	0.226303	Y
3	IC 410-414994/8	1.25	0.342081	5.0	423789.0	0.273664	Y
4	IC 410-414994/7	3.75	1.090698	5.0	322784.0	0.290853	Y
5	IC 410-414994/6	7.5	2.356561	5.0	450646.0	0.314208	Y
6	ICIS 410-414994/2	12.5	3.914698	5.0	402427.0	0.313176	Y
7	IC 410-414994/5	20.0	6.630255	5.0	360732.0	0.331513	Y
8	IC 410-414994/4	30.0	9.77394	5.0	358556.0	0.325798	Y



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Calibration / Acenaphthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

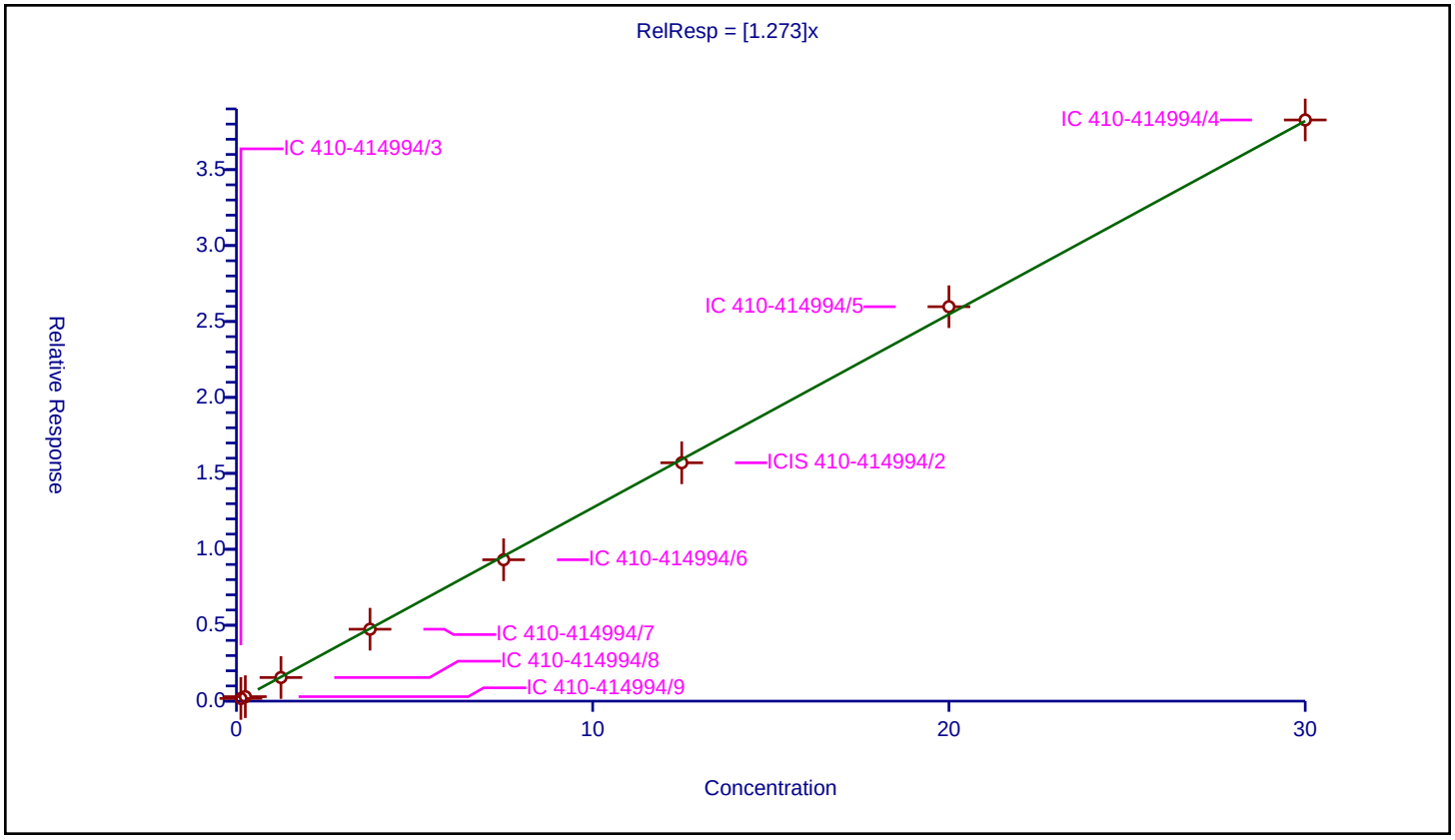
Curve Coefficients

Intercept:	0
Slope:	1.273

Error Coefficients

Standard Error:	1390000
Relative Standard Error:	5.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.178677	5.0	348171.0	1.429413	Y
2	IC 410-414994/9	0.25	0.294744	5.0	357751.0	1.178976	Y
3	IC 410-414994/8	1.25	1.555574	5.0	423789.0	1.244459	Y
4	IC 410-414994/7	3.75	4.735675	5.0	322784.0	1.262847	Y
5	IC 410-414994/6	7.5	9.310923	5.0	450646.0	1.241456	Y
6	ICIS 410-414994/2	12.5	15.697021	5.0	402427.0	1.255762	Y
7	IC 410-414994/5	20.0	25.97377	5.0	360732.0	1.298689	Y
8	IC 410-414994/4	30.0	38.272948	5.0	358556.0	1.275765	Y



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Calibration / 2,4-Dinitrophenol

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

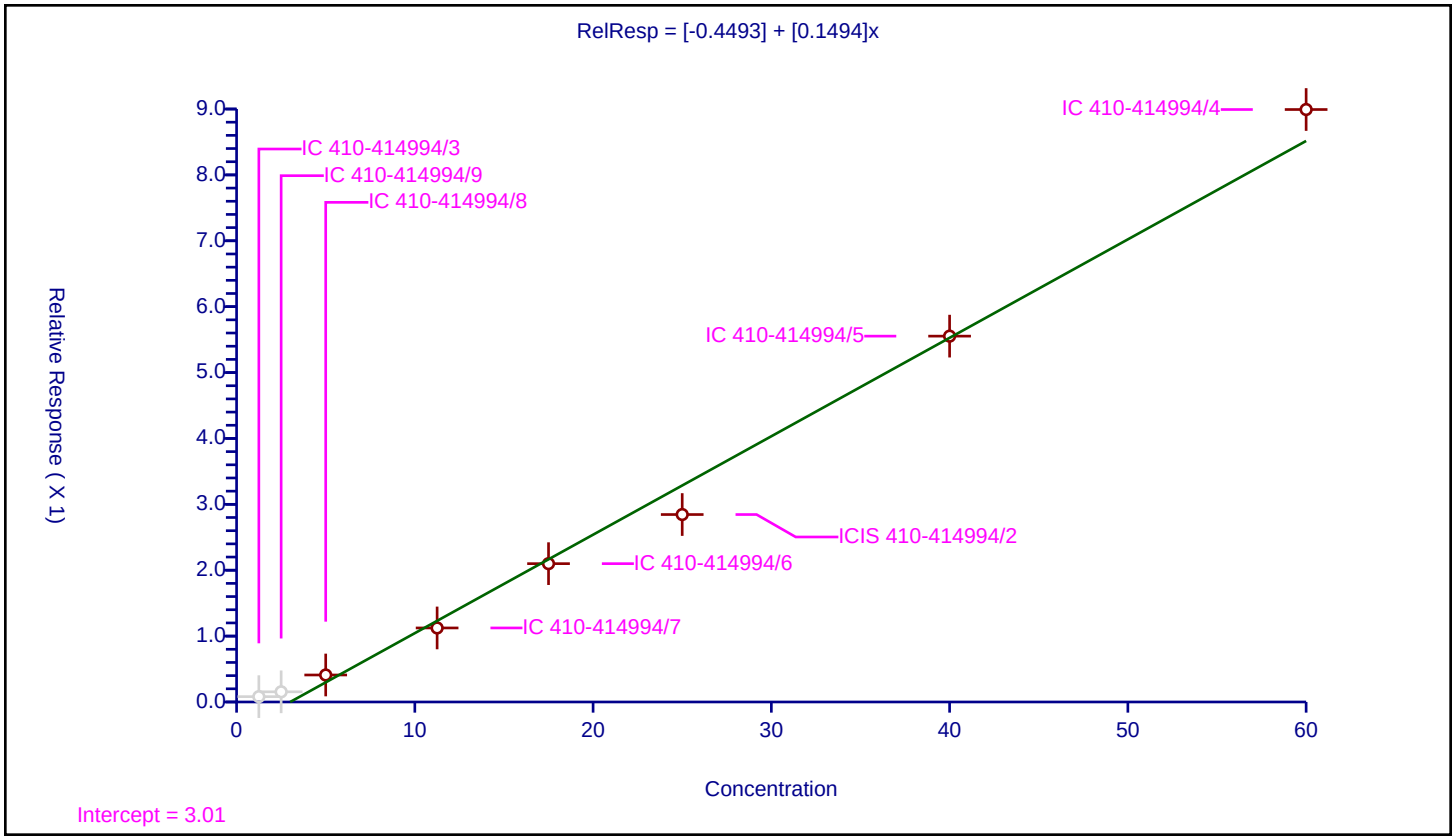
Curve Coefficients

Intercept:	-0.4493
Slope:	0.1494

Error Coefficients

Standard Error:	410000
Relative Standard Error:	10.5
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	1.25	0.081253	5.0	348171.0	0.065003	N
2	IC 410-414994/9	2.5	0.154479	5.0	357751.0	0.061792	N
3	IC 410-414994/8	5.0	0.409744	5.0	423789.0	0.081949	Y
4	IC 410-414994/7	11.25	1.123832	5.0	322784.0	0.099896	Y
5	IC 410-414994/6	17.5	2.099564	5.0	450646.0	0.119975	Y
6	ICIS 410-414994/2	25.0	2.845162	5.0	402427.0	0.113806	Y
7	IC 410-414994/5	40.0	5.552779	5.0	360732.0	0.138819	Y
8	IC 410-414994/4	60.0	8.992417	5.0	358556.0	0.149874	Y



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Calibration / 4-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

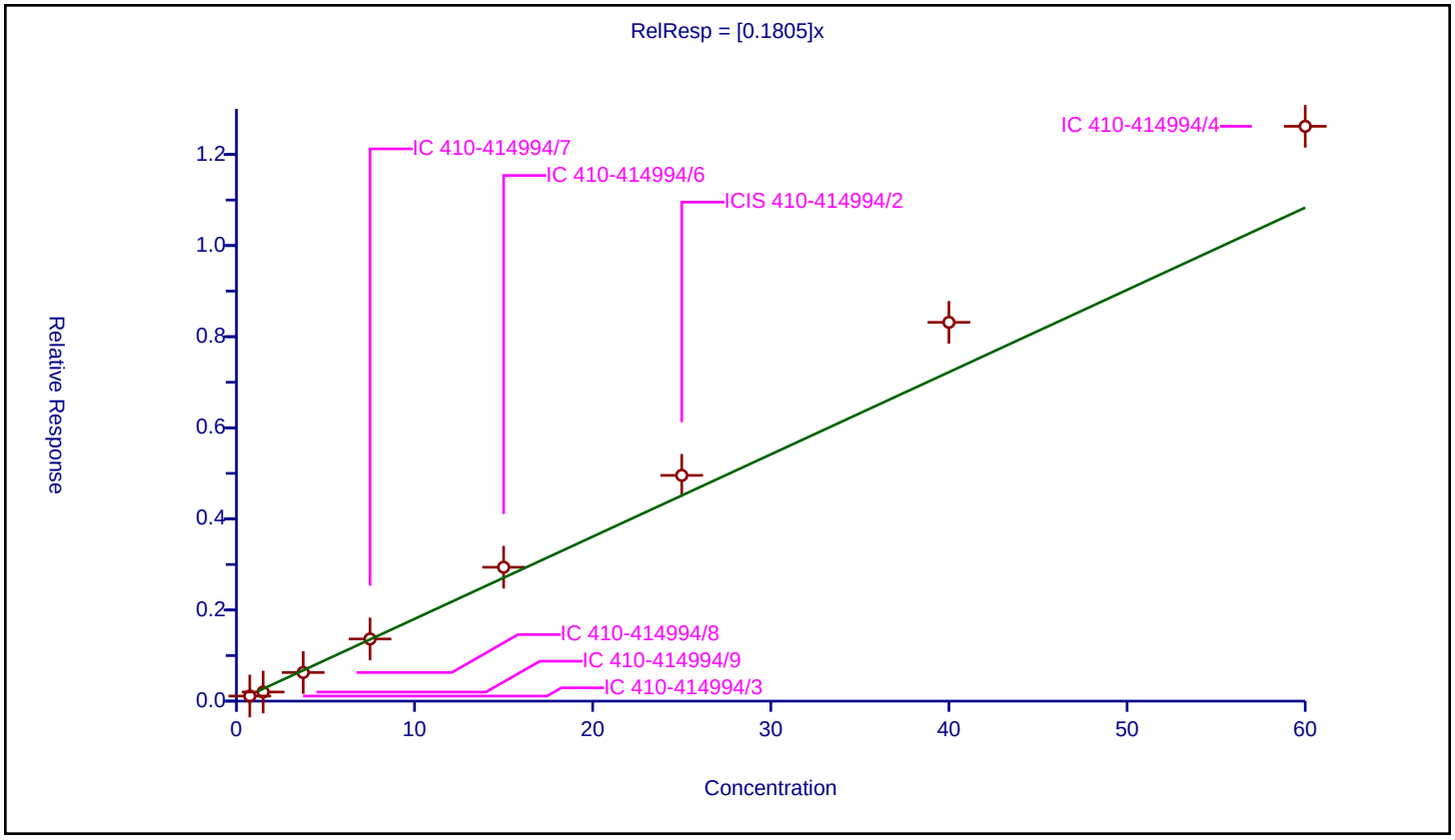
Curve Coefficients

Intercept:	0
Slope:	0.1805

Error Coefficients

Standard Error:	450000
Relative Standard Error:	15.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.75	0.111727	5.0	348171.0	0.148969	Y
2	IC 410-414994/9	1.5	0.200069	5.0	357751.0	0.13338	Y
3	IC 410-414994/8	3.75	0.628839	5.0	423789.0	0.16769	Y
4	IC 410-414994/7	7.5	1.364876	5.0	322784.0	0.181983	Y
5	IC 410-414994/6	15.0	2.939303	5.0	450646.0	0.195954	Y
6	ICIS 410-414994/2	25.0	4.955644	5.0	402427.0	0.198226	Y
7	IC 410-414994/5	40.0	8.314857	5.0	360732.0	0.207871	Y
8	IC 410-414994/4	60.0	12.617415	5.0	358556.0	0.21029	Y



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Calibration / Pentachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

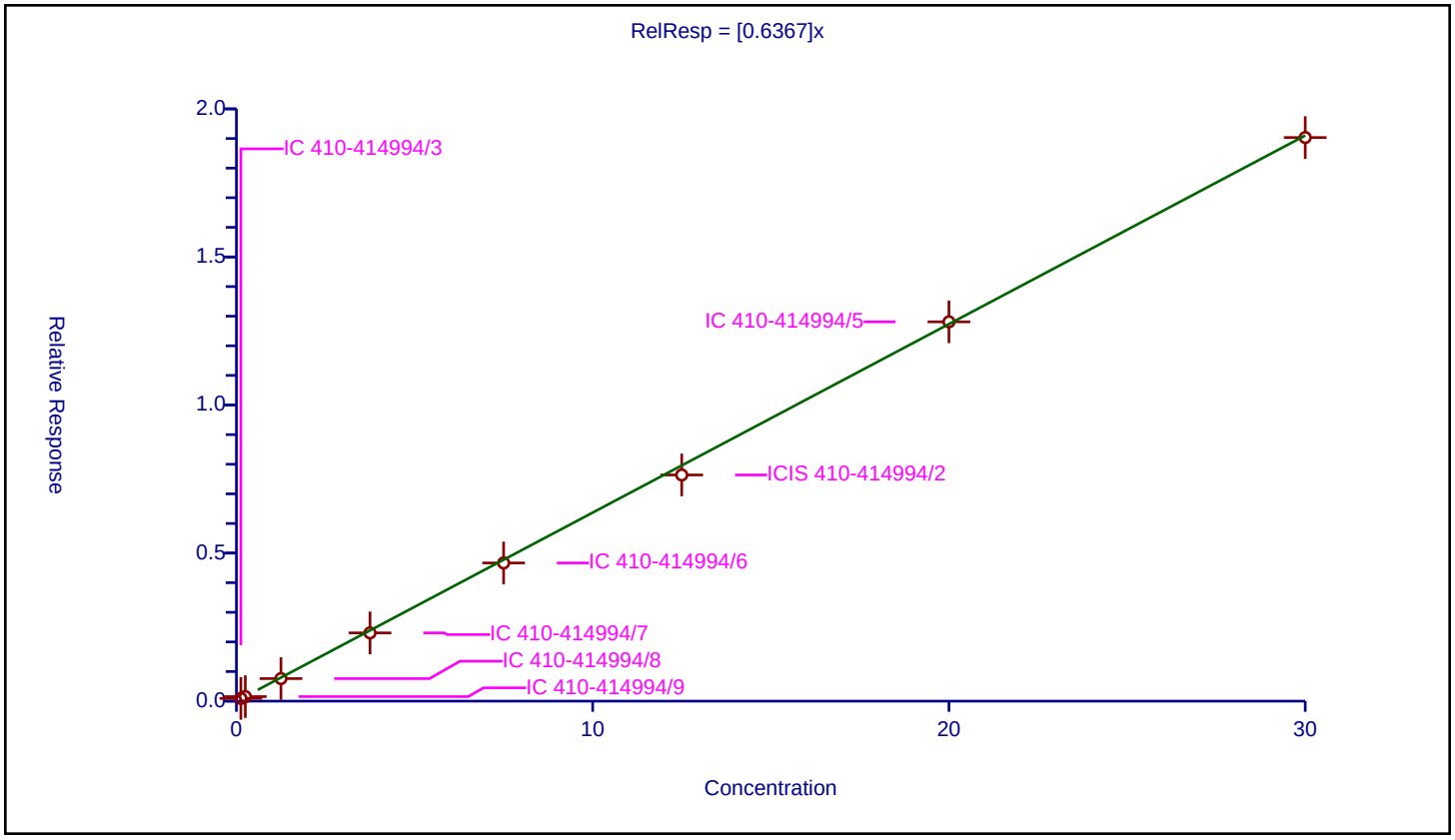
Curve Coefficients

Intercept:	0
Slope:	0.6367

Error Coefficients

Standard Error:	686000
Relative Standard Error:	7.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.093402	5.0	348171.0	0.747219	Y
2	IC 410-414994/9	0.25	0.153654	5.0	357751.0	0.614617	Y
3	IC 410-414994/8	1.25	0.761145	5.0	423789.0	0.608916	Y
4	IC 410-414994/7	3.75	2.304575	5.0	322784.0	0.614553	Y
5	IC 410-414994/6	7.5	4.666446	5.0	450646.0	0.622193	Y
6	ICIS 410-414994/2	12.5	7.638118	5.0	402427.0	0.611049	Y
7	IC 410-414994/5	20.0	12.808983	5.0	360732.0	0.640449	Y
8	IC 410-414994/4	30.0	19.032187	5.0	358556.0	0.634406	Y



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Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

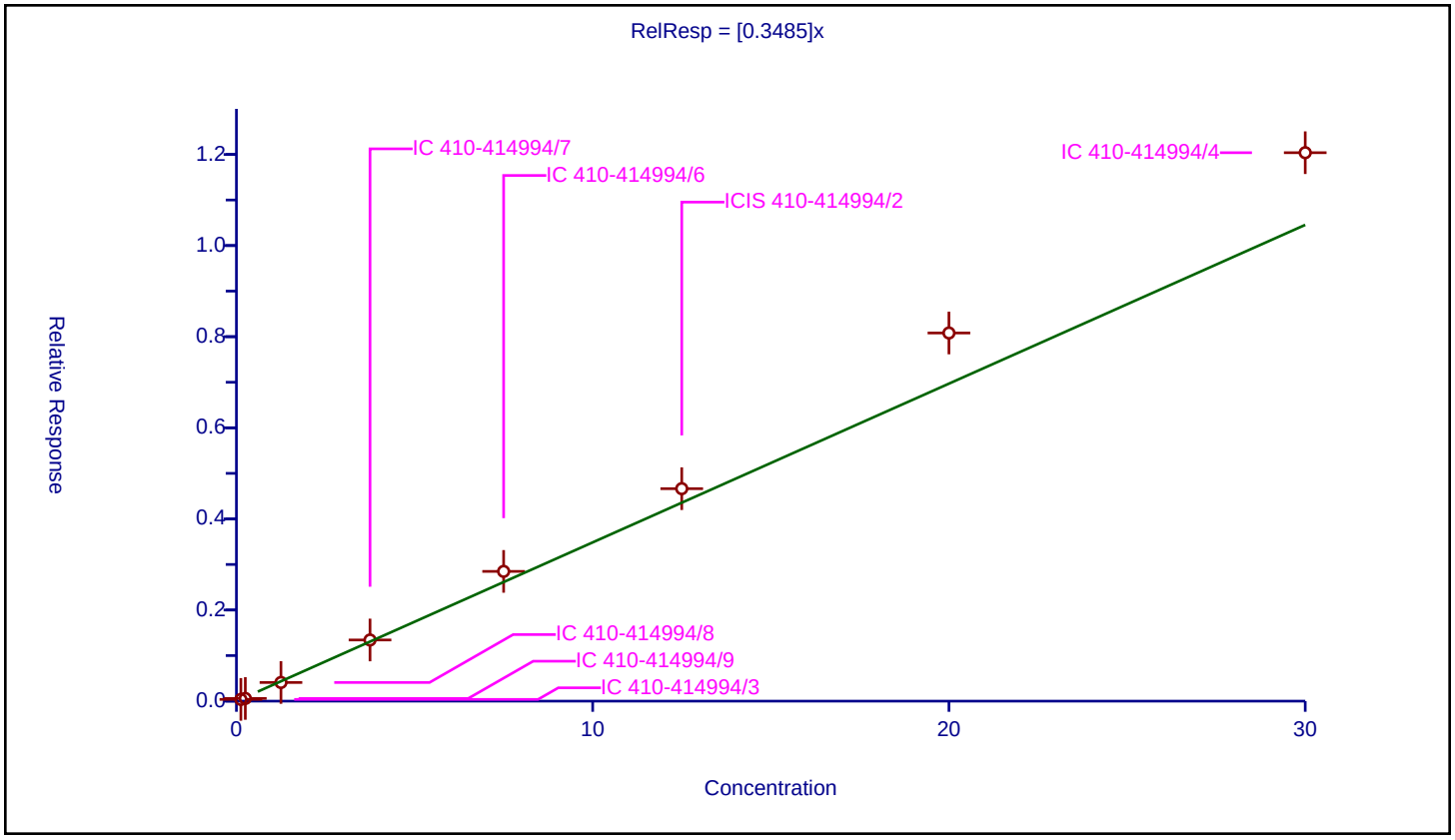
Curve Coefficients

Intercept:	0
Slope:	0.3485

Error Coefficients

Standard Error:	431000
Relative Standard Error:	16.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.038315	5.0	348171.0	0.306516	Y
2	IC 410-414994/9	0.25	0.059357	5.0	357751.0	0.237428	Y
3	IC 410-414994/8	1.25	0.409449	5.0	423789.0	0.327559	Y
4	IC 410-414994/7	3.75	1.342322	5.0	322784.0	0.357952	Y
5	IC 410-414994/6	7.5	2.848233	5.0	450646.0	0.379764	Y
6	ICIS 410-414994/2	12.5	4.664051	5.0	402427.0	0.373124	Y
7	IC 410-414994/5	20.0	8.08068	5.0	360732.0	0.404034	Y
8	IC 410-414994/4	30.0	12.038329	5.0	358556.0	0.401278	Y



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Calibration / Dibenzofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

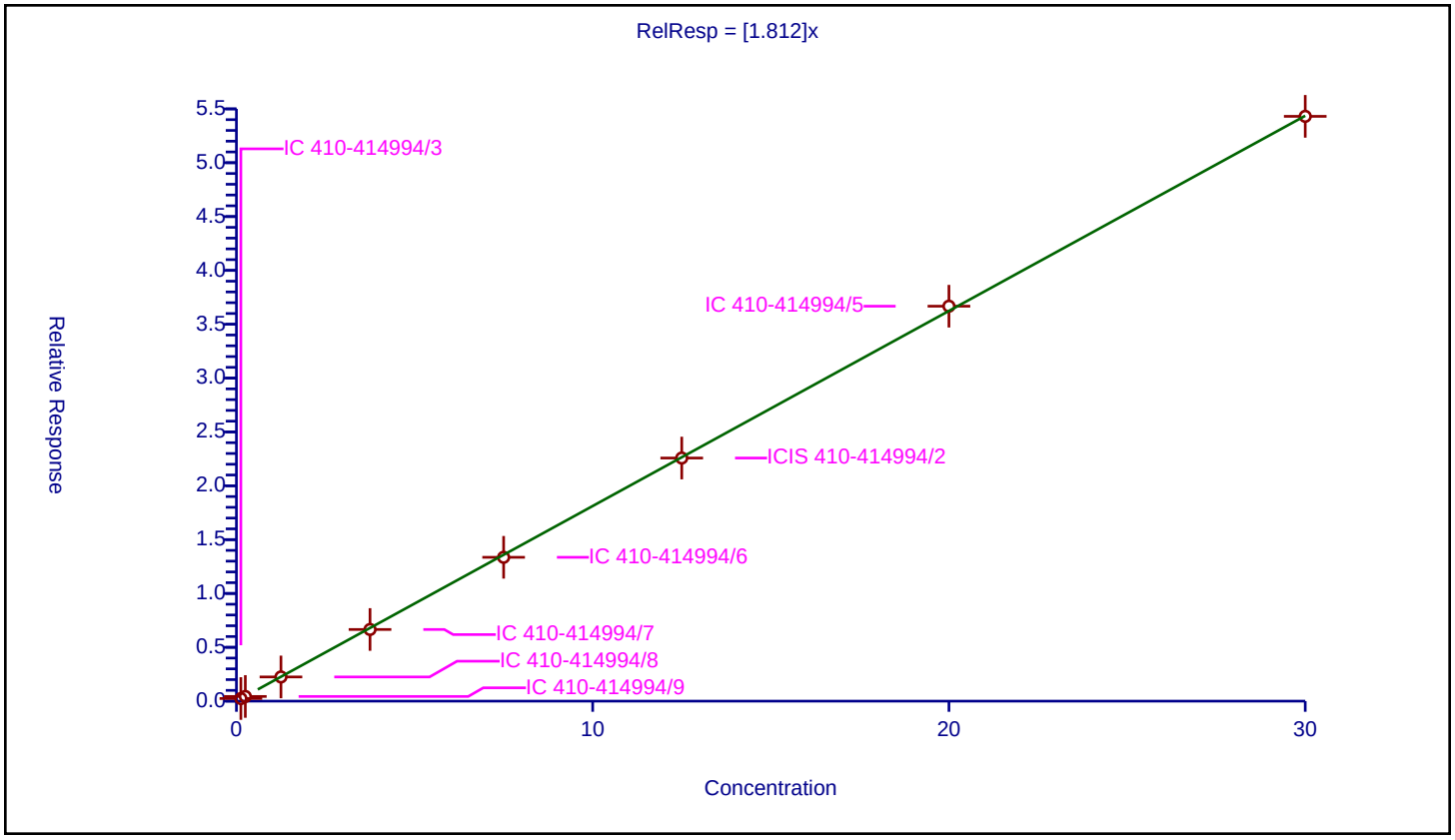
Curve Coefficients

Intercept:	0
Slope:	1.812

Error Coefficients

Standard Error:	1970000
Relative Standard Error:	3.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.243918	5.0	348171.0	1.95134	Y
2	IC 410-414994/9	0.25	0.435163	5.0	357751.0	1.740652	Y
3	IC 410-414994/8	1.25	2.247286	5.0	423789.0	1.797829	Y
4	IC 410-414994/7	3.75	6.65428	5.0	322784.0	1.774475	Y
5	IC 410-414994/6	7.5	13.357846	5.0	450646.0	1.781046	Y
6	ICIS 410-414994/2	12.5	22.576231	5.0	402427.0	1.806098	Y
7	IC 410-414994/5	20.0	36.677173	5.0	360732.0	1.833859	Y
8	IC 410-414994/4	30.0	54.306789	5.0	358556.0	1.810226	Y



Calibration / 1-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

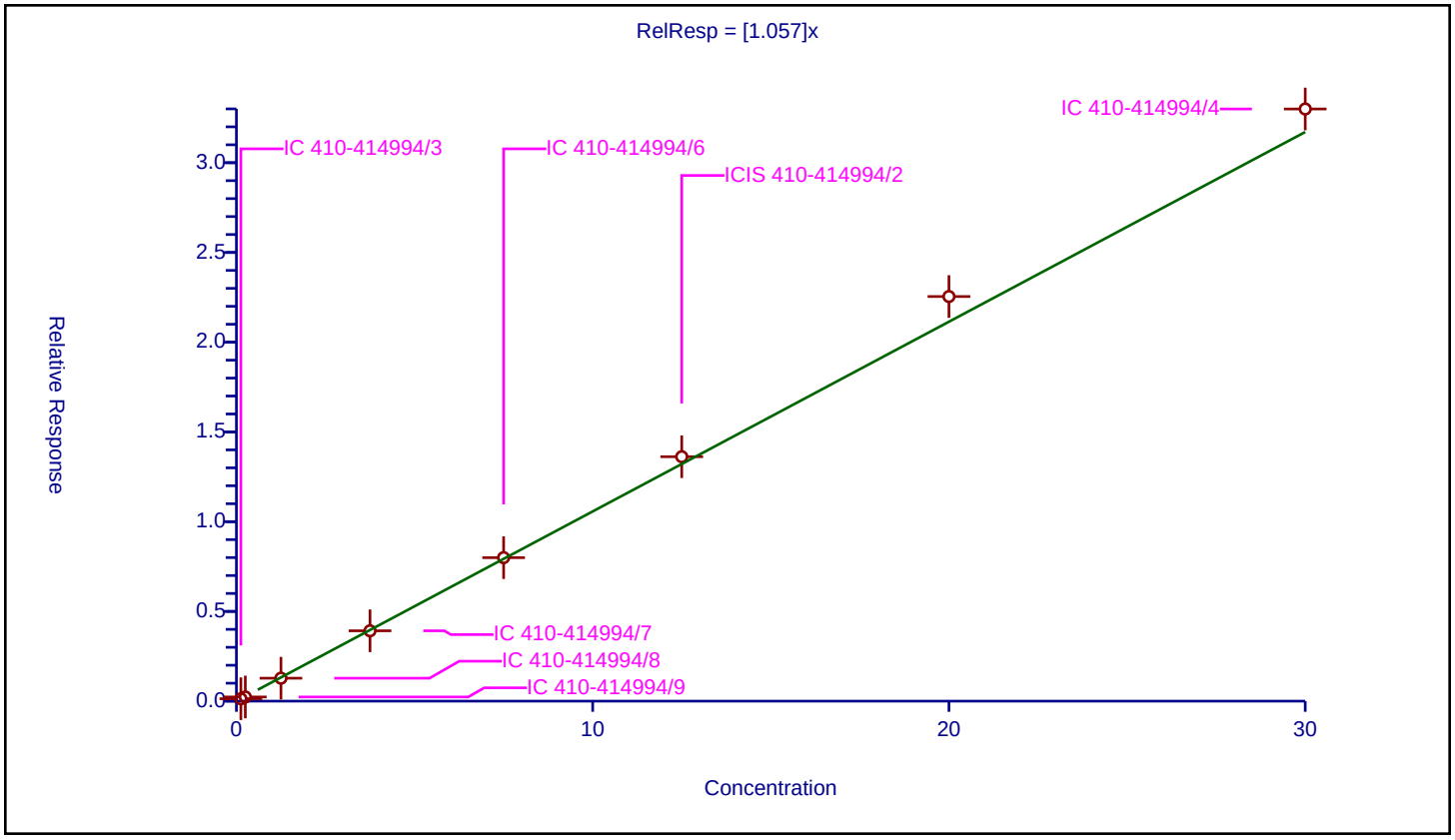
Curve Coefficients

Intercept:	0
Slope:	1.057

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	5.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.134474	5.0	348171.0	1.075793	Y
2	IC 410-414994/9	0.25	0.232368	5.0	357751.0	0.929473	Y
3	IC 410-414994/8	1.25	1.278608	5.0	423789.0	1.022886	Y
4	IC 410-414994/7	3.75	3.920284	5.0	322784.0	1.045409	Y
5	IC 410-414994/6	7.5	7.995977	5.0	450646.0	1.06613	Y
6	ICIS 410-414994/2	12.5	13.619104	5.0	402427.0	1.089528	Y
7	IC 410-414994/5	20.0	22.544895	5.0	360732.0	1.127245	Y
8	IC 410-414994/4	30.0	32.993605	5.0	358556.0	1.099787	Y



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Calibration / 2,3,4,6-Tetrachlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

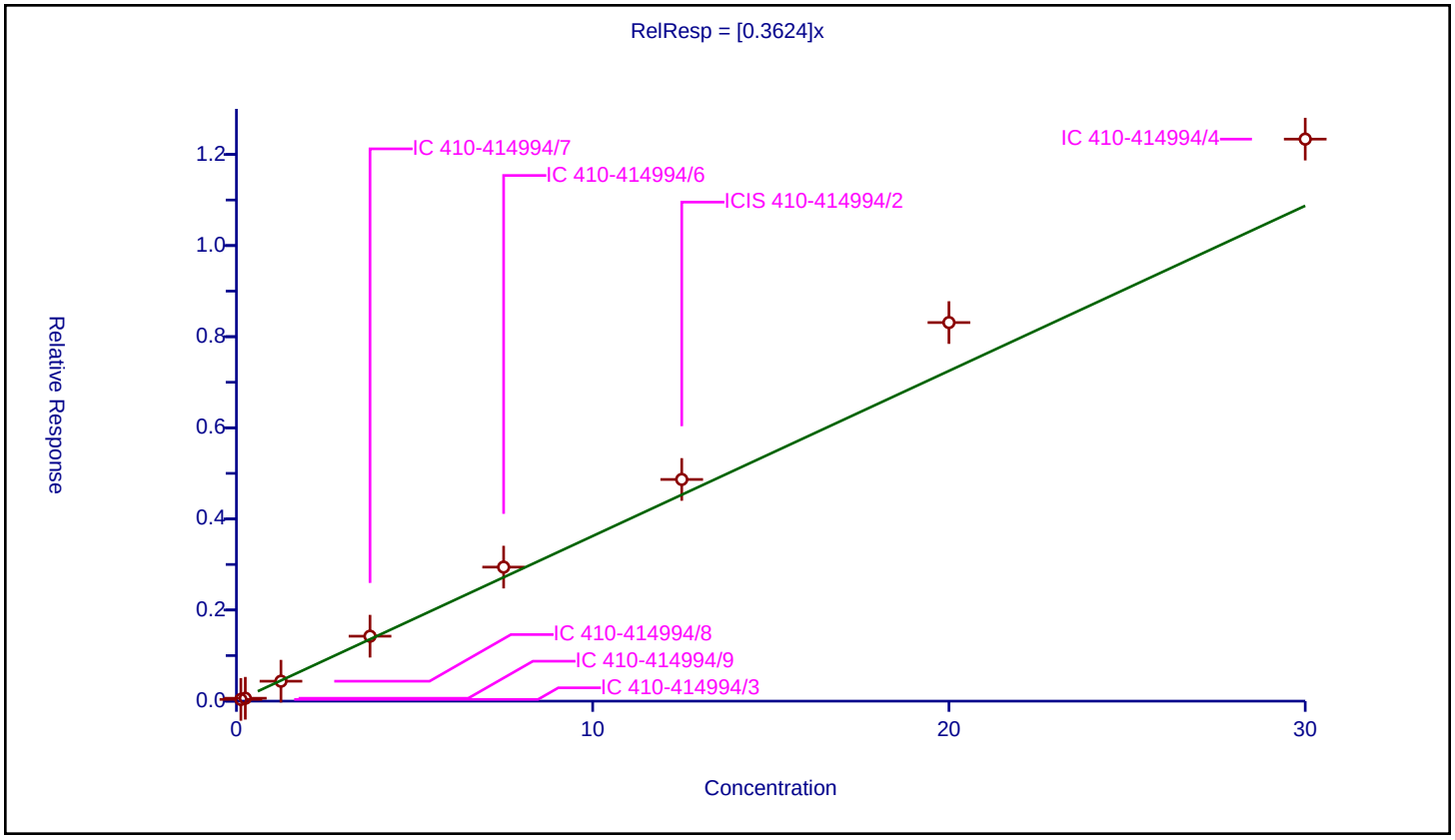
Curve Coefficients

Intercept:	0
Slope:	0.3624

Error Coefficients

Standard Error:	443000
Relative Standard Error:	15.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.038472	5.0	348171.0	0.30778	Y
2	IC 410-414994/9	0.25	0.063354	5.0	357751.0	0.253416	Y
3	IC 410-414994/8	1.25	0.437399	5.0	423789.0	0.349919	Y
4	IC 410-414994/7	3.75	1.425535	5.0	322784.0	0.380143	Y
5	IC 410-414994/6	7.5	2.94201	5.0	450646.0	0.392268	Y
6	ICIS 410-414994/2	12.5	4.866174	5.0	402427.0	0.389294	Y
7	IC 410-414994/5	20.0	8.309895	5.0	360732.0	0.415495	Y
8	IC 410-414994/4	30.0	12.336692	5.0	358556.0	0.411223	Y



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Calibration / 2-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

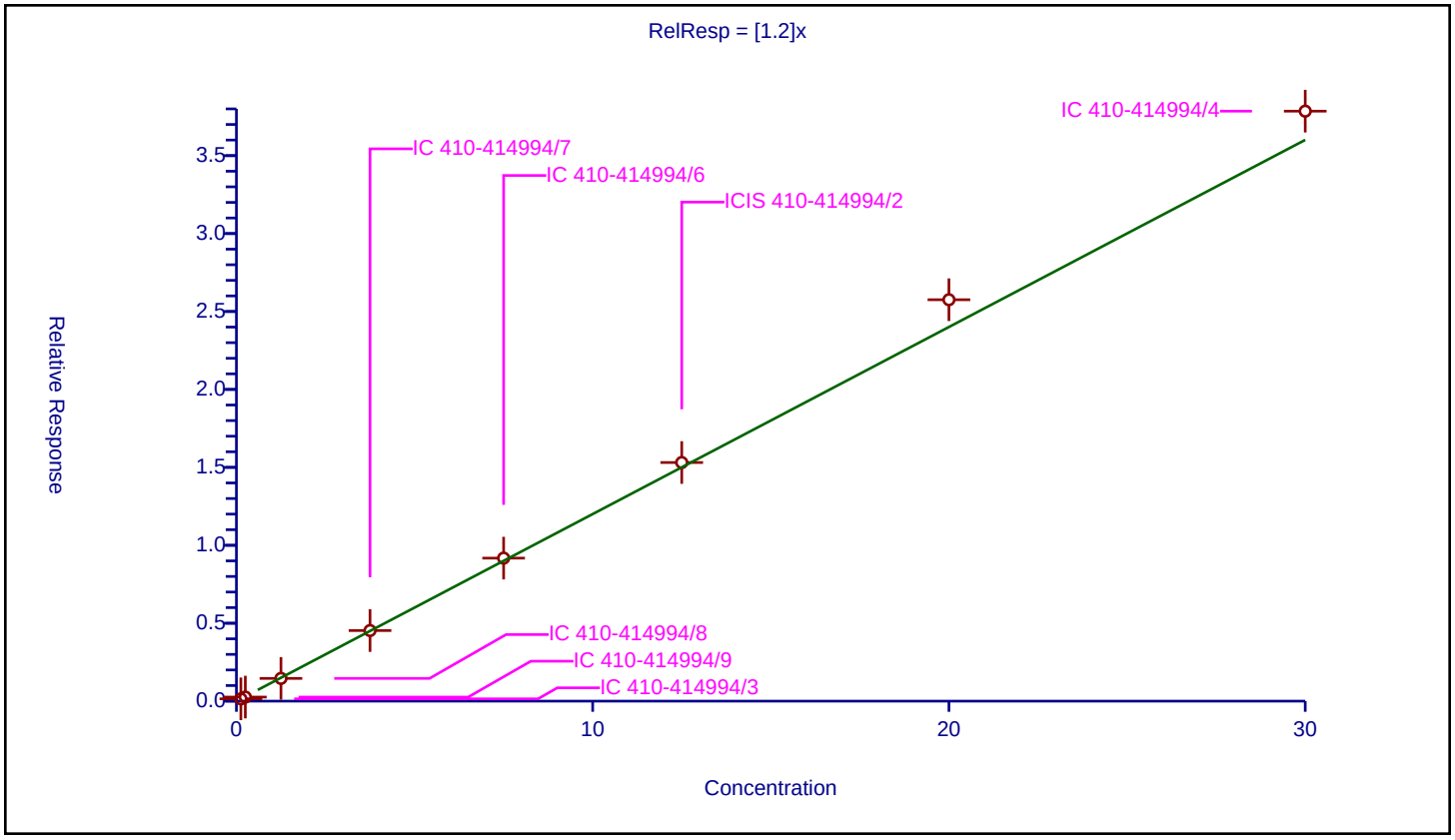
Curve Coefficients

Intercept:	0
Slope:	1.2

Error Coefficients

Standard Error:	1370000
Relative Standard Error:	6.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.148103	5.0	348171.0	1.18482	Y
2	IC 410-414994/9	0.25	0.261327	5.0	357751.0	1.045308	Y
3	IC 410-414994/8	1.25	1.457978	5.0	423789.0	1.166382	Y
4	IC 410-414994/7	3.75	4.530026	5.0	322784.0	1.208007	Y
5	IC 410-414994/6	7.5	9.176327	5.0	450646.0	1.22351	Y
6	ICIS 410-414994/2	12.5	15.310218	5.0	402427.0	1.224817	Y
7	IC 410-414994/5	20.0	25.756351	5.0	360732.0	1.287818	Y
8	IC 410-414994/4	30.0	37.853989	5.0	358556.0	1.2618	Y



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Calibration / Diethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

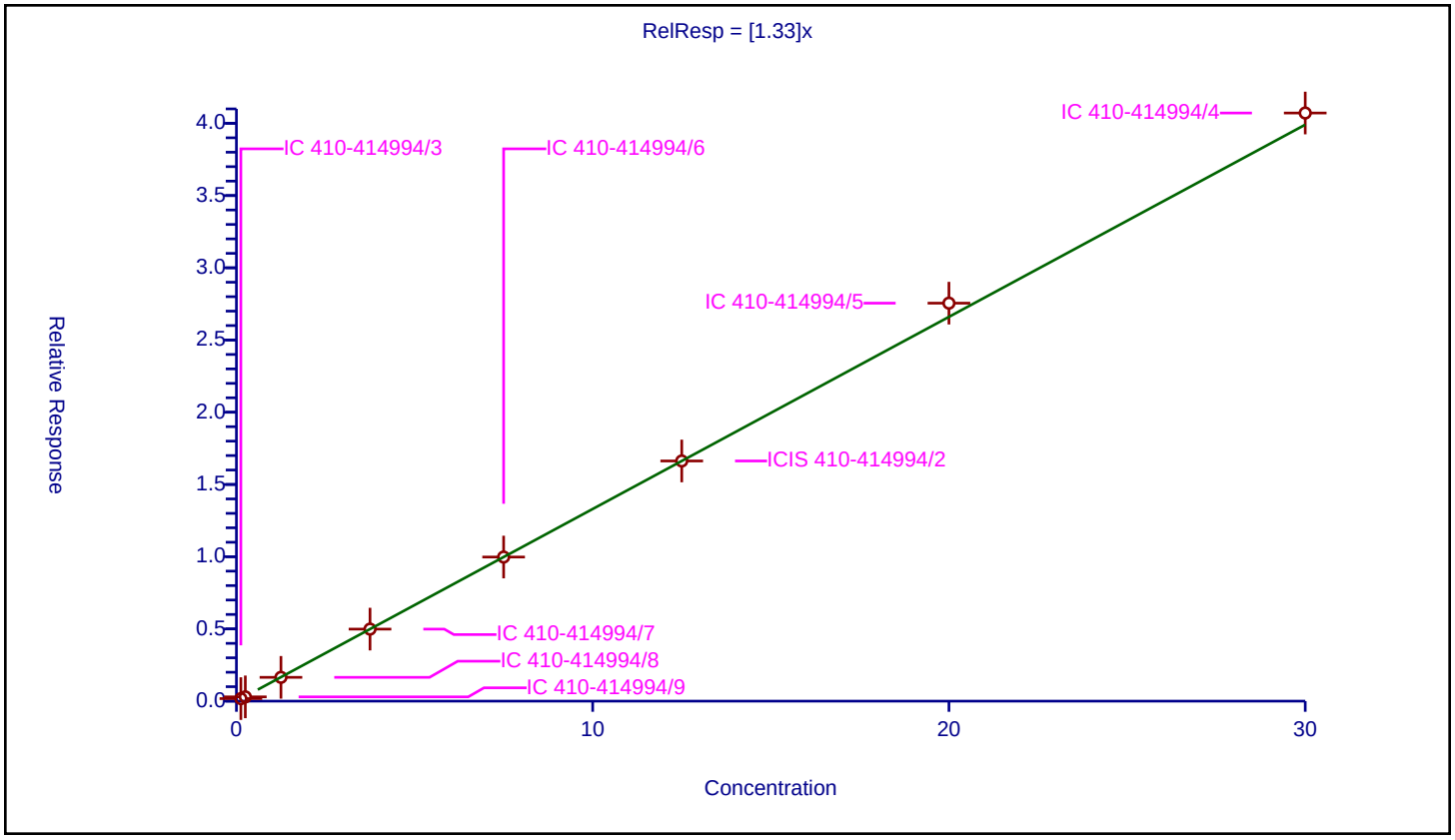
Curve Coefficients

Intercept:	0
Slope:	1.33

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	5.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.176623	5.0	348171.0	1.412984	Y
2	IC 410-414994/9	0.25	0.296281	5.0	357751.0	1.185126	Y
3	IC 410-414994/8	1.25	1.647624	5.0	423789.0	1.318099	Y
4	IC 410-414994/7	3.75	4.987298	5.0	322784.0	1.329946	Y
5	IC 410-414994/6	7.5	9.976012	5.0	450646.0	1.330135	Y
6	ICIS 410-414994/2	12.5	16.625997	5.0	402427.0	1.33008	Y
7	IC 410-414994/5	20.0	27.551007	5.0	360732.0	1.37755	Y
8	IC 410-414994/4	30.0	40.713431	5.0	358556.0	1.357114	Y



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Calibration / Thionazin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

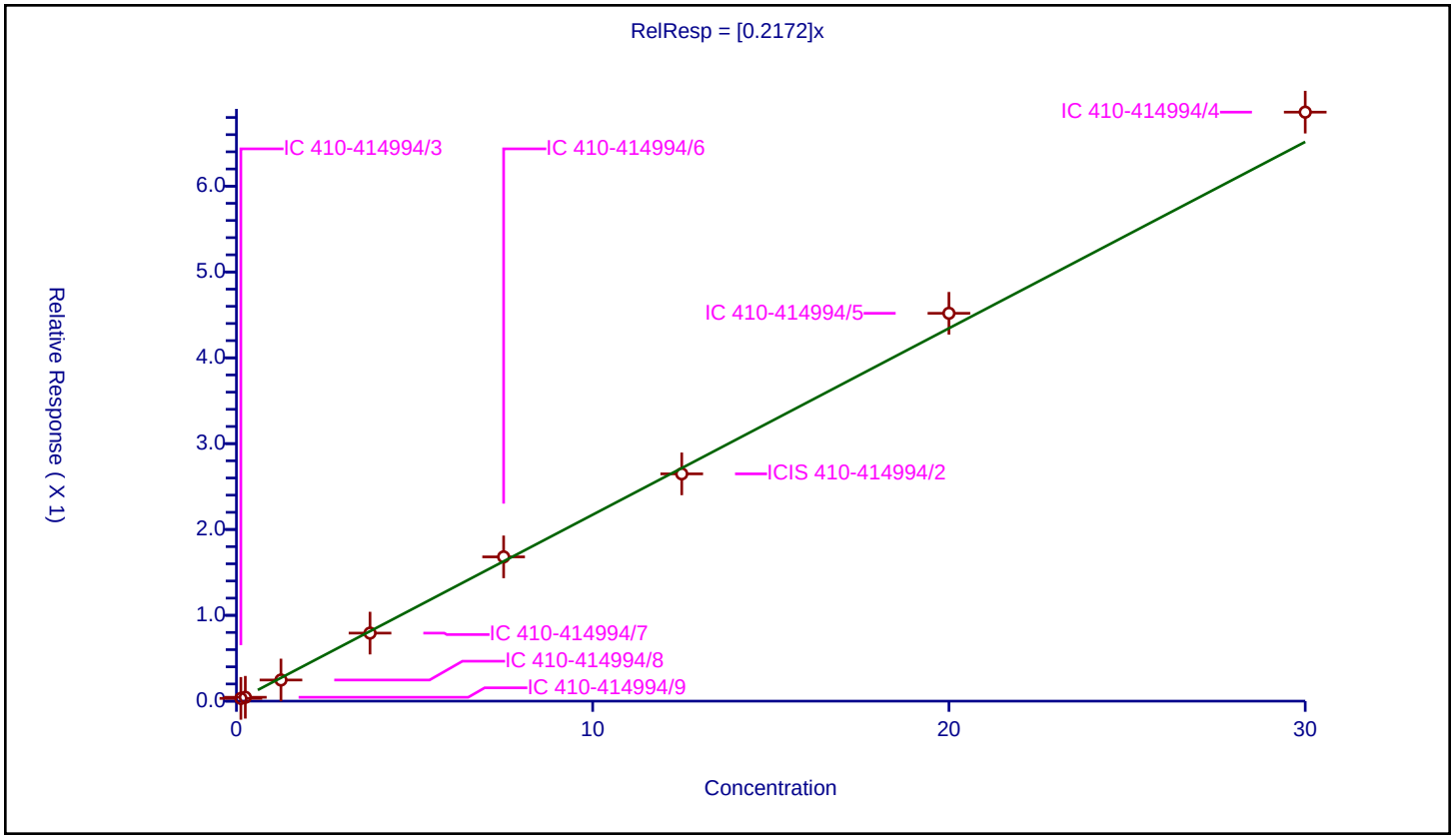
Curve Coefficients

Intercept:	0
Slope:	0.2172

Error Coefficients

Standard Error:	245000
Relative Standard Error:	10.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.032197	5.0	348171.0	0.257575	Y
2	IC 410-414994/9	0.25	0.045283	5.0	357751.0	0.181132	Y
3	IC 410-414994/8	1.25	0.246078	5.0	423789.0	0.196862	Y
4	IC 410-414994/7	3.75	0.792728	5.0	322784.0	0.211394	Y
5	IC 410-414994/6	7.5	1.680843	5.0	450646.0	0.224112	Y
6	ICIS 410-414994/2	12.5	2.647797	5.0	402427.0	0.211824	Y
7	IC 410-414994/5	20.0	4.518604	5.0	360732.0	0.22593	Y
8	IC 410-414994/4	30.0	6.862234	5.0	358556.0	0.228741	Y



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Calibration / Fluorene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

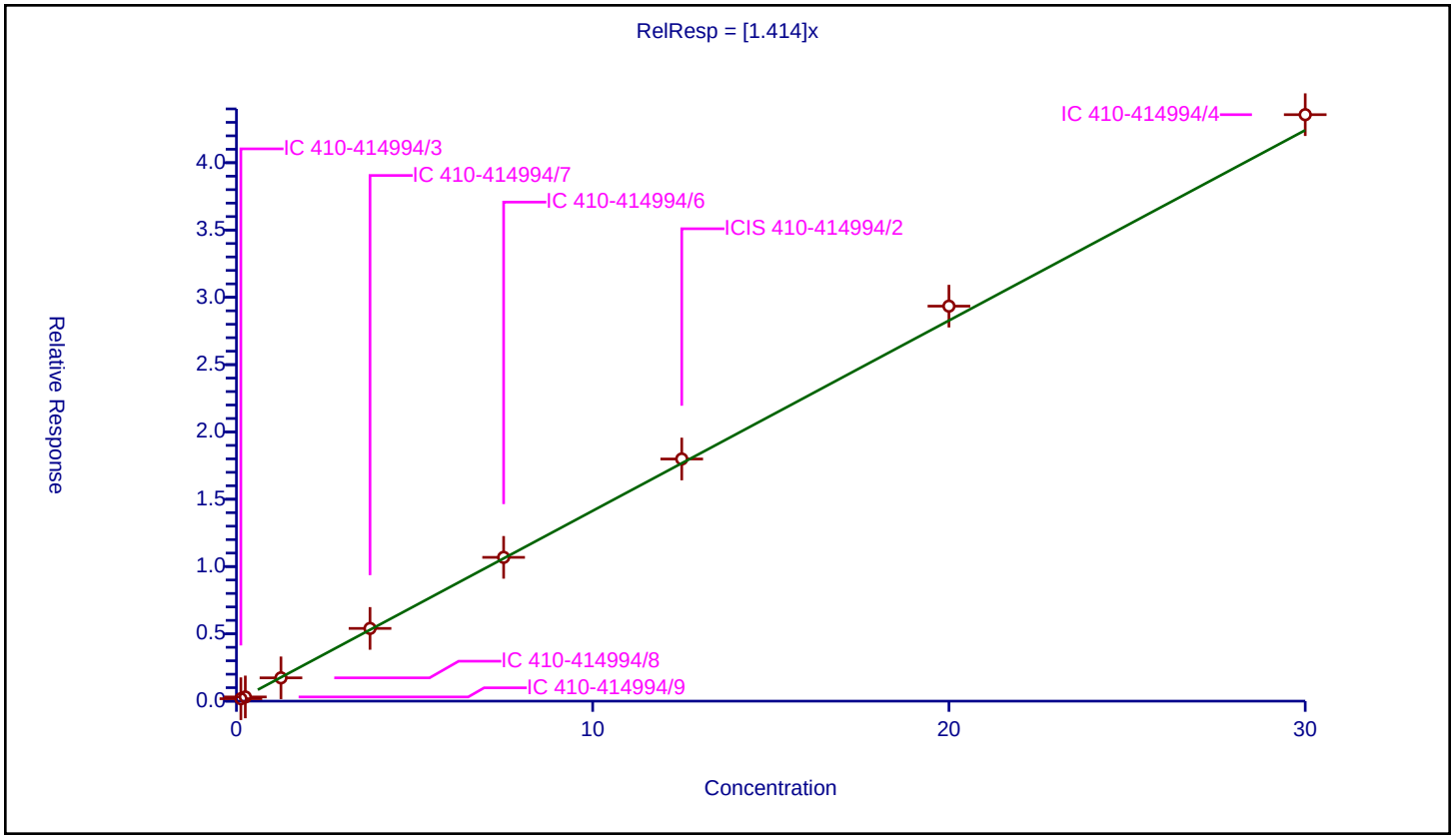
Curve Coefficients

Intercept:	0
Slope:	1.414

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	5.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.181635	5.0	348171.0	1.453079	Y
2	IC 410-414994/9	0.25	0.312592	5.0	357751.0	1.250367	Y
3	IC 410-414994/8	1.25	1.730047	5.0	423789.0	1.384038	Y
4	IC 410-414994/7	3.75	5.402157	5.0	322784.0	1.440575	Y
5	IC 410-414994/6	7.5	10.681943	5.0	450646.0	1.424259	Y
6	ICIS 410-414994/2	12.5	17.990518	5.0	402427.0	1.439241	Y
7	IC 410-414994/5	20.0	29.344638	5.0	360732.0	1.467232	Y
8	IC 410-414994/4	30.0	43.56993	5.0	358556.0	1.452331	Y



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Calibration / N-Nitro-o-toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

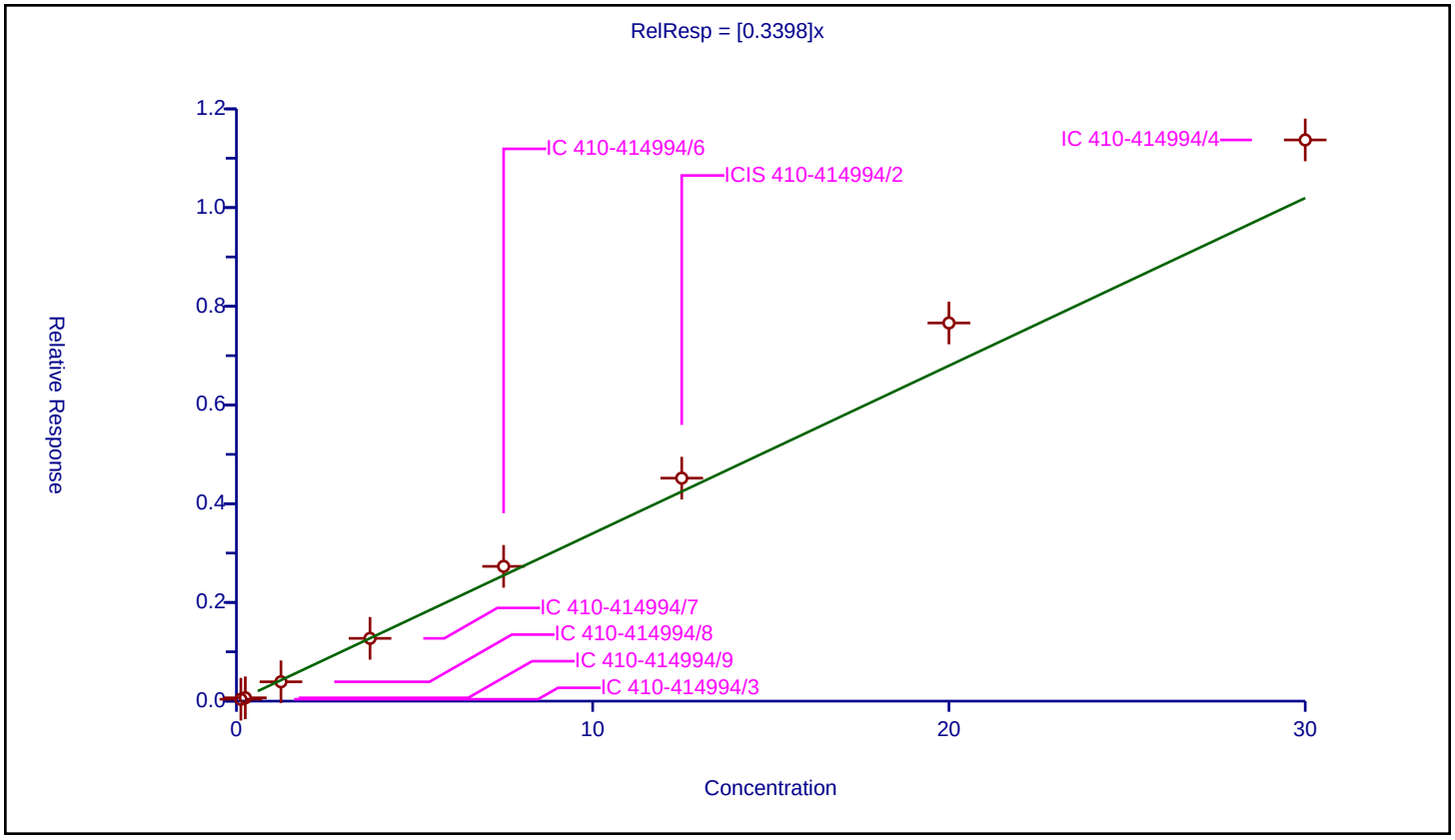
Curve Coefficients

Intercept:	0
Slope:	0.3398

Error Coefficients

Standard Error:	409000
Relative Standard Error:	11.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.038329	5.0	348171.0	0.306631	Y
2	IC 410-414994/9	0.25	0.067743	5.0	357751.0	0.270971	Y
3	IC 410-414994/8	1.25	0.392247	5.0	423789.0	0.313798	Y
4	IC 410-414994/7	3.75	1.272399	5.0	322784.0	0.339306	Y
5	IC 410-414994/6	7.5	2.730713	5.0	450646.0	0.364095	Y
6	ICIS 410-414994/2	12.5	4.518372	5.0	402427.0	0.36147	Y
7	IC 410-414994/5	20.0	7.662198	5.0	360732.0	0.38311	Y
8	IC 410-414994/4	30.0	11.370609	5.0	358556.0	0.37902	Y



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Calibration / 4-Chlorophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

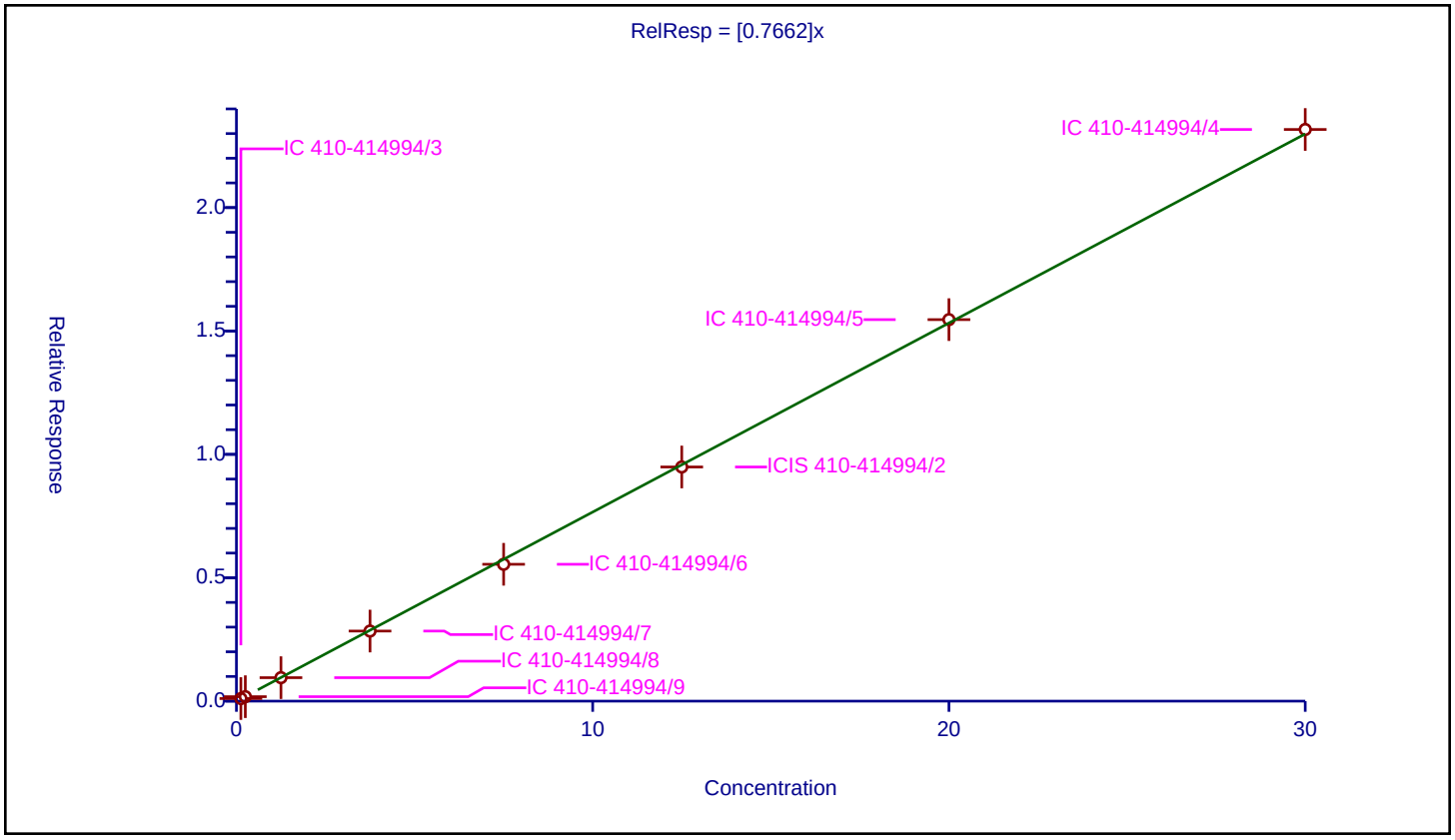
Curve Coefficients

Intercept:	0
Slope:	0.7662

Error Coefficients

Standard Error:	835000
Relative Standard Error:	4.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.105336	5.0	348171.0	0.842689	Y
2	IC 410-414994/9	0.25	0.181187	5.0	357751.0	0.72475	Y
3	IC 410-414994/8	1.25	0.951063	5.0	423789.0	0.76085	Y
4	IC 410-414994/7	3.75	2.840692	5.0	322784.0	0.757518	Y
5	IC 410-414994/6	7.5	5.54595	5.0	450646.0	0.73946	Y
6	ICIS 410-414994/2	12.5	9.488504	5.0	402427.0	0.75908	Y
7	IC 410-414994/5	20.0	15.460162	5.0	360732.0	0.773008	Y
8	IC 410-414994/4	30.0	23.166144	5.0	358556.0	0.772205	Y



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Calibration / 4-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

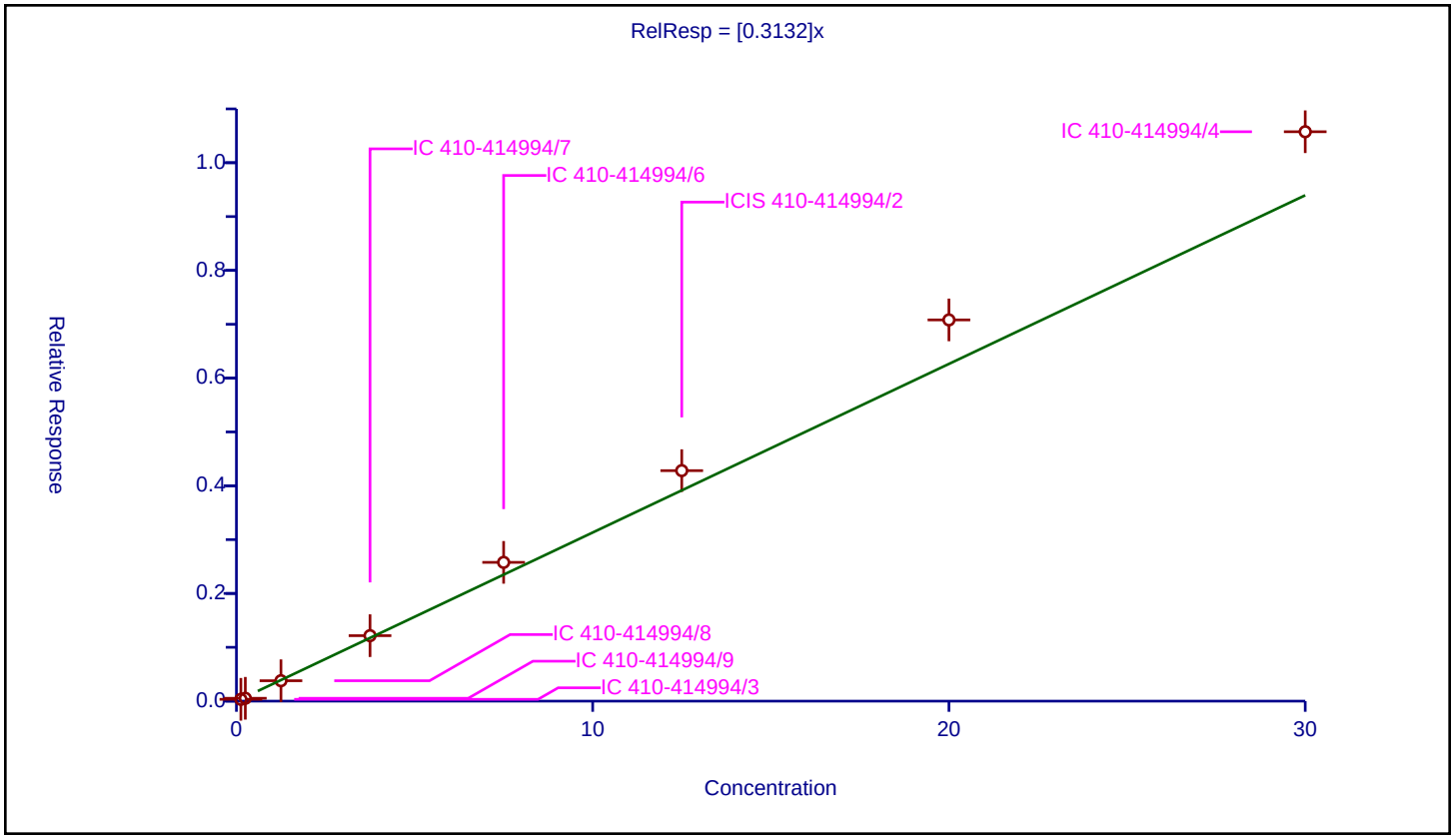
Curve Coefficients

Intercept:	0
Slope:	0.3132

Error Coefficients

Standard Error:	381000
Relative Standard Error:	15.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.033978	5.0	348171.0	0.27182	Y
2	IC 410-414994/9	0.25	0.053305	5.0	357751.0	0.213221	Y
3	IC 410-414994/8	1.25	0.379116	5.0	423789.0	0.303292	Y
4	IC 410-414994/7	3.75	1.216262	5.0	322784.0	0.324337	Y
5	IC 410-414994/6	7.5	2.577522	5.0	450646.0	0.34367	Y
6	ICIS 410-414994/2	12.5	4.281335	5.0	402427.0	0.342507	Y
7	IC 410-414994/5	20.0	7.080741	5.0	360732.0	0.354037	Y
8	IC 410-414994/4	30.0	10.575433	5.0	358556.0	0.352514	Y



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Calibration / 4,6-Dinitro-2-methylphenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

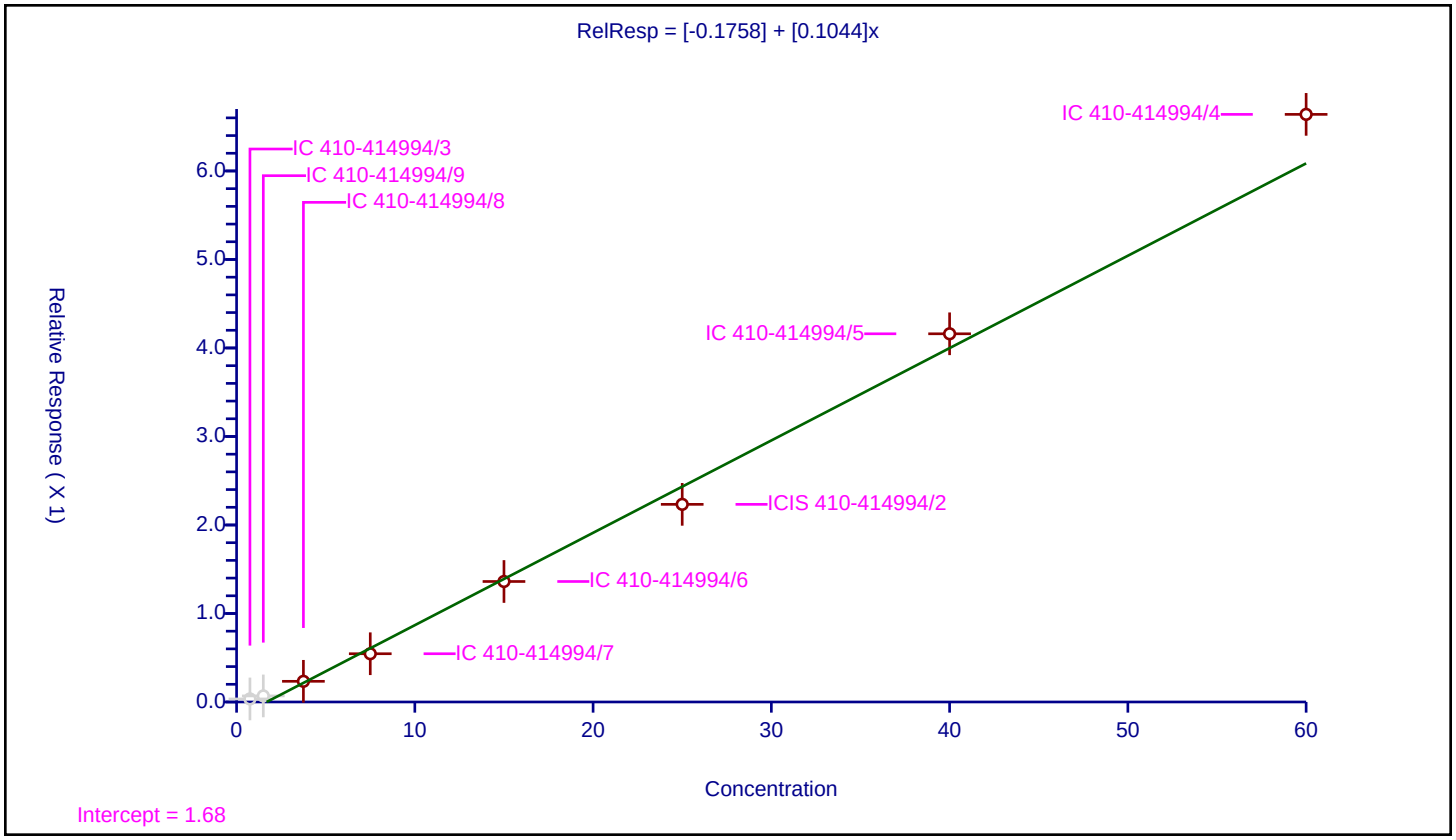
Curve Coefficients

Intercept:	-0.1758
Slope:	0.1044

Error Coefficients

Standard Error:	602000
Relative Standard Error:	7.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.75	0.034423	5.0	688634.0	0.045898	N
2	IC 410-414994/9	1.5	0.068484	5.0	714770.0	0.045656	N
3	IC 410-414994/8	3.75	0.233608	5.0	854186.0	0.062296	Y
4	IC 410-414994/7	7.5	0.545326	5.0	642827.0	0.07271	Y
5	IC 410-414994/6	15.0	1.361389	5.0	892618.0	0.090759	Y
6	ICIS 410-414994/2	25.0	2.232985	5.0	790639.0	0.089319	Y
7	IC 410-414994/5	40.0	4.160286	5.0	723425.0	0.104007	Y
8	IC 410-414994/4	60.0	6.639557	5.0	712778.0	0.110659	Y



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Calibration / N-Nitrosodiphenylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

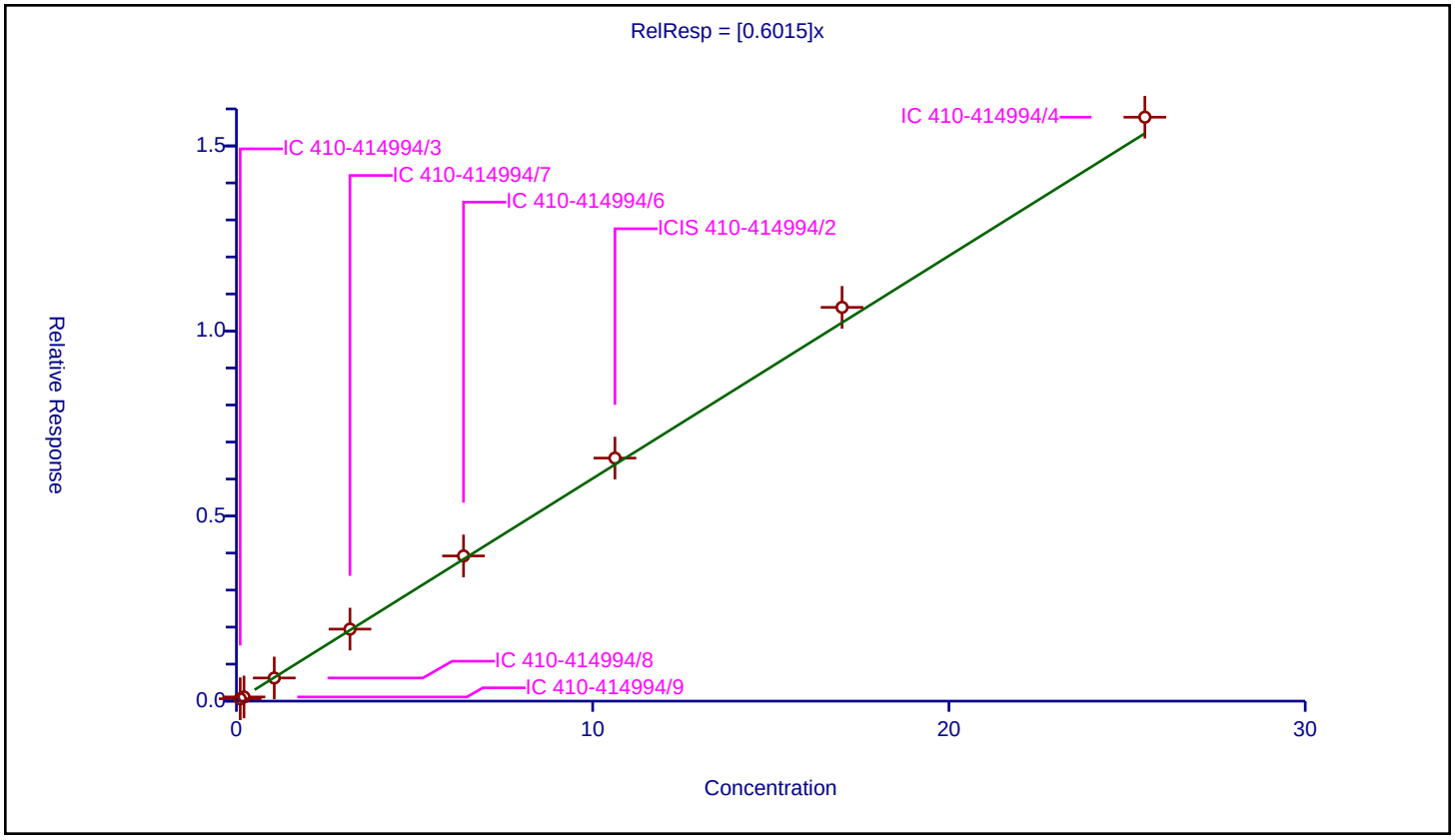
Curve Coefficients

Intercept:	0
Slope:	0.6015

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	5.2
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.10625	0.064308	5.0	688634.0	0.605256	Y
2	IC 410-414994/9	0.2125	0.112582	5.0	714770.0	0.529796	Y
3	IC 410-414994/8	1.0625	0.625508	5.0	854186.0	0.588713	Y
4	IC 410-414994/7	3.1875	1.945928	5.0	642827.0	0.610487	Y
5	IC 410-414994/6	6.375	3.922271	5.0	892618.0	0.615258	Y
6	ICIS 410-414994/2	10.625	6.566239	5.0	790639.0	0.617999	Y
7	IC 410-414994/5	17.0	10.638276	5.0	723425.0	0.625781	Y
8	IC 410-414994/4	25.5	15.776427	5.0	712778.0	0.618683	Y



Calibration / 1,2-Diphenylhydrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

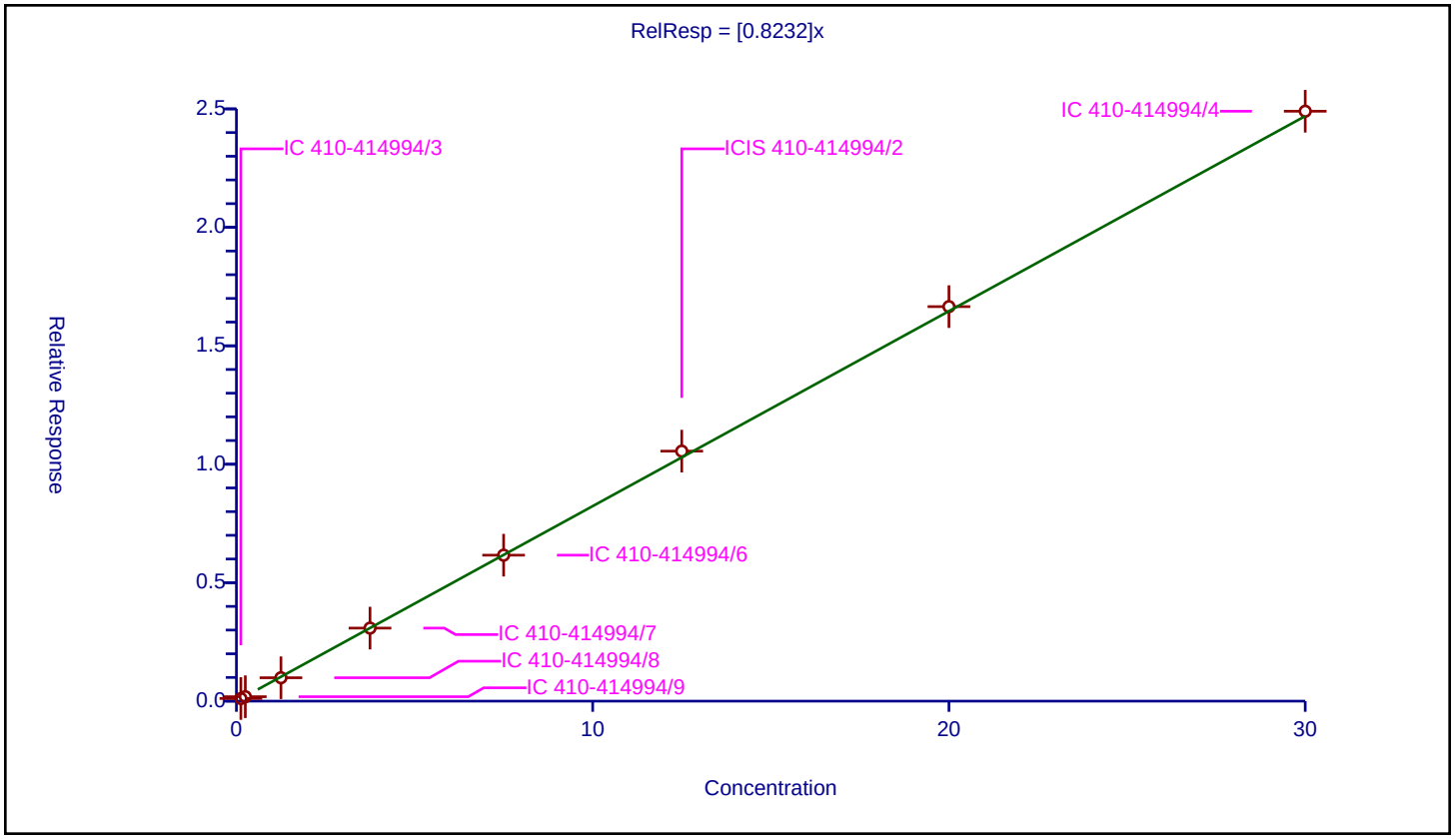
Curve Coefficients

Intercept:	0
Slope:	0.8232

Error Coefficients

Standard Error:	1800000
Relative Standard Error:	5.2
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.112164	5.0	688634.0	0.897313	Y
2	IC 410-414994/9	0.25	0.186724	5.0	714770.0	0.746898	Y
3	IC 410-414994/8	1.25	0.987987	5.0	854186.0	0.79039	Y
4	IC 410-414994/7	3.75	3.083038	5.0	642827.0	0.822143	Y
5	IC 410-414994/6	7.5	6.161409	5.0	892618.0	0.821521	Y
6	ICIS 410-414994/2	12.5	10.552996	5.0	790639.0	0.84424	Y
7	IC 410-414994/5	20.0	16.65362	5.0	723425.0	0.832681	Y
8	IC 410-414994/4	30.0	24.900733	5.0	712778.0	0.830024	Y



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Calibration / 2,4,6-Tribromophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

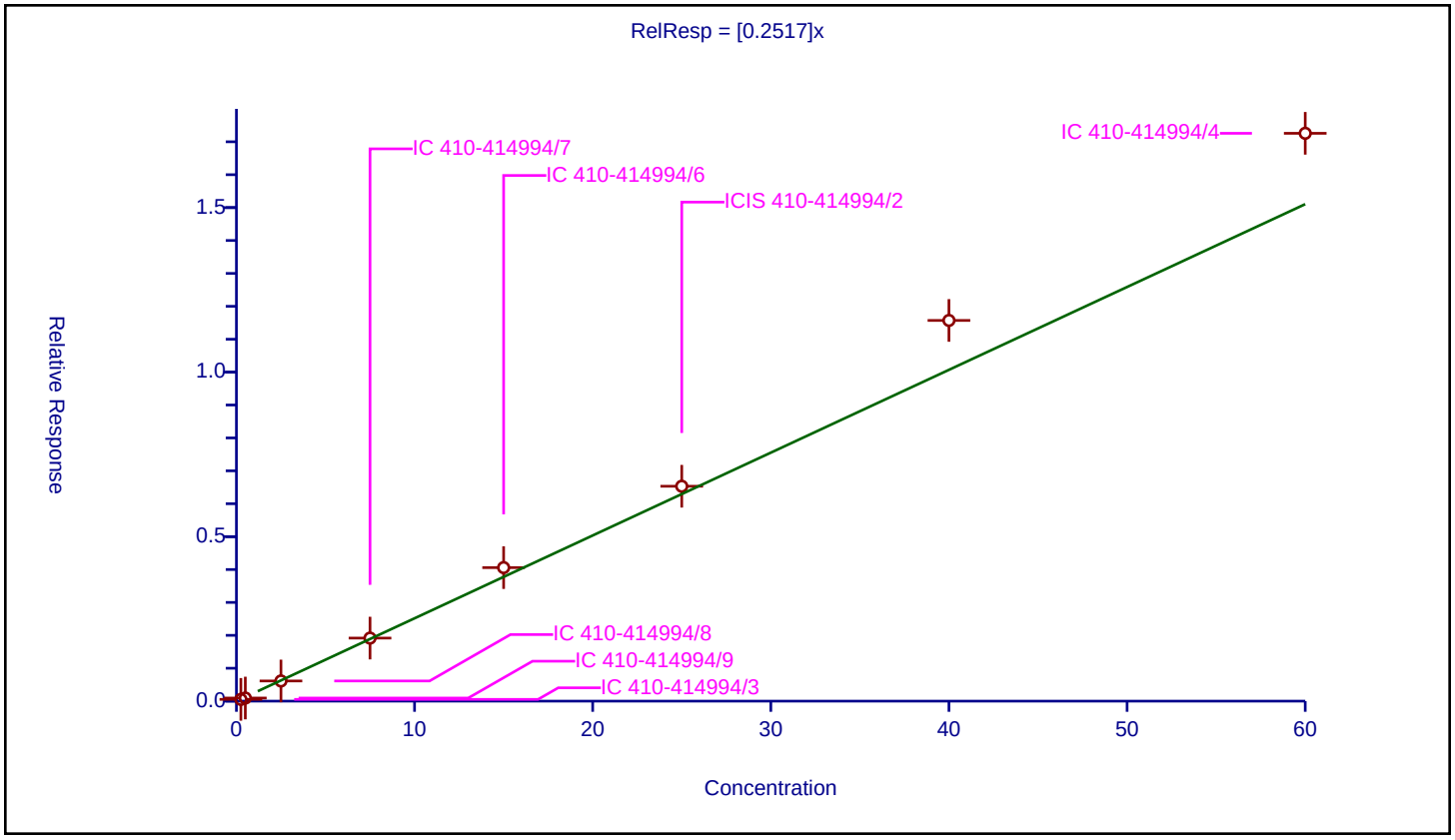
Curve Coefficients

Intercept:	0
Slope:	0.2517

Error Coefficients

Standard Error:	616000
Relative Standard Error:	13.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.25	0.053996	5.0	348171.0	0.215986	Y
2	IC 410-414994/9	0.5	0.094158	5.0	357751.0	0.188315	Y
3	IC 410-414994/8	2.5	0.613466	5.0	423789.0	0.245386	Y
4	IC 410-414994/7	7.5	1.91625	5.0	322784.0	0.2555	Y
5	IC 410-414994/6	15.0	4.058196	5.0	450646.0	0.270546	Y
6	ICIS 410-414994/2	25.0	6.53147	5.0	402427.0	0.261259	Y
7	IC 410-414994/5	40.0	11.570279	5.0	360732.0	0.289257	Y
8	IC 410-414994/4	60.0	17.258099	5.0	358556.0	0.287635	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

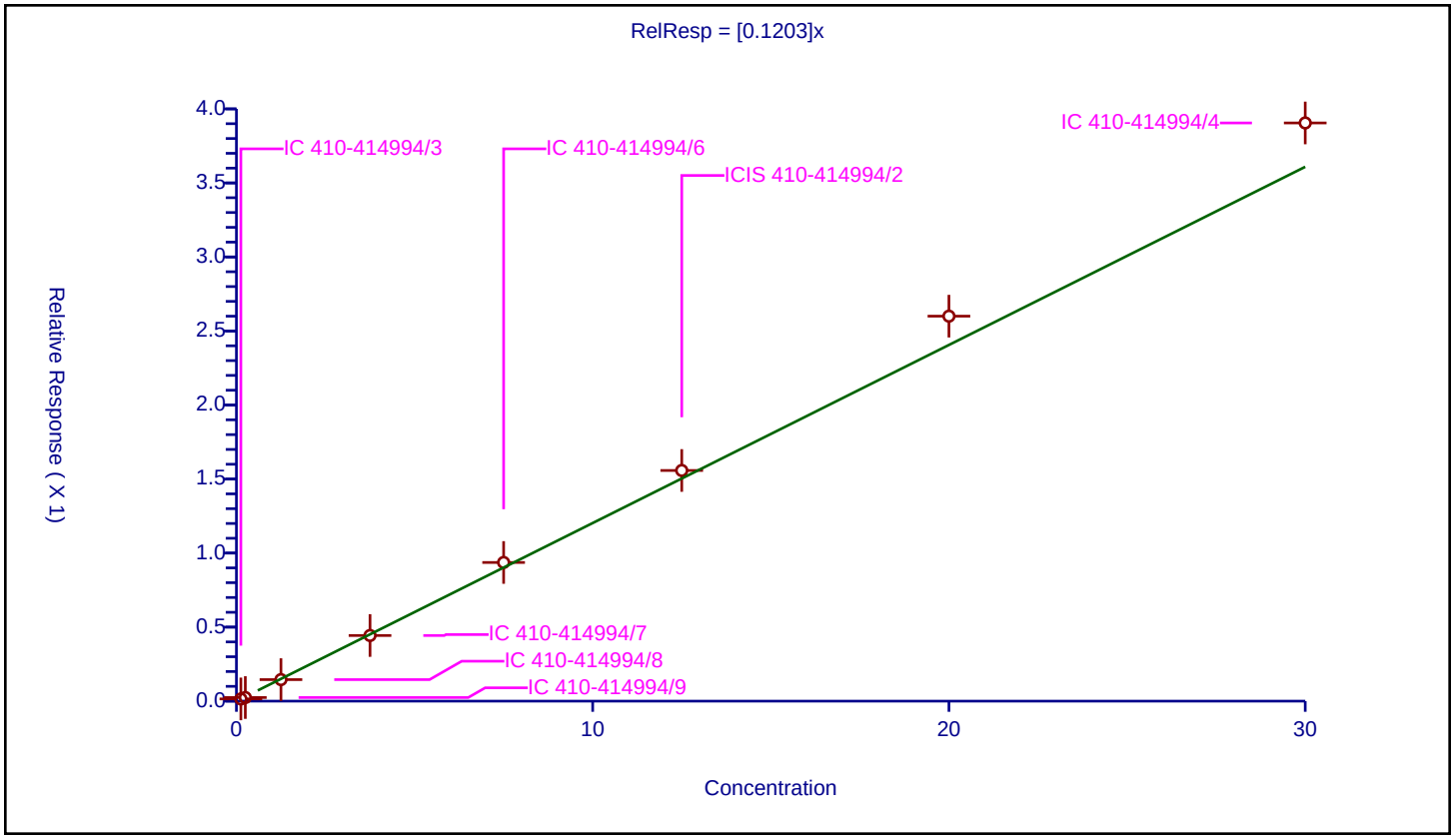
Curve Coefficients

Intercept:	0
Slope:	0.1203

Error Coefficients

Standard Error:	279000
Relative Standard Error:	8.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.015052	5.0	688634.0	0.120412	Y
2	IC 410-414994/9	0.25	0.024406	5.0	714770.0	0.097626	Y
3	IC 410-414994/8	1.25	0.145448	5.0	854186.0	0.116359	Y
4	IC 410-414994/7	3.75	0.443354	5.0	642827.0	0.118228	Y
5	IC 410-414994/6	7.5	0.936571	5.0	892618.0	0.124876	Y
6	ICIS 410-414994/2	12.5	1.557961	5.0	790639.0	0.124637	Y
7	IC 410-414994/5	20.0	2.600124	5.0	723425.0	0.130006	Y
8	IC 410-414994/4	30.0	3.905031	5.0	712778.0	0.130168	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

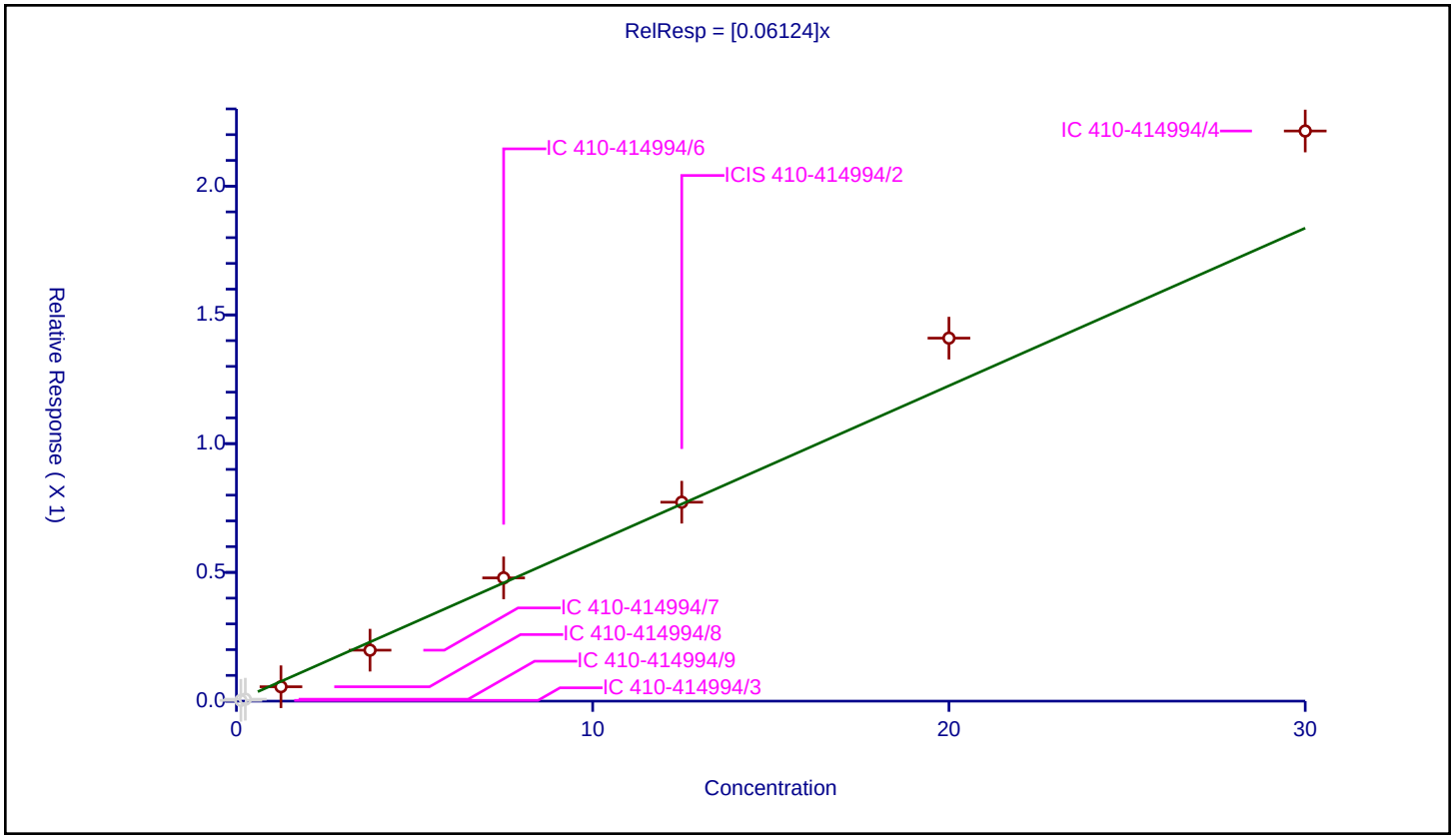
Curve Coefficients

Intercept:	0
Slope:	0.06124

Error Coefficients

Standard Error:	181000
Relative Standard Error:	17.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.003035	5.0	688634.0	0.02428	N
2	IC 410-414994/9	0.25	0.007506	5.0	714770.0	0.030024	N
3	IC 410-414994/8	1.25	0.055907	5.0	854186.0	0.044726	Y
4	IC 410-414994/7	3.75	0.197892	5.0	642827.0	0.052771	Y
5	IC 410-414994/6	7.5	0.478643	5.0	892618.0	0.063819	Y
6	ICIS 410-414994/2	12.5	0.772603	5.0	790639.0	0.061808	Y
7	IC 410-414994/5	20.0	1.409697	5.0	723425.0	0.070485	Y
8	IC 410-414994/4	30.0	2.214112	5.0	712778.0	0.073804	Y



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Calibration / cis-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

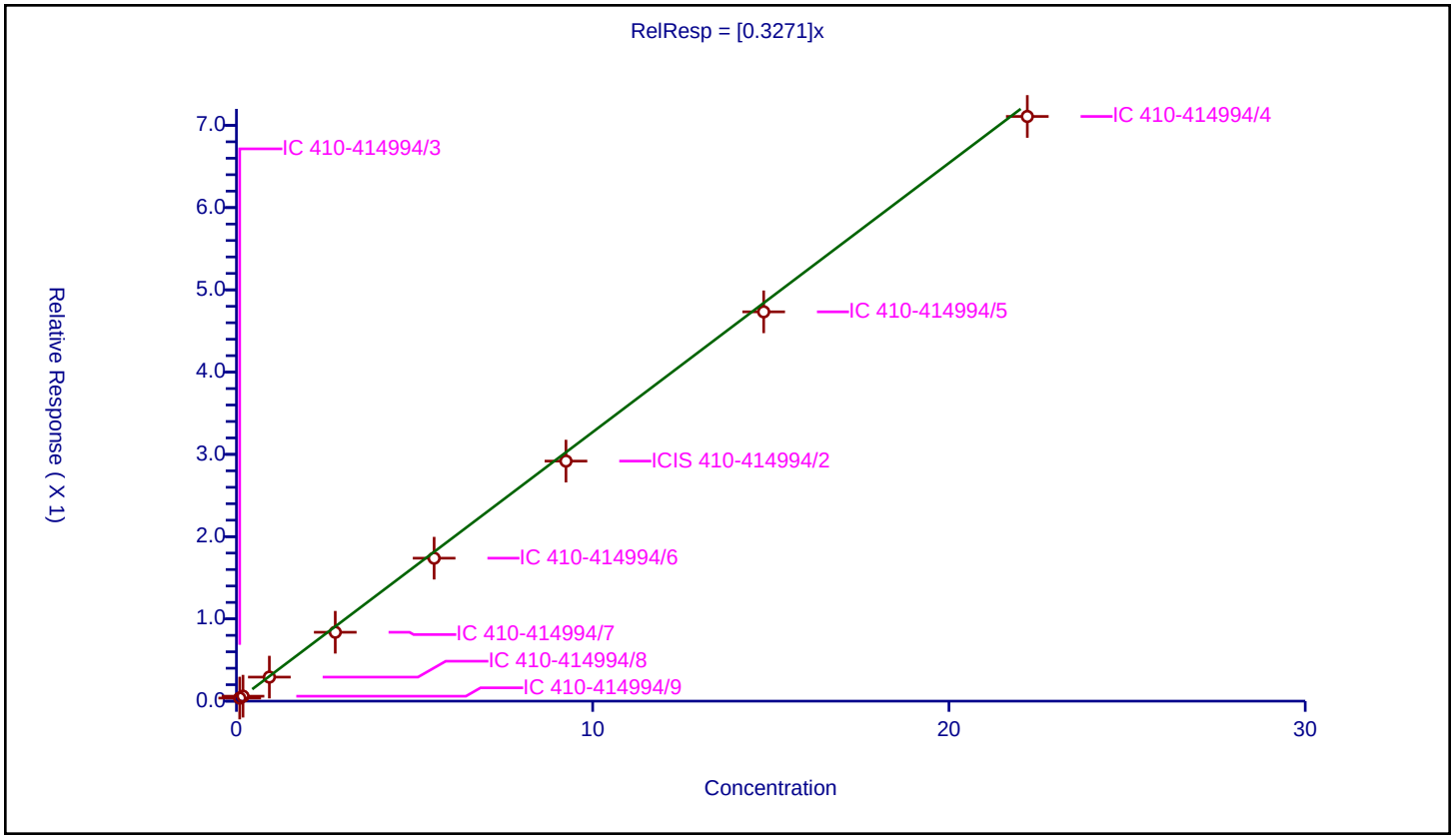
Curve Coefficients

Intercept:	0
Slope:	0.3271

Error Coefficients

Standard Error:	510000
Relative Standard Error:	9.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.0925	0.037487	5.0	688634.0	0.405268	Y
2	IC 410-414994/9	0.185	0.060103	5.0	714770.0	0.324882	Y
3	IC 410-414994/8	0.925	0.292272	5.0	854186.0	0.31597	Y
4	IC 410-414994/7	2.775	0.83748	5.0	642827.0	0.301795	Y
5	IC 410-414994/6	5.55	1.737821	5.0	892618.0	0.313121	Y
6	ICIS 410-414994/2	9.25	2.918216	5.0	790639.0	0.315483	Y
7	IC 410-414994/5	14.8	4.732972	5.0	723425.0	0.319795	Y
8	IC 410-414994/4	22.2	7.108041	5.0	712778.0	0.320182	Y



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Calibration / Phenacetin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

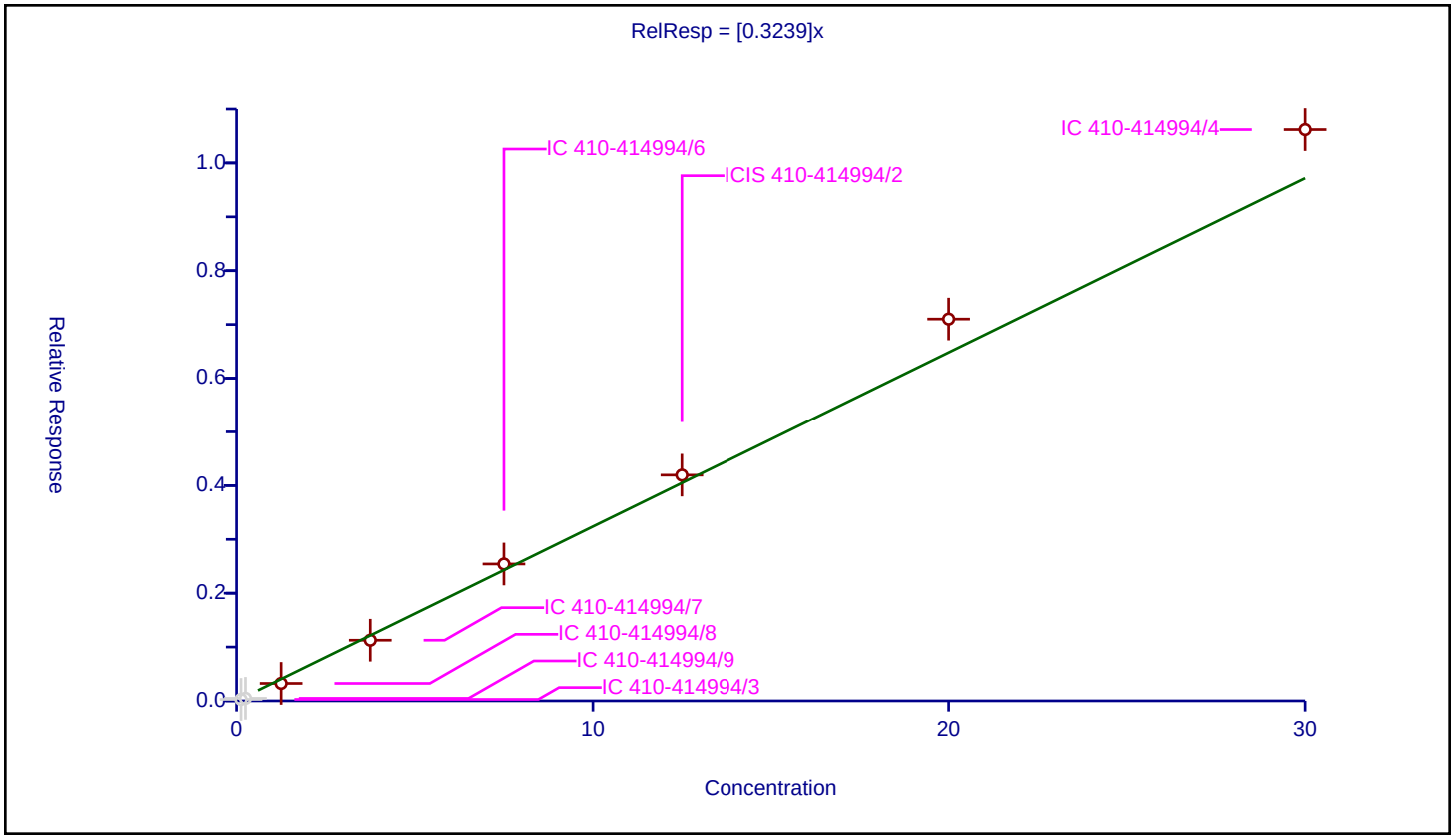
Curve Coefficients

Intercept:	0
Slope:	0.3239

Error Coefficients

Standard Error:	896000
Relative Standard Error:	11.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.027424	5.0	688634.0	0.219391	N
2	IC 410-414994/9	0.25	0.047169	5.0	714770.0	0.188676	N
3	IC 410-414994/8	1.25	0.324379	5.0	854186.0	0.259503	Y
4	IC 410-414994/7	3.75	1.126407	5.0	642827.0	0.300375	Y
5	IC 410-414994/6	7.5	2.542415	5.0	892618.0	0.338989	Y
6	ICIS 410-414994/2	12.5	4.195341	5.0	790639.0	0.335627	Y
7	IC 410-414994/5	20.0	7.101068	5.0	723425.0	0.355053	Y
8	IC 410-414994/4	30.0	10.619618	5.0	712778.0	0.353987	Y



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Calibration / Phorate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

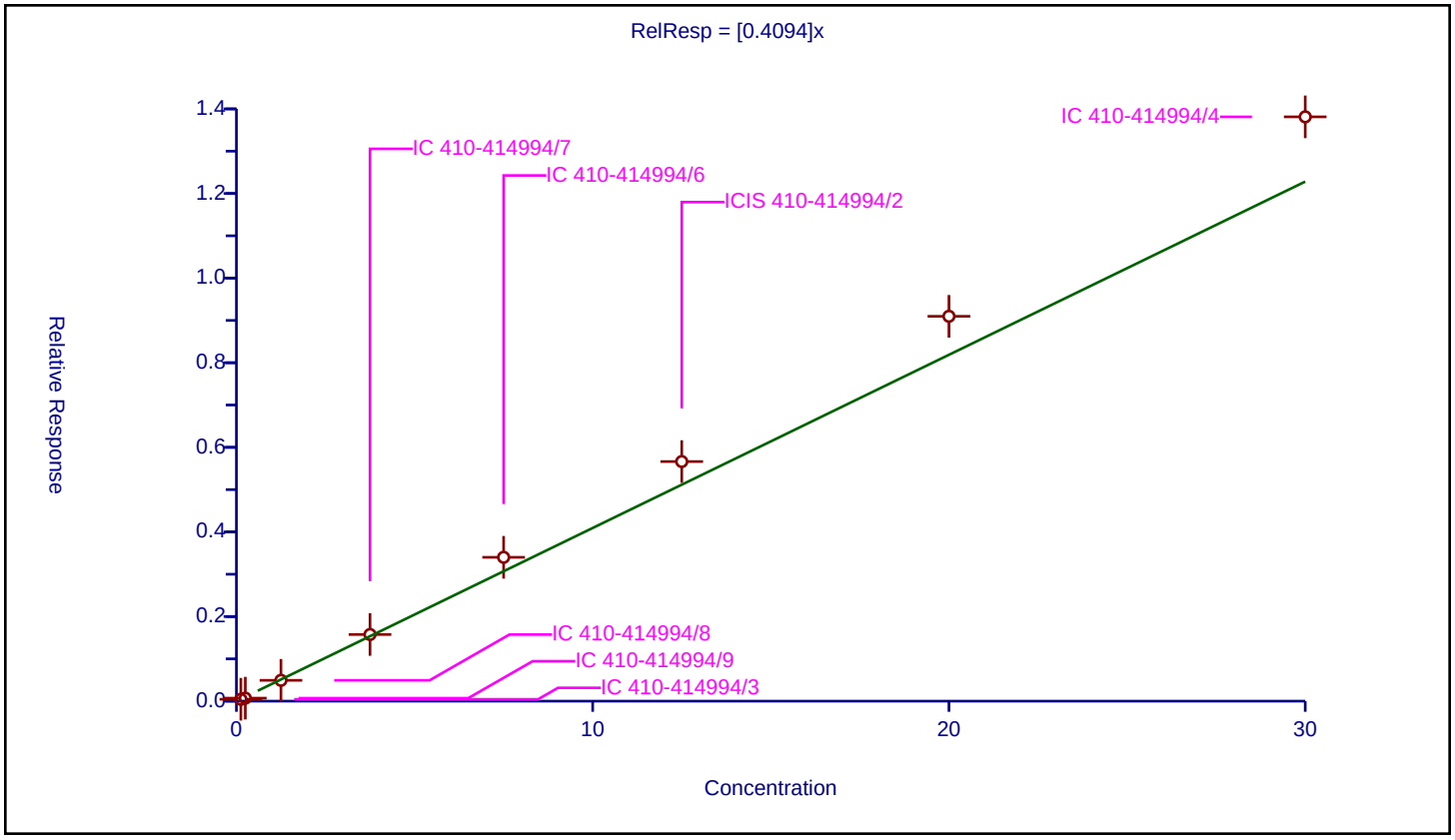
Curve Coefficients

Intercept:	0
Slope:	0.4094

Error Coefficients

Standard Error:	988000
Relative Standard Error:	15.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.044443	5.0	688634.0	0.355544	Y
2	IC 410-414994/9	0.25	0.070939	5.0	714770.0	0.283756	Y
3	IC 410-414994/8	1.25	0.492129	5.0	854186.0	0.393703	Y
4	IC 410-414994/7	3.75	1.575548	5.0	642827.0	0.420146	Y
5	IC 410-414994/6	7.5	3.400055	5.0	892618.0	0.453341	Y
6	ICIS 410-414994/2	12.5	5.663508	5.0	790639.0	0.453081	Y
7	IC 410-414994/5	20.0	9.097536	5.0	723425.0	0.454877	Y
8	IC 410-414994/4	30.0	13.811453	5.0	712778.0	0.460382	Y



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Calibration / 4-Bromophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

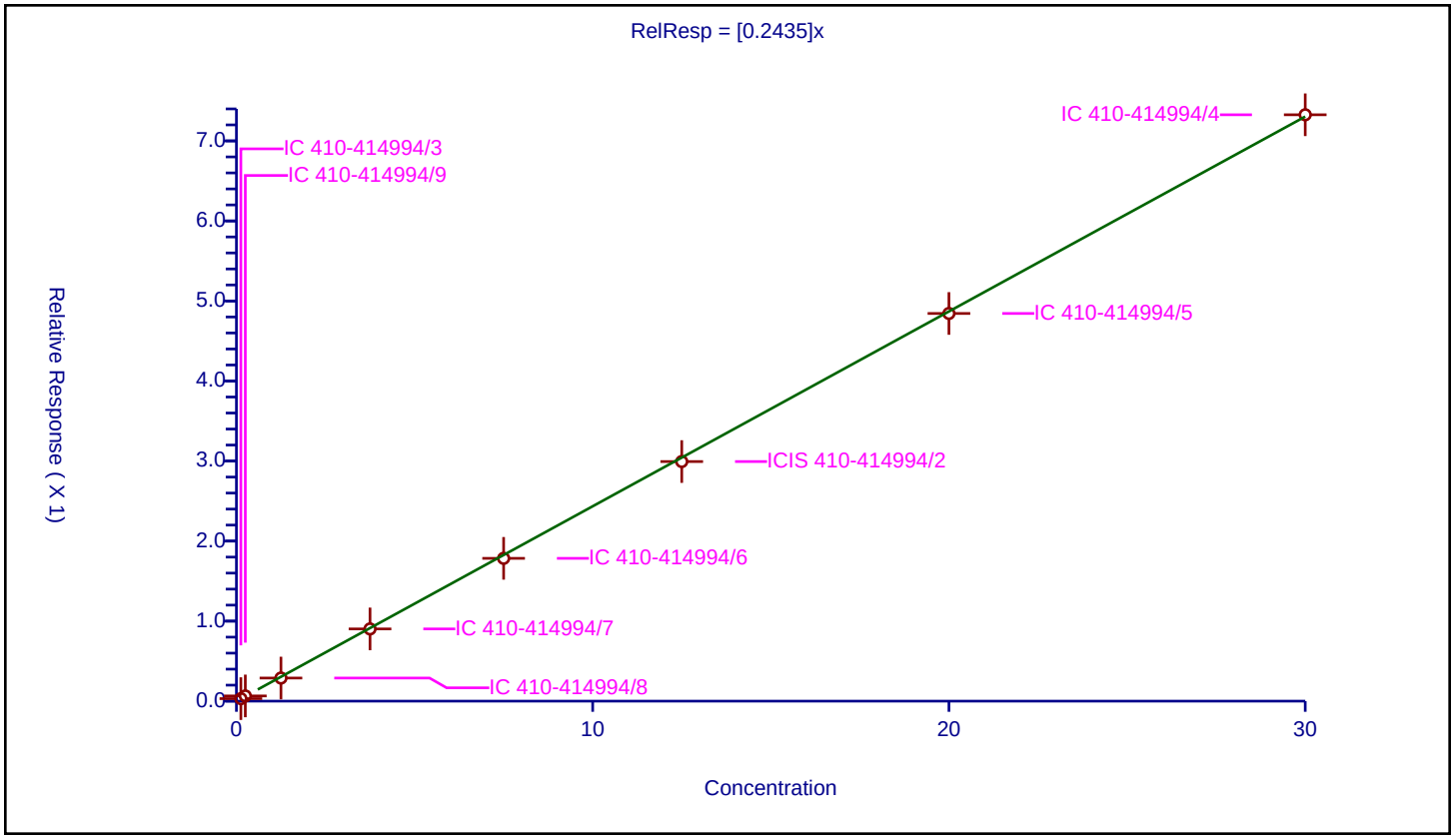
Curve Coefficients

Intercept:	0
Slope:	0.2435

Error Coefficients

Standard Error:	524000
Relative Standard Error:	3.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.031468	5.0	688634.0	0.251745	Y
2	IC 410-414994/9	0.25	0.065119	5.0	714770.0	0.260475	Y
3	IC 410-414994/8	1.25	0.28879	5.0	854186.0	0.231032	Y
4	IC 410-414994/7	3.75	0.902373	5.0	642827.0	0.240633	Y
5	IC 410-414994/6	7.5	1.784268	5.0	892618.0	0.237902	Y
6	ICIS 410-414994/2	12.5	2.993572	5.0	790639.0	0.239486	Y
7	IC 410-414994/5	20.0	4.84402	5.0	723425.0	0.242201	Y
8	IC 410-414994/4	30.0	7.326559	5.0	712778.0	0.244219	Y



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Calibration / trans-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

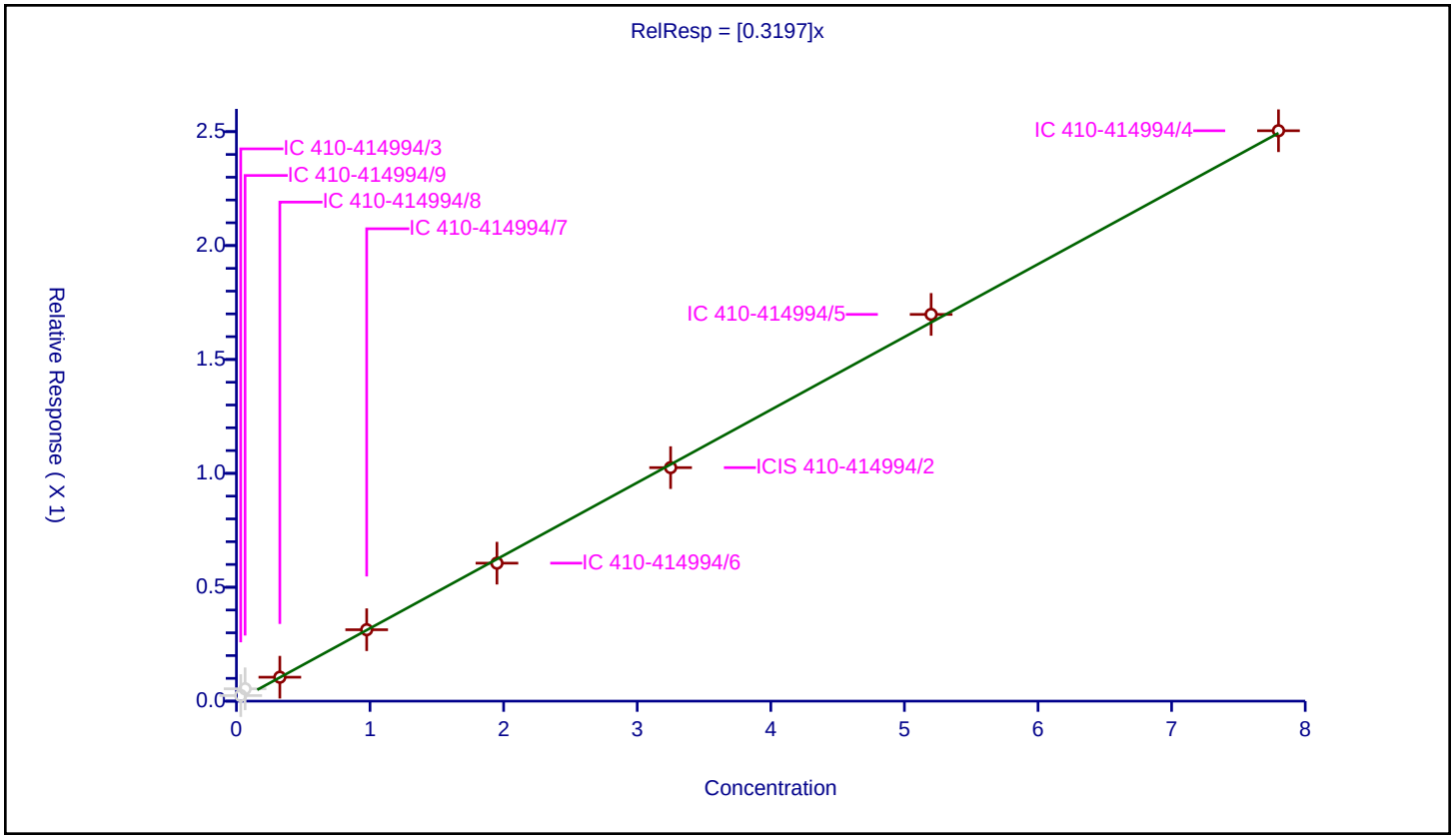
Curve Coefficients

Intercept:	0
Slope:	0.3197

Error Coefficients

Standard Error:	213000
Relative Standard Error:	1.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.0325	0.024534	5.0	688634.0	0.754895	N
2	IC 410-414994/9	0.065	0.054136	5.0	714770.0	0.832866	N
3	IC 410-414994/8	0.325	0.10503	5.0	854186.0	0.323169	Y
4	IC 410-414994/7	0.975	0.313552	5.0	642827.0	0.321592	Y
5	IC 410-414994/6	1.95	0.605774	5.0	892618.0	0.310653	Y
6	ICIS 410-414994/2	3.25	1.02512	5.0	790639.0	0.315422	Y
7	IC 410-414994/5	5.2	1.69784	5.0	723425.0	0.326508	Y
8	IC 410-414994/4	7.8	2.50409	5.0	712778.0	0.321037	Y



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Calibration / Hexachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

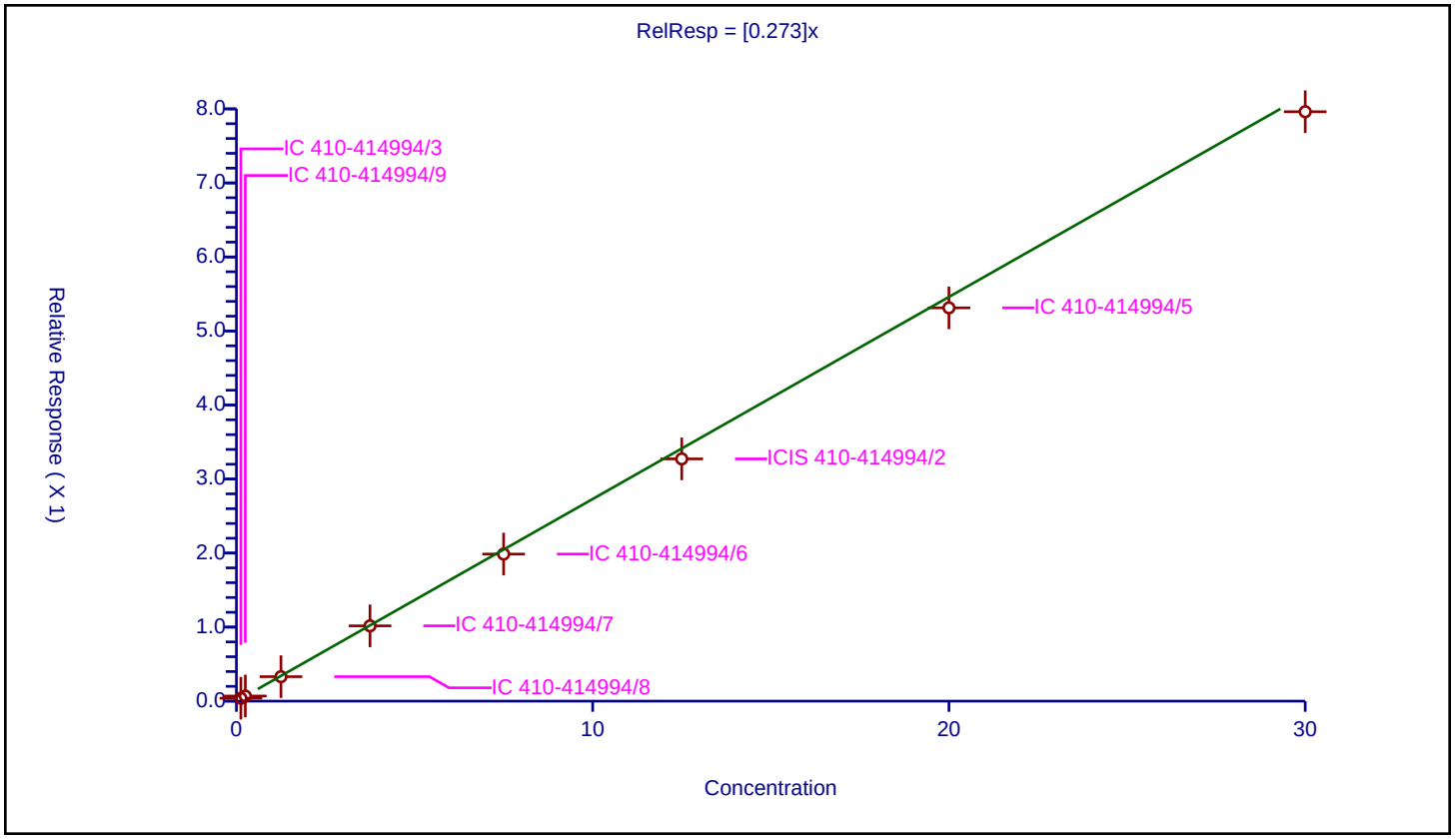
Curve Coefficients

Intercept:	0
Slope:	0.273

Error Coefficients

Standard Error:	572000
Relative Standard Error:	6.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.039339	5.0	688634.0	0.31471	Y
2	IC 410-414994/9	0.25	0.069015	5.0	714770.0	0.276061	Y
3	IC 410-414994/8	1.25	0.330525	5.0	854186.0	0.26442	Y
4	IC 410-414994/7	3.75	1.017039	5.0	642827.0	0.27121	Y
5	IC 410-414994/6	7.5	1.986449	5.0	892618.0	0.26486	Y
6	ICIS 410-414994/2	12.5	3.272258	5.0	790639.0	0.261781	Y
7	IC 410-414994/5	20.0	5.312493	5.0	723425.0	0.265625	Y
8	IC 410-414994/4	30.0	7.961385	5.0	712778.0	0.265379	Y



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Calibration / Dimethoate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

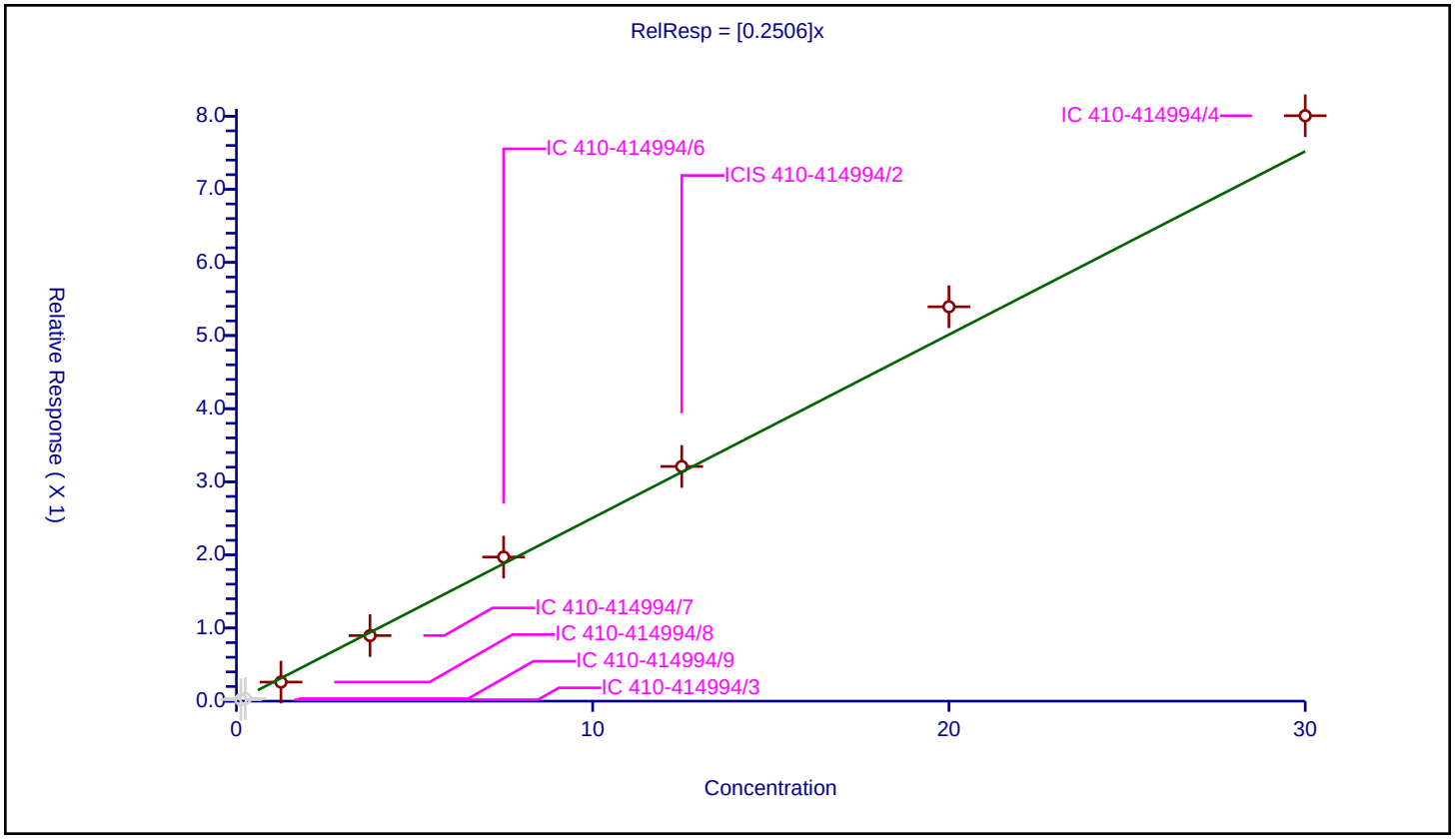
Curve Coefficients

Intercept:	0
Slope:	0.2506

Error Coefficients

Standard Error:	679000
Relative Standard Error:	9.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.019771	5.0	688634.0	0.158168	N
2	IC 410-414994/9	0.25	0.034655	5.0	714770.0	0.138618	N
3	IC 410-414994/8	1.25	0.260769	5.0	854186.0	0.208615	Y
4	IC 410-414994/7	3.75	0.896656	5.0	642827.0	0.239108	Y
5	IC 410-414994/6	7.5	1.970731	5.0	892618.0	0.262764	Y
6	ICIS 410-414994/2	12.5	3.209891	5.0	790639.0	0.256791	Y
7	IC 410-414994/5	20.0	5.3938	5.0	723425.0	0.26969	Y
8	IC 410-414994/4	30.0	8.006469	5.0	712778.0	0.266882	Y



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Calibration / Atrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

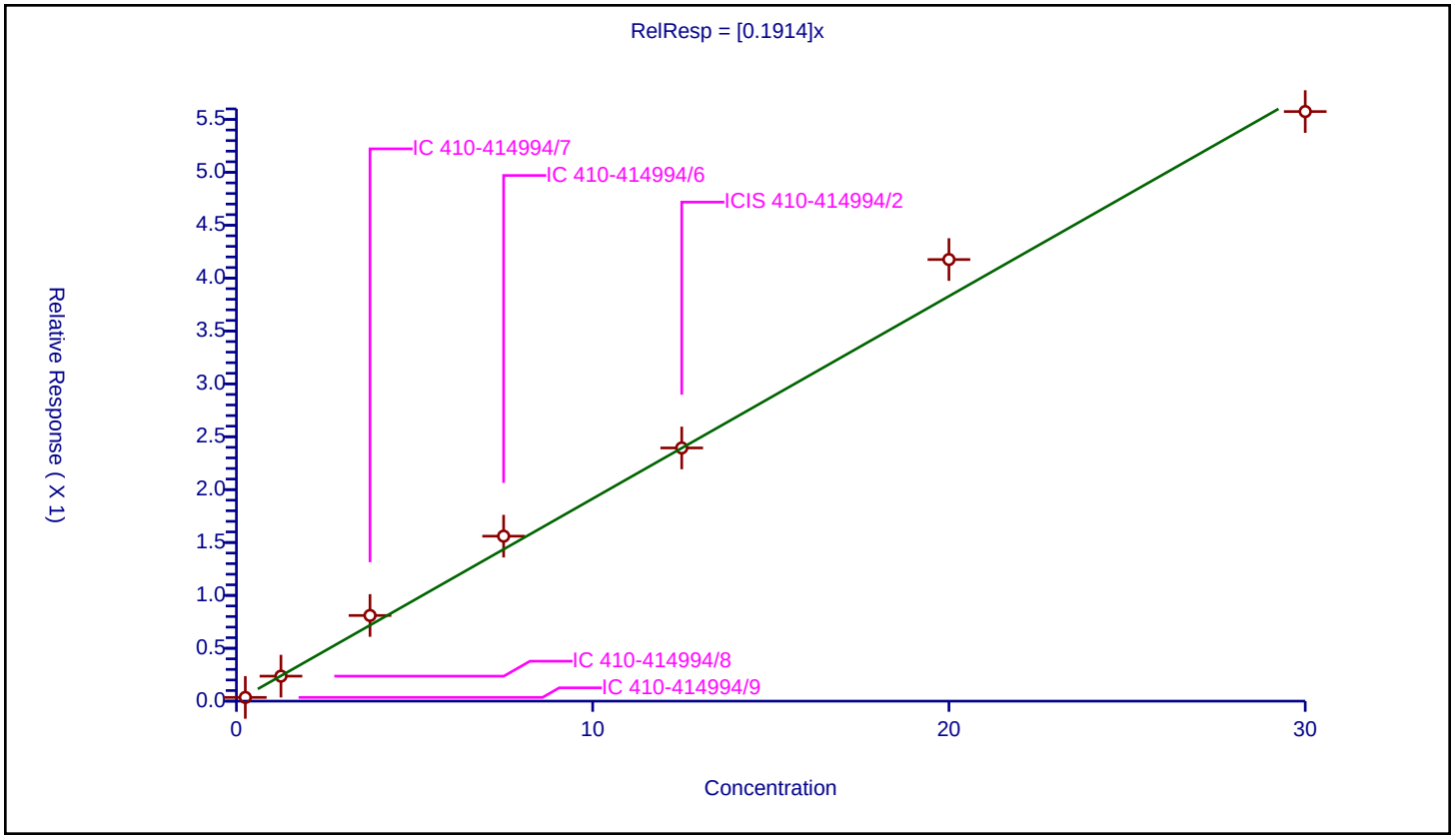
Curve Coefficients

Intercept:	0
Slope:	0.1914

Error Coefficients

Standard Error:	453000
Relative Standard Error:	13.1
Correlation Coefficient:	0.986
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/9	0.25	0.035214	5.0	714770.0	0.140856	Y
2	IC 410-414994/8	1.25	0.236436	5.0	854186.0	0.189148	Y
3	IC 410-414994/7	3.75	0.809938	5.0	642827.0	0.215983	Y
4	IC 410-414994/6	7.5	1.560068	5.0	892618.0	0.208009	Y
5	ICIS 410-414994/2	12.5	2.394171	5.0	790639.0	0.191534	Y
6	IC 410-414994/5	20.0	4.17554	5.0	723425.0	0.208777	Y
7	IC 410-414994/4	30.0	5.574849	5.0	712778.0	0.185828	Y



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Calibration / Pentachlorophenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

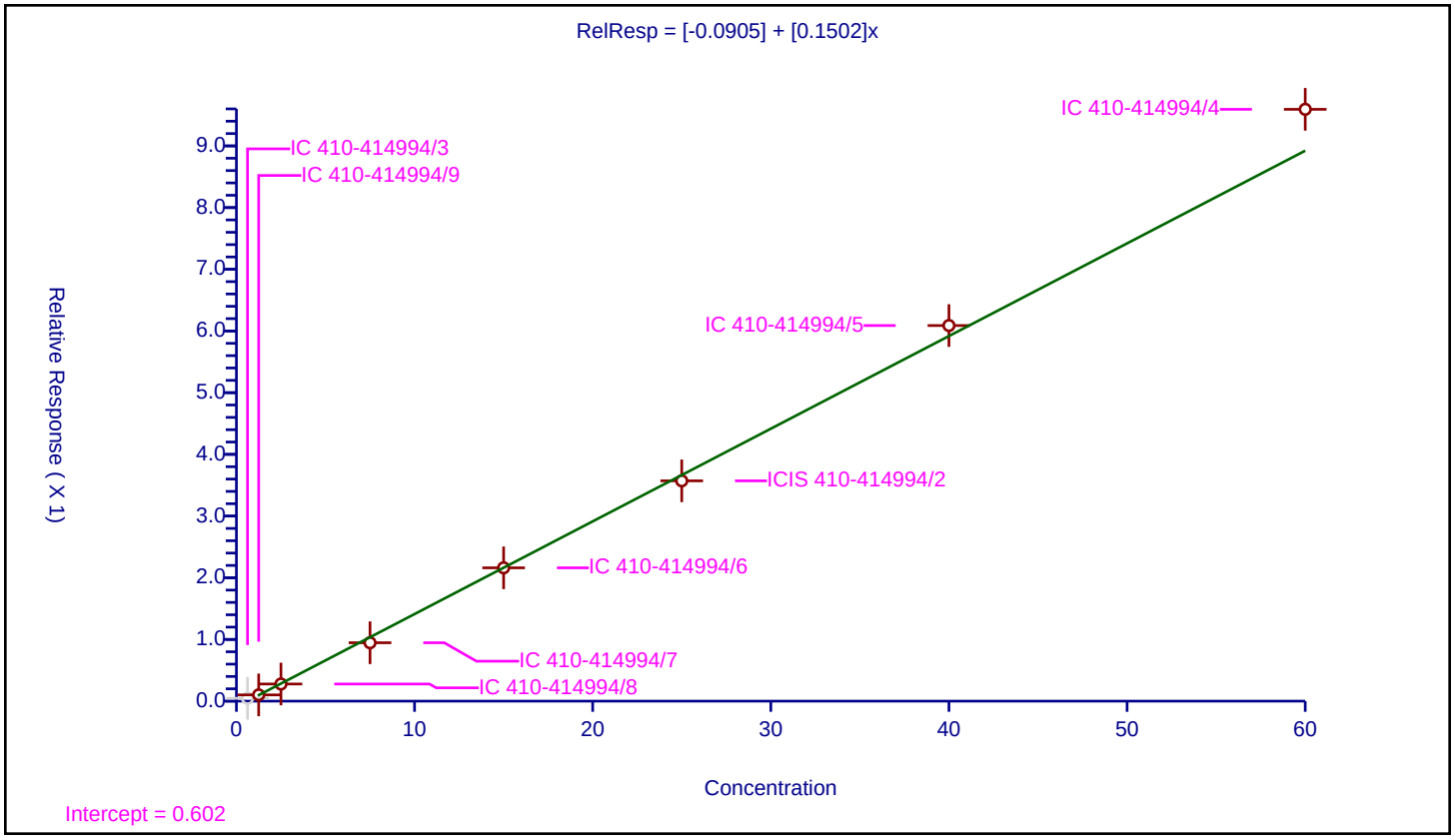
Curve Coefficients

Intercept:	-0.0905
Slope:	0.1502

Error Coefficients

Standard Error:	791000
Relative Standard Error:	5.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.625	0.0462	5.0	688634.0	0.07392	N
2	IC 410-414994/9	1.25	0.101361	5.0	714770.0	0.081089	Y
3	IC 410-414994/8	2.5	0.277756	5.0	854186.0	0.111102	Y
4	IC 410-414994/7	7.5	0.946405	5.0	642827.0	0.126187	Y
5	IC 410-414994/6	15.0	2.161154	5.0	892618.0	0.144077	Y
6	ICIS 410-414994/2	25.0	3.570783	5.0	790639.0	0.142831	Y
7	IC 410-414994/5	40.0	6.088192	5.0	723425.0	0.152205	Y
8	IC 410-414994/4	60.0	9.593106	5.0	712778.0	0.159885	Y



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Calibration / 4-Aminobiphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

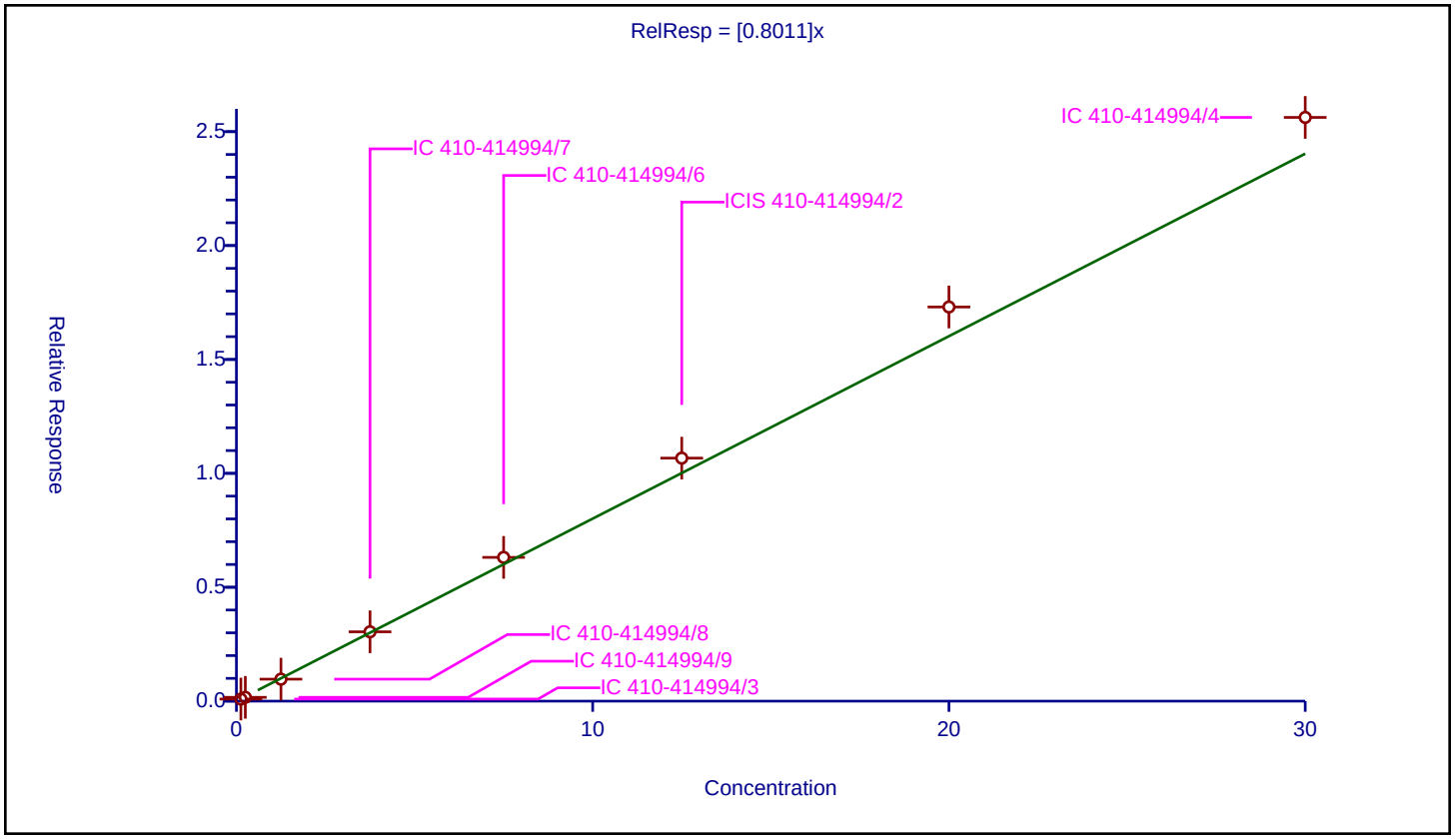
Curve Coefficients

Intercept:	0
Slope:	0.8011

Error Coefficients

Standard Error:	1850000
Relative Standard Error:	8.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.092204	5.0	688634.0	0.737634	Y
2	IC 410-414994/9	0.25	0.168222	5.0	714770.0	0.672888	Y
3	IC 410-414994/8	1.25	0.964696	5.0	854186.0	0.771757	Y
4	IC 410-414994/7	3.75	3.044606	5.0	642827.0	0.811895	Y
5	IC 410-414994/6	7.5	6.311591	5.0	892618.0	0.841546	Y
6	ICIS 410-414994/2	12.5	10.668826	5.0	790639.0	0.853506	Y
7	IC 410-414994/5	20.0	17.303176	5.0	723425.0	0.865159	Y
8	IC 410-414994/4	30.0	25.625384	5.0	712778.0	0.854179	Y



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Calibration / Pentachloronitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

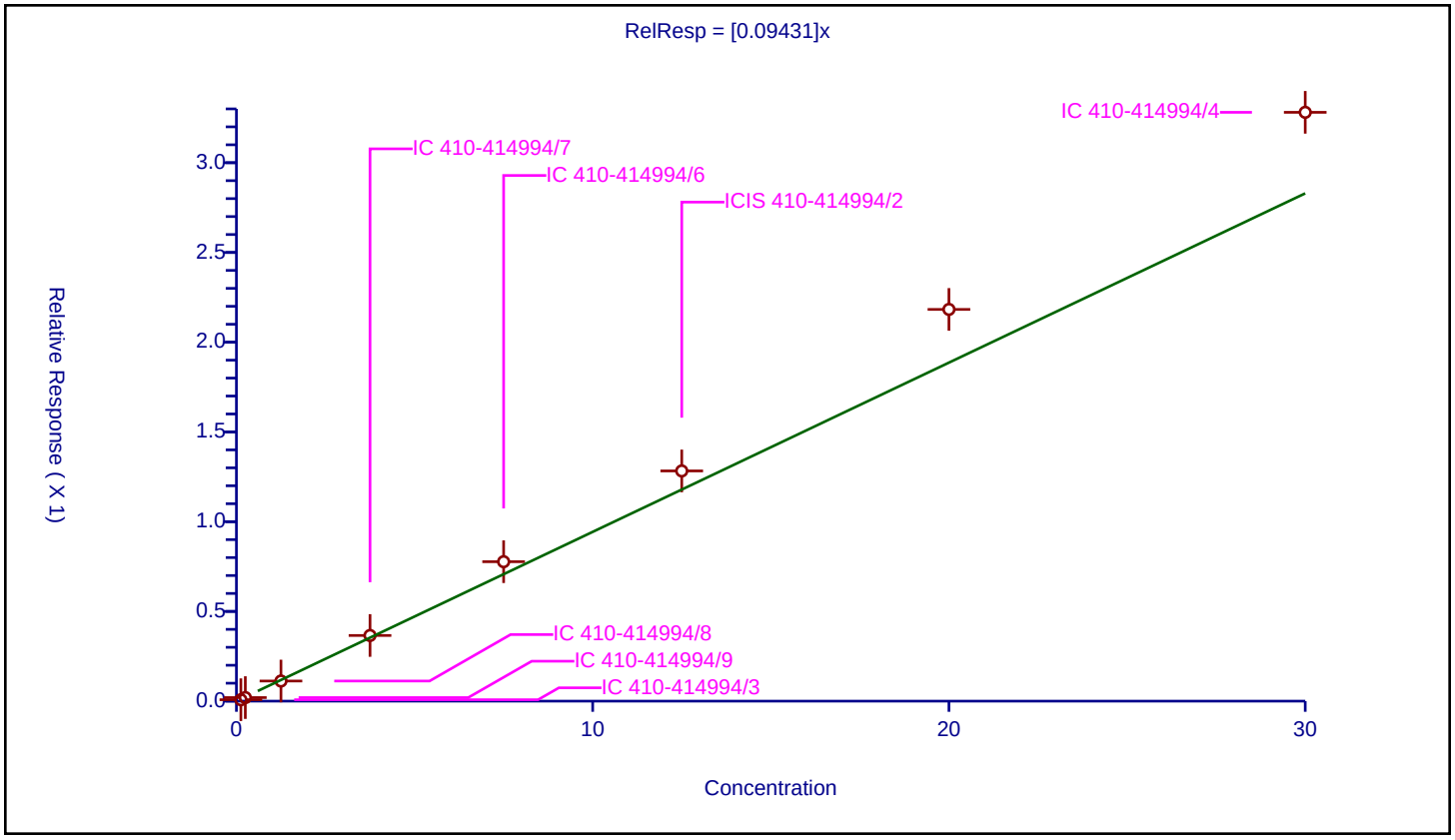
Curve Coefficients

Intercept:	0
Slope:	0.09431

Error Coefficients

Standard Error:	233000
Relative Standard Error:	17.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.007885	5.0	688634.0	0.063081	Y
2	IC 410-414994/9	0.25	0.01986	5.0	714770.0	0.079438	Y
3	IC 410-414994/8	1.25	0.112113	5.0	854186.0	0.08969	Y
4	IC 410-414994/7	3.75	0.365876	5.0	642827.0	0.097567	Y
5	IC 410-414994/6	7.5	0.776928	5.0	892618.0	0.10359	Y
6	ICIS 410-414994/2	12.5	1.282697	5.0	790639.0	0.102616	Y
7	IC 410-414994/5	20.0	2.182659	5.0	723425.0	0.109133	Y
8	IC 410-414994/4	30.0	3.280846	5.0	712778.0	0.109362	Y



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Calibration / Pronamide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

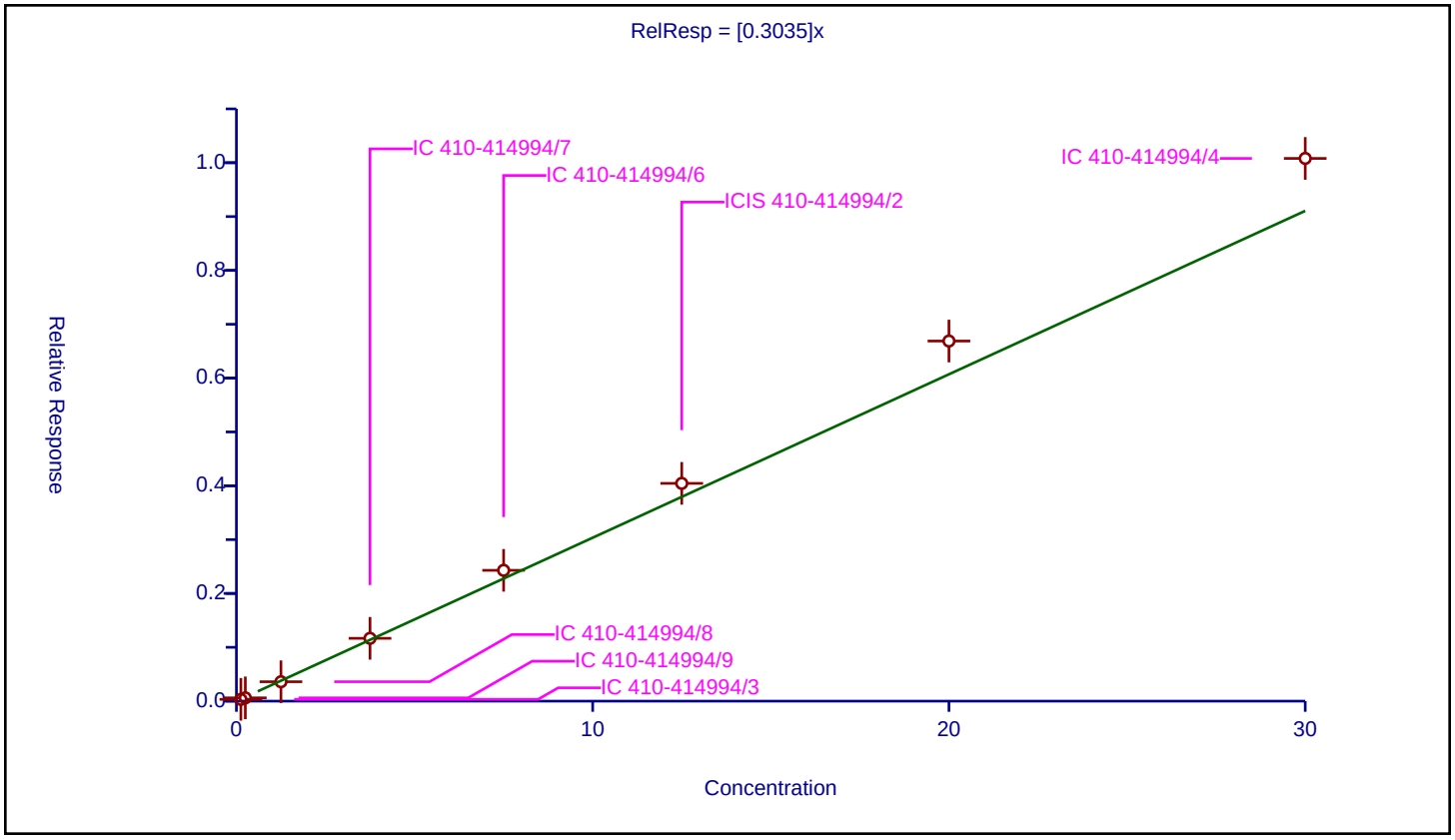
Curve Coefficients

Intercept:	0
Slope:	0.3035

Error Coefficients

Standard Error:	720000
Relative Standard Error:	11.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.033341	5.0	688634.0	0.266731	Y
2	IC 410-414994/9	0.25	0.061055	5.0	714770.0	0.244218	Y
3	IC 410-414994/8	1.25	0.360273	5.0	854186.0	0.288218	Y
4	IC 410-414994/7	3.75	1.166799	5.0	642827.0	0.311146	Y
5	IC 410-414994/6	7.5	2.429757	5.0	892618.0	0.323968	Y
6	ICIS 410-414994/2	12.5	4.044634	5.0	790639.0	0.323571	Y
7	IC 410-414994/5	20.0	6.688558	5.0	723425.0	0.334428	Y
8	IC 410-414994/4	30.0	10.079913	5.0	712778.0	0.335997	Y



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Calibration / Dinoseb

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

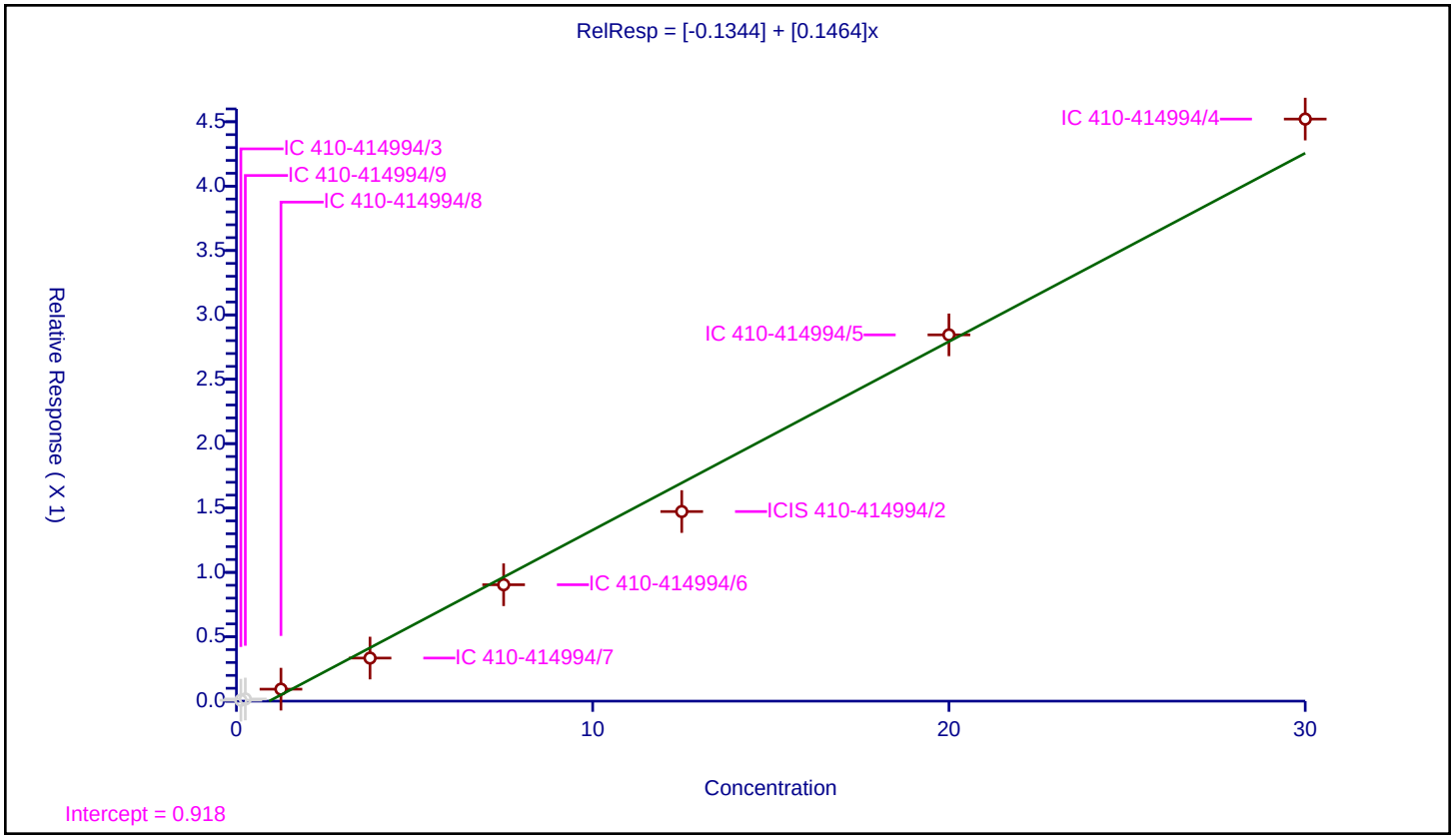
Curve Coefficients

Intercept:	-0.1344
Slope:	0.1464

Error Coefficients

Standard Error:	408000
Relative Standard Error:	16.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.007326	5.0	688634.0	0.058609	N
2	IC 410-414994/9	0.25	0.016712	5.0	714770.0	0.066847	N
3	IC 410-414994/8	1.25	0.092972	5.0	854186.0	0.074377	Y
4	IC 410-414994/7	3.75	0.33453	5.0	642827.0	0.089208	Y
5	IC 410-414994/6	7.5	0.904099	5.0	892618.0	0.120547	Y
6	ICIS 410-414994/2	12.5	1.472556	5.0	790639.0	0.117804	Y
7	IC 410-414994/5	20.0	2.84487	5.0	723425.0	0.142243	Y
8	IC 410-414994/4	30.0	4.520938	5.0	712778.0	0.150698	Y



Calibration / Disulfoton

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

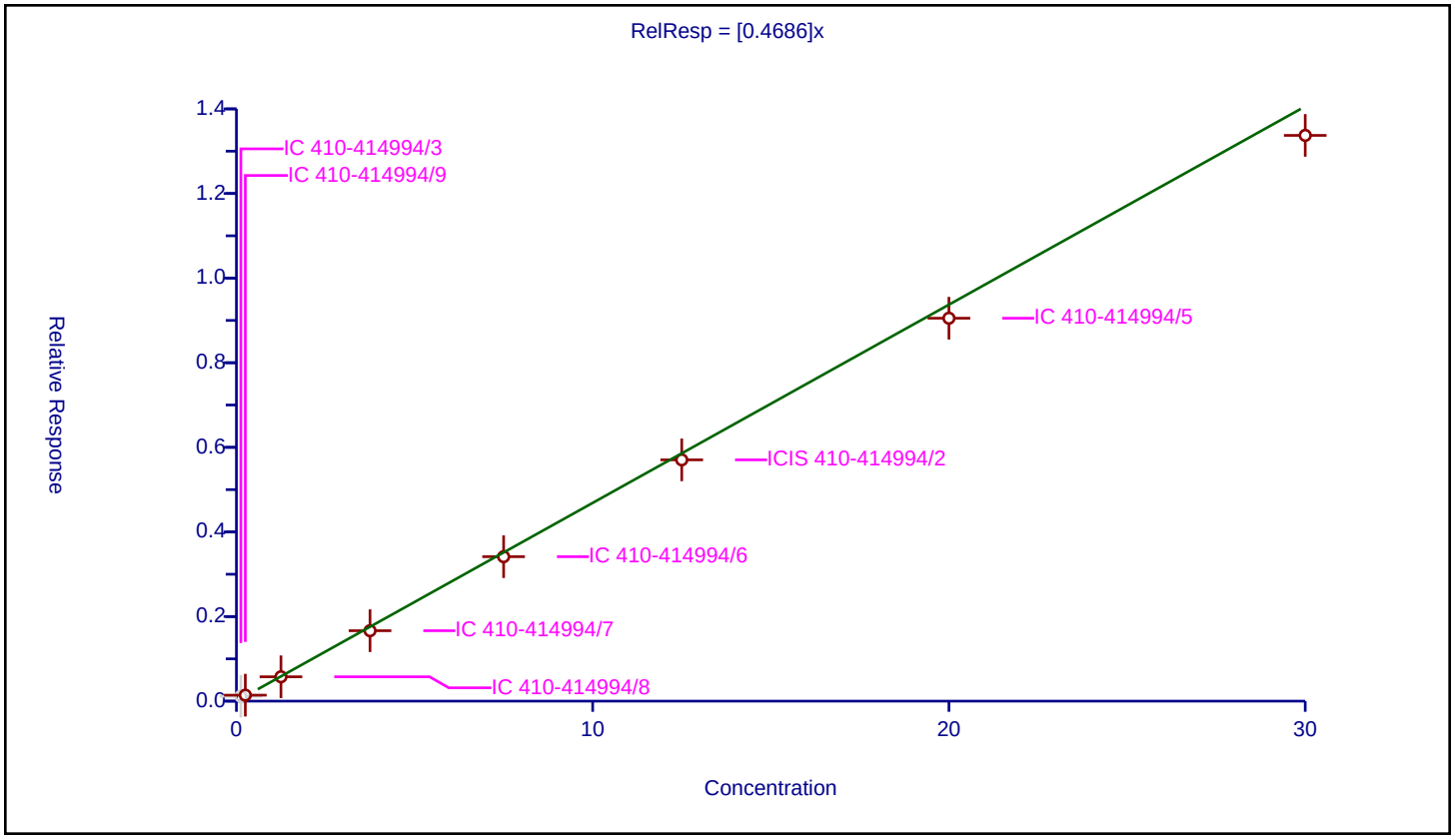
Curve Coefficients

Intercept:	0
Slope:	0.4686

Error Coefficients

Standard Error:	1050000
Relative Standard Error:	9.2
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.115533	5.0	688634.0	0.924265	N
2	IC 410-414994/9	0.25	0.141437	5.0	714770.0	0.565748	Y
3	IC 410-414994/8	1.25	0.575794	5.0	854186.0	0.460635	Y
4	IC 410-414994/7	3.75	1.664849	5.0	642827.0	0.44396	Y
5	IC 410-414994/6	7.5	3.414512	5.0	892618.0	0.455268	Y
6	ICIS 410-414994/2	12.5	5.703703	5.0	790639.0	0.456296	Y
7	IC 410-414994/5	20.0	9.051809	5.0	723425.0	0.45259	Y
8	IC 410-414994/4	30.0	13.37361	5.0	712778.0	0.445787	Y



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Calibration / Phenanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

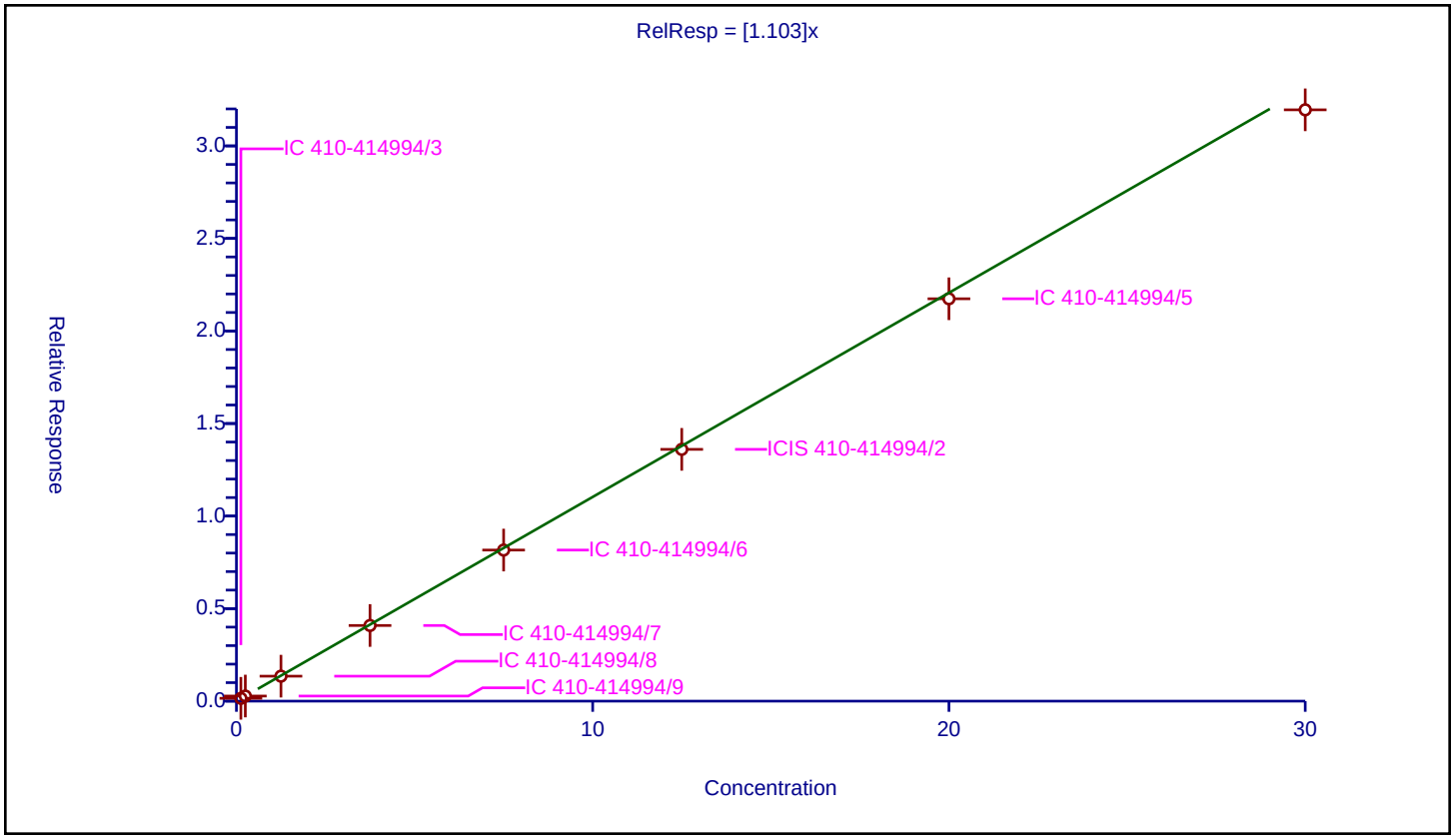
Curve Coefficients

Intercept:	0
Slope:	1.103

Error Coefficients

Standard Error:	2320000
Relative Standard Error:	4.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.153267	5.0	688634.0	1.226138	Y
2	IC 410-414994/9	0.25	0.275158	5.0	714770.0	1.100634	Y
3	IC 410-414994/8	1.25	1.349741	5.0	854186.0	1.079793	Y
4	IC 410-414994/7	3.75	4.088075	5.0	642827.0	1.090153	Y
5	IC 410-414994/6	7.5	8.163145	5.0	892618.0	1.088419	Y
6	ICIS 410-414994/2	12.5	13.604831	5.0	790639.0	1.088386	Y
7	IC 410-414994/5	20.0	21.740374	5.0	723425.0	1.087019	Y
8	IC 410-414994/4	30.0	31.95013	5.0	712778.0	1.065004	Y



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Calibration / Anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

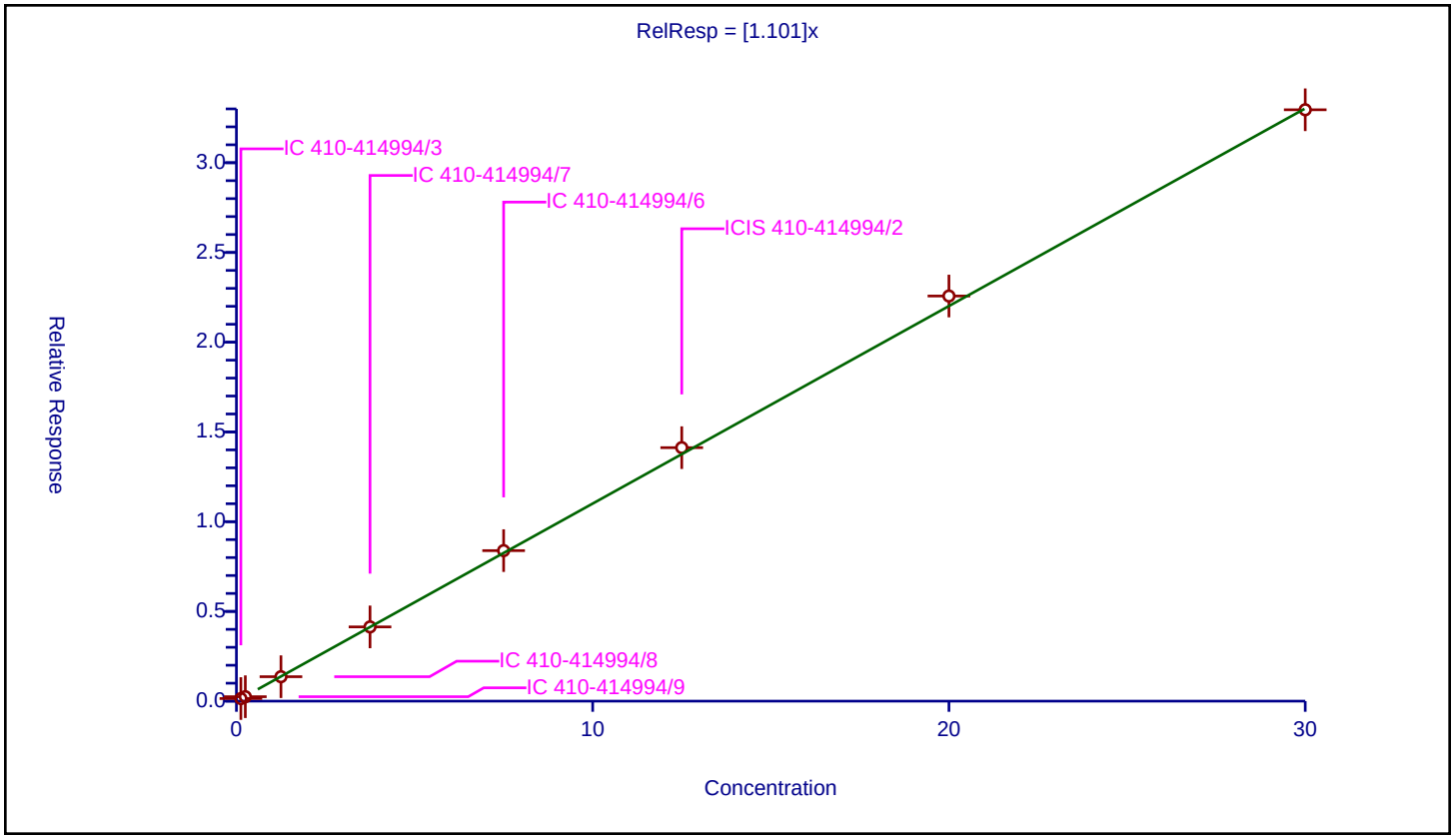
Curve Coefficients

Intercept:	0
Slope:	1.101

Error Coefficients

Standard Error:	2400000
Relative Standard Error:	4.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.144148	5.0	688634.0	1.153182	Y
2	IC 410-414994/9	0.25	0.246541	5.0	714770.0	0.986163	Y
3	IC 410-414994/8	1.25	1.361062	5.0	854186.0	1.08885	Y
4	IC 410-414994/7	3.75	4.136222	5.0	642827.0	1.102992	Y
5	IC 410-414994/6	7.5	8.386869	5.0	892618.0	1.118249	Y
6	ICIS 410-414994/2	12.5	14.12369	5.0	790639.0	1.129895	Y
7	IC 410-414994/5	20.0	22.573328	5.0	723425.0	1.128666	Y
8	IC 410-414994/4	30.0	32.951108	5.0	712778.0	1.09837	Y



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Calibration / Carbazole

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

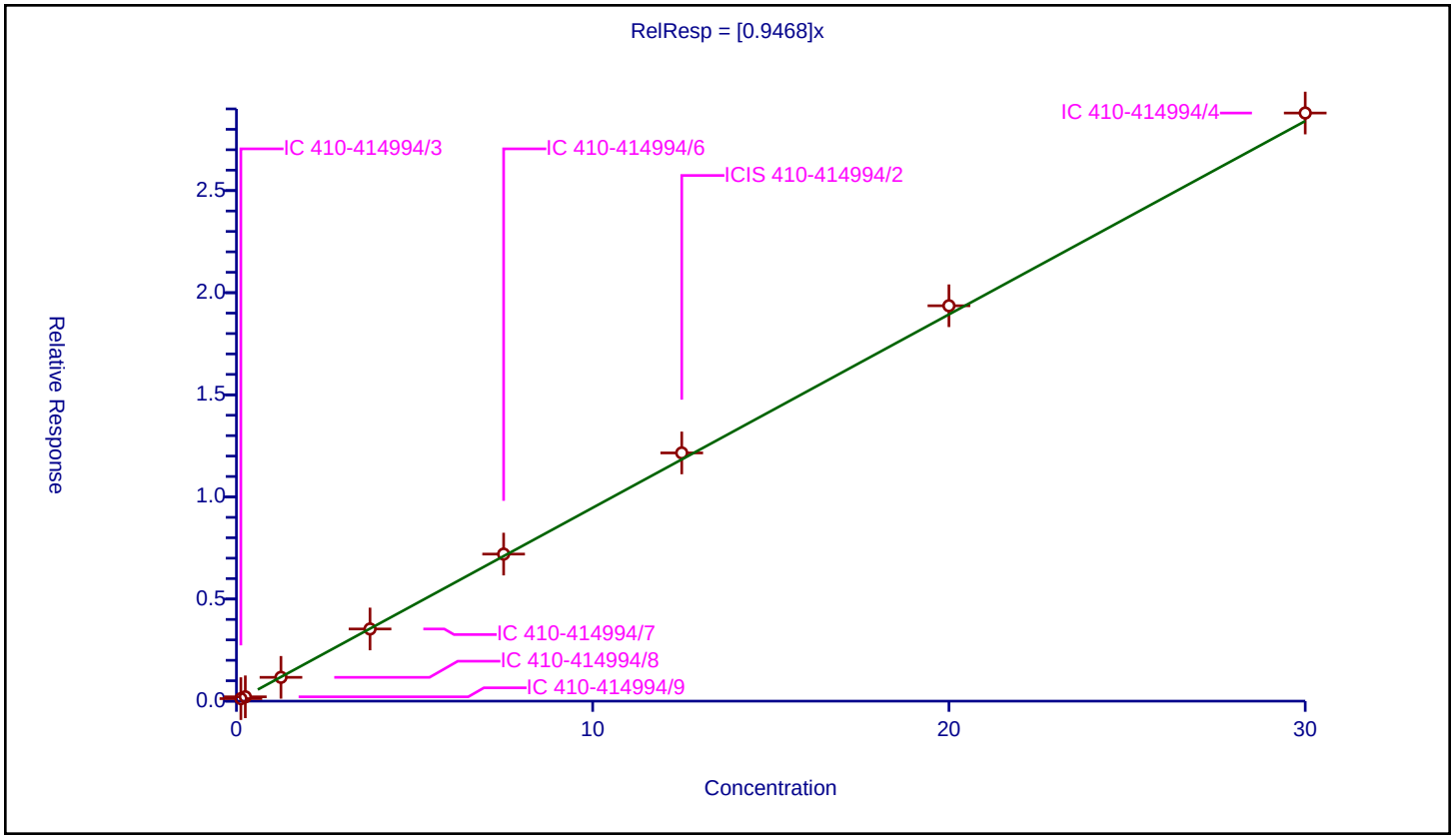
Curve Coefficients

Intercept:	0
Slope:	0.9468

Error Coefficients

Standard Error:	2080000
Relative Standard Error:	4.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.12376	5.0	688634.0	0.990076	Y
2	IC 410-414994/9	0.25	0.212404	5.0	714770.0	0.849616	Y
3	IC 410-414994/8	1.25	1.16522	5.0	854186.0	0.932176	Y
4	IC 410-414994/7	3.75	3.53298	5.0	642827.0	0.942128	Y
5	IC 410-414994/6	7.5	7.200992	5.0	892618.0	0.960132	Y
6	ICIS 410-414994/2	12.5	12.154529	5.0	790639.0	0.972362	Y
7	IC 410-414994/5	20.0	19.361475	5.0	723425.0	0.968074	Y
8	IC 410-414994/4	30.0	28.79783	5.0	712778.0	0.959928	Y



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Calibration / Methyl parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

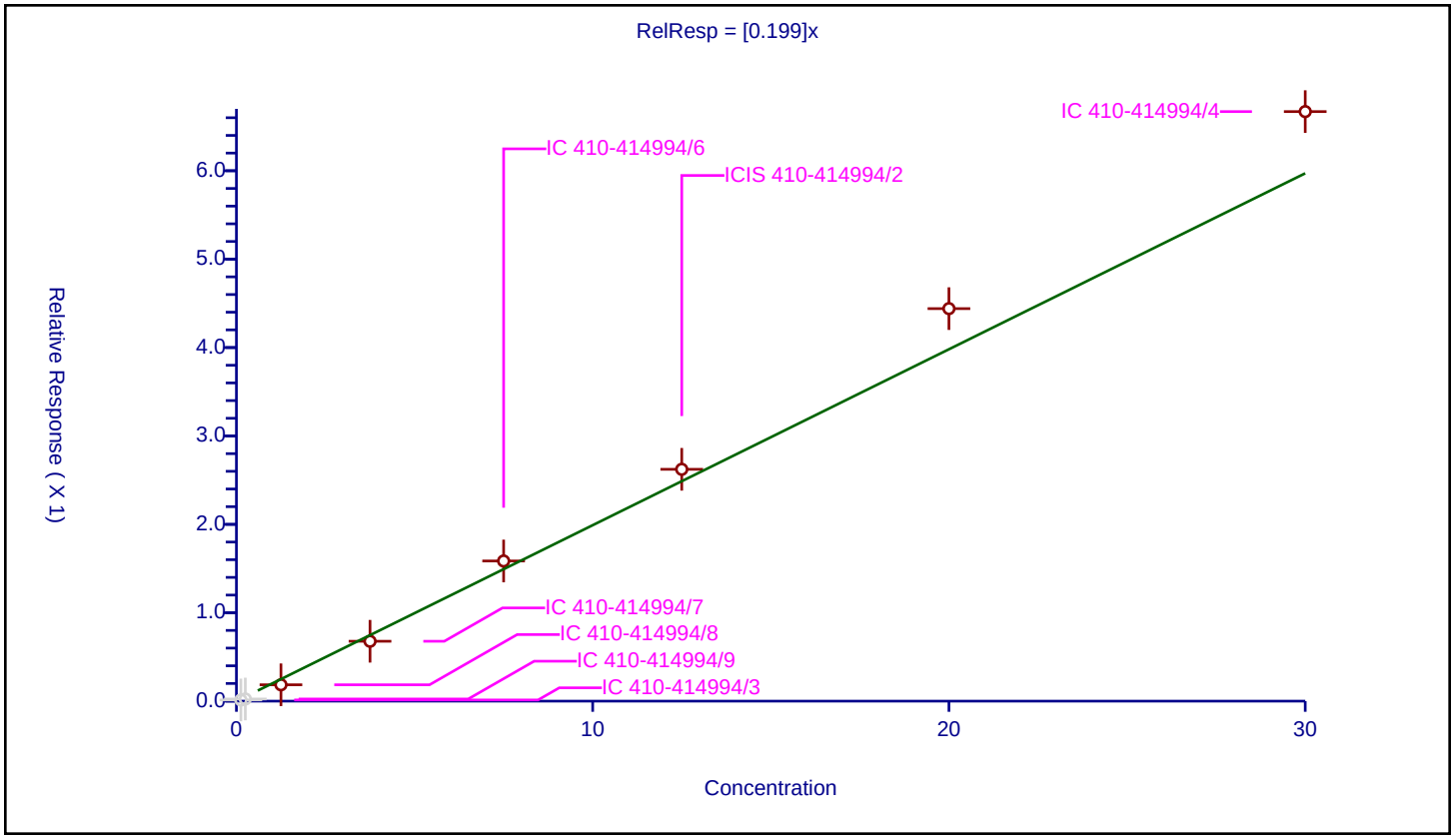
Curve Coefficients

Intercept:	0
Slope:	0.199

Error Coefficients

Standard Error:	562000
Relative Standard Error:	14.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.01352	5.0	688634.0	0.108156	N
2	IC 410-414994/9	0.25	0.024385	5.0	714770.0	0.097542	N
3	IC 410-414994/8	1.25	0.185065	5.0	854186.0	0.148052	Y
4	IC 410-414994/7	3.75	0.677383	5.0	642827.0	0.180635	Y
5	IC 410-414994/6	7.5	1.585566	5.0	892618.0	0.211409	Y
6	ICIS 410-414994/2	12.5	2.6226	5.0	790639.0	0.209808	Y
7	IC 410-414994/5	20.0	4.44037	5.0	723425.0	0.222019	Y
8	IC 410-414994/4	30.0	6.669314	5.0	712778.0	0.22231	Y



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Calibration / Di-n-butyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

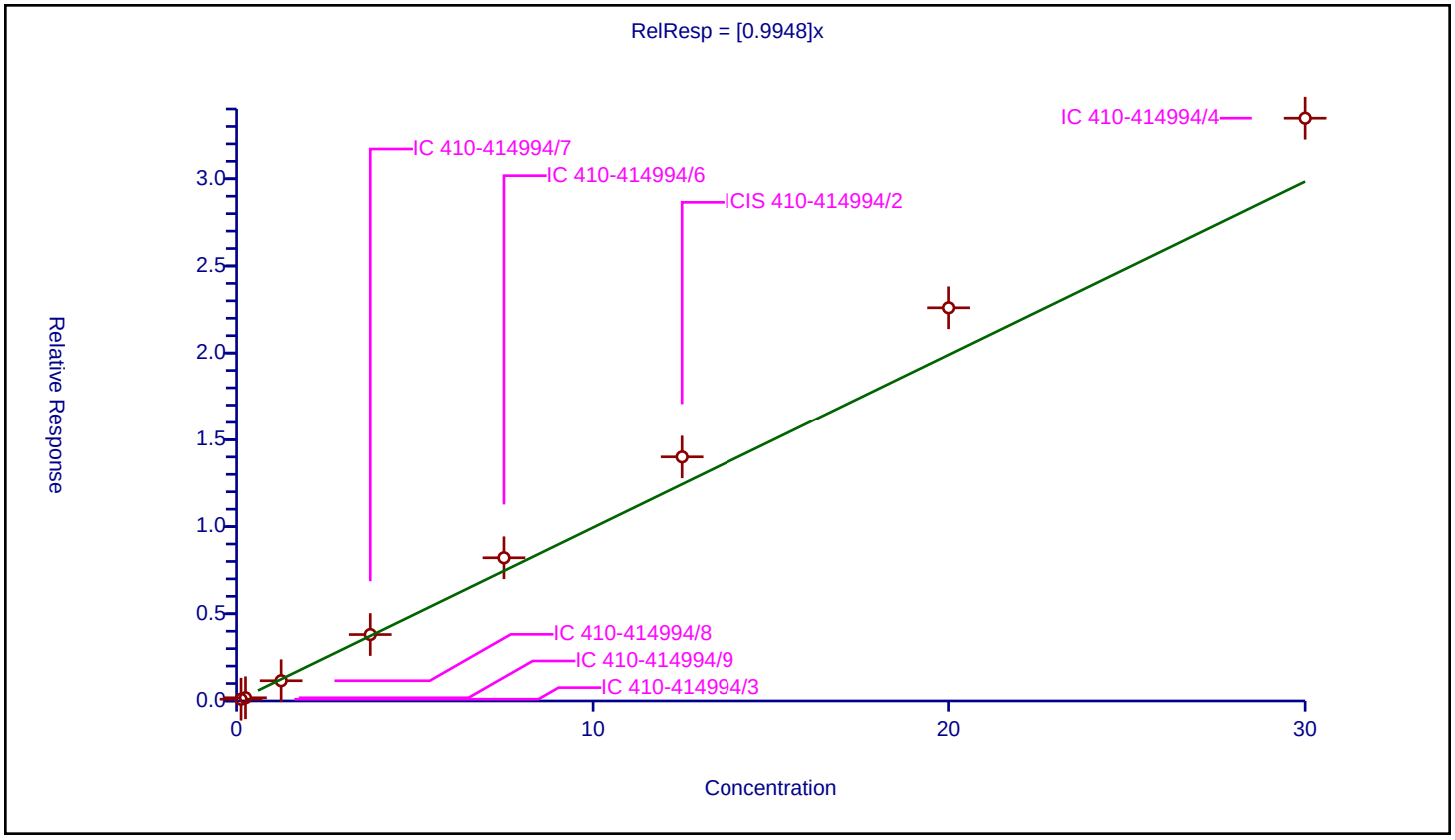
Curve Coefficients

Intercept:	0
Slope:	0.9948

Error Coefficients

Standard Error:	2410000
Relative Standard Error:	15.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.102362	5.0	688634.0	0.818897	Y
2	IC 410-414994/9	0.25	0.183758	5.0	714770.0	0.735034	Y
3	IC 410-414994/8	1.25	1.159168	5.0	854186.0	0.927334	Y
4	IC 410-414994/7	3.75	3.809571	5.0	642827.0	1.015886	Y
5	IC 410-414994/6	7.5	8.211323	5.0	892618.0	1.094843	Y
6	ICIS 410-414994/2	12.5	14.00459	5.0	790639.0	1.120367	Y
7	IC 410-414994/5	20.0	22.600442	5.0	723425.0	1.130022	Y
8	IC 410-414994/4	30.0	33.473108	5.0	712778.0	1.11577	Y



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Calibration / Ethyl Parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

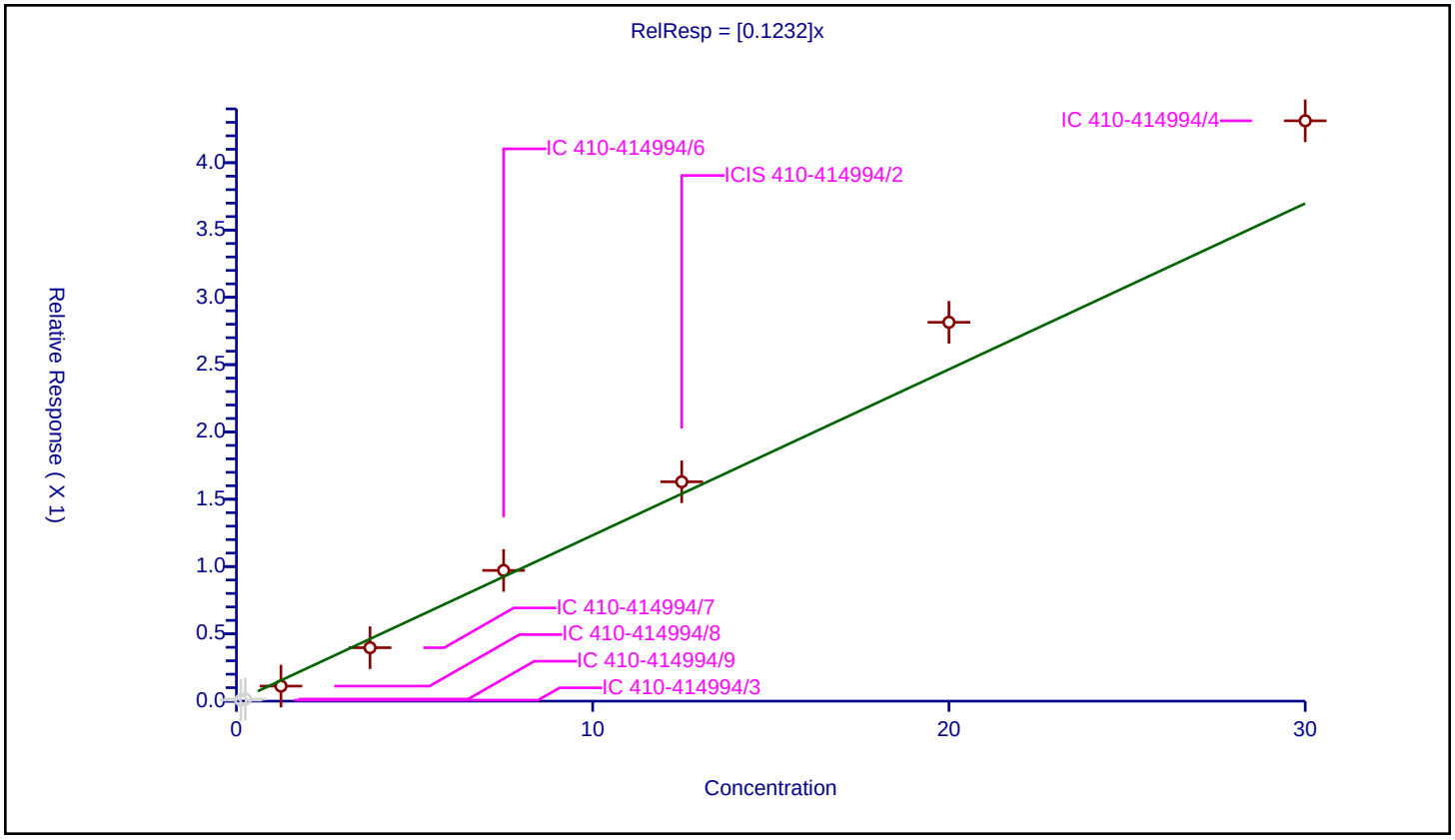
Curve Coefficients

Intercept:	0
Slope:	0.1232

Error Coefficients

Standard Error:	359000
Relative Standard Error:	17.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.007558	5.0	688634.0	0.060468	N
2	IC 410-414994/9	0.25	0.015543	5.0	714770.0	0.062174	N
3	IC 410-414994/8	1.25	0.111668	5.0	854186.0	0.089334	Y
4	IC 410-414994/7	3.75	0.397012	5.0	642827.0	0.10587	Y
5	IC 410-414994/6	7.5	0.970981	5.0	892618.0	0.129464	Y
6	ICIS 410-414994/2	12.5	1.629587	5.0	790639.0	0.130367	Y
7	IC 410-414994/5	20.0	2.814694	5.0	723425.0	0.140735	Y
8	IC 410-414994/4	30.0	4.311455	5.0	712778.0	0.143715	Y



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Calibration / 4-Nitroquinoline-1-oxide

Curve Type:	Quadratic
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

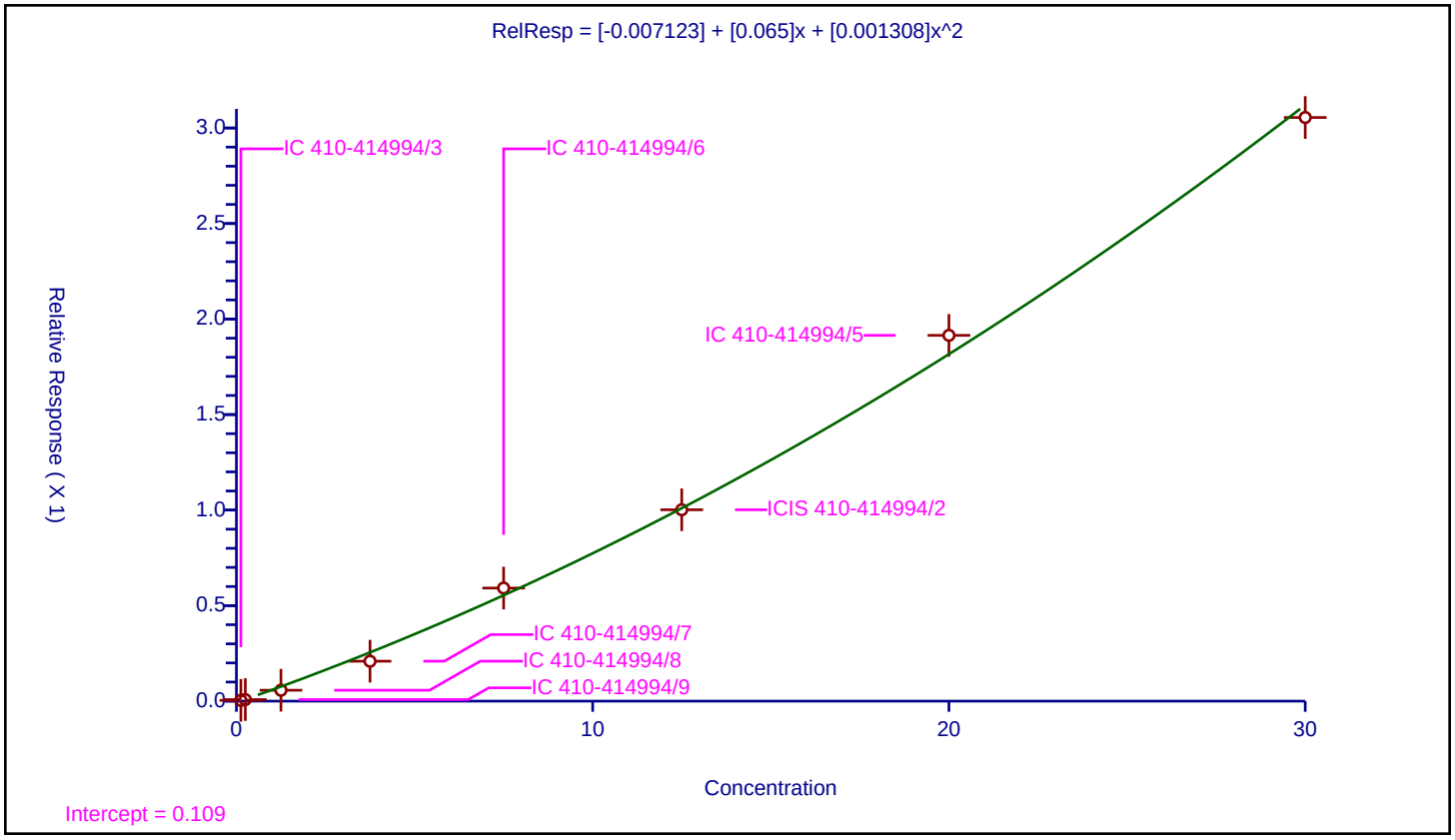
Curve Coefficients

Intercept:	-0.007123
Slope:	0.065
Second Order:	0.001308

Error Coefficients

Standard Error:	246000
Relative Standard Error:	21.5
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.004117	5.0	688634.0	0.032935	Y
2	IC 410-414994/9	0.25	0.008114	5.0	714770.0	0.032458	Y
3	IC 410-414994/8	1.25	0.057107	5.0	854186.0	0.045686	Y
4	IC 410-414994/7	3.75	0.209022	5.0	642827.0	0.055739	Y
5	IC 410-414994/6	7.5	0.591888	5.0	892618.0	0.078918	Y
6	ICIS 410-414994/2	12.5	1.001702	5.0	790639.0	0.080136	Y
7	IC 410-414994/5	20.0	1.914601	5.0	723425.0	0.09573	Y
8	IC 410-414994/4	30.0	3.054878	5.0	712778.0	0.101829	Y



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Calibration / Octachlorostyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

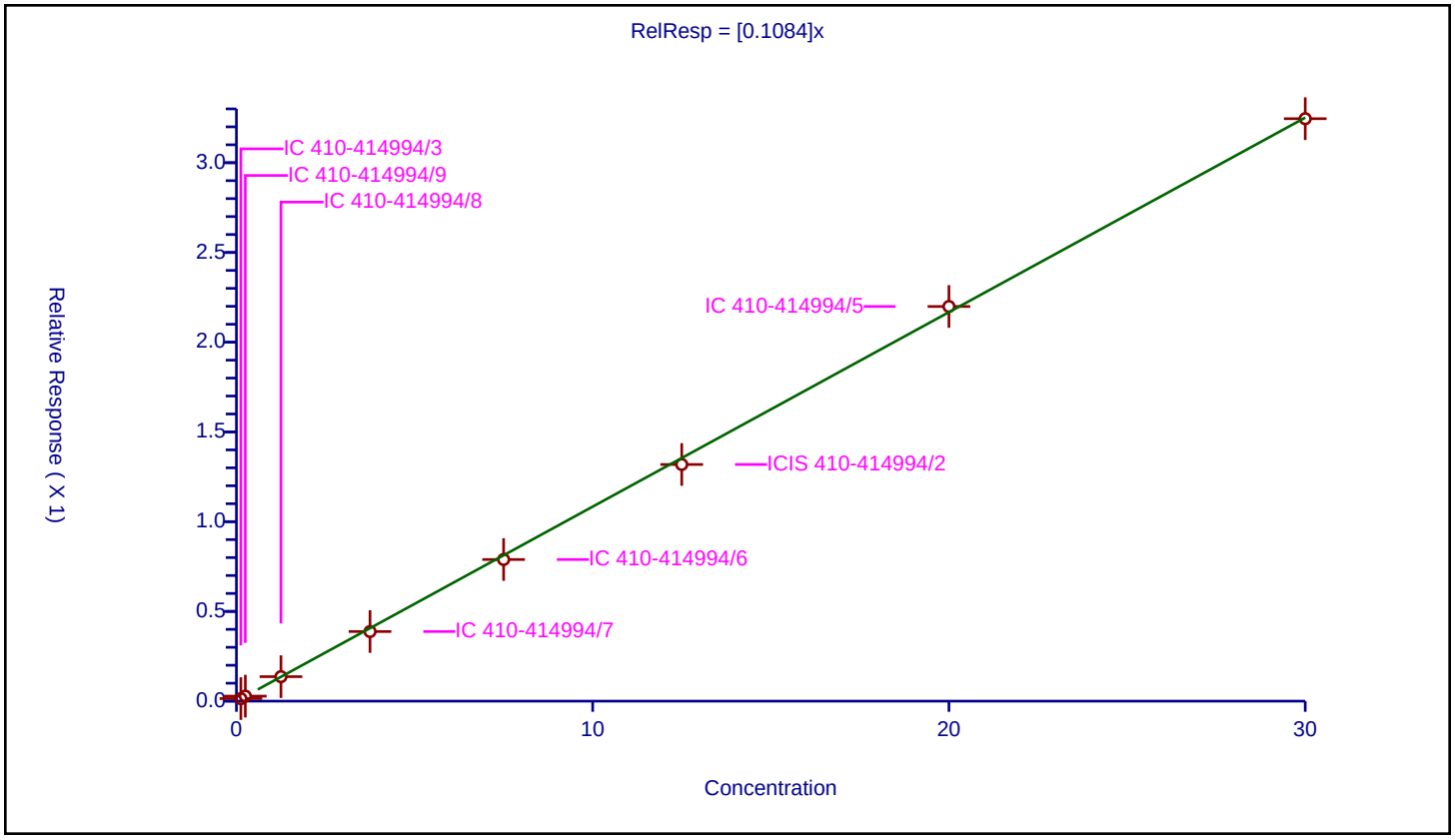
Curve Coefficients

Intercept:	0
Slope:	0.1084

Error Coefficients

Standard Error:	233000
Relative Standard Error:	3.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.014238	5.0	688634.0	0.113907	Y
2	IC 410-414994/9	0.25	0.027918	5.0	714770.0	0.111672	Y
3	IC 410-414994/8	1.25	0.136399	5.0	854186.0	0.109119	Y
4	IC 410-414994/7	3.75	0.38788	5.0	642827.0	0.103435	Y
5	IC 410-414994/6	7.5	0.789106	5.0	892618.0	0.105214	Y
6	ICIS 410-414994/2	12.5	1.318706	5.0	790639.0	0.105496	Y
7	IC 410-414994/5	20.0	2.199025	5.0	723425.0	0.109951	Y
8	IC 410-414994/4	30.0	3.245365	5.0	712778.0	0.108179	Y



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Calibration / Isodrin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

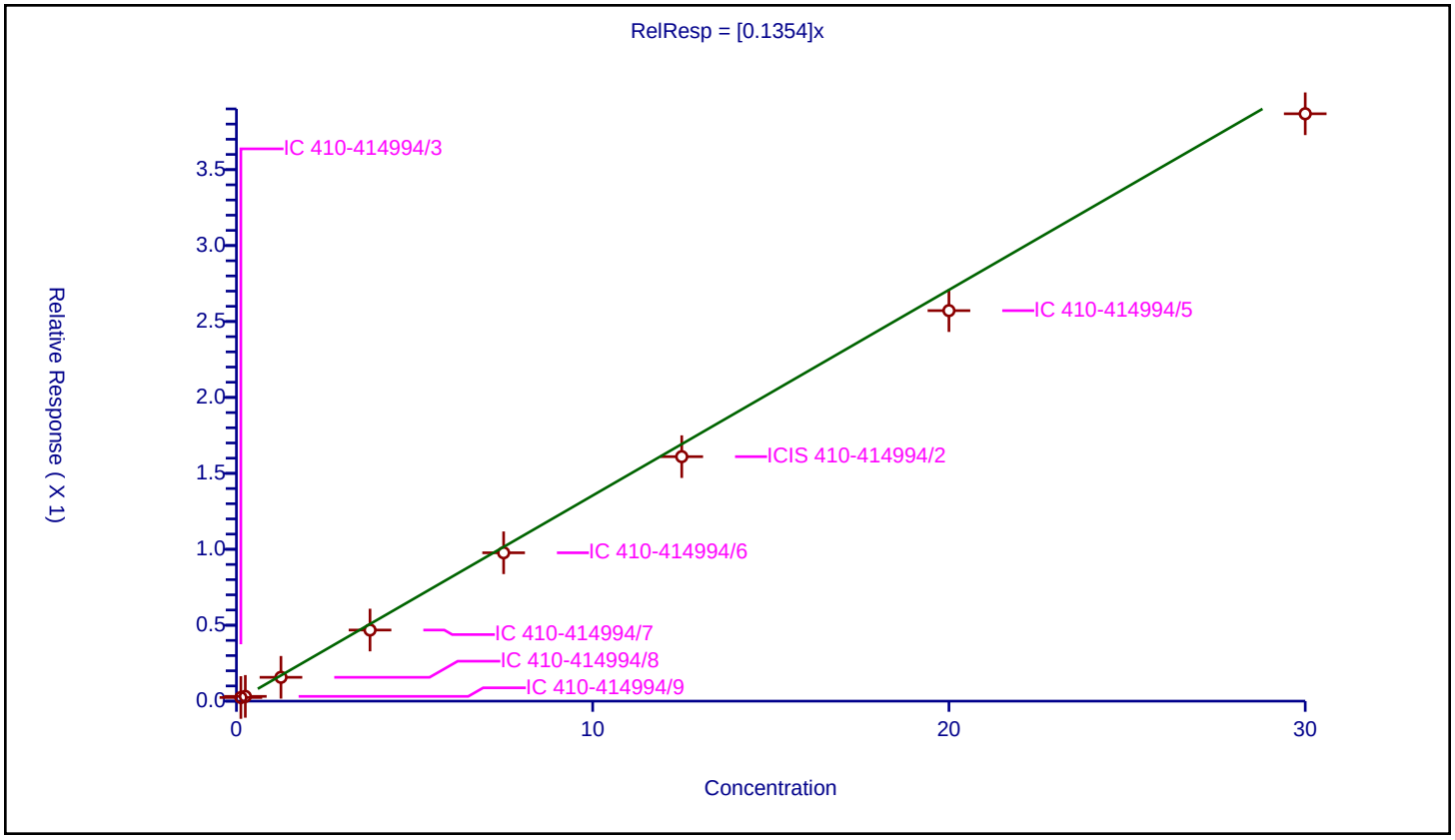
Curve Coefficients

Intercept:	0
Slope:	0.1354

Error Coefficients

Standard Error:	278000
Relative Standard Error:	16.8
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.023917	5.0	688634.0	0.191335	Y
2	IC 410-414994/9	0.25	0.031262	5.0	714770.0	0.125047	Y
3	IC 410-414994/8	1.25	0.156816	5.0	854186.0	0.125453	Y
4	IC 410-414994/7	3.75	0.468213	5.0	642827.0	0.124857	Y
5	IC 410-414994/6	7.5	0.977064	5.0	892618.0	0.130275	Y
6	ICIS 410-414994/2	12.5	1.610027	5.0	790639.0	0.128802	Y
7	IC 410-414994/5	20.0	2.571587	5.0	723425.0	0.128579	Y
8	IC 410-414994/4	30.0	3.867922	5.0	712778.0	0.128931	Y



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Calibration / Fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

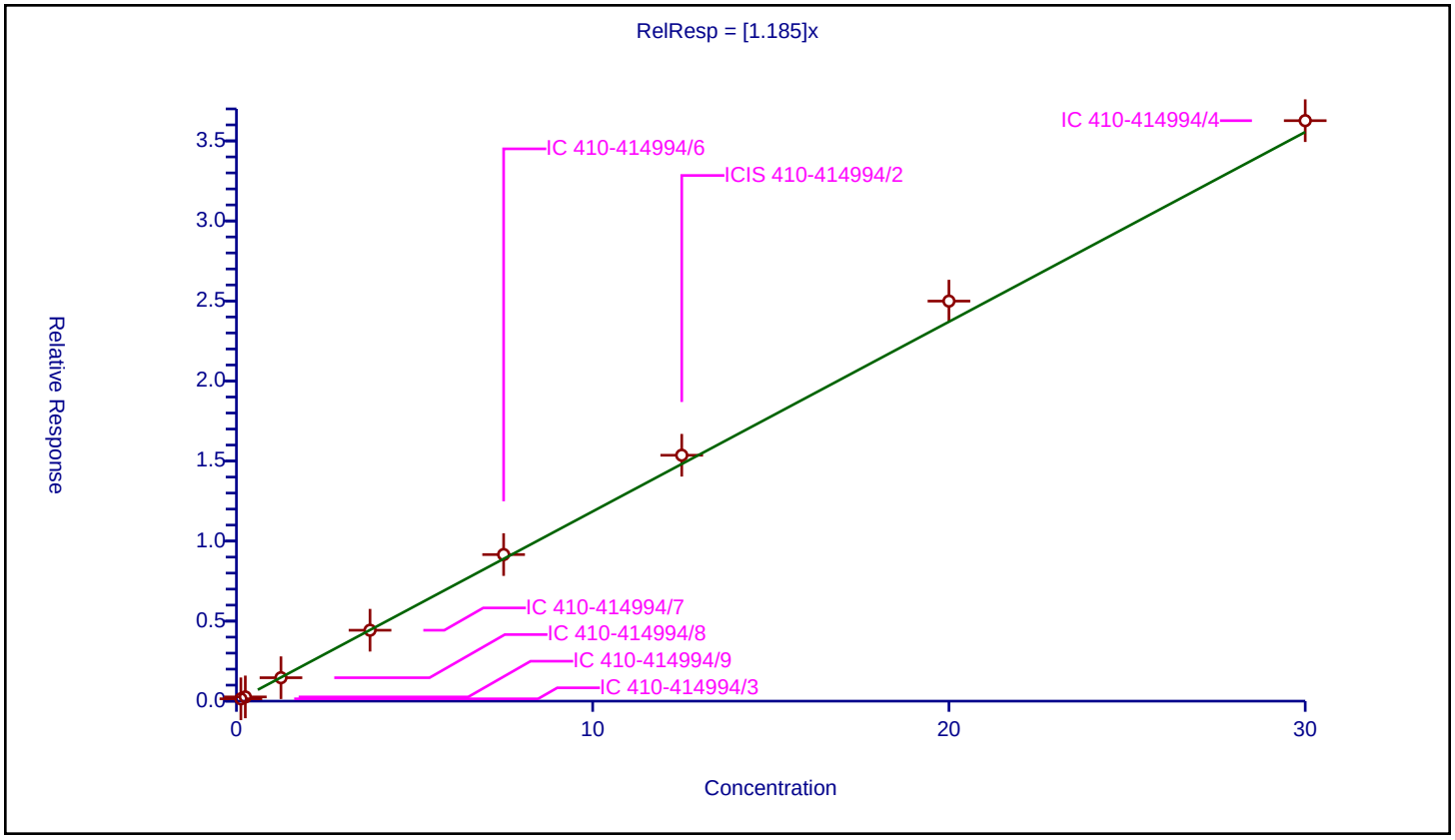
Curve Coefficients

Intercept:	0
Slope:	1.185

Error Coefficients

Standard Error:	2640000
Relative Standard Error:	5.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.145549	5.0	688634.0	1.164392	Y
2	IC 410-414994/9	0.25	0.264036	5.0	714770.0	1.056144	Y
3	IC 410-414994/8	1.25	1.463446	5.0	854186.0	1.170757	Y
4	IC 410-414994/7	3.75	4.430383	5.0	642827.0	1.181436	Y
5	IC 410-414994/6	7.5	9.157411	5.0	892618.0	1.220988	Y
6	ICIS 410-414994/2	12.5	15.362586	5.0	790639.0	1.229007	Y
7	IC 410-414994/5	20.0	24.991354	5.0	723425.0	1.249568	Y
8	IC 410-414994/4	30.0	36.263746	5.0	712778.0	1.208792	Y



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Calibration / Benzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

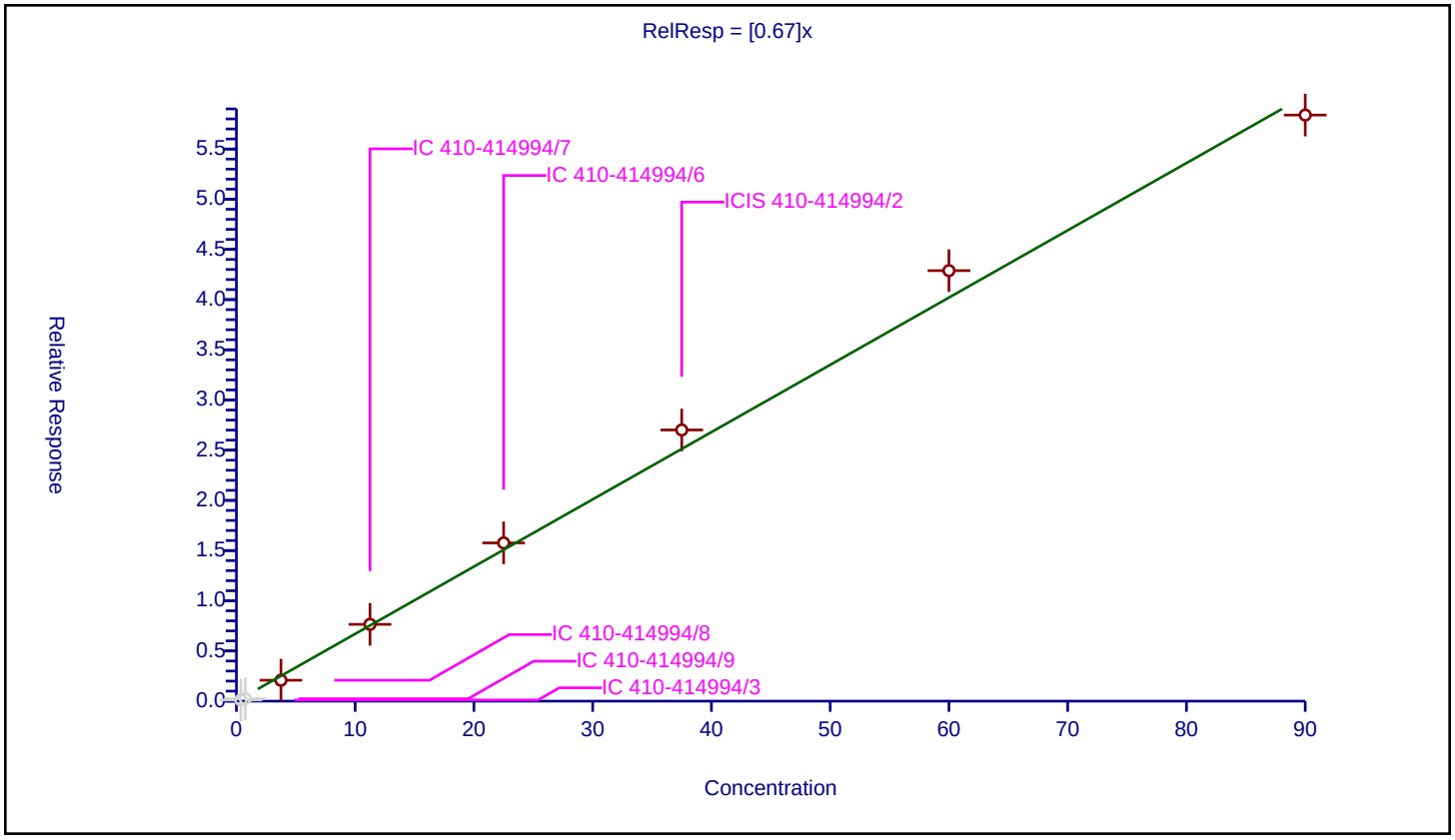
Curve Coefficients

Intercept:	0
Slope:	0.67

Error Coefficients

Standard Error:	5580000
Relative Standard Error:	9.2
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.375	0.116743	5.0	743168.0	0.311316	N
2	IC 410-414994/9	0.75	0.242506	5.0	779444.0	0.323342	N
3	IC 410-414994/8	3.75	2.08364	5.0	934048.0	0.555637	Y
4	IC 410-414994/7	11.25	7.651362	5.0	693006.0	0.680121	Y
5	IC 410-414994/6	22.5	15.763953	5.0	978895.0	0.70062	Y
6	ICIS 410-414994/2	37.5	27.013556	5.0	849209.0	0.720361	Y
7	IC 410-414994/5	60.0	42.885356	5.0	772934.0	0.714756	Y
8	IC 410-414994/4	90.0	58.384006	5.0	766457.0	0.648711	Y



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Calibration / Pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

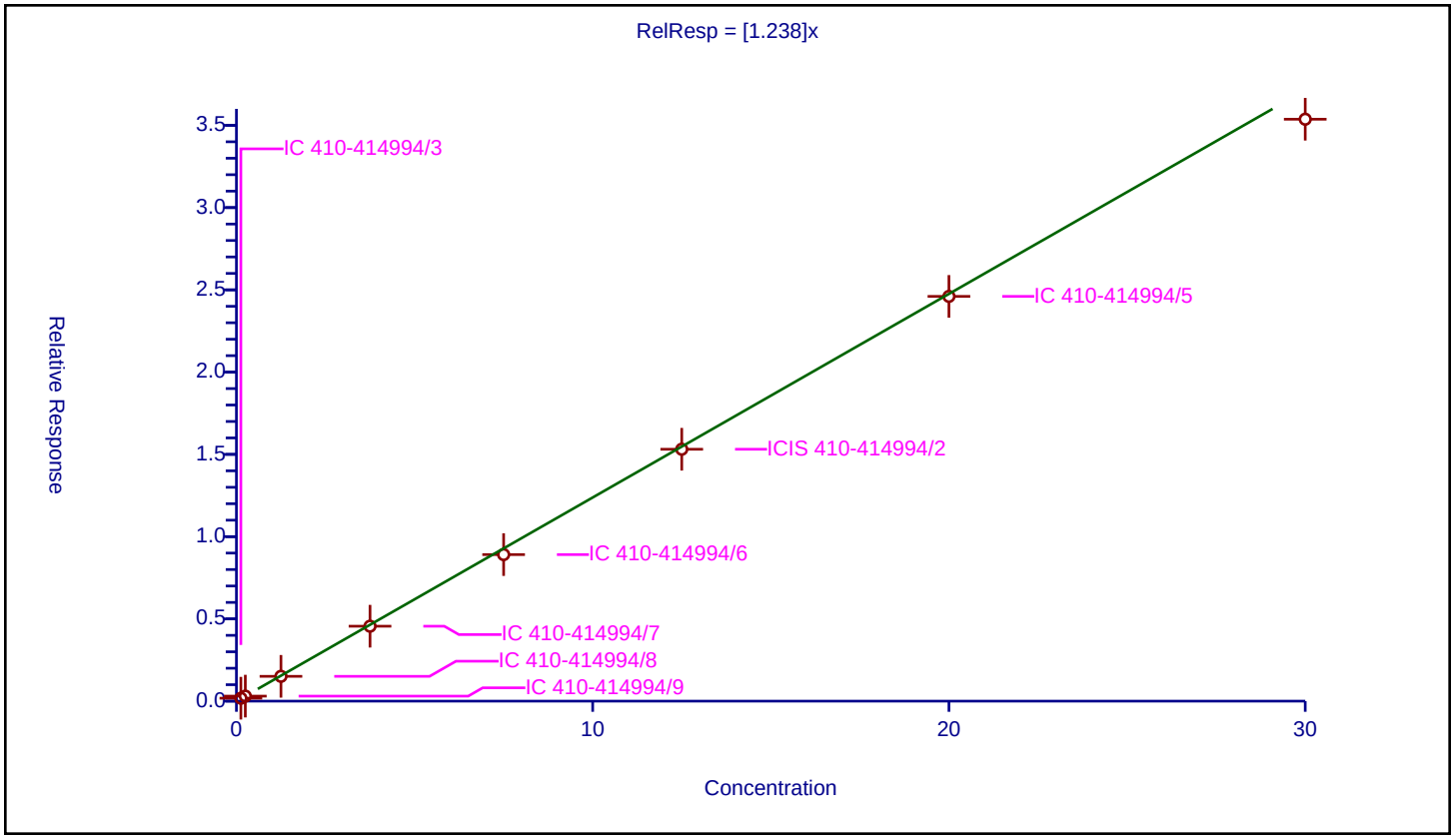
Curve Coefficients

Intercept:	0
Slope:	1.238

Error Coefficients

Standard Error:	2780000
Relative Standard Error:	6.7
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.179609	5.0	743168.0	1.436876	Y
2	IC 410-414994/9	0.25	0.30541	5.0	779444.0	1.22164	Y
3	IC 410-414994/8	1.25	1.508648	5.0	934048.0	1.206919	Y
4	IC 410-414994/7	3.75	4.555531	5.0	693006.0	1.214808	Y
5	IC 410-414994/6	7.5	8.909107	5.0	978895.0	1.187881	Y
6	ICIS 410-414994/2	12.5	15.311696	5.0	849209.0	1.224936	Y
7	IC 410-414994/5	20.0	24.603304	5.0	772934.0	1.230165	Y
8	IC 410-414994/4	30.0	35.371221	5.0	766457.0	1.179041	Y



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Calibration / p-Terphenyl-d14

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

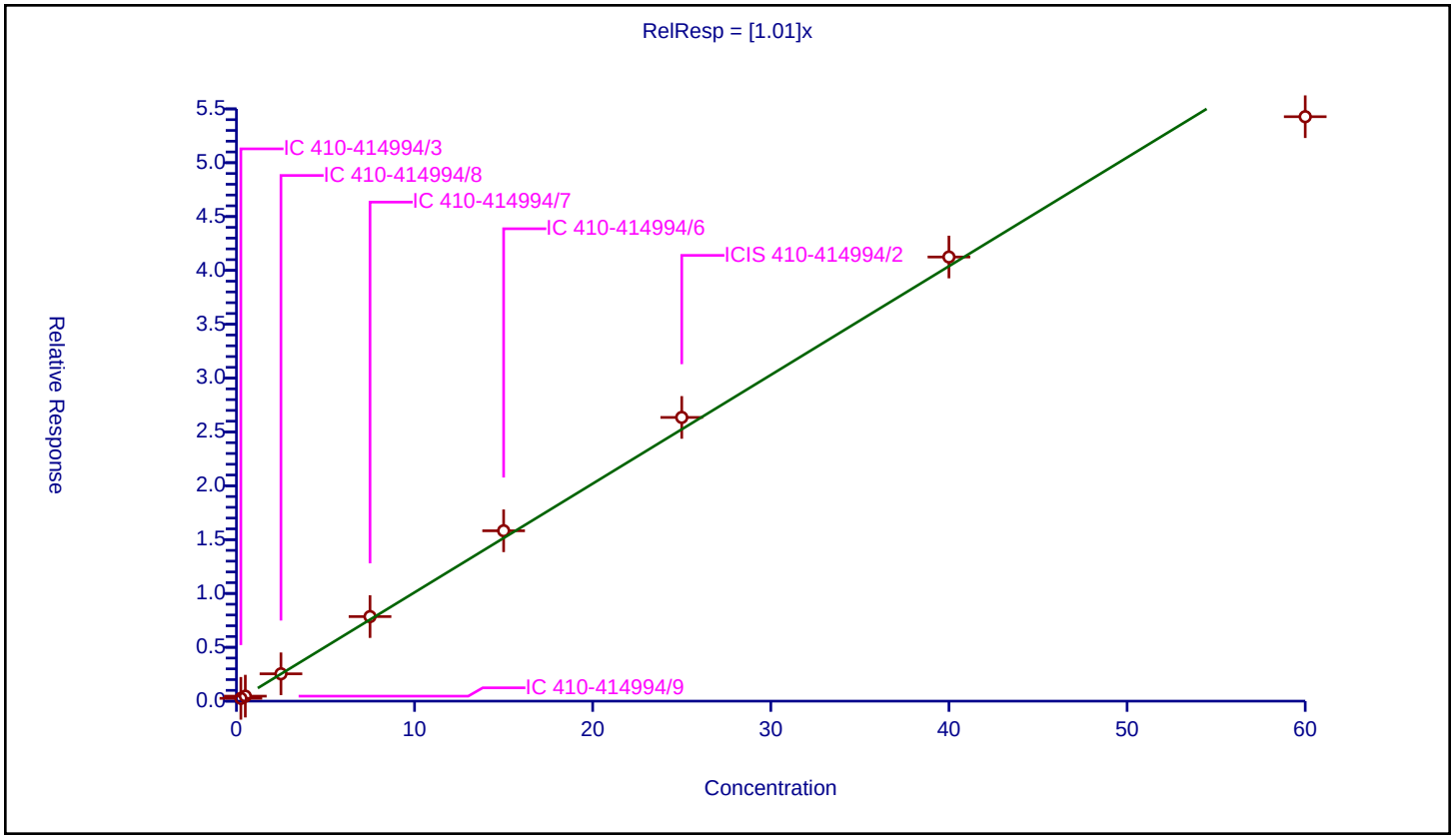
Curve Coefficients

Intercept:	0
Slope:	1.01

Error Coefficients

Standard Error:	4490000
Relative Standard Error:	5.9
Correlation Coefficient:	0.978
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.25	0.26087	5.0	743168.0	1.043479	Y
2	IC 410-414994/9	0.5	0.463587	5.0	779444.0	0.927174	Y
3	IC 410-414994/8	2.5	2.540142	5.0	934048.0	1.016057	Y
4	IC 410-414994/7	7.5	7.85214	5.0	693006.0	1.046952	Y
5	IC 410-414994/6	15.0	15.822315	5.0	978895.0	1.054821	Y
6	ICIS 410-414994/2	25.0	26.348808	5.0	849209.0	1.053952	Y
7	IC 410-414994/5	40.0	41.24609	5.0	772934.0	1.031152	Y
8	IC 410-414994/4	60.0	54.274708	5.0	766457.0	0.904578	Y



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Calibration / p-Dimethylamino azobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

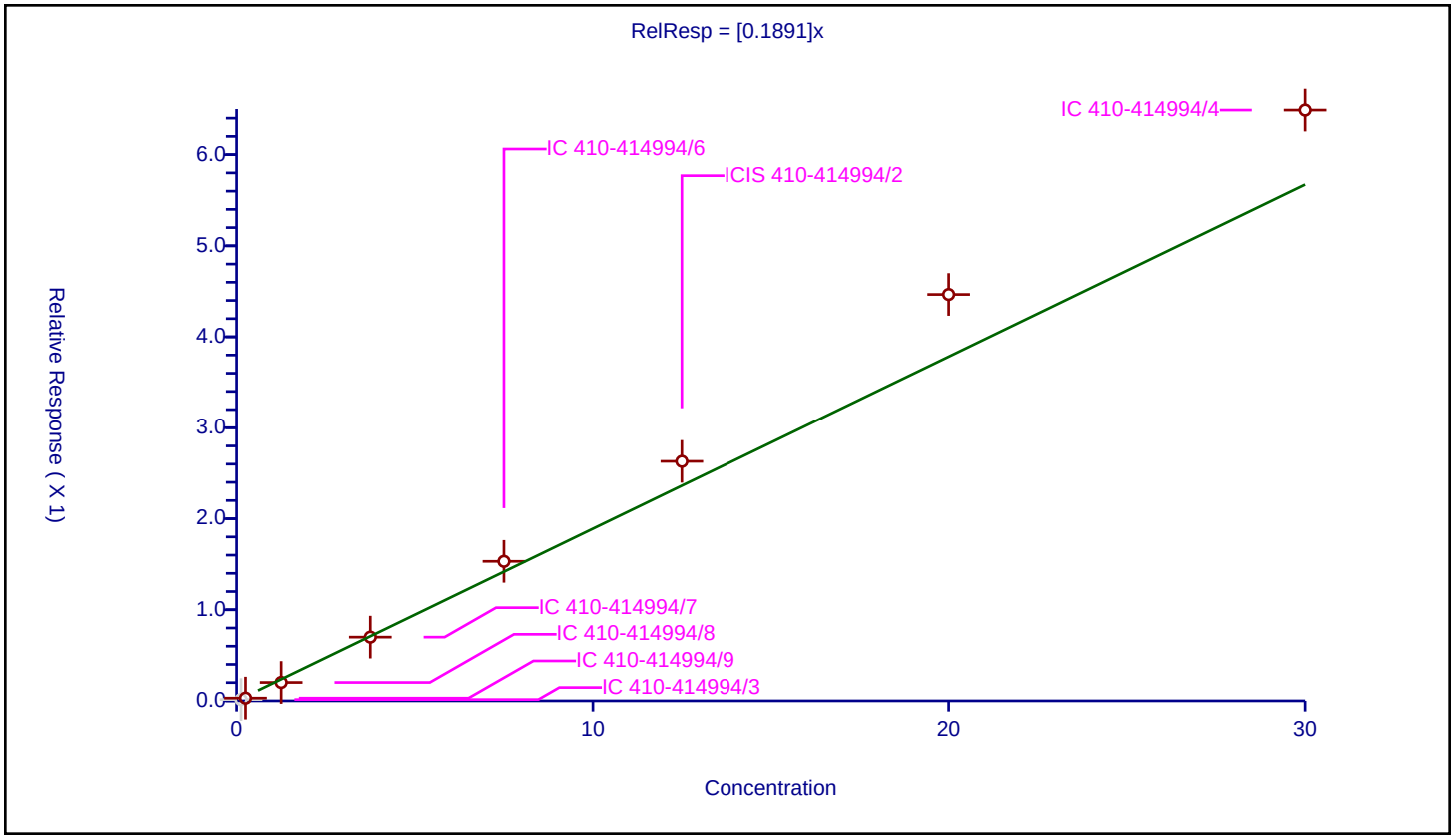
Curve Coefficients

Intercept:	0
Slope:	0.1891

Error Coefficients

Standard Error:	543000
Relative Standard Error:	19.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.014479	5.0	743168.0	0.115828	N
2	IC 410-414994/9	0.25	0.030336	5.0	779444.0	0.121343	Y
3	IC 410-414994/8	1.25	0.201735	5.0	934048.0	0.161388	Y
4	IC 410-414994/7	3.75	0.699539	5.0	693006.0	0.186544	Y
5	IC 410-414994/6	7.5	1.532003	5.0	978895.0	0.204267	Y
6	ICIS 410-414994/2	12.5	2.630566	5.0	849209.0	0.210445	Y
7	IC 410-414994/5	20.0	4.465543	5.0	772934.0	0.223277	Y
8	IC 410-414994/4	30.0	6.48859	5.0	766457.0	0.216286	Y



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Calibration / Chlorobenzilate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

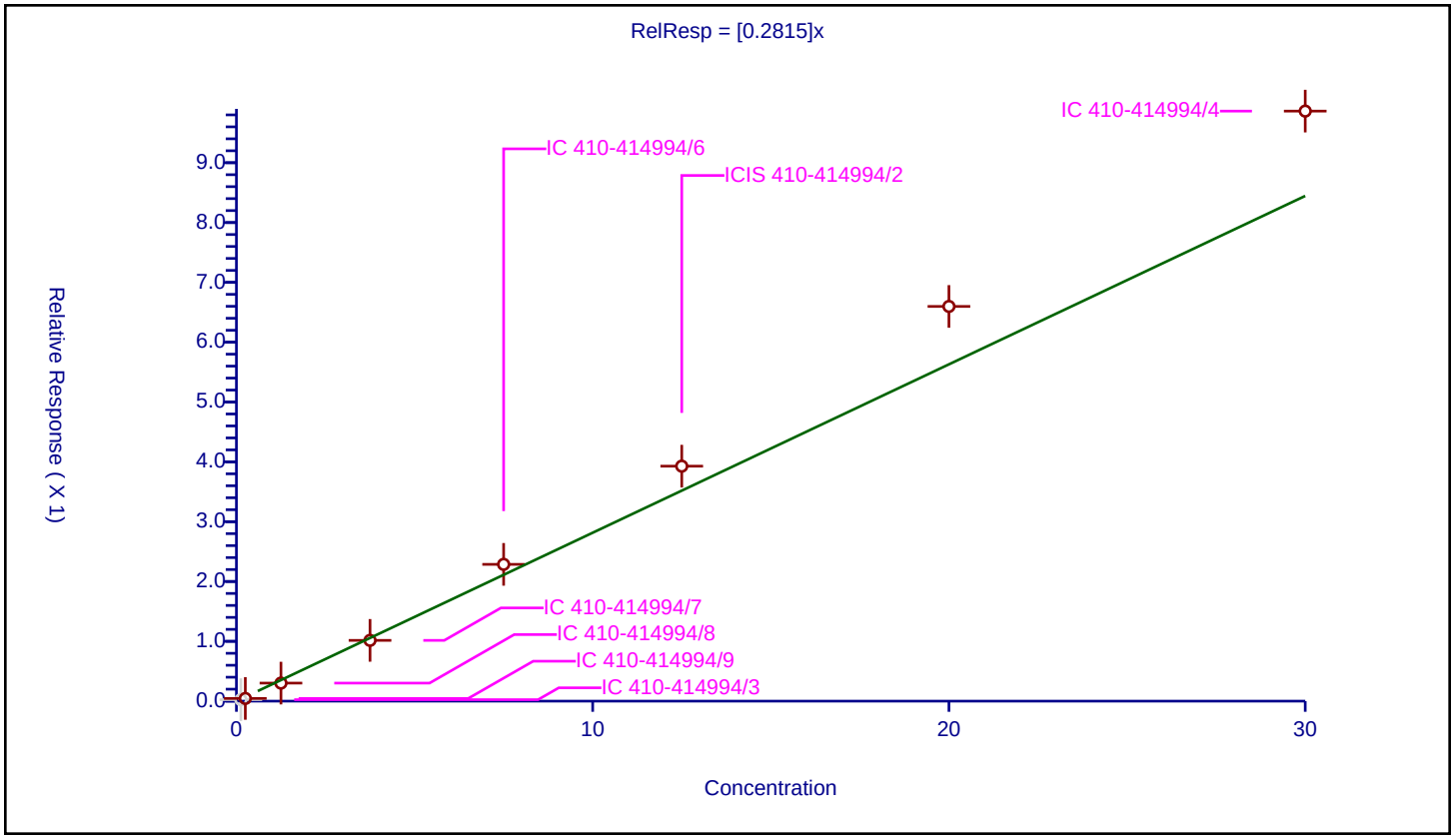
Curve Coefficients

Intercept:	0
Slope:	0.2815

Error Coefficients

Standard Error:	816000
Relative Standard Error:	19.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.024611	5.0	743168.0	0.196887	N
2	IC 410-414994/9	0.25	0.045167	5.0	779444.0	0.180667	Y
3	IC 410-414994/8	1.25	0.301537	5.0	934048.0	0.24123	Y
4	IC 410-414994/7	3.75	1.015799	5.0	693006.0	0.27088	Y
5	IC 410-414994/6	7.5	2.286542	5.0	978895.0	0.304872	Y
6	ICIS 410-414994/2	12.5	3.927767	5.0	849209.0	0.314221	Y
7	IC 410-414994/5	20.0	6.597931	5.0	772934.0	0.329897	Y
8	IC 410-414994/4	30.0	9.862908	5.0	766457.0	0.328764	Y



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Calibration / 3,3'-Dimethylbenzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

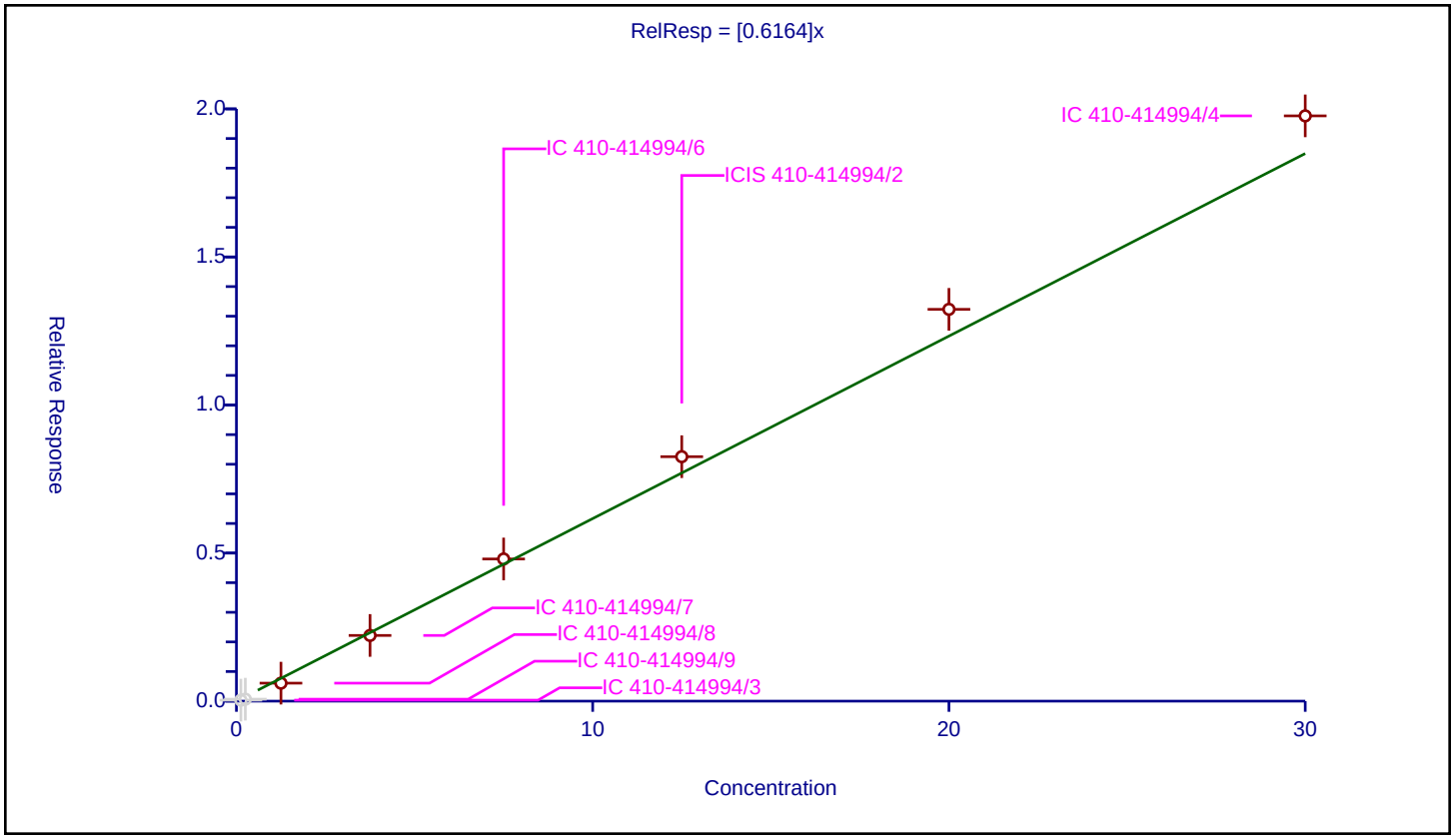
Curve Coefficients

Intercept:	0
Slope:	0.6164

Error Coefficients

Standard Error:	1810000
Relative Standard Error:	11.2
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.033424	5.0	743168.0	0.267396	N
2	IC 410-414994/9	0.25	0.066342	5.0	779444.0	0.265369	N
3	IC 410-414994/8	1.25	0.607372	5.0	934048.0	0.485898	Y
4	IC 410-414994/7	3.75	2.218415	5.0	693006.0	0.591577	Y
5	IC 410-414994/6	7.5	4.800627	5.0	978895.0	0.640084	Y
6	ICIS 410-414994/2	12.5	8.255606	5.0	849209.0	0.660448	Y
7	IC 410-414994/5	20.0	13.231388	5.0	772934.0	0.661569	Y
8	IC 410-414994/4	30.0	19.764579	5.0	766457.0	0.658819	Y



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Calibration / Butyl benzyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

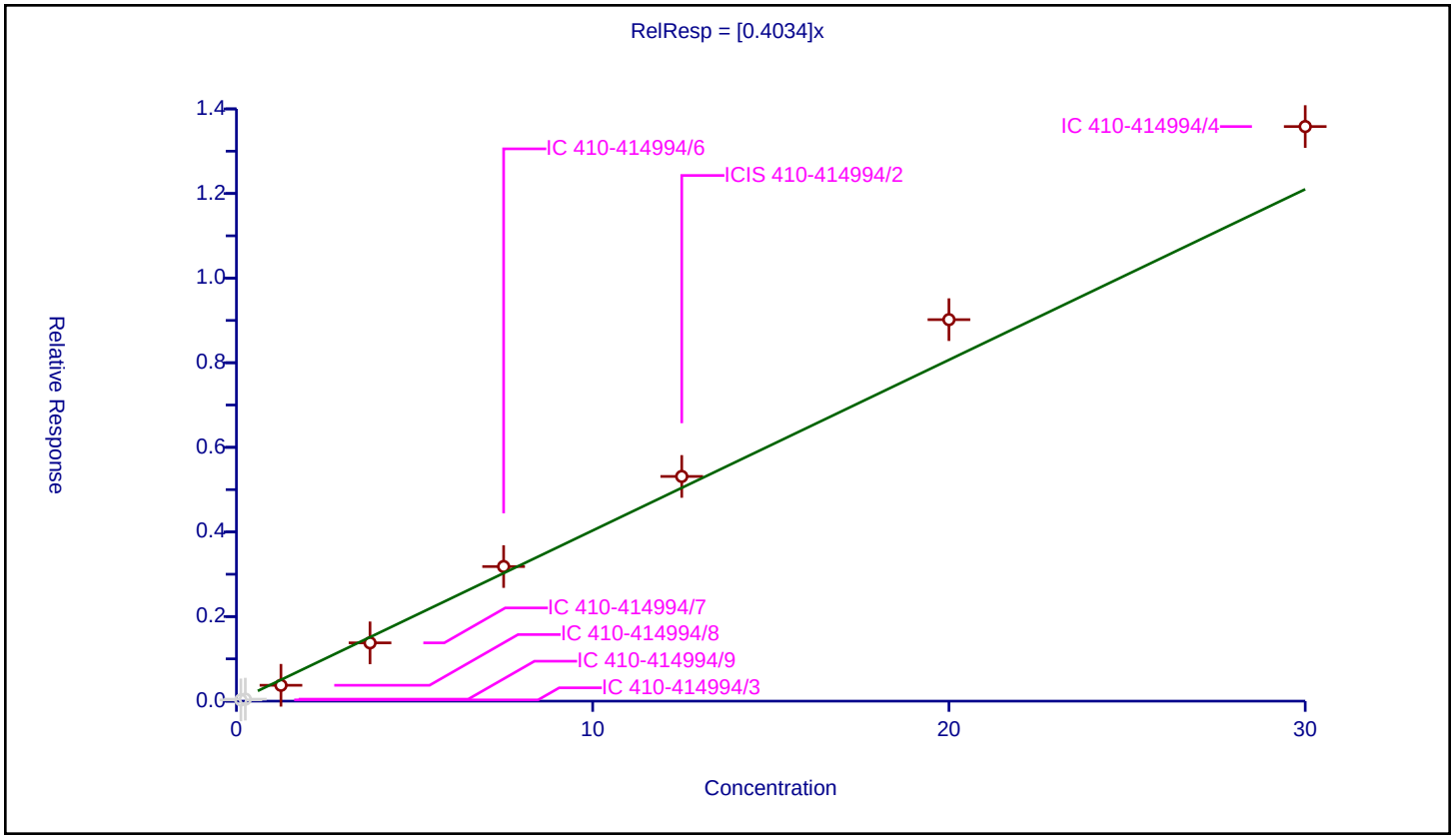
Curve Coefficients

Intercept:	0
Slope:	0.4034

Error Coefficients

Standard Error:	1230000
Relative Standard Error:	14.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.029159	5.0	743168.0	0.233272	N
2	IC 410-414994/9	0.25	0.047117	5.0	779444.0	0.188468	N
3	IC 410-414994/8	1.25	0.374858	5.0	934048.0	0.299886	Y
4	IC 410-414994/7	3.75	1.377737	5.0	693006.0	0.367397	Y
5	IC 410-414994/6	7.5	3.181725	5.0	978895.0	0.42423	Y
6	ICIS 410-414994/2	12.5	5.311784	5.0	849209.0	0.424943	Y
7	IC 410-414994/5	20.0	9.018163	5.0	772934.0	0.450908	Y
8	IC 410-414994/4	30.0	13.582602	5.0	766457.0	0.452753	Y



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Calibration / 2-Acetylaminofluorene

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

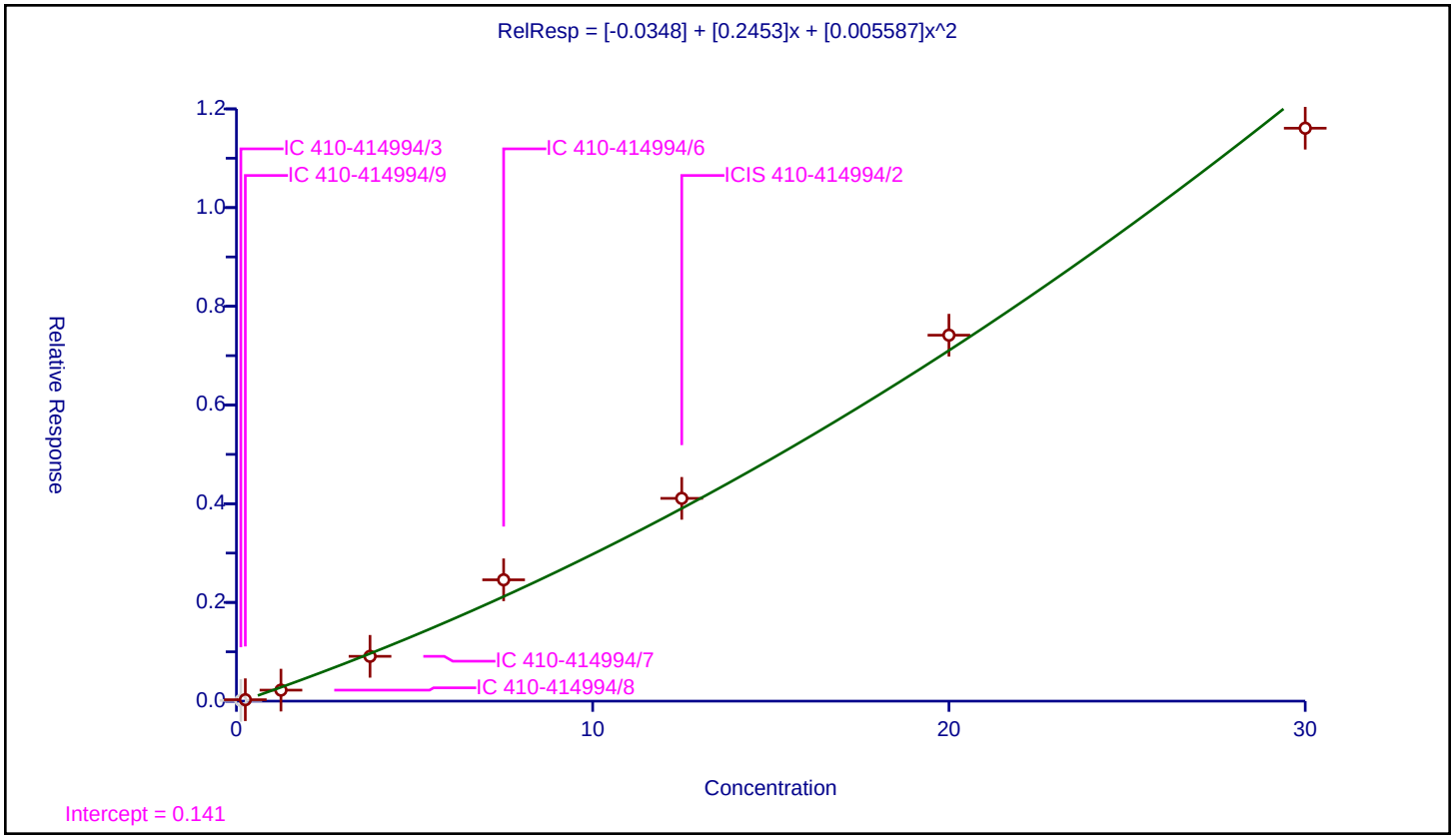
Curve Coefficients

Intercept:	-0.0348
Slope:	0.2453
Second Order:	0.005587

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	12.1
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.014122	5.0	743168.0	0.112976	N
2	IC 410-414994/9	0.25	0.028957	5.0	779444.0	0.115826	Y
3	IC 410-414994/8	1.25	0.223292	5.0	934048.0	0.178633	Y
4	IC 410-414994/7	3.75	0.907741	5.0	693006.0	0.242064	Y
5	IC 410-414994/6	7.5	2.458507	5.0	978895.0	0.327801	Y
6	ICIS 410-414994/2	12.5	4.108912	5.0	849209.0	0.328713	Y
7	IC 410-414994/5	20.0	7.415355	5.0	772934.0	0.370768	Y
8	IC 410-414994/4	30.0	11.608766	5.0	766457.0	0.386959	Y



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Calibration / 3,3'-Dichlorobenzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

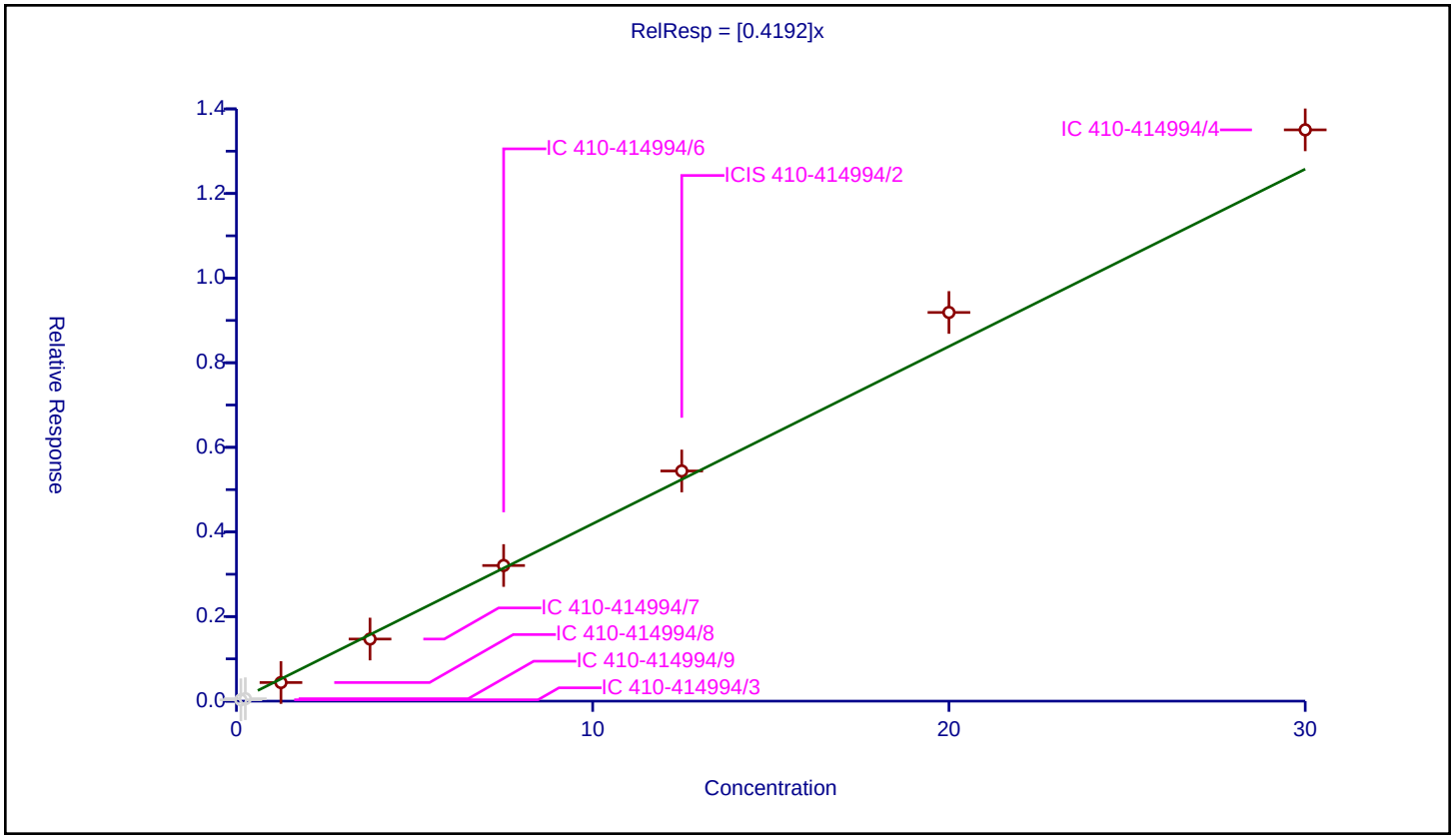
Curve Coefficients

Intercept:	0
Slope:	0.4192

Error Coefficients

Standard Error:	1230000
Relative Standard Error:	9.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.032375	5.0	743168.0	0.258999	N
2	IC 410-414994/9	0.25	0.057663	5.0	779444.0	0.230652	N
3	IC 410-414994/8	1.25	0.439624	5.0	934048.0	0.351699	Y
4	IC 410-414994/7	3.75	1.467902	5.0	693006.0	0.391441	Y
5	IC 410-414994/6	7.5	3.206376	5.0	978895.0	0.427517	Y
6	ICIS 410-414994/2	12.5	5.440428	5.0	849209.0	0.435234	Y
7	IC 410-414994/5	20.0	9.187841	5.0	772934.0	0.459392	Y
8	IC 410-414994/4	30.0	13.504202	5.0	766457.0	0.45014	Y



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Calibration / 4,4'-Methylene bis(2-chloroaniline)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

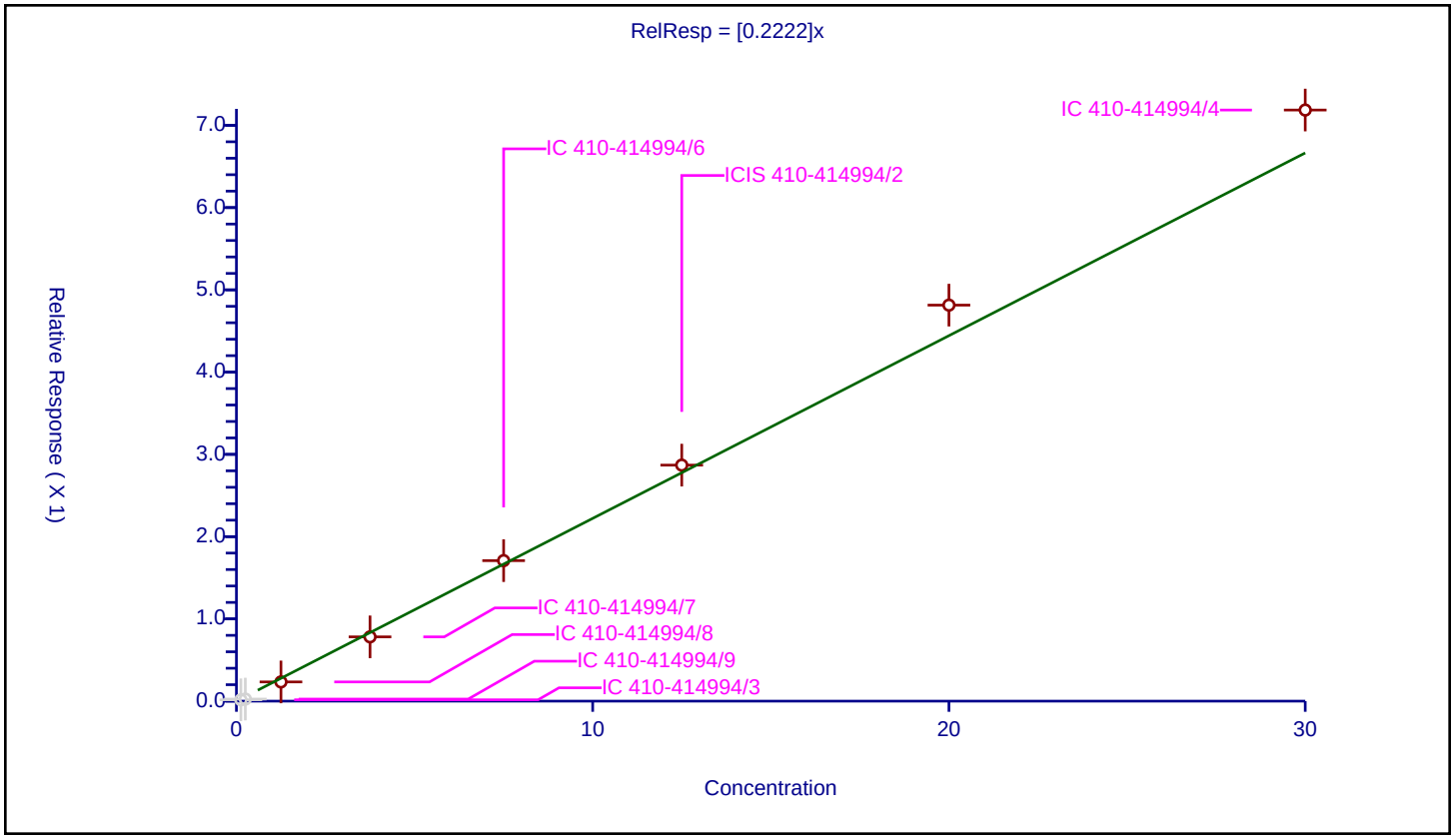
Curve Coefficients

Intercept:	0
Slope:	0.2222

Error Coefficients

Standard Error:	653000
Relative Standard Error:	9.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.01647	5.0	743168.0	0.13176	N
2	IC 410-414994/9	0.25	0.02512	5.0	779444.0	0.100482	N
3	IC 410-414994/8	1.25	0.233746	5.0	934048.0	0.186997	Y
4	IC 410-414994/7	3.75	0.781328	5.0	693006.0	0.208354	Y
5	IC 410-414994/6	7.5	1.708181	5.0	978895.0	0.227757	Y
6	ICIS 410-414994/2	12.5	2.869347	5.0	849209.0	0.229548	Y
7	IC 410-414994/5	20.0	4.81435	5.0	772934.0	0.240718	Y
8	IC 410-414994/4	30.0	7.186007	5.0	766457.0	0.239534	Y



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Calibration / Benzo[a]anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

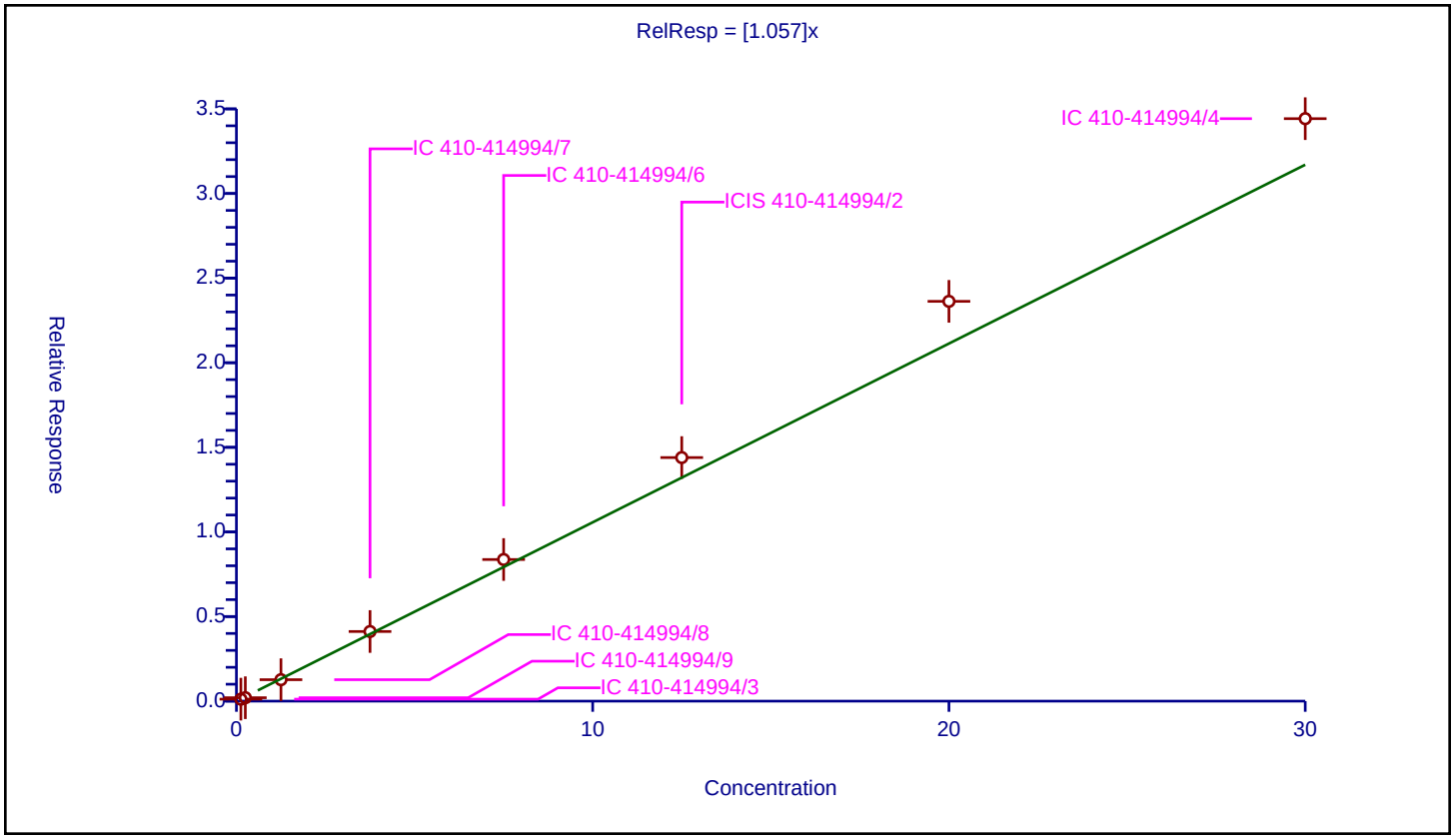
Curve Coefficients

Intercept:	0
Slope:	1.057

Error Coefficients

Standard Error:	2680000
Relative Standard Error:	12.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.116696	5.0	743168.0	0.933571	Y
2	IC 410-414994/9	0.25	0.202856	5.0	779444.0	0.811425	Y
3	IC 410-414994/8	1.25	1.267874	5.0	934048.0	1.014299	Y
4	IC 410-414994/7	3.75	4.11565	5.0	693006.0	1.097507	Y
5	IC 410-414994/6	7.5	8.3698	5.0	978895.0	1.115973	Y
6	ICIS 410-414994/2	12.5	14.394654	5.0	849209.0	1.151572	Y
7	IC 410-414994/5	20.0	23.626215	5.0	772934.0	1.181311	Y
8	IC 410-414994/4	30.0	34.422309	5.0	766457.0	1.14741	Y



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Calibration / Chrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

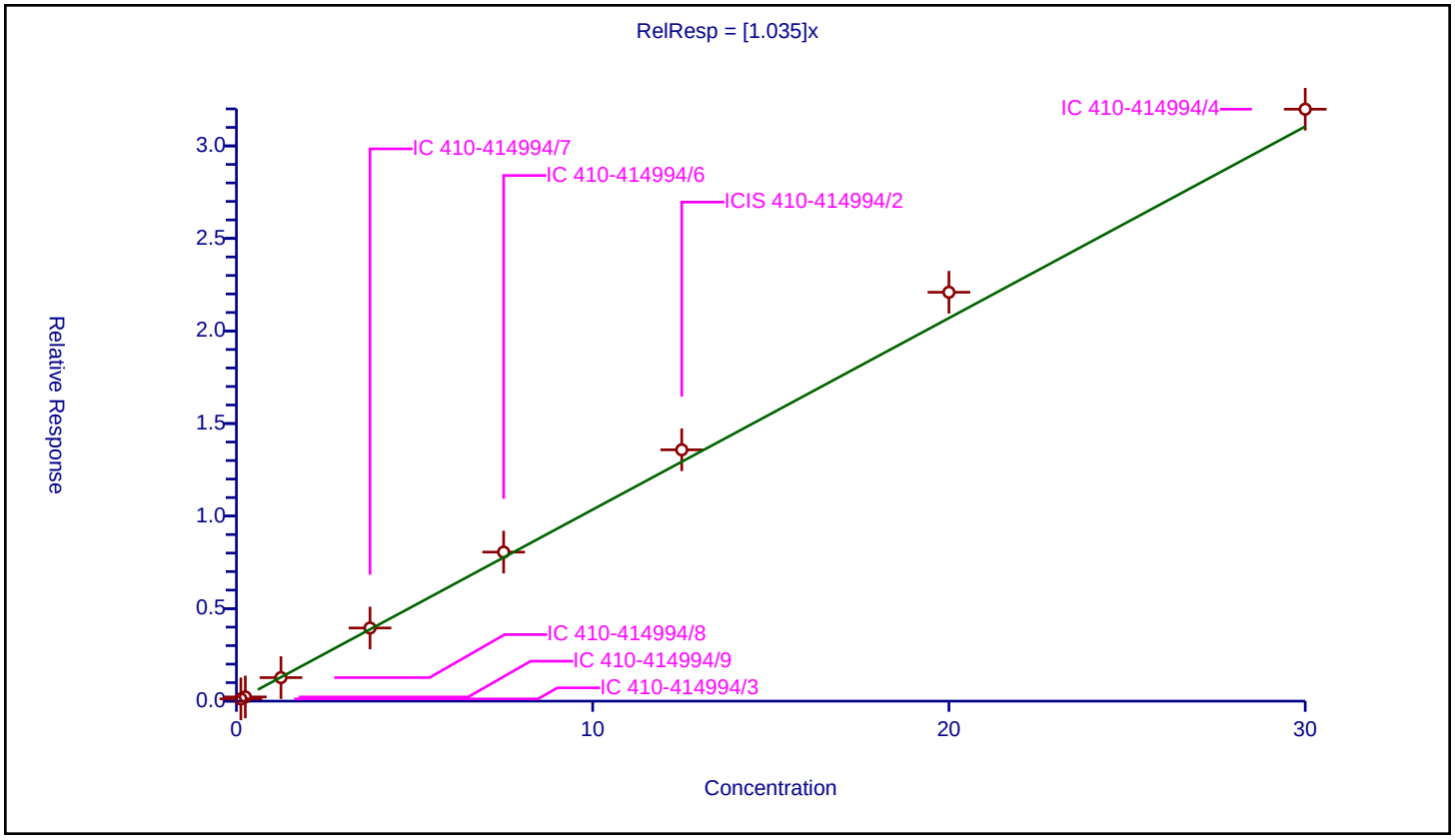
Curve Coefficients

Intercept:	0
Slope:	1.035

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	6.5
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.121123	5.0	743168.0	0.968987	Y
2	IC 410-414994/9	0.25	0.226816	5.0	779444.0	0.907262	Y
3	IC 410-414994/8	1.25	1.27191	5.0	934048.0	1.017528	Y
4	IC 410-414994/7	3.75	3.952989	5.0	693006.0	1.05413	Y
5	IC 410-414994/6	7.5	8.053872	5.0	978895.0	1.07385	Y
6	ICIS 410-414994/2	12.5	13.580497	5.0	849209.0	1.08644	Y
7	IC 410-414994/5	20.0	22.093284	5.0	772934.0	1.104664	Y
8	IC 410-414994/4	30.0	31.983053	5.0	766457.0	1.066102	Y



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Calibration / Bis(2-ethylhexyl) phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

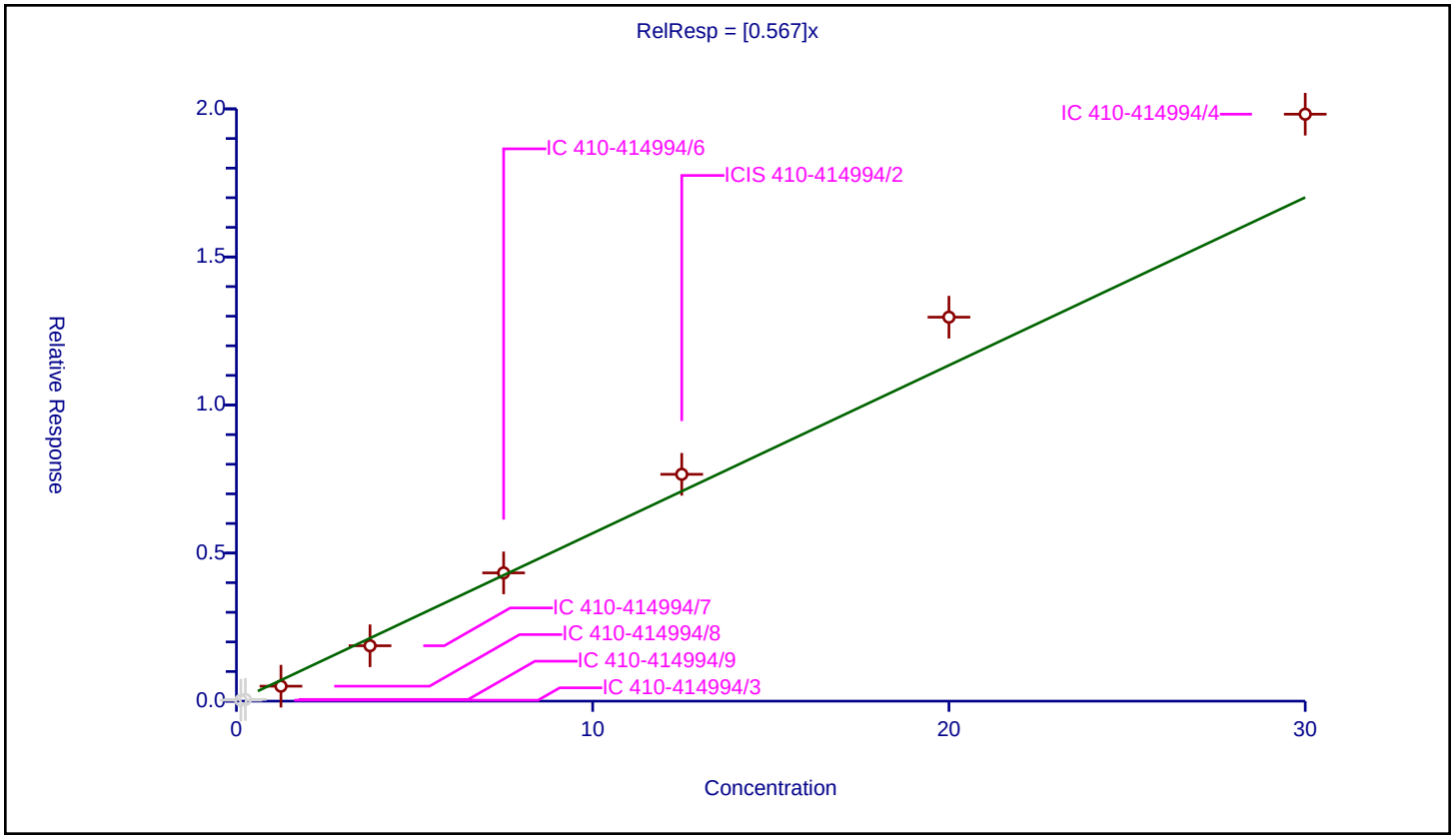
Curve Coefficients

Intercept:	0
Slope:	0.567

Error Coefficients

Standard Error:	1770000
Relative Standard Error:	17.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.031965	5.0	743168.0	0.255716	N
2	IC 410-414994/9	0.25	0.058189	5.0	779444.0	0.232756	N
3	IC 410-414994/8	1.25	0.504953	5.0	934048.0	0.403962	Y
4	IC 410-414994/7	3.75	1.870734	5.0	693006.0	0.498862	Y
5	IC 410-414994/6	7.5	4.331006	5.0	978895.0	0.577467	Y
6	ICIS 410-414994/2	12.5	7.659975	5.0	849209.0	0.612798	Y
7	IC 410-414994/5	20.0	12.966372	5.0	772934.0	0.648319	Y
8	IC 410-414994/4	30.0	19.821334	5.0	766457.0	0.660711	Y



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Calibration / 6-Methylchrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

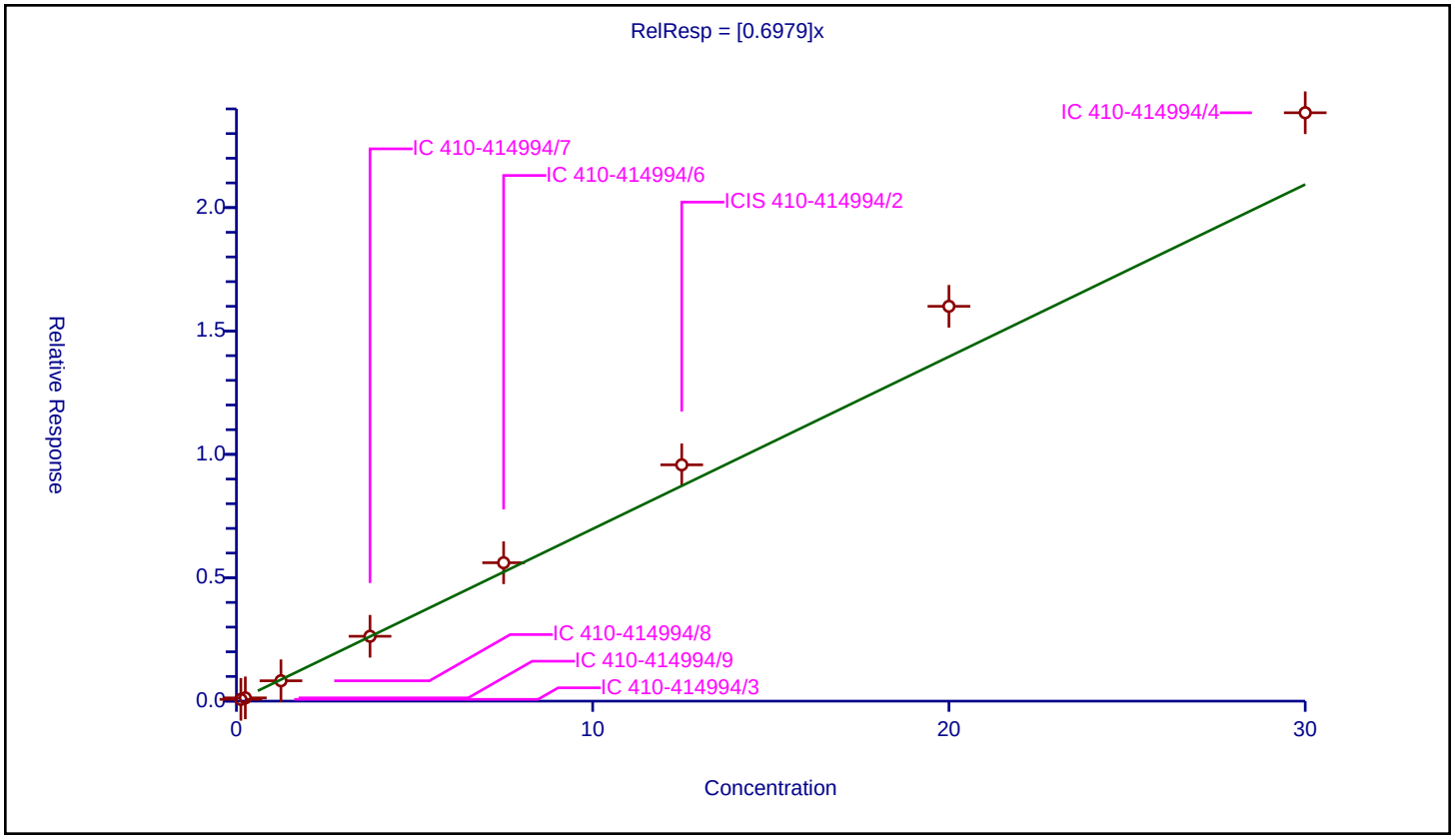
Curve Coefficients

Intercept:	0
Slope:	0.6979

Error Coefficients

Standard Error:	1830000
Relative Standard Error:	14.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.073052	5.0	743168.0	0.584417	Y
2	IC 410-414994/9	0.25	0.132357	5.0	779444.0	0.529429	Y
3	IC 410-414994/8	1.25	0.82469	5.0	934048.0	0.659752	Y
4	IC 410-414994/7	3.75	2.628808	5.0	693006.0	0.701016	Y
5	IC 410-414994/6	7.5	5.609039	5.0	978895.0	0.747872	Y
6	ICIS 410-414994/2	12.5	9.576488	5.0	849209.0	0.766119	Y
7	IC 410-414994/5	20.0	15.999775	5.0	772934.0	0.799989	Y
8	IC 410-414994/4	30.0	23.843614	5.0	766457.0	0.794787	Y



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Calibration / Di-n-octyl phthalate

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

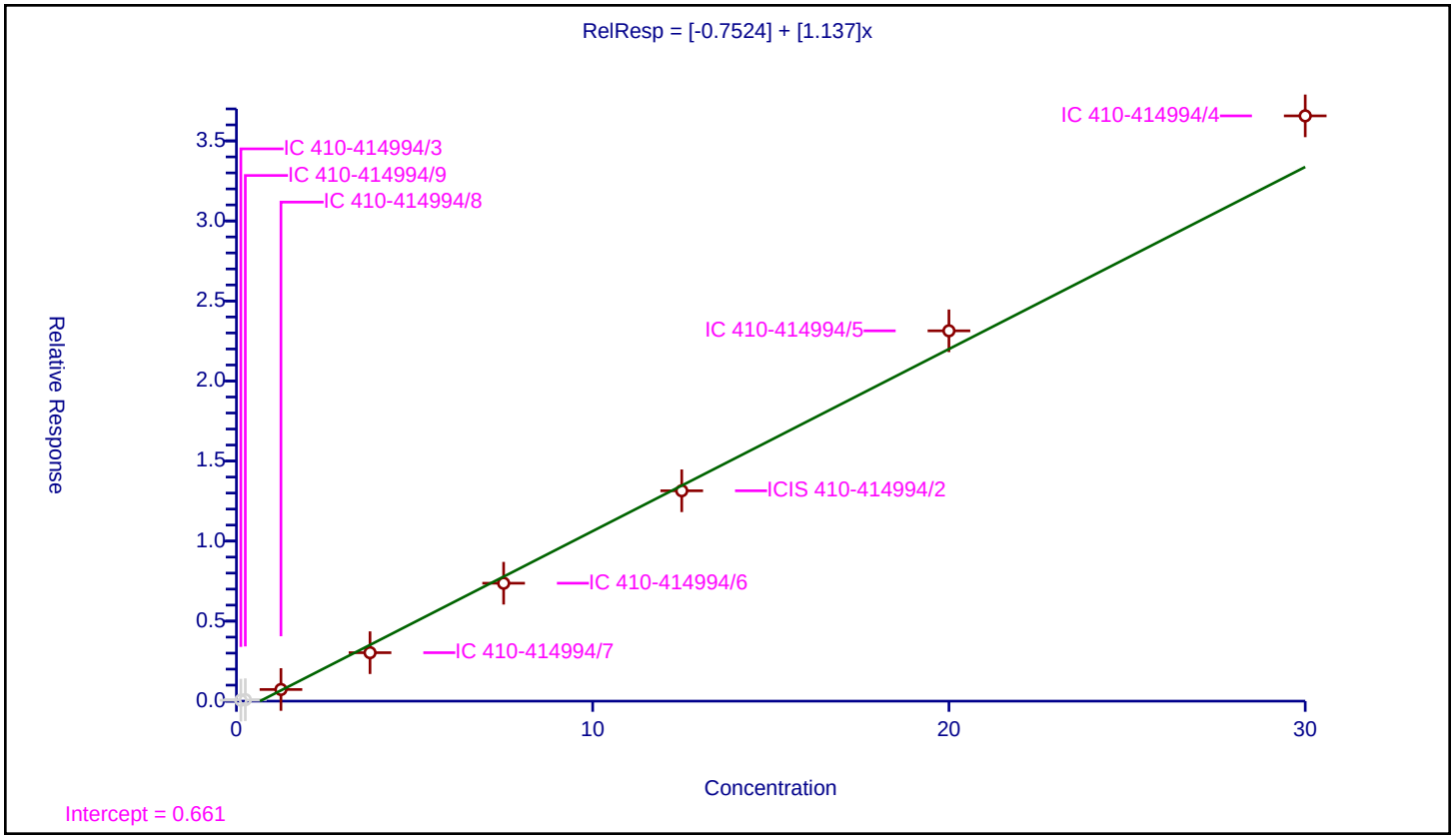
Curve Coefficients

Intercept:	-0.7524
Slope:	1.137

Error Coefficients

Standard Error:	3140000
Relative Standard Error:	8.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.060072	5.0	612760.0	0.48058	N
2	IC 410-414994/9	0.25	0.090675	5.0	639480.0	0.362701	N
3	IC 410-414994/8	1.25	0.728035	5.0	794041.0	0.582428	Y
4	IC 410-414994/7	3.75	3.028265	5.0	586552.0	0.807537	Y
5	IC 410-414994/6	7.5	7.366259	5.0	870828.0	0.982168	Y
6	ICIS 410-414994/2	12.5	13.142084	5.0	762782.0	1.051367	Y
7	IC 410-414994/5	20.0	23.135485	5.0	682947.0	1.156774	Y
8	IC 410-414994/4	30.0	36.564581	5.0	665600.0	1.218819	Y



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Calibration / 7,12-Dimethylbenz(a)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

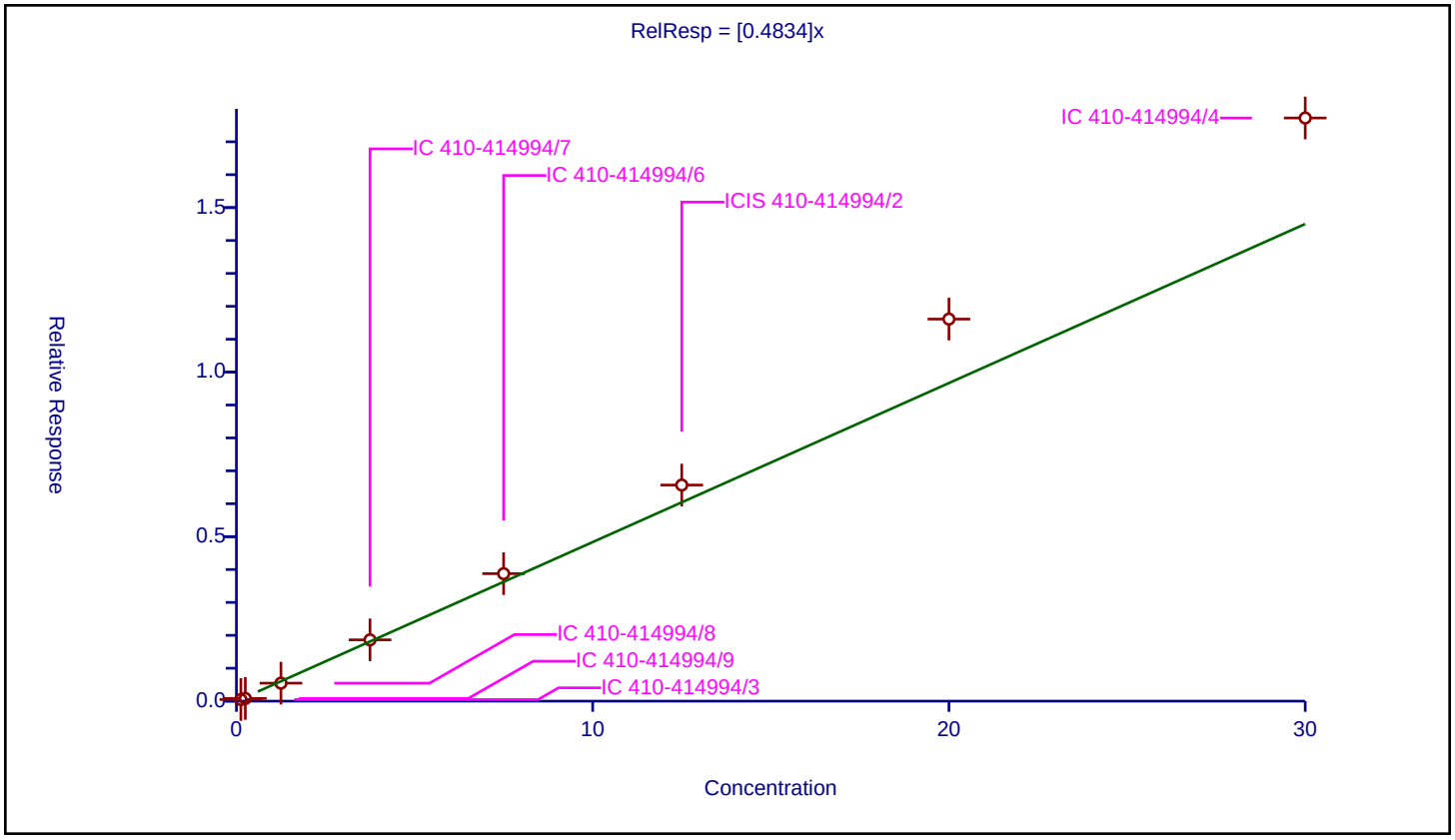
Curve Coefficients

Intercept:	0
Slope:	0.4834

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	19.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.049024	5.0	612760.0	0.392193	Y
2	IC 410-414994/9	0.25	0.081856	5.0	639480.0	0.327422	Y
3	IC 410-414994/8	1.25	0.546584	5.0	794041.0	0.437267	Y
4	IC 410-414994/7	3.75	1.863407	5.0	586552.0	0.496908	Y
5	IC 410-414994/6	7.5	3.874519	5.0	870828.0	0.516603	Y
6	ICIS 410-414994/2	12.5	6.567689	5.0	762782.0	0.525415	Y
7	IC 410-414994/5	20.0	11.611589	5.0	682947.0	0.580579	Y
8	IC 410-414994/4	30.0	17.72319	5.0	665600.0	0.590773	Y



Calibration / Benzo[b]fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

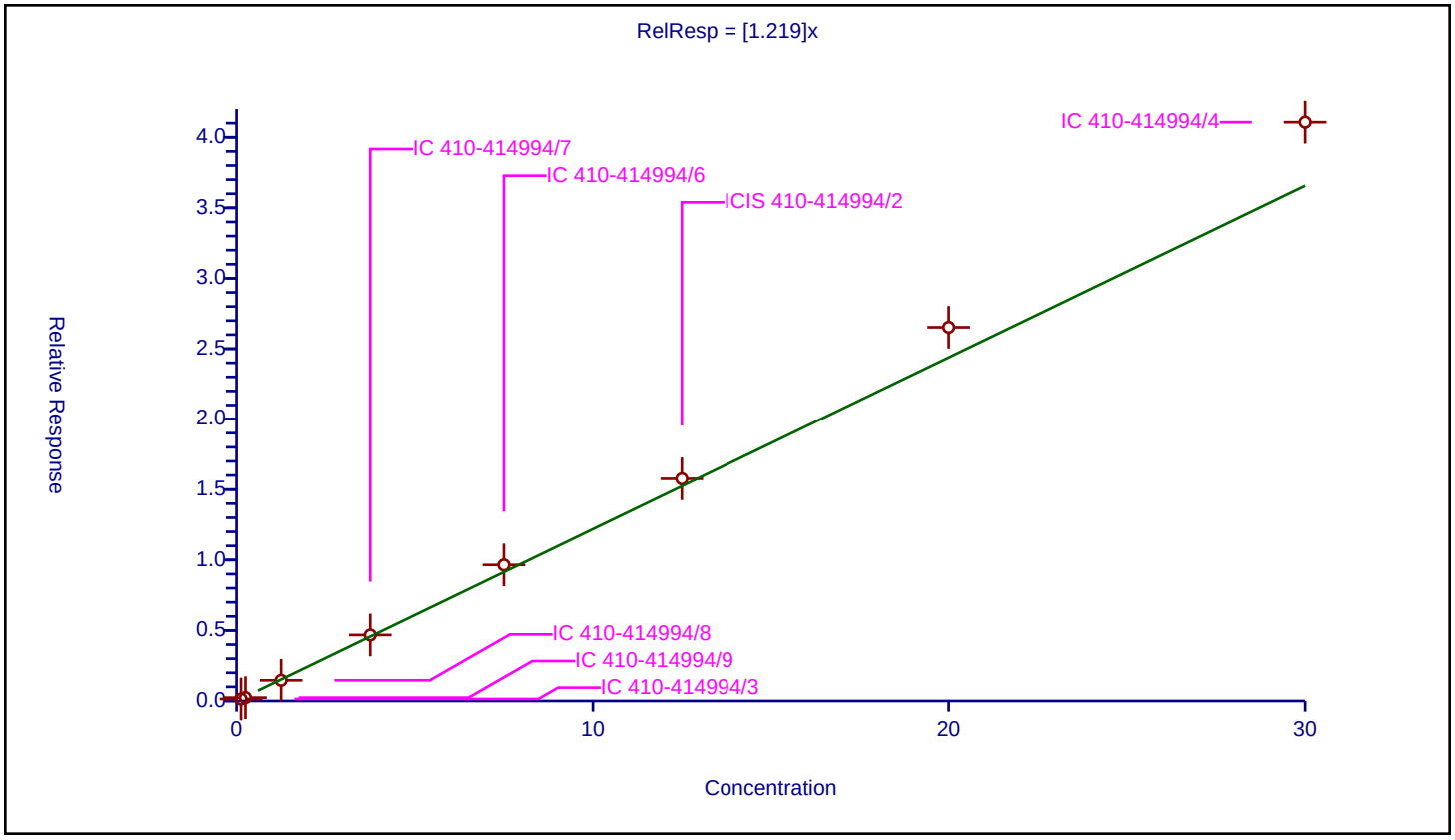
Curve Coefficients

Intercept:	0
Slope:	1.219

Error Coefficients

Standard Error:	2730000
Relative Standard Error:	10.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.142535	5.0	612760.0	1.140283	Y
2	IC 410-414994/9	0.25	0.236958	5.0	639480.0	0.947833	Y
3	IC 410-414994/8	1.25	1.465535	5.0	794041.0	1.172428	Y
4	IC 410-414994/7	3.75	4.682074	5.0	586552.0	1.248553	Y
5	IC 410-414994/6	7.5	9.650534	5.0	870828.0	1.286738	Y
6	ICIS 410-414994/2	12.5	15.76377	5.0	762782.0	1.261102	Y
7	IC 410-414994/5	20.0	26.523434	5.0	682947.0	1.326172	Y
8	IC 410-414994/4	30.0	41.069494	5.0	665600.0	1.368983	Y



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Calibration / Benzo[k]fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

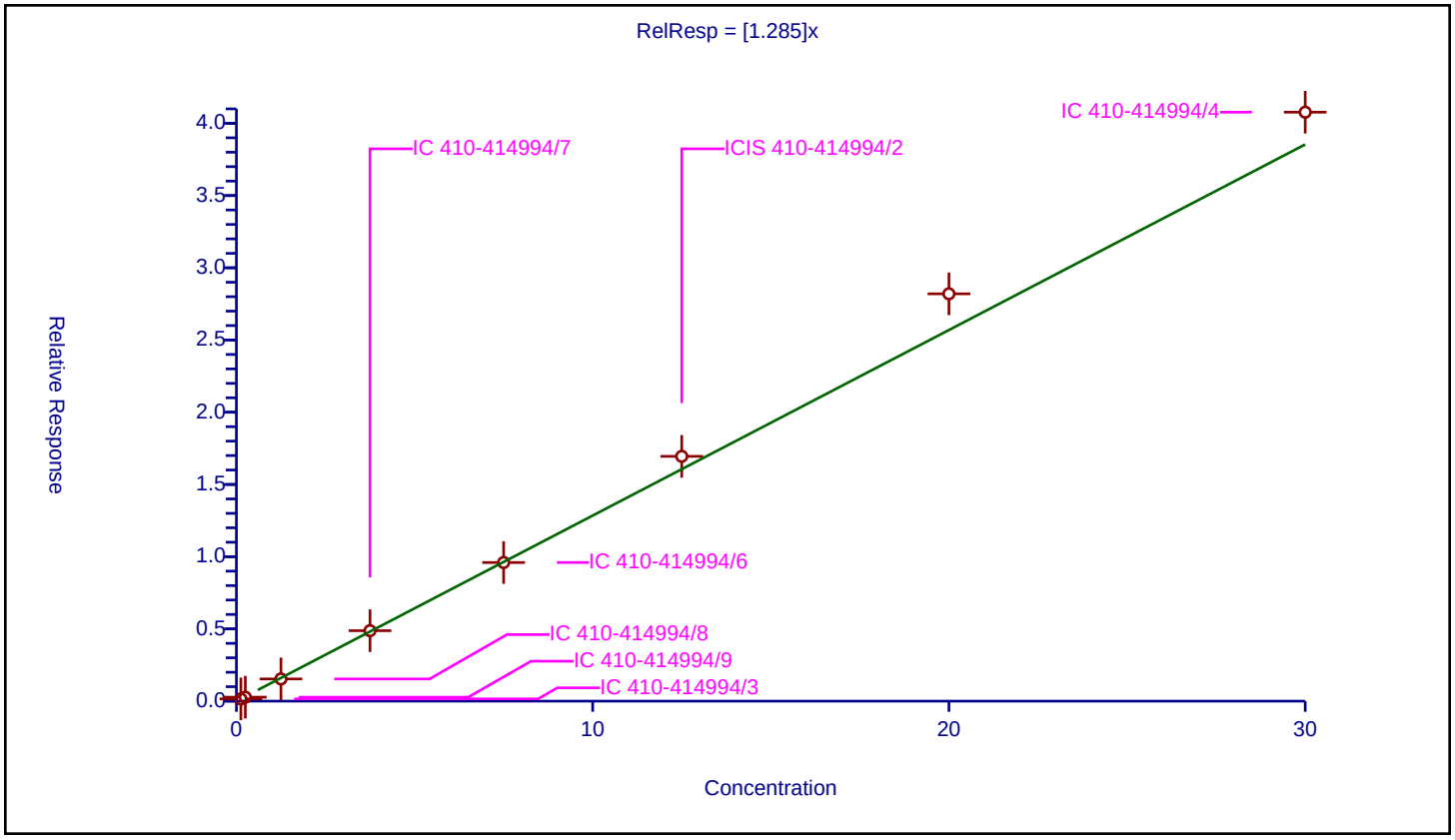
Curve Coefficients

Intercept:	0
Slope:	1.285

Error Coefficients

Standard Error:	2780000
Relative Standard Error:	7.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.156179	5.0	612760.0	1.249429	Y
2	IC 410-414994/9	0.25	0.273417	5.0	639480.0	1.09367	Y
3	IC 410-414994/8	1.25	1.536123	5.0	794041.0	1.228899	Y
4	IC 410-414994/7	3.75	4.877453	5.0	586552.0	1.300654	Y
5	IC 410-414994/6	7.5	9.596832	5.0	870828.0	1.279578	Y
6	ICIS 410-414994/2	12.5	16.946683	5.0	762782.0	1.355735	Y
7	IC 410-414994/5	20.0	28.198696	5.0	682947.0	1.409935	Y
8	IC 410-414994/4	30.0	40.770545	5.0	665600.0	1.359018	Y



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Calibration / Benzo[a]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

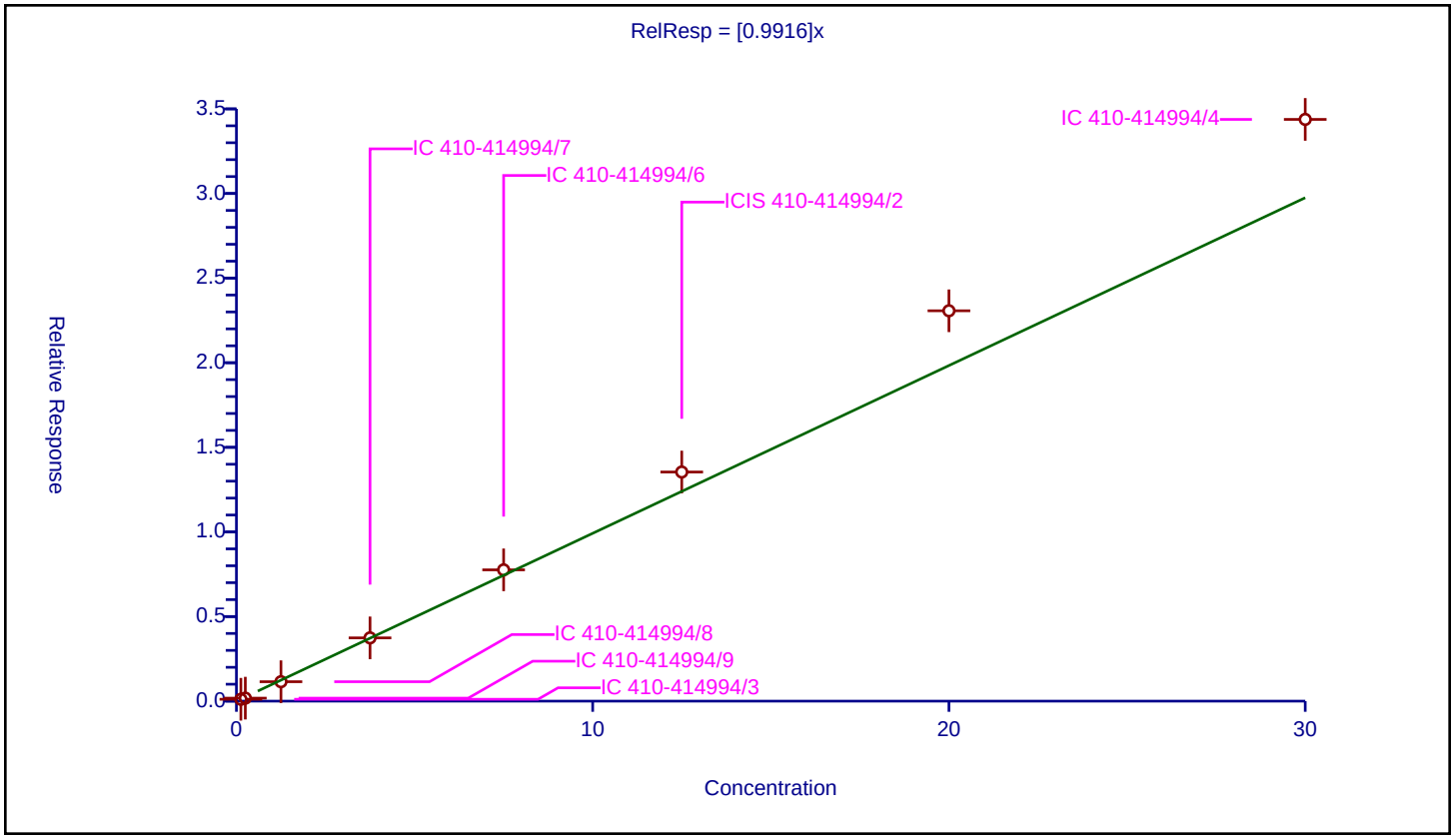
Curve Coefficients

Intercept:	0
Slope:	0.9916

Error Coefficients

Standard Error:	2310000
Relative Standard Error:	15.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.111308	5.0	612760.0	0.890463	Y
2	IC 410-414994/9	0.25	0.177504	5.0	639480.0	0.710014	Y
3	IC 410-414994/8	1.25	1.147712	5.0	794041.0	0.918169	Y
4	IC 410-414994/7	3.75	3.7392	5.0	586552.0	0.99712	Y
5	IC 410-414994/6	7.5	7.759024	5.0	870828.0	1.034536	Y
6	ICIS 410-414994/2	12.5	13.540841	5.0	762782.0	1.083267	Y
7	IC 410-414994/5	20.0	23.069184	5.0	682947.0	1.153459	Y
8	IC 410-414994/4	30.0	34.377892	5.0	665600.0	1.14593	Y



11/14/2023
11:12 AM

Calibration / 3-Methylcholanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

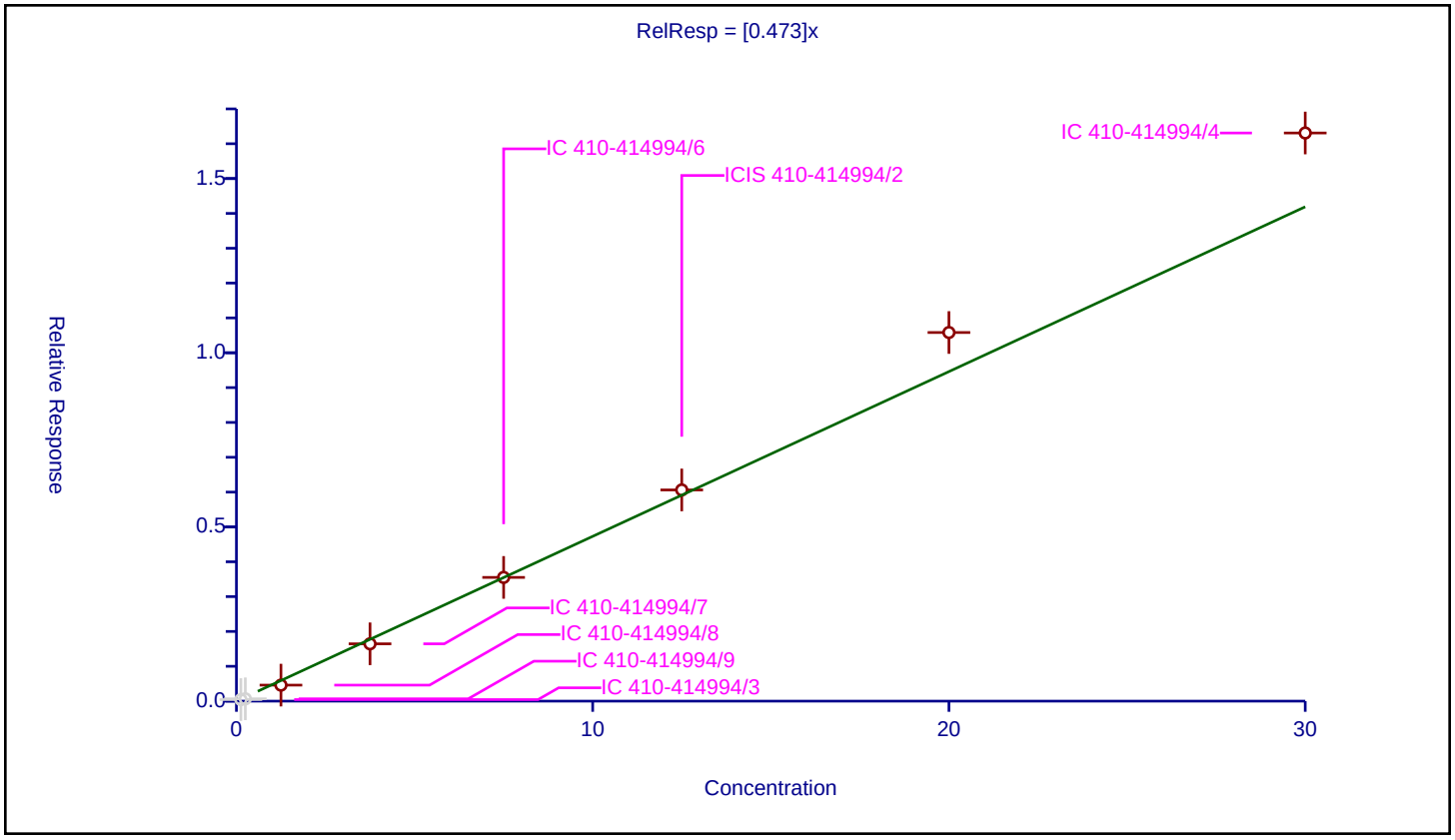
Curve Coefficients

Intercept:	0
Slope:	0.473

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	13.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.044797	5.0	612760.0	0.358378	N
2	IC 410-414994/9	0.25	0.067156	5.0	639480.0	0.268625	N
3	IC 410-414994/8	1.25	0.459901	5.0	794041.0	0.367921	Y
4	IC 410-414994/7	3.75	1.645745	5.0	586552.0	0.438865	Y
5	IC 410-414994/6	7.5	3.551201	5.0	870828.0	0.473493	Y
6	ICIS 410-414994/2	12.5	6.062374	5.0	762782.0	0.48499	Y
7	IC 410-414994/5	20.0	10.581436	5.0	682947.0	0.529072	Y
8	IC 410-414994/4	30.0	16.307737	5.0	665600.0	0.543591	Y



11/14/2023
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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

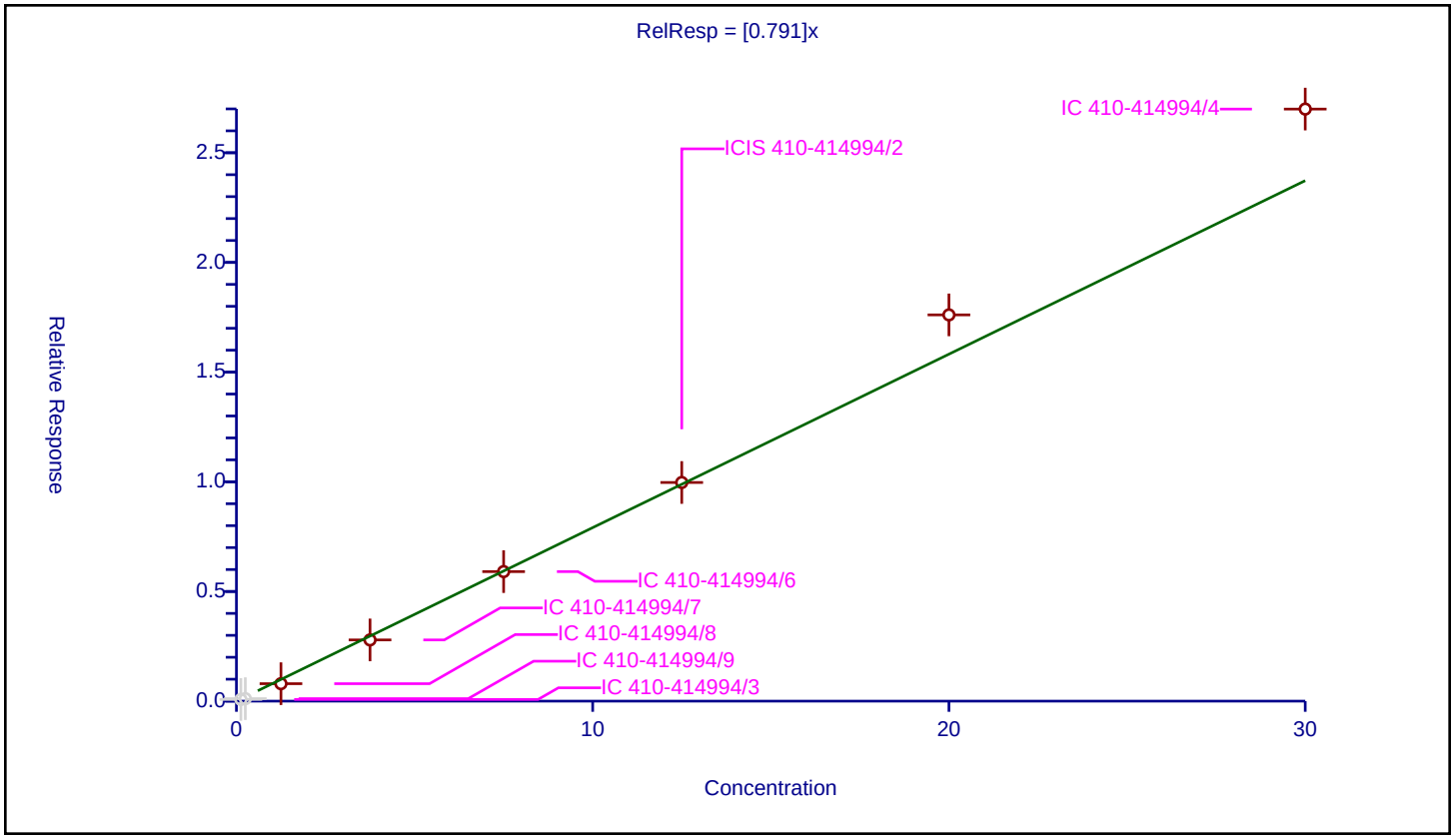
Curve Coefficients

Intercept:	0
Slope:	0.791

Error Coefficients

Standard Error:	2110000
Relative Standard Error:	12.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.077445	5.0	612760.0	0.619557	N
2	IC 410-414994/9	0.25	0.113201	5.0	639480.0	0.452805	N
3	IC 410-414994/8	1.25	0.795696	5.0	794041.0	0.636557	Y
4	IC 410-414994/7	3.75	2.790622	5.0	586552.0	0.744166	Y
5	IC 410-414994/6	7.5	5.905437	5.0	870828.0	0.787392	Y
6	ICIS 410-414994/2	12.5	9.967789	5.0	762782.0	0.797423	Y
7	IC 410-414994/5	20.0	17.608914	5.0	682947.0	0.880446	Y
8	IC 410-414994/4	30.0	26.992067	5.0	665600.0	0.899736	Y



Calibration / Dibenz[a,j]acridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

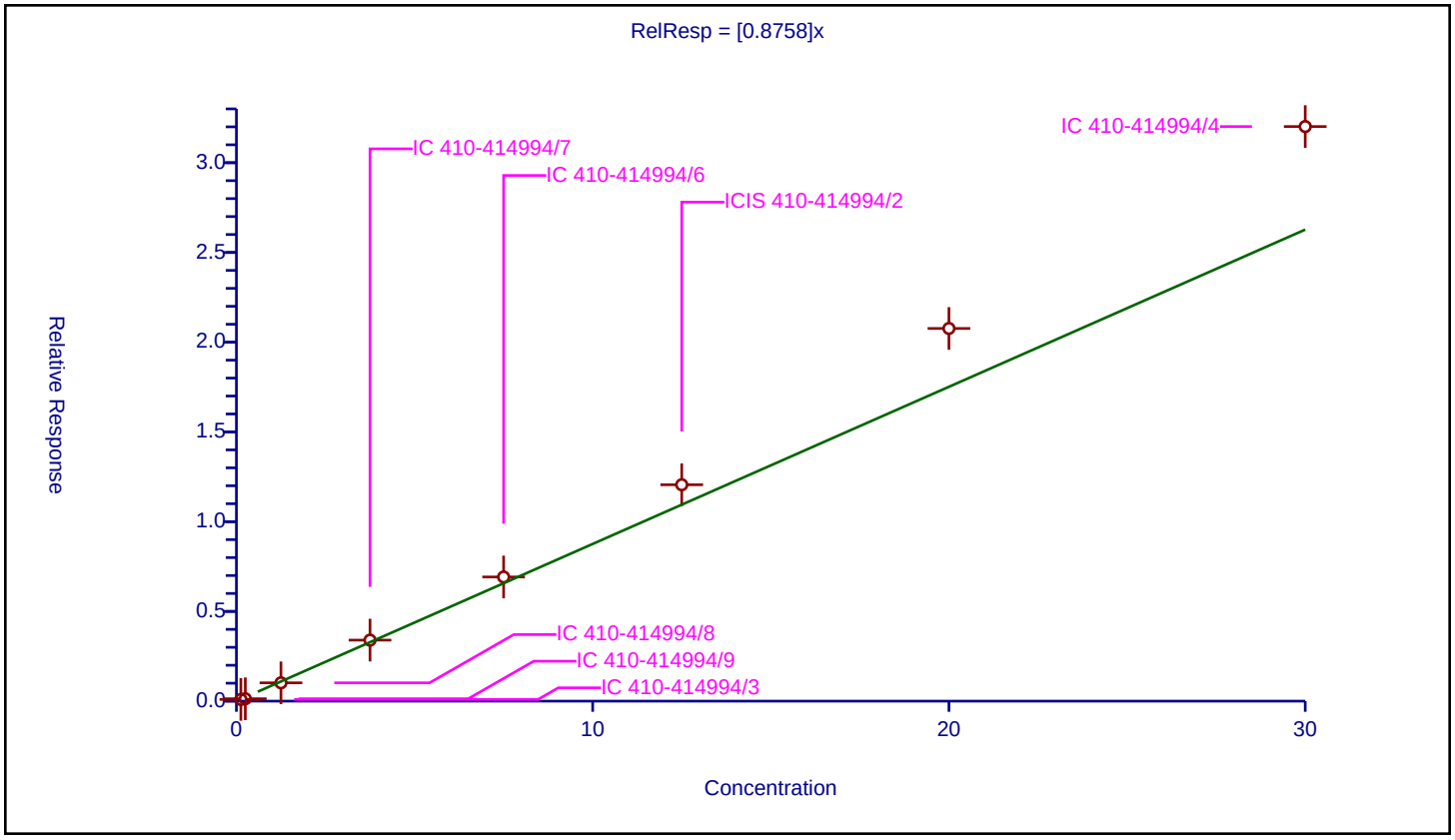
Curve Coefficients

Intercept:	0
Slope:	0.8758

Error Coefficients

Standard Error:	2110000
Relative Standard Error:	19.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.095258	5.0	612760.0	0.76206	Y
2	IC 410-414994/9	0.25	0.132279	5.0	639480.0	0.529117	Y
3	IC 410-414994/8	1.25	1.019973	5.0	794041.0	0.815978	Y
4	IC 410-414994/7	3.75	3.399716	5.0	586552.0	0.906591	Y
5	IC 410-414994/6	7.5	6.917394	5.0	870828.0	0.922319	Y
6	ICIS 410-414994/2	12.5	12.057698	5.0	762782.0	0.964616	Y
7	IC 410-414994/5	20.0	20.765938	5.0	682947.0	1.038297	Y
8	IC 410-414994/4	30.0	32.016248	5.0	665600.0	1.067208	Y



11/14/2023
11:12 AM

Calibration / Indeno[1,2,3-cd]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

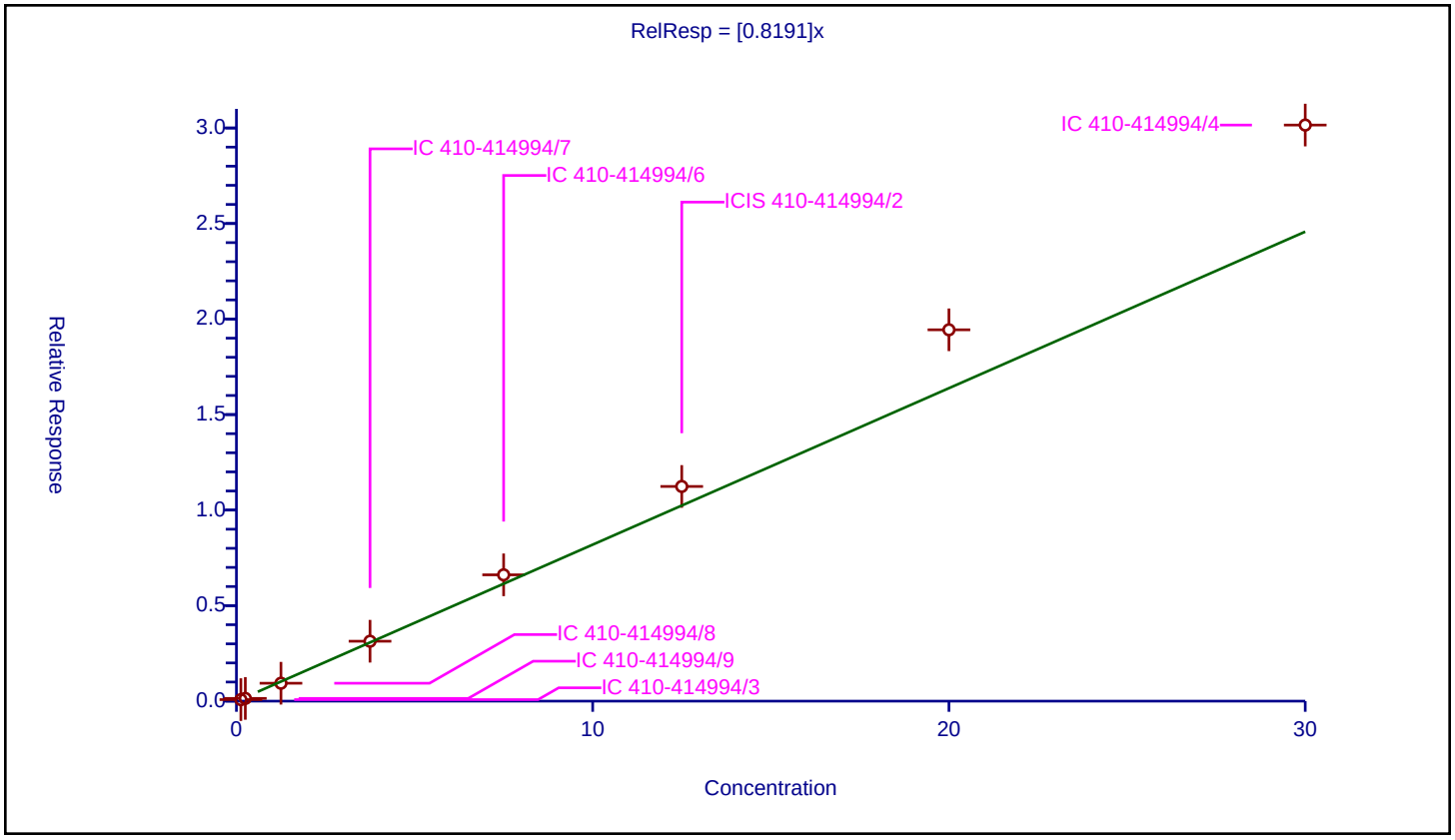
Curve Coefficients

Intercept:	0
Slope:	0.8191

Error Coefficients

Standard Error:	1990000
Relative Standard Error:	18.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.079909	5.0	612760.0	0.639271	Y
2	IC 410-414994/9	0.25	0.142272	5.0	639480.0	0.569087	Y
3	IC 410-414994/8	1.25	0.937936	5.0	794041.0	0.750349	Y
4	IC 410-414994/7	3.75	3.136516	5.0	586552.0	0.836404	Y
5	IC 410-414994/6	7.5	6.611587	5.0	870828.0	0.881545	Y
6	ICIS 410-414994/2	12.5	11.236572	5.0	762782.0	0.898926	Y
7	IC 410-414994/5	20.0	19.437365	5.0	682947.0	0.971868	Y
8	IC 410-414994/4	30.0	30.154304	5.0	665600.0	1.005143	Y



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Calibration / Dibenz(a,h)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

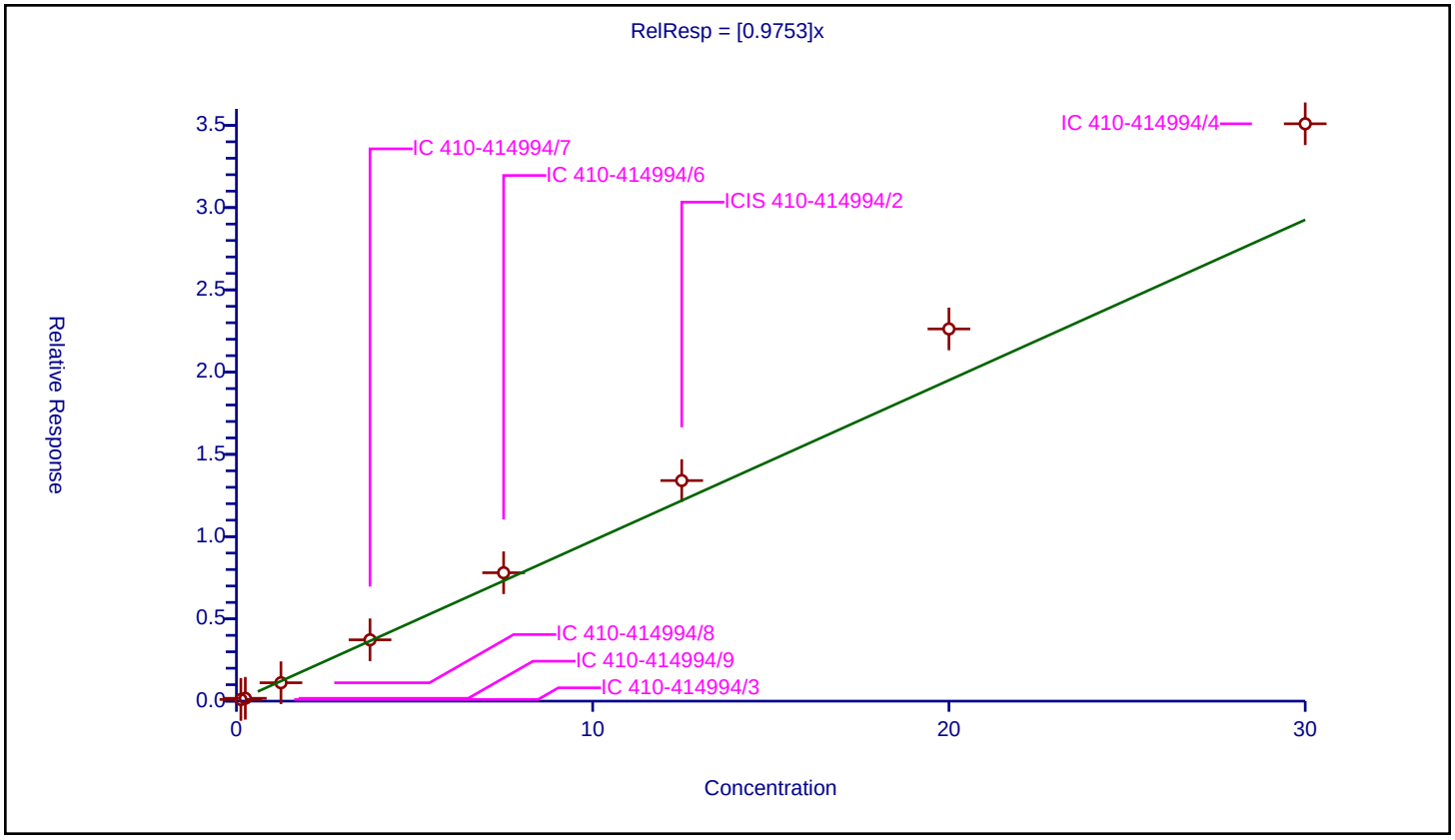
Curve Coefficients

Intercept:	0
Slope:	0.9753

Error Coefficients

Standard Error:	2320000
Relative Standard Error:	17.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.101532	5.0	612760.0	0.812259	Y
2	IC 410-414994/9	0.25	0.171905	5.0	639480.0	0.687621	Y
3	IC 410-414994/8	1.25	1.118223	5.0	794041.0	0.894578	Y
4	IC 410-414994/7	3.75	3.727197	5.0	586552.0	0.993919	Y
5	IC 410-414994/6	7.5	7.803671	5.0	870828.0	1.040489	Y
6	ICIS 410-414994/2	12.5	13.407736	5.0	762782.0	1.072619	Y
7	IC 410-414994/5	20.0	22.62371	5.0	682947.0	1.131186	Y
8	IC 410-414994/4	30.0	35.095433	5.0	665600.0	1.169848	Y



Calibration / Benzo[g,h,i]perylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

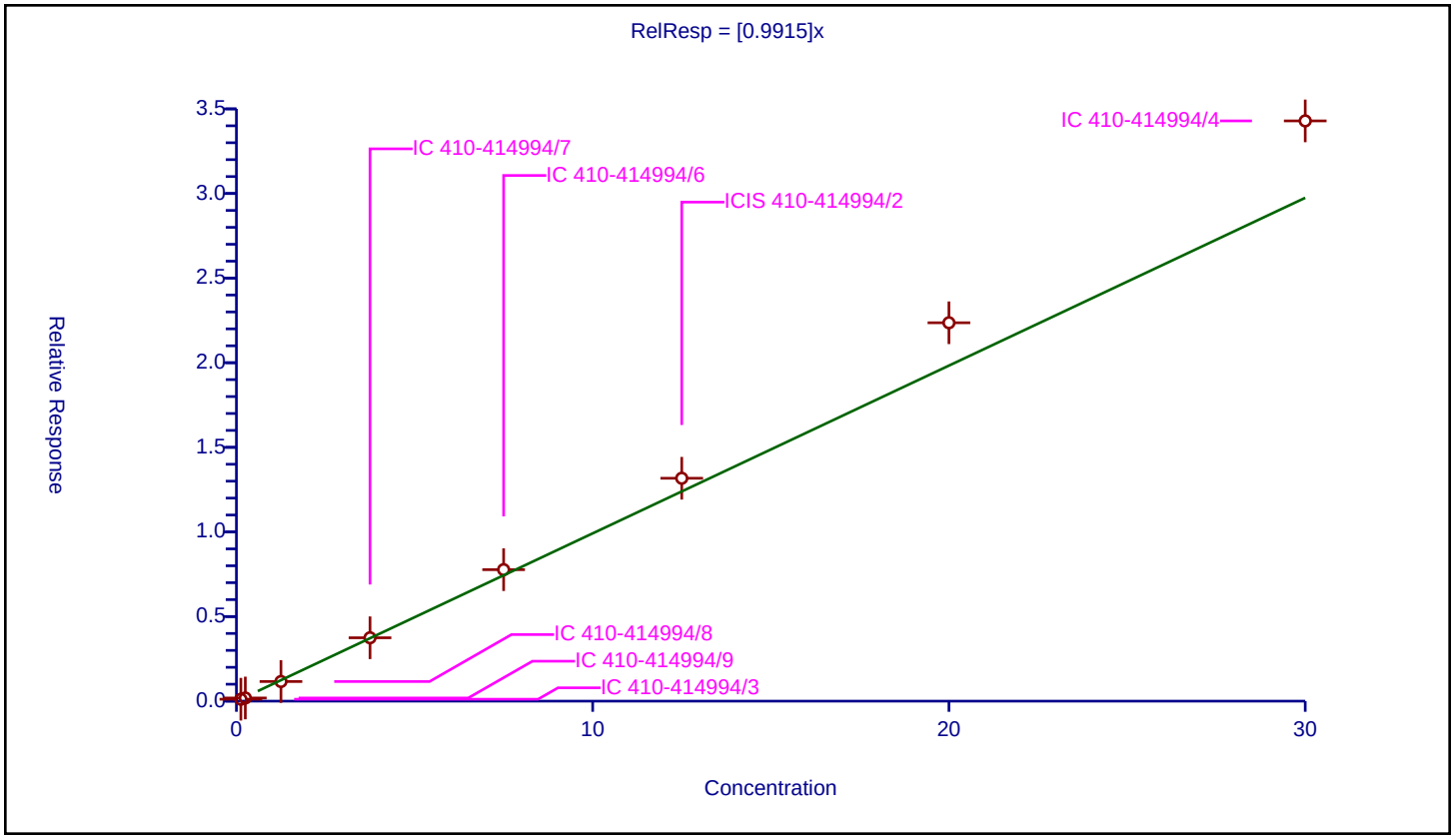
Curve Coefficients

Intercept:	0
Slope:	0.9915

Error Coefficients

Standard Error:	2280000
Relative Standard Error:	13.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-414994/3	0.125	0.113935	5.0	612760.0	0.911482	Y
2	IC 410-414994/9	0.25	0.185815	5.0	639480.0	0.74326	Y
3	IC 410-414994/8	1.25	1.159273	5.0	794041.0	0.927418	Y
4	IC 410-414994/7	3.75	3.7448	5.0	586552.0	0.998613	Y
5	IC 410-414994/6	7.5	7.770427	5.0	870828.0	1.036057	Y
6	ICIS 410-414994/2	12.5	13.172532	5.0	762782.0	1.053803	Y
7	IC 410-414994/5	20.0	22.360447	5.0	682947.0	1.118022	Y
8	IC 410-414994/4	30.0	34.289558	5.0	665600.0	1.142985	Y



11/14/2023
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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-435991/9	DJ2608.D
Level 2	IC 410-435991/8	DJ2607.D
Level 3	IC 410-435991/7	DJ2606.D
Level 4	IC 410-435991/6	DJ2605.D
Level 5	IC 410-435991/5	DJ2604.D
Level 6	ICIS 410-435991/2	DJ2601b.D
Level 7	IC 410-435991/4	DJ2603.D
Level 8	IC 410-435991/3	DJ2602.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 0.5989	+++++ 0.5886	0.5501 0.5568	0.5879	0.5869	Ave		0.5782				3.4		20.0			
N-Nitrosodimethylamine	0.8620 0.9873	0.8172 0.9928	0.9335 0.9354	1.0117	0.9726	Ave		0.9391				7.3		20.0			
Pyridine	1.2724 1.6157	1.3329 1.5976	1.5416 1.4992	1.6294	1.5239	Ave		1.5016				8.8		20.0			
N,N-dimethylformamide	+++++ 1.0380	+++++ 1.0465	0.8315 1.0137	1.0048	1.0544	Ave		0.9981				8.4		20.0			
2-Picoline	1.6171 1.6578	1.3578 1.6447	1.5871 1.5819	1.6325	1.5651	Ave		1.5805				6.1		20.0			
N-Nitrosomethylethylamine	+++++ 0.7272	2.1958 0.7231	1.1039 0.6646	0.7353	0.7108	Lin2	0.3814	0.6878							0.9930		0.9900
Methyl methanesulfonate	0.9087 0.8973	0.7160 0.8984	0.8588 0.8387	0.8574	0.8598	Ave		0.8544				7.2		20.0			
N-Nitrosodiethylamine	0.4935 0.6975	0.6221 0.6828	0.6525 0.6678	0.6748	0.6748	Ave		0.6457				10.1		20.0			
Ethyl methanesulfonate	0.7618 0.7279	0.6637 0.7463	0.6691 0.6964	0.7300	0.7131	Ave		0.7135				4.9		20.0			
Benzaldehyde	1.2049	1.1004 1.1309	0.9961 0.9487	1.2548	1.2182	Ave		1.1220			0.0100	10.3		20.0			
Phenol	1.7165 1.9240	1.5951 1.9325	1.8831 1.7932	1.9167	1.8246	Ave		1.8232			0.8000	6.5		20.0			
Aniline	1.7820 2.2250	1.8024 2.2462	2.1118 2.1175	2.2593	2.1412	Ave		2.0857				9.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Bis(2-chloroethyl)ether	1.6649 1.5460	1.4097 1.5230	1.5132 1.4356	1.5457	1.4678	Ave		1.5132			0.7000	5.2		20.0			
2-Chlorophenol	1.2142 1.3622	1.1398 1.3806	1.2737 1.2757	1.3567	1.3246	Ave		1.2909			0.8000	6.4		20.0			
1,3-Dichlorobenzene	1.5369 1.6160	1.4981 1.6129	1.6505 1.5002	1.6300	1.5360	Ave		1.5726				3.9		20.0			
1,4-Dichlorobenzene	1.5649 1.6060	1.4663 1.6461	1.6109 1.5203	1.6495	1.5893	Ave		1.5817				4.0		20.0			
Benzyl alcohol	+++++ 0.9108	+++++ 0.9162	0.7590 0.8498	0.8578	0.8633	Ave		0.8595				6.6		20.0			
1,2-Dichlorobenzene	1.3234 1.5328	1.4118 1.5603	1.5025 1.4427	1.5554	1.4829	Ave		1.4765				5.5		20.0			
2-Methylphenol	1.2075 1.2957	1.0657 1.2840	1.2433 1.2184	1.2856	1.2741	Ave		1.2343			0.7000	6.1		20.0			
2,2'-oxybis[1-chloropropane]	2.3899 2.6048	2.2445 2.5787	2.5253 2.4470	2.5464	2.5035	Ave		2.4800			0.0100	4.7		20.0			
N-Nitrosopyrrolidine	0.5547 0.7416	0.5638 0.7436	0.6856 0.7114	0.7199	0.7106	Ave		0.6789				11.2		20.0			
3,4-Methylphenol	1.1795 1.3332	1.0091 1.3557	1.2655 1.2598	1.3523	1.2913	Ave		1.2558			0.6000	9.2		20.0			
Acetophenone	1.8614 2.0781	1.9207 2.1018	2.1190 1.9411	2.0975	2.0344	Ave		2.0193			0.0100	4.9		20.0			
N-Nitrosodi-n-propylamine	1.1734 1.1937	1.1166 1.2173	1.1692 1.1278	1.2038	1.1622	Ave		1.1705			0.5000	3.0		20.0			
N-Nitrosomorpholine	1.1831 1.1631	1.0417 1.1430	1.1494 1.0818	1.1789	1.1095	Ave		1.1313				4.4		20.0			
o-Toluidine	1.7083 2.2431	1.8886 2.2171	2.1597 2.1047	2.3241	2.1564	Ave		2.1002				9.7		20.0			
Hexachloroethane	0.7618 0.5980	0.6261 0.6082	0.5927 0.5651	0.6056	0.5946	Ave		0.6190			0.3000	9.7		20.0			
Nitrobenzene	0.5412 0.4914	0.4713 0.5030	0.4708 0.4816	0.4897	0.4853	Ave		0.4918			0.2000	4.6		20.0			
N-Nitrosopiperidine	0.1716 0.2029	0.1783 0.2033	0.1839 0.1972	0.1959	0.1938	Ave		0.1909				6.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isophorone	0.8407 0.8943	0.7676 0.9096	0.8483 0.8785	0.8694	0.8690	Ave		0.8597			0.4000	5.1		20.0			
2-Nitrophenol	0.1642 0.2008	0.1655 0.2102	0.1855 0.2020	0.2035	0.1990	Ave		0.1913			0.1000	9.3		20.0			
2,4-Dimethylphenol	0.2750 0.3490	0.3018 0.3586	0.3239 0.3408	0.3444	0.3357	Ave		0.3287			0.2000	8.4		20.0			
o,o',o''-Triethylphosphorothioate	0.2049 0.2249	0.1839 0.2287	0.2219 0.2241	0.2249	0.2267	Ave		0.2175				7.1		20.0			
Bis(2-chloroethoxy)methane	0.4316 0.5040	0.4656 0.5257	0.5014 0.5059	0.5053	0.5059	Ave		0.4932			0.3000	6.1		20.0			
2,4-Dichlorophenol	0.2575 0.3420	0.2475 0.3569	0.3335 0.3379	0.3305	0.3387	Ave		0.3180			0.2000	13.0		20.0			
1,2,4-Trichlorobenzene	0.3729 0.3871	0.3428 0.4007	0.3766 0.3794	0.3828	0.3875	Ave		0.3787				4.4		20.0			
Naphthalene	1.1063 1.1198	1.0034 1.1209	1.1145 1.0694	1.1281	1.0981	Ave		1.0950			0.7000	3.8		20.0			
a-Terpineol	0.3741 0.4476	0.3631 0.4522	0.4215 0.4376	0.4375	0.4363	Ave		0.4212				8.0		20.0			
4-Chloroaniline	0.3493 0.4492	0.3655 0.4629	0.4310 0.4350	0.4578	0.4462	Ave		0.4246			0.0100	10.1		20.0			
2,6-Dichlorophenol	0.3429 0.3351	0.2869 0.3478	0.3300 0.3276	0.3341	0.3308	Ave		0.3294				5.6		20.0			
Hexachloropropene	0.2898 0.3047	0.2424 0.3033	0.2901 0.2946	0.3007	0.2924	Ave		0.2897				6.9		20.0			
Hexachlorobutadiene	0.2296 0.2623	0.2587 0.2651	0.2572 0.2544	0.2576	0.2566	Ave		0.2552			0.0100	4.3		20.0			
Quinoline	0.6733 0.7023	0.6127 0.7073	0.6718 0.6950	0.6968	0.6814	Ave		0.6801				4.4		20.0			
Caprolactam	0.1075	0.0801 0.1095	0.0850 0.1004	0.0995	0.0996	Ave		0.0974			0.0100	11.2		20.0			
N-Nitrosodi-n-butylamine	+++++ 0.3867	0.5121 0.3883	0.3159 0.3762	0.4014	0.3853	Ave		0.3951				14.8		20.0			
1,4-phenylenediamine	+++++ 0.3620	0.2699 0.3495	0.3487 0.3088	0.3738	0.3731	Ave		0.3408				11.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.2712 0.3430	0.2624 0.3600	0.3189 0.3421	0.3374	0.3375	Ave		0.3216			0.2000	11.1		20.0			
Safrole, Total	0.2789 0.3002	0.2604 0.3050	0.2897 0.2983	0.2949	0.2949	Ave		0.2903				5.0		20.0			
2-Methylnaphthalene	0.6068 0.7177	0.6875 0.7275	0.7068 0.6928	0.7232	0.7058	Ave		0.6960			0.4000	5.6		20.0			
1-Methylnaphthalene	0.6668 0.6591	0.5813 0.6660	0.6574 0.6435	0.6555	0.6552	Ave		0.6481				4.3		20.0			
Hexachlorocyclopentadiene	0.2630 0.4083	0.3495 0.3911	0.3784 0.3547	0.4031	0.4101	Ave		0.3698			0.0500	13.2		20.0			
1,2,4,5-Tetrachlorobenzene	0.7748 0.7277	0.7358 0.7215	0.7101 0.6821	0.7339	0.7110	Ave		0.7246			0.0100	3.7		20.0			
Isosafrole Peak 1	0.6006 0.5395	0.4235 0.5508	0.5279 0.5320	0.5456	0.5460	Ave		0.5332				9.3		20.0			
2,4,6-Trichlorophenol	0.3504 0.4233	0.3597 0.4290	0.3875 0.3995	0.4219	0.4076	Ave		0.3974			0.2000	7.4		20.0			
2,4,5-Trichlorophenol	0.3319 0.4703	0.3344 0.4663	0.4256 0.4407	0.4693	0.4432	Ave		0.4227			0.2000	13.6		20.0			
Isosafrole Peak 2	0.5141 0.6147	0.5376 0.6018	0.5663 0.5798	0.6017	0.5747	Ave		0.5738				6.0		20.0			
1,1'-Biphenyl	1.5613 1.5581	1.4278 1.5281	1.5550 1.4174	1.5727	1.5143	Ave		1.5168			0.0100	4.0		20.0			
2-Chloronaphthalene	1.3007 1.2827	1.2650 1.2204	1.1363 1.0524	1.3293	1.2715	Ave		1.2323			0.8000	7.6		20.0			
1-Chloronaphthalene	1.0105 1.0485	0.9351 1.0708	1.1954 1.1186	1.0428	1.0143	Ave		1.0545				7.4		20.0			
Diphenyl ether	0.8234 0.8632	0.7926 0.8535	0.8401 0.7960	0.8808	0.8451	Ave		0.8368				3.7		20.0			
2-Nitroaniline	0.2818 0.3734	0.2976 0.3821	0.3404 0.3545	0.3811	0.3623	Ave		0.3467			0.0100	11.0		20.0			
1,4-Naphthoquinone	0.3532 0.4654	0.3281 0.4654	0.4385 0.4357	0.4629	0.4555	Ave		0.4256				12.7		20.0			
1,4-Dinitrobenzene	0.1285 0.2097	0.2123 0.2082	0.1865 0.1994	0.1957	0.1994	Ave		0.1924				14.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dimethyl phthalate	1.2716 1.4138	1.3657 1.4393	1.4017 1.3462	1.4399	1.4188	Ave		1.3871			0.0100	4.1		20.0			
1,3-Dinitrobenzene	0.1644 0.2387	0.1742 0.2380	0.2231 0.2239	0.2317	0.2295	Ave		0.2155				13.5		20.0			
2,6-Dinitrotoluene	0.3325 0.3130	0.2572 0.3161	0.2925 0.2968	0.3097	0.3109	Ave		0.3036			0.2000	7.4		20.0			
Acenaphthylene	1.6874 1.8980	1.7218 1.8491	1.7455 1.7622	1.8663	1.8373	Ave		1.7959			0.9000	4.3		20.0			
3-Nitroaniline	+++++ 0.3279	0.2564 0.3245	0.2921 0.3028	0.3182	0.3114	Ave		0.3047			0.0100	8.1		20.0			
Acenaphthene	1.3216 1.2787	1.2784 1.2586	1.2181 1.1744	1.2695	1.2360	Ave		1.2544			0.9000	3.6		20.0			
2,4-Dinitrophenol	+++++ 0.2091	+++++ 0.2212	0.1541 0.2122	0.1926	0.2002	Ave		0.1982			0.0100	12.0		20.0			
4-Nitrophenol	+++++ 0.2276	0.1642 0.2326	0.1797 0.2186	0.1956	0.2029	Ave		0.2030			0.0100	12.4		20.0			
Pentachlorobenzene	0.5762 0.5961	0.5953 0.5906	0.5870 0.5658	0.5865	0.5794	Ave		0.5846				1.8		20.0			
2,4-Dinitrotoluene	0.3486 0.4378	0.3539 0.4376	0.4087 0.4090	0.4347	0.4289	Ave		0.4074			0.2000	9.0		20.0			
Dibenzofuran	1.7340 1.8319	1.6847 1.8021	1.7820 1.6763	1.8425	1.7916	Ave		1.7681			0.8000	3.6		20.0			
1-Naphthylamine	0.8196 1.1092	0.9457 1.0863	1.0375 1.0376	1.1046	1.0645	Ave		1.0256				9.6		20.0			
2,3,4,6-Tetrachlorophenol	0.3204 0.4169	0.3550 0.4124	0.3749 0.3966	0.4005	0.4072	Ave		0.3855			0.0100	8.7		20.0			
2-Naphthylamine	0.9940 1.2094	1.0486 1.1780	1.1426 1.1170	1.1923	1.1583	Ave		1.1300				6.6		20.0			
Diethyl phthalate	1.2156 1.3721	1.3236 1.3556	1.3317 1.2926	1.3683	1.3429	Ave		1.3253			0.0100	3.9		20.0			
Thionazin	0.1796 0.2235	0.2553 0.2211	0.2021 0.2131	0.2185	0.2143	Ave		0.2159				9.8		20.0			
Fluorene	1.1696 1.3694	1.2561 1.3405	1.3468 1.2365	1.3935	1.3486	Ave		1.3076			0.9000	5.9		20.0			

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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorophenyl-phenyl ether	0.6487 0.7361	0.7311 0.7291	0.7168 0.6729	0.7530	0.7398	Ave		0.7159			0.4000	5.0		20.0			
5-Nitro-o-toluidine	0.3107 0.3589	0.2727 0.3556	0.3392 0.3362	0.3611	0.3494	Ave		0.3355				9.0		20.0			
4-Nitroaniline	+++++ 0.3369	0.2570 0.3319	0.3225 0.2963	0.3372	0.3258	Ave		0.3154			0.0100	9.3		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1480	0.1044 0.1545	0.1259 0.1445	0.1431	0.1398	Ave		0.1372			0.0100	12.3		20.0			
N-Nitrosodiphenylamine	0.5664 0.6215	0.5391 0.6194	0.6133 0.5820	0.6327	0.6118	Ave		0.5983			0.0100	5.4		20.0			
1,2-Diphenylhydrazine	0.6728 0.8037	0.7120 0.8053	0.7881 0.7646	0.8016	0.7892	Ave		0.7672				6.4		20.0			
Sulfotepp	0.1079 0.1301	0.1098 0.1344	0.1236 0.1291	0.1293	0.1284	Ave		0.1241				7.9		20.0			
1,3,5-Trinitrobenzene	+++++ 0.0875	0.0515 0.0906	0.0637 0.0874	0.0813	0.0802	Ave		0.0775				18.7		20.0			
cis-Diallate	+++++ 0.3108	0.4082 0.3086	0.3150 0.3002	0.3013	0.3033	Ave		0.3210				12.1		20.0			
Phorate	0.3907 0.4724	0.4258 0.4718	0.4411 0.4497	0.4702	0.4602	Ave		0.4477				6.3		20.0			
Phenacetin	0.2822 0.3529	0.2530 0.3619	0.3174 0.3407	0.3504	0.3409	Ave		0.3249				11.8		20.0			
4-Bromophenyl-phenylether	0.2127 0.2361	0.2105 0.2336	0.2386 0.2208	0.2387	0.2299	Ave		0.2276			0.1000	5.0		20.0			
trans-Diallate	+++++ 0.3194	+++++ 0.3069	0.3587 0.2918	0.3311	0.3217	Ave		0.3216				7.1		20.0			
Hexachlorobenzene	0.2706 0.2479	0.2315 0.2560	0.2534 0.2355	0.2478	0.2462	Ave		0.2486			0.1000	4.9		20.0			
Dimethoate	0.2516 0.2834	0.2026 0.2763	0.2636 0.2459	0.2857	0.2716	Ave		0.2601				10.5		20.0			
Atrazine	0.2085	0.1923 0.2015	0.1736 0.1700	0.2040	0.2036	Ave		0.1933			0.0100	8.0		20.0			
Pentachlorophenol	+++++ 0.1652	0.1056 0.1685	0.1422 0.1612	0.1568	0.1565	Ave		0.1509			0.0500	14.4		20.0			

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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Aminobiphenyl	0.7419 0.8294	0.6965 0.8260	0.7732 0.7664	0.8406	0.8059	Ave		0.7850				6.3		20.0			
Pentachloronitrobenzene	+++++ 0.1154	0.1169 0.1183	0.1179 0.1155	0.1176	0.1143	Ave		0.1166				1.3		20.0			
Pronamide	0.2595 0.3282	0.2446 0.3359	0.2966 0.3239	0.3301	0.3229	Ave		0.3052				11.5		20.0			
Dinoseb	+++++ 0.1932	0.1299 0.2038	0.1567 0.2021	0.1787	0.1856	Ave		0.1786				15.0		20.0			
Disulfoton	+++++ 0.4548	0.6152 0.4492	0.4749 0.4271	0.4683	0.4411	Ave		0.4758				13.3		20.0			
Phenanthrene	1.0119 1.0612	1.0465 1.0711	1.0902 0.9833	1.0908	1.0593	Ave		1.0518			0.7000	3.6		20.0			
Anthracene	1.0012 1.0949	0.9903 1.1045	1.0760 1.0129	1.1412	1.0774	Ave		1.0623			0.7000	5.1		20.0			
Carbazole	0.8367 0.9226	0.7885 0.9524	0.9269 0.8775	0.9425	0.9124	Ave		0.8949			0.0100	6.4		20.0			
Methyl parathion	0.1831 0.2397	0.1717 0.2398	0.2152 0.2145	0.2331	0.2303	Ave		0.2159				12.0		20.0			
Di-n-butyl phthalate	0.9360 1.1587	0.9595 1.1924	1.0758 1.0881	1.1440	1.1359	Ave		1.0863			0.0100	8.6		20.0			
Parathion	0.1164 0.1497	0.1133 0.1511	0.1261 0.1439	0.1416	0.1412	Ave		0.1354				10.9		20.0			
4-Nitroquinoline-1-oxide	+++++ 0.1048	+++++ 0.1152	0.0639 0.1095	0.0878	0.0946	Ave		0.0960				19.4		20.0			
Octachlorostyrene	0.0857 0.1006	0.0995 0.1022	0.0982 0.0960	0.1049	0.1007	Ave		0.0985				5.9		20.0			
Isodrin	+++++ 0.1235	0.1481 0.1269	0.1333 0.1207	0.1267	0.1244	Ave		0.1291				7.1		20.0			
Fluoranthene	1.0563 1.1939	1.0914 1.2261	1.1496 1.1166	1.2033	1.1849	Ave		1.1528			0.6000	5.2		20.0			
Benzidine	0.4874 0.7284	0.5350 0.6976	0.6463 0.6172	0.6955	0.6932	Ave		0.6376				13.5		20.0			
Pyrene	1.1348 1.1742	1.1561 1.1763	1.2233 1.1527	1.1954	1.1649	Ave		1.1722			0.6000	2.3		20.0			

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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
p-Dimethylamino azobenzene	0.1476 0.2189	0.1581 0.2133	0.1779 0.2141	0.2029	0.2064	Ave		0.1924				14.3		20.0			
Chlorobenzilate	0.2452 0.3223	0.2335 0.3253	0.2767 0.3247	0.3218	0.3160	Ave		0.2957				13.0		20.0			
3,3'-Dimethylbenzidine	+++++ 0.7017	0.4408 0.6724	0.5559 0.6523	0.6647	0.6645	Ave		0.6217				14.8		20.0			
Butylbenzylphthalate	0.3678 0.4624	0.3591 0.4678	0.4020 0.4506	0.4503	0.4533	Ave		0.4267			0.0100	10.3		20.0			
2-Acetylaminofluorene	+++++ 0.3975	+++++ 0.4040	0.2883 0.3977	0.3452	0.3664	Ave		0.3665				12.1		20.0			
3,3'-Dichlorobenzidine	0.3351 0.4159	0.2952 0.4148	0.3487 0.3917	0.4021	0.4030	Ave		0.3758			0.0100	11.8		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.1577 0.2337	0.1637 0.2237	0.2017 0.2178	0.2165	0.2236	Ave		0.2048				14.0		20.0			
Benzo[a]anthracene	0.9561 1.1152	0.8846 1.1166	1.0258 1.0685	1.0821	1.0921	Ave		1.0426			0.8000	8.0		20.0			
Chrysene	0.9355 1.0572	0.9830 1.0642	1.0456 1.0113	1.0661	1.0454	Ave		1.0260			0.7000	4.5		20.0			
Bis(2-ethylhexyl) phthalate	0.4507 0.6530	0.4845 0.6527	0.5667 0.6445	0.6307	0.6244	Ave		0.5884			0.0100	13.6		20.0			
6-Methylchrysene	0.6661 0.7302	0.6004 0.7358	0.6452 0.7177	0.7119	0.6990	Ave		0.6883				6.9		20.0			
Di-n-octyl phthalate	+++++ 1.2681	+++++ 1.3474	1.0800 1.3086	1.2058	1.2118	Ave		1.2370			0.0100	7.6		20.0			
7,12-Dimethylbenz(a)anthracene	+++++ 0.5153	0.3449 0.5362	0.4464 0.5161	0.4948	0.4836	Ave		0.4768				13.6		20.0			
Benzo[b]fluoranthene	1.0941 1.2692	1.0505 1.2939	1.2178 1.2001	1.2200	1.1940	Ave		1.1925			0.7000	6.9		20.0			
Benzo[k]fluoranthene	1.1479 1.2136	1.0314 1.2713	1.1953 1.1965	1.2253	1.2080	Ave		1.1861			0.7000	6.0		20.0			
Benzo[a]pyrene	1.0010 1.1498	0.9923 1.1879	1.0820 1.1158	1.1181	1.1270	Ave		1.0967			0.7000	6.3		20.0			
3-Methylcholanthrene	0.5375 0.6207	0.4717 0.6382	0.5322 0.6074	0.5833	0.5650	Ave		0.5695				9.6		20.0			

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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibenz[a,h]acridine	0.6652 0.8454	0.5858 0.8730	0.7557 0.8400	0.7958	0.7863	Ave		0.7684				12.8		20.0			
Dibenz[a,j]acridine	0.7496 0.9559	0.6843 0.9637	0.8150 0.9021	0.9076	0.8894	Ave		0.8584				11.6		20.0			
Indeno[1,2,3-cd]pyrene	0.9960 1.0573	0.8179 1.0682	0.9428 1.0174	0.9903	0.9749	Ave		0.9831			0.5000	8.0		20.0			
Dibenz(a,h)anthracene	0.9149 1.0872	0.8814 1.0912	0.9827 1.0495	0.9947	1.0031	Ave		1.0006			0.4000	7.6		20.0			
Benzo[g,h,i]perylene	1.0099 1.0832	0.8583 1.1022	0.9896 1.0344	1.0375	1.0097	Ave		1.0156			0.5000	7.3		20.0			
2-Fluorophenol (Surr)	1.0933 1.3547	1.0935 1.3620	1.3126 1.2747	1.3505	1.2869	Ave		1.2660				8.8		20.0			
Phenol-d5 (Surr)	1.5112 1.8438	1.5435 1.8582	1.7119 1.7399	1.7997	1.7741	Ave		1.7228				7.6		20.0			
Nitrobenzene-d5 (Surr)	0.4483 0.4831	0.4424 0.4892	0.4721 0.4707	0.4780	0.4720	Ave		0.4695				3.5		20.0			
2-Fluorobiphenyl (Surr)	1.4971 1.4260	1.3289 1.3974	1.4244 1.2880	1.4201	1.3944	Ave		1.3970				4.6		20.0			
2,4,6-Tribromophenol (Surr)	0.1525 0.2223	0.1832 0.2233	0.2048 0.2102	0.2205	0.2152	Ave		0.2040				12.0		20.0			
p-Terphenyl-d14 (Surr)	0.8527 0.8886	0.8450 0.8974	0.8997 0.8068	0.9097	0.8965	Ave		0.8746				4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-435991/9	DJ2608.D
Level 2	IC 410-435991/8	DJ2607.D
Level 3	IC 410-435991/7	DJ2606.D
Level 4	IC 410-435991/6	DJ2605.D
Level 5	IC 410-435991/5	DJ2604.D
Level 6	ICIS 410-435991/2	DJ2601b.D
Level 7	IC 410-435991/4	DJ2603.D
Level 8	IC 410-435991/3	DJ2602.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCBd4	Ave	+++++ 256804	+++++ 378002	25378 656733	87438	144346	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodimethylamine	DCBd4	Ave	3355 423359	8095 637553	43063 1103182	150480	239215	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pyridine	DCBd4	Ave	9905 1385549	26407 2051875	142234 3536214	484731	749611	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
N,N-dimethylformamide	DCBd4	Ave	+++++ 445095	+++++ 672021	38358 1195498	149451	259339	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2-Picoline	DCBd4	Ave	6294 710833	13450 1056183	73213 1865662	242820	384940	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomethylethylamine	DCBd4	Lin2	+++++ 311792	21751 464369	50925 783757	109365	174821	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Methyl methanesulfonate	DCBd4	Ave	3537 384760	7093 576919	39619 989175	127529	211484	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodiethylamine	DCBd4	Ave	1921 299098	6162 438464	30099 787615	100370	165978	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Ethyl methanesulfonate	DCBd4	Ave	2965 312127	6575 479278	30866 821312	108579	175395	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzaldehyde	DCBd4	Ave	 516629	10901 726246	45950 1118909	186640	299617	 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenol	DCBd4	Ave	6681 825000	15801 1241019	86872 2114903	285086	448773	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Aniline	DCBd4	Ave	6936 954057	17854 1442483	97419 2497289	336045	526639	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethyl)ether	DCBd4	Ave	6480 662923	13964 978065	69804 1693062	229906	361008	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chlorophenol	DCBd4	Ave	4726 584090	11291 886604	58756 1504556	201804	325791	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dichlorobenzene	DCBd4	Ave	5982	14840	76140	242450	377778	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			692930	1035780	1769248			12.5	20.0	30.0		
1,4-Dichlorobenzene	DCBd4	Ave	6091 688624	14525 1057099	74312 1793032	245355	390904	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzyl alcohol	DCBd4	Ave	+++++ 390518	+++++ 588367	35014 1002232	127594	212341	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
1,2-Dichlorobenzene	DCBd4	Ave	5151 657244	13985 1001981	69310 1701535	231351	364734	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Methylphenol	DCBd4	Ave	4700 555559	10557 824564	57357 1436992	191215	313370	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,2'-oxybis[1-chloropropane]	DCBd4	Ave	9302 1116881	22234 1656012	116495 2885985	378749	615744	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopyrrolidine	DCBd4	Ave	2159 317978	5585 477507	31626 839031	107076	174781	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,4-Methylphenol	DCBd4	Ave	4591 571653	9996 870600	58377 1485799	201138	317604	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acetophenone	DCBd4	Ave	7245 891059	19026 1349739	97754 2289261	311991	500368	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-propylamine	DCBd4	Ave	4567 511860	11061 781757	53935 1330100	179058	285852	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomorpholine	DCBd4	Ave	4605 498705	10319 734015	53021 1275910	175350	272884	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o-Toluidine	DCBd4	Ave	6649 961825	18708 1423747	99630 2482252	345690	530385	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloroethane	DCBd4	Ave	2965 256429	6202 390579	27340 666507	90070	146240	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Nitrobenzene	NPT	Ave	7394 736131	15753 1123600	75312 1915033	257213	415484	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopiperidine	NPT	Ave	2345 303956	5959 454129	29415 784412	102884	165909	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isophorone	NPT	Ave	11486 1339637	25660 2031949	135692 3493537	456602	743966	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitrophenol	NPT	Ave	2244 300755	5532 469557	29671 803119	106894	170382	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dimethylphenol	NPT	Ave	3757 522828	10089 801138	51815 1355109	180887	287399	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o,o',o''-Triethylphosphorothioate	NPT	Ave	2799 336933	6148 510832	35491 891236	118140	194106	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethoxy)methane	NPT	Ave	5897 754930	15565 1174291	80202 2011710	265391	433105	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dichlorophenol	NPT	Ave	3518	8272	53338	173564	289953	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			512224	797334	1343864			12.5	20.0	30.0		
1,2,4-Trichlorobenzene	NPT	Ave	5095 579895	11460 895201	60239 1508726	201057	331698	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Naphthalene	NPT	Ave	15115 1677276	33540 2503871	178265 4252544	592497	940063	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
a-Terpineol	NPT	Ave	5111 670493	12136 1010120	67412 1740254	229797	373477	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloroaniline	NPT	Ave	4773 672862	12217 1034022	68942 1729794	240420	382018	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dichlorophenol	NPT	Ave	4685 501961	9589 776929	52783 1302943	175487	283195	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloropropene	NPT	Ave	3959 456388	8102 677540	46397 1171633	157913	250344	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorobutadiene	NPT	Ave	3137 392879	8648 592246	41146 1011622	135319	219702	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Quinoline	NPT	Ave	9199 1052029	20481 1580051	107450 2763881	365989	583385	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Caprolactam	NPT	Ave	 160990	2679 244520	13593 399224	52234	85254	 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-butylamine	NPT	Ave	+++++ 579273	17118 867364	50536 1495857	210800	329832	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-phenylenediamine	NPT	Ave	+++++ 542198	9022 780636	55776 1228098	196304	319373	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloro-3-methylphenol	NPT	Ave	3705 513723	8772 804245	51015 1360272	177197	288940	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Safrole, Total	NPT	Ave	3810 449615	8704 681342	46335 1186435	154892	252461	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Methylnaphthalene	NPT	Ave	8291 1074974	22983 1625196	113048 2755177	379853	604212	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Methylnaphthalene	NPT	Ave	9111 987282	19431 1487756	105154 2559064	344301	560912	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorocyclopentadiene	ANT	Ave	2113 365265	6927 535469	36598 873564	126763	212986	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,2,4,5-Tetrachlorobenzene	ANT	Ave	6224 651061	14584 987765	68673 1680093	230817	369242	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isosafrole Peak 1	ANT	Ave	772 77233	1343 120644	8168 209657	27453	45370	0.0200 2.00	0.0400 3.20	0.200 4.80	0.600	1.20
2,4,6-Trichlorophenol	ANT	Ave	2815 378726	7130 587383	37475 983878	132691	211662	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4,5-Trichlorophenol	ANT	Ave	2666	6627	41161	147583	230161	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			420779	638448	1085438			12.5	20.0	30.0		
Isosafrole Peak 2	ANT	Ave	3469 461951	8951 692101	46003 1199497	158966	250676	0.105 10.5	0.210 16.8	1.05 25.2	3.15	6.30
1,1'-Biphenyl	ANT	Ave	12542 1393994	28300 2092060	150391 3491197	494612	786405	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chloronaphthalene	ANT	Ave	10449 1147596	25073 1670729	109893 2592039	418080	660290	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Chloronaphthalene	ANT	Ave	8118 938075	18534 1465994	115613 2755190	327952	526722	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diphenyl ether	ANT	Ave	6615 772255	15709 1168411	81253 1960598	277030	438890	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitroaniline	ANT	Ave	2264 334078	5898 523102	32921 873120	119864	188152	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Naphthoquinone	ANT	Ave	2837 416403	6503 637096	42406 1073196	145578	236547	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Dinitrobenzene	ANT	Ave	1032 187645	4207 284981	18034 491062	61555	103530	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dimethyl phthalate	ANT	Ave	10215 1264946	27068 1970491	135560 3315844	452857	736783	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dinitrobenzene	ANT	Ave	1321 213593	3452 325887	21577 551603	72881	119204	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dinitrotoluene	ANT	Ave	2671 280016	5097 432702	28284 730923	97389	161480	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthylene	ANT	Ave	13555 1698123	34126 2531464	168816 4340539	586955	954134	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Nitroaniline	ANT	Ave	+++++ 293334	5082 444243	28249 745710	100085	161703	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthene	ANT	Ave	10617 1144074	25338 1723090	117803 2892626	399253	641850	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrophenol	ANT	Ave	+++++ 374158	+++++ 605538	59612 1045135	181745	242634	+++++ 25.0	+++++ 40.0	5.00 60.0	11.3	17.5
4-Nitrophenol	ANT	Ave	+++++ 407342	19522 636818	52145 1076660	123049	210732	+++++ 25.0	1.50 40.0	3.75 60.0	7.50	15.0
Pentachlorobenzene	ANT	Ave	4629 533354	11799 808540	56769 1393712	184445	300902	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrotoluene	ANT	Ave	2800 391703	7014 599131	39525 1007309	136706	222735	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenzofuran	ANT	Ave	13930 1638987	33390 2467138	172342 4128815	579482	930385	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Naphthylamine	ANT	Ave	6584	18744	100337	347411	552835	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			992361	1487154	2555595			12.5	20.0	30.0		
2,3,4,6-Tetrachlorophenol	ANT	Ave	2574 373039	7037 564588	36262 976773	125967	211481	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Naphthylamine	ANT	Ave	7985 1082075	20783 1612739	110501 2751311	374995	601527	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diethyl phthalate	ANT	Ave	9765 1227596	26234 1855840	128793 3183799	430341	697398	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Thionazin	ANT	Ave	1443 199936	5060 302671	19547 524766	68721	111274	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluorene	ANT	Ave	9396 1225181	24897 1835261	130248 3045557	438250	700331	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chlorophenyl-phenyl ether	ANT	Ave	5211 658569	14490 998187	69328 1657310	236833	384173	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
5-Nitro-o-toluidine	ANT	Ave	2496 321096	5404 486870	32809 828042	113569	181470	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitroaniline	ANT	Ave	+++++ 301410	5094 454352	31194 729762	106037	169183	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,6-Dinitro-2-methylphenol	PHN	Ave	+++++ 521376	24818 817432	69827 1372209	175333	283943	+++++ 25.0	1.50 40.0	3.75 60.0	7.50	15.0
N-Nitrosodiphenylamine	PHN	Ave	7585 930663	18146 1392520	96395 2349477	329367	528178	0.106 10.6	0.213 17.0	1.06 25.5	3.19	6.38
1,2-Diphenylhydrazine	PHN	Ave	10601 1415837	28198 2129914	145721 3631599	490968	801528	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Sulfotepp	PHN	Ave	1700 229125	4350 355551	22861 613222	79195	130376	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3,5-Trinitrobenzene	PHN	Ave	+++++ 154071	2039 239740	11772 415235	49825	81451	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
cis-Diallate	PHN	Ave	+++++ 405121	11962 604069	43103 1054975	136573	227935	+++++ 9.25	0.185 14.8	0.925 22.2	2.78	5.55
Phorate	PHN	Ave	6156 832254	16863 1247799	81558 2136090	287980	467385	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenacetin	PHN	Ave	4446 621736	10018 957149	58685 1618350	214637	346259	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Bromophenyl-phenylether	PHN	Ave	3352 415868	8335 617791	44115 1048659	146174	233485	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
trans-Diallate	PHN	Ave	+++++ 146303	+++++ 211086	17246 360341	52722	84945	+++++ 3.25	+++++ 5.20	0.325 7.80	0.975	1.95
Hexachlorobenzene	PHN	Ave	4263 436661	9168 677125	46854 1118341	151777	250096	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dimethoate	PHN	Ave	3965	8022	48741	174981	275815	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			499182	730810	1168047			12.5	20.0	30.0		
Atrazine	PHN	Ave	367245	7616 532960	32094 807361	124918	206815	12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachlorophenol	PHN	Ave	+++++ 581945	20914 891266	52572 1531201	192134	317955	+++++ 25.0	1.25 40.0	2.50 60.0	7.50	15.0
4-Aminobiphenyl	PHN	Ave	11690 1461144	27585 2184795	142978 3640025	514851	818571	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachloronitrobenzene	PHN	Ave	+++++ 203364	4631 312850	21806 548501	72056	116106	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pronamide	PHN	Ave	4088 578141	9688 888438	54849 1538191	202172	327947	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dinoseb	PHN	Ave	+++++ 340383	5143 539117	28970 959770	109454	188468	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Disulfoton	PHN	Ave	+++++ 801202	24364 1188176	87811 2028686	286847	448036	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenanthrene	PHN	Ave	15944 1869339	41446 2832915	201598 4670333	668075	1075915	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Anthracene	PHN	Ave	15775 1928734	39220 2921338	198970 4810611	698981	1094323	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Carbazole	PHN	Ave	13183 1625202	31228 2519051	171392 4167818	577262	926703	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Methyl parathion	PHN	Ave	2885 422305	6801 634222	39791 1018659	142762	233903	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Di-n-butyl phthalate	PHN	Ave	14748 2041249	38001 3153814	198924 5168155	700660	1153698	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Parathion	PHN	Ave	1834 263754	4487 399549	23313 683587	86748	143448	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitroquinoline-1-oxide	PHN	Ave	+++++ 184682	+++++ 304758	11817 520170	53762	96098	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Octachlorostyrene	PHN	Ave	1351 177274	3941 270431	18161 455773	64222	102328	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isodrin	PHN	Ave	+++++ 217573	5864 335711	24654 573387	77630	126391	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluoranthene	PHN	Ave	16643 2103246	43223 3242961	212571 5303357	737022	1203431	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzidine	PYR10	Ave	24834 4044195	66619 5905642	381106 8736566	1373895	2220729	0.375 37.5	0.750 60.0	3.75 90.0	11.3	22.5
Pyrene	PYR10	Ave	19274 2173158	47992 3319648	240454 5438864	787180	1243924	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
p-Dimethylamino azobenzene	PYR10	Ave	2507	6562	34975	133589	220395	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			405210	601901	1010071			12.5	20.0	30.0		
Chlorobenzilate	PYR10	Ave	4165 596540	9692 918133	54396 1532214	211886	337478	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,3'-Dimethylbenzidine	PYR10	Ave	+++++ 1298619	18297 1897440	109279 3077619	437700	709611	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Butylbenzylphthalate	PYR10	Ave	6246 855743	14905 1320155	79011 2126106	296542	484059	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Acetylaminofluorene	PYR10	Ave	+++++ 735635	+++++ 1140015	56666 1876372	227342	391278	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
3,3'-Dichlorobenzidine	PYR10	Ave	5692 769708	12253 1170643	68534 1847894	264814	430362	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,4'-Methylene bis(2-chloroaniline)	PYR10	Ave	2678 432561	6794 631423	39645 1027754	142579	238826	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]anthracene	PYR10	Ave	16238 2063878	36722 3151139	201636 5041552	712578	1166248	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Chrysene	PYR10	Ave	15889 1956552	40803 3003345	205529 4771709	702037	1116366	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-ethylhexyl) phthalate	PYR10	Ave	7654 1208523	20110 1841845	111386 3040896	415344	666820	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
6-Methylchrysene	PYR10	Ave	11313 1351372	24924 2076504	126818 3386121	468778	746421	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Di-n-octyl phthalate	PRY	Ave	+++++ 2025851	+++++ 3166300	169496 5178437	668395	1103935	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
7,12-Dimethylbenz(a)anthracene	PRY	Ave	+++++ 823213	12187 1260052	70059 2042286	274263	440585	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[b]fluoranthene	PRY	Ave	16114 2027494	37116 3040576	191119 4749134	676246	1087730	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[k]fluoranthene	PRY	Ave	16905 1938670	36442 2987534	187578 4734863	679185	1100471	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]pyrene	PRY	Ave	14742 1836888	35062 2791478	169806 4415402	619782	1026672	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Methylcholanthrene	PRY	Ave	7916 991653	16667 1499686	83521 2403611	323335	514716	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,h]acridine	PRY	Ave	9797 1350479	20699 2051493	118589 3324106	441145	716276	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,j]acridine	PRY	Ave	11040 1526987	24178 2264732	127897 3569563	503095	810251	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Indeno[1,2,3-cd]pyrene	PRY	Ave	14669 1689098	28898 2510109	147955 4025835	548937	888089	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz(a,h)anthracene	PRY	Ave	13474	31142	154216	551398	913785	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			1736819	2564152	4152942			12.5	20.0	30.0		
Benzo[g,h,i]perylene	PRY	Ave	14874 1730374	30326 2590196	155306 4093315	575092	919786	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Fluorophenol (Surr)	DCBd4	Ave	8511 1161756	21665 1749291	121104 3006592	401756	633026	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Phenol-d5 (Surr)	DCBd4	Ave	11764 1581153	30580 2386619	157948 4103957	535375	872689	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Nitrobenzene-d5 (Surr)	NPT	Ave	12250 1447258	29577 2185764	151036 3743764	502109	808091	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2-Fluorobiphenyl (Surr)	ANT	Ave	24054 2551580	52676 3826336	275505 6344731	893240	1448294	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	2450 397778	7264 611321	39615 1035635	138715	223484	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
p-Terphenyl-d14 (Surr)	PYR10	Ave	28965 3289136	70155 5064714	353708 7613077	1198151	1914640	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0

Curve Type Legend:
Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 435991

SDG No.:

Instrument ID: HP19760 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2023 12:12 Calibration End Date: 10/26/2023 14:48 Calibration ID: 55149

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-435991/9	DJ2608.D
Level 2	IC 410-435991/8	DJ2607.D
Level 3	IC 410-435991/7	DJ2606.D
Level 4	IC 410-435991/6	DJ2605.D
Level 5	IC 410-435991/5	DJ2604.D
Level 6	ICIS 410-435991/2	DJ2601b.D
Level 7	IC 410-435991/4	DJ2603.D
Level 8	IC 410-435991/3	DJ2602.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
N-Nitrosomethylethylamine	+++++ 2.4	-2.6 -5.2	16.1	-7.9	-4.1	1.3	30	50 30	30	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2601b.D
Lims ID: ICIS L6
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 26-Oct-2023 12:12:55 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICIS L6
Misc. Info.: 410-0097721-002
Operator ID: kel10217 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:21:36 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: SJ89 Date: 26-Oct-2023 12:42:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.833	1.833	0.000	94	256804	12.5	12.9	
3 N-Nitrosodimethylamine	74	2.054	2.054	0.000	95	423359	12.5	13.1	
4 Pyridine	79	2.089	2.089	0.000	87	1385549	25.0	26.9	
6 Dimethylformamide	73	2.375	2.375	0.000	98	445095	12.5	13.0	
7 2-Picoline	93	2.678	2.678	0.000	90	710833	12.5	13.1	
8 N-Nitrosomethylethylamine	88	2.771	2.771	0.000	97	311792	12.5	12.7	
9 Methyl methanesulfonate	80	3.033	3.033	0.000	86	384760	12.5	13.1	
$ 10 2-Fluorophenol	112	3.191	3.191	0.000	95	1161756	25.0	26.8	
11 N-Nitrosodiethylamine	102	3.412	3.412	0.000	90	299098	12.5	13.5	
12 Ethyl methanesulfonate	109	3.692	3.692	0.000	98	312127	12.5	12.8	
15 Benzaldehyde	77	4.024	4.024	0.000	92	516629	12.5	13.4	
$ 16 Phenol-d5	99	4.071	4.071	0.000	96	1581153	25.0	26.8	
17 Phenol	94	4.083	4.083	0.000	93	825000	12.5	13.2	
18 Aniline	93	4.123	4.123	0.000	94	954057	12.5	13.3	
19 Bis(2-chloroethyl)ether	93	4.182	4.182	0.000	90	662923	12.5	12.8	
20 2-Chlorophenol	128	4.234	4.234	0.000	92	584090	12.5	13.2	
21 1,3-Dichlorobenzene	146	4.386	4.386	0.000	97	692930	12.5	12.8	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	97	171514	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.456	4.456	0.000	92	688624	12.5	12.7	
25 Benzyl alcohol	108	4.560	4.560	0.000	90	390518	12.5	13.2	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	657244	12.5	13.0	
28 2-Methylphenol	108	4.665	4.665	0.000	97	555559	12.5	13.1	
29 2,2'-oxybis[1-chloropropane]	45	4.695	4.695	0.000	94	1116881	12.5	13.1	
31 N-Nitrosopyrrolidine	100	4.799	4.799	0.000	87	317978	12.5	13.7	
32 4-Methylphenol	108	4.811	4.811	0.000	92	571653	12.5	13.3	
33 N-Nitrosodi-n-propylamine	70	4.823	4.823	0.000	75	511860	12.5	12.7	
34 Acetophenone	105	4.817	4.817	0.000	87	891059	12.5	12.9	
35 N-Nitrosomorpholine	56	4.840	4.840	0.000	87	498705	12.5	12.9	
36 2-Toluidine	106	4.852	4.852	0.000	95	961825	12.5	13.4	
38 Hexachloroethane	117	4.922	4.922	0.000	91	256429	12.5	12.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.963	4.963	0.000	90	1447258	25.0	25.7	
40 Nitrobenzene	77	4.980	4.980	0.000	90	736131	12.5	12.5	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	83	303956	12.5	13.3	
43 Isophorone	82	5.207	5.207	0.000	96	1339637	12.5	13.0	
44 2-Nitrophenol	139	5.283	5.283	0.000	91	300755	12.5	13.1	
45 2,4-Dimethylphenol	107	5.324	5.324	0.000	98	522828	12.5	13.3	
46 o,o',o''-Triethylphosphorothioat	198	5.394	5.394	0.000	82	336933	12.5	12.9	
47 Bis(2-chloroethoxy)methane	93	5.417	5.417	0.000	94	754930	12.5	12.8	
48 2,4-Dichlorophenol	162	5.516	5.516	0.000	94	512224	12.5	13.4	
49 1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	94	579895	12.5	12.8	
* 50 Naphthalene-d8	136	5.650	5.650	0.000	99	599158	5.00	5.00	
51 Naphthalene	128	5.674	5.674	0.000	97	1677276	12.5	12.8	
52 Alpha-Terpineol	59	5.680	5.680	0.000	91	670493	12.5	13.3	
53 4-Chloroaniline	127	5.720	5.720	0.000	93	672862	12.5	13.2	
54 2,6-Dichlorophenol	162	5.726	5.726	0.000	94	501961	12.5	12.7	
55 Hexachloropropene	213	5.755	5.755	0.000	85	456388	12.5	13.1	
56 Hexachlorobutadiene	225	5.790	5.790	0.000	92	392879	12.5	12.8	
60 Quinoline	129	5.989	5.989	0.000	95	1052029	12.5	12.9	
61 Caprolactam	113	6.041	6.041	0.000	73	160990	12.5	13.8	
62 N-Nitrosodi-n-butylamine	84	6.047	6.047	0.000	93	579273	12.5	12.2	
63 p-Phenylene diamine	108	6.058	6.058	0.000	93	542198	12.5	13.3	
64 4-Chloro-3-methylphenol	107	6.187	6.187	0.000	94	513723	12.5	13.3	
65 Safrole, Total	162	6.251	6.251	0.000	88	449615	12.5	12.9	
66 2-Methylnaphthalene	142	6.332	6.332	0.000	90	1074974	12.5	12.9	
67 1-Methylnaphthalene	142	6.426	6.426	0.000	91	987282	12.5	12.7	
68 Hexachlorocyclopentadiene	237	6.478	6.478	0.000	93	365265	12.5	13.8	
69 1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	96	651061	12.5	12.6	
70 Isosafrole Peak 1	162	6.525	6.525	0.000	91	77233	2.00	2.02	
71 2,4,6-Trichlorophenol	196	6.595	6.595	0.000	81	378726	12.5	13.3	
72 2,4,5-Trichlorophenol	196	6.630	6.630	0.000	94	420779	12.5	13.9	
$ 73 2-Fluorobiphenyl (Surr)	172	6.682	6.682	0.000	100	2551580	25.0	25.5	
74 Isosafrole Peak 2	162	6.740	6.740	0.000	91	461951	10.5	11.2	
75 1,1'-Biphenyl	154	6.775	6.775	0.000	93	1393994	12.5	12.8	
76 2-Chloronaphthalene	162	6.793	6.793	0.000	94	1147596	12.5	13.0	
77 1-Chloronaphthalene	162	6.816	6.816	0.000	99	938075	12.5	12.4	a
78 Phenyl ether	170	6.874	6.874	0.000	86	772255	12.5	12.9	
79 2-Nitroaniline	138	6.886	6.886	0.000	77	334078	12.5	13.5	
81 1,4-Naphthoquinone	158	6.962	6.962	0.000	85	416403	12.5	13.7	
84 1,4-Dinitrobenzene	168	7.020	7.020	0.000	91	187645	12.5	13.6	
85 Dimethyl phthalate	163	7.067	7.067	0.000	98	1264946	12.5	12.7	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	82	213593	12.5	13.9	
87 2,6-Dinitrotoluene	165	7.119	7.119	0.000	92	280016	12.5	12.9	
88 Acenaphthylene	152	7.183	7.183	0.000	99	1698123	12.5	13.2	
89 3-Nitroaniline	138	7.277	7.277	0.000	86	293334	12.5	13.4	
* 90 Acenaphthene-d10	164	7.317	7.317	0.000	95	357876	5.00	5.00	
91 Acenaphthene	153	7.347	7.347	0.000	95	1144074	12.5	12.7	
92 2,4-Dinitrophenol	184	7.376	7.376	0.000	86	374158	25.0	26.4	
93 4-Nitrophenol	109	7.440	7.440	0.000	83	407342	25.0	28.0	
94 Pentachlorobenzene	250	7.469	7.469	0.000	98	533354	12.5	12.7	
95 2,4-Dinitrotoluene	165	7.504	7.504	0.000	92	391703	12.5	13.4	
96 Dibenzofuran	168	7.516	7.516	0.000	97	1638987	12.5	13.0	
97 1-Naphthylamine	143	7.586	7.586	0.000	98	992361	12.5	13.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	71	373039	12.5	13.5	
99 2-Naphthylamine	143	7.661	7.661	0.000	95	1082075	12.5	13.4	
100 Diethyl phthalate	149	7.737	7.737	0.000	98	1227596	12.5	12.9	
101 Thionazin	107	7.813	7.813	0.000	78	199936	12.5	12.9	
102 Fluorene	166	7.836	7.836	0.000	93	1225181	12.5	13.1	
103 4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	91	658569	12.5	12.9	
104 N-Nitro-o-toluidine	152	7.848	7.848	0.000	86	321096	12.5	13.4	
105 4-Nitroaniline	138	7.854	7.854	0.000	78	301410	12.5	13.4	
106 4,6-Dinitro-2-methylphenol	198	7.883	7.883	0.000	84	521376	25.0	27.0	
107 N-Nitrosodiphenylamine	169	7.953	7.953	0.000	68	930663	10.6	11.0	
108 1,2-Diphenylhydrazine	77	7.988	7.988	0.000	41	1415837	12.5	13.1	
$ 109 2,4,6-Tribromophenol	330	8.064	8.064	0.000	93	397778	25.0	27.2	
110 Sulfotepp	97	8.110	8.110	0.000	75	229125	12.5	13.1	
112 1,3,5-Trinitrobenzene	213	8.203	8.203	0.000	84	154071	12.5	14.1	
113 cis-Diallate	86	8.227	8.227	0.000	0	405121	9.25	8.95	
114 Phorate	75	8.238	8.238	0.000	95	832254	12.5	13.2	
115 Phenacetin	108	8.250	8.250	0.000	89	621736	12.5	13.6	
116 4-Bromophenyl phenyl ether	248	8.302	8.302	0.000	66	415868	12.5	13.0	
117 trans-Diallate	86	8.314	8.314	0.000	0	146303	3.25	3.23	
118 Hexachlorobenzene	284	8.355	8.355	0.000	95	436661	12.5	12.5	
119 Dimethoate	87	8.396	8.396	0.000	96	499182	12.5	13.6	
120 Atrazine	200	8.460	8.460	0.000	91	367245	12.5	13.5	
121 Pentachlorophenol	266	8.541	8.541	0.000	92	581945	25.0	27.4	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	91	1461144	12.5	13.2	
123 Pentachloronitrobenzene	237	8.553	8.553	0.000	88	203364	12.5	12.4	
124 Pronamide	173	8.611	8.611	0.000	90	578141	12.5	13.4	
125 Dinoseb	211	8.722	8.722	0.000	97	340383	12.5	13.5	
* 126 Phenanthrene-d10	188	8.722	8.722	0.000	97	704641	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	98	801202	12.5	11.9	
128 Phenanthrene	178	8.745	8.745	0.000	96	1869339	12.5	12.6	
129 Anthracene	178	8.798	8.798	0.000	97	1928734	12.5	12.9	
130 Carbazole	167	8.949	8.949	0.000	96	1625202	12.5	12.9	
131 Methyl parathion	109	9.084	9.084	0.000	94	422305	12.5	13.9	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	100	2041249	12.5	13.3	
134 Ethyl Parathion	109	9.457	9.457	0.000	85	263754	12.5	13.8	
135 4-Nitroquinoline-1-oxide	190	9.480	9.480	0.000	94	184682	12.5	13.7	
S 136 Diallate	86				0		12.5	12.2	
140 Octachlorostyrene	308	9.696	9.696	0.000	90	177274	12.5	12.8	
141 Isodrin	193	9.730	9.730	0.000	94	217573	12.5	12.0	
143 Fluoranthene	202	9.876	9.876	0.000	97	2103246	12.5	12.9	
147 Benzidine	184	10.010	10.010	0.000	99	4044195	37.5	42.8	
* 149 Pyrene-d10 (IS)	212	10.074	10.074	0.000	98	740287	5.00	5.00	
150 Pyrene	202	10.092	10.092	0.000	98	2173158	12.5	12.5	
$ 152 p-Terphenyl-d14	244	10.249	10.249	0.000	97	3289136	25.0	25.4	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	94	405210	12.5	14.2	
155 Chlorobenzilate	139	10.442	10.442	0.000	93	596540	12.5	13.6	
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	99	1298619	12.5	14.1	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	97	855743	12.5	13.5	
158 2-Acetylaminofluorene	181	11.013	11.013	0.000	93	735635	12.5	13.6	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	74	769708	12.5	13.8	
160 4,4'-Methylene bis(2-chloroani	231	11.351	11.351	0.000	95	432561	12.5	14.3	
161 Benzo[a]anthracene	228	11.363	11.363	0.000	97	2063878	12.5	13.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.403	11.403	0.000	96	1956552	12.5	12.9	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	97	1208523	12.5	13.9	
164 6-Methylchrysene	242	11.969	11.969	0.000	98	1351372	12.5	13.3	
165 Di-n-octyl phthalate	149	12.295	12.295	0.000	99	2025851	12.5	12.8	
166 7,12-Dimethylbenz(a)anthracene	256	12.756	12.756	0.000	73	823213	12.5	13.5	
167 Benzo[b]fluoranthene	252	12.756	12.756	0.000	96	2027494	12.5	13.3	
168 Benzo[k]fluoranthene	252	12.796	12.796	0.000	98	1938670	12.5	12.8	
169 Benzo[a]pyrene	252	13.210	13.210	0.000	76	1836888	12.5	13.1	
* 170 Perylene-d12	264	13.292	13.292	0.000	99	639006	5.00	5.00	
171 3-Methylcholanthrene	268	13.729	13.729	0.000	90	991653	12.5	13.6	
172 Dibenz[a,h]acridine	279	14.533	14.533	0.000	90	1350479	12.5	13.8	
173 Dibenz[a,j]acridine	279	14.615	14.615	0.000	96	1526987	12.5	13.9	
174 Indeno[1,2,3-cd]pyrene	276	14.889	14.889	0.000	98	1689098	12.5	13.4	
175 Dibenz(a,h)anthracene	278	14.935	14.935	0.000	91	1736819	12.5	13.6	
176 Benzo[g,h,i]perylene	276	15.332	15.332	0.000	98	1730374	12.5	13.3	
S 182 Isosafrole	162				0		12.5	13.3	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MSS_RV8270_6_00048 Amount Added: 1.00 Units: mL

Report Date: 27-Oct-2023 07:21:37 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2601b.D

Injection Date: 26-Oct-2023 12:12:55 Instrument ID: HP19760 Operator ID: kel10217

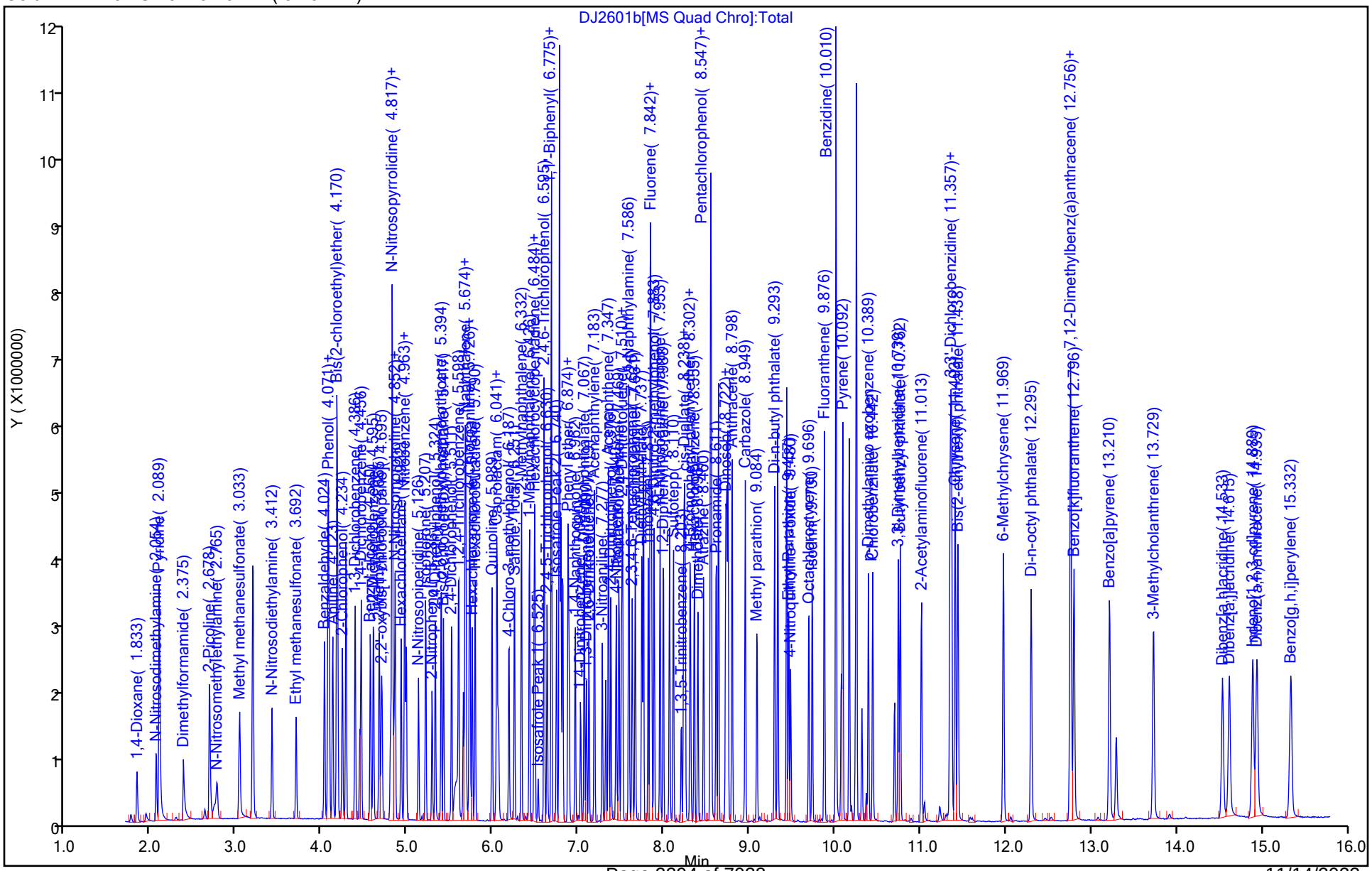
Lims ID: ICIS L6 Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

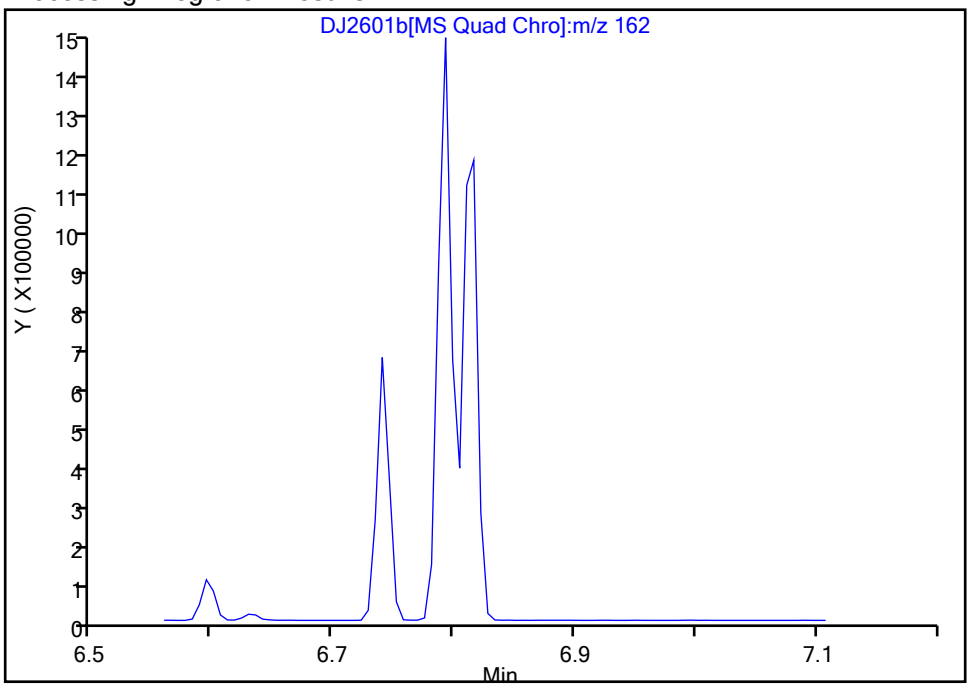
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2601b.D				
Injection Date:	26-Oct-2023 12:12:55	Instrument ID:	HP19760		
Lims ID:	ICIS L6				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

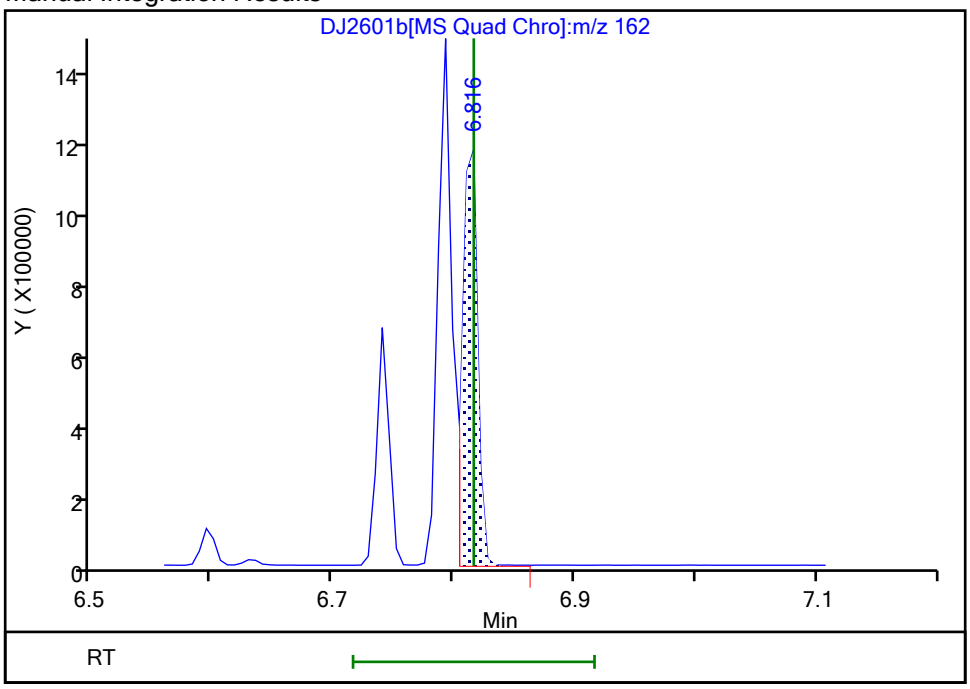
Not Detected
Expected RT: 6.82

Processing Integration Results



Manual Integration Results

RT: 6.82
Area: 938075
Amount: 12.428750
Amount Units: ug/ml



Reviewer: SJ89, 26-Oct-2023 12:42:05 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2602.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 26-Oct-2023 12:44:01 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: 410-0097721-003
Operator ID: kel10217 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:21:55 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: SJ89 Date: 26-Oct-2023 13:17:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.827	1.833	-0.006	93	656733	30.0	28.9	
3 N-Nitrosodimethylamine	74	2.054	2.054	0.000	95	1103182	30.0	29.9	
4 Pyridine	79	2.089	2.089	0.000	88	3536214	60.0	59.9	
6 Dimethylformamide	73	2.369	2.375	-0.006	98	1195498	30.0	30.5	
7 2-Picoline	93	2.678	2.678	0.000	90	1865662	30.0	30.0	
8 N-Nitrosomethylethylamine	88	2.771	2.771	0.000	97	783757	30.0	28.4	
9 Methyl methanesulfonate	80	3.039	3.033	0.006	86	989175	30.0	29.4	
$ 10 2-Fluorophenol	112	3.196	3.191	0.005	96	3006592	60.0	60.4	
11 N-Nitrosodiethylamine	102	3.418	3.412	0.006	89	787615	30.0	31.0	
12 Ethyl methanesulfonate	109	3.698	3.692	0.006	98	821312	30.0	29.3	
15 Benzaldehyde	77	4.024	4.024	0.000	92	1118909	30.0	25.4	
$ 16 Phenol-d5	99	4.077	4.071	0.006	96	4103957	60.0	60.6	
17 Phenol	94	4.088	4.083	0.005	94	2114903	30.0	29.5	
18 Aniline	93	4.123	4.123	0.000	94	2497289	30.0	30.5	
19 Bis(2-chloroethyl)ether	93	4.187	4.182	0.005	90	1693062	30.0	28.5	
20 2-Chlorophenol	128	4.240	4.234	0.006	92	1504556	30.0	29.6	
21 1,3-Dichlorobenzene	146	4.385	4.386	-0.001	97	1769248	30.0	28.6	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	90	196563	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.455	4.456	-0.001	92	1793032	30.0	28.8	
25 Benzyl alcohol	108	4.566	4.560	0.006	90	1002232	30.0	29.7	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	1701535	30.0	29.3	
28 2-Methylphenol	108	4.671	4.665	0.006	94	1436992	30.0	29.6	
29 2,2'-oxybis[1-chloropropane]	45	4.700	4.695	0.005	93	2885985	30.0	29.6	
31 N-Nitrosopyrrolidine	100	4.811	4.799	0.012	89	839031	30.0	31.4	
32 4-Methylphenol	108	4.823	4.811	0.012	94	1485799	30.0	30.1	
34 Acetophenone	105	4.823	4.817	0.006	82	2289261	30.0	28.8	
33 N-Nitrosodi-n-propylamine	70	4.828	4.823	0.005	81	1330100	30.0	28.9	
35 N-Nitrosomorpholine	56	4.846	4.840	0.006	90	1275910	30.0	28.7	
36 2-Toluidine	106	4.858	4.852	0.006	96	2482252	30.0	30.1	
38 Hexachloroethane	117	4.922	4.922	0.000	91	666507	30.0	27.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.968	4.963	0.005	93	3743764	60.0	60.2	
40 Nitrobenzene	77	4.986	4.980	0.006	89	1915033	30.0	29.4	
42 N-Nitrosopiperidine	114	5.132	5.126	0.006	83	784412	30.0	31.0	
43 Isophorone	82	5.213	5.207	0.006	96	3493537	30.0	30.7	
44 2-Nitrophenol	139	5.289	5.283	0.006	90	803119	30.0	31.7	
45 2,4-Dimethylphenol	107	5.324	5.324	0.000	97	1355109	30.0	31.1	
46 o,o',o''-Triethylphosphorothioat	198	5.394	5.394	0.000	85	891236	30.0	30.9	
47 Bis(2-chloroethoxy)methane	93	5.423	5.417	0.006	94	2011710	30.0	30.8	
48 2,4-Dichlorophenol	162	5.516	5.516	0.000	96	1343864	30.0	31.9	
49 1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	93	1508726	30.0	30.1	
* 50 Naphthalene-d8	136	5.650	5.650	0.000	99	662792	5.00	5.00	
51 Naphthalene	128	5.674	5.674	0.000	98	4252544	30.0	29.3	
52 Alpha-Terpineol	59	5.685	5.680	0.005	91	1740254	30.0	31.2	
53 4-Chloroaniline	127	5.726	5.720	0.006	93	1729794	30.0	30.7	
54 2,6-Dichlorophenol	162	5.732	5.726	0.006	93	1302943	30.0	29.8	
55 Hexachloropropene	213	5.755	5.755	0.000	85	1171633	30.0	30.5	
56 Hexachlorobutadiene	225	5.790	5.790	0.000	93	1011622	30.0	29.9	
60 Quinoline	129	5.988	5.989	0.000	95	2763881	30.0	30.7	
61 Caprolactam	113	6.064	6.041	0.023	73	399224	30.0	30.9	
62 N-Nitrosodi-n-butylamine	84	6.047	6.047	0.000	93	1495857	30.0	28.6	
63 p-Phenylene diamine	108	6.076	6.058	0.018	93	1228098	30.0	27.2	
64 4-Chloro-3-methylphenol	107	6.192	6.187	0.005	93	1360272	30.0	31.9	
65 Safrole, Total	162	6.251	6.251	0.000	88	1186435	30.0	30.8	
66 2-Methylnaphthalene	142	6.332	6.332	0.000	90	2755177	30.0	29.9	
67 1-Methylnaphthalene	142	6.426	6.426	0.000	92	2559064	30.0	29.8	
68 Hexachlorocyclopentadiene	237	6.478	6.478	0.000	94	873564	30.0	28.8	
69 1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	96	1680093	30.0	28.2	
70 Isosafrole Peak 1	162	6.530	6.525	0.005	90	209657	4.80	4.79	
71 2,4,6-Trichlorophenol	196	6.600	6.595	0.005	82	983878	30.0	30.2	
72 2,4,5-Trichlorophenol	196	6.635	6.630	0.005	93	1085438	30.0	31.3	
$ 73 2-Fluorobiphenyl (Surr)	172	6.682	6.682	0.000	100	6344731	60.0	55.3	
74 Isosafrole Peak 2	162	6.746	6.740	0.006	91	1199497	25.2	25.5	
75 1,1'-Biphenyl	154	6.781	6.775	0.006	95	3491197	30.0	28.0	
76 2-Chloronaphthalene	162	6.799	6.793	0.006	93	2592039	30.0	25.6	
77 1-Chloronaphthalene	162	6.816	6.816	0.000	98	2755190	30.0	31.8	
78 Phenyl ether	170	6.880	6.874	0.006	85	1960598	30.0	28.5	
79 2-Nitroaniline	138	6.892	6.886	0.006	78	873120	30.0	30.7	
81 1,4-Naphthoquinone	158	6.962	6.962	0.000	86	1073196	30.0	30.7	
84 1,4-Dinitrobenzene	168	7.026	7.020	0.006	91	491062	30.0	31.1	
85 Dimethyl phthalate	163	7.072	7.067	0.005	99	3315844	30.0	29.1	
86 1,3-Dinitrobenzene	168	7.096	7.090	0.006	83	551603	30.0	31.2	
87 2,6-Dinitrotoluene	165	7.125	7.119	0.006	92	730923	30.0	29.3	
88 Acenaphthylene	152	7.189	7.183	0.006	99	4340539	30.0	29.4	
89 3-Nitroaniline	138	7.282	7.277	0.005	85	745710	30.0	29.8	
* 90 Acenaphthene-d10	164	7.317	7.317	0.000	94	410513	5.00	5.00	
91 Acenaphthene	153	7.352	7.347	0.005	95	2892626	30.0	28.1	
92 2,4-Dinitrophenol	184	7.387	7.376	0.011	86	1045135	60.0	64.2	
93 4-Nitrophenol	109	7.451	7.440	0.011	83	1076660	60.0	64.6	
94 Pentachlorobenzene	250	7.475	7.469	0.006	98	1393712	30.0	29.0	
95 2,4-Dinitrotoluene	165	7.510	7.504	0.006	89	1007309	30.0	30.1	
96 Dibenzofuran	168	7.515	7.516	-0.001	96	4128815	30.0	28.4	
97 1-Naphthylamine	143	7.591	7.586	0.005	98	2555595	30.0	30.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.632	7.626	0.006	71	976773	30.0	30.9	
99 2-Naphthylamine	143	7.667	7.661	0.006	95	2751311	30.0	29.7	
100 Diethyl phthalate	149	7.749	7.737	0.012	98	3183799	30.0	29.3	
101 Thionazin	107	7.824	7.813	0.011	78	524766	30.0	29.6	
102 Fluorene	166	7.842	7.836	0.006	93	3045557	30.0	28.4	
103 4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	92	1657310	30.0	28.2	
104 N-Nitro-o-toluidine	152	7.854	7.848	0.006	92	828042	30.0	30.1	
105 4-Nitroaniline	138	7.871	7.854	0.017	79	729762	30.0	28.2	
106 4,6-Dinitro-2-methylphenol	198	7.894	7.883	0.011	84	1372209	60.0	63.2	
107 N-Nitrosodiphenylamine	169	7.958	7.953	0.005	62	2349477	25.5	24.8	
108 1,2-Diphenylhydrazine	77	7.993	7.988	0.005	41	3631599	30.0	29.9	
$ 109 2,4,6-Tribromophenol	330	8.069	8.064	0.006	93	1035635	60.0	61.8	
110 Sulfotepp	97	8.110	8.110	0.000	76	613222	30.0	31.2	
112 1,3,5-Trinitrobenzene	213	8.215	8.203	0.012	84	415235	30.0	33.9	
113 cis-Diallate	86	8.232	8.227	0.005	0	1054975	22.2	20.8	
114 Phorate	75	8.238	8.238	0.000	95	2136090	30.0	30.1	
115 Phenacetin	108	8.262	8.250	0.012	93	1618350	30.0	31.5	
116 4-Bromophenyl phenyl ether	248	8.308	8.302	0.006	64	1048659	30.0	29.1	
117 trans-Diallate	86	8.314	8.314	0.000	0	360341	7.80	7.08	
118 Hexachlorobenzene	284	8.355	8.355	0.000	94	1118341	30.0	28.4	
119 Dimethoate	87	8.407	8.396	0.011	95	1168047	30.0	28.4	
120 Atrazine	200	8.471	8.460	0.011	92	807361	30.0	26.4	
121 Pentachlorophenol	266	8.547	8.541	0.006	92	1531201	60.0	64.1	
122 4-Aminobiphenyl	169	8.553	8.547	0.006	91	3640025	30.0	29.3	
123 Pentachloronitrobenzene	237	8.559	8.553	0.006	84	548501	30.0	29.7	
124 Pronamide	173	8.617	8.611	0.006	89	1538191	30.0	31.8	
125 Dinoseb	211	8.728	8.722	0.006	96	959770	30.0	34.0	
* 126 Phenanthrene-d10	188	8.728	8.722	0.006	96	791590	5.00	5.00	
127 Disulfoton	88	8.739	8.734	0.005	98	2028686	30.0	26.9	
128 Phenanthrene	178	8.751	8.745	0.006	96	4670333	30.0	28.0	
129 Anthracene	178	8.804	8.798	0.006	97	4810611	30.0	28.6	
130 Carbazole	167	8.955	8.949	0.006	96	4167818	30.0	29.4	
131 Methyl parathion	109	9.089	9.084	0.005	94	1018659	30.0	29.8	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	100	5168155	30.0	30.1	
134 Ethyl Parathion	109	9.462	9.457	0.005	85	683587	30.0	31.9	
135 4-Nitroquinoline-1-oxide	190	9.486	9.480	0.006	89	520170	30.0	34.2	
S 136 Diallate	86				0		30.0	27.8	
140 Octachlorostyrene	308	9.695	9.696	-0.001	89	455773	30.0	29.2	
141 Isodrin	193	9.736	9.730	0.006	94	573387	30.0	28.1	
143 Fluoranthene	202	9.882	9.876	0.006	97	5303357	30.0	29.1	
147 Benzidine	184	10.022	10.010	0.012	98	8736566	90.0	87.1	e
* 149 Pyrene-d10 (IS)	212	10.074	10.074	0.000	97	786367	5.00	5.00	
150 Pyrene	202	10.092	10.092	0.000	98	5438864	30.0	29.5	
$ 152 p-Terphenyl-d14	244	10.255	10.249	0.006	97	7613077	60.0	55.4	e
154 p-Dimethylamino azobenzene	225	10.395	10.389	0.006	94	1010071	30.0	33.4	
155 Chlorobenzilate	139	10.441	10.442	-0.001	93	1532214	30.0	32.9	
156 3,3'-Dimethylbenzidine	212	10.745	10.739	0.006	99	3077619	30.0	31.5	
157 Butyl benzyl phthalate	149	10.768	10.762	0.006	97	2126106	30.0	31.7	
158 2-Acetylaminofluorene	181	11.018	11.013	0.005	93	1876372	30.0	32.6	
159 3,3'-Dichlorobenzidine	252	11.351	11.345	0.006	72	1847894	30.0	31.3	
160 4,4'-Methylene bis(2-chloroani	231	11.357	11.351	0.006	94	1027754	30.0	31.9	
161 Benzo[a]anthracene	228	11.368	11.363	0.006	98	5041552	30.0	30.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.415	11.403	0.012	96	4771709	30.0	29.6	
163 Bis(2-ethylhexyl) phthalate	149	11.444	11.438	0.006	97	3040896	30.0	32.9	
164 6-Methylchrysene	242	11.980	11.969	0.011	98	3386121	30.0	31.3	
165 Di-n-octyl phthalate	149	12.301	12.295	0.006	99	5178437	30.0	31.7	
166 7,12-Dimethylbenz(a)anthracene	256	12.767	12.756	0.011	76	2042286	30.0	32.5	
167 Benzo[b]fluoranthene	252	12.767	12.756	0.011	96	4749134	30.0	30.2	
168 Benzo[k]fluoranthene	252	12.808	12.796	0.012	98	4734863	30.0	30.3	
169 Benzo[a]pyrene	252	13.222	13.210	0.012	75	4415402	30.0	30.5	
* 170 Perylene-d12	264	13.292	13.292	0.000	99	659523	5.00	5.00	
171 3-Methylcholanthrene	268	13.735	13.729	0.006	90	2403611	30.0	32.0	
172 Dibenz[a,h]acridine	279	14.545	14.533	0.012	90	3324106	30.0	32.8	
173 Dibenz[a,j]acridine	279	14.626	14.615	0.011	96	3569563	30.0	31.5	
174 Indeno[1,2,3-cd]pyrene	276	14.906	14.889	0.017	98	4025835	30.0	31.0	
175 Dibenz(a,h)anthracene	278	14.953	14.935	0.018	92	4152942	30.0	31.5	
176 Benzo[g,h,i]perylene	276	15.349	15.332	0.017	97	4093315	30.0	30.6	
S 178 Dinitrotoluene	165				0			59.4	
S 182 Isosafrole	162				0		30.0	30.2	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

MSS_RV8270_8_00032 Amount Added: 1.00 Units: mL

Report Date: 27-Oct-2023 07:21:56 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2602.D

Injection Date: 26-Oct-2023 12:44:01 Instrument ID: HP19760 Operator ID: kel10217

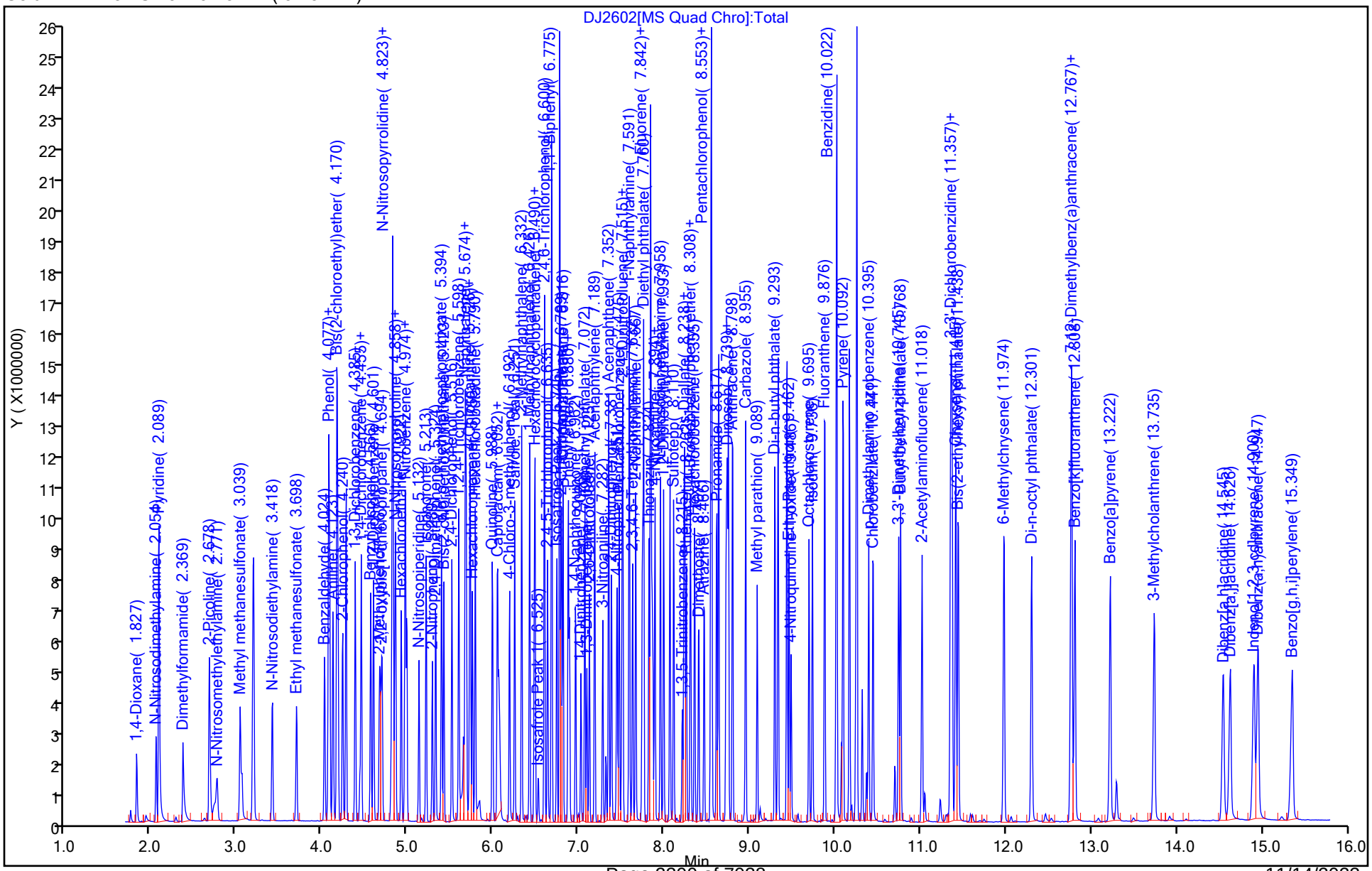
Lims ID: IC L8 Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2603.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Oct-2023 13:04:42 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 410-0097721-004
Operator ID: kel10217 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:22:17 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: SJ89 Date: 26-Oct-2023 13:30:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.827	1.833	-0.006	92	378002	20.0	20.4	
3 N-Nitrosodimethylamine	74	2.054	2.054	0.000	96	637553	20.0	21.1	
4 Pyridine	79	2.089	2.089	0.000	87	2051875	40.0	42.6	
6 Dimethylformamide	73	2.369	2.375	-0.006	98	672021	20.0	21.0	
7 2-Picoline	93	2.678	2.678	0.000	90	1056183	20.0	20.8	
8 N-Nitrosomethylethylamine	88	2.765	2.771	-0.006	96	464369	20.0	20.5	
9 Methyl methanesulfonate	80	3.033	3.033	0.000	86	576919	20.0	21.0	
$ 10 2-Fluorophenol	112	3.191	3.191	0.000	95	1749291	40.0	43.0	
11 N-Nitrosodiethylamine	102	3.412	3.412	0.000	89	438464	20.0	21.1	
12 Ethyl methanesulfonate	109	3.698	3.692	0.006	98	479278	20.0	20.9	
15 Benzaldehyde	77	4.024	4.024	0.000	92	726246	20.0	20.2	
$ 16 Phenol-d5	99	4.071	4.071	0.000	95	2386619	40.0	43.1	
17 Phenol	94	4.083	4.083	0.000	93	1241019	20.0	21.2	
18 Aniline	93	4.123	4.123	0.000	94	1442483	20.0	21.5	
19 Bis(2-chloroethyl)ether	93	4.182	4.182	0.000	90	978065	20.0	20.1	
20 2-Chlorophenol	128	4.240	4.234	0.006	92	886604	20.0	21.4	
21 1,3-Dichlorobenzene	146	4.386	4.386	0.000	97	1035780	20.0	20.5	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	94	160545	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.456	4.456	0.000	92	1057099	20.0	20.8	
25 Benzyl alcohol	108	4.566	4.560	0.006	89	588367	20.0	21.3	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	1001981	20.0	21.1	
28 2-Methylphenol	108	4.671	4.665	0.006	96	824564	20.0	20.8	
29 2,2'-oxybis[1-chloropropane]	45	4.695	4.695	0.000	93	1656012	20.0	20.8	
31 N-Nitrosopyrrolidine	100	4.805	4.799	0.006	90	477507	20.0	21.9	
32 4-Methylphenol	108	4.817	4.811	0.006	96	870600	20.0	21.6	
34 Acetophenone	105	4.823	4.817	0.006	90	1349739	20.0	20.8	
33 N-Nitrosodi-n-propylamine	70	4.823	4.823	0.000	90	781757	20.0	20.8	
35 N-Nitrosomorpholine	56	4.840	4.840	0.000	87	734015	20.0	20.2	
36 2-Toluidine	106	4.858	4.852	0.006	95	1423747	20.0	21.1	
38 Hexachloroethane	117	4.922	4.922	0.000	91	390579	20.0	19.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.969	4.963	0.006	90	2185764	40.0	41.7	
40 Nitrobenzene	77	4.986	4.980	0.006	89	1123600	20.0	20.5	
42 N-Nitrosopiperidine	114	5.132	5.126	0.006	83	454129	20.0	21.3	
43 Isophorone	82	5.213	5.207	0.006	96	2031949	20.0	21.2	
44 2-Nitrophenol	139	5.289	5.283	0.006	91	469557	20.0	22.0	
45 2,4-Dimethylphenol	107	5.324	5.324	0.000	98	801138	20.0	21.8	
46 o,o',o''-Triethylphosphorothioat	198	5.394	5.394	0.000	81	510832	20.0	21.0	
47 Bis(2-chloroethoxy)methane	93	5.417	5.417	0.000	94	1174291	20.0	21.3	
48 2,4-Dichlorophenol	162	5.516	5.516	0.000	95	797334	20.0	22.4	
49 1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	93	895201	20.0	21.2	
* 50 Naphthalene-d8	136	5.650	5.650	0.000	99	558454	5.00	5.00	
51 Naphthalene	128	5.674	5.674	0.000	98	2503871	20.0	20.5	
52 Alpha-Terpineol	59	5.680	5.680	0.000	91	1010120	20.0	21.5	
53 4-Chloroaniline	127	5.720	5.720	0.000	93	1034022	20.0	21.8	
54 2,6-Dichlorophenol	162	5.732	5.726	0.006	95	776929	20.0	21.1	
55 Hexachloropropene	213	5.755	5.755	0.000	85	677540	20.0	20.9	
56 Hexachlorobutadiene	225	5.790	5.790	0.000	93	592246	20.0	20.8	
60 Quinoline	129	5.989	5.989	0.001	95	1580051	20.0	20.8	
61 Caprolactam	113	6.047	6.041	0.006	67	244520	20.0	22.5	
62 N-Nitrosodi-n-butylamine	84	6.047	6.047	0.000	89	867364	20.0	19.7	
63 p-Phenylene diamine	108	6.070	6.058	0.012	94	780636	20.0	20.5	
64 4-Chloro-3-methylphenol	107	6.187	6.187	0.000	94	804245	20.0	22.4	
65 Safrole, Total	162	6.251	6.251	0.000	88	681342	20.0	21.0	
66 2-Methylnaphthalene	142	6.332	6.332	0.000	90	1625196	20.0	20.9	
67 1-Methylnaphthalene	142	6.426	6.426	0.000	91	1487756	20.0	20.6	
68 Hexachlorocyclopentadiene	237	6.478	6.478	0.000	94	535469	20.0	21.2	
69 1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	96	987765	20.0	19.9	
70 Isosafrole Peak 1	162	6.525	6.525	0.000	89	120644	3.20	3.31	
71 2,4,6-Trichlorophenol	196	6.601	6.595	0.006	80	587383	20.0	21.6	
72 2,4,5-Trichlorophenol	196	6.636	6.630	0.006	93	638448	20.0	22.1	
$ 73 2-Fluorobiphenyl (Surr)	172	6.682	6.682	0.000	100	3826336	40.0	40.0	
74 Isosafrole Peak 2	162	6.740	6.740	0.000	91	692101	16.8	17.6	
75 1,1'-Biphenyl	154	6.775	6.775	0.000	93	2092060	20.0	20.1	
76 2-Chloronaphthalene	162	6.793	6.793	0.000	94	1670729	20.0	19.8	
77 1-Chloronaphthalene	162	6.816	6.816	0.000	98	1465994	20.0	20.3	
78 Phenyl ether	170	6.875	6.874	0.000	87	1168411	20.0	20.4	
79 2-Nitroaniline	138	6.892	6.886	0.006	79	523102	20.0	22.0	
81 1,4-Naphthoquinone	158	6.962	6.962	0.000	85	637096	20.0	21.9	
84 1,4-Dinitrobenzene	168	7.026	7.020	0.006	91	284981	20.0	21.6	
85 Dimethyl phthalate	163	7.067	7.067	0.000	99	1970491	20.0	20.8	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	84	325887	20.0	22.1	
87 2,6-Dinitrotoluene	165	7.125	7.119	0.006	92	432702	20.0	20.8	
88 Acenaphthylene	152	7.183	7.183	0.000	99	2531464	20.0	20.6	
89 3-Nitroaniline	138	7.277	7.277	0.000	85	444243	20.0	21.3	
* 90 Acenaphthene-d10	164	7.317	7.317	0.000	95	342261	5.00	5.00	
91 Acenaphthene	153	7.347	7.347	0.000	95	1723090	20.0	20.1	
92 2,4-Dinitrophenol	184	7.382	7.376	0.006	86	605538	40.0	44.6	
93 4-Nitrophenol	109	7.440	7.440	0.000	83	636818	40.0	45.8	
94 Pentachlorobenzene	250	7.475	7.469	0.006	98	808540	20.0	20.2	
95 2,4-Dinitrotoluene	165	7.504	7.504	0.000	91	599131	20.0	21.5	
96 Dibenzofuran	168	7.516	7.516	0.000	97	2467138	20.0	20.4	
97 1-Naphthylamine	143	7.591	7.586	0.005	98	1487154	20.0	21.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	71	564588	20.0	21.4	
99 2-Naphthylamine	143	7.661	7.661	0.000	95	1612739	20.0	20.8	
100 Diethyl phthalate	149	7.743	7.737	0.006	98	1855840	20.0	20.5	
101 Thionazin	107	7.819	7.813	0.006	79	302671	20.0	20.5	
102 Fluorene	166	7.836	7.836	0.000	93	1835261	20.0	20.5	
103 4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	91	998187	20.0	20.4	
104 N-Nitro-o-toluidine	152	7.854	7.848	0.006	90	486870	20.0	21.2	
105 4-Nitroaniline	138	7.860	7.854	0.006	78	454352	20.0	21.0	
106 4,6-Dinitro-2-methylphenol	198	7.889	7.883	0.006	85	817432	40.0	45.1	
107 N-Nitrosodiphenylamine	169	7.953	7.953	0.000	62	1392520	17.0	17.6	
108 1,2-Diphenylhydrazine	77	7.994	7.988	0.006	41	2129914	20.0	21.0	
$ 109 2,4,6-Tribromophenol	330	8.064	8.064	0.001	93	611321	40.0	43.8	
110 Sulfotepp	97	8.110	8.110	0.000	76	355551	20.0	21.7	
112 1,3,5-Trinitrobenzene	213	8.203	8.203	0.000	84	239740	20.0	23.4	
113 cis-Diallate	86	8.227	8.227	0.000	0	604069	14.8	14.2	
114 Phorate	75	8.238	8.238	0.000	95	1247799	20.0	21.1	
115 Phenacetin	108	8.250	8.250	0.000	93	957149	20.0	22.3	
116 4-Bromophenyl phenyl ether	248	8.303	8.302	0.001	65	617791	20.0	20.5	
117 trans-Diallate	86	8.314	8.314	0.000	0	211086	5.20	4.96	
118 Hexachlorobenzene	284	8.355	8.355	0.000	95	677125	20.0	20.6	
119 Dimethoate	87	8.396	8.396	0.000	95	730810	20.0	21.2	
120 Atrazine	200	8.466	8.460	0.006	92	532960	20.0	20.8	
121 Pentachlorophenol	266	8.541	8.541	0.000	93	891266	40.0	44.7	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	90	2184795	20.0	21.0	
123 Pentachloronitrobenzene	237	8.553	8.553	0.000	85	312850	20.0	20.3	
124 Pronamide	173	8.611	8.611	0.000	89	888438	20.0	22.0	
125 Dinoseb	211	8.722	8.722	0.000	97	539117	20.0	22.8	
* 126 Phenanthrene-d10	188	8.722	8.722	0.000	97	661246	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	97	1188176	20.0	18.9	
128 Phenanthrene	178	8.745	8.745	0.000	96	2832915	20.0	20.4	
129 Anthracene	178	8.798	8.798	0.000	97	2921338	20.0	20.8	
130 Carbazole	167	8.950	8.949	0.001	96	2519051	20.0	21.3	
131 Methyl parathion	109	9.084	9.084	0.000	94	634222	20.0	22.2	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	100	3153814	20.0	22.0	
134 Ethyl Parathion	109	9.457	9.457	0.000	85	399549	20.0	22.3	
135 4-Nitroquinoline-1-oxide	190	9.486	9.480	0.006	92	304758	20.0	24.0	
S 136 Diallate	86				0		20.0	19.2	
140 Octachlorostyrene	308	9.696	9.696	0.000	90	270431	20.0	20.8	
141 Isodrin	193	9.731	9.730	0.001	94	335711	20.0	19.7	
143 Fluoranthene	202	9.876	9.876	0.000	97	3242961	20.0	21.3	
147 Benzidine	184	10.016	10.010	0.006	99	5905642	60.0	65.6	
* 149 Pyrene-d10 (IS)	212	10.074	10.074	0.000	98	705508	5.00	5.00	
150 Pyrene	202	10.092	10.092	0.000	98	3319648	20.0	20.1	
$ 152 p-Terphenyl-d14	244	10.249	10.249	0.000	97	5064714	40.0	41.0	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	94	601901	20.0	22.2	
155 Chlorobenzilate	139	10.442	10.442	0.000	93	918133	20.0	22.0	
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	99	1897440	20.0	21.6	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	97	1320155	20.0	21.9	
158 2-Acetylaminofluorene	181	11.013	11.013	0.000	92	1140015	20.0	22.0	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	75	1170643	20.0	22.1	
160 4,4'-Methylene bis(2-chloroani	231	11.357	11.351	0.006	95	631423	20.0	21.8	
161 Benzo[a]anthracene	228	11.363	11.363	0.001	97	3151139	20.0	21.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.409	11.403	0.006	96	3003345	20.0	20.7	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	97	1841845	20.0	22.2	
164 6-Methylchrysene	242	11.975	11.969	0.006	98	2076504	20.0	21.4	
165 Di-n-octyl phthalate	149	12.295	12.295	0.000	99	3166300	20.0	21.8	
166 7,12-Dimethylbenz(a)anthracene	256	12.756	12.756	0.000	87	1260052	20.0	22.5	
167 Benzo[b]fluoranthene	252	12.761	12.756	0.005	97	3040576	20.0	21.7	
168 Benzo[k]fluoranthene	252	12.796	12.796	0.000	98	2987534	20.0	21.4	
169 Benzo[a]pyrene	252	13.210	13.210	0.000	76	2791478	20.0	21.7	
* 170 Perylene-d12	264	13.292	13.292	0.000	99	587483	5.00	5.00	
171 3-Methylcholanthrene	268	13.729	13.729	0.000	90	1499686	20.0	22.4	
172 Dibenz[a,h]acridine	279	14.539	14.533	0.006	90	2051493	20.0	22.7	
173 Dibenz[a,j]acridine	279	14.615	14.615	0.000	96	2264732	20.0	22.5	
174 Indeno[1,2,3-cd]pyrene	276	14.895	14.889	0.006	98	2510109	20.0	21.7	
175 Dibenz(a,h)anthracene	278	14.941	14.935	0.006	91	2564152	20.0	21.8	
176 Benzo[g,h,i]perylene	276	15.338	15.332	0.006	98	2590196	20.0	21.7	
S 178 Dinitrotoluene	165				0			42.3	
S 182 Isosafrole	162				0		20.0	20.9	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_7_00032 Amount Added: 1.00 Units: mL

Report Date: 27-Oct-2023 07:22:17 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2603.D

Injection Date: 26-Oct-2023 13:04:42 Instrument ID: HP19760 Operator ID: kel10217

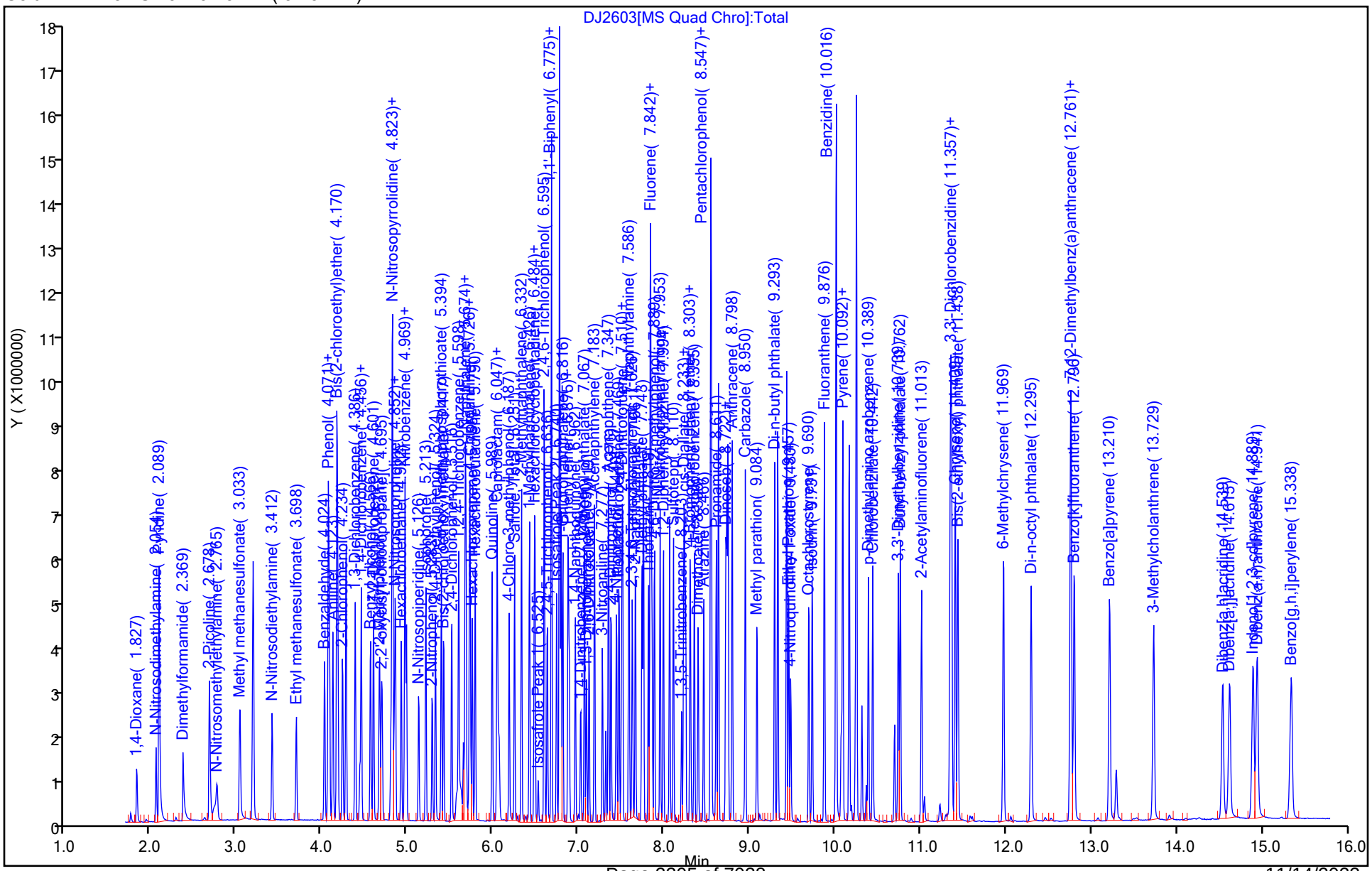
Lims ID: IC L7 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2604.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Oct-2023 13:25:21 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L5
Misc. Info.: 410-0097721-005
Operator ID: kel10217 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:22:38 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: N5QU Date: 26-Oct-2023 19:37:16

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.833	1.833	0.000	93	144346	7.50	7.61	
	3 N-Nitrosodimethylamine	74	2.054	2.054	0.000	95	239215	7.50	7.77	
	4 Pyridine	79	2.095	2.095	0.000	88	749611	15.0	15.2	
	6 Dimethylformamide	73	2.380	2.380	0.000	98	259339	7.50	7.92	
	7 2-Picoline	93	2.684	2.684	0.000	91	384940	7.50	7.43	
	8 N-Nitrosomethylethylamine	88	2.771	2.771	0.000	95	174821	7.50	7.20	
	9 Methyl methanesulfonate	80	3.033	3.033	0.000	86	211484	7.50	7.55	
$	10 2-Fluorophenol	112	3.185	3.185	0.000	95	633026	15.0	15.2	
	11 N-Nitrosodiethylamine	102	3.412	3.412	0.000	90	165978	7.50	7.84	
	12 Ethyl methanesulfonate	109	3.692	3.692	0.000	98	175395	7.50	7.50	
	15 Benzaldehyde	77	4.024	4.024	0.000	92	299617	7.50	8.14	
$	16 Phenol-d5	99	4.071	4.071	0.000	96	872689	15.0	15.4	
	17 Phenol	94	4.082	4.082	0.000	93	448773	7.50	7.51	
	18 Aniline	93	4.123	4.123	0.000	94	526639	7.50	7.70	
	19 Bis(2-chloroethyl)ether	93	4.181	4.181	0.000	89	361008	7.50	7.27	
	20 2-Chlorophenol	128	4.234	4.234	0.000	92	325791	7.50	7.70	
	21 1,3-Dichlorobenzene	146	4.385	4.385	0.000	97	377778	7.50	7.33	
*	22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	96	163970	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.455	4.455	0.000	92	390904	7.50	7.54	
	25 Benzyl alcohol	108	4.560	4.560	0.000	89	212341	7.50	7.53	
	26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	364734	7.50	7.53	
	28 2-Methylphenol	108	4.665	4.665	0.000	96	313370	7.50	7.74	
	29 2,2'-oxybis[1-chloropropane]	45	4.694	4.694	0.000	93	615744	7.50	7.57	
	31 N-Nitrosopyrrolidine	100	4.793	4.793	0.000	88	174781	7.50	7.85	
	32 4-Methylphenol	108	4.811	4.811	0.000	97	317604	7.50	7.71	
	34 Acetophenone	105	4.817	4.817	0.000	83	500368	7.50	7.56	
	33 N-Nitrosodi-n-propylamine	70	4.817	4.817	0.000	75	285852	7.50	7.45	
	35 N-Nitrosomorpholine	56	4.834	4.834	0.000	91	272884	7.50	7.36	
	36 2-Toluidine	106	4.852	4.852	0.000	95	530385	7.50	7.70	
	38 Hexachloroethane	117	4.922	4.922	0.000	91	146240	7.50	7.20	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.963	4.963	0.000	91	808091	15.0	15.1	
40 Nitrobenzene	77	4.980	4.980	0.000	90	415484	7.50	7.40	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	82	165909	7.50	7.62	
43 Isophorone	82	5.207	5.207	0.000	96	743966	7.50	7.58	
44 2-Nitrophenol	139	5.283	5.283	0.000	90	170382	7.50	7.80	
45 2,4-Dimethylphenol	107	5.324	5.324	0.000	97	287399	7.50	7.66	
46 o,o',o''-Triethylphosphorothioat	198	5.394	5.394	0.000	81	194106	7.50	7.82	
47 Bis(2-chloroethoxy)methane	93	5.417	5.417	0.000	95	433105	7.50	7.69	
48 2,4-Dichlorophenol	162	5.510	5.510	0.000	95	289953	7.50	7.99	
49 1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	94	331698	7.50	7.67	
* 50 Naphthalene-d8	136	5.650	5.650	0.000	99	570732	5.00	5.00	
51 Naphthalene	128	5.674	5.674	0.000	98	940063	7.50	7.52	
52 Alpha-Terpineol	59	5.679	5.679	0.000	92	373477	7.50	7.77	
53 4-Chloroaniline	127	5.720	5.720	0.000	93	382018	7.50	7.88	
54 2,6-Dichlorophenol	162	5.726	5.726	0.000	94	283195	7.50	7.53	
55 Hexachloropropene	213	5.755	5.755	0.000	85	250344	7.50	7.57	
56 Hexachlorobutadiene	225	5.790	5.790	0.000	93	219702	7.50	7.54	
60 Quinoline	129	5.988	5.988	0.000	95	583385	7.50	7.51	
61 Caprolactam	113	6.035	6.035	0.000	71	85254	7.50	7.67	
62 N-Nitrosodi-n-butylamine	84	6.041	6.041	0.000	92	329832	7.50	7.31	
63 p-Phenylene diamine	108	6.058	6.058	0.000	94	319373	7.50	8.21	
64 4-Chloro-3-methylphenol	107	6.181	6.181	0.000	94	288940	7.50	7.87	
65 Safrole, Total	162	6.251	6.251	0.000	88	252461	7.50	7.62	
66 2-Methylnaphthalene	142	6.332	6.332	0.000	90	604212	7.50	7.61	
67 1-Methylnaphthalene	142	6.426	6.426	0.000	91	560912	7.50	7.58	
68 Hexachlorocyclopentadiene	237	6.478	6.478	0.000	94	212986	7.50	8.32	
69 1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	96	369242	7.50	7.36	
70 Isosafrole Peak 1	162	6.525	6.525	0.000	90	45370	1.20	1.23	
71 2,4,6-Trichlorophenol	196	6.595	6.595	0.000	79	211662	7.50	7.69	
72 2,4,5-Trichlorophenol	196	6.630	6.630	0.000	92	230161	7.50	7.86	
$ 73 2-Fluorobiphenyl (Surr)	172	6.682	6.682	0.000	100	1448294	15.0	15.0	
74 Isosafrole Peak 2	162	6.740	6.740	0.000	90	250676	6.30	6.31	
75 1,1'-Biphenyl	154	6.775	6.775	0.000	93	786405	7.50	7.49	
76 2-Chloronaphthalene	162	6.793	6.793	0.000	93	660290	7.50	7.74	M
77 1-Chloronaphthalene	162	6.810	6.810	0.000	98	526722	7.50	7.21	Ma
78 Phenyl ether	170	6.874	6.874	0.000	87	438890	7.50	7.57	
79 2-Nitroaniline	138	6.886	6.886	0.000	77	188152	7.50	7.84	
81 1,4-Naphthoquinone	158	6.962	6.962	0.000	84	236547	7.50	8.03	
84 1,4-Dinitrobenzene	168	7.020	7.020	0.000	90	103530	7.50	7.77	
85 Dimethyl phthalate	163	7.067	7.067	0.000	98	736783	7.50	7.67	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	82	119204	7.50	7.99	
87 2,6-Dinitrotoluene	165	7.119	7.119	0.000	93	161480	7.50	7.68	
88 Acenaphthylene	152	7.183	7.183	0.000	99	954134	7.50	7.67	
89 3-Nitroaniline	138	7.276	7.276	0.000	85	161703	7.50	7.66	
* 90 Acenaphthene-d10	164	7.317	7.317	0.000	95	346209	5.00	5.00	
91 Acenaphthene	153	7.346	7.346	0.000	95	641850	7.50	7.39	
92 2,4-Dinitrophenol	184	7.376	7.376	0.000	86	242634	17.5	17.7	
93 4-Nitrophenol	109	7.434	7.434	0.000	83	210732	15.0	15.0	
94 Pentachlorobenzene	250	7.469	7.469	0.000	98	300902	7.50	7.43	
95 2,4-Dinitrotoluene	165	7.498	7.498	0.000	90	222735	7.50	7.90	
96 Dibenzofuran	168	7.510	7.510	0.000	97	930385	7.50	7.60	
97 1-Naphthylamine	143	7.585	7.585	0.000	98	552835	7.50	7.78	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	71	211481	7.50	7.92	
99 2-Naphthylamine	143	7.661	7.661	0.000	95	601527	7.50	7.69	
100 Diethyl phthalate	149	7.737	7.737	0.000	98	697398	7.50	7.60	
101 Thionazin	107	7.813	7.813	0.000	78	111274	7.50	7.44	
102 Fluorene	166	7.836	7.836	0.000	93	700331	7.50	7.73	
103 4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	92	384173	7.50	7.75	
104 N-Nitro-o-toluidine	152	7.848	7.848	0.000	91	181470	7.50	7.81	
105 4-Nitroaniline	138	7.854	7.854	0.000	78	169183	7.50	7.75	
106 4,6-Dinitro-2-methylphenol	198	7.883	7.883	0.000	83	283943	15.0	15.3	
107 N-Nitrosodiphenylamine	169	7.953	7.953	0.000	63	528178	6.38	6.52	
108 1,2-Diphenylhydrazine	77	7.988	7.988	0.000	41	801528	7.50	7.72	
$ 109 2,4,6-Tribromophenol	330	8.063	8.063	0.000	93	223484	15.0	15.8	
110 Sulfotepp	97	8.104	8.104	0.000	75	130376	7.50	7.76	
112 1,3,5-Trinitrobenzene	213	8.197	8.197	0.000	83	81451	7.50	7.76	
113 cis-Diallate	86	8.227	8.227	0.000	0	227935	5.55	5.24	
114 Phorate	75	8.232	8.232	0.000	95	467385	7.50	7.71	
115 Phenacetin	108	8.244	8.244	0.000	89	346259	7.50	7.87	
116 4-Bromophenyl phenyl ether	248	8.302	8.302	0.000	63	233485	7.50	7.58	
117 trans-Diallate	86	8.314	8.314	0.000	0	84945	1.95	1.95	
118 Hexachlorobenzene	284	8.355	8.355	0.000	94	250096	7.50	7.43	
119 Dimethoate	87	8.390	8.390	0.000	95	275815	7.50	7.83	
120 Atrazine	200	8.460	8.460	0.000	92	206815	7.50	7.90	
121 Pentachlorophenol	266	8.541	8.541	0.000	93	317955	15.0	15.6	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	91	818571	7.50	7.70	
123 Pentachloronitrobenzene	237	8.553	8.553	0.000	85	116106	7.50	7.35	
124 Pronamide	173	8.605	8.605	0.000	89	327947	7.50	7.93	
125 Dinoseb	211	8.716	8.716	0.000	96	188468	7.50	7.79	
* 126 Phenanthrene-d10	188	8.722	8.722	0.000	97	677111	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	98	448036	7.50	6.95	
128 Phenanthrene	178	8.745	8.745	0.000	96	1075915	7.50	7.55	
129 Anthracene	178	8.792	8.792	0.000	97	1094323	7.50	7.61	
130 Carbazole	167	8.949	8.949	0.000	96	926703	7.50	7.65	
131 Methyl parathion	109	9.083	9.083	0.000	94	233903	7.50	8.00	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	100	1153698	7.50	7.84	
134 Ethyl Parathion	109	9.456	9.456	0.000	85	143448	7.50	7.82	
135 4-Nitroquinoline-1-oxide	190	9.480	9.480	0.000	92	96098	7.50	7.39	
S 136 Diallate	86				0		7.50	7.19	
140 Octachlorostyrene	308	9.695	9.695	0.000	89	102328	7.50	7.67	
141 Isodrin	193	9.730	9.730	0.000	94	126391	7.50	7.23	
143 Fluoranthene	202	9.876	9.876	0.000	97	1203431	7.50	7.71	
147 Benzidine	184	10.010	10.010	0.000	99	2220729	22.5	24.5	
* 149 Pyrene-d10 (IS)	212	10.068	10.068	0.000	98	711922	5.00	5.00	
150 Pyrene	202	10.086	10.086	0.000	98	1243924	7.50	7.45	
$ 152 p-Terphenyl-d14	244	10.249	10.249	0.000	97	1914640	15.0	15.4	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	94	220395	7.50	8.05	
155 Chlorobenzilate	139	10.441	10.441	0.000	93	337478	7.50	8.02	
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	99	709611	7.50	8.02	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	97	484059	7.50	7.97	
158 2-Acetylaminofluorene	181	11.007	11.007	0.000	94	391278	7.50	7.50	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	76	430362	7.50	8.04	
160 4,4'-Methylene bis(2-chloroani	231	11.351	11.351	0.000	95	238826	7.50	8.19	
161 Benzo[a]anthracene	228	11.362	11.362	0.000	97	1166248	7.50	7.86	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.403	11.403	0.000	96	1116366	7.50	7.64	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	97	666820	7.50	7.96	
164 6-Methylchrysene	242	11.969	11.969	0.000	97	746421	7.50	7.62	
165 Di-n-octyl phthalate	149	12.295	12.295	0.000	99	1103935	7.50	7.35	
166 7,12-Dimethylbenz(a)anthracene	256	12.755	12.755	0.000	71	440585	7.50	7.61	
167 Benzo[b]fluoranthene	252	12.755	12.755	0.000	96	1087730	7.50	7.51	
168 Benzo[k]fluoranthene	252	12.790	12.790	0.000	98	1100471	7.50	7.64	
169 Benzo[a]pyrene	252	13.210	13.210	0.000	76	1026672	7.50	7.71	
* 170 Perylene-d12	264	13.286	13.286	0.000	99	607315	5.00	5.00	
171 3-Methylcholanthrene	268	13.723	13.723	0.000	90	514716	7.50	7.44	
172 Dibenz[a,h]acridine	279	14.533	14.533	0.000	90	716276	7.50	7.67	
173 Dibenz[a,j]acridine	279	14.609	14.609	0.000	96	810251	7.50	7.77	
174 Indeno[1,2,3-cd]pyrene	276	14.883	14.883	0.000	98	888089	7.50	7.44	
175 Dibenz(a,h)anthracene	278	14.929	14.929	0.000	92	913785	7.50	7.52	
176 Benzo[g,h,i]perylene	276	15.326	15.326	0.000	98	919786	7.50	7.46	
S 178 Dinitrotoluene	165				0			15.6	
S 182 Isosafrole	162				0		7.50	7.54	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_5_00039 Amount Added: 1.00 Units: mL

Report Date: 27-Oct-2023 07:22:39 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2604.D

Injection Date: 26-Oct-2023 13:25:21 Instrument ID: HP19760 Operator ID: kel10217

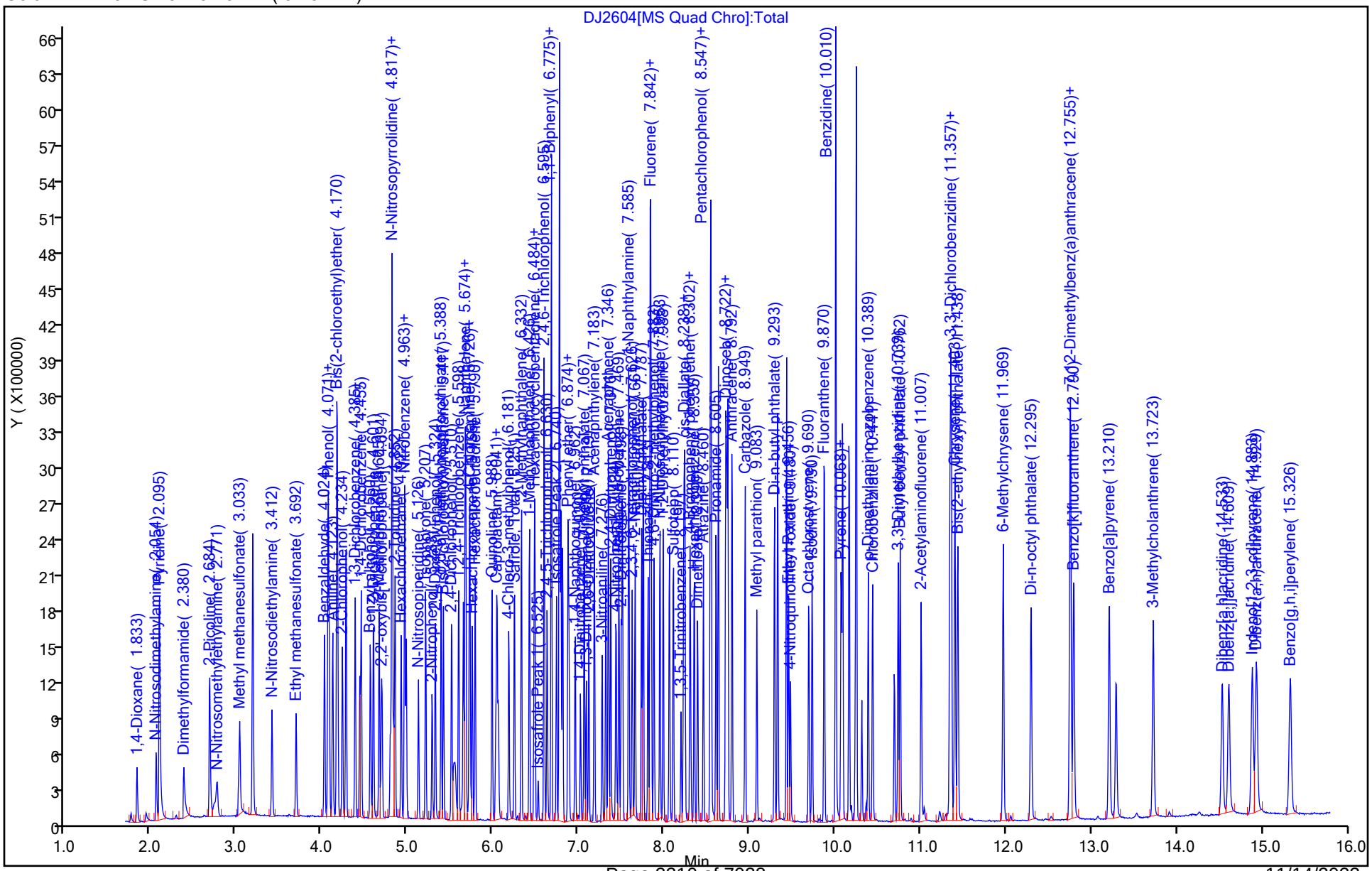
Lims ID: IC L5 Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

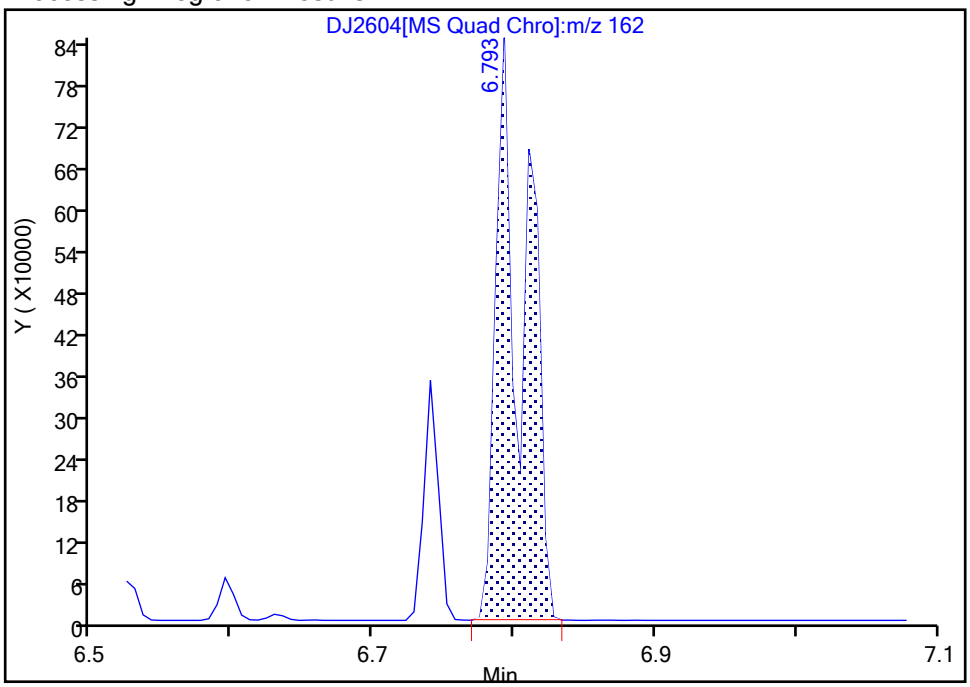
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2604.D				
Injection Date:	26-Oct-2023 13:25:21	Instrument ID:	HP19760		
Lims ID:	IC L5				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

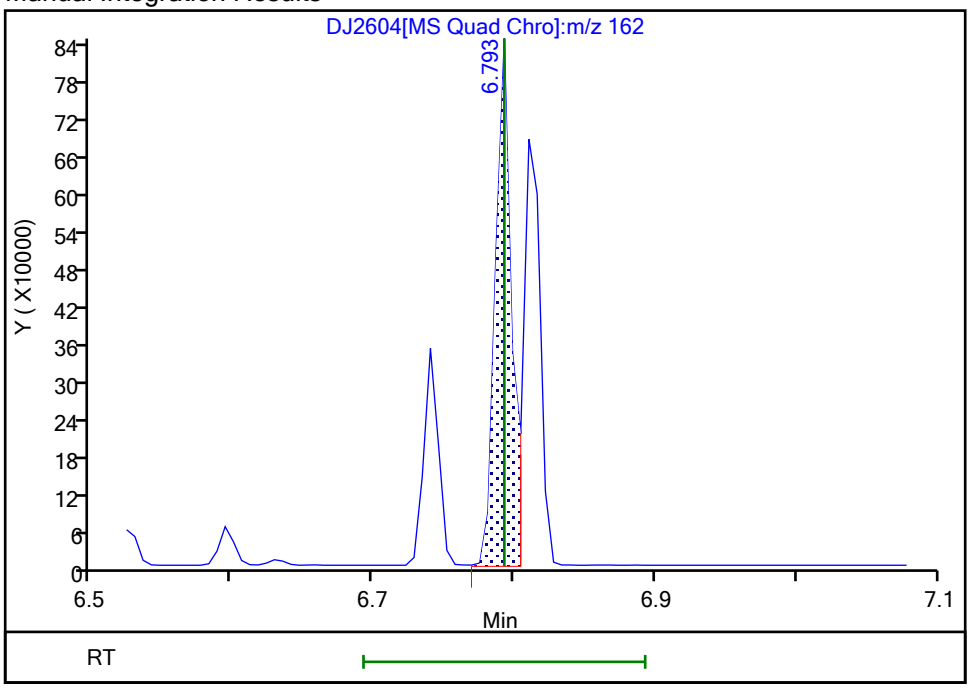
Processing Integration Results

RT: 6.79
Area: 1187012
Amount: 9.894175
Amount Units: ug/ml



Manual Integration Results

RT: 6.79
Area: 660290
Amount: 7.738516
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:35:11 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

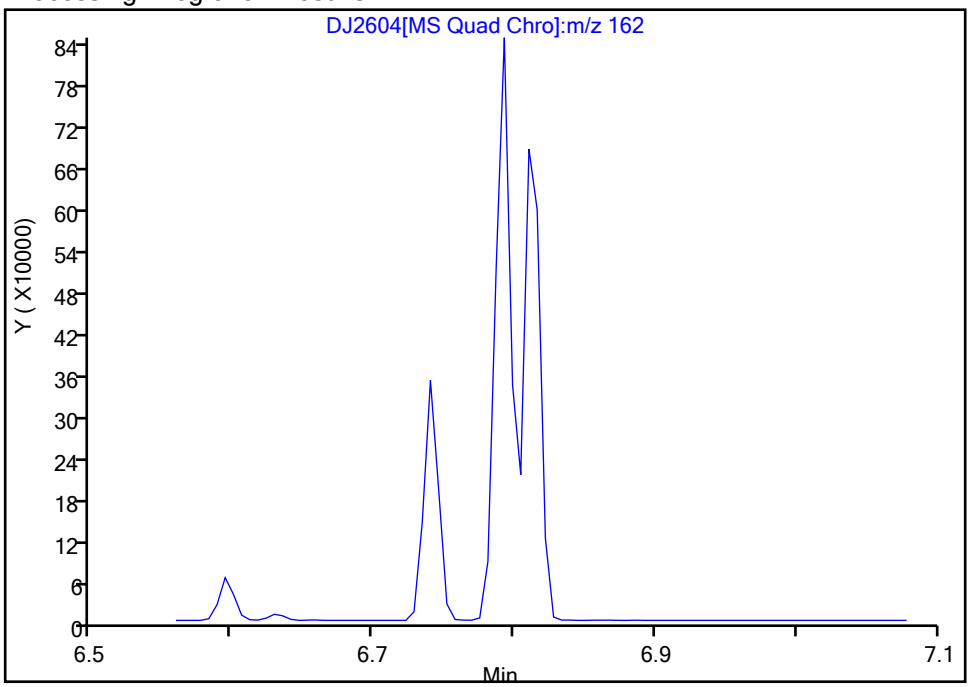
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2604.D				
Injection Date:	26-Oct-2023 13:25:21	Instrument ID:	HP19760		
Lims ID:	IC L5				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

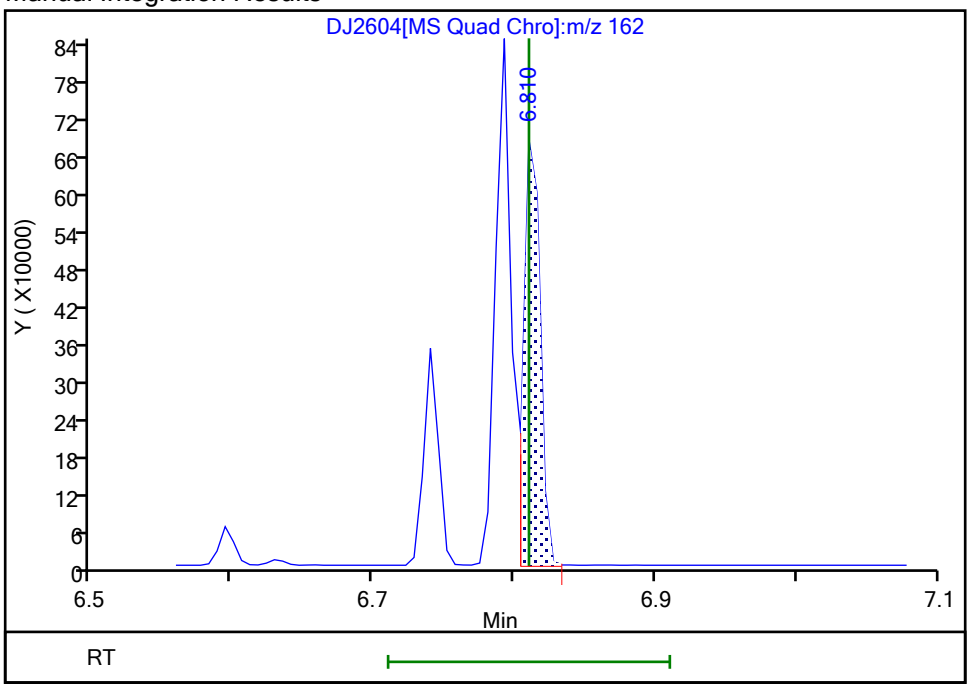
Not Detected
Expected RT: 6.81

Processing Integration Results



Manual Integration Results

RT: 6.81
Area: 526722
Amount: 7.213824
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:35:23 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2605.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 26-Oct-2023 13:46:05 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L4
Misc. Info.: 410-0097721-006
Operator ID: kel10217 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:22:57 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: N5QU Date: 26-Oct-2023 19:41:19

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 1,4-Dioxane	88	1.838	1.833	0.005	93	87438	3.75	3.81	
	3 N-Nitrosodimethylamine	74	2.066	2.054	0.012	96	150480	3.75	4.04	
	4 Pyridine	79	2.101	2.095	0.006	87	484731	7.50	8.14	
	6 Dimethylformamide	73	2.392	2.380	0.012	97	149451	3.75	3.77	
	7 2-Picoline	93	2.683	2.684	-0.001	89	242820	3.75	3.87	
	8 N-Nitrosomethylethylamine	88	2.771	2.771	0.000	98	109365	3.75	3.45	
	9 Methyl methanesulfonate	80	3.039	3.033	0.006	87	127529	3.75	3.76	
$	10 2-Fluorophenol	112	3.185	3.185	0.000	95	401756	7.50	8.00	
	11 N-Nitrosodiethylamine	102	3.412	3.412	0.000	89	100370	3.75	3.92	
	12 Ethyl methanesulfonate	109	3.692	3.692	0.000	98	108579	3.75	3.84	
	15 Benzaldehyde	77	4.024	4.024	0.000	93	186640	3.75	4.19	
$	16 Phenol-d5	99	4.065	4.071	-0.006	94	535375	7.50	7.83	
	17 Phenol	94	4.082	4.082	0.000	94	285086	3.75	3.94	
	18 Aniline	93	4.123	4.123	0.000	95	336045	3.75	4.06	
	19 Bis(2-chloroethyl)ether	93	4.181	4.181	0.000	90	229906	3.75	3.83	
	20 2-Chlorophenol	128	4.234	4.234	0.000	92	201804	3.75	3.94	
	21 1,3-Dichlorobenzene	146	4.385	4.385	0.000	96	242450	3.75	3.89	
*	22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	97	198321	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.455	4.455	0.000	93	245355	3.75	3.91	
	25 Benzyl alcohol	108	4.560	4.560	0.000	90	127594	3.75	3.74	
	26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	231351	3.75	3.95	
	28 2-Methylphenol	108	4.665	4.665	0.000	97	191215	3.75	3.91	
	29 2,2'-oxybis[1-chloropropane]	45	4.694	4.694	0.000	94	378749	3.75	3.85	
	31 N-Nitrosopyrrolidine	100	4.793	4.793	0.000	88	107076	3.75	3.98	
	32 4-Methylphenol	108	4.811	4.811	0.000	96	201138	3.75	4.04	
	34 Acetophenone	105	4.817	4.817	0.000	84	311991	3.75	3.90	
	33 N-Nitrosodi-n-propylamine	70	4.817	4.817	0.000	86	179058	3.75	3.86	
	35 N-Nitrosomorpholine	56	4.834	4.834	0.000	92	175350	3.75	3.91	
	36 2-Toluidine	106	4.852	4.852	0.000	94	345690	3.75	4.15	
	38 Hexachloroethane	117	4.922	4.922	0.000	90	90070	3.75	3.67	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.962	4.963	0.000	91	502109	7.50	7.64	
40 Nitrobenzene	77	4.980	4.980	0.000	90	257213	3.75	3.73	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	83	102884	3.75	3.85	
43 Isophorone	82	5.207	5.207	0.000	96	456602	3.75	3.79	
44 2-Nitrophenol	139	5.283	5.283	0.000	91	106894	3.75	3.99	
45 2,4-Dimethylphenol	107	5.324	5.324	0.000	98	180887	3.75	3.93	
46 o,o',o''-Triethylphosphorothioat	198	5.388	5.394	-0.006	85	118140	3.75	3.88	
47 Bis(2-chloroethoxy)methane	93	5.417	5.417	0.000	94	265391	3.75	3.84	
48 2,4-Dichlorophenol	162	5.510	5.510	0.000	96	173564	3.75	3.90	
49 1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	94	201057	3.75	3.79	
* 50 Naphthalene-d8	136	5.650	5.650	0.000	99	700285	5.00	5.00	
51 Naphthalene	128	5.668	5.674	-0.006	97	592497	3.75	3.86	
52 Alpha-Terpineol	59	5.679	5.679	0.000	92	229797	3.75	3.90	
53 4-Chloroaniline	127	5.720	5.720	0.000	93	240420	3.75	4.04	
54 2,6-Dichlorophenol	162	5.726	5.726	0.000	94	175487	3.75	3.80	
55 Hexachloropropene	213	5.755	5.755	0.000	85	157913	3.75	3.89	
56 Hexachlorobutadiene	225	5.790	5.790	0.000	93	135319	3.75	3.79	
60 Quinoline	129	5.988	5.988	0.000	95	365989	3.75	3.84	
61 Caprolactam	113	6.029	6.035	-0.006	71	52234	3.75	3.83	
62 N-Nitrosodi-n-butylamine	84	6.041	6.041	0.000	92	210800	3.75	3.81	
63 p-Phenylene diamine	108	6.058	6.058	0.000	93	196304	3.75	4.11	
64 4-Chloro-3-methylphenol	107	6.181	6.181	0.000	95	177197	3.75	3.93	
65 Safrole, Total	162	6.251	6.251	0.000	88	154892	3.75	3.81	
66 2-Methylnaphthalene	142	6.332	6.332	0.000	90	379853	3.75	3.90	
67 1-Methylnaphthalene	142	6.425	6.426	-0.001	92	344301	3.75	3.79	
68 Hexachlorocyclopentadiene	237	6.478	6.478	0.000	93	126763	3.75	4.09	
69 1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	96	230817	3.75	3.80	
70 Isosafrole Peak 1	162	6.525	6.525	0.000	89	27453	0.6000	0.6139	
71 2,4,6-Trichlorophenol	196	6.594	6.595	-0.001	80	132691	3.75	3.98	
72 2,4,5-Trichlorophenol	196	6.629	6.630	-0.001	94	147583	3.75	4.16	
$ 73 2-Fluorobiphenyl (Surr)	172	6.682	6.682	0.000	100	893240	7.50	7.62	
74 Isosafrole Peak 2	162	6.740	6.740	0.000	91	158966	3.15	3.30	
75 1,1'-Biphenyl	154	6.775	6.775	0.000	93	494612	3.75	3.89	
76 2-Chloronaphthalene	162	6.793	6.793	0.000	94	418080	3.75	4.05	M
77 1-Chloronaphthalene	162	6.810	6.810	0.000	99	327952	3.75	3.71	Ma
78 Phenyl ether	170	6.874	6.874	0.000	86	277030	3.75	3.95	
79 2-Nitroaniline	138	6.886	6.886	0.000	77	119864	3.75	4.12	
81 1,4-Naphthoquinone	158	6.962	6.962	0.000	85	145578	3.75	4.08	
84 1,4-Dinitrobenzene	168	7.020	7.020	0.000	91	61555	3.75	3.81	
85 Dimethyl phthalate	163	7.067	7.067	0.000	98	452857	3.75	3.89	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	84	72881	3.75	4.03	
87 2,6-Dinitrotoluene	165	7.119	7.119	0.000	92	97389	3.75	3.83	
88 Acenaphthylene	152	7.183	7.183	0.000	99	586955	3.75	3.90	
89 3-Nitroaniline	138	7.276	7.276	0.000	85	100085	3.75	3.92	
* 90 Acenaphthene-d10	164	7.317	7.317	0.000	95	419338	5.00	5.00	
91 Acenaphthene	153	7.346	7.346	0.000	96	399253	3.75	3.80	
92 2,4-Dinitrophenol	184	7.376	7.376	0.000	85	181745	11.3	10.9	
93 4-Nitrophenol	109	7.434	7.434	0.000	84	123049	7.50	7.23	
94 Pentachlorobenzene	250	7.469	7.469	0.000	98	184445	3.75	3.76	
95 2,4-Dinitrotoluene	165	7.498	7.498	0.000	91	136706	3.75	4.00	
96 Dibenzofuran	168	7.510	7.510	0.000	96	579482	3.75	3.91	
97 1-Naphthylamine	143	7.585	7.585	0.000	98	347411	3.75	4.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	71	125967	3.75	3.90	
99 2-Naphthylamine	143	7.661	7.661	0.000	95	374995	3.75	3.96	
100 Diethyl phthalate	149	7.737	7.737	0.000	98	430341	3.75	3.87	
101 Thionazin	107	7.813	7.813	0.000	78	68721	3.75	3.79	
102 Fluorene	166	7.836	7.836	0.000	93	438250	3.75	4.00	
103 4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	91	236833	3.75	3.94	
104 N-Nitro-o-toluidine	152	7.848	7.848	0.000	88	113569	3.75	4.04	
105 4-Nitroaniline	138	7.848	7.854	-0.006	77	106037	3.75	4.01	
106 4,6-Dinitro-2-methylphenol	198	7.883	7.883	0.000	84	175333	7.50	7.83	
107 N-Nitrosodiphenylamine	169	7.953	7.953	0.000	62	329367	3.19	3.37	
108 1,2-Diphenylhydrazine	77	7.988	7.988	0.000	41	490968	3.75	3.92	
$ 109 2,4,6-Tribromophenol	330	8.063	8.063	0.000	93	138715	7.50	8.11	
110 Sulfotepp	97	8.104	8.104	0.000	75	79195	3.75	3.91	
112 1,3,5-Trinitrobenzene	213	8.197	8.197	0.000	83	49825	3.75	3.94	
113 cis-Diallate	86	8.227	8.227	-0.001	0	136573	2.78	2.60	
114 Phorate	75	8.232	8.232	0.000	95	287980	3.75	3.94	
115 Phenacetin	108	8.244	8.244	0.000	91	214637	3.75	4.04	
116 4-Bromophenyl phenyl ether	248	8.302	8.302	0.000	64	146174	3.75	3.93	
117 trans-Diallate	86	8.308	8.314	-0.006	0	52722	0.9750	1.00	
118 Hexachlorobenzene	284	8.355	8.355	0.000	94	151777	3.75	3.74	
119 Dimethoate	87	8.390	8.390	0.000	97	174981	3.75	4.12	
120 Atrazine	200	8.460	8.460	0.000	92	124918	3.75	3.96	
121 Pentachlorophenol	266	8.541	8.541	0.000	92	192134	7.50	7.80	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	91	514851	3.75	4.02	
123 Pentachloronitrobenzene	237	8.547	8.553	-0.006	85	72056	3.75	3.78	
124 Pronamide	173	8.605	8.605	0.000	89	202172	3.75	4.06	
125 Dinoseb	211	8.716	8.716	0.000	95	109454	3.75	3.75	
* 126 Phenanthrene-d10	188	8.722	8.722	0.000	98	816649	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	97	286847	3.75	3.69	
128 Phenanthrene	178	8.745	8.745	0.000	96	668075	3.75	3.89	
129 Anthracene	178	8.792	8.792	0.000	97	698981	3.75	4.03	
130 Carbazole	167	8.949	8.949	0.000	96	577262	3.75	3.95	
131 Methyl parathion	109	9.083	9.083	0.000	94	142762	3.75	4.05	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	100	700660	3.75	3.95	
134 Ethyl Parathion	109	9.456	9.456	0.000	85	86748	3.75	3.92	
135 4-Nitroquinoline-1-oxide	190	9.480	9.480	0.000	91	53762	3.75	3.43	
S 136 Diallate	86				0		3.75	3.61	
140 Octachlorostyrene	308	9.689	9.695	-0.006	88	64222	3.75	3.99	
141 Isodrin	193	9.730	9.730	0.000	94	77630	3.75	3.68	
143 Fluoranthene	202	9.870	9.876	-0.006	97	737022	3.75	3.91	
147 Benzidine	184	10.010	10.010	0.000	99	1373895	11.3	12.3	
* 149 Pyrene-d10 (IS)	212	10.068	10.068	0.000	98	878009	5.00	5.00	
150 Pyrene	202	10.086	10.086	0.000	98	787180	3.75	3.82	
$ 152 p-Terphenyl-d14	244	10.249	10.249	0.000	97	1198151	7.50	7.80	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	94	133589	3.75	3.95	
155 Chlorobenzilate	139	10.436	10.441	-0.005	93	211886	3.75	4.08	
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	99	437700	3.75	4.01	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	97	296542	3.75	3.96	
158 2-Acetylaminofluorene	181	11.007	11.007	0.000	93	227342	3.75	3.53	
159 3,3'-Dichlorobenzidine	252	11.339	11.345	-0.006	72	264814	3.75	4.01	
160 4,4'-Methylene bis(2-chloroani	231	11.351	11.351	0.000	95	142579	3.75	3.96	
161 Benzo[a]anthracene	228	11.362	11.362	0.000	97	712578	3.75	3.89	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.403	11.403	0.000	96	702037	3.75	3.90	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	97	415344	3.75	4.02	
164 6-Methylchrysene	242	11.968	11.969	-0.001	98	468778	3.75	3.88	
165 Di-n-octyl phthalate	149	12.295	12.295	0.000	99	668395	3.75	3.66	
166 7,12-Dimethylbenz(a)anthracene	256	12.750	12.755	-0.005	72	274263	3.75	3.89	
167 Benzo[b]fluoranthene	252	12.750	12.755	-0.005	96	676246	3.75	3.84	
168 Benzo[k]fluoranthene	252	12.790	12.790	0.000	98	679185	3.75	3.87	
169 Benzo[a]pyrene	252	13.210	13.210	0.000	76	619782	3.75	3.82	
* 170 Perylene-d12	264	13.286	13.286	0.000	99	739094	5.00	5.00	
171 3-Methylcholanthrene	268	13.723	13.723	0.000	90	323335	3.75	3.84	
172 Dibenz[a,h]acridine	279	14.527	14.533	-0.006	90	441145	3.75	3.88	
173 Dibenz[a,j]acridine	279	14.603	14.609	-0.006	96	503095	3.75	3.96	
174 Indeno[1,2,3-cd]pyrene	276	14.883	14.883	0.000	98	548937	3.75	3.78	
175 Dibenz(a,h)anthracene	278	14.929	14.929	0.000	92	551398	3.75	3.73	
176 Benzo[g,h,i]perylene	276	15.320	15.326	-0.006	98	575092	3.75	3.83	
S 178 Dinitrotoluene	165				0			7.83	
S 182 Isosafrole	162				0		3.75	3.92	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_4_00030 Amount Added: 1.00 Units: mL

Report Date: 27-Oct-2023 07:22:57 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2605.D

Injection Date: 26-Oct-2023 13:46:05 Instrument ID: HP19760 Operator ID: kel10217

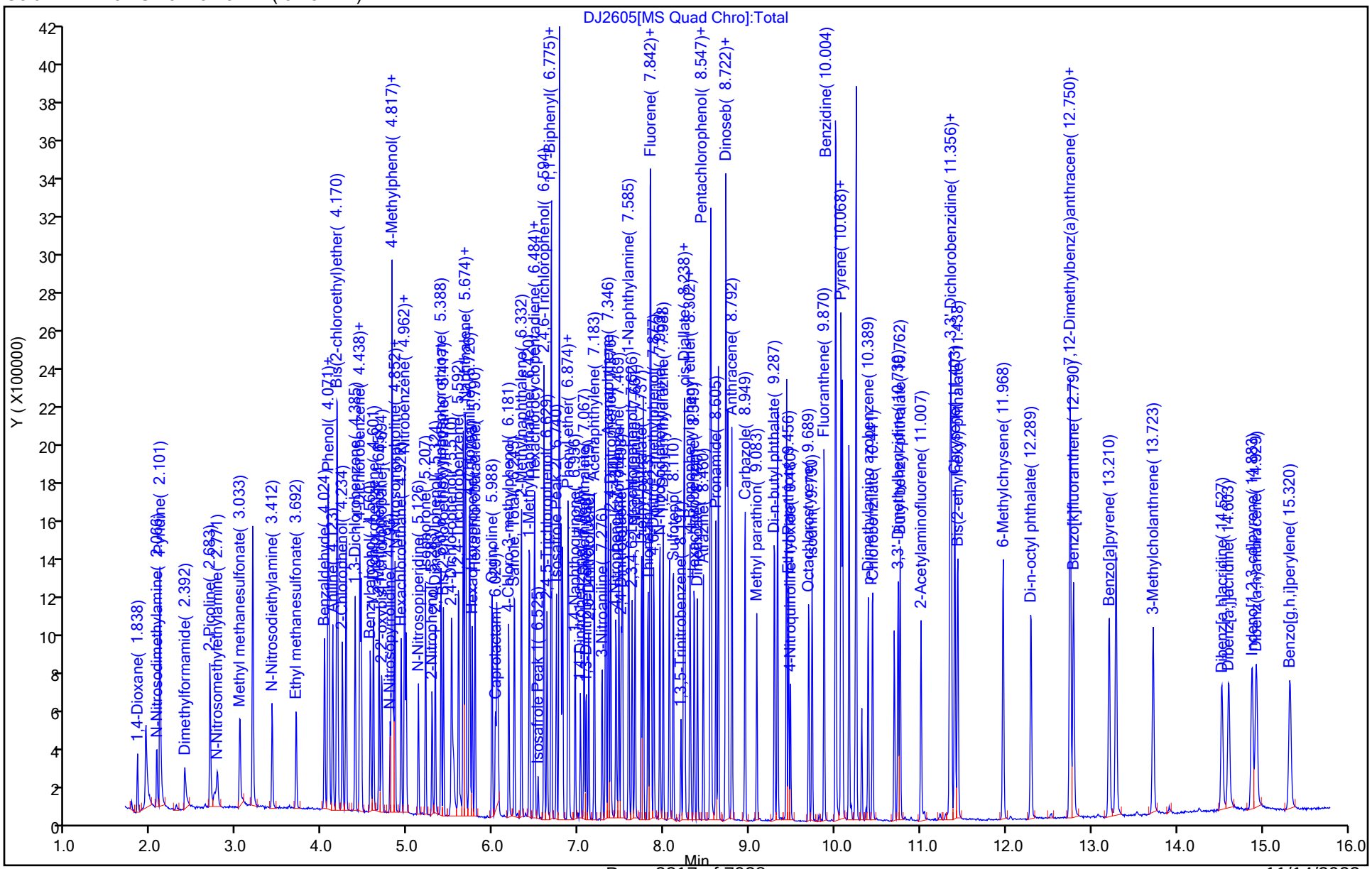
Lims ID: IC L4 Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

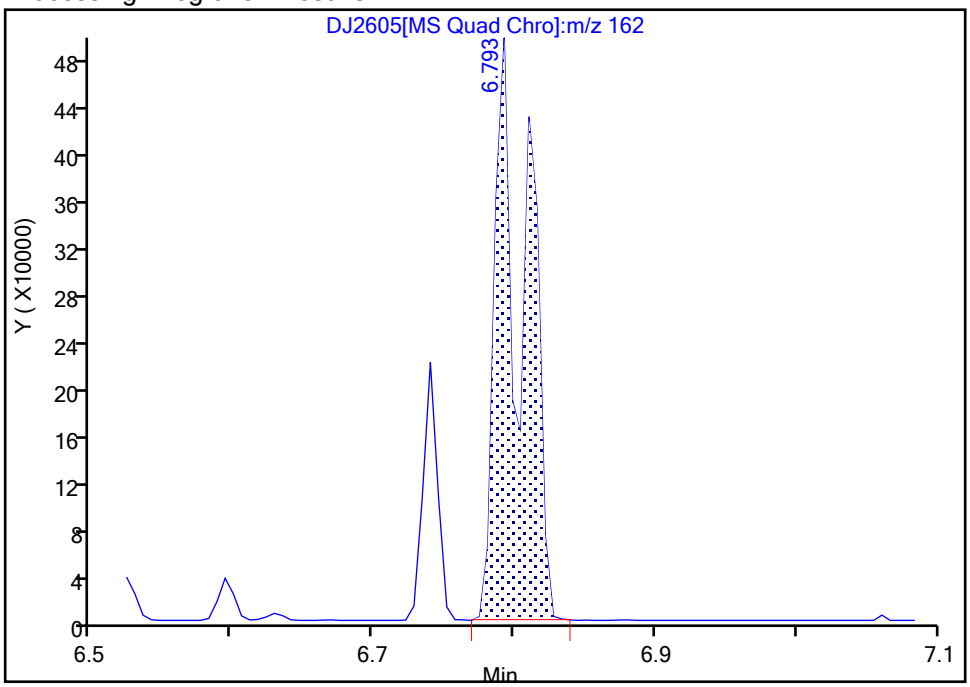
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2605.D				
Injection Date:	26-Oct-2023 13:46:05	Instrument ID:	HP19760		
Lims ID:	IC L4				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

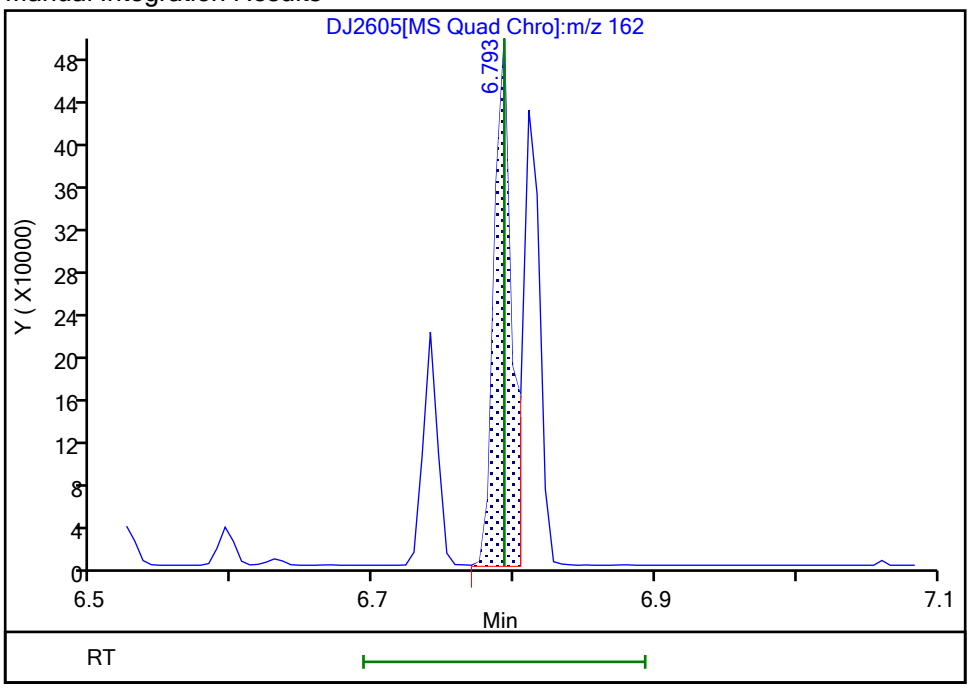
Processing Integration Results

RT: 6.79
Area: 746032
Amount: 5.539336
Amount Units: ug/ml



Manual Integration Results

RT: 6.79
Area: 418080
Amount: 4.045354
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:38:30 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

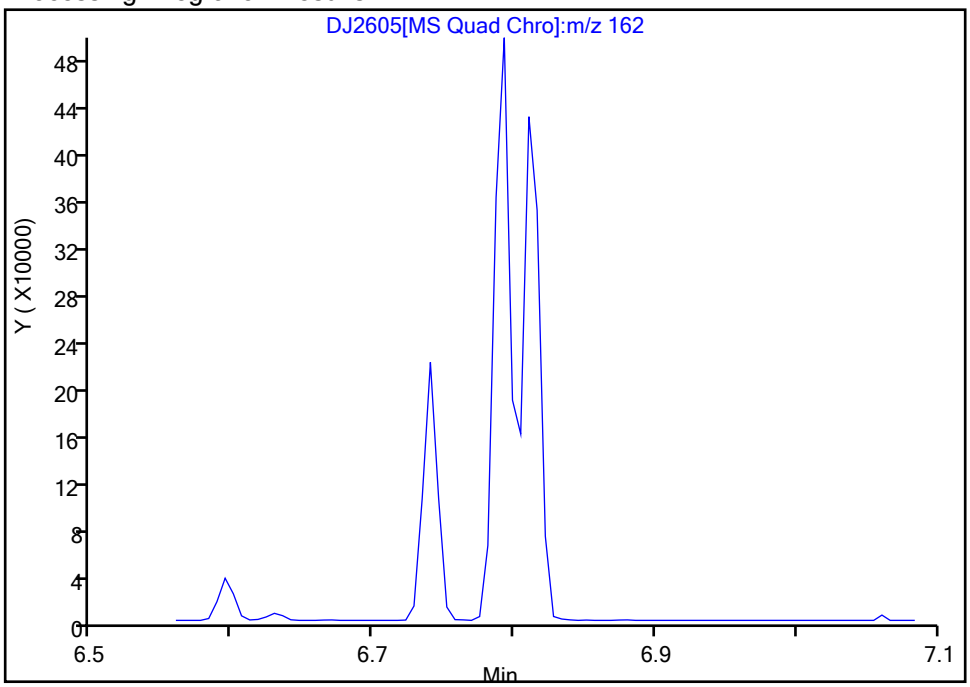
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2605.D				
Injection Date:	26-Oct-2023 13:46:05	Instrument ID:	HP19760		
Lims ID:	IC L4				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

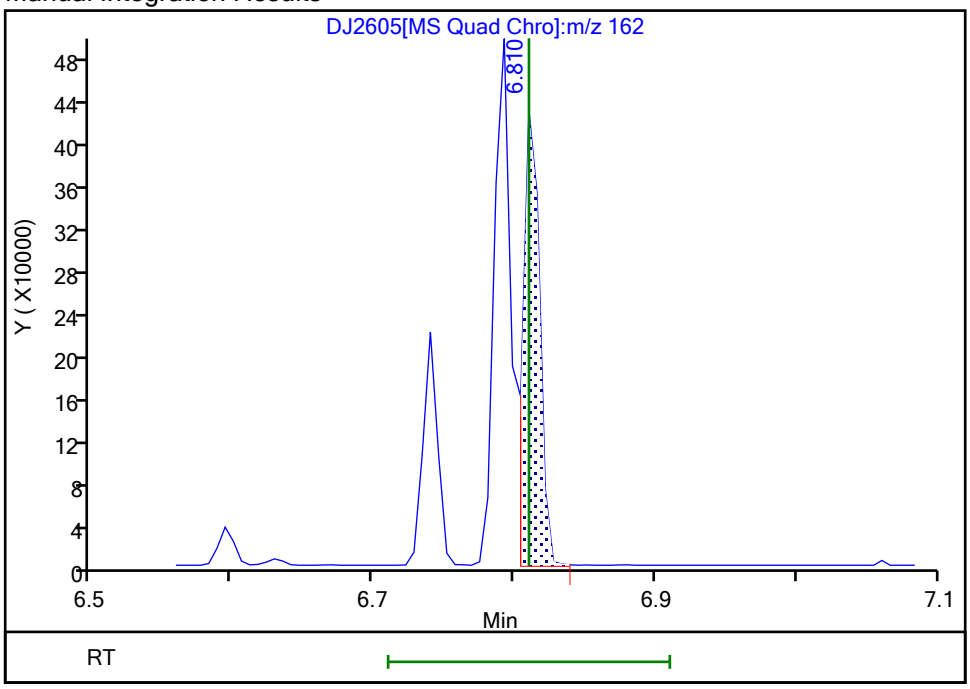
Not Detected
Expected RT: 6.81

Processing Integration Results



Manual Integration Results

RT: 6.81
Area: 327952
Amount: 3.708246
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:38:45 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2606.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Oct-2023 14:06:46 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 410-0097721-007
Operator ID: kel10217 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:23:14 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: N5QU Date: 26-Oct-2023 19:46:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.833	1.833	0.000	89	25378	1.25	1.19	
3 N-Nitrosodimethylamine	74	2.060	2.054	0.006	96	43063	1.25	1.24	
4 Pyridine	79	2.101	2.095	0.006	86	142234	2.50	2.57	
6 Dimethylformamide	73	2.404	2.380	0.024	97	38358	1.25	1.04	
7 2-Picoline	93	2.684	2.684	0.000	90	73213	1.25	1.26	
8 N-Nitrosomethylethylamine	88	2.771	2.771	0.000	93	50925	1.25	1.45	
9 Methyl methanesulfonate	80	3.033	3.033	0.000	86	39619	1.25	1.26	
$ 10 2-Fluorophenol	112	3.185	3.185	0.000	95	121104	2.50	2.59	
11 N-Nitrosodiethylamine	102	3.412	3.412	0.000	90	30099	1.25	1.26	
12 Ethyl methanesulfonate	109	3.692	3.692	0.000	97	30866	1.25	1.17	
15 Benzaldehyde	77	4.024	4.024	0.000	92	45950	1.25	1.11	
$ 16 Phenol-d5	99	4.065	4.071	-0.006	95	157948	2.50	2.48	
17 Phenol	94	4.077	4.082	-0.005	93	86872	1.25	1.29	
18 Aniline	93	4.117	4.123	-0.006	93	97419	1.25	1.27	
19 Bis(2-chloroethyl)ether	93	4.182	4.181	0.001	91	69804	1.25	1.25	
20 2-Chlorophenol	128	4.234	4.234	0.000	91	58756	1.25	1.23	
21 1,3-Dichlorobenzene	146	4.386	4.385	0.001	96	76140	1.25	1.31	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	97	184525	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.455	4.455	0.000	95	74312	1.25	1.27	
25 Benzyl alcohol	108	4.560	4.560	0.000	88	35014	1.25	1.10	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	94	69310	1.25	1.27	
28 2-Methylphenol	108	4.665	4.665	0.000	96	57357	1.25	1.26	
29 2,2'-oxybis[1-chloropropane]	45	4.694	4.694	0.000	93	116495	1.25	1.27	
31 N-Nitrosopyrrolidine	100	4.794	4.793	0.001	89	31626	1.25	1.26	
32 4-Methylphenol	108	4.811	4.811	0.000	95	58377	1.25	1.26	
34 Acetophenone	105	4.817	4.817	0.000	84	97754	1.25	1.31	
33 N-Nitrosodi-n-propylamine	70	4.817	4.817	0.000	82	53935	1.25	1.25	
35 N-Nitrosomorpholine	56	4.834	4.834	0.000	92	53021	1.25	1.27	
36 2-Toluidine	106	4.852	4.852	0.000	95	99630	1.25	1.29	
38 Hexachloroethane	117	4.922	4.922	0.000	88	27340	1.25	1.20	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.963	4.963	0.001	91	151036	2.50	2.51	
40 Nitrobenzene	77	4.980	4.980	0.000	91	75312	1.25	1.20	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	85	29415	1.25	1.20	
43 Isophorone	82	5.207	5.207	0.000	96	135692	1.25	1.23	
44 2-Nitrophenol	139	5.283	5.283	0.000	89	29671	1.25	1.21	
45 2,4-Dimethylphenol	107	5.324	5.324	0.000	98	51815	1.25	1.23	
46 o,o',o''-Triethylphosphorothioat	198	5.388	5.394	-0.006	84	35491	1.25	1.28	
47 Bis(2-chloroethoxy)methane	93	5.417	5.417	0.000	95	80202	1.25	1.27	
48 2,4-Dichlorophenol	162	5.510	5.510	0.000	93	53338	1.25	1.31	
49 1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	93	60239	1.25	1.24	
* 50 Naphthalene-d8	136	5.650	5.650	0.000	99	639802	5.00	5.00	
51 Naphthalene	128	5.668	5.674	-0.006	97	178265	1.25	1.27	
52 Alpha-Terpineol	59	5.679	5.679	0.000	92	67412	1.25	1.25	
53 4-Chloroaniline	127	5.720	5.720	0.000	92	68942	1.25	1.27	
54 2,6-Dichlorophenol	162	5.726	5.726	0.000	92	52783	1.25	1.25	
55 Hexachloropropene	213	5.755	5.755	0.000	85	46397	1.25	1.25	
56 Hexachlorobutadiene	225	5.790	5.790	0.000	92	41146	1.25	1.26	
60 Quinoline	129	5.988	5.988	0.000	96	107450	1.25	1.23	
61 Caprolactam	113	6.023	6.035	-0.012	73	13593	1.25	1.09	
62 N-Nitrosodi-n-butylamine	84	6.041	6.041	0.000	92	50536	1.25	1.00	
63 p-Phenylene diamine	108	6.053	6.058	-0.006	92	55776	1.25	1.28	
64 4-Chloro-3-methylphenol	107	6.181	6.181	0.000	93	51015	1.25	1.24	
65 Safrole, Total	162	6.251	6.251	0.000	90	46335	1.25	1.25	
66 2-Methylnaphthalene	142	6.332	6.332	0.000	90	113048	1.25	1.27	
67 1-Methylnaphthalene	142	6.426	6.426	0.000	92	105154	1.25	1.27	
68 Hexachlorocyclopentadiene	237	6.478	6.478	0.000	93	36598	1.25	1.28	
69 1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	97	68673	1.25	1.22	
70 Isosafrole Peak 1	162	6.525	6.525	0.000	85	8168	0.2000	0.1980	
71 2,4,6-Trichlorophenol	196	6.595	6.595	0.000	79	37475	1.25	1.22	
72 2,4,5-Trichlorophenol	196	6.630	6.630	0.000	93	41161	1.25	1.26	
$ 73 2-Fluorobiphenyl (Surr)	172	6.682	6.682	0.000	99	275505	2.50	2.55	
74 Isosafrole Peak 2	162	6.740	6.740	0.000	90	46003	1.05	1.04	
75 1,1'-Biphenyl	154	6.775	6.775	0.000	93	150391	1.25	1.28	
76 2-Chloronaphthalene	162	6.793	6.793	0.000	93	109893	1.25	1.15	
77 1-Chloronaphthalene	162	6.810	6.810	0.000	98	115613	1.25	1.42	
78 Phenyl ether	170	6.874	6.874	0.000	88	81253	1.25	1.25	
79 2-Nitroaniline	138	6.886	6.886	0.000	77	32921	1.25	1.23	
81 1,4-Naphthoquinone	158	6.956	6.962	-0.006	87	42406	1.25	1.29	
84 1,4-Dinitrobenzene	168	7.020	7.020	0.000	93	18034	1.25	1.21	
85 Dimethyl phthalate	163	7.061	7.067	-0.006	98	135560	1.25	1.26	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	83	21577	1.25	1.29	
87 2,6-Dinitrotoluene	165	7.119	7.119	0.000	91	28284	1.25	1.20	
88 Acenaphthylene	152	7.183	7.183	0.000	98	168816	1.25	1.21	
89 3-Nitroaniline	138	7.277	7.276	0.001	87	28249	1.25	1.20	
* 90 Acenaphthene-d10	164	7.317	7.317	0.000	94	386850	5.00	5.00	
91 Acenaphthene	153	7.346	7.346	0.000	95	117803	1.25	1.21	
92 2,4-Dinitrophenol	184	7.376	7.376	0.000	85	59612	5.00	3.89	
93 4-Nitrophenol	109	7.434	7.434	0.000	83	52145	3.75	3.32	
94 Pentachlorobenzene	250	7.469	7.469	0.000	98	56769	1.25	1.26	
95 2,4-Dinitrotoluene	165	7.498	7.498	0.000	90	39525	1.25	1.25	
96 Dibenzofuran	168	7.510	7.510	0.000	97	172342	1.25	1.26	
97 1-Naphthylamine	143	7.585	7.585	0.000	98	100337	1.25	1.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	71	36262	1.25	1.22	
99 2-Naphthylamine	143	7.661	7.661	0.000	96	110501	1.25	1.26	
100 Diethyl phthalate	149	7.731	7.737	-0.006	98	128793	1.25	1.26	
101 Thionazin	107	7.807	7.813	-0.006	77	19547	1.25	1.17	
102 Fluorene	166	7.836	7.836	0.000	92	130248	1.25	1.29	
103 4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	90	69328	1.25	1.25	
104 N-Nitro-o-toluidine	152	7.842	7.848	-0.006	81	32809	1.25	1.26	
105 4-Nitroaniline	138	7.848	7.854	-0.006	78	31194	1.25	1.28	
106 4,6-Dinitro-2-methylphenol	198	7.877	7.883	-0.006	83	69827	3.75	3.44	
107 N-Nitrosodiphenylamine	169	7.947	7.953	-0.006	63	96395	1.06	1.09	
108 1,2-Diphenylhydrazine	77	7.988	7.988	0.000	41	145721	1.25	1.28	
$ 109 2,4,6-Tribromophenol	330	8.063	8.063	0.000	93	39615	2.50	2.51	
110 Sulfotepp	97	8.104	8.104	0.000	76	22861	1.25	1.25	
112 1,3,5-Trinitrobenzene	213	8.197	8.197	0.000	82	11772	1.25	1.03	
113 cis-Diallate	86	8.227	8.227	0.000	0	43103	0.9250	0.9076	
114 Phorate	75	8.232	8.232	0.000	94	81558	1.25	1.23	
115 Phenacetin	108	8.238	8.244	-0.006	88	58685	1.25	1.22	
116 4-Bromophenyl phenyl ether	248	8.302	8.302	0.000	64	44115	1.25	1.31	
117 trans-Diallate	86	8.308	8.314	-0.006	0	17246	0.3250	0.3625	
118 Hexachlorobenzene	284	8.349	8.355	-0.006	95	46854	1.25	1.27	
119 Dimethoate	87	8.390	8.390	0.000	94	48741	1.25	1.27	
120 Atrazine	200	8.460	8.460	0.000	91	32094	1.25	1.12	
121 Pentachlorophenol	266	8.541	8.541	0.000	93	52572	2.50	2.36	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	90	142978	1.25	1.23	
123 Pentachloronitrobenzene	237	8.553	8.553	0.000	86	21806	1.25	1.26	
124 Pronamide	173	8.605	8.605	0.000	90	54849	1.25	1.21	
125 Dinoseb	211	8.716	8.716	0.000	95	28970	1.25	1.10	
* 126 Phenanthrene-d10	188	8.722	8.722	0.000	97	739644	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	97	87811	1.25	1.25	
128 Phenanthrene	178	8.745	8.745	0.000	97	201598	1.25	1.30	
129 Anthracene	178	8.792	8.792	0.000	97	198970	1.25	1.27	
130 Carbazole	167	8.949	8.949	0.000	96	171392	1.25	1.29	
131 Methyl parathion	109	9.083	9.083	0.000	94	39791	1.25	1.25	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	99	198924	1.25	1.24	
134 Ethyl Parathion	109	9.456	9.456	0.000	83	23313	1.25	1.16	
135 4-Nitroquinoline-1-oxide	190	9.480	9.480	0.000	84	11817	1.25	0.8323	
S 136 Diallate	86				0		1.25	1.27	
140 Octachlorostyrene	308	9.695	9.695	0.000	91	18161	1.25	1.25	
141 Isodrin	193	9.730	9.730	0.000	92	24654	1.25	1.29	
143 Fluoranthene	202	9.870	9.876	-0.006	97	212571	1.25	1.25	
147 Benzidine	184	10.004	10.010	-0.006	99	381106	3.75	3.80	
* 149 Pyrene-d10 (IS)	212	10.068	10.068	0.000	97	786261	5.00	5.00	
150 Pyrene	202	10.086	10.086	0.000	98	240454	1.25	1.30	
$ 152 p-Terphenyl-d14	244	10.249	10.249	0.000	97	353708	2.50	2.57	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	93	34975	1.25	1.16	
155 Chlorobenzilate	139	10.441	10.441	0.000	94	54396	1.25	1.17	
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	98	109279	1.25	1.12	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	97	79011	1.25	1.18	
158 2-Acetylaminofluorene	181	11.007	11.007	0.000	93	56666	1.25	0.9832	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	74	68534	1.25	1.16	
160 4,4'-Methylene bis(2-chloroani	231	11.351	11.351	0.000	95	39645	1.25	1.23	
161 Benzo[a]anthracene	228	11.357	11.362	-0.005	97	201636	1.25	1.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.403	11.403	0.000	96	205529	1.25	1.27	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	97	111386	1.25	1.20	
164 6-Methylchrysene	242	11.969	11.969	0.000	98	126818	1.25	1.17	
165 Di-n-octyl phthalate	149	12.295	12.295	0.000	99	169496	1.25	1.09	
166 7,12-Dimethylbenz(a)anthracene	256	12.750	12.755	-0.005	68	70059	1.25	1.17	
167 Benzo[b]fluoranthene	252	12.750	12.755	-0.005	96	191119	1.25	1.28	
168 Benzo[k]fluoranthene	252	12.790	12.790	0.000	97	187578	1.25	1.26	
169 Benzo[a]pyrene	252	13.204	13.210	-0.006	76	169806	1.25	1.23	
* 170 Perylene-d12	264	13.292	13.286	0.006	99	627742	5.00	5.00	
171 3-Methylcholanthrene	268	13.723	13.723	0.000	90	83521	1.25	1.17	
172 Dibenz[a,h]acridine	279	14.527	14.533	-0.006	90	118589	1.25	1.23	
173 Dibenz[a,j]acridine	279	14.609	14.609	0.000	95	127897	1.25	1.19	
174 Indeno[1,2,3-cd]pyrene	276	14.877	14.883	-0.006	98	147955	1.25	1.20	
175 Dibenz(a,h)anthracene	278	14.930	14.929	0.001	92	154216	1.25	1.23	
176 Benzo[g,h,i]perylene	276	15.320	15.326	-0.006	98	155306	1.25	1.22	
S 178 Dinitrotoluene	165				0			2.46	
S 182 Isosafrole	162				0		1.25	1.23	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_3_00030 Amount Added: 1.00 Units: mL

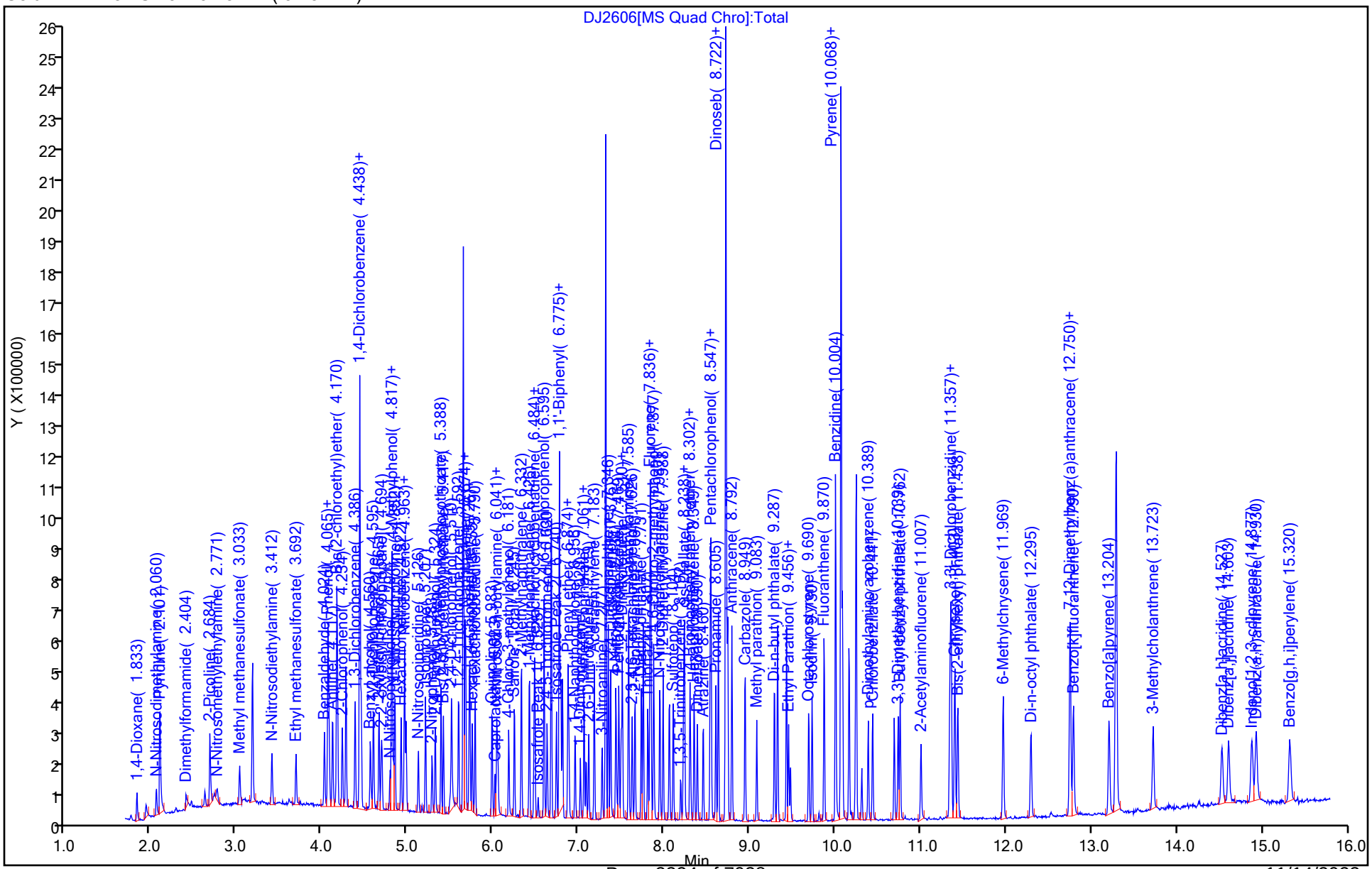
Report Date: 27-Oct-2023 07:23:15 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2606.D

Injection Date:	26-Oct-2023 14:06:46	Instrument ID:	HP19760	Operator ID:	kel10217
Lims ID:	IC L3			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2607.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Oct-2023 14:27:26 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 410-0097721-008
Operator ID: kel10217 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:23:32 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: N5QU Date: 26-Oct-2023 19:50:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.838	1.833	0.005	94	9420	0.2500	0.4112	
3 N-Nitrosodimethylamine	74	2.072	2.054	0.018	95	8095	0.2500	0.2176	
4 Pyridine	79	2.118	2.095	0.023	91	26407	0.5000	0.4438	
6 Dimethylformamide	73	2.462	2.380	0.082	55	1088	0.2500	0.0275	
7 2-Picoline	93	2.695	2.684	0.011	85	13450	0.2500	0.2148	
8 N-Nitrosomethylethylamine	88	2.765	2.771	-0.006	52	21751	0.2500	0.2436	
9 Methyl methanesulfonate	80	3.039	3.033	0.006	85	7093	0.2500	0.2095	
$ 10 2-Fluorophenol	112	3.185	3.185	0.000	93	21665	0.5000	0.4319	
11 N-Nitrosodiethylamine	102	3.412	3.412	0.000	92	6162	0.2500	0.2408	
12 Ethyl methanesulfonate	109	3.698	3.692	0.006	98	6575	0.2500	0.2326	
15 Benzaldehyde	77	4.024	4.024	0.000	89	10901	0.2500	0.2452	
$ 16 Phenol-d5	99	4.065	4.071	-0.006	95	30580	0.5000	0.4480	
17 Phenol	94	4.082	4.082	0.000	92	15801	0.2500	0.2187	
18 Aniline	93	4.123	4.123	0.000	92	17854	0.2500	0.2160	
19 Bis(2-chloroethyl)ether	93	4.182	4.181	0.001	84	13964	0.2500	0.2329	
20 2-Chlorophenol	128	4.234	4.234	0.000	90	11291	0.2500	0.2207	
21 1,3-Dichlorobenzene	146	4.386	4.385	0.001	96	14840	0.2500	0.2382	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	97	198119	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.455	4.455	0.000	92	14525	0.2500	0.2318	
25 Benzyl alcohol	108	4.566	4.560	0.006	87	4440	0.2500	0.1304	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	13985	0.2500	0.2390	
28 2-Methylphenol	108	4.665	4.665	0.000	94	10557	0.2500	0.2159	
29 2,2'-oxybis[1-chloropropane]	45	4.694	4.694	0.000	93	22234	0.2500	0.2263	
31 N-Nitrosopyrrolidine	100	4.794	4.793	0.001	84	5585	0.2500	0.2076	
32 4-Methylphenol	108	4.811	4.811	0.000	93	9996	0.2500	0.2009	
34 Acetophenone	105	4.817	4.817	0.000	84	19026	0.2500	0.2378	
33 N-Nitrosodi-n-propylamine	70	4.817	4.817	0.000	71	11061	0.2500	0.2385	
35 N-Nitrosomorpholine	56	4.834	4.834	0.000	90	10319	0.2500	0.2302	
36 2-Toluidine	106	4.852	4.852	0.000	95	18708	0.2500	0.2248	
38 Hexachloroethane	117	4.922	4.922	0.000	94	6202	0.2500	0.2529	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.963	4.963	0.001	91	29577	0.5000	0.4712	
40 Nitrobenzene	77	4.980	4.980	0.000	96	15753	0.2500	0.2396	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	87	5959	0.2500	0.2335	
43 Isophorone	82	5.207	5.207	0.000	95	25660	0.2500	0.2232	
44 2-Nitrophenol	139	5.283	5.283	0.000	86	5532	0.2500	0.2162	
45 2,4-Dimethylphenol	107	5.324	5.324	0.000	95	10089	0.2500	0.2296	
46 o,o',o''-Triethylphosphorothioat	198	5.388	5.394	-0.006	83	6148	0.2500	0.2114	
47 Bis(2-chloroethoxy)methane	93	5.417	5.417	0.000	93	15565	0.2500	0.2360	
48 2,4-Dichlorophenol	162	5.516	5.510	0.006	94	8272	0.2500	0.1945	
49 1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	93	11460	0.2500	0.2263	
* 50 Naphthalene-d8	136	5.650	5.650	0.000	100	668548	5.00	5.00	
51 Naphthalene	128	5.668	5.674	-0.006	96	33540	0.2500	0.2291	
52 Alpha-Terpineol	59	5.679	5.679	0.000	89	12136	0.2500	0.2155	
53 4-Chloroaniline	127	5.720	5.720	0.000	85	12217	0.2500	0.2152	
54 2,6-Dichlorophenol	162	5.732	5.726	0.006	91	9589	0.2500	0.2177	
55 Hexachloropropene	213	5.755	5.755	0.000	88	8102	0.2500	0.2091	
56 Hexachlorobutadiene	225	5.790	5.790	0.000	89	8648	0.2500	0.2534	
60 Quinoline	129	5.988	5.988	0.000	95	20481	0.2500	0.2252	
61 Caprolactam	113	6.023	6.035	-0.012	70	2679	0.2500	0.2058	
62 N-Nitrosodi-n-butylamine	84	6.041	6.041	0.000	91	17118	0.2500	0.3240	
63 p-Phenylene diamine	108	6.058	6.058	0.000	88	9022	0.2500	0.1980	
64 4-Chloro-3-methylphenol	107	6.181	6.181	0.000	94	8772	0.2500	0.2040	
65 Safrole, Total	162	6.251	6.251	0.000	88	8704	0.2500	0.2243	
66 2-Methylnaphthalene	142	6.332	6.332	0.000	90	22983	0.2500	0.2470	
67 1-Methylnaphthalene	142	6.426	6.426	0.000	89	19431	0.2500	0.2242	
68 Hexachlorocyclopentadiene	237	6.478	6.478	0.000	91	6927	0.2500	0.2363	
69 1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	94	14584	0.2500	0.2539	
70 Isosafrole Peak 1	162	6.530	6.525	0.005	1	1343	0.0400	0.0318	a
71 2,4,6-Trichlorophenol	196	6.600	6.595	0.005	77	7130	0.2500	0.2263	
72 2,4,5-Trichlorophenol	196	6.630	6.630	0.000	87	6627	0.2500	0.1977	
$ 73 2-Fluorobiphenyl (Surr)	172	6.682	6.682	0.000	99	52676	0.5000	0.4756	
74 Isosafrole Peak 2	162	6.740	6.740	0.000	91	8951	0.2100	0.1968	
75 1,1'-Biphenyl	154	6.775	6.775	0.000	95	28300	0.2500	0.2353	
76 2-Chloronaphthalene	162	6.793	6.793	0.000	93	25073	0.2500	0.2566	M
77 1-Chloronaphthalene	162	6.810	6.810	0.000	97	18534	0.2500	0.2217	Ma
78 Phenyl ether	170	6.874	6.874	0.000	85	15709	0.2500	0.2368	
79 2-Nitroaniline	138	6.886	6.886	0.000	84	5898	0.2500	0.2146	
81 1,4-Naphthoquinone	158	6.962	6.962	0.000	68	6503	0.2500	0.1927	
84 1,4-Dinitrobenzene	168	7.026	7.020	0.006	87	4207	0.2500	0.2757	
85 Dimethyl phthalate	163	7.061	7.067	-0.006	99	27068	0.2500	0.2461	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	78	3452	0.2500	0.2021	
87 2,6-Dinitrotoluene	165	7.119	7.119	0.000	87	5097	0.2500	0.2118	
88 Acenaphthylene	152	7.183	7.183	0.000	98	34126	0.2500	0.2397	
89 3-Nitroaniline	138	7.277	7.276	0.001	83	5082	0.2500	0.2103	
* 90 Acenaphthene-d10	164	7.317	7.317	0.000	95	396402	5.00	5.00	
91 Acenaphthene	153	7.346	7.346	0.000	95	25338	0.2500	0.2548	
92 2,4-Dinitrophenol	184	7.376	7.376	0.000	84	28795	2.50	1.83	
93 4-Nitrophenol	109	7.440	7.434	0.006	85	19522	1.50	1.21	
94 Pentachlorobenzene	250	7.469	7.469	0.000	96	11799	0.2500	0.2546	
95 2,4-Dinitrotoluene	165	7.498	7.498	0.000	87	7014	0.2500	0.2172	
96 Dibenzofuran	168	7.510	7.510	0.000	97	33390	0.2500	0.2382	
97 1-Naphthylamine	143	7.585	7.585	0.000	97	18744	0.2500	0.2305	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	68	7037	0.2500	0.2302	
99 2-Naphthylamine	143	7.661	7.661	0.000	96	20783	0.2500	0.2320	
100 Diethyl phthalate	149	7.737	7.737	0.000	98	26234	0.2500	0.2497	
101 Thionazin	107	7.807	7.813	-0.006	77	5060	0.2500	0.2956	
102 Fluorene	166	7.836	7.836	0.000	93	24897	0.2500	0.2402	
103 4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	89	14490	0.2500	0.2553	
104 N-Nitro-o-toluidine	152	7.848	7.848	0.000	75	5404	0.2500	0.2032	
105 4-Nitroaniline	138	7.848	7.854	-0.006	73	5094	0.2500	0.2037	
106 4,6-Dinitro-2-methylphenol	198	7.877	7.883	-0.006	85	24818	1.50	1.14	
107 N-Nitrosodiphenylamine	169	7.947	7.953	-0.006	60	18146	0.2125	0.1915	
108 1,2-Diphenylhydrazine	77	7.988	7.988	0.000	41	28198	0.2500	0.2320	
$ 109 2,4,6-Tribromophenol	330	8.063	8.063	0.000	90	7264	0.5000	0.4491	
110 Sulfotepp	97	8.104	8.104	0.000	72	4350	0.2500	0.2213	
112 1,3,5-Trinitrobenzene	213	8.197	8.197	0.000	84	2039	0.2500	0.1662	
113 cis-Diallate	86	8.227	8.227	0.000	0	11962	0.1850	0.2352	
114 Phorate	75	8.232	8.232	0.000	94	16863	0.2500	0.2378	
115 Phenacetin	108	8.238	8.244	-0.006	89	10018	0.2500	0.1946	
116 4-Bromophenyl phenyl ether	248	8.302	8.302	0.000	63	8335	0.2500	0.2312	
117 trans-Diallate	86	8.308	8.314	-0.006	0	5320	0.0650	0.1044	
118 Hexachlorobenzene	284	8.349	8.355	-0.006	92	9168	0.2500	0.2328	
119 Dimethoate	87	8.390	8.390	0.000	94	8022	0.2500	0.1947	
120 Atrazine	200	8.460	8.460	0.000	89	7616	0.2500	0.2487	
121 Pentachlorophenol	266	8.541	8.541	0.000	92	20914	1.25	0.8751	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	91	27585	0.2500	0.2218	
123 Pentachloronitrobenzene	237	8.553	8.553	0.000	73	4631	0.2500	0.2508	
124 Pronamide	173	8.605	8.605	0.000	88	9688	0.2500	0.2004	
125 Dinoseb	211	8.716	8.716	0.000	89	5143	0.2500	0.1818	
* 126 Phenanthrene-d10	188	8.722	8.722	0.000	97	792064	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	93	24364	0.2500	0.3232	
128 Phenanthrene	178	8.745	8.745	0.000	94	41446	0.2500	0.2488	
129 Anthracene	178	8.792	8.792	0.000	97	39220	0.2500	0.2331	
130 Carbazole	167	8.949	8.949	0.000	96	31228	0.2500	0.2203	
131 Methyl parathion	109	9.083	9.083	0.000	93	6801	0.2500	0.1988	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	99	38001	0.2500	0.2208	
134 Ethyl Parathion	109	9.456	9.456	0.000	81	4487	0.2500	0.2092	
135 4-Nitroquinoline-1-oxide	190	9.480	9.480	0.000	78	2275	0.2500	0.1496	
S 136 Diallate	86				0		0.2500	0.3396	
140 Octachlorostyrene	308	9.690	9.695	-0.005	82	3941	0.2500	0.2526	
141 Isodrin	193	9.730	9.730	0.000	91	5864	0.2500	0.2867	
143 Fluoranthene	202	9.870	9.876	-0.006	96	43223	0.2500	0.2367	
147 Benzidine	184	10.010	10.010	0.000	99	66619	0.7500	0.6293	
* 149 Pyrene-d10 (IS)	212	10.068	10.068	0.000	98	830213	5.00	5.00	
150 Pyrene	202	10.086	10.086	0.000	98	47992	0.2500	0.2466	
$ 152 p-Terphenyl-d14	244	10.249	10.249	0.000	97	70155	0.5000	0.4831	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	92	6562	0.2500	0.2054	
155 Chlorobenzilate	139	10.441	10.441	0.000	93	9692	0.2500	0.1974	
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	98	18297	0.2500	0.1772	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	95	14905	0.2500	0.2104	
158 2-Acetylaminofluorene	181	11.007	11.007	0.000	90	8368	0.2500	0.1375	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	73	12253	0.2500	0.1964	
160 4,4'-Methylene bis(2-chloroani	231	11.351	11.351	0.000	92	6794	0.2500	0.1998	
161 Benzo[a]anthracene	228	11.362	11.362	0.000	97	36722	0.2500	0.2121	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
162 Chrysene	228	11.403	11.403	0.000	95	40803	0.2500	0.2395	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	96	20110	0.2500	0.2058	
164 6-Methylchrysene	242	11.969	11.969	0.000	95	24924	0.2500	0.2181	
165 Di-n-octyl phthalate	149	12.289	12.295	-0.006	99	26712	0.2500	0.1528	
166 7,12-Dimethylbenz(a)anthracene	256	12.750	12.755	-0.005	67	12187	0.2500	0.1809	
167 Benzo[b]fluoranthene	252	12.750	12.755	-0.005	95	37116	0.2500	0.2202	
168 Benzo[k]fluoranthene	252	12.790	12.790	0.000	98	36442	0.2500	0.2174	
169 Benzo[a]pyrene	252	13.210	13.210	0.000	75	35062	0.2500	0.2262	
* 170 Perylene-d12	264	13.292	13.286	0.006	99	706662	5.00	5.00	
171 3-Methylcholanthrene	268	13.723	13.723	0.000	91	16667	0.2500	0.2071	
172 Dibenz[a,h]acridine	279	14.522	14.533	-0.011	90	20699	0.2500	0.1906	
173 Dibenz[a,j]acridine	279	14.603	14.609	-0.006	95	24178	0.2500	0.1993	
174 Indeno[1,2,3-cd]pyrene	276	14.877	14.883	-0.006	97	28898	0.2500	0.2080	
175 Dibenz(a,h)anthracene	278	14.935	14.929	0.006	92	31142	0.2500	0.2202	
176 Benzo[g,h,i]perylene	276	15.320	15.326	-0.006	97	30326	0.2500	0.2113	
S 178 Dinitrotoluene	165				0			0.4290	
S 182 Isosafrole	162				0		0.2500	0.2285	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_2_00033 Amount Added: 1.00 Units: mL

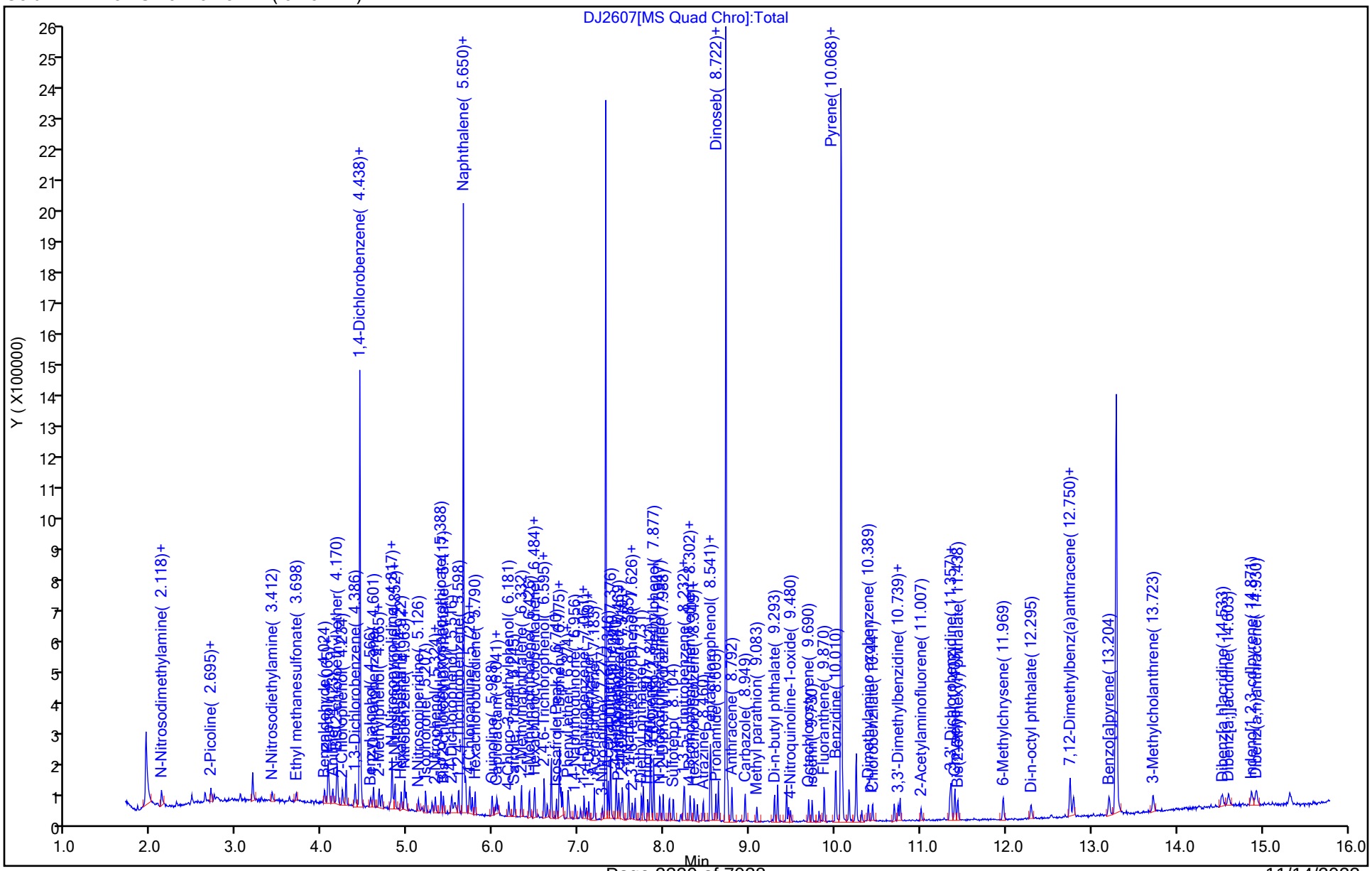
Report Date: 27-Oct-2023 07:23:32 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2607.D

Injection Date:	26-Oct-2023 14:27:26	Instrument ID:	HP19760	Operator ID:	kel10217
Lims ID:	IC L2			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

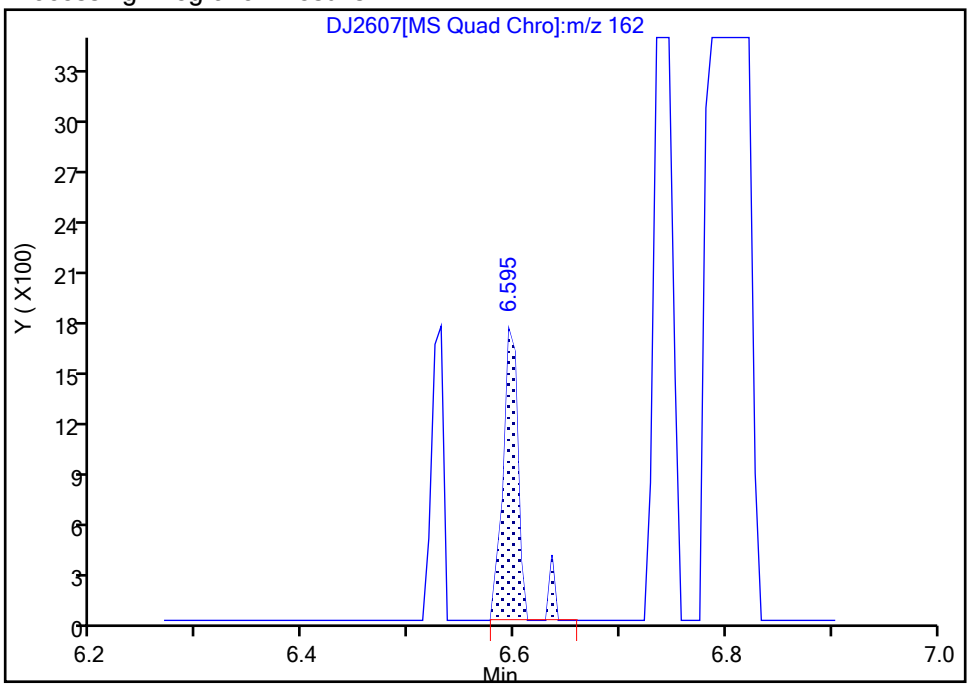
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2607.D				
Injection Date:	26-Oct-2023 14:27:26	Instrument ID:	HP19760		
Lims ID:	IC L2				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

70 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

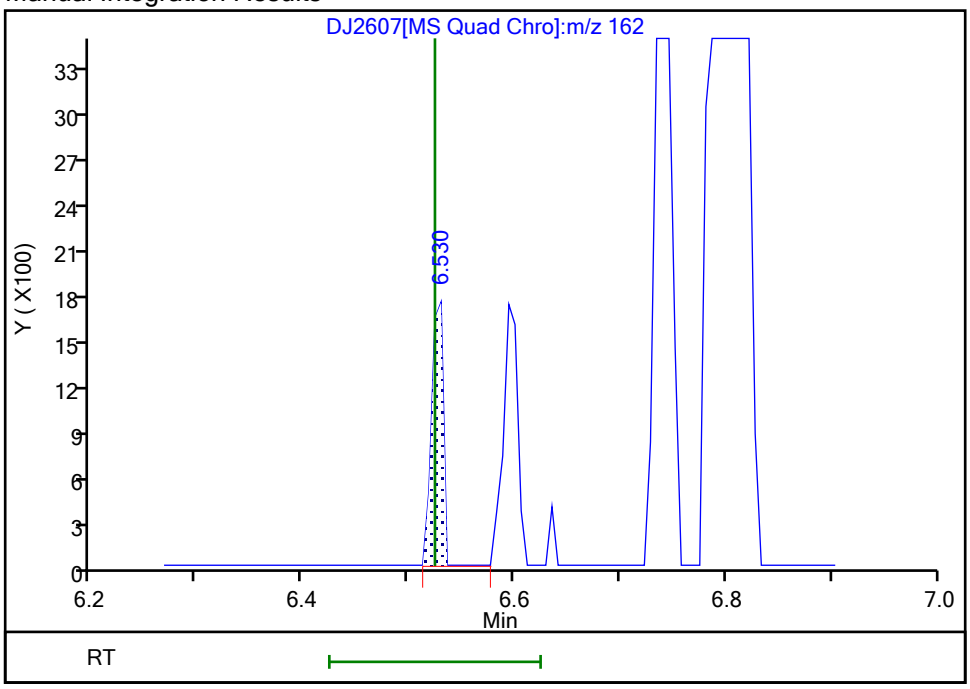
Processing Integration Results

RT: 6.59
Area: 1785
Amount: 0.041414
Amount Units: ug/ml



Manual Integration Results

RT: 6.53
Area: 1343
Amount: 0.031768
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:48:16 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

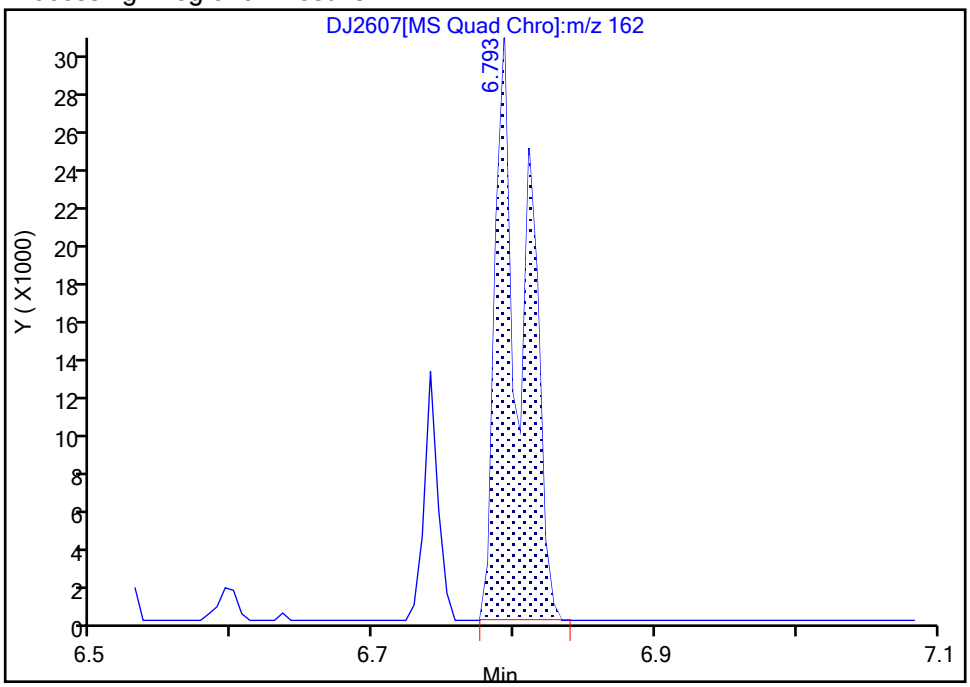
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2607.D				
Injection Date:	26-Oct-2023 14:27:26	Instrument ID:	HP19760		
Lims ID:	IC L2				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

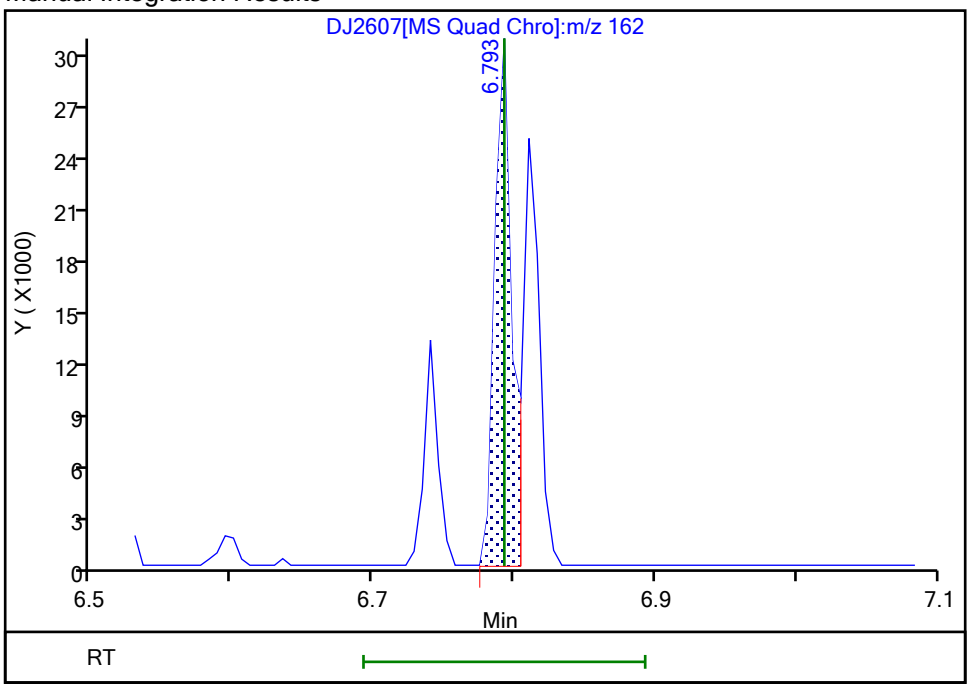
Processing Integration Results

RT: 6.79
Area: 43608
Amount: 0.310810
Amount Units: ug/ml



Manual Integration Results

RT: 6.79
Area: 25073
Amount: 0.256644
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:48:34 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

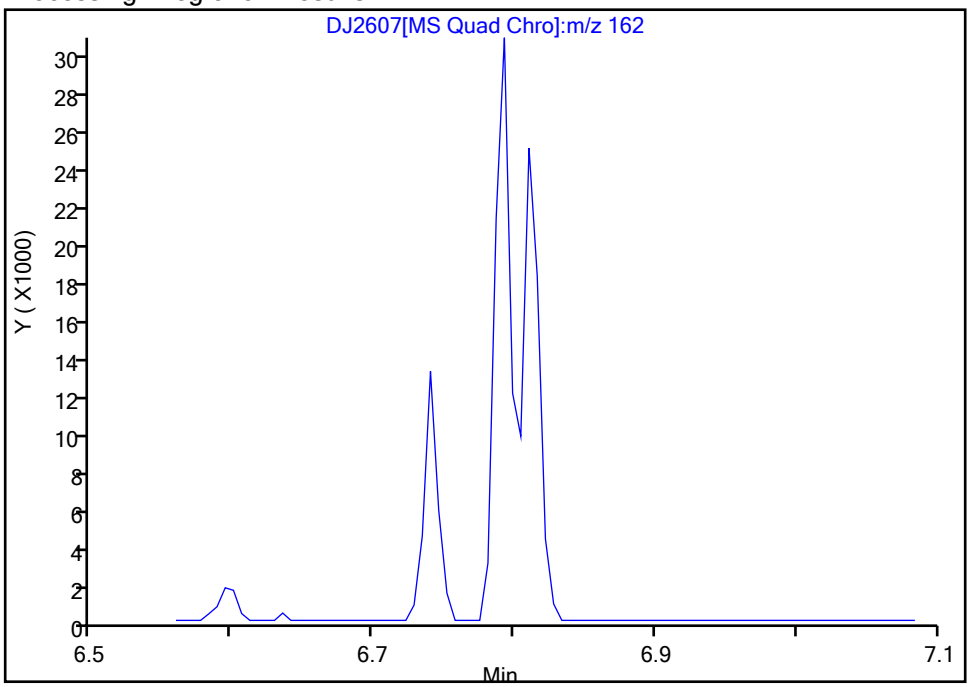
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2607.D				
Injection Date:	26-Oct-2023 14:27:26	Instrument ID:	HP19760		
Lims ID:	IC L2				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

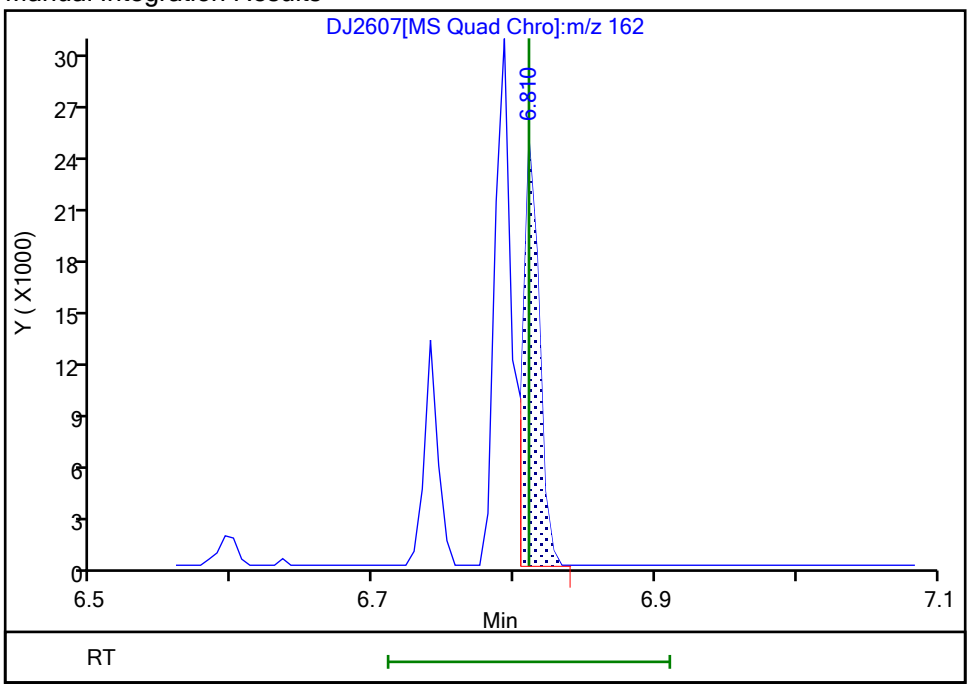
Not Detected
Expected RT: 6.81

Processing Integration Results



Manual Integration Results

RT: 6.81
Area: 18534
Amount: 0.221695
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:48:44 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Oct-2023 14:48:13 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 410-0097721-009
Operator ID: kel10217 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub26

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:23:49 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: N5QU Date: 26-Oct-2023 19:55:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.838	1.833	0.005	75	2891	0.1250	0.1606	
3 N-Nitrosodimethylamine	74	2.072	2.054	0.018	84	3355	0.1250	0.1147	
4 Pyridine	79	2.130	2.095	0.035	93	9905	0.2500	0.2118	
6 Dimethylformamide	73	2.398	2.380	0.018	1	328	0.1250	0.0106	
7 2-Picoline	93	2.701	2.684	0.017	83	6294	0.1250	0.1279	
8 N-Nitrosomethylethylamine	88	2.777	2.771	0.006	32	17712	0.1250	0.2725	
9 Methyl methanesulfonate	80	3.039	3.033	0.006	80	3537	0.1250	0.1329	
$ 10 2-Fluorophenol	112	3.185	3.185	0.000	94	8511	0.2500	0.2159	
11 N-Nitrosodiethylamine	102	3.412	3.412	0.000	80	1921	0.1250	0.0955	
12 Ethyl methanesulfonate	109	3.698	3.692	0.006	95	2965	0.1250	0.1334	
$ 16 Phenol-d5	99	4.071	4.071	0.000	92	11764	0.2500	0.2193	
17 Phenol	94	4.082	4.082	0.000	87	6681	0.1250	0.1177	
18 Aniline	93	4.123	4.123	0.000	90	6936	0.1250	0.1068	
19 Bis(2-chloroethyl)ether	93	4.182	4.181	0.001	62	6480	0.1250	0.1375	
20 2-Chlorophenol	128	4.234	4.234	0.000	86	4726	0.1250	0.1176	
21 1,3-Dichlorobenzene	146	4.386	4.385	0.001	93	5982	0.1250	0.1222	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	97	155689	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.461	4.455	0.006	90	6091	0.1250	0.1237	
25 Benzyl alcohol	108	4.566	4.560	0.006	88	2673	0.1250	0.0999	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	91	5151	0.1250	0.1120	
28 2-Methylphenol	108	4.665	4.665	0.000	94	4700	0.1250	0.1223	
29 2,2'-oxybis[1-chloropropane]	45	4.695	4.694	0.000	92	9302	0.1250	0.1205	
31 N-Nitrosopyrrolidine	100	4.794	4.793	0.001	48	2159	0.1250	0.1021	
32 4-Methylphenol	108	4.817	4.811	0.006	49	4591	0.1250	0.1174	a
34 Acetophenone	105	4.817	4.817	0.000	80	7245	0.1250	0.1152	
33 N-Nitrosodi-n-propylamine	70	4.817	4.817	0.000	72	4567	0.1250	0.1253	
35 N-Nitrosomorpholine	56	4.834	4.834	0.000	87	4605	0.1250	0.1307	
36 2-Toluidine	106	4.852	4.852	0.000	95	6649	0.1250	0.1017	
38 Hexachloroethane	117	4.922	4.922	0.000	87	2965	0.1250	0.1538	
$ 39 Nitrobenzene-d5	82	4.963	4.963	0.001	90	12250	0.2500	0.2387	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	4.980	4.980	0.000	88	7394	0.1250	0.1376	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	78	2345	0.1250	0.1124	
43 Isophorone	82	5.207	5.207	0.000	96	11486	0.1250	0.1222	
44 2-Nitrophenol	139	5.289	5.283	0.006	84	2244	0.1250	0.1073	
45 2,4-Dimethylphenol	107	5.324	5.324	0.000	92	3757	0.1250	0.1046	
46 o,o',o''-Triethylphosphorothioat	198	5.388	5.394	-0.006	84	2799	0.1250	0.1177	
47 Bis(2-chloroethoxy)methane	93	5.417	5.417	0.000	92	5897	0.1250	0.1094	
48 2,4-Dichlorophenol	162	5.516	5.510	0.006	91	3518	0.1250	0.1012	
49 1,2,4-Trichlorobenzene	180	5.592	5.598	-0.006	91	5095	0.1250	0.1231	
* 50 Naphthalene-d8	136	5.650	5.650	0.000	99	546517	5.00	5.00	
51 Naphthalene	128	5.674	5.674	0.000	95	15115	0.1250	0.1263	
52 Alpha-Terpineol	59	5.680	5.679	0.001	87	5111	0.1250	0.1110	
53 4-Chloroaniline	127	5.720	5.720	0.000	82	4773	0.1250	0.1028	
54 2,6-Dichlorophenol	162	5.732	5.726	0.006	89	4685	0.1250	0.1301	
55 Hexachloropropene	213	5.755	5.755	0.000	83	3959	0.1250	0.1250	
56 Hexachlorobutadiene	225	5.790	5.790	0.000	91	3137	0.1250	0.1125	
60 Quinoline	129	5.988	5.988	0.000	96	9199	0.1250	0.1237	
62 N-Nitrosodi-n-butylamine	84	6.047	6.041	0.006	91	16136	0.1250	0.3736	
63 p-Phenylene diamine	108	6.064	6.058	0.006	27	2153	0.1250	0.0578	
64 4-Chloro-3-methylphenol	107	6.187	6.181	0.006	89	3705	0.1250	0.1054	
65 Safrole, Total	162	6.251	6.251	0.000	89	3810	0.1250	0.1201	
66 2-Methylnaphthalene	142	6.332	6.332	0.000	91	8291	0.1250	0.1090	
67 1-Methylnaphthalene	142	6.426	6.426	0.000	90	9111	0.1250	0.1286	
68 Hexachlorocyclopentadiene	237	6.478	6.478	0.000	85	2113	0.1250	0.0889	
69 1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	93	6224	0.1250	0.1337	
70 Isosafrole Peak 1	162	6.525	6.525	0.000	1	772	0.0200	0.0225	a
71 2,4,6-Trichlorophenol	196	6.600	6.595	0.005	75	2815	0.1250	0.1102	
72 2,4,5-Trichlorophenol	196	6.635	6.630	0.005	93	2666	0.1250	0.0981	
$ 73 2-Fluorobiphenyl (Surr)	172	6.682	6.682	0.000	98	24054	0.2500	0.2679	
74 Isosafrole Peak 2	162	6.740	6.740	0.000	85	3469	0.1050	0.0941	
75 1,1'-Biphenyl	154	6.775	6.775	0.000	93	12542	0.1250	0.1287	
76 2-Chloronaphthalene	162	6.793	6.793	0.000	89	10449	0.1250	0.1319	M
77 1-Chloronaphthalene	162	6.810	6.810	0.000	97	8118	0.1250	0.1198	Ma
78 Phenyl ether	170	6.874	6.874	0.000	85	6615	0.1250	0.1230	
79 2-Nitroaniline	138	6.886	6.886	0.000	75	2264	0.1250	0.1016	
81 1,4-Naphthoquinone	158	6.962	6.962	0.000	84	2837	0.1250	0.1037	
84 1,4-Dinitrobenzene	168	7.020	7.020	0.000	46	1032	0.1250	0.0834	a
85 Dimethyl phthalate	163	7.067	7.067	0.000	96	10215	0.1250	0.1146	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	79	1321	0.1250	0.0954	
87 2,6-Dinitrotoluene	165	7.119	7.119	0.000	89	2671	0.1250	0.1369	
88 Acenaphthylene	152	7.183	7.183	0.000	97	13555	0.1250	0.1174	
89 3-Nitroaniline	138	7.282	7.276	0.006	79	1533	0.1250	0.0783	
* 90 Acenaphthene-d10	164	7.317	7.317	0.000	95	321331	5.00	5.00	
91 Acenaphthene	153	7.347	7.346	0.001	93	10617	0.1250	0.1317	
92 2,4-Dinitrophenol	184	7.376	7.376	0.000	80	9242	1.25	0.7255	
93 4-Nitrophenol	109	7.440	7.434	0.006	82	7120	0.7500	0.5457	
94 Pentachlorobenzene	250	7.469	7.469	0.000	94	4629	0.1250	0.1232	
95 2,4-Dinitrotoluene	165	7.498	7.498	0.000	86	2800	0.1250	0.1069	
96 Dibenzofuran	168	7.516	7.510	0.006	97	13930	0.1250	0.1226	
97 1-Naphthylamine	143	7.586	7.585	0.001	96	6584	0.1250	0.0999	
98 2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	69	2574	0.1250	0.1039	
99 2-Naphthylamine	143	7.661	7.661	0.000	95	7985	0.1250	0.1100	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 Diethyl phthalate	149	7.731	7.737	-0.006	97	9765	0.1250	0.1147	
101 Thionazin	107	7.807	7.813	-0.006	75	1443	0.1250	0.1040	
102 Fluorene	166	7.836	7.836	0.000	91	9396	0.1250	0.1118	
103 4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	85	5211	0.1250	0.1133	
104 N-Nitro-o-toluidine	152	7.848	7.848	0.000	68	2496	0.1250	0.1158	
105 4-Nitroaniline	138	7.848	7.854	-0.006	43	1626	0.1250	0.0802	
106 4,6-Dinitro-2-methylphenol	198	7.877	7.883	-0.006	81	8703	0.7500	0.5033	
107 N-Nitrosodiphenylamine	169	7.947	7.953	-0.006	63	7585	0.1063	0.1006	
108 1,2-Diphenylhydrazine	77	7.988	7.988	0.000	40	10601	0.1250	0.1096	
$ 109 2,4,6-Tribromophenol	330	8.063	8.063	0.000	90	2450	0.2500	0.1869	
110 Sulfotepp	97	8.104	8.104	0.000	73	1700	0.1250	0.1087	
112 1,3,5-Trinitrobenzene	213	8.198	8.197	0.001	83	815	0.1250	0.0835	
113 cis-Diallate	86	8.227	8.227	0.000	0	6397	0.0925	0.1581	
114 Phorate	75	8.232	8.232	0.000	92	6156	0.1250	0.1091	
115 Phenacetin	108	8.238	8.244	-0.006	85	4446	0.1250	0.1086	
116 4-Bromophenyl phenyl ether	248	8.302	8.302	0.000	63	3352	0.1250	0.1168	
117 trans-Diallate	86	8.314	8.314	0.000	0	4594	0.0325	0.1133	
118 Hexachlorobenzene	284	8.349	8.355	-0.006	91	4263	0.1250	0.1360	
119 Dimethoate	87	8.390	8.390	0.000	93	3965	0.1250	0.1209	
121 Pentachlorophenol	266	8.541	8.541	0.000	89	8634	0.6250	0.4541	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	89	11690	0.1250	0.1181	
123 Pentachloronitrobenzene	237		8.553				ND	ND	MU
124 Pronamide	173	8.606	8.605	0.001	87	4088	0.1250	0.1063	
125 Dinoseb	211	8.722	8.716	0.006	60	1825	0.1250	0.0811	
* 126 Phenanthrene-d10	188	8.722	8.722	0.000	96	630248	5.00	5.00	
127 Disulfoton	88	8.722	8.734	-0.012	54	13084	0.1250	0.2182	
128 Phenanthrene	178	8.745	8.745	0.000	94	15944	0.1250	0.1203	
129 Anthracene	178	8.792	8.792	0.000	97	15775	0.1250	0.1178	
130 Carbazole	167	8.949	8.949	0.000	95	13183	0.1250	0.1169	
131 Methyl parathion	109	9.083	9.083	0.000	88	2885	0.1250	0.1060	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	99	14748	0.1250	0.1077	
134 Ethyl Parathion	109	9.457	9.456	0.000	74	1834	0.1250	0.1074	
135 4-Nitroquinoline-1-oxide	190	9.480	9.480	0.000	1	907	0.1250	0.0750	
S 136 Diallate	86				0		0.1250	0.2714	
140 Octachlorostyrene	308	9.695	9.695	0.000	78	1351	0.1250	0.1088	
141 Isodrin	193	9.730	9.730	0.000	84	3672	0.1250	0.2256	
143 Fluoranthene	202	9.876	9.876	0.000	96	16643	0.1250	0.1145	
147 Benzidine	184	10.010	10.010	0.000	99	24834	0.3750	0.2867	
* 149 Pyrene-d10 (IS)	212	10.069	10.068	0.000	98	679351	5.00	5.00	
150 Pyrene	202	10.086	10.086	0.000	96	19274	0.1250	0.1210	
$ 152 p-Terphenyl-d14	244	10.249	10.249	0.000	97	28965	0.2500	0.2438	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	88	2507	0.1250	0.0959	
155 Chlorobenzilate	139	10.442	10.441	0.001	83	4165	0.1250	0.1037	
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	96	6606	0.1250	0.0782	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	96	6246	0.1250	0.1077	
158 2-Acetylaminofluorene	181	11.007	11.007	0.000	92	3480	0.1250	0.0699	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	73	5692	0.1250	0.1115	
160 4,4'-Methylene bis(2-chloroani	231	11.357	11.351	0.006	63	2678	0.1250	0.0962	
161 Benzo[a]anthracene	228	11.362	11.362	0.000	96	16238	0.1250	0.1146	
162 Chrysene	228	11.403	11.403	0.000	96	15889	0.1250	0.1140	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	96	7654	0.1250	0.0957	
164 6-Methylchrysene	242	11.969	11.969	0.000	95	11313	0.1250	0.1210	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.295	12.295	0.000	97	11796	0.1250	0.0809	
166 7,12-Dimethylbenz(a)anthracene	256	12.750	12.755	-0.005	69	5080	0.1250	0.0904	
167 Benzo[b]fluoranthene	252	12.756	12.755	0.001	94	16114	0.1250	0.1147	
168 Benzo[k]fluoranthene	252	12.790	12.790	0.000	97	16905	0.1250	0.1210	
169 Benzo[a]pyrene	252	13.204	13.210	-0.006	76	14742	0.1250	0.1141	
* 170 Perylene-d12	264	13.292	13.286	0.006	100	589100	5.00	5.00	
171 3-Methylcholanthrene	268	13.723	13.723	0.000	91	7916	0.1250	0.1180	
172 Dibenz[a,h]acridine	279	14.527	14.533	-0.006	89	9797	0.1250	0.1082	
173 Dibenz[a,j]acridine	279	14.615	14.609	0.006	50	11040	0.1250	0.1092	
174 Indeno[1,2,3-cd]pyrene	276	14.877	14.883	-0.006	95	14669	0.1250	0.1266	
175 Dibenz(a,h)anthracene	278	14.930	14.929	0.001	90	13474	0.1250	0.1143	
176 Benzo[g,h,i]perylene	276	15.326	15.326	0.000	94	14874	0.1250	0.1243	
S 178 Dinitrotoluene	165				0			0.2439	
S 182 Isosafrole	162				0		0.1250	0.1166	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270_1_00032 Amount Added: 1.00 Units: mL

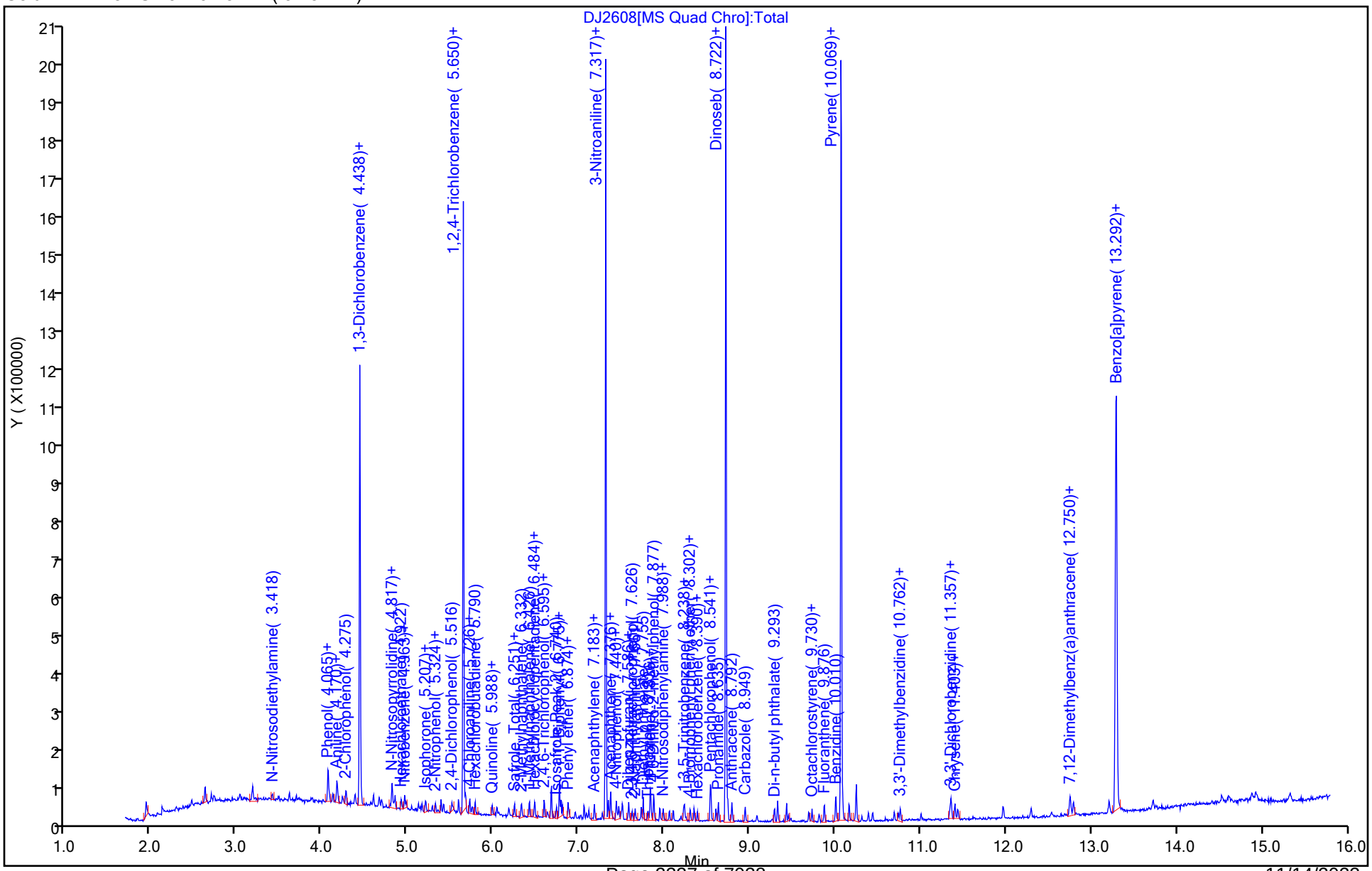
Report Date: 27-Oct-2023 07:23:50 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Injection Date:	26-Oct-2023 14:48:13	Instrument ID:	HP19760	Operator ID:	kel10217
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

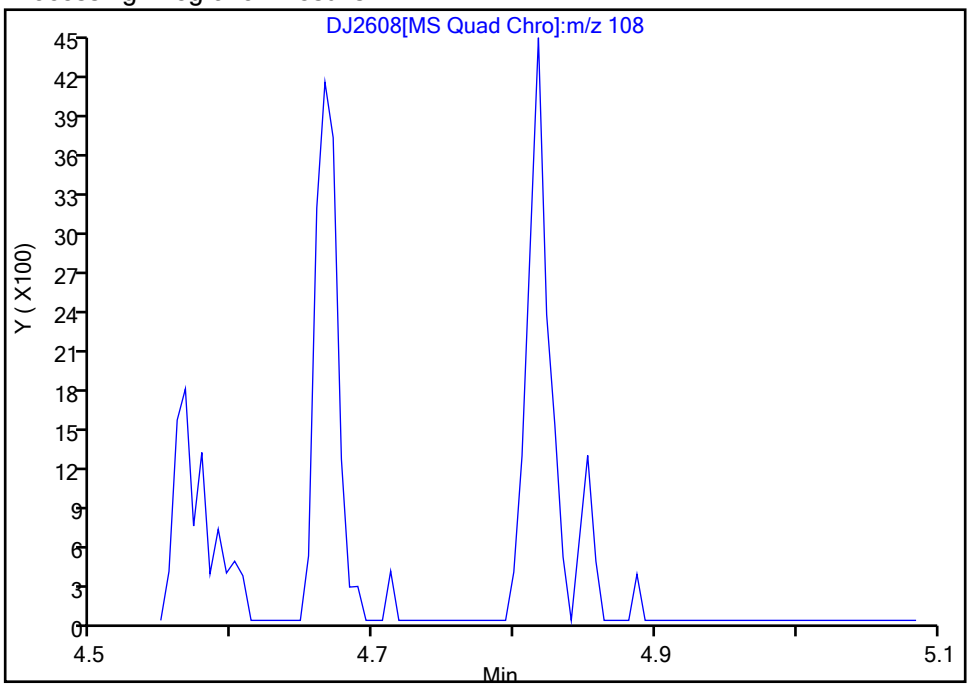
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D				
Injection Date:	26-Oct-2023 14:48:13	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

32 4-Methylphenol, CAS: 106-44-5

Signal: 1

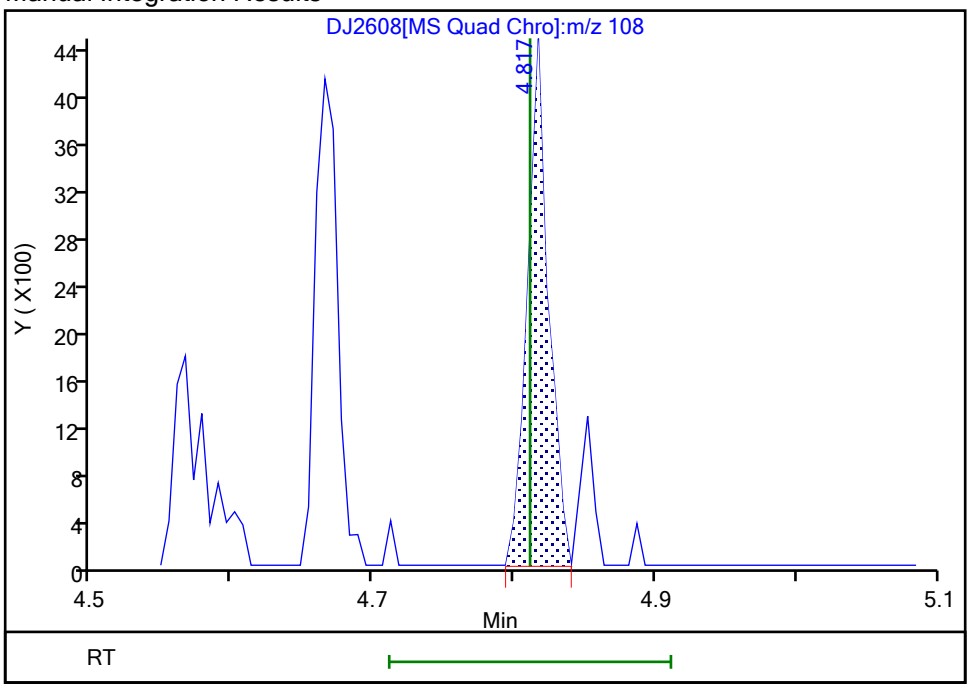
Not Detected
Expected RT: 4.81

Processing Integration Results



Manual Integration Results

RT: 4.82
Area: 4591
Amount: 0.117409
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:52:18 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

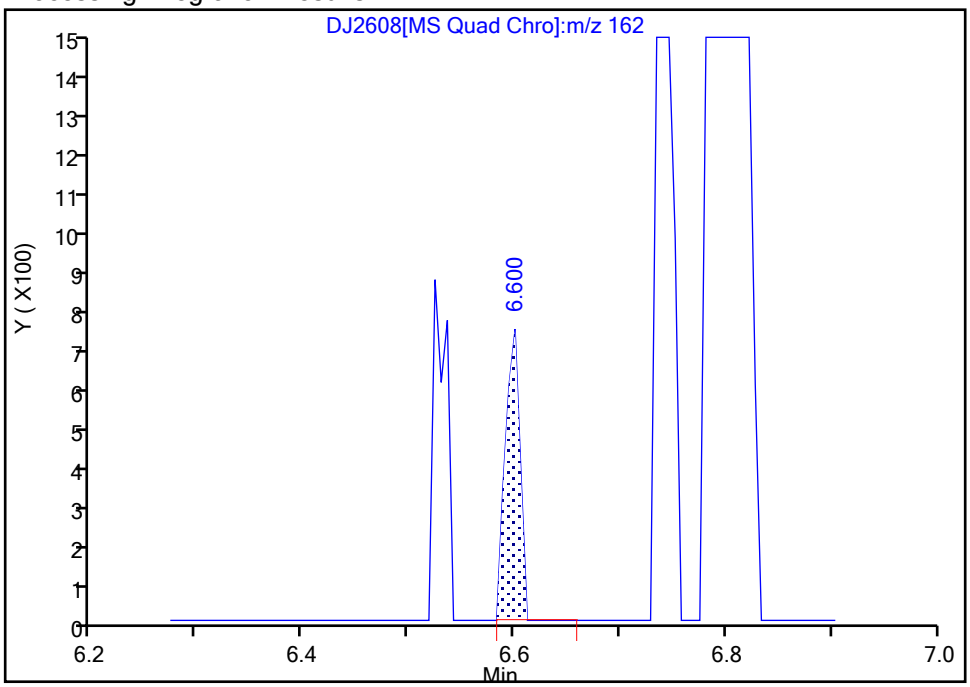
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D				
Injection Date:	26-Oct-2023 14:48:13	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

70 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

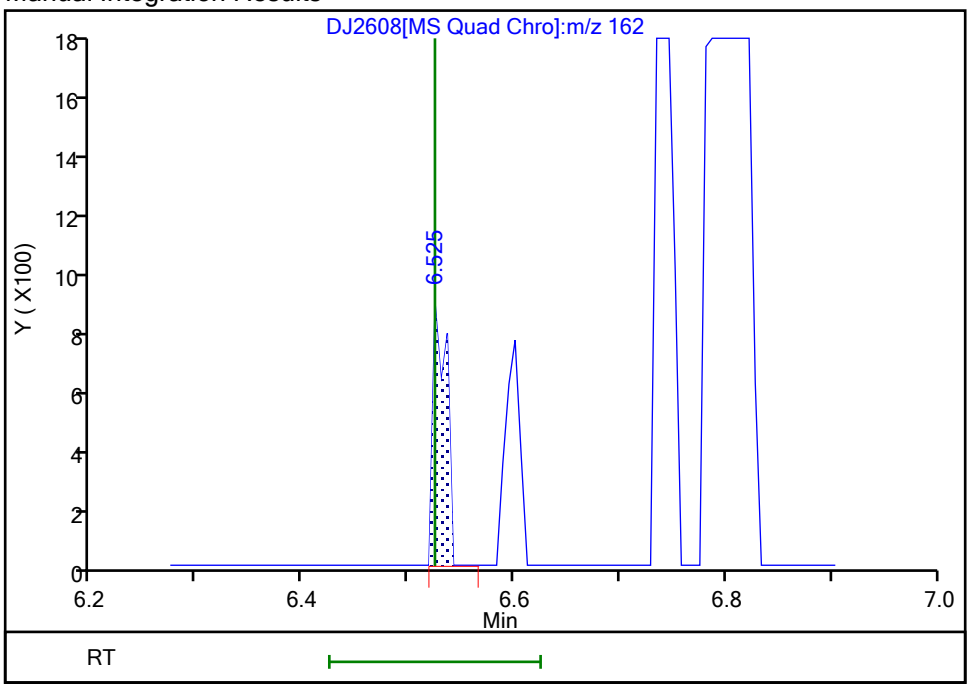
Processing Integration Results

RT: 6.60
Area: 700
Amount: 0.020699
Amount Units: ug/ml



Manual Integration Results

RT: 6.52
Area: 772
Amount: 0.022528
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:53:07 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

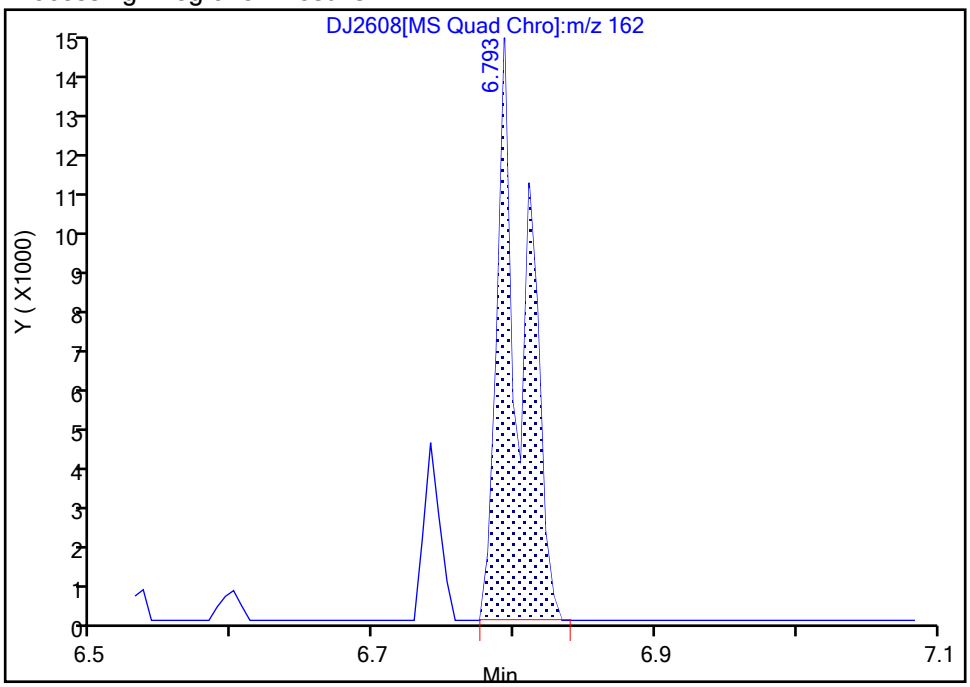
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D				
Injection Date:	26-Oct-2023 14:48:13	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

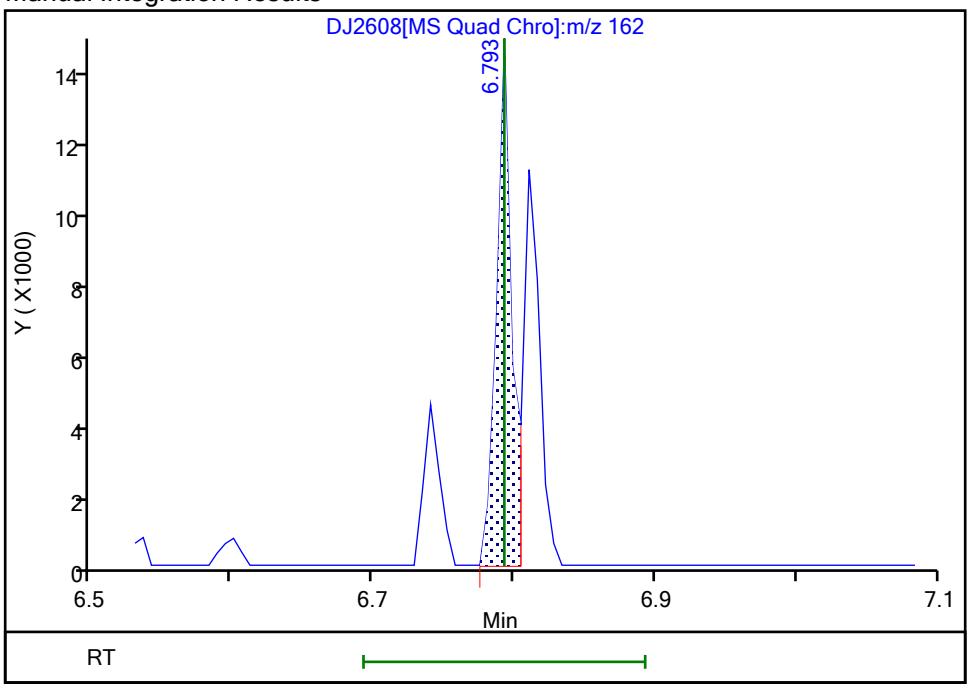
Processing Integration Results

RT: 6.79
Area: 18568
Amount: 0.175323
Amount Units: ug/ml



Manual Integration Results

RT: 6.79
Area: 10449
Amount: 0.131942
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:53:19 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

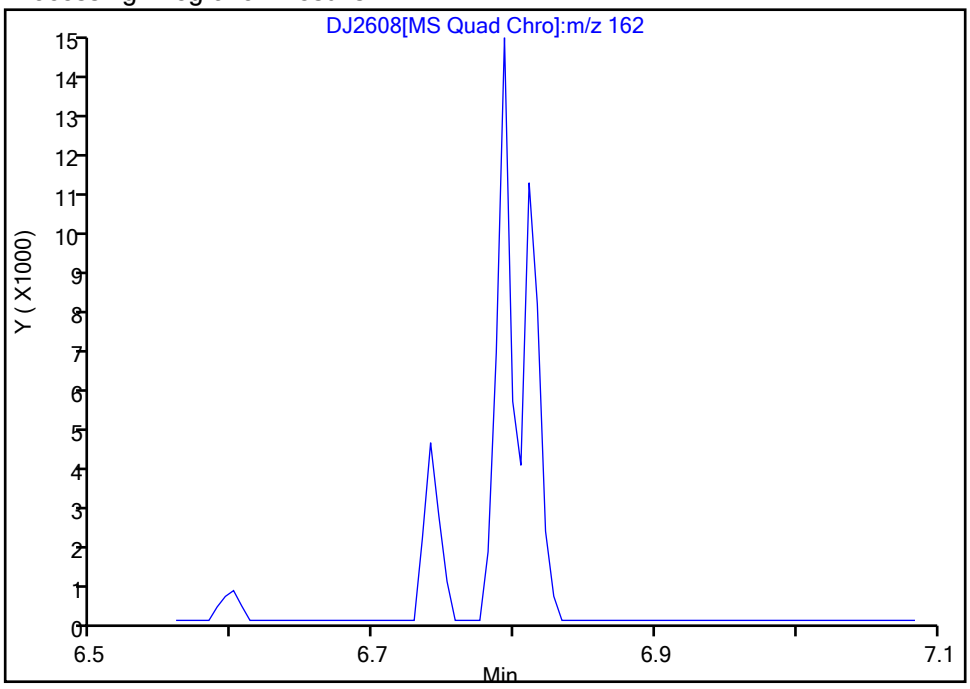
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D				
Injection Date:	26-Oct-2023 14:48:13	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

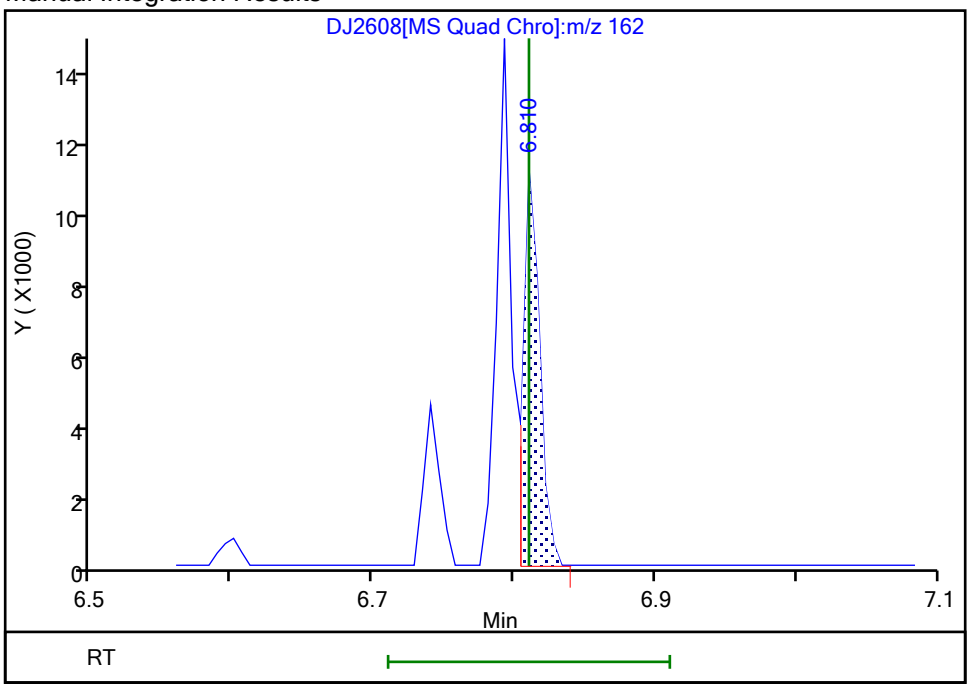
Not Detected
Expected RT: 6.81

Processing Integration Results



Manual Integration Results

RT: 6.81
Area: 8118
Amount: 0.119790
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:53:32 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

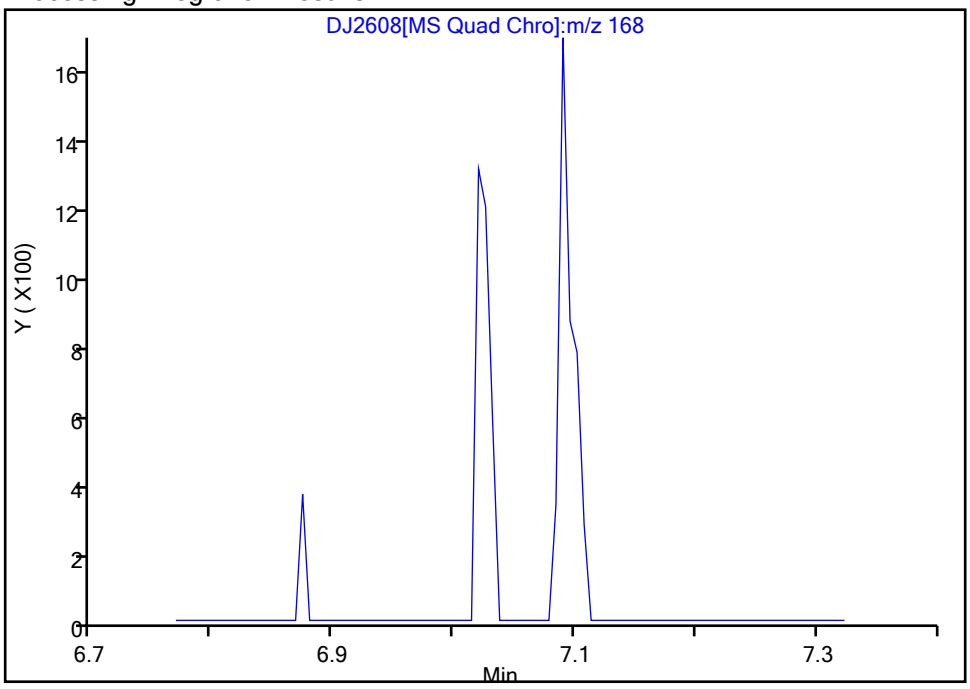
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D				
Injection Date:	26-Oct-2023 14:48:13	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

84 1,4-Dinitrobenzene, CAS: 100-25-4

Signal: 1

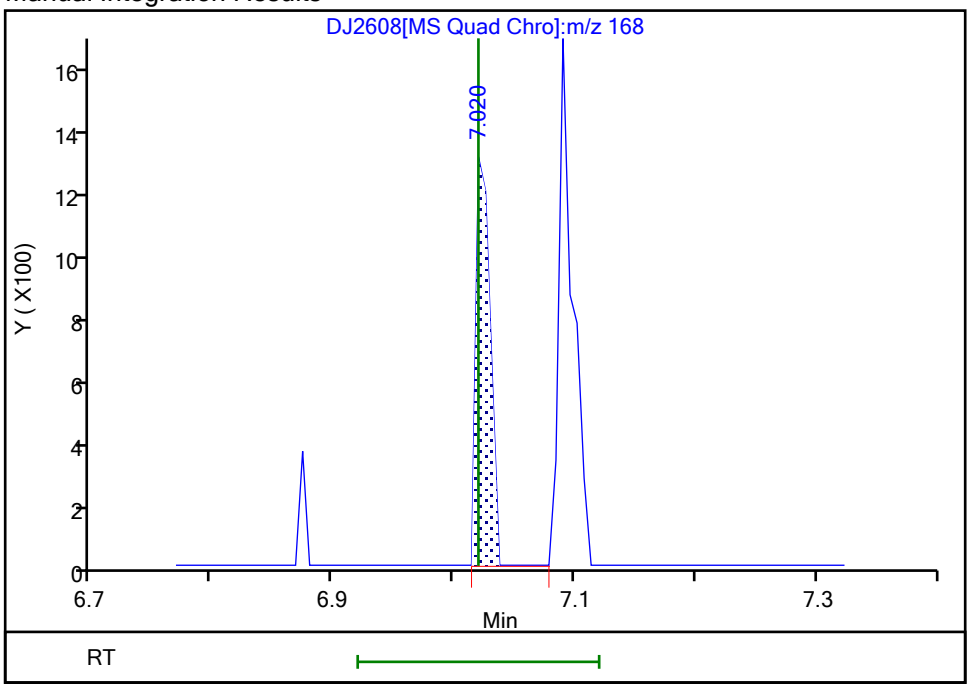
Not Detected
Expected RT: 7.02

Processing Integration Results



Manual Integration Results

RT: 7.02
Area: 1032
Amount: 0.083444
Amount Units: ug/ml



Reviewer: N5QU, 26-Oct-2023 19:53:46 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Split Peak

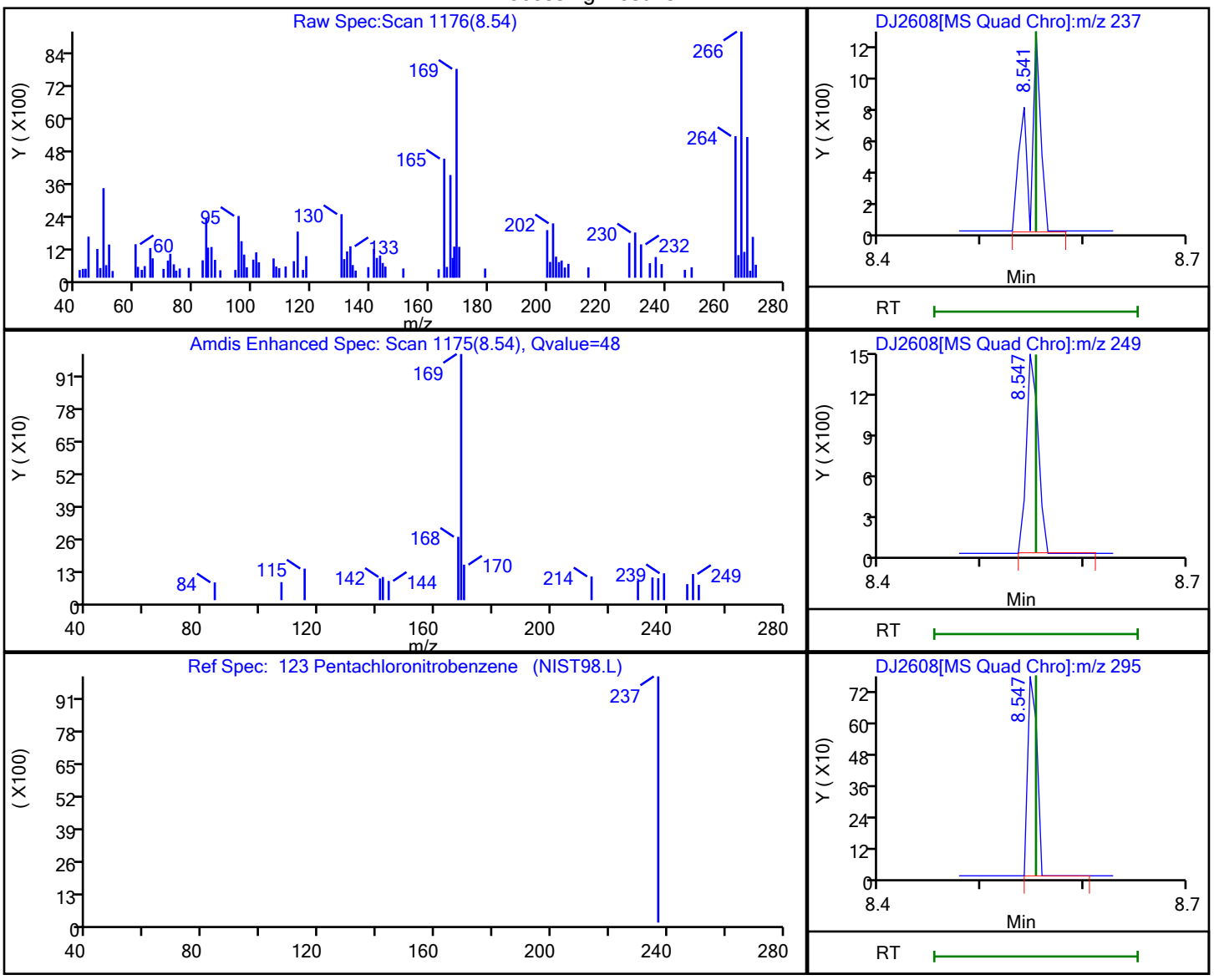
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D				
Injection Date:	26-Oct-2023 14:48:13	Instrument ID:	HP19760		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

123 Pentachloronitrobenzene, CAS: 82-68-8

Processing Results



RT	Mass	Response	Amount
8.54	237.00	1033	0.074367
8.55	249.00	1148	
8.55	295.00	484	
8.55	214.00	975	

Reviewer: N5QU, 26-Oct-2023 22:15:41 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

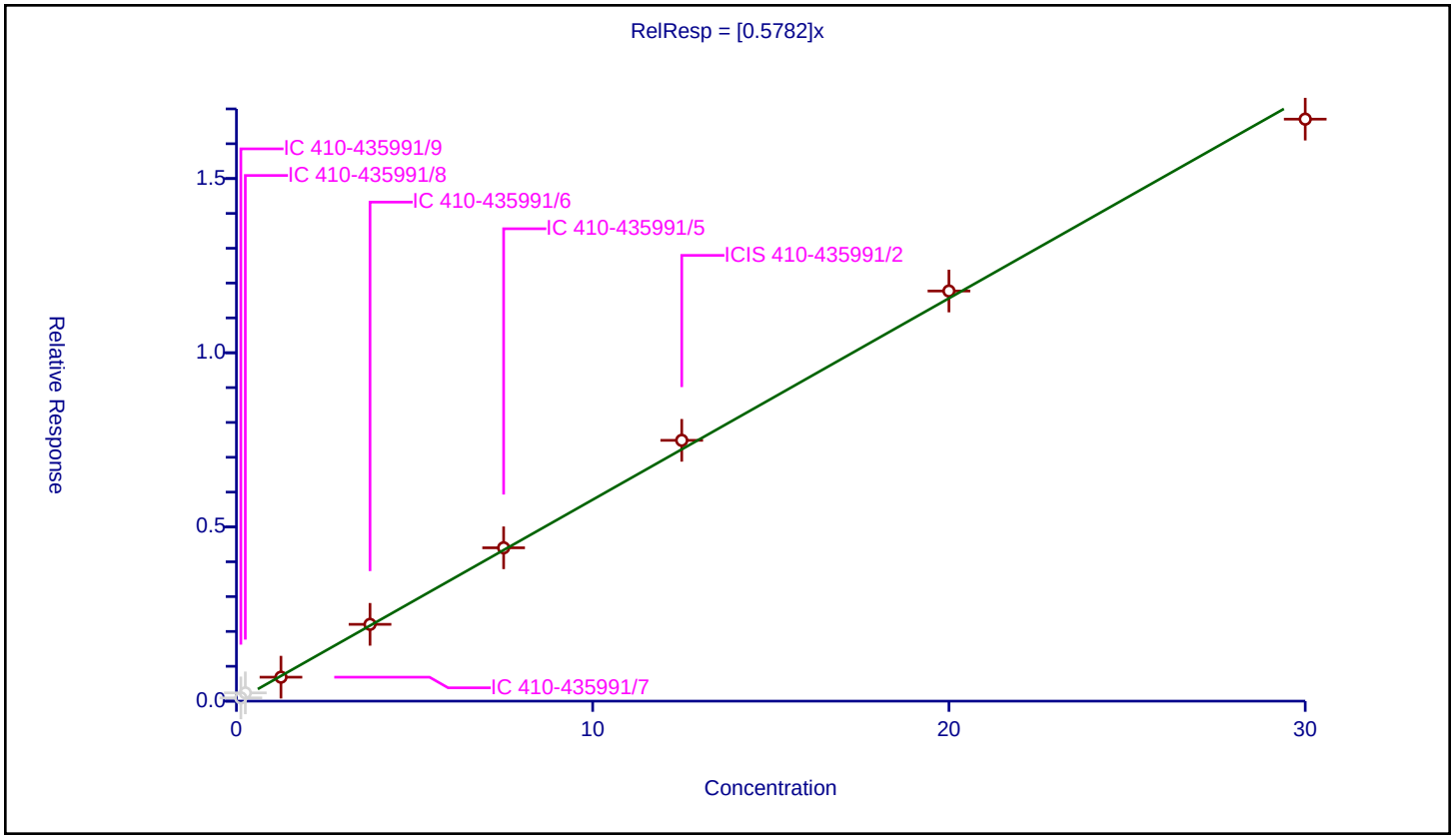
Curve Coefficients

Intercept:	0
Slope:	0.5782

Error Coefficients

Standard Error:	366000
Relative Standard Error:	3.4
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.092845	5.0	155689.0	0.742763	N
2	IC 410-435991/8	0.25	0.237736	5.0	198119.0	0.950944	N
3	IC 410-435991/7	1.25	0.687657	5.0	184525.0	0.550126	Y
4	IC 410-435991/6	3.75	2.204456	5.0	198321.0	0.587855	Y
5	IC 410-435991/5	7.5	4.401598	5.0	163970.0	0.58688	Y
6	ICIS 410-435991/2	12.5	7.486386	5.0	171514.0	0.598911	Y
7	IC 410-435991/4	20.0	11.772463	5.0	160545.0	0.588623	Y
8	IC 410-435991/3	30.0	16.705407	5.0	196563.0	0.556847	Y



11/14/2023
11:12 AM

Calibration / N-Nitrosodimethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

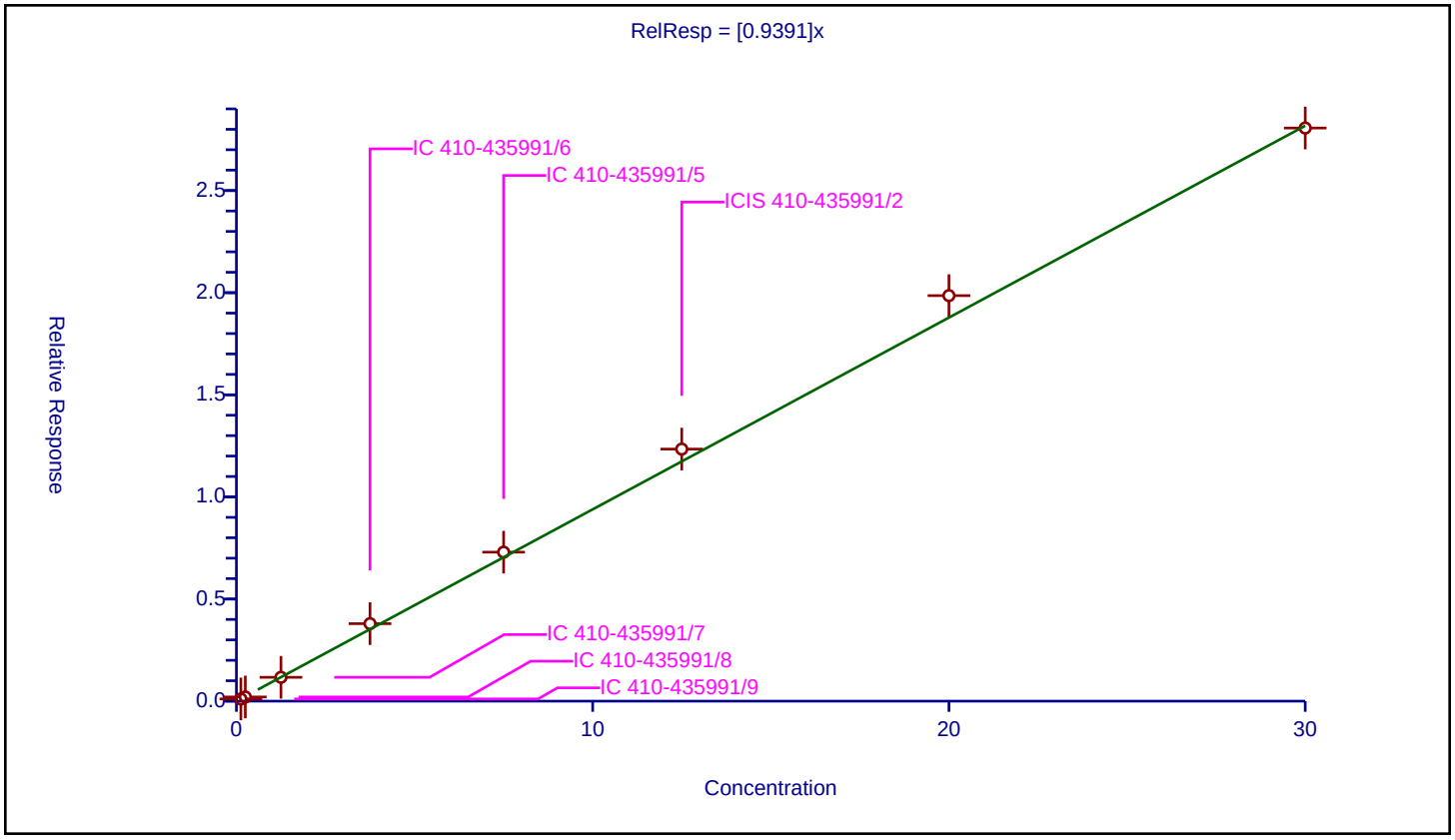
Curve Coefficients

Intercept:	0
Slope:	0.9391

Error Coefficients

Standard Error:	519000
Relative Standard Error:	7.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.107747	5.0	155689.0	0.861975	Y
2	IC 410-435991/8	0.25	0.204296	5.0	198119.0	0.817186	Y
3	IC 410-435991/7	1.25	1.166861	5.0	184525.0	0.933489	Y
4	IC 410-435991/6	3.75	3.793849	5.0	198321.0	1.011693	Y
5	IC 410-435991/5	7.5	7.294475	5.0	163970.0	0.972597	Y
6	ICIS 410-435991/2	12.5	12.34182	5.0	171514.0	0.987346	Y
7	IC 410-435991/4	20.0	19.855897	5.0	160545.0	0.992795	Y
8	IC 410-435991/3	30.0	28.061792	5.0	196563.0	0.935393	Y



11/14/2023
11:12 AM

Calibration / Pyridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

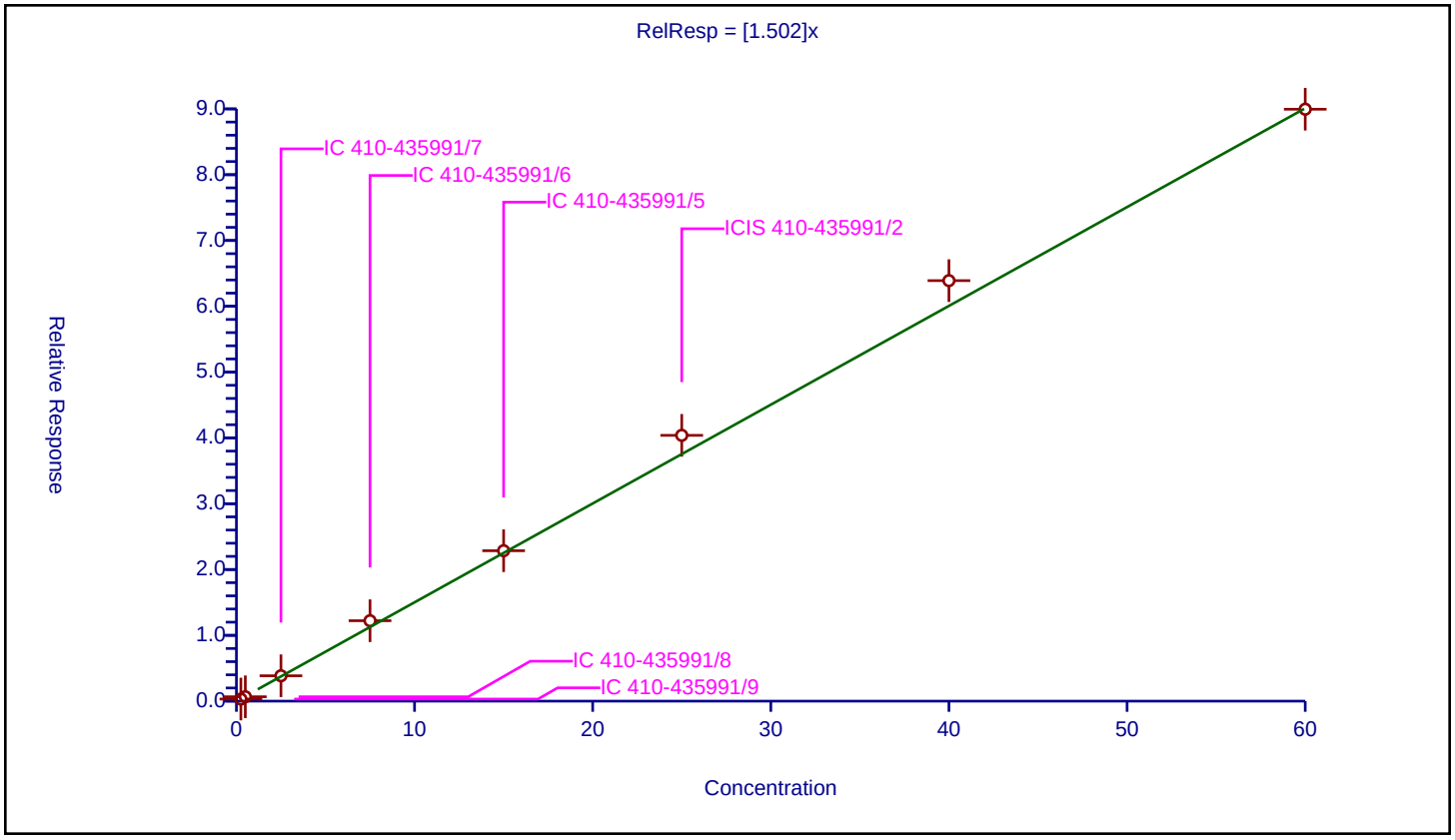
Curve Coefficients

Intercept:	0
Slope:	1.502

Error Coefficients

Standard Error:	1670000
Relative Standard Error:	8.8
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.25	0.318102	5.0	155689.0	1.272408	Y
2	IC 410-435991/8	0.5	0.666443	5.0	198119.0	1.332886	Y
3	IC 410-435991/7	2.5	3.854058	5.0	184525.0	1.541623	Y
4	IC 410-435991/6	7.5	12.220869	5.0	198321.0	1.629449	Y
5	IC 410-435991/5	15.0	22.858175	5.0	163970.0	1.523878	Y
6	ICIS 410-435991/2	25.0	40.391717	5.0	171514.0	1.615669	Y
7	IC 410-435991/4	40.0	63.903423	5.0	160545.0	1.597586	Y
8	IC 410-435991/3	60.0	89.951161	5.0	196563.0	1.499186	Y



11/14/2023
11:12 AM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

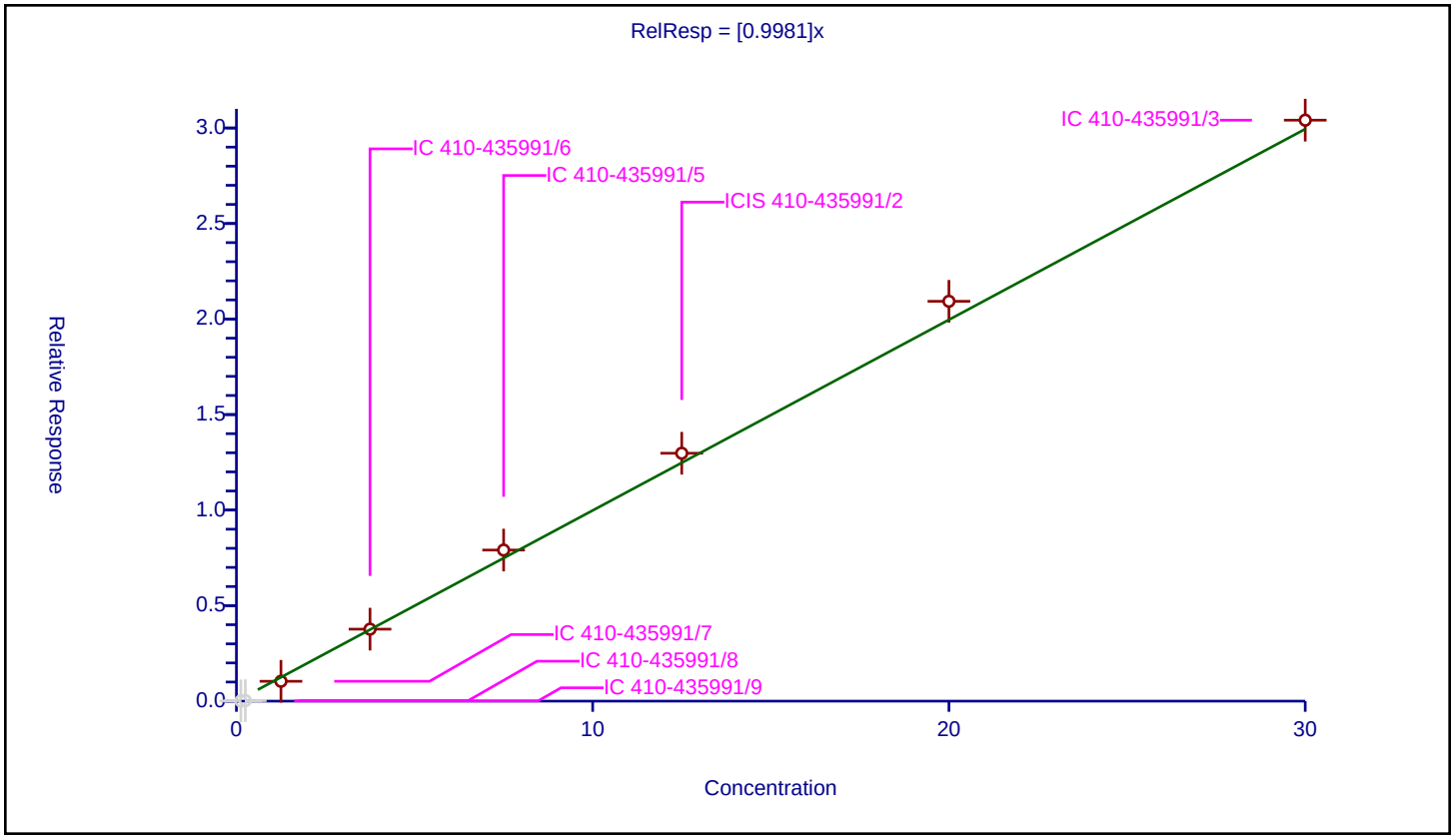
Curve Coefficients

Intercept:	0
Slope:	0.9981

Error Coefficients

Standard Error:	659000
Relative Standard Error:	8.4
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.010534	5.0	155689.0	0.084271	N
2	IC 410-435991/8	0.25	0.027458	5.0	198119.0	0.109833	N
3	IC 410-435991/7	1.25	1.039371	5.0	184525.0	0.831497	Y
4	IC 410-435991/6	3.75	3.767907	5.0	198321.0	1.004775	Y
5	IC 410-435991/5	7.5	7.908123	5.0	163970.0	1.054416	Y
6	ICIS 410-435991/2	12.5	12.975471	5.0	171514.0	1.038038	Y
7	IC 410-435991/4	20.0	20.929366	5.0	160545.0	1.046468	Y
8	IC 410-435991/3	30.0	30.410047	5.0	196563.0	1.013668	Y



Calibration / 2-Picoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

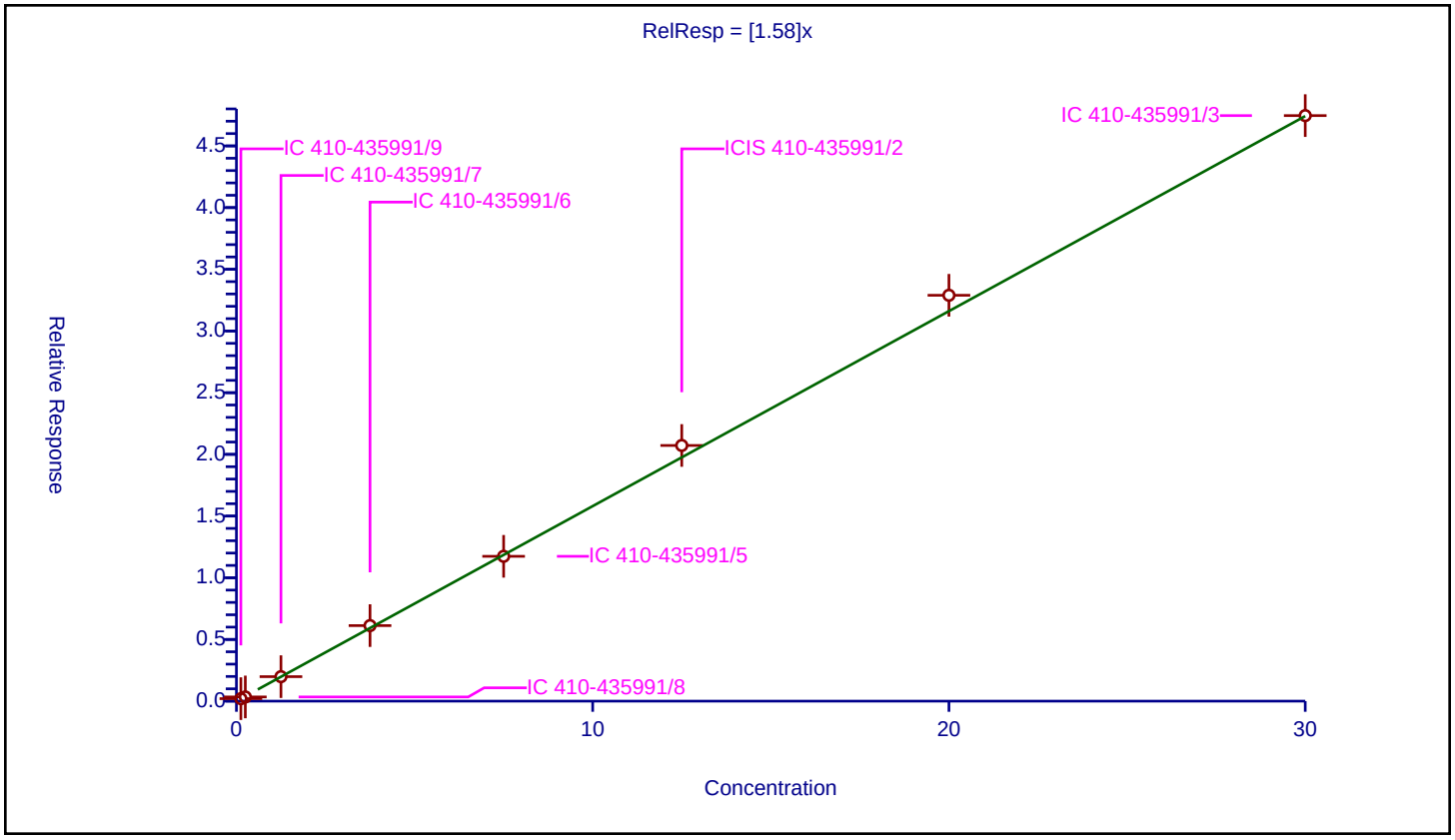
Curve Coefficients

Intercept:	0
Slope:	1.58

Error Coefficients

Standard Error:	871000
Relative Standard Error:	6.1
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.202134	5.0	155689.0	1.61707	Y
2	IC 410-435991/8	0.25	0.339442	5.0	198119.0	1.35777	Y
3	IC 410-435991/7	1.25	1.983823	5.0	184525.0	1.587059	Y
4	IC 410-435991/6	3.75	6.121893	5.0	198321.0	1.632505	Y
5	IC 410-435991/5	7.5	11.738123	5.0	163970.0	1.565083	Y
6	ICIS 410-435991/2	12.5	20.722303	5.0	171514.0	1.657784	Y
7	IC 410-435991/4	20.0	32.893675	5.0	160545.0	1.644684	Y
8	IC 410-435991/3	30.0	47.4571	5.0	196563.0	1.581903	Y



11/14/2023
11:12 AM

Calibration / N-Nitrosomethylethylamine

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

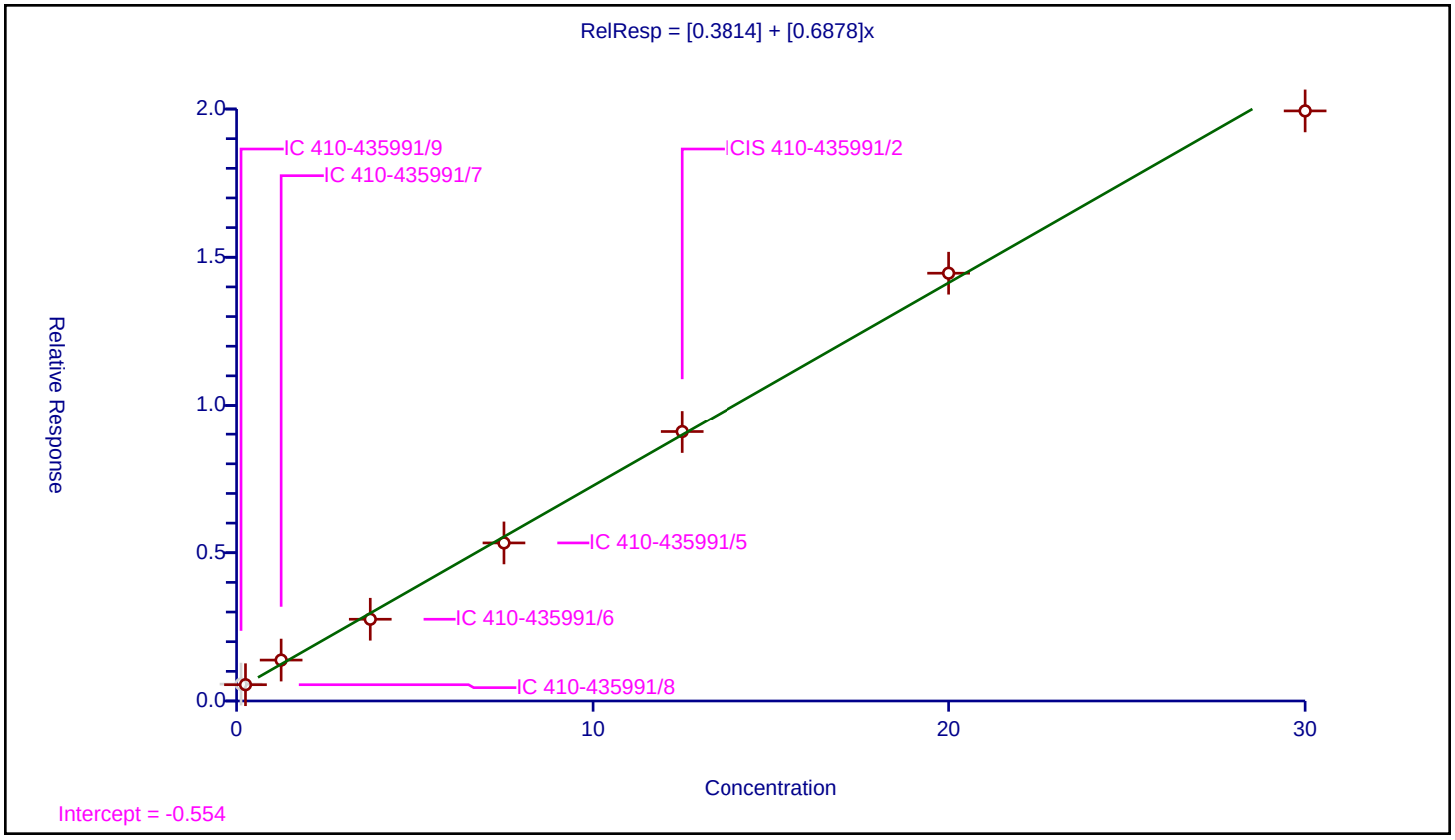
Curve Coefficients

Intercept:	0.3814
Slope:	0.6878

Error Coefficients

Standard Error:	441000
Relative Standard Error:	8.7
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.568826	5.0	155689.0	4.550611	N
2	IC 410-435991/8	0.25	0.548938	5.0	198119.0	2.195751	Y
3	IC 410-435991/7	1.25	1.379894	5.0	184525.0	1.103915	Y
4	IC 410-435991/6	3.75	2.757272	5.0	198321.0	0.735273	Y
5	IC 410-435991/5	7.5	5.330884	5.0	163970.0	0.710784	Y
6	ICIS 410-435991/2	12.5	9.089404	5.0	171514.0	0.727152	Y
7	IC 410-435991/4	20.0	14.462269	5.0	160545.0	0.723113	Y
8	IC 410-435991/3	30.0	19.936534	5.0	196563.0	0.664551	Y



11/14/2023
11:12 AM

Calibration / Methyl methanesulfonate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

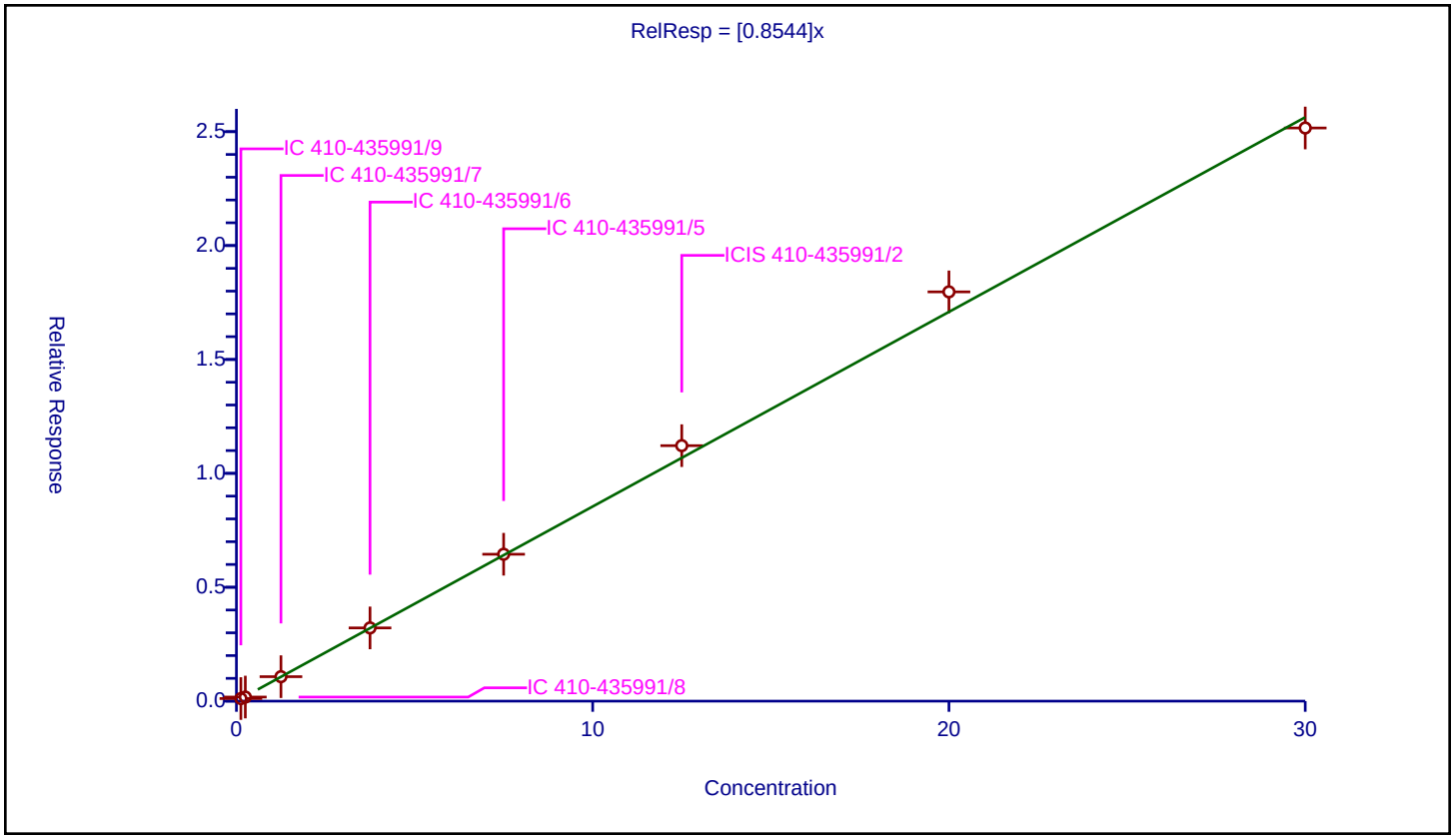
Curve Coefficients

Intercept:	0
Slope:	0.8544

Error Coefficients

Standard Error:	466000
Relative Standard Error:	7.2
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.113592	5.0	155689.0	0.908735	Y
2	IC 410-435991/8	0.25	0.179009	5.0	198119.0	0.716034	Y
3	IC 410-435991/7	1.25	1.07354	5.0	184525.0	0.858832	Y
4	IC 410-435991/6	3.75	3.215217	5.0	198321.0	0.857391	Y
5	IC 410-435991/5	7.5	6.448863	5.0	163970.0	0.859848	Y
6	ICIS 410-435991/2	12.5	11.216577	5.0	171514.0	0.897326	Y
7	IC 410-435991/4	20.0	17.967517	5.0	160545.0	0.898376	Y
8	IC 410-435991/3	30.0	25.16178	5.0	196563.0	0.838726	Y



Calibration / 2-Fluorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

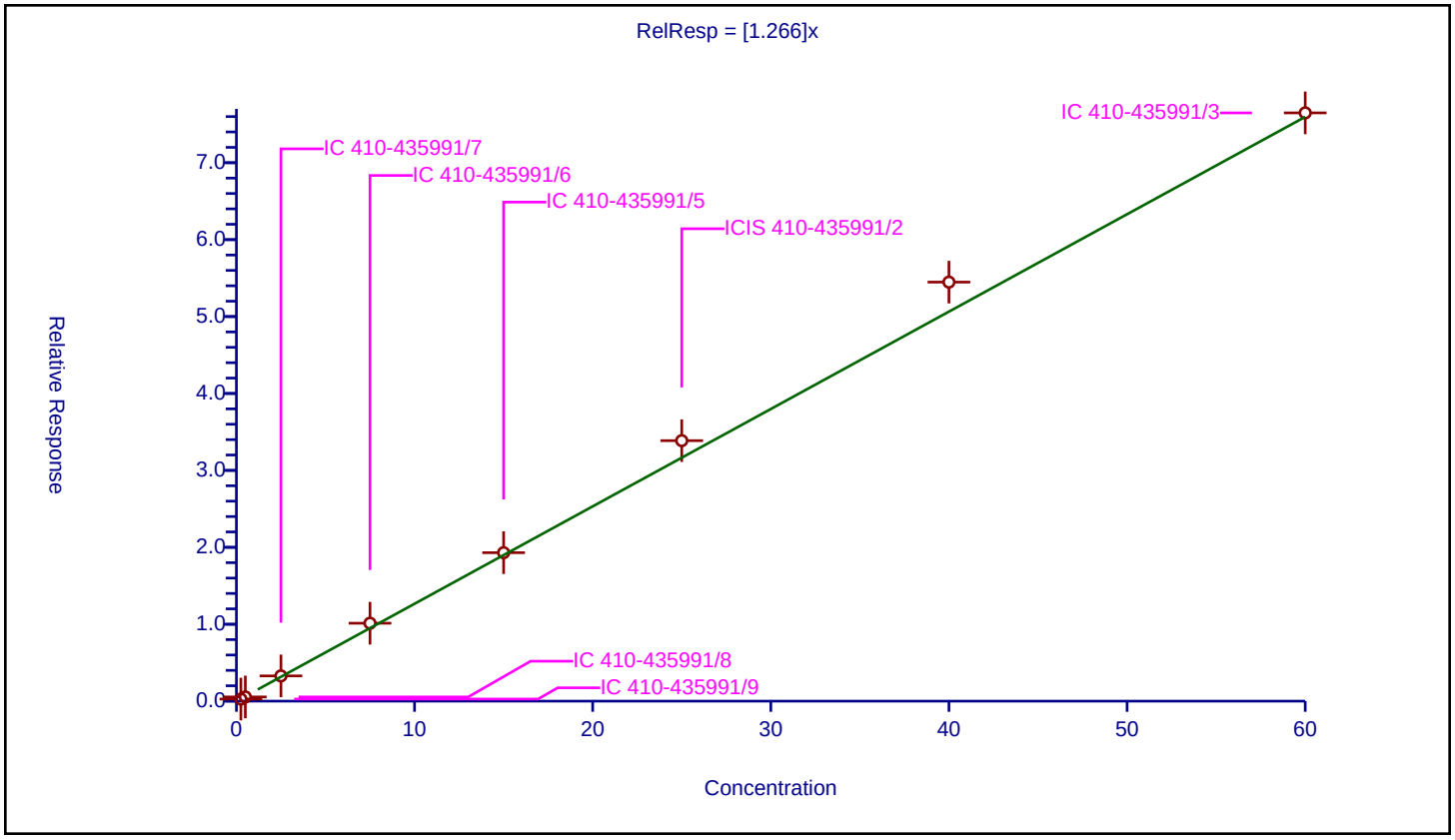
Curve Coefficients

Intercept:	0
Slope:	1.266

Error Coefficients

Standard Error:	1420000
Relative Standard Error:	8.8
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.25	0.273333	5.0	155689.0	1.093334	Y
2	IC 410-435991/8	0.5	0.546767	5.0	198119.0	1.093535	Y
3	IC 410-435991/7	2.5	3.281507	5.0	184525.0	1.312603	Y
4	IC 410-435991/6	7.5	10.128932	5.0	198321.0	1.350524	Y
5	IC 410-435991/5	15.0	19.303104	5.0	163970.0	1.286874	Y
6	ICIS 410-435991/2	25.0	33.867673	5.0	171514.0	1.354707	Y
7	IC 410-435991/4	40.0	54.479772	5.0	160545.0	1.361994	Y
8	IC 410-435991/3	60.0	76.479093	5.0	196563.0	1.274652	Y



11/14/2023
11:12 AM

Calibration / N-Nitrosodiethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

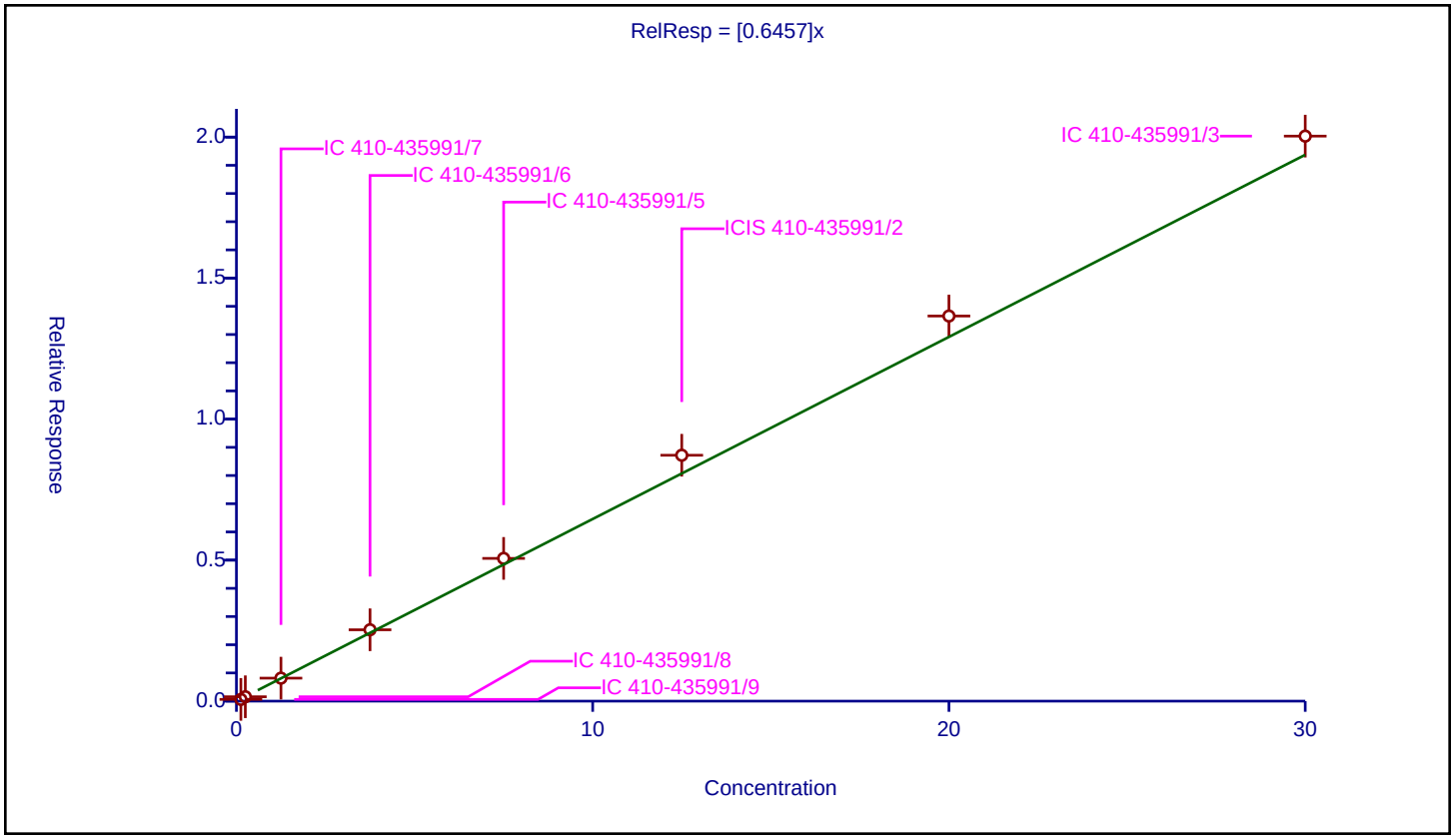
Curve Coefficients

Intercept:	0
Slope:	0.6457

Error Coefficients

Standard Error:	367000
Relative Standard Error:	10.1
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.061694	5.0	155689.0	0.493548	Y
2	IC 410-435991/8	0.25	0.155513	5.0	198119.0	0.62205	Y
3	IC 410-435991/7	1.25	0.815581	5.0	184525.0	0.652464	Y
4	IC 410-435991/6	3.75	2.530493	5.0	198321.0	0.674798	Y
5	IC 410-435991/5	7.5	5.061231	5.0	163970.0	0.674831	Y
6	ICIS 410-435991/2	12.5	8.719347	5.0	171514.0	0.697548	Y
7	IC 410-435991/4	20.0	13.655486	5.0	160545.0	0.682774	Y
8	IC 410-435991/3	30.0	20.034671	5.0	196563.0	0.667822	Y



Calibration / Ethyl methanesulfonate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

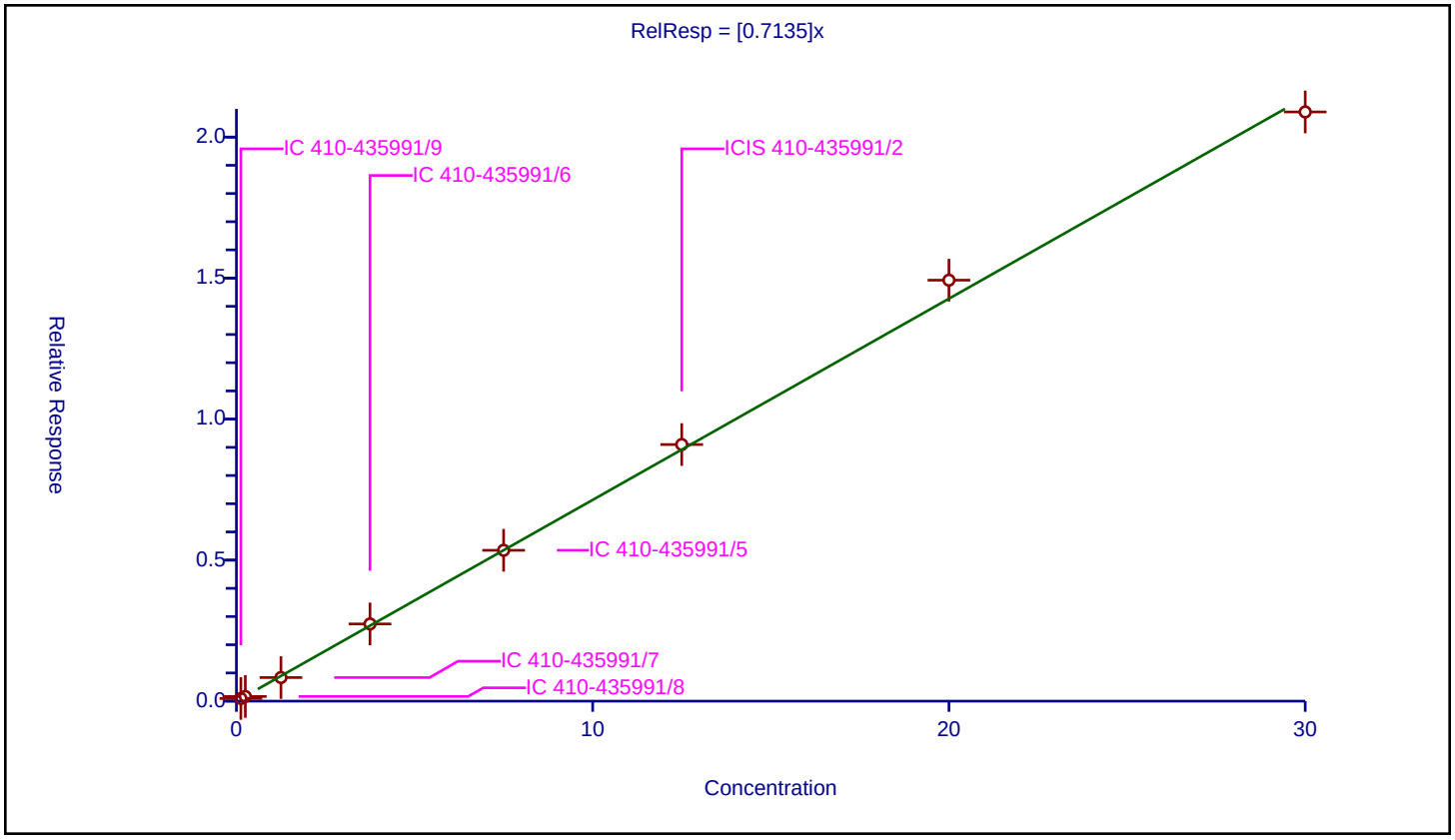
Curve Coefficients

Intercept:	0
Slope:	0.7135

Error Coefficients

Standard Error:	386000
Relative Standard Error:	4.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.095222	5.0	155689.0	0.761775	Y
2	IC 410-435991/8	0.25	0.165936	5.0	198119.0	0.663742	Y
3	IC 410-435991/7	1.25	0.836364	5.0	184525.0	0.669091	Y
4	IC 410-435991/6	3.75	2.737456	5.0	198321.0	0.729988	Y
5	IC 410-435991/5	7.5	5.348387	5.0	163970.0	0.713118	Y
6	ICIS 410-435991/2	12.5	9.09917	5.0	171514.0	0.727934	Y
7	IC 410-435991/4	20.0	14.926594	5.0	160545.0	0.74633	Y
8	IC 410-435991/3	30.0	20.891826	5.0	196563.0	0.696394	Y



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Calibration / Benzaldehyde

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

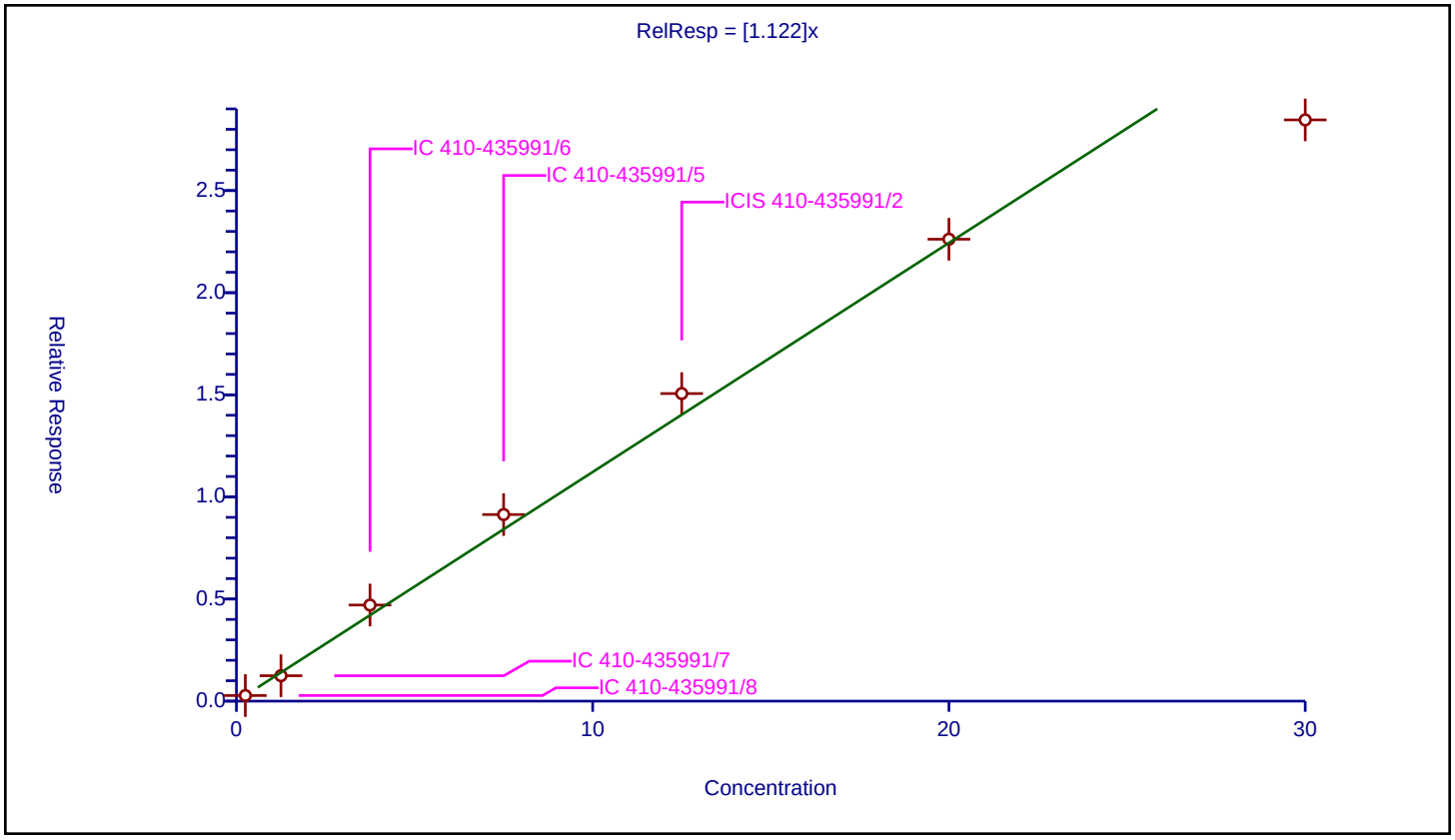
Curve Coefficients

Intercept:	0
Slope:	1.122

Error Coefficients

Standard Error:	602000
Relative Standard Error:	10.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/8	0.25	0.275112	5.0	198119.0	1.10045	Y
2	IC 410-435991/7	1.25	1.245089	5.0	184525.0	0.996071	Y
3	IC 410-435991/6	3.75	4.705503	5.0	198321.0	1.254801	Y
4	IC 410-435991/5	7.5	9.136336	5.0	163970.0	1.218178	Y
5	ICIS 410-435991/2	12.5	15.060841	5.0	171514.0	1.204867	Y
6	IC 410-435991/4	20.0	22.618144	5.0	160545.0	1.130907	Y
7	IC 410-435991/3	30.0	28.461842	5.0	196563.0	0.948728	Y



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Calibration / Phenol-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

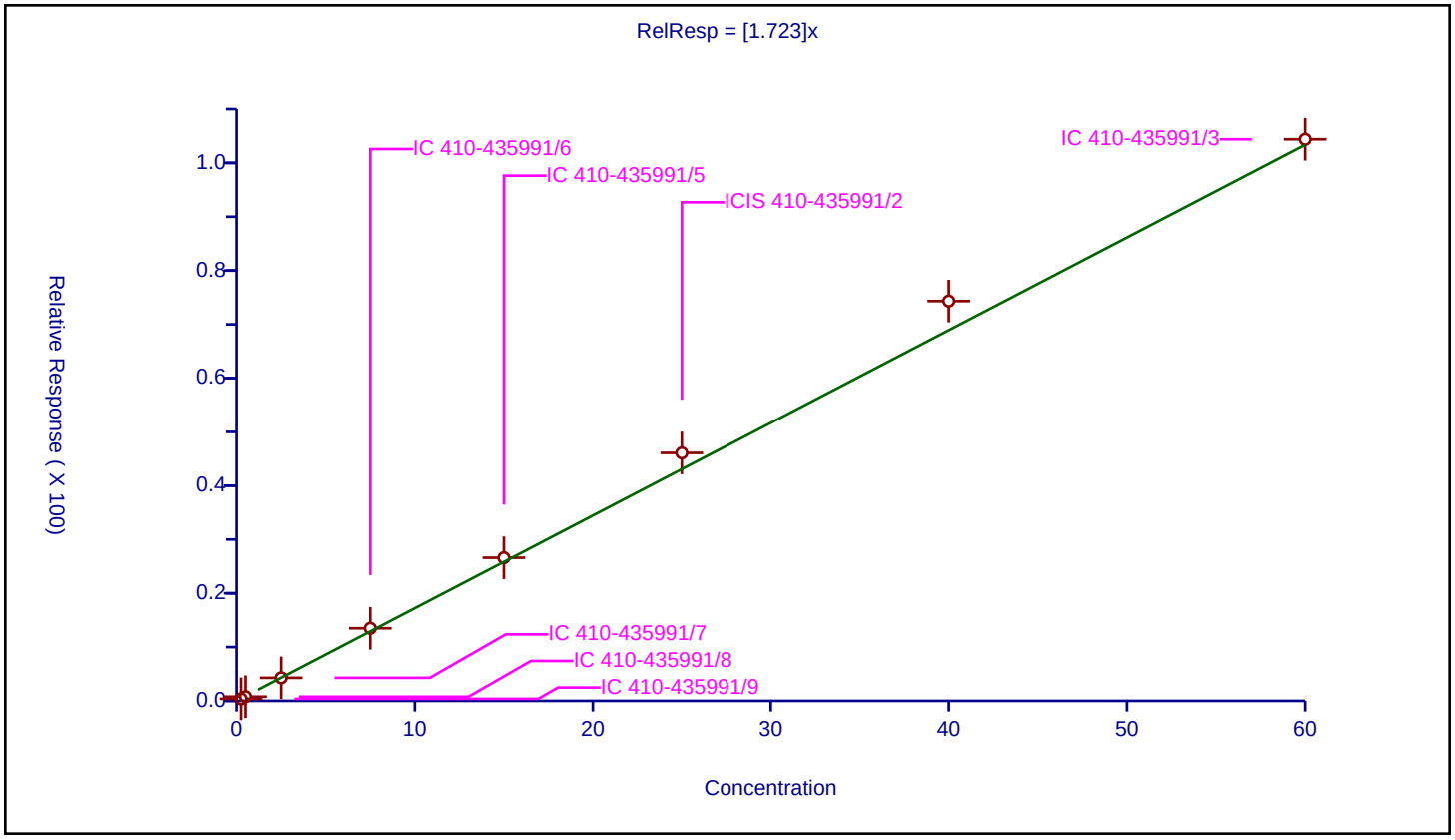
Curve Coefficients

Intercept:	0
Slope:	1.723

Error Coefficients

Standard Error:	1930000
Relative Standard Error:	7.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.25	0.377804	5.0	155689.0	1.511218	Y
2	IC 410-435991/8	0.5	0.771758	5.0	198119.0	1.543517	Y
3	IC 410-435991/7	2.5	4.279854	5.0	184525.0	1.711941	Y
4	IC 410-435991/6	7.5	13.497688	5.0	198321.0	1.799692	Y
5	IC 410-435991/5	15.0	26.61124	5.0	163970.0	1.774083	Y
6	ICIS 410-435991/2	25.0	46.093992	5.0	171514.0	1.84376	Y
7	IC 410-435991/4	40.0	74.328662	5.0	160545.0	1.858217	Y
8	IC 410-435991/3	60.0	104.392917	5.0	196563.0	1.739882	Y



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Calibration / Phenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

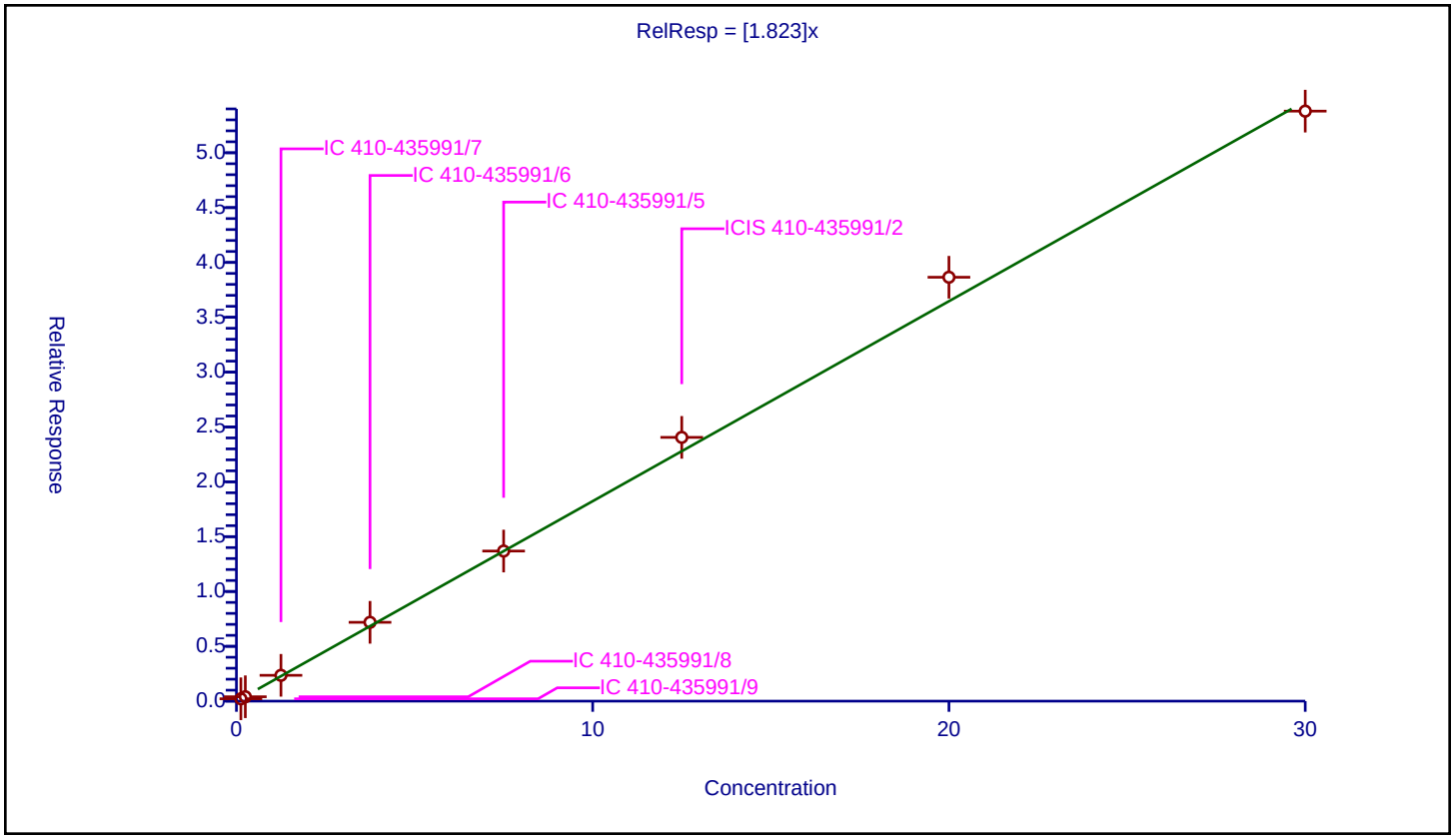
Curve Coefficients

Intercept:	0
Slope:	1.823

Error Coefficients

Standard Error:	999000
Relative Standard Error:	6.5
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.214562	5.0	155689.0	1.716499	Y
2	IC 410-435991/8	0.25	0.398775	5.0	198119.0	1.595102	Y
3	IC 410-435991/7	1.25	2.353936	5.0	184525.0	1.883149	Y
4	IC 410-435991/6	3.75	7.187489	5.0	198321.0	1.916664	Y
5	IC 410-435991/5	7.5	13.684607	5.0	163970.0	1.824614	Y
6	ICIS 410-435991/2	12.5	24.050515	5.0	171514.0	1.924041	Y
7	IC 410-435991/4	20.0	38.650192	5.0	160545.0	1.93251	Y
8	IC 410-435991/3	30.0	53.797078	5.0	196563.0	1.793236	Y



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Calibration / Aniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

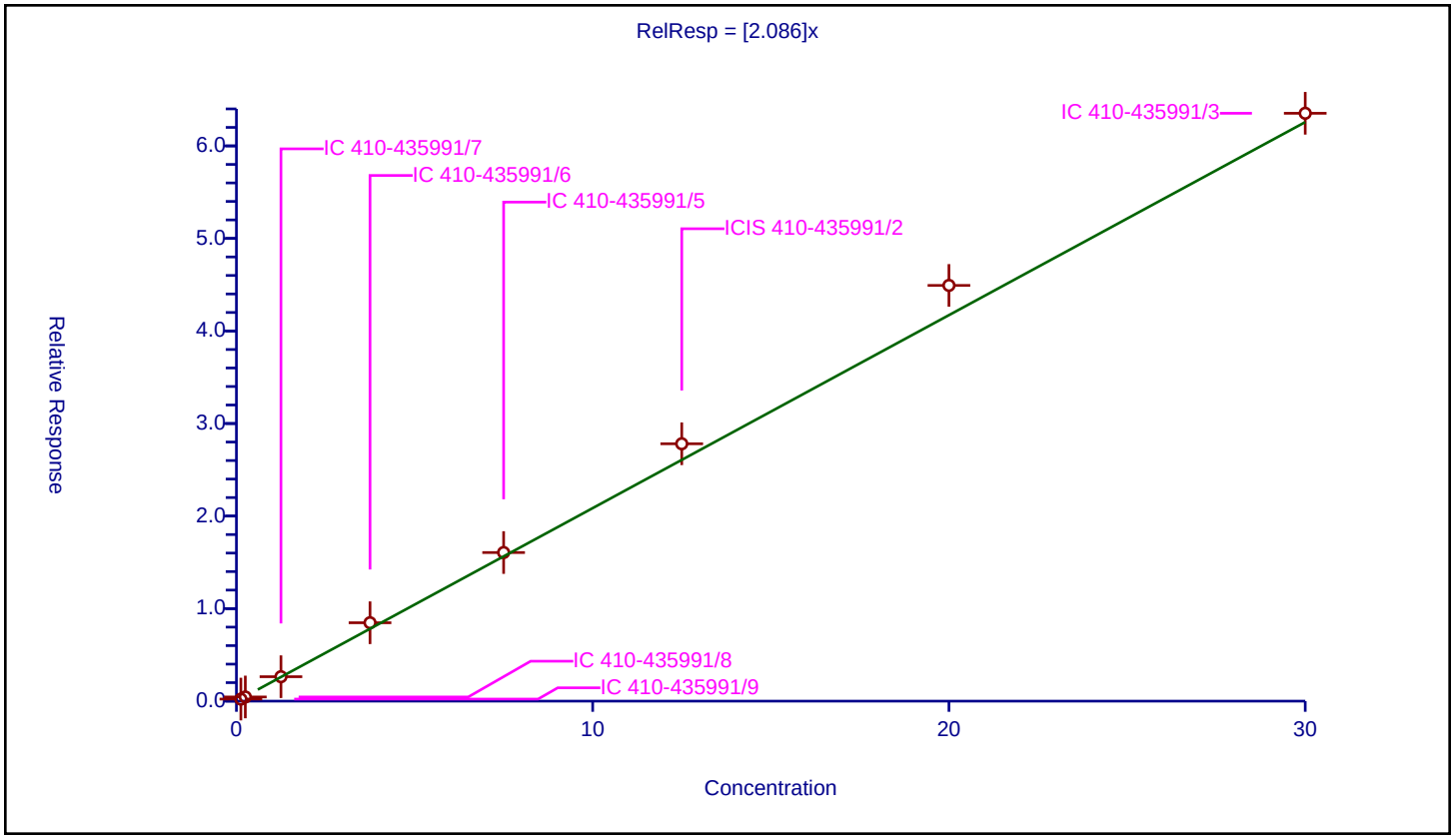
Curve Coefficients

Intercept:	0
Slope:	2.086

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	9.1
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.222752	5.0	155689.0	1.782014	Y
2	IC 410-435991/8	0.25	0.450588	5.0	198119.0	1.802351	Y
3	IC 410-435991/7	1.25	2.639724	5.0	184525.0	2.111779	Y
4	IC 410-435991/6	3.75	8.47225	5.0	198321.0	2.259267	Y
5	IC 410-435991/5	7.5	16.059005	5.0	163970.0	2.141201	Y
6	ICIS 410-435991/2	12.5	27.812802	5.0	171514.0	2.225024	Y
7	IC 410-435991/4	20.0	44.924569	5.0	160545.0	2.246228	Y
8	IC 410-435991/3	30.0	63.523883	5.0	196563.0	2.117463	Y



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Calibration / Bis(2-chloroethyl)ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

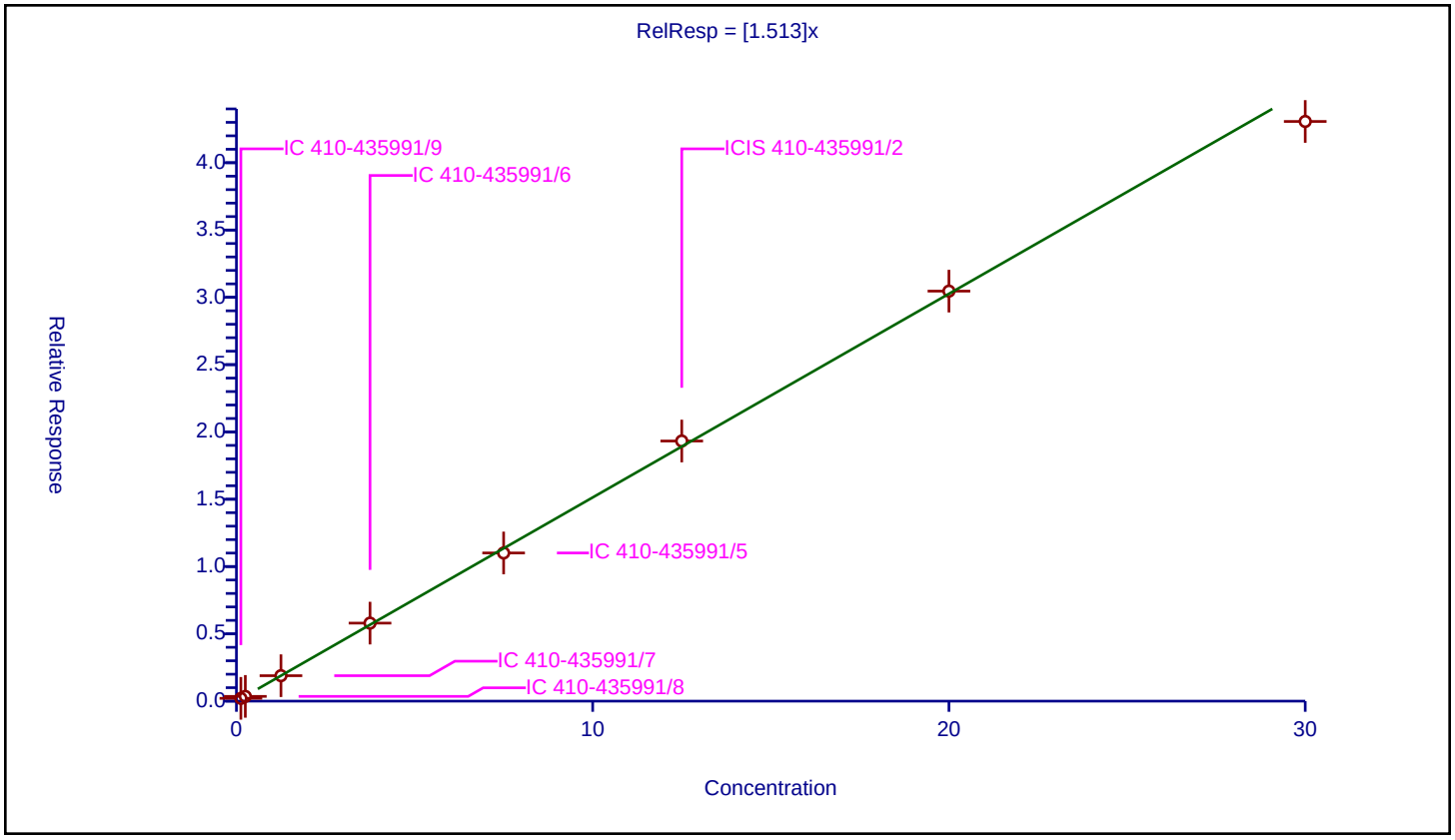
Curve Coefficients

Intercept:	0
Slope:	1.513

Error Coefficients

Standard Error:	797000
Relative Standard Error:	5.2
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.208107	5.0	155689.0	1.664858	Y
2	IC 410-435991/8	0.25	0.352414	5.0	198119.0	1.409658	Y
3	IC 410-435991/7	1.25	1.891451	5.0	184525.0	1.513161	Y
4	IC 410-435991/6	3.75	5.79631	5.0	198321.0	1.545683	Y
5	IC 410-435991/5	7.5	11.008355	5.0	163970.0	1.467781	Y
6	ICIS 410-435991/2	12.5	19.325624	5.0	171514.0	1.54605	Y
7	IC 410-435991/4	20.0	30.460774	5.0	160545.0	1.523039	Y
8	IC 410-435991/3	30.0	43.06665	5.0	196563.0	1.435555	Y



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Calibration / 2-Chlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

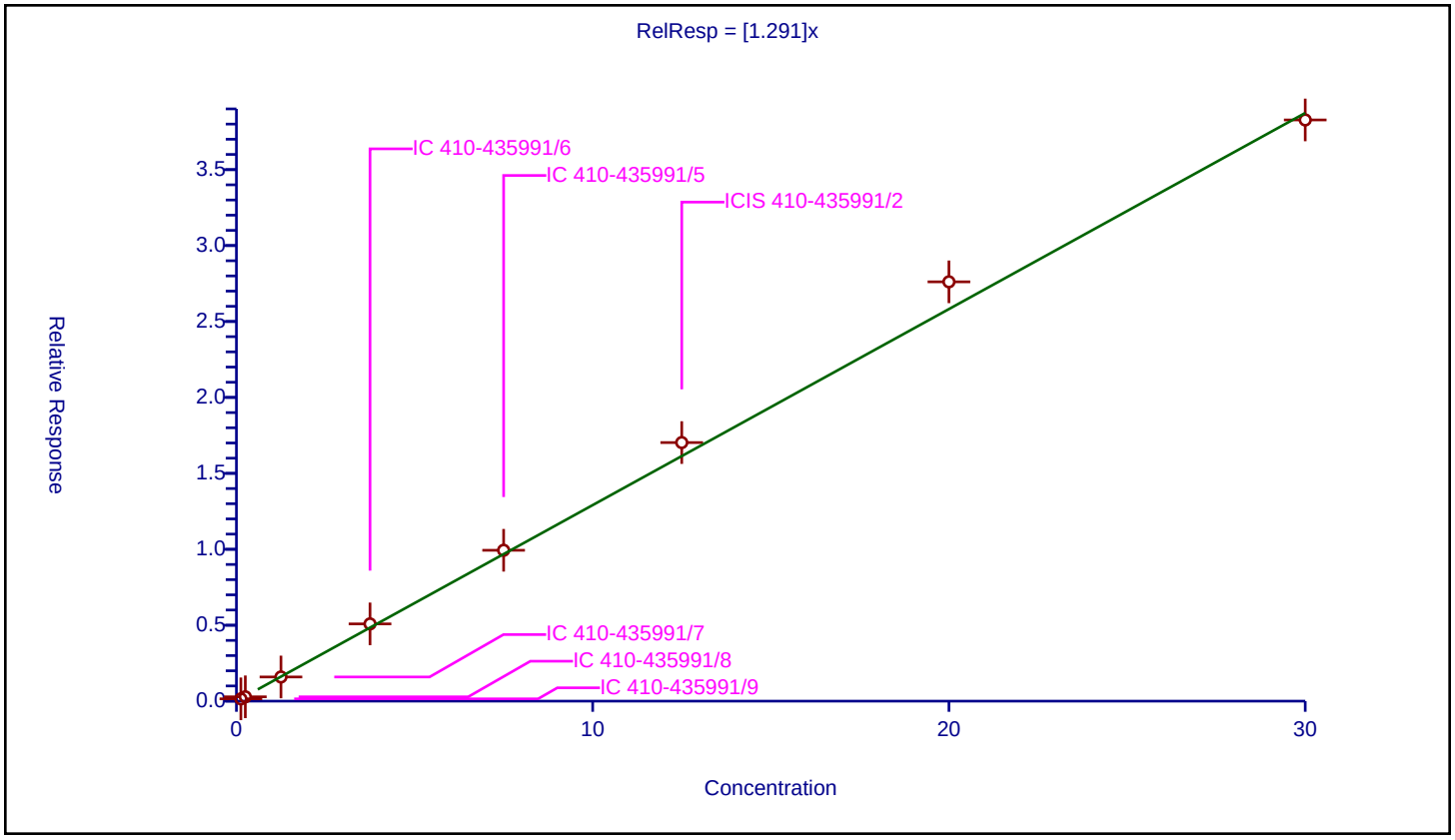
Curve Coefficients

Intercept:	0
Slope:	1.291

Error Coefficients

Standard Error:	711000
Relative Standard Error:	6.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.151777	5.0	155689.0	1.214216	Y
2	IC 410-435991/8	0.25	0.284955	5.0	198119.0	1.13982	Y
3	IC 410-435991/7	1.25	1.592088	5.0	184525.0	1.27367	Y
4	IC 410-435991/6	3.75	5.087812	5.0	198321.0	1.35675	Y
5	IC 410-435991/5	7.5	9.93447	5.0	163970.0	1.324596	Y
6	ICIS 410-435991/2	12.5	17.027473	5.0	171514.0	1.362198	Y
7	IC 410-435991/4	20.0	27.612321	5.0	160545.0	1.380616	Y
8	IC 410-435991/3	30.0	38.271597	5.0	196563.0	1.27572	Y



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Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

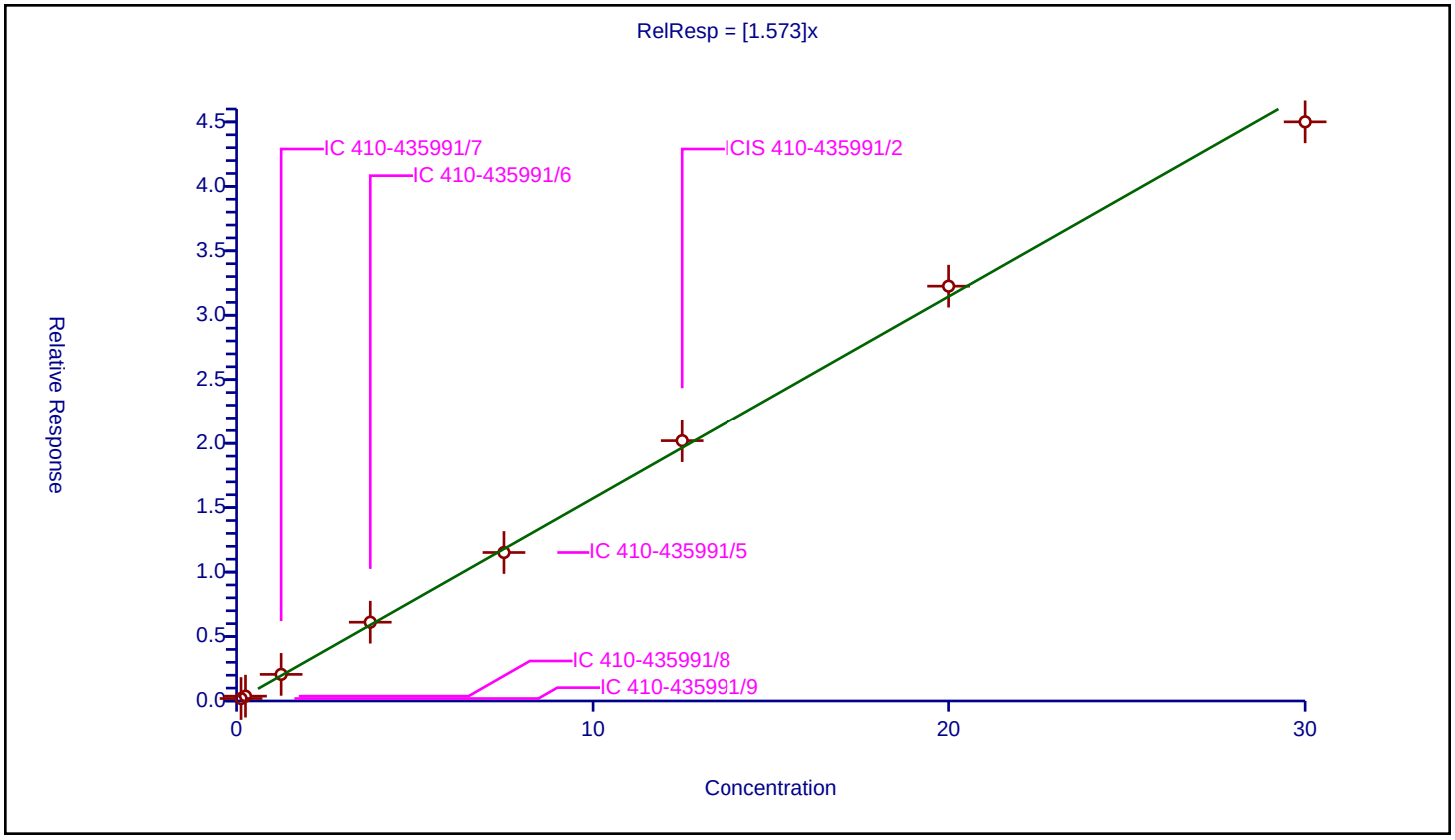
Curve Coefficients

Intercept:	0
Slope:	1.573

Error Coefficients

Standard Error:	836000
Relative Standard Error:	3.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.192114	5.0	155689.0	1.53691	Y
2	IC 410-435991/8	0.25	0.374522	5.0	198119.0	1.49809	Y
3	IC 410-435991/7	1.25	2.063135	5.0	184525.0	1.650508	Y
4	IC 410-435991/6	3.75	6.112565	5.0	198321.0	1.630017	Y
5	IC 410-435991/5	7.5	11.519729	5.0	163970.0	1.535964	Y
6	ICIS 410-435991/2	12.5	20.200392	5.0	171514.0	1.616031	Y
7	IC 410-435991/4	20.0	32.258245	5.0	160545.0	1.612912	Y
8	IC 410-435991/3	30.0	45.004604	5.0	196563.0	1.500153	Y



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Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

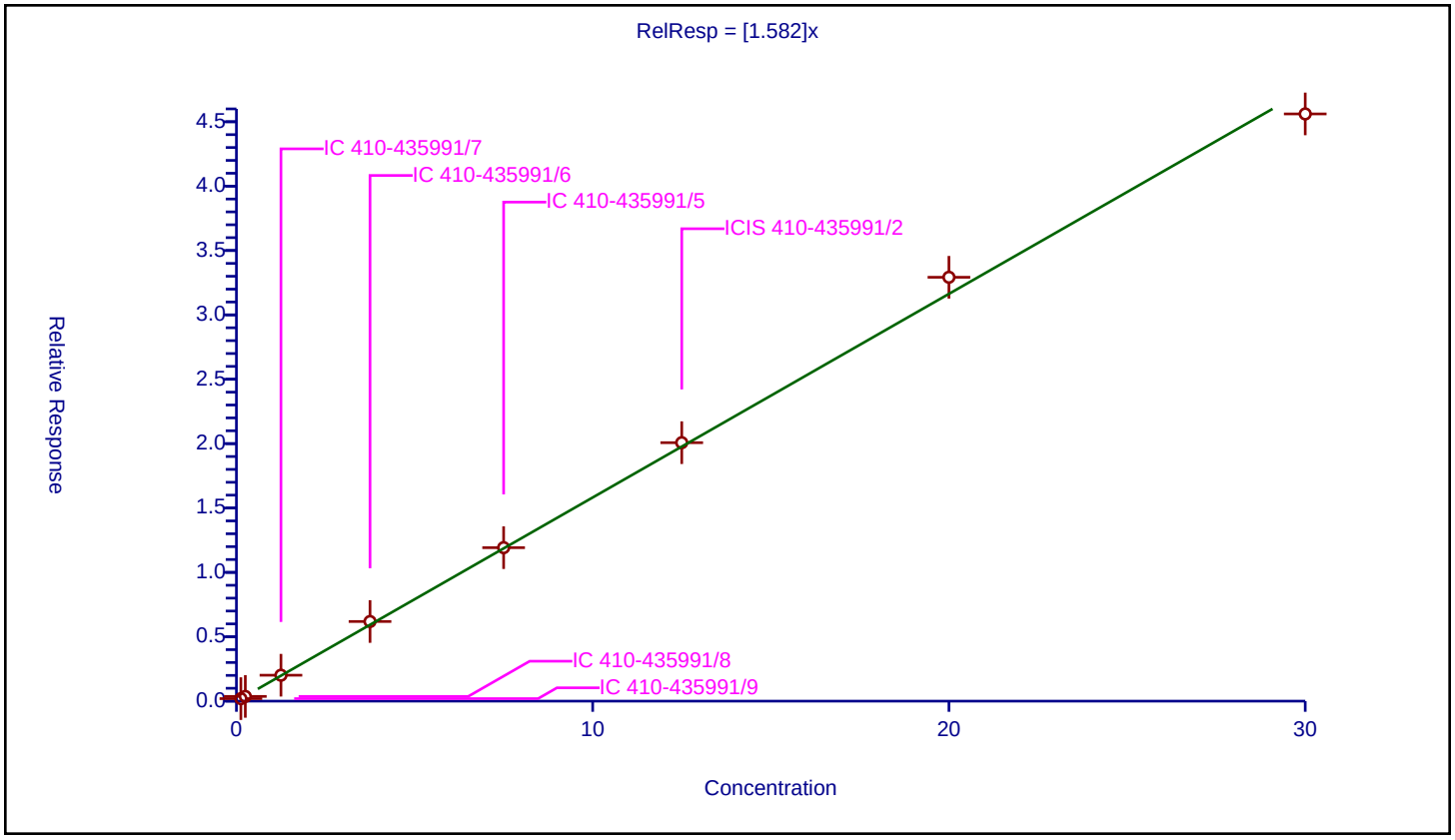
Curve Coefficients

Intercept:	0
Slope:	1.582

Error Coefficients

Standard Error:	847000
Relative Standard Error:	4.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.195614	5.0	155689.0	1.564915	Y
2	IC 410-435991/8	0.25	0.366573	5.0	198119.0	1.46629	Y
3	IC 410-435991/7	1.25	2.013602	5.0	184525.0	1.610882	Y
4	IC 410-435991/6	3.75	6.185805	5.0	198321.0	1.649548	Y
5	IC 410-435991/5	7.5	11.919985	5.0	163970.0	1.589331	Y
6	ICIS 410-435991/2	12.5	20.074863	5.0	171514.0	1.605989	Y
7	IC 410-435991/4	20.0	32.922202	5.0	160545.0	1.64611	Y
8	IC 410-435991/3	30.0	45.609601	5.0	196563.0	1.52032	Y



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Calibration / Benzyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

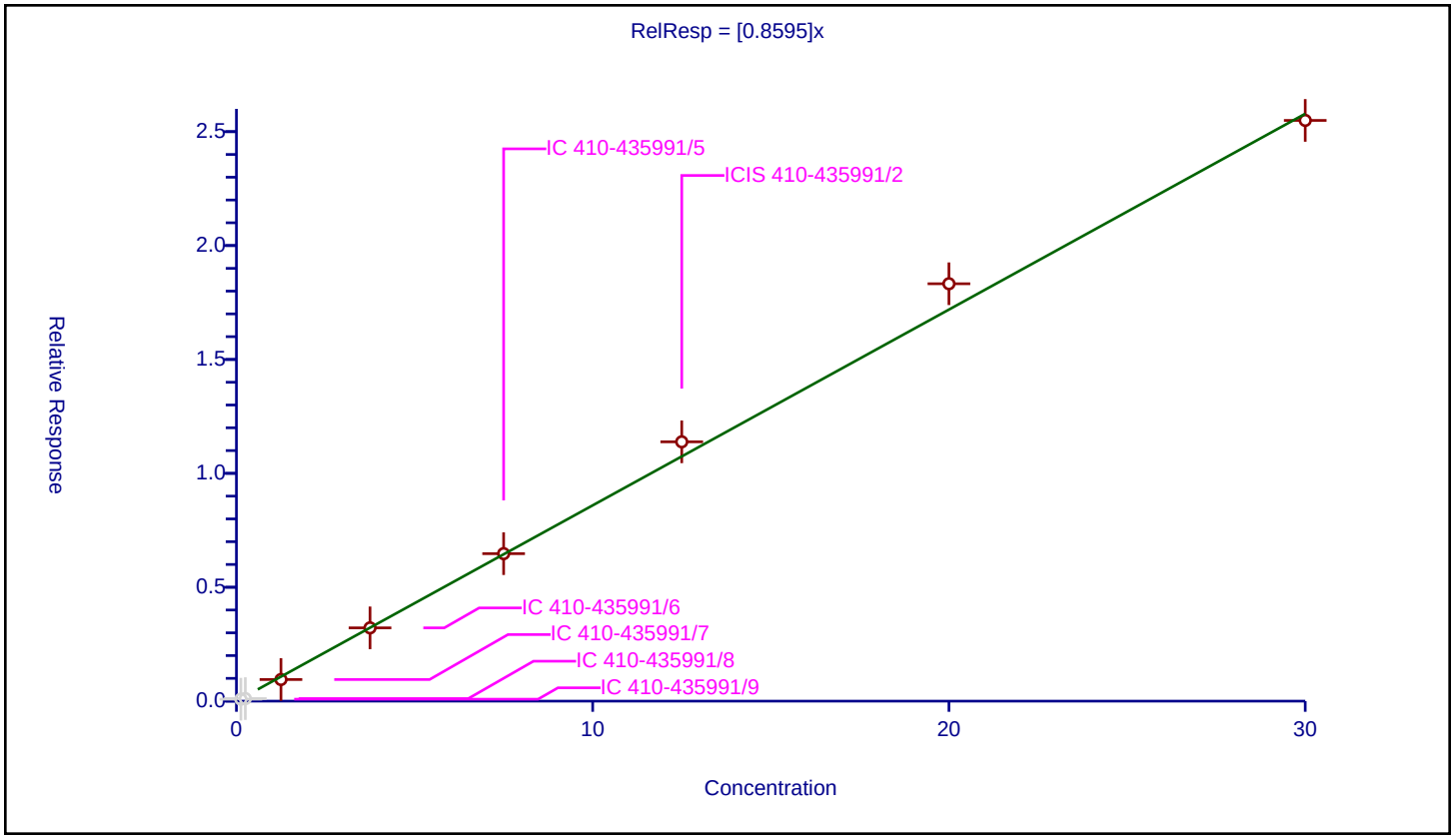
Curve Coefficients

Intercept:	0
Slope:	0.8595

Error Coefficients

Standard Error:	560000
Relative Standard Error:	6.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.085844	5.0	155689.0	0.686754	N
2	IC 410-435991/8	0.25	0.112054	5.0	198119.0	0.448215	N
3	IC 410-435991/7	1.25	0.94876	5.0	184525.0	0.759008	Y
4	IC 410-435991/6	3.75	3.216856	5.0	198321.0	0.857828	Y
5	IC 410-435991/5	7.5	6.474995	5.0	163970.0	0.863333	Y
6	ICIS 410-435991/2	12.5	11.384435	5.0	171514.0	0.910755	Y
7	IC 410-435991/4	20.0	18.324052	5.0	160545.0	0.916203	Y
8	IC 410-435991/3	30.0	25.493913	5.0	196563.0	0.849797	Y



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Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

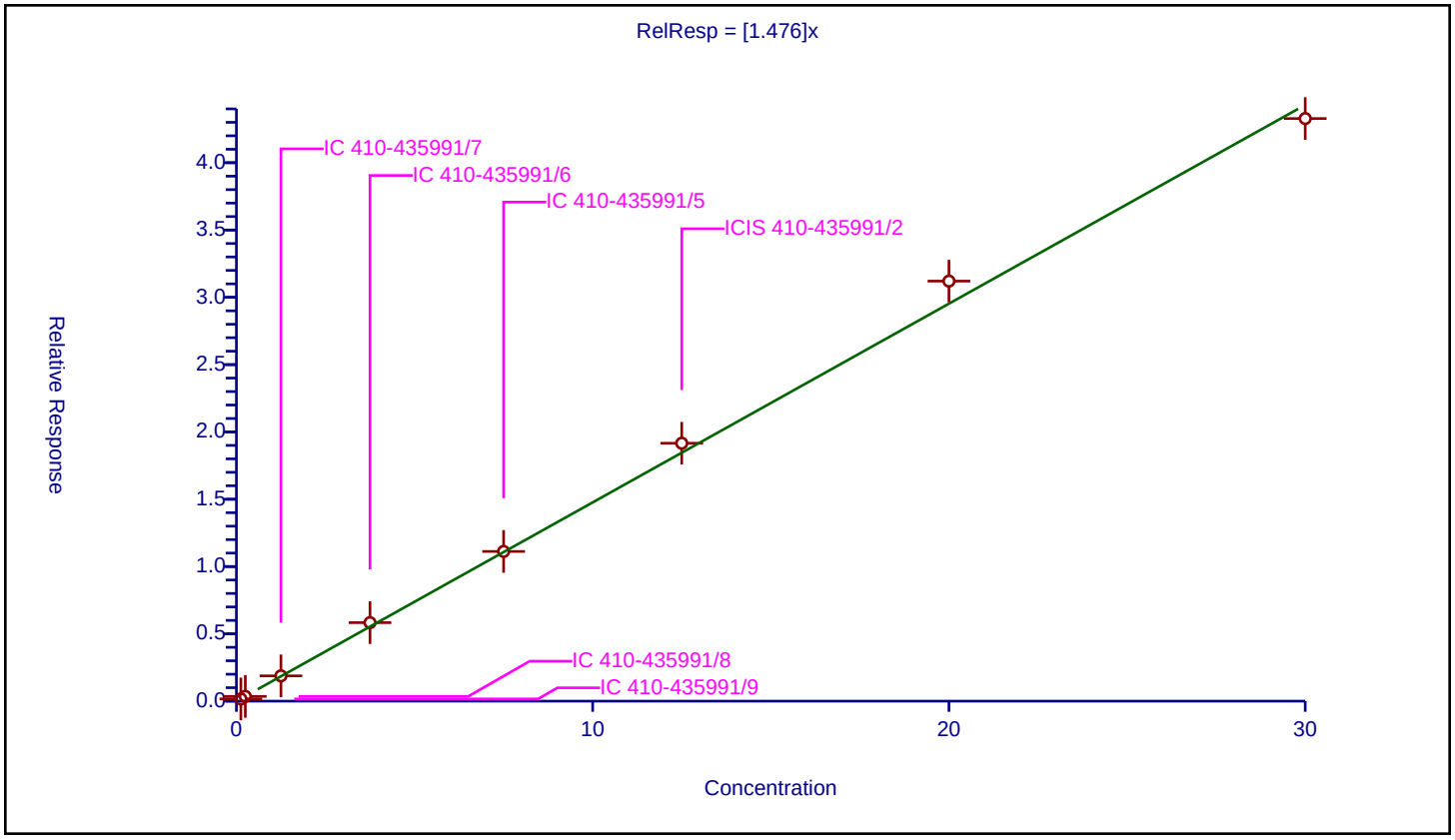
Curve Coefficients

Intercept:	0
Slope:	1.476

Error Coefficients

Standard Error:	804000
Relative Standard Error:	5.5
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.165426	5.0	155689.0	1.323408	Y
2	IC 410-435991/8	0.25	0.352944	5.0	198119.0	1.411778	Y
3	IC 410-435991/7	1.25	1.878065	5.0	184525.0	1.502452	Y
4	IC 410-435991/6	3.75	5.832741	5.0	198321.0	1.555398	Y
5	IC 410-435991/5	7.5	11.121974	5.0	163970.0	1.48293	Y
6	ICIS 410-435991/2	12.5	19.160069	5.0	171514.0	1.532805	Y
7	IC 410-435991/4	20.0	31.205612	5.0	160545.0	1.560281	Y
8	IC 410-435991/3	30.0	43.282179	5.0	196563.0	1.442739	Y



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Calibration / 2-Methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

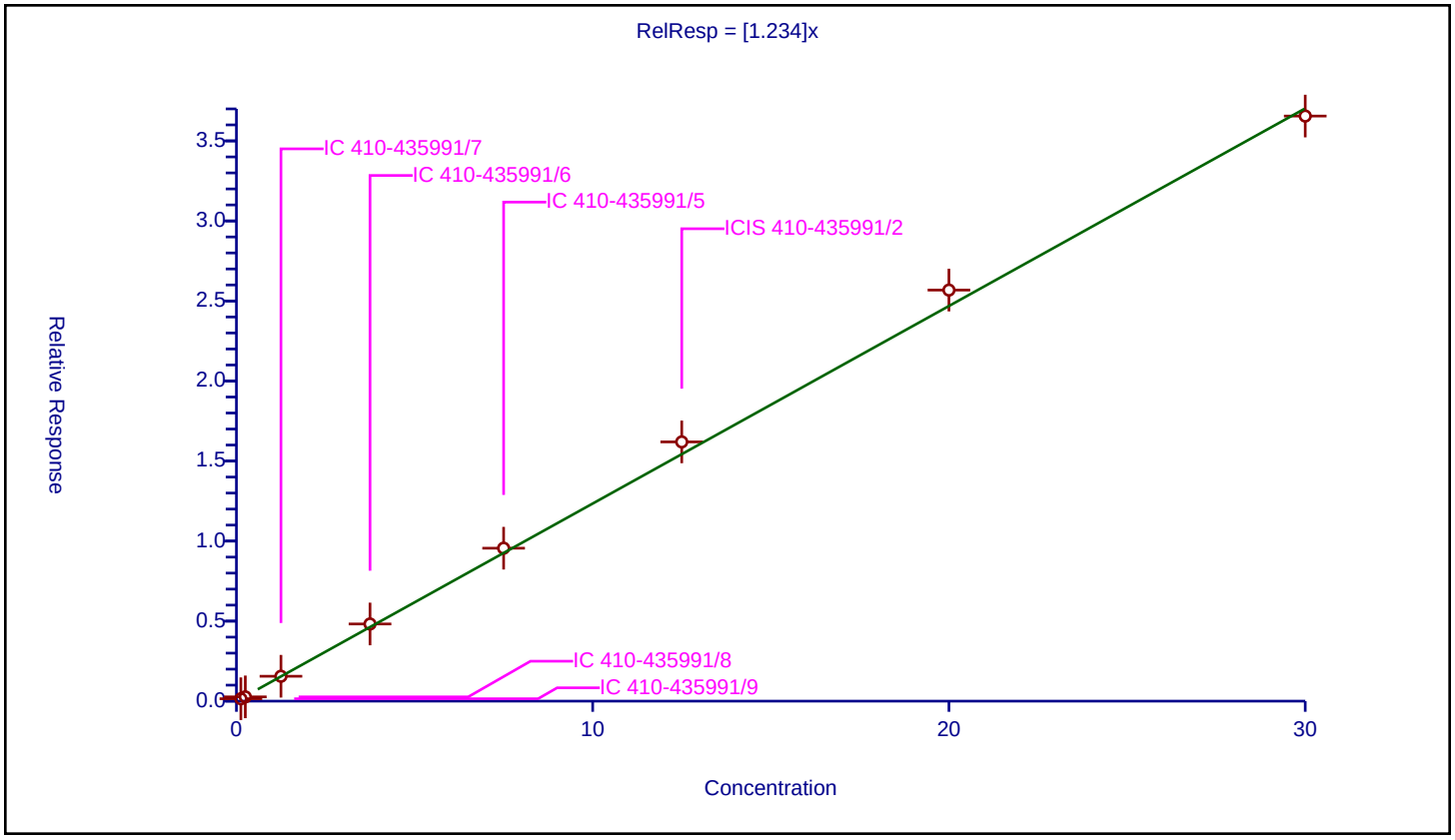
Curve Coefficients

Intercept:	0
Slope:	1.234

Error Coefficients

Standard Error:	675000
Relative Standard Error:	6.1
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.150942	5.0	155689.0	1.207536	Y
2	IC 410-435991/8	0.25	0.266431	5.0	198119.0	1.065723	Y
3	IC 410-435991/7	1.25	1.55418	5.0	184525.0	1.243344	Y
4	IC 410-435991/6	3.75	4.820846	5.0	198321.0	1.285559	Y
5	IC 410-435991/5	7.5	9.555711	5.0	163970.0	1.274095	Y
6	ICIS 410-435991/2	12.5	16.195733	5.0	171514.0	1.295659	Y
7	IC 410-435991/4	20.0	25.680152	5.0	160545.0	1.284008	Y
8	IC 410-435991/3	30.0	36.552963	5.0	196563.0	1.218432	Y



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Calibration / 2,2'-oxybis[1-chloropropane]

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

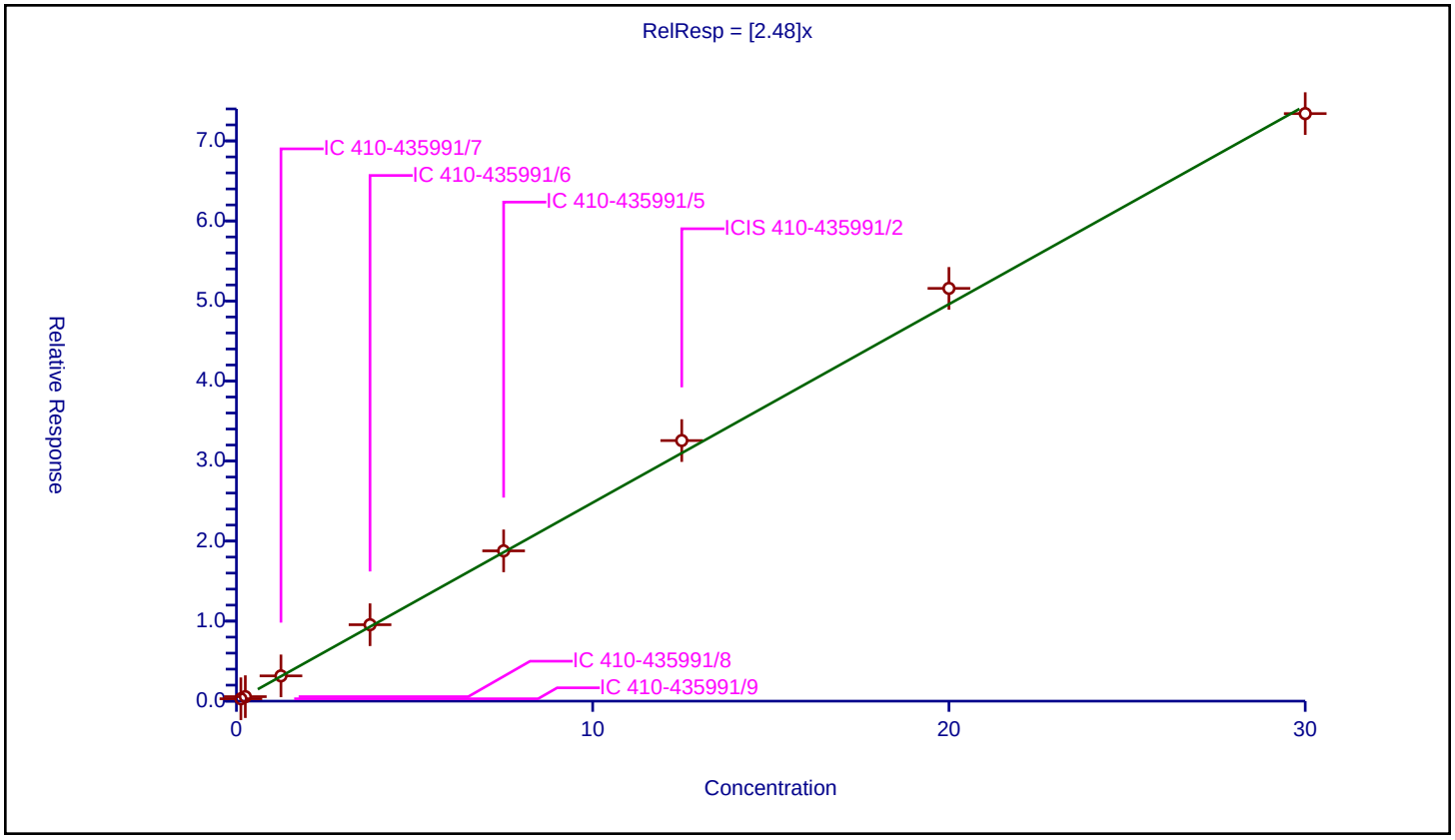
Curve Coefficients

Intercept:	0
Slope:	2.48

Error Coefficients

Standard Error:	1360000
Relative Standard Error:	4.7
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.298737	5.0	155689.0	2.389893	Y
2	IC 410-435991/8	0.25	0.561127	5.0	198119.0	2.24451	Y
3	IC 410-435991/7	1.25	3.156618	5.0	184525.0	2.525295	Y
4	IC 410-435991/6	3.75	9.548888	5.0	198321.0	2.54637	Y
5	IC 410-435991/5	7.5	18.776118	5.0	163970.0	2.503482	Y
6	ICIS 410-435991/2	12.5	32.55947	5.0	171514.0	2.604758	Y
7	IC 410-435991/4	20.0	51.574699	5.0	160545.0	2.578735	Y
8	IC 410-435991/3	30.0	73.411196	5.0	196563.0	2.44704	Y



11/14/2023
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Calibration / N-Nitrosopyrrolidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

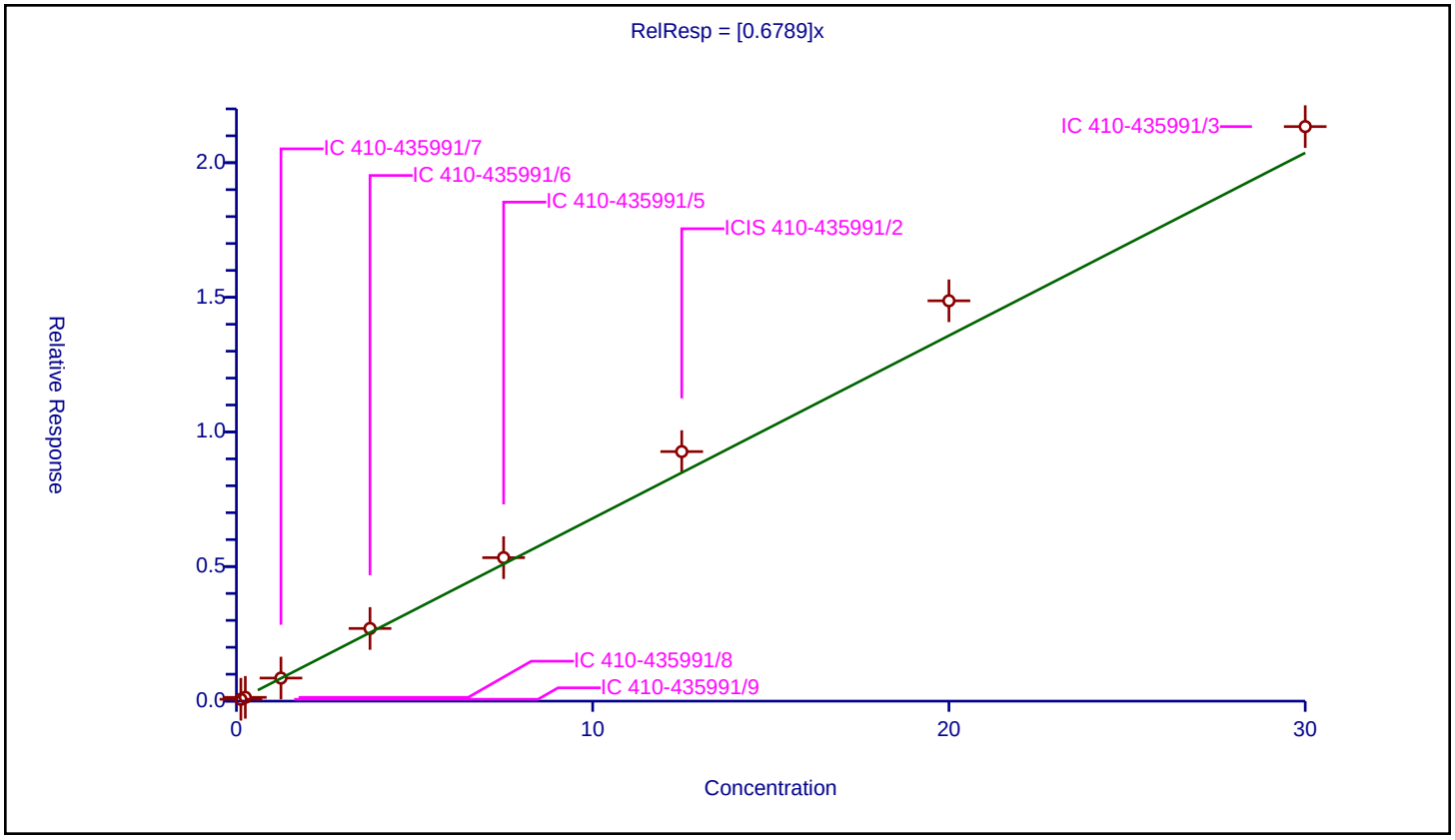
Curve Coefficients

Intercept:	0
Slope:	0.6789

Error Coefficients

Standard Error:	392000
Relative Standard Error:	11.2
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.069337	5.0	155689.0	0.554696	Y
2	IC 410-435991/8	0.25	0.140951	5.0	198119.0	0.563803	Y
3	IC 410-435991/7	1.25	0.856957	5.0	184525.0	0.685566	Y
4	IC 410-435991/6	3.75	2.699563	5.0	198321.0	0.719883	Y
5	IC 410-435991/5	7.5	5.329664	5.0	163970.0	0.710622	Y
6	ICIS 410-435991/2	12.5	9.269739	5.0	171514.0	0.741579	Y
7	IC 410-435991/4	20.0	14.871438	5.0	160545.0	0.743572	Y
8	IC 410-435991/3	30.0	21.342547	5.0	196563.0	0.711418	Y



11/14/2023
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Calibration / 4-Methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

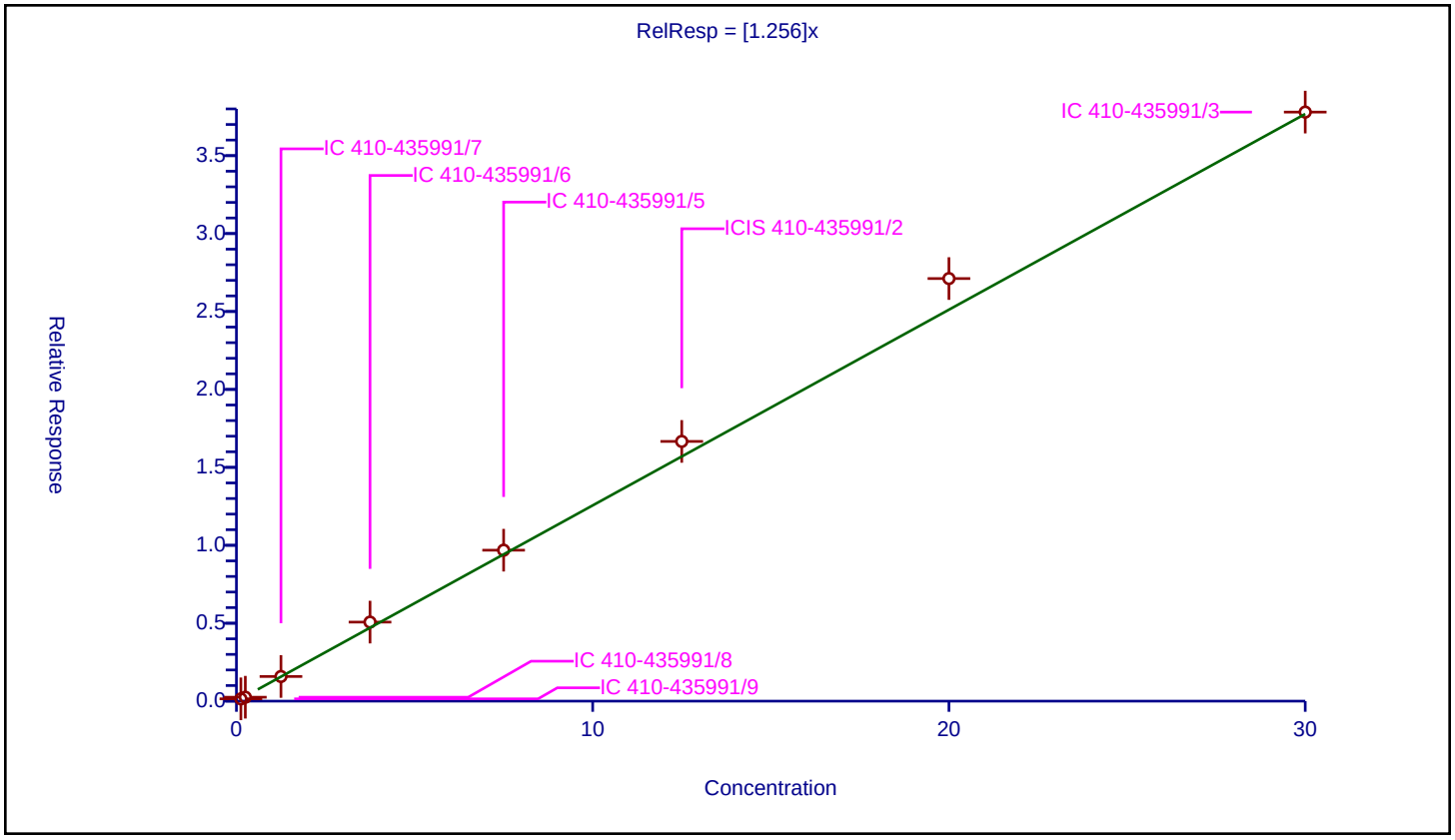
Curve Coefficients

Intercept:	0
Slope:	1.256

Error Coefficients

Standard Error:	701000
Relative Standard Error:	9.2
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.147441	5.0	155689.0	1.179531	Y
2	IC 410-435991/8	0.25	0.252273	5.0	198119.0	1.00909	Y
3	IC 410-435991/7	1.25	1.581818	5.0	184525.0	1.265455	Y
4	IC 410-435991/6	3.75	5.071021	5.0	198321.0	1.352272	Y
5	IC 410-435991/5	7.5	9.68482	5.0	163970.0	1.291309	Y
6	ICIS 410-435991/2	12.5	16.664908	5.0	171514.0	1.333193	Y
7	IC 410-435991/4	20.0	27.113893	5.0	160545.0	1.355695	Y
8	IC 410-435991/3	30.0	37.794473	5.0	196563.0	1.259816	Y



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Calibration / Acetophenone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

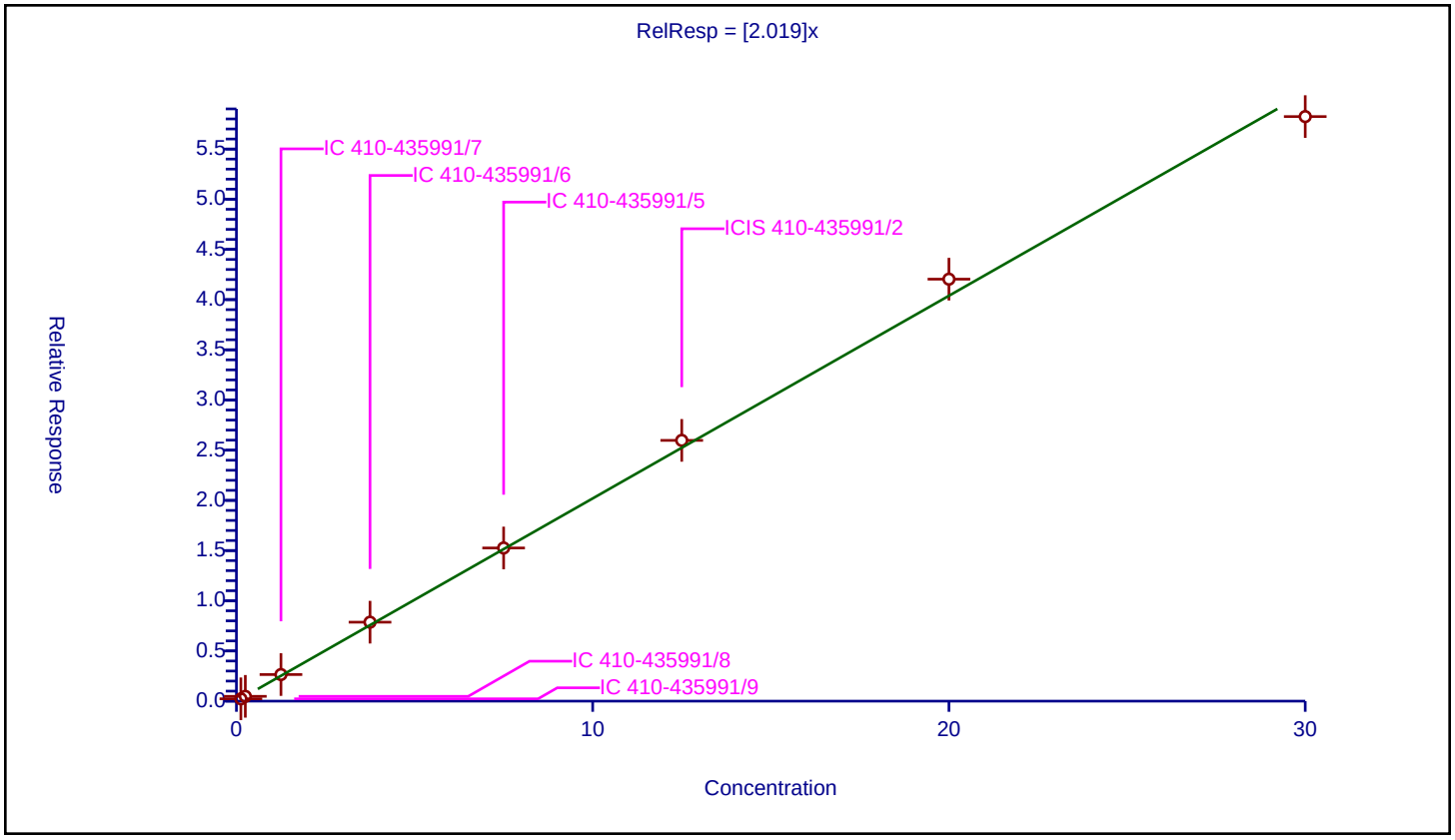
Curve Coefficients

Intercept:	0
Slope:	2.019

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	4.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.232675	5.0	155689.0	1.861403	Y
2	IC 410-435991/8	0.25	0.480166	5.0	198119.0	1.920664	Y
3	IC 410-435991/7	1.25	2.648801	5.0	184525.0	2.119041	Y
4	IC 410-435991/6	3.75	7.865808	5.0	198321.0	2.097549	Y
5	IC 410-435991/5	7.5	15.257913	5.0	163970.0	2.034388	Y
6	ICIS 410-435991/2	12.5	25.976276	5.0	171514.0	2.078102	Y
7	IC 410-435991/4	20.0	42.036158	5.0	160545.0	2.101808	Y
8	IC 410-435991/3	30.0	58.232246	5.0	196563.0	1.941075	Y



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Calibration / N-Nitrosodi-n-propylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

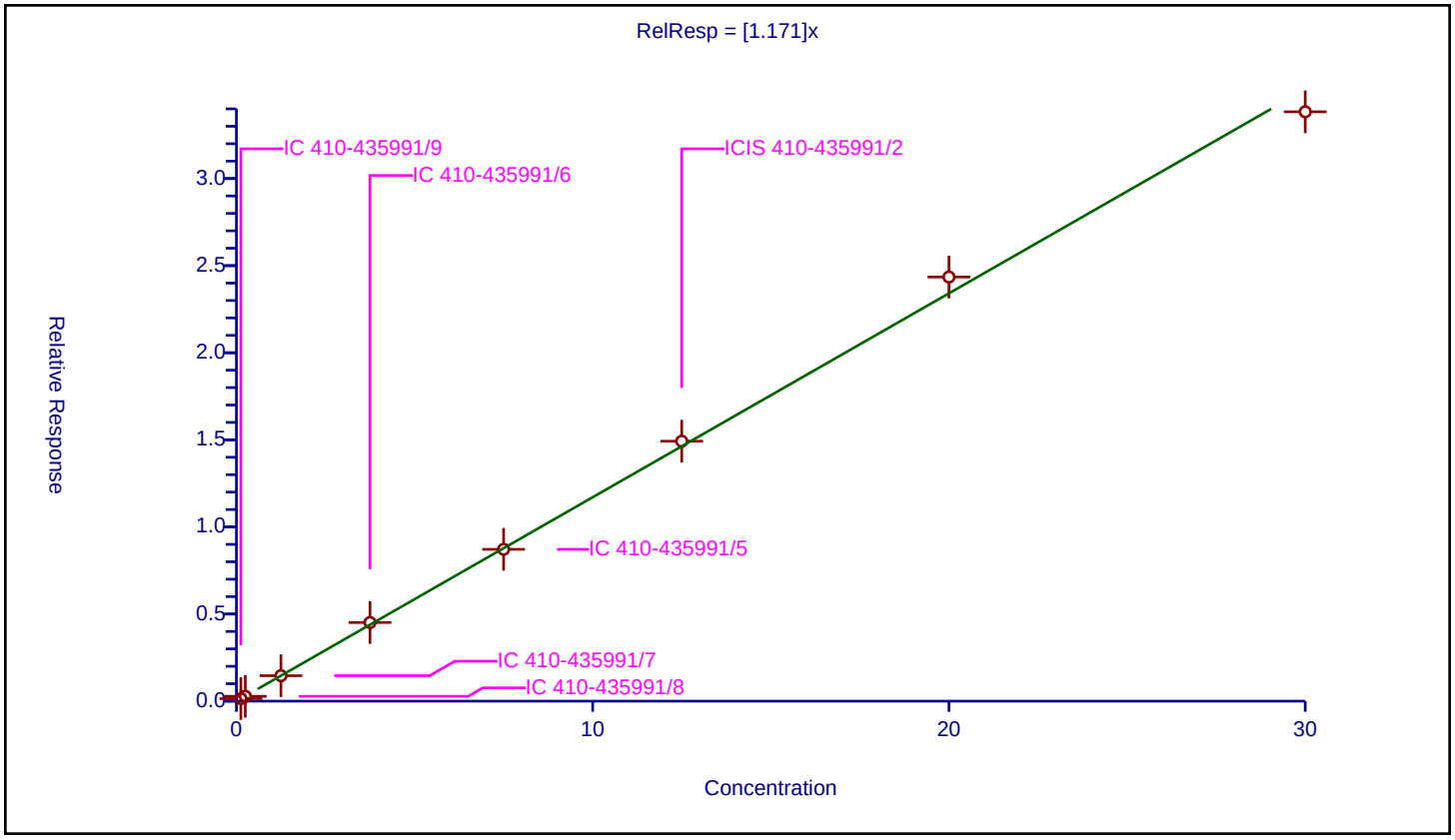
Curve Coefficients

Intercept:	0
Slope:	1.171

Error Coefficients

Standard Error:	628000
Relative Standard Error:	3.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.146671	5.0	155689.0	1.173365	Y
2	IC 410-435991/8	0.25	0.27915	5.0	198119.0	1.116602	Y
3	IC 410-435991/7	1.25	1.461455	5.0	184525.0	1.169164	Y
4	IC 410-435991/6	3.75	4.514348	5.0	198321.0	1.203826	Y
5	IC 410-435991/5	7.5	8.716594	5.0	163970.0	1.162213	Y
6	ICIS 410-435991/2	12.5	14.921814	5.0	171514.0	1.193745	Y
7	IC 410-435991/4	20.0	24.346974	5.0	160545.0	1.217349	Y
8	IC 410-435991/3	30.0	33.833936	5.0	196563.0	1.127798	Y



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Calibration / N-Nitrosomorpholine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

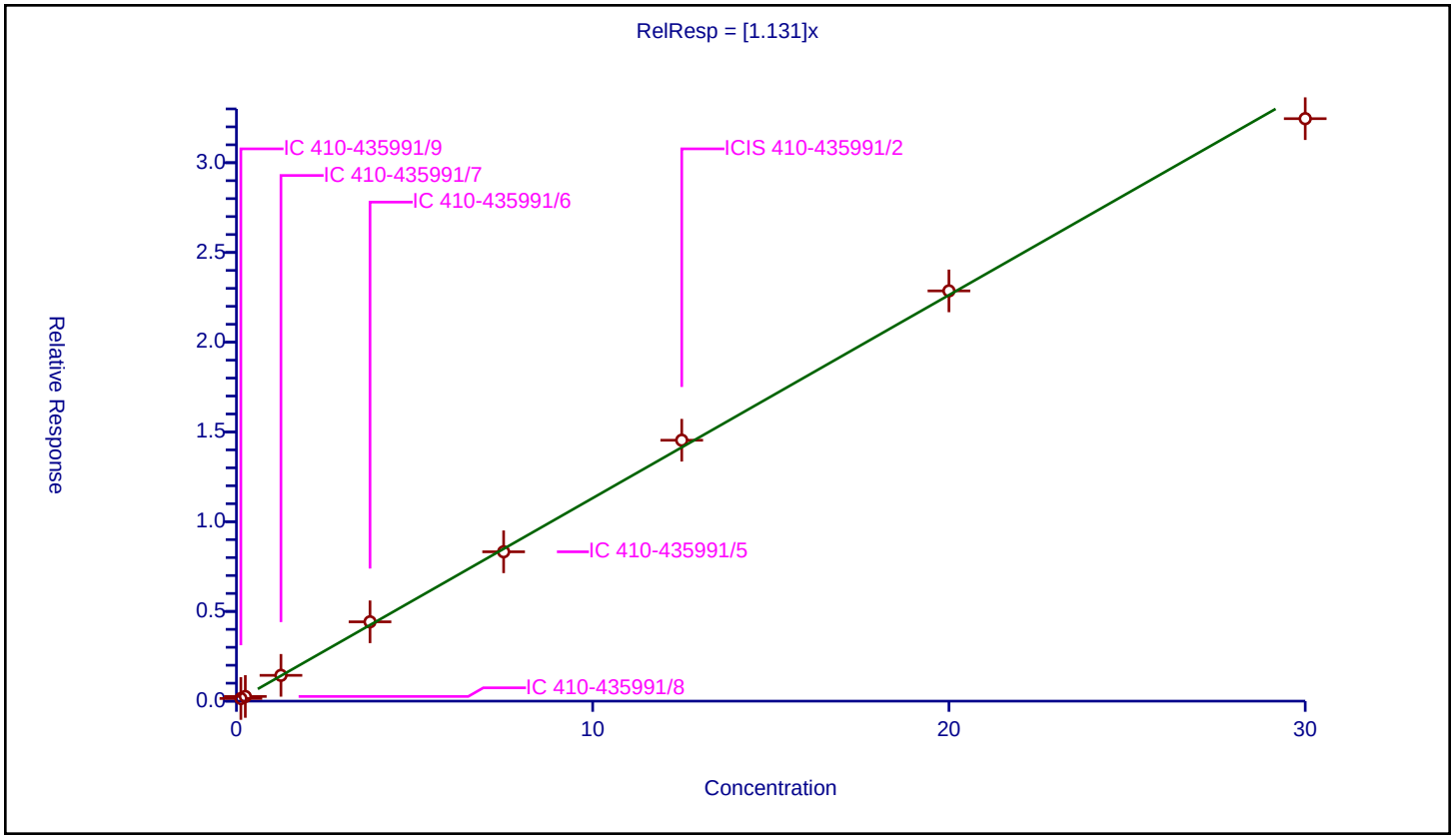
Curve Coefficients

Intercept:	0
Slope:	1.131

Error Coefficients

Standard Error:	600000
Relative Standard Error:	4.4
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.147891	5.0	155689.0	1.183128	Y
2	IC 410-435991/8	0.25	0.260424	5.0	198119.0	1.041697	Y
3	IC 410-435991/7	1.25	1.436689	5.0	184525.0	1.149351	Y
4	IC 410-435991/6	3.75	4.420863	5.0	198321.0	1.178897	Y
5	IC 410-435991/5	7.5	8.321156	5.0	163970.0	1.109488	Y
6	ICIS 410-435991/2	12.5	14.538318	5.0	171514.0	1.163065	Y
7	IC 410-435991/4	20.0	22.860102	5.0	160545.0	1.143005	Y
8	IC 410-435991/3	30.0	32.455498	5.0	196563.0	1.08185	Y



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Calibration / 2-Toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

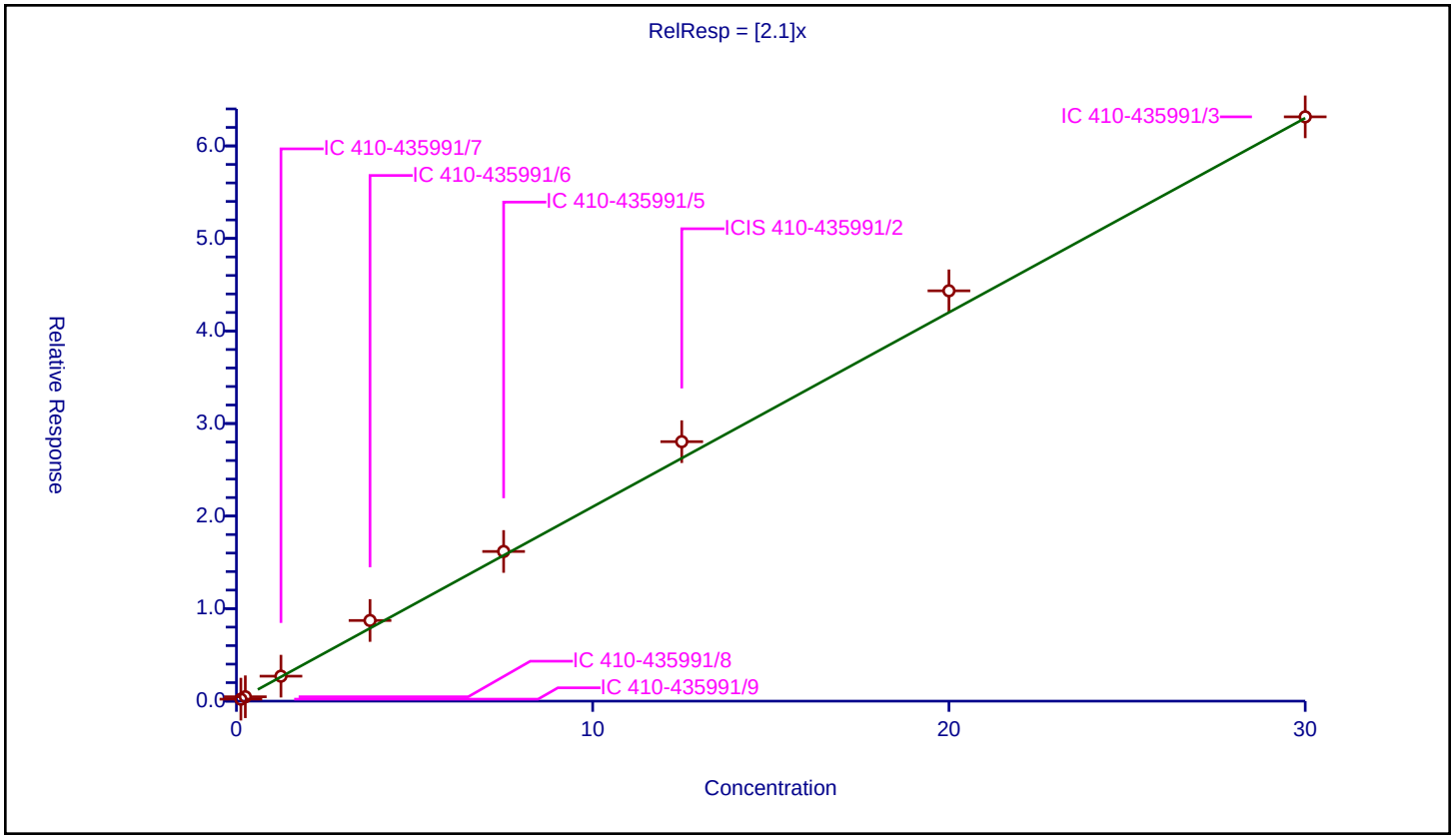
Curve Coefficients

Intercept:	0
Slope:	2.1

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	9.7
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.213535	5.0	155689.0	1.708277	Y
2	IC 410-435991/8	0.25	0.47214	5.0	198119.0	1.888562	Y
3	IC 410-435991/7	1.25	2.699634	5.0	184525.0	2.159707	Y
4	IC 410-435991/6	3.75	8.715416	5.0	198321.0	2.324111	Y
5	IC 410-435991/5	7.5	16.173233	5.0	163970.0	2.156431	Y
6	ICIS 410-435991/2	12.5	28.039256	5.0	171514.0	2.243141	Y
7	IC 410-435991/4	20.0	44.341057	5.0	160545.0	2.217053	Y
8	IC 410-435991/3	30.0	63.141385	5.0	196563.0	2.104713	Y



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Calibration / Hexachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

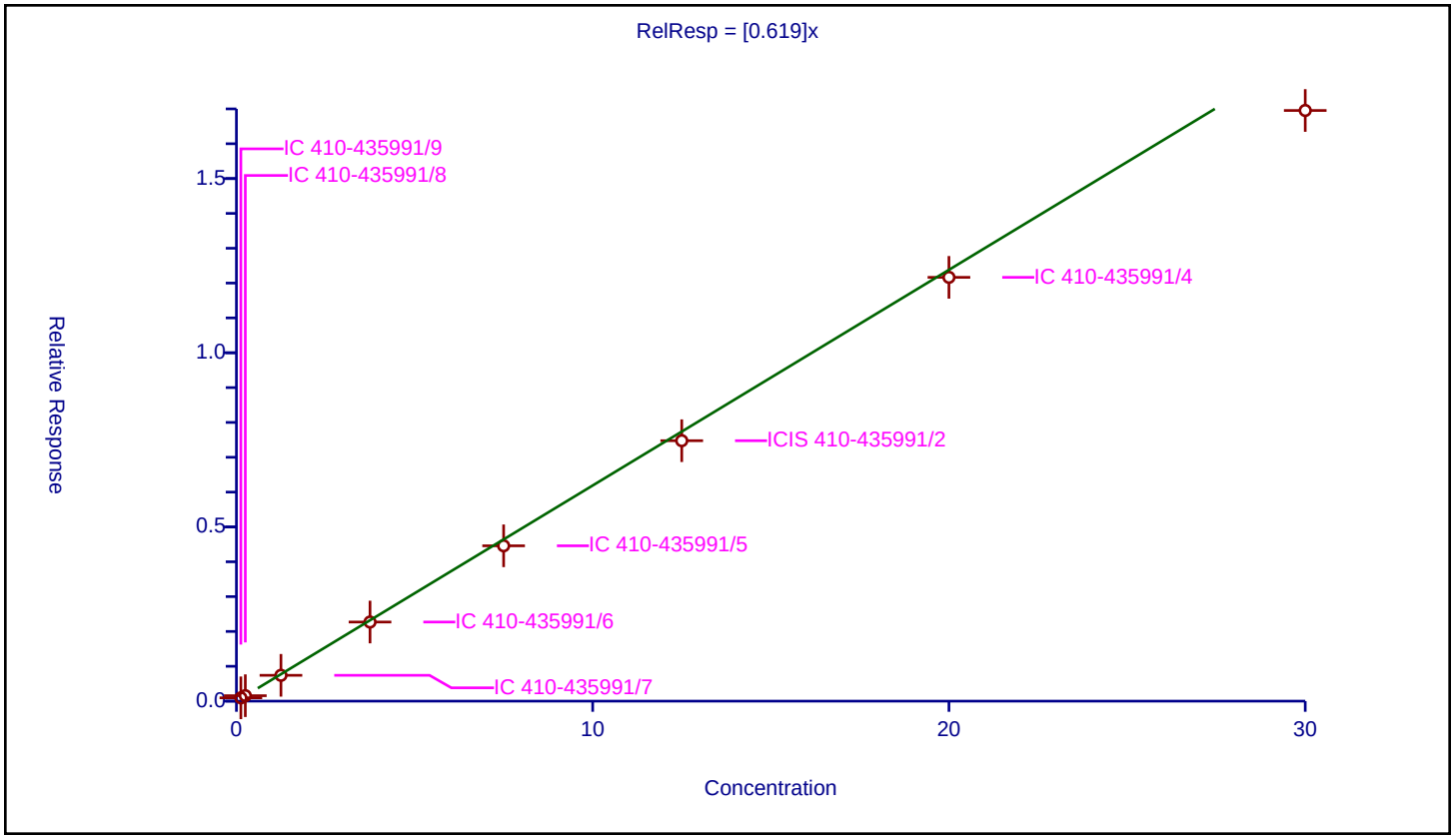
Curve Coefficients

Intercept:	0
Slope:	0.619

Error Coefficients

Standard Error:	315000
Relative Standard Error:	9.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.095222	5.0	155689.0	0.761775	Y
2	IC 410-435991/8	0.25	0.156522	5.0	198119.0	0.626088	Y
3	IC 410-435991/7	1.25	0.740821	5.0	184525.0	0.592657	Y
4	IC 410-435991/6	3.75	2.270813	5.0	198321.0	0.60555	Y
5	IC 410-435991/5	7.5	4.459352	5.0	163970.0	0.59458	Y
6	ICIS 410-435991/2	12.5	7.475454	5.0	171514.0	0.598036	Y
7	IC 410-435991/4	20.0	12.16416	5.0	160545.0	0.608208	Y
8	IC 410-435991/3	30.0	16.95403	5.0	196563.0	0.565134	Y



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Calibration / Nitrobenzene-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

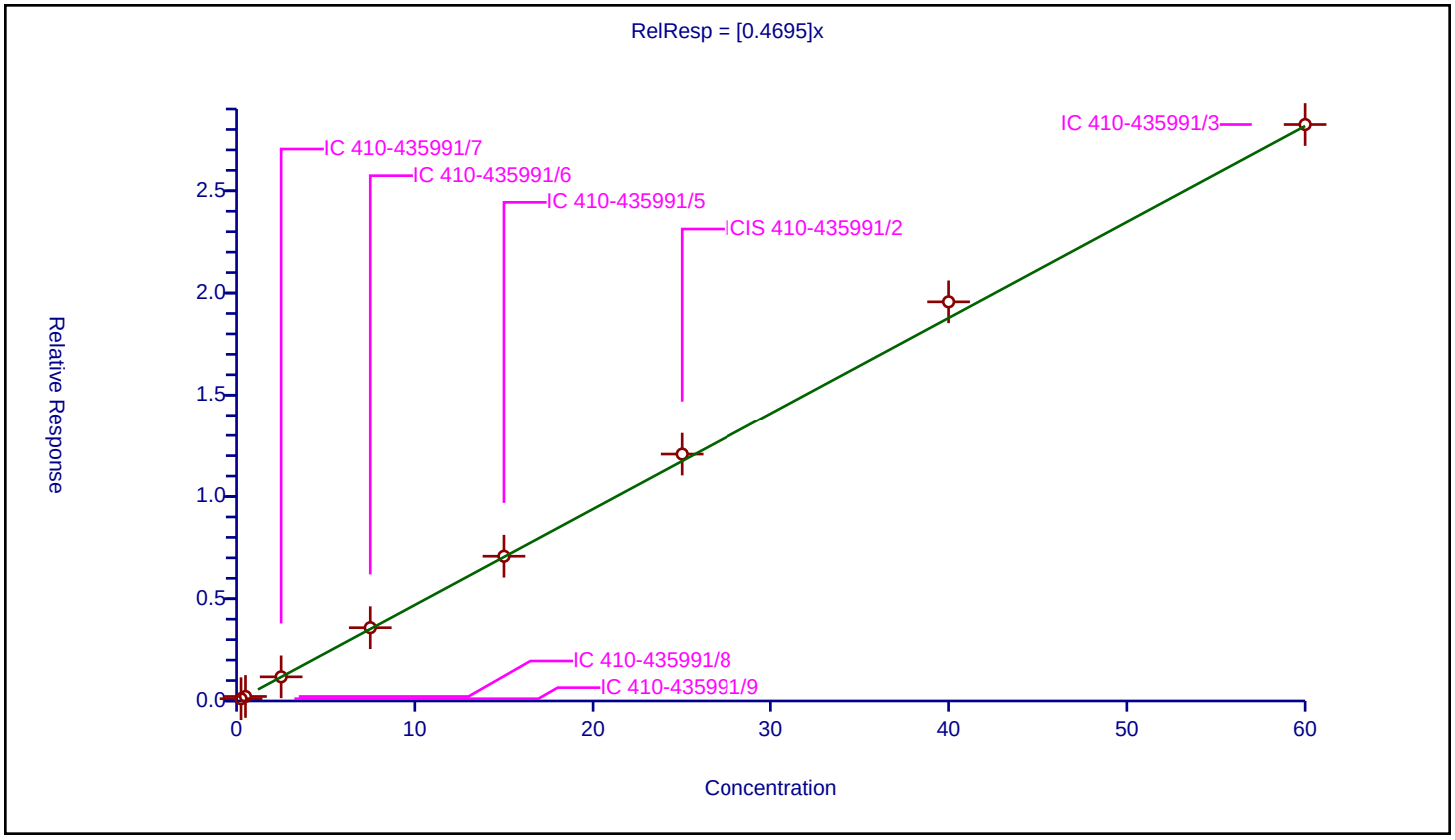
Curve Coefficients

Intercept:	0
Slope:	0.4695

Error Coefficients

Standard Error:	1770000
Relative Standard Error:	3.5
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.25	0.112073	5.0	546517.0	0.448293	Y
2	IC 410-435991/8	0.5	0.221203	5.0	668548.0	0.442407	Y
3	IC 410-435991/7	2.5	1.180334	5.0	639802.0	0.472134	Y
4	IC 410-435991/6	7.5	3.585033	5.0	700285.0	0.478004	Y
5	IC 410-435991/5	15.0	7.079426	5.0	570732.0	0.471962	Y
6	ICIS 410-435991/2	25.0	12.077432	5.0	599158.0	0.483097	Y
7	IC 410-435991/4	40.0	19.569777	5.0	558454.0	0.489244	Y
8	IC 410-435991/3	60.0	28.242375	5.0	662792.0	0.470706	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

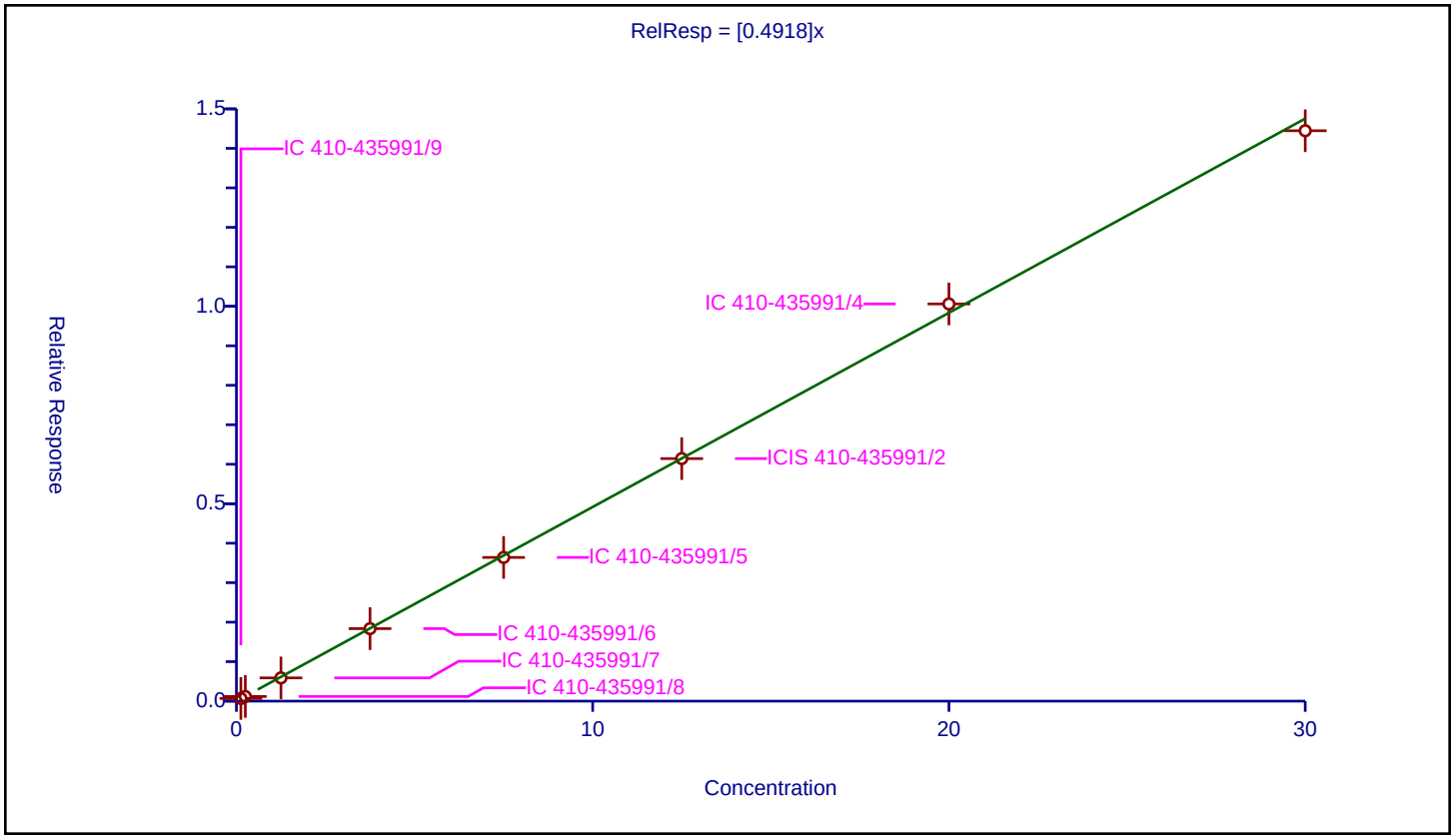
Curve Coefficients

Intercept:	0
Slope:	0.4918

Error Coefficients

Standard Error:	904000
Relative Standard Error:	4.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.067647	5.0	546517.0	0.541173	Y
2	IC 410-435991/8	0.25	0.117815	5.0	668548.0	0.47126	Y
3	IC 410-435991/7	1.25	0.588557	5.0	639802.0	0.470846	Y
4	IC 410-435991/6	3.75	1.836488	5.0	700285.0	0.48973	Y
5	IC 410-435991/5	7.5	3.639922	5.0	570732.0	0.485323	Y
6	ICIS 410-435991/2	12.5	6.143046	5.0	599158.0	0.491444	Y
7	IC 410-435991/4	20.0	10.059915	5.0	558454.0	0.502996	Y
8	IC 410-435991/3	30.0	14.446712	5.0	662792.0	0.481557	Y



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Calibration / N-Nitrosopiperidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

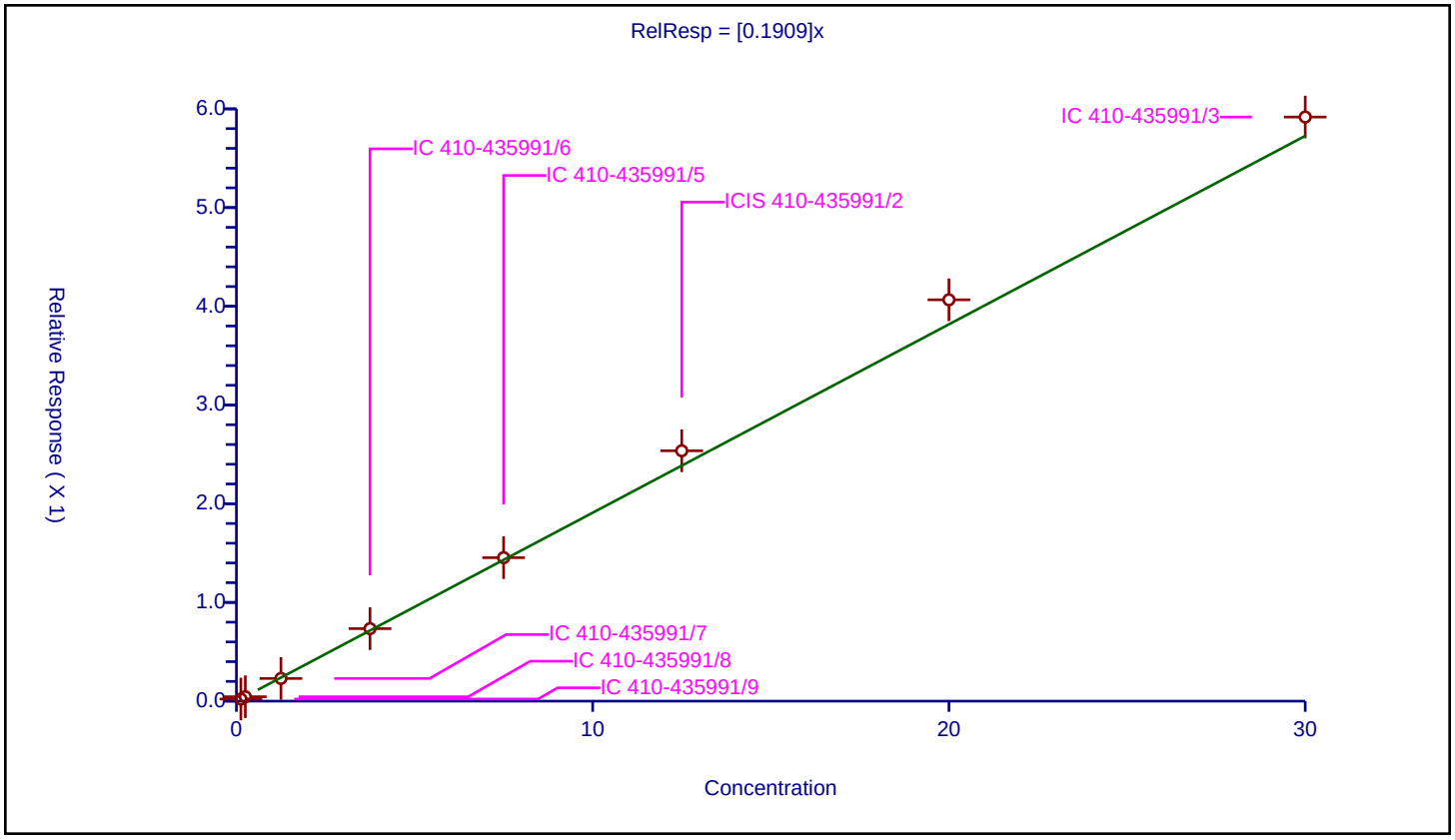
Curve Coefficients

Intercept:	0
Slope:	0.1909

Error Coefficients

Standard Error:	369000
Relative Standard Error:	6.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.021454	5.0	546517.0	0.171632	Y
2	IC 410-435991/8	0.25	0.044567	5.0	668548.0	0.178267	Y
3	IC 410-435991/7	1.25	0.229876	5.0	639802.0	0.183901	Y
4	IC 410-435991/6	3.75	0.734587	5.0	700285.0	0.19589	Y
5	IC 410-435991/5	7.5	1.453476	5.0	570732.0	0.193797	Y
6	ICIS 410-435991/2	12.5	2.536526	5.0	599158.0	0.202922	Y
7	IC 410-435991/4	20.0	4.065948	5.0	558454.0	0.203297	Y
8	IC 410-435991/3	30.0	5.917482	5.0	662792.0	0.197249	Y



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Calibration / Isophorone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

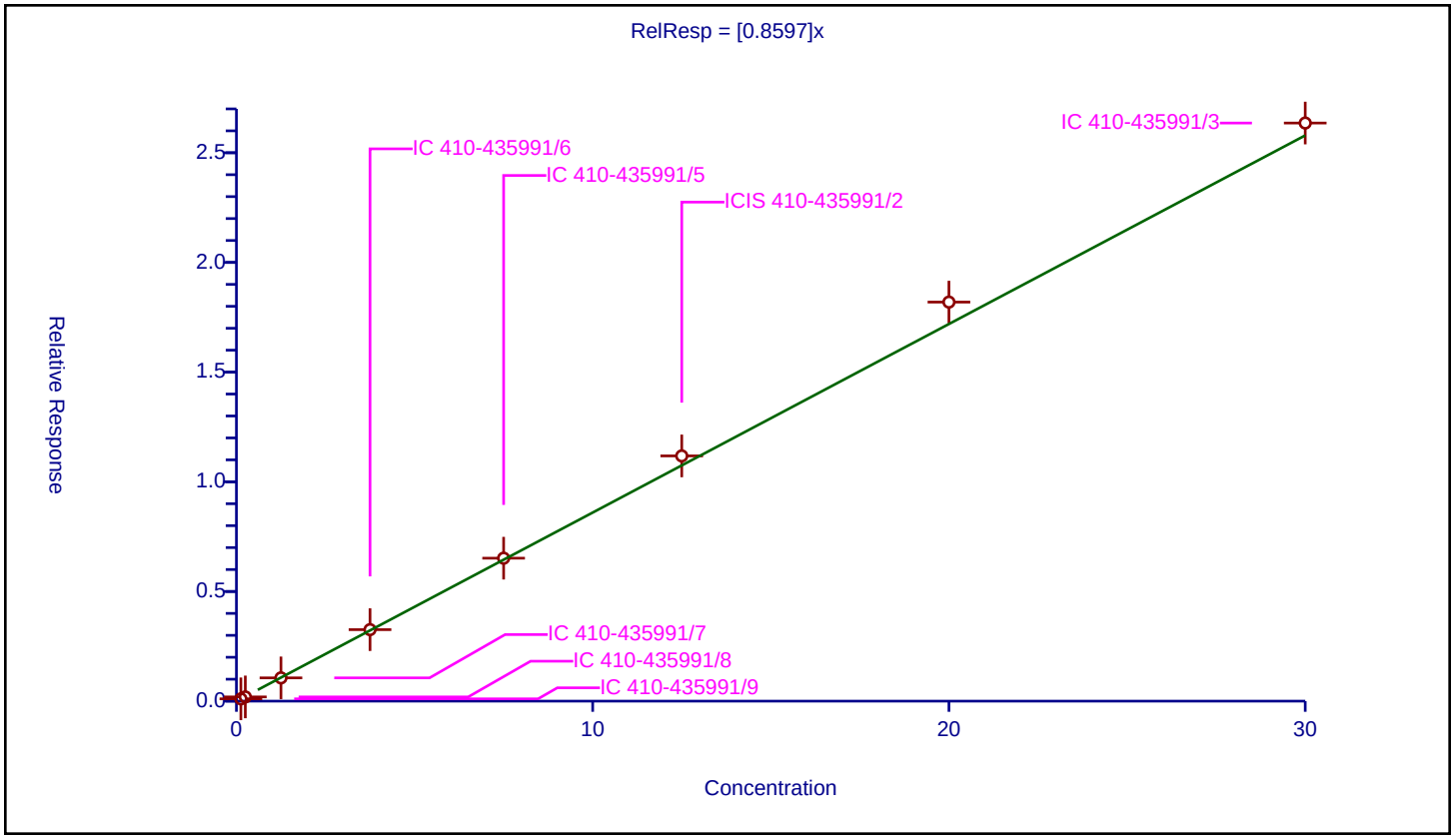
Curve Coefficients

Intercept:	0
Slope:	0.8597

Error Coefficients

Standard Error:	1640000
Relative Standard Error:	5.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.105084	5.0	546517.0	0.840669	Y
2	IC 410-435991/8	0.25	0.191908	5.0	668548.0	0.767634	Y
3	IC 410-435991/7	1.25	1.060422	5.0	639802.0	0.848337	Y
4	IC 410-435991/6	3.75	3.260116	5.0	700285.0	0.869364	Y
5	IC 410-435991/5	7.5	6.517648	5.0	570732.0	0.86902	Y
6	ICIS 410-435991/2	12.5	11.17933	5.0	599158.0	0.894346	Y
7	IC 410-435991/4	20.0	18.192626	5.0	558454.0	0.909631	Y
8	IC 410-435991/3	30.0	26.354701	5.0	662792.0	0.87849	Y



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Calibration / 2-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

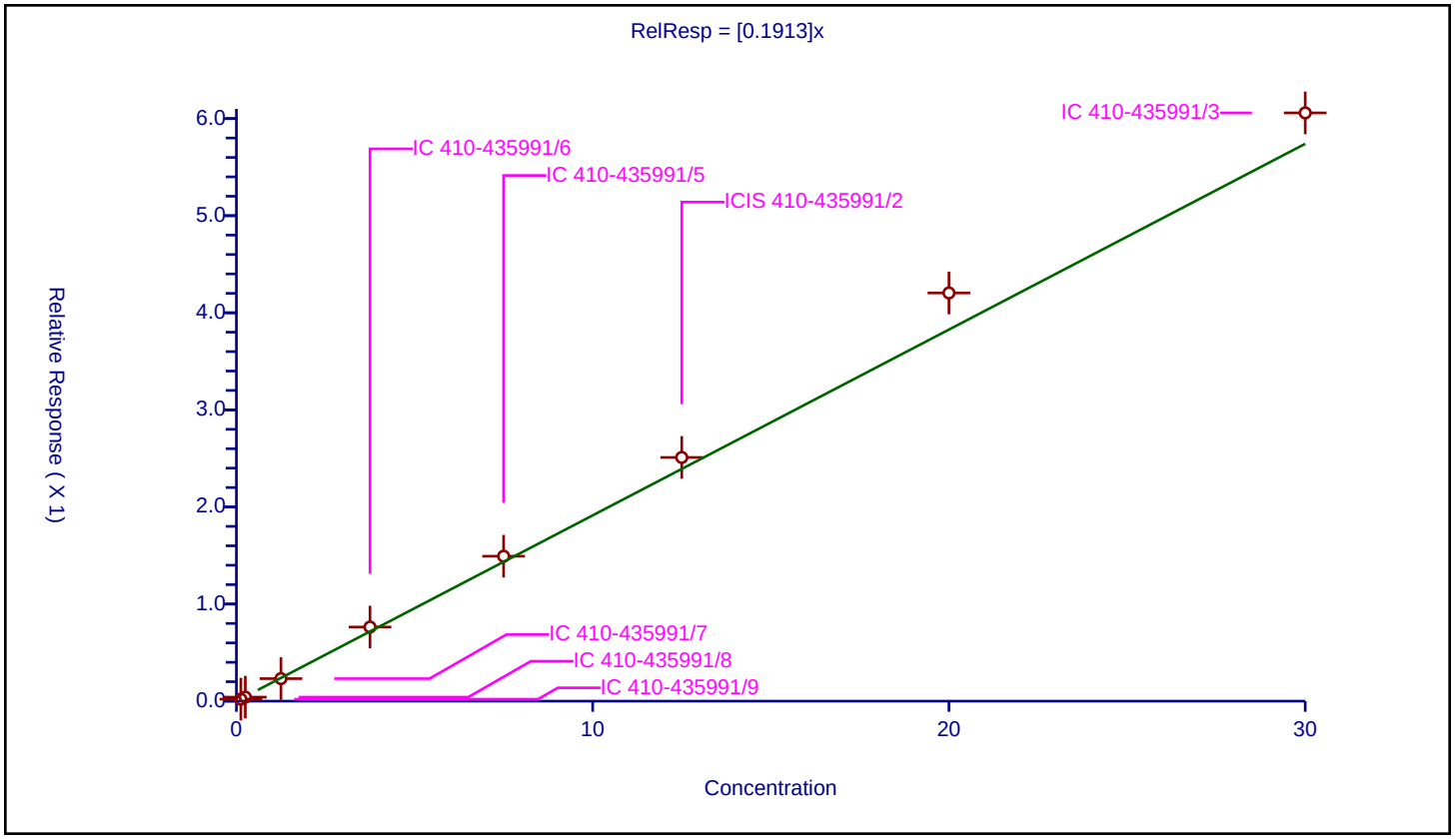
Curve Coefficients

Intercept:	0
Slope:	0.1913

Error Coefficients

Standard Error:	377000
Relative Standard Error:	9.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.02053	5.0	546517.0	0.16424	Y
2	IC 410-435991/8	0.25	0.041373	5.0	668548.0	0.165493	Y
3	IC 410-435991/7	1.25	0.231876	5.0	639802.0	0.185501	Y
4	IC 410-435991/6	3.75	0.763218	5.0	700285.0	0.203525	Y
5	IC 410-435991/5	7.5	1.492662	5.0	570732.0	0.199022	Y
6	ICIS 410-435991/2	12.5	2.509814	5.0	599158.0	0.200785	Y
7	IC 410-435991/4	20.0	4.204079	5.0	558454.0	0.210204	Y
8	IC 410-435991/3	30.0	6.058605	5.0	662792.0	0.201954	Y



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Calibration / 2,4-Dimethylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

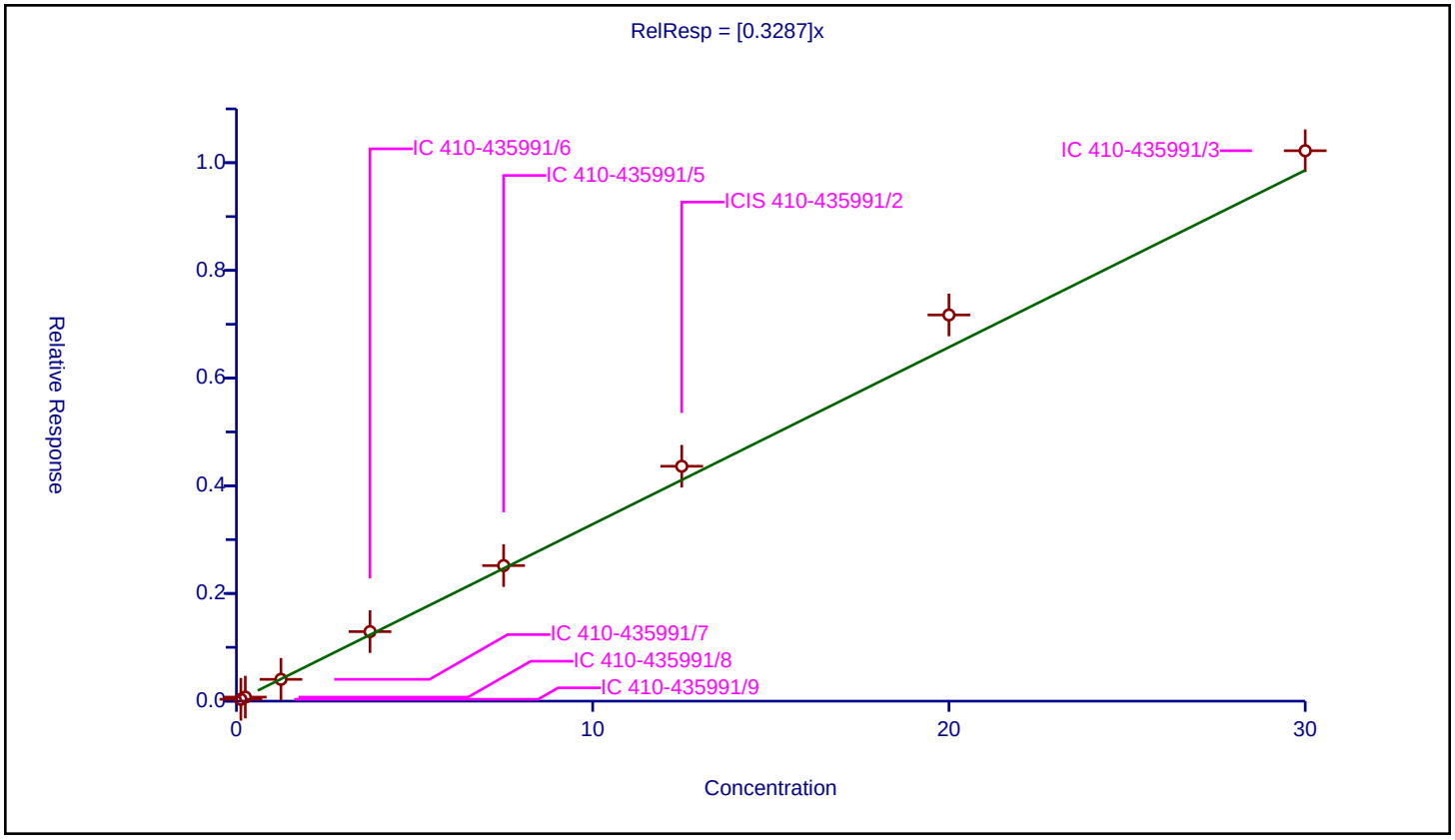
Curve Coefficients

Intercept:	0
Slope:	0.3287

Error Coefficients

Standard Error:	640000
Relative Standard Error:	8.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.034372	5.0	546517.0	0.274978	Y
2	IC 410-435991/8	0.25	0.075455	5.0	668548.0	0.301818	Y
3	IC 410-435991/7	1.25	0.40493	5.0	639802.0	0.323944	Y
4	IC 410-435991/6	3.75	1.291524	5.0	700285.0	0.344406	Y
5	IC 410-435991/5	7.5	2.51781	5.0	570732.0	0.335708	Y
6	ICIS 410-435991/2	12.5	4.363023	5.0	599158.0	0.349042	Y
7	IC 410-435991/4	20.0	7.17282	5.0	558454.0	0.358641	Y
8	IC 410-435991/3	30.0	10.222732	5.0	662792.0	0.340758	Y



11/14/2023
11:12 AM

Calibration / o,o',o''-Triethylphosphorothioate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

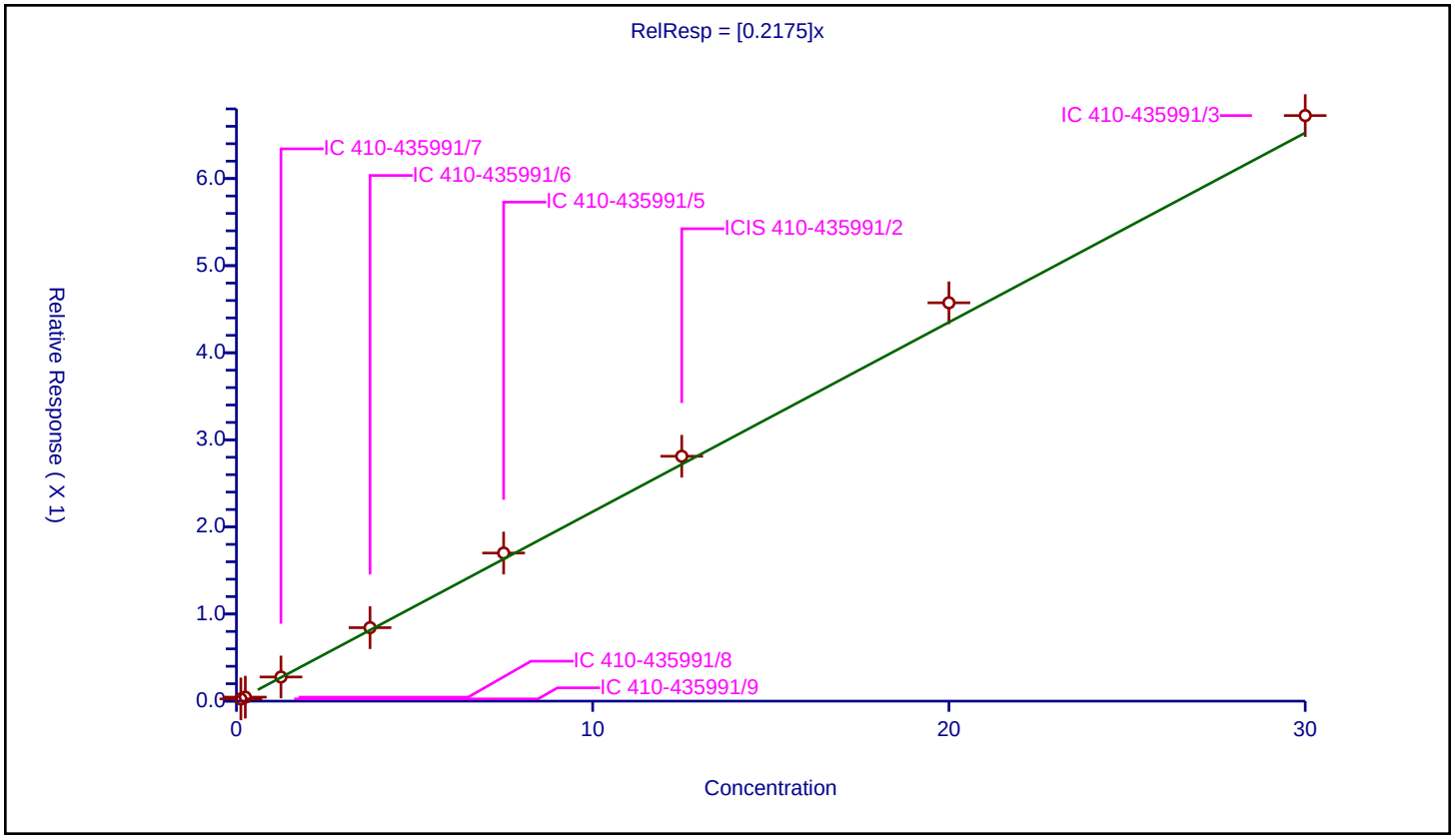
Curve Coefficients

Intercept:	0
Slope:	0.2175

Error Coefficients

Standard Error:	418000
Relative Standard Error:	7.1
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.025608	5.0	546517.0	0.204861	Y
2	IC 410-435991/8	0.25	0.04598	5.0	668548.0	0.183921	Y
3	IC 410-435991/7	1.25	0.277359	5.0	639802.0	0.221887	Y
4	IC 410-435991/6	3.75	0.843514	5.0	700285.0	0.224937	Y
5	IC 410-435991/5	7.5	1.7005	5.0	570732.0	0.226733	Y
6	ICIS 410-435991/2	12.5	2.811721	5.0	599158.0	0.224938	Y
7	IC 410-435991/4	20.0	4.573626	5.0	558454.0	0.228681	Y
8	IC 410-435991/3	30.0	6.723346	5.0	662792.0	0.224112	Y



11/14/2023
11:12 AM

Calibration / Bis(2-chloroethoxy)methane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

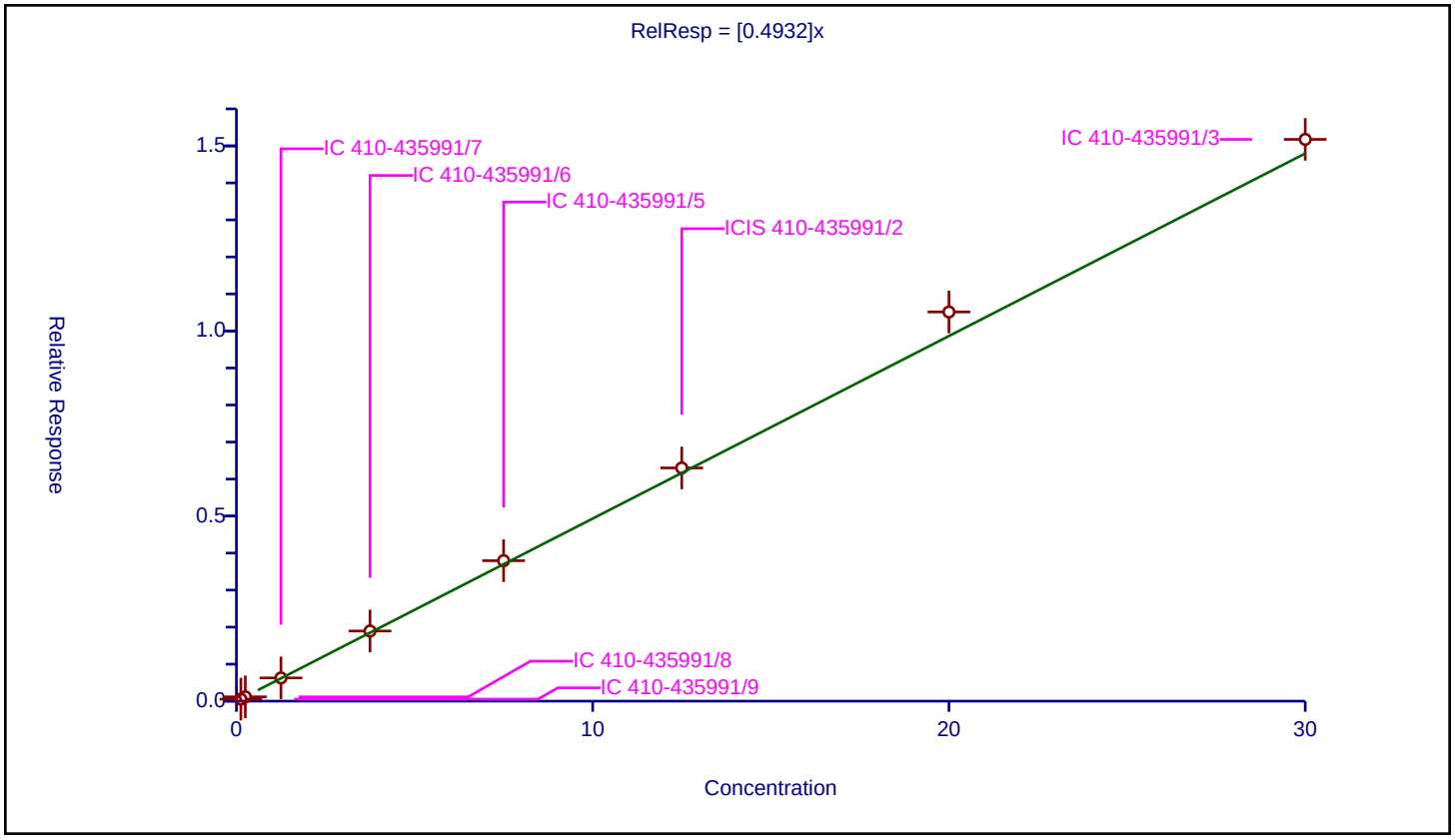
Curve Coefficients

Intercept:	0
Slope:	0.4932

Error Coefficients

Standard Error:	946000
Relative Standard Error:	6.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.053951	5.0	546517.0	0.431606	Y
2	IC 410-435991/8	0.25	0.116409	5.0	668548.0	0.465636	Y
3	IC 410-435991/7	1.25	0.626772	5.0	639802.0	0.501418	Y
4	IC 410-435991/6	3.75	1.894879	5.0	700285.0	0.505301	Y
5	IC 410-435991/5	7.5	3.794294	5.0	570732.0	0.505906	Y
6	ICIS 410-435991/2	12.5	6.299924	5.0	599158.0	0.503994	Y
7	IC 410-435991/4	20.0	10.513767	5.0	558454.0	0.525688	Y
8	IC 410-435991/3	30.0	15.176028	5.0	662792.0	0.505868	Y



11/14/2023
11:12 AM

Calibration / 2,4-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

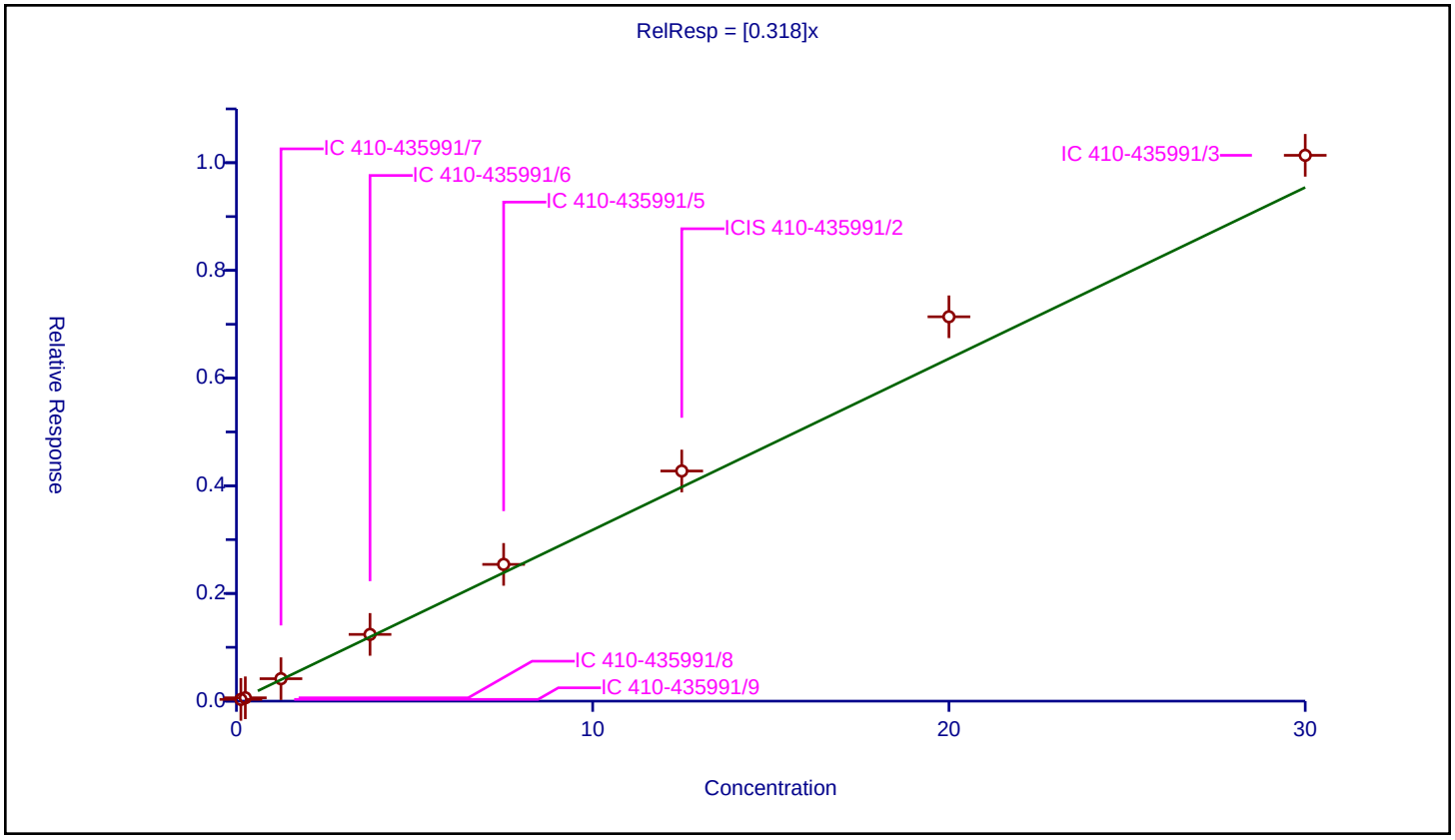
Curve Coefficients

Intercept:	0
Slope:	0.318

Error Coefficients

Standard Error:	635000
Relative Standard Error:	13.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.032186	5.0	546517.0	0.257485	Y
2	IC 410-435991/8	0.25	0.061865	5.0	668548.0	0.247462	Y
3	IC 410-435991/7	1.25	0.416832	5.0	639802.0	0.333466	Y
4	IC 410-435991/6	3.75	1.239238	5.0	700285.0	0.330464	Y
5	IC 410-435991/5	7.5	2.540185	5.0	570732.0	0.338691	Y
6	ICIS 410-435991/2	12.5	4.274532	5.0	599158.0	0.341963	Y
7	IC 410-435991/4	20.0	7.138762	5.0	558454.0	0.356938	Y
8	IC 410-435991/3	30.0	10.137901	5.0	662792.0	0.33793	Y



11/14/2023
11:12 AM

Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

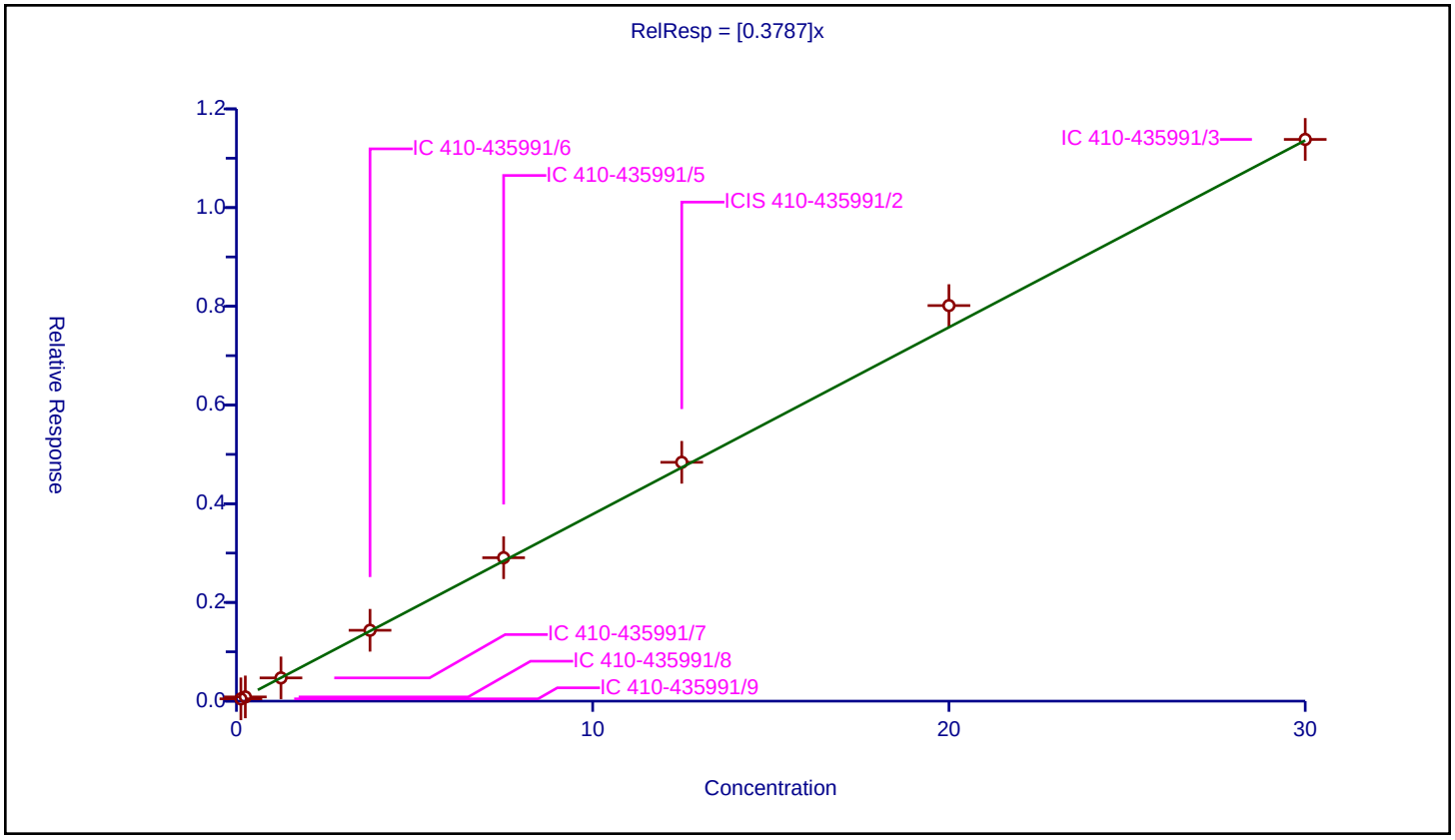
Curve Coefficients

Intercept:	0
Slope:	0.3787

Error Coefficients

Standard Error:	714000
Relative Standard Error:	4.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.046613	5.0	546517.0	0.372907	Y
2	IC 410-435991/8	0.25	0.085708	5.0	668548.0	0.342833	Y
3	IC 410-435991/7	1.25	0.470763	5.0	639802.0	0.37661	Y
4	IC 410-435991/6	3.75	1.435537	5.0	700285.0	0.38281	Y
5	IC 410-435991/5	7.5	2.9059	5.0	570732.0	0.387453	Y
6	ICIS 410-435991/2	12.5	4.839249	5.0	599158.0	0.38714	Y
7	IC 410-435991/4	20.0	8.014993	5.0	558454.0	0.40075	Y
8	IC 410-435991/3	30.0	11.381595	5.0	662792.0	0.379386	Y



11/14/2023
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Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

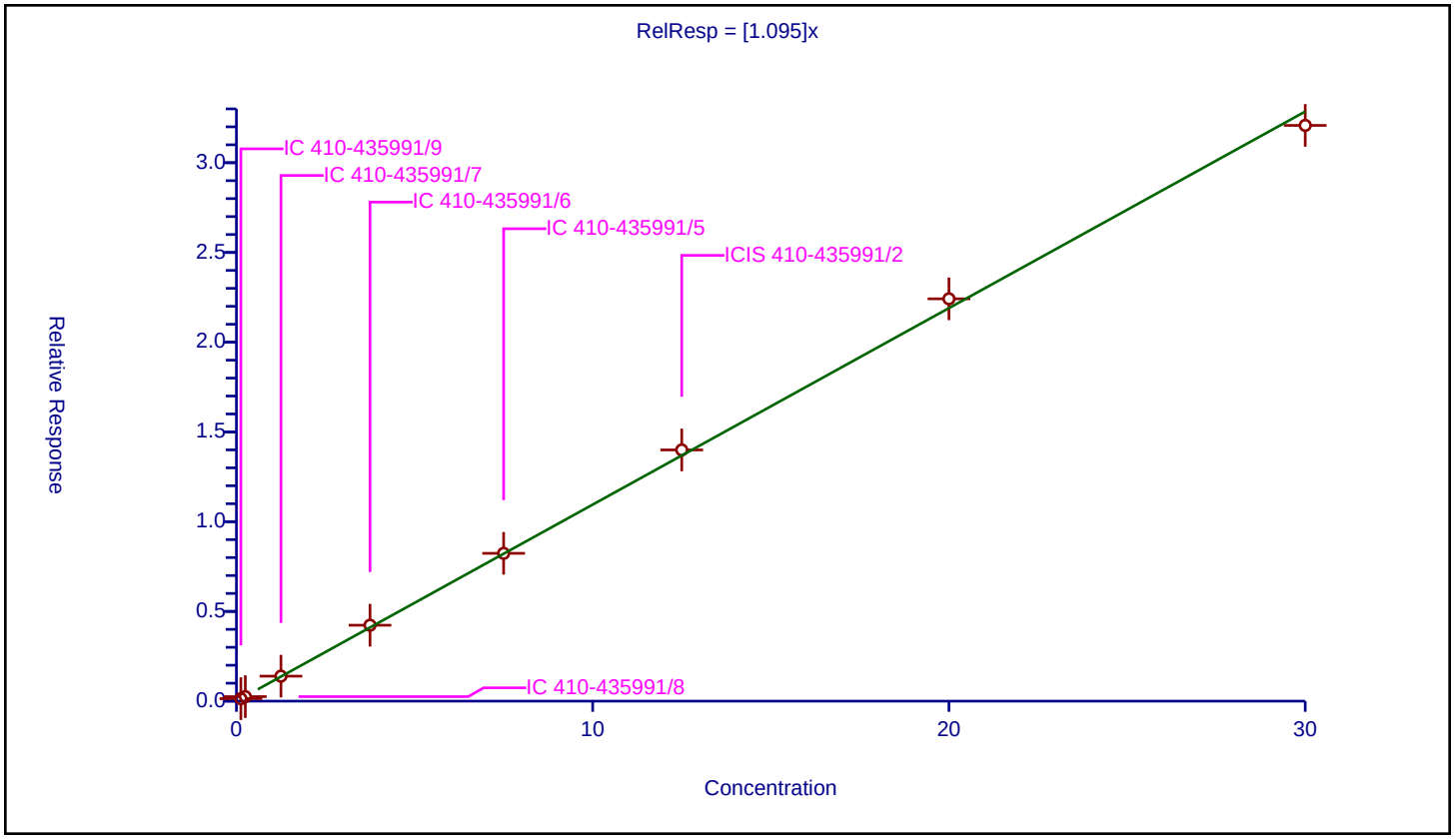
Curve Coefficients

Intercept:	0
Slope:	1.095

Error Coefficients

Standard Error:	2020000
Relative Standard Error:	3.8
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.138285	5.0	546517.0	1.106278	Y
2	IC 410-435991/8	0.25	0.250842	5.0	668548.0	1.003368	Y
3	IC 410-435991/7	1.25	1.393126	5.0	639802.0	1.114501	Y
4	IC 410-435991/6	3.75	4.230399	5.0	700285.0	1.128106	Y
5	IC 410-435991/5	7.5	8.23559	5.0	570732.0	1.098079	Y
6	ICIS 410-435991/2	12.5	13.996942	5.0	599158.0	1.119755	Y
7	IC 410-435991/4	20.0	22.41788	5.0	558454.0	1.120894	Y
8	IC 410-435991/3	30.0	32.080532	5.0	662792.0	1.069351	Y



11/14/2023
11:12 AM

Calibration / Alpha-Terpineol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

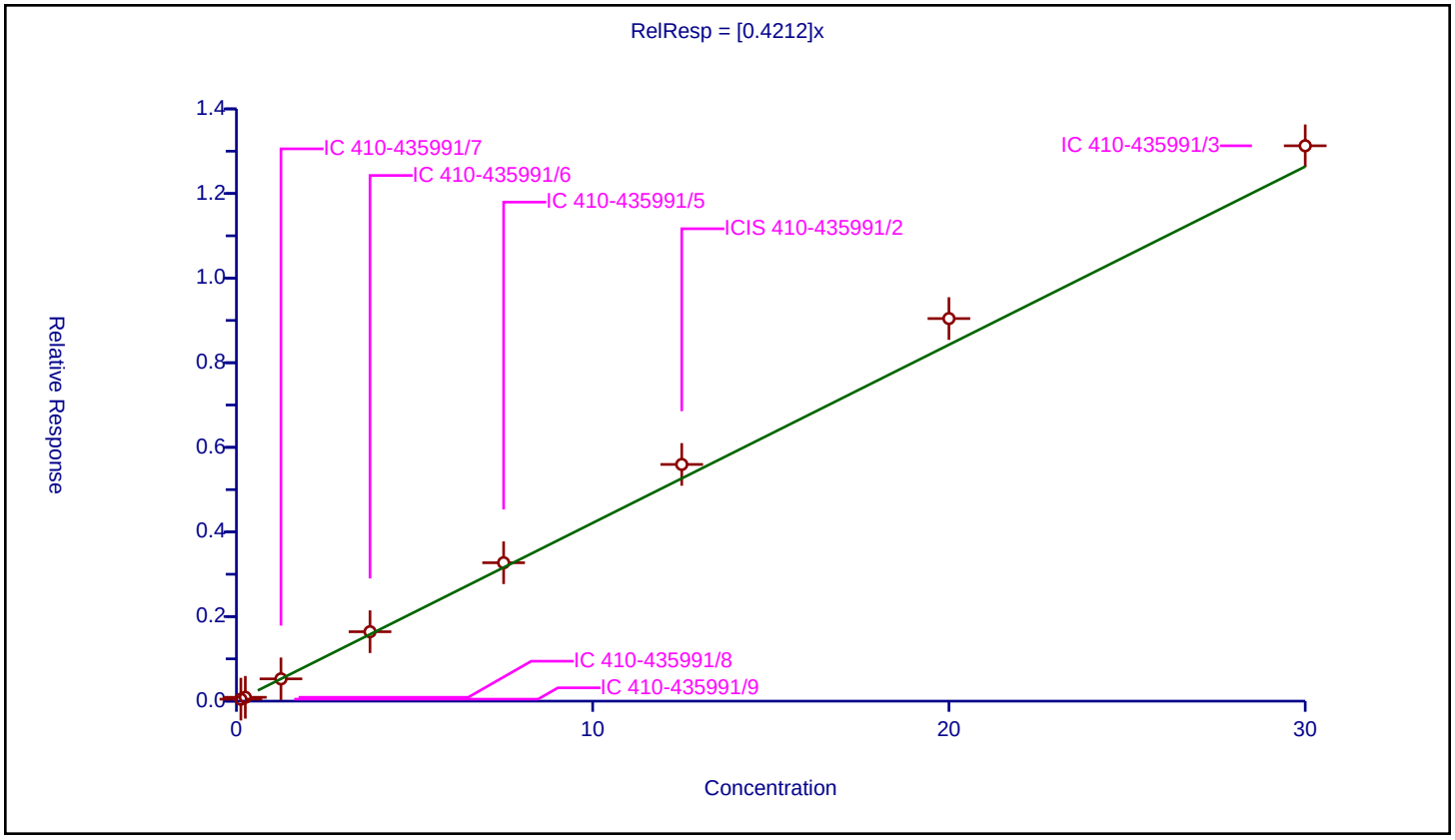
Curve Coefficients

Intercept:	0
Slope:	0.4212

Error Coefficients

Standard Error:	819000
Relative Standard Error:	8.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.04676	5.0	546517.0	0.374078	Y
2	IC 410-435991/8	0.25	0.090764	5.0	668548.0	0.363055	Y
3	IC 410-435991/7	1.25	0.526819	5.0	639802.0	0.421455	Y
4	IC 410-435991/6	3.75	1.640739	5.0	700285.0	0.43753	Y
5	IC 410-435991/5	7.5	3.271912	5.0	570732.0	0.436255	Y
6	ICIS 410-435991/2	12.5	5.595294	5.0	599158.0	0.447623	Y
7	IC 410-435991/4	20.0	9.043896	5.0	558454.0	0.452195	Y
8	IC 410-435991/3	30.0	13.128206	5.0	662792.0	0.437607	Y



11/14/2023
11:12 AM

Calibration / 4-Chloroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

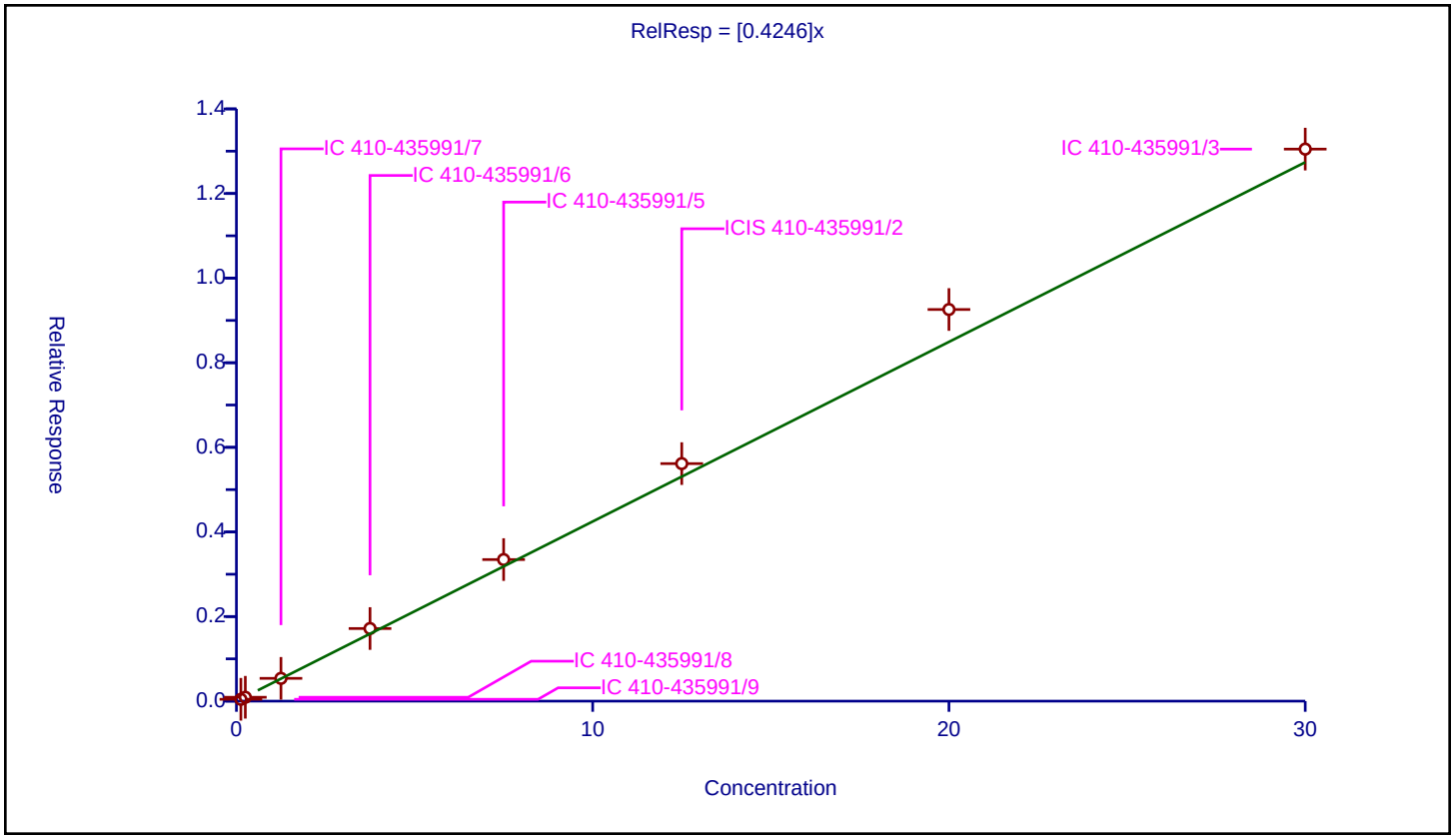
Curve Coefficients

Intercept:	0
Slope:	0.4246

Error Coefficients

Standard Error:	821000
Relative Standard Error:	10.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.043667	5.0	546517.0	0.34934	Y
2	IC 410-435991/8	0.25	0.09137	5.0	668548.0	0.365479	Y
3	IC 410-435991/7	1.25	0.538776	5.0	639802.0	0.431021	Y
4	IC 410-435991/6	3.75	1.716587	5.0	700285.0	0.457756	Y
5	IC 410-435991/5	7.5	3.346737	5.0	570732.0	0.446232	Y
6	ICIS 410-435991/2	12.5	5.615063	5.0	599158.0	0.449205	Y
7	IC 410-435991/4	20.0	9.257898	5.0	558454.0	0.462895	Y
8	IC 410-435991/3	30.0	13.049298	5.0	662792.0	0.434977	Y



11/14/2023
11:12 AM

Calibration / 2,6-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

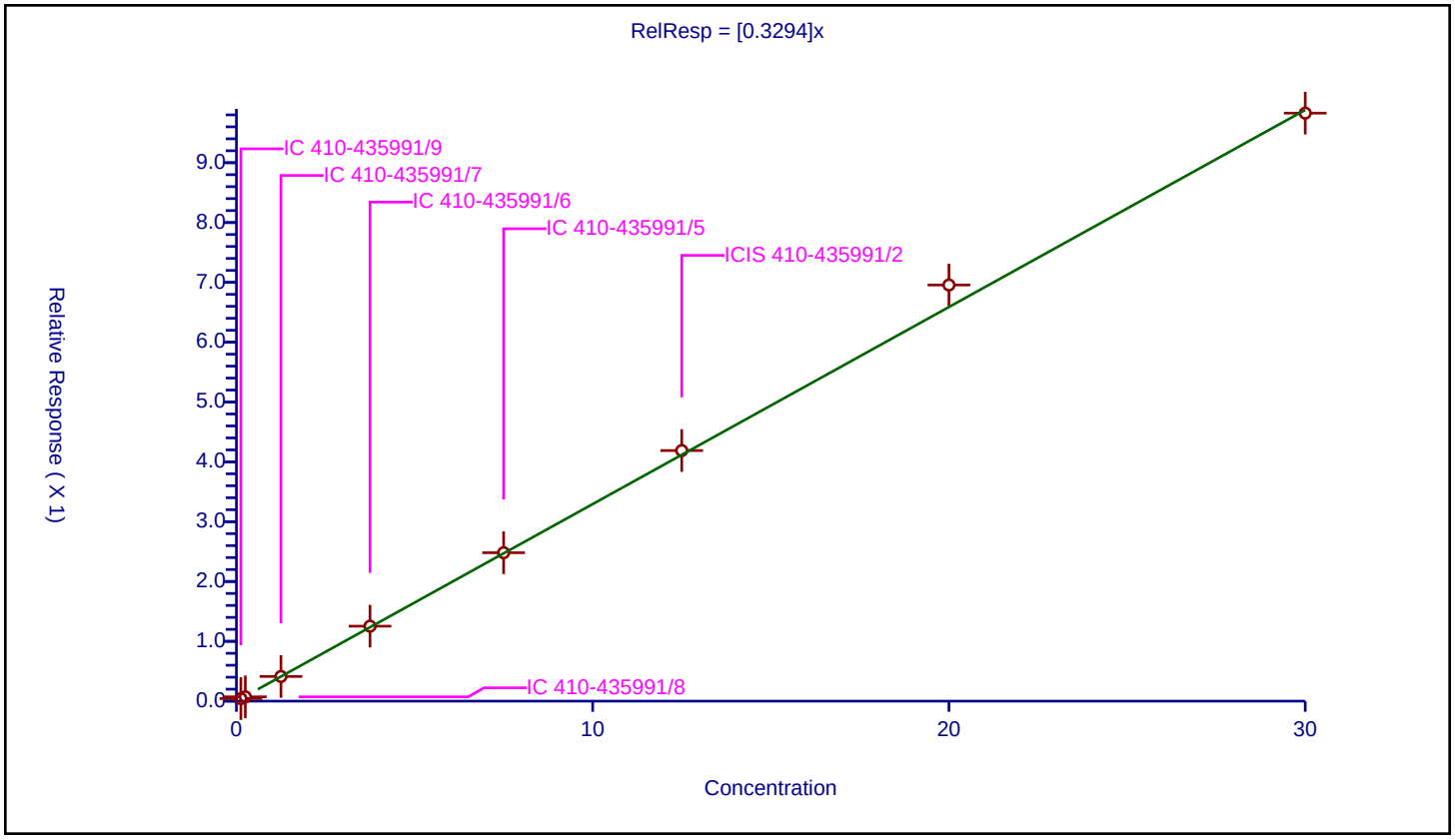
Curve Coefficients

Intercept:	0
Slope:	0.3294

Error Coefficients

Standard Error:	617000
Relative Standard Error:	5.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.042862	5.0	546517.0	0.342899	Y
2	IC 410-435991/8	0.25	0.071715	5.0	668548.0	0.28686	Y
3	IC 410-435991/7	1.25	0.412495	5.0	639802.0	0.329996	Y
4	IC 410-435991/6	3.75	1.252968	5.0	700285.0	0.334125	Y
5	IC 410-435991/5	7.5	2.480981	5.0	570732.0	0.330797	Y
6	ICIS 410-435991/2	12.5	4.188887	5.0	599158.0	0.335111	Y
7	IC 410-435991/4	20.0	6.95607	5.0	558454.0	0.347803	Y
8	IC 410-435991/3	30.0	9.8292	5.0	662792.0	0.32764	Y



11/14/2023
11:12 AM

Calibration / Hexachloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

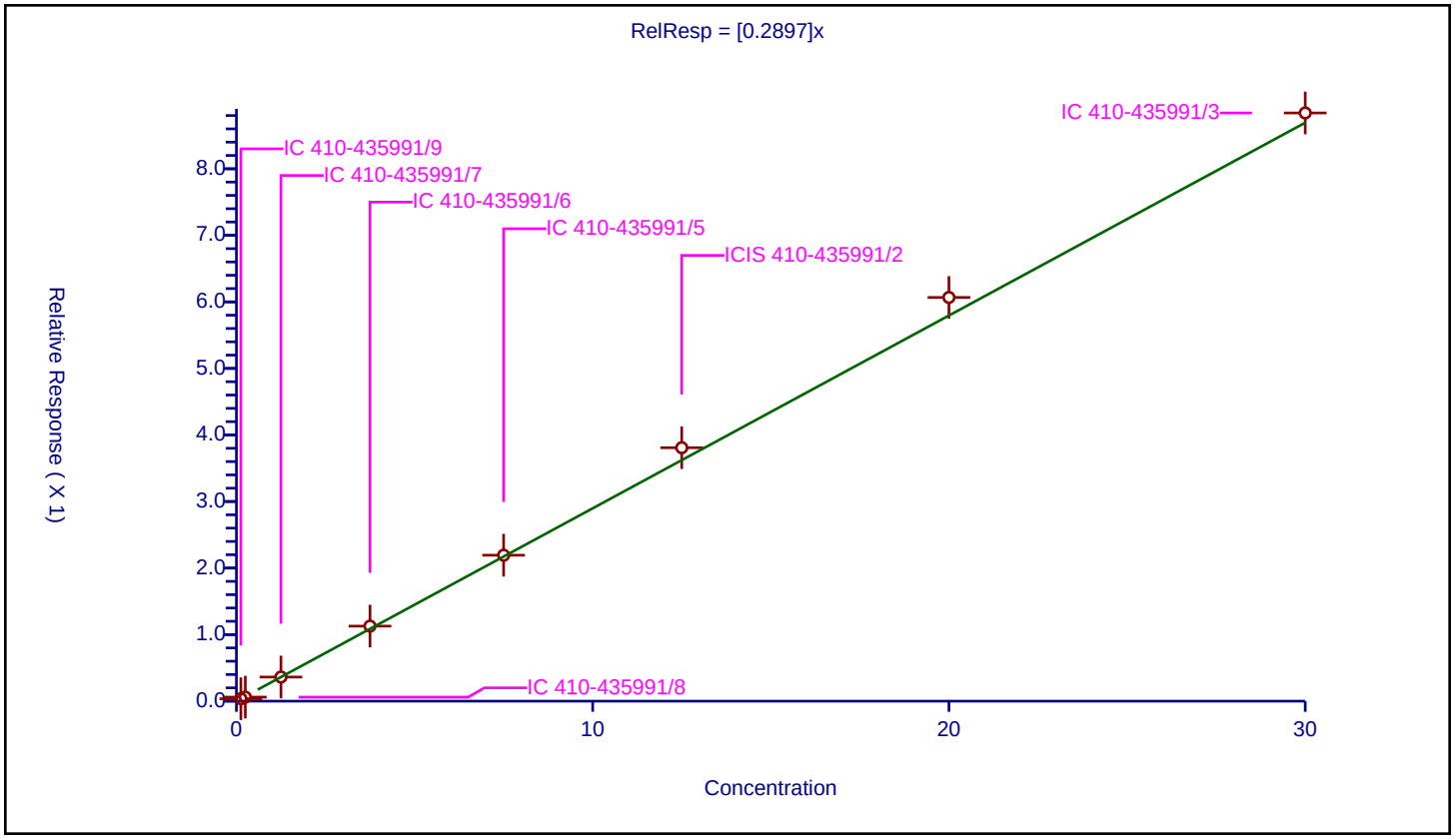
Curve Coefficients

Intercept:	0
Slope:	0.2897

Error Coefficients

Standard Error:	552000
Relative Standard Error:	6.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.03622	5.0	546517.0	0.289762	Y
2	IC 410-435991/8	0.25	0.060594	5.0	668548.0	0.242376	Y
3	IC 410-435991/7	1.25	0.362589	5.0	639802.0	0.290071	Y
4	IC 410-435991/6	3.75	1.127491	5.0	700285.0	0.300664	Y
5	IC 410-435991/5	7.5	2.193183	5.0	570732.0	0.292424	Y
6	ICIS 410-435991/2	12.5	3.808578	5.0	599158.0	0.304686	Y
7	IC 410-435991/4	20.0	6.066211	5.0	558454.0	0.303311	Y
8	IC 410-435991/3	30.0	8.838618	5.0	662792.0	0.294621	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

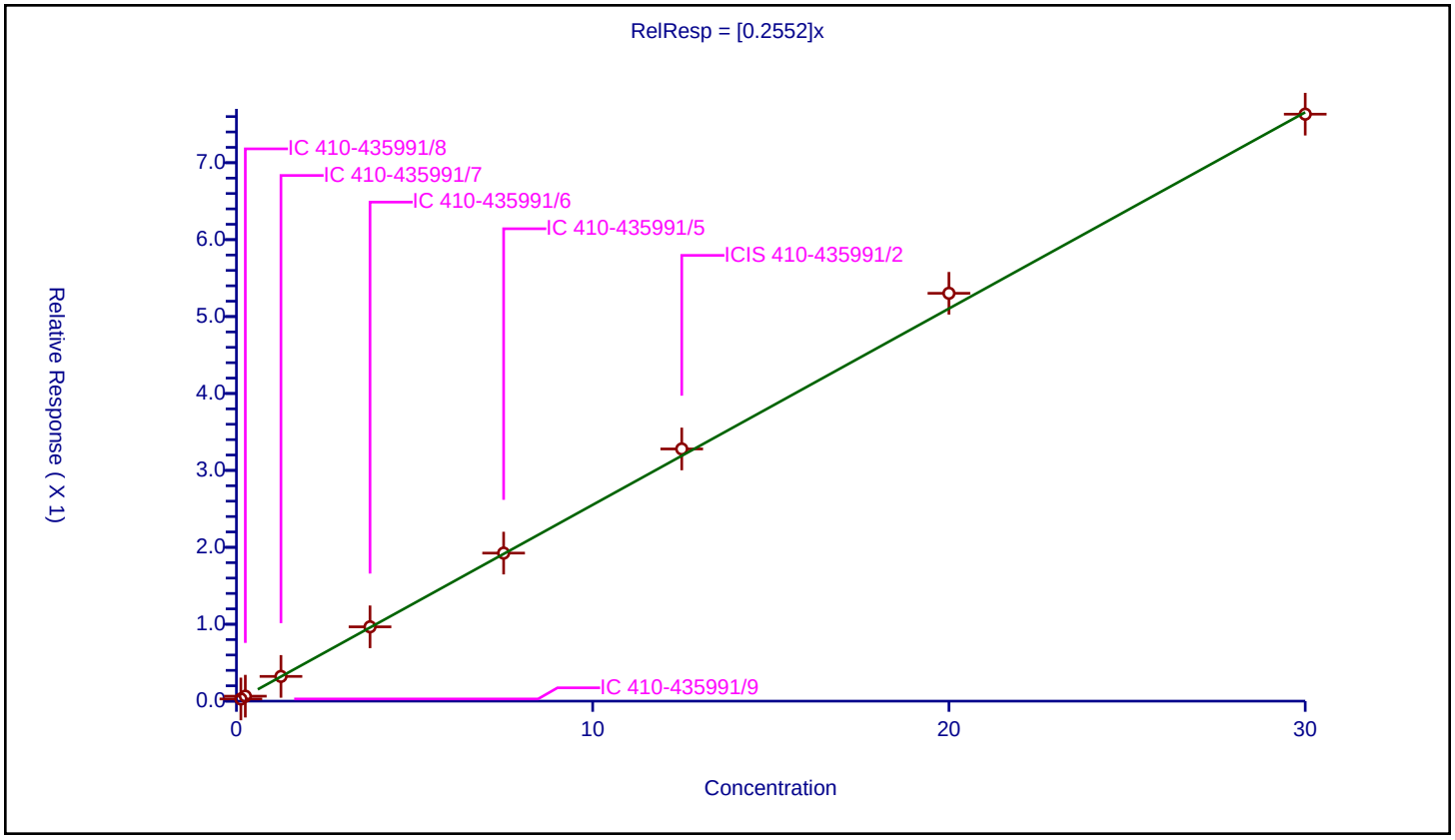
Curve Coefficients

Intercept:	0
Slope:	0.2552

Error Coefficients

Standard Error:	478000
Relative Standard Error:	4.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.0287	5.0	546517.0	0.229599	Y
2	IC 410-435991/8	0.25	0.064677	5.0	668548.0	0.25871	Y
3	IC 410-435991/7	1.25	0.321553	5.0	639802.0	0.257242	Y
4	IC 410-435991/6	3.75	0.966171	5.0	700285.0	0.257646	Y
5	IC 410-435991/5	7.5	1.924739	5.0	570732.0	0.256632	Y
6	ICIS 410-435991/2	12.5	3.278593	5.0	599158.0	0.262287	Y
7	IC 410-435991/4	20.0	5.30255	5.0	558454.0	0.265127	Y
8	IC 410-435991/3	30.0	7.631519	5.0	662792.0	0.254384	Y



Calibration / Quinoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

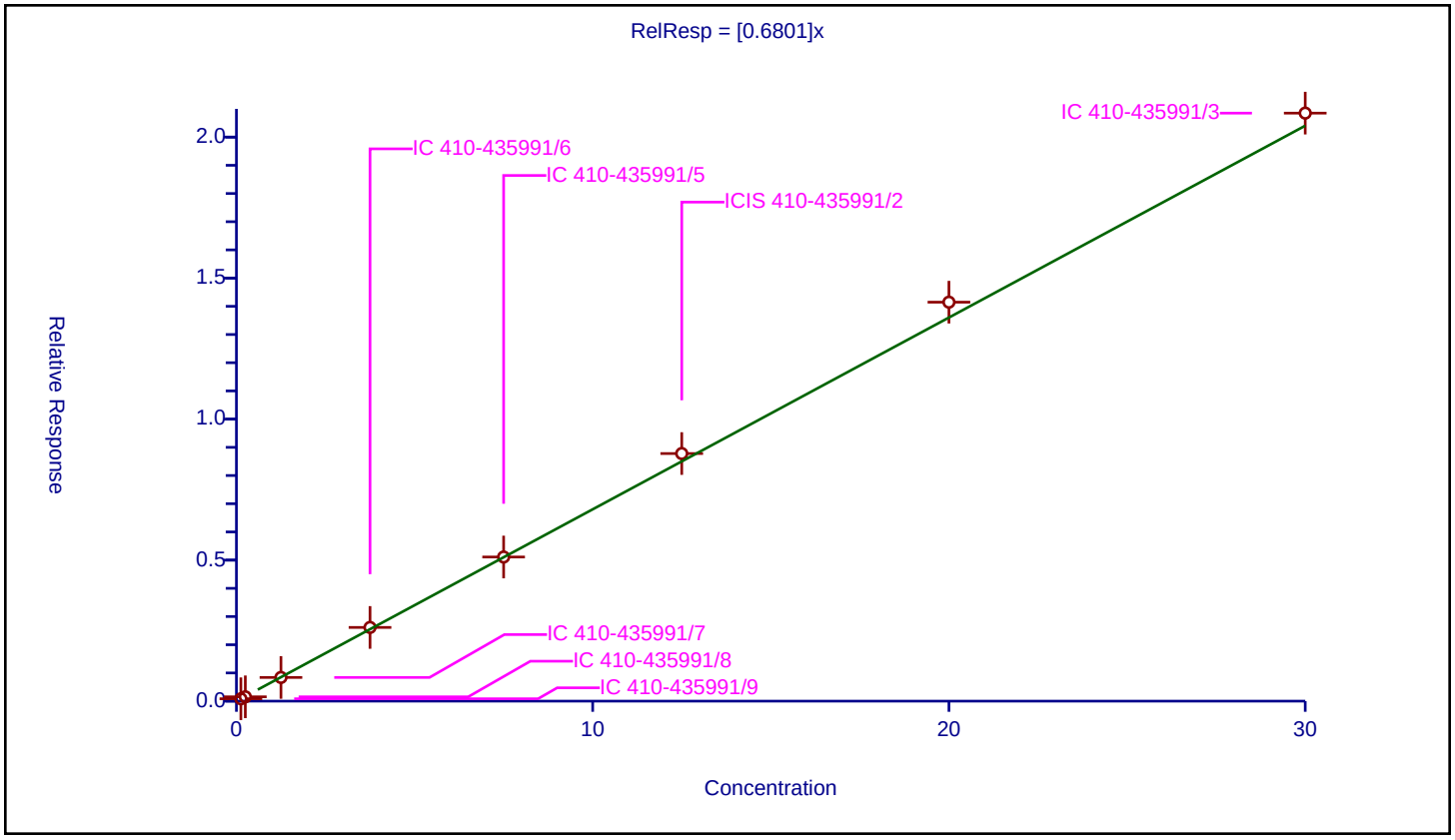
Curve Coefficients

Intercept:	0
Slope:	0.6801

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	4.4
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.08416	5.0	546517.0	0.673282	Y
2	IC 410-435991/8	0.25	0.153175	5.0	668548.0	0.612701	Y
3	IC 410-435991/7	1.25	0.839713	5.0	639802.0	0.67177	Y
4	IC 410-435991/6	3.75	2.613143	5.0	700285.0	0.696838	Y
5	IC 410-435991/5	7.5	5.110849	5.0	570732.0	0.681447	Y
6	ICIS 410-435991/2	12.5	8.779229	5.0	599158.0	0.702338	Y
7	IC 410-435991/4	20.0	14.146653	5.0	558454.0	0.707333	Y
8	IC 410-435991/3	30.0	20.850289	5.0	662792.0	0.69501	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

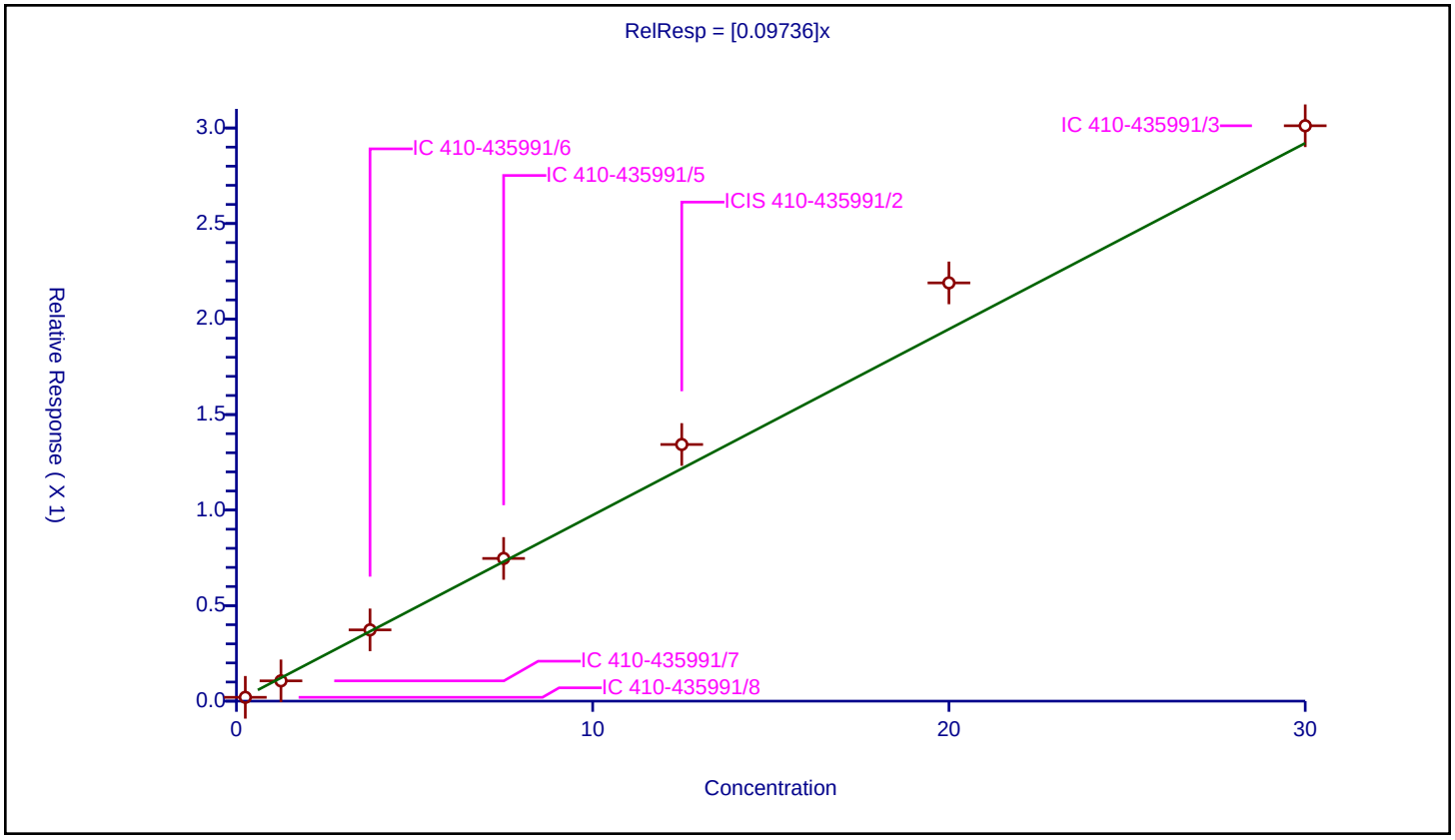
Curve Coefficients

Intercept:	0
Slope:	0.09736

Error Coefficients

Standard Error:	206000
Relative Standard Error:	11.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/8	0.25	0.020036	5.0	668548.0	0.080144	Y
2	IC 410-435991/7	1.25	0.106228	5.0	639802.0	0.084983	Y
3	IC 410-435991/6	3.75	0.372948	5.0	700285.0	0.099453	Y
4	IC 410-435991/5	7.5	0.746883	5.0	570732.0	0.099584	Y
5	ICIS 410-435991/2	12.5	1.343469	5.0	599158.0	0.107477	Y
6	IC 410-435991/4	20.0	2.189258	5.0	558454.0	0.109463	Y
7	IC 410-435991/3	30.0	3.011684	5.0	662792.0	0.100389	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

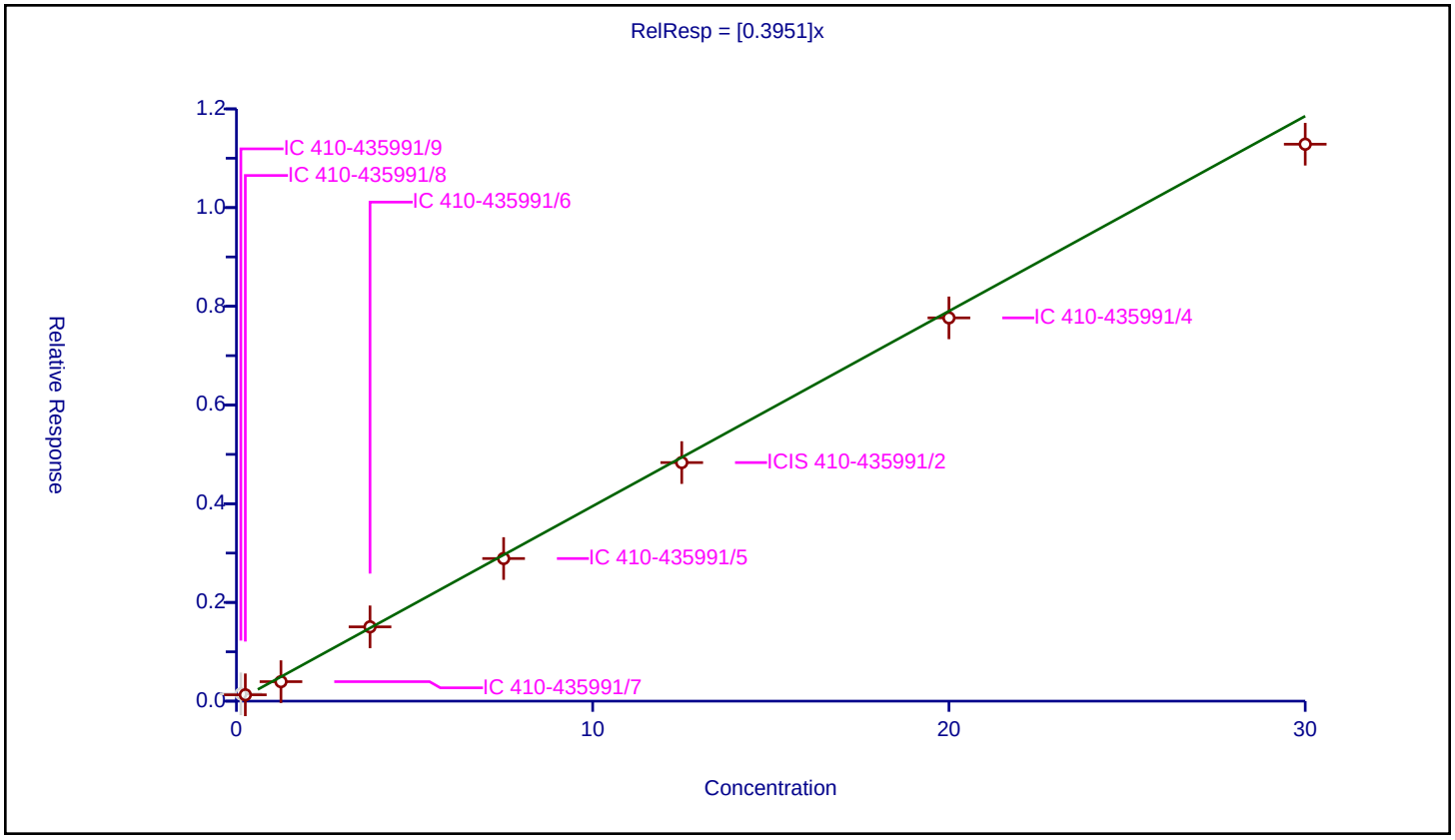
Curve Coefficients

Intercept:	0
Slope:	0.3951

Error Coefficients

Standard Error:	762000
Relative Standard Error:	14.8
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.147626	5.0	546517.0	1.181006	N
2	IC 410-435991/8	0.25	0.128024	5.0	668548.0	0.512095	Y
3	IC 410-435991/7	1.25	0.394935	5.0	639802.0	0.315948	Y
4	IC 410-435991/6	3.75	1.505101	5.0	700285.0	0.40136	Y
5	IC 410-435991/5	7.5	2.889552	5.0	570732.0	0.385274	Y
6	ICIS 410-435991/2	12.5	4.834059	5.0	599158.0	0.386725	Y
7	IC 410-435991/4	20.0	7.76576	5.0	558454.0	0.388288	Y
8	IC 410-435991/3	30.0	11.284513	5.0	662792.0	0.37615	Y



Calibration / p-Phenylene diamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

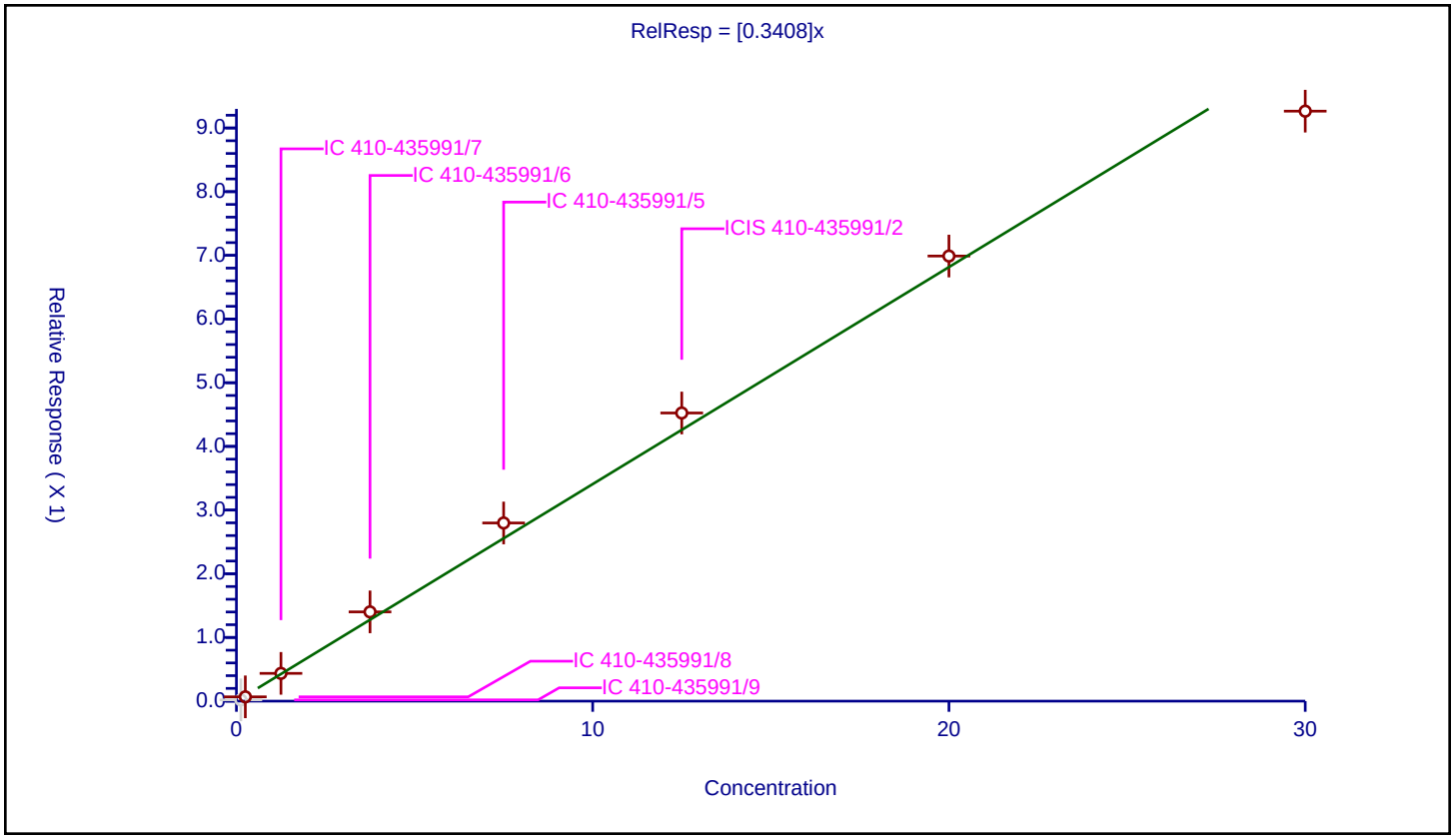
Curve Coefficients

Intercept:	0
Slope:	0.3408

Error Coefficients

Standard Error:	653000
Relative Standard Error:	11.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.019697	5.0	546517.0	0.15758	N
2	IC 410-435991/8	0.25	0.067475	5.0	668548.0	0.269898	Y
3	IC 410-435991/7	1.25	0.435885	5.0	639802.0	0.348708	Y
4	IC 410-435991/6	3.75	1.401601	5.0	700285.0	0.37376	Y
5	IC 410-435991/5	7.5	2.797924	5.0	570732.0	0.373057	Y
6	ICIS 410-435991/2	12.5	4.524666	5.0	599158.0	0.361973	Y
7	IC 410-435991/4	20.0	6.98926	5.0	558454.0	0.349463	Y
8	IC 410-435991/3	30.0	9.264581	5.0	662792.0	0.308819	Y



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Calibration / 4-Chloro-3-methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

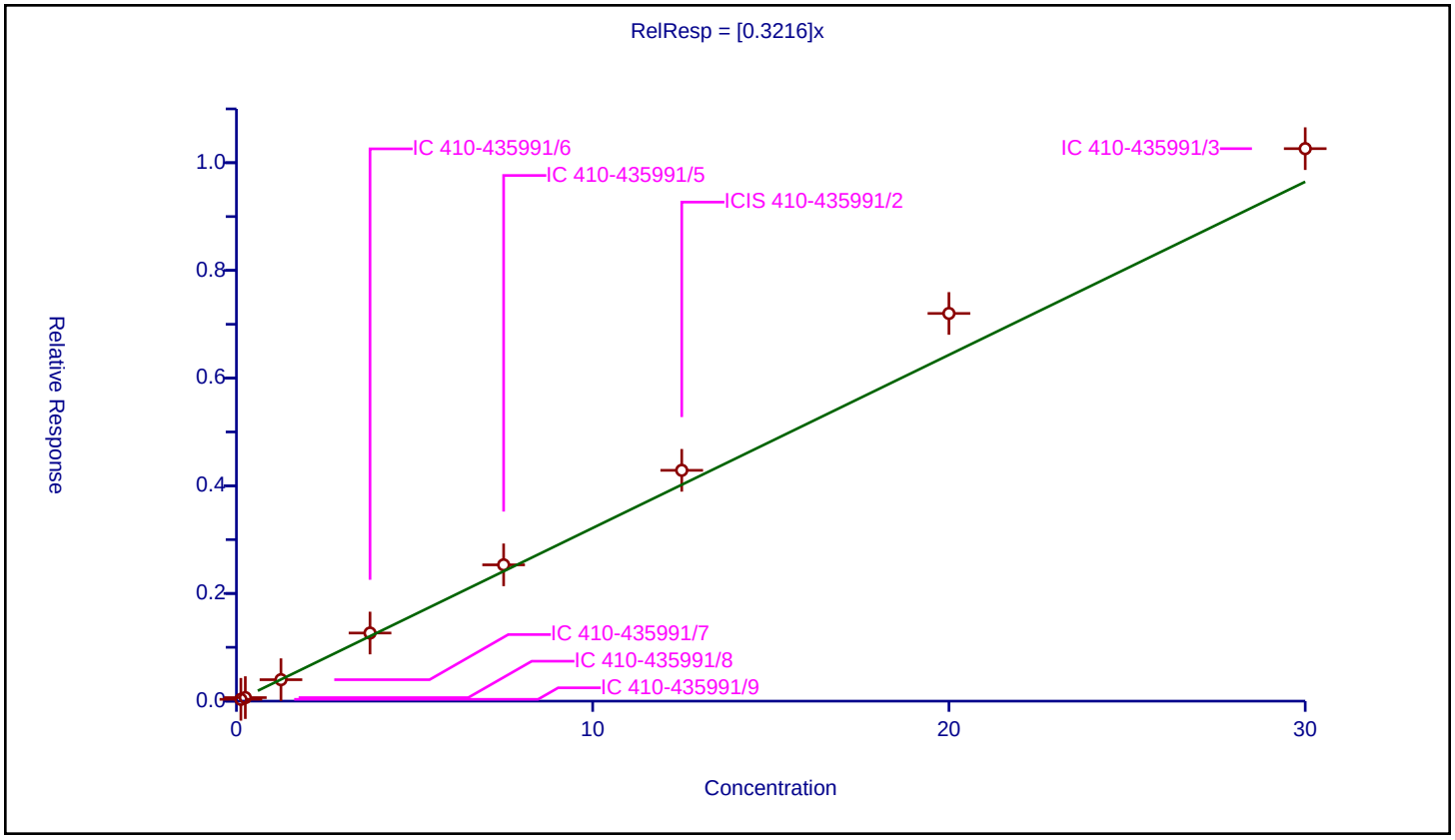
Curve Coefficients

Intercept:	0
Slope:	0.3216

Error Coefficients

Standard Error:	641000
Relative Standard Error:	11.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.033896	5.0	546517.0	0.271172	Y
2	IC 410-435991/8	0.25	0.065605	5.0	668548.0	0.262419	Y
3	IC 410-435991/7	1.25	0.398678	5.0	639802.0	0.318942	Y
4	IC 410-435991/6	3.75	1.265178	5.0	700285.0	0.337381	Y
5	IC 410-435991/5	7.5	2.531311	5.0	570732.0	0.337508	Y
6	ICIS 410-435991/2	12.5	4.287041	5.0	599158.0	0.342963	Y
7	IC 410-435991/4	20.0	7.200638	5.0	558454.0	0.360032	Y
8	IC 410-435991/3	30.0	10.261681	5.0	662792.0	0.342056	Y



Calibration / Safrole, Total

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

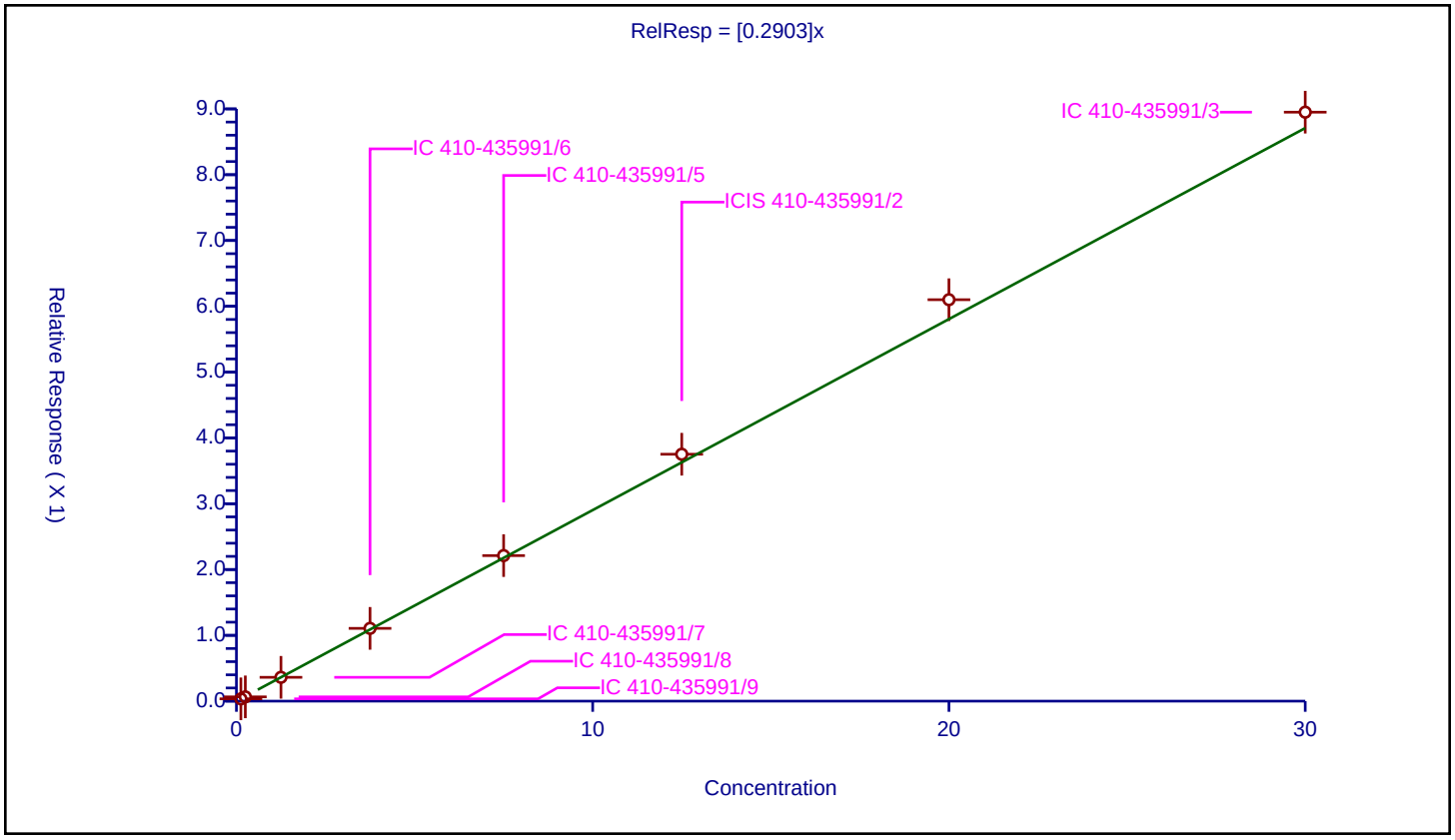
Curve Coefficients

Intercept:	0
Slope:	0.2903

Error Coefficients

Standard Error:	556000
Relative Standard Error:	5.0
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.034857	5.0	546517.0	0.278857	Y
2	IC 410-435991/8	0.25	0.065096	5.0	668548.0	0.260385	Y
3	IC 410-435991/7	1.25	0.362104	5.0	639802.0	0.289683	Y
4	IC 410-435991/6	3.75	1.105921	5.0	700285.0	0.294912	Y
5	IC 410-435991/5	7.5	2.21173	5.0	570732.0	0.294897	Y
6	ICIS 410-435991/2	12.5	3.752057	5.0	599158.0	0.300165	Y
7	IC 410-435991/4	20.0	6.100252	5.0	558454.0	0.305013	Y
8	IC 410-435991/3	30.0	8.950282	5.0	662792.0	0.298343	Y



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Calibration / 2-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

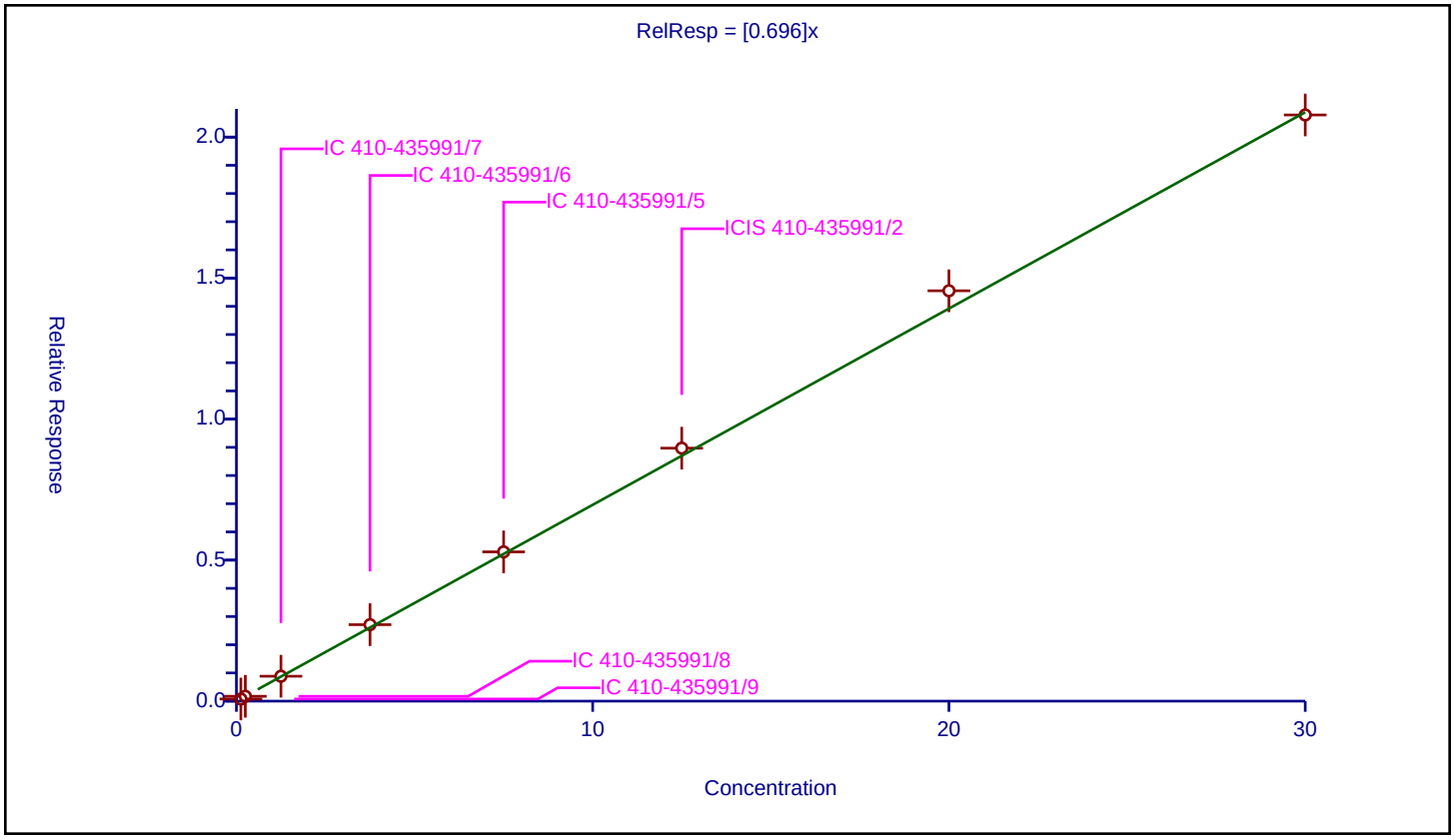
Curve Coefficients

Intercept:	0
Slope:	0.696

Error Coefficients

Standard Error:	1300000
Relative Standard Error:	5.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.075853	5.0	546517.0	0.606825	Y
2	IC 410-435991/8	0.25	0.171887	5.0	668548.0	0.68755	Y
3	IC 410-435991/7	1.25	0.883461	5.0	639802.0	0.706769	Y
4	IC 410-435991/6	3.75	2.712131	5.0	700285.0	0.723235	Y
5	IC 410-435991/5	7.5	5.293308	5.0	570732.0	0.705774	Y
6	ICIS 410-435991/2	12.5	8.970706	5.0	599158.0	0.717656	Y
7	IC 410-435991/4	20.0	14.550849	5.0	558454.0	0.727542	Y
8	IC 410-435991/3	30.0	20.784628	5.0	662792.0	0.692821	Y



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Calibration / 1-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

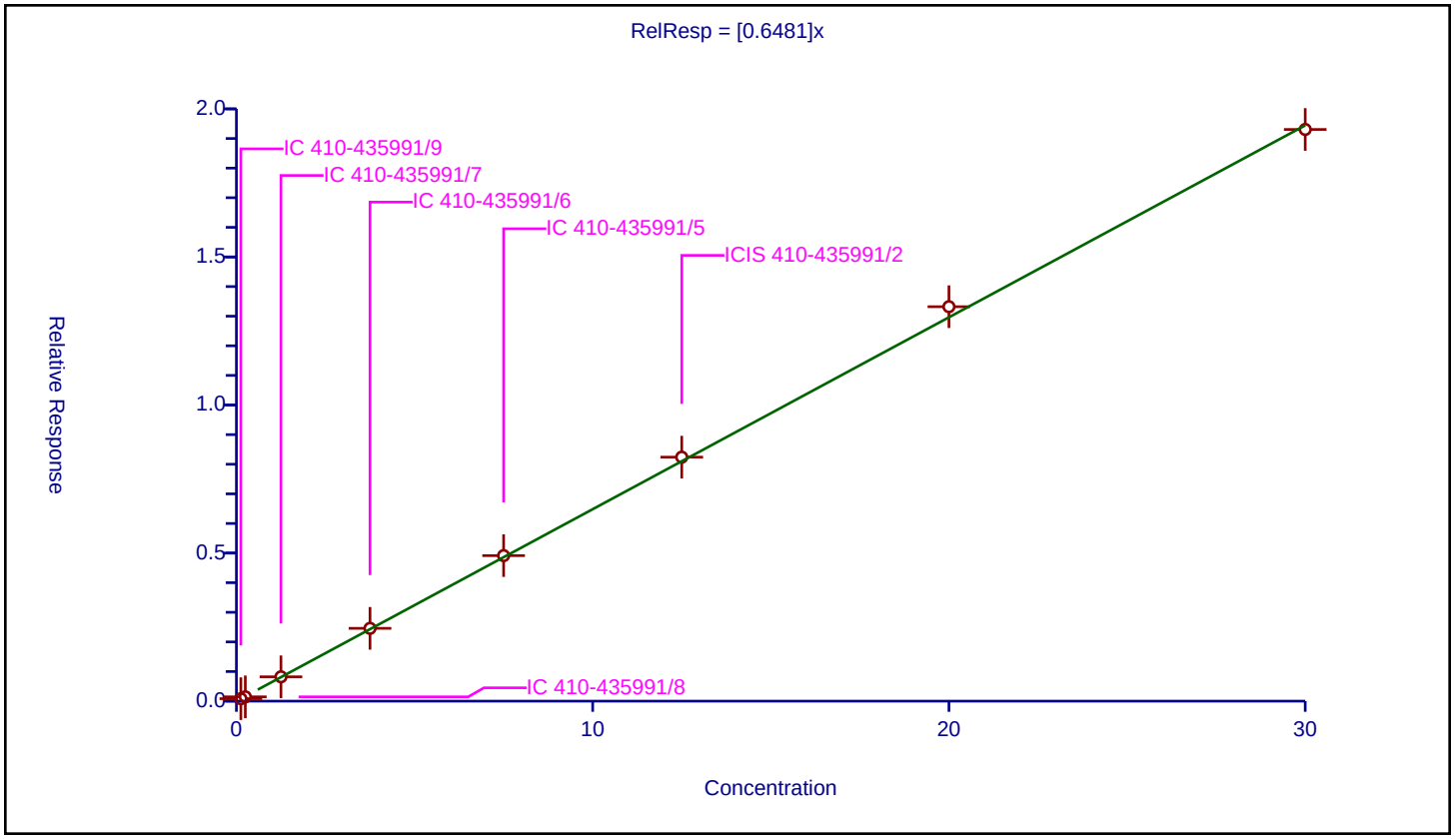
Curve Coefficients

Intercept:	0
Slope:	0.6481

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	4.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.083355	5.0	546517.0	0.666841	Y
2	IC 410-435991/8	0.25	0.145322	5.0	668548.0	0.58129	Y
3	IC 410-435991/7	1.25	0.82177	5.0	639802.0	0.657416	Y
4	IC 410-435991/6	3.75	2.458292	5.0	700285.0	0.655545	Y
5	IC 410-435991/5	7.5	4.91397	5.0	570732.0	0.655196	Y
6	ICIS 410-435991/2	12.5	8.238912	5.0	599158.0	0.659113	Y
7	IC 410-435991/4	20.0	13.320309	5.0	558454.0	0.666015	Y
8	IC 410-435991/3	30.0	19.305182	5.0	662792.0	0.643506	Y



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Calibration / Hexachlorocyclopentadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

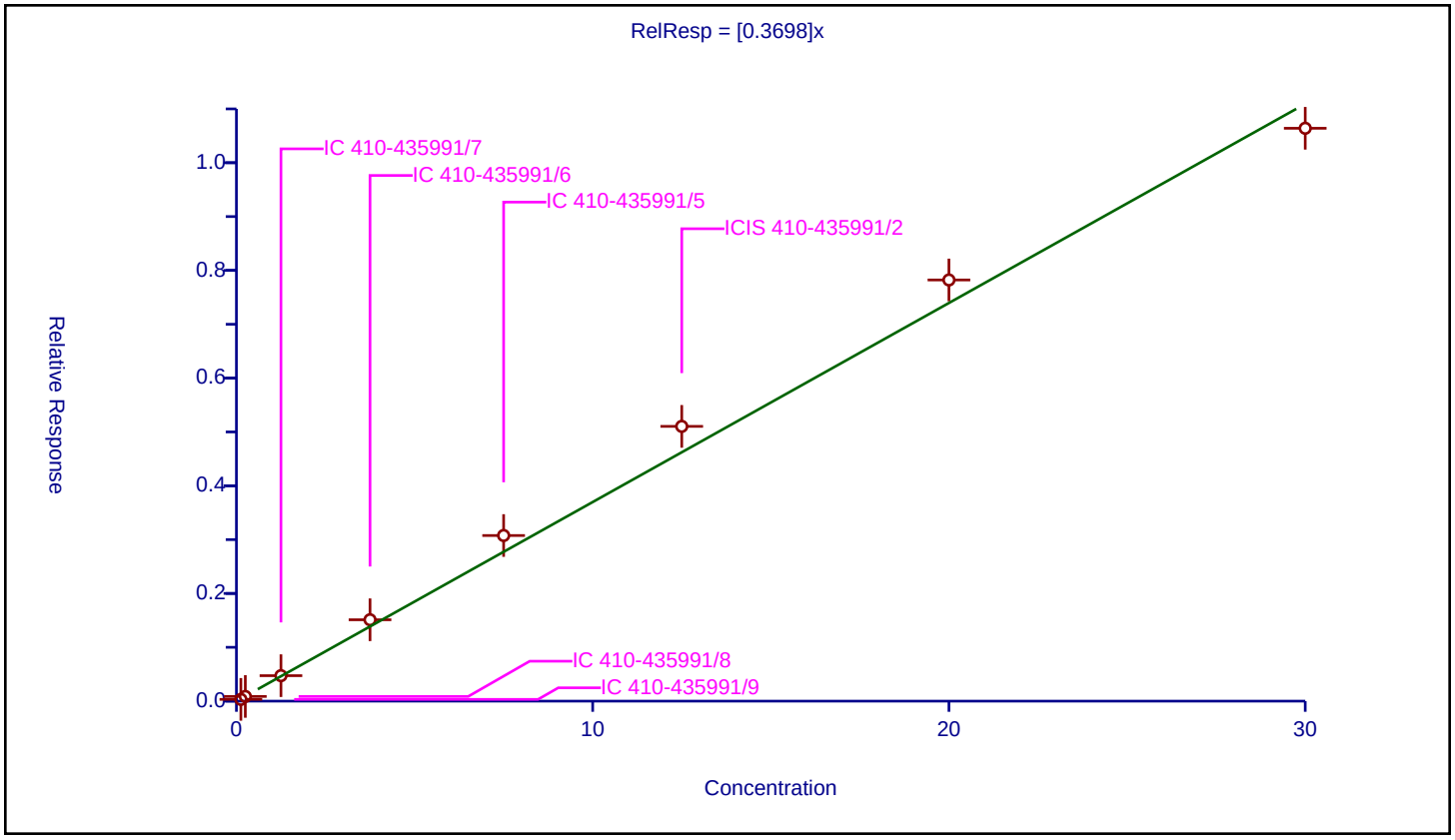
Curve Coefficients

Intercept:	0
Slope:	0.3698

Error Coefficients

Standard Error:	422000
Relative Standard Error:	13.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.032879	5.0	321331.0	0.263031	Y
2	IC 410-435991/8	0.25	0.087373	5.0	396402.0	0.349494	Y
3	IC 410-435991/7	1.25	0.473026	5.0	386850.0	0.378421	Y
4	IC 410-435991/6	3.75	1.511466	5.0	419338.0	0.403058	Y
5	IC 410-435991/5	7.5	3.075974	5.0	346209.0	0.41013	Y
6	ICIS 410-435991/2	12.5	5.103234	5.0	357876.0	0.408259	Y
7	IC 410-435991/4	20.0	7.822524	5.0	342261.0	0.391126	Y
8	IC 410-435991/3	30.0	10.639907	5.0	410513.0	0.354664	Y



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Calibration / 1,2,4,5-Tetrachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

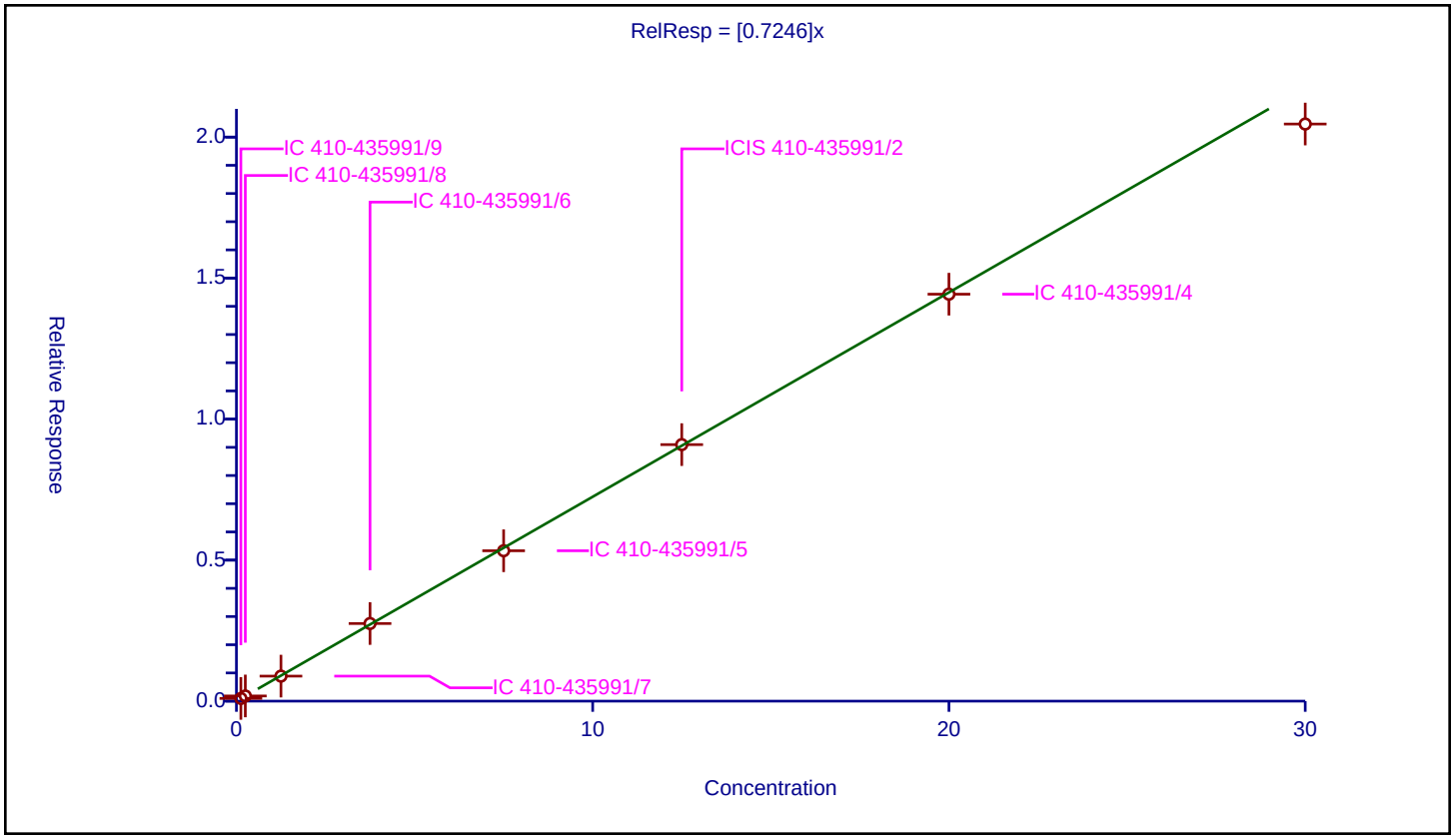
Curve Coefficients

Intercept:	0
Slope:	0.7246

Error Coefficients

Standard Error:	794000
Relative Standard Error:	3.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.096847	5.0	321331.0	0.774777	Y
2	IC 410-435991/8	0.25	0.183955	5.0	396402.0	0.735819	Y
3	IC 410-435991/7	1.25	0.887592	5.0	386850.0	0.710074	Y
4	IC 410-435991/6	3.75	2.752159	5.0	419338.0	0.733909	Y
5	IC 410-435991/5	7.5	5.332646	5.0	346209.0	0.711019	Y
6	ICIS 410-435991/2	12.5	9.096181	5.0	357876.0	0.727695	Y
7	IC 410-435991/4	20.0	14.429996	5.0	342261.0	0.7215	Y
8	IC 410-435991/3	30.0	20.463335	5.0	410513.0	0.682111	Y



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Calibration / Isosafrole Peak 1

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

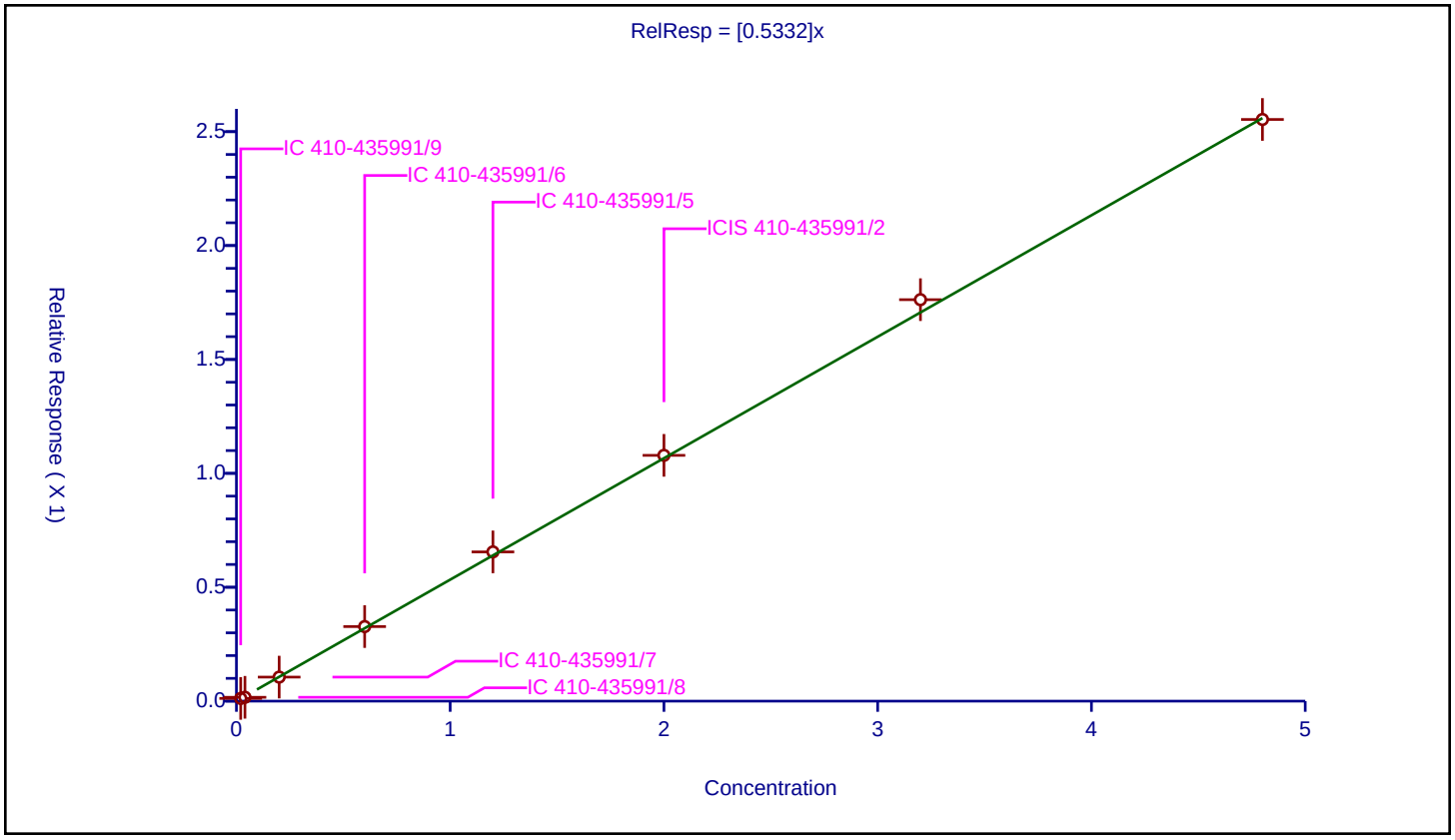
Curve Coefficients

Intercept:	0
Slope:	0.5332

Error Coefficients

Standard Error:	98100
Relative Standard Error:	9.3
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.02	0.012013	5.0	321331.0	0.600627	Y
2	IC 410-435991/8	0.04	0.01694	5.0	396402.0	0.423497	Y
3	IC 410-435991/7	0.2	0.105571	5.0	386850.0	0.527853	Y
4	IC 410-435991/6	0.6	0.327337	5.0	419338.0	0.545562	Y
5	IC 410-435991/5	1.2	0.65524	5.0	346209.0	0.546033	Y
6	ICIS 410-435991/2	2.0	1.079047	5.0	357876.0	0.539523	Y
7	IC 410-435991/4	3.2	1.762456	5.0	342261.0	0.550768	Y
8	IC 410-435991/3	4.8	2.553598	5.0	410513.0	0.531999	Y



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Calibration / 2,4,6-Trichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

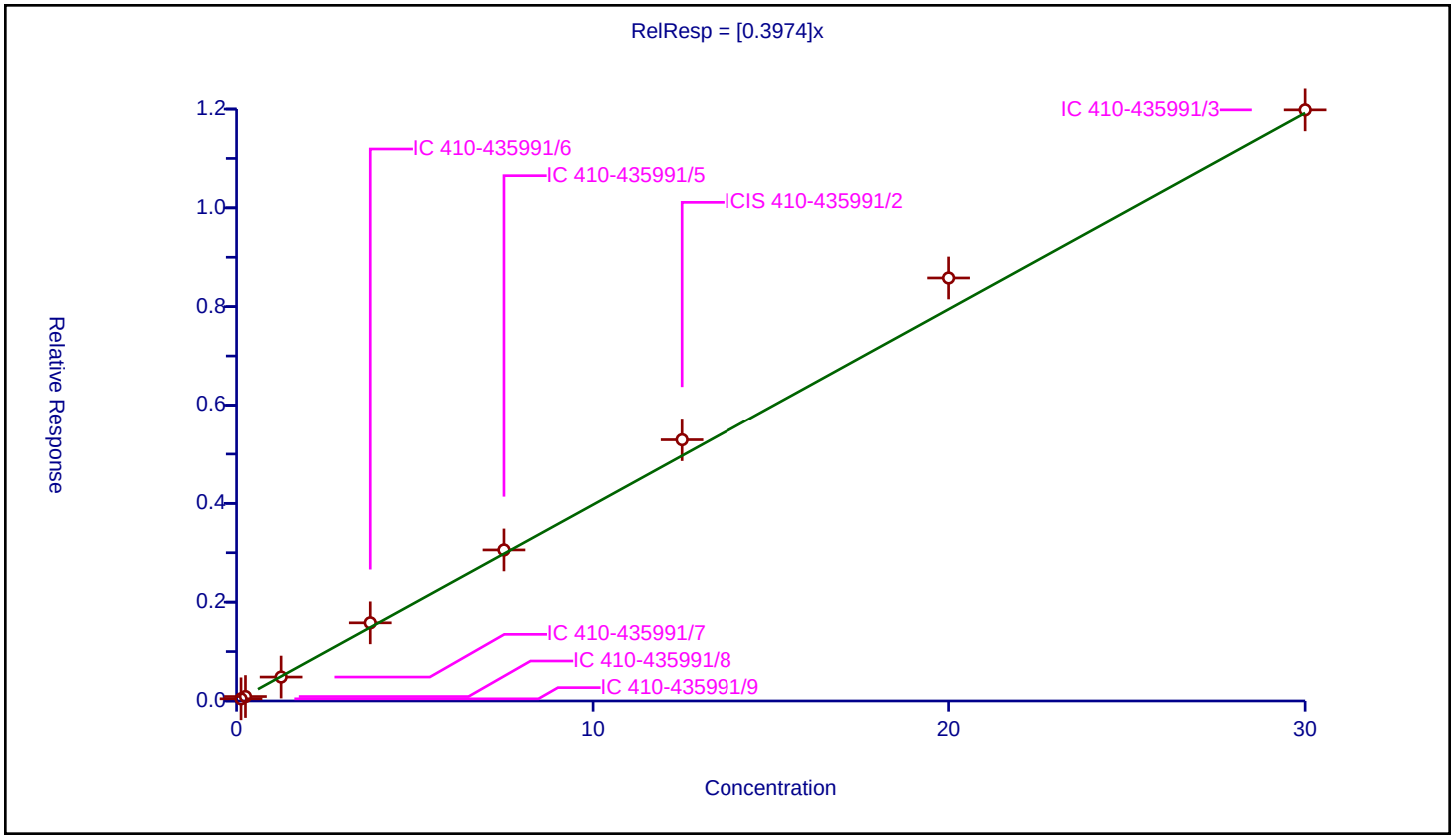
Curve Coefficients

Intercept:	0
Slope:	0.3974

Error Coefficients

Standard Error:	466000
Relative Standard Error:	7.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.043802	5.0	321331.0	0.350417	Y
2	IC 410-435991/8	0.25	0.089934	5.0	396402.0	0.359736	Y
3	IC 410-435991/7	1.25	0.484361	5.0	386850.0	0.387489	Y
4	IC 410-435991/6	3.75	1.582149	5.0	419338.0	0.421906	Y
5	IC 410-435991/5	7.5	3.056853	5.0	346209.0	0.40758	Y
6	ICIS 410-435991/2	12.5	5.291302	5.0	357876.0	0.423304	Y
7	IC 410-435991/4	20.0	8.580922	5.0	342261.0	0.429046	Y
8	IC 410-435991/3	30.0	11.983518	5.0	410513.0	0.399451	Y



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Calibration / 2,4,5-Trichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

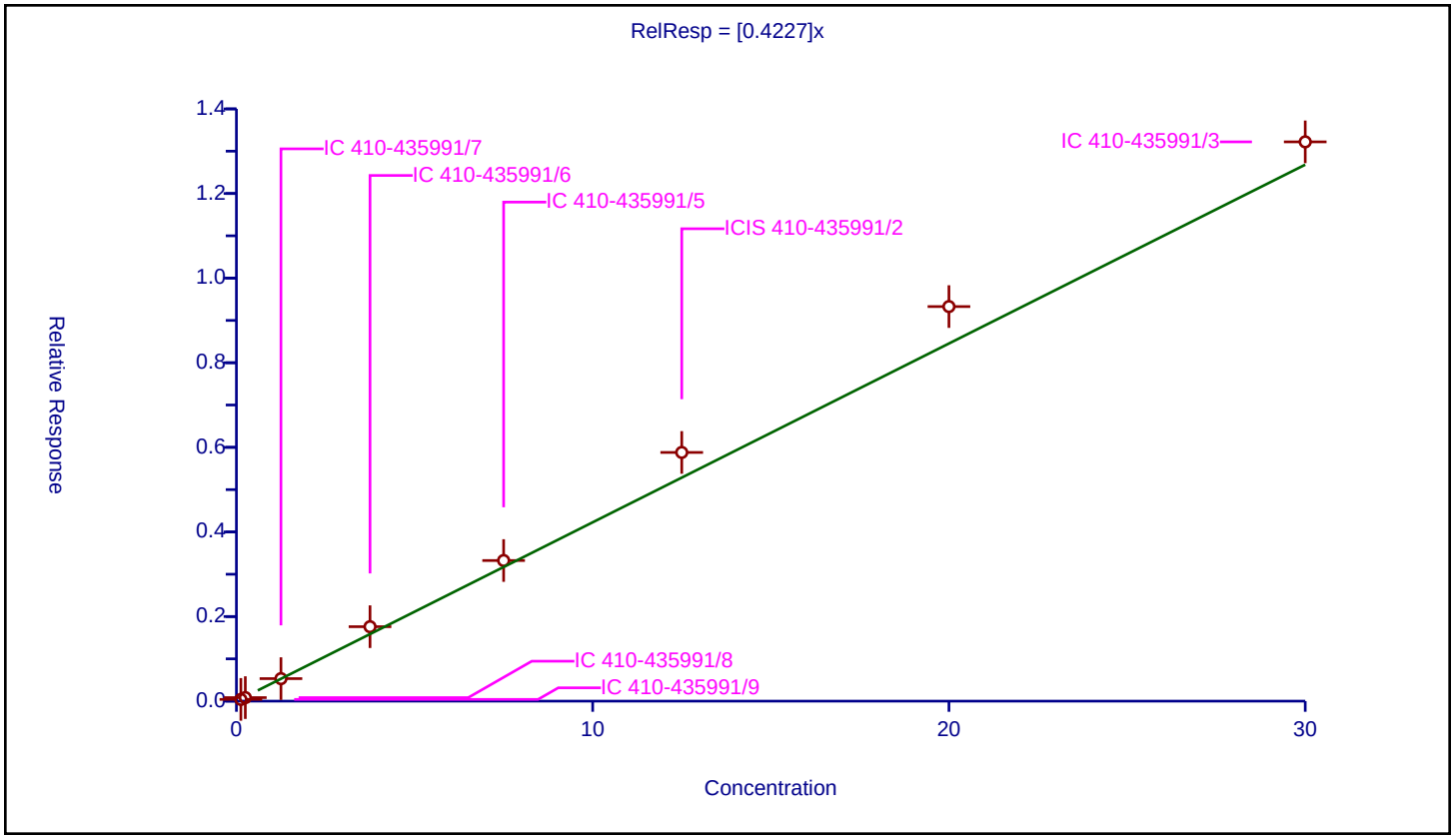
Curve Coefficients

Intercept:	0
Slope:	0.4227

Error Coefficients

Standard Error:	513000
Relative Standard Error:	13.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.041484	5.0	321331.0	0.33187	Y
2	IC 410-435991/8	0.25	0.083589	5.0	396402.0	0.334358	Y
3	IC 410-435991/7	1.25	0.532002	5.0	386850.0	0.425602	Y
4	IC 410-435991/6	3.75	1.759714	5.0	419338.0	0.469257	Y
5	IC 410-435991/5	7.5	3.324018	5.0	346209.0	0.443202	Y
6	ICIS 410-435991/2	12.5	5.878838	5.0	357876.0	0.470307	Y
7	IC 410-435991/4	20.0	9.326917	5.0	342261.0	0.466346	Y
8	IC 410-435991/3	30.0	13.220507	5.0	410513.0	0.440684	Y



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Calibration / 2-Fluorobiphenyl (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

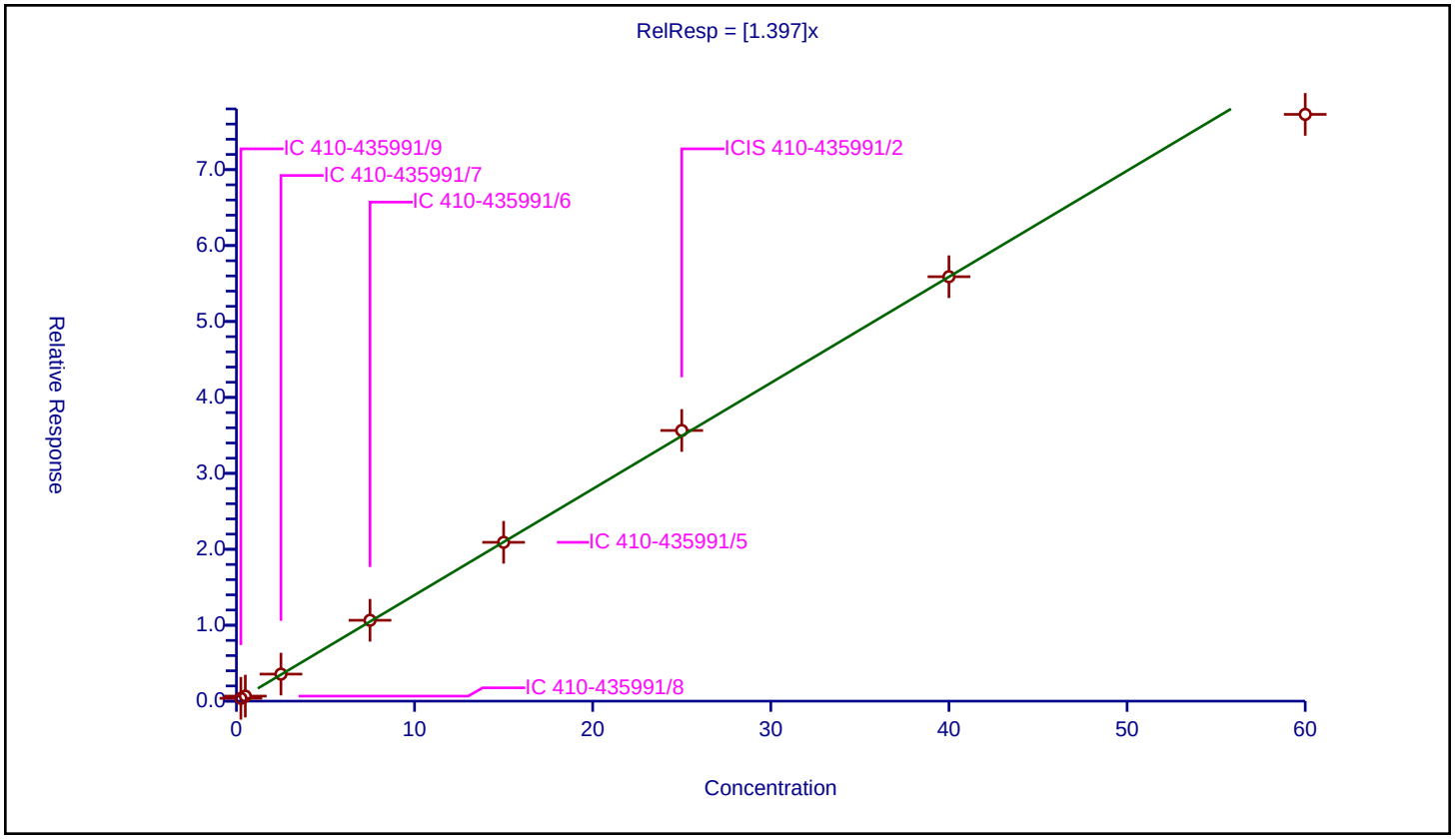
Curve Coefficients

Intercept:	0
Slope:	1.397

Error Coefficients

Standard Error:	3030000
Relative Standard Error:	4.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.25	0.374287	5.0	321331.0	1.497148	Y
2	IC 410-435991/8	0.5	0.664427	5.0	396402.0	1.328853	Y
3	IC 410-435991/7	2.5	3.560876	5.0	386850.0	1.424351	Y
4	IC 410-435991/6	7.5	10.650597	5.0	419338.0	1.42008	Y
5	IC 410-435991/5	15.0	20.91647	5.0	346209.0	1.394431	Y
6	ICIS 410-435991/2	25.0	35.64894	5.0	357876.0	1.425958	Y
7	IC 410-435991/4	40.0	55.897926	5.0	342261.0	1.397448	Y
8	IC 410-435991/3	60.0	77.278076	5.0	410513.0	1.287968	Y



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Calibration / Isosafrole Peak 2

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

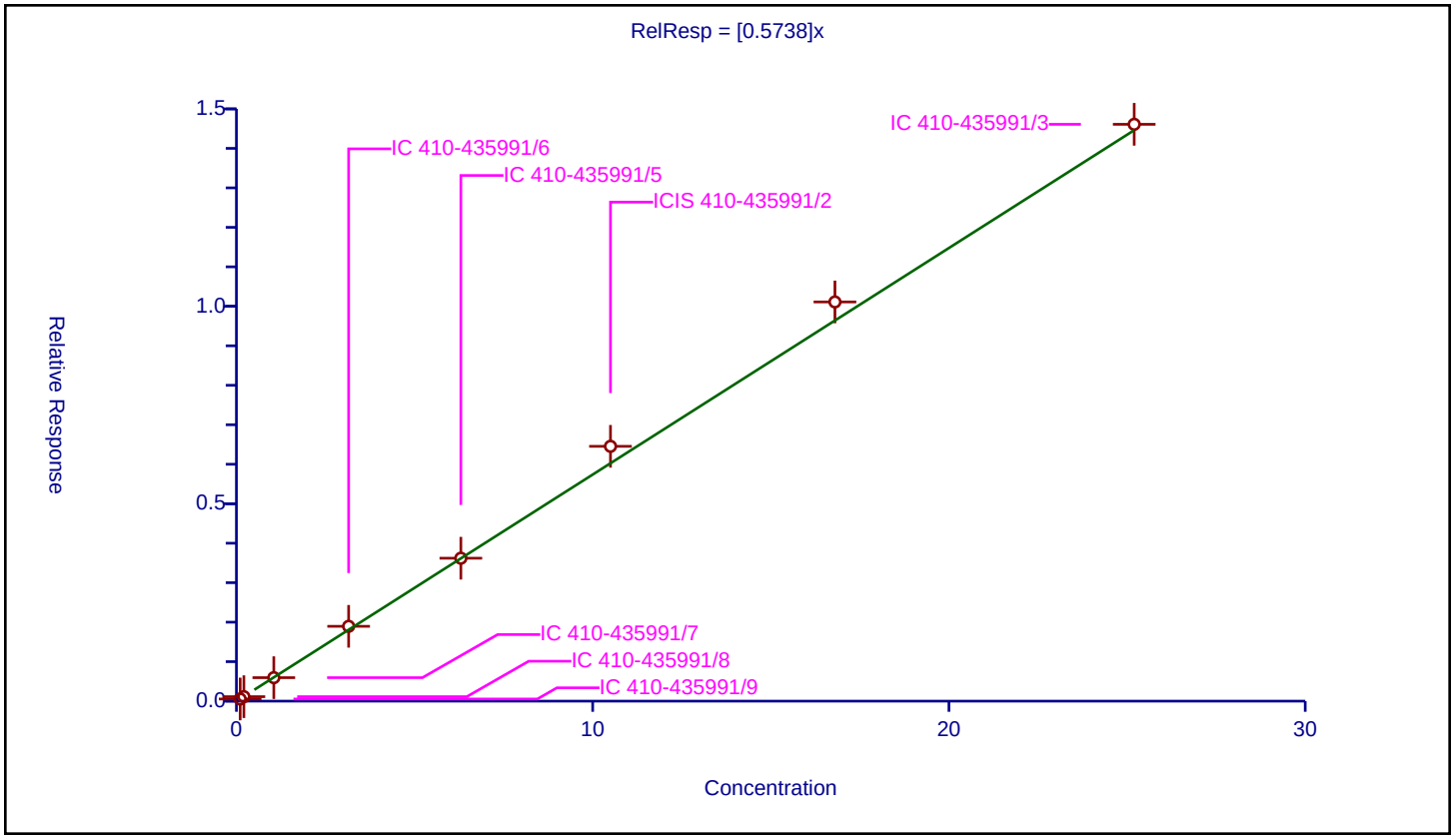
Curve Coefficients

Intercept:	0
Slope:	0.5738

Error Coefficients

Standard Error:	563000
Relative Standard Error:	6.0
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.105	0.053979	5.0	321331.0	0.514082	Y
2	IC 410-435991/8	0.21	0.112903	5.0	396402.0	0.537634	Y
3	IC 410-435991/7	1.05	0.594584	5.0	386850.0	0.566271	Y
4	IC 410-435991/6	3.15	1.89544	5.0	419338.0	0.601727	Y
5	IC 410-435991/5	6.3	3.620299	5.0	346209.0	0.574651	Y
6	ICIS 410-435991/2	10.5	6.454065	5.0	357876.0	0.614673	Y
7	IC 410-435991/4	16.8	10.11072	5.0	342261.0	0.601829	Y
8	IC 410-435991/3	25.2	14.609732	5.0	410513.0	0.579751	Y



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Calibration / 1,1'-Biphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

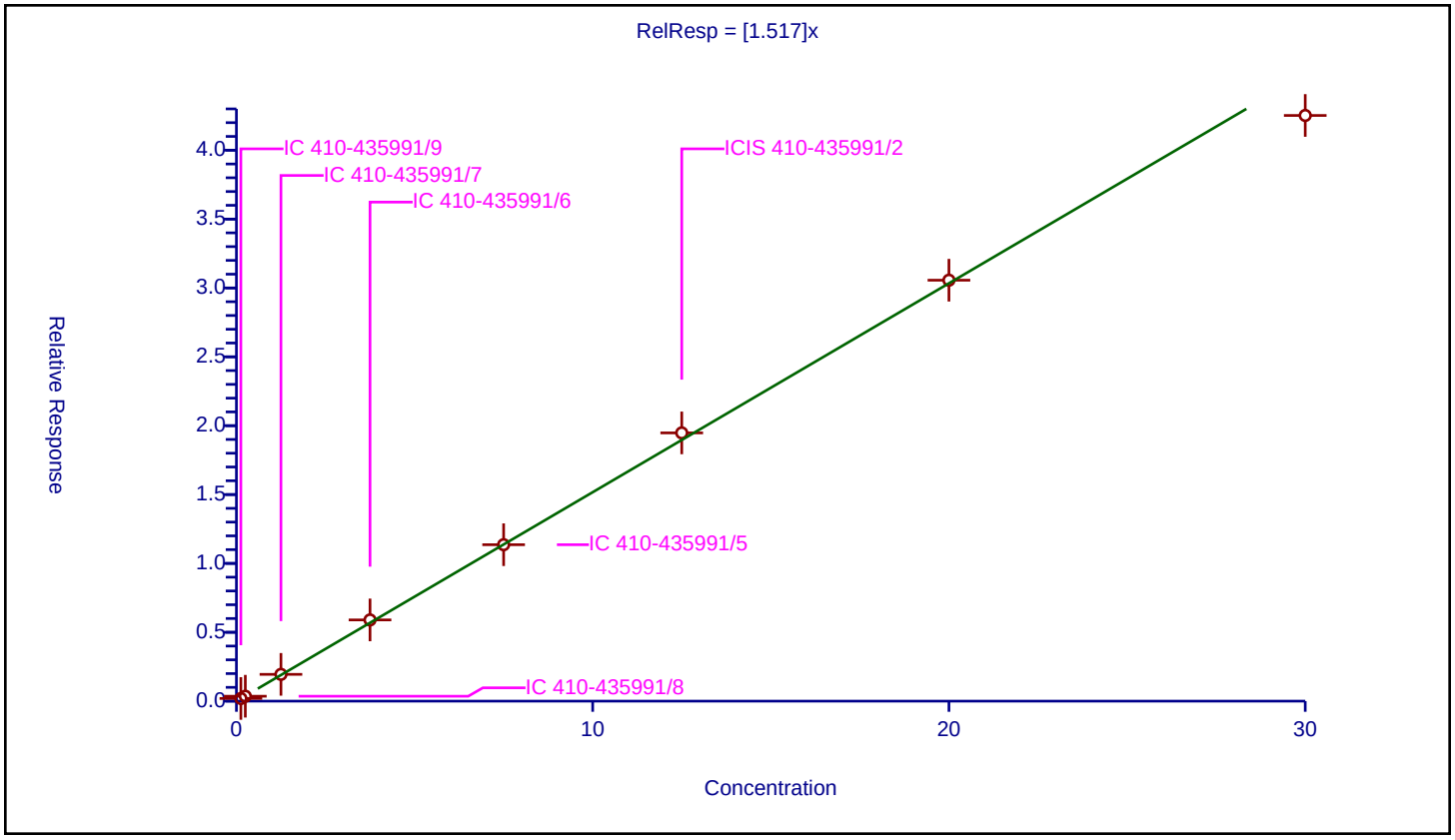
Curve Coefficients

Intercept:	0
Slope:	1.517

Error Coefficients

Standard Error:	1660000
Relative Standard Error:	4.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.195157	5.0	321331.0	1.561256	Y
2	IC 410-435991/8	0.25	0.356961	5.0	396402.0	1.427843	Y
3	IC 410-435991/7	1.25	1.94379	5.0	386850.0	1.555032	Y
4	IC 410-435991/6	3.75	5.897534	5.0	419338.0	1.572676	Y
5	IC 410-435991/5	7.5	11.357374	5.0	346209.0	1.514316	Y
6	ICIS 410-435991/2	12.5	19.475936	5.0	357876.0	1.558075	Y
7	IC 410-435991/4	20.0	30.562349	5.0	342261.0	1.528117	Y
8	IC 410-435991/3	30.0	42.522368	5.0	410513.0	1.417412	Y



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Calibration / 2-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

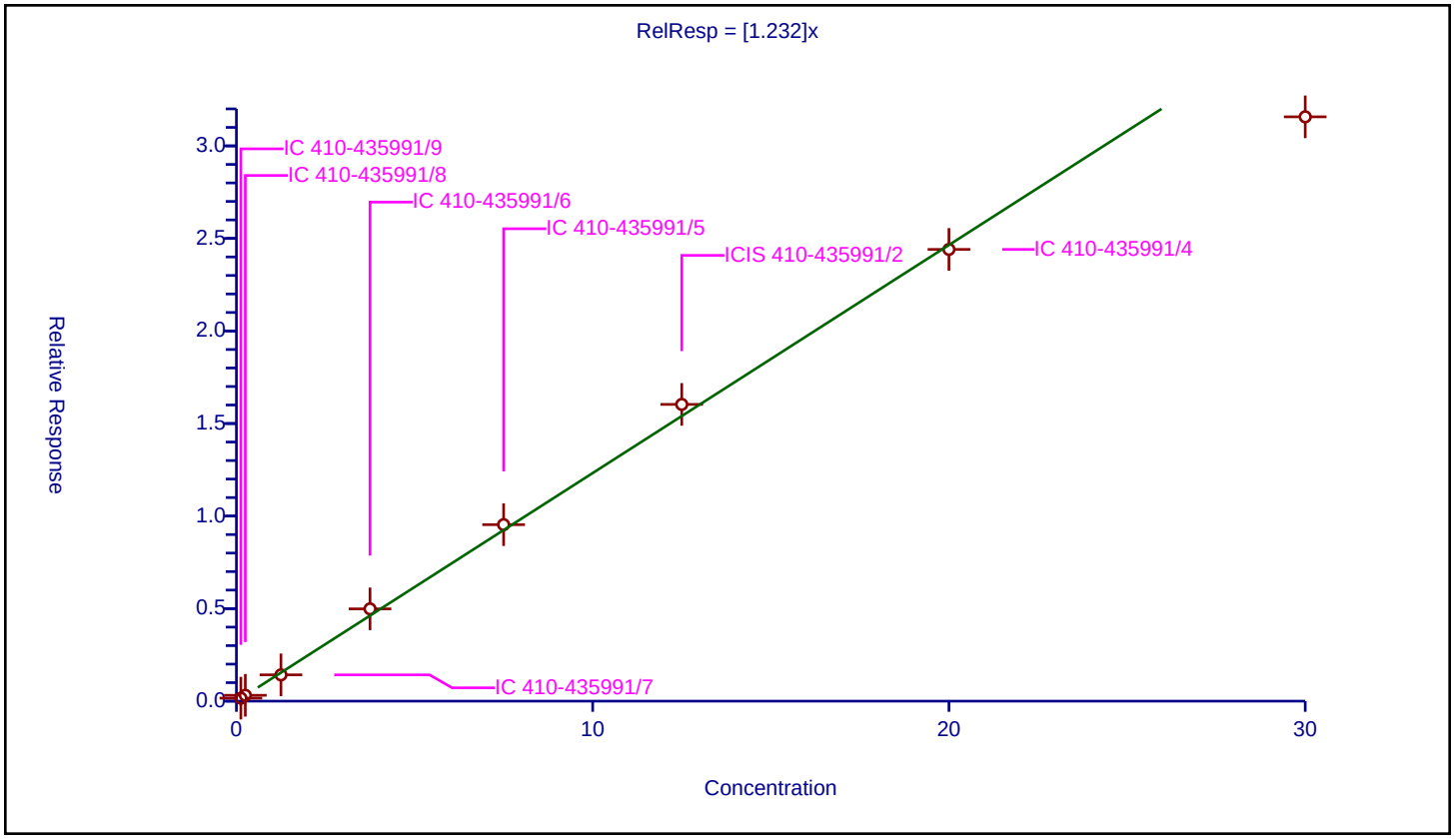
Curve Coefficients

Intercept:	0
Slope:	1.232

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	7.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.162589	5.0	321331.0	1.300715	Y
2	IC 410-435991/8	0.25	0.316257	5.0	396402.0	1.265029	Y
3	IC 410-435991/7	1.25	1.420357	5.0	386850.0	1.136285	Y
4	IC 410-435991/6	3.75	4.985	5.0	419338.0	1.329333	Y
5	IC 410-435991/5	7.5	9.536003	5.0	346209.0	1.271467	Y
6	ICIS 410-435991/2	12.5	16.033431	5.0	357876.0	1.282674	Y
7	IC 410-435991/4	20.0	24.407236	5.0	342261.0	1.220362	Y
8	IC 410-435991/3	30.0	31.57073	5.0	410513.0	1.052358	Y



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Calibration / 1-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

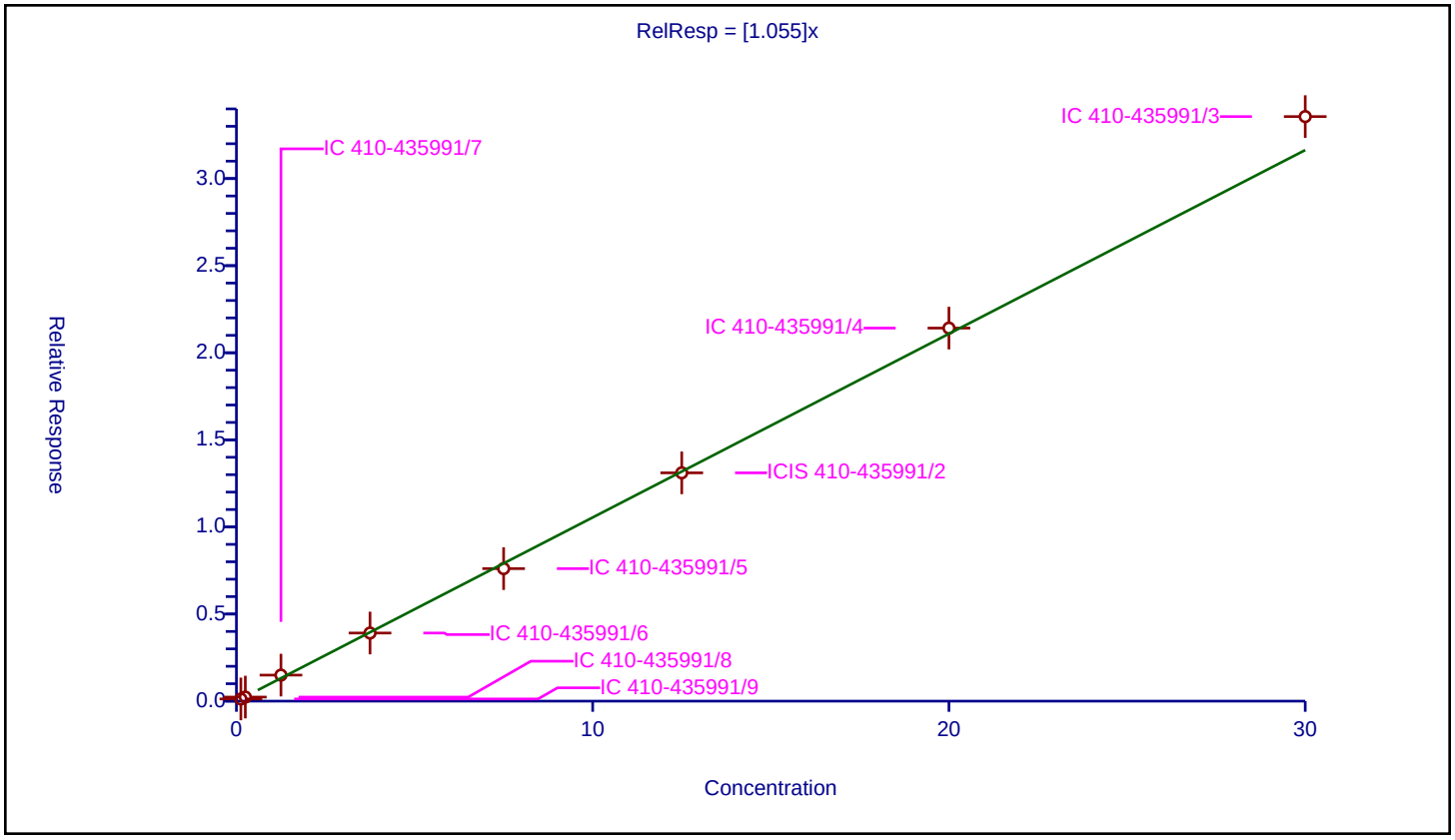
Curve Coefficients

Intercept:	0
Slope:	1.055

Error Coefficients

Standard Error:	1250000
Relative Standard Error:	7.4
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.126318	5.0	321331.0	1.010547	Y
2	IC 410-435991/8	0.25	0.233778	5.0	396402.0	0.935111	Y
3	IC 410-435991/7	1.25	1.494287	5.0	386850.0	1.19543	Y
4	IC 410-435991/6	3.75	3.910354	5.0	419338.0	1.042761	Y
5	IC 410-435991/5	7.5	7.606995	5.0	346209.0	1.014266	Y
6	ICIS 410-435991/2	12.5	13.106146	5.0	357876.0	1.048492	Y
7	IC 410-435991/4	20.0	21.416317	5.0	342261.0	1.070816	Y
8	IC 410-435991/3	30.0	33.55789	5.0	410513.0	1.118596	Y



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Calibration / Phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

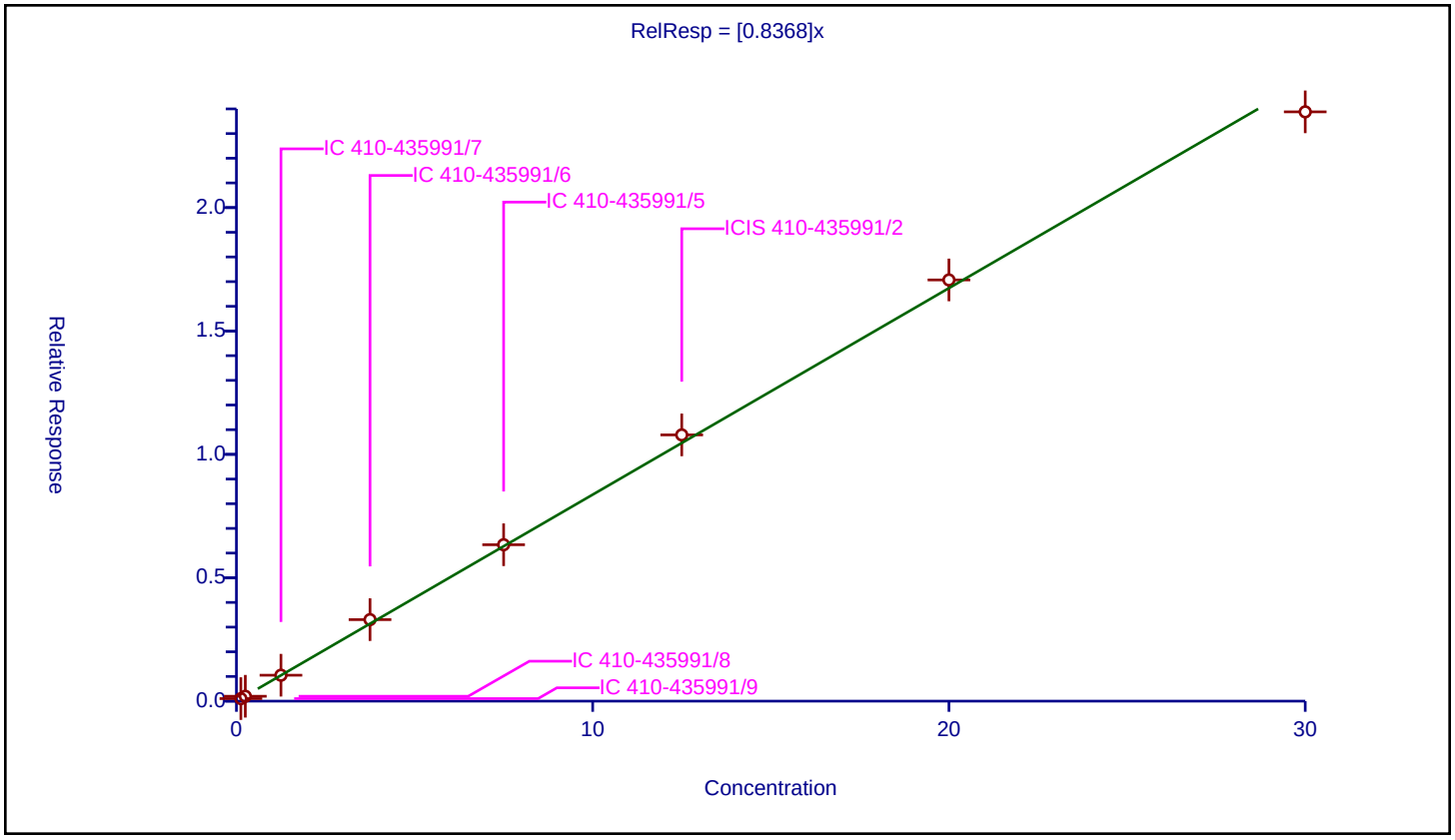
Curve Coefficients

Intercept:	0
Slope:	0.8368

Error Coefficients

Standard Error:	932000
Relative Standard Error:	3.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.102931	5.0	321331.0	0.82345	Y
2	IC 410-435991/8	0.25	0.198145	5.0	396402.0	0.792579	Y
3	IC 410-435991/7	1.25	1.050187	5.0	386850.0	0.84015	Y
4	IC 410-435991/6	3.75	3.303183	5.0	419338.0	0.880849	Y
5	IC 410-435991/5	7.5	6.338512	5.0	346209.0	0.845135	Y
6	ICIS 410-435991/2	12.5	10.789421	5.0	357876.0	0.863154	Y
7	IC 410-435991/4	20.0	17.069006	5.0	342261.0	0.85345	Y
8	IC 410-435991/3	30.0	23.879853	5.0	410513.0	0.795995	Y



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Calibration / 2-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

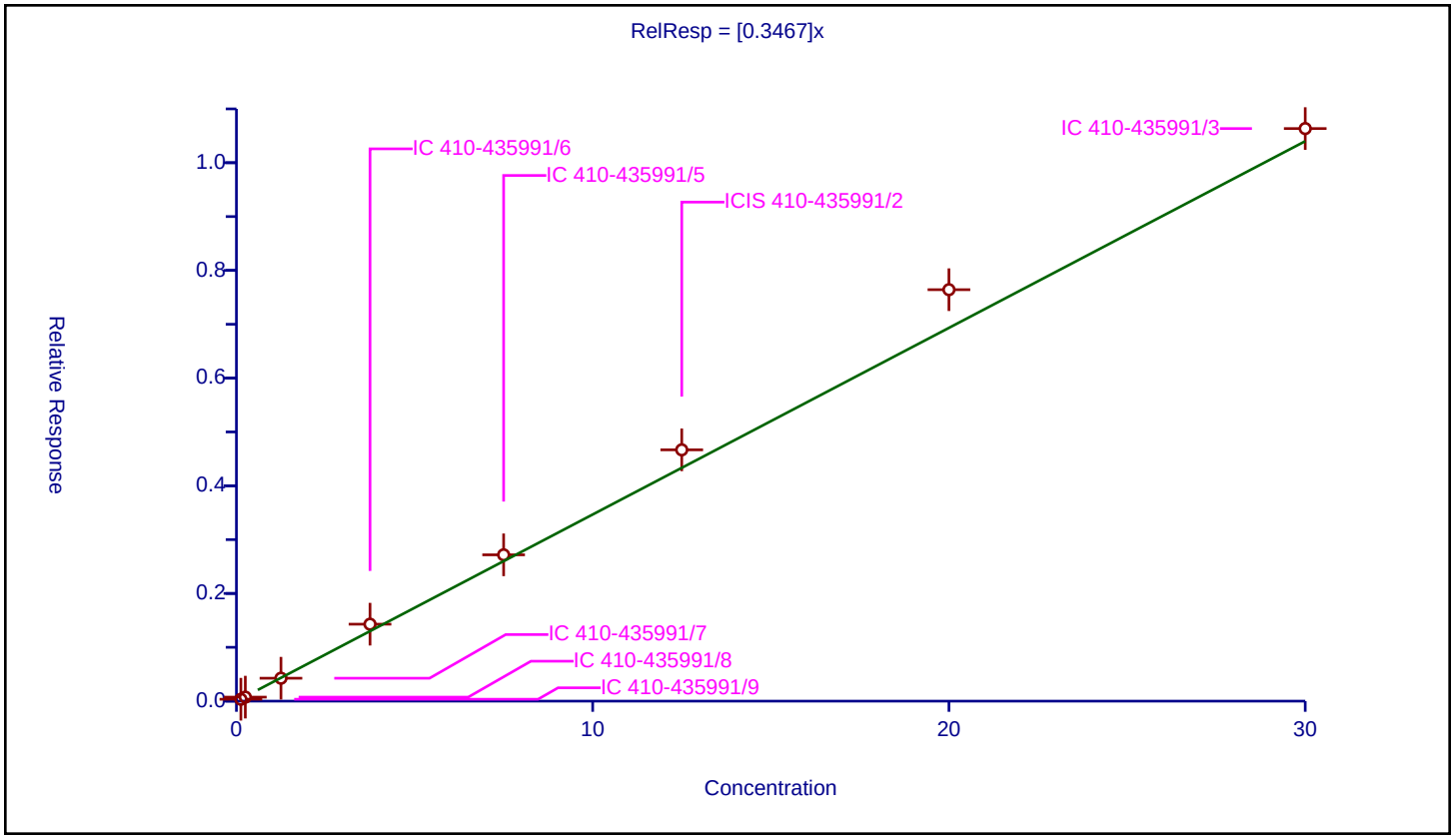
Curve Coefficients

Intercept:	0
Slope:	0.3467

Error Coefficients

Standard Error:	414000
Relative Standard Error:	11.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.035228	5.0	321331.0	0.281828	Y
2	IC 410-435991/8	0.25	0.074394	5.0	396402.0	0.297577	Y
3	IC 410-435991/7	1.25	0.425501	5.0	386850.0	0.340401	Y
4	IC 410-435991/6	3.75	1.429205	5.0	419338.0	0.381121	Y
5	IC 410-435991/5	7.5	2.717318	5.0	346209.0	0.362309	Y
6	ICIS 410-435991/2	12.5	4.667511	5.0	357876.0	0.373401	Y
7	IC 410-435991/4	20.0	7.641858	5.0	342261.0	0.382093	Y
8	IC 410-435991/3	30.0	10.634499	5.0	410513.0	0.354483	Y



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Calibration / 1,4-Naphthoquinone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

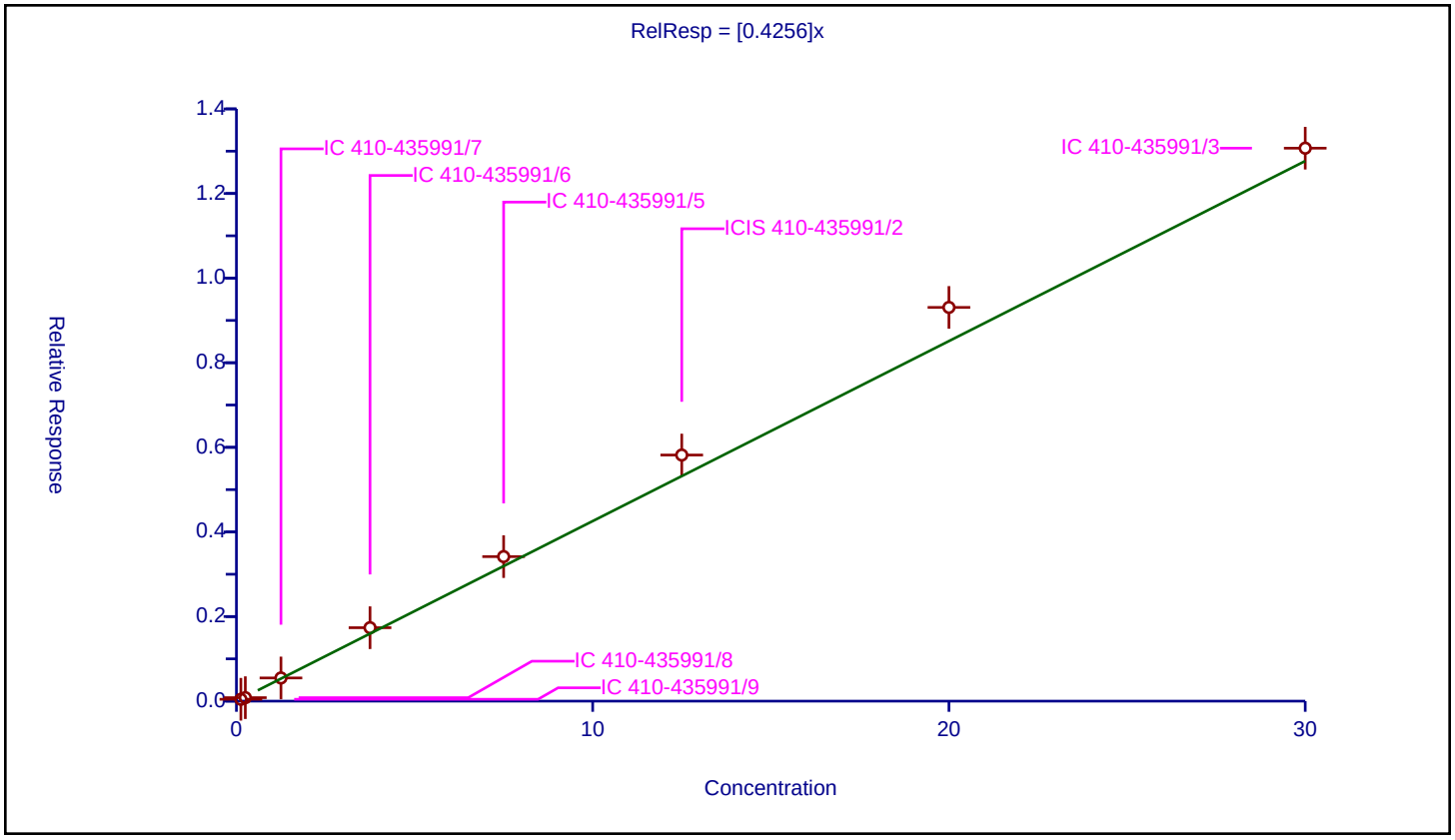
Curve Coefficients

Intercept:	0
Slope:	0.4256

Error Coefficients

Standard Error:	508000
Relative Standard Error:	12.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.044145	5.0	321331.0	0.353156	Y
2	IC 410-435991/8	0.25	0.082025	5.0	396402.0	0.328101	Y
3	IC 410-435991/7	1.25	0.548094	5.0	386850.0	0.438475	Y
4	IC 410-435991/6	3.75	1.735807	5.0	419338.0	0.462882	Y
5	IC 410-435991/5	7.5	3.416246	5.0	346209.0	0.455499	Y
6	ICIS 410-435991/2	12.5	5.817699	5.0	357876.0	0.465416	Y
7	IC 410-435991/4	20.0	9.307166	5.0	342261.0	0.465358	Y
8	IC 410-435991/3	30.0	13.071401	5.0	410513.0	0.435713	Y



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Calibration / 1,4-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

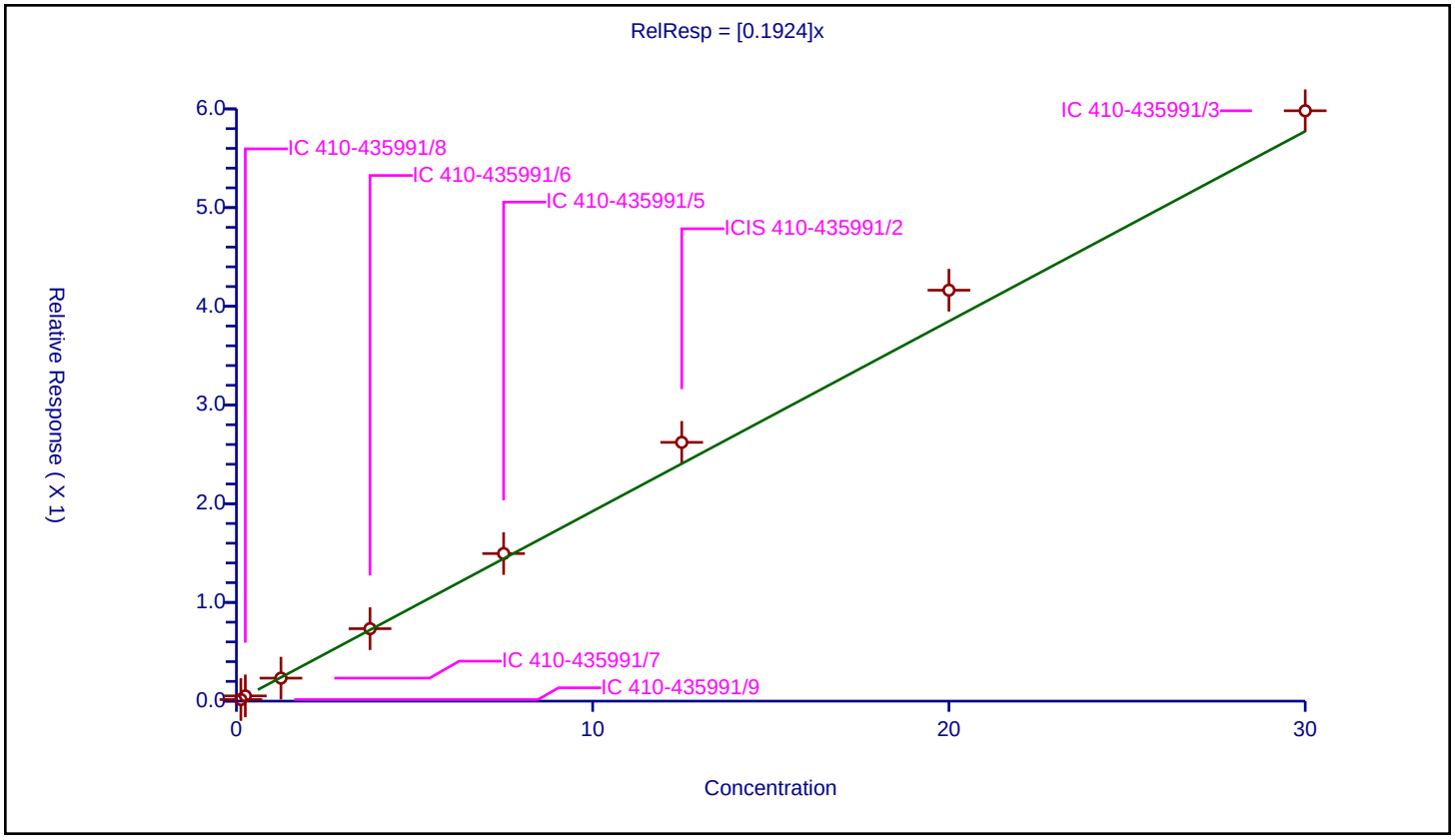
Curve Coefficients

Intercept:	0
Slope:	0.1924

Error Coefficients

Standard Error:	231000
Relative Standard Error:	14.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.016058	5.0	321331.0	0.128466	Y
2	IC 410-435991/8	0.25	0.053065	5.0	396402.0	0.212259	Y
3	IC 410-435991/7	1.25	0.233088	5.0	386850.0	0.18647	Y
4	IC 410-435991/6	3.75	0.733954	5.0	419338.0	0.195721	Y
5	IC 410-435991/5	7.5	1.495195	5.0	346209.0	0.199359	Y
6	ICIS 410-435991/2	12.5	2.621648	5.0	357876.0	0.209732	Y
7	IC 410-435991/4	20.0	4.163212	5.0	342261.0	0.208161	Y
8	IC 410-435991/3	30.0	5.981077	5.0	410513.0	0.199369	Y



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Calibration / Dimethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

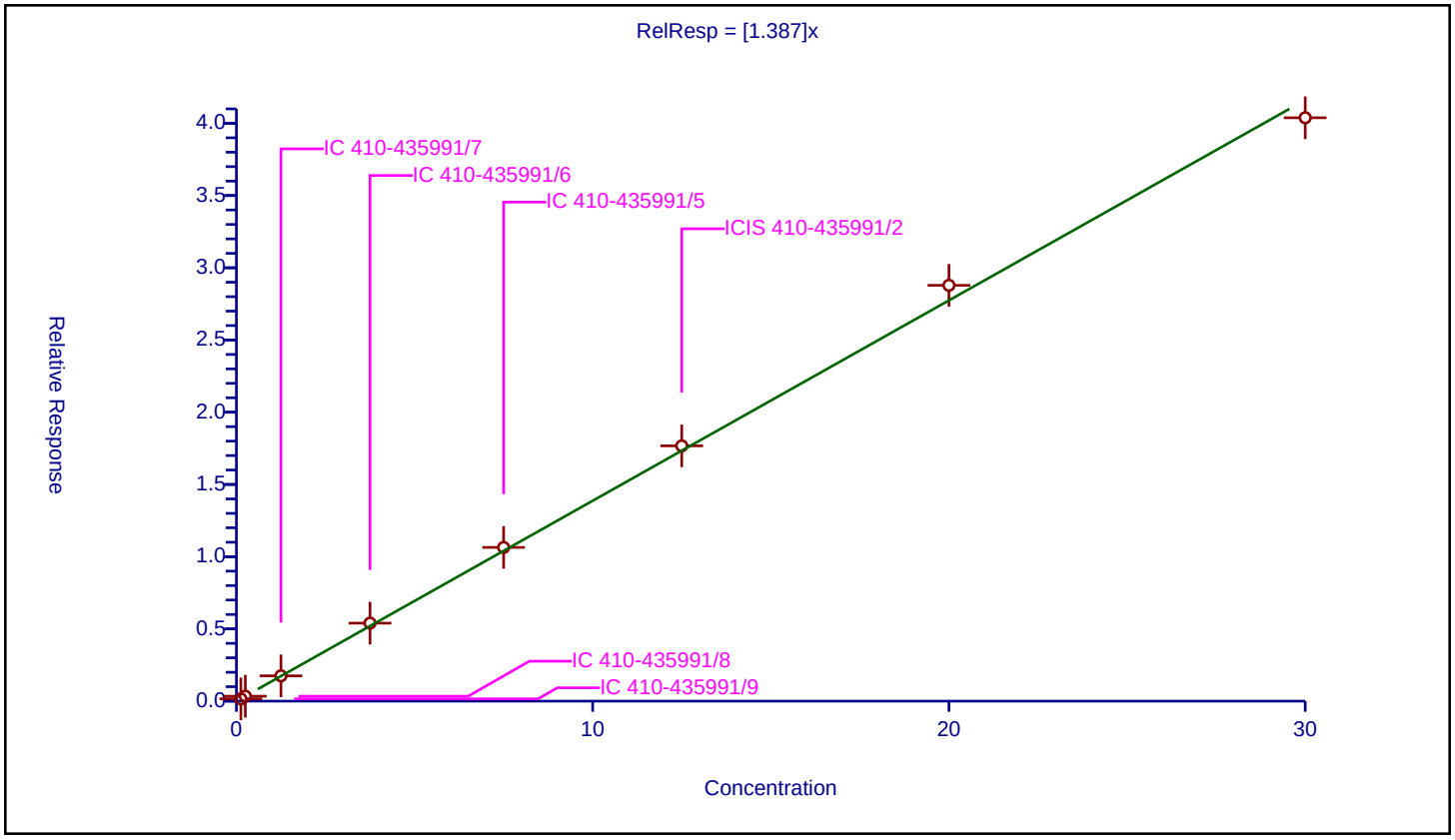
Curve Coefficients

Intercept:	0
Slope:	1.387

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	4.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.158948	5.0	321331.0	1.271586	Y
2	IC 410-435991/8	0.25	0.341421	5.0	396402.0	1.365684	Y
3	IC 410-435991/7	1.25	1.7521	5.0	386850.0	1.40168	Y
4	IC 410-435991/6	3.75	5.399666	5.0	419338.0	1.439911	Y
5	IC 410-435991/5	7.5	10.640726	5.0	346209.0	1.418763	Y
6	ICIS 410-435991/2	12.5	17.672965	5.0	357876.0	1.413837	Y
7	IC 410-435991/4	20.0	28.786379	5.0	342261.0	1.439319	Y
8	IC 410-435991/3	30.0	40.386589	5.0	410513.0	1.34622	Y



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Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

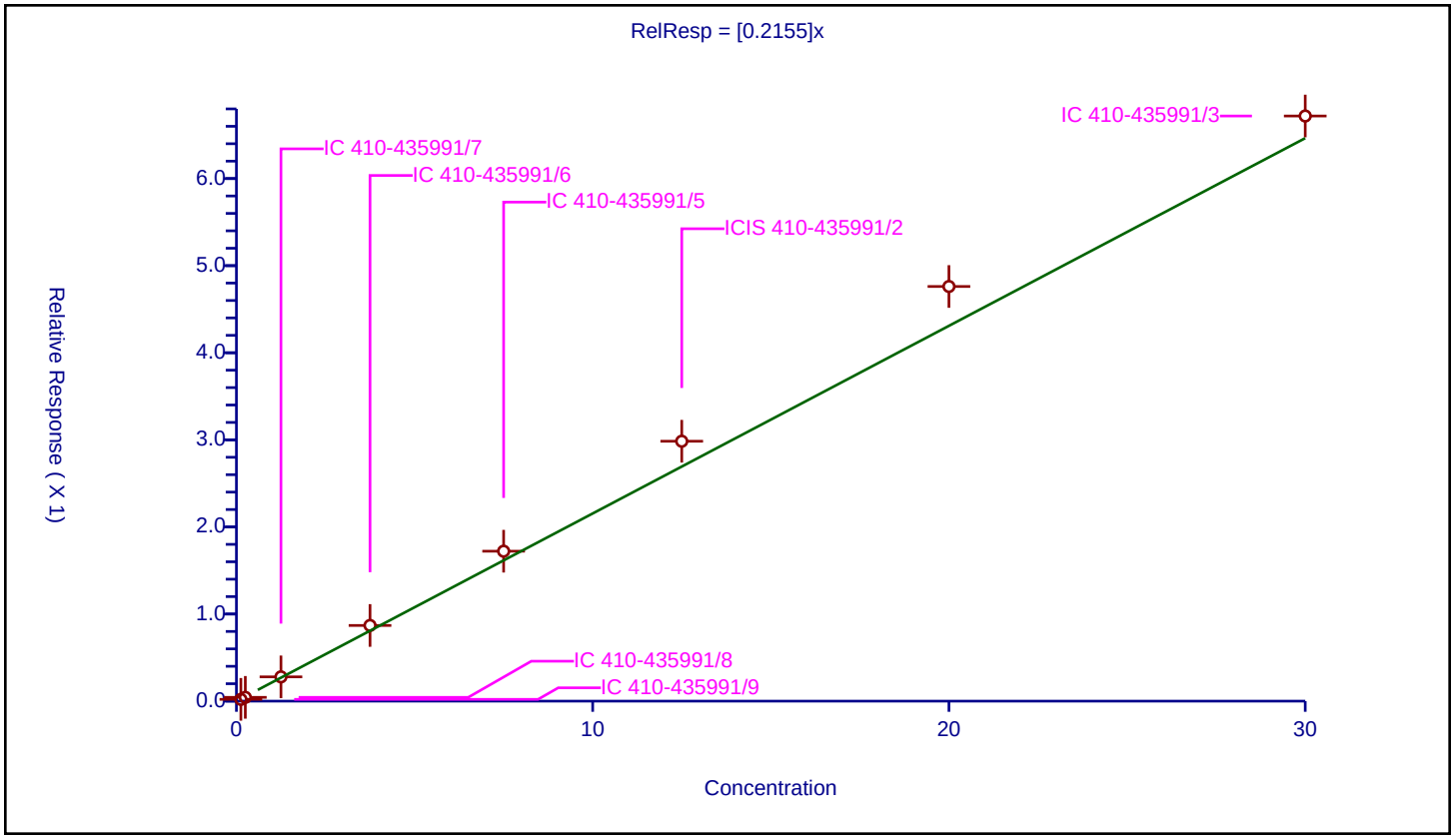
Curve Coefficients

Intercept:	0
Slope:	0.2155

Error Coefficients

Standard Error:	261000
Relative Standard Error:	13.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.020555	5.0	321331.0	0.164441	Y
2	IC 410-435991/8	0.25	0.043542	5.0	396402.0	0.174167	Y
3	IC 410-435991/7	1.25	0.278881	5.0	386850.0	0.223105	Y
4	IC 410-435991/6	3.75	0.869001	5.0	419338.0	0.231734	Y
5	IC 410-435991/5	7.5	1.721561	5.0	346209.0	0.229542	Y
6	ICIS 410-435991/2	12.5	2.984176	5.0	357876.0	0.238734	Y
7	IC 410-435991/4	20.0	4.760797	5.0	342261.0	0.23804	Y
8	IC 410-435991/3	30.0	6.71846	5.0	410513.0	0.223949	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

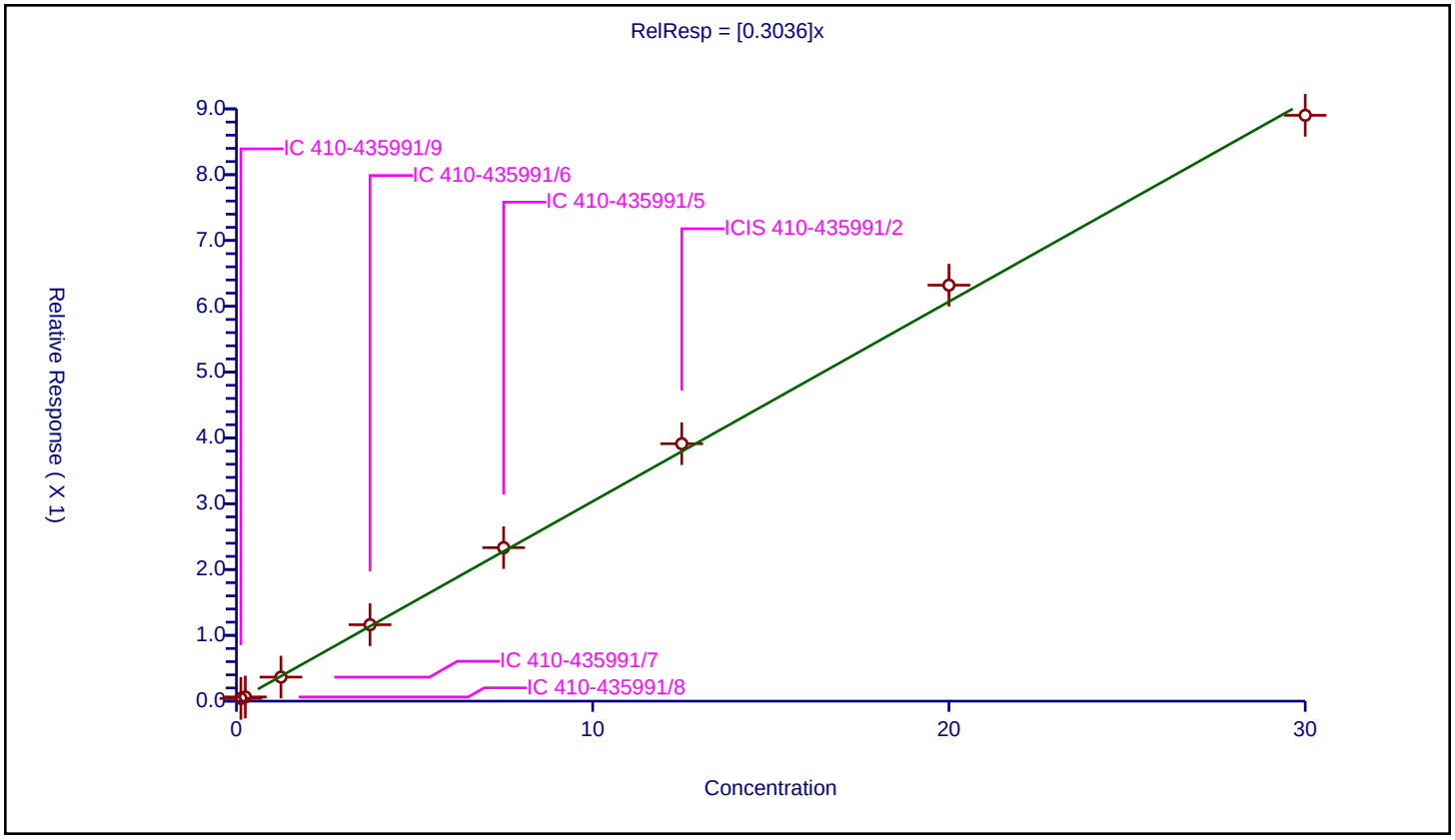
Curve Coefficients

Intercept:	0
Slope:	0.3036

Error Coefficients

Standard Error:	346000
Relative Standard Error:	7.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.041562	5.0	321331.0	0.332492	Y
2	IC 410-435991/8	0.25	0.064291	5.0	396402.0	0.257163	Y
3	IC 410-435991/7	1.25	0.365568	5.0	386850.0	0.292454	Y
4	IC 410-435991/6	3.75	1.161223	5.0	419338.0	0.30966	Y
5	IC 410-435991/5	7.5	2.332117	5.0	346209.0	0.310949	Y
6	ICIS 410-435991/2	12.5	3.912193	5.0	357876.0	0.312975	Y
7	IC 410-435991/4	20.0	6.321229	5.0	342261.0	0.316061	Y
8	IC 410-435991/3	30.0	8.902556	5.0	410513.0	0.296752	Y



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Calibration / Acenaphthylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

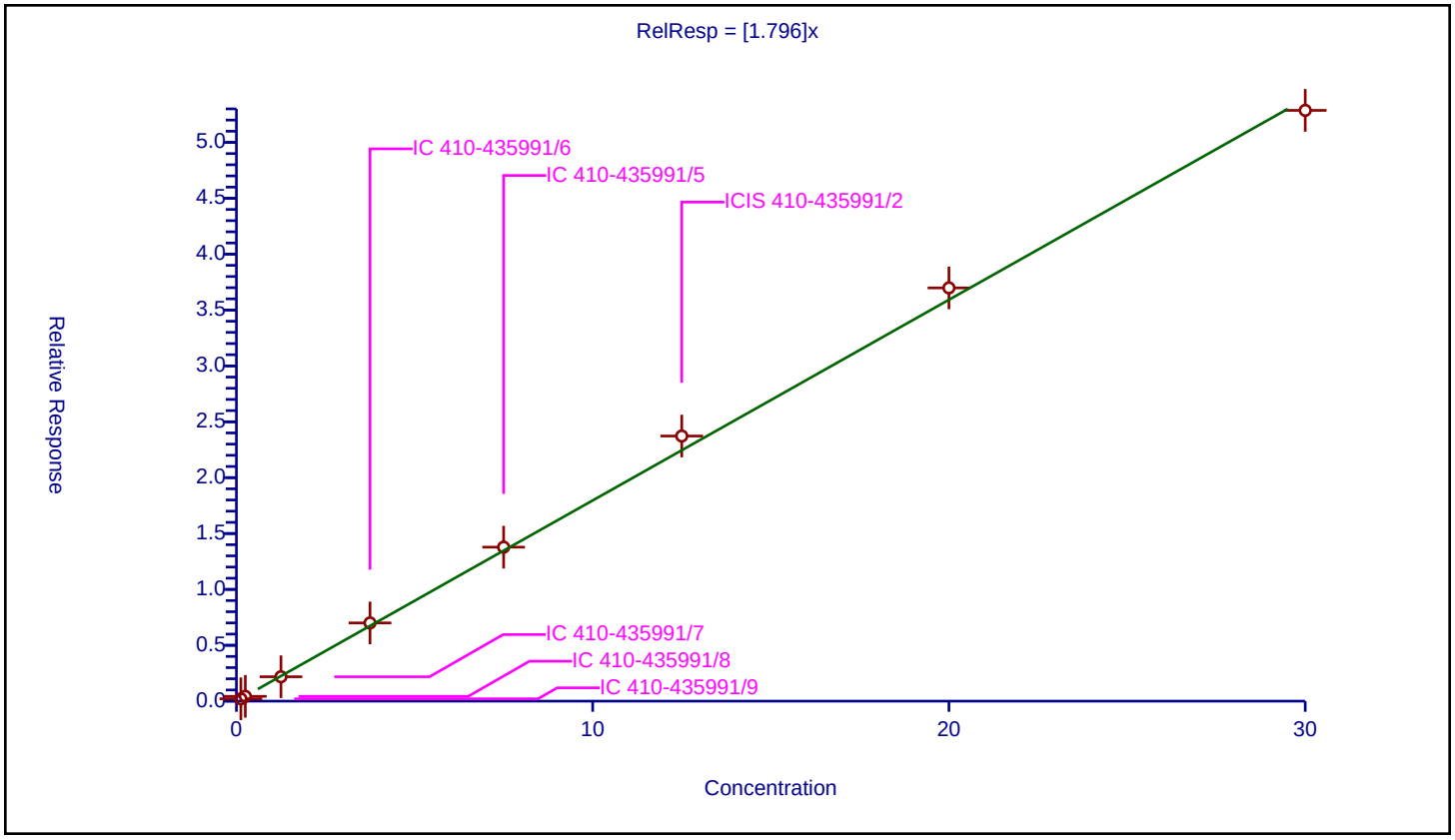
Curve Coefficients

Intercept:	0
Slope:	1.796

Error Coefficients

Standard Error:	2050000
Relative Standard Error:	4.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.21092	5.0	321331.0	1.687357	Y
2	IC 410-435991/8	0.25	0.430447	5.0	396402.0	1.721787	Y
3	IC 410-435991/7	1.25	2.181931	5.0	386850.0	1.745545	Y
4	IC 410-435991/6	3.75	6.998591	5.0	419338.0	1.866291	Y
5	IC 410-435991/5	7.5	13.77974	5.0	346209.0	1.837299	Y
6	ICIS 410-435991/2	12.5	23.725019	5.0	357876.0	1.898002	Y
7	IC 410-435991/4	20.0	36.981485	5.0	342261.0	1.849074	Y
8	IC 410-435991/3	30.0	52.867254	5.0	410513.0	1.762242	Y



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Calibration / 3-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

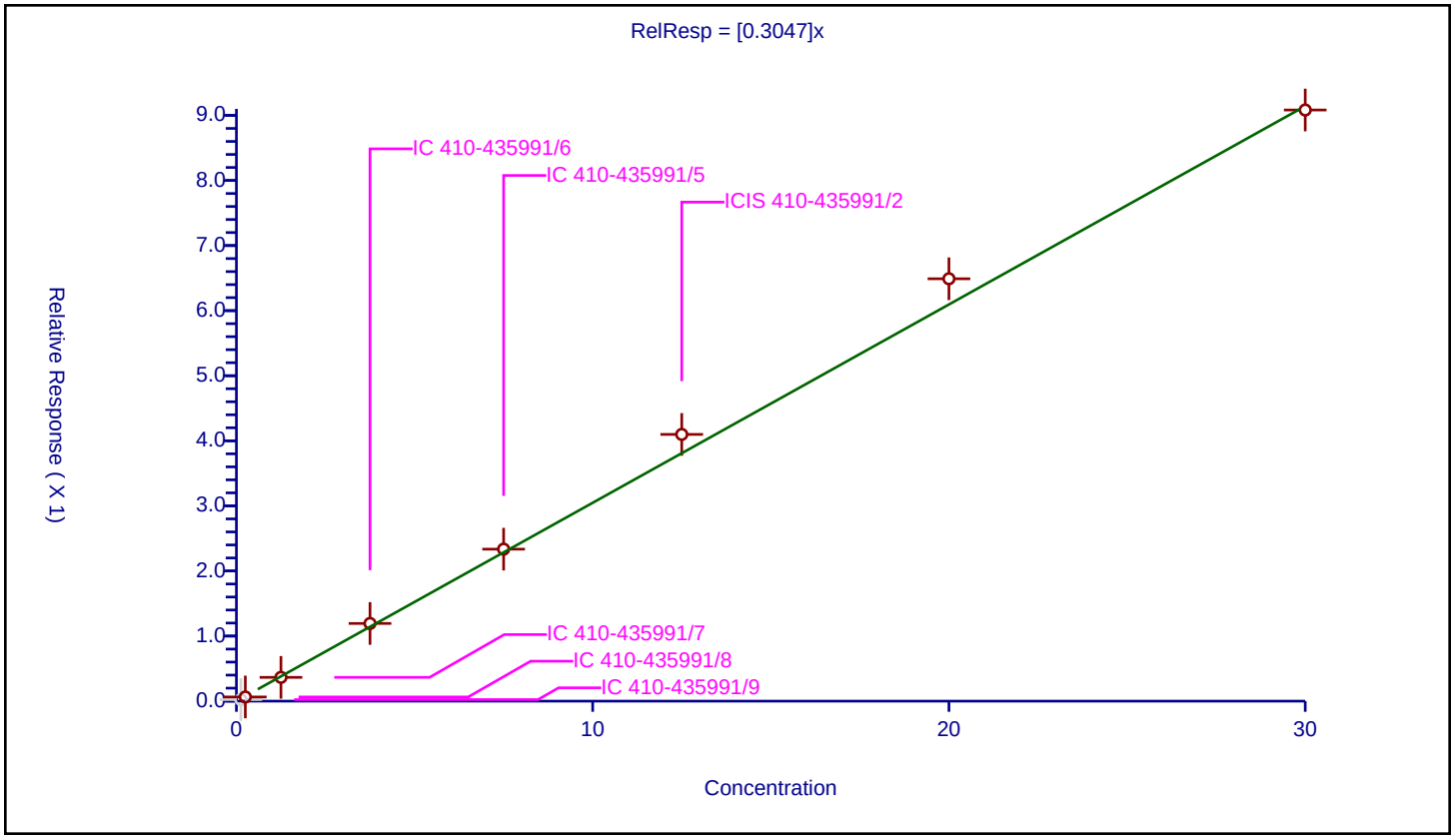
Curve Coefficients

Intercept:	0
Slope:	0.3047

Error Coefficients

Standard Error:	382000
Relative Standard Error:	8.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.023854	5.0	321331.0	0.190831	N
2	IC 410-435991/8	0.25	0.064102	5.0	396402.0	0.256406	Y
3	IC 410-435991/7	1.25	0.365116	5.0	386850.0	0.292093	Y
4	IC 410-435991/6	3.75	1.193369	5.0	419338.0	0.318232	Y
5	IC 410-435991/5	7.5	2.335338	5.0	346209.0	0.311378	Y
6	ICIS 410-435991/2	12.5	4.098263	5.0	357876.0	0.327861	Y
7	IC 410-435991/4	20.0	6.489828	5.0	342261.0	0.324491	Y
8	IC 410-435991/3	30.0	9.08266	5.0	410513.0	0.302755	Y



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Calibration / Acenaphthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

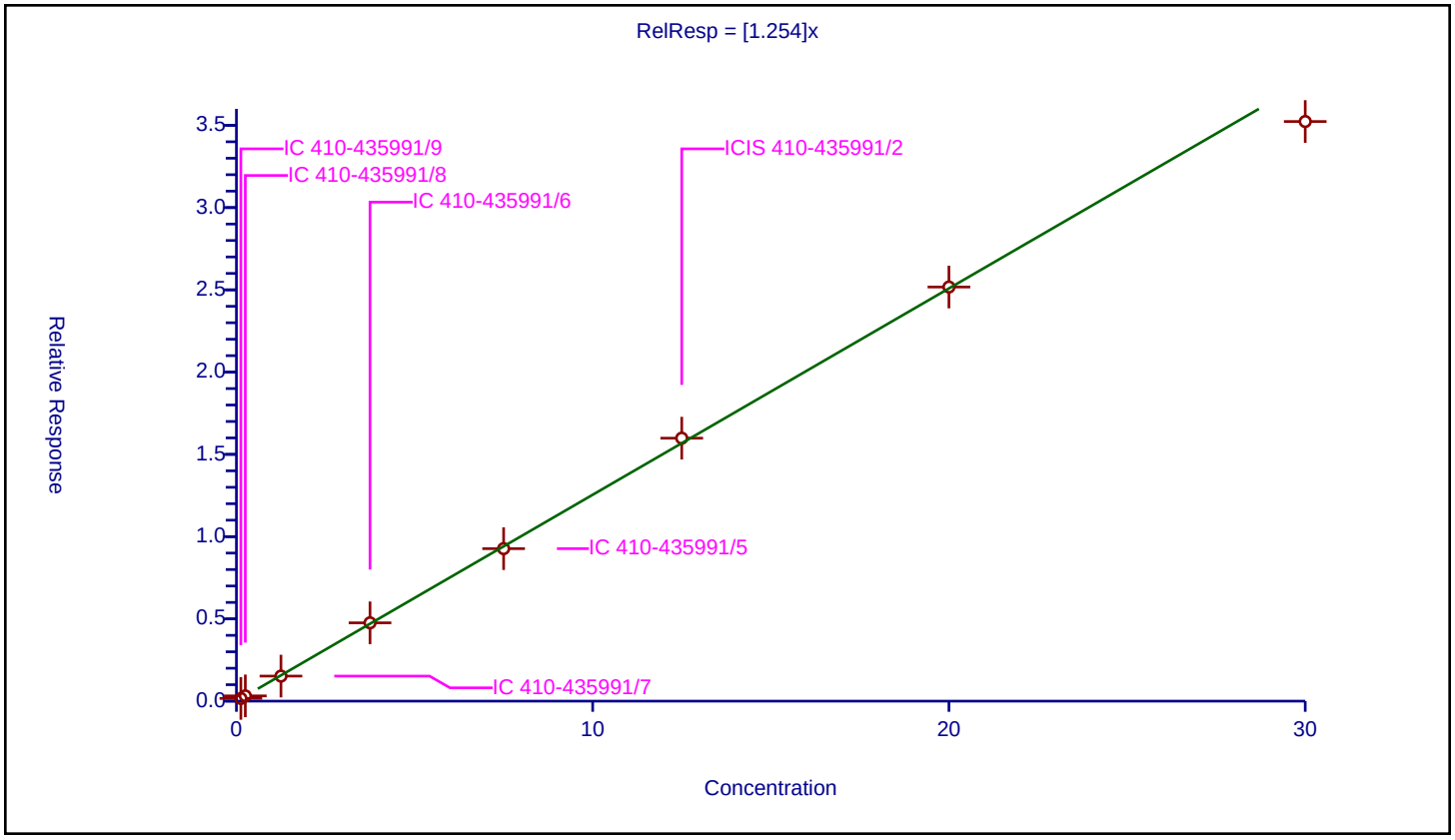
Curve Coefficients

Intercept:	0
Slope:	1.254

Error Coefficients

Standard Error:	1370000
Relative Standard Error:	3.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.165203	5.0	321331.0	1.321628	Y
2	IC 410-435991/8	0.25	0.3196	5.0	396402.0	1.278399	Y
3	IC 410-435991/7	1.25	1.522593	5.0	386850.0	1.218074	Y
4	IC 410-435991/6	3.75	4.760515	5.0	419338.0	1.269471	Y
5	IC 410-435991/5	7.5	9.26969	5.0	346209.0	1.235959	Y
6	ICIS 410-435991/2	12.5	15.984224	5.0	357876.0	1.278738	Y
7	IC 410-435991/4	20.0	25.172164	5.0	342261.0	1.258608	Y
8	IC 410-435991/3	30.0	35.231844	5.0	410513.0	1.174395	Y



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Calibration / 2,4-Dinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

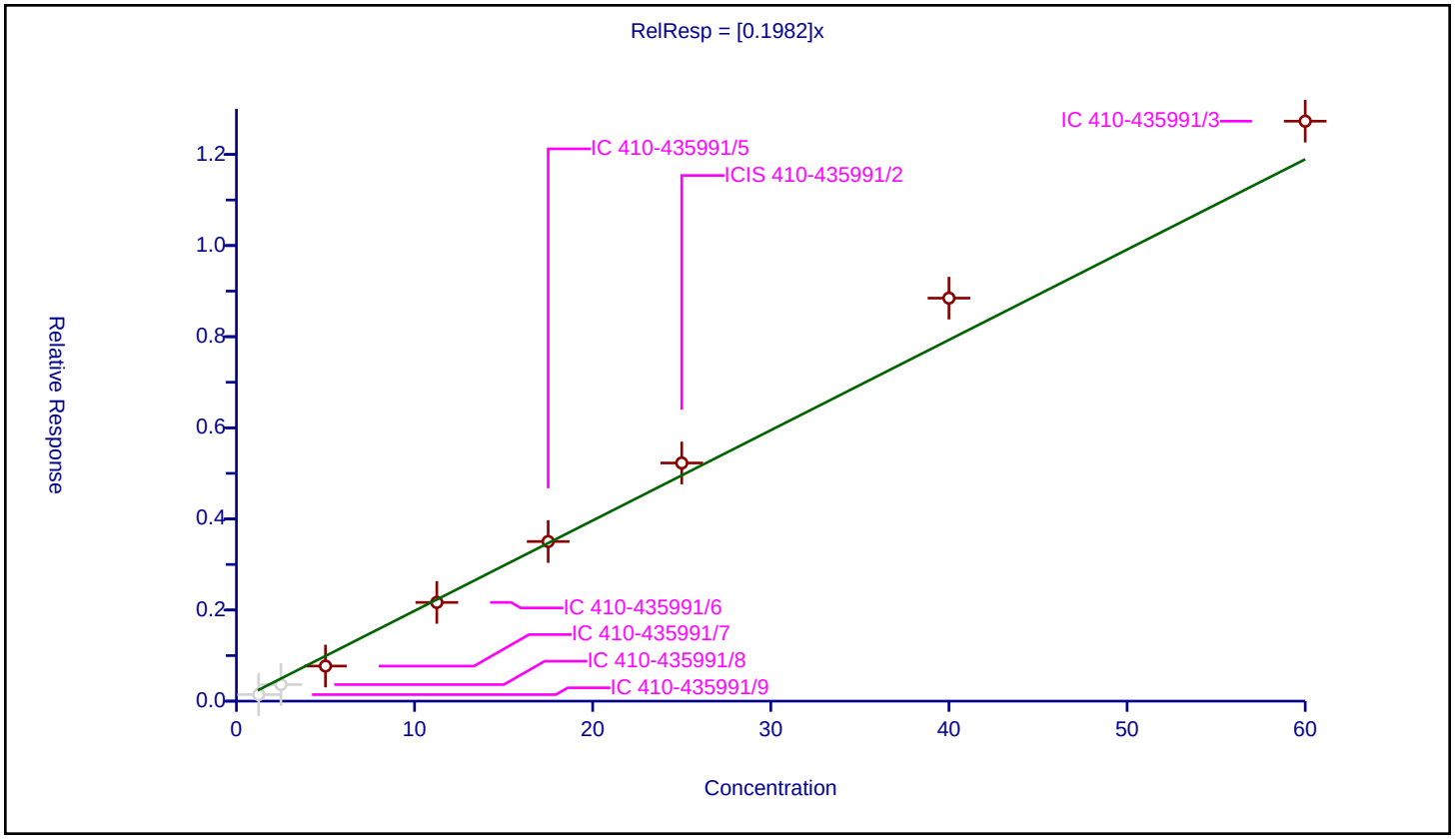
Curve Coefficients

Intercept:	0
Slope:	0.1982

Error Coefficients

Standard Error:	582000
Relative Standard Error:	12.0
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	1.25	0.143808	5.0	321331.0	0.115046	N
2	IC 410-435991/8	2.5	0.363205	5.0	396402.0	0.145282	N
3	IC 410-435991/7	5.0	0.77048	5.0	386850.0	0.154096	Y
4	IC 410-435991/6	11.25	2.167047	5.0	419338.0	0.192626	Y
5	IC 410-435991/5	17.5	3.504155	5.0	346209.0	0.200237	Y
6	ICIS 410-435991/2	25.0	5.227481	5.0	357876.0	0.209099	Y
7	IC 410-435991/4	40.0	8.846144	5.0	342261.0	0.221154	Y
8	IC 410-435991/3	60.0	12.729621	5.0	410513.0	0.21216	Y



11/14/2023
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Calibration / 4-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

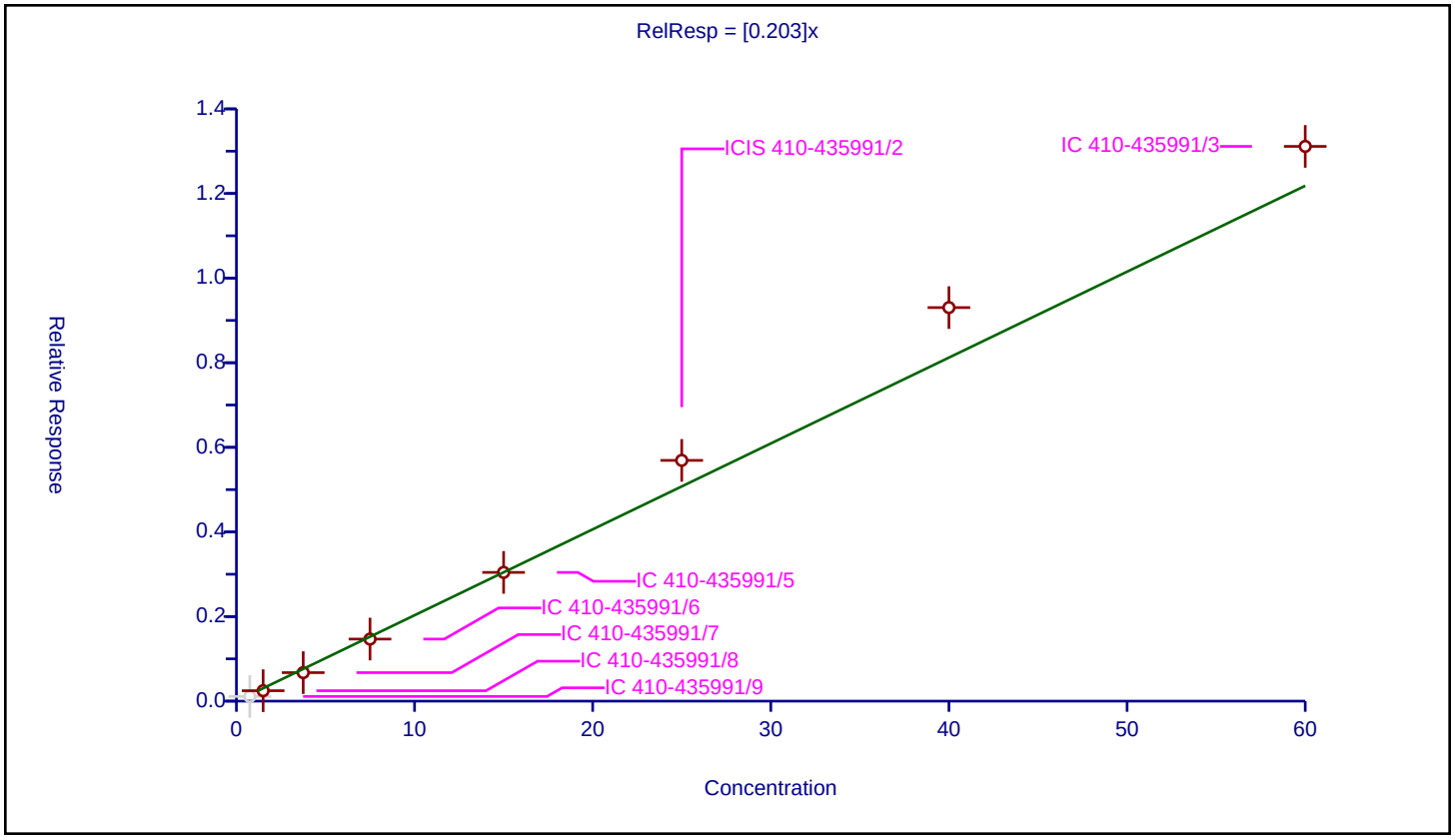
Curve Coefficients

Intercept:	0
Slope:	0.203

Error Coefficients

Standard Error:	547000
Relative Standard Error:	12.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.75	0.110789	5.0	321331.0	0.147719	N
2	IC 410-435991/8	1.5	0.24624	5.0	396402.0	0.16416	Y
3	IC 410-435991/7	3.75	0.673969	5.0	386850.0	0.179725	Y
4	IC 410-435991/6	7.5	1.467182	5.0	419338.0	0.195624	Y
5	IC 410-435991/5	15.0	3.043422	5.0	346209.0	0.202895	Y
6	ICIS 410-435991/2	25.0	5.691105	5.0	357876.0	0.227644	Y
7	IC 410-435991/4	40.0	9.303105	5.0	342261.0	0.232578	Y
8	IC 410-435991/3	60.0	13.113592	5.0	410513.0	0.21856	Y



11/14/2023
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Calibration / Pentachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

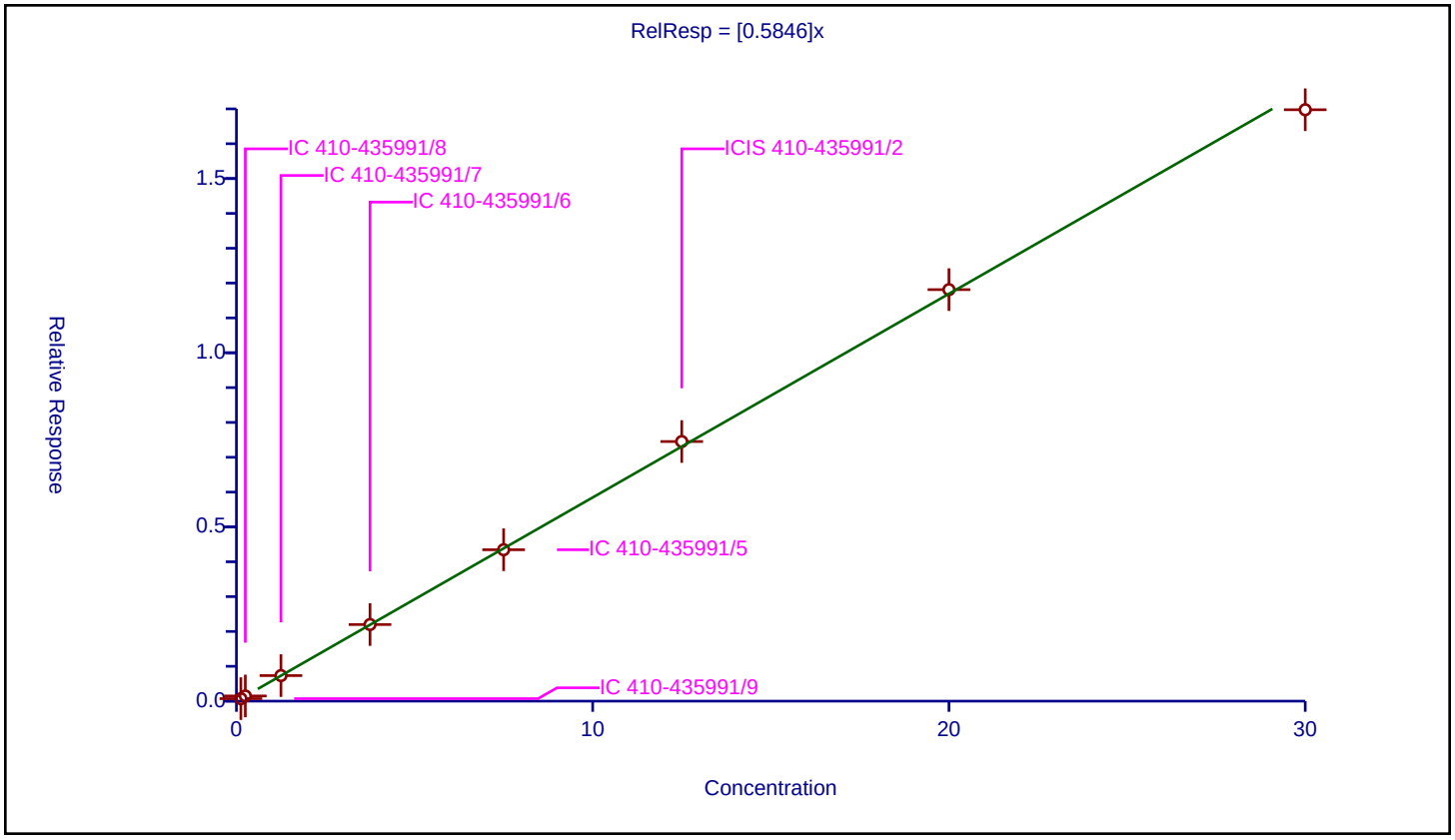
Curve Coefficients

Intercept:	0
Slope:	0.5846

Error Coefficients

Standard Error:	656000
Relative Standard Error:	1.8
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.072029	5.0	321331.0	0.576228	Y
2	IC 410-435991/8	0.25	0.148826	5.0	396402.0	0.595305	Y
3	IC 410-435991/7	1.25	0.733734	5.0	386850.0	0.586987	Y
4	IC 410-435991/6	3.75	2.19924	5.0	419338.0	0.586464	Y
5	IC 410-435991/5	7.5	4.34567	5.0	346209.0	0.579423	Y
6	ICIS 410-435991/2	12.5	7.451659	5.0	357876.0	0.596133	Y
7	IC 410-435991/4	20.0	11.811746	5.0	342261.0	0.590587	Y
8	IC 410-435991/3	30.0	16.975248	5.0	410513.0	0.565842	Y



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Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

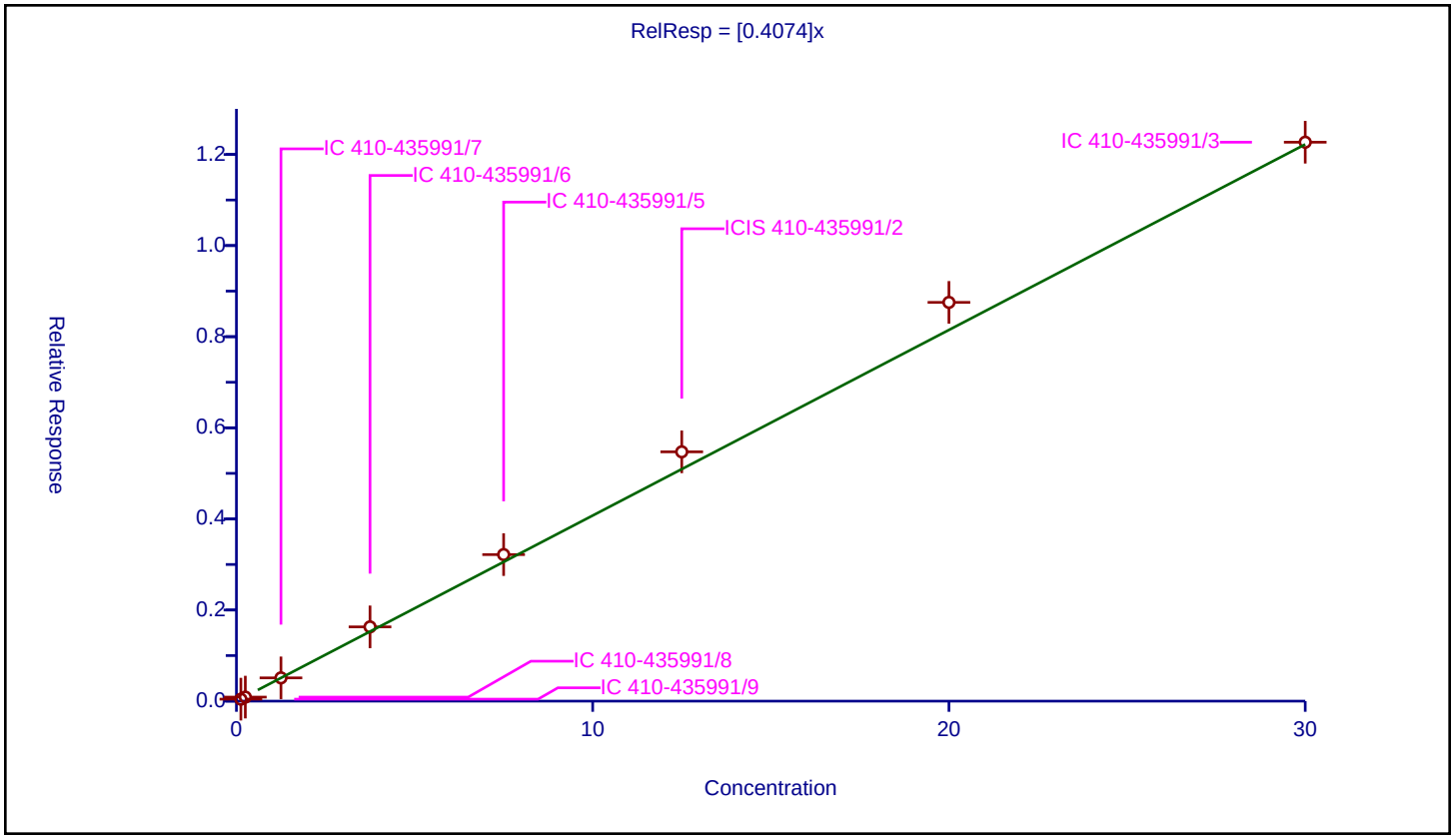
Curve Coefficients

Intercept:	0
Slope:	0.4074

Error Coefficients

Standard Error:	478000
Relative Standard Error:	9.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.043569	5.0	321331.0	0.34855	Y
2	IC 410-435991/8	0.25	0.088471	5.0	396402.0	0.353883	Y
3	IC 410-435991/7	1.25	0.510857	5.0	386850.0	0.408686	Y
4	IC 410-435991/6	3.75	1.630022	5.0	419338.0	0.434672	Y
5	IC 410-435991/5	7.5	3.216771	5.0	346209.0	0.428903	Y
6	ICIS 410-435991/2	12.5	5.472608	5.0	357876.0	0.437809	Y
7	IC 410-435991/4	20.0	8.752546	5.0	342261.0	0.437627	Y
8	IC 410-435991/3	30.0	12.268905	5.0	410513.0	0.408964	Y



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Calibration / Dibenzofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

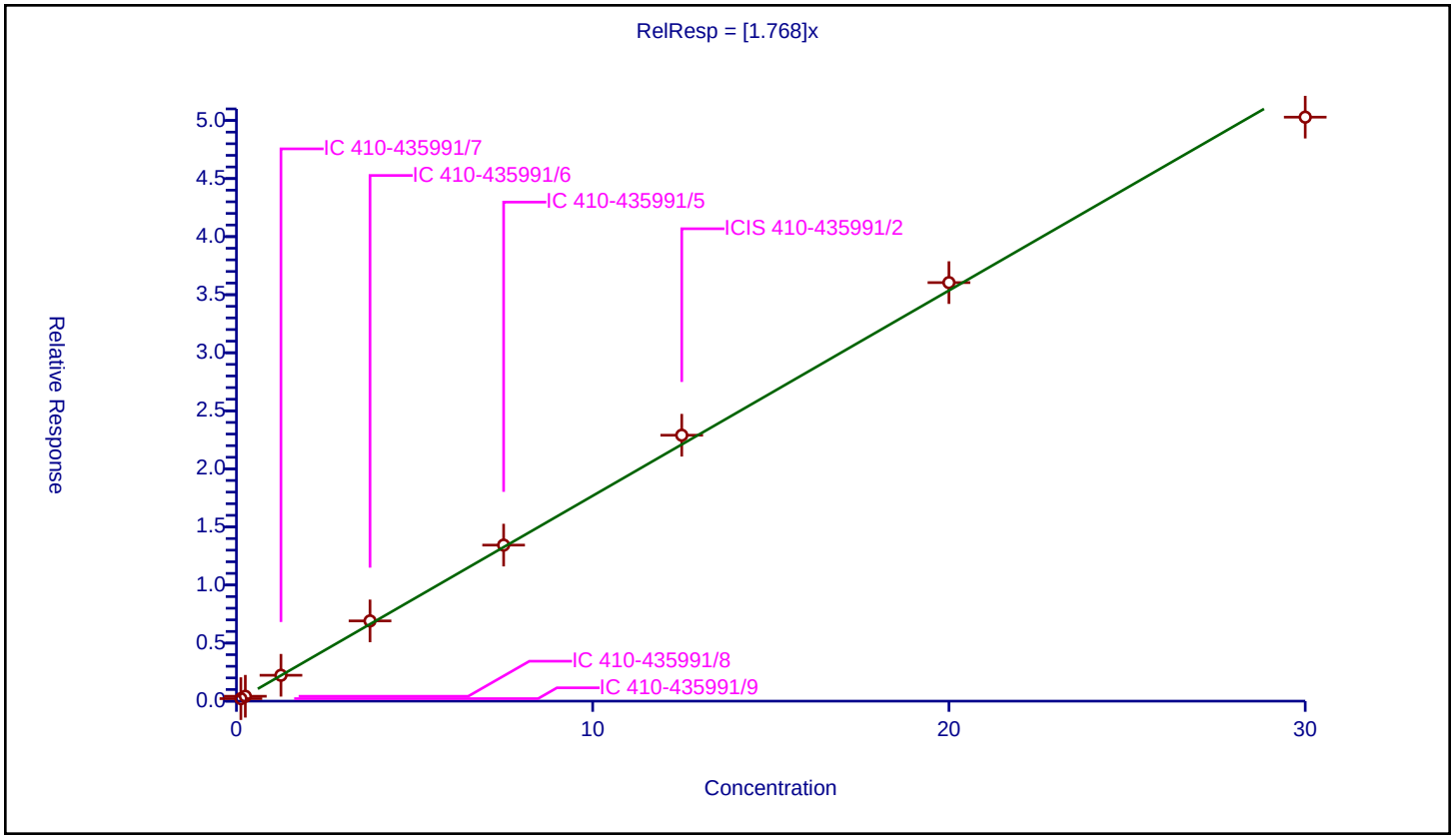
Curve Coefficients

Intercept:	0
Slope:	1.768

Error Coefficients

Standard Error:	1970000
Relative Standard Error:	3.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.216755	5.0	321331.0	1.734037	Y
2	IC 410-435991/8	0.25	0.421163	5.0	396402.0	1.684653	Y
3	IC 410-435991/7	1.25	2.227504	5.0	386850.0	1.782003	Y
4	IC 410-435991/6	3.75	6.909486	5.0	419338.0	1.84253	Y
5	IC 410-435991/5	7.5	13.436754	5.0	346209.0	1.791567	Y
6	ICIS 410-435991/2	12.5	22.898811	5.0	357876.0	1.831905	Y
7	IC 410-435991/4	20.0	36.041763	5.0	342261.0	1.802088	Y
8	IC 410-435991/3	30.0	50.288481	5.0	410513.0	1.676283	Y



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Calibration / 1-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

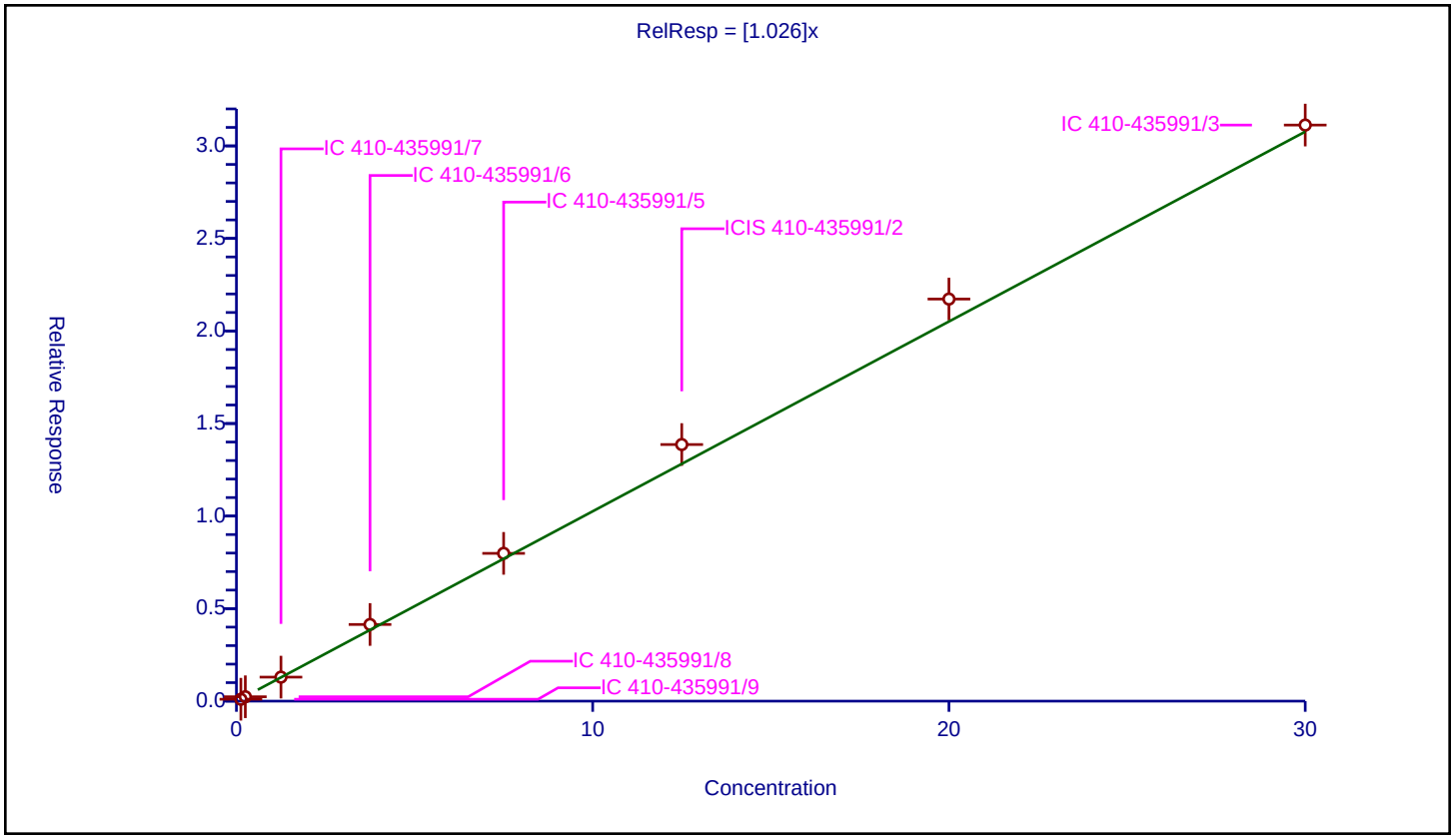
Curve Coefficients

Intercept:	0
Slope:	1.026

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	9.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.102449	5.0	321331.0	0.819591	Y
2	IC 410-435991/8	0.25	0.236427	5.0	396402.0	0.945707	Y
3	IC 410-435991/7	1.25	1.296846	5.0	386850.0	1.037477	Y
4	IC 410-435991/6	3.75	4.142374	5.0	419338.0	1.104633	Y
5	IC 410-435991/5	7.5	7.984122	5.0	346209.0	1.06455	Y
6	ICIS 410-435991/2	12.5	13.864593	5.0	357876.0	1.109167	Y
7	IC 410-435991/4	20.0	21.725438	5.0	342261.0	1.086272	Y
8	IC 410-435991/3	30.0	31.126846	5.0	410513.0	1.037562	Y



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Calibration / 2,3,4,6-Tetrachlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

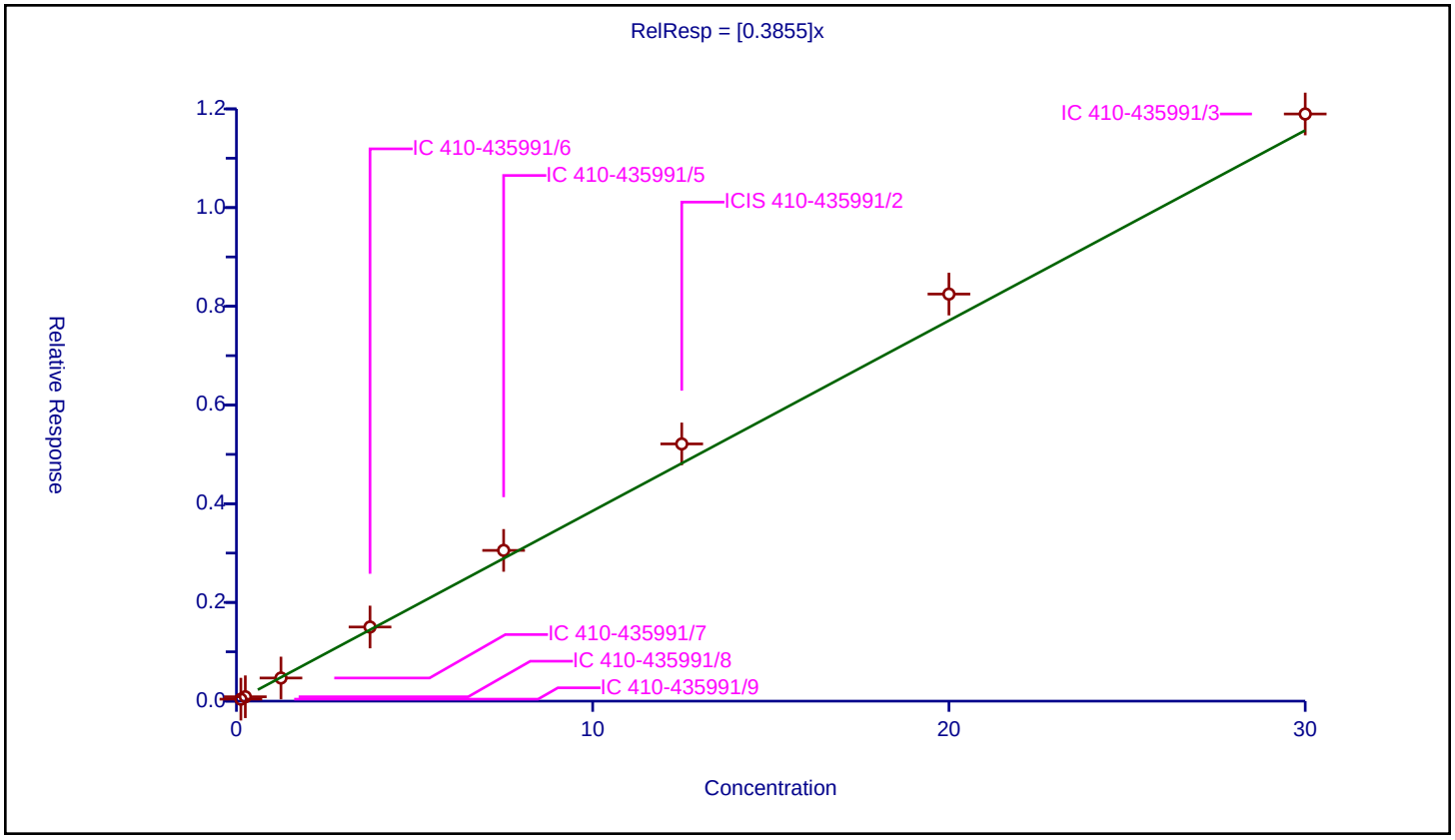
Curve Coefficients

Intercept:	0
Slope:	0.3855

Error Coefficients

Standard Error:	459000
Relative Standard Error:	8.7
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.040052	5.0	321331.0	0.320417	Y
2	IC 410-435991/8	0.25	0.088761	5.0	396402.0	0.355044	Y
3	IC 410-435991/7	1.25	0.468683	5.0	386850.0	0.374946	Y
4	IC 410-435991/6	3.75	1.501975	5.0	419338.0	0.400527	Y
5	IC 410-435991/5	7.5	3.054239	5.0	346209.0	0.407232	Y
6	ICIS 410-435991/2	12.5	5.211847	5.0	357876.0	0.416948	Y
7	IC 410-435991/4	20.0	8.247916	5.0	342261.0	0.412396	Y
8	IC 410-435991/3	30.0	11.89698	5.0	410513.0	0.396566	Y



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Calibration / 2-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

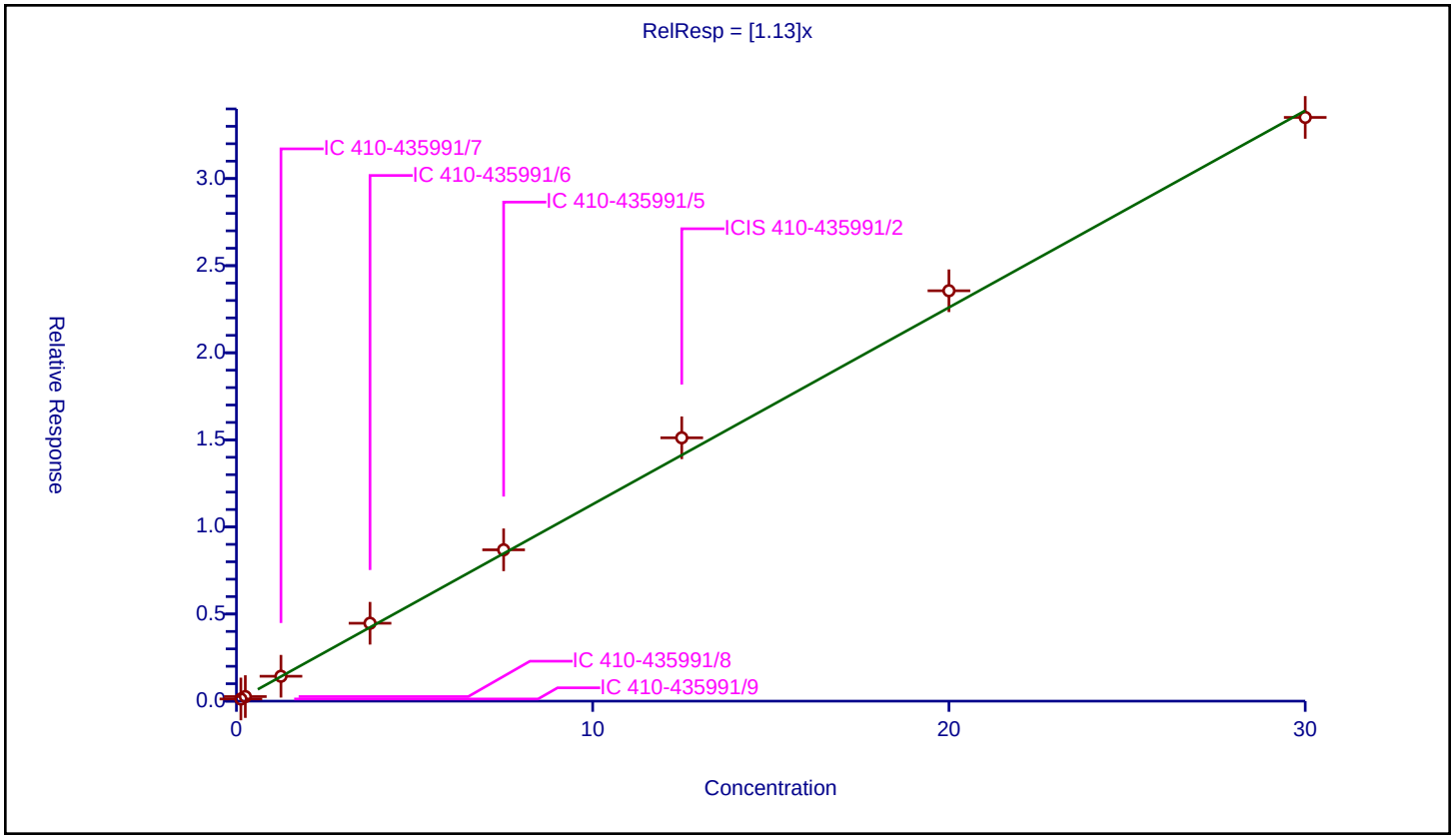
Curve Coefficients

Intercept:	0
Slope:	1.13

Error Coefficients

Standard Error:	1300000
Relative Standard Error:	6.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.124249	5.0	321331.0	0.993991	Y
2	IC 410-435991/8	0.25	0.262145	5.0	396402.0	1.048582	Y
3	IC 410-435991/7	1.25	1.428215	5.0	386850.0	1.142572	Y
4	IC 410-435991/6	3.75	4.471274	5.0	419338.0	1.19234	Y
5	IC 410-435991/5	7.5	8.687339	5.0	346209.0	1.158312	Y
6	ICIS 410-435991/2	12.5	15.118016	5.0	357876.0	1.209441	Y
7	IC 410-435991/4	20.0	23.560075	5.0	342261.0	1.178004	Y
8	IC 410-435991/3	30.0	33.510644	5.0	410513.0	1.117021	Y



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Calibration / Diethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

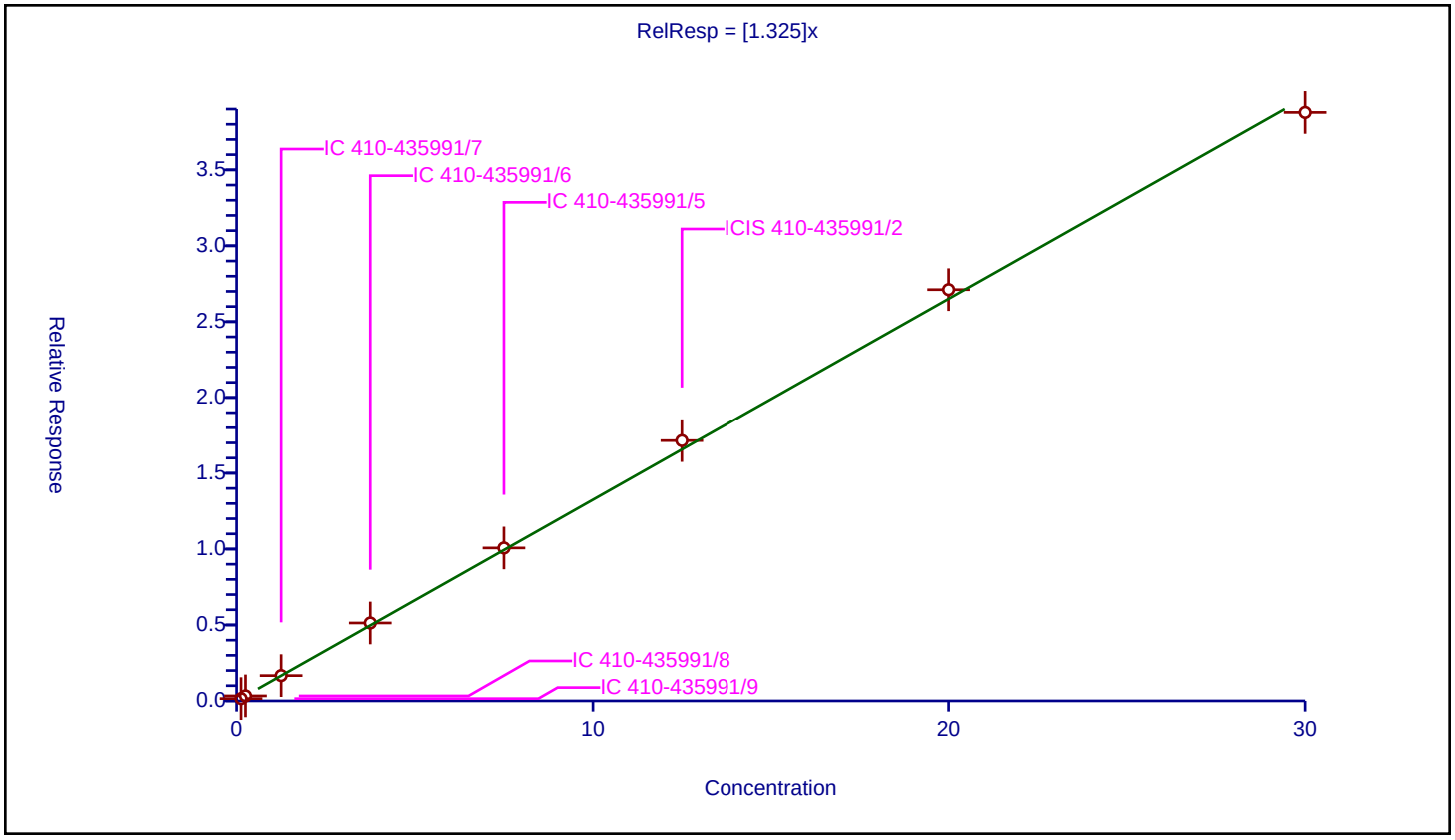
Curve Coefficients

Intercept:	0
Slope:	1.325

Error Coefficients

Standard Error:	1500000
Relative Standard Error:	3.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.151946	5.0	321331.0	1.215569	Y
2	IC 410-435991/8	0.25	0.330901	5.0	396402.0	1.323606	Y
3	IC 410-435991/7	1.25	1.664637	5.0	386850.0	1.33171	Y
4	IC 410-435991/6	3.75	5.131195	5.0	419338.0	1.368319	Y
5	IC 410-435991/5	7.5	10.071922	5.0	346209.0	1.342923	Y
6	ICIS 410-435991/2	12.5	17.151136	5.0	357876.0	1.372091	Y
7	IC 410-435991/4	20.0	27.111473	5.0	342261.0	1.355574	Y
8	IC 410-435991/3	30.0	38.778297	5.0	410513.0	1.29261	Y



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Calibration / Thionazin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

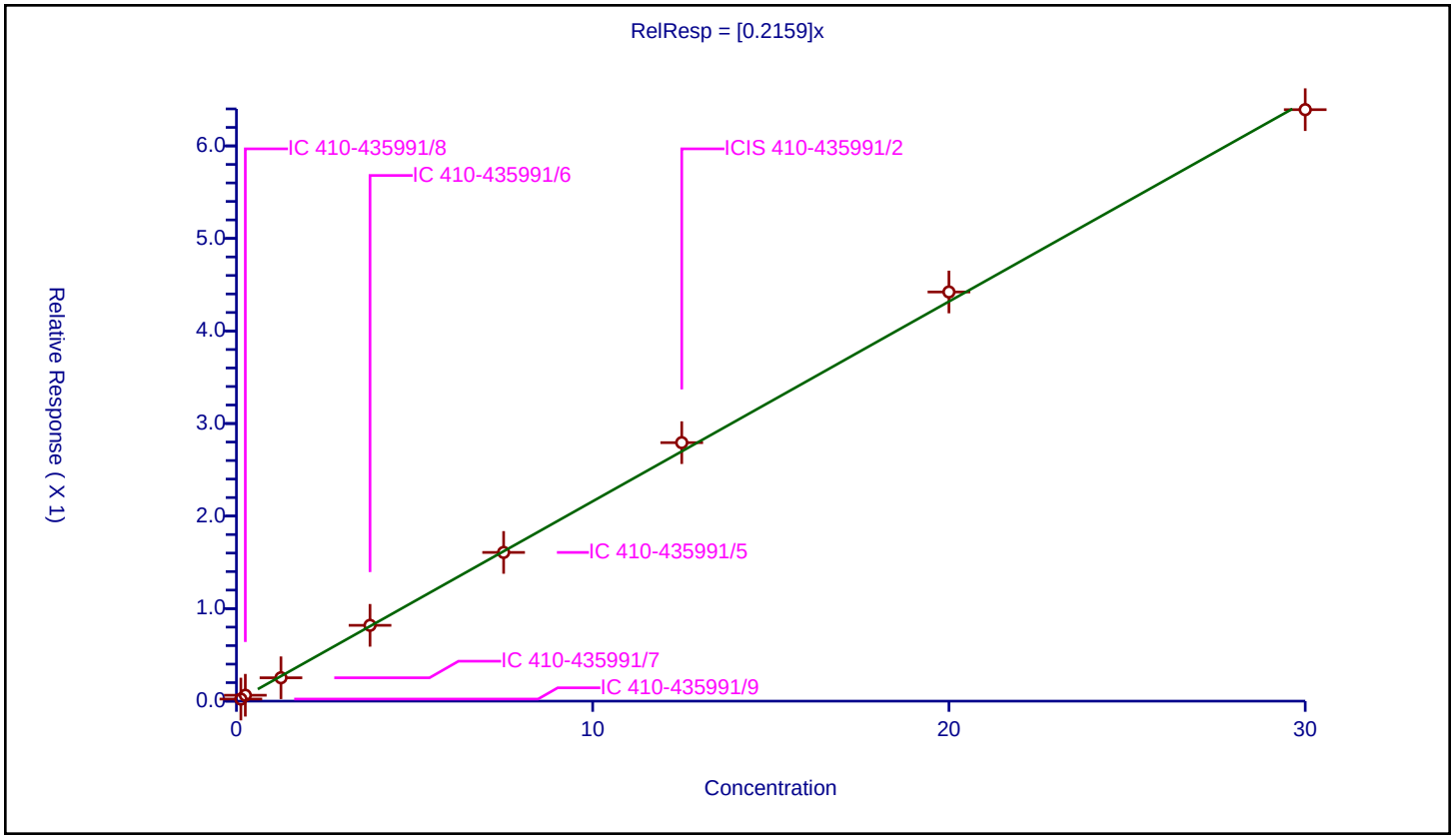
Curve Coefficients

Intercept:	0
Slope:	0.2159

Error Coefficients

Standard Error:	246000
Relative Standard Error:	9.8
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.022453	5.0	321331.0	0.179628	Y
2	IC 410-435991/8	0.25	0.063824	5.0	396402.0	0.255296	Y
3	IC 410-435991/7	1.25	0.252643	5.0	386850.0	0.202115	Y
4	IC 410-435991/6	3.75	0.819399	5.0	419338.0	0.218506	Y
5	IC 410-435991/5	7.5	1.607035	5.0	346209.0	0.214271	Y
6	ICIS 410-435991/2	12.5	2.79337	5.0	357876.0	0.22347	Y
7	IC 410-435991/4	20.0	4.42164	5.0	342261.0	0.221082	Y
8	IC 410-435991/3	30.0	6.391588	5.0	410513.0	0.213053	Y



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Calibration / Fluorene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

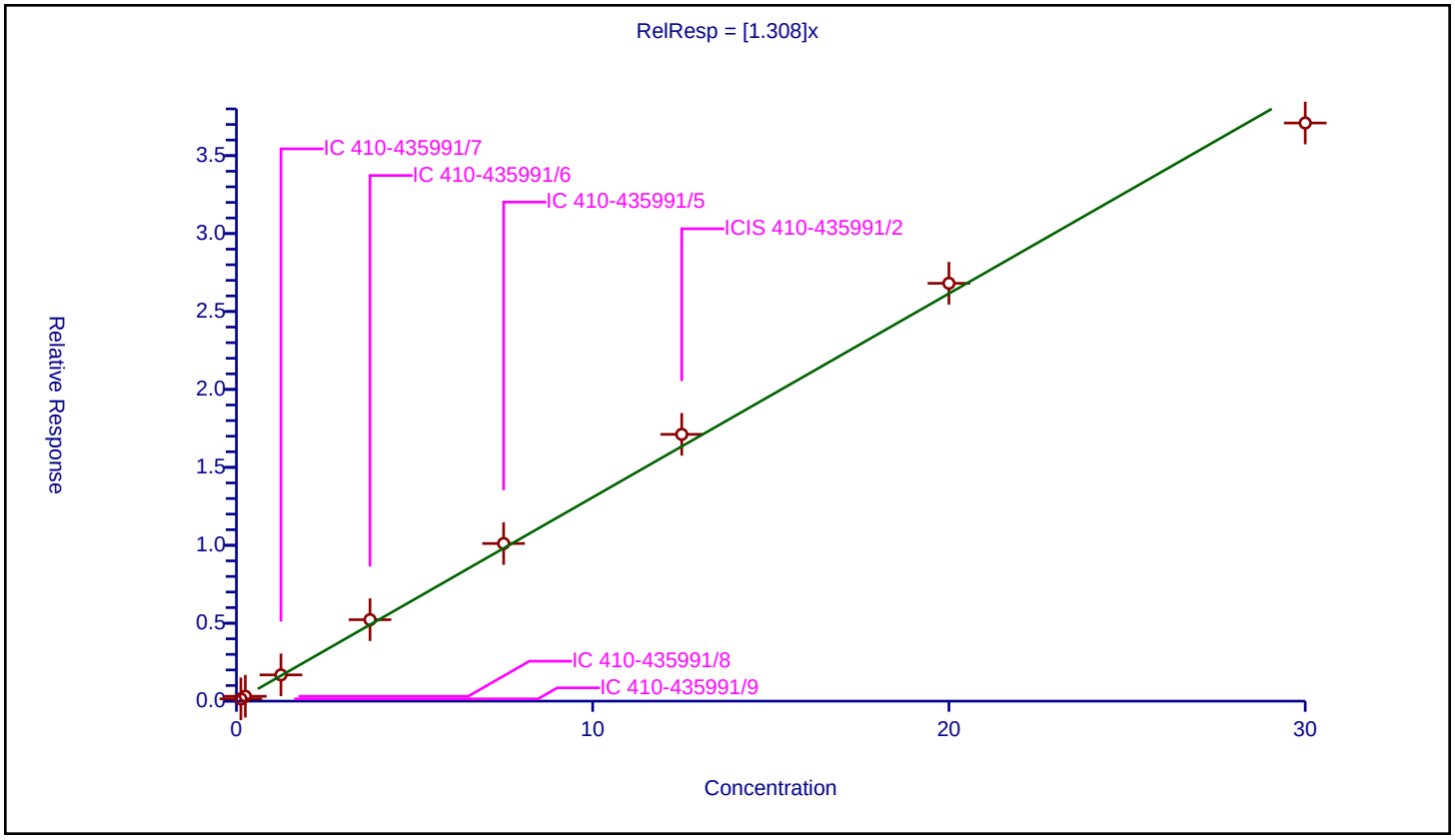
Curve Coefficients

Intercept:	0
Slope:	1.308

Error Coefficients

Standard Error:	1460000
Relative Standard Error:	5.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.146204	5.0	321331.0	1.169635	Y
2	IC 410-435991/8	0.25	0.314037	5.0	396402.0	1.256149	Y
3	IC 410-435991/7	1.25	1.683443	5.0	386850.0	1.346755	Y
4	IC 410-435991/6	3.75	5.225498	5.0	419338.0	1.393466	Y
5	IC 410-435991/5	7.5	10.114281	5.0	346209.0	1.348571	Y
6	ICIS 410-435991/2	12.5	17.117395	5.0	357876.0	1.369392	Y
7	IC 410-435991/4	20.0	26.81084	5.0	342261.0	1.340542	Y
8	IC 410-435991/3	30.0	37.094526	5.0	410513.0	1.236484	Y



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Calibration / 4-Chlorophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

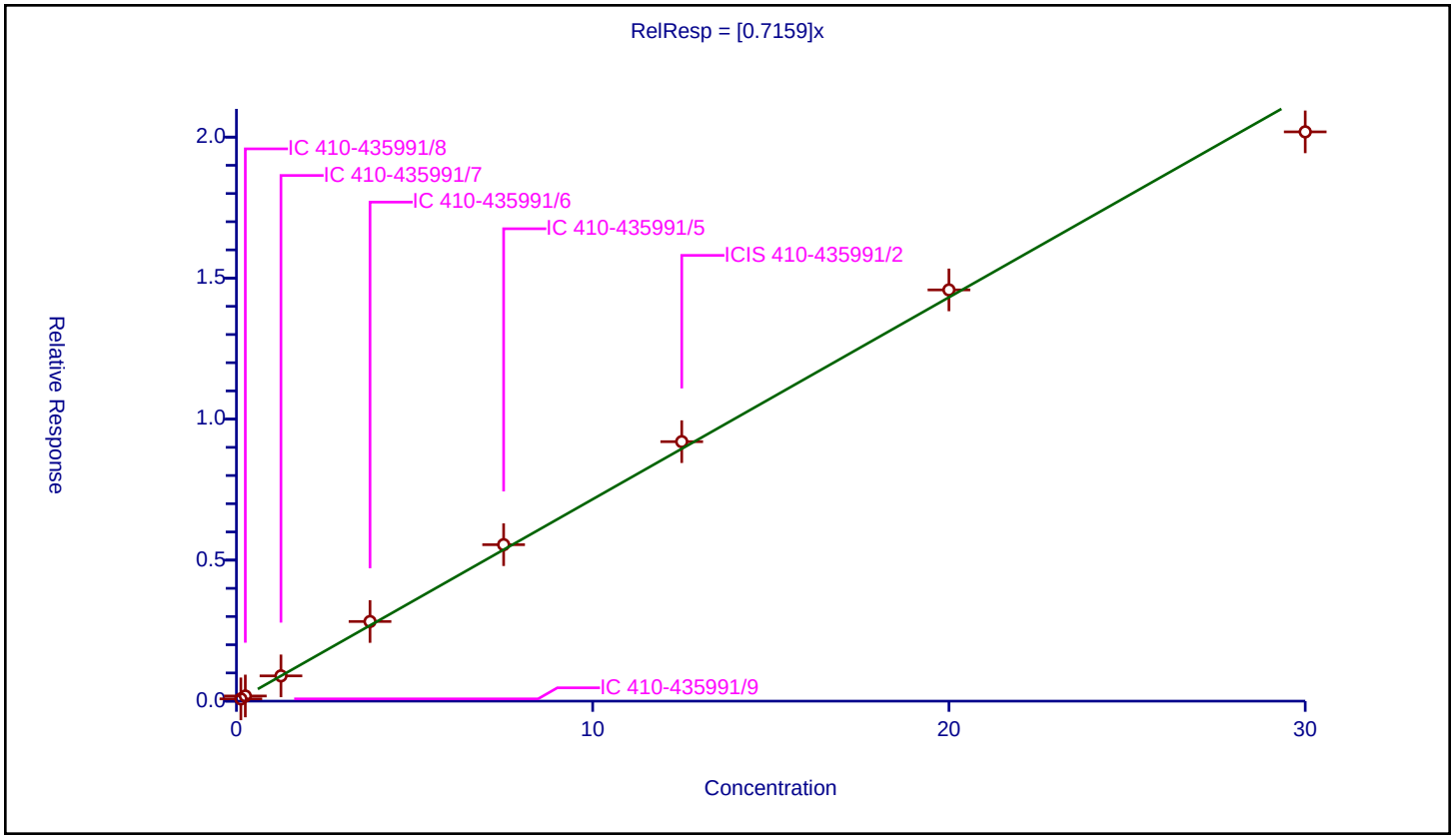
Curve Coefficients

Intercept:	0
Slope:	0.7159

Error Coefficients

Standard Error:	792000
Relative Standard Error:	5.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.081085	5.0	321331.0	0.648677	Y
2	IC 410-435991/8	0.25	0.182769	5.0	396402.0	0.731076	Y
3	IC 410-435991/7	1.25	0.896058	5.0	386850.0	0.716846	Y
4	IC 410-435991/6	3.75	2.823891	5.0	419338.0	0.753038	Y
5	IC 410-435991/5	7.5	5.548282	5.0	346209.0	0.739771	Y
6	ICIS 410-435991/2	12.5	9.201078	5.0	357876.0	0.736086	Y
7	IC 410-435991/4	20.0	14.582249	5.0	342261.0	0.729112	Y
8	IC 410-435991/3	30.0	20.185841	5.0	410513.0	0.672861	Y



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Calibration / N-Nitro-o-toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

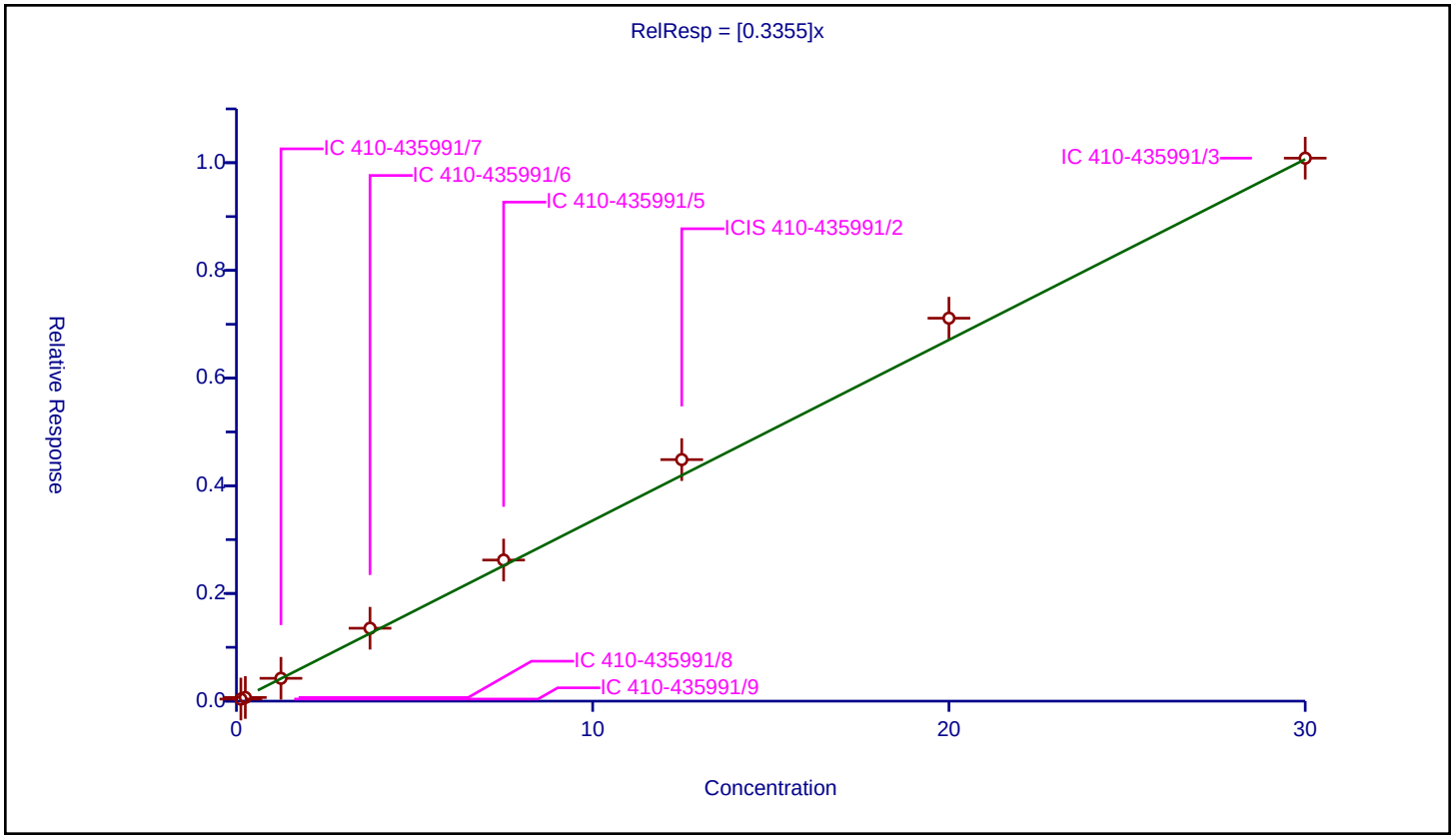
Curve Coefficients

Intercept:	0
Slope:	0.3355

Error Coefficients

Standard Error:	391000
Relative Standard Error:	9.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.038838	5.0	321331.0	0.310708	Y
2	IC 410-435991/8	0.25	0.068163	5.0	396402.0	0.272653	Y
3	IC 410-435991/7	1.25	0.424053	5.0	386850.0	0.339243	Y
4	IC 410-435991/6	3.75	1.354146	5.0	419338.0	0.361106	Y
5	IC 410-435991/5	7.5	2.620816	5.0	346209.0	0.349442	Y
6	ICIS 410-435991/2	12.5	4.486135	5.0	357876.0	0.358891	Y
7	IC 410-435991/4	20.0	7.112554	5.0	342261.0	0.355628	Y
8	IC 410-435991/3	30.0	10.085454	5.0	410513.0	0.336182	Y



Calibration / 4-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

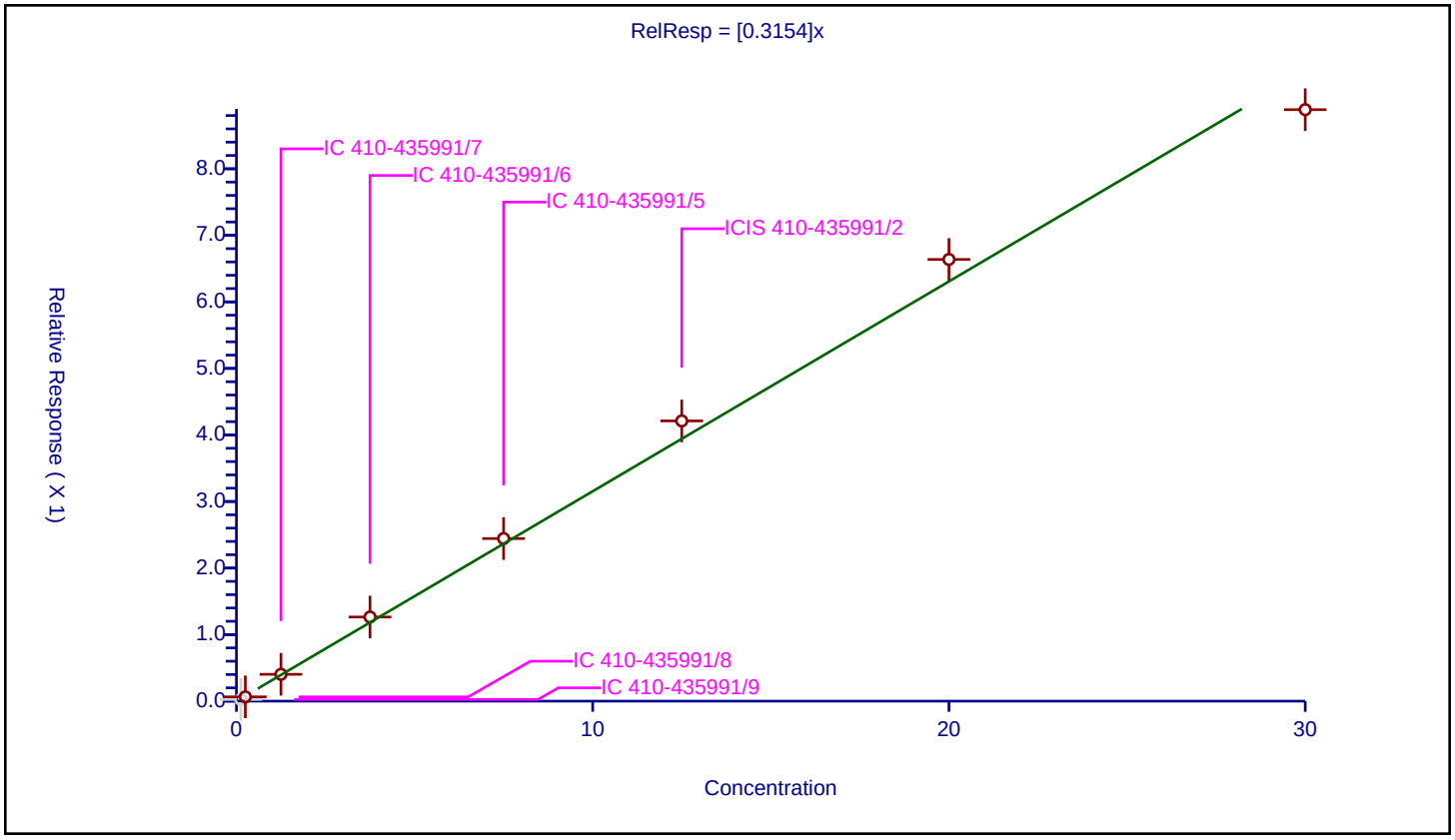
Curve Coefficients

Intercept:	0
Slope:	0.3154

Error Coefficients

Standard Error:	381000
Relative Standard Error:	9.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.025301	5.0	321331.0	0.202408	N
2	IC 410-435991/8	0.25	0.064253	5.0	396402.0	0.257012	Y
3	IC 410-435991/7	1.25	0.40318	5.0	386850.0	0.322544	Y
4	IC 410-435991/6	3.75	1.264338	5.0	419338.0	0.337157	Y
5	IC 410-435991/5	7.5	2.443365	5.0	346209.0	0.325782	Y
6	ICIS 410-435991/2	12.5	4.211095	5.0	357876.0	0.336888	Y
7	IC 410-435991/4	20.0	6.637508	5.0	342261.0	0.331875	Y
8	IC 410-435991/3	30.0	8.888415	5.0	410513.0	0.296281	Y



Calibration / 4,6-Dinitro-2-methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

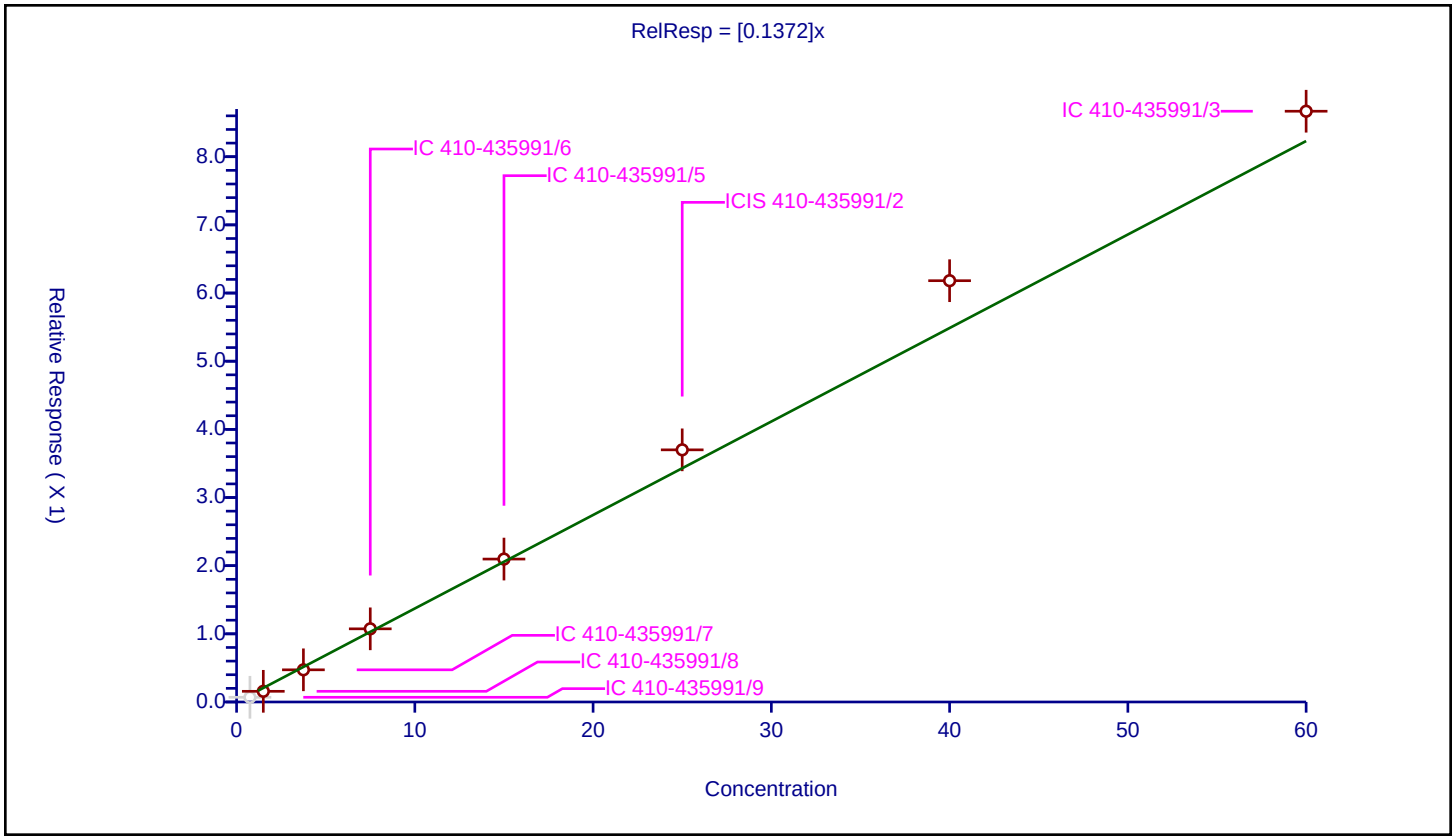
Curve Coefficients

Intercept:	0
Slope:	0.1372

Error Coefficients

Standard Error:	700000
Relative Standard Error:	12.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.75	0.069044	5.0	630248.0	0.092059	N
2	IC 410-435991/8	1.5	0.156667	5.0	792064.0	0.104444	Y
3	IC 410-435991/7	3.75	0.472031	5.0	739644.0	0.125875	Y
4	IC 410-435991/6	7.5	1.073491	5.0	816649.0	0.143132	Y
5	IC 410-435991/5	15.0	2.096724	5.0	677111.0	0.139782	Y
6	ICIS 410-435991/2	25.0	3.699586	5.0	704641.0	0.147983	Y
7	IC 410-435991/4	40.0	6.180998	5.0	661246.0	0.154525	Y
8	IC 410-435991/3	60.0	8.667423	5.0	791590.0	0.144457	Y



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Calibration / N-Nitrosodiphenylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

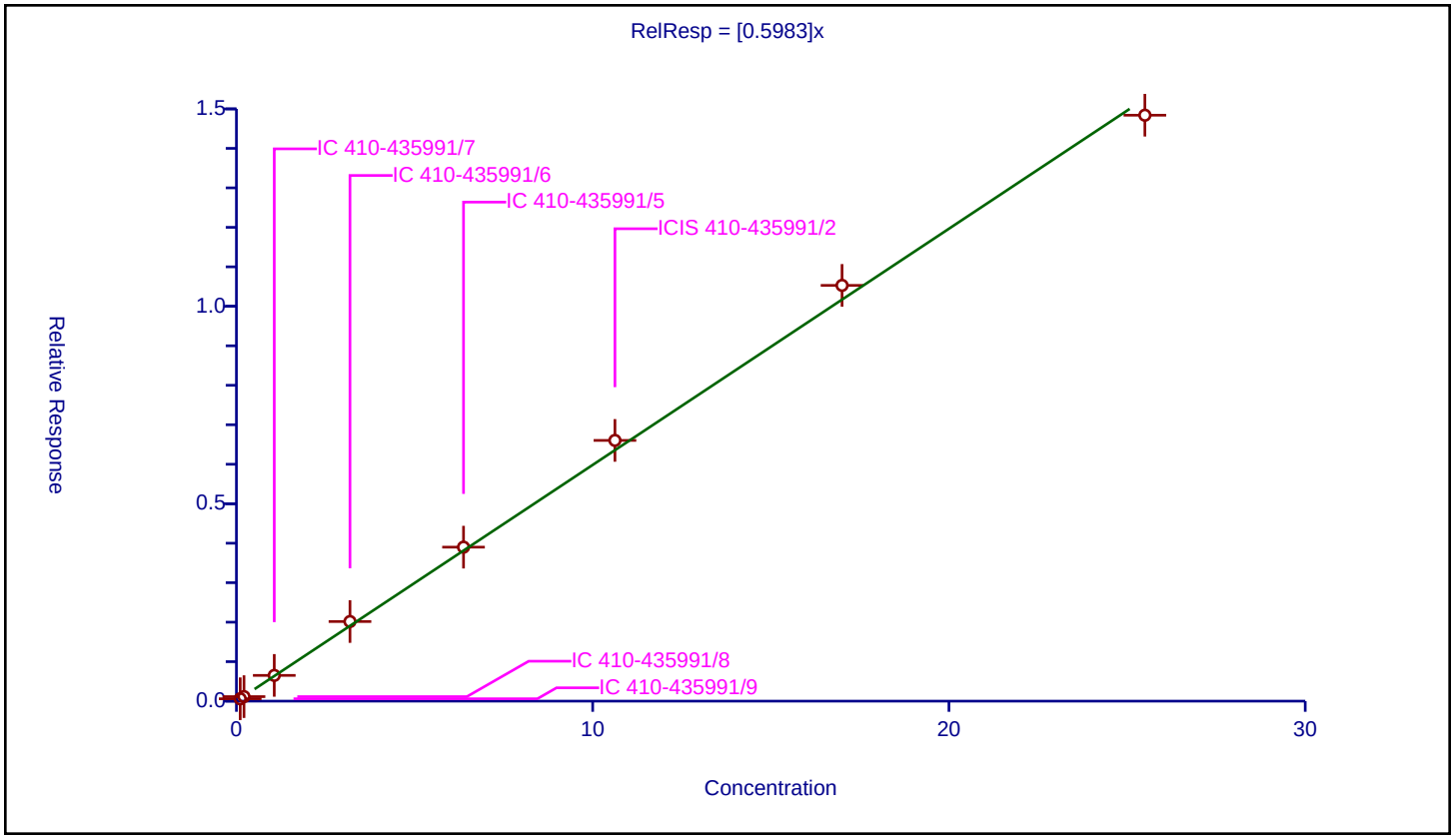
Curve Coefficients

Intercept:	0
Slope:	0.5983

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	5.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.10625	0.060175	5.0	630248.0	0.56635	Y
2	IC 410-435991/8	0.2125	0.114549	5.0	792064.0	0.539053	Y
3	IC 410-435991/7	1.0625	0.651631	5.0	739644.0	0.6133	Y
4	IC 410-435991/6	3.1875	2.016576	5.0	816649.0	0.632651	Y
5	IC 410-435991/5	6.375	3.900232	5.0	677111.0	0.611801	Y
6	ICIS 410-435991/2	10.625	6.60381	5.0	704641.0	0.621535	Y
7	IC 410-435991/4	17.0	10.529515	5.0	661246.0	0.619383	Y
8	IC 410-435991/3	25.5	14.840239	5.0	791590.0	0.58197	Y



Calibration / 1,2-Diphenylhydrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

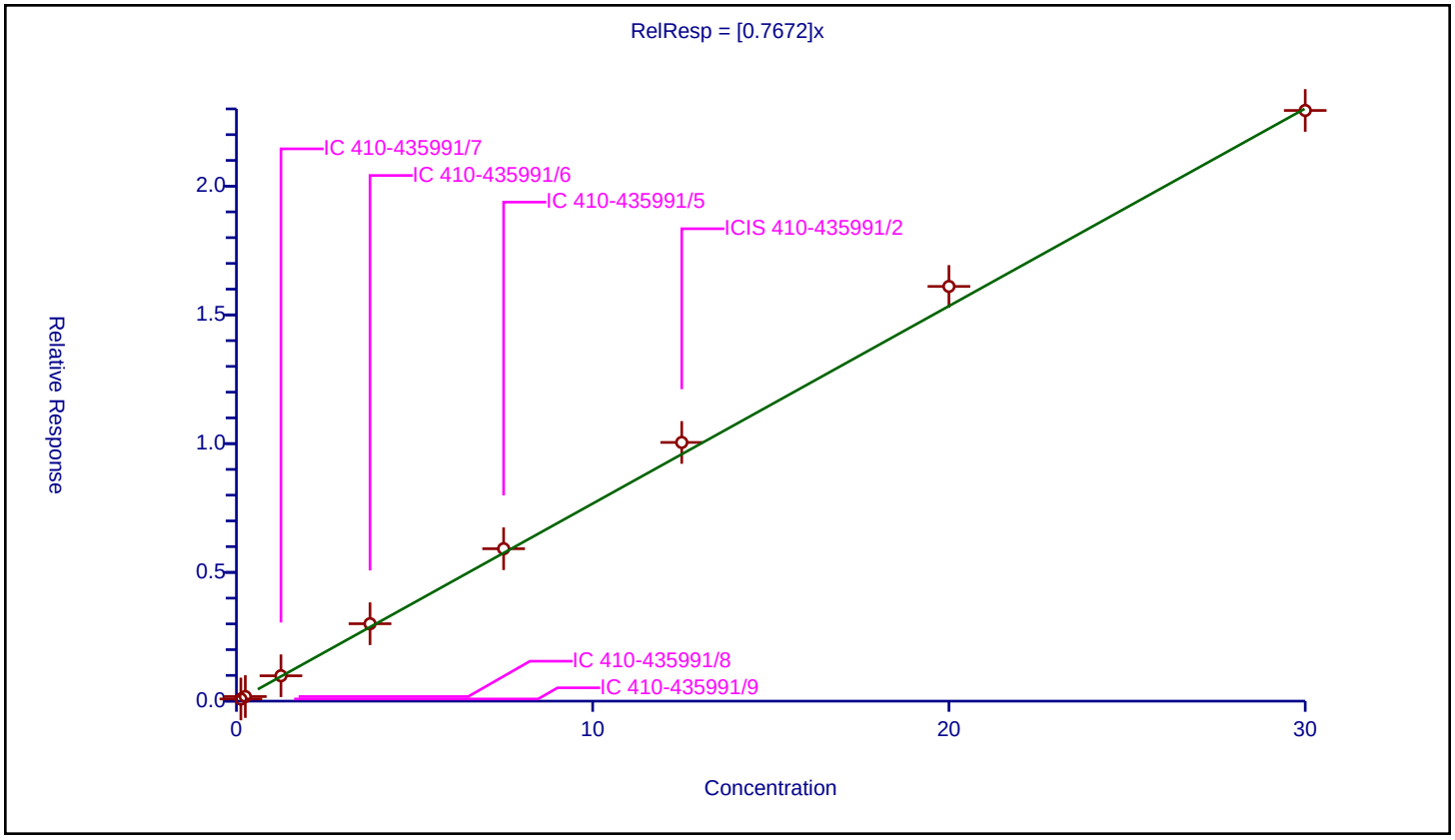
Curve Coefficients

Intercept:	0
Slope:	0.7672

Error Coefficients

Standard Error:	1720000
Relative Standard Error:	6.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.084102	5.0	630248.0	0.672815	Y
2	IC 410-435991/8	0.25	0.178003	5.0	792064.0	0.712013	Y
3	IC 410-435991/7	1.25	0.985075	5.0	739644.0	0.78806	Y
4	IC 410-435991/6	3.75	3.005992	5.0	816649.0	0.801598	Y
5	IC 410-435991/5	7.5	5.918734	5.0	677111.0	0.789165	Y
6	ICIS 410-435991/2	12.5	10.046513	5.0	704641.0	0.803721	Y
7	IC 410-435991/4	20.0	16.105307	5.0	661246.0	0.805265	Y
8	IC 410-435991/3	30.0	22.938636	5.0	791590.0	0.764621	Y



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Calibration / 2,4,6-Tribromophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

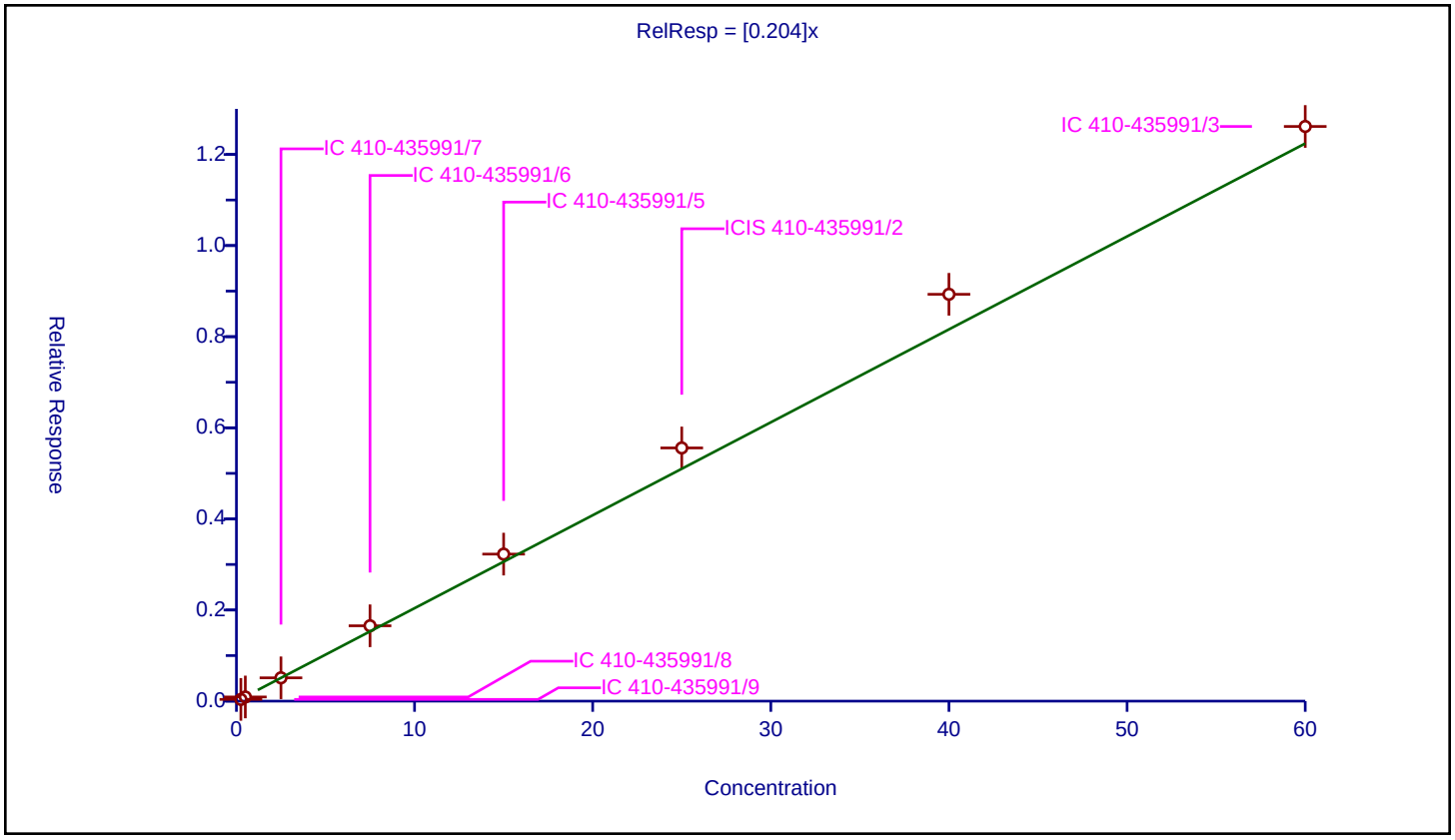
Curve Coefficients

Intercept:	0
Slope:	0.204

Error Coefficients

Standard Error:	489000
Relative Standard Error:	12.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.25	0.038123	5.0	321331.0	0.152491	Y
2	IC 410-435991/8	0.5	0.091624	5.0	396402.0	0.183248	Y
3	IC 410-435991/7	2.5	0.51202	5.0	386850.0	0.204808	Y
4	IC 410-435991/6	7.5	1.653976	5.0	419338.0	0.22053	Y
5	IC 410-435991/5	15.0	3.227588	5.0	346209.0	0.215173	Y
6	ICIS 410-435991/2	25.0	5.557484	5.0	357876.0	0.222299	Y
7	IC 410-435991/4	40.0	8.930626	5.0	342261.0	0.223266	Y
8	IC 410-435991/3	60.0	12.613912	5.0	410513.0	0.210232	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

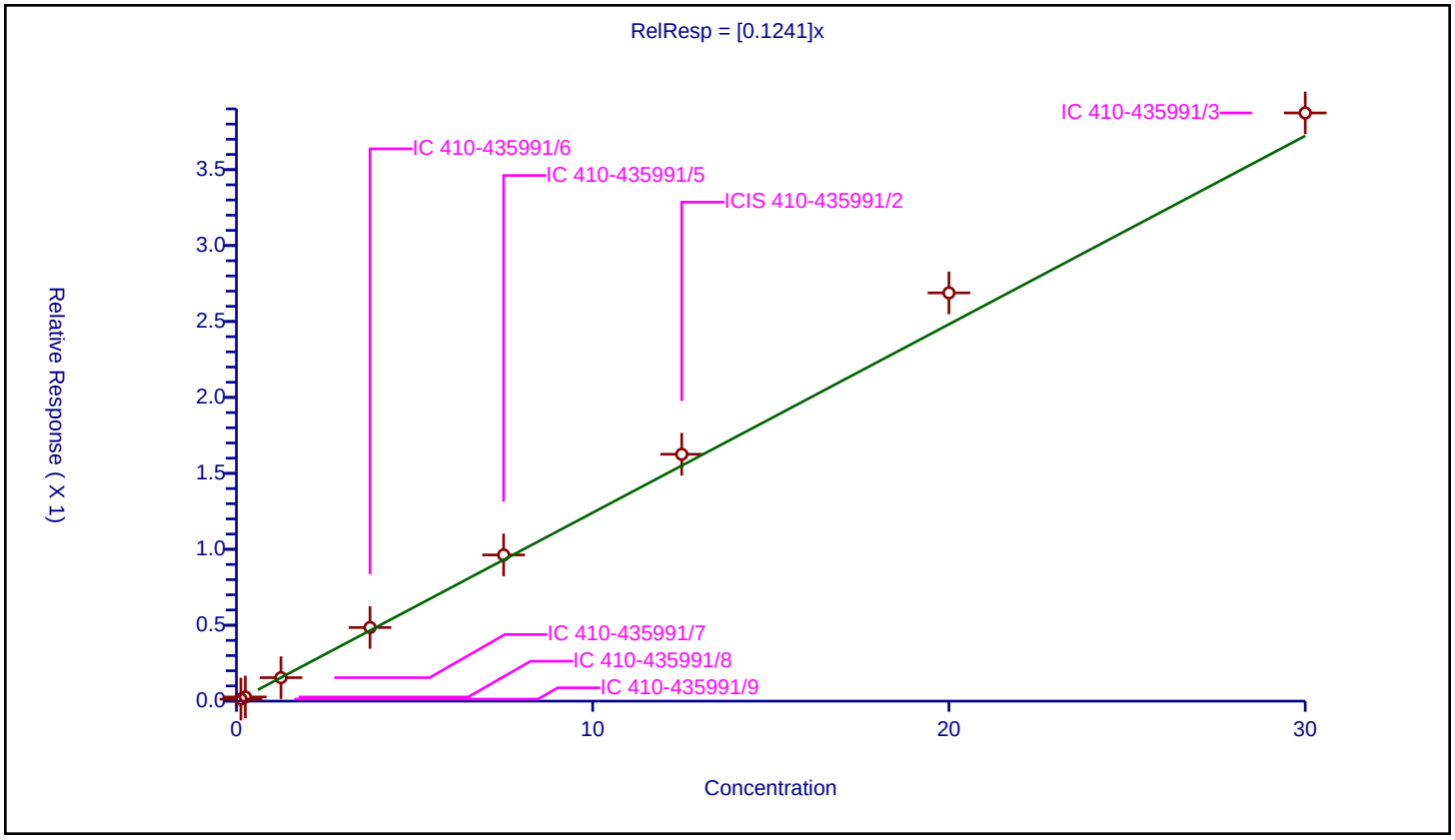
Curve Coefficients

Intercept:	0
Slope:	0.1241

Error Coefficients

Standard Error:	288000
Relative Standard Error:	7.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.013487	5.0	630248.0	0.107894	Y
2	IC 410-435991/8	0.25	0.02746	5.0	792064.0	0.10984	Y
3	IC 410-435991/7	1.25	0.154541	5.0	739644.0	0.123632	Y
4	IC 410-435991/6	3.75	0.484878	5.0	816649.0	0.129301	Y
5	IC 410-435991/5	7.5	0.962737	5.0	677111.0	0.128365	Y
6	ICIS 410-435991/2	12.5	1.625828	5.0	704641.0	0.130066	Y
7	IC 410-435991/4	20.0	2.688493	5.0	661246.0	0.134425	Y
8	IC 410-435991/3	30.0	3.873356	5.0	791590.0	0.129112	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

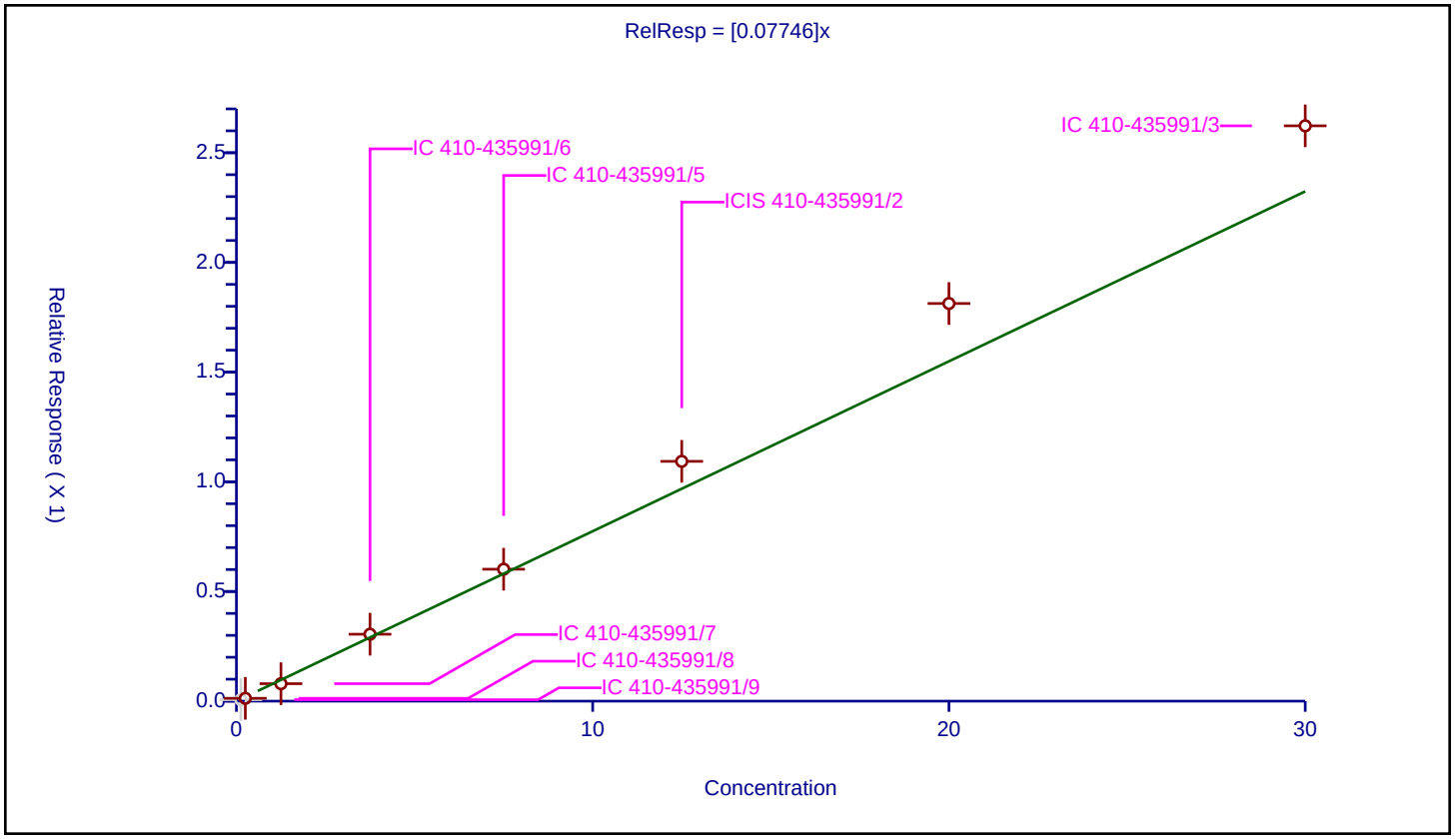
Curve Coefficients

Intercept:	0
Slope:	0.07746

Error Coefficients

Standard Error:	209000
Relative Standard Error:	18.7
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.967

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.006466	5.0	630248.0	0.051726	N
2	IC 410-435991/8	0.25	0.012871	5.0	792064.0	0.051486	Y
3	IC 410-435991/7	1.25	0.079579	5.0	739644.0	0.063663	Y
4	IC 410-435991/6	3.75	0.305058	5.0	816649.0	0.081349	Y
5	IC 410-435991/5	7.5	0.60146	5.0	677111.0	0.080195	Y
6	ICIS 410-435991/2	12.5	1.093259	5.0	704641.0	0.087461	Y
7	IC 410-435991/4	20.0	1.81279	5.0	661246.0	0.090639	Y
8	IC 410-435991/3	30.0	2.622791	5.0	791590.0	0.087426	Y



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Calibration / cis-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

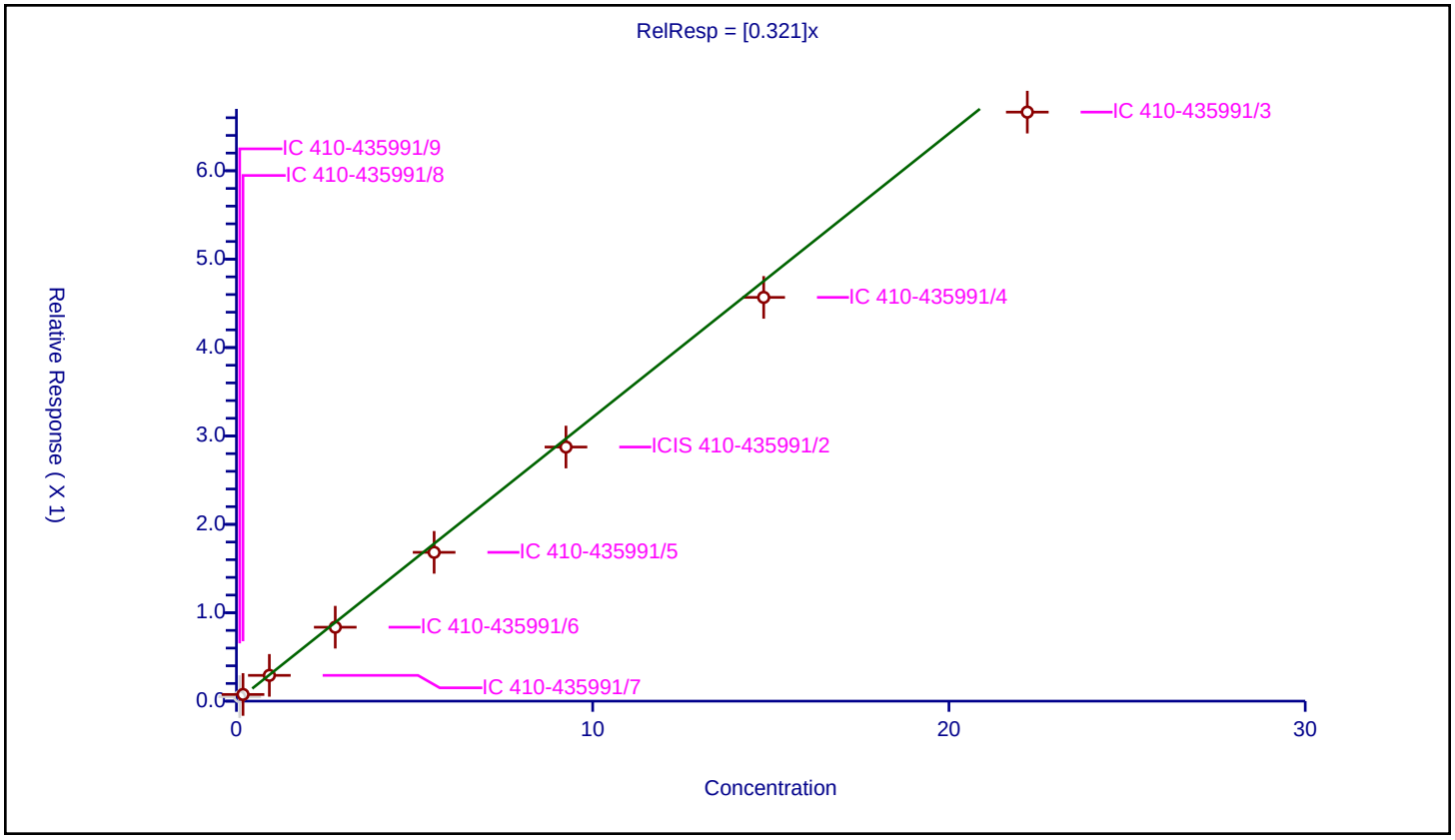
Curve Coefficients

Intercept:	0
Slope:	0.321

Error Coefficients

Standard Error:	535000
Relative Standard Error:	12.1
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.0925	0.05075	5.0	630248.0	0.548647	N
2	IC 410-435991/8	0.185	0.075512	5.0	792064.0	0.408171	Y
3	IC 410-435991/7	0.925	0.291377	5.0	739644.0	0.315002	Y
4	IC 410-435991/6	2.775	0.836179	5.0	816649.0	0.301326	Y
5	IC 410-435991/5	5.55	1.683144	5.0	677111.0	0.303269	Y
6	ICIS 410-435991/2	9.25	2.874662	5.0	704641.0	0.310774	Y
7	IC 410-435991/4	14.8	4.567657	5.0	661246.0	0.308625	Y
8	IC 410-435991/3	22.2	6.663645	5.0	791590.0	0.300164	Y



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Calibration / Phorate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

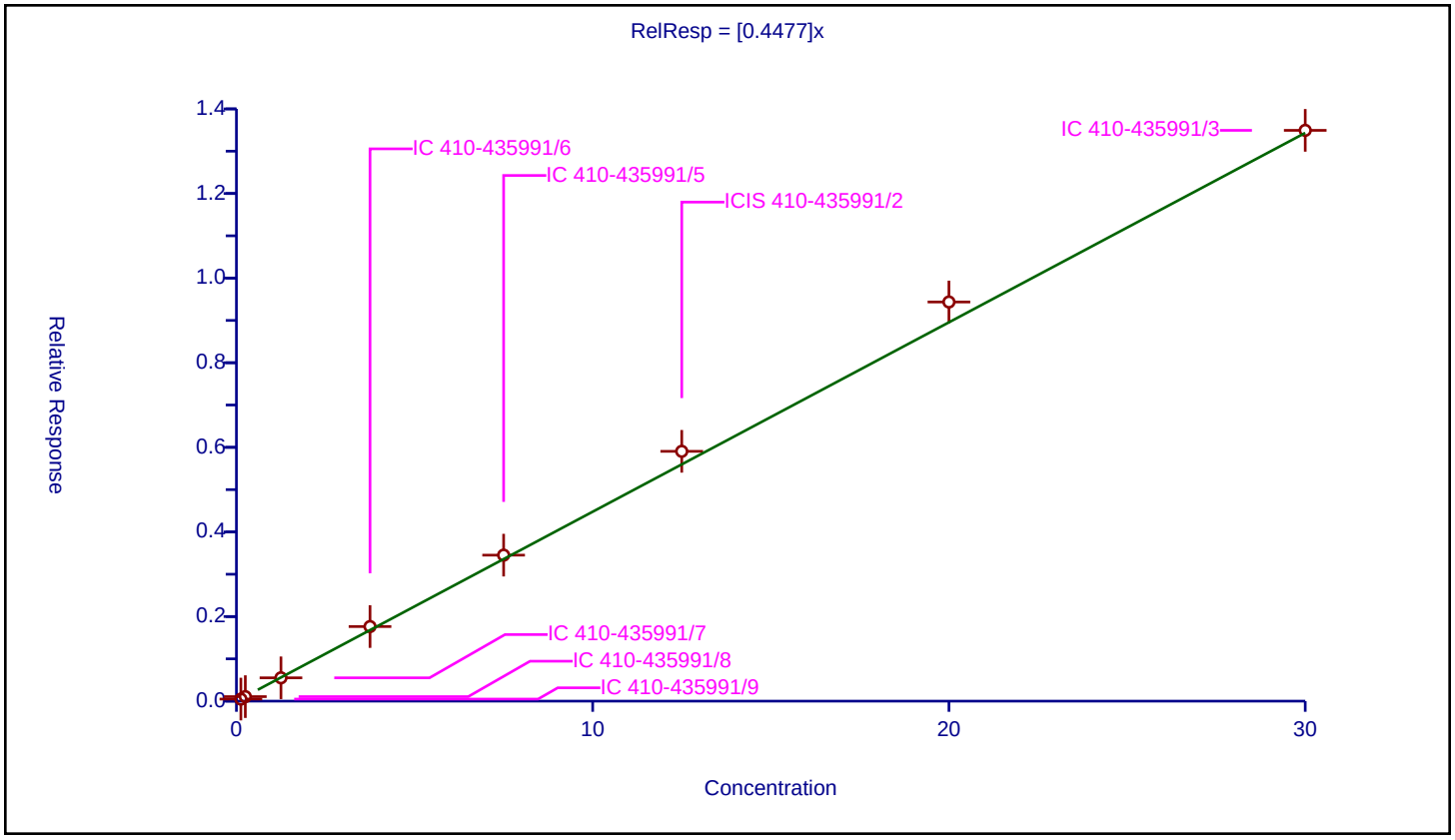
Curve Coefficients

Intercept:	0
Slope:	0.4477

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	6.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.048838	5.0	630248.0	0.390703	Y
2	IC 410-435991/8	0.25	0.10645	5.0	792064.0	0.425799	Y
3	IC 410-435991/7	1.25	0.551333	5.0	739644.0	0.441066	Y
4	IC 410-435991/6	3.75	1.763181	5.0	816649.0	0.470182	Y
5	IC 410-435991/5	7.5	3.451317	5.0	677111.0	0.460176	Y
6	ICIS 410-435991/2	12.5	5.905518	5.0	704641.0	0.472441	Y
7	IC 410-435991/4	20.0	9.43521	5.0	661246.0	0.471761	Y
8	IC 410-435991/3	30.0	13.492401	5.0	791590.0	0.449747	Y



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Calibration / Phenacetin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

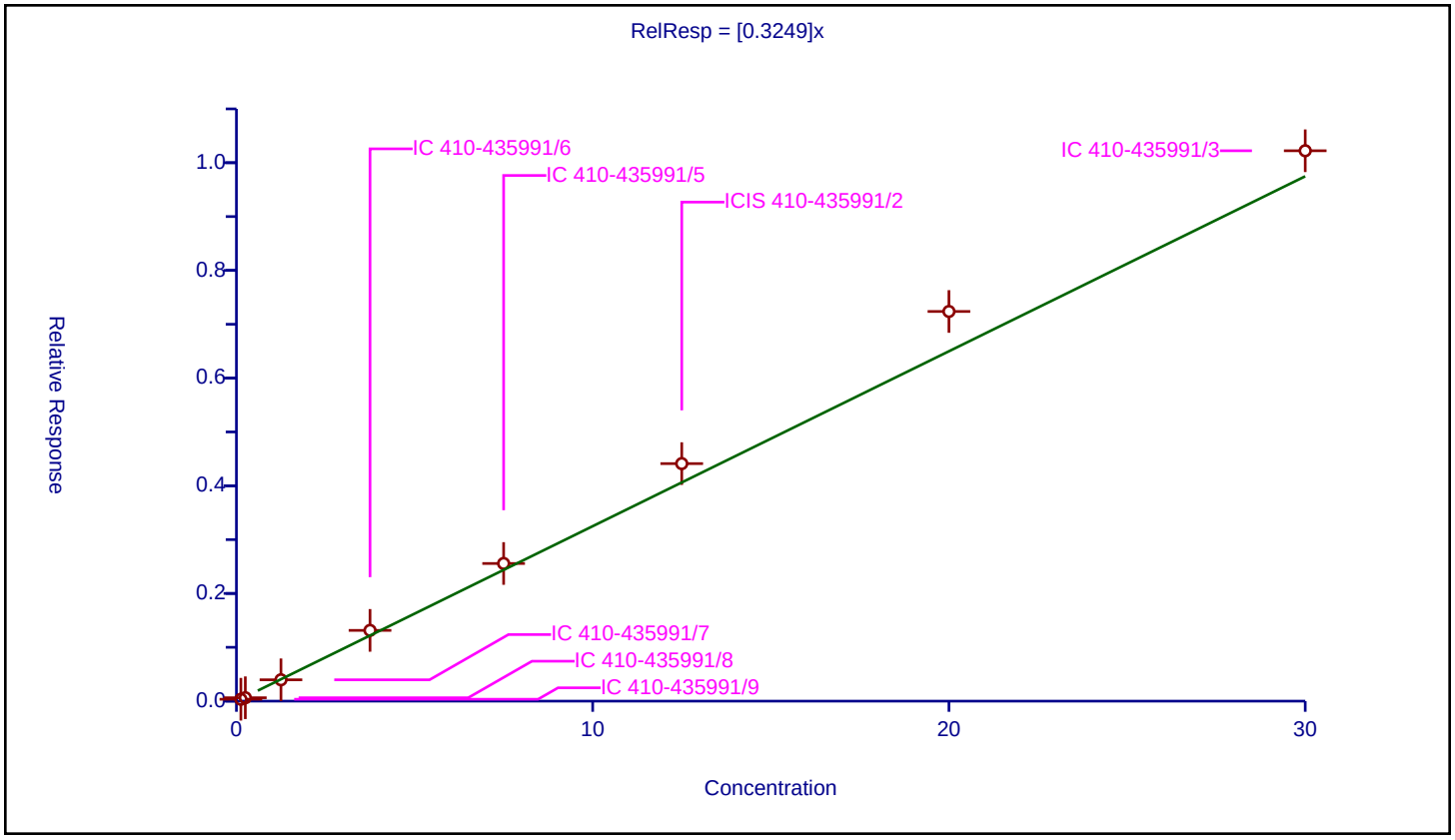
Curve Coefficients

Intercept:	0
Slope:	0.3249

Error Coefficients

Standard Error:	765000
Relative Standard Error:	11.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.035272	5.0	630248.0	0.282175	Y
2	IC 410-435991/8	0.25	0.06324	5.0	792064.0	0.252959	Y
3	IC 410-435991/7	1.25	0.396711	5.0	739644.0	0.317369	Y
4	IC 410-435991/6	3.75	1.314133	5.0	816649.0	0.350435	Y
5	IC 410-435991/5	7.5	2.556885	5.0	677111.0	0.340918	Y
6	ICIS 410-435991/2	12.5	4.411722	5.0	704641.0	0.352938	Y
7	IC 410-435991/4	20.0	7.237465	5.0	661246.0	0.361873	Y
8	IC 410-435991/3	30.0	10.222148	5.0	791590.0	0.340738	Y



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Calibration / 4-Bromophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

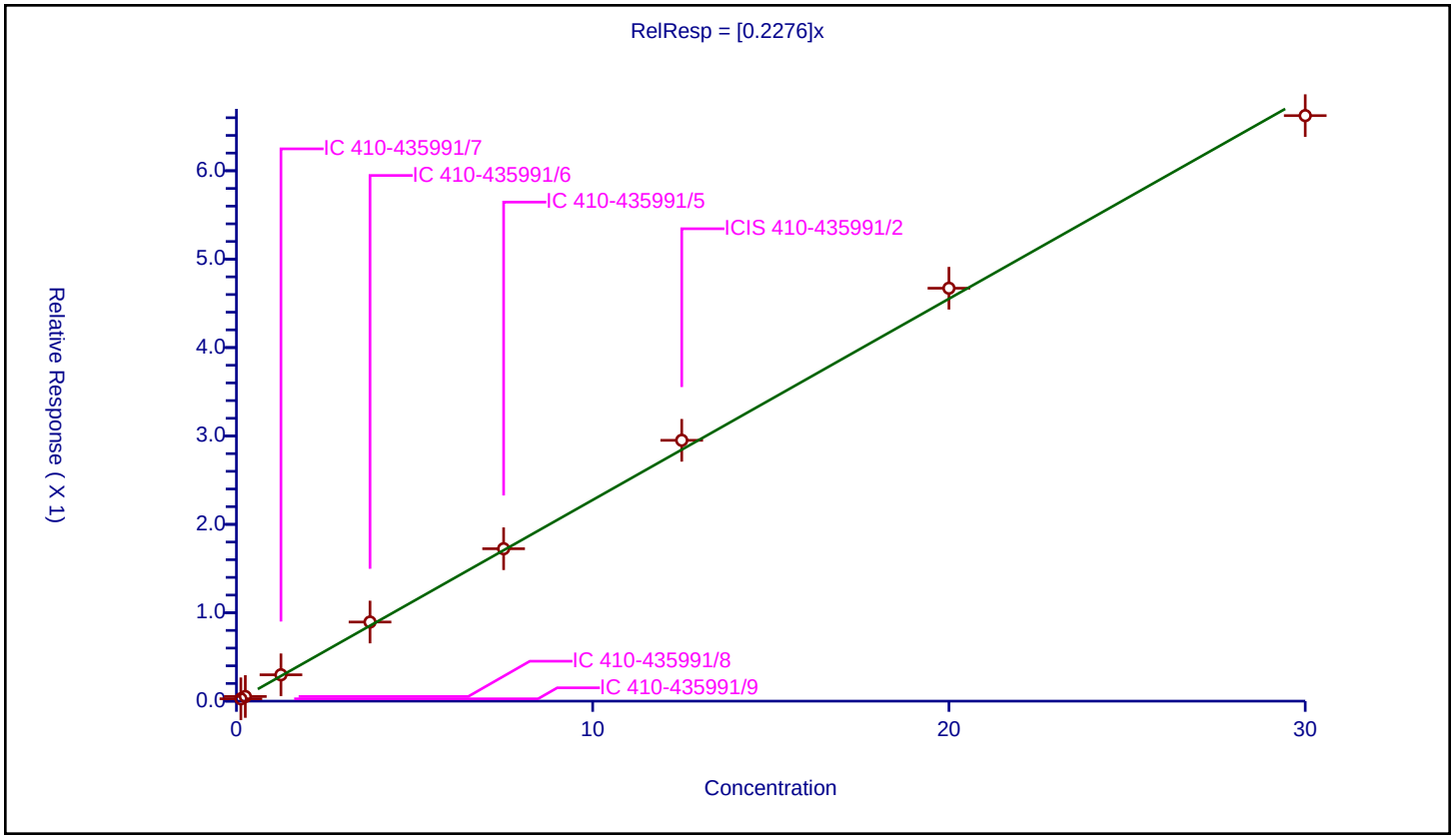
Curve Coefficients

Intercept:	0
Slope:	0.2276

Error Coefficients

Standard Error:	497000
Relative Standard Error:	5.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.026593	5.0	630248.0	0.212742	Y
2	IC 410-435991/8	0.25	0.052616	5.0	792064.0	0.210463	Y
3	IC 410-435991/7	1.25	0.298218	5.0	739644.0	0.238574	Y
4	IC 410-435991/6	3.75	0.894962	5.0	816649.0	0.238657	Y
5	IC 410-435991/5	7.5	1.724126	5.0	677111.0	0.229884	Y
6	ICIS 410-435991/2	12.5	2.950921	5.0	704641.0	0.236074	Y
7	IC 410-435991/4	20.0	4.671416	5.0	661246.0	0.233571	Y
8	IC 410-435991/3	30.0	6.623751	5.0	791590.0	0.220792	Y



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Calibration / trans-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

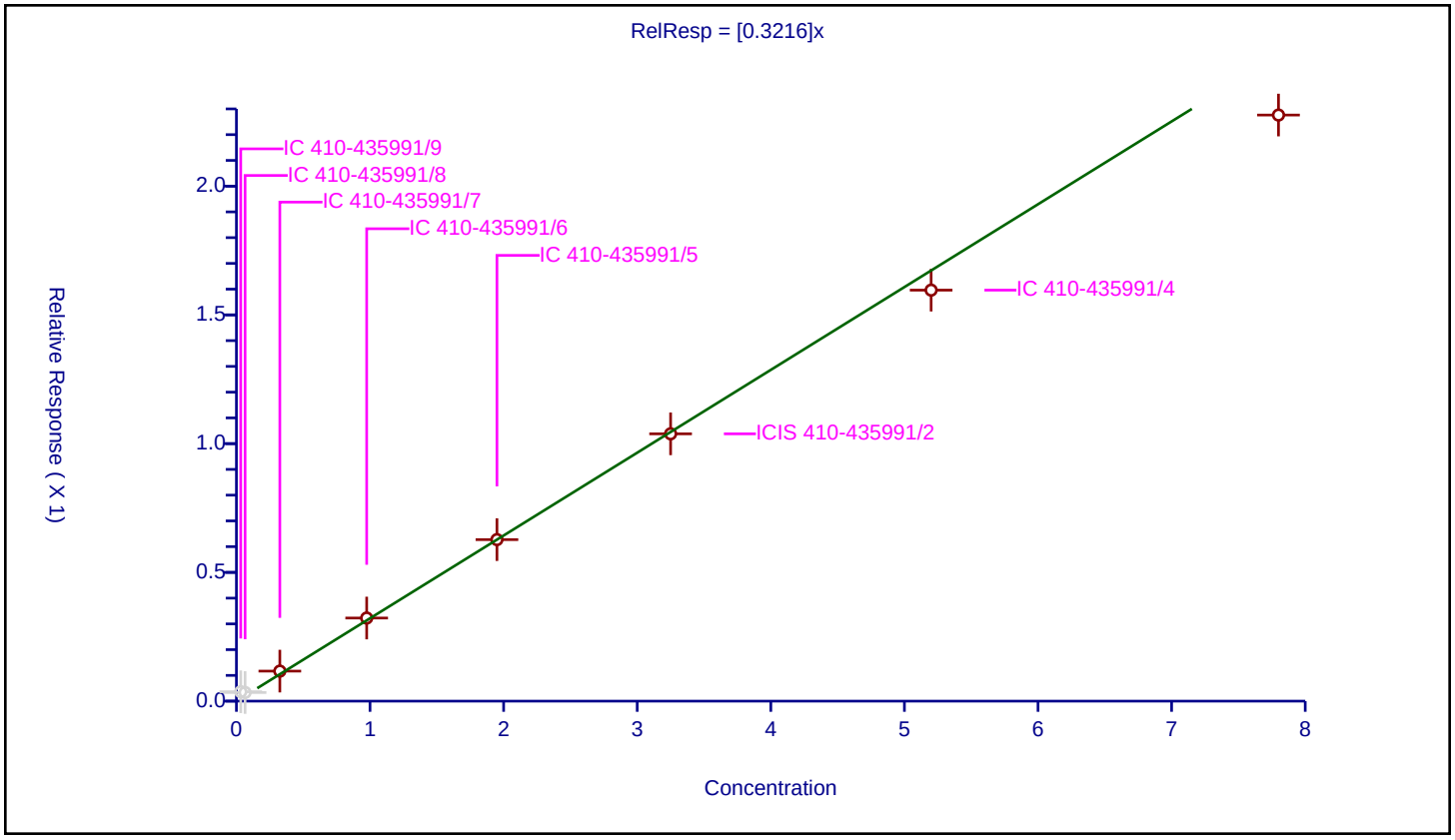
Curve Coefficients

Intercept:	0
Slope:	0.3216

Error Coefficients

Standard Error:	203000
Relative Standard Error:	7.1
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.0325	0.036446	5.0	630248.0	1.121414	N
2	IC 410-435991/8	0.065	0.033583	5.0	792064.0	0.516664	N
3	IC 410-435991/7	0.325	0.116583	5.0	739644.0	0.358717	Y
4	IC 410-435991/6	0.975	0.322795	5.0	816649.0	0.331072	Y
5	IC 410-435991/5	1.95	0.627261	5.0	677111.0	0.321672	Y
6	ICIS 410-435991/2	3.25	1.038139	5.0	704641.0	0.319427	Y
7	IC 410-435991/4	5.2	1.596123	5.0	661246.0	0.306947	Y
8	IC 410-435991/3	7.8	2.276058	5.0	791590.0	0.291802	Y



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Calibration / Hexachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

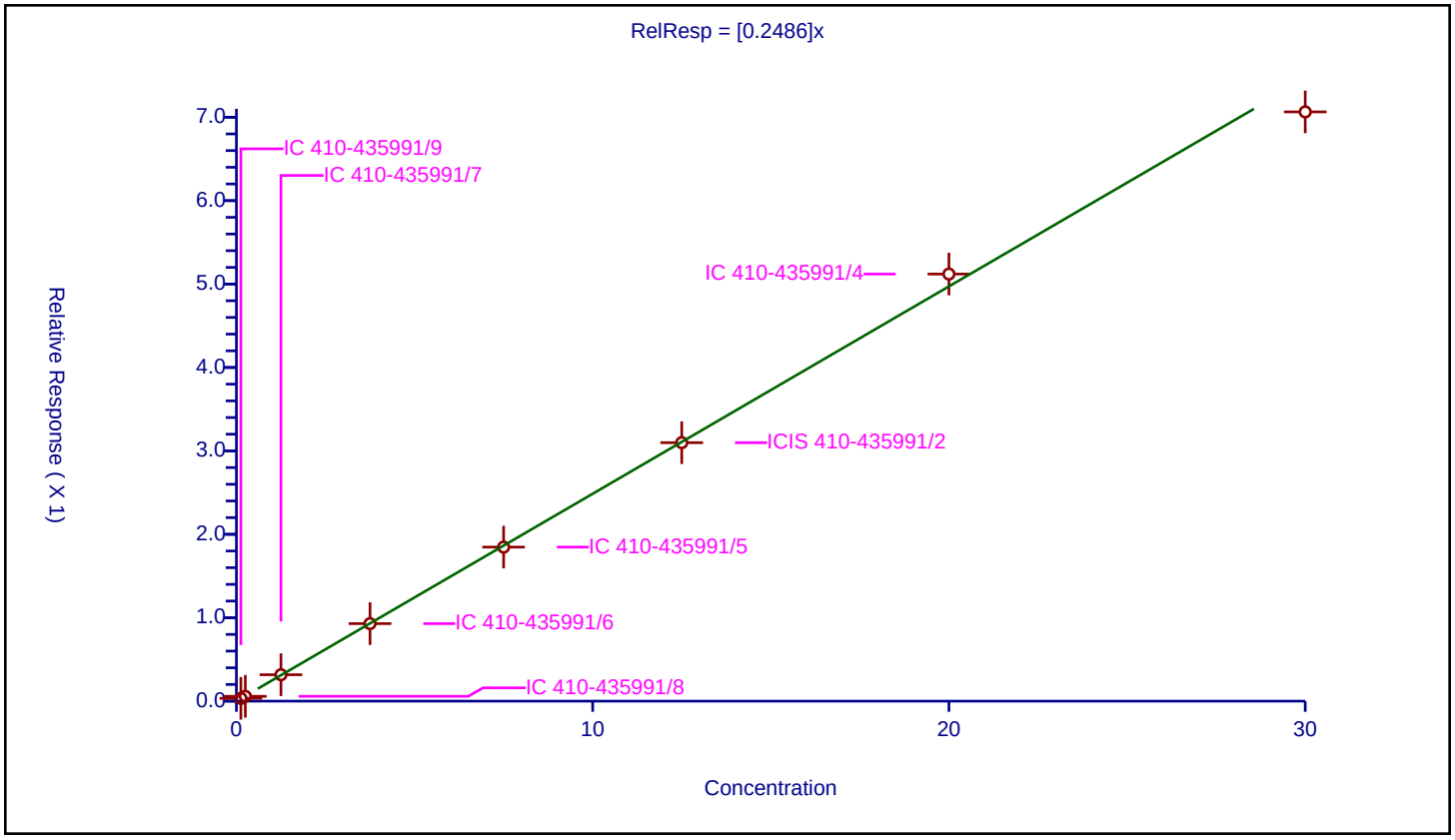
Curve Coefficients

Intercept:	0
Slope:	0.2486

Error Coefficients

Standard Error:	533000
Relative Standard Error:	4.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.03382	5.0	630248.0	0.27056	Y
2	IC 410-435991/8	0.25	0.057874	5.0	792064.0	0.231496	Y
3	IC 410-435991/7	1.25	0.316733	5.0	739644.0	0.253387	Y
4	IC 410-435991/6	3.75	0.929267	5.0	816649.0	0.247805	Y
5	IC 410-435991/5	7.5	1.846787	5.0	677111.0	0.246238	Y
6	ICIS 410-435991/2	12.5	3.098464	5.0	704641.0	0.247877	Y
7	IC 410-435991/4	20.0	5.120069	5.0	661246.0	0.256003	Y
8	IC 410-435991/3	30.0	7.06389	5.0	791590.0	0.235463	Y



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Calibration / Dimethoate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

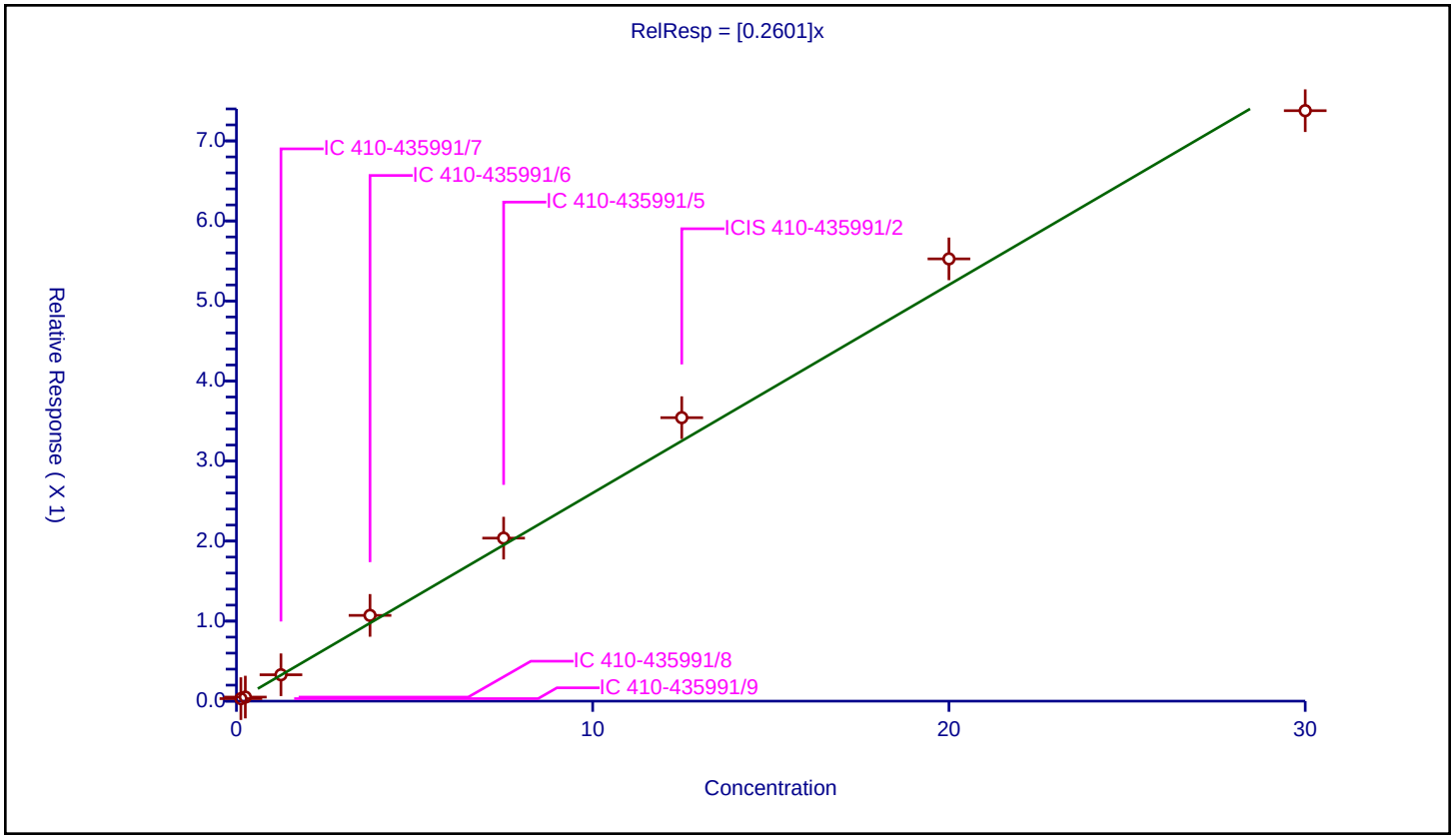
Curve Coefficients

Intercept:	0
Slope:	0.2601

Error Coefficients

Standard Error:	568000
Relative Standard Error:	10.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.031456	5.0	630248.0	0.251647	Y
2	IC 410-435991/8	0.25	0.05064	5.0	792064.0	0.202559	Y
3	IC 410-435991/7	1.25	0.32949	5.0	739644.0	0.263592	Y
4	IC 410-435991/6	3.75	1.071335	5.0	816649.0	0.285689	Y
5	IC 410-435991/5	7.5	2.036704	5.0	677111.0	0.271561	Y
6	ICIS 410-435991/2	12.5	3.542102	5.0	704641.0	0.283368	Y
7	IC 410-435991/4	20.0	5.526007	5.0	661246.0	0.2763	Y
8	IC 410-435991/3	30.0	7.377853	5.0	791590.0	0.245928	Y



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Calibration / Atrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

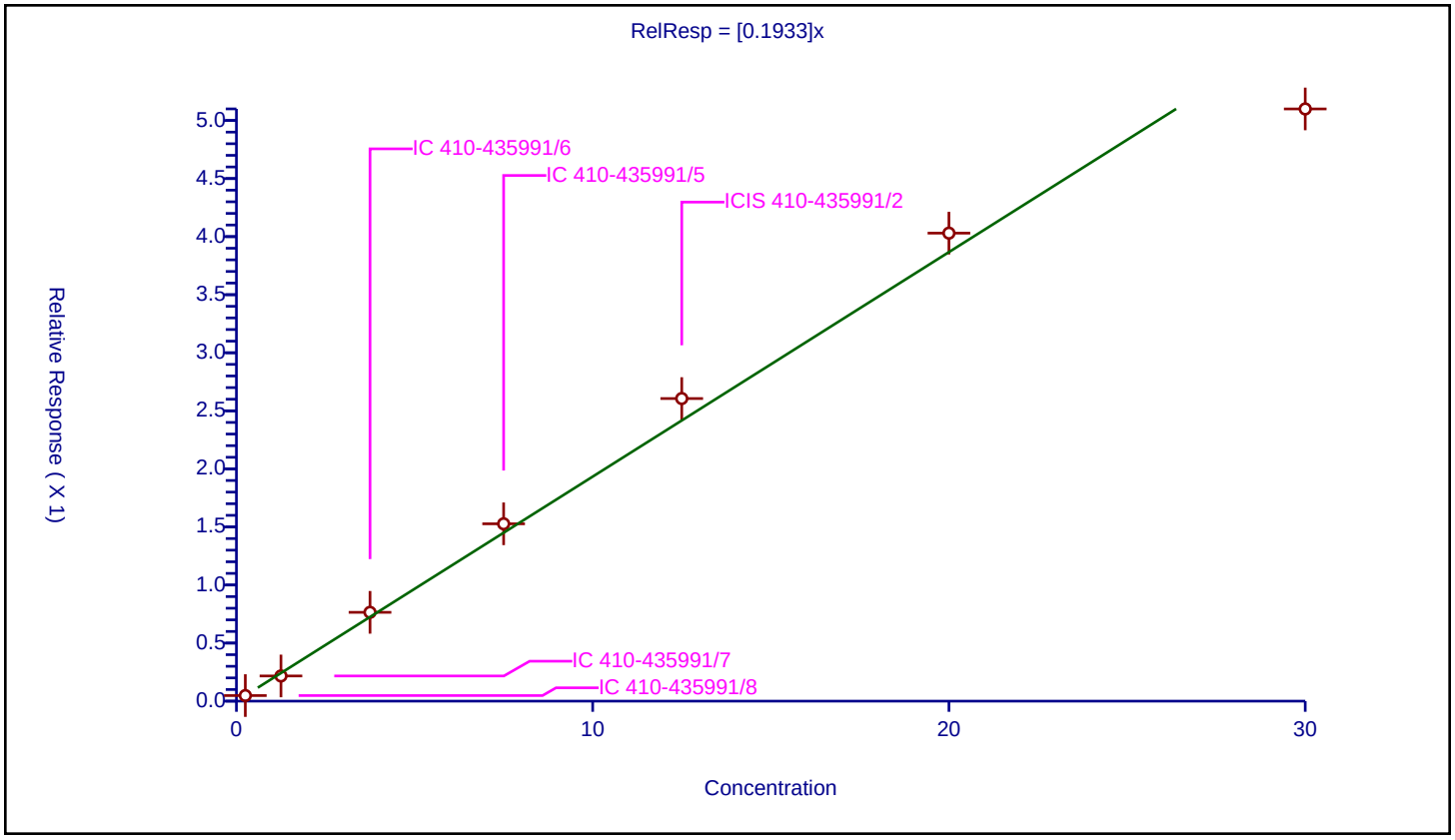
Curve Coefficients

Intercept:	0
Slope:	0.1933

Error Coefficients

Standard Error:	434000
Relative Standard Error:	8.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/8	0.25	0.048077	5.0	792064.0	0.192308	Y
2	IC 410-435991/7	1.25	0.216956	5.0	739644.0	0.173565	Y
3	IC 410-435991/6	3.75	0.764821	5.0	816649.0	0.203952	Y
4	IC 410-435991/5	7.5	1.527187	5.0	677111.0	0.203625	Y
5	ICIS 410-435991/2	12.5	2.605901	5.0	704641.0	0.208472	Y
6	IC 410-435991/4	20.0	4.029968	5.0	661246.0	0.201498	Y
7	IC 410-435991/3	30.0	5.099616	5.0	791590.0	0.169987	Y



Calibration / Pentachlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

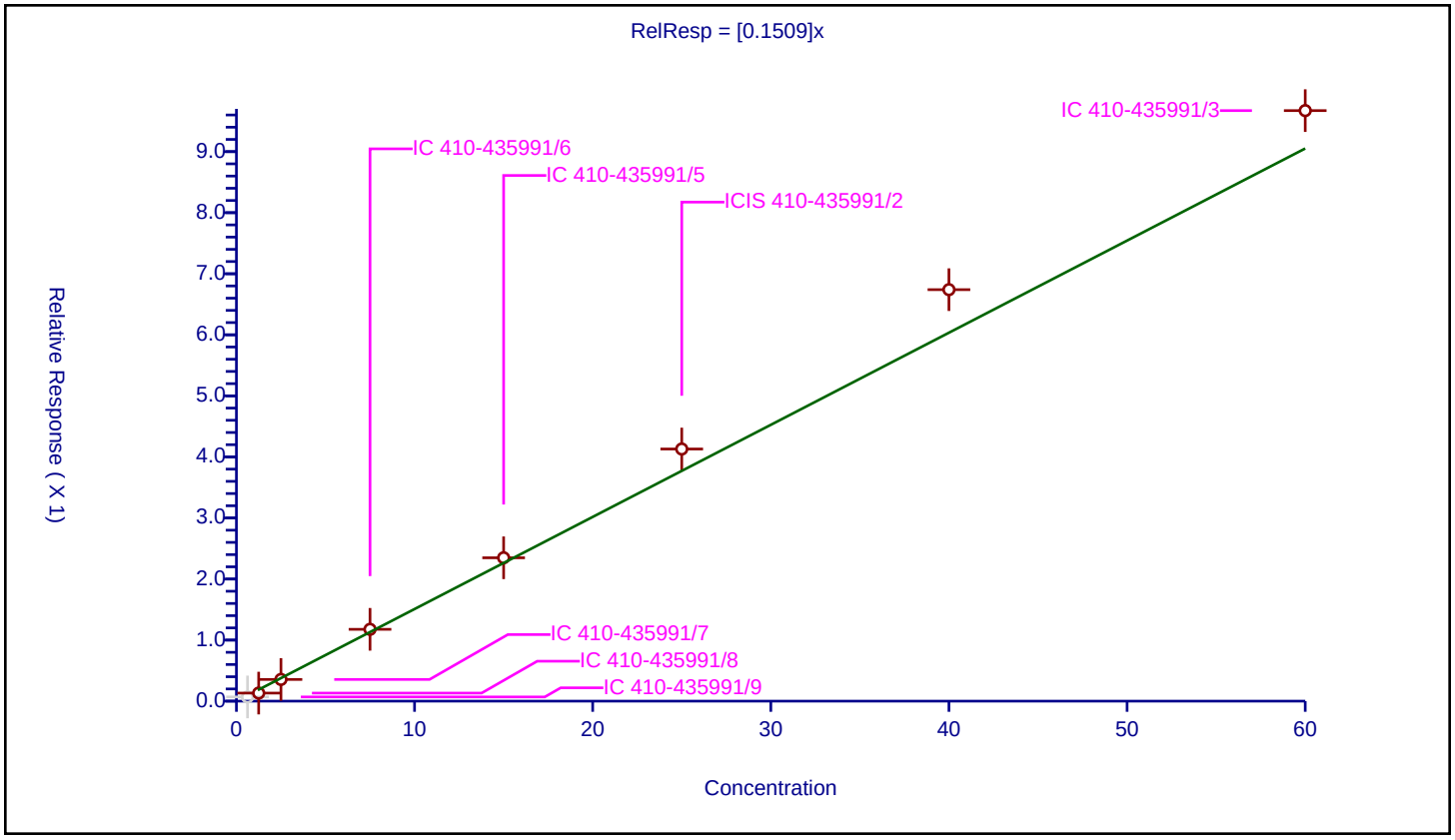
Curve Coefficients

Intercept:	0
Slope:	0.1509

Error Coefficients

Standard Error:	777000
Relative Standard Error:	14.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.625	0.068497	5.0	630248.0	0.109595	N
2	IC 410-435991/8	1.25	0.132022	5.0	792064.0	0.105618	Y
3	IC 410-435991/7	2.5	0.355387	5.0	739644.0	0.142155	Y
4	IC 410-435991/6	7.5	1.176356	5.0	816649.0	0.156847	Y
5	IC 410-435991/5	15.0	2.347879	5.0	677111.0	0.156525	Y
6	ICIS 410-435991/2	25.0	4.129372	5.0	704641.0	0.165175	Y
7	IC 410-435991/4	40.0	6.739292	5.0	661246.0	0.168482	Y
8	IC 410-435991/3	60.0	9.67168	5.0	791590.0	0.161195	Y



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Calibration / 4-Aminobiphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

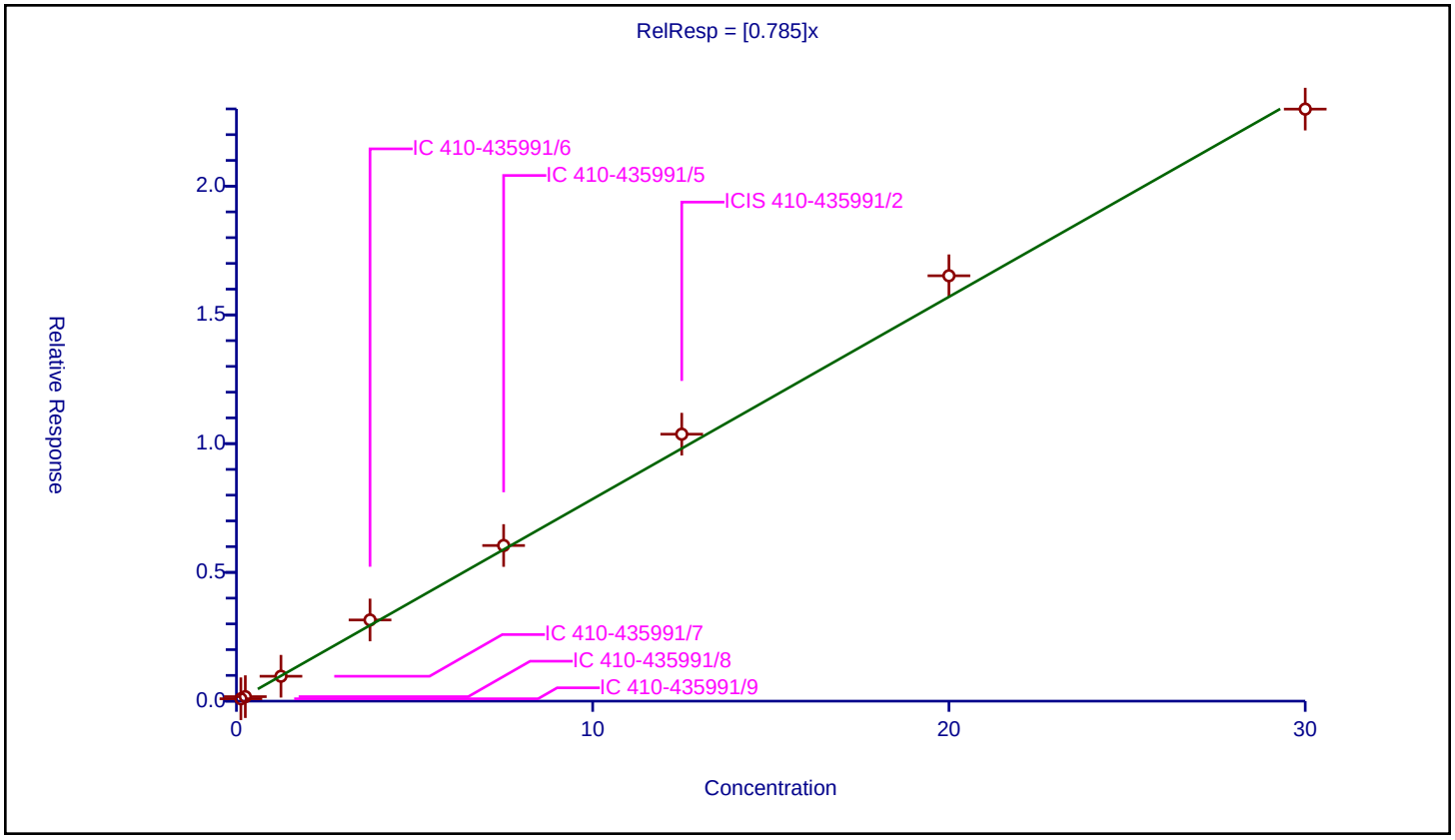
Curve Coefficients

Intercept:	0
Slope:	0.785

Error Coefficients

Standard Error:	1740000
Relative Standard Error:	6.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.092741	5.0	630248.0	0.74193	Y
2	IC 410-435991/8	0.25	0.174134	5.0	792064.0	0.696535	Y
3	IC 410-435991/7	1.25	0.966533	5.0	739644.0	0.773226	Y
4	IC 410-435991/6	3.75	3.152217	5.0	816649.0	0.840591	Y
5	IC 410-435991/5	7.5	6.044585	5.0	677111.0	0.805945	Y
6	ICIS 410-435991/2	12.5	10.368003	5.0	704641.0	0.82944	Y
7	IC 410-435991/4	20.0	16.520289	5.0	661246.0	0.826014	Y
8	IC 410-435991/3	30.0	22.991858	5.0	791590.0	0.766395	Y



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Calibration / Pentachloronitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

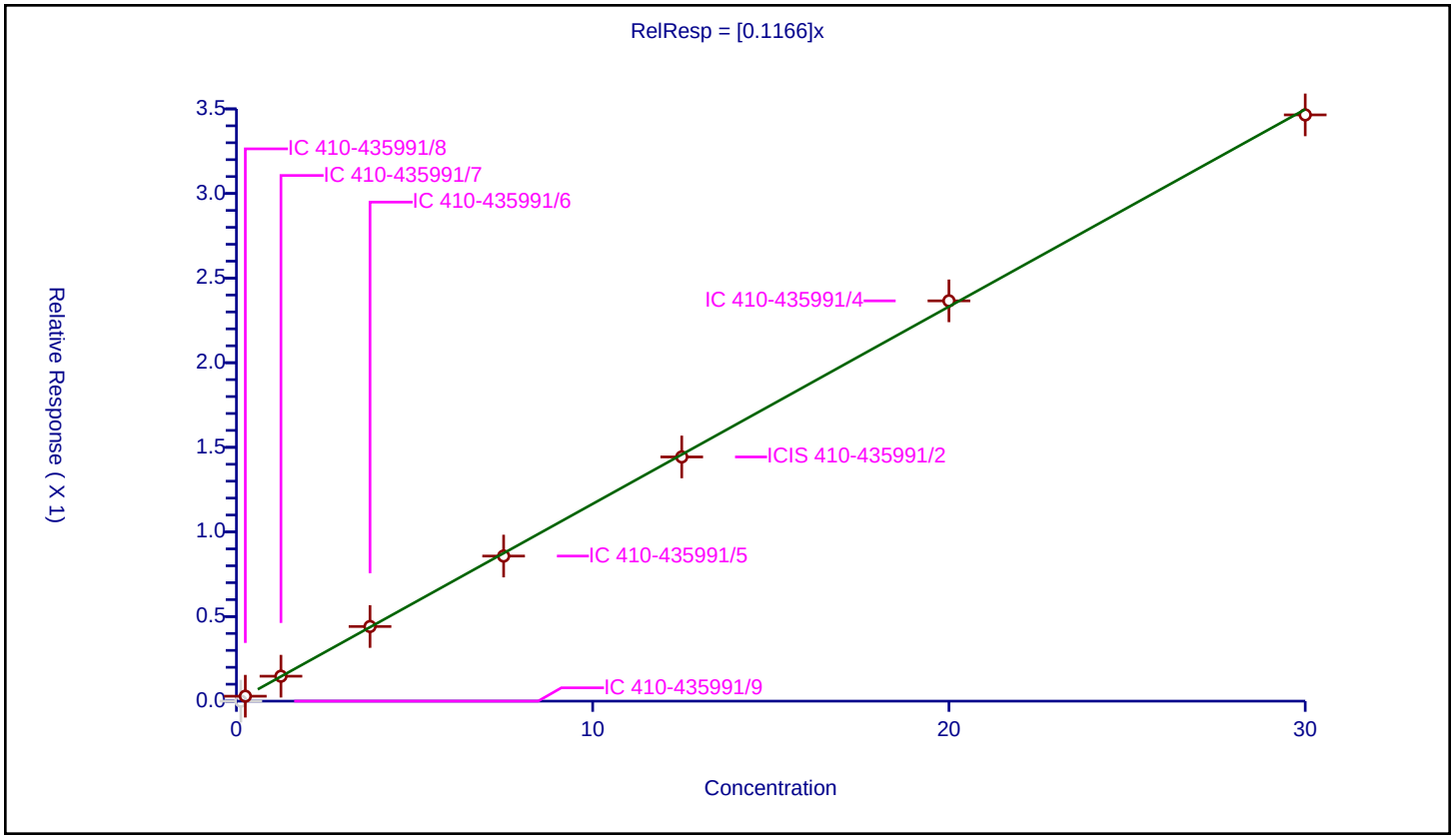
Curve Coefficients

Intercept:	0
Slope:	0.1166

Error Coefficients

Standard Error:	277000
Relative Standard Error:	1.3
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.0	5.0	630248.0	0.0	N
2	IC 410-435991/8	0.25	0.029234	5.0	792064.0	0.116935	Y
3	IC 410-435991/7	1.25	0.147409	5.0	739644.0	0.117927	Y
4	IC 410-435991/6	3.75	0.441169	5.0	816649.0	0.117645	Y
5	IC 410-435991/5	7.5	0.857363	5.0	677111.0	0.114315	Y
6	ICIS 410-435991/2	12.5	1.443033	5.0	704641.0	0.115443	Y
7	IC 410-435991/4	20.0	2.36561	5.0	661246.0	0.11828	Y
8	IC 410-435991/3	30.0	3.464552	5.0	791590.0	0.115485	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

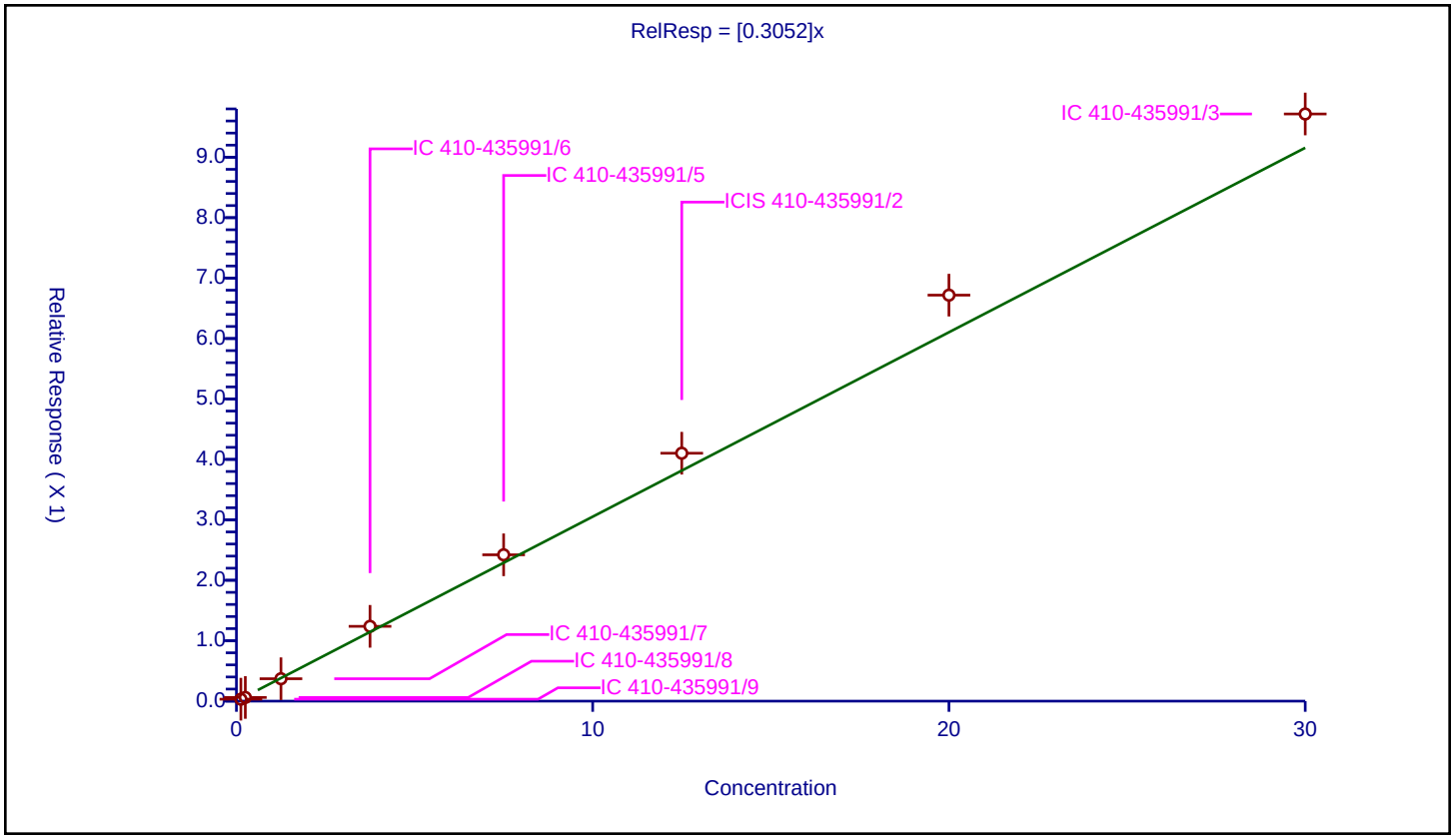
Curve Coefficients

Intercept:	0
Slope:	0.3052

Error Coefficients

Standard Error:	721000
Relative Standard Error:	11.5
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.032432	5.0	630248.0	0.259453	Y
2	IC 410-435991/8	0.25	0.061157	5.0	792064.0	0.244627	Y
3	IC 410-435991/7	1.25	0.37078	5.0	739644.0	0.296624	Y
4	IC 410-435991/6	3.75	1.237815	5.0	816649.0	0.330084	Y
5	IC 410-435991/5	7.5	2.421664	5.0	677111.0	0.322888	Y
6	ICIS 410-435991/2	12.5	4.10238	5.0	704641.0	0.32819	Y
7	IC 410-435991/4	20.0	6.717908	5.0	661246.0	0.335895	Y
8	IC 410-435991/3	30.0	9.715831	5.0	791590.0	0.323861	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

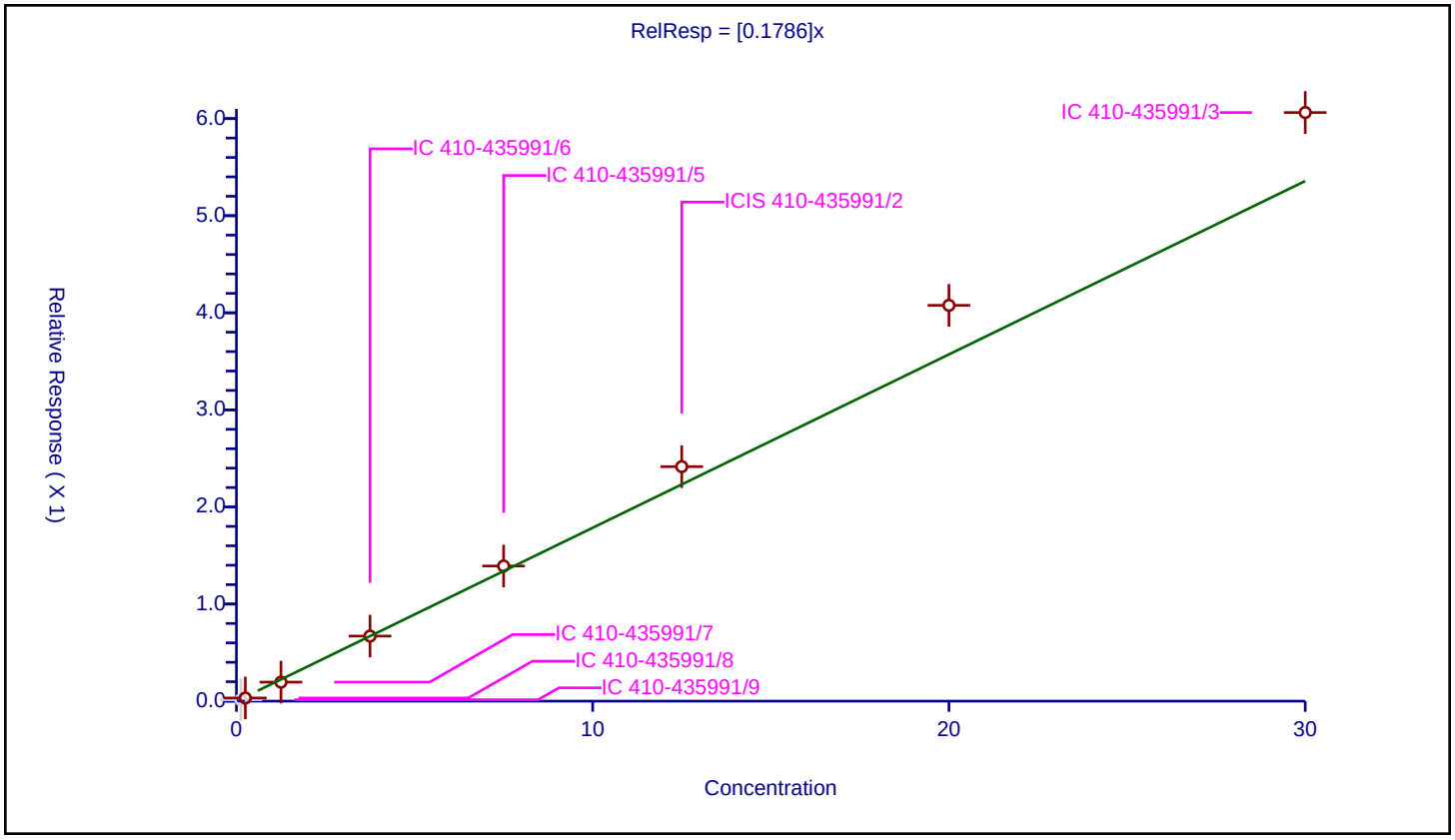
Curve Coefficients

Intercept:	0
Slope:	0.1786

Error Coefficients

Standard Error:	479000
Relative Standard Error:	15.0
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.014478	5.0	630248.0	0.115827	N
2	IC 410-435991/8	0.25	0.032466	5.0	792064.0	0.129863	Y
3	IC 410-435991/7	1.25	0.195837	5.0	739644.0	0.15667	Y
4	IC 410-435991/6	3.75	0.670141	5.0	816649.0	0.178704	Y
5	IC 410-435991/5	7.5	1.391707	5.0	677111.0	0.185561	Y
6	ICIS 410-435991/2	12.5	2.415294	5.0	704641.0	0.193223	Y
7	IC 410-435991/4	20.0	4.076524	5.0	661246.0	0.203826	Y
8	IC 410-435991/3	30.0	6.062292	5.0	791590.0	0.202076	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

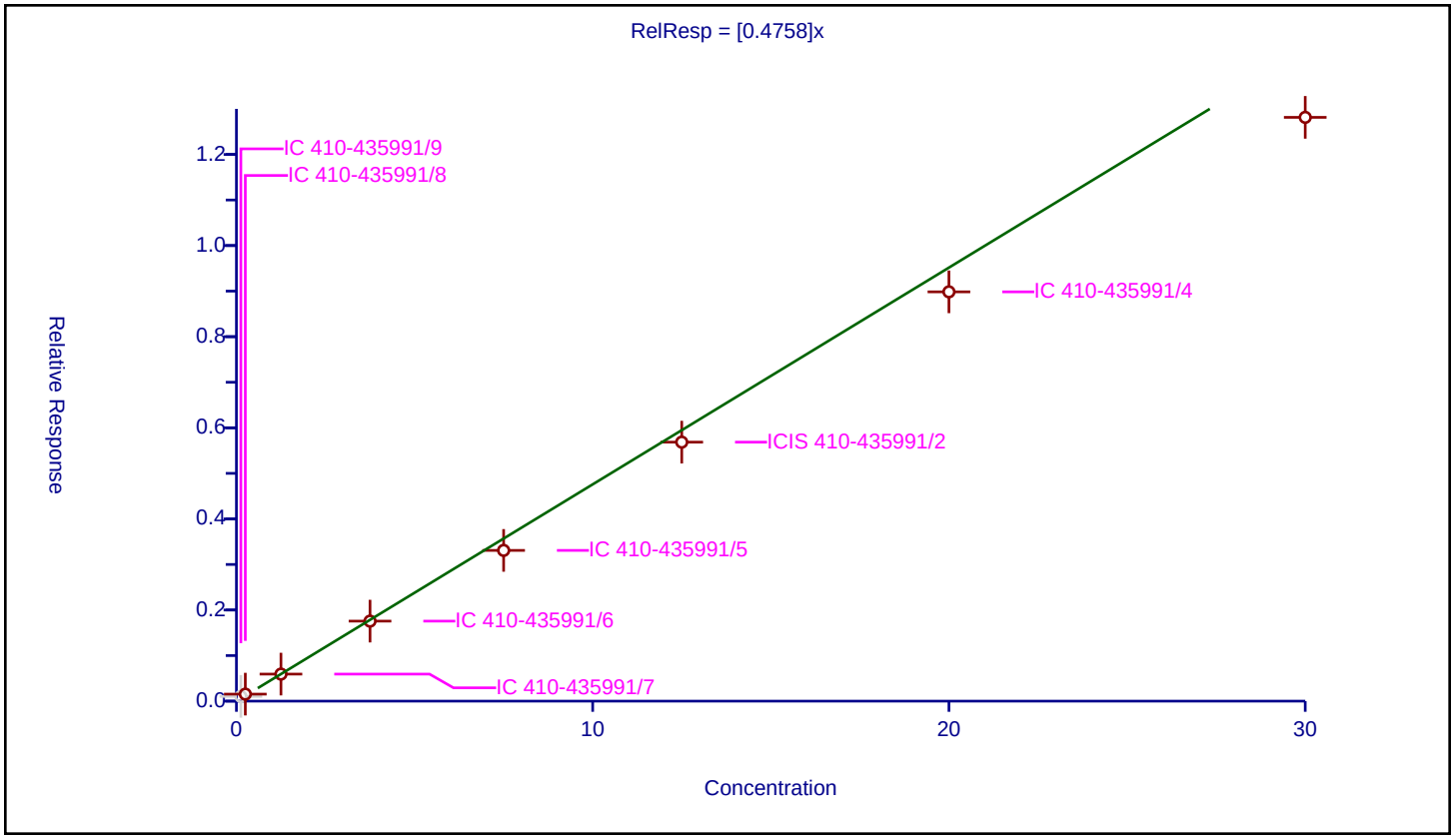
Curve Coefficients

Intercept:	0
Slope:	0.4758

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	13.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.1038	5.0	630248.0	0.830403	N
2	IC 410-435991/8	0.25	0.153801	5.0	792064.0	0.615203	Y
3	IC 410-435991/7	1.25	0.593603	5.0	739644.0	0.474883	Y
4	IC 410-435991/6	3.75	1.756244	5.0	816649.0	0.468332	Y
5	IC 410-435991/5	7.5	3.308438	5.0	677111.0	0.441125	Y
6	ICIS 410-435991/2	12.5	5.685179	5.0	704641.0	0.454814	Y
7	IC 410-435991/4	20.0	8.984372	5.0	661246.0	0.449219	Y
8	IC 410-435991/3	30.0	12.813995	5.0	791590.0	0.427133	Y



Calibration / Phenanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

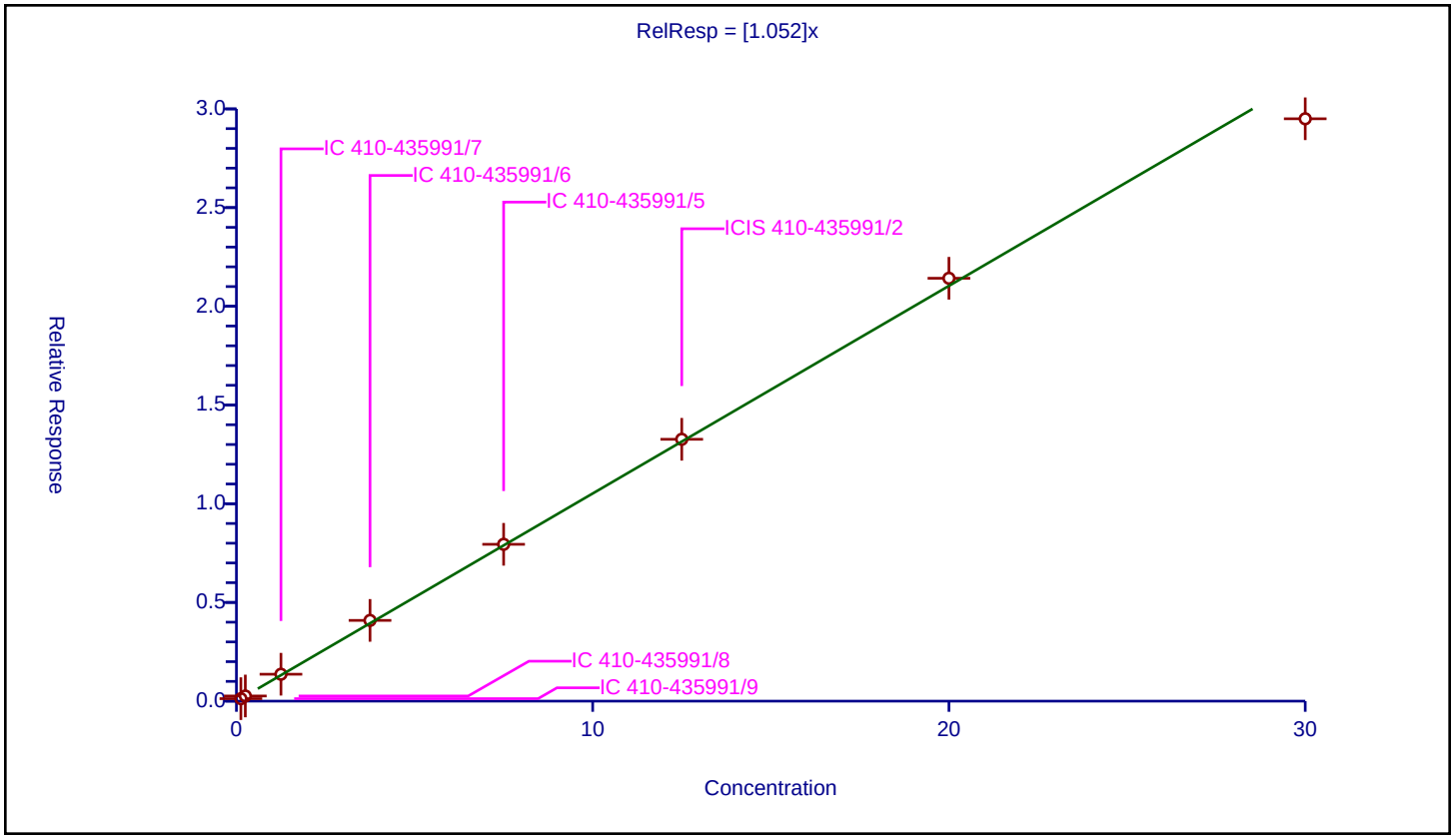
Curve Coefficients

Intercept:	0
Slope:	1.052

Error Coefficients

Standard Error:	2240000
Relative Standard Error:	3.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.12649	5.0	630248.0	1.011919	Y
2	IC 410-435991/8	0.25	0.261633	5.0	792064.0	1.046532	Y
3	IC 410-435991/7	1.25	1.362804	5.0	739644.0	1.090243	Y
4	IC 410-435991/6	3.75	4.090344	5.0	816649.0	1.090758	Y
5	IC 410-435991/5	7.5	7.944894	5.0	677111.0	1.059319	Y
6	ICIS 410-435991/2	12.5	13.264478	5.0	704641.0	1.061158	Y
7	IC 410-435991/4	20.0	21.421037	5.0	661246.0	1.071052	Y
8	IC 410-435991/3	30.0	29.499697	5.0	791590.0	0.983323	Y



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Calibration / Anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

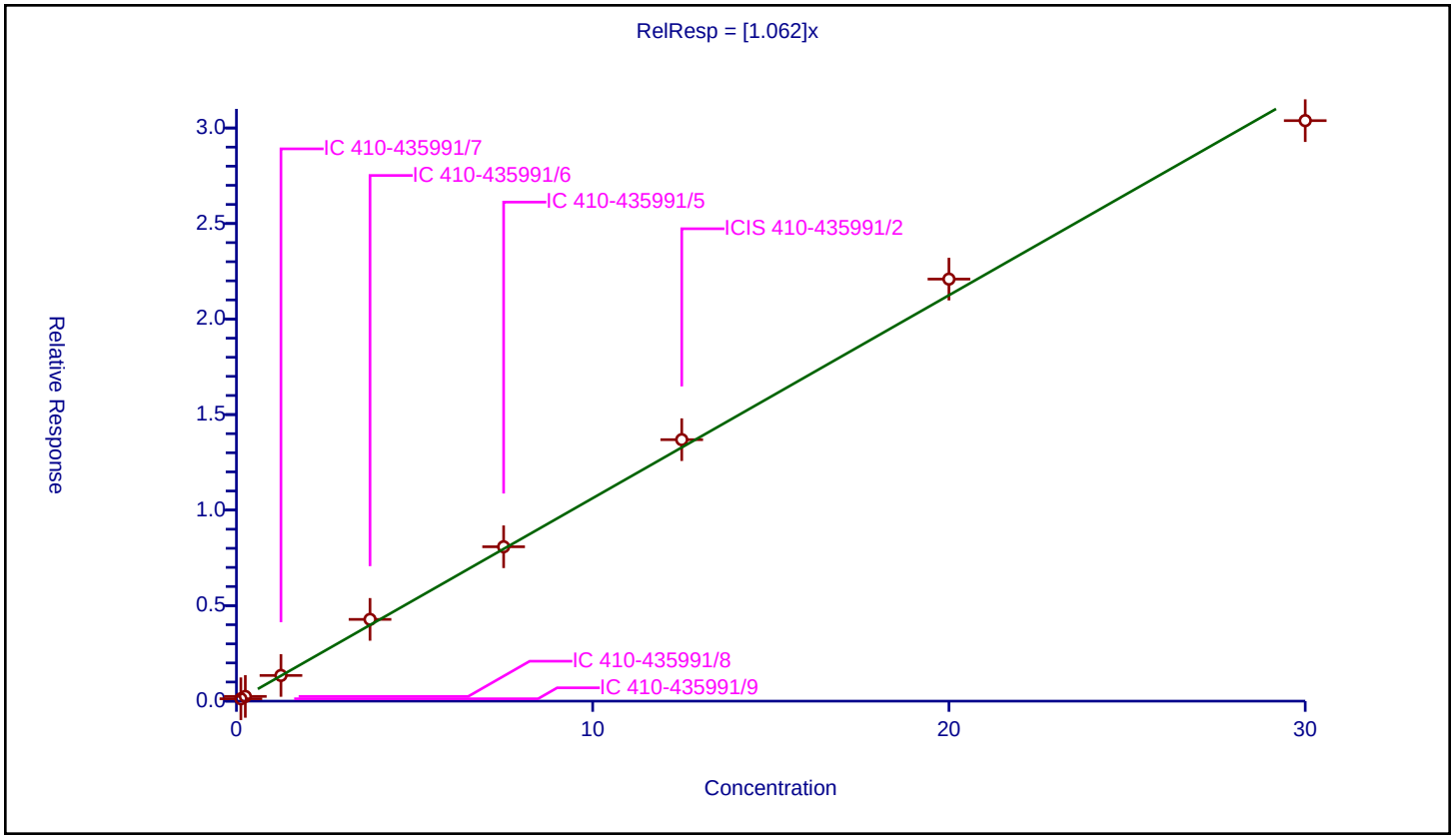
Curve Coefficients

Intercept:	0
Slope:	1.062

Error Coefficients

Standard Error:	2300000
Relative Standard Error:	5.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.125149	5.0	630248.0	1.001193	Y
2	IC 410-435991/8	0.25	0.247581	5.0	792064.0	0.990324	Y
3	IC 410-435991/7	1.25	1.345039	5.0	739644.0	1.076031	Y
4	IC 410-435991/6	3.75	4.279568	5.0	816649.0	1.141218	Y
5	IC 410-435991/5	7.5	8.080824	5.0	677111.0	1.077443	Y
6	ICIS 410-435991/2	12.5	13.685934	5.0	704641.0	1.094875	Y
7	IC 410-435991/4	20.0	22.089646	5.0	661246.0	1.104482	Y
8	IC 410-435991/3	30.0	30.385749	5.0	791590.0	1.012858	Y



Calibration / Carbazole

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

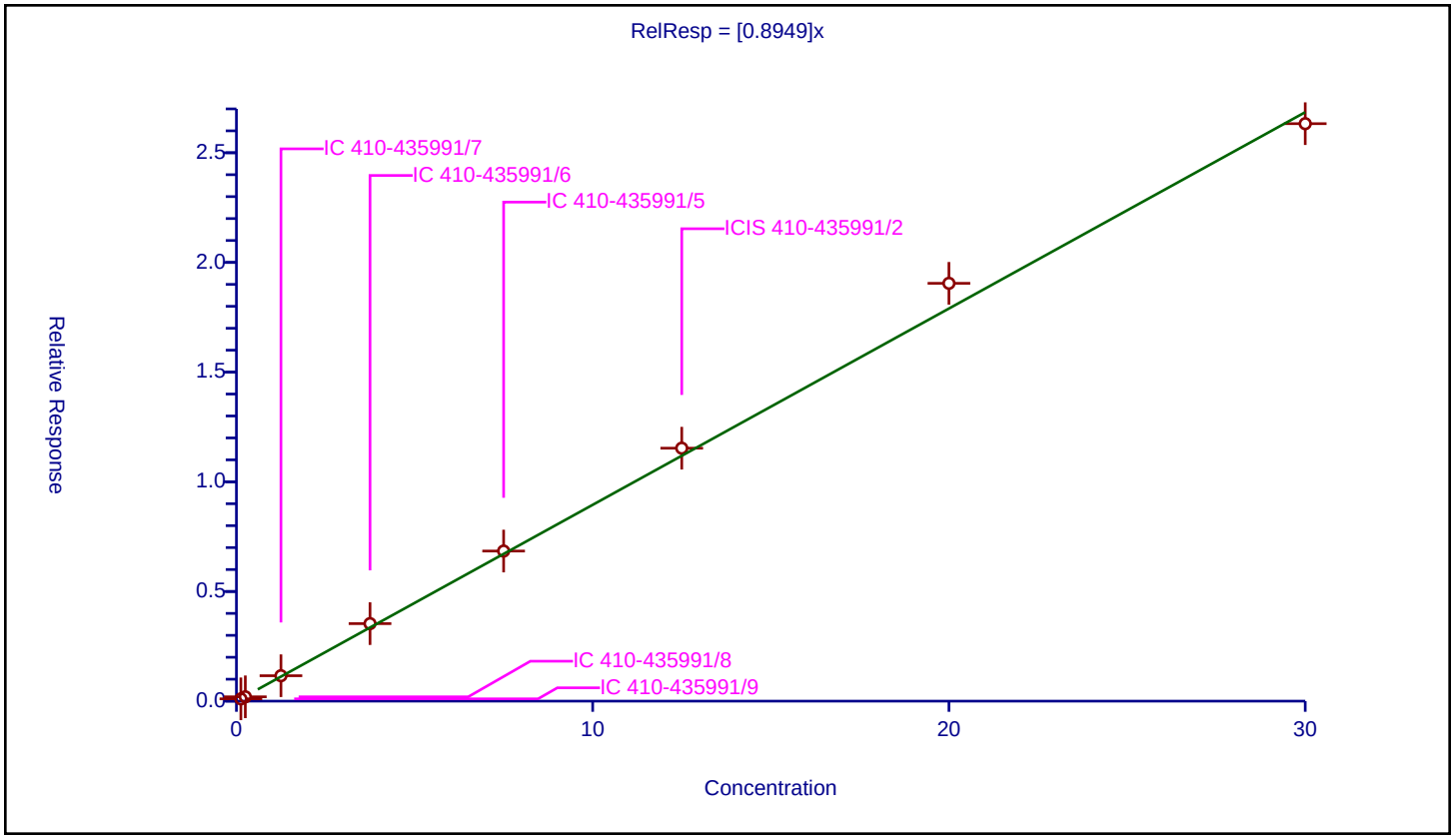
Curve Coefficients

Intercept:	0
Slope:	0.8949

Error Coefficients

Standard Error:	1980000
Relative Standard Error:	6.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.104586	5.0	630248.0	0.836687	Y
2	IC 410-435991/8	0.25	0.197131	5.0	792064.0	0.788522	Y
3	IC 410-435991/7	1.25	1.158611	5.0	739644.0	0.926889	Y
4	IC 410-435991/6	3.75	3.534334	5.0	816649.0	0.942489	Y
5	IC 410-435991/5	7.5	6.843066	5.0	677111.0	0.912409	Y
6	ICIS 410-435991/2	12.5	11.532128	5.0	704641.0	0.92257	Y
7	IC 410-435991/4	20.0	19.04776	5.0	661246.0	0.952388	Y
8	IC 410-435991/3	30.0	26.32561	5.0	791590.0	0.87752	Y



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Calibration / Methyl parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

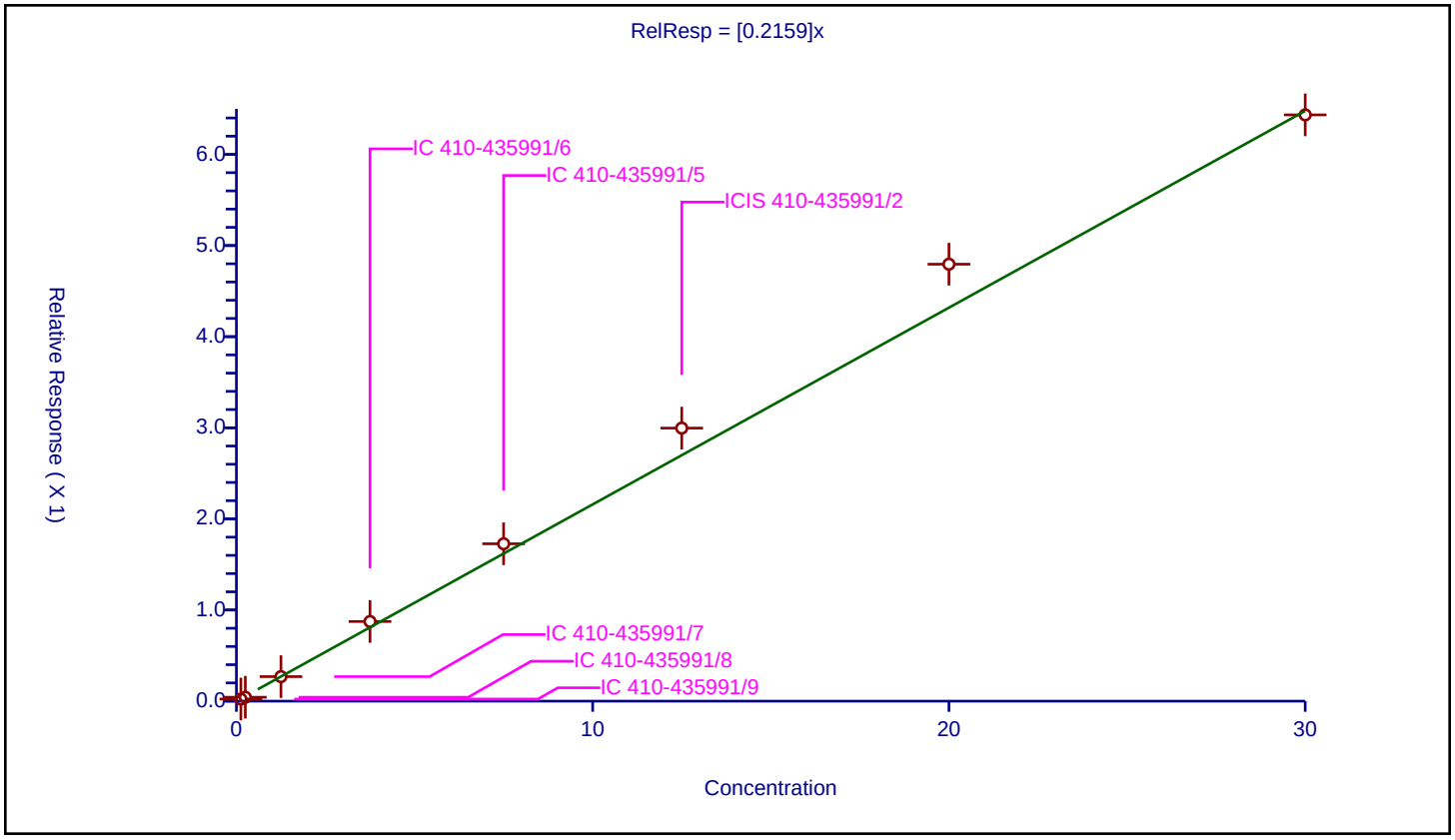
Curve Coefficients

Intercept:	0
Slope:	0.2159

Error Coefficients

Standard Error:	492000
Relative Standard Error:	12.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.022888	5.0	630248.0	0.183103	Y
2	IC 410-435991/8	0.25	0.042932	5.0	792064.0	0.171729	Y
3	IC 410-435991/7	1.25	0.268988	5.0	739644.0	0.21519	Y
4	IC 410-435991/6	3.75	0.874072	5.0	816649.0	0.233086	Y
5	IC 410-435991/5	7.5	1.727213	5.0	677111.0	0.230295	Y
6	ICIS 410-435991/2	12.5	2.996597	5.0	704641.0	0.239728	Y
7	IC 410-435991/4	20.0	4.795658	5.0	661246.0	0.239783	Y
8	IC 410-435991/3	30.0	6.434259	5.0	791590.0	0.214475	Y



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Calibration / Di-n-butyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

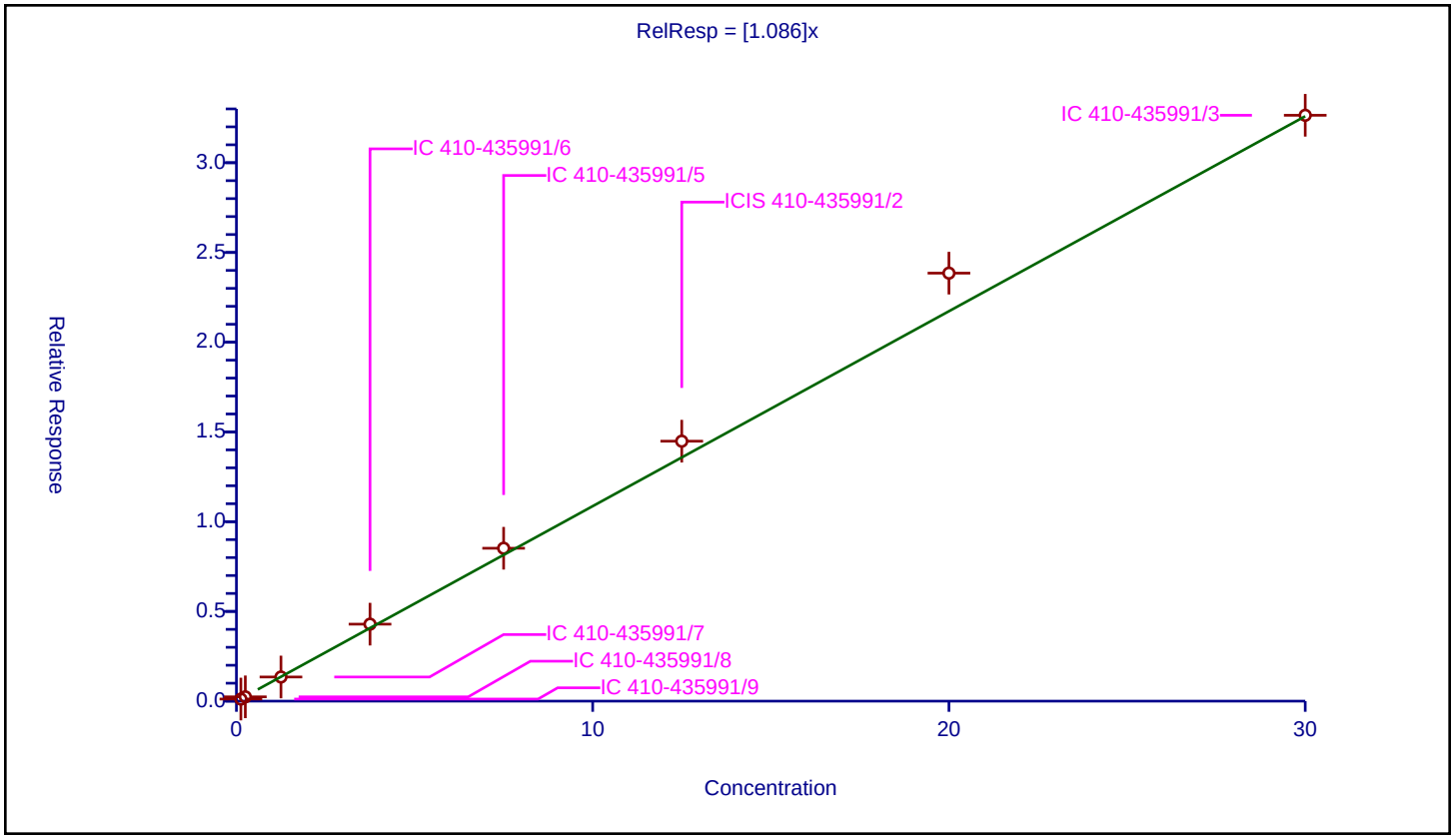
Curve Coefficients

Intercept:	0
Slope:	1.086

Error Coefficients

Standard Error:	2470000
Relative Standard Error:	8.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.117002	5.0	630248.0	0.936012	Y
2	IC 410-435991/8	0.25	0.239886	5.0	792064.0	0.959544	Y
3	IC 410-435991/7	1.25	1.344728	5.0	739644.0	1.075782	Y
4	IC 410-435991/6	3.75	4.289848	5.0	816649.0	1.143959	Y
5	IC 410-435991/5	7.5	8.519268	5.0	677111.0	1.135902	Y
6	ICIS 410-435991/2	12.5	14.484319	5.0	704641.0	1.158746	Y
7	IC 410-435991/4	20.0	23.847509	5.0	661246.0	1.192375	Y
8	IC 410-435991/3	30.0	32.64414	5.0	791590.0	1.088138	Y



Calibration / Ethyl Parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

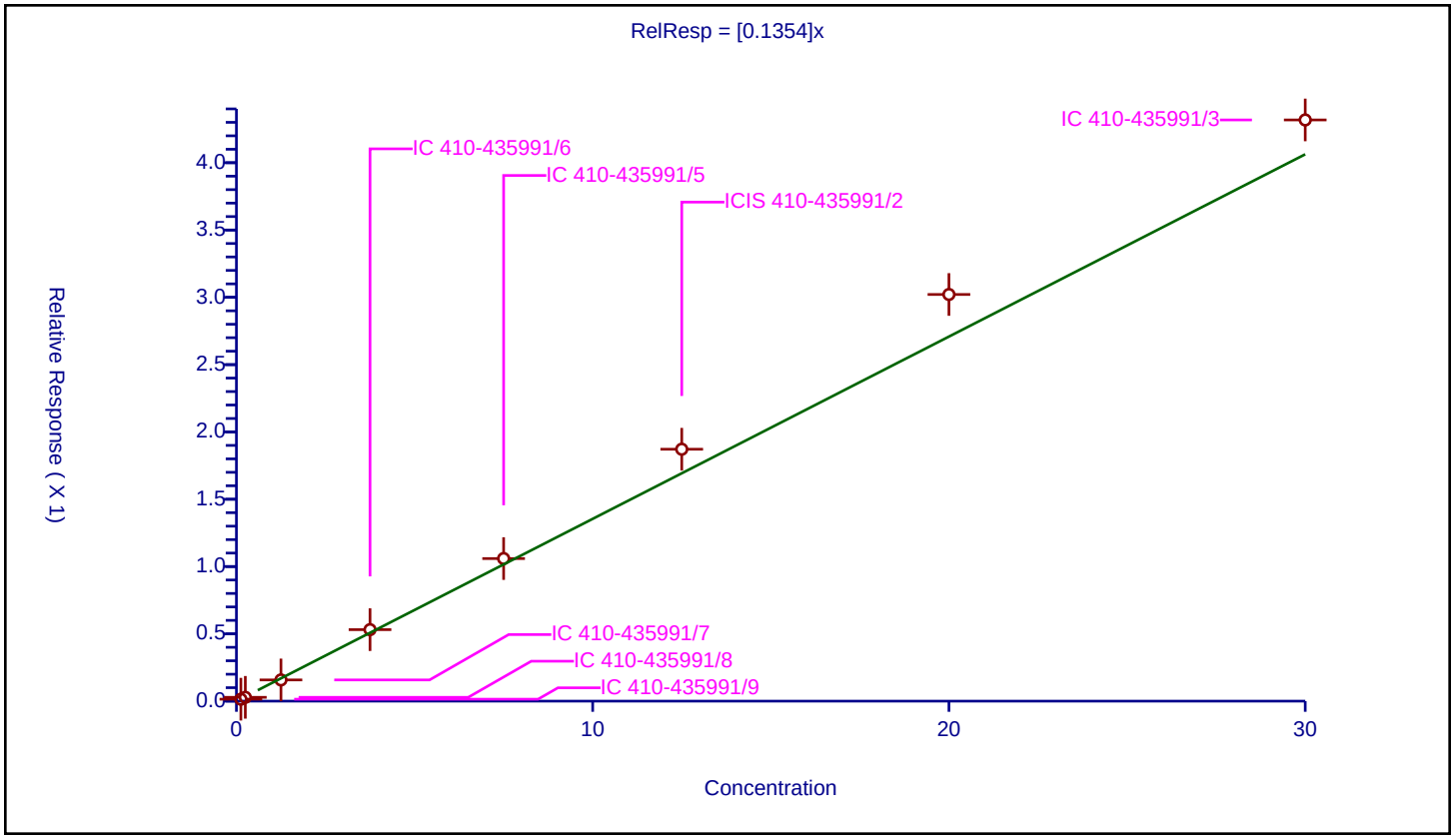
Curve Coefficients

Intercept:	0
Slope:	0.1354

Error Coefficients

Standard Error:	322000
Relative Standard Error:	10.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.01455	5.0	630248.0	0.116399	Y
2	IC 410-435991/8	0.25	0.028325	5.0	792064.0	0.113299	Y
3	IC 410-435991/7	1.25	0.157596	5.0	739644.0	0.126077	Y
4	IC 410-435991/6	3.75	0.531122	5.0	816649.0	0.141632	Y
5	IC 410-435991/5	7.5	1.059265	5.0	677111.0	0.141235	Y
6	ICIS 410-435991/2	12.5	1.871549	5.0	704641.0	0.149724	Y
7	IC 410-435991/4	20.0	3.021183	5.0	661246.0	0.151059	Y
8	IC 410-435991/3	30.0	4.31781	5.0	791590.0	0.143927	Y



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Calibration / 4-Nitroquinoline-1-oxide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

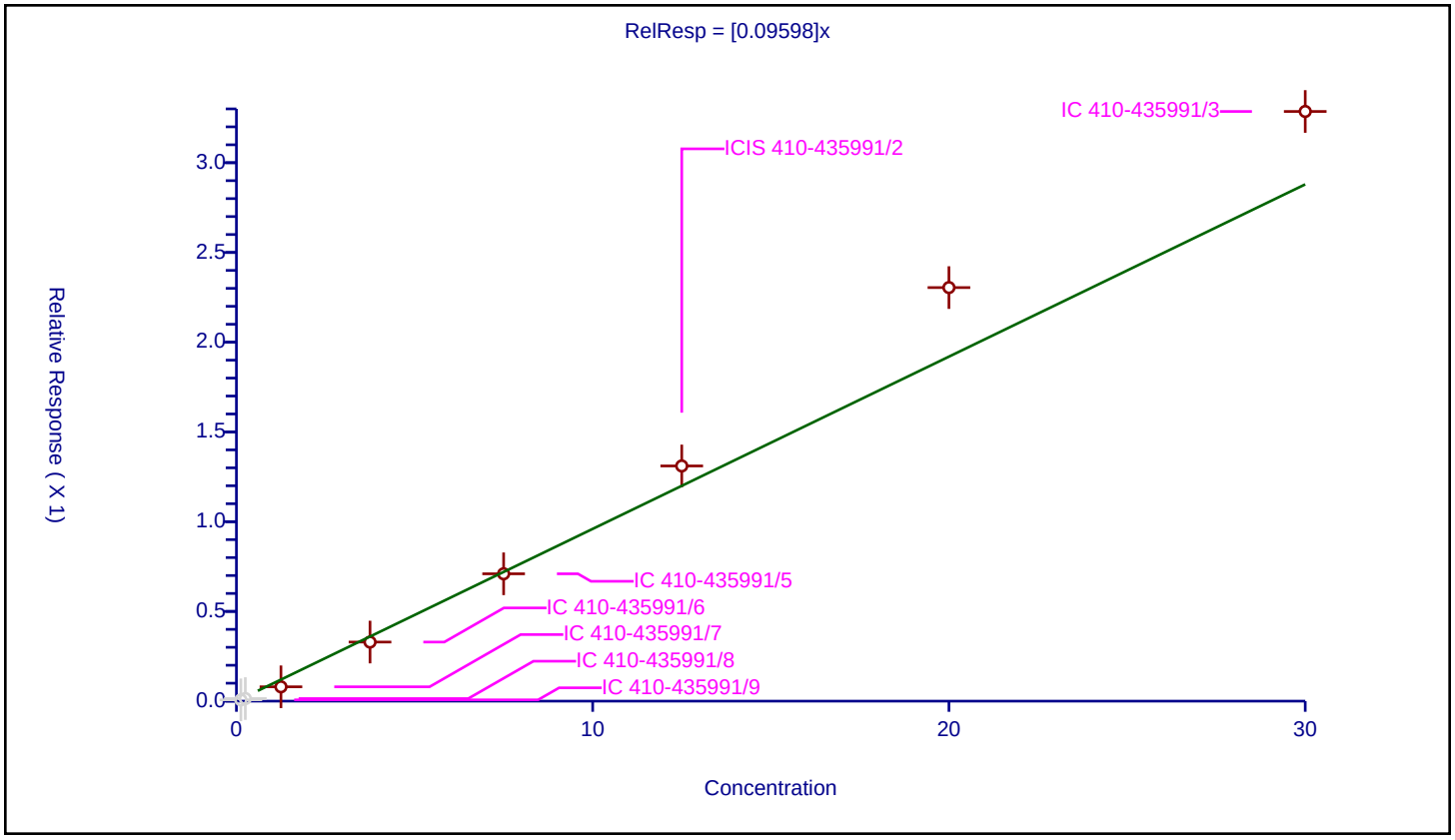
Curve Coefficients

Intercept:	0
Slope:	0.09598

Error Coefficients

Standard Error:	286000
Relative Standard Error:	19.4
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.959

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.007196	5.0	630248.0	0.057565	N
2	IC 410-435991/8	0.25	0.014361	5.0	792064.0	0.057445	N
3	IC 410-435991/7	1.25	0.079883	5.0	739644.0	0.063906	Y
4	IC 410-435991/6	3.75	0.329162	5.0	816649.0	0.087777	Y
5	IC 410-435991/5	7.5	0.709618	5.0	677111.0	0.094616	Y
6	ICIS 410-435991/2	12.5	1.310469	5.0	704641.0	0.104837	Y
7	IC 410-435991/4	20.0	2.304422	5.0	661246.0	0.115221	Y
8	IC 410-435991/3	30.0	3.285602	5.0	791590.0	0.10952	Y



Calibration / Octachlorostyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

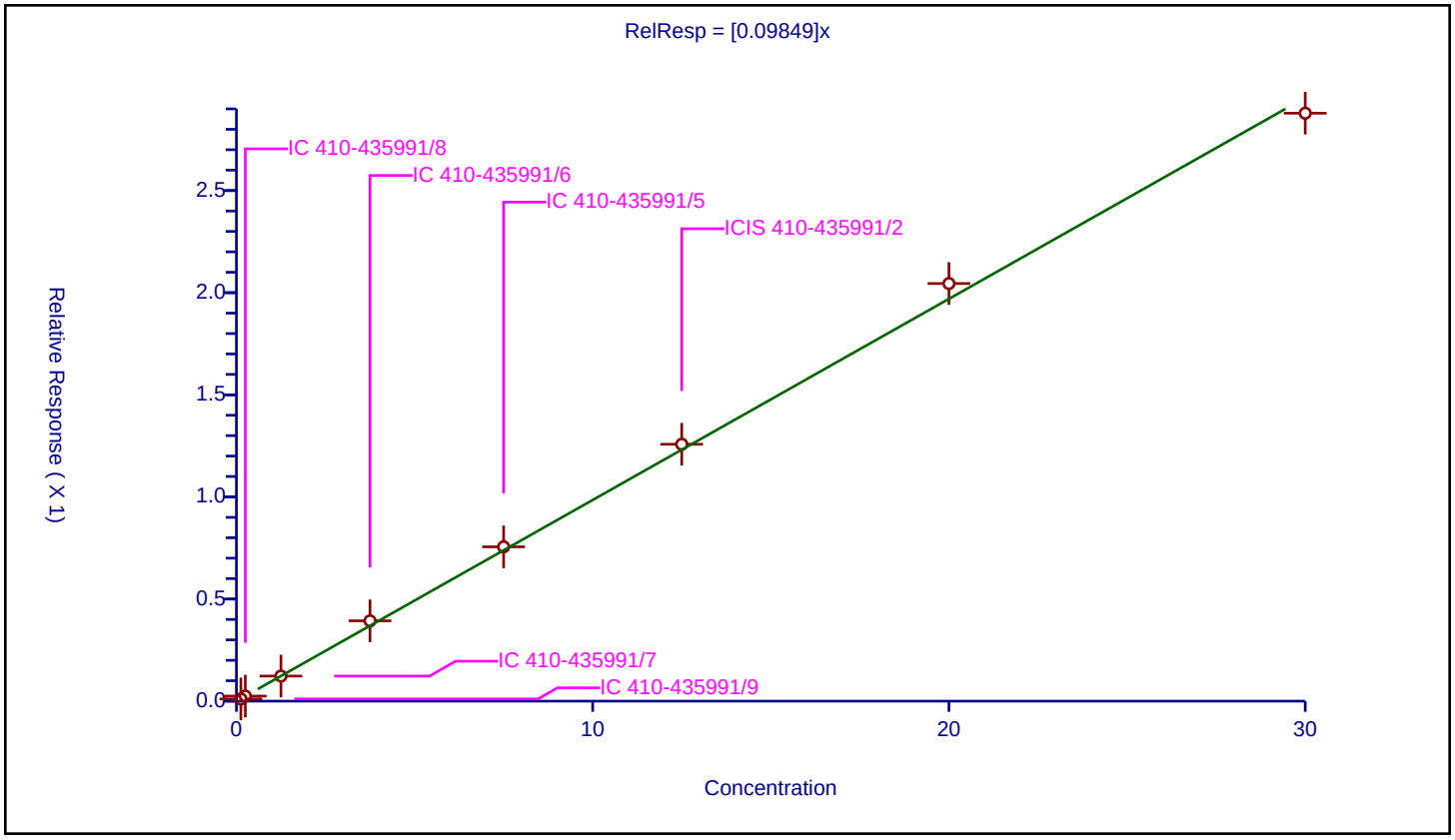
Curve Coefficients

Intercept:	0
Slope:	0.09849

Error Coefficients

Standard Error:	216000
Relative Standard Error:	5.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.010718	5.0	630248.0	0.085744	Y
2	IC 410-435991/8	0.25	0.024878	5.0	792064.0	0.099512	Y
3	IC 410-435991/7	1.25	0.122769	5.0	739644.0	0.098215	Y
4	IC 410-435991/6	3.75	0.393204	5.0	816649.0	0.104855	Y
5	IC 410-435991/5	7.5	0.755622	5.0	677111.0	0.10075	Y
6	ICIS 410-435991/2	12.5	1.257903	5.0	704641.0	0.100632	Y
7	IC 410-435991/4	20.0	2.044859	5.0	661246.0	0.102243	Y
8	IC 410-435991/3	30.0	2.878845	5.0	791590.0	0.095962	Y



Calibration / Isodrin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

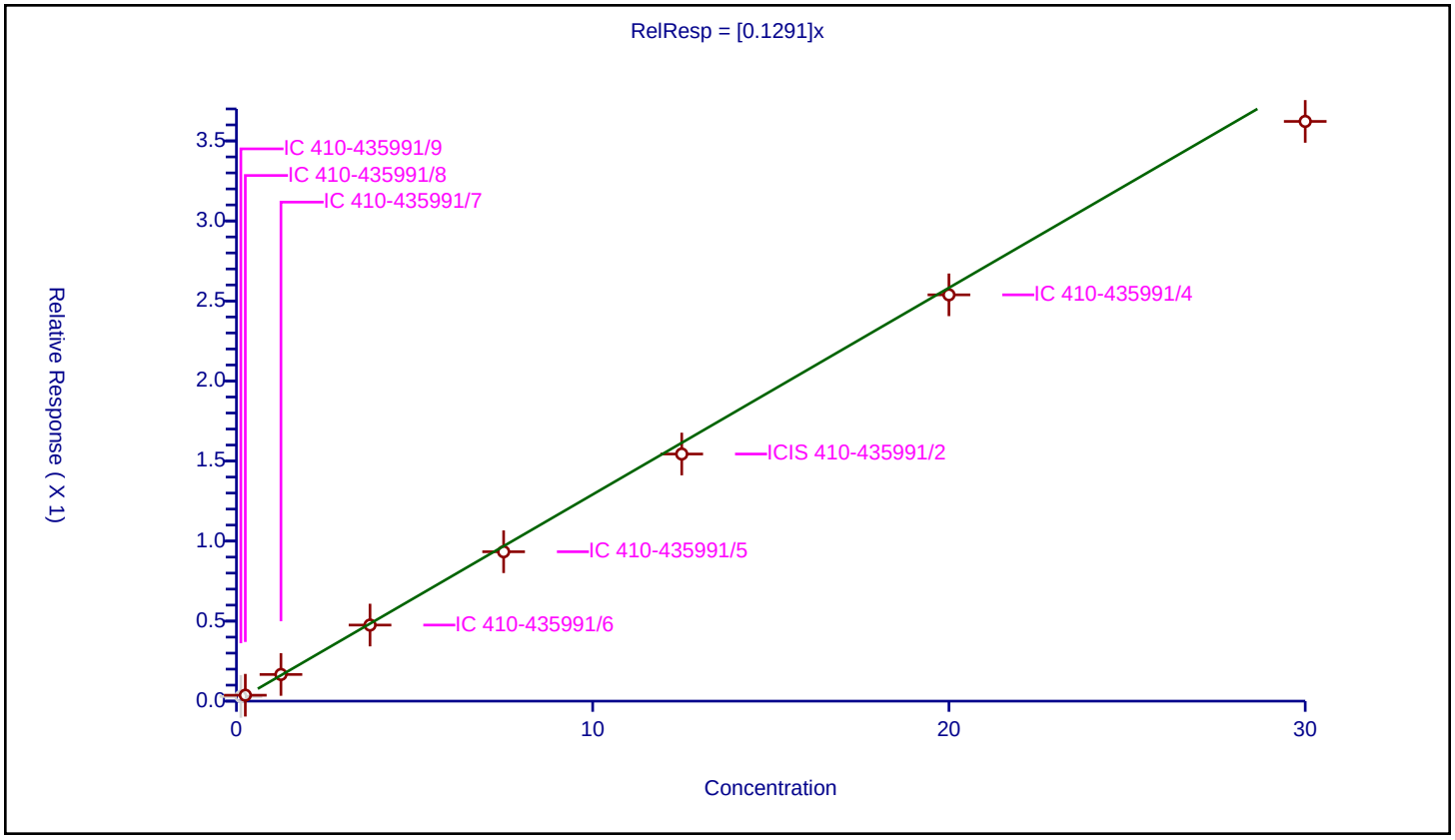
Curve Coefficients

Intercept:	0
Slope:	0.1291

Error Coefficients

Standard Error:	292000
Relative Standard Error:	7.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.029131	5.0	630248.0	0.233051	N
2	IC 410-435991/8	0.25	0.037017	5.0	792064.0	0.148069	Y
3	IC 410-435991/7	1.25	0.166661	5.0	739644.0	0.133329	Y
4	IC 410-435991/6	3.75	0.475296	5.0	816649.0	0.126746	Y
5	IC 410-435991/5	7.5	0.933311	5.0	677111.0	0.124441	Y
6	ICIS 410-435991/2	12.5	1.543857	5.0	704641.0	0.123509	Y
7	IC 410-435991/4	20.0	2.538473	5.0	661246.0	0.126924	Y
8	IC 410-435991/3	30.0	3.621742	5.0	791590.0	0.120725	Y



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Calibration / Fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

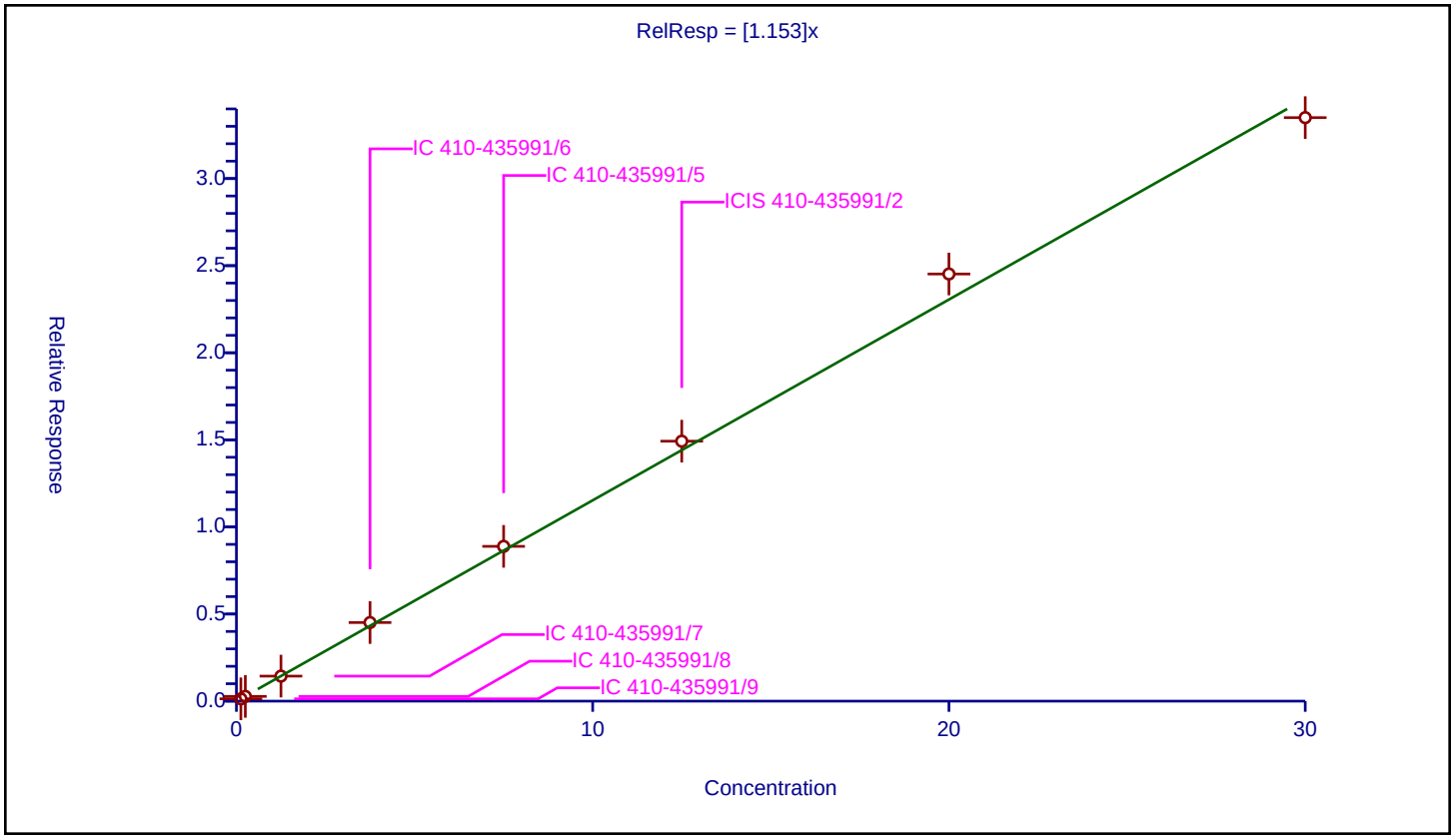
Curve Coefficients

Intercept:	0
Slope:	1.153

Error Coefficients

Standard Error:	2540000
Relative Standard Error:	5.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.132035	5.0	630248.0	1.056283	Y
2	IC 410-435991/8	0.25	0.27285	5.0	792064.0	1.091402	Y
3	IC 410-435991/7	1.25	1.436982	5.0	739644.0	1.149585	Y
4	IC 410-435991/6	3.75	4.512477	5.0	816649.0	1.203327	Y
5	IC 410-435991/5	7.5	8.886512	5.0	677111.0	1.184868	Y
6	ICIS 410-435991/2	12.5	14.924238	5.0	704641.0	1.193939	Y
7	IC 410-435991/4	20.0	24.521593	5.0	661246.0	1.22608	Y
8	IC 410-435991/3	30.0	33.49813	5.0	791590.0	1.116604	Y



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Calibration / Benzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

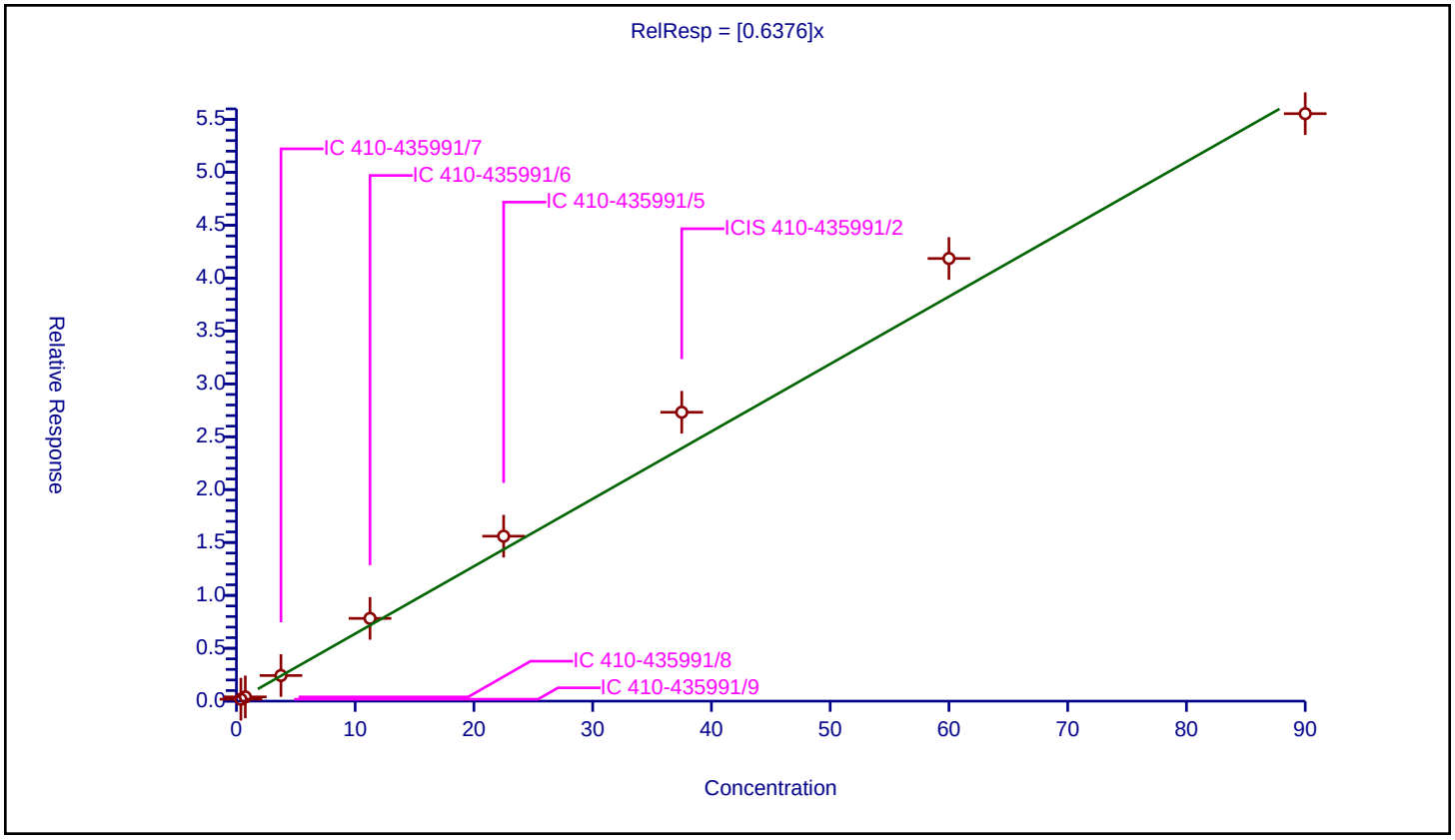
Curve Coefficients

Intercept:	0
Slope:	0.6376

Error Coefficients

Standard Error:	4380000
Relative Standard Error:	13.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.375	0.182777	5.0	679351.0	0.487406	Y
2	IC 410-435991/8	0.75	0.401216	5.0	830213.0	0.534955	Y
3	IC 410-435991/7	3.75	2.423534	5.0	786261.0	0.646276	Y
4	IC 410-435991/6	11.25	7.823923	5.0	878009.0	0.69546	Y
5	IC 410-435991/5	22.5	15.596716	5.0	711922.0	0.693187	Y
6	ICIS 410-435991/2	37.5	27.315048	5.0	740287.0	0.728401	Y
7	IC 410-435991/4	60.0	41.853827	5.0	705508.0	0.697564	Y
8	IC 410-435991/3	90.0	55.550182	5.0	786367.0	0.617224	Y



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Calibration / Pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

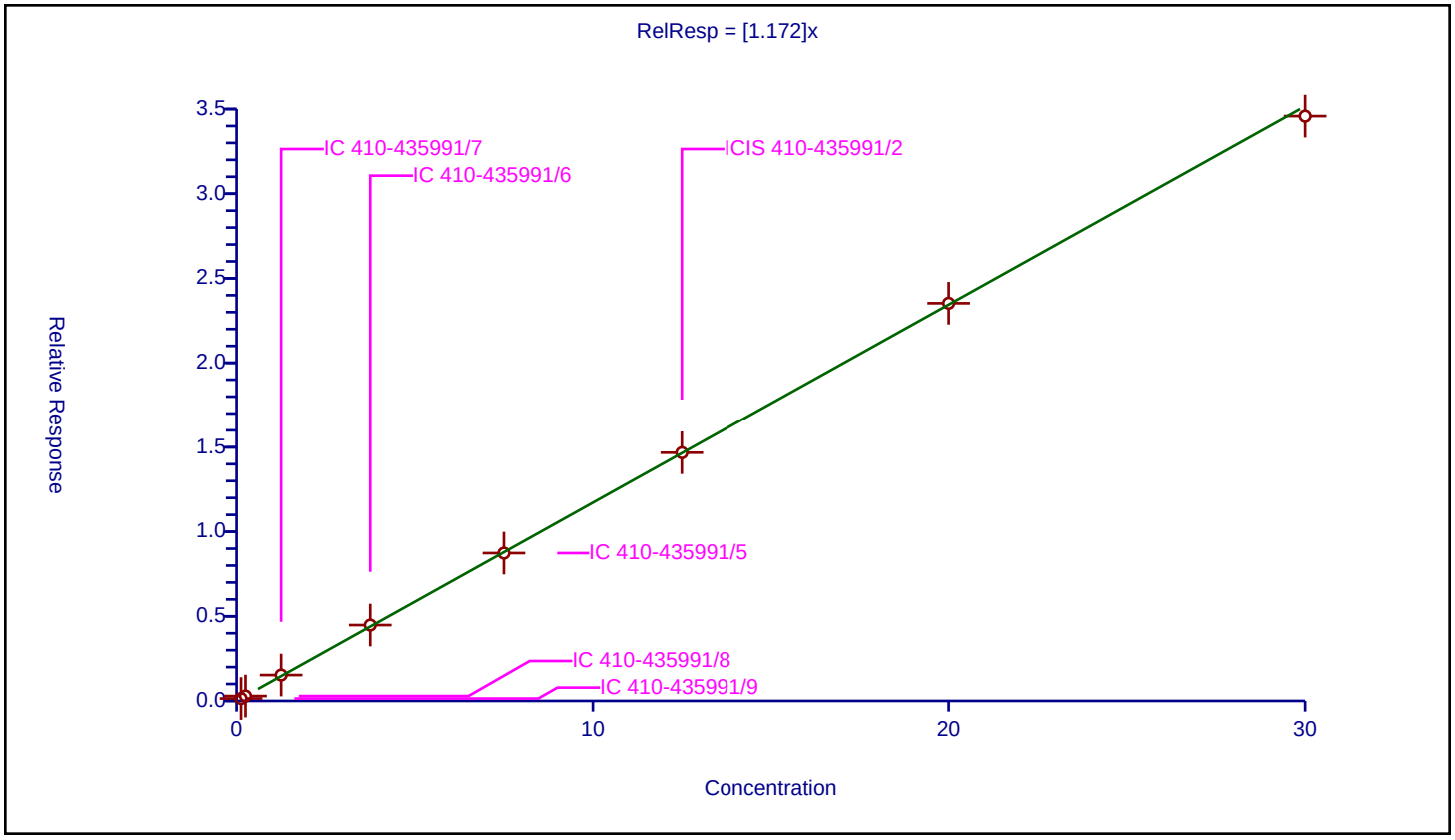
Curve Coefficients

Intercept:	0
Slope:	1.172

Error Coefficients

Standard Error:	2610000
Relative Standard Error:	2.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.141856	5.0	679351.0	1.134848	Y
2	IC 410-435991/8	0.25	0.289034	5.0	830213.0	1.156137	Y
3	IC 410-435991/7	1.25	1.529098	5.0	786261.0	1.223278	Y
4	IC 410-435991/6	3.75	4.482756	5.0	878009.0	1.195402	Y
5	IC 410-435991/5	7.5	8.736378	5.0	711922.0	1.16485	Y
6	ICIS 410-435991/2	12.5	14.677807	5.0	740287.0	1.174225	Y
7	IC 410-435991/4	20.0	23.52665	5.0	705508.0	1.176333	Y
8	IC 410-435991/3	30.0	34.582224	5.0	786367.0	1.152741	Y



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Calibration / p-Terphenyl-d14

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

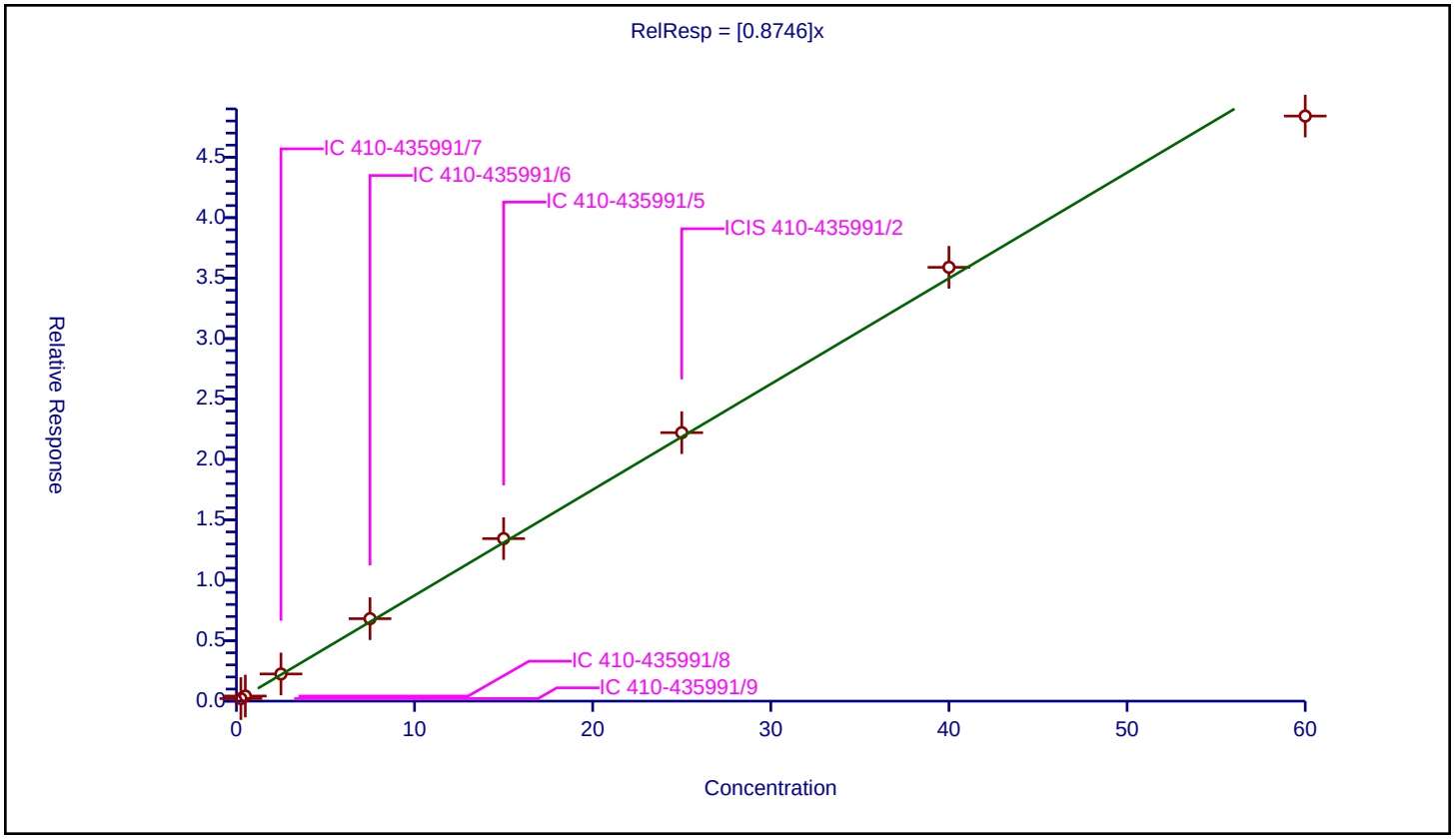
Curve Coefficients

Intercept:	0
Slope:	0.8746

Error Coefficients

Standard Error:	3770000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.25	0.213181	5.0	679351.0	0.852726	Y
2	IC 410-435991/8	0.5	0.422512	5.0	830213.0	0.845024	Y
3	IC 410-435991/7	2.5	2.249304	5.0	786261.0	0.899722	Y
4	IC 410-435991/6	7.5	6.823113	5.0	878009.0	0.909748	Y
5	IC 410-435991/5	15.0	13.446979	5.0	711922.0	0.896465	Y
6	ICIS 410-435991/2	25.0	22.215276	5.0	740287.0	0.888611	Y
7	IC 410-435991/4	40.0	35.894093	5.0	705508.0	0.897352	Y
8	IC 410-435991/3	60.0	48.406641	5.0	786367.0	0.806777	Y



Calibration / p-Dimethylamino azobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

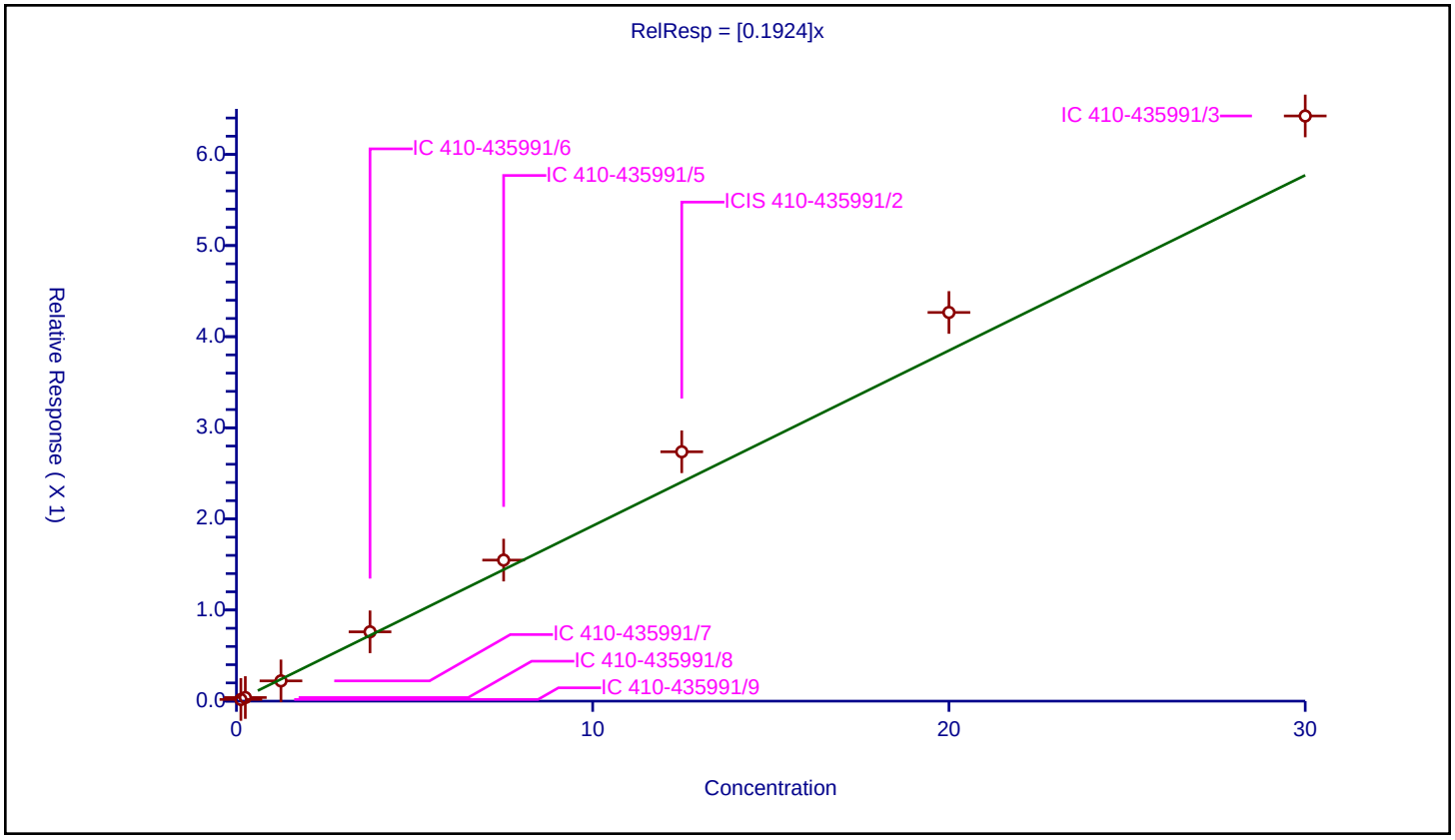
Curve Coefficients

Intercept:	0
Slope:	0.1924

Error Coefficients

Standard Error:	480000
Relative Standard Error:	14.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.018451	5.0	679351.0	0.147611	Y
2	IC 410-435991/8	0.25	0.03952	5.0	830213.0	0.15808	Y
3	IC 410-435991/7	1.25	0.222413	5.0	786261.0	0.177931	Y
4	IC 410-435991/6	3.75	0.76075	5.0	878009.0	0.202867	Y
5	IC 410-435991/5	7.5	1.547887	5.0	711922.0	0.206385	Y
6	ICIS 410-435991/2	12.5	2.736844	5.0	740287.0	0.218948	Y
7	IC 410-435991/4	20.0	4.265728	5.0	705508.0	0.213286	Y
8	IC 410-435991/3	30.0	6.422389	5.0	786367.0	0.21408	Y



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Calibration / Chlorobenzilate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

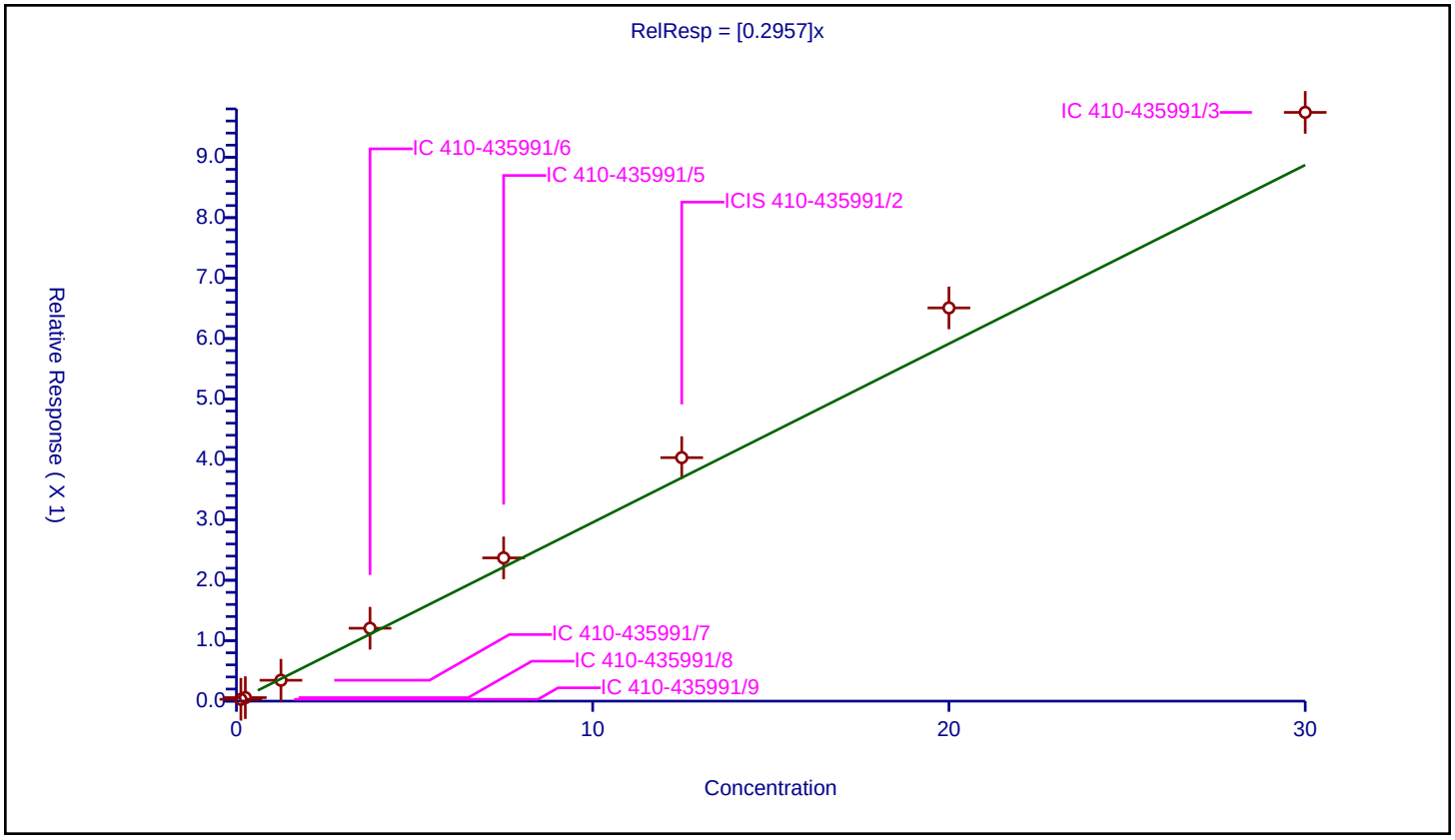
Curve Coefficients

Intercept:	0
Slope:	0.2957

Error Coefficients

Standard Error:	728000
Relative Standard Error:	13.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.030654	5.0	679351.0	0.245234	Y
2	IC 410-435991/8	0.25	0.058371	5.0	830213.0	0.233482	Y
3	IC 410-435991/7	1.25	0.345916	5.0	786261.0	0.276733	Y
4	IC 410-435991/6	3.75	1.206628	5.0	878009.0	0.321767	Y
5	IC 410-435991/5	7.5	2.370189	5.0	711922.0	0.316025	Y
6	ICIS 410-435991/2	12.5	4.029113	5.0	740287.0	0.322329	Y
7	IC 410-435991/4	20.0	6.506893	5.0	705508.0	0.325345	Y
8	IC 410-435991/3	30.0	9.742359	5.0	786367.0	0.324745	Y



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Calibration / 3,3'-Dimethylbenzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

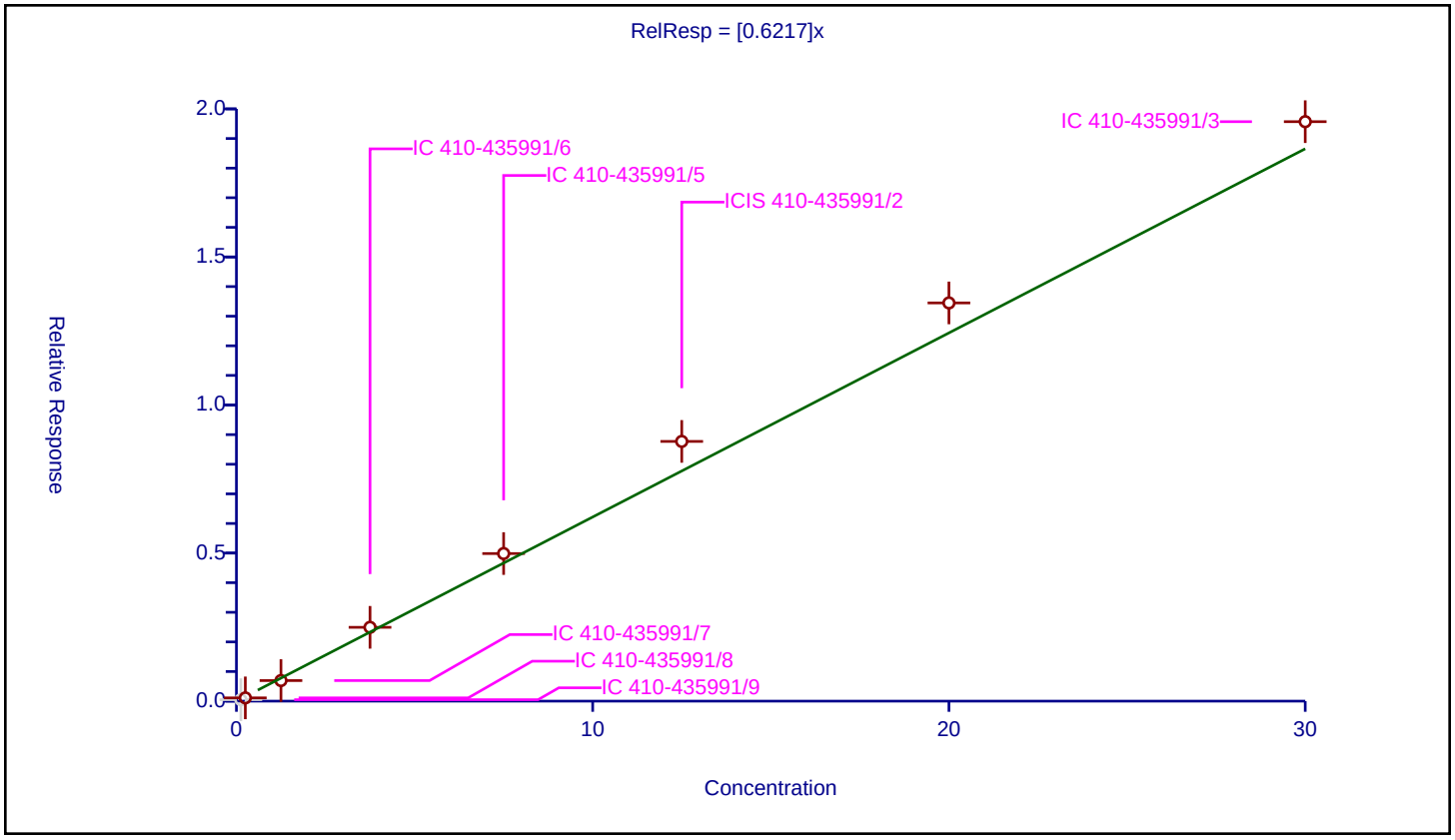
Curve Coefficients

Intercept:	0
Slope:	0.6217

Error Coefficients

Standard Error:	1610000
Relative Standard Error:	14.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.04862	5.0	679351.0	0.388959	N
2	IC 410-435991/8	0.25	0.110195	5.0	830213.0	0.440778	Y
3	IC 410-435991/7	1.25	0.694928	5.0	786261.0	0.555943	Y
4	IC 410-435991/6	3.75	2.492571	5.0	878009.0	0.664686	Y
5	IC 410-435991/5	7.5	4.983769	5.0	711922.0	0.664503	Y
6	ICIS 410-435991/2	12.5	8.771051	5.0	740287.0	0.701684	Y
7	IC 410-435991/4	20.0	13.447332	5.0	705508.0	0.672367	Y
8	IC 410-435991/3	30.0	19.568592	5.0	786367.0	0.652286	Y



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Calibration / Butyl benzyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

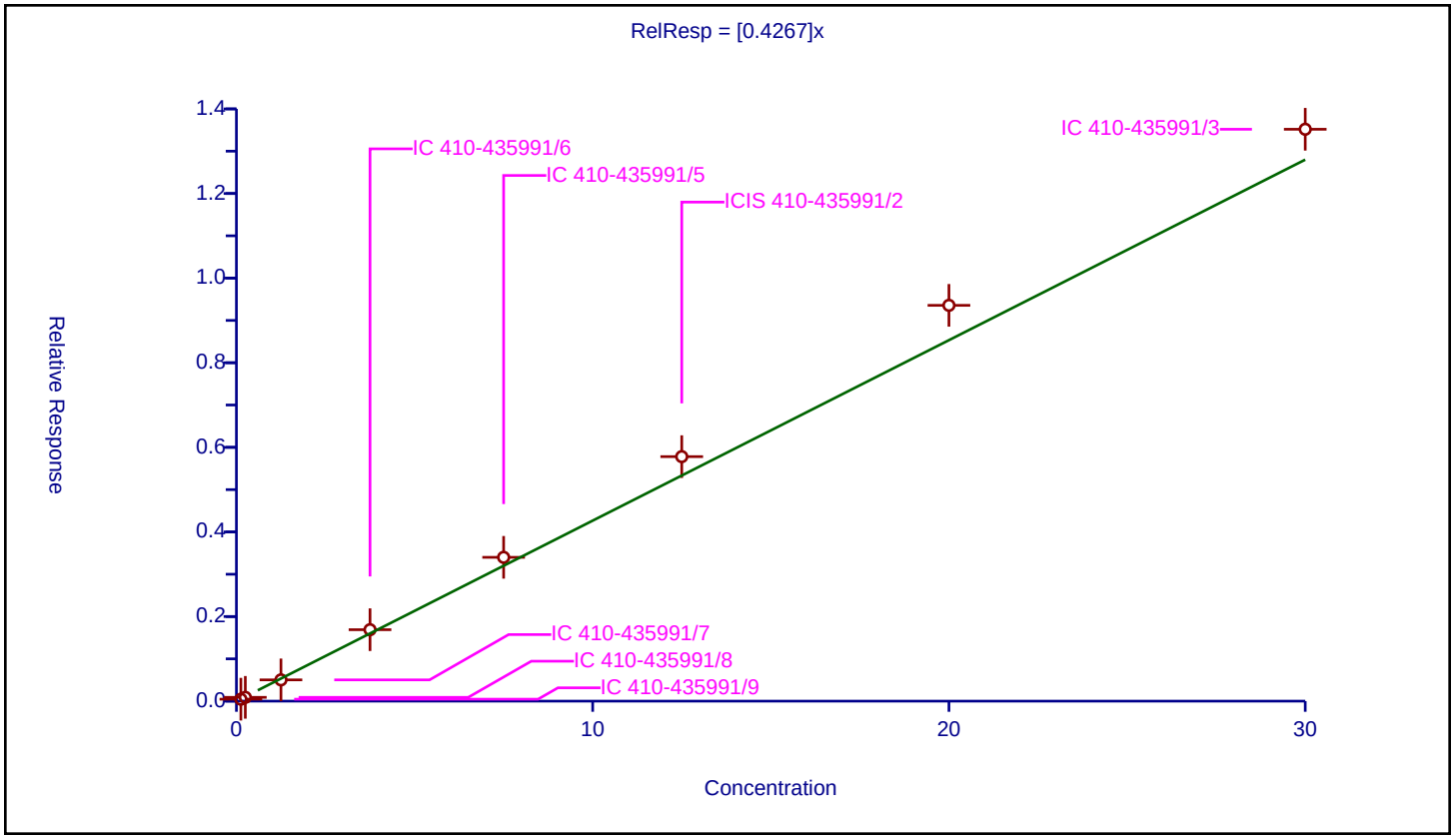
Curve Coefficients

Intercept:	0
Slope:	0.4267

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	10.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.04597	5.0	679351.0	0.367763	Y
2	IC 410-435991/8	0.25	0.089766	5.0	830213.0	0.359064	Y
3	IC 410-435991/7	1.25	0.502448	5.0	786261.0	0.401958	Y
4	IC 410-435991/6	3.75	1.688718	5.0	878009.0	0.450325	Y
5	IC 410-435991/5	7.5	3.399663	5.0	711922.0	0.453288	Y
6	ICIS 410-435991/2	12.5	5.779806	5.0	740287.0	0.462384	Y
7	IC 410-435991/4	20.0	9.35606	5.0	705508.0	0.467803	Y
8	IC 410-435991/3	30.0	13.518535	5.0	786367.0	0.450618	Y



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Calibration / 2-Acetylaminofluorene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

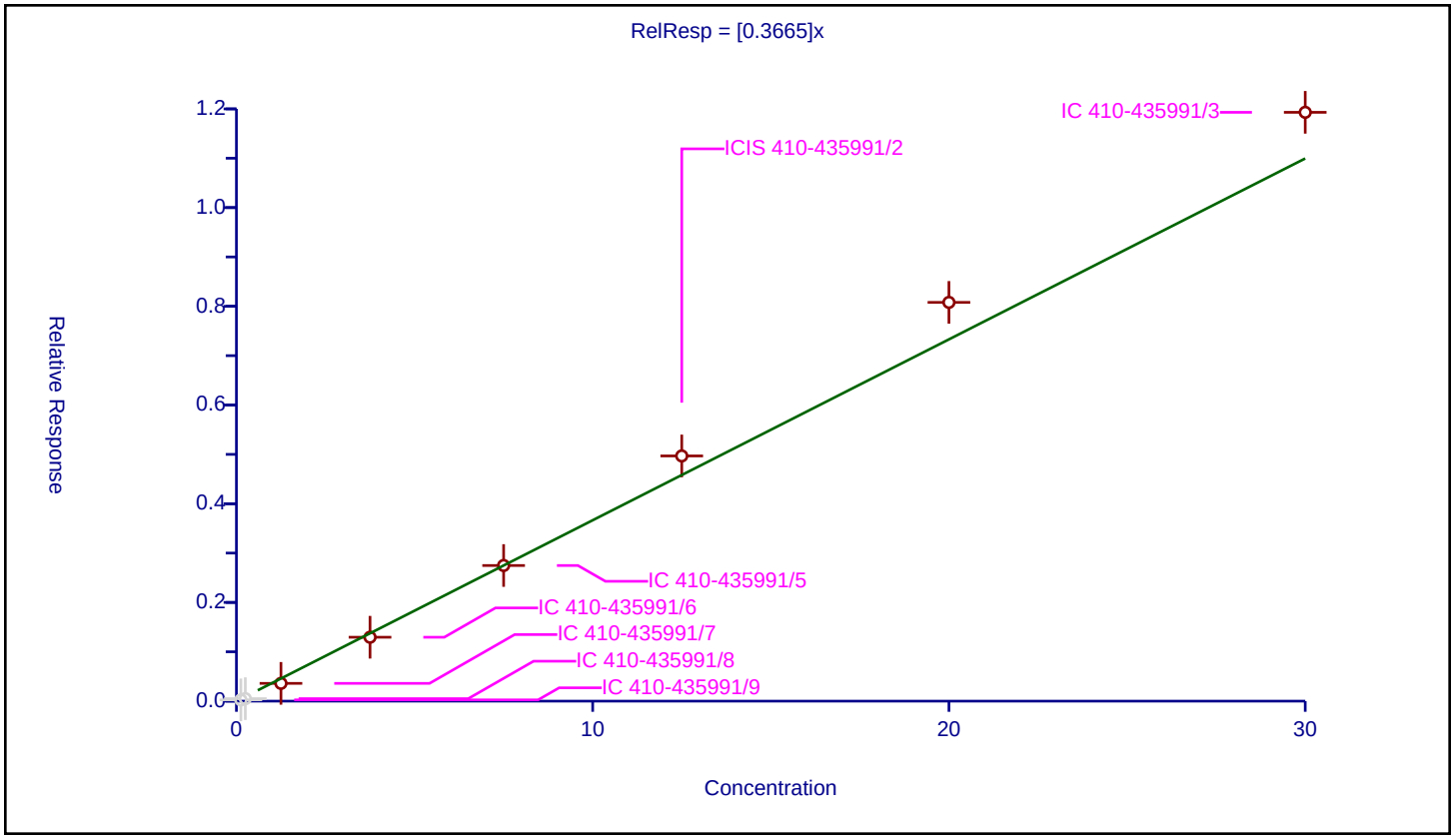
Curve Coefficients

Intercept:	0
Slope:	0.3665

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	12.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.025613	5.0	679351.0	0.204901	N
2	IC 410-435991/8	0.25	0.050397	5.0	830213.0	0.201587	N
3	IC 410-435991/7	1.25	0.360351	5.0	786261.0	0.288281	Y
4	IC 410-435991/6	3.75	1.294645	5.0	878009.0	0.345239	Y
5	IC 410-435991/5	7.5	2.74804	5.0	711922.0	0.366405	Y
6	ICIS 410-435991/2	12.5	4.96858	5.0	740287.0	0.397486	Y
7	IC 410-435991/4	20.0	8.079391	5.0	705508.0	0.40397	Y
8	IC 410-435991/3	30.0	11.930638	5.0	786367.0	0.397688	Y



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Calibration / 3,3'-Dichlorobenzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

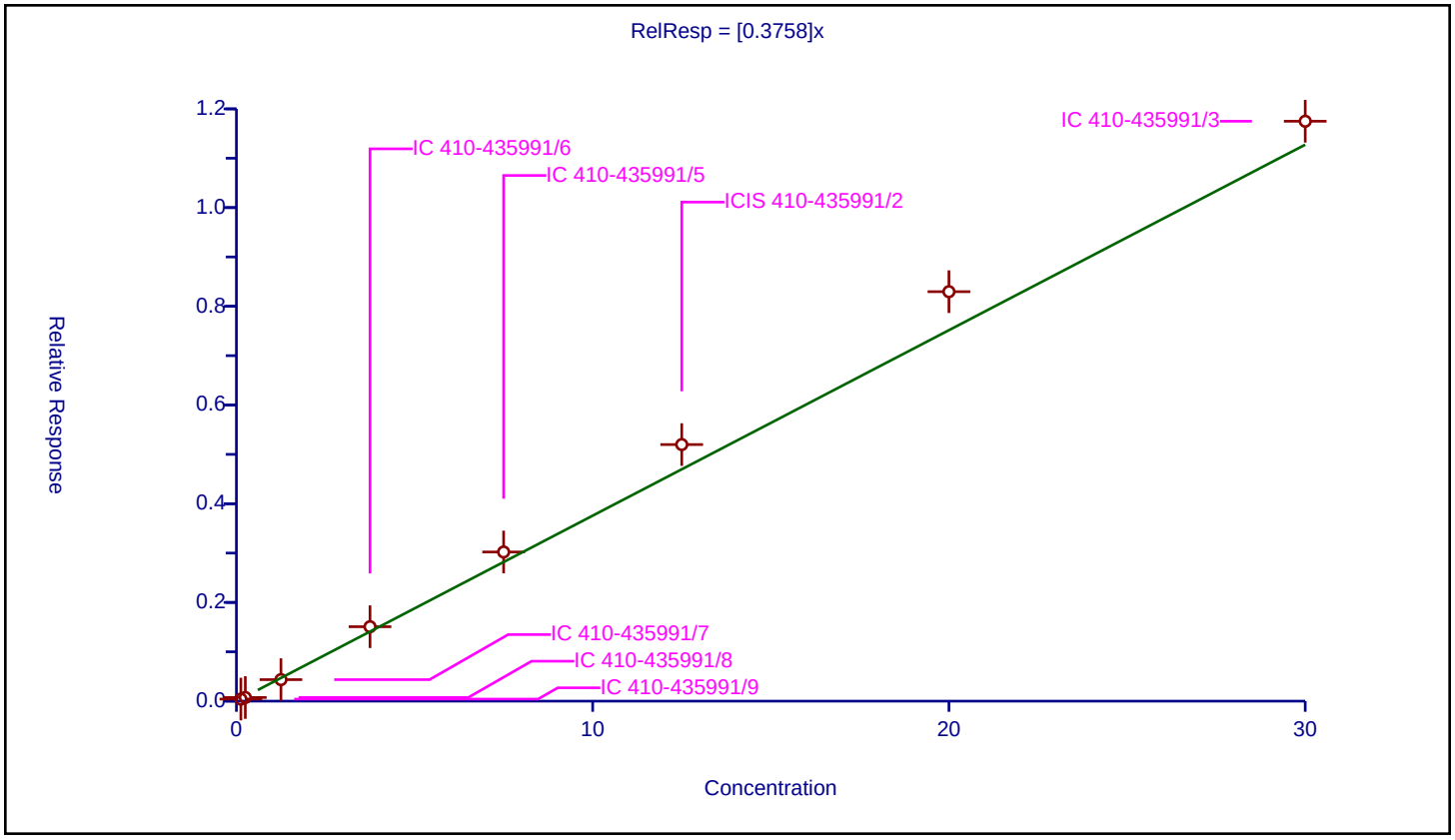
Curve Coefficients

Intercept:	0
Slope:	0.3758

Error Coefficients

Standard Error:	897000
Relative Standard Error:	11.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.041893	5.0	679351.0	0.335143	Y
2	IC 410-435991/8	0.25	0.073794	5.0	830213.0	0.295177	Y
3	IC 410-435991/7	1.25	0.435822	5.0	786261.0	0.348658	Y
4	IC 410-435991/6	3.75	1.508037	5.0	878009.0	0.402143	Y
5	IC 410-435991/5	7.5	3.022536	5.0	711922.0	0.403005	Y
6	ICIS 410-435991/2	12.5	5.198713	5.0	740287.0	0.415897	Y
7	IC 410-435991/4	20.0	8.296454	5.0	705508.0	0.414823	Y
8	IC 410-435991/3	30.0	11.749565	5.0	786367.0	0.391652	Y



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Calibration / 4,4'-Methylene bis(2-chloroaniline)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

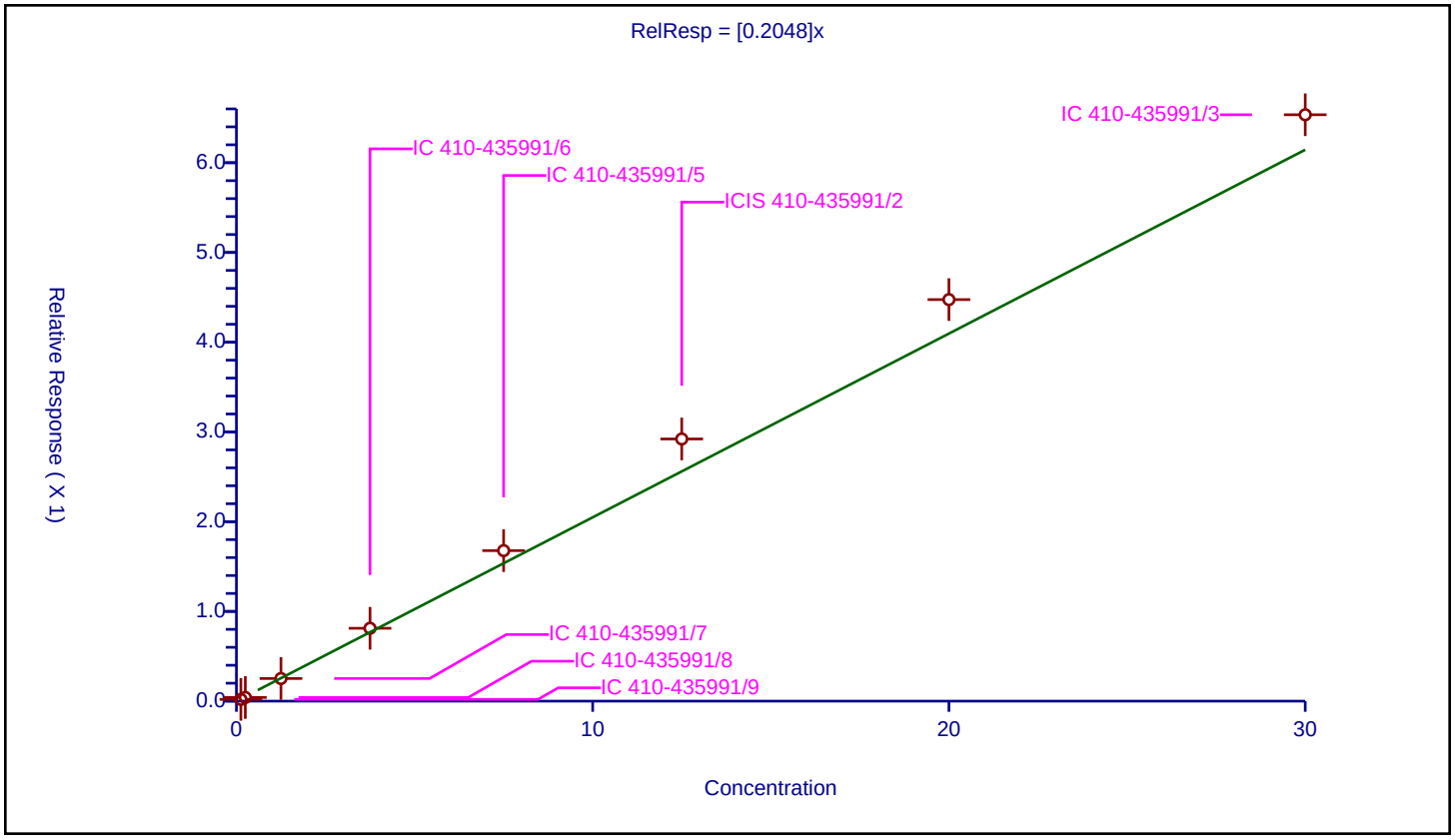
Curve Coefficients

Intercept:	0
Slope:	0.2048

Error Coefficients

Standard Error:	496000
Relative Standard Error:	14.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.01971	5.0	679351.0	0.15768	Y
2	IC 410-435991/8	0.25	0.040917	5.0	830213.0	0.163669	Y
3	IC 410-435991/7	1.25	0.252111	5.0	786261.0	0.201689	Y
4	IC 410-435991/6	3.75	0.811945	5.0	878009.0	0.216519	Y
5	IC 410-435991/5	7.5	1.677333	5.0	711922.0	0.223644	Y
6	ICIS 410-435991/2	12.5	2.921576	5.0	740287.0	0.233726	Y
7	IC 410-435991/4	20.0	4.474953	5.0	705508.0	0.223748	Y
8	IC 410-435991/3	30.0	6.534824	5.0	786367.0	0.217827	Y



Calibration / Benzo[a]anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

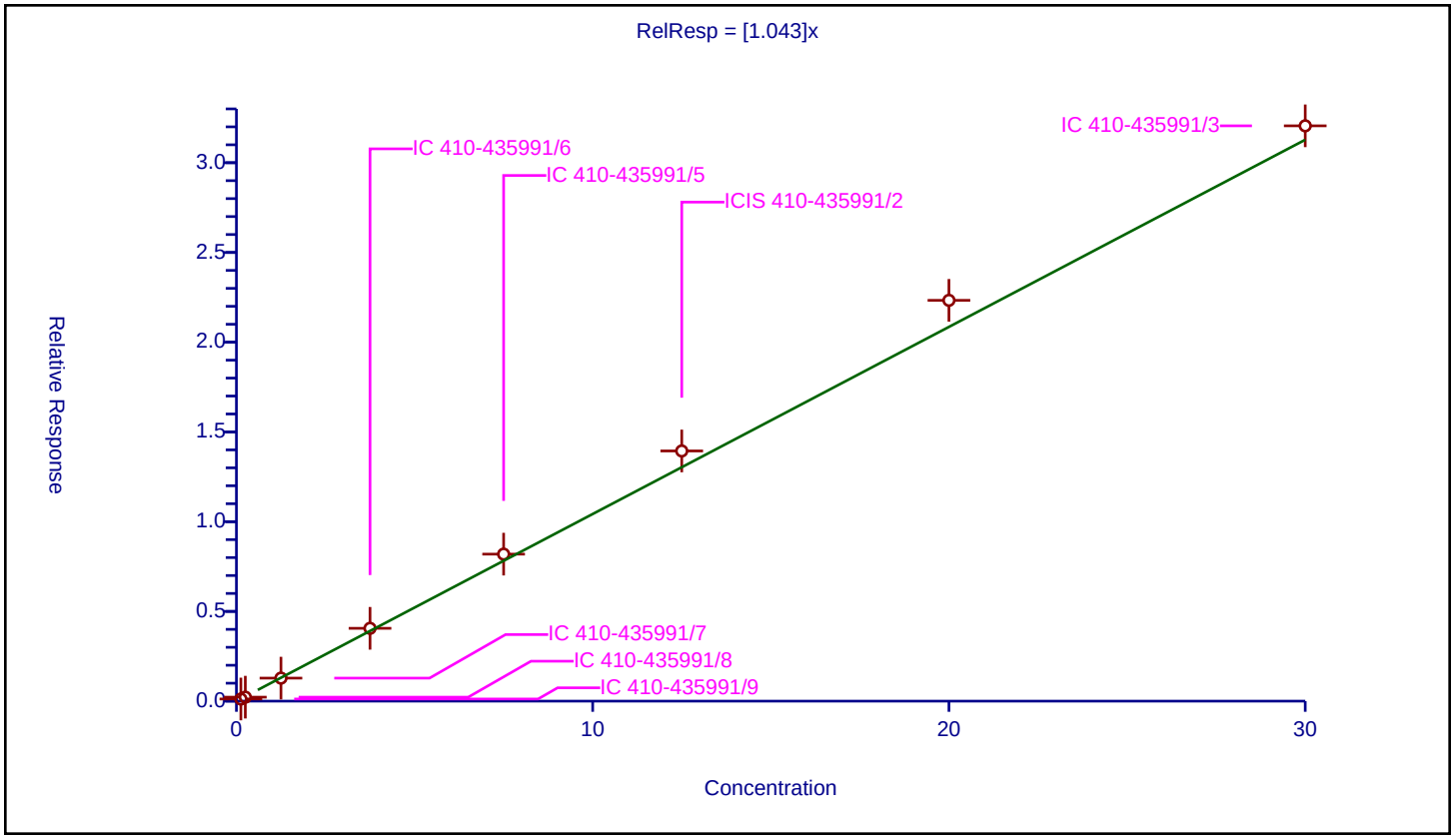
Curve Coefficients

Intercept:	0
Slope:	1.043

Error Coefficients

Standard Error:	2440000
Relative Standard Error:	8.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.119511	5.0	679351.0	0.956089	Y
2	IC 410-435991/8	0.25	0.22116	5.0	830213.0	0.88464	Y
3	IC 410-435991/7	1.25	1.282246	5.0	786261.0	1.025797	Y
4	IC 410-435991/6	3.75	4.05792	5.0	878009.0	1.082112	Y
5	IC 410-435991/5	7.5	8.190841	5.0	711922.0	1.092112	Y
6	ICIS 410-435991/2	12.5	13.939715	5.0	740287.0	1.115177	Y
7	IC 410-435991/4	20.0	22.332412	5.0	705508.0	1.116621	Y
8	IC 410-435991/3	30.0	32.055974	5.0	786367.0	1.068532	Y



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Calibration / Chrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

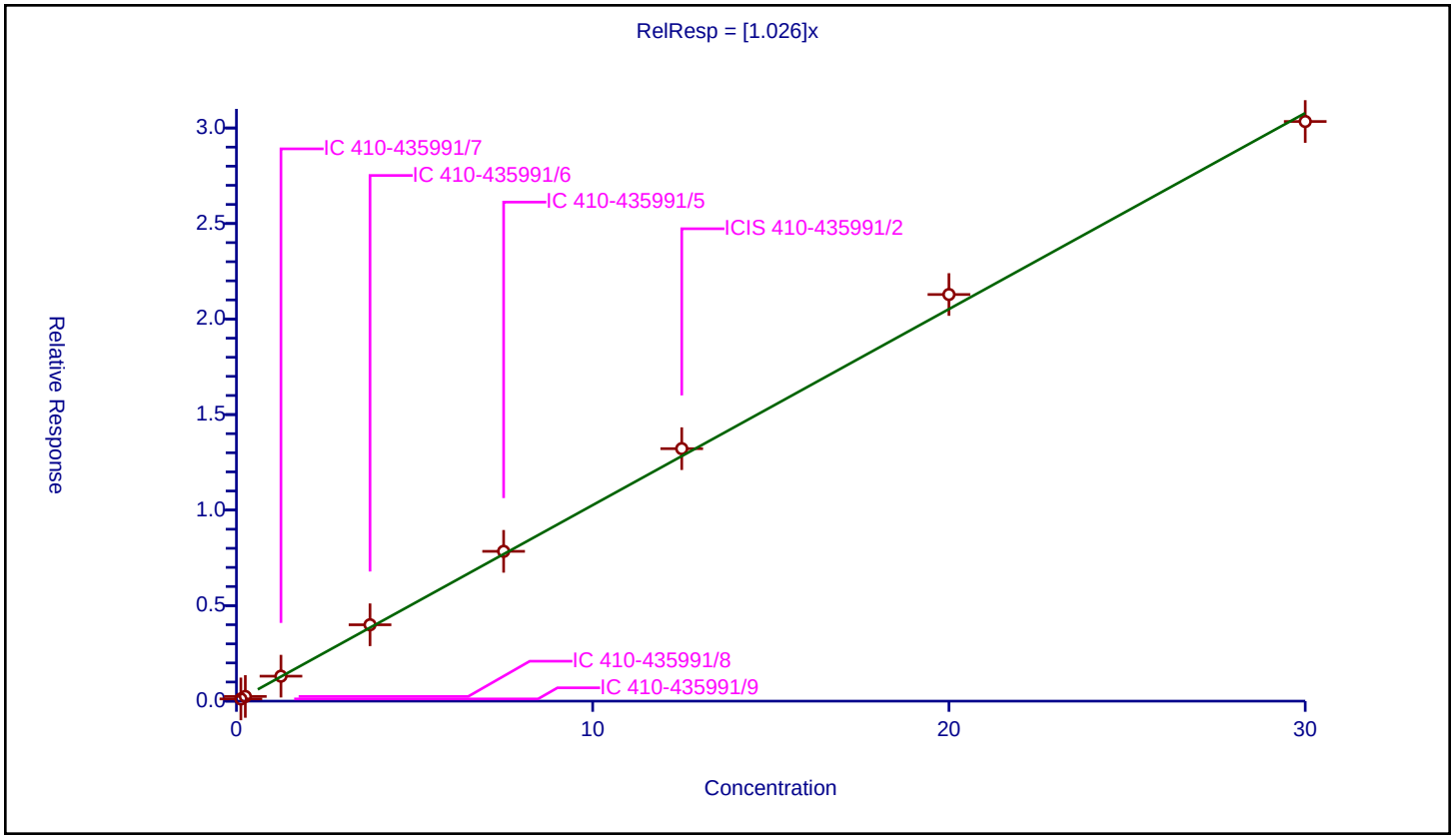
Curve Coefficients

Intercept:	0
Slope:	1.026

Error Coefficients

Standard Error:	2310000
Relative Standard Error:	4.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.116942	5.0	679351.0	0.93554	Y
2	IC 410-435991/8	0.25	0.245738	5.0	830213.0	0.982953	Y
3	IC 410-435991/7	1.25	1.307002	5.0	786261.0	1.045602	Y
4	IC 410-435991/6	3.75	3.997892	5.0	878009.0	1.066104	Y
5	IC 410-435991/5	7.5	7.840508	5.0	711922.0	1.045401	Y
6	ICIS 410-435991/2	12.5	13.214821	5.0	740287.0	1.057186	Y
7	IC 410-435991/4	20.0	21.284982	5.0	705508.0	1.064249	Y
8	IC 410-435991/3	30.0	30.340216	5.0	786367.0	1.011341	Y



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Calibration / Bis(2-ethylhexyl) phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

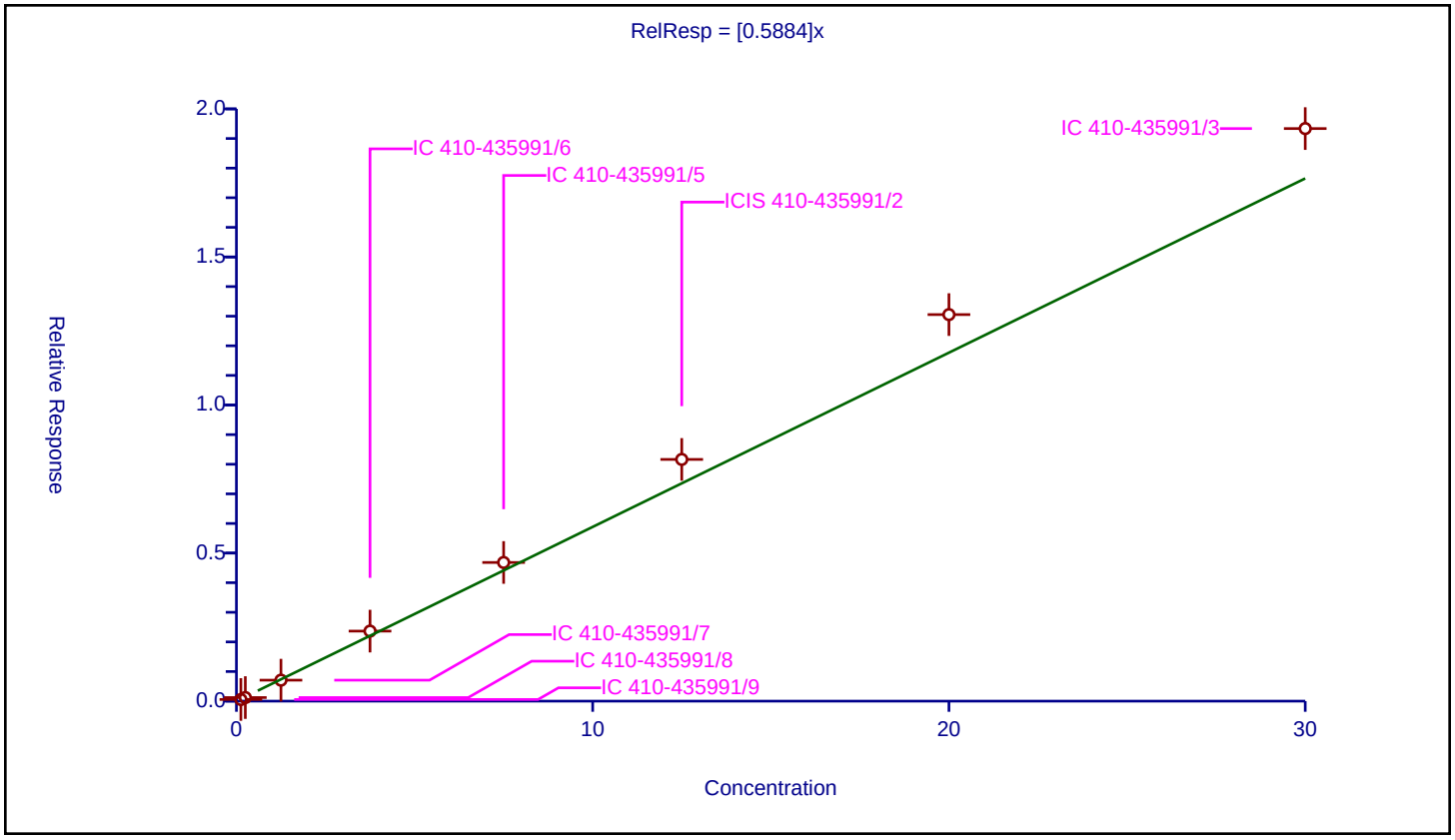
Curve Coefficients

Intercept:	0
Slope:	0.5884

Error Coefficients

Standard Error:	1450000
Relative Standard Error:	13.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.056333	5.0	679351.0	0.450665	Y
2	IC 410-435991/8	0.25	0.121113	5.0	830213.0	0.484454	Y
3	IC 410-435991/7	1.25	0.708327	5.0	786261.0	0.566662	Y
4	IC 410-435991/6	3.75	2.36526	5.0	878009.0	0.630736	Y
5	IC 410-435991/5	7.5	4.683238	5.0	711922.0	0.624432	Y
6	ICIS 410-435991/2	12.5	8.16253	5.0	740287.0	0.653002	Y
7	IC 410-435991/4	20.0	13.053325	5.0	705508.0	0.652666	Y
8	IC 410-435991/3	30.0	19.335094	5.0	786367.0	0.644503	Y



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Calibration / 6-Methylchrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

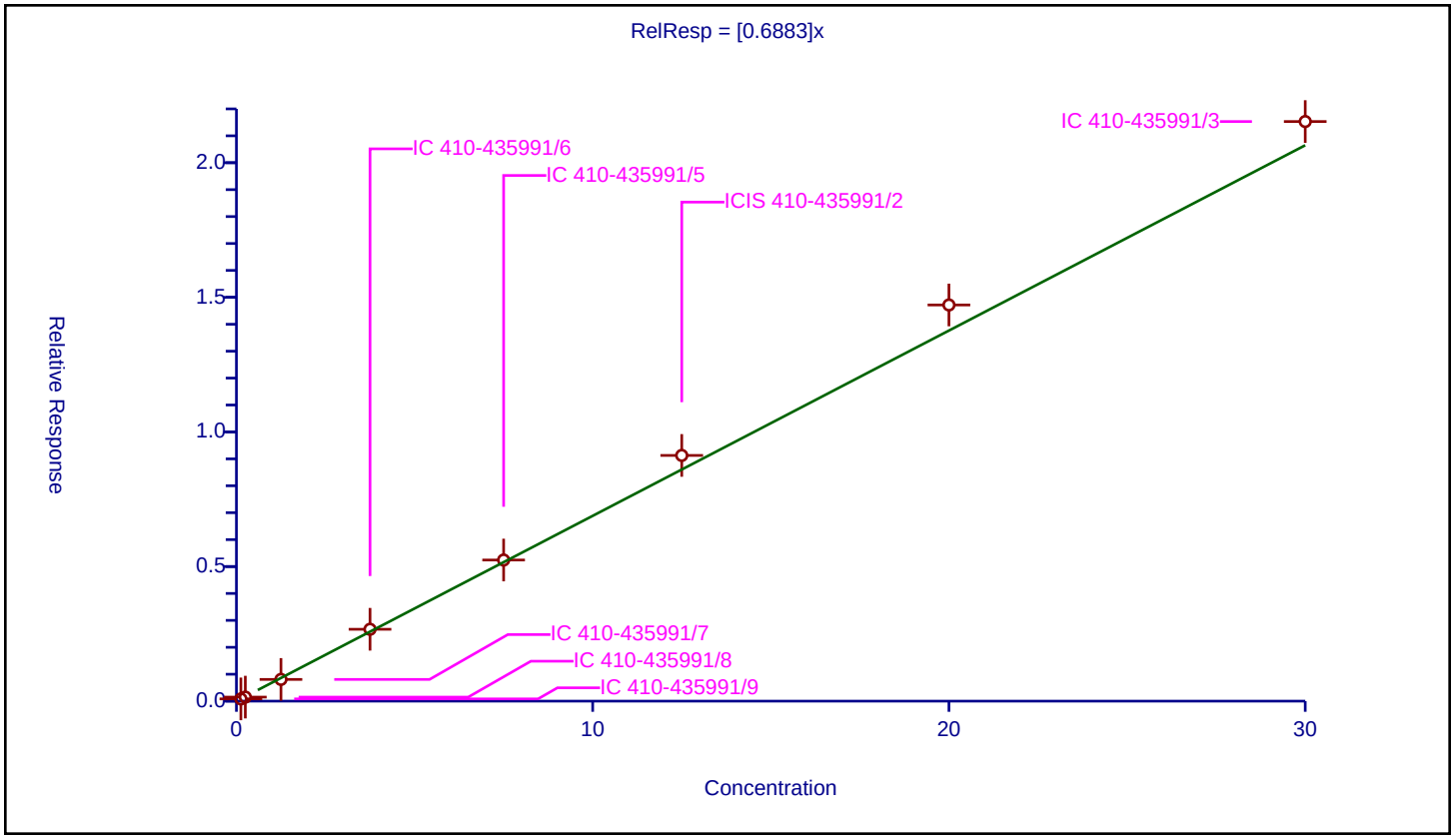
Curve Coefficients

Intercept:	0
Slope:	0.6883

Error Coefficients

Standard Error:	1620000
Relative Standard Error:	6.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.083263	5.0	679351.0	0.666106	Y
2	IC 410-435991/8	0.25	0.150106	5.0	830213.0	0.600424	Y
3	IC 410-435991/7	1.25	0.806462	5.0	786261.0	0.64517	Y
4	IC 410-435991/6	3.75	2.669551	5.0	878009.0	0.71188	Y
5	IC 410-435991/5	7.5	5.242295	5.0	711922.0	0.698973	Y
6	ICIS 410-435991/2	12.5	9.127352	5.0	740287.0	0.730188	Y
7	IC 410-435991/4	20.0	14.716375	5.0	705508.0	0.735819	Y
8	IC 410-435991/3	30.0	21.530157	5.0	786367.0	0.717672	Y



Calibration / Di-n-octyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

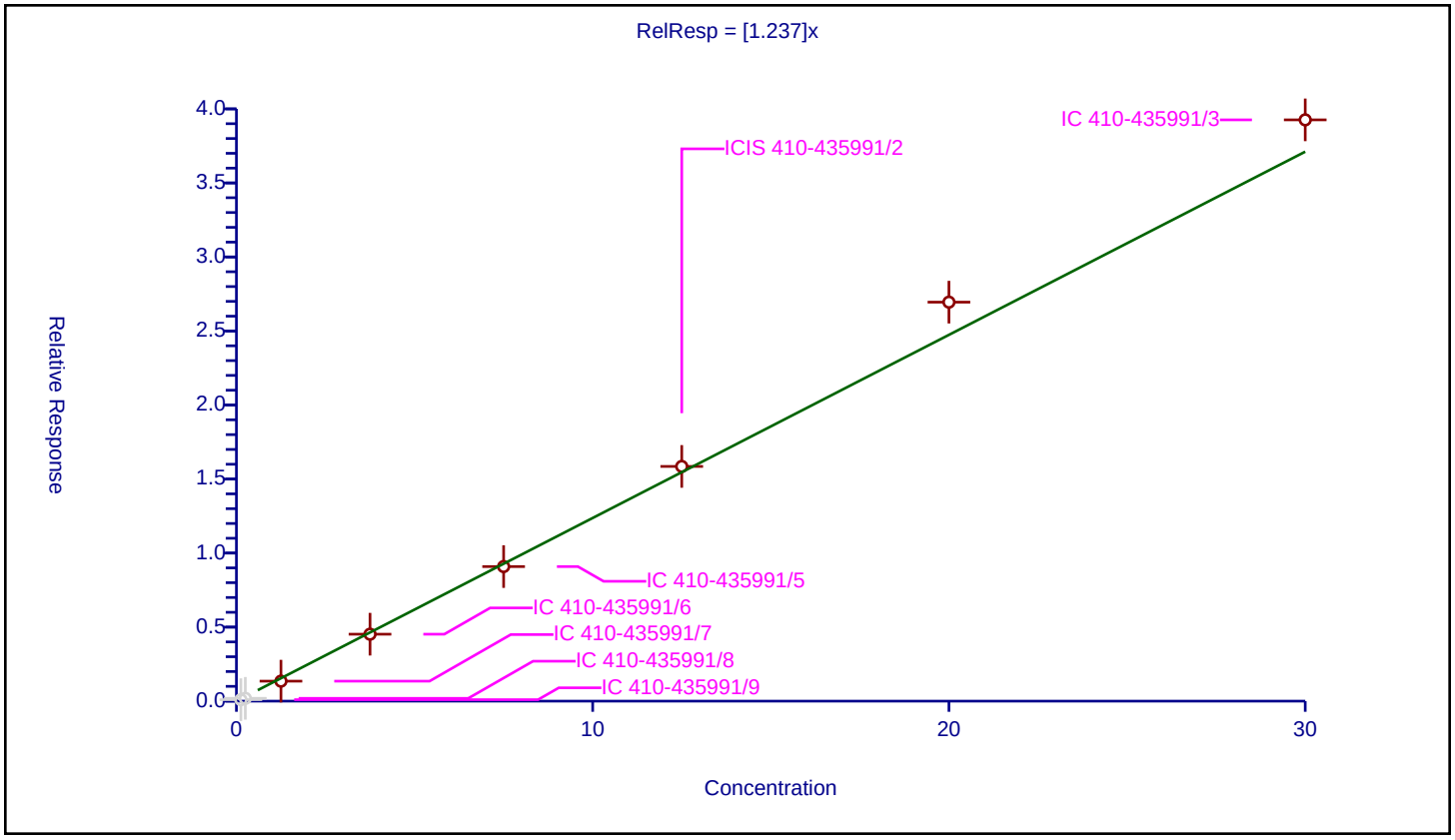
Curve Coefficients

Intercept:	0
Slope:	1.237

Error Coefficients

Standard Error:	2920000
Relative Standard Error:	7.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.100119	5.0	589100.0	0.800951	N
2	IC 410-435991/8	0.25	0.189001	5.0	706662.0	0.756005	N
3	IC 410-435991/7	1.25	1.350045	5.0	627742.0	1.080036	Y
4	IC 410-435991/6	3.75	4.521718	5.0	739094.0	1.205792	Y
5	IC 410-435991/5	7.5	9.088653	5.0	607315.0	1.21182	Y
6	ICIS 410-435991/2	12.5	15.85158	5.0	639006.0	1.268126	Y
7	IC 410-435991/4	20.0	26.948014	5.0	587483.0	1.347401	Y
8	IC 410-435991/3	30.0	39.258957	5.0	659523.0	1.308632	Y



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Calibration / 7,12-Dimethylbenz(a)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

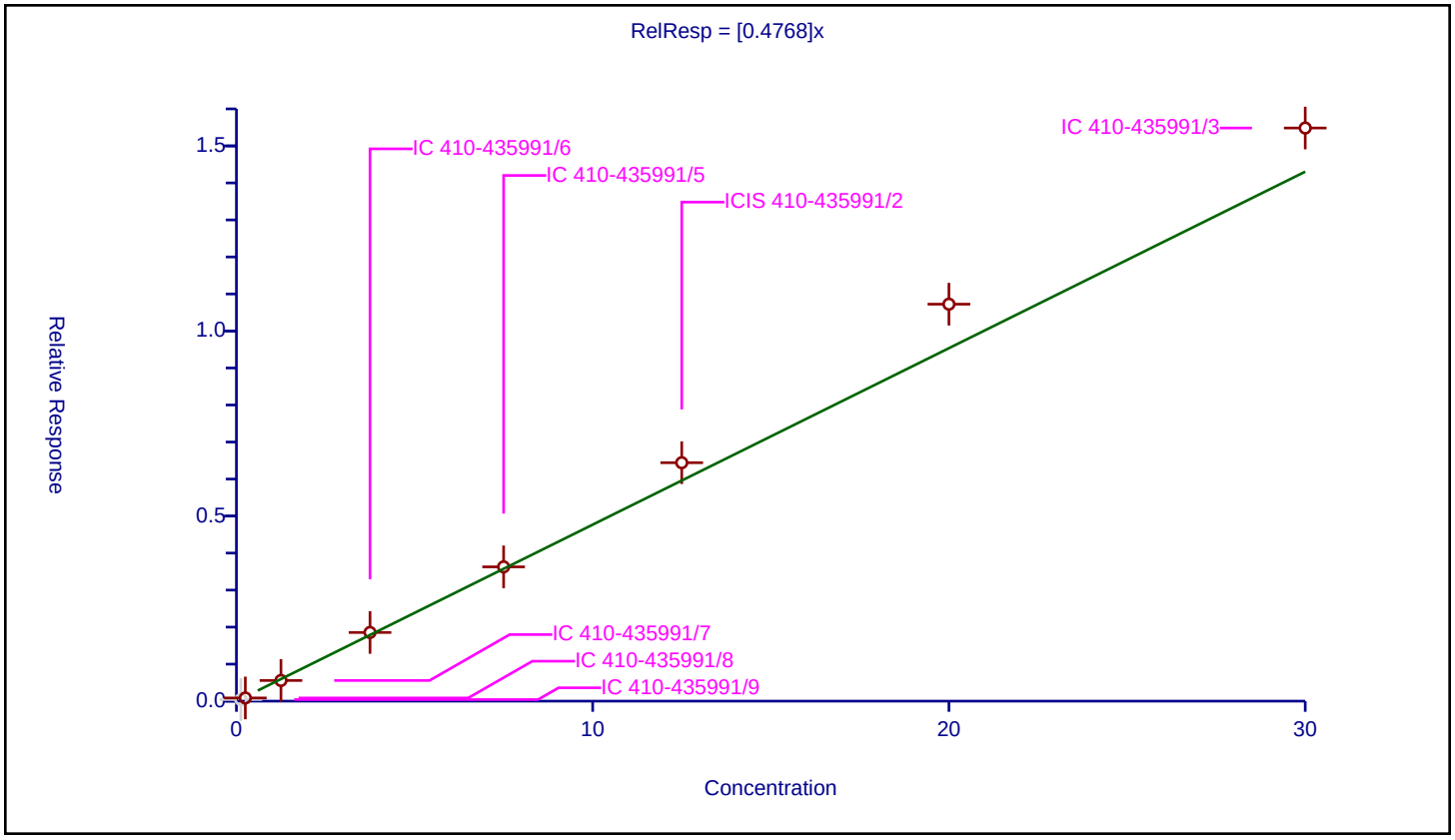
Curve Coefficients

Intercept:	0
Slope:	0.4768

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	13.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.043117	5.0	589100.0	0.344933	N
2	IC 410-435991/8	0.25	0.086229	5.0	706662.0	0.344917	Y
3	IC 410-435991/7	1.25	0.558024	5.0	627742.0	0.446419	Y
4	IC 410-435991/6	3.75	1.8554	5.0	739094.0	0.494773	Y
5	IC 410-435991/5	7.5	3.627319	5.0	607315.0	0.483642	Y
6	ICIS 410-435991/2	12.5	6.441356	5.0	639006.0	0.515308	Y
7	IC 410-435991/4	20.0	10.724157	5.0	587483.0	0.536208	Y
8	IC 410-435991/3	30.0	15.483054	5.0	659523.0	0.516102	Y



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Calibration / Benzo[b]fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

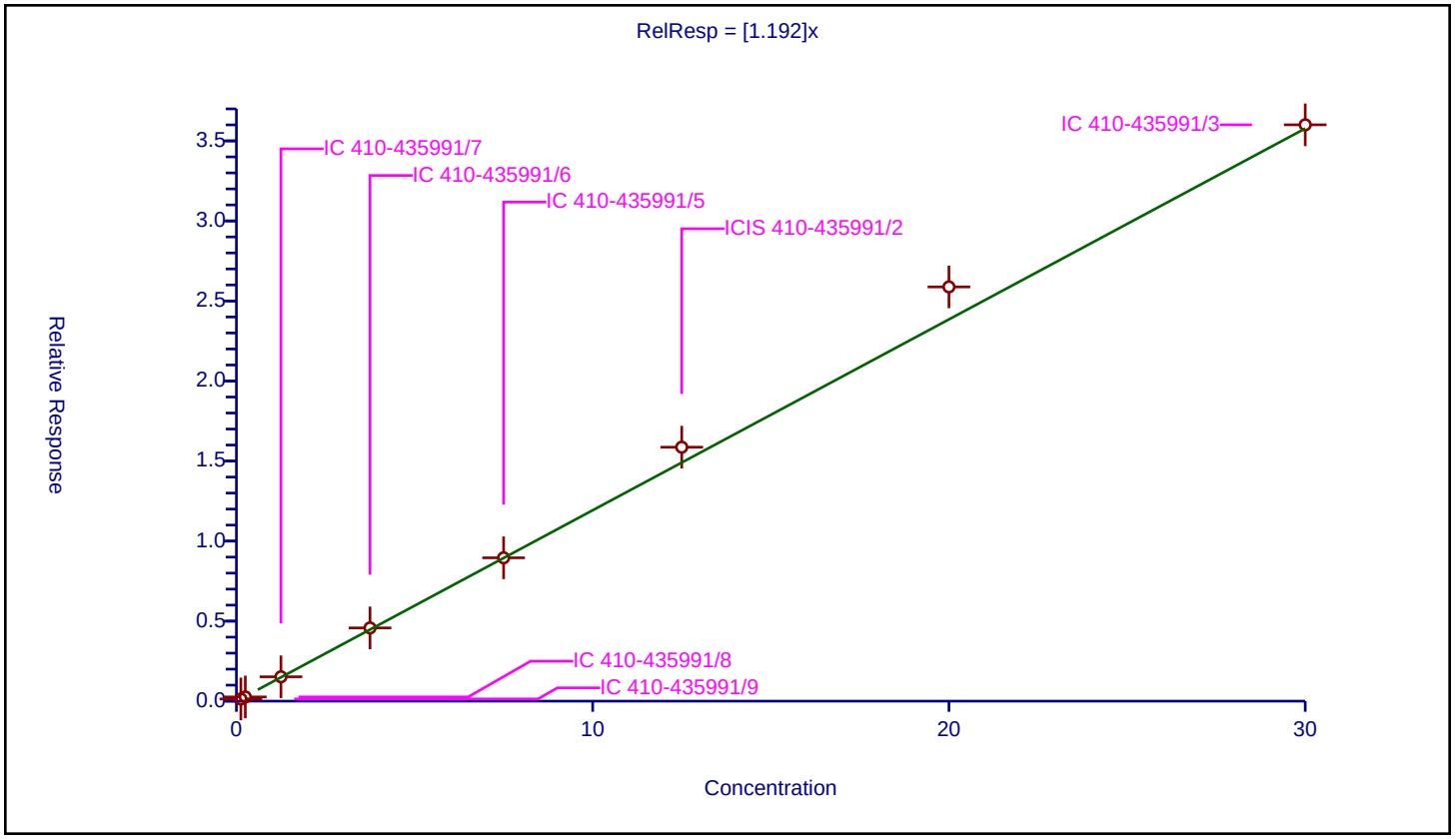
Curve Coefficients

Intercept:	0
Slope:	1.192

Error Coefficients

Standard Error:	2320000
Relative Standard Error:	6.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.136768	5.0	589100.0	1.094144	Y
2	IC 410-435991/8	0.25	0.262615	5.0	706662.0	1.05046	Y
3	IC 410-435991/7	1.25	1.522273	5.0	627742.0	1.217819	Y
4	IC 410-435991/6	3.75	4.574831	5.0	739094.0	1.219955	Y
5	IC 410-435991/5	7.5	8.955237	5.0	607315.0	1.194032	Y
6	ICIS 410-435991/2	12.5	15.864436	5.0	639006.0	1.269155	Y
7	IC 410-435991/4	20.0	25.877991	5.0	587483.0	1.2939	Y
8	IC 410-435991/3	30.0	36.004309	5.0	659523.0	1.200144	Y



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Calibration / Benzo[k]fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

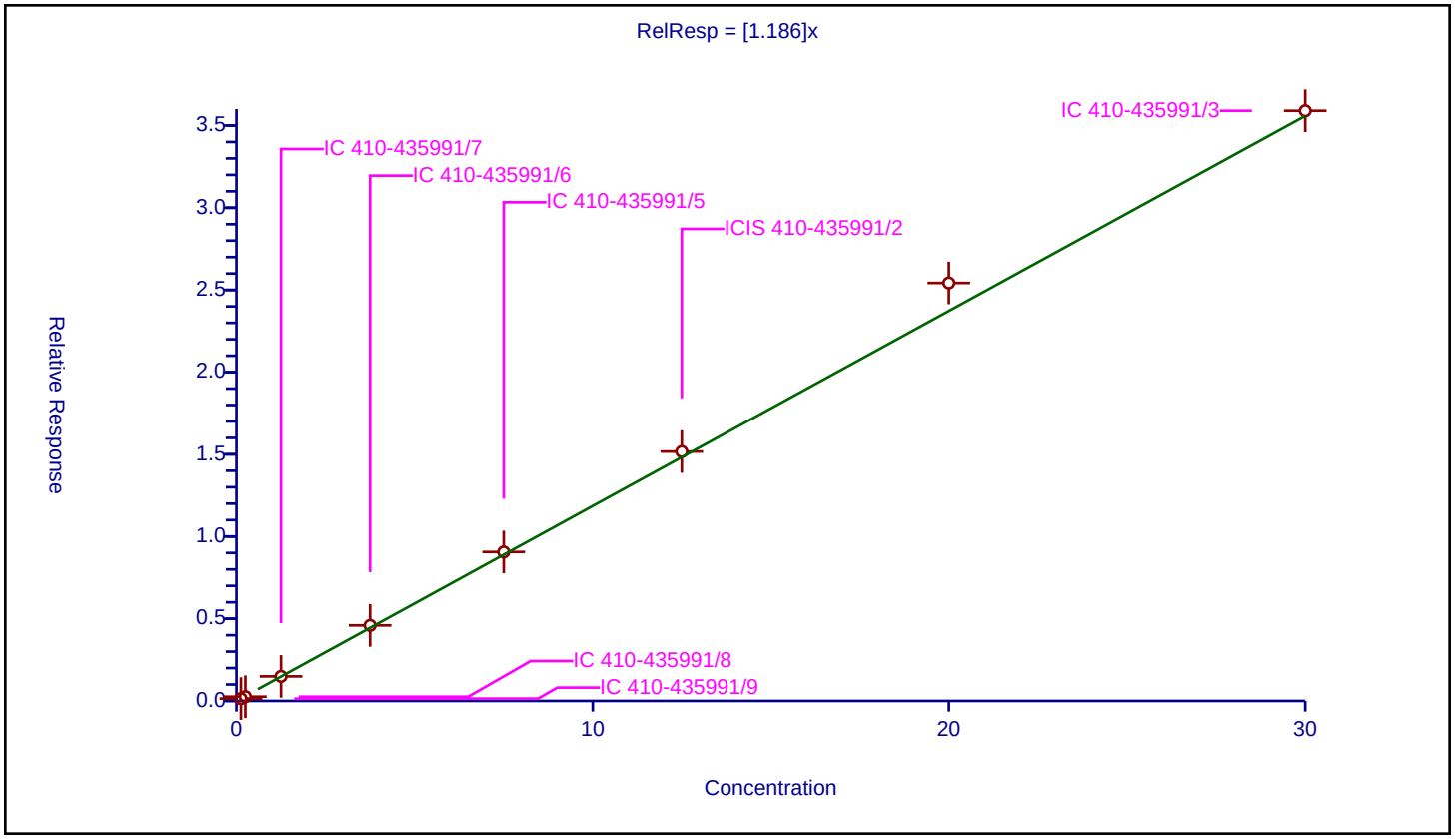
Curve Coefficients

Intercept:	0
Slope:	1.186

Error Coefficients

Standard Error:	2290000
Relative Standard Error:	6.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.143482	5.0	589100.0	1.147853	Y
2	IC 410-435991/8	0.25	0.257846	5.0	706662.0	1.031384	Y
3	IC 410-435991/7	1.25	1.494069	5.0	627742.0	1.195255	Y
4	IC 410-435991/6	3.75	4.594713	5.0	739094.0	1.225257	Y
5	IC 410-435991/5	7.5	9.060134	5.0	607315.0	1.208018	Y
6	ICIS 410-435991/2	12.5	15.169419	5.0	639006.0	1.213554	Y
7	IC 410-435991/4	20.0	25.426557	5.0	587483.0	1.271328	Y
8	IC 410-435991/3	30.0	35.896117	5.0	659523.0	1.196537	Y



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Calibration / Benzo[a]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

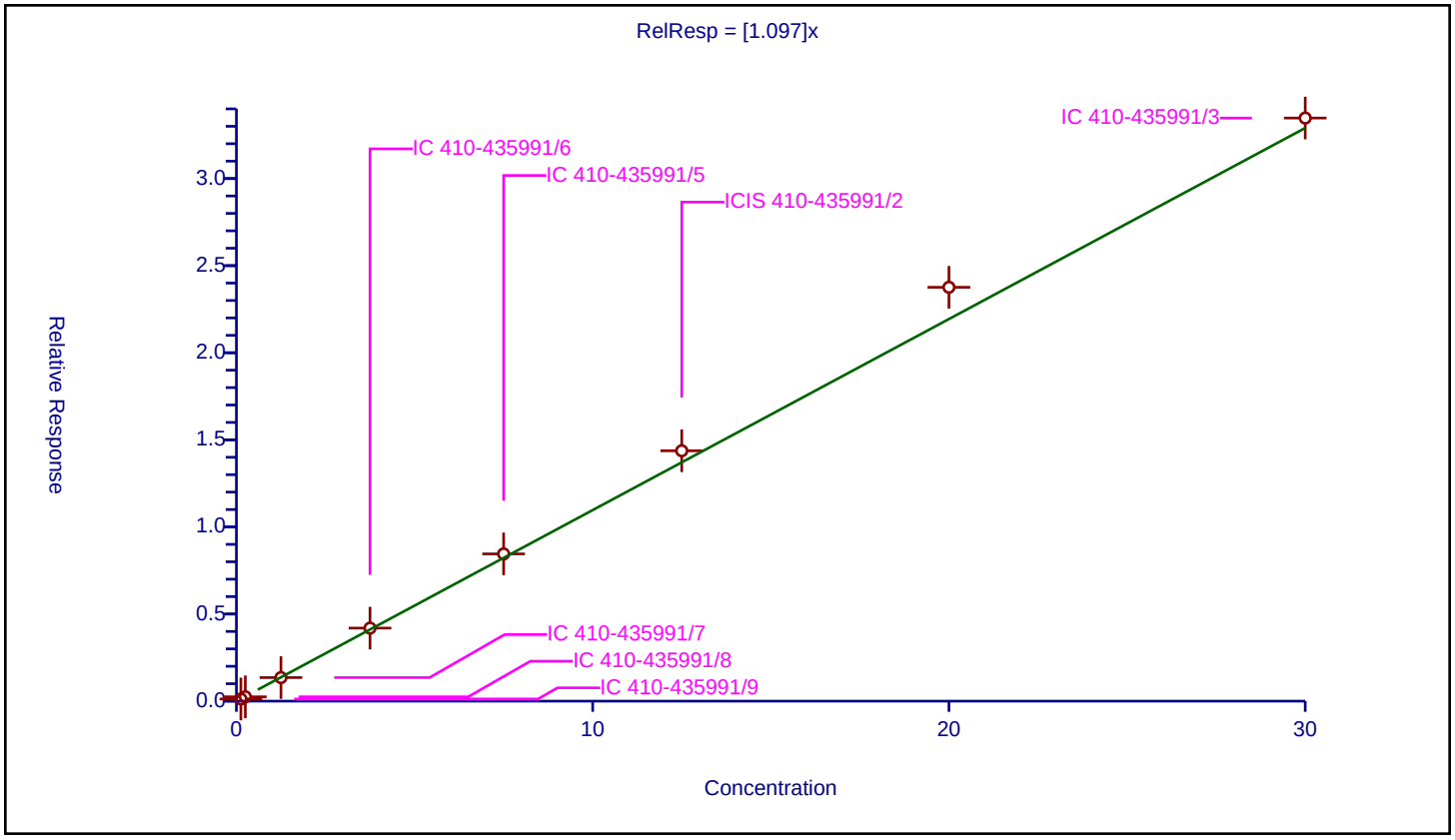
Curve Coefficients

Intercept:	0
Slope:	1.097

Error Coefficients

Standard Error:	2140000
Relative Standard Error:	6.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.125123	5.0	589100.0	1.000985	Y
2	IC 410-435991/8	0.25	0.248082	5.0	706662.0	0.992327	Y
3	IC 410-435991/7	1.25	1.352514	5.0	627742.0	1.082011	Y
4	IC 410-435991/6	3.75	4.19285	5.0	739094.0	1.118093	Y
5	IC 410-435991/5	7.5	8.452549	5.0	607315.0	1.127007	Y
6	ICIS 410-435991/2	12.5	14.373011	5.0	639006.0	1.149841	Y
7	IC 410-435991/4	20.0	23.757947	5.0	587483.0	1.187897	Y
8	IC 410-435991/3	30.0	33.474208	5.0	659523.0	1.115807	Y



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Calibration / 3-Methylcholanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

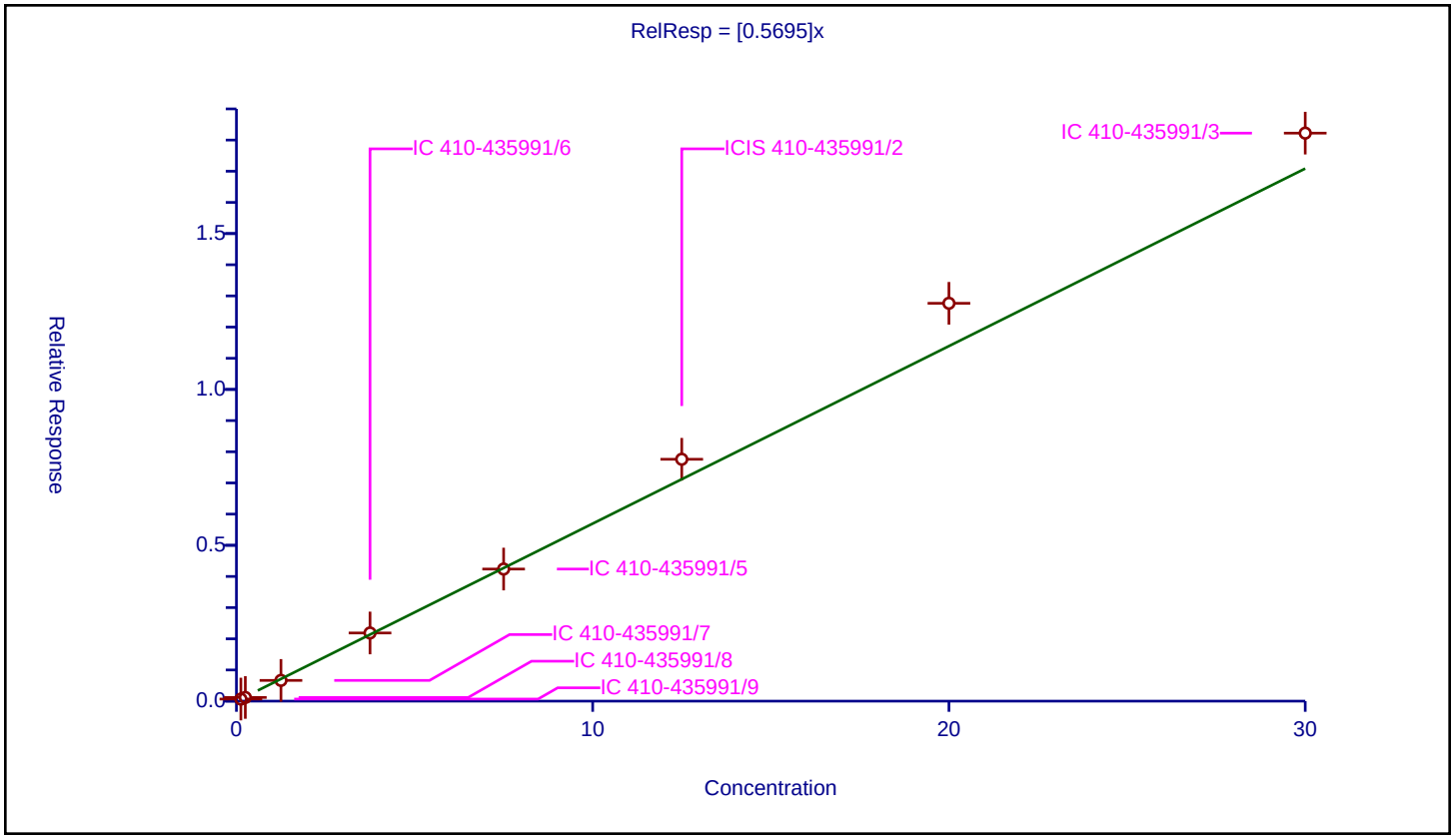
Curve Coefficients

Intercept:	0
Slope:	0.5695

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	9.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.067187	5.0	589100.0	0.537498	Y
2	IC 410-435991/8	0.25	0.117928	5.0	706662.0	0.471711	Y
3	IC 410-435991/7	1.25	0.665249	5.0	627742.0	0.5322	Y
4	IC 410-435991/6	3.75	2.187374	5.0	739094.0	0.5833	Y
5	IC 410-435991/5	7.5	4.237636	5.0	607315.0	0.565018	Y
6	ICIS 410-435991/2	12.5	7.75934	5.0	639006.0	0.620747	Y
7	IC 410-435991/4	20.0	12.763654	5.0	587483.0	0.638183	Y
8	IC 410-435991/3	30.0	18.222344	5.0	659523.0	0.607411	Y



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Calibration / Dibenz[a,h]acridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

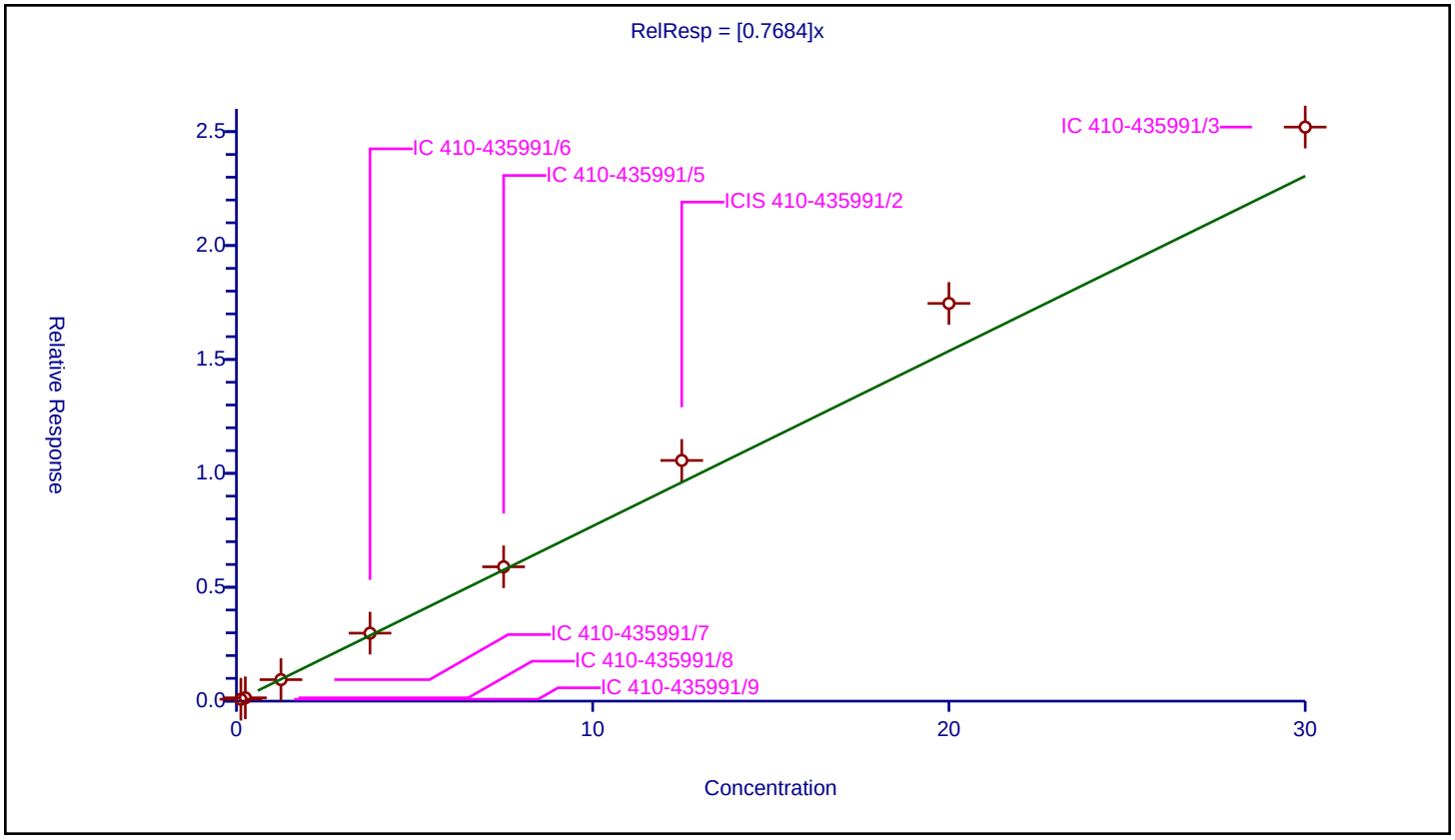
Curve Coefficients

Intercept:	0
Slope:	0.7684

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	12.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.083152	5.0	589100.0	0.665218	Y
2	IC 410-435991/8	0.25	0.146456	5.0	706662.0	0.585825	Y
3	IC 410-435991/7	1.25	0.944568	5.0	627742.0	0.755654	Y
4	IC 410-435991/6	3.75	2.984363	5.0	739094.0	0.79583	Y
5	IC 410-435991/5	7.5	5.897072	5.0	607315.0	0.786276	Y
6	ICIS 410-435991/2	12.5	10.567029	5.0	639006.0	0.845362	Y
7	IC 410-435991/4	20.0	17.46002	5.0	587483.0	0.873001	Y
8	IC 410-435991/3	30.0	25.200835	5.0	659523.0	0.840028	Y



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Calibration / Dibenz[a,j]acridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

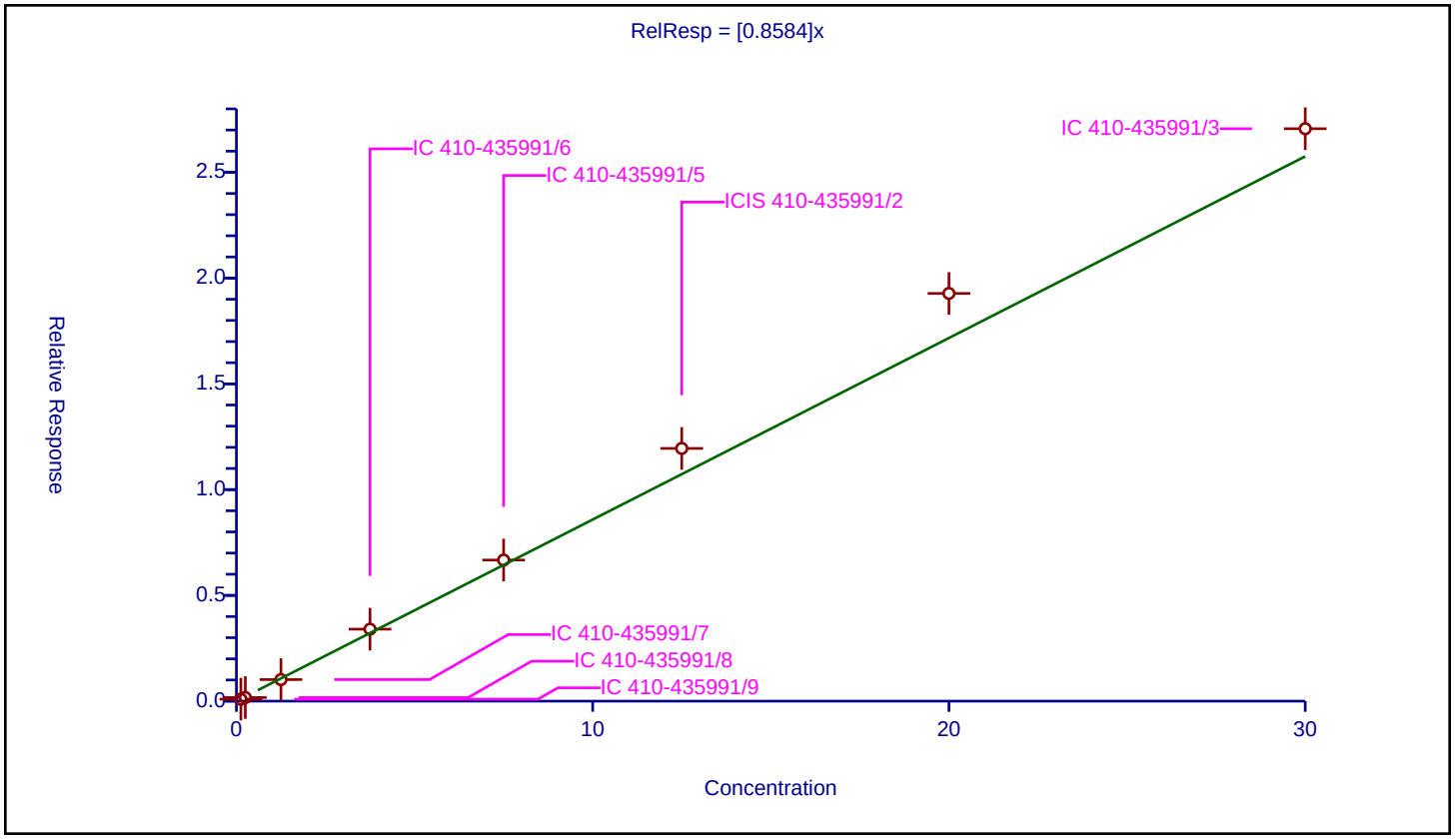
Curve Coefficients

Intercept:	0
Slope:	0.8584

Error Coefficients

Standard Error:	1740000
Relative Standard Error:	11.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.093702	5.0	589100.0	0.749618	Y
2	IC 410-435991/8	0.25	0.171072	5.0	706662.0	0.684288	Y
3	IC 410-435991/7	1.25	1.018707	5.0	627742.0	0.814965	Y
4	IC 410-435991/6	3.75	3.403457	5.0	739094.0	0.907589	Y
5	IC 410-435991/5	7.5	6.670764	5.0	607315.0	0.889435	Y
6	ICIS 410-435991/2	12.5	11.948143	5.0	639006.0	0.955851	Y
7	IC 410-435991/4	20.0	19.274873	5.0	587483.0	0.963744	Y
8	IC 410-435991/3	30.0	27.061702	5.0	659523.0	0.902057	Y



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Calibration / Indeno[1,2,3-cd]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

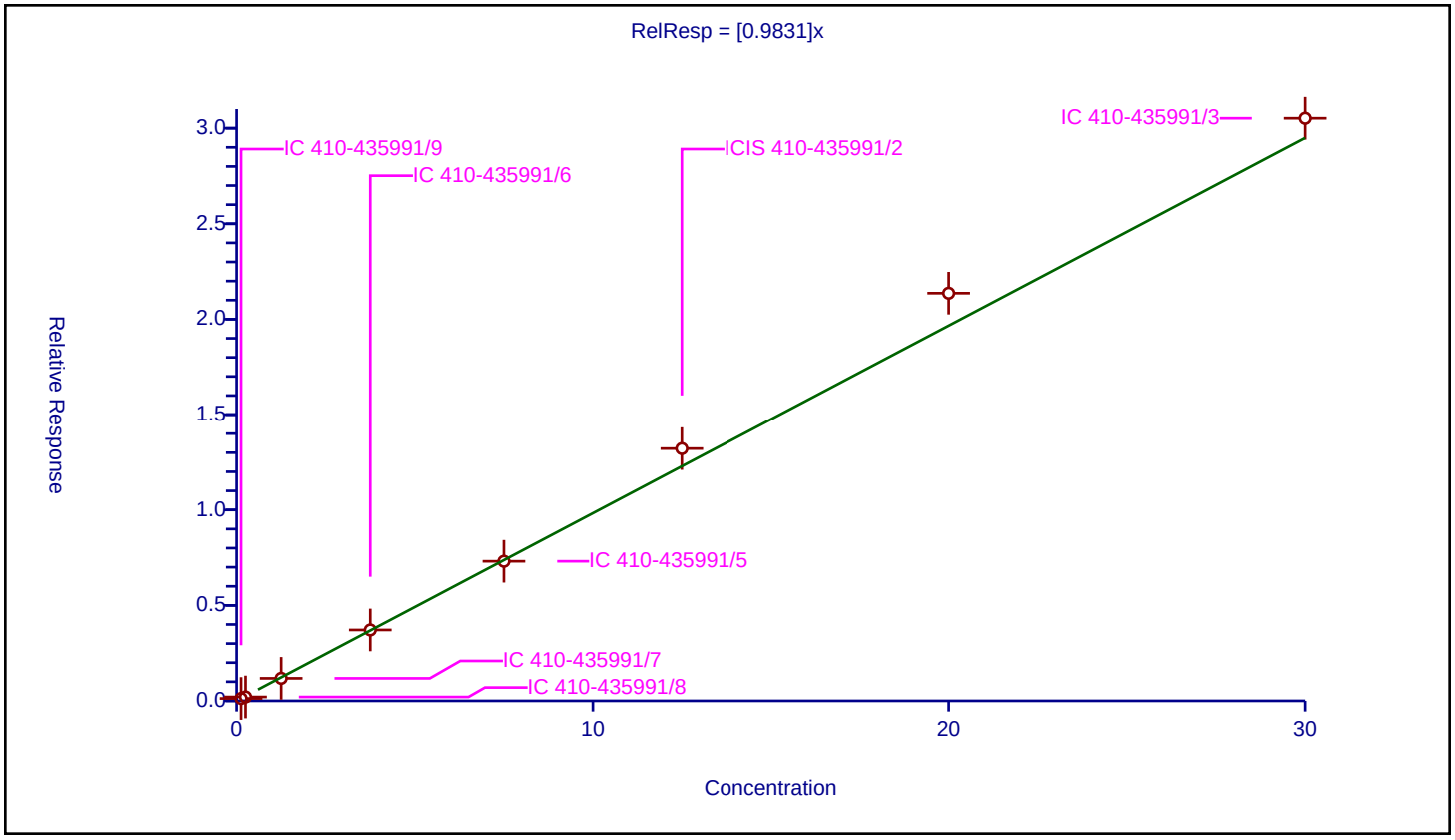
Curve Coefficients

Intercept:	0
Slope:	0.9831

Error Coefficients

Standard Error:	1940000
Relative Standard Error:	8.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.124503	5.0	589100.0	0.996028	Y
2	IC 410-435991/8	0.25	0.204468	5.0	706662.0	0.817873	Y
3	IC 410-435991/7	1.25	1.17847	5.0	627742.0	0.942776	Y
4	IC 410-435991/6	3.75	3.71358	5.0	739094.0	0.990288	Y
5	IC 410-435991/5	7.5	7.311601	5.0	607315.0	0.97488	Y
6	ICIS 410-435991/2	12.5	13.216605	5.0	639006.0	1.057328	Y
7	IC 410-435991/4	20.0	21.363248	5.0	587483.0	1.068162	Y
8	IC 410-435991/3	30.0	30.520808	5.0	659523.0	1.01736	Y



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Calibration / Dibenz(a,h)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

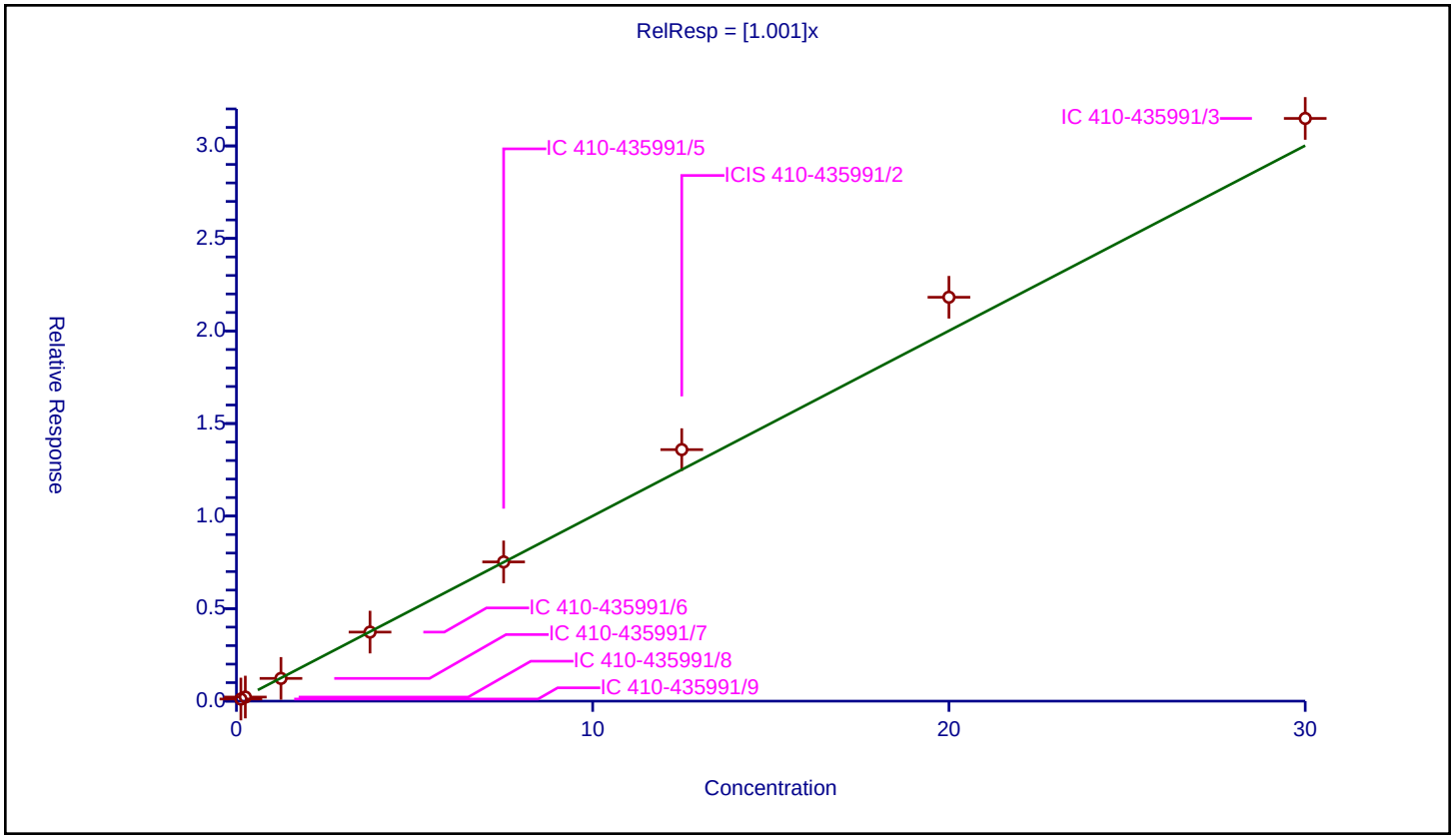
Curve Coefficients

Intercept:	0
Slope:	1.001

Error Coefficients

Standard Error:	2000000
Relative Standard Error:	7.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.114361	5.0	589100.0	0.914887	Y
2	IC 410-435991/8	0.25	0.220346	5.0	706662.0	0.881383	Y
3	IC 410-435991/7	1.25	1.228339	5.0	627742.0	0.982671	Y
4	IC 410-435991/6	3.75	3.730229	5.0	739094.0	0.994728	Y
5	IC 410-435991/5	7.5	7.523155	5.0	607315.0	1.003087	Y
6	ICIS 410-435991/2	12.5	13.590005	5.0	639006.0	1.0872	Y
7	IC 410-435991/4	20.0	21.823202	5.0	587483.0	1.09116	Y
8	IC 410-435991/3	30.0	31.484436	5.0	659523.0	1.049481	Y



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Calibration / Benzo[g,h,i]perylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

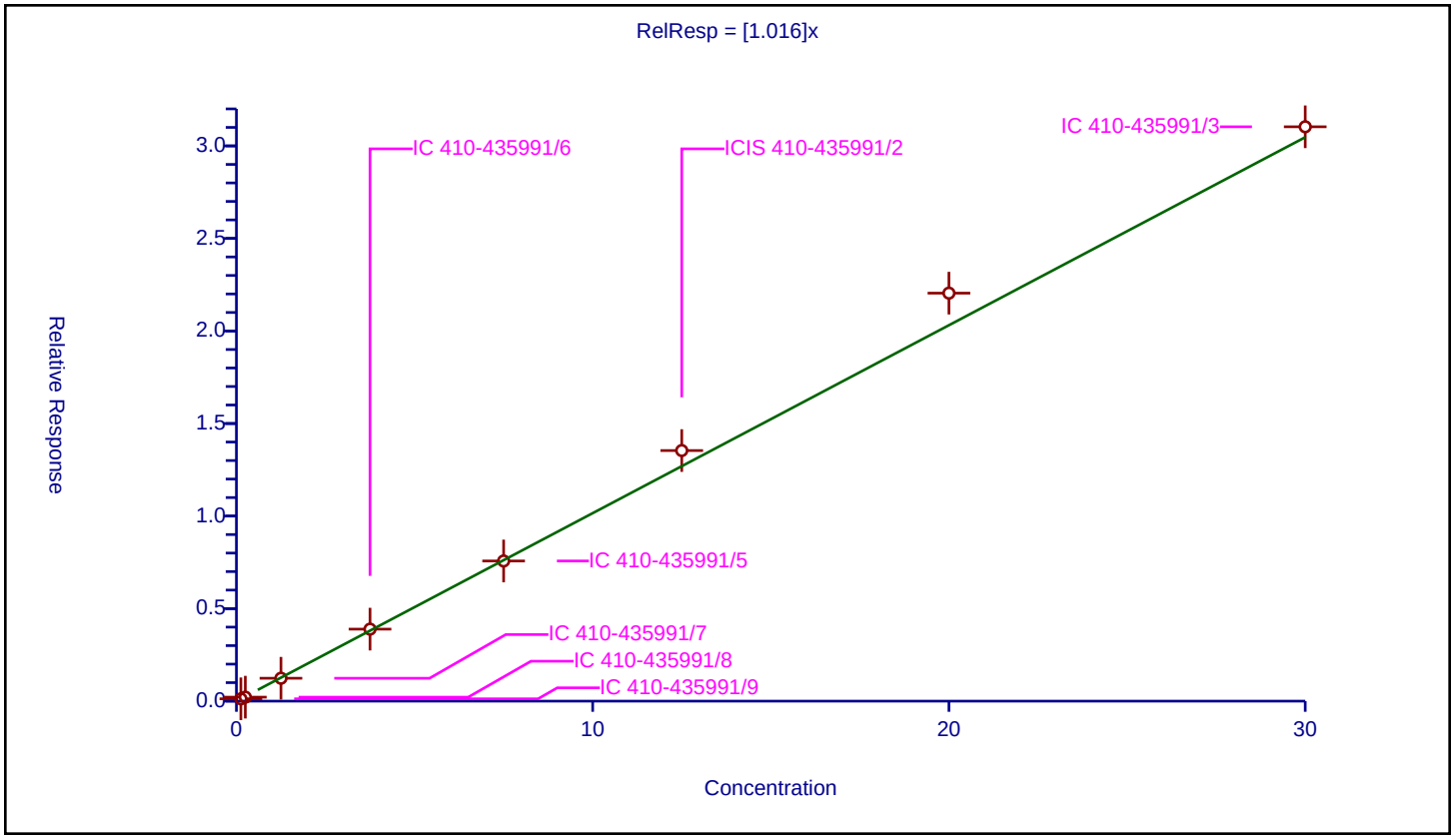
Curve Coefficients

Intercept:	0
Slope:	1.016

Error Coefficients

Standard Error:	1990000
Relative Standard Error:	7.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-435991/9	0.125	0.126243	5.0	589100.0	1.009947	Y
2	IC 410-435991/8	0.25	0.214572	5.0	706662.0	0.858289	Y
3	IC 410-435991/7	1.25	1.237021	5.0	627742.0	0.989617	Y
4	IC 410-435991/6	3.75	3.89052	5.0	739094.0	1.037472	Y
5	IC 410-435991/5	7.5	7.572561	5.0	607315.0	1.009675	Y
6	ICIS 410-435991/2	12.5	13.539576	5.0	639006.0	1.083166	Y
7	IC 410-435991/4	20.0	22.044859	5.0	587483.0	1.102243	Y
8	IC 410-435991/3	30.0	31.03239	5.0	659523.0	1.034413	Y



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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 363143

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/11/2023 14:51 Calibration End Date: 04/11/2023 16:37 Calibration ID: 49223

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-363143/8	JD1107.D
Level 2	IC 410-363143/7	JD1106.D
Level 3	IC 410-363143/6	JD1105.D
Level 4	IC 410-363143/5	JD1104.D
Level 5	IC 410-363143/4	JD1103.D
Level 6	IC 410-363143/3	JD1102.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methapyrilene	+++++ 0.5436	0.3444	0.4437	0.4782	0.5125	Ave		0.4644				16.5		20.0			
Famphur	0.2858 0.2580	0.3463	0.3760	0.3888	0.3437	Ave		0.3331				15.4		20.0			
Kepone	0.1248 0.1238	0.1741	0.1350	0.1335	0.1219	Ave		0.1355				14.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 363143

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/11/2023 14:51 Calibration End Date: 04/11/2023 16:37 Calibration ID: 49223

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-363143/8	JD1107.D
Level 2	IC 410-363143/7	JD1106.D
Level 3	IC 410-363143/6	JD1105.D
Level 4	IC 410-363143/5	JD1104.D
Level 5	IC 410-363143/4	JD1103.D
Level 6	IC 410-363143/3	JD1102.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methapyrilene	PHN	Ave	+++++ 2080718	174170	421099	896646	1470212	+++++ 30.0	3.75	7.50	12.5	20.0
Famphur	PYR10	Ave	50159 1087196	172223	387618	718260	1002462	1.25 30.0	3.75	7.50	12.5	20.0
Kepone	PYR10	Ave	219030 1738854	461668	742371	1184045	1421999	12.5 100	20.0	40.0	60.0	80.0

Curve Type Legend:
Ave = Average ISTD

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1102.D
Lims ID: IC L8 ABC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 11-Apr-2023 14:51:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L8 ABC
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub21

Method: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 11-Apr-2023 17:38:30 Calib Date: 11-Apr-2023 16:37:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1107.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1653

First Level Reviewer: P7EB Date: 11-Apr-2023 16:22:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.567	4.567	0.000	96	184334	5.00	5.00	
* 52 Naphthalene-d8	136	5.775	5.775	0.000	99	655024	5.00	5.00	
* 96 Acenaphthene-d10	164	7.439	7.439	0.000	94	338850	5.00	5.00	
* 131 Phenanthrene-d10	188	8.847	8.847	0.000	95	637975	5.00	5.00	
141 Methapyrilene	97	9.682	9.682	0.000	94	2080718	30.0	35.1	
* 146 Pyrene-d10 (IS)	212	10.195	10.195	0.000	96	702246	5.00	5.00	
151 Famphur	218	10.826	10.826	0.000	89	1087196	30.0	23.2	
154 Kepone	272	10.919	10.919	0.000	95	1738854	100.0	91.4	
* 167 Perylene-d12	264	13.494	13.494	0.000	96	603674	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_8_00012 Amount Added: 1.00 Units: mL

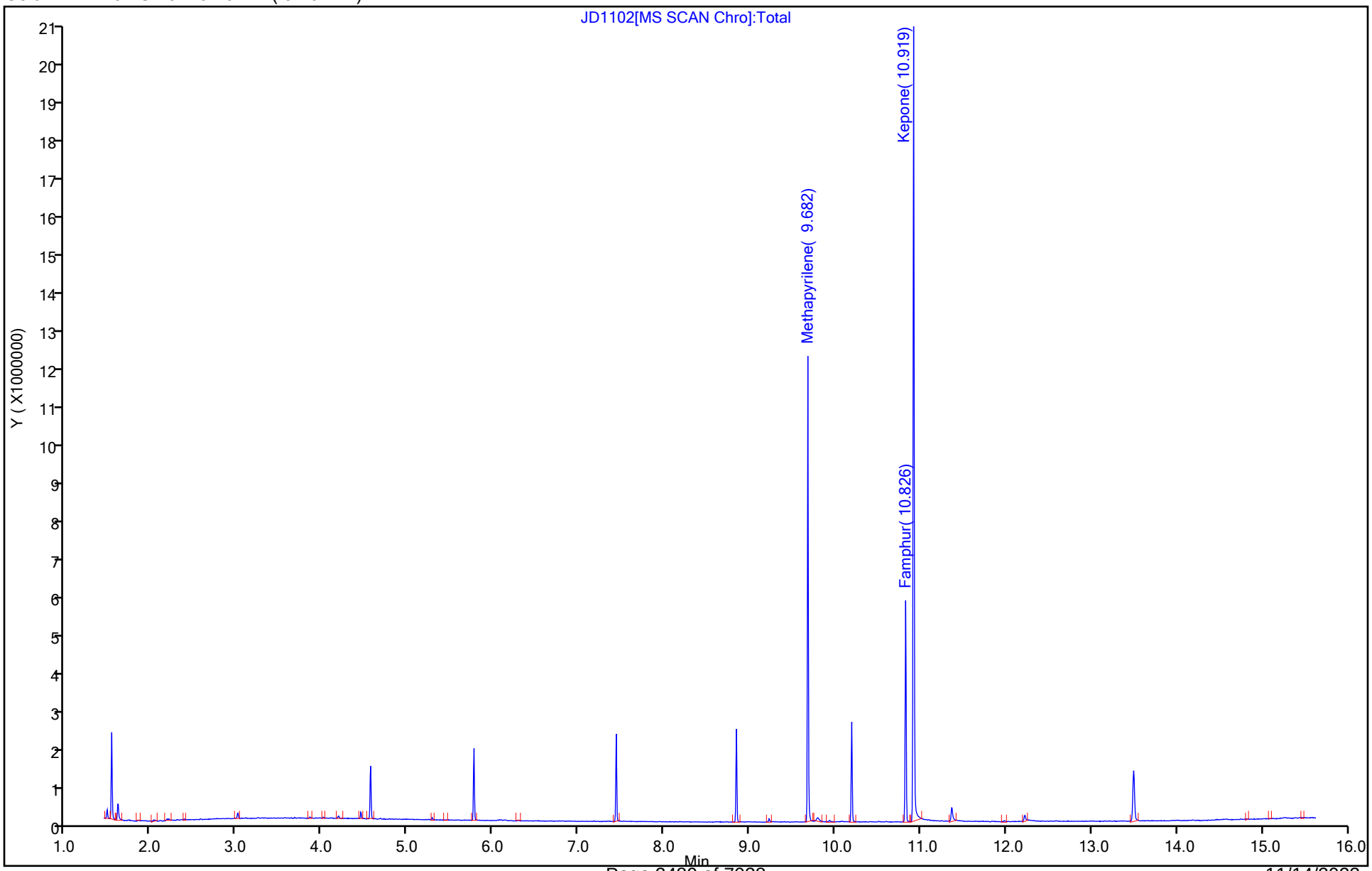
Report Date: 11-Apr-2023 17:38:30 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1102.D

Injection Date:	11-Apr-2023 14:51:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	IC L8 ABC			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1103.D
Lims ID: IC L7 ABC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 11-Apr-2023 15:12:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L7 ABC
Misc. Info.: 410-0081178-004
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub21

Method: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 11-Apr-2023 17:38:32 Calib Date: 11-Apr-2023 16:37:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1107.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1653

First Level Reviewer: P7EB Date: 11-Apr-2023 16:22:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.567	4.567	0.001	97	184049	5.00	5.00	
* 52 Naphthalene-d8	136	5.775	5.775	0.000	99	706210	5.00	5.00	
* 96 Acenaphthene-d10	164	7.439	7.439	0.000	94	379951	5.00	5.00	
* 131 Phenanthrene-d10	188	8.847	8.847	0.000	95	717229	5.00	5.00	
141 Methapyrilene	97	9.682	9.682	0.000	94	1470212	20.0	22.1	
* 146 Pyrene-d10 (IS)	212	10.195	10.195	0.000	96	729091	5.00	5.00	
151 Famphur	218	10.826	10.826	0.000	90	1002462	20.0	20.6	
154 Kepone	272	10.919	10.919	0.000	95	1421999	80.0	72.0	
* 167 Perylene-d12	264	13.494	13.494	0.000	97	658333	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_7_00011 Amount Added: 1.00 Units: mL

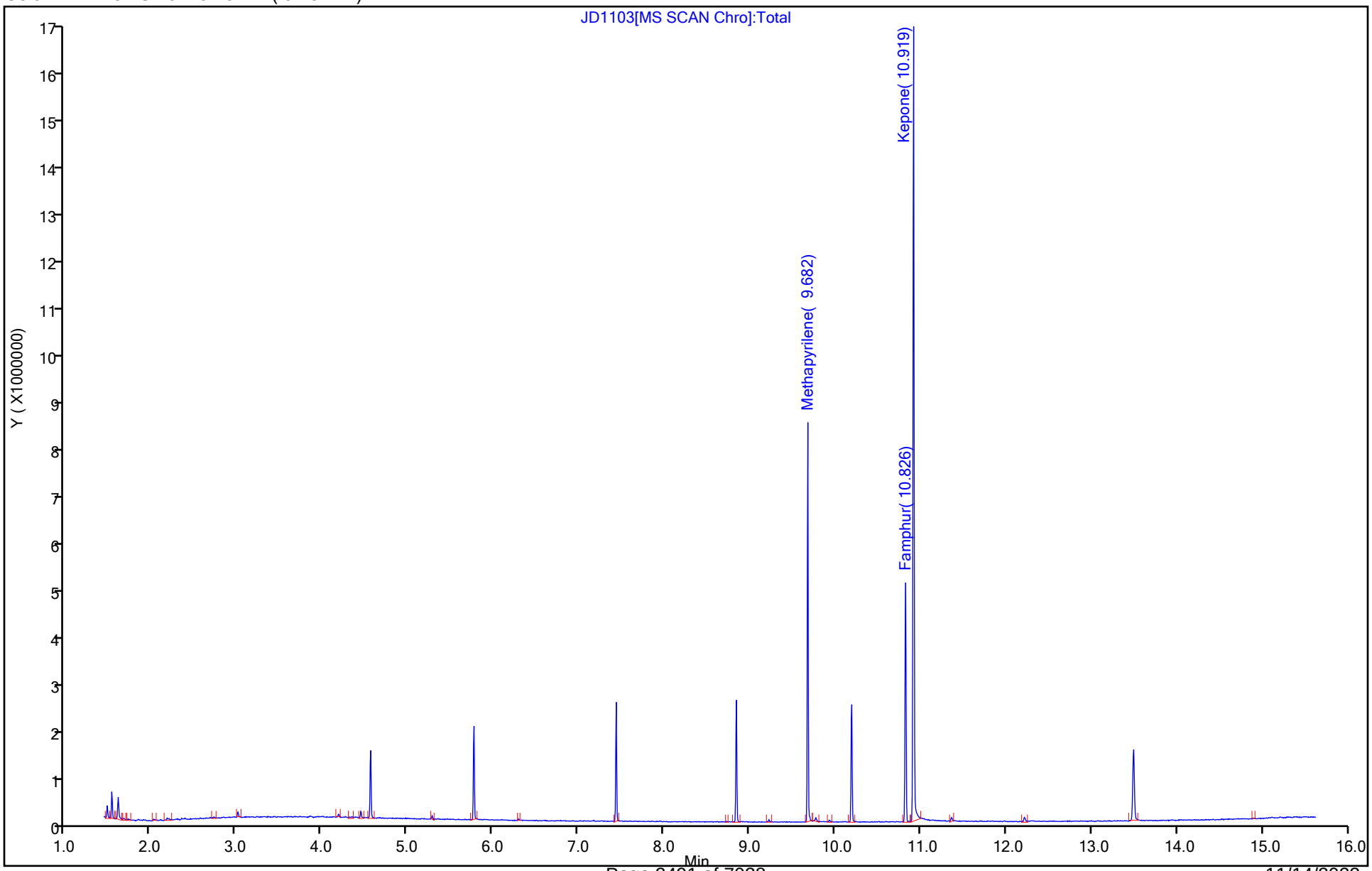
Report Date: 11-Apr-2023 17:38:32 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1103.D

Injection Date:	11-Apr-2023 15:12:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	IC L7 ABC			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1104.D
Lims ID: IC L6 ABC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 11-Apr-2023 15:34:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L6 ABC
Misc. Info.: 410-0081178-005
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub21

Method: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 11-Apr-2023 17:38:33 Calib Date: 11-Apr-2023 16:37:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1107.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1653

First Level Reviewer: P7EB Date: 11-Apr-2023 16:23:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.567	4.567	0.001	96	193789	5.00	5.00	
* 52 Naphthalene-d8	136	5.775	5.775	0.000	99	735367	5.00	5.00	
* 96 Acenaphthene-d10	164	7.439	7.439	0.000	95	401391	5.00	5.00	
* 131 Phenanthrene-d10	188	8.847	8.847	0.000	96	750086	5.00	5.00	
141 Methapyrilene	97	9.682	9.682	0.000	94	896646	12.5	12.9	
* 146 Pyrene-d10 (IS)	212	10.195	10.195	0.000	96	738897	5.00	5.00	
151 Famphur	218	10.826	10.826	0.000	89	718260	12.5	14.6	
154 Kepone	272	10.920	10.919	0.001	95	1184045	60.0	59.1	
* 167 Perylene-d12	264	13.489	13.494	-0.005	96	614189	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_6_00015 Amount Added: 1.00 Units: mL

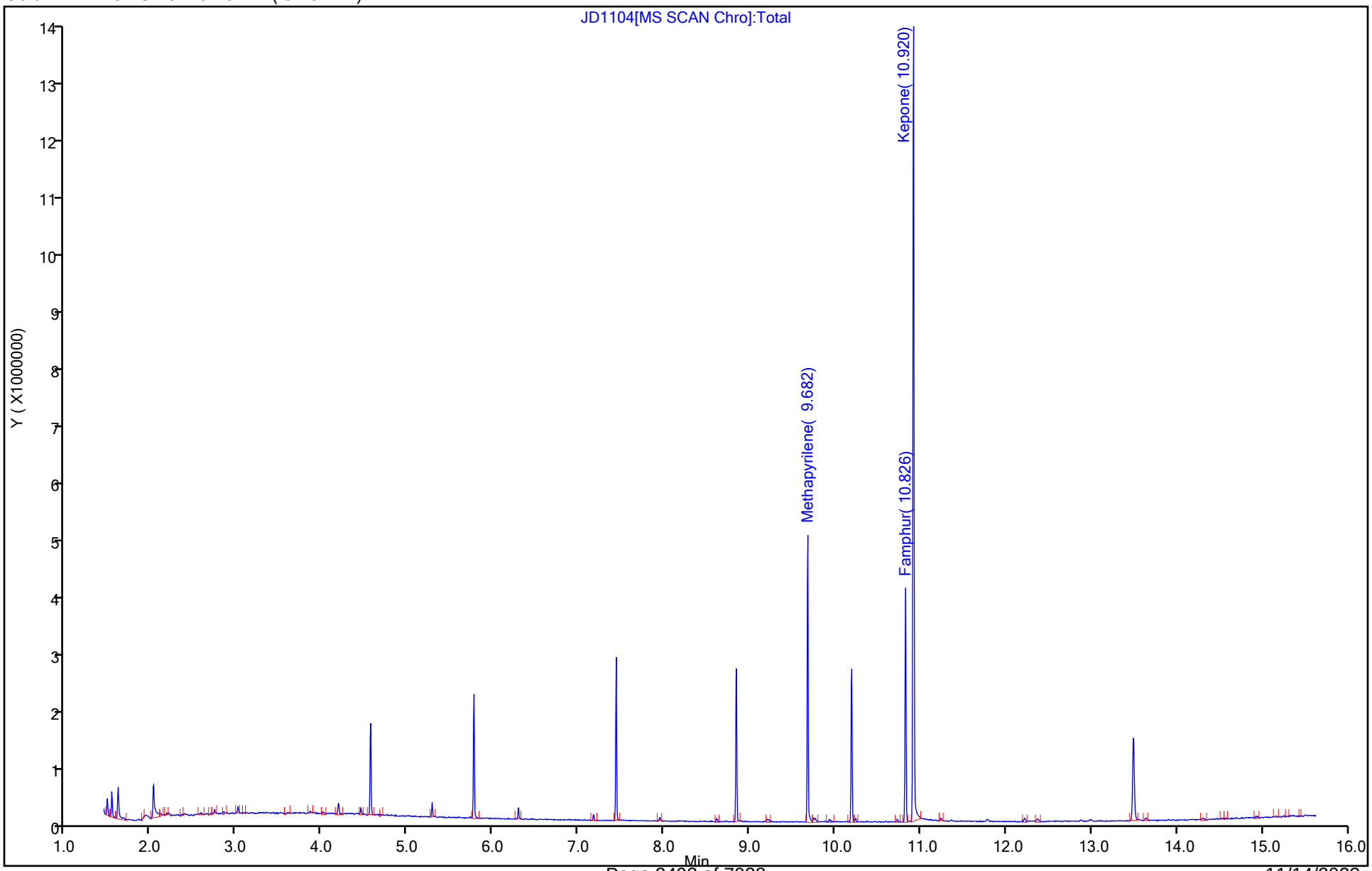
Report Date: 11-Apr-2023 17:38:33 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1104.D

Injection Date:	11-Apr-2023 15:34:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	IC L6 ABC			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1105.D
Lims ID: IC L5 ABC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 11-Apr-2023 15:55:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L5 ABC
Misc. Info.: 410-0081178-006
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub21

Method: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 11-Apr-2023 17:38:51 Calib Date: 11-Apr-2023 16:37:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1107.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1653

First Level Reviewer: P7EB Date: 11-Apr-2023 17:38:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.567	4.567	0.000	97	172482	5.00	5.00	
* 52 Naphthalene-d8	136	5.775	5.775	0.000	99	686528	5.00	5.00	
* 96 Acenaphthene-d10	164	7.439	7.439	0.000	94	362088	5.00	5.00	
* 131 Phenanthrene-d10	188	8.847	8.847	0.000	95	632769	5.00	5.00	
141 Methapyrilene	97	9.682	9.682	0.000	94	421099	7.50	7.16	
* 146 Pyrene-d10 (IS)	212	10.195	10.195	0.000	97	687240	5.00	5.00	
151 Famphur	218	10.826	10.826	0.000	90	387618	7.50	8.47	
154 Kepone	272	10.919	10.919	0.000	95	742371	40.0	39.9	
* 167 Perylene-d12	264	13.489	13.489	0.000	95	548823	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_5_00010 Amount Added: 1.00 Units: mL

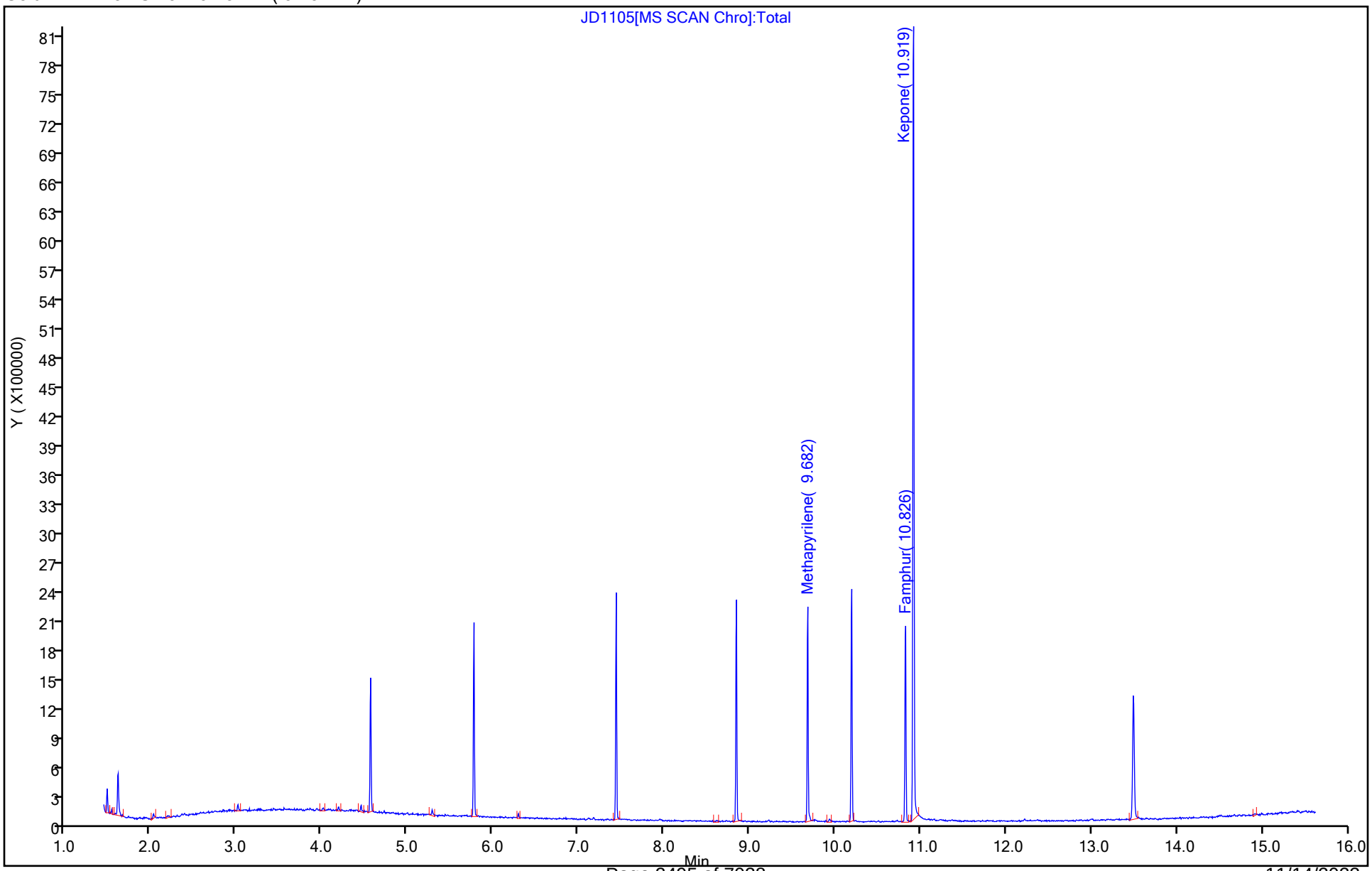
Report Date: 11-Apr-2023 17:38:51 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1105.D

Injection Date:	11-Apr-2023 15:55:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	IC L5 ABC			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1106.D
Lims ID: IC L4 ABC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 11-Apr-2023 16:16:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L4 ABC
Misc. Info.: 410-0081178-007
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub21

Method: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 11-Apr-2023 17:38:35 Calib Date: 11-Apr-2023 16:37:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1107.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1653

First Level Reviewer: P7EB Date: 11-Apr-2023 17:32:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.566	4.567	0.000	97	169844	5.00	5.00	
* 52 Naphthalene-d8	136	5.775	5.775	0.000	99	642174	5.00	5.00	
* 96 Acenaphthene-d10	164	7.439	7.439	0.000	94	357147	5.00	5.00	
* 131 Phenanthrene-d10	188	8.846	8.847	-0.001	95	674308	5.00	5.00	
141 Methapyrilene	97	9.681	9.682	-0.001	93	174170	3.75	2.78	
* 146 Pyrene-d10 (IS)	212	10.195	10.195	0.000	96	663091	5.00	5.00	
151 Famphur	218	10.826	10.826	0.000	90	172223	3.75	3.90	
154 Kepone	272	10.919	10.919	0.000	95	461668	20.0	25.7	
* 167 Perylene-d12	264	13.494	13.494	0.000	96	592903	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_4_00010 Amount Added: 1.00 Units: mL

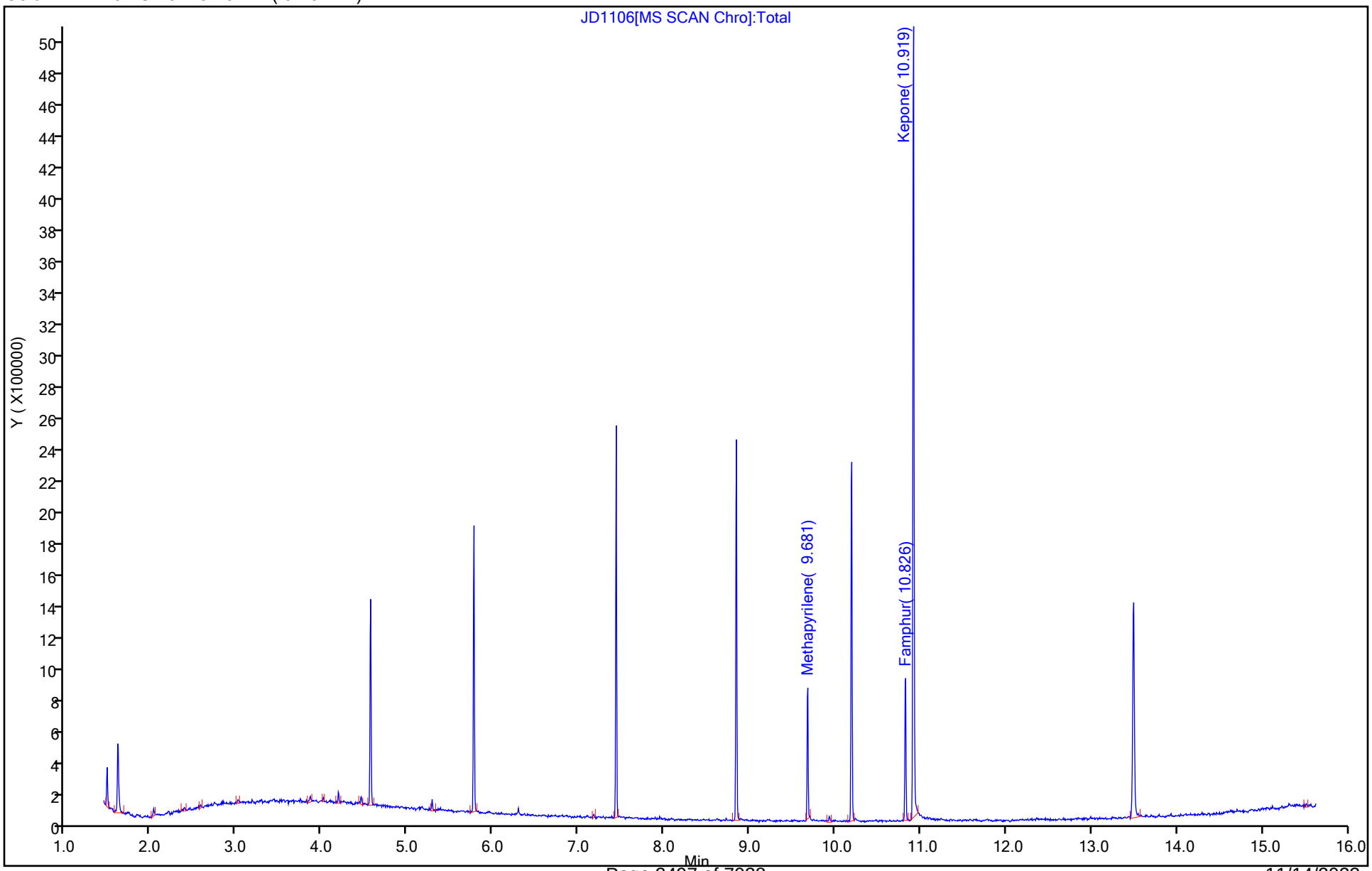
Report Date: 11-Apr-2023 17:38:35 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1106.D

Injection Date:	11-Apr-2023 16:16:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	IC L4 ABC			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



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Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1107.D
Lims ID: IC L3 ABC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-Apr-2023 16:37:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L3 ABC
Misc. Info.: 410-0081178-008
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub21

Method: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 11-Apr-2023 17:38:36 Calib Date: 11-Apr-2023 16:37:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1107.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1653

First Level Reviewer: P7EB Date: 11-Apr-2023 17:33:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.567	4.567	0.001	97	190754	5.00	5.00	
* 52 Naphthalene-d8	136	5.775	5.775	0.000	99	680580	5.00	5.00	
* 96 Acenaphthene-d10	164	7.439	7.439	0.000	94	367216	5.00	5.00	
* 131 Phenanthrene-d10	188	8.847	8.847	0.000	95	692516	5.00	5.00	
141 Methapyrilene	97	9.682	9.682	0.000	93	48511	1.25	0.7541	
* 146 Pyrene-d10 (IS)	212	10.195	10.195	0.000	96	702089	5.00	5.00	
151 Famphur	218	10.826	10.826	0.000	89	50159	1.25	1.07	
154 Kepone	272	10.920	10.919	0.001	95	219030	12.5	11.5	
* 167 Perylene-d12	264	13.495	13.494	0.001	96	620806	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_3_00011 Amount Added: 1.00 Units: mL

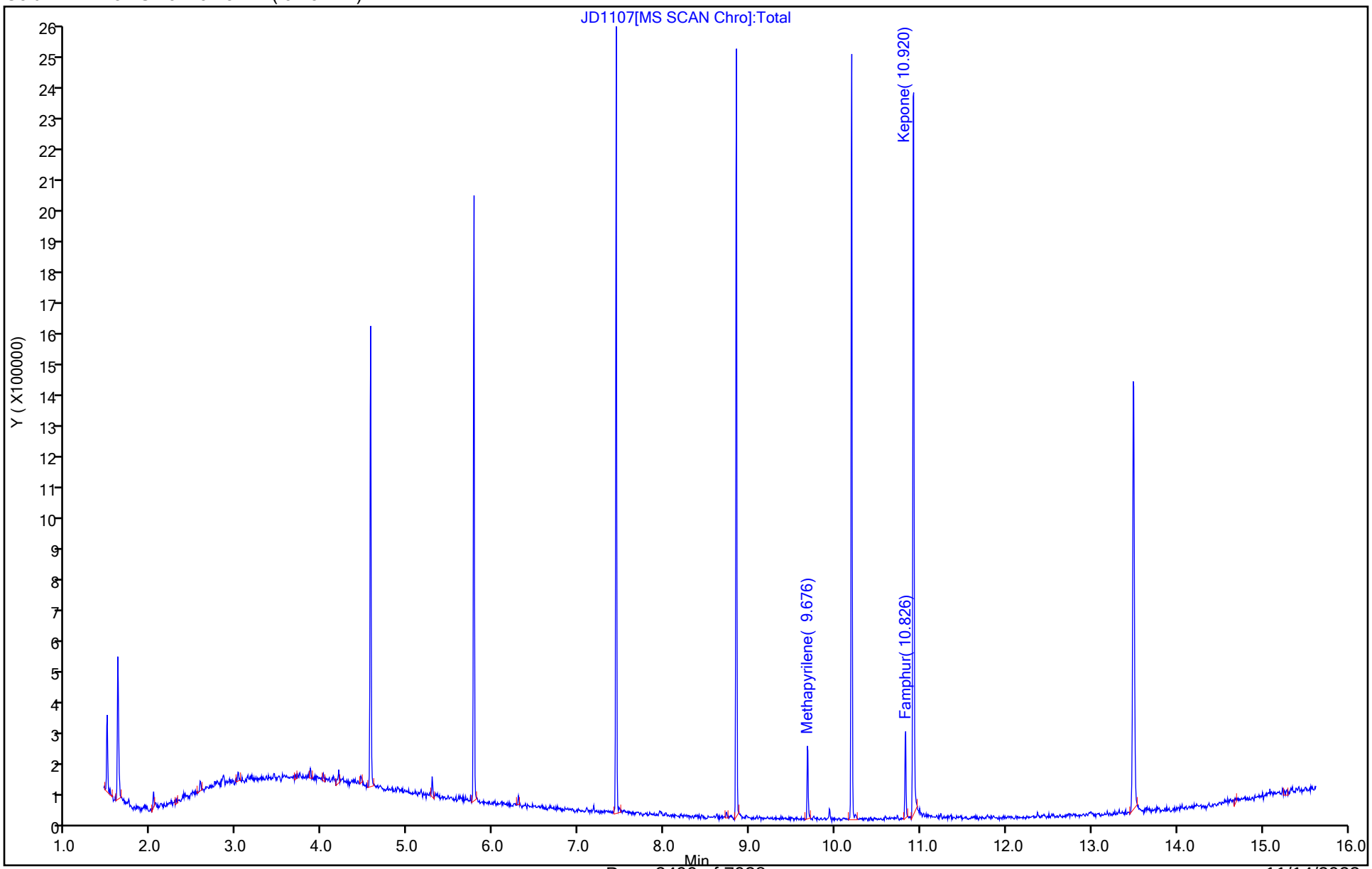
Report Date: 11-Apr-2023 17:38:37 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230411-81178.b\JD1107.D

Injection Date:	11-Apr-2023 16:37:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	IC L3 ABC			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Calibration / Methapyrilene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

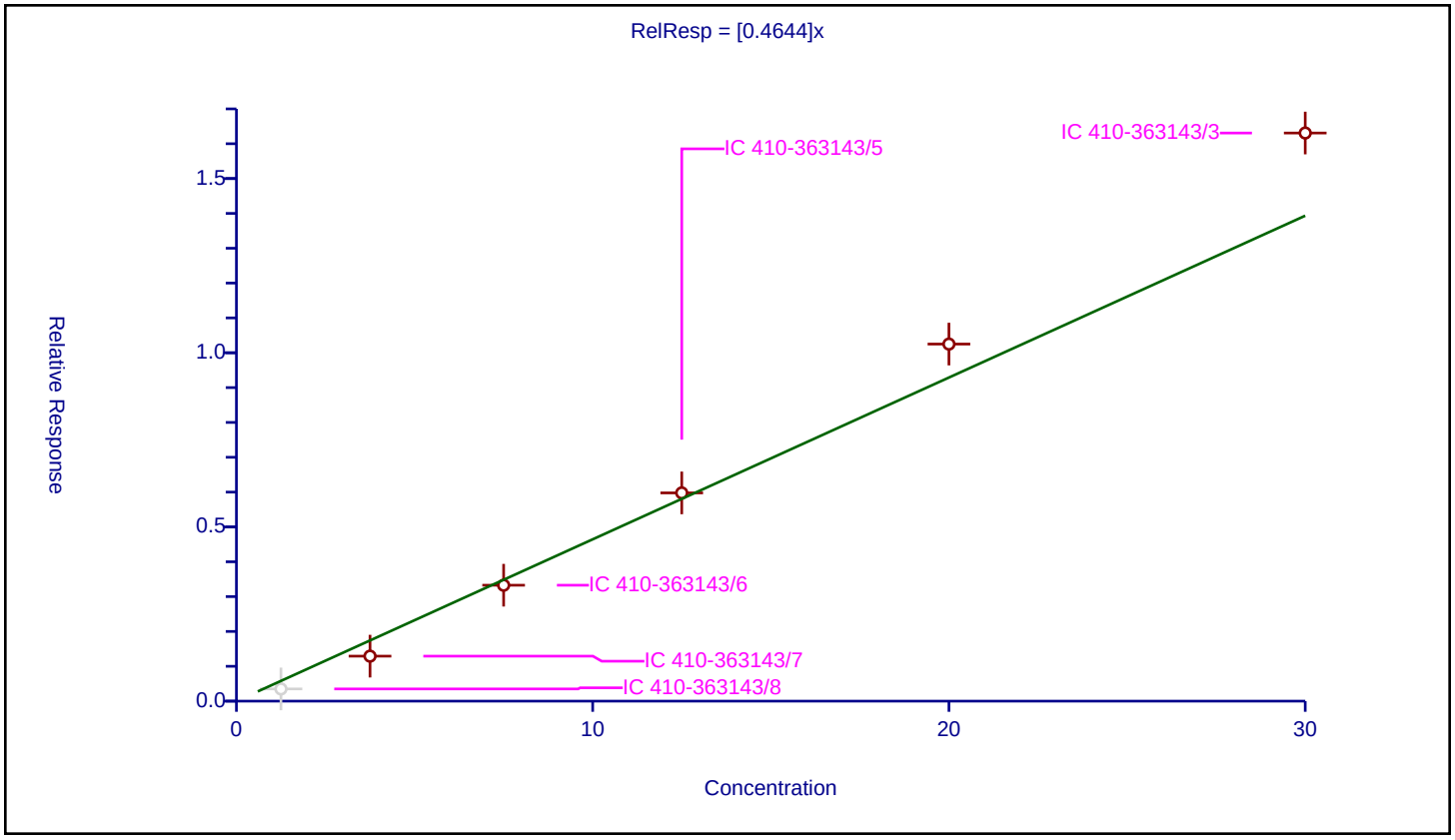
Curve Coefficients

Intercept:	0
Slope:	0.4644

Error Coefficients

Standard Error:	1370000
Relative Standard Error:	16.5
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.957

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-363143/8	1.25	0.350252	5.0	692516.0	0.280201	N
2	IC 410-363143/7	3.75	1.291472	5.0	674308.0	0.344393	Y
3	IC 410-363143/6	7.5	3.327431	5.0	632769.0	0.443657	Y
4	IC 410-363143/5	12.5	5.976955	5.0	750086.0	0.478156	Y
5	IC 410-363143/4	20.0	10.249251	5.0	717229.0	0.512463	Y
6	IC 410-363143/3	30.0	16.307206	5.0	637975.0	0.543574	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

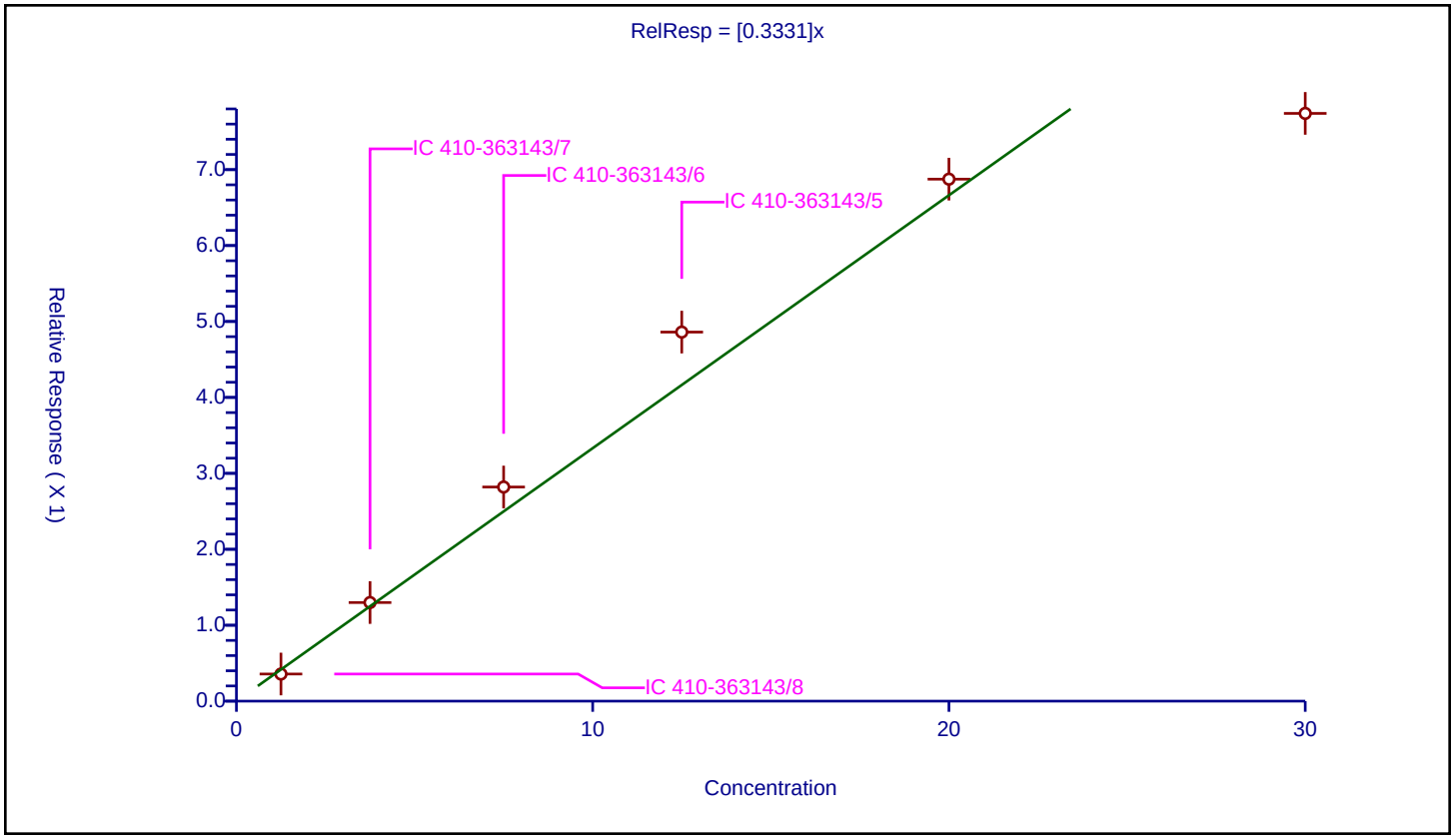
Curve Coefficients

Intercept:	0
Slope:	0.3331

Error Coefficients

Standard Error:	760000
Relative Standard Error:	15.4
Correlation Coefficient:	0.916
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-363143/8	1.25	0.357213	5.0	702089.0	0.28577	Y
2	IC 410-363143/7	3.75	1.298638	5.0	663091.0	0.346303	Y
3	IC 410-363143/6	7.5	2.820107	5.0	687240.0	0.376014	Y
4	IC 410-363143/5	12.5	4.860353	5.0	738897.0	0.388828	Y
5	IC 410-363143/4	20.0	6.874739	5.0	729091.0	0.343737	Y
6	IC 410-363143/3	30.0	7.740849	5.0	702246.0	0.258028	Y



Calibration / Kepone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

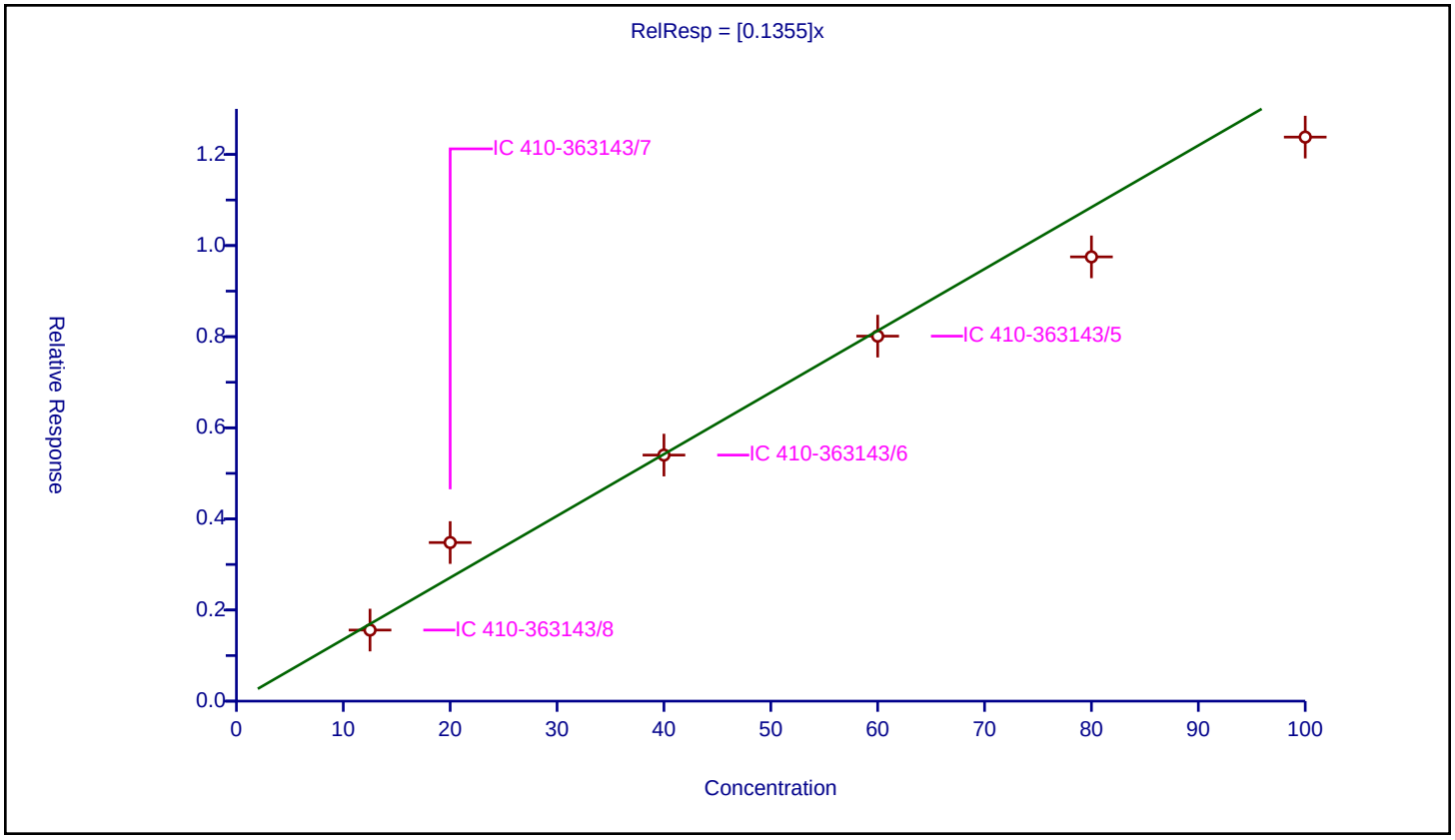
Curve Coefficients

Intercept:	0
Slope:	0.1355

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	14.5
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.951

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-363143/8	12.5	1.559845	5.0	702089.0	0.124788	Y
2	IC 410-363143/7	20.0	3.481181	5.0	663091.0	0.174059	Y
3	IC 410-363143/6	40.0	5.401104	5.0	687240.0	0.135028	Y
4	IC 410-363143/5	60.0	8.012247	5.0	738897.0	0.133537	Y
5	IC 410-363143/4	80.0	9.751862	5.0	729091.0	0.121898	Y
6	IC 410-363143/3	100.0	12.380661	5.0	702246.0	0.123807	Y



11/14/2023
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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-397829/3	JG1802.D
Level 2	IC 410-397829/9	JG1808.D
Level 3	IC 410-397829/8	JG1807.D
Level 4	IC 410-397829/7	JG1806.D
Level 5	ICIS 410-397829/2	JG1801a.D
Level 6	IC 410-397829/6	JG1805.D
Level 7	IC 410-397829/5	JG1804.D
Level 8	IC 410-397829/4	JG1803.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 0.5980	+++++ 0.6083	0.6685 0.5980	0.5996	0.5901	Ave		0.6104				4.8		20.0			
N-Nitrosodimethylamine	1.0522 1.0263	0.8045 1.0294	1.0273 1.0499	0.9815	0.9878	Ave		0.9949				8.2		20.0			
Pyridine	1.9117 1.6310	1.9663 1.6937	1.5804 1.6635	1.6236	1.6559	Ave		1.7158				8.3		20.0			
N,N-dimethylformamide	+++++ 1.2314	+++++ 1.2450	1.2146 1.3102	1.1225	1.2294	Ave		1.2255				4.9		20.0			
2-Picoline	1.8644 1.7340	1.4453 1.7119	1.5722 1.7231	1.6297	1.6368	Ave		1.6647				7.5		20.0			
N-Nitrosomethylethylamine	+++++ 0.7446	+++++ 0.7483	0.9569 0.7294	0.9160	0.8097	Ave		0.8175				11.9		20.0			
Methyl methanesulfonate	1.0213 0.9606	0.9599 0.9905	0.9881 0.9901	0.9837	0.9823	Ave		0.9846				2.0		20.0			
N-Nitrosodiethylamine	0.5396 0.7366	0.5253 0.7404	0.7270 0.7107	0.6746	0.6594	Ave		0.6642				13.0		20.0			
Ethyl methanesulfonate	0.9055 0.8038	0.8590 0.8289	0.7592 0.8590	0.7826	0.7853	Ave		0.8229				6.0		20.0			
Benzaldehyde	1.1706	1.5060 1.0642	1.5098 +++++	1.4329	1.3303	Ave		1.3356			0.0100	13.8		20.0			
Aniline	2.2426 2.3595	2.1274 2.4933	2.2543 2.4926	2.3178	2.2972	Ave		2.3231				5.4		20.0			
Phenol	2.2770 2.2694	2.4025 2.3323	2.2423 2.3449	2.3158	2.3223	Ave		2.3133			0.8000	2.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Bis(2-chloroethyl)ether	1.6538 1.5473	1.8475 1.5694	1.6941 1.5319	1.5681	1.4900	Ave		1.6128			0.7000	7.2		20.0			
2-Chlorophenol	1.5309 1.4724	1.2766 1.4835	1.3714 1.4442	1.4066	1.4048	Ave		1.4238			0.8000	5.5		20.0			
1,3-Dichlorobenzene	1.3811 1.4229	1.3442 1.4259	1.3810 1.4741	1.4402	1.4551	Ave		1.4156				3.1		20.0			
1,4-Dichlorobenzene	1.5732 1.4836	1.6583 1.4804	1.5115 1.4555	1.4790	1.4846	Ave		1.5158				4.5		20.0			
Benzyl alcohol	0.8873 1.0244	0.8194 1.0099	0.8461 1.0714	0.9384	0.9545	Ave		0.9439				9.4		20.0			
1,2-Dichlorobenzene	1.5300 1.4356	1.2752 1.4147	1.3902 1.4312	1.3619	1.3784	Ave		1.4021				5.2		20.0			
bis (2-chloroisopropyl) ether	4.3473 3.4210	3.6303 3.5146	3.3451 3.3926	3.3493	3.4170	Ave		3.5522			0.0100	9.4		20.0			
o-Cresol	1.3640 1.4325	1.3121 1.4771	1.2598 1.4272	1.3165	1.3400	Ave		1.3661			0.7000	5.4		20.0			
N-Nitrosopyrrolidine	0.6574 0.8704	0.8187 0.8699	0.8298 0.8952	0.7804	0.8325	Ave		0.8193				9.1		20.0			
Acetophenone	2.1187 2.1864	2.1859 2.1748	2.2118 2.2485	2.1876	2.2398	Ave		2.1942			0.0100	1.9		20.0			
N-Nitrosodi-n-propylamine	1.5147 1.3258	1.4668 1.3017	1.2950 1.3474	1.2697	1.3395	Ave		1.3576			0.5000	6.4		20.0			
N-Nitrosomorpholine	1.1694 1.1933	1.4614 1.2493	1.2765 1.2562	1.2133	1.2575	Ave		1.2596				7.1		20.0			
o-Toluidine	2.1432 2.3733	2.3311 2.4773	2.3161 2.4731	2.3522	2.5422	Ave		2.3761				5.2		20.0			
m & p-Cresol	1.4308 1.6255	1.4559 1.6819	1.5030 1.6958	1.5737	1.6811	Ave		1.5809			0.6000	6.7		20.0			
Hexachloroethane	0.6258 0.6099	0.6827 0.6224	0.6349 0.6598	0.6280	0.6441	Ave		0.6384			0.3000	3.7		20.0			
Nitrobenzene	0.6122 0.4424	0.5257 0.4609	0.4440 0.4658	0.4841	0.4758	Ave		0.4889			0.2000	11.5		20.0			
N-Nitrosopiperidine	0.2250 0.1936	0.1848 0.2043	0.1688 0.2018	0.1976	0.2016	Ave		0.1972				8.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isophorone	0.9053 0.8592	0.8579 0.9092	0.8124 0.8580	0.8742	0.9183	Ave		0.8743			0.4000	4.0		20.0			
2-Nitrophenol	0.1668 0.1856	0.1764 0.2043	0.1537 0.1901	0.1867	0.1813	Ave		0.1806			0.1000	8.5		20.0			
2,4-Dimethylphenol	0.3474 0.3975	0.2951 0.4143	0.3582 0.3667	0.3942	0.3787	Ave		0.3690			0.2000	10.1		20.0			
o,o',o''-Triethylphosphorothioate	0.1263 0.1369	0.1416 0.1605	0.1334 0.1331	0.1538	0.1503	Ave		0.1420				8.3		20.0			
Bis(2-chloroethoxy)methane	0.4882 0.5159	0.5337 0.5501	0.4939 0.4964	0.5907	0.5525	Ave		0.5277			0.3000	6.8		20.0			
2,4-Dichlorophenol	0.2083 0.2856	0.2606 0.3149	0.2575 0.2908	0.2912	0.2953	Ave		0.2755			0.2000	12.0		20.0			
1,2,4-Trichlorobenzene	0.3274 0.2950	0.3135 0.3096	0.2908 0.3077	0.3233	0.3135	Ave		0.3101				4.0		20.0			
Naphthalene	1.1323 1.0183	1.0180 1.1206	1.0368 1.0781	1.0993	1.1040	Ave		1.0759			0.7000	4.3		20.0			
a-Terpineol	0.5131 0.4592	0.4099 0.5177	0.4163 0.4876	0.4968	0.4811	Ave		0.4727				8.7		20.0			
4-Chloroaniline	0.3445 0.4750	0.4552 0.4944	0.4329 0.4763	0.4833	0.4742	Ave		0.4545			0.0100	10.6		20.0			
2,6-Dichlorophenol	0.2263 0.2937	0.2402 0.3001	0.2646 0.2860	0.2764	0.2923	Ave		0.2724				9.9		20.0			
Hexachloropropene	0.1812 0.1951	0.1933 0.2054	0.1823 0.1916	0.2069	0.2037	Ave		0.1950				5.1		20.0			
Hexachlorobutadiene	0.1650 0.1709	0.1487 0.1812	0.1625 0.1628	0.1743	0.1780	Ave		0.1679			0.0100	6.2		20.0			
Quinoline	0.7684 0.7164	0.7056 0.7573	0.6867 0.7419	0.7643	0.7698	Ave		0.7388				4.3		20.0			
Caprolactam	0.0994	0.0966 0.1044	0.0880 0.0986	0.1015	0.0956	Ave		0.0977			0.0100	5.3		20.0			
N-Nitrosodi-n-butylamine	+++++ 0.3735	+++++ 0.3976	0.4291 0.3899	0.4435	0.3949	Ave		0.4048				6.5		20.0			
1,4-phenylenediamine	+++++ 0.2305	+++++ 0.2322	+++++ 0.2126	0.2835	0.2422	Ave		0.2402				11.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.3188 0.3448	0.3304 0.3521	0.3121 0.3601	0.3403	0.3612	Ave		0.3400			0.2000	5.4		20.0			
Safrole, Total	0.1974 0.2400	0.2146 0.2611	0.2309 0.2519	0.2374	0.2617	Ave		0.2369				9.5		20.0			
2-Methylnaphthalene	0.6432 0.6352	0.6219 0.6967	0.6123 0.6553	0.7014	0.6630	Ave		0.6536			0.4000	5.0		20.0			
1-Methylnaphthalene	0.6396 0.6397	0.6205 0.6280	0.5596 0.6305	0.6637	0.6312	Ave		0.6266				4.8		20.0			
Hexachlorocyclopentadiene	0.3121 0.3437	0.2765 0.3419	0.2774 0.3257	0.3674	0.3750	Ave		0.3275			0.0500	11.4		20.0			
1,2,4,5-Tetrachlorobenzene	0.5657 0.5968	0.5141 0.6125	0.5794 0.6196	0.6403	0.6066	Ave		0.5919			0.0100	6.6		20.0			
Isosafrole Peak 1	0.6537 0.5695	0.5556 0.5500	0.5371 0.5656	0.5751	0.5692	Ave		0.5720				6.2		20.0			
2,4,6-Trichlorophenol	0.3577 0.3817	0.3174 0.3961	0.3522 0.4007	0.3893	0.4138	Ave		0.3761			0.2000	8.4		20.0			
2,4,5-Trichlorophenol	0.3393 0.4208	0.3932 0.4207	0.4012 0.4461	0.4269	0.4661	Ave		0.4143			0.2000	9.2		20.0			
Isosafrole Peak 2	0.5253 0.5638	0.5056 0.6032	0.5679 0.5767	0.6227	0.6492	Ave		0.5768				8.3		20.0			
1,1'-Biphenyl	1.4007 1.4894	1.5551 1.5709	1.5555 1.5149	1.6435	1.7072	Ave		1.5546			0.0100	6.0		20.0			
2-Chloronaphthalene	1.2300 1.0520	1.1666 1.0932	1.1249 1.2656	1.2239	1.2707	Ave		1.1784			0.8000	7.0		20.0			
1-Chloronaphthalene	1.0284 1.1260	1.0748 1.2005	1.0859 1.0347	1.1967	1.3019	Ave		1.1311				8.4		20.0			
Diphenyl ether	0.8573 0.7791	0.7488 0.8556	0.8309 0.8241	0.8280	0.8918	Ave		0.8270				5.5		20.0			
2-Nitroaniline	+++++ 0.4228	+++++ 0.4369	0.3724 0.4361	0.3971	0.4262	Ave		0.4152			0.0100	6.1		20.0			
1,4-Naphthoquinone	0.3985 0.5085	0.3951 0.5136	0.4391 0.5079	0.4737	0.4945	Ave		0.4664				10.6		20.0			
1,4-Dinitrobenzene	0.2266 0.1938	0.1359 0.1864	0.1582 0.2021	0.1797	0.1935	Ave		0.1845				15.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dimethyl phthalate	1.3280 1.3797	1.4462 1.3210	1.3915 1.3248	1.5026	1.4639	Ave		1.3947			0.0100	5.0		20.0			
1,3-Dinitrobenzene	0.2809 0.2082	0.1718 0.2117	0.1998 0.2110	0.2212	0.2156	Ave		0.2150				14.2		20.0			
2,6-Dinitrotoluene	+++++ 0.3180	0.2207 0.3023	0.2892 0.2954	0.2992	0.3277	Ave		0.2932			0.2000	11.8		20.0			
Acenaphthylene	1.8801 2.0384	1.8975 2.1317	2.0063 2.0098	2.1271	2.1722	Ave		2.0329			0.9000	5.3		20.0			
3-Nitroaniline	0.2898 0.3884	0.2980 0.3943	0.3595 0.3901	0.3725	0.3915	Ave		0.3605			0.0100	11.9		20.0			
Acenaphthene	1.3253 1.2609	1.3099 1.3466	1.3211 1.3149	1.3467	1.3094	Ave		1.3169			0.9000	2.0		20.0			
2,4-Dinitrophenol	+++++ 0.1981	+++++ 0.2034	0.1430 0.2082	0.1740	0.1870	Ave		0.1856			0.0100	13.1		20.0			
Pentachlorobenzene	0.4685 0.4985	0.5402 0.5211	0.4951 0.5280	0.5138	0.5295	Ave		0.5118				4.6		20.0			
4-Nitrophenol	+++++ 0.2337	0.1564 0.2282	0.2007 0.2413	0.2285	0.2449	Ave		0.2191			0.0100	14.2		20.0			
2,4-Dinitrotoluene	0.3756 0.4098	0.3563 0.4007	0.3746 0.4104	0.4230	0.4348	Ave		0.3981			0.2000	6.8		20.0			
Dibenzofuran	1.8598 1.7480	1.7056 1.6884	1.7870 1.6883	1.8375	1.8967	Ave		1.7764			0.8000	4.6		20.0			
1-Naphthylamine	1.2807 1.1347	1.1752 1.1586	1.1278 1.1656	1.2452	1.2708	Ave		1.1948				5.1		20.0			
2,3,4,6-Tetrachlorophenol	0.3740 0.3401	0.4117 0.3409	0.3451 0.3546	0.3580	0.3817	Ave		0.3633			0.0100	6.8		20.0			
2-Naphthylamine	0.9897 1.2979	1.1817 1.2863	1.2609 1.2265	1.2912	1.3843	Ave		1.2398				9.4		20.0			
Diethyl phthalate	1.4416 1.4669	1.5552 1.4432	1.5197 1.4791	1.5186	1.5984	Ave		1.5028			0.0100	3.7		20.0			
O,O-Diethyl O-2-pyrazinyl phosphorothioate	0.2739 0.2607	0.2215 0.2679	0.2698 0.2708	0.2752	0.2902	Ave		0.2662				7.5		20.0			
Fluorene	1.3859 1.3607	1.3290 1.3980	1.4031 1.3267	1.5267	1.4595	Ave		1.3987			0.9000	4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorophenyl-phenyl ether	0.6136 0.5925	0.6830 0.6097	0.6139 0.5844	0.6661	0.6431	Ave		0.6258			0.4000	5.6		20.0			
5-Nitro-o-toluidine	0.3895 0.3983	0.3282 0.3923	0.4155 0.4175	0.3926	0.4162	Ave		0.3937				7.4		20.0			
4-Nitroaniline	+++++ 0.3756	0.2582 0.3504	0.3847 0.3762	0.3740	0.3903	Ave		0.3585			0.0100	12.8		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1193	+++++ 0.1201	0.1058 0.1312	0.1144	0.1090	Ave		0.1166			0.0100	7.8		20.0			
n-Nitrosodiphenylamine(as diphenylamine)	0.6012 0.5887	0.5456 0.6353	0.6336 0.6390	0.6447	0.5852	Ave		0.6091			0.0100	5.7		20.0			
1,2-Diphenylhydrazine	1.0414 0.9694	1.0392 1.0289	1.0500 1.0683	1.0471	0.9313	Ave		1.0219				4.6		20.0			
Sulfotepp	0.1537 0.1703	0.1594 0.1796	0.1749 0.1756	0.1680	0.1607	Ave		0.1678				5.4		20.0			
1,3,5-Trinitrobenzene	+++++ 0.0615	0.0713 0.0702	0.0494 0.0672	0.0556	0.0562	Ave		0.0616				13.5		20.0			
cis-Diallate	0.4949 0.3713	0.4877 0.4047	0.3819 0.3965	0.3791	0.3462	Ave		0.4078				13.3		20.0			
Phorate	+++++ 0.6248	0.5131 0.7079	0.5770 +++++	0.6048	0.5662	Ave		0.5990				10.9		20.0			
Phenacetin	0.3039 0.4535	0.3368 0.4566	0.4063 0.4781	0.4328	0.4040	Ave		0.4090				14.9		20.0			
4-Bromophenyl-phenylether	0.1836 0.1930	0.2070 0.2019	0.2035 0.1925	0.2036	0.1923	Ave		0.1972			0.1000	4.0		20.0			
trans-Diallate	+++++ 0.3699	+++++ 0.3842	0.4215 0.3794	0.4102	0.3739	Ave		0.3898				5.4		20.0			
Hexachlorobenzene	0.1908 0.2302	0.2789 0.2330	0.2349 0.2296	0.2458	0.2289	Ave		0.2340			0.1000	10.3		20.0			
Dimethoate	0.3381 0.3769	0.3683 0.4124	0.3932 0.3991	0.3890	0.3575	Ave		0.3793				6.4		20.0			
Atrazine	0.1702	0.1710 0.1828	0.1858 0.1692	0.1956	0.1758	Ave		0.1786			0.0100	5.5		20.0			
Pentachloronitrobenzene	0.1006 0.0986	0.0957 0.0955	0.1037 0.1079	0.1039	0.0958	Ave		0.1002				4.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Pentachlorophenol	0.0922 0.1217	0.0864 0.1248	0.1063 +++++	0.1240	0.1219	Ave		0.1110			0.0500	14.6		20.0			
4-Aminobiphenyl	0.8343 0.7526	0.8089 0.7531	0.8215 0.8230	0.8682	0.7486	Ave		0.8013				5.6		20.0			
Pronamide	0.2702 0.3608	0.3177 0.3633	0.3191 0.3595	0.3564	0.3507	Ave		0.3372				9.7		20.0			
Dinoseb	+++++ 0.1702	+++++ 0.1768	0.1288 0.1801	0.1416	0.1580	Ave		0.1593				12.9		20.0			
Disulfoton	0.5293 0.6274	0.8688 0.6389	0.6690 0.6101	0.6350	0.6198	Ave		0.6498				15.0		20.0			
Phenanthrene	1.0782 1.0330	0.9589 1.0610	1.1439 1.0399	1.0858	1.0333	Ave		1.0543			0.7000	5.0		20.0			
Anthracene	1.1031 1.0628	1.0203 1.0531	1.0833 1.0367	1.0619	0.9817	Ave		1.0504			0.7000	3.6		20.0			
Carbazole	0.9614 1.0805	1.0003 1.0346	1.0559 1.0760	1.0713	1.0120	Ave		1.0365			0.0100	4.1		20.0			
Methyl parathion	0.2145 0.3006	0.2256 0.3253	0.2783 0.3284	0.2692	0.2789	Ave		0.2776				15.0		20.0			
Di-n-butyl phthalate	1.1359 1.4370	1.2031 1.4249	1.4050 1.3854	1.3877	1.2956	Ave		1.3343			0.0100	8.4		20.0			
Parathion	0.1348 0.1714	0.1424 0.1893	0.1517 0.1890	0.1707	0.1639	Ave		0.1642				12.3		20.0			
4-Nitroquinoline-1-oxide	+++++ 0.0715	+++++ 0.0770	+++++ 0.0881	0.0592	0.0620	Ave		0.0716				16.3		20.0			
Octachlorostyrene	0.0671 0.0860	0.0845 0.0919	0.0993 0.0909	0.0922	0.0848	Ave		0.0871				10.8		20.0			
Isodrin	+++++ 0.1304	0.1741 0.1280	0.1601 0.1301	0.1371	0.1163	Ave		0.1394				14.5		20.0			
Fluoranthene	1.0065 1.1016	1.0618 1.1592	1.1720 1.1344	1.2023	1.0881	Ave		1.1157			0.6000	5.7		20.0			
Benzidine	0.6203 0.7622	0.5595 0.7685	0.6927 0.7231	0.7459	0.7778	Ave		0.7062				11.1		20.0			
Pyrene	1.3399 1.2276	1.2602 1.3450	1.2418 1.3427	1.2730	1.2322	Ave		1.2828			0.6000	4.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
p-Dimethylamino azobenzene	+++++ 0.1623	+++++ 0.1864	0.1469 0.1968	0.1605	0.1593	Ave		0.1687				11.2		20.0			
Chlorobenzilate	0.4360 0.4075	0.2935 0.4458	0.3678 0.4781	0.3828	0.4380	Ave		0.4062				14.2		20.0			
3,3'-Dimethylbenzidine	0.6141 0.5789	0.4800 0.6490	0.4817 0.6309	0.5148	0.6021	Ave		0.5689				11.9		20.0			
Butylbenzylphthalate	0.4984 0.5948	0.5336 0.6647	0.5307 0.6602	0.5688	0.6220	Ave		0.5841			0.0100	10.6		20.0			
2-Acetylaminofluorene	+++++ 0.3774	+++++ 0.4264	+++++ 0.4554	0.3100	0.3666	Ave		0.3872				14.5		20.0			
3,3'-Dichlorobenzidine	0.2954 0.3741	0.3160 0.4068	0.3301 0.4158	0.3488	0.3774	Ave		0.3581			0.0100	12.0		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.1557 0.2006	0.1410 0.2107	0.1713 0.2176	0.1718	0.2030	Ave		0.1840				15.1		20.0			
Benzo[a]anthracene	0.8589 0.9864	0.7935 1.0535	0.9299 1.0418	0.9353	0.9861	Ave		0.9482			0.8000	9.4		20.0			
Chrysene	0.9393 0.9005	0.8527 0.9648	0.9109 1.0460	0.9268	0.9596	Ave		0.9376			0.7000	6.0		20.0			
Bis(2-ethylhexyl) phthalate	0.6694 0.8458	0.6433 0.9138	0.7316 0.9598	0.7718	0.8065	Ave		0.7928			0.0100	14.1		20.0			
6-Methylchrysene	0.6397 0.6095	0.6113 0.6648	0.5915 0.7470	0.6075	0.6737	Ave		0.6431				7.9		20.0			
Di-n-octyl phthalate	+++++ 1.8032	+++++ 1.8178	1.4405 2.0488	1.8165	1.7991	Ave		1.7877			0.0100	10.9		20.0			
7,12-Dimethylbenz(a)anthracene	0.4178 0.4775	0.3455 0.5029	0.4472 0.4848	0.5451	0.4840	Ave		0.4631				13.0		20.0			
Benzo[b]fluoranthene	1.4065 1.2240	1.0152 1.2567	1.2062 1.2208	1.3865	1.2873	Ave		1.2504			0.7000	9.7		20.0			
Benzo[k]fluoranthene	1.2445 1.3035	1.1976 1.2670	1.1706 1.2877	1.3782	1.3262	Ave		1.2719			0.7000	5.3		20.0			
Benzo[a]pyrene	1.0523 1.0613	0.9745 1.0796	1.0200 1.1165	1.0985	1.1089	Ave		1.0639			0.7000	4.5		20.0			
3-Methylcholanthrene	0.4905 0.4633	0.3837 0.4729	0.4232 0.5398	0.5033	0.4654	Ave		0.4678				10.2		20.0			

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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibenz[a,h]acridine	0.8869 0.8634	0.8020 0.8958	0.8355 0.9572	0.9092	0.9025	Ave		0.8816				5.4		20.0			
Dibenz[a,j]acridine	0.9870 0.9581	0.9134 0.9807	0.9327 1.0864	1.1361	0.9965	Ave		0.9988				7.6		20.0			
Indeno[1,2,3-cd]pyrene	0.9839 1.0203	0.8670 1.0304	0.9705 1.1090	1.1403	0.9908	Ave		1.0140			0.5000	8.4		20.0			
Dibenz(a,h)anthracene	1.0329 1.1392	0.9691 1.1283	1.0822 1.1999	1.2501	1.1655	Ave		1.1209			0.4000	8.1		20.0			
Benzo[g,h,i]perylene	1.1848 1.1407	1.0651 1.1757	1.1455 1.2730	1.2863	1.2654	Ave		1.1921			0.5000	6.5		20.0			
2-Fluorophenol (Surr)	1.4311 1.5949	1.4832 1.6079	1.4970 1.6142	1.5317	1.5332	Ave		1.5366				4.3		20.0			
Phenol-d5 (Surr)	2.0409 2.3141	1.8632 2.3795	2.1684 2.3651	2.2551	2.2396	Ave		2.2032				8.0		20.0			
Nitrobenzene-d5 (Surr)	0.5262 0.5002	0.5515 0.5502	0.5160 0.5378	0.5551	0.5446	Ave		0.5352				3.6		20.0			
2-Fluorobiphenyl (Surr)	1.5963 1.5186	1.6115 1.6369	1.5777 1.4135	1.6169	1.7247	Ave		1.5870				5.7		20.0			
2,4,6-Tribromophenol (Surr)	0.1991 0.2426	0.2330 0.2463	0.2289 0.2405	0.2419	0.2626	Ave		0.2368				7.7		20.0			
p-Terphenyl-d14 (Surr)	0.8756 0.8679	0.8434 0.8759	0.8642 0.8944	0.9083	0.9627	Ave		0.8865				4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1 | Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 | GC Column: DB-5MS 30m ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 | Calibration End Date: 07/18/2023 10:14 | Calibration ID: 52063

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-397829/3	JG1802.D
Level 2	IC 410-397829/9	JG1808.D
Level 3	IC 410-397829/8	JG1807.D
Level 4	IC 410-397829/7	JG1806.D
Level 5	ICIS 410-397829/2	JG1801a.D
Level 6	IC 410-397829/6	JG1805.D
Level 7	IC 410-397829/5	JG1804.D
Level 8	IC 410-397829/4	JG1803.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCBd4	Ave	+++++ 344728	+++++ 552607	39236 758139	86564	188328	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodimethylamine	DCBd4	Ave	5717 591627	7593 935066	60295 1331176	141688	315242	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pyridine	DCBd4	Ave	20774 1880460	37118 3077034	185508 4218053	468775	1056962	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
N,N-dimethylformamide	DCBd4	Ave	+++++ 709839	+++++ 1130899	71283 1661162	162039	392348	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2-Picoline	DCBd4	Ave	10130 999554	13641 1555113	92270 2184698	235256	522378	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomethylethylamine	DCBd4	Ave	+++++ 429259	+++++ 679740	56162 924805	132237	258422	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Methyl methanesulfonate	DCBd4	Ave	5549 553757	9060 899721	57993 1255316	142001	313500	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodiethylamine	DCBd4	Ave	2932 424605	4958 672534	42666 901108	97390	210463	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Ethyl methanesulfonate	DCBd4	Ave	4920 463350	8108 752996	44559 1089118	112977	250618	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzaldehyde	DCBd4	Ave	 674785	14214 966730	88611 +++++	206848	424550	 12.5	0.250 20.0	1.25 +++++	3.75	7.50
Aniline	DCBd4	Ave	12185 1360168	20079 2264896	132307 3160259	334598	733148	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenol	DCBd4	Ave	12372 1308192	22676 2118631	131603 2973020	334305	741167	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethyl)ether	DCBd4	Ave	8986 891977	17437 1425613	99429 1942224	226362	475541	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chlorophenol	DCBd4	Ave	8318 848768	12049 1347636	80486 1831037	203052	448330	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dichlorobenzene	DCBd4	Ave	7504	12687	81053	207905	464391	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			820239	1295260	1868945			12.5	20.0	30.0		
1,4-Dichlorobenzene	DCBd4	Ave	8548 855219	15652 1344816	88711 1845336	213503	473819	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzyl alcohol	DCBd4	Ave	4821 590534	7734 917389	49655 1358348	135473	304640	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,2-Dichlorobenzene	DCBd4	Ave	8313 827551	12036 1285129	81588 1814507	196605	439910	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
bis (2-chloroisopropyl) ether	DCBd4	Ave	23621 1972059	34264 3192650	196326 4301264	483495	1090541	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o-Cresol	DCBd4	Ave	7411 825774	12384 1341808	73940 1809425	190048	427647	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopyrrolidine	DCBd4	Ave	3572 501730	7727 790226	48702 1134935	112657	265679	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acetophenone	DCBd4	Ave	11512 1260374	20631 1975563	129811 2850714	315799	714827	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-propylamine	DCBd4	Ave	8230 764275	13844 1182472	76003 1708253	183291	427502	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomorpholine	DCBd4	Ave	6354 687911	13793 1134880	74919 1592626	175146	401320	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o-Toluidine	DCBd4	Ave	11645 1368101	22002 2250375	135934 3135525	339553	811332	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
m & p-Cresol	DCBd4	Ave	7774 937008	13741 1527791	88210 2149999	227183	536513	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloroethane	DCBd4	Ave	3400 351578	6444 565396	37263 836588	90652	205550	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Nitrobenzene	NPT	Ave	12978 1023932	18870 1574319	104580 2297951	257341	557937	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopiperidine	NPT	Ave	4769 448198	6635 697888	39762 995288	105025	236371	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isophorone	NPT	Ave	19192 1988537	30798 3105432	191355 4232244	464646	1076763	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitrophenol	NPT	Ave	3535 429664	6333 697828	36201 937703	99254	212630	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dimethylphenol	NPT	Ave	7364 920106	10595 1414914	84376 1809092	209542	444010	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o,o',o''-Triethylphosphorothioate	NPT	Ave	2678 316953	5083 548173	31411 656618	81733	176223	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethoxy)methane	NPT	Ave	10350 1194002	19159 1878754	116327 2448605	313973	647787	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dichlorophenol	NPT	Ave	4415	9356	60658	154808	346214	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			661028	1075516	1434658			12.5	20.0	30.0		
1,2,4-Trichlorobenzene	NPT	Ave	6940 682667	11255 1057382	68507 1518107	171847	367641	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Naphthalene	NPT	Ave	24004 2356877	36545 3827519	244228 5318245	584301	1294520	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
a-Terpineol	NPT	Ave	10877 1062879	14716 1768342	98054 2405204	264042	564048	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloroaniline	NPT	Ave	7302 1099329	16342 1688552	101979 2349345	256874	556069	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dichlorophenol	NPT	Ave	4798 679678	8621 1025095	62321 1410998	146915	342746	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloropropene	NPT	Ave	3842 451501	6940 701637	42951 944940	109981	238881	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorobutadiene	NPT	Ave	3498 395453	5338 618744	38282 802915	92648	208730	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Quinoline	NPT	Ave	16290 1657991	25329 2586492	161749 3659695	406251	902597	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Caprolactam	NPT	Ave	 229984	3467 356615	20721 486477	53932	112097	 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-butylamine	NPT	Ave	+++++ 864574	+++++ 1358056	101074 1923533	235719	463033	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
1,4-phenylenediamine	NPT	Ave	+++++ 533389	+++++ 793060	+++++ 1048579	150678	284022	+++++ 12.5	+++++ 20.0	+++++ 30.0	3.75	7.50
4-Chloro-3-methylphenol	NPT	Ave	6758 797987	11860 1202487	73506 1776236	180907	423546	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Safrole, Total	NPT	Ave	4184 555590	7702 891771	54396 1242648	126195	306900	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Methylnaphthalene	NPT	Ave	13635 1470058	22326 2379623	144228 3232363	372806	777354	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Methylnaphthalene	NPT	Ave	13558 1480614	22273 2144900	131816 3110285	352755	740103	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorocyclopentadiene	ANT	Ave	3411 410711	5299 606468	32281 814796	100443	220832	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,2,4,5-Tetrachlorobenzene	ANT	Ave	6182 713170	9854 1086417	67430 1549832	175078	357183	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isosafrole Peak 1	ANT	Ave	1143 108895	1704 156065	10001 226389	25159	53630	0.0200 2.00	0.0400 3.20	0.200 4.80	0.600	1.20
2,4,6-Trichlorophenol	ANT	Ave	3909 456102	6083 702470	40990 1002427	106445	243697	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4,5-Trichlorophenol	ANT	Ave	3708	7536	46690	116734	274450	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			502890	746082	1115858			12.5	20.0	30.0		
Isosafrole Peak 2	ANT	Ave	4822 565998	8140 898730	55516 1211718	143019	321102	0.105 10.5	0.210 16.8	1.05 25.2	3.15	6.30
1,1'-Biphenyl	ANT	Ave	15307 1779906	29807 2786135	181022 3789487	449360	1005300	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chloronaphthalene	ANT	Ave	13442 1257193	22361 1938874	130910 3165716	334623	748290	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Chloronaphthalene	ANT	Ave	11238 1345697	20600 2129294	126372 2588131	327188	766656	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diphenyl ether	ANT	Ave	9369 931062	14352 1517543	96695 2061445	226401	525175	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitroaniline	ANT	Ave	+++++ 505283	+++++ 774957	43333 1090794	108573	250980	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
1,4-Naphthoquinone	ANT	Ave	4355 607747	7573 910966	51101 1270508	129530	291212	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Dinitrobenzene	ANT	Ave	2476 231617	2605 330533	18406 505612	49136	113923	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dimethyl phthalate	ANT	Ave	14513 1648857	27720 2342888	161939 3313928	410834	862060	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dinitrobenzene	ANT	Ave	3070 248806	3293 375445	23254 527714	60490	126956	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dinitrotoluene	ANT	Ave	+++++ 380075	4231 536178	33656 739031	81818	192964	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthylene	ANT	Ave	20546 2436056	36369 3780836	233488 5027376	581599	1279126	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Nitroaniline	ANT	Ave	3167 464150	5711 699357	41834 975702	101846	230553	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthene	ANT	Ave	14483 1506926	25108 2388349	153744 3289130	368210	771090	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrophenol	ANT	Ave	+++++ 473545	+++++ 721579	66552 1041502	142743	256885	+++++ 25.0	+++++ 40.0	5.00 60.0	11.3	17.5
Pentachlorobenzene	ANT	Ave	5120 595727	10355 924253	57614 1320708	140471	311809	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitrophenol	ANT	Ave	+++++ 558546	17987 809483	70076 1207288	124929	288466	+++++ 25.0	1.50 40.0	3.75 60.0	7.50	15.0
2,4-Dinitrotoluene	ANT	Ave	4105 489700	6829 710649	43599 1026638	115644	256044	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenzofuran	ANT	Ave	20324 2088979	32691 2994625	207959 4223162	502401	1116904	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Naphthylamine	ANT	Ave	13996	22526	131249	340473	748311	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			1356020	2054924	2915673			12.5	20.0	30.0		
2,3,4,6-Tetrachlorophenol	ANT	Ave	4087 406481	7892 604565	40165 887037	97888	224744	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Naphthylamine	ANT	Ave	10816 1551098	22649 2281327	146743 3068143	353025	815162	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diethyl phthalate	ANT	Ave	15754 1753034	29809 2559624	176854 3699969	415225	941245	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
O,O-Diethyl O-2-pyrazinyl phosphorothioate	ANT	Ave	2993 311529	4245 475073	31399 677392	75246	170866	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluorene	ANT	Ave	15145 1626086	25474 2479499	163283 3318688	417431	859455	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chlorophenyl-phenyl ether	ANT	Ave	6706 708063	13091 1081302	71444 1461852	182127	378715	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
5-Nitro-o-toluidine	ANT	Ave	4256 475993	6290 695792	48358 1044283	107343	245067	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitroaniline	ANT	Ave	+++++ 448882	4949 621517	44769 941053	102254	229862	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,6-Dinitro-2-methylphenol	PHN	Ave	+++++ 526923	+++++ 752685	67128 1147286	116549	262544	+++++ 25.0	+++++ 40.0	3.75 60.0	7.50	15.0
n-Nitrosodiphenylamine(as diphenylamine)	PHN	Ave	10277 1105153	16392 1692187	113870 2375303	279085	598994	0.106 10.6	0.213 17.0	1.06 25.5	3.19	6.38
1,2-Diphenylhydrazine	PHN	Ave	20944 2140819	36734 3224217	222023 4672113	533280	1121567	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Sulfotepp	PHN	Ave	3092 376153	5633 562950	36978 767749	85540	193474	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3,5-Trinitrobenzene	PHN	Ave	+++++ 135742	2521 219972	10445 293828	28314	67723	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
cis-Diallate	PHN	Ave	7365 606801	12758 938427	59759 1283042	142884	308505	0.0925 9.25	0.185 14.8	0.925 22.2	2.78	5.55
Phorate	PHN	Ave	+++++ 1379888	18137 2218183	122015 +++++	308022	681816	+++++ 12.5	0.250 20.0	1.25 +++++	3.75	7.50
Phenacetin	PHN	Ave	6113 1001454	11906 1430872	85907 2090955	220448	486502	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Bromophenyl-phenylether	PHN	Ave	3693 426153	7316 632660	43025 841869	103669	231605	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
trans-Diallate	PHN	Ave	+++++ 212374	+++++ 313039	23175 431356	54315	117078	+++++ 3.25	+++++ 5.20	0.325 7.80	0.975	1.95
Hexachlorobenzene	PHN	Ave	3837 508428	9858 730182	49679 1004060	125181	275654	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dimethoate	PHN	Ave	6800 832322	13018 1292276	83143 1745336	198108	430516	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Atrazine	PHN	Ave	 375895	6043 572793	39280 739863	99596	211759	 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachloronitrobenzene	PHN	Ave	2024 217765	3382 299117	21928 471866	52899	115339	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachlorophenol	PHN	Ave	9273 537516	15262 782266	44969 +++++	126284	293634	0.625 25.0	1.25 40.0	2.50 +++++	7.50	15.0
4-Aminobiphenyl	PHN	Ave	16779 1662090	28595 2359997	173710 3598950	442158	901508	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pronamide	PHN	Ave	5435 796823	11231 1138403	67464 1572267	181521	422361	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dinoseb	PHN	Ave	+++++ 375948	+++++ 554044	27234 787656	72131	190320	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Disulfoton	PHN	Ave	10645 1385615	30710 2002024	141448 2667923	323390	746391	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenanthrene	PHN	Ave	21684 2281428	33896 3324991	241875 4547860	553001	1244410	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Anthracene	PHN	Ave	22186 2347203	36065 3300194	229057 4533662	540842	1182296	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Carbazole	PHN	Ave	19336 2386159	35360 3241977	223276 4705775	545632	1218752	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Methyl parathion	PHN	Ave	4314 663897	7973 1019267	58845 1436383	137081	335825	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Di-n-butyl phthalate	PHN	Ave	22845 3173440	42527 4465053	297076 6058805	706745	1560292	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Parathion	PHN	Ave	2711 378629	5032 593213	32086 826730	86940	197436	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitroquinoline-1-oxide	PHN	Ave	+++++ 157867	+++++ 241247	+++++ 385319	30169	74706	+++++ 12.5	+++++ 20.0	+++++ 30.0	3.75	7.50
Octachlorostyrene	PHN	Ave	1350 189820	2987 288048	20987 397429	46981	102167	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isodrin	PHN	Ave	+++++ 288092	6153 401146	33850 568884	69843	140034	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluoranthene	PHN	Ave	20242 2432903	37533 3632622	247826 4961103	612311	1310358	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzidine	PYR10	Ave	34316 4882330	56350 6495011	452767 8562031	1123403	2444466	0.375 37.5	0.750 60.0	3.75 90.0	11.3	22.5
Pyrene	PYR10	Ave	24708 2621383	42309 3789293	270567 5299123	639077	1290885	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
p-Dimethylamino azobenzene	PYR10	Ave	+++++ 346551	+++++ 525216	31999 776708	80571	166892	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Chlorobenzilate	PYR10	Ave	8041 870060	9854 1256030	80144 1887121	192148	458867	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,3'-Dimethylbenzidine	PYR10	Ave	11325 1236050	16117 1828341	104950 2489927	258443	630805	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Butylbenzylphthalate	PYR10	Ave	9190 1270114	17915 1872559	115634 2605649	285528	651658	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Acetylaminofluorene	PYR10	Ave	+++++ 805866	+++++ 1201420	+++++ 1797350	155649	384081	+++++ 12.5	+++++ 20.0	+++++ 30.0	3.75	7.50
3,3'-Dichlorobenzidine	PYR10	Ave	5448 798891	10609 1145974	71915 1641122	175091	395429	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,4'-Methylene bis(2-chloroaniline)	PYR10	Ave	2871 428397	4734 593478	37331 858865	86266	212694	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]anthracene	PYR10	Ave	15839 2106160	26642 2967991	202609 4111608	469547	1033128	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Chrysene	PYR10	Ave	17322 1922877	28627 2718314	198461 4128130	465262	1005364	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-ethylhexyl) phthalate	PYR10	Ave	12345 1806011	21599 2574536	159408 3787944	387470	844907	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
6-Methylchrysene	PYR10	Ave	11796 1301423	20523 1873048	128883 2948128	304994	705803	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Di-n-octyl phthalate	PRY	Ave	+++++ 3038527	+++++ 4293371	246376 6714812	647239	1477000	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
7,12-Dimethylbenz(a)anthracene	PRY	Ave	5991 804531	9306 1187839	76486 1588990	194214	397327	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[b]fluoranthene	PRY	Ave	20166 2062463	27348 2968163	206295 4000931	494017	1056806	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[k]fluoranthene	PRY	Ave	17843 2196534	32260 2992534	200213 4220209	491053	1088750	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]pyrene	PRY	Ave	15088 1788380	26251 2550018	174453 3659072	391391	910317	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Methylcholanthrene	PRY	Ave	7033 780681	10335 1117040	72385 1769236	179336	382065	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,h]acridine	PRY	Ave	12716 1454919	21604 2115860	142889 3137193	323939	740890	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,j]acridine	PRY	Ave	14152 1614406	24606 2316213	159513 3560552	404787	818053	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Indeno[1,2,3-cd]pyrene	PRY	Ave	14107 1719181	23355 2433703	165988 3634794	406284	813400	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 397829

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2023 07:41 Calibration End Date: 07/18/2023 10:14 Calibration ID: 52063

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dibenz(a,h)anthracene	PRY	Ave	14809 1919596	26105 2664858	185093 3932644	445434	956776	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[g,h,i]perylene	PRY	Ave	16988 1922075	28691 2776898	195917 4172078	458330	1038814	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Fluorophenol (Surr)	DCBd4	Ave	15552 1838729	27997 2921241	175720 4093043	442229	978644	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Phenol-d5 (Surr)	DCBd4	Ave	22178 2667971	35171 4322971	254522 5997111	651095	1429513	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Nitrobenzene-d5 (Surr)	NPT	Ave	22310 2315361	39592 3758510	243107 5305854	590137	1277098	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2-Fluorobiphenyl (Surr)	ANT	Ave	34889 3629778	61775 5806339	367207 7071668	884190	2031204	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	4351 579732	8931 873518	53273 1203425	132286	309253	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
p-Terphenyl-d14 (Surr)	PYR10	Ave	32293 3706583	56629 4935167	376593 7059892	911973	2017039	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0

Curve Type Legend:
Ave = Average ISTD

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1801a.D
Lims ID: ICIS L5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 18-Jul-2023 07:41:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICIS L5
Misc. Info.: 410-0089185-002
Operator ID: kel10217 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:15:02 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 08:13:25

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.701	1.701	0.000	94	188328	7.50	7.25	
	2 N-Nitrosodimethylamine	74	1.928	1.928	0.000	93	315242	7.50	7.45	
	3 Pyridine	79	1.969	1.969	0.000	84	1056962	15.0	14.5	
	4 Dimethylformamide	73	2.267	2.267	0.000	97	392348	7.50	7.52	
	5 2-Picoline	93	2.559	2.559	0.000	93	522378	7.50	7.37	
	6 N-Nitrosomethylethylamine	88	2.647	2.647	0.000	95	258422	7.50	7.43	
	7 Methyl methanesulfonate	80	2.921	2.921	0.000	86	313500	7.50	7.48	
$	9 2-Fluorophenol	112	3.119	3.119	0.000	96	978644	15.0	15.0	
	11 N-Nitrosodiethylamine	102	3.289	3.289	0.000	86	210463	7.50	7.45	
	12 Ethyl methanesulfonate	109	3.587	3.587	0.000	95	250618	7.50	7.16	
	13 Benzaldehyde	77	3.914	3.914	0.000	92	424550	7.50	7.47	
	17 Aniline	93	4.019	4.019	0.000	76	733148	7.50	7.42	
$	15 Phenol-d5	99	4.025	4.025	0.000	95	1429513	15.0	15.2	
	16 Phenol	94	4.036	4.036	0.000	93	741167	7.50	7.53	
	18 Bis(2-chloroethyl)ether	93	4.077	4.077	0.000	87	475541	7.50	6.93	
	19 2-Chlorophenol	128	4.147	4.147	0.000	94	448330	7.50	7.40	
	21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	95	464391	7.50	7.71	
*	22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	95	212767	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	91	473819	7.50	7.35	
	26 Benzyl alcohol	108	4.474	4.474	0.000	89	304640	7.50	7.58	
	27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	95	439910	7.50	7.37	
	30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	93	1090541	7.50	7.21	
	29 2-Methylphenol	108	4.603	4.603	0.000	98	427647	7.50	7.36	
	31 N-Nitrosopyrrolidine	100	4.696	4.696	0.000	81	265679	7.50	7.62	
	33 N-Nitrosodi-n-propylamine	70	4.714	4.714	0.000	88	427502	7.50	7.40	
	32 Acetophenone	105	4.714	4.714	0.000	85	714827	7.50	7.66	
	35 N-Nitrosomorpholine	56	4.737	4.737	0.000	91	401320	7.50	7.49	
	36 2-Toluidine	106	4.754	4.754	0.000	83	811332	7.50	8.02	
	34 4-Methylphenol	108	4.754	4.754	0.000	83	536513	7.50	7.97	
	37 Hexachloroethane	117	4.813	4.813	0.000	96	205550	7.50	7.57	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.860	4.860	0.000	93	1277098	15.0	15.3	
40 Nitrobenzene	77	4.877	4.877	0.000	94	557937	7.50	7.30	
41 N-Nitrosopiperidine	114	5.023	5.023	0.000	80	236371	7.50	7.67	
42 Isophorone	82	5.105	5.105	0.000	98	1076763	7.50	7.88	
43 2-Nitrophenol	139	5.186	5.186	0.000	91	212630	7.50	7.53	
44 2,4-Dimethylphenol	107	5.251	5.251	0.000	97	444010	7.50	7.70	
46 o,o',o''-Triethylphosphorothioat	198	5.292	5.292	0.000	95	176223	7.50	7.94	
47 Bis(2-chloroethoxy)methane	93	5.321	5.321	0.000	91	647787	7.50	7.85	
49 2,4-Dichlorophenol	162	5.438	5.438	0.000	97	346214	7.50	8.04	
50 1,2,4-Trichlorobenzene	180	5.490	5.490	0.000	94	367641	7.50	7.58	
* 52 Naphthalene-d8	136	5.549	5.549	0.000	98	781685	5.00	5.00	
53 Naphthalene	128	5.566	5.566	0.000	97	1294520	7.50	7.70	
55 Alpha-Terpineol	59	5.578	5.578	0.000	89	564048	7.50	7.63	
56 4-Chloroaniline	127	5.630	5.630	0.000	94	556069	7.50	7.83	
57 2,6-Dichlorophenol	162	5.636	5.636	0.000	91	342746	7.50	8.05	
58 Hexachloropropene	213	5.648	5.648	0.000	94	238881	7.50	7.84	
59 Hexachlorobutadiene	225	5.683	5.683	0.000	97	208730	7.50	7.95	
61 Quinoline	129	5.887	5.887	0.000	95	902597	7.50	7.81	
62 Caprolactam	113	5.940	5.940	0.000	67	112097	7.50	7.34	
63 N-Nitrosodi-n-butylamine	84	5.946	5.946	0.000	92	463033	7.50	7.32	
64 p-Phenylene diamine	108	5.969	5.969	0.000	95	284022	7.50	7.56	
65 4-Chloro-3-methylphenol	107	6.121	6.121	0.000	96	423546	7.50	7.97	
66 Safrole, Total	162	6.150	6.150	0.000	84	306900	7.50	8.29	
67 2-Methylnaphthalene	142	6.226	6.226	0.000	91	777354	7.50	7.61	
69 1-Methylnaphthalene	142	6.319	6.319	0.000	93	740103	7.50	7.56	
71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	95	220832	7.50	8.59	
70 1,2,4,5-Tetrachlorobenzene	216	6.383	6.383	0.000	97	357183	7.50	7.69	
72 Isosafrole Peak 1	162	6.430	6.430	0.000	84	53630	1.20	1.19	
79 2,4,6-Trichlorophenol	196	6.506	6.506	0.000	96	243697	7.50	8.25	
80 2,4,5-Trichlorophenol	196	6.553	6.553	0.000	91	274450	7.50	8.44	
$ 81 2-Fluorobiphenyl (Surr)	172	6.582	6.582	0.000	99	2031204	15.0	16.3	
82 Isosafrole Peak 2	162	6.640	6.640	0.000	88	321102	6.30	7.09	
83 1,1'-Biphenyl	154	6.675	6.675	0.000	97	1005300	7.50	8.24	
84 2-Chloronaphthalene	162	6.687	6.687	0.000	97	748290	7.50	8.09	
85 1-Chloronaphthalene	162	6.710	6.710	0.000	97	766656	7.50	8.63	
86 Phenyl ether	170	6.775	6.775	0.000	92	525175	7.50	8.09	
87 2-Nitroaniline	138	6.798	6.798	0.000	78	250980	7.50	7.70	
88 1,4-Naphthoquinone	158	6.862	6.862	0.000	80	291212	7.50	7.95	
89 1,4-Dinitrobenzene	168	6.932	6.932	0.000	90	113923	7.50	7.86	
90 Dimethyl phthalate	163	6.967	6.967	0.000	97	862060	7.50	7.87	
91 1,3-Dinitrobenzene	168	6.997	6.997	0.000	78	126956	7.50	7.52	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	87	192964	7.50	8.38	
93 Acenaphthylene	152	7.078	7.078	0.000	99	1279126	7.50	8.01	
95 3-Nitroaniline	138	7.189	7.189	0.000	87	230553	7.50	8.15	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	95	392579	5.00	5.00	
97 Acenaphthene	153	7.242	7.242	0.000	97	771090	7.50	7.46	
98 2,4-Dinitrophenol	184	7.283	7.283	0.000	76	256885	17.5	17.6	
99 Pentachlorobenzene	250	7.370	7.370	0.000	98	311809	7.50	7.76	
100 4-Nitrophenol	109	7.399	7.399	0.000	95	288466	15.0	16.8	
102 2,4-Dinitrotoluene	165	7.405	7.405	0.000	85	256044	7.50	8.19	
101 Dibenzofuran	168	7.411	7.411	0.000	98	1116904	7.50	8.01	
104 1-Naphthylamine	143	7.487	7.487	0.000	98	748311	7.50	7.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
105 2,3,4,6-Tetrachlorophenol	232	7.534	7.534	0.000	76	224744	7.50	7.88	a
106 2-Naphthylamine	143	7.563	7.563	0.000	96	815162	7.50	8.37	
107 Diethyl phthalate	149	7.639	7.639	0.000	96	941245	7.50	7.98	
109 Thionazin	107	7.715	7.715	0.000	76	170866	7.50	8.17	
108 Fluorene	166	7.732	7.732	0.000	93	859455	7.50	7.83	
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	92	378715	7.50	7.71	
111 N-Nitro-o-toluidine	152	7.756	7.756	0.000	92	245067	7.50	7.93	
112 4-Nitroaniline	138	7.767	7.767	0.000	81	229862	7.50	8.17	
113 4,6-Dinitro-2-methylphenol	198	7.785	7.785	0.000	68	262544	15.0	14.0	
114 N-Nitrosodiphenylamine	169	7.855	7.855	0.000	67	598994	6.38	6.12	
115 1,2-Diphenylhydrazine	77	7.884	7.884	0.000	41	1121567	7.50	6.83	
$ 116 2,4,6-Tribromophenol	330	7.966	7.966	0.000	90	309253	15.0	16.6	
117 Sulfotepp	97	8.013	8.013	0.000	75	193474	7.50	7.18	
118 1,3,5-Trinitrobenzene	213	8.118	8.118	0.000	81	67723	7.50	6.84	
120 cis-Diallate	86	8.124	8.124	0.000	94	308505	5.55	4.71	
119 Phorate	75	8.135	8.135	0.000	92	681816	7.50	7.09	
121 Phenacetin	108	8.153	8.153	0.000	90	486502	7.50	7.41	
122 4-Bromophenyl phenyl ether	248	8.199	8.199	0.000	75	231605	7.50	7.32	
123 trans-Diallate	86	8.211	8.211	0.000	92	117078	1.95	1.87	
124 Hexachlorobenzene	284	8.246	8.246	0.000	93	275654	7.50	7.34	
125 Dimethoate	87	8.299	8.299	0.000	96	430516	7.50	7.07	
126 Atrazine	200	8.369	8.369	0.000	82	211759	7.50	7.38	
128 Pentachloronitrobenzene	237	8.445	8.445	0.000	61	115339	7.50	7.17	
127 Pentachlorophenol	266	8.451	8.451	0.000	84	293634	15.0	16.5	
129 4-Aminobiphenyl	169	8.451	8.451	0.000	91	901508	7.50	7.01	
130 Pronamide	173	8.515	8.515	0.000	88	422361	7.50	7.80	
* 131 Phenanthrene-d10	188	8.620	8.620	0.000	96	802857	5.00	5.00	
133 Dinoseb	211	8.620	8.620	0.000	71	190320	7.50	7.44	
134 Disulfoton	88	8.632	8.632	0.000	97	746391	7.50	7.15	
132 Phenanthrene	178	8.643	8.643	0.000	98	1244410	7.50	7.35	
135 Anthracene	178	8.690	8.690	0.000	99	1182296	7.50	7.01	
136 Carbazole	167	8.853	8.853	0.000	96	1218752	7.50	7.32	
137 Methyl parathion	109	8.988	8.988	0.000	89	335825	7.50	7.53	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	99	1560292	7.50	7.28	
139 Ethyl Parathion	109	9.356	9.356	0.000	81	197436	7.50	7.49	
140 4-Nitroquinoline-1-oxide	190	9.379	9.379	0.000	78	74706	7.50	6.50	
142 Octachlorostyrene	308	9.583	9.583	0.000	91	102167	7.50	7.31	
143 Isodrin	193	9.624	9.624	0.000	92	140034	7.50	6.25	
S 68 Diallate	86				0		7.50	6.58	
144 Fluoranthene	202	9.764	9.764	0.000	99	1310358	7.50	7.31	
145 Benzidine	184	9.910	9.910	0.000	99	2444466	22.5	24.8	
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	96	698430	5.00	5.00	
147 Pyrene	202	9.980	9.980	0.000	96	1290885	7.50	7.20	
$ 148 p-Terphenyl-d14	244	10.138	10.138	0.000	98	2017039	15.0	16.3	
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	91	166892	7.50	7.08	
150 Chlorobenzilate	139	10.331	10.331	0.000	81	458867	7.50	8.09	
152 3,3'-Dimethylbenzidine	212	10.628	10.628	0.000	98	630805	7.50	7.94	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	96	651658	7.50	7.99	
155 2-Acetylaminofluorene	181	10.897	10.897	0.000	94	384081	7.50	7.10	
S 94 Isosafrole	162				0		7.50	8.28	
157 3,3'-Dichlorobenzidine	252	11.218	11.218	0.000	79	395429	7.50	7.91	
158 4,4'-Methylene bis(2-chloroani	231	11.230	11.230	0.000	84	212694	7.50	8.28	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
156 Benzo[a]anthracene	228	11.230	11.230	0.000	97	1033128	7.50	7.80	
159 Chrysene	228	11.271	11.271	0.000	97	1005364	7.50	7.68	
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	94	844907	7.50	7.63	
161 6-Methylchrysene	242	11.831	11.831	0.000	98	705803	7.50	7.86	
162 Di-n-octyl phthalate	149	12.152	12.152	0.000	98	1477000	7.50	7.55	
163 7,12-Dimethylbenz(a)anthracene	256	12.596	12.596	0.000	88	397327	7.50	7.84	
164 Benzo[b]fluoranthene	252	12.602	12.602	0.000	95	1056806	7.50	7.72	
165 Benzo[k]fluoranthene	252	12.637	12.637	0.000	97	1088750	7.50	7.82	
166 Benzo[a]pyrene	252	13.046	13.046	0.000	82	910317	7.50	7.82	
* 167 Perylene-d12	264	13.128	13.128	0.000	94	547299	5.00	5.00	
168 3-Methylcholanthrene	268	13.560	13.560	0.000	92	382065	7.50	7.46	
169 Dibenz[a,h]acridine	279	14.342	14.342	0.000	93	740890	7.50	7.68	
170 Dibenz[a,j]acridine	279	14.412	14.412	0.000	95	818053	7.50	7.48	
171 Indeno[1,2,3-cd]pyrene	276	14.634	14.634	0.000	95	813400	7.50	7.33	
172 Dibenz(a,h)anthracene	278	14.675	14.675	0.000	95	956776	7.50	7.80	
173 Benzo[g,h,i]perylene	276	14.984	14.984	0.000	92	1038814	7.50	7.96	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MSS_RV8270_5_00037 Amount Added: 1.00 Units: mL

Report Date: 18-Jul-2023 15:15:04 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1801a.D

Injection Date: 18-Jul-2023 07:41:30 Instrument ID: HP23264 Operator ID: kel10217

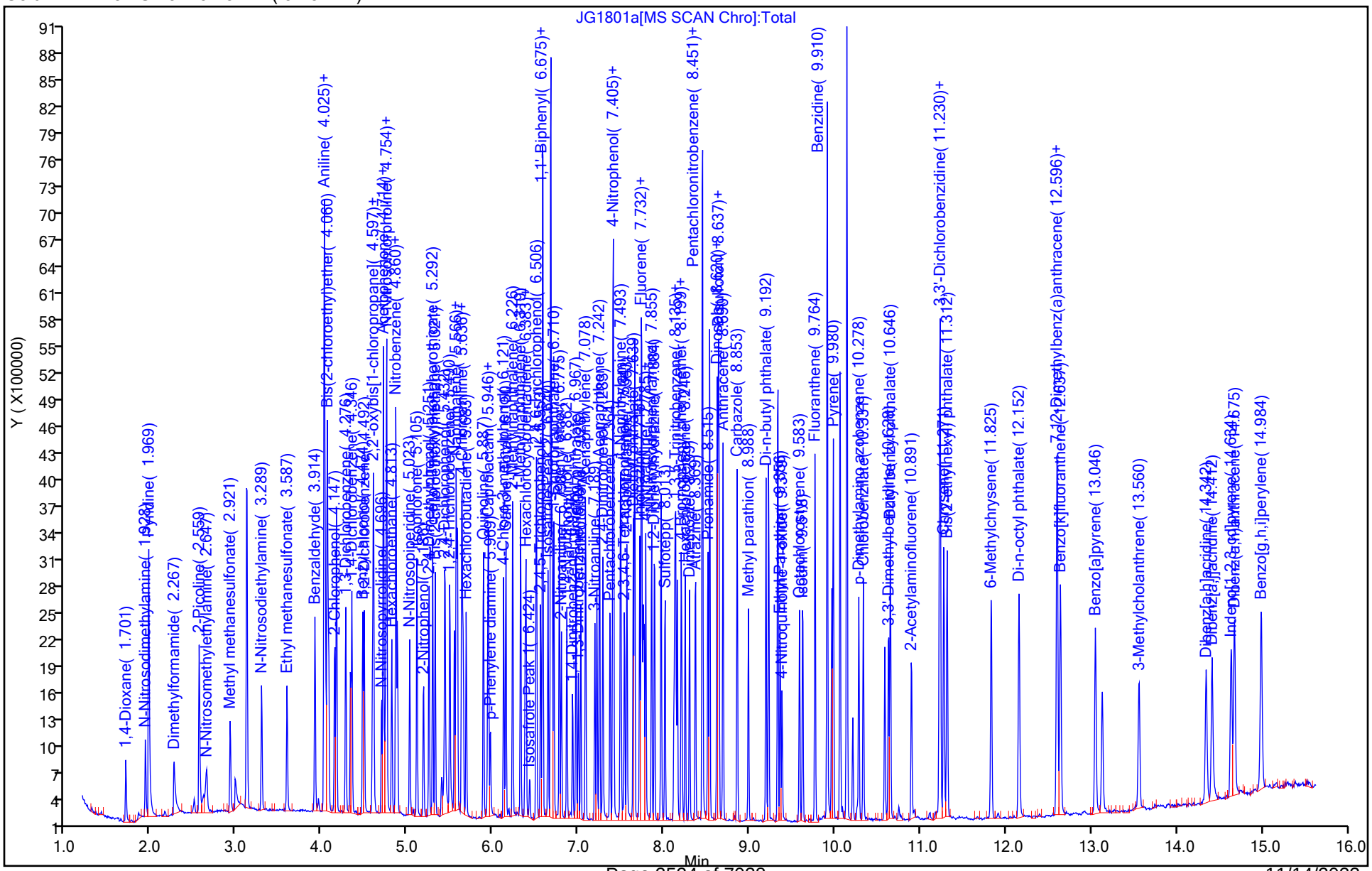
Lims ID: ICIS L5 Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 2

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

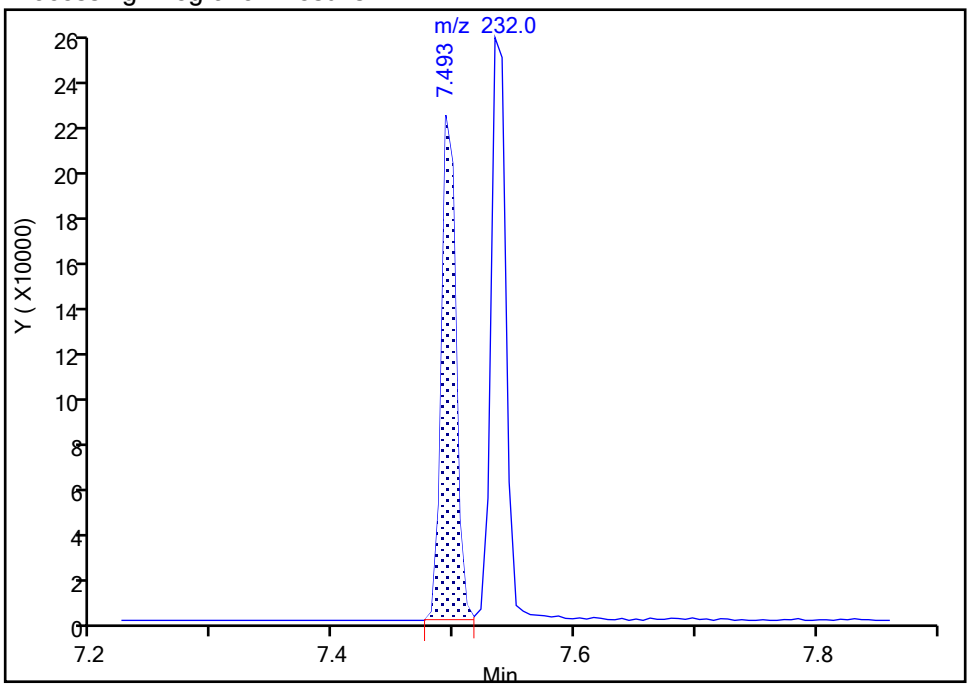
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1801a.D				
Injection Date:	18-Jul-2023 07:41:30	Instrument ID:	HP23264		
Lims ID:	ICIS L5				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

105 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

Signal: 1

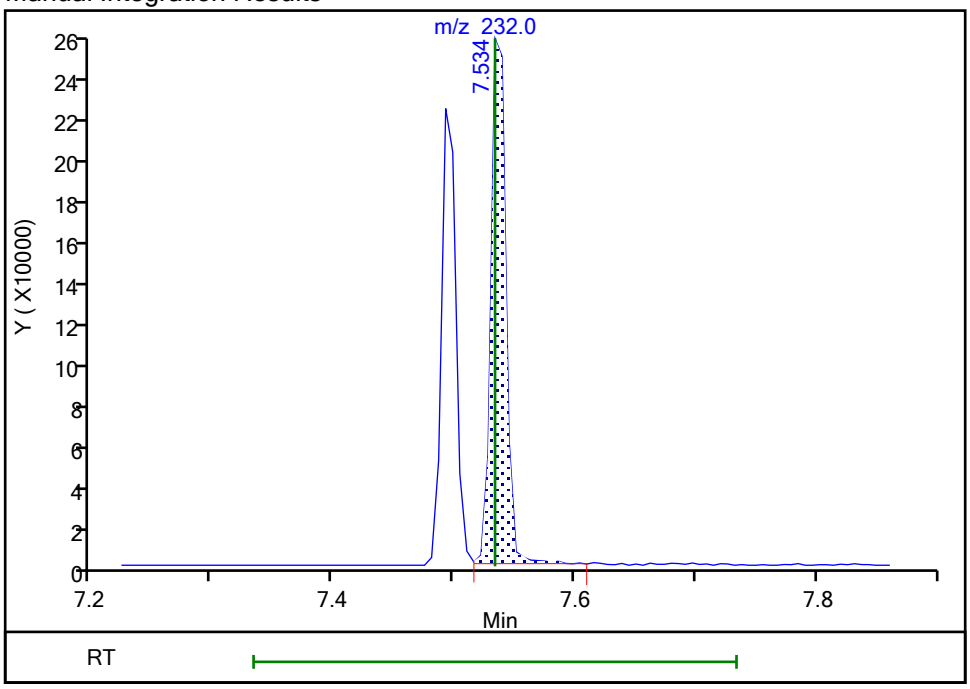
Processing Integration Results

RT: 7.49
Area: 184580
Amount: 8.046429
Amount Units: ug/ml



Manual Integration Results

RT: 7.53
Area: 224744
Amount: 7.879595
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:03:28 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 18-Jul-2023 08:07:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 410-0089185-003
Operator ID: kel10217 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:15:38 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 11:03:12

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.707	1.701	0.006	22	5799	0.1250	0.2185	
	2 N-Nitrosodimethylamine	74	1.928	1.928	0.000	30	5717	0.1250	0.1322	
	3 Pyridine	79	2.004	1.969	0.035	76	20774	0.2500	0.2785	
	4 Dimethylformamide	73		2.267				ND	ND	U
	5 2-Picoline	93	2.577	2.559	0.018	71	10130	0.1250	0.1400	
	6 N-Nitrosomethylethylamine	88		2.647				ND	ND	U
	7 Methyl methanesulfonate	80	2.933	2.921	0.012	75	5549	0.1250	0.1297	
$	9 2-Fluorophenol	112	3.114	3.119	-0.005	91	15552	0.2500	0.2328	
	11 N-Nitrosodiethylamine	102	3.295	3.289	0.006	61	2932	0.1250	0.1016	
	12 Ethyl methanesulfonate	109	3.593	3.587	0.006	96	4920	0.1250	0.1375	
	17 Aniline	93	4.025	4.019	0.006	68	12185	0.1250	0.1207	
$	15 Phenol-d5	99	4.025	4.025	0.000	91	22178	0.2500	0.2316	
	16 Phenol	94	4.036	4.036	0.000	49	12372	0.1250	0.1230	
	18 Bis(2-chloroethyl)ether	93	4.077	4.077	0.000	74	8986	0.1250	0.1282	
	19 2-Chlorophenol	128	4.147	4.147	0.000	69	8318	0.1250	0.1344	
	21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	85	7504	0.1250	0.1220	
*	22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	97	217338	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	63	8548	0.1250	0.1297	
	26 Benzyl alcohol	108	4.480	4.474	0.006	75	4821	0.1250	0.1175	
	27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	70	8313	0.1250	0.1364	
	30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	91	23621	0.1250	0.1530	
	29 2-Methylphenol	108	4.597	4.603	-0.006	87	7411	0.1250	0.1248	
	31 N-Nitrosopyrrolidine	100	4.696	4.696	0.000	47	3572	0.1250	0.1003	
	33 N-Nitrosodi-n-propylamine	70	4.714	4.714	0.000	77	8230	0.1250	0.1395	
	32 Acetophenone	105	4.720	4.714	0.006	80	11512	0.1250	0.1207	
	35 N-Nitrosomorpholine	56	4.737	4.737	0.000	40	6354	0.1250	0.1160	
	36 2-Toluidine	106	4.755	4.754	0.001	82	11645	0.1250	0.1127	
	34 4-Methylphenol	108	4.755	4.754	0.001	83	7774	0.1250	0.1131	
	37 Hexachloroethane	117	4.813	4.813	0.000	76	3400	0.1250	0.1225	
$	39 Nitrobenzene-d5	82	4.860	4.860	0.000	92	22310	0.2500	0.2458	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	4.883	4.877	0.006	70	12978	0.1250	0.1565	
41 N-Nitrosopiperidine	114	5.023	5.023	0.000	54	4769	0.1250	0.1426	
42 Isophorone	82	5.111	5.105	0.006	97	19192	0.1250	0.1294	
43 2-Nitrophenol	139	5.187	5.186	0.001	88	3535	0.1250	0.1154	
44 2,4-Dimethylphenol	107	5.251	5.251	0.000	91	7364	0.1250	0.1177	
46 o,o',o''-Triethylphosphorothioat	198	5.292	5.292	0.000	81	2678	0.1250	0.1112	
47 Bis(2-chloroethoxy)methane	93	5.321	5.321	0.000	85	10350	0.1250	0.1157	
49 2,4-Dichlorophenol	162	5.438	5.438	0.000	85	4415	0.1250	0.0945	
50 1,2,4-Trichlorobenzene	180	5.490	5.490	0.000	51	6940	0.1250	0.1320	
* 52 Naphthalene-d8	136	5.549	5.549	0.001	99	847959	5.00	5.00	
53 Naphthalene	128	5.566	5.566	0.000	96	24004	0.1250	0.1315	
55 Alpha-Terpineol	59	5.578	5.578	0.000	47	10877	0.1250	0.1357	
56 4-Chloroaniline	127	5.636	5.630	0.006	76	7302	0.1250	0.0947	
57 2,6-Dichlorophenol	162	5.636	5.636	0.000	80	4798	0.1250	0.1038	
58 Hexachloropropene	213	5.648	5.648	0.000	87	3842	0.1250	0.1162	
59 Hexachlorobutadiene	225	5.683	5.683	0.000	89	3498	0.1250	0.1228	
61 Quinoline	129	5.887	5.887	0.000	97	16290	0.1250	0.1300	
63 N-Nitrosodi-n-butylamine	84		5.946				ND	ND	U
64 p-Phenylene diamine	108		5.969				ND	ND	U
65 4-Chloro-3-methylphenol	107	6.121	6.121	0.000	84	6758	0.1250	0.1172	
66 Safrole, Total	162	6.150	6.150	0.000	64	4184	0.1250	0.1041	
67 2-Methylnaphthalene	142	6.226	6.226	0.000	90	13635	0.1250	0.1230	
69 1-Methylnaphthalene	142	6.319	6.319	0.000	88	13558	0.1250	0.1276	
71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	49	3411	0.1250	0.1191	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.383	0.001	91	6182	0.1250	0.1195	
72 Isosafrole Peak 1	162	6.425	6.430	-0.005	7	1143	0.0200	0.0229	
79 2,4,6-Trichlorophenol	196	6.506	6.506	0.000	76	3909	0.1250	0.1189	
S 24 Dinitrotoluene	165				0			0.1940	
80 2,4,5-Trichlorophenol	196	6.559	6.553	0.006	83	3708	0.1250	0.1024	
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.582	-0.006	98	34889	0.2500	0.2515	
82 Isosafrole Peak 2	162	6.646	6.640	0.006	51	4822	0.1050	0.0956	
83 1,1'-Biphenyl	154	6.670	6.675	-0.005	91	15307	0.1250	0.1126	
84 2-Chloronaphthalene	162	6.687	6.687	0.000	93	13442	0.1250	0.1305	
85 1-Chloronaphthalene	162	6.711	6.710	0.001	79	11238	0.1250	0.1136	
86 Phenyl ether	170	6.775	6.775	0.000	85	9369	0.1250	0.1296	
87 2-Nitroaniline	138	6.804	6.798	0.006	62	3690	0.1250	0.1016	
88 1,4-Naphthoquinone	158	6.862	6.862	0.000	82	4355	0.1250	0.1068	
89 1,4-Dinitrobenzene	168	6.938	6.932	0.006	34	2476	0.1250	0.1535	a
90 Dimethyl phthalate	163	6.968	6.967	0.001	95	14513	0.1250	0.1190	
91 1,3-Dinitrobenzene	168	6.997	6.997	0.000	49	3070	0.1250	0.1633	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	22	1951	0.1250	0.0761	a
93 Acenaphthylene	152	7.079	7.078	0.001	97	20546	0.1250	0.1156	
95 3-Nitroaniline	138	7.195	7.189	0.006	53	3167	0.1250	0.1005	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	95	437124	5.00	5.00	
97 Acenaphthene	153	7.242	7.242	0.000	94	14483	0.1250	0.1258	
98 2,4-Dinitrophenol	184	7.283	7.283	0.000	75	13445	1.25	0.8286	
99 Pentachlorobenzene	250	7.370	7.370	0.000	89	5120	0.1250	0.1144	
100 4-Nitrophenol	109	7.406	7.399	0.007	81	9594	0.7500	0.5009	
102 2,4-Dinitrotoluene	165	7.406	7.405	0.001	62	4105	0.1250	0.1179	
101 Dibenzofuran	168	7.411	7.411	0.000	79	20324	0.1250	0.1309	
104 1-Naphthylamine	143	7.487	7.487	0.000	96	13996	0.1250	0.1340	
105 2,3,4,6-Tetrachlorophenol	232	7.540	7.534	0.006	67	4087	0.1250	0.1287	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
106 2-Naphthylamine	143	7.563	7.563	0.000	93	10816	0.1250	0.0998	
107 Diethyl phthalate	149	7.633	7.639	-0.006	95	15754	0.1250	0.1199	
109 Thionazin	107	7.709	7.715	-0.006	69	2993	0.1250	0.1286	
108 Fluorene	166	7.732	7.732	0.000	90	15145	0.1250	0.1239	
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	90	6706	0.1250	0.1226	
111 N-Nitro-o-toluidine	152	7.756	7.756	0.000	85	4256	0.1250	0.1236	
112 4-Nitroaniline	138	7.773	7.767	0.006	40	2810	0.1250	0.0897	
113 4,6-Dinitro-2-methylphenol	198	7.785	7.785	0.000	62	9013	0.7500	0.4803	
114 N-Nitrosodiphenylamine	169	7.814	7.855	-0.041	66	10277	0.1063	0.1049	
115 1,2-Diphenylhydrazine	77	7.884	7.884	0.000	41	20944	0.1250	0.1274	
$ 116 2,4,6-Tribromophenol	330	7.966	7.966	0.000	83	4351	0.2500	0.2101	
117 Sulfotepp	97	8.007	8.013	-0.006	67	3092	0.1250	0.1146	
118 1,3,5-Trinitrobenzene	213	8.118	8.118	0.000	62	681	0.1250	0.0687	
120 cis-Diallate	86	8.130	8.124	0.006	53	7365	0.0925	0.1123	
119 Phorate	75	8.135	8.135	0.000	90	10410	0.1250	0.1080	
121 Phenacetin	108	8.153	8.153	0.000	76	6113	0.1250	0.0929	
122 4-Bromophenyl phenyl ether	248	8.200	8.199	0.001	72	3693	0.1250	0.1164	
123 trans-Diallate	86		8.211				ND	ND	
124 Hexachlorobenzene	284	8.246	8.246	0.000	86	3837	0.1250	0.1019	
125 Dimethoate	87	8.299	8.299	0.000	91	6800	0.1250	0.1114	
128 Pentachloronitrobenzene	237	8.445	8.445	0.000	58	2024	0.1250	0.1255	
127 Pentachlorophenol	266	8.451	8.451	0.000	73	9273	0.6250	0.5190	
129 4-Aminobiphenyl	169	8.451	8.451	0.000	89	16779	0.1250	0.1301	
130 Pronamide	173	8.515	8.515	0.000	84	5435	0.1250	0.1002	
* 131 Phenanthrene-d10	188	8.620	8.620	0.000	97	804481	5.00	5.00	
133 Dinoseb	211	8.620	8.620	0.000	60	1977	0.1250	0.0771	
134 Disulfoton	88	8.632	8.632	0.000	56	10645	0.1250	0.1018	Ma
132 Phenanthrene	178	8.643	8.643	0.000	94	21684	0.1250	0.1278	
135 Anthracene	178	8.690	8.690	0.000	98	22186	0.1250	0.1313	
136 Carbazole	167	8.854	8.853	0.001	96	19336	0.1250	0.1159	
137 Methyl parathion	109	8.988	8.988	0.000	85	4314	0.1250	0.0966	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	99	22845	0.1250	0.1064	
139 Ethyl Parathion	109	9.356	9.356	0.000	1	2711	0.1250	0.1026	
140 4-Nitroquinoline-1-oxide	190	9.379	9.379	0.000	17	996	0.1250	0.0865	
142 Octachlorostyrene	308	9.578	9.583	-0.005	74	1350	0.1250	0.0963	
143 Isodrin	193	9.624	9.624	0.000	80	3647	0.1250	0.1626	
S 68 Diallate	86				0		0.1250	0.1123	
144 Fluoranthene	202	9.770	9.764	0.006	97	20242	0.1250	0.1128	
145 Benzidine	184	9.910	9.910	0.000	99	34316	0.3750	0.3294	
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	96	737632	5.00	5.00	
147 Pyrene	202	9.981	9.980	0.001	97	24708	0.1250	0.1306	
$ 148 p-Terphenyl-d14	244	10.138	10.138	0.000	96	32293	0.2500	0.2469	
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	86	2614	0.1250	0.1050	
150 Chlorobenzilate	139	10.331	10.331	0.000	77	8041	0.1250	0.1342	
152 3,3'-Dimethylbenzidine	212	10.629	10.628	0.001	96	11325	0.1250	0.1349	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	90	9190	0.1250	0.1066	
155 2-Acetylaminofluorene	181	10.891	10.897	-0.006	90	4959	0.1250	0.0868	
S 94 Isosafrole	162				0		0.1250	0.1185	
157 3,3'-Dichlorobenzidine	252	11.224	11.218	0.006	58	5448	0.1250	0.1031	
158 4,4'-Methylene bis(2-chloroani	231	11.224	11.230	-0.006	65	2871	0.1250	0.1058	
156 Benzo[a]anthracene	228	11.230	11.230	0.000	93	15839	0.1250	0.1132	
159 Chrysene	228	11.271	11.271	0.000	94	17322	0.1250	0.1252	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	91	12345	0.1250	0.1056	
161 6-Methylchrysene	242	11.831	11.831	0.000	95	11796	0.1250	0.1243	
162 Di-n-octyl phthalate	149	12.147	12.152	-0.005	95	18327	0.1250	0.0894	
163 7,12-Dimethylbenz(a)anthracene	256	12.591	12.596	-0.005	64	5991	0.1250	0.1128	
164 Benzo[b]fluoranthene	252	12.602	12.602	0.000	93	20166	0.1250	0.1406	
165 Benzo[k]fluoranthene	252	12.637	12.637	0.000	79	17843	0.1250	0.1223	
166 Benzo[a]pyrene	252	13.046	13.046	0.000	42	15088	0.1250	0.1236	
* 167 Perylene-d12	264	13.128	13.128	0.000	94	573515	5.00	5.00	
168 3-Methylcholanthrene	268	13.560	13.560	0.000	44	7033	0.1250	0.1311	
169 Dibenz[a,h]acridine	279	14.342	14.342	0.000	90	12716	0.1250	0.1258	
170 Dibenz[a,j]acridine	279	14.407	14.412	-0.006	41	14152	0.1250	0.1235	a
171 Indeno[1,2,3-cd]pyrene	276	14.640	14.634	0.006	88	14107	0.1250	0.1213	
172 Dibenz(a,h)anthracene	278	14.669	14.675	-0.006	90	14809	0.1250	0.1152	
173 Benzo[g,h,i]perylene	276	14.979	14.984	-0.005	93	16988	0.1250	0.1242	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270_1_00029 Amount Added: 1.00 Units: mL

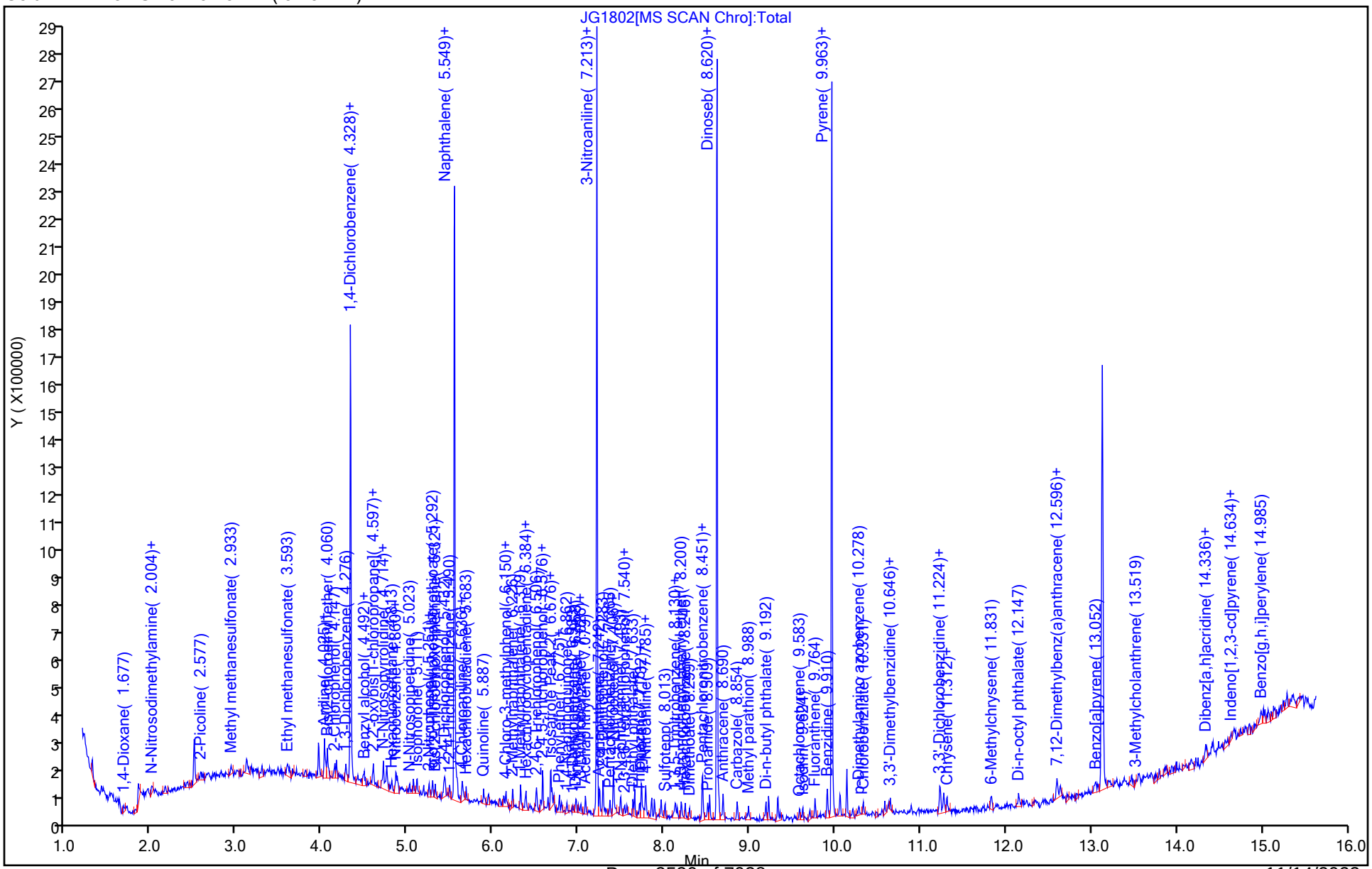
Report Date: 18-Jul-2023 15:15:40 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D

Injection Date:	18-Jul-2023 08:07:30	Instrument ID:	HP23264	Operator ID:	kel10217
Lims ID:	IC L1			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

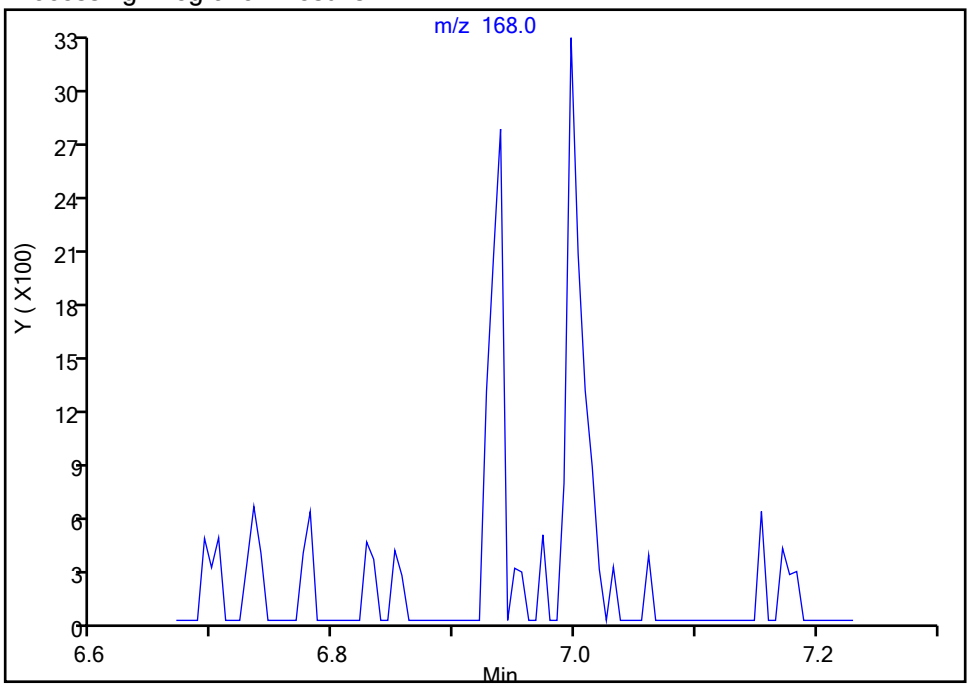
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D				
Injection Date:	18-Jul-2023 08:07:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

89 1,4-Dinitrobenzene, CAS: 100-25-4

Signal: 1

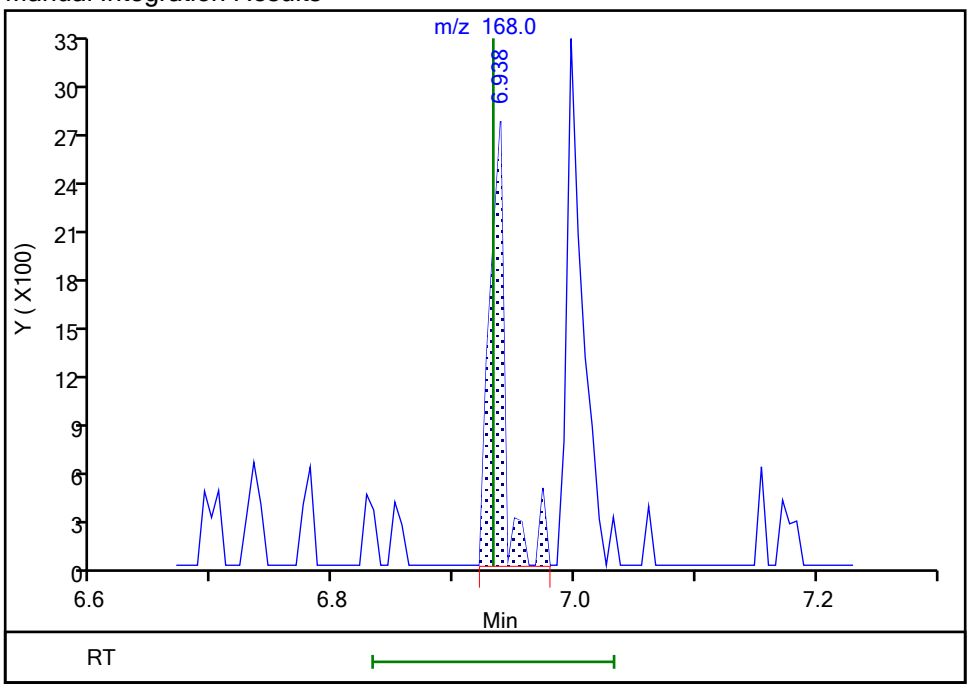
Not Detected
Expected RT: 6.93

Processing Integration Results



Manual Integration Results

RT: 6.94
Area: 2476
Amount: 0.153492
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:02:45 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

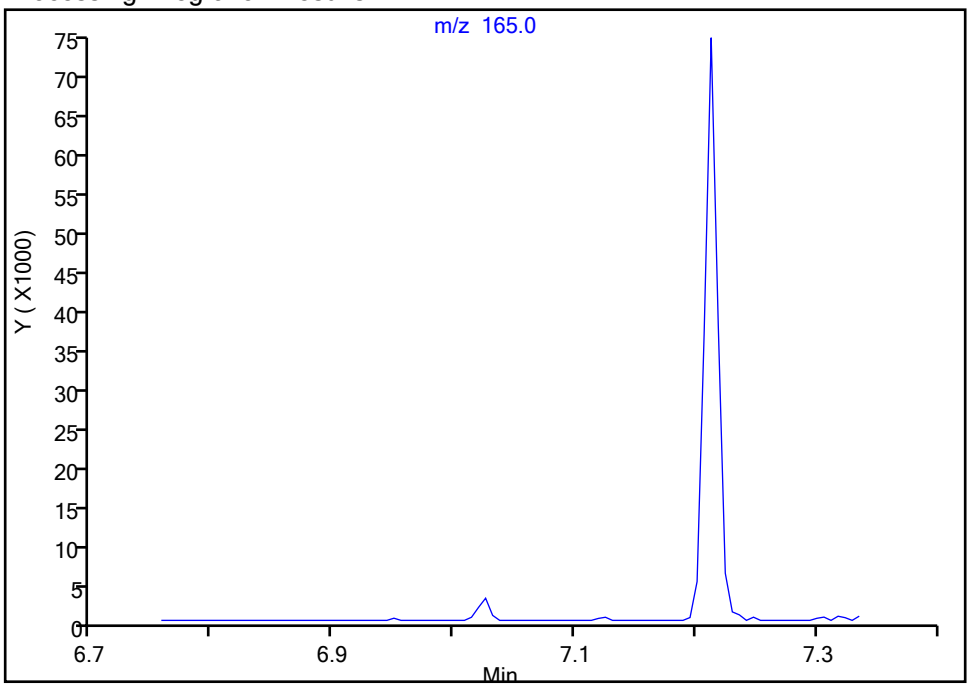
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D				
Injection Date:	18-Jul-2023 08:07:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

92 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

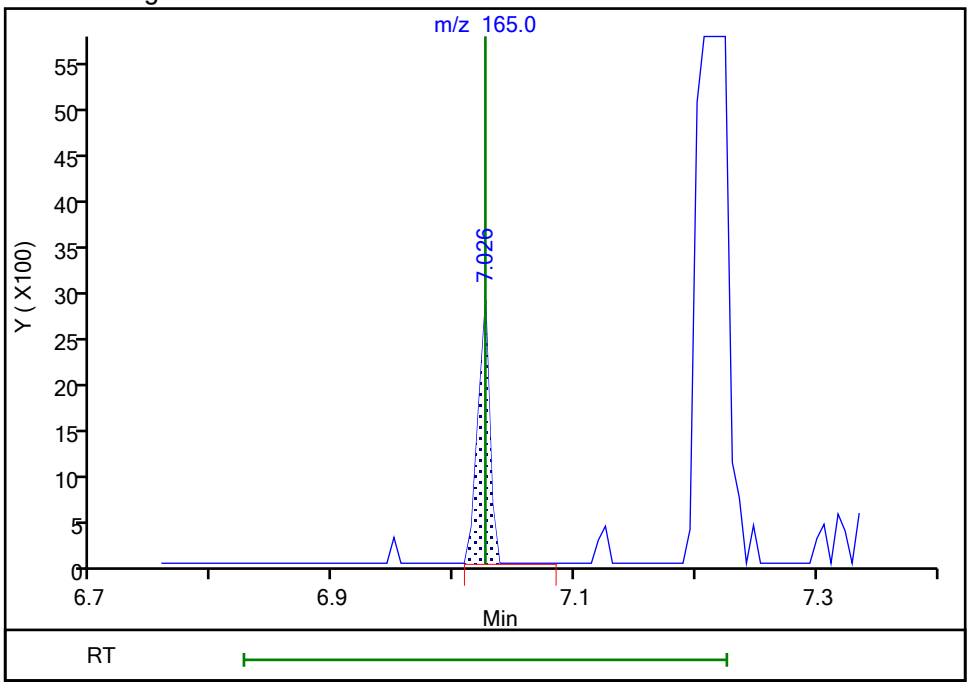
Processing Integration Results

Not Detected
Expected RT: 7.03



Manual Integration Results

RT: 7.03
Area: 1951
Amount: 0.076103
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:02:53 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

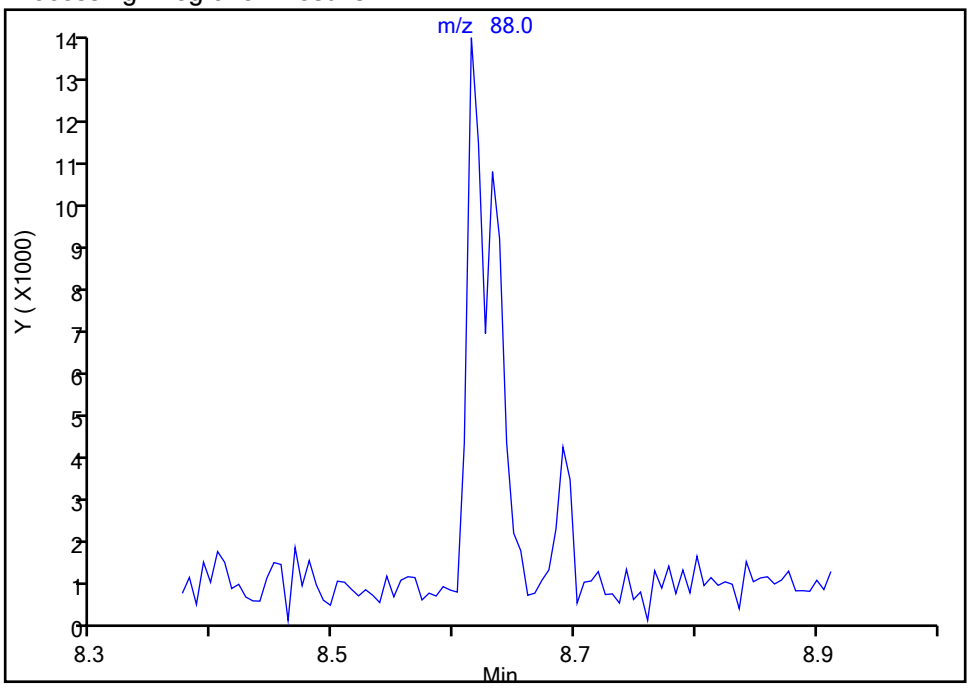
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D				
Injection Date:	18-Jul-2023 08:07:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

134 Disulfoton, CAS: 298-04-4

Signal: 1

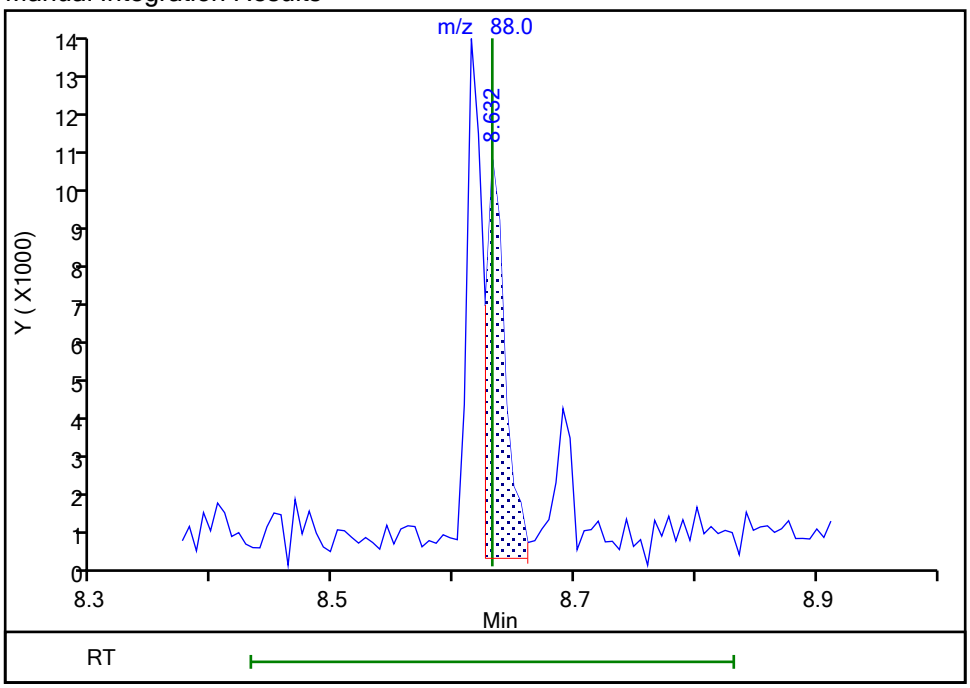
Not Detected
Expected RT: 8.63

Processing Integration Results



Manual Integration Results

RT: 8.63
Area: 10645
Amount: 0.101823
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:04:19 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

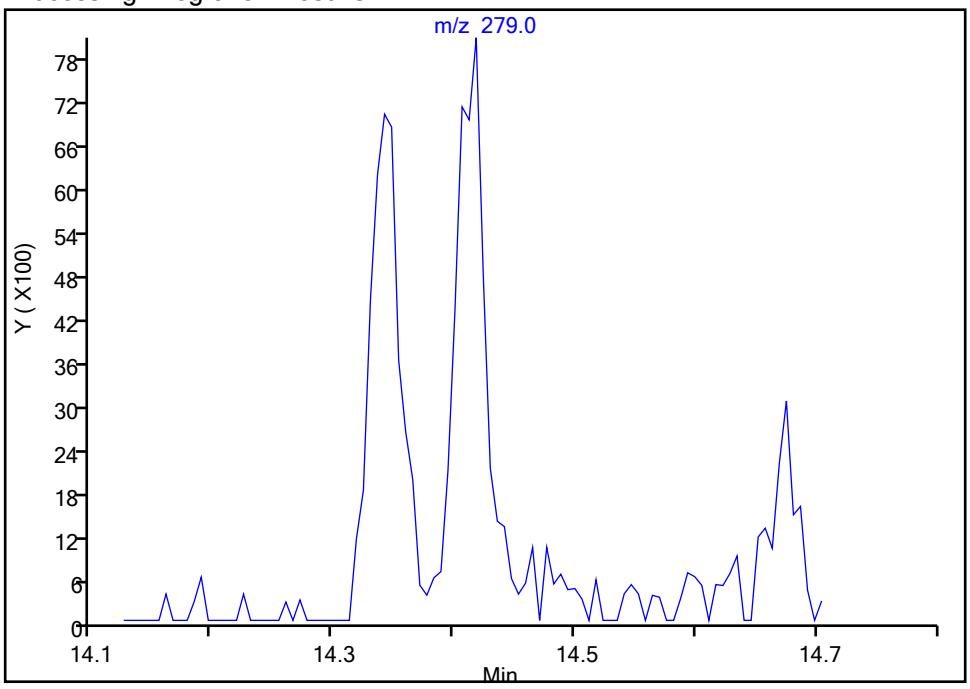
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D				
Injection Date:	18-Jul-2023 08:07:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

170 Dibenz[a,j]acridine, CAS: 224-42-0

Signal: 1

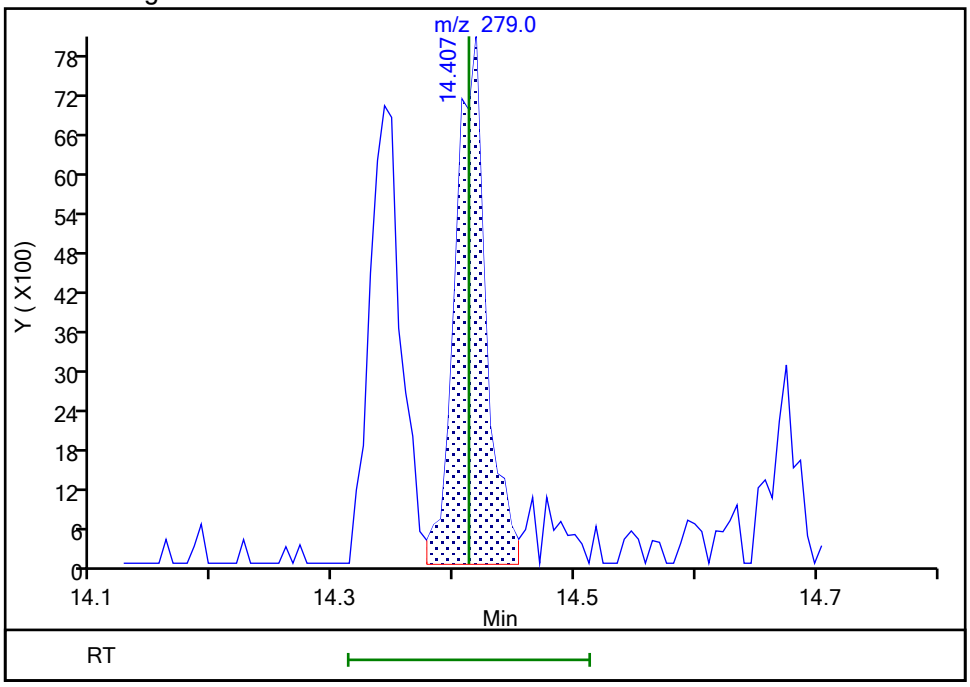
Not Detected
Expected RT: 14.41

Processing Integration Results



Manual Integration Results

RT: 14.41
Area: 14152
Amount: 0.123522
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:04:38 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

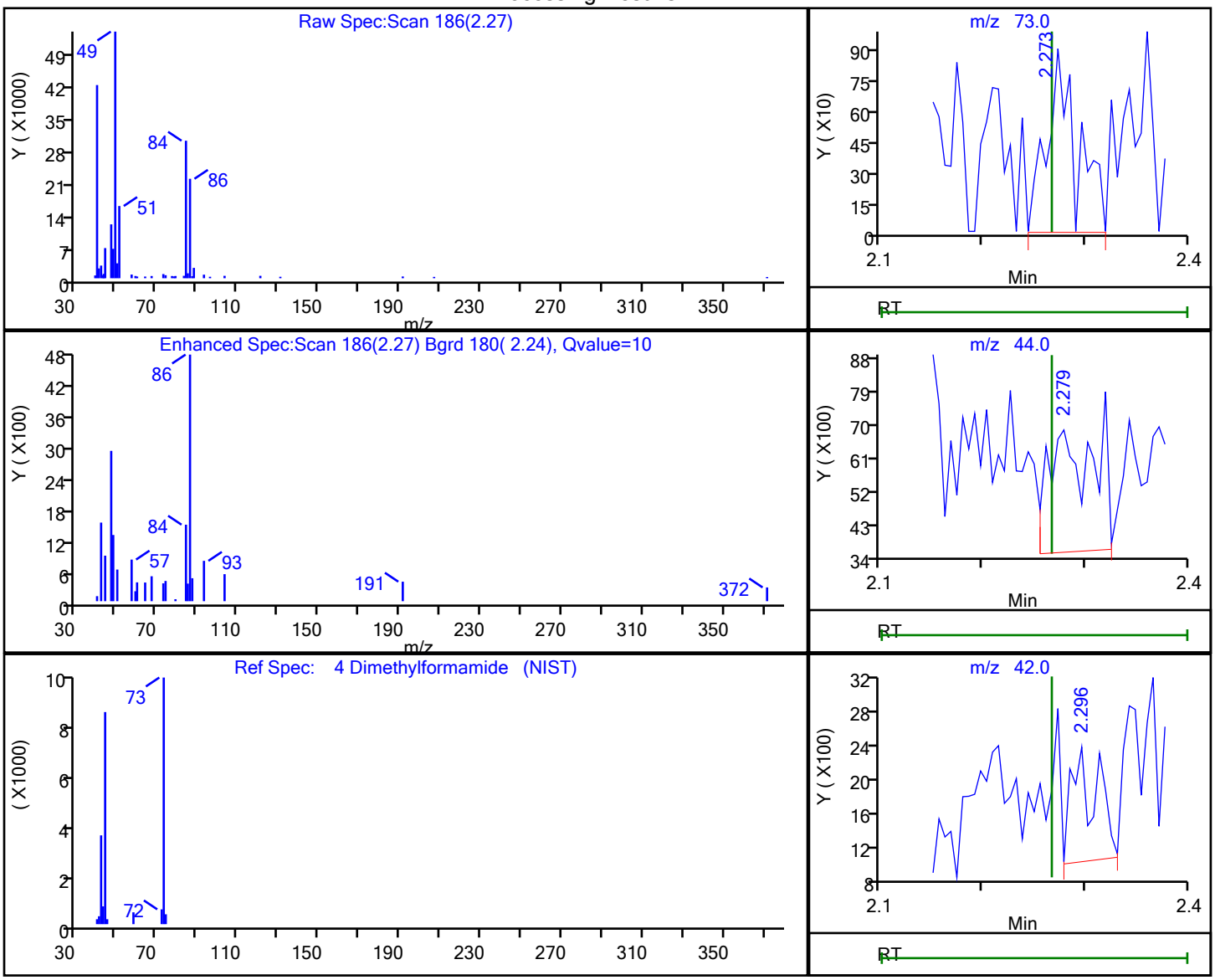
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D				
Injection Date:	18-Jul-2023 08:07:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

4 Dimethylformamide, CAS: 68-12-2

Processing Results



RT	Mass	Response	Amount
2.27	73.00	1849	0.048656
2.28	44.00	10237	
2.30	42.00	2315	

Reviewer: SJ89, 18-Jul-2023 11:01:54 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

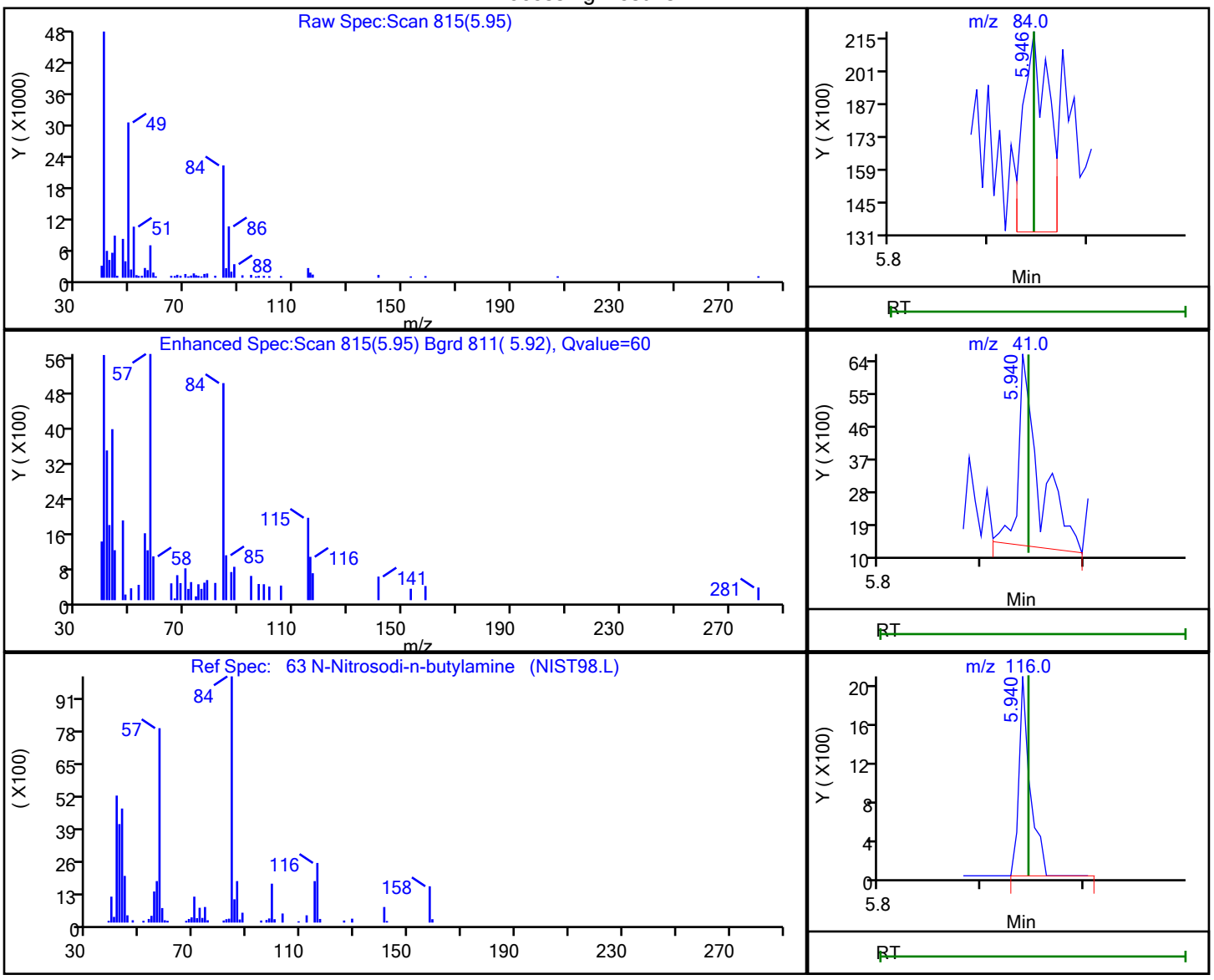
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D				
Injection Date:	18-Jul-2023 08:07:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

63 N-Nitrosodi-n-butylamine, CAS: 924-16-3

Processing Results



RT	Mass	Response	Amount
5.95	84.00	14589	0.085205
5.94	41.00	7699	
5.94	116.00	1516	
5.95	57.00	6340	

Reviewer: SJ89, 18-Jul-2023 11:02:24 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

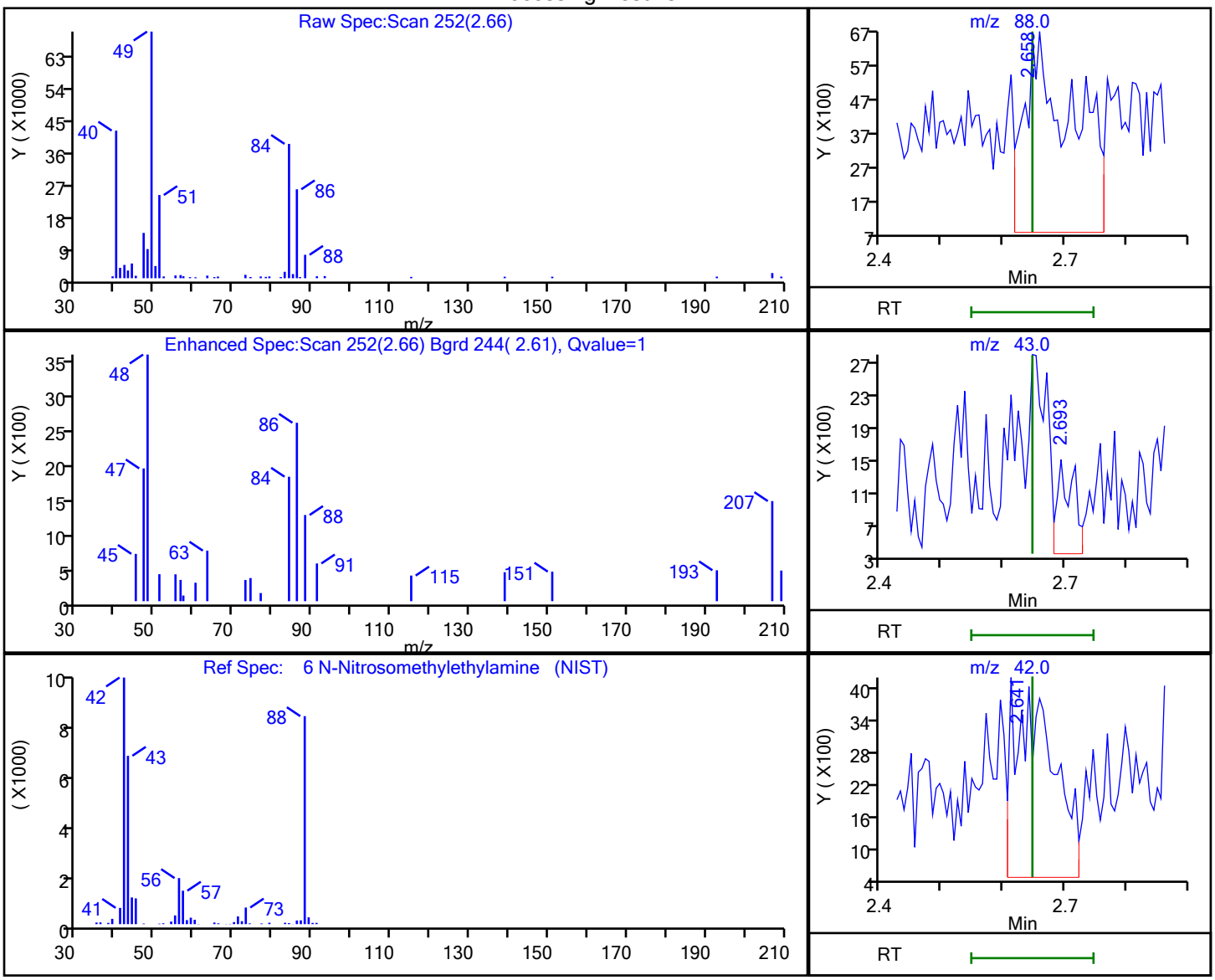
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D				
Injection Date:	18-Jul-2023 08:07:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

6 N-Nitrosomethylethylamine, CAS: 10595-95-6

Processing Results



RT	Mass	Response	Amount
2.66	88.00	31183	0.480685
2.69	43.00	2024	
2.64	42.00	15875	

Reviewer: SJ89, 18-Jul-2023 11:02:00 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

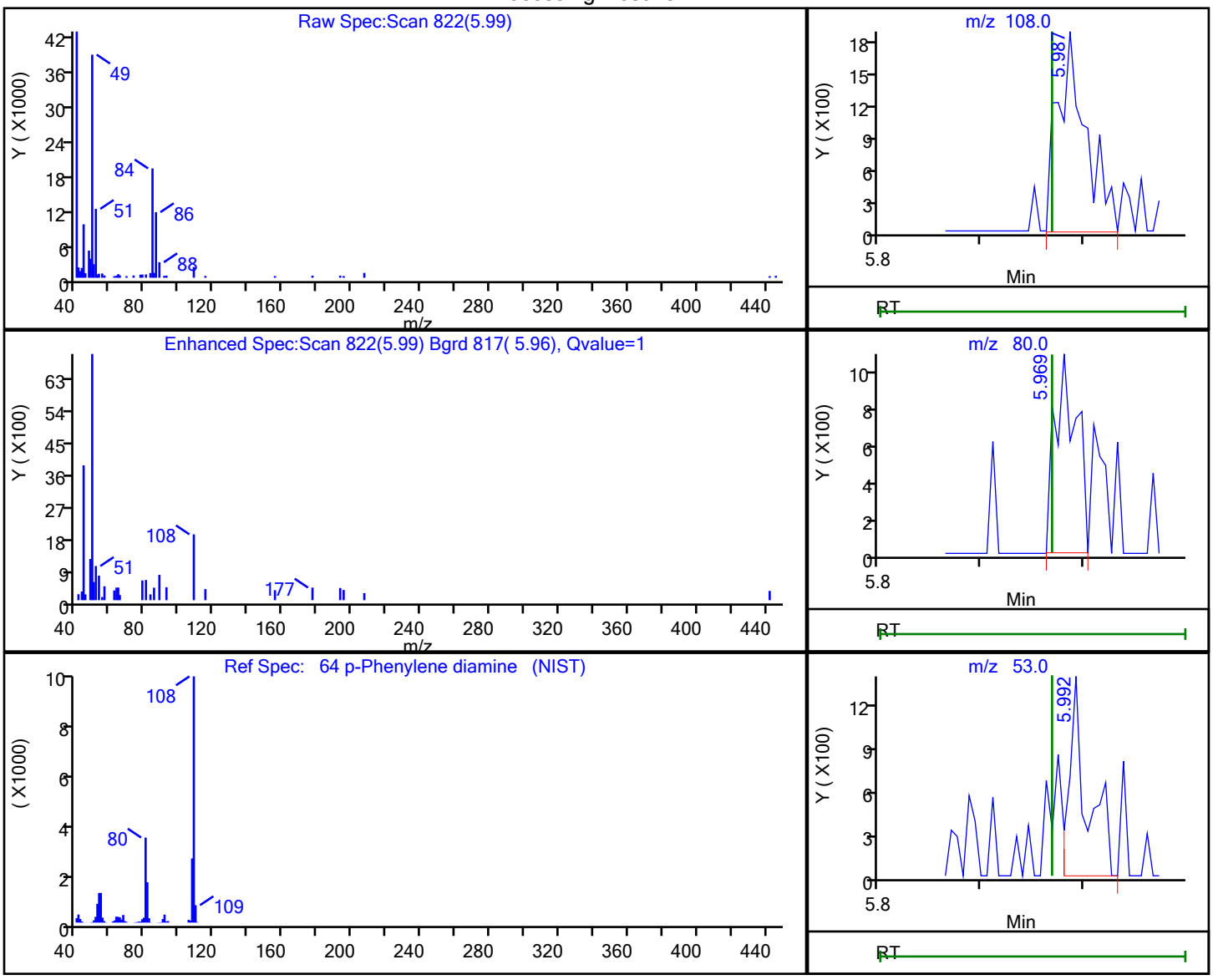
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1802.D				
Injection Date:	18-Jul-2023 08:07:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

64 p-Phenylene diamine, CAS: 106-50-3

Processing Results



RT	Mass	Response	Amount
5.99	108.00	3561	0.104154
5.97	80.00	1493	
5.99	53.00	1601	
5.98	54.00	350	
5.97	52.00	1127	

Reviewer: SJ89, 18-Jul-2023 11:02:28 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1803.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 18-Jul-2023 08:28:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: 410-0089185-004
Operator ID: kel10217 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:16:11 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 11:06:34

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.701	1.701	0.000	95	758139	30.0	29.4	
	2 N-Nitrosodimethylamine	74	1.929	1.928	0.001	92	1331176	30.0	31.7	
	3 Pyridine	79	1.964	1.969	-0.005	84	4218053	60.0	58.2	
	4 Dimethylformamide	73	2.250	2.267	-0.017	94	1661162	30.0	32.1	
	5 2-Picoline	93	2.553	2.559	-0.006	96	2184698	30.0	31.1	
	6 N-Nitrosomethylethylamine	88	2.647	2.647	0.001	95	924805	30.0	26.8	
	7 Methyl methanesulfonate	80	2.927	2.921	0.006	86	1255316	30.0	30.2	
$	9 2-Fluorophenol	112	3.120	3.119	0.001	96	4093043	60.0	63.0	
	11 N-Nitrosodiethylamine	102	3.295	3.289	0.006	89	901108	30.0	32.1	
	12 Ethyl methanesulfonate	109	3.593	3.587	0.006	96	1089118	30.0	31.3	
	13 Benzaldehyde	77	3.914	3.914	0.000	91	1038938	30.0	18.4	
	17 Aniline	93	4.025	4.019	0.006	97	3160259	30.0	32.2	
$	15 Phenol-d5	99	4.025	4.025	0.000	97	5997111	60.0	64.4	
	16 Phenol	94	4.036	4.036	0.000	95	2973020	30.0	30.4	
	18 Bis(2-chloroethyl)ether	93	4.077	4.077	0.000	86	1942224	30.0	28.5	
	19 2-Chlorophenol	128	4.147	4.147	0.000	93	1831037	30.0	30.4	
	21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	96	1868945	30.0	31.2	
*	22 1,4-Dichlorobenzene-d4	152	4.334	4.328	0.006	96	211309	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	91	1845336	30.0	28.8	
	26 Benzyl alcohol	108	4.474	4.474	0.000	90	1358348	30.0	34.1	
	27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	95	1814507	30.0	30.6	
	30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	93	4301264	30.0	28.7	
	29 2-Methylphenol	108	4.609	4.603	0.006	96	1809425	30.0	31.3	
	31 N-Nitrosopyrrolidine	100	4.702	4.696	0.006	83	1134935	30.0	32.8	
	33 N-Nitrosodi-n-propylamine	70	4.720	4.714	0.006	89	1708253	30.0	29.8	
	32 Acetophenone	105	4.720	4.714	0.006	92	2850714	30.0	30.7	
	35 N-Nitrosomorpholine	56	4.743	4.737	0.006	90	1592626	30.0	29.9	
	36 2-Toluidine	106	4.755	4.754	0.001	82	3135525	30.0	31.2	
	34 4-Methylphenol	108	4.755	4.754	0.001	83	2149999	30.0	32.2	
	37 Hexachloroethane	117	4.813	4.813	0.000	96	836588	30.0	31.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.866	4.860	0.006	93	5305854	60.0	60.3	
40 Nitrobenzene	77	4.883	4.877	0.006	93	2297951	30.0	28.6	
41 N-Nitrosopiperidine	114	5.029	5.023	0.006	80	995288	30.0	30.7	
42 Isophorone	82	5.111	5.105	0.006	98	4232244	30.0	29.4	
43 2-Nitrophenol	139	5.187	5.186	0.001	92	937703	30.0	31.6	
44 2,4-Dimethylphenol	107	5.251	5.251	0.000	98	1809092	30.0	29.8	
46 o,o',o''-Triethylphosphorothioat	198	5.298	5.292	0.006	94	656618	30.0	28.1	
47 Bis(2-chloroethoxy)methane	93	5.327	5.321	0.006	90	2448605	30.0	28.2	
49 2,4-Dichlorophenol	162	5.438	5.438	0.000	98	1434658	30.0	31.7	
50 1,2,4-Trichlorobenzene	180	5.496	5.490	0.006	94	1518107	30.0	29.8	
* 52 Naphthalene-d8	136	5.549	5.549	0.001	98	822157	5.00	5.00	
53 Naphthalene	128	5.566	5.566	0.000	97	5318245	30.0	30.1	
55 Alpha-Terpineol	59	5.584	5.578	0.006	89	2405204	30.0	30.9	
56 4-Chloroaniline	127	5.636	5.630	0.006	94	2349345	30.0	31.4	
57 2,6-Dichlorophenol	162	5.642	5.636	0.006	95	1410998	30.0	31.5	
58 Hexachloropropene	213	5.648	5.648	0.000	95	944940	30.0	29.5	
59 Hexachlorobutadiene	225	5.683	5.683	0.000	96	802915	30.0	29.1	
61 Quinoline	129	5.887	5.887	0.000	94	3659695	30.0	30.1	
62 Caprolactam	113	5.957	5.940	0.017	72	486477	30.0	30.3	
63 N-Nitrosodi-n-butylamine	84	5.952	5.946	0.006	91	1923533	30.0	28.9	
64 p-Phenylene diamine	108	5.969	5.969	0.000	95	1048579	30.0	26.6	
65 4-Chloro-3-methylphenol	107	6.127	6.121	0.006	96	1776236	30.0	31.8	
66 Safrole, Total	162	6.150	6.150	0.000	84	1242648	30.0	31.9	
67 2-Methylnaphthalene	142	6.232	6.226	0.006	91	3232363	30.0	30.1	
69 1-Methylnaphthalene	142	6.319	6.319	0.000	93	3110285	30.0	30.2	
71 Hexachlorocyclopentadiene	237	6.378	6.372	0.006	96	814796	30.0	29.8	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.383	0.001	98	1549832	30.0	31.4	
72 Isosafrole Peak 1	162	6.425	6.430	-0.005	84	226389	4.80	4.75	
79 2,4,6-Trichlorophenol	196	6.512	6.506	0.006	96	1002427	30.0	32.0	
S 24 Dinitrotoluene	165				0			61.2	
80 2,4,5-Trichlorophenol	196	6.559	6.553	0.006	92	1115858	30.0	32.3	
$ 81 2-Fluorobiphenyl (Surr)	172	6.582	6.582	0.000	95	7071668	60.0	53.4	e
82 Isosafrole Peak 2	162	6.646	6.640	0.006	88	1211718	25.2	25.2	
83 1,1'-Biphenyl	154	6.676	6.675	0.001	95	3789487	30.0	29.2	
84 2-Chloronaphthalene	162	6.693	6.687	0.006	95	3165716	30.0	32.2	M
85 1-Chloronaphthalene	162	6.711	6.710	0.001	97	2588131	30.0	27.4	Ma
86 Phenyl ether	170	6.775	6.775	0.000	91	2061445	30.0	29.9	
87 2-Nitroaniline	138	6.798	6.798	0.000	78	1090794	30.0	31.5	
88 1,4-Naphthoquinone	158	6.863	6.862	0.000	80	1270508	30.0	32.7	
89 1,4-Dinitrobenzene	168	6.933	6.932	0.001	89	505612	30.0	32.9	
90 Dimethyl phthalate	163	6.973	6.967	0.006	96	3313928	30.0	28.5	
91 1,3-Dinitrobenzene	168	7.003	6.997	0.006	79	527714	30.0	29.4	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	85	739031	30.0	30.2	
93 Acenaphthylene	152	7.084	7.078	0.006	99	5027376	30.0	29.7	
95 3-Nitroaniline	138	7.195	7.189	0.006	88	975702	30.0	32.5	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	95	416908	5.00	5.00	
97 Acenaphthene	153	7.248	7.242	0.006	98	3289130	30.0	30.0	
98 2,4-Dinitrophenol	184	7.289	7.283	0.006	78	1041502	60.0	67.3	
99 Pentachlorobenzene	250	7.371	7.370	0.000	97	1320708	30.0	30.9	
100 4-Nitrophenol	109	7.406	7.399	0.007	91	1207288	60.0	66.1	
102 2,4-Dinitrotoluene	165	7.411	7.405	0.006	82	1026638	30.0	30.9	
101 Dibenzofuran	168	7.411	7.411	0.000	98	4223162	30.0	28.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.493	7.487	0.006	98	2915673	30.0	29.3	
105 2,3,4,6-Tetrachlorophenol	232	7.540	7.534	0.006	76	887037	30.0	29.3	a
106 2-Naphthylamine	143	7.569	7.563	0.006	96	3068143	30.0	29.7	
107 Diethyl phthalate	149	7.645	7.639	0.006	96	3699969	30.0	29.5	
109 Thionazin	107	7.721	7.715	0.006	76	677392	30.0	30.5	
108 Fluorene	166	7.733	7.732	0.001	93	3318688	30.0	28.5	
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	94	1461852	30.0	28.0	
111 N-Nitro-o-toluidine	152	7.762	7.756	0.006	92	1044283	30.0	31.8	
112 4-Nitroaniline	138	7.779	7.767	0.012	83	941053	30.0	31.5	
113 4,6-Dinitro-2-methylphenol	198	7.791	7.785	0.006	82	1147286	60.0	67.5	
114 N-Nitrosodiphenylamine	169	7.855	7.855	0.000	66	2375303	25.5	26.7	
115 1,2-Diphenylhydrazine	77	7.890	7.884	0.006	41	4672113	30.0	31.4	
$ 116 2,4,6-Tribromophenol	330	7.966	7.966	0.000	88	1203425	60.0	60.9	
117 Sulfotepp	97	8.013	8.013	0.000	75	767749	30.0	31.4	
118 1,3,5-Trinitrobenzene	213	8.124	8.118	0.006	81	293828	30.0	32.7	
120 cis-Diallate	86	8.130	8.124	0.006	94	1283042	22.2	21.6	
119 Phorate	75	8.135	8.135	0.000	93	4053302	30.0	46.4	
121 Phenacetin	108	8.165	8.153	0.012	90	2090955	30.0	35.1	
122 4-Bromophenyl phenyl ether	248	8.205	8.199	0.006	77	841869	30.0	29.3	
123 trans-Diallate	86	8.211	8.211	0.000	92	431356	7.80	7.59	
124 Hexachlorobenzene	284	8.252	8.246	0.006	93	1004060	30.0	29.4	
125 Dimethoate	87	8.305	8.299	0.006	96	1745336	30.0	31.6	
126 Atrazine	200	8.375	8.369	0.006	83	739863	30.0	28.4	
128 Pentachloronitrobenzene	237	8.451	8.445	0.006	59	471866	30.0	32.3	
127 Pentachlorophenol	266	8.451	8.451	0.000	84	1259991	60.0	77.8	
129 4-Aminobiphenyl	169	8.451	8.451	0.000	91	3598950	30.0	30.8	
130 Pronamide	173	8.515	8.515	0.000	89	1572267	30.0	32.0	
* 131 Phenanthrene-d10	188	8.620	8.620	0.000	94	728871	5.00	5.00	
133 Dinoseb	211	8.620	8.620	0.000	90	787656	30.0	33.9	
134 Disulfoton	88	8.632	8.632	0.000	97	2667923	30.0	28.2	
132 Phenanthrene	178	8.643	8.643	0.000	98	4547860	30.0	29.6	
135 Anthracene	178	8.690	8.690	0.000	98	4533662	30.0	29.6	
136 Carbazole	167	8.859	8.853	0.006	96	4705775	30.0	31.1	
137 Methyl parathion	109	8.988	8.988	0.000	88	1436383	30.0	35.5	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	99	6058805	30.0	31.1	
139 Ethyl Parathion	109	9.362	9.356	0.006	81	826730	30.0	34.5	
140 4-Nitroquinoline-1-oxide	190	9.385	9.379	0.006	91	385319	30.0	36.9	
142 Octachlorostyrene	308	9.584	9.583	0.001	91	397429	30.0	31.3	
143 Isodrin	193	9.624	9.624	0.000	90	568884	30.0	28.0	
S 68 Diallate	86				0		30.0	29.2	
144 Fluoranthene	202	9.770	9.764	0.006	99	4961103	30.0	30.5	
145 Benzidine	184	9.916	9.910	0.006	97	8562031	90.0	92.2	e
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	96	657789	5.00	5.00	
147 Pyrene	202	9.981	9.980	0.001	96	5299123	30.0	31.4	
$ 148 p-Terphenyl-d14	244	10.144	10.138	0.006	98	7059892	60.0	60.5	e
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	92	776708	30.0	35.0	
150 Chlorobenzilate	139	10.331	10.331	0.000	82	1887121	30.0	35.3	
152 3,3'-Dimethylbenzidine	212	10.629	10.628	0.001	98	2489927	30.0	33.3	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	96	2605649	30.0	33.9	
155 2-Acetylaminofluorene	181	10.897	10.897	0.000	94	1797350	30.0	35.3	
S 94 Isosafrole	162				0		30.0	29.9	
157 3,3'-Dichlorobenzidine	252	11.224	11.218	0.006	79	1641122	30.0	34.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158 4,4'-Methylene bis(2-chloroanil	231	11.230	11.230	0.000	89	858865	30.0	35.5	
156 Benzo[a]anthracene	228	11.236	11.230	0.006	98	4111608	30.0	33.0	
159 Chrysene	228	11.277	11.271	0.006	96	4128130	30.0	33.5	
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	95	3787944	30.0	36.3	
161 6-Methylchrysene	242	11.832	11.831	0.001	98	2948128	30.0	34.8	
162 Di-n-octyl phthalate	149	12.153	12.152	0.001	98	6714812	30.0	34.4	
163 7,12-Dimethylbenz(a)anthracene	256	12.602	12.596	0.006	74	1588990	30.0	31.4	
164 Benzo[b]fluoranthene	252	12.608	12.602	0.006	94	4000931	30.0	29.3	
165 Benzo[k]fluoranthene	252	12.643	12.637	0.006	97	4220209	30.0	30.4	
166 Benzo[a]pyrene	252	13.052	13.046	0.006	83	3659072	30.0	31.5	
* 167 Perylene-d12	264	13.128	13.128	0.000	94	546233	5.00	5.00	
168 3-Methylcholanthrene	268	13.560	13.560	0.000	94	1769236	30.0	34.6	
169 Dibenz[a,h]acridine	279	14.348	14.342	0.006	93	3137193	30.0	32.6	
170 Dibenz[a,j]acridine	279	14.424	14.412	0.012	95	3560552	30.0	32.6	
171 Indeno[1,2,3-cd]pyrene	276	14.646	14.634	0.012	94	3634794	30.0	32.8	
172 Dibenz(a,h)anthracene	278	14.681	14.675	0.006	96	3932644	30.0	32.1	
173 Benzo[g,h,i]perylene	276	14.996	14.984	0.012	92	4172078	30.0	32.0	

QC Flag Legend

Processing Flags
e - Potential Peak Saturated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSS_RV8270_8_00030 Amount Added: 1.00 Units: mL

Report Date: 18-Jul-2023 15:16:12 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1803.D

Injection Date: 18-Jul-2023 08:28:30 Instrument ID: HP23264 Operator ID: kel10217

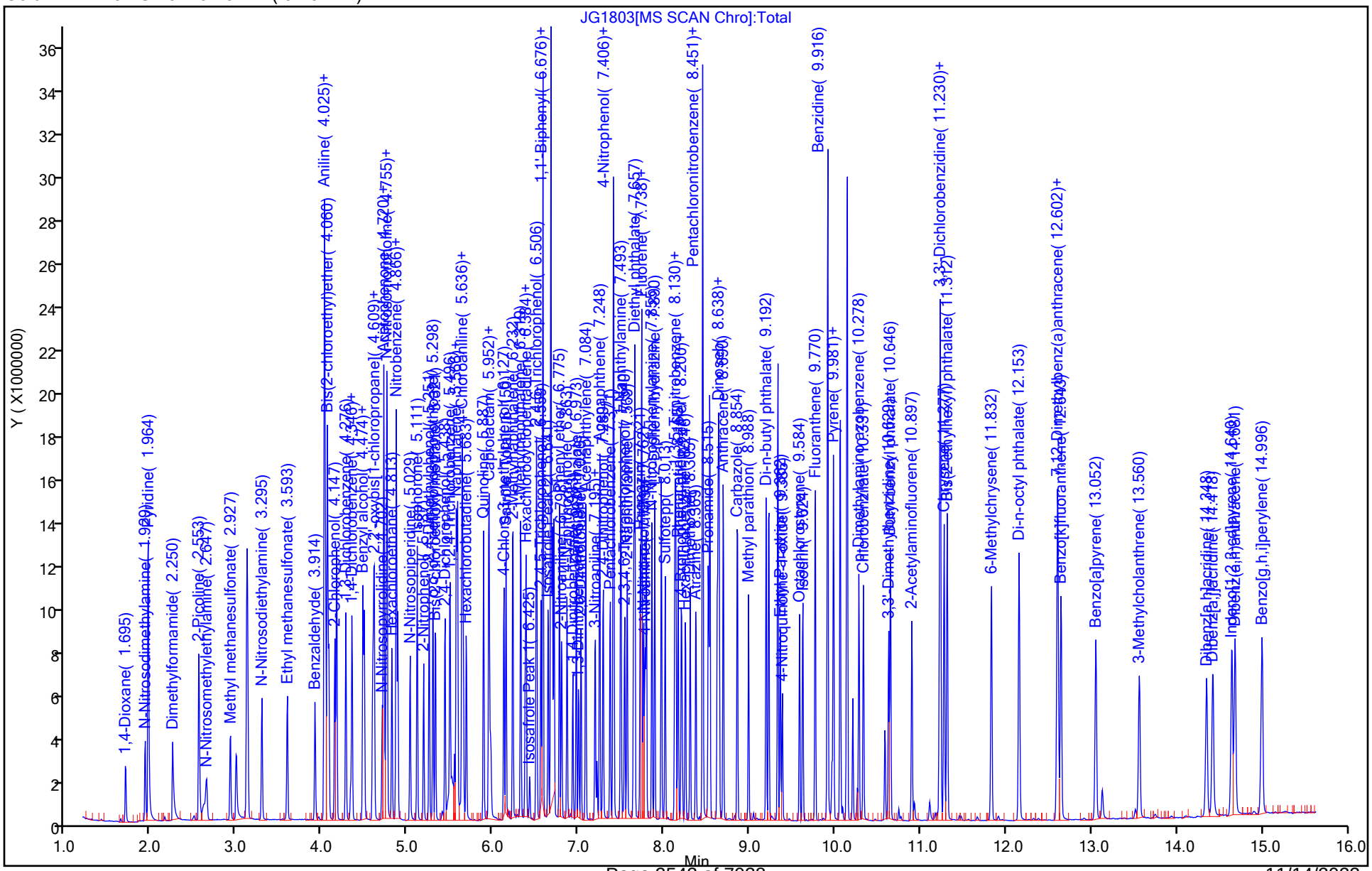
Lims ID: IC L8 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 4

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

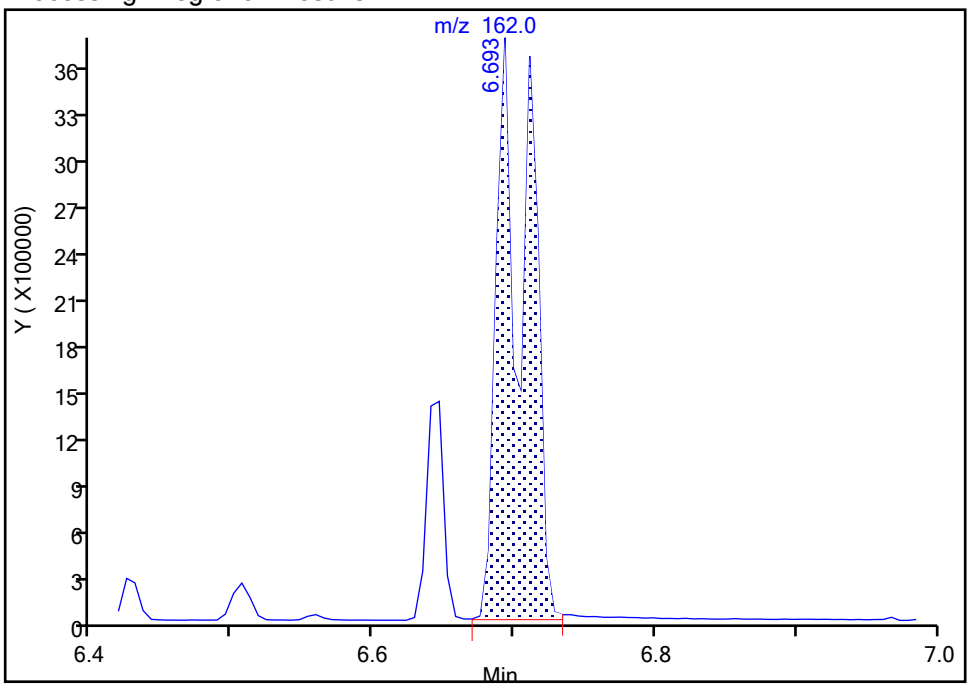
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1803.D				
Injection Date:	18-Jul-2023 08:28:30	Instrument ID:	HP23264		
Lims ID:	IC L8				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

84 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

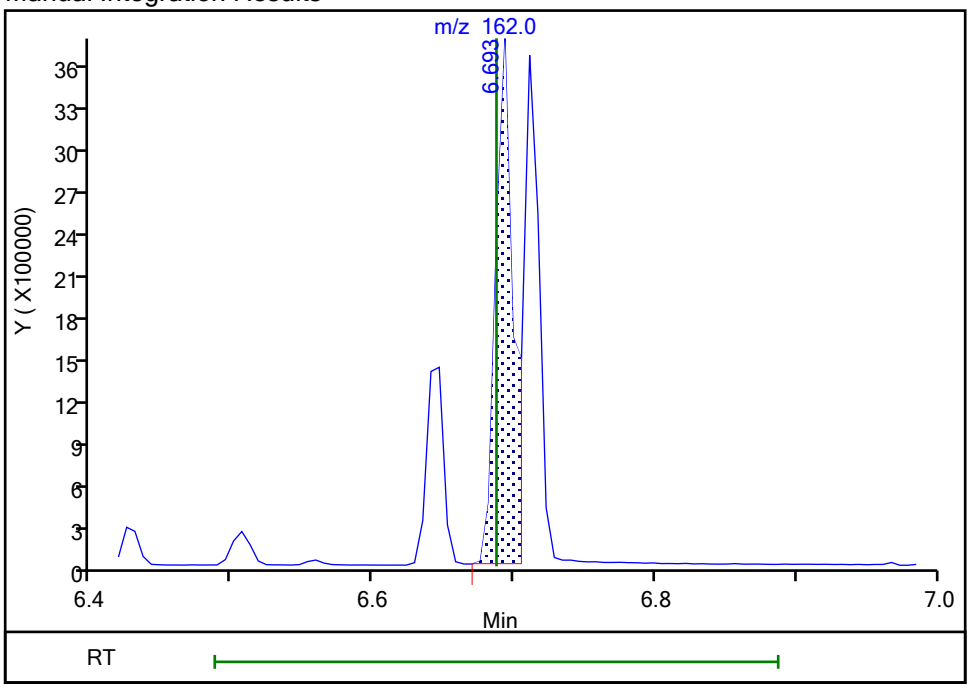
Processing Integration Results

RT: 6.69
Area: 5753846
Amount: 52.769619
Amount Units: ug/ml



Manual Integration Results

RT: 6.69
Area: 3165716
Amount: 32.219972
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:05:39 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

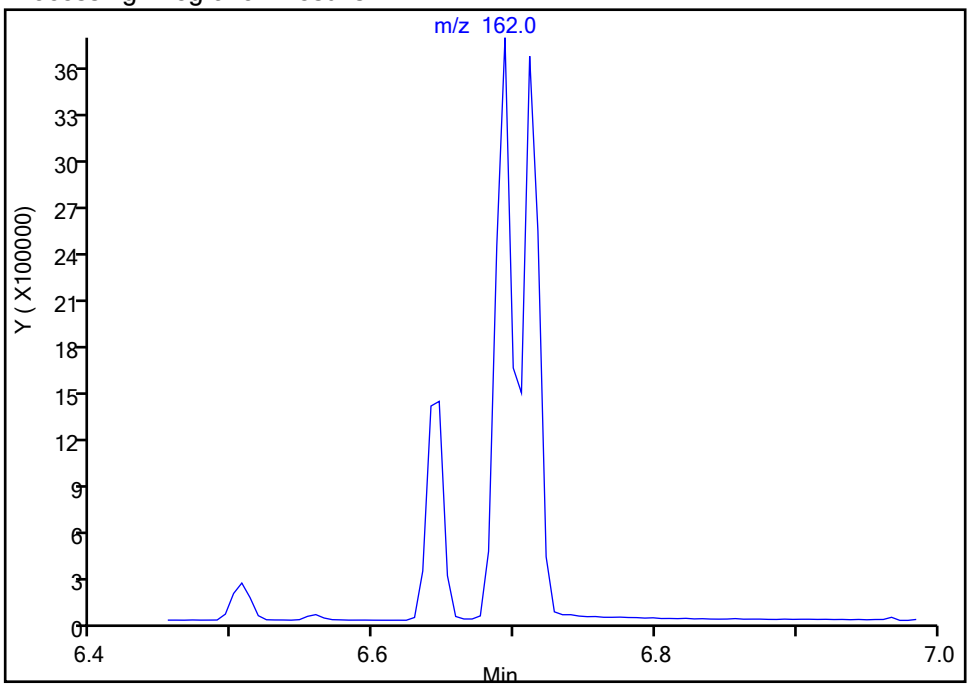
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1803.D				
Injection Date:	18-Jul-2023 08:28:30	Instrument ID:	HP23264		
Lims ID:	IC L8				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

85 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

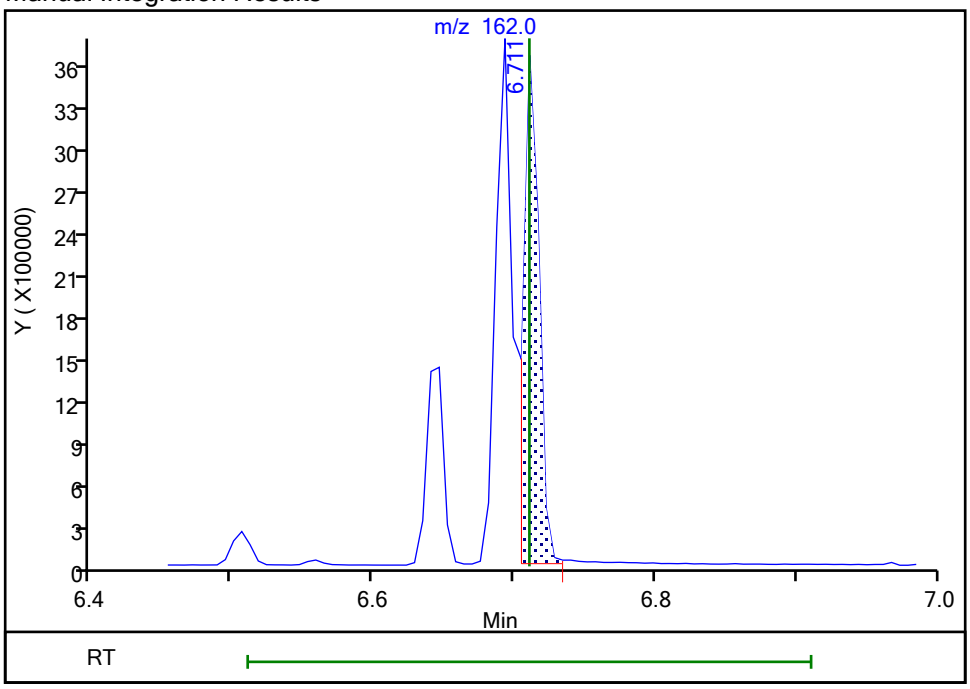
Not Detected
Expected RT: 6.71

Processing Integration Results



Manual Integration Results

RT: 6.71
Area: 2588131
Amount: 27.441912
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:05:50 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

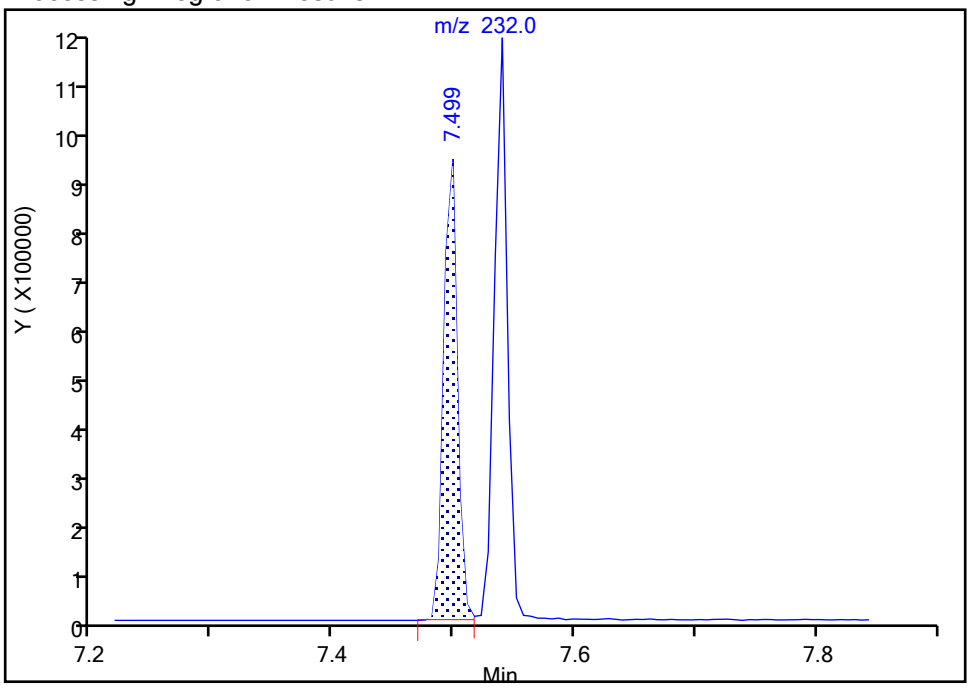
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1803.D				
Injection Date:	18-Jul-2023 08:28:30	Instrument ID:	HP23264		
Lims ID:	IC L8				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

105 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

Signal: 1

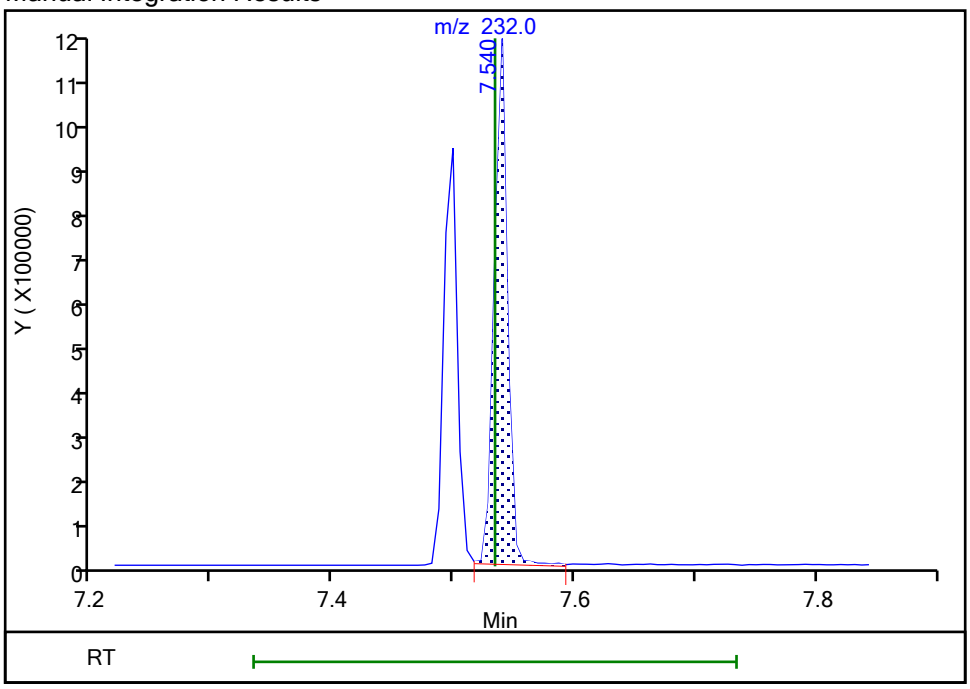
Processing Integration Results

RT: 7.50
Area: 731085
Amount: 29.159586
Amount Units: ug/ml



Manual Integration Results

RT: 7.54
Area: 887037
Amount: 29.284940
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:06:03 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1804.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Jul-2023 08:49:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 410-0089185-005
Operator ID: kel10217 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:16:48 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 11:07:56

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.701	1.701	0.000	93	552607	20.0	19.9	
	2 N-Nitrosodimethylamine	74	1.928	1.928	0.000	93	935066	20.0	20.7	
	3 Pyridine	79	1.964	1.969	-0.005	84	3077034	40.0	39.5	
	4 Dimethylformamide	73	2.250	2.267	-0.017	96	1130899	20.0	20.3	
	5 2-Picoline	93	2.553	2.559	-0.006	93	1555113	20.0	20.6	
	6 N-Nitrosomethylethylamine	88	2.647	2.647	0.001	95	679740	20.0	18.3	
	7 Methyl methanesulfonate	80	2.921	2.921	0.000	86	899721	20.0	20.1	
$	9 2-Fluorophenol	112	3.120	3.119	0.001	96	2921241	40.0	41.9	
	11 N-Nitrosodiethylamine	102	3.295	3.289	0.006	89	672534	20.0	22.3	
	12 Ethyl methanesulfonate	109	3.587	3.587	0.000	95	752996	20.0	20.1	
	13 Benzaldehyde	77	3.914	3.914	0.000	91	966730	20.0	15.9	
	17 Aniline	93	4.025	4.019	0.006	97	2264896	20.0	21.5	
$	15 Phenol-d5	99	4.025	4.025	0.000	95	4322971	40.0	43.2	
	16 Phenol	94	4.036	4.036	0.000	96	2118631	20.0	20.2	
	18 Bis(2-chloroethyl)ether	93	4.077	4.077	0.000	86	1425613	20.0	19.5	
	19 2-Chlorophenol	128	4.147	4.147	0.000	94	1347636	20.0	20.8	
	21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	96	1295260	20.0	20.1	
*	22 1,4-Dichlorobenzene-d4	152	4.334	4.328	0.006	97	227097	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	91	1344816	20.0	19.5	
	26 Benzyl alcohol	108	4.474	4.474	0.000	89	917389	20.0	21.4	
	27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	95	1285129	20.0	20.2	
	30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	93	3192650	20.0	19.8	
	29 2-Methylphenol	108	4.603	4.603	0.000	98	1341808	20.0	21.6	
	31 N-Nitrosopyrrolidine	100	4.696	4.696	0.000	88	790226	20.0	21.2	
	33 N-Nitrosodi-n-propylamine	70	4.720	4.714	0.006	93	1182472	20.0	19.2	
	32 Acetophenone	105	4.720	4.714	0.006	93	1975563	20.0	19.8	
	35 N-Nitrosomorpholine	56	4.743	4.737	0.006	87	1134880	20.0	19.8	
	36 2-Toluidine	106	4.755	4.754	0.001	81	2250375	20.0	20.9	
	34 4-Methylphenol	108	4.755	4.754	0.001	83	1527791	20.0	21.3	
	37 Hexachloroethane	117	4.813	4.813	0.000	97	565396	20.0	19.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.866	4.860	0.006	93	3758510	40.0	41.1	
40 Nitrobenzene	77	4.883	4.877	0.006	92	1574319	20.0	18.9	
41 N-Nitrosopiperidine	114	5.029	5.023	0.006	80	697888	20.0	20.7	
42 Isophorone	82	5.111	5.105	0.006	98	3105432	20.0	20.8	
43 2-Nitrophenol	139	5.187	5.186	0.001	92	697828	20.0	22.6	
44 2,4-Dimethylphenol	107	5.251	5.251	0.000	97	1414914	20.0	22.5	
46 o,o',o''-Triethylphosphorothioat	198	5.292	5.292	0.000	96	548173	20.0	22.6	
47 Bis(2-chloroethoxy)methane	93	5.321	5.321	0.000	90	1878754	20.0	20.8	
49 2,4-Dichlorophenol	162	5.438	5.438	0.000	97	1075516	20.0	22.9	
50 1,2,4-Trichlorobenzene	180	5.496	5.490	0.006	94	1057382	20.0	20.0	
* 52 Naphthalene-d8	136	5.549	5.549	0.001	98	853884	5.00	5.00	
53 Naphthalene	128	5.566	5.566	0.000	97	3827519	20.0	20.8	
55 Alpha-Terpineol	59	5.584	5.578	0.006	88	1768342	20.0	21.9	
56 4-Chloroaniline	127	5.630	5.630	0.000	94	1688552	20.0	21.8	
57 2,6-Dichlorophenol	162	5.636	5.636	0.000	92	1025095	20.0	22.0	
58 Hexachloropropene	213	5.648	5.648	0.000	95	701637	20.0	21.1	
59 Hexachlorobutadiene	225	5.683	5.683	0.000	97	618744	20.0	21.6	
61 Quinoline	129	5.887	5.887	0.000	95	2586492	20.0	20.5	
62 Caprolactam	113	5.952	5.940	0.012	59	356615	20.0	21.4	
63 N-Nitrosodi-n-butylamine	84	5.946	5.946	0.000	82	1358056	20.0	19.6	
64 p-Phenylene diamine	108	5.969	5.969	0.000	94	793060	20.0	19.3	
65 4-Chloro-3-methylphenol	107	6.121	6.121	0.000	96	1202487	20.0	20.7	
66 Safrole, Total	162	6.150	6.150	0.000	84	891771	20.0	22.0	
67 2-Methylnaphthalene	142	6.226	6.226	0.000	91	2379623	20.0	21.3	
69 1-Methylnaphthalene	142	6.319	6.319	0.000	92	2144900	20.0	20.0	
71 Hexachlorocyclopentadiene	237	6.378	6.372	0.006	95	606468	20.0	20.9	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.383	0.001	97	1086417	20.0	20.7	
72 Isosafrole Peak 1	162	6.425	6.430	-0.005	85	156065	3.20	3.08	
79 2,4,6-Trichlorophenol	196	6.512	6.506	0.006	95	702470	20.0	21.1	
S 24 Dinitrotoluene	165				0			40.7	
80 2,4,5-Trichlorophenol	196	6.559	6.553	0.006	92	746082	20.0	20.3	
$ 81 2-Fluorobiphenyl (Surr)	172	6.582	6.582	0.000	99	5806339	40.0	41.3	
82 Isosafrole Peak 2	162	6.641	6.640	0.001	87	898730	16.8	17.6	
83 1,1'-Biphenyl	154	6.676	6.675	0.001	92	2786135	20.0	20.2	
84 2-Chloronaphthalene	162	6.693	6.687	0.006	89	1938874	20.0	18.6	
85 1-Chloronaphthalene	162	6.711	6.710	0.001	96	2129294	20.0	21.2	
86 Phenyl ether	170	6.775	6.775	0.000	91	1517543	20.0	20.7	
87 2-Nitroaniline	138	6.798	6.798	0.000	78	774957	20.0	21.0	
88 1,4-Naphthoquinone	158	6.862	6.862	0.000	81	910966	20.0	22.0	
89 1,4-Dinitrobenzene	168	6.933	6.932	0.001	90	330533	20.0	20.2	
90 Dimethyl phthalate	163	6.973	6.967	0.006	96	2342888	20.0	18.9	
91 1,3-Dinitrobenzene	168	6.997	6.997	0.000	79	375445	20.0	19.7	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	85	536178	20.0	20.6	
93 Acenaphthylene	152	7.084	7.078	0.006	99	3780836	20.0	21.0	
95 3-Nitroaniline	138	7.189	7.189	0.000	88	699357	20.0	21.9	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	95	443400	5.00	5.00	
97 Acenaphthene	153	7.248	7.242	0.006	98	2388349	20.0	20.5	
98 2,4-Dinitrophenol	184	7.289	7.283	0.006	78	721579	40.0	43.8	
99 Pentachlorobenzene	250	7.370	7.370	0.000	97	924253	20.0	20.4	
100 4-Nitrophenol	109	7.400	7.399	0.001	90	809483	40.0	41.7	
102 2,4-Dinitrotoluene	165	7.405	7.405	0.000	75	710649	20.0	20.1	
101 Dibenzofuran	168	7.411	7.411	0.000	98	2994625	20.0	19.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.493	7.487	0.006	98	2054924	20.0	19.4	
105 2,3,4,6-Tetrachlorophenol	232	7.540	7.534	0.006	77	604565	20.0	18.8	a
106 2-Naphthylamine	143	7.569	7.563	0.006	96	2281327	20.0	20.7	
107 Diethyl phthalate	149	7.639	7.639	0.000	96	2559624	20.0	19.2	
109 Thionazin	107	7.721	7.715	0.006	77	475073	20.0	20.1	
108 Fluorene	166	7.732	7.732	0.000	94	2479499	20.0	20.0	
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	96	1081302	20.0	19.5	
111 N-Nitro-o-toluidine	152	7.756	7.756	0.000	93	695792	20.0	19.9	
112 4-Nitroaniline	138	7.773	7.767	0.006	83	621517	20.0	19.5	
113 4,6-Dinitro-2-methylphenol	198	7.791	7.785	0.006	70	752685	40.0	41.2	
114 N-Nitrosodiphenylamine	169	7.855	7.855	0.000	67	1692187	17.0	17.7	
115 1,2-Diphenylhydrazine	77	7.890	7.884	0.006	41	3224217	20.0	20.1	
$ 116 2,4,6-Tribromophenol	330	7.966	7.966	0.000	89	873518	40.0	41.6	
117 Sulfotepp	97	8.013	8.013	0.000	75	562950	20.0	21.4	
118 1,3,5-Trinitrobenzene	213	8.118	8.118	0.000	81	219972	20.0	22.8	
120 cis-Diallate	86	8.124	8.124	0.000	93	938427	14.8	14.7	
119 Phorate	75	8.135	8.135	0.000	92	2218183	20.0	23.6	
121 Phenacetin	108	8.159	8.153	0.006	90	1430872	20.0	22.3	
122 4-Bromophenyl phenyl ether	248	8.200	8.199	0.001	75	632660	20.0	20.5	
123 trans-Diallate	86	8.211	8.211	0.000	91	313039	5.20	5.12	
124 Hexachlorobenzene	284	8.246	8.246	0.000	93	730182	20.0	19.9	
125 Dimethoate	87	8.299	8.299	0.000	96	1292276	20.0	21.7	
126 Atrazine	200	8.369	8.369	0.000	80	572793	20.0	20.5	
128 Pentachloronitrobenzene	237	8.451	8.445	0.006	60	299117	20.0	19.1	
127 Pentachlorophenol	266	8.451	8.451	0.000	85	782266	40.0	45.0	
129 4-Aminobiphenyl	169	8.451	8.451	0.000	91	2359997	20.0	18.8	
130 Pronamide	173	8.515	8.515	0.000	88	1138403	20.0	21.5	
* 131 Phenanthrene-d10	188	8.620	8.620	0.000	95	783422	5.00	5.00	
133 Dinoseb	211	8.620	8.620	0.000	90	554044	20.0	22.2	
134 Disulfoton	88	8.632	8.632	0.000	97	2002024	20.0	19.7	
132 Phenanthrene	178	8.643	8.643	0.000	99	3324991	20.0	20.1	
135 Anthracene	178	8.690	8.690	0.000	98	3300194	20.0	20.1	
136 Carbazole	167	8.854	8.853	0.001	96	3241977	20.0	20.0	
137 Methyl parathion	109	8.988	8.988	0.000	88	1019267	20.0	23.4	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	99	4465053	20.0	21.4	
139 Ethyl Parathion	109	9.356	9.356	0.000	81	593213	20.0	23.1	
140 4-Nitroquinoline-1-oxide	190	9.385	9.379	0.006	88	241247	20.0	21.5	
142 Octachlorostyrene	308	9.583	9.583	0.000	91	288048	20.0	21.1	
143 Isodrin	193	9.624	9.624	0.000	92	401146	20.0	18.4	
S 68 Diallate	86				0		20.0	19.8	
144 Fluoranthene	202	9.764	9.764	0.000	99	3632622	20.0	20.8	
145 Benzidine	184	9.910	9.910	0.000	99	6495011	60.0	65.3	
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	96	704339	5.00	5.00	
147 Pyrene	202	9.981	9.980	0.000	96	3789293	20.0	21.0	
$ 148 p-Terphenyl-d14	244	10.144	10.138	0.006	99	4935167	40.0	39.5	
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	92	525216	20.0	22.1	
150 Chlorobenzilate	139	10.331	10.331	0.000	81	1256030	20.0	22.0	
152 3,3'-Dimethylbenzidine	212	10.629	10.628	0.001	98	1828341	20.0	22.8	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	96	1872559	20.0	22.8	
155 2-Acetylaminofluorene	181	10.897	10.897	0.000	94	1201420	20.0	22.0	
S 94 Isosafrole	162				0		20.0	20.6	
157 3,3'-Dichlorobenzidine	252	11.218	11.218	0.000	80	1145974	20.0	22.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158 4,4'-Methylene bis(2-chloroanil	231	11.230	11.230	0.000	90	593478	20.0	22.9	
156 Benzo[a]anthracene	228	11.230	11.230	0.000	99	2967991	20.0	22.2	
159 Chrysene	228	11.271	11.271	0.000	97	2718314	20.0	20.6	
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	95	2574536	20.0	23.1	
161 6-Methylchrysene	242	11.826	11.831	-0.005	98	1873048	20.0	20.7	
162 Di-n-octyl phthalate	149	12.153	12.152	0.001	98	4293371	20.0	20.3	
163 7,12-Dimethylbenz(a)anthracene	256	12.602	12.596	0.006	86	1187839	20.0	21.7	
164 Benzo[b]fluoranthene	252	12.602	12.602	0.000	96	2968163	20.0	20.1	
165 Benzo[k]fluoranthene	252	12.637	12.637	0.000	97	2992534	20.0	19.9	
166 Benzo[a]pyrene	252	13.046	13.046	0.000	83	2550018	20.0	20.3	
* 167 Perylene-d12	264	13.128	13.128	0.000	95	590478	5.00	5.00	
168 3-Methylcholanthrene	268	13.560	13.560	0.000	93	1117040	20.0	20.2	
169 Dibenz[a,h]acridine	279	14.342	14.342	0.000	93	2115860	20.0	20.3	
170 Dibenz[a,j]acridine	279	14.412	14.412	0.000	95	2316213	20.0	19.6	
171 Indeno[1,2,3-cd]pyrene	276	14.640	14.634	0.006	94	2433703	20.0	20.3	
172 Dibenz(a,h)anthracene	278	14.681	14.675	0.006	96	2664858	20.0	20.1	
173 Benzo[g,h,i]perylene	276	14.990	14.984	0.006	92	2776898	20.0	19.7	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MSS_RV8270_7_00030 Amount Added: 1.00 Units: mL

Report Date: 18-Jul-2023 15:16:49 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1804.D

Injection Date: 18-Jul-2023 08:49:30 Instrument ID: HP23264 Operator ID: kel10217

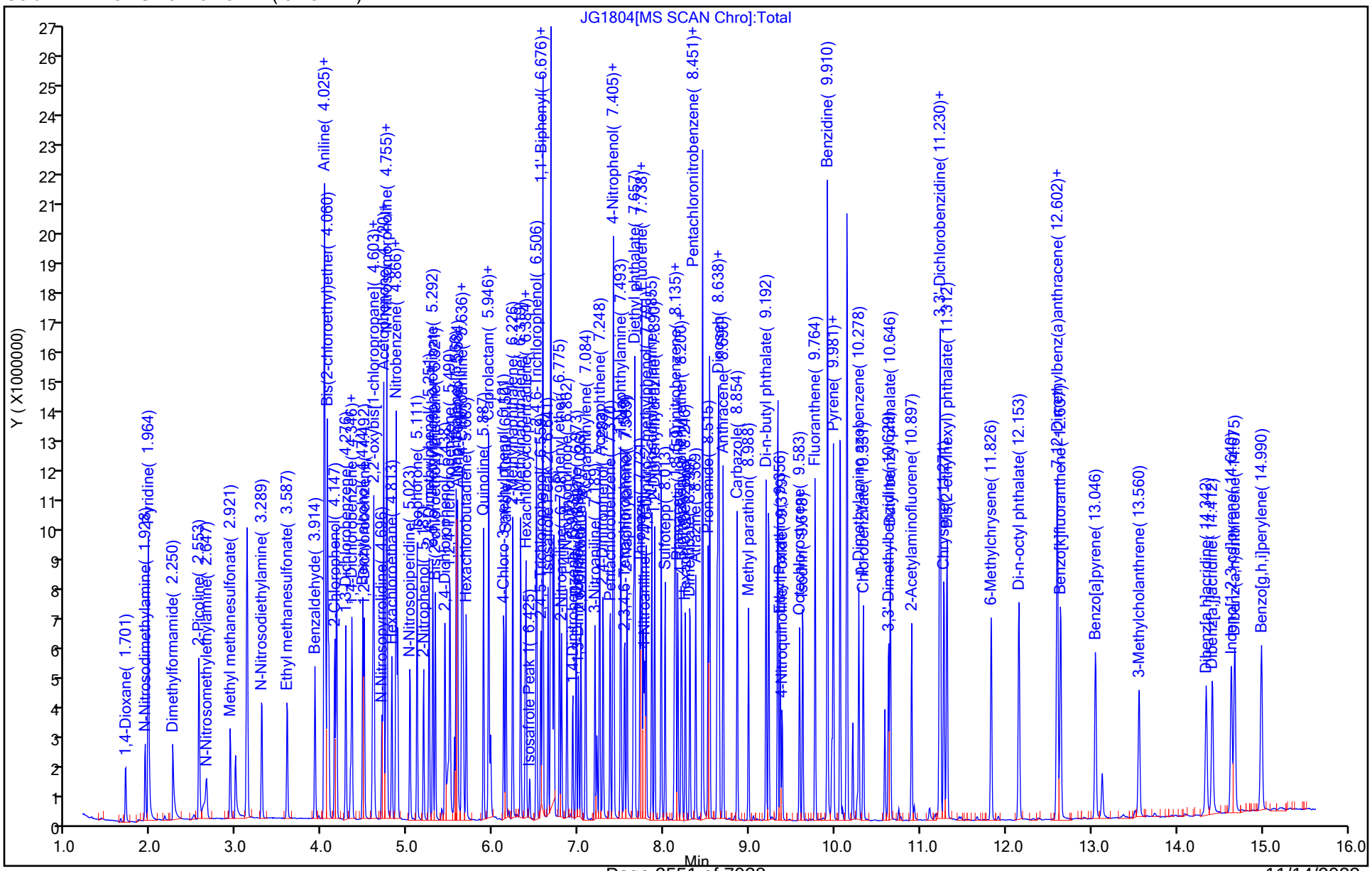
Lims ID: IC L7 Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 5

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

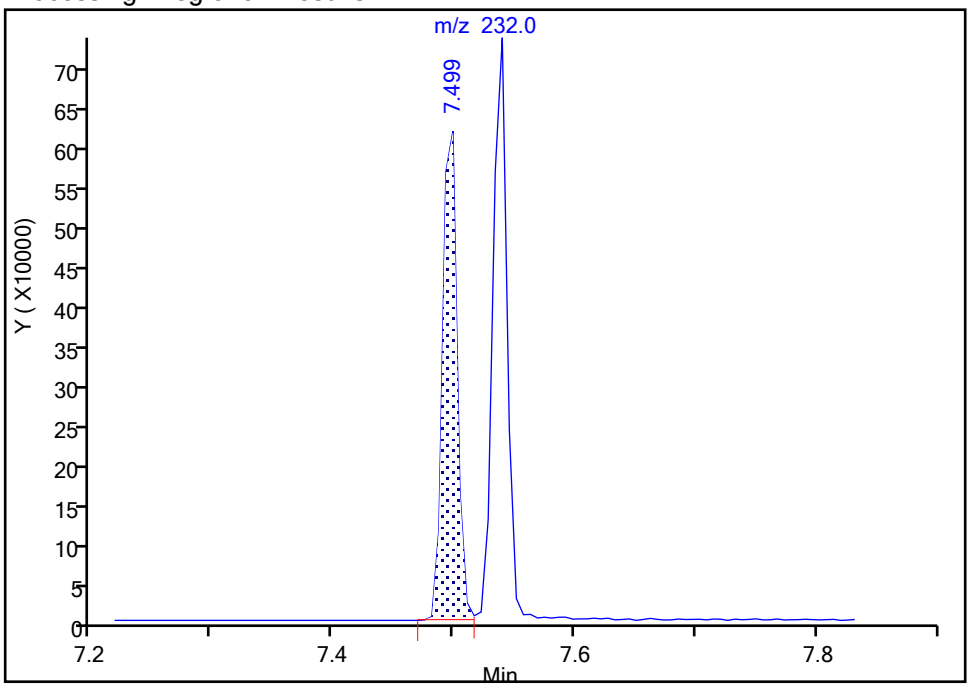
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1804.D				
Injection Date:	18-Jul-2023 08:49:30	Instrument ID:	HP23264		
Lims ID:	IC L7				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

105 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

Signal: 1

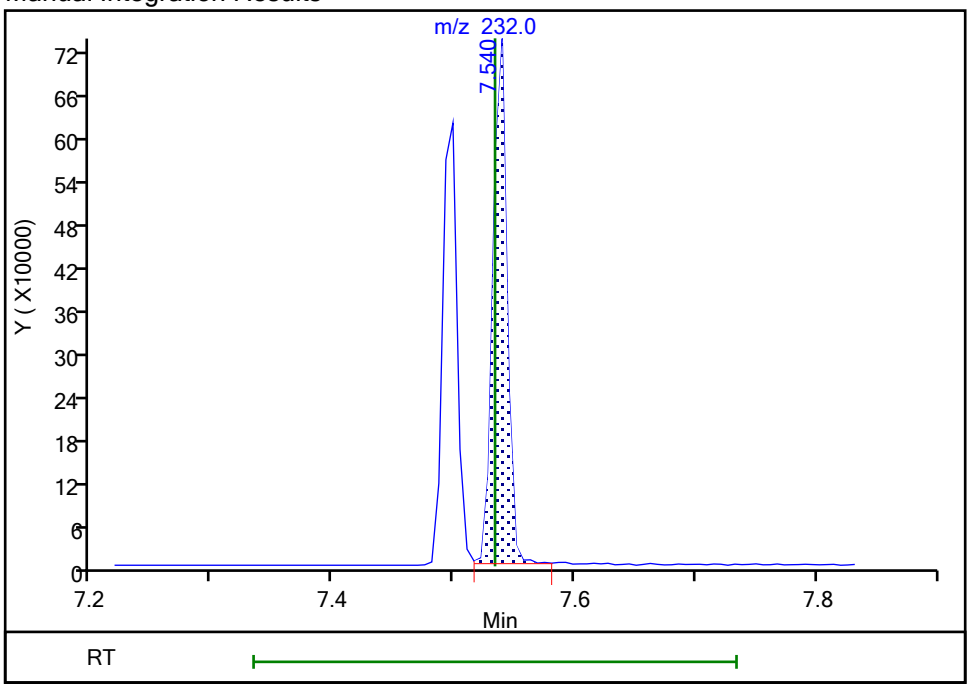
Processing Integration Results

RT: 7.50
Area: 520963
Amount: 19.043749
Amount Units: ug/ml



Manual Integration Results

RT: 7.54
Area: 604565
Amount: 18.766796
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:07:27 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1805.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 18-Jul-2023 09:10:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L6
Misc. Info.: 410-0089185-006
Operator ID: kel10217 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:17:26 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 11:09:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.695	1.701	-0.006	93	344728	12.5	12.2	
2 N-Nitrosodimethylamine	74	1.928	1.928	0.000	94	591627	12.5	12.9	
3 Pyridine	79	1.964	1.969	-0.005	84	1880460	25.0	23.8	
4 Dimethylformamide	73	2.255	2.267	-0.012	94	709839	12.5	12.6	Ma
5 2-Picoline	93	2.553	2.559	-0.006	94	999554	12.5	13.0	
6 N-Nitrosomethylethylamine	88	2.647	2.647	0.001	94	429259	12.5	11.4	
7 Methyl methanesulfonate	80	2.921	2.921	0.000	86	553757	12.5	12.2	
$ 9 2-Fluorophenol	112	3.120	3.119	0.001	96	1838729	25.0	25.9	
11 N-Nitrosodiethylamine	102	3.289	3.289	0.000	89	424605	12.5	13.9	
12 Ethyl methanesulfonate	109	3.587	3.587	0.000	95	463350	12.5	12.2	
13 Benzaldehyde	77	3.914	3.914	0.000	92	674785	12.5	11.0	
17 Aniline	93	4.019	4.019	0.000	96	1360168	12.5	12.7	
$ 15 Phenol-d5	99	4.025	4.025	0.000	98	2667971	25.0	26.3	
16 Phenol	94	4.036	4.036	0.000	96	1308192	12.5	12.3	
18 Bis(2-chloroethyl)ether	93	4.077	4.077	0.000	86	891977	12.5	12.0	
19 2-Chlorophenol	128	4.147	4.147	0.000	93	848768	12.5	12.9	
21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	95	820239	12.5	12.6	
* 22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	96	230583	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	90	855219	12.5	12.2	
26 Benzyl alcohol	108	4.474	4.474	0.000	90	590534	12.5	13.6	
27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	95	827551	12.5	12.8	
30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	93	1972059	12.5	12.0	
29 2-Methylphenol	108	4.603	4.603	0.000	98	825774	12.5	13.1	
31 N-Nitrosopyrrolidine	100	4.696	4.696	0.000	84	501730	12.5	13.3	
33 N-Nitrosodi-n-propylamine	70	4.720	4.714	0.006	87	764275	12.5	12.2	
32 Acetophenone	105	4.714	4.714	0.000	84	1260374	12.5	12.5	
35 N-Nitrosomorpholine	56	4.737	4.737	0.000	90	687911	12.5	11.8	
36 2-Toluidine	106	4.755	4.754	0.001	82	1368101	12.5	12.5	
34 4-Methylphenol	108	4.755	4.754	0.001	83	937008	12.5	12.9	
37 Hexachloroethane	117	4.813	4.813	0.000	96	351578	12.5	11.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.866	4.860	0.006	93	2315361	25.0	23.4	
40 Nitrobenzene	77	4.883	4.877	0.006	93	1023932	12.5	11.3	
41 N-Nitrosopiperidine	114	5.023	5.023	0.000	80	448198	12.5	12.3	
42 Isophorone	82	5.111	5.105	0.006	98	1988537	12.5	12.3	
43 2-Nitrophenol	139	5.187	5.186	0.001	92	429664	12.5	12.8	
44 2,4-Dimethylphenol	107	5.251	5.251	0.000	97	920106	12.5	13.5	
46 o,o',o''-Triethylphosphorothioat	198	5.292	5.292	0.000	95	316953	12.5	12.1	
47 Bis(2-chloroethoxy)methane	93	5.321	5.321	0.000	90	1194002	12.5	12.2	
49 2,4-Dichlorophenol	162	5.432	5.438	-0.006	97	661028	12.5	13.0	
50 1,2,4-Trichlorobenzene	180	5.496	5.490	0.006	93	682667	12.5	11.9	
* 52 Naphthalene-d8	136	5.549	5.549	0.001	98	925798	5.00	5.00	
53 Naphthalene	128	5.566	5.566	0.000	97	2356877	12.5	11.8	
55 Alpha-Terpineol	59	5.578	5.578	0.000	89	1062879	12.5	12.1	
56 4-Chloroaniline	127	5.630	5.630	0.000	94	1099329	12.5	13.1	
57 2,6-Dichlorophenol	162	5.636	5.636	0.000	91	679678	12.5	13.5	
58 Hexachloropropene	213	5.648	5.648	0.000	95	451501	12.5	12.5	
59 Hexachlorobutadiene	225	5.683	5.683	0.000	96	395453	12.5	12.7	
61 Quinoline	129	5.887	5.887	0.000	95	1657991	12.5	12.1	
62 Caprolactam	113	5.940	5.940	0.000	59	229984	12.5	12.7	
63 N-Nitrosodi-n-butylamine	84	5.946	5.946	0.000	80	864574	12.5	11.5	
64 p-Phenylene diamine	108	5.969	5.969	0.000	94	533389	12.5	12.0	
65 4-Chloro-3-methylphenol	107	6.121	6.121	0.000	96	797987	12.5	12.7	
66 Safrole, Total	162	6.150	6.150	0.000	84	555590	12.5	12.7	
67 2-Methylnaphthalene	142	6.226	6.226	0.000	91	1470058	12.5	12.1	
69 1-Methylnaphthalene	142	6.319	6.319	0.000	93	1480614	12.5	12.8	
71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	95	410711	12.5	13.1	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.383	0.001	98	713170	12.5	12.6	
72 Isosafrole Peak 1	162	6.425	6.430	-0.005	87	108895	2.00	1.99	
79 2,4,6-Trichlorophenol	196	6.506	6.506	0.000	90	456102	12.5	12.7	
S 24 Dinitrotoluene	165				0			26.4	
80 2,4,5-Trichlorophenol	196	6.553	6.553	0.000	92	502890	12.5	12.7	
$ 81 2-Fluorobiphenyl (Surr)	172	6.582	6.582	0.000	99	3629778	25.0	23.9	
82 Isosafrole Peak 2	162	6.641	6.640	0.001	87	565998	10.5	10.3	
83 1,1'-Biphenyl	154	6.676	6.675	0.001	94	1779906	12.5	12.0	
84 2-Chloronaphthalene	162	6.693	6.687	0.006	95	1257193	12.5	11.2	
85 1-Chloronaphthalene	162	6.711	6.710	0.001	96	1345697	12.5	12.4	
86 Phenyl ether	170	6.775	6.775	0.000	91	931062	12.5	11.8	
87 2-Nitroaniline	138	6.798	6.798	0.000	77	505283	12.5	12.7	
88 1,4-Naphthoquinone	158	6.862	6.862	0.000	83	607747	12.5	13.6	
89 1,4-Dinitrobenzene	168	6.933	6.932	0.001	90	231617	12.5	13.1	
90 Dimethyl phthalate	163	6.968	6.967	0.001	97	1648857	12.5	12.4	
91 1,3-Dinitrobenzene	168	6.997	6.997	0.000	78	248806	12.5	12.1	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	87	380075	12.5	13.6	
93 Acenaphthylene	152	7.079	7.078	0.000	99	2436056	12.5	12.5	
95 3-Nitroaniline	138	7.189	7.189	0.000	89	464150	12.5	13.5	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	95	478030	5.00	5.00	
97 Acenaphthene	153	7.248	7.242	0.006	98	1506926	12.5	12.0	
98 2,4-Dinitrophenol	184	7.283	7.283	0.000	77	473545	25.0	26.7	
99 Pentachlorobenzene	250	7.370	7.370	0.000	97	595727	12.5	12.2	
100 4-Nitrophenol	109	7.400	7.399	0.001	90	558546	25.0	26.7	
102 2,4-Dinitrotoluene	165	7.405	7.405	0.000	83	489700	12.5	12.9	
101 Dibenzofuran	168	7.411	7.411	0.000	97	2088979	12.5	12.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.487	7.487	0.000	98	1356020	12.5	11.9	
105 2,3,4,6-Tetrachlorophenol	232	7.534	7.534	0.000	77	406481	12.5	11.7	a
106 2-Naphthylamine	143	7.563	7.563	0.000	96	1551098	12.5	13.1	
107 Diethyl phthalate	149	7.639	7.639	0.000	96	1753034	12.5	12.2	
109 Thionazin	107	7.715	7.715	0.000	76	311529	12.5	12.2	
108 Fluorene	166	7.732	7.732	0.000	93	1626086	12.5	12.2	
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	94	708063	12.5	11.8	
111 N-Nitro-o-toluidine	152	7.756	7.756	0.000	93	475993	12.5	12.6	
112 4-Nitroaniline	138	7.768	7.767	0.001	84	448882	12.5	13.1	
113 4,6-Dinitro-2-methylphenol	198	7.791	7.785	0.006	80	526923	25.0	25.6	
114 N-Nitrosodiphenylamine	169	7.855	7.855	0.000	68	1105153	10.6	10.3	
115 1,2-Diphenylhydrazine	77	7.890	7.884	0.006	41	2140819	12.5	11.9	
$ 116 2,4,6-Tribromophenol	330	7.966	7.966	0.000	89	579732	25.0	25.6	
117 Sulfotepp	97	8.013	8.013	0.000	76	376153	12.5	12.7	
118 1,3,5-Trinitrobenzene	213	8.118	8.118	0.000	83	135742	12.5	12.5	
120 cis-Diallate	86	8.124	8.124	0.000	95	606801	9.25	8.42	
119 Phorate	75	8.135	8.135	0.000	92	1379888	12.5	13.0	
121 Phenacetin	108	8.159	8.153	0.006	90	1001454	12.5	13.9	
122 4-Bromophenyl phenyl ether	248	8.200	8.199	0.001	74	426153	12.5	12.2	
123 trans-Diallate	86	8.211	8.211	0.000	91	212374	3.25	3.08	
124 Hexachlorobenzene	284	8.246	8.246	0.000	94	508428	12.5	12.3	
125 Dimethoate	87	8.299	8.299	0.000	96	832322	12.5	12.4	
126 Atrazine	200	8.369	8.369	0.000	80	375895	12.5	11.9	
128 Pentachloronitrobenzene	237	8.451	8.445	0.006	62	217765	12.5	12.3	
127 Pentachlorophenol	266	8.451	8.451	0.000	85	537516	25.0	27.4	
129 4-Aminobiphenyl	169	8.451	8.451	0.000	92	1662090	12.5	11.7	
130 Pronamide	173	8.515	8.515	0.000	89	796823	12.5	13.4	
* 131 Phenanthrene-d10	188	8.620	8.620	0.000	95	883382	5.00	5.00	
133 Dinoseb	211	8.620	8.620	0.000	80	375948	12.5	13.4	
134 Disulfoton	88	8.632	8.632	0.000	97	1385615	12.5	12.1	
132 Phenanthrene	178	8.643	8.643	0.000	98	2281428	12.5	12.2	
135 Anthracene	178	8.690	8.690	0.000	98	2347203	12.5	12.6	
136 Carbazole	167	8.854	8.853	0.001	96	2386159	12.5	13.0	
137 Methyl parathion	109	8.988	8.988	0.000	89	663897	12.5	13.5	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	99	3173440	12.5	13.5	
139 Ethyl Parathion	109	9.356	9.356	0.000	80	378629	12.5	13.1	
140 4-Nitroquinoline-1-oxide	190	9.385	9.379	0.006	80	157867	12.5	12.5	
142 Octachlorostyrene	308	9.583	9.583	0.000	91	189820	12.5	12.3	
143 Isodrin	193	9.618	9.624	-0.006	89	288092	12.5	11.7	
S 68 Diallate	86				0		12.5	11.5	
144 Fluoranthene	202	9.764	9.764	0.000	98	2432903	12.5	12.3	
145 Benzidine	184	9.910	9.910	0.000	99	4882330	37.5	40.5	
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	96	854122	5.00	5.00	
147 Pyrene	202	9.981	9.980	0.000	96	2621383	12.5	12.0	
$ 148 p-Terphenyl-d14	244	10.138	10.138	0.000	98	3706583	25.0	24.5	
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	92	346551	12.5	12.0	
150 Chlorobenzilate	139	10.331	10.331	0.000	81	870060	12.5	12.5	
152 3,3'-Dimethylbenzidine	212	10.629	10.628	0.001	98	1236050	12.5	12.7	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	96	1270114	12.5	12.7	
155 2-Acetylaminofluorene	181	10.897	10.897	0.000	94	805866	12.5	12.2	
S 94 Isosafrole	162				0		12.5	12.3	
157 3,3'-Dichlorobenzidine	252	11.218	11.218	0.000	77	798891	12.5	13.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158 4,4'-Methylene bis(2-chloroanil	231	11.230	11.230	0.000	91	428397	12.5	13.6	
156 Benzo[a]anthracene	228	11.230	11.230	0.000	98	2106160	12.5	13.0	
159 Chrysene	228	11.271	11.271	0.000	97	1922877	12.5	12.0	
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	95	1806011	12.5	13.3	
161 6-Methylchrysene	242	11.826	11.831	-0.005	97	1301423	12.5	11.8	
162 Di-n-octyl phthalate	149	12.153	12.152	0.001	98	3038527	12.5	12.6	
163 7,12-Dimethylbenz(a)anthracene	256	12.596	12.596	0.000	89	804531	12.5	12.9	
164 Benzo[b]fluoranthene	252	12.602	12.602	0.000	96	2062463	12.5	12.2	
165 Benzo[k]fluoranthene	252	12.637	12.637	0.000	97	2196534	12.5	12.8	
166 Benzo[a]pyrene	252	13.046	13.046	0.000	82	1788380	12.5	12.5	
* 167 Perylene-d12	264	13.128	13.128	0.000	95	674017	5.00	5.00	
168 3-Methylcholanthrene	268	13.560	13.560	0.000	93	780681	12.5	12.4	
169 Dibenz[a,h]acridine	279	14.342	14.342	0.000	93	1454919	12.5	12.2	
170 Dibenz[a,j]acridine	279	14.412	14.412	0.000	95	1614406	12.5	12.0	
171 Indeno[1,2,3-cd]pyrene	276	14.634	14.634	0.000	95	1719181	12.5	12.6	
172 Dibenz(a,h)anthracene	278	14.675	14.675	0.000	95	1919596	12.5	12.7	
173 Benzo[g,h,i]perylene	276	14.990	14.984	0.006	92	1922075	12.5	12.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_6_00045 Amount Added: 1.00 Units: mL

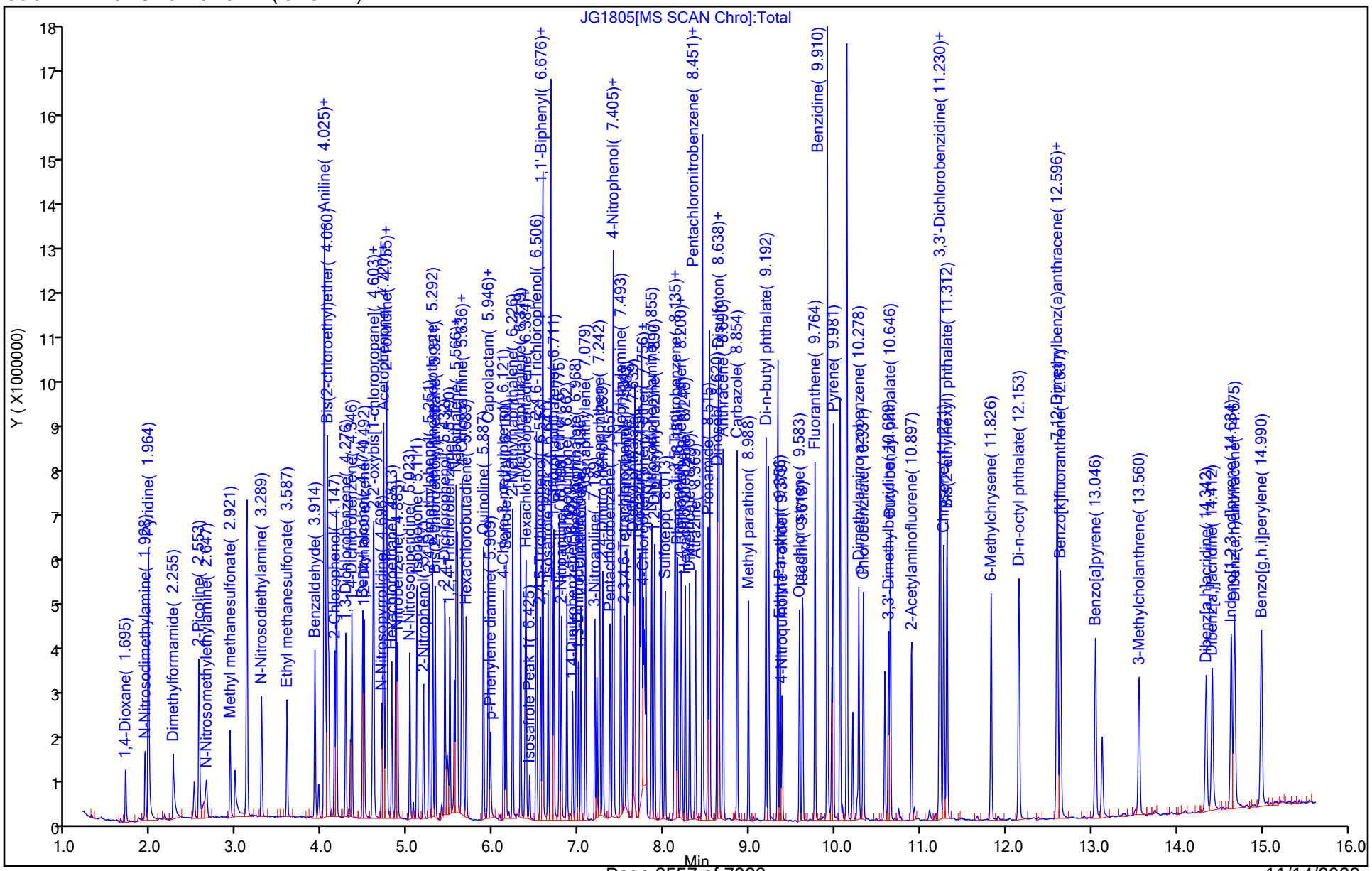
Report Date: 18-Jul-2023 15:17:27 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1805.D

Injection Date:	18-Jul-2023 09:10:30	Instrument ID:	HP23264	Operator ID:	kel10217
Lims ID:	IC L6			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Environment Testing, LLC

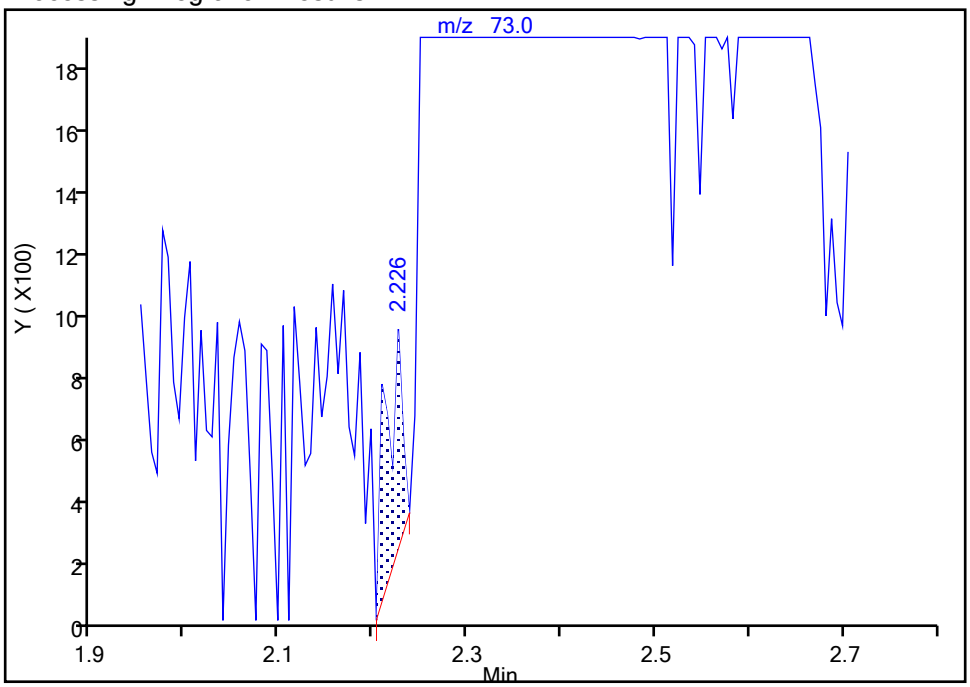
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1805.D				
Injection Date:	18-Jul-2023 09:10:30	Instrument ID:	HP23264		
Lims ID:	IC L6				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

4 Dimethylformamide, CAS: 68-12-2

Signal: 1

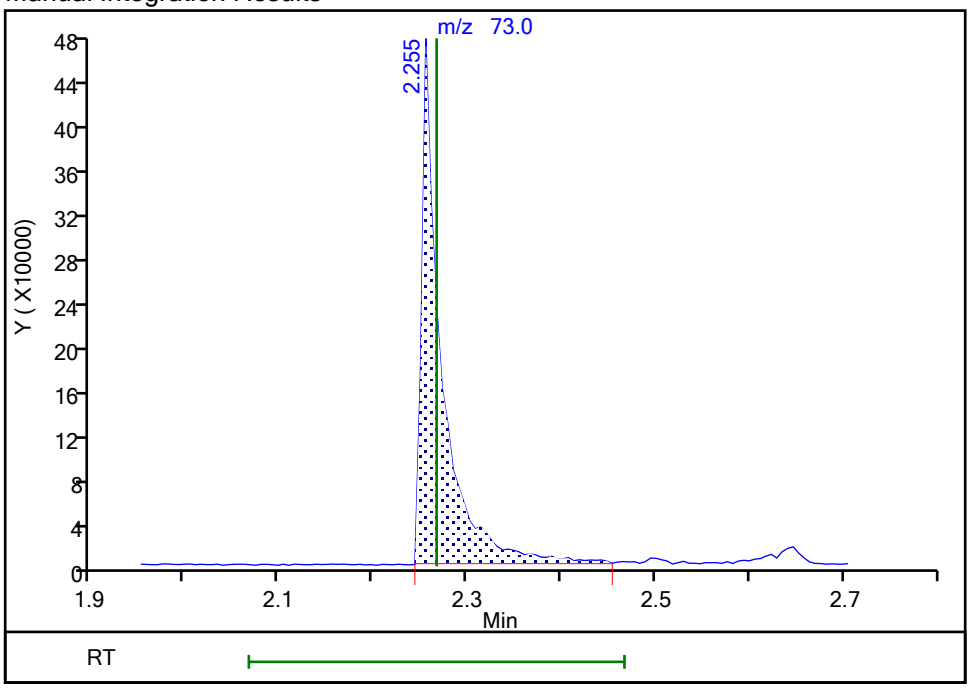
Processing Integration Results

RT: 2.23
Area: 865
Amount: 0.019733
Amount Units: ug/ml



Manual Integration Results

RT: 2.26
Area: 709839
Amount: 12.560085
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:08:49 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

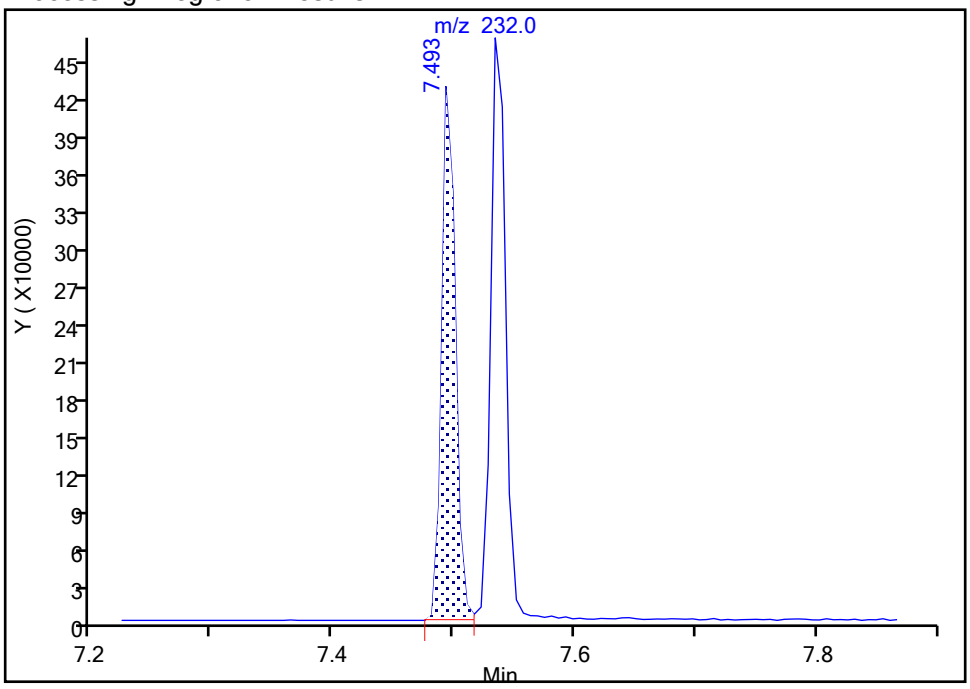
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1805.D				
Injection Date:	18-Jul-2023 09:10:30	Instrument ID:	HP23264		
Lims ID:	IC L6				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

105 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

Signal: 1

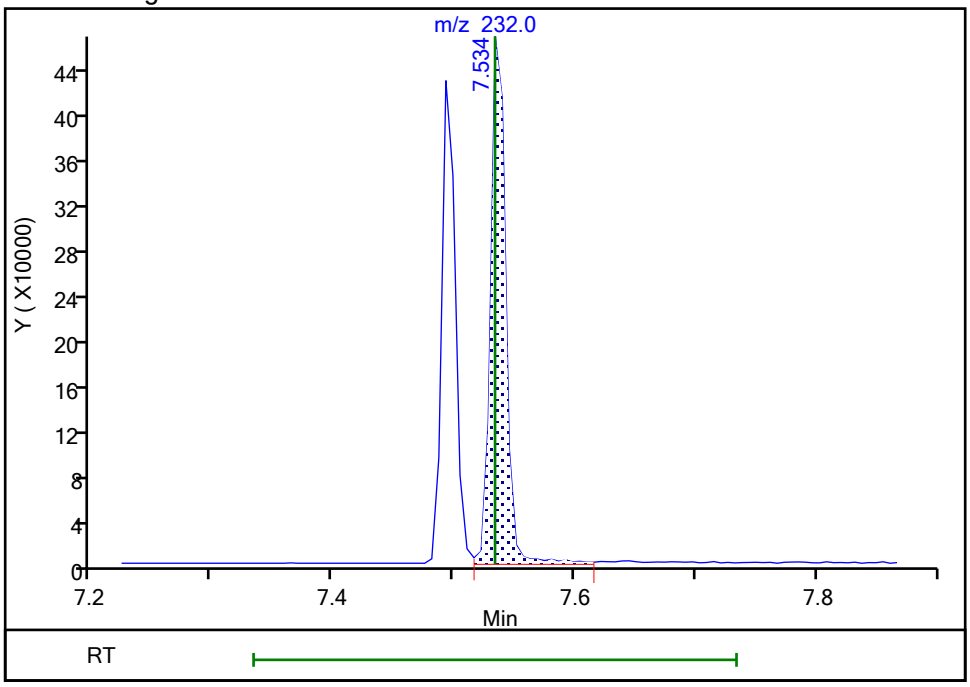
Processing Integration Results

RT: 7.49
Area: 336698
Amount: 11.202364
Amount Units: ug/ml



Manual Integration Results

RT: 7.53
Area: 406481
Amount: 11.703828
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:09:17 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1806.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 18-Jul-2023 09:31:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L4
Misc. Info.: 410-0089185-007
Operator ID: kel10217 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:18:04 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 11:11:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.701	1.701	0.000	97	86564	3.75	3.68	
2 N-Nitrosodimethylamine	74	1.929	1.928	0.001	93	141688	3.75	3.70	
3 Pyridine	79	1.969	1.969	0.000	83	468775	7.50	7.10	
4 Dimethylformamide	73	2.279	2.267	0.012	94	162039	3.75	3.43	
5 2-Picoline	93	2.559	2.559	0.000	89	235256	3.75	3.67	
6 N-Nitrosomethylethylamine	88	2.641	2.647	-0.005	94	132237	3.75	4.20	
7 Methyl methanesulfonate	80	2.921	2.921	0.000	85	142001	3.75	3.75	
$ 9 2-Fluorophenol	112	3.114	3.119	-0.005	96	442229	7.50	7.48	
11 N-Nitrosodiethylamine	102	3.289	3.289	0.000	90	97390	3.75	3.81	
12 Ethyl methanesulfonate	109	3.587	3.587	0.000	96	112977	3.75	3.57	
13 Benzaldehyde	77	3.914	3.914	0.000	92	206848	3.75	4.02	
17 Aniline	93	4.019	4.019	0.000	70	334598	3.75	3.74	
$ 15 Phenol-d5	99	4.025	4.025	0.000	95	651095	7.50	7.68	
16 Phenol	94	4.036	4.036	0.000	97	334305	3.75	3.75	
18 Bis(2-chloroethyl)ether	93	4.077	4.077	0.000	86	226362	3.75	3.65	
19 2-Chlorophenol	128	4.142	4.147	-0.005	92	203052	3.75	3.70	
21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	96	207905	3.75	3.82	
* 22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	96	192478	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	92	213503	3.75	3.66	
26 Benzyl alcohol	108	4.474	4.474	0.000	90	135473	3.75	3.73	
27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	96	196605	3.75	3.64	
30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	92	483495	3.75	3.54	
29 2-Methylphenol	108	4.597	4.603	-0.006	96	190048	3.75	3.61	
31 N-Nitrosopyrrolidine	100	4.690	4.696	-0.006	83	112657	3.75	3.57	
33 N-Nitrosodi-n-propylamine	70	4.714	4.714	0.000	93	183291	3.75	3.51	
32 Acetophenone	105	4.714	4.714	0.000	92	315799	3.75	3.74	
35 N-Nitrosomorpholine	56	4.737	4.737	0.000	93	175146	3.75	3.61	
36 2-Toluidine	106	4.755	4.754	0.001	82	339553	3.75	3.71	
34 4-Methylphenol	108	4.755	4.754	0.001	83	227183	3.75	3.73	
37 Hexachloroethane	117	4.813	4.813	0.000	96	90652	3.75	3.69	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.860	4.860	0.000	93	590137	7.50	7.78	
40 Nitrobenzene	77	4.877	4.877	0.000	94	257341	3.75	3.71	
41 N-Nitrosopiperidine	114	5.023	5.023	0.000	80	105025	3.75	3.76	
42 Isophorone	82	5.105	5.105	0.000	98	464646	3.75	3.75	
43 2-Nitrophenol	139	5.187	5.186	0.001	92	99254	3.75	3.88	
44 2,4-Dimethylphenol	107	5.251	5.251	0.000	97	209542	3.75	4.01	
46 o,o',o''-Triethylphosphorothioat	198	5.292	5.292	0.000	94	81733	3.75	4.06	
47 Bis(2-chloroethoxy)methane	93	5.321	5.321	0.000	90	313973	3.75	4.20	
49 2,4-Dichlorophenol	162	5.432	5.438	-0.006	96	154808	3.75	3.96	
50 1,2,4-Trichlorobenzene	180	5.490	5.490	0.000	94	171847	3.75	3.91	
* 52 Naphthalene-d8	136	5.549	5.549	0.001	99	708713	5.00	5.00	
53 Naphthalene	128	5.566	5.566	0.000	96	584301	3.75	3.83	
55 Alpha-Terpineol	59	5.578	5.578	0.000	89	264042	3.75	3.94	
56 4-Chloroaniline	127	5.631	5.630	0.001	94	256874	3.75	3.99	
57 2,6-Dichlorophenol	162	5.636	5.636	0.000	90	146915	3.75	3.80	
58 Hexachloropropene	213	5.648	5.648	0.000	95	109981	3.75	3.98	
59 Hexachlorobutadiene	225	5.683	5.683	0.000	97	92648	3.75	3.89	
61 Quinoline	129	5.887	5.887	0.000	95	406251	3.75	3.88	
62 Caprolactam	113	5.934	5.940	-0.006	67	53932	3.75	3.89	
63 N-Nitrosodi-n-butylamine	84	5.946	5.946	0.000	90	235719	3.75	4.11	
64 p-Phenylene diamine	108	5.969	5.969	0.000	94	150678	3.75	4.43	
65 4-Chloro-3-methylphenol	107	6.121	6.121	0.000	96	180907	3.75	3.75	
66 Safrole, Total	162	6.150	6.150	0.000	82	126195	3.75	3.76	
67 2-Methylnaphthalene	142	6.226	6.226	0.000	91	372806	3.75	4.02	
69 1-Methylnaphthalene	142	6.320	6.319	0.001	93	352755	3.75	3.97	
71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	93	100443	3.75	4.21	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.383	0.001	97	175078	3.75	4.06	
72 Isosafrole Peak 1	162	6.430	6.430	0.000	83	25159	0.6000	0.6033	
79 2,4,6-Trichlorophenol	196	6.506	6.506	0.000	91	106445	3.75	3.88	
S 24 Dinitrotoluene	165				0			7.81	
80 2,4,5-Trichlorophenol	196	6.553	6.553	0.000	92	116734	3.75	3.86	
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.582	-0.006	99	884190	7.50	7.64	
82 Isosafrole Peak 2	162	6.641	6.640	0.001	88	143019	3.15	3.40	
83 1,1'-Biphenyl	154	6.670	6.675	-0.005	97	449360	3.75	3.96	
84 2-Chloronaphthalene	162	6.687	6.687	0.000	97	334623	3.75	3.89	
85 1-Chloronaphthalene	162	6.711	6.710	0.001	97	327188	3.75	3.97	
86 Phenyl ether	170	6.775	6.775	0.000	90	226401	3.75	3.75	
87 2-Nitroaniline	138	6.798	6.798	0.000	76	108573	3.75	3.59	
88 1,4-Naphthoquinone	158	6.863	6.862	0.001	81	129530	3.75	3.81	
89 1,4-Dinitrobenzene	168	6.927	6.932	-0.005	89	49136	3.75	3.65	
90 Dimethyl phthalate	163	6.968	6.967	0.001	97	410834	3.75	4.04	
91 1,3-Dinitrobenzene	168	6.997	6.997	0.000	81	60490	3.75	3.86	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	85	81818	3.75	3.83	
93 Acenaphthylene	152	7.079	7.078	0.001	99	581599	3.75	3.92	
95 3-Nitroaniline	138	7.190	7.189	0.001	88	101846	3.75	3.87	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	95	364557	5.00	5.00	
97 Acenaphthene	153	7.242	7.242	0.000	97	368210	3.75	3.83	
98 2,4-Dinitrophenol	184	7.283	7.283	0.000	78	142743	11.3	10.5	
99 Pentachlorobenzene	250	7.365	7.370	-0.005	97	140471	3.75	3.76	
100 4-Nitrophenol	109	7.400	7.399	0.001	91	124929	7.50	7.82	
102 2,4-Dinitrotoluene	165	7.406	7.405	0.001	79	115644	3.75	3.98	
101 Dibenzofuran	168	7.411	7.411	0.000	97	502401	3.75	3.88	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.487	7.487	0.000	98	340473	3.75	3.91	
105 2,3,4,6-Tetrachlorophenol	232	7.534	7.534	0.000	76	97888	3.75	3.70	a
106 2-Naphthylamine	143	7.563	7.563	0.000	96	353025	3.75	3.91	
107 Diethyl phthalate	149	7.639	7.639	0.000	96	415225	3.75	3.79	
109 Thionazin	107	7.715	7.715	0.000	76	75246	3.75	3.88	
108 Fluorene	166	7.733	7.732	0.001	93	417431	3.75	4.09	
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	94	182127	3.75	3.99	
111 N-Nitro-o-toluidine	152	7.756	7.756	0.000	92	107343	3.75	3.74	
112 4-Nitroaniline	138	7.768	7.767	0.001	83	102254	3.75	3.91	
113 4,6-Dinitro-2-methylphenol	198	7.785	7.785	0.000	68	116549	7.50	7.36	
114 N-Nitrosodiphenylamine	169	7.855	7.855	0.000	67	279085	3.19	3.37	
115 1,2-Diphenylhydrazine	77	7.884	7.884	0.000	41	533280	3.75	3.84	
$ 116 2,4,6-Tribromophenol	330	7.966	7.966	0.000	88	132286	7.50	7.66	
117 Sulfotepp	97	8.007	8.013	-0.006	78	85540	3.75	3.75	
118 1,3,5-Trinitrobenzene	213	8.112	8.118	-0.006	82	28314	3.75	3.38	
120 cis-Diallate	86	8.124	8.124	0.000	94	142884	2.78	2.58	
119 Phorate	75	8.135	8.135	0.000	93	308022	3.75	3.79	
121 Phenacetin	108	8.153	8.153	0.000	90	220448	3.75	3.97	
122 4-Bromophenyl phenyl ether	248	8.200	8.199	0.001	76	103669	3.75	3.87	
123 trans-Diallate	86	8.211	8.211	0.000	90	54315	0.9750	1.03	
124 Hexachlorobenzene	284	8.246	8.246	0.000	94	125181	3.75	3.94	
125 Dimethoate	87	8.293	8.299	-0.006	95	198108	3.75	3.85	
126 Atrazine	200	8.363	8.369	-0.006	80	99596	3.75	4.11	
128 Pentachloronitrobenzene	237	8.445	8.445	0.000	61	52899	3.75	3.89	
127 Pentachlorophenol	266	8.445	8.451	-0.006	85	126284	7.50	8.37	
129 4-Aminobiphenyl	169	8.451	8.451	0.000	91	442158	3.75	4.06	
130 Pronamide	173	8.515	8.515	0.000	89	181521	3.75	3.96	
* 131 Phenanthrene-d10	188	8.620	8.620	0.000	97	679061	5.00	5.00	
133 Dinoseb	211	8.620	8.620	0.000	91	72131	3.75	3.33	
134 Disulfoton	88	8.632	8.632	0.000	96	323390	3.75	3.66	
132 Phenanthrene	178	8.638	8.643	-0.005	97	553001	3.75	3.86	
135 Anthracene	178	8.690	8.690	0.000	98	540842	3.75	3.79	
136 Carbazole	167	8.854	8.853	0.001	96	545632	3.75	3.88	
137 Methyl parathion	109	8.988	8.988	0.000	88	137081	3.75	3.64	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	99	706745	3.75	3.90	
139 Ethyl Parathion	109	9.356	9.356	0.000	79	86940	3.75	3.90	
140 4-Nitroquinoline-1-oxide	190	9.379	9.379	0.000	79	30169	3.75	3.10	
142 Octachlorostyrene	308	9.584	9.583	0.001	89	46981	3.75	3.97	
143 Isodrin	193	9.619	9.624	-0.005	88	69843	3.75	3.69	
S 68 Diallate	86				0		3.75	3.61	
144 Fluoranthene	202	9.765	9.764	0.001	99	612311	3.75	4.04	
145 Benzidine	184	9.911	9.910	0.001	100	1123403	11.3	11.9	
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	97	669358	5.00	5.00	
147 Pyrene	202	9.981	9.980	0.001	96	639077	3.75	3.72	
$ 148 p-Terphenyl-d14	244	10.138	10.138	0.000	98	911973	7.50	7.68	
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	91	80571	3.75	3.57	
150 Chlorobenzilate	139	10.331	10.331	0.000	84	192148	3.75	3.53	
152 3,3'-Dimethylbenzidine	212	10.623	10.628	-0.005	98	258443	3.75	3.39	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	95	285528	3.75	3.65	
155 2-Acetylaminofluorene	181	10.892	10.897	-0.005	93	155649	3.75	3.00	
S 94 Isosafrole	162				0		3.75	4.00	
157 3,3'-Dichlorobenzidine	252	11.218	11.218	0.000	80	175091	3.75	3.65	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158 4,4'-Methylene bis(2-chloroanil	231	11.230	11.230	0.000	66	86266	3.75	3.50	
156 Benzo[a]anthracene	228	11.230	11.230	0.000	98	469547	3.75	3.70	
159 Chrysene	228	11.271	11.271	0.000	96	465262	3.75	3.71	
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	94	387470	3.75	3.65	
161 6-Methylchrysene	242	11.826	11.831	-0.005	98	304994	3.75	3.54	
162 Di-n-octyl phthalate	149	12.153	12.152	0.001	98	647239	3.75	3.81	
163 7,12-Dimethylbenz(a)anthracene	256	12.597	12.596	0.000	88	194214	3.75	4.41	
164 Benzo[b]fluoranthene	252	12.597	12.602	-0.006	96	494017	3.75	4.16	
165 Benzo[k]fluoranthene	252	12.632	12.637	-0.005	97	491053	3.75	4.06	
166 Benzo[a]pyrene	252	13.046	13.046	0.000	83	391391	3.75	3.87	
* 167 Perylene-d12	264	13.122	13.128	-0.006	94	475078	5.00	5.00	
168 3-Methylcholanthrene	268	13.554	13.560	-0.006	95	179336	3.75	4.03	
169 Dibenz[a,h]acridine	279	14.342	14.342	0.000	93	323939	3.75	3.87	
170 Dibenz[a,j]acridine	279	14.412	14.412	0.000	95	404787	3.75	4.27	
171 Indeno[1,2,3-cd]pyrene	276	14.628	14.634	-0.006	95	406284	3.75	4.22	
172 Dibenz(a,h)anthracene	278	14.675	14.675	0.000	94	445434	3.75	4.18	
173 Benzo[g,h,i]perylene	276	14.979	14.984	-0.005	91	458330	3.75	4.05	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MSS_RV8270_4_00027 Amount Added: 1.00 Units: mL

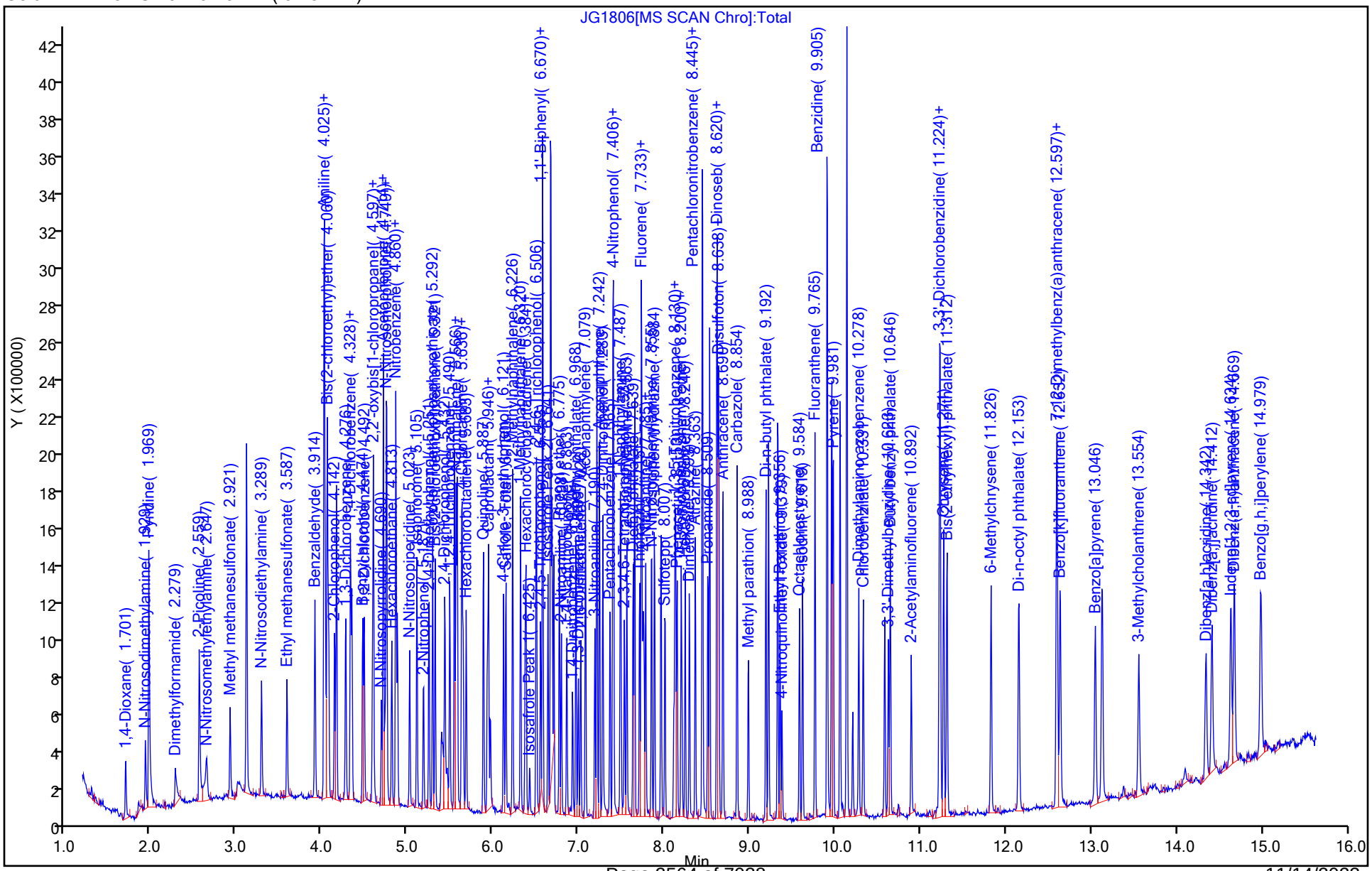
Report Date: 18-Jul-2023 15:18:06 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1806.D

Injection Date:	18-Jul-2023 09:31:30	Instrument ID:	HP23264	Operator ID:	kel10217
Lims ID:	IC L4			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

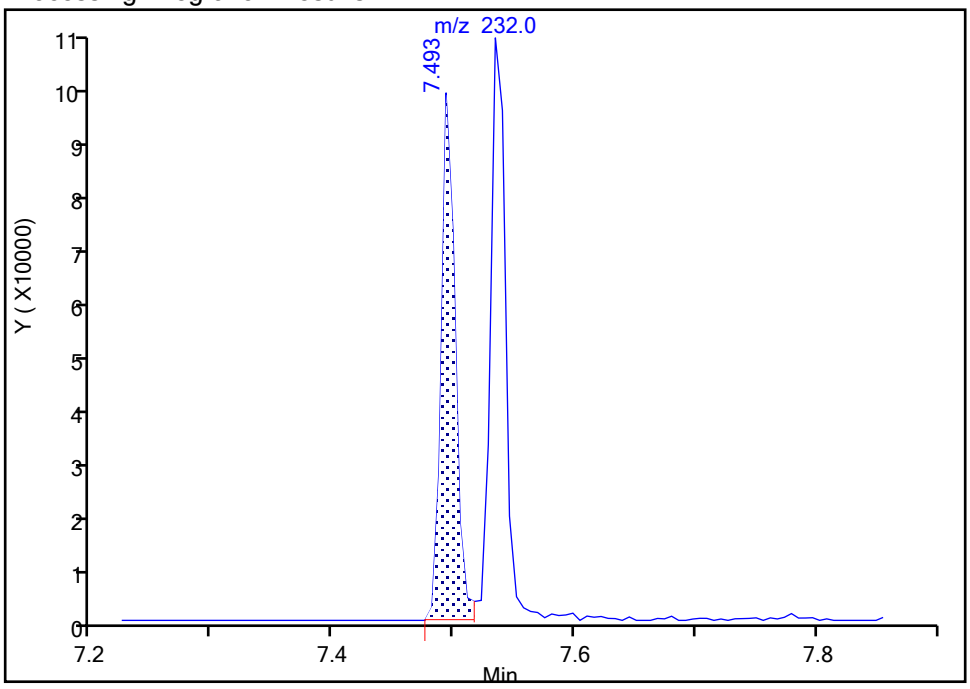
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1806.D				
Injection Date:	18-Jul-2023 09:31:30	Instrument ID:	HP23264		
Lims ID:	IC L4				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

105 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

Signal: 1

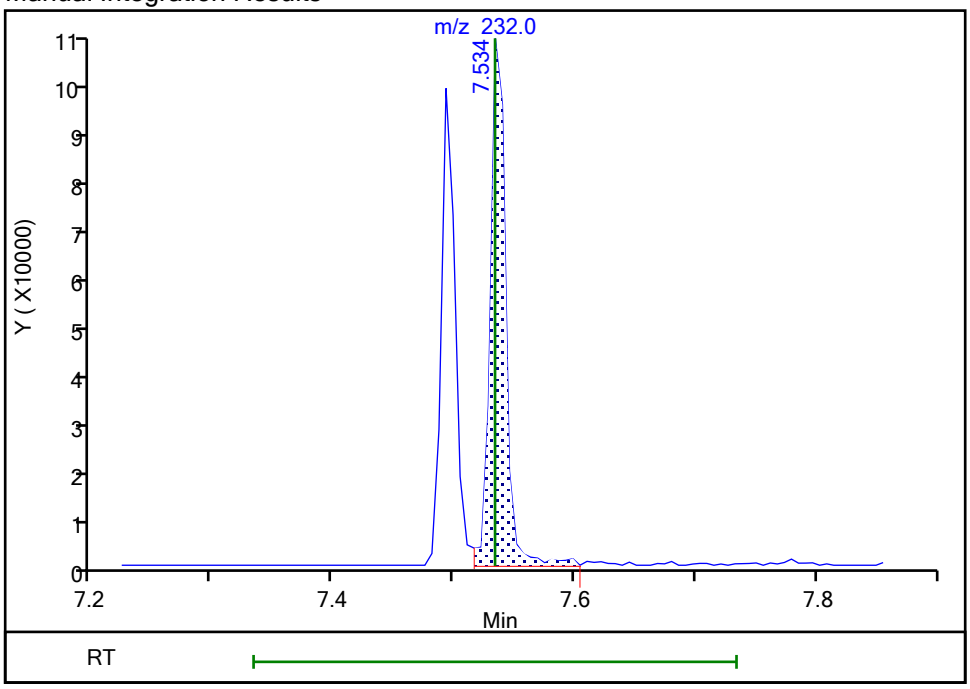
Processing Integration Results

RT: 7.49
Area: 79826
Amount: 3.403574
Amount Units: ug/ml



Manual Integration Results

RT: 7.53
Area: 97888
Amount: 3.695786
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:11:06 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Baseline

Report Date: 18-Jul-2023 15:18:46 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1807.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Jul-2023 09:52:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 410-0089185-008
Operator ID: kel10217 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:18:44 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 11:13:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.701	1.701	0.000	95	39236	1.25	1.37	
2 N-Nitrosodimethylamine	74	1.934	1.928	0.006	91	60295	1.25	1.29	
3 Pyridine	79	1.975	1.969	0.006	86	185508	2.50	2.30	
4 Dimethylformamide	73	2.314	2.267	0.047	97	71283	1.25	1.24	
5 2-Picoline	93	2.565	2.559	0.006	90	92270	1.25	1.18	
6 N-Nitrosomethylethylamine	88	2.647	2.647	0.001	94	56162	1.25	1.46	
7 Methyl methanesulfonate	80	2.921	2.921	0.000	87	57993	1.25	1.25	
$ 9 2-Fluorophenol	112	3.114	3.119	-0.005	95	175720	2.50	2.44	
11 N-Nitrosodiethylamine	102	3.289	3.289	0.000	88	42666	1.25	1.37	
12 Ethyl methanesulfonate	109	3.587	3.587	0.000	96	44559	1.25	1.15	
13 Benzaldehyde	77	3.914	3.914	0.000	92	88611	1.25	1.41	
17 Aniline	93	4.019	4.019	0.000	73	132307	1.25	1.21	
$ 15 Phenol-d5	99	4.025	4.025	0.000	94	254522	2.50	2.46	
16 Phenol	94	4.036	4.036	0.000	92	131603	1.25	1.21	
18 Bis(2-chloroethyl)ether	93	4.071	4.077	-0.006	85	99429	1.25	1.31	
19 2-Chlorophenol	128	4.147	4.147	0.000	93	80486	1.25	1.20	
21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	94	81053	1.25	1.22	
* 22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	96	234760	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	95	88711	1.25	1.25	
26 Benzyl alcohol	108	4.474	4.474	0.000	90	49655	1.25	1.12	
27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	95	81588	1.25	1.24	
30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	92	196326	1.25	1.18	
29 2-Methylphenol	108	4.597	4.603	-0.006	96	73940	1.25	1.15	
31 N-Nitrosopyrrolidine	100	4.690	4.696	-0.006	83	48702	1.25	1.27	
33 N-Nitrosodi-n-propylamine	70	4.714	4.714	0.000	91	76003	1.25	1.19	
32 Acetophenone	105	4.714	4.714	0.000	82	129811	1.25	1.26	
35 N-Nitrosomorpholine	56	4.737	4.737	0.000	92	74919	1.25	1.27	
36 2-Toluidine	106	4.749	4.754	-0.005	83	135934	1.25	1.22	
34 4-Methylphenol	108	4.755	4.754	0.001	83	88210	1.25	1.19	
37 Hexachloroethane	117	4.813	4.813	0.000	95	37263	1.25	1.24	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.860	4.860	0.000	93	243107	2.50	2.41	
40 Nitrobenzene	77	4.877	4.877	0.000	98	104580	1.25	1.14	
41 N-Nitrosopiperidine	114	5.023	5.023	0.000	79	39762	1.25	1.07	
42 Isophorone	82	5.105	5.105	0.000	98	191355	1.25	1.16	
43 2-Nitrophenol	139	5.187	5.186	0.001	88	36201	1.25	1.06	
44 2,4-Dimethylphenol	107	5.245	5.251	-0.006	97	84376	1.25	1.21	
46 o,o',o''-Triethylphosphorothioat	198	5.292	5.292	0.000	95	31411	1.25	1.17	
47 Bis(2-chloroethoxy)methane	93	5.321	5.321	0.000	91	116327	1.25	1.17	
49 2,4-Dichlorophenol	162	5.432	5.438	-0.006	96	60658	1.25	1.17	
50 1,2,4-Trichlorobenzene	180	5.490	5.490	0.000	93	68507	1.25	1.17	
* 52 Naphthalene-d8	136	5.549	5.549	0.001	98	942199	5.00	5.00	
53 Naphthalene	128	5.566	5.566	0.000	96	244228	1.25	1.20	
55 Alpha-Terpineol	59	5.578	5.578	0.000	89	98054	1.25	1.10	
56 4-Chloroaniline	127	5.630	5.630	0.000	93	101979	1.25	1.19	
57 2,6-Dichlorophenol	162	5.636	5.636	0.000	89	62321	1.25	1.21	
58 Hexachloropropene	213	5.648	5.648	0.000	93	42951	1.25	1.17	
59 Hexachlorobutadiene	225	5.683	5.683	0.000	96	38282	1.25	1.21	
61 Quinoline	129	5.887	5.887	0.000	94	161749	1.25	1.16	
62 Caprolactam	113	5.934	5.940	-0.006	71	20721	1.25	1.13	
63 N-Nitrosodi-n-butylamine	84	5.946	5.946	0.000	88	101074	1.25	1.33	
64 p-Phenylene diamine	108	5.969	5.969	0.000	97	35686	1.25	0.7885	
65 4-Chloro-3-methylphenol	107	6.121	6.121	0.000	96	73506	1.25	1.15	
66 Safrole, Total	162	6.150	6.150	0.000	87	54396	1.25	1.22	
67 2-Methylnaphthalene	142	6.226	6.226	0.000	92	144228	1.25	1.17	
69 1-Methylnaphthalene	142	6.319	6.319	0.000	90	131816	1.25	1.12	
71 Hexachlorocyclopentadiene	237	6.378	6.372	0.006	96	32281	1.25	1.06	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.383	0.001	97	67430	1.25	1.22	
72 Isosafrole Peak 1	162	6.425	6.430	-0.005	85	10001	0.2000	0.1878	
79 2,4,6-Trichlorophenol	196	6.506	6.506	0.000	94	40990	1.25	1.17	
S 24 Dinitrotoluene	165				0			2.41	
80 2,4,5-Trichlorophenol	196	6.553	6.553	0.000	89	46690	1.25	1.21	
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.582	-0.006	99	367207	2.50	2.49	
82 Isosafrole Peak 2	162	6.641	6.640	0.001	90	55516	1.05	1.03	
83 1,1'-Biphenyl	154	6.670	6.675	-0.005	97	181022	1.25	1.25	
84 2-Chloronaphthalene	162	6.687	6.687	0.000	95	130910	1.25	1.19	
85 1-Chloronaphthalene	162	6.711	6.710	0.001	95	126372	1.25	1.20	
86 Phenyl ether	170	6.775	6.775	0.000	91	96695	1.25	1.26	
87 2-Nitroaniline	138	6.798	6.798	0.000	77	43333	1.25	1.12	
88 1,4-Naphthoquinone	158	6.862	6.862	0.000	79	51101	1.25	1.18	
89 1,4-Dinitrobenzene	168	6.933	6.932	0.001	87	18406	1.25	1.07	
90 Dimethyl phthalate	163	6.968	6.967	0.001	97	161939	1.25	1.25	
91 1,3-Dinitrobenzene	168	6.997	6.997	0.000	80	23254	1.25	1.16	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	84	33656	1.25	1.23	
93 Acenaphthylene	152	7.079	7.078	0.001	99	233488	1.25	1.23	
95 3-Nitroaniline	138	7.189	7.189	0.000	87	41834	1.25	1.25	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	94	465505	5.00	5.00	
97 Acenaphthene	153	7.242	7.242	0.000	98	153744	1.25	1.25	
98 2,4-Dinitrophenol	184	7.283	7.283	0.000	73	66552	5.00	3.85	
99 Pentachlorobenzene	250	7.365	7.370	-0.005	97	57614	1.25	1.21	
100 4-Nitrophenol	109	7.400	7.399	0.001	90	70076	3.75	3.44	
102 2,4-Dinitrotoluene	165	7.406	7.405	0.001	70	43599	1.25	1.18	
101 Dibenzofuran	168	7.411	7.411	0.000	97	207959	1.25	1.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.487	7.487	0.000	97	131249	1.25	1.18	
105 2,3,4,6-Tetrachlorophenol	232	7.534	7.534	0.000	76	40165	1.25	1.19	a
106 2-Naphthylamine	143	7.563	7.563	0.000	96	146743	1.25	1.27	
107 Diethyl phthalate	149	7.639	7.639	0.000	96	176854	1.25	1.26	
109 Thionazin	107	7.715	7.715	0.000	74	31399	1.25	1.27	
108 Fluorene	166	7.732	7.732	0.000	92	163283	1.25	1.25	
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	94	71444	1.25	1.23	
111 N-Nitro-o-toluidine	152	7.750	7.756	-0.006	90	48358	1.25	1.32	
112 4-Nitroaniline	138	7.768	7.767	0.001	82	44769	1.25	1.34	
113 4,6-Dinitro-2-methylphenol	198	7.785	7.785	0.000	67	67128	3.75	3.40	
114 N-Nitrosodiphenylamine	169	7.855	7.855	0.000	67	113870	1.06	1.11	
115 1,2-Diphenylhydrazine	77	7.884	7.884	0.000	41	222023	1.25	1.28	
$ 116 2,4,6-Tribromophenol	330	7.966	7.966	0.000	88	53273	2.50	2.42	
117 Sulfotepp	97	8.007	8.013	-0.006	76	36978	1.25	1.30	
118 1,3,5-Trinitrobenzene	213	8.112	8.118	-0.006	82	10445	1.25	1.00	
120 cis-Diallate	86	8.124	8.124	0.000	95	59759	0.9250	0.8663	
119 Phorate	75	8.135	8.135	0.000	92	122015	1.25	1.20	
121 Phenacetin	108	8.153	8.153	0.000	91	85907	1.25	1.24	
122 4-Bromophenyl phenyl ether	248	8.200	8.199	0.001	75	43025	1.25	1.29	
123 trans-Diallate	86	8.211	8.211	0.000	89	23175	0.3250	0.3514	
124 Hexachlorobenzene	284	8.246	8.246	0.000	93	49679	1.25	1.25	
125 Dimethoate	87	8.293	8.299	-0.006	96	83143	1.25	1.30	
126 Atrazine	200	8.363	8.369	-0.006	79	39280	1.25	1.30	
128 Pentachloronitrobenzene	237	8.445	8.445	0.000	64	21928	1.25	1.29	
127 Pentachlorophenol	266	8.445	8.451	-0.006	81	44969	2.50	2.39	
129 4-Aminobiphenyl	169	8.451	8.451	0.000	91	173710	1.25	1.28	
130 Pronamide	173	8.509	8.515	-0.006	90	67464	1.25	1.18	
* 131 Phenanthrene-d10	188	8.614	8.620	-0.006	96	845790	5.00	5.00	
133 Dinoseb	211	8.620	8.620	0.000	61	27234	1.25	1.01	
134 Disulfoton	88	8.632	8.632	0.000	97	141448	1.25	1.29	
132 Phenanthrene	178	8.638	8.643	-0.005	97	241875	1.25	1.36	
135 Anthracene	178	8.690	8.690	0.000	98	229057	1.25	1.29	
136 Carbazole	167	8.854	8.853	0.001	96	223276	1.25	1.27	
137 Methyl parathion	109	8.988	8.988	0.000	88	58845	1.25	1.25	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	99	297076	1.25	1.32	
139 Ethyl Parathion	109	9.356	9.356	0.000	78	32086	1.25	1.16	
140 4-Nitroquinoline-1-oxide	190	9.379	9.379	0.000	77	12134	1.25	1.00	
142 Octachlorostyrene	308	9.583	9.583	0.000	88	20987	1.25	1.42	
143 Isodrin	193	9.619	9.624	-0.006	88	33850	1.25	1.44	
S 68 Diallate	86				0		1.25	1.22	
144 Fluoranthene	202	9.764	9.764	0.000	99	247826	1.25	1.31	
145 Benzidine	184	9.905	9.910	-0.005	100	452767	3.75	3.68	
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	97	871519	5.00	5.00	
147 Pyrene	202	9.981	9.980	0.001	96	270567	1.25	1.21	
$ 148 p-Terphenyl-d14	244	10.138	10.138	0.000	98	376593	2.50	2.44	
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	92	31999	1.25	1.09	
150 Chlorobenzilate	139	10.331	10.331	0.000	81	80144	1.25	1.13	
152 3,3'-Dimethylbenzidine	212	10.623	10.628	-0.005	98	104950	1.25	1.06	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	95	115634	1.25	1.14	
155 2-Acetylaminofluorene	181	10.891	10.897	-0.006	94	62993	1.25	0.9334	
S 94 Isosafrole	162				0		1.25	1.22	
157 3,3'-Dichlorobenzidine	252	11.218	11.218	0.000	78	71915	1.25	1.15	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158 4,4'-Methylene bis(2-chloroanil	231	11.230	11.230	0.000	69	37331	1.25	1.16	
156 Benzo[a]anthracene	228	11.230	11.230	0.000	98	202609	1.25	1.23	
159 Chrysene	228	11.271	11.271	0.000	97	198461	1.25	1.21	
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	93	159408	1.25	1.15	
161 6-Methylchrysene	242	11.826	11.831	-0.005	98	128883	1.25	1.15	
162 Di-n-octyl phthalate	149	12.153	12.152	0.001	98	246376	1.25	1.01	
163 7,12-Dimethylbenz(a)anthracene	256	12.591	12.596	-0.005	84	76486	1.25	1.21	
164 Benzo[b]fluoranthene	252	12.596	12.602	-0.006	94	206295	1.25	1.21	
165 Benzo[k]fluoranthene	252	12.637	12.637	0.000	96	200213	1.25	1.15	
166 Benzo[a]pyrene	252	13.046	13.046	0.000	82	174453	1.25	1.20	
* 167 Perylene-d12	264	13.128	13.128	0.000	94	684118	5.00	5.00	
168 3-Methylcholanthrene	268	13.554	13.560	-0.006	93	72385	1.25	1.13	
169 Dibenz[a,h]acridine	279	14.336	14.342	-0.006	92	142889	1.25	1.18	
170 Dibenz[a,j]acridine	279	14.412	14.412	0.000	94	159513	1.25	1.17	
171 Indeno[1,2,3-cd]pyrene	276	14.634	14.634	0.000	95	165988	1.25	1.20	
172 Dibenz(a,h)anthracene	278	14.669	14.675	-0.006	95	185093	1.25	1.21	
173 Benzo[g,h,i]perylene	276	14.985	14.984	0.001	92	195917	1.25	1.20	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MSS_RV8270_3_00027 Amount Added: 1.00 Units: mL

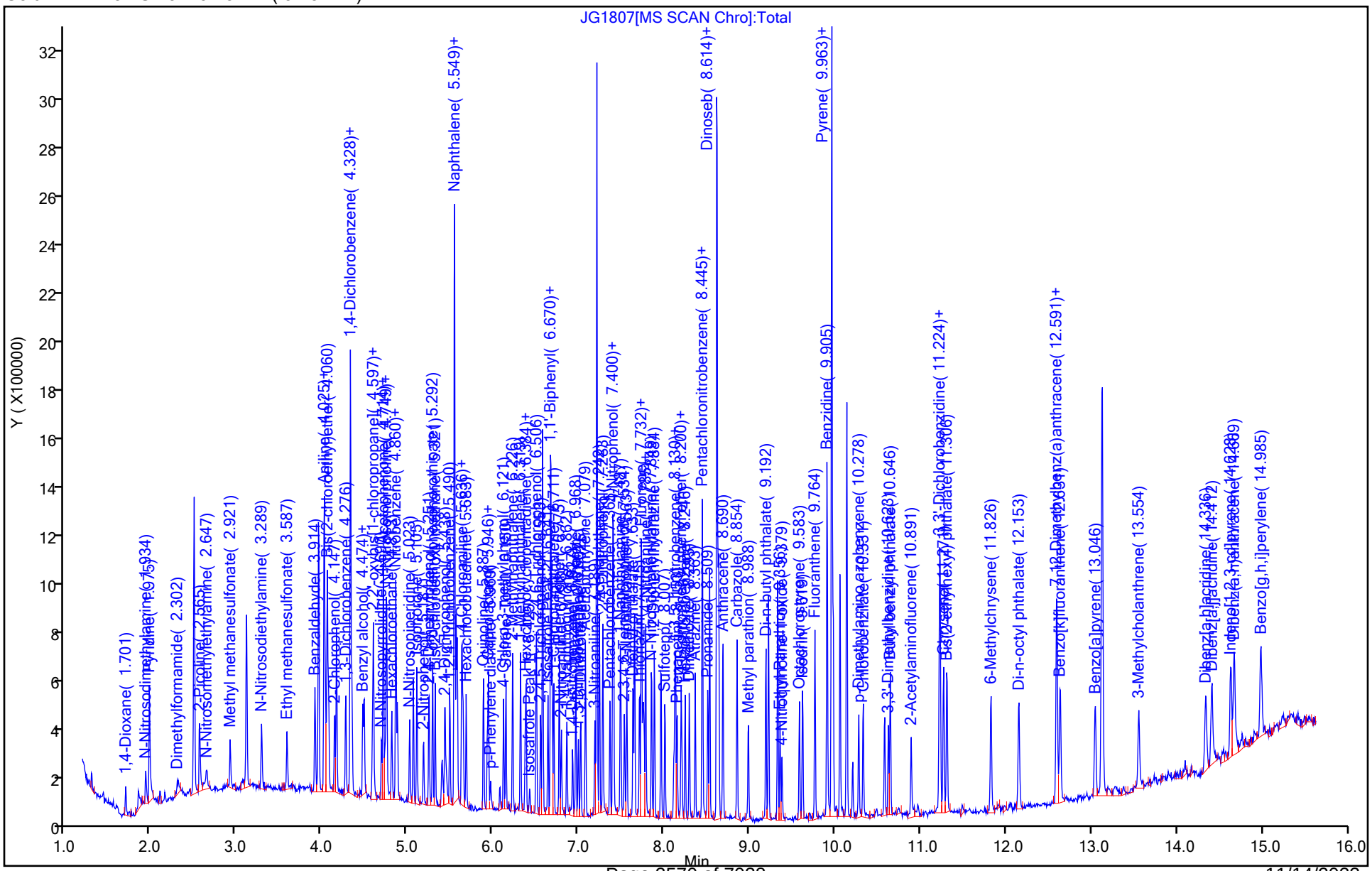
Report Date: 18-Jul-2023 15:18:46 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1807.D

Injection Date:	18-Jul-2023 09:52:30	Instrument ID:	HP23264	Operator ID:	kel10217
Lims ID:	IC L3			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

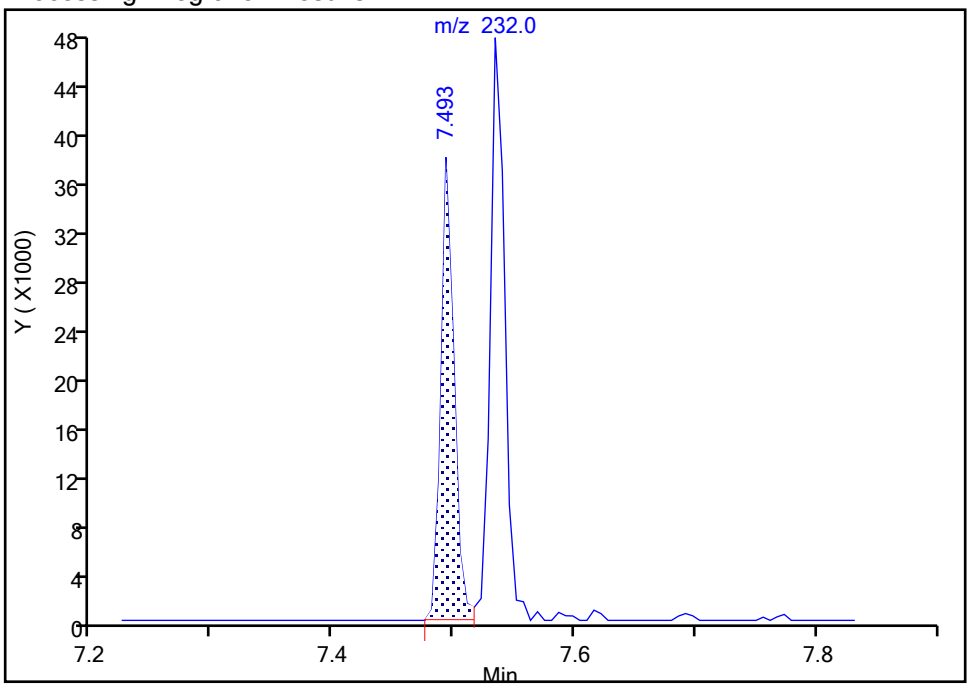
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1807.D				
Injection Date:	18-Jul-2023 09:52:30	Instrument ID:	HP23264		
Lims ID:	IC L3				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

105 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

Signal: 1

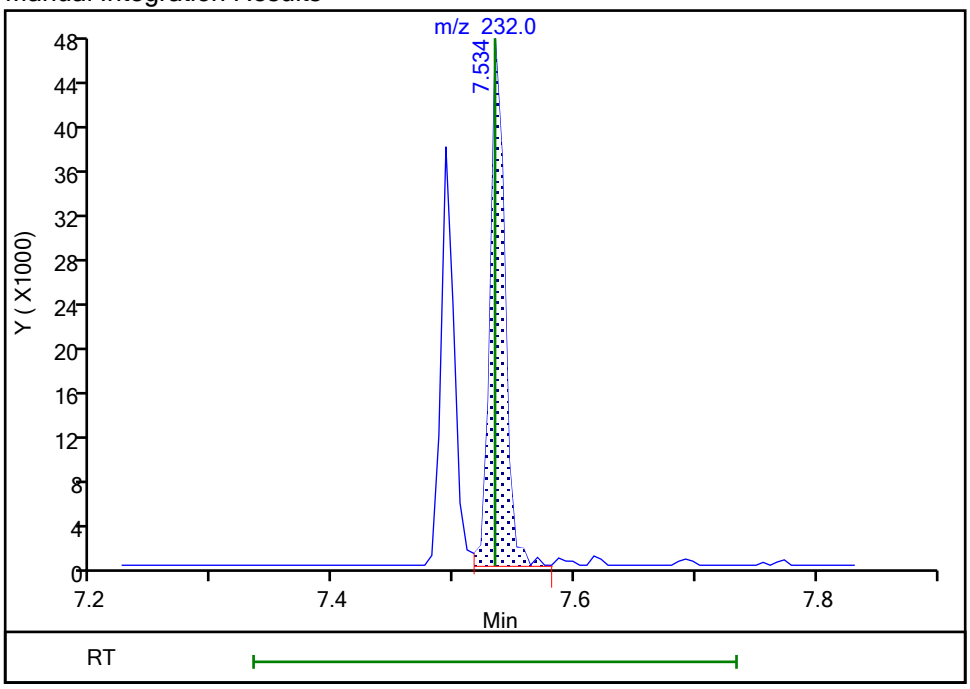
Processing Integration Results

RT: 7.49
Area: 28550
Amount: 0.929459
Amount Units: ug/ml



Manual Integration Results

RT: 7.53
Area: 40165
Amount: 1.187589
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:22:45 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Jul-2023 10:14:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 410-0089185-009
Operator ID: kel10217 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:19:23 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 11:28:57

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.701	1.701	0.000	94	13058	0.2500	0.5666	
	2 N-Nitrosodimethylamine	74	1.946	1.928	0.018	76	7593	0.2500	0.2022	
	3 Pyridine	79	1.993	1.969	0.024	82	37118	0.5000	0.5730	
	4 Dimethylformamide	73		2.267				ND	ND	U
	5 2-Picoline	93	2.571	2.559	0.012	48	13641	0.2500	0.2171	
	6 N-Nitrosomethylethylamine	88	2.647	2.647	0.001	55	12225	0.2500	0.3961	
	7 Methyl methanesulfonate	80	2.927	2.921	0.006	52	9060	0.2500	0.2437	
$	9 2-Fluorophenol	112	3.114	3.119	-0.005	96	27997	0.5000	0.4826	
	11 N-Nitrosodiethylamine	102	3.295	3.289	0.006	61	4958	0.2500	0.1977	
	12 Ethyl methanesulfonate	109	3.593	3.587	0.006	97	8108	0.2500	0.2610	
	13 Benzaldehyde	77	3.914	3.914	0.000	93	14214	0.2500	0.2819	
	17 Aniline	93	4.025	4.019	0.006	69	20079	0.2500	0.2289	
$	15 Phenol-d5	99	4.025	4.025	0.000	94	35171	0.5000	0.4228	
	16 Phenol	94	4.036	4.036	0.000	65	22676	0.2500	0.2596	
	18 Bis(2-chloroethyl)ether	93	4.077	4.077	0.000	91	17437	0.2500	0.2864	
	19 2-Chlorophenol	128	4.147	4.147	0.000	87	12049	0.2500	0.2242	
	21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	93	12687	0.2500	0.2374	
*	22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	96	188767	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	90	15652	0.2500	0.2735	
	26 Benzyl alcohol	108	4.474	4.474	0.000	82	7734	0.2500	0.2170	
	27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	91	12036	0.2500	0.2274	
	30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	88	34264	0.2500	0.2555	
	29 2-Methylphenol	108	4.603	4.603	0.000	89	12384	0.2500	0.2401	
	31 N-Nitrosopyrrolidine	100	4.696	4.696	0.000	74	7727	0.2500	0.2498	
	33 N-Nitrosodi-n-propylamine	70	4.714	4.714	0.000	84	13844	0.2500	0.2701	
	32 Acetophenone	105	4.714	4.714	0.000	84	20631	0.2500	0.2491	
	35 N-Nitrosomorpholine	56	4.737	4.737	0.000	40	13793	0.2500	0.2900	
	36 2-Toluidine	106	4.749	4.754	-0.005	80	22002	0.2500	0.2453	
	34 4-Methylphenol	108	4.755	4.754	0.001	80	13741	0.2500	0.2302	
	37 Hexachloroethane	117	4.813	4.813	0.000	86	6444	0.2500	0.2673	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.860	4.860	0.000	93	39592	0.5000	0.5152	
40 Nitrobenzene	77	4.877	4.877	0.000	81	18870	0.2500	0.2688	
41 N-Nitrosopiperidine	114	5.023	5.023	0.000	76	6635	0.2500	0.2343	
42 Isophorone	82	5.105	5.105	0.000	98	30798	0.2500	0.2453	
43 2-Nitrophenol	139	5.187	5.186	0.001	88	6333	0.2500	0.2442	
44 2,4-Dimethylphenol	107	5.251	5.251	0.000	90	10595	0.2500	0.1999	
46 o,o',o''-Triethylphosphorothioat	198	5.292	5.292	0.000	82	5083	0.2500	0.2493	
47 Bis(2-chloroethoxy)methane	93	5.321	5.321	0.000	91	19159	0.2500	0.2529	
49 2,4-Dichlorophenol	162	5.438	5.438	0.000	91	9356	0.2500	0.2365	
50 1,2,4-Trichlorobenzene	180	5.490	5.490	0.000	89	11255	0.2500	0.2528	
* 52 Naphthalene-d8	136	5.549	5.549	0.001	99	717961	5.00	5.00	
53 Naphthalene	128	5.566	5.566	0.000	96	36545	0.2500	0.2365	
55 Alpha-Terpineol	59	5.578	5.578	0.000	90	14716	0.2500	0.2168	
56 4-Chloroaniline	127	5.630	5.630	0.000	81	16342	0.2500	0.2504	
57 2,6-Dichlorophenol	162	5.636	5.636	0.000	79	8621	0.2500	0.2204	
58 Hexachloropropene	213	5.648	5.648	0.000	90	6940	0.2500	0.2479	
59 Hexachlorobutadiene	225	5.683	5.683	0.000	90	5338	0.2500	0.2214	
61 Quinoline	129	5.887	5.887	0.000	94	25329	0.2500	0.2388	
62 Caprolactam	113	5.940	5.940	0.000	51	3467	0.2500	0.2471	
63 N-Nitrosodi-n-butylamine	84	5.946	5.946	0.000	84	25191	0.2500	0.4334	
64 p-Phenylene diamine	108	5.975	5.969	0.006	41	3317	0.2500	0.0962	
65 4-Chloro-3-methylphenol	107	6.121	6.121	0.000	90	11860	0.2500	0.2430	
66 Safrole, Total	162	6.150	6.150	0.000	81	7702	0.2500	0.2264	
67 2-Methylnaphthalene	142	6.226	6.226	0.000	85	22326	0.2500	0.2379	
69 1-Methylnaphthalene	142	6.319	6.319	0.000	88	22273	0.2500	0.2476	
71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	65	5299	0.2500	0.2111	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.383	0.001	94	9854	0.2500	0.2172	
72 Isosafrole Peak 1	162	6.425	6.430	-0.005	3	1704	0.0400	0.0389	a
79 2,4,6-Trichlorophenol	196	6.512	6.506	0.006	86	6083	0.2500	0.2110	
S 24 Dinitrotoluene	165				0			0.4119	
80 2,4,5-Trichlorophenol	196	6.559	6.553	0.006	73	7536	0.2500	0.2373	
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.582	-0.006	99	61775	0.5000	0.5077	
82 Isosafrole Peak 2	162	6.641	6.640	0.001	88	8140	0.2100	0.1841	
83 1,1'-Biphenyl	154	6.670	6.675	-0.005	96	29807	0.2500	0.2501	
84 2-Chloronaphthalene	162	6.687	6.687	0.000	94	22361	0.2500	0.2475	
85 1-Chloronaphthalene	162	6.711	6.710	0.001	92	20600	0.2500	0.2375	
86 Phenyl ether	170	6.775	6.775	0.000	87	14352	0.2500	0.2264	
87 2-Nitroaniline	138	6.798	6.798	0.000	68	4946	0.2500	0.1554	
88 1,4-Naphthoquinone	158	6.863	6.862	0.000	74	7573	0.2500	0.2118	
89 1,4-Dinitrobenzene	168	6.903	6.932	-0.029	84	2605	0.2500	0.1841	
90 Dimethyl phthalate	163	6.968	6.967	0.001	97	27720	0.2500	0.2592	
91 1,3-Dinitrobenzene	168	6.997	6.997	0.000	80	3293	0.2500	0.1997	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	72	4231	0.2500	0.1882	
93 Acenaphthylene	152	7.079	7.078	0.001	97	36369	0.2500	0.2333	
95 3-Nitroaniline	138	7.189	7.189	0.000	73	5711	0.2500	0.2066	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	95	383344	5.00	5.00	
97 Acenaphthene	153	7.242	7.242	0.000	95	25108	0.2500	0.2487	
98 2,4-Dinitrophenol	184	7.283	7.283	0.000	72	20156	2.50	1.42	
99 Pentachlorobenzene	250	7.371	7.370	0.000	96	10355	0.2500	0.2639	
100 4-Nitrophenol	109	7.400	7.399	0.001	89	17987	1.50	1.07	
102 2,4-Dinitrotoluene	165	7.406	7.405	0.001	62	6829	0.2500	0.2237	
101 Dibenzofuran	168	7.411	7.411	0.000	79	32691	0.2500	0.2400	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.487	7.487	0.000	95	22526	0.2500	0.2459	
105 2,3,4,6-Tetrachlorophenol	232	7.540	7.534	0.006	70	7892	0.2500	0.2834	a
106 2-Naphthylamine	143	7.563	7.563	0.000	94	22649	0.2500	0.2383	
107 Diethyl phthalate	149	7.633	7.639	-0.006	96	29809	0.2500	0.2587	
109 Thionazin	107	7.709	7.715	-0.006	71	4245	0.2500	0.2080	
108 Fluorene	166	7.733	7.732	0.001	92	25474	0.2500	0.2376	
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	90	13091	0.2500	0.2729	
111 N-Nitro-o-toluidine	152	7.756	7.756	0.000	76	6290	0.2500	0.2084	
112 4-Nitroaniline	138	7.768	7.767	0.001	47	4949	0.2500	0.1801	
113 4,6-Dinitro-2-methylphenol	198	7.785	7.785	0.000	68	16537	1.50	1.00	
114 N-Nitrosodiphenylamine	169	7.855	7.855	0.000	65	16392	0.2125	0.1903	
115 1,2-Diphenylhydrazine	77	7.884	7.884	0.000	44	36734	0.2500	0.2542	
$ 116 2,4,6-Tribromophenol	330	7.966	7.966	0.000	88	8931	0.5000	0.4918	
117 Sulfotepp	97	8.007	8.013	-0.006	74	5633	0.2500	0.2375	
118 1,3,5-Trinitrobenzene	213	8.118	8.118	0.000	80	2521	0.2500	0.2893	
120 cis-Diallate	86	8.124	8.124	0.000	90	12758	0.1850	0.2213	
119 Phorate	75	8.135	8.135	0.000	90	18137	0.2500	0.2142	
121 Phenacetin	108	8.153	8.153	0.000	89	11906	0.2500	0.2059	
122 4-Bromophenyl phenyl ether	248	8.200	8.199	0.001	70	7316	0.2500	0.2624	
123 trans-Diallate	86	8.205	8.211	-0.006	44	6238	0.0650	0.1132	a
124 Hexachlorobenzene	284	8.246	8.246	0.000	88	9858	0.2500	0.2979	
125 Dimethoate	87	8.293	8.299	-0.006	94	13018	0.2500	0.2427	
126 Atrazine	200	8.363	8.369	-0.006	80	6043	0.2500	0.2393	
128 Pentachloronitrobenzene	237	8.445	8.445	0.000	51	3382	0.2500	0.2387	
127 Pentachlorophenol	266	8.445	8.451	-0.006	82	15262	1.25	0.9720	
129 4-Aminobiphenyl	169	8.451	8.451	0.000	90	28595	0.2500	0.2524	
130 Pronamide	173	8.509	8.515	-0.006	84	11231	0.2500	0.2355	
* 131 Phenanthrene-d10	188	8.620	8.620	0.000	97	706975	5.00	5.00	
133 Dinoseb	211	8.620	8.620	0.000	61	3089	0.2500	0.1372	
134 Disulfoton	88	8.632	8.632	0.000	92	30710	0.2500	0.3343	
132 Phenanthrene	178	8.638	8.643	-0.005	96	33896	0.2500	0.2274	
135 Anthracene	178	8.690	8.690	0.000	98	36065	0.2500	0.2428	
136 Carbazole	167	8.854	8.853	0.001	95	35360	0.2500	0.2413	
137 Methyl parathion	109	8.988	8.988	0.000	87	7973	0.2500	0.2031	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	98	42527	0.2500	0.2254	
139 Ethyl Parathion	109	9.356	9.356	0.000	75	5032	0.2500	0.2168	
140 4-Nitroquinoline-1-oxide	190	9.379	9.379	0.000	24	1696	0.2500	0.1676	
142 Octachlorostyrene	308	9.584	9.583	0.001	83	2987	0.2500	0.2426	
143 Isodrin	193	9.619	9.624	-0.005	81	6153	0.2500	0.3121	
S 68 Diallate	86				0		0.2500	0.3344	
144 Fluoranthene	202	9.765	9.764	0.000	98	37533	0.2500	0.2379	
145 Benzidine	184	9.905	9.910	-0.005	98	56350	0.7500	0.5941	
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	97	671472	5.00	5.00	
147 Pyrene	202	9.981	9.980	0.001	96	42309	0.2500	0.2456	
$ 148 p-Terphenyl-d14	244	10.138	10.138	0.000	97	56629	0.5000	0.4756	
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	84	2962	0.2500	0.1307	
150 Chlorobenzilate	139	10.331	10.331	0.000	81	9854	0.2500	0.1806	
152 3,3'-Dimethylbenzidine	212	10.623	10.628	-0.005	96	16117	0.2500	0.2109	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	92	17915	0.2500	0.2284	
155 2-Acetylaminofluorene	181	10.891	10.897	-0.006	86	7746	0.2500	0.1490	
S 94 Isosafrole	162				0		0.2500	0.2229	
157 3,3'-Dichlorobenzidine	252	11.224	11.218	0.006	72	10609	0.2500	0.2206	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158 4,4'-Methylene bis(2-chloroanil	231	11.230	11.230	0.000	66	4734	0.2500	0.1916	
156 Benzo[a]anthracene	228	11.230	11.230	0.000	96	26642	0.2500	0.2092	
159 Chrysene	228	11.271	11.271	0.000	95	28627	0.2500	0.2274	
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	93	21599	0.2500	0.2029	
161 6-Methylchrysene	242	11.826	11.831	-0.005	98	20523	0.2500	0.2376	
162 Di-n-octyl phthalate	149	12.153	12.152	0.001	97	33425	0.2500	0.1735	
163 7,12-Dimethylbenz(a)anthracene	256	12.596	12.596	0.000	71	9306	0.2500	0.1865	
164 Benzo[b]fluoranthene	252	12.596	12.602	-0.006	94	27348	0.2500	0.2030	
165 Benzo[k]fluoranthene	252	12.631	12.637	-0.006	97	32260	0.2500	0.2354	
166 Benzo[a]pyrene	252	13.046	13.046	0.000	80	26251	0.2500	0.2290	
* 167 Perylene-d12	264	13.128	13.128	0.000	95	538761	5.00	5.00	
168 3-Methylcholanthrene	268	13.554	13.560	-0.006	82	10335	0.2500	0.2050	
169 Dibenz[a,h]acridine	279	14.336	14.342	-0.006	91	21604	0.2500	0.2274	
170 Dibenz[a,j]acridine	279	14.412	14.412	0.000	51	24606	0.2500	0.2286	
171 Indeno[1,2,3-cd]pyrene	276	14.634	14.634	0.000	91	23355	0.2500	0.2138	
172 Dibenz(a,h)anthracene	278	14.669	14.675	-0.006	93	26105	0.2500	0.2161	
173 Benzo[g,h,i]perylene	276	14.985	14.984	0.001	91	28691	0.2500	0.2234	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270_2_00030 Amount Added: 1.00 Units: mL

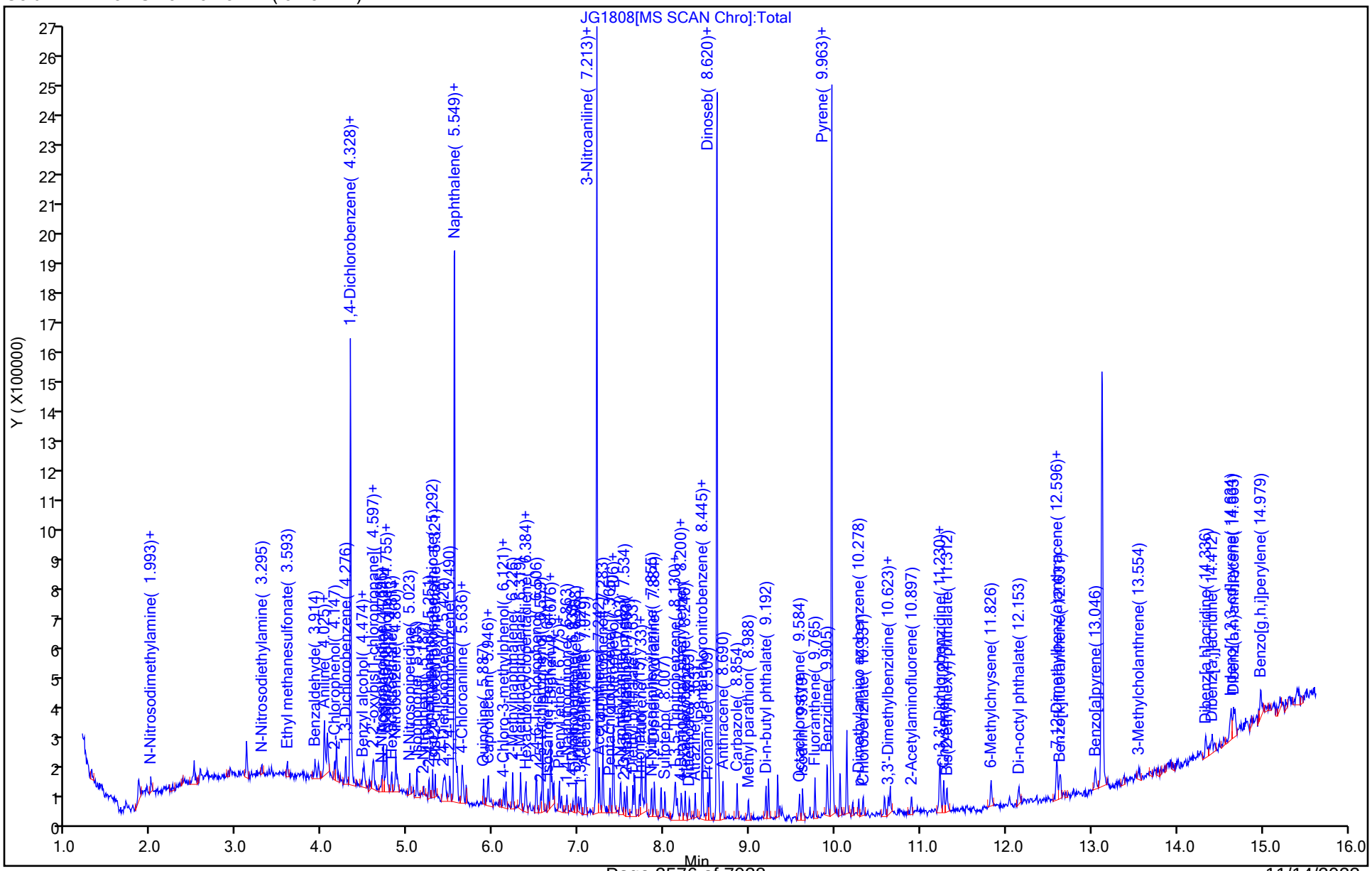
Report Date: 18-Jul-2023 15:19:24 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Injection Date:	18-Jul-2023 10:14:30	Instrument ID:	HP23264	Operator ID:	kel10217
Lims ID:	IC L2			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

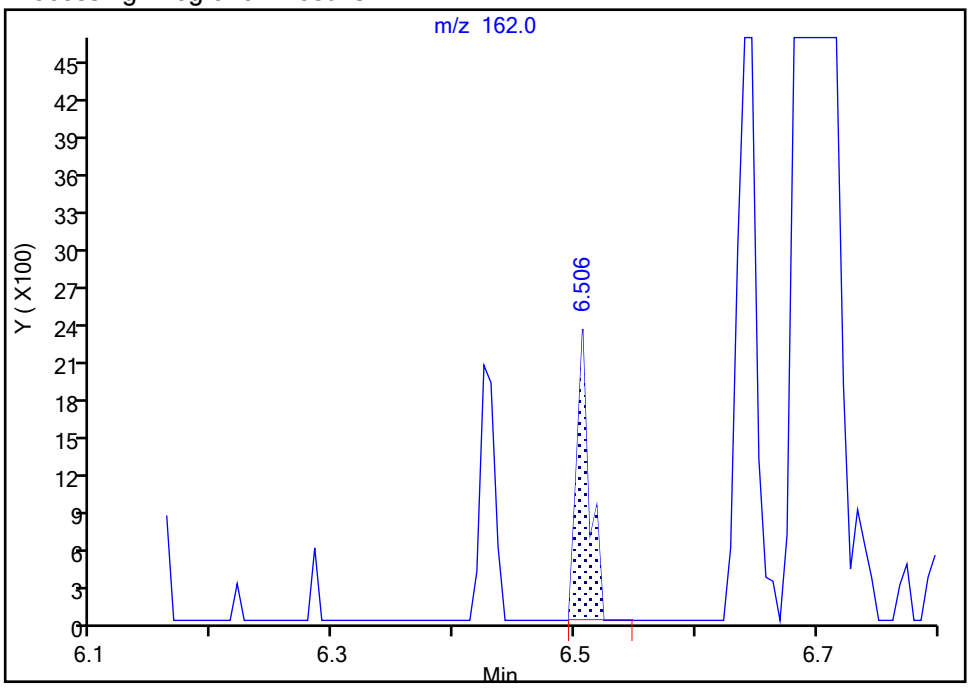
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D				
Injection Date:	18-Jul-2023 10:14:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

72 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

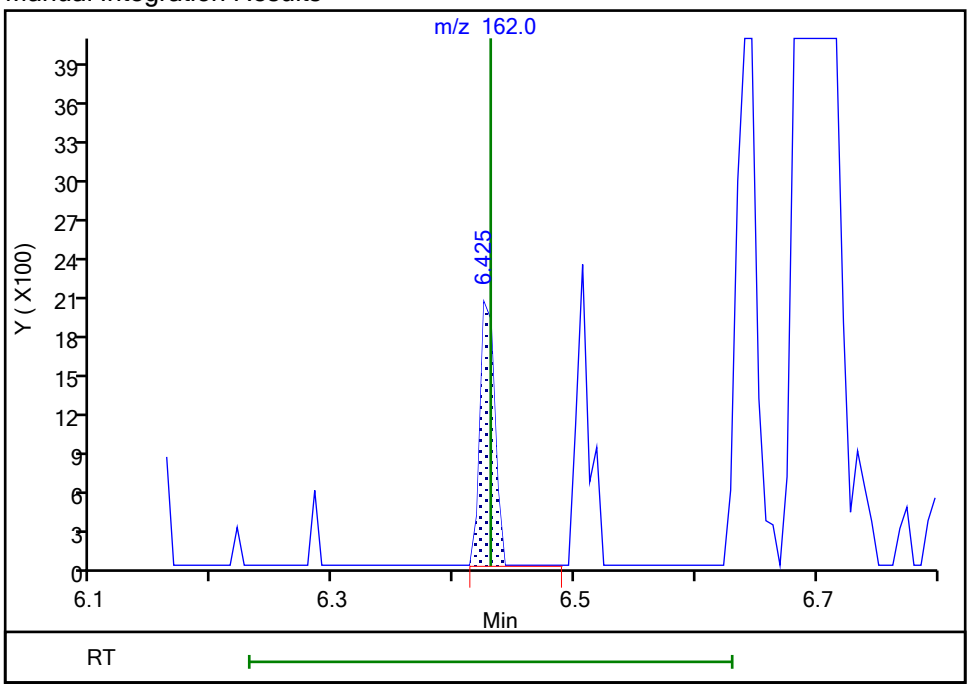
Processing Integration Results

RT: 6.51
Area: 1720
Amount: 0.039177
Amount Units: ug/ml



Manual Integration Results

RT: 6.42
Area: 1704
Amount: 0.038857
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:27:42 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

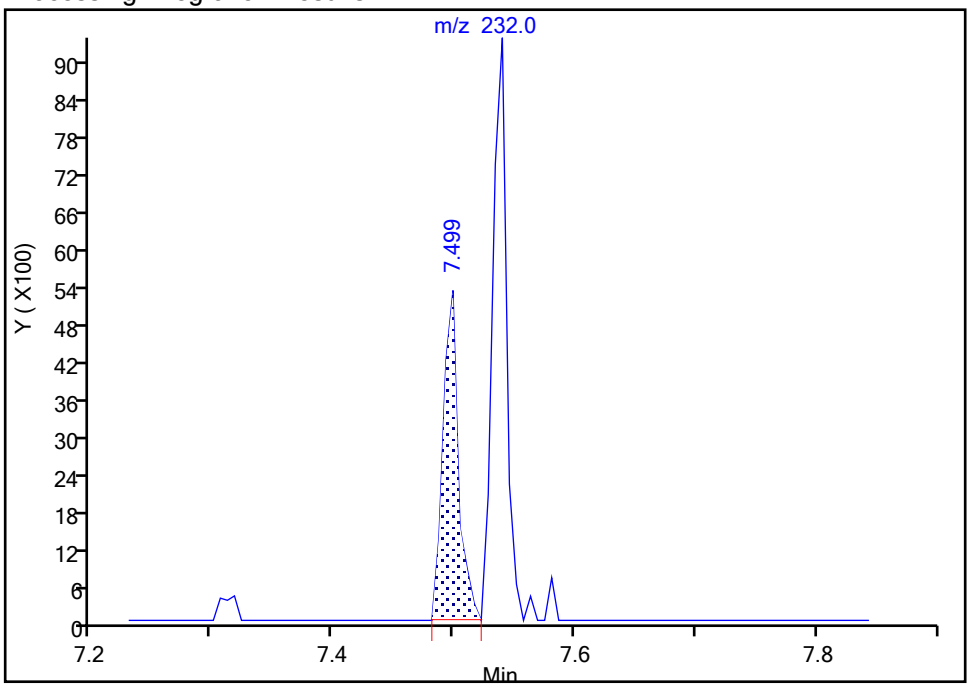
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D				
Injection Date:	18-Jul-2023 10:14:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

105 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

Signal: 1

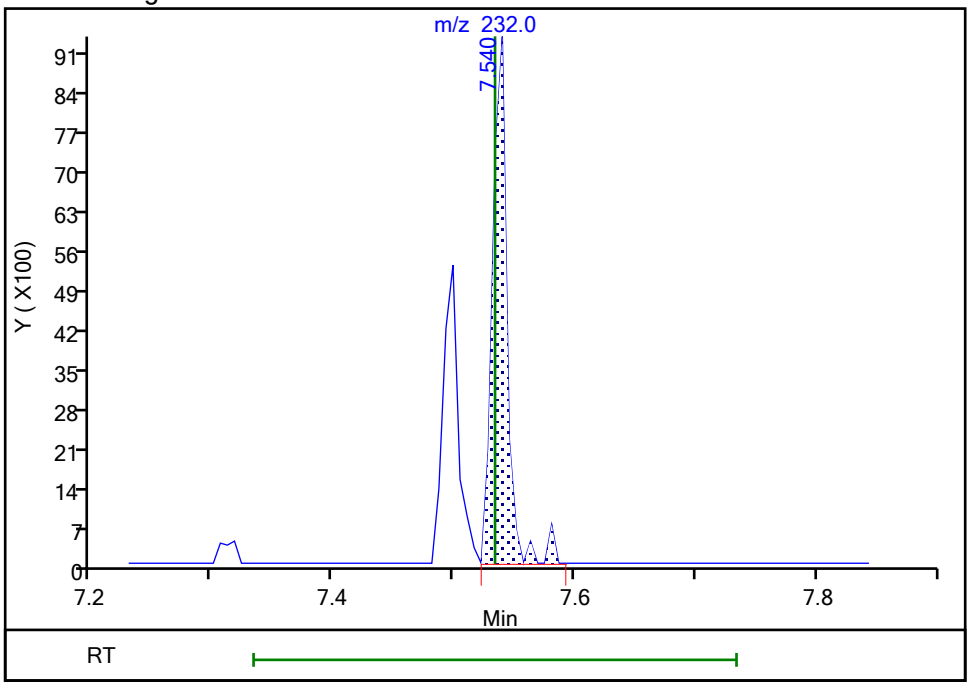
Processing Integration Results

RT: 7.50
Area: 4693
Amount: 0.178769
Amount Units: ug/ml



Manual Integration Results

RT: 7.54
Area: 7892
Amount: 0.283362
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:27:58 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

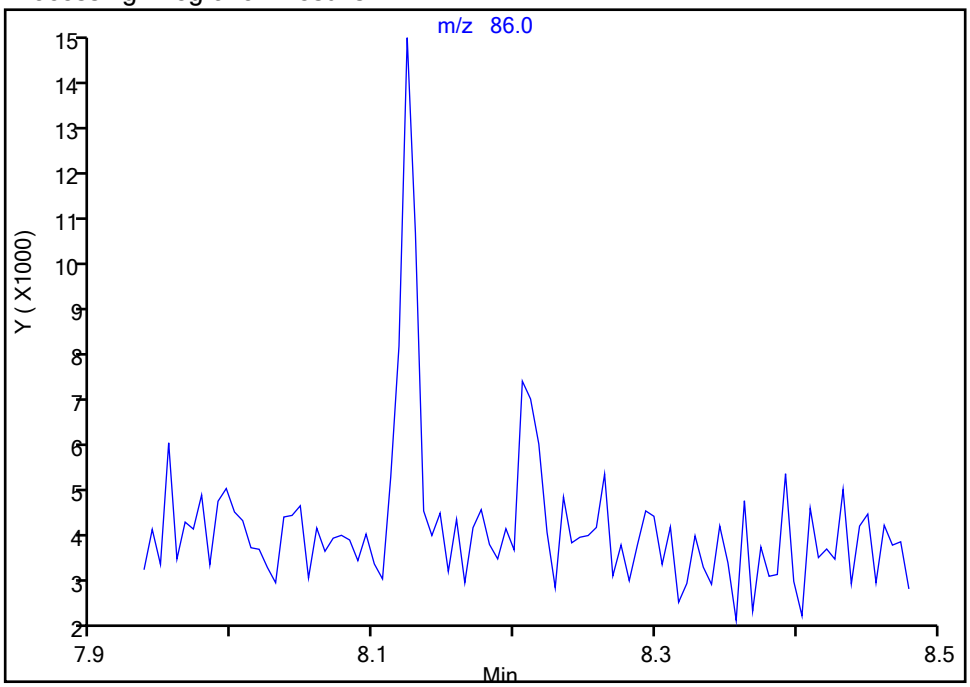
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D				
Injection Date:	18-Jul-2023 10:14:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

123 trans-Diallate, CAS: 17708-58-6

Signal: 1

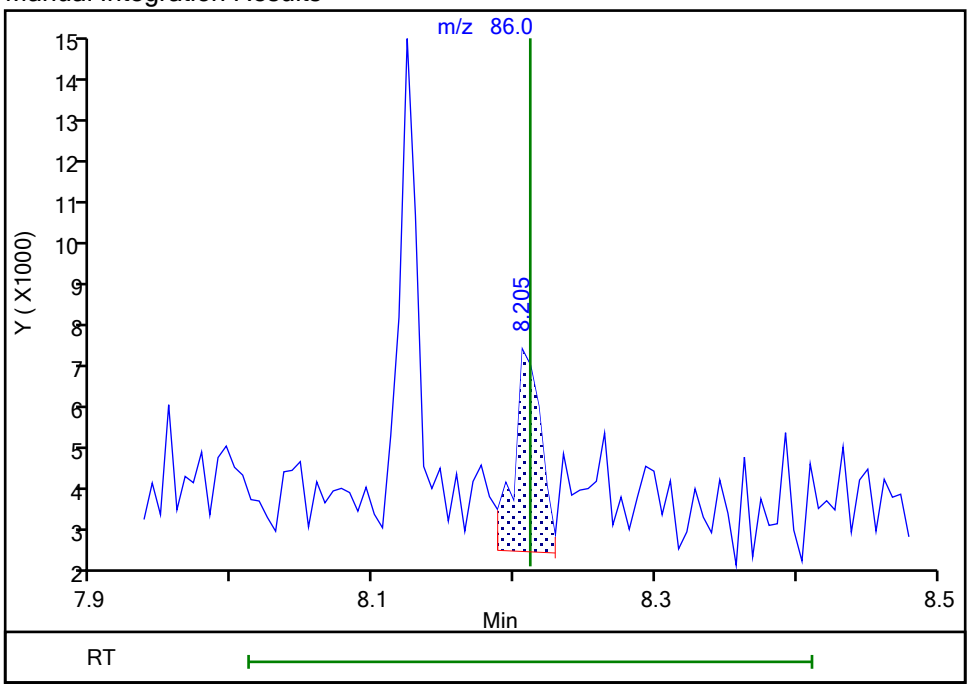
Not Detected
Expected RT: 8.21

Processing Integration Results



Manual Integration Results

RT: 8.21
Area: 6238
Amount: 0.113166
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 11:28:11 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

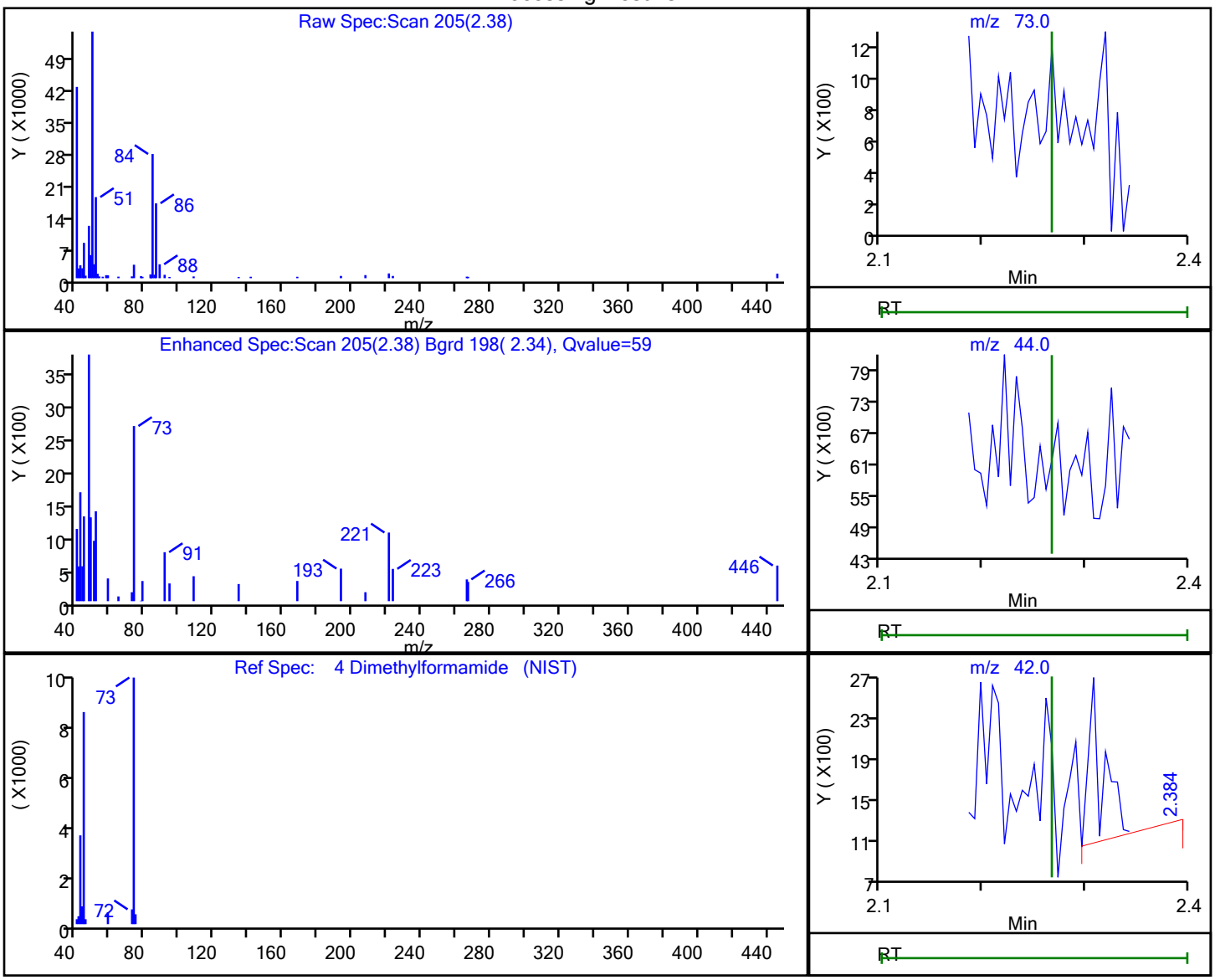
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D				
Injection Date:	18-Jul-2023 10:14:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

4 Dimethylformamide, CAS: 68-12-2

Processing Results



RT	Mass	Response	Amount
2.38	73.00	5008	0.247590
2.39	44.00	13933	
2.38	42.00	4146	

Reviewer: SJ89, 18-Jul-2023 11:27:14 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

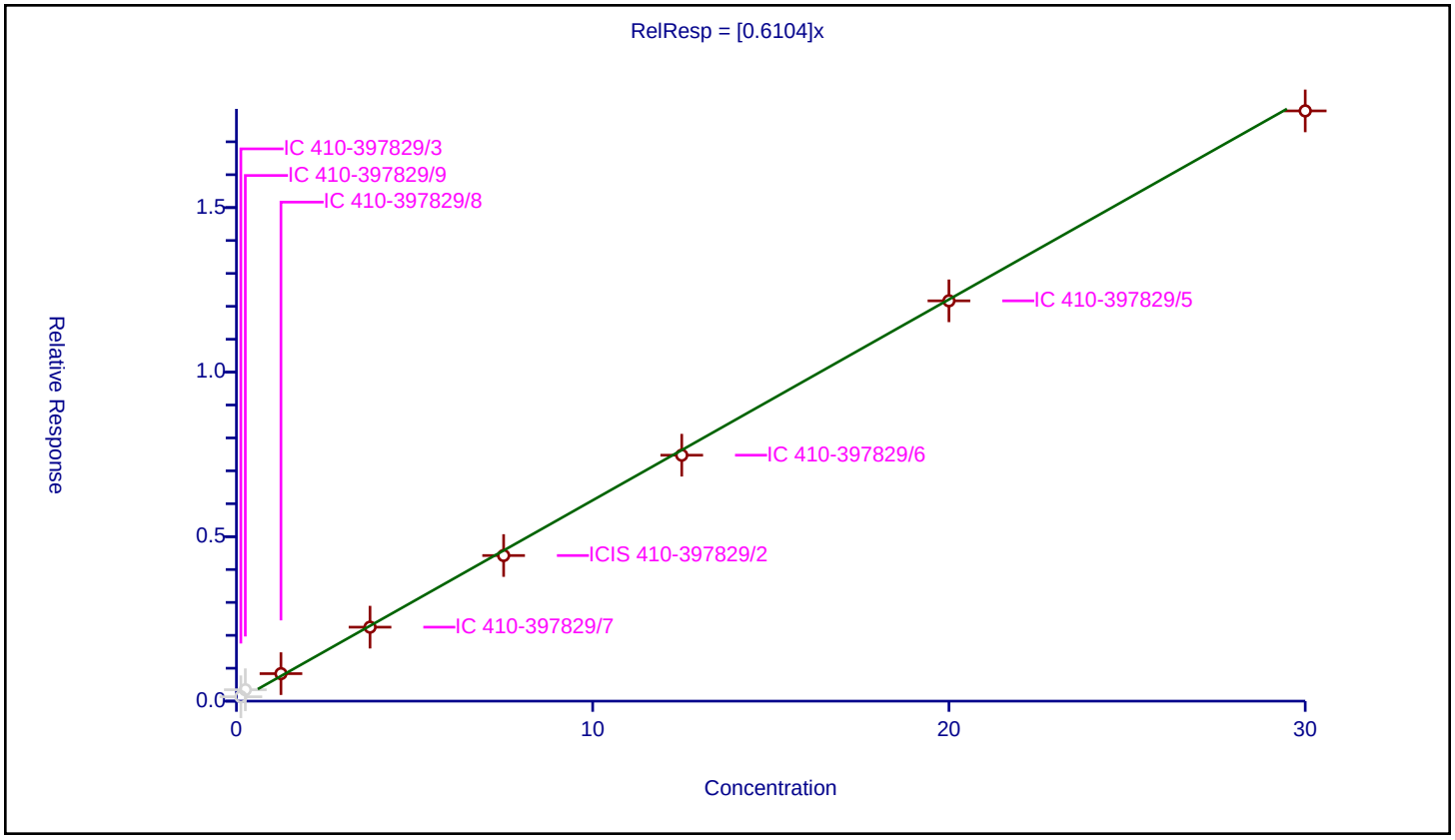
Curve Coefficients

Intercept:	0
Slope:	0.6104

Error Coefficients

Standard Error:	457000
Relative Standard Error:	4.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.13341	5.0	217338.0	1.067278	N
2	IC 410-397829/9	0.25	0.345876	5.0	188767.0	1.383505	N
3	IC 410-397829/8	1.25	0.835662	5.0	234760.0	0.66853	Y
4	IC 410-397829/7	3.75	2.248673	5.0	192478.0	0.599646	Y
5	ICIS 410-397829/2	7.5	4.425686	5.0	212767.0	0.590092	Y
6	IC 410-397829/6	12.5	7.475139	5.0	230583.0	0.598011	Y
7	IC 410-397829/5	20.0	12.166761	5.0	227097.0	0.608338	Y
8	IC 410-397829/4	30.0	17.939108	5.0	211309.0	0.59797	Y



11/14/2023
11:12 AM

Calibration / N-Nitrosodimethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

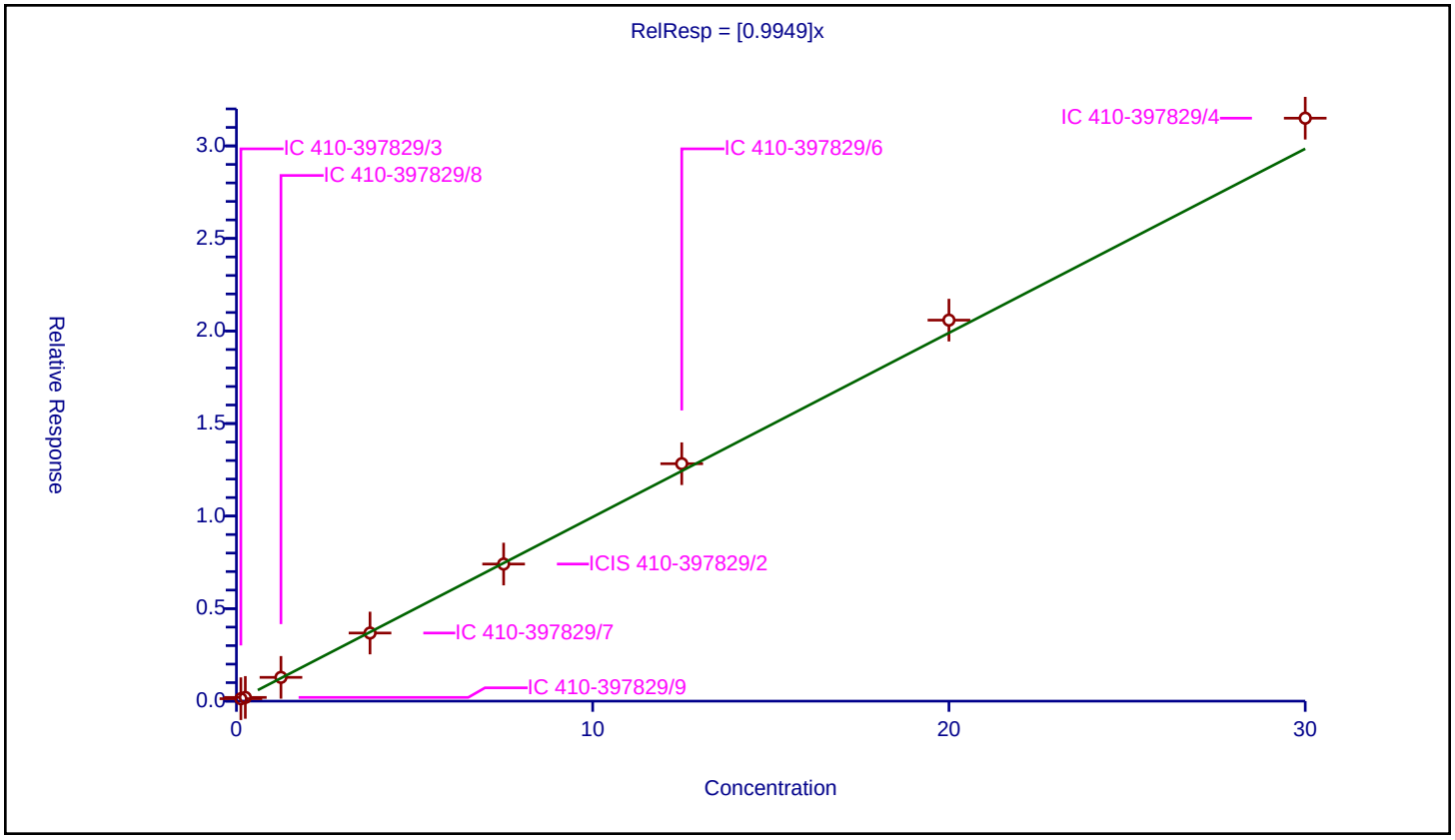
Curve Coefficients

Intercept:	0
Slope:	0.9949

Error Coefficients

Standard Error:	668000
Relative Standard Error:	8.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.131523	5.0	217338.0	1.052186	Y
2	IC 410-397829/9	0.25	0.201121	5.0	188767.0	0.804484	Y
3	IC 410-397829/8	1.25	1.284184	5.0	234760.0	1.027347	Y
4	IC 410-397829/7	3.75	3.680628	5.0	192478.0	0.981501	Y
5	ICIS 410-397829/2	7.5	7.408151	5.0	212767.0	0.987753	Y
6	IC 410-397829/6	12.5	12.828938	5.0	230583.0	1.026315	Y
7	IC 410-397829/5	20.0	20.58737	5.0	227097.0	1.029369	Y
8	IC 410-397829/4	30.0	31.498327	5.0	211309.0	1.049944	Y



11/14/2023
11:12 AM

Calibration / Pyridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

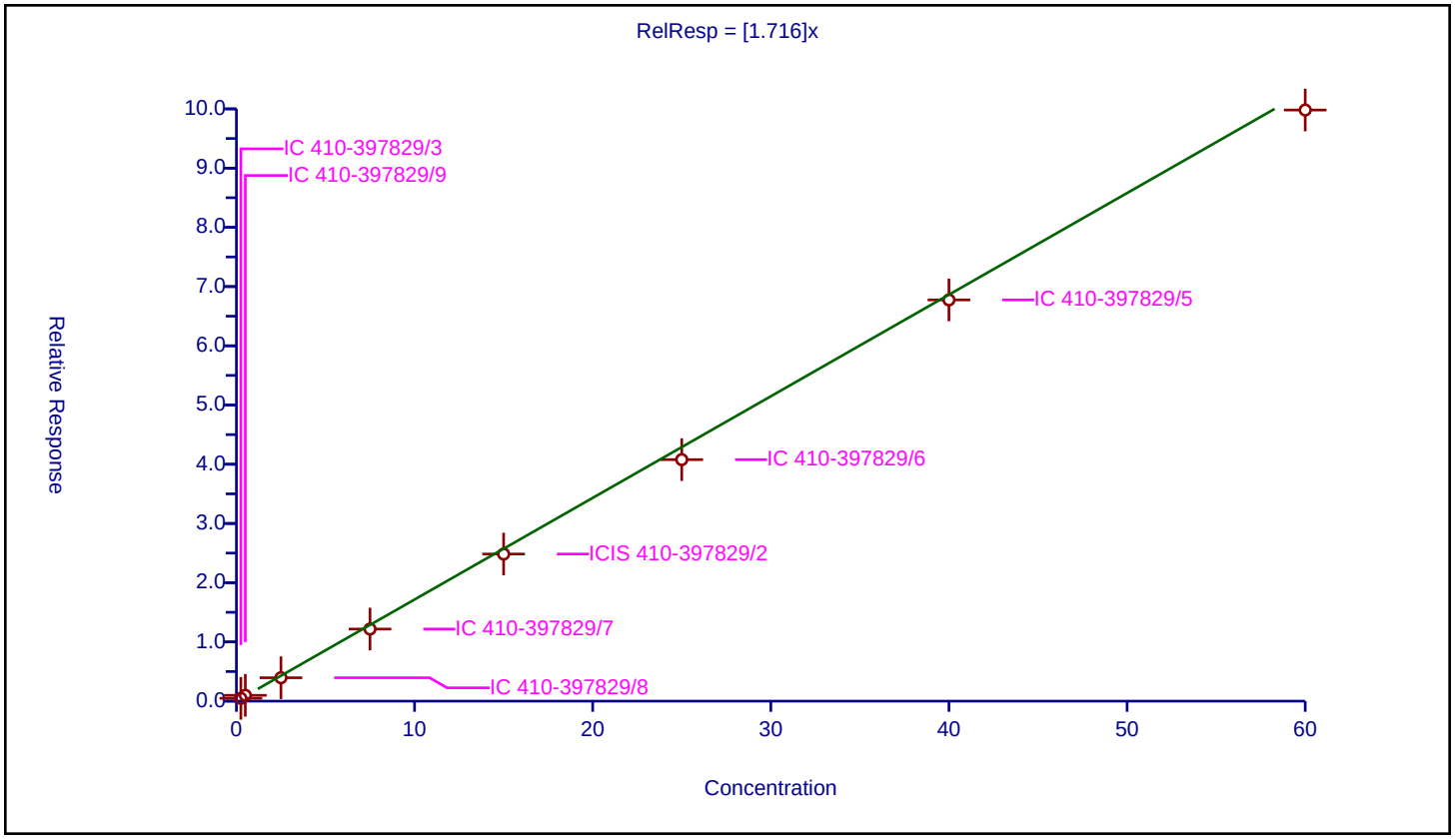
Curve Coefficients

Intercept:	0
Slope:	1.716

Error Coefficients

Standard Error:	2140000
Relative Standard Error:	8.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.25	0.477919	5.0	217338.0	1.911677	Y
2	IC 410-397829/9	0.5	0.98317	5.0	188767.0	1.966339	Y
3	IC 410-397829/8	2.5	3.951014	5.0	234760.0	1.580406	Y
4	IC 410-397829/7	7.5	12.177366	5.0	192478.0	1.623649	Y
5	ICIS 410-397829/2	15.0	24.838485	5.0	212767.0	1.655899	Y
6	IC 410-397829/6	25.0	40.776206	5.0	230583.0	1.631048	Y
7	IC 410-397829/5	40.0	67.74713	5.0	227097.0	1.693678	Y
8	IC 410-397829/4	60.0	99.807699	5.0	211309.0	1.663462	Y



11/14/2023
11:12 AM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

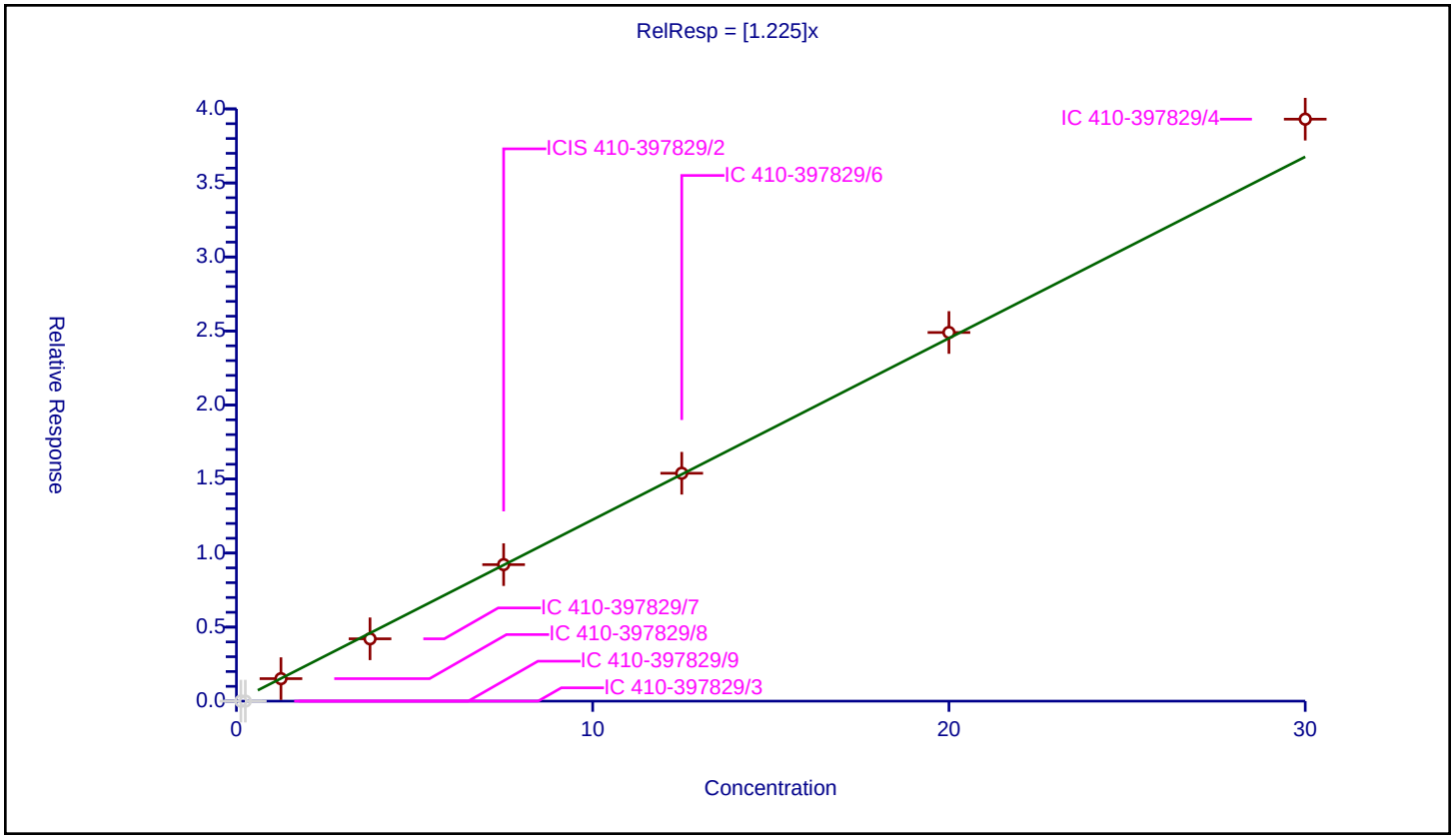
Curve Coefficients

Intercept:	0
Slope:	1.225

Error Coefficients

Standard Error:	972000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.0	5.0	217338.0	0.0	N
2	IC 410-397829/9	0.25	0.0	5.0	188767.0	0.0	N
3	IC 410-397829/8	1.25	1.51821	5.0	234760.0	1.214568	Y
4	IC 410-397829/7	3.75	4.209286	5.0	192478.0	1.122476	Y
5	ICIS 410-397829/2	7.5	9.220133	5.0	212767.0	1.229351	Y
6	IC 410-397829/6	12.5	15.392267	5.0	230583.0	1.231381	Y
7	IC 410-397829/5	20.0	24.89903	5.0	227097.0	1.244951	Y
8	IC 410-397829/4	30.0	39.306466	5.0	211309.0	1.310216	Y



Calibration / 2-Picoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

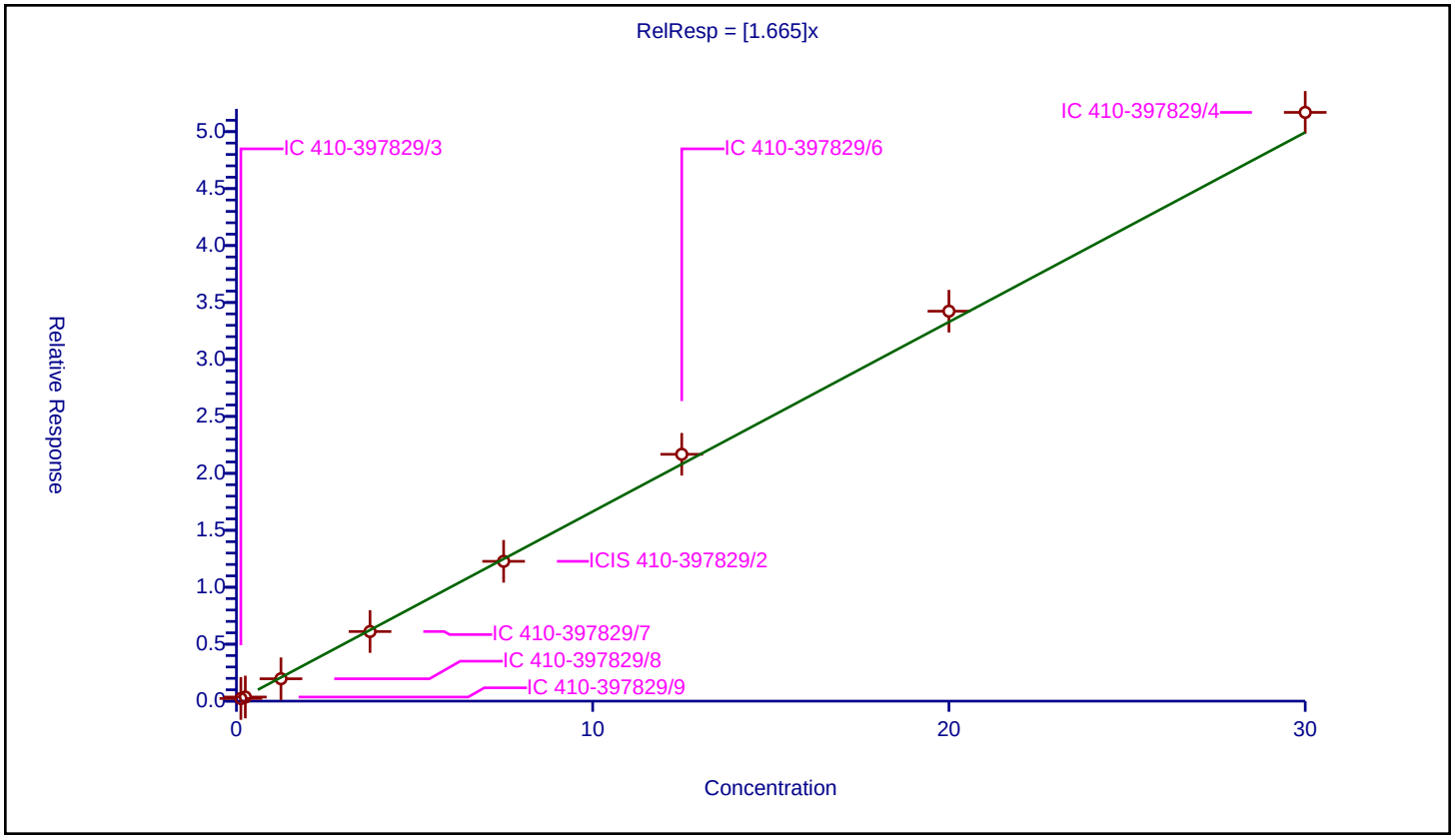
Curve Coefficients

Intercept:	0
Slope:	1.665

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	7.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.233047	5.0	217338.0	1.864377	Y
2	IC 410-397829/9	0.25	0.361318	5.0	188767.0	1.445274	Y
3	IC 410-397829/8	1.25	1.965199	5.0	234760.0	1.572159	Y
4	IC 410-397829/7	3.75	6.111244	5.0	192478.0	1.629665	Y
5	ICIS 410-397829/2	7.5	12.275823	5.0	212767.0	1.636776	Y
6	IC 410-397829/6	12.5	21.674495	5.0	230583.0	1.73396	Y
7	IC 410-397829/5	20.0	34.23896	5.0	227097.0	1.711948	Y
8	IC 410-397829/4	30.0	51.694391	5.0	211309.0	1.723146	Y



Calibration / N-Nitrosomethylethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

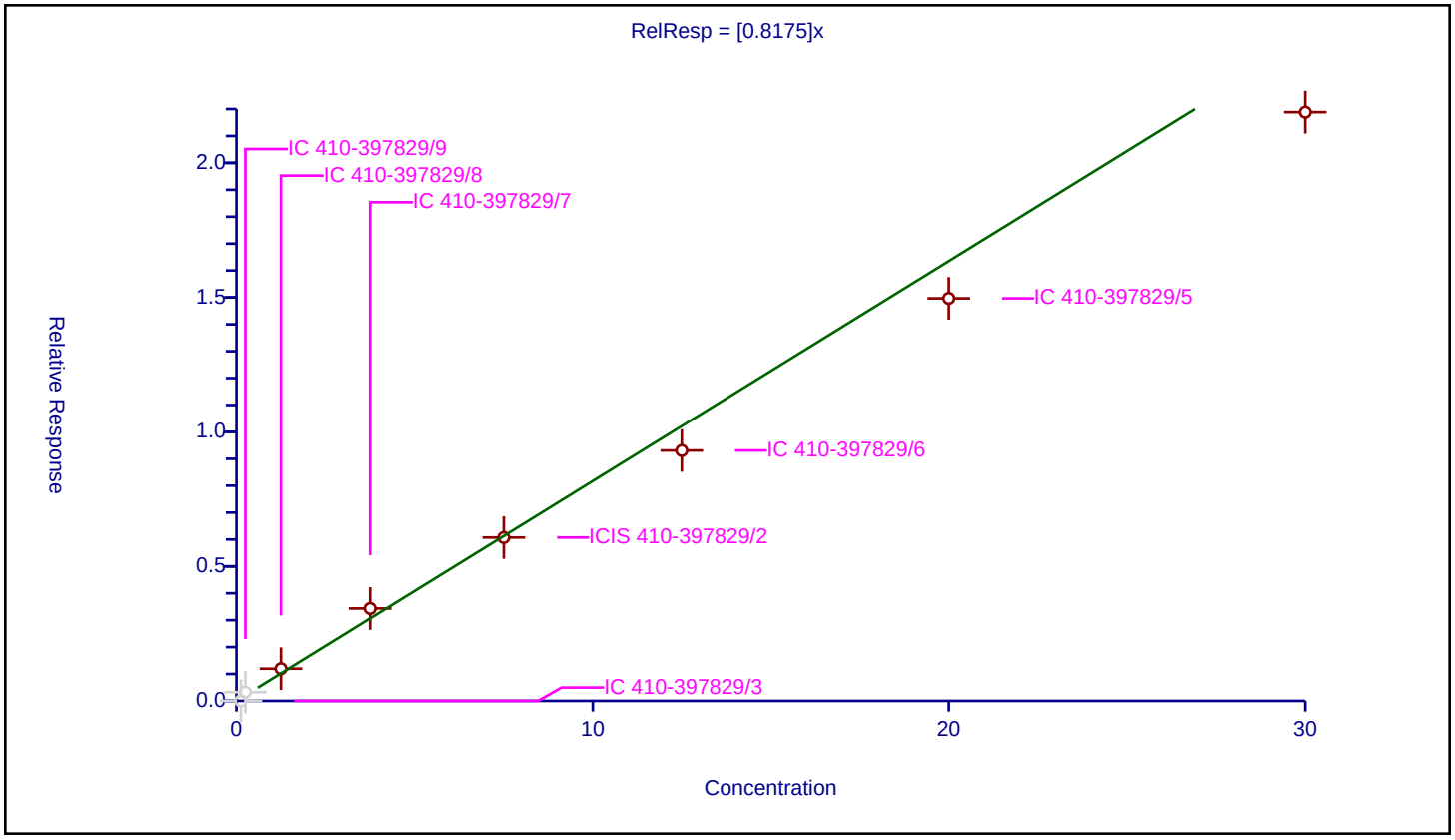
Curve Coefficients

Intercept:	0
Slope:	0.8175

Error Coefficients

Standard Error:	564000
Relative Standard Error:	11.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.0	5.0	217338.0	0.0	N
2	IC 410-397829/9	0.25	0.323812	5.0	188767.0	1.295248	N
3	IC 410-397829/8	1.25	1.196158	5.0	234760.0	0.956926	Y
4	IC 410-397829/7	3.75	3.43512	5.0	192478.0	0.916032	Y
5	ICIS 410-397829/2	7.5	6.072887	5.0	212767.0	0.809718	Y
6	IC 410-397829/6	12.5	9.308123	5.0	230583.0	0.74465	Y
7	IC 410-397829/5	20.0	14.965852	5.0	227097.0	0.748293	Y
8	IC 410-397829/4	30.0	21.882764	5.0	211309.0	0.729425	Y



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Calibration / Methyl methanesulfonate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

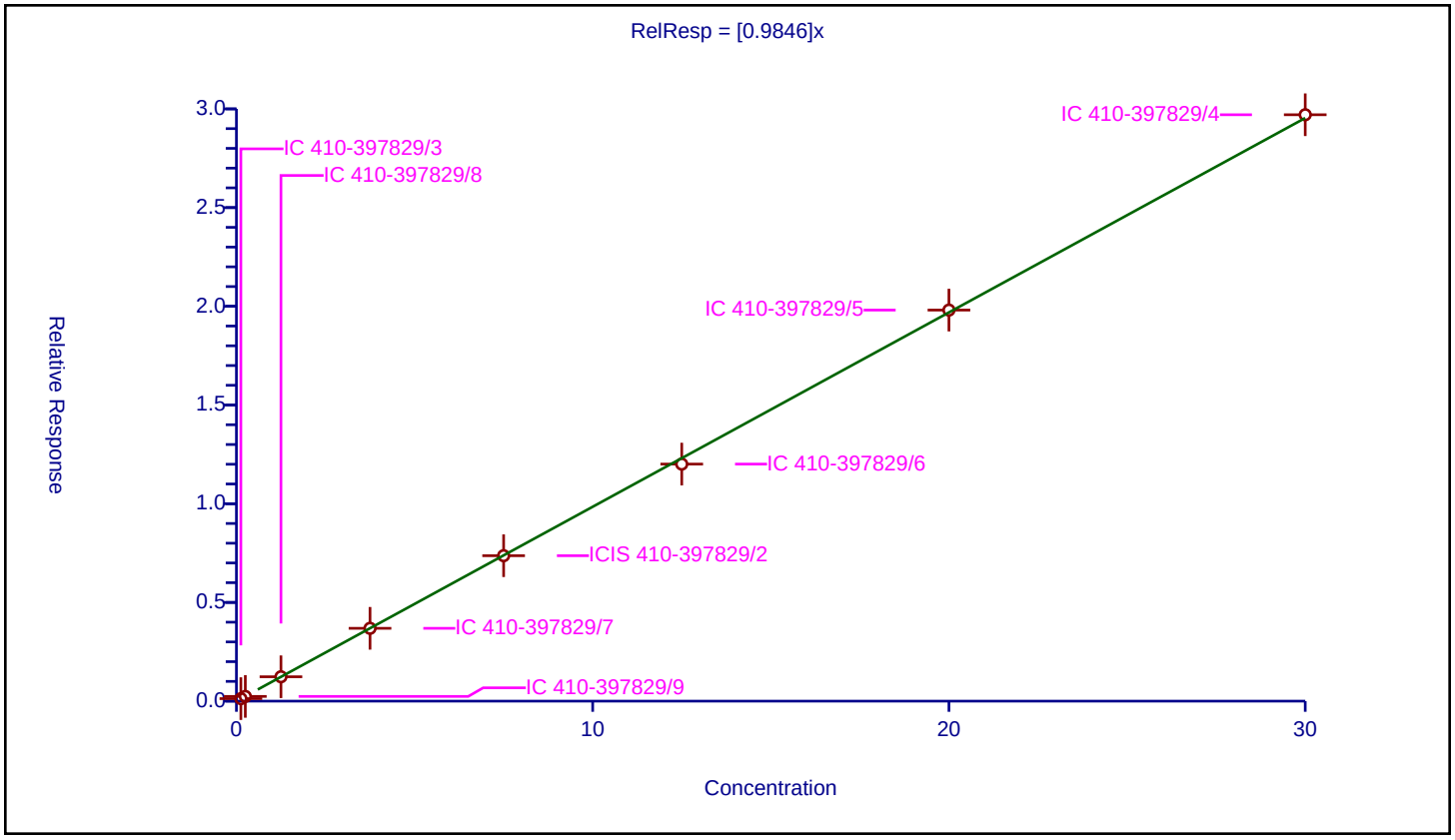
Curve Coefficients

Intercept:	0
Slope:	0.9846

Error Coefficients

Standard Error:	634000
Relative Standard Error:	2.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.127658	5.0	217338.0	1.021266	Y
2	IC 410-397829/9	0.25	0.239978	5.0	188767.0	0.959914	Y
3	IC 410-397829/8	1.25	1.235155	5.0	234760.0	0.988124	Y
4	IC 410-397829/7	3.75	3.688759	5.0	192478.0	0.983669	Y
5	ICIS 410-397829/2	7.5	7.367214	5.0	212767.0	0.982295	Y
6	IC 410-397829/6	12.5	12.007759	5.0	230583.0	0.960621	Y
7	IC 410-397829/5	20.0	19.809178	5.0	227097.0	0.990459	Y
8	IC 410-397829/4	30.0	29.703325	5.0	211309.0	0.990111	Y



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Calibration / 2-Fluorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

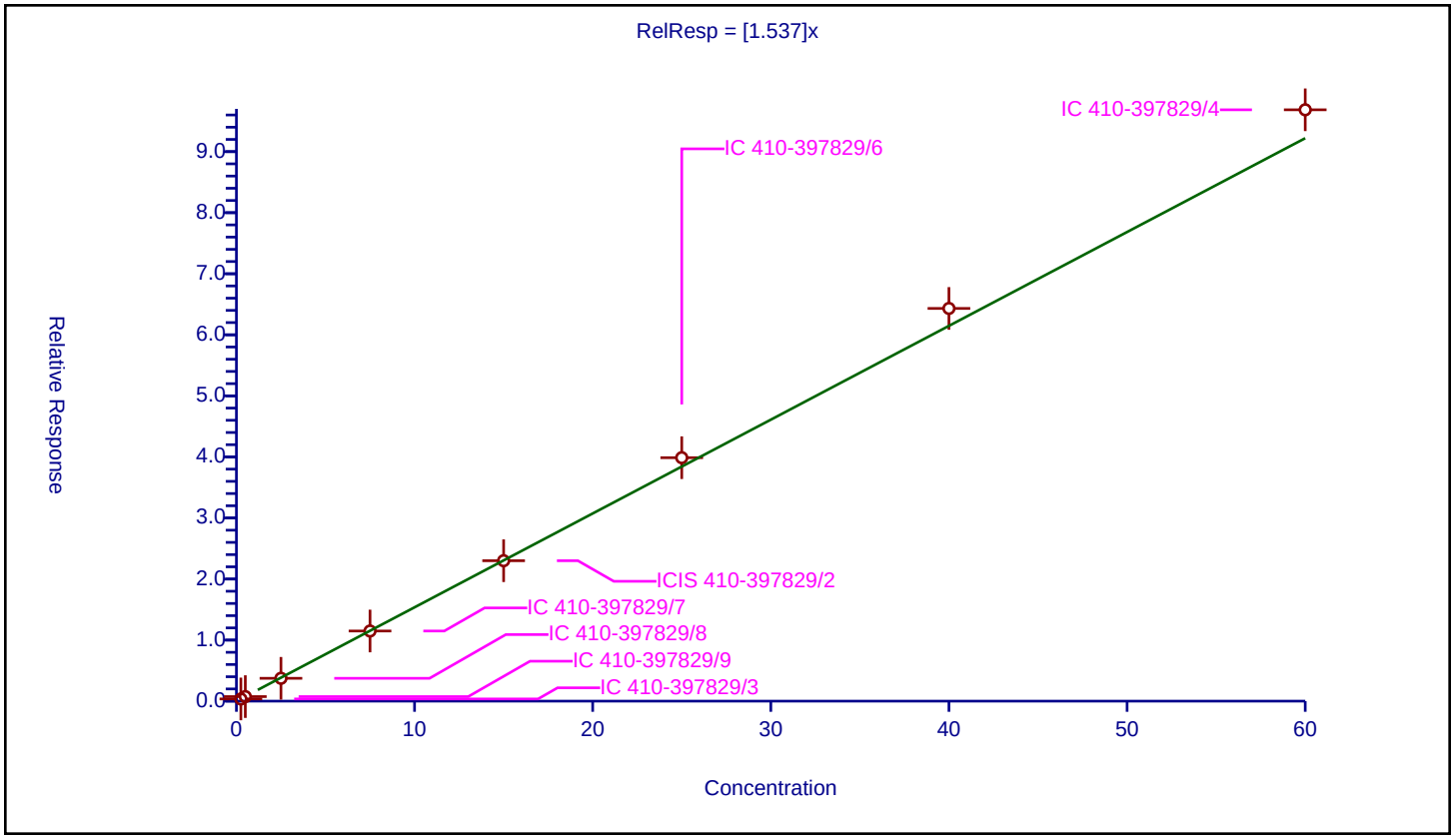
Curve Coefficients

Intercept:	0
Slope:	1.537

Error Coefficients

Standard Error:	2070000
Relative Standard Error:	4.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.25	0.357784	5.0	217338.0	1.431135	Y
2	IC 410-397829/9	0.5	0.741576	5.0	188767.0	1.483151	Y
3	IC 410-397829/8	2.5	3.742546	5.0	234760.0	1.497018	Y
4	IC 410-397829/7	7.5	11.48778	5.0	192478.0	1.531704	Y
5	ICIS 410-397829/2	15.0	22.998021	5.0	212767.0	1.533201	Y
6	IC 410-397829/6	25.0	39.871304	5.0	230583.0	1.594852	Y
7	IC 410-397829/5	40.0	64.317032	5.0	227097.0	1.607926	Y
8	IC 410-397829/4	60.0	96.849708	5.0	211309.0	1.614162	Y



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Calibration / N-Nitrosodiethylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

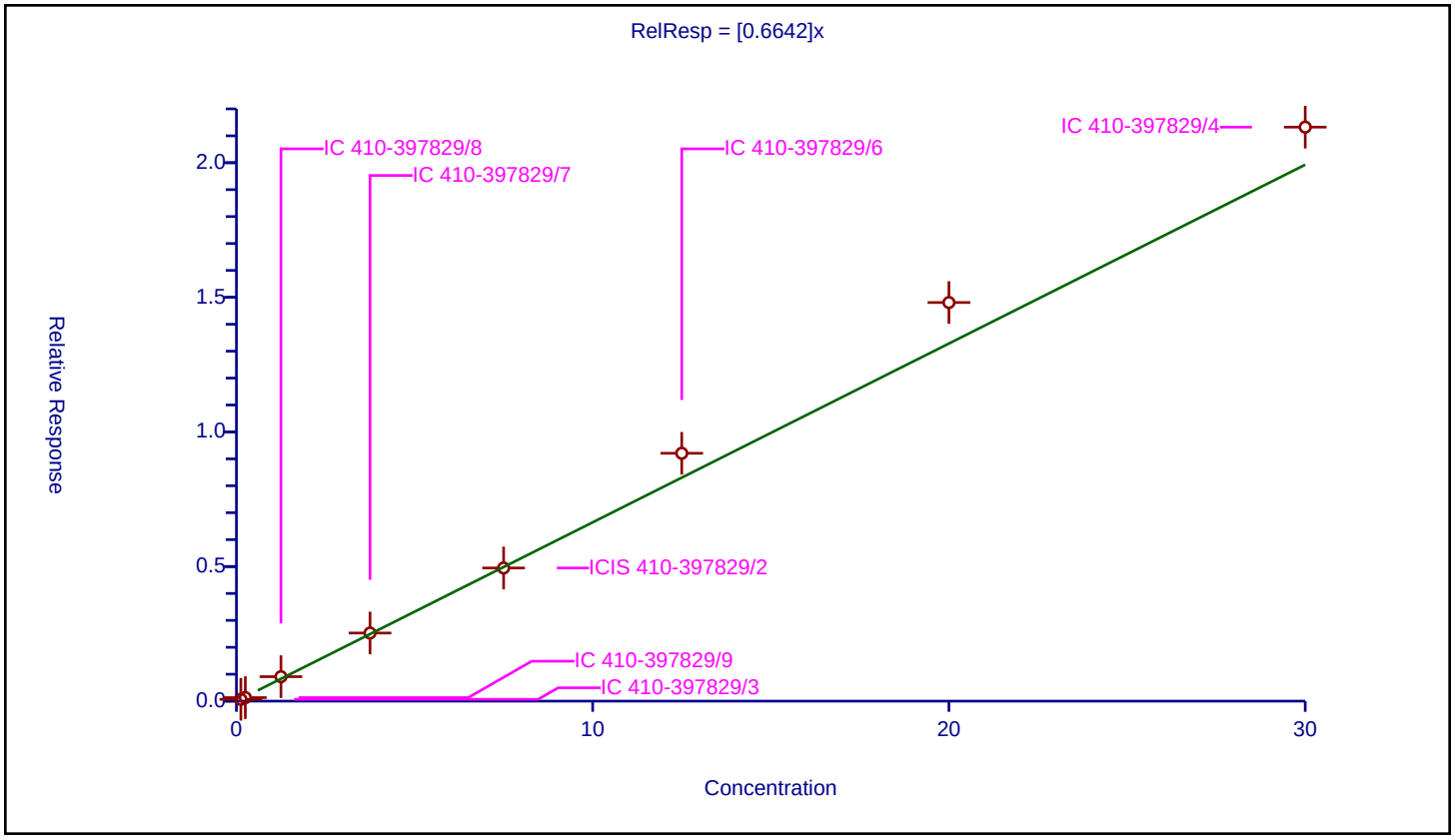
Curve Coefficients

Intercept:	0
Slope:	0.6642

Error Coefficients

Standard Error:	463000
Relative Standard Error:	13.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.067453	5.0	217338.0	0.53962	Y
2	IC 410-397829/9	0.25	0.131326	5.0	188767.0	0.525304	Y
3	IC 410-397829/8	1.25	0.908715	5.0	234760.0	0.726972	Y
4	IC 410-397829/7	3.75	2.5299	5.0	192478.0	0.67464	Y
5	ICIS 410-397829/2	7.5	4.945856	5.0	212767.0	0.659448	Y
6	IC 410-397829/6	12.5	9.207205	5.0	230583.0	0.736576	Y
7	IC 410-397829/5	20.0	14.807197	5.0	227097.0	0.74036	Y
8	IC 410-397829/4	30.0	21.322045	5.0	211309.0	0.710735	Y



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Calibration / Ethyl methanesulfonate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

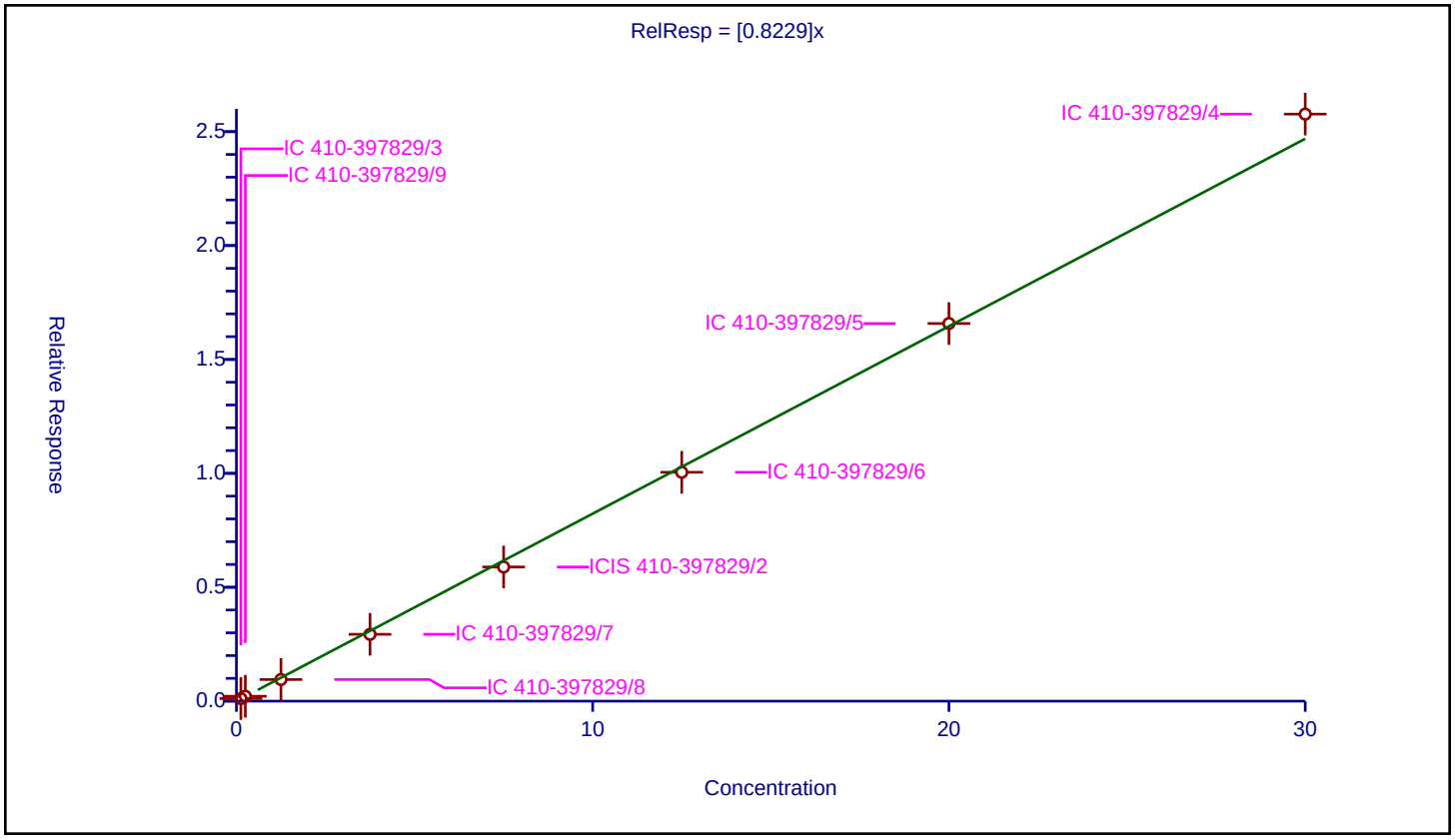
Curve Coefficients

Intercept:	0
Slope:	0.8229

Error Coefficients

Standard Error:	541000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.113188	5.0	217338.0	0.905502	Y
2	IC 410-397829/9	0.25	0.214762	5.0	188767.0	0.859048	Y
3	IC 410-397829/8	1.25	0.949033	5.0	234760.0	0.759226	Y
4	IC 410-397829/7	3.75	2.934803	5.0	192478.0	0.782614	Y
5	ICIS 410-397829/2	7.5	5.889494	5.0	212767.0	0.785266	Y
6	IC 410-397829/6	12.5	10.047358	5.0	230583.0	0.803789	Y
7	IC 410-397829/5	20.0	16.578731	5.0	227097.0	0.828937	Y
8	IC 410-397829/4	30.0	25.770743	5.0	211309.0	0.859025	Y



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Calibration / Benzaldehyde

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

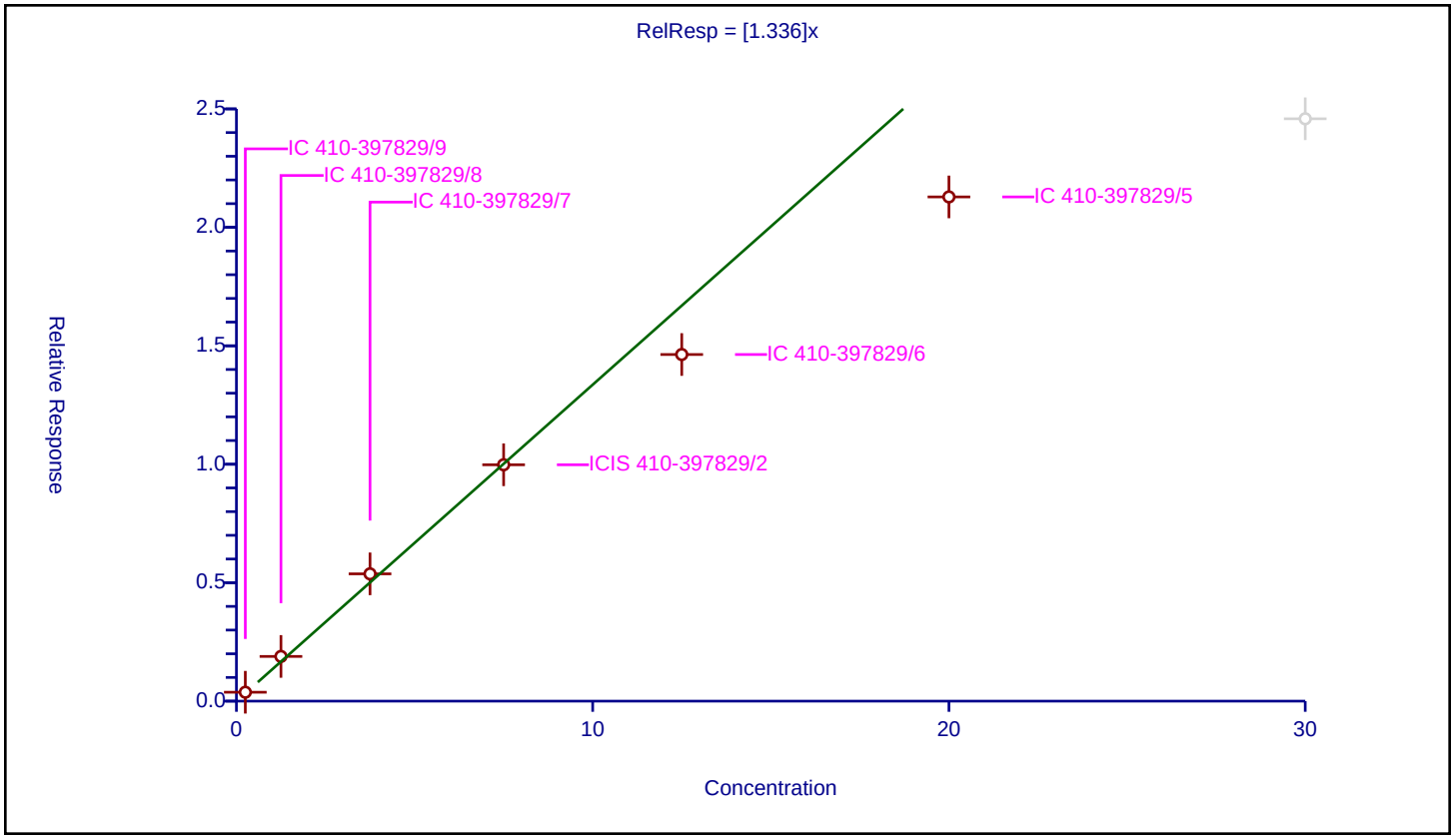
Curve Coefficients

Intercept:	0
Slope:	1.336

Error Coefficients

Standard Error:	569000
Relative Standard Error:	13.8
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/9	0.25	0.376496	5.0	188767.0	1.505984	Y
2	IC 410-397829/8	1.25	1.887268	5.0	234760.0	1.509814	Y
3	IC 410-397829/7	3.75	5.373289	5.0	192478.0	1.432877	Y
4	ICIS 410-397829/2	7.5	9.976876	5.0	212767.0	1.33025	Y
5	IC 410-397829/6	12.5	14.63215	5.0	230583.0	1.170572	Y
6	IC 410-397829/5	20.0	21.284517	5.0	227097.0	1.064226	Y
7	IC 410-397829/4	30.0	24.583383	5.0	211309.0	0.819446	N



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Calibration / Aniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

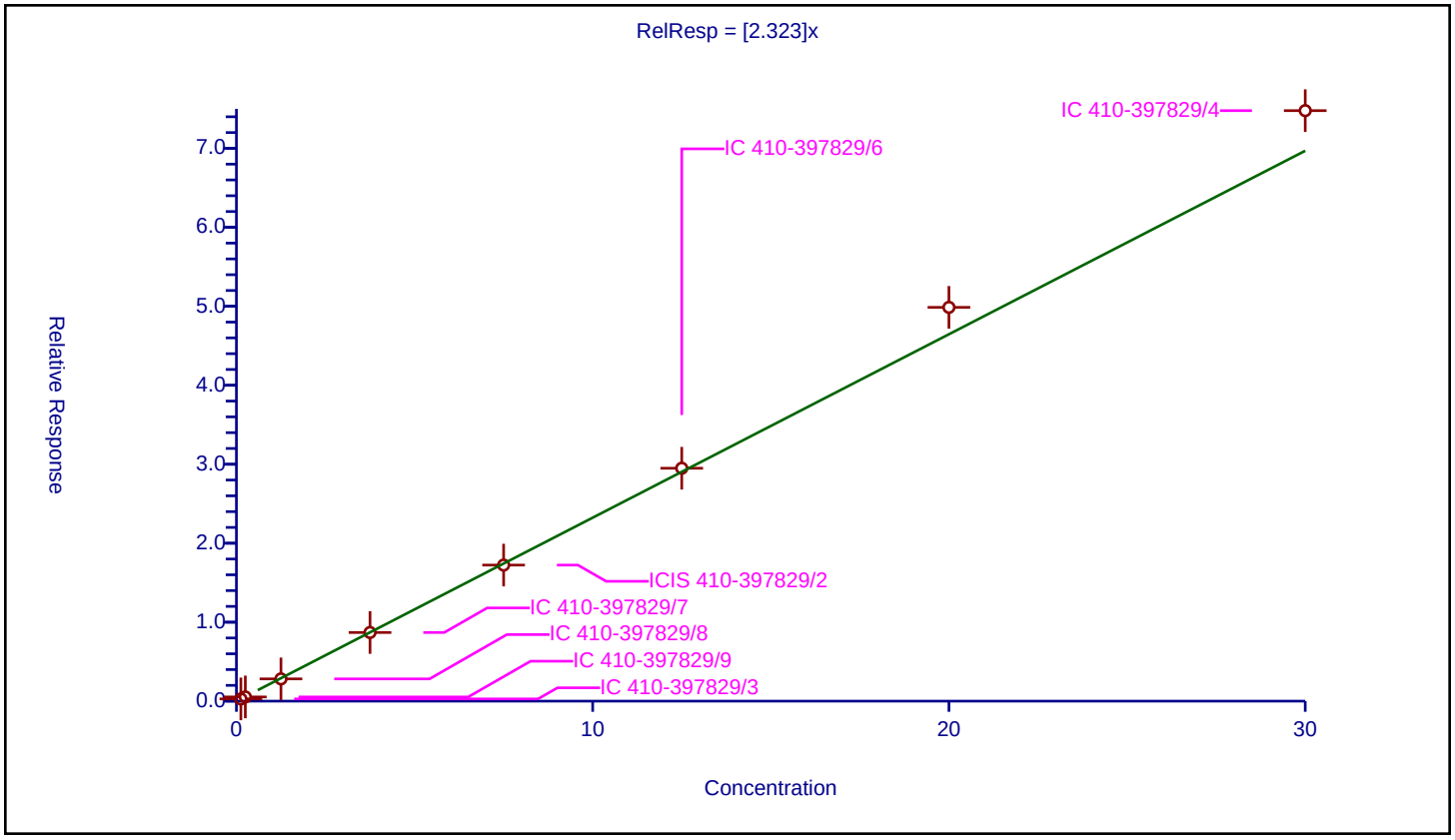
Curve Coefficients

Intercept:	0
Slope:	2.323

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	5.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.280324	5.0	217338.0	2.24259	Y
2	IC 410-397829/9	0.25	0.531846	5.0	188767.0	2.127385	Y
3	IC 410-397829/8	1.25	2.81792	5.0	234760.0	2.254336	Y
4	IC 410-397829/7	3.75	8.69185	5.0	192478.0	2.317827	Y
5	ICIS 410-397829/2	7.5	17.228894	5.0	212767.0	2.297186	Y
6	IC 410-397829/6	12.5	29.494108	5.0	230583.0	2.359529	Y
7	IC 410-397829/5	20.0	49.866269	5.0	227097.0	2.493313	Y
8	IC 410-397829/4	30.0	74.778145	5.0	211309.0	2.492605	Y



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Calibration / Phenol-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

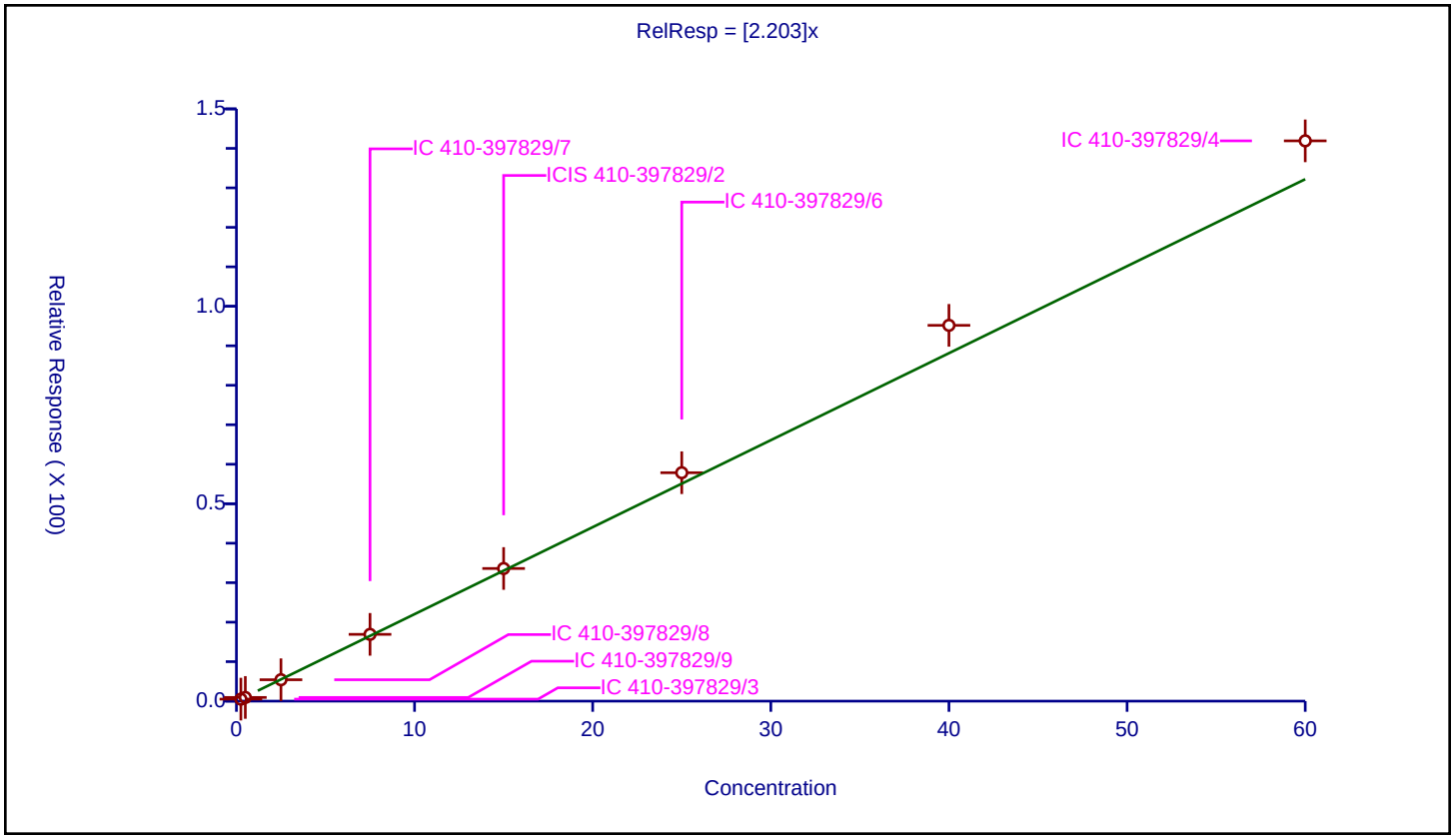
Curve Coefficients

Intercept:	0
Slope:	2.203

Error Coefficients

Standard Error:	3030000
Relative Standard Error:	8.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.25	0.510219	5.0	217338.0	2.040876	Y
2	IC 410-397829/9	0.5	0.931598	5.0	188767.0	1.863196	Y
3	IC 410-397829/8	2.5	5.420898	5.0	234760.0	2.168359	Y
4	IC 410-397829/7	7.5	16.913491	5.0	192478.0	2.255132	Y
5	ICIS 410-397829/2	15.0	33.593391	5.0	212767.0	2.239559	Y
6	IC 410-397829/6	25.0	57.852725	5.0	230583.0	2.314109	Y
7	IC 410-397829/5	40.0	95.178954	5.0	227097.0	2.379474	Y
8	IC 410-397829/4	60.0	141.903823	5.0	211309.0	2.365064	Y



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Calibration / Phenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

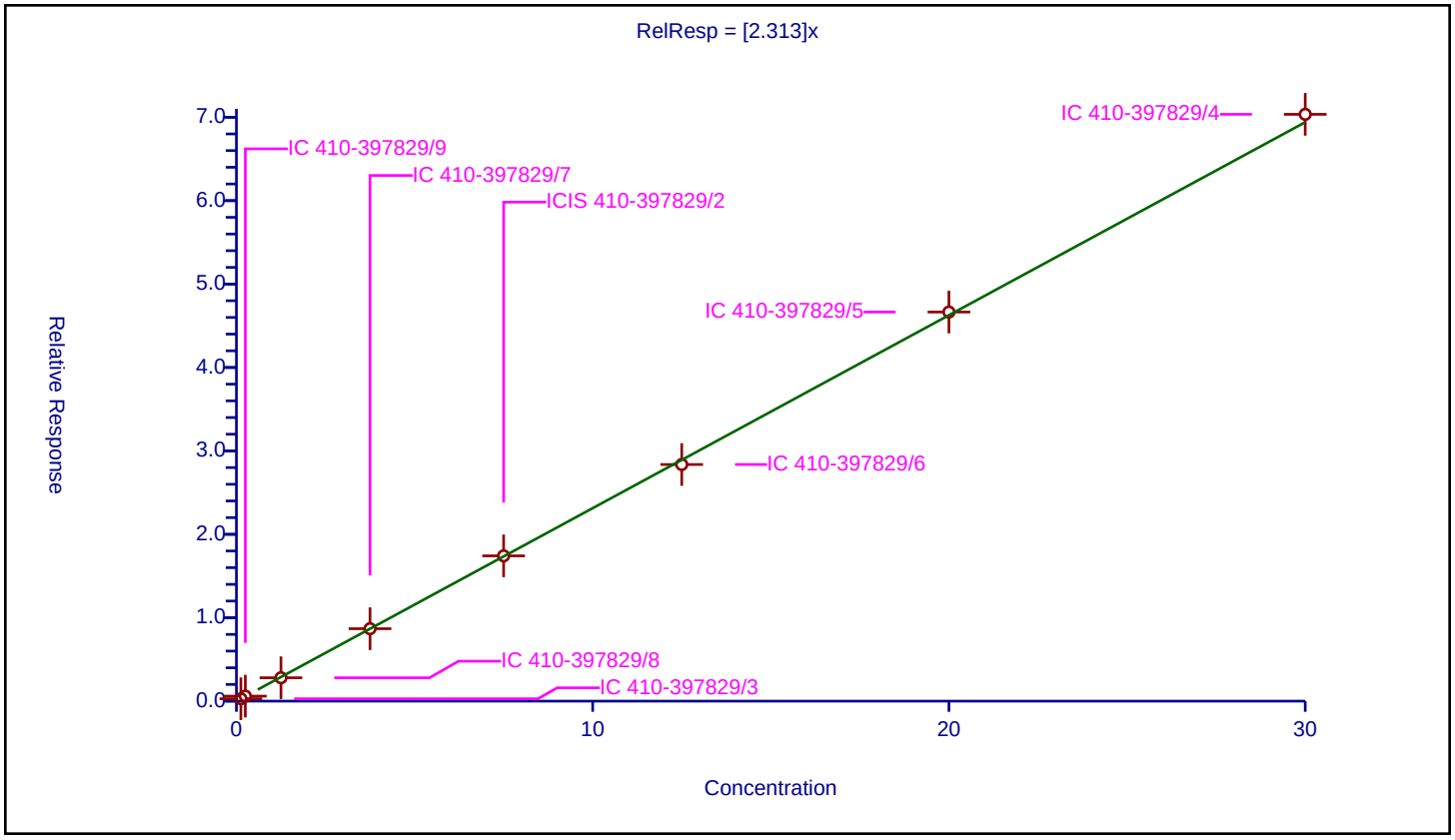
Curve Coefficients

Intercept:	0
Slope:	2.313

Error Coefficients

Standard Error:	1500000
Relative Standard Error:	2.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.284626	5.0	217338.0	2.277006	Y
2	IC 410-397829/9	0.25	0.600635	5.0	188767.0	2.402539	Y
3	IC 410-397829/8	1.25	2.802926	5.0	234760.0	2.242341	Y
4	IC 410-397829/7	3.75	8.684239	5.0	192478.0	2.315797	Y
5	ICIS 410-397829/2	7.5	17.417339	5.0	212767.0	2.322312	Y
6	IC 410-397829/6	12.5	28.367052	5.0	230583.0	2.269364	Y
7	IC 410-397829/5	20.0	46.645949	5.0	227097.0	2.332297	Y
8	IC 410-397829/4	30.0	70.34769	5.0	211309.0	2.344923	Y



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Calibration / Bis(2-chloroethyl)ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

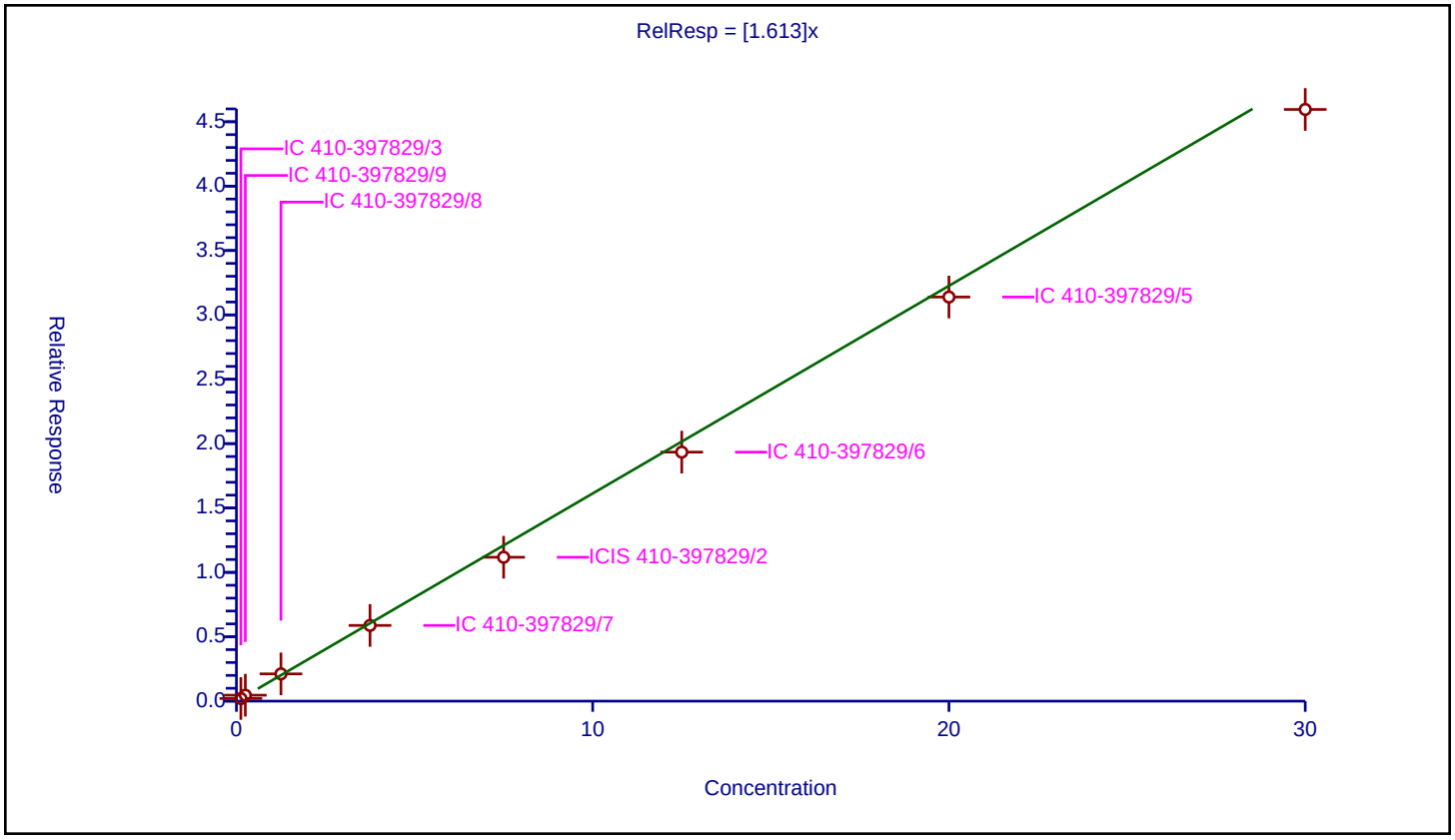
Curve Coefficients

Intercept:	0
Slope:	1.613

Error Coefficients

Standard Error:	992000
Relative Standard Error:	7.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.206729	5.0	217338.0	1.65383	Y
2	IC 410-397829/9	0.25	0.461866	5.0	188767.0	1.847463	Y
3	IC 410-397829/8	1.25	2.117673	5.0	234760.0	1.694139	Y
4	IC 410-397829/7	3.75	5.880204	5.0	192478.0	1.568055	Y
5	ICIS 410-397829/2	7.5	11.175159	5.0	212767.0	1.490021	Y
6	IC 410-397829/6	12.5	19.341777	5.0	230583.0	1.547342	Y
7	IC 410-397829/5	20.0	31.387755	5.0	227097.0	1.569388	Y
8	IC 410-397829/4	30.0	45.956963	5.0	211309.0	1.531899	Y



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Calibration / 2-Chlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

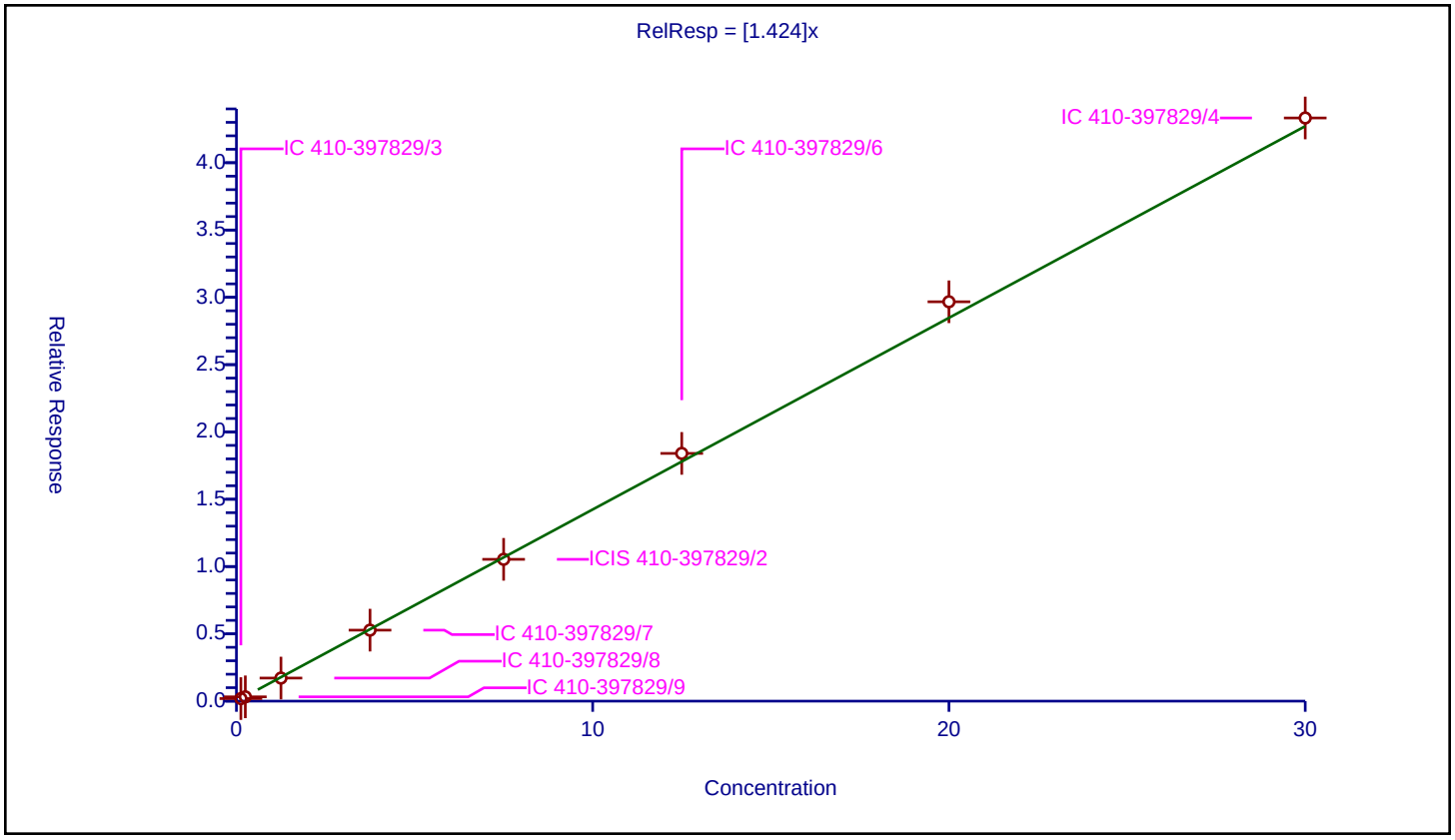
Curve Coefficients

Intercept:	0
Slope:	1.424

Error Coefficients

Standard Error:	936000
Relative Standard Error:	5.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.191361	5.0	217338.0	1.530887	Y
2	IC 410-397829/9	0.25	0.31915	5.0	188767.0	1.2766	Y
3	IC 410-397829/8	1.25	1.714219	5.0	234760.0	1.371375	Y
4	IC 410-397829/7	3.75	5.274681	5.0	192478.0	1.406582	Y
5	ICIS 410-397829/2	7.5	10.535703	5.0	212767.0	1.40476	Y
6	IC 410-397829/6	12.5	18.404826	5.0	230583.0	1.472386	Y
7	IC 410-397829/5	20.0	29.670934	5.0	227097.0	1.483547	Y
8	IC 410-397829/4	30.0	43.326053	5.0	211309.0	1.444202	Y



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Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

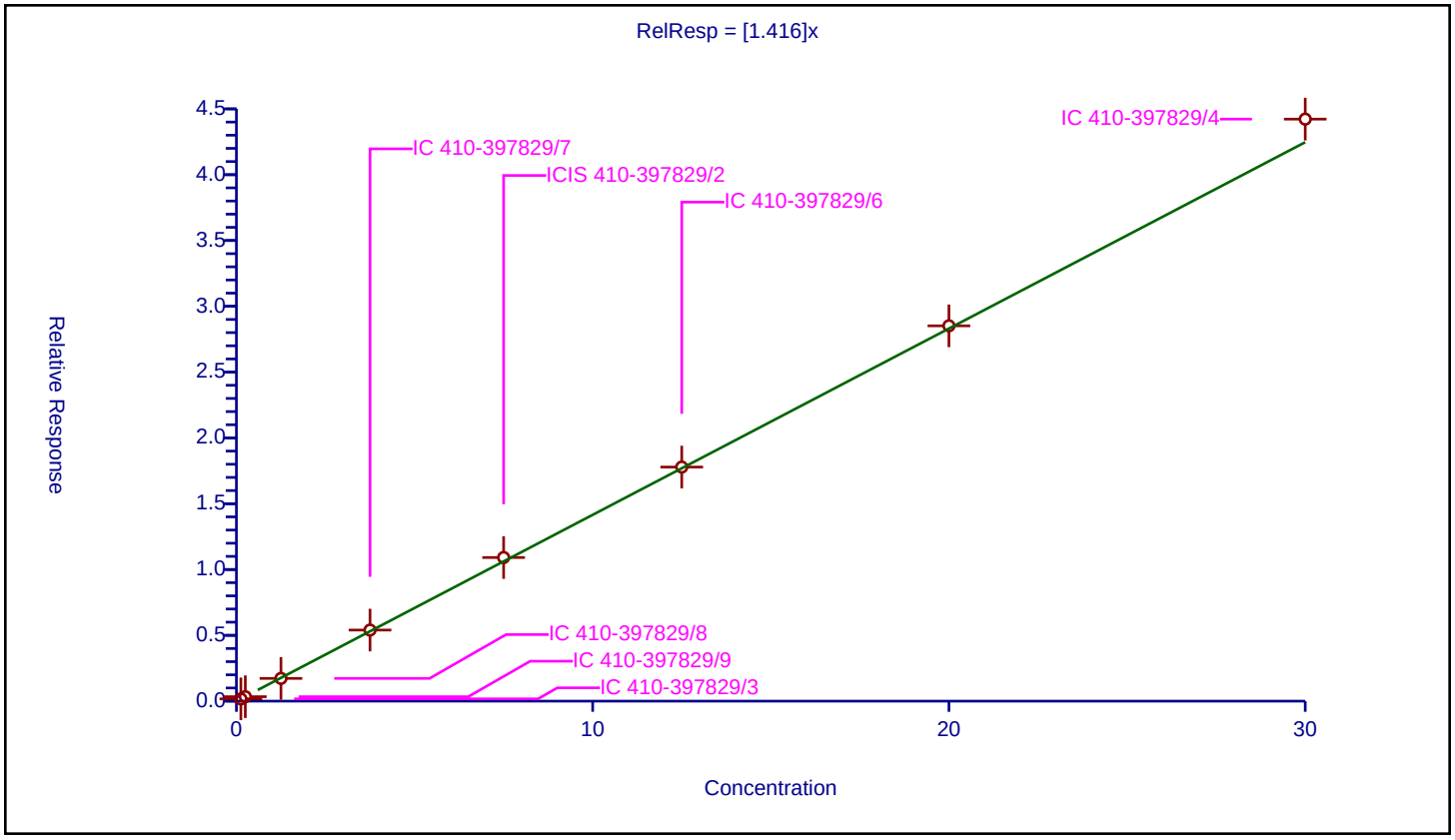
Curve Coefficients

Intercept:	0
Slope:	1.416

Error Coefficients

Standard Error:	934000
Relative Standard Error:	3.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.172634	5.0	217338.0	1.381075	Y
2	IC 410-397829/9	0.25	0.336049	5.0	188767.0	1.344197	Y
3	IC 410-397829/8	1.25	1.726295	5.0	234760.0	1.381036	Y
4	IC 410-397829/7	3.75	5.400747	5.0	192478.0	1.440199	Y
5	ICIS 410-397829/2	7.5	10.913135	5.0	212767.0	1.455085	Y
6	IC 410-397829/6	12.5	17.786198	5.0	230583.0	1.422896	Y
7	IC 410-397829/5	20.0	28.51777	5.0	227097.0	1.425888	Y
8	IC 410-397829/4	30.0	44.223034	5.0	211309.0	1.474101	Y



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Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

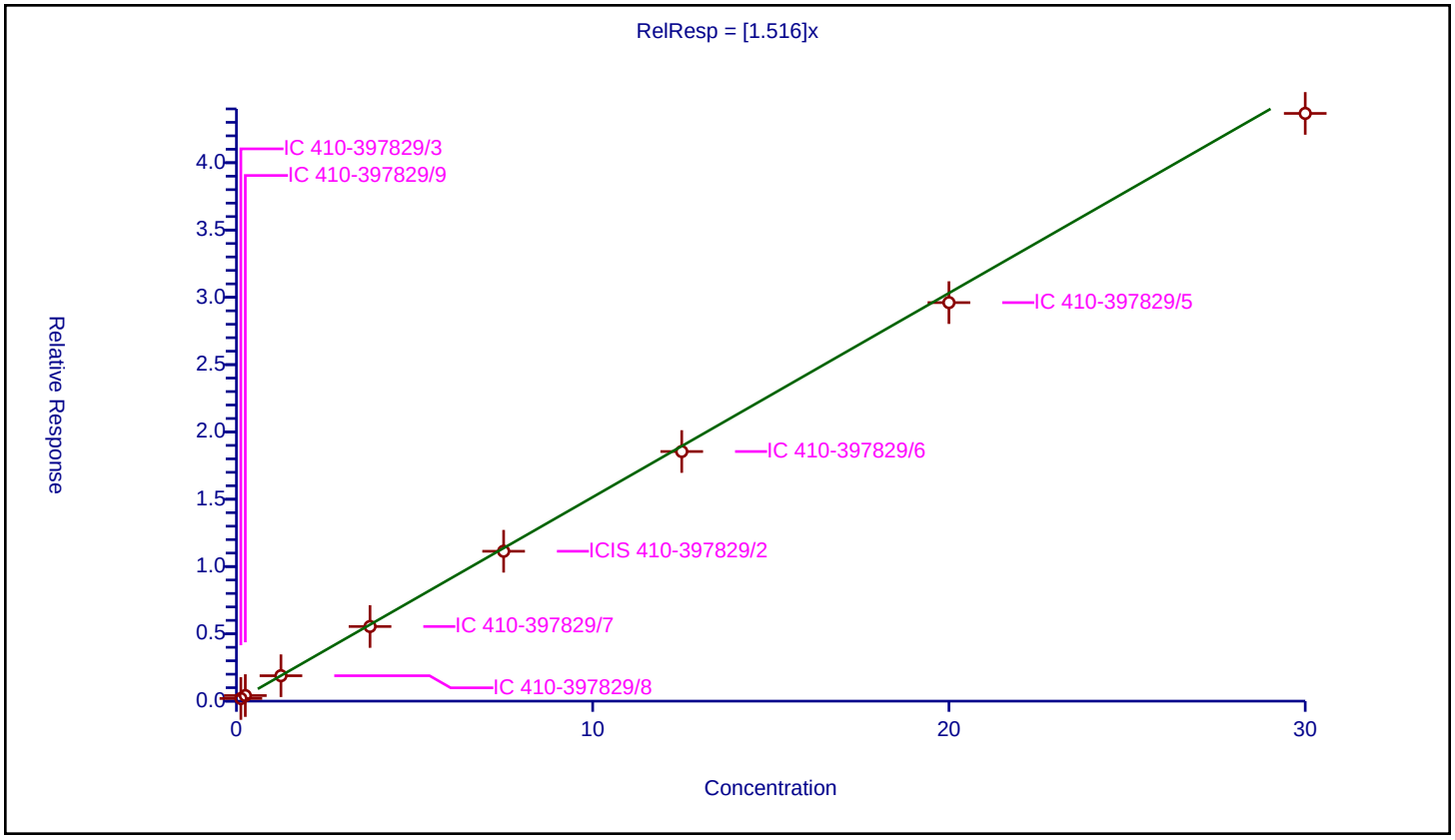
Curve Coefficients

Intercept:	0
Slope:	1.516

Error Coefficients

Standard Error:	943000
Relative Standard Error:	4.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.196652	5.0	217338.0	1.573218	Y
2	IC 410-397829/9	0.25	0.414585	5.0	188767.0	1.658341	Y
3	IC 410-397829/8	1.25	1.889398	5.0	234760.0	1.511518	Y
4	IC 410-397829/7	3.75	5.546166	5.0	192478.0	1.478978	Y
5	ICIS 410-397829/2	7.5	11.134692	5.0	212767.0	1.484626	Y
6	IC 410-397829/6	12.5	18.544711	5.0	230583.0	1.483577	Y
7	IC 410-397829/5	20.0	29.608846	5.0	227097.0	1.480442	Y
8	IC 410-397829/4	30.0	43.664397	5.0	211309.0	1.45548	Y



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Calibration / Benzyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

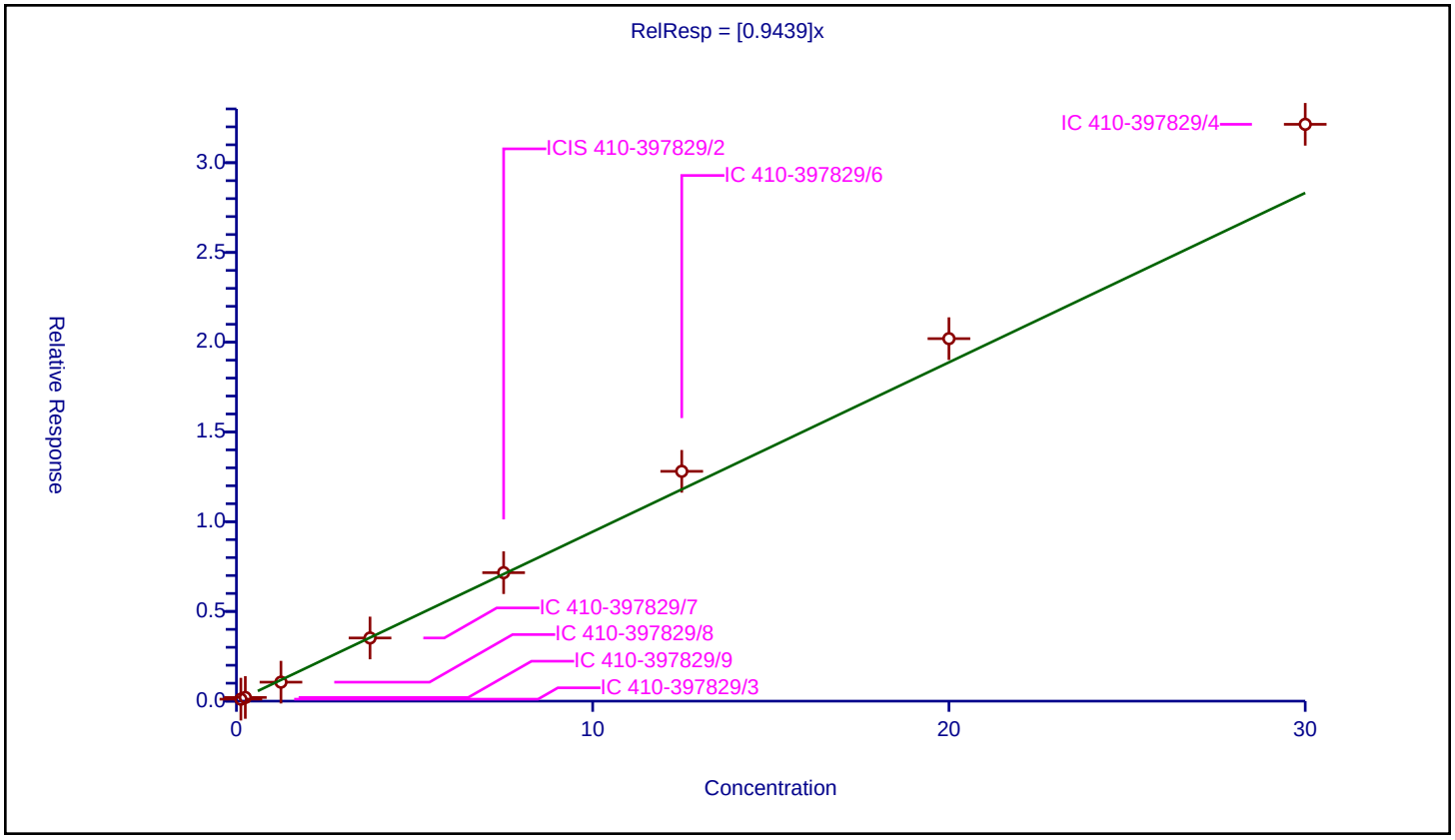
Curve Coefficients

Intercept:	0
Slope:	0.9439

Error Coefficients

Standard Error:	671000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.11091	5.0	217338.0	0.887282	Y
2	IC 410-397829/9	0.25	0.204856	5.0	188767.0	0.819423	Y
3	IC 410-397829/8	1.25	1.057569	5.0	234760.0	0.846056	Y
4	IC 410-397829/7	3.75	3.519181	5.0	192478.0	0.938448	Y
5	ICIS 410-397829/2	7.5	7.159005	5.0	212767.0	0.954534	Y
6	IC 410-397829/6	12.5	12.805237	5.0	230583.0	1.024419	Y
7	IC 410-397829/5	20.0	20.198175	5.0	227097.0	1.009909	Y
8	IC 410-397829/4	30.0	32.141272	5.0	211309.0	1.071376	Y



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Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

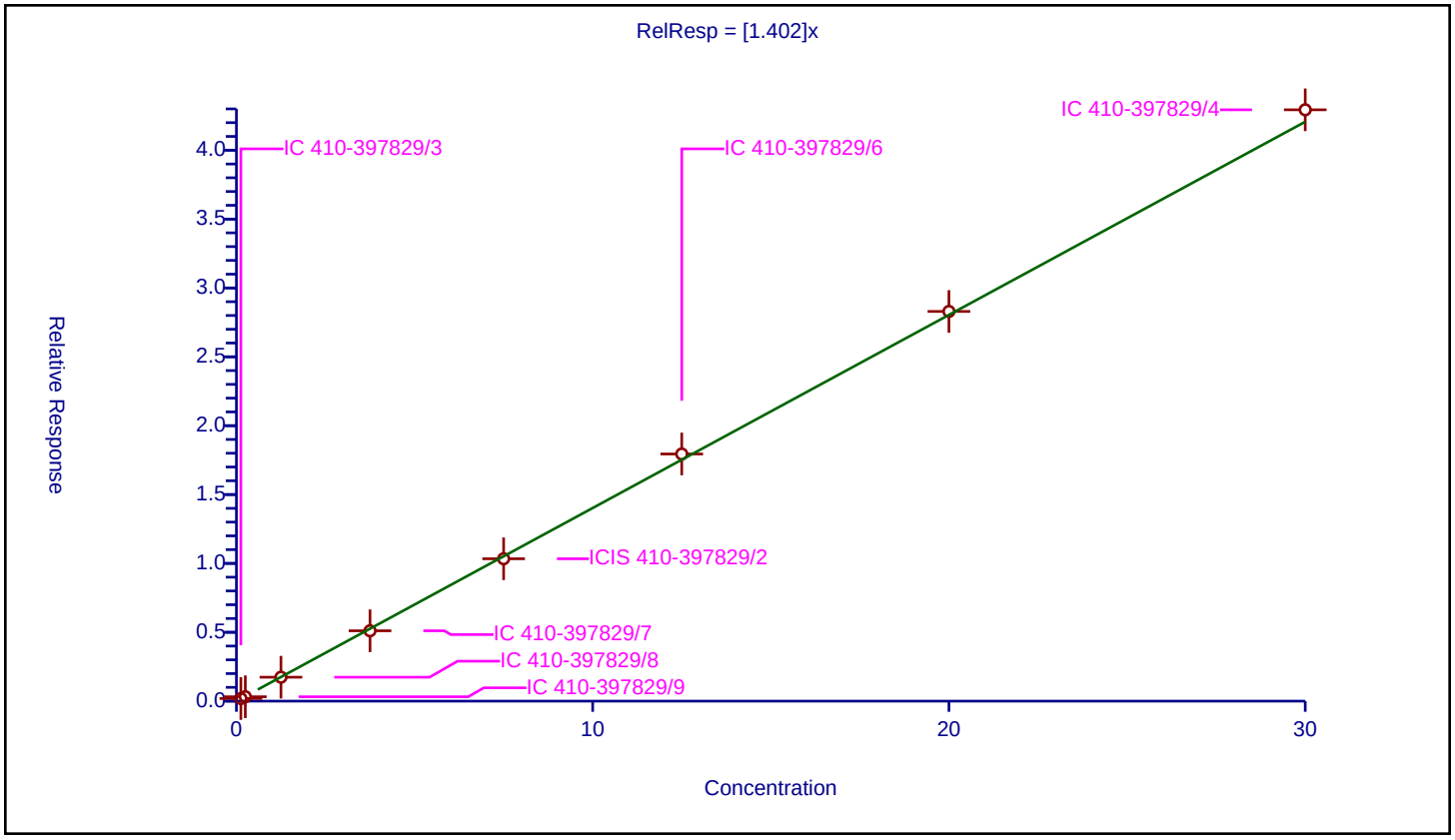
Curve Coefficients

Intercept:	0
Slope:	1.402

Error Coefficients

Standard Error:	916000
Relative Standard Error:	5.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.191246	5.0	217338.0	1.529967	Y
2	IC 410-397829/9	0.25	0.318806	5.0	188767.0	1.275223	Y
3	IC 410-397829/8	1.25	1.73769	5.0	234760.0	1.390152	Y
4	IC 410-397829/7	3.75	5.107207	5.0	192478.0	1.361922	Y
5	ICIS 410-397829/2	7.5	10.337834	5.0	212767.0	1.378378	Y
6	IC 410-397829/6	12.5	17.944753	5.0	230583.0	1.43558	Y
7	IC 410-397829/5	20.0	28.294715	5.0	227097.0	1.414736	Y
8	IC 410-397829/4	30.0	42.93492	5.0	211309.0	1.431164	Y



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Calibration / 2,2'-oxybis[1-chloropropane]

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

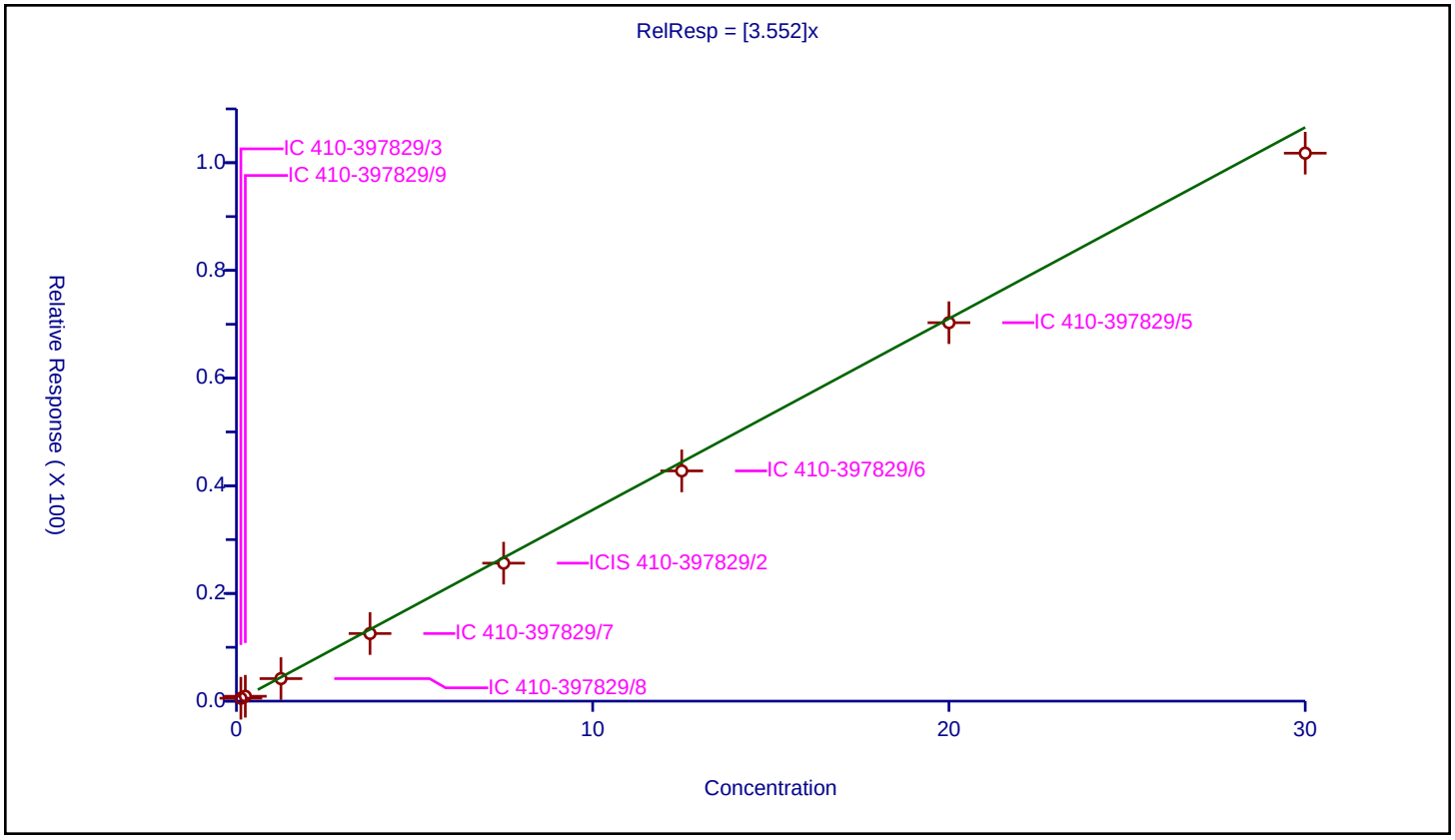
Curve Coefficients

Intercept:	0
Slope:	3.552

Error Coefficients

Standard Error:	2210000
Relative Standard Error:	9.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.543416	5.0	217338.0	4.34733	Y
2	IC 410-397829/9	0.25	0.907574	5.0	188767.0	3.630296	Y
3	IC 410-397829/8	1.25	4.181419	5.0	234760.0	3.345135	Y
4	IC 410-397829/7	3.75	12.559747	5.0	192478.0	3.349266	Y
5	ICIS 410-397829/2	7.5	25.627588	5.0	212767.0	3.417012	Y
6	IC 410-397829/6	12.5	42.762454	5.0	230583.0	3.420996	Y
7	IC 410-397829/5	20.0	70.29265	5.0	227097.0	3.514633	Y
8	IC 410-397829/4	30.0	101.77664	5.0	211309.0	3.392555	Y



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Calibration / 2-Methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

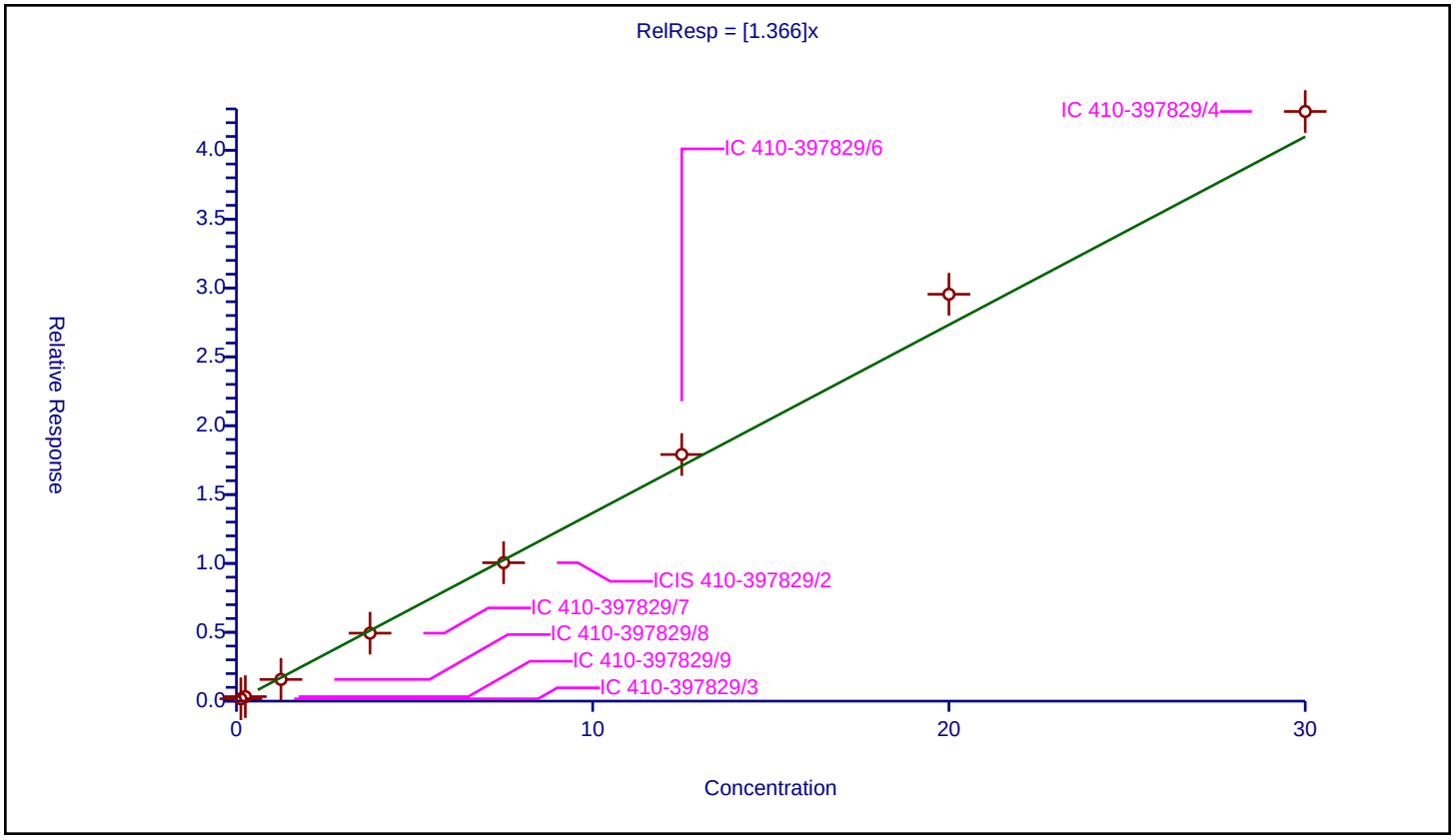
Curve Coefficients

Intercept:	0
Slope:	1.366

Error Coefficients

Standard Error:	924000
Relative Standard Error:	5.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.170495	5.0	217338.0	1.363958	Y
2	IC 410-397829/9	0.25	0.328023	5.0	188767.0	1.312094	Y
3	IC 410-397829/8	1.25	1.5748	5.0	234760.0	1.25984	Y
4	IC 410-397829/7	3.75	4.936876	5.0	192478.0	1.3165	Y
5	ICIS 410-397829/2	7.5	10.049655	5.0	212767.0	1.339954	Y
6	IC 410-397829/6	12.5	17.90622	5.0	230583.0	1.432498	Y
7	IC 410-397829/5	20.0	29.542618	5.0	227097.0	1.477131	Y
8	IC 410-397829/4	30.0	42.81467	5.0	211309.0	1.427156	Y



Calibration / N-Nitrosopyrrolidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

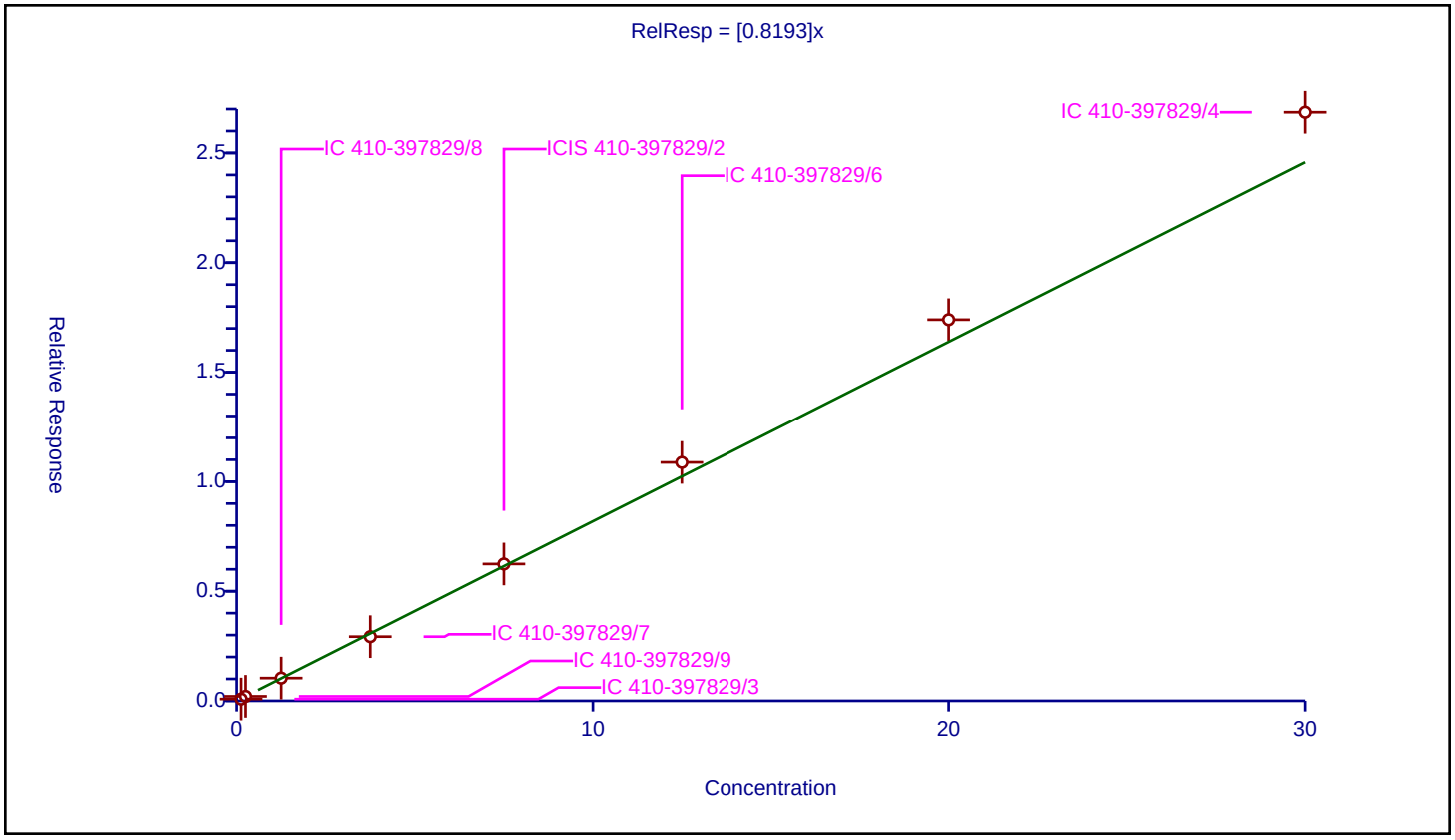
Curve Coefficients

Intercept:	0
Slope:	0.8193

Error Coefficients

Standard Error:	567000
Relative Standard Error:	9.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.082176	5.0	217338.0	0.657409	Y
2	IC 410-397829/9	0.25	0.20467	5.0	188767.0	0.818681	Y
3	IC 410-397829/8	1.25	1.037272	5.0	234760.0	0.829818	Y
4	IC 410-397829/7	3.75	2.92649	5.0	192478.0	0.780397	Y
5	ICIS 410-397829/2	7.5	6.243426	5.0	212767.0	0.832457	Y
6	IC 410-397829/6	12.5	10.879597	5.0	230583.0	0.870368	Y
7	IC 410-397829/5	20.0	17.398424	5.0	227097.0	0.869921	Y
8	IC 410-397829/4	30.0	26.854867	5.0	211309.0	0.895162	Y



Calibration / Acetophenone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

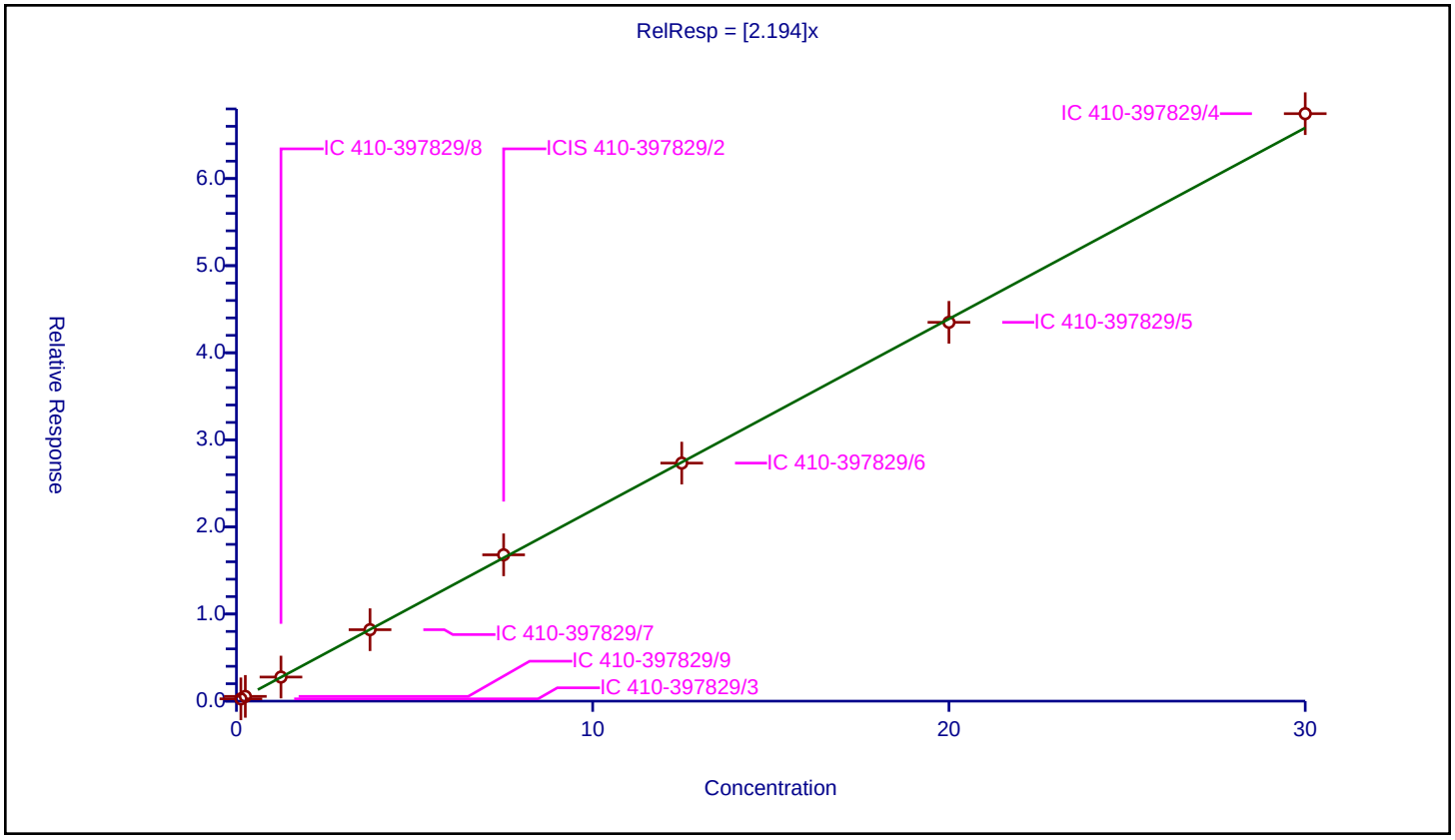
Curve Coefficients

Intercept:	0
Slope:	2.194

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	1.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.264841	5.0	217338.0	2.118728	Y
2	IC 410-397829/9	0.25	0.546467	5.0	188767.0	2.185869	Y
3	IC 410-397829/8	1.25	2.76476	5.0	234760.0	2.211808	Y
4	IC 410-397829/7	3.75	8.203509	5.0	192478.0	2.187602	Y
5	ICIS 410-397829/2	7.5	16.798352	5.0	212767.0	2.23978	Y
6	IC 410-397829/6	12.5	27.330159	5.0	230583.0	2.186413	Y
7	IC 410-397829/5	20.0	43.496017	5.0	227097.0	2.174801	Y
8	IC 410-397829/4	30.0	67.453682	5.0	211309.0	2.248456	Y



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Calibration / N-Nitrosodi-n-propylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

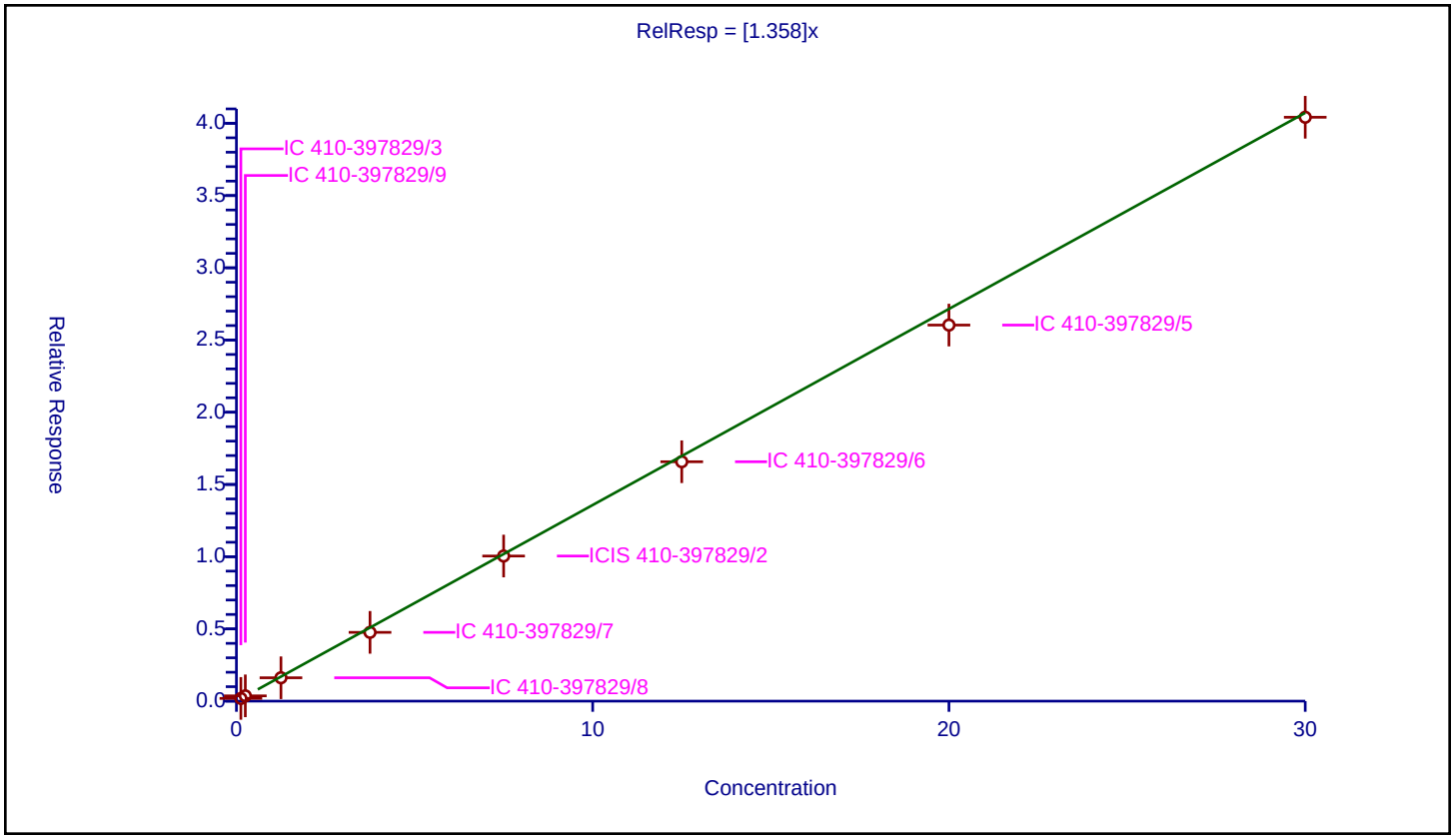
Curve Coefficients

Intercept:	0
Slope:	1.358

Error Coefficients

Standard Error:	855000
Relative Standard Error:	6.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.189336	5.0	217338.0	1.514691	Y
2	IC 410-397829/9	0.25	0.366695	5.0	188767.0	1.466782	Y
3	IC 410-397829/8	1.25	1.618738	5.0	234760.0	1.294991	Y
4	IC 410-397829/7	3.75	4.761349	5.0	192478.0	1.269693	Y
5	ICIS 410-397829/2	7.5	10.046248	5.0	212767.0	1.3395	Y
6	IC 410-397829/6	12.5	16.572666	5.0	230583.0	1.325813	Y
7	IC 410-397829/5	20.0	26.034514	5.0	227097.0	1.301726	Y
8	IC 410-397829/4	30.0	40.420735	5.0	211309.0	1.347358	Y



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Calibration / N-Nitrosomorpholine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

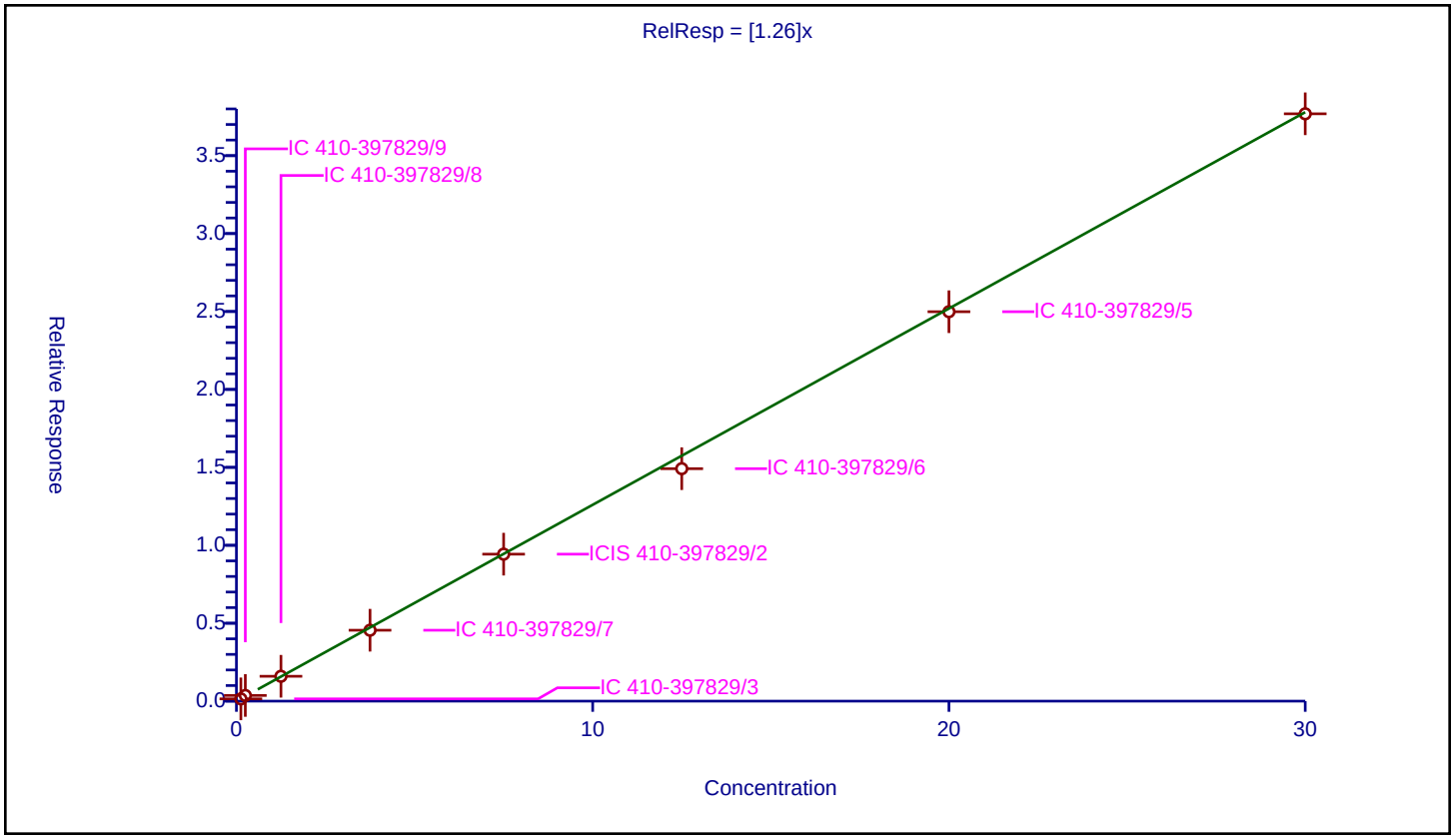
Curve Coefficients

Intercept:	0
Slope:	1.26

Error Coefficients

Standard Error:	801000
Relative Standard Error:	7.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.146178	5.0	217338.0	1.169423	Y
2	IC 410-397829/9	0.25	0.365345	5.0	188767.0	1.461378	Y
3	IC 410-397829/8	1.25	1.595651	5.0	234760.0	1.276521	Y
4	IC 410-397829/7	3.75	4.549767	5.0	192478.0	1.213271	Y
5	ICIS 410-397829/2	7.5	9.430974	5.0	212767.0	1.257463	Y
6	IC 410-397829/6	12.5	14.916776	5.0	230583.0	1.193342	Y
7	IC 410-397829/5	20.0	24.98668	5.0	227097.0	1.249334	Y
8	IC 410-397829/4	30.0	37.684765	5.0	211309.0	1.256159	Y



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Calibration / 2-Toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

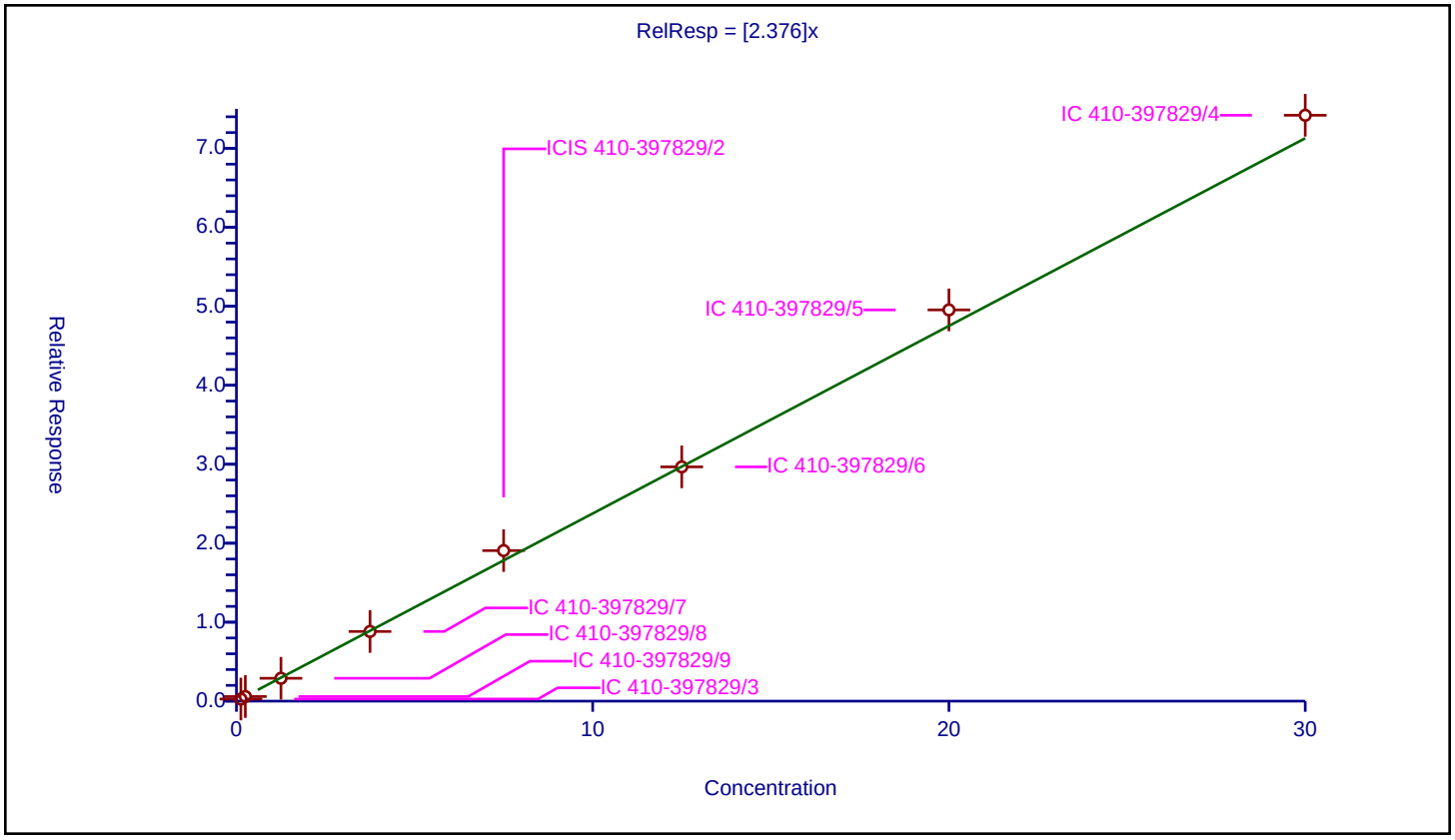
Curve Coefficients

Intercept:	0
Slope:	2.376

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	5.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.267901	5.0	217338.0	2.143206	Y
2	IC 410-397829/9	0.25	0.582782	5.0	188767.0	2.331128	Y
3	IC 410-397829/8	1.25	2.89517	5.0	234760.0	2.316136	Y
4	IC 410-397829/7	3.75	8.820567	5.0	192478.0	2.352151	Y
5	ICIS 410-397829/2	7.5	19.066209	5.0	212767.0	2.542161	Y
6	IC 410-397829/6	12.5	29.666129	5.0	230583.0	2.37329	Y
7	IC 410-397829/5	20.0	49.546559	5.0	227097.0	2.477328	Y
8	IC 410-397829/4	30.0	74.192888	5.0	211309.0	2.473096	Y



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Calibration / 4-Methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

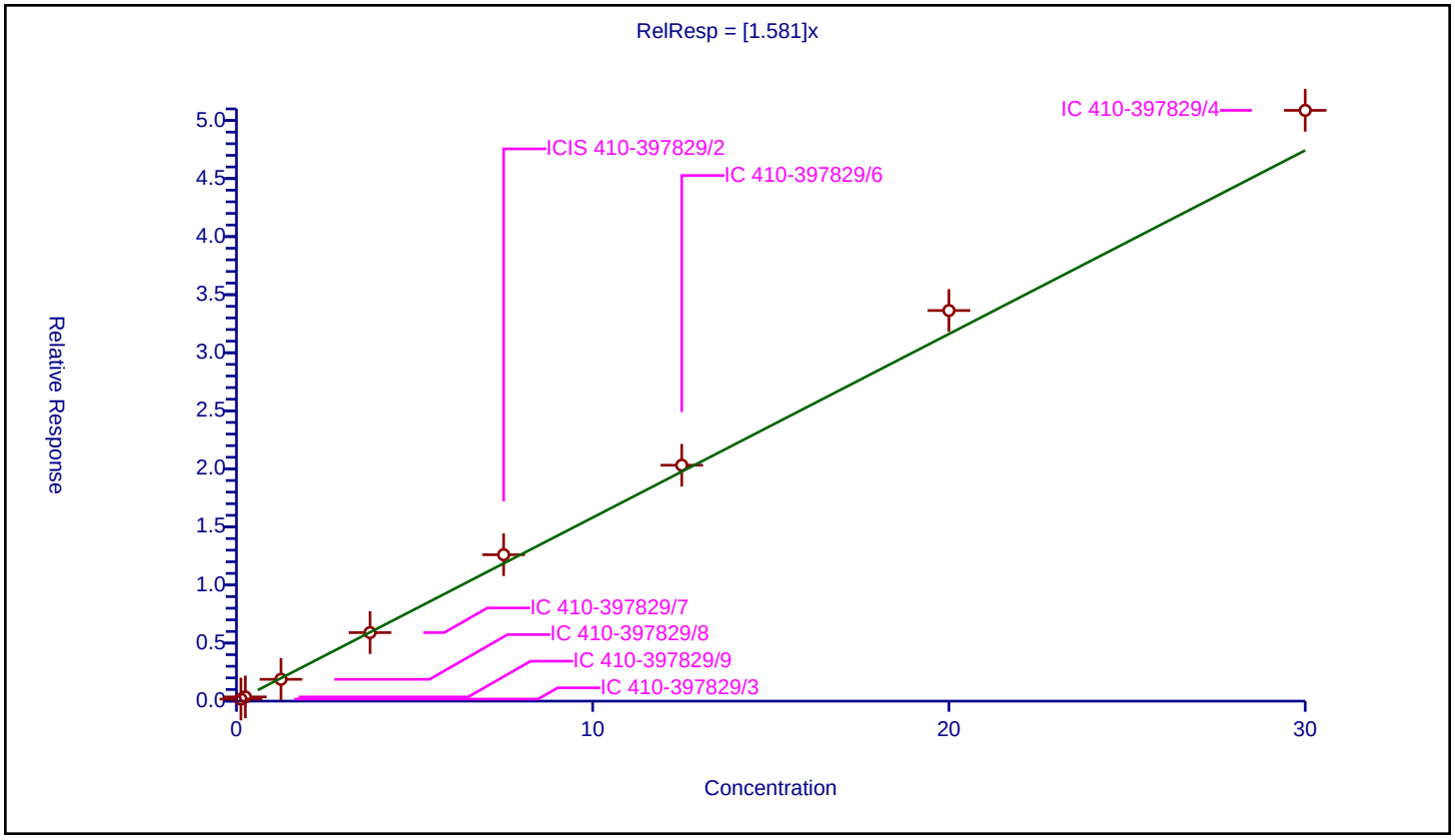
Curve Coefficients

Intercept:	0
Slope:	1.581

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	6.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.178846	5.0	217338.0	1.430767	Y
2	IC 410-397829/9	0.25	0.363967	5.0	188767.0	1.455869	Y
3	IC 410-397829/8	1.25	1.878727	5.0	234760.0	1.502982	Y
4	IC 410-397829/7	3.75	5.901532	5.0	192478.0	1.573742	Y
5	ICIS 410-397829/2	7.5	12.607994	5.0	212767.0	1.681066	Y
6	IC 410-397829/6	12.5	20.318237	5.0	230583.0	1.625459	Y
7	IC 410-397829/5	20.0	33.63741	5.0	227097.0	1.681871	Y
8	IC 410-397829/4	30.0	50.873342	5.0	211309.0	1.695778	Y



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Calibration / Hexachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

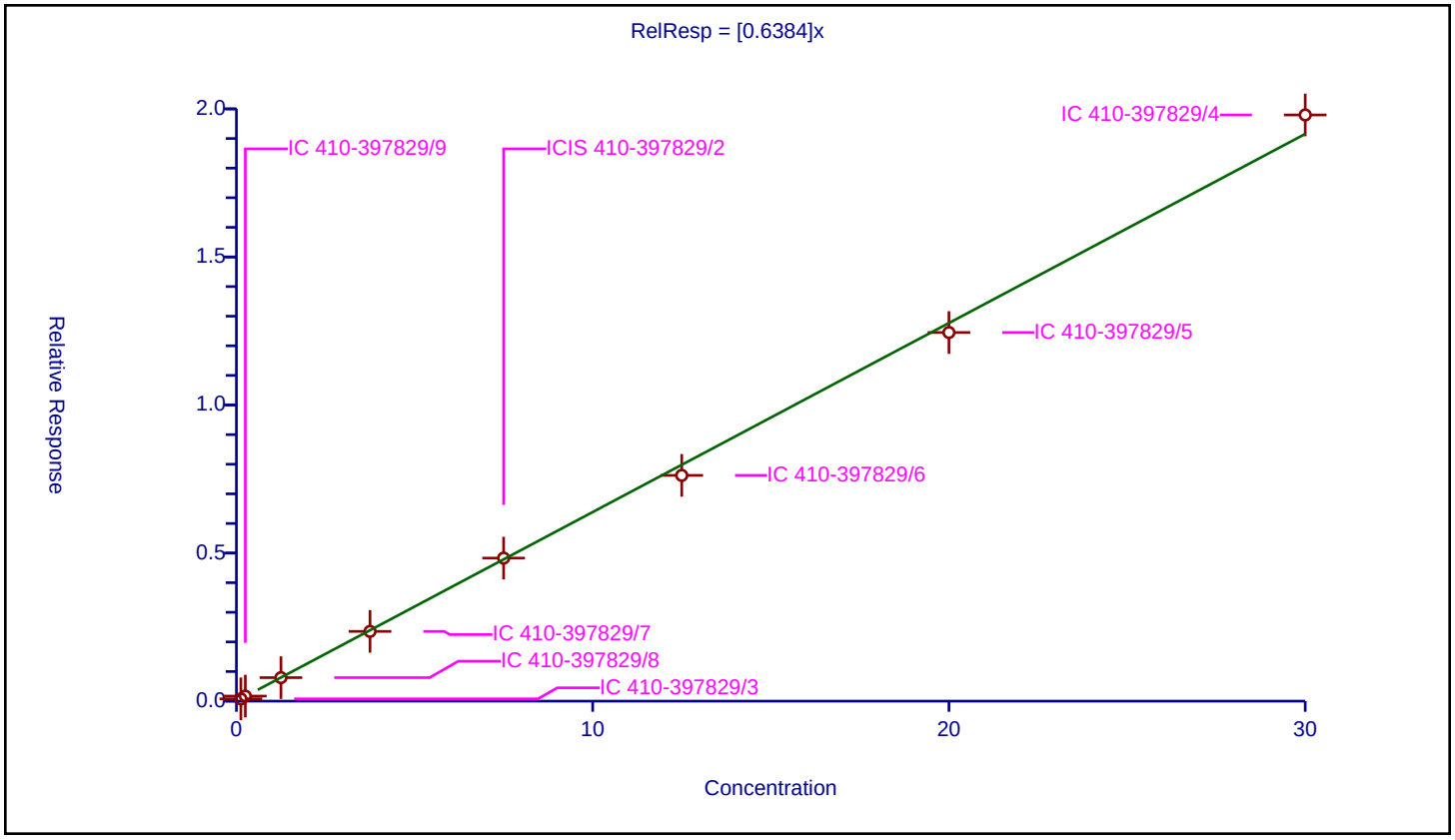
Curve Coefficients

Intercept:	0
Slope:	0.6384

Error Coefficients

Standard Error:	413000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.078219	5.0	217338.0	0.625753	Y
2	IC 410-397829/9	0.25	0.170687	5.0	188767.0	0.682746	Y
3	IC 410-397829/8	1.25	0.79364	5.0	234760.0	0.634912	Y
4	IC 410-397829/7	3.75	2.354867	5.0	192478.0	0.627964	Y
5	ICIS 410-397829/2	7.5	4.830401	5.0	212767.0	0.644054	Y
6	IC 410-397829/6	12.5	7.623676	5.0	230583.0	0.609894	Y
7	IC 410-397829/5	20.0	12.448337	5.0	227097.0	0.622417	Y
8	IC 410-397829/4	30.0	19.795371	5.0	211309.0	0.659846	Y



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Calibration / Nitrobenzene-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

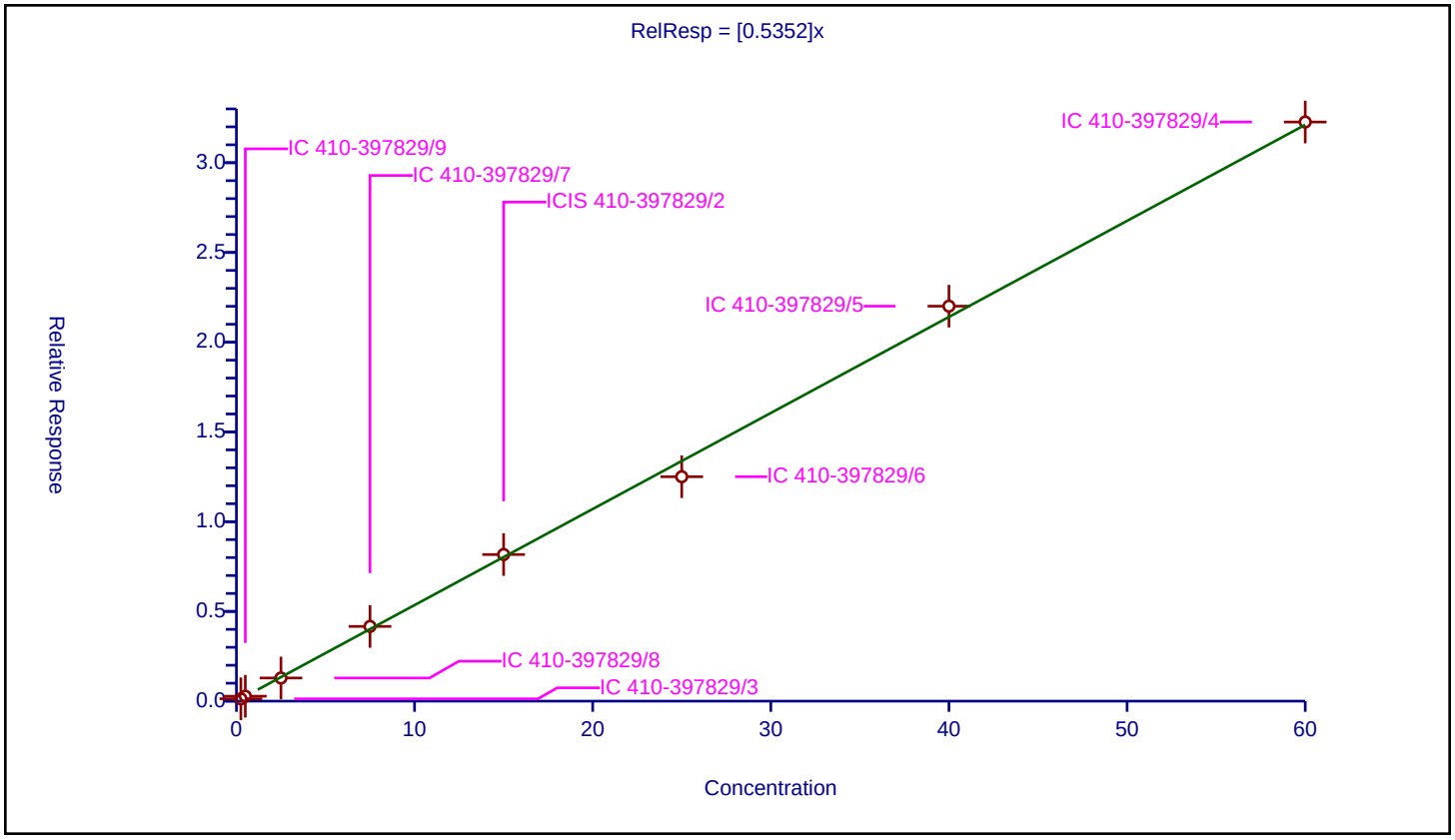
Curve Coefficients

Intercept:	0
Slope:	0.5352

Error Coefficients

Standard Error:	2660000
Relative Standard Error:	3.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.25	0.131551	5.0	847959.0	0.526205	Y
2	IC 410-397829/9	0.5	0.275725	5.0	717961.0	0.551451	Y
3	IC 410-397829/8	2.5	1.290104	5.0	942199.0	0.516042	Y
4	IC 410-397829/7	7.5	4.163441	5.0	708713.0	0.555126	Y
5	ICIS 410-397829/2	15.0	8.168879	5.0	781685.0	0.544592	Y
6	IC 410-397829/6	25.0	12.504677	5.0	925798.0	0.500187	Y
7	IC 410-397829/5	40.0	22.008317	5.0	853884.0	0.550208	Y
8	IC 410-397829/4	60.0	32.267888	5.0	822157.0	0.537798	Y



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Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

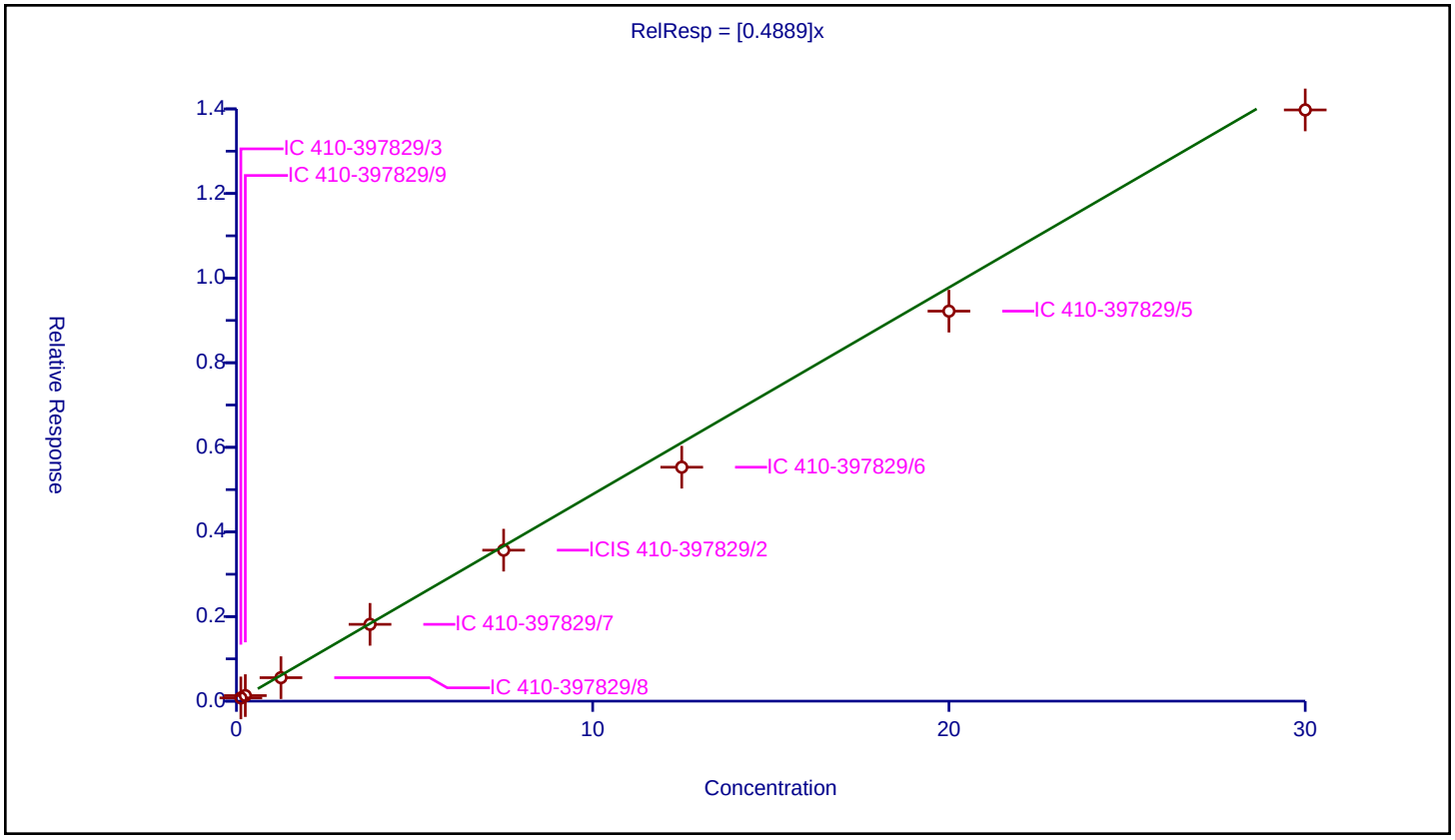
Curve Coefficients

Intercept:	0
Slope:	0.4889

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	11.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.076525	5.0	847959.0	0.612199	Y
2	IC 410-397829/9	0.25	0.131414	5.0	717961.0	0.525655	Y
3	IC 410-397829/8	1.25	0.554978	5.0	942199.0	0.443983	Y
4	IC 410-397829/7	3.75	1.815552	5.0	708713.0	0.484147	Y
5	ICIS 410-397829/2	7.5	3.56881	5.0	781685.0	0.475841	Y
6	IC 410-397829/6	12.5	5.529997	5.0	925798.0	0.4424	Y
7	IC 410-397829/5	20.0	9.218577	5.0	853884.0	0.460929	Y
8	IC 410-397829/4	30.0	13.975135	5.0	822157.0	0.465838	Y



Calibration / N-Nitrosopiperidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

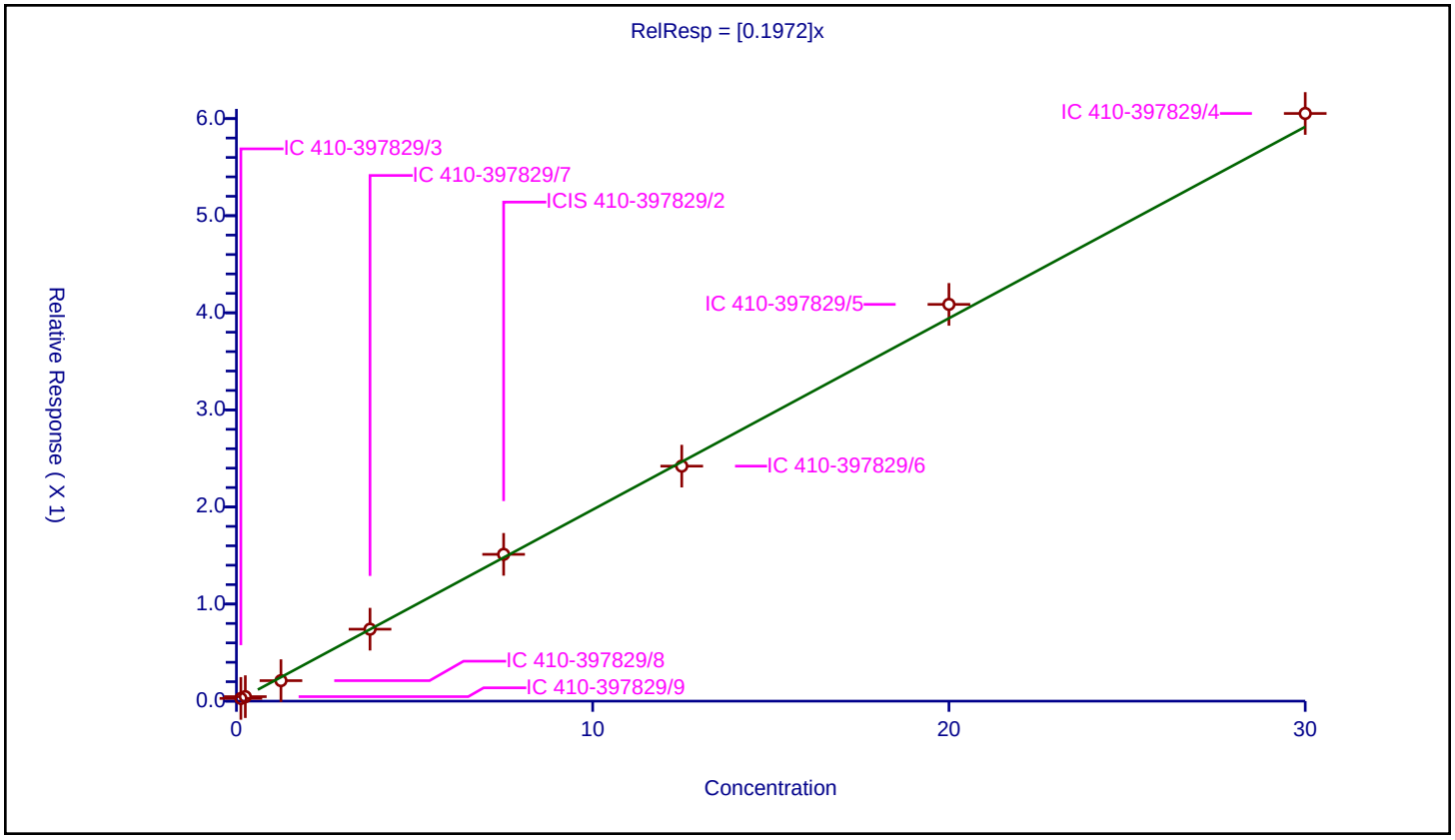
Curve Coefficients

Intercept:	0
Slope:	0.1972

Error Coefficients

Standard Error:	500000
Relative Standard Error:	8.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.02812	5.0	847959.0	0.224964	Y
2	IC 410-397829/9	0.25	0.046207	5.0	717961.0	0.184829	Y
3	IC 410-397829/8	1.25	0.211006	5.0	942199.0	0.168805	Y
4	IC 410-397829/7	3.75	0.740956	5.0	708713.0	0.197588	Y
5	ICIS 410-397829/2	7.5	1.511933	5.0	781685.0	0.201591	Y
6	IC 410-397829/6	12.5	2.420604	5.0	925798.0	0.193648	Y
7	IC 410-397829/5	20.0	4.08655	5.0	853884.0	0.204328	Y
8	IC 410-397829/4	30.0	6.052907	5.0	822157.0	0.201764	Y



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Calibration / Isophorone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

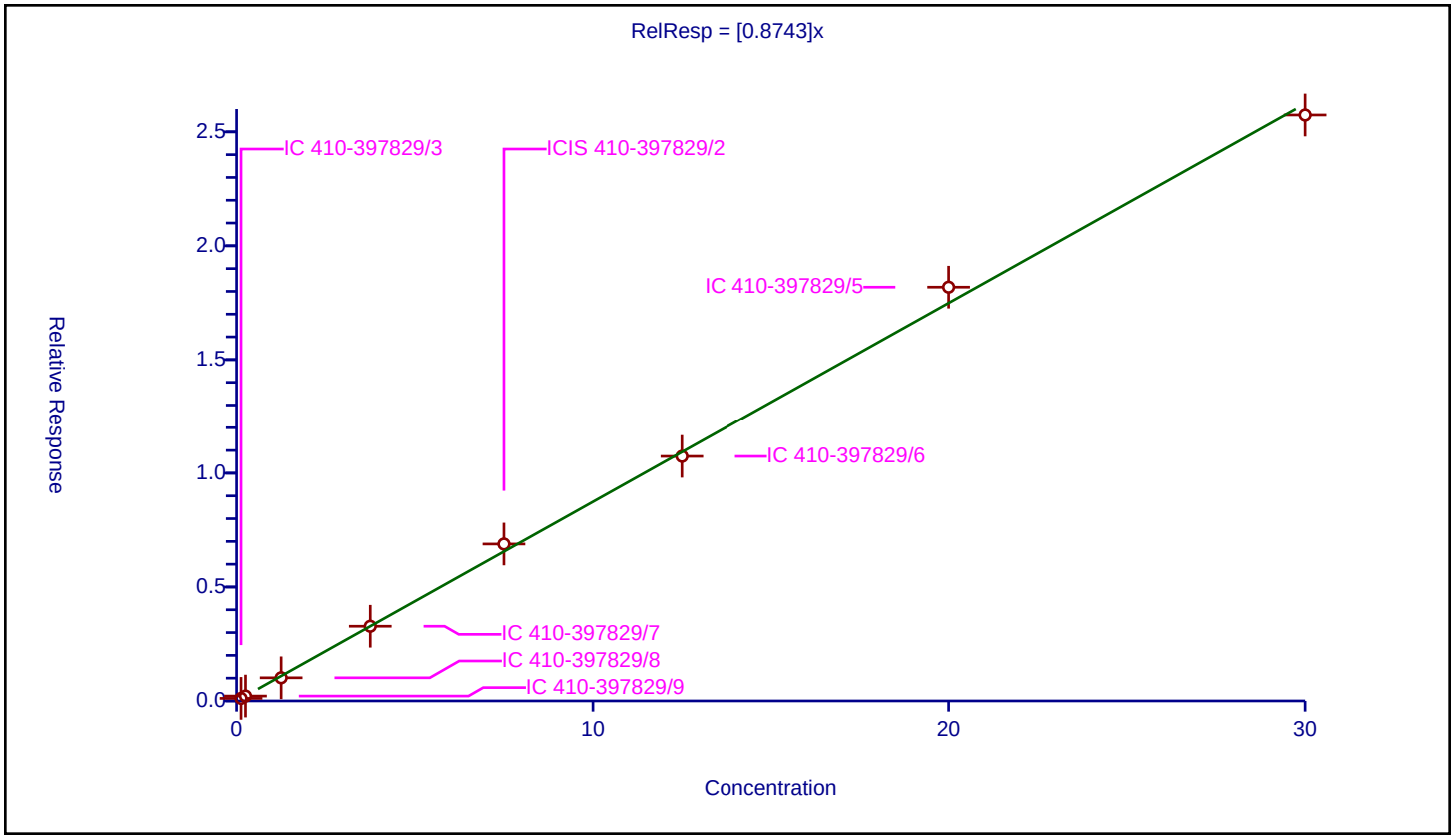
Curve Coefficients

Intercept:	0
Slope:	0.8743

Error Coefficients

Standard Error:	2170000
Relative Standard Error:	4.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.113166	5.0	847959.0	0.905327	Y
2	IC 410-397829/9	0.25	0.214482	5.0	717961.0	0.85793	Y
3	IC 410-397829/8	1.25	1.01547	5.0	942199.0	0.812376	Y
4	IC 410-397829/7	3.75	3.278097	5.0	708713.0	0.874159	Y
5	ICIS 410-397829/2	7.5	6.887448	5.0	781685.0	0.918326	Y
6	IC 410-397829/6	12.5	10.739584	5.0	925798.0	0.859167	Y
7	IC 410-397829/5	20.0	18.184156	5.0	853884.0	0.909208	Y
8	IC 410-397829/4	30.0	25.738661	5.0	822157.0	0.857955	Y



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Calibration / 2-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

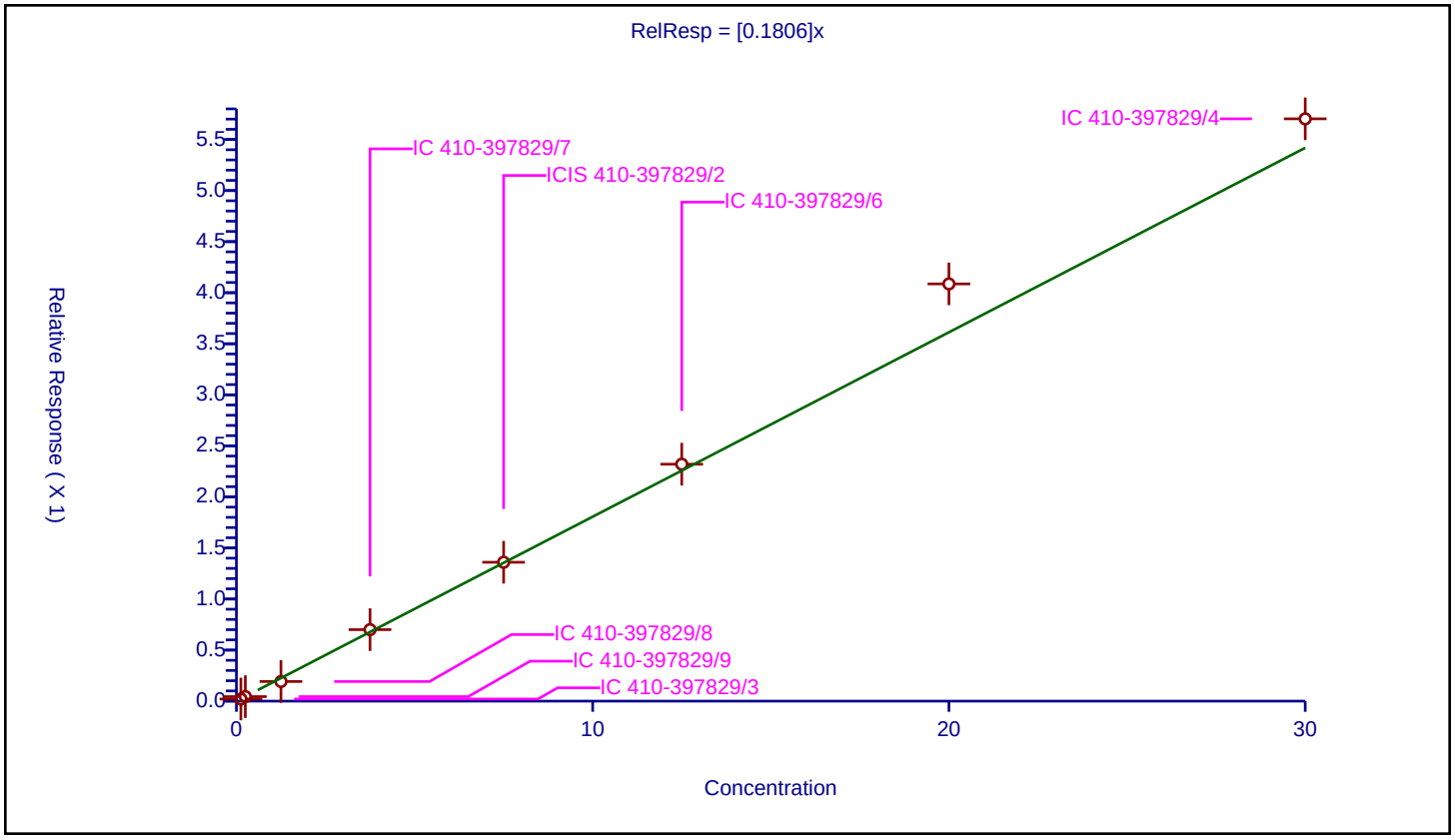
Curve Coefficients

Intercept:	0
Slope:	0.1806

Error Coefficients

Standard Error:	479000
Relative Standard Error:	8.5
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.020844	5.0	847959.0	0.166753	Y
2	IC 410-397829/9	0.25	0.044104	5.0	717961.0	0.176416	Y
3	IC 410-397829/8	1.25	0.192109	5.0	942199.0	0.153687	Y
4	IC 410-397829/7	3.75	0.700241	5.0	708713.0	0.186731	Y
5	ICIS 410-397829/2	7.5	1.360075	5.0	781685.0	0.181343	Y
6	IC 410-397829/6	12.5	2.320506	5.0	925798.0	0.18564	Y
7	IC 410-397829/5	20.0	4.086199	5.0	853884.0	0.20431	Y
8	IC 410-397829/4	30.0	5.7027	5.0	822157.0	0.19009	Y



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Calibration / 2,4-Dimethylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

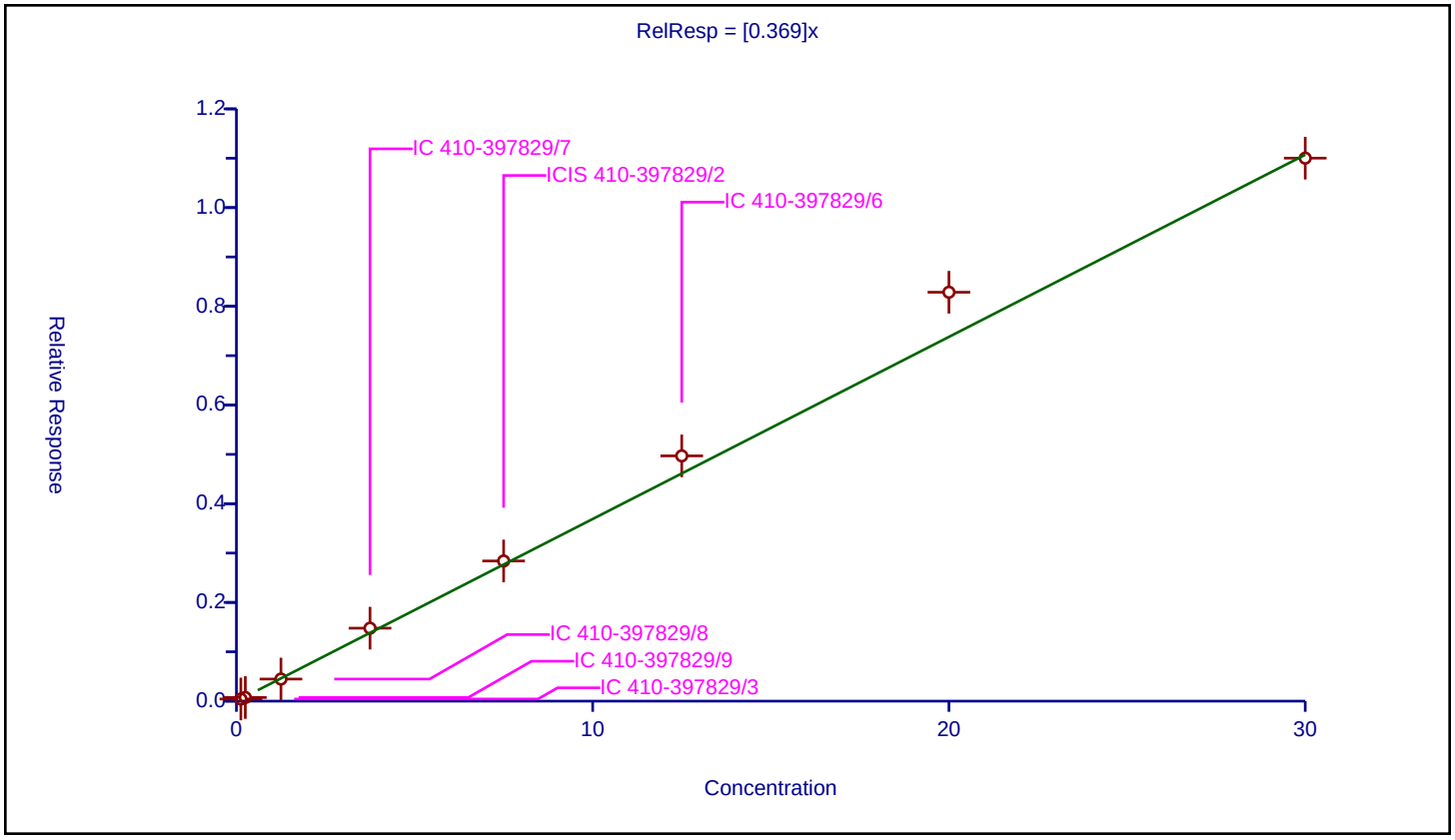
Curve Coefficients

Intercept:	0
Slope:	0.369

Error Coefficients

Standard Error:	954000
Relative Standard Error:	10.1
Correlation Coefficient:	0.986
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.043422	5.0	847959.0	0.347375	Y
2	IC 410-397829/9	0.25	0.073785	5.0	717961.0	0.295141	Y
3	IC 410-397829/8	1.25	0.447761	5.0	942199.0	0.358209	Y
4	IC 410-397829/7	3.75	1.478328	5.0	708713.0	0.394221	Y
5	ICIS 410-397829/2	7.5	2.840083	5.0	781685.0	0.378678	Y
6	IC 410-397829/6	12.5	4.969259	5.0	925798.0	0.397541	Y
7	IC 410-397829/5	20.0	8.285165	5.0	853884.0	0.414258	Y
8	IC 410-397829/4	30.0	11.002108	5.0	822157.0	0.366737	Y



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Calibration / o,o',o''-Triethylphosphorothioate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

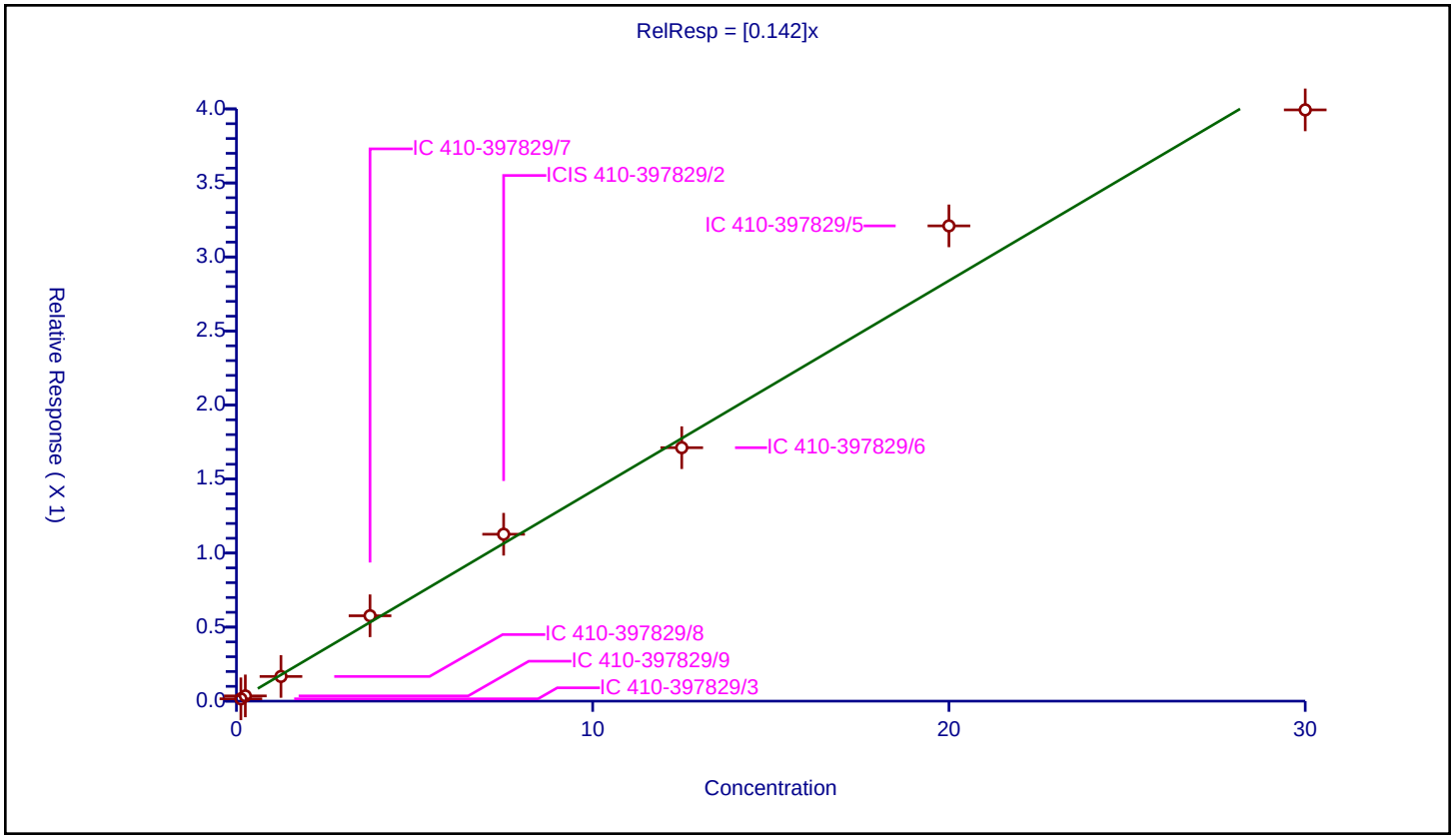
Curve Coefficients

Intercept:	0
Slope:	0.142

Error Coefficients

Standard Error:	353000
Relative Standard Error:	8.3
Correlation Coefficient:	0.981
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.015791	5.0	847959.0	0.126327	Y
2	IC 410-397829/9	0.25	0.035399	5.0	717961.0	0.141595	Y
3	IC 410-397829/8	1.25	0.16669	5.0	942199.0	0.133352	Y
4	IC 410-397829/7	3.75	0.57663	5.0	708713.0	0.153768	Y
5	ICIS 410-397829/2	7.5	1.1272	5.0	781685.0	0.150293	Y
6	IC 410-397829/6	12.5	1.711783	5.0	925798.0	0.136943	Y
7	IC 410-397829/5	20.0	3.20988	5.0	853884.0	0.160494	Y
8	IC 410-397829/4	30.0	3.993264	5.0	822157.0	0.133109	Y



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Calibration / Bis(2-chloroethoxy)methane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

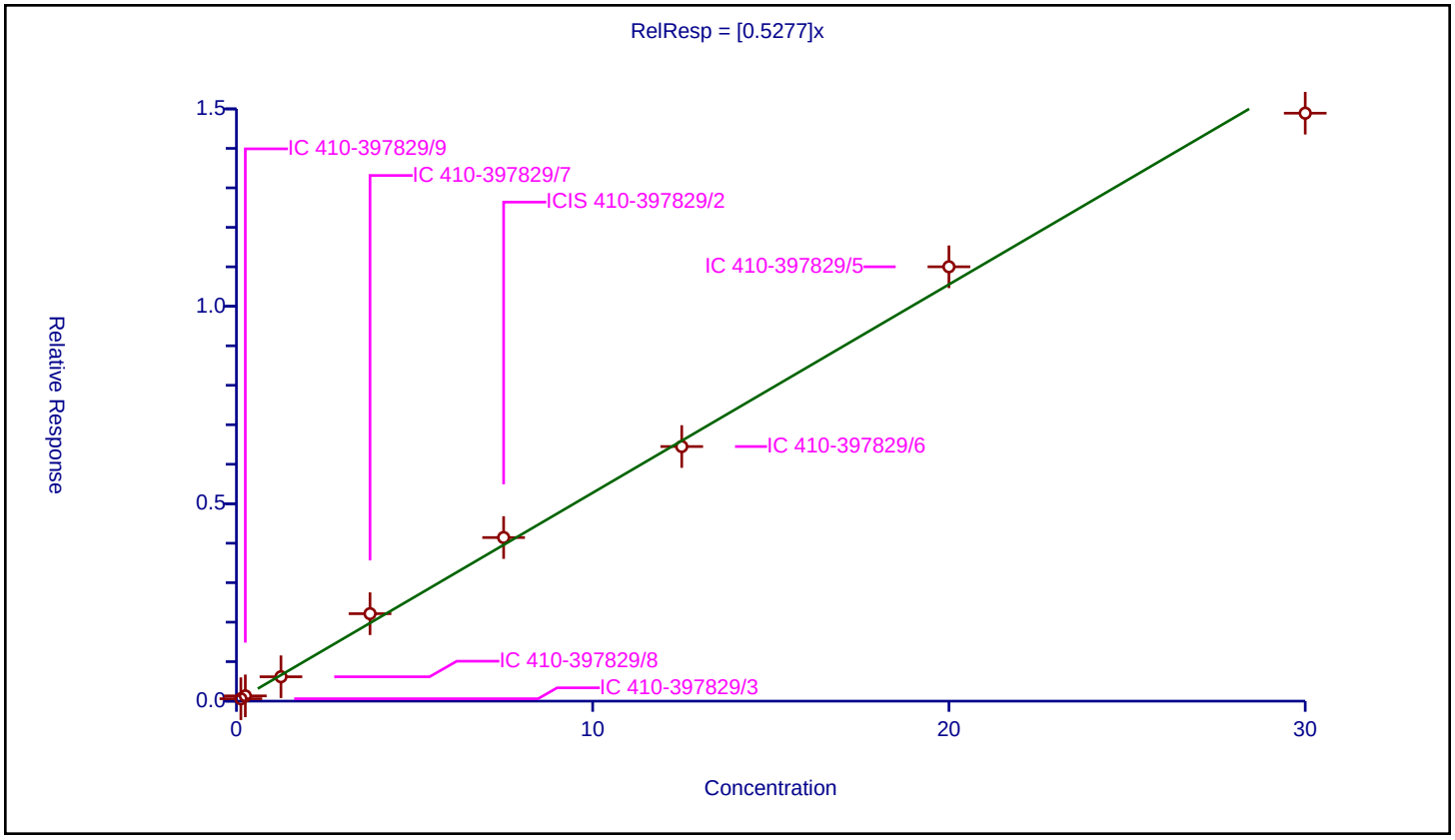
Curve Coefficients

Intercept:	0
Slope:	0.5277

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	6.8
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.061029	5.0	847959.0	0.488231	Y
2	IC 410-397829/9	0.25	0.133426	5.0	717961.0	0.533706	Y
3	IC 410-397829/8	1.25	0.617317	5.0	942199.0	0.493853	Y
4	IC 410-397829/7	3.75	2.215093	5.0	708713.0	0.590691	Y
5	ICIS 410-397829/2	7.5	4.14353	5.0	781685.0	0.552471	Y
6	IC 410-397829/6	12.5	6.448502	5.0	925798.0	0.51588	Y
7	IC 410-397829/5	20.0	11.001225	5.0	853884.0	0.550061	Y
8	IC 410-397829/4	30.0	14.891347	5.0	822157.0	0.496378	Y



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Calibration / 2,4-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

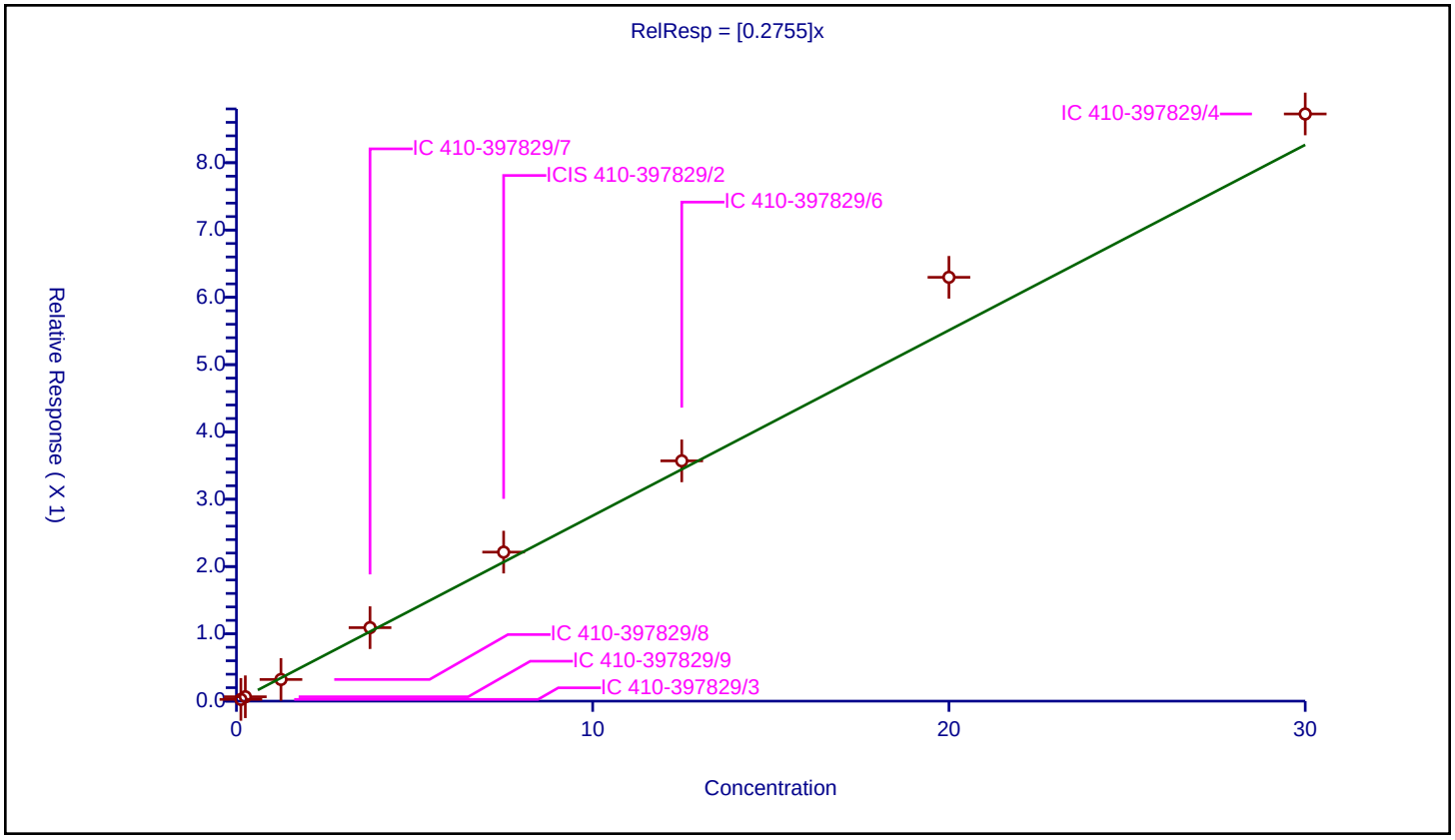
Curve Coefficients

Intercept:	0
Slope:	0.2755

Error Coefficients

Standard Error:	737000
Relative Standard Error:	12.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.026033	5.0	847959.0	0.208265	Y
2	IC 410-397829/9	0.25	0.065157	5.0	717961.0	0.260627	Y
3	IC 410-397829/8	1.25	0.321896	5.0	942199.0	0.257517	Y
4	IC 410-397829/7	3.75	1.092177	5.0	708713.0	0.291247	Y
5	ICIS 410-397829/2	7.5	2.214537	5.0	781685.0	0.295272	Y
6	IC 410-397829/6	12.5	3.570044	5.0	925798.0	0.285604	Y
7	IC 410-397829/5	20.0	6.297788	5.0	853884.0	0.314889	Y
8	IC 410-397829/4	30.0	8.724964	5.0	822157.0	0.290832	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

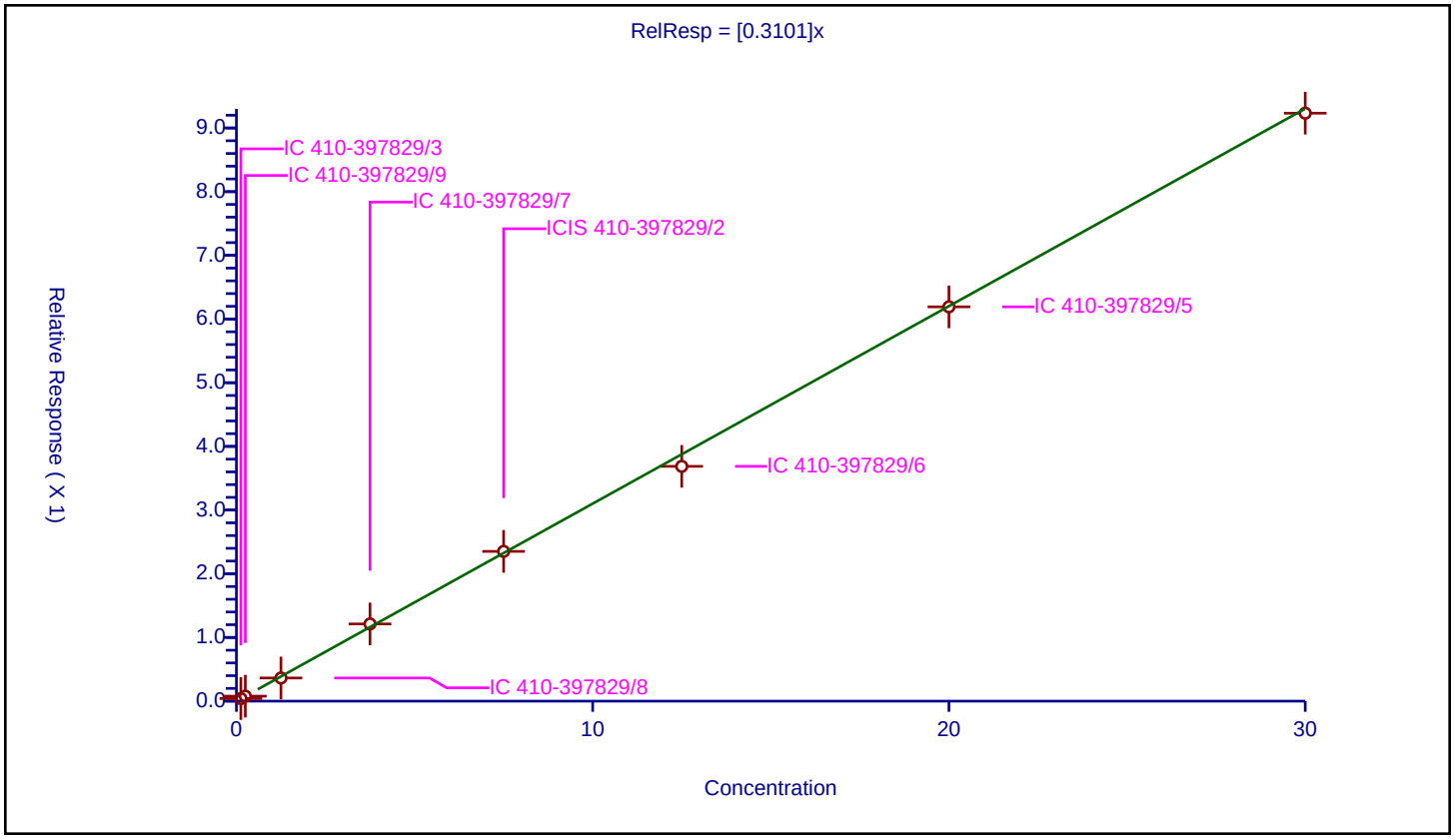
Curve Coefficients

Intercept:	0
Slope:	0.3101

Error Coefficients

Standard Error:	761000
Relative Standard Error:	4.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.040922	5.0	847959.0	0.327374	Y
2	IC 410-397829/9	0.25	0.078382	5.0	717961.0	0.313527	Y
3	IC 410-397829/8	1.25	0.363548	5.0	942199.0	0.290839	Y
4	IC 410-397829/7	3.75	1.212388	5.0	708713.0	0.323303	Y
5	ICIS 410-397829/2	7.5	2.351593	5.0	781685.0	0.313546	Y
6	IC 410-397829/6	12.5	3.686911	5.0	925798.0	0.294953	Y
7	IC 410-397829/5	20.0	6.191602	5.0	853884.0	0.30958	Y
8	IC 410-397829/4	30.0	9.232464	5.0	822157.0	0.307749	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

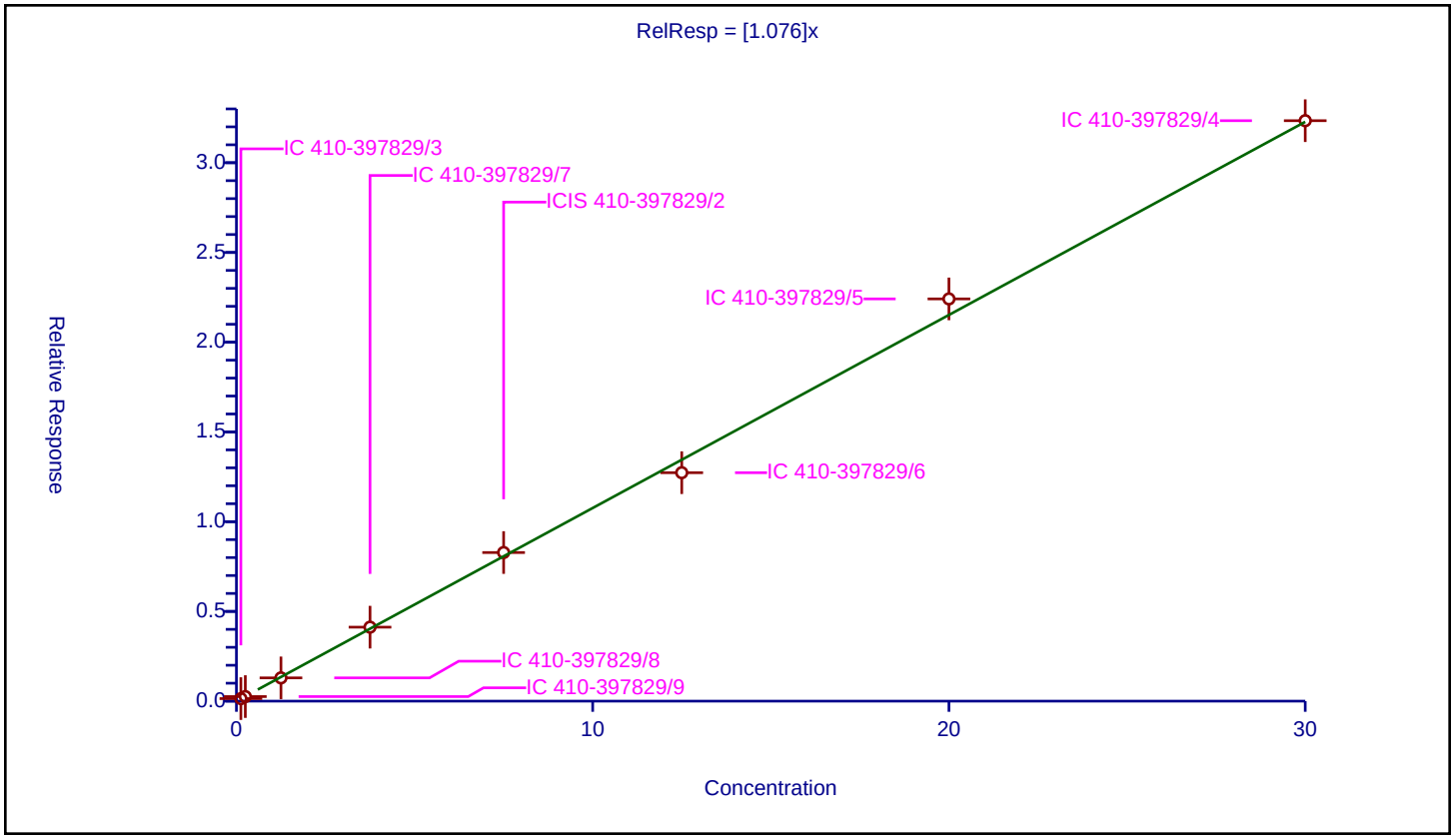
Curve Coefficients

Intercept:	0
Slope:	1.076

Error Coefficients

Standard Error:	2690000
Relative Standard Error:	4.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.14154	5.0	847959.0	1.132319	Y
2	IC 410-397829/9	0.25	0.254505	5.0	717961.0	1.018022	Y
3	IC 410-397829/8	1.25	1.296053	5.0	942199.0	1.036843	Y
4	IC 410-397829/7	3.75	4.122268	5.0	708713.0	1.099271	Y
5	ICIS 410-397829/2	7.5	8.280318	5.0	781685.0	1.104042	Y
6	IC 410-397829/6	12.5	12.728894	5.0	925798.0	1.018312	Y
7	IC 410-397829/5	20.0	22.412406	5.0	853884.0	1.12062	Y
8	IC 410-397829/4	30.0	32.343245	5.0	822157.0	1.078108	Y



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Calibration / Alpha-Terpineol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

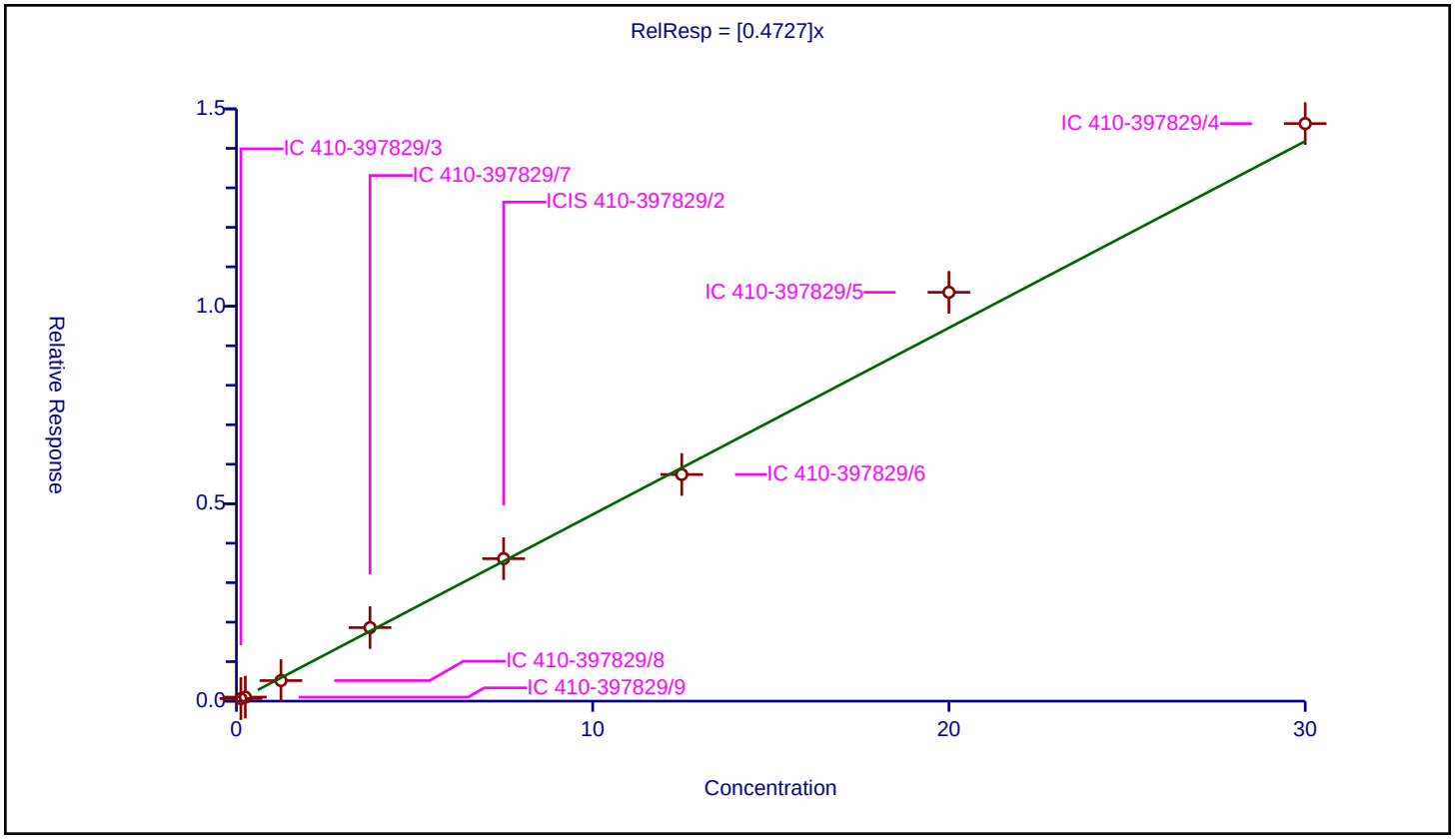
Curve Coefficients

Intercept:	0
Slope:	0.4727

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	8.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.064136	5.0	847959.0	0.513091	Y
2	IC 410-397829/9	0.25	0.102485	5.0	717961.0	0.409939	Y
3	IC 410-397829/8	1.25	0.520347	5.0	942199.0	0.416277	Y
4	IC 410-397829/7	3.75	1.862827	5.0	708713.0	0.496754	Y
5	ICIS 410-397829/2	7.5	3.607898	5.0	781685.0	0.481053	Y
6	IC 410-397829/6	12.5	5.74034	5.0	925798.0	0.459227	Y
7	IC 410-397829/5	20.0	10.354697	5.0	853884.0	0.517735	Y
8	IC 410-397829/4	30.0	14.627401	5.0	822157.0	0.48758	Y



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Calibration / 4-Chloroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

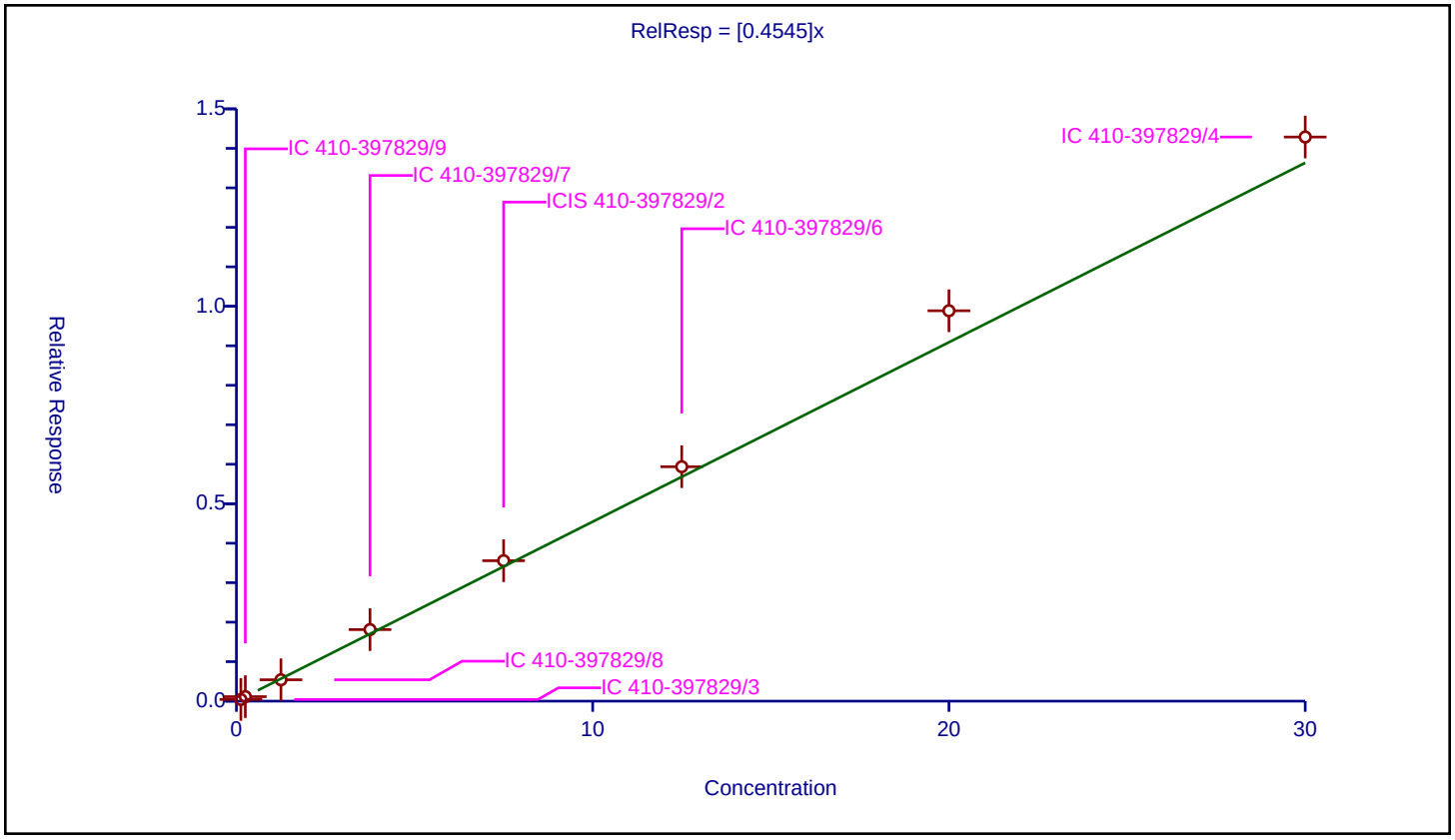
Curve Coefficients

Intercept:	0
Slope:	0.4545

Error Coefficients

Standard Error:	1190000
Relative Standard Error:	10.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.043056	5.0	847959.0	0.344451	Y
2	IC 410-397829/9	0.25	0.113808	5.0	717961.0	0.455234	Y
3	IC 410-397829/8	1.25	0.541175	5.0	942199.0	0.43294	Y
4	IC 410-397829/7	3.75	1.812257	5.0	708713.0	0.483268	Y
5	ICIS 410-397829/2	7.5	3.556861	5.0	781685.0	0.474248	Y
6	IC 410-397829/6	12.5	5.937197	5.0	925798.0	0.474976	Y
7	IC 410-397829/5	20.0	9.887479	5.0	853884.0	0.494374	Y
8	IC 410-397829/4	30.0	14.287691	5.0	822157.0	0.476256	Y



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Calibration / 2,6-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

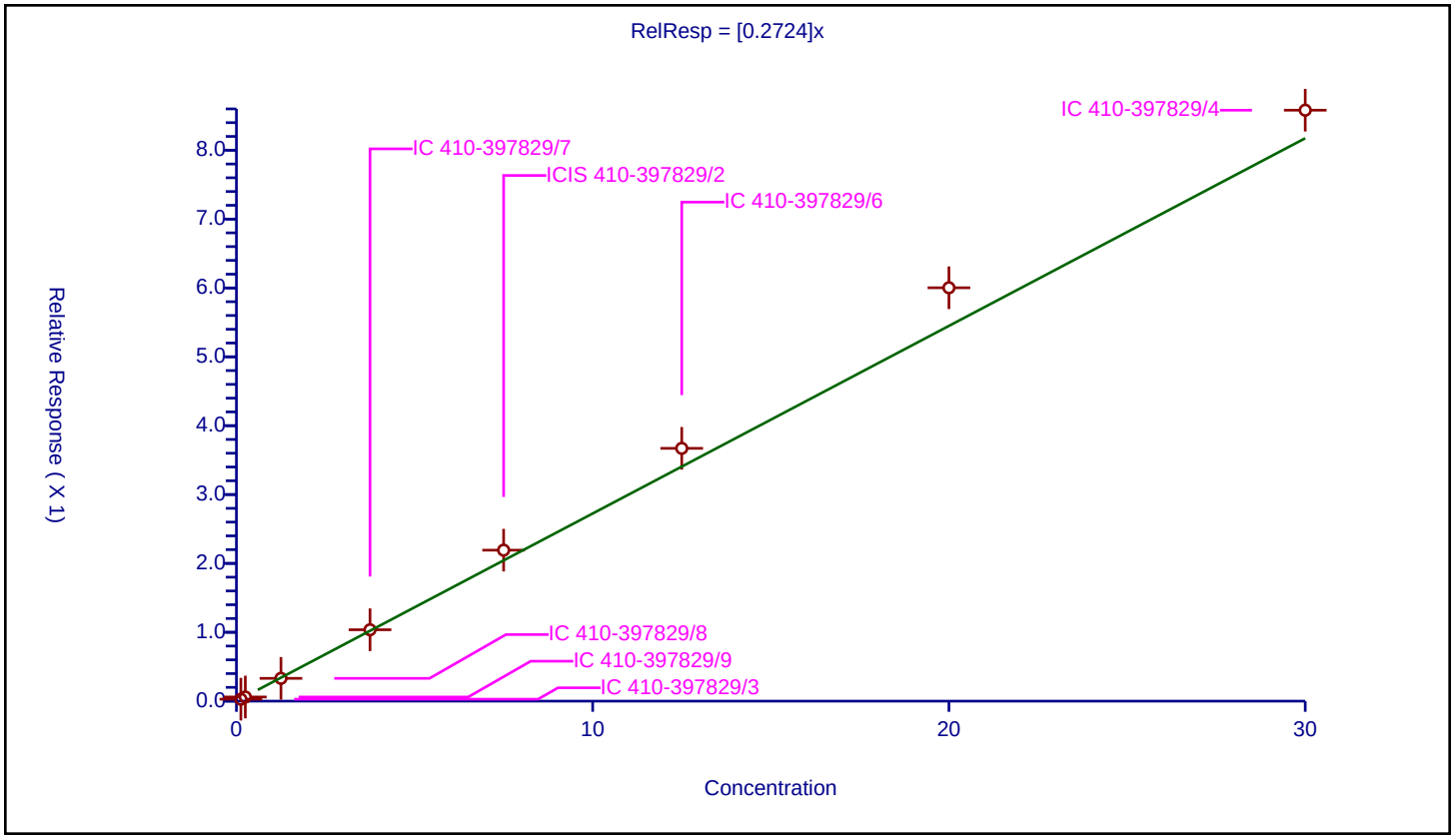
Curve Coefficients

Intercept:	0
Slope:	0.2724

Error Coefficients

Standard Error:	722000
Relative Standard Error:	9.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.028291	5.0	847959.0	0.226332	Y
2	IC 410-397829/9	0.25	0.060038	5.0	717961.0	0.240152	Y
3	IC 410-397829/8	1.25	0.330721	5.0	942199.0	0.264577	Y
4	IC 410-397829/7	3.75	1.036491	5.0	708713.0	0.276398	Y
5	ICIS 410-397829/2	7.5	2.192354	5.0	781685.0	0.292314	Y
6	IC 410-397829/6	12.5	3.670768	5.0	925798.0	0.293661	Y
7	IC 410-397829/5	20.0	6.002542	5.0	853884.0	0.300127	Y
8	IC 410-397829/4	30.0	8.581074	5.0	822157.0	0.286036	Y



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Calibration / Hexachloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

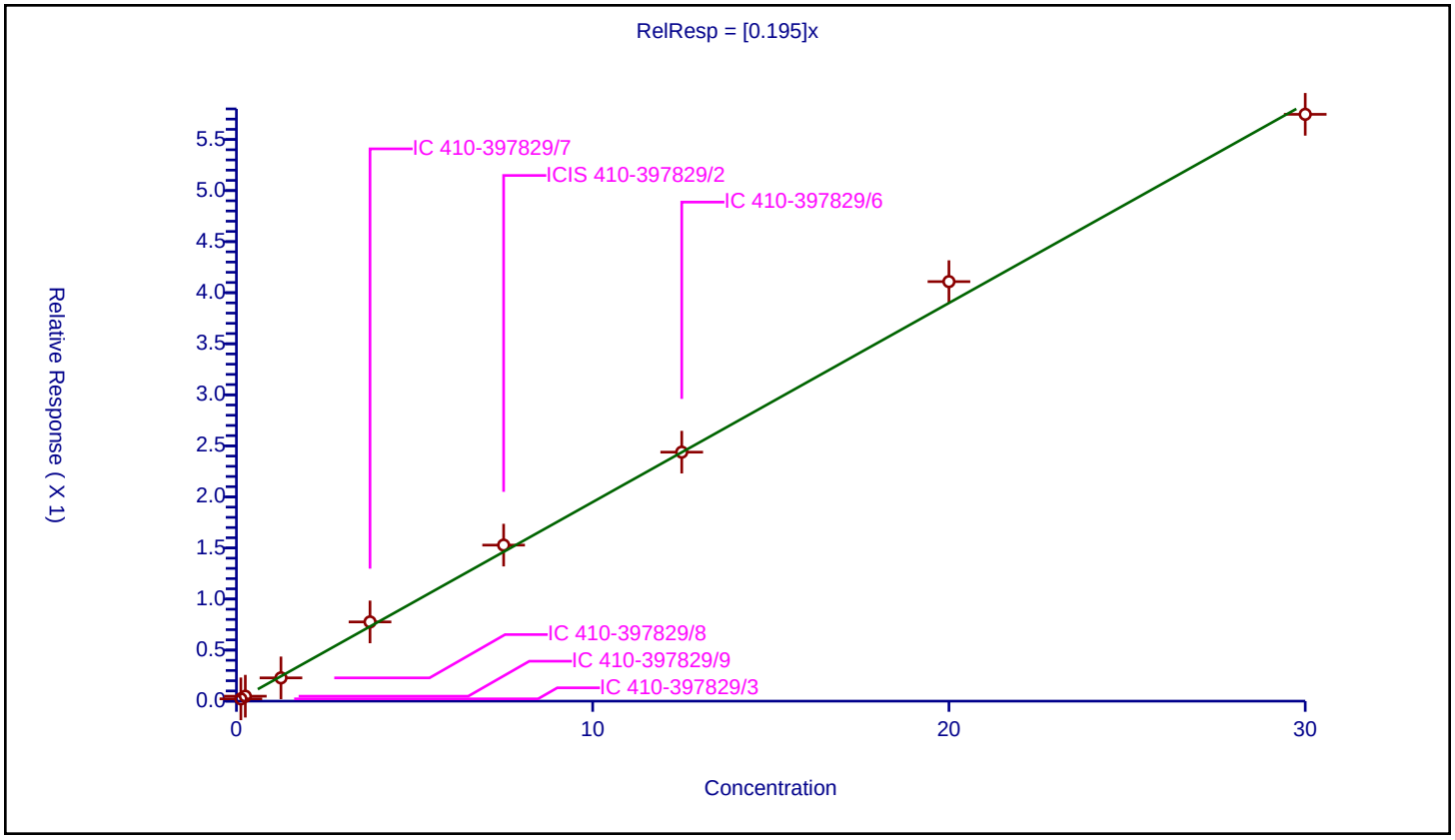
Curve Coefficients

Intercept:	0
Slope:	0.195

Error Coefficients

Standard Error:	487000
Relative Standard Error:	5.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.022654	5.0	847959.0	0.181235	Y
2	IC 410-397829/9	0.25	0.048331	5.0	717961.0	0.193325	Y
3	IC 410-397829/8	1.25	0.22793	5.0	942199.0	0.182344	Y
4	IC 410-397829/7	3.75	0.775921	5.0	708713.0	0.206912	Y
5	ICIS 410-397829/2	7.5	1.527988	5.0	781685.0	0.203732	Y
6	IC 410-397829/6	12.5	2.438442	5.0	925798.0	0.195075	Y
7	IC 410-397829/5	20.0	4.108503	5.0	853884.0	0.205425	Y
8	IC 410-397829/4	30.0	5.746713	5.0	822157.0	0.191557	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

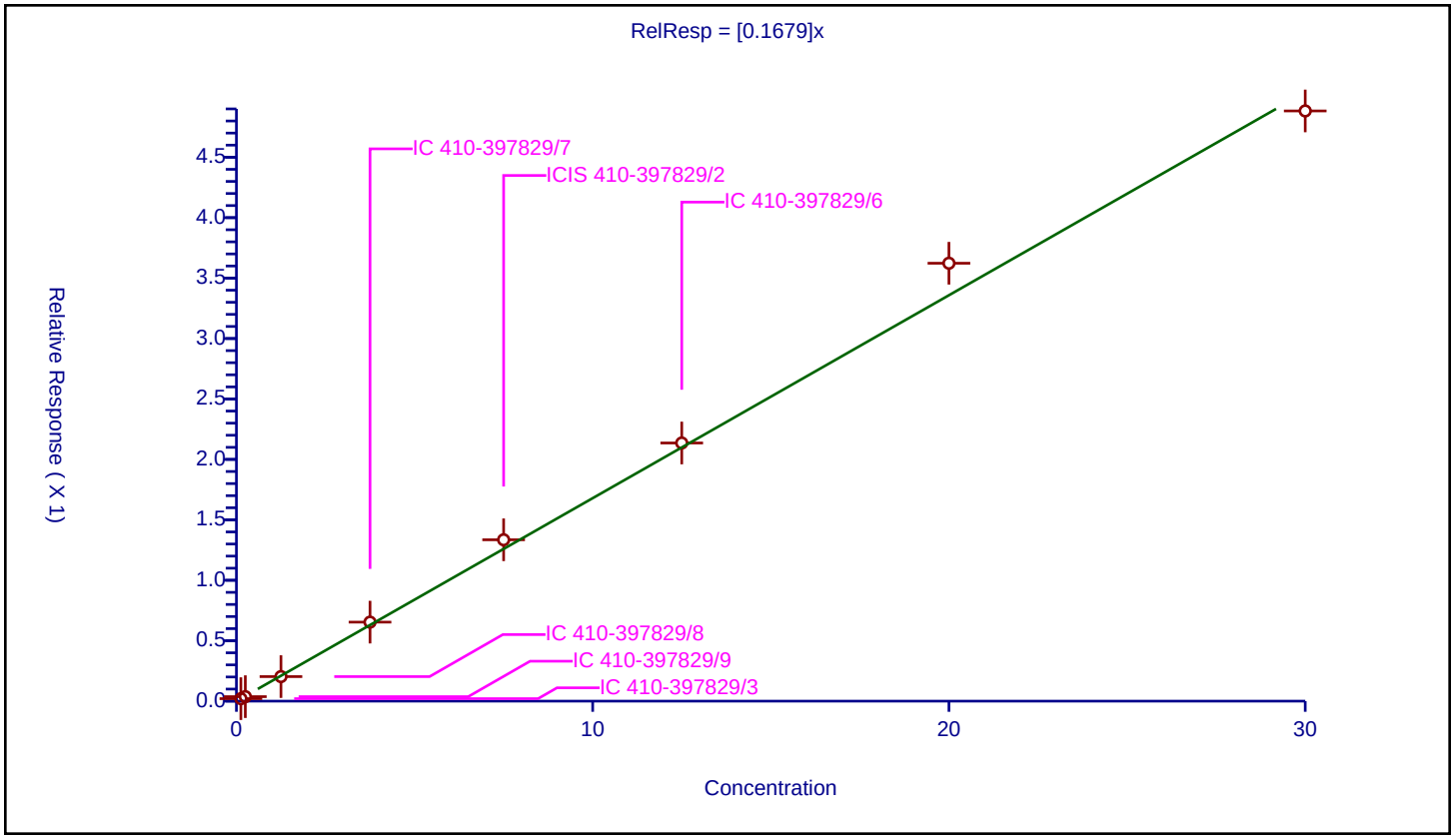
Curve Coefficients

Intercept:	0
Slope:	0.1679

Error Coefficients

Standard Error:	420000
Relative Standard Error:	6.2
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.020626	5.0	847959.0	0.165008	Y
2	IC 410-397829/9	0.25	0.037175	5.0	717961.0	0.148699	Y
3	IC 410-397829/8	1.25	0.203152	5.0	942199.0	0.162522	Y
4	IC 410-397829/7	3.75	0.653636	5.0	708713.0	0.174303	Y
5	ICIS 410-397829/2	7.5	1.335129	5.0	781685.0	0.178017	Y
6	IC 410-397829/6	12.5	2.135741	5.0	925798.0	0.170859	Y
7	IC 410-397829/5	20.0	3.623115	5.0	853884.0	0.181156	Y
8	IC 410-397829/4	30.0	4.882979	5.0	822157.0	0.162766	Y



Calibration / Quinoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

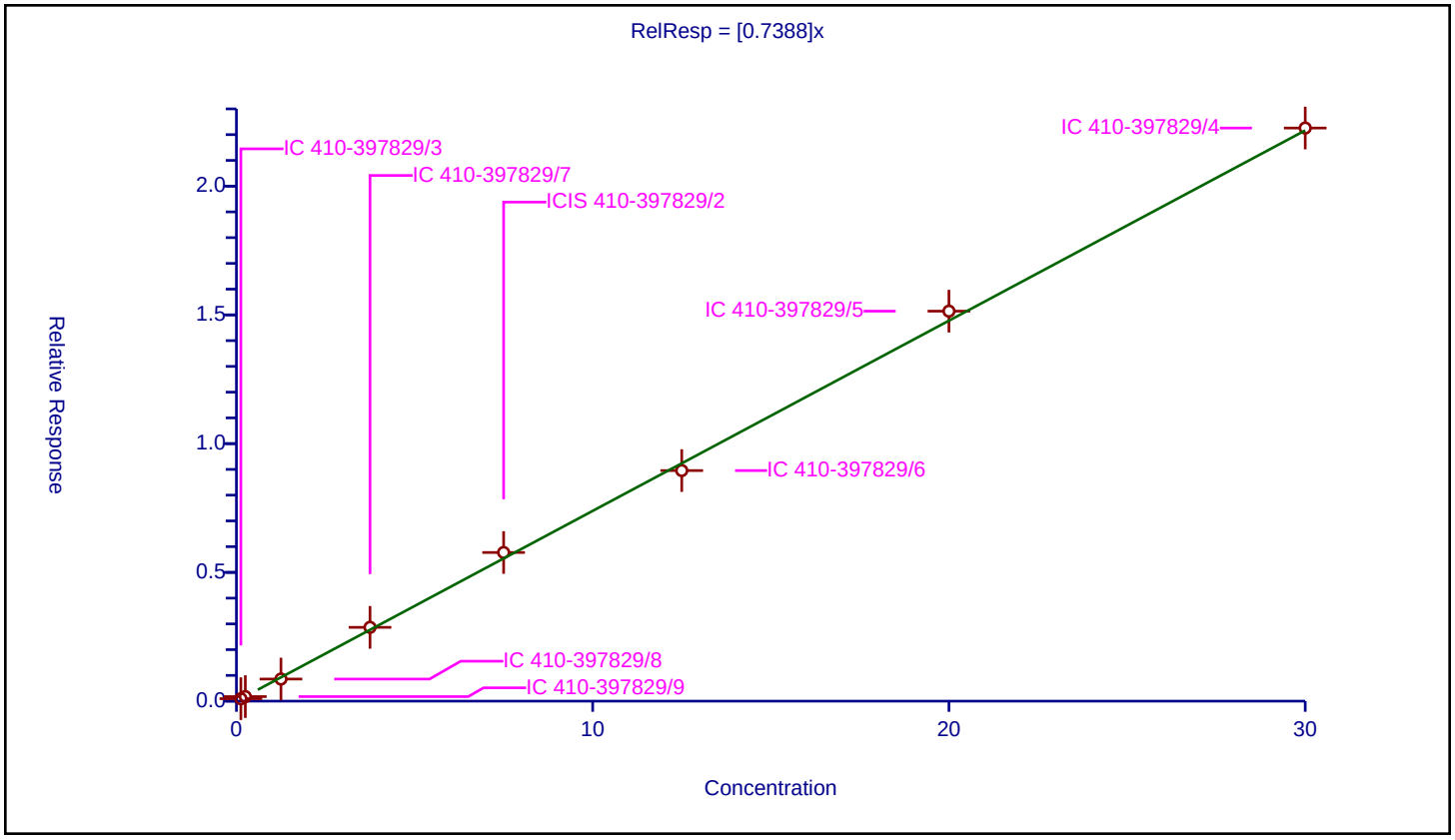
Curve Coefficients

Intercept:	0
Slope:	0.7388

Error Coefficients

Standard Error:	1850000
Relative Standard Error:	4.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.096054	5.0	847959.0	0.768433	Y
2	IC 410-397829/9	0.25	0.176395	5.0	717961.0	0.705582	Y
3	IC 410-397829/8	1.25	0.858359	5.0	942199.0	0.686687	Y
4	IC 410-397829/7	3.75	2.866118	5.0	708713.0	0.764298	Y
5	ICIS 410-397829/2	7.5	5.773406	5.0	781685.0	0.769787	Y
6	IC 410-397829/6	12.5	8.954389	5.0	925798.0	0.716351	Y
7	IC 410-397829/5	20.0	15.145453	5.0	853884.0	0.757273	Y
8	IC 410-397829/4	30.0	22.256668	5.0	822157.0	0.741889	Y



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Calibration / Caprolactam

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

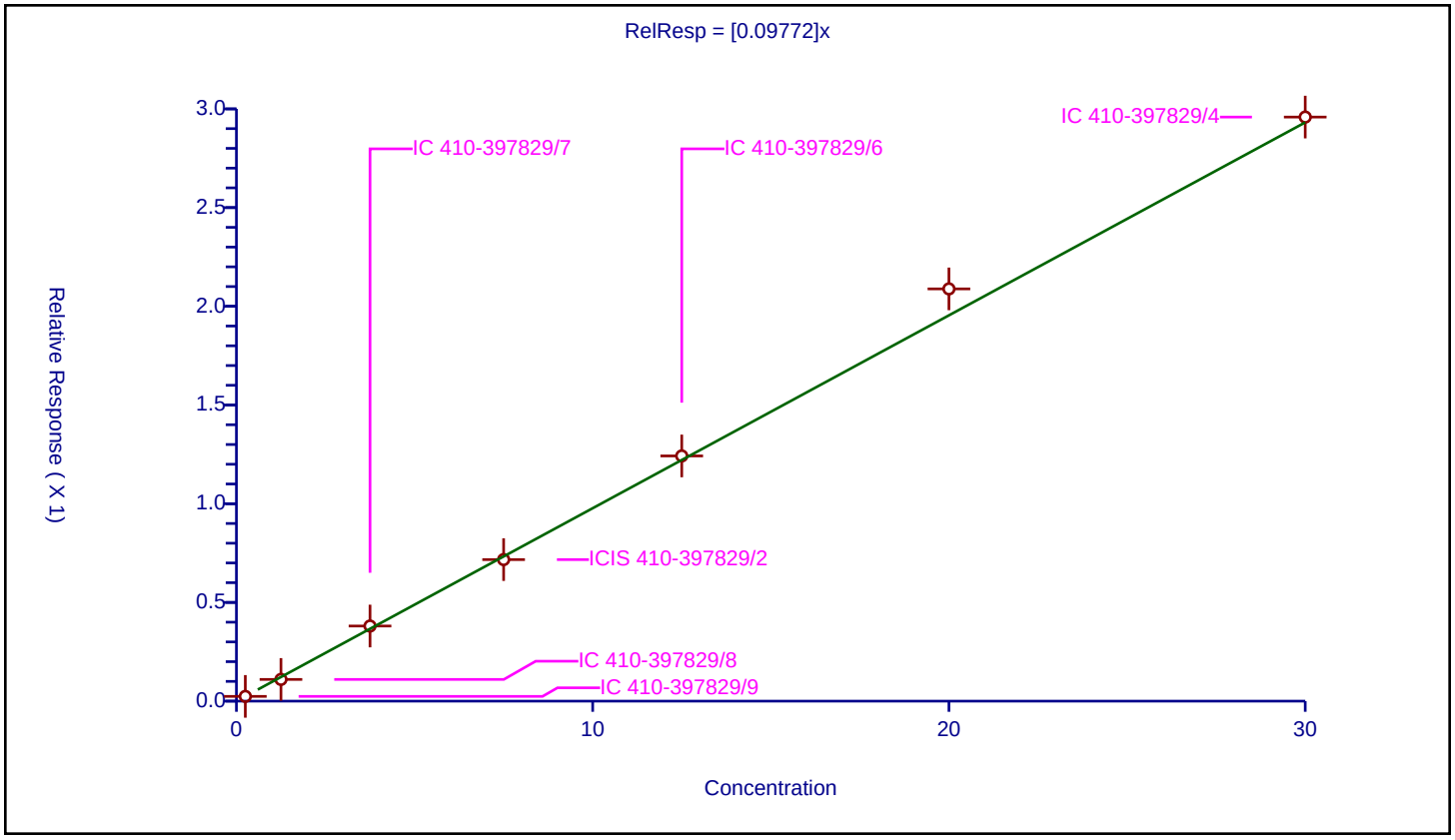
Curve Coefficients

Intercept:	0
Slope:	0.09772

Error Coefficients

Standard Error:	269000
Relative Standard Error:	5.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/9	0.25	0.024145	5.0	717961.0	0.096579	Y
2	IC 410-397829/8	1.25	0.109961	5.0	942199.0	0.087969	Y
3	IC 410-397829/7	3.75	0.380493	5.0	708713.0	0.101465	Y
4	ICIS 410-397829/2	7.5	0.717022	5.0	781685.0	0.095603	Y
5	IC 410-397829/6	12.5	1.242085	5.0	925798.0	0.099367	Y
6	IC 410-397829/5	20.0	2.088193	5.0	853884.0	0.10441	Y
7	IC 410-397829/4	30.0	2.958541	5.0	822157.0	0.098618	Y



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Calibration / N-Nitrosodi-n-butylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

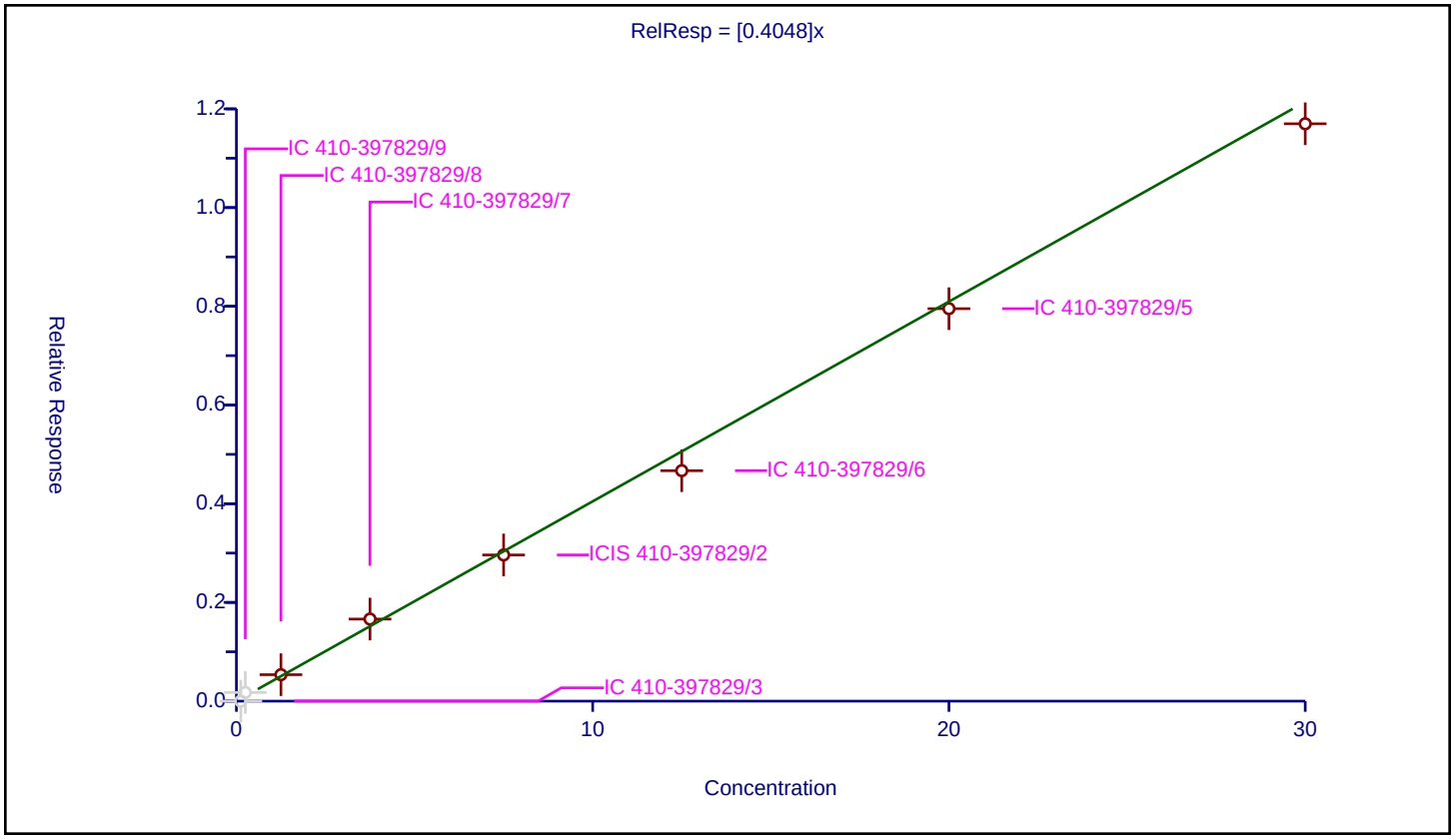
Curve Coefficients

Intercept:	0
Slope:	0.4048

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	6.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.0	5.0	847959.0	0.0	N
2	IC 410-397829/9	0.25	0.175434	5.0	717961.0	0.701737	N
3	IC 410-397829/8	1.25	0.536373	5.0	942199.0	0.429098	Y
4	IC 410-397829/7	3.75	1.663007	5.0	708713.0	0.443469	Y
5	ICIS 410-397829/2	7.5	2.961762	5.0	781685.0	0.394902	Y
6	IC 410-397829/6	12.5	4.669345	5.0	925798.0	0.373548	Y
7	IC 410-397829/5	20.0	7.952228	5.0	853884.0	0.397611	Y
8	IC 410-397829/4	30.0	11.698088	5.0	822157.0	0.389936	Y



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Calibration / p-Phenylene diamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

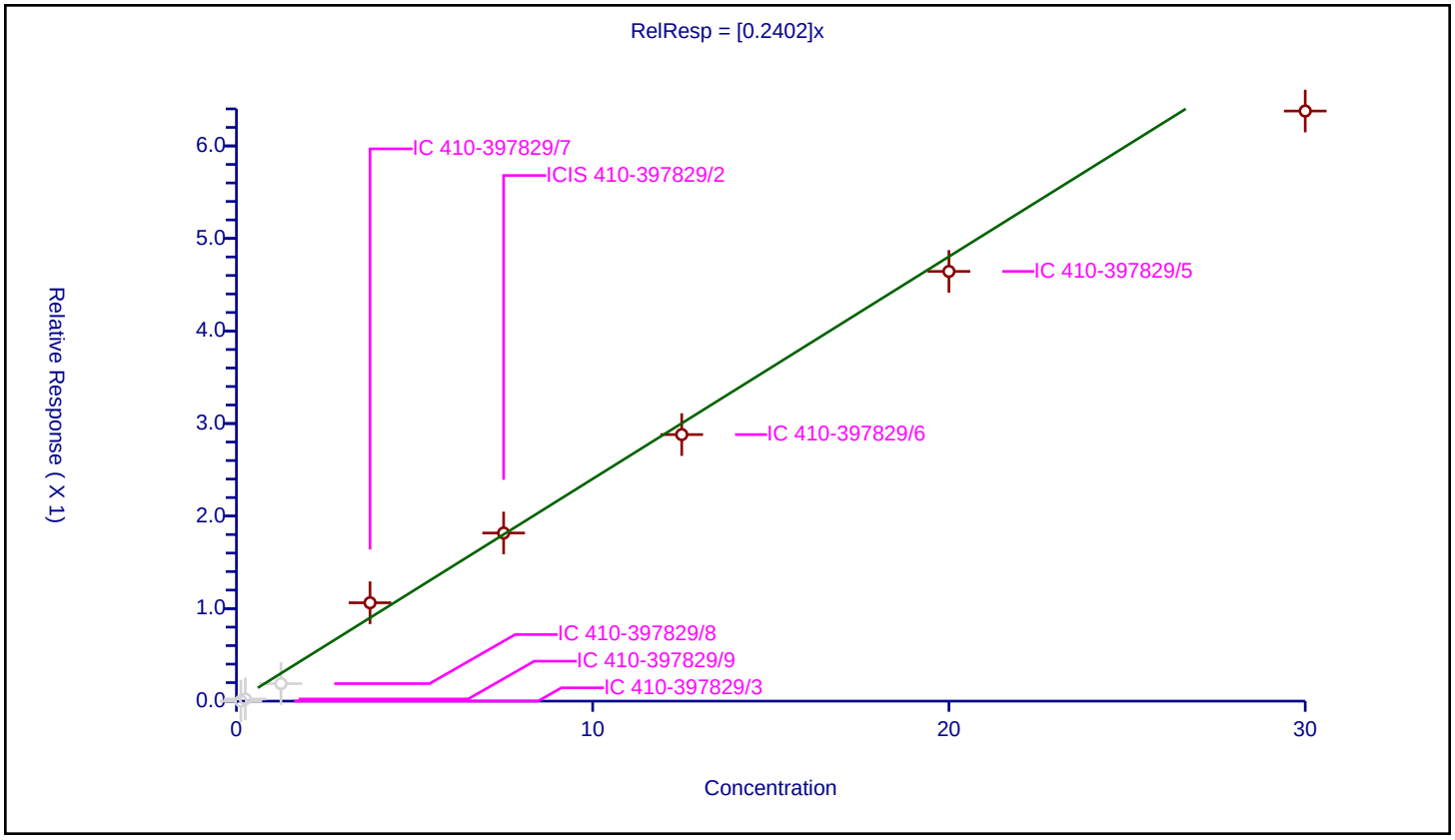
Curve Coefficients

Intercept:	0
Slope:	0.2402

Error Coefficients

Standard Error:	727000
Relative Standard Error:	11.0
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.0	5.0	847959.0	0.0	N
2	IC 410-397829/9	0.25	0.0231	5.0	717961.0	0.092401	N
3	IC 410-397829/8	1.25	0.189376	5.0	942199.0	0.151501	N
4	IC 410-397829/7	3.75	1.06304	5.0	708713.0	0.283477	Y
5	ICIS 410-397829/2	7.5	1.816729	5.0	781685.0	0.242231	Y
6	IC 410-397829/6	12.5	2.880699	5.0	925798.0	0.230456	Y
7	IC 410-397829/5	20.0	4.643839	5.0	853884.0	0.232192	Y
8	IC 410-397829/4	30.0	6.377	5.0	822157.0	0.212567	Y



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Calibration / 4-Chloro-3-methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

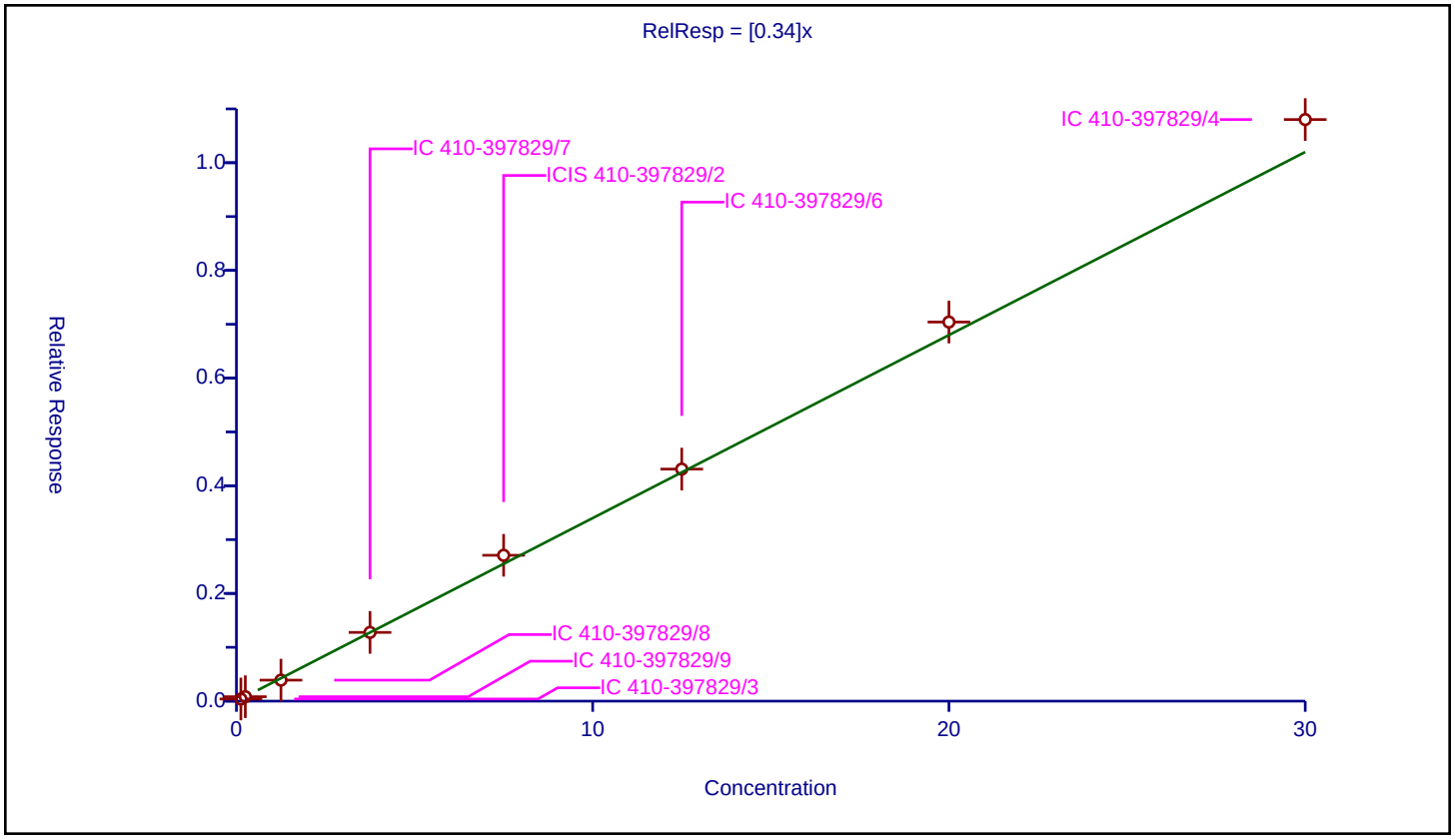
Curve Coefficients

Intercept:	0
Slope:	0.34

Error Coefficients

Standard Error:	883000
Relative Standard Error:	5.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.039849	5.0	847959.0	0.318789	Y
2	IC 410-397829/9	0.25	0.082595	5.0	717961.0	0.33038	Y
3	IC 410-397829/8	1.25	0.390077	5.0	942199.0	0.312061	Y
4	IC 410-397829/7	3.75	1.276306	5.0	708713.0	0.340348	Y
5	ICIS 410-397829/2	7.5	2.709186	5.0	781685.0	0.361225	Y
6	IC 410-397829/6	12.5	4.309725	5.0	925798.0	0.344778	Y
7	IC 410-397829/5	20.0	7.041278	5.0	853884.0	0.352064	Y
8	IC 410-397829/4	30.0	10.802292	5.0	822157.0	0.360076	Y



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Calibration / Safrole, Total

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

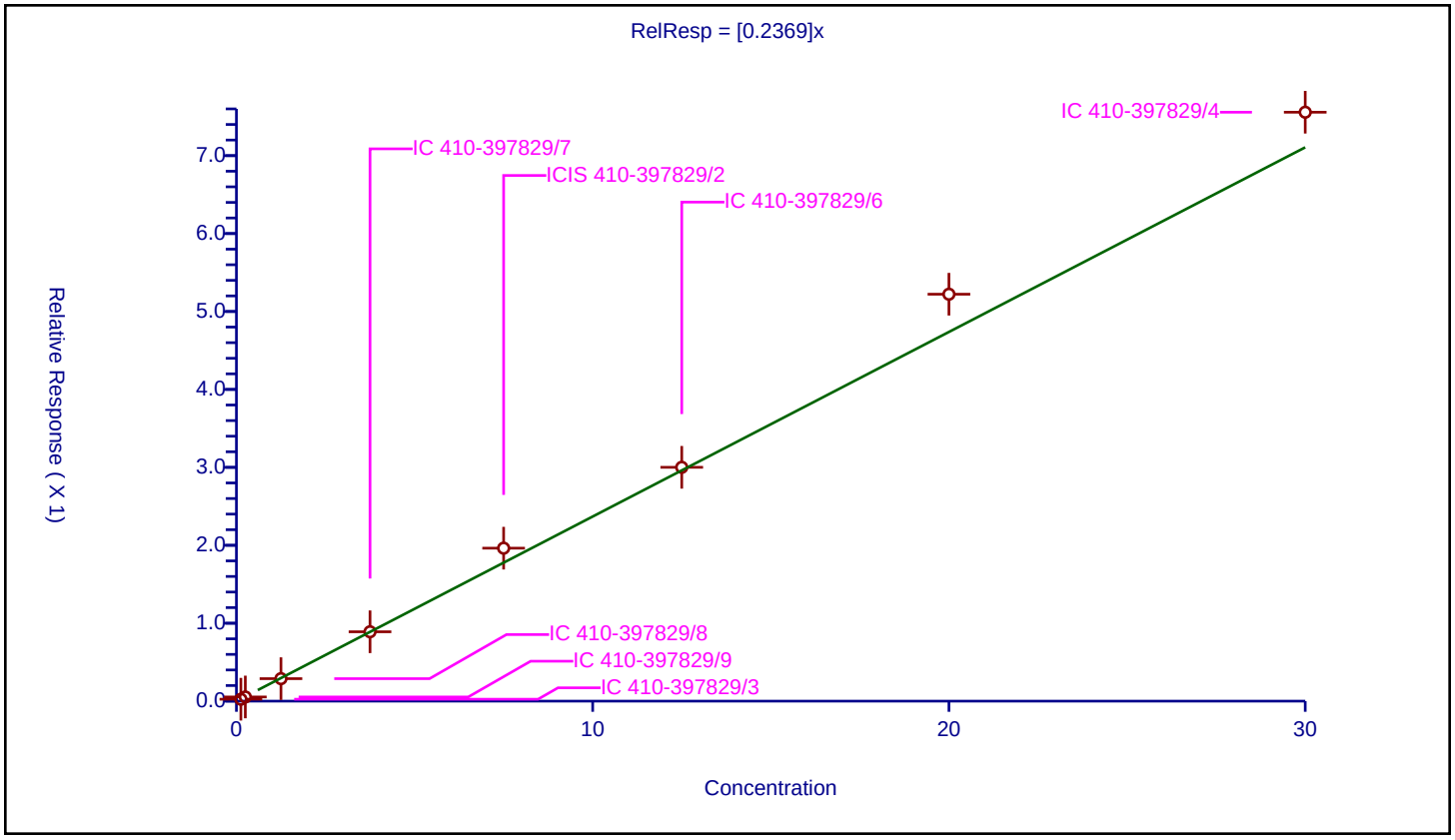
Curve Coefficients

Intercept:	0
Slope:	0.2369

Error Coefficients

Standard Error:	628000
Relative Standard Error:	9.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.024671	5.0	847959.0	0.197368	Y
2	IC 410-397829/9	0.25	0.053638	5.0	717961.0	0.214552	Y
3	IC 410-397829/8	1.25	0.288665	5.0	942199.0	0.230932	Y
4	IC 410-397829/7	3.75	0.890311	5.0	708713.0	0.237416	Y
5	ICIS 410-397829/2	7.5	1.963067	5.0	781685.0	0.261742	Y
6	IC 410-397829/6	12.5	3.000601	5.0	925798.0	0.240048	Y
7	IC 410-397829/5	20.0	5.221851	5.0	853884.0	0.261093	Y
8	IC 410-397829/4	30.0	7.557243	5.0	822157.0	0.251908	Y



Calibration / 2-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

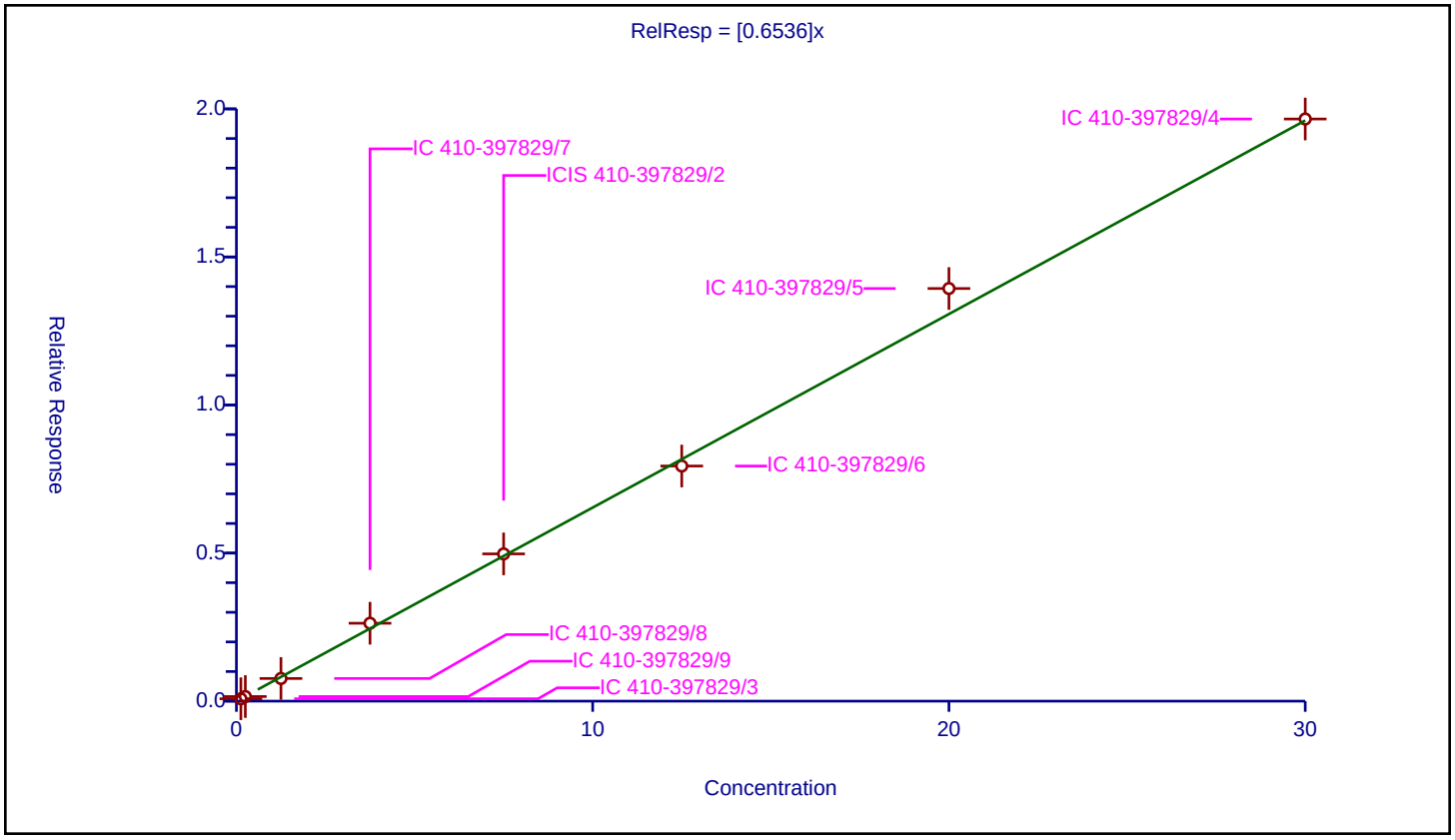
Curve Coefficients

Intercept:	0
Slope:	0.6536

Error Coefficients

Standard Error:	1650000
Relative Standard Error:	5.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.080399	5.0	847959.0	0.643191	Y
2	IC 410-397829/9	0.25	0.155482	5.0	717961.0	0.621928	Y
3	IC 410-397829/8	1.25	0.76538	5.0	942199.0	0.612304	Y
4	IC 410-397829/7	3.75	2.630162	5.0	708713.0	0.701377	Y
5	ICIS 410-397829/2	7.5	4.972297	5.0	781685.0	0.662973	Y
6	IC 410-397829/6	12.5	7.93941	5.0	925798.0	0.635153	Y
7	IC 410-397829/5	20.0	13.934112	5.0	853884.0	0.696706	Y
8	IC 410-397829/4	30.0	19.657821	5.0	822157.0	0.655261	Y



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Calibration / 1-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

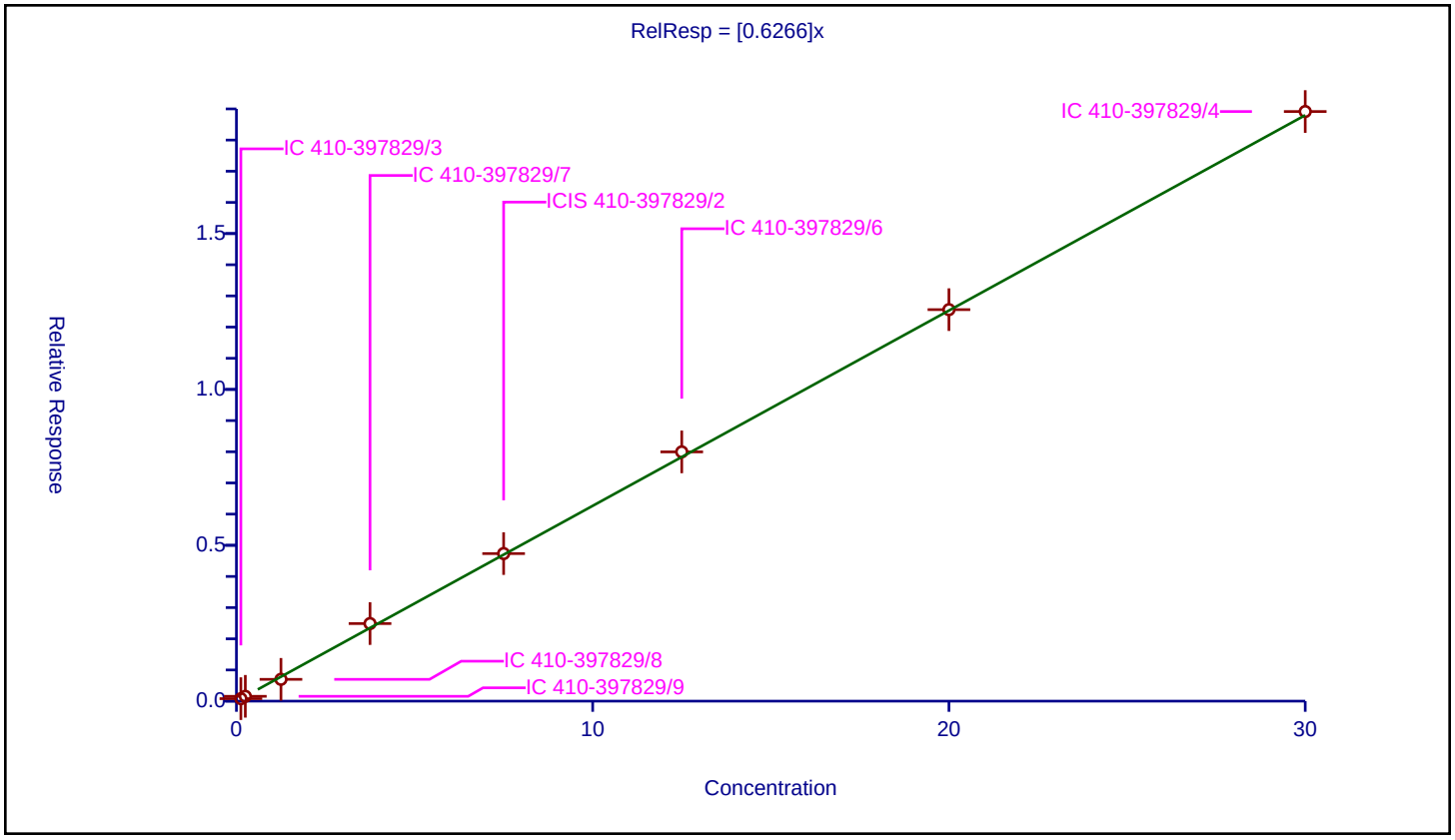
Curve Coefficients

Intercept:	0
Slope:	0.6266

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	4.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.079945	5.0	847959.0	0.639559	Y
2	IC 410-397829/9	0.25	0.155113	5.0	717961.0	0.620452	Y
3	IC 410-397829/8	1.25	0.699513	5.0	942199.0	0.55961	Y
4	IC 410-397829/7	3.75	2.488701	5.0	708713.0	0.663654	Y
5	ICIS 410-397829/2	7.5	4.734023	5.0	781685.0	0.631203	Y
6	IC 410-397829/6	12.5	7.99642	5.0	925798.0	0.639714	Y
7	IC 410-397829/5	20.0	12.559669	5.0	853884.0	0.627983	Y
8	IC 410-397829/4	30.0	18.915396	5.0	822157.0	0.630513	Y



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Calibration / Hexachlorocyclopentadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

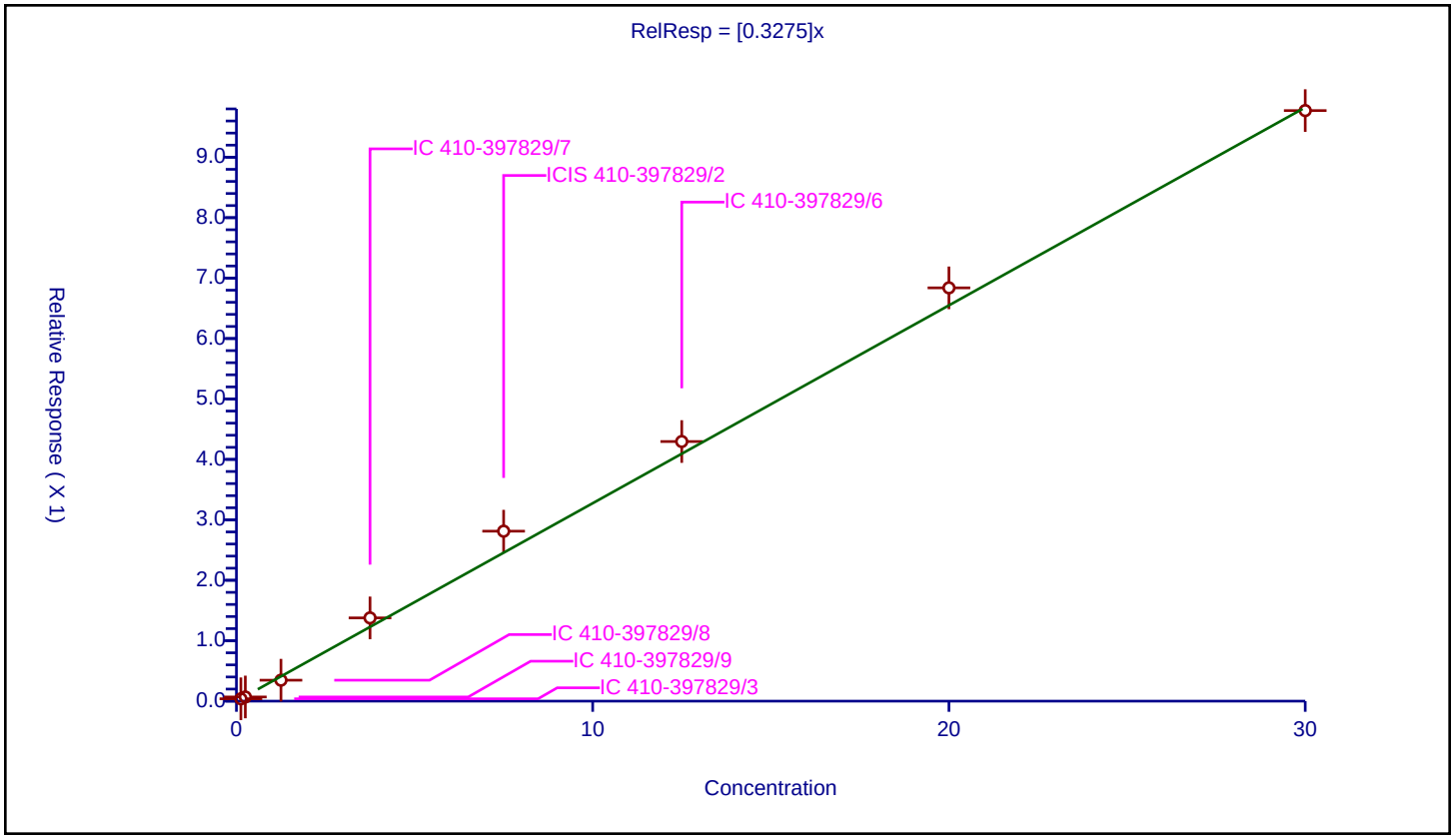
Curve Coefficients

Intercept:	0
Slope:	0.3275

Error Coefficients

Standard Error:	424000
Relative Standard Error:	11.4
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.039016	5.0	437124.0	0.312131	Y
2	IC 410-397829/9	0.25	0.069115	5.0	383344.0	0.276462	Y
3	IC 410-397829/8	1.25	0.346731	5.0	465505.0	0.277385	Y
4	IC 410-397829/7	3.75	1.377604	5.0	364557.0	0.367361	Y
5	ICIS 410-397829/2	7.5	2.81258	5.0	392579.0	0.375011	Y
6	IC 410-397829/6	12.5	4.295871	5.0	478030.0	0.34367	Y
7	IC 410-397829/5	20.0	6.838836	5.0	443400.0	0.341942	Y
8	IC 410-397829/4	30.0	9.771892	5.0	416908.0	0.32573	Y



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Calibration / 1,2,4,5-Tetrachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

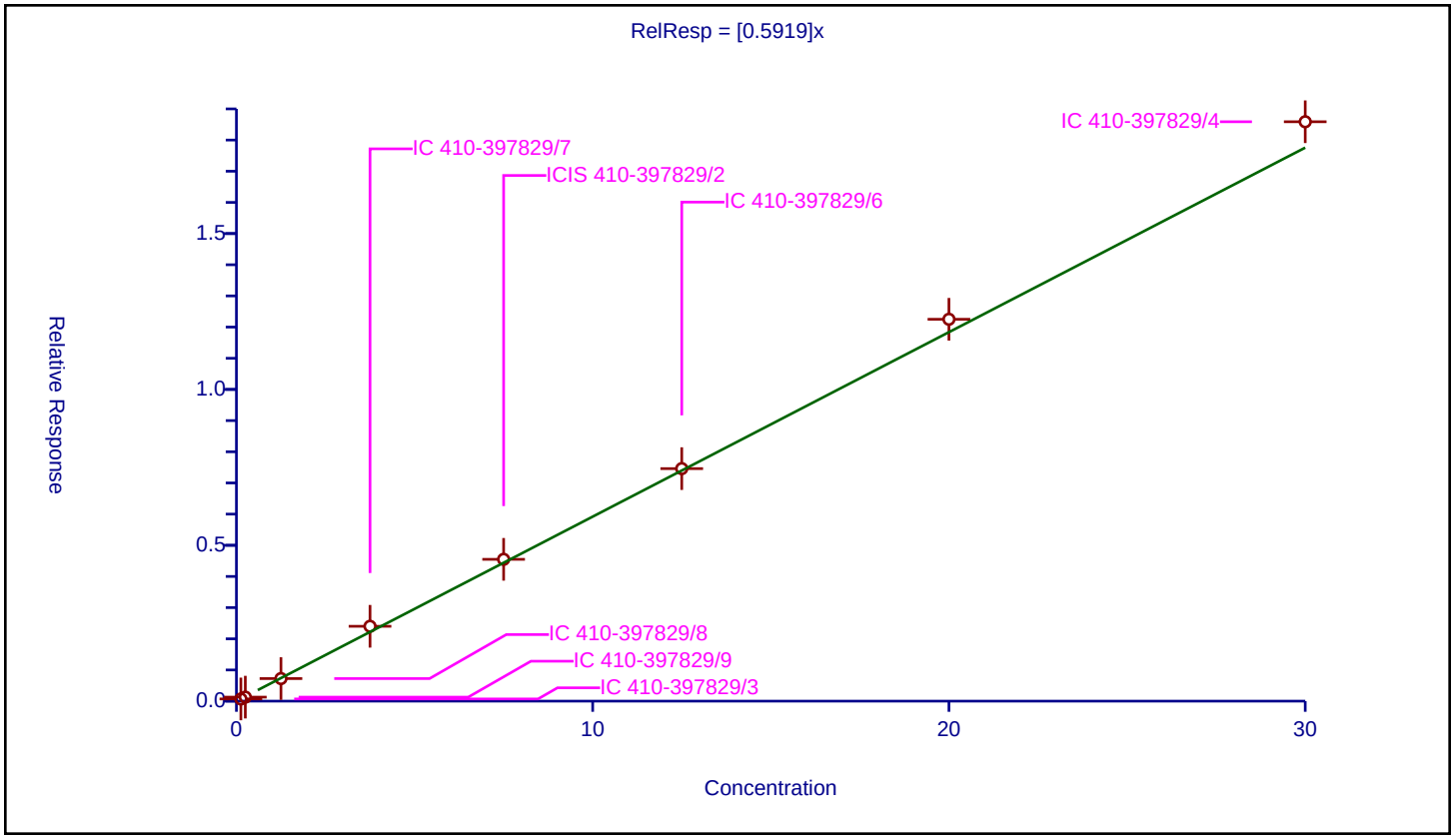
Curve Coefficients

Intercept:	0
Slope:	0.5919

Error Coefficients

Standard Error:	780000
Relative Standard Error:	6.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.070712	5.0	437124.0	0.565698	Y
2	IC 410-397829/9	0.25	0.128527	5.0	383344.0	0.514107	Y
3	IC 410-397829/8	1.25	0.724267	5.0	465505.0	0.579414	Y
4	IC 410-397829/7	3.75	2.401243	5.0	364557.0	0.640332	Y
5	ICIS 410-397829/2	7.5	4.549186	5.0	392579.0	0.606558	Y
6	IC 410-397829/6	12.5	7.459469	5.0	478030.0	0.596758	Y
7	IC 410-397829/5	20.0	12.250981	5.0	443400.0	0.612549	Y
8	IC 410-397829/4	30.0	18.587218	5.0	416908.0	0.619574	Y



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Calibration / Isosafrole Peak 1

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

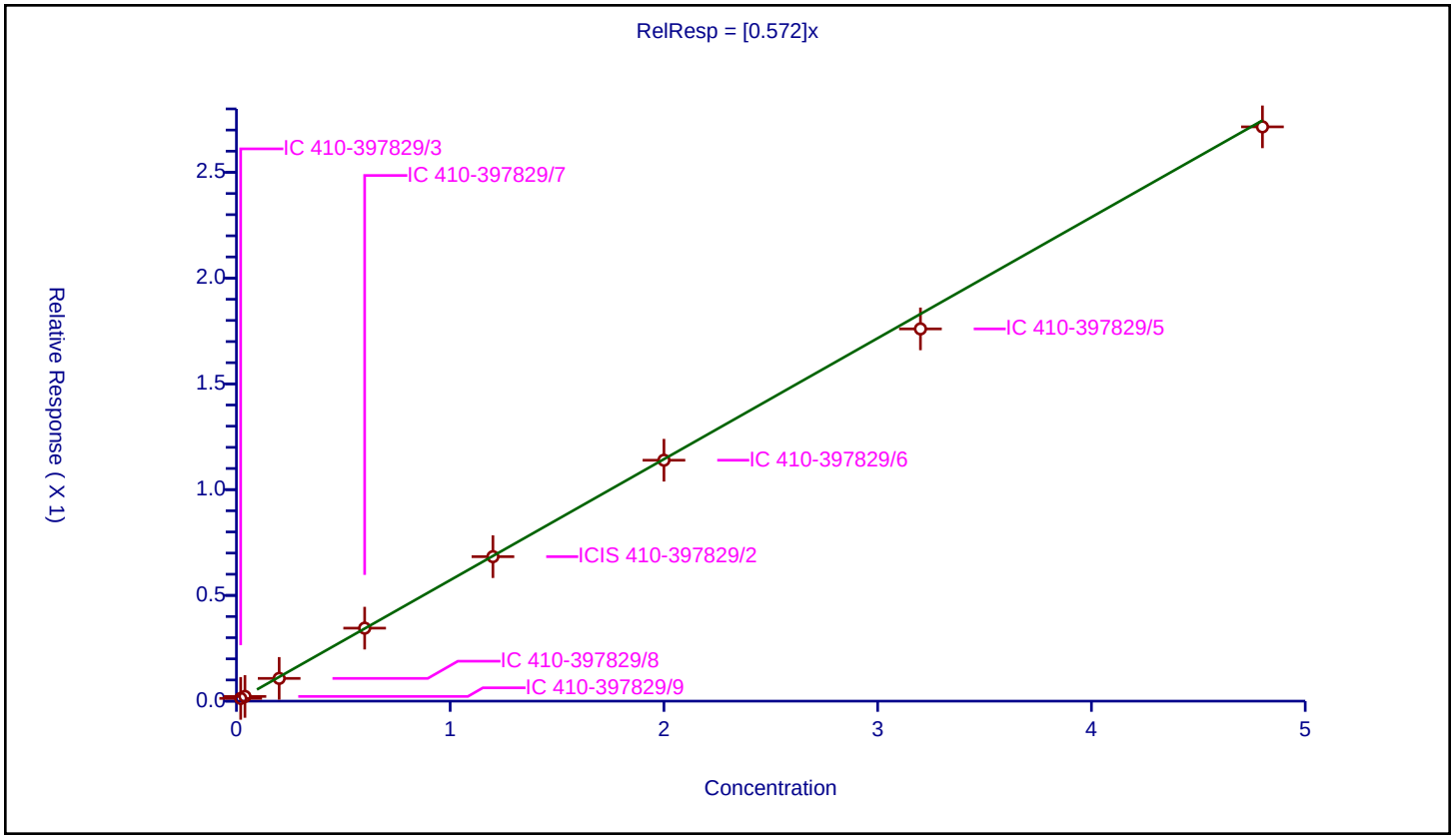
Curve Coefficients

Intercept:	0
Slope:	0.572

Error Coefficients

Standard Error:	114000
Relative Standard Error:	6.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.02	0.013074	5.0	437124.0	0.653705	Y
2	IC 410-397829/9	0.04	0.022225	5.0	383344.0	0.555637	Y
3	IC 410-397829/8	0.2	0.107421	5.0	465505.0	0.537105	Y
4	IC 410-397829/7	0.6	0.345063	5.0	364557.0	0.575104	Y
5	ICIS 410-397829/2	1.2	0.683047	5.0	392579.0	0.569206	Y
6	IC 410-397829/6	2.0	1.138998	5.0	478030.0	0.569499	Y
7	IC 410-397829/5	3.2	1.759867	5.0	443400.0	0.549958	Y
8	IC 410-397829/4	4.8	2.715095	5.0	416908.0	0.565645	Y



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Calibration / 2,4,6-Trichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

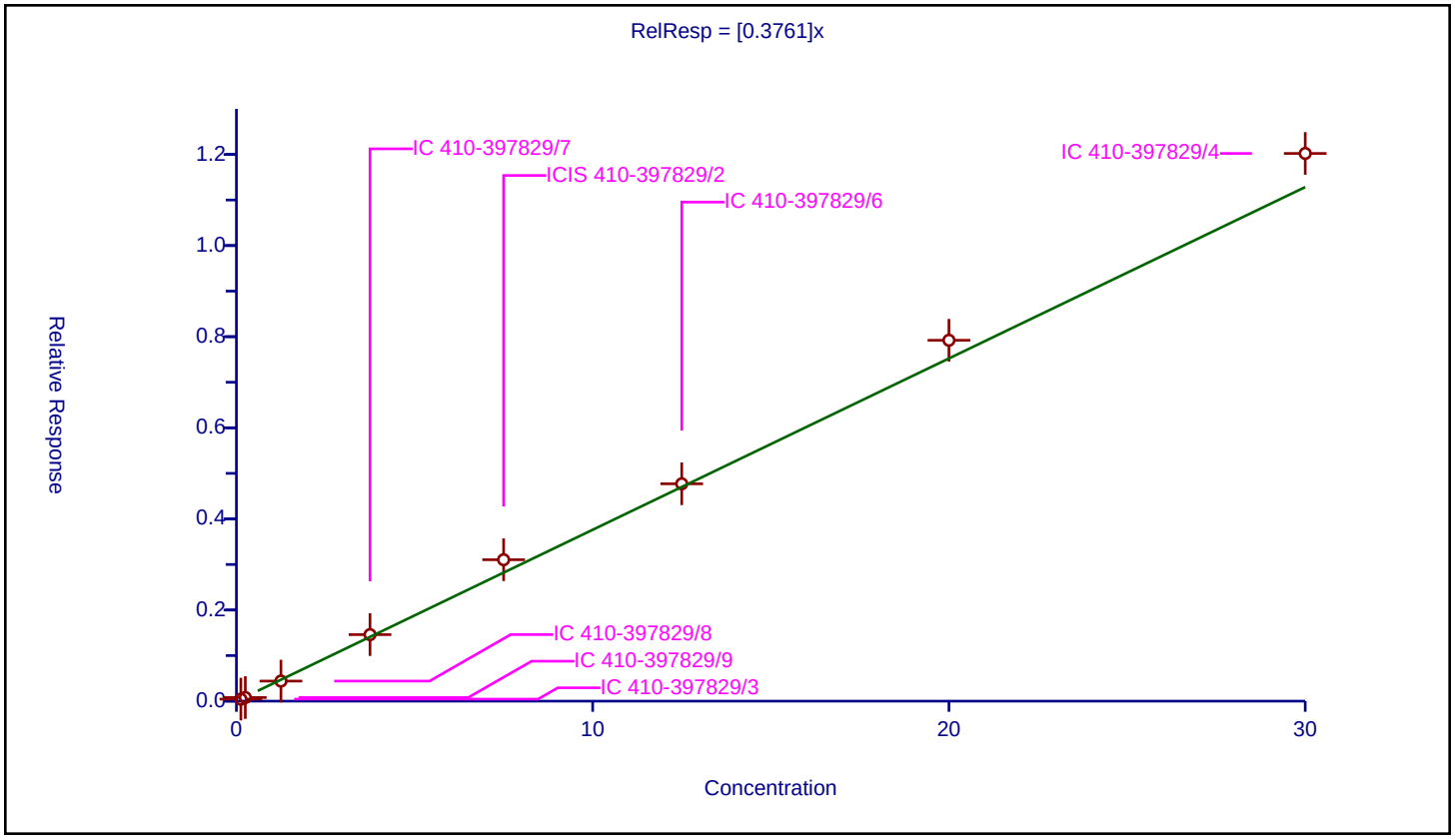
Curve Coefficients

Intercept:	0
Slope:	0.3761

Error Coefficients

Standard Error:	504000
Relative Standard Error:	8.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.044713	5.0	437124.0	0.357702	Y
2	IC 410-397829/9	0.25	0.079341	5.0	383344.0	0.317365	Y
3	IC 410-397829/8	1.25	0.440275	5.0	465505.0	0.35222	Y
4	IC 410-397829/7	3.75	1.459923	5.0	364557.0	0.389313	Y
5	ICIS 410-397829/2	7.5	3.103796	5.0	392579.0	0.413839	Y
6	IC 410-397829/6	12.5	4.770642	5.0	478030.0	0.381651	Y
7	IC 410-397829/5	20.0	7.921403	5.0	443400.0	0.39607	Y
8	IC 410-397829/4	30.0	12.022161	5.0	416908.0	0.400739	Y



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Calibration / 2,4,5-Trichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

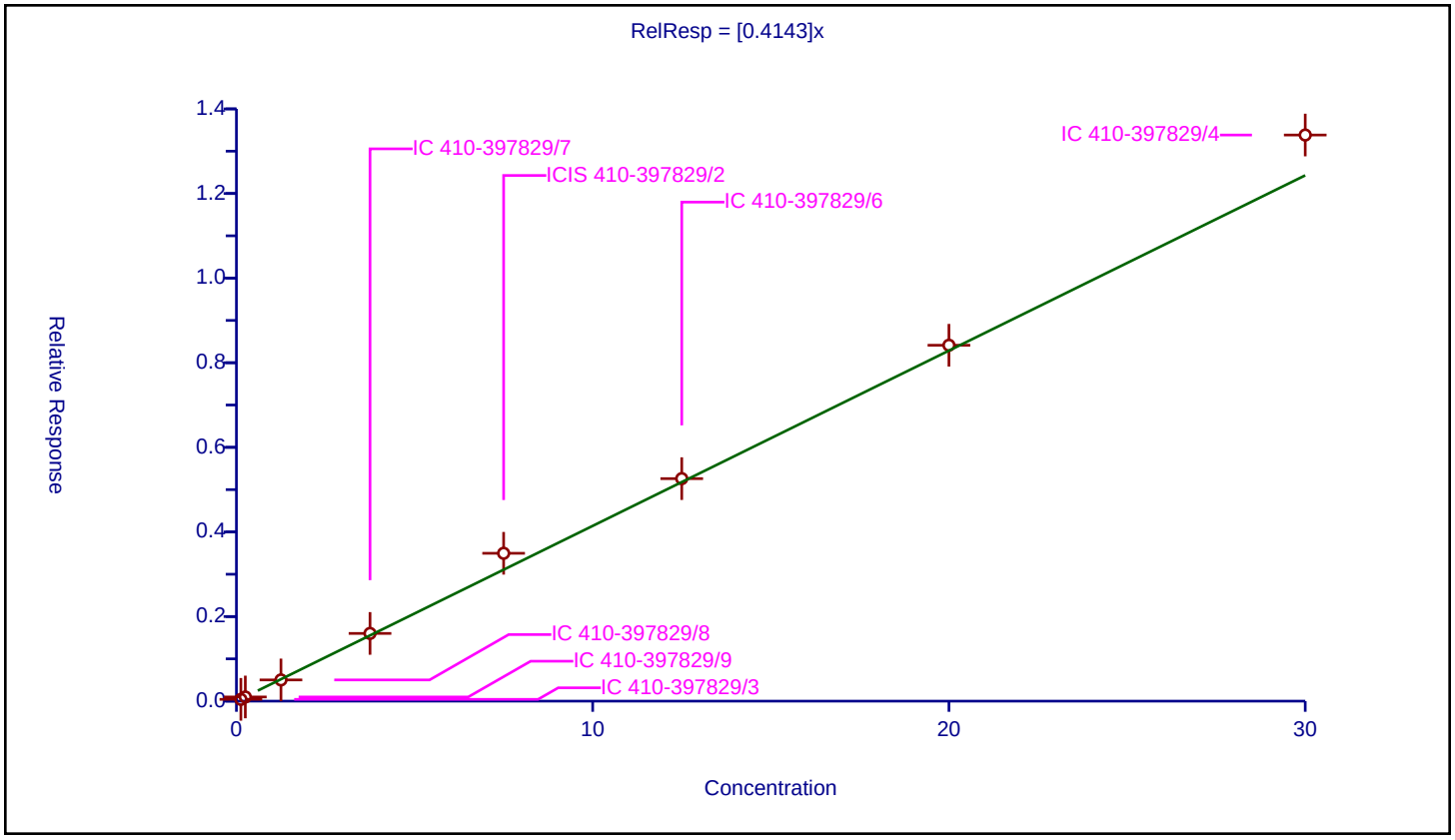
Curve Coefficients

Intercept:	0
Slope:	0.4143

Error Coefficients

Standard Error:	554000
Relative Standard Error:	9.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.042414	5.0	437124.0	0.339309	Y
2	IC 410-397829/9	0.25	0.098293	5.0	383344.0	0.393172	Y
3	IC 410-397829/8	1.25	0.501498	5.0	465505.0	0.401199	Y
4	IC 410-397829/7	3.75	1.601039	5.0	364557.0	0.426944	Y
5	ICIS 410-397829/2	7.5	3.495475	5.0	392579.0	0.466063	Y
6	IC 410-397829/6	12.5	5.260026	5.0	478030.0	0.420802	Y
7	IC 410-397829/5	20.0	8.413194	5.0	443400.0	0.42066	Y
8	IC 410-397829/4	30.0	13.382545	5.0	416908.0	0.446085	Y



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Calibration / 2-Fluorobiphenyl (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

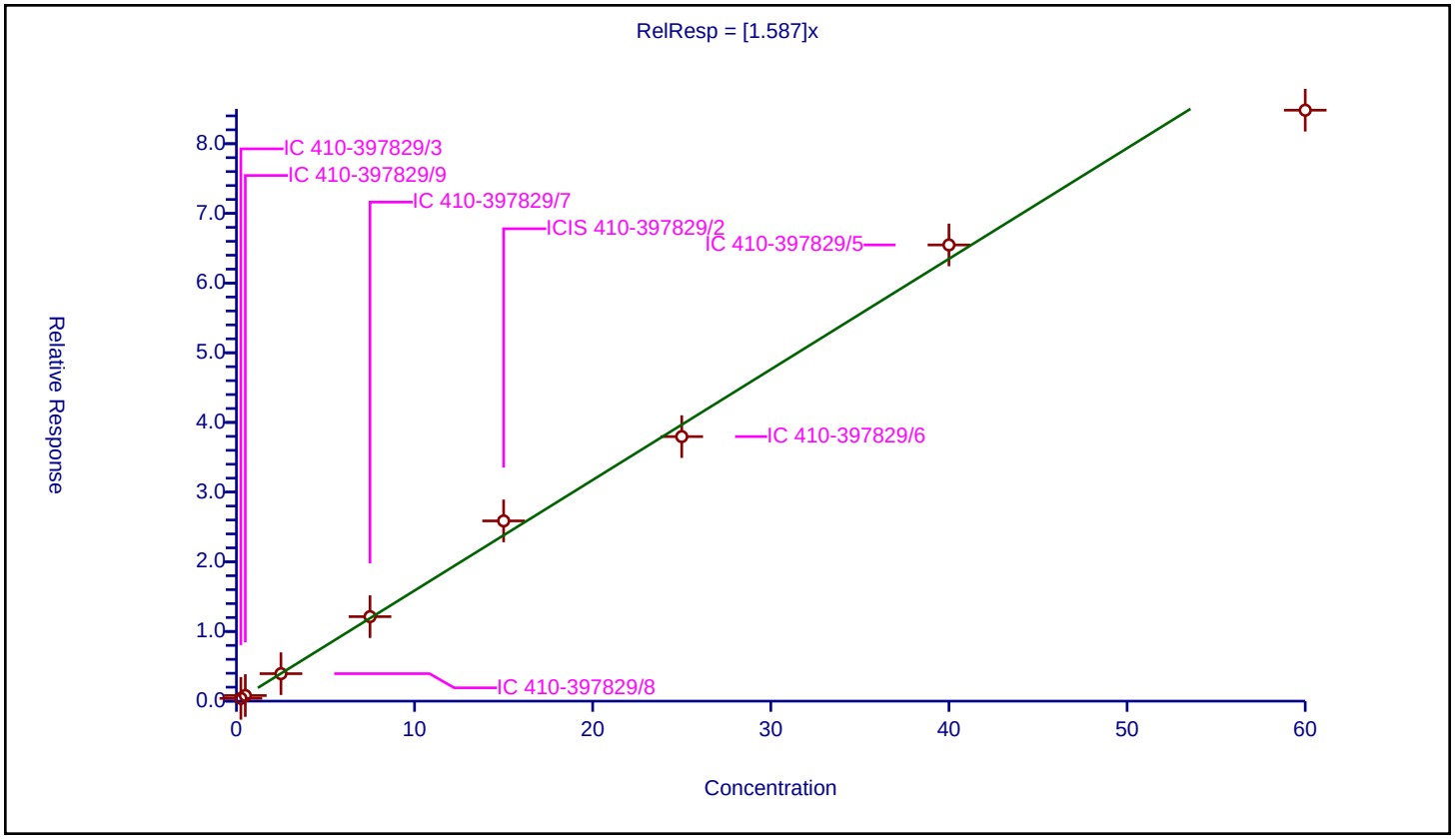
Curve Coefficients

Intercept:	0
Slope:	1.587

Error Coefficients

Standard Error:	3820000
Relative Standard Error:	5.7
Correlation Coefficient:	0.981
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.25	0.399074	5.0	437124.0	1.596298	Y
2	IC 410-397829/9	0.5	0.805738	5.0	383344.0	1.611477	Y
3	IC 410-397829/8	2.5	3.944179	5.0	465505.0	1.577672	Y
4	IC 410-397829/7	7.5	12.12691	5.0	364557.0	1.616921	Y
5	ICIS 410-397829/2	15.0	25.870003	5.0	392579.0	1.724667	Y
6	IC 410-397829/6	25.0	37.966006	5.0	478030.0	1.51864	Y
7	IC 410-397829/5	40.0	65.47518	5.0	443400.0	1.63688	Y
8	IC 410-397829/4	60.0	84.810894	5.0	416908.0	1.413515	Y



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Calibration / Isosafrole Peak 2

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

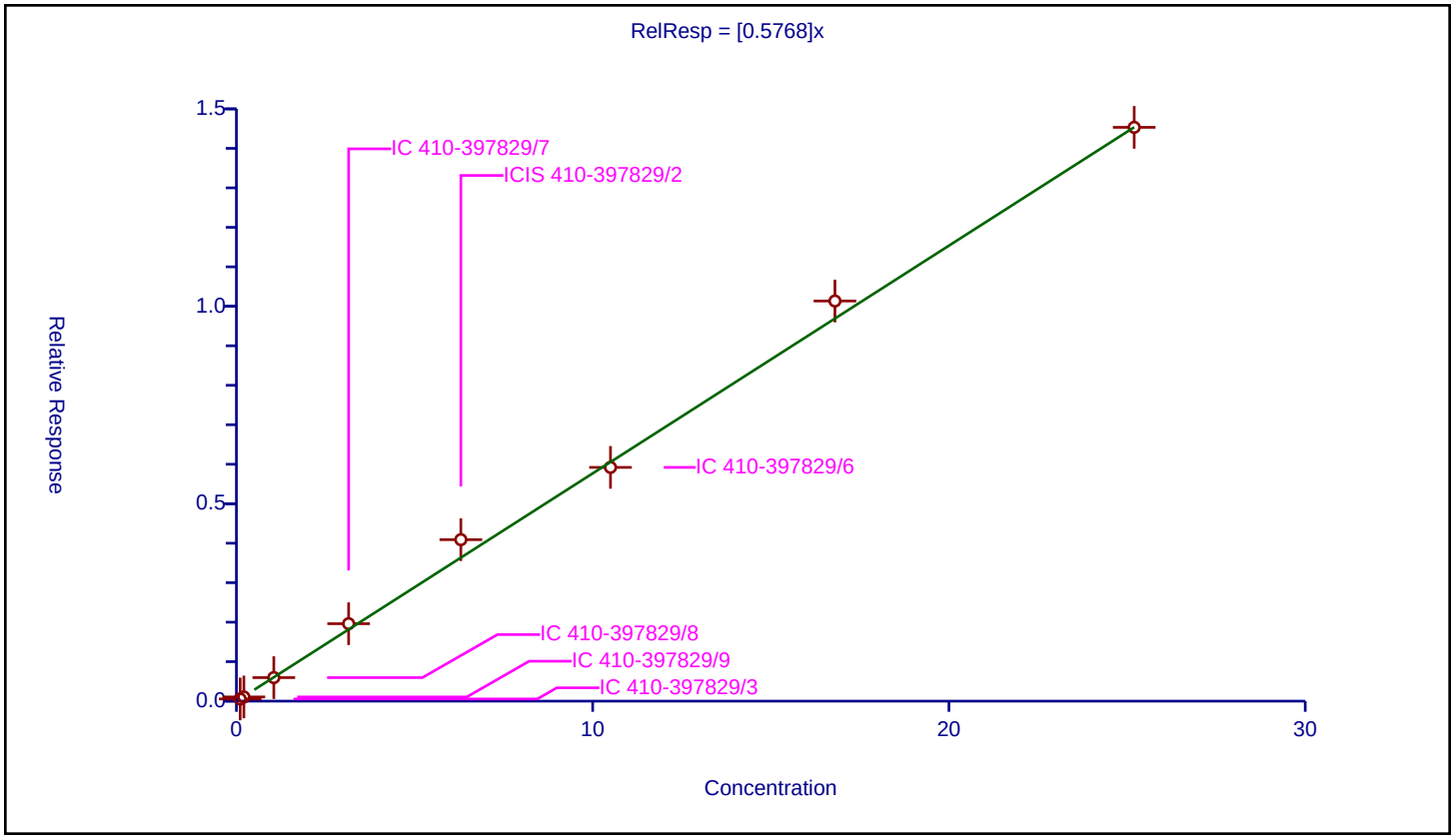
Curve Coefficients

Intercept:	0
Slope:	0.5768

Error Coefficients

Standard Error:	624000
Relative Standard Error:	8.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.105	0.055156	5.0	437124.0	0.525295	Y
2	IC 410-397829/9	0.21	0.106171	5.0	383344.0	0.505576	Y
3	IC 410-397829/8	1.05	0.596299	5.0	465505.0	0.567903	Y
4	IC 410-397829/7	3.15	1.961545	5.0	364557.0	0.622713	Y
5	ICIS 410-397829/2	6.3	4.089648	5.0	392579.0	0.649151	Y
6	IC 410-397829/6	10.5	5.92011	5.0	478030.0	0.56382	Y
7	IC 410-397829/5	16.8	10.134529	5.0	443400.0	0.603246	Y
8	IC 410-397829/4	25.2	14.532199	5.0	416908.0	0.576675	Y



Calibration / 1,1'-Biphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

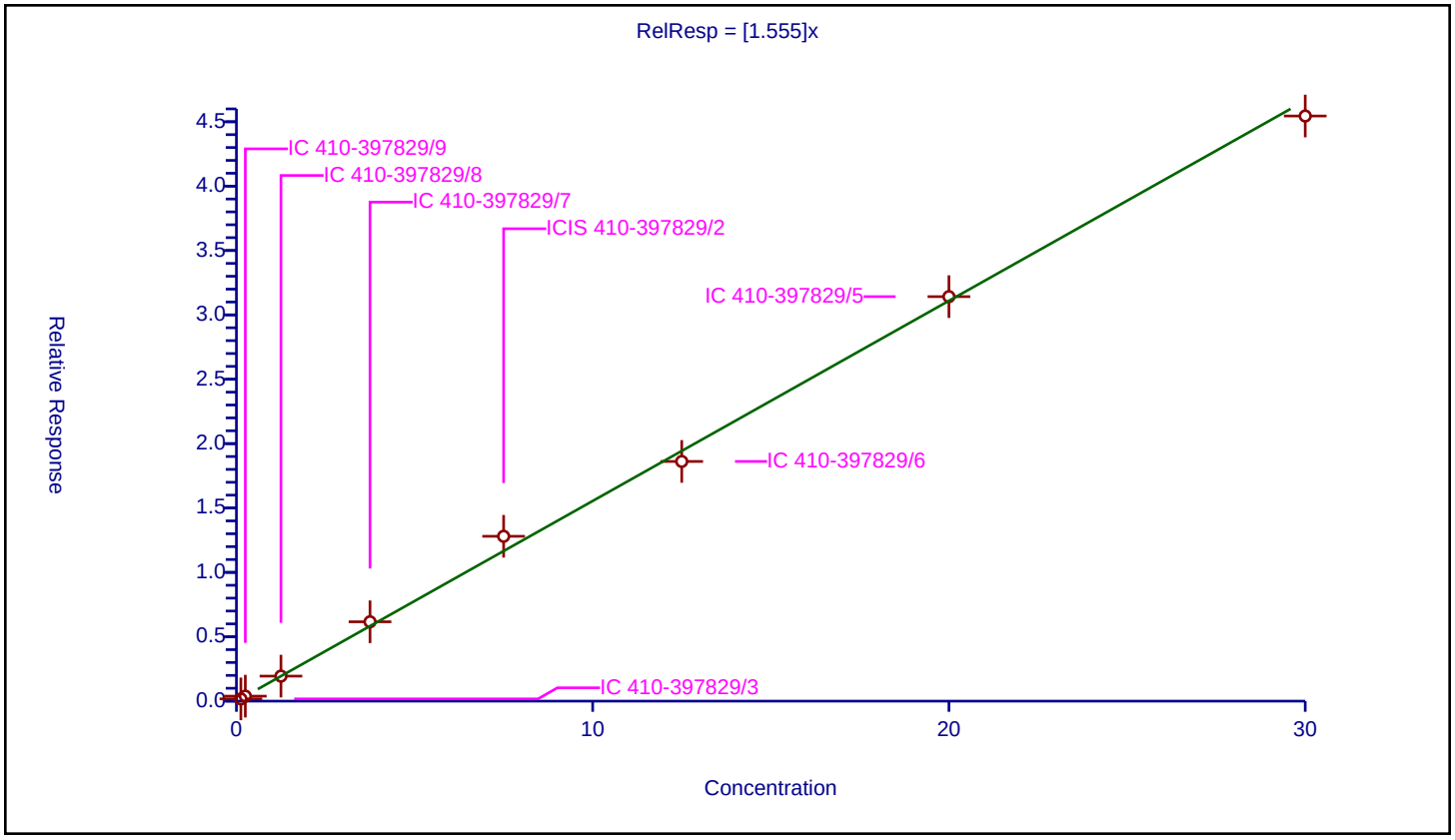
Curve Coefficients

Intercept:	0
Slope:	1.555

Error Coefficients

Standard Error:	1950000
Relative Standard Error:	6.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.175088	5.0	437124.0	1.400701	Y
2	IC 410-397829/9	0.25	0.388776	5.0	383344.0	1.555105	Y
3	IC 410-397829/8	1.25	1.944361	5.0	465505.0	1.555489	Y
4	IC 410-397829/7	3.75	6.163097	5.0	364557.0	1.643492	Y
5	ICIS 410-397829/2	7.5	12.803792	5.0	392579.0	1.707172	Y
6	IC 410-397829/6	12.5	18.617095	5.0	478030.0	1.489368	Y
7	IC 410-397829/5	20.0	31.417851	5.0	443400.0	1.570893	Y
8	IC 410-397829/4	30.0	45.447521	5.0	416908.0	1.514917	Y



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Calibration / 2-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

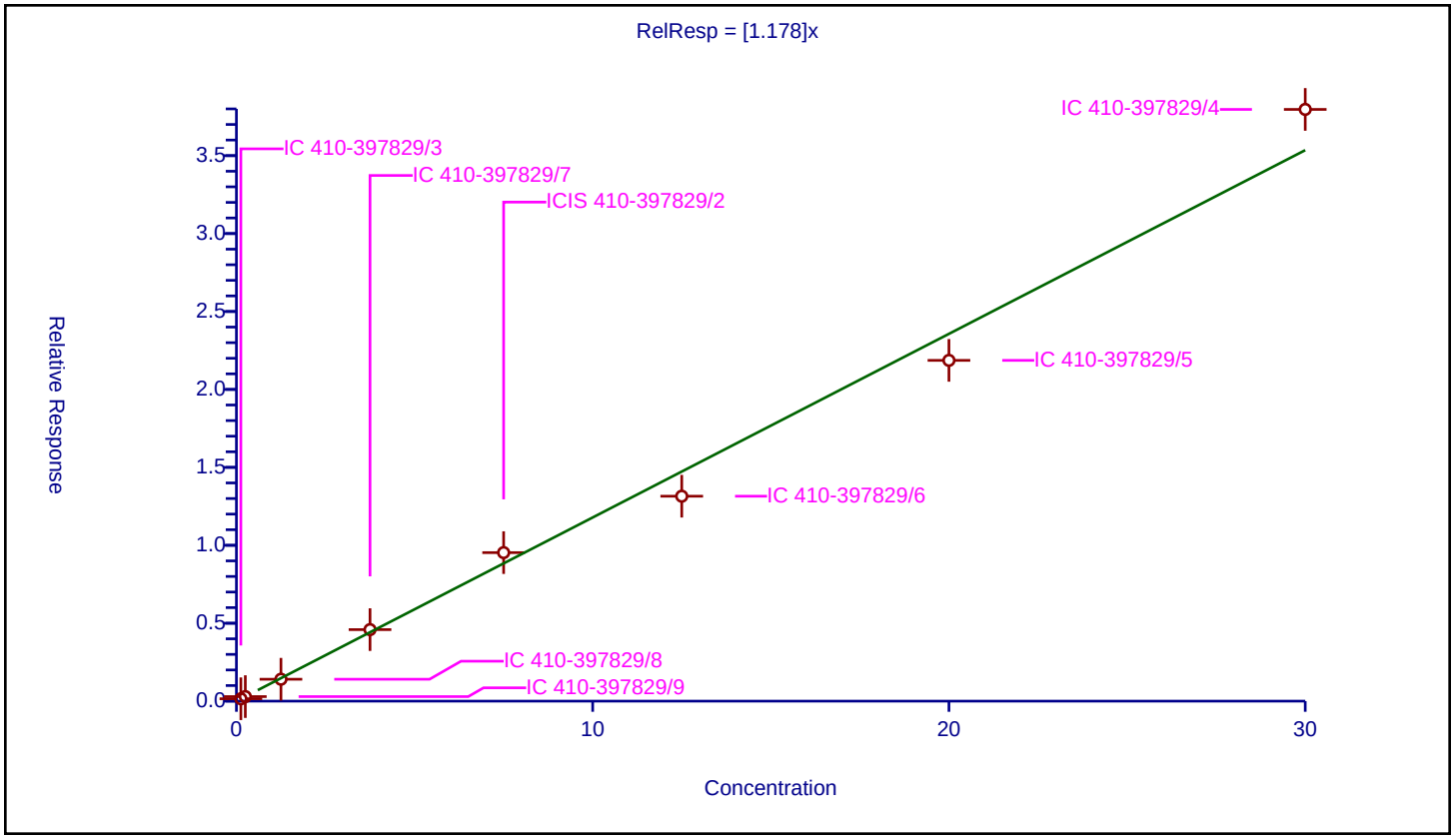
Curve Coefficients

Intercept:	0
Slope:	1.178

Error Coefficients

Standard Error:	1510000
Relative Standard Error:	7.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.153755	5.0	437124.0	1.23004	Y
2	IC 410-397829/9	0.25	0.291657	5.0	383344.0	1.166628	Y
3	IC 410-397829/8	1.25	1.406107	5.0	465505.0	1.124886	Y
4	IC 410-397829/7	3.75	4.589447	5.0	364557.0	1.223853	Y
5	ICIS 410-397829/2	7.5	9.530438	5.0	392579.0	1.270725	Y
6	IC 410-397829/6	12.5	13.149729	5.0	478030.0	1.051978	Y
7	IC 410-397829/5	20.0	21.863712	5.0	443400.0	1.093186	Y
8	IC 410-397829/4	30.0	37.966602	5.0	416908.0	1.265553	Y



Calibration / 1-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

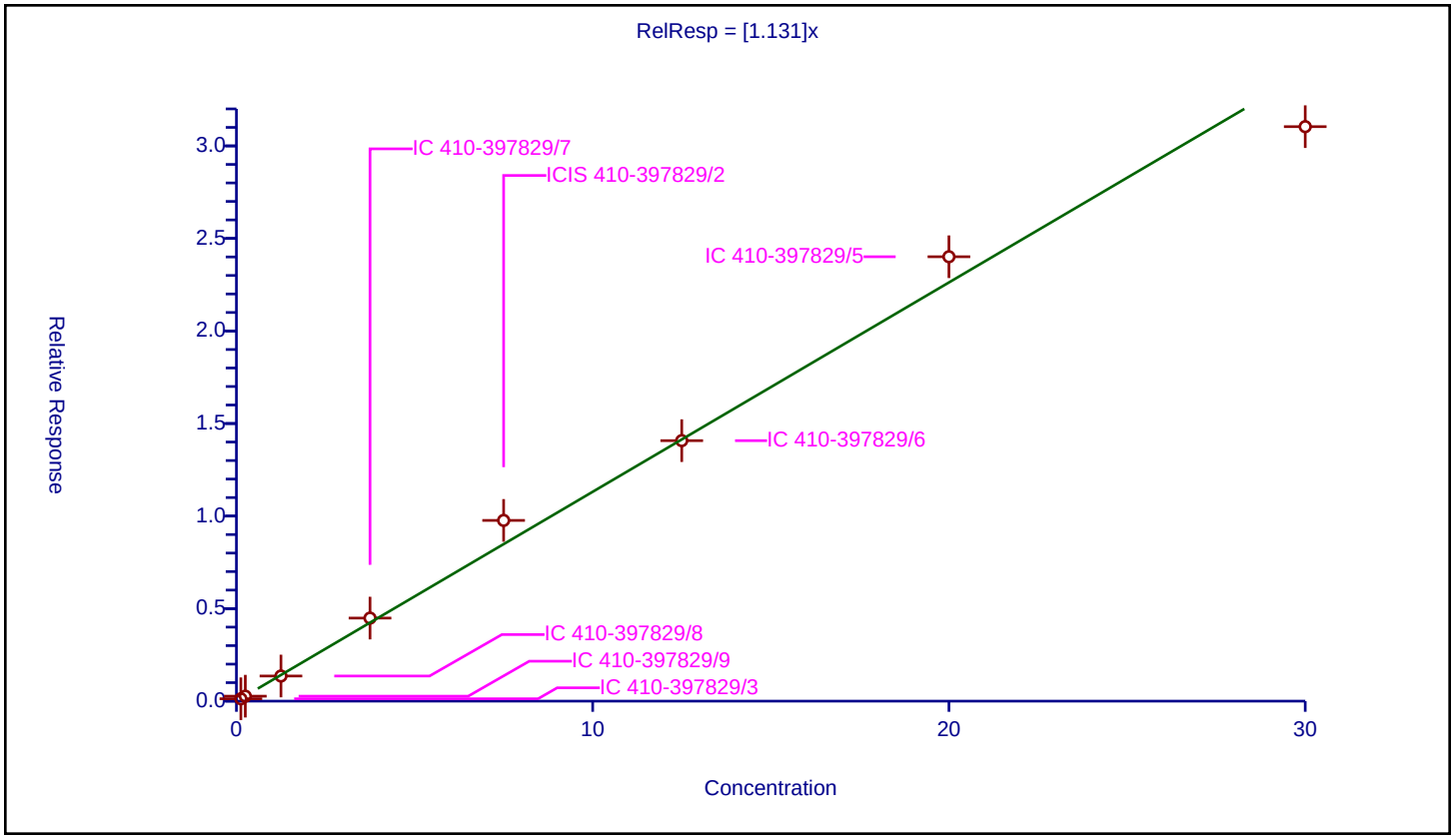
Curve Coefficients

Intercept:	0
Slope:	1.131

Error Coefficients

Standard Error:	1400000
Relative Standard Error:	8.4
Correlation Coefficient:	0.980
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.128545	5.0	437124.0	1.028358	Y
2	IC 410-397829/9	0.25	0.268688	5.0	383344.0	1.074753	Y
3	IC 410-397829/8	1.25	1.357365	5.0	465505.0	1.085892	Y
4	IC 410-397829/7	3.75	4.487474	5.0	364557.0	1.19666	Y
5	ICIS 410-397829/2	7.5	9.764353	5.0	392579.0	1.301914	Y
6	IC 410-397829/6	12.5	14.075445	5.0	478030.0	1.126036	Y
7	IC 410-397829/5	20.0	24.010983	5.0	443400.0	1.200549	Y
8	IC 410-397829/4	30.0	31.039594	5.0	416908.0	1.034653	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

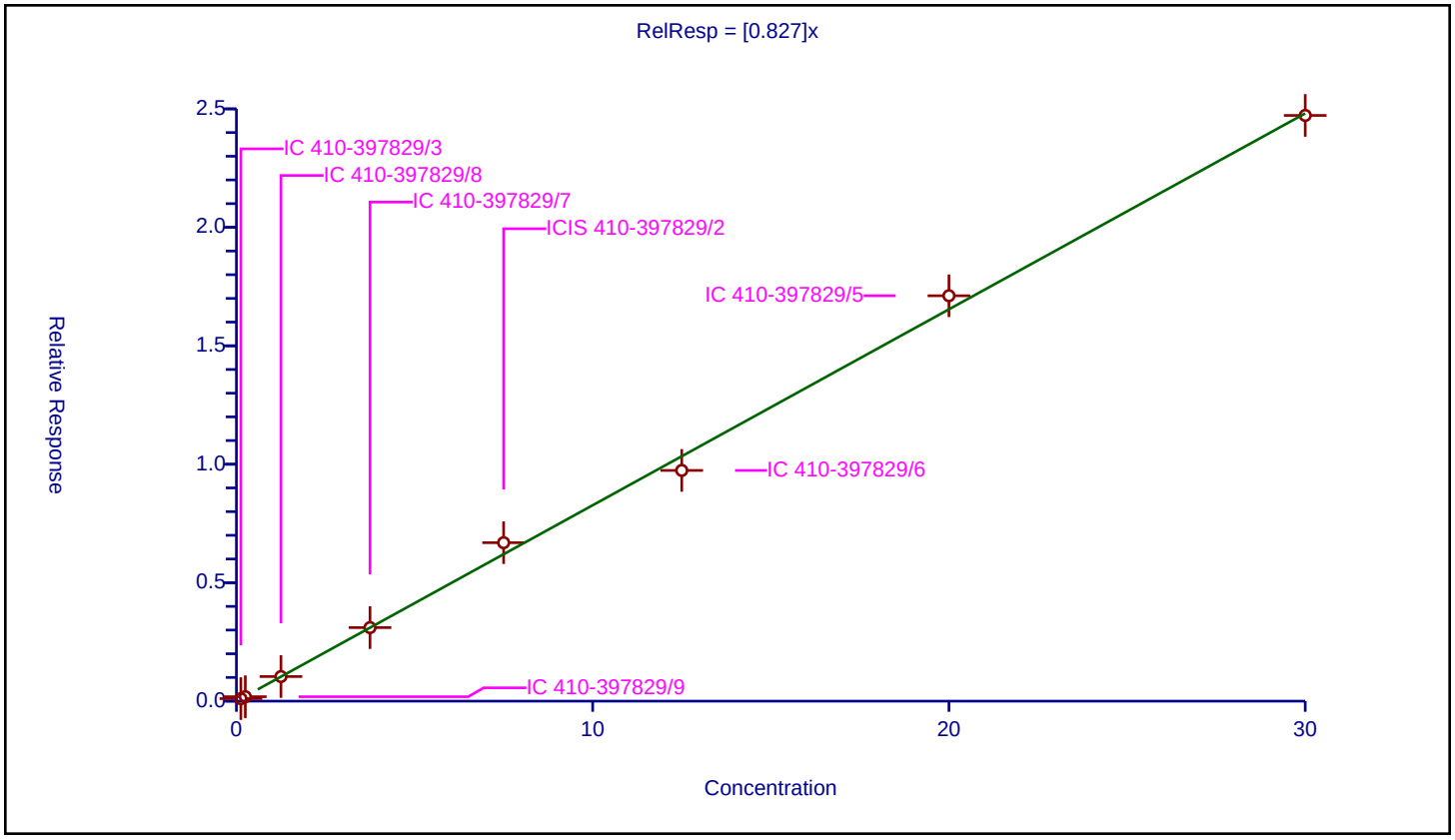
Curve Coefficients

Intercept:	0
Slope:	0.827

Error Coefficients

Standard Error:	1050000
Relative Standard Error:	5.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.107166	5.0	437124.0	0.857331	Y
2	IC 410-397829/9	0.25	0.187195	5.0	383344.0	0.748779	Y
3	IC 410-397829/8	1.25	1.038603	5.0	465505.0	0.830883	Y
4	IC 410-397829/7	3.75	3.105152	5.0	364557.0	0.828041	Y
5	ICIS 410-397829/2	7.5	6.688781	5.0	392579.0	0.891837	Y
6	IC 410-397829/6	12.5	9.738531	5.0	478030.0	0.779082	Y
7	IC 410-397829/5	20.0	17.112573	5.0	443400.0	0.855629	Y
8	IC 410-397829/4	30.0	24.72302	5.0	416908.0	0.824101	Y



Calibration / 2-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

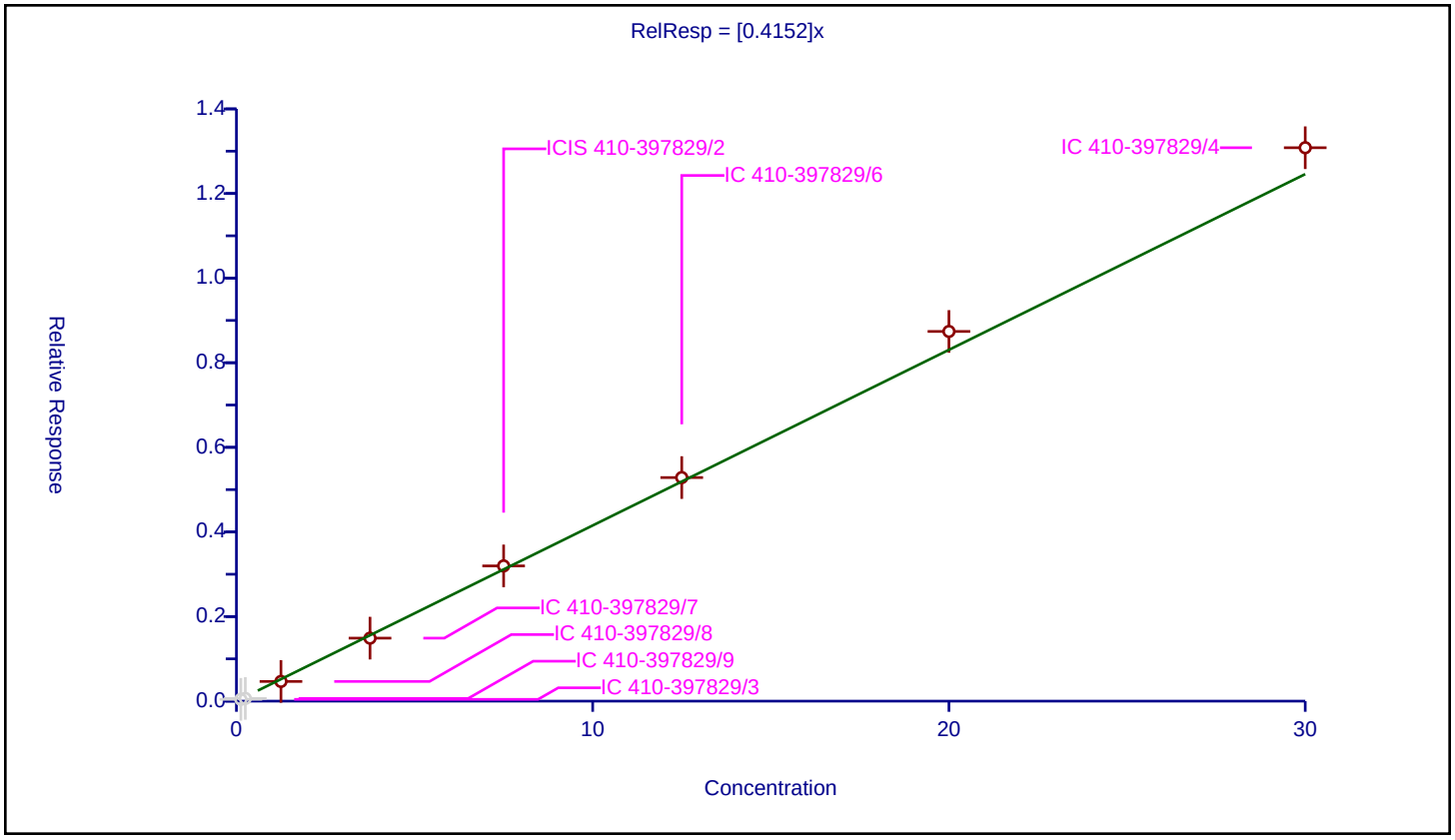
Curve Coefficients

Intercept:	0
Slope:	0.4152

Error Coefficients

Standard Error:	652000
Relative Standard Error:	6.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.042208	5.0	437124.0	0.337662	N
2	IC 410-397829/9	0.25	0.064511	5.0	383344.0	0.258045	N
3	IC 410-397829/8	1.25	0.465441	5.0	465505.0	0.372353	Y
4	IC 410-397829/7	3.75	1.489109	5.0	364557.0	0.397096	Y
5	ICIS 410-397829/2	7.5	3.196554	5.0	392579.0	0.426207	Y
6	IC 410-397829/6	12.5	5.285055	5.0	478030.0	0.422804	Y
7	IC 410-397829/5	20.0	8.738802	5.0	443400.0	0.43694	Y
8	IC 410-397829/4	30.0	13.081951	5.0	416908.0	0.436065	Y



Calibration / 1,4-Naphthoquinone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

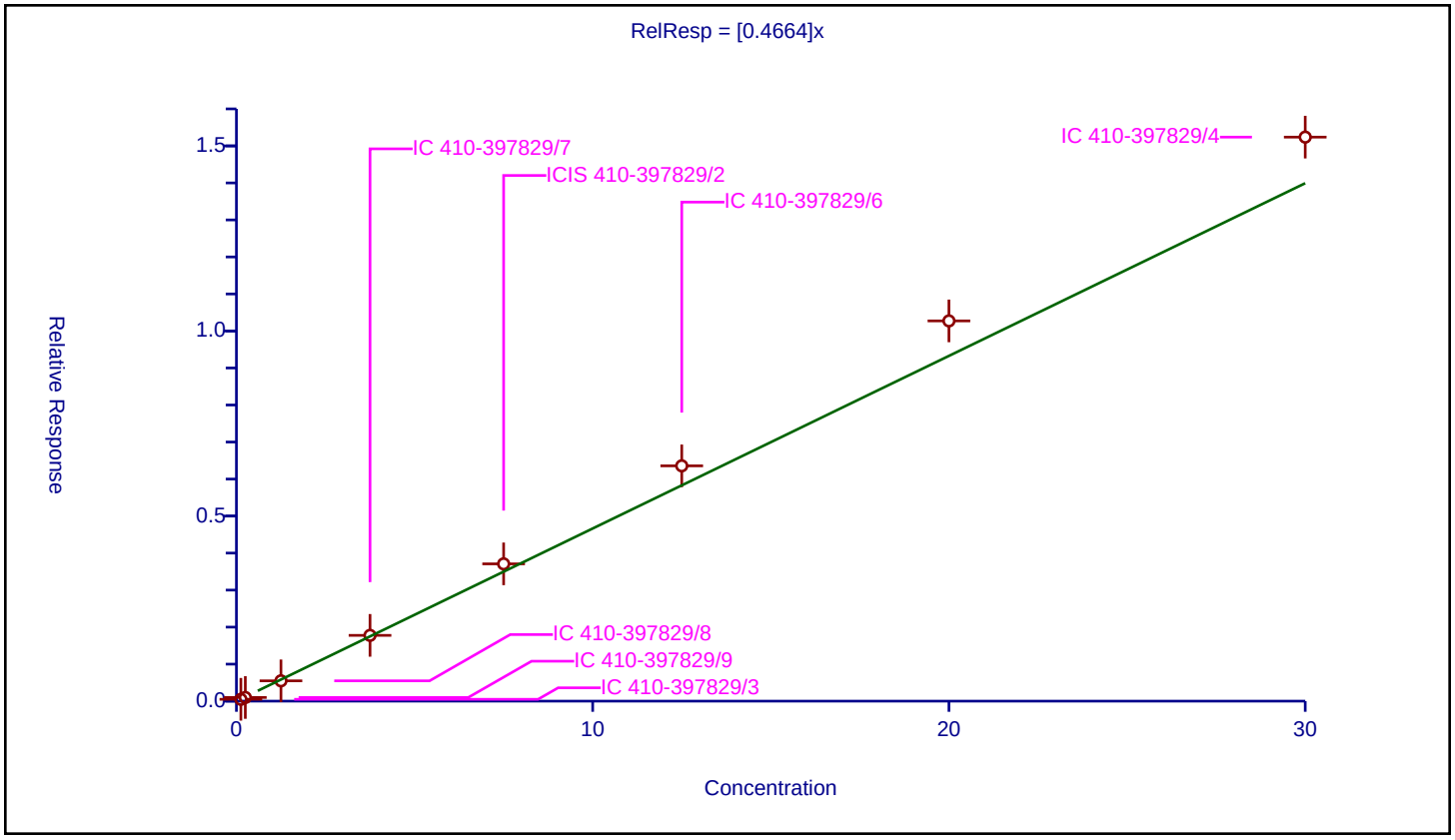
Curve Coefficients

Intercept:	0
Slope:	0.4664

Error Coefficients

Standard Error:	646000
Relative Standard Error:	10.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.049814	5.0	437124.0	0.398514	Y
2	IC 410-397829/9	0.25	0.098776	5.0	383344.0	0.395102	Y
3	IC 410-397829/8	1.25	0.548877	5.0	465505.0	0.439102	Y
4	IC 410-397829/7	3.75	1.77654	5.0	364557.0	0.473744	Y
5	ICIS 410-397829/2	7.5	3.70896	5.0	392579.0	0.494528	Y
6	IC 410-397829/6	12.5	6.356787	5.0	478030.0	0.508543	Y
7	IC 410-397829/5	20.0	10.272508	5.0	443400.0	0.513625	Y
8	IC 410-397829/4	30.0	15.237271	5.0	416908.0	0.507909	Y



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Calibration / 1,4-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

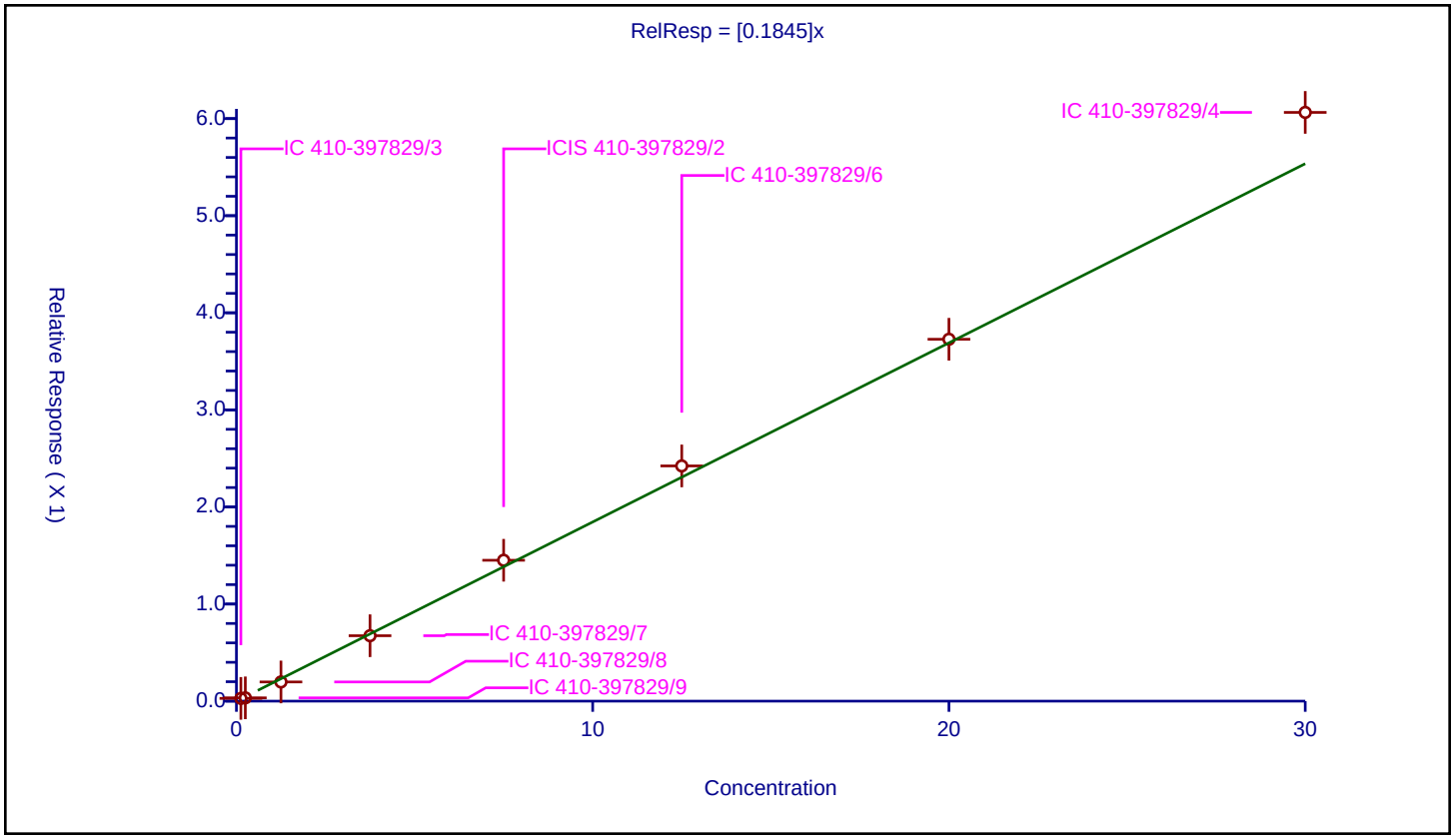
Curve Coefficients

Intercept:	0
Slope:	0.1845

Error Coefficients

Standard Error:	249000
Relative Standard Error:	15.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.028321	5.0	437124.0	0.226572	Y
2	IC 410-397829/9	0.25	0.033977	5.0	383344.0	0.135909	Y
3	IC 410-397829/8	1.25	0.197699	5.0	465505.0	0.158159	Y
4	IC 410-397829/7	3.75	0.673914	5.0	364557.0	0.17971	Y
5	ICIS 410-397829/2	7.5	1.450956	5.0	392579.0	0.193461	Y
6	IC 410-397829/6	12.5	2.42262	5.0	478030.0	0.19381	Y
7	IC 410-397829/5	20.0	3.727255	5.0	443400.0	0.186363	Y
8	IC 410-397829/4	30.0	6.063832	5.0	416908.0	0.202128	Y



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Calibration / Dimethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

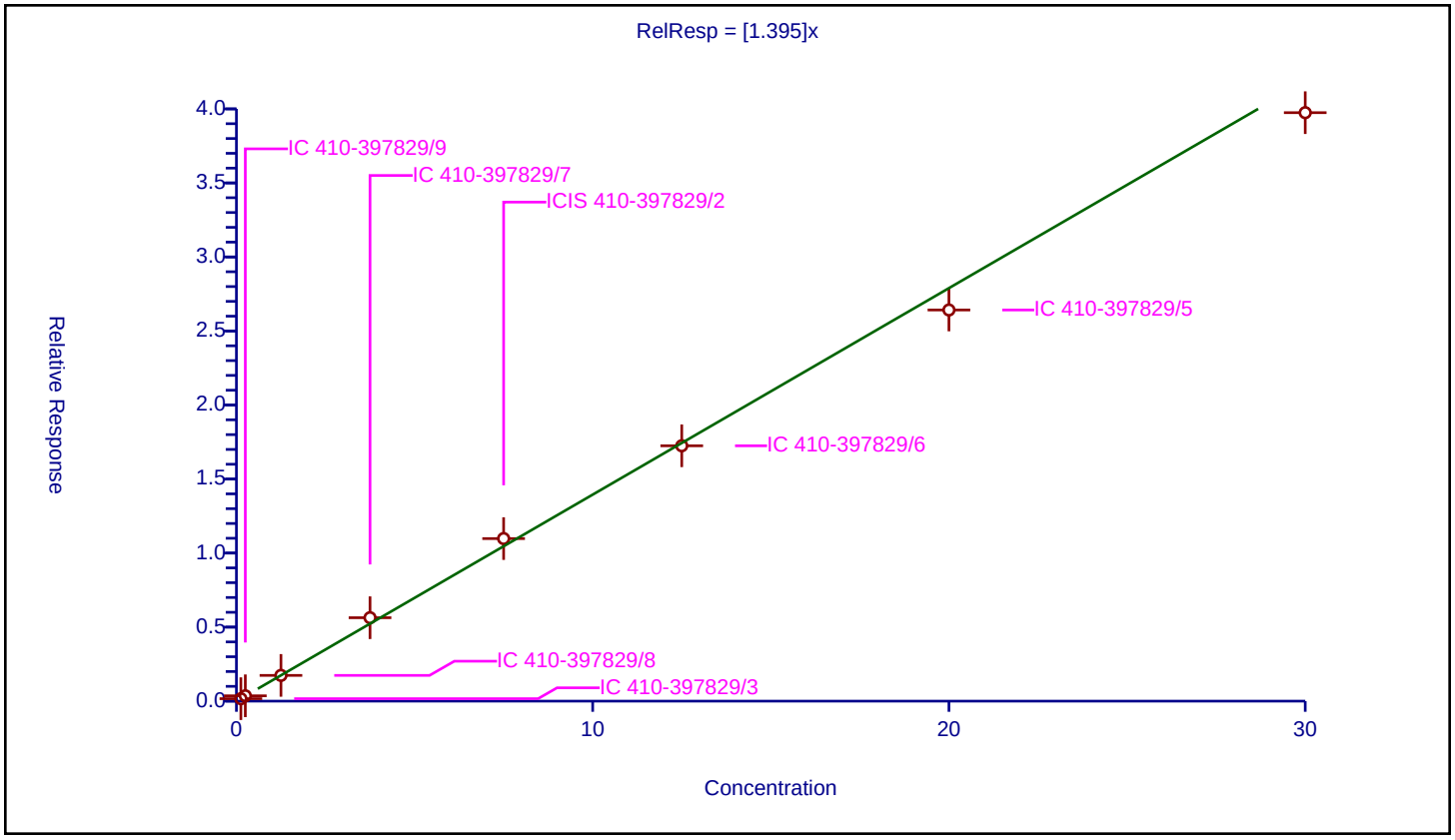
Curve Coefficients

Intercept:	0
Slope:	1.395

Error Coefficients

Standard Error:	1700000
Relative Standard Error:	5.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.166006	5.0	437124.0	1.328044	Y
2	IC 410-397829/9	0.25	0.361555	5.0	383344.0	1.446221	Y
3	IC 410-397829/8	1.25	1.739391	5.0	465505.0	1.391512	Y
4	IC 410-397829/7	3.75	5.634702	5.0	364557.0	1.502587	Y
5	ICIS 410-397829/2	7.5	10.979446	5.0	392579.0	1.463926	Y
6	IC 410-397829/6	12.5	17.246376	5.0	478030.0	1.37971	Y
7	IC 410-397829/5	20.0	26.419576	5.0	443400.0	1.320979	Y
8	IC 410-397829/4	30.0	39.744116	5.0	416908.0	1.324804	Y



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Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

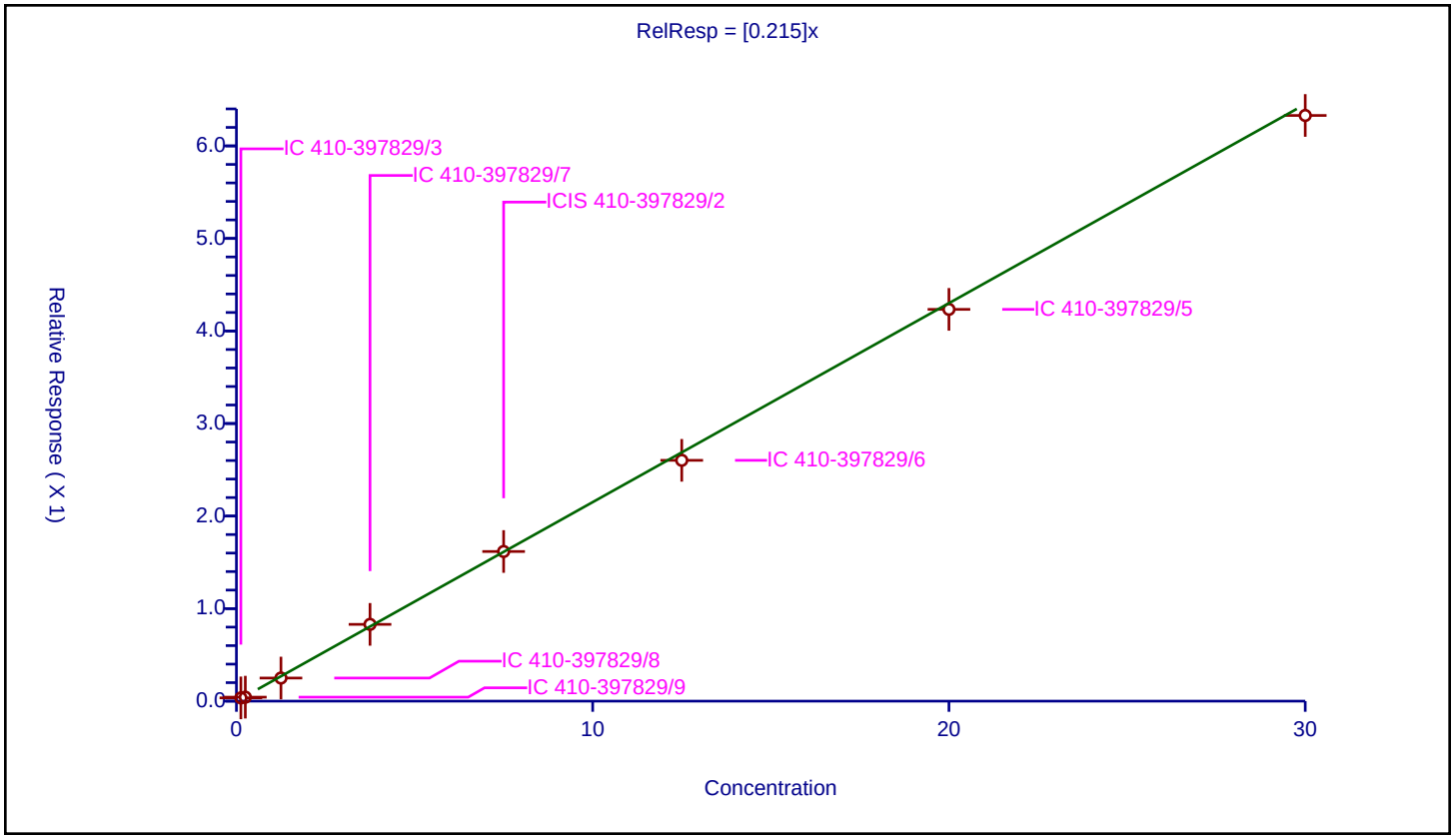
Curve Coefficients

Intercept:	0
Slope:	0.215

Error Coefficients

Standard Error:	268000
Relative Standard Error:	14.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.035116	5.0	437124.0	0.280927	Y
2	IC 410-397829/9	0.25	0.042951	5.0	383344.0	0.171804	Y
3	IC 410-397829/8	1.25	0.249772	5.0	465505.0	0.199817	Y
4	IC 410-397829/7	3.75	0.829637	5.0	364557.0	0.221237	Y
5	ICIS 410-397829/2	7.5	1.616948	5.0	392579.0	0.215593	Y
6	IC 410-397829/6	12.5	2.60241	5.0	478030.0	0.208193	Y
7	IC 410-397829/5	20.0	4.233705	5.0	443400.0	0.211685	Y
8	IC 410-397829/4	30.0	6.328902	5.0	416908.0	0.210963	Y



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Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

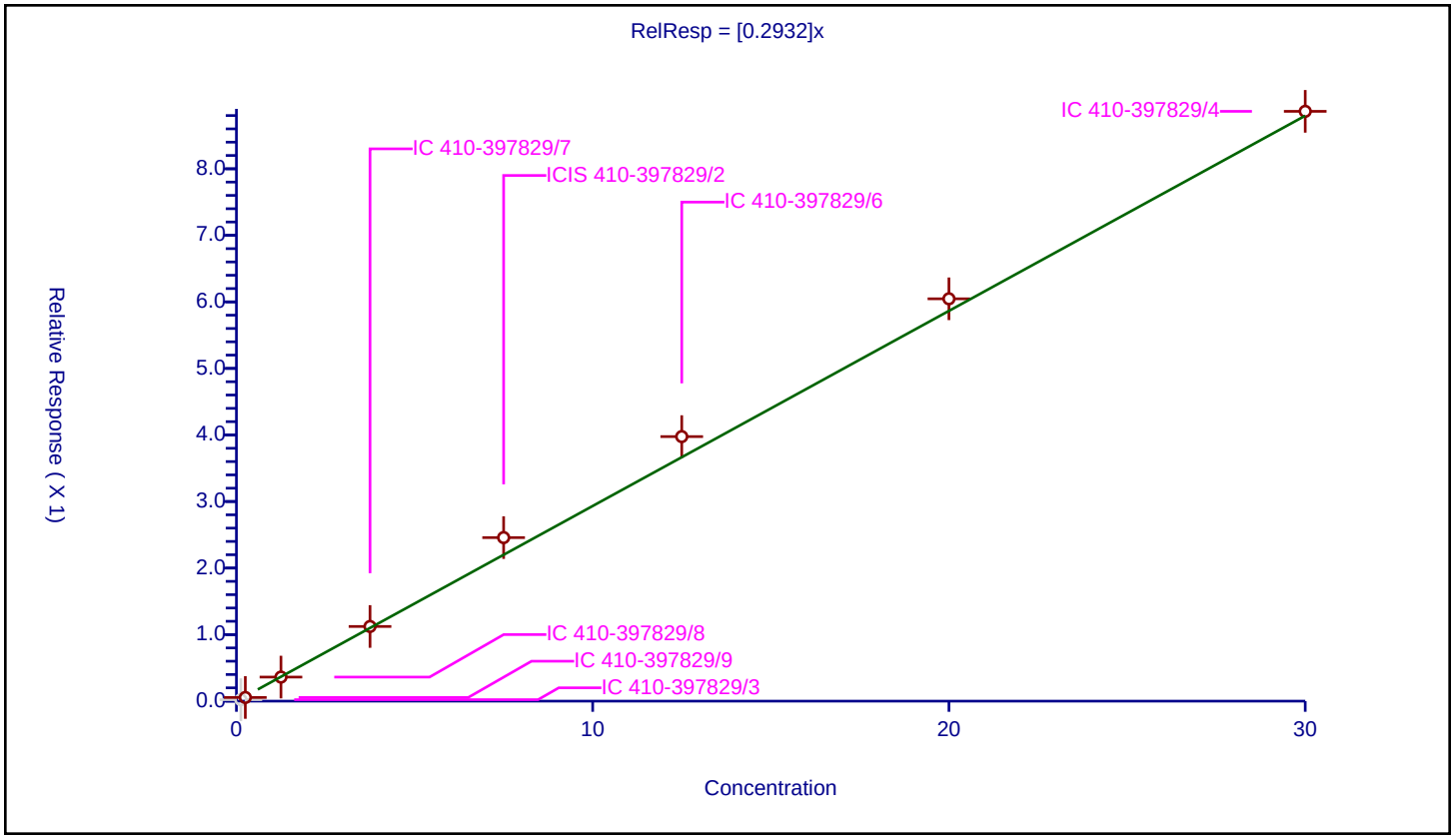
Curve Coefficients

Intercept:	0
Slope:	0.2932

Error Coefficients

Standard Error:	413000
Relative Standard Error:	11.8
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.022316	5.0	437124.0	0.178531	N
2	IC 410-397829/9	0.25	0.055185	5.0	383344.0	0.220742	Y
3	IC 410-397829/8	1.25	0.3615	5.0	465505.0	0.2892	Y
4	IC 410-397829/7	3.75	1.122156	5.0	364557.0	0.299242	Y
5	ICIS 410-397829/2	7.5	2.457645	5.0	392579.0	0.327686	Y
6	IC 410-397829/6	12.5	3.97543	5.0	478030.0	0.318034	Y
7	IC 410-397829/5	20.0	6.046211	5.0	443400.0	0.302311	Y
8	IC 410-397829/4	30.0	8.863238	5.0	416908.0	0.295441	Y



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Calibration / Acenaphthylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

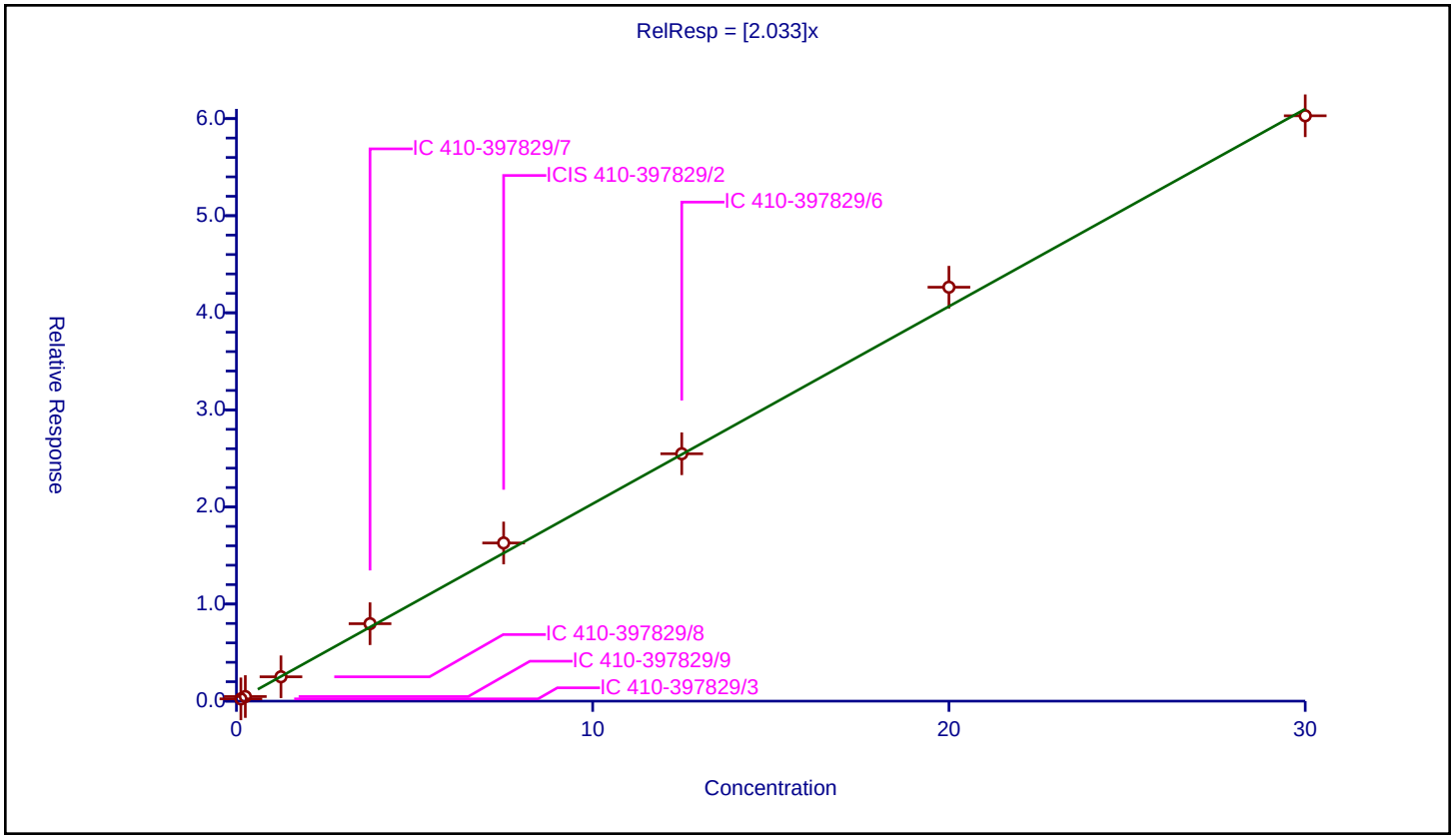
Curve Coefficients

Intercept:	0
Slope:	2.033

Error Coefficients

Standard Error:	2610000
Relative Standard Error:	5.3
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.235013	5.0	437124.0	1.880107	Y
2	IC 410-397829/9	0.25	0.474365	5.0	383344.0	1.89746	Y
3	IC 410-397829/8	1.25	2.5079	5.0	465505.0	2.00632	Y
4	IC 410-397829/7	3.75	7.976791	5.0	364557.0	2.127144	Y
5	ICIS 410-397829/2	7.5	16.29132	5.0	392579.0	2.172176	Y
6	IC 410-397829/6	12.5	25.480158	5.0	478030.0	2.038413	Y
7	IC 410-397829/5	20.0	42.634596	5.0	443400.0	2.13173	Y
8	IC 410-397829/4	30.0	60.29359	5.0	416908.0	2.009786	Y



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Calibration / 3-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

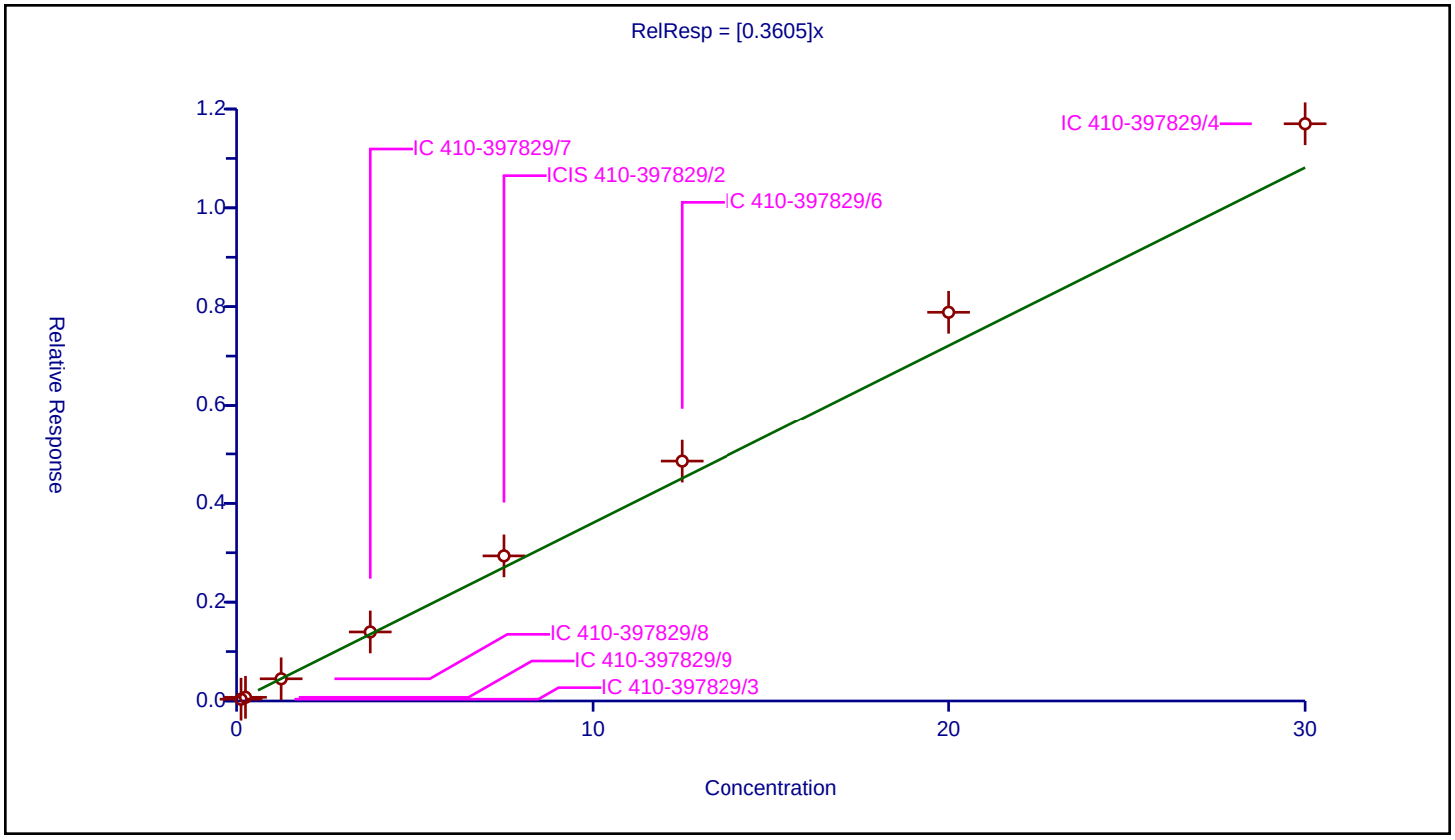
Curve Coefficients

Intercept:	0
Slope:	0.3605

Error Coefficients

Standard Error:	496000
Relative Standard Error:	11.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.036225	5.0	437124.0	0.289803	Y
2	IC 410-397829/9	0.25	0.074489	5.0	383344.0	0.297957	Y
3	IC 410-397829/8	1.25	0.44934	5.0	465505.0	0.359472	Y
4	IC 410-397829/7	3.75	1.396846	5.0	364557.0	0.372492	Y
5	ICIS 410-397829/2	7.5	2.93639	5.0	392579.0	0.391519	Y
6	IC 410-397829/6	12.5	4.854821	5.0	478030.0	0.388386	Y
7	IC 410-397829/5	20.0	7.886299	5.0	443400.0	0.394315	Y
8	IC 410-397829/4	30.0	11.701646	5.0	416908.0	0.390055	Y



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Calibration / Acenaphthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

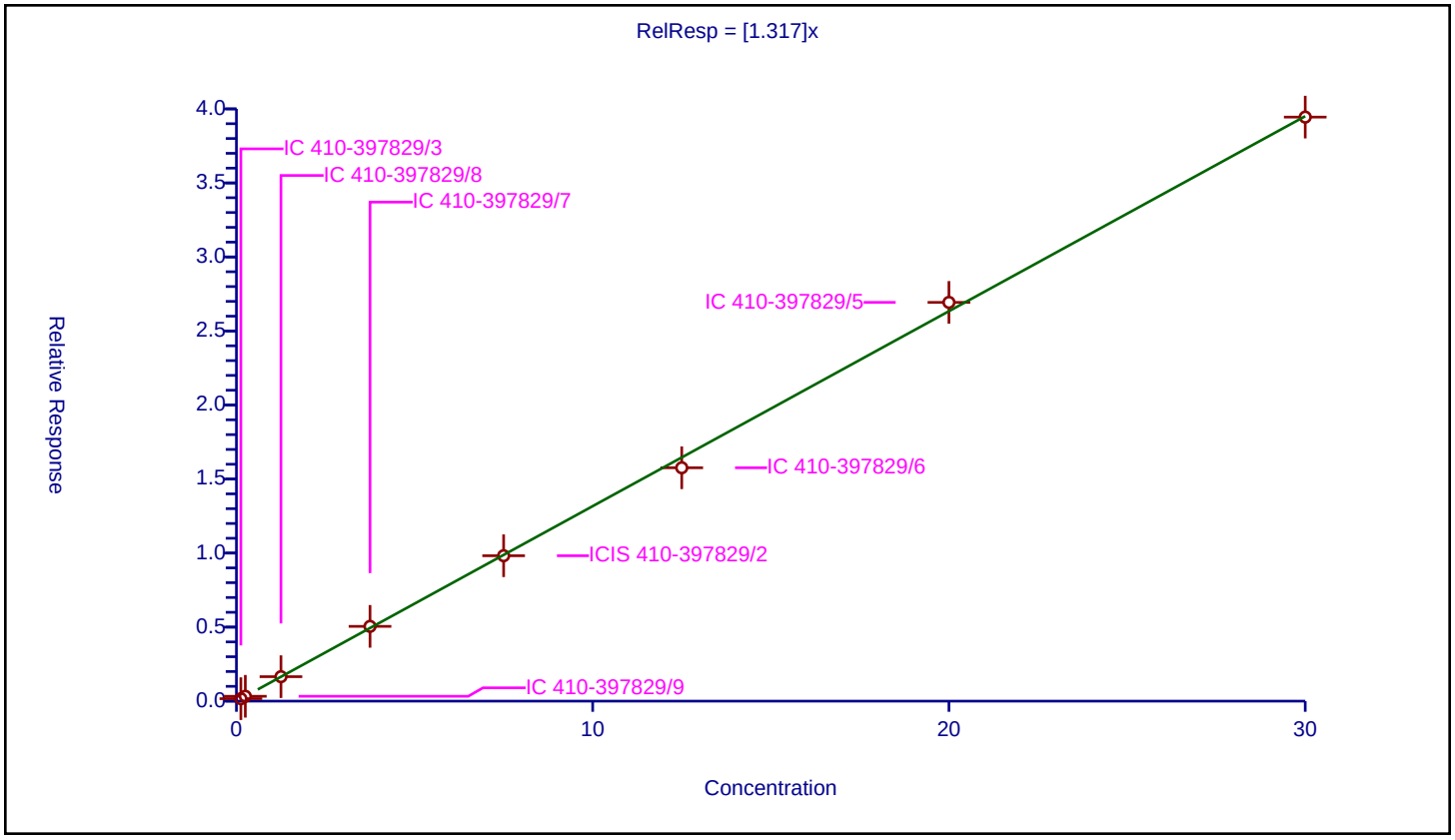
Curve Coefficients

Intercept:	0
Slope:	1.317

Error Coefficients

Standard Error:	1670000
Relative Standard Error:	2.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.165662	5.0	437124.0	1.325299	Y
2	IC 410-397829/9	0.25	0.327487	5.0	383344.0	1.309946	Y
3	IC 410-397829/8	1.25	1.651368	5.0	465505.0	1.321094	Y
4	IC 410-397829/7	3.75	5.050102	5.0	364557.0	1.346694	Y
5	ICIS 410-397829/2	7.5	9.820826	5.0	392579.0	1.309443	Y
6	IC 410-397829/6	12.5	15.761835	5.0	478030.0	1.260947	Y
7	IC 410-397829/5	20.0	26.932217	5.0	443400.0	1.346611	Y
8	IC 410-397829/4	30.0	39.446712	5.0	416908.0	1.31489	Y



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Calibration / 2,4-Dinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

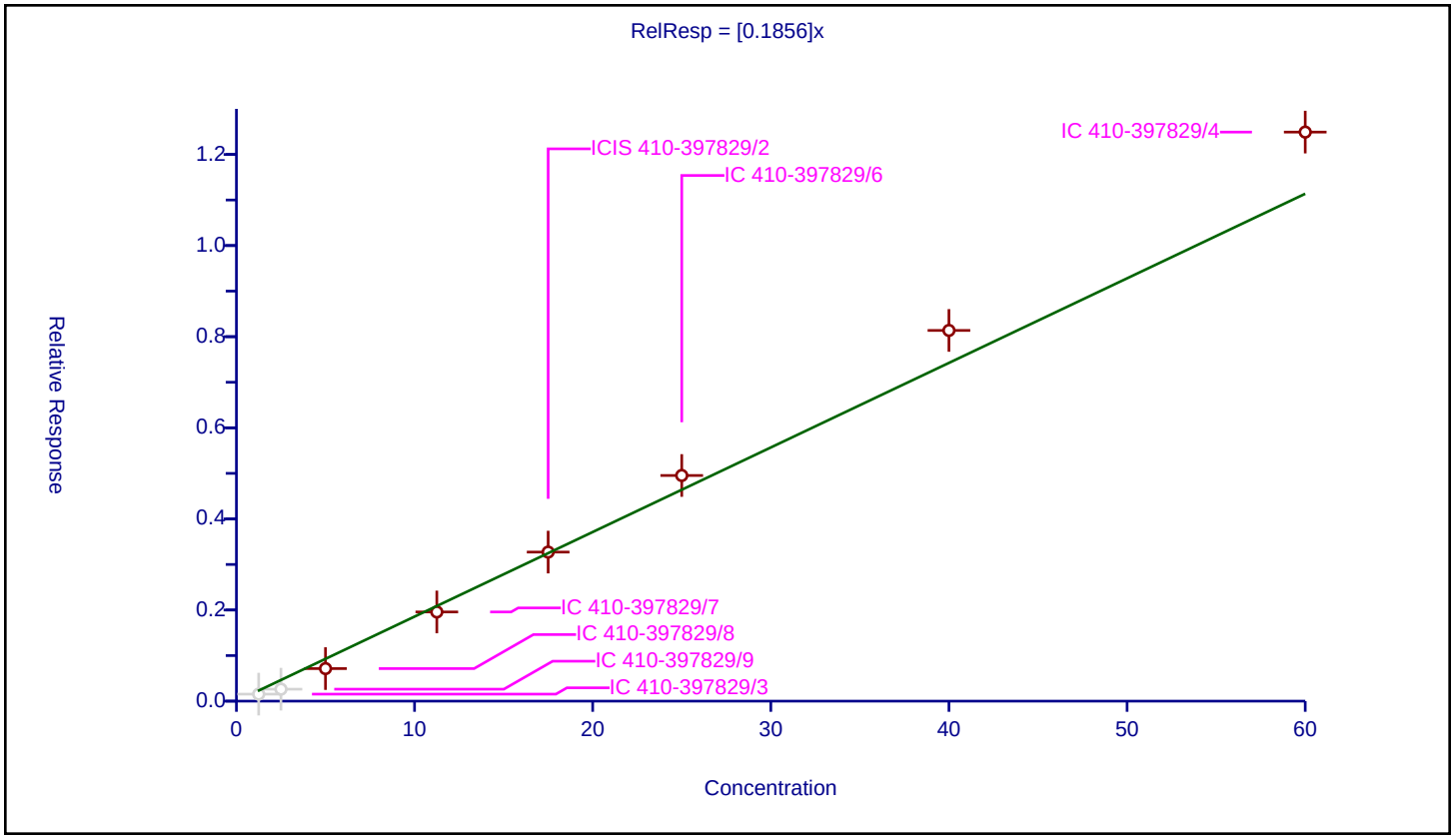
Curve Coefficients

Intercept:	0
Slope:	0.1856

Error Coefficients

Standard Error:	620000
Relative Standard Error:	13.1
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	1.25	0.153789	5.0	437124.0	0.123031	N
2	IC 410-397829/9	2.5	0.262897	5.0	383344.0	0.105159	N
3	IC 410-397829/8	5.0	0.714837	5.0	465505.0	0.142967	Y
4	IC 410-397829/7	11.25	1.95776	5.0	364557.0	0.174023	Y
5	ICIS 410-397829/2	17.5	3.271762	5.0	392579.0	0.186958	Y
6	IC 410-397829/6	25.0	4.953089	5.0	478030.0	0.198124	Y
7	IC 410-397829/5	40.0	8.136885	5.0	443400.0	0.203422	Y
8	IC 410-397829/4	60.0	12.490789	5.0	416908.0	0.20818	Y



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Calibration / Pentachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

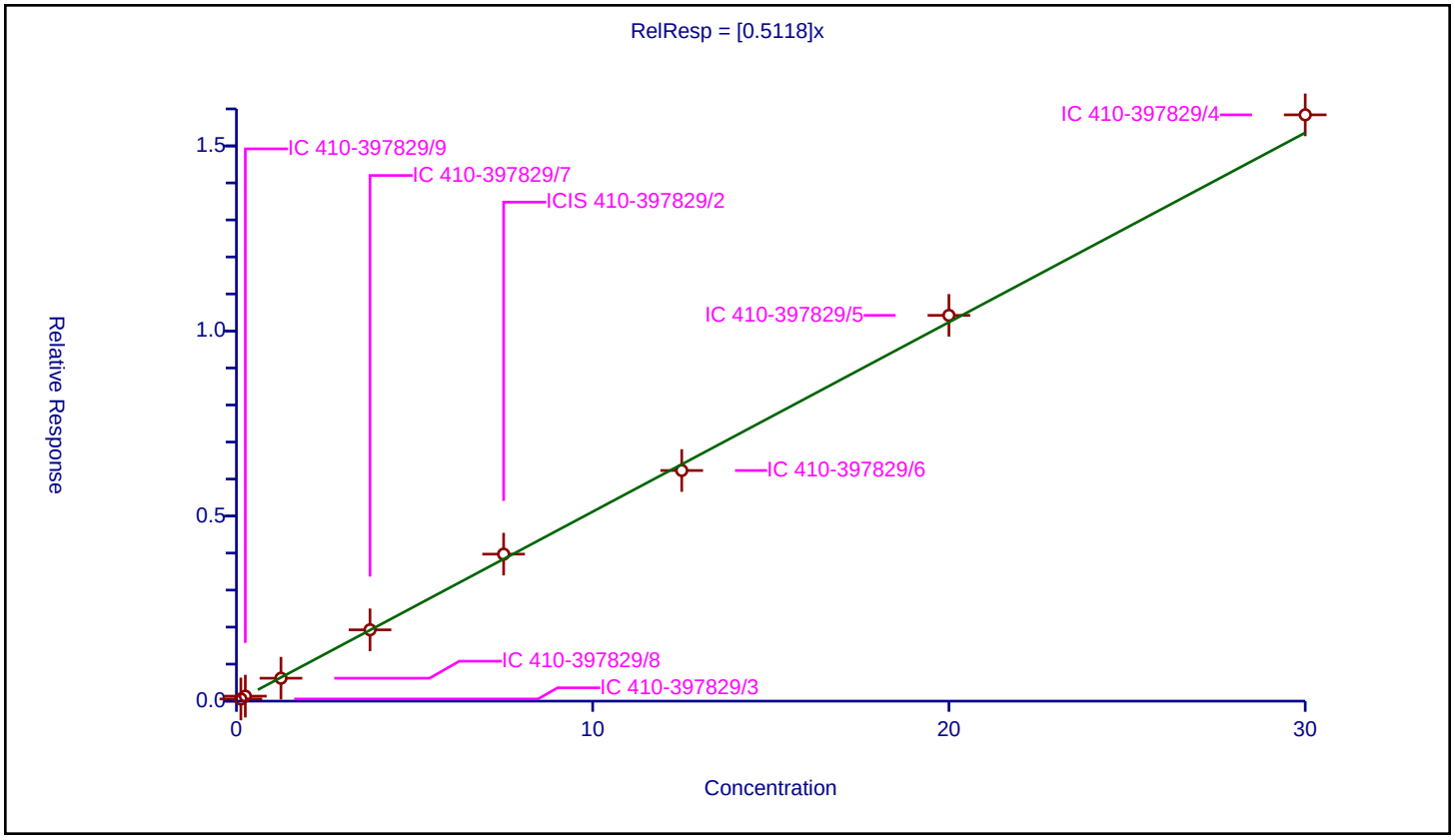
Curve Coefficients

Intercept:	0
Slope:	0.5118

Error Coefficients

Standard Error:	663000
Relative Standard Error:	4.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.058565	5.0	437124.0	0.468517	Y
2	IC 410-397829/9	0.25	0.135061	5.0	383344.0	0.540246	Y
3	IC 410-397829/8	1.25	0.618833	5.0	465505.0	0.495067	Y
4	IC 410-397829/7	3.75	1.926599	5.0	364557.0	0.51376	Y
5	ICIS 410-397829/2	7.5	3.97129	5.0	392579.0	0.529505	Y
6	IC 410-397829/6	12.5	6.231063	5.0	478030.0	0.498485	Y
7	IC 410-397829/5	20.0	10.422339	5.0	443400.0	0.521117	Y
8	IC 410-397829/4	30.0	15.839322	5.0	416908.0	0.527977	Y



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Calibration / 4-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

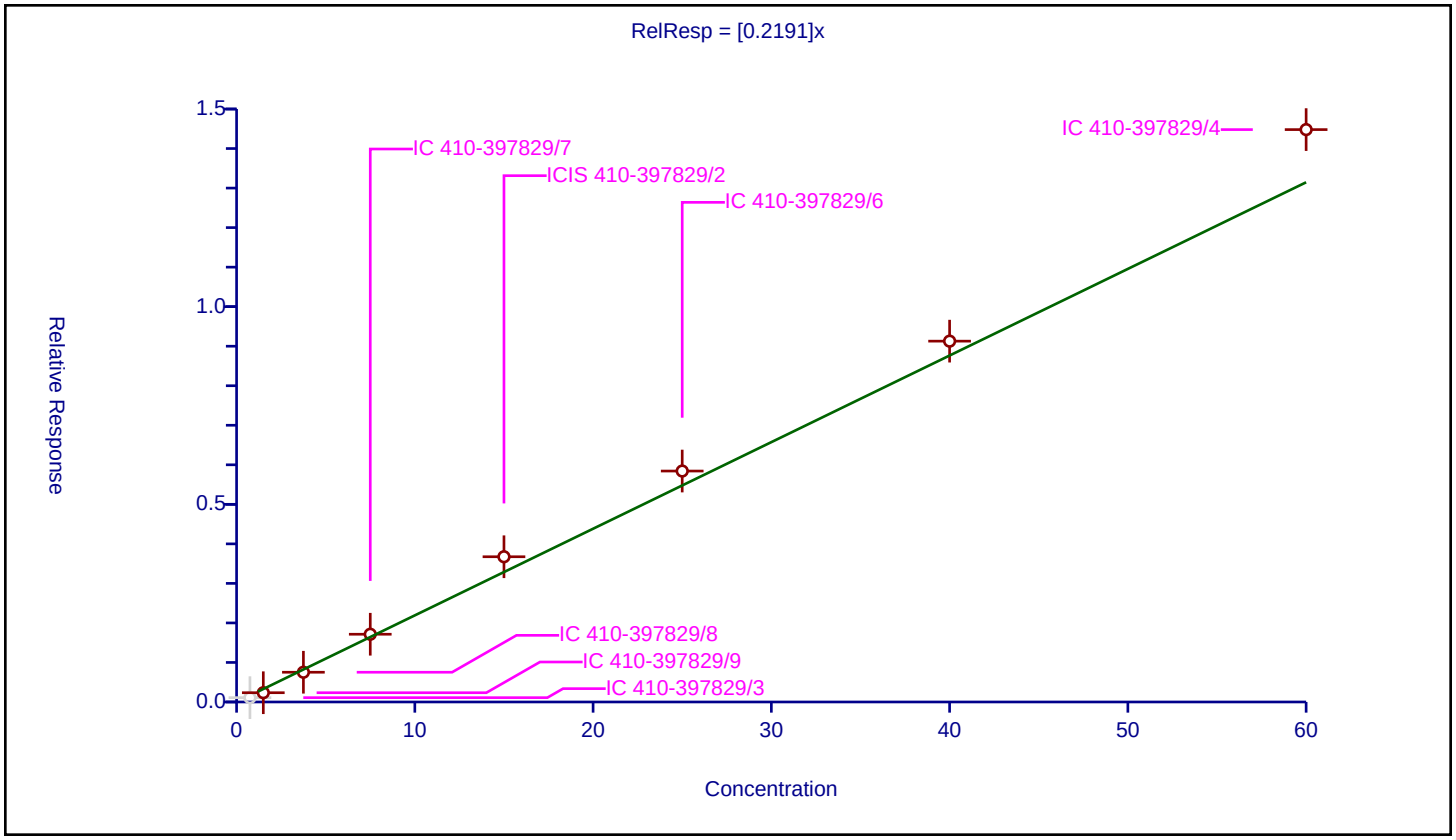
Curve Coefficients

Intercept:	0
Slope:	0.2191

Error Coefficients

Standard Error:	649000
Relative Standard Error:	14.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.75	0.10974	5.0	437124.0	0.14632	N
2	IC 410-397829/9	1.5	0.234607	5.0	383344.0	0.156404	Y
3	IC 410-397829/8	3.75	0.752688	5.0	465505.0	0.200717	Y
4	IC 410-397829/7	7.5	1.713436	5.0	364557.0	0.228458	Y
5	ICIS 410-397829/2	15.0	3.673987	5.0	392579.0	0.244932	Y
6	IC 410-397829/6	25.0	5.842165	5.0	478030.0	0.233687	Y
7	IC 410-397829/5	40.0	9.128135	5.0	443400.0	0.228203	Y
8	IC 410-397829/4	60.0	14.47907	5.0	416908.0	0.241318	Y



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Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

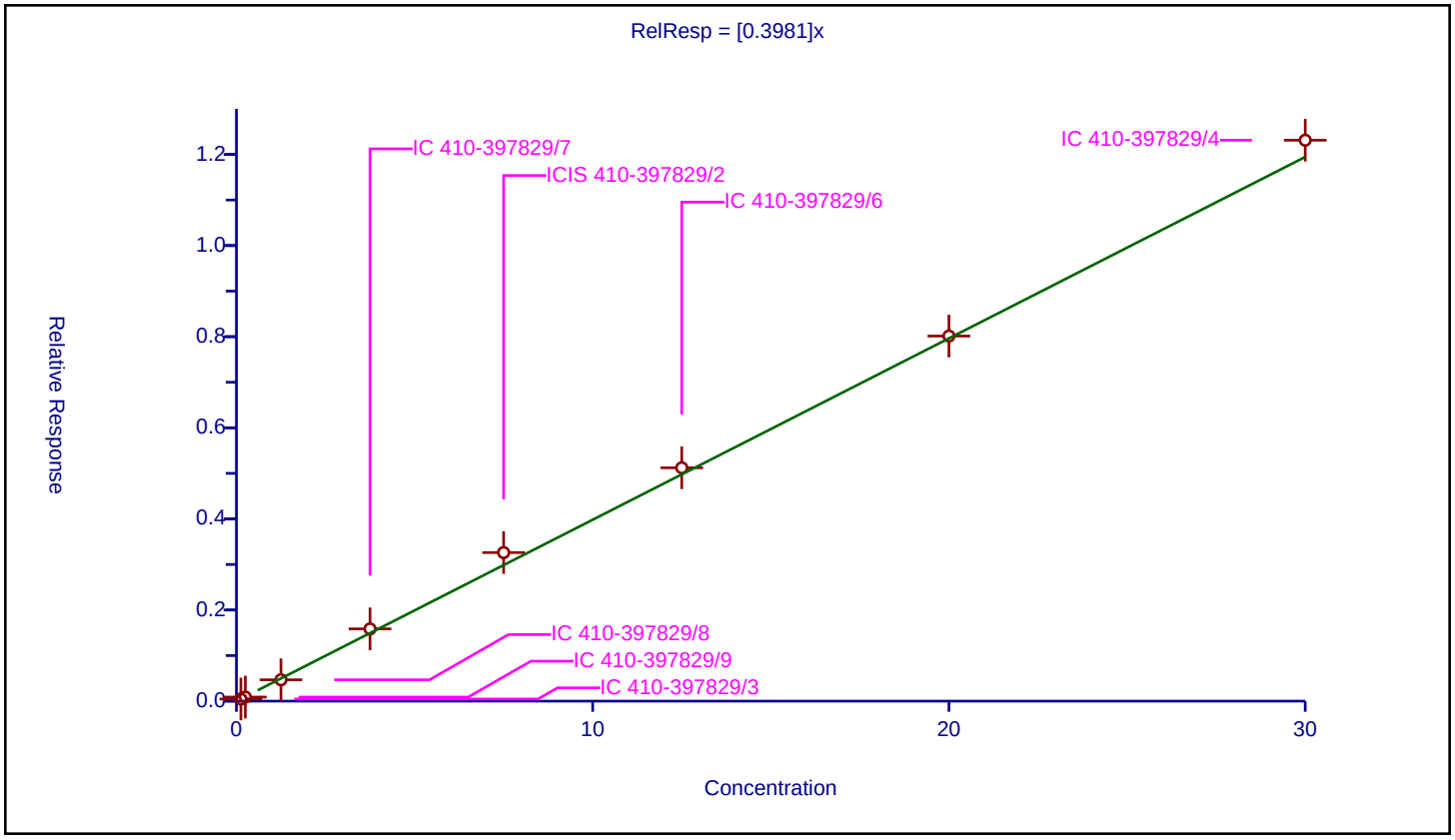
Curve Coefficients

Intercept:	0
Slope:	0.3981

Error Coefficients

Standard Error:	518000
Relative Standard Error:	6.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.046955	5.0	437124.0	0.375637	Y
2	IC 410-397829/9	0.25	0.089071	5.0	383344.0	0.356286	Y
3	IC 410-397829/8	1.25	0.468298	5.0	465505.0	0.374638	Y
4	IC 410-397829/7	3.75	1.586089	5.0	364557.0	0.422957	Y
5	ICIS 410-397829/2	7.5	3.261051	5.0	392579.0	0.434807	Y
6	IC 410-397829/6	12.5	5.122063	5.0	478030.0	0.409765	Y
7	IC 410-397829/5	20.0	8.013633	5.0	443400.0	0.400682	Y
8	IC 410-397829/4	30.0	12.312525	5.0	416908.0	0.410417	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

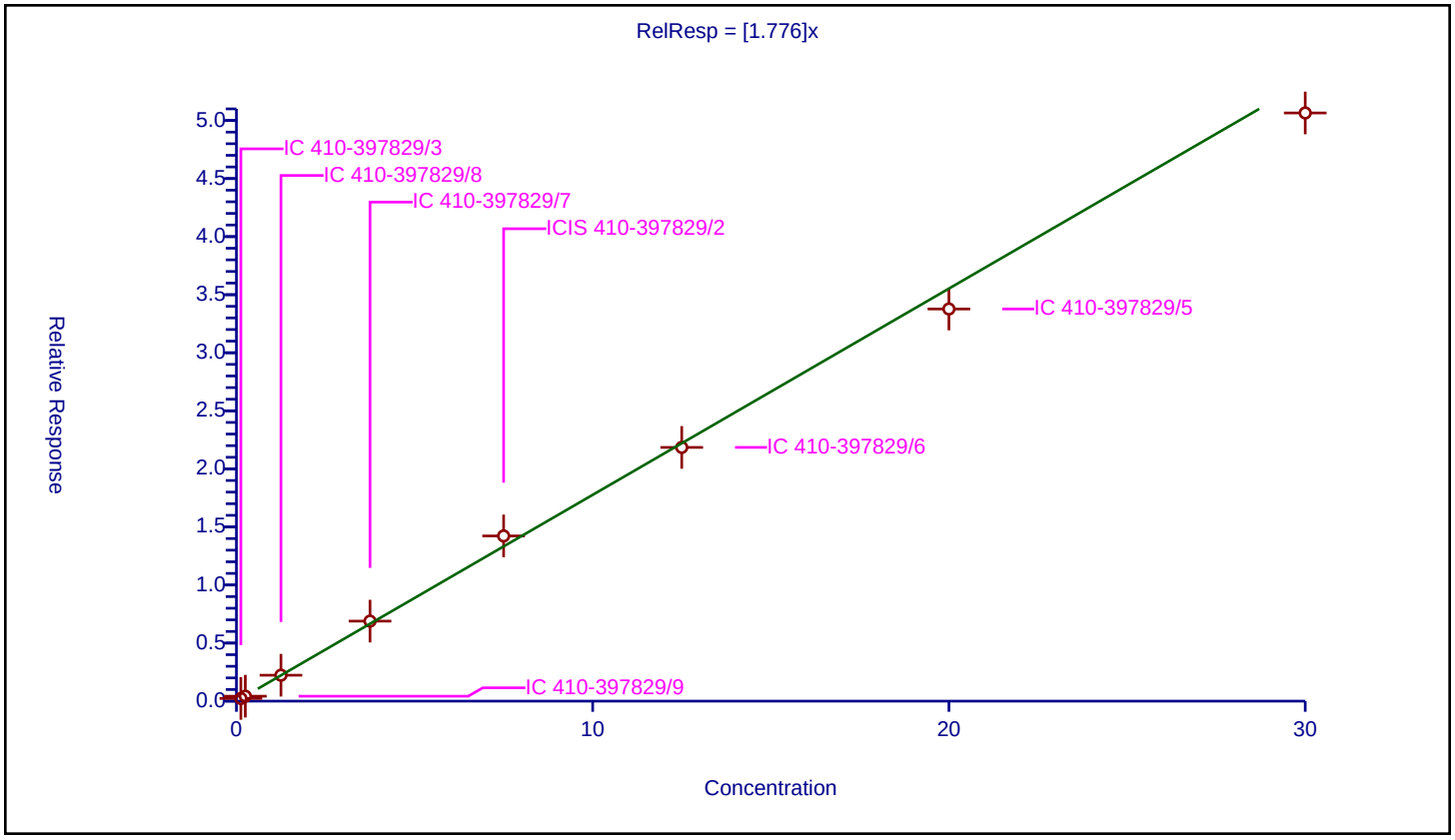
Curve Coefficients

Intercept:	0
Slope:	1.776

Error Coefficients

Standard Error:	2160000
Relative Standard Error:	4.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.232474	5.0	437124.0	1.859793	Y
2	IC 410-397829/9	0.25	0.426392	5.0	383344.0	1.70557	Y
3	IC 410-397829/8	1.25	2.233692	5.0	465505.0	1.786954	Y
4	IC 410-397829/7	3.75	6.890569	5.0	364557.0	1.837485	Y
5	ICIS 410-397829/2	7.5	14.225213	5.0	392579.0	1.896695	Y
6	IC 410-397829/6	12.5	21.849873	5.0	478030.0	1.74799	Y
7	IC 410-397829/5	20.0	33.768888	5.0	443400.0	1.688444	Y
8	IC 410-397829/4	30.0	50.648608	5.0	416908.0	1.688287	Y



Calibration / 1-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

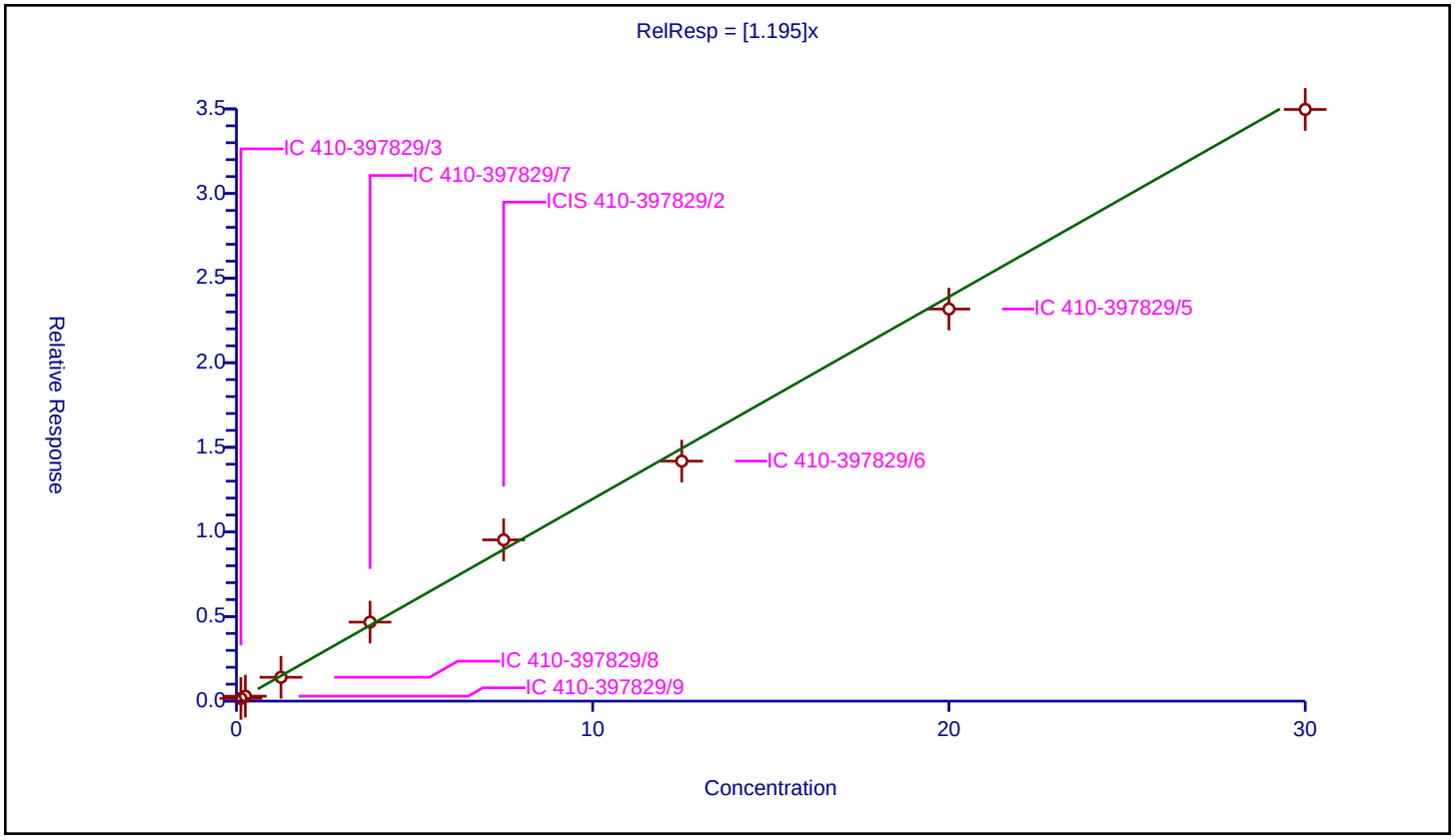
Curve Coefficients

Intercept:	0
Slope:	1.195

Error Coefficients

Standard Error:	1480000
Relative Standard Error:	5.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.160092	5.0	437124.0	1.280735	Y
2	IC 410-397829/9	0.25	0.293809	5.0	383344.0	1.175237	Y
3	IC 410-397829/8	1.25	1.409749	5.0	465505.0	1.127799	Y
4	IC 410-397829/7	3.75	4.669681	5.0	364557.0	1.245248	Y
5	ICIS 410-397829/2	7.5	9.530706	5.0	392579.0	1.270761	Y
6	IC 410-397829/6	12.5	14.183419	5.0	478030.0	1.134674	Y
7	IC 410-397829/5	20.0	23.17235	5.0	443400.0	1.158618	Y
8	IC 410-397829/4	30.0	34.967823	5.0	416908.0	1.165594	Y



Calibration / 2,3,4,6-Tetrachlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

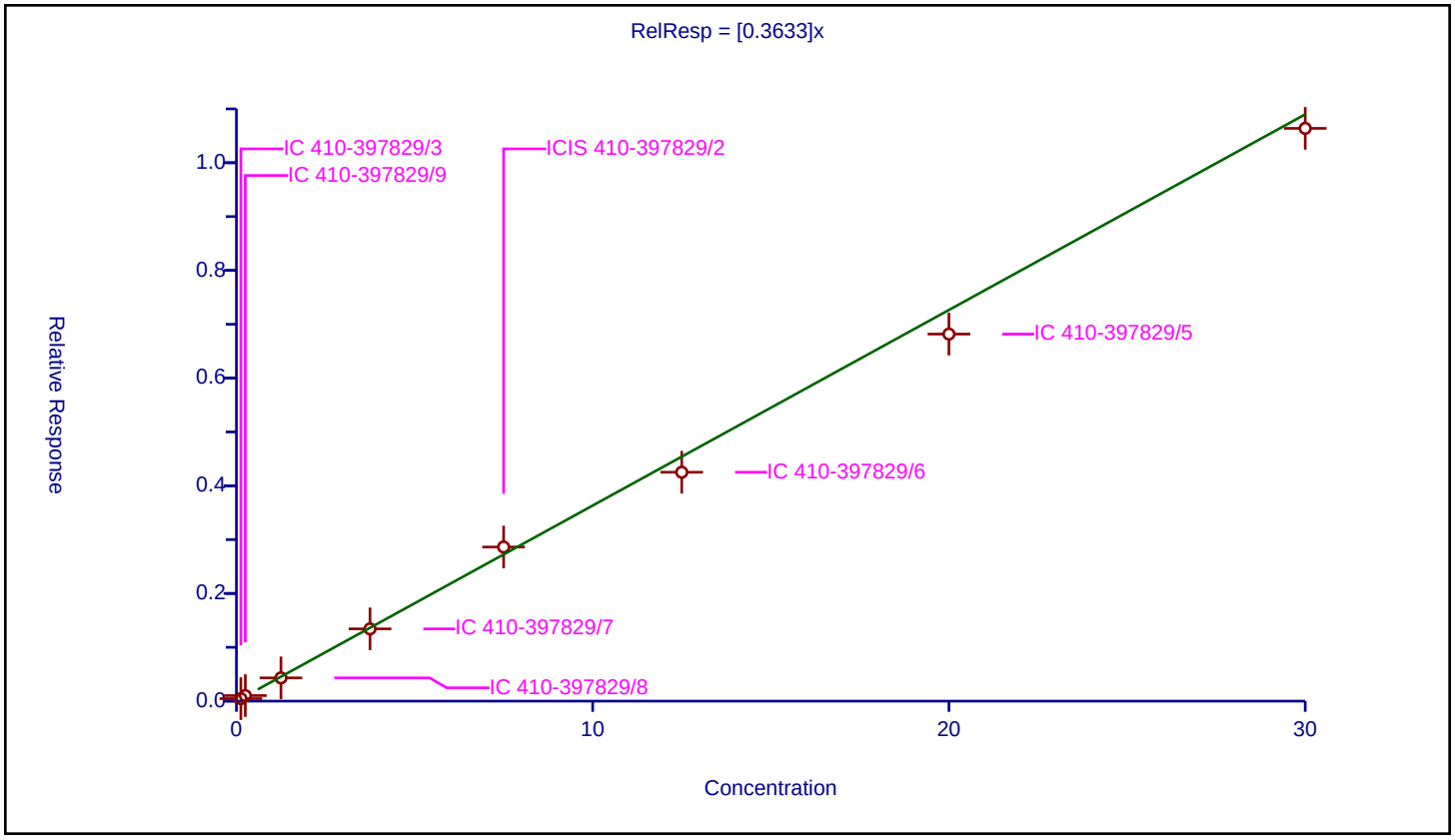
Curve Coefficients

Intercept:	0
Slope:	0.3633

Error Coefficients

Standard Error:	444000
Relative Standard Error:	6.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.046749	5.0	437124.0	0.37399	Y
2	IC 410-397829/9	0.25	0.102936	5.0	383344.0	0.411745	Y
3	IC 410-397829/8	1.25	0.431413	5.0	465505.0	0.345131	Y
4	IC 410-397829/7	3.75	1.342561	5.0	364557.0	0.358016	Y
5	ICIS 410-397829/2	7.5	2.862405	5.0	392579.0	0.381654	Y
6	IC 410-397829/6	12.5	4.251626	5.0	478030.0	0.34013	Y
7	IC 410-397829/5	20.0	6.817377	5.0	443400.0	0.340869	Y
8	IC 410-397829/4	30.0	10.638282	5.0	416908.0	0.354609	Y



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Calibration / 2-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

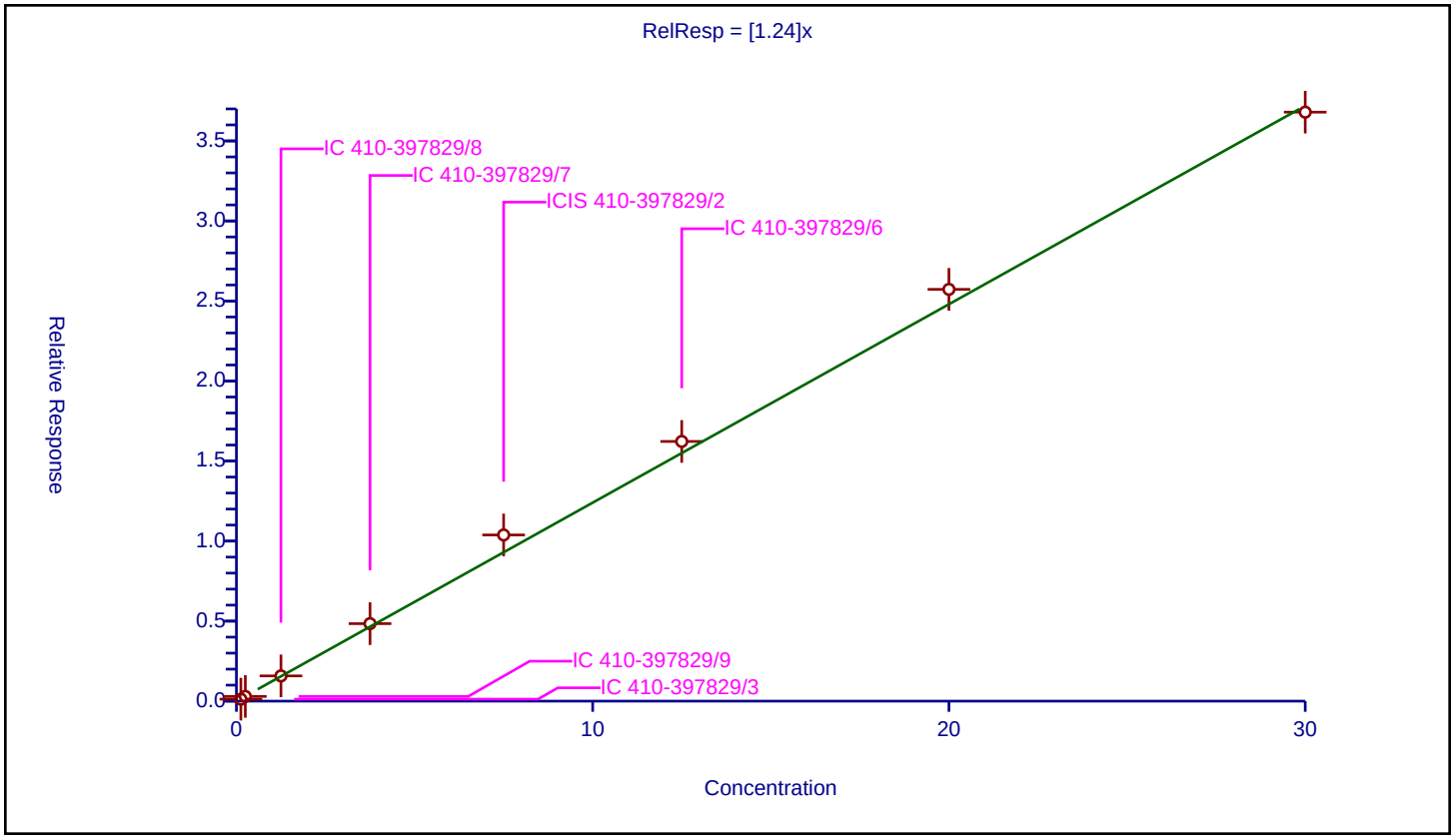
Curve Coefficients

Intercept:	0
Slope:	1.24

Error Coefficients

Standard Error:	1600000
Relative Standard Error:	9.4
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.123718	5.0	437124.0	0.989742	Y
2	IC 410-397829/9	0.25	0.295414	5.0	383344.0	1.181654	Y
3	IC 410-397829/8	1.25	1.57617	5.0	465505.0	1.260936	Y
4	IC 410-397829/7	3.75	4.841835	5.0	364557.0	1.291156	Y
5	ICIS 410-397829/2	7.5	10.38214	5.0	392579.0	1.384285	Y
6	IC 410-397829/6	12.5	16.223856	5.0	478030.0	1.297908	Y
7	IC 410-397829/5	20.0	25.725383	5.0	443400.0	1.286269	Y
8	IC 410-397829/4	30.0	36.796404	5.0	416908.0	1.226547	Y



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Calibration / Diethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

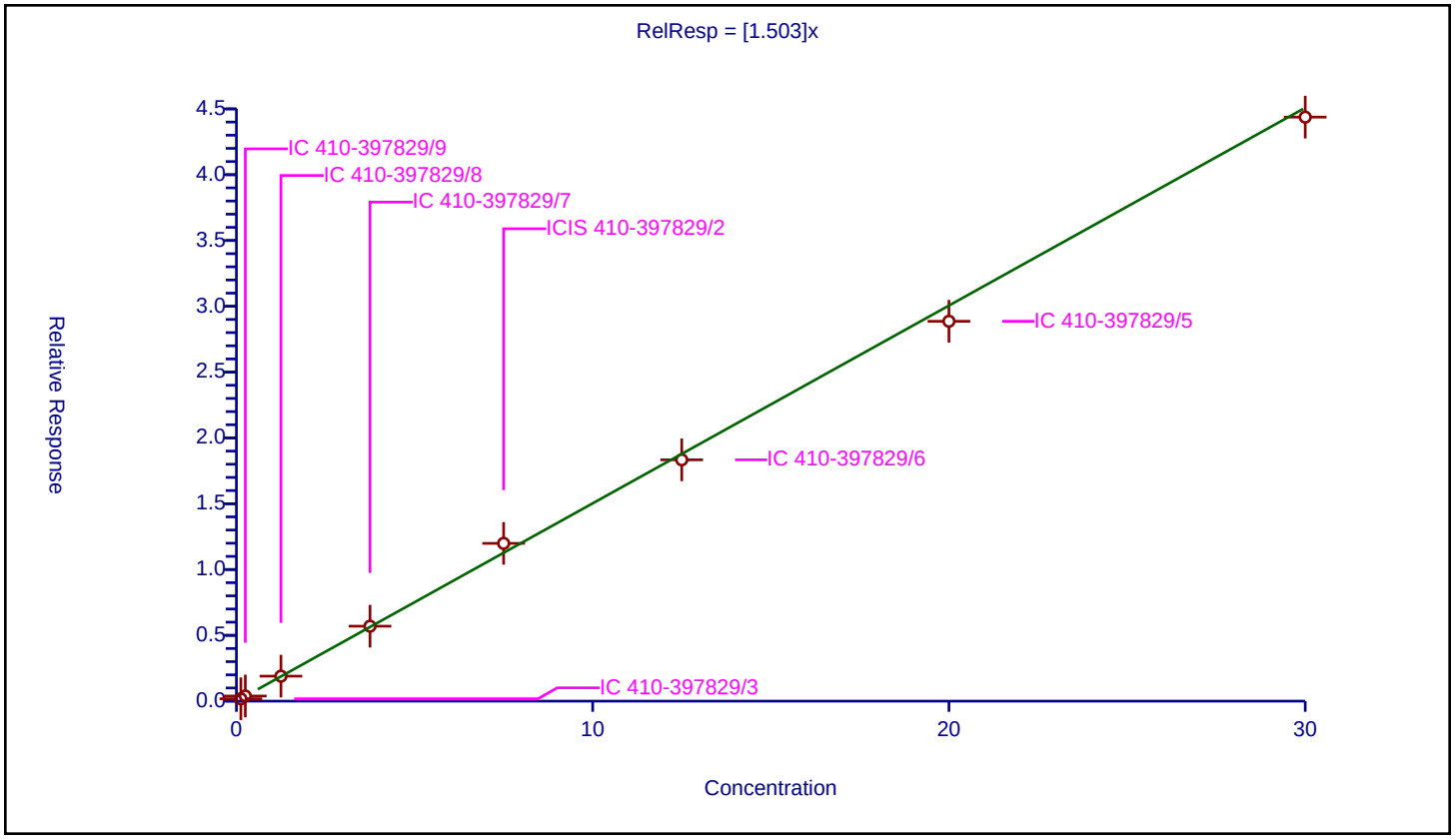
Curve Coefficients

Intercept:	0
Slope:	1.503

Error Coefficients

Standard Error:	1870000
Relative Standard Error:	3.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.180201	5.0	437124.0	1.441605	Y
2	IC 410-397829/9	0.25	0.388802	5.0	383344.0	1.555209	Y
3	IC 410-397829/8	1.25	1.899593	5.0	465505.0	1.519674	Y
4	IC 410-397829/7	3.75	5.694926	5.0	364557.0	1.518647	Y
5	ICIS 410-397829/2	7.5	11.987969	5.0	392579.0	1.598396	Y
6	IC 410-397829/6	12.5	18.336025	5.0	478030.0	1.466882	Y
7	IC 410-397829/5	20.0	28.863599	5.0	443400.0	1.44318	Y
8	IC 410-397829/4	30.0	44.373927	5.0	416908.0	1.479131	Y



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Calibration / Thionazin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

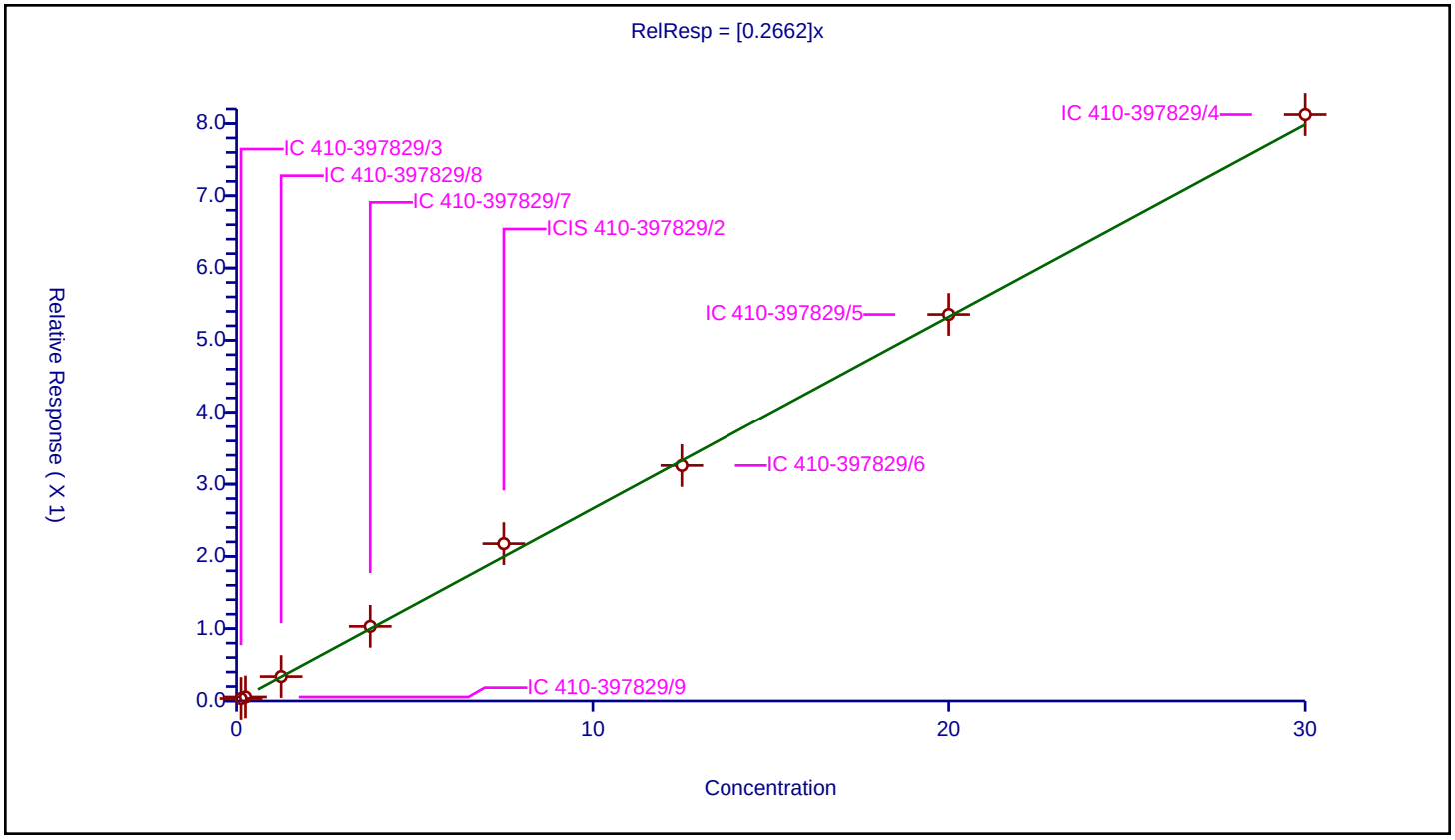
Curve Coefficients

Intercept:	0
Slope:	0.2662

Error Coefficients

Standard Error:	342000
Relative Standard Error:	7.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.034235	5.0	437124.0	0.273881	Y
2	IC 410-397829/9	0.25	0.055368	5.0	383344.0	0.221472	Y
3	IC 410-397829/8	1.25	0.337257	5.0	465505.0	0.269806	Y
4	IC 410-397829/7	3.75	1.03202	5.0	364557.0	0.275205	Y
5	ICIS 410-397829/2	7.5	2.176199	5.0	392579.0	0.29016	Y
6	IC 410-397829/6	12.5	3.258467	5.0	478030.0	0.260677	Y
7	IC 410-397829/5	20.0	5.357161	5.0	443400.0	0.267858	Y
8	IC 410-397829/4	30.0	8.123999	5.0	416908.0	0.2708	Y



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Calibration / Fluorene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

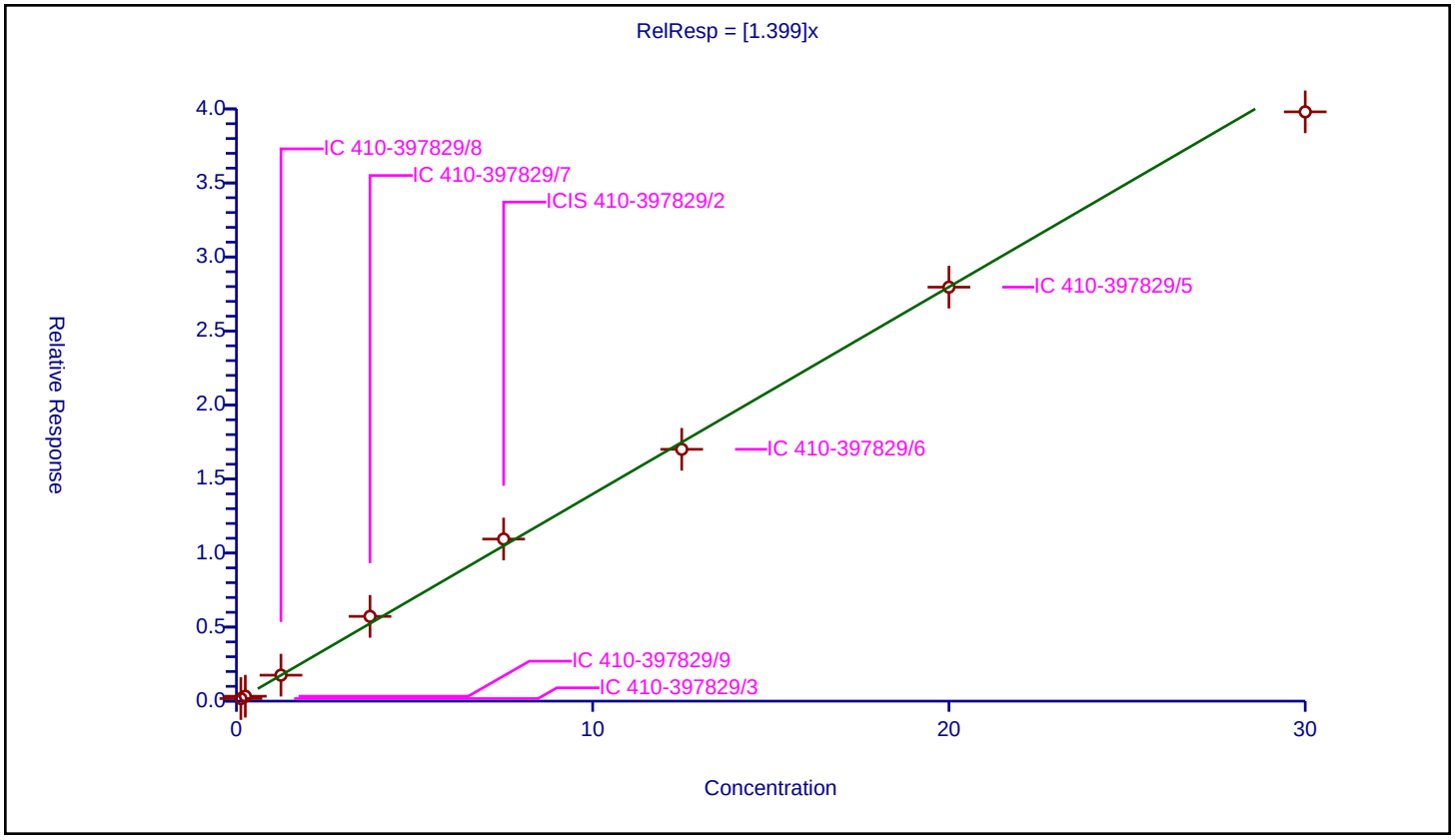
Curve Coefficients

Intercept:	0
Slope:	1.399

Error Coefficients

Standard Error:	1720000
Relative Standard Error:	4.8
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.173235	5.0	437124.0	1.385877	Y
2	IC 410-397829/9	0.25	0.33226	5.0	383344.0	1.329041	Y
3	IC 410-397829/8	1.25	1.753826	5.0	465505.0	1.403061	Y
4	IC 410-397829/7	3.75	5.725182	5.0	364557.0	1.526715	Y
5	ICIS 410-397829/2	7.5	10.946268	5.0	392579.0	1.459502	Y
6	IC 410-397829/6	12.5	17.0082	5.0	478030.0	1.360656	Y
7	IC 410-397829/5	20.0	27.96007	5.0	443400.0	1.398003	Y
8	IC 410-397829/4	30.0	39.801203	5.0	416908.0	1.326707	Y



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Calibration / 4-Chlorophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

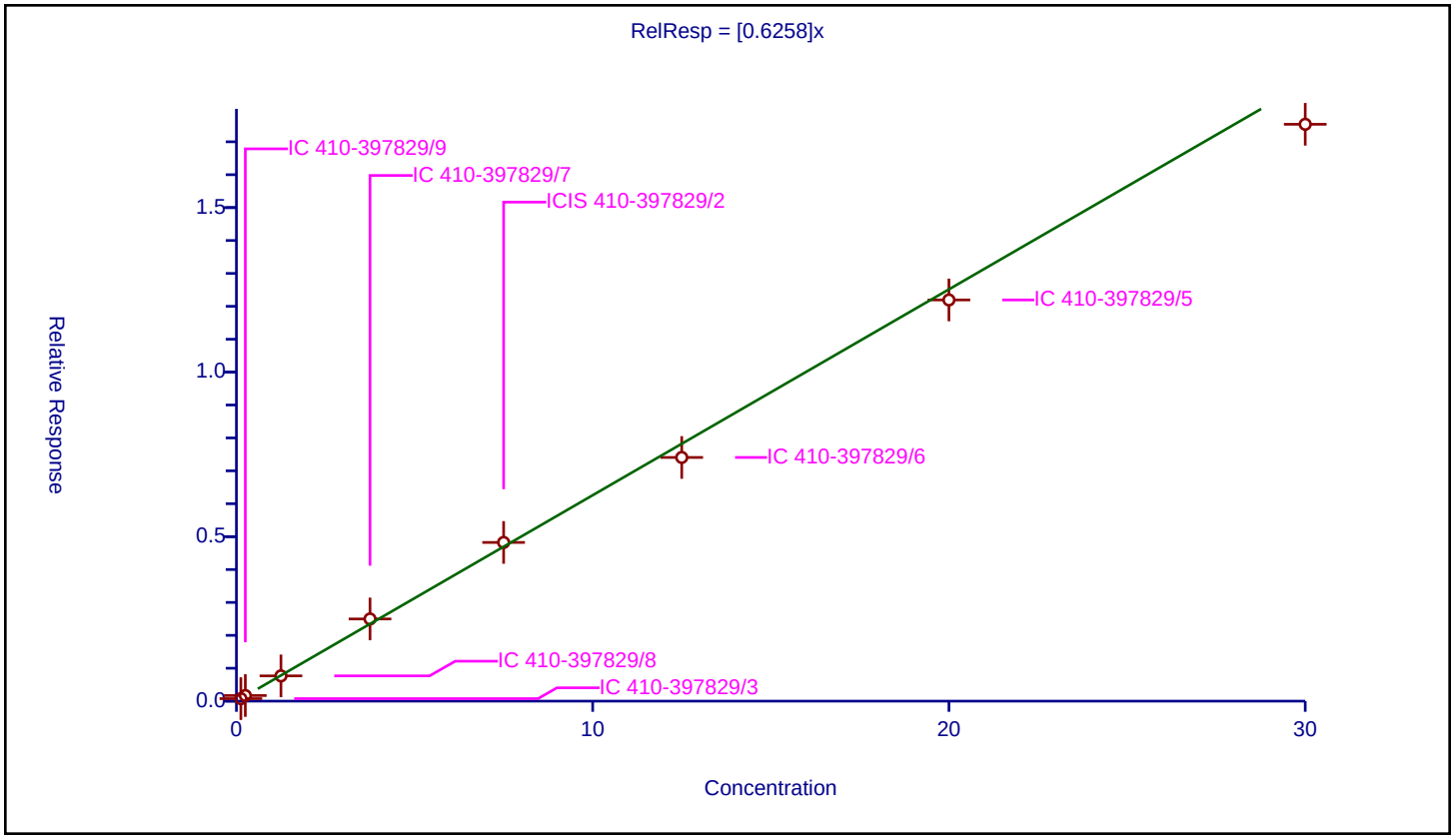
Curve Coefficients

Intercept:	0
Slope:	0.6258

Error Coefficients

Standard Error:	755000
Relative Standard Error:	5.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.076706	5.0	437124.0	0.613647	Y
2	IC 410-397829/9	0.25	0.170747	5.0	383344.0	0.68299	Y
3	IC 410-397829/8	1.25	0.767382	5.0	465505.0	0.613905	Y
4	IC 410-397829/7	3.75	2.497922	5.0	364557.0	0.666113	Y
5	ICIS 410-397829/2	7.5	4.823424	5.0	392579.0	0.643123	Y
6	IC 410-397829/6	12.5	7.406052	5.0	478030.0	0.592484	Y
7	IC 410-397829/5	20.0	12.193302	5.0	443400.0	0.609665	Y
8	IC 410-397829/4	30.0	17.532069	5.0	416908.0	0.584402	Y



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Calibration / N-Nitro-o-toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

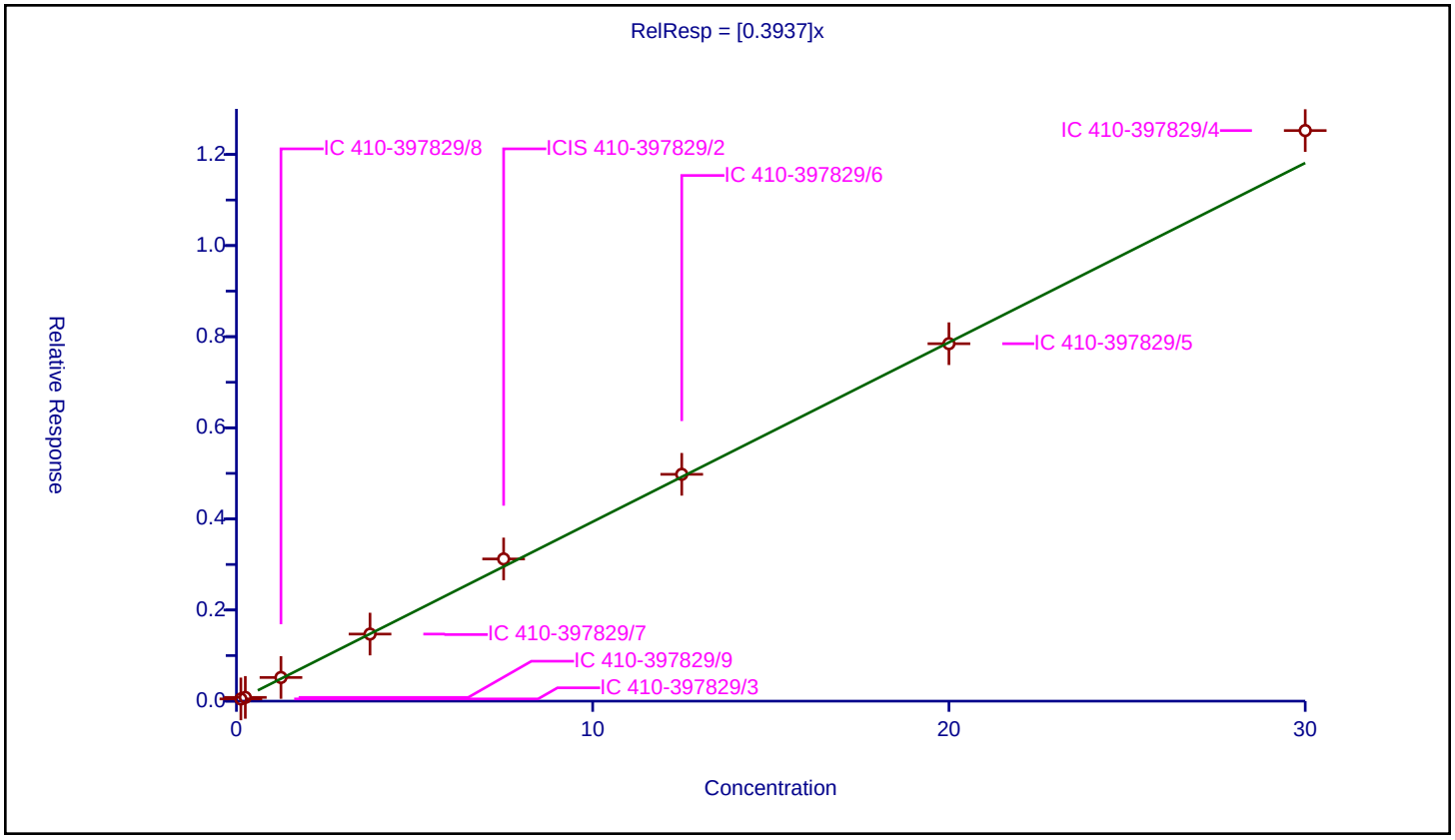
Curve Coefficients

Intercept:	0
Slope:	0.3937

Error Coefficients

Standard Error:	518000
Relative Standard Error:	7.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.048682	5.0	437124.0	0.389455	Y
2	IC 410-397829/9	0.25	0.082041	5.0	383344.0	0.328165	Y
3	IC 410-397829/8	1.25	0.519414	5.0	465505.0	0.415532	Y
4	IC 410-397829/7	3.75	1.472239	5.0	364557.0	0.392597	Y
5	ICIS 410-397829/2	7.5	3.121244	5.0	392579.0	0.416166	Y
6	IC 410-397829/6	12.5	4.978694	5.0	478030.0	0.398296	Y
7	IC 410-397829/5	20.0	7.846098	5.0	443400.0	0.392305	Y
8	IC 410-397829/4	30.0	12.524142	5.0	416908.0	0.417471	Y



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Calibration / 4-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

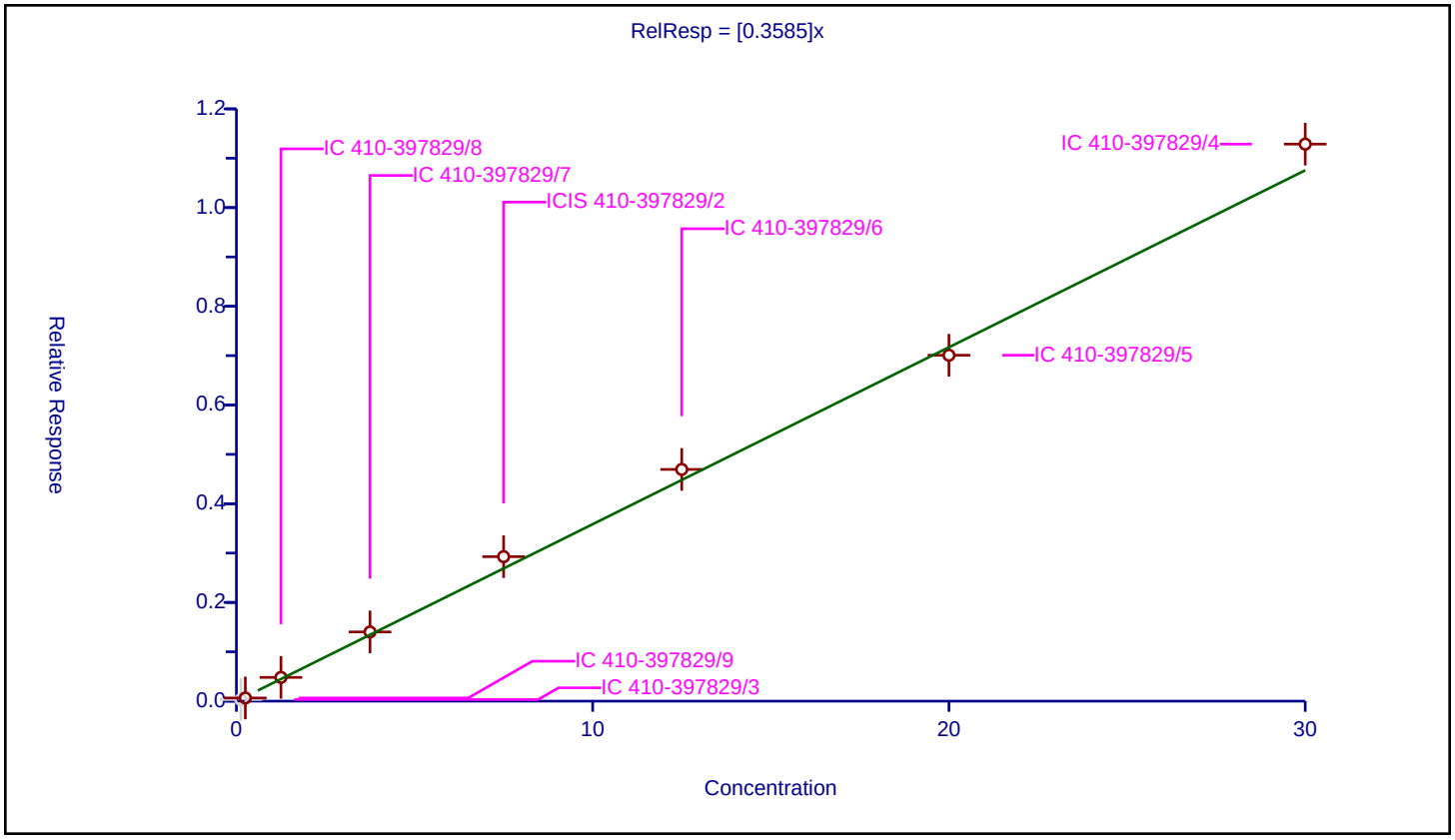
Curve Coefficients

Intercept:	0
Slope:	0.3585

Error Coefficients

Standard Error:	506000
Relative Standard Error:	12.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.032142	5.0	437124.0	0.257135	N
2	IC 410-397829/9	0.25	0.06455	5.0	383344.0	0.258202	Y
3	IC 410-397829/8	1.25	0.480865	5.0	465505.0	0.384692	Y
4	IC 410-397829/7	3.75	1.402442	5.0	364557.0	0.373984	Y
5	ICIS 410-397829/2	7.5	2.927589	5.0	392579.0	0.390345	Y
6	IC 410-397829/6	12.5	4.695124	5.0	478030.0	0.37561	Y
7	IC 410-397829/5	20.0	7.008536	5.0	443400.0	0.350427	Y
8	IC 410-397829/4	30.0	11.286099	5.0	416908.0	0.376203	Y



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Calibration / 4,6-Dinitro-2-methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

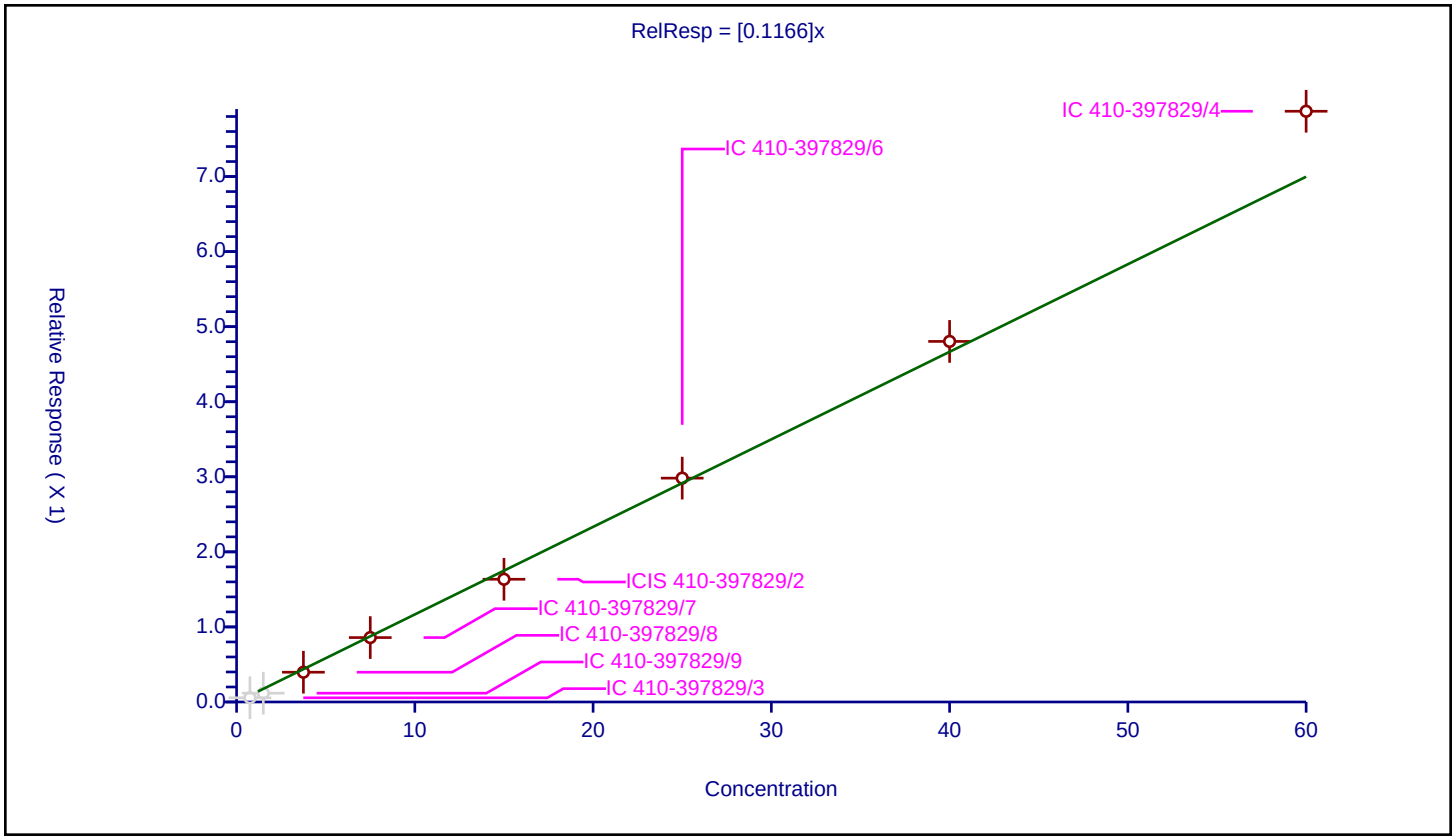
Curve Coefficients

Intercept:	0
Slope:	0.1166

Error Coefficients

Standard Error:	670000
Relative Standard Error:	7.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.75	0.056017	5.0	804481.0	0.07469	N
2	IC 410-397829/9	1.5	0.116956	5.0	706975.0	0.077971	N
3	IC 410-397829/8	3.75	0.396836	5.0	845790.0	0.105823	Y
4	IC 410-397829/7	7.5	0.858163	5.0	679061.0	0.114422	Y
5	ICIS 410-397829/2	15.0	1.635061	5.0	802857.0	0.109004	Y
6	IC 410-397829/6	25.0	2.982419	5.0	883382.0	0.119297	Y
7	IC 410-397829/5	40.0	4.803829	5.0	783422.0	0.120096	Y
8	IC 410-397829/4	60.0	7.870295	5.0	728871.0	0.131172	Y



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Calibration / N-Nitrosodiphenylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

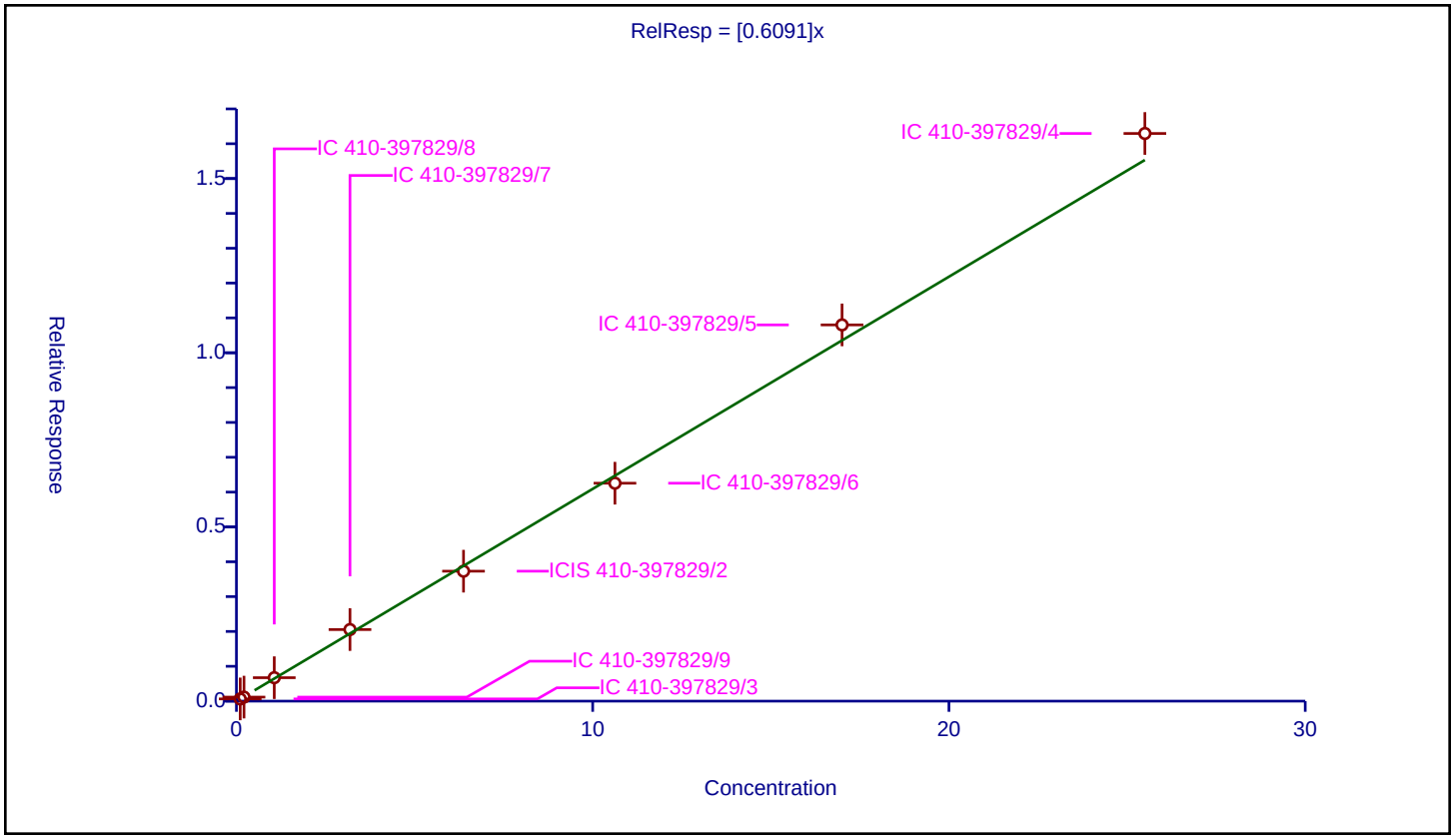
Curve Coefficients

Intercept:	0
Slope:	0.6091

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	5.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.10625	0.063873	5.0	804481.0	0.601162	Y
2	IC 410-397829/9	0.2125	0.115931	5.0	706975.0	0.545556	Y
3	IC 410-397829/8	1.0625	0.673158	5.0	845790.0	0.63356	Y
4	IC 410-397829/7	3.1875	2.054933	5.0	679061.0	0.644685	Y
5	ICIS 410-397829/2	6.375	3.73039	5.0	802857.0	0.585159	Y
6	IC 410-397829/6	10.625	6.255238	5.0	883382.0	0.588728	Y
7	IC 410-397829/5	17.0	10.799971	5.0	783422.0	0.635292	Y
8	IC 410-397829/4	25.5	16.294399	5.0	728871.0	0.638996	Y



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Calibration / 1,2-Diphenylhydrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

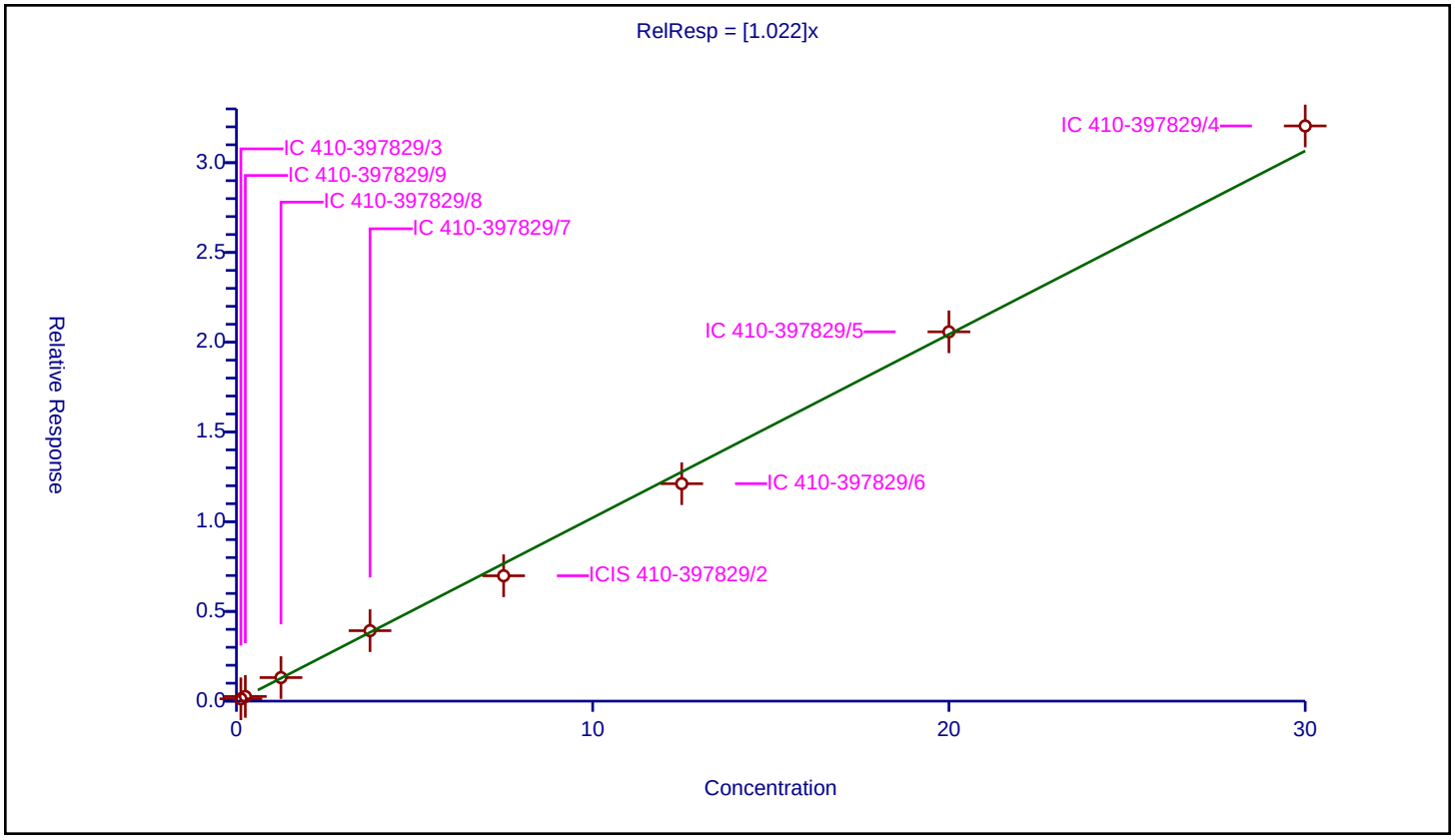
Curve Coefficients

Intercept:	0
Slope:	1.022

Error Coefficients

Standard Error:	2340000
Relative Standard Error:	4.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.130171	5.0	804481.0	1.041367	Y
2	IC 410-397829/9	0.25	0.259797	5.0	706975.0	1.039188	Y
3	IC 410-397829/8	1.25	1.312518	5.0	845790.0	1.050015	Y
4	IC 410-397829/7	3.75	3.926599	5.0	679061.0	1.047093	Y
5	ICIS 410-397829/2	7.5	6.984849	5.0	802857.0	0.931313	Y
6	IC 410-397829/6	12.5	12.117176	5.0	883382.0	0.969374	Y
7	IC 410-397829/5	20.0	20.577779	5.0	783422.0	1.028889	Y
8	IC 410-397829/4	30.0	32.050342	5.0	728871.0	1.068345	Y



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Calibration / 2,4,6-Tribromophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

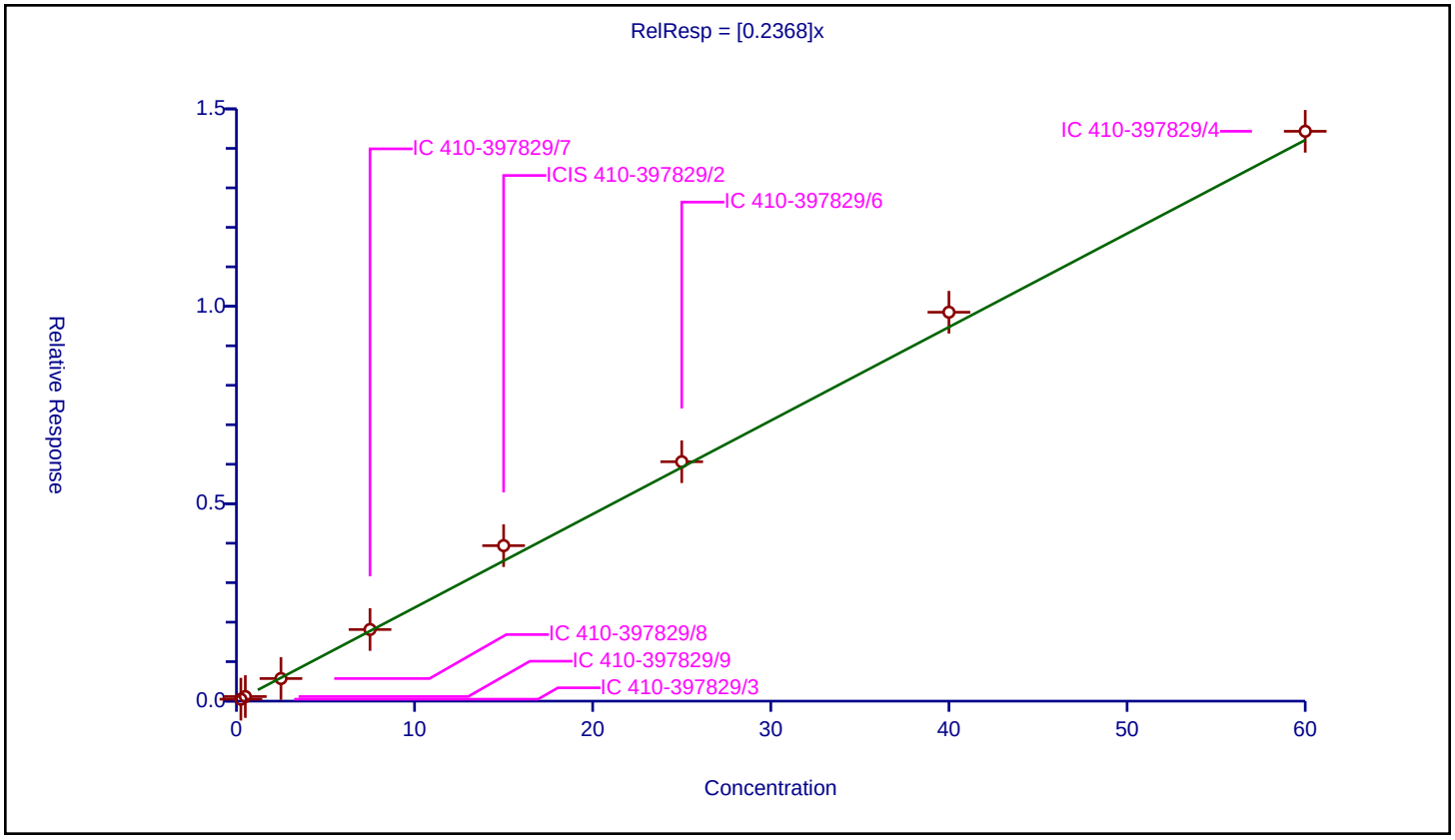
Curve Coefficients

Intercept:	0
Slope:	0.2368

Error Coefficients

Standard Error:	617000
Relative Standard Error:	7.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.25	0.049768	5.0	437124.0	0.199074	Y
2	IC 410-397829/9	0.5	0.116488	5.0	383344.0	0.232976	Y
3	IC 410-397829/8	2.5	0.572207	5.0	465505.0	0.228883	Y
4	IC 410-397829/7	7.5	1.814339	5.0	364557.0	0.241912	Y
5	ICIS 410-397829/2	15.0	3.938736	5.0	392579.0	0.262582	Y
6	IC 410-397829/6	25.0	6.063762	5.0	478030.0	0.24255	Y
7	IC 410-397829/5	40.0	9.850226	5.0	443400.0	0.246256	Y
8	IC 410-397829/4	60.0	14.432741	5.0	416908.0	0.240546	Y



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Calibration / Sulfotepp

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

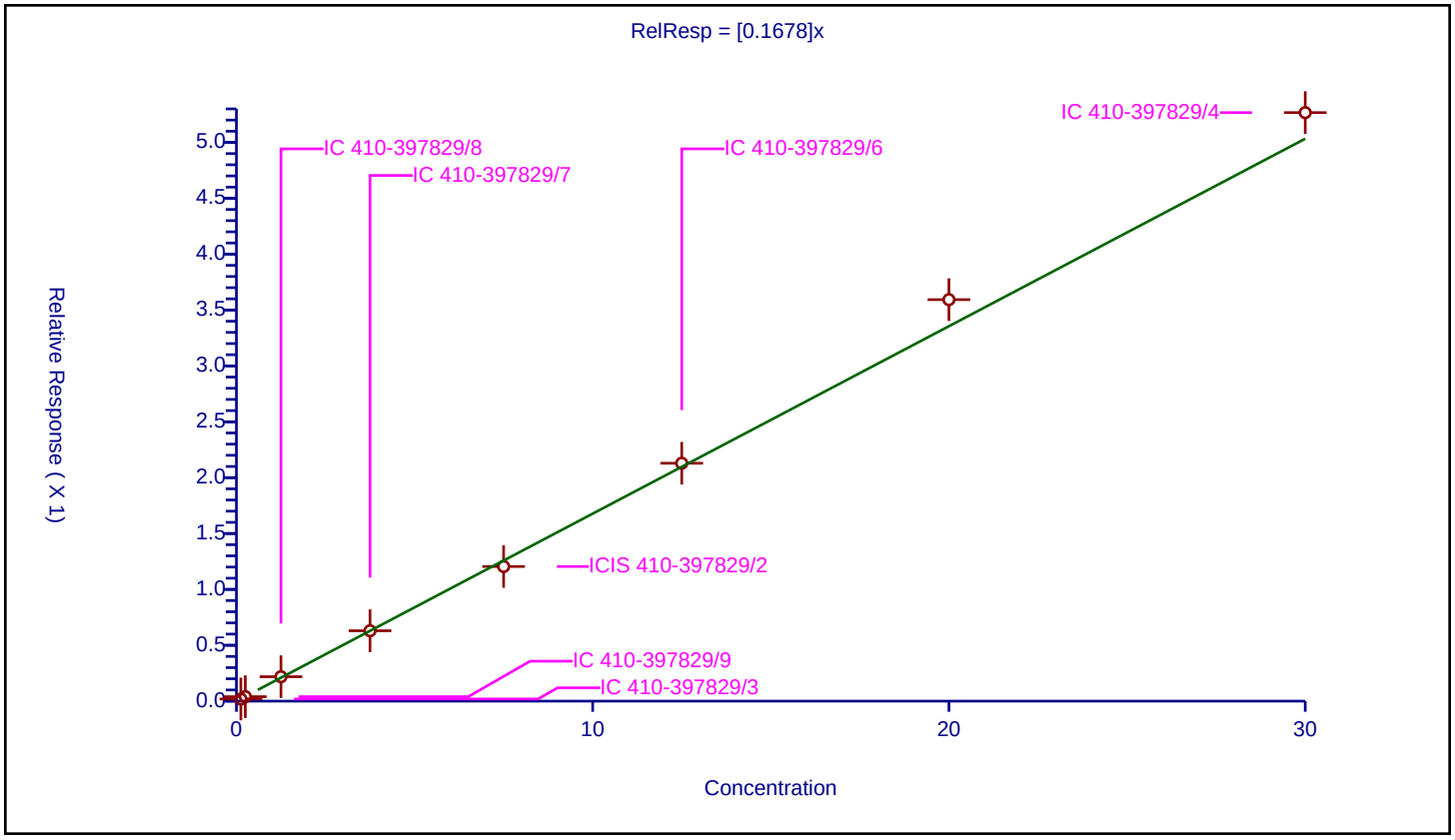
Curve Coefficients

Intercept:	0
Slope:	0.1678

Error Coefficients

Standard Error:	395000
Relative Standard Error:	5.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.019217	5.0	804481.0	0.153739	Y
2	IC 410-397829/9	0.25	0.039839	5.0	706975.0	0.159355	Y
3	IC 410-397829/8	1.25	0.2186	5.0	845790.0	0.17488	Y
4	IC 410-397829/7	3.75	0.62984	5.0	679061.0	0.167957	Y
5	ICIS 410-397829/2	7.5	1.204909	5.0	802857.0	0.160655	Y
6	IC 410-397829/6	12.5	2.129051	5.0	883382.0	0.170324	Y
7	IC 410-397829/5	20.0	3.592891	5.0	783422.0	0.179645	Y
8	IC 410-397829/4	30.0	5.2667	5.0	728871.0	0.175557	Y



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Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

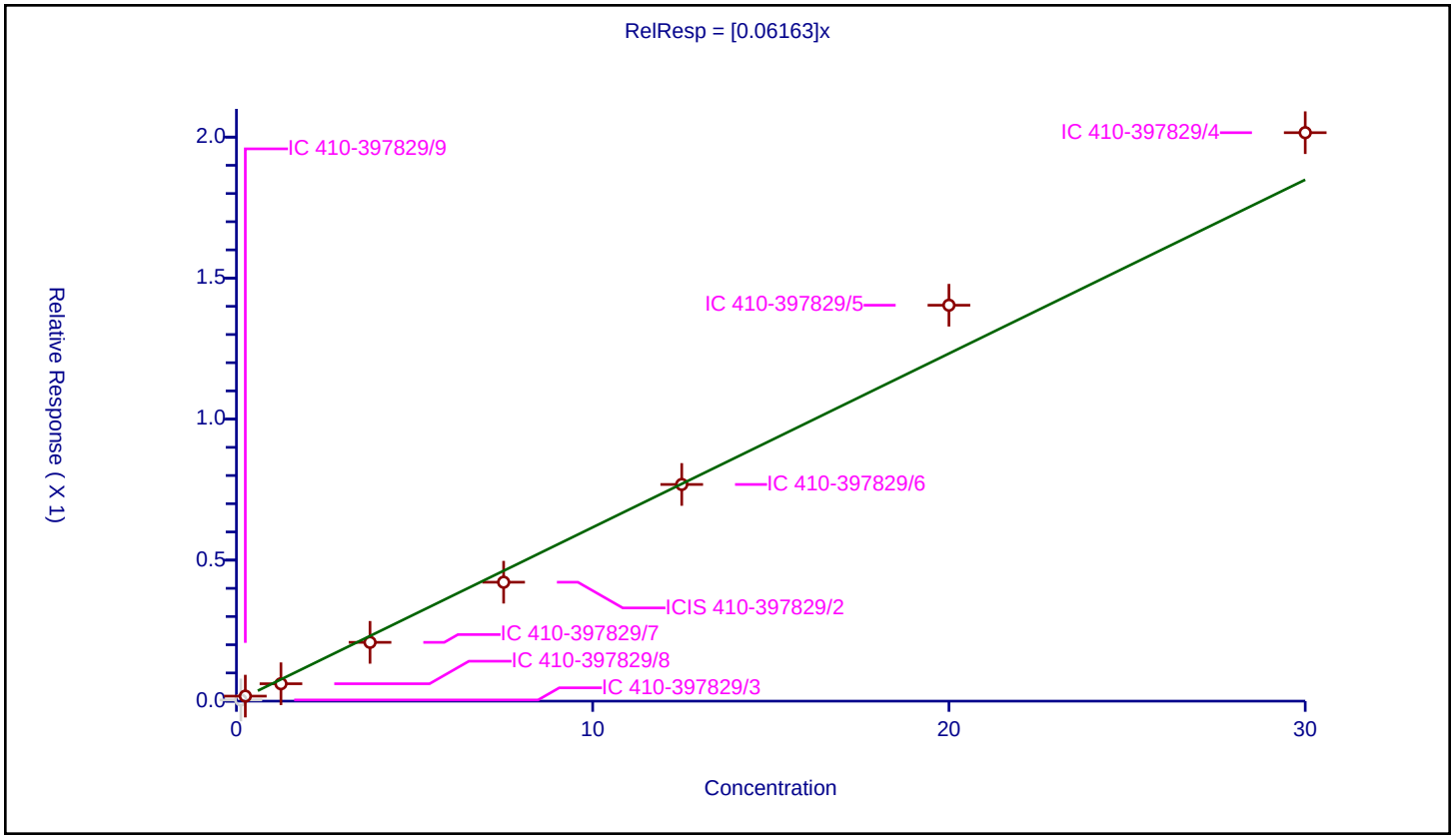
Curve Coefficients

Intercept:	0
Slope:	0.06163

Error Coefficients

Standard Error:	163000
Relative Standard Error:	13.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.004233	5.0	804481.0	0.03386	N
2	IC 410-397829/9	0.25	0.017829	5.0	706975.0	0.071318	Y
3	IC 410-397829/8	1.25	0.061747	5.0	845790.0	0.049398	Y
4	IC 410-397829/7	3.75	0.208479	5.0	679061.0	0.055594	Y
5	ICIS 410-397829/2	7.5	0.421763	5.0	802857.0	0.056235	Y
6	IC 410-397829/6	12.5	0.768309	5.0	883382.0	0.061465	Y
7	IC 410-397829/5	20.0	1.403918	5.0	783422.0	0.070196	Y
8	IC 410-397829/4	30.0	2.015638	5.0	728871.0	0.067188	Y



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Calibration / cis-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

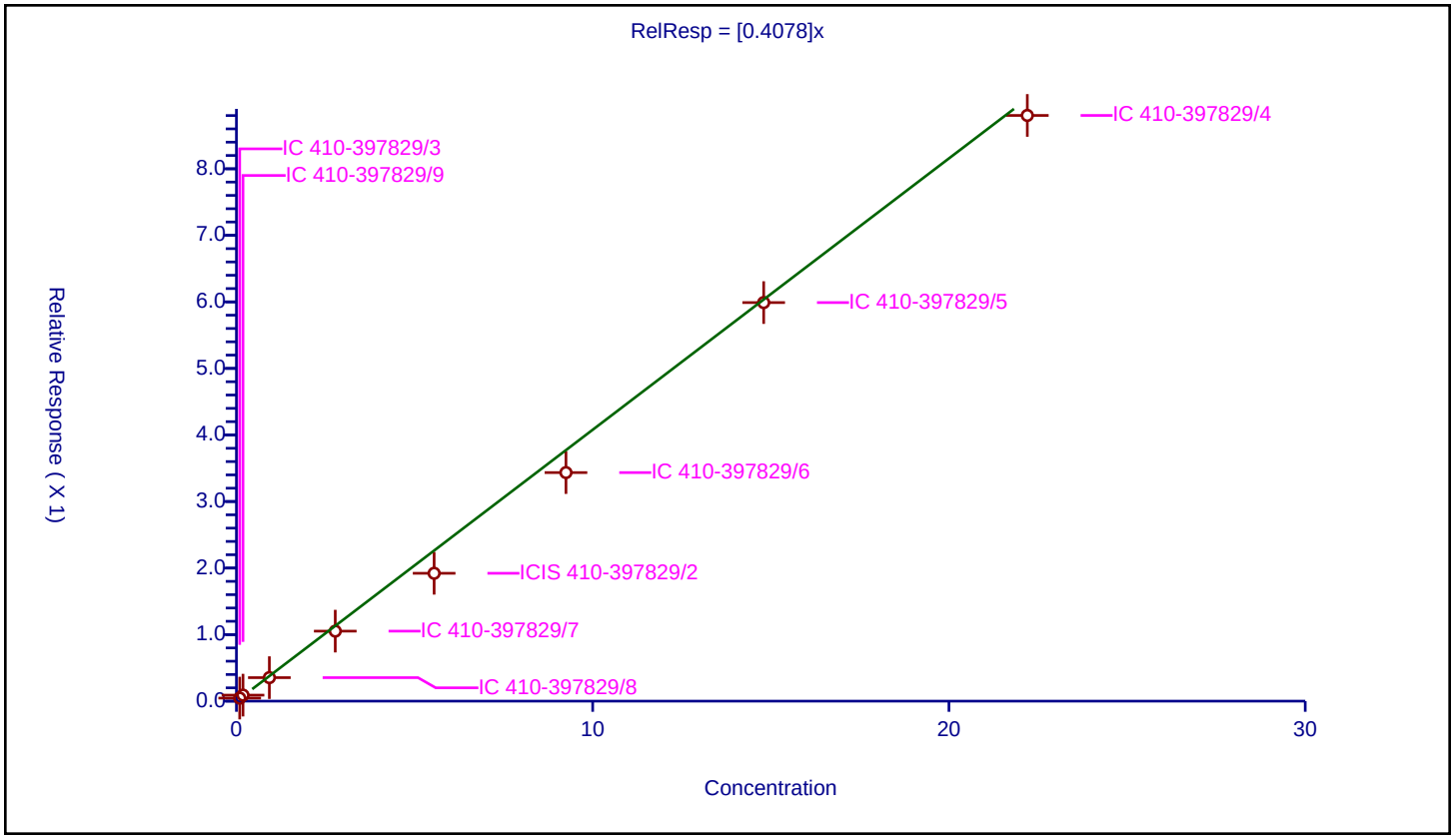
Curve Coefficients

Intercept:	0
Slope:	0.4078

Error Coefficients

Standard Error:	656000
Relative Standard Error:	13.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.0925	0.045775	5.0	804481.0	0.494863	Y
2	IC 410-397829/9	0.185	0.090229	5.0	706975.0	0.487727	Y
3	IC 410-397829/8	0.925	0.353273	5.0	845790.0	0.381917	Y
4	IC 410-397829/7	2.775	1.05207	5.0	679061.0	0.379124	Y
5	ICIS 410-397829/2	5.55	1.921295	5.0	802857.0	0.346179	Y
6	IC 410-397829/6	9.25	3.434533	5.0	883382.0	0.371301	Y
7	IC 410-397829/5	14.8	5.989282	5.0	783422.0	0.404681	Y
8	IC 410-397829/4	22.2	8.801571	5.0	728871.0	0.396467	Y



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Calibration / Phorate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

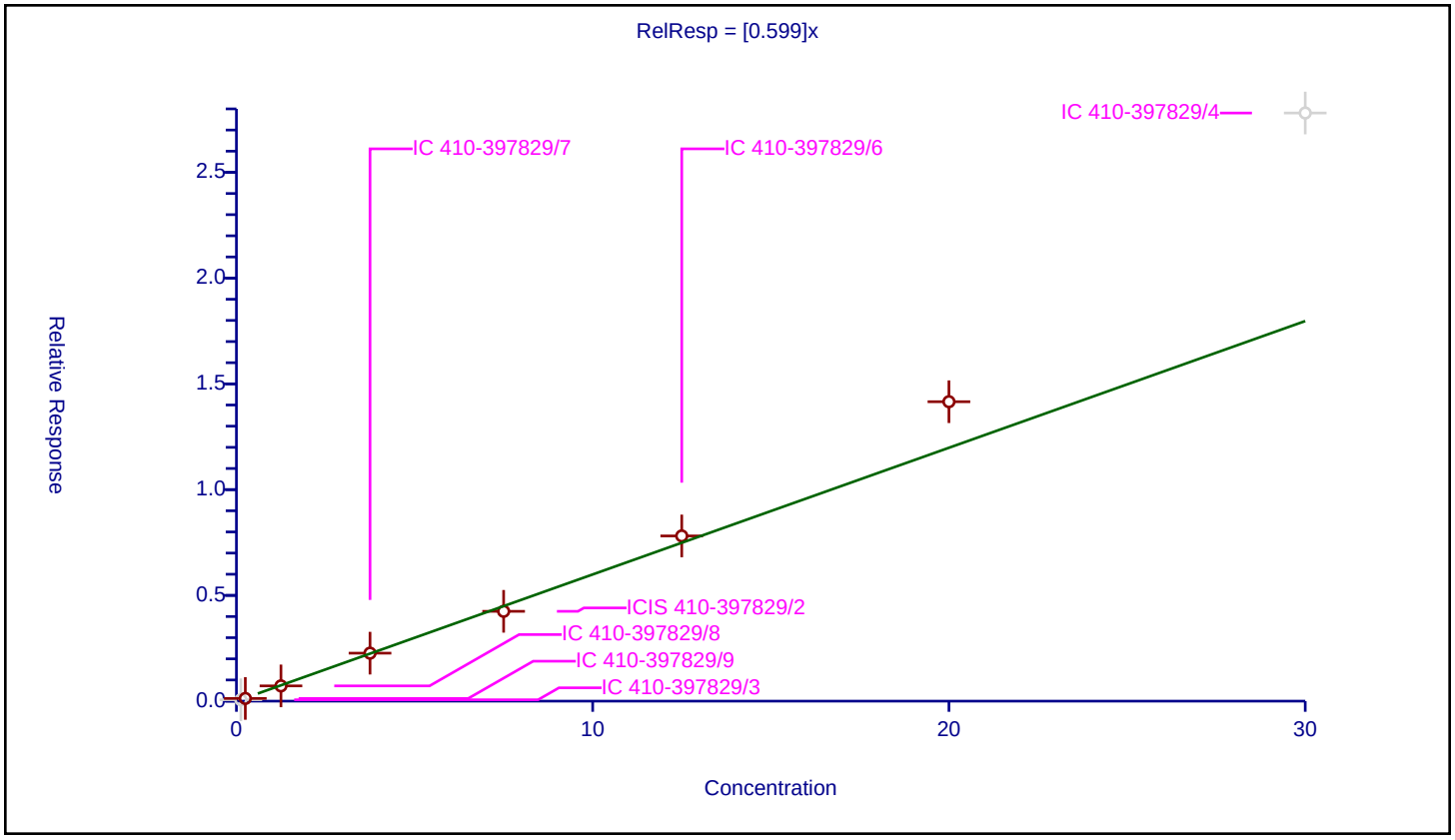
Curve Coefficients

Intercept:	0
Slope:	0.599

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	10.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.0647	5.0	804481.0	0.517601	N
2	IC 410-397829/9	0.25	0.128272	5.0	706975.0	0.513087	Y
3	IC 410-397829/8	1.25	0.721308	5.0	845790.0	0.577046	Y
4	IC 410-397829/7	3.75	2.267999	5.0	679061.0	0.6048	Y
5	ICIS 410-397829/2	7.5	4.246186	5.0	802857.0	0.566158	Y
6	IC 410-397829/6	12.5	7.810256	5.0	883382.0	0.624821	Y
7	IC 410-397829/5	20.0	14.157012	5.0	783422.0	0.707851	Y
8	IC 410-397829/4	30.0	27.805346	5.0	728871.0	0.926845	N



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Calibration / Phenacetin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

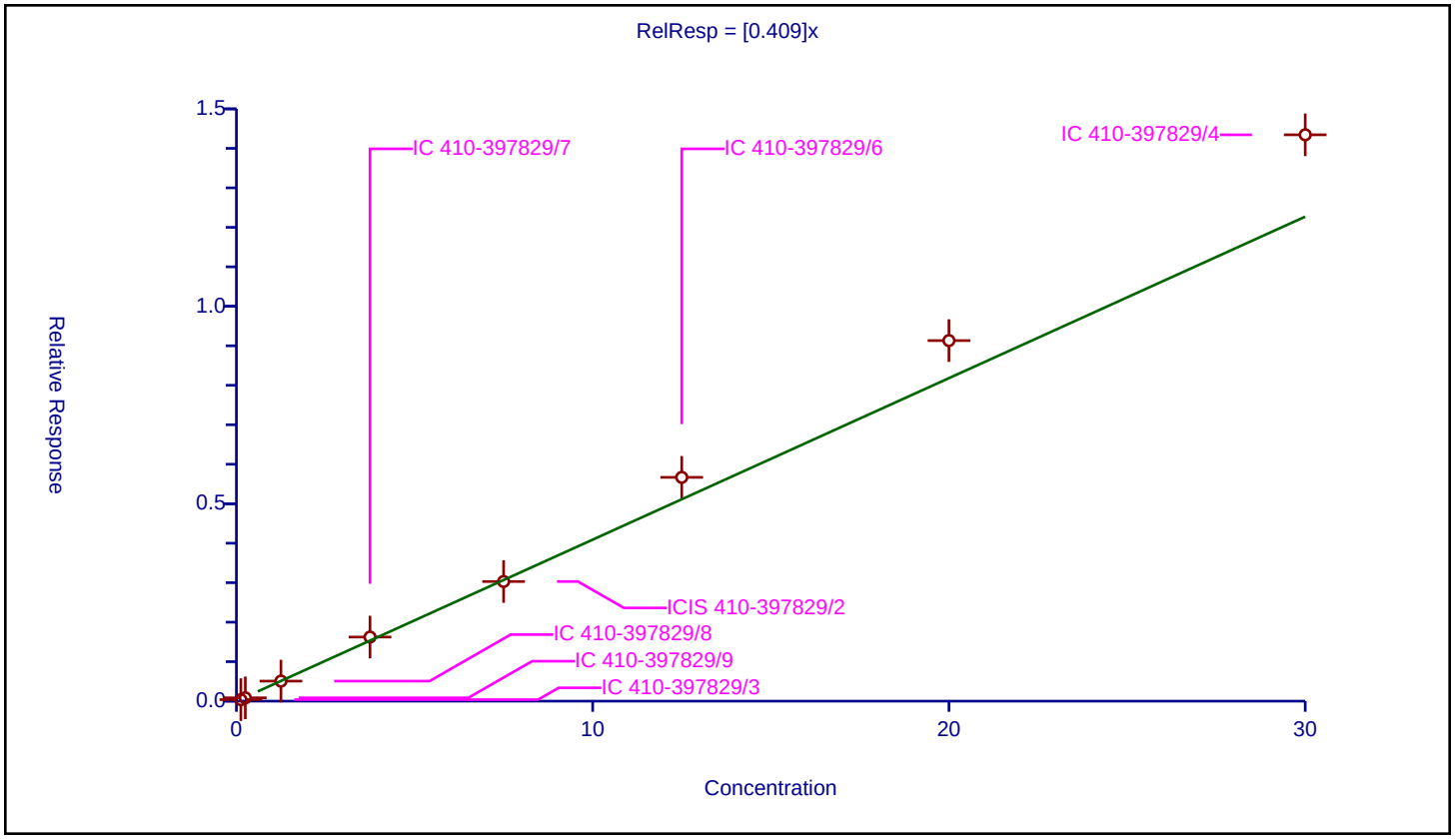
Curve Coefficients

Intercept:	0
Slope:	0.409

Error Coefficients

Standard Error:	1050000
Relative Standard Error:	14.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.037993	5.0	804481.0	0.303948	Y
2	IC 410-397829/9	0.25	0.084204	5.0	706975.0	0.336815	Y
3	IC 410-397829/8	1.25	0.507851	5.0	845790.0	0.406281	Y
4	IC 410-397829/7	3.75	1.623183	5.0	679061.0	0.432849	Y
5	ICIS 410-397829/2	7.5	3.029817	5.0	802857.0	0.403976	Y
6	IC 410-397829/6	12.5	5.668295	5.0	883382.0	0.453464	Y
7	IC 410-397829/5	20.0	9.132192	5.0	783422.0	0.45661	Y
8	IC 410-397829/4	30.0	14.343793	5.0	728871.0	0.478126	Y



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Calibration / 4-Bromophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

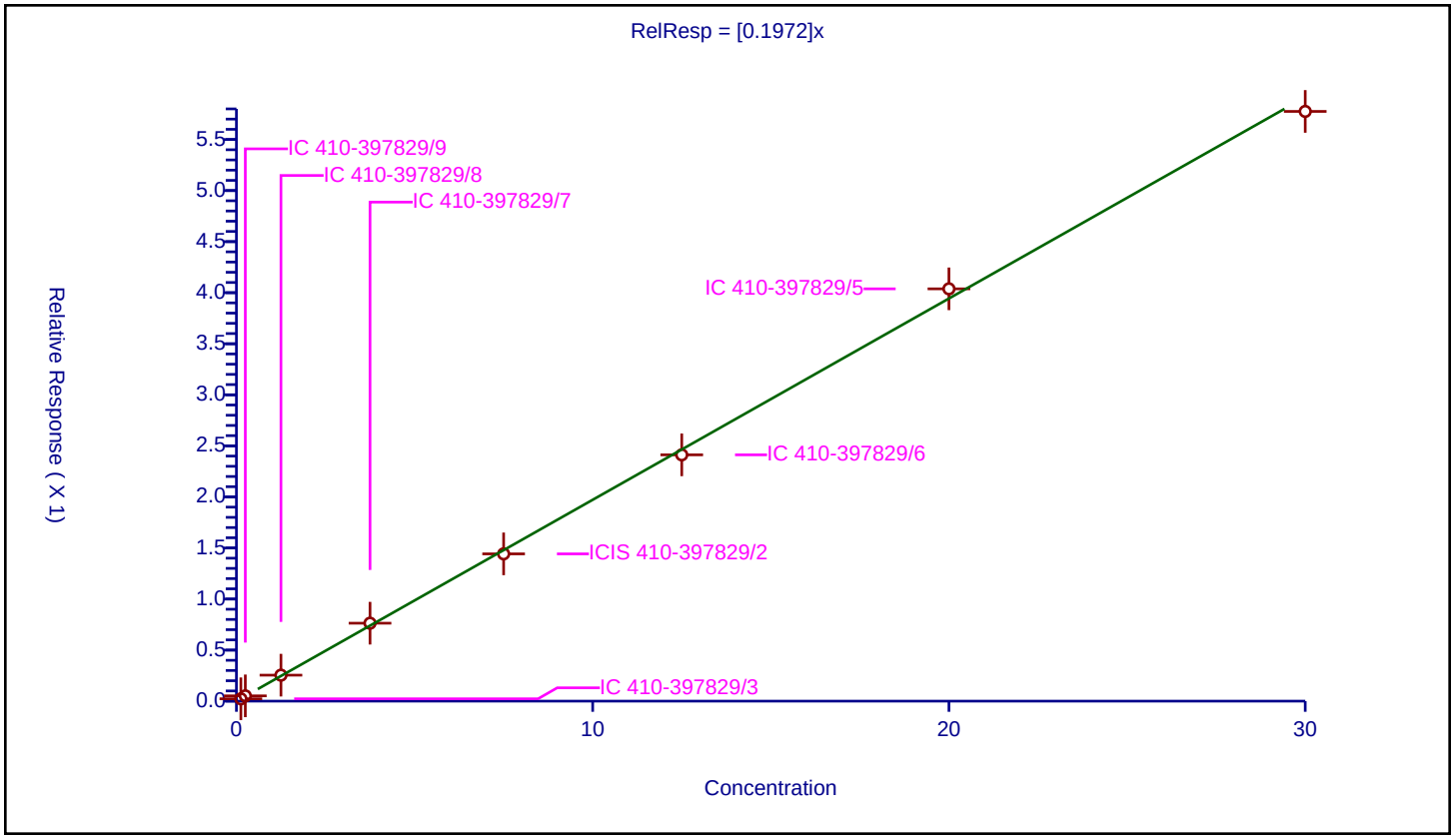
Curve Coefficients

Intercept:	0
Slope:	0.1972

Error Coefficients

Standard Error:	440000
Relative Standard Error:	4.0
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.022953	5.0	804481.0	0.183621	Y
2	IC 410-397829/9	0.25	0.051742	5.0	706975.0	0.206966	Y
3	IC 410-397829/8	1.25	0.254348	5.0	845790.0	0.203478	Y
4	IC 410-397829/7	3.75	0.763326	5.0	679061.0	0.203554	Y
5	ICIS 410-397829/2	7.5	1.44238	5.0	802857.0	0.192317	Y
6	IC 410-397829/6	12.5	2.412054	5.0	883382.0	0.192964	Y
7	IC 410-397829/5	20.0	4.037798	5.0	783422.0	0.20189	Y
8	IC 410-397829/4	30.0	5.775158	5.0	728871.0	0.192505	Y



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Calibration / trans-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

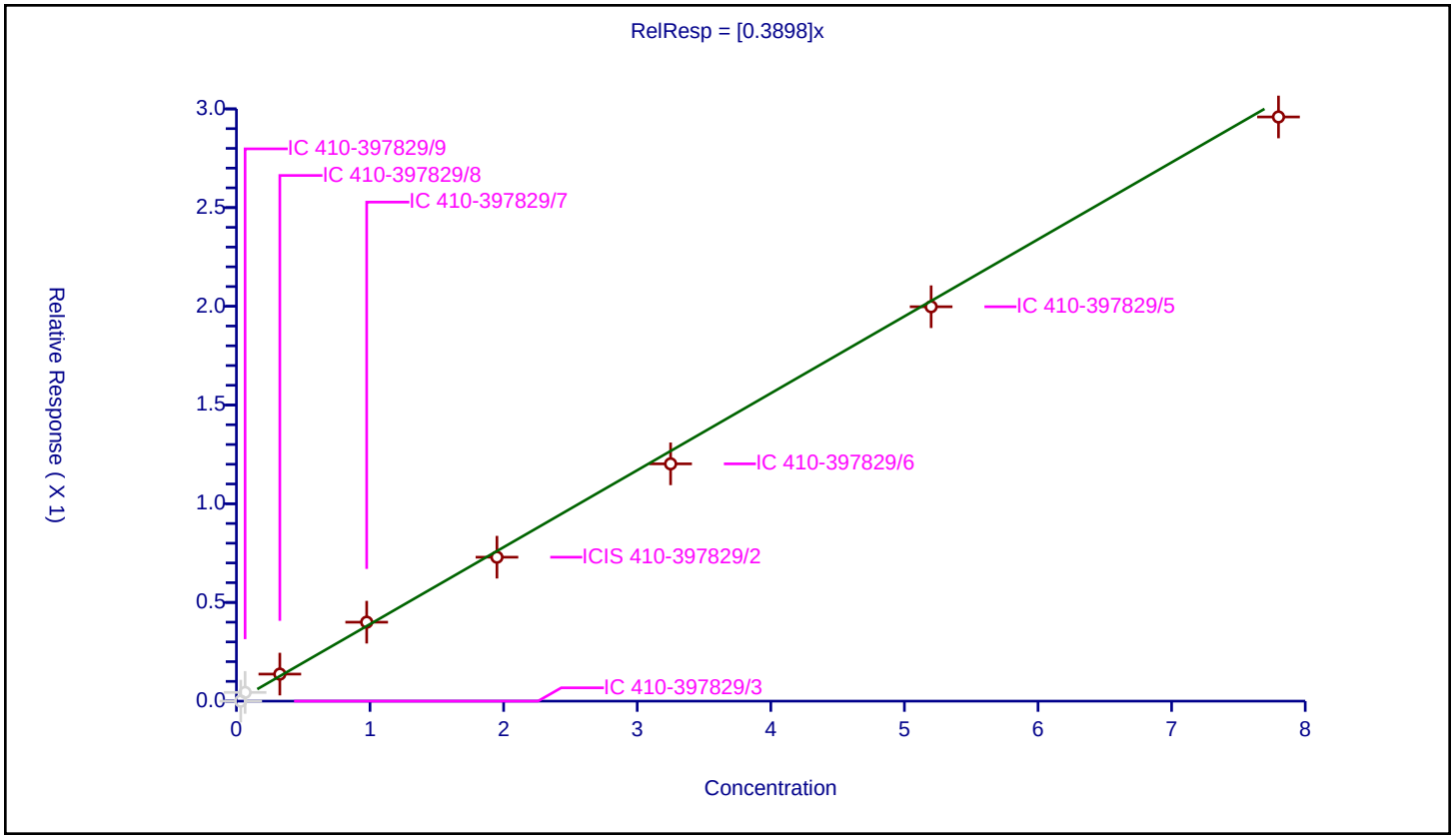
Curve Coefficients

Intercept:	0
Slope:	0.3898

Error Coefficients

Standard Error:	263000
Relative Standard Error:	5.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.0325	0.0	5.0	804481.0	0.0	N
2	IC 410-397829/9	0.065	0.044118	5.0	706975.0	0.678731	N
3	IC 410-397829/8	0.325	0.137002	5.0	845790.0	0.421545	Y
4	IC 410-397829/7	0.975	0.399927	5.0	679061.0	0.410182	Y
5	ICIS 410-397829/2	1.95	0.729134	5.0	802857.0	0.373915	Y
6	IC 410-397829/6	3.25	1.202051	5.0	883382.0	0.369862	Y
7	IC 410-397829/5	5.2	1.997895	5.0	783422.0	0.384211	Y
8	IC 410-397829/4	7.8	2.95907	5.0	728871.0	0.379368	Y



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Calibration / Hexachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

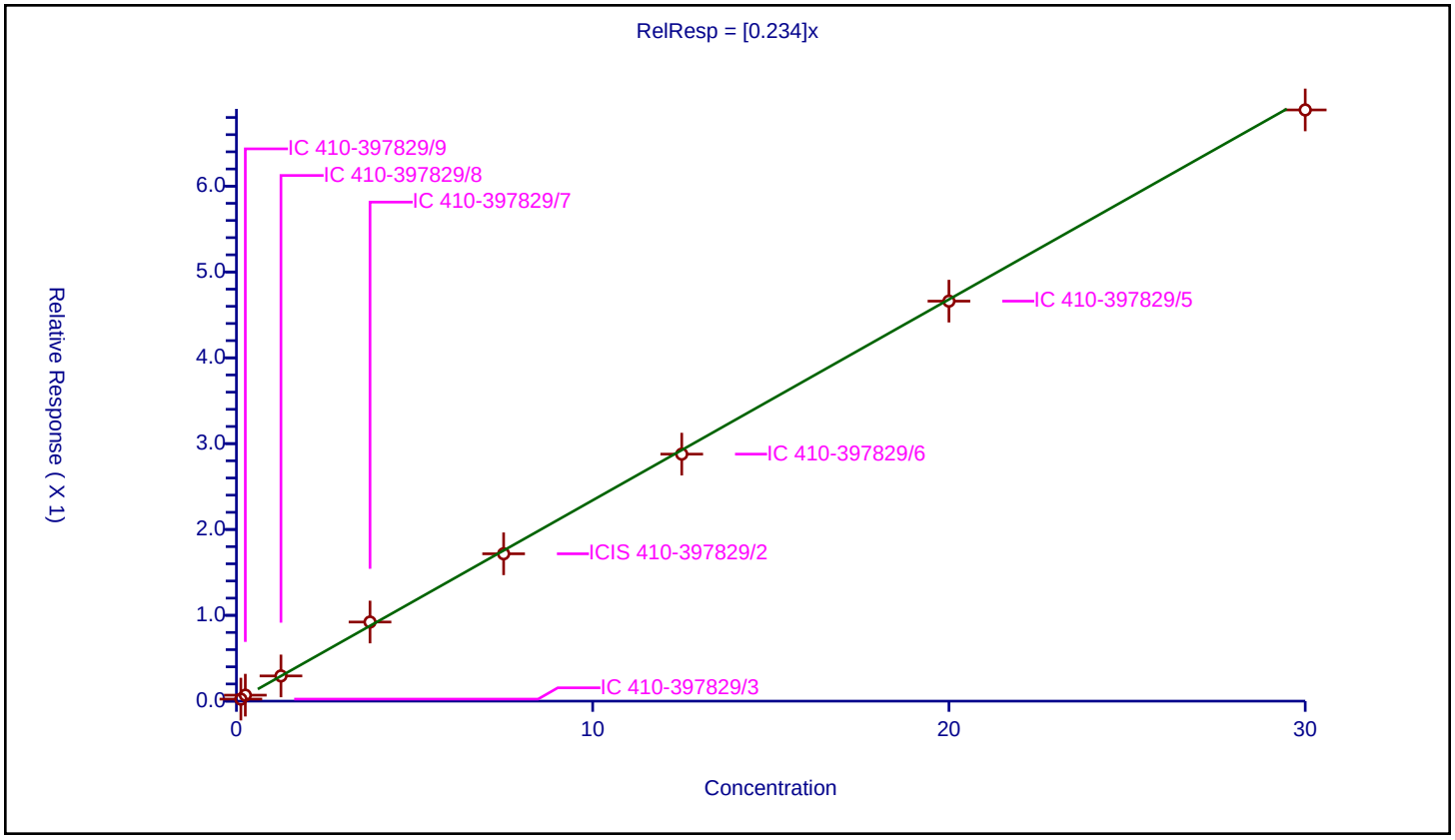
Curve Coefficients

Intercept:	0
Slope:	0.234

Error Coefficients

Standard Error:	520000
Relative Standard Error:	10.3
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.023848	5.0	804481.0	0.190781	Y
2	IC 410-397829/9	0.25	0.06972	5.0	706975.0	0.278878	Y
3	IC 410-397829/8	1.25	0.293684	5.0	845790.0	0.234947	Y
4	IC 410-397829/7	3.75	0.921721	5.0	679061.0	0.245792	Y
5	ICIS 410-397829/2	7.5	1.716707	5.0	802857.0	0.228894	Y
6	IC 410-397829/6	12.5	2.877736	5.0	883382.0	0.230219	Y
7	IC 410-397829/5	20.0	4.660209	5.0	783422.0	0.23301	Y
8	IC 410-397829/4	30.0	6.887776	5.0	728871.0	0.229593	Y



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Calibration / Dimethoate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

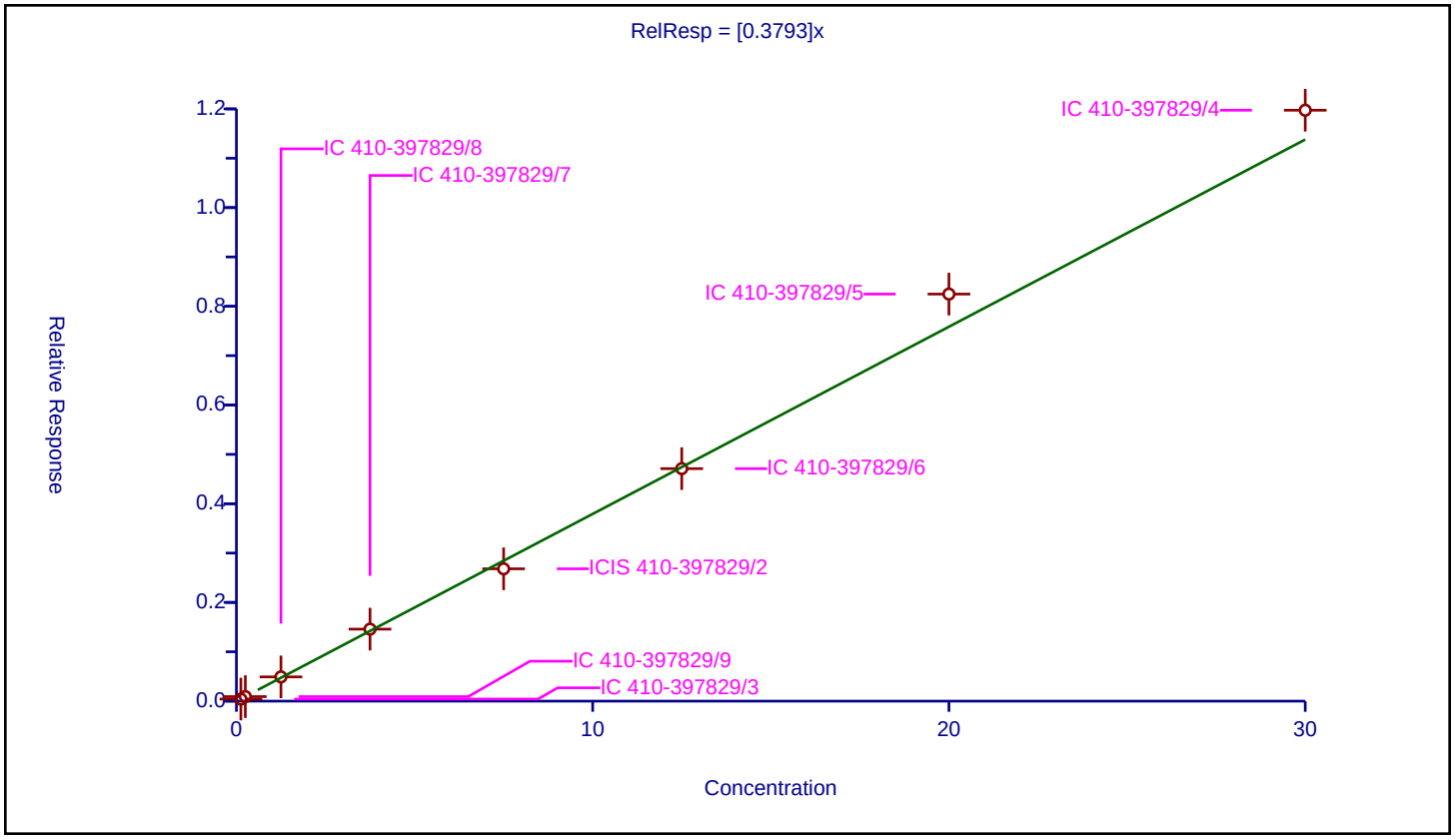
Curve Coefficients

Intercept:	0
Slope:	0.3793

Error Coefficients

Standard Error:	898000
Relative Standard Error:	6.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.042263	5.0	804481.0	0.338106	Y
2	IC 410-397829/9	0.25	0.092068	5.0	706975.0	0.368273	Y
3	IC 410-397829/8	1.25	0.491511	5.0	845790.0	0.393209	Y
4	IC 410-397829/7	3.75	1.458691	5.0	679061.0	0.388984	Y
5	ICIS 410-397829/2	7.5	2.68115	5.0	802857.0	0.357487	Y
6	IC 410-397829/6	12.5	4.710997	5.0	883382.0	0.37688	Y
7	IC 410-397829/5	20.0	8.247637	5.0	783422.0	0.412382	Y
8	IC 410-397829/4	30.0	11.972873	5.0	728871.0	0.399096	Y



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Calibration / Atrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

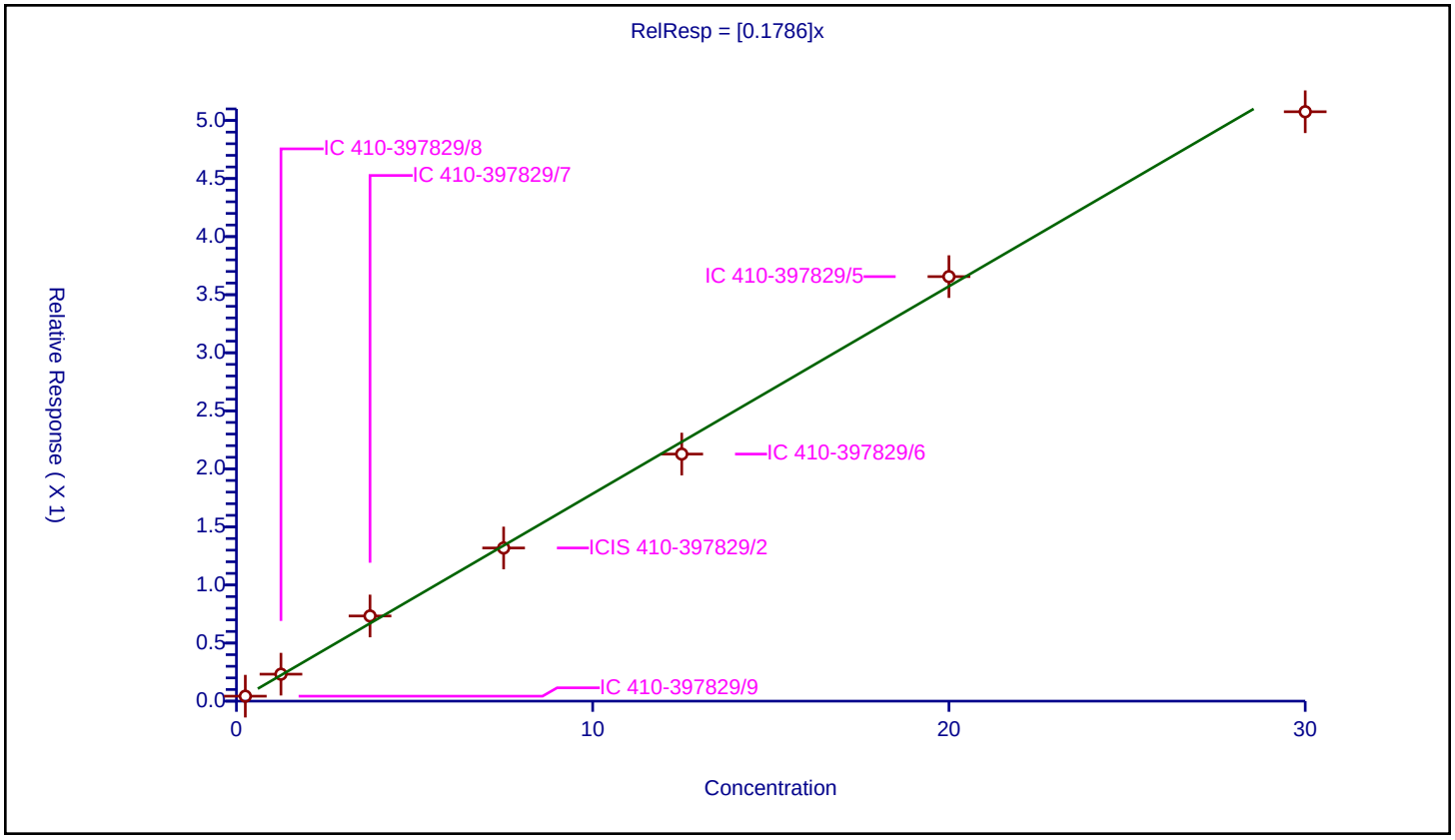
Curve Coefficients

Intercept:	0
Slope:	0.1786

Error Coefficients

Standard Error:	423000
Relative Standard Error:	5.5
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/9	0.25	0.042738	5.0	706975.0	0.170954	Y
2	IC 410-397829/8	1.25	0.232209	5.0	845790.0	0.185767	Y
3	IC 410-397829/7	3.75	0.733336	5.0	679061.0	0.195556	Y
4	ICIS 410-397829/2	7.5	1.318784	5.0	802857.0	0.175838	Y
5	IC 410-397829/6	12.5	2.12759	5.0	883382.0	0.170207	Y
6	IC 410-397829/5	20.0	3.655712	5.0	783422.0	0.182786	Y
7	IC 410-397829/4	30.0	5.075404	5.0	728871.0	0.16918	Y



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Calibration / Pentachloronitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

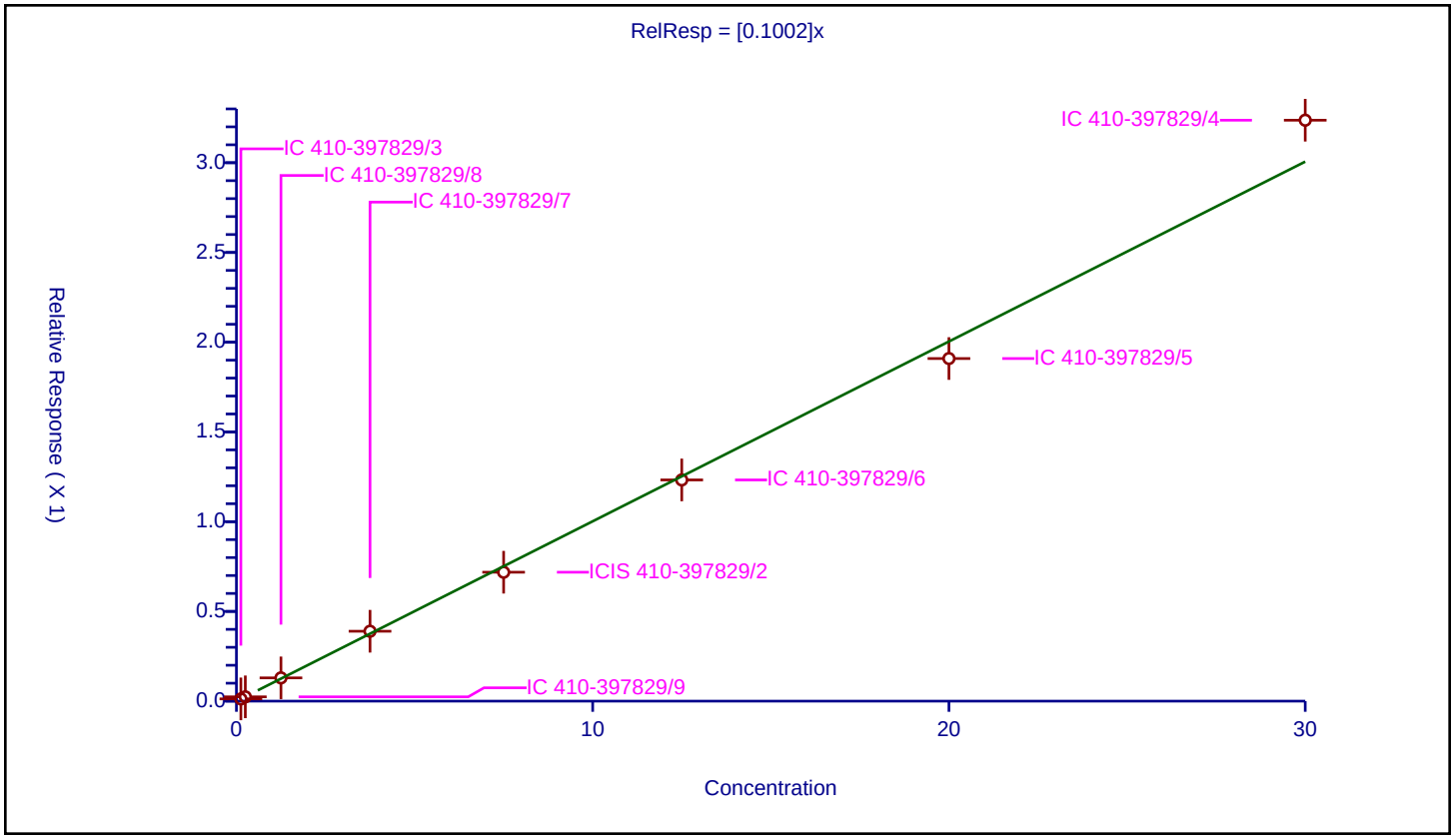
Curve Coefficients

Intercept:	0
Slope:	0.1002

Error Coefficients

Standard Error:	232000
Relative Standard Error:	4.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.01258	5.0	804481.0	0.100636	Y
2	IC 410-397829/9	0.25	0.023919	5.0	706975.0	0.095675	Y
3	IC 410-397829/8	1.25	0.12963	5.0	845790.0	0.103704	Y
4	IC 410-397829/7	3.75	0.389501	5.0	679061.0	0.103867	Y
5	ICIS 410-397829/2	7.5	0.718304	5.0	802857.0	0.095774	Y
6	IC 410-397829/6	12.5	1.232564	5.0	883382.0	0.098605	Y
7	IC 410-397829/5	20.0	1.909041	5.0	783422.0	0.095452	Y
8	IC 410-397829/4	30.0	3.236965	5.0	728871.0	0.107899	Y



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Calibration / Pentachlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

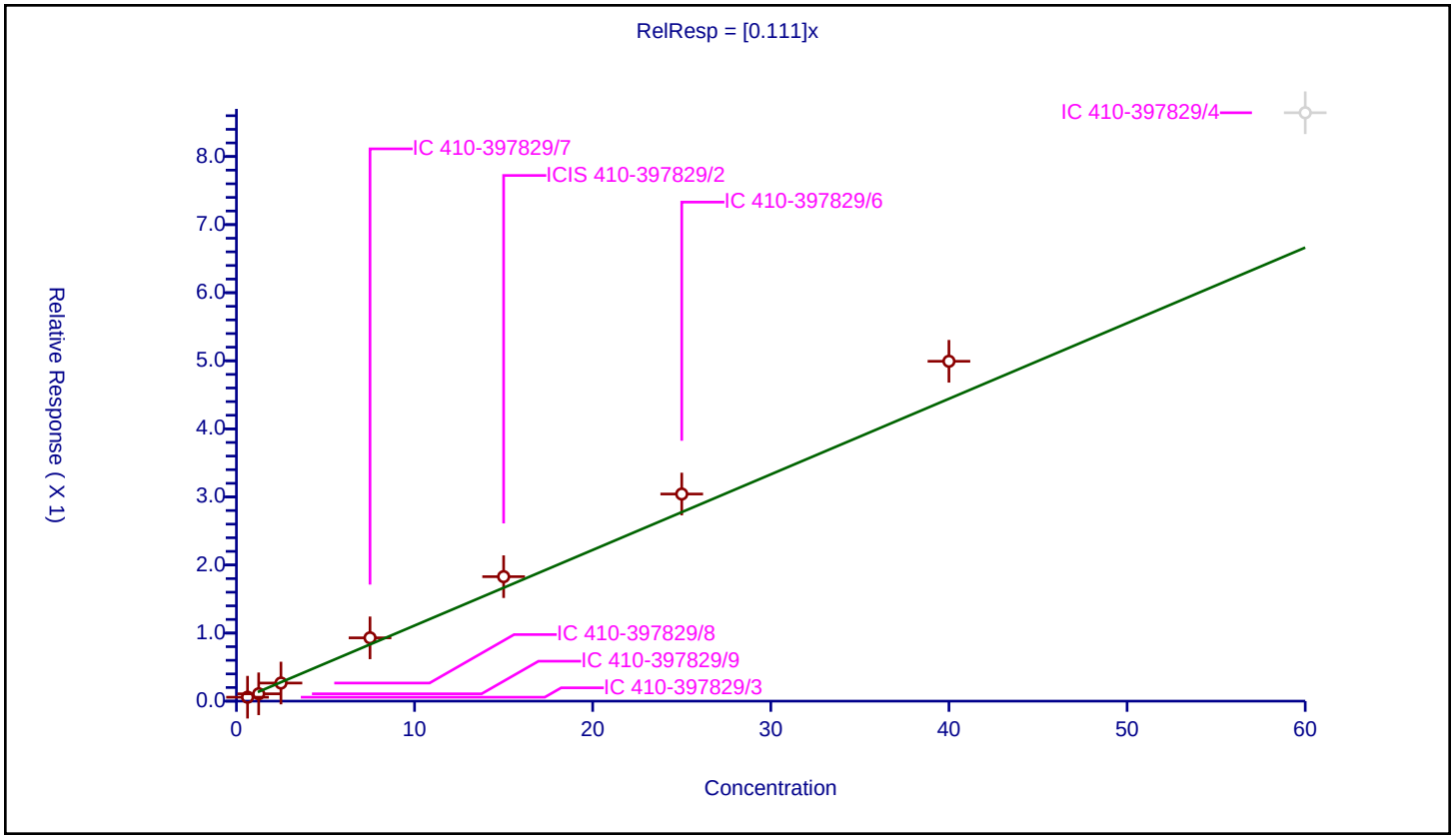
Curve Coefficients

Intercept:	0
Slope:	0.111

Error Coefficients

Standard Error:	409000
Relative Standard Error:	14.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.625	0.057633	5.0	804481.0	0.092213	Y
2	IC 410-397829/9	1.25	0.107939	5.0	706975.0	0.086351	Y
3	IC 410-397829/8	2.5	0.26584	5.0	845790.0	0.106336	Y
4	IC 410-397829/7	7.5	0.929843	5.0	679061.0	0.123979	Y
5	ICIS 410-397829/2	15.0	1.828682	5.0	802857.0	0.121912	Y
6	IC 410-397829/6	25.0	3.042376	5.0	883382.0	0.121695	Y
7	IC 410-397829/5	40.0	4.992622	5.0	783422.0	0.124816	Y
8	IC 410-397829/4	60.0	8.643443	5.0	728871.0	0.144057	N



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Calibration / 4-Aminobiphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

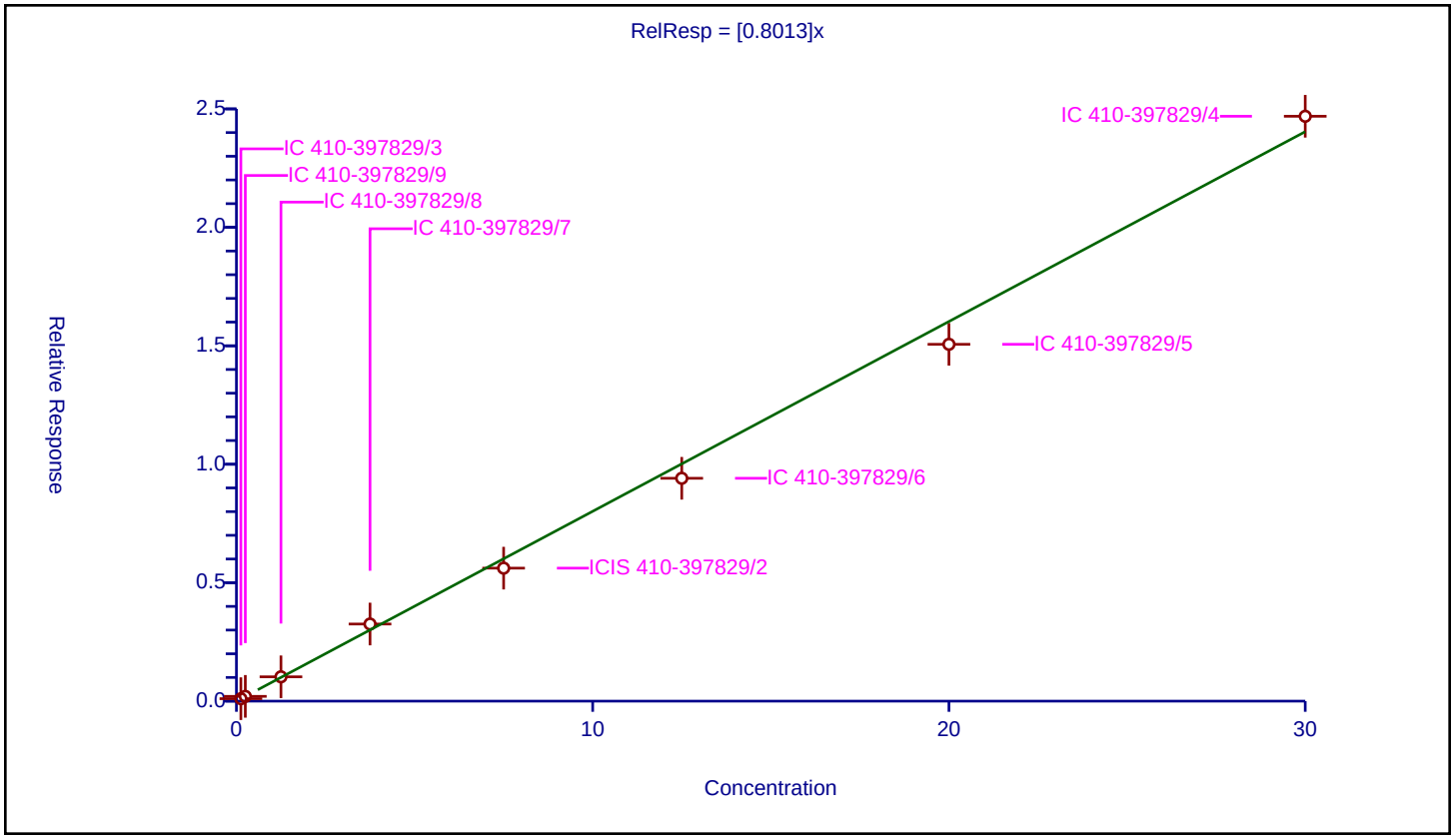
Curve Coefficients

Intercept:	0
Slope:	0.8013

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	5.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.104285	5.0	804481.0	0.834277	Y
2	IC 410-397829/9	0.25	0.202235	5.0	706975.0	0.808939	Y
3	IC 410-397829/8	1.25	1.02691	5.0	845790.0	0.821528	Y
4	IC 410-397829/7	3.75	3.255657	5.0	679061.0	0.868175	Y
5	ICIS 410-397829/2	7.5	5.614375	5.0	802857.0	0.748583	Y
6	IC 410-397829/6	12.5	9.407538	5.0	883382.0	0.752603	Y
7	IC 410-397829/5	20.0	15.062106	5.0	783422.0	0.753105	Y
8	IC 410-397829/4	30.0	24.688525	5.0	728871.0	0.822951	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

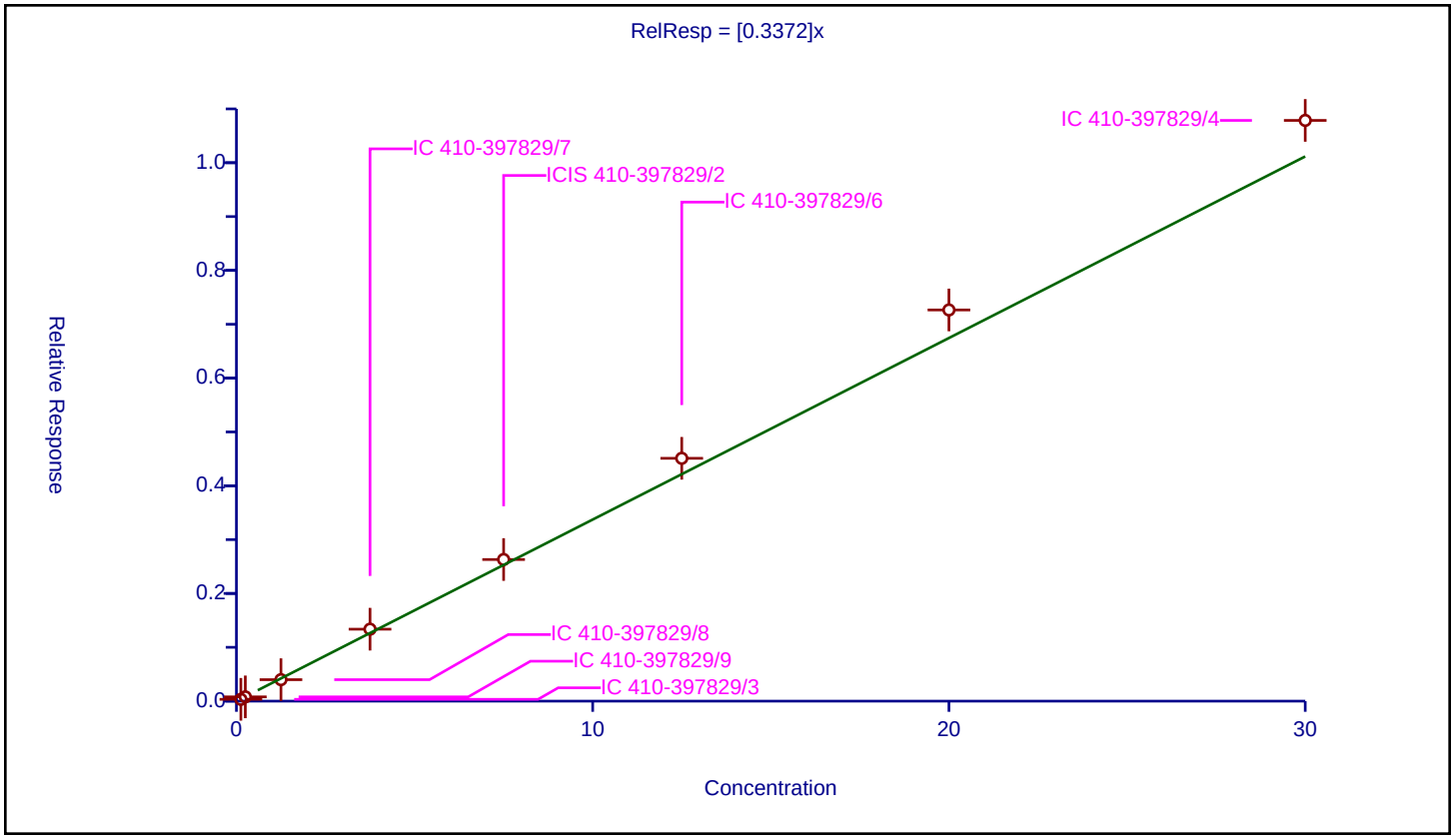
Curve Coefficients

Intercept:	0
Slope:	0.3372

Error Coefficients

Standard Error:	812000
Relative Standard Error:	9.7
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.03378	5.0	804481.0	0.270236	Y
2	IC 410-397829/9	0.25	0.07943	5.0	706975.0	0.31772	Y
3	IC 410-397829/8	1.25	0.398822	5.0	845790.0	0.319058	Y
4	IC 410-397829/7	3.75	1.336559	5.0	679061.0	0.356416	Y
5	ICIS 410-397829/2	7.5	2.630363	5.0	802857.0	0.350715	Y
6	IC 410-397829/6	12.5	4.51007	5.0	883382.0	0.360806	Y
7	IC 410-397829/5	20.0	7.26558	5.0	783422.0	0.363279	Y
8	IC 410-397829/4	30.0	10.785633	5.0	728871.0	0.359521	Y



Calibration / Dinoseb

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

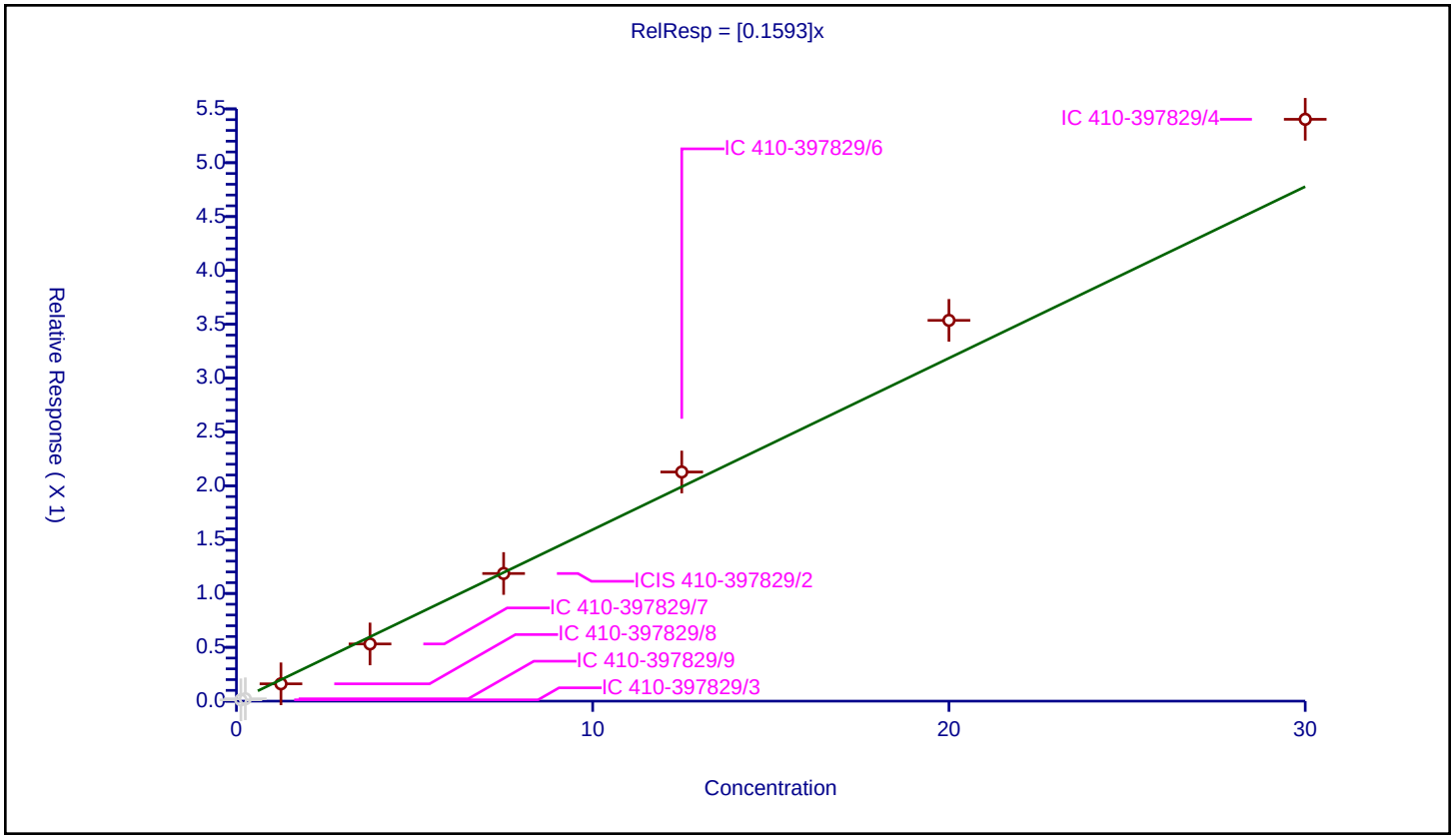
Curve Coefficients

Intercept:	0
Slope:	0.1593

Error Coefficients

Standard Error:	471000
Relative Standard Error:	12.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.012287	5.0	804481.0	0.098299	N
2	IC 410-397829/9	0.25	0.021847	5.0	706975.0	0.087386	N
3	IC 410-397829/8	1.25	0.160997	5.0	845790.0	0.128798	Y
4	IC 410-397829/7	3.75	0.531108	5.0	679061.0	0.141629	Y
5	ICIS 410-397829/2	7.5	1.185267	5.0	802857.0	0.158036	Y
6	IC 410-397829/6	12.5	2.12789	5.0	883382.0	0.170231	Y
7	IC 410-397829/5	20.0	3.536051	5.0	783422.0	0.176803	Y
8	IC 410-397829/4	30.0	5.403261	5.0	728871.0	0.180109	Y



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Calibration / Disulfoton

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

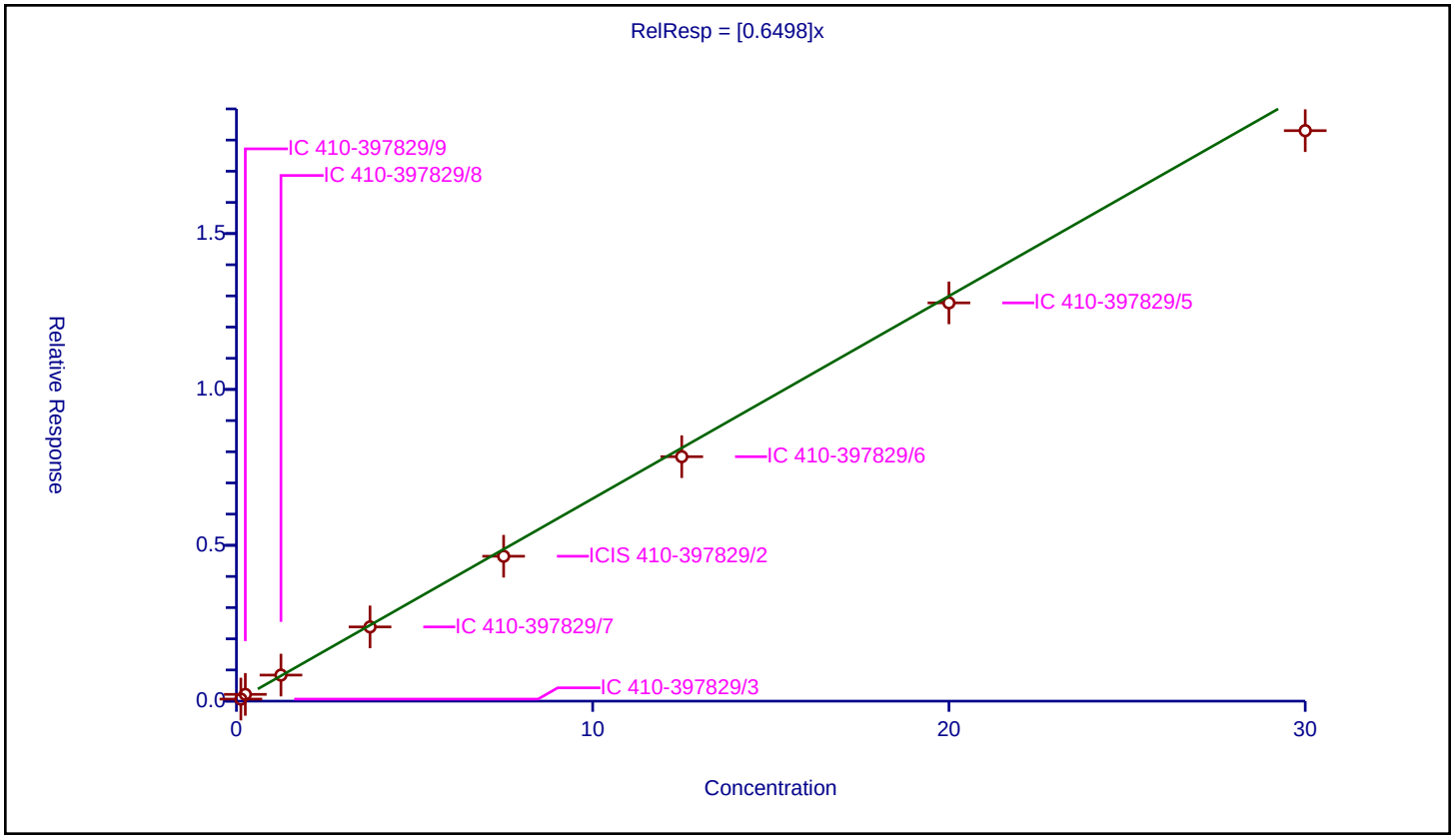
Curve Coefficients

Intercept:	0
Slope:	0.6498

Error Coefficients

Standard Error:	1400000
Relative Standard Error:	15.0
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.066161	5.0	804481.0	0.529285	Y
2	IC 410-397829/9	0.25	0.217193	5.0	706975.0	0.868772	Y
3	IC 410-397829/8	1.25	0.836189	5.0	845790.0	0.668951	Y
4	IC 410-397829/7	3.75	2.381156	5.0	679061.0	0.634975	Y
5	ICIS 410-397829/2	7.5	4.648343	5.0	802857.0	0.619779	Y
6	IC 410-397829/6	12.5	7.842672	5.0	883382.0	0.627414	Y
7	IC 410-397829/5	20.0	12.77743	5.0	783422.0	0.638872	Y
8	IC 410-397829/4	30.0	18.30175	5.0	728871.0	0.610058	Y



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Calibration / Phenanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

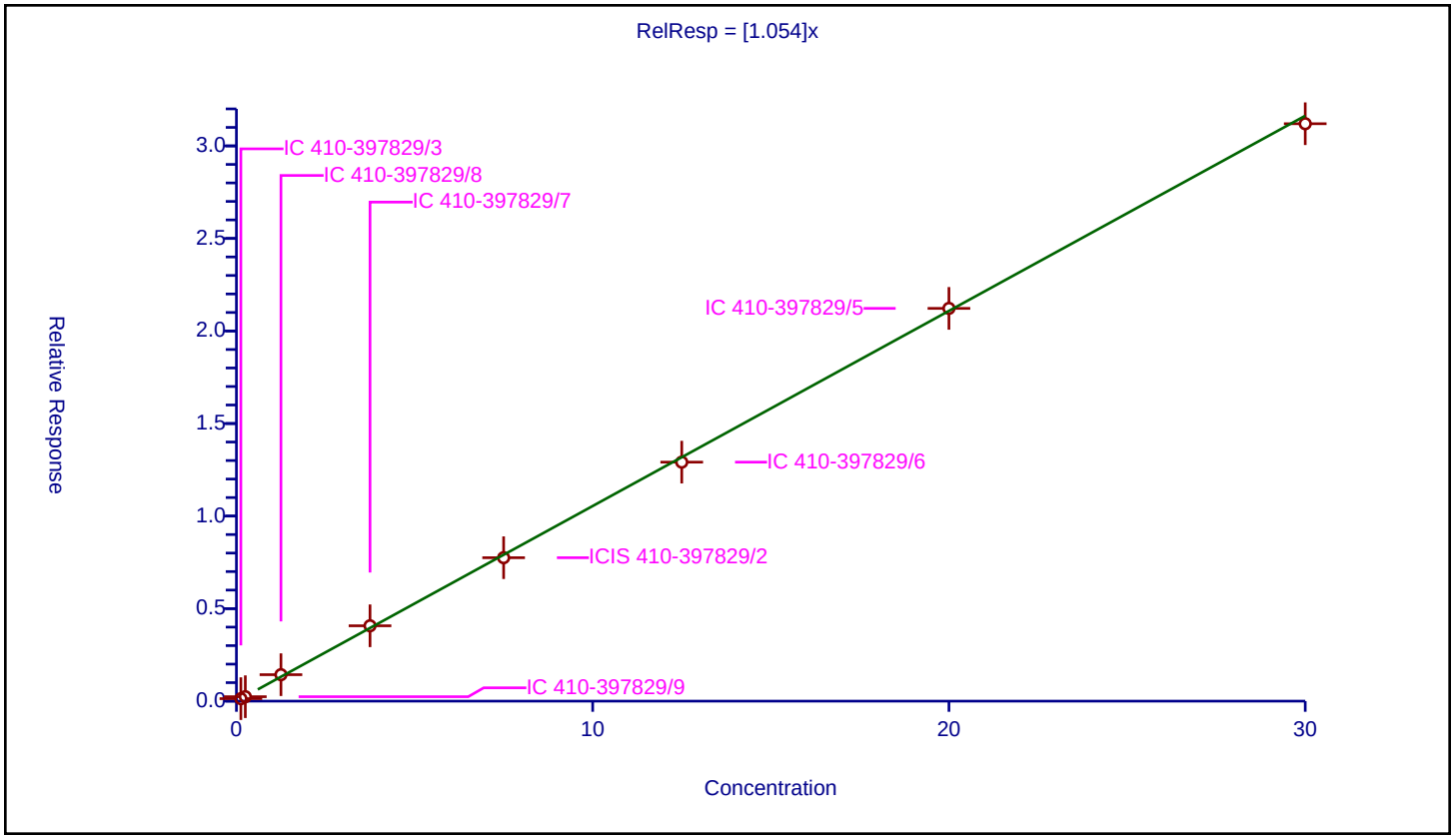
Curve Coefficients

Intercept:	0
Slope:	1.054

Error Coefficients

Standard Error:	2360000
Relative Standard Error:	5.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.13477	5.0	804481.0	1.078161	Y
2	IC 410-397829/9	0.25	0.239726	5.0	706975.0	0.958902	Y
3	IC 410-397829/8	1.25	1.429876	5.0	845790.0	1.143901	Y
4	IC 410-397829/7	3.75	4.071807	5.0	679061.0	1.085815	Y
5	ICIS 410-397829/2	7.5	7.749886	5.0	802857.0	1.033318	Y
6	IC 410-397829/6	12.5	12.913032	5.0	883382.0	1.033043	Y
7	IC 410-397829/5	20.0	21.220945	5.0	783422.0	1.061047	Y
8	IC 410-397829/4	30.0	31.197976	5.0	728871.0	1.039933	Y



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Calibration / Anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

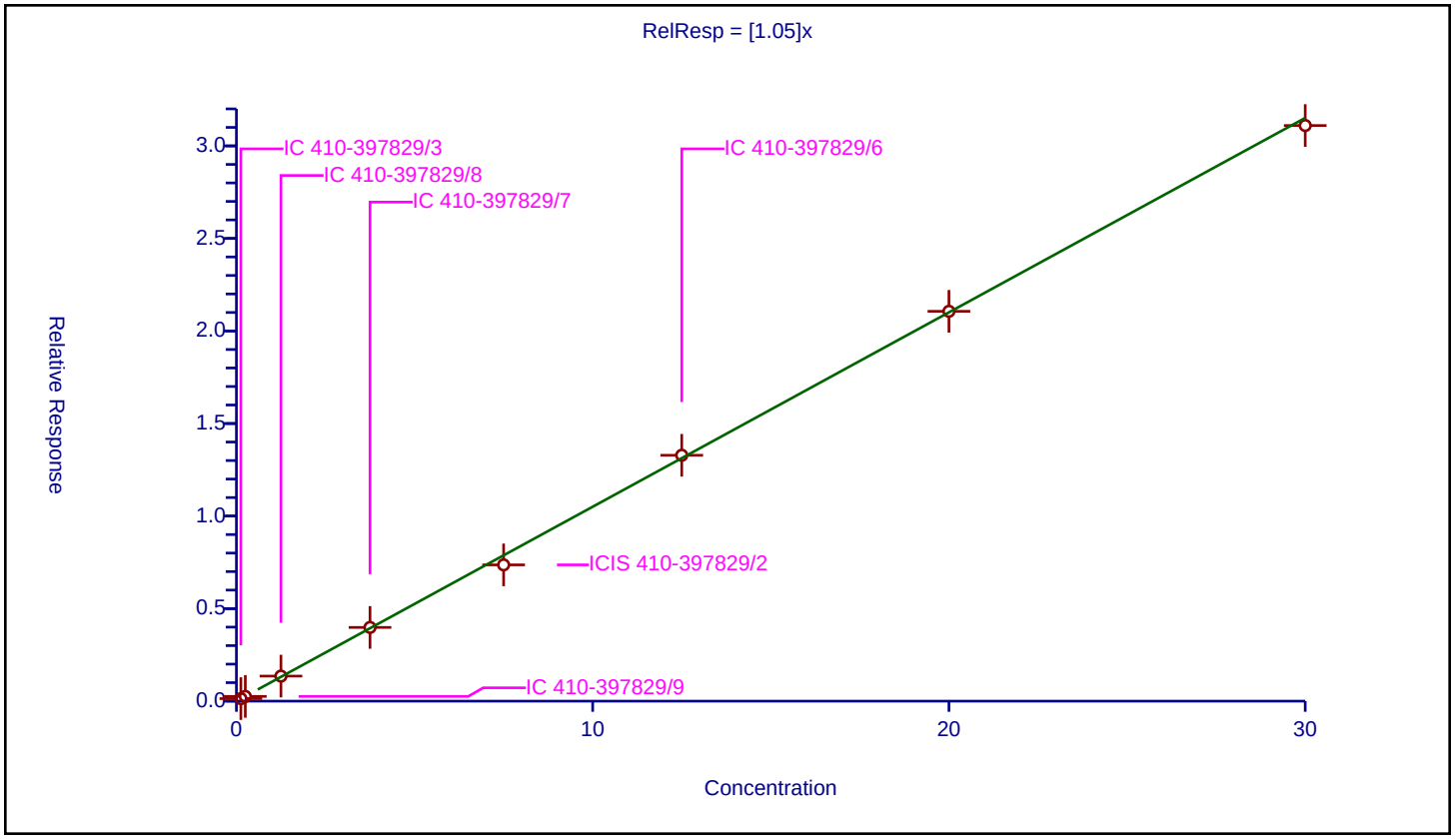
Curve Coefficients

Intercept:	0
Slope:	1.05

Error Coefficients

Standard Error:	2350000
Relative Standard Error:	3.6
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.13789	5.0	804481.0	1.103121	Y
2	IC 410-397829/9	0.25	0.255066	5.0	706975.0	1.020262	Y
3	IC 410-397829/8	1.25	1.354101	5.0	845790.0	1.083281	Y
4	IC 410-397829/7	3.75	3.982278	5.0	679061.0	1.061941	Y
5	ICIS 410-397829/2	7.5	7.363055	5.0	802857.0	0.981741	Y
6	IC 410-397829/6	12.5	13.285323	5.0	883382.0	1.062826	Y
7	IC 410-397829/5	20.0	21.062684	5.0	783422.0	1.053134	Y
8	IC 410-397829/4	30.0	31.100579	5.0	728871.0	1.036686	Y



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Calibration / Carbazole

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

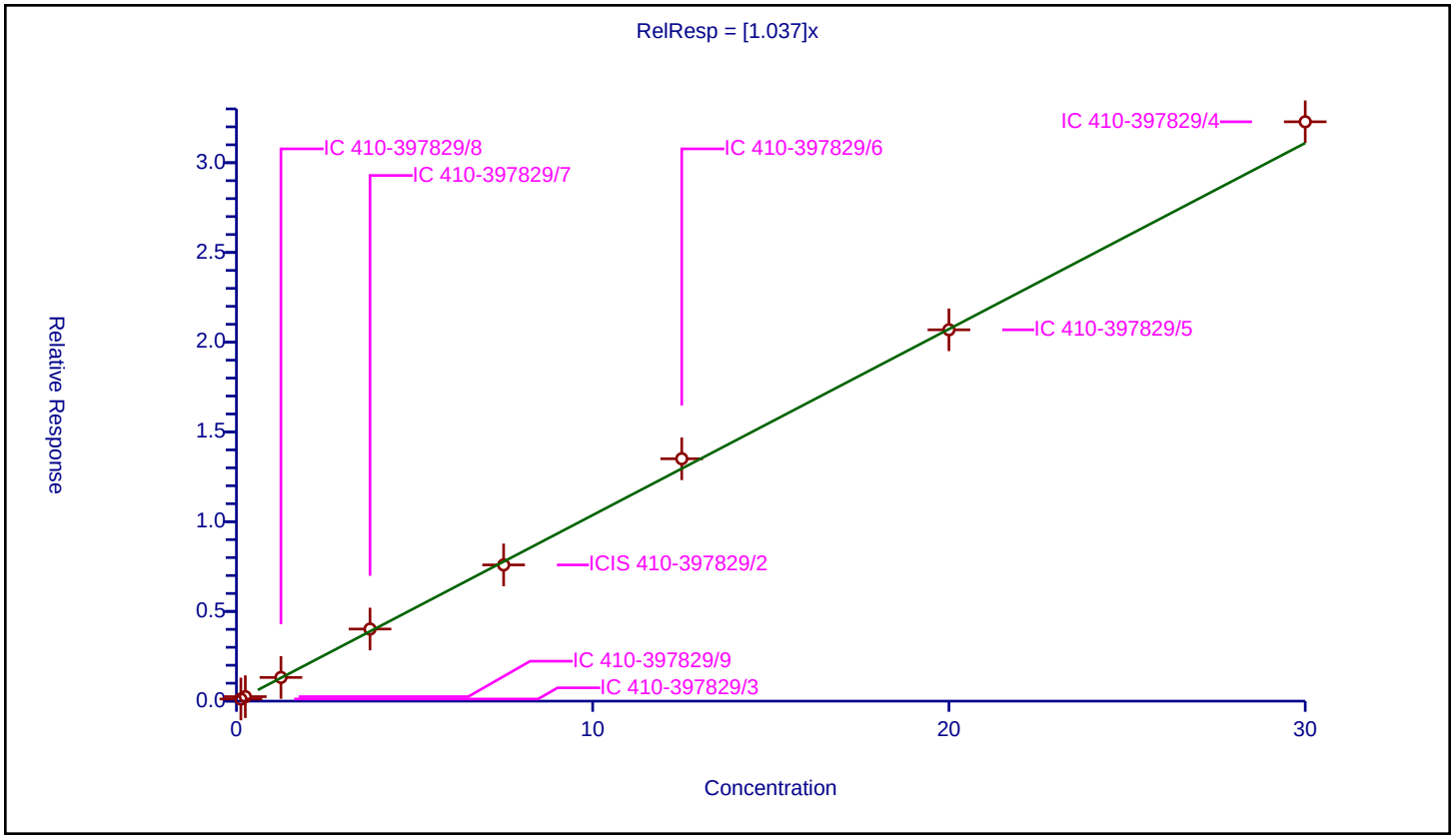
Curve Coefficients

Intercept:	0
Slope:	1.037

Error Coefficients

Standard Error:	2400000
Relative Standard Error:	4.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.120177	5.0	804481.0	0.961415	Y
2	IC 410-397829/9	0.25	0.25008	5.0	706975.0	1.000318	Y
3	IC 410-397829/8	1.25	1.319926	5.0	845790.0	1.055941	Y
4	IC 410-397829/7	3.75	4.017548	5.0	679061.0	1.071346	Y
5	ICIS 410-397829/2	7.5	7.590094	5.0	802857.0	1.012013	Y
6	IC 410-397829/6	12.5	13.505816	5.0	883382.0	1.080465	Y
7	IC 410-397829/5	20.0	20.691128	5.0	783422.0	1.034556	Y
8	IC 410-397829/4	30.0	32.281261	5.0	728871.0	1.076042	Y



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Calibration / Methyl parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

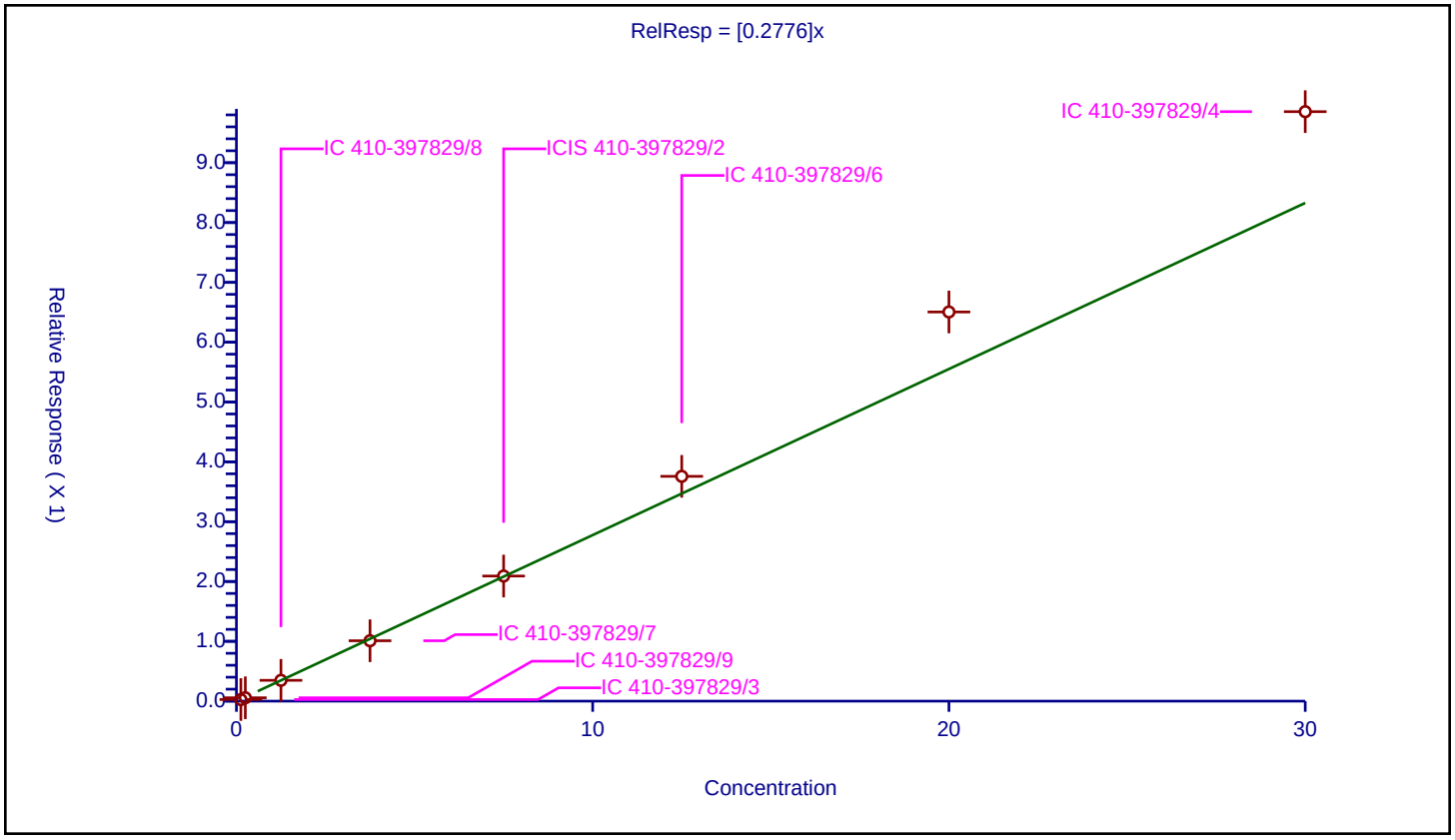
Curve Coefficients

Intercept:	0
Slope:	0.2776

Error Coefficients

Standard Error:	725000
Relative Standard Error:	15.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.026812	5.0	804481.0	0.214499	Y
2	IC 410-397829/9	0.25	0.056388	5.0	706975.0	0.225553	Y
3	IC 410-397829/8	1.25	0.34787	5.0	845790.0	0.278296	Y
4	IC 410-397829/7	3.75	1.009342	5.0	679061.0	0.269158	Y
5	ICIS 410-397829/2	7.5	2.091437	5.0	802857.0	0.278858	Y
6	IC 410-397829/6	12.5	3.757701	5.0	883382.0	0.300616	Y
7	IC 410-397829/5	20.0	6.505223	5.0	783422.0	0.325261	Y
8	IC 410-397829/4	30.0	9.853479	5.0	728871.0	0.328449	Y



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Calibration / Di-n-butyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

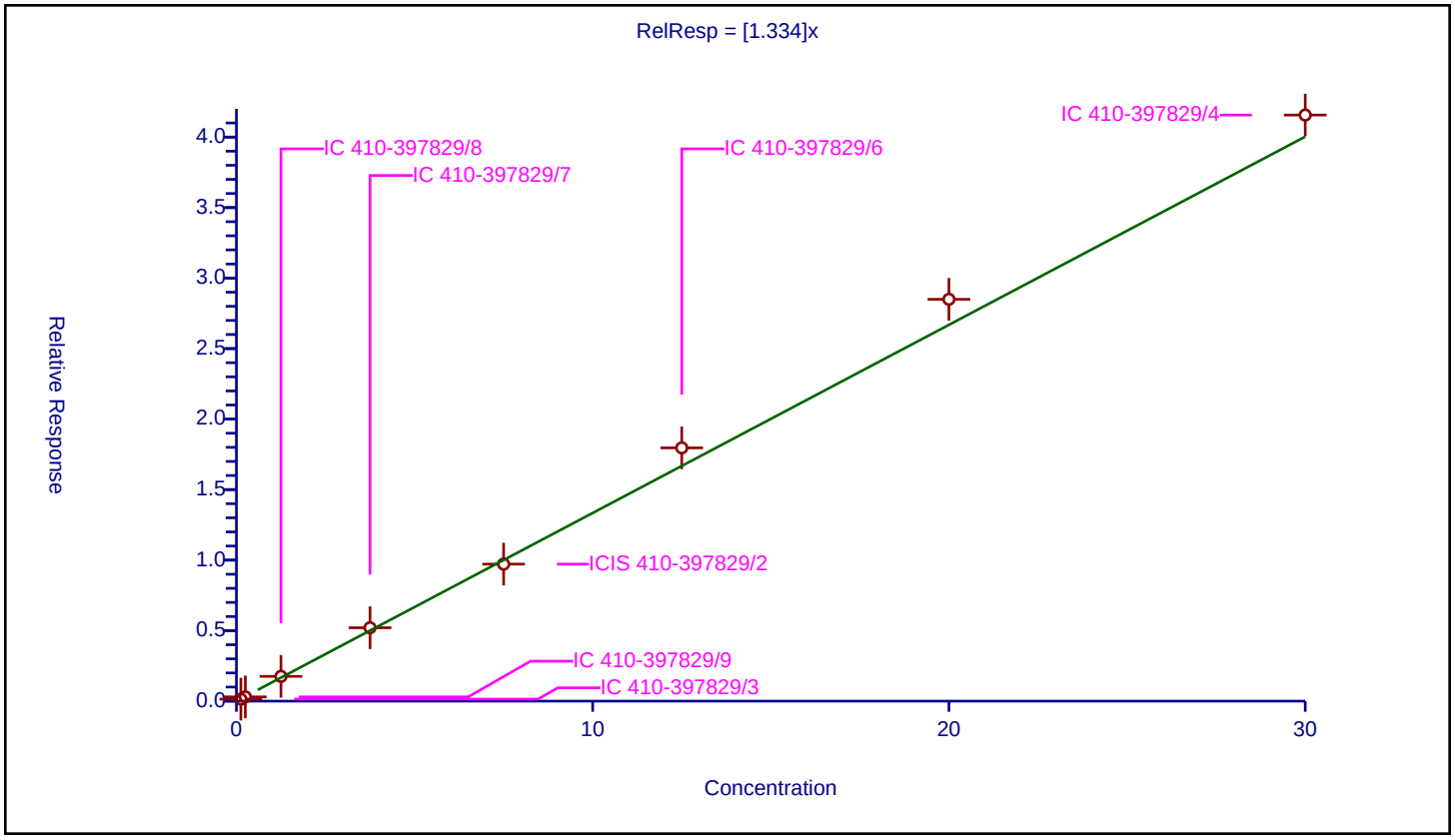
Curve Coefficients

Intercept:	0
Slope:	1.334

Error Coefficients

Standard Error:	3160000
Relative Standard Error:	8.4
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.141986	5.0	804481.0	1.135888	Y
2	IC 410-397829/9	0.25	0.300767	5.0	706975.0	1.203069	Y
3	IC 410-397829/8	1.25	1.756204	5.0	845790.0	1.404963	Y
4	IC 410-397829/7	3.75	5.20384	5.0	679061.0	1.387691	Y
5	ICIS 410-397829/2	7.5	9.717123	5.0	802857.0	1.295616	Y
6	IC 410-397829/6	12.5	17.961878	5.0	883382.0	1.43695	Y
7	IC 410-397829/5	20.0	28.497113	5.0	783422.0	1.424856	Y
8	IC 410-397829/4	30.0	41.562945	5.0	728871.0	1.385431	Y



Calibration / Ethyl Parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

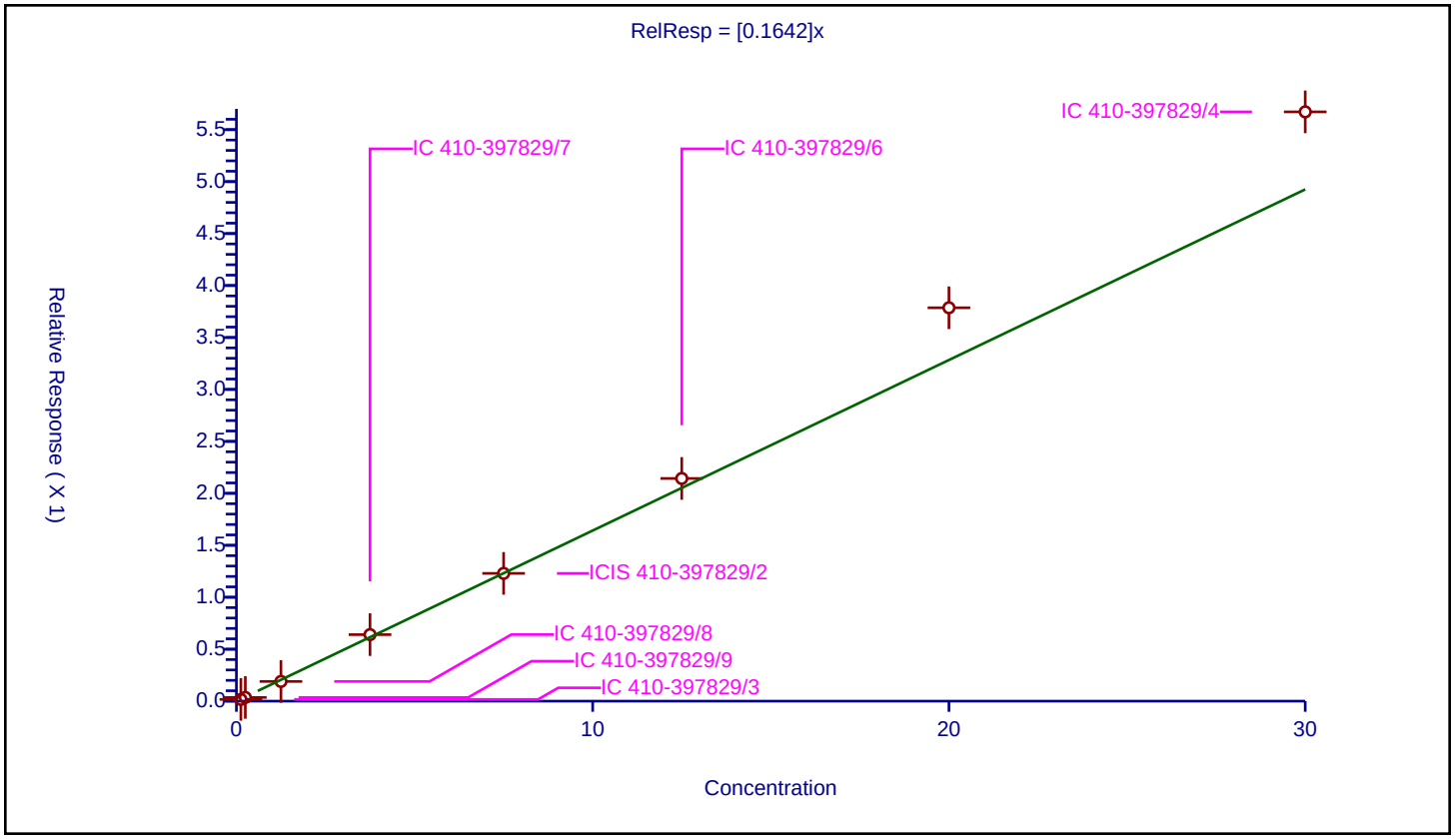
Curve Coefficients

Intercept:	0
Slope:	0.1642

Error Coefficients

Standard Error:	419000
Relative Standard Error:	12.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.016849	5.0	804481.0	0.134795	Y
2	IC 410-397829/9	0.25	0.035588	5.0	706975.0	0.142353	Y
3	IC 410-397829/8	1.25	0.189681	5.0	845790.0	0.151745	Y
4	IC 410-397829/7	3.75	0.640149	5.0	679061.0	0.170706	Y
5	ICIS 410-397829/2	7.5	1.229584	5.0	802857.0	0.163945	Y
6	IC 410-397829/6	12.5	2.143065	5.0	883382.0	0.171445	Y
7	IC 410-397829/5	20.0	3.786037	5.0	783422.0	0.189302	Y
8	IC 410-397829/4	30.0	5.671305	5.0	728871.0	0.189044	Y



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Calibration / 4-Nitroquinoline-1-oxide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

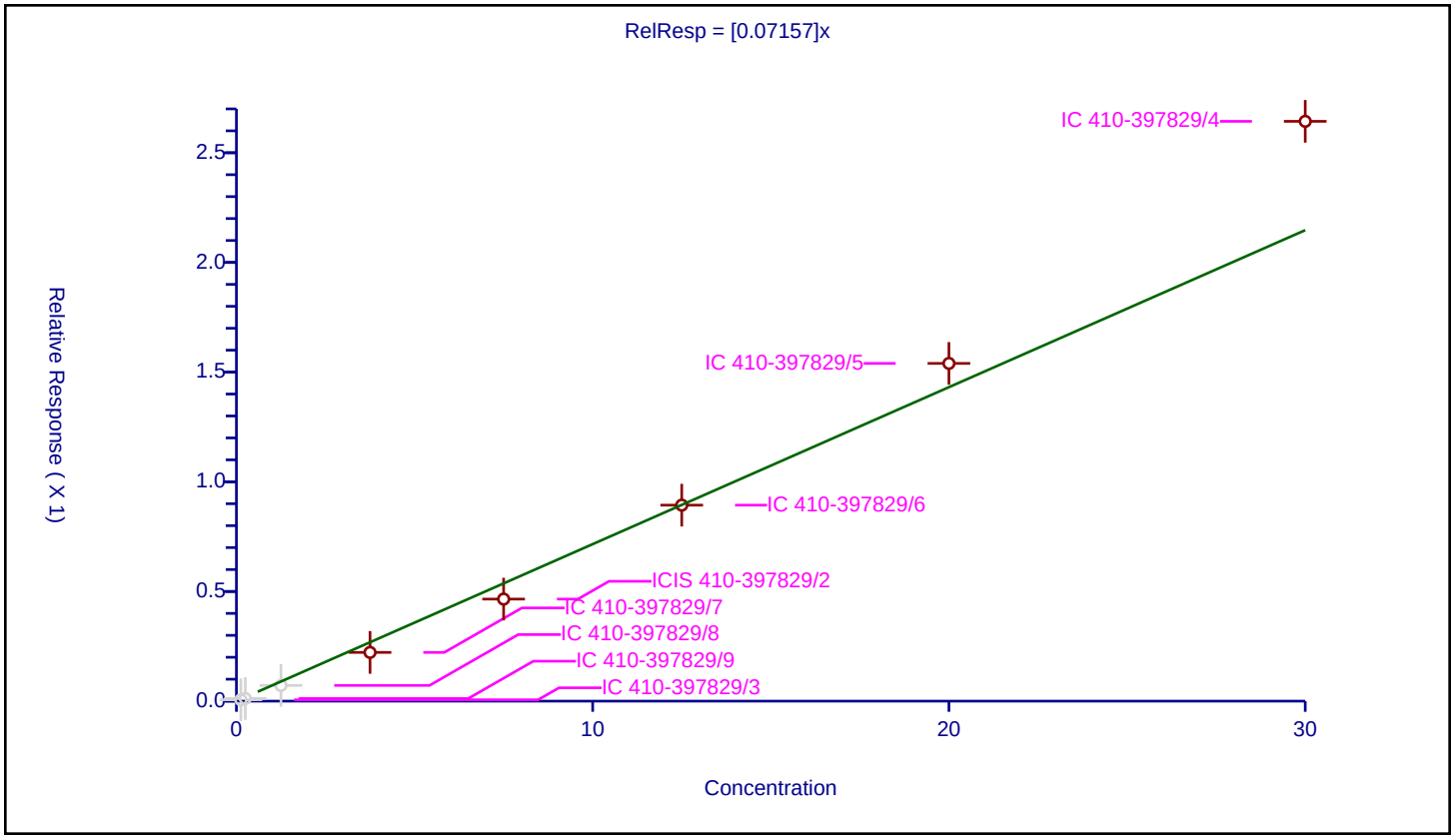
Curve Coefficients

Intercept:	0
Slope:	0.07157

Error Coefficients

Standard Error:	244000
Relative Standard Error:	16.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.957

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.00619	5.0	804481.0	0.049523	N
2	IC 410-397829/9	0.25	0.011995	5.0	706975.0	0.047979	N
3	IC 410-397829/8	1.25	0.071732	5.0	845790.0	0.057385	N
4	IC 410-397829/7	3.75	0.222138	5.0	679061.0	0.059237	Y
5	ICIS 410-397829/2	7.5	0.465251	5.0	802857.0	0.062033	Y
6	IC 410-397829/6	12.5	0.893538	5.0	883382.0	0.071483	Y
7	IC 410-397829/5	20.0	1.5397	5.0	783422.0	0.076985	Y
8	IC 410-397829/4	30.0	2.643259	5.0	728871.0	0.088109	Y



Calibration / Octachlorostyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

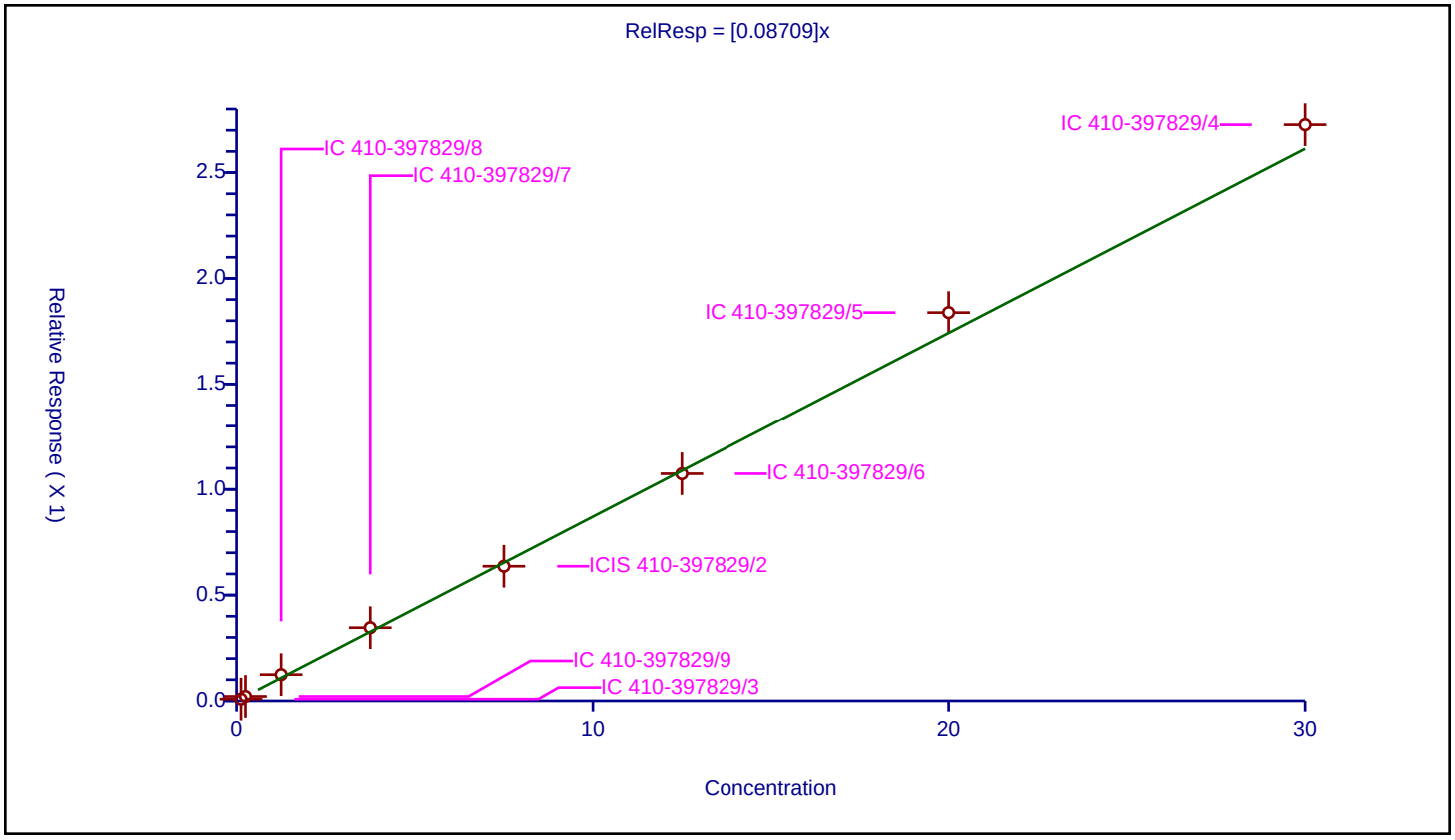
Curve Coefficients

Intercept:	0
Slope:	0.08709

Error Coefficients

Standard Error:	204000
Relative Standard Error:	10.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.008391	5.0	804481.0	0.067124	Y
2	IC 410-397829/9	0.25	0.021125	5.0	706975.0	0.084501	Y
3	IC 410-397829/8	1.25	0.124067	5.0	845790.0	0.099254	Y
4	IC 410-397829/7	3.75	0.345926	5.0	679061.0	0.092247	Y
5	ICIS 410-397829/2	7.5	0.636271	5.0	802857.0	0.084836	Y
6	IC 410-397829/6	12.5	1.074394	5.0	883382.0	0.085951	Y
7	IC 410-397829/5	20.0	1.838396	5.0	783422.0	0.09192	Y
8	IC 410-397829/4	30.0	2.726333	5.0	728871.0	0.090878	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

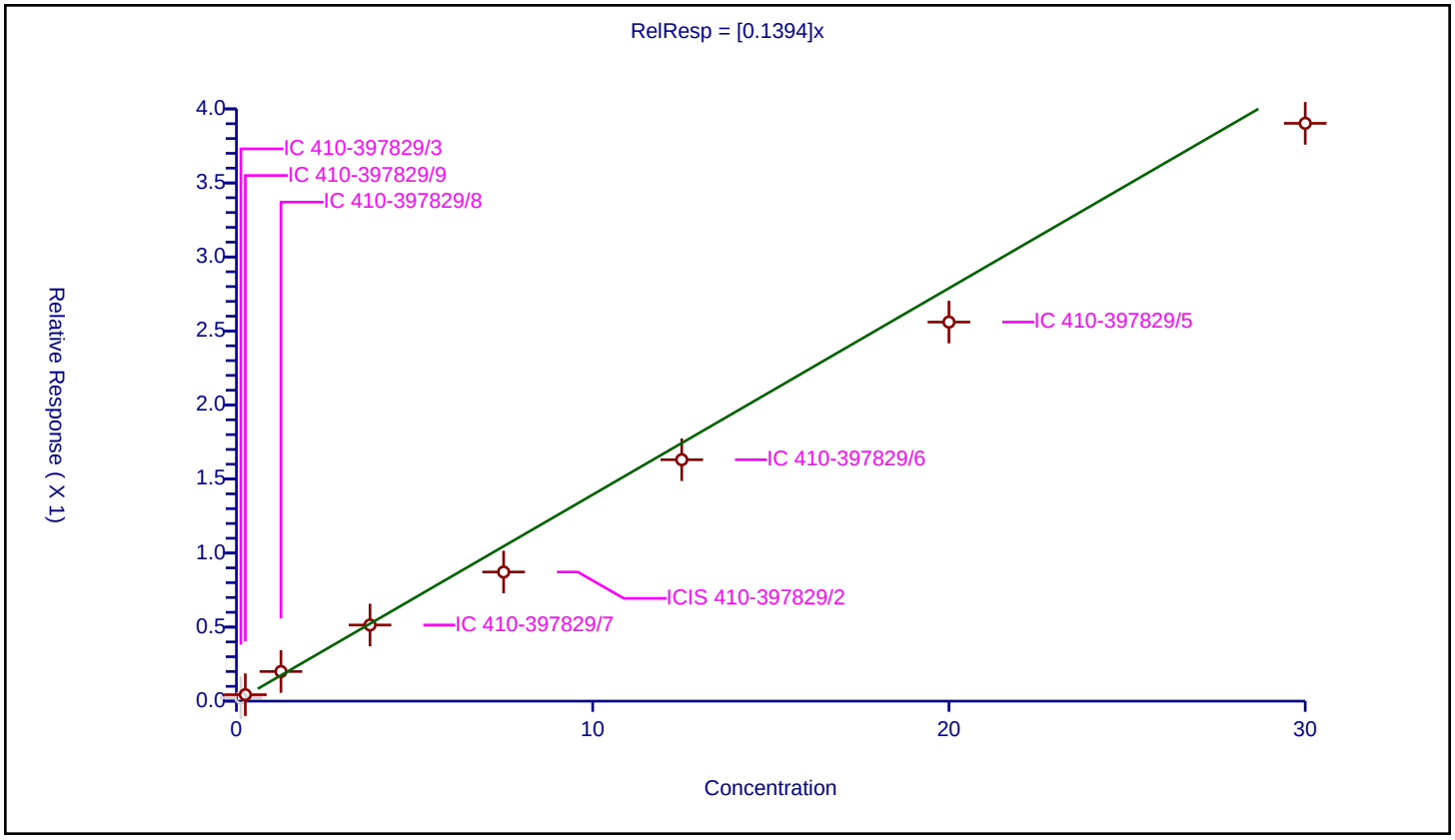
Curve Coefficients

Intercept:	0
Slope:	0.1394

Error Coefficients

Standard Error:	314000
Relative Standard Error:	14.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.022667	5.0	804481.0	0.181334	N
2	IC 410-397829/9	0.25	0.043516	5.0	706975.0	0.174066	Y
3	IC 410-397829/8	1.25	0.200109	5.0	845790.0	0.160087	Y
4	IC 410-397829/7	3.75	0.514262	5.0	679061.0	0.137136	Y
5	ICIS 410-397829/2	7.5	0.872098	5.0	802857.0	0.11628	Y
6	IC 410-397829/6	12.5	1.63062	5.0	883382.0	0.13045	Y
7	IC 410-397829/5	20.0	2.560217	5.0	783422.0	0.128011	Y
8	IC 410-397829/4	30.0	3.902501	5.0	728871.0	0.130083	Y



Calibration / Fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

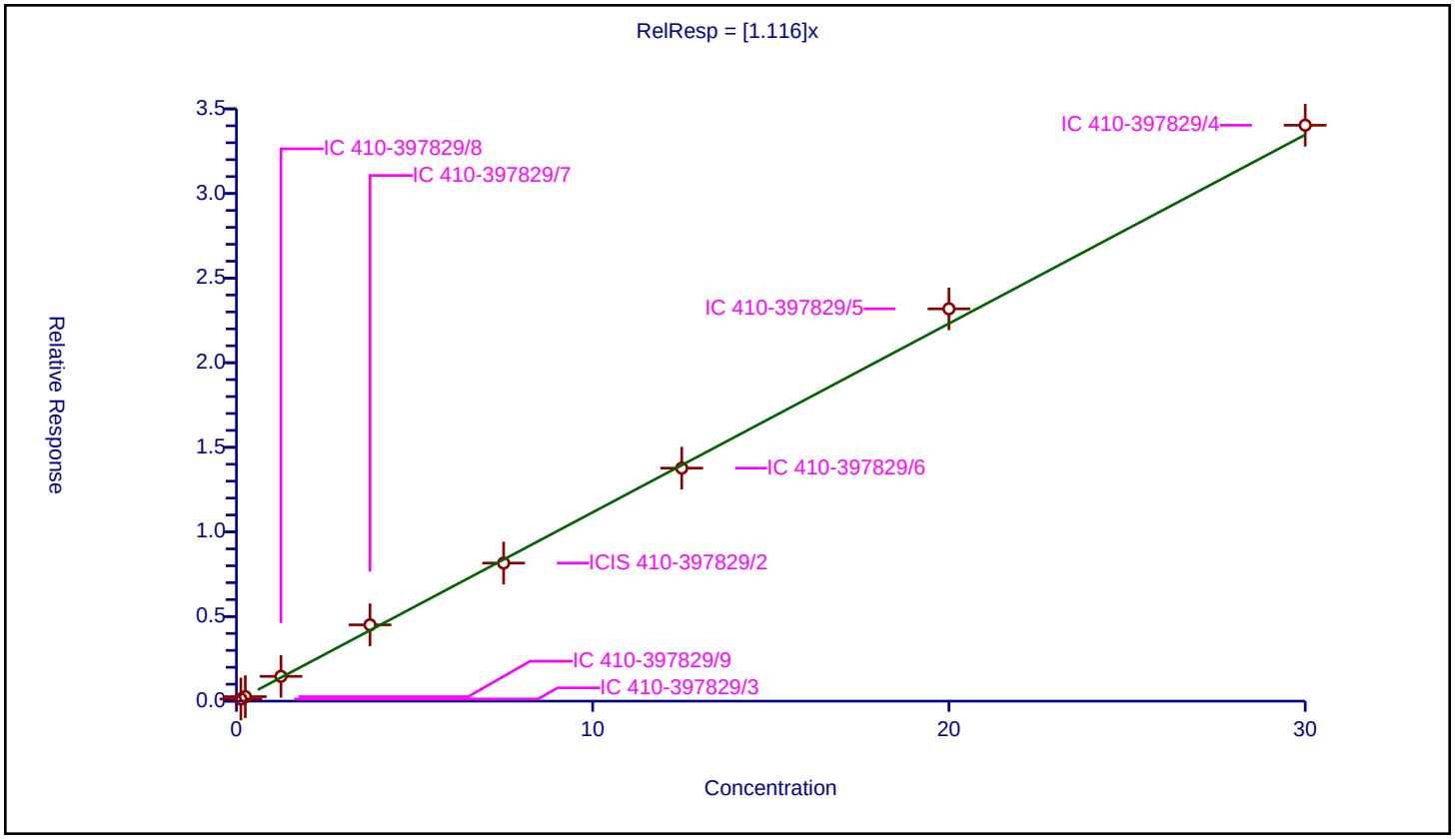
Curve Coefficients

Intercept:	0
Slope:	1.116

Error Coefficients

Standard Error:	2560000
Relative Standard Error:	5.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.125808	5.0	804481.0	1.006463	Y
2	IC 410-397829/9	0.25	0.265448	5.0	706975.0	1.061791	Y
3	IC 410-397829/8	1.25	1.465056	5.0	845790.0	1.172045	Y
4	IC 410-397829/7	3.75	4.508512	5.0	679061.0	1.20227	Y
5	ICIS 410-397829/2	7.5	8.160594	5.0	802857.0	1.088079	Y
6	IC 410-397829/6	12.5	13.77039	5.0	883382.0	1.101631	Y
7	IC 410-397829/5	20.0	23.184325	5.0	783422.0	1.159216	Y
8	IC 410-397829/4	30.0	34.032792	5.0	728871.0	1.134426	Y



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Calibration / Benzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

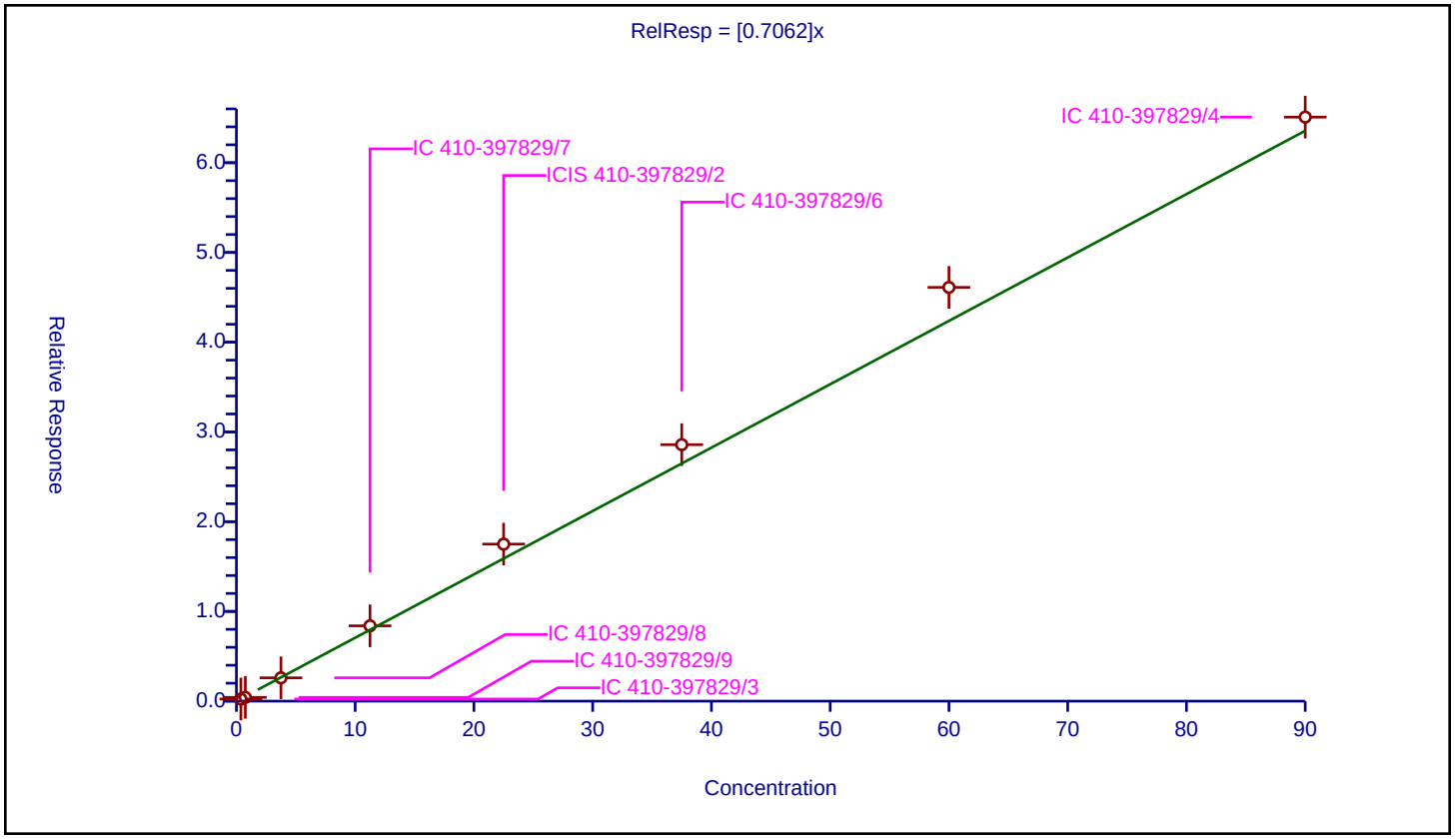
Curve Coefficients

Intercept:	0
Slope:	0.7062

Error Coefficients

Standard Error:	4580000
Relative Standard Error:	11.1
Correlation Coefficient:	0.980
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.375	0.232609	5.0	737632.0	0.620291	Y
2	IC 410-397829/9	0.75	0.419601	5.0	671472.0	0.559467	Y
3	IC 410-397829/8	3.75	2.597574	5.0	871519.0	0.692686	Y
4	IC 410-397829/7	11.25	8.391645	5.0	669358.0	0.745924	Y
5	ICIS 410-397829/2	22.5	17.499721	5.0	698430.0	0.777765	Y
6	IC 410-397829/6	37.5	28.580987	5.0	854122.0	0.76216	Y
7	IC 410-397829/5	60.0	46.107137	5.0	704339.0	0.768452	Y
8	IC 410-397829/4	90.0	65.081896	5.0	657789.0	0.723132	Y



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Calibration / Pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

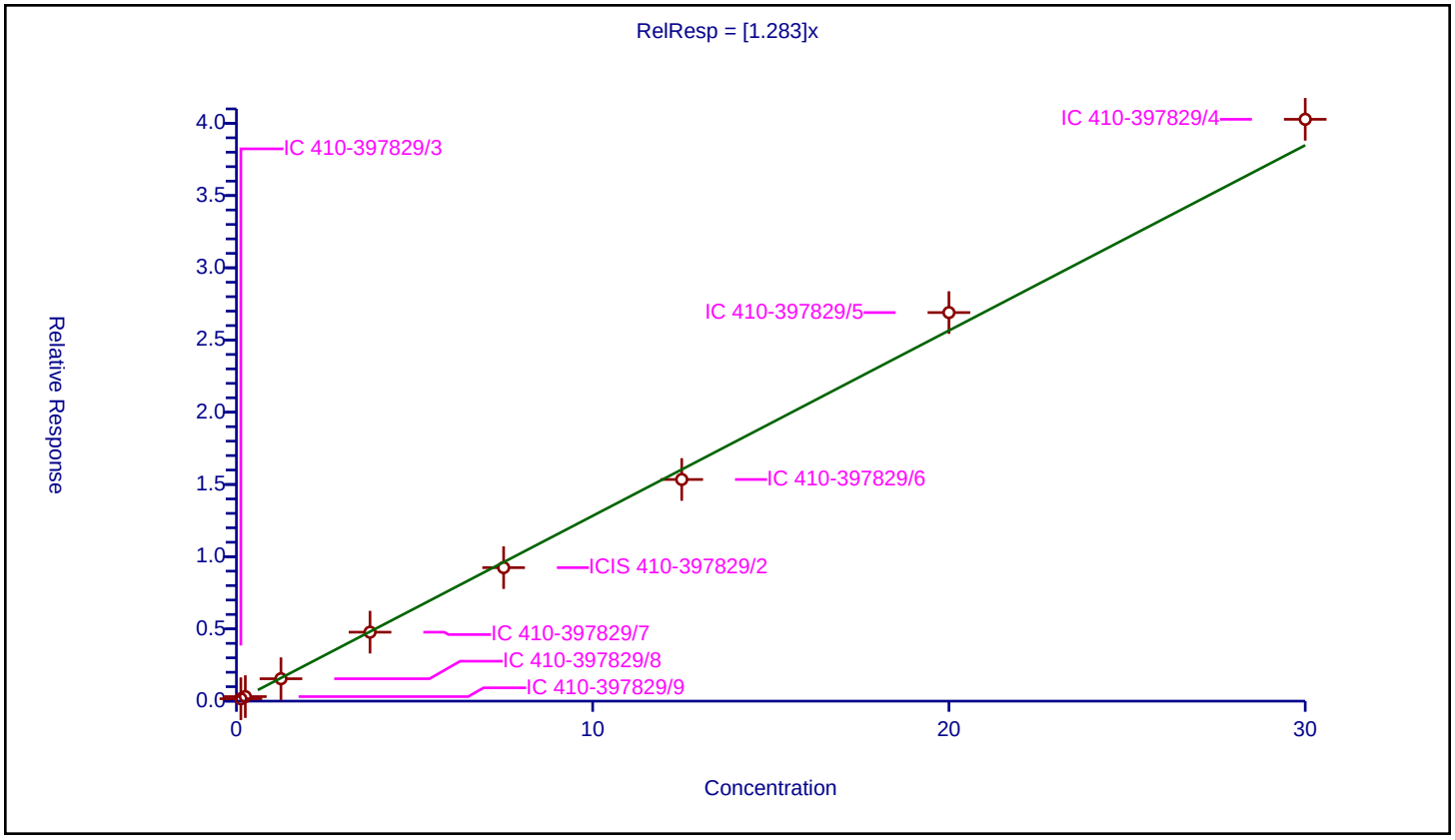
Curve Coefficients

Intercept:	0
Slope:	1.283

Error Coefficients

Standard Error:	2710000
Relative Standard Error:	4.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.167482	5.0	737632.0	1.339855	Y
2	IC 410-397829/9	0.25	0.315047	5.0	671472.0	1.260187	Y
3	IC 410-397829/8	1.25	1.552273	5.0	871519.0	1.241818	Y
4	IC 410-397829/7	3.75	4.773806	5.0	669358.0	1.273015	Y
5	ICIS 410-397829/2	7.5	9.241334	5.0	698430.0	1.232178	Y
6	IC 410-397829/6	12.5	15.345483	5.0	854122.0	1.227639	Y
7	IC 410-397829/5	20.0	26.899639	5.0	704339.0	1.344982	Y
8	IC 410-397829/4	30.0	40.279809	5.0	657789.0	1.34266	Y



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Calibration / p-Terphenyl-d14

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

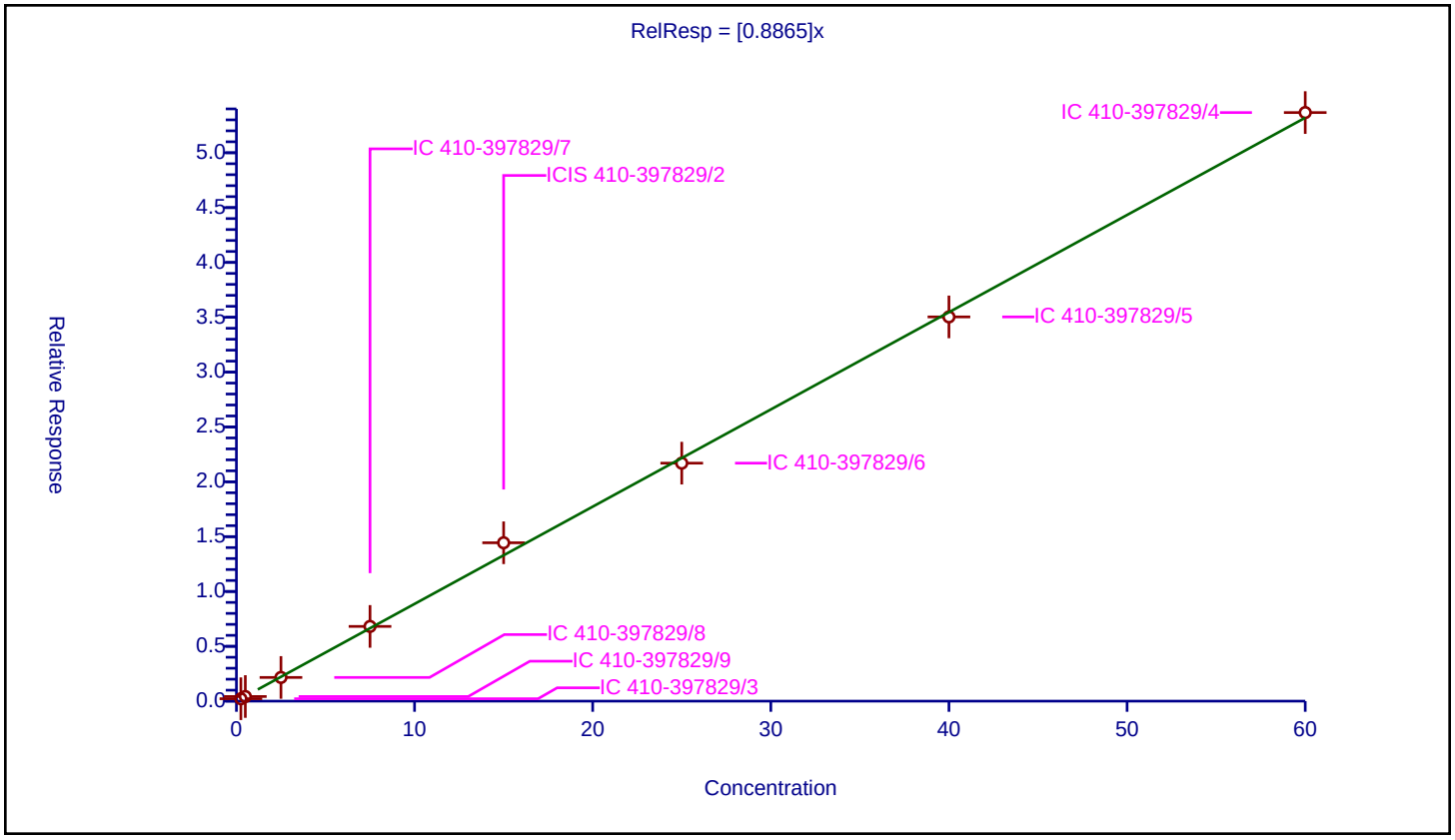
Curve Coefficients

Intercept:	0
Slope:	0.8865

Error Coefficients

Standard Error:	3640000
Relative Standard Error:	4.1
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.25	0.218896	5.0	737632.0	0.875586	Y
2	IC 410-397829/9	0.5	0.421678	5.0	671472.0	0.843356	Y
3	IC 410-397829/8	2.5	2.160555	5.0	871519.0	0.864222	Y
4	IC 410-397829/7	7.5	6.812296	5.0	669358.0	0.908306	Y
5	ICIS 410-397829/2	15.0	14.439808	5.0	698430.0	0.962654	Y
6	IC 410-397829/6	25.0	21.698206	5.0	854122.0	0.867928	Y
7	IC 410-397829/5	40.0	35.034032	5.0	704339.0	0.875851	Y
8	IC 410-397829/4	60.0	53.663804	5.0	657789.0	0.894397	Y



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Calibration / p-Dimethylamino azobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

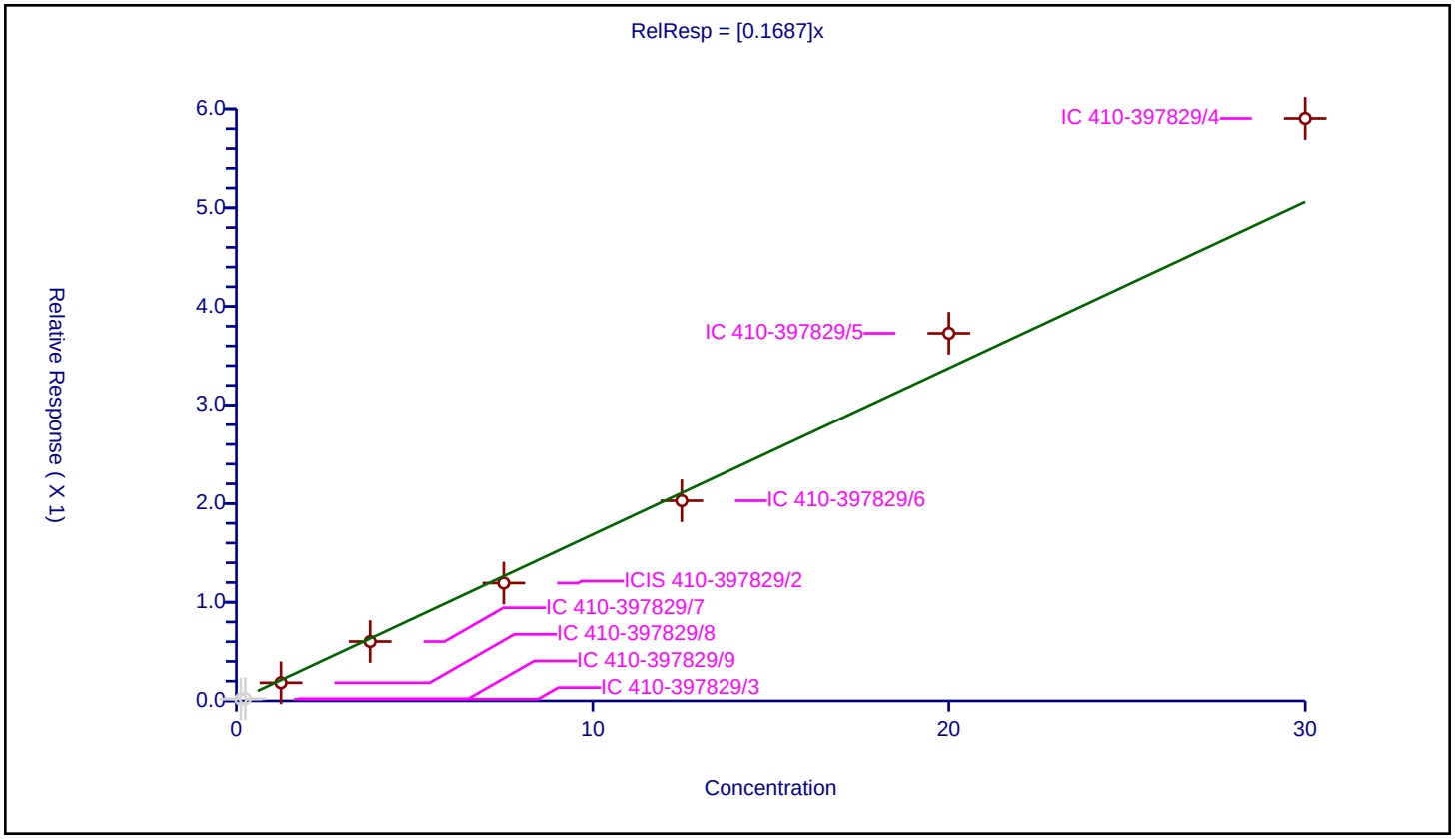
Curve Coefficients

Intercept:	0
Slope:	0.1687

Error Coefficients

Standard Error:	455000
Relative Standard Error:	11.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.017719	5.0	737632.0	0.141751	N
2	IC 410-397829/9	0.25	0.022056	5.0	671472.0	0.088224	N
3	IC 410-397829/8	1.25	0.183582	5.0	871519.0	0.146865	Y
4	IC 410-397829/7	3.75	0.601853	5.0	669358.0	0.160494	Y
5	ICIS 410-397829/2	7.5	1.194765	5.0	698430.0	0.159302	Y
6	IC 410-397829/6	12.5	2.028697	5.0	854122.0	0.162296	Y
7	IC 410-397829/5	20.0	3.728432	5.0	704339.0	0.186422	Y
8	IC 410-397829/4	30.0	5.90393	5.0	657789.0	0.196798	Y



Calibration / Chlorobenzilate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

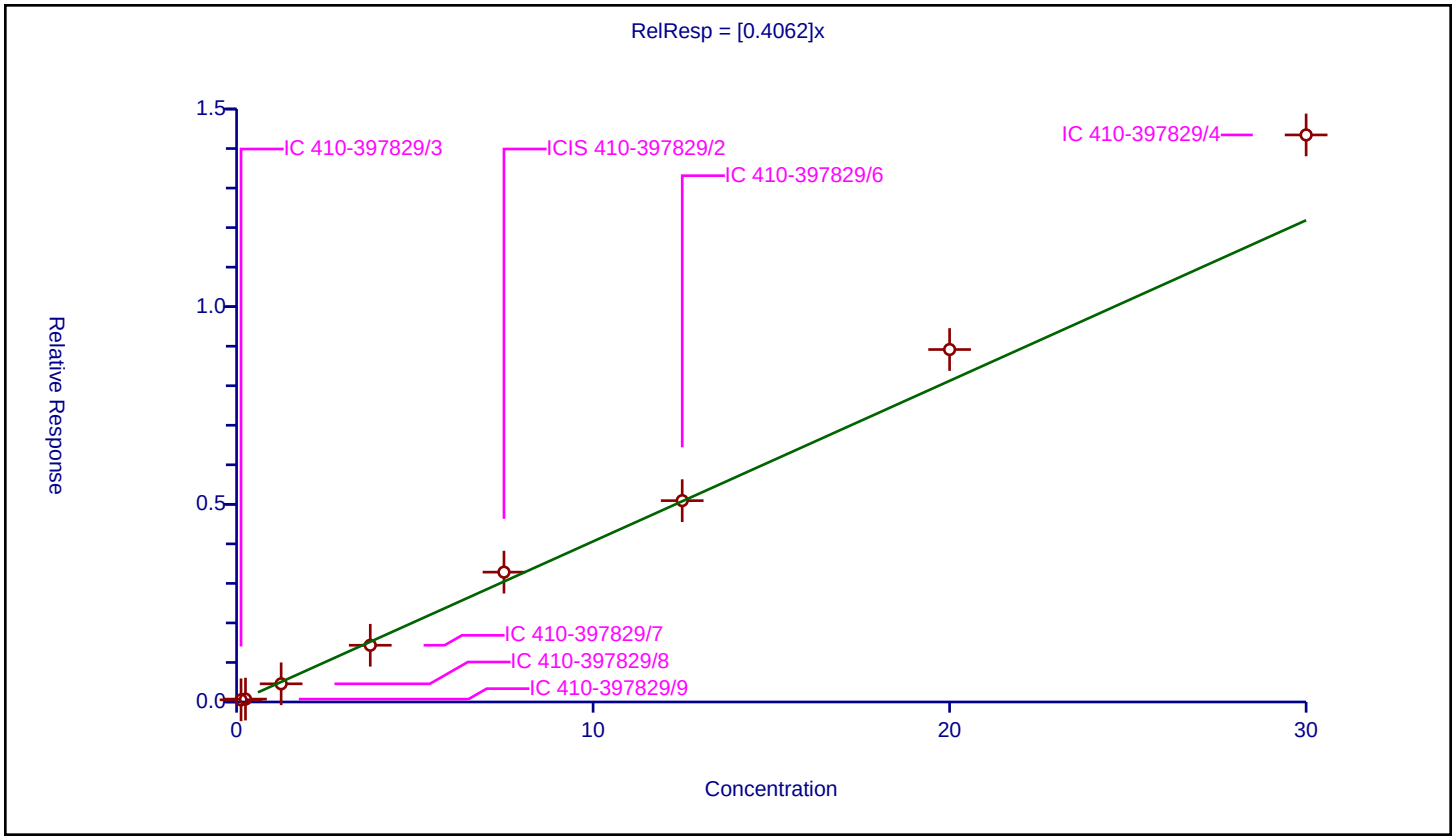
Curve Coefficients

Intercept:	0
Slope:	0.4062

Error Coefficients

Standard Error:	937000
Relative Standard Error:	14.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.054505	5.0	737632.0	0.436044	Y
2	IC 410-397829/9	0.25	0.073376	5.0	671472.0	0.293504	Y
3	IC 410-397829/8	1.25	0.459795	5.0	871519.0	0.367836	Y
4	IC 410-397829/7	3.75	1.435316	5.0	669358.0	0.382751	Y
5	ICIS 410-397829/2	7.5	3.284989	5.0	698430.0	0.437999	Y
6	IC 410-397829/6	12.5	5.0933	5.0	854122.0	0.407464	Y
7	IC 410-397829/5	20.0	8.916374	5.0	704339.0	0.445819	Y
8	IC 410-397829/4	30.0	14.344425	5.0	657789.0	0.478148	Y



Calibration / 3,3'-Dimethylbenzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

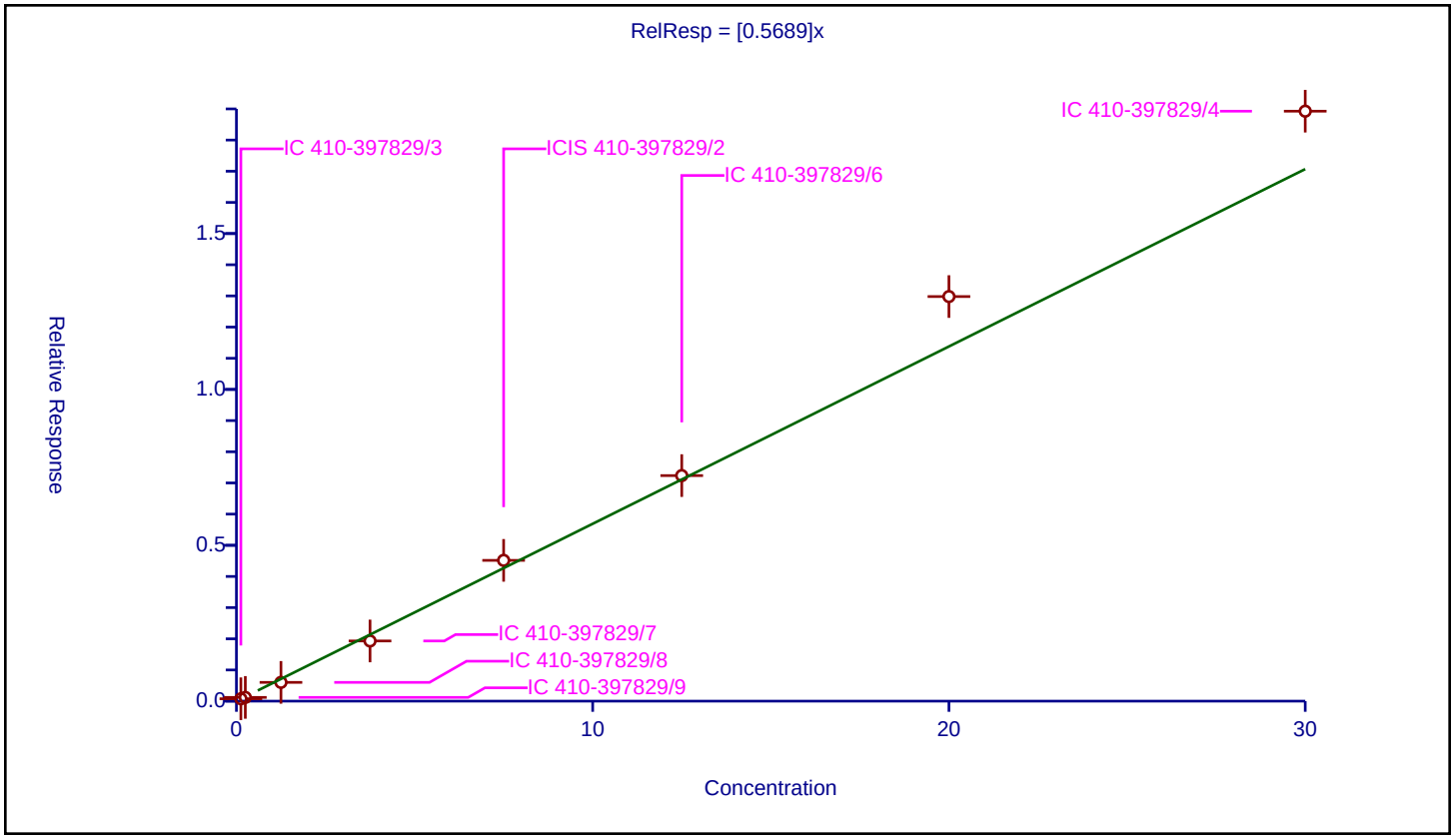
Curve Coefficients

Intercept:	0
Slope:	0.5689

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	11.9
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.076766	5.0	737632.0	0.614127	Y
2	IC 410-397829/9	0.25	0.120012	5.0	671472.0	0.48005	Y
3	IC 410-397829/8	1.25	0.60211	5.0	871519.0	0.481688	Y
4	IC 410-397829/7	3.75	1.930529	5.0	669358.0	0.514808	Y
5	ICIS 410-397829/2	7.5	4.515878	5.0	698430.0	0.602117	Y
6	IC 410-397829/6	12.5	7.235793	5.0	854122.0	0.578863	Y
7	IC 410-397829/5	20.0	12.979127	5.0	704339.0	0.648956	Y
8	IC 410-397829/4	30.0	18.926487	5.0	657789.0	0.630883	Y



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Calibration / Butyl benzyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

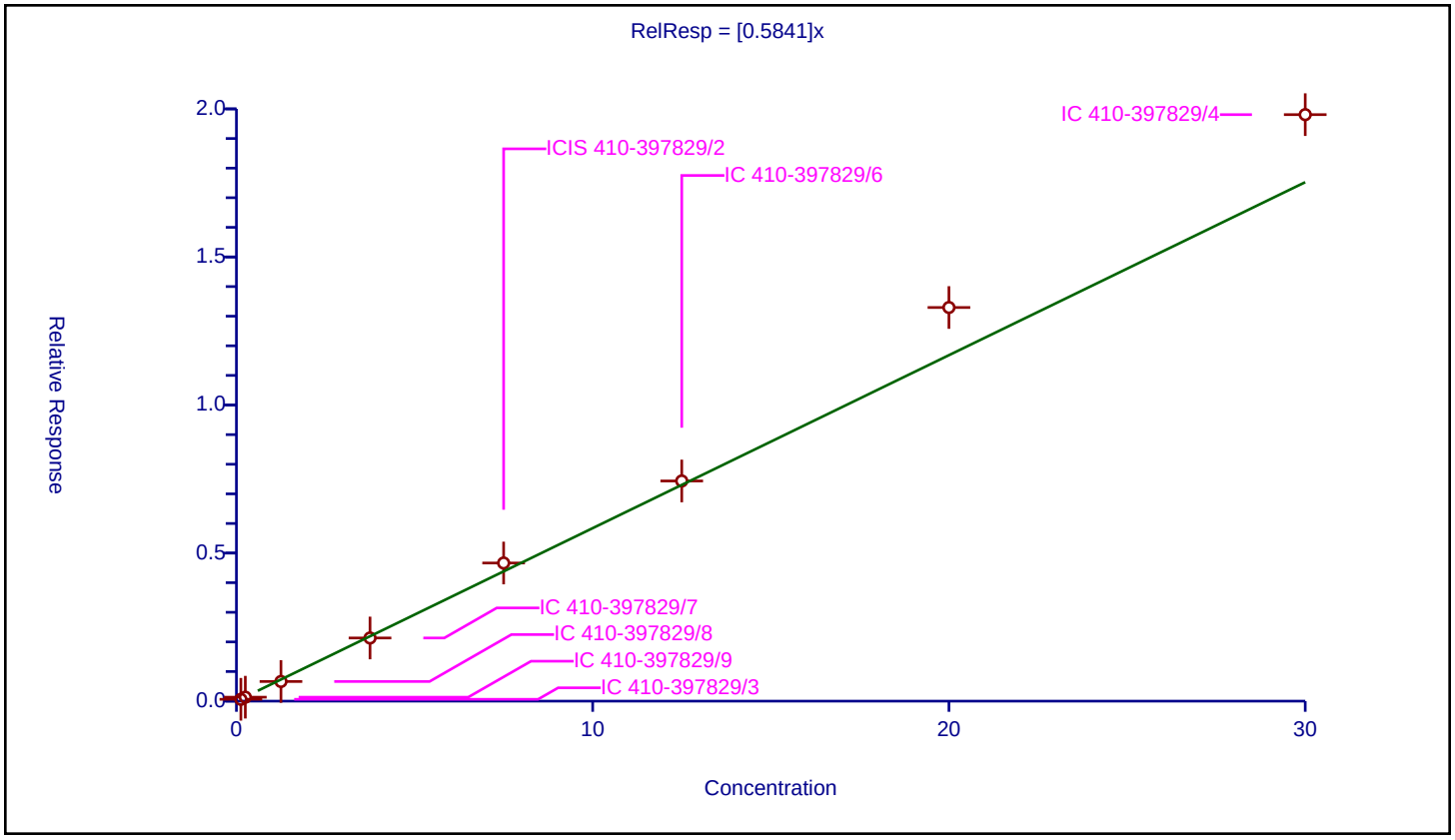
Curve Coefficients

Intercept:	0
Slope:	0.5841

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	10.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.062294	5.0	737632.0	0.498351	Y
2	IC 410-397829/9	0.25	0.133401	5.0	671472.0	0.533604	Y
3	IC 410-397829/8	1.25	0.663405	5.0	871519.0	0.530724	Y
4	IC 410-397829/7	3.75	2.13285	5.0	669358.0	0.56876	Y
5	ICIS 410-397829/2	7.5	4.665163	5.0	698430.0	0.622022	Y
6	IC 410-397829/6	12.5	7.435202	5.0	854122.0	0.594816	Y
7	IC 410-397829/5	20.0	13.293024	5.0	704339.0	0.664651	Y
8	IC 410-397829/4	30.0	19.806116	5.0	657789.0	0.660204	Y



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Calibration / 2-Acetylaminofluorene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

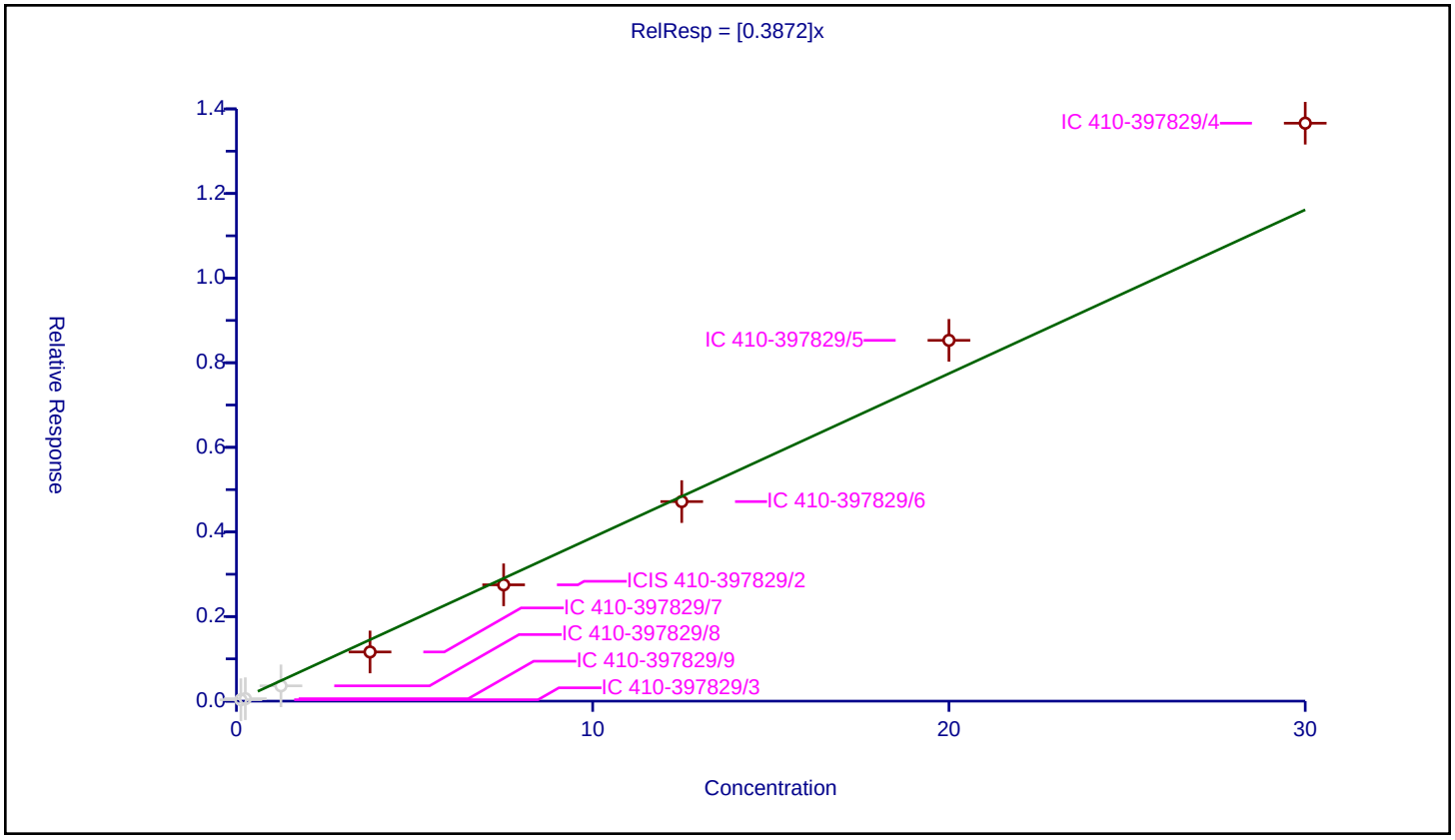
Curve Coefficients

Intercept:	0
Slope:	0.3872

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	14.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.033614	5.0	737632.0	0.268915	N
2	IC 410-397829/9	0.25	0.057679	5.0	671472.0	0.230717	N
3	IC 410-397829/8	1.25	0.361398	5.0	871519.0	0.289118	N
4	IC 410-397829/7	3.75	1.162674	5.0	669358.0	0.310046	Y
5	ICIS 410-397829/2	7.5	2.749603	5.0	698430.0	0.366614	Y
6	IC 410-397829/6	12.5	4.717511	5.0	854122.0	0.377401	Y
7	IC 410-397829/5	20.0	8.528706	5.0	704339.0	0.426435	Y
8	IC 410-397829/4	30.0	13.662056	5.0	657789.0	0.455402	Y



Calibration / 3,3'-Dichlorobenzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

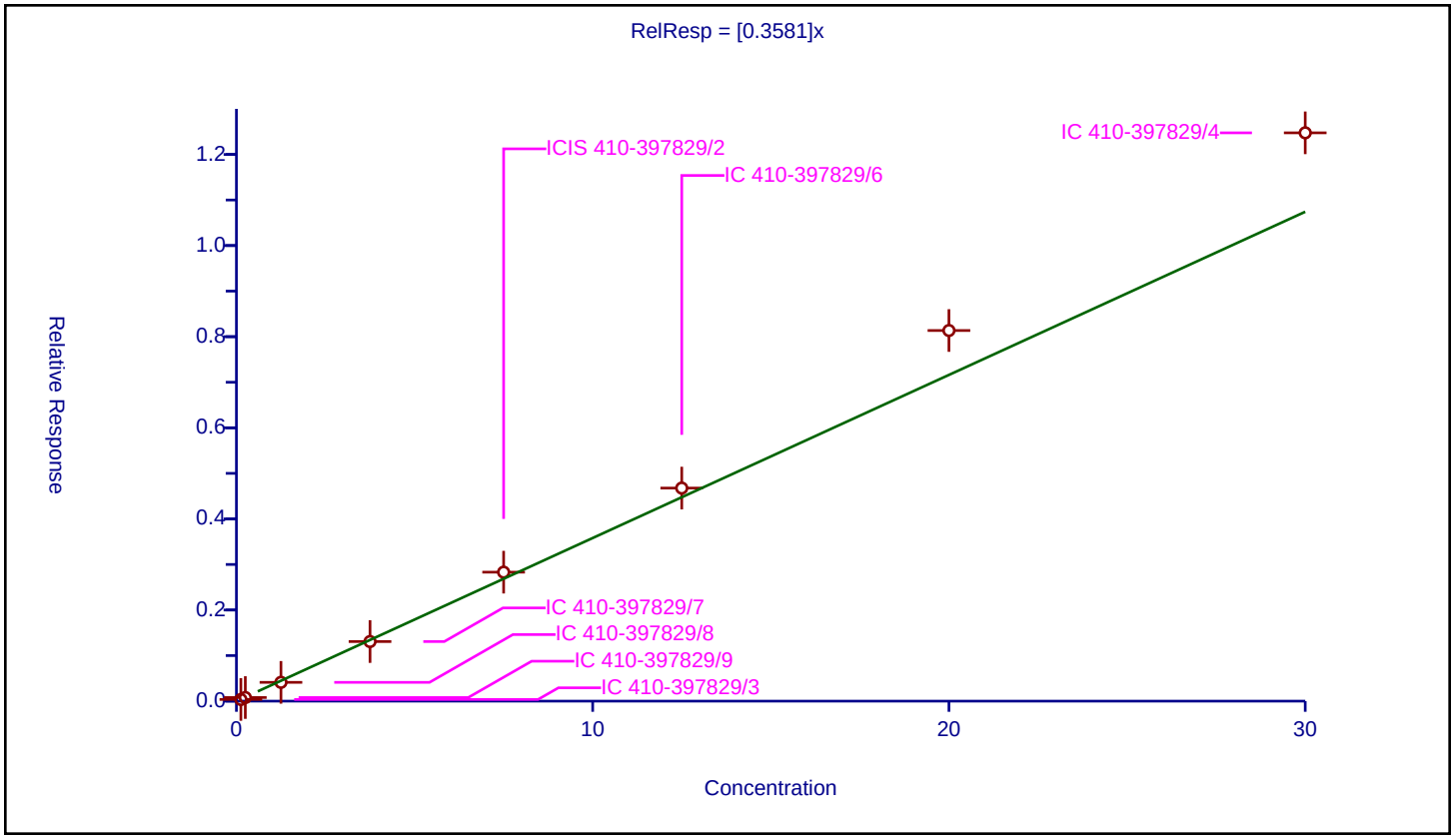
Curve Coefficients

Intercept:	0
Slope:	0.3581

Error Coefficients

Standard Error:	831000
Relative Standard Error:	12.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.036929	5.0	737632.0	0.295432	Y
2	IC 410-397829/9	0.25	0.078998	5.0	671472.0	0.315992	Y
3	IC 410-397829/8	1.25	0.412584	5.0	871519.0	0.330067	Y
4	IC 410-397829/7	3.75	1.307902	5.0	669358.0	0.348774	Y
5	ICIS 410-397829/2	7.5	2.830842	5.0	698430.0	0.377446	Y
6	IC 410-397829/6	12.5	4.67668	5.0	854122.0	0.374134	Y
7	IC 410-397829/5	20.0	8.135103	5.0	704339.0	0.406755	Y
8	IC 410-397829/4	30.0	12.474532	5.0	657789.0	0.415818	Y



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Calibration / 4,4'-Methylene bis(2-chloroaniline)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

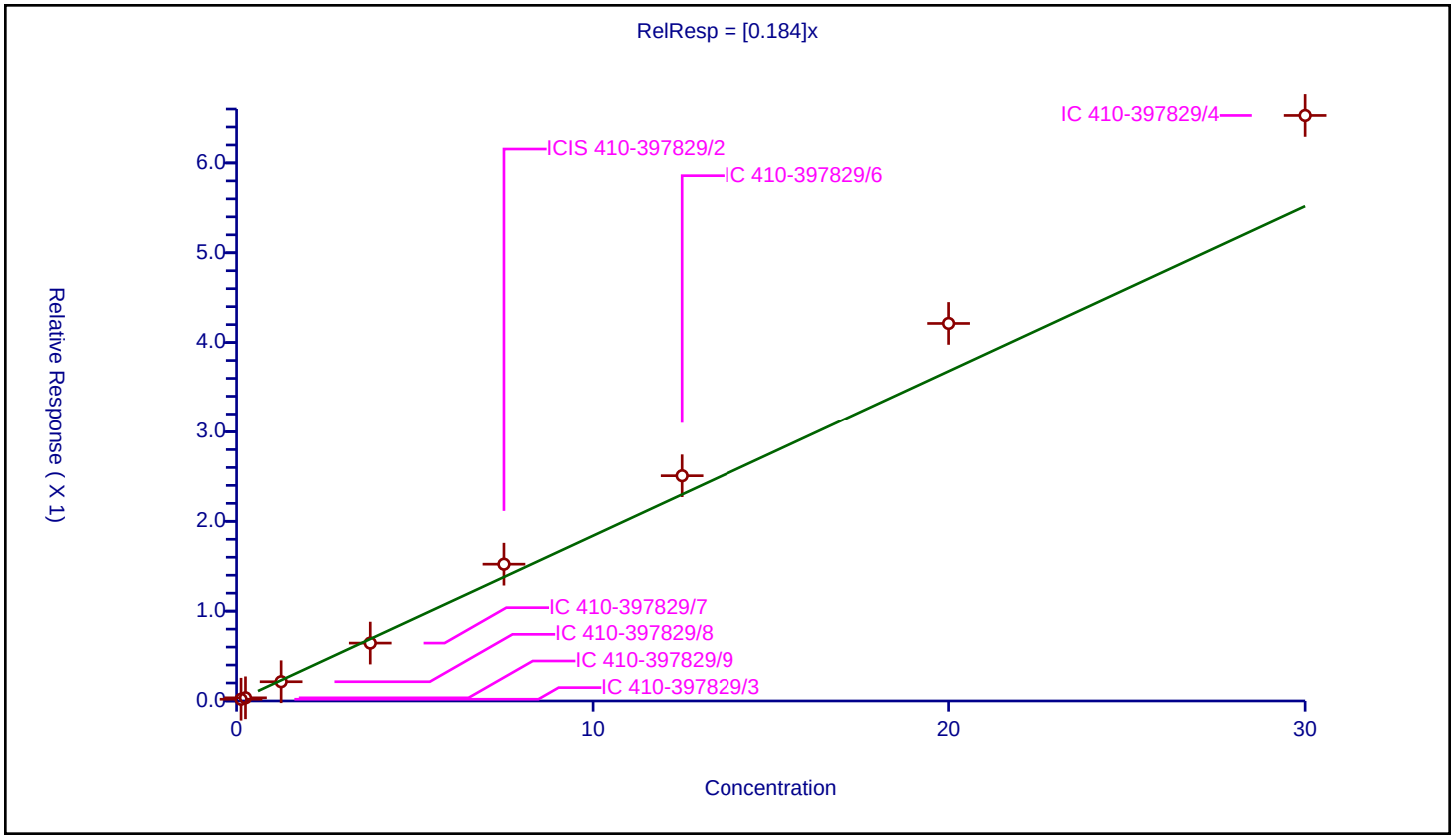
Curve Coefficients

Intercept:	0
Slope:	0.184

Error Coefficients

Standard Error:	435000
Relative Standard Error:	15.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.019461	5.0	737632.0	0.155687	Y
2	IC 410-397829/9	0.25	0.035251	5.0	671472.0	0.141004	Y
3	IC 410-397829/8	1.25	0.214172	5.0	871519.0	0.171338	Y
4	IC 410-397829/7	3.75	0.644394	5.0	669358.0	0.171838	Y
5	ICIS 410-397829/2	7.5	1.522658	5.0	698430.0	0.203021	Y
6	IC 410-397829/6	12.5	2.507821	5.0	854122.0	0.200626	Y
7	IC 410-397829/5	20.0	4.213014	5.0	704339.0	0.210651	Y
8	IC 410-397829/4	30.0	6.528423	5.0	657789.0	0.217614	Y



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Calibration / Benzo[a]anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

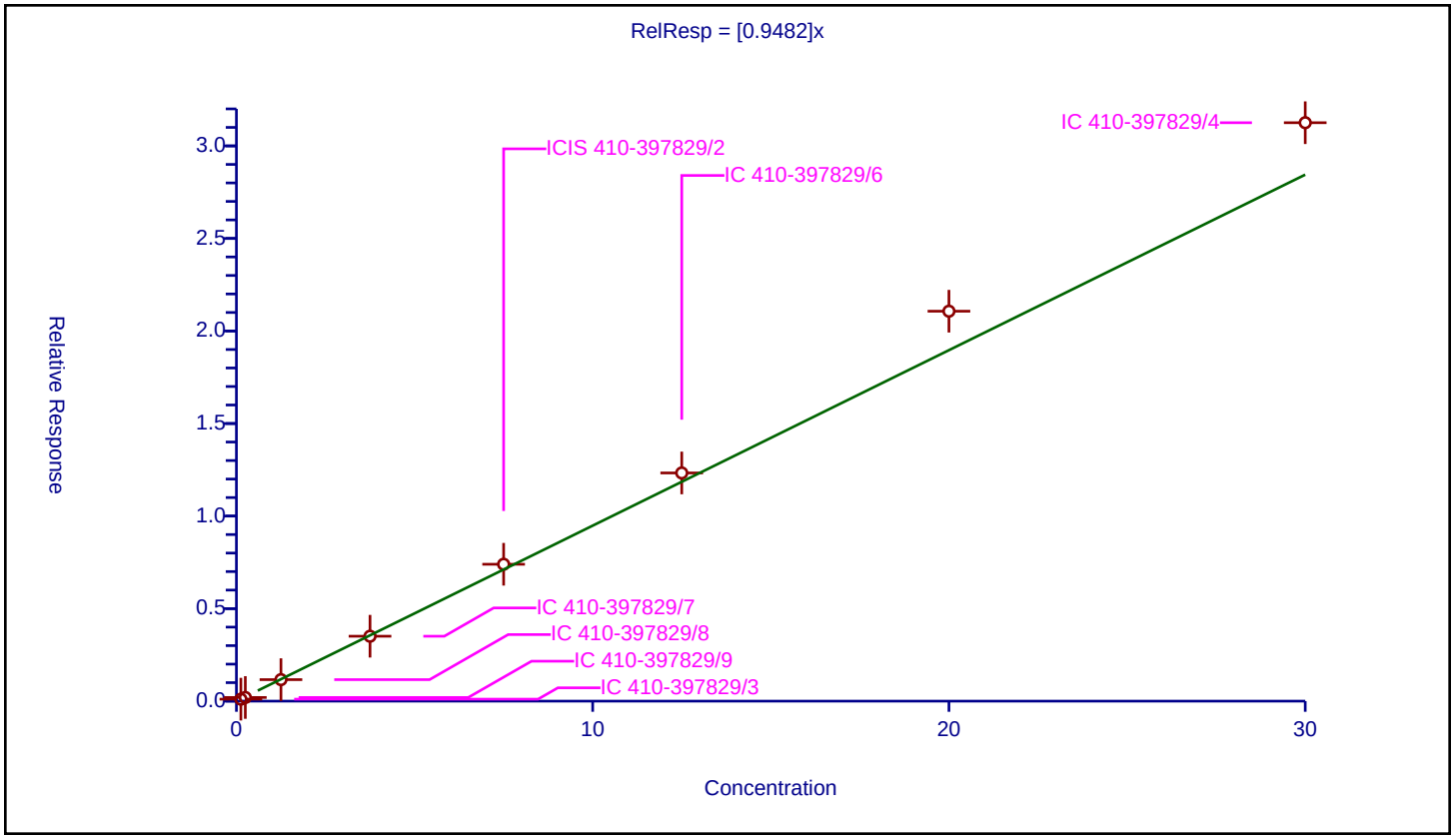
Curve Coefficients

Intercept:	0
Slope:	0.9482

Error Coefficients

Standard Error:	2120000
Relative Standard Error:	9.4
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.107364	5.0	737632.0	0.858911	Y
2	IC 410-397829/9	0.25	0.198385	5.0	671472.0	0.79354	Y
3	IC 410-397829/8	1.25	1.16239	5.0	871519.0	0.929912	Y
4	IC 410-397829/7	3.75	3.507443	5.0	669358.0	0.935318	Y
5	ICIS 410-397829/2	7.5	7.396074	5.0	698430.0	0.986143	Y
6	IC 410-397829/6	12.5	12.329386	5.0	854122.0	0.986351	Y
7	IC 410-397829/5	20.0	21.069336	5.0	704339.0	1.053467	Y
8	IC 410-397829/4	30.0	31.253244	5.0	657789.0	1.041775	Y



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Calibration / Chrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

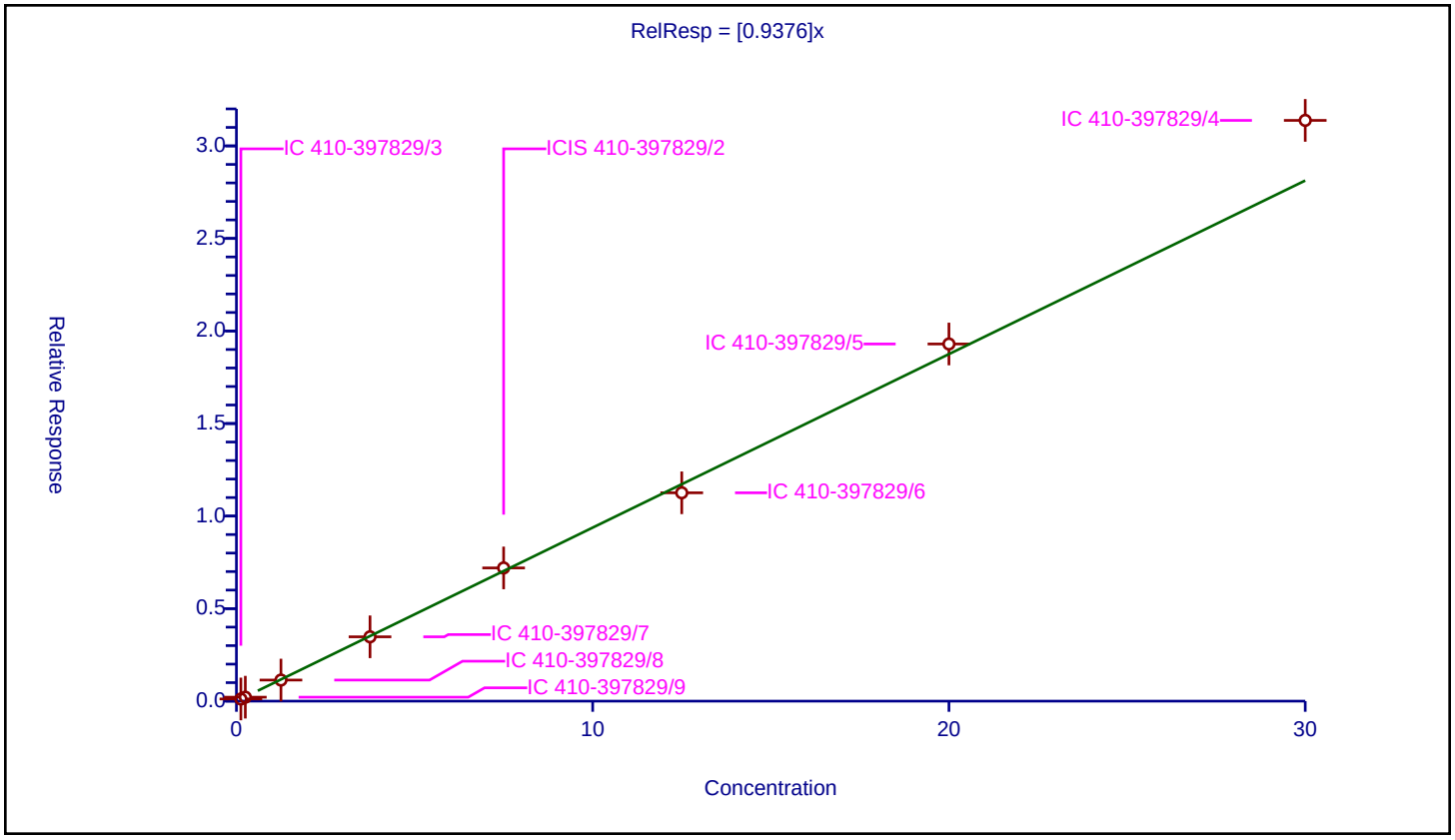
Curve Coefficients

Intercept:	0
Slope:	0.9376

Error Coefficients

Standard Error:	2050000
Relative Standard Error:	6.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.117416	5.0	737632.0	0.93933	Y
2	IC 410-397829/9	0.25	0.213166	5.0	671472.0	0.852664	Y
3	IC 410-397829/8	1.25	1.138593	5.0	871519.0	0.910874	Y
4	IC 410-397829/7	3.75	3.475435	5.0	669358.0	0.926783	Y
5	ICIS 410-397829/2	7.5	7.197314	5.0	698430.0	0.959642	Y
6	IC 410-397829/6	12.5	11.256454	5.0	854122.0	0.900516	Y
7	IC 410-397829/5	20.0	19.296915	5.0	704339.0	0.964846	Y
8	IC 410-397829/4	30.0	31.378831	5.0	657789.0	1.045961	Y



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Calibration / Bis(2-ethylhexyl) phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

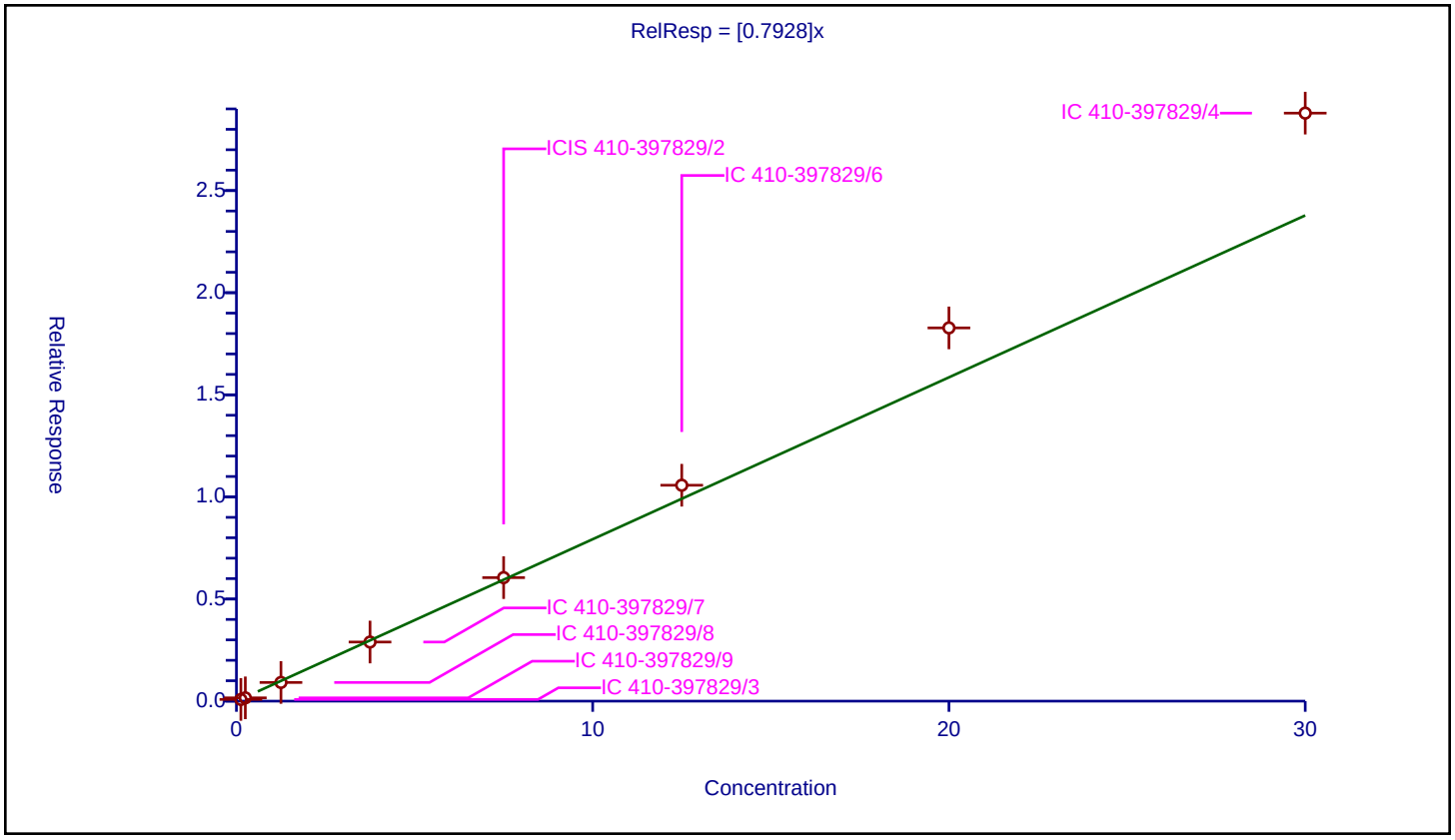
Curve Coefficients

Intercept:	0
Slope:	0.7928

Error Coefficients

Standard Error:	1890000
Relative Standard Error:	14.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.08368	5.0	737632.0	0.66944	Y
2	IC 410-397829/9	0.25	0.160833	5.0	671472.0	0.643333	Y
3	IC 410-397829/8	1.25	0.914541	5.0	871519.0	0.731633	Y
4	IC 410-397829/7	3.75	2.894341	5.0	669358.0	0.771824	Y
5	ICIS 410-397829/2	7.5	6.048616	5.0	698430.0	0.806482	Y
6	IC 410-397829/6	12.5	10.572325	5.0	854122.0	0.845786	Y
7	IC 410-397829/5	20.0	18.276256	5.0	704339.0	0.913813	Y
8	IC 410-397829/4	30.0	28.793002	5.0	657789.0	0.959767	Y



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Calibration / 6-Methylchrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

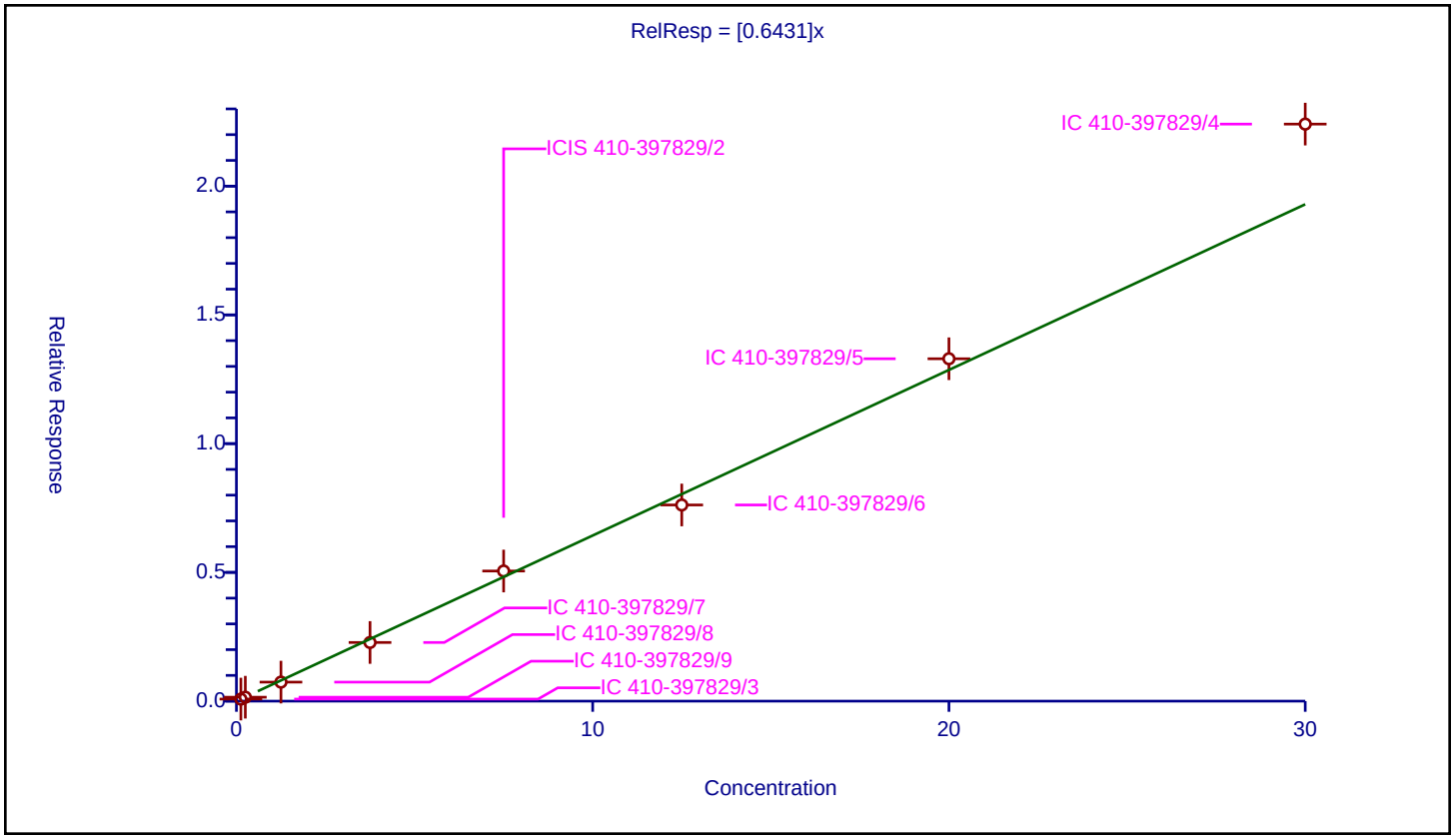
Curve Coefficients

Intercept:	0
Slope:	0.6431

Error Coefficients

Standard Error:	1440000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.079959	5.0	737632.0	0.639669	Y
2	IC 410-397829/9	0.25	0.152821	5.0	671472.0	0.611284	Y
3	IC 410-397829/8	1.25	0.739416	5.0	871519.0	0.591533	Y
4	IC 410-397829/7	3.75	2.278258	5.0	669358.0	0.607535	Y
5	ICIS 410-397829/2	7.5	5.052783	5.0	698430.0	0.673704	Y
6	IC 410-397829/6	12.5	7.618484	5.0	854122.0	0.609479	Y
7	IC 410-397829/5	20.0	13.296495	5.0	704339.0	0.664825	Y
8	IC 410-397829/4	30.0	22.409374	5.0	657789.0	0.746979	Y



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Calibration / Di-n-octyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

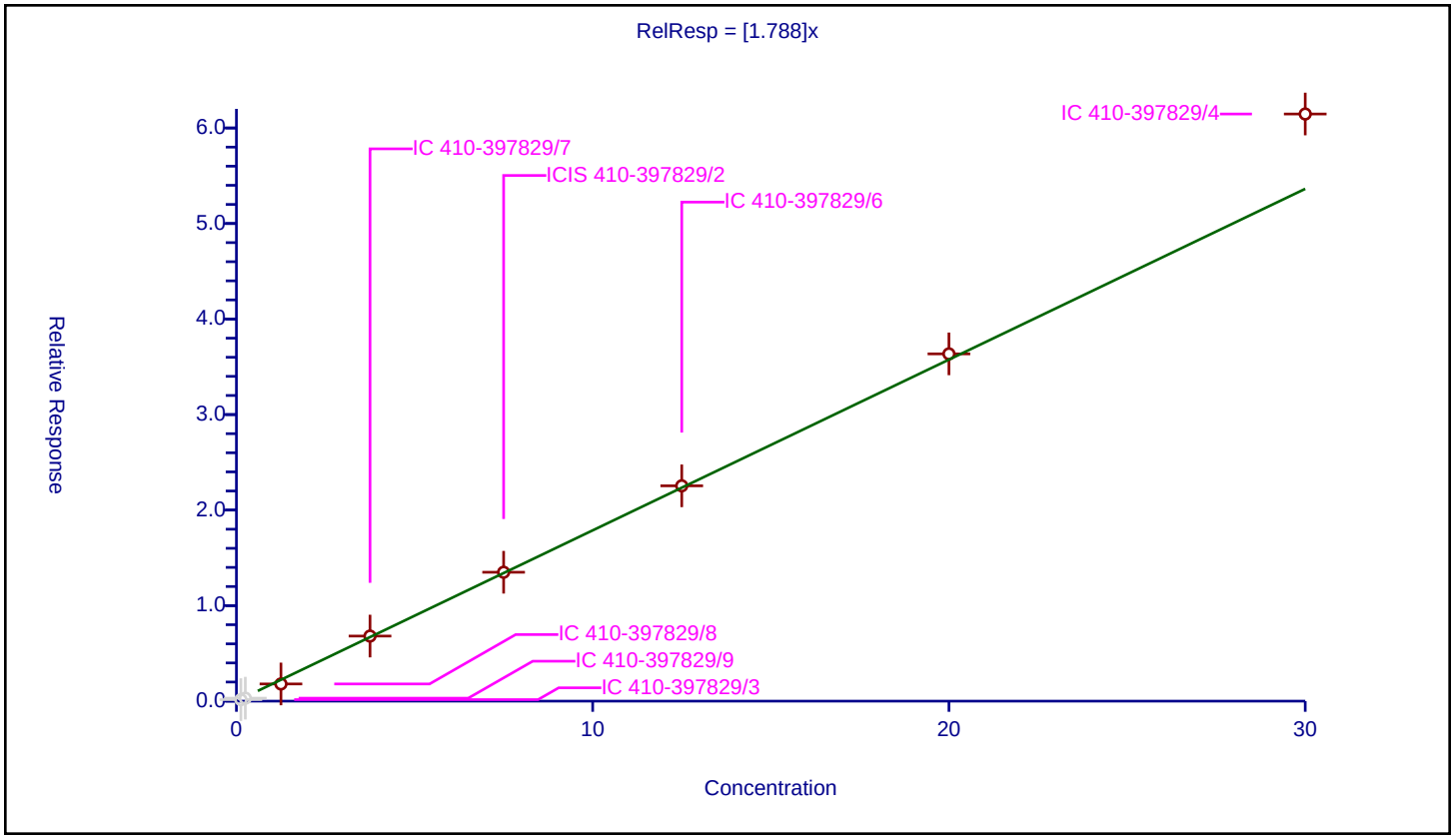
Curve Coefficients

Intercept:	0
Slope:	1.788

Error Coefficients

Standard Error:	3880000
Relative Standard Error:	10.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.159778	5.0	573515.0	1.278223	N
2	IC 410-397829/9	0.25	0.310202	5.0	538761.0	1.24081	N
3	IC 410-397829/8	1.25	1.800684	5.0	684118.0	1.440547	Y
4	IC 410-397829/7	3.75	6.811924	5.0	475078.0	1.816513	Y
5	ICIS 410-397829/2	7.5	13.493538	5.0	547299.0	1.799138	Y
6	IC 410-397829/6	12.5	22.540433	5.0	674017.0	1.803235	Y
7	IC 410-397829/5	20.0	36.355046	5.0	590478.0	1.817752	Y
8	IC 410-397829/4	30.0	61.464723	5.0	546233.0	2.048824	Y



Calibration / 7,12-Dimethylbenz(a)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

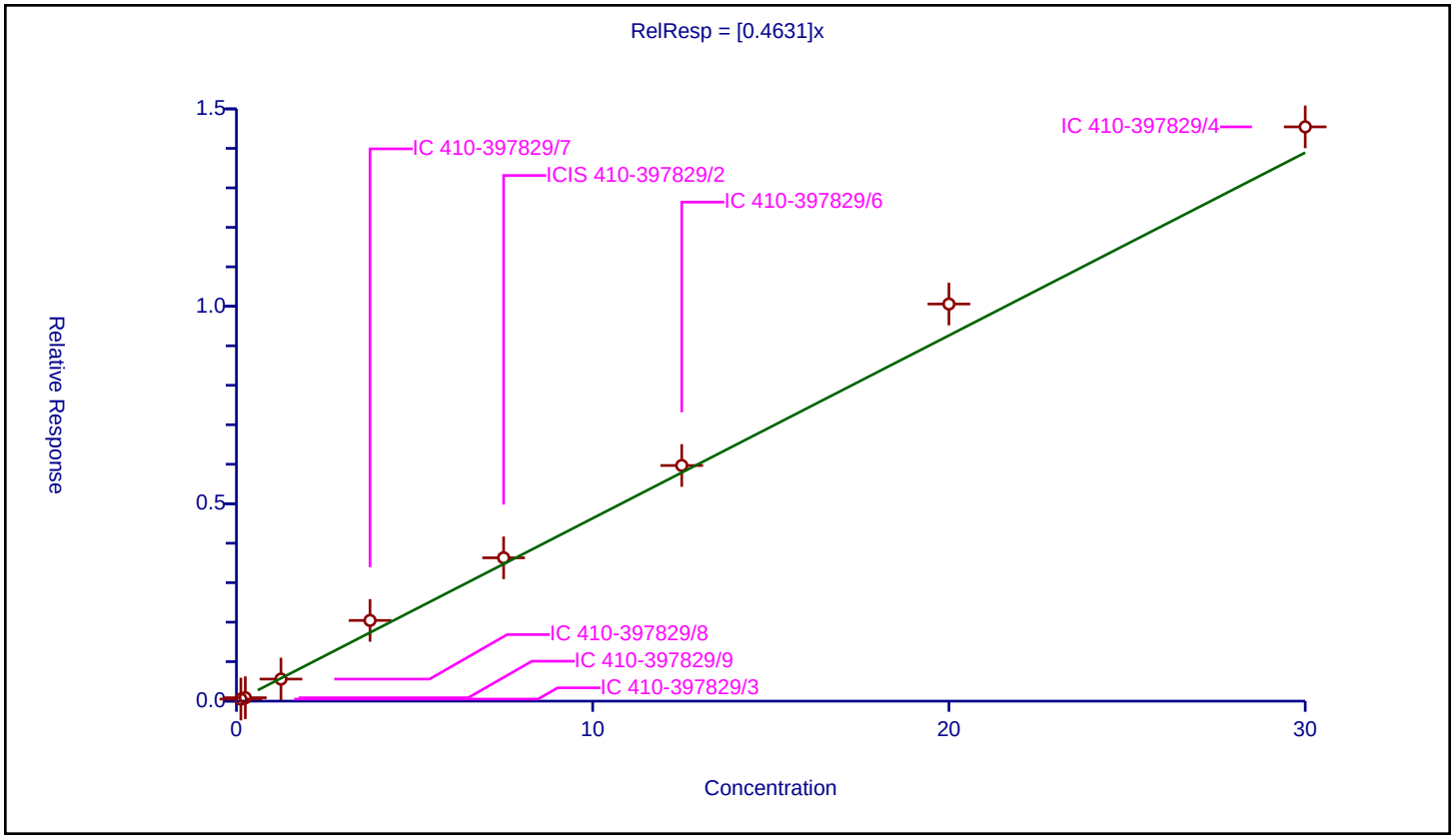
Curve Coefficients

Intercept:	0
Slope:	0.4631

Error Coefficients

Standard Error:	827000
Relative Standard Error:	13.0
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.052231	5.0	573515.0	0.417844	Y
2	IC 410-397829/9	0.25	0.086365	5.0	538761.0	0.345459	Y
3	IC 410-397829/8	1.25	0.559012	5.0	684118.0	0.447209	Y
4	IC 410-397829/7	3.75	2.044022	5.0	475078.0	0.545073	Y
5	ICIS 410-397829/2	7.5	3.62989	5.0	547299.0	0.483985	Y
6	IC 410-397829/6	12.5	5.96818	5.0	674017.0	0.477454	Y
7	IC 410-397829/5	20.0	10.058283	5.0	590478.0	0.502914	Y
8	IC 410-397829/4	30.0	14.544984	5.0	546233.0	0.484833	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

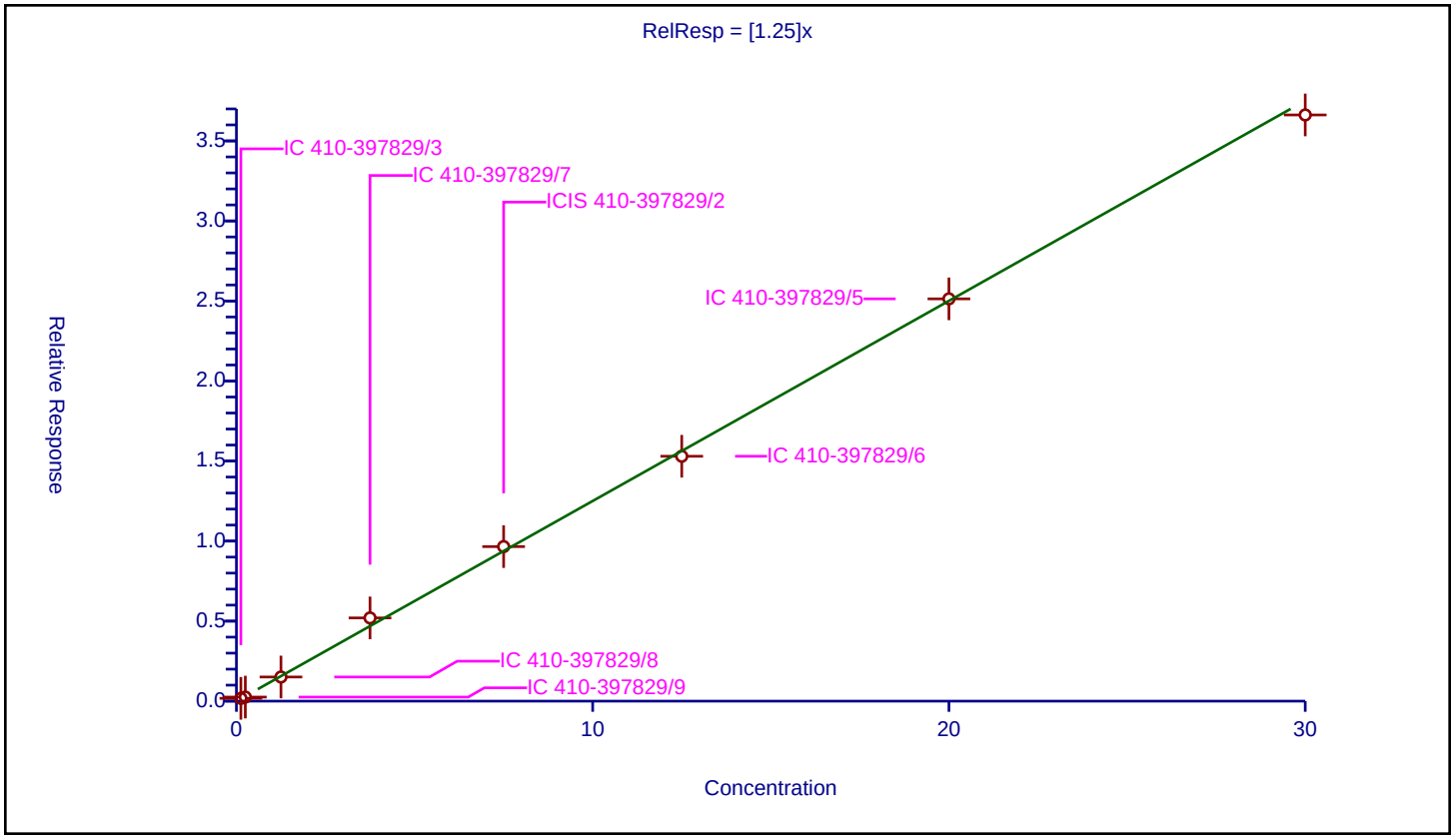
Curve Coefficients

Intercept:	0
Slope:	1.25

Error Coefficients

Standard Error:	2090000
Relative Standard Error:	9.7
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.175811	5.0	573515.0	1.406485	Y
2	IC 410-397829/9	0.25	0.253805	5.0	538761.0	1.015218	Y
3	IC 410-397829/8	1.25	1.507744	5.0	684118.0	1.206195	Y
4	IC 410-397829/7	3.75	5.199325	5.0	475078.0	1.386487	Y
5	ICIS 410-397829/2	7.5	9.654741	5.0	547299.0	1.287299	Y
6	IC 410-397829/6	12.5	15.299785	5.0	674017.0	1.223983	Y
7	IC 410-397829/5	20.0	25.133561	5.0	590478.0	1.256678	Y
8	IC 410-397829/4	30.0	36.622934	5.0	546233.0	1.220764	Y



Calibration / Benzo[k]fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

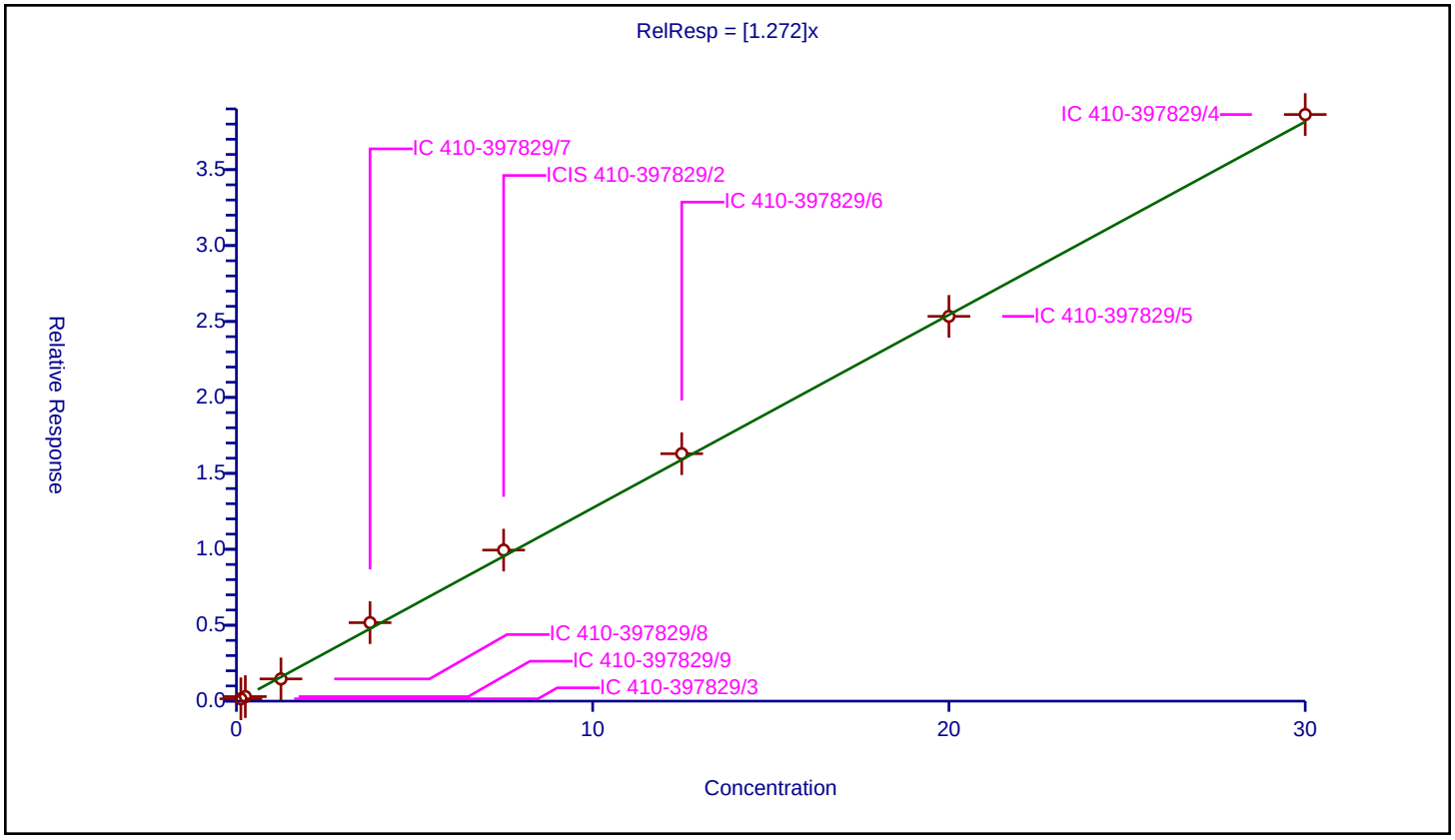
Curve Coefficients

Intercept:	0
Slope:	1.272

Error Coefficients

Standard Error:	2170000
Relative Standard Error:	5.3
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.155558	5.0	573515.0	1.244466	Y
2	IC 410-397829/9	0.25	0.299391	5.0	538761.0	1.197563	Y
3	IC 410-397829/8	1.25	1.463293	5.0	684118.0	1.170634	Y
4	IC 410-397829/7	3.75	5.16813	5.0	475078.0	1.378168	Y
5	ICIS 410-397829/2	7.5	9.946574	5.0	547299.0	1.32621	Y
6	IC 410-397829/6	12.5	16.294352	5.0	674017.0	1.303548	Y
7	IC 410-397829/5	20.0	25.339928	5.0	590478.0	1.266996	Y
8	IC 410-397829/4	30.0	38.630118	5.0	546233.0	1.287671	Y



11/14/2023
11:12 AM

Calibration / Benzo[a]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

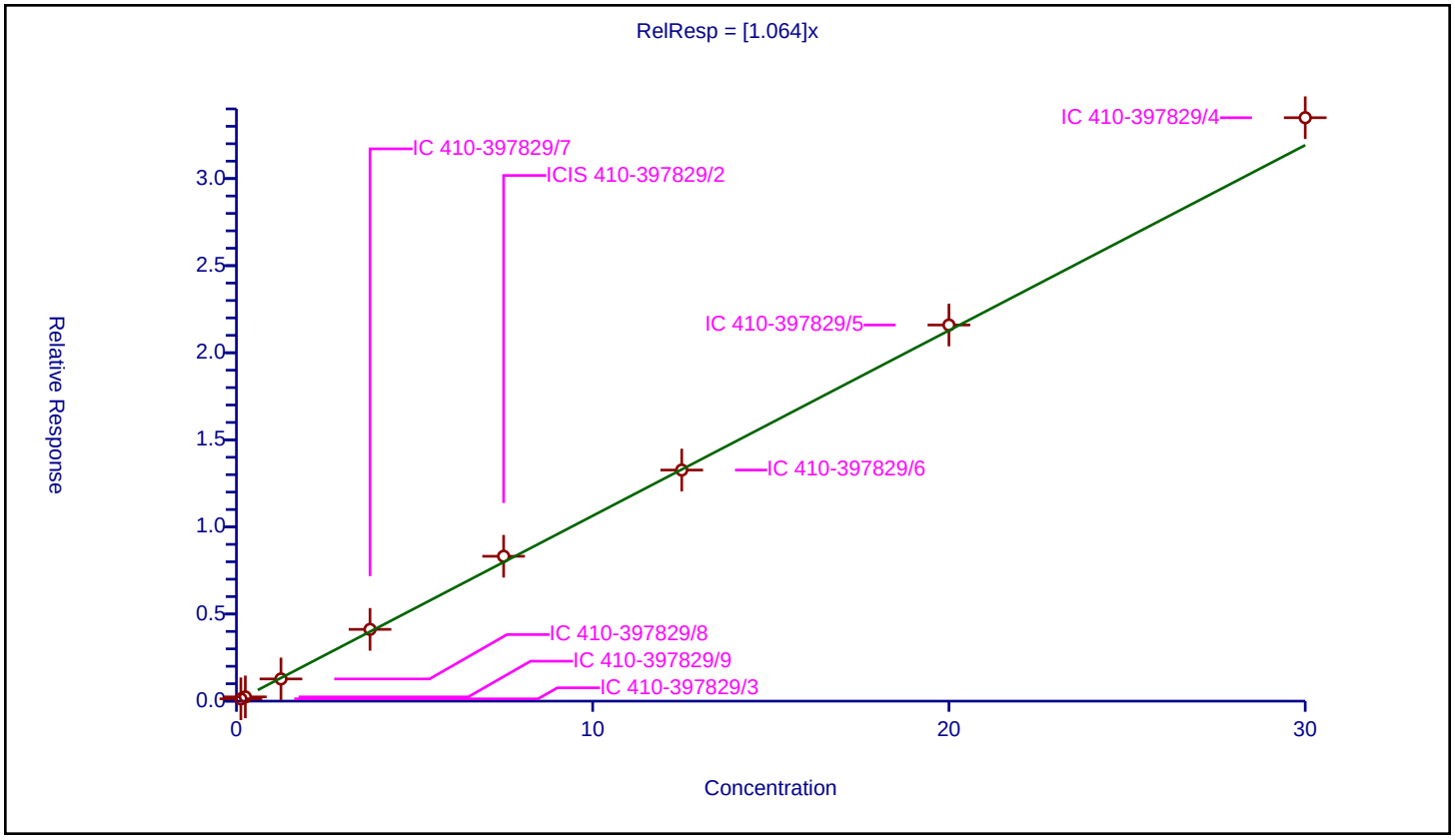
Curve Coefficients

Intercept:	0
Slope:	1.064

Error Coefficients

Standard Error:	1860000
Relative Standard Error:	4.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.13154	5.0	573515.0	1.052318	Y
2	IC 410-397829/9	0.25	0.243624	5.0	538761.0	0.974495	Y
3	IC 410-397829/8	1.25	1.275021	5.0	684118.0	1.020017	Y
4	IC 410-397829/7	3.75	4.119229	5.0	475078.0	1.098461	Y
5	ICIS 410-397829/2	7.5	8.31645	5.0	547299.0	1.10886	Y
6	IC 410-397829/6	12.5	13.266579	5.0	674017.0	1.061326	Y
7	IC 410-397829/5	20.0	21.592828	5.0	590478.0	1.079641	Y
8	IC 410-397829/4	30.0	33.493692	5.0	546233.0	1.116456	Y



11/14/2023
11:12 AM

Calibration / 3-Methylcholanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

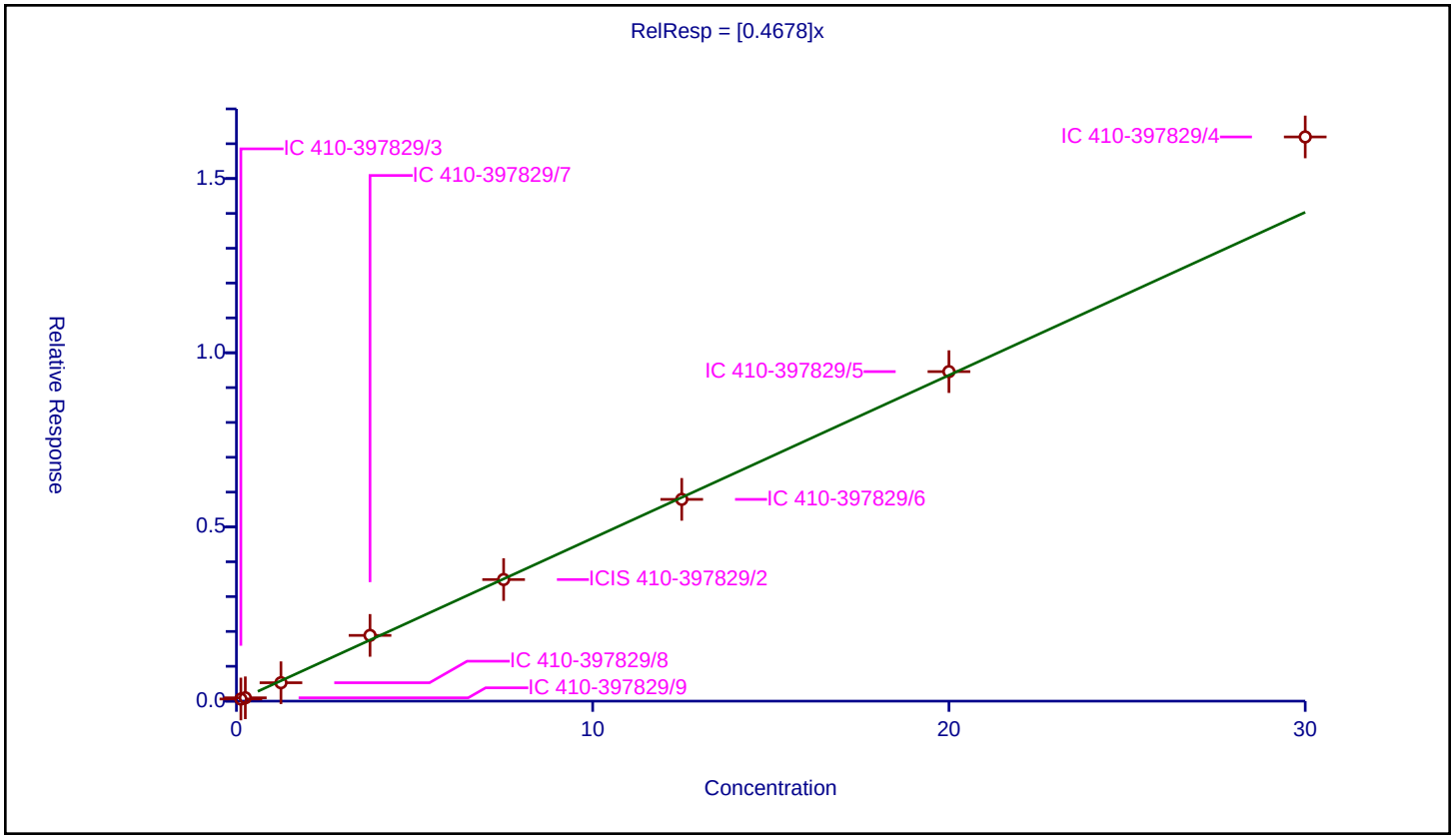
Curve Coefficients

Intercept:	0
Slope:	0.4678

Error Coefficients

Standard Error:	859000
Relative Standard Error:	10.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.061315	5.0	573515.0	0.490519	Y
2	IC 410-397829/9	0.25	0.095915	5.0	538761.0	0.383658	Y
3	IC 410-397829/8	1.25	0.529039	5.0	684118.0	0.423231	Y
4	IC 410-397829/7	3.75	1.887437	5.0	475078.0	0.503317	Y
5	ICIS 410-397829/2	7.5	3.49046	5.0	547299.0	0.465395	Y
6	IC 410-397829/6	12.5	5.791256	5.0	674017.0	0.4633	Y
7	IC 410-397829/5	20.0	9.458777	5.0	590478.0	0.472939	Y
8	IC 410-397829/4	30.0	16.194884	5.0	546233.0	0.539829	Y



11/14/2023
11:12 AM

Calibration / Dibenz[a,h]acridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

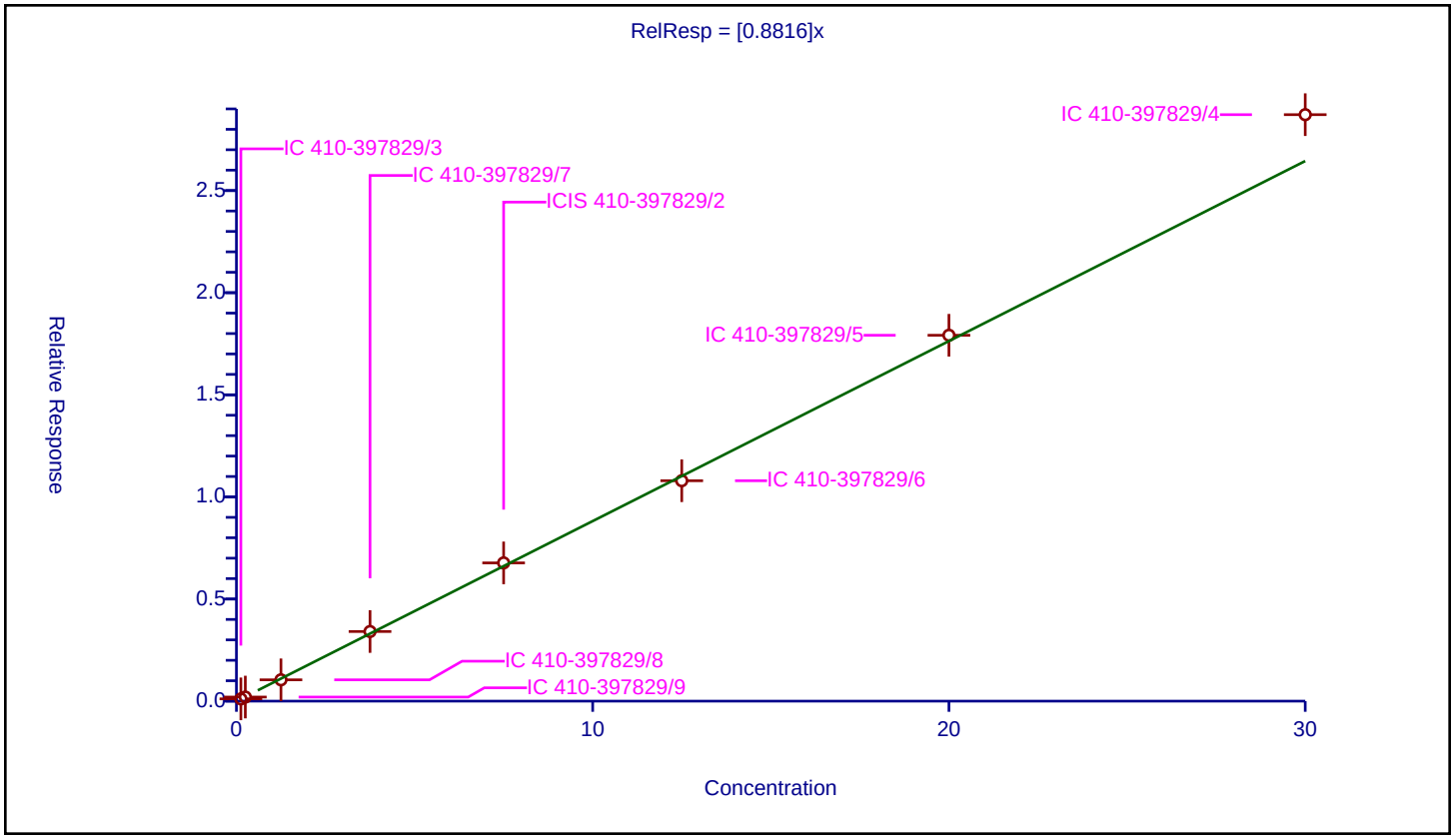
Curve Coefficients

Intercept:	0
Slope:	0.8816

Error Coefficients

Standard Error:	1560000
Relative Standard Error:	5.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.11086	5.0	573515.0	0.886882	Y
2	IC 410-397829/9	0.25	0.200497	5.0	538761.0	0.801988	Y
3	IC 410-397829/8	1.25	1.04433	5.0	684118.0	0.835464	Y
4	IC 410-397829/7	3.75	3.409324	5.0	475078.0	0.909153	Y
5	ICIS 410-397829/2	7.5	6.768604	5.0	547299.0	0.90248	Y
6	IC 410-397829/6	12.5	10.792895	5.0	674017.0	0.863432	Y
7	IC 410-397829/5	20.0	17.916502	5.0	590478.0	0.895825	Y
8	IC 410-397829/4	30.0	28.716619	5.0	546233.0	0.957221	Y



11/14/2023
11:12 AM

Calibration / Dibenz[a,j]acridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

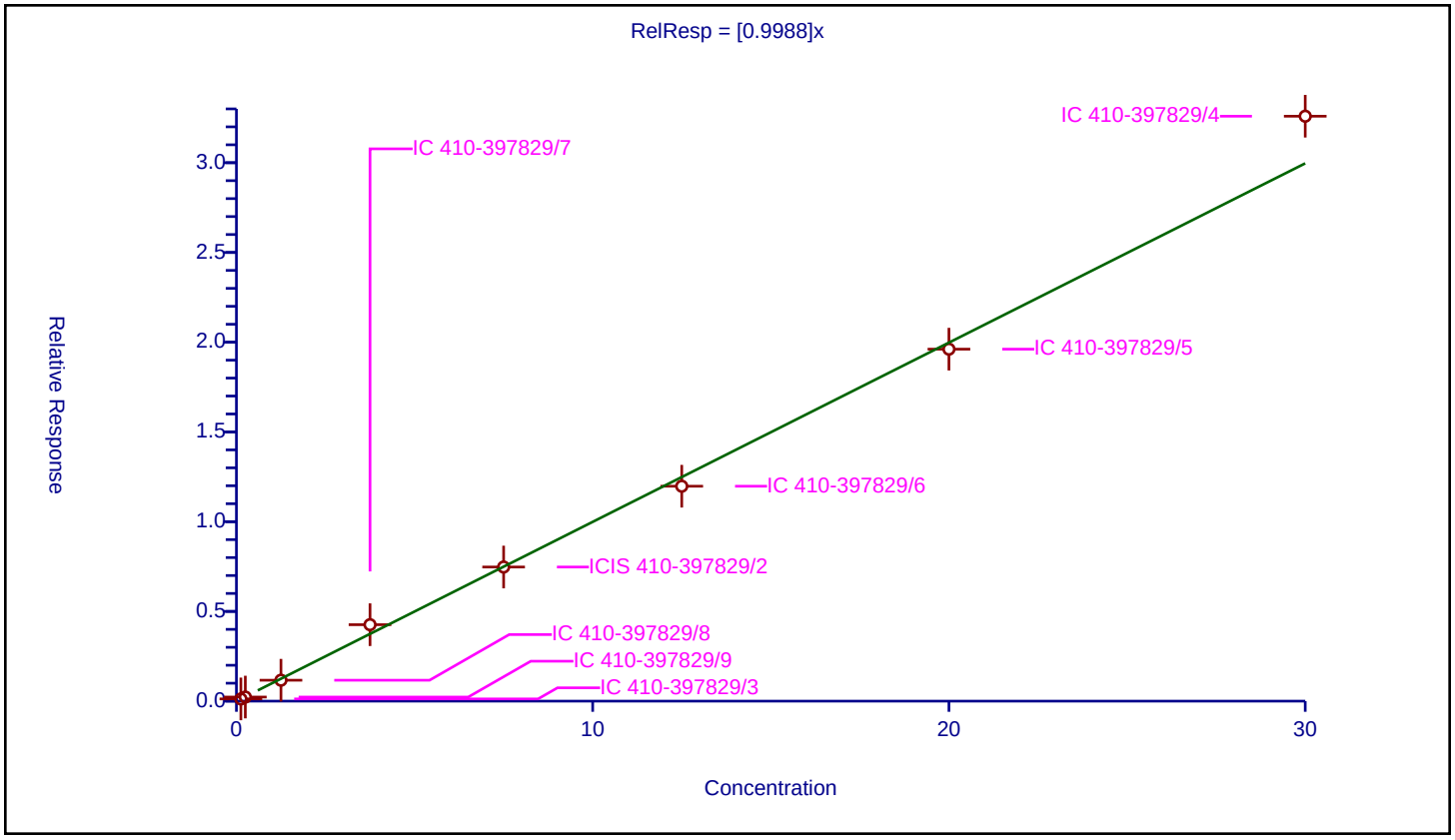
Curve Coefficients

Intercept:	0
Slope:	0.9988

Error Coefficients

Standard Error:	1750000
Relative Standard Error:	7.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.12338	5.0	573515.0	0.987036	Y
2	IC 410-397829/9	0.25	0.228357	5.0	538761.0	0.913429	Y
3	IC 410-397829/8	1.25	1.16583	5.0	684118.0	0.932664	Y
4	IC 410-397829/7	3.75	4.260216	5.0	475078.0	1.136058	Y
5	ICIS 410-397829/2	7.5	7.473547	5.0	547299.0	0.996473	Y
6	IC 410-397829/6	12.5	11.976004	5.0	674017.0	0.95808	Y
7	IC 410-397829/5	20.0	19.613034	5.0	590478.0	0.980652	Y
8	IC 410-397829/4	30.0	32.591879	5.0	546233.0	1.086396	Y



11/14/2023
11:12 AM

Calibration / Indeno[1,2,3-cd]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

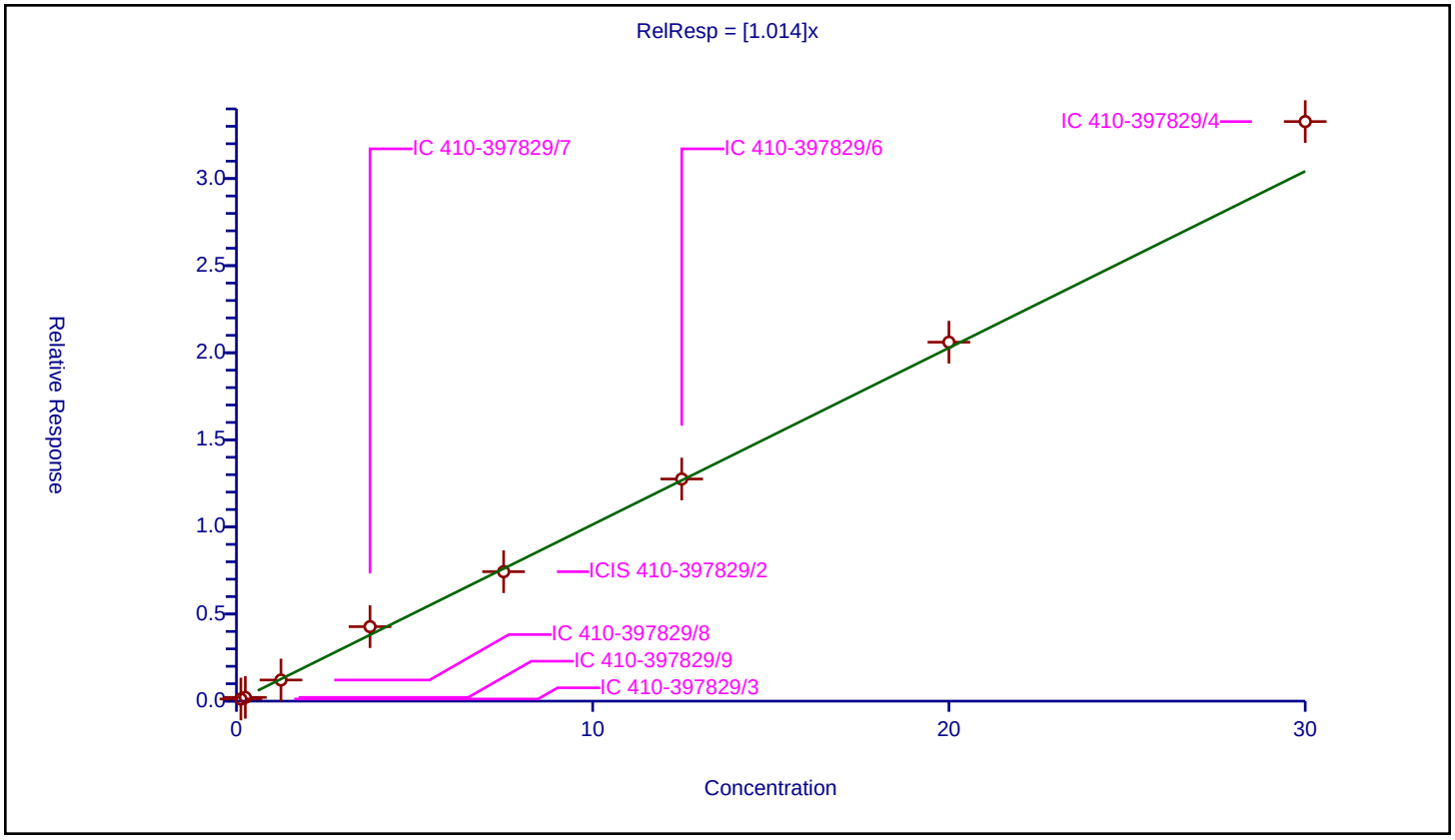
Curve Coefficients

Intercept:	0
Slope:	1.014

Error Coefficients

Standard Error:	1810000
Relative Standard Error:	8.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.122987	5.0	573515.0	0.983898	Y
2	IC 410-397829/9	0.25	0.216747	5.0	538761.0	0.866989	Y
3	IC 410-397829/8	1.25	1.213153	5.0	684118.0	0.970523	Y
4	IC 410-397829/7	3.75	4.275972	5.0	475078.0	1.140259	Y
5	ICIS 410-397829/2	7.5	7.431039	5.0	547299.0	0.990805	Y
6	IC 410-397829/6	12.5	12.753247	5.0	674017.0	1.02026	Y
7	IC 410-397829/5	20.0	20.607906	5.0	590478.0	1.030395	Y
8	IC 410-397829/4	30.0	33.271461	5.0	546233.0	1.109049	Y



Calibration / Dibenz(a,h)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

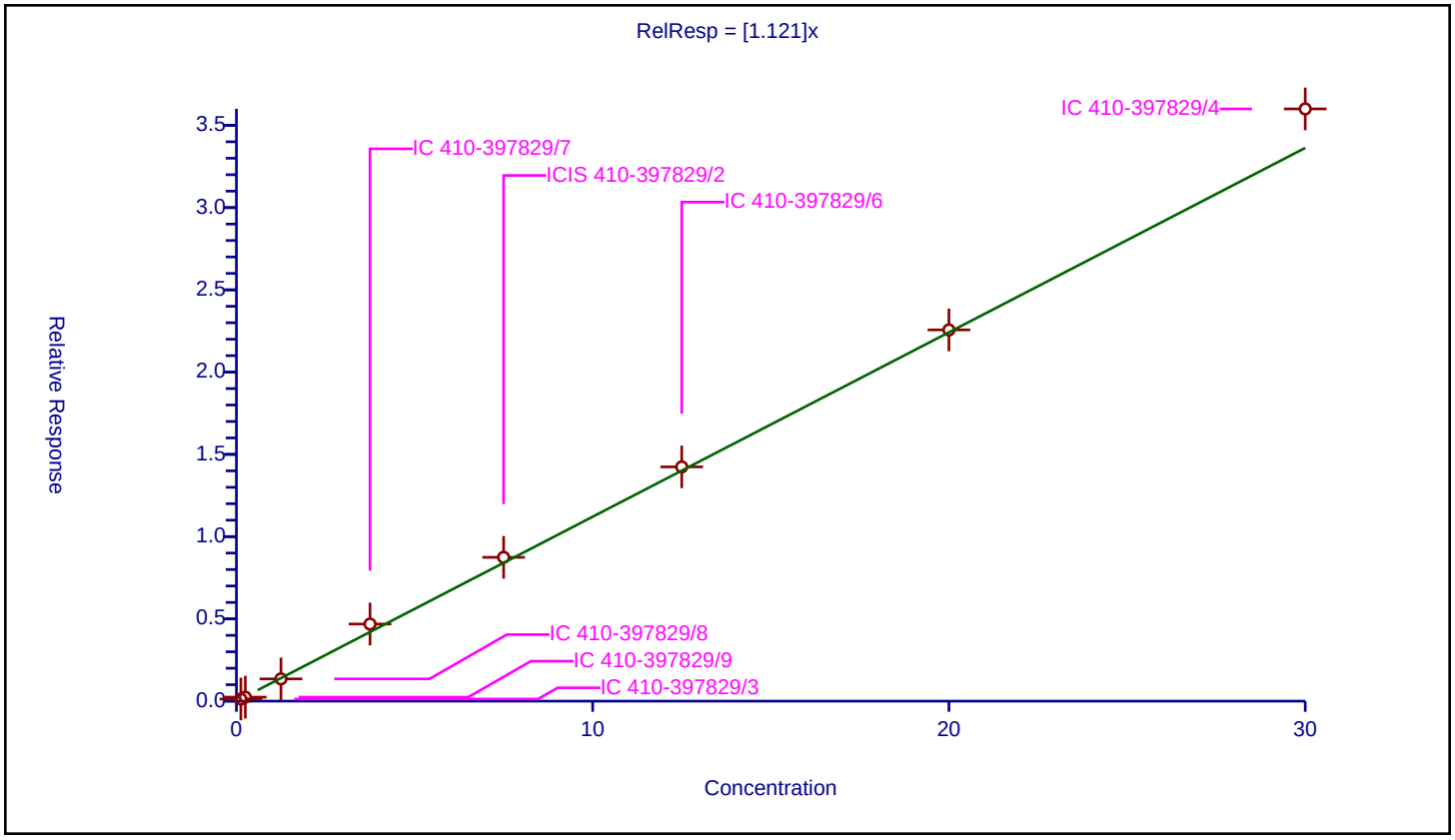
Curve Coefficients

Intercept:	0
Slope:	1.121

Error Coefficients

Standard Error:	1980000
Relative Standard Error:	8.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.129107	5.0	573515.0	1.032859	Y
2	IC 410-397829/9	0.25	0.242269	5.0	538761.0	0.969075	Y
3	IC 410-397829/8	1.25	1.352786	5.0	684118.0	1.082229	Y
4	IC 410-397829/7	3.75	4.688009	5.0	475078.0	1.250136	Y
5	ICIS 410-397829/2	7.5	8.740889	5.0	547299.0	1.165452	Y
6	IC 410-397829/6	12.5	14.239967	5.0	674017.0	1.139197	Y
7	IC 410-397829/5	20.0	22.565261	5.0	590478.0	1.128263	Y
8	IC 410-397829/4	30.0	35.997862	5.0	546233.0	1.199929	Y



11/14/2023
11:12 AM

Calibration / Benzo[g,h,i]perylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

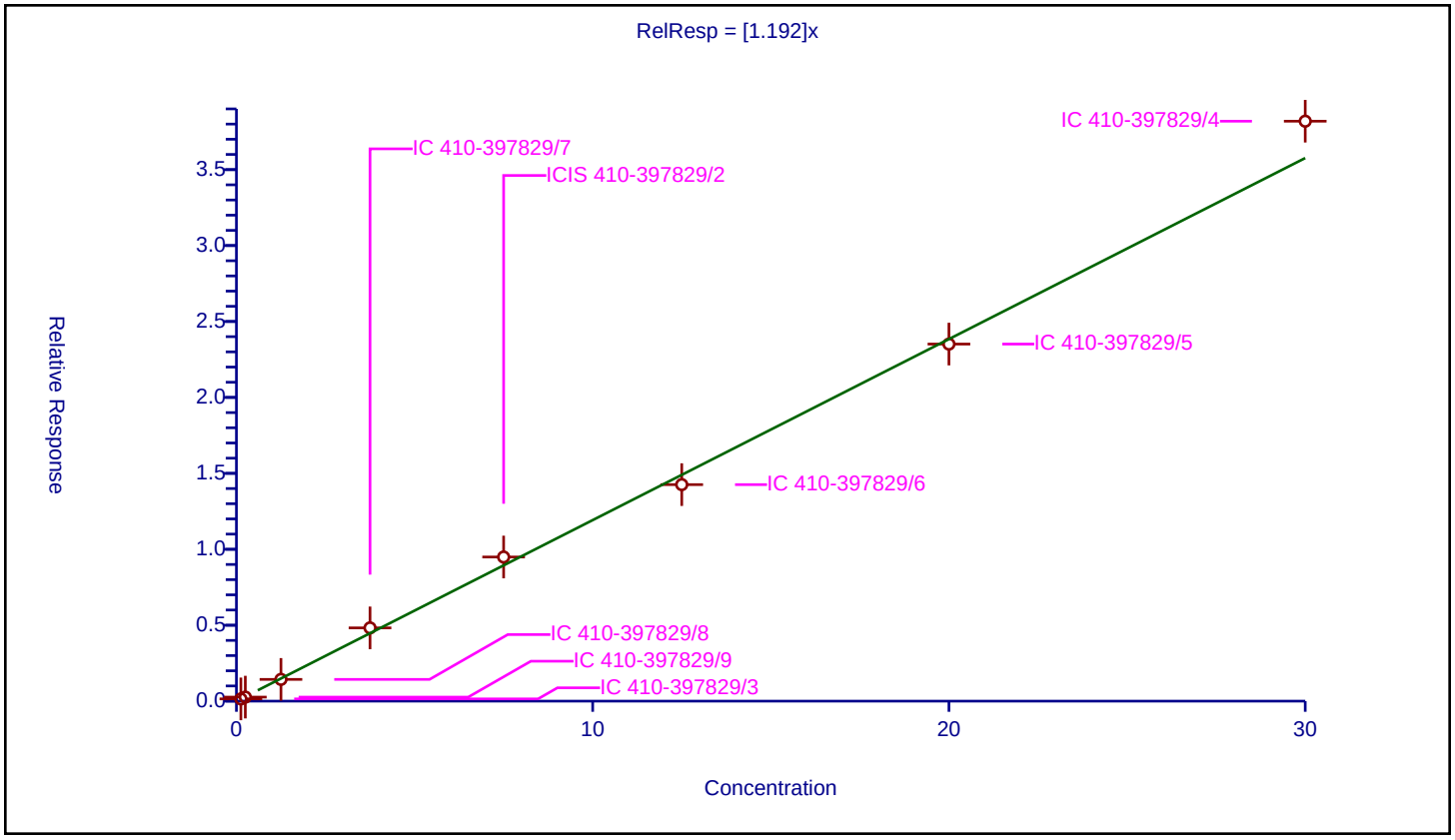
Curve Coefficients

Intercept:	0
Slope:	1.192

Error Coefficients

Standard Error:	2080000
Relative Standard Error:	6.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-397829/3	0.125	0.148104	5.0	573515.0	1.184834	Y
2	IC 410-397829/9	0.25	0.266268	5.0	538761.0	1.065073	Y
3	IC 410-397829/8	1.25	1.431895	5.0	684118.0	1.145516	Y
4	IC 410-397829/7	3.75	4.823734	5.0	475078.0	1.286329	Y
5	ICIS 410-397829/2	7.5	9.49037	5.0	547299.0	1.265383	Y
6	IC 410-397829/6	12.5	14.258357	5.0	674017.0	1.140669	Y
7	IC 410-397829/5	20.0	23.513984	5.0	590478.0	1.175699	Y
8	IC 410-397829/4	30.0	38.189545	5.0	546233.0	1.272985	Y



FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 403788

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2023 21:45 Calibration End Date: 08/02/2023 21:45 Calibration ID: 52362

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-403788/5	JH0254.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
a,a-Dimethylphenethylamine	1.2005					Ave		1.2005						20.0			
Aramite Peak 1	0.0345					Ave		0.0345						20.0			
Aramite Peak 2	0.0269					Ave		0.0269						20.0			
Aramite Peak 3	0.1065					Ave		0.1065						20.0			
Aramite Peak 4	0.1296					Ave		0.1296						20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 403788

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2023 21:45 Calibration End Date: 08/02/2023 21:45 Calibration ID: 52362

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-403788/5	JH0254.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1					LVL 1				
a,a-Dimethylphenethylamine	NPT	Ave	1610592					12.5				
Aramite Peak 1	PYR10	Ave	4855					1.25				
Aramite Peak 2	PYR10	Ave	3776					1.25				
Aramite Peak 3	PYR10	Ave	59864					5.00				
Aramite Peak 4	PYR10	Ave	72879					5.00				

Curve Type Legend:

Ave = Average ISTD

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D
Lims ID: IC AAP RT
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Aug-2023 21:45:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC AAP
Misc. Info.: 410-0090492-005
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub25

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Aug-2023 22:18:34 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1634

First Level Reviewer: P7EB Date: 02-Aug-2023 22:18:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	97	138913	5.00	5.00	
54 alpha,alpha-Dimethyl phenethylam	58	5.379	5.379	0.000	95	1610592	12.5	12.5	
* 52 Naphthalene-d8	136	5.543	5.543	0.000	99	536635	5.00	5.00	
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	95	286764	5.00	5.00	
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	96	559608	5.00	5.00	
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	96	562244	5.00	5.00	
200 Aramite Peak 1	185	10.062	10.062	0.000	0	4855	1.25	1.25	Ma
192 Aramite Peak 2	185	10.080	10.080	0.000	0	3776	1.25	1.25	Ma
185 Aramite Peak 3	185	10.126	10.126	0.000	0	59864	5.00	5.00	a
180 Aramite Peak 4	185	10.197	10.197	0.000	0	72879	5.00	5.00	
S 103 Aramite, Total	185				0		12.5	12.5	
* 167 Perylene-d12	264	13.116	13.116	0.000	95	378041	5.00	5.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSS_RVAAP_SP_00010 Amount Added: 1.00 Units: mL

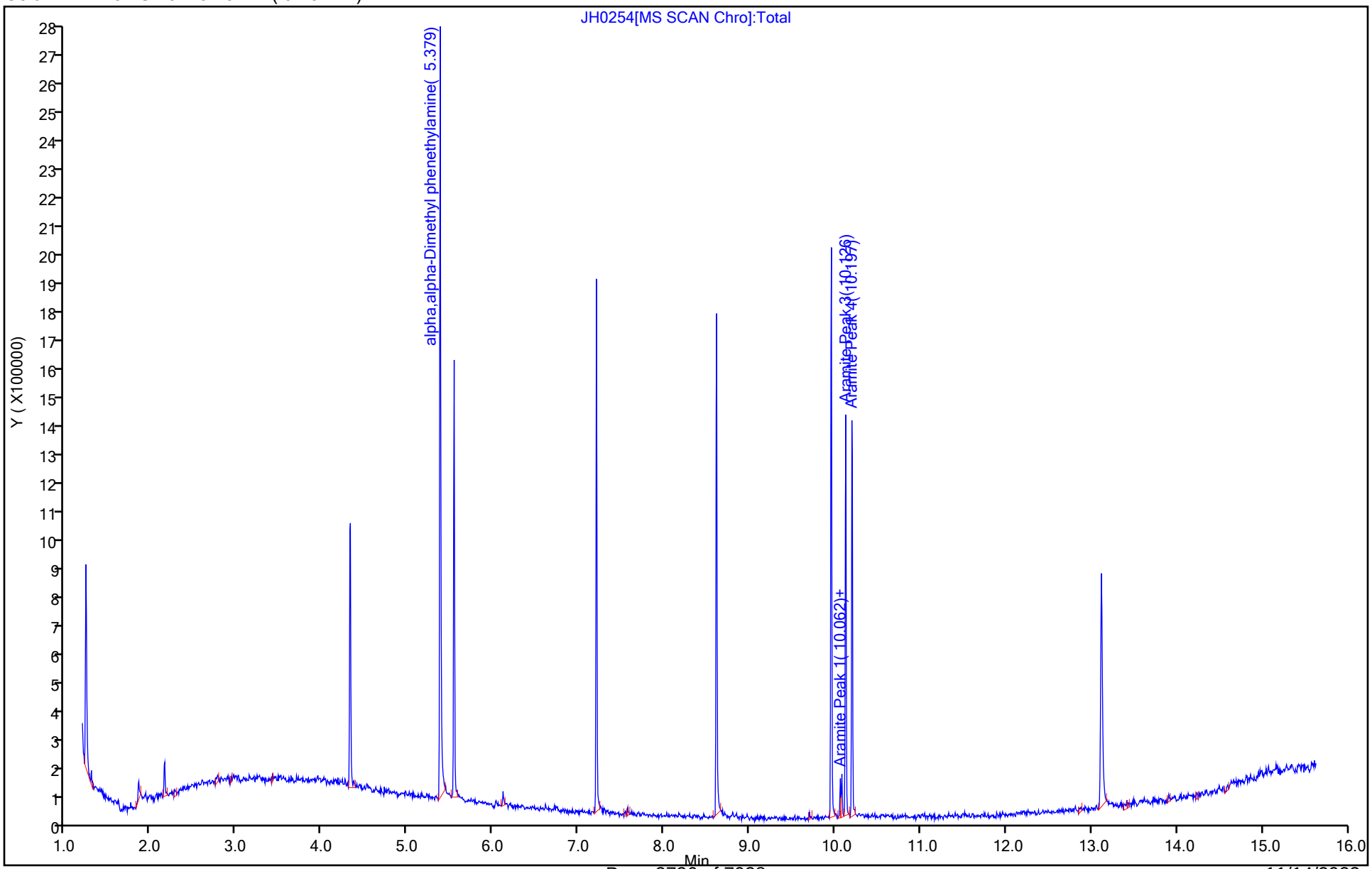
Report Date: 02-Aug-2023 22:18:34 Chrom Revision: 2.3 02-Aug-2023 16:16:36

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Injection Date:	02-Aug-2023 21:45:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	IC AAP RT			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

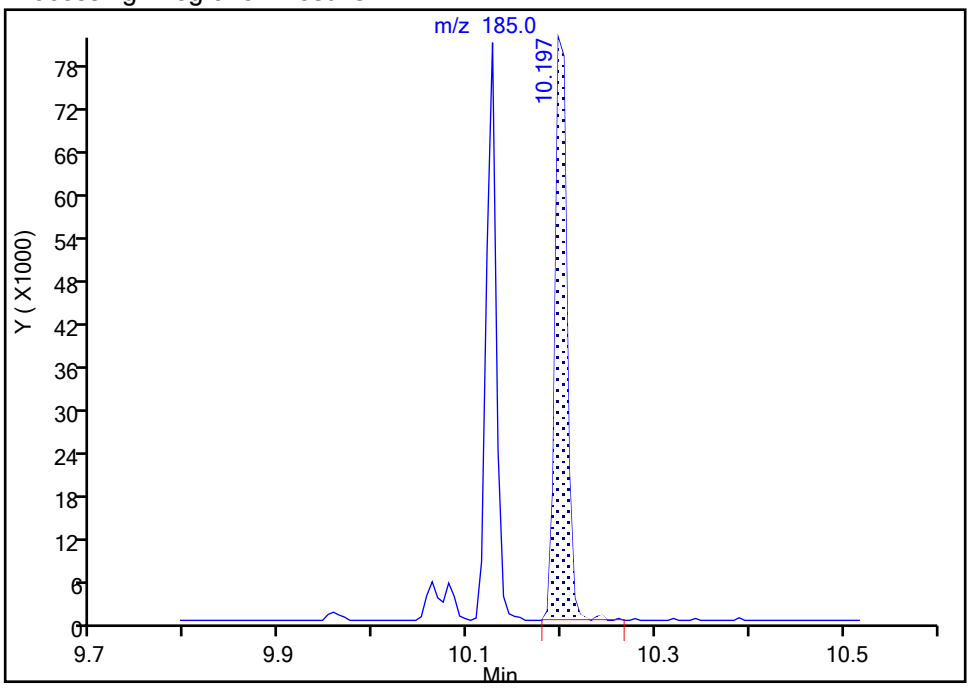
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D				
Injection Date:	02-Aug-2023 21:45:30	Instrument ID:	HP23264		
Lims ID:	IC AAP RT				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

200 Aramite Peak 1, CAS: STL00690

Signal: 1

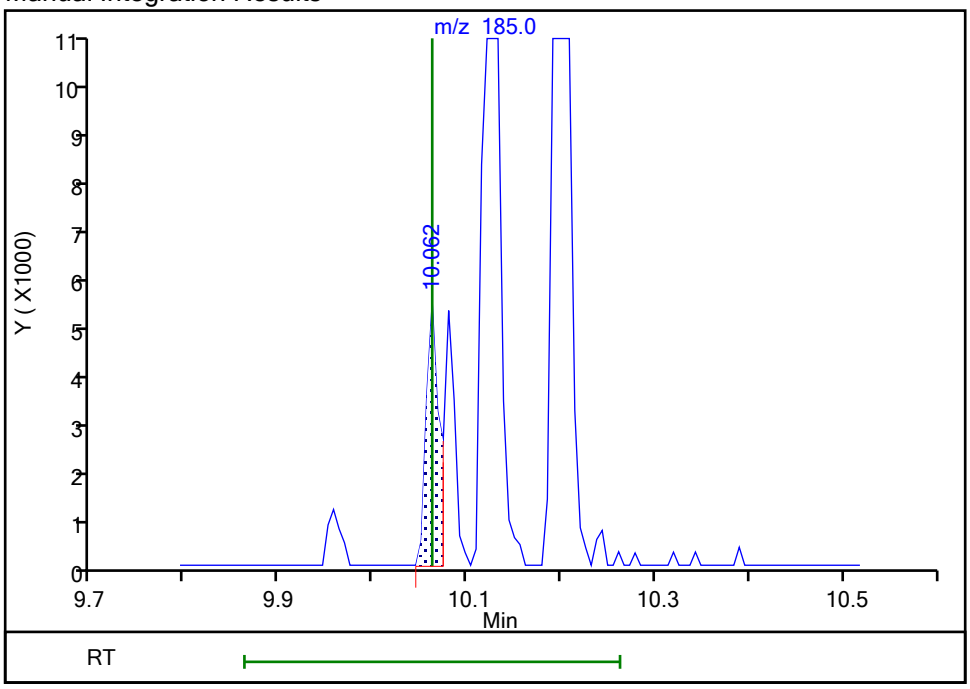
Processing Integration Results

RT: 10.20
Area: 72879
Amount: 1.250000
Amount Units: ug/ml



Manual Integration Results

RT: 10.06
Area: 4855
Amount: 1.250000
Amount Units: ug/ml



Reviewer: P7EB, 02-Aug-2023 22:18:18 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

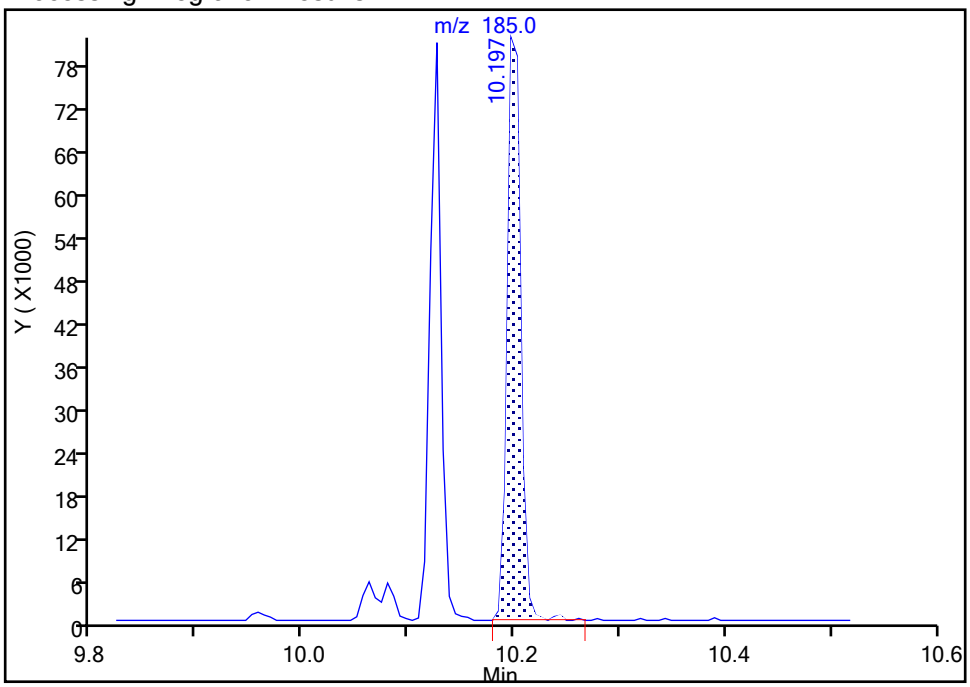
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D				
Injection Date:	02-Aug-2023 21:45:30	Instrument ID:	HP23264		
Lims ID:	IC AAP RT				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

192 Aramite Peak 2, CAS: STL00691

Signal: 1

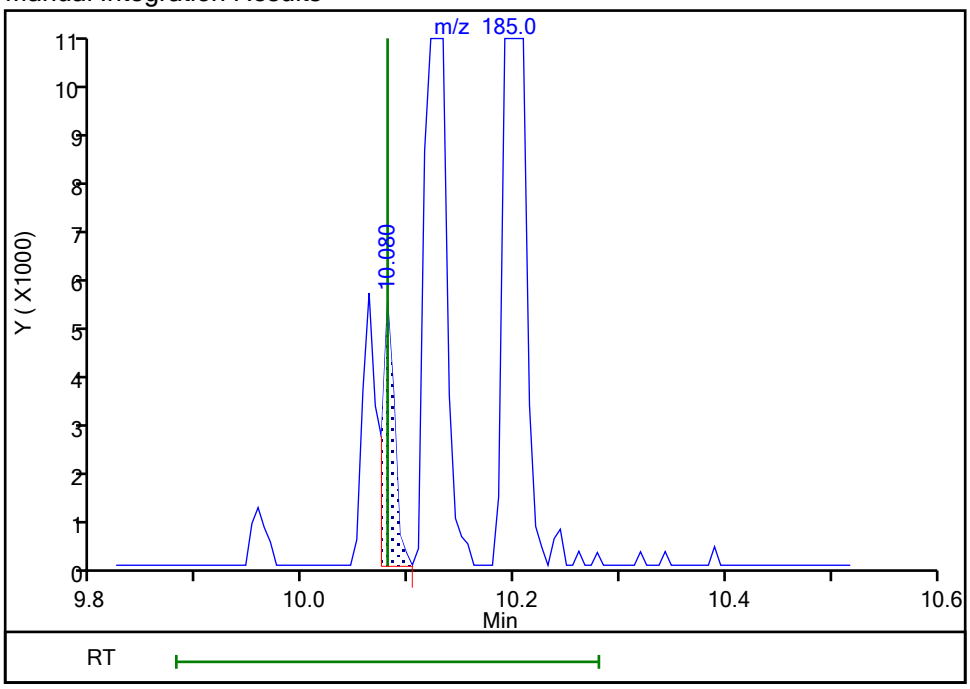
Processing Integration Results

RT: 10.20
Area: 72879
Amount: 1.250000
Amount Units: ug/ml



Manual Integration Results

RT: 10.08
Area: 3776
Amount: 1.250000
Amount Units: ug/ml



Reviewer: P7EB, 02-Aug-2023 22:18:23 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

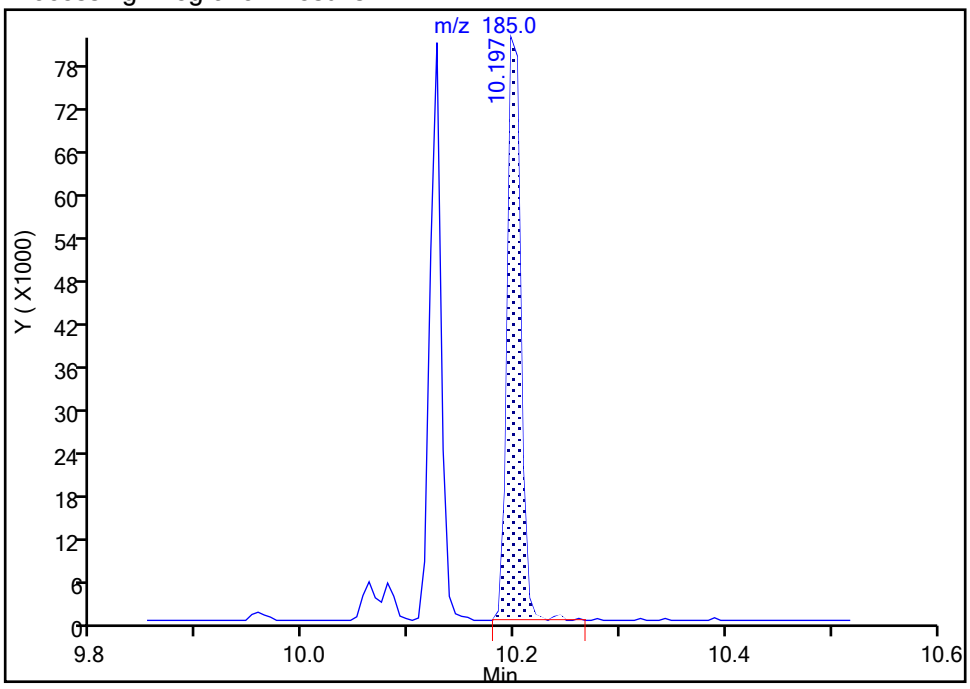
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D				
Injection Date:	02-Aug-2023 21:45:30	Instrument ID:	HP23264		
Lims ID:	IC AAP RT				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

185 Aramite Peak 3, CAS: STL02688

Signal: 1

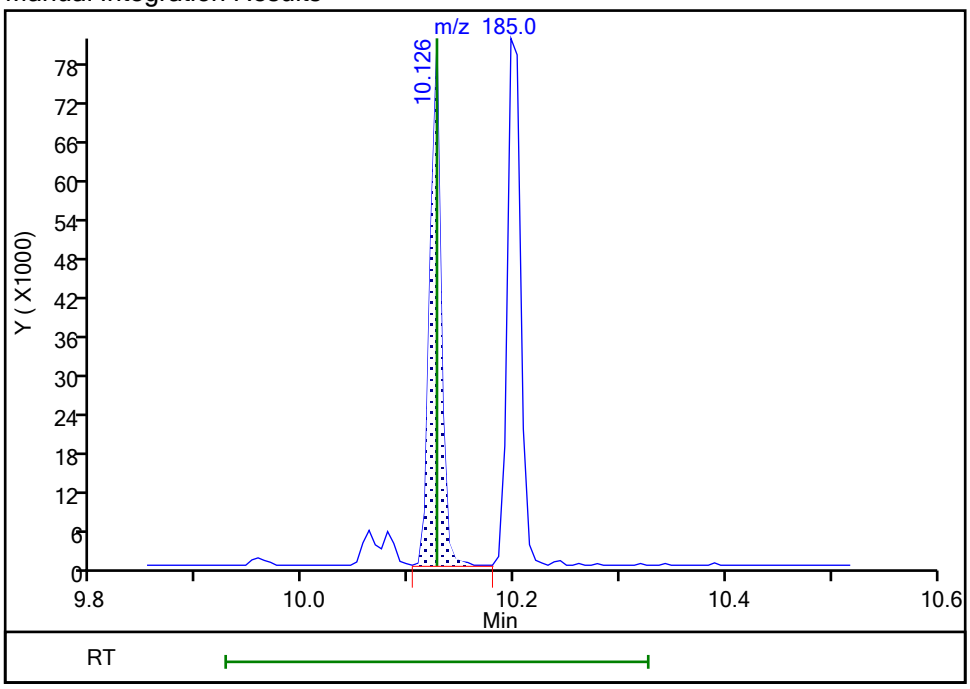
Processing Integration Results

RT: 10.20
Area: 72879
Amount: 5.000000
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 59864
Amount: 5.000000
Amount Units: ug/ml



Reviewer: P7EB, 02-Aug-2023 22:18:27 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-437867/9	JJ3108.D
Level 2	IC 410-437867/8	JJ3107.D
Level 3	IC 410-437867/7	JJ3106.D
Level 4	IC 410-437867/6	JJ3105.D
Level 5	IC 410-437867/5	JJ3104.D
Level 6	ICIS 410-437867/2	JJ3101e.D
Level 7	IC 410-437867/4	JJ3103.D
Level 8	IC 410-437867/3	JJ3102.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 0.6122	+++++ 0.6119	0.8060 0.5752	0.6434	0.6495	Ave		0.6497				12.5		20.0			
N-Nitrosodimethylamine	+++++ 1.1092	+++++ 1.2303	0.8414 1.1214	1.0511	1.1190	Ave		1.0787				12.0		20.0			
Pyridine	+++++ 1.7886	1.2834 1.8282	1.7554 1.7802	1.6647	1.5582	Ave		1.6655				11.5		20.0			
N,N-dimethylformamide	+++++ 1.3728	+++++ 1.3571	+++++ 1.3183	1.1197	1.2188	Ave		1.2773				8.3		20.0			
2-Picoline	+++++ 1.8321	+++++ 1.8277	1.2881 1.7414	1.4684	1.6106	Ave		1.6281				13.3		20.0			
N-Nitrosomethylethylamine	+++++ 0.8314	+++++ 0.8104	1.5304 0.7466	0.8531	0.7976	Lin1	0.8628	0.7322							0.9950		0.9900
Methyl methanesulfonate	+++++ 1.1610	0.4007 1.1081	0.8709 1.0249	1.0493	1.0581	Lin2	-0.175	1.0874							0.9970		0.9900
N-Nitrosodiethylamine	+++++ 0.7817	0.2891 0.7664	0.7144 0.7562	0.6908	0.7644	Lin2	-0.119	0.7720							0.9990		0.9900
Ethyl methanesulfonate	+++++ 0.8042	0.3561 0.8931	0.5279 0.8584	0.7717	0.8272	Lin1	-0.185	0.8612							0.9980		0.9900
Benzaldehyde	1.4256	+++++ 1.4415	1.2327 1.1360	1.5317	1.5229	Ave		1.3817			0.0100	11.7		20.0			
Aniline	+++++ 2.3363	+++++ 2.5997	2.0992 2.4729	2.4609	2.4766	Ave		2.4076				7.2		20.0			
Phenol	+++++ 2.3207	2.9190 2.5748	2.3314 2.4549	2.4739	2.4129	Ave		2.4982			0.8000	8.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Bis(2-chloroethyl)ether	+++++ 1.6251	1.2373 1.8211	1.6097 1.6758	1.8227	1.7203	Ave		1.6446			0.7000	12.1		20.0			
2-Chlorophenol	+++++ 1.4018	0.8360 1.5467	1.3767 1.4201	1.3751	1.4733	Ave		1.3471			0.8000	17.3		20.0			
1,3-Dichlorobenzene	1.4867 1.4818	1.3927 1.5817	1.6225 1.4764	1.5694	1.5023	Ave		1.5142				4.8		20.0			
1,4-Dichlorobenzene	1.9350 1.5724	1.7440 1.5579	1.5732 1.4876	1.5509	1.5738	Ave		1.6244				8.9		20.0			
Benzyl alcohol	+++++ 1.0378	+++++ 1.1569	1.0216 1.0486	0.9712	1.0444	Ave		1.0467				5.8		20.0			
1,2-Dichlorobenzene	1.3535 1.4924	1.5992 1.6311	1.7782 1.4563	1.5721	1.5418	Ave		1.5531				8.2		20.0			
2,2'-oxybis[1-chloropropane]	4.0277 3.7981	3.1749 4.0773	3.9199 3.5093	3.8198	3.6892	Ave		3.7520			0.0100	7.9		20.0			
2-Methylphenol	+++++ 1.4953	1.8725 1.5482	1.5126 1.4714	1.4277	1.4512	Ave		1.5399			0.7000	9.9		20.0			
N-Nitrosopyrrolidine	+++++ 0.9229	0.5839 0.9662	0.8276 0.9076	0.8455	0.8265	Ave		0.8400				14.8		20.0			
Acetophenone	+++++ 2.3342	2.0524 2.5195	2.4138 2.2804	2.2504	2.2877	Ave		2.3055			0.0100	6.3		20.0			
N-Nitrosodi-n-propylamine	1.6204 1.5205	1.4095 1.6348	1.7758 1.4584	1.5611	1.5432	Ave		1.5655			0.5000	7.3		20.0			
N-Nitrosomorpholine	1.0600 1.2723	1.0116 1.3631	1.4378 1.3826	1.3181	1.3896	Ave		1.2794				12.4		20.0			
o-Toluidine	+++++ 2.2955	2.3563 2.5082	2.6617 2.2888	2.3158	2.3548	Ave		2.3973				5.8		20.0			
3,4-Methylphenol	+++++ 1.5460	0.4052 1.7661	1.6160 1.5851	1.4957	1.5814	Lin2	-0.306	1.6627			0.6000				0.9950		0.9900
Hexachloroethane	+++++ 0.6725	0.7630 0.7084	0.7199 0.6371	0.6825	0.6416	Ave		0.6893			0.3000	6.5		20.0			
Nitrobenzene	+++++ 0.5913	0.2217 0.6015	0.6104 0.5664	0.5339	0.5698	Lin2	-0.090	0.5971			0.2000				0.9950		0.9900
N-Nitrosopiperidine	0.1804 0.2314	0.2269 0.2100	0.2046 0.2171	0.1709	0.2030	Ave		0.2055				10.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isophorone	1.0018 1.1096	1.0499 1.0685	1.0206 1.0066	0.9512	1.0651	Ave		1.0342			0.4000	4.8		20.0			
2-Nitrophenol	+++++ 0.2177	+++++ 0.1919	0.1693 0.1969	0.1685	0.1951	Ave		0.1899			0.1000	9.8		20.0			
2,4-Dimethylphenol	+++++ 0.4052	+++++ 0.3714	0.3343 0.3829	0.3134	0.3744	Ave		0.3636			0.2000	9.3		20.0			
o,o',o''-Triethylphosphorothioate	0.1426 0.1763	0.1788 0.1422	0.1702 0.1649	0.1516	0.1589	Ave		0.1607				8.9		20.0			
Bis(2-chloroethoxy)methane	+++++ 0.7025	0.3599 0.5654	0.5853 0.5828	0.5584	0.5976	Ave		0.5646			0.3000	18.1		20.0			
2,4-Dichlorophenol	+++++ 0.3259	0.1828 0.3369	0.2332 0.3227	0.2833	0.3022	Ave		0.2838			0.2000	19.9		20.0			
1,2,4-Trichlorobenzene	0.3425 0.3485	0.3610 0.3404	0.3434 0.3241	0.3306	0.3491	Ave		0.3425				3.3		20.0			
Naphthalene	1.2962 1.1646	1.0921 1.0800	1.0811 1.0948	1.0746	1.0575	Ave		1.1176			0.7000	7.1		20.0			
a-Terpineol	0.4287 0.5736	0.4525 0.5806	0.4706 0.5219	0.4862	0.5266	Ave		0.5051				10.9		20.0			
4-Chloroaniline	+++++ 0.5084	+++++ 0.4624	0.3560 0.4620	0.4009	0.4606	Ave		0.4417			0.0100	12.3		20.0			
2,6-Dichlorophenol	+++++ 0.3456	0.2607 0.3101	0.3106 0.3122	0.2885	0.3265	Ave		0.3077				8.8		20.0			
Hexachloropropene	0.2027 0.2411	0.2083 0.2289	0.2302 0.2254	0.2239	0.2315	Ave		0.2240				5.6		20.0			
Hexachlorobutadiene	0.2158 0.2191	0.2262 0.1944	0.2092 0.1927	0.1932	0.1987	Ave		0.2062			0.0100	6.4		20.0			
Quinoline	+++++ 0.8221	+++++ 0.7842	0.7653 0.7072	0.6939	0.7196	Ave		0.7487				6.7		20.0			
Caprolactam	0.1151	+++++ 0.1076	0.0665 0.0971	0.0907	0.0984	Ave		0.0959			0.0100	17.5		20.0			
N-Nitrosodi-n-butylamine	+++++ 0.5018	0.4563 0.4437	0.4847 0.4172	0.3987	0.4265	Ave		0.4470				8.3		20.0			
1,4-phenylenediamine	+++++ 0.3840	+++++ 0.3386	+++++ 0.3294	0.2962	0.3394	Ave		0.3375				9.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	+++++ 0.4331	+++++ 0.3899	0.3493 0.3762	0.3247	0.3717	Ave		0.3742			0.2000	9.9		20.0			
Safrole, Total	+++++ 0.2963	+++++ 0.2418	0.2522 0.2674	0.2338	0.2625	Ave		0.2590				8.5		20.0			
2-Methylnaphthalene	0.5383 0.6817	0.6944 0.6446	0.6567 0.6565	0.6340	0.6868	Ave		0.6491			0.4000	7.6		20.0			
1-Methylnaphthalene	0.6929 0.6794	0.6874 0.6258	0.5943 0.6431	0.6241	0.6234	Ave		0.6463				5.6		20.0			
Hexachlorocyclopentadiene	+++++ 0.3237	+++++ 0.3182	0.2253 0.2852	0.3086	0.2878	Ave		0.2915			0.0500	12.3		20.0			
1,2,4,5-Tetrachlorobenzene	+++++ 0.6213	0.5770 0.6482	0.5803 0.6062	0.7221	0.6088	Ave		0.6234			0.0100	8.0		20.0			
Isosafrole Peak 1	+++++ 0.5200	0.5113 0.5233	0.5721 0.5349	0.6141	0.4927	Ave		0.5383				7.7		20.0			
2,4,6-Trichlorophenol	+++++ 0.4588	0.1627 0.4179	0.3789 0.3915	0.4060	0.3909	Lin2	-0.064	0.4217			0.2000				0.9970		0.9900
2,4,5-Trichlorophenol	+++++ 0.4881	0.1023 0.4730	0.4553 0.4599	0.4736	0.4626	Lin2	-0.095	0.4888			0.2000				0.9980		0.9900
Isosafrole Peak 2	+++++ 0.5672	+++++ 0.6128	0.5326 0.5606	0.5719	0.5331	Ave		0.5630				5.3		20.0			
1,1'-Biphenyl	1.1899 1.6119	1.4170 1.6145	1.6070 1.3820	1.5391	1.4172	Ave		1.4723			0.0100	10.1		20.0			
2-Chloronaphthalene	+++++ 1.1863	0.9145 1.1953	1.3060 1.2497	1.4600	1.0717	Ave		1.1976			0.8000	14.4		20.0			
1-Chloronaphthalene	+++++ 1.4235	1.5133 1.3314	1.1999 0.9901	1.1098	1.2223	Ave		1.2558				14.4		20.0			
Diphenyl ether	0.6563 0.8171	0.7740 0.8132	0.8376 0.7397	0.9034	0.7619	Ave		0.7879				9.3		20.0			
2-Nitroaniline	+++++ 0.4369	0.2950 0.4564	0.3668 0.4210	0.4219	0.3989	Ave		0.3995			0.0100	13.5		20.0			
1,4-Naphthoquinone	0.4538 0.5339	0.3245 0.5113	0.4600 0.4539	0.4648	0.4474	Ave		0.4562				13.5		20.0			
1,4-Dinitrobenzene	+++++ 0.2022	+++++ 0.1964	0.1491 0.1925	0.1924	0.1601	Ave		0.1821				12.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dimethyl phthalate	1.4510 1.6471	1.5844 1.4647	1.5792 1.4987	1.6630	1.4564	Ave		1.5431			0.0100	5.6		20.0			
1,3-Dinitrobenzene	+++++ 0.2294	+++++ 0.2263	0.1725 0.2235	0.2244	0.1923	Ave		0.2114				11.1		20.0			
2,6-Dinitrotoluene	+++++ 0.3303	0.2841 0.3411	0.3104 0.3305	0.3299	0.2920	Ave		0.3169			0.2000	6.9		20.0			
Acenaphthylene	2.0336 2.1583	1.9010 2.1492	2.0122 1.8918	2.1014	1.8803	Ave		2.0160			0.9000	5.7		20.0			
3-Nitroaniline	+++++ 0.3861	+++++ 0.4023	0.3127 0.3831	0.3846	0.3539	Ave		0.3705			0.0100	8.7		20.0			
Acenaphthene	1.1684 1.2727	1.0037 1.2982	1.3558 1.2166	1.3188	1.2194	Ave		1.2317			0.9000	9.0		20.0			
2,4-Dinitrophenol	+++++ 0.2062	0.0785 0.2256	0.1241 0.2090	0.1611	0.1778	Lin2	-0.360	0.2115			0.0100				0.9910		0.9900
Pentachlorobenzene	0.6122 0.5238	0.4387 0.5498	0.5960 0.5224	0.5805	0.4945	Ave		0.5397				10.6		20.0			
4-Nitrophenol	+++++ 0.2756	+++++ 0.2771	0.2245 0.2872	0.2382	0.2389	Ave		0.2569			0.0100	10.1		20.0			
Dibenzofuran	1.6200 1.7385	1.5839 1.6669	1.9408 1.6128	1.8663	1.6479	Ave		1.7096			0.8000	7.6		20.0			
2,4-Dinitrotoluene	+++++ 0.4537	0.4956 0.4441	0.4240 0.4384	0.4545	0.4101	Ave		0.4458			0.2000	6.1		20.0			
1-Naphthylamine	1.0432 1.2432	0.8812 1.1948	1.3038 1.2048	1.2611	1.0522	Ave		1.1480				12.4		20.0			
2,3,4,6-Tetrachlorophenol	+++++ 0.3642	+++++ 0.3350	0.3521 0.3511	0.3609	0.2794	Ave		0.3405			0.0100	9.3		20.0			
2-Naphthylamine	+++++ 1.3915	1.1854 1.2626	1.2780 1.2766	1.4441	1.1480	Ave		1.2837				8.2		20.0			
Diethyl phthalate	1.4097 1.7043	1.5405 1.5496	1.6850 1.4892	1.7158	1.3931	Ave		1.5609			0.0100	8.3		20.0			
Thionazin	0.3015 0.2876	0.2804 0.2592	0.2965 0.2755	0.2645	0.2389	Ave		0.2755				7.5		20.0			
Fluorene	1.1416 1.4182	1.3950 1.2338	1.3908 1.3181	1.3622	1.2489	Ave		1.3136			0.9000	7.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorophenyl-phenyl ether	0.6167 0.6691	0.5824 0.5874	0.6767 0.6190	0.6755	0.5517	Ave		0.6223			0.4000	7.6		20.0			
5-Nitro-o-toluidine	+++++ 0.4556	+++++ 0.3855	0.3476 0.4236	0.4549	0.3244	Ave		0.3986				13.9		20.0			
4-Nitroaniline	+++++ 0.4094	0.1438 0.3837	0.2832 0.3959	0.3156	0.3427	Lin2	-0.059	0.3702			0.0100				0.9910		0.9900
4,6-Dinitro-2-methylphenol	+++++ 0.1426	+++++ 0.1375	0.1083 0.1579	0.1135	0.1285	Ave		0.1314			0.0100	14.2		20.0			
N-Nitrosodiphenylamine	0.5721 0.6418	0.6424 0.6307	0.5815 0.6256	0.5514	0.5574	Ave		0.6004			0.0100	6.4		20.0			
1,2-Diphenylhydrazine	1.2278 1.2577	1.0963 1.1695	1.1176 1.1811	1.0550	1.0707	Ave		1.1470				6.4		20.0			
Sulfotepp	+++++ 0.2002	0.2193 0.1856	0.2100 0.2013	0.1891	0.1804	Ave		0.1980				7.0		20.0			
cis-Diallate	+++++ 0.4341	+++++ 0.3903	0.4109 0.4132	0.4108	0.3788	Ave		0.4063				4.8		20.0			
Phorate	+++++ 1.0536	0.5604 0.9332	0.8602 1.0291	0.9116	0.9401	Ave		0.8983				18.2		20.0			
1,3,5-Trinitrobenzene	+++++ 0.0702	+++++ 0.0640	0.0560 0.0721	0.0499	0.0629	Ave		0.0625				13.5		20.0			
Phenacetin	+++++ 0.4675	+++++ 0.4671	0.3582 0.4872	0.4194	0.4561	Ave		0.4426				10.6		20.0			
4-Bromophenyl-phenylether	+++++ 0.2167	0.3159 0.1940	0.2147 0.1992	0.2026	0.2143	Ave		0.2225			0.1000	18.9		20.0			
trans-Diallate	+++++ 0.4064	+++++ 0.3797	+++++ 0.4061	0.3997	0.4070	Ave		0.3998				2.9		20.0			
Hexachlorobenzene	0.2287 0.2302	0.2452 0.2397	0.2732 0.2347	0.2291	0.2374	Ave		0.2398			0.1000	6.1		20.0			
Dimethoate	+++++ 0.4277	+++++ 0.4316	0.3684 0.4108	0.4094	0.4119	Ave		0.4100				5.5		20.0			
Atrazine	0.1988	0.2122 0.1715	0.1767 0.1724	0.1806	0.1870	Ave		0.1856			0.0100	8.1		20.0			
Pentachloronitrobenzene	+++++ 0.1297	0.0909 0.1219	0.1102 0.1263	0.1207	0.1184	Ave		0.1169				11.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Pentachlorophenol	+++++ 0.1591	0.0721 0.1547	0.0940 0.1521	0.1228	0.1385	Lin2	-0.108	0.1506			0.0500				0.9930		0.9900
4-Aminobiphenyl	0.5812 0.8733	0.6956 0.8129	0.7620 0.7922	0.8657	0.8274	Ave		0.7763				12.5		20.0			
Pronamide	0.3197 0.3710	0.3316 0.3635	0.3317 0.3650	0.3612	0.3623	Ave		0.3507				5.6		20.0			
Dinoseb	+++++ 0.1722	0.1491 0.1859	0.1273 0.1807	0.1385	0.1500	Ave		0.1577				14.1		20.0			
Disulfoton	+++++ 0.6339	+++++ 0.6043	0.6489 0.5725	0.5832	0.5773	Ave		0.6033				5.3		20.0			
Phenanthrene	1.1744 1.0678	1.1459 1.0939	1.2518 1.0014	1.0744	1.0358	Ave		1.1057			0.7000	7.3		20.0			
Anthracene	1.2261 1.0970	1.0635 1.1186	1.1388 1.0585	1.1254	1.1664	Ave		1.1243			0.7000	4.9		20.0			
Carbazole	0.9466 1.1113	0.9021 1.1013	1.0622 1.0139	0.9784	1.0213	Ave		1.0171			0.0100	7.2		20.0			
Methyl parathion	0.3073 0.3558	0.2663 0.3330	0.2370 0.3398	0.2777	0.3138	Ave		0.3038				13.4		20.0			
Di-n-butyl phthalate	1.3339 1.5970	1.3313 1.4394	1.3267 1.4412	1.2857	1.4167	Ave		1.3965			0.0100	7.1		20.0			
Parathion	0.1720 0.1888	0.1957 0.1939	0.1573 0.2183	0.1734	0.1813	Ave		0.1851				10.0		20.0			
4-Nitroquinoline-1-oxide	+++++ 0.0801	+++++ 0.0872	0.0391 0.0997	0.0512	0.0676	Qua2	-0.030	0.0596	0.0014321						0.9980		0.9900
Octachlorostyrene	0.1148 0.0979	0.1162 0.1019	0.0994 0.1086	0.1025	0.1075	Ave		0.1061				6.5		20.0			
Isodrin	+++++ 0.1297	0.1809 0.1353	0.1708 0.1509	0.1320	0.1338	Ave		0.1476				14.0		20.0			
Fluoranthene	1.0543 1.1528	1.2349 1.1682	1.1102 1.1929	1.1564	1.1153	Ave		1.1481			0.6000	4.8		20.0			
Benzidine	+++++ 0.7847	0.5412 0.7366	0.6310 0.5922	0.7540	0.6982	Ave		0.6768				13.4		20.0			
Pyrene	1.1915 1.1771	1.1490 1.2488	1.1572 1.2276	1.2502	1.1938	Ave		1.1994			0.6000	3.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
p-Dimethylamino azobenzene	+++++ 0.1564	0.1525 0.1897	0.1490 0.1789	0.1456	0.1662	Ave		0.1626				10.1		20.0			
Chlorobenzilate	0.3140 0.4378	0.3326 0.4726	0.3755 0.4471	0.4315	0.4044	Ave		0.4019				14.1		20.0			
3,3'-Dimethylbenzidine	0.4586 0.6542	0.5248 0.6869	0.5329 0.6768	0.5820	0.5818	Ave		0.5872				13.8		20.0			
Butylbenzylphthalate	0.5514 0.6194	0.4965 0.6935	0.5169 0.6164	0.5968	0.5768	Ave		0.5835			0.0100	10.8		20.0			
2-Acetylaminofluorene	+++++ 0.4303	+++++ 0.5156	+++++ 0.4822	0.3867	0.3873	Ave		0.4404				13.0		20.0			
3,3'-Dichlorobenzidine	0.3083 0.4198	0.3362 0.4925	0.3684 0.4265	0.4199	0.3905	Ave		0.3953			0.0100	14.6		20.0			
Benzo[a]anthracene	0.8221 1.0288	0.8986 1.2527	0.9590 1.0909	1.0231	1.0277	Ave		1.0129			0.8000	12.7		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.1425 0.2172	0.2081 0.2442	0.1751 0.2287	0.2166	0.2052	Ave		0.2047				15.7		20.0			
Chrysene	1.0088 0.9804	0.9542 1.0573	1.0089 1.0255	1.0832	0.9436	Ave		1.0078			0.7000	4.8		20.0			
Bis(2-ethylhexyl) phthalate	0.7220 0.8531	0.7594 0.9663	0.7455 0.8692	0.8518	0.7880	Ave		0.8194			0.0100	9.9		20.0			
6-Methylchrysene	0.8217 0.6873	0.5982 0.6996	0.5993 0.7029	0.6733	0.6397	Ave		0.6777				10.6		20.0			
Di-n-octyl phthalate	+++++ 1.7800	1.2906 1.7422	1.3163 1.5873	1.4966	1.5007	Ave		1.5305			0.0100	12.4		20.0			
7,12-Dimethylbenz(a)anthracene	0.3994 0.4601	0.3550 0.4651	0.3871 0.4516	0.4345	0.4305	Ave		0.4229				9.2		20.0			
Benzo[b]fluoranthene	0.9523 1.2264	0.9397 1.2134	1.1785 1.1689	1.2699	1.2042	Ave		1.1442			0.7000	11.0		20.0			
Benzo[k]fluoranthene	1.2366 1.2095	0.9392 1.1902	1.1611 1.1211	1.1309	1.1023	Ave		1.1364			0.7000	8.1		20.0			
Benzo[a]pyrene	1.0110 1.1814	1.0801 1.1698	1.1073 1.1047	1.1885	1.0825	Ave		1.1157			0.7000	5.5		20.0			
3-Methylcholanthrene	0.5656 0.5951	0.4043 0.5406	0.4594 0.5800	0.4999	0.4805	Ave		0.5157				12.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibenz[a,h]acridine	0.7667 0.9572	0.7983 0.9096	0.7814 0.8930	0.9271	0.8433	Ave		0.8596				8.4		20.0			
Dibenz[a,j]acridine	0.9815 1.0364	0.9360 1.0278	0.8951 0.9559	0.9599	0.9578	Ave		0.9688				4.8		20.0			
Indeno[1,2,3-cd]pyrene	1.0905 1.2235	0.9772 1.1805	1.0170 1.0604	1.1428	1.0068	Ave		1.0873			0.5000	8.1		20.0			
Dibenz(a,h)anthracene	1.0185 1.1233	1.2233 1.1565	1.0818 1.1034	1.1397	1.0462	Ave		1.1116			0.4000	5.8		20.0			
Benzo[g,h,i]perylene	0.9903 1.3377	1.2522 1.1701	1.2424 1.1439	1.2327	1.1336	Ave		1.1879			0.5000	8.8		20.0			
2-Fluorophenol (Surr)	+++++ 1.4641	+++++ 1.5015	0.9634 1.3795	1.2848	1.4076	Ave		1.3335				14.7		20.0			
Phenol-d5 (Surr)	2.2381 1.9886	1.2467 2.2135	1.5499 2.0785	2.0799	2.0489	Ave		1.9305				18.0		20.0			
Nitrobenzene-d5 (Surr)	+++++ 0.5859	0.4093 0.5461	0.5078 0.5196	0.4833	0.5250	Ave		0.5110				10.8		20.0			
2-Fluorobiphenyl (Surr)	1.1957 1.3391	1.3144 1.3602	1.2980 1.1633	1.3679	1.3178	Ave		1.2946				5.8		20.0			
2,4,6-Tribromophenol (Surr)	0.1926 0.2485	0.2448 0.2572	0.2585 0.2391	0.2671	0.2178	Ave		0.2407				10.2		20.0			
p-Terphenyl-d14 (Surr)	0.7941 0.7566	0.8173 0.9232	0.8168 0.7282	0.8727	0.8083	Ave		0.8146				7.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-437867/9	JJ3108.D
Level 2	IC 410-437867/8	JJ3107.D
Level 3	IC 410-437867/7	JJ3106.D
Level 4	IC 410-437867/6	JJ3105.D
Level 5	IC 410-437867/5	JJ3104.D
Level 6	ICIS 410-437867/2	JJ3101e.D
Level 7	IC 410-437867/4	JJ3103.D
Level 8	IC 410-437867/3	JJ3102.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCBd4	Ave	+++++ 293319	+++++ 529095	33072 756547	88405	177827	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodimethylamine	DCBd4	Ave	+++++ 531452	+++++ 1063848	34524 1474889	144431	306386	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Pyridine	DCBd4	Ave	+++++ 1714013	21352 3161595	144052 4682766	457500	853267	+++++ 25.0	0.500 40.0	2.50 60.0	7.50	15.0
N,N-dimethylformamide	DCBd4	Ave	+++++ 657785	+++++ 1173448	+++++ 1733828	153862	333722	+++++ 12.5	+++++ 20.0	+++++ 30.0	3.75	7.50
2-Picoline	DCBd4	Ave	+++++ 877841	+++++ 1580386	52854 2290354	201774	440998	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosomethylethylamine	DCBd4	Lin1	+++++ 398372	+++++ 700772	62797 981920	117220	218398	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Methyl methanesulfonate	DCBd4	Lin2	+++++ 556289	3333 958189	35734 1348022	144182	289723	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodiethylamine	DCBd4	Lin2	+++++ 374557	2405 662684	29315 994560	94920	209290	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Ethyl methanesulfonate	DCBd4	Lin1	+++++ 385332	2962 772243	21662 1129053	106033	226496	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzaldehyde	DCBd4	Ave	 683065	+++++ 1246439	50580 1494073	210474	416962	 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Aniline	DCBd4	Ave	+++++ 1119432	+++++ 2247925	86134 3252537	338147	678096	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Phenol	DCBd4	Ave	+++++ 1111959	24282 2226331	95662 3228861	339940	660671	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethyl)ether	DCBd4	Ave	+++++ 778668	10293 1574698	66051 2204035	250457	471018	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chlorophenol	DCBd4	Ave	+++++ 671659	6954 1337360	56491 1867815	188955	403386	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dichlorobenzene	DCBd4	Ave	6407	11585	66573	215654	411338	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1 | Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 | GC Column: DB-5MS 30m ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 | Calibration End Date: 10/31/2023 17:10 | Calibration ID: 55355

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			710009	1367677	1941823			12.5	20.0	30.0		
1,4-Dichlorobenzene	DCBd4	Ave	8339 753427	14508 1347097	64552 1956573	213104	430904	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzyl alcohol	DCBd4	Ave	+++++ 497252	+++++ 1000373	41919 1379138	133453	285956	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
1,2-Dichlorobenzene	DCBd4	Ave	5833 715095	13303 1410379	72964 1915340	216021	422138	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,2'-oxybis[1-chloropropane]	DCBd4	Ave	17357 1819871	26411 3525552	160844 4615579	524886	1010117	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Methylphenol	DCBd4	Ave	+++++ 716487	15577 1338722	62066 1935223	196183	397340	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopyrrolidine	DCBd4	Ave	+++++ 442195	4857 835486	33957 1193757	116177	226305	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acetophenone	DCBd4	Ave	+++++ 1118422	17073 2178570	99045 2999357	309230	626373	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-propylamine	DCBd4	Ave	6983 728555	11725 1413603	72865 1918180	214513	422541	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomorpholine	DCBd4	Ave	4568 609630	8415 1178623	58996 1818482	181119	380465	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o-Toluidine	DCBd4	Ave	+++++ 1099884	19601 2168759	109216 3010354	318213	644746	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,4-Methylphenol	DCBd4	Lin2	+++++ 740746	3371 1527098	66308 2084778	205529	432993	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloroethane	DCBd4	Ave	+++++ 322210	6347 612510	29540 837926	93779	175675	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Nitrobenzene	NPT	Lin2	+++++ 937769	6788 2064520	99999 2722382	292681	572177	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopiperidine	NPT	Ave	3043 367081	6945 720754	33525 1043477	93672	203794	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isophorone	NPT	Ave	16898 1759887	32142 3666980	167205 4838205	521424	1069537	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitrophenol	NPT	Ave	+++++ 345331	+++++ 658596	27732 946159	92341	195862	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2,4-Dimethylphenol	NPT	Ave	+++++ 642672	+++++ 1274695	54775 1840303	171782	375955	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
o,o',o''-Triethylphosphorothioate	NPT	Ave	2405 279596	5475 488066	27880 792403	83120	159604	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethoxy)methane	NPT	Ave	+++++ 1114286	11018 1940481	95898 2801091	306087	600054	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dichlorophenol	NPT	Ave	+++++	5596	38213	155279	303404	+++++	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			516838	1156122	1551137			12.5	20.0	30.0		
1,2,4-Trichlorobenzene	NPT	Ave	5778 552792	11052 1168274	56254 1557925	181231	350584	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Naphthalene	NPT	Ave	21865 1847201	33433 3706418	177118 5261664	589079	1061870	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
a-Terpineol	NPT	Ave	7231 909814	13853 1992731	77108 2508236	266498	528762	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloroaniline	NPT	Ave	+++++ 806432	+++++ 1586880	58323 2220668	219764	462475	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2,6-Dichlorophenol	NPT	Ave	+++++ 548182	7982 1064258	50890 1500562	158136	327811	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloropropene	NPT	Ave	3420 382423	6378 785722	37716 1083256	122728	232467	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorobutadiene	NPT	Ave	3641 347456	6925 667184	34269 926174	105923	199472	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Quinoline	NPT	Ave	+++++ 1303896	+++++ 2691401	125382 3399200	380369	722606	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Caprolactam	NPT	Ave	 182537	+++++ 369134	10898 466450	49728	98785	 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-butylamine	NPT	Ave	+++++ 795970	13968 1522756	79405 2004973	218570	428239	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-phenylenediamine	NPT	Ave	+++++ 609122	+++++ 1162037	+++++ 1583187	162359	340802	+++++ 12.5	+++++ 20.0	+++++ 30.0	3.75	7.50
4-Chloro-3-methylphenol	NPT	Ave	+++++ 686961	+++++ 1338119	57235 1808034	178013	373223	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Safrole, Total	NPT	Ave	+++++ 469901	+++++ 829881	41317 1285051	128179	263555	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2-Methylnaphthalene	NPT	Ave	9081 1081256	21259 2212163	107597 3155132	347543	689625	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Methylnaphthalene	NPT	Ave	11688 1077584	21045 2147745	97372 3090670	342122	626007	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorocyclopentadiene	ANT	Ave	+++++ 299168	+++++ 583178	20306 774558	81110	173266	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
1,2,4,5-Tetrachlorobenzene	ANT	Ave	+++++ 574231	10347 1188067	52297 1646258	189775	366492	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isosafrole Peak 1	ANT	Ave	+++++ 76888	1467 153459	8250 232440	25823	47457	+++++ 2.00	0.0400 3.20	0.200 4.80	0.600	1.20
2,4,6-Trichlorophenol	ANT	Lin2	+++++ 424036	2917 766031	34147 1063332	106697	235310	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4,5-Trichlorophenol	ANT	Lin2	+++++	1835	41037	124462	278472	+++++	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			451045	867014	1249114			12.5	20.0	30.0		
Isosafrole Peak 2	ANT	Ave	+++++ 440292	+++++ 943514	40321 1278878	126253	269544	+++++ 10.5	+++++ 16.8	1.05 25.2	3.15	6.30
1,1'-Biphenyl	ANT	Ave	11664 1489637	25412 2959039	144829 3753243	404500	853074	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chloronaphthalene	ANT	Ave	+++++ 1096299	16400 2190833	117709 3394006	383714	645075	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Chloronaphthalene	ANT	Ave	+++++ 1315576	27140 2440320	108147 2688974	291678	735727	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diphenyl ether	ANT	Ave	6433 755139	13881 1490429	75493 2008788	237440	458594	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitroaniline	ANT	Ave	+++++ 403806	5291 836439	33056 1143264	110882	240103	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Naphthoquinone	ANT	Ave	4448 493425	5819 937199	41462 1232778	122157	269284	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Dinitrobenzene	ANT	Ave	+++++ 186886	+++++ 359921	13439 522666	50563	96392	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Dimethyl phthalate	ANT	Ave	14223 1522194	28414 2684466	142329 4070125	437082	876692	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dinitrobenzene	ANT	Ave	+++++ 212002	+++++ 414747	15545 606874	58987	115751	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2,6-Dinitrotoluene	ANT	Ave	+++++ 305209	5095 625215	27975 897557	86700	175771	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthylene	ANT	Ave	19934 1994619	34092 3939129	181353 5137707	552290	1131861	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Nitroaniline	ANT	Ave	+++++ 356861	+++++ 737356	28183 1040388	101089	213014	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Acenaphthene	ANT	Ave	11453 1176153	18001 2379362	122197 3304044	346610	734012	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrophenol	ANT	Lin2	+++++ 381081	14076 826890	44733 1135305	127026	249743	+++++ 25.0	2.50 40.0	5.00 60.0	11.3	17.5
Pentachlorobenzene	ANT	Ave	6001 484063	7867 1007684	53715 1418832	152561	297670	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitrophenol	ANT	Ave	+++++ 509488	+++++ 1015876	60700 1559782	125230	287570	+++++ 25.0	+++++ 40.0	3.75 60.0	7.50	15.0
Dibenzofuran	ANT	Ave	15880 1606641	28405 3055180	174915 4379938	490510	991941	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrotoluene	ANT	Ave	+++++ 419285	8888 814049	38215 1190667	119445	246842	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Naphthylamine	ANT	Ave	10226	15804	117509	331437	633379	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			1148934	2189840	3272020			12.5	20.0	30.0		
2,3,4,6-Tetrachlorophenol	ANT	Ave	+++++ 336612	+++++ 613931	31737 953568	94848	168200	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
2-Naphthylamine	ANT	Ave	+++++ 1286018	21259 2314048	115179 3466954	379545	691015	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diethyl phthalate	ANT	Ave	13818 1575031	27627 2840153	151867 4044246	450960	838584	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Thionazin	ANT	Ave	2955 265750	5029 475095	26725 748102	69512	143827	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluorene	ANT	Ave	11190 1310682	25018 2261336	125345 3579632	358008	751745	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chlorophenyl-phenyl ether	ANT	Ave	6045 618360	10445 1076640	60990 1681170	177542	332065	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
5-Nitro-o-toluidine	ANT	Ave	+++++ 421049	+++++ 706500	31330 1150500	119563	195269	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
4-Nitroaniline	ANT	Lin2	+++++ 378381	2579 703339	25523 1075282	82959	206284	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,6-Dinitro-2-methylphenol	PHN	Ave	+++++ 507594	+++++ 982700	61724 1512793	128226	291311	+++++ 25.0	+++++ 40.0	3.75 60.0	7.50	15.0
N-Nitrosodiphenylamine	PHN	Ave	8541 970858	17678 1914999	93913 2547556	264741	537181	0.106 10.6	0.213 17.0	1.06 25.5	3.19	6.38
1,2-Diphenylhydrazine	PHN	Ave	21566 2238415	35493 4177907	212360 5657954	595857	1213930	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Sulfotepp	PHN	Ave	+++++ 356357	7101 662967	39905 964343	106796	204530	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
cis-Diallate	PHN	Ave	+++++ 571679	+++++ 1031642	57781 1464634	171682	317850	+++++ 9.25	+++++ 14.8	0.925 22.2	2.78	5.55
Phorate	PHN	Ave	+++++ 1875214	18143 3333557	163450 4929771	514872	1065862	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3,5-Trinitrobenzene	PHN	Ave	+++++ 125027	+++++ 228744	10635 345474	28166	71294	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Phenacetin	PHN	Ave	+++++ 831979	+++++ 1668490	68058 2333809	236901	517064	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
4-Bromophenyl-phenylether	PHN	Ave	+++++ 385701	10227 693144	40793 954381	114451	242932	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
trans-Diallate	PHN	Ave	+++++ 188041	+++++ 352691	+++++ 505770	58699	119966	+++++ 3.25	+++++ 5.20	+++++ 7.80	0.975	1.95
Hexachlorobenzene	PHN	Ave	4017 409726	7939 856433	51905 1124239	129410	269128	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dimethoate	PHN	Ave	+++++	+++++	69991	231207	467019	+++++	+++++	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			761191	1541955	1967932			12.5	20.0	30.0		
Atrazine	PHN	Ave	353868	6871 612720	33566 825723	102015	212006	12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachloronitrobenzene	PHN	Ave	+++++ 230821	2943 435502	20935 604918	68180	134216	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachlorophenol	PHN	Lin2	+++++ 566359	11668 1105239	35721 1457529	138745	313990	+++++ 25.0	1.25 40.0	2.50 60.0	7.50	15.0
4-Aminobiphenyl	PHN	Ave	10208 1554164	22518 2903853	144794 3795150	488933	938108	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pronamide	PHN	Ave	5615 660203	10735 1298464	63020 1748463	203982	410756	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dinoseb	PHN	Ave	+++++ 306520	4827 664141	24179 865419	78212	170060	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Disulfoton	PHN	Ave	+++++ 1128103	+++++ 2158638	123305 2742335	329371	654541	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Phenanthrene	PHN	Ave	20627 1900497	37097 3907922	237863 4796971	606815	1174351	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Anthracene	PHN	Ave	21535 1952333	34430 3995831	216380 5070852	635613	1322389	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Carbazole	PHN	Ave	16626 1977790	29204 3934230	201832 4857299	552607	1157909	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Methyl parathion	PHN	Ave	5398 633280	8622 1189492	45029 1627858	156842	355835	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Di-n-butyl phthalate	PHN	Ave	23429 2842246	43101 5142073	252080 6904137	726164	1606240	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Parathion	PHN	Ave	3021 335992	6334 692800	29895 1045920	97955	205506	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitroquinoline-1-oxide	PHN	Qua2	+++++ 142472	+++++ 311602	7424 477397	28930	76615	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Octachlorostyrene	PHN	Ave	2017 174250	3763 363935	18894 520038	57892	121882	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isodrin	PHN	Ave	+++++ 230802	5857 483204	32447 723085	74573	151715	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluoranthene	PHN	Ave	18518 2051707	39980 4173138	210944 5714689	653160	1264480	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzidine	PYR10	Ave	+++++ 4259852	55948 7221396	381819 8999700	1279471	2574597	+++++ 37.5	0.750 60.0	3.75 90.0	11.3	22.5
Pyrene	PYR10	Ave	21975 2130028	39596 4081050	233407 6218435	707158	1467332	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
p-Dimethylamino azobenzene	PYR10	Ave	+++++	5256	30059	82367	204253	+++++	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			282967	619834	906248			12.5	20.0	30.0		
Chlorobenzilate	PYR10	Ave	5791 792205	11460 1544589	75747 2264785	244063	497065	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3,3'-Dimethylbenzidine	PYR10	Ave	8457 1183777	18084 2244682	107478 3428026	329179	715187	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Butylbenzylphthalate	PYR10	Ave	10169 1120948	17111 2266470	104254 3122494	337558	709044	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Acetylaminofluorene	PYR10	Ave	+++++ 778667	+++++ 1685031	+++++ 2442663	218746	476080	+++++ 12.5	+++++ 20.0	+++++ 30.0	3.75	7.50
3,3'-Dichlorobenzidine	PYR10	Ave	5685 759641	11585 1609596	74301 2160567	237503	479971	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]anthracene	PYR10	Ave	15162 1861764	30965 4093759	193427 5525904	578717	1263191	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,4'-Methylene bis(2-chloroaniline)	PYR10	Ave	2628 393075	7172 797901	35318 1158368	122506	252219	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Chrysene	PYR10	Ave	18605 1774175	32883 3455247	203504 5194579	612704	1159860	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-ethylhexyl) phthalate	PYR10	Ave	13316 1543795	26170 3157869	150361 4402586	481826	968548	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
6-Methylchrysene	PYR10	Ave	15155 1243830	20613 2286212	120875 3560614	380812	786303	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Di-n-octyl phthalate	PRY	Ave	+++++ 2548575	37761 5279212	221942 7424292	730502	1585935	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
7,12-Dimethylbenz(a)anthracene	PRY	Ave	5995 658701	10387 1409198	65265 2112300	212066	454951	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[b]fluoranthene	PRY	Ave	14295 1756007	27494 3676859	198703 5467605	619844	1272584	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[k]fluoranthene	PRY	Ave	18562 1731797	27480 3606588	195769 5243875	552002	1164895	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]pyrene	PRY	Ave	15176 1691552	31603 3544711	186707 5167285	580116	1143944	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Methylcholanthrene	PRY	Ave	8490 852052	11828 1638210	77467 2713026	243988	507776	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,h]acridine	PRY	Ave	11508 1370536	23357 2756184	131756 4177073	452541	891218	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,j]acridine	PRY	Ave	14733 1483889	27386 3114246	150914 4471167	468547	1012234	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Indeno[1,2,3-cd]pyrene	PRY	Ave	16369 1751718	28592 3577102	171478 4959697	557823	1064004	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz(a,h)anthracene	PRY	Ave	15288	35791	182393	556307	1105646	0.125	0.250	1.25	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			1608271	3504382	5160843			12.5	20.0	30.0		
Benzo[g,h,i]perylene	PRY	Ave	14865 1915267	36639 3545467	209483 5350704	601663	1197957	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Fluorophenol (Surr)	DCBd4	Ave	+++++ 1403038	+++++ 2596706	79060 3628802	353088	770834	+++++ 25.0	+++++ 40.0	2.50 60.0	7.50	15.0
Phenol-d5 (Surr)	DCBd4	Ave	19290 1905678	20742 3827889	127191 5467599	571601	1121965	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Nitrobenzene-d5 (Surr)	NPT	Ave	+++++ 1858554	25062 3748526	166405 4995055	529900	1054377	+++++ 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2-Fluorobiphenyl (Surr)	ANT	Ave	23442 2475165	47145 4985988	233971 6318490	719023	1586438	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	3775 459286	8781 942760	46595 1298439	140391	262148	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
p-Terphenyl-d14 (Surr)	PYR10	Ave	29290 2738513	56328 6033779	329511 7376938	987199	1987085	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua2 = Quadratic 1/conc^2 ISTD

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1 Analy Batch No.: 437867

SDG No.:

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2023 14:37 Calibration End Date: 10/31/2023 17:10 Calibration ID: 55355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-437867/9	JJ3108.D
Level 2	IC 410-437867/8	JJ3107.D
Level 3	IC 410-437867/7	JJ3106.D
Level 4	IC 410-437867/6	JJ3105.D
Level 5	IC 410-437867/5	JJ3104.D
Level 6	ICIS 410-437867/2	JJ3101e.D
Level 7	IC 410-437867/4	JJ3103.D
Level 8	IC 410-437867/3	JJ3102.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
N-Nitrosomethylethylamine	+++++ 4.8	+++++ -2.0	14.7	-14.9	-6.8	4.1	30	30	50	30	30	30
Methyl methanesulfonate	+++++ 2.7	1.2 -5.2	-7.0	0.8	-0.5	8.1	30	50 30	30	30	30	30
N-Nitrosodiethylamine	+++++ 0.1	-0.6 -1.5	4.9	-6.4	1.1	2.5	30	50 30	30	30	30	30
Ethyl methanesulfonate	+++++ 4.8	27.1 0.4	-21.6	-4.7	-1.1	-4.9	30	50 30	30	30	30	30
3,4-Methylphenol	+++++ 7.1	-1.9 -4.1	11.9	-5.1	-2.4	-5.5	30	50 30	30	30	30	30
Nitrobenzene	+++++ 1.5	-2.3 -4.6	14.3	-6.5	-2.6	0.2	30	50 30	30	30	30	30
2,4,6-Trichlorophenol	+++++ -0.1	-0.4 -6.6	2.1	0.3	-5.3	10.0	30	50 30	30	30	30	30
2,4,5-Trichlorophenol	+++++ -2.3	-1.7 -5.3	8.6	2.0	-2.8	1.4	30	50 30	30	30	30	30
2,4-Dinitrophenol	+++++ 10.9	5.3 1.7	-7.3	-8.7	-6.2	4.3	30	50 30	30	30	30	30
4-Nitroaniline	+++++ 4.5	2.7 7.5	-10.7	-10.5	-5.3	11.9	30	50 30	30	30	30	30
Pentachlorophenol	+++++ 4.5	5.5 2.2	-8.8	-8.8	-3.2	8.6	30	50 30	30	30	30	30
4-Nitroquinoline-1-oxide	+++++ 0.4	+++++ -1.3	2.1	-8.4	1.4	5.1	30	30	50	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3101e.D
Lims ID: ICIS L6
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 31-Oct-2023 14:37:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICIS L6
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 12:54:05 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

First Level Reviewer: P7EB Date: 31-Oct-2023 15:01:36

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.432	1.432	0.000	95	293319	12.5	11.8	
	2 N-Nitrosodimethylamine	74	1.648	1.648	0.000	94	531452	12.5	12.9	
	3 Pyridine	79	1.677	1.677	0.000	87	1714013	25.0	26.8	
	4 Dimethylformamide	73	1.981	1.981	0.000	98	657785	12.5	13.4	
	5 2-Picoline	93	2.238	2.238	0.000	93	877841	12.5	14.1	
	6 N-Nitrosomethylethylamine	88	2.331	2.331	0.000	95	398372	12.5	13.0	
	7 Methyl methanesulfonate	80	2.594	2.594	0.000	86	556289	12.5	13.5	
$	9 2-Fluorophenol	112	2.757	2.757	0.000	95	1403038	25.0	27.4	
	11 N-Nitrosodiethylamine	102	2.944	2.944	0.000	89	374557	12.5	12.8	
	12 Ethyl methanesulfonate	109	3.248	3.248	0.000	95	385332	12.5	11.9	
	13 Benzaldehyde	77	3.581	3.581	0.000	86	683065	12.5	12.9	
$	15 Phenol-d5	99	3.674	3.674	0.000	95	1905678	25.0	25.8	
	17 Aniline	93	3.686	3.686	0.000	72	1119432	12.5	12.1	
	16 Phenol	94	3.686	3.686	0.000	78	1111959	12.5	11.6	
	18 Bis(2-chloroethyl)ether	93	3.750	3.750	0.000	85	778668	12.5	12.4	
	19 2-Chlorophenol	128	3.803	3.803	0.000	92	671659	12.5	13.0	
	21 1,3-Dichlorobenzene	146	3.943	3.943	0.000	94	710009	12.5	12.2	
*	22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	95	191661	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	90	753427	12.5	12.1	
	26 Benzyl alcohol	108	4.147	4.147	0.000	86	497252	12.5	12.4	
	27 1,2-Dichlorobenzene	146	4.165	4.165	0.000	94	715095	12.5	12.0	
	30 2,2'-oxybis[1-chloropropane]	45	4.276	4.276	0.000	92	1819871	12.5	12.7	
	29 2-Methylphenol	108	4.276	4.276	0.000	96	716487	12.5	12.1	
	31 N-Nitrosopyrrolidine	100	4.381	4.381	0.000	84	442195	12.5	13.7	
	32 Acetophenone	105	4.398	4.398	0.000	89	1118422	12.5	12.7	
	33 N-Nitrosodi-n-propylamine	70	4.398	4.398	0.000	88	728555	12.5	12.1	
	35 N-Nitrosomorpholine	56	4.422	4.422	0.000	85	609630	12.5	12.4	
	34 4-Methylphenol	108	4.427	4.427	0.000	79	740746	12.5	11.8	
	36 2-Toluidine	106	4.433	4.433	0.000	84	1099884	12.5	12.0	
	37 Hexachloroethane	117	4.486	4.486	0.000	96	322210	12.5	12.2	
$	39 Nitrobenzene-d5	82	4.544	4.544	0.000	92	1858554	25.0	28.7	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	40 Nitrobenzene	77	4.562	4.562	0.000	92	937769	12.5	12.5	
	41 N-Nitrosopiperidine	114	4.708	4.708	0.000	79	367081	12.5	14.1	
	42 Isophorone	82	4.795	4.795	0.000	98	1759887	12.5	13.4	
	43 2-Nitrophenol	139	4.871	4.871	0.000	90	345331	12.5	14.3	
	44 2,4-Dimethylphenol	107	4.935	4.935	0.000	98	642672	12.5	13.9	
	46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	93	279596	12.5	13.7	
	47 Bis(2-chloroethoxy)methane	93	5.017	5.017	0.000	91	1114286	12.5	15.6	
	49 2,4-Dichlorophenol	162	5.116	5.116	0.000	95	516838	12.5	14.4	
	50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	92	552792	12.5	12.7	
*	52 Naphthalene-d8	136	5.227	5.227	0.000	97	634430	5.00	5.00	
	53 Naphthalene	128	5.251	5.251	0.000	97	1847201	12.5	13.0	
	55 Alpha-Terpineol	59	5.268	5.268	0.000	88	909814	12.5	14.2	
	56 4-Chloroaniline	127	5.321	5.321	0.000	92	806432	12.5	14.4	
	57 2,6-Dichlorophenol	162	5.321	5.321	0.000	85	548182	12.5	14.0	
	58 Hexachloropropene	213	5.332	5.332	0.000	95	382423	12.5	13.5	
	59 Hexachlorobutadiene	225	5.373	5.373	0.000	95	347456	12.5	13.3	
	61 Quinoline	129	5.572	5.572	0.000	93	1303896	12.5	13.7	
	62 Caprolactam	113	5.630	5.630	0.000	71	182537	12.5	15.0	
	63 N-Nitrosodi-n-butylamine	84	5.642	5.642	0.000	92	795970	12.5	14.0	
	64 p-Phenylene diamine	108	5.659	5.659	0.000	92	609122	12.5	14.2	
	65 4-Chloro-3-methylphenol	107	5.811	5.811	0.000	94	686961	12.5	14.5	
	66 Safrole, Total	162	5.846	5.846	0.000	82	469901	12.5	14.3	
	67 2-Methylnaphthalene	142	5.916	5.916	0.000	91	1081256	12.5	13.1	
	69 1-Methylnaphthalene	142	6.010	6.010	0.000	91	1077584	12.5	13.1	
	71 Hexachlorocyclopentadiene	237	6.062	6.062	0.000	95	299168	12.5	13.9	
	70 1,2,4,5-Tetrachlorobenzene	216	6.074	6.074	0.000	98	574231	12.5	12.5	
	72 Isosafrole Peak 1	162	6.127	6.127	0.000	82	76888	2.00	1.93	
	79 2,4,6-Trichlorophenol	196	6.197	6.197	0.000	95	424036	12.5	13.8	
	80 2,4,5-Trichlorophenol	196	6.243	6.243	0.000	91	451045	12.5	12.7	
$	81 2-Fluorobiphenyl (Surr)	172	6.273	6.273	0.000	99	2475165	25.0	25.9	
	82 Isosafrole Peak 2	162	6.337	6.337	0.000	85	440292	10.5	10.6	
	83 1,1'-Biphenyl	154	6.366	6.366	0.000	98	1489637	12.5	13.7	
	84 2-Chloronaphthalene	162	6.378	6.378	0.000	85	1096299	12.5	12.4	
	85 1-Chloronaphthalene	162	6.395	6.395	0.000	97	1315576	12.5	14.2	
	86 Phenyl ether	170	6.465	6.465	0.000	88	755139	12.5	13.0	
	87 2-Nitroaniline	138	6.489	6.489	0.000	75	403806	12.5	13.7	
	88 1,4-Naphthoquinone	158	6.553	6.553	0.000	76	493425	12.5	14.6	
	89 1,4-Dinitrobenzene	168	6.629	6.629	0.000	86	186886	12.5	13.9	
	90 Dimethyl phthalate	163	6.670	6.670	0.000	95	1522194	12.5	13.3	
	91 1,3-Dinitrobenzene	168	6.699	6.699	0.000	78	212002	12.5	13.6	
	92 2,6-Dinitrotoluene	165	6.722	6.722	0.000	82	305209	12.5	13.0	
	93 Acenaphthylene	152	6.763	6.763	0.000	99	1994619	12.5	13.4	
	95 3-Nitroaniline	138	6.880	6.880	0.000	87	356861	12.5	13.0	
*	96 Acenaphthene-d10	164	6.897	6.897	0.000	95	369667	5.00	5.00	
	97 Acenaphthene	153	6.932	6.932	0.000	98	1176153	12.5	12.9	
	98 2,4-Dinitrophenol	184	6.985	6.985	0.000	74	381081	25.0	26.1	
	99 Pentachlorobenzene	250	7.055	7.055	0.000	96	484063	12.5	12.1	
	100 4-Nitrophenol	109	7.090	7.090	0.000	88	509488	25.0	26.8	
	101 Dibenzofuran	168	7.096	7.096	0.000	96	1606641	12.5	12.7	
	102 2,4-Dinitrotoluene	165	7.102	7.102	0.000	86	419285	12.5	12.7	
	104 1-Naphthylamine	143	7.178	7.178	0.000	96	1148934	12.5	13.5	
	105 2,3,4,6-Tetrachlorophenol	232	7.183	7.183	0.000	74	336612	12.5	13.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
106 2-Naphthylamine	143	7.254	7.254	0.000	94	1286018	12.5	13.5	
107 Diethyl phthalate	149	7.341	7.341	0.000	96	1575031	12.5	13.6	
109 Thionazin	107	7.411	7.411	0.000	75	265750	12.5	13.0	
108 Fluorene	166	7.417	7.417	0.000	91	1310682	12.5	13.5	
110 4-Chlorophenyl phenyl ether	204	7.429	7.429	0.000	95	618360	12.5	13.4	
111 N-Nitro-o-toluidine	152	7.446	7.446	0.000	88	421049	12.5	14.3	
112 4-Nitroaniline	138	7.458	7.458	0.000	80	378381	12.5	14.0	
113 4,6-Dinitro-2-methylphenol	198	7.487	7.487	0.000	65	507594	25.0	27.1	
114 N-Nitrosodiphenylamine	169	7.545	7.545	0.000	68	970858	10.6	11.4	
115 1,2-Diphenylhydrazine	77	7.581	7.581	0.000	99	2238415	12.5	13.7	
$ 116 2,4,6-Tribromophenol	330	7.651	7.651	0.000	89	459286	25.0	25.8	
117 Sulfotepp	97	7.709	7.709	0.000	75	356357	12.5	12.6	
120 cis-Diallate	86	7.820	7.820	0.000	97	571679	9.25	9.88	
119 Phorate	75	7.832	7.832	0.000	92	1875214	12.5	14.7	
118 1,3,5-Trinitrobenzene	213	7.832	7.832	0.000	70	125027	12.5	14.0	
121 Phenacetin	108	7.855	7.855	0.000	89	831979	12.5	13.2	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	77	385701	12.5	12.2	
123 trans-Diallate	86	7.902	7.902	0.000	90	188041	3.25	3.30	
124 Hexachlorobenzene	284	7.931	7.931	0.000	92	409726	12.5	12.0	
125 Dimethoate	87	7.989	7.989	0.000	93	761191	12.5	13.0	
126 Atrazine	200	8.065	8.065	0.000	79	353868	12.5	13.4	
127 Pentachlorophenol	266	8.135	8.135	0.000	89	566359	25.0	27.1	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	73	230821	12.5	13.9	
129 4-Aminobiphenyl	169	8.141	8.141	0.000	92	1554164	12.5	14.1	
130 Pronamide	173	8.211	8.211	0.000	90	660203	12.5	13.2	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	95	711898	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	87	306520	12.5	13.7	
134 Disulfoton	88	8.322	8.322	0.000	96	1128103	12.5	13.1	
132 Phenanthrene	178	8.322	8.322	0.000	98	1900497	12.5	12.1	
135 Anthracene	178	8.375	8.375	0.000	99	1952333	12.5	12.2	
136 Carbazole	167	8.538	8.538	0.000	96	1977790	12.5	13.7	
137 Methyl parathion	109	8.678	8.678	0.000	88	633280	12.5	14.6	
138 Di-n-butyl phthalate	149	8.888	8.888	0.000	99	2842246	12.5	14.3	
139 Ethyl Parathion	109	9.052	9.052	0.000	79	335992	12.5	12.7	
140 4-Nitroquinoline-1-oxide	190	9.069	9.069	0.000	75	142472	12.5	13.1	
142 Octachlorostyrene	308	9.268	9.268	0.000	92	174250	12.5	11.5	
143 Isodrin	193	9.297	9.297	0.000	89	230802	12.5	11.0	
144 Fluoranthene	202	9.443	9.443	0.000	99	2051707	12.5	12.6	
145 Benzidine	184	9.595	9.595	0.000	99	4259852	37.5	43.5	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	97	723852	5.00	5.00	
S 68 Diallate	86				0		12.5	13.2	
147 Pyrene	202	9.653	9.653	0.000	95	2130028	12.5	12.3	
$ 148 p-Terphenyl-d14	244	9.823	9.823	0.000	96	2738513	25.0	23.2	
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	91	282967	12.5	12.0	
150 Chlorobenzilate	139	10.010	10.010	0.000	80	792205	12.5	13.6	
152 3,3'-Dimethylbenzidine	212	10.290	10.290	0.000	99	1183777	12.5	13.9	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	95	1120948	12.5	13.3	
155 2-Acetylaminofluorene	181	10.541	10.541	0.000	92	778667	12.5	12.2	
157 3,3'-Dichlorobenzidine	252	10.845	10.845	0.000	75	759641	12.5	13.3	
156 Benzo[a]anthracene	228	10.850	10.850	0.000	99	1861764	12.5	12.7	
158 4,4'-Methylene bis(2-chloroani	231	10.856	10.856	0.000	92	393075	12.5	13.3	
159 Chrysene	228	10.885	10.885	0.000	96	1774175	12.5	12.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
160 Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	94	1543795	12.5	13.0	
S 94 Isosafrole	162				0		12.5	12.5	
161 6-Methylchrysene	242	11.411	11.411	0.000	98	1243830	12.5	12.7	
162 Di-n-octyl phthalate	149	11.726	11.726	0.000	98	2548575	12.5	14.5	
163 7,12-Dimethylbenz(a)anthracene	256	12.123	12.123	0.000	84	658701	12.5	13.6	
164 Benzo[b]fluoranthene	252	12.123	12.123	0.000	97	1756007	12.5	13.4	
165 Benzo[k]fluoranthene	252	12.158	12.158	0.000	97	1731797	12.5	13.3	
166 Benzo[a]pyrene	252	12.544	12.544	0.000	81	1691552	12.5	13.2	
* 167 Perylene-d12	264	12.620	12.620	0.000	96	572713	5.00	5.00	
168 3-Methylcholanthrene	268	13.028	13.028	0.000	92	852052	12.5	14.4	
169 Dibenz[a,h]acridine	279	13.776	13.776	0.000	92	1370536	12.5	13.9	
170 Dibenz[a,j]acridine	279	13.846	13.846	0.000	95	1483889	12.5	13.4	
171 Indeno[1,2,3-cd]pyrene	276	14.068	14.068	0.000	96	1751718	12.5	14.1	
172 Dibenz(a,h)anthracene	278	14.114	14.114	0.000	97	1608271	12.5	12.6	
173 Benzo[g,h,i]perylene	276	14.424	14.424	0.000	95	1915267	12.5	14.1	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_6_00047 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 12:54:06 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3101e.D

Injection Date: 31-Oct-2023 14:37:30 Instrument ID: HP23264 Operator ID: mem41592

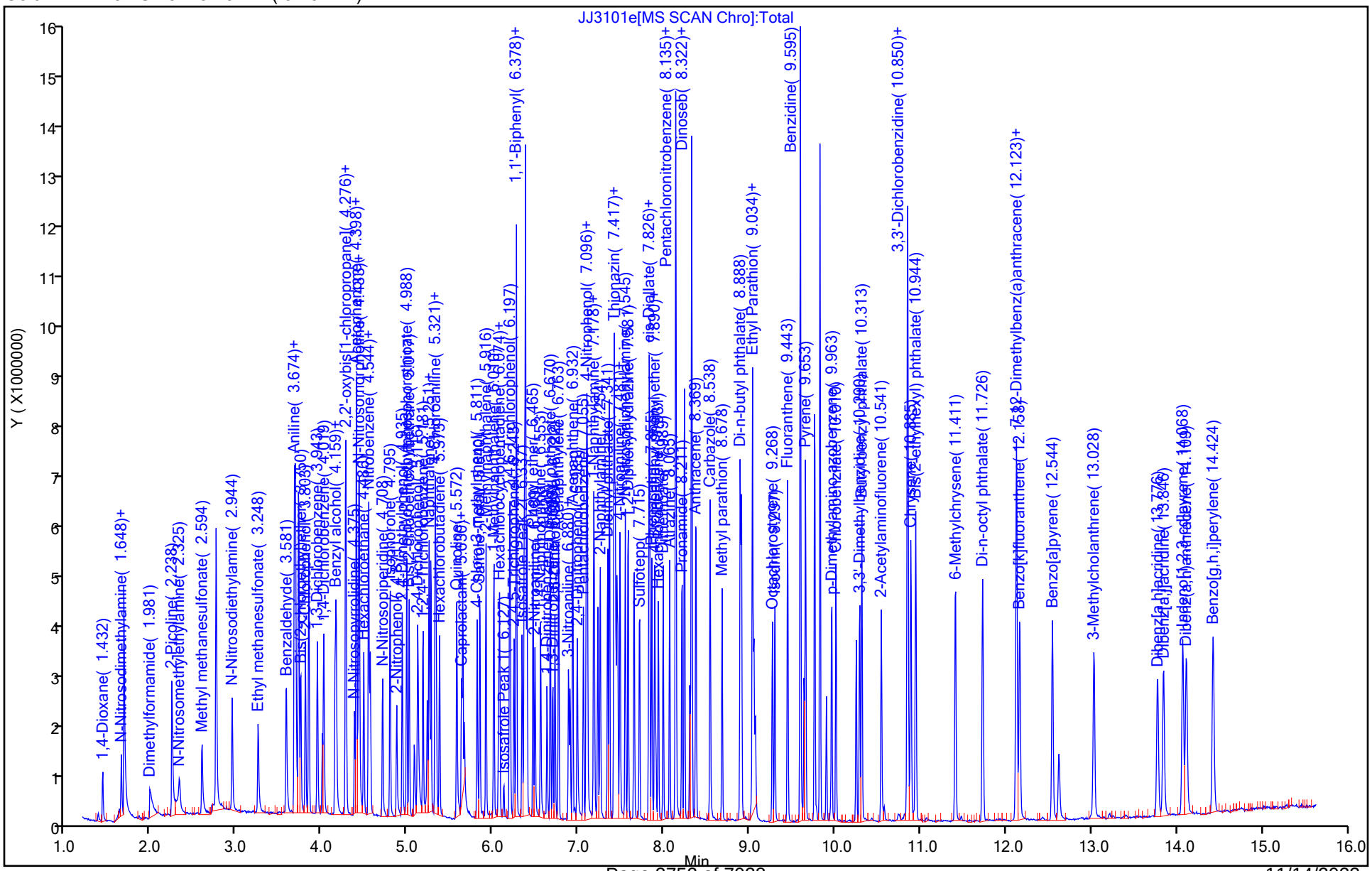
Lims ID: ICIS L6 Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 2

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3102.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 31-Oct-2023 15:02:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: 410-0098173-003
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 12:54:20 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

First Level Reviewer: GLQ9 Date: 31-Oct-2023 20:34:13

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.432	1.432	0.000	95	756547	30.0	26.6	
	2 N-Nitrosodimethylamine	74	1.642	1.642	0.000	94	1474889	30.0	31.2	
	3 Pyridine	79	1.671	1.671	0.000	86	4682766	60.0	64.1	
	4 Dimethylformamide	73	1.957	1.957	0.000	98	1733828	30.0	31.0	
	5 2-Picoline	93	2.232	2.232	0.000	93	2290354	30.0	32.1	
	6 N-Nitrosomethylethylamine	88	2.325	2.325	0.000	94	981920	30.0	29.4	
	7 Methyl methanesulfonate	80	2.588	2.588	0.000	87	1348022	30.0	28.4	
$	9 2-Fluorophenol	112	2.757	2.757	0.000	96	3628802	60.0	62.1	
	11 N-Nitrosodiethylamine	102	2.944	2.944	0.000	87	994560	30.0	29.5	
	12 Ethyl methanesulfonate	109	3.248	3.248	0.000	95	1129053	30.0	30.1	
	13 Benzaldehyde	77	3.575	3.575	0.000	87	1494073	30.0	24.7	
$	15 Phenol-d5	99	3.674	3.674	0.000	95	5467599	60.0	64.6	
	17 Aniline	93	3.686	3.686	0.000	71	3252537	30.0	30.8	
	16 Phenol	94	3.686	3.686	0.000	86	3228861	30.0	29.5	
	18 Bis(2-chloroethyl)ether	93	3.750	3.750	0.000	86	2204035	30.0	30.6	
	19 2-Chlorophenol	128	3.803	3.803	0.000	91	1867815	30.0	31.6	
	21 1,3-Dichlorobenzene	146	3.943	3.943	0.000	94	1941823	30.0	29.3	
*	22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	97	219208	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	89	1956573	30.0	27.5	
	26 Benzyl alcohol	108	4.147	4.147	0.000	87	1379138	30.0	30.1	
	27 1,2-Dichlorobenzene	146	4.159	4.159	0.000	94	1915340	30.0	28.1	
	30 2,2'-oxybis[1-chloropropane]	45	4.276	4.276	0.000	85	4615579	30.0	28.1	
	29 2-Methylphenol	108	4.276	4.276	0.000	80	1935223	30.0	28.7	
	31 N-Nitrosopyrrolidine	100	4.381	4.381	0.000	85	1193757	30.0	32.4	
	32 Acetophenone	105	4.398	4.398	0.000	88	2999357	30.0	29.7	
	33 N-Nitrosodi-n-propylamine	70	4.404	4.404	0.000	88	1918180	30.0	27.9	
	35 N-Nitrosomorpholine	56	4.422	4.422	0.000	90	1818482	30.0	32.4	
	34 4-Methylphenol	108	4.427	4.427	0.000	82	2084778	30.0	28.8	
	36 2-Toluidine	106	4.433	4.433	0.000	93	3010354	30.0	28.6	
	37 Hexachloroethane	117	4.486	4.486	0.000	97	837926	30.0	27.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.544	4.544	0.000	92	4995055	60.0	61.0	
40 Nitrobenzene	77	4.562	4.562	0.000	90	2722382	30.0	28.6	
41 N-Nitrosopiperidine	114	4.708	4.708	0.000	79	1043477	30.0	31.7	
42 Isophorone	82	4.795	4.795	0.000	98	4838205	30.0	29.2	
43 2-Nitrophenol	139	4.871	4.871	0.000	88	946159	30.0	31.1	
44 2,4-Dimethylphenol	107	4.935	4.935	0.000	98	1840303	30.0	31.6	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	94	792403	30.0	30.8	
47 Bis(2-chloroethoxy)methane	93	5.017	5.017	0.000	90	2801091	30.0	31.0	
49 2,4-Dichlorophenol	162	5.116	5.116	0.000	95	1551137	30.0	34.1	
50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	92	1557925	30.0	28.4	
* 52 Naphthalene-d8	136	5.227	5.227	0.000	98	801042	5.00	5.00	
53 Naphthalene	128	5.251	5.251	0.000	97	5261664	30.0	29.4	
55 Alpha-Terpineol	59	5.268	5.268	0.000	89	2508236	30.0	31.0	
56 4-Chloroaniline	127	5.321	5.321	0.000	92	2220668	30.0	31.4	
57 2,6-Dichlorophenol	162	5.321	5.321	0.000	87	1500562	30.0	30.4	
58 Hexachloropropene	213	5.332	5.332	0.000	96	1083256	30.0	30.2	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	96	926174	30.0	28.0	
61 Quinoline	129	5.572	5.572	0.000	93	3399200	30.0	28.3	
62 Caprolactam	113	5.642	5.642	0.000	67	466450	30.0	30.4	
63 N-Nitrosodi-n-butylamine	84	5.648	5.648	0.000	88	2004973	30.0	28.0	
64 p-Phenylene diamine	108	5.659	5.659	0.000	92	1583187	30.0	29.3	
65 4-Chloro-3-methylphenol	107	5.811	5.811	0.000	94	1808034	30.0	30.2	
66 Safrole, Total	162	5.840	5.840	0.000	80	1285051	30.0	31.0	
67 2-Methylnaphthalene	142	5.916	5.916	0.000	90	3155132	30.0	30.3	
69 1-Methylnaphthalene	142	6.010	6.010	0.000	92	3090670	30.0	29.8	
71 Hexachlorocyclopentadiene	237	6.062	6.062	0.000	95	774558	30.0	29.4	
70 1,2,4,5-Tetrachlorobenzene	216	6.074	6.074	0.000	98	1646258	30.0	29.2	
72 Isosafrole Peak 1	162	6.121	6.121	0.000	81	232440	4.80	4.77	
79 2,4,6-Trichlorophenol	196	6.197	6.197	0.000	95	1063332	30.0	28.0	
80 2,4,5-Trichlorophenol	196	6.243	6.243	0.000	92	1249114	30.0	28.4	
$ 81 2-Fluorobiphenyl (Surr)	172	6.272	6.272	0.000	98	6318490	60.0	53.9	e
82 Isosafrole Peak 2	162	6.337	6.337	0.000	86	1278878	25.2	25.1	
83 1,1'-Biphenyl	154	6.366	6.366	0.000	97	3753243	30.0	28.2	
84 2-Chloronaphthalene	162	6.378	6.378	0.000	96	3394006	30.0	31.3	M
85 1-Chloronaphthalene	162	6.395	6.395	0.000	97	2688974	30.0	23.7	M
86 Phenyl ether	170	6.465	6.465	0.000	88	2008788	30.0	28.2	
87 2-Nitroaniline	138	6.489	6.489	0.000	75	1143264	30.0	31.6	
88 1,4-Naphthoquinone	158	6.553	6.553	0.000	73	1232778	30.0	29.9	
89 1,4-Dinitrobenzene	168	6.629	6.629	0.000	86	522666	30.0	31.7	
90 Dimethyl phthalate	163	6.670	6.670	0.000	96	4070125	30.0	29.1	
91 1,3-Dinitrobenzene	168	6.699	6.699	0.000	78	606874	30.0	31.7	
92 2,6-Dinitrotoluene	165	6.722	6.722	0.000	85	897557	30.0	31.3	
93 Acenaphthylene	152	6.763	6.763	0.000	99	5137707	30.0	28.2	
95 3-Nitroaniline	138	6.880	6.880	0.000	86	1040388	30.0	31.0	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	95	452629	5.00	5.00	
97 Acenaphthene	153	6.932	6.932	0.000	98	3304044	30.0	29.6	
98 2,4-Dinitrophenol	184	6.985	6.985	0.000	74	1135305	60.0	61.0	
99 Pentachlorobenzene	250	7.055	7.055	0.000	97	1418832	30.0	29.0	
100 4-Nitrophenol	109	7.084	7.084	0.000	87	1559782	60.0	67.1	
101 Dibenzofuran	168	7.096	7.096	0.000	97	4379938	30.0	28.3	
102 2,4-Dinitrotoluene	165	7.102	7.102	0.000	84	1190667	30.0	29.5	
104 1-Naphthylamine	143	7.178	7.178	0.000	97	3272020	30.0	31.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
105 2,3,4,6-Tetrachlorophenol	232	7.183	7.183	0.000	75	953568	30.0	30.9	
106 2-Naphthylamine	143	7.253	7.253	0.000	94	3466954	30.0	29.8	
107 Diethyl phthalate	149	7.341	7.341	0.000	96	4044246	30.0	28.6	
109 Thionazin	107	7.417	7.417	0.000	74	748102	30.0	30.0	
108 Fluorene	166	7.417	7.417	0.000	91	3579632	30.0	30.1	
110 4-Chlorophenyl phenyl ether	204	7.429	7.429	0.000	96	1681170	30.0	29.8	
111 N-Nitro-o-toluidine	152	7.446	7.446	0.000	89	1150500	30.0	31.9	
112 4-Nitroaniline	138	7.464	7.464	0.000	80	1075282	30.0	32.2	
113 4,6-Dinitro-2-methylphenol	198	7.487	7.487	0.000	67	1512793	60.0	72.1	
114 N-Nitrosodiphenylamine	169	7.545	7.545	0.000	68	2547556	25.5	26.6	
115 1,2-Diphenylhydrazine	77	7.580	7.580	0.000	99	5657954	30.0	30.9	
$ 116 2,4,6-Tribromophenol	330	7.650	7.650	0.000	90	1298439	60.0	59.6	
117 Sulfotepp	97	7.709	7.709	0.000	75	964343	30.0	30.5	
120 cis-Diallate	86	7.820	7.820	0.000	98	1464634	22.2	22.6	
119 Phorate	75	7.832	7.832	0.000	93	4929771	30.0	34.4	
118 1,3,5-Trinitrobenzene	213	7.837	7.837	0.000	81	345474	30.0	34.6	
121 Phenacetin	108	7.861	7.861	0.000	88	2333809	30.0	33.0	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	77	954381	30.0	26.9	
123 trans-Diallate	86	7.902	7.902	0.000	92	505770	7.80	7.92	
124 Hexachlorobenzene	284	7.937	7.937	0.000	93	1124239	30.0	29.4	
125 Dimethoate	87	7.995	7.995	0.000	93	1967932	30.0	30.1	
126 Atrazine	200	8.065	8.065	0.000	79	825723	30.0	27.9	
127 Pentachlorophenol	266	8.135	8.135	0.000	89	1457529	60.0	61.3	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	81	604918	30.0	32.4	
129 4-Aminobiphenyl	169	8.141	8.141	0.000	92	3795150	30.0	30.6	
130 Pronamide	173	8.211	8.211	0.000	90	1748463	30.0	31.2	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	95	798412	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	89	865419	30.0	34.4	
134 Disulfoton	88	8.322	8.322	0.000	97	2742335	30.0	28.5	
132 Phenanthrene	178	8.322	8.322	0.000	98	4796971	30.0	27.2	
135 Anthracene	178	8.375	8.375	0.000	99	5070852	30.0	28.2	
136 Carbazole	167	8.538	8.538	0.000	97	4857299	30.0	29.9	
137 Methyl parathion	109	8.678	8.678	0.000	88	1627858	30.0	33.6	
138 Di-n-butyl phthalate	149	8.888	8.888	0.000	99	6904137	30.0	31.0	e
139 Ethyl Parathion	109	9.052	9.052	0.000	81	1045920	30.0	35.4	
140 4-Nitroquinoline-1-oxide	190	9.069	9.069	0.000	89	477397	30.0	29.6	
142 Octachlorostyrene	308	9.268	9.268	0.000	92	520038	30.0	30.7	
143 Isodrin	193	9.297	9.297	0.000	91	723085	30.0	30.7	
144 Fluoranthene	202	9.443	9.443	0.000	100	5714689	30.0	31.2	
145 Benzidine	184	9.601	9.601	0.000	96	8999700	90.0	78.8	e
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	97	844222	5.00	5.00	
S 68 Diallate	86				0		30.0	30.5	
147 Pyrene	202	9.653	9.653	0.000	96	6218435	30.0	30.7	
$ 148 p-Terphenyl-d14	244	9.823	9.823	0.000	96	7376938	60.0	53.6	e
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	92	906248	30.0	33.0	
150 Chlorobenzilate	139	10.009	10.009	0.000	83	2264785	30.0	33.4	
152 3,3'-Dimethylbenzidine	212	10.290	10.290	0.000	99	3428026	30.0	34.6	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	95	3122494	30.0	31.7	
155 2-Acetylaminofluorene	181	10.541	10.541	0.000	94	2442663	30.0	32.8	
157 3,3'-Dichlorobenzidine	252	10.844	10.844	0.000	75	2160567	30.0	32.4	
156 Benzo[a]anthracene	228	10.850	10.850	0.000	99	5525904	30.0	32.3	
158 4,4'-Methylene bis(2-chloroanil	231	10.856	10.856	0.000	93	1158368	30.0	33.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
159 Chrysene	228	10.891	10.891	0.000	96	5194579	30.0	30.5	
160 Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	95	4402586	30.0	31.8	
S 94 Isosafrole	162				0		30.0	29.9	
161 6-Methylchrysene	242	11.405	11.405	0.000	98	3560614	30.0	31.1	
162 Di-n-octyl phthalate	149	11.726	11.726	0.000	99	7424292	30.0	31.1	
163 7,12-Dimethylbenz(a)anthracene	256	12.123	12.123	0.000	87	2112300	30.0	32.0	
164 Benzo[b]fluoranthene	252	12.129	12.129	0.000	98	5467605	30.0	30.6	
165 Benzo[k]fluoranthene	252	12.164	12.164	0.000	98	5243875	30.0	29.6	
166 Benzo[a]pyrene	252	12.544	12.544	0.000	80	5167285	30.0	29.7	
* 167 Perylene-d12	264	12.620	12.620	0.000	96	779568	5.00	5.00	
168 3-Methylcholanthrene	268	13.034	13.034	0.000	91	2713026	30.0	33.7	
169 Dibenz[a,h]acridine	279	13.776	13.776	0.000	92	4177073	30.0	31.2	
170 Dibenz[a,j]acridine	279	13.846	13.846	0.000	95	4471167	30.0	29.6	
171 Indeno[1,2,3-cd]pyrene	276	14.073	14.073	0.000	97	4959697	30.0	29.3	
172 Dibenz(a,h)anthracene	278	14.114	14.114	0.000	95	5160843	30.0	29.8	
173 Benzo[g,h,i]perylene	276	14.430	14.430	0.000	95	5350704	30.0	28.9	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_8_00032 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 12:54:21 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3102.D

Injection Date: 31-Oct-2023 15:02:30 Instrument ID: HP23264 Operator ID: mem41592

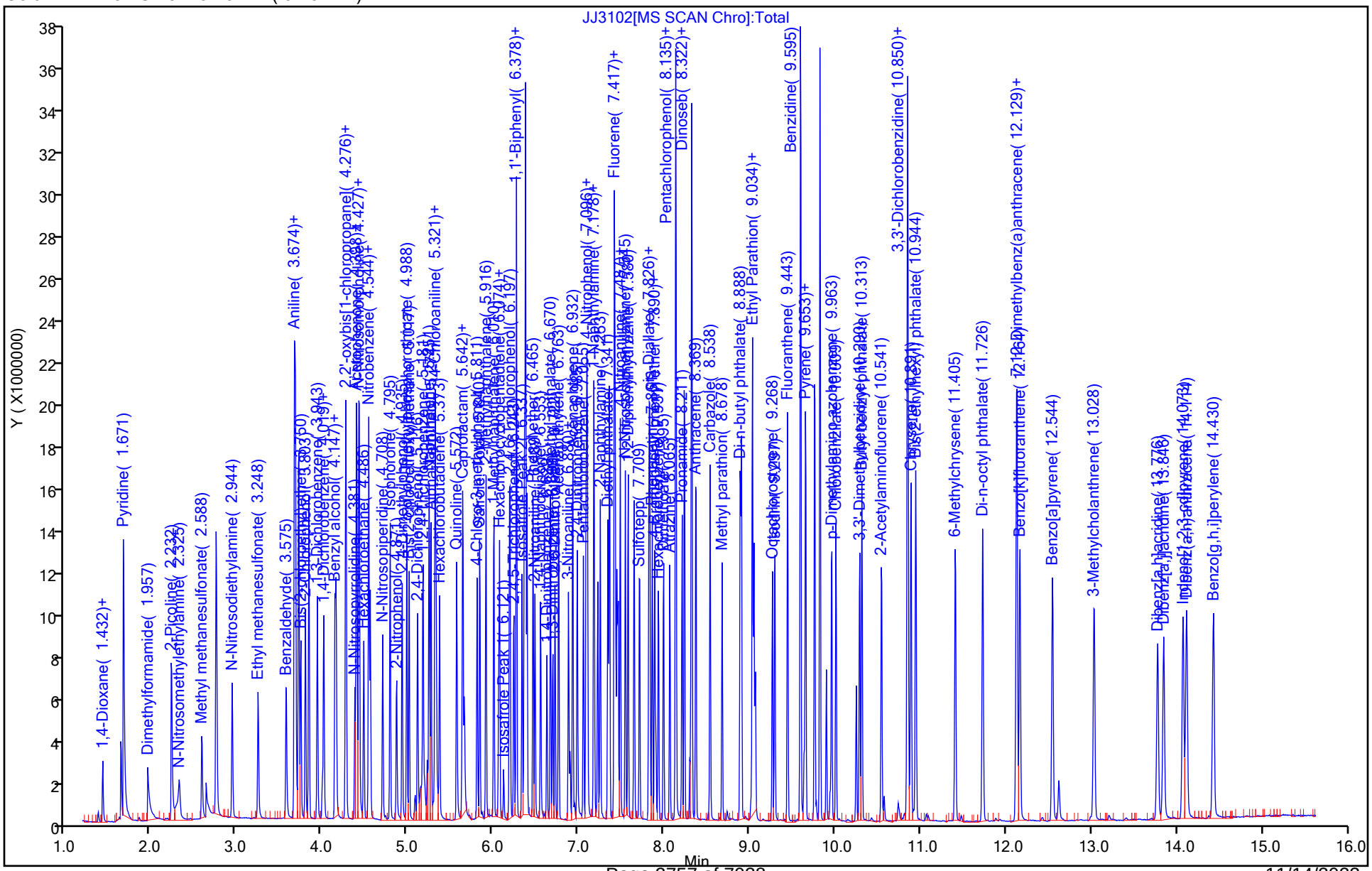
Lims ID: IC L8 Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 3

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

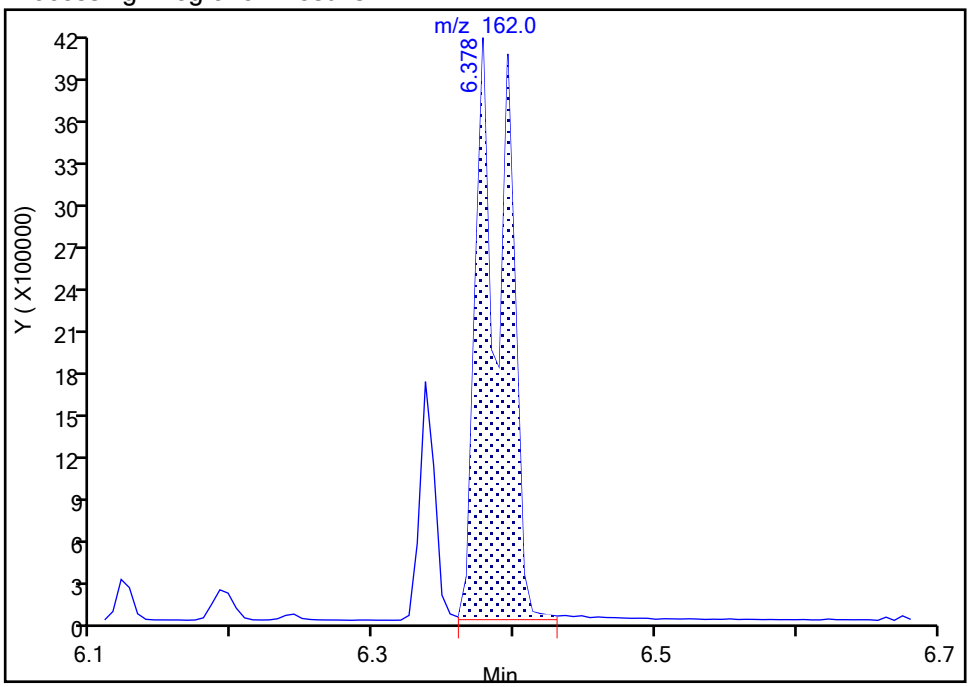
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3102.D				
Injection Date:	31-Oct-2023 15:02:30	Instrument ID:	HP23264		
Lims ID:	IC L8				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

84 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

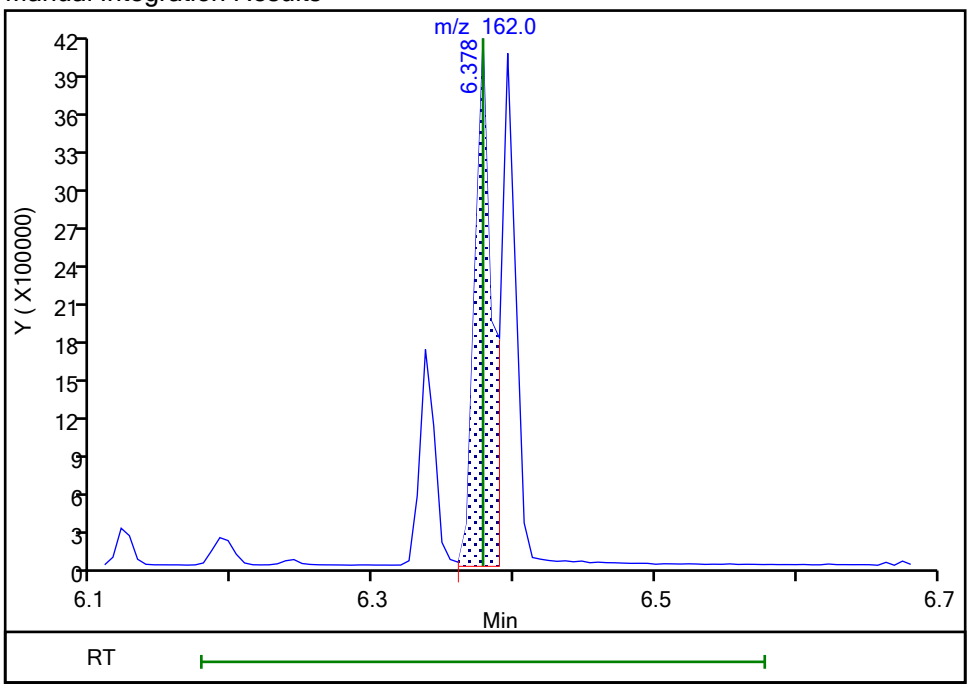
Processing Integration Results

RT: 6.38
Area: 6082981
Amount: 34.208810
Amount Units: ug/ml



Manual Integration Results

RT: 6.38
Area: 3394006
Amount: 31.305056
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:33:36 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

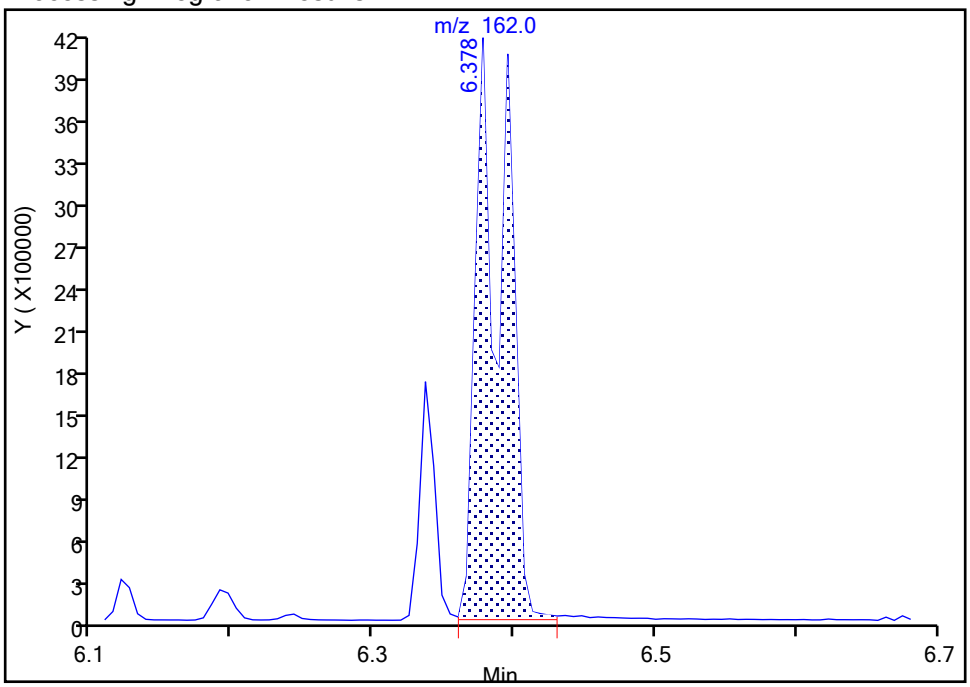
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3102.D				
Injection Date:	31-Oct-2023 15:02:30	Instrument ID:	HP23264		
Lims ID:	IC L8				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

85 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

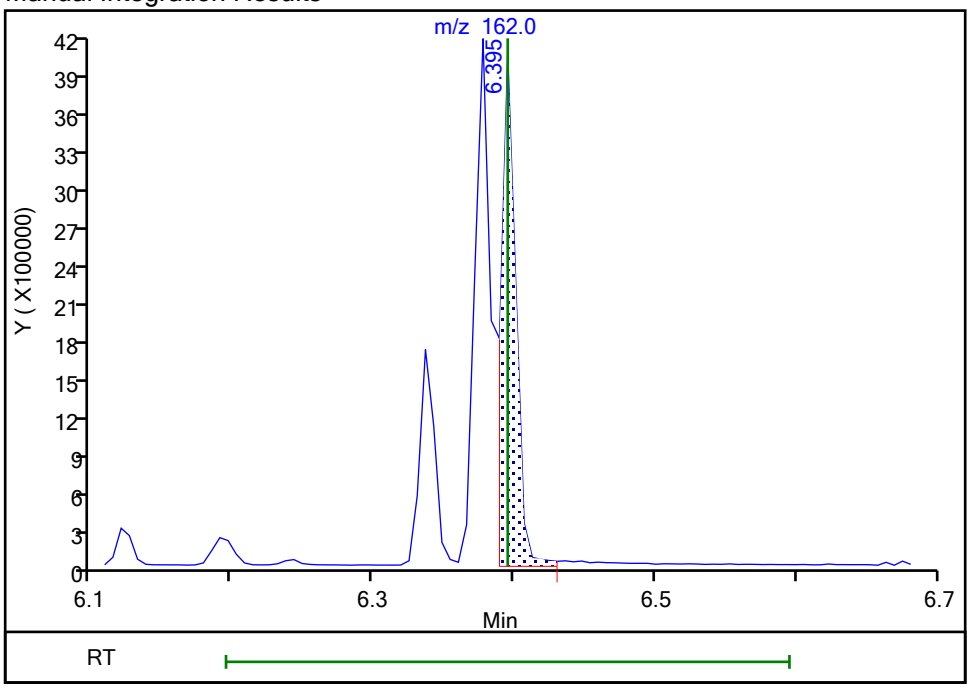
Processing Integration Results

RT: 6.38
Area: 6082981
Amount: 33.104936
Amount Units: ug/ml



Manual Integration Results

RT: 6.40
Area: 2688974
Amount: 23.653841
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:33:43 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3103.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 31-Oct-2023 15:23:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 410-0098173-004
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 12:54:35 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

First Level Reviewer: GLQ9 Date: 31-Oct-2023 20:36:27

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.438	1.432	0.006	95	529095	20.0	18.8	
	2 N-Nitrosodimethylamine	74	1.648	1.642	0.006	95	1063848	20.0	22.8	
	3 Pyridine	79	1.677	1.671	0.006	85	3161595	40.0	43.9	
	4 Dimethylformamide	73	1.969	1.957	0.012	98	1173448	20.0	21.2	
	5 2-Picoline	93	2.238	2.232	0.006	94	1580386	20.0	22.5	
	6 N-Nitrosomethylethylamine	88	2.331	2.325	0.006	94	700772	20.0	21.0	
	7 Methyl methanesulfonate	80	2.594	2.588	0.006	87	958189	20.0	20.5	
$	9 2-Fluorophenol	112	2.758	2.757	0.001	96	2596706	40.0	45.0	
	11 N-Nitrosodiethylamine	102	2.950	2.944	0.006	88	662684	20.0	20.0	
	12 Ethyl methanesulfonate	109	3.248	3.248	0.000	94	772243	20.0	21.0	
	13 Benzaldehyde	77	3.581	3.575	0.006	86	1246439	20.0	20.9	
$	15 Phenol-d5	99	3.674	3.674	0.000	95	3827889	40.0	45.9	
	17 Aniline	93	3.686	3.686	0.000	91	2247925	20.0	21.6	
	16 Phenol	94	3.686	3.686	0.000	78	2226331	20.0	20.6	
	18 Bis(2-chloroethyl)ether	93	3.750	3.750	0.000	86	1574698	20.0	22.1	
	19 2-Chlorophenol	128	3.803	3.803	0.000	93	1337360	20.0	23.0	
	21 1,3-Dichlorobenzene	146	3.943	3.943	0.000	94	1367677	20.0	20.9	
*	22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	95	216169	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	89	1347097	20.0	19.2	
	26 Benzyl alcohol	108	4.147	4.147	0.000	86	1000373	20.0	22.1	
	27 1,2-Dichlorobenzene	146	4.165	4.159	0.006	94	1410379	20.0	21.0	
	30 2,2'-oxybis[1-chloropropane]	45	4.276	4.276	0.000	91	3525552	20.0	21.7	
	29 2-Methylphenol	108	4.276	4.276	0.000	94	1338722	20.0	20.1	
	31 N-Nitrosopyrrolidine	100	4.381	4.381	0.000	83	835486	20.0	23.0	
	32 Acetophenone	105	4.398	4.398	0.000	88	2178570	20.0	21.9	
	33 N-Nitrosodi-n-propylamine	70	4.404	4.404	0.000	90	1413603	20.0	20.9	
	35 N-Nitrosomorpholine	56	4.422	4.422	0.000	89	1178623	20.0	21.3	
	34 4-Methylphenol	108	4.428	4.427	0.001	82	1527098	20.0	21.4	
	36 2-Toluidine	106	4.433	4.433	0.000	92	2168759	20.0	20.9	
	37 Hexachloroethane	117	4.486	4.486	0.000	96	612510	20.0	20.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.544	4.544	0.000	92	3748526	40.0	42.7	
40 Nitrobenzene	77	4.562	4.562	0.000	90	2064520	20.0	20.3	
41 N-Nitrosopiperidine	114	4.708	4.708	0.000	79	720754	20.0	20.4	
42 Isophorone	82	4.795	4.795	0.000	98	3666980	20.0	20.7	
43 2-Nitrophenol	139	4.871	4.871	0.000	89	658596	20.0	20.2	
44 2,4-Dimethylphenol	107	4.936	4.935	0.001	98	1274695	20.0	20.4	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	93	488066	20.0	17.7	
47 Bis(2-chloroethoxy)methane	93	5.017	5.017	0.000	90	1940481	20.0	20.0	
49 2,4-Dichlorophenol	162	5.117	5.116	0.001	96	1156122	20.0	23.7	
50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	93	1168274	20.0	19.9	
* 52 Naphthalene-d8	136	5.228	5.227	0.001	98	858006	5.00	5.00	
53 Naphthalene	128	5.251	5.251	0.000	97	3706418	20.0	19.3	
55 Alpha-Terpineol	59	5.268	5.268	0.000	89	1992731	20.0	23.0	
56 4-Chloroaniline	127	5.321	5.321	0.000	92	1586880	20.0	20.9	
57 2,6-Dichlorophenol	162	5.321	5.321	0.000	86	1064258	20.0	20.2	
58 Hexachloropropene	213	5.333	5.332	0.001	95	785722	20.0	20.4	
59 Hexachlorobutadiene	225	5.374	5.373	0.001	96	667184	20.0	18.9	
61 Quinoline	129	5.572	5.572	0.000	93	2691401	20.0	20.9	
62 Caprolactam	113	5.636	5.642	-0.006	69	369134	20.0	22.4	
63 N-Nitrosodi-n-butylamine	84	5.642	5.648	-0.006	91	1522756	20.0	19.9	
64 p-Phenylene diamine	108	5.660	5.659	0.001	91	1162037	20.0	20.1	
65 4-Chloro-3-methylphenol	107	5.811	5.811	0.000	94	1338119	20.0	20.8	
66 Safrole, Total	162	5.841	5.840	0.001	77	829881	20.0	18.7	
67 2-Methylnaphthalene	142	5.917	5.916	0.001	90	2212163	20.0	19.9	
69 1-Methylnaphthalene	142	6.010	6.010	0.000	91	2147745	20.0	19.4	
71 Hexachlorocyclopentadiene	237	6.063	6.062	0.001	93	583178	20.0	21.8	
70 1,2,4,5-Tetrachlorobenzene	216	6.074	6.074	0.000	98	1188067	20.0	20.8	
72 Isosafrole Peak 1	162	6.121	6.121	0.000	79	153459	3.20	3.11	
79 2,4,6-Trichlorophenol	196	6.197	6.197	0.000	95	766031	20.0	20.0	
80 2,4,5-Trichlorophenol	196	6.244	6.243	0.001	90	867014	20.0	19.5	
$ 81 2-Fluorobiphenyl (Surr)	172	6.273	6.272	0.001	99	4985988	40.0	42.0	
82 Isosafrole Peak 2	162	6.337	6.337	0.000	85	943514	16.8	18.3	
83 1,1'-Biphenyl	154	6.366	6.366	0.000	95	2959039	20.0	21.9	
84 2-Chloronaphthalene	162	6.378	6.378	0.000	80	2190833	20.0	20.0	
85 1-Chloronaphthalene	162	6.395	6.395	0.000	97	2440320	20.0	21.2	
86 Phenyl ether	170	6.465	6.465	0.000	88	1490429	20.0	20.6	
87 2-Nitroaniline	138	6.489	6.489	0.000	75	836439	20.0	22.8	
S 24 Dinitrotoluene	165				0			41.5	
88 1,4-Naphthoquinone	158	6.553	6.553	0.000	75	937199	20.0	22.4	
89 1,4-Dinitrobenzene	168	6.629	6.629	0.000	87	359921	20.0	21.6	
90 Dimethyl phthalate	163	6.670	6.670	0.000	95	2684466	20.0	19.0	
91 1,3-Dinitrobenzene	168	6.699	6.699	0.000	78	414747	20.0	21.4	
92 2,6-Dinitrotoluene	165	6.722	6.722	0.000	83	625215	20.0	21.5	
93 Acenaphthylene	152	6.763	6.763	0.000	99	3939129	20.0	21.3	
95 3-Nitroaniline	138	6.880	6.880	0.000	86	737356	20.0	21.7	
* 96 Acenaphthene-d10	164	6.898	6.897	0.001	95	458208	5.00	5.00	
97 Acenaphthene	153	6.933	6.932	0.001	98	2379362	20.0	21.1	
98 2,4-Dinitrophenol	184	6.985	6.985	0.000	74	826890	40.0	44.4	
99 Pentachlorobenzene	250	7.055	7.055	0.000	97	1007684	20.0	20.4	
100 4-Nitrophenol	109	7.084	7.084	0.000	90	1015876	40.0	43.1	
101 Dibenzofuran	168	7.096	7.096	0.000	97	3055180	20.0	19.5	
102 2,4-Dinitrotoluene	165	7.102	7.102	0.000	82	814049	20.0	19.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.178	7.178	0.000	97	2189840	20.0	20.8	
105 2,3,4,6-Tetrachlorophenol	232	7.184	7.183	0.001	75	613931	20.0	19.7	
106 2-Naphthylamine	143	7.254	7.253	0.001	94	2314048	20.0	19.7	
107 Diethyl phthalate	149	7.341	7.341	0.000	95	2840153	20.0	19.9	
109 Thionazin	107	7.411	7.417	-0.006	74	475095	20.0	18.8	
108 Fluorene	166	7.417	7.417	0.000	91	2261336	20.0	18.8	
110 4-Chlorophenyl phenyl ether	204	7.429	7.429	0.000	95	1076640	20.0	18.9	
111 N-Nitro-o-toluidine	152	7.446	7.446	0.000	87	706500	20.0	19.3	
112 4-Nitroaniline	138	7.458	7.464	-0.006	79	703339	20.0	20.9	
113 4,6-Dinitro-2-methylphenol	198	7.487	7.487	0.000	66	982700	40.0	41.9	
114 N-Nitrosodiphenylamine	169	7.546	7.545	0.001	67	1914999	17.0	17.9	
115 1,2-Diphenylhydrazine	77	7.581	7.580	0.001	99	4177907	20.0	20.4	
$ 116 2,4,6-Tribromophenol	330	7.651	7.650	0.001	91	942760	40.0	42.7	
117 Sulfotepp	97	7.709	7.709	0.000	75	662967	20.0	18.7	
120 cis-Diallate	86	7.820	7.820	0.000	97	1031642	14.8	14.2	
119 Phorate	75	7.832	7.832	0.000	93	3333557	20.0	20.8	
118 1,3,5-Trinitrobenzene	213	7.832	7.837	-0.005	81	228744	20.0	20.5	
121 Phenacetin	108	7.861	7.861	0.000	90	1668490	20.0	21.1	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	76	693144	20.0	17.4	
123 trans-Diallate	86	7.902	7.902	0.000	92	352691	5.20	4.94	
124 Hexachlorobenzene	284	7.931	7.937	-0.006	92	856433	20.0	20.0	
125 Dimethoate	87	7.989	7.995	-0.006	95	1541955	20.0	21.1	
126 Atrazine	200	8.065	8.065	0.000	79	612720	20.0	18.5	
127 Pentachlorophenol	266	8.135	8.135	0.000	89	1105239	40.0	41.8	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	80	435502	20.0	20.9	
129 4-Aminobiphenyl	169	8.141	8.141	0.000	91	2903853	20.0	20.9	
130 Pronamide	173	8.211	8.211	0.000	90	1298464	20.0	20.7	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	95	893081	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	88	664141	20.0	23.6	
134 Disulfoton	88	8.322	8.322	0.000	97	2158638	20.0	20.0	
132 Phenanthrene	178	8.322	8.322	0.000	98	3907922	20.0	19.8	
135 Anthracene	178	8.369	8.375	-0.006	99	3995831	20.0	19.9	
136 Carbazole	167	8.538	8.538	0.000	96	3934230	20.0	21.7	
137 Methyl parathion	109	8.678	8.678	0.000	88	1189492	20.0	21.9	
138 Di-n-butyl phthalate	149	8.889	8.888	0.001	99	5142073	20.0	20.6	
139 Ethyl Parathion	109	9.052	9.052	0.000	80	692800	20.0	21.0	
140 4-Nitroquinoline-1-oxide	190	9.070	9.069	0.001	83	311602	20.0	20.1	
142 Octachlorostyrene	308	9.268	9.268	0.000	92	363935	20.0	19.2	
143 Isodrin	193	9.292	9.297	-0.005	91	483204	20.0	18.3	
144 Fluoranthene	202	9.443	9.443	0.000	99	4173138	20.0	20.3	
145 Benzidine	184	9.595	9.601	-0.006	97	7221396	60.0	65.3	e
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	96	816988	5.00	5.00	
S 68 Diallate	86				0		20.0	19.2	
147 Pyrene	202	9.654	9.653	0.001	95	4081050	20.0	20.8	
$ 148 p-Terphenyl-d14	244	9.823	9.823	0.000	97	6033779	40.0	45.3	
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	93	619834	20.0	23.3	
150 Chlorobenzilate	139	10.010	10.009	0.001	82	1544589	20.0	23.5	
152 3,3'-Dimethylbenzidine	212	10.284	10.290	-0.006	99	2244682	20.0	23.4	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	95	2266470	20.0	23.8	
155 2-Acetylaminofluorene	181	10.541	10.541	0.000	93	1685031	20.0	23.4	
157 3,3'-Dichlorobenzidine	252	10.845	10.844	0.001	78	1609596	20.0	24.9	
156 Benzo[a]anthracene	228	10.851	10.850	0.001	99	4093759	20.0	24.7	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158	4,4'-Methylene bis(2-chloroanil	231	10.851	10.856	-0.005	94	797901	20.0	23.9	
159	Chrysene	228	10.886	10.891	-0.005	97	3455247	20.0	21.0	
160	Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	96	3157869	20.0	23.6	
S 94	Isosafrole	162				0		20.0	21.4	
161	6-Methylchrysene	242	11.405	11.405	0.000	98	2286212	20.0	20.6	
162	Di-n-octyl phthalate	149	11.726	11.726	0.000	99	5279212	20.0	22.8	
163	7,12-Dimethylbenz(a)anthracene	256	12.123	12.123	0.000	87	1409198	20.0	22.0	
164	Benzo[b]fluoranthene	252	12.123	12.129	-0.006	97	3676859	20.0	21.2	
165	Benzo[k]fluoranthene	252	12.159	12.164	-0.006	98	3606588	20.0	20.9	
166	Benzo[a]pyrene	252	12.544	12.544	0.000	80	3544711	20.0	21.0	
* 167	Perylene-d12	264	12.620	12.620	0.000	96	757528	5.00	5.00	
168	3-Methylcholanthrene	268	13.029	13.034	-0.005	92	1638210	20.0	21.0	
169	Dibenz[a,h]acridine	279	13.770	13.776	-0.006	92	2756184	20.0	21.2	
170	Dibenz[a,j]acridine	279	13.840	13.846	-0.006	95	3114246	20.0	21.2	
171	Indeno[1,2,3-cd]pyrene	276	14.068	14.073	-0.005	97	3577102	20.0	21.7	
172	Dibenz(a,h)anthracene	278	14.109	14.114	-0.005	94	3504382	20.0	20.8	
173	Benzo[g,h,i]perylene	276	14.424	14.430	-0.006	94	3545467	20.0	19.7	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

MSS_RV8270_7_00032 Amount Added: 1.00 Units: mL

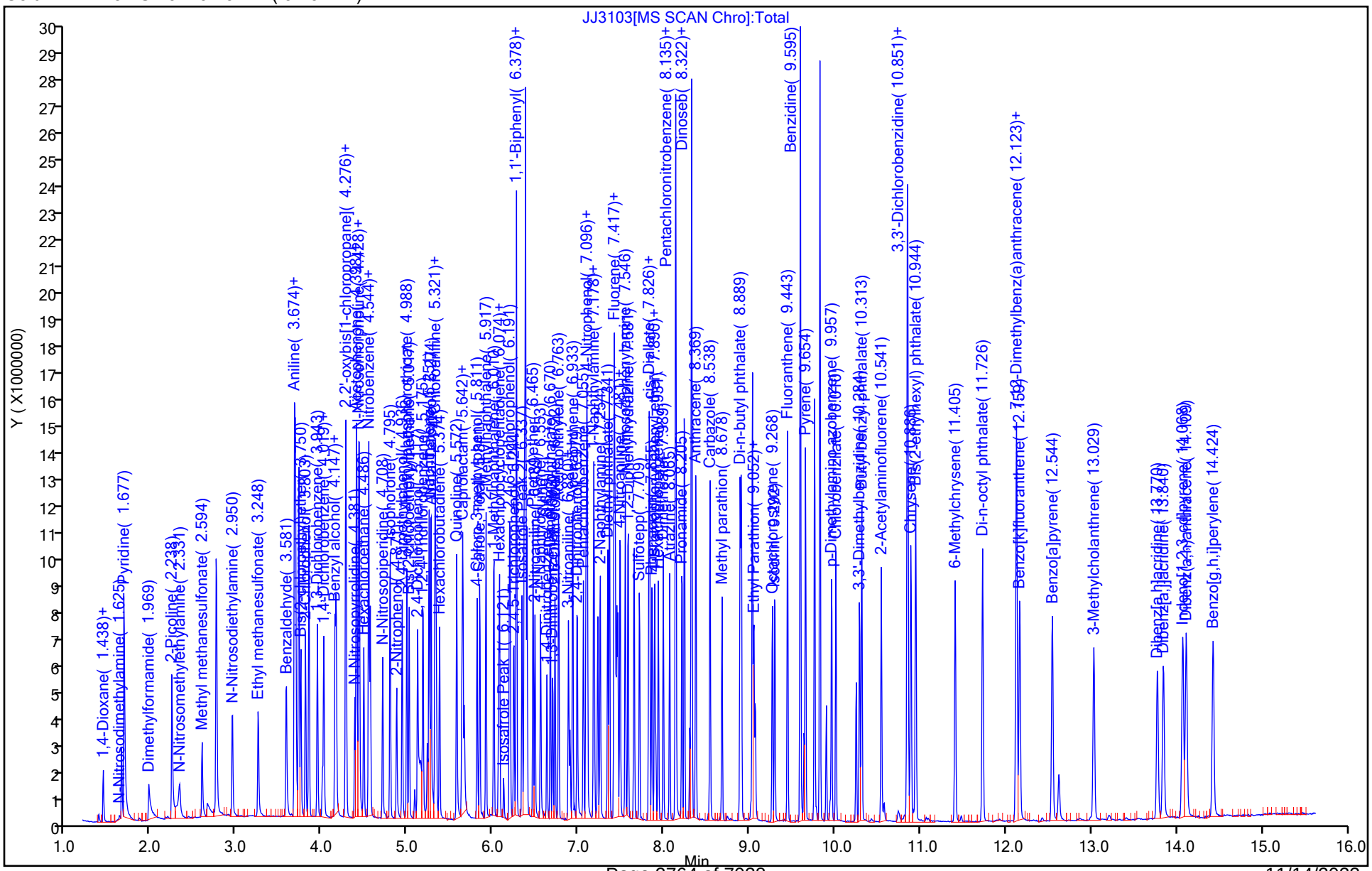
Report Date: 02-Nov-2023 12:54:36 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3103.D

Injection Date:	31-Oct-2023 15:23:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	IC L7			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3104.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 31-Oct-2023 15:45:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L5
Misc. Info.: 410-0098173-005
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 12:54:50 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

First Level Reviewer: GLQ9 Date: 31-Oct-2023 20:40:03

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.432	1.432	0.000	96	177827	7.50	7.50	
	2 N-Nitrosodimethylamine	74	1.648	1.648	0.000	93	306386	7.50	7.78	
	3 Pyridine	79	1.683	1.683	0.000	87	853267	15.0	14.0	
	4 Dimethylformamide	73	2.010	2.010	0.000	98	333722	7.50	7.16	M
	5 2-Picoline	93	2.244	2.244	0.000	92	440998	7.50	7.42	
	6 N-Nitrosomethylethylamine	88	2.331	2.331	0.000	96	218398	7.50	6.99	
	7 Methyl methanesulfonate	80	2.594	2.594	0.000	87	289723	7.50	7.46	
$	9 2-Fluorophenol	112	2.758	2.758	0.000	95	770834	15.0	15.8	
	11 N-Nitrosodiethylamine	102	2.950	2.950	0.000	89	209290	7.50	7.58	
	12 Ethyl methanesulfonate	109	3.254	3.254	0.000	95	226496	7.50	7.42	
	13 Benzaldehyde	77	3.581	3.581	0.000	88	416962	7.50	8.27	
$	15 Phenol-d5	99	3.674	3.674	0.000	95	1121965	15.0	15.9	
	17 Aniline	93	3.686	3.686	0.000	93	678096	7.50	7.71	
	16 Phenol	94	3.692	3.692	0.000	90	660671	7.50	7.24	
	18 Bis(2-chloroethyl)ether	93	3.750	3.750	0.000	85	471018	7.50	7.85	
	19 2-Chlorophenol	128	3.803	3.803	0.000	92	403386	7.50	8.20	
	21 1,3-Dichlorobenzene	146	3.943	3.943	0.000	94	411338	7.50	7.44	
*	22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	96	182535	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	89	430904	7.50	7.27	
	26 Benzyl alcohol	108	4.153	4.153	0.000	86	285956	7.50	7.48	
	27 1,2-Dichlorobenzene	146	4.165	4.165	0.000	93	422138	7.50	7.45	
	30 2,2'-oxybis[1-chloropropane]	45	4.276	4.276	0.000	92	1010117	7.50	7.37	
	29 2-Methylphenol	108	4.276	4.276	0.000	96	397340	7.50	7.07	
	31 N-Nitrosopyrrolidine	100	4.381	4.381	0.000	80	226305	7.50	7.38	
	32 Acetophenone	105	4.398	4.398	0.000	87	626373	7.50	7.44	
	33 N-Nitrosodi-n-propylamine	70	4.398	4.398	0.000	88	422541	7.50	7.39	
	35 N-Nitrosomorpholine	56	4.422	4.422	0.000	88	380465	7.50	8.15	
	34 4-Methylphenol	108	4.433	4.433	0.000	80	432993	7.50	7.32	
	36 2-Toluidine	106	4.433	4.433	0.000	84	644746	7.50	7.37	
	37 Hexachloroethane	117	4.486	4.486	0.000	97	175675	7.50	6.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.544	4.544	0.000	93	1054377	15.0	15.4	
40 Nitrobenzene	77	4.562	4.562	0.000	90	572177	7.50	7.31	
41 N-Nitrosopiperidine	114	4.708	4.708	0.000	79	203794	7.50	7.41	
42 Isophorone	82	4.795	4.795	0.000	98	1069537	7.50	7.72	
43 2-Nitrophenol	139	4.871	4.871	0.000	88	195862	7.50	7.70	
44 2,4-Dimethylphenol	107	4.936	4.936	0.000	98	375955	7.50	7.72	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	90	159604	7.50	7.42	
47 Bis(2-chloroethoxy)methane	93	5.017	5.017	0.000	90	600054	7.50	7.94	
49 2,4-Dichlorophenol	162	5.122	5.122	0.000	95	303404	7.50	7.98	
50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	92	350584	7.50	7.65	
* 52 Naphthalene-d8	136	5.227	5.227	0.000	99	669419	5.00	5.00	
53 Naphthalene	128	5.251	5.251	0.000	97	1061870	7.50	7.10	
55 Alpha-Terpineol	59	5.268	5.268	0.000	90	528762	7.50	7.82	
56 4-Chloroaniline	127	5.321	5.321	0.000	92	462475	7.50	7.82	
57 2,6-Dichlorophenol	162	5.327	5.327	0.000	86	327811	7.50	7.96	
58 Hexachloropropene	213	5.333	5.333	0.000	97	232467	7.50	7.75	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	96	199472	7.50	7.23	
61 Quinoline	129	5.578	5.578	0.000	93	722606	7.50	7.21	
62 Caprolactam	113	5.630	5.630	0.000	71	98785	7.50	7.70	
63 N-Nitrosodi-n-butylamine	84	5.642	5.642	0.000	93	428239	7.50	7.16	
64 p-Phenylene diamine	108	5.665	5.665	0.000	91	340802	7.50	7.54	
65 4-Chloro-3-methylphenol	107	5.811	5.811	0.000	94	373223	7.50	7.45	
66 Safrole, Total	162	5.846	5.846	0.000	79	263555	7.50	7.60	
67 2-Methylnaphthalene	142	5.916	5.916	0.000	91	689625	7.50	7.94	
69 1-Methylnaphthalene	142	6.010	6.010	0.000	90	626007	7.50	7.23	
71 Hexachlorocyclopentadiene	237	6.062	6.062	0.000	97	173266	7.50	7.41	
70 1,2,4,5-Tetrachlorobenzene	216	6.074	6.074	0.000	98	366492	7.50	7.32	
72 Isosafrole Peak 1	162	6.127	6.127	0.000	82	47457	1.20	1.10	
79 2,4,6-Trichlorophenol	196	6.203	6.203	0.000	95	235310	7.50	7.11	
80 2,4,5-Trichlorophenol	196	6.243	6.243	0.000	92	278472	7.50	7.29	
$ 81 2-Fluorobiphenyl (Surr)	172	6.273	6.273	0.000	99	1586438	15.0	15.3	
82 Isosafrole Peak 2	162	6.337	6.337	0.000	86	269544	6.30	5.96	
83 1,1'-Biphenyl	154	6.366	6.366	0.000	96	853074	7.50	7.22	
84 2-Chloronaphthalene	162	6.378	6.378	0.000	79	645075	7.50	6.71	
85 1-Chloronaphthalene	162	6.395	6.395	0.000	96	735727	7.50	7.30	
86 Phenyl ether	170	6.465	6.465	0.000	90	458594	7.50	7.25	
87 2-Nitroaniline	138	6.489	6.489	0.000	74	240103	7.50	7.49	
S 24 Dinitrotoluene	165				0			13.8	
88 1,4-Naphthoquinone	158	6.553	6.553	0.000	76	269284	7.50	7.35	
89 1,4-Dinitrobenzene	168	6.629	6.629	0.000	85	96392	7.50	6.59	
90 Dimethyl phthalate	163	6.670	6.670	0.000	95	876692	7.50	7.08	
91 1,3-Dinitrobenzene	168	6.699	6.699	0.000	77	115751	7.50	6.82	
92 2,6-Dinitrotoluene	165	6.722	6.722	0.000	81	175771	7.50	6.91	
93 Acenaphthylene	152	6.763	6.763	0.000	99	1131861	7.50	7.00	
95 3-Nitroaniline	138	6.880	6.880	0.000	84	213014	7.50	7.16	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	95	401296	5.00	5.00	
97 Acenaphthene	153	6.932	6.932	0.000	97	734012	7.50	7.43	
98 2,4-Dinitrophenol	184	6.985	6.985	0.000	75	249743	17.5	16.4	
99 Pentachlorobenzene	250	7.055	7.055	0.000	97	297670	7.50	6.87	
100 4-Nitrophenol	109	7.090	7.090	0.000	83	287570	15.0	13.9	
101 Dibenzofuran	168	7.096	7.096	0.000	95	991941	7.50	7.23	
102 2,4-Dinitrotoluene	165	7.102	7.102	0.000	87	246842	7.50	6.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.178	7.178	0.000	96	633379	7.50	6.87	
105 2,3,4,6-Tetrachlorophenol	232	7.184	7.184	0.000	76	168200	7.50	6.16	
106 2-Naphthylamine	143	7.254	7.254	0.000	93	691015	7.50	6.71	
107 Diethyl phthalate	149	7.335	7.335	0.000	96	838584	7.50	6.69	
109 Thionazin	107	7.411	7.411	0.000	72	143827	7.50	6.50	
108 Fluorene	166	7.417	7.417	0.000	92	751745	7.50	7.13	
110 4-Chlorophenyl phenyl ether	204	7.429	7.429	0.000	95	332065	7.50	6.65	
111 N-Nitro-o-toluidine	152	7.446	7.446	0.000	87	195269	7.50	6.10	
112 4-Nitroaniline	138	7.458	7.458	0.000	79	206284	7.50	7.10	
113 4,6-Dinitro-2-methylphenol	198	7.481	7.481	0.000	68	291311	15.0	14.7	
114 N-Nitrosodiphenylamine	169	7.546	7.546	0.000	68	537181	6.38	5.92	
115 1,2-Diphenylhydrazine	77	7.575	7.575	0.000	99	1213930	7.50	7.00	
$ 116 2,4,6-Tribromophenol	330	7.651	7.651	0.000	91	262148	15.0	13.6	
117 Sulfotepp	97	7.709	7.709	0.000	74	204530	7.50	6.83	
120 cis-Diallate	86	7.820	7.820	0.000	94	317850	5.55	5.17	
119 Phorate	75	7.826	7.826	0.000	93	1065862	7.50	7.85	
118 1,3,5-Trinitrobenzene	213	7.832	7.832	0.000	70	71294	7.50	7.54	
121 Phenacetin	108	7.855	7.855	0.000	90	517064	7.50	7.73	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	73	242932	7.50	7.22	
123 trans-Diallate	86	7.902	7.902	0.000	92	119966	1.95	1.99	
124 Hexachlorobenzene	284	7.931	7.931	0.000	93	269128	7.50	7.42	
125 Dimethoate	87	7.989	7.989	0.000	95	467019	7.50	7.54	
126 Atrazine	200	8.065	8.065	0.000	85	212006	7.50	7.56	
127 Pentachlorophenol	266	8.135	8.135	0.000	86	313990	15.0	14.5	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	83	134216	7.50	7.60	
129 4-Aminobiphenyl	169	8.135	8.135	0.000	91	938108	7.50	7.99	
130 Pronamide	173	8.205	8.205	0.000	89	410756	7.50	7.75	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	96	755856	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	91	170060	7.50	7.14	
134 Disulfoton	88	8.322	8.322	0.000	96	654541	7.50	7.18	
132 Phenanthrene	178	8.322	8.322	0.000	98	1174351	7.50	7.03	
135 Anthracene	178	8.369	8.369	0.000	99	1322389	7.50	7.78	
136 Carbazole	167	8.538	8.538	0.000	96	1157909	7.50	7.53	
137 Methyl parathion	109	8.678	8.678	0.000	89	355835	7.50	7.75	
138 Di-n-butyl phthalate	149	8.889	8.889	0.000	99	1606240	7.50	7.61	
139 Ethyl Parathion	109	9.052	9.052	0.000	81	205506	7.50	7.34	
140 4-Nitroquinoline-1-oxide	190	9.070	9.070	0.000	78	76615	7.50	7.61	
142 Octachlorostyrene	308	9.268	9.268	0.000	91	121882	7.50	7.60	
143 Isodrin	193	9.297	9.297	0.000	91	151715	7.50	6.80	
144 Fluoranthene	202	9.443	9.443	0.000	99	1264480	7.50	7.29	
145 Benzidine	184	9.595	9.595	0.000	99	2574597	22.5	23.2	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	97	819450	5.00	5.00	
S 68 Diallate	86				0		7.50	7.16	
147 Pyrene	202	9.653	9.653	0.000	96	1467332	7.50	7.46	
$ 148 p-Terphenyl-d14	244	9.823	9.823	0.000	97	1987085	15.0	14.9	
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	93	204253	7.50	7.66	
150 Chlorobenzilate	139	10.010	10.010	0.000	81	497065	7.50	7.55	
152 3,3'-Dimethylbenzidine	212	10.290	10.290	0.000	99	715187	7.50	7.43	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	95	709044	7.50	7.41	
155 2-Acetylaminofluorene	181	10.541	10.541	0.000	93	476080	7.50	6.60	
157 3,3'-Dichlorobenzidine	252	10.845	10.845	0.000	73	479971	7.50	7.41	
156 Benzo[a]anthracene	228	10.850	10.850	0.000	99	1263191	7.50	7.61	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158 4,4'-Methylene bis(2-chloroanil	231	10.850	10.850	0.000	93	252219	7.50	7.52	
159 Chrysene	228	10.885	10.885	0.000	97	1159860	7.50	7.02	
160 Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	95	968548	7.50	7.21	
S 94 Isosafrole	162				0		7.50	7.06	
161 6-Methylchrysene	242	11.405	11.405	0.000	98	786303	7.50	7.08	
162 Di-n-octyl phthalate	149	11.726	11.726	0.000	99	1585935	7.50	7.35	
163 7,12-Dimethylbenz(a)anthracene	256	12.118	12.118	0.000	88	454951	7.50	7.63	
164 Benzo[b]fluoranthene	252	12.123	12.123	0.000	98	1272584	7.50	7.89	
165 Benzo[k]fluoranthene	252	12.158	12.158	0.000	99	1164895	7.50	7.27	
166 Benzo[a]pyrene	252	12.544	12.544	0.000	80	1143944	7.50	7.28	
* 167 Perylene-d12	264	12.620	12.620	0.000	97	704539	5.00	5.00	
168 3-Methylcholanthrene	268	13.028	13.028	0.000	92	507776	7.50	6.99	
169 Dibenz[a,h]acridine	279	13.770	13.770	0.000	92	891218	7.50	7.36	
170 Dibenz[a,j]acridine	279	13.840	13.840	0.000	95	1012234	7.50	7.42	
171 Indeno[1,2,3-cd]pyrene	276	14.068	14.068	0.000	96	1064004	7.50	6.94	
172 Dibenz(a,h)anthracene	278	14.109	14.109	0.000	96	1105646	7.50	7.06	
173 Benzo[g,h,i]perylene	276	14.424	14.424	0.000	95	1197957	7.50	7.16	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_5_00039 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 12:54:52 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3104.D

Injection Date: 31-Oct-2023 15:45:30 Instrument ID: HP23264 Operator ID: mem41592

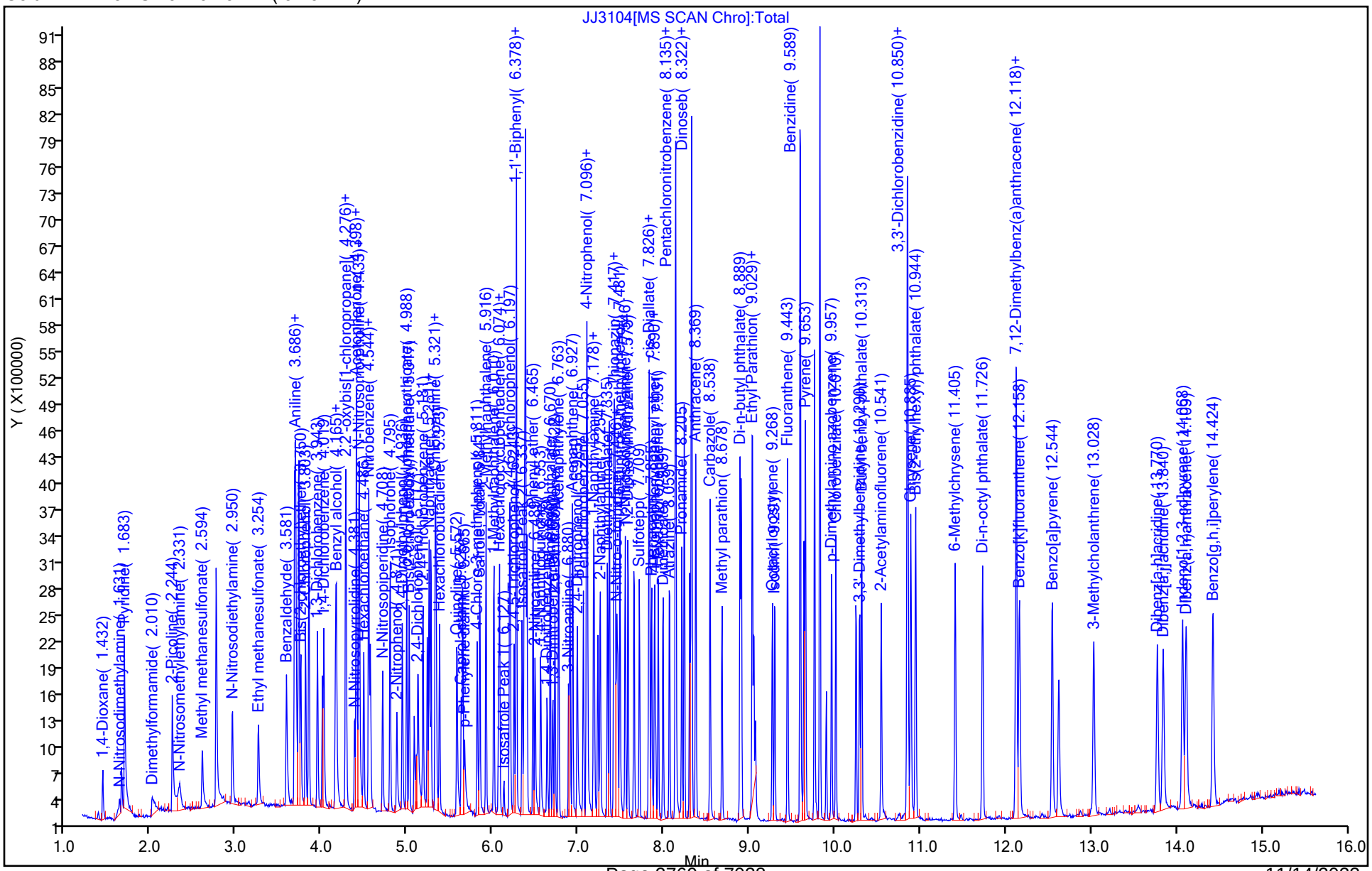
Lims ID: IC L5 Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 5

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

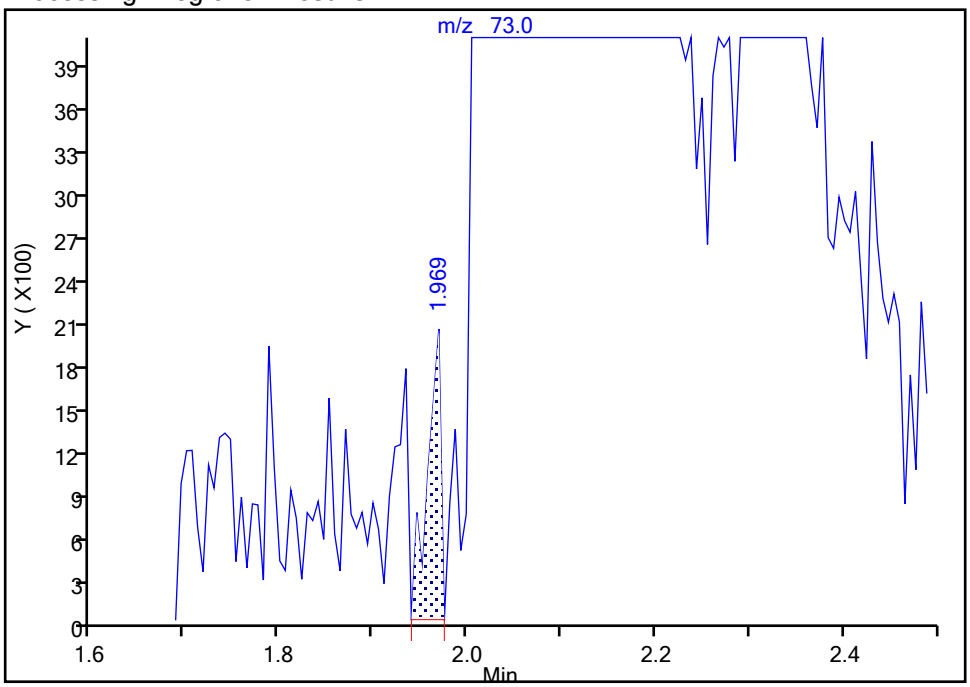
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3104.D				
Injection Date:	31-Oct-2023 15:45:30	Instrument ID:	HP23264		
Lims ID:	IC L5				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

4 Dimethylformamide, CAS: 68-12-2

Signal: 1

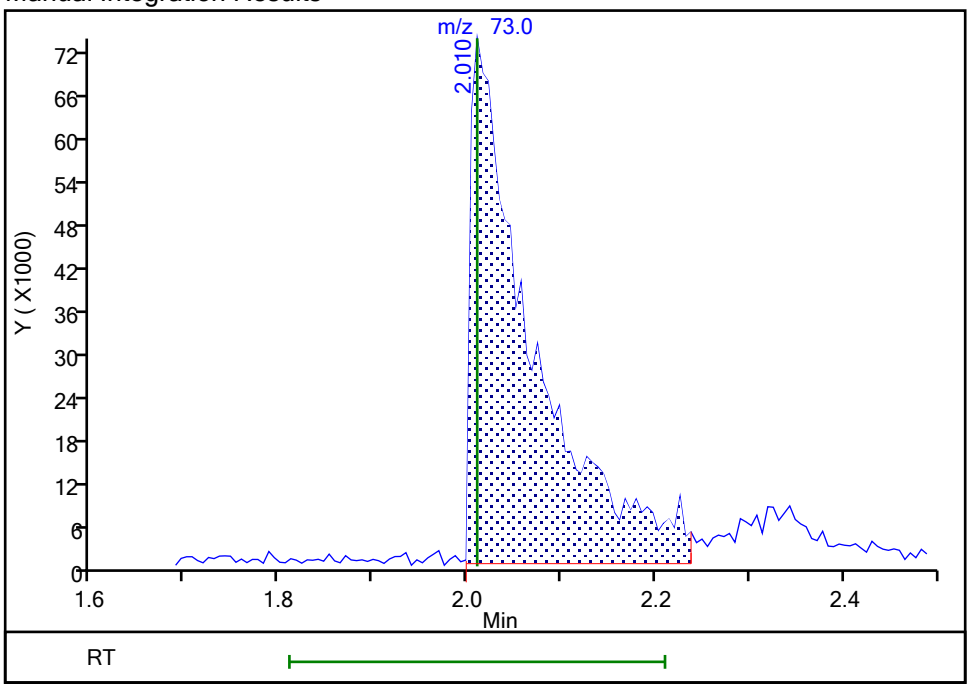
Processing Integration Results

RT: 1.97
Area: 2007
Amount: 0.065665
Amount Units: ug/ml



Manual Integration Results

RT: 2.01
Area: 333722
Amount: 7.156498
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:38:42 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3105.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 31-Oct-2023 16:06:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L4
Misc. Info.: 410-0098173-006
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 12:55:08 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

First Level Reviewer: GLQ9 Date: 31-Oct-2023 20:43:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.432	1.432	0.000	97	88405	3.75	3.71	
2 N-Nitrosodimethylamine	74	1.660	1.648	0.012	96	144431	3.75	3.65	
3 Pyridine	79	1.689	1.683	0.006	87	457500	7.50	7.50	
4 Dimethylformamide	73	2.051	2.010	0.041	95	153862	3.75	3.29	M
5 2-Picoline	93	2.250	2.244	0.006	93	201774	3.75	3.38	
6 N-Nitrosomethylethylamine	88	2.337	2.331	0.006	93	117220	3.75	3.19	
7 Methyl methanesulfonate	80	2.600	2.594	0.006	88	144182	3.75	3.78	
$ 9 2-Fluorophenol	112	2.763	2.758	0.005	96	353088	7.50	7.23	
11 N-Nitrosodiethylamine	102	2.950	2.950	0.000	88	94920	3.75	3.51	
12 Ethyl methanesulfonate	109	3.260	3.254	0.006	92	106033	3.75	3.57	
13 Benzaldehyde	77	3.587	3.581	0.006	88	210474	3.75	4.16	
$ 15 Phenol-d5	99	3.680	3.674	0.006	95	571601	7.50	8.08	
17 Aniline	93	3.692	3.686	0.006	72	338147	3.75	3.83	
16 Phenol	94	3.692	3.692	0.000	74	339940	3.75	3.71	
18 Bis(2-chloroethyl)ether	93	3.750	3.750	0.000	88	250457	3.75	4.16	
19 2-Chlorophenol	128	3.809	3.803	0.006	92	188955	3.75	3.83	
21 1,3-Dichlorobenzene	146	3.943	3.943	0.000	93	215654	3.75	3.89	
* 22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	96	183214	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	88	213104	3.75	3.58	
26 Benzyl alcohol	108	4.159	4.153	0.006	84	133453	3.75	3.48	
27 1,2-Dichlorobenzene	146	4.165	4.165	0.000	92	216021	3.75	3.80	
30 2,2'-oxybis[1-chloropropane]	45	4.276	4.276	0.000	90	524886	3.75	3.82	
29 2-Methylphenol	108	4.276	4.276	0.000	93	196183	3.75	3.48	
31 N-Nitrosopyrrolidine	100	4.381	4.381	0.000	80	116177	3.75	3.77	
32 Acetophenone	105	4.398	4.398	0.000	90	309230	3.75	3.66	
33 N-Nitrosodi-n-propylamine	70	4.398	4.398	0.000	90	214513	3.75	3.74	
35 N-Nitrosomorpholine	56	4.422	4.422	0.000	89	181119	3.75	3.86	
34 4-Methylphenol	108	4.439	4.433	0.006	77	205529	3.75	3.56	
36 2-Toluidine	106	4.433	4.433	0.000	94	318213	3.75	3.62	
37 Hexachloroethane	117	4.486	4.486	0.000	95	93779	3.75	3.71	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.544	4.544	0.000	91	529900	7.50	7.09	
40 Nitrobenzene	77	4.568	4.562	0.006	90	292681	3.75	3.50	
41 N-Nitrosopiperidine	114	4.708	4.708	0.000	77	93672	3.75	3.12	
42 Isophorone	82	4.795	4.795	0.000	98	521424	3.75	3.45	
43 2-Nitrophenol	139	4.877	4.871	0.006	92	92341	3.75	3.33	
44 2,4-Dimethylphenol	107	4.941	4.936	0.005	97	171782	3.75	3.23	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	92	83120	3.75	3.54	
47 Bis(2-chloroethoxy)methane	93	5.017	5.017	0.000	88	306087	3.75	3.71	
49 2,4-Dichlorophenol	162	5.128	5.122	0.006	94	155279	3.75	3.74	
50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	92	181231	3.75	3.62	
* 52 Naphthalene-d8	136	5.227	5.227	0.000	99	730894	5.00	5.00	
53 Naphthalene	128	5.251	5.251	0.000	97	589079	3.75	3.61	
55 Alpha-Terpineol	59	5.274	5.268	0.006	89	266498	3.75	3.61	
56 4-Chloroaniline	127	5.327	5.321	0.006	75	219764	3.75	3.40	
57 2,6-Dichlorophenol	162	5.327	5.327	0.000	84	158136	3.75	3.52	
58 Hexachloropropene	213	5.333	5.333	0.000	93	122728	3.75	3.75	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	95	105923	3.75	3.51	
61 Quinoline	129	5.578	5.578	0.000	94	380369	3.75	3.48	
62 Caprolactam	113	5.630	5.630	0.000	71	49728	3.75	3.55	
63 N-Nitrosodi-n-butylamine	84	5.642	5.642	0.000	89	218570	3.75	3.35	
64 p-Phenylene diamine	108	5.677	5.665	0.012	93	162359	3.75	3.29	M
65 4-Chloro-3-methylphenol	107	5.817	5.811	0.006	93	178013	3.75	3.25	
66 Safrole, Total	162	5.846	5.846	0.000	76	128179	3.75	3.39	
67 2-Methylnaphthalene	142	5.916	5.916	0.000	90	347543	3.75	3.66	
69 1-Methylnaphthalene	142	6.010	6.010	0.000	92	342122	3.75	3.62	
71 Hexachlorocyclopentadiene	237	6.062	6.062	0.000	90	81110	3.75	3.97	
70 1,2,4,5-Tetrachlorobenzene	216	6.074	6.074	0.000	97	189775	3.75	4.34	
72 Isosafrole Peak 1	162	6.127	6.127	0.000	84	25823	0.6000	0.6844	
79 2,4,6-Trichlorophenol	196	6.203	6.203	0.000	94	106697	3.75	3.76	
80 2,4,5-Trichlorophenol	196	6.249	6.243	0.006	92	124462	3.75	3.83	
$ 81 2-Fluorobiphenyl (Surr)	172	6.273	6.273	0.000	99	719023	7.50	7.92	
82 Isosafrole Peak 2	162	6.343	6.337	0.006	86	126253	3.15	3.20	
83 1,1'-Biphenyl	154	6.366	6.366	0.000	98	404500	3.75	3.92	
84 2-Chloronaphthalene	162	6.378	6.378	0.000	83	383714	3.75	4.57	M
85 1-Chloronaphthalene	162	6.395	6.395	0.000	96	291678	3.75	3.31	M
86 Phenyl ether	170	6.471	6.465	0.006	92	237440	3.75	4.30	
87 2-Nitroaniline	138	6.495	6.489	0.005	73	110882	3.75	3.96	
S 24 Dinitrotoluene	165				0			7.73	
88 1,4-Naphthoquinone	158	6.559	6.553	0.006	76	122157	3.75	3.82	
89 1,4-Dinitrobenzene	168	6.635	6.629	0.006	82	50563	3.75	3.96	
90 Dimethyl phthalate	163	6.670	6.670	0.000	96	437082	3.75	4.04	
91 1,3-Dinitrobenzene	168	6.699	6.699	0.000	80	58987	3.75	3.98	
92 2,6-Dinitrotoluene	165	6.722	6.722	0.000	80	86700	3.75	3.90	
93 Acenaphthylene	152	6.763	6.763	0.000	99	552290	3.75	3.91	
95 3-Nitroaniline	138	6.892	6.880	0.012	84	101089	3.75	3.89	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	95	350428	5.00	5.00	
97 Acenaphthene	153	6.927	6.932	-0.005	98	346610	3.75	4.02	
98 2,4-Dinitrophenol	184	6.985	6.985	0.000	75	127026	11.3	10.3	
99 Pentachlorobenzene	250	7.055	7.055	0.000	97	152561	3.75	4.03	
100 4-Nitrophenol	109	7.096	7.090	0.006	79	125230	7.50	6.95	
101 Dibenzofuran	168	7.096	7.096	0.000	95	490510	3.75	4.09	
102 2,4-Dinitrotoluene	165	7.108	7.102	0.006	83	119445	3.75	3.82	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.178	7.178	0.000	97	331437	3.75	4.12	
105 2,3,4,6-Tetrachlorophenol	232	7.184	7.184	0.000	73	94848	3.75	3.97	
106 2-Naphthylamine	143	7.254	7.254	0.000	95	379545	3.75	4.22	
107 Diethyl phthalate	149	7.335	7.335	0.000	96	450960	3.75	4.12	
109 Thionazin	107	7.411	7.411	0.000	73	69512	3.75	3.60	
108 Fluorene	166	7.417	7.417	0.000	91	358008	3.75	3.89	
110 4-Chlorophenyl phenyl ether	204	7.429	7.429	0.000	94	177542	3.75	4.07	
111 N-Nitro-o-toluidine	152	7.446	7.446	0.000	89	119563	3.75	4.28	
112 4-Nitroaniline	138	7.458	7.458	0.000	80	82959	3.75	3.36	
113 4,6-Dinitro-2-methylphenol	198	7.487	7.481	0.006	66	128226	7.50	6.48	
114 N-Nitrosodiphenylamine	169	7.546	7.546	0.000	69	264741	3.19	2.93	
115 1,2-Diphenylhydrazine	77	7.575	7.575	0.000	98	595857	3.75	3.45	
$ 116 2,4,6-Tribromophenol	330	7.651	7.651	0.000	93	140391	7.50	8.32	
117 Sulfotepp	97	7.709	7.709	0.000	75	106796	3.75	3.58	
120 cis-Diallate	86	7.820	7.820	0.000	96	171682	2.78	2.81	
119 Phorate	75	7.826	7.826	0.000	93	514872	3.75	3.81	
118 1,3,5-Trinitrobenzene	213	7.832	7.832	0.000	76	28166	3.75	2.99	
121 Phenacetin	108	7.855	7.855	0.000	89	236901	3.75	3.55	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	73	114451	3.75	3.42	
123 trans-Diallate	86	7.902	7.902	0.000	92	58699	0.9750	0.9749	
124 Hexachlorobenzene	284	7.931	7.931	0.000	93	129410	3.75	3.58	
125 Dimethoate	87	7.989	7.989	0.000	95	231207	3.75	3.74	
126 Atrazine	200	8.065	8.065	0.000	80	102015	3.75	3.65	
127 Pentachlorophenol	266	8.135	8.135	0.000	76	138745	7.50	6.84	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	68	68180	3.75	3.87	
129 4-Aminobiphenyl	169	8.141	8.135	0.006	91	488933	3.75	4.18	
130 Pronamide	173	8.205	8.205	0.000	89	203982	3.75	3.86	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	96	753070	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	88	78212	3.75	3.29	
134 Disulfoton	88	8.322	8.322	0.000	95	329371	3.75	3.62	a
132 Phenanthrene	178	8.322	8.322	0.000	97	606815	3.75	3.64	
135 Anthracene	178	8.369	8.369	0.000	98	635613	3.75	3.75	
136 Carbazole	167	8.538	8.538	0.000	96	552607	3.75	3.61	
137 Methyl parathion	109	8.678	8.678	0.000	88	156842	3.75	3.43	
138 Di-n-butyl phthalate	149	8.889	8.889	0.000	99	726164	3.75	3.45	
139 Ethyl Parathion	109	9.046	9.052	-0.006	78	97955	3.75	3.51	
140 4-Nitroquinoline-1-oxide	190	9.070	9.070	0.000	76	28930	3.75	3.43	
142 Octachlorostyrene	308	9.268	9.268	0.000	89	57892	3.75	3.62	
143 Isodrin	193	9.291	9.297	-0.006	91	74573	3.75	3.35	
144 Fluoranthene	202	9.443	9.443	0.000	99	653160	3.75	3.78	
145 Benzidine	184	9.595	9.595	0.000	99	1279471	11.3	12.5	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	96	754176	5.00	5.00	
S 68 Diallate	86				0		3.75	3.78	
147 Pyrene	202	9.653	9.653	0.000	96	707158	3.75	3.91	
$ 148 p-Terphenyl-d14	244	9.823	9.823	0.000	97	987199	7.50	8.03	
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	93	82367	3.75	3.36	
150 Chlorobenzilate	139	10.010	10.010	0.000	81	244063	3.75	4.03	
152 3,3'-Dimethylbenzidine	212	10.290	10.290	0.000	98	329179	3.75	3.72	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	95	337558	3.75	3.84	
155 2-Acetylaminofluorene	181	10.541	10.541	0.000	93	218746	3.75	3.29	
157 3,3'-Dichlorobenzidine	252	10.845	10.845	0.000	76	237503	3.75	3.98	
156 Benzo[a]anthracene	228	10.850	10.850	0.000	98	578717	3.75	3.79	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158	4,4'-Methylene bis(2-chloroanil	231	10.850	10.850	0.000	91	122506	3.75	3.97	
159	Chrysene	228	10.885	10.885	0.000	98	612704	3.75	4.03	
160	Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	95	481826	3.75	3.90	
S 94	Isosafrole	162				0		3.75	3.88	
161	6-Methylchrysene	242	11.405	11.405	0.000	97	380812	3.75	3.73	
162	Di-n-octyl phthalate	149	11.726	11.726	0.000	99	730502	3.75	3.67	
163	7,12-Dimethylbenz(a)anthracene	256	12.118	12.118	0.000	88	212066	3.75	3.85	
164	Benzo[b]fluoranthene	252	12.123	12.123	0.000	97	619844	3.75	4.16	
165	Benzo[k]fluoranthene	252	12.158	12.158	0.000	98	552002	3.75	3.73	
166	Benzo[a]pyrene	252	12.544	12.544	0.000	80	580116	3.75	3.99	
* 167	Perylene-d12	264	12.614	12.620	-0.006	97	650805	5.00	5.00	
168	3-Methylcholanthrene	268	13.028	13.028	0.000	94	243988	3.75	3.64	
169	Dibenz[a,h]acridine	279	13.770	13.770	0.000	92	452541	3.75	4.04	
170	Dibenz[a,j]acridine	279	13.840	13.840	0.000	95	468547	3.75	3.72	
171	Indeno[1,2,3-cd]pyrene	276	14.068	14.068	0.000	97	557823	3.75	3.94	
172	Dibenz(a,h)anthracene	278	14.109	14.109	0.000	95	556307	3.75	3.84	
173	Benzo[g,h,i]perylene	276	14.424	14.424	0.000	95	601663	3.75	3.89	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_4_00030 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 12:55:09 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3105.D

Injection Date: 31-Oct-2023 16:06:30 Instrument ID: HP23264 Operator ID: mem41592

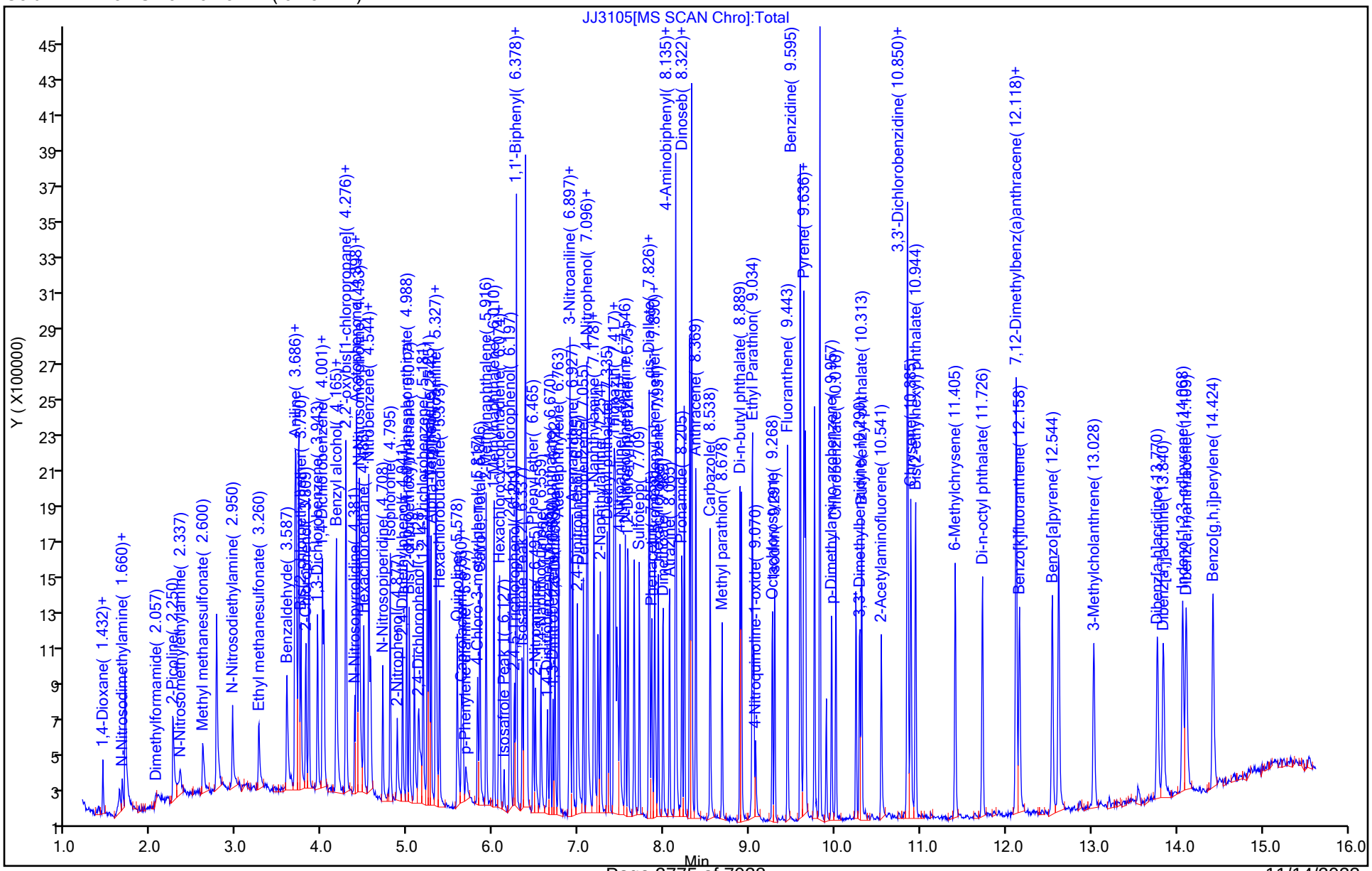
Lims ID: IC L4 Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 6

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

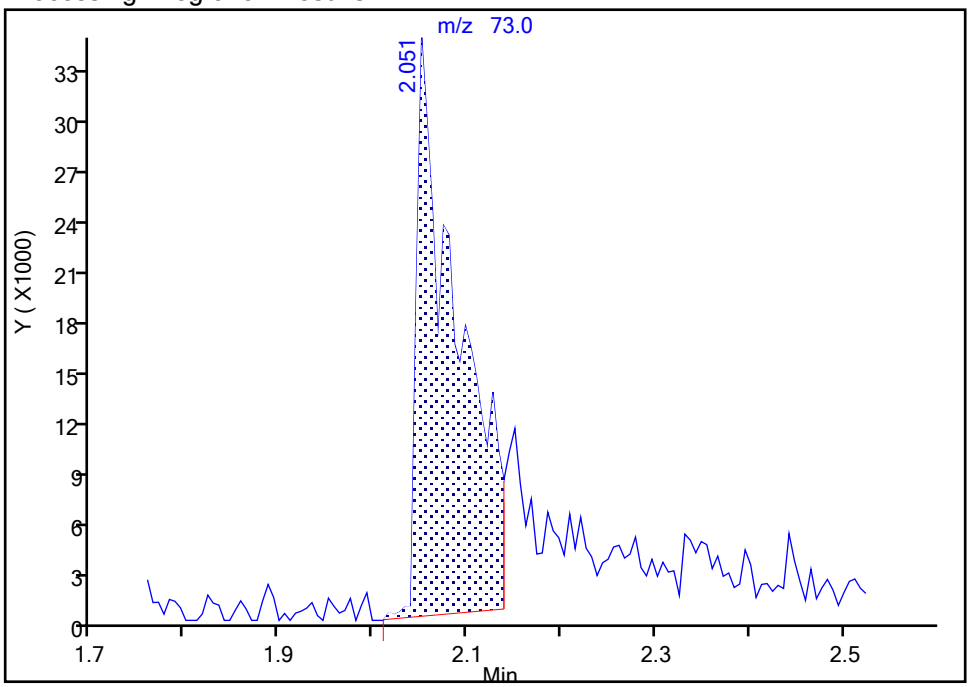
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3105.D				
Injection Date:	31-Oct-2023 16:06:30	Instrument ID:	HP23264		
Lims ID:	IC L4				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

4 Dimethylformamide, CAS: 68-12-2

Signal: 1

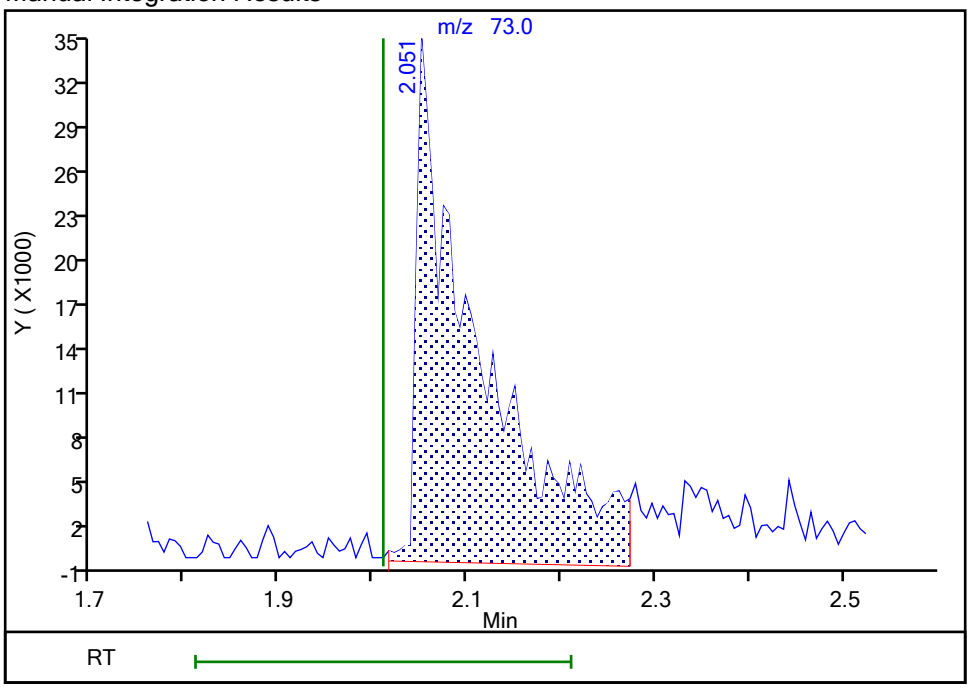
Processing Integration Results

RT: 2.05
Area: 102888
Amount: 2.840081
Amount Units: ug/ml



Manual Integration Results

RT: 2.05
Area: 153862
Amount: 3.287264
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:40:47 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

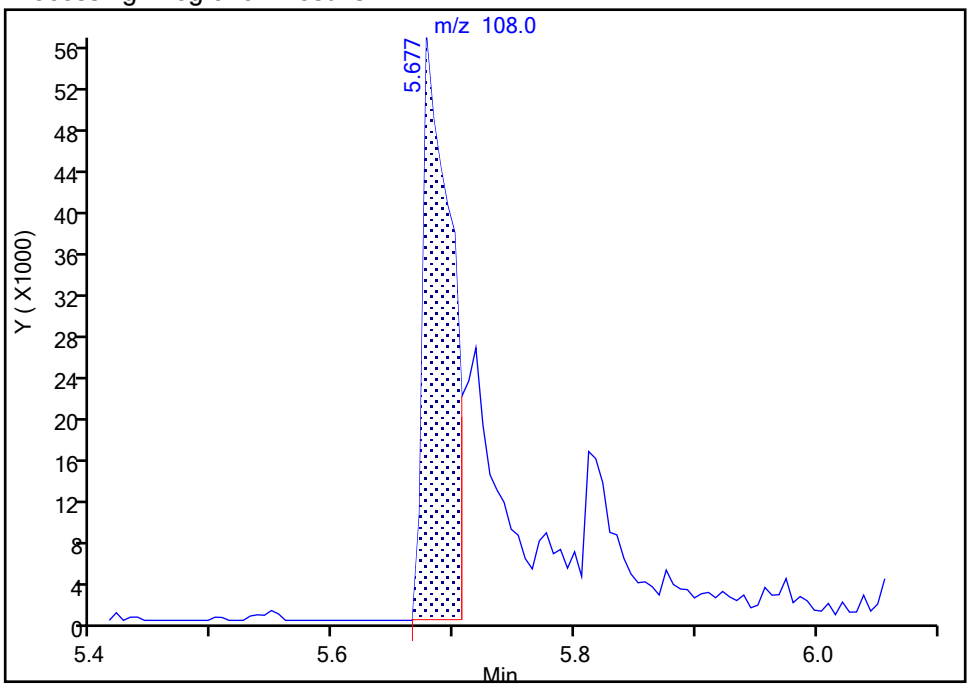
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3105.D				
Injection Date:	31-Oct-2023 16:06:30	Instrument ID:	HP23264		
Lims ID:	IC L4				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

64 p-Phenylene diamine, CAS: 106-50-3

Signal: 1

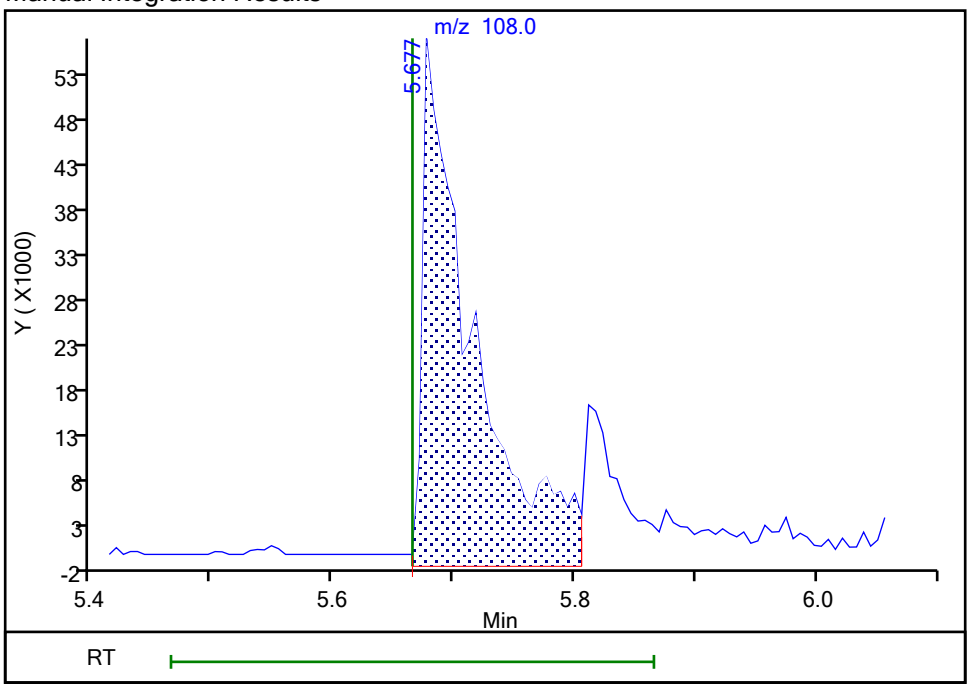
Processing Integration Results

RT: 5.68
Area: 86529
Amount: 2.749378
Amount Units: ug/ml



Manual Integration Results

RT: 5.68
Area: 162359
Amount: 3.290701
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:41:27 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

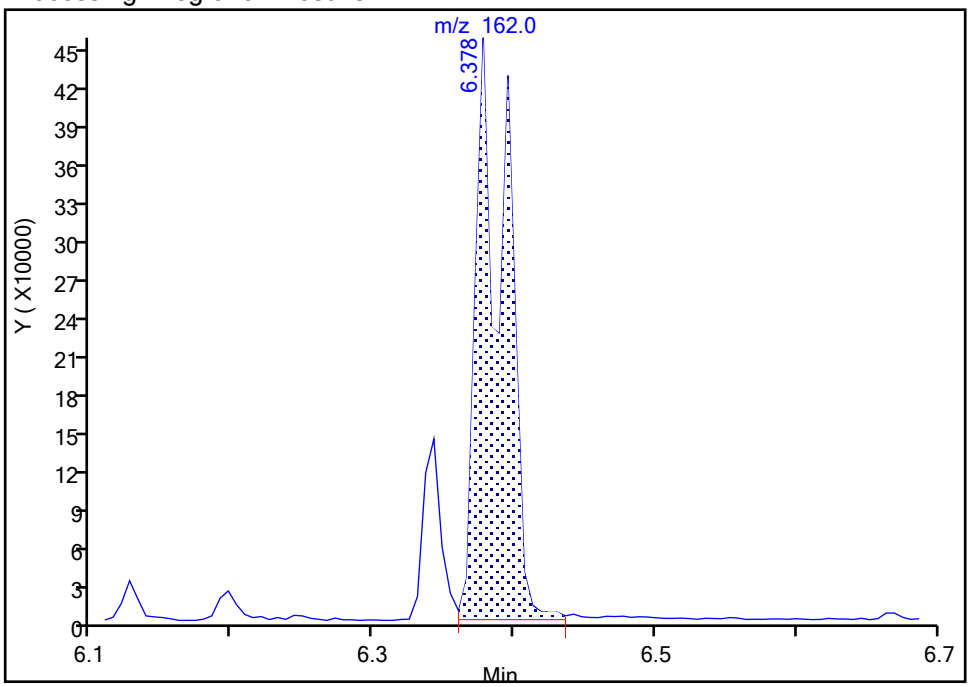
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3105.D				
Injection Date:	31-Oct-2023 16:06:30	Instrument ID:	HP23264		
Lims ID:	IC L4				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

84 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

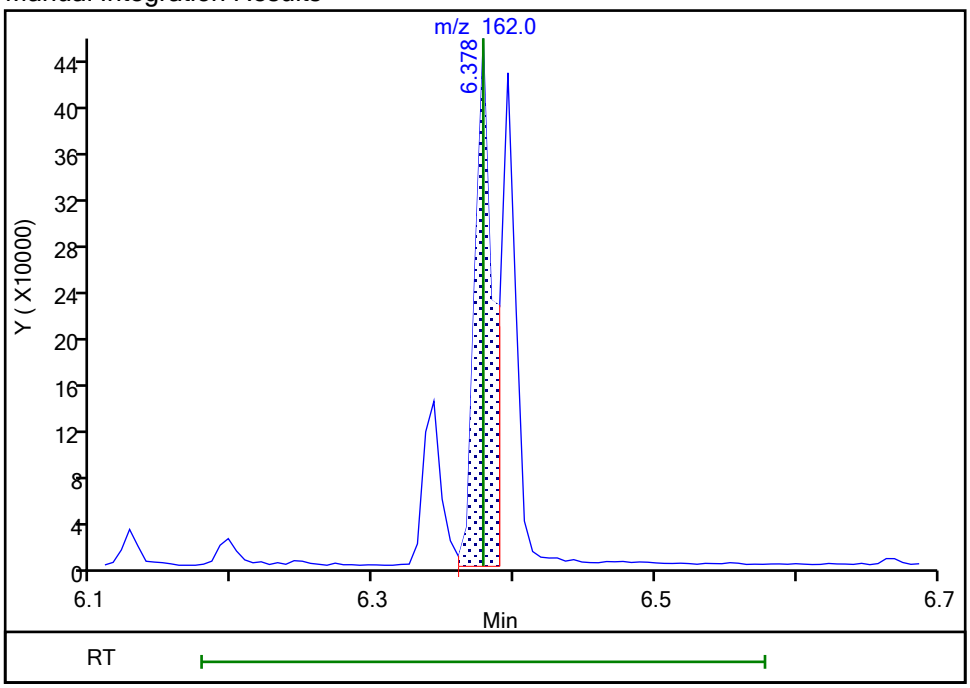
Processing Integration Results

RT: 6.38
Area: 675393
Amount: 5.235834
Amount Units: ug/ml



Manual Integration Results

RT: 6.38
Area: 383714
Amount: 4.571441
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:41:42 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

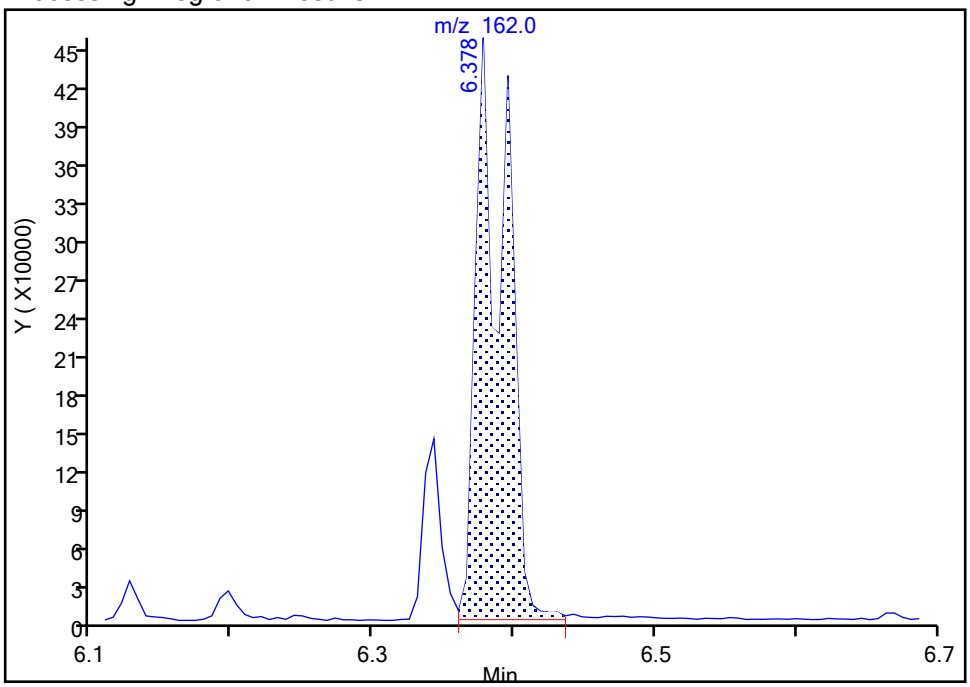
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3105.D				
Injection Date:	31-Oct-2023 16:06:30	Instrument ID:	HP23264		
Lims ID:	IC L4				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

85 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

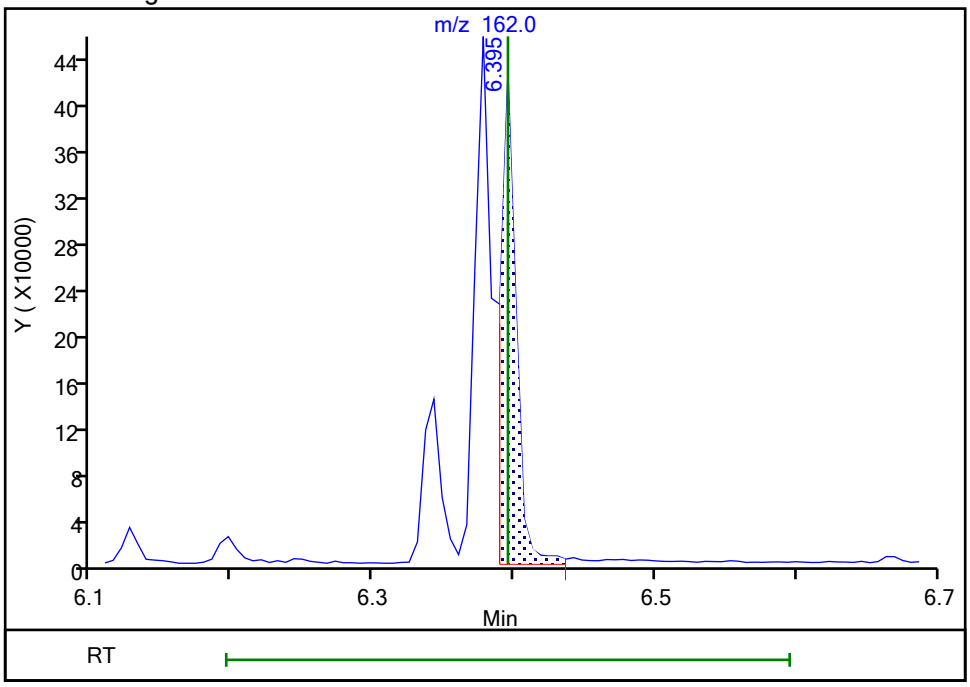
Processing Integration Results

RT: 6.38
Area: 675393
Amount: 5.143479
Amount Units: ug/ml



Manual Integration Results

RT: 6.40
Area: 291678
Amount: 3.314075
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:41:48 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

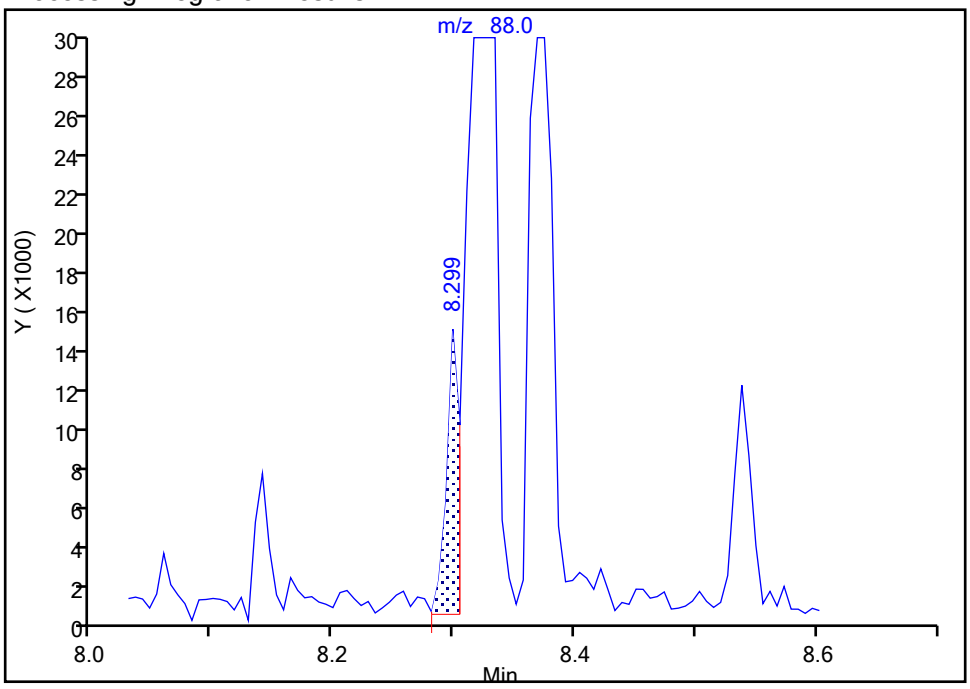
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3105.D				
Injection Date:	31-Oct-2023 16:06:30	Instrument ID:	HP23264		
Lims ID:	IC L4				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

134 Disulfoton, CAS: 298-04-4

Signal: 1

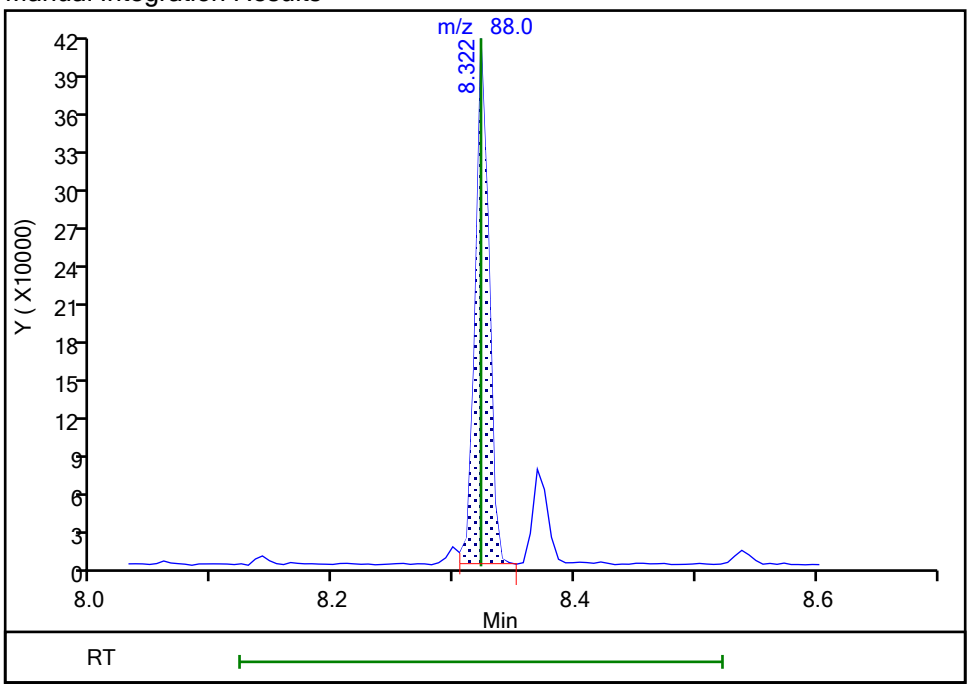
Processing Integration Results

RT: 8.30
Area: 9357
Amount: 0.138087
Amount Units: ug/ml



Manual Integration Results

RT: 8.32
Area: 329371
Amount: 3.624637
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:42:35 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3106.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 31-Oct-2023 16:27:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 410-0098173-007
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 12:55:24 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

First Level Reviewer: GLQ9 Date: 31-Oct-2023 20:46:26

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.432	1.432	0.000	93	33072	1.25	1.55	
	2 N-Nitrosodimethylamine	74	1.683	1.648	0.035	80	34524	1.25	0.9750	
	3 Pyridine	79	1.712	1.683	0.029	91	144052	2.50	2.63	
	4 Dimethylformamide	73	2.156	2.010	0.146	53	26840	1.25	0.6401	
	5 2-Picoline	93	2.279	2.244	0.035	81	52854	1.25	0.9890	
	6 N-Nitrosomethylethylamine	88	2.360	2.331	0.029	28	62797	1.25	1.43	M
	7 Methyl methanesulfonate	80	2.623	2.594	0.029	78	35734	1.25	1.16	
$	9 2-Fluorophenol	112	2.781	2.758	0.023	95	79060	2.50	1.81	
	11 N-Nitrosodiethylamine	102	2.962	2.950	0.012	89	29315	1.25	1.31	
	12 Ethyl methanesulfonate	109	3.271	3.254	0.017	70	21662	1.25	0.9806	
	13 Benzaldehyde	77	3.604	3.581	0.023	86	50580	1.25	1.12	
$	15 Phenol-d5	99	3.692	3.674	0.018	93	127191	2.50	2.01	
	17 Aniline	93	3.698	3.686	0.012	72	86134	1.25	1.09	
	16 Phenol	94	3.703	3.692	0.011	71	95662	1.25	1.17	
	18 Bis(2-chloroethyl)ether	93	3.756	3.750	0.006	87	66051	1.25	1.22	
	19 2-Chlorophenol	128	3.814	3.803	0.011	87	56491	1.25	1.28	
	21 1,3-Dichlorobenzene	146	3.949	3.943	0.006	95	66573	1.25	1.34	
*	22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	97	164129	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.025	4.019	0.006	88	64552	1.25	1.21	
	26 Benzyl alcohol	108	4.188	4.153	0.035	85	41919	1.25	1.22	
	27 1,2-Dichlorobenzene	146	4.171	4.165	0.006	92	72964	1.25	1.43	
	30 2,2'-oxybis[1-chloropropane]	45	4.282	4.276	0.006	88	160844	1.25	1.31	
	29 2-Methylphenol	108	4.282	4.276	0.006	77	62066	1.25	1.23	
	31 N-Nitrosopyrrolidine	100	4.387	4.381	0.006	66	33957	1.25	1.23	
	32 Acetophenone	105	4.404	4.398	0.006	82	99045	1.25	1.31	
	33 N-Nitrosodi-n-propylamine	70	4.404	4.398	0.006	87	72865	1.25	1.42	
	35 N-Nitrosomorpholine	56	4.427	4.422	0.005	56	58996	1.25	1.40	
	34 4-Methylphenol	108	4.457	4.433	0.024	60	66308	1.25	1.40	Ma
	36 2-Toluidine	106	4.433	4.433	0.000	93	109216	1.25	1.39	
	37 Hexachloroethane	117	4.486	4.486	0.000	91	29540	1.25	1.31	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.550	4.544	0.006	93	166405	2.50	2.48	
40 Nitrobenzene	77	4.573	4.562	0.011	91	99999	1.25	1.43	
41 N-Nitrosopiperidine	114	4.714	4.708	0.006	80	33525	1.25	1.24	
42 Isophorone	82	4.795	4.795	0.000	97	167205	1.25	1.23	
43 2-Nitrophenol	139	4.895	4.871	0.024	82	27732	1.25	1.11	
44 2,4-Dimethylphenol	107	4.947	4.936	0.011	91	54775	1.25	1.15	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	93	27880	1.25	1.32	
47 Bis(2-chloroethoxy)methane	93	5.023	5.017	0.006	86	95898	1.25	1.30	
49 2,4-Dichlorophenol	162	5.146	5.122	0.024	91	38213	1.25	1.03	
50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	91	56254	1.25	1.25	
* 52 Naphthalene-d8	136	5.233	5.227	0.006	98	655341	5.00	5.00	
53 Naphthalene	128	5.251	5.251	0.000	96	177118	1.25	1.21	
55 Alpha-Terpineol	59	5.274	5.268	0.006	90	77108	1.25	1.16	
56 4-Chloroaniline	127	5.344	5.321	0.023	53	58323	1.25	1.01	
57 2,6-Dichlorophenol	162	5.338	5.327	0.011	85	50890	1.25	1.26	
58 Hexachloropropene	213	5.333	5.333	0.000	93	37716	1.25	1.28	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	92	34269	1.25	1.27	
61 Quinoline	129	5.589	5.578	0.011	95	125382	1.25	1.28	
62 Caprolactam	113	5.642	5.630	0.012	42	10898	1.25	0.8672	
63 N-Nitrosodi-n-butylamine	84	5.648	5.642	0.006	88	79405	1.25	1.36	
64 p-Phenylene diamine	108	5.730	5.665	0.065	65	20905	1.25	0.4726	
65 4-Chloro-3-methylphenol	107	5.829	5.811	0.018	63	57235	1.25	1.17	
66 Safrole, Total	162	5.846	5.846	0.000	81	41317	1.25	1.22	
67 2-Methylnaphthalene	142	5.916	5.916	0.000	89	107597	1.25	1.26	
69 1-Methylnaphthalene	142	6.010	6.010	0.000	91	97372	1.25	1.15	
71 Hexachlorocyclopentadiene	237	6.062	6.062	0.000	90	20306	1.25	0.9662	
70 1,2,4,5-Tetrachlorobenzene	216	6.080	6.074	0.006	97	52297	1.25	1.16	
72 Isosafrole Peak 1	162	6.132	6.127	0.005	53	8250	0.2000	0.2125	
79 2,4,6-Trichlorophenol	196	6.208	6.203	0.005	90	34147	1.25	1.28	
80 2,4,5-Trichlorophenol	196	6.261	6.243	0.018	87	41037	1.25	1.36	
$ 81 2-Fluorobiphenyl (Surr)	172	6.273	6.273	0.000	98	233971	2.50	2.51	
82 Isosafrole Peak 2	162	6.343	6.337	0.006	79	40321	1.05	0.99	
83 1,1'-Biphenyl	154	6.366	6.366	0.000	96	144829	1.25	1.36	
84 2-Chloronaphthalene	162	6.378	6.378	0.000	91	117709	1.25	1.36	M
85 1-Chloronaphthalene	162	6.395	6.395	0.000	95	108147	1.25	1.19	M
86 Phenyl ether	170	6.471	6.465	0.006	90	75493	1.25	1.33	
87 2-Nitroaniline	138	6.500	6.489	0.011	73	33056	1.25	1.15	
S 24 Dinitrotoluene	165				0			2.41	
88 1,4-Naphthoquinone	158	6.565	6.553	0.012	78	41462	1.25	1.26	
89 1,4-Dinitrobenzene	168	6.640	6.629	0.011	82	13439	1.25	1.02	
90 Dimethyl phthalate	163	6.670	6.670	0.000	96	142329	1.25	1.28	
91 1,3-Dinitrobenzene	168	6.711	6.699	0.012	73	15545	1.25	1.02	
92 2,6-Dinitrotoluene	165	6.728	6.722	0.006	76	27975	1.25	1.22	
93 Acenaphthylene	152	6.769	6.763	0.006	99	181353	1.25	1.25	
95 3-Nitroaniline	138	6.903	6.880	0.023	35	28183	1.25	1.06	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	94	360506	5.00	5.00	
97 Acenaphthene	153	6.932	6.932	0.000	96	122197	1.25	1.38	
98 2,4-Dinitrophenol	184	6.997	6.985	0.012	71	44733	5.00	4.64	
99 Pentachlorobenzene	250	7.055	7.055	0.000	95	53715	1.25	1.38	
100 4-Nitrophenol	109	7.113	7.090	0.023	73	60700	3.75	3.28	
101 Dibenzofuran	168	7.096	7.096	0.000	98	174915	1.25	1.42	
102 2,4-Dinitrotoluene	165	7.113	7.102	0.011	70	38215	1.25	1.19	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.178	7.178	0.000	97	117509	1.25	1.42	
105 2,3,4,6-Tetrachlorophenol	232	7.189	7.184	0.005	70	31737	1.25	1.29	
106 2-Naphthylamine	143	7.259	7.254	0.005	93	115179	1.25	1.24	
107 Diethyl phthalate	149	7.335	7.335	0.000	95	151867	1.25	1.35	
109 Thionazin	107	7.411	7.411	0.000	77	26725	1.25	1.35	
108 Fluorene	166	7.423	7.417	0.006	91	125345	1.25	1.32	
110 4-Chlorophenyl phenyl ether	204	7.435	7.429	0.006	93	60990	1.25	1.36	
111 N-Nitro-o-toluidine	152	7.452	7.446	0.006	84	31330	1.25	1.09	
112 4-Nitroaniline	138	7.470	7.458	0.012	74	25523	1.25	1.12	
113 4,6-Dinitro-2-methylphenol	198	7.487	7.481	0.006	71	61724	3.75	3.09	
114 N-Nitrosodiphenylamine	169	7.546	7.546	0.000	66	93913	1.06	1.03	
115 1,2-Diphenylhydrazine	77	7.581	7.575	0.006	99	212360	1.25	1.22	
$ 116 2,4,6-Tribromophenol	330	7.651	7.651	0.000	92	46595	2.50	2.69	
117 Sulfotepp	97	7.709	7.709	0.000	74	39905	1.25	1.33	
120 cis-Diallate	86	7.820	7.820	0.000	95	57781	0.9250	0.9355	
119 Phorate	75	7.826	7.826	0.000	93	163450	1.25	1.20	
118 1,3,5-Trinitrobenzene	213	7.837	7.832	0.005	70	10635	1.25	1.12	
121 Phenacetin	108	7.861	7.855	0.006	89	68058	1.25	1.01	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	72	40793	1.25	1.21	
123 trans-Diallate	86	7.902	7.902	0.000	50	33603	0.3250	0.5530	
124 Hexachlorobenzene	284	7.931	7.931	0.000	93	51905	1.25	1.42	
125 Dimethoate	87	7.989	7.989	0.000	93	69991	1.25	1.12	
126 Atrazine	200	8.065	8.065	0.000	81	33566	1.25	1.19	
127 Pentachlorophenol	266	8.135	8.135	0.000	77	35721	2.50	2.28	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	76	20935	1.25	1.18	
129 4-Aminobiphenyl	169	8.141	8.135	0.006	91	144794	1.25	1.23	
130 Pronamide	173	8.211	8.205	0.006	90	63020	1.25	1.18	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	96	760043	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	87	24179	1.25	1.01	
134 Disulfoton	88	8.322	8.322	0.000	75	123305	1.25	1.34	a
132 Phenanthrene	178	8.322	8.322	0.000	93	237863	1.25	1.42	
135 Anthracene	178	8.375	8.369	0.006	98	216380	1.25	1.27	
136 Carbazole	167	8.544	8.538	0.006	96	201832	1.25	1.31	
137 Methyl parathion	109	8.678	8.678	0.000	87	45029	1.25	0.9749	
138 Di-n-butyl phthalate	149	8.889	8.889	-0.001	99	252080	1.25	1.19	
139 Ethyl Parathion	109	9.052	9.052	0.000	77	29895	1.25	1.06	
140 4-Nitroquinoline-1-oxide	190	9.081	9.070	0.011	72	7424	1.25	1.28	
142 Octachlorostyrene	308	9.268	9.268	0.000	87	18894	1.25	1.17	
143 Isodrin	193	9.297	9.297	0.000	91	32447	1.25	1.45	
144 Fluoranthene	202	9.449	9.443	0.006	99	210944	1.25	1.21	
145 Benzidine	184	9.595	9.595	0.000	99	381819	3.75	3.50	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	96	806805	5.00	5.00	
S 68 Diallate	86				0		1.25	1.49	
147 Pyrene	202	9.653	9.653	0.000	96	233407	1.25	1.21	
$ 148 p-Terphenyl-d14	244	9.823	9.823	0.000	97	329511	2.50	2.51	
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	90	30059	1.25	1.15	
150 Chlorobenzilate	139	10.010	10.010	0.000	84	75747	1.25	1.17	
152 3,3'-Dimethylbenzidine	212	10.290	10.290	0.000	97	107478	1.25	1.13	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	94	104254	1.25	1.11	
155 2-Acetylaminofluorene	181	10.547	10.541	0.006	93	65869	1.25	0.9268	
157 3,3'-Dichlorobenzidine	252	10.845	10.845	0.000	73	74301	1.25	1.16	
156 Benzo[a]anthracene	228	10.850	10.850	0.000	97	193427	1.25	1.18	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158	4,4'-Methylene bis(2-chloroanil	231	10.856	10.850	0.006	64	35318	1.25	1.07	
159	Chrysene	228	10.891	10.885	0.006	95	203504	1.25	1.25	
160	Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	95	150361	1.25	1.14	
S 94	Isosafrole	162				0		1.25	1.21	
161	6-Methylchrysene	242	11.411	11.405	0.006	98	120875	1.25	1.11	
162	Di-n-octyl phthalate	149	11.726	11.726	0.000	99	221942	1.25	1.08	
163	7,12-Dimethylbenz(a)anthracene	256	12.117	12.118	-0.001	81	65265	1.25	1.14	
164	Benzo[b]fluoranthene	252	12.123	12.123	0.000	98	198703	1.25	1.29	
165	Benzo[k]fluoranthene	252	12.164	12.158	0.006	97	195769	1.25	1.28	
166	Benzo[a]pyrene	252	12.544	12.544	0.000	81	186707	1.25	1.24	
* 167	Perylene-d12	264	12.620	12.620	0.000	96	674434	5.00	5.00	
168	3-Methylcholanthrene	268	13.034	13.028	0.006	94	77467	1.25	1.11	
169	Dibenz[a,h]acridine	279	13.776	13.770	0.006	91	131756	1.25	1.14	
170	Dibenz[a,j]acridine	279	13.846	13.840	0.006	95	150914	1.25	1.15	
171	Indeno[1,2,3-cd]pyrene	276	14.074	14.068	0.006	96	171478	1.25	1.17	
172	Dibenz(a,h)anthracene	278	14.114	14.109	0.005	90	182393	1.25	1.22	
173	Benzo[g,h,i]perylene	276	14.430	14.424	0.006	95	209483	1.25	1.31	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_3_00030 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 12:55:26 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3106.D

Injection Date: 31-Oct-2023 16:27:30 Instrument ID: HP23264 Operator ID: mem41592

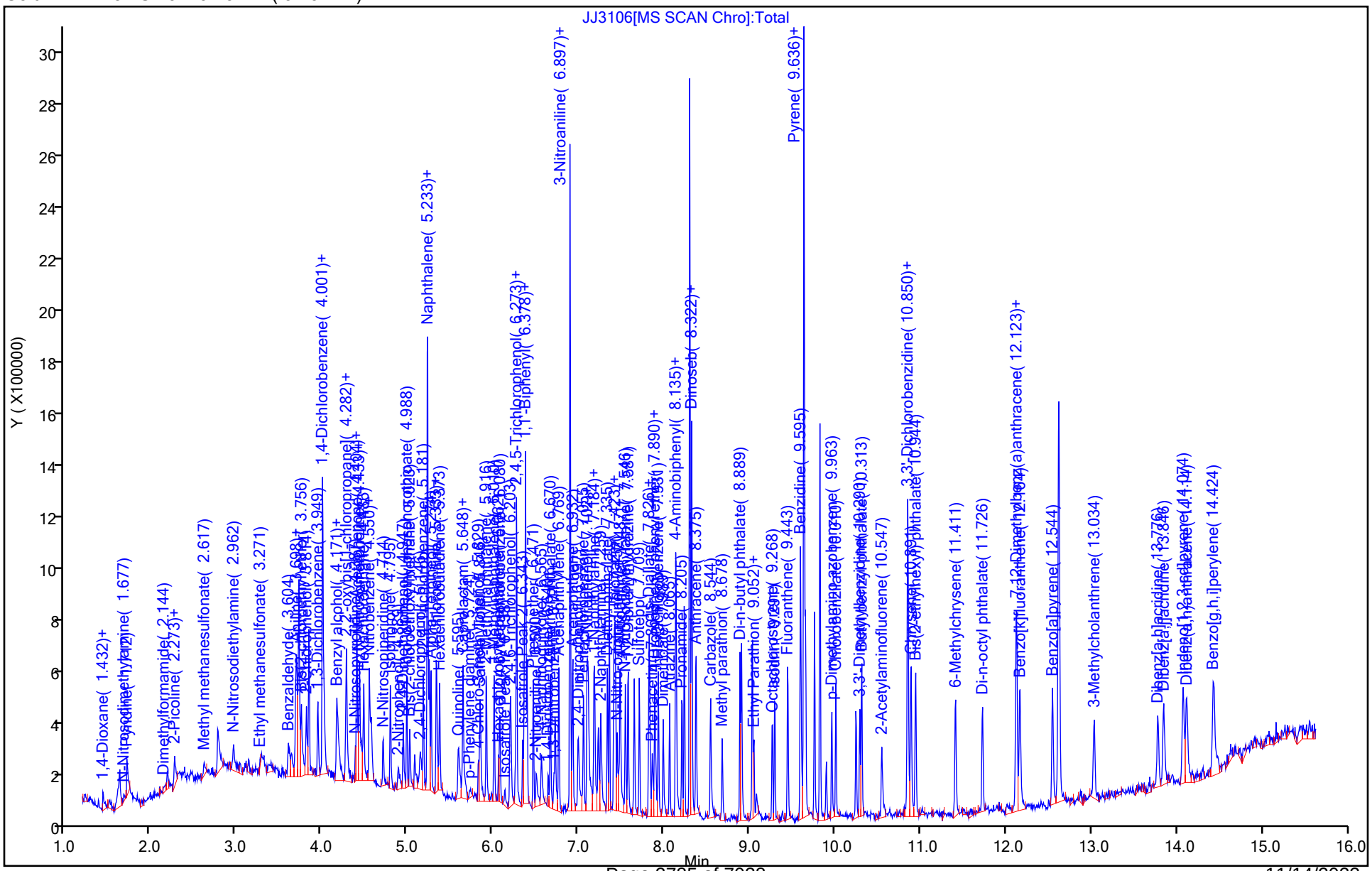
Lims ID: IC L3 Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 7

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

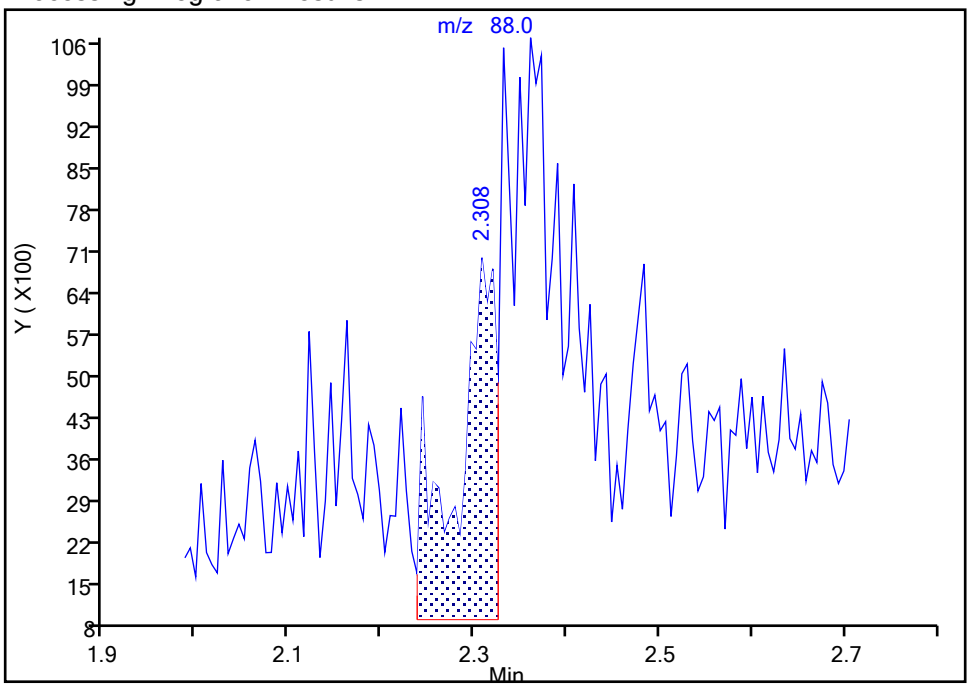
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3106.D				
Injection Date:	31-Oct-2023 16:27:30	Instrument ID:	HP23264		
Lims ID:	IC L3				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

6 N-Nitrosomethylethylamine, CAS: 10595-95-6

Signal: 1

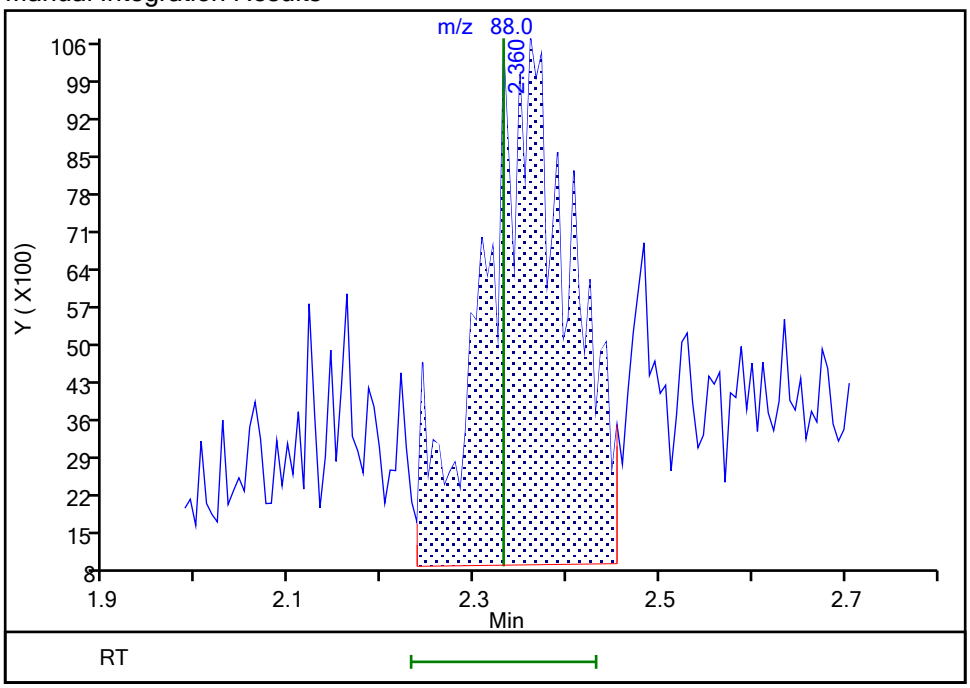
Processing Integration Results

RT: 2.31
Area: 16772
Amount: 0.982661
Amount Units: ug/ml



Manual Integration Results

RT: 2.36
Area: 62797
Amount: 1.434342
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:13:04 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

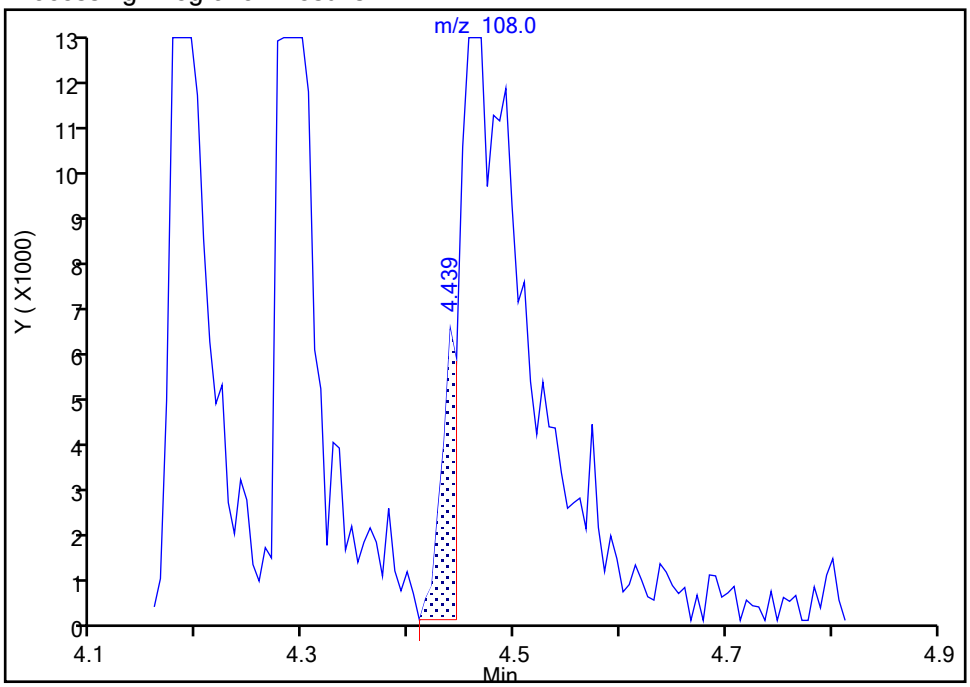
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3106.D				
Injection Date:	31-Oct-2023 16:27:30	Instrument ID:	HP23264		
Lims ID:	IC L3				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

34 4-Methylphenol, CAS: 106-44-5

Signal: 1

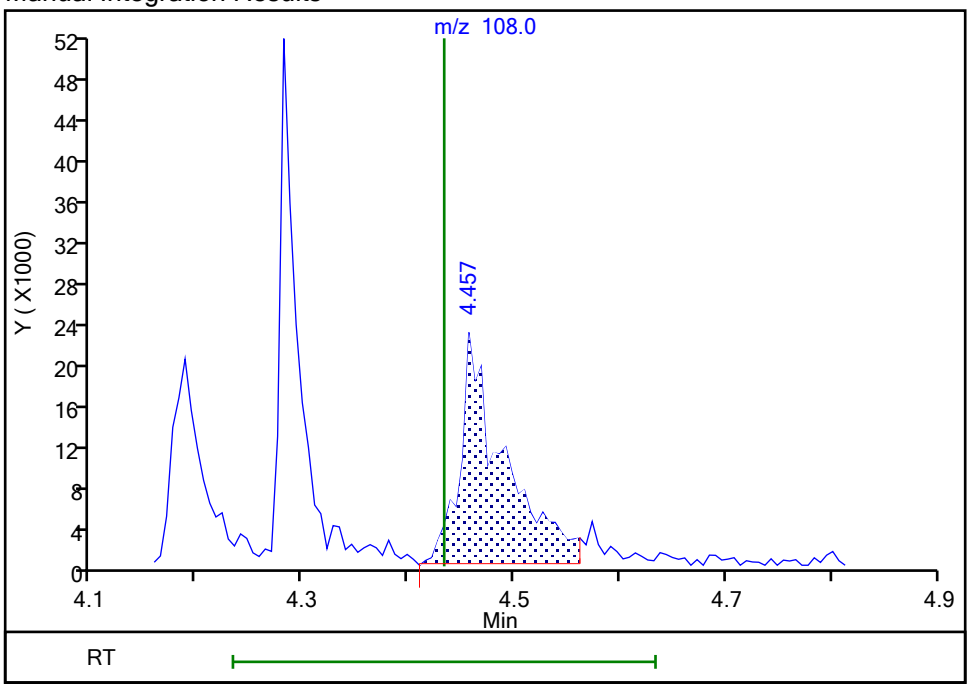
Processing Integration Results

RT: 4.44
Area: 5909
Amount: 0.172894
Amount Units: ug/ml



Manual Integration Results

RT: 4.46
Area: 66308
Amount: 1.399176
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:44:20 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

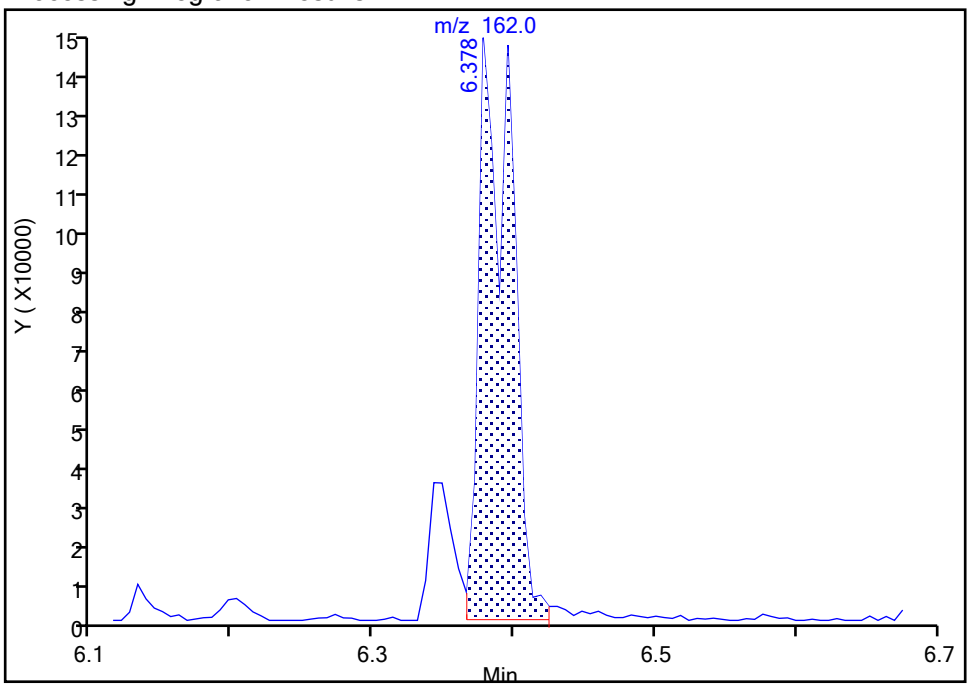
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3106.D				
Injection Date:	31-Oct-2023 16:27:30	Instrument ID:	HP23264		
Lims ID:	IC L3				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

84 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

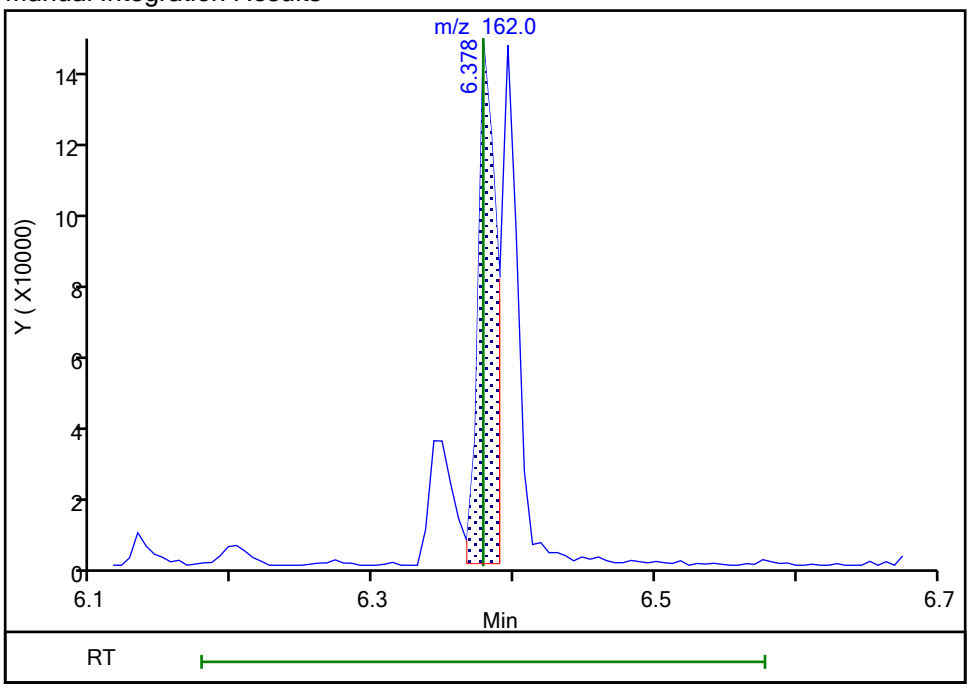
Processing Integration Results

RT: 6.38
Area: 225858
Amount: 1.840705
Amount Units: ug/ml



Manual Integration Results

RT: 6.38
Area: 117709
Amount: 1.363143
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:45:49 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

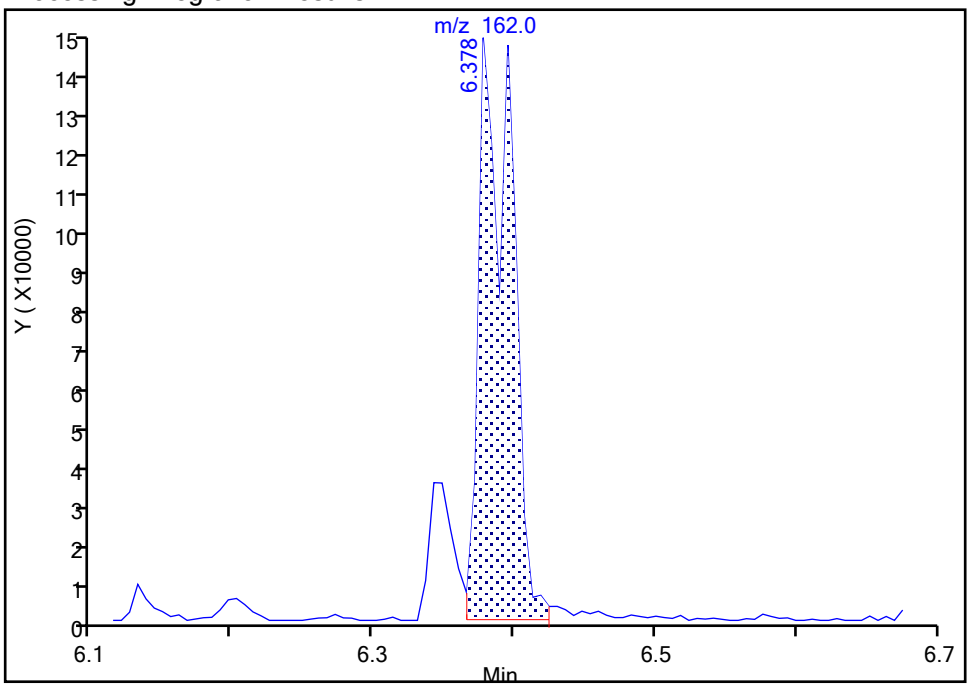
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3106.D				
Injection Date:	31-Oct-2023 16:27:30	Instrument ID:	HP23264		
Lims ID:	IC L3				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

85 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

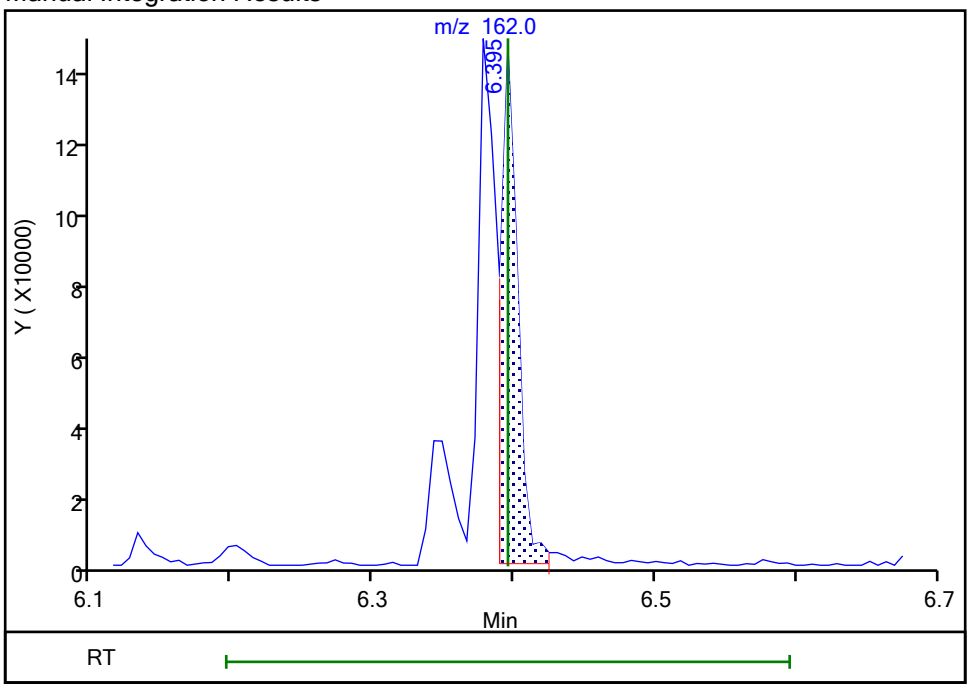
Processing Integration Results

RT: 6.38
Area: 225858
Amount: 1.852380
Amount Units: ug/ml



Manual Integration Results

RT: 6.40
Area: 108147
Amount: 1.194426
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:45:44 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

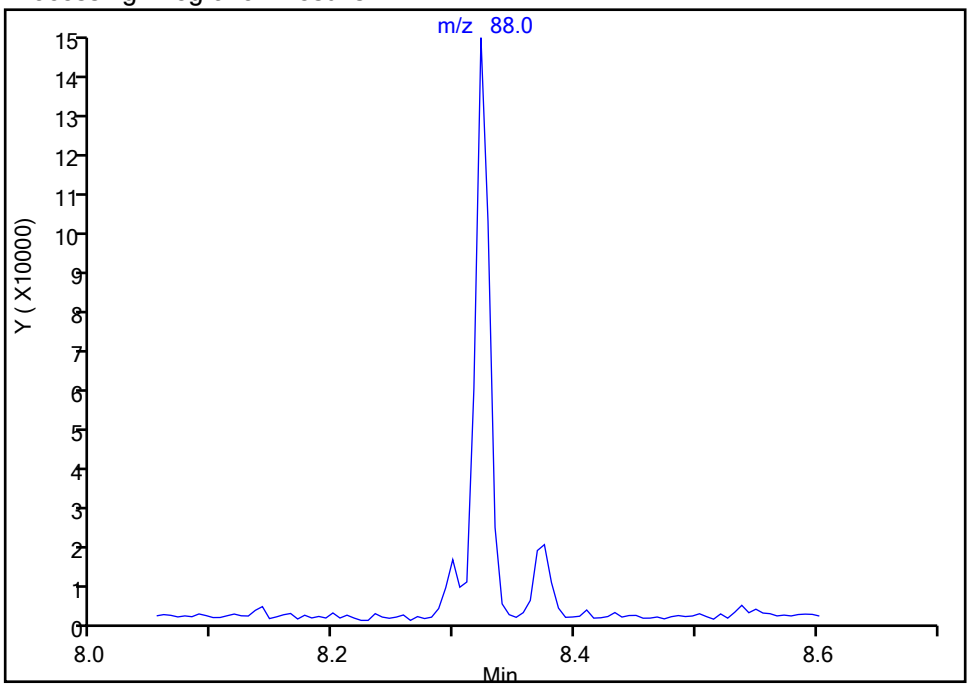
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3106.D				
Injection Date:	31-Oct-2023 16:27:30	Instrument ID:	HP23264		
Lims ID:	IC L3				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

134 Disulfoton, CAS: 298-04-4

Signal: 1

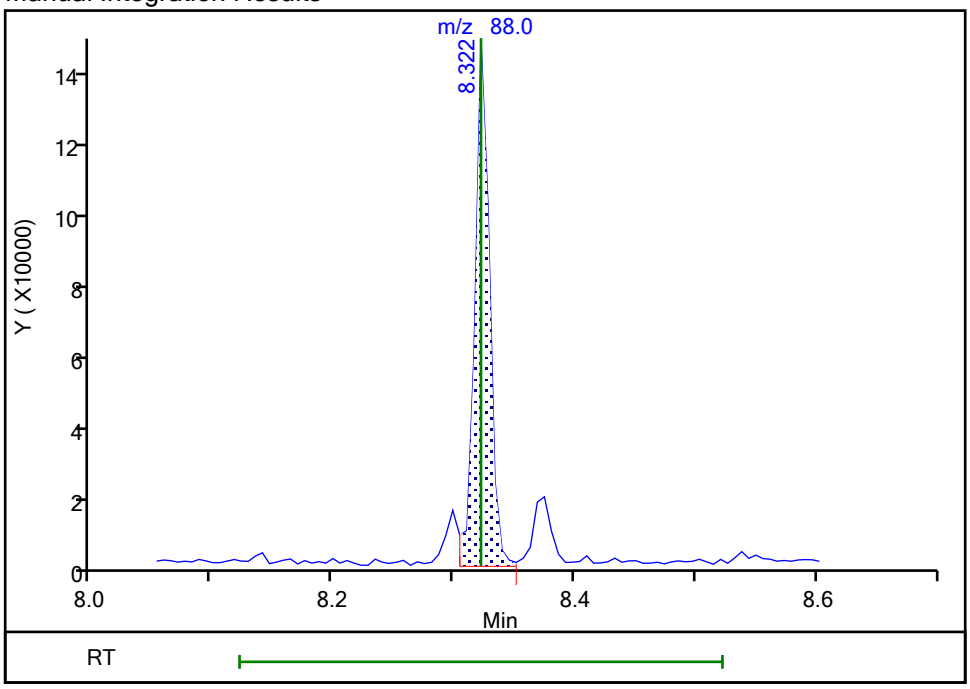
Not Detected
Expected RT: 8.32

Processing Integration Results



Manual Integration Results

RT: 8.32
Area: 123305
Amount: 1.344488
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:46:09 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 31-Oct-2023 16:49:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 410-0098173-008
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 13:01:41 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

First Level Reviewer: SJ89 Date: 02-Nov-2023 13:01:41

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.444	1.432	0.012	64	14102	0.2500	0.6523	
	2 N-Nitrosodimethylamine	74	1.613	1.648	-0.035	21	1285	0.2500	0.0358	
	3 Pyridine	79	1.806	1.677	0.129	47	21352	0.5000	0.3853	
	4 Dimethylformamide	73	1.923	2.010	-0.088	1	3629	0.2500	0.0854	
	5 2-Picoline	93	2.279	2.238	0.041	1	625	0.2500	0.0115	
	6 N-Nitrosomethylethylamine	88	2.320	2.331	-0.011	1	9808	0.2500	-0.7758	
	7 Methyl methanesulfonate	80	2.658	2.594	0.064	1	3333	0.2500	0.2531	
$	9 2-Fluorophenol	112	2.863	2.758	0.105	9	10648	0.5000	0.2400	M
	11 N-Nitrosodiethylamine	102	2.979	2.944	0.035	1	2405	0.2500	0.2484	
	12 Ethyl methanesulfonate	109	3.341	3.248	0.093	30	2962	0.2500	0.3177	
	13 Benzaldehyde	77	3.587	3.581	0.006	1	1110	0.2500	0.0241	
$	15 Phenol-d5	99	3.721	3.674	0.047	70	20742	0.5000	0.3229	M
	17 Aniline	93		3.686				ND	ND	MU
	16 Phenol	94	3.733	3.692	0.041	57	24282	0.2500	0.2921	M
	18 Bis(2-chloroethyl)ether	93	3.744	3.750	-0.006	45	10293	0.2500	0.1881	
	19 2-Chlorophenol	128	3.849	3.803	0.046	58	6954	0.2500	0.1551	
	21 1,3-Dichlorobenzene	146	3.954	3.943	0.011	62	11585	0.2500	0.2299	
*	22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	97	166373	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	34	14508	0.2500	0.2684	a
	26 Benzyl alcohol	108	4.229	4.153	0.076	1	4065	0.2500	0.1167	a
	27 1,2-Dichlorobenzene	146	4.182	4.165	0.017	91	13303	0.2500	0.2574	a
	30 2,2'-oxybis[1-chloropropane]	45	4.287	4.276	0.011	42	26411	0.2500	0.2115	
	29 2-Methylphenol	108	4.322	4.276	0.046	9	15577	0.2500	0.3040	Ma
	31 N-Nitrosopyrrolidine	100	4.416	4.375	0.041	34	4857	0.2500	0.1738	
	32 Acetophenone	105	4.445	4.398	0.047	36	17073	0.2500	0.2226	M
	33 N-Nitrosodi-n-propylamine	70	4.416	4.398	0.018	61	11725	0.2500	0.2251	
	35 N-Nitrosomorpholine	56	4.445	4.422	0.023	38	8415	0.2500	0.1977	M
	34 4-Methylphenol	108	4.468	4.428	0.040	5	3371	0.2500	0.2452	M
	36 2-Toluidine	106	4.451	4.433	0.018	40	19601	0.2500	0.2457	M
	37 Hexachloroethane	117	4.486	4.486	0.000	77	6347	0.2500	0.2767	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 39 Nitrobenzene-d5	82	4.573	4.544	0.029	88	25062	0.5000	0.4005	
40 Nitrobenzene	77	4.544	4.562	-0.018	2	6788	0.2500	0.2442	
41 N-Nitrosopiperidine	114	4.725	4.708	0.017	49	6945	0.2500	0.2759	
42 Isophorone	82	4.801	4.795	0.006	60	32142	0.2500	0.2538	
43 2-Nitrophenol	139	4.865	4.871	-0.006	1	496	0.2500	0.0213	
44 2,4-Dimethylphenol	107	4.959	4.936	0.023	1	450	0.2500	0.0101	
46 o,o',o''-Triethylphosphorothioat	198	4.994	4.988	0.006	82	5475	0.2500	0.2782	
47 Bis(2-chloroethoxy)methane	93	5.058	5.017	0.041	65	11018	0.2500	0.1594	
49 2,4-Dichlorophenol	162	5.210	5.117	0.093	43	5596	0.2500	0.1610	
50 1,2,4-Trichlorobenzene	180	5.187	5.181	0.006	85	11052	0.2500	0.2635	
* 52 Naphthalene-d8	136	5.233	5.227	0.006	98	612265	5.00	5.00	
53 Naphthalene	128	5.257	5.251	0.006	37	33433	0.2500	0.2443	
55 Alpha-Terpineol	59	5.274	5.268	0.006	31	13853	0.2500	0.2240	
56 4-Chloroaniline	127	5.315	5.321	-0.006	47	246	0.2500	0.004548	
57 2,6-Dichlorophenol	162	5.356	5.321	0.035	50	7982	0.2500	0.2118	
58 Hexachloropropene	213	5.338	5.333	0.005	90	6378	0.2500	0.2325	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	88	6925	0.2500	0.2743	
61 Quinoline	129	5.636	5.572	0.064	70	11861	0.2500	0.1294	
62 Caprolactam	113	5.677	5.630	0.047	1	2090	0.2500	0.1780	Ma
63 N-Nitrosodi-n-butylamine	84	5.659	5.642	0.017	65	13968	0.2500	0.2552	
64 p-Phenylene diamine	108	5.741	5.677	0.064	1	642	0.2500	0.0155	
65 4-Chloro-3-methylphenol	107	5.911	5.811	0.100	54	2683	0.2500	0.0586	
66 Safrole, Total	162	5.928	5.846	0.082	52	1043	0.2500	0.0329	
67 2-Methylnaphthalene	142	5.934	5.916	0.018	91	21259	0.2500	0.2674	
69 1-Methylnaphthalene	142	6.016	6.010	0.006	57	21045	0.2500	0.2659	
71 Hexachlorocyclopentadiene	237	6.068	6.062	0.006	49	2645	0.2500	0.1265	
70 1,2,4,5-Tetrachlorobenzene	216	6.092	6.074	0.018	91	10347	0.2500	0.2314	
72 Isosafrole Peak 1	162	6.150	6.127	0.023	1	1467	0.0400	0.0380	a
79 2,4,6-Trichlorophenol	196	6.226	6.197	0.029	2	2917	0.2500	0.2490	
80 2,4,5-Trichlorophenol	196	6.354	6.243	0.111	38	1835	0.2500	0.2457	
$ 81 2-Fluorobiphenyl (Surr)	172	6.278	6.273	0.005	95	47145	0.5000	0.5077	
82 Isosafrole Peak 2	162	6.360	6.337	0.023	18	4513	0.2100	0.1117	a
83 1,1'-Biphenyl	154	6.378	6.366	0.012	92	25412	0.2500	0.2406	
84 2-Chloronaphthalene	162	6.389	6.378	0.011	46	16400	0.2500	0.1909	Ma
85 1-Chloronaphthalene	162	6.401	6.395	0.006	54	27140	0.2500	0.3013	M
86 Phenyl ether	170	6.477	6.465	0.012	84	13881	0.2500	0.2456	
87 2-Nitroaniline	138	6.547	6.489	0.058	23	5291	0.2500	0.1846	
S 24 Dinitrotoluene	165				0			0.5021	
88 1,4-Naphthoquinone	158	6.594	6.553	0.041	46	5819	0.2500	0.1778	
89 1,4-Dinitrobenzene	168		6.629				ND	ND	U
90 Dimethyl phthalate	163	6.675	6.670	0.005	96	28414	0.2500	0.2567	
91 1,3-Dinitrobenzene	168	6.681	6.699	-0.018	40	2023	0.2500	0.1334	
92 2,6-Dinitrotoluene	165	6.734	6.722	0.012	51	5095	0.2500	0.2241	
93 Acenaphthylene	152	6.775	6.763	0.012	98	34092	0.2500	0.2357	
95 3-Nitroaniline	138	6.932	6.880	0.052	36	3171	0.2500	0.1193	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	95	358677	5.00	5.00	
97 Acenaphthene	153	6.932	6.932	0.000	88	18001	0.2500	0.2037	
98 2,4-Dinitrophenol	184	7.014	6.985	0.029	79	14076	2.50	2.63	
99 Pentachlorobenzene	250	7.061	7.055	0.006	78	7867	0.2500	0.2032	
100 4-Nitrophenol	109	7.073	7.084	-0.011	39	733	1.50	0.0398	
101 Dibenzofuran	168	7.108	7.096	0.012	94	28405	0.2500	0.2316	
102 2,4-Dinitrotoluene	165	7.125	7.102	0.023	50	8888	0.2500	0.2779	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 1-Naphthylamine	143	7.189	7.178	0.011	95	15804	0.2500	0.1919	
105 2,3,4,6-Tetrachlorophenol	232	7.195	7.184	0.011	49	3351	0.2500	0.1372	
106 2-Naphthylamine	143	7.277	7.254	0.023	92	21259	0.2500	0.2309	
107 Diethyl phthalate	149	7.341	7.335	0.006	96	27627	0.2500	0.2467	
109 Thionazin	107	7.411	7.411	0.000	68	5029	0.2500	0.2545	
108 Fluorene	166	7.429	7.417	0.012	91	25018	0.2500	0.2655	
110 4-Chlorophenyl phenyl ether	204	7.435	7.429	0.006	85	10445	0.2500	0.2340	
111 N-Nitro-o-toluidine	152	7.429	7.446	-0.017	52	164	0.2500	0.005735	
112 4-Nitroaniline	138	7.528	7.458	0.070	1	2579	0.2500	0.2567	
113 4,6-Dinitro-2-methylphenol	198	7.493	7.481	0.012	58	15384	1.50	0.9042	
114 N-Nitrosodiphenylamine	169	7.551	7.546	0.005	62	17678	0.2125	0.2274	
115 1,2-Diphenylhydrazine	77	7.581	7.575	0.006	98	35493	0.2500	0.2390	
$ 116 2,4,6-Tribromophenol	330	7.656	7.651	0.005	88	8781	0.5000	0.5086	
117 Sulfotepp	97	7.709	7.709	0.000	74	7101	0.2500	0.2770	
120 cis-Diallate	86	7.820	7.820	0.000	78	15993	0.1850	0.3039	
119 Phorate	75	7.832	7.826	0.006	91	18143	0.2500	0.1560	
118 1,3,5-Trinitrobenzene	213	7.872	7.832	0.040	54	1238	0.2500	0.1529	
121 Phenacetin	108	7.826	7.855	-0.029	32	224	0.2500	0.003909	
122 4-Bromophenyl phenyl ether	248	7.896	7.890	0.006	73	10227	0.2500	0.3550	
123 trans-Diallate	86	7.908	7.902	0.006	63	11197	0.0650	0.2163	
124 Hexachlorobenzene	284	7.937	7.931	0.006	88	7939	0.2500	0.2557	
125 Dimethoate	87	7.913	7.989	-0.076	51	775	0.2500	0.0146	
126 Atrazine	200	8.059	8.065	-0.006	71	6871	0.2500	0.2859	
127 Pentachlorophenol	266	8.141	8.135	0.006	84	11668	1.25	1.32	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	55	2943	0.2500	0.1945	
129 4-Aminobiphenyl	169	8.147	8.135	0.012	62	22518	0.2500	0.2240	
130 Pronamide	173	8.211	8.205	0.006	86	10735	0.2500	0.2364	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	96	647482	5.00	5.00	
133 Dinoseb	211	8.322	8.316	0.006	62	4827	0.2500	0.2364	
134 Disulfoton	88	8.299	8.322	-0.023	53	9549	0.2500	0.1222	
132 Phenanthrene	178	8.322	8.322	0.000	88	37097	0.2500	0.2591	
135 Anthracene	178	8.380	8.369	0.011	97	34430	0.2500	0.2365	
136 Carbazole	167	8.556	8.538	0.018	94	29204	0.2500	0.2217	
137 Methyl parathion	109	8.684	8.678	0.006	45	8622	0.2500	0.2191	
138 Di-n-butyl phthalate	149	8.888	8.889	-0.001	98	43101	0.2500	0.2383	
139 Ethyl Parathion	109	9.052	9.046	0.006	73	6334	0.2500	0.2643	
140 4-Nitroquinoline-1-oxide	190	9.105	9.070	0.035	1	523	0.2500	0.5566	
142 Octachlorostyrene	308	9.268	9.268	0.000	77	3763	0.2500	0.2739	
143 Isodrin	193	9.297	9.297	0.000	79	5857	0.2500	0.3064	
144 Fluoranthene	202	9.449	9.443	0.006	96	39980	0.2500	0.2689	
145 Benzidine	184	9.607	9.595	0.012	81	55948	0.7500	0.5997	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	96	689211	5.00	5.00	
S 68 Diallate	86				0		0.2500	0.5202	
147 Pyrene	202	9.653	9.653	0.000	94	39596	0.2500	0.2395	
$ 148 p-Terphenyl-d14	244	9.829	9.823	0.006	96	56328	0.5000	0.5016	
149 p-Dimethylamino azobenzene	225	9.969	9.963	0.006	88	5256	0.2500	0.2345	
150 Chlorobenzilate	139	10.010	10.010	0.000	78	11460	0.2500	0.2068	
152 3,3'-Dimethylbenzidine	212	10.302	10.284	0.018	51	18084	0.2500	0.2234	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	89	17111	0.2500	0.2127	
155 2-Acetylaminofluorene	181	10.570	10.541	0.029	38	8620	0.2500	0.1420	
157 3,3'-Dichlorobenzidine	252	10.856	10.845	0.011	59	11585	0.2500	0.2126	
156 Benzo[a]anthracene	228	10.856	10.850	0.006	97	30965	0.2500	0.2218	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
158	4,4'-Methylene bis(2-chloroanil	231	10.856	10.850	0.006	63	7172	0.2500	0.2542	
159	Chrysene	228	10.891	10.886	0.005	94	32883	0.2500	0.2367	
160	Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	93	26170	0.2500	0.2317	
S 94	Isosafrole	162				0		0.2500	0.1497	
161	6-Methylchrysene	242	11.411	11.405	0.006	96	20613	0.2500	0.2206	
162	Di-n-octyl phthalate	149	11.726	11.726	0.000	98	37761	0.2500	0.2108	
163	7,12-Dimethylbenz(a)anthracene	256	12.117	12.118	-0.001	87	10387	0.2500	0.2099	
164	Benzo[b]fluoranthene	252	12.129	12.123	0.006	90	27494	0.2500	0.2053	
165	Benzo[k]fluoranthene	252	12.164	12.158	0.006	42	27480	0.2500	0.2066	
166	Benzo[a]pyrene	252	12.544	12.538	0.006	82	31603	0.2500	0.2420	
* 167	Perylene-d12	264	12.620	12.614	0.006	95	585178	5.00	5.00	
168	3-Methylcholanthrene	268	13.040	13.028	0.012	84	11828	0.2500	0.1960	
169	Dibenz[a,h]acridine	279	13.782	13.770	0.012	44	23357	0.2500	0.2322	a
170	Dibenz[a,j]acridine	279	13.857	13.840	0.017	91	27386	0.2500	0.2415	M
171	Indeno[1,2,3-cd]pyrene	276	14.079	14.068	0.011	68	28592	0.2500	0.2247	
172	Dibenz(a,h)anthracene	278	14.126	14.109	0.017	1	35791	0.2500	0.2751	
173	Benzo[g,h,i]perylene	276	14.441	14.424	0.017	87	36639	0.2500	0.2635	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270_2_00033 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 13:01:42 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D

Injection Date: 31-Oct-2023 16:49:30 Instrument ID: HP23264 Operator ID: mem41592

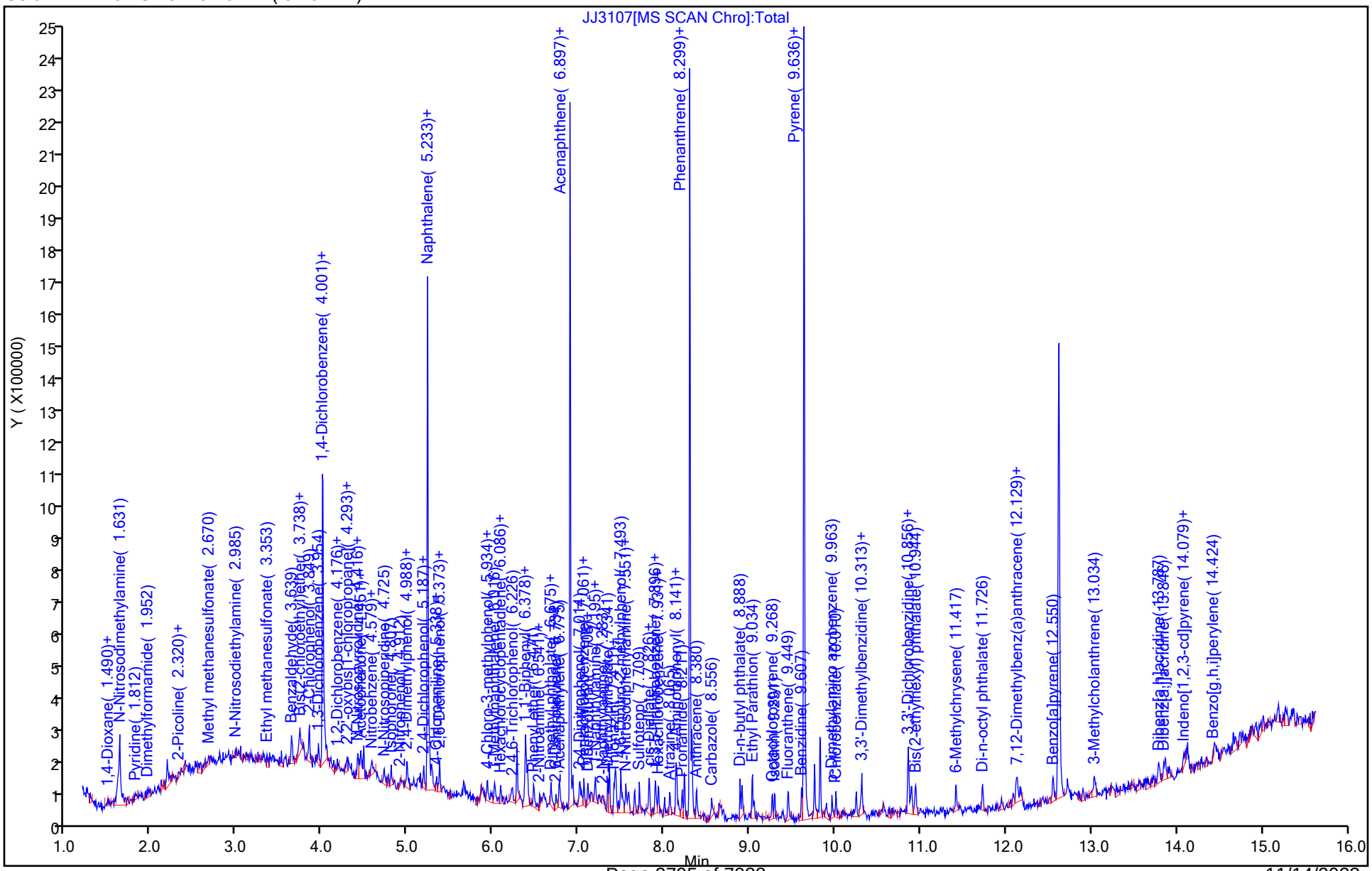
Lims ID: IC L2 Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 8

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

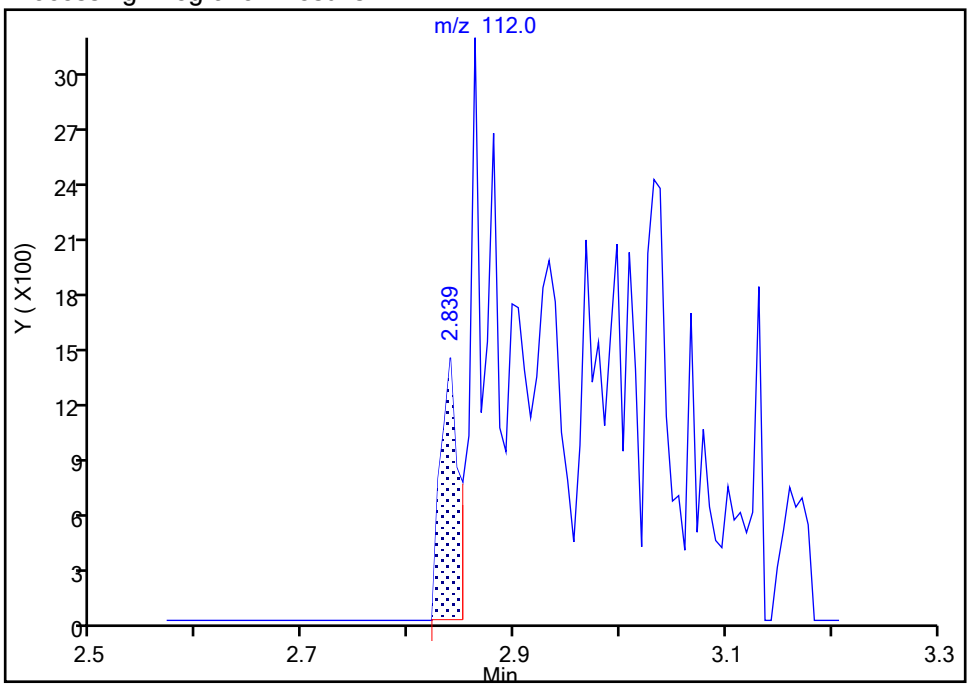
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

$ 9 2-Fluorophenol, CAS: 367-12-4

Signal: 1

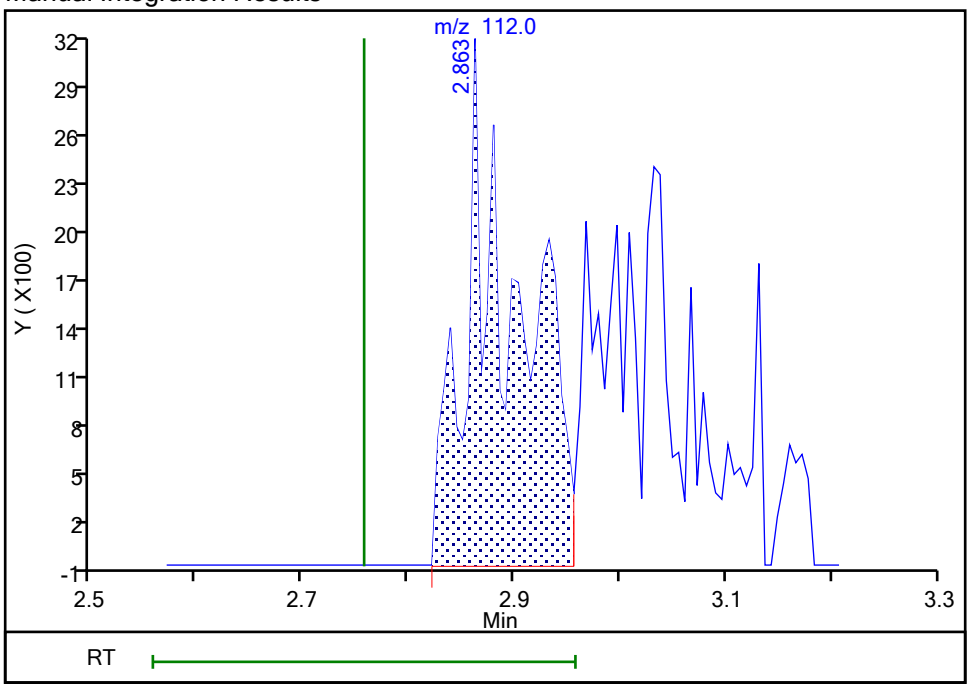
Processing Integration Results

RT: 2.84
Area: 1536
Amount: 0.368005
Amount Units: ug/ml



Manual Integration Results

RT: 2.86
Area: 10648
Amount: 0.239974
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:47:13 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

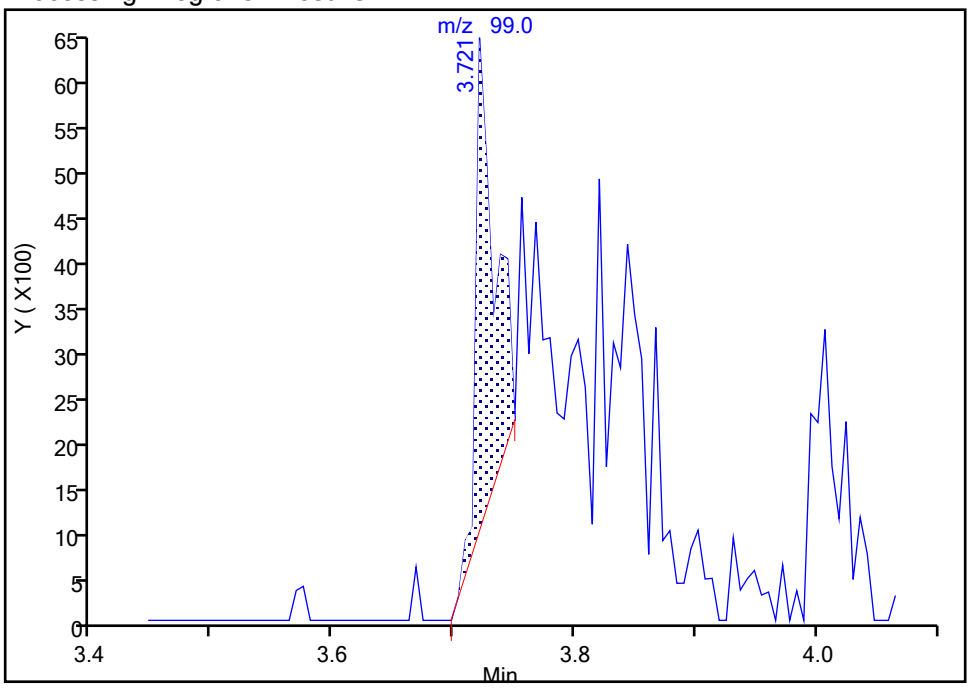
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

$ 15 Phenol-d5, CAS: 4165-62-2

Signal: 1

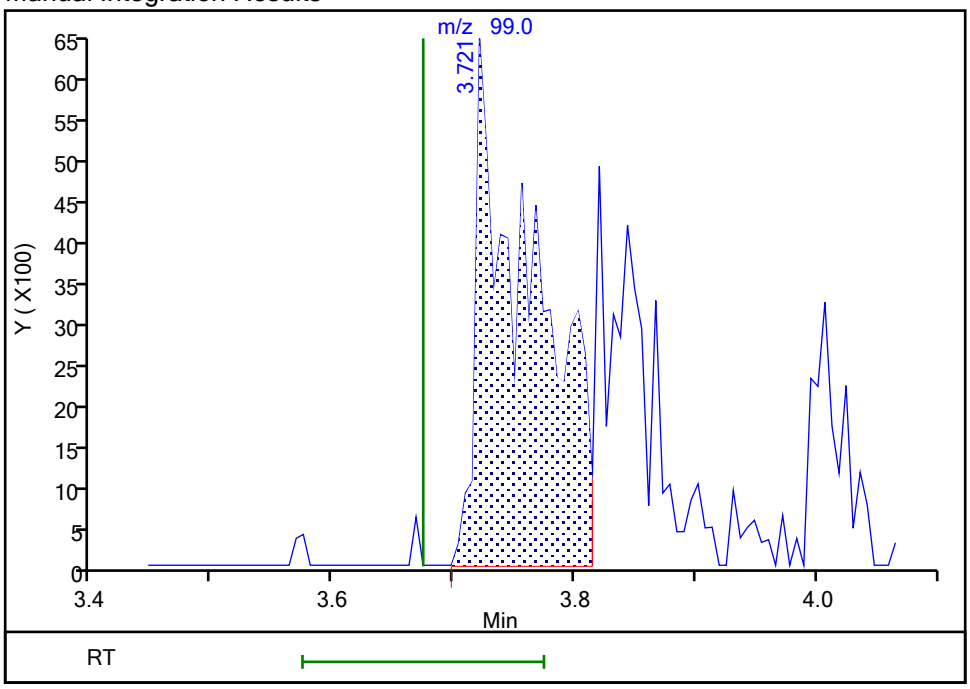
Processing Integration Results

RT: 3.72
Area: 5699
Amount: 0.507491
Amount Units: ug/ml



Manual Integration Results

RT: 3.72
Area: 20742
Amount: 0.322898
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:47:29 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

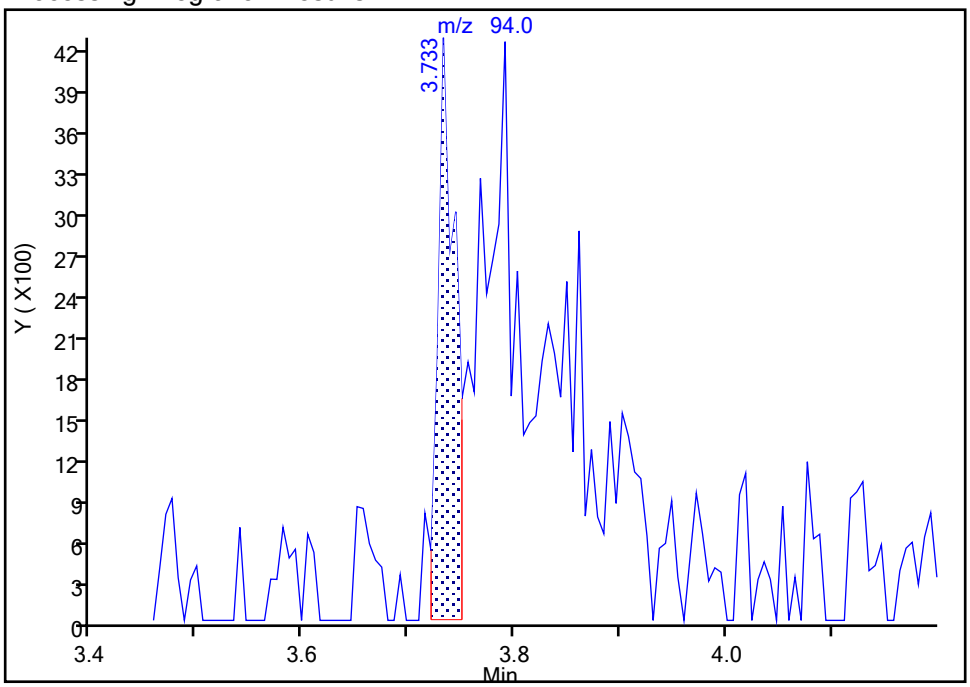
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

16 Phenol, CAS: 108-95-2

Signal: 1

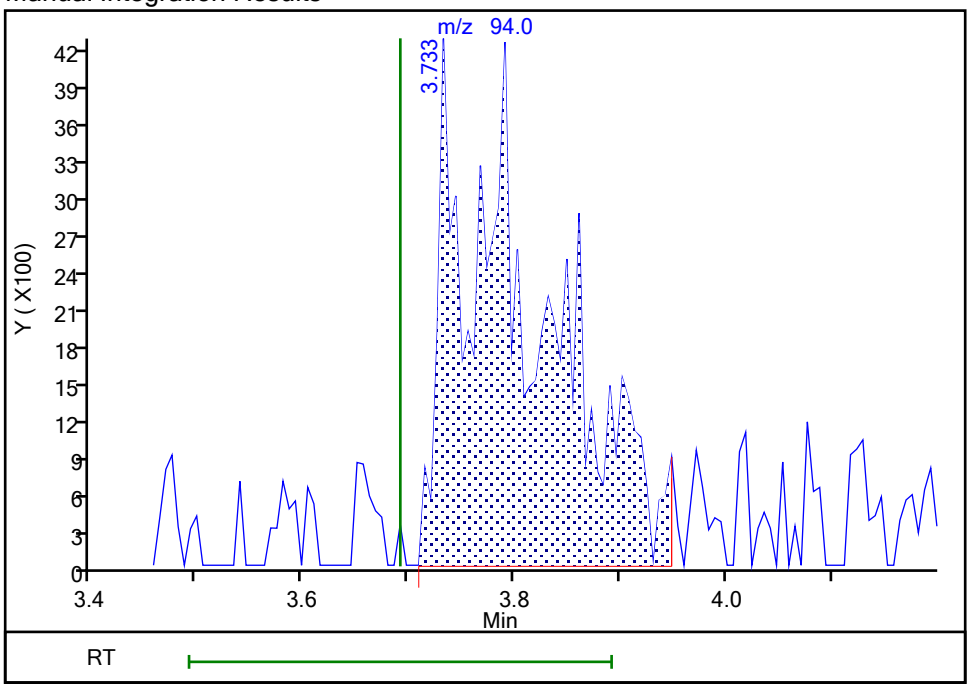
Processing Integration Results

RT: 3.73
Area: 4511
Amount: 0.246286
Amount Units: ug/ml



Manual Integration Results

RT: 3.73
Area: 24282
Amount: 0.292105
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 08:54:13 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

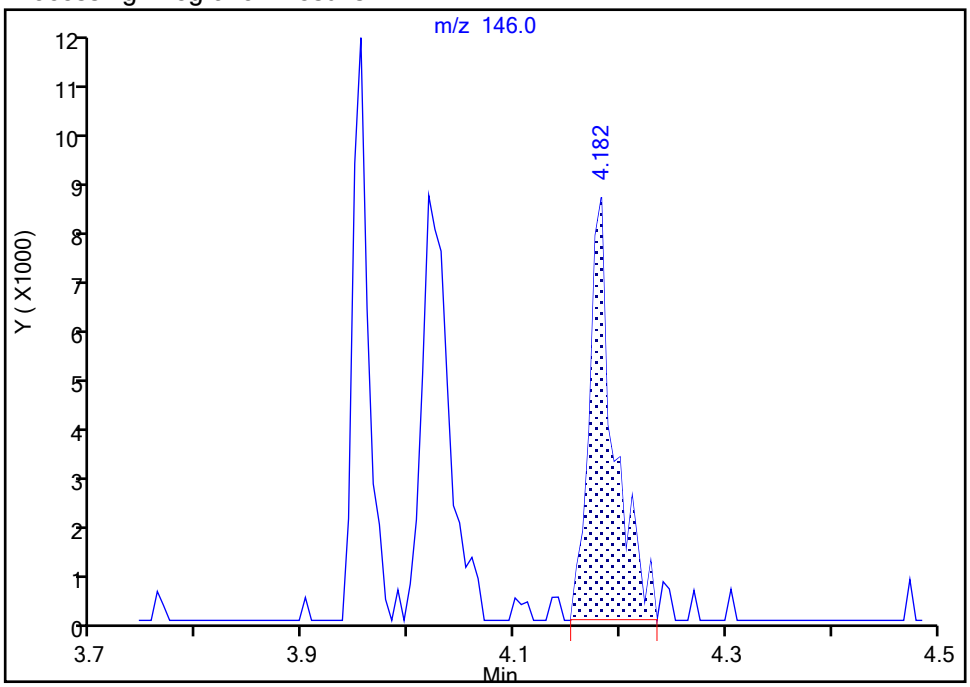
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

23 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

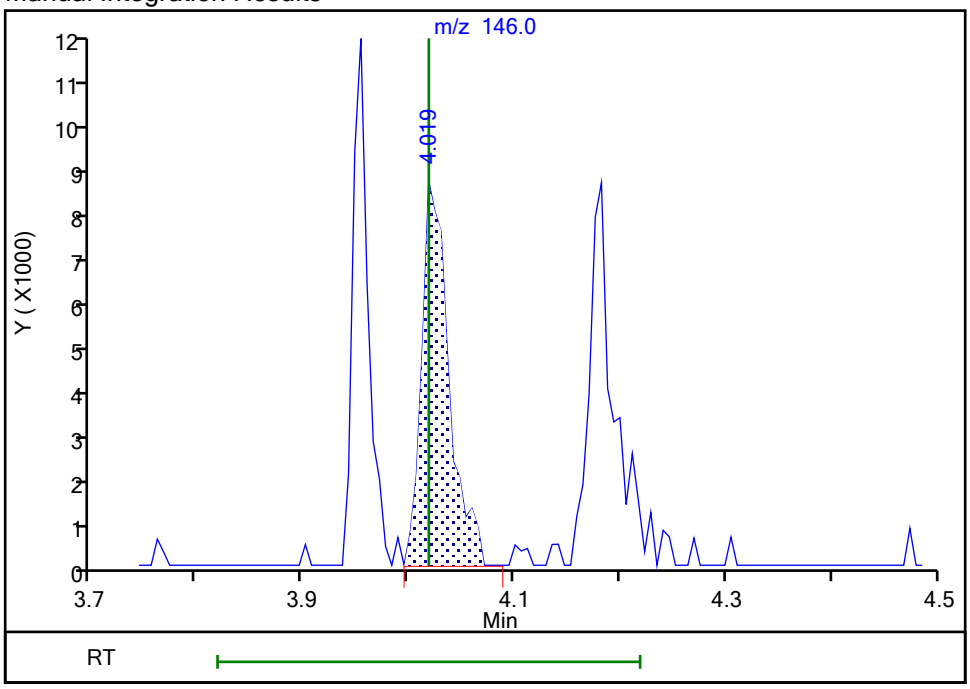
Processing Integration Results

RT: 4.18
Area: 13303
Amount: 0.248899
Amount Units: ug/ml



Manual Integration Results

RT: 4.02
Area: 14508
Amount: 0.268419
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:48:01 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

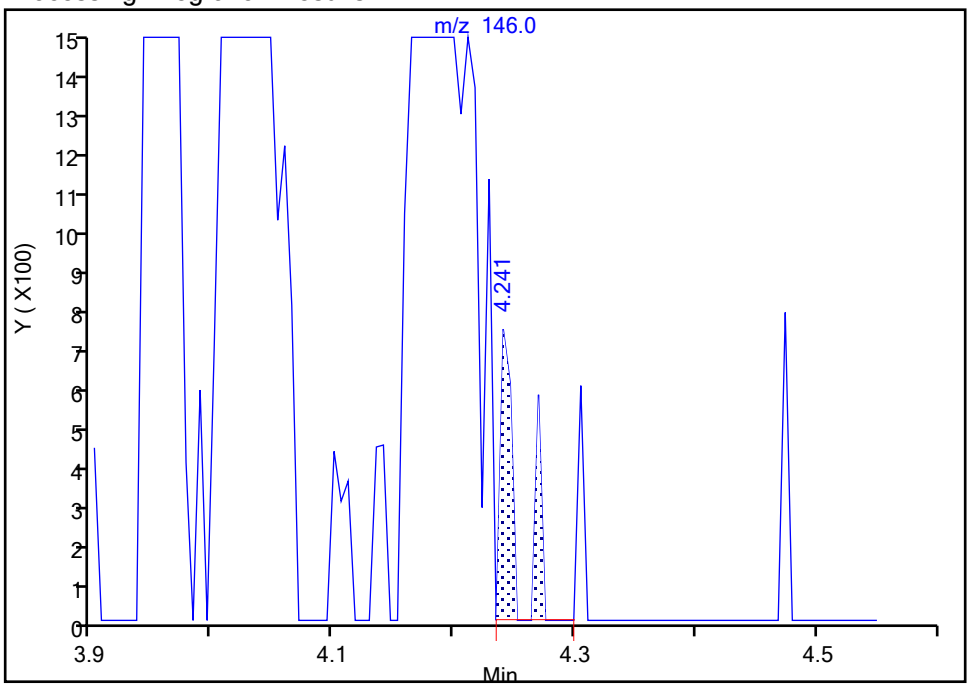
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

27 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

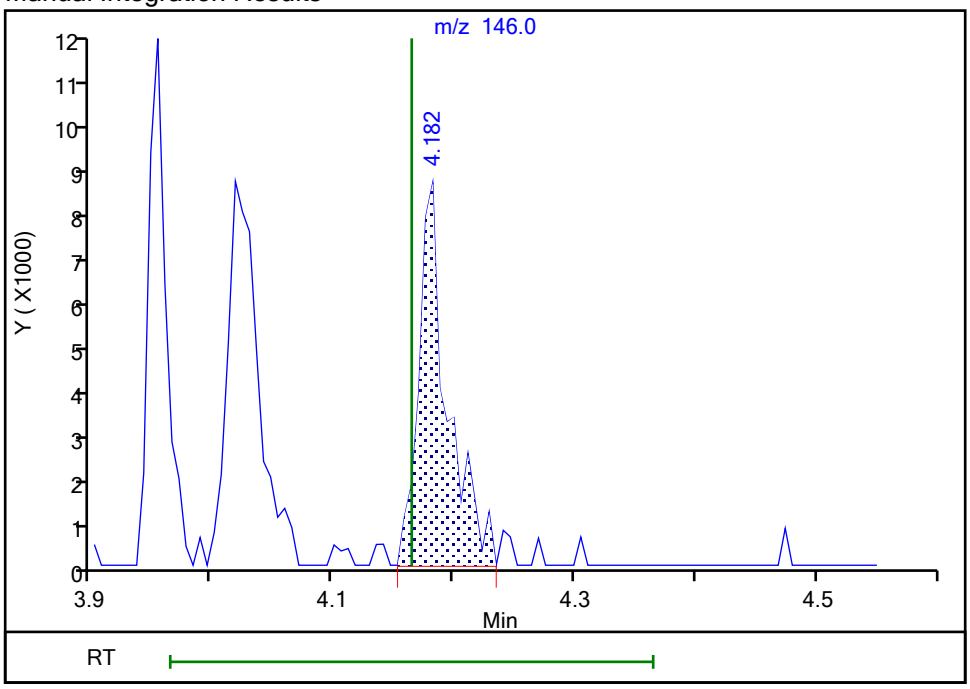
Processing Integration Results

RT: 4.24
Area: 667
Amount: 0.014705
Amount Units: ug/ml



Manual Integration Results

RT: 4.18
Area: 13303
Amount: 0.257422
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:48:13 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

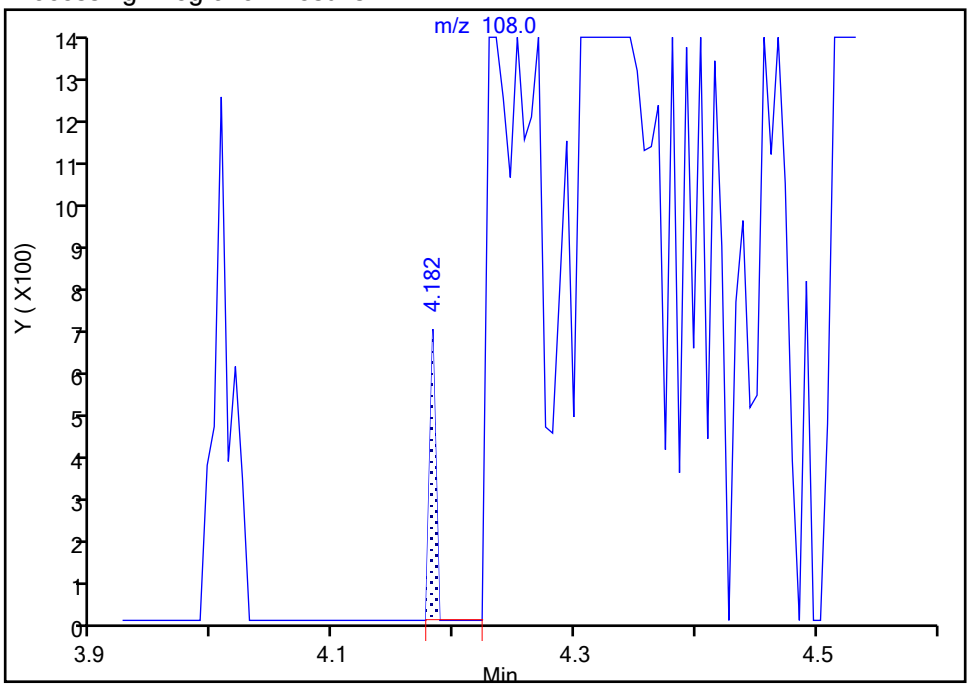
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

26 Benzyl alcohol, CAS: 100-51-6

Signal: 1

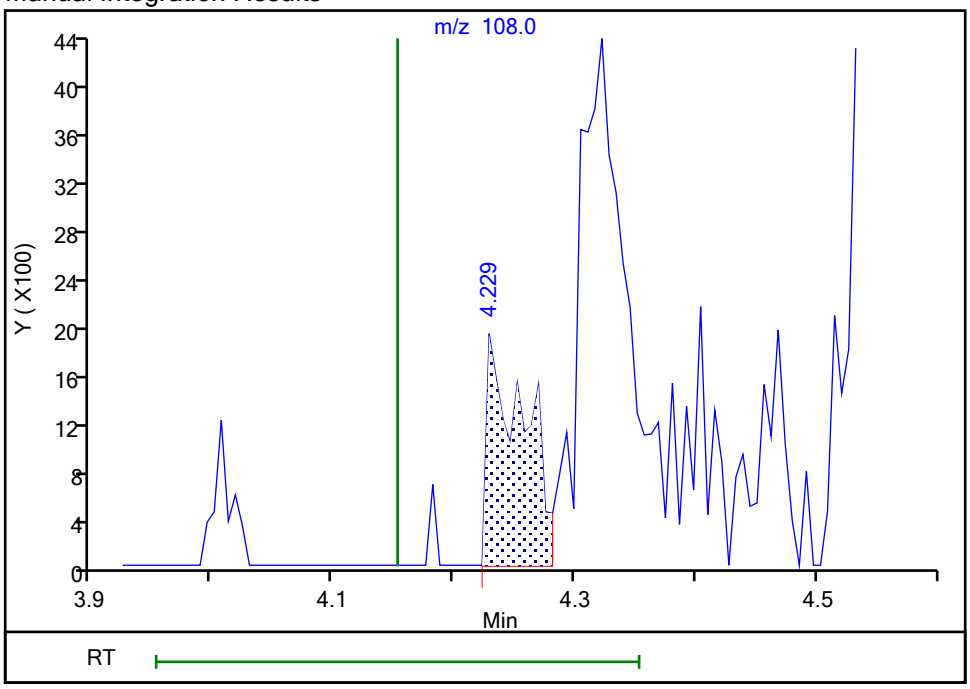
Processing Integration Results

RT: 4.18
Area: 234
Amount: 0.008478
Amount Units: ug/ml



Manual Integration Results

RT: 4.23
Area: 4065
Amount: 0.116709
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:48:07 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

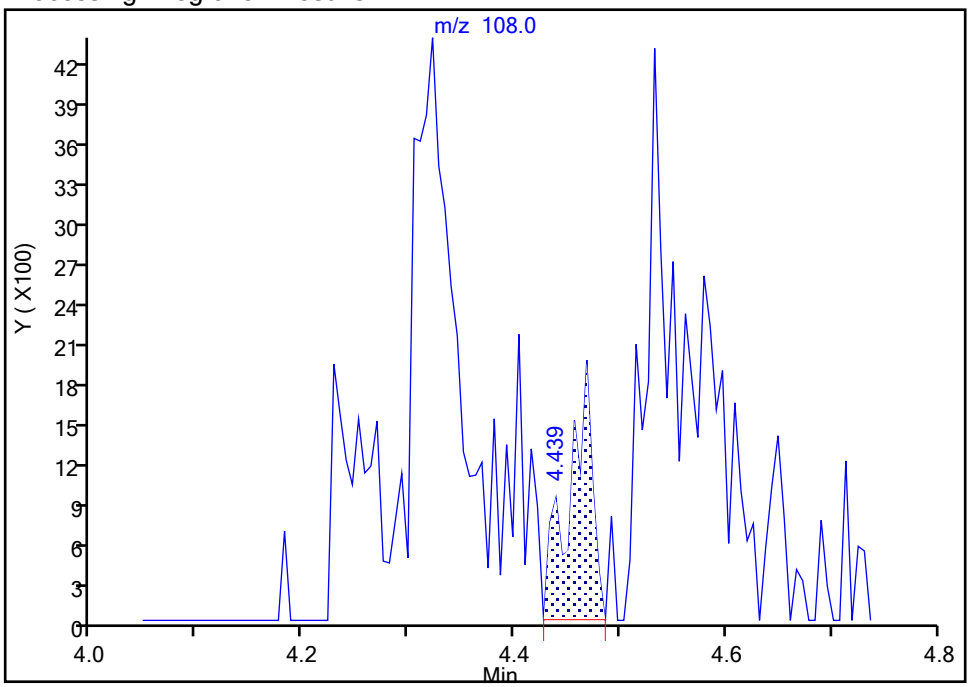
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

29 2-Methylphenol, CAS: 95-48-7

Signal: 1

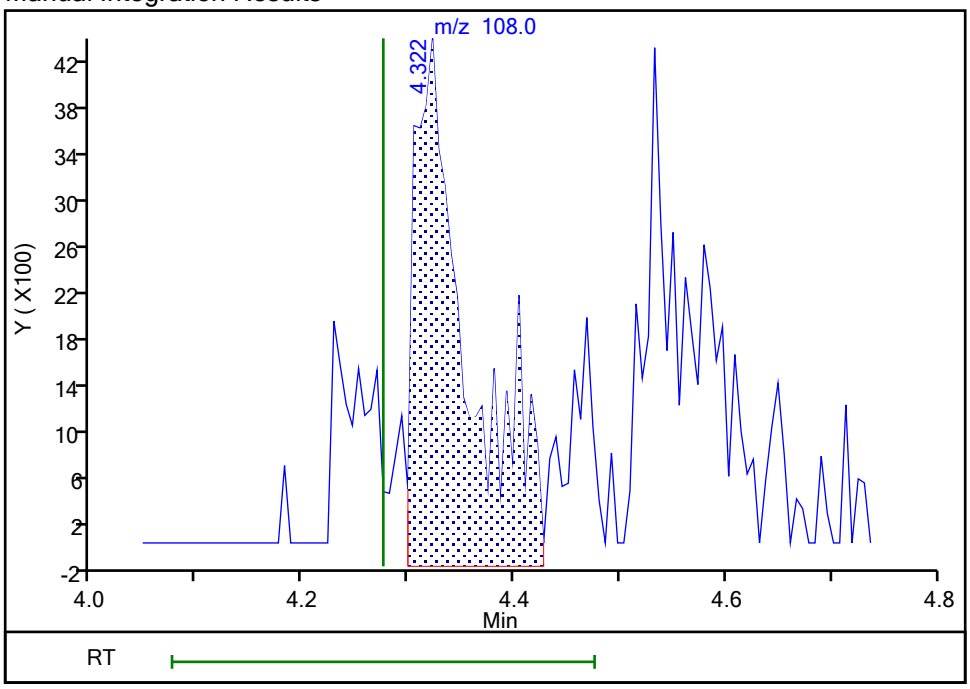
Processing Integration Results

RT: 4.44
Area: 2992
Amount: 0.175070
Amount Units: ug/ml



Manual Integration Results

RT: 4.32
Area: 15577
Amount: 0.304012
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:48:29 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

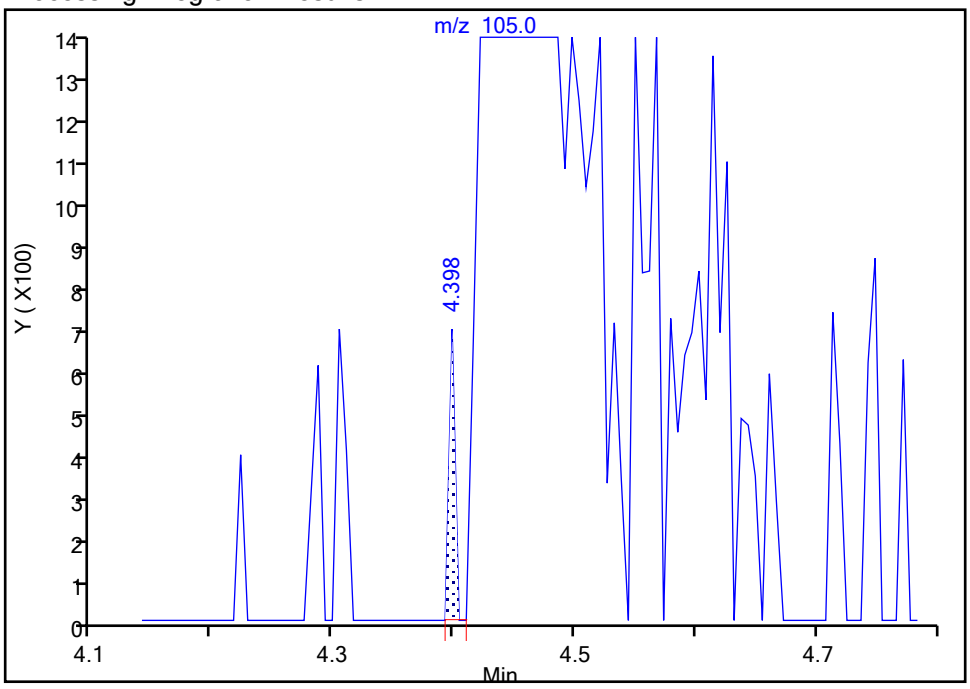
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

32 Acetophenone, CAS: 98-86-2

Signal: 1

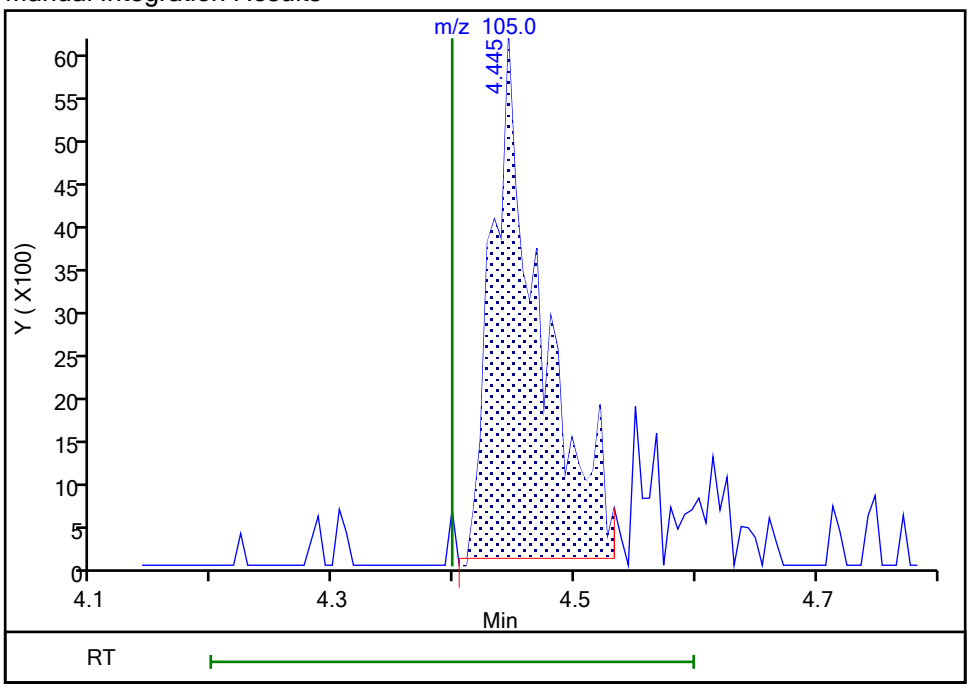
Processing Integration Results

RT: 4.40
Area: 230
Amount: 0.003910
Amount Units: ug/ml



Manual Integration Results

RT: 4.44
Area: 17073
Amount: 0.222553
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:48:39 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

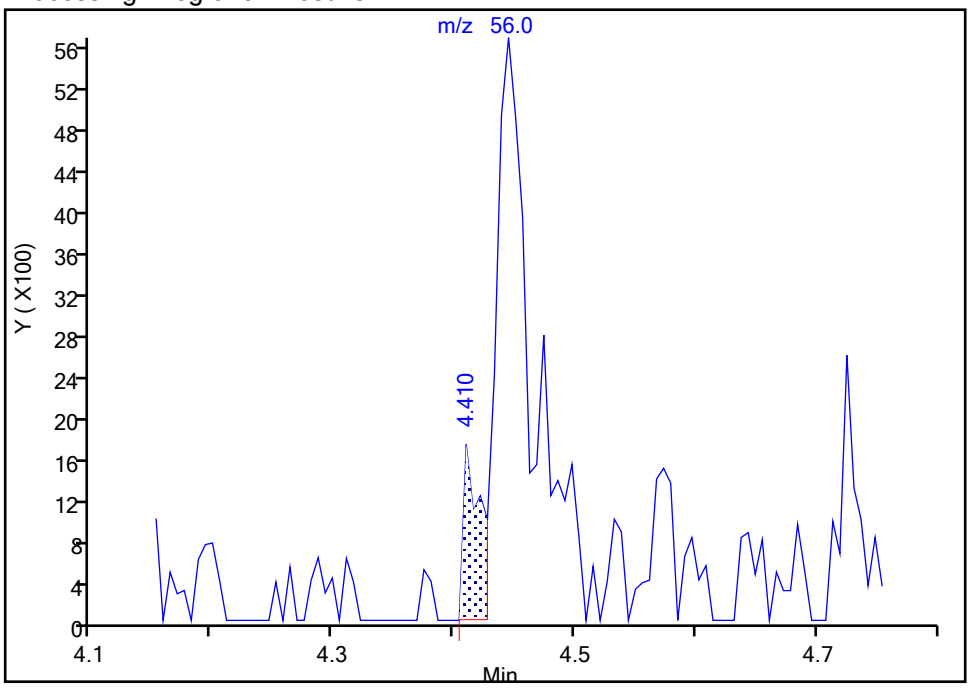
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

35 N-Nitrosomorpholine, CAS: 59-89-2

Signal: 1

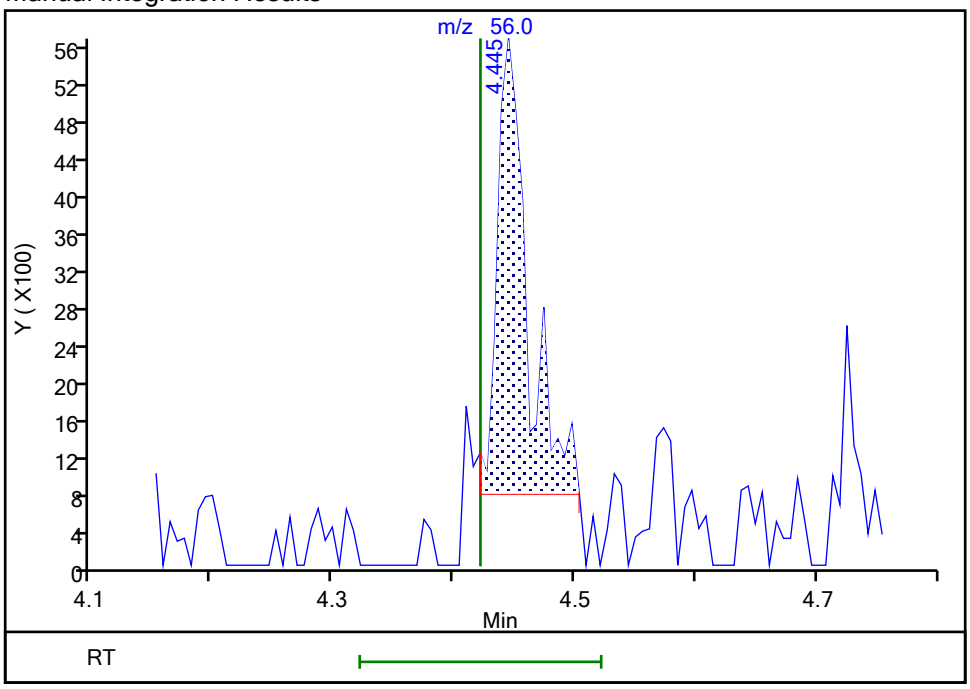
Processing Integration Results

RT: 4.41
Area: 1552
Amount: 0.039653
Amount Units: ug/ml



Manual Integration Results

RT: 4.44
Area: 8415
Amount: 0.197671
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:49:19 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

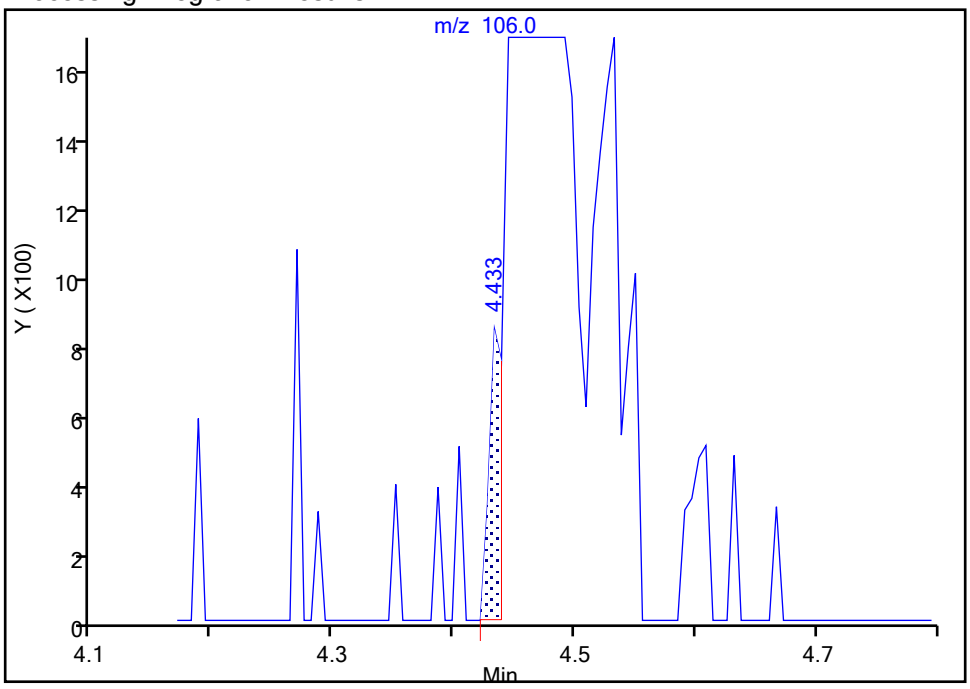
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

36 2-Toluidine, CAS: 95-53-4

Signal: 1

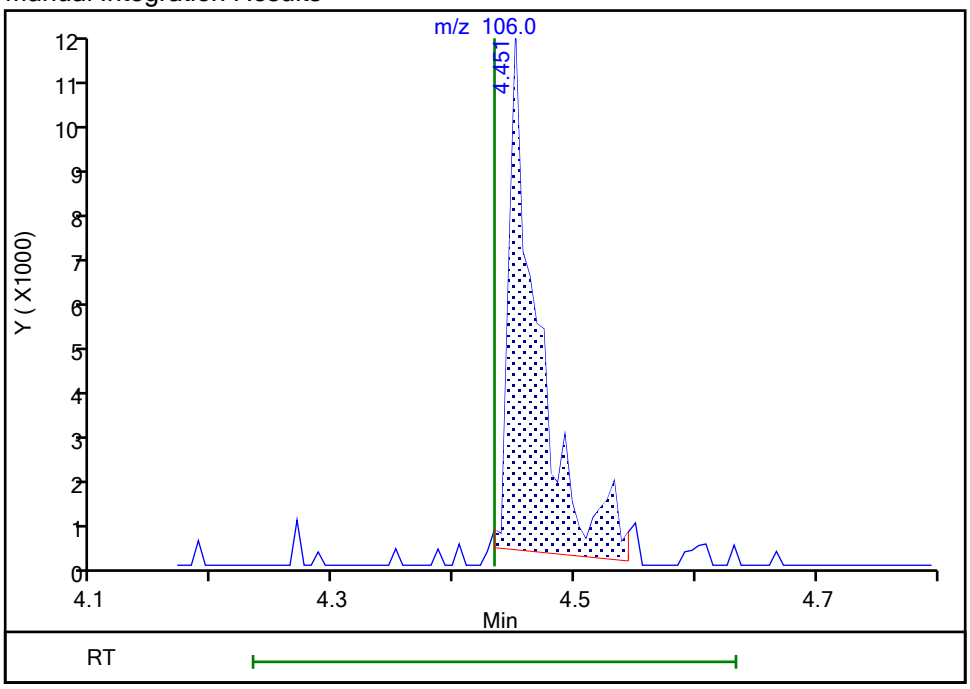
Processing Integration Results

RT: 4.43
Area: 518
Amount: 0.008496
Amount Units: ug/ml



Manual Integration Results

RT: 4.45
Area: 19601
Amount: 0.245723
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:48:59 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

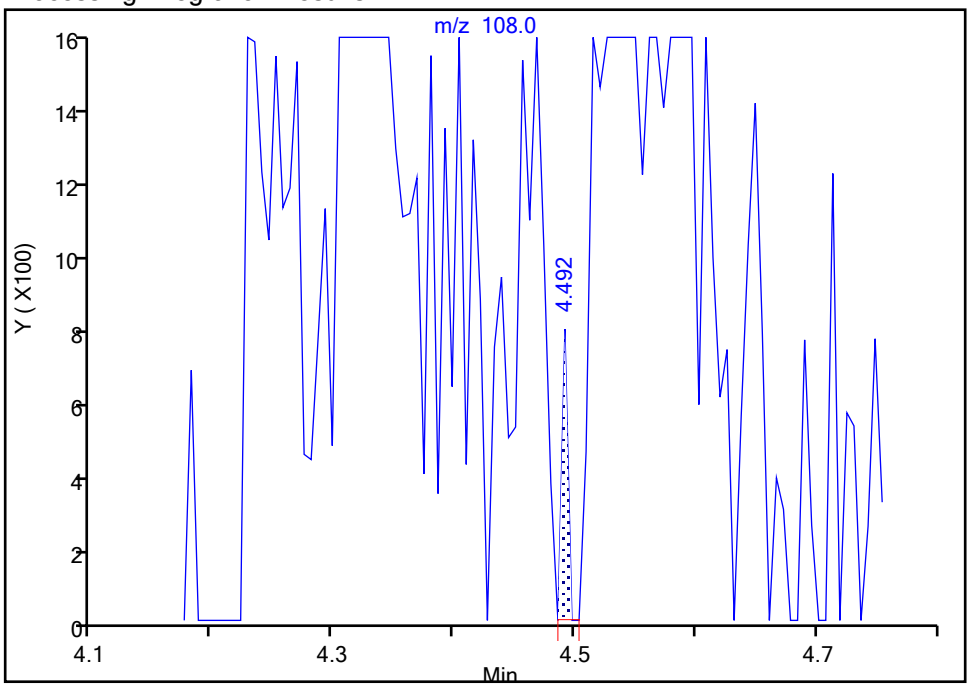
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

34 4-Methylphenol, CAS: 106-44-5

Signal: 1

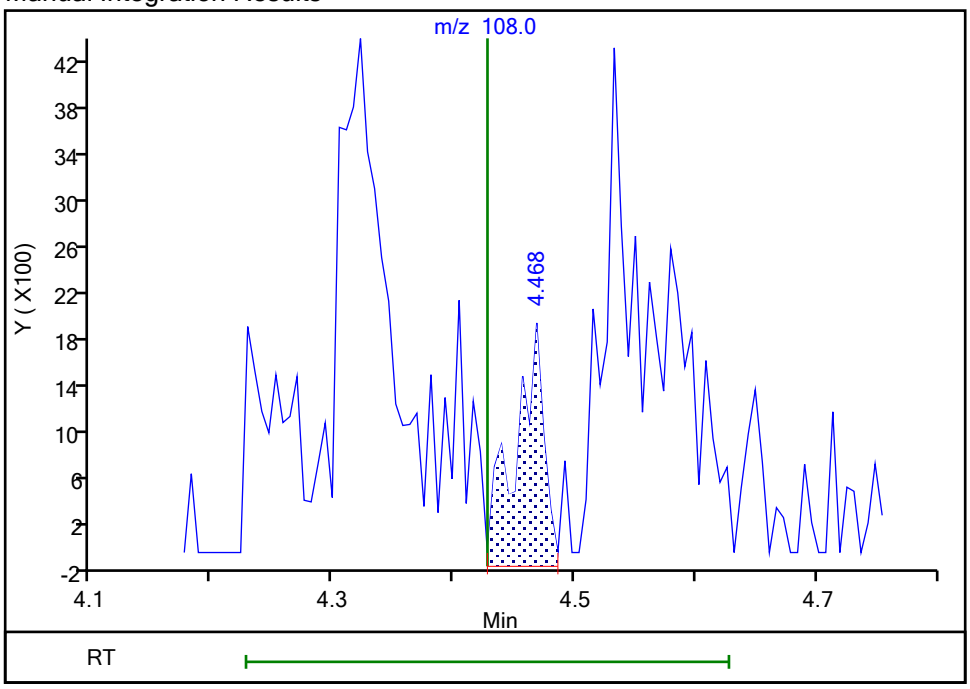
Processing Integration Results

RT: 4.49
Area: 273
Amount: 0.006697
Amount Units: ug/ml



Manual Integration Results

RT: 4.47
Area: 3371
Amount: 0.245229
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:49:08 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

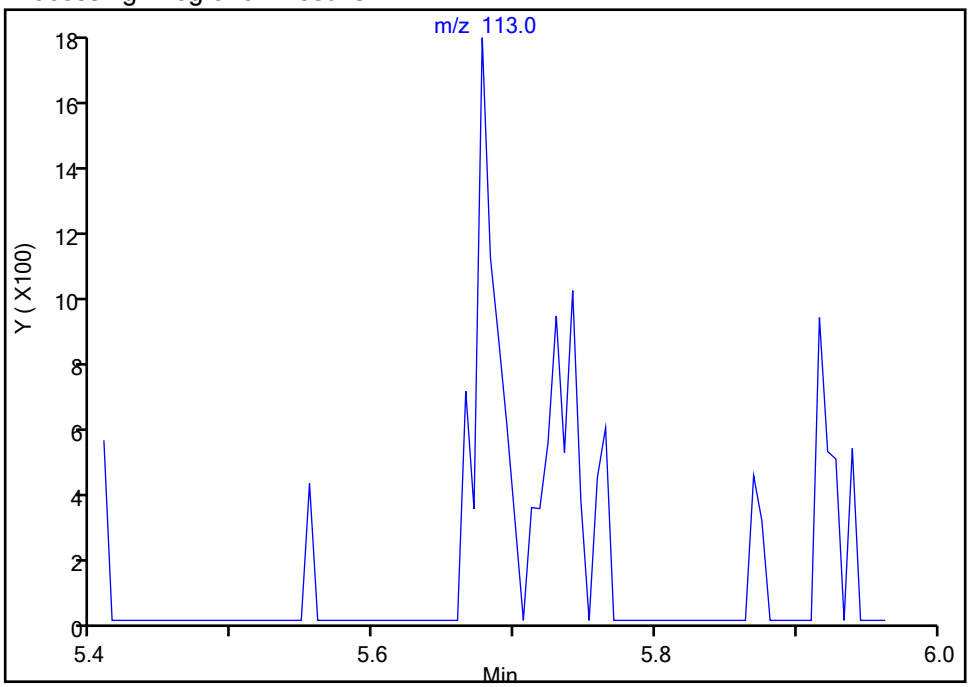
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

62 Caprolactam, CAS: 105-60-2

Signal: 1

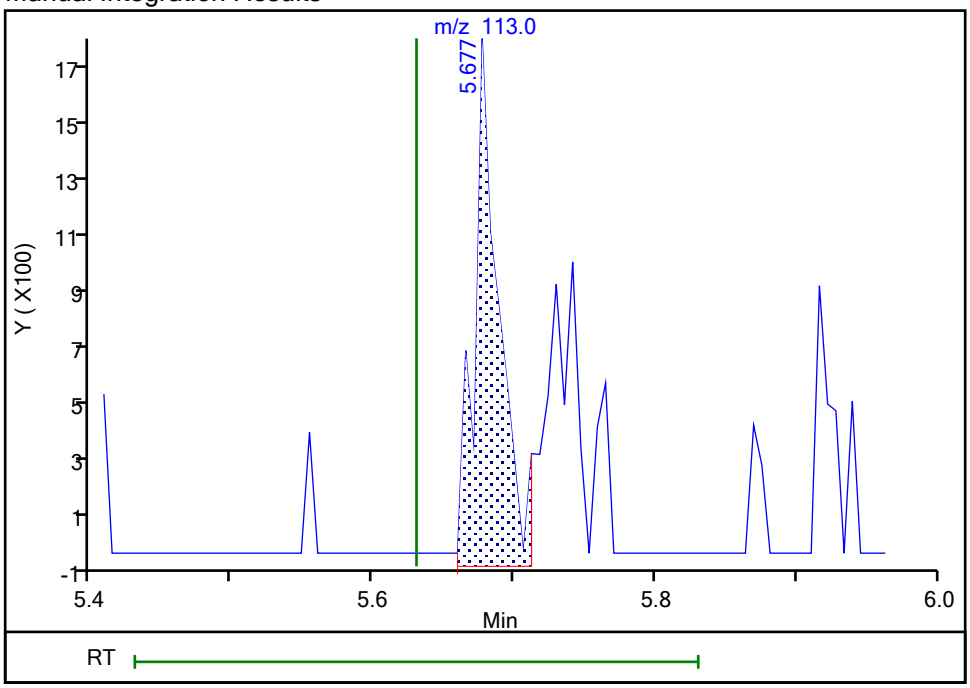
Not Detected
Expected RT: 5.63

Processing Integration Results



Manual Integration Results

RT: 5.68
Area: 2090
Amount: 0.178003
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:49:56 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

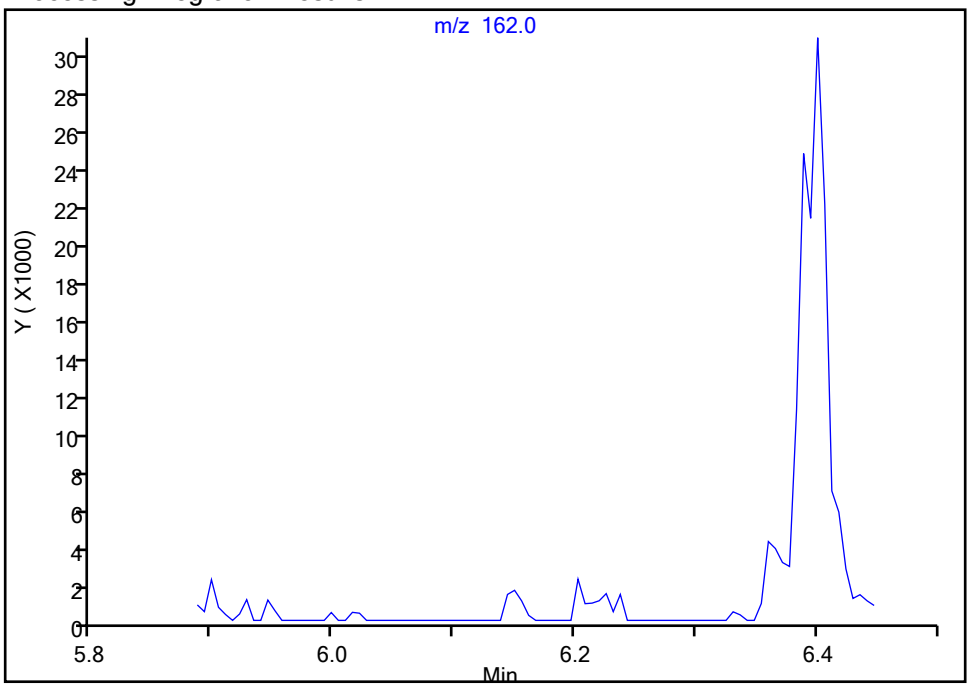
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

72 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

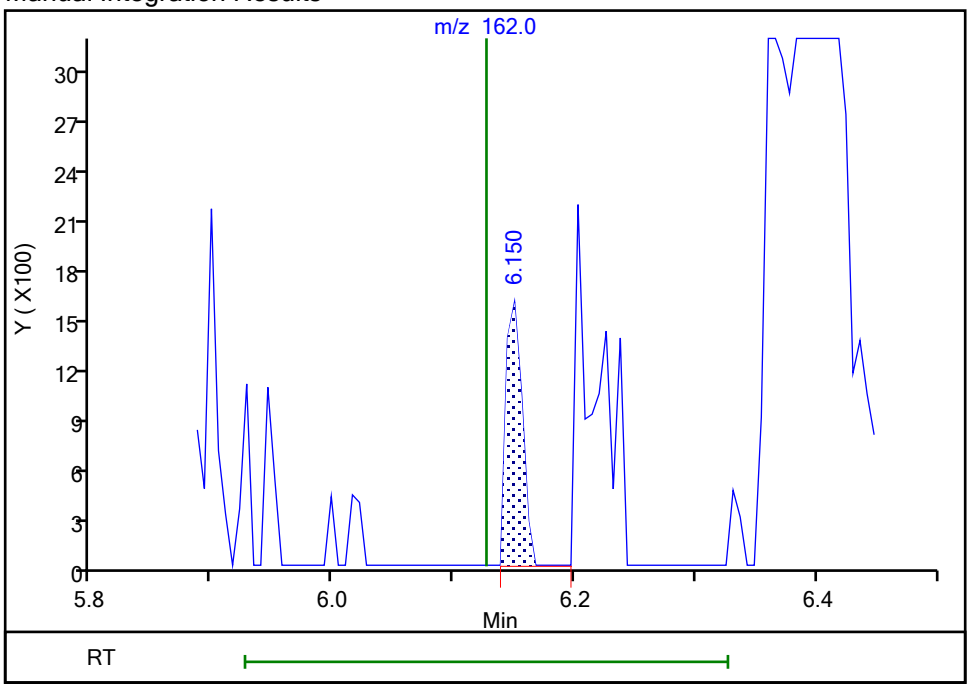
Not Detected
Expected RT: 6.13

Processing Integration Results



RT: 6.15
Area: 1467
Amount: 0.037987
Amount Units: ug/ml

Manual Integration Results



Reviewer: GLQ9, 31-Oct-2023 20:49:46 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

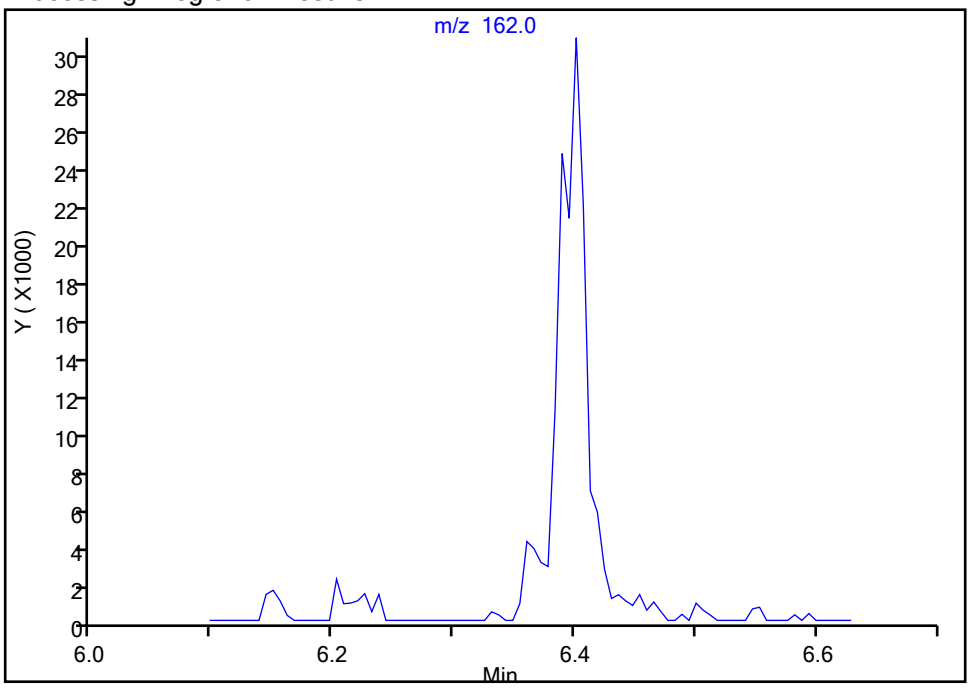
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

82 Isosafrole Peak 2, CAS: 120-58-1

Signal: 1

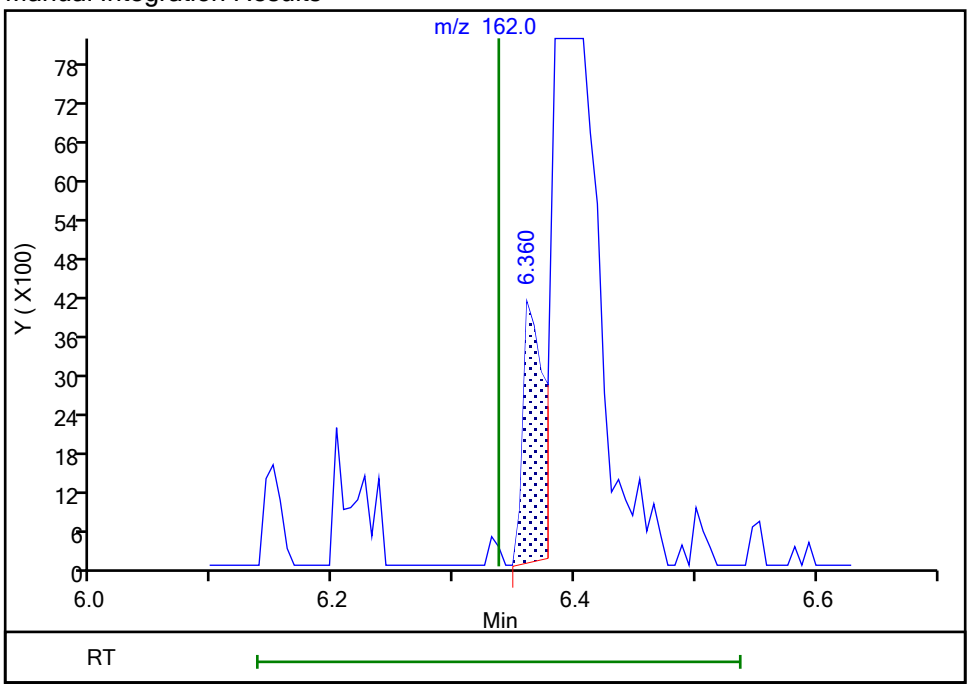
Not Detected
Expected RT: 6.34

Processing Integration Results



RT: 6.36
Area: 4513
Amount: 0.111738
Amount Units: ug/ml

Manual Integration Results



Reviewer: GLQ9, 31-Oct-2023 20:50:04 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

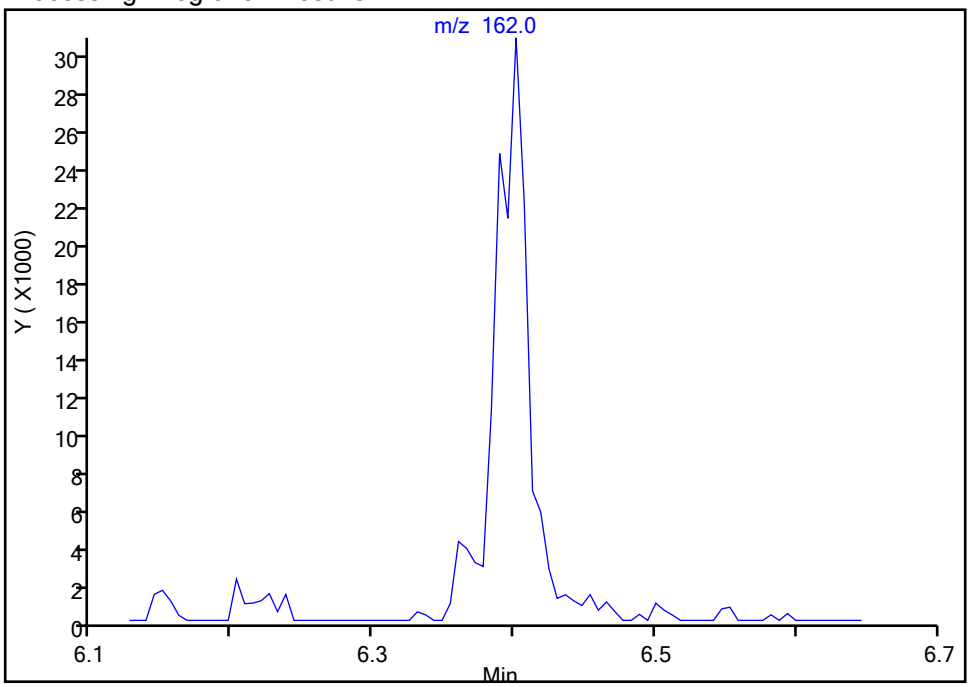
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

84 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

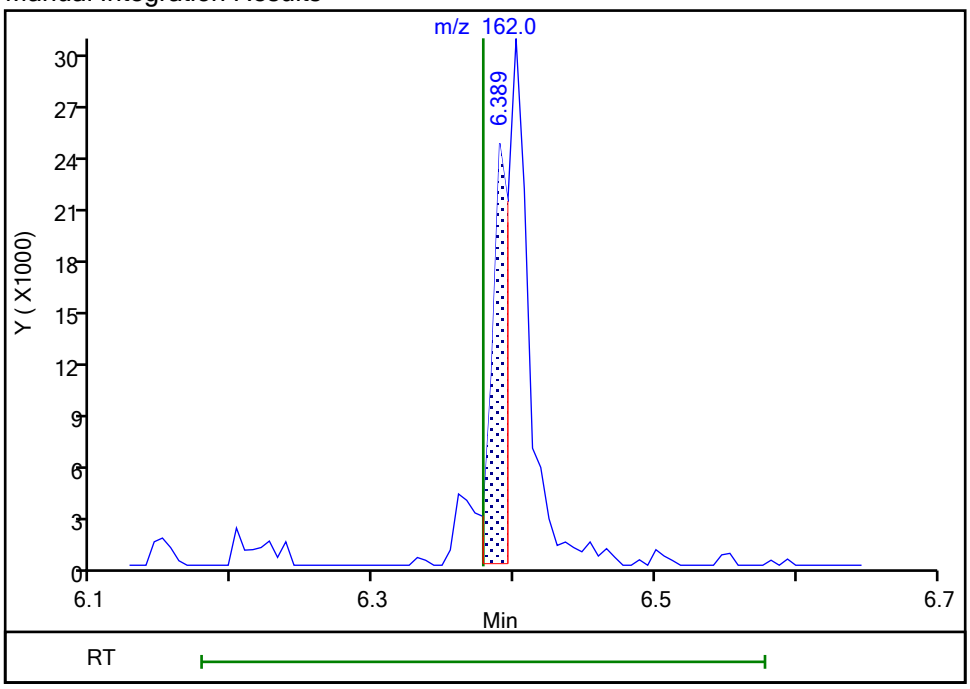
Not Detected
Expected RT: 6.38

Processing Integration Results



Manual Integration Results

RT: 6.39
Area: 16400
Amount: 0.190891
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:50:18 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

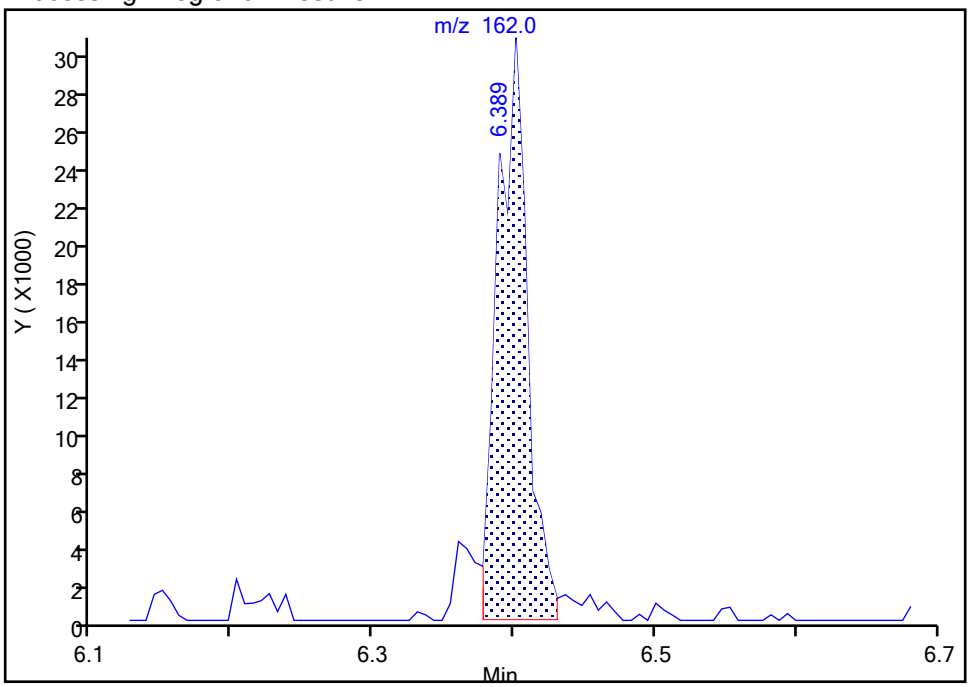
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

85 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

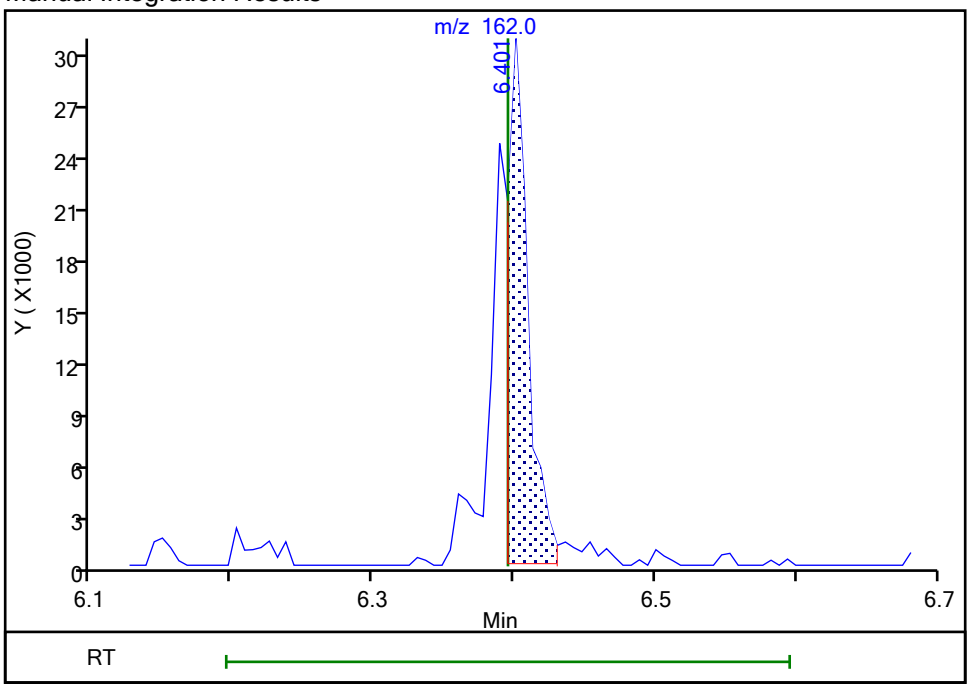
Processing Integration Results

RT: 6.39
Area: 43541
Amount: 0.397277
Amount Units: ug/ml



Manual Integration Results

RT: 6.40
Area: 27140
Amount: 0.301275
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:50:10 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

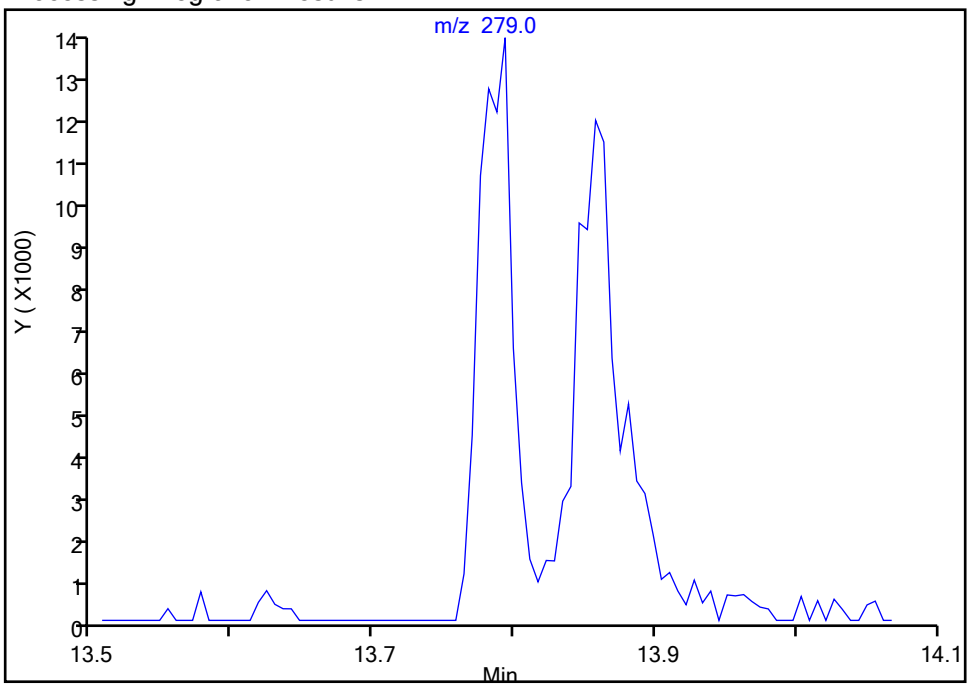
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

169 Dibenz[a,h]acridine, CAS: 226-36-8

Signal: 1

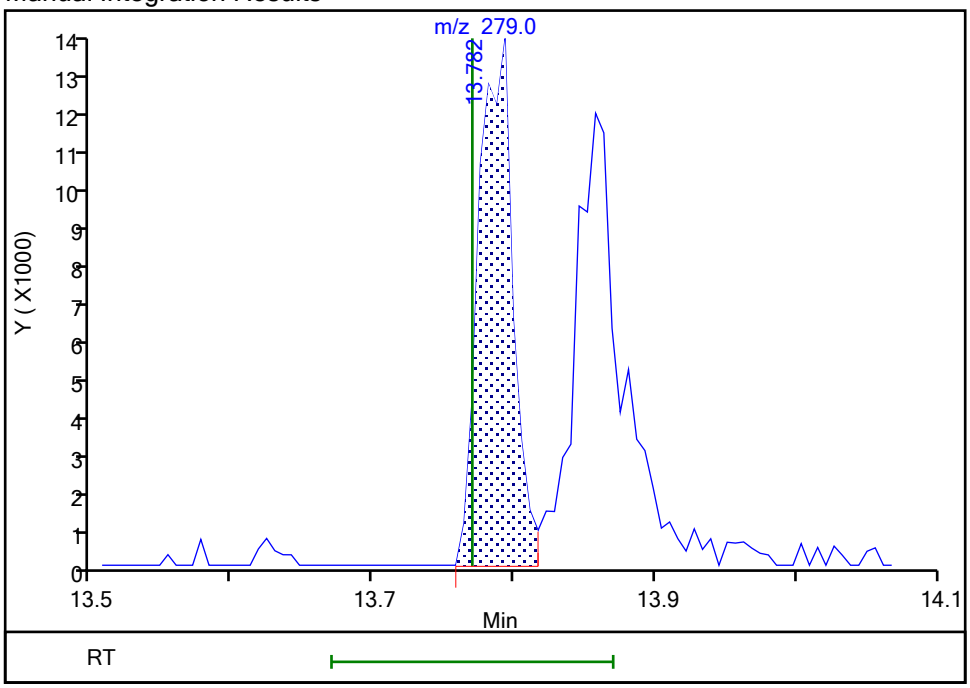
Not Detected
Expected RT: 13.77

Processing Integration Results



Manual Integration Results

RT: 13.78
Area: 23357
Amount: 0.232172
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:51:04 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

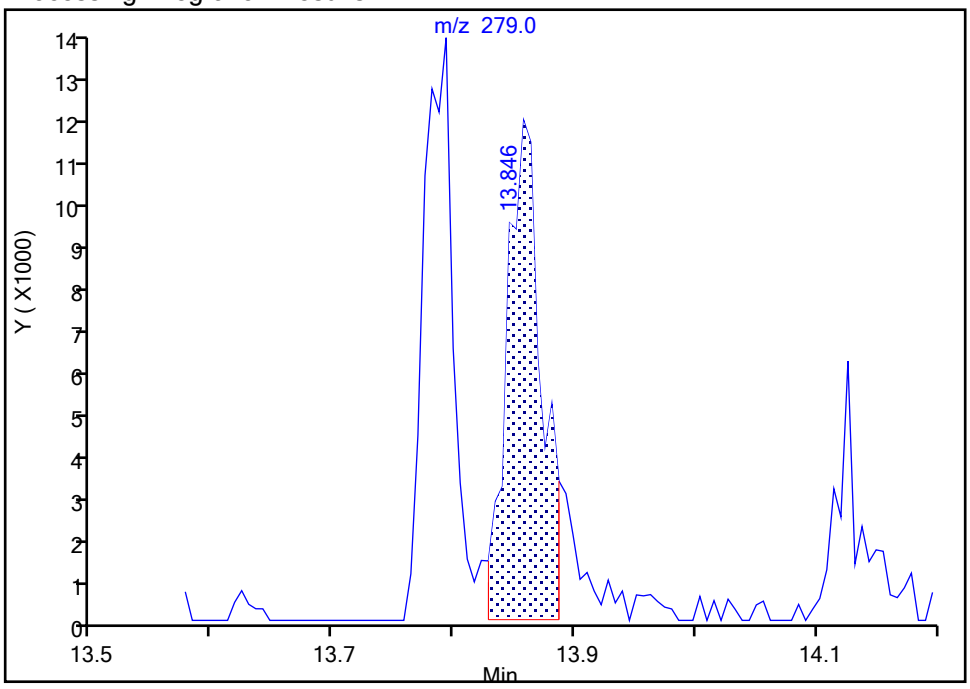
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

170 Dibenz[a,j]acridine, CAS: 224-42-0

Signal: 1

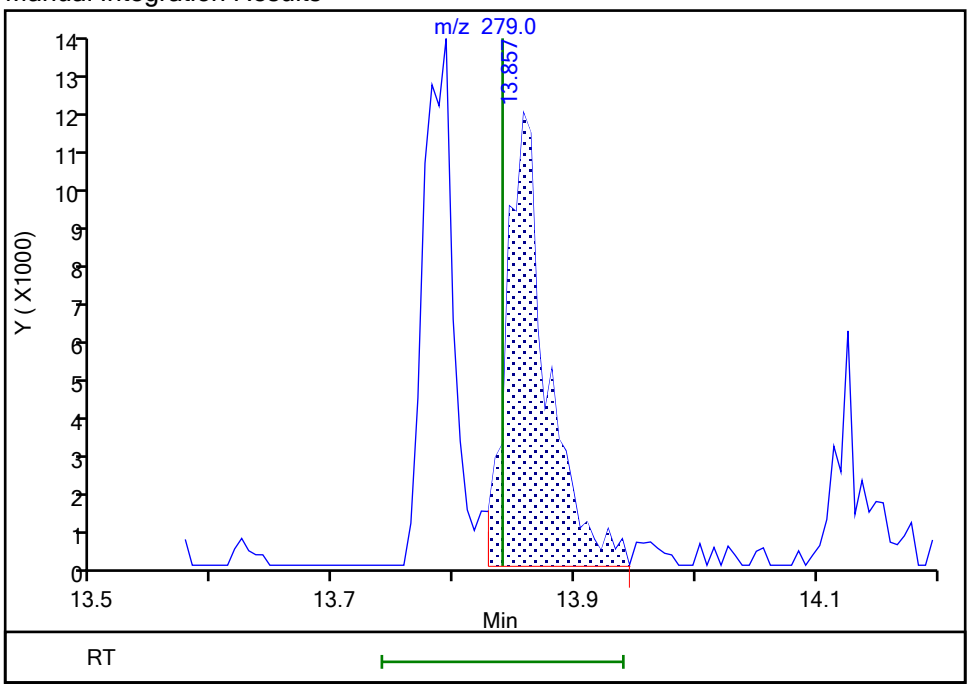
Processing Integration Results

RT: 13.85
Area: 23173
Amount: 0.208245
Amount Units: ug/ml



Manual Integration Results

RT: 13.86
Area: 27386
Amount: 0.241533
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:16:34 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

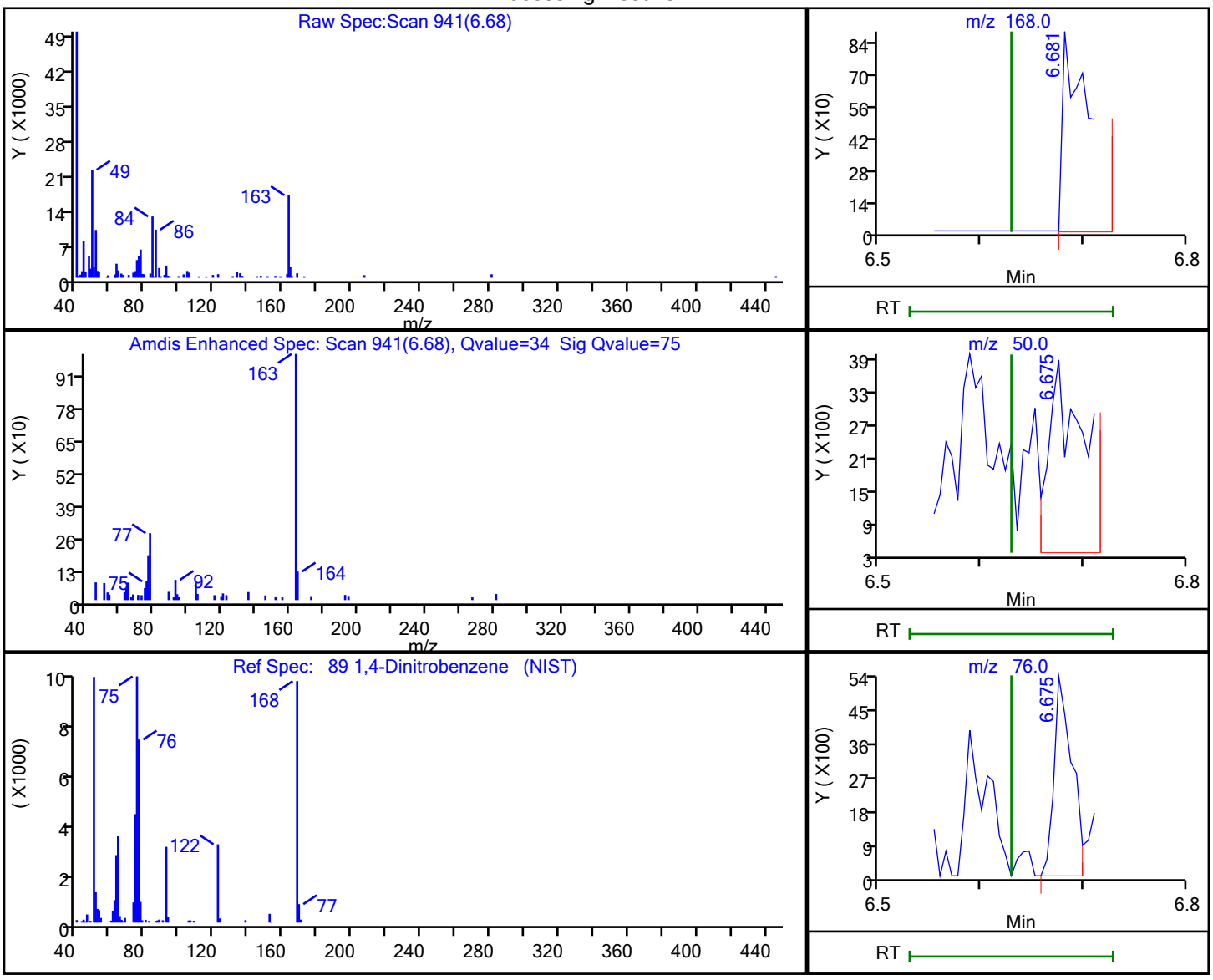
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

89 1,4-Dinitrobenzene, CAS: 100-25-4

Processing Results



RT	Mass	Response	Amount
6.68	168.00	2023	0.154853
6.68	50.00	7563	
6.68	76.00	6437	
6.68	75.00	6431	

Reviewer: P7EB, 01-Nov-2023 07:16:05 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

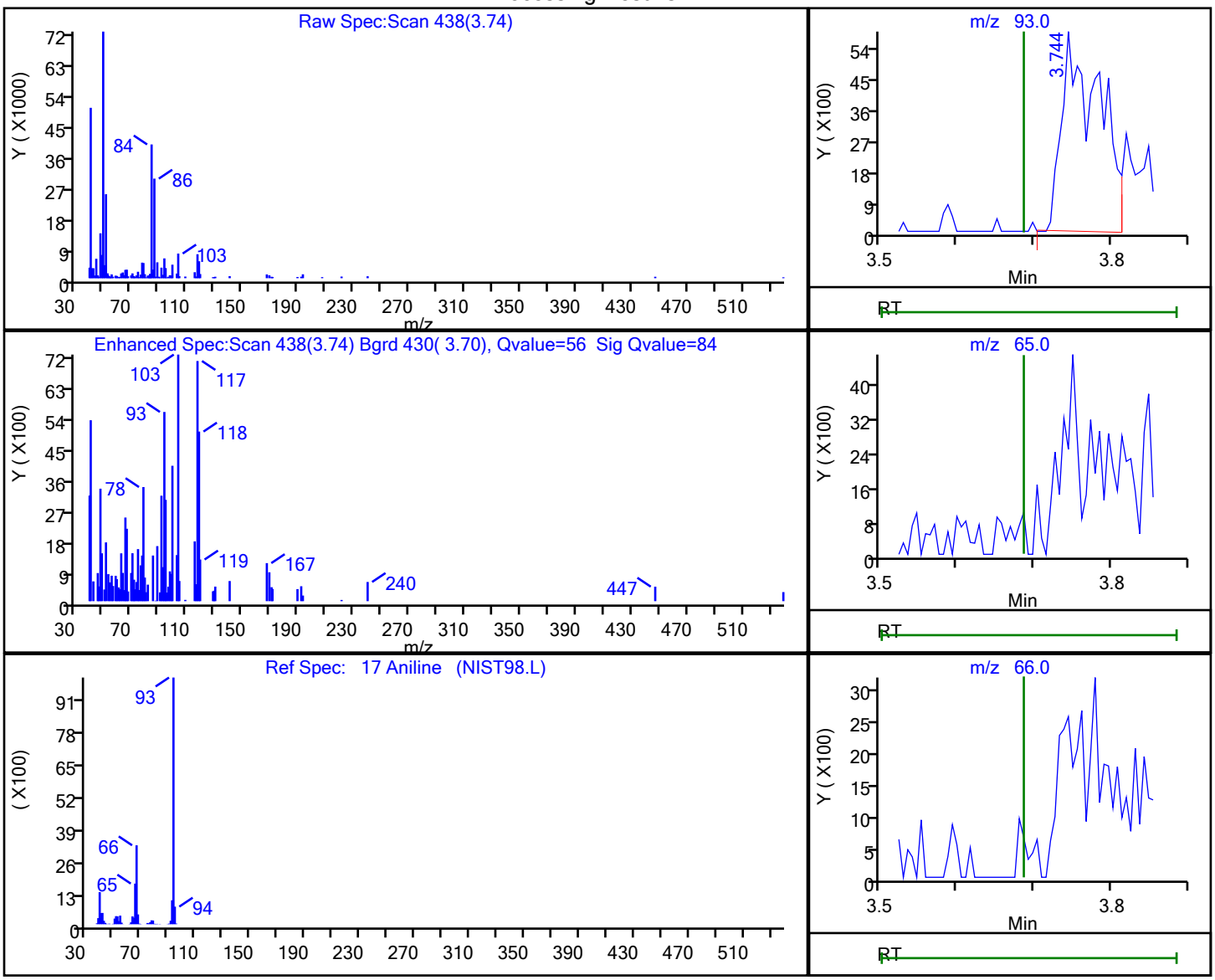
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3107.D				
Injection Date:	31-Oct-2023 16:49:30	Instrument ID:	HP23264		
Lims ID:	IC L2				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

17 Aniline, CAS: 62-53-3

Processing Results



RT	Mass	Response	Amount
3.74	93.00	19670	0.245532
3.69	65.00	0	
3.69	66.00	0	

Reviewer: P7EB, 01-Nov-2023 08:50:12 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 31-Oct-2023 17:10:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 410-0098173-009
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 12:55:41 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

First Level Reviewer: SJ89 Date: 02-Nov-2023 10:27:32

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.520	1.432	0.088	1	5104	0.1250	0.2279	
	2 N-Nitrosodimethylamine	74	1.701	1.648	0.053	35	1158	0.1250	0.0311	
	3 Pyridine	79	1.934	1.683	0.251	13	15869	0.2500	0.2764	M
	4 Dimethylformamide	73	1.958	2.010	-0.052	9	3461	0.1250	0.0786	
	5 2-Picoline	93	2.244	2.244	0.000	1	197	0.1250	0.003510	
	6 N-Nitrosomethylethylamine	88	2.366	2.331	0.035	1	8213	0.1250	-0.8530	
	7 Methyl methanesulfonate	80	2.693	2.594	0.099	1	1799	0.1250	0.2089	M
$	9 2-Fluorophenol	112	2.868	2.758	0.110	1	1505	0.2500	0.0327	
	11 N-Nitrosodiethylamine	102	3.003	2.950	0.053	11	1160	0.1250	0.1984	
	12 Ethyl methanesulfonate	109	3.441	3.254	0.187	1	2040	0.1250	0.2830	M
$	15 Phenol-d5	99	3.826	3.674	0.152	40	19290	0.2500	0.2898	M
	17 Aniline	93		3.686				ND	ND	U
	16 Phenol	94	3.663	3.692	-0.029	1	1305	0.1250	0.0152	
	18 Bis(2-chloroethyl)ether	93	3.756	3.750	0.006	6	1877	0.1250	0.0331	
	19 2-Chlorophenol	128	3.809	3.803	0.006	1	225	0.1250	0.004845	
	21 1,3-Dichlorobenzene	146	3.960	3.943	0.017	30	6407	0.1250	0.1227	
*	22 1,4-Dichlorobenzene-d4	152	4.007	4.001	0.006	96	172378	5.00	5.00	
	23 1,4-Dichlorobenzene	146	4.025	4.019	0.006	34	8339	0.1250	0.1489	
	26 Benzyl alcohol	108	4.252	4.153	0.099	1	1411	0.1250	0.0391	
	27 1,2-Dichlorobenzene	146	4.188	4.165	0.023	35	5833	0.1250	0.1089	
	30 2,2'-oxybis[1-chloropropane]	45	4.287	4.276	0.011	43	17357	0.1250	0.1342	
	29 2-Methylphenol	108	4.328	4.276	0.052	1	2149	0.1250	0.0405	
	31 N-Nitrosopyrrolidine	100	4.416	4.381	0.035	1	439	0.1250	0.0152	
	32 Acetophenone	105	4.381	4.398	-0.017	1	120	0.1250	0.001510	
	33 N-Nitrosodi-n-propylamine	70	4.439	4.398	0.041	48	6983	0.1250	0.1294	
	35 N-Nitrosomorpholine	56	4.445	4.422	0.023	1	4568	0.1250	0.1036	
	34 4-Methylphenol	108	4.433	4.433	0.000	1	768	0.1250	0.1977	
	36 2-Toluidine	106	4.451	4.433	0.018	1	739	0.1250	0.008942	
	37 Hexachloroethane	117	4.480	4.486	-0.006	36	4435	0.1250	0.1866	
$	39 Nitrobenzene-d5	82	4.562	4.544	0.018	1	616	0.2500	0.008933	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	4.568	4.562	0.006	1	1540	0.1250	0.1705	
41 N-Nitrosopiperidine	114	4.719	4.708	0.011	11	3043	0.1250	0.1097	
42 Isophorone	82	4.801	4.795	0.006	59	16898	0.1250	0.1211	
43 2-Nitrophenol	139	4.912	4.871	0.041	1	244	0.1250	0.009523	
44 2,4-Dimethylphenol	107	4.889	4.936	-0.047	1	130	0.1250	0.002649	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	33	2405	0.1250	0.1109	
47 Bis(2-chloroethoxy)methane	93	4.994	5.017	-0.023	1	2672	0.1250	0.0351	
49 2,4-Dichlorophenol	162	5.227	5.122	0.105	42	1275	0.1250	0.0333	
50 1,2,4-Trichlorobenzene	180	5.187	5.181	0.006	19	5778	0.1250	0.1250	
* 52 Naphthalene-d8	136	5.233	5.227	0.006	98	674732	5.00	5.00	
53 Naphthalene	128	5.257	5.251	0.006	31	21865	0.1250	0.1450	
55 Alpha-Terpineol	59	5.280	5.268	0.012	30	7231	0.1250	0.1061	
56 4-Chloroaniline	127	5.309	5.321	-0.012	1	382	0.1250	0.006408	
57 2,6-Dichlorophenol	162	5.368	5.327	0.041	1	2412	0.1250	0.0581	
58 Hexachloropropene	213	5.338	5.333	0.005	50	3420	0.1250	0.1131	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	34	3641	0.1250	0.1309	
61 Quinoline	129	5.624	5.578	0.046	1	133	0.1250	0.001316	
63 N-Nitrosodi-n-butylamine	84	5.654	5.642	0.012	1	2943	0.1250	0.0488	
64 p-Phenylene diamine	108	5.624	5.665	-0.041	1	414	0.1250	0.009089	
65 4-Chloro-3-methylphenol	107	5.776	5.811	-0.035	1	214	0.1250	0.004238	
66 Safrole, Total	162	5.876	5.846	0.030	1	4872	0.1250	0.1394	
67 2-Methylnaphthalene	142	5.940	5.916	0.024	46	9081	0.1250	0.1037	
69 1-Methylnaphthalene	142	6.016	6.010	0.006	33	11688	0.1250	0.1340	
71 Hexachlorocyclopentadiene	237	6.068	6.062	0.006	1	630	0.1250	0.0276	
70 1,2,4,5-Tetrachlorobenzene	216	6.080	6.074	0.006	1	223	0.1250	0.004562	
72 Isosafrole Peak 1	162	6.156	6.127	0.029	1	1366	0.0200	0.0324	
79 2,4,6-Trichlorophenol	196	6.232	6.203	0.029	1	3363	0.1250	0.2543	
80 2,4,5-Trichlorophenol	196	6.360	6.243	0.117	40	1354	0.1250	0.2287	
$ 81 2-Fluorobiphenyl (Surr)	172	6.284	6.273	0.011	95	23442	0.2500	0.2309	
82 Isosafrole Peak 2	162	6.360	6.337	0.023	1	291	0.1050	0.006591	M
83 1,1'-Biphenyl	154	6.378	6.366	0.012	73	11664	0.1250	0.1010	
84 2-Chloronaphthalene	162	6.401	6.378	0.023	46	15413	0.1250	0.1641	Ma
85 1-Chloronaphthalene	162	6.413	6.395	0.018	1	9264	0.1250	0.0941	M
86 Phenyl ether	170	6.477	6.465	0.012	45	6433	0.1250	0.1041	a
87 2-Nitroaniline	138	6.559	6.489	0.070	1	364	0.1250	0.0116	
S 24 Dinitrotoluene	165				0			0.1025	
88 1,4-Naphthoquinone	158	6.605	6.553	0.052	17	4448	0.1250	0.1243	
89 1,4-Dinitrobenzene	168	6.775	6.629	0.146	0	3667	0.1250	0.2568	M
90 Dimethyl phthalate	163	6.681	6.670	0.011	94	14223	0.1250	0.1175	
91 1,3-Dinitrobenzene	168	6.711	6.699	0.012	1	750	0.1250	0.0452	
92 2,6-Dinitrotoluene	165	6.746	6.722	0.024	54	1818	0.1250	0.0732	
93 Acenaphthylene	152	6.775	6.763	0.012	94	19934	0.1250	0.1261	
95 3-Nitroaniline	138	6.868	6.880	-0.012	32	321	0.1250	0.0110	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	95	392092	5.00	5.00	
97 Acenaphthene	153	6.932	6.932	0.000	39	11453	0.1250	0.1186	
98 2,4-Dinitrophenol	184	6.979	6.985	-0.006	1	468	1.25	1.73	
99 Pentachlorobenzene	250	7.067	7.055	0.012	67	6001	0.1250	0.1418	
100 4-Nitrophenol	109	7.219	7.090	0.129	1	10474	0.7500	0.5199	M
101 Dibenzofuran	168	7.113	7.096	0.017	63	15880	0.1250	0.1184	
102 2,4-Dinitrotoluene	165	7.061	7.102	-0.041	56	1025	0.1250	0.0293	
104 1-Naphthylamine	143	7.195	7.178	0.017	92	10226	0.1250	0.1136	
105 2,3,4,6-Tetrachlorophenol	232	7.189	7.184	0.005	45	1545	0.1250	0.0579	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
106 2-Naphthylamine	143		7.254				ND	ND	MU
107 Diethyl phthalate	149	7.341	7.335	0.006	63	13818	0.1250	0.1129	
109 Thionazin	107	7.417	7.411	0.006	41	2955	0.1250	0.1368	
108 Fluorene	166	7.429	7.417	0.012	79	11190	0.1250	0.1086	
110 4-Chlorophenyl phenyl ether	204	7.440	7.429	0.011	57	6045	0.1250	0.1239	
111 N-Nitro-o-toluidine	152	7.423	7.446	-0.023	45	156	0.1250	0.004991	
112 4-Nitroaniline	138	7.446	7.458	-0.012	1	287	0.1250	0.1694	M
113 4,6-Dinitro-2-methylphenol	198	7.505	7.481	0.024	52	10489	0.7500	0.5682	
114 N-Nitrosodiphenylamine	169	7.557	7.546	0.011	66	8541	0.1063	0.1012	
115 1,2-Diphenylhydrazine	77	7.586	7.575	0.011	92	21566	0.1250	0.1338	
$ 116 2,4,6-Tribromophenol	330	7.656	7.651	0.005	7	3775	0.2500	0.2000	
117 Sulfotepp	97	7.709	7.709	0.000	6	3517	0.1250	0.1264	M
120 cis-Diallate	86	7.820	7.820	0.000	56	7847	0.0925	0.1374	
119 Phorate	75	7.832	7.826	0.006	87	10389	0.1250	0.0823	
118 1,3,5-Trinitrobenzene	213	7.931	7.832	0.099	1	295	0.1250	0.0336	M
121 Phenacetin	108	7.832	7.855	-0.023	33	330	0.1250	0.005307	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	1	3625	0.1250	0.1159	
123 trans-Diallate	86	7.820	7.902	-0.082	53	7550	0.0325	0.1344	M
124 Hexachlorobenzene	284	7.937	7.931	0.006	80	4017	0.1250	0.1192	
125 Dimethoate	87	8.007	7.989	0.018	1	5030	0.1250	0.0873	
127 Pentachlorophenol	266	8.147	8.135	0.012	66	3804	0.6250	0.9002	
128 Pentachloronitrobenzene	237	8.141	8.135	0.006	57	2882	0.1250	0.1755	
129 4-Aminobiphenyl	169	8.153	8.135	0.018	53	10208	0.1250	0.0936	
130 Pronamide	173	8.211	8.205	0.006	56	5615	0.1250	0.1139	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	96	702580	5.00	5.00	
133 Dinoseb	211	8.322	8.316	0.006	63	1825	0.1250	0.0824	
134 Disulfoton	88	8.328	8.322	0.006	41	25289	0.1250	0.2983	M
132 Phenanthrene	178	8.322	8.322	0.000	93	20627	0.1250	0.1328	
135 Anthracene	178	8.381	8.369	0.011	95	21535	0.1250	0.1363	
136 Carbazole	167	8.567	8.538	0.029	95	16626	0.1250	0.1163	
137 Methyl parathion	109	8.690	8.678	0.012	2	5398	0.1250	0.1264	
138 Di-n-butyl phthalate	149	8.889	8.889	-0.001	97	23429	0.1250	0.1194	
139 Ethyl Parathion	109	9.046	9.052	-0.006	1	3021	0.1250	0.1162	
140 4-Nitroquinoline-1-oxide	190	9.163	9.070	0.093	1	631	0.1250	0.5640	
142 Octachlorostyrene	308	9.268	9.268	0.000	6	2017	0.1250	0.1353	
143 Isodrin	193	9.280	9.297	-0.017	1	3929	0.1250	0.1894	
144 Fluoranthene	202	9.455	9.443	0.012	96	18518	0.1250	0.1148	
145 Benzidine	184	9.618	9.595	0.023	52	7280	0.3750	0.0729	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	96	737702	5.00	5.00	
S 68 Diallate	86				0		0.1250	0.2718	
147 Pyrene	202	9.653	9.653	0.000	71	21975	0.1250	0.1242	
$ 148 p-Terphenyl-d14	244	9.829	9.823	0.006	94	29290	0.2500	0.2437	
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	21	2045	0.1250	0.0852	
150 Chlorobenzilate	139	10.015	10.010	0.005	44	5791	0.1250	0.0977	
152 3,3'-Dimethylbenzidine	212	10.302	10.290	0.012	65	8457	0.1250	0.0976	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	87	10169	0.1250	0.1181	
155 2-Acetylaminofluorene	181	10.564	10.541	0.023	1	197	0.1250	0.003032	
157 3,3'-Dichlorobenzidine	252	10.862	10.845	0.017	59	5685	0.1250	0.0975	
156 Benzo[a]anthracene	228	10.862	10.850	0.012	95	15162	0.1250	0.1015	
158 4,4'-Methylene bis(2-chloroani	231	10.862	10.850	0.012	62	2628	0.1250	0.0870	
159 Chrysene	228	10.897	10.885	0.012	66	18605	0.1250	0.1251	
160 Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	90	13316	0.1250	0.1101	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
S 94 Isosafrole	162				0		0.1250	0.0389	
161 6-Methylchrysene	242	11.417	11.405	0.012	92	15155	0.1250	0.1516	
162 Di-n-octyl phthalate	149	11.720	11.726	-0.006	95	16924	0.1250	0.0921	
163 7,12-Dimethylbenz(a)anthracene	256	12.123	12.118	0.005	40	5995	0.1250	0.1181	
164 Benzo[b]fluoranthene	252	12.135	12.123	0.012	78	14295	0.1250	0.1040	
165 Benzo[k]fluoranthene	252	12.170	12.158	0.012	27	18562	0.1250	0.1360	
166 Benzo[a]pyrene	252	12.550	12.544	0.006	52	15176	0.1250	0.1133	M
* 167 Perylene-d12	264	12.620	12.620	0.000	95	600410	5.00	5.00	
168 3-Methylcholanthrene	268	13.028	13.028	0.000	36	8490	0.1250	0.1371	
169 Dibenz[a,h]acridine	279	13.793	13.770	0.023	25	11508	0.1250	0.1115	a
170 Dibenz[a,j]acridine	279	13.863	13.840	0.023	30	14733	0.1250	0.1266	a
171 Indeno[1,2,3-cd]pyrene	276	14.091	14.068	0.023	86	16369	0.1250	0.1254	
172 Dibenz(a,h)anthracene	278	14.126	14.109	0.017	14	15288	0.1250	0.1145	
173 Benzo[g,h,i]perylene	276	14.441	14.424	0.017	70	14865	0.1250	0.1042	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270_1_00032 Amount Added: 1.00 Units: mL

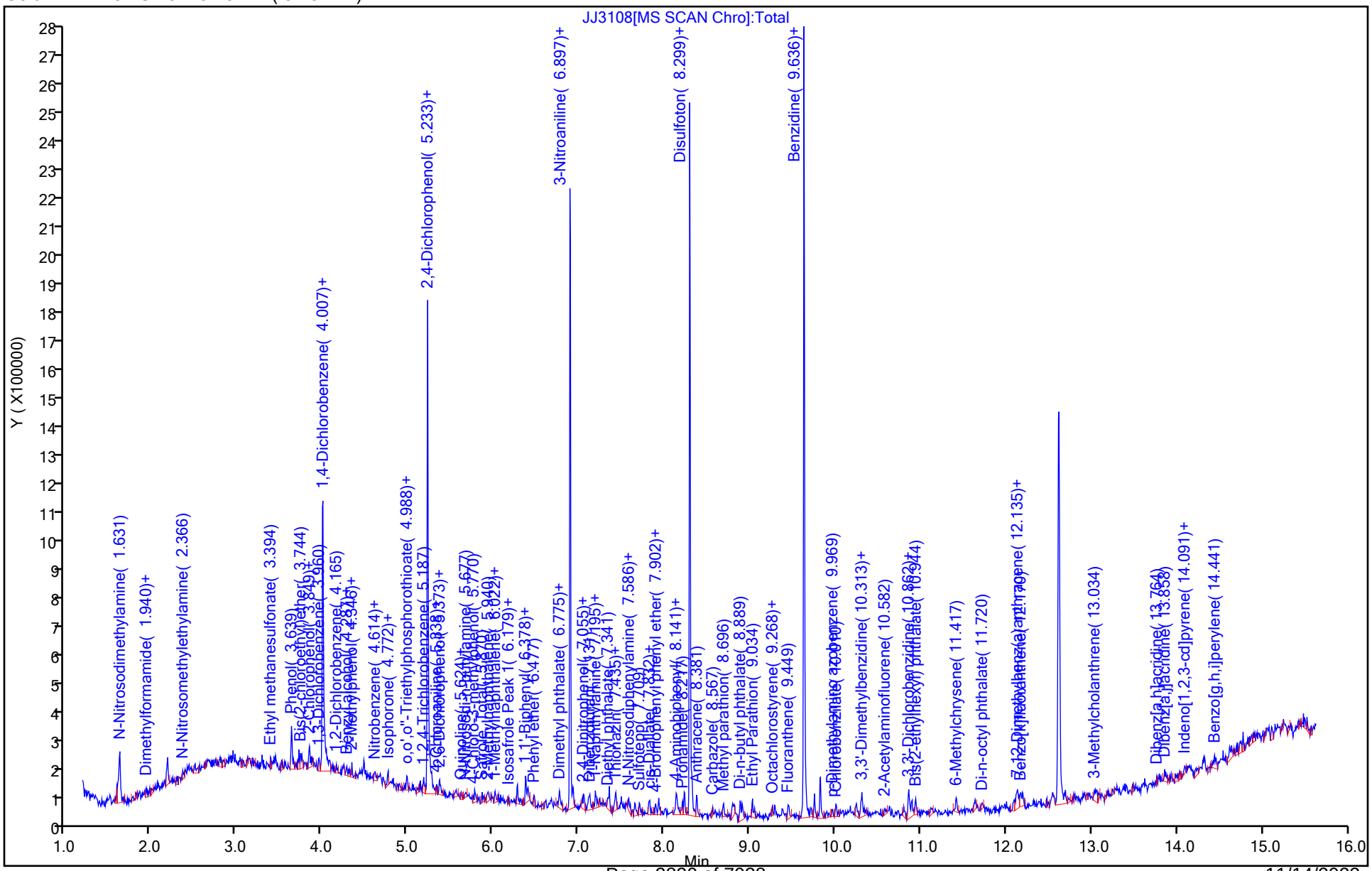
Report Date: 02-Nov-2023 12:55:42 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

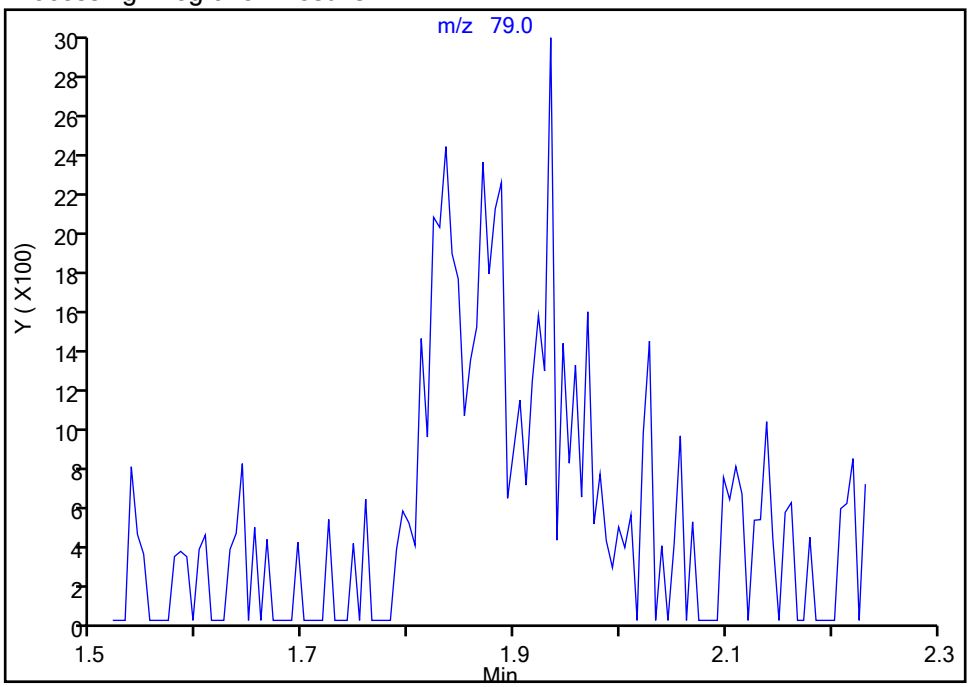
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

3 Pyridine, CAS: 110-86-1

Signal: 1

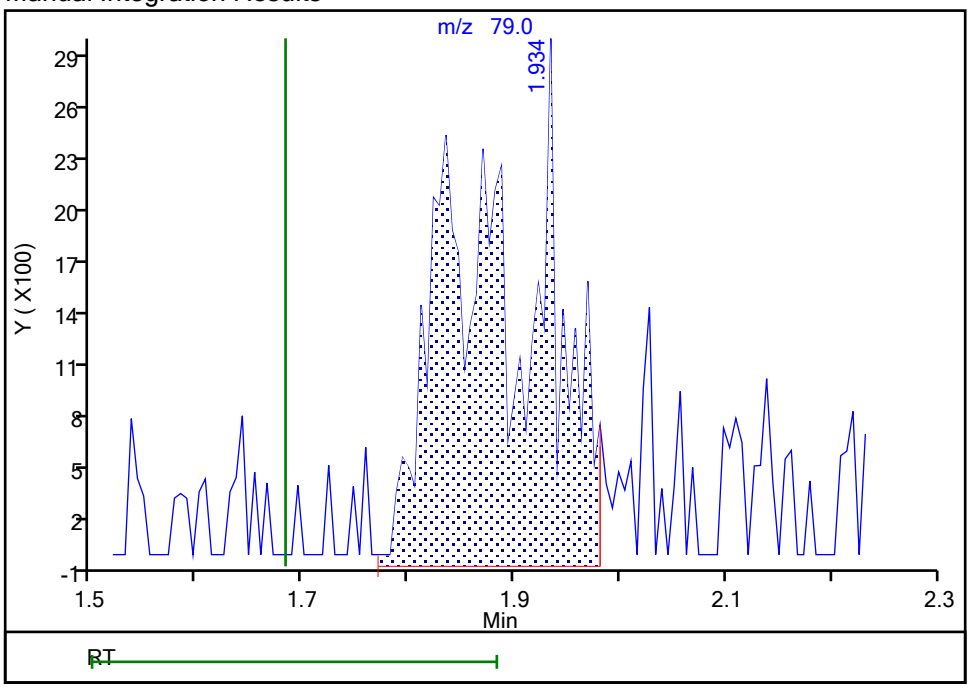
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.93
Area: 15869
Amount: 0.276369
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:29:11 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

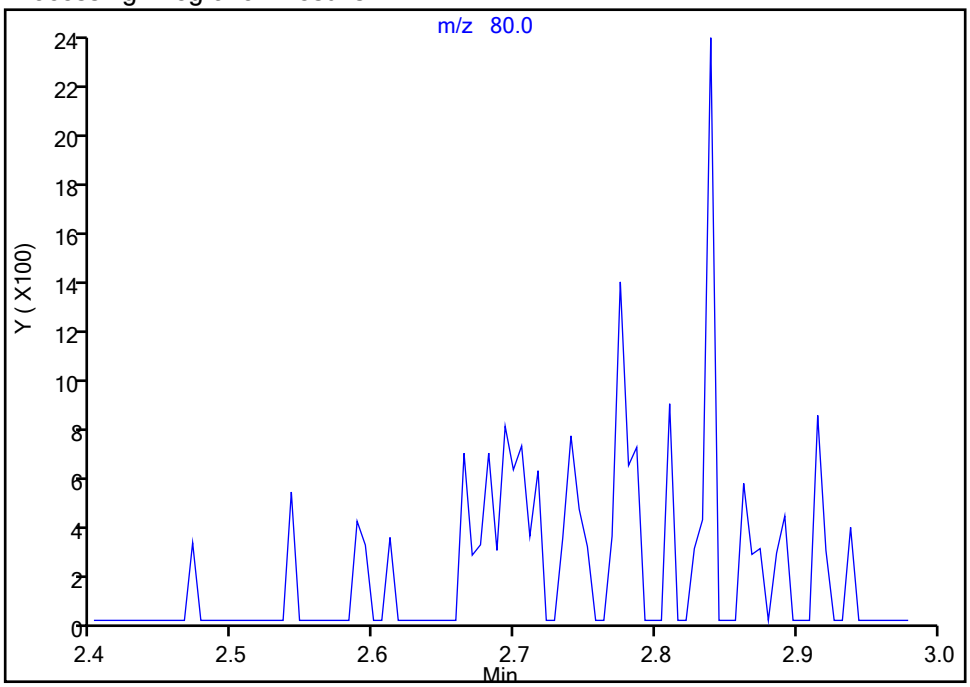
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

7 Methyl methanesulfonate, CAS: 66-27-3

Signal: 1

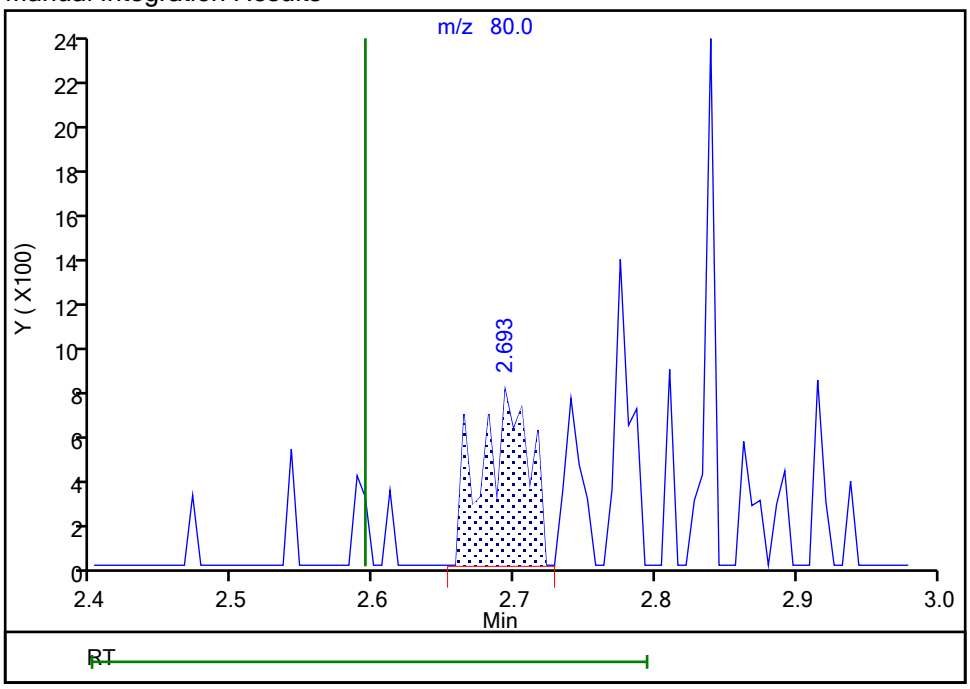
Not Detected
Expected RT: 2.59

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 1799
Amount: 0.208923
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:29:20 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
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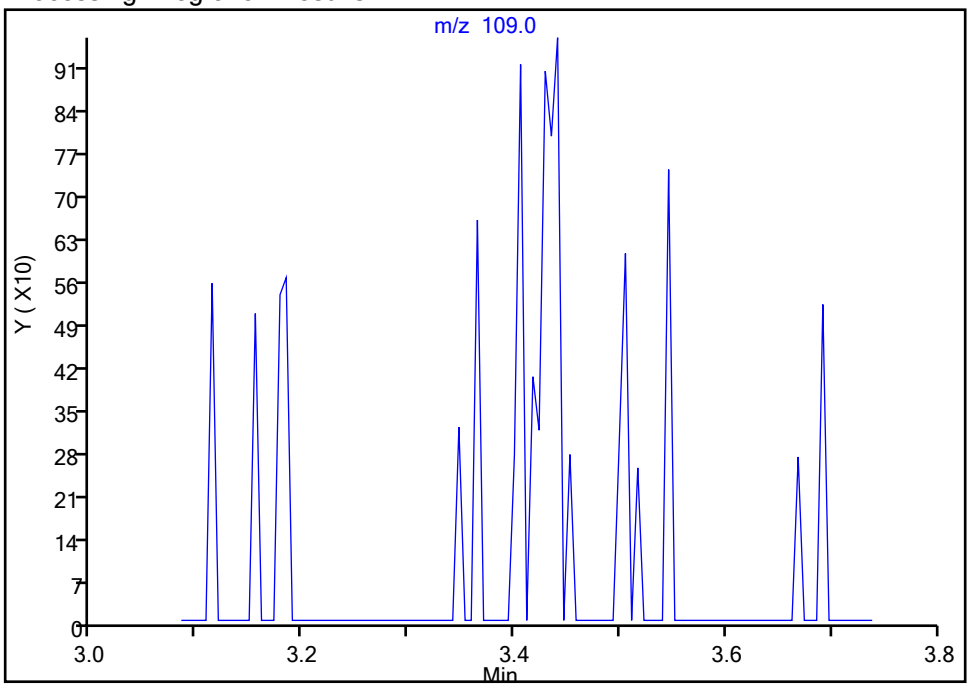
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

12 Ethyl methanesulfonate, CAS: 62-50-0

Signal: 1

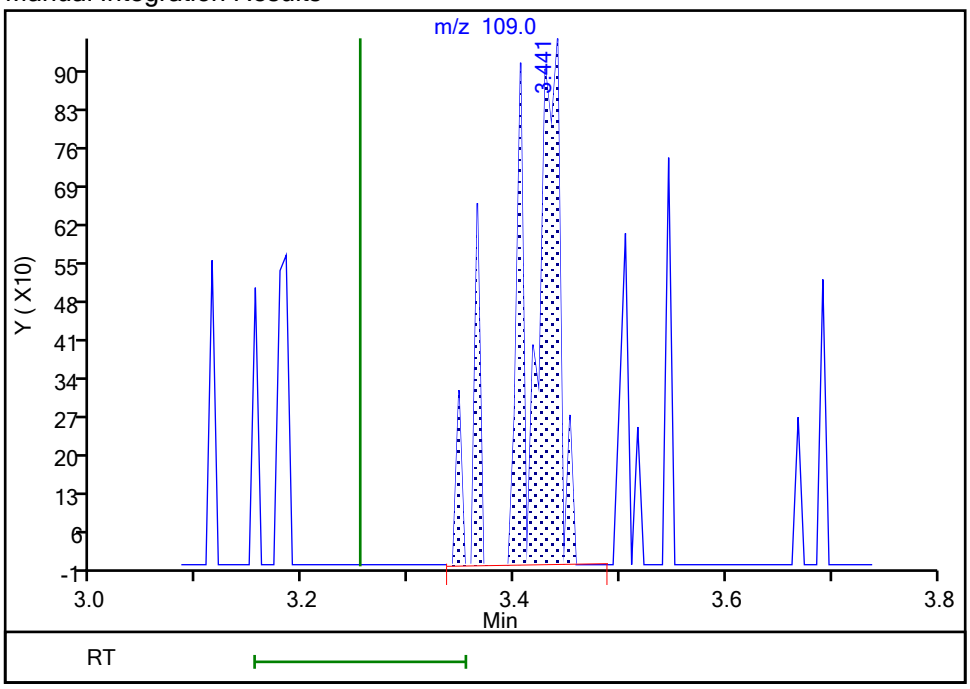
Not Detected
Expected RT: 3.25

Processing Integration Results



Manual Integration Results

RT: 3.44
Area: 2040
Amount: 0.283017
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:29:38 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

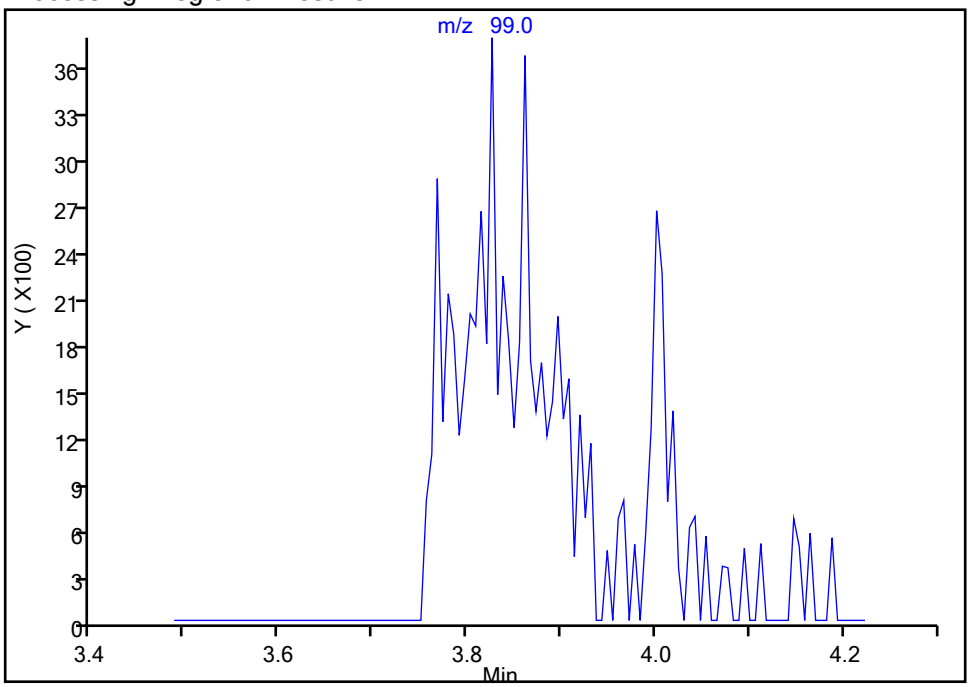
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

$ 15 Phenol-d5, CAS: 4165-62-2

Signal: 1

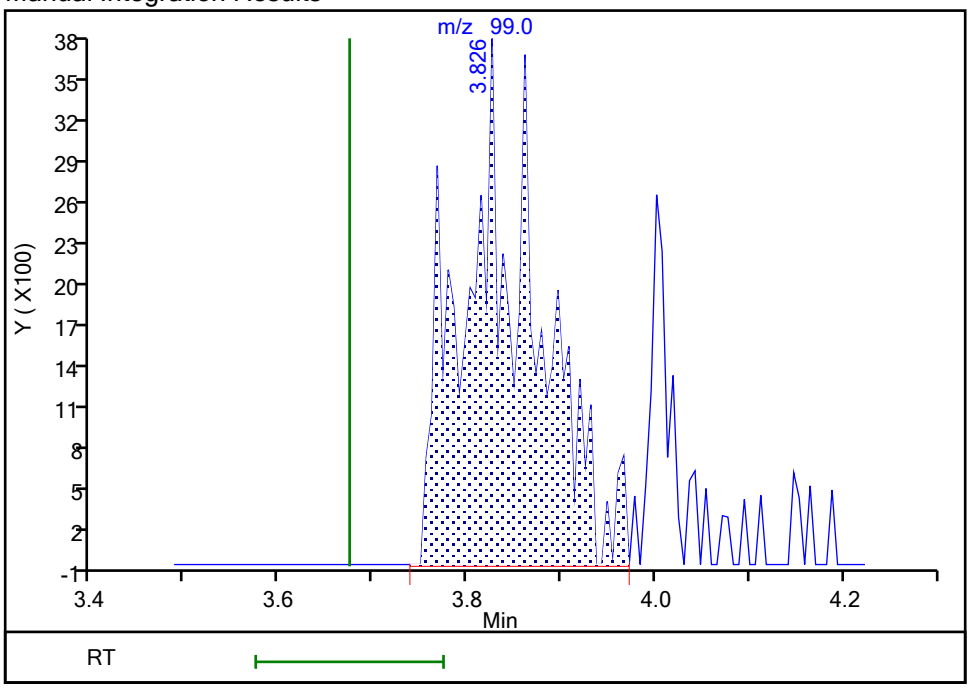
Processing Integration Results

Not Detected
Expected RT: 3.67



Manual Integration Results

RT: 3.83
Area: 19290
Amount: 0.289833
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:28:50 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

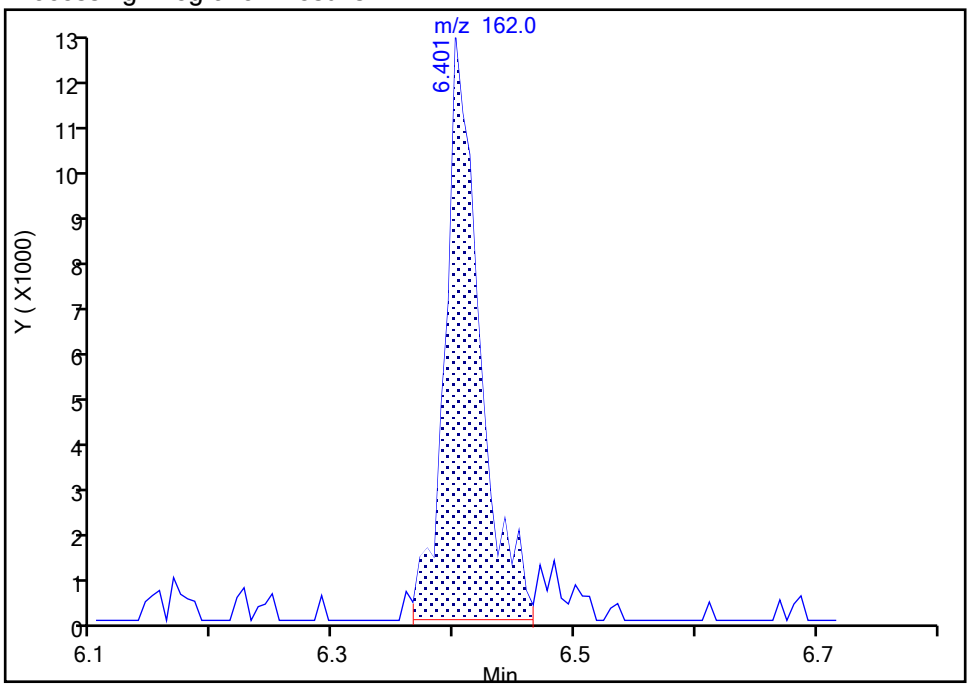
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

82 Isosafrole Peak 2, CAS: 120-58-1

Signal: 1

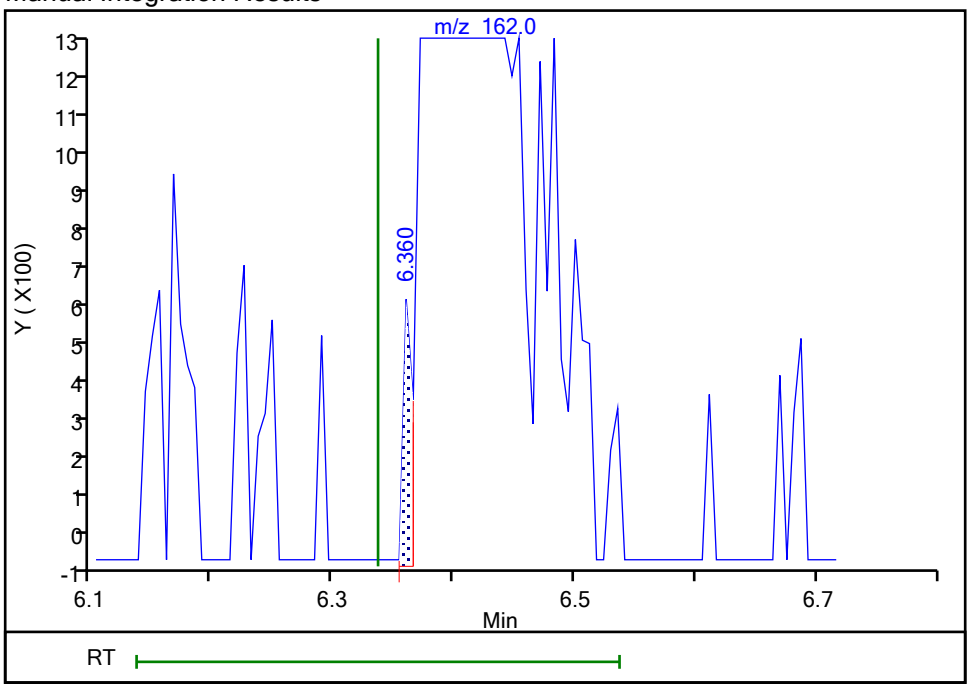
Processing Integration Results

RT: 6.40
Area: 24678
Amount: 0.377173
Amount Units: ug/ml



Manual Integration Results

RT: 6.36
Area: 291
Amount: 0.006591
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:53:43 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
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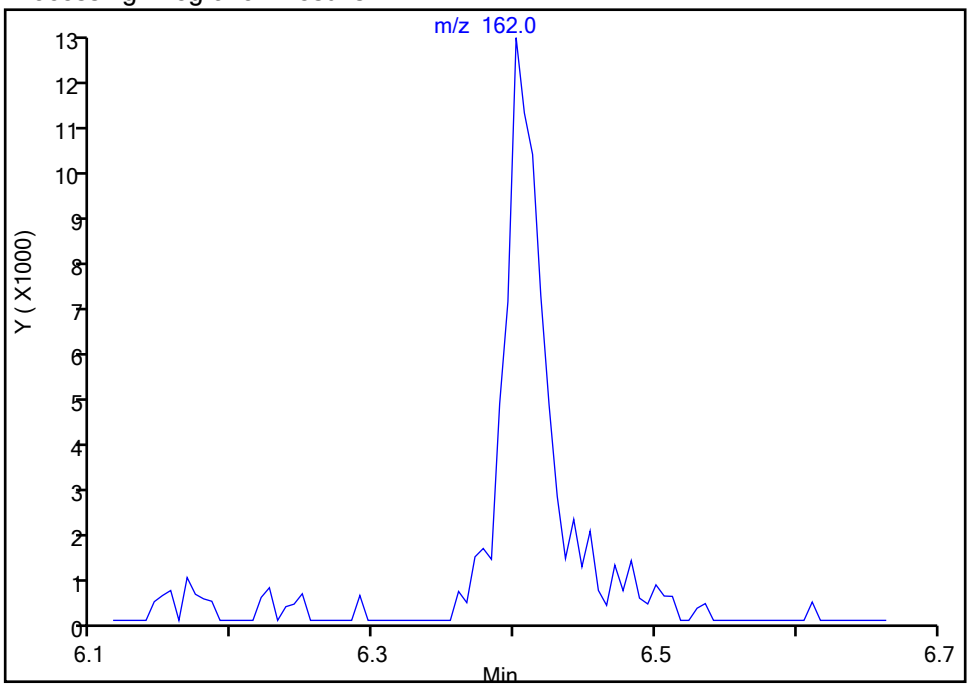
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

84 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

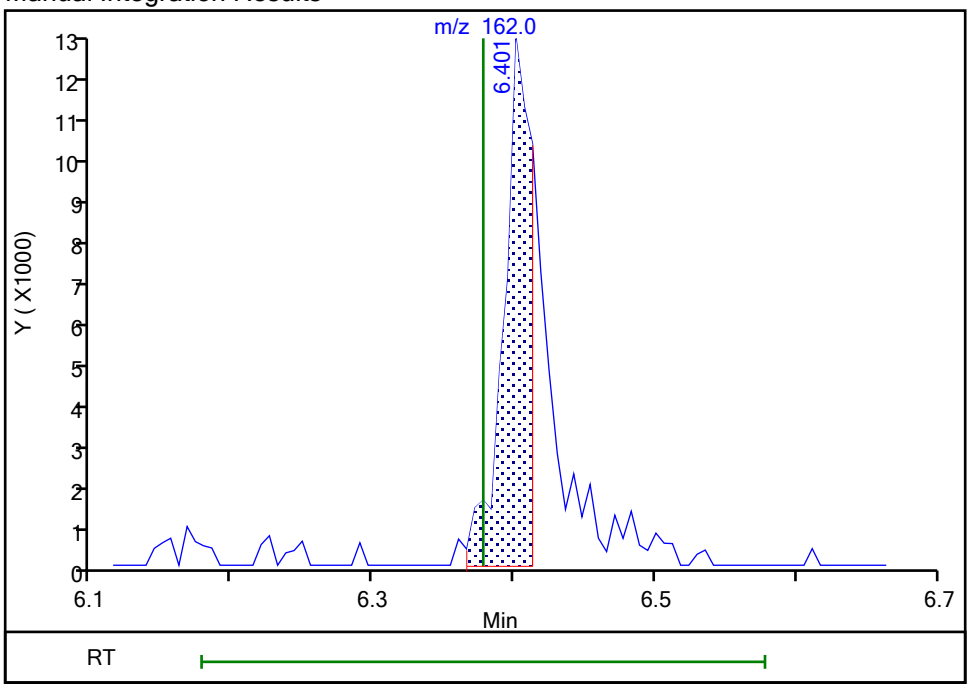
Not Detected
Expected RT: 6.38

Processing Integration Results



Manual Integration Results

RT: 6.40
Area: 15413
Amount: 0.164113
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:52:34 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

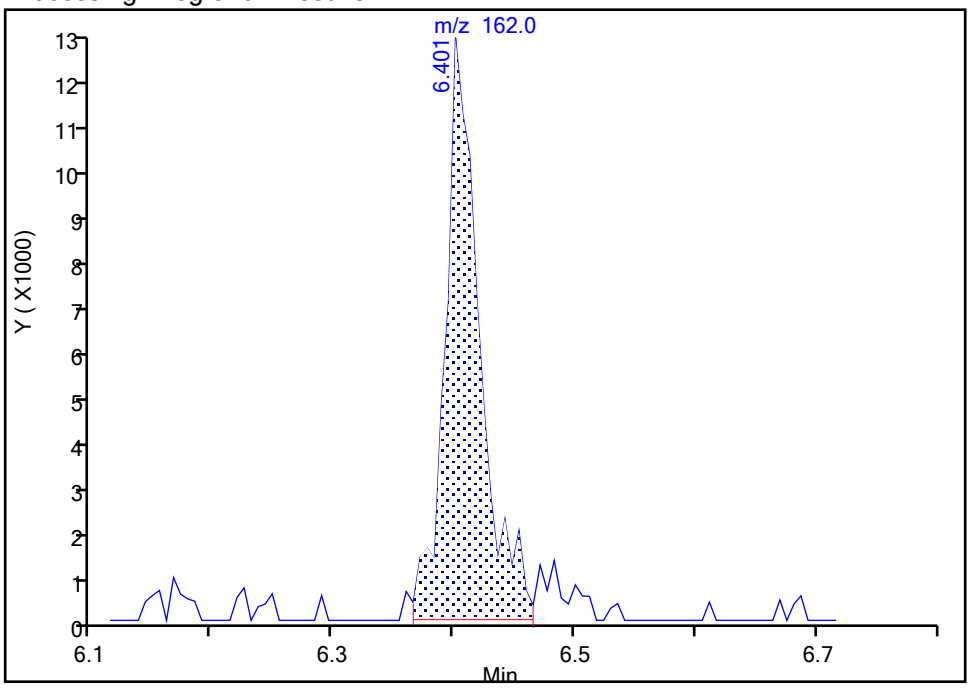
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

85 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

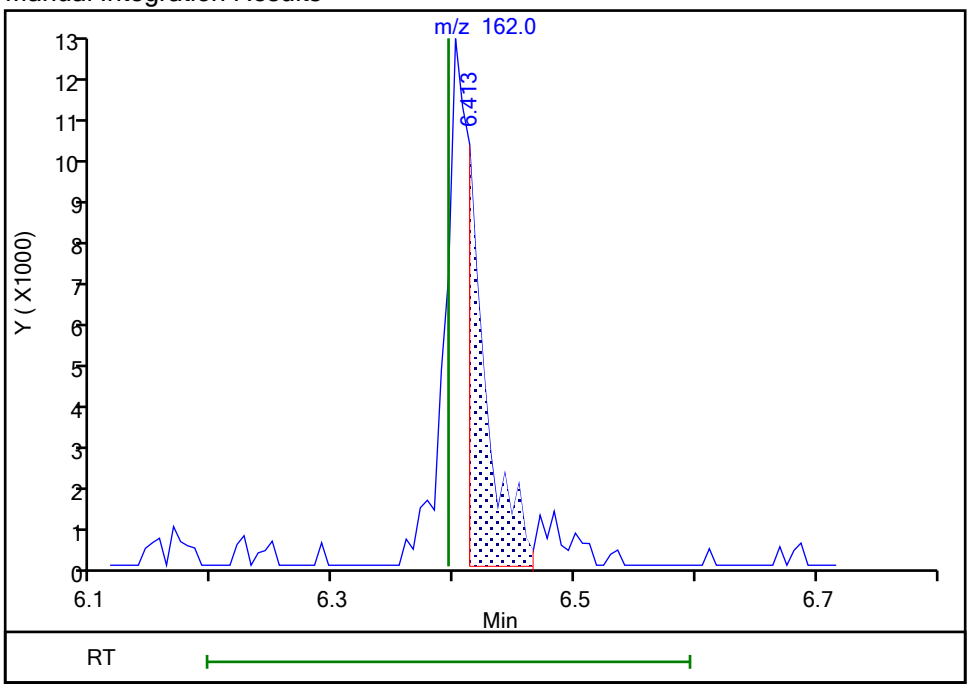
Processing Integration Results

RT: 6.40
Area: 24678
Amount: 0.222636
Amount Units: ug/ml



Manual Integration Results

RT: 6.41
Area: 9264
Amount: 0.094074
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:52:56 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

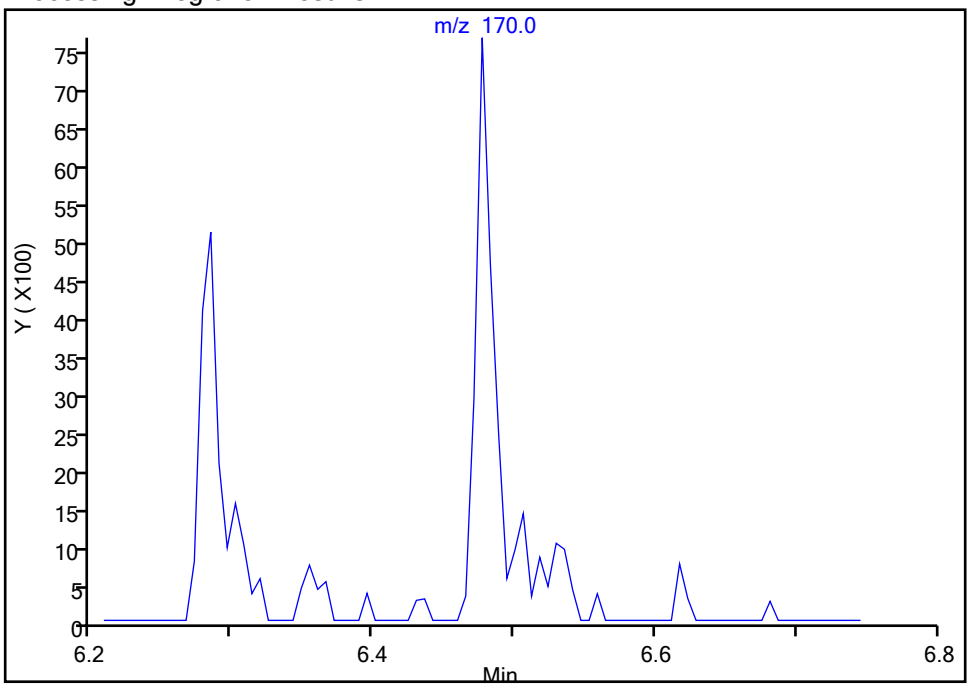
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

86 Phenyl ether, CAS: 101-84-8

Signal: 1

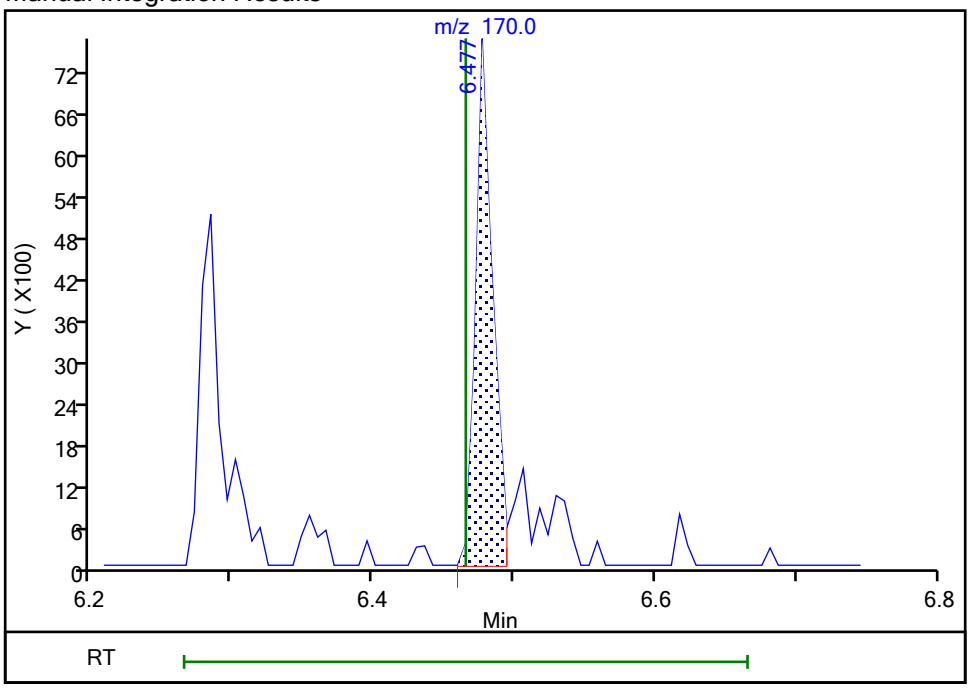
Not Detected
Expected RT: 6.47

Processing Integration Results



Manual Integration Results

RT: 6.48
Area: 6433
Amount: 0.104118
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:52:15 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

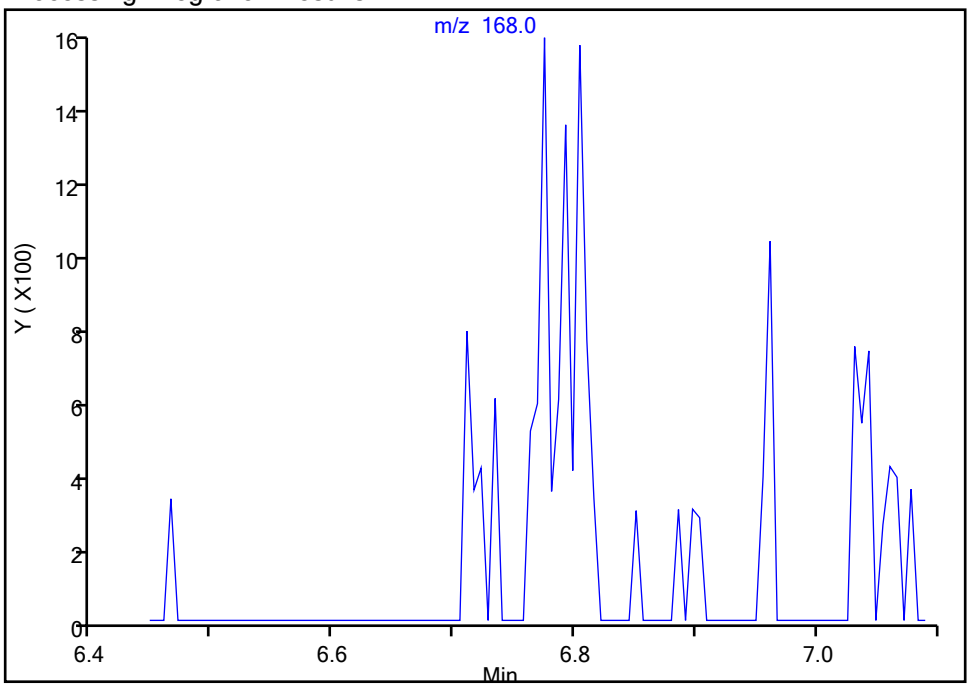
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

89 1,4-Dinitrobenzene, CAS: 100-25-4

Signal: 1

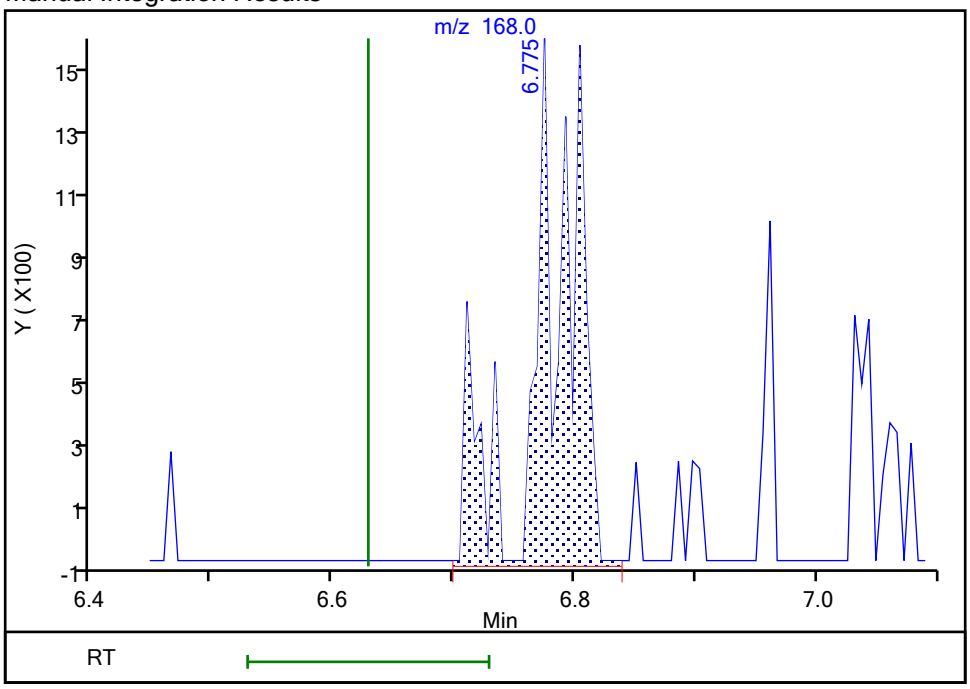
Not Detected
Expected RT: 6.63

Processing Integration Results



Manual Integration Results

RT: 6.77
Area: 3667
Amount: 0.256773
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:30:17 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

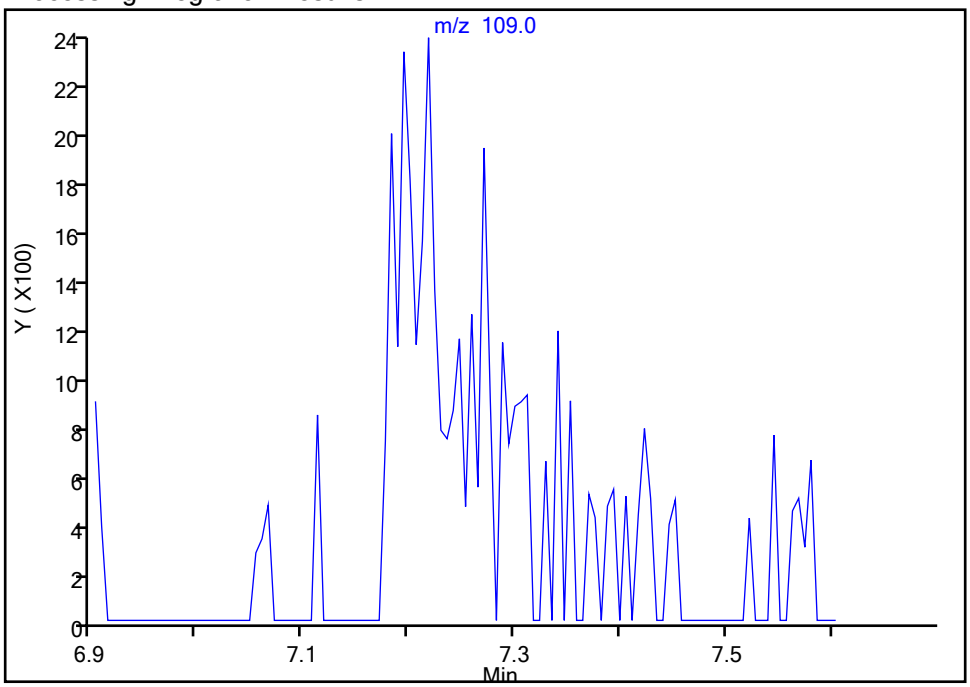
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

100 4-Nitrophenol, CAS: 100-02-7

Signal: 1

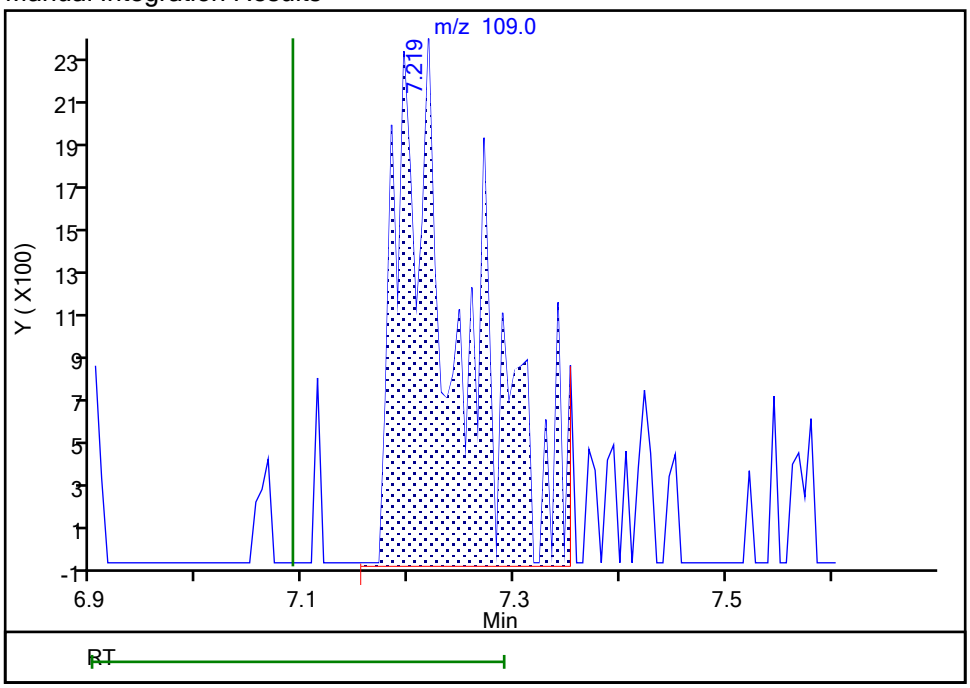
Not Detected
Expected RT: 7.09

Processing Integration Results



Manual Integration Results

RT: 7.22
Area: 10474
Amount: 0.519859
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:30:27 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

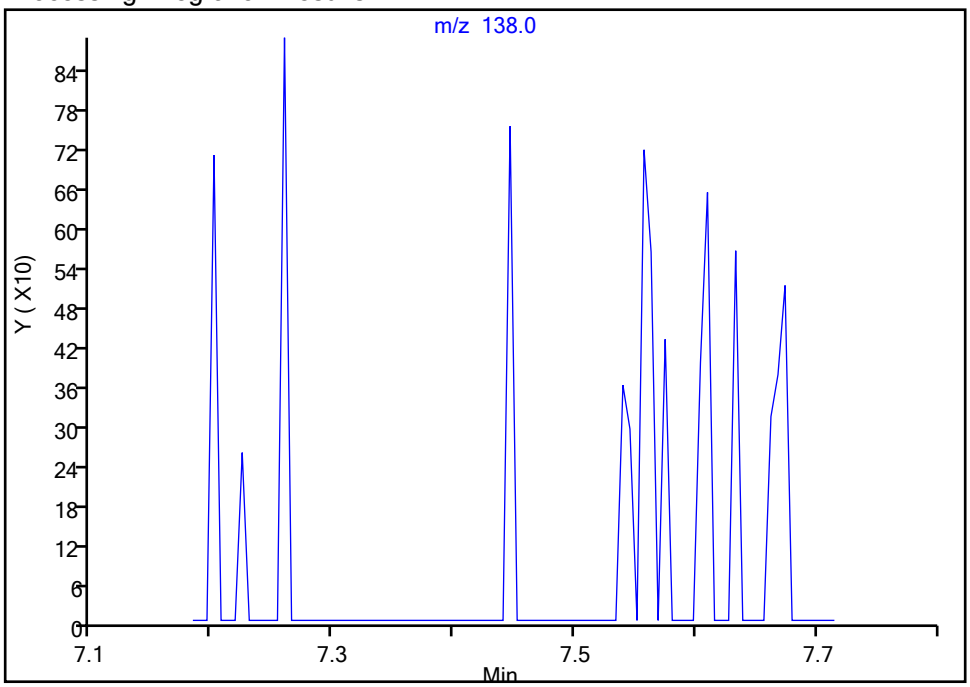
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

112 4-Nitroaniline, CAS: 100-01-6

Signal: 1

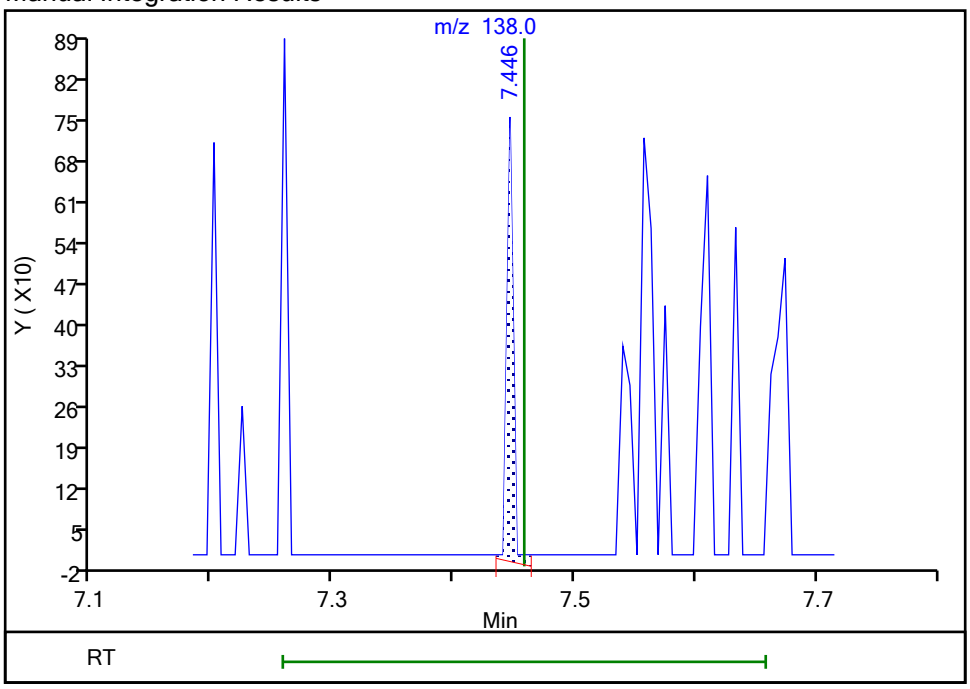
Not Detected
Expected RT: 7.46

Processing Integration Results



Manual Integration Results

RT: 7.45
Area: 287
Amount: 0.169430
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:30:47 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

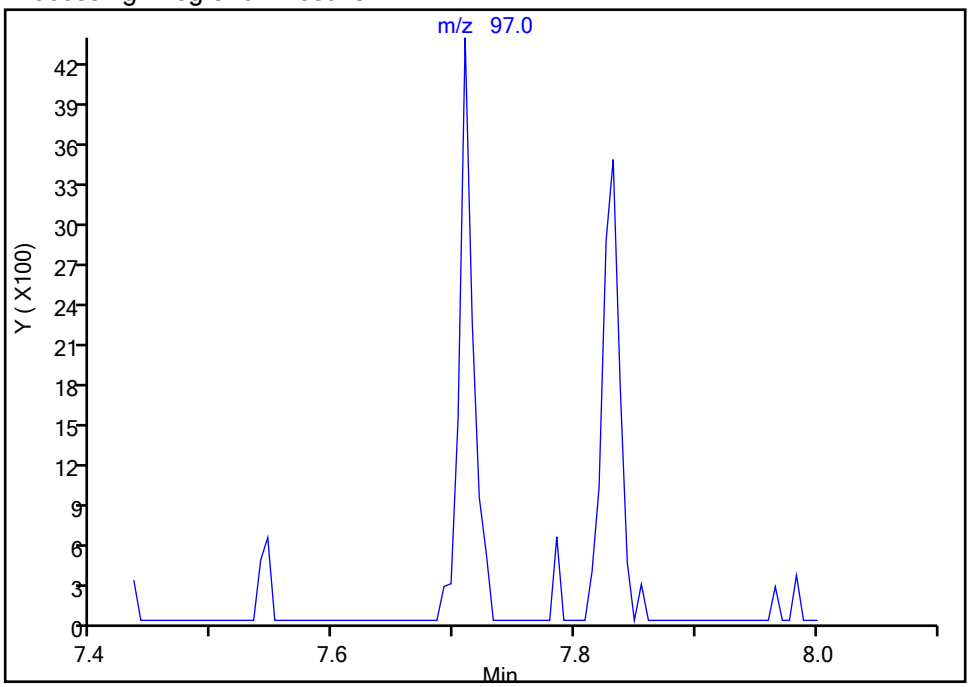
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

117 Sulfotepp, CAS: 3689-24-5

Signal: 1

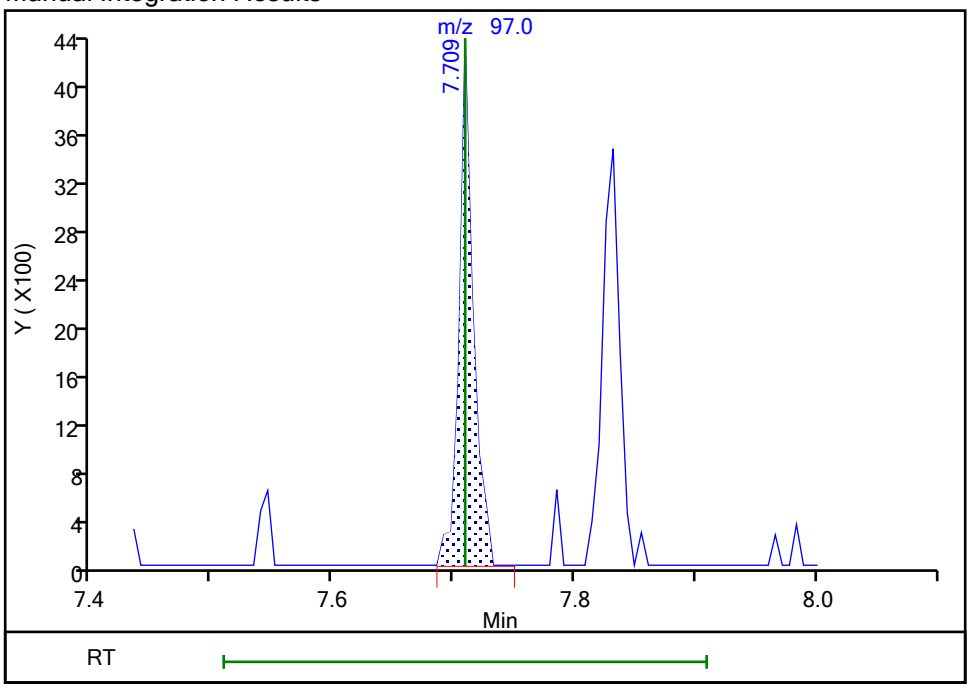
Not Detected
Expected RT: 7.71

Processing Integration Results



Manual Integration Results

RT: 7.71
Area: 3517
Amount: 0.126414
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:15:06 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

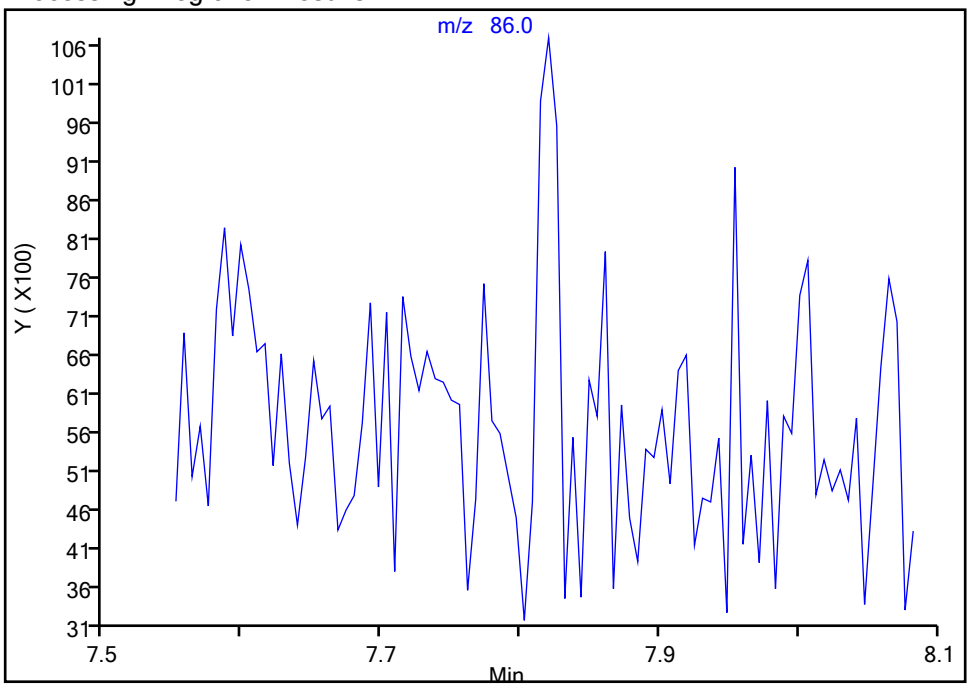
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

123 trans-Diallate, CAS: 17708-58-6

Signal: 1

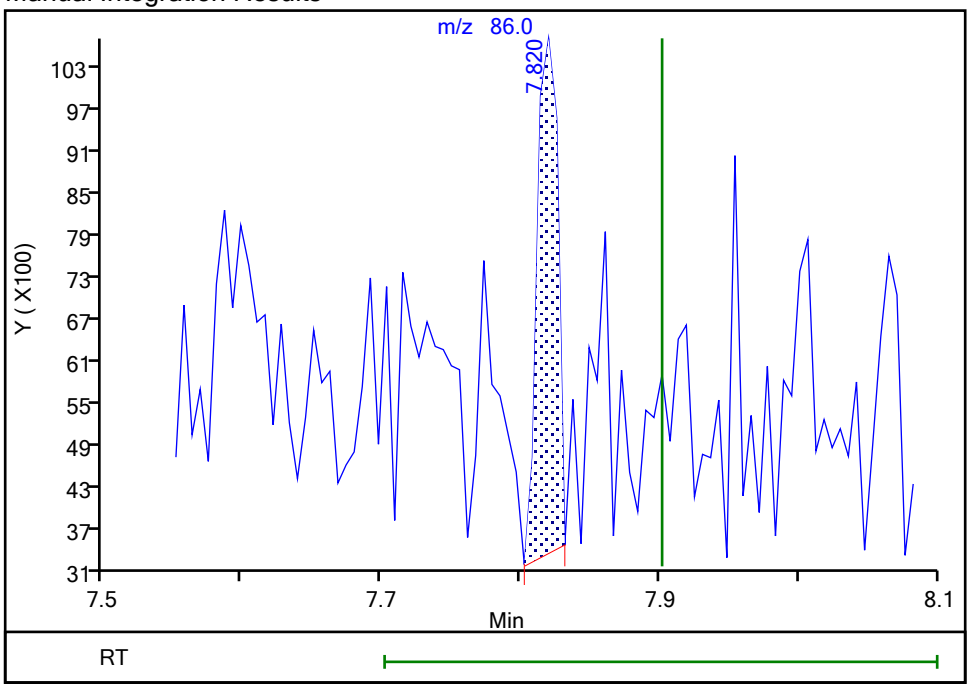
Not Detected
Expected RT: 7.90

Processing Integration Results



Manual Integration Results

RT: 7.82
Area: 7550
Amount: 0.134403
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:31:06 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

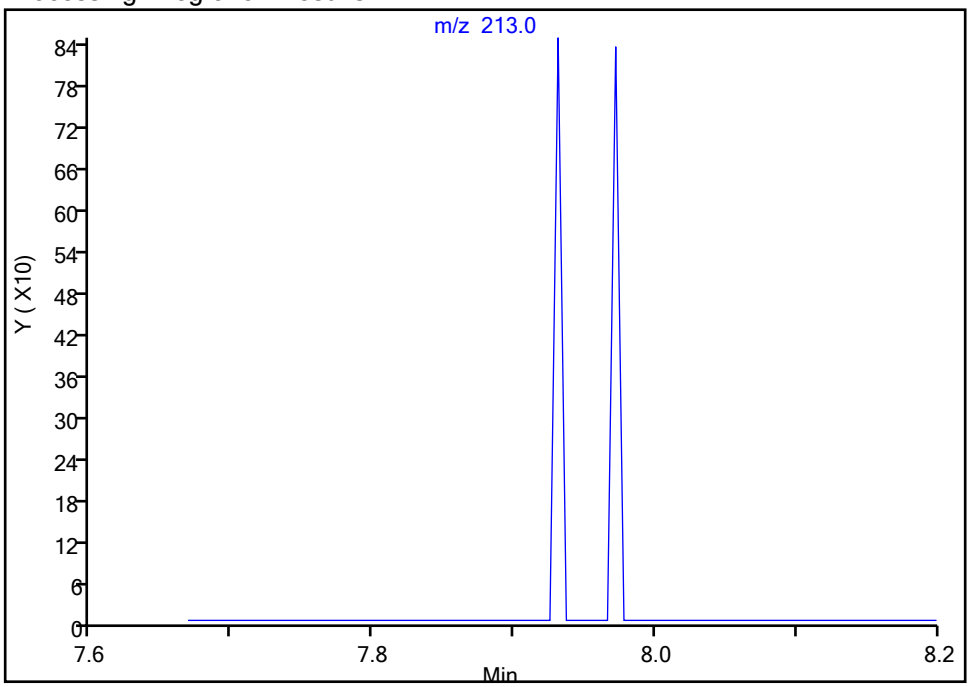
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

118 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

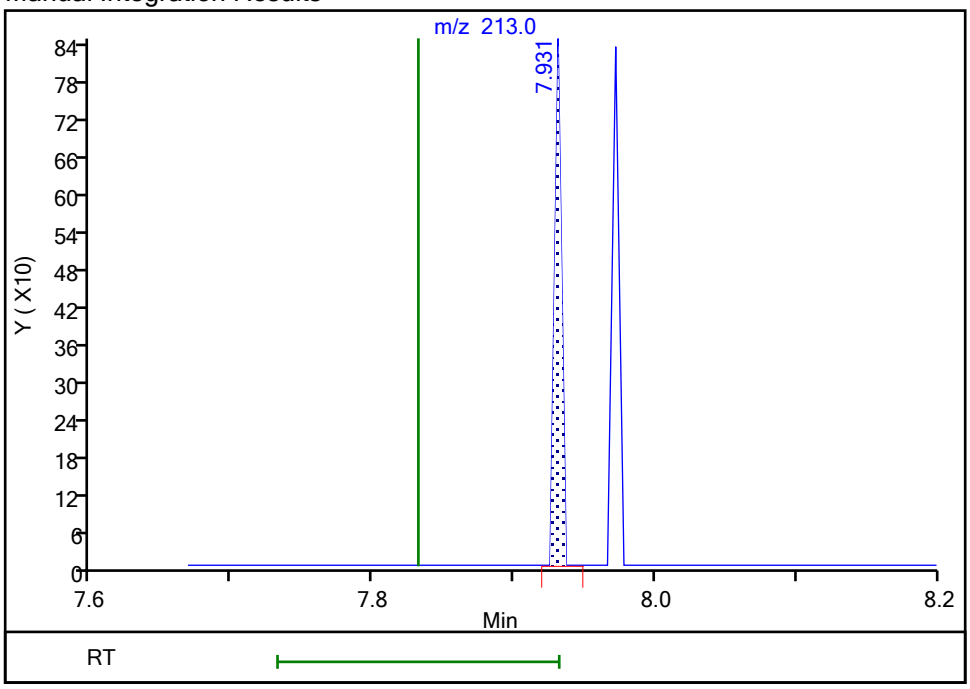
Not Detected
Expected RT: 7.83

Processing Integration Results



Manual Integration Results

RT: 7.93
Area: 295
Amount: 0.033580
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:30:59 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

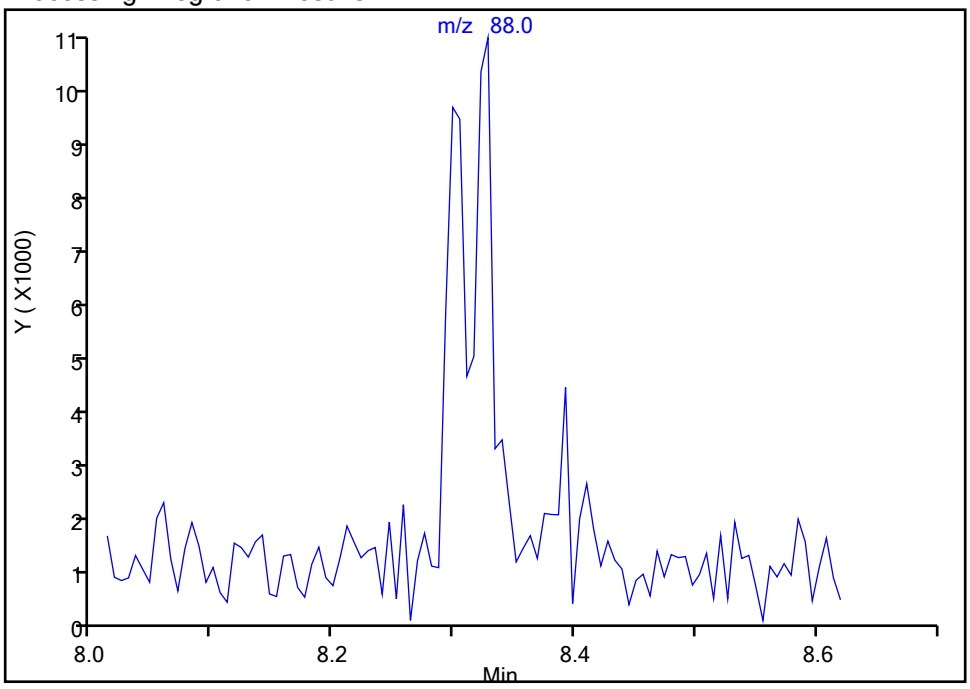
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

134 Disulfoton, CAS: 298-04-4

Signal: 1

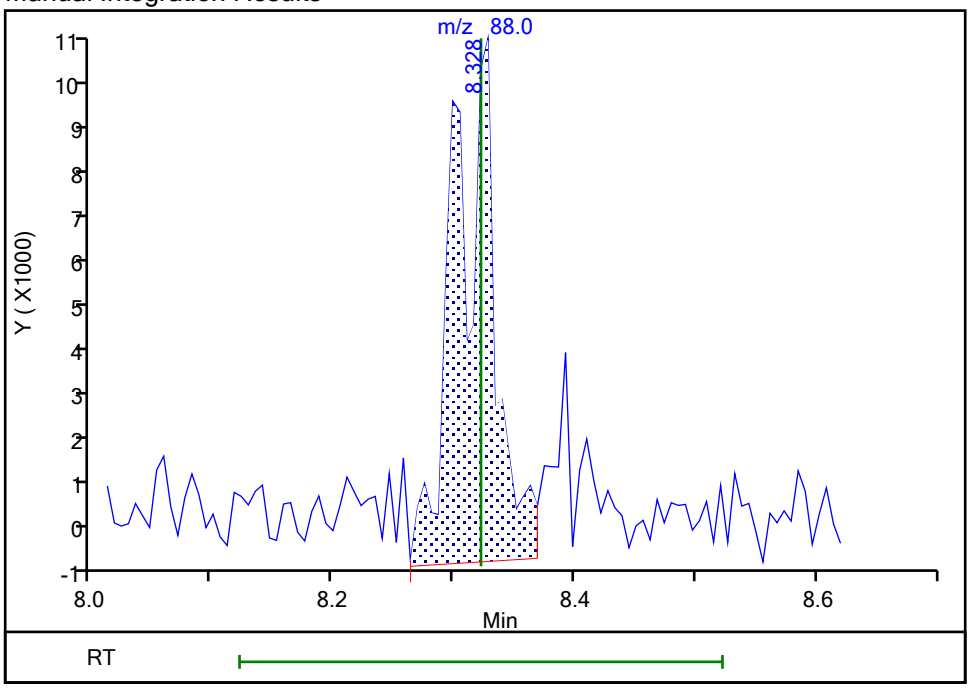
Not Detected
Expected RT: 8.32

Processing Integration Results



Manual Integration Results

RT: 8.33
Area: 25289
Amount: 0.298298
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 07:31:17 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

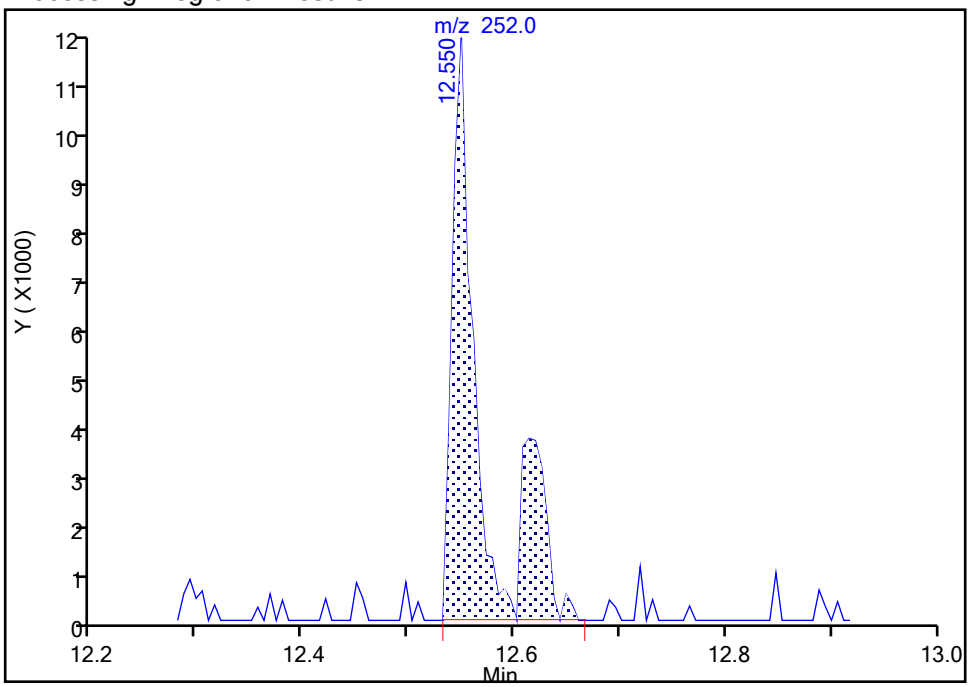
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

166 Benzo[a]pyrene, CAS: 50-32-8

Signal: 1

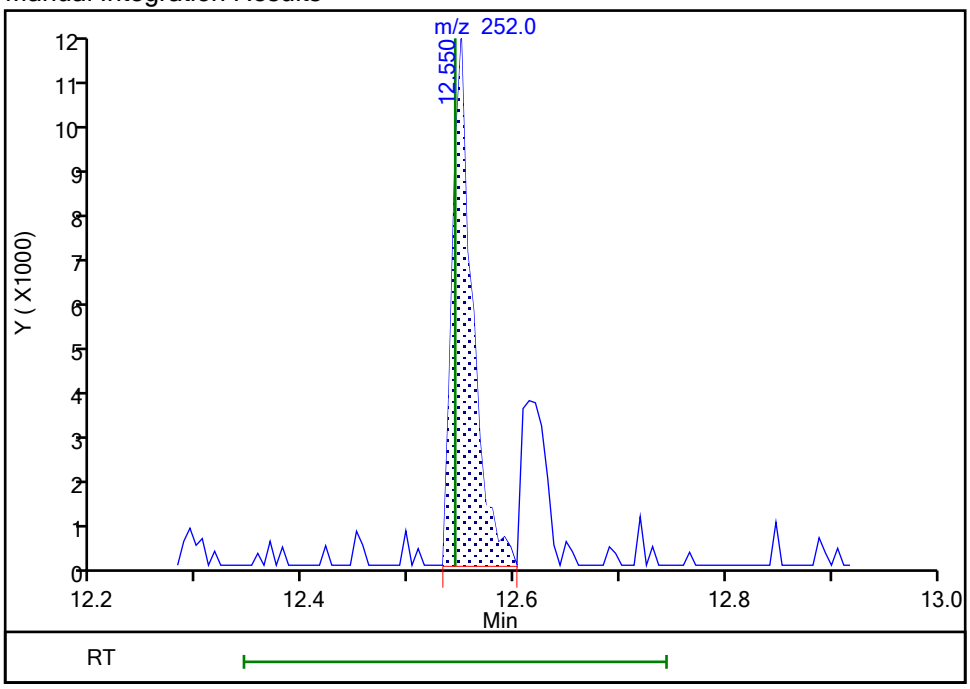
Processing Integration Results

RT: 12.55
Area: 21010
Amount: 0.150278
Amount Units: ug/ml



Manual Integration Results

RT: 12.55
Area: 15176
Amount: 0.113276
Amount Units: ug/ml



Reviewer: SJ89, 02-Nov-2023 10:27:00 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

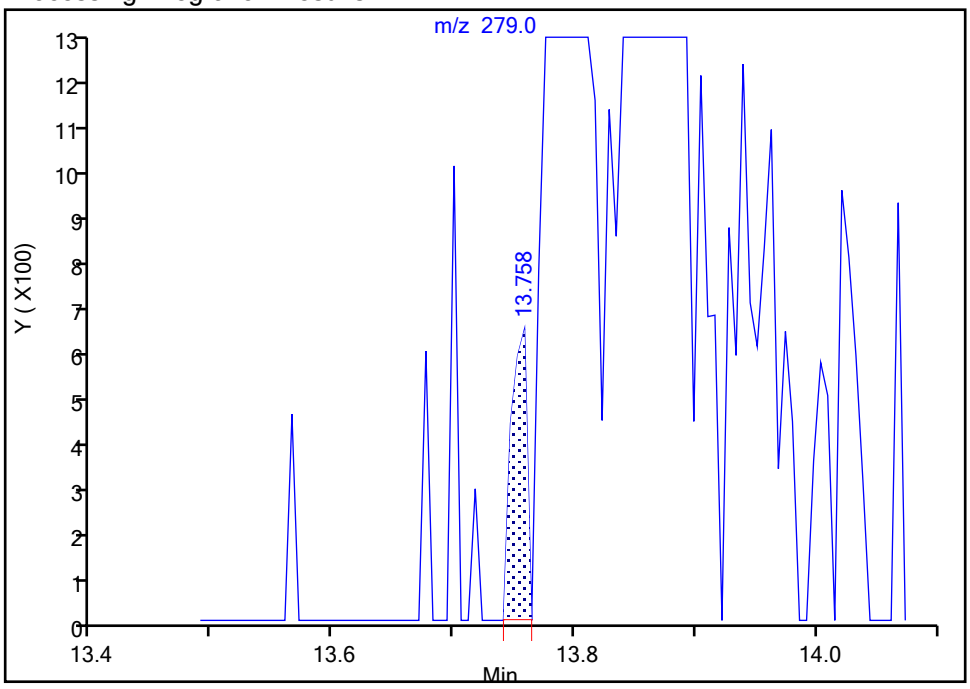
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

169 Dibenz[a,h]acridine, CAS: 226-36-8

Signal: 1

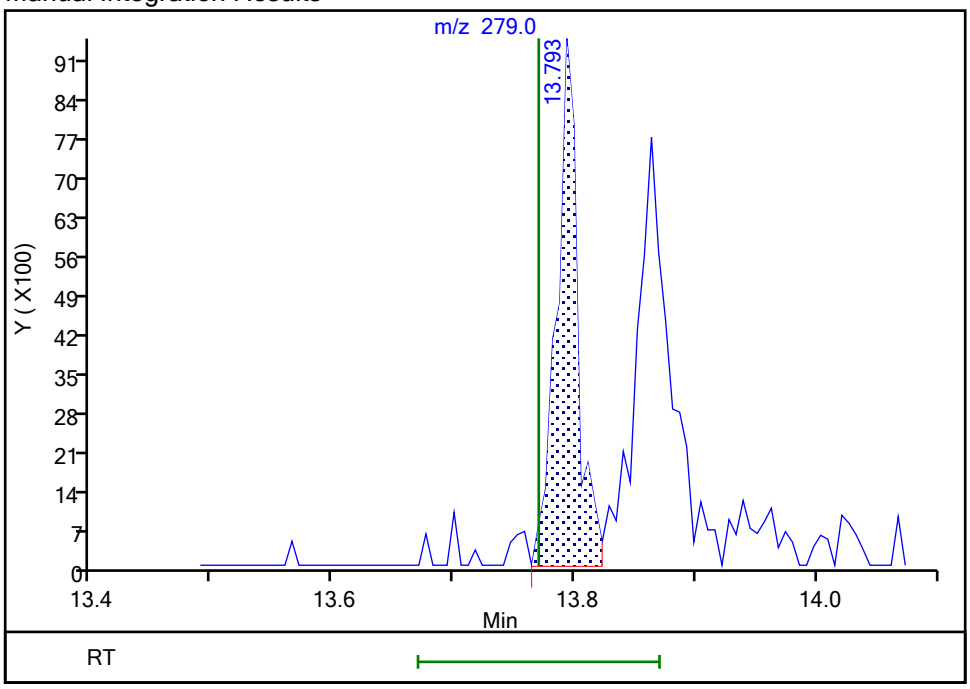
Processing Integration Results

RT: 13.76
Area: 551
Amount: 0.098374
Amount Units: ug/ml



Manual Integration Results

RT: 13.79
Area: 11508
Amount: 0.111489
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:54:11 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

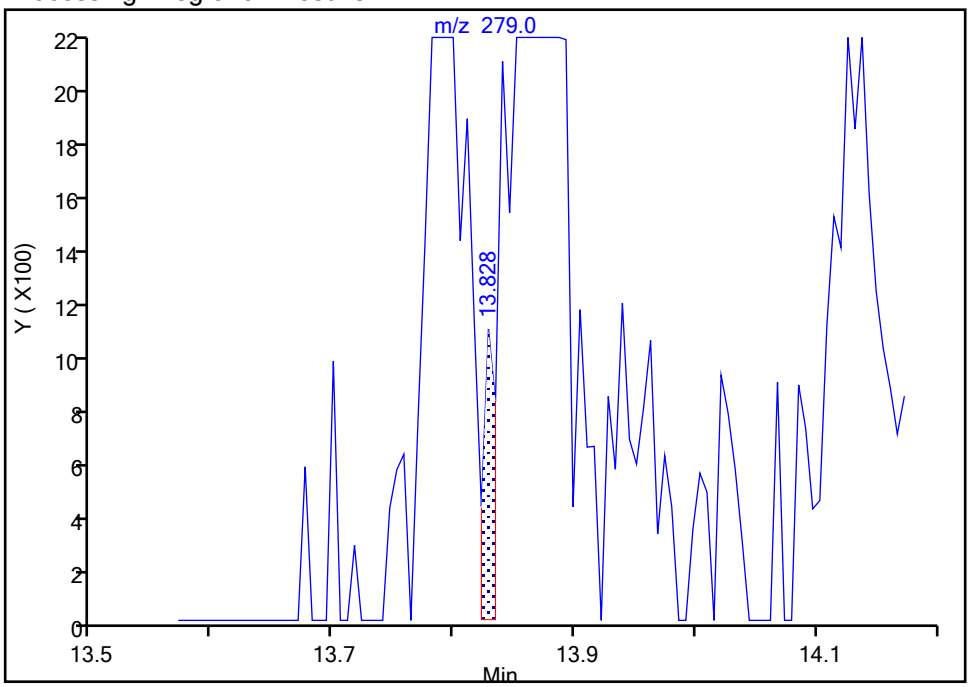
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

170 Dibenz[a,j]acridine, CAS: 224-42-0

Signal: 1

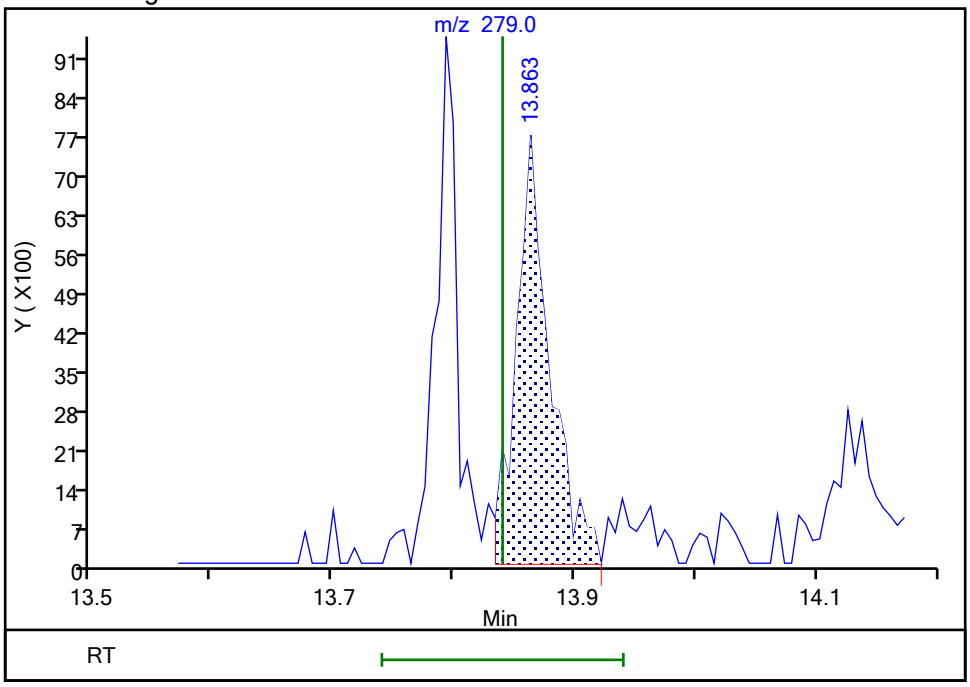
Processing Integration Results

RT: 13.83
Area: 588
Amount: 0.102883
Amount Units: ug/ml



Manual Integration Results

RT: 13.86
Area: 14733
Amount: 0.126642
Amount Units: ug/ml



Reviewer: GLQ9, 31-Oct-2023 20:54:15 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

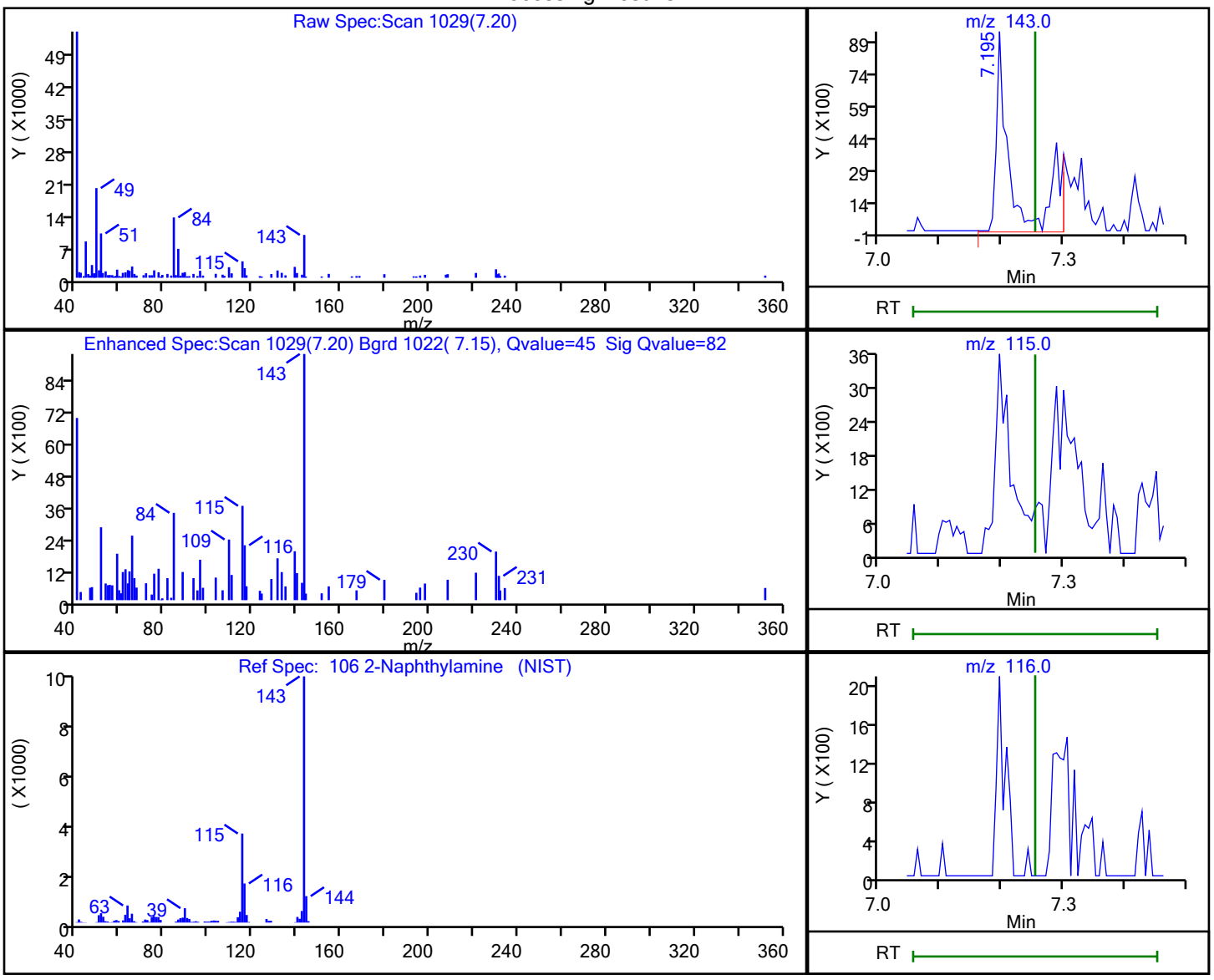
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

106 2-Naphthylamine, CAS: 91-59-8

Processing Results



RT	Mass	Response	Amount
7.20	143.00	15448	0.153454
7.25	115.00	0	
7.25	116.00	0	

Reviewer: P7EB, 01-Nov-2023 09:04:44 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

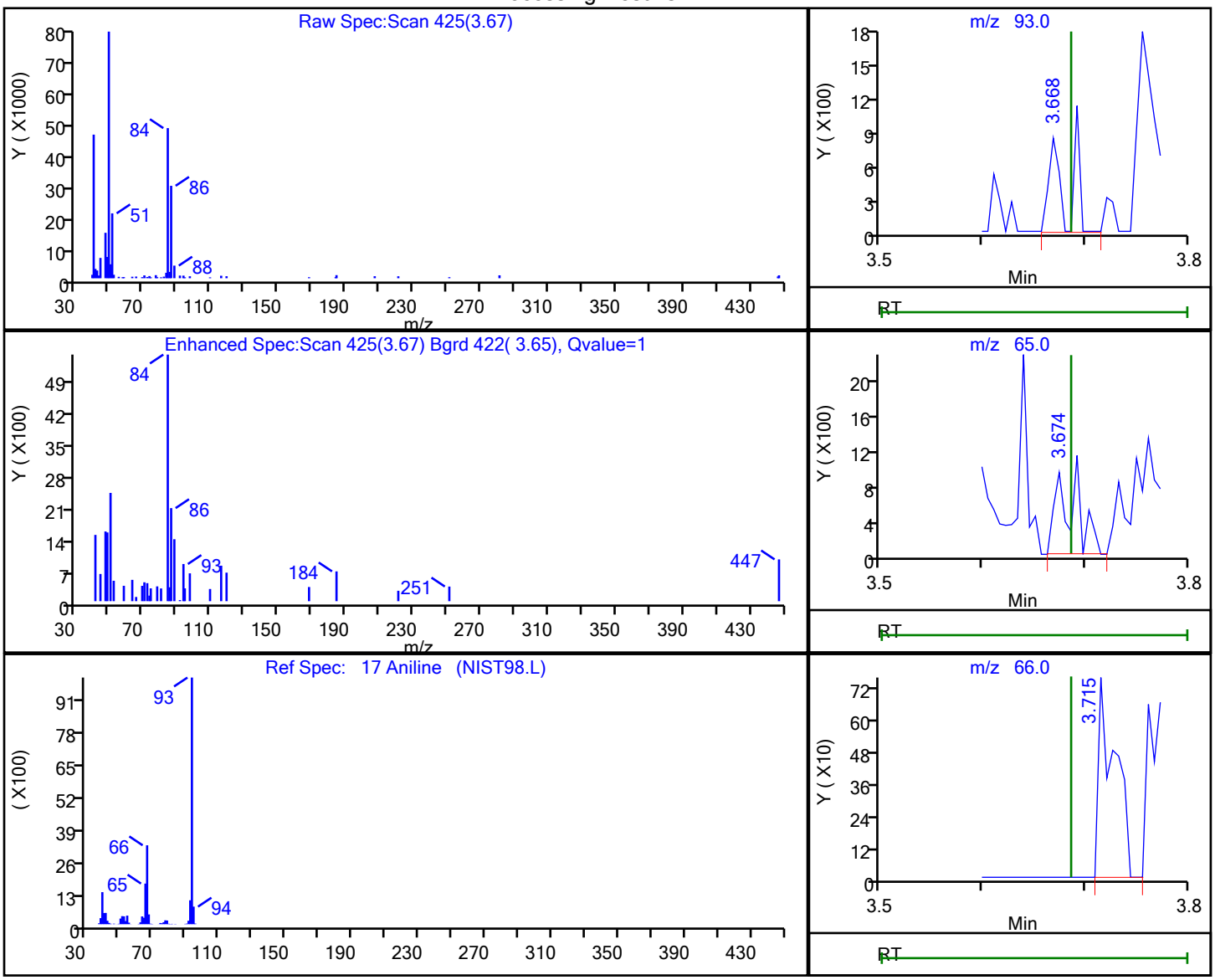
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D				
Injection Date:	31-Oct-2023 17:10:30	Instrument ID:	HP23264		
Lims ID:	IC L1				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

17 Aniline, CAS: 62-53-3

Processing Results



RT	Mass	Response	Amount
3.67	93.00	981	0.011819
3.67	65.00	1383	
3.72	66.00	859	

Reviewer: P7EB, 01-Nov-2023 08:51:41 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

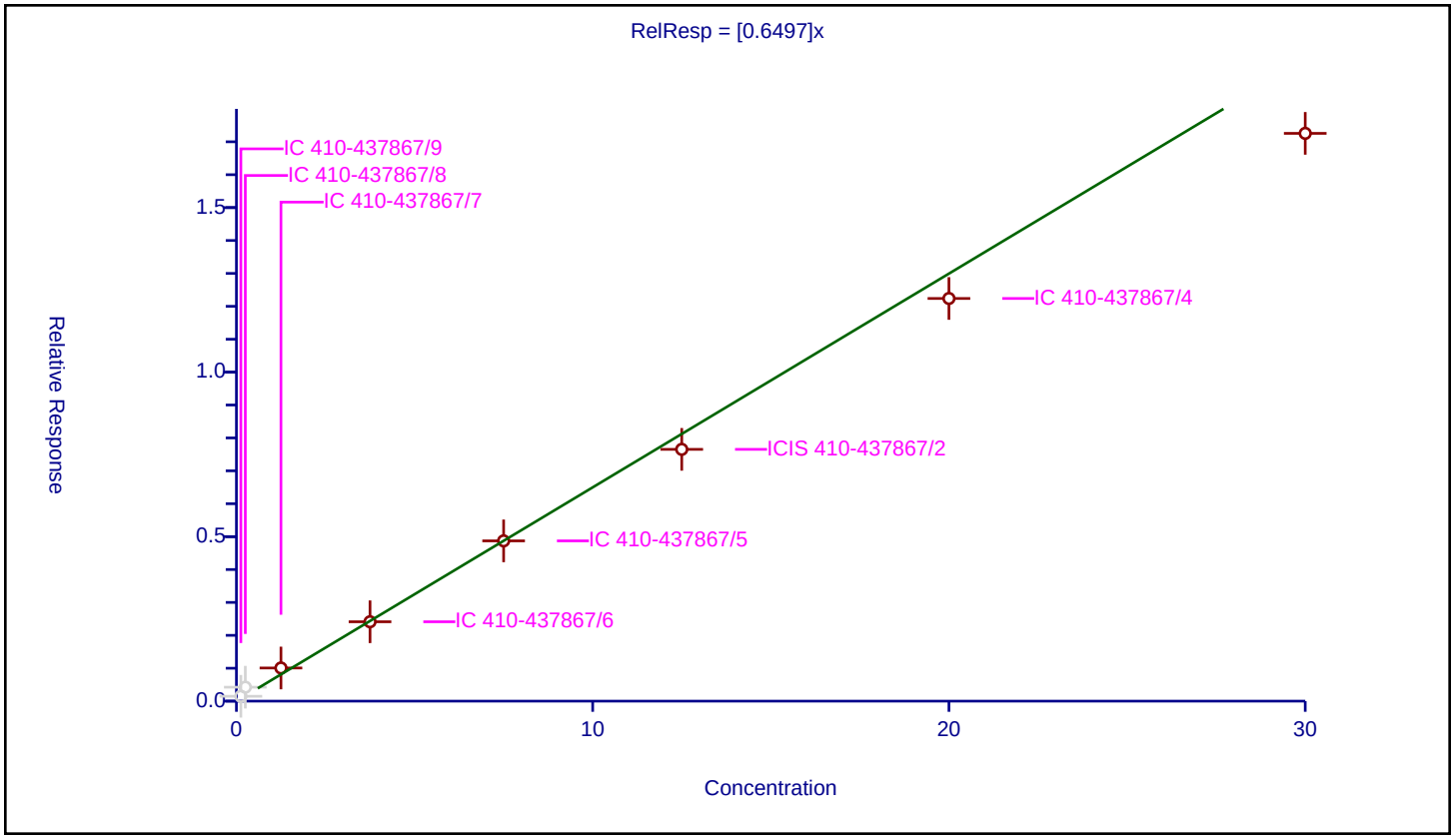
Curve Coefficients

Intercept:	0
Slope:	0.6497

Error Coefficients

Standard Error:	442000
Relative Standard Error:	12.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.148047	5.0	172378.0	1.184374	N
2	IC 410-437867/8	0.25	0.423807	5.0	166373.0	1.695227	N
3	IC 410-437867/7	1.25	1.0075	5.0	164129.0	0.806	Y
4	IC 410-437867/6	3.75	2.412616	5.0	183214.0	0.643364	Y
5	IC 410-437867/5	7.5	4.871038	5.0	182535.0	0.649472	Y
6	ICIS 410-437867/2	12.5	7.652026	5.0	191661.0	0.612162	Y
7	IC 410-437867/4	20.0	12.237994	5.0	216169.0	0.6119	Y
8	IC 410-437867/3	30.0	17.256373	5.0	219208.0	0.575212	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

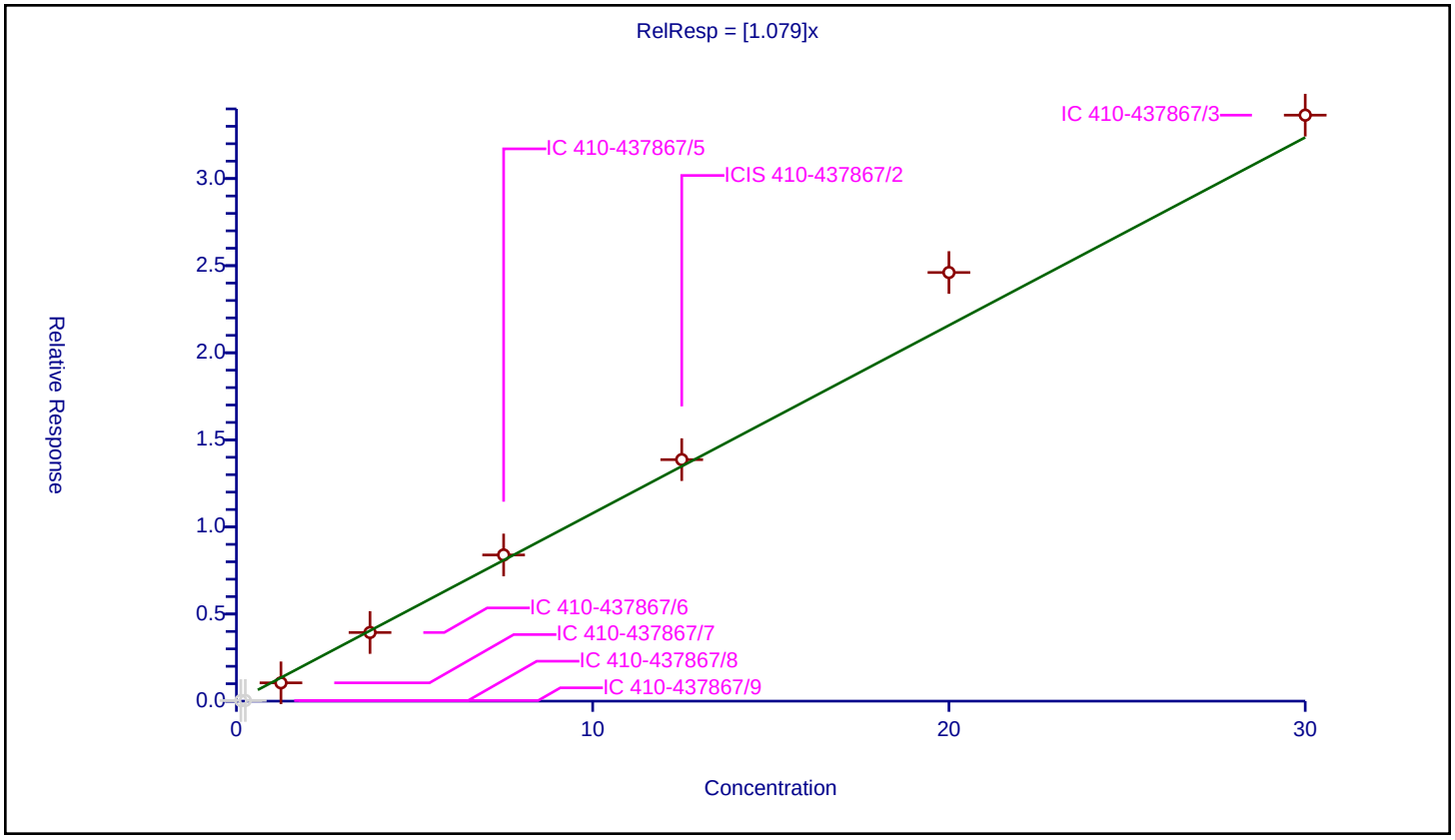
Curve Coefficients

Intercept:	0
Slope:	1.079

Error Coefficients

Standard Error:	861000
Relative Standard Error:	12.0
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.033589	5.0	172378.0	0.268712	N
2	IC 410-437867/8	0.25	0.038618	5.0	166373.0	0.154472	N
3	IC 410-437867/7	1.25	1.051734	5.0	164129.0	0.841387	Y
4	IC 410-437867/6	3.75	3.941593	5.0	183214.0	1.051091	Y
5	IC 410-437867/5	7.5	8.392527	5.0	182535.0	1.119004	Y
6	ICIS 410-437867/2	12.5	13.864375	5.0	191661.0	1.10915	Y
7	IC 410-437867/4	20.0	24.606859	5.0	216169.0	1.230343	Y
8	IC 410-437867/3	30.0	33.641313	5.0	219208.0	1.121377	Y



Calibration / Pyridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

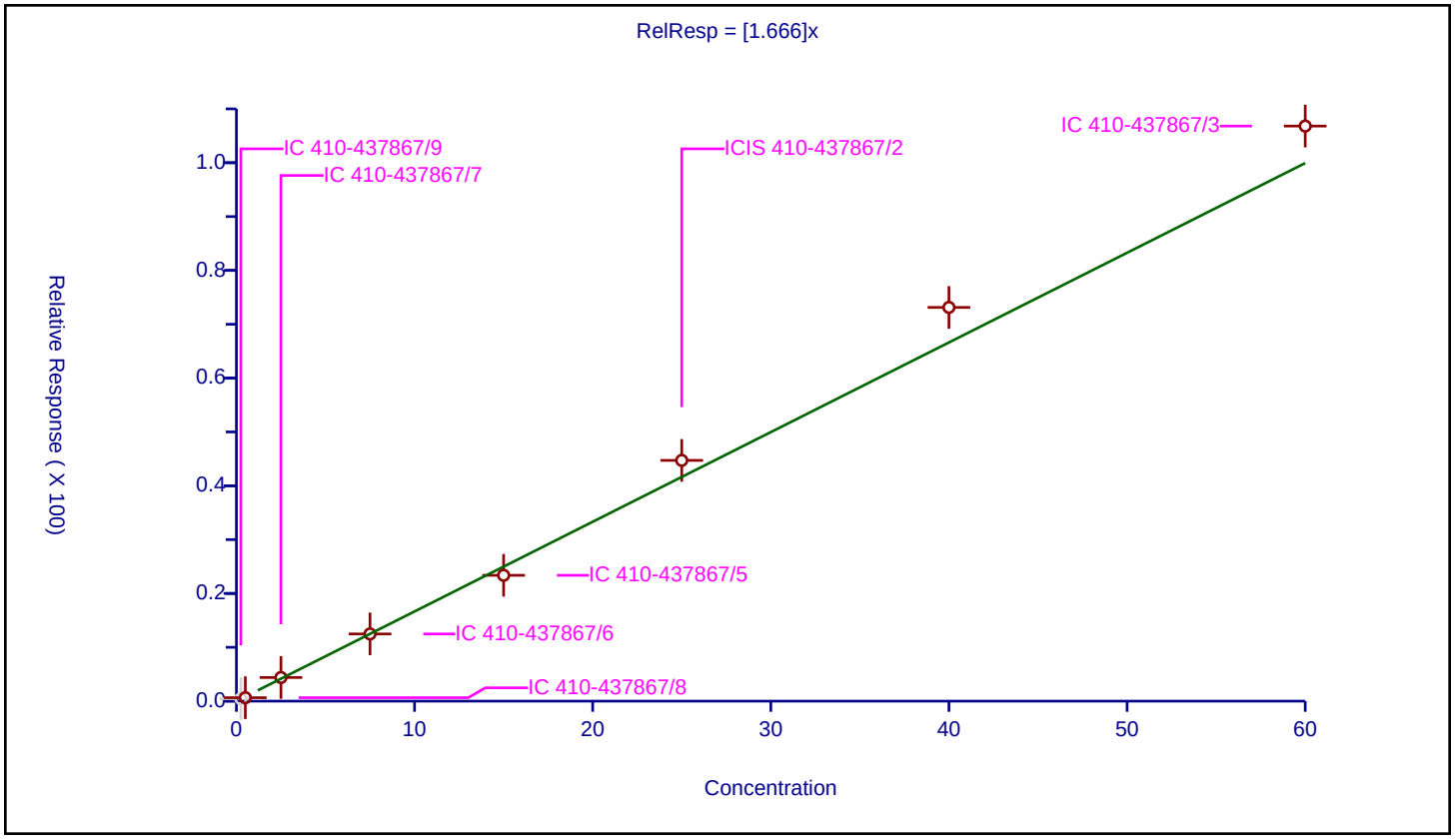
Curve Coefficients

Intercept:	0
Slope:	1.666

Error Coefficients

Standard Error:	2440000
Relative Standard Error:	11.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.25	0.460297	5.0	172378.0	1.841186	N
2	IC 410-437867/8	0.5	0.641691	5.0	166373.0	1.283381	Y
3	IC 410-437867/7	2.5	4.388377	5.0	164129.0	1.755351	Y
4	IC 410-437867/6	7.5	12.4854	5.0	183214.0	1.66472	Y
5	IC 410-437867/5	15.0	23.372696	5.0	182535.0	1.55818	Y
6	ICIS 410-437867/2	25.0	44.714705	5.0	191661.0	1.788588	Y
7	IC 410-437867/4	40.0	73.127854	5.0	216169.0	1.828196	Y
8	IC 410-437867/3	60.0	106.81102	5.0	219208.0	1.780184	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

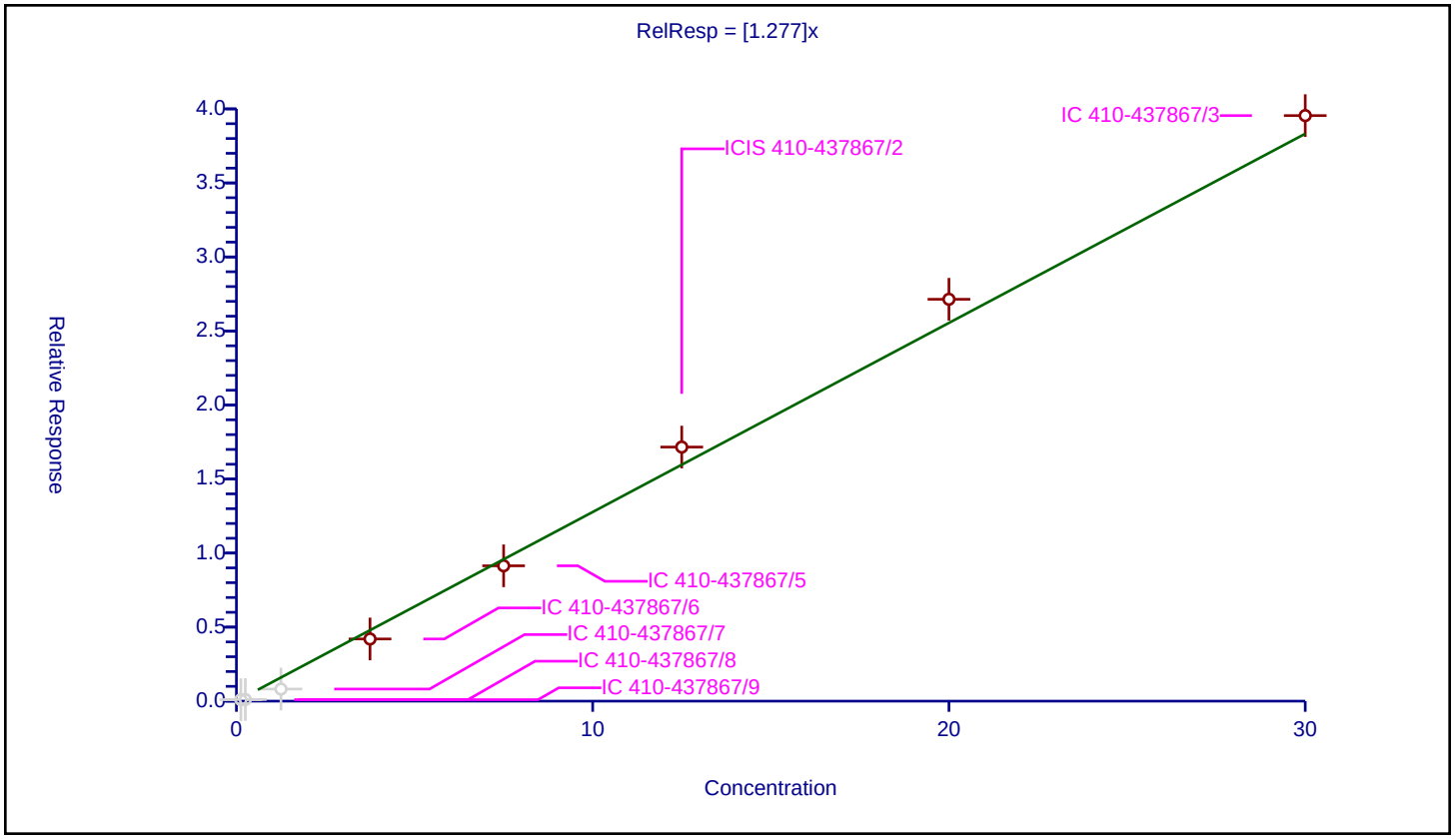
Curve Coefficients

Intercept:	0
Slope:	1.277

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	8.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.10039	5.0	172378.0	0.803119	N
2	IC 410-437867/8	0.25	0.109062	5.0	166373.0	0.436249	N
3	IC 410-437867/7	1.25	0.81765	5.0	164129.0	0.65412	N
4	IC 410-437867/6	3.75	4.19897	5.0	183214.0	1.119725	Y
5	IC 410-437867/5	7.5	9.141315	5.0	182535.0	1.218842	Y
6	ICIS 410-437867/2	12.5	17.160116	5.0	191661.0	1.372809	Y
7	IC 410-437867/4	20.0	27.141912	5.0	216169.0	1.357096	Y
8	IC 410-437867/3	30.0	39.547553	5.0	219208.0	1.318252	Y



Calibration / 2-Picoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

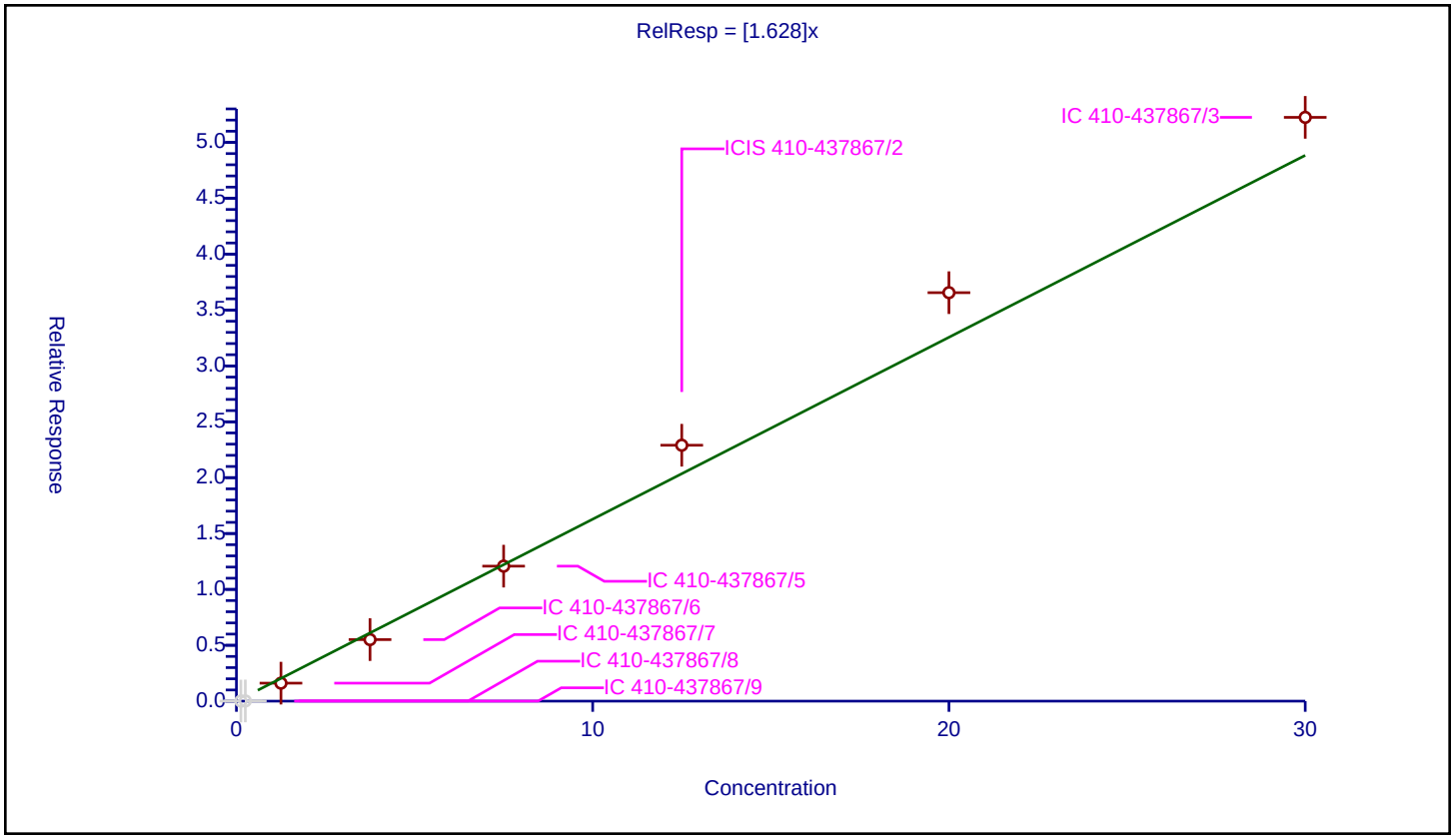
Curve Coefficients

Intercept:	0
Slope:	1.628

Error Coefficients

Standard Error:	1320000
Relative Standard Error:	13.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.005714	5.0	172378.0	0.045713	N
2	IC 410-437867/8	0.25	0.018783	5.0	166373.0	0.075132	N
3	IC 410-437867/7	1.25	1.610136	5.0	164129.0	1.288109	Y
4	IC 410-437867/6	3.75	5.506512	5.0	183214.0	1.468403	Y
5	IC 410-437867/5	7.5	12.07982	5.0	182535.0	1.610643	Y
6	ICIS 410-437867/2	12.5	22.900877	5.0	191661.0	1.83207	Y
7	IC 410-437867/4	20.0	36.554409	5.0	216169.0	1.82772	Y
8	IC 410-437867/3	30.0	52.24157	5.0	219208.0	1.741386	Y



Calibration / N-Nitrosomethylethylamine

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

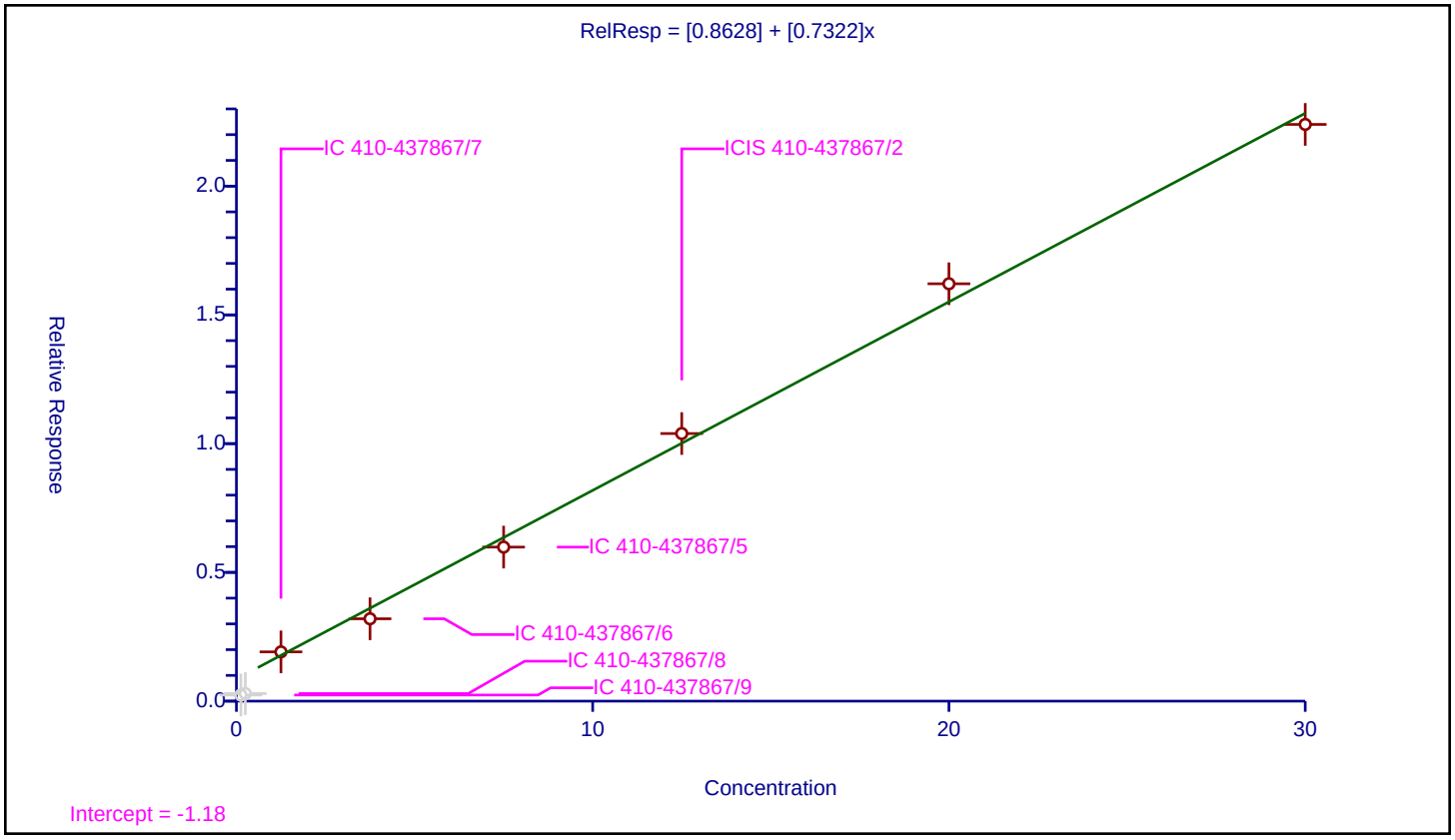
Curve Coefficients

Intercept:	0.8628
Slope:	0.7322

Error Coefficients

Standard Error:	648000
Relative Standard Error:	11.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.238226	5.0	172378.0	1.905812	N
2	IC 410-437867/8	0.25	0.294759	5.0	166373.0	1.179037	N
3	IC 410-437867/7	1.25	1.913038	5.0	164129.0	1.53043	Y
4	IC 410-437867/6	3.75	3.198991	5.0	183214.0	0.853064	Y
5	IC 410-437867/5	7.5	5.98236	5.0	182535.0	0.797648	Y
6	ICIS 410-437867/2	12.5	10.39262	5.0	191661.0	0.83141	Y
7	IC 410-437867/4	20.0	16.208892	5.0	216169.0	0.810445	Y
8	IC 410-437867/3	30.0	22.396993	5.0	219208.0	0.746566	Y



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Calibration / Methyl methanesulfonate

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

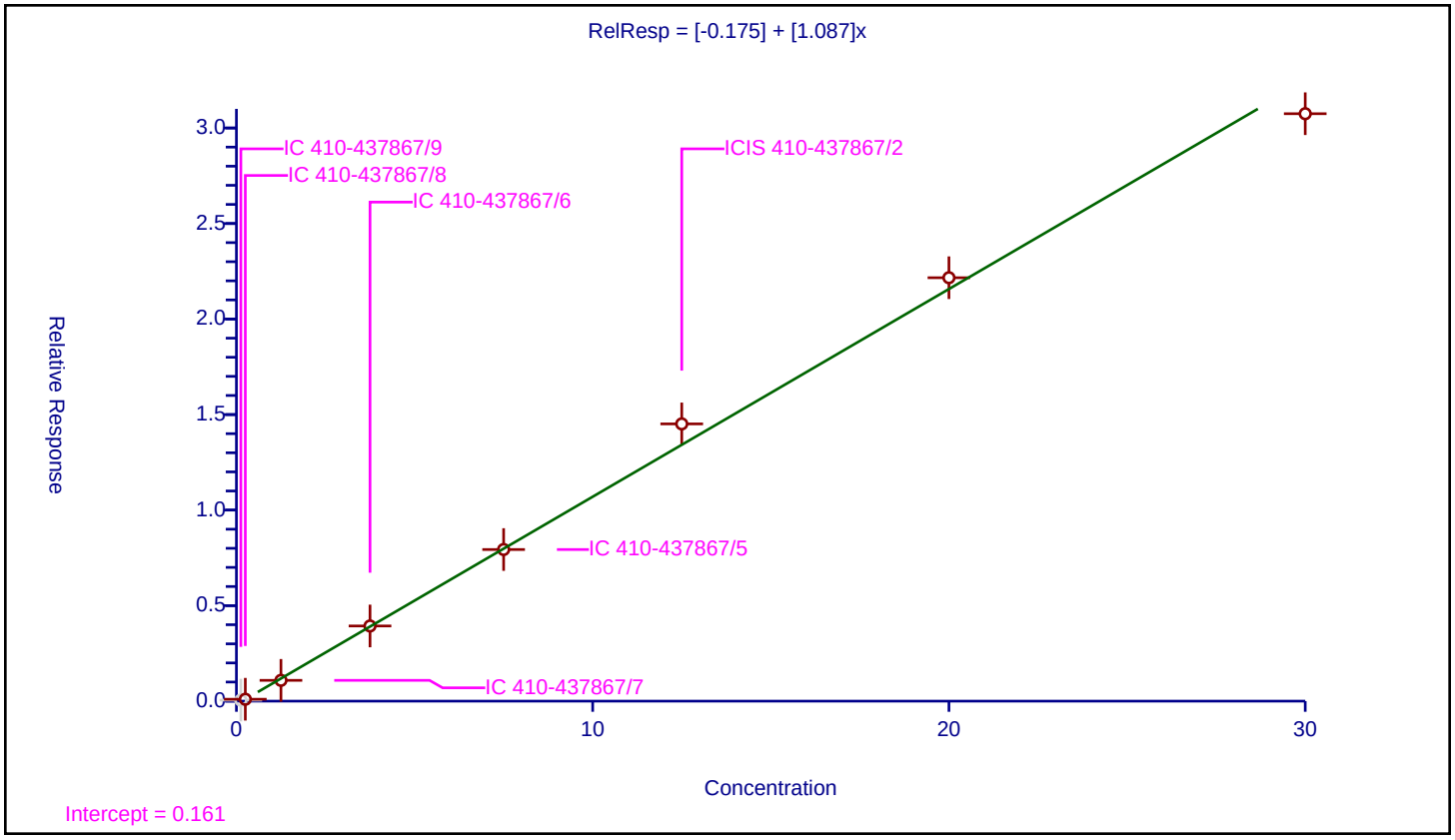
Curve Coefficients

Intercept:	-0.175
Slope:	1.087

Error Coefficients

Standard Error:	794000
Relative Standard Error:	5.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.052182	5.0	172378.0	0.417455	N
2	IC 410-437867/8	0.25	0.100166	5.0	166373.0	0.400666	Y
3	IC 410-437867/7	1.25	1.088595	5.0	164129.0	0.870876	Y
4	IC 410-437867/6	3.75	3.934798	5.0	183214.0	1.049279	Y
5	IC 410-437867/5	7.5	7.936094	5.0	182535.0	1.058146	Y
6	ICIS 410-437867/2	12.5	14.512316	5.0	191661.0	1.160985	Y
7	IC 410-437867/4	20.0	22.16296	5.0	216169.0	1.108148	Y
8	IC 410-437867/3	30.0	30.747555	5.0	219208.0	1.024918	Y



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Calibration / 2-Fluorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

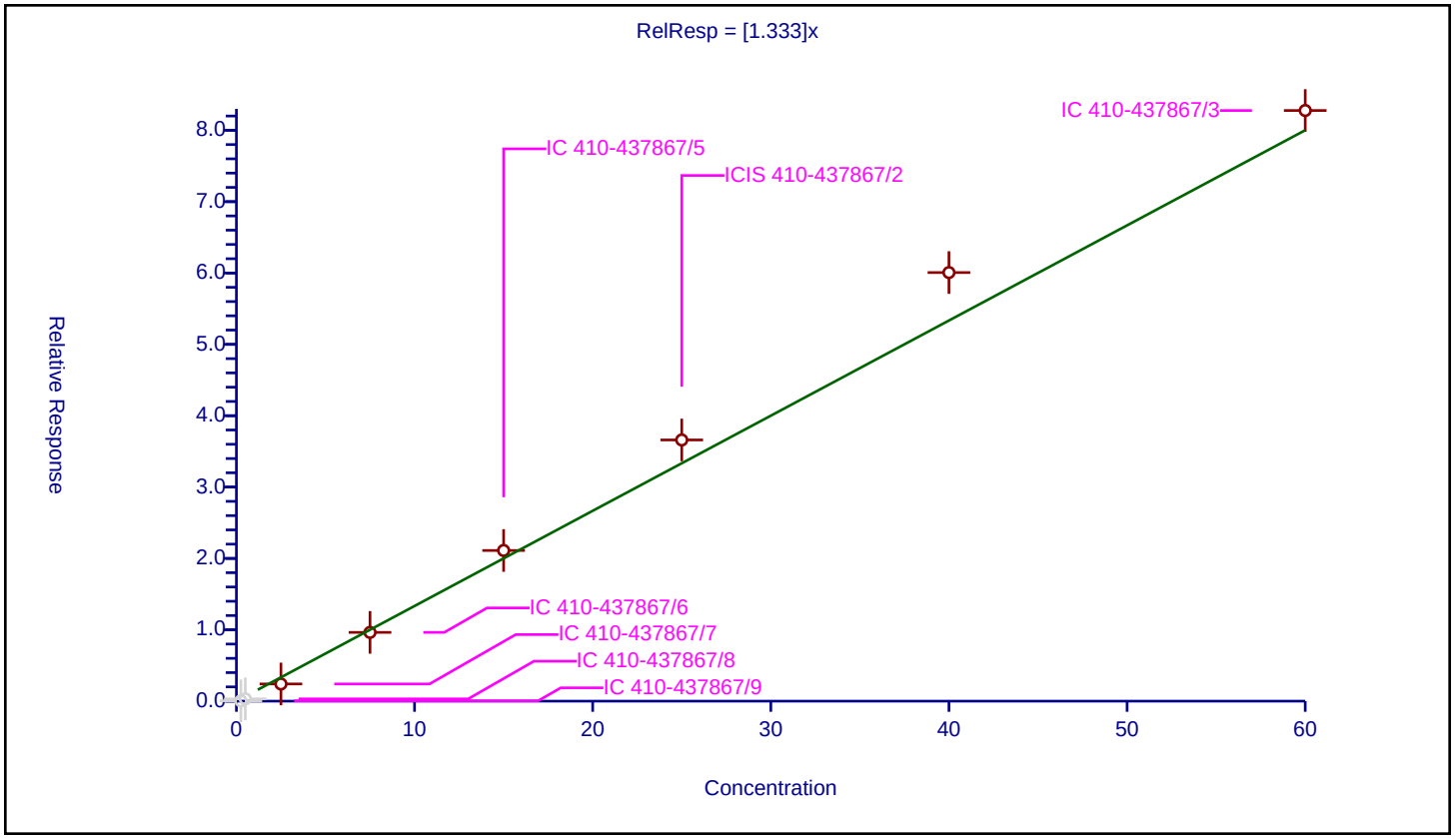
Curve Coefficients

Intercept:	0
Slope:	1.333

Error Coefficients

Standard Error:	2130000
Relative Standard Error:	14.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.25	0.043654	5.0	172378.0	0.174616	N
2	IC 410-437867/8	0.5	0.320004	5.0	166373.0	0.640008	N
3	IC 410-437867/7	2.5	2.408471	5.0	164129.0	0.963389	Y
4	IC 410-437867/6	7.5	9.635945	5.0	183214.0	1.284793	Y
5	IC 410-437867/5	15.0	21.11469	5.0	182535.0	1.407646	Y
6	ICIS 410-437867/2	25.0	36.602073	5.0	191661.0	1.464083	Y
7	IC 410-437867/4	40.0	60.061942	5.0	216169.0	1.501549	Y
8	IC 410-437867/3	60.0	82.770747	5.0	219208.0	1.379512	Y



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Calibration / N-Nitrosodiethylamine

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

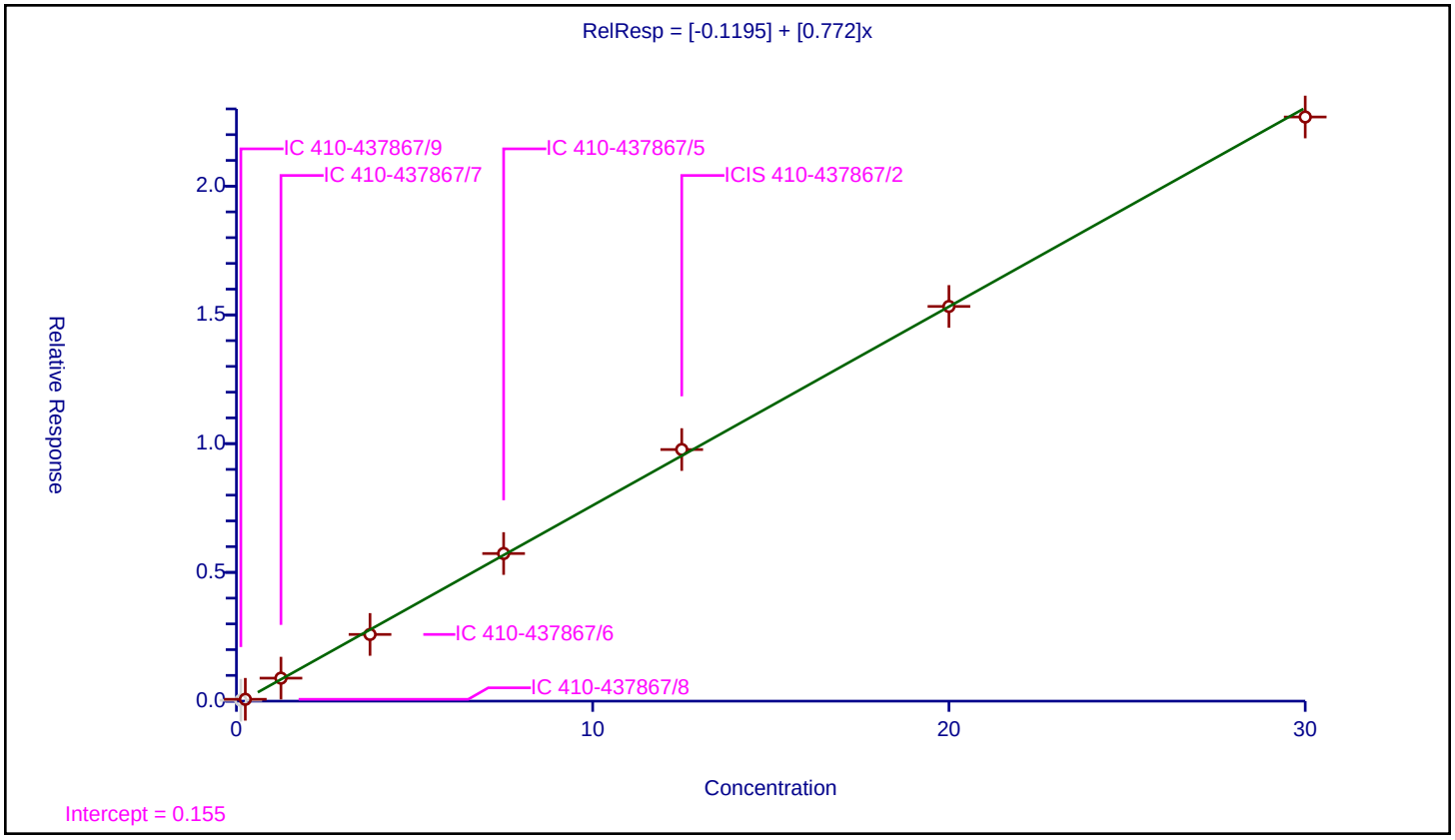
Curve Coefficients

Intercept:	-0.1195
Slope:	0.772

Error Coefficients

Standard Error:	570000
Relative Standard Error:	3.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.033647	5.0	172378.0	0.269176	N
2	IC 410-437867/8	0.25	0.072277	5.0	166373.0	0.289109	Y
3	IC 410-437867/7	1.25	0.893048	5.0	164129.0	0.714438	Y
4	IC 410-437867/6	3.75	2.590413	5.0	183214.0	0.690777	Y
5	IC 410-437867/5	7.5	5.732873	5.0	182535.0	0.764383	Y
6	ICIS 410-437867/2	12.5	9.771341	5.0	191661.0	0.781707	Y
7	IC 410-437867/4	20.0	15.327915	5.0	216169.0	0.766396	Y
8	IC 410-437867/3	30.0	22.685303	5.0	219208.0	0.756177	Y



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Calibration / Ethyl methanesulfonate

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

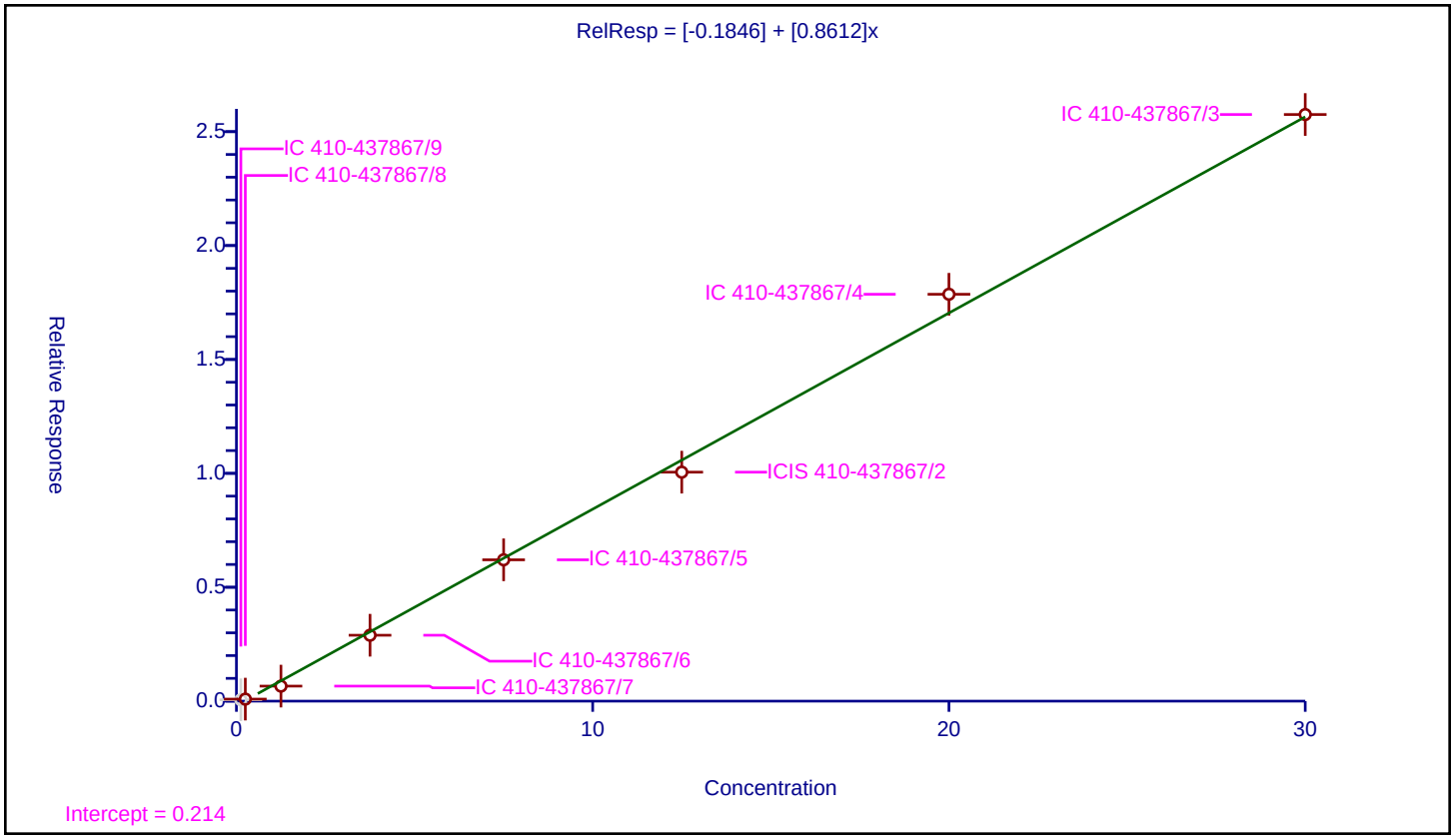
Curve Coefficients

Intercept:	-0.1846
Slope:	0.8612

Error Coefficients

Standard Error:	645000
Relative Standard Error:	15.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.059172	5.0	172378.0	0.473378	N
2	IC 410-437867/8	0.25	0.089017	5.0	166373.0	0.356067	Y
3	IC 410-437867/7	1.25	0.659908	5.0	164129.0	0.527926	Y
4	IC 410-437867/6	3.75	2.893693	5.0	183214.0	0.771651	Y
5	IC 410-437867/5	7.5	6.20418	5.0	182535.0	0.827224	Y
6	ICIS 410-437867/2	12.5	10.052436	5.0	191661.0	0.804195	Y
7	IC 410-437867/4	20.0	17.86202	5.0	216169.0	0.893101	Y
8	IC 410-437867/3	30.0	25.753006	5.0	219208.0	0.858434	Y



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Calibration / Benzaldehyde

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

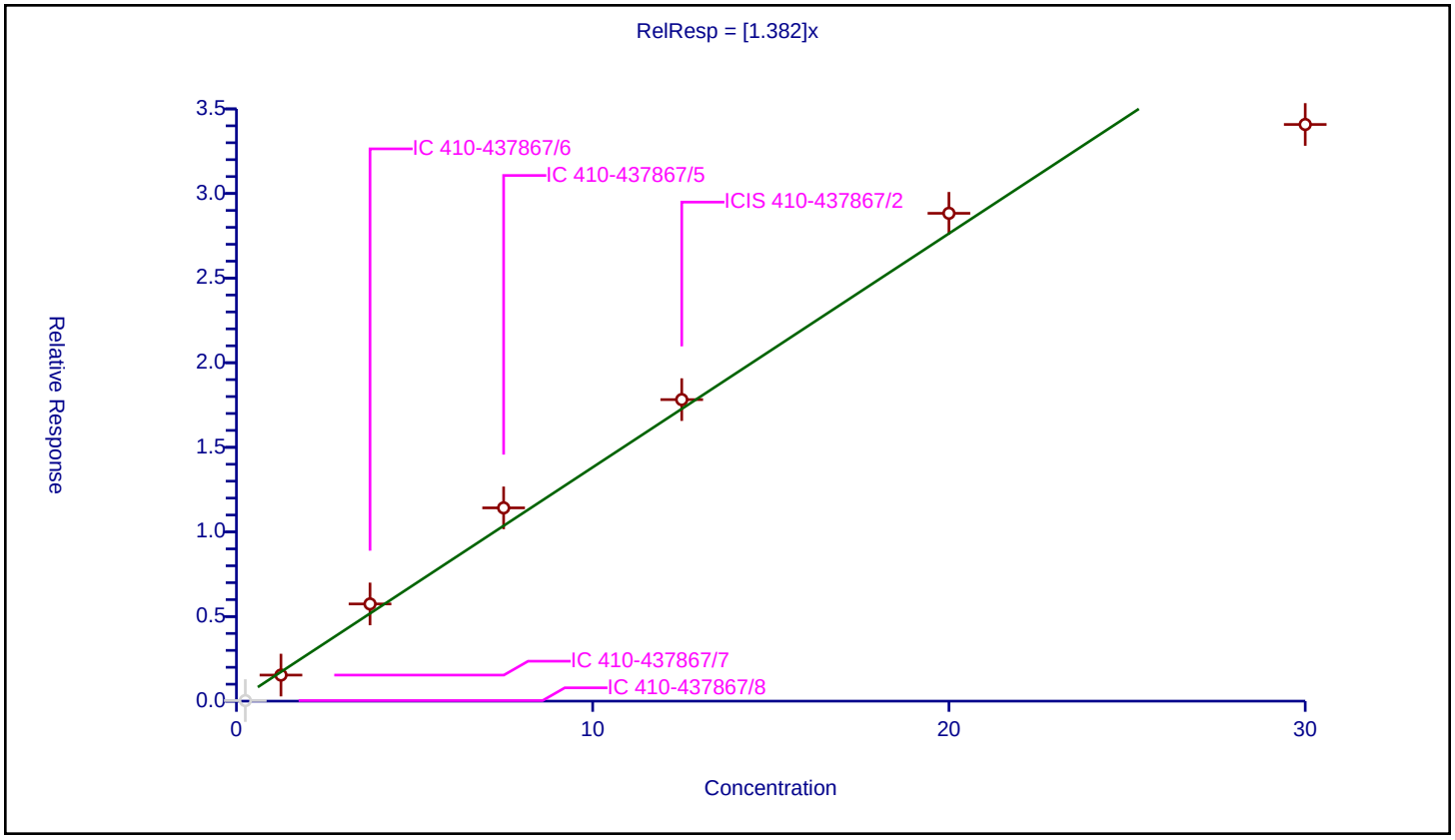
Curve Coefficients

Intercept:	0
Slope:	1.382

Error Coefficients

Standard Error:	946000
Relative Standard Error:	11.7
Correlation Coefficient:	0.975
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/8	0.25	0.033359	5.0	166373.0	0.133435	N
2	IC 410-437867/7	1.25	1.540861	5.0	164129.0	1.232689	Y
3	IC 410-437867/6	3.75	5.743939	5.0	183214.0	1.531717	Y
4	IC 410-437867/5	7.5	11.421426	5.0	182535.0	1.522857	Y
5	ICIS 410-437867/2	12.5	17.819614	5.0	191661.0	1.425569	Y
6	IC 410-437867/4	20.0	28.830198	5.0	216169.0	1.44151	Y
7	IC 410-437867/3	30.0	34.078889	5.0	219208.0	1.135963	Y



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Calibration / Phenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

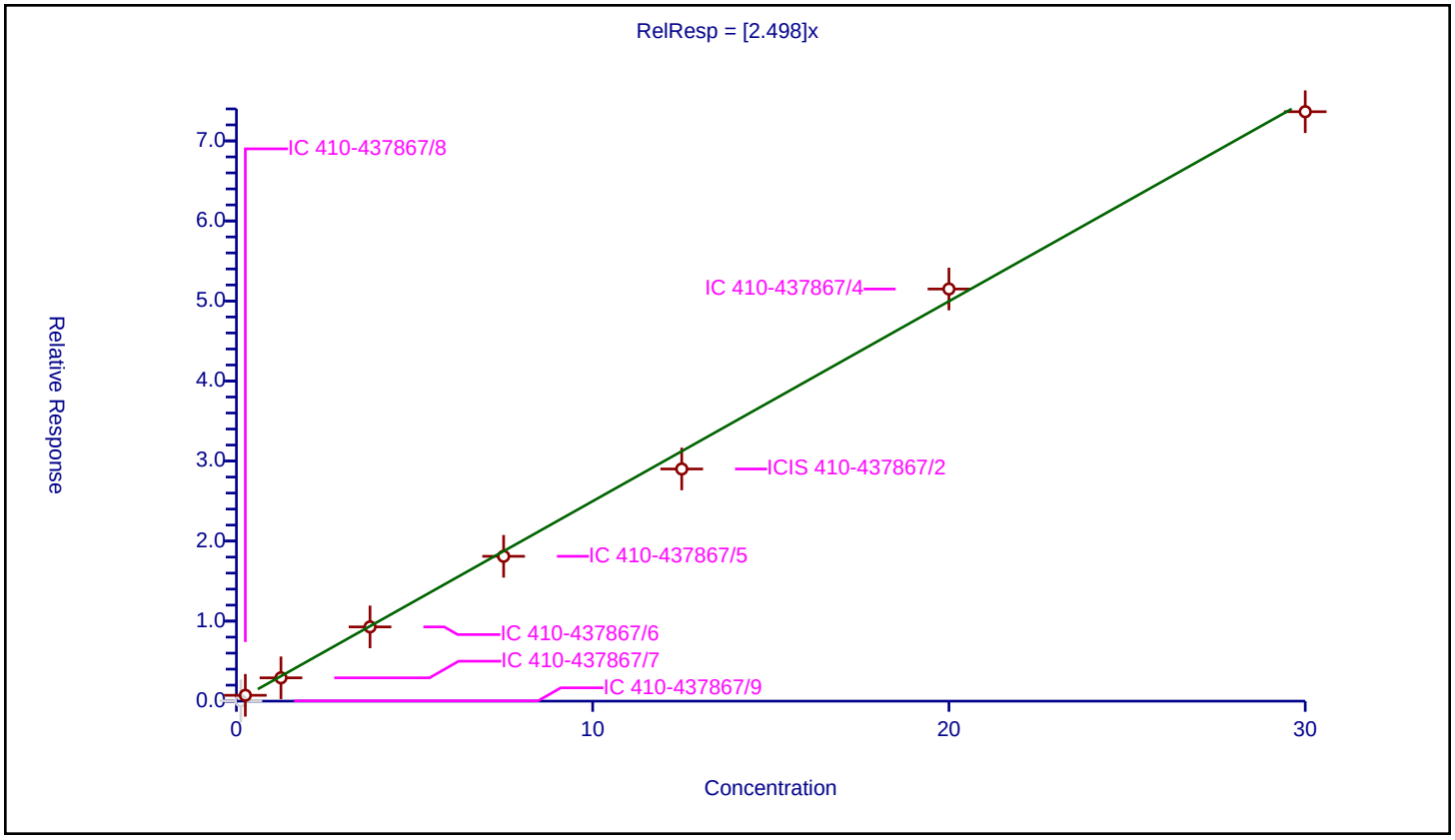
Curve Coefficients

Intercept:	0
Slope:	2.498

Error Coefficients

Standard Error:	1690000
Relative Standard Error:	8.2
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.037853	5.0	172378.0	0.302823	N
2	IC 410-437867/8	0.25	0.729746	5.0	166373.0	2.918983	Y
3	IC 410-437867/7	1.25	2.914232	5.0	164129.0	2.331386	Y
4	IC 410-437867/6	3.75	9.277129	5.0	183214.0	2.473901	Y
5	IC 410-437867/5	7.5	18.097105	5.0	182535.0	2.412947	Y
6	ICIS 410-437867/2	12.5	29.008484	5.0	191661.0	2.320679	Y
7	IC 410-437867/4	20.0	51.49515	5.0	216169.0	2.574757	Y
8	IC 410-437867/3	30.0	73.648339	5.0	219208.0	2.454945	Y



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Calibration / Phenol-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

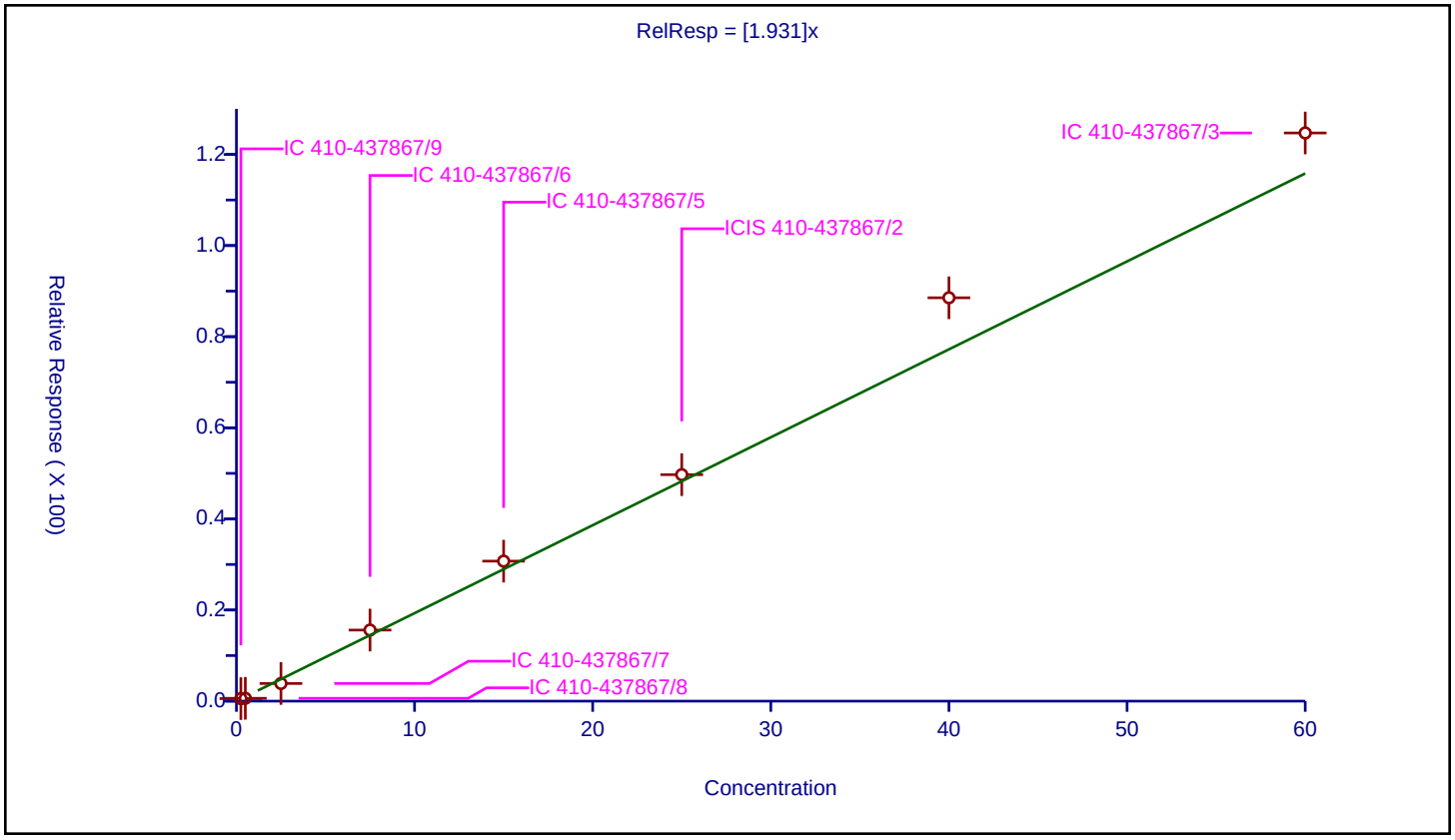
Curve Coefficients

Intercept:	0
Slope:	1.931

Error Coefficients

Standard Error:	2670000
Relative Standard Error:	18.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.25	0.559526	5.0	172378.0	2.238105	Y
2	IC 410-437867/8	0.5	0.623358	5.0	166373.0	1.246717	Y
3	IC 410-437867/7	2.5	3.874727	5.0	164129.0	1.549891	Y
4	IC 410-437867/6	7.5	15.599272	5.0	183214.0	2.079903	Y
5	IC 410-437867/5	15.0	30.732873	5.0	182535.0	2.048858	Y
6	ICIS 410-437867/2	25.0	49.714809	5.0	191661.0	1.988592	Y
7	IC 410-437867/4	40.0	88.539268	5.0	216169.0	2.213482	Y
8	IC 410-437867/3	60.0	124.712579	5.0	219208.0	2.078543	Y



Calibration / Aniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

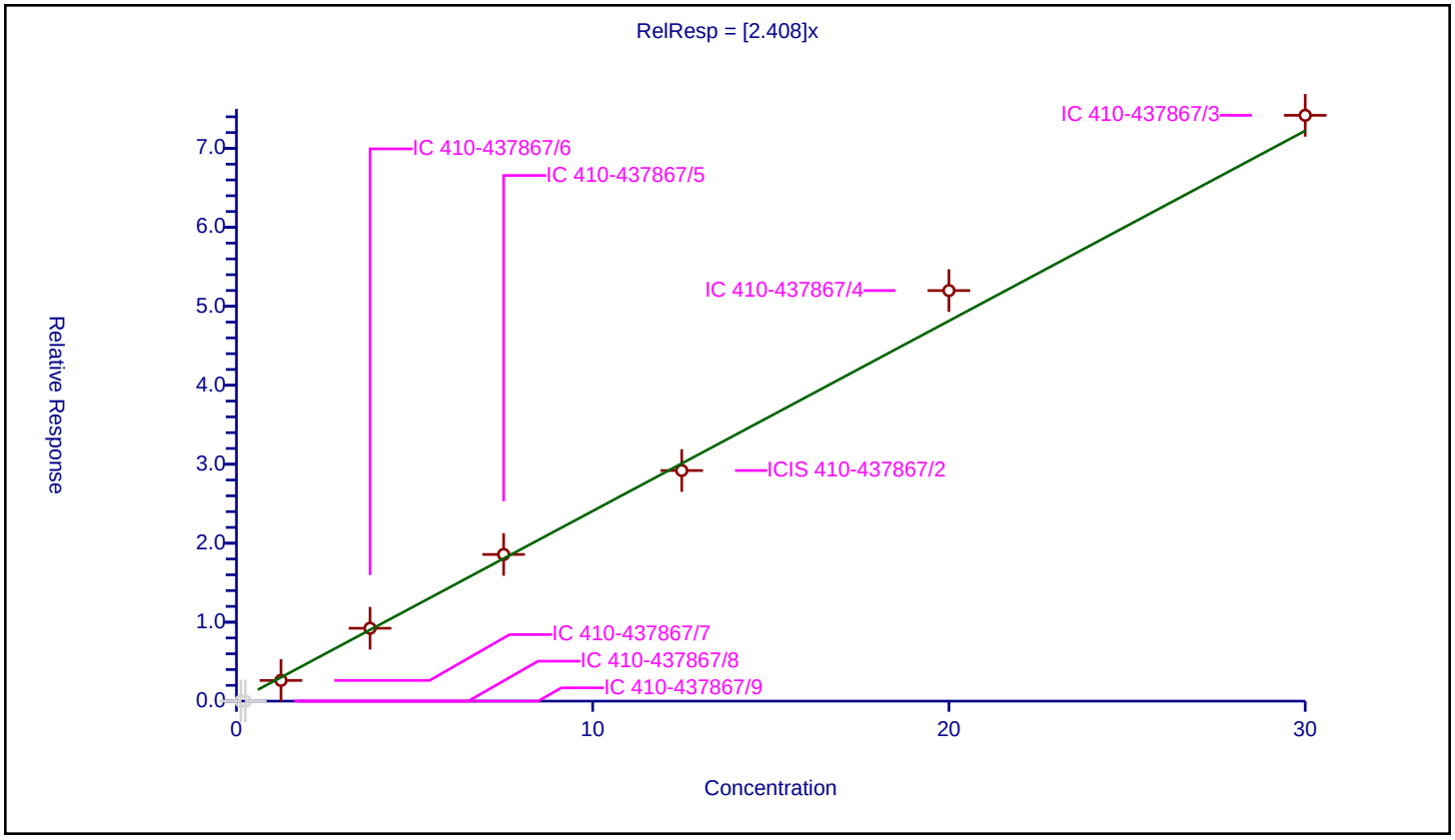
Curve Coefficients

Intercept:	0
Slope:	2.408

Error Coefficients

Standard Error:	1870000
Relative Standard Error:	7.2
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.0	5.0	172378.0	0.0	N
2	IC 410-437867/8	0.25	0.0	5.0	166373.0	0.0	N
3	IC 410-437867/7	1.25	2.623973	5.0	164129.0	2.099178	Y
4	IC 410-437867/6	3.75	9.228198	5.0	183214.0	2.460853	Y
5	IC 410-437867/5	7.5	18.57441	5.0	182535.0	2.476588	Y
6	ICIS 410-437867/2	12.5	29.203437	5.0	191661.0	2.336275	Y
7	IC 410-437867/4	20.0	51.99462	5.0	216169.0	2.599731	Y
8	IC 410-437867/3	30.0	74.188374	5.0	219208.0	2.472946	Y



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Calibration / Bis(2-chloroethyl)ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

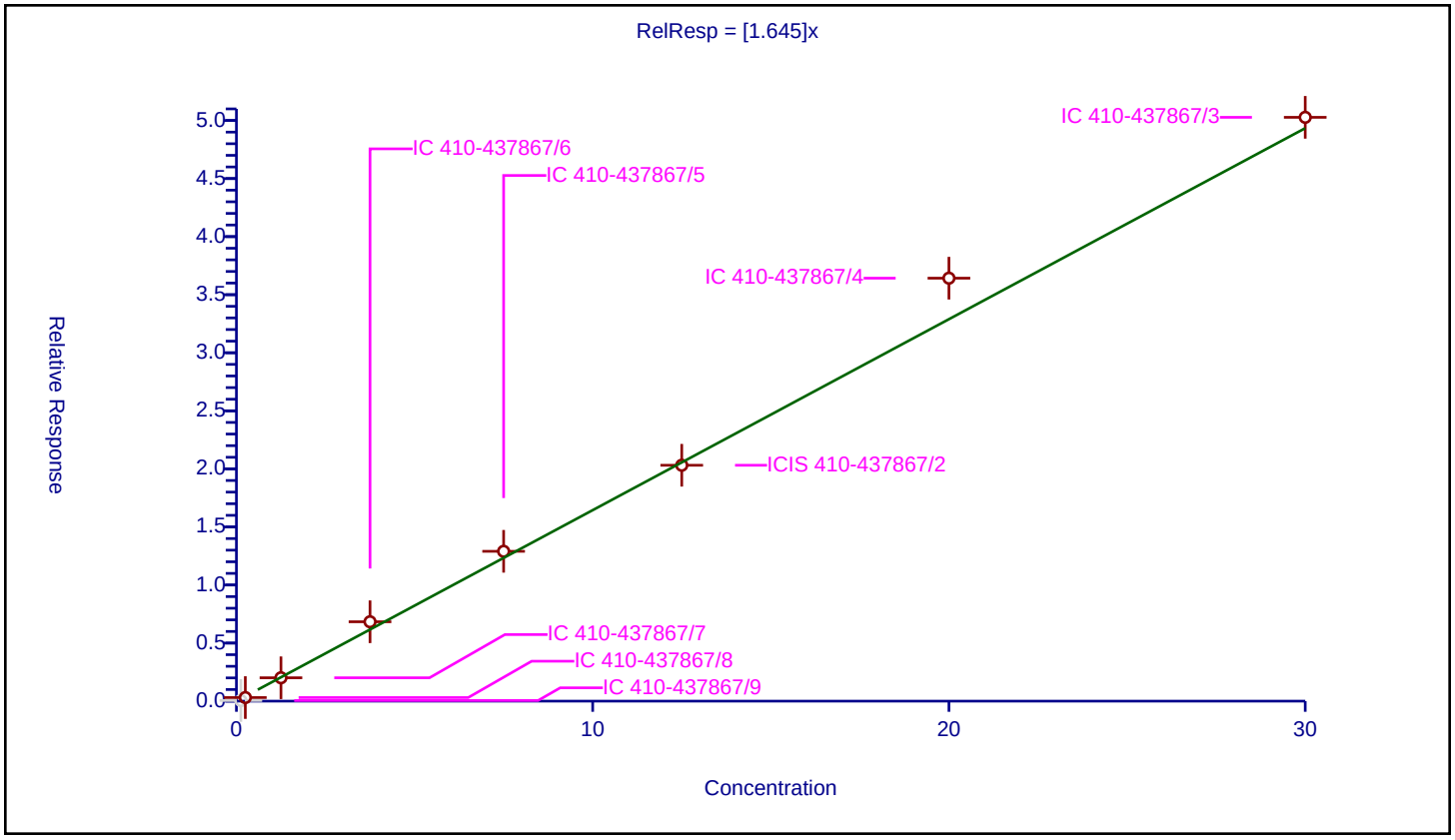
Curve Coefficients

Intercept:	0
Slope:	1.645

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	12.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.054444	5.0	172378.0	0.435554	N
2	IC 410-437867/8	0.25	0.309335	5.0	166373.0	1.23734	Y
3	IC 410-437867/7	1.25	2.012167	5.0	164129.0	1.609734	Y
4	IC 410-437867/6	3.75	6.835094	5.0	183214.0	1.822692	Y
5	IC 410-437867/5	7.5	12.902128	5.0	182535.0	1.720284	Y
6	ICIS 410-437867/2	12.5	20.313679	5.0	191661.0	1.625094	Y
7	IC 410-437867/4	20.0	36.422845	5.0	216169.0	1.821142	Y
8	IC 410-437867/3	30.0	50.272686	5.0	219208.0	1.675756	Y



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Calibration / 2-Chlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

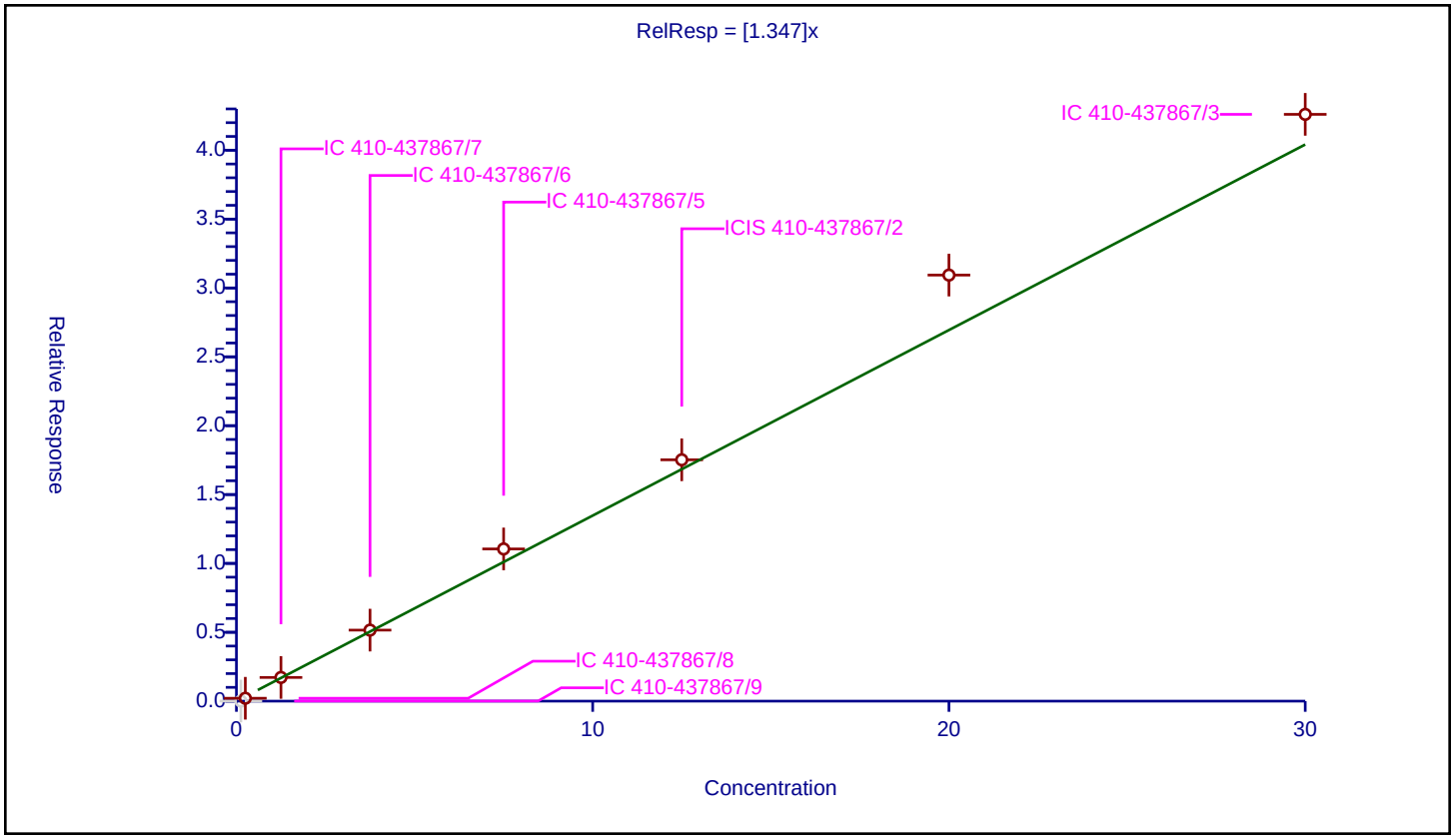
Curve Coefficients

Intercept:	0
Slope:	1.347

Error Coefficients

Standard Error:	994000
Relative Standard Error:	17.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.006526	5.0	172378.0	0.052211	N
2	IC 410-437867/8	0.25	0.208988	5.0	166373.0	0.835953	Y
3	IC 410-437867/7	1.25	1.720933	5.0	164129.0	1.376746	Y
4	IC 410-437867/6	3.75	5.156675	5.0	183214.0	1.375113	Y
5	IC 410-437867/5	7.5	11.049552	5.0	182535.0	1.473274	Y
6	ICIS 410-437867/2	12.5	17.522057	5.0	191661.0	1.401765	Y
7	IC 410-437867/4	20.0	30.933205	5.0	216169.0	1.54666	Y
8	IC 410-437867/3	30.0	42.603714	5.0	219208.0	1.420124	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

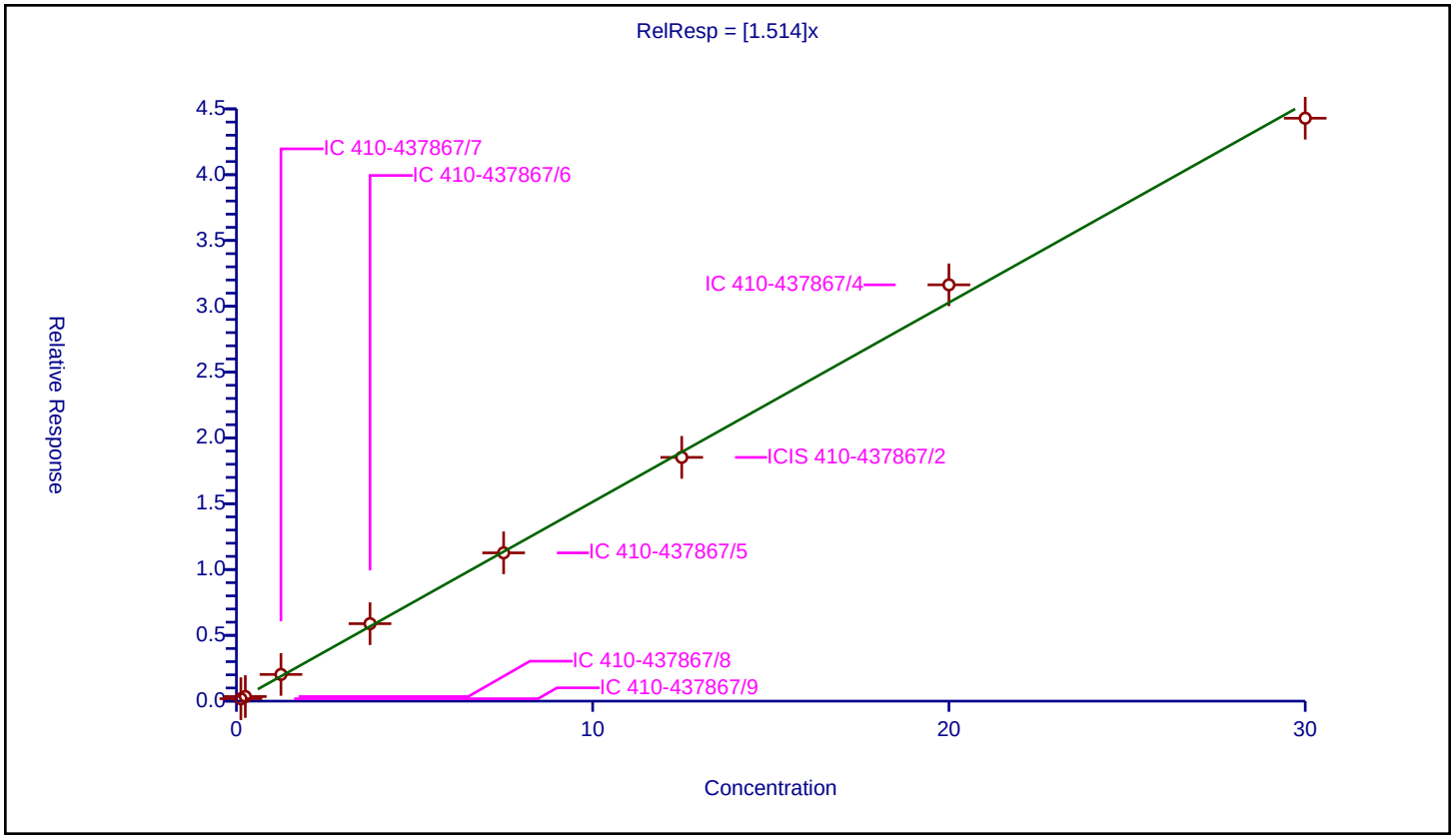
Curve Coefficients

Intercept:	0
Slope:	1.514

Error Coefficients

Standard Error:	954000
Relative Standard Error:	4.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.185842	5.0	172378.0	1.486733	Y
2	IC 410-437867/8	0.25	0.348163	5.0	166373.0	1.392654	Y
3	IC 410-437867/7	1.25	2.028069	5.0	164129.0	1.622456	Y
4	IC 410-437867/6	3.75	5.885304	5.0	183214.0	1.569414	Y
5	IC 410-437867/5	7.5	11.267373	5.0	182535.0	1.502316	Y
6	ICIS 410-437867/2	12.5	18.522522	5.0	191661.0	1.481802	Y
7	IC 410-437867/4	20.0	31.634439	5.0	216169.0	1.581722	Y
8	IC 410-437867/3	30.0	44.291791	5.0	219208.0	1.476393	Y



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Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

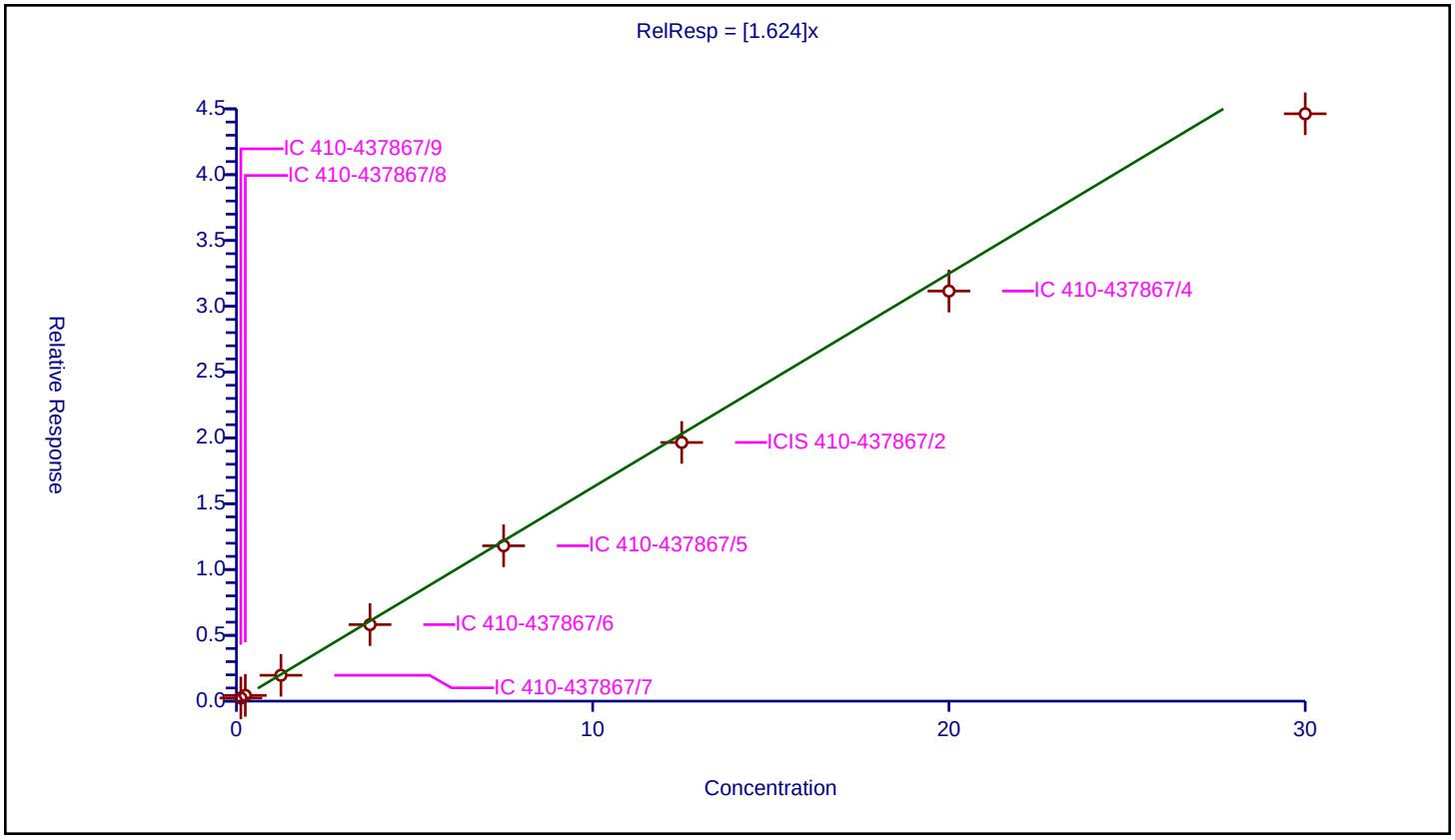
Curve Coefficients

Intercept:	0
Slope:	1.624

Error Coefficients

Standard Error:	960000
Relative Standard Error:	8.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.241881	5.0	172378.0	1.93505	Y
2	IC 410-437867/8	0.25	0.436008	5.0	166373.0	1.744033	Y
3	IC 410-437867/7	1.25	1.966502	5.0	164129.0	1.573202	Y
4	IC 410-437867/6	3.75	5.815713	5.0	183214.0	1.550857	Y
5	IC 410-437867/5	7.5	11.803325	5.0	182535.0	1.573777	Y
6	ICIS 410-437867/2	12.5	19.655199	5.0	191661.0	1.572416	Y
7	IC 410-437867/4	20.0	31.158422	5.0	216169.0	1.557921	Y
8	IC 410-437867/3	30.0	44.62823	5.0	219208.0	1.487608	Y



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Calibration / Benzyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

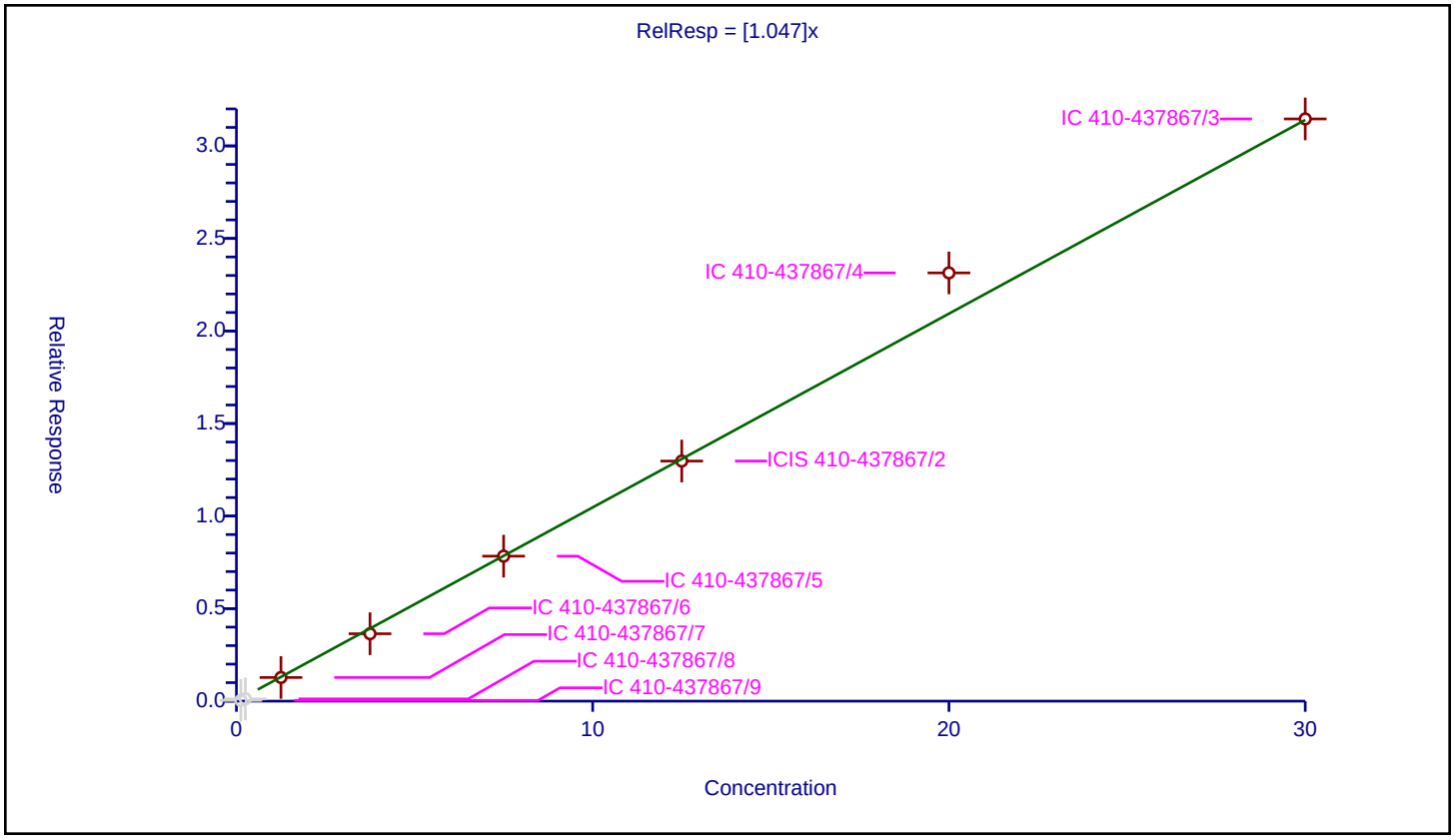
Curve Coefficients

Intercept:	0
Slope:	1.047

Error Coefficients

Standard Error:	806000
Relative Standard Error:	5.8
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.040927	5.0	172378.0	0.32742	N
2	IC 410-437867/8	0.25	0.122165	5.0	166373.0	0.488661	N
3	IC 410-437867/7	1.25	1.277014	5.0	164129.0	1.021611	Y
4	IC 410-437867/6	3.75	3.641998	5.0	183214.0	0.971199	Y
5	IC 410-437867/5	7.5	7.832909	5.0	182535.0	1.044388	Y
6	ICIS 410-437867/2	12.5	12.972175	5.0	191661.0	1.037774	Y
7	IC 410-437867/4	20.0	23.138679	5.0	216169.0	1.156934	Y
8	IC 410-437867/3	30.0	31.457292	5.0	219208.0	1.048576	Y



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Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

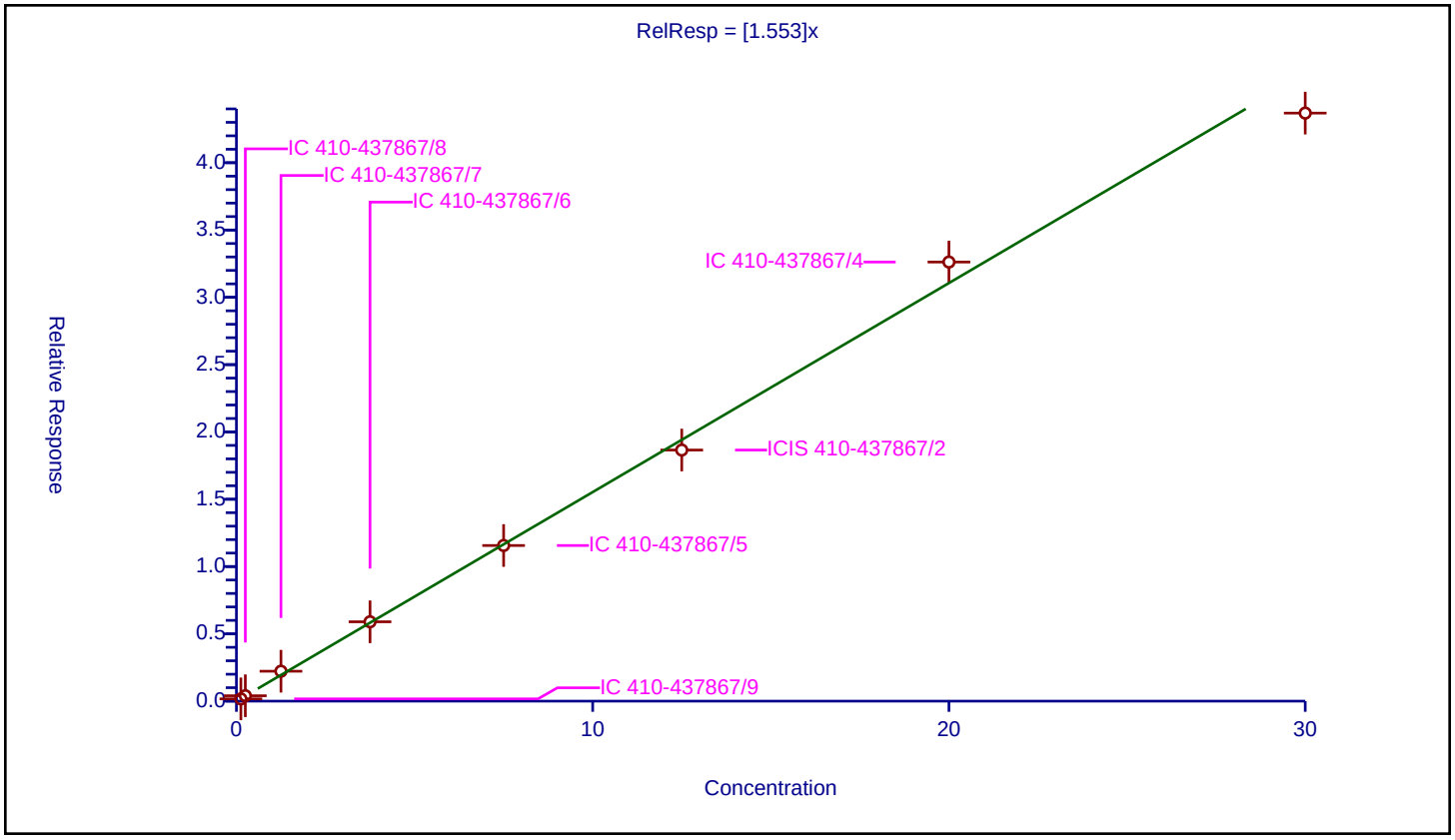
Curve Coefficients

Intercept:	0
Slope:	1.553

Error Coefficients

Standard Error:	956000
Relative Standard Error:	8.2
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.169192	5.0	172378.0	1.353537	Y
2	IC 410-437867/8	0.25	0.399794	5.0	166373.0	1.599178	Y
3	IC 410-437867/7	1.25	2.222764	5.0	164129.0	1.778211	Y
4	IC 410-437867/6	3.75	5.895319	5.0	183214.0	1.572085	Y
5	IC 410-437867/5	7.5	11.563207	5.0	182535.0	1.541761	Y
6	ICIS 410-437867/2	12.5	18.655204	5.0	191661.0	1.492416	Y
7	IC 410-437867/4	20.0	32.622138	5.0	216169.0	1.631107	Y
8	IC 410-437867/3	30.0	43.68773	5.0	219208.0	1.456258	Y



Calibration / 2,2'-oxybis[1-chloropropane]

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

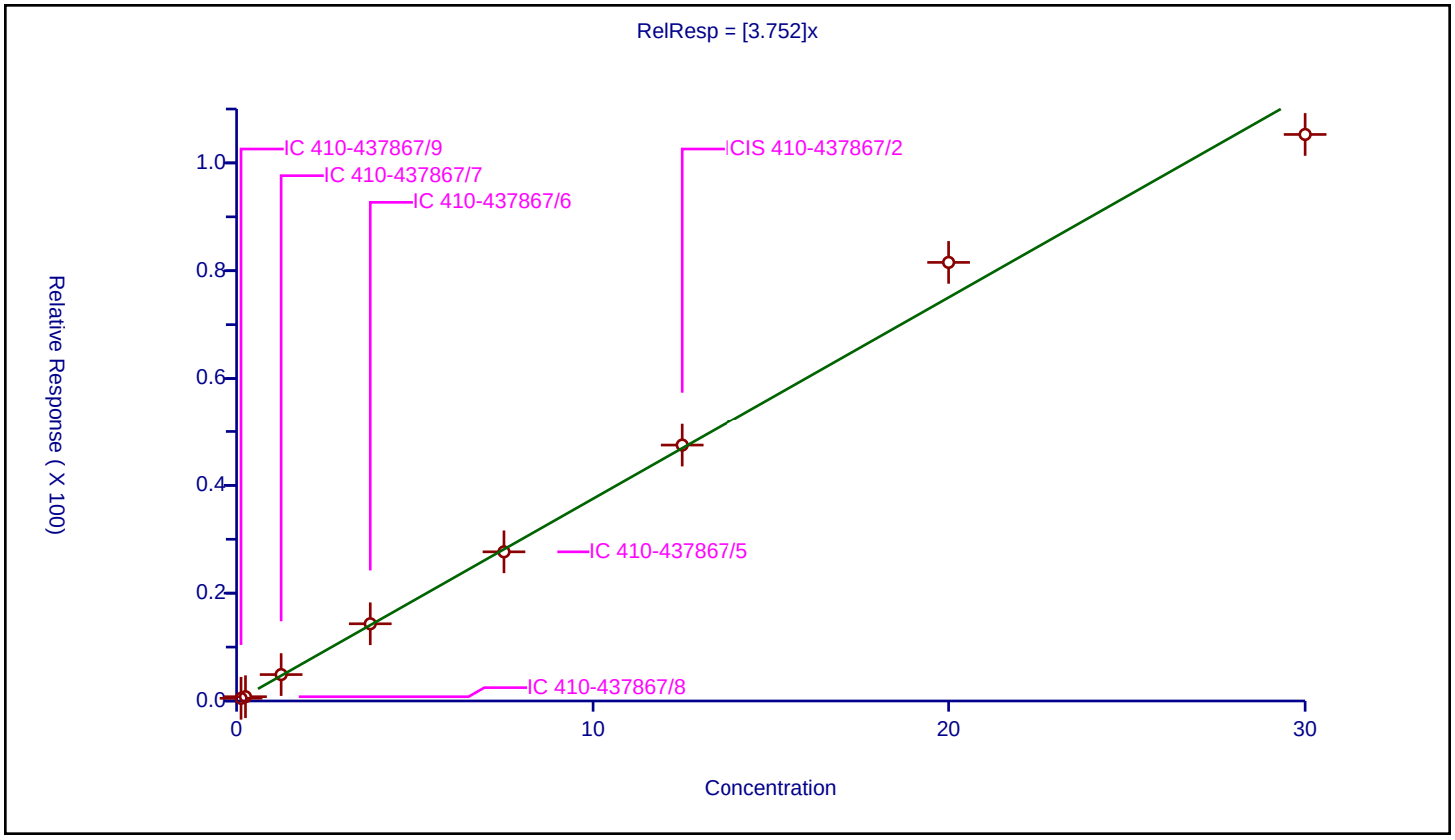
Curve Coefficients

Intercept:	0
Slope:	3.752

Error Coefficients

Standard Error:	2340000
Relative Standard Error:	7.9
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.503458	5.0	172378.0	4.02766	Y
2	IC 410-437867/8	0.25	0.793729	5.0	166373.0	3.174914	Y
3	IC 410-437867/7	1.25	4.899926	5.0	164129.0	3.919941	Y
4	IC 410-437867/6	3.75	14.324397	5.0	183214.0	3.819839	Y
5	IC 410-437867/5	7.5	27.669132	5.0	182535.0	3.689218	Y
6	ICIS 410-437867/2	12.5	47.476299	5.0	191661.0	3.798104	Y
7	IC 410-437867/4	20.0	81.546198	5.0	216169.0	4.07731	Y
8	IC 410-437867/3	30.0	105.278525	5.0	219208.0	3.509284	Y



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Calibration / 2-Methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

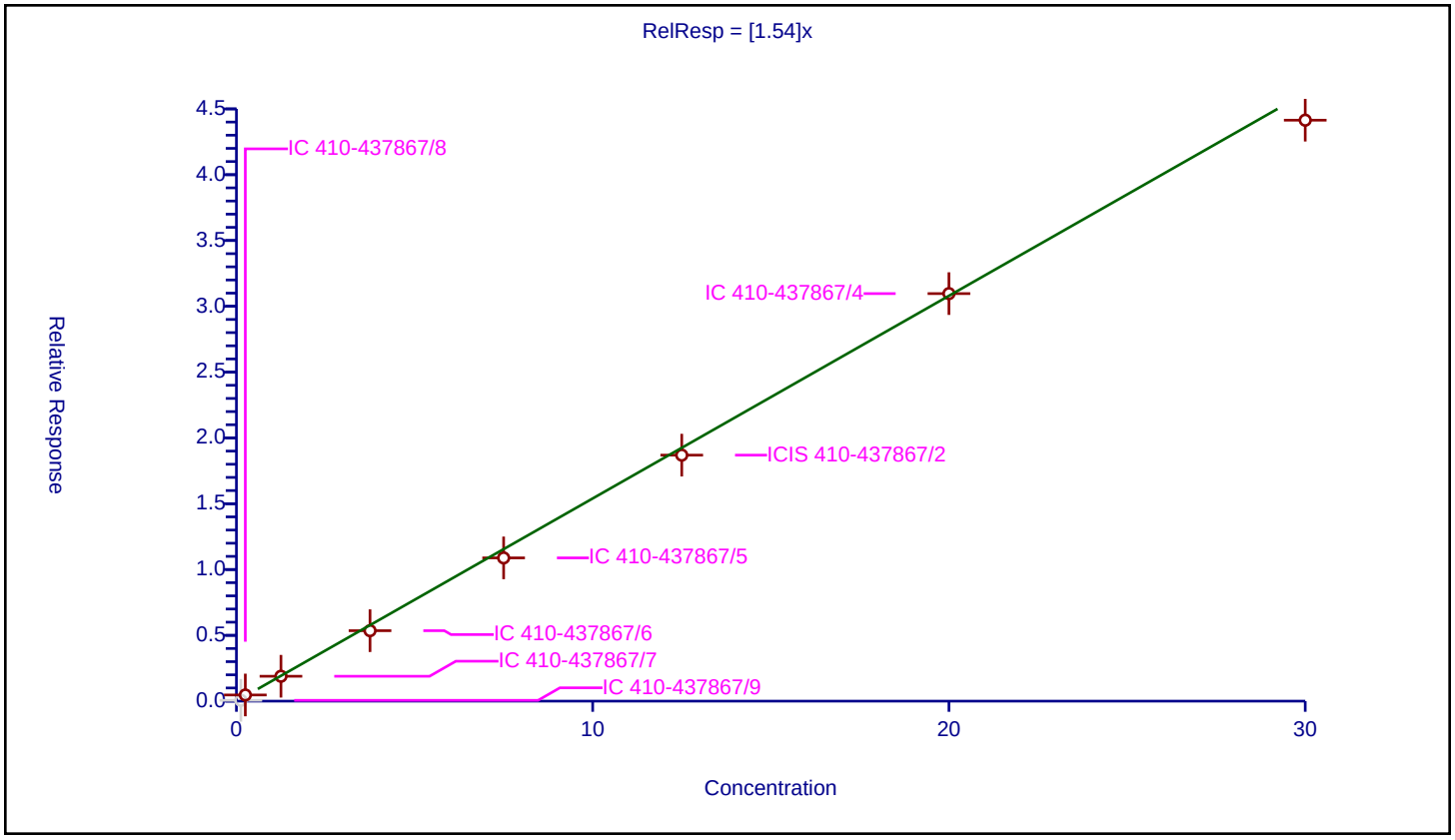
Curve Coefficients

Intercept:	0
Slope:	1.54

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	9.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.062334	5.0	172378.0	0.498672	N
2	IC 410-437867/8	0.25	0.468135	5.0	166373.0	1.872539	Y
3	IC 410-437867/7	1.25	1.890769	5.0	164129.0	1.512615	Y
4	IC 410-437867/6	3.75	5.35393	5.0	183214.0	1.427715	Y
5	IC 410-437867/5	7.5	10.88394	5.0	182535.0	1.451192	Y
6	ICIS 410-437867/2	12.5	18.691518	5.0	191661.0	1.495321	Y
7	IC 410-437867/4	20.0	30.964708	5.0	216169.0	1.548235	Y
8	IC 410-437867/3	30.0	44.141249	5.0	219208.0	1.471375	Y



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Calibration / Acetophenone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

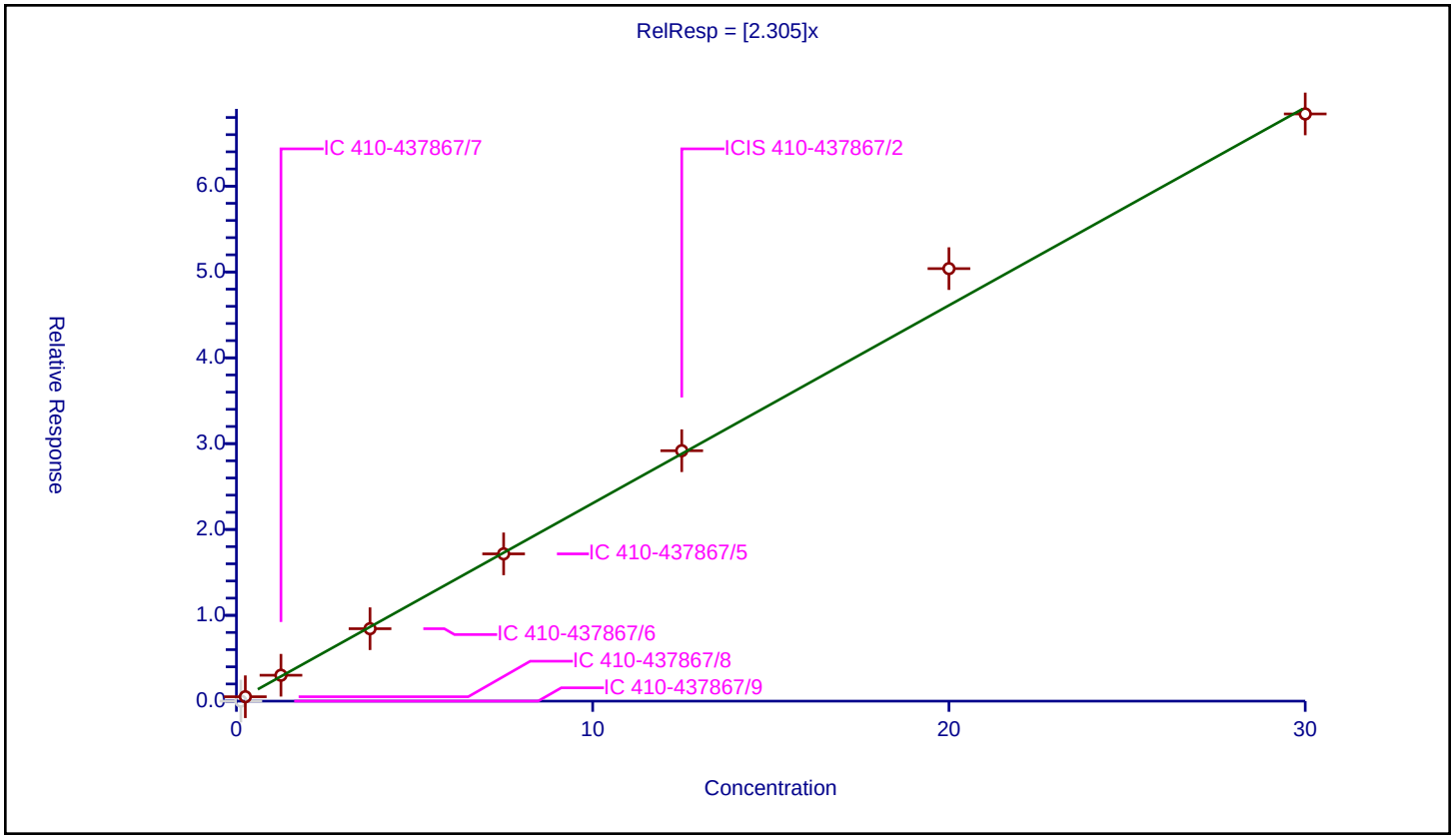
Curve Coefficients

Intercept:	0
Slope:	2.305

Error Coefficients

Standard Error:	1610000
Relative Standard Error:	6.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.003481	5.0	172378.0	0.027846	N
2	IC 410-437867/8	0.25	0.513094	5.0	166373.0	2.052376	Y
3	IC 410-437867/7	1.25	3.017291	5.0	164129.0	2.413833	Y
4	IC 410-437867/6	3.75	8.439039	5.0	183214.0	2.25041	Y
5	IC 410-437867/5	7.5	17.157614	5.0	182535.0	2.287682	Y
6	ICIS 410-437867/2	12.5	29.177089	5.0	191661.0	2.334167	Y
7	IC 410-437867/4	20.0	50.390435	5.0	216169.0	2.519522	Y
8	IC 410-437867/3	30.0	68.413493	5.0	219208.0	2.28045	Y



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Calibration / N-Nitrosopyrrolidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

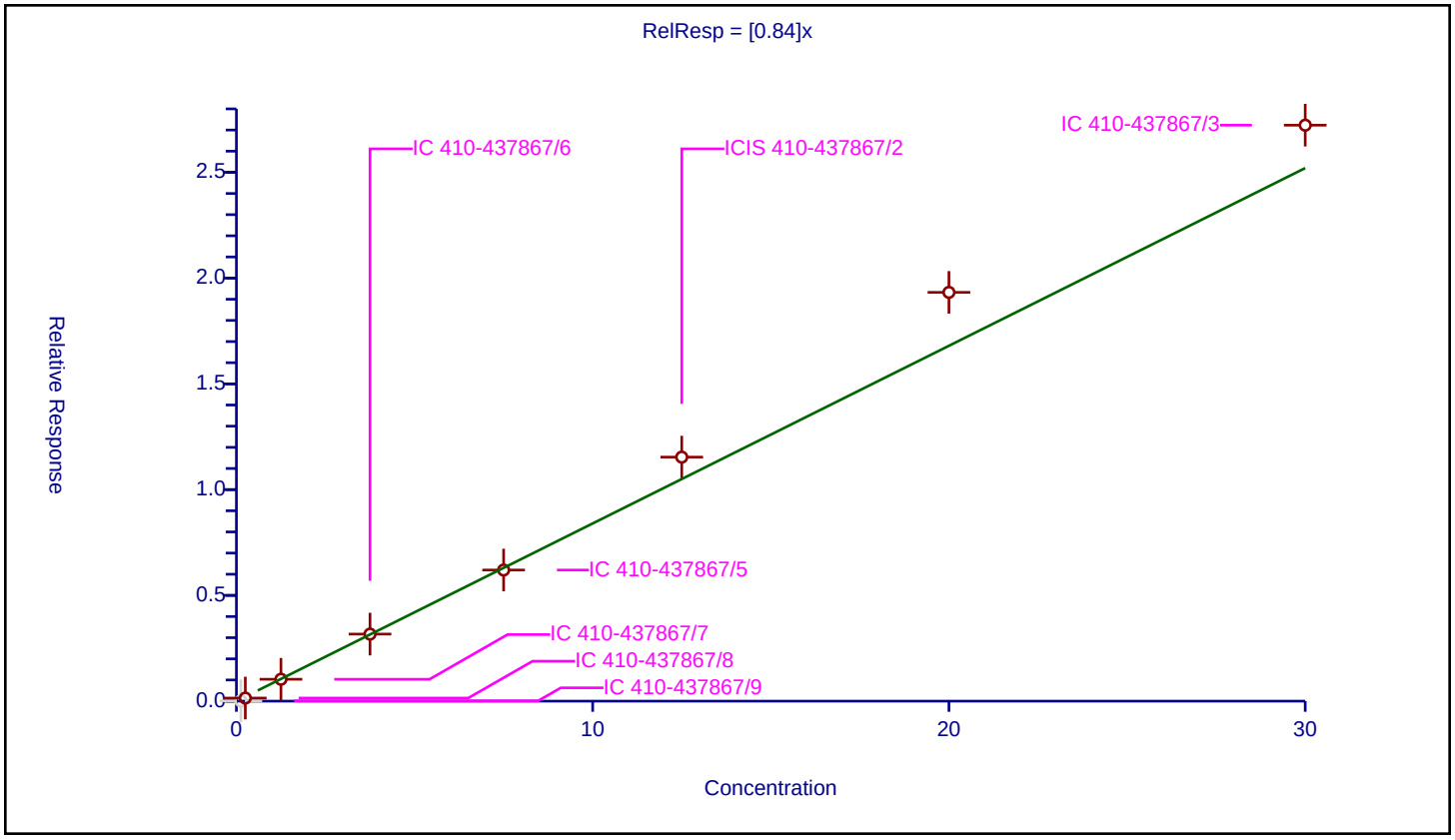
Curve Coefficients

Intercept:	0
Slope:	0.84

Error Coefficients

Standard Error:	630000
Relative Standard Error:	14.8
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.012734	5.0	172378.0	0.101869	N
2	IC 410-437867/8	0.25	0.145967	5.0	166373.0	0.583869	Y
3	IC 410-437867/7	1.25	1.034461	5.0	164129.0	0.827569	Y
4	IC 410-437867/6	3.75	3.170527	5.0	183214.0	0.845474	Y
5	IC 410-437867/5	7.5	6.198948	5.0	182535.0	0.826526	Y
6	ICIS 410-437867/2	12.5	11.535863	5.0	191661.0	0.922869	Y
7	IC 410-437867/4	20.0	19.324834	5.0	216169.0	0.966242	Y
8	IC 410-437867/3	30.0	27.228865	5.0	219208.0	0.907629	Y



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Calibration / N-Nitrosodi-n-propylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

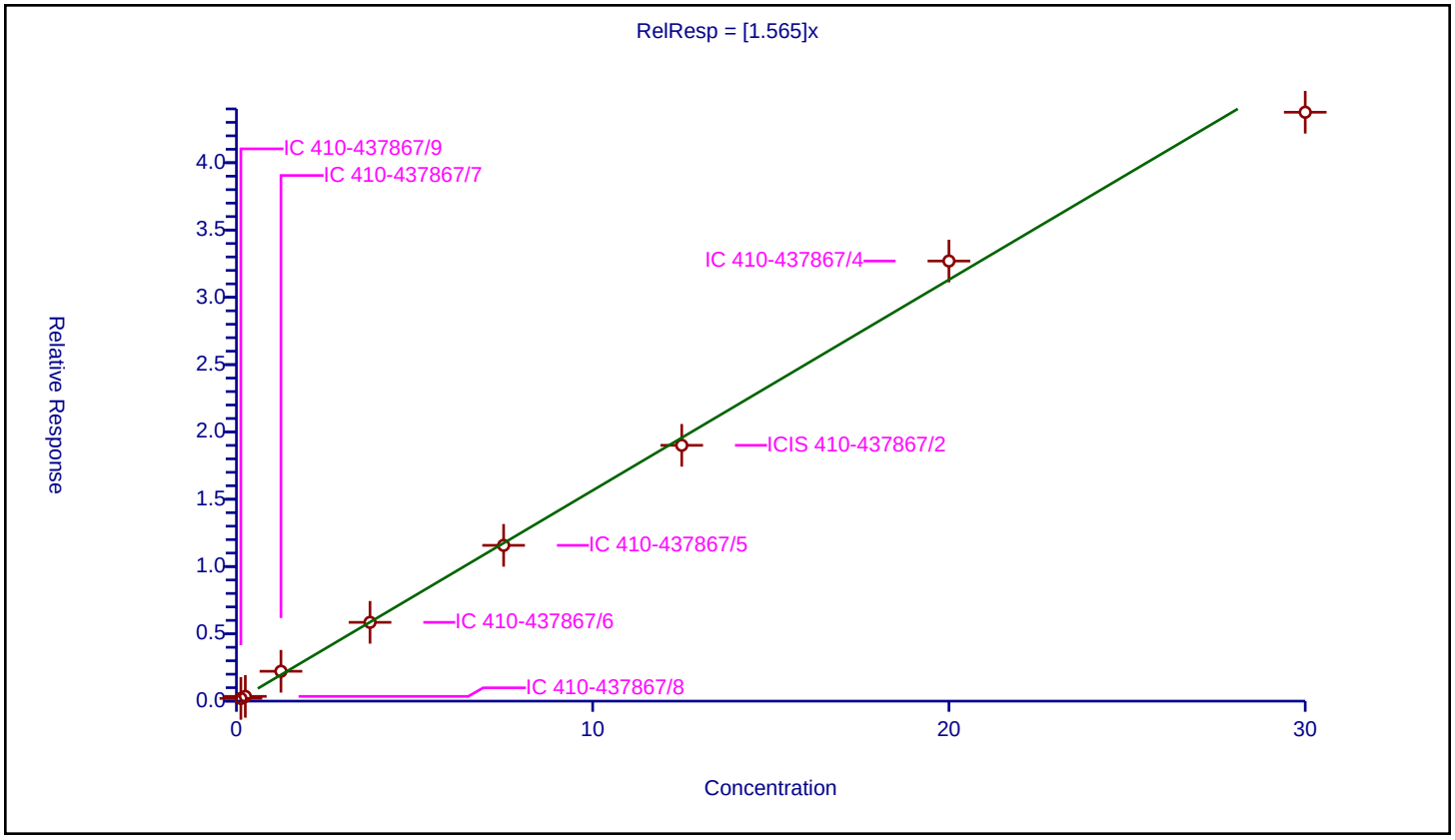
Curve Coefficients

Intercept:	0
Slope:	1.565

Error Coefficients

Standard Error:	959000
Relative Standard Error:	7.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.202549	5.0	172378.0	1.620392	Y
2	IC 410-437867/8	0.25	0.352371	5.0	166373.0	1.409484	Y
3	IC 410-437867/7	1.25	2.219748	5.0	164129.0	1.775798	Y
4	IC 410-437867/6	3.75	5.854165	5.0	183214.0	1.561111	Y
5	IC 410-437867/5	7.5	11.574246	5.0	182535.0	1.543233	Y
6	ICIS 410-437867/2	12.5	19.006345	5.0	191661.0	1.520508	Y
7	IC 410-437867/4	20.0	32.69671	5.0	216169.0	1.634835	Y
8	IC 410-437867/3	30.0	43.752509	5.0	219208.0	1.458417	Y



Calibration / N-Nitrosomorpholine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

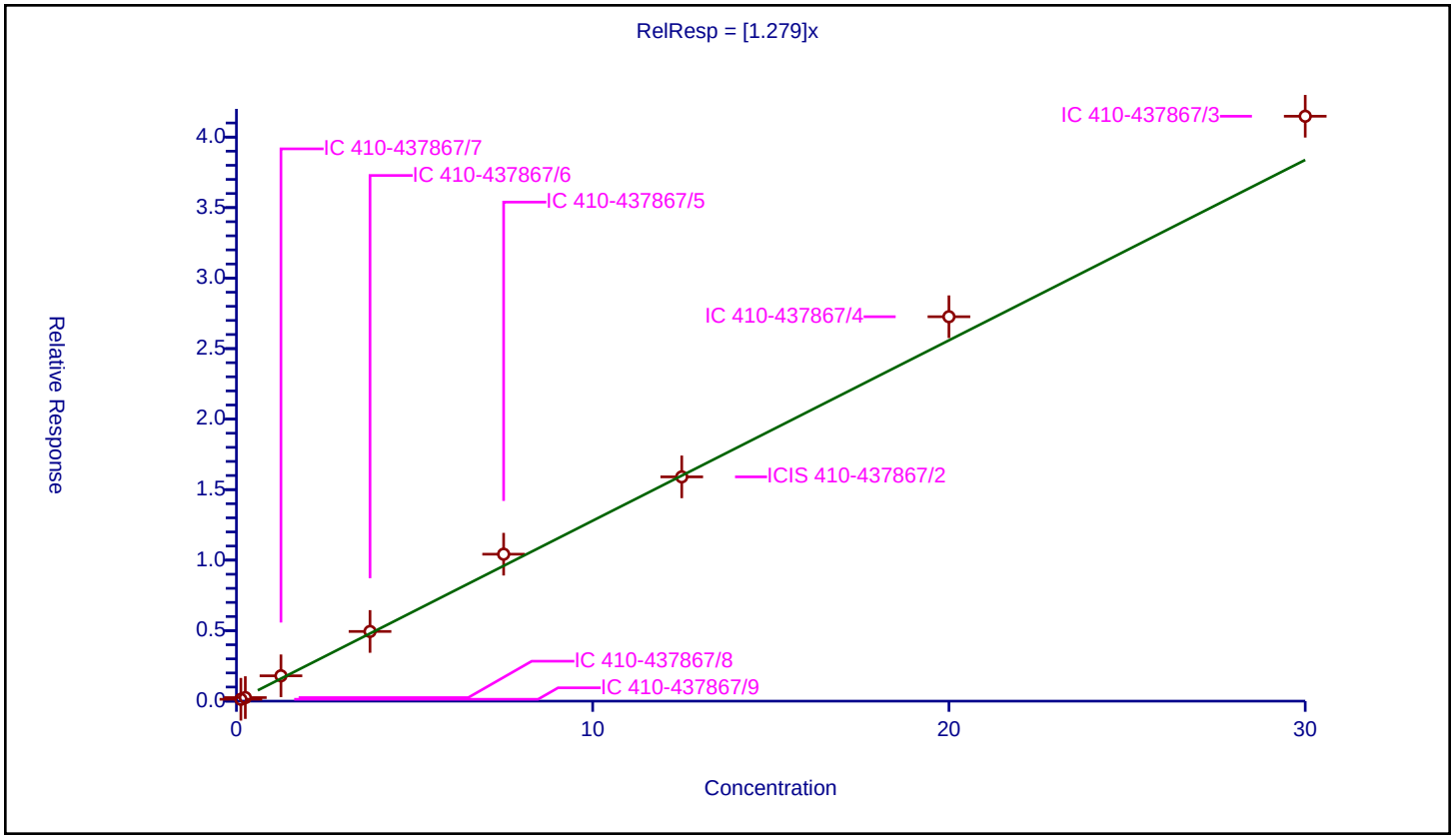
Curve Coefficients

Intercept:	0
Slope:	1.279

Error Coefficients

Standard Error:	866000
Relative Standard Error:	12.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.1325	5.0	172378.0	1.059996	Y
2	IC 410-437867/8	0.25	0.252896	5.0	166373.0	1.011582	Y
3	IC 410-437867/7	1.25	1.797245	5.0	164129.0	1.437796	Y
4	IC 410-437867/6	3.75	4.942826	5.0	183214.0	1.318087	Y
5	IC 410-437867/5	7.5	10.4217	5.0	182535.0	1.38956	Y
6	ICIS 410-437867/2	12.5	15.903862	5.0	191661.0	1.272309	Y
7	IC 410-437867/4	20.0	27.26161	5.0	216169.0	1.363081	Y
8	IC 410-437867/3	30.0	41.478459	5.0	219208.0	1.382615	Y



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Calibration / 4-Methylphenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

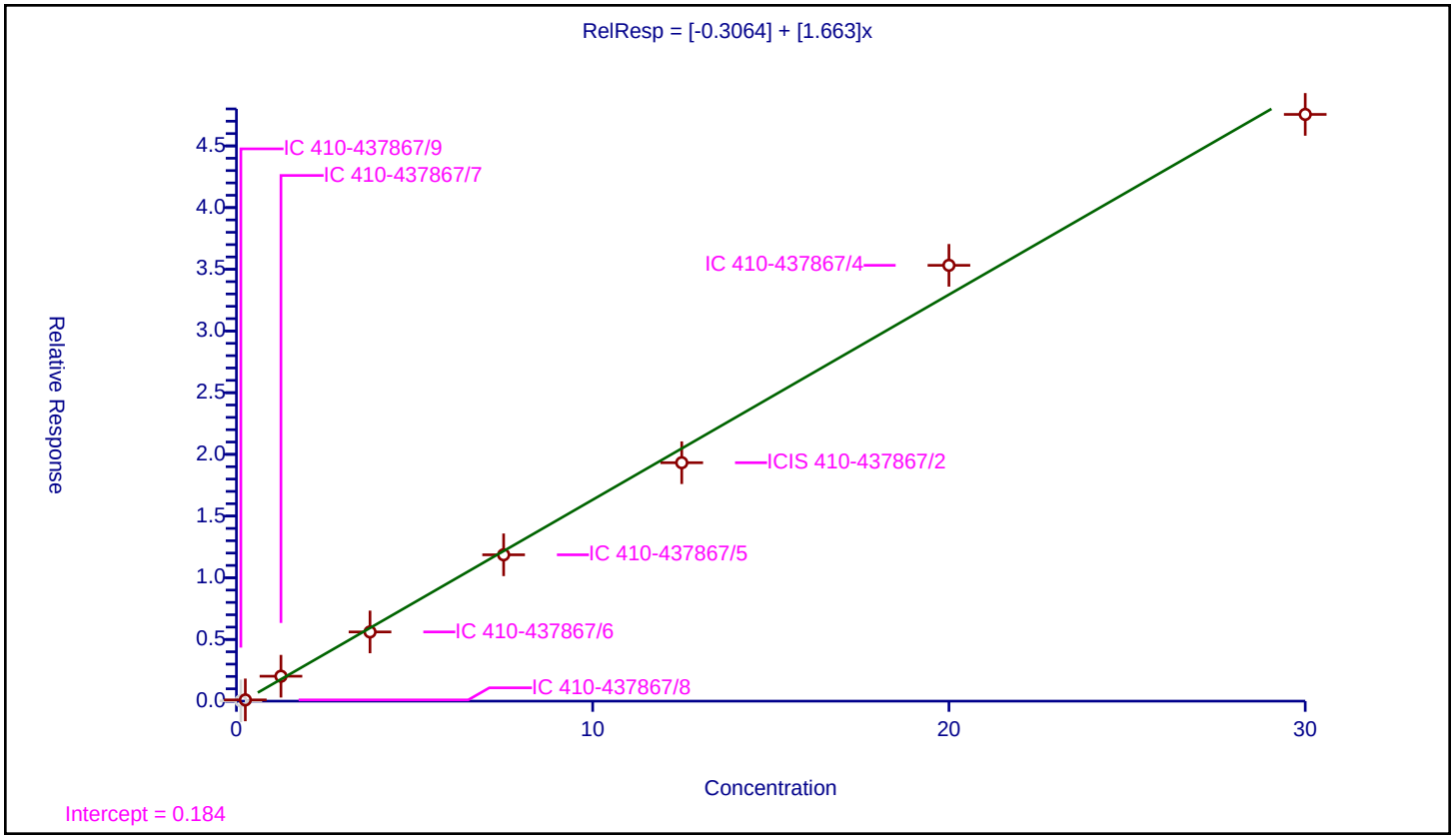
Curve Coefficients

Intercept:	-0.3064
Slope:	1.663

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	7.4
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.022277	5.0	172378.0	0.178213	N
2	IC 410-437867/8	0.25	0.101309	5.0	166373.0	0.405234	Y
3	IC 410-437867/7	1.25	2.019996	5.0	164129.0	1.615997	Y
4	IC 410-437867/6	3.75	5.608987	5.0	183214.0	1.49573	Y
5	IC 410-437867/5	7.5	11.860547	5.0	182535.0	1.581406	Y
6	ICIS 410-437867/2	12.5	19.32438	5.0	191661.0	1.54595	Y
7	IC 410-437867/4	20.0	35.321855	5.0	216169.0	1.766093	Y
8	IC 410-437867/3	30.0	47.552507	5.0	219208.0	1.585084	Y



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Calibration / 2-Toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

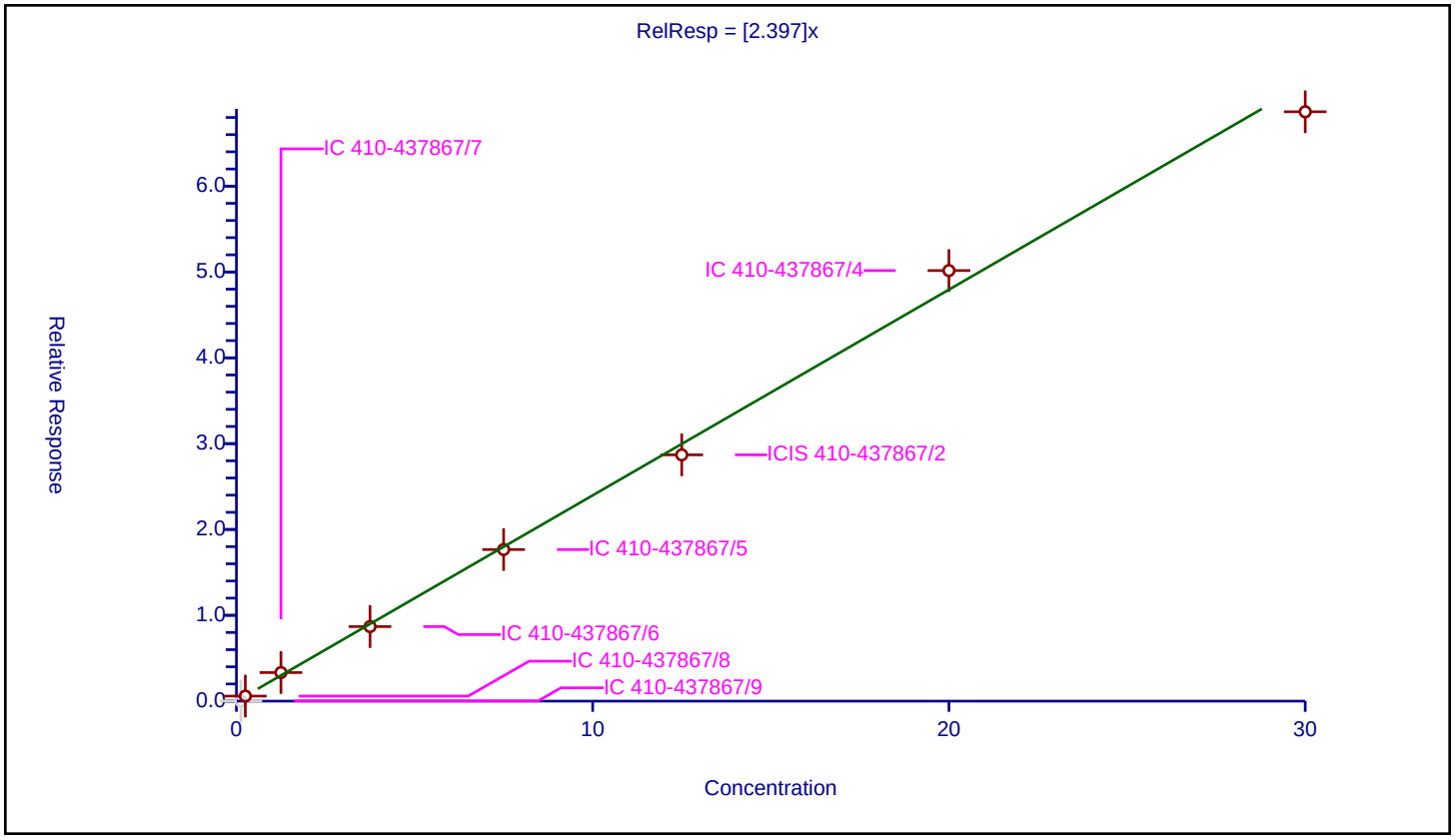
Curve Coefficients

Intercept:	0
Slope:	2.397

Error Coefficients

Standard Error:	1610000
Relative Standard Error:	5.8
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.021435	5.0	172378.0	0.171484	N
2	IC 410-437867/8	0.25	0.589068	5.0	166373.0	2.356272	Y
3	IC 410-437867/7	1.25	3.327139	5.0	164129.0	2.661711	Y
4	IC 410-437867/6	3.75	8.684189	5.0	183214.0	2.315784	Y
5	IC 410-437867/5	7.5	17.660887	5.0	182535.0	2.354785	Y
6	ICIS 410-437867/2	12.5	28.693474	5.0	191661.0	2.295478	Y
7	IC 410-437867/4	20.0	50.163506	5.0	216169.0	2.508175	Y
8	IC 410-437867/3	30.0	68.664328	5.0	219208.0	2.288811	Y



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Calibration / Hexachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

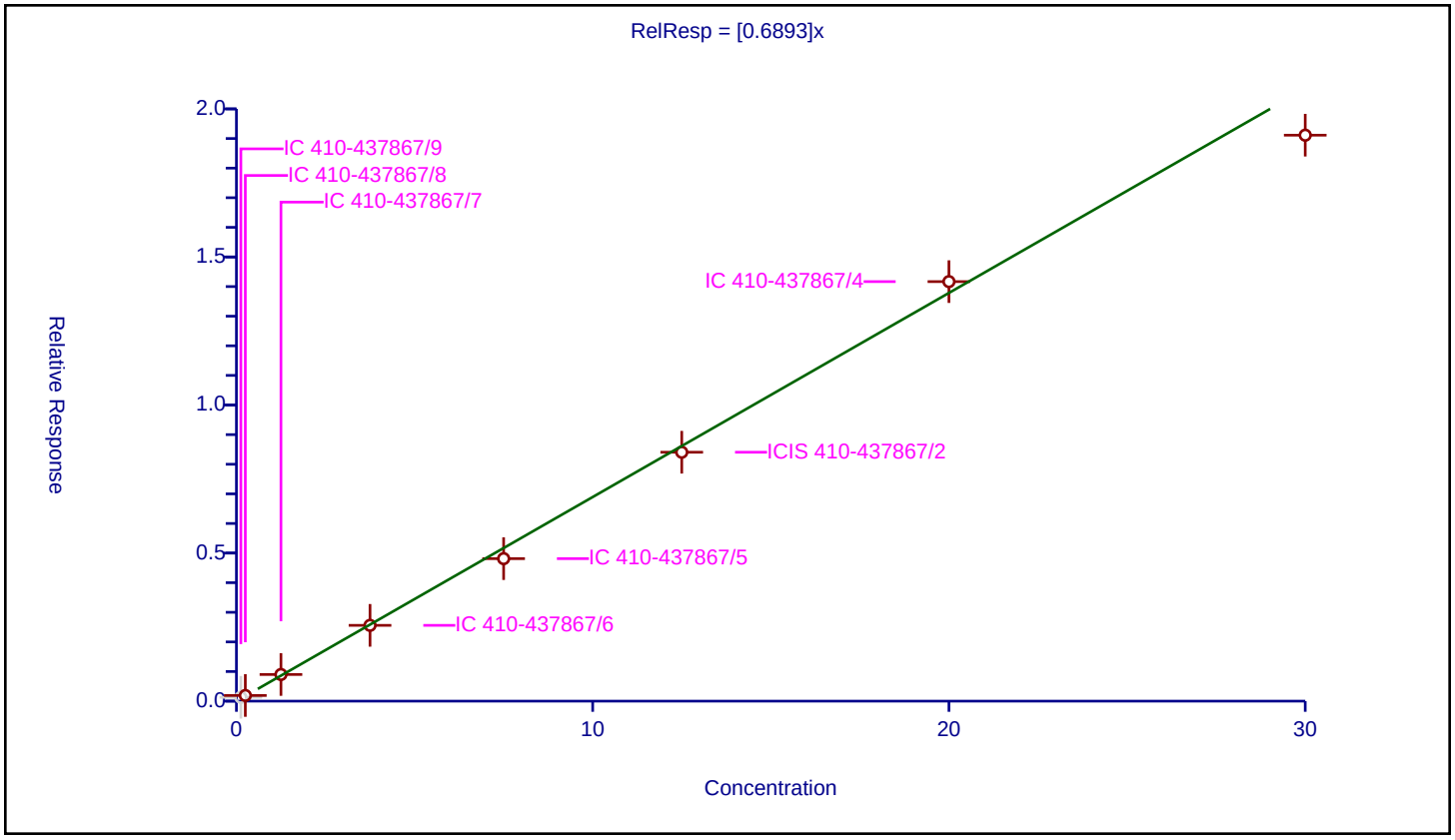
Curve Coefficients

Intercept:	0
Slope:	0.6893

Error Coefficients

Standard Error:	451000
Relative Standard Error:	6.5
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.128642	5.0	172378.0	1.029134	N
2	IC 410-437867/8	0.25	0.190746	5.0	166373.0	0.762984	Y
3	IC 410-437867/7	1.25	0.899902	5.0	164129.0	0.719922	Y
4	IC 410-437867/6	3.75	2.559275	5.0	183214.0	0.682473	Y
5	IC 410-437867/5	7.5	4.812091	5.0	182535.0	0.641612	Y
6	ICIS 410-437867/2	12.5	8.405727	5.0	191661.0	0.672458	Y
7	IC 410-437867/4	20.0	14.167388	5.0	216169.0	0.708369	Y
8	IC 410-437867/3	30.0	19.112578	5.0	219208.0	0.637086	Y



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Calibration / Nitrobenzene-d5

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

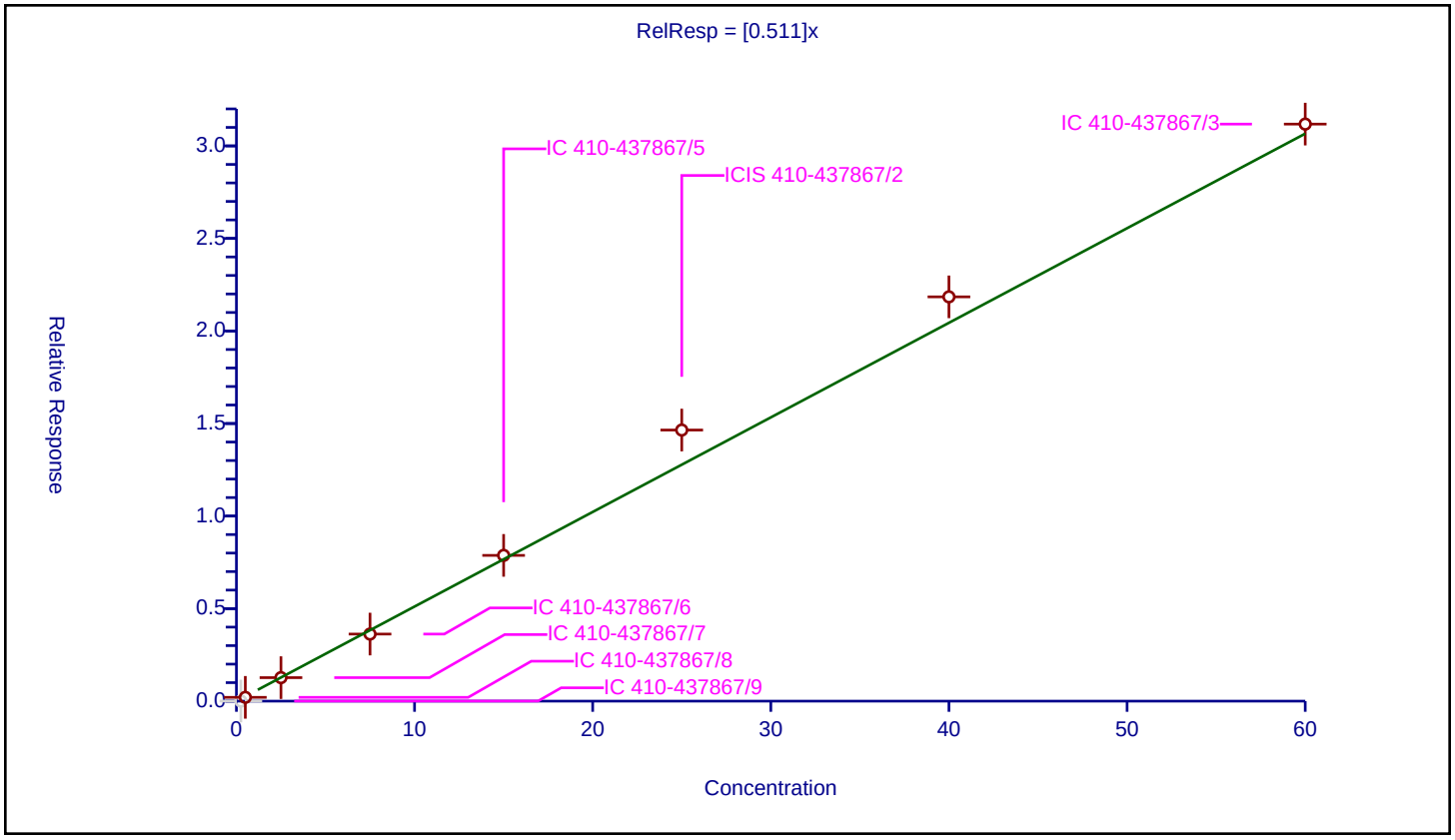
Curve Coefficients

Intercept:	0
Slope:	0.511

Error Coefficients

Standard Error:	2700000
Relative Standard Error:	10.8
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.25	0.004565	5.0	674732.0	0.018259	N
2	IC 410-437867/8	0.5	0.204666	5.0	612265.0	0.409333	Y
3	IC 410-437867/7	2.5	1.269606	5.0	655341.0	0.507842	Y
4	IC 410-437867/6	7.5	3.625013	5.0	730894.0	0.483335	Y
5	IC 410-437867/5	15.0	7.875314	5.0	669419.0	0.525021	Y
6	ICIS 410-437867/2	25.0	14.647432	5.0	634430.0	0.585897	Y
7	IC 410-437867/4	40.0	21.844404	5.0	858006.0	0.54611	Y
8	IC 410-437867/3	60.0	31.178484	5.0	801042.0	0.519641	Y



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Calibration / Nitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

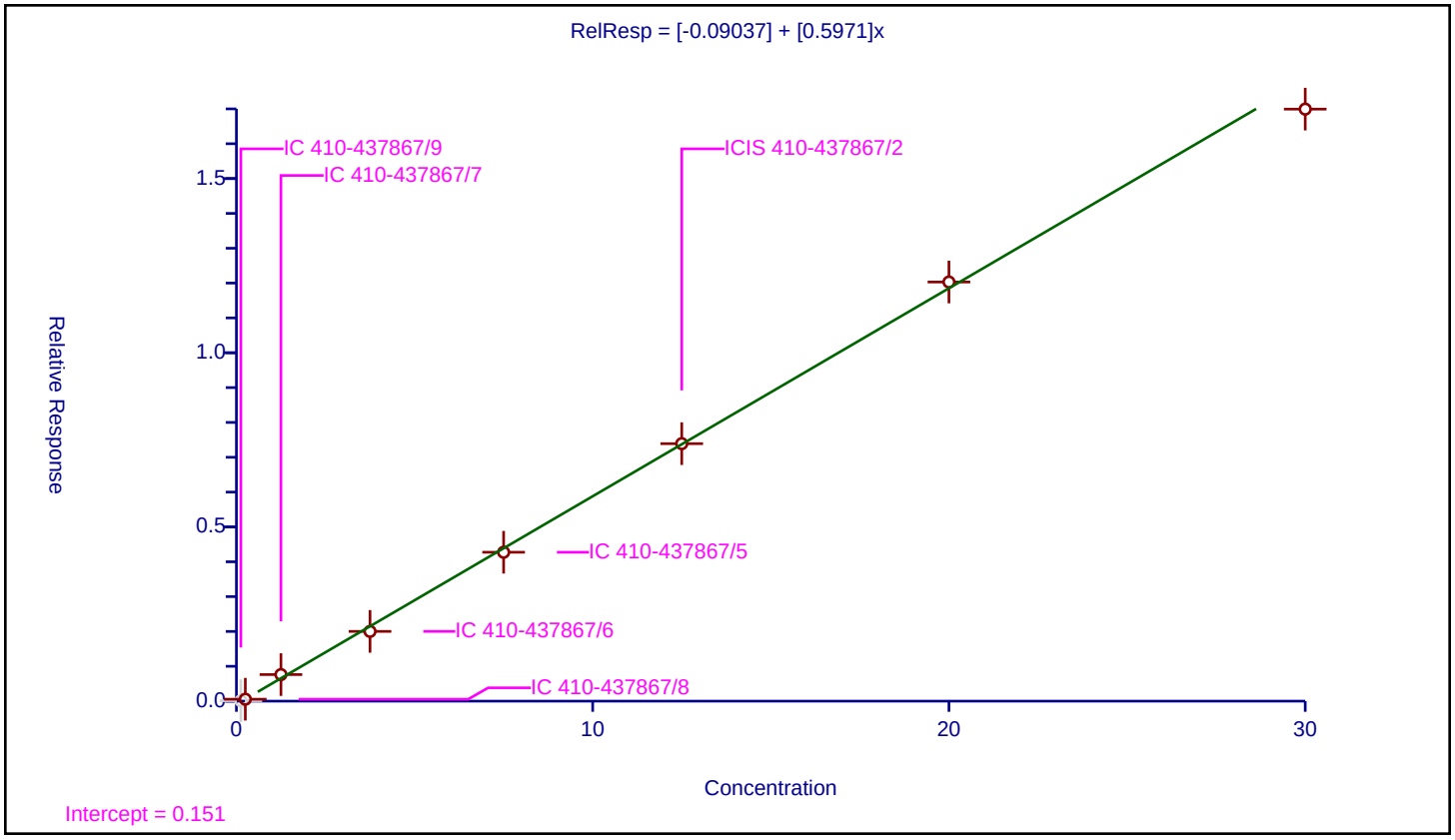
Curve Coefficients

Intercept:	-0.09037
Slope:	0.5971

Error Coefficients

Standard Error:	1610000
Relative Standard Error:	7.5
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.011412	5.0	674732.0	0.091296	N
2	IC 410-437867/8	0.25	0.055434	5.0	612265.0	0.221734	Y
3	IC 410-437867/7	1.25	0.762954	5.0	655341.0	0.610363	Y
4	IC 410-437867/6	3.75	2.002212	5.0	730894.0	0.533923	Y
5	IC 410-437867/5	7.5	4.273684	5.0	669419.0	0.569824	Y
6	ICIS 410-437867/2	12.5	7.390642	5.0	634430.0	0.591251	Y
7	IC 410-437867/4	20.0	12.030918	5.0	858006.0	0.601546	Y
8	IC 410-437867/3	30.0	16.992754	5.0	801042.0	0.566425	Y



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Calibration / N-Nitrosopiperidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

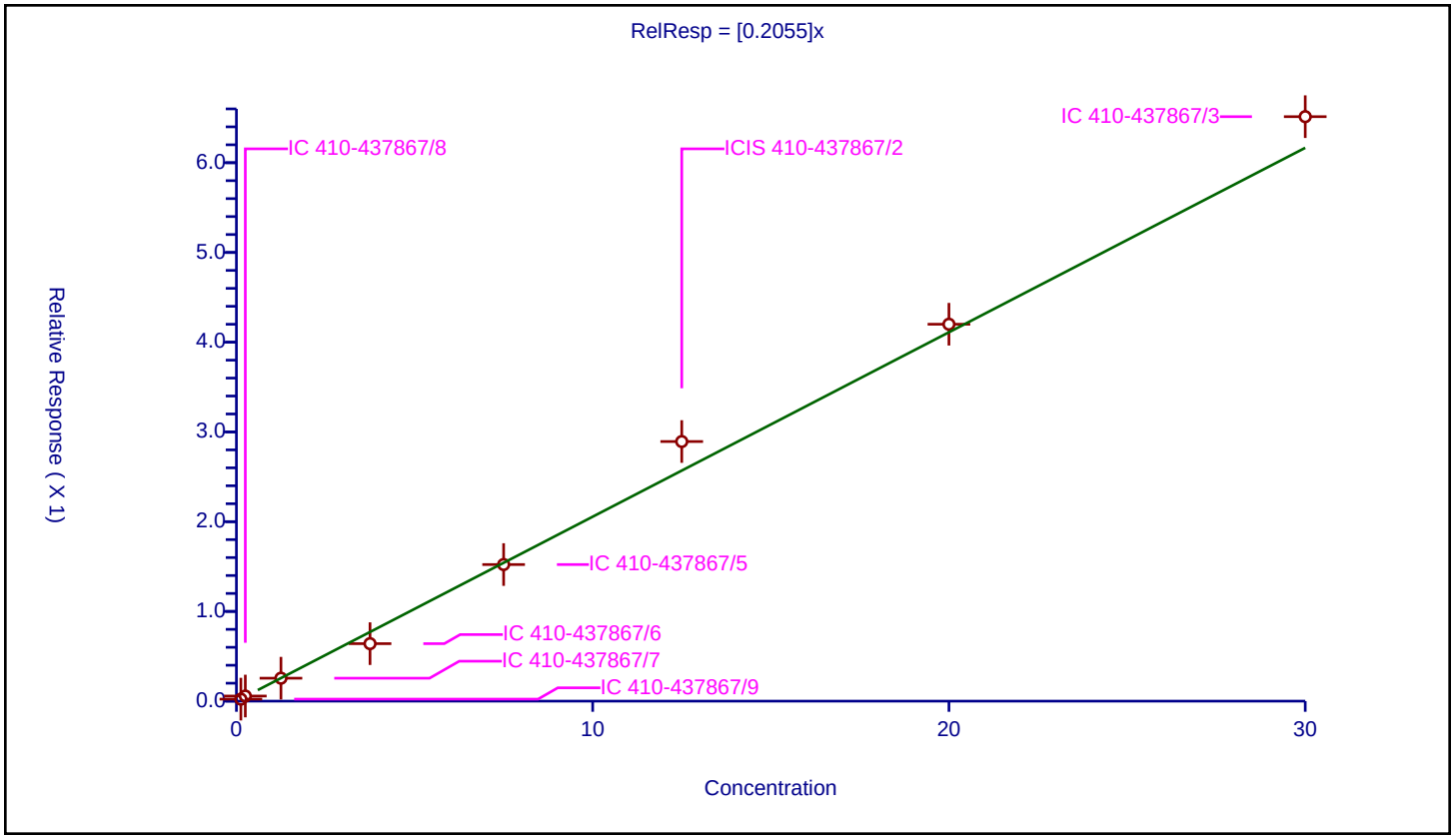
Curve Coefficients

Intercept:	0
Slope:	0.2055

Error Coefficients

Standard Error:	506000
Relative Standard Error:	10.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.02255	5.0	674732.0	0.180398	Y
2	IC 410-437867/8	0.25	0.056716	5.0	612265.0	0.226863	Y
3	IC 410-437867/7	1.25	0.255783	5.0	655341.0	0.204626	Y
4	IC 410-437867/6	3.75	0.640804	5.0	730894.0	0.170881	Y
5	IC 410-437867/5	7.5	1.522171	5.0	669419.0	0.202956	Y
6	ICIS 410-437867/2	12.5	2.892998	5.0	634430.0	0.23144	Y
7	IC 410-437867/4	20.0	4.200169	5.0	858006.0	0.210008	Y
8	IC 410-437867/3	30.0	6.513248	5.0	801042.0	0.217108	Y



Calibration / Isophorone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

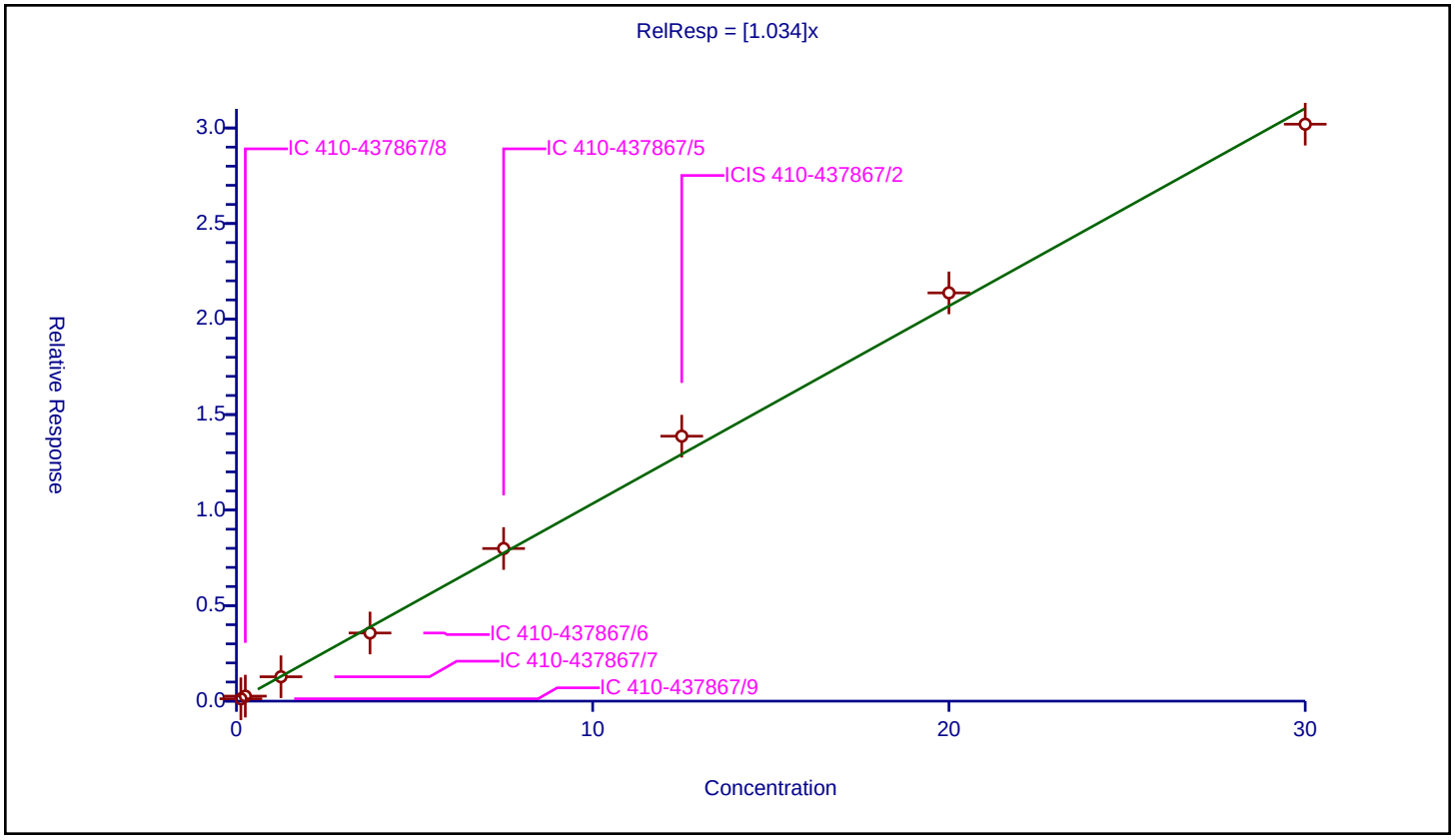
Curve Coefficients

Intercept:	0
Slope:	1.034

Error Coefficients

Standard Error:	2430000
Relative Standard Error:	4.8
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.12522	5.0	674732.0	1.001761	Y
2	IC 410-437867/8	0.25	0.262484	5.0	612265.0	1.049938	Y
3	IC 410-437867/7	1.25	1.27571	5.0	655341.0	1.020568	Y
4	IC 410-437867/6	3.75	3.567029	5.0	730894.0	0.951208	Y
5	IC 410-437867/5	7.5	7.988547	5.0	669419.0	1.06514	Y
6	ICIS 410-437867/2	12.5	13.869828	5.0	634430.0	1.109586	Y
7	IC 410-437867/4	20.0	21.369198	5.0	858006.0	1.06846	Y
8	IC 410-437867/3	30.0	30.199446	5.0	801042.0	1.006648	Y



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Calibration / 2-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

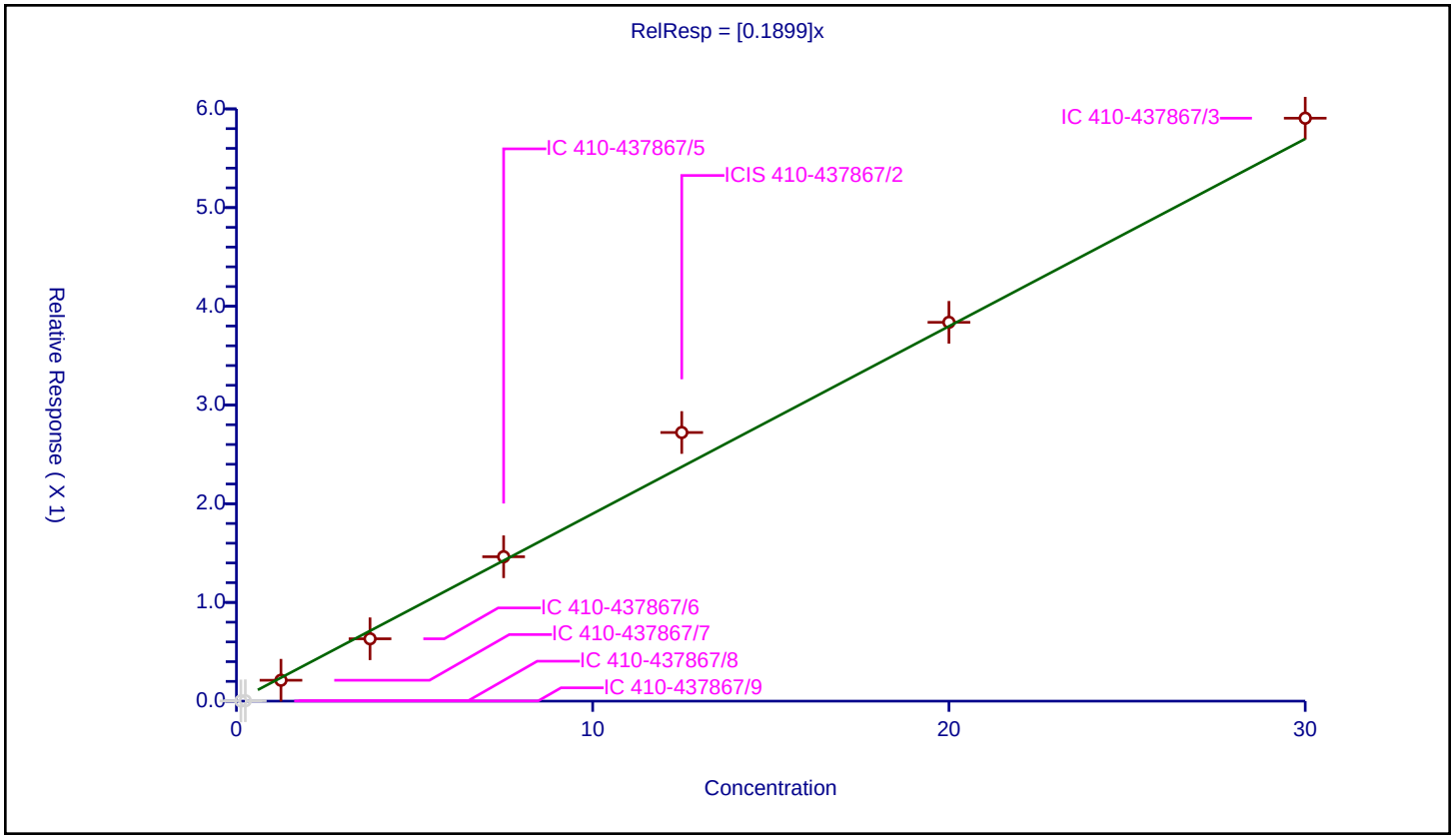
Curve Coefficients

Intercept:	0
Slope:	0.1899

Error Coefficients

Standard Error:	547000
Relative Standard Error:	9.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.001808	5.0	674732.0	0.014465	N
2	IC 410-437867/8	0.25	0.004051	5.0	612265.0	0.016202	N
3	IC 410-437867/7	1.25	0.211585	5.0	655341.0	0.169268	Y
4	IC 410-437867/6	3.75	0.631699	5.0	730894.0	0.168453	Y
5	IC 410-437867/5	7.5	1.462925	5.0	669419.0	0.195057	Y
6	ICIS 410-437867/2	12.5	2.721585	5.0	634430.0	0.217727	Y
7	IC 410-437867/4	20.0	3.837945	5.0	858006.0	0.191897	Y
8	IC 410-437867/3	30.0	5.905801	5.0	801042.0	0.19686	Y



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Calibration / 2,4-Dimethylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

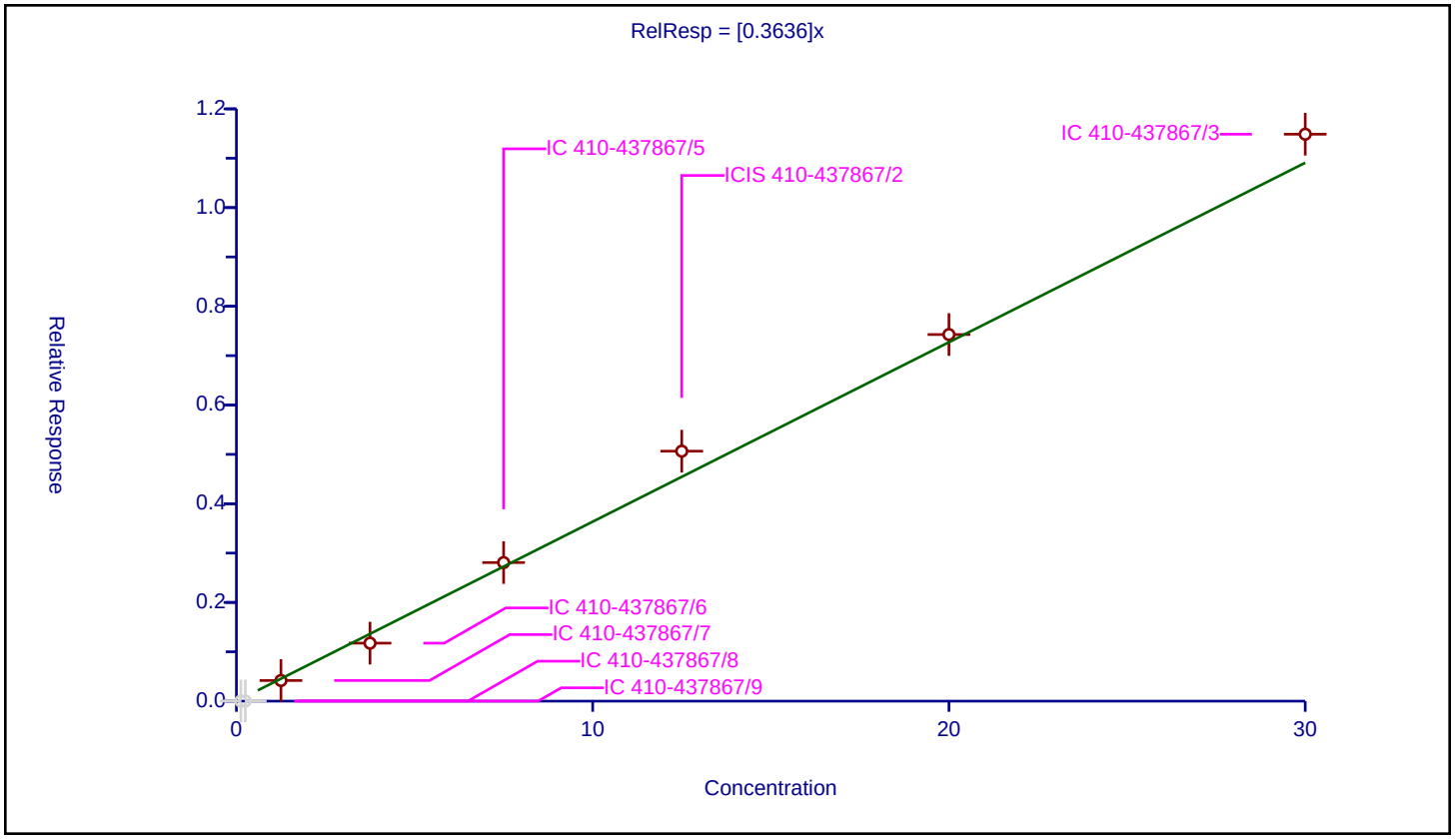
Curve Coefficients

Intercept:	0
Slope:	0.3636

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	9.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.000963	5.0	674732.0	0.007707	N
2	IC 410-437867/8	0.25	0.003675	5.0	612265.0	0.0147	N
3	IC 410-437867/7	1.25	0.417912	5.0	655341.0	0.33433	Y
4	IC 410-437867/6	3.75	1.17515	5.0	730894.0	0.313373	Y
5	IC 410-437867/5	7.5	2.808069	5.0	669419.0	0.374409	Y
6	ICIS 410-437867/2	12.5	5.064956	5.0	634430.0	0.405196	Y
7	IC 410-437867/4	20.0	7.428241	5.0	858006.0	0.371412	Y
8	IC 410-437867/3	30.0	11.486932	5.0	801042.0	0.382898	Y



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Calibration / o,o',o''-Triethylphosphorothioate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

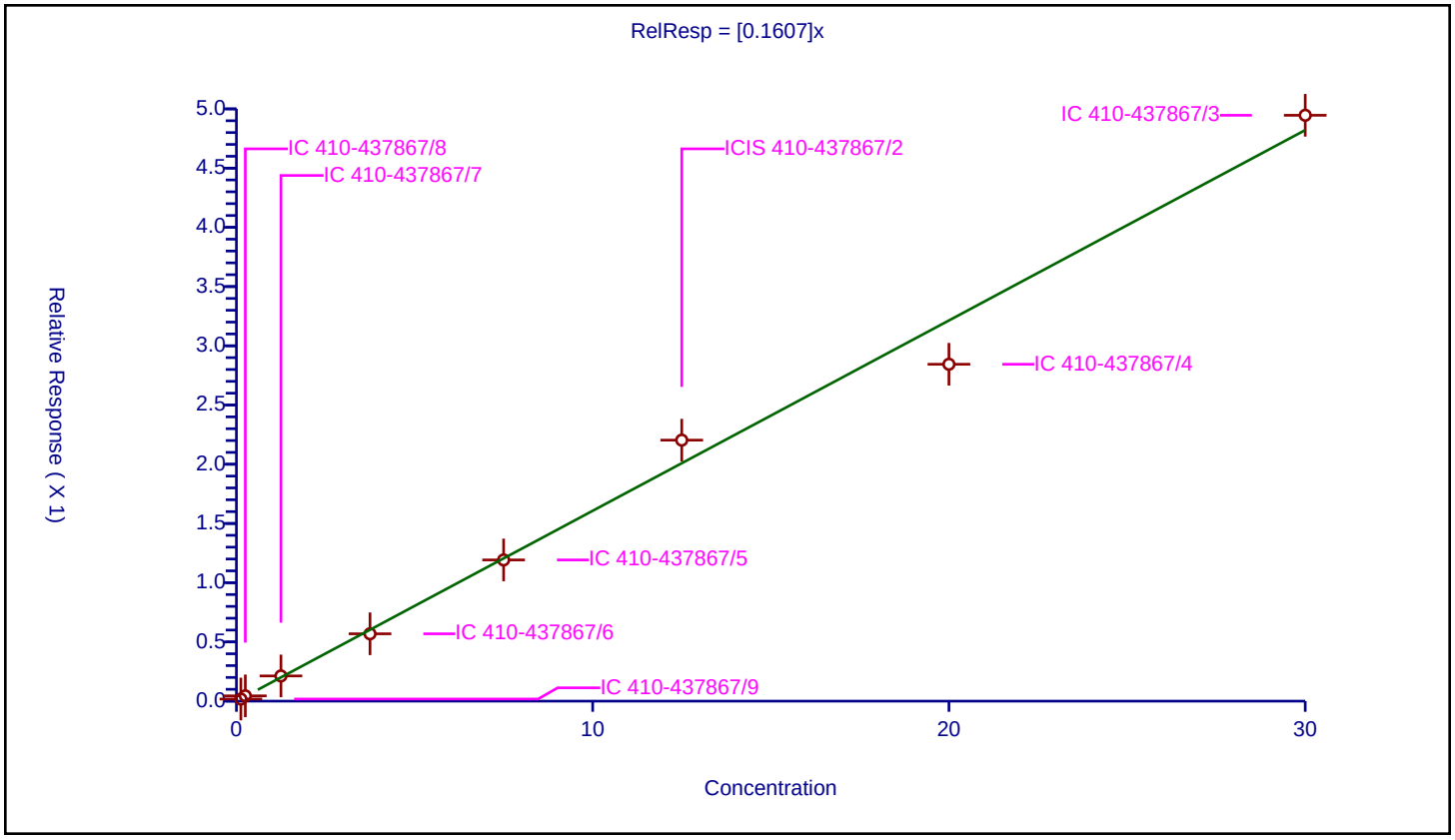
Curve Coefficients

Intercept:	0
Slope:	0.1607

Error Coefficients

Standard Error:	374000
Relative Standard Error:	8.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.017822	5.0	674732.0	0.142575	Y
2	IC 410-437867/8	0.25	0.044711	5.0	612265.0	0.178844	Y
3	IC 410-437867/7	1.25	0.212714	5.0	655341.0	0.170171	Y
4	IC 410-437867/6	3.75	0.568619	5.0	730894.0	0.151632	Y
5	IC 410-437867/5	7.5	1.192108	5.0	669419.0	0.158948	Y
6	ICIS 410-437867/2	12.5	2.203521	5.0	634430.0	0.176282	Y
7	IC 410-437867/4	20.0	2.844188	5.0	858006.0	0.142209	Y
8	IC 410-437867/3	30.0	4.946076	5.0	801042.0	0.164869	Y



Calibration / Bis(2-chloroethoxy)methane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

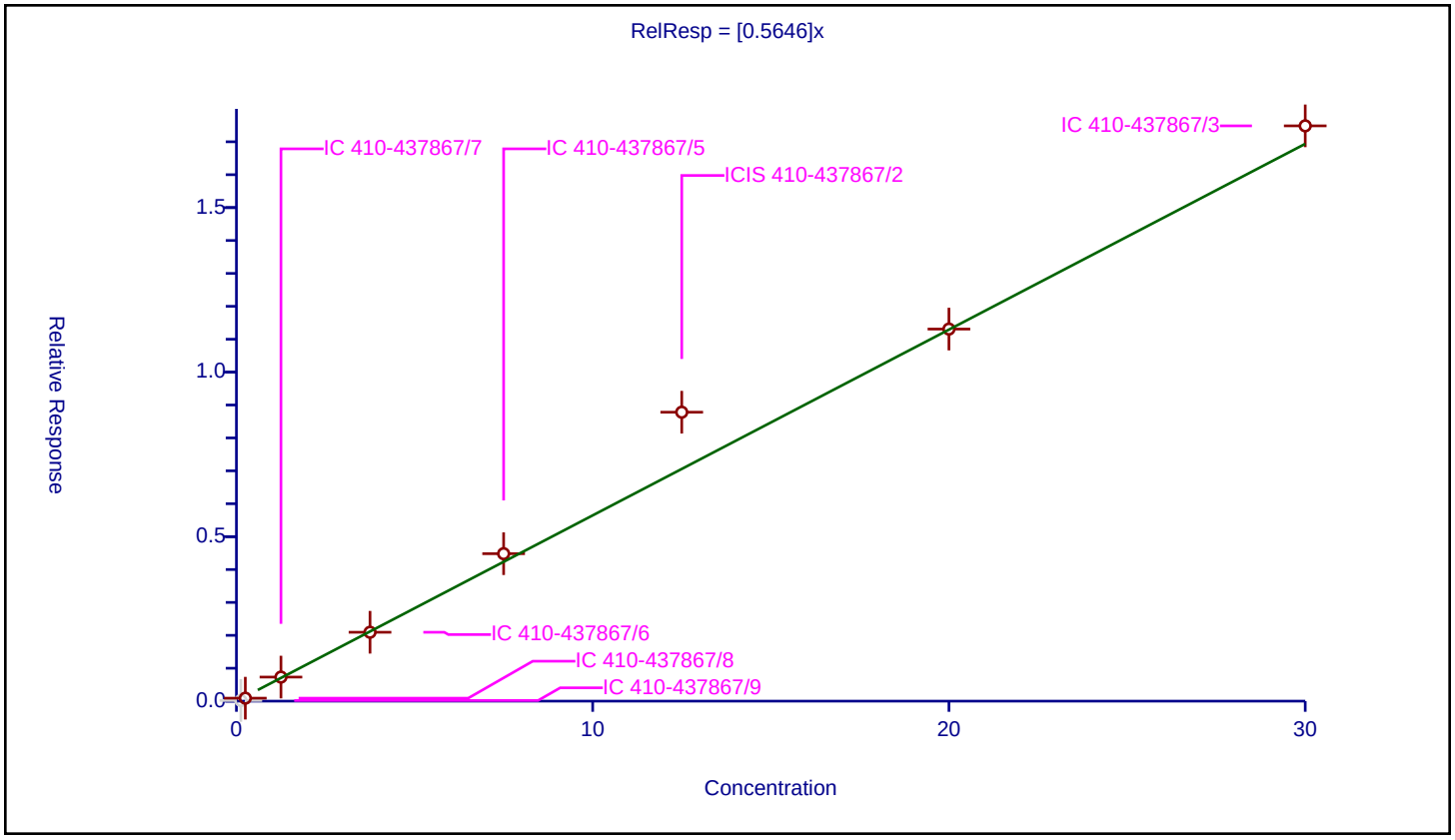
Curve Coefficients

Intercept:	0
Slope:	0.5646

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	18.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.0198	5.0	674732.0	0.158404	N
2	IC 410-437867/8	0.25	0.089977	5.0	612265.0	0.35991	Y
3	IC 410-437867/7	1.25	0.731665	5.0	655341.0	0.585332	Y
4	IC 410-437867/6	3.75	2.093922	5.0	730894.0	0.558379	Y
5	IC 410-437867/5	7.5	4.481901	5.0	669419.0	0.597587	Y
6	ICIS 410-437867/2	12.5	8.781788	5.0	634430.0	0.702543	Y
7	IC 410-437867/4	20.0	11.308085	5.0	858006.0	0.565404	Y
8	IC 410-437867/3	30.0	17.484046	5.0	801042.0	0.582802	Y



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Calibration / 2,4-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

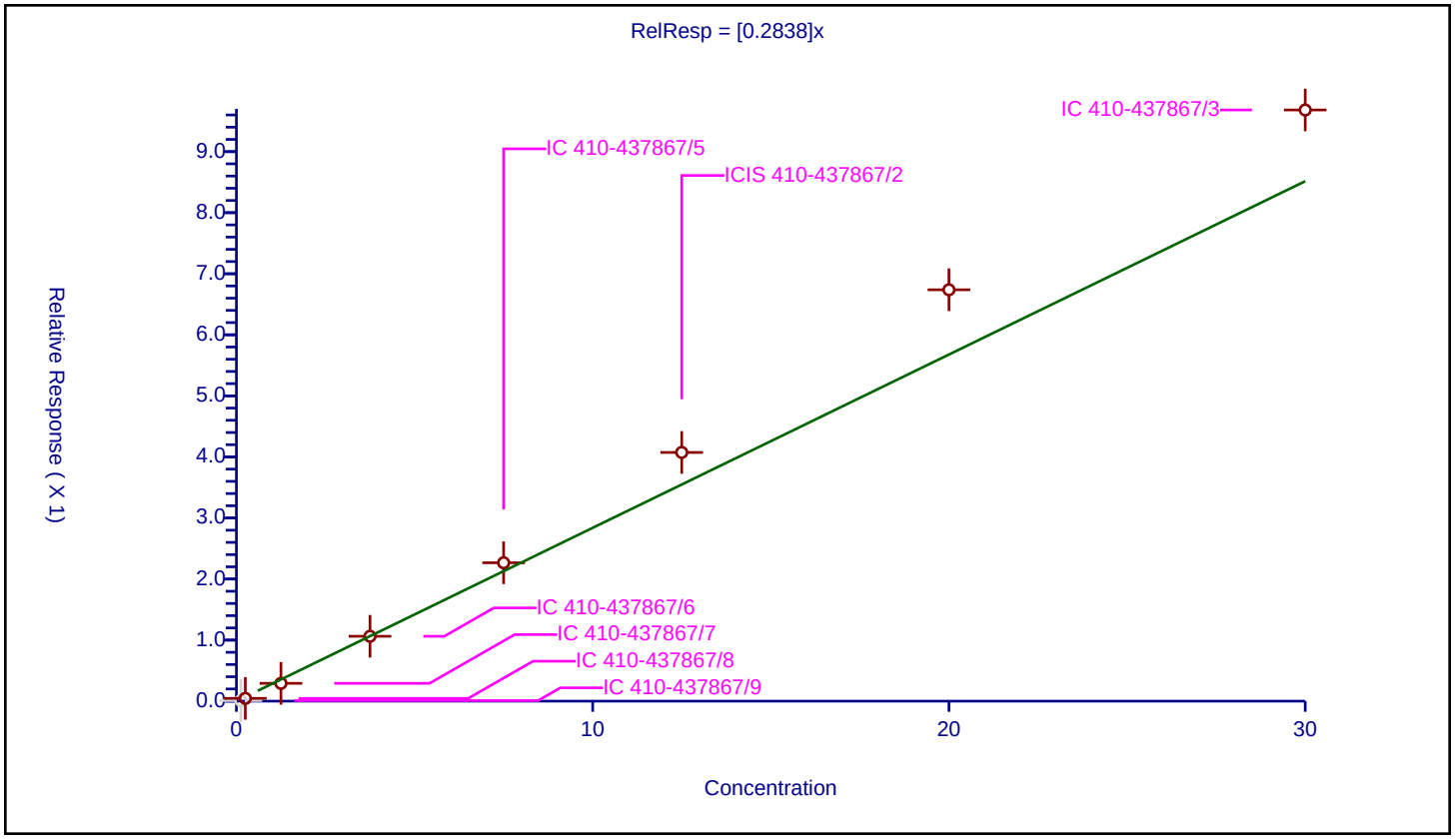
Curve Coefficients

Intercept:	0
Slope:	0.2838

Error Coefficients

Standard Error:	829000
Relative Standard Error:	19.9
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.009448	5.0	674732.0	0.075586	N
2	IC 410-437867/8	0.25	0.045699	5.0	612265.0	0.182797	Y
3	IC 410-437867/7	1.25	0.291551	5.0	655341.0	0.23324	Y
4	IC 410-437867/6	3.75	1.062254	5.0	730894.0	0.283268	Y
5	IC 410-437867/5	7.5	2.266174	5.0	669419.0	0.302157	Y
6	ICIS 410-437867/2	12.5	4.073247	5.0	634430.0	0.32586	Y
7	IC 410-437867/4	20.0	6.737261	5.0	858006.0	0.336863	Y
8	IC 410-437867/3	30.0	9.681995	5.0	801042.0	0.322733	Y



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Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

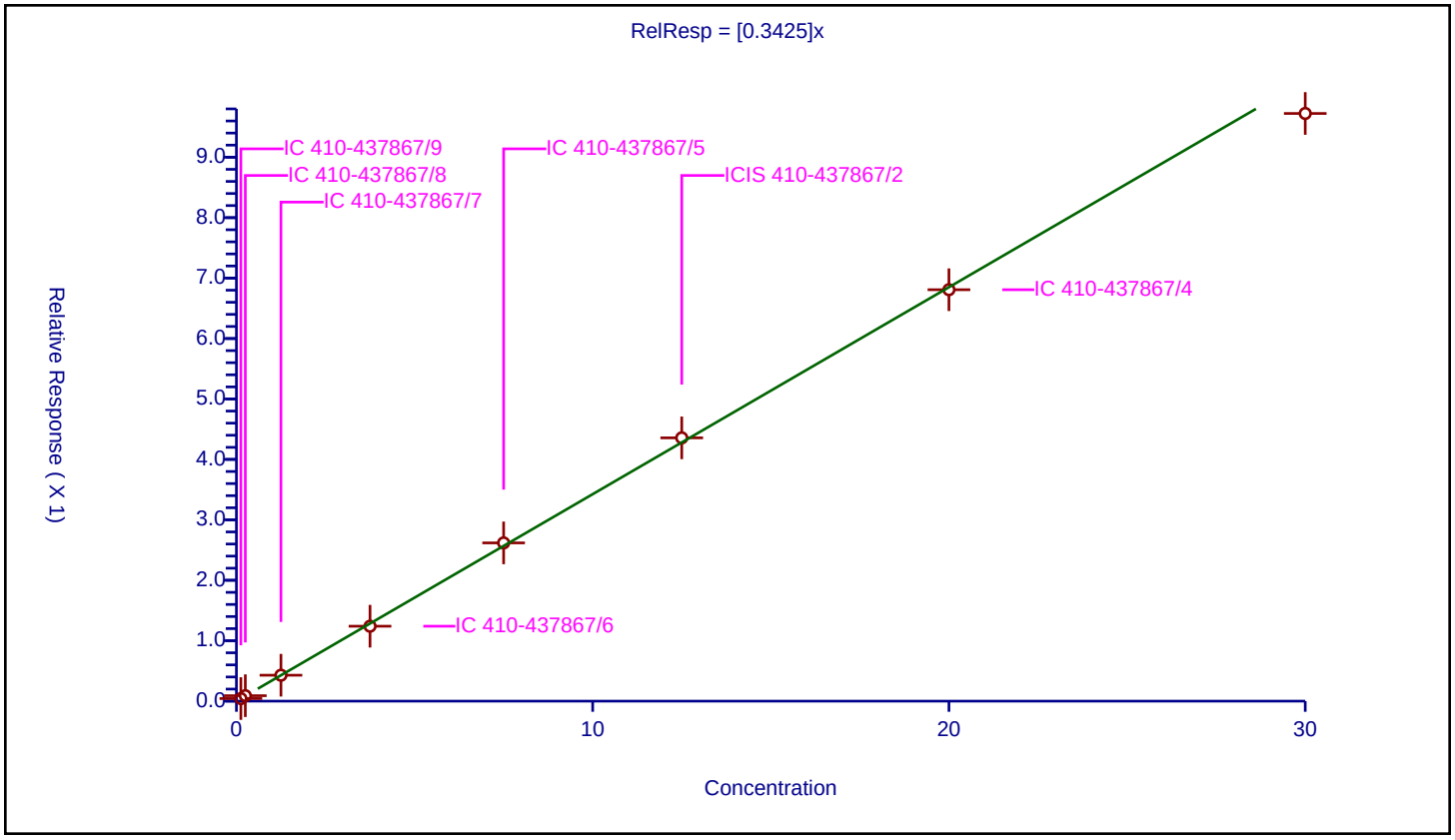
Curve Coefficients

Intercept:	0
Slope:	0.3425

Error Coefficients

Standard Error:	780000
Relative Standard Error:	3.3
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.042817	5.0	674732.0	0.342536	Y
2	IC 410-437867/8	0.25	0.090255	5.0	612265.0	0.36102	Y
3	IC 410-437867/7	1.25	0.429196	5.0	655341.0	0.343357	Y
4	IC 410-437867/6	3.75	1.23979	5.0	730894.0	0.330611	Y
5	IC 410-437867/5	7.5	2.618569	5.0	669419.0	0.349143	Y
6	ICIS 410-437867/2	12.5	4.356604	5.0	634430.0	0.348528	Y
7	IC 410-437867/4	20.0	6.808076	5.0	858006.0	0.340404	Y
8	IC 410-437867/3	30.0	9.724365	5.0	801042.0	0.324146	Y



11/14/2023
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Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

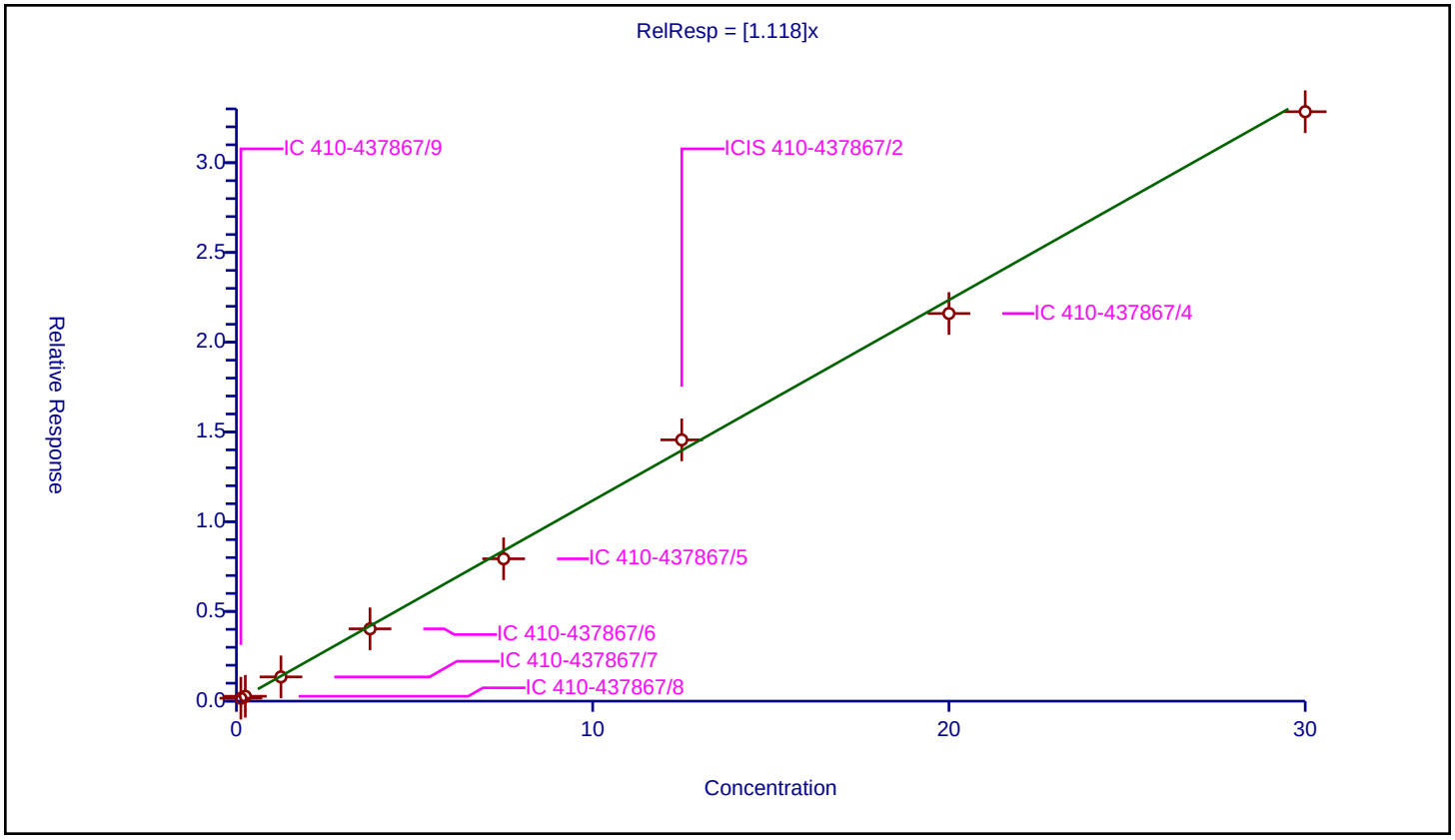
Curve Coefficients

Intercept:	0
Slope:	1.118

Error Coefficients

Standard Error:	2570000
Relative Standard Error:	7.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.162027	5.0	674732.0	1.296218	Y
2	IC 410-437867/8	0.25	0.273027	5.0	612265.0	1.092109	Y
3	IC 410-437867/7	1.25	1.351342	5.0	655341.0	1.081074	Y
4	IC 410-437867/6	3.75	4.029852	5.0	730894.0	1.074627	Y
5	IC 410-437867/5	7.5	7.931281	5.0	669419.0	1.057504	Y
6	ICIS 410-437867/2	12.5	14.557958	5.0	634430.0	1.164637	Y
7	IC 410-437867/4	20.0	21.599021	5.0	858006.0	1.079951	Y
8	IC 410-437867/3	30.0	32.842622	5.0	801042.0	1.094754	Y



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Calibration / Alpha-Terpineol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

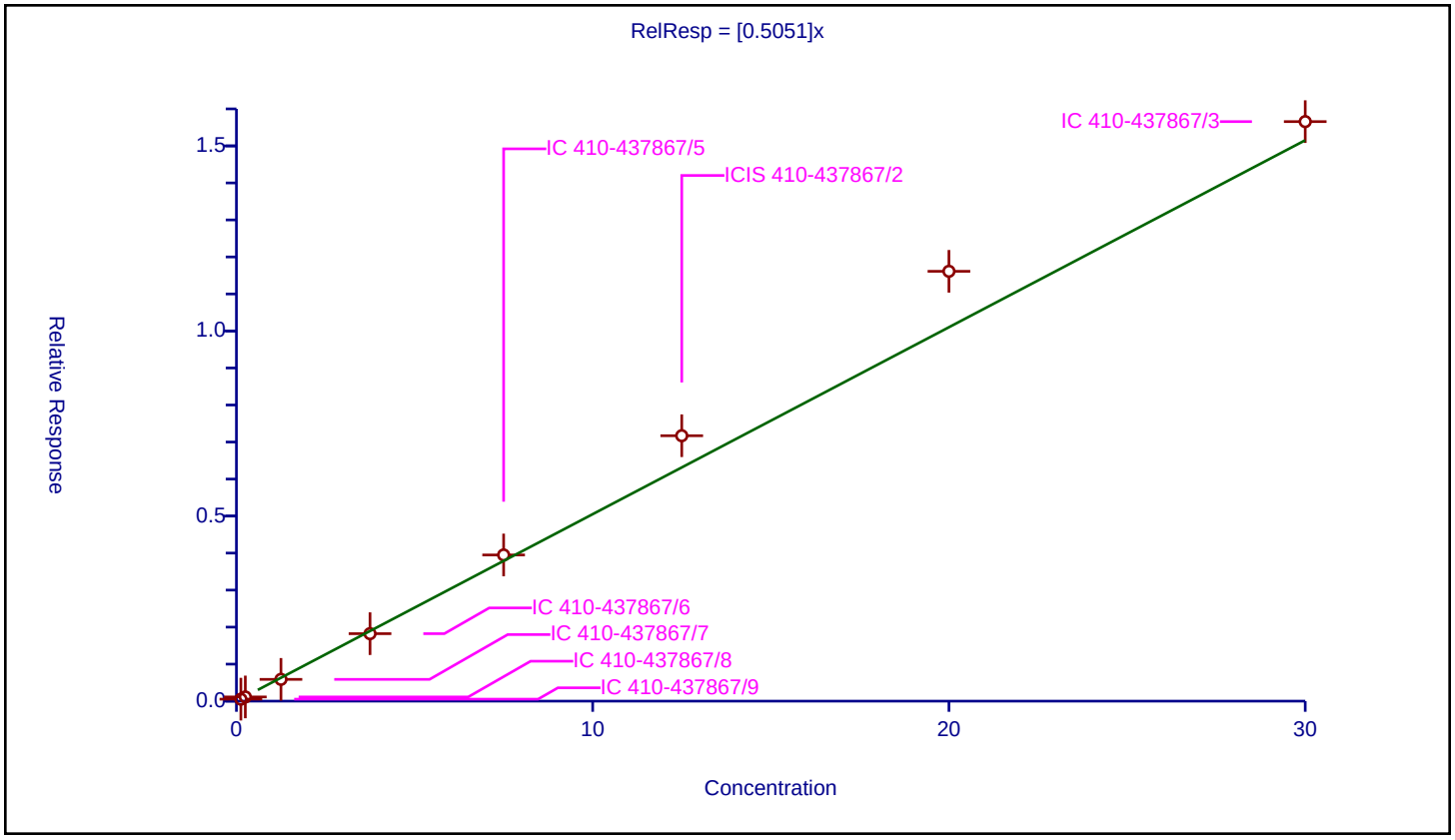
Curve Coefficients

Intercept:	0
Slope:	0.5051

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	10.9
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.053584	5.0	674732.0	0.428674	Y
2	IC 410-437867/8	0.25	0.113129	5.0	612265.0	0.452516	Y
3	IC 410-437867/7	1.25	0.588304	5.0	655341.0	0.470644	Y
4	IC 410-437867/6	3.75	1.823096	5.0	730894.0	0.486159	Y
5	IC 410-437867/5	7.5	3.94941	5.0	669419.0	0.526588	Y
6	ICIS 410-437867/2	12.5	7.170326	5.0	634430.0	0.573626	Y
7	IC 410-437867/4	20.0	11.61257	5.0	858006.0	0.580629	Y
8	IC 410-437867/3	30.0	15.656083	5.0	801042.0	0.521869	Y



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Calibration / 4-Chloroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

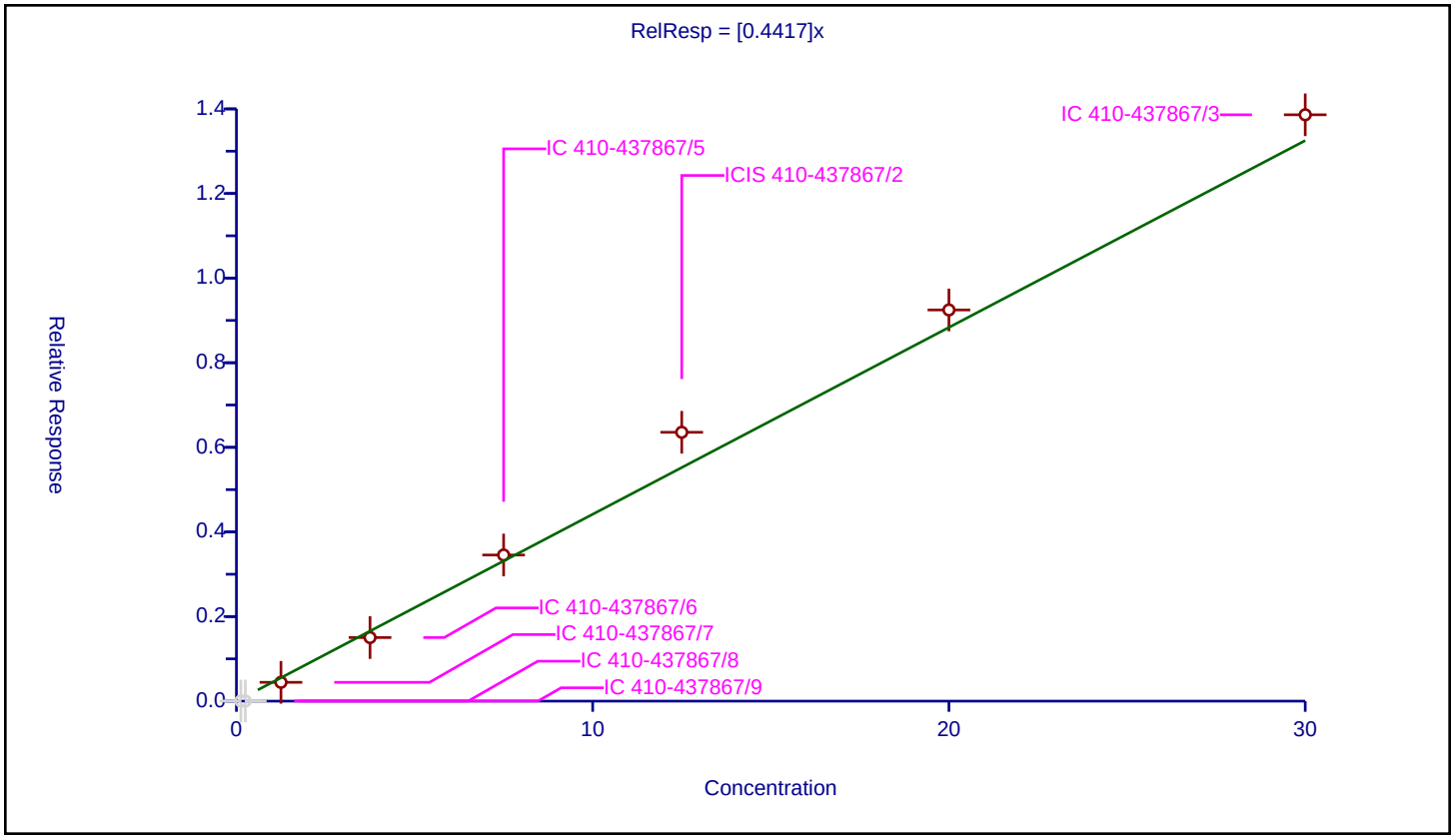
Curve Coefficients

Intercept:	0
Slope:	0.4417

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	12.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.002831	5.0	674732.0	0.022646	N
2	IC 410-437867/8	0.25	0.002009	5.0	612265.0	0.008036	N
3	IC 410-437867/7	1.25	0.444982	5.0	655341.0	0.355986	Y
4	IC 410-437867/6	3.75	1.503392	5.0	730894.0	0.400904	Y
5	IC 410-437867/5	7.5	3.454301	5.0	669419.0	0.460574	Y
6	ICIS 410-437867/2	12.5	6.355563	5.0	634430.0	0.508445	Y
7	IC 410-437867/4	20.0	9.247488	5.0	858006.0	0.462374	Y
8	IC 410-437867/3	30.0	13.861121	5.0	801042.0	0.462037	Y



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Calibration / 2,6-Dichlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

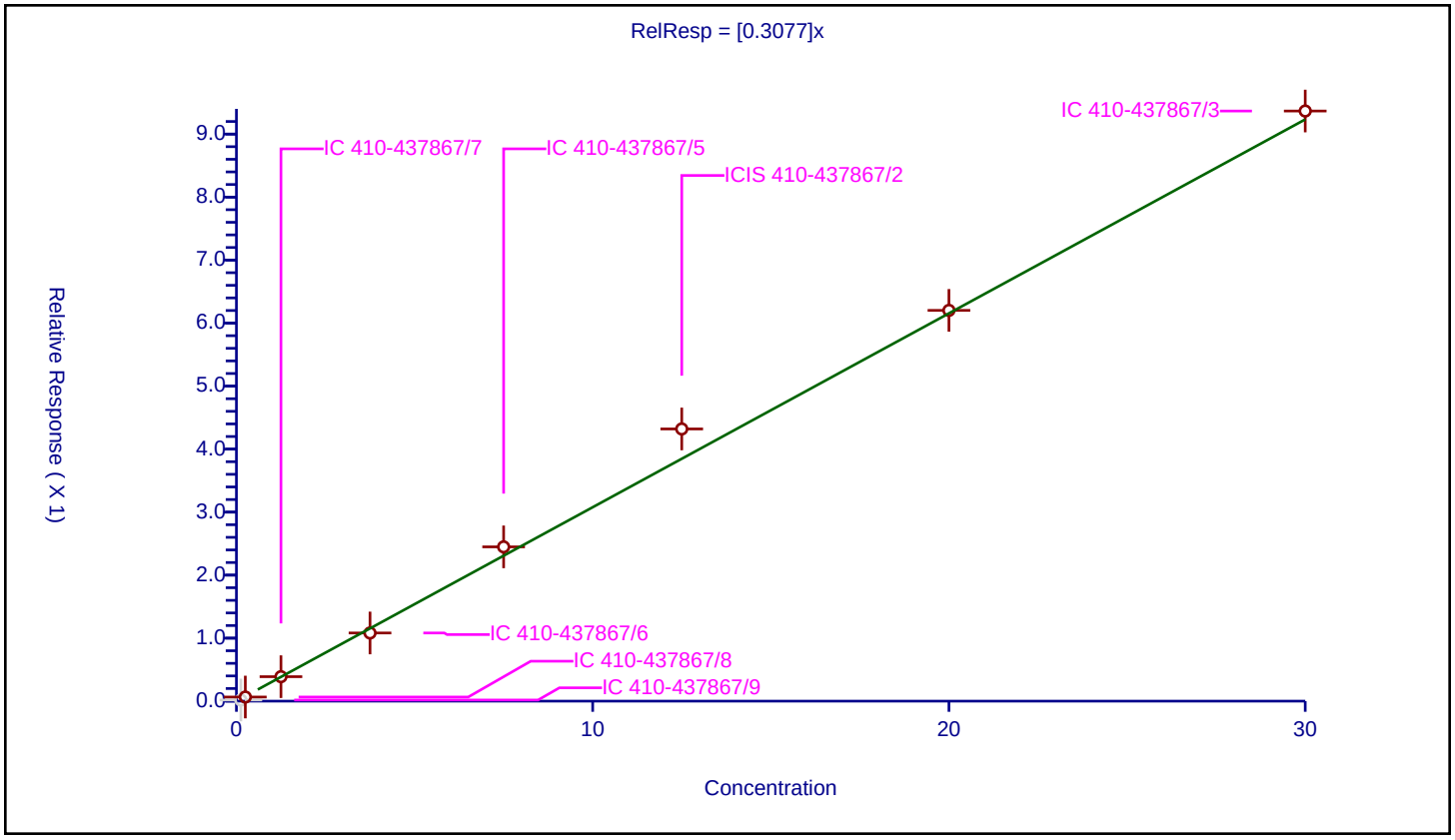
Curve Coefficients

Intercept:	0
Slope:	0.3077

Error Coefficients

Standard Error:	798000
Relative Standard Error:	8.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.017874	5.0	674732.0	0.14299	N
2	IC 410-437867/8	0.25	0.065184	5.0	612265.0	0.260737	Y
3	IC 410-437867/7	1.25	0.388271	5.0	655341.0	0.310617	Y
4	IC 410-437867/6	3.75	1.081798	5.0	730894.0	0.28848	Y
5	IC 410-437867/5	7.5	2.448474	5.0	669419.0	0.326463	Y
6	ICIS 410-437867/2	12.5	4.320272	5.0	634430.0	0.345622	Y
7	IC 410-437867/4	20.0	6.201926	5.0	858006.0	0.310096	Y
8	IC 410-437867/3	30.0	9.366313	5.0	801042.0	0.31221	Y



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Calibration / Hexachloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

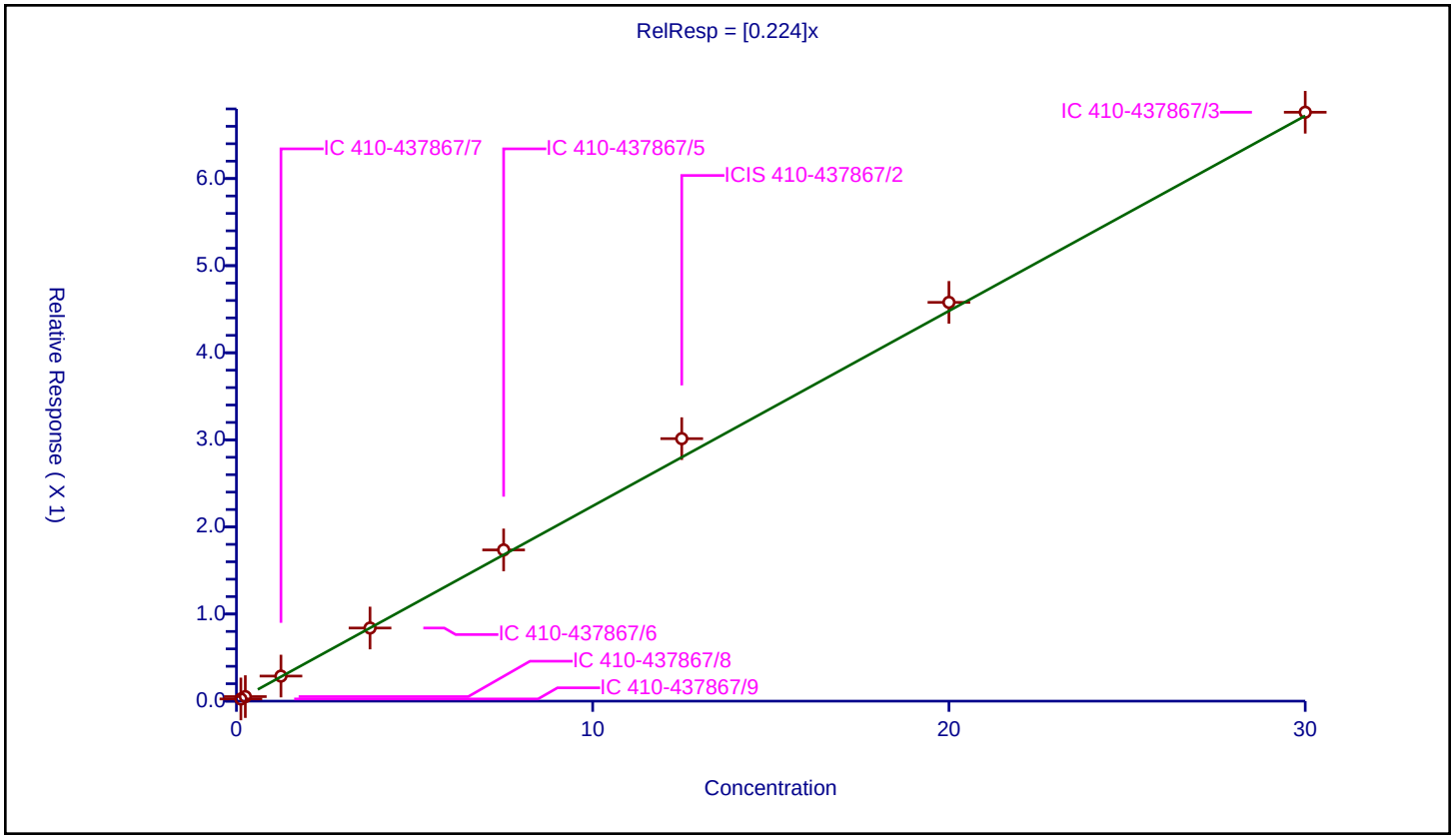
Curve Coefficients

Intercept:	0
Slope:	0.224

Error Coefficients

Standard Error:	536000
Relative Standard Error:	5.6
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.025343	5.0	674732.0	0.202747	Y
2	IC 410-437867/8	0.25	0.052085	5.0	612265.0	0.208341	Y
3	IC 410-437867/7	1.25	0.287759	5.0	655341.0	0.230207	Y
4	IC 410-437867/6	3.75	0.839575	5.0	730894.0	0.223887	Y
5	IC 410-437867/5	7.5	1.736334	5.0	669419.0	0.231511	Y
6	ICIS 410-437867/2	12.5	3.01391	5.0	634430.0	0.241113	Y
7	IC 410-437867/4	20.0	4.578768	5.0	858006.0	0.228938	Y
8	IC 410-437867/3	30.0	6.761543	5.0	801042.0	0.225385	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

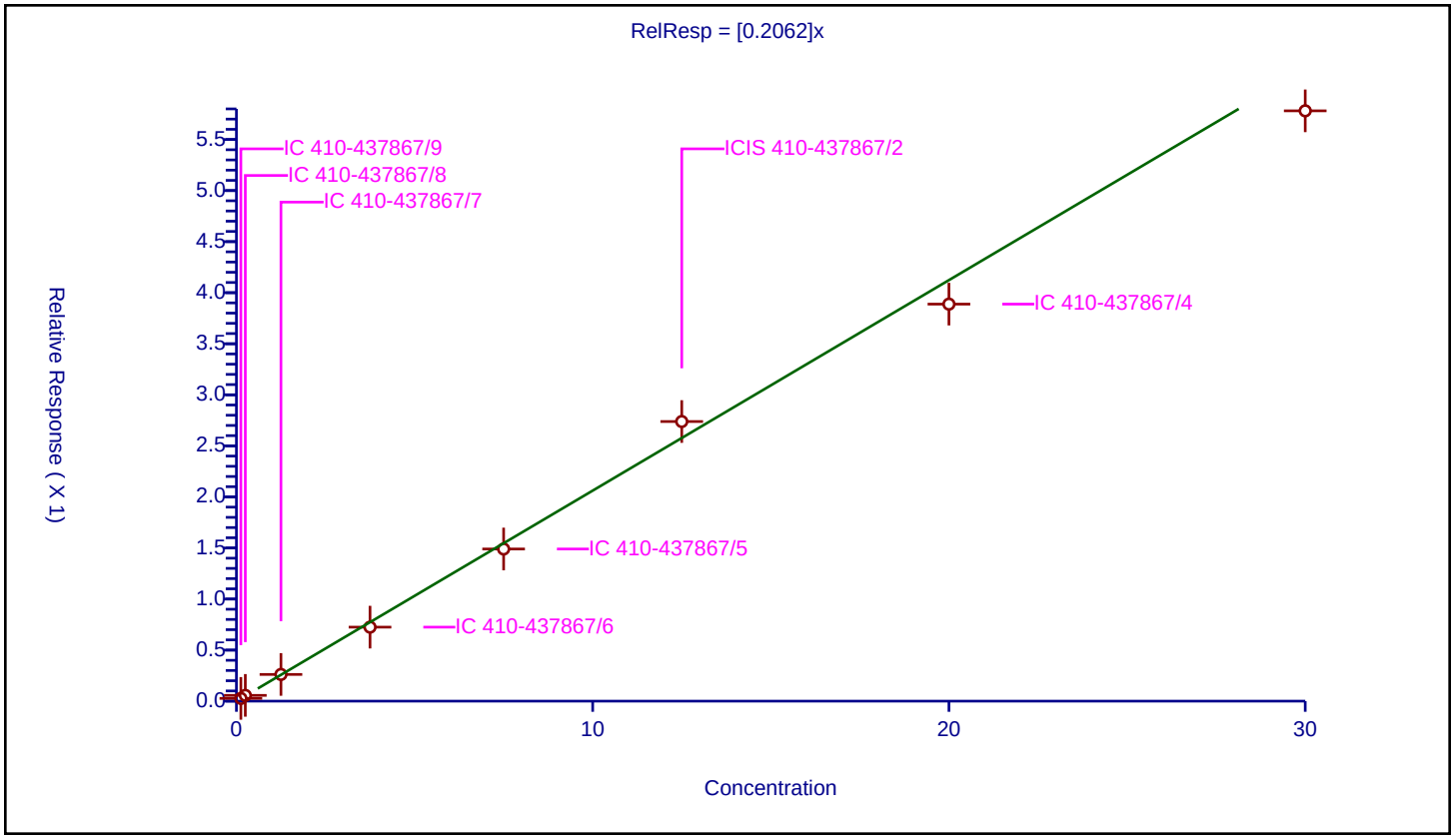
Curve Coefficients

Intercept:	0
Slope:	0.2062

Error Coefficients

Standard Error:	459000
Relative Standard Error:	6.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.026981	5.0	674732.0	0.215849	Y
2	IC 410-437867/8	0.25	0.056552	5.0	612265.0	0.226209	Y
3	IC 410-437867/7	1.25	0.261459	5.0	655341.0	0.209167	Y
4	IC 410-437867/6	3.75	0.724613	5.0	730894.0	0.19323	Y
5	IC 410-437867/5	7.5	1.489889	5.0	669419.0	0.198652	Y
6	ICIS 410-437867/2	12.5	2.738332	5.0	634430.0	0.219067	Y
7	IC 410-437867/4	20.0	3.887991	5.0	858006.0	0.1944	Y
8	IC 410-437867/3	30.0	5.781058	5.0	801042.0	0.192702	Y



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Calibration / Quinoline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

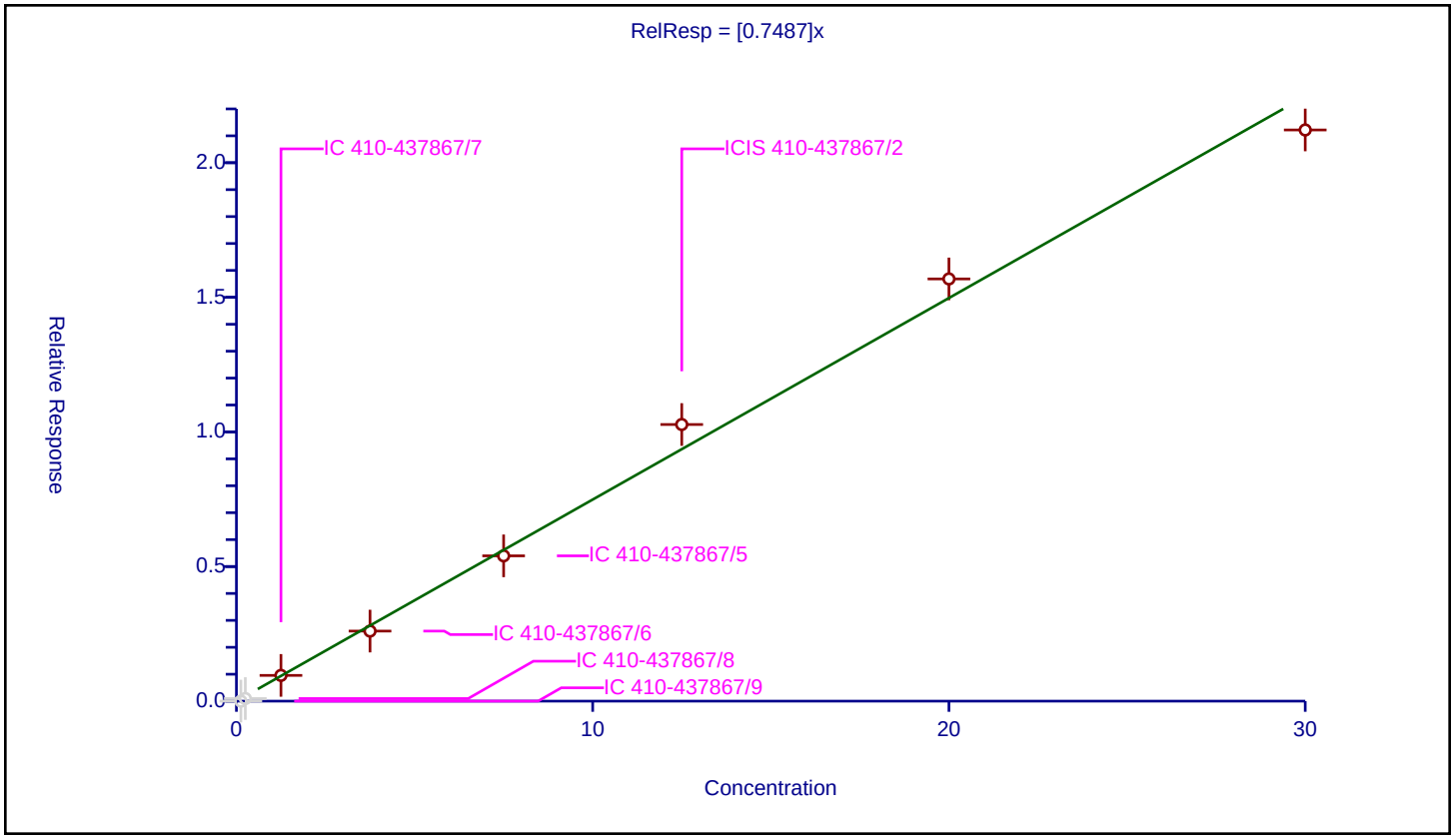
Curve Coefficients

Intercept:	0
Slope:	0.7487

Error Coefficients

Standard Error:	2060000
Relative Standard Error:	6.7
Correlation Coefficient:	0.980
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.000986	5.0	674732.0	0.007885	N
2	IC 410-437867/8	0.25	0.096862	5.0	612265.0	0.387447	N
3	IC 410-437867/7	1.25	0.956616	5.0	655341.0	0.765293	Y
4	IC 410-437867/6	3.75	2.60208	5.0	730894.0	0.693888	Y
5	IC 410-437867/5	7.5	5.397262	5.0	669419.0	0.719635	Y
6	ICIS 410-437867/2	12.5	10.276122	5.0	634430.0	0.82209	Y
7	IC 410-437867/4	20.0	15.684045	5.0	858006.0	0.784202	Y
8	IC 410-437867/3	30.0	21.217364	5.0	801042.0	0.707245	Y



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Calibration / p-Phenylene diamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

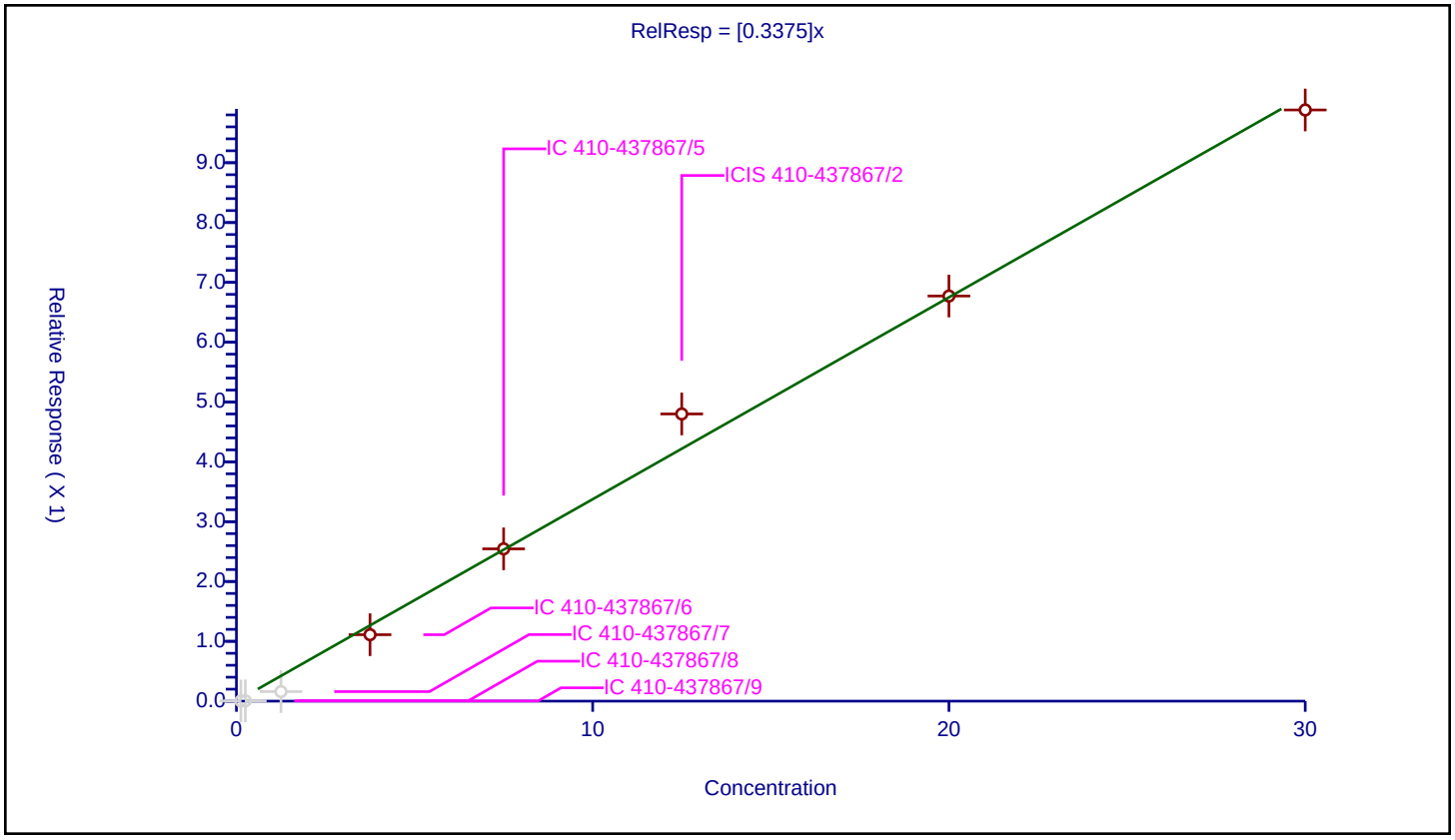
Curve Coefficients

Intercept:	0
Slope:	0.3375

Error Coefficients

Standard Error:	1050000
Relative Standard Error:	9.3
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.003068	5.0	674732.0	0.024543	N
2	IC 410-437867/8	0.25	0.005243	5.0	612265.0	0.020971	N
3	IC 410-437867/7	1.25	0.159497	5.0	655341.0	0.127598	N
4	IC 410-437867/6	3.75	1.110688	5.0	730894.0	0.296183	Y
5	IC 410-437867/5	7.5	2.545506	5.0	669419.0	0.339401	Y
6	ICIS 410-437867/2	12.5	4.800545	5.0	634430.0	0.384044	Y
7	IC 410-437867/4	20.0	6.77173	5.0	858006.0	0.338587	Y
8	IC 410-437867/3	30.0	9.882047	5.0	801042.0	0.329402	Y



Calibration / Caprolactam

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

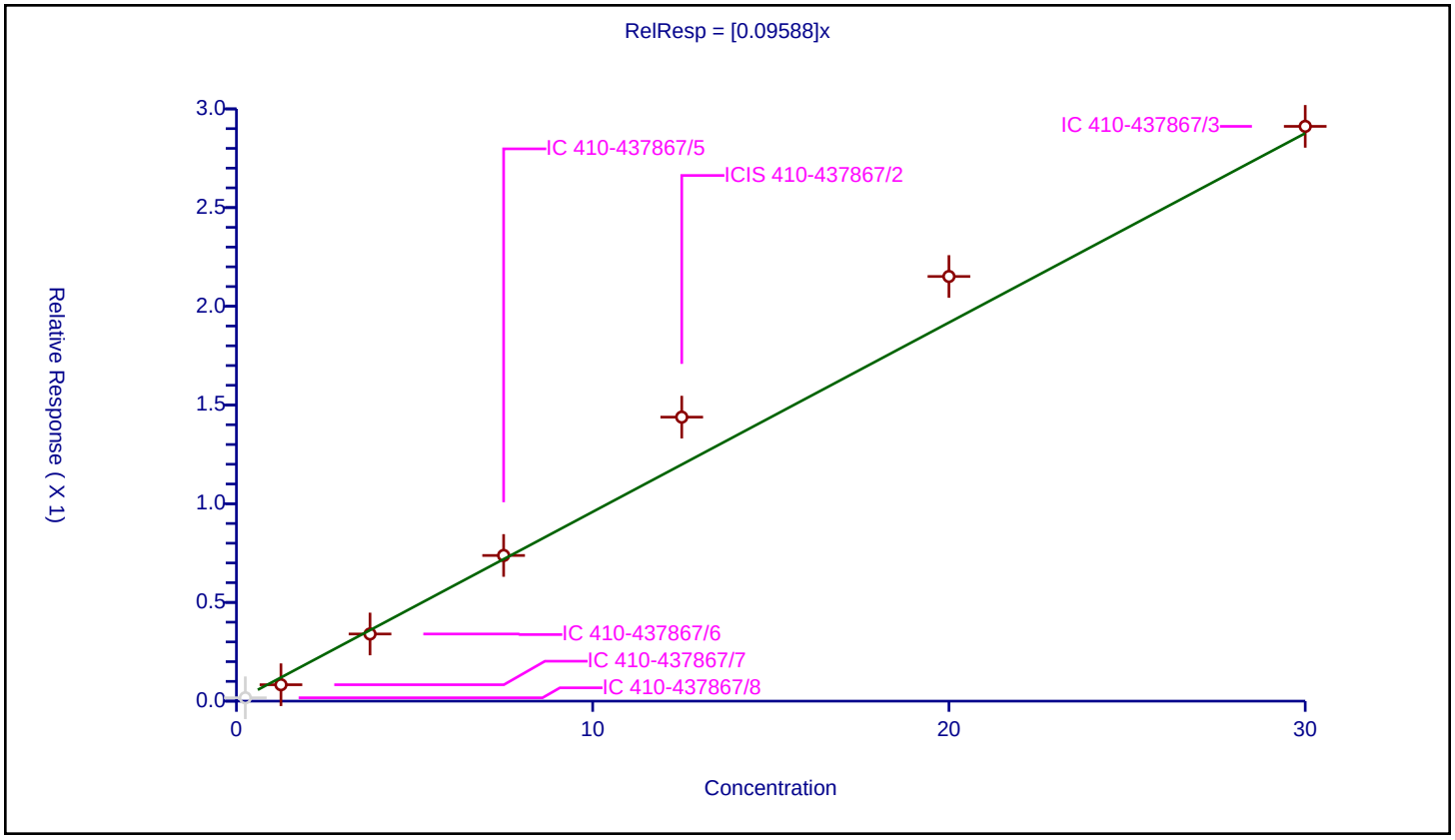
Curve Coefficients

Intercept:	0
Slope:	0.09588

Error Coefficients

Standard Error:	283000
Relative Standard Error:	17.5
Correlation Coefficient:	0.981
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/8	0.25	0.017068	5.0	612265.0	0.068271	N
2	IC 410-437867/7	1.25	0.083148	5.0	655341.0	0.066518	Y
3	IC 410-437867/6	3.75	0.340186	5.0	730894.0	0.090716	Y
4	IC 410-437867/5	7.5	0.737841	5.0	669419.0	0.098379	Y
5	ICIS 410-437867/2	12.5	1.438591	5.0	634430.0	0.115087	Y
6	IC 410-437867/4	20.0	2.151115	5.0	858006.0	0.107556	Y
7	IC 410-437867/3	30.0	2.91152	5.0	801042.0	0.097051	Y



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Calibration / N-Nitrosodi-n-butylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

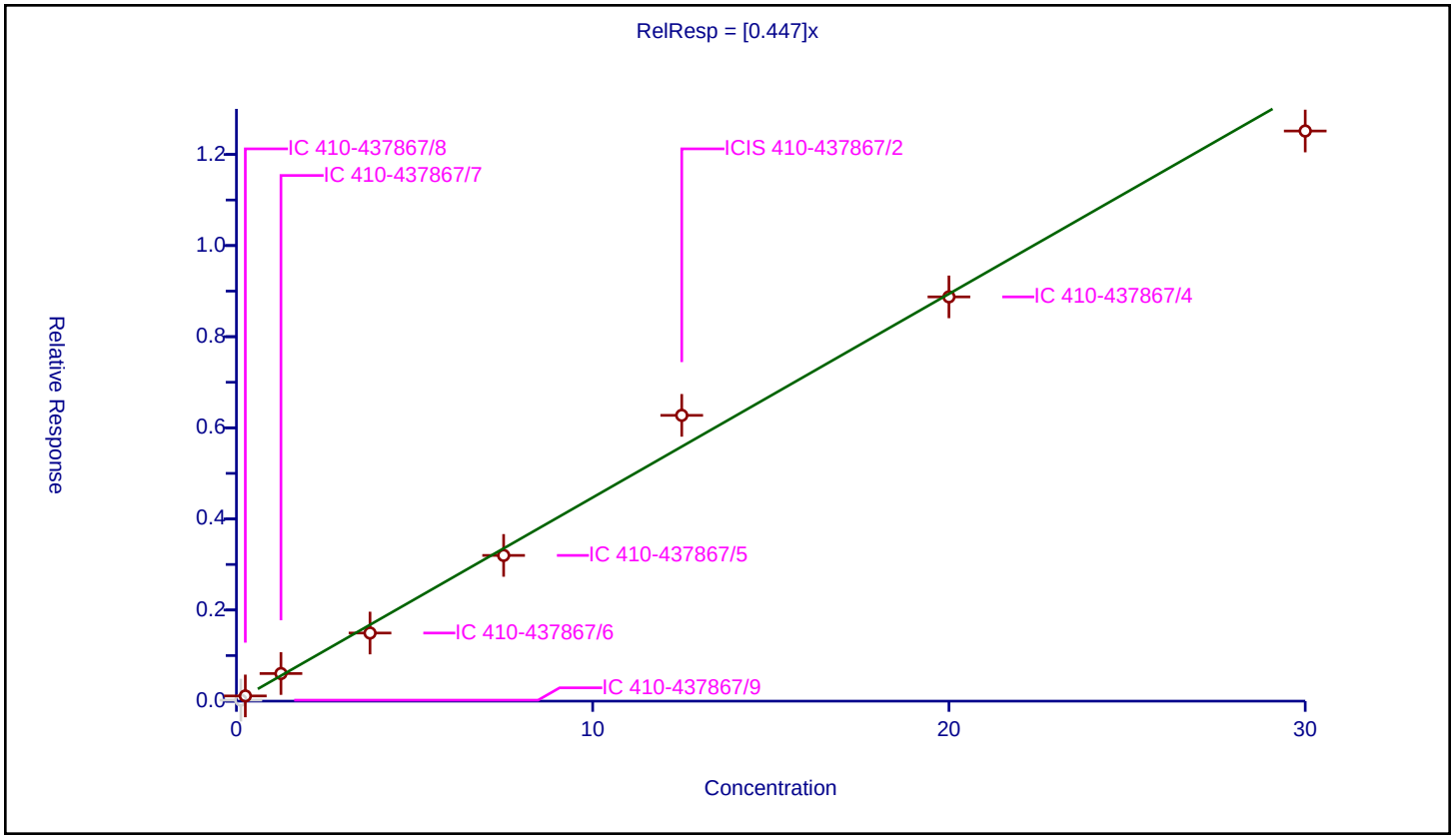
Curve Coefficients

Intercept:	0
Slope:	0.447

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	8.3
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.021809	5.0	674732.0	0.174469	N
2	IC 410-437867/8	0.25	0.114068	5.0	612265.0	0.456273	Y
3	IC 410-437867/7	1.25	0.60583	5.0	655341.0	0.484664	Y
4	IC 410-437867/6	3.75	1.495224	5.0	730894.0	0.398726	Y
5	IC 410-437867/5	7.5	3.198587	5.0	669419.0	0.426478	Y
6	ICIS 410-437867/2	12.5	6.273111	5.0	634430.0	0.501849	Y
7	IC 410-437867/4	20.0	8.873807	5.0	858006.0	0.44369	Y
8	IC 410-437867/3	30.0	12.514781	5.0	801042.0	0.417159	Y



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Calibration / 4-Chloro-3-methylphenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

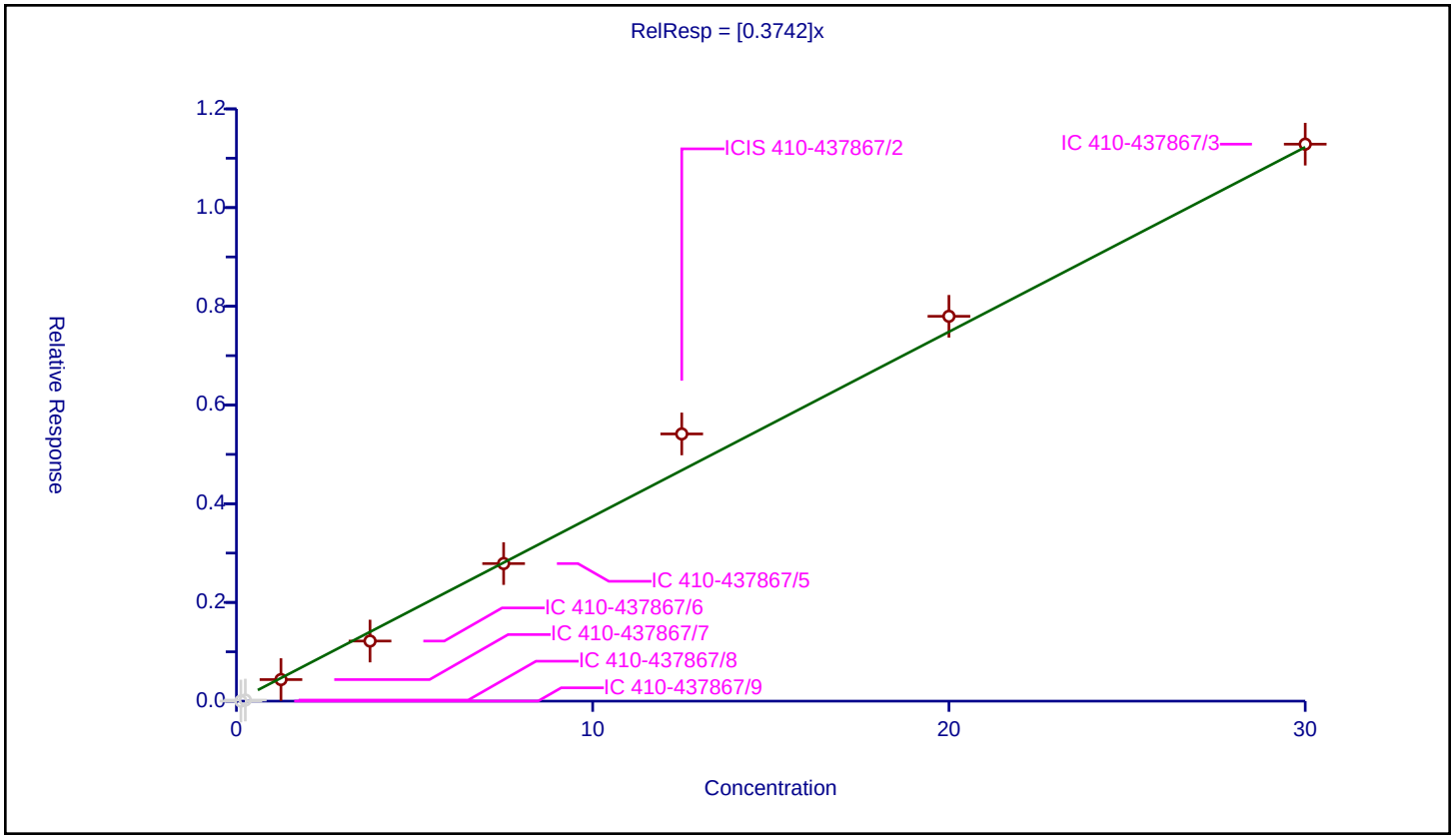
Curve Coefficients

Intercept:	0
Slope:	0.3742

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	9.9
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.001586	5.0	674732.0	0.012687	N
2	IC 410-437867/8	0.25	0.02191	5.0	612265.0	0.087642	N
3	IC 410-437867/7	1.25	0.436681	5.0	655341.0	0.349345	Y
4	IC 410-437867/6	3.75	1.217776	5.0	730894.0	0.32474	Y
5	IC 410-437867/5	7.5	2.787664	5.0	669419.0	0.371688	Y
6	ICIS 410-437867/2	12.5	5.414002	5.0	634430.0	0.43312	Y
7	IC 410-437867/4	20.0	7.797842	5.0	858006.0	0.389892	Y
8	IC 410-437867/3	30.0	11.285513	5.0	801042.0	0.376184	Y



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Calibration / Safrole, Total

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

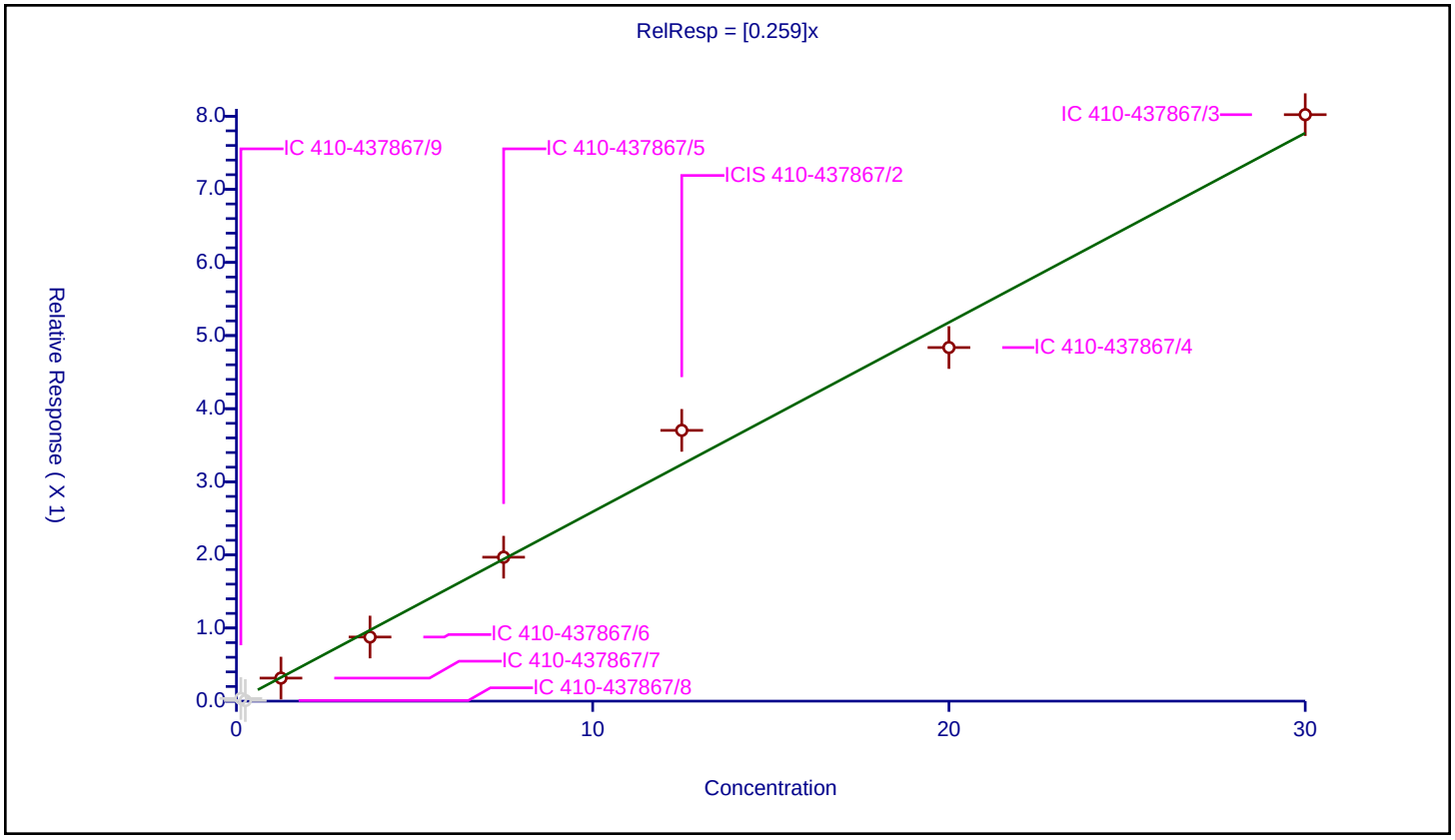
Curve Coefficients

Intercept:	0
Slope:	0.259

Error Coefficients

Standard Error:	728000
Relative Standard Error:	8.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.036103	5.0	674732.0	0.288826	N
2	IC 410-437867/8	0.25	0.008518	5.0	612265.0	0.03407	N
3	IC 410-437867/7	1.25	0.315233	5.0	655341.0	0.252186	Y
4	IC 410-437867/6	3.75	0.876864	5.0	730894.0	0.233831	Y
5	IC 410-437867/5	7.5	1.968535	5.0	669419.0	0.262471	Y
6	ICIS 410-437867/2	12.5	3.703332	5.0	634430.0	0.296267	Y
7	IC 410-437867/4	20.0	4.836103	5.0	858006.0	0.241805	Y
8	IC 410-437867/3	30.0	8.021121	5.0	801042.0	0.267371	Y



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Calibration / 2-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

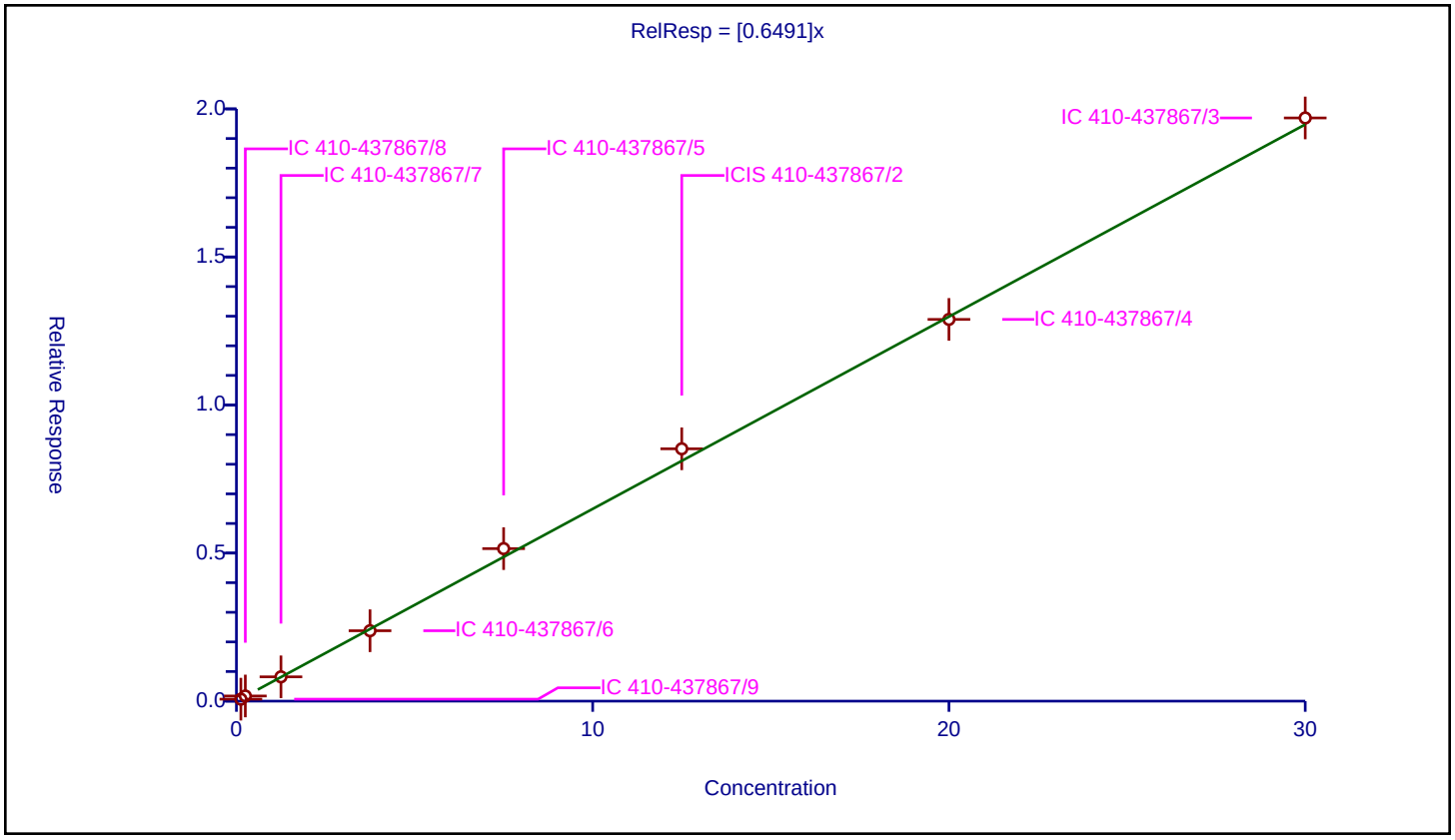
Curve Coefficients

Intercept:	0
Slope:	0.6491

Error Coefficients

Standard Error:	1540000
Relative Standard Error:	7.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.067293	5.0	674732.0	0.538347	Y
2	IC 410-437867/8	0.25	0.173609	5.0	612265.0	0.694438	Y
3	IC 410-437867/7	1.25	0.820924	5.0	655341.0	0.656739	Y
4	IC 410-437867/6	3.75	2.37752	5.0	730894.0	0.634005	Y
5	IC 410-437867/5	7.5	5.150922	5.0	669419.0	0.68679	Y
6	ICIS 410-437867/2	12.5	8.521476	5.0	634430.0	0.681718	Y
7	IC 410-437867/4	20.0	12.891303	5.0	858006.0	0.644565	Y
8	IC 410-437867/3	30.0	19.693924	5.0	801042.0	0.656464	Y



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Calibration / 1-Methylnaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

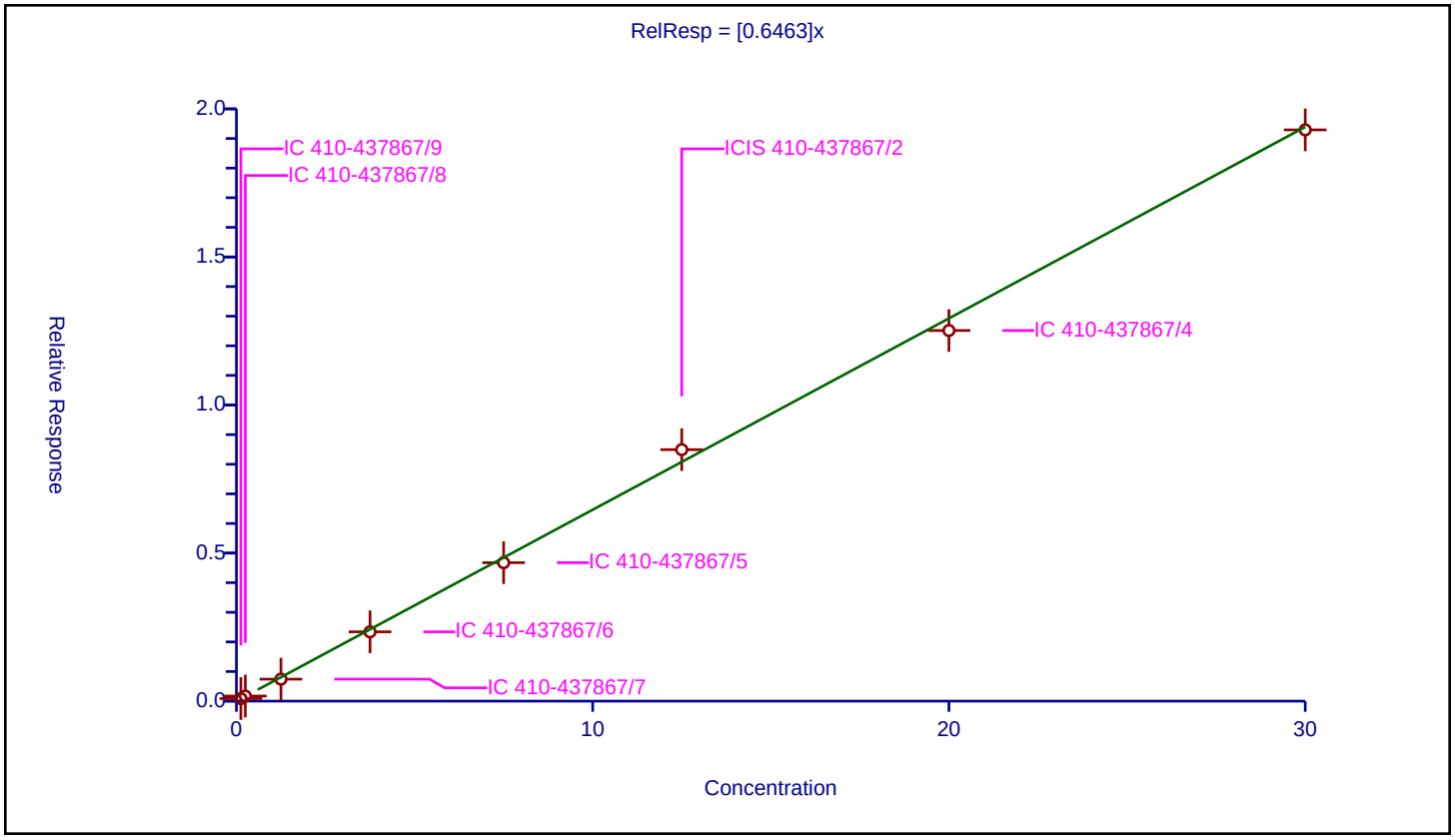
Curve Coefficients

Intercept:	0
Slope:	0.6463

Error Coefficients

Standard Error:	1500000
Relative Standard Error:	5.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.086612	5.0	674732.0	0.692897	Y
2	IC 410-437867/8	0.25	0.171862	5.0	612265.0	0.687447	Y
3	IC 410-437867/7	1.25	0.742911	5.0	655341.0	0.594329	Y
4	IC 410-437867/6	3.75	2.340435	5.0	730894.0	0.624116	Y
5	IC 410-437867/5	7.5	4.675749	5.0	669419.0	0.623433	Y
6	ICIS 410-437867/2	12.5	8.492537	5.0	634430.0	0.679403	Y
7	IC 410-437867/4	20.0	12.515909	5.0	858006.0	0.625795	Y
8	IC 410-437867/3	30.0	19.29156	5.0	801042.0	0.643052	Y



Calibration / Hexachlorocyclopentadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

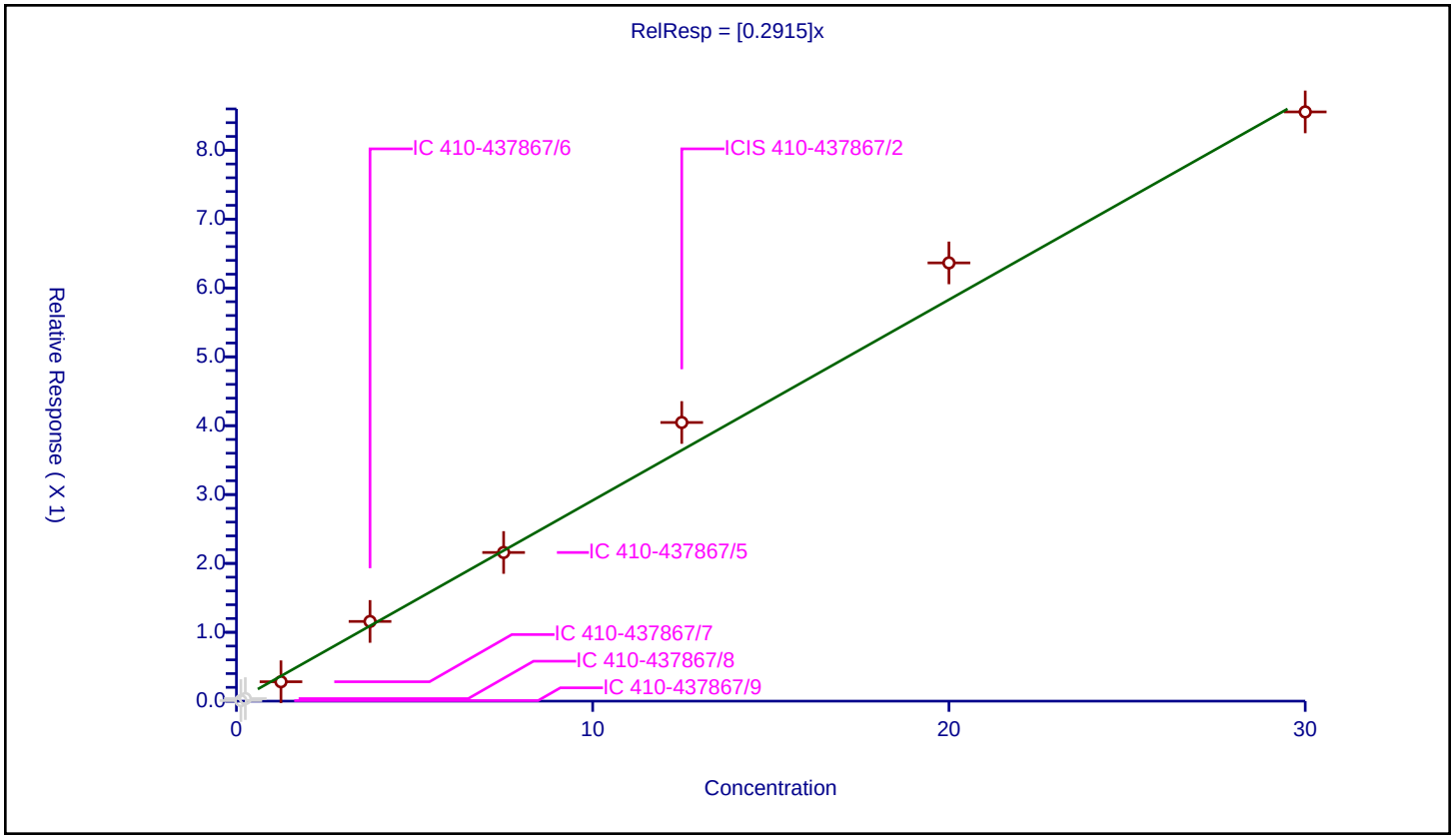
Curve Coefficients

Intercept:	0
Slope:	0.2915

Error Coefficients

Standard Error:	462000
Relative Standard Error:	12.3
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.008034	5.0	392092.0	0.064271	N
2	IC 410-437867/8	0.25	0.036872	5.0	358677.0	0.147486	N
3	IC 410-437867/7	1.25	0.281632	5.0	360506.0	0.225306	Y
4	IC 410-437867/6	3.75	1.157299	5.0	350428.0	0.308613	Y
5	IC 410-437867/5	7.5	2.15883	5.0	401296.0	0.287844	Y
6	ICIS 410-437867/2	12.5	4.046453	5.0	369667.0	0.323716	Y
7	IC 410-437867/4	20.0	6.363682	5.0	458208.0	0.318184	Y
8	IC 410-437867/3	30.0	8.556213	5.0	452629.0	0.285207	Y



Calibration / 1,2,4,5-Tetrachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

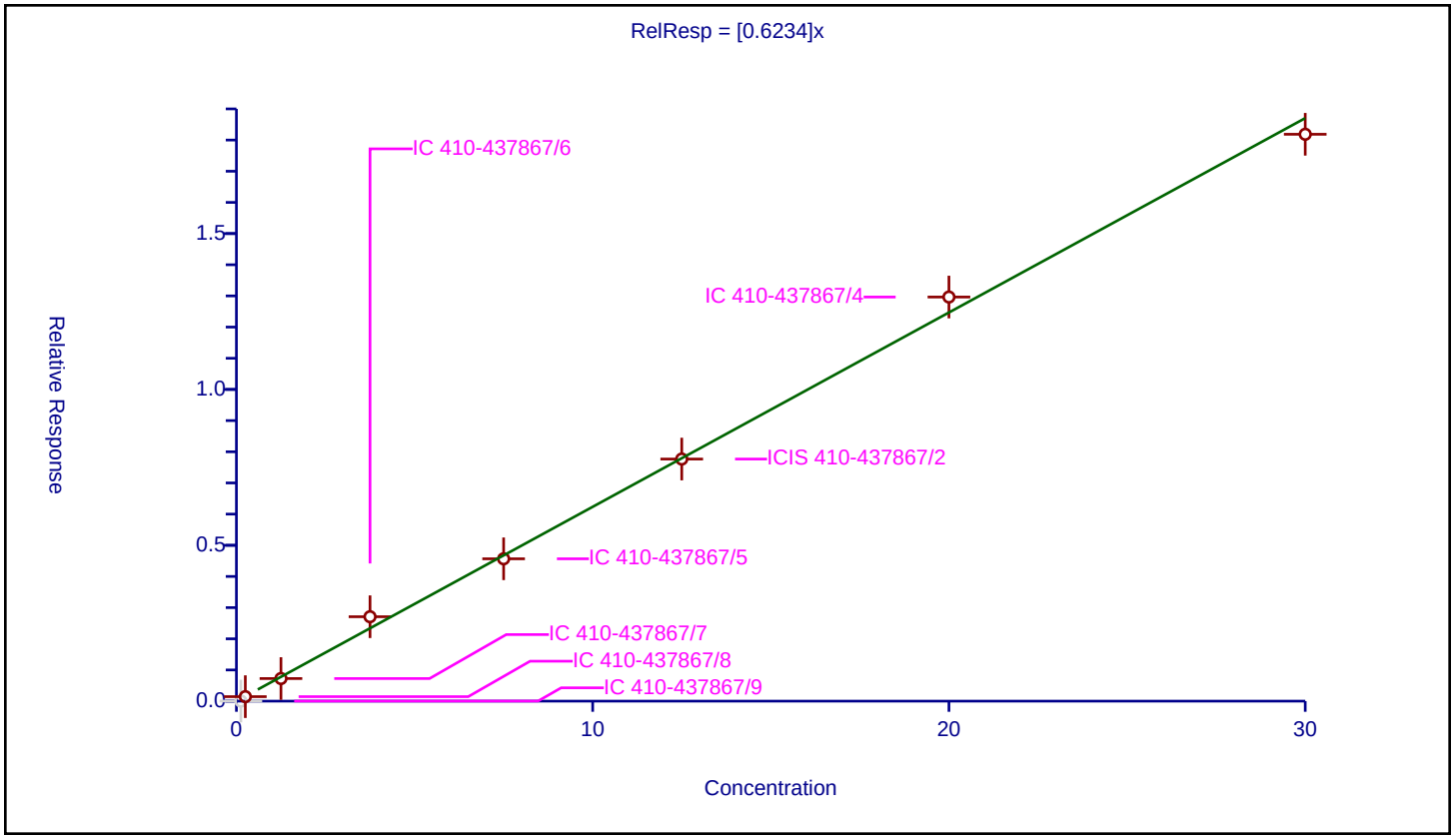
Curve Coefficients

Intercept:	0
Slope:	0.6234

Error Coefficients

Standard Error:	878000
Relative Standard Error:	8.0
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.002844	5.0	392092.0	0.02275	N
2	IC 410-437867/8	0.25	0.144238	5.0	358677.0	0.576954	Y
3	IC 410-437867/7	1.25	0.725328	5.0	360506.0	0.580262	Y
4	IC 410-437867/6	3.75	2.70776	5.0	350428.0	0.722069	Y
5	IC 410-437867/5	7.5	4.566355	5.0	401296.0	0.608847	Y
6	ICIS 410-437867/2	12.5	7.766869	5.0	369667.0	0.621349	Y
7	IC 410-437867/4	20.0	12.964276	5.0	458208.0	0.648214	Y
8	IC 410-437867/3	30.0	18.185512	5.0	452629.0	0.606184	Y



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Calibration / Isosafrole Peak 1

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

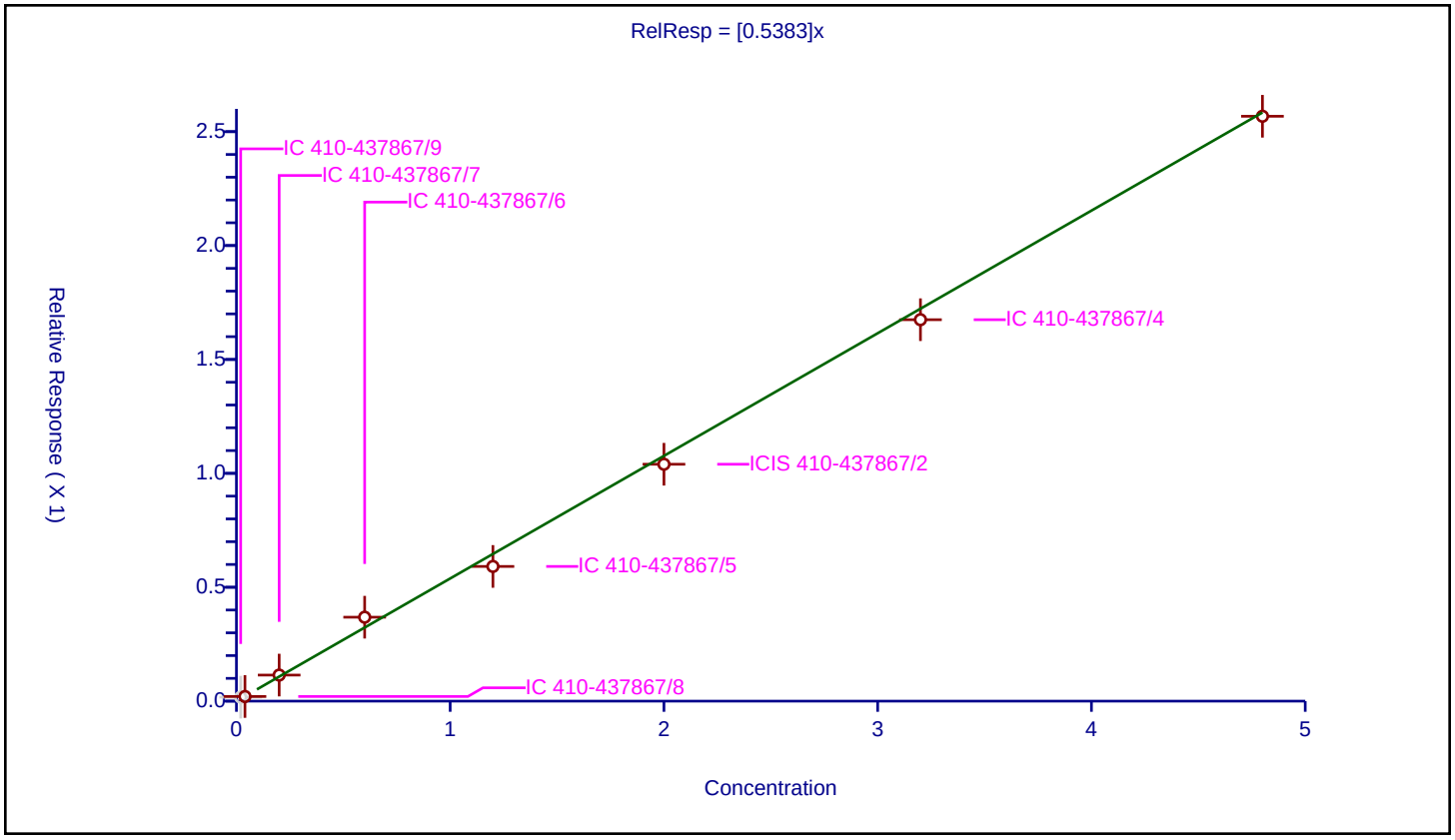
Curve Coefficients

Intercept:	0
Slope:	0.5383

Error Coefficients

Standard Error:	120000
Relative Standard Error:	7.7
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.02	0.017419	5.0	392092.0	0.870969	N
2	IC 410-437867/8	0.04	0.02045	5.0	358677.0	0.511254	Y
3	IC 410-437867/7	0.2	0.114423	5.0	360506.0	0.572113	Y
4	IC 410-437867/6	0.6	0.368449	5.0	350428.0	0.614082	Y
5	IC 410-437867/5	1.2	0.591297	5.0	401296.0	0.492747	Y
6	ICIS 410-437867/2	2.0	1.039963	5.0	369667.0	0.519981	Y
7	IC 410-437867/4	3.2	1.674556	5.0	458208.0	0.523299	Y
8	IC 410-437867/3	4.8	2.567666	5.0	452629.0	0.53493	Y



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Calibration / 2,4,6-Trichlorophenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

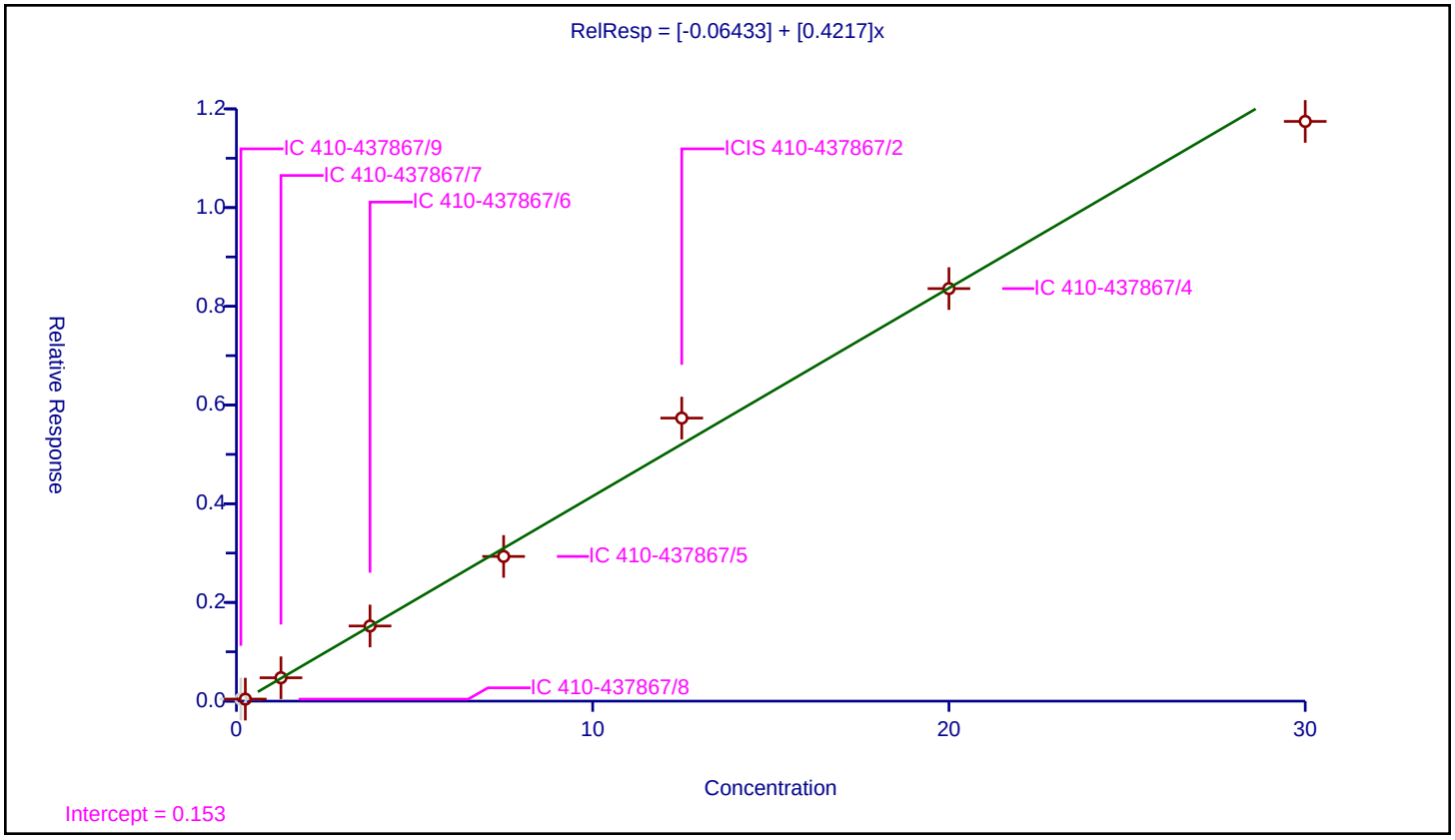
Curve Coefficients

Intercept:	-0.06433
Slope:	0.4217

Error Coefficients

Standard Error:	627000
Relative Standard Error:	5.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.042885	5.0	392092.0	0.343083	N
2	IC 410-437867/8	0.25	0.040663	5.0	358677.0	0.162653	Y
3	IC 410-437867/7	1.25	0.473598	5.0	360506.0	0.378879	Y
4	IC 410-437867/6	3.75	1.522381	5.0	350428.0	0.405968	Y
5	IC 410-437867/5	7.5	2.931876	5.0	401296.0	0.390917	Y
6	ICIS 410-437867/2	12.5	5.735378	5.0	369667.0	0.45883	Y
7	IC 410-437867/4	20.0	8.358988	5.0	458208.0	0.417949	Y
8	IC 410-437867/3	30.0	11.746176	5.0	452629.0	0.391539	Y



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Calibration / 2,4,5-Trichlorophenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

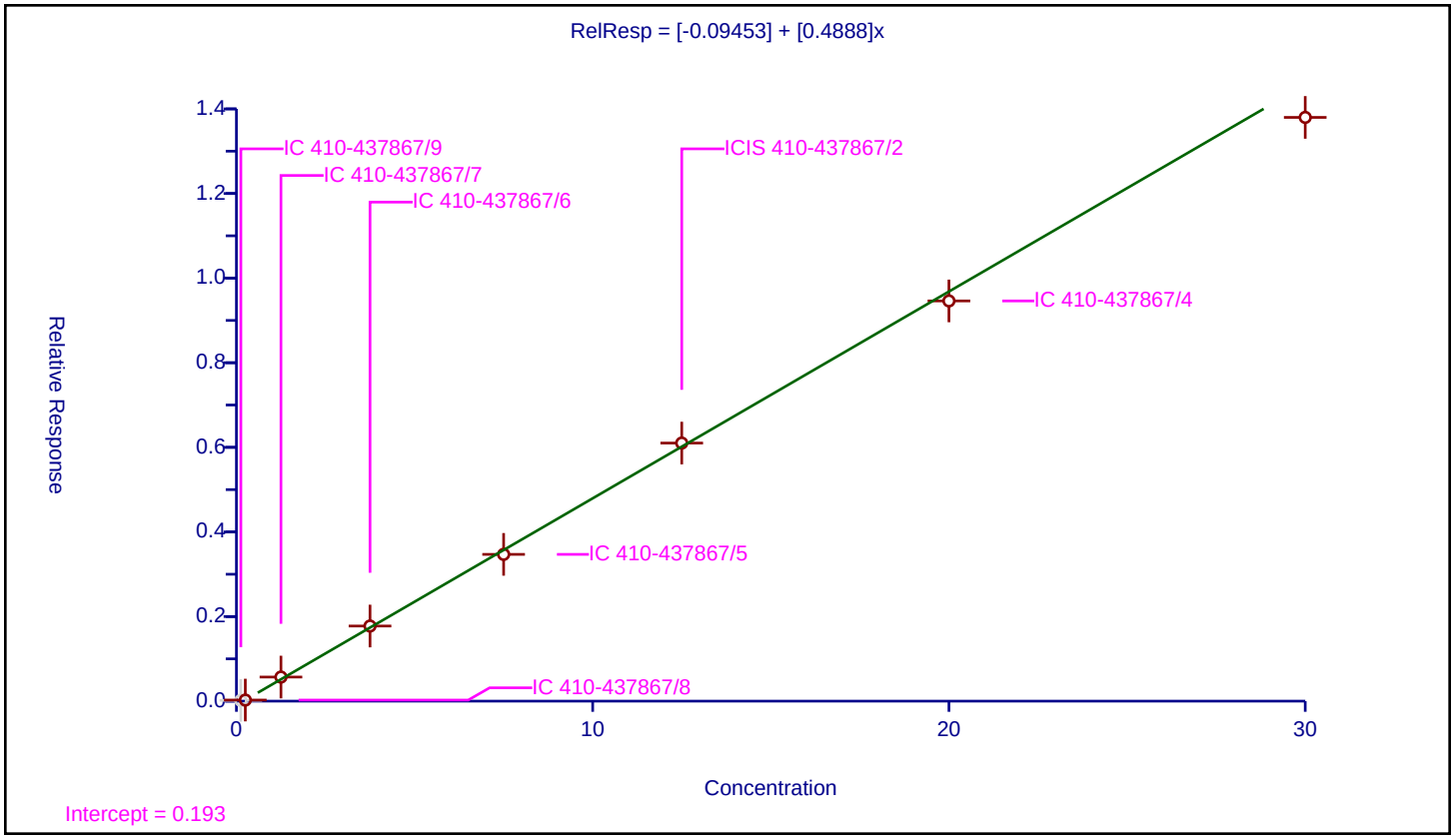
Curve Coefficients

Intercept:	-0.09453
Slope:	0.4888

Error Coefficients

Standard Error:	723000
Relative Standard Error:	5.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.017266	5.0	392092.0	0.138131	N
2	IC 410-437867/8	0.25	0.02558	5.0	358677.0	0.10232	Y
3	IC 410-437867/7	1.25	0.569158	5.0	360506.0	0.455327	Y
4	IC 410-437867/6	3.75	1.775857	5.0	350428.0	0.473562	Y
5	IC 410-437867/5	7.5	3.469658	5.0	401296.0	0.462621	Y
6	ICIS 410-437867/2	12.5	6.100693	5.0	369667.0	0.488055	Y
7	IC 410-437867/4	20.0	9.460922	5.0	458208.0	0.473046	Y
8	IC 410-437867/3	30.0	13.798431	5.0	452629.0	0.459948	Y



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Calibration / 2-Fluorobiphenyl (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

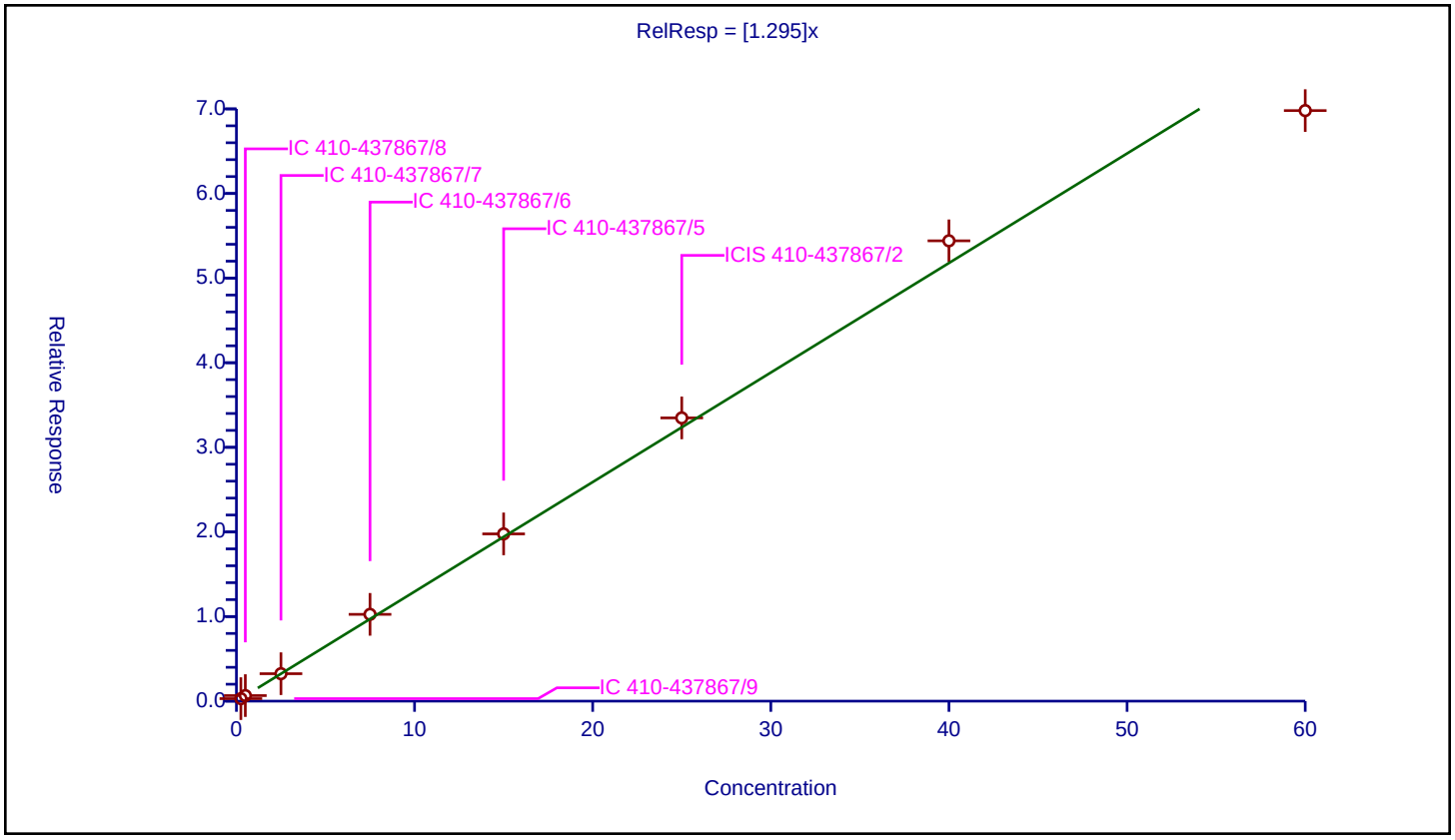
Curve Coefficients

Intercept:	0
Slope:	1.295

Error Coefficients

Standard Error:	3250000
Relative Standard Error:	5.8
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.25	0.298935	5.0	392092.0	1.19574	Y
2	IC 410-437867/8	0.5	0.657207	5.0	358677.0	1.314414	Y
3	IC 410-437867/7	2.5	3.245036	5.0	360506.0	1.298014	Y
4	IC 410-437867/6	7.5	10.259212	5.0	350428.0	1.367895	Y
5	IC 410-437867/5	15.0	19.766432	5.0	401296.0	1.317762	Y
6	ICIS 410-437867/2	25.0	33.478306	5.0	369667.0	1.339132	Y
7	IC 410-437867/4	40.0	54.407474	5.0	458208.0	1.360187	Y
8	IC 410-437867/3	60.0	69.797671	5.0	452629.0	1.163295	Y



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Calibration / Isosafrole Peak 2

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

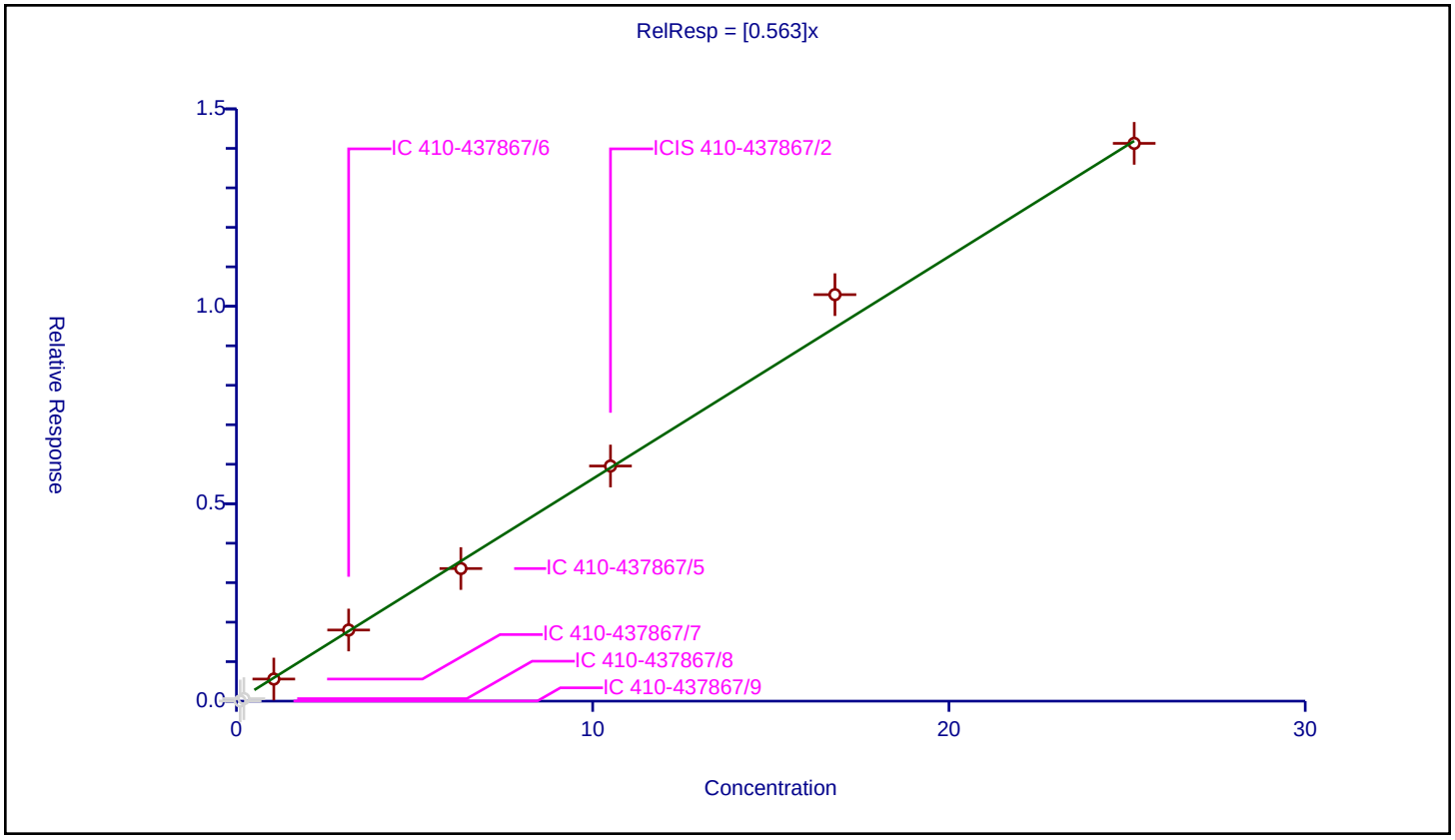
Curve Coefficients

Intercept:	0
Slope:	0.563

Error Coefficients

Standard Error:	750000
Relative Standard Error:	5.3
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.105	0.003711	5.0	392092.0	0.035342	N
2	IC 410-437867/8	0.21	0.062912	5.0	358677.0	0.29958	N
3	IC 410-437867/7	1.05	0.559228	5.0	360506.0	0.532598	Y
4	IC 410-437867/6	3.15	1.801411	5.0	350428.0	0.571877	Y
5	IC 410-437867/5	6.3	3.358419	5.0	401296.0	0.533082	Y
6	ICIS 410-437867/2	10.5	5.955252	5.0	369667.0	0.567167	Y
7	IC 410-437867/4	16.8	10.295695	5.0	458208.0	0.612839	Y
8	IC 410-437867/3	25.2	14.127221	5.0	452629.0	0.560604	Y



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Calibration / 1,1'-Biphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

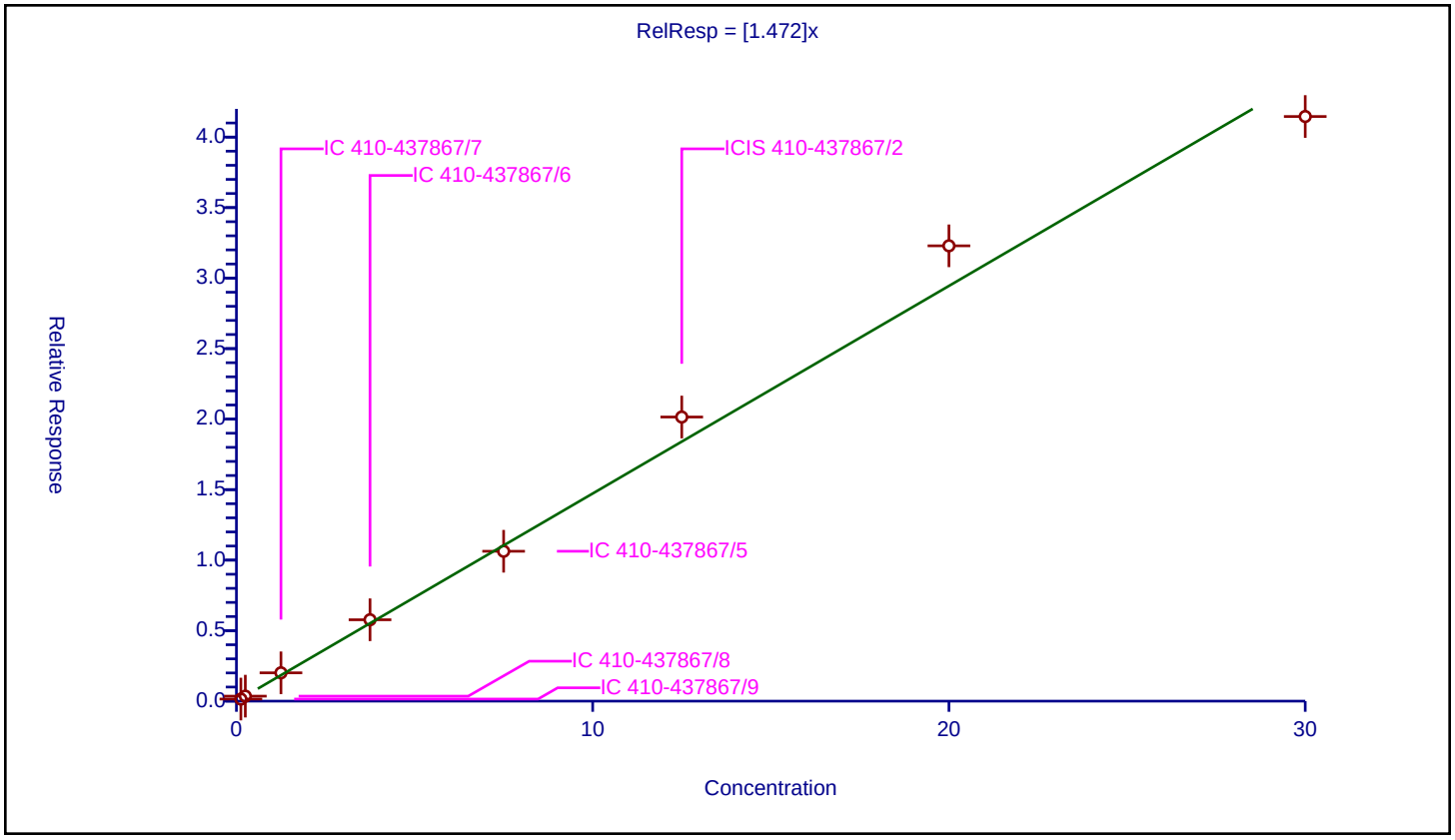
Curve Coefficients

Intercept:	0
Slope:	1.472

Error Coefficients

Standard Error:	1930000
Relative Standard Error:	10.1
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.148741	5.0	392092.0	1.189925	Y
2	IC 410-437867/8	0.25	0.354246	5.0	358677.0	1.416985	Y
3	IC 410-437867/7	1.25	2.008691	5.0	360506.0	1.606952	Y
4	IC 410-437867/6	3.75	5.771514	5.0	350428.0	1.53907	Y
5	IC 410-437867/5	7.5	10.628987	5.0	401296.0	1.417198	Y
6	ICIS 410-437867/2	12.5	20.148363	5.0	369667.0	1.611869	Y
7	IC 410-437867/4	20.0	32.289255	5.0	458208.0	1.614463	Y
8	IC 410-437867/3	30.0	41.460479	5.0	452629.0	1.382016	Y



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Calibration / 2-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

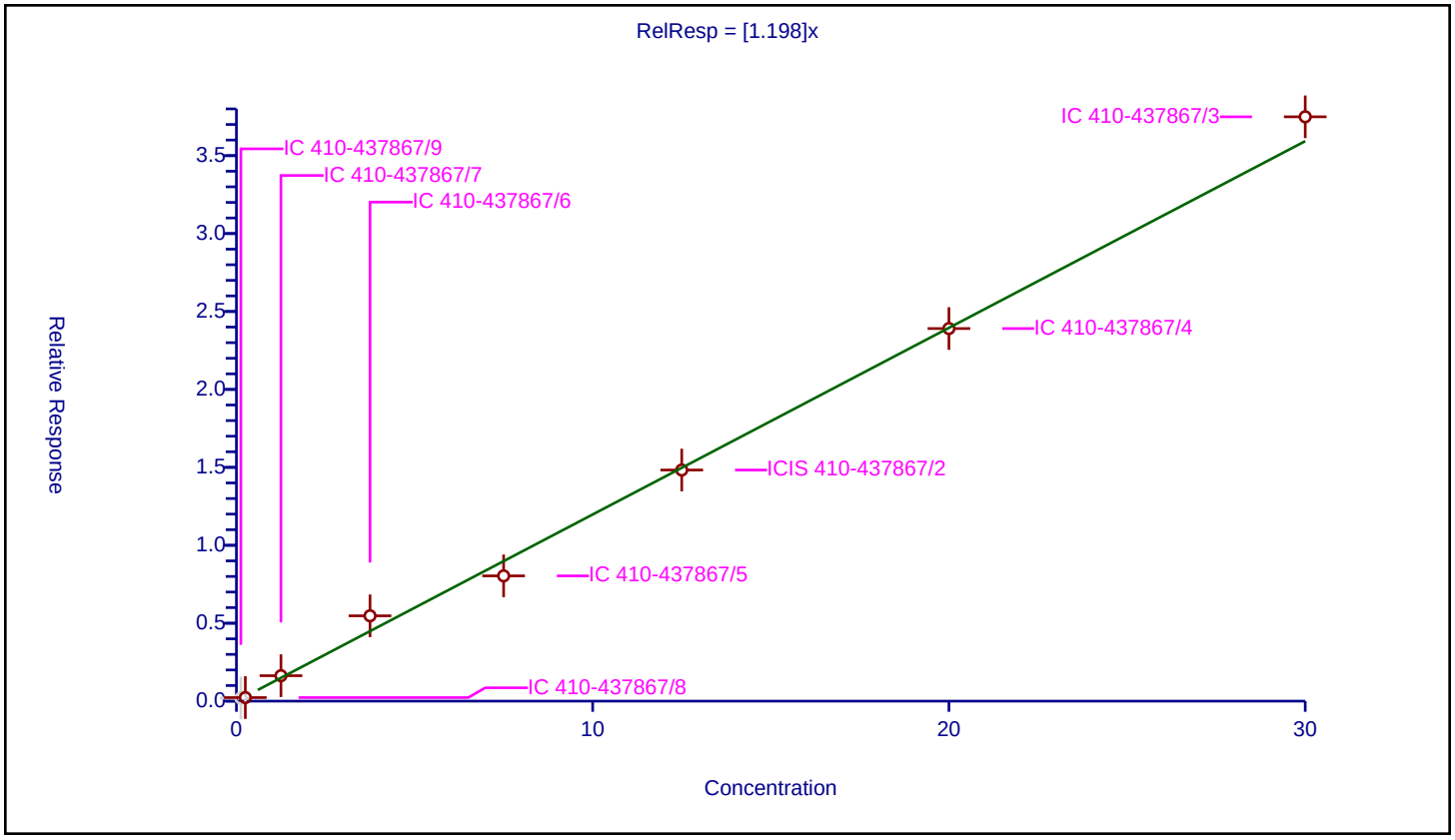
Curve Coefficients

Intercept:	0
Slope:	1.198

Error Coefficients

Standard Error:	1740000
Relative Standard Error:	14.4
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.196548	5.0	392092.0	1.572386	N
2	IC 410-437867/8	0.25	0.228618	5.0	358677.0	0.914472	Y
3	IC 410-437867/7	1.25	1.632553	5.0	360506.0	1.306042	Y
4	IC 410-437867/6	3.75	5.474934	5.0	350428.0	1.459982	Y
5	IC 410-437867/5	7.5	8.037396	5.0	401296.0	1.071653	Y
6	ICIS 410-437867/2	12.5	14.828197	5.0	369667.0	1.186256	Y
7	IC 410-437867/4	20.0	23.906534	5.0	458208.0	1.195327	Y
8	IC 410-437867/3	30.0	37.49214	5.0	452629.0	1.249738	Y



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Calibration / 1-Chloronaphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

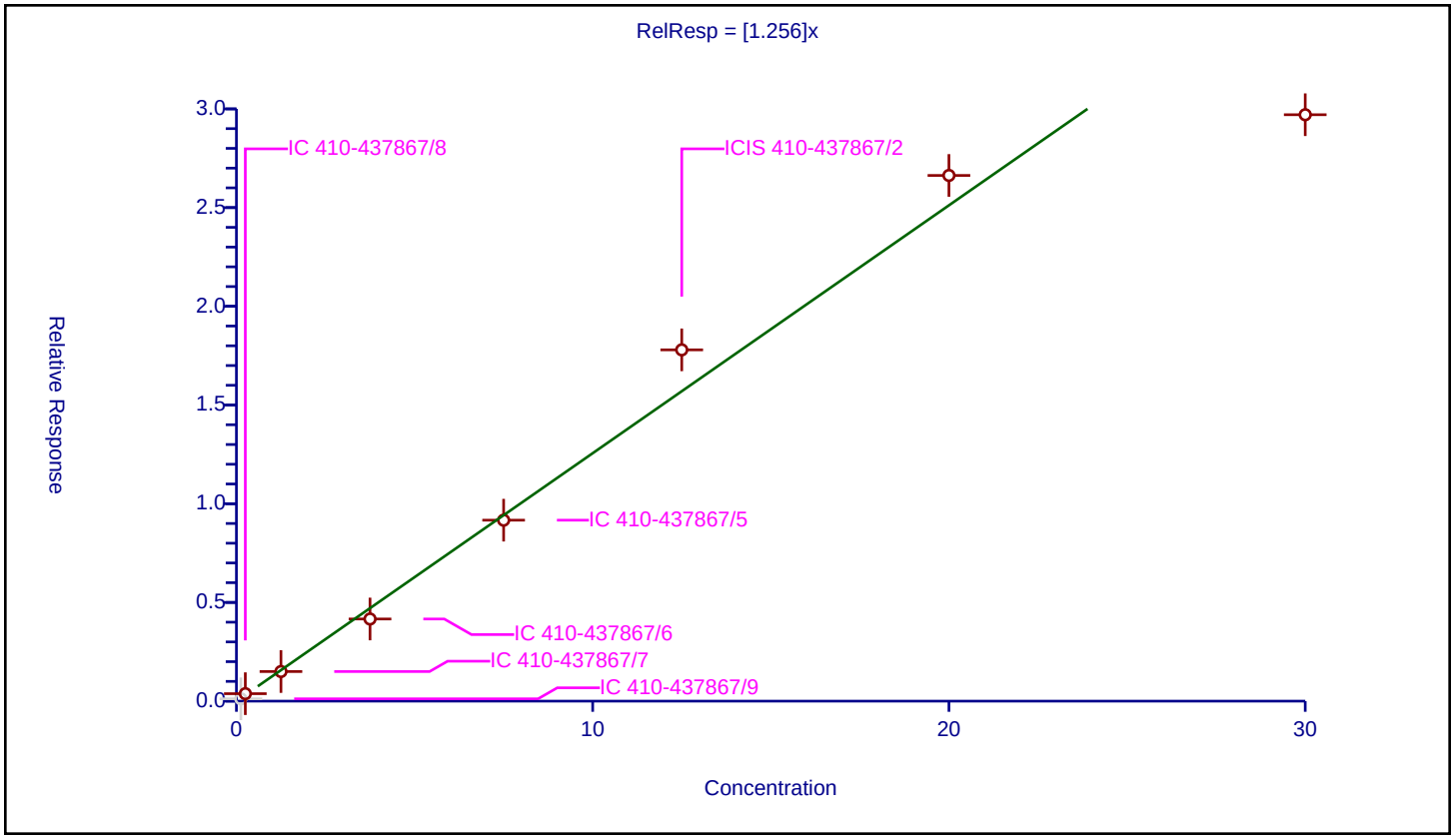
Curve Coefficients

Intercept:	0
Slope:	1.256

Error Coefficients

Standard Error:	1610000
Relative Standard Error:	14.4
Correlation Coefficient:	0.959
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.118136	5.0	392092.0	0.945084	N
2	IC 410-437867/8	0.25	0.378335	5.0	358677.0	1.513339	Y
3	IC 410-437867/7	1.25	1.499933	5.0	360506.0	1.199947	Y
4	IC 410-437867/6	3.75	4.161739	5.0	350428.0	1.109797	Y
5	IC 410-437867/5	7.5	9.166887	5.0	401296.0	1.222252	Y
6	ICIS 410-437867/2	12.5	17.794069	5.0	369667.0	1.423525	Y
7	IC 410-437867/4	20.0	26.628955	5.0	458208.0	1.331448	Y
8	IC 410-437867/3	30.0	29.703952	5.0	452629.0	0.990132	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

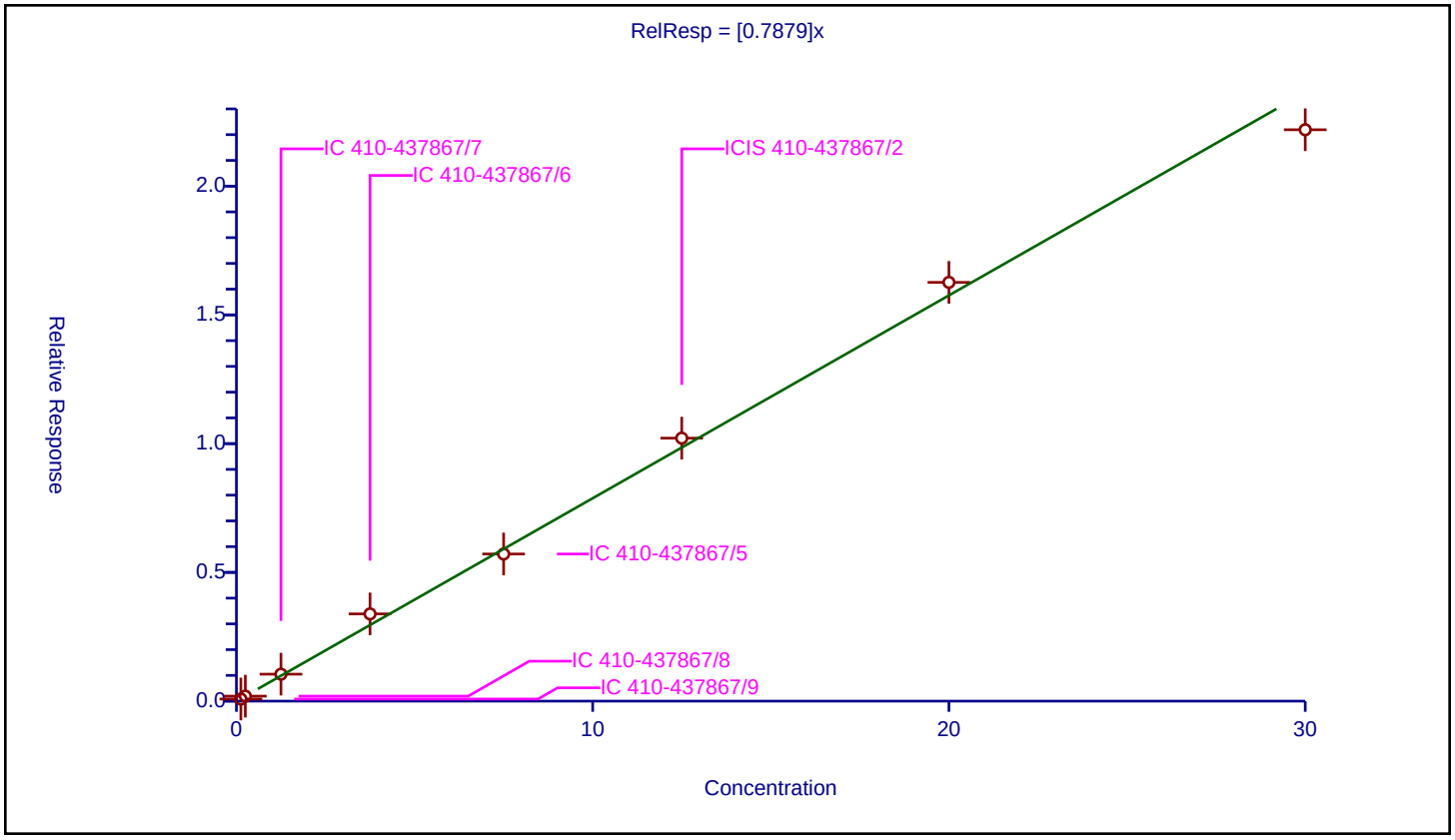
Curve Coefficients

Intercept:	0
Slope:	0.7879

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	9.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.082034	5.0	392092.0	0.656275	Y
2	IC 410-437867/8	0.25	0.193503	5.0	358677.0	0.774011	Y
3	IC 410-437867/7	1.25	1.047042	5.0	360506.0	0.837634	Y
4	IC 410-437867/6	3.75	3.387857	5.0	350428.0	0.903429	Y
5	IC 410-437867/5	7.5	5.713912	5.0	401296.0	0.761855	Y
6	ICIS 410-437867/2	12.5	10.213773	5.0	369667.0	0.817102	Y
7	IC 410-437867/4	20.0	16.263673	5.0	458208.0	0.813184	Y
8	IC 410-437867/3	30.0	22.190226	5.0	452629.0	0.739674	Y



Calibration / 2-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

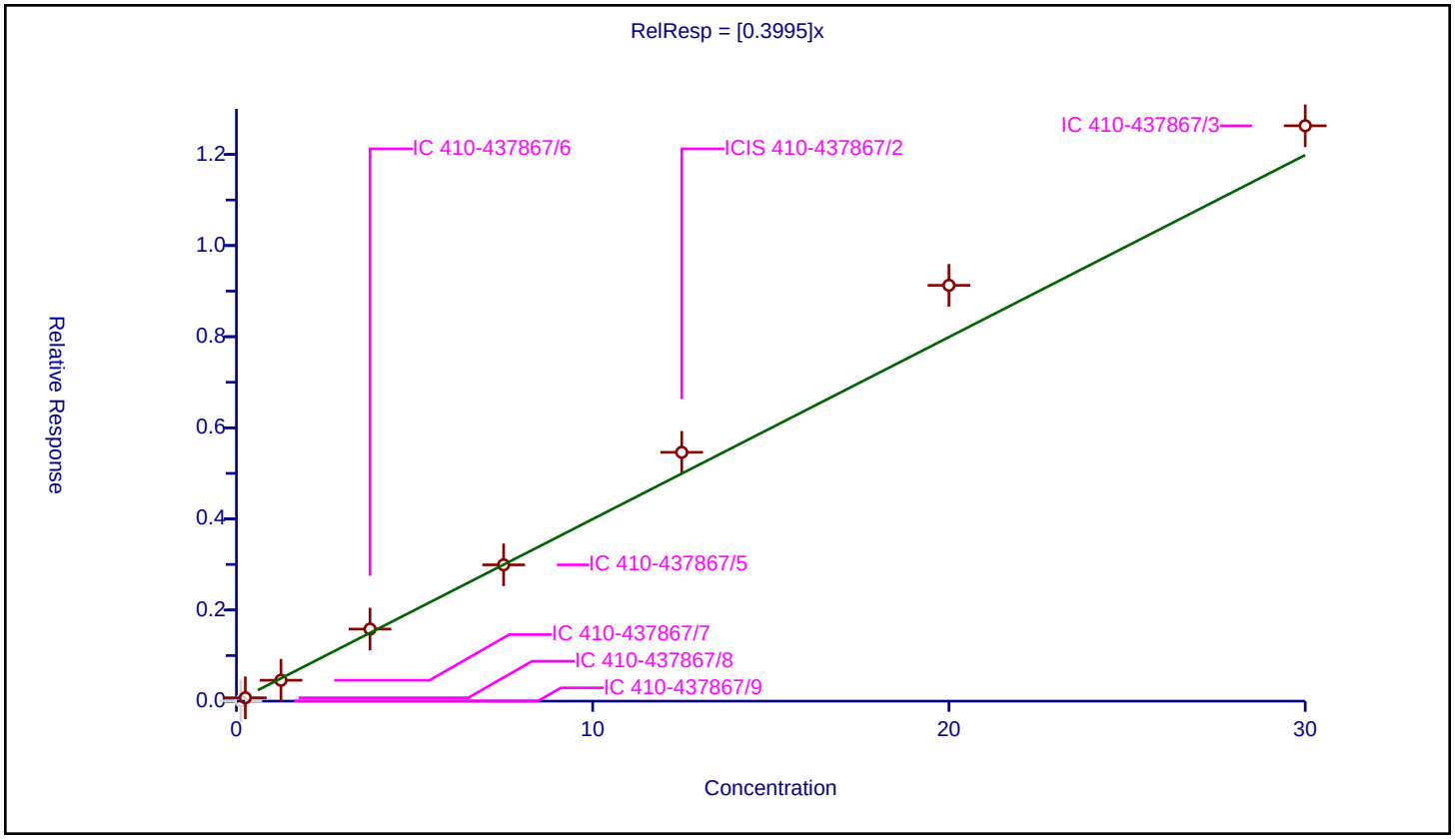
Curve Coefficients

Intercept:	0
Slope:	0.3995

Error Coefficients

Standard Error:	611000
Relative Standard Error:	13.5
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.004642	5.0	392092.0	0.037134	N
2	IC 410-437867/8	0.25	0.073757	5.0	358677.0	0.295029	Y
3	IC 410-437867/7	1.25	0.458467	5.0	360506.0	0.366773	Y
4	IC 410-437867/6	3.75	1.582094	5.0	350428.0	0.421892	Y
5	IC 410-437867/5	7.5	2.991595	5.0	401296.0	0.398879	Y
6	ICIS 410-437867/2	12.5	5.461753	5.0	369667.0	0.43694	Y
7	IC 410-437867/4	20.0	9.127285	5.0	458208.0	0.456364	Y
8	IC 410-437867/3	30.0	12.629151	5.0	452629.0	0.420972	Y



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Calibration / 1,4-Naphthoquinone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

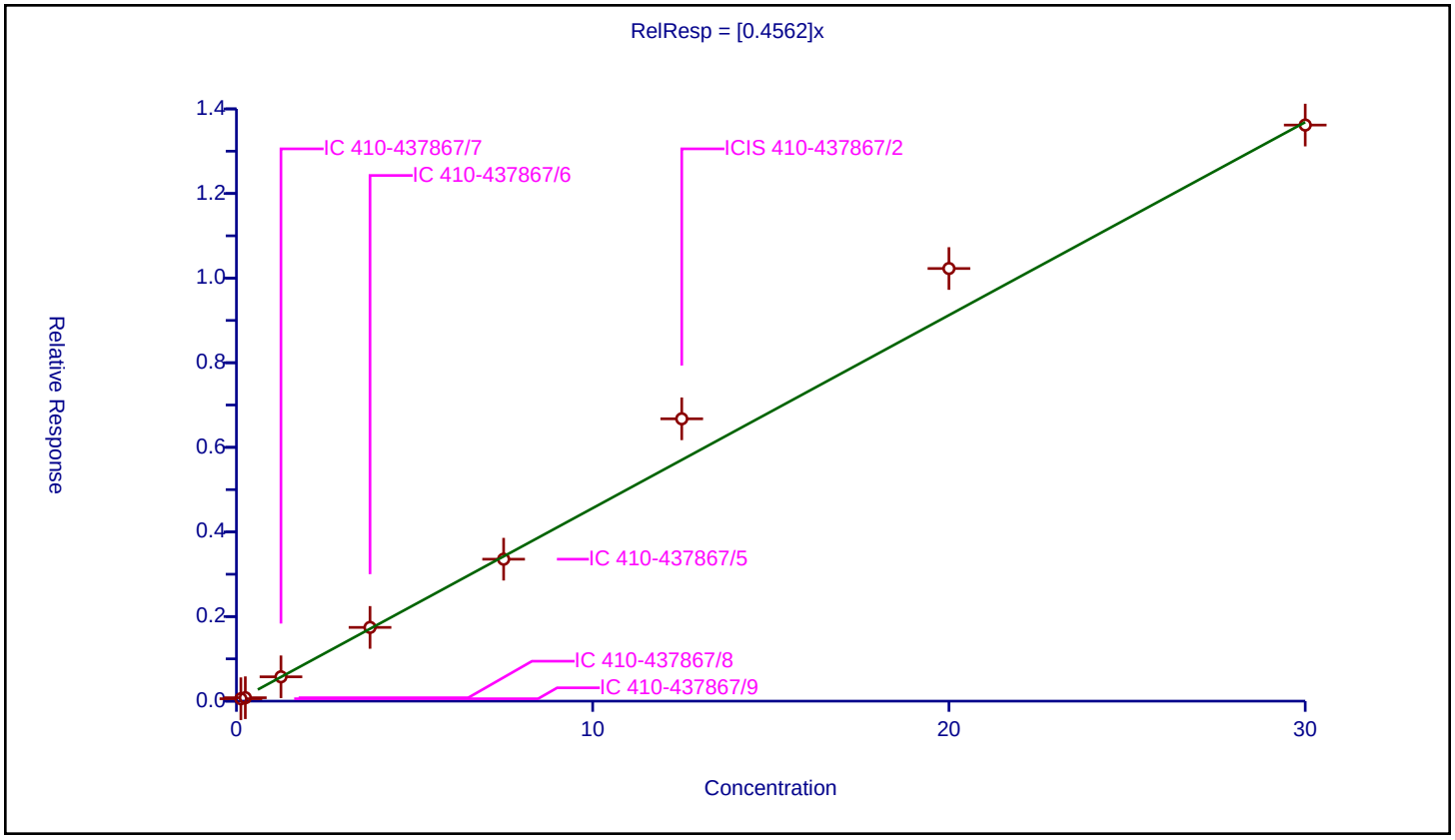
Curve Coefficients

Intercept:	0
Slope:	0.4562

Error Coefficients

Standard Error:	625000
Relative Standard Error:	13.5
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.056721	5.0	392092.0	0.453771	Y
2	IC 410-437867/8	0.25	0.081118	5.0	358677.0	0.32447	Y
3	IC 410-437867/7	1.25	0.575053	5.0	360506.0	0.460042	Y
4	IC 410-437867/6	3.75	1.742969	5.0	350428.0	0.464792	Y
5	IC 410-437867/5	7.5	3.355179	5.0	401296.0	0.447357	Y
6	ICIS 410-437867/2	12.5	6.673912	5.0	369667.0	0.533913	Y
7	IC 410-437867/4	20.0	10.226786	5.0	458208.0	0.511339	Y
8	IC 410-437867/3	30.0	13.617974	5.0	452629.0	0.453932	Y



Calibration / 1,4-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

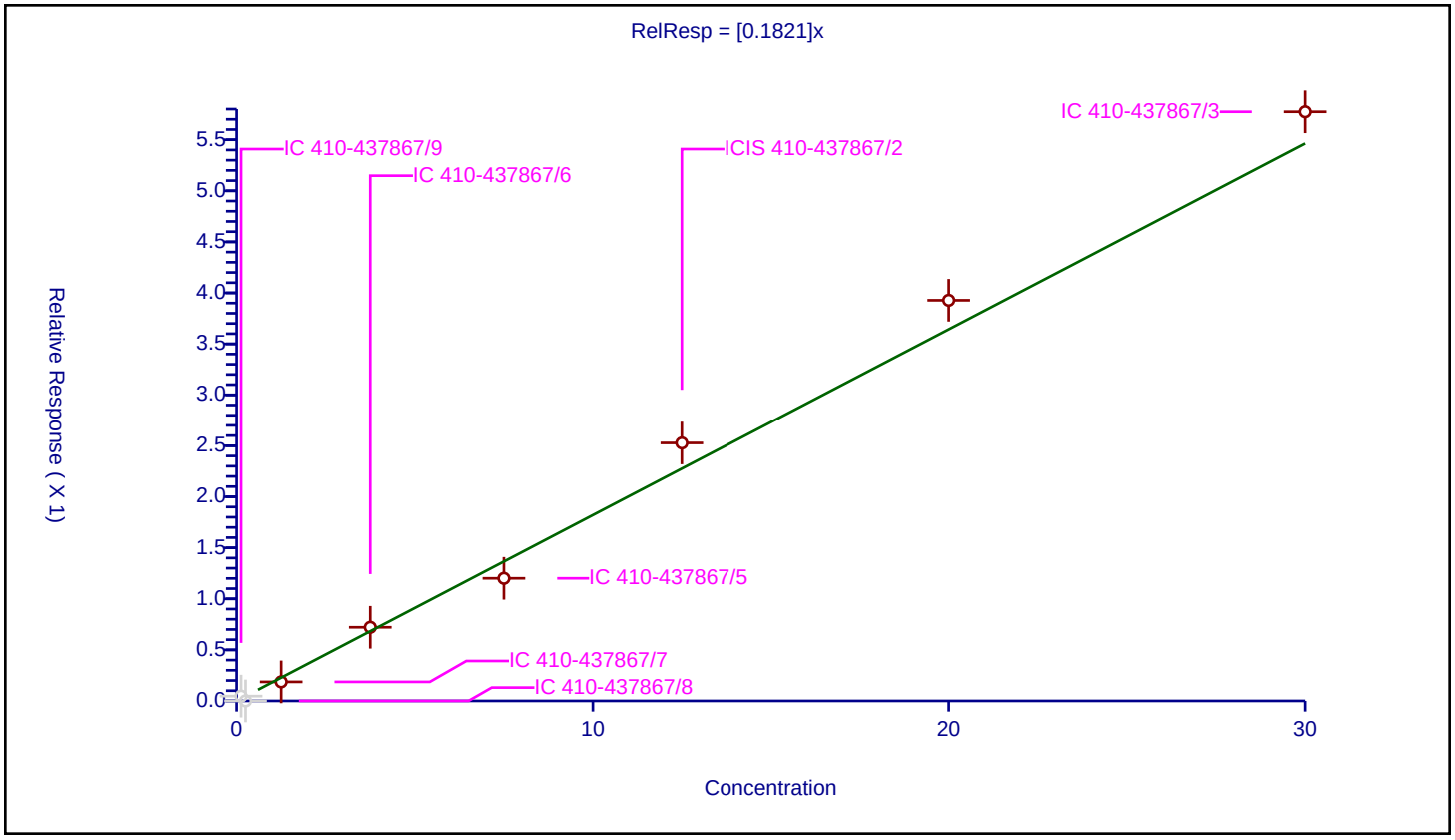
Curve Coefficients

Intercept:	0
Slope:	0.1821

Error Coefficients

Standard Error:	300000
Relative Standard Error:	12.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.046762	5.0	392092.0	0.374096	N
2	IC 410-437867/8	0.25	0.0	5.0	358677.0	0.0	N
3	IC 410-437867/7	1.25	0.186391	5.0	360506.0	0.149113	Y
4	IC 410-437867/6	3.75	0.721446	5.0	350428.0	0.192386	Y
5	IC 410-437867/5	7.5	1.201009	5.0	401296.0	0.160134	Y
6	ICIS 410-437867/2	12.5	2.527761	5.0	369667.0	0.202221	Y
7	IC 410-437867/4	20.0	3.927485	5.0	458208.0	0.196374	Y
8	IC 410-437867/3	30.0	5.773669	5.0	452629.0	0.192456	Y



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Calibration / Dimethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

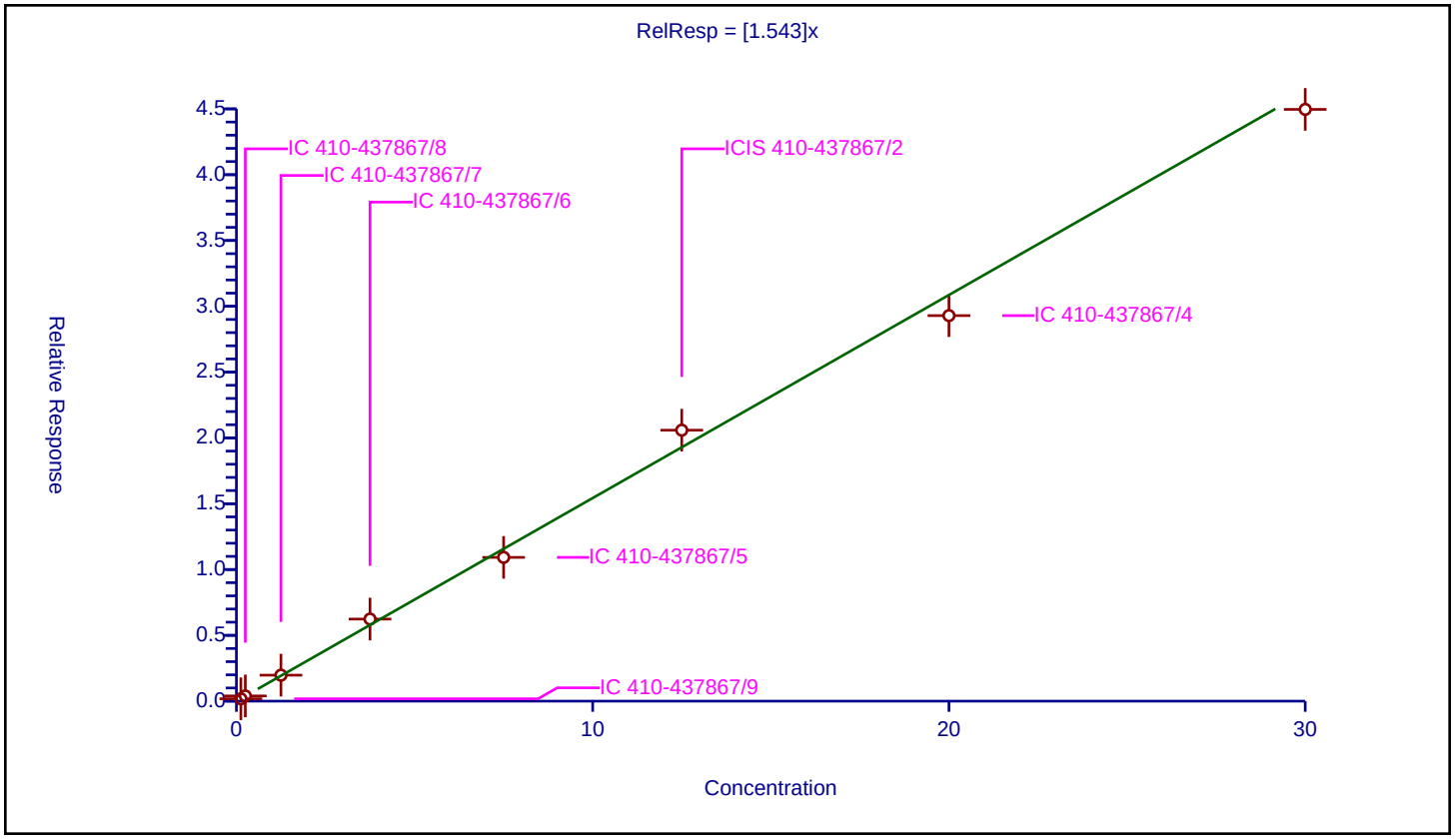
Curve Coefficients

Intercept:	0
Slope:	1.543

Error Coefficients

Standard Error:	1970000
Relative Standard Error:	5.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.181373	5.0	392092.0	1.450986	Y
2	IC 410-437867/8	0.25	0.396095	5.0	358677.0	1.584378	Y
3	IC 410-437867/7	1.25	1.974017	5.0	360506.0	1.579214	Y
4	IC 410-437867/6	3.75	6.236402	5.0	350428.0	1.663041	Y
5	IC 410-437867/5	7.5	10.923259	5.0	401296.0	1.456434	Y
6	ICIS 410-437867/2	12.5	20.588719	5.0	369667.0	1.647098	Y
7	IC 410-437867/4	20.0	29.293094	5.0	458208.0	1.464655	Y
8	IC 410-437867/3	30.0	44.960939	5.0	452629.0	1.498698	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

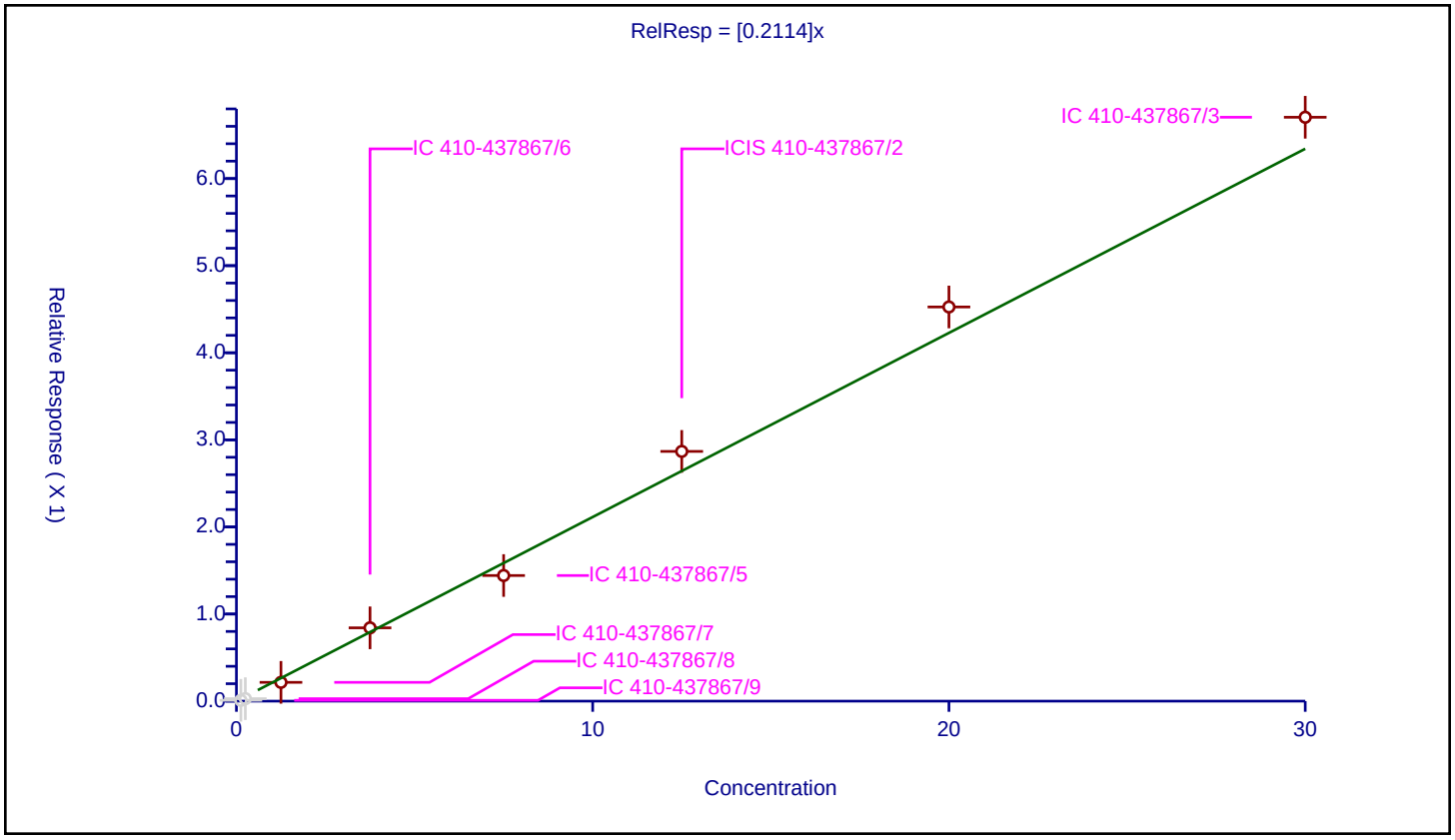
Curve Coefficients

Intercept:	0
Slope:	0.2114

Error Coefficients

Standard Error:	347000
Relative Standard Error:	11.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.009564	5.0	392092.0	0.076513	N
2	IC 410-437867/8	0.25	0.028201	5.0	358677.0	0.112803	N
3	IC 410-437867/7	1.25	0.2156	5.0	360506.0	0.17248	Y
4	IC 410-437867/6	3.75	0.841642	5.0	350428.0	0.224438	Y
5	IC 410-437867/5	7.5	1.442215	5.0	401296.0	0.192295	Y
6	ICIS 410-437867/2	12.5	2.867473	5.0	369667.0	0.229398	Y
7	IC 410-437867/4	20.0	4.52575	5.0	458208.0	0.226288	Y
8	IC 410-437867/3	30.0	6.703879	5.0	452629.0	0.223463	Y



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Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

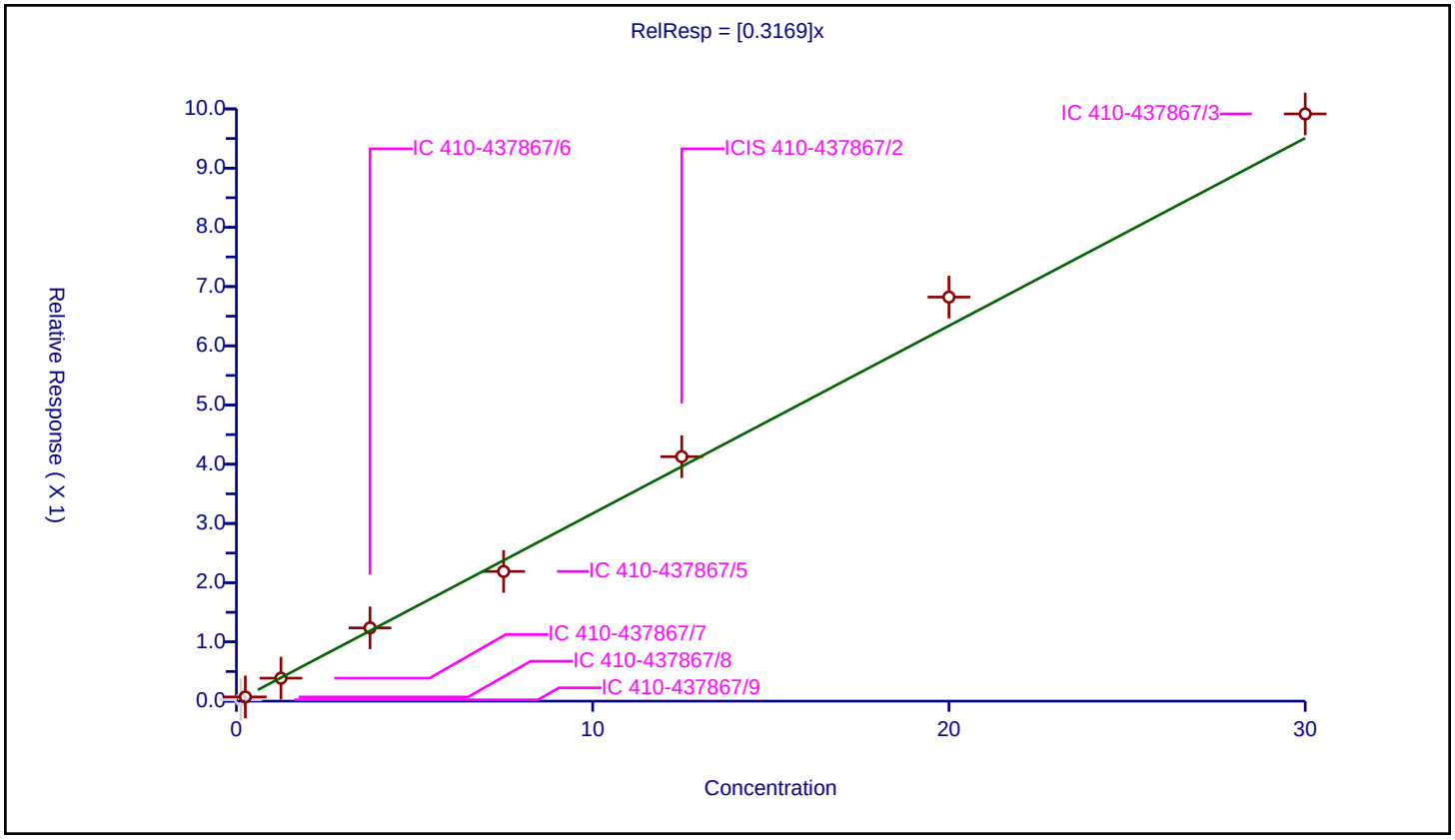
Curve Coefficients

Intercept:	0
Slope:	0.3169

Error Coefficients

Standard Error:	471000
Relative Standard Error:	6.9
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.023183	5.0	392092.0	0.185467	N
2	IC 410-437867/8	0.25	0.071025	5.0	358677.0	0.2841	Y
3	IC 410-437867/7	1.25	0.387996	5.0	360506.0	0.310397	Y
4	IC 410-437867/6	3.75	1.237059	5.0	350428.0	0.329882	Y
5	IC 410-437867/5	7.5	2.190042	5.0	401296.0	0.292006	Y
6	ICIS 410-437867/2	12.5	4.128161	5.0	369667.0	0.330253	Y
7	IC 410-437867/4	20.0	6.822393	5.0	458208.0	0.34112	Y
8	IC 410-437867/3	30.0	9.91493	5.0	452629.0	0.330498	Y



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Calibration / Acenaphthylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

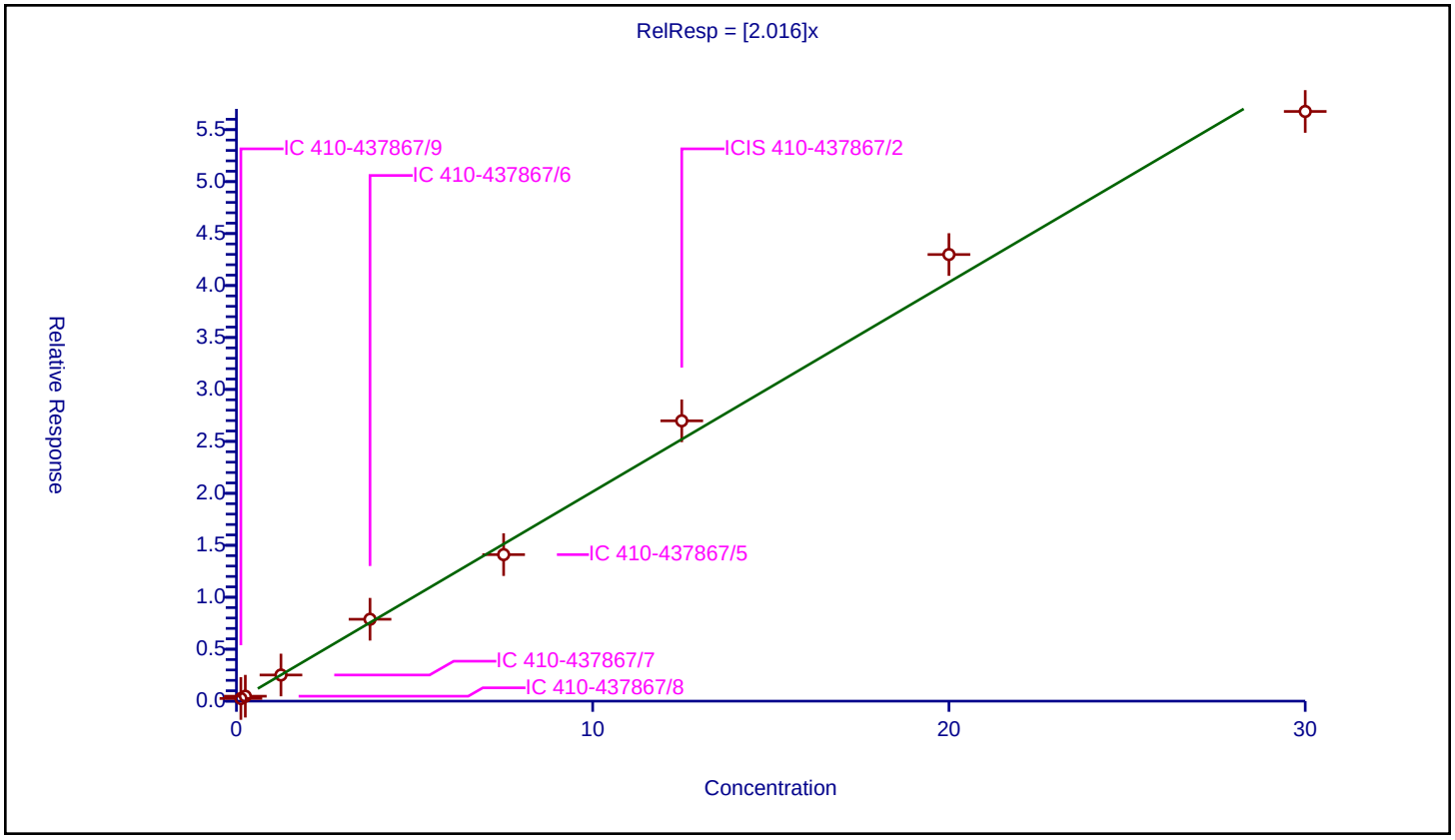
Curve Coefficients

Intercept:	0
Slope:	2.016

Error Coefficients

Standard Error:	2610000
Relative Standard Error:	5.7
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.254201	5.0	392092.0	2.033604	Y
2	IC 410-437867/8	0.25	0.475247	5.0	358677.0	1.900986	Y
3	IC 410-437867/7	1.25	2.515256	5.0	360506.0	2.012205	Y
4	IC 410-437867/6	3.75	7.880221	5.0	350428.0	2.101392	Y
5	IC 410-437867/5	7.5	14.10257	5.0	401296.0	1.880343	Y
6	ICIS 410-437867/2	12.5	26.978592	5.0	369667.0	2.158287	Y
7	IC 410-437867/4	20.0	42.984071	5.0	458208.0	2.149204	Y
8	IC 410-437867/3	30.0	56.754063	5.0	452629.0	1.891802	Y



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Calibration / 3-Nitroaniline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

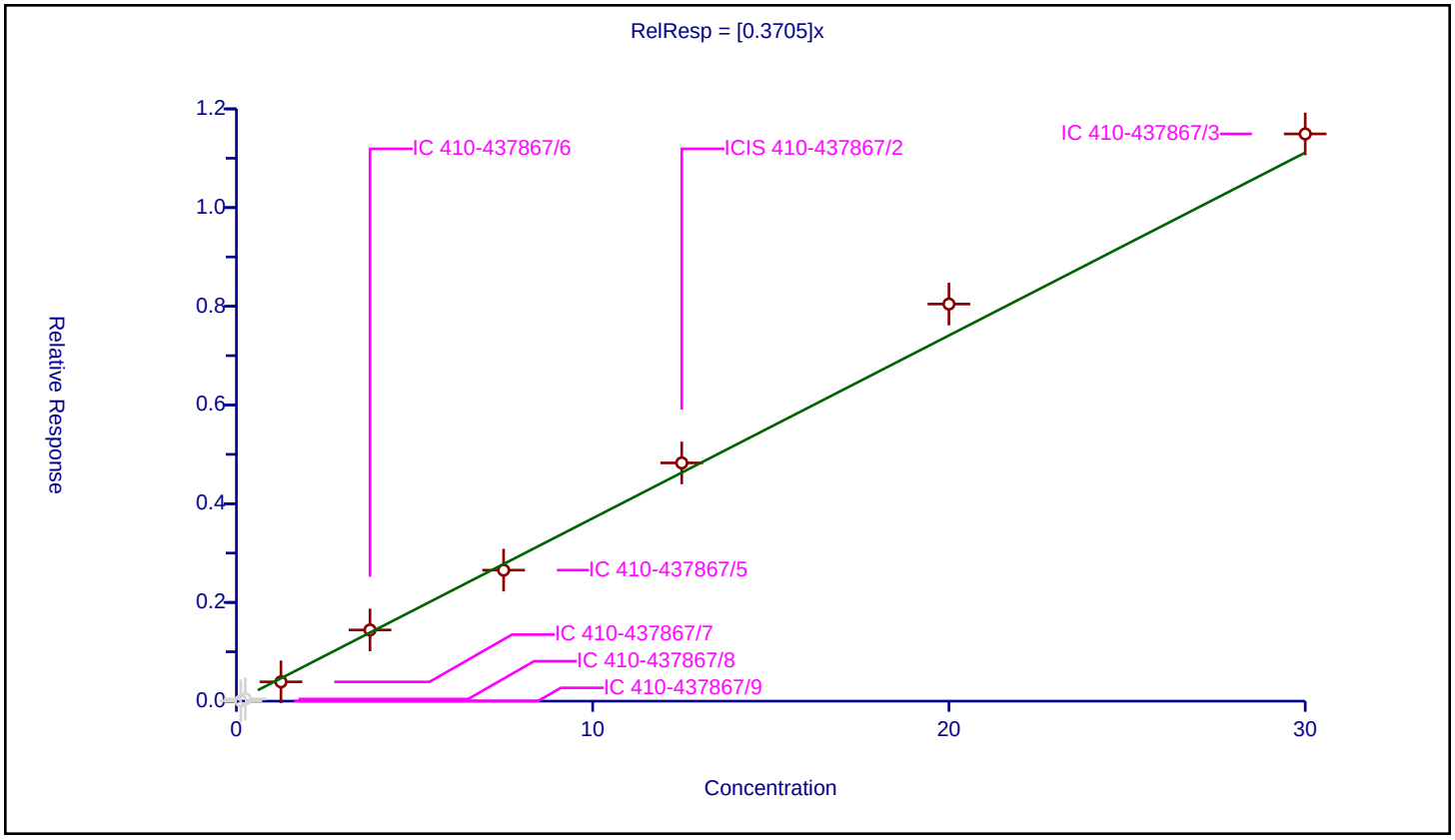
Curve Coefficients

Intercept:	0
Slope:	0.3705

Error Coefficients

Standard Error:	602000
Relative Standard Error:	8.7
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.004093	5.0	392092.0	0.032747	N
2	IC 410-437867/8	0.25	0.044204	5.0	358677.0	0.176816	N
3	IC 410-437867/7	1.25	0.390881	5.0	360506.0	0.312705	Y
4	IC 410-437867/6	3.75	1.442365	5.0	350428.0	0.384631	Y
5	IC 410-437867/5	7.5	2.654076	5.0	401296.0	0.353877	Y
6	ICIS 410-437867/2	12.5	4.82679	5.0	369667.0	0.386143	Y
7	IC 410-437867/4	20.0	8.046084	5.0	458208.0	0.402304	Y
8	IC 410-437867/3	30.0	11.492724	5.0	452629.0	0.383091	Y



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Calibration / Acenaphthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

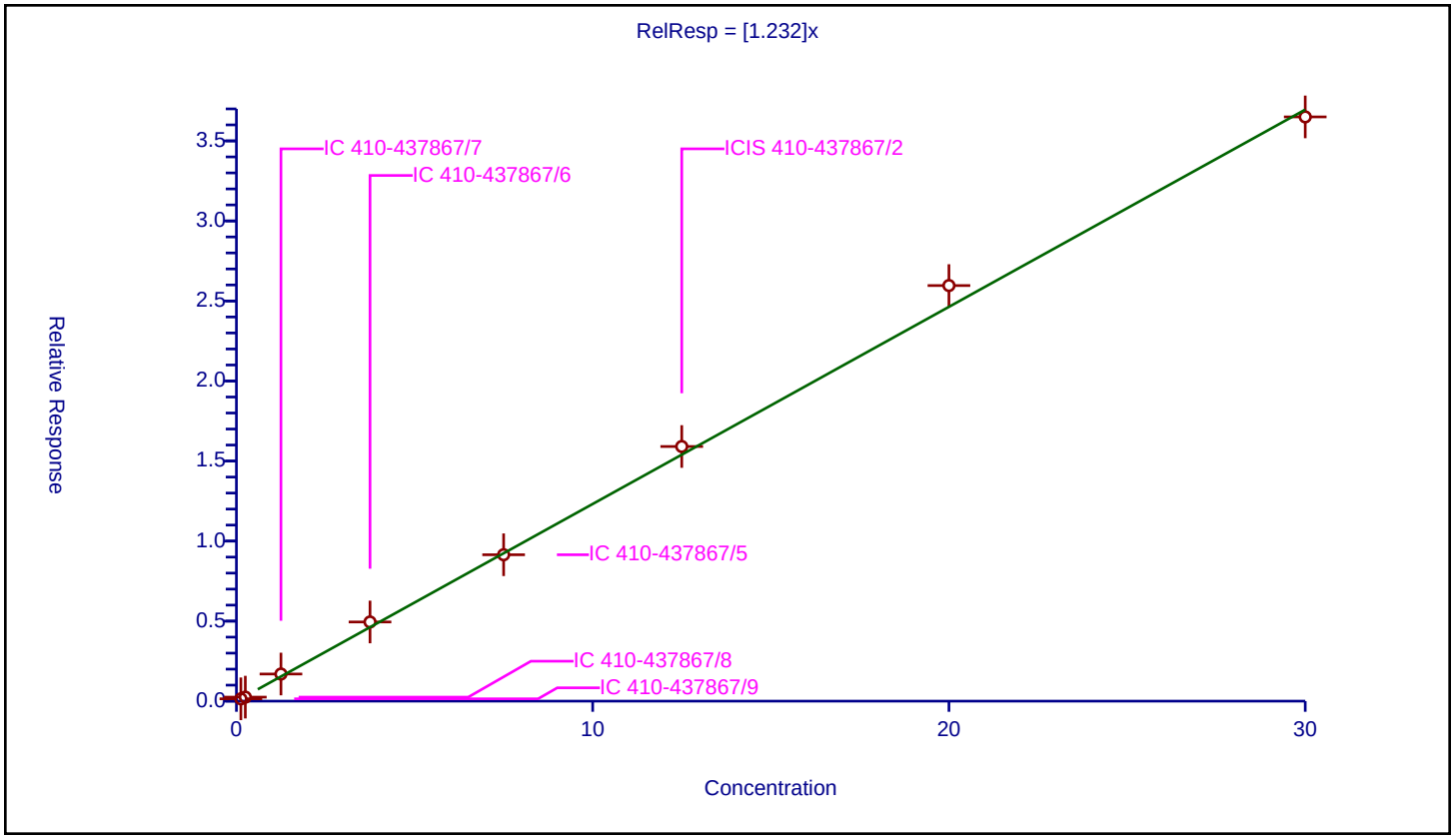
Curve Coefficients

Intercept:	0
Slope:	1.232

Error Coefficients

Standard Error:	1630000
Relative Standard Error:	9.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.14605	5.0	392092.0	1.168399	Y
2	IC 410-437867/8	0.25	0.250936	5.0	358677.0	1.003744	Y
3	IC 410-437867/7	1.25	1.694798	5.0	360506.0	1.355839	Y
4	IC 410-437867/6	3.75	4.945524	5.0	350428.0	1.318806	Y
5	IC 410-437867/5	7.5	9.145519	5.0	401296.0	1.219402	Y
6	ICIS 410-437867/2	12.5	15.908277	5.0	369667.0	1.272662	Y
7	IC 410-437867/4	20.0	25.963776	5.0	458208.0	1.298189	Y
8	IC 410-437867/3	30.0	36.498368	5.0	452629.0	1.216612	Y



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Calibration / 2,4-Dinitrophenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

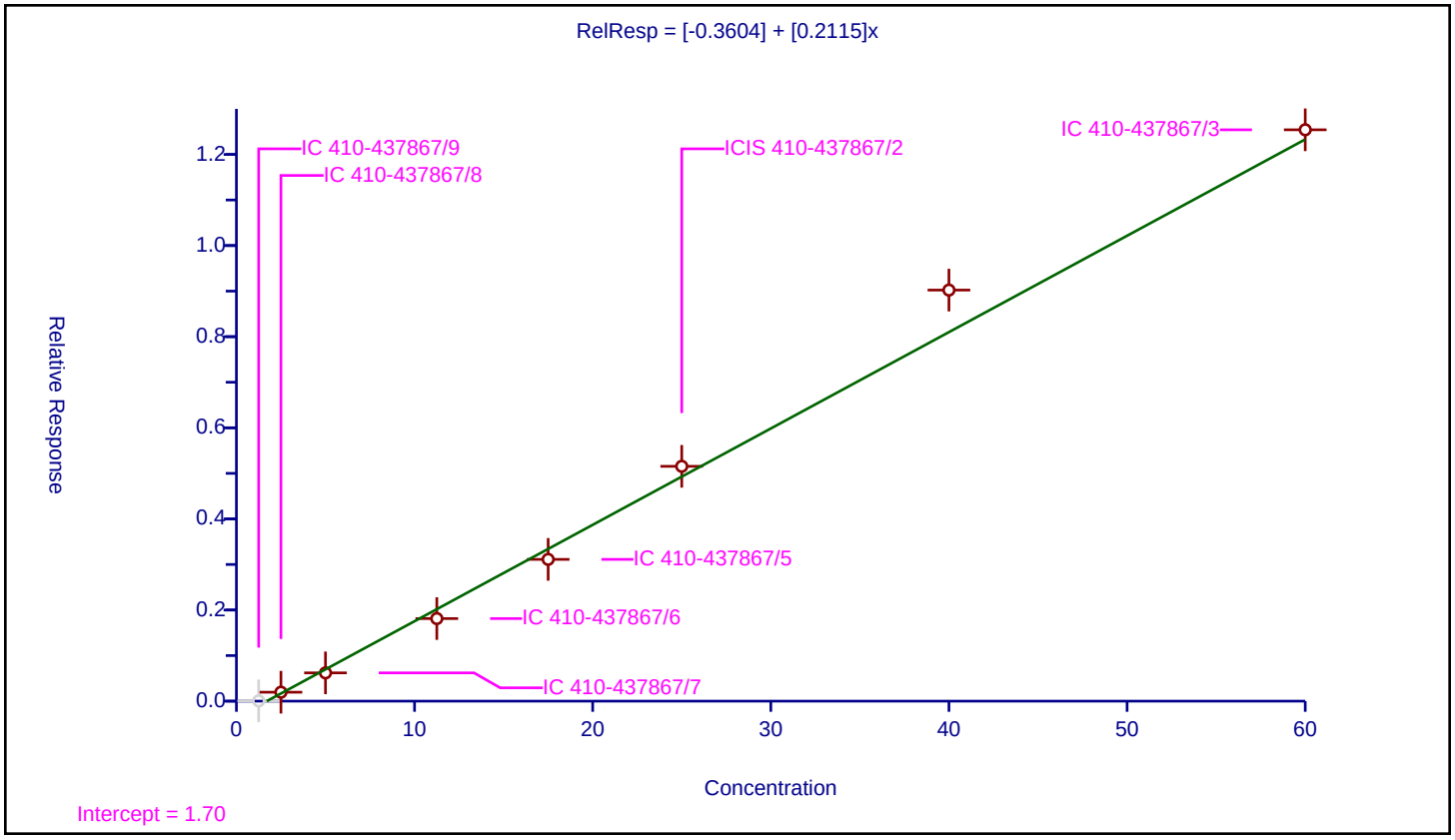
Curve Coefficients

Intercept:	-0.3604
Slope:	0.2115

Error Coefficients

Standard Error:	663000
Relative Standard Error:	8.2
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	1.25	0.005968	5.0	392092.0	0.004774	N
2	IC 410-437867/8	2.5	0.196221	5.0	358677.0	0.078488	Y
3	IC 410-437867/7	5.0	0.62042	5.0	360506.0	0.124084	Y
4	IC 410-437867/6	11.25	1.812441	5.0	350428.0	0.161106	Y
5	IC 410-437867/5	17.5	3.111706	5.0	401296.0	0.177812	Y
6	ICIS 410-437867/2	25.0	5.154382	5.0	369667.0	0.206175	Y
7	IC 410-437867/4	40.0	9.023086	5.0	458208.0	0.225577	Y
8	IC 410-437867/3	60.0	12.541231	5.0	452629.0	0.209021	Y



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Calibration / Pentachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

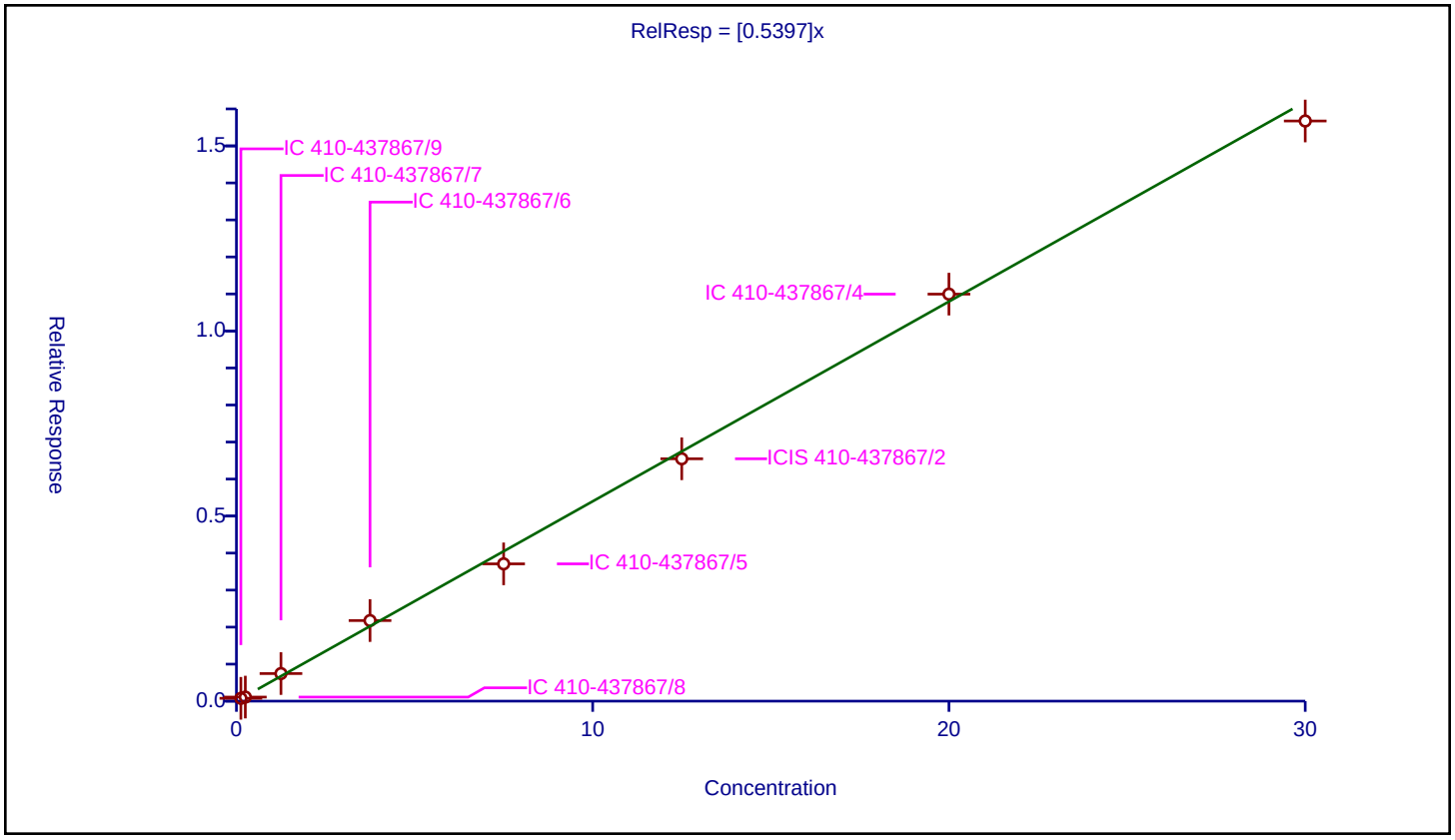
Curve Coefficients

Intercept:	0
Slope:	0.5397

Error Coefficients

Standard Error:	695000
Relative Standard Error:	10.6
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.076525	5.0	392092.0	0.612203	Y
2	IC 410-437867/8	0.25	0.109667	5.0	358677.0	0.438668	Y
3	IC 410-437867/7	1.25	0.744995	5.0	360506.0	0.595996	Y
4	IC 410-437867/6	3.75	2.176781	5.0	350428.0	0.580475	Y
5	IC 410-437867/5	7.5	3.708858	5.0	401296.0	0.494514	Y
6	ICIS 410-437867/2	12.5	6.547284	5.0	369667.0	0.523783	Y
7	IC 410-437867/4	20.0	10.995923	5.0	458208.0	0.549796	Y
8	IC 410-437867/3	30.0	15.673233	5.0	452629.0	0.522441	Y



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Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

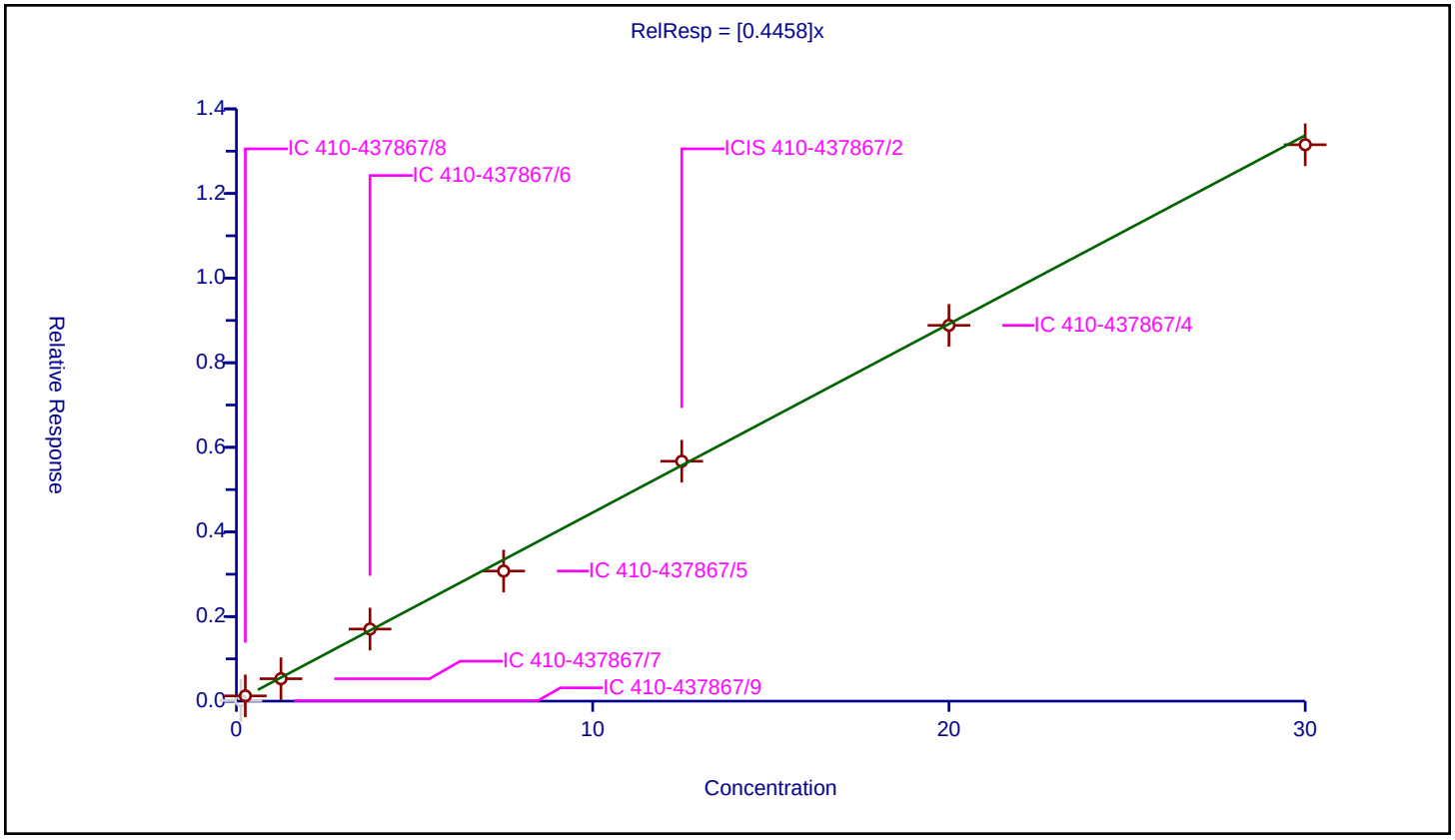
Curve Coefficients

Intercept:	0
Slope:	0.4458

Error Coefficients

Standard Error:	624000
Relative Standard Error:	6.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.013071	5.0	392092.0	0.104567	N
2	IC 410-437867/8	0.25	0.1239	5.0	358677.0	0.495599	Y
3	IC 410-437867/7	1.25	0.530019	5.0	360506.0	0.424015	Y
4	IC 410-437867/6	3.75	1.704273	5.0	350428.0	0.454473	Y
5	IC 410-437867/5	7.5	3.07556	5.0	401296.0	0.410075	Y
6	ICIS 410-437867/2	12.5	5.671118	5.0	369667.0	0.453689	Y
7	IC 410-437867/4	20.0	8.882964	5.0	458208.0	0.444148	Y
8	IC 410-437867/3	30.0	13.152792	5.0	452629.0	0.438426	Y



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Calibration / 4-Nitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

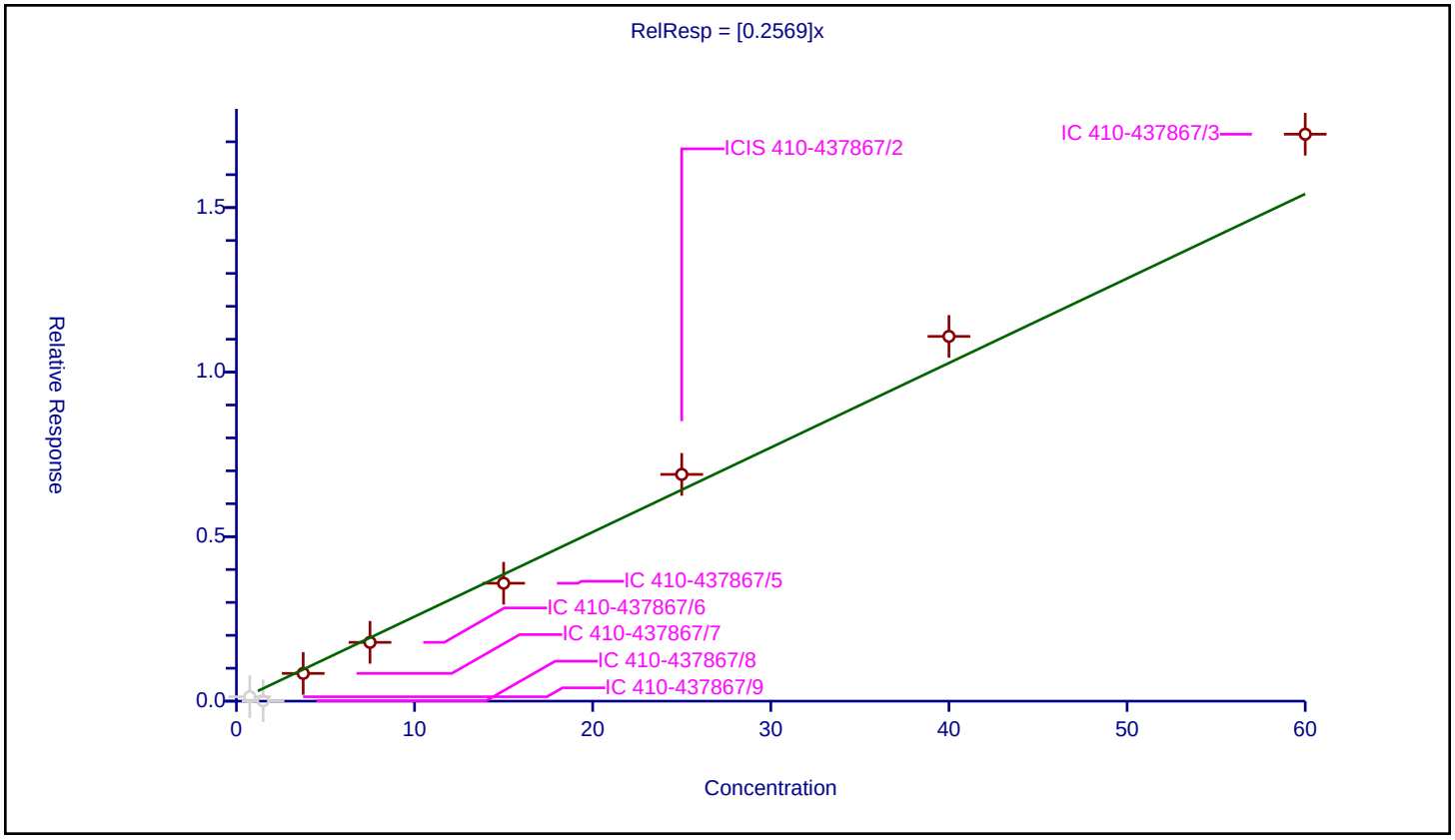
Curve Coefficients

Intercept:	0
Slope:	0.2569

Error Coefficients

Standard Error:	875000
Relative Standard Error:	10.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.75	0.133566	5.0	392092.0	0.178087	N
2	IC 410-437867/8	1.5	0.010218	5.0	358677.0	0.006812	N
3	IC 410-437867/7	3.75	0.841872	5.0	360506.0	0.224499	Y
4	IC 410-437867/6	7.5	1.786815	5.0	350428.0	0.238242	Y
5	IC 410-437867/5	15.0	3.583016	5.0	401296.0	0.238868	Y
6	ICIS 410-437867/2	25.0	6.891175	5.0	369667.0	0.275647	Y
7	IC 410-437867/4	40.0	11.085315	5.0	458208.0	0.277133	Y
8	IC 410-437867/3	60.0	17.230248	5.0	452629.0	0.287171	Y



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Calibration / Dibenzofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

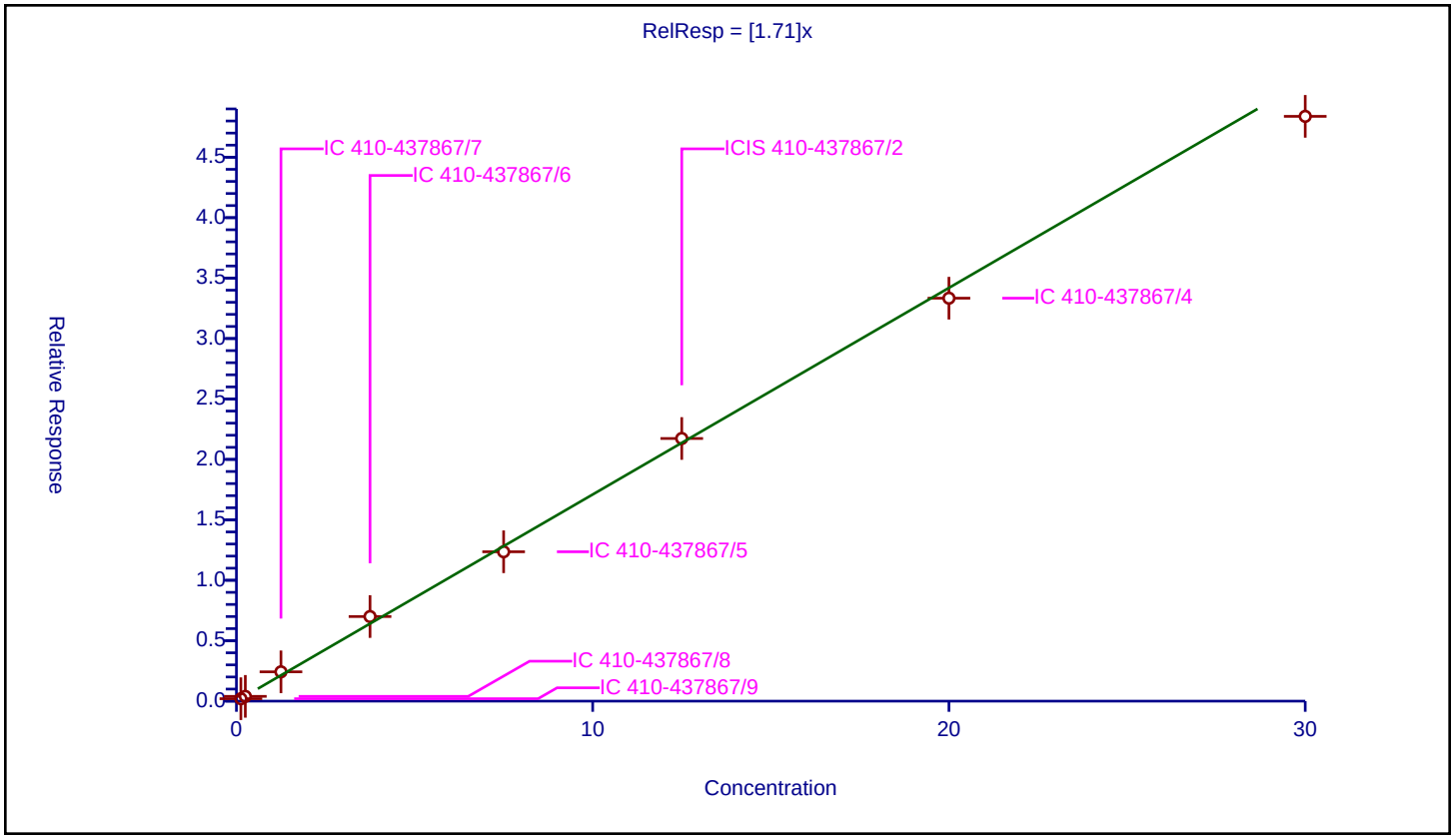
Curve Coefficients

Intercept:	0
Slope:	1.71

Error Coefficients

Standard Error:	2150000
Relative Standard Error:	7.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.202503	5.0	392092.0	1.620028	Y
2	IC 410-437867/8	0.25	0.395969	5.0	358677.0	1.583876	Y
3	IC 410-437867/7	1.25	2.425965	5.0	360506.0	1.940772	Y
4	IC 410-437867/6	3.75	6.998727	5.0	350428.0	1.866327	Y
5	IC 410-437867/5	7.5	12.359219	5.0	401296.0	1.647896	Y
6	ICIS 410-437867/2	12.5	21.730923	5.0	369667.0	1.738474	Y
7	IC 410-437867/4	20.0	33.338353	5.0	458208.0	1.666918	Y
8	IC 410-437867/3	30.0	48.383312	5.0	452629.0	1.612777	Y



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Calibration / 1-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

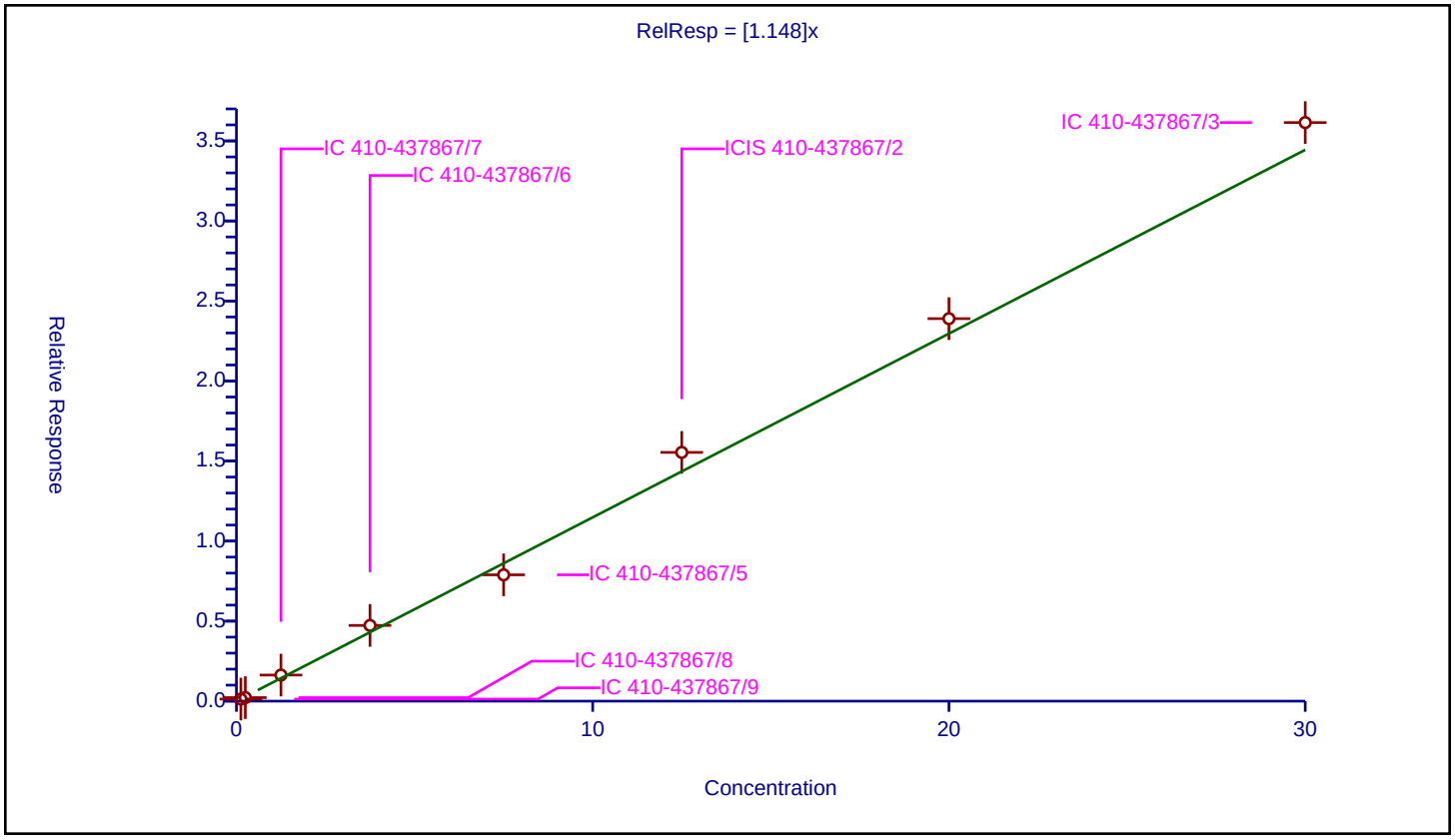
Curve Coefficients

Intercept:	0
Slope:	1.148

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	12.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.130403	5.0	392092.0	1.043225	Y
2	IC 410-437867/8	0.25	0.22031	5.0	358677.0	0.881239	Y
3	IC 410-437867/7	1.25	1.629779	5.0	360506.0	1.303823	Y
4	IC 410-437867/6	3.75	4.729031	5.0	350428.0	1.261075	Y
5	IC 410-437867/5	7.5	7.891668	5.0	401296.0	1.052222	Y
6	ICIS 410-437867/2	12.5	15.540121	5.0	369667.0	1.24321	Y
7	IC 410-437867/4	20.0	23.895698	5.0	458208.0	1.194785	Y
8	IC 410-437867/3	30.0	36.144613	5.0	452629.0	1.20482	Y



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Calibration / 2,3,4,6-Tetrachlorophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

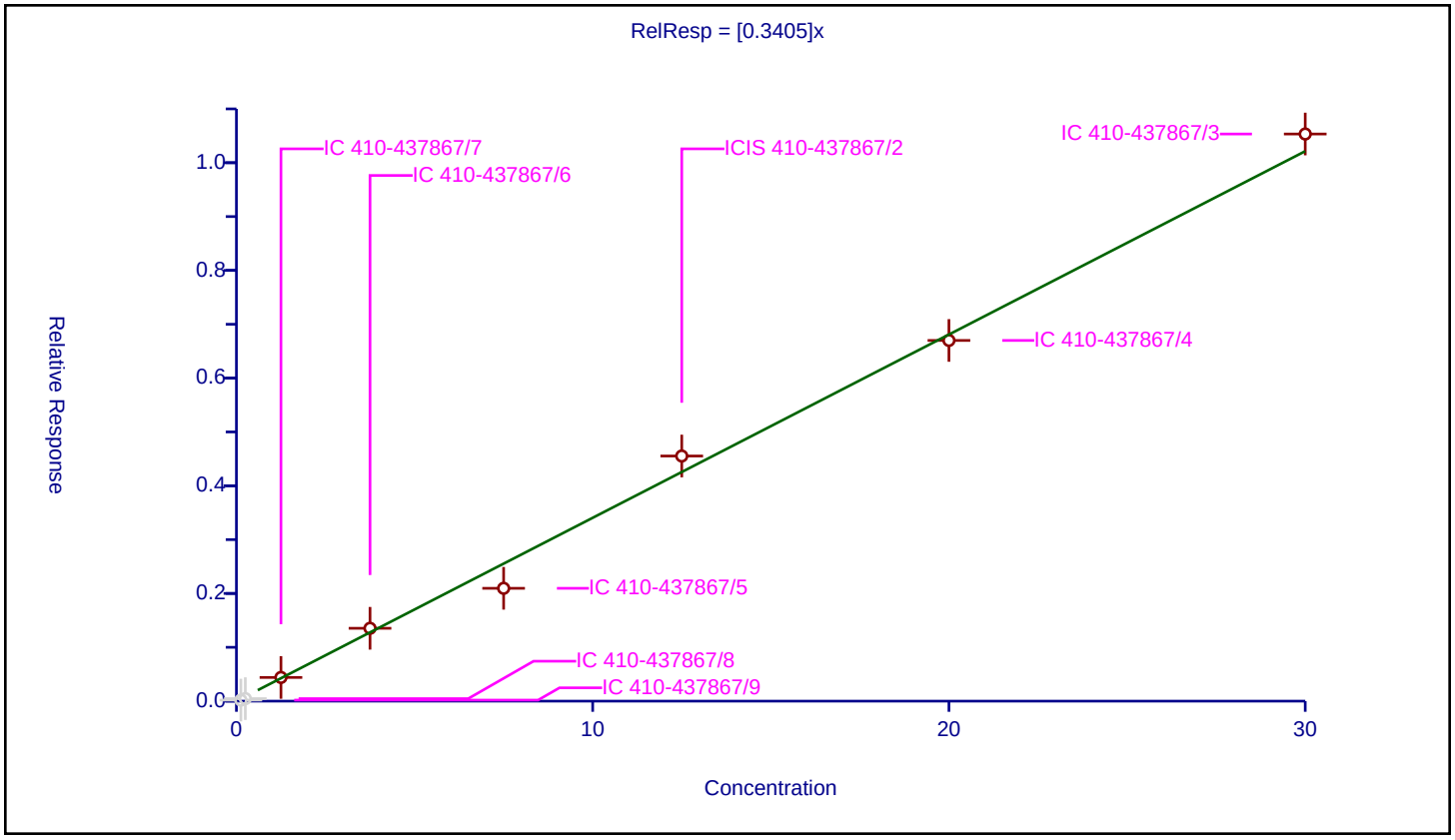
Curve Coefficients

Intercept:	0
Slope:	0.3405

Error Coefficients

Standard Error:	536000
Relative Standard Error:	9.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.019702	5.0	392092.0	0.157616	N
2	IC 410-437867/8	0.25	0.046713	5.0	358677.0	0.186853	N
3	IC 410-437867/7	1.25	0.440173	5.0	360506.0	0.352138	Y
4	IC 410-437867/6	3.75	1.353317	5.0	350428.0	0.360884	Y
5	IC 410-437867/5	7.5	2.09571	5.0	401296.0	0.279428	Y
6	ICIS 410-437867/2	12.5	4.552908	5.0	369667.0	0.364233	Y
7	IC 410-437867/4	20.0	6.699261	5.0	458208.0	0.334963	Y
8	IC 410-437867/3	30.0	10.53366	5.0	452629.0	0.351122	Y



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Calibration / 2-Naphthylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

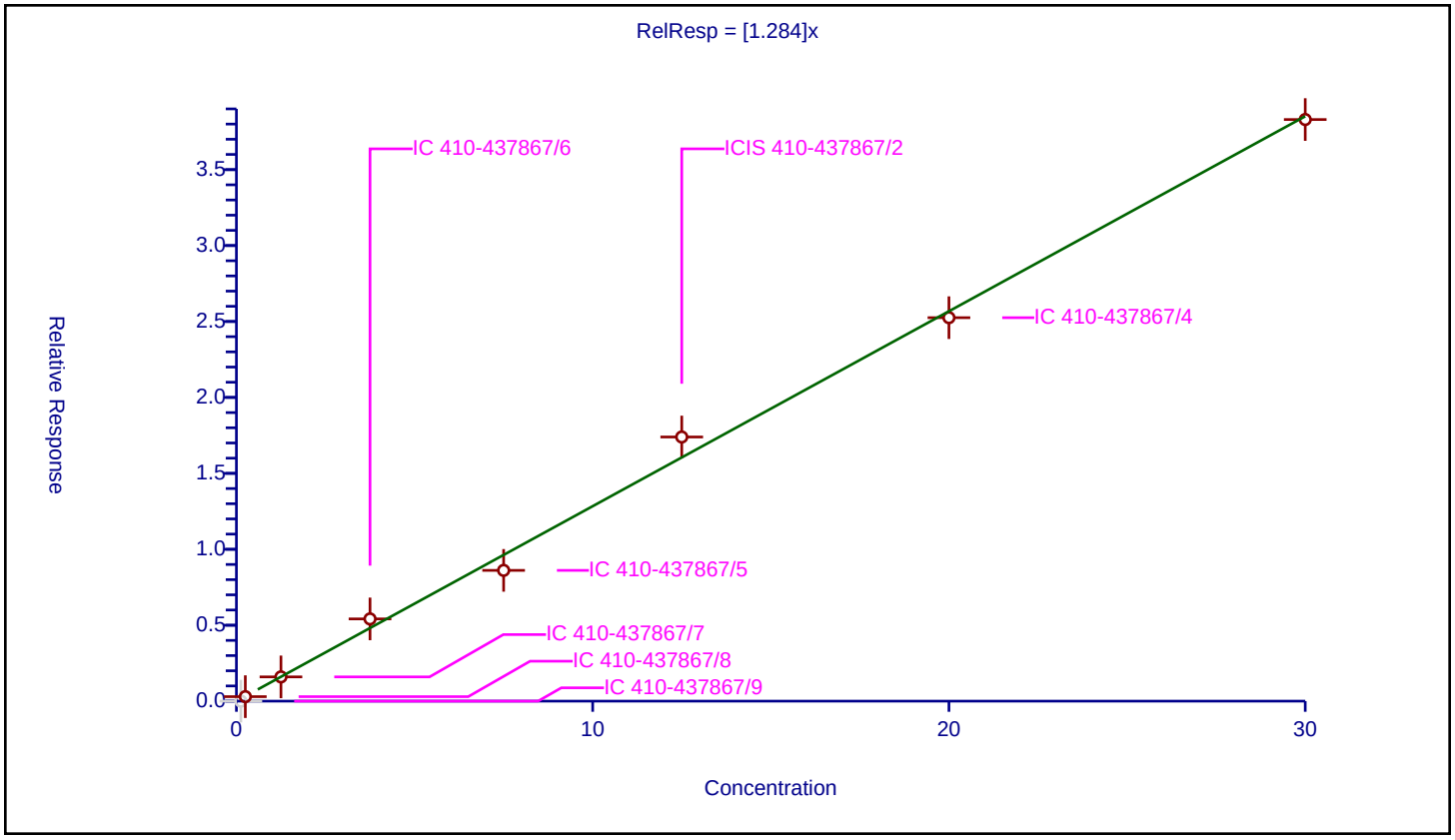
Curve Coefficients

Intercept:	0
Slope:	1.284

Error Coefficients

Standard Error:	1810000
Relative Standard Error:	8.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.0	5.0	392092.0	0.0	N
2	IC 410-437867/8	0.25	0.296353	5.0	358677.0	1.185412	Y
3	IC 410-437867/7	1.25	1.597463	5.0	360506.0	1.27797	Y
4	IC 410-437867/6	3.75	5.415449	5.0	350428.0	1.44412	Y
5	IC 410-437867/5	7.5	8.609792	5.0	401296.0	1.147972	Y
6	ICIS 410-437867/2	12.5	17.394276	5.0	369667.0	1.391542	Y
7	IC 410-437867/4	20.0	25.251065	5.0	458208.0	1.262553	Y
8	IC 410-437867/3	30.0	38.297966	5.0	452629.0	1.276599	Y



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Calibration / Diethyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

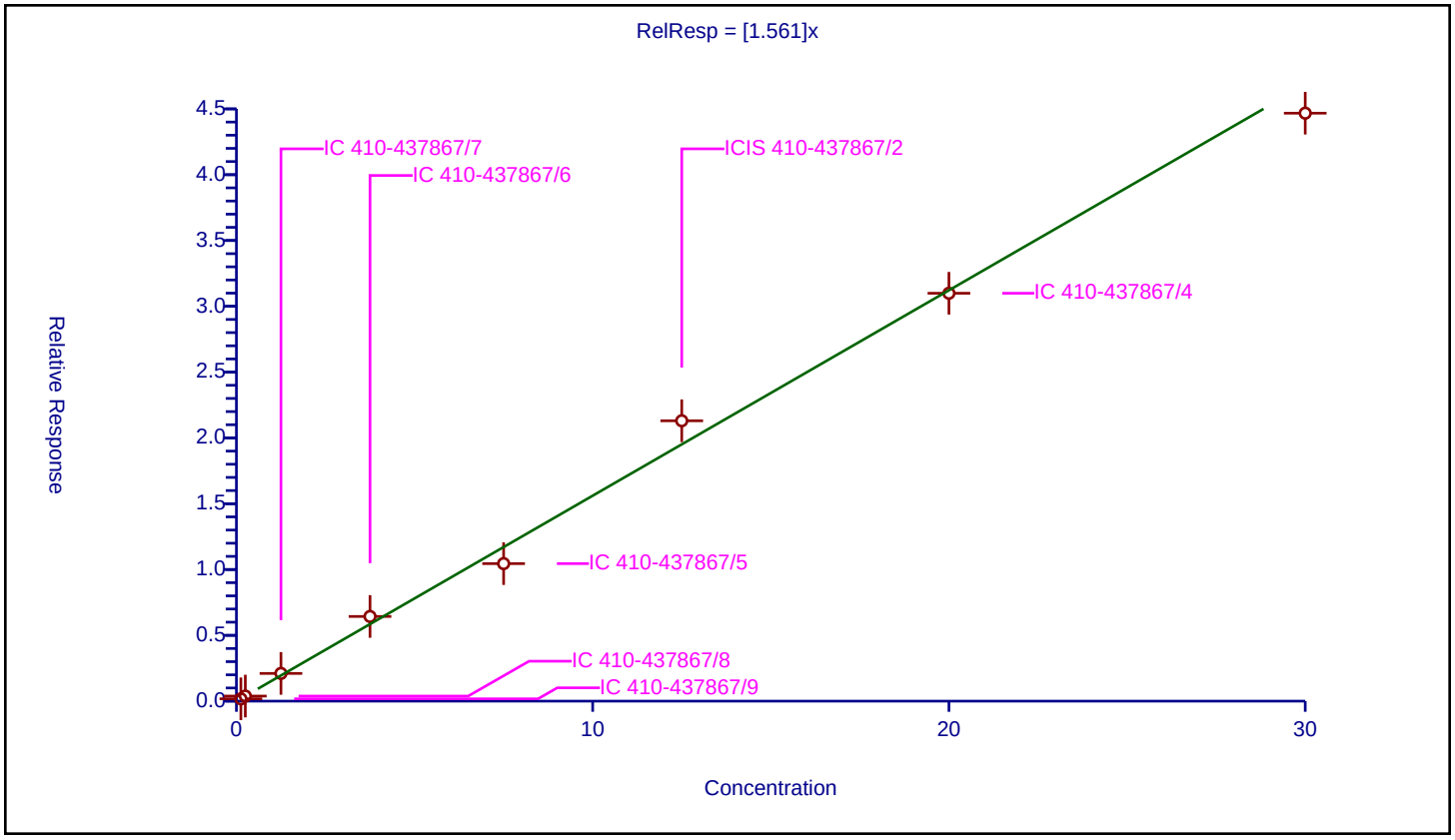
Curve Coefficients

Intercept:	0
Slope:	1.561

Error Coefficients

Standard Error:	1990000
Relative Standard Error:	8.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.176209	5.0	392092.0	1.409669	Y
2	IC 410-437867/8	0.25	0.385124	5.0	358677.0	1.540495	Y
3	IC 410-437867/7	1.25	2.106303	5.0	360506.0	1.685043	Y
4	IC 410-437867/6	3.75	6.434417	5.0	350428.0	1.715845	Y
5	IC 410-437867/5	7.5	10.448447	5.0	401296.0	1.393126	Y
6	ICIS 410-437867/2	12.5	21.303376	5.0	369667.0	1.70427	Y
7	IC 410-437867/4	20.0	30.991962	5.0	458208.0	1.549598	Y
8	IC 410-437867/3	30.0	44.675065	5.0	452629.0	1.489169	Y



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Calibration / Thionazin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

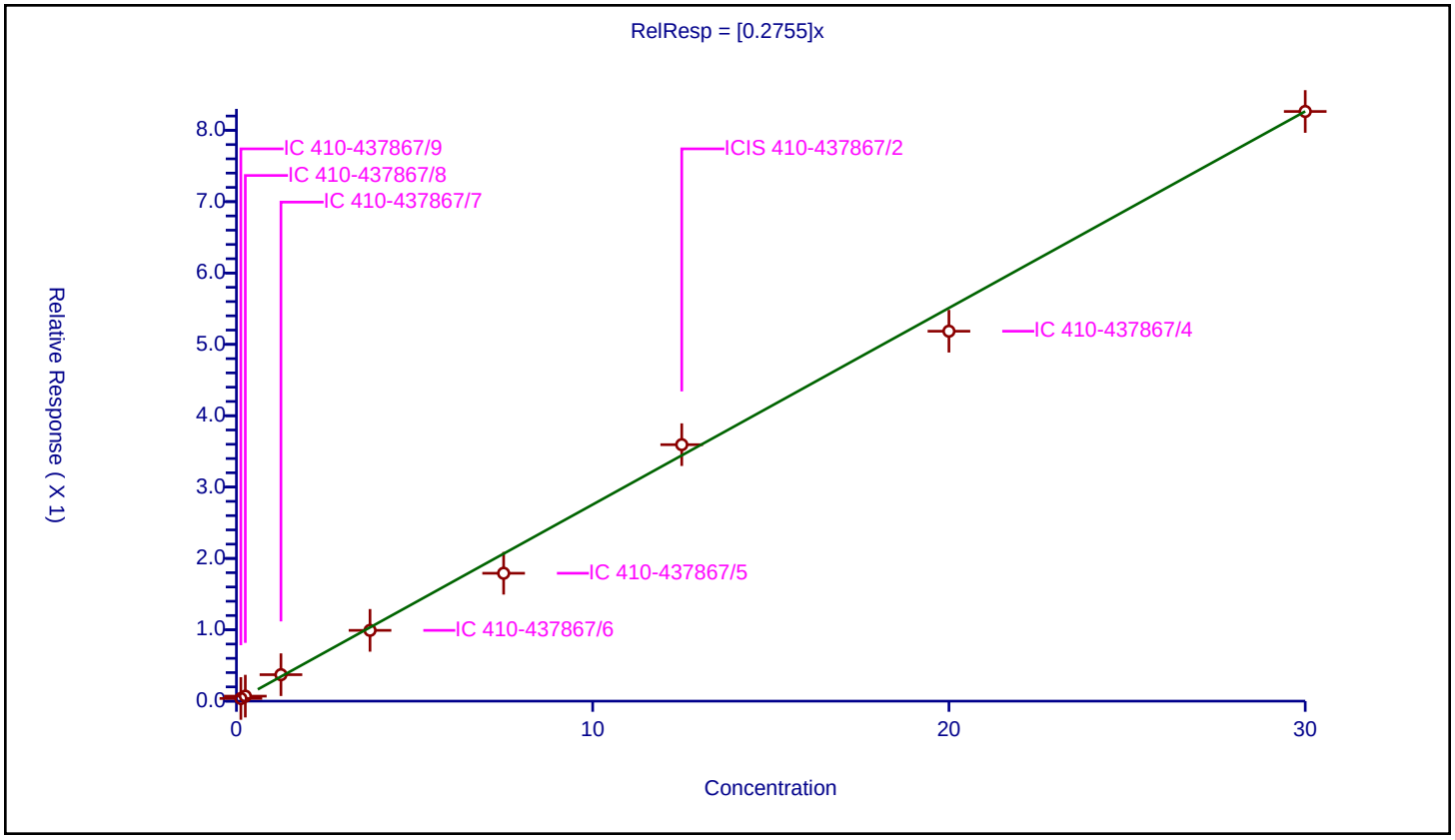
Curve Coefficients

Intercept:	0
Slope:	0.2755

Error Coefficients

Standard Error:	355000
Relative Standard Error:	7.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.037682	5.0	392092.0	0.30146	Y
2	IC 410-437867/8	0.25	0.070105	5.0	358677.0	0.280419	Y
3	IC 410-437867/7	1.25	0.37066	5.0	360506.0	0.296528	Y
4	IC 410-437867/6	3.75	0.991816	5.0	350428.0	0.264484	Y
5	IC 410-437867/5	7.5	1.792031	5.0	401296.0	0.238938	Y
6	ICIS 410-437867/2	12.5	3.594451	5.0	369667.0	0.287556	Y
7	IC 410-437867/4	20.0	5.184272	5.0	458208.0	0.259214	Y
8	IC 410-437867/3	30.0	8.263965	5.0	452629.0	0.275465	Y



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Calibration / Fluorene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

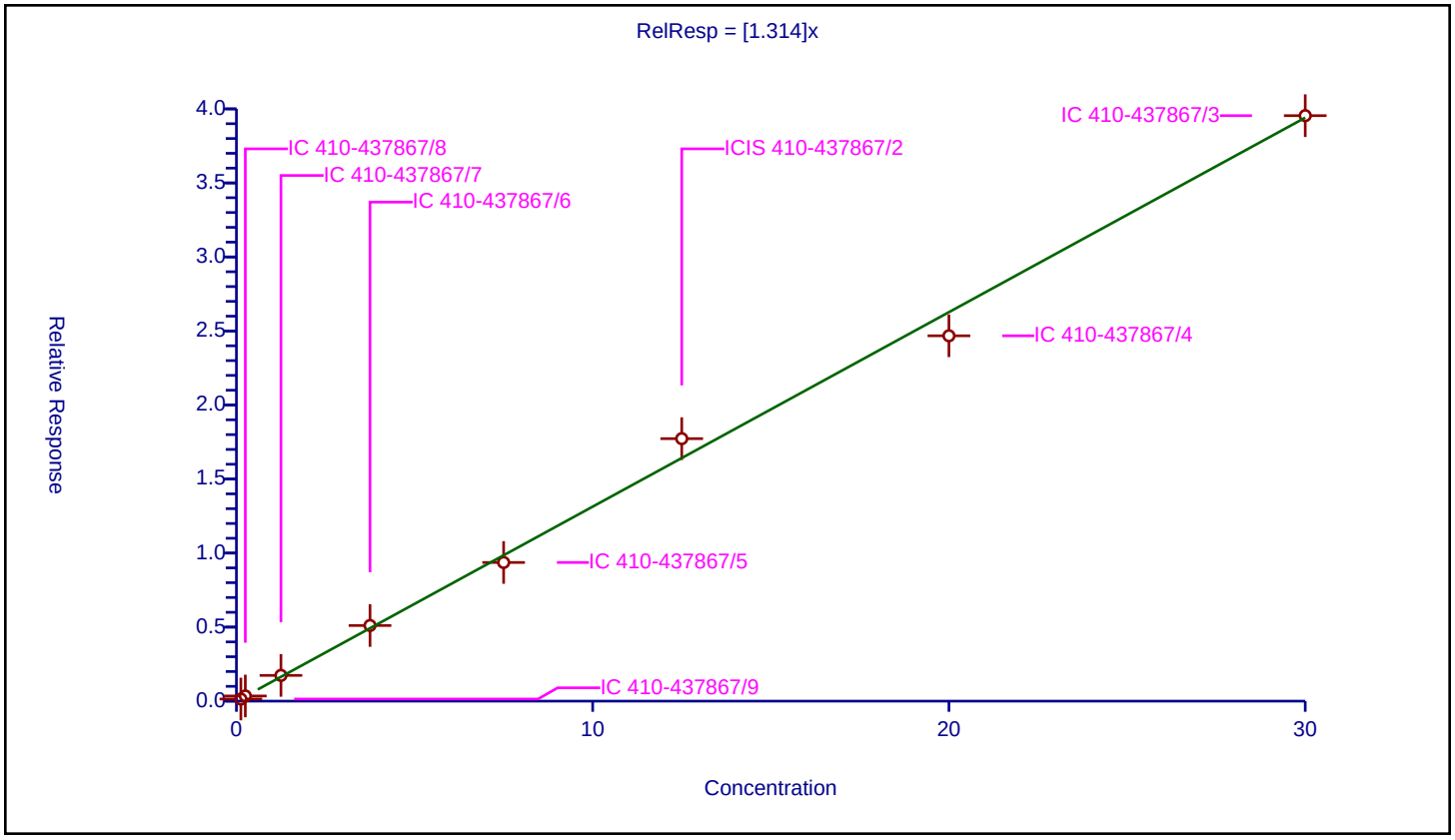
Curve Coefficients

Intercept:	0
Slope:	1.314

Error Coefficients

Standard Error:	1710000
Relative Standard Error:	7.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.142696	5.0	392092.0	1.141569	Y
2	IC 410-437867/8	0.25	0.348754	5.0	358677.0	1.395016	Y
3	IC 410-437867/7	1.25	1.738459	5.0	360506.0	1.390767	Y
4	IC 410-437867/6	3.75	5.108153	5.0	350428.0	1.362174	Y
5	IC 410-437867/5	7.5	9.366465	5.0	401296.0	1.248862	Y
6	ICIS 410-437867/2	12.5	17.727874	5.0	369667.0	1.41823	Y
7	IC 410-437867/4	20.0	24.675868	5.0	458208.0	1.233793	Y
8	IC 410-437867/3	30.0	39.542672	5.0	452629.0	1.318089	Y



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Calibration / N-Nitro-o-toluidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

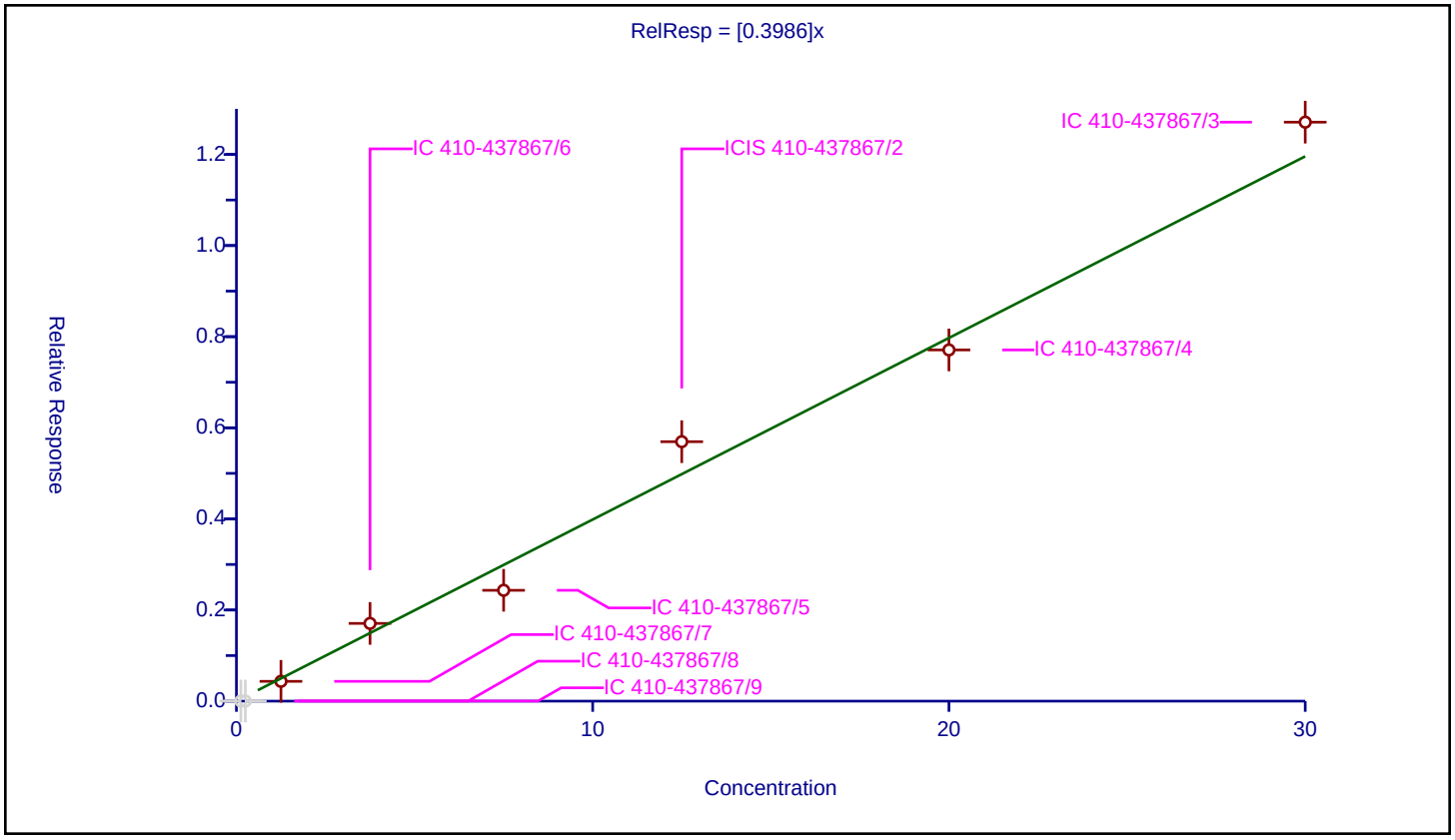
Curve Coefficients

Intercept:	0
Slope:	0.3986

Error Coefficients

Standard Error:	641000
Relative Standard Error:	13.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.001989	5.0	392092.0	0.015915	N
2	IC 410-437867/8	0.25	0.002286	5.0	358677.0	0.009145	N
3	IC 410-437867/7	1.25	0.434528	5.0	360506.0	0.347623	Y
4	IC 410-437867/6	3.75	1.705957	5.0	350428.0	0.454922	Y
5	IC 410-437867/5	7.5	2.43298	5.0	401296.0	0.324397	Y
6	ICIS 410-437867/2	12.5	5.694977	5.0	369667.0	0.455598	Y
7	IC 410-437867/4	20.0	7.709381	5.0	458208.0	0.385469	Y
8	IC 410-437867/3	30.0	12.709084	5.0	452629.0	0.423636	Y



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Calibration / 4-Chlorophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

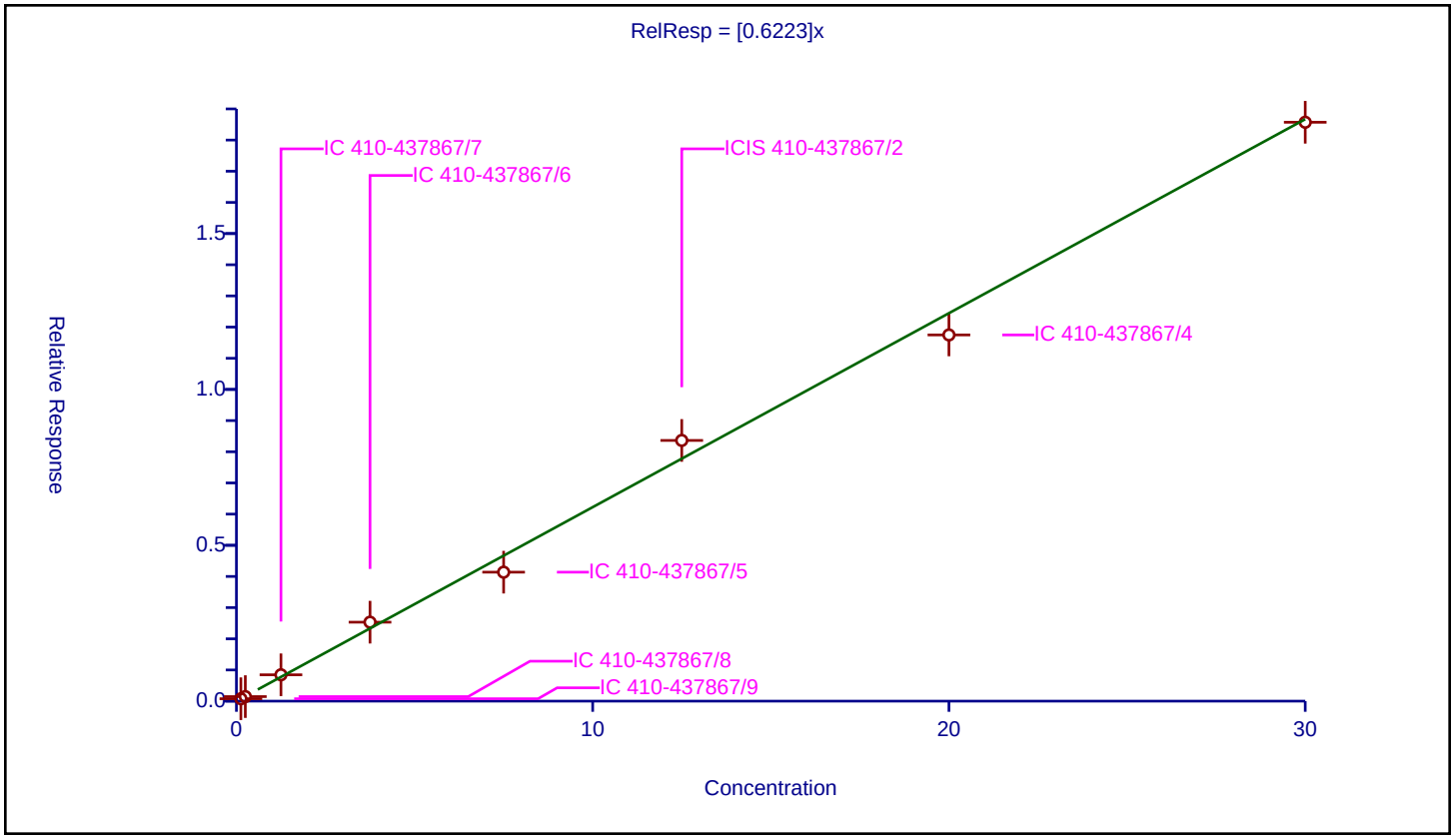
Curve Coefficients

Intercept:	0
Slope:	0.6223

Error Coefficients

Standard Error:	803000
Relative Standard Error:	7.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.077087	5.0	392092.0	0.616692	Y
2	IC 410-437867/8	0.25	0.145605	5.0	358677.0	0.582418	Y
3	IC 410-437867/7	1.25	0.845894	5.0	360506.0	0.676716	Y
4	IC 410-437867/6	3.75	2.533217	5.0	350428.0	0.675524	Y
5	IC 410-437867/5	7.5	4.137407	5.0	401296.0	0.551654	Y
6	ICIS 410-437867/2	12.5	8.363744	5.0	369667.0	0.669099	Y
7	IC 410-437867/4	20.0	11.748376	5.0	458208.0	0.587419	Y
8	IC 410-437867/3	30.0	18.57117	5.0	452629.0	0.619039	Y



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Calibration / 4-Nitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

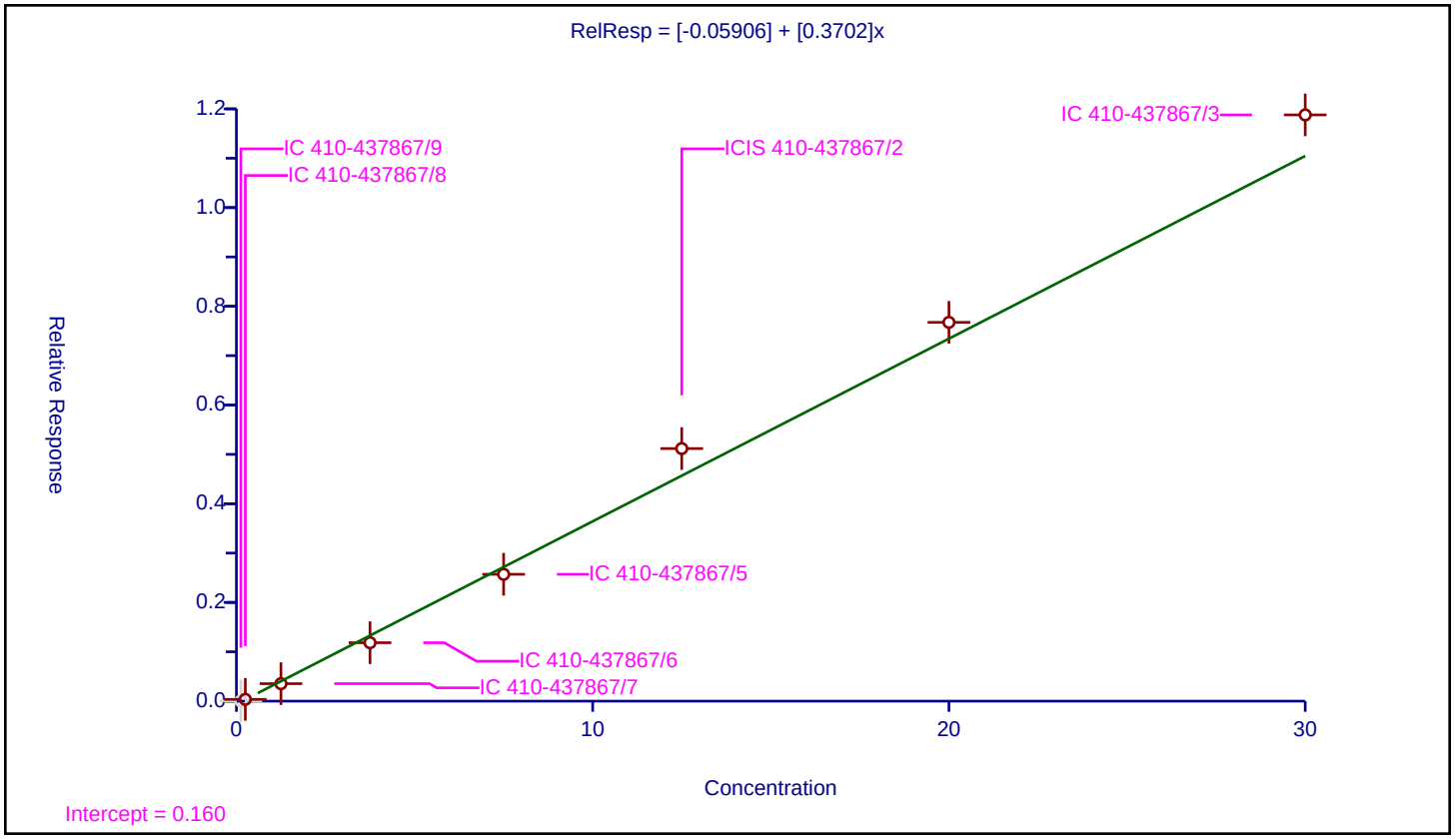
Curve Coefficients

Intercept:	-0.05906
Slope:	0.3702

Error Coefficients

Standard Error:	607000
Relative Standard Error:	9.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.00366	5.0	392092.0	0.029279	N
2	IC 410-437867/8	0.25	0.035952	5.0	358677.0	0.143806	Y
3	IC 410-437867/7	1.25	0.353989	5.0	360506.0	0.283191	Y
4	IC 410-437867/6	3.75	1.183681	5.0	350428.0	0.315648	Y
5	IC 410-437867/5	7.5	2.570222	5.0	401296.0	0.342696	Y
6	ICIS 410-437867/2	12.5	5.117863	5.0	369667.0	0.409429	Y
7	IC 410-437867/4	20.0	7.674888	5.0	458208.0	0.383744	Y
8	IC 410-437867/3	30.0	11.878183	5.0	452629.0	0.395939	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

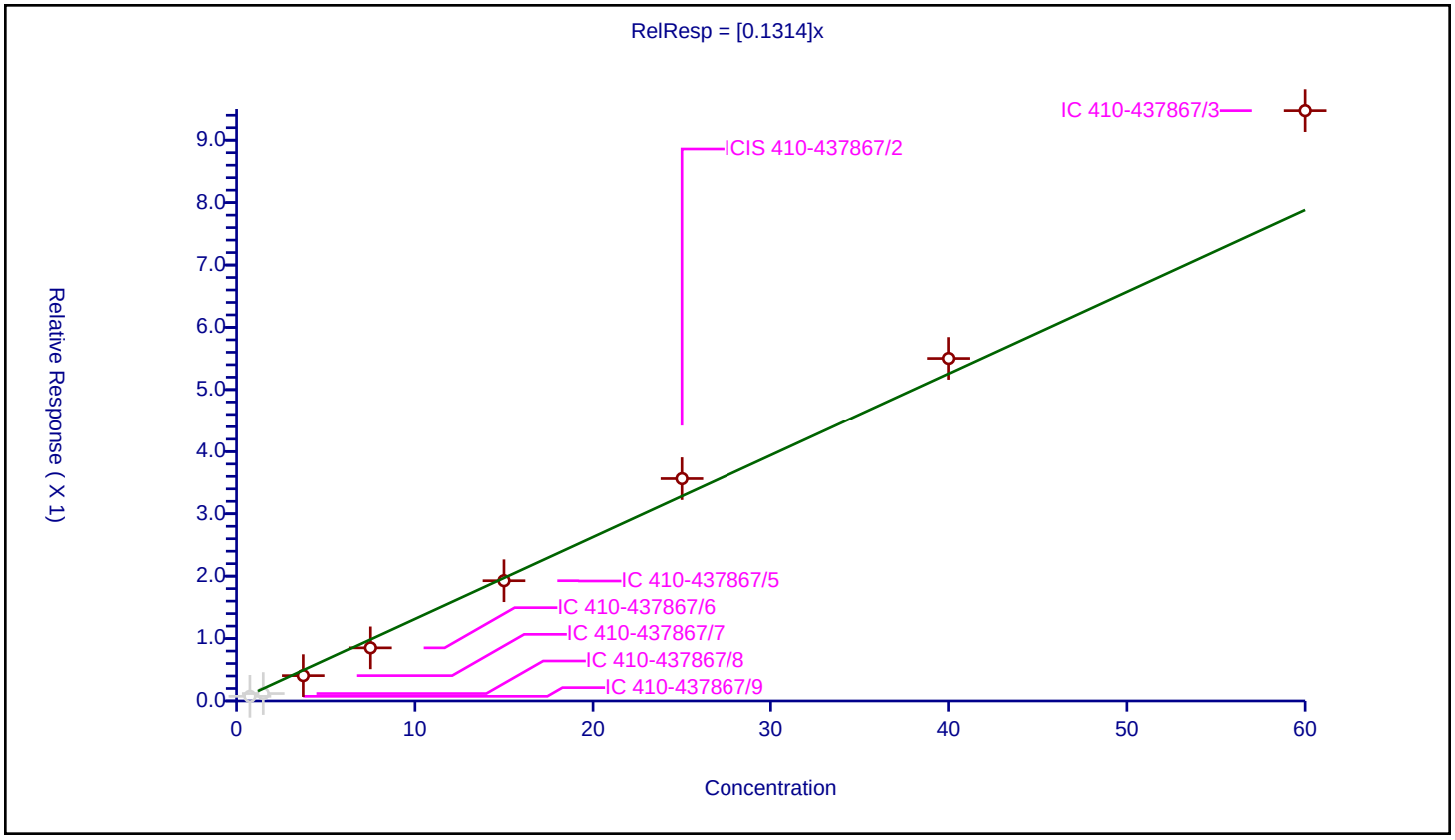
Curve Coefficients

Intercept:	0
Slope:	0.1314

Error Coefficients

Standard Error:	851000
Relative Standard Error:	14.2
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.75	0.074646	5.0	702580.0	0.099528	N
2	IC 410-437867/8	1.5	0.118799	5.0	647482.0	0.079199	N
3	IC 410-437867/7	3.75	0.406056	5.0	760043.0	0.108282	Y
4	IC 410-437867/6	7.5	0.851355	5.0	753070.0	0.113514	Y
5	IC 410-437867/5	15.0	1.927027	5.0	755856.0	0.128468	Y
6	ICIS 410-437867/2	25.0	3.565075	5.0	711898.0	0.142603	Y
7	IC 410-437867/4	40.0	5.501741	5.0	893081.0	0.137544	Y
8	IC 410-437867/3	60.0	9.473762	5.0	798412.0	0.157896	Y



Calibration / N-Nitrosodiphenylamine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

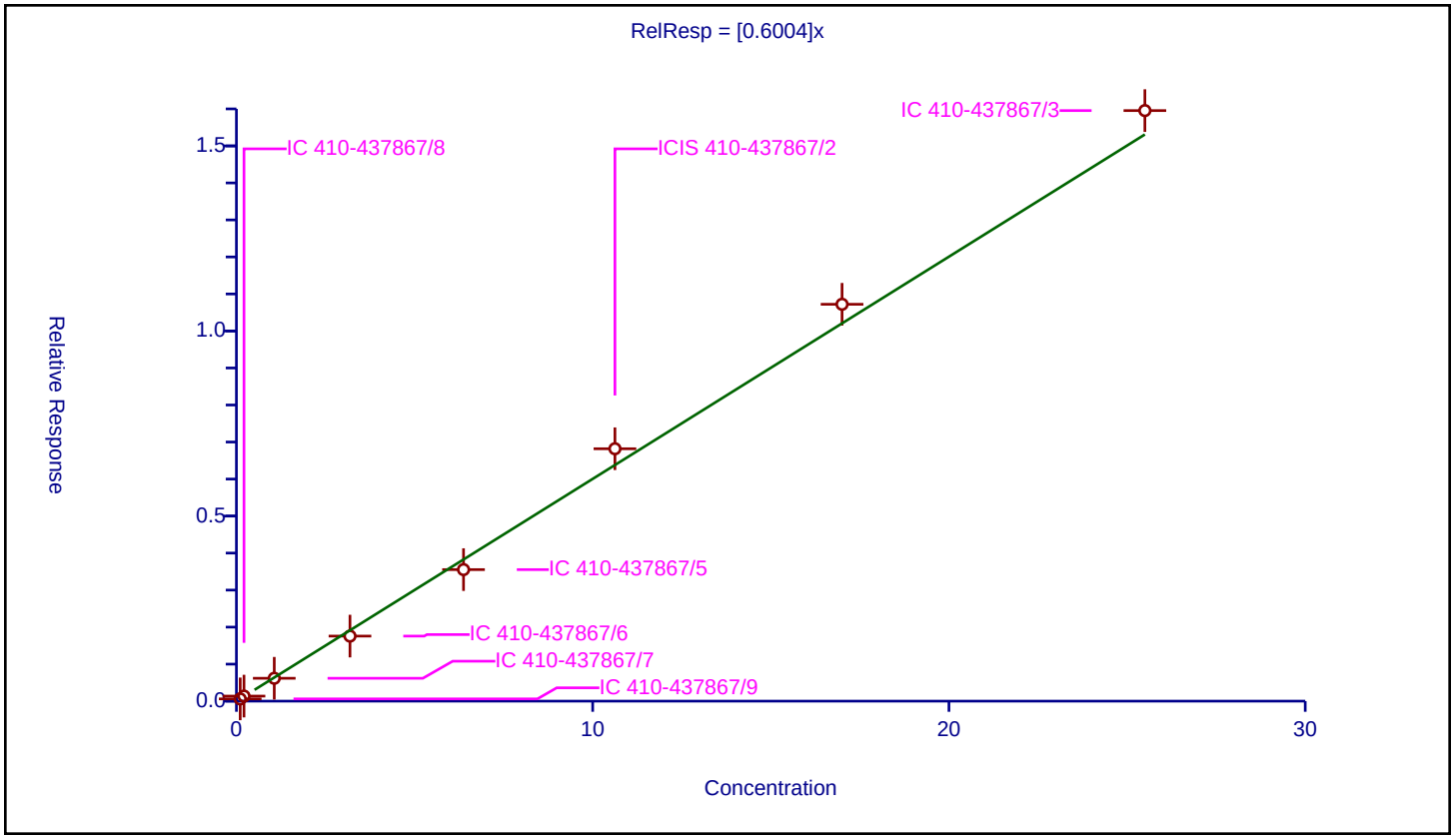
Curve Coefficients

Intercept:	0
Slope:	0.6004

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	6.4
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.10625	0.060783	5.0	702580.0	0.572076	Y
2	IC 410-437867/8	0.2125	0.136513	5.0	647482.0	0.642416	Y
3	IC 410-437867/7	1.0625	0.617814	5.0	760043.0	0.581472	Y
4	IC 410-437867/6	3.1875	1.757745	5.0	753070.0	0.551449	Y
5	IC 410-437867/5	6.375	3.553461	5.0	755856.0	0.557406	Y
6	ICIS 410-437867/2	10.625	6.8188	5.0	711898.0	0.641769	Y
7	IC 410-437867/4	17.0	10.721306	5.0	893081.0	0.630665	Y
8	IC 410-437867/3	25.5	15.953893	5.0	798412.0	0.625643	Y



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Calibration / 1,2-Diphenylhydrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

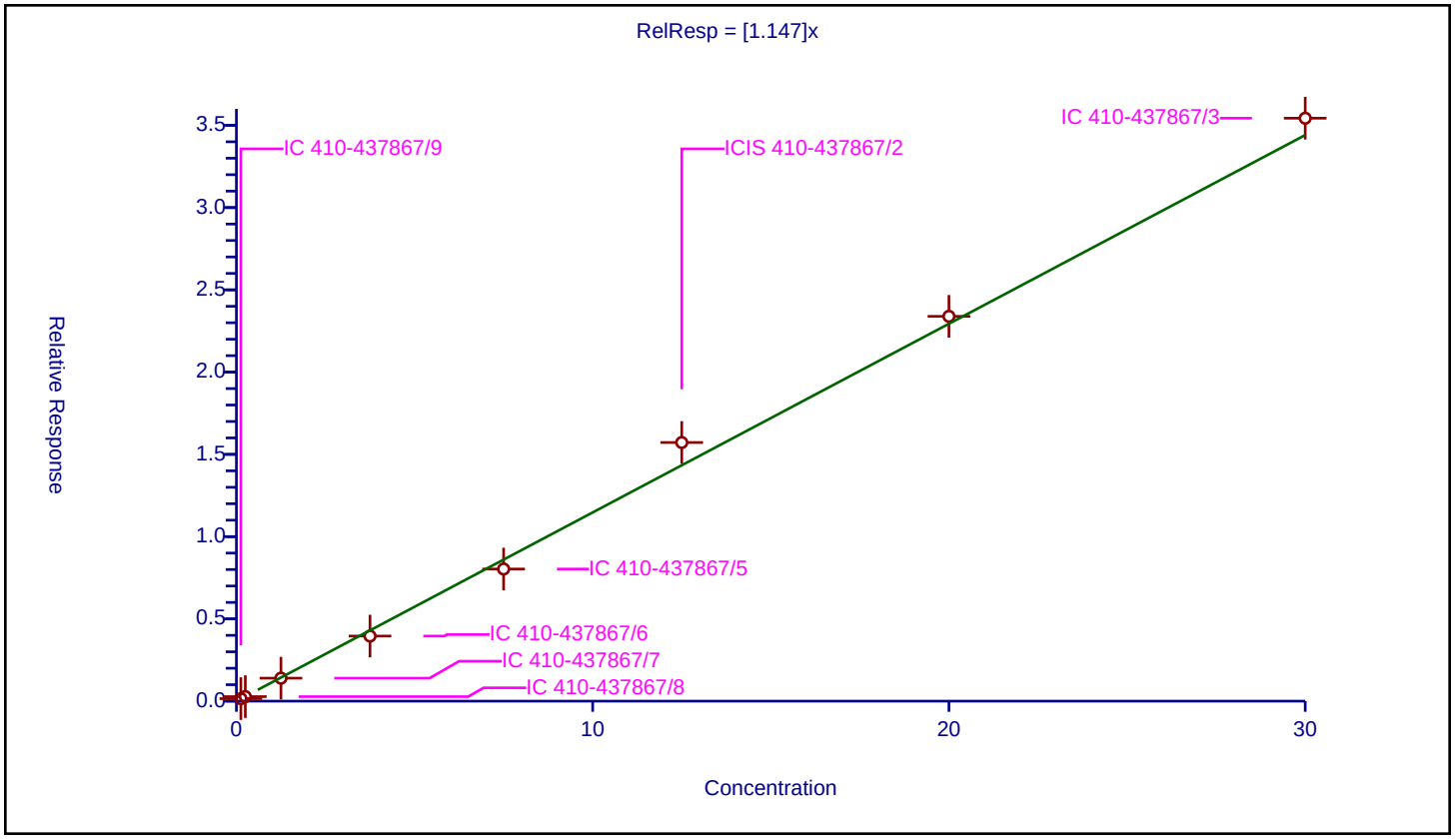
Curve Coefficients

Intercept:	0
Slope:	1.147

Error Coefficients

Standard Error:	2840000
Relative Standard Error:	6.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.153477	5.0	702580.0	1.227817	Y
2	IC 410-437867/8	0.25	0.274085	5.0	647482.0	1.096339	Y
3	IC 410-437867/7	1.25	1.397026	5.0	760043.0	1.117621	Y
4	IC 410-437867/6	3.75	3.956186	5.0	753070.0	1.054983	Y
5	IC 410-437867/5	7.5	8.030167	5.0	755856.0	1.070689	Y
6	ICIS 410-437867/2	12.5	15.721459	5.0	711898.0	1.257717	Y
7	IC 410-437867/4	20.0	23.390415	5.0	893081.0	1.169521	Y
8	IC 410-437867/3	30.0	35.432546	5.0	798412.0	1.181085	Y



Calibration / 2,4,6-Tribromophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

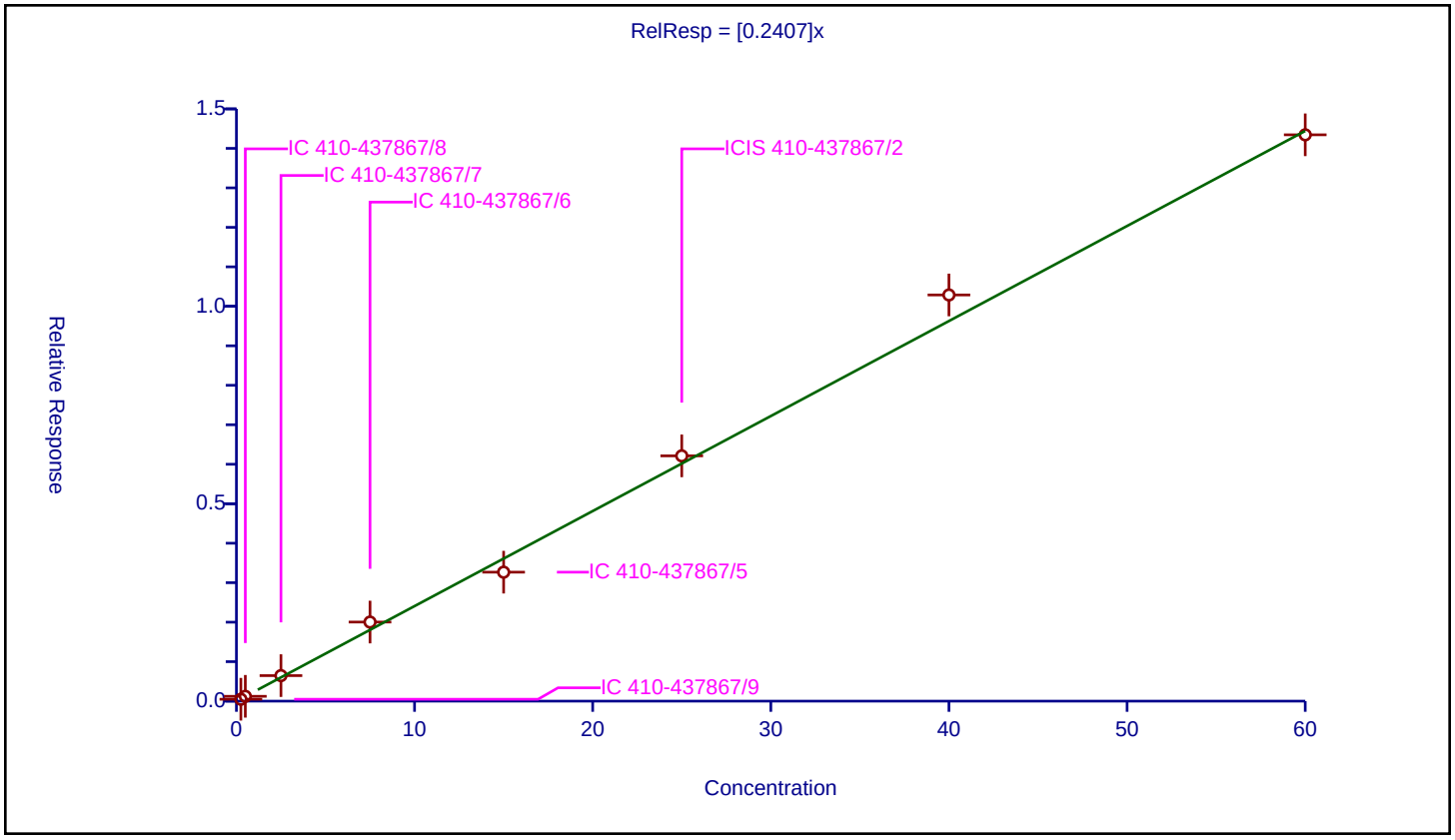
Curve Coefficients

Intercept:	0
Slope:	0.2407

Error Coefficients

Standard Error:	641000
Relative Standard Error:	10.2
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.25	0.048139	5.0	392092.0	0.192557	Y
2	IC 410-437867/8	0.5	0.122408	5.0	358677.0	0.244816	Y
3	IC 410-437867/7	2.5	0.646244	5.0	360506.0	0.258498	Y
4	IC 410-437867/6	7.5	2.003136	5.0	350428.0	0.267085	Y
5	IC 410-437867/5	15.0	3.266267	5.0	401296.0	0.217751	Y
6	ICIS 410-437867/2	25.0	6.212159	5.0	369667.0	0.248486	Y
7	IC 410-437867/4	40.0	10.287468	5.0	458208.0	0.257187	Y
8	IC 410-437867/3	60.0	14.343303	5.0	452629.0	0.239055	Y



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Calibration / Sulfotepp

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

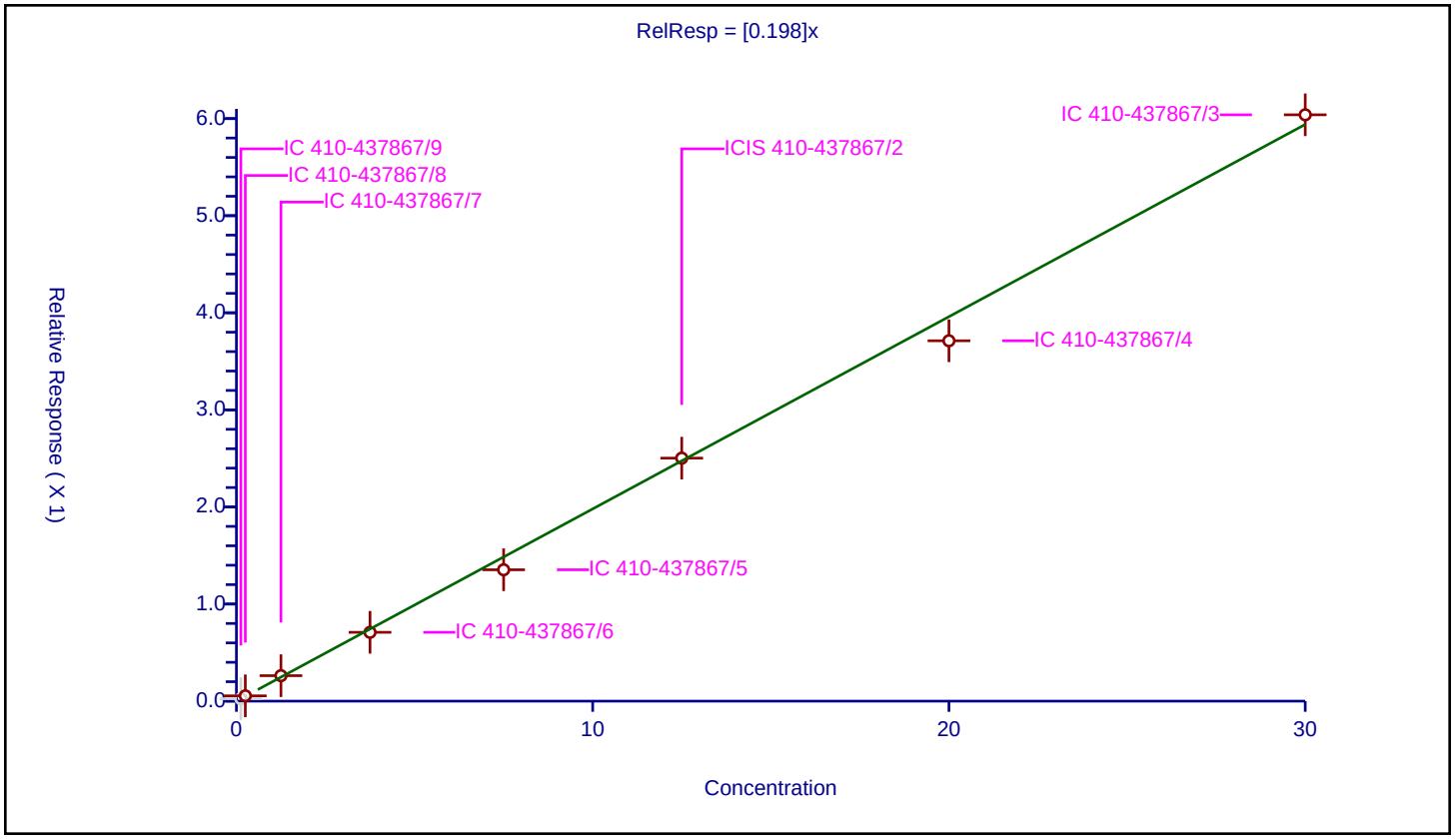
Curve Coefficients

Intercept:	0
Slope:	0.198

Error Coefficients

Standard Error:	508000
Relative Standard Error:	7.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.025029	5.0	702580.0	0.200233	N
2	IC 410-437867/8	0.25	0.054836	5.0	647482.0	0.219342	Y
3	IC 410-437867/7	1.25	0.262518	5.0	760043.0	0.210014	Y
4	IC 410-437867/6	3.75	0.709071	5.0	753070.0	0.189086	Y
5	IC 410-437867/5	7.5	1.352969	5.0	755856.0	0.180396	Y
6	ICIS 410-437867/2	12.5	2.502866	5.0	711898.0	0.200229	Y
7	IC 410-437867/4	20.0	3.711685	5.0	893081.0	0.185584	Y
8	IC 410-437867/3	30.0	6.039131	5.0	798412.0	0.201304	Y



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Calibration / cis-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

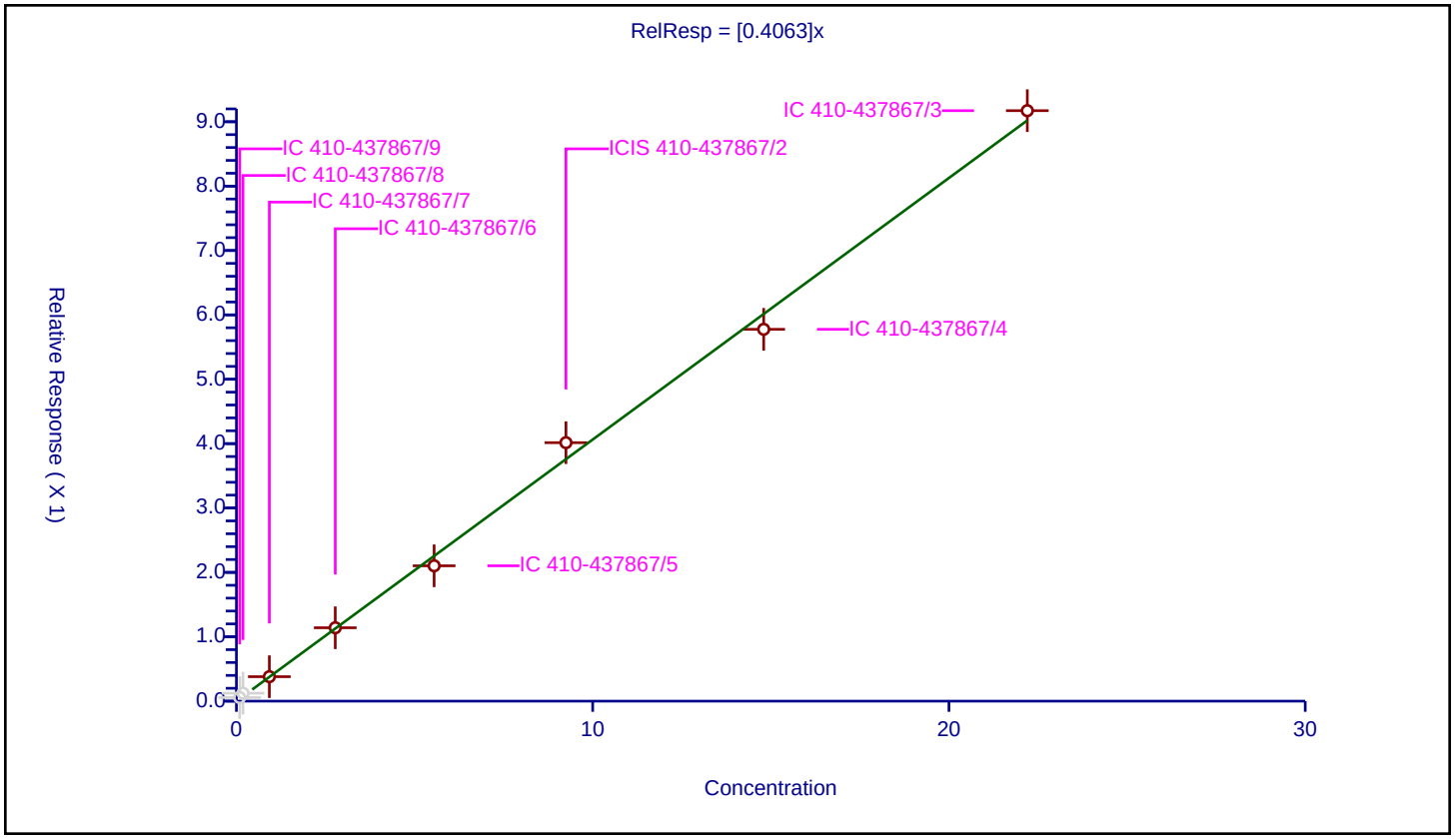
Curve Coefficients

Intercept:	0
Slope:	0.4063

Error Coefficients

Standard Error:	857000
Relative Standard Error:	4.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.0925	0.055844	5.0	702580.0	0.603721	N
2	IC 410-437867/8	0.185	0.123502	5.0	647482.0	0.667576	N
3	IC 410-437867/7	0.925	0.380117	5.0	760043.0	0.410937	Y
4	IC 410-437867/6	2.775	1.139881	5.0	753070.0	0.410768	Y
5	IC 410-437867/5	5.55	2.102583	5.0	755856.0	0.378844	Y
6	ICIS 410-437867/2	9.25	4.015175	5.0	711898.0	0.434073	Y
7	IC 410-437867/4	14.8	5.775747	5.0	893081.0	0.390253	Y
8	IC 410-437867/3	22.2	9.172169	5.0	798412.0	0.413161	Y



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Calibration / trans-Diallate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

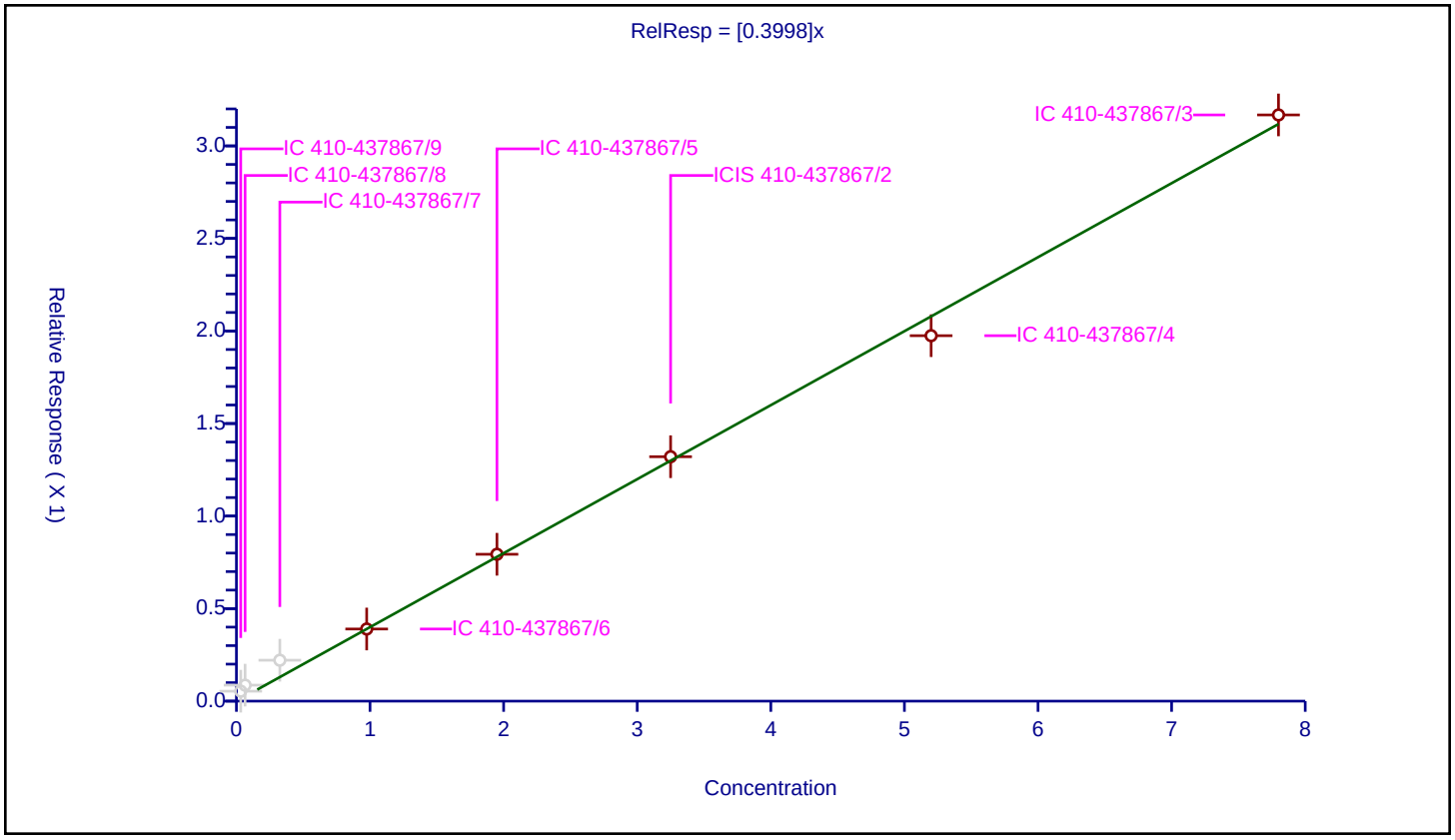
Curve Coefficients

Intercept:	0
Slope:	0.3998

Error Coefficients

Standard Error:	329000
Relative Standard Error:	2.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.0325	0.053731	5.0	702580.0	1.653247	N
2	IC 410-437867/8	0.065	0.086466	5.0	647482.0	1.330242	N
3	IC 410-437867/7	0.325	0.22106	5.0	760043.0	0.680184	N
4	IC 410-437867/6	0.975	0.389731	5.0	753070.0	0.399724	Y
5	IC 410-437867/5	1.95	0.793577	5.0	755856.0	0.406963	Y
6	ICIS 410-437867/2	3.25	1.320702	5.0	711898.0	0.40637	Y
7	IC 410-437867/4	5.2	1.974575	5.0	893081.0	0.379726	Y
8	IC 410-437867/3	7.8	3.16735	5.0	798412.0	0.40607	Y



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Calibration / Phenacetin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

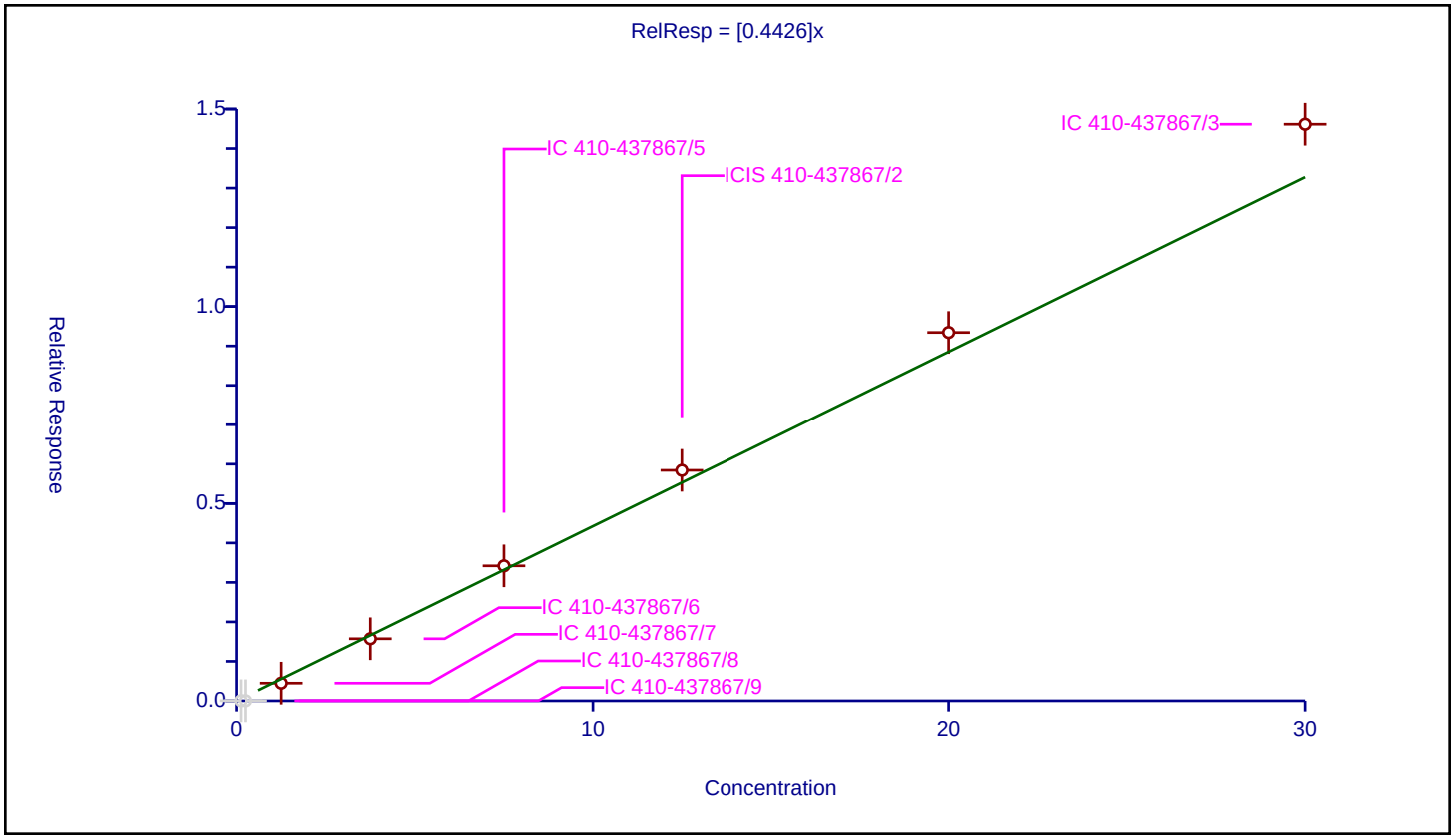
Curve Coefficients

Intercept:	0
Slope:	0.4426

Error Coefficients

Standard Error:	1360000
Relative Standard Error:	10.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.002348	5.0	702580.0	0.018788	N
2	IC 410-437867/8	0.25	0.00173	5.0	647482.0	0.006919	N
3	IC 410-437867/7	1.25	0.447725	5.0	760043.0	0.35818	Y
4	IC 410-437867/6	3.75	1.572902	5.0	753070.0	0.41944	Y
5	IC 410-437867/5	7.5	3.420387	5.0	755856.0	0.456052	Y
6	ICIS 410-437867/2	12.5	5.843386	5.0	711898.0	0.467471	Y
7	IC 410-437867/4	20.0	9.341202	5.0	893081.0	0.46706	Y
8	IC 410-437867/3	30.0	14.615318	5.0	798412.0	0.487177	Y



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Calibration / Phorate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

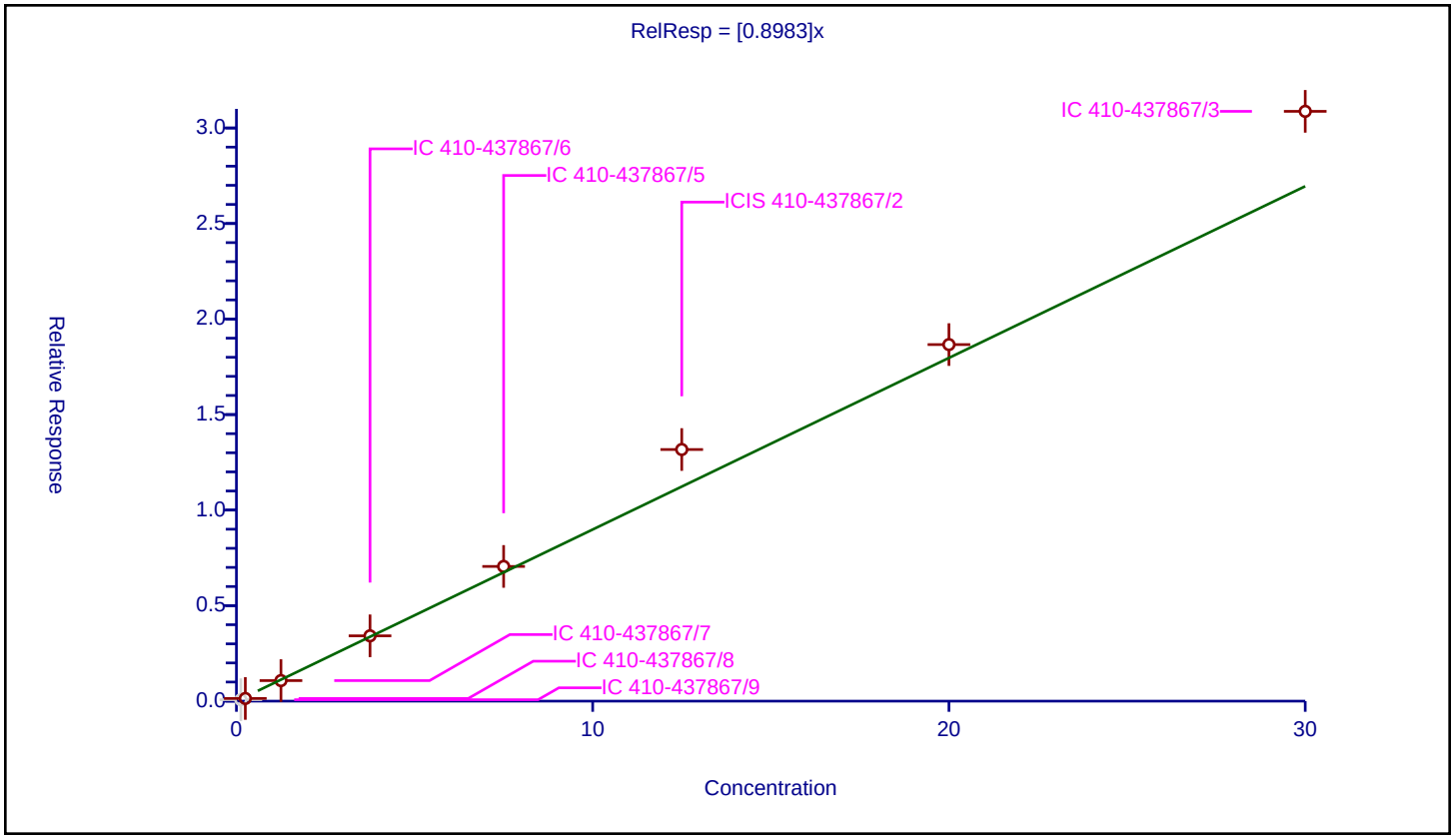
Curve Coefficients

Intercept:	0
Slope:	0.8983

Error Coefficients

Standard Error:	2590000
Relative Standard Error:	18.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.073935	5.0	702580.0	0.591477	N
2	IC 410-437867/8	0.25	0.140104	5.0	647482.0	0.560417	Y
3	IC 410-437867/7	1.25	1.075268	5.0	760043.0	0.860214	Y
4	IC 410-437867/6	3.75	3.418487	5.0	753070.0	0.911597	Y
5	IC 410-437867/5	7.5	7.050695	5.0	755856.0	0.940093	Y
6	ICIS 410-437867/2	12.5	13.170524	5.0	711898.0	1.053642	Y
7	IC 410-437867/4	20.0	18.66324	5.0	893081.0	0.933162	Y
8	IC 410-437867/3	30.0	30.87235	5.0	798412.0	1.029078	Y



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Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

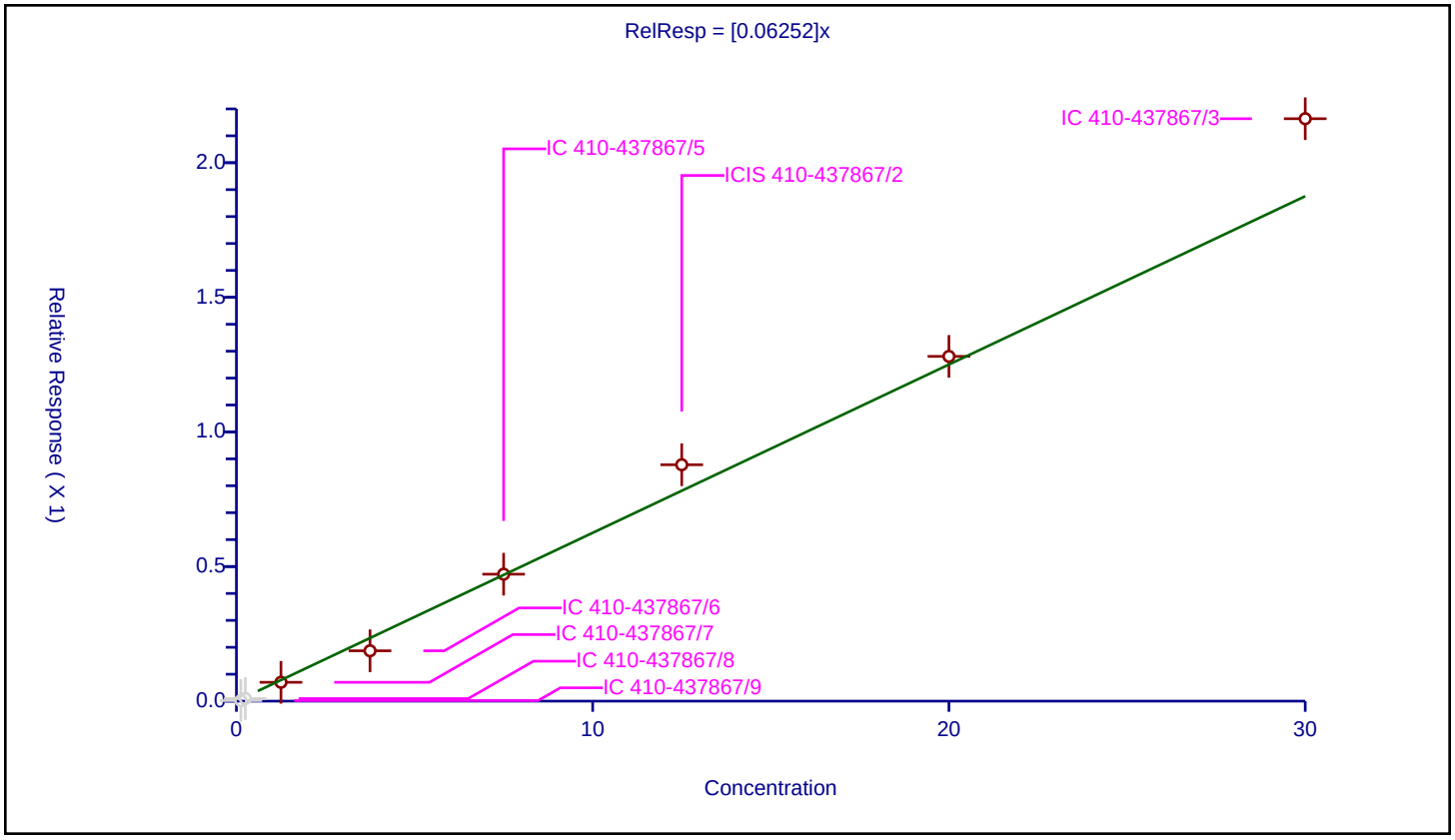
Curve Coefficients

Intercept:	0
Slope:	0.06252

Error Coefficients

Standard Error:	197000
Relative Standard Error:	13.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.002099	5.0	702580.0	0.016795	N
2	IC 410-437867/8	0.25	0.00956	5.0	647482.0	0.03824	N
3	IC 410-437867/7	1.25	0.069963	5.0	760043.0	0.055971	Y
4	IC 410-437867/6	3.75	0.187008	5.0	753070.0	0.049869	Y
5	IC 410-437867/5	7.5	0.471611	5.0	755856.0	0.062881	Y
6	ICIS 410-437867/2	12.5	0.878124	5.0	711898.0	0.07025	Y
7	IC 410-437867/4	20.0	1.280645	5.0	893081.0	0.064032	Y
8	IC 410-437867/3	30.0	2.163507	5.0	798412.0	0.072117	Y



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Calibration / 4-Bromophenyl phenyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

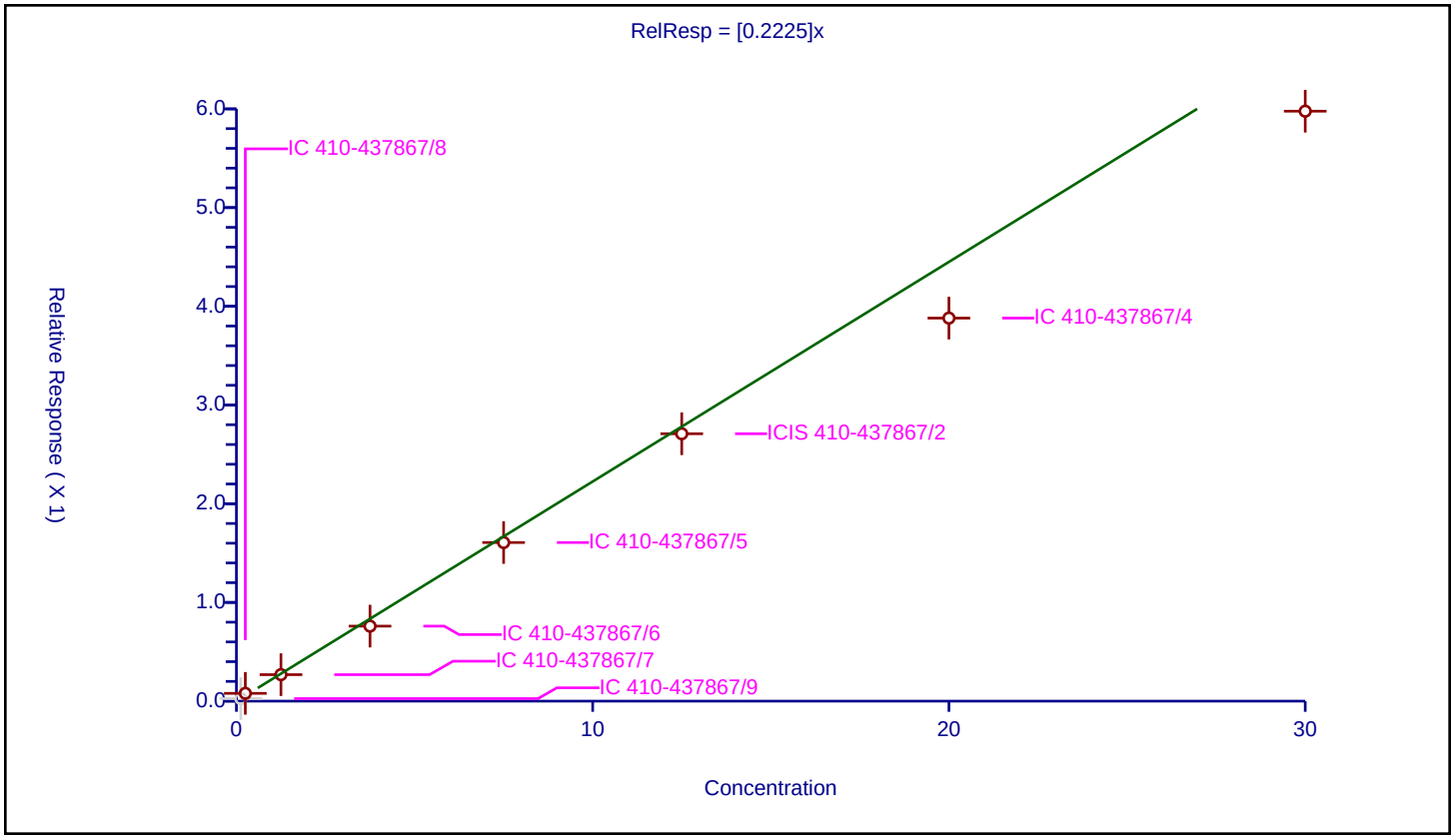
Curve Coefficients

Intercept:	0
Slope:	0.2225

Error Coefficients

Standard Error:	519000
Relative Standard Error:	18.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.950

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.025798	5.0	702580.0	0.206382	N
2	IC 410-437867/8	0.25	0.078975	5.0	647482.0	0.315901	Y
3	IC 410-437867/7	1.25	0.26836	5.0	760043.0	0.214688	Y
4	IC 410-437867/6	3.75	0.759896	5.0	753070.0	0.202639	Y
5	IC 410-437867/5	7.5	1.606999	5.0	755856.0	0.214267	Y
6	ICIS 410-437867/2	12.5	2.708963	5.0	711898.0	0.216717	Y
7	IC 410-437867/4	20.0	3.880633	5.0	893081.0	0.194032	Y
8	IC 410-437867/3	30.0	5.976745	5.0	798412.0	0.199225	Y



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Calibration / Dimethoate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

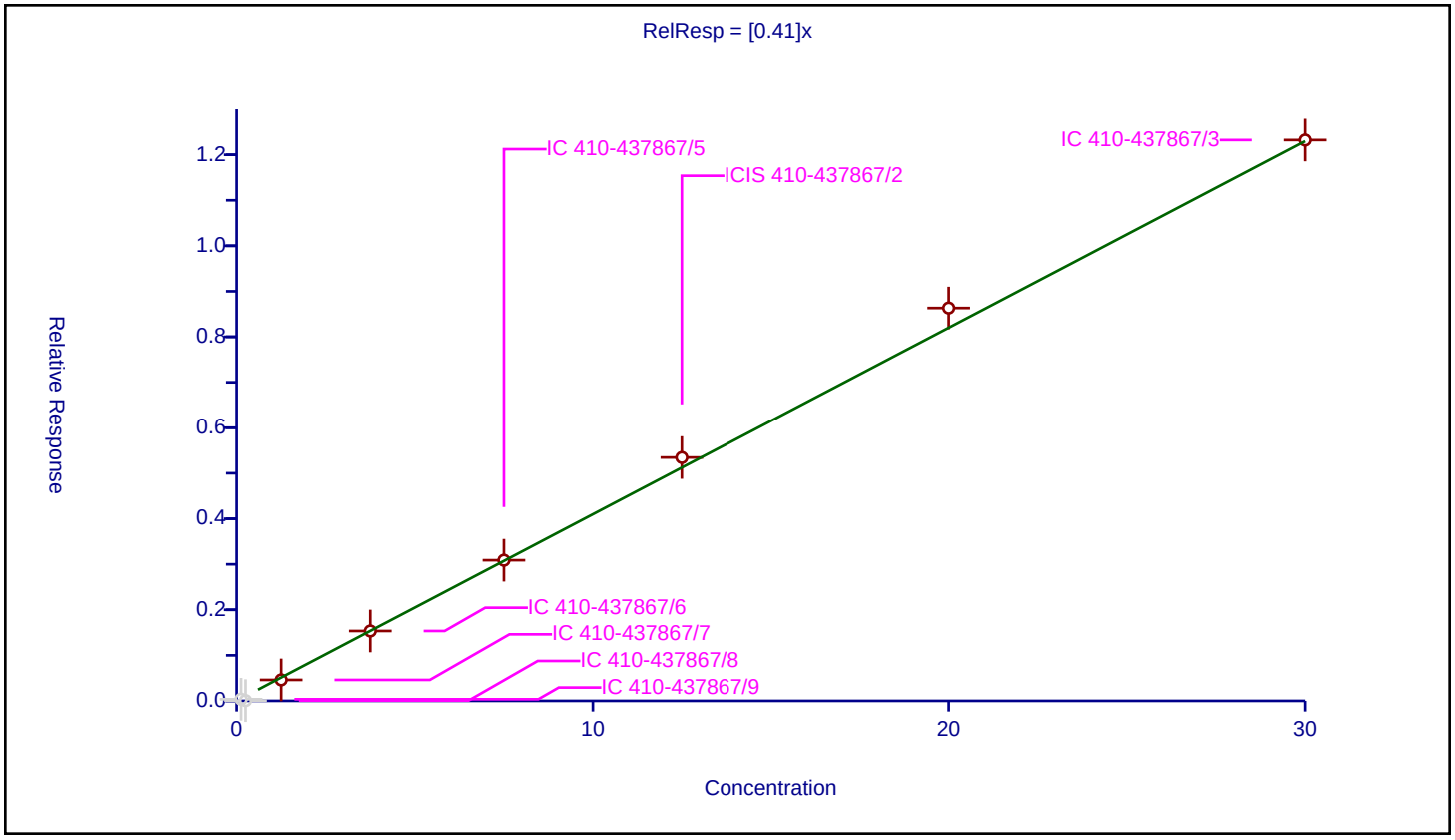
Curve Coefficients

Intercept:	0
Slope:	0.41

Error Coefficients

Standard Error:	1190000
Relative Standard Error:	5.5
Correlation Coefficient:	0.984
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.035797	5.0	702580.0	0.286373	N
2	IC 410-437867/8	0.25	0.005985	5.0	647482.0	0.023939	N
3	IC 410-437867/7	1.25	0.460441	5.0	760043.0	0.368353	Y
4	IC 410-437867/6	3.75	1.535096	5.0	753070.0	0.409359	Y
5	IC 410-437867/5	7.5	3.089338	5.0	755856.0	0.411912	Y
6	ICIS 410-437867/2	12.5	5.346208	5.0	711898.0	0.427697	Y
7	IC 410-437867/4	20.0	8.632784	5.0	893081.0	0.431639	Y
8	IC 410-437867/3	30.0	12.324038	5.0	798412.0	0.410801	Y



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Calibration / Hexachlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

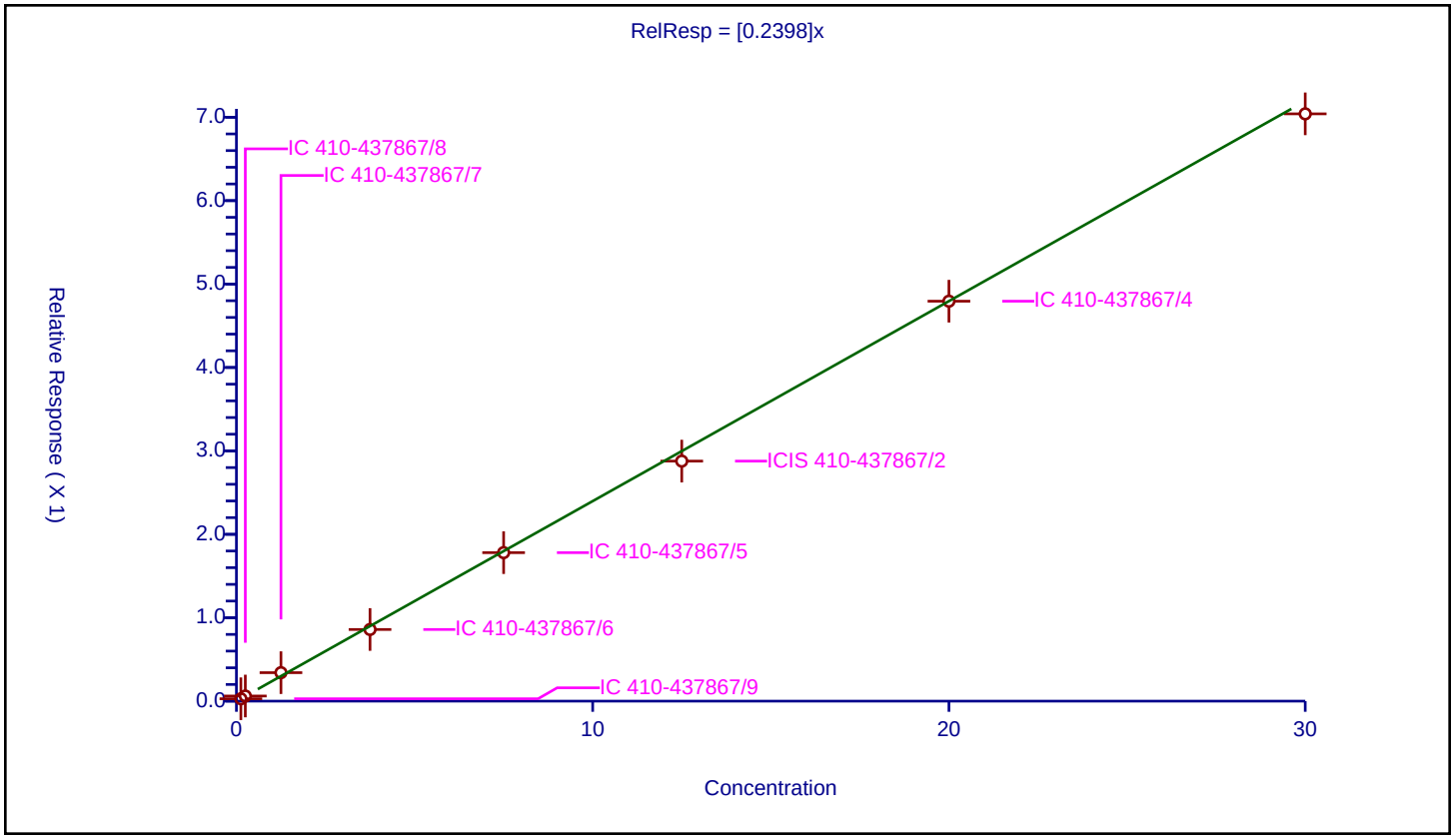
Curve Coefficients

Intercept:	0
Slope:	0.2398

Error Coefficients

Standard Error:	568000
Relative Standard Error:	6.1
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.028587	5.0	702580.0	0.2287	Y
2	IC 410-437867/8	0.25	0.061307	5.0	647482.0	0.245227	Y
3	IC 410-437867/7	1.25	0.341461	5.0	760043.0	0.273169	Y
4	IC 410-437867/6	3.75	0.859216	5.0	753070.0	0.229124	Y
5	IC 410-437867/5	7.5	1.780286	5.0	755856.0	0.237371	Y
6	ICIS 410-437867/2	12.5	2.877702	5.0	711898.0	0.230216	Y
7	IC 410-437867/4	20.0	4.794823	5.0	893081.0	0.239741	Y
8	IC 410-437867/3	30.0	7.040469	5.0	798412.0	0.234682	Y



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Calibration / Atrazine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

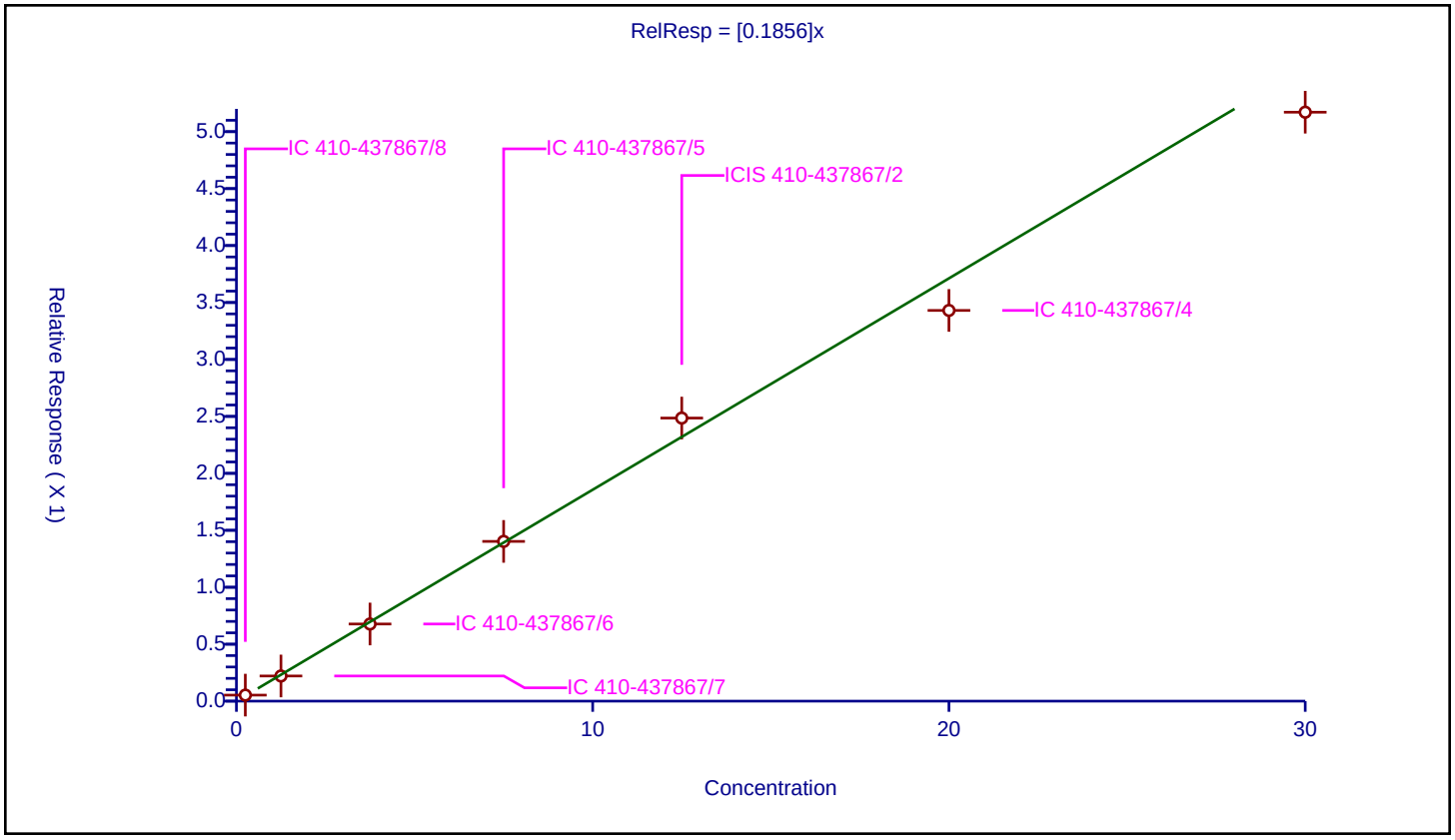
Curve Coefficients

Intercept:	0
Slope:	0.1856

Error Coefficients

Standard Error:	454000
Relative Standard Error:	8.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/8	0.25	0.053059	5.0	647482.0	0.212238	Y
2	IC 410-437867/7	1.25	0.220816	5.0	760043.0	0.176653	Y
3	IC 410-437867/6	3.75	0.677327	5.0	753070.0	0.180621	Y
4	IC 410-437867/5	7.5	1.402423	5.0	755856.0	0.18699	Y
5	ICIS 410-437867/2	12.5	2.485384	5.0	711898.0	0.198831	Y
6	IC 410-437867/4	20.0	3.430372	5.0	893081.0	0.171519	Y
7	IC 410-437867/3	30.0	5.171033	5.0	798412.0	0.172368	Y



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Calibration / 4-Aminobiphenyl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

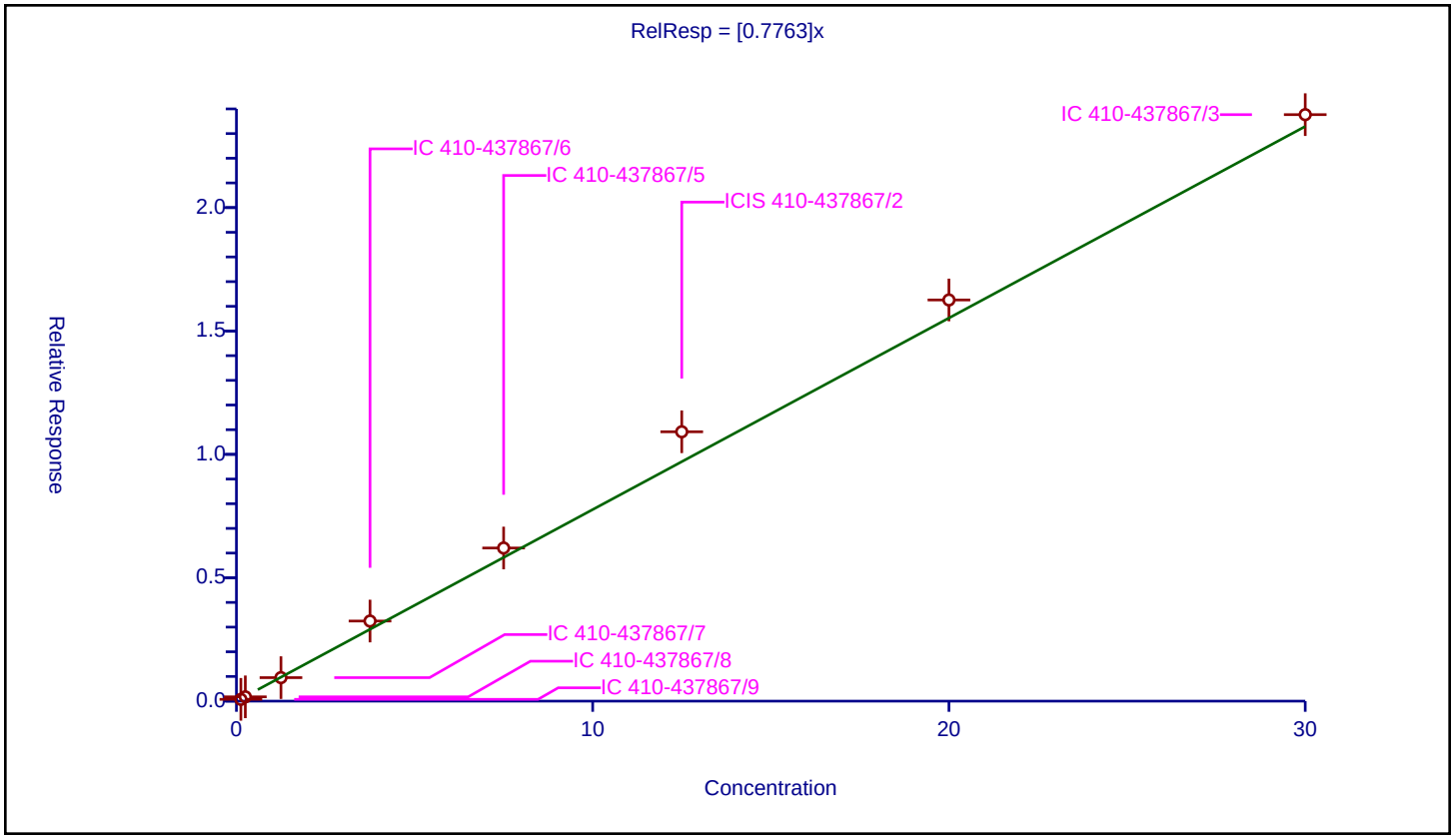
Curve Coefficients

Intercept:	0
Slope:	0.7763

Error Coefficients

Standard Error:	1940000
Relative Standard Error:	12.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.072647	5.0	702580.0	0.581172	Y
2	IC 410-437867/8	0.25	0.173889	5.0	647482.0	0.695556	Y
3	IC 410-437867/7	1.25	0.952538	5.0	760043.0	0.762031	Y
4	IC 410-437867/6	3.75	3.246265	5.0	753070.0	0.865671	Y
5	IC 410-437867/5	7.5	6.2056	5.0	755856.0	0.827413	Y
6	ICIS 410-437867/2	12.5	10.915637	5.0	711898.0	0.873251	Y
7	IC 410-437867/4	20.0	16.257501	5.0	893081.0	0.812875	Y
8	IC 410-437867/3	30.0	23.766865	5.0	798412.0	0.792229	Y



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Calibration / Pentachloronitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

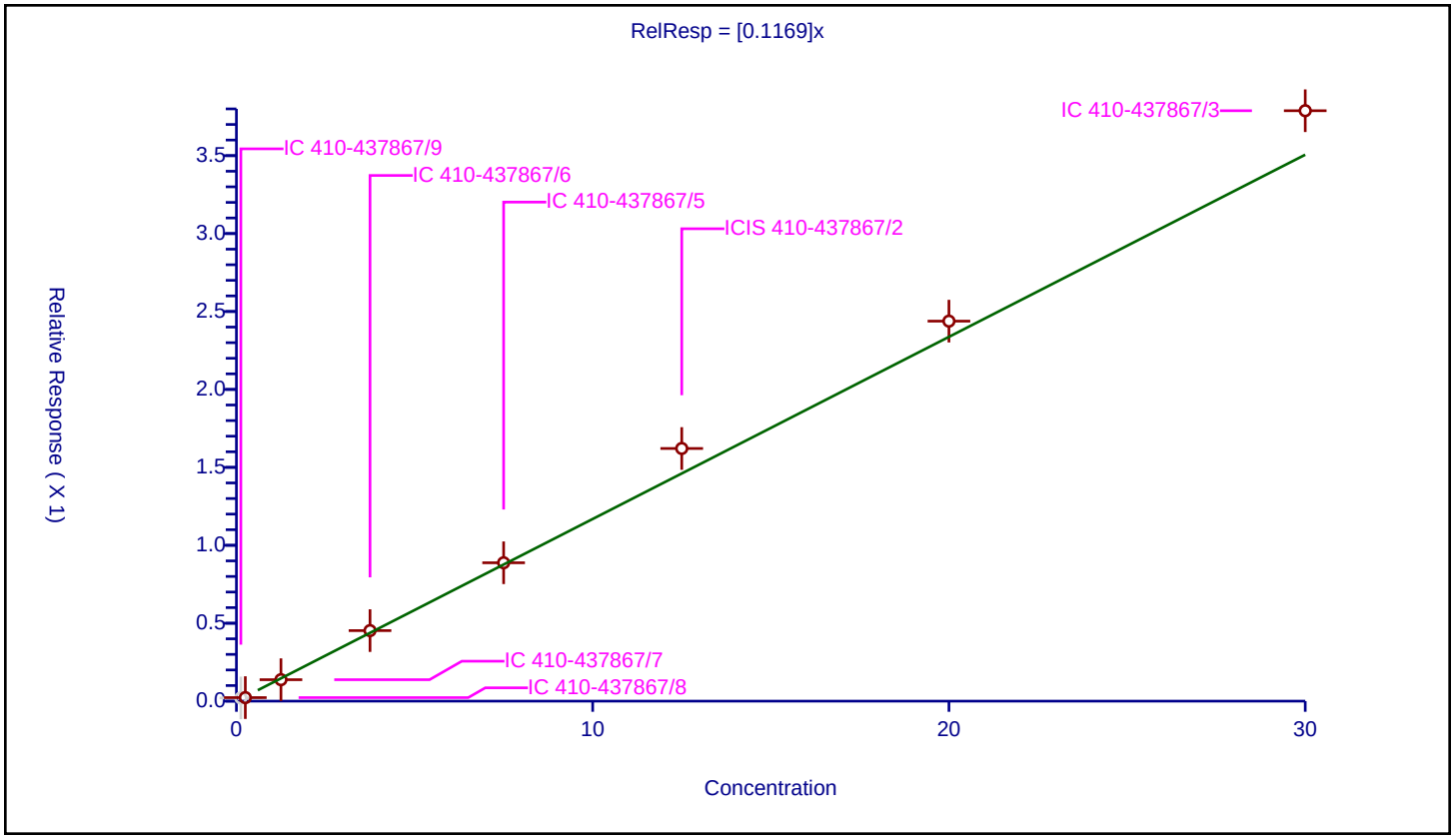
Curve Coefficients

Intercept:	0
Slope:	0.1169

Error Coefficients

Standard Error:	325000
Relative Standard Error:	11.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.02051	5.0	702580.0	0.164081	N
2	IC 410-437867/8	0.25	0.022727	5.0	647482.0	0.090906	Y
3	IC 410-437867/7	1.25	0.137722	5.0	760043.0	0.110178	Y
4	IC 410-437867/6	3.75	0.45268	5.0	753070.0	0.120715	Y
5	IC 410-437867/5	7.5	0.887841	5.0	755856.0	0.118379	Y
6	ICIS 410-437867/2	12.5	1.621166	5.0	711898.0	0.129693	Y
7	IC 410-437867/4	20.0	2.4382	5.0	893081.0	0.12191	Y
8	IC 410-437867/3	30.0	3.788257	5.0	798412.0	0.126275	Y



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Calibration / Pentachlorophenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

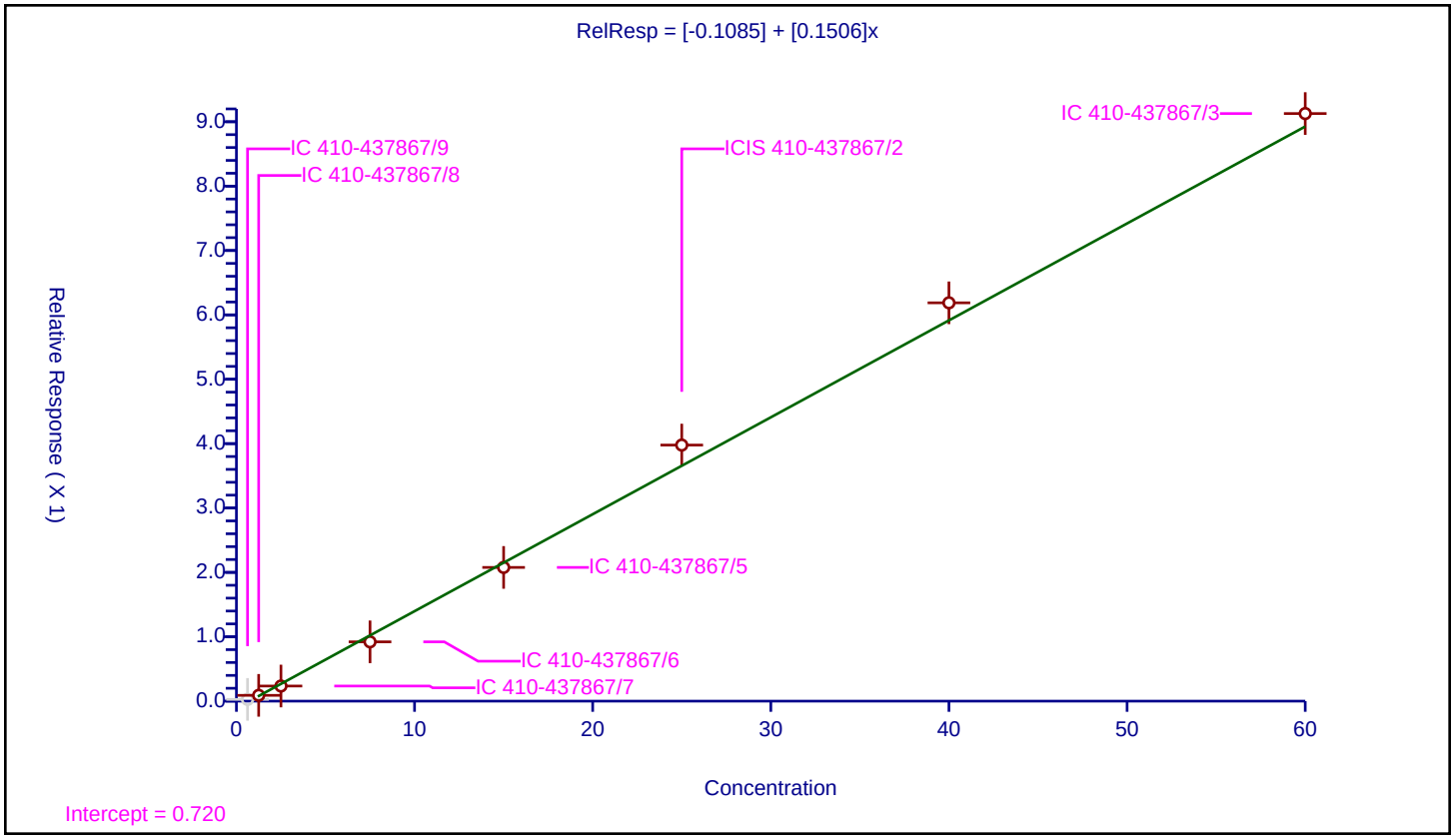
Curve Coefficients

Intercept:	-0.1085
Slope:	0.1506

Error Coefficients

Standard Error:	870000
Relative Standard Error:	7.7
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.625	0.027072	5.0	702580.0	0.043315	N
2	IC 410-437867/8	1.25	0.090103	5.0	647482.0	0.072082	Y
3	IC 410-437867/7	2.5	0.234993	5.0	760043.0	0.093997	Y
4	IC 410-437867/6	7.5	0.921196	5.0	753070.0	0.122826	Y
5	IC 410-437867/5	15.0	2.077049	5.0	755856.0	0.13847	Y
6	ICIS 410-437867/2	25.0	3.97781	5.0	711898.0	0.159112	Y
7	IC 410-437867/4	40.0	6.187787	5.0	893081.0	0.154695	Y
8	IC 410-437867/3	60.0	9.127675	5.0	798412.0	0.152128	Y



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Calibration / Pronamide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

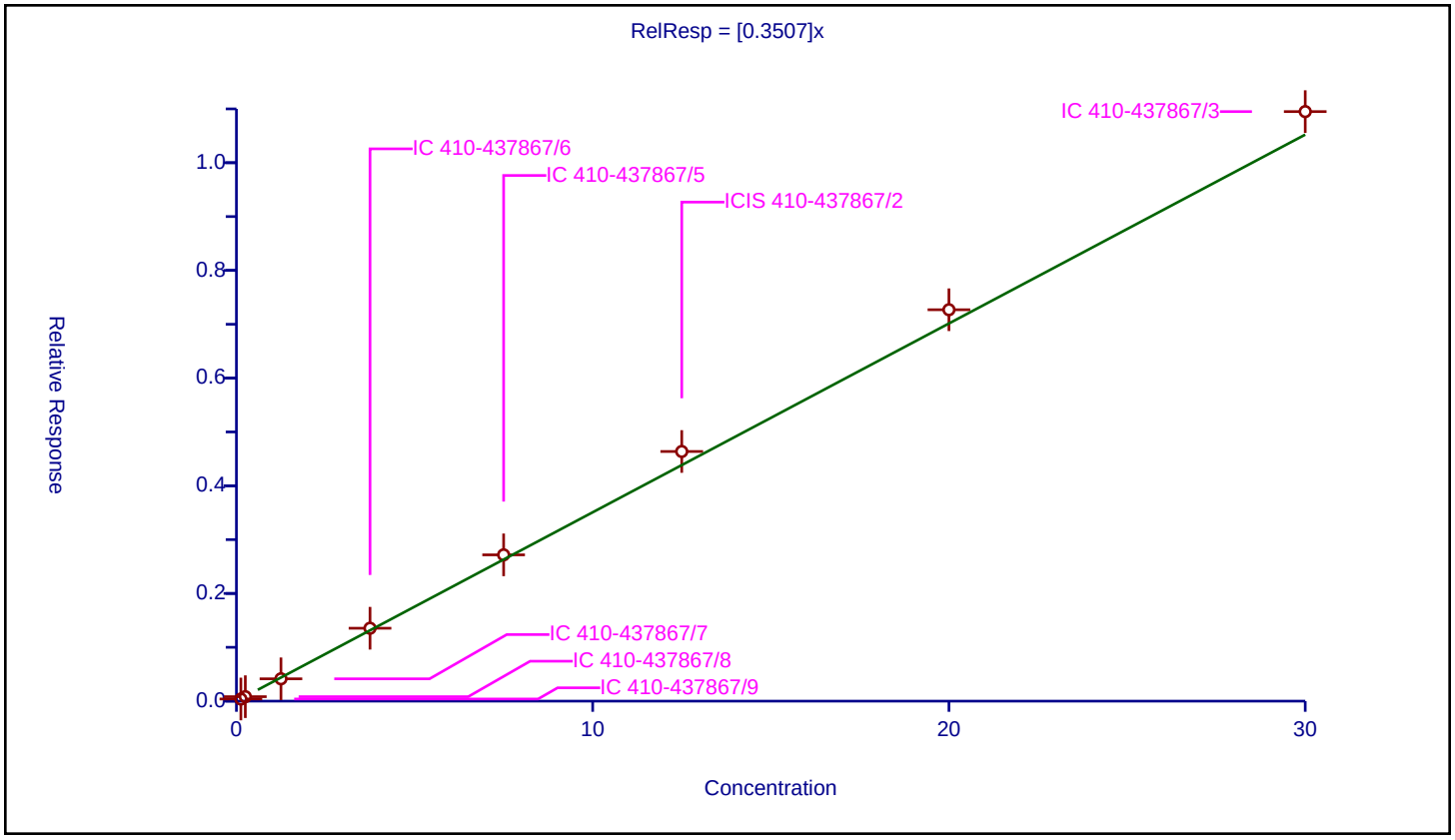
Curve Coefficients

Intercept:	0
Slope:	0.3507

Error Coefficients

Standard Error:	878000
Relative Standard Error:	5.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.03996	5.0	702580.0	0.319679	Y
2	IC 410-437867/8	0.25	0.082898	5.0	647482.0	0.331592	Y
3	IC 410-437867/7	1.25	0.414582	5.0	760043.0	0.331665	Y
4	IC 410-437867/6	3.75	1.354336	5.0	753070.0	0.361156	Y
5	IC 410-437867/5	7.5	2.717158	5.0	755856.0	0.362288	Y
6	ICIS 410-437867/2	12.5	4.636921	5.0	711898.0	0.370954	Y
7	IC 410-437867/4	20.0	7.269576	5.0	893081.0	0.363479	Y
8	IC 410-437867/3	30.0	10.949629	5.0	798412.0	0.364988	Y



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Calibration / Disulfoton

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

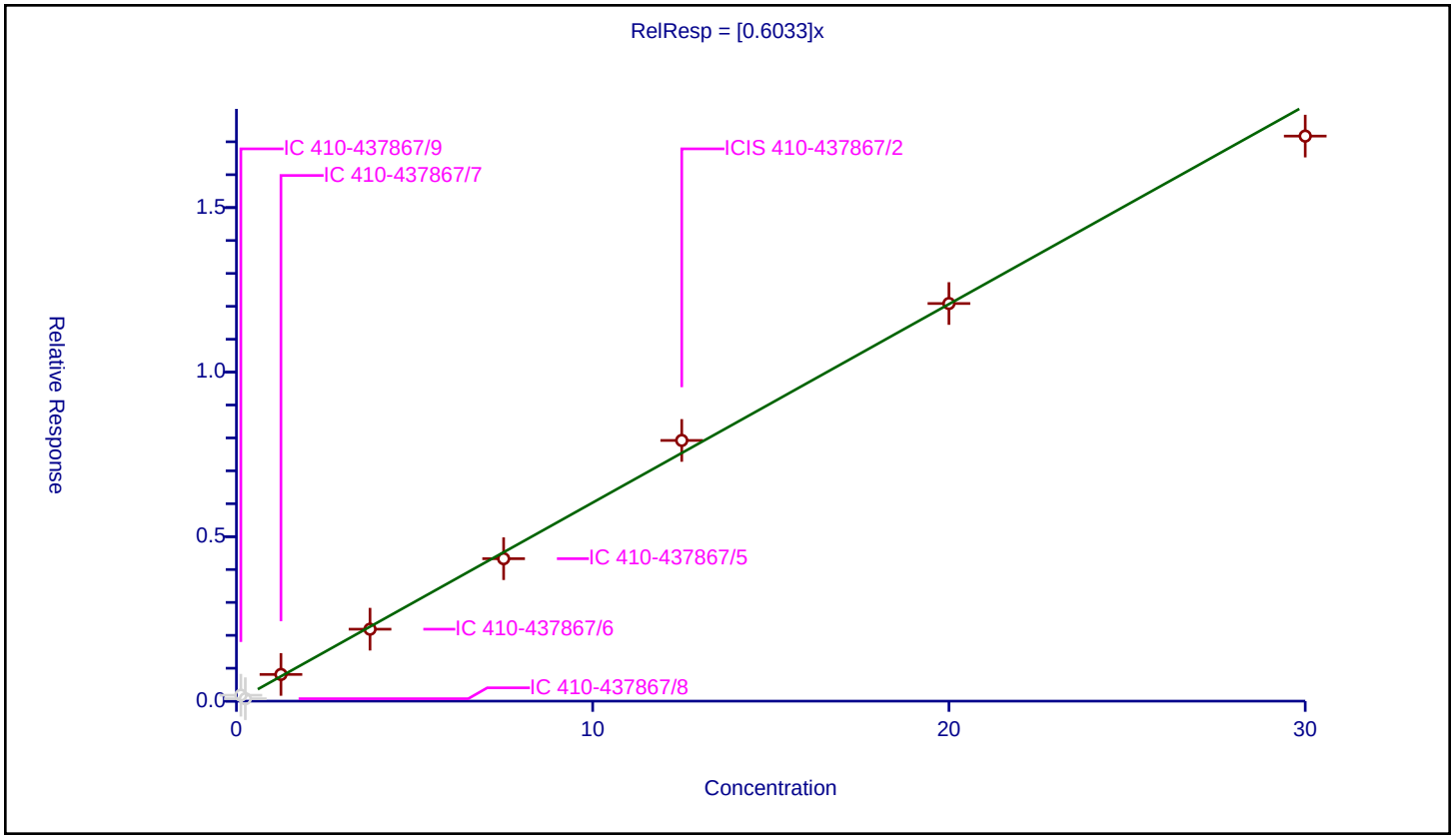
Curve Coefficients

Intercept:	0
Slope:	0.6033

Error Coefficients

Standard Error:	1670000
Relative Standard Error:	5.3
Correlation Coefficient:	0.984
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.179972	5.0	702580.0	1.439779	N
2	IC 410-437867/8	0.25	0.07374	5.0	647482.0	0.294958	N
3	IC 410-437867/7	1.25	0.811171	5.0	760043.0	0.648937	Y
4	IC 410-437867/6	3.75	2.186855	5.0	753070.0	0.583161	Y
5	IC 410-437867/5	7.5	4.3298	5.0	755856.0	0.577307	Y
6	ICIS 410-437867/2	12.5	7.923207	5.0	711898.0	0.633857	Y
7	IC 410-437867/4	20.0	12.085343	5.0	893081.0	0.604267	Y
8	IC 410-437867/3	30.0	17.173684	5.0	798412.0	0.572456	Y



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Calibration / Dinoseb

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

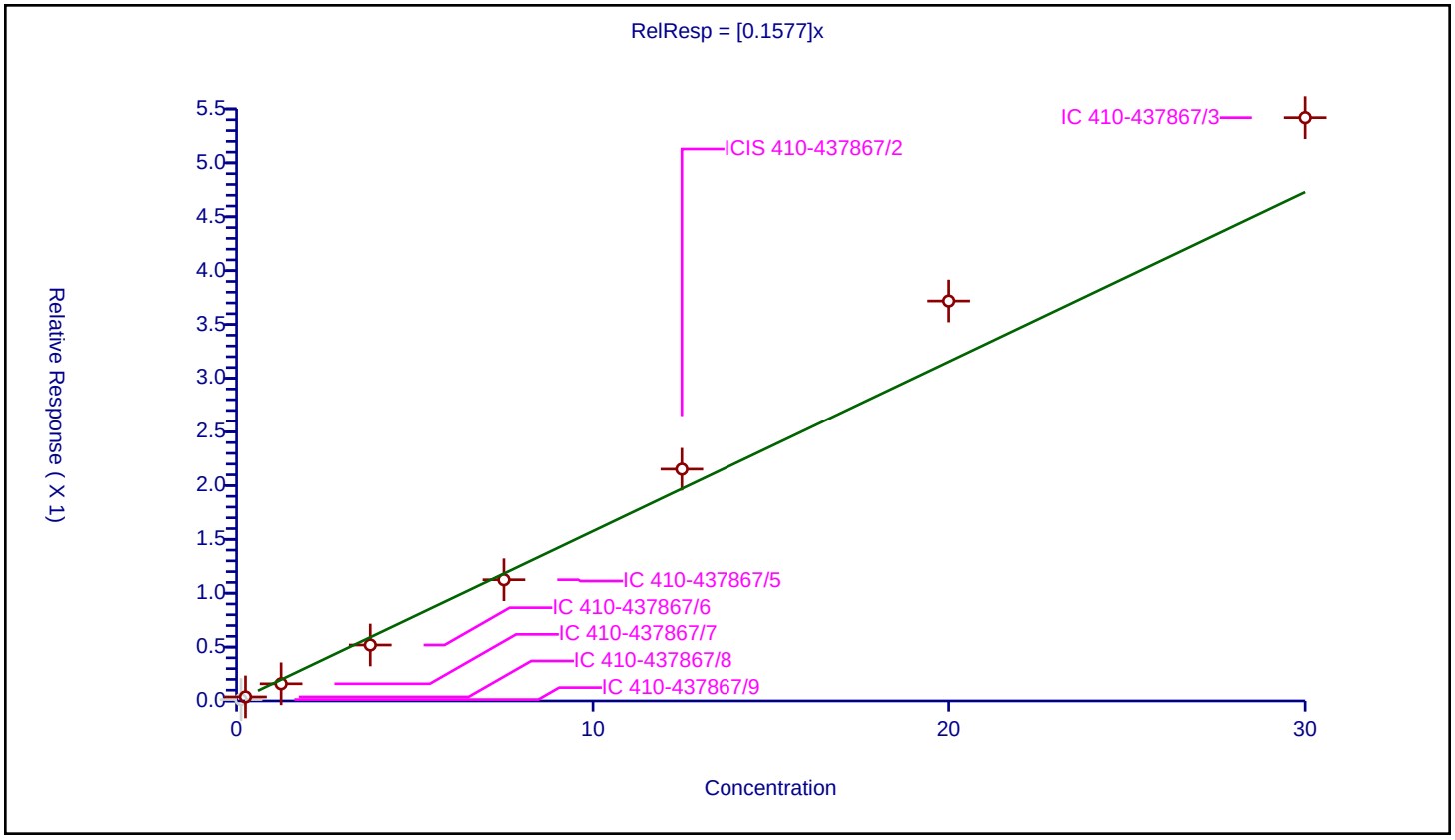
Curve Coefficients

Intercept:	0
Slope:	0.1577

Error Coefficients

Standard Error:	469000
Relative Standard Error:	14.1
Correlation Coefficient:	0.984
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.012988	5.0	702580.0	0.103903	N
2	IC 410-437867/8	0.25	0.037275	5.0	647482.0	0.149101	Y
3	IC 410-437867/7	1.25	0.159063	5.0	760043.0	0.127251	Y
4	IC 410-437867/6	3.75	0.519288	5.0	753070.0	0.138477	Y
5	IC 410-437867/5	7.5	1.12495	5.0	755856.0	0.149993	Y
6	ICIS 410-437867/2	12.5	2.152837	5.0	711898.0	0.172227	Y
7	IC 410-437867/4	20.0	3.718257	5.0	893081.0	0.185913	Y
8	IC 410-437867/3	30.0	5.419627	5.0	798412.0	0.180654	Y



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Calibration / Phenanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

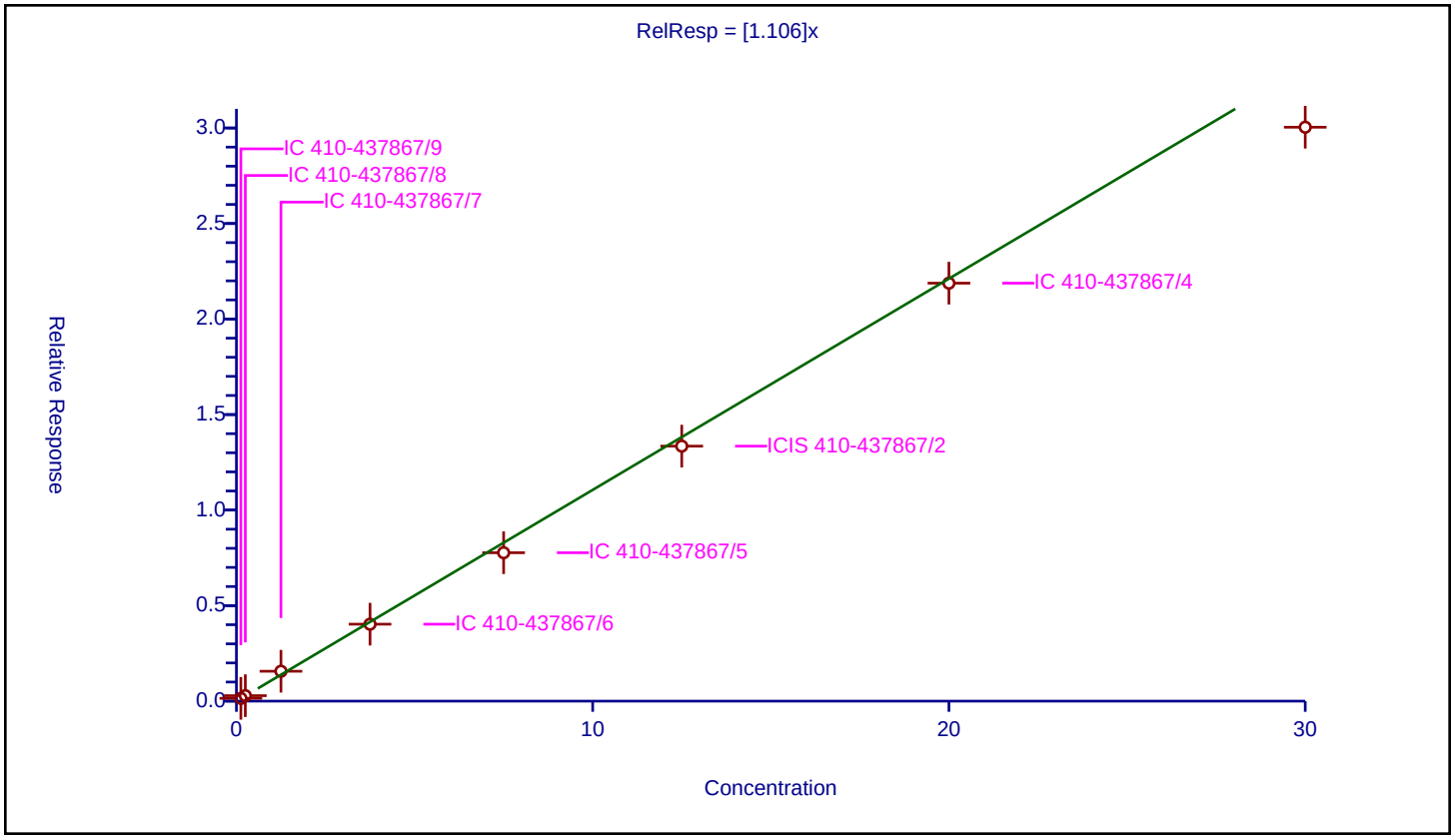
Curve Coefficients

Intercept:	0
Slope:	1.106

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	7.3
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.146795	5.0	702580.0	1.174357	Y
2	IC 410-437867/8	0.25	0.286471	5.0	647482.0	1.145885	Y
3	IC 410-437867/7	1.25	1.5648	5.0	760043.0	1.25184	Y
4	IC 410-437867/6	3.75	4.028942	5.0	753070.0	1.074384	Y
5	IC 410-437867/5	7.5	7.768351	5.0	755856.0	1.03578	Y
6	ICIS 410-437867/2	12.5	13.348099	5.0	711898.0	1.067848	Y
7	IC 410-437867/4	20.0	21.878878	5.0	893081.0	1.093944	Y
8	IC 410-437867/3	30.0	30.0407	5.0	798412.0	1.001357	Y



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Calibration / Anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

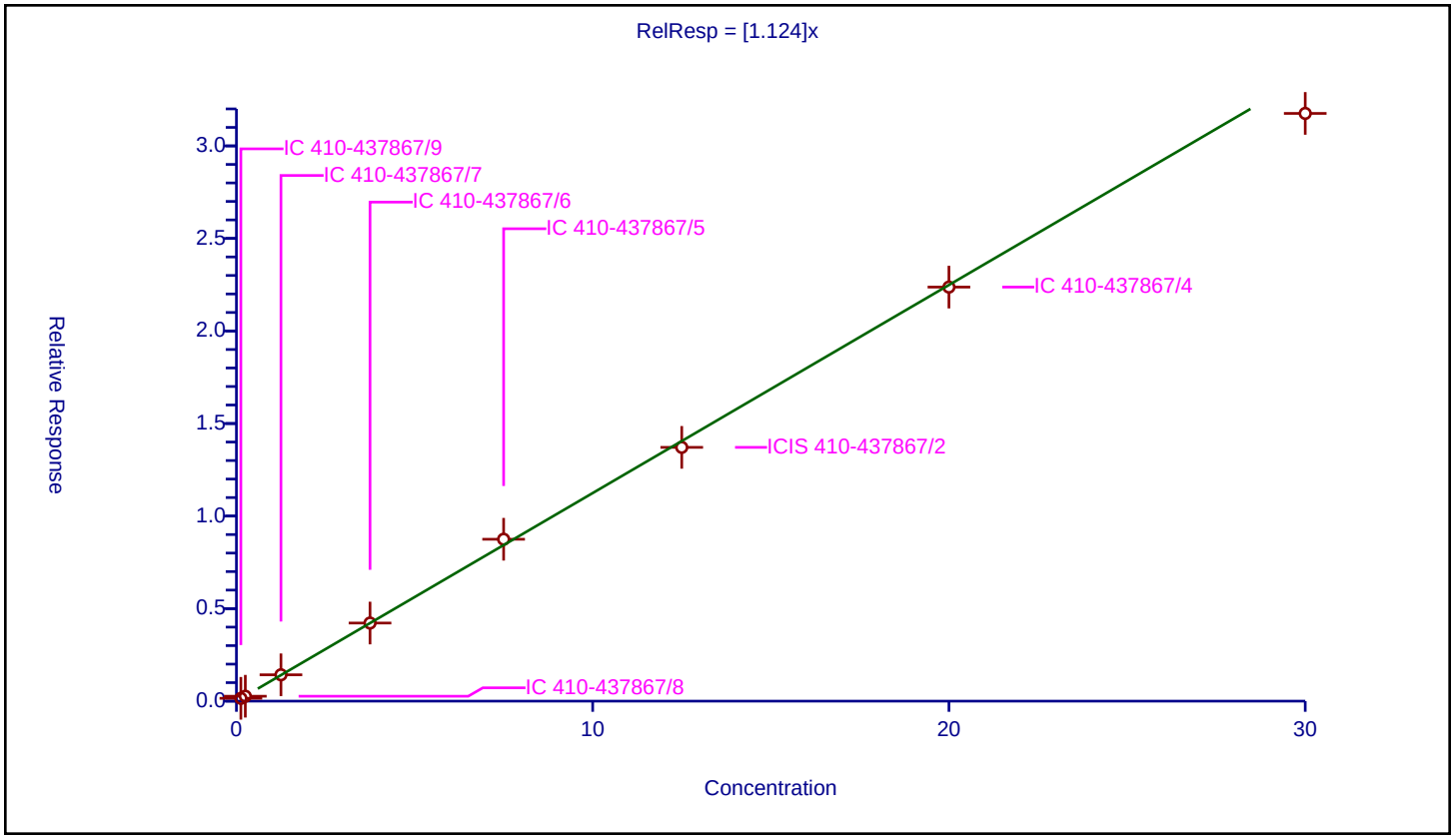
Curve Coefficients

Intercept:	0
Slope:	1.124

Error Coefficients

Standard Error:	2610000
Relative Standard Error:	4.9
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.153257	5.0	702580.0	1.226053	Y
2	IC 410-437867/8	0.25	0.265876	5.0	647482.0	1.063504	Y
3	IC 410-437867/7	1.25	1.423472	5.0	760043.0	1.138778	Y
4	IC 410-437867/6	3.75	4.220146	5.0	753070.0	1.125372	Y
5	IC 410-437867/5	7.5	8.747625	5.0	755856.0	1.16635	Y
6	ICIS 410-437867/2	12.5	13.712168	5.0	711898.0	1.096973	Y
7	IC 410-437867/4	20.0	22.371045	5.0	893081.0	1.118552	Y
8	IC 410-437867/3	30.0	31.75586	5.0	798412.0	1.058529	Y



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Calibration / Carbazole

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

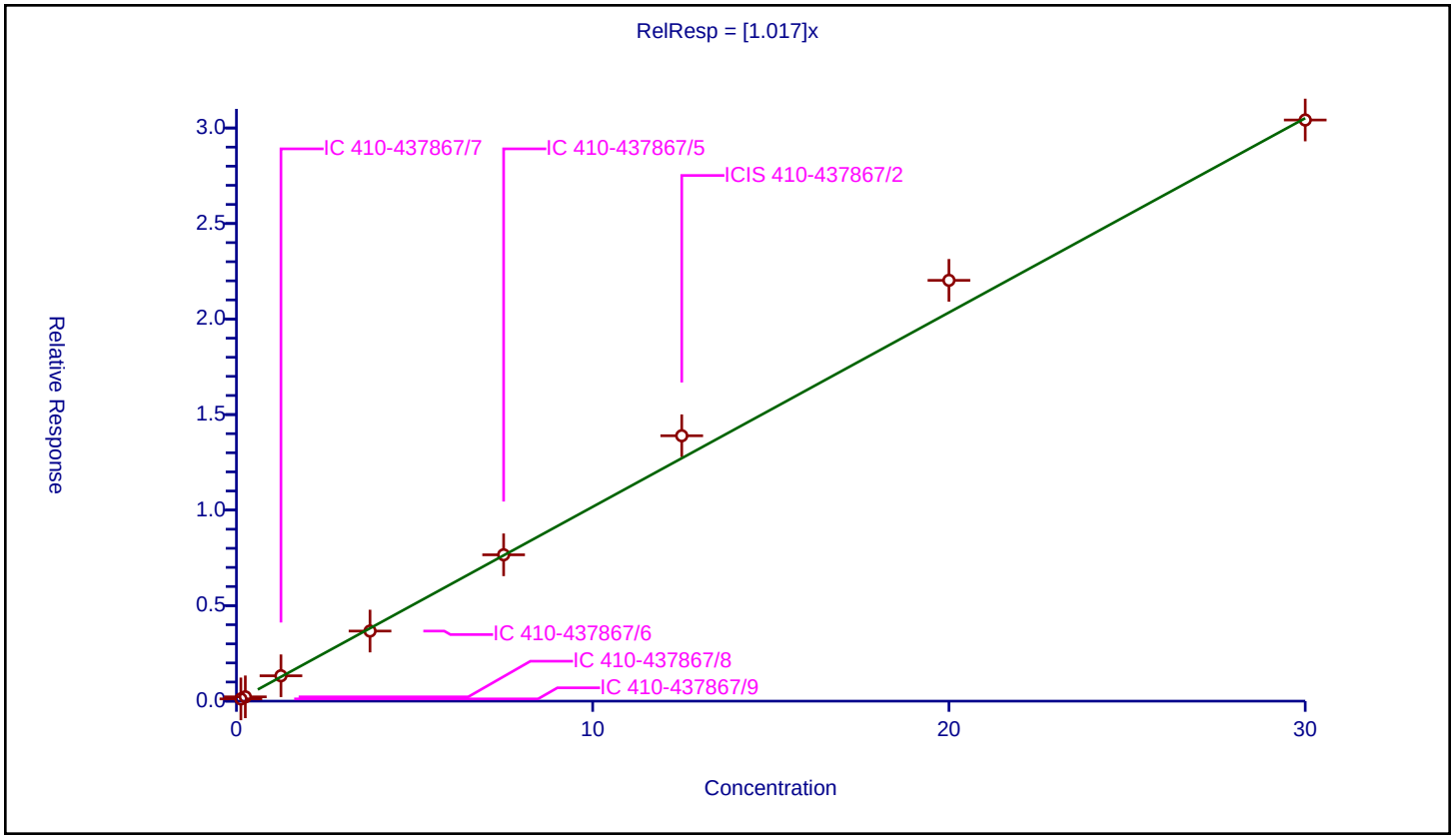
Curve Coefficients

Intercept:	0
Slope:	1.017

Error Coefficients

Standard Error:	2530000
Relative Standard Error:	7.2
Correlation Coefficient:	0.984
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.118321	5.0	702580.0	0.946568	Y
2	IC 410-437867/8	0.25	0.22552	5.0	647482.0	0.902079	Y
3	IC 410-437867/7	1.25	1.327767	5.0	760043.0	1.062214	Y
4	IC 410-437867/6	3.75	3.669028	5.0	753070.0	0.978407	Y
5	IC 410-437867/5	7.5	7.659587	5.0	755856.0	1.021278	Y
6	ICIS 410-437867/2	12.5	13.890965	5.0	711898.0	1.111277	Y
7	IC 410-437867/4	20.0	22.026166	5.0	893081.0	1.101308	Y
8	IC 410-437867/3	30.0	30.418499	5.0	798412.0	1.01395	Y



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Calibration / Methyl parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

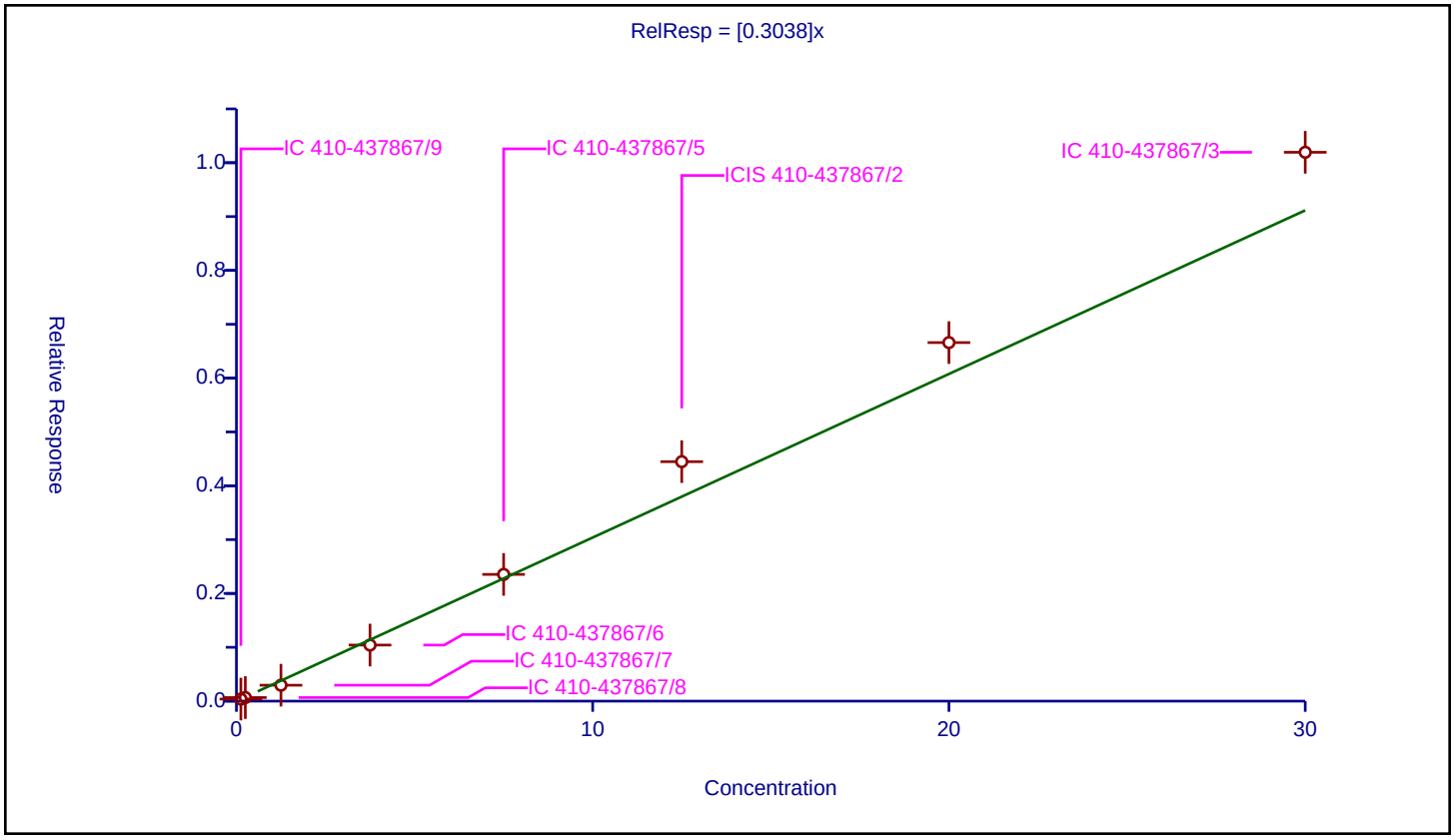
Curve Coefficients

Intercept:	0
Slope:	0.3038

Error Coefficients

Standard Error:	812000
Relative Standard Error:	13.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.038416	5.0	702580.0	0.307324	Y
2	IC 410-437867/8	0.25	0.066581	5.0	647482.0	0.266324	Y
3	IC 410-437867/7	1.25	0.296227	5.0	760043.0	0.236981	Y
4	IC 410-437867/6	3.75	1.041351	5.0	753070.0	0.277694	Y
5	IC 410-437867/5	7.5	2.353854	5.0	755856.0	0.313847	Y
6	ICIS 410-437867/2	12.5	4.447828	5.0	711898.0	0.355826	Y
7	IC 410-437867/4	20.0	6.659486	5.0	893081.0	0.332974	Y
8	IC 410-437867/3	30.0	10.194348	5.0	798412.0	0.339812	Y



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Calibration / Di-n-butyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

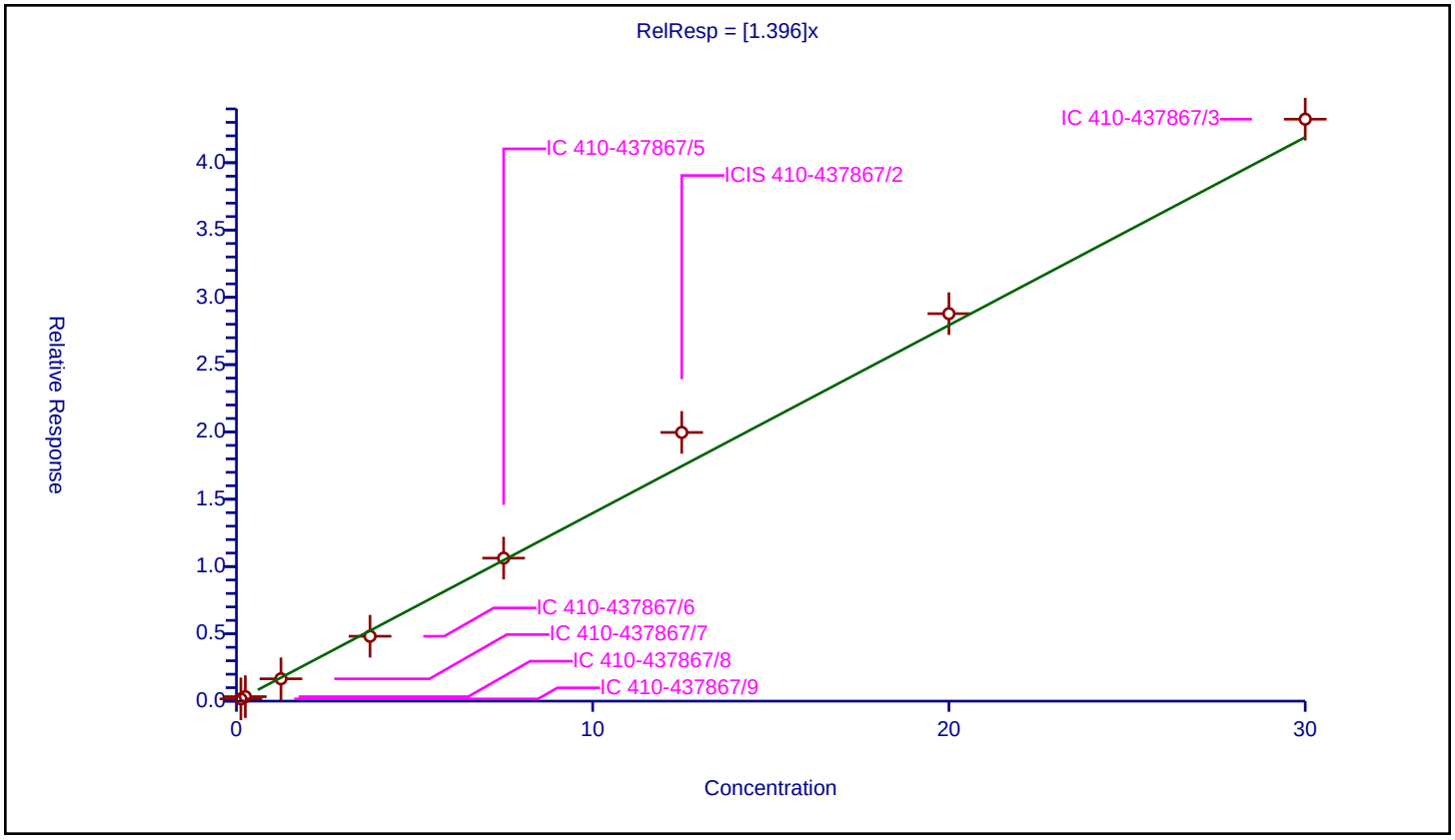
Curve Coefficients

Intercept:	0
Slope:	1.396

Error Coefficients

Standard Error:	3490000
Relative Standard Error:	7.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.166735	5.0	702580.0	1.333884	Y
2	IC 410-437867/8	0.25	0.332836	5.0	647482.0	1.331342	Y
3	IC 410-437867/7	1.25	1.658327	5.0	760043.0	1.326662	Y
4	IC 410-437867/6	3.75	4.821358	5.0	753070.0	1.285695	Y
5	IC 410-437867/5	7.5	10.625304	5.0	755856.0	1.416707	Y
6	ICIS 410-437867/2	12.5	19.962452	5.0	711898.0	1.596996	Y
7	IC 410-437867/4	20.0	28.788391	5.0	893081.0	1.43942	Y
8	IC 410-437867/3	30.0	43.236681	5.0	798412.0	1.441223	Y



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Calibration / Ethyl Parathion

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

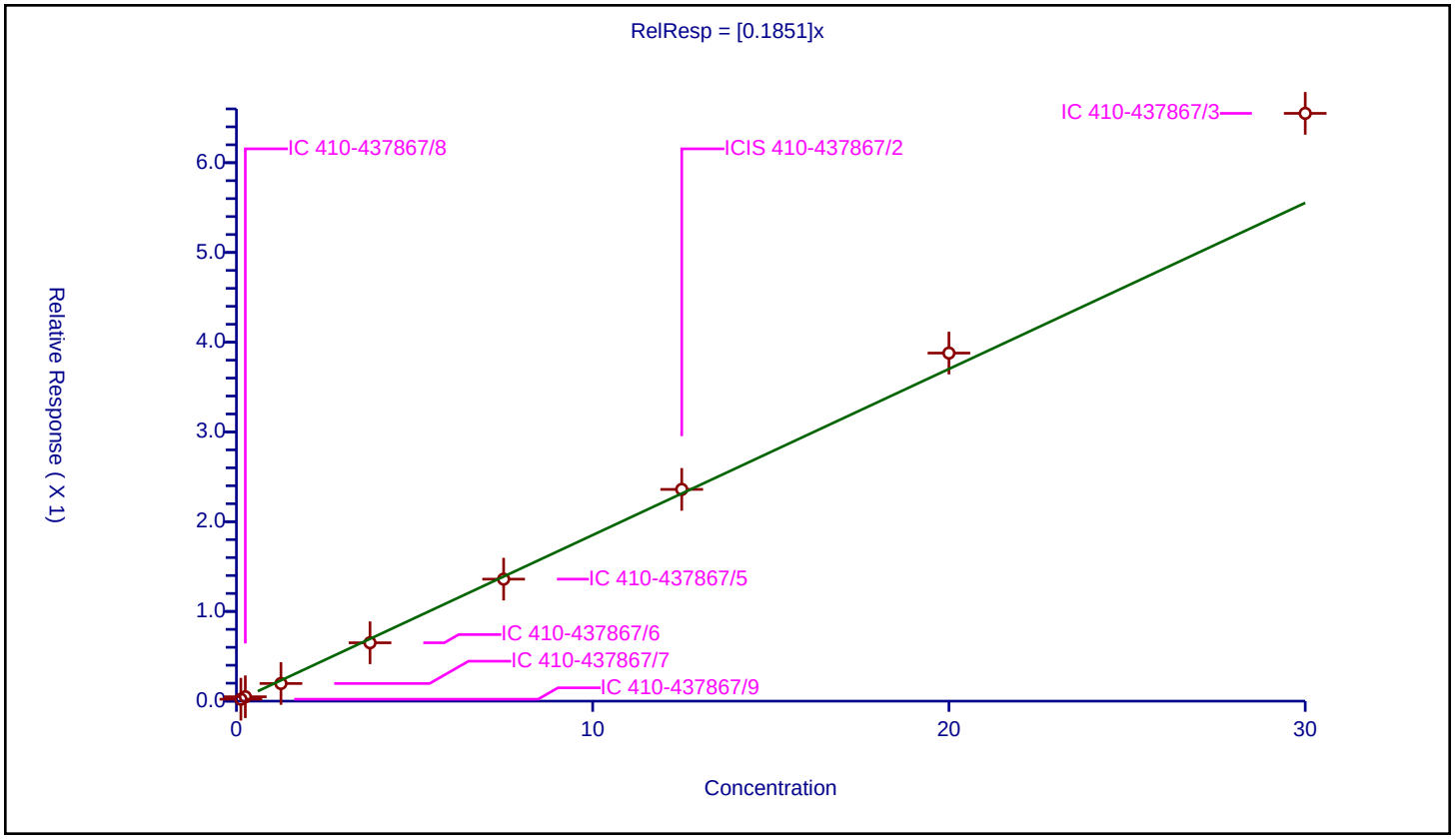
Curve Coefficients

Intercept:	0
Slope:	0.1851

Error Coefficients

Standard Error:	499000
Relative Standard Error:	10.0
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.021499	5.0	702580.0	0.171995	Y
2	IC 410-437867/8	0.25	0.048913	5.0	647482.0	0.19565	Y
3	IC 410-437867/7	1.25	0.196667	5.0	760043.0	0.157333	Y
4	IC 410-437867/6	3.75	0.650371	5.0	753070.0	0.173432	Y
5	IC 410-437867/5	7.5	1.359426	5.0	755856.0	0.181257	Y
6	ICIS 410-437867/2	12.5	2.359832	5.0	711898.0	0.188787	Y
7	IC 410-437867/4	20.0	3.878708	5.0	893081.0	0.193935	Y
8	IC 410-437867/3	30.0	6.550002	5.0	798412.0	0.218333	Y



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Calibration / 4-Nitroquinoline-1-oxide

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

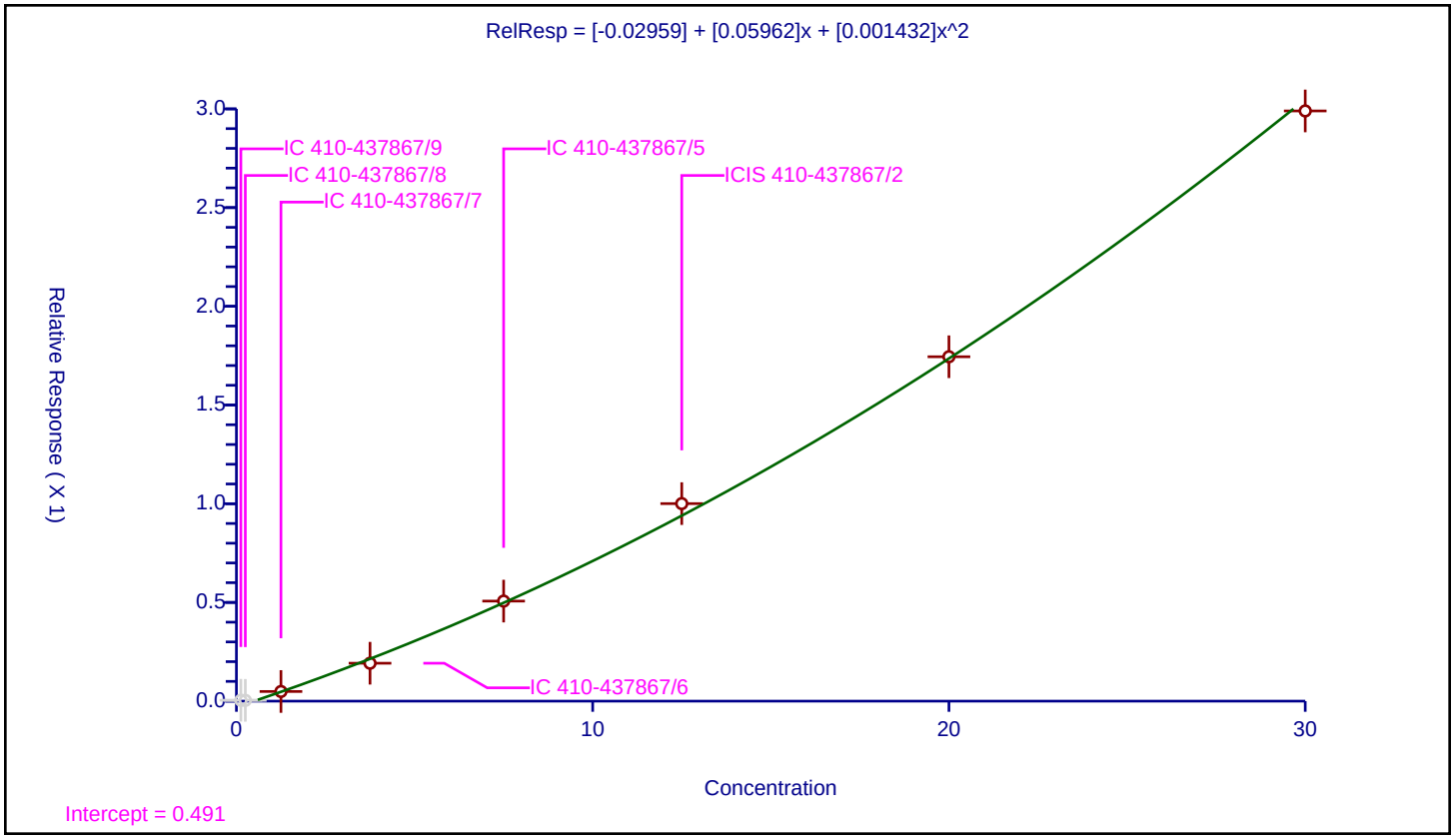
Curve Coefficients

Intercept:	-0.02959
Slope:	0.05962
Second Order:	0.001432

Error Coefficients

Standard Error:	343000
Relative Standard Error:	5.9
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.004491	5.0	702580.0	0.035925	N
2	IC 410-437867/8	0.25	0.004039	5.0	647482.0	0.016155	N
3	IC 410-437867/7	1.25	0.048839	5.0	760043.0	0.039071	Y
4	IC 410-437867/6	3.75	0.19208	5.0	753070.0	0.051221	Y
5	IC 410-437867/5	7.5	0.506809	5.0	755856.0	0.067575	Y
6	ICIS 410-437867/2	12.5	1.000649	5.0	711898.0	0.080052	Y
7	IC 410-437867/4	20.0	1.744534	5.0	893081.0	0.087227	Y
8	IC 410-437867/3	30.0	2.989666	5.0	798412.0	0.099656	Y



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Calibration / Octachlorostyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

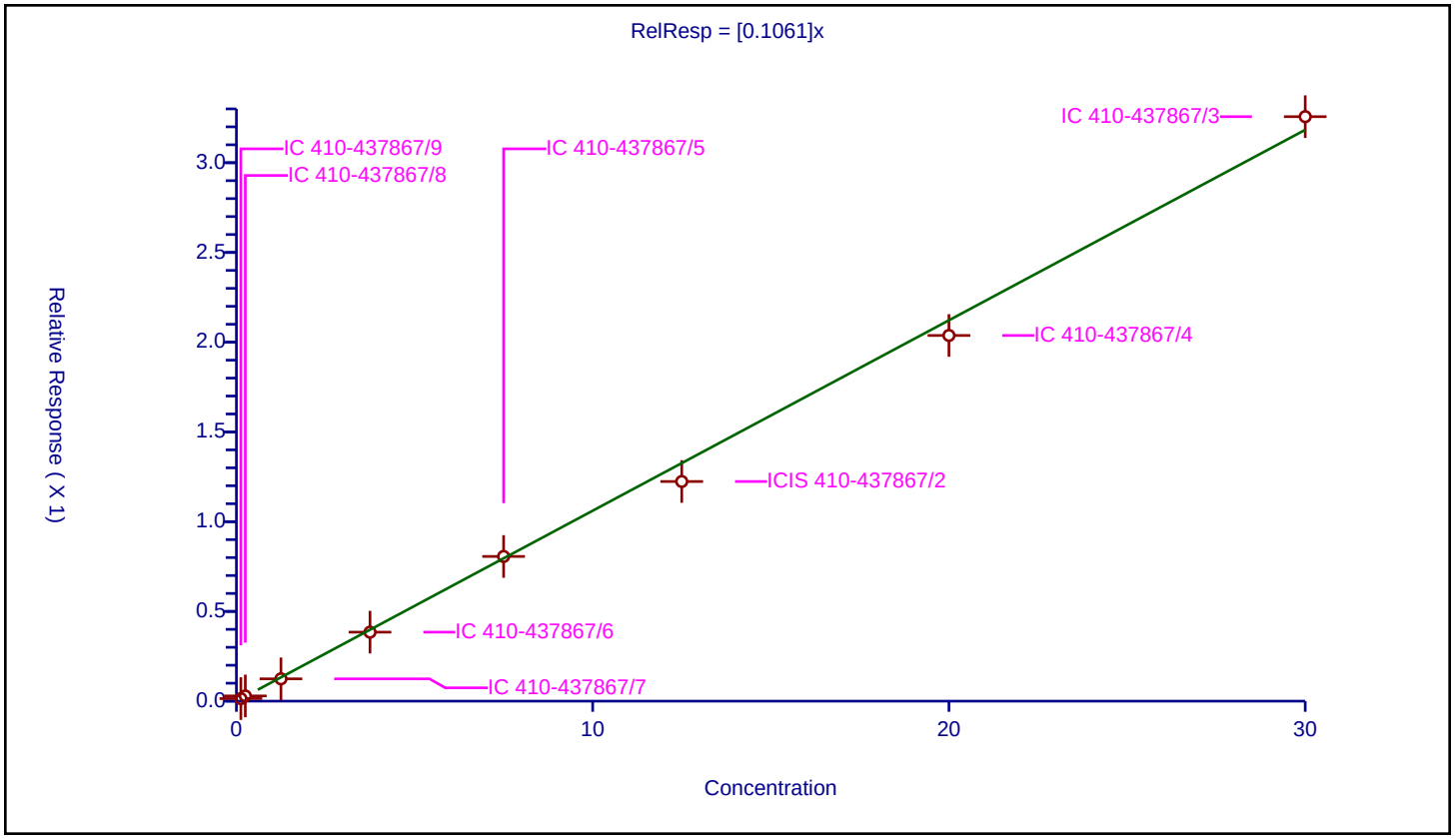
Curve Coefficients

Intercept:	0
Slope:	0.1061

Error Coefficients

Standard Error:	254000
Relative Standard Error:	6.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.014354	5.0	702580.0	0.114834	Y
2	IC 410-437867/8	0.25	0.029059	5.0	647482.0	0.116235	Y
3	IC 410-437867/7	1.25	0.124296	5.0	760043.0	0.099436	Y
4	IC 410-437867/6	3.75	0.384373	5.0	753070.0	0.1025	Y
5	IC 410-437867/5	7.5	0.806251	5.0	755856.0	0.1075	Y
6	ICIS 410-437867/2	12.5	1.223841	5.0	711898.0	0.097907	Y
7	IC 410-437867/4	20.0	2.037525	5.0	893081.0	0.101876	Y
8	IC 410-437867/3	30.0	3.256702	5.0	798412.0	0.108557	Y



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Calibration / Isodrin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

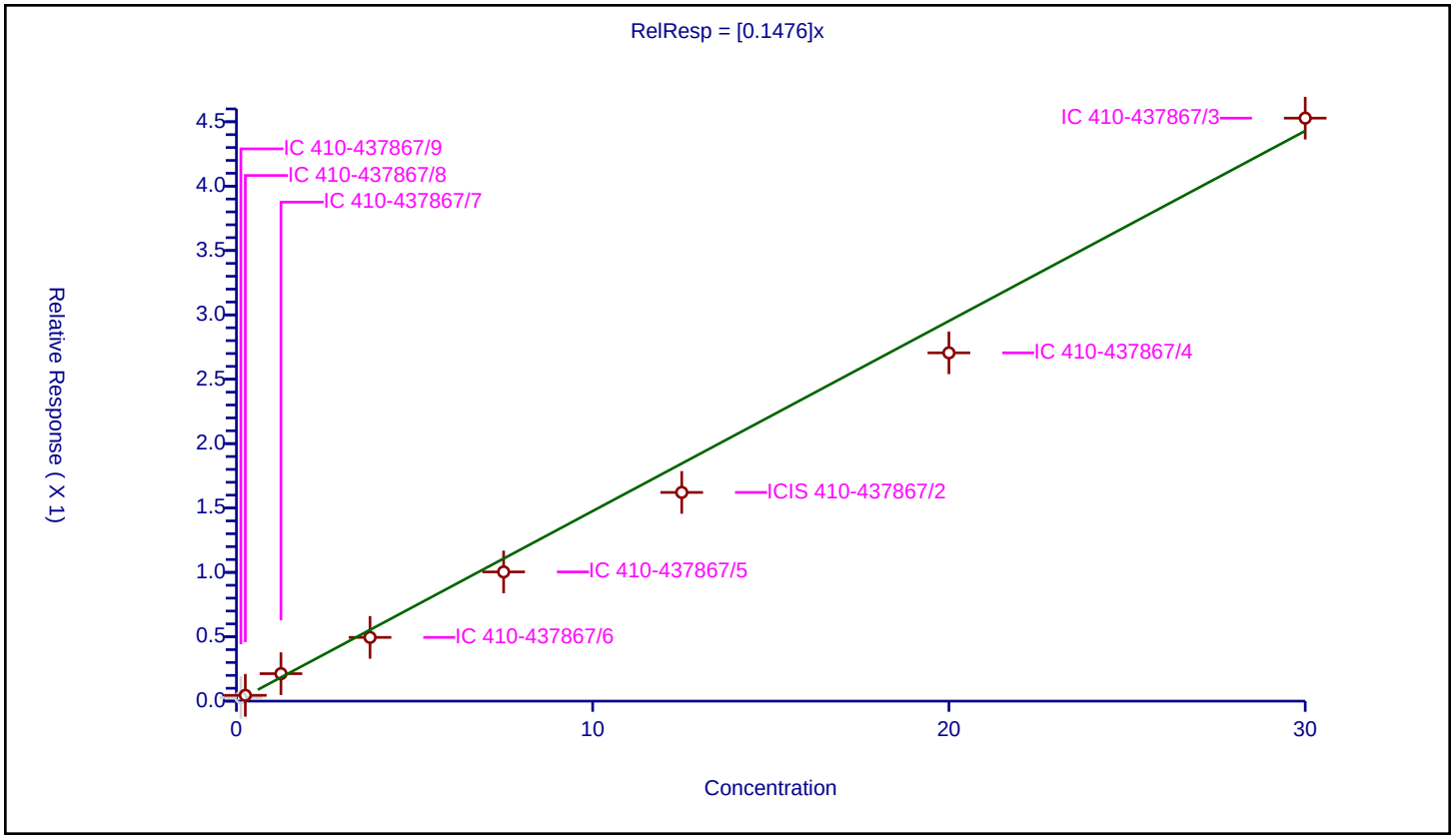
Curve Coefficients

Intercept:	0
Slope:	0.1476

Error Coefficients

Standard Error:	374000
Relative Standard Error:	14.0
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.027961	5.0	702580.0	0.22369	N
2	IC 410-437867/8	0.25	0.045229	5.0	647482.0	0.180916	Y
3	IC 410-437867/7	1.25	0.213455	5.0	760043.0	0.170764	Y
4	IC 410-437867/6	3.75	0.495127	5.0	753070.0	0.132034	Y
5	IC 410-437867/5	7.5	1.003597	5.0	755856.0	0.133813	Y
6	ICIS 410-437867/2	12.5	1.621033	5.0	711898.0	0.129683	Y
7	IC 410-437867/4	20.0	2.705264	5.0	893081.0	0.135263	Y
8	IC 410-437867/3	30.0	4.52827	5.0	798412.0	0.150942	Y



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Calibration / Fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

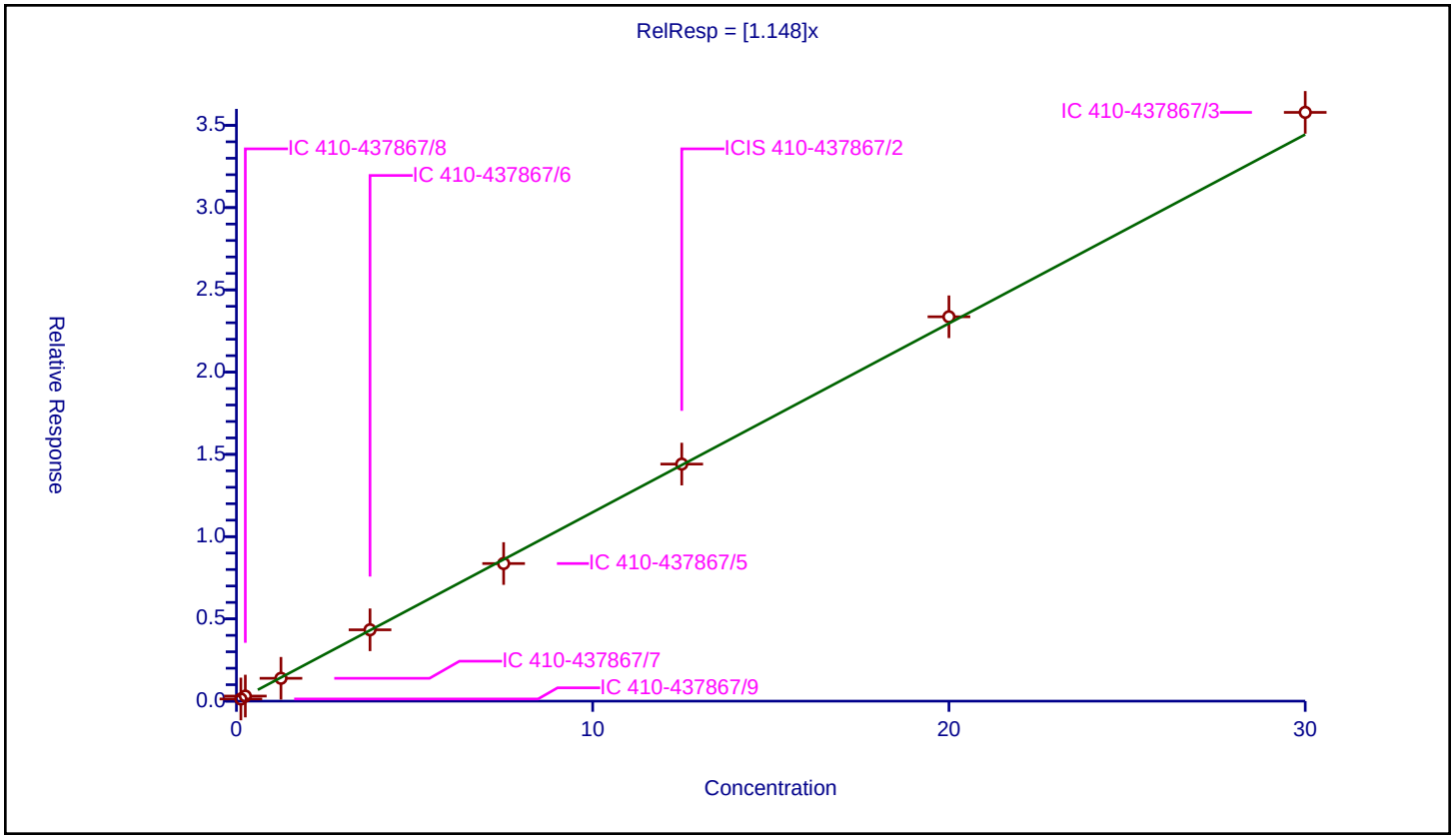
Curve Coefficients

Intercept:	0
Slope:	1.148

Error Coefficients

Standard Error:	2840000
Relative Standard Error:	4.8
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.131786	5.0	702580.0	1.054286	Y
2	IC 410-437867/8	0.25	0.308734	5.0	647482.0	1.234938	Y
3	IC 410-437867/7	1.25	1.387711	5.0	760043.0	1.110169	Y
4	IC 410-437867/6	3.75	4.336649	5.0	753070.0	1.15644	Y
5	IC 410-437867/5	7.5	8.364556	5.0	755856.0	1.115274	Y
6	ICIS 410-437867/2	12.5	14.410119	5.0	711898.0	1.15281	Y
7	IC 410-437867/4	20.0	23.363715	5.0	893081.0	1.168186	Y
8	IC 410-437867/3	30.0	35.787845	5.0	798412.0	1.192928	Y



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Calibration / Benzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

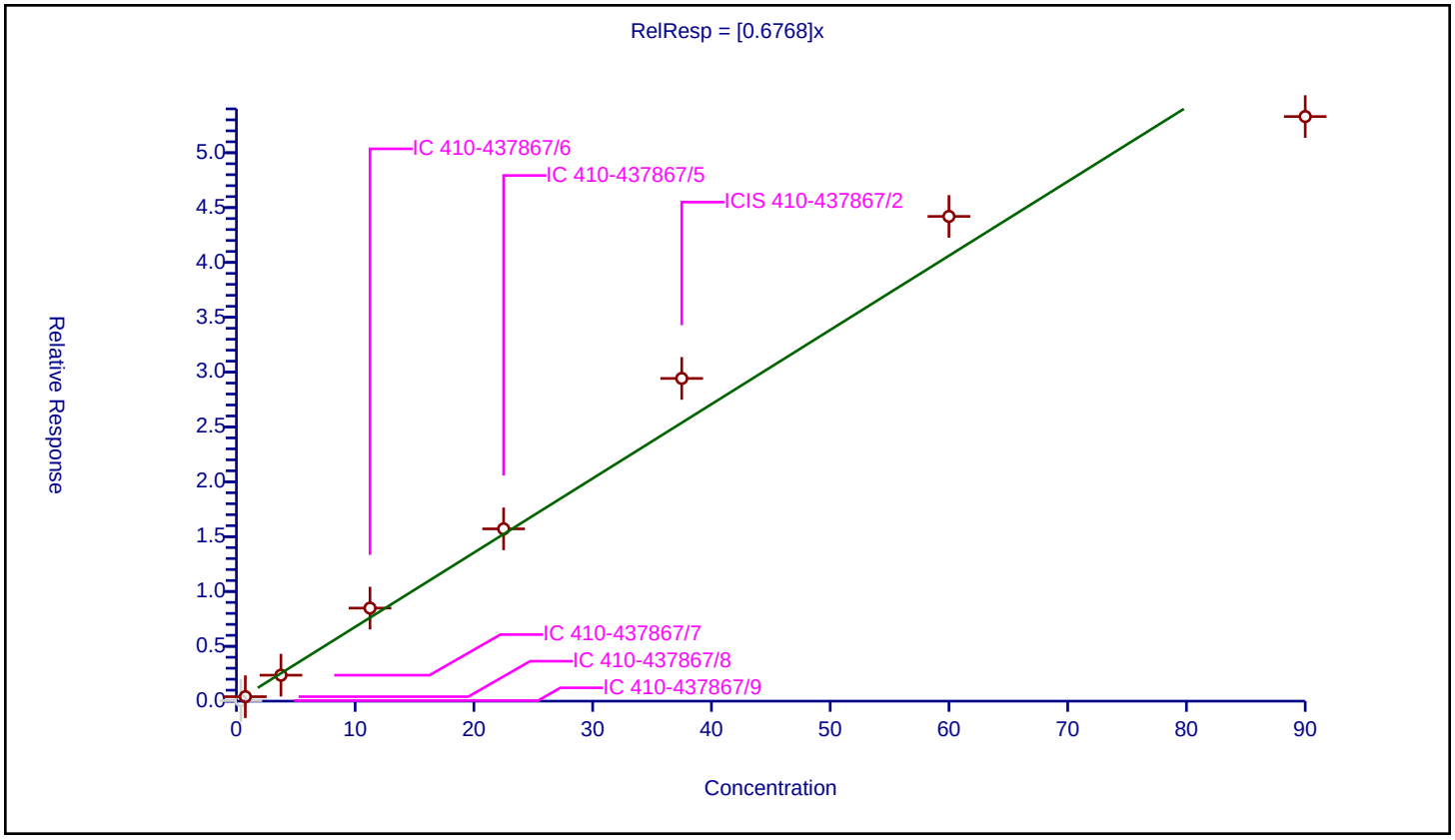
Curve Coefficients

Intercept:	0
Slope:	0.6768

Error Coefficients

Standard Error:	5160000
Relative Standard Error:	13.4
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.375	0.049342	5.0	737702.0	0.13158	N
2	IC 410-437867/8	0.75	0.405884	5.0	689211.0	0.541179	Y
3	IC 410-437867/7	3.75	2.366241	5.0	806805.0	0.630998	Y
4	IC 410-437867/6	11.25	8.482576	5.0	754176.0	0.754007	Y
5	IC 410-437867/5	22.5	15.709299	5.0	819450.0	0.698191	Y
6	ICIS 410-437867/2	37.5	29.424882	5.0	723852.0	0.784664	Y
7	IC 410-437867/4	60.0	44.195239	5.0	816988.0	0.736587	Y
8	IC 410-437867/3	90.0	53.301738	5.0	844222.0	0.592242	Y



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Calibration / Pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

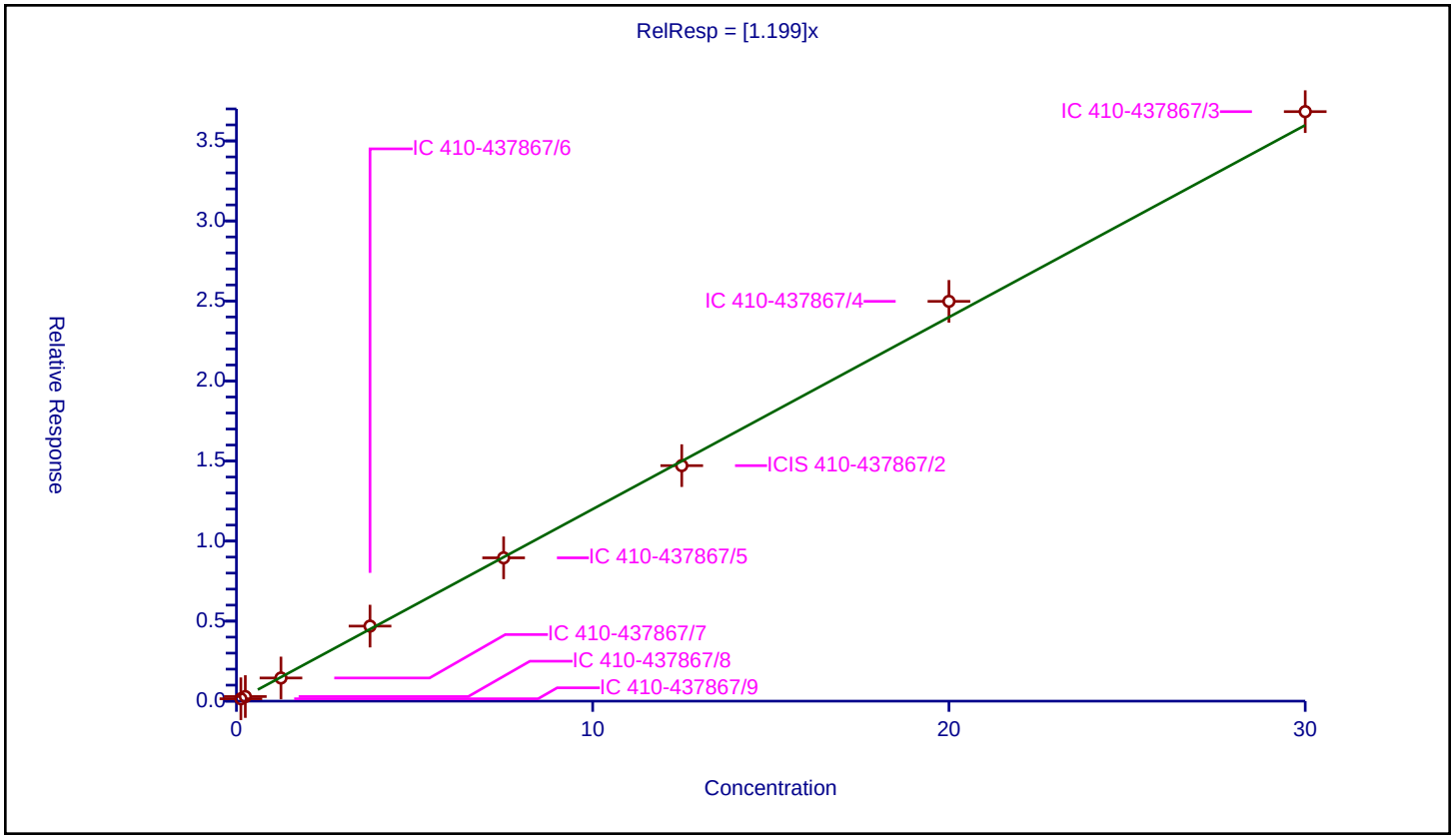
Curve Coefficients

Intercept:	0
Slope:	1.199

Error Coefficients

Standard Error:	2990000
Relative Standard Error:	3.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.148942	5.0	737702.0	1.191538	Y
2	IC 410-437867/8	0.25	0.287256	5.0	689211.0	1.149024	Y
3	IC 410-437867/7	1.25	1.44649	5.0	806805.0	1.157192	Y
4	IC 410-437867/6	3.75	4.688282	5.0	754176.0	1.250209	Y
5	IC 410-437867/5	7.5	8.953152	5.0	819450.0	1.193754	Y
6	ICIS 410-437867/2	12.5	14.713146	5.0	723852.0	1.177052	Y
7	IC 410-437867/4	20.0	24.976193	5.0	816988.0	1.24881	Y
8	IC 410-437867/3	30.0	36.829383	5.0	844222.0	1.227646	Y



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Calibration / p-Terphenyl-d14

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

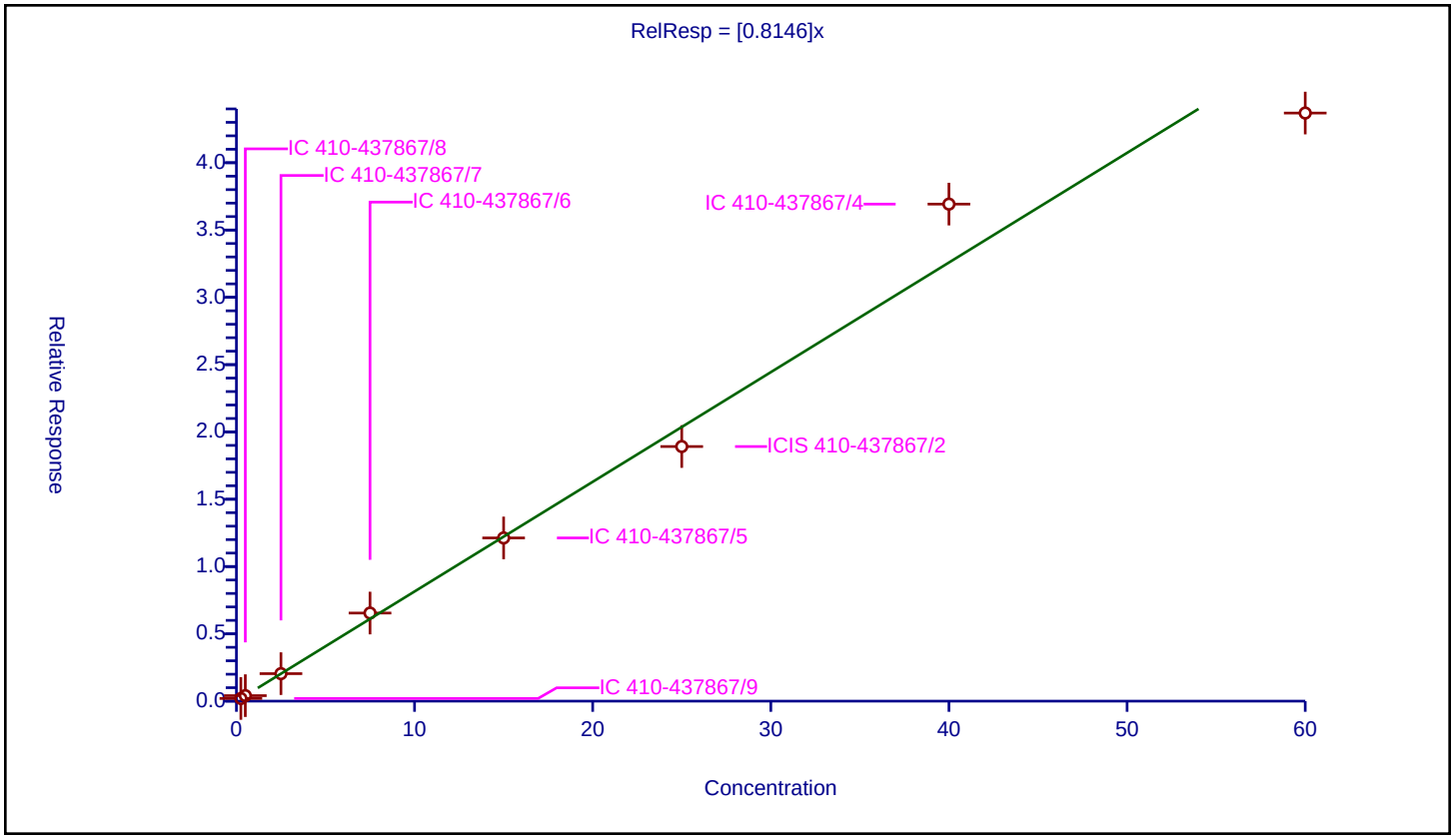
Curve Coefficients

Intercept:	0
Slope:	0.8146

Error Coefficients

Standard Error:	3840000
Relative Standard Error:	7.5
Correlation Coefficient:	0.980
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.25	0.198522	5.0	737702.0	0.794088	Y
2	IC 410-437867/8	0.5	0.408641	5.0	689211.0	0.817282	Y
3	IC 410-437867/7	2.5	2.042073	5.0	806805.0	0.816829	Y
4	IC 410-437867/6	7.5	6.544885	5.0	754176.0	0.872651	Y
5	IC 410-437867/5	15.0	12.124504	5.0	819450.0	0.8083	Y
6	ICIS 410-437867/2	25.0	18.916249	5.0	723852.0	0.75665	Y
7	IC 410-437867/4	40.0	36.926974	5.0	816988.0	0.923174	Y
8	IC 410-437867/3	60.0	43.690747	5.0	844222.0	0.728179	Y



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Calibration / p-Dimethylamino azobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

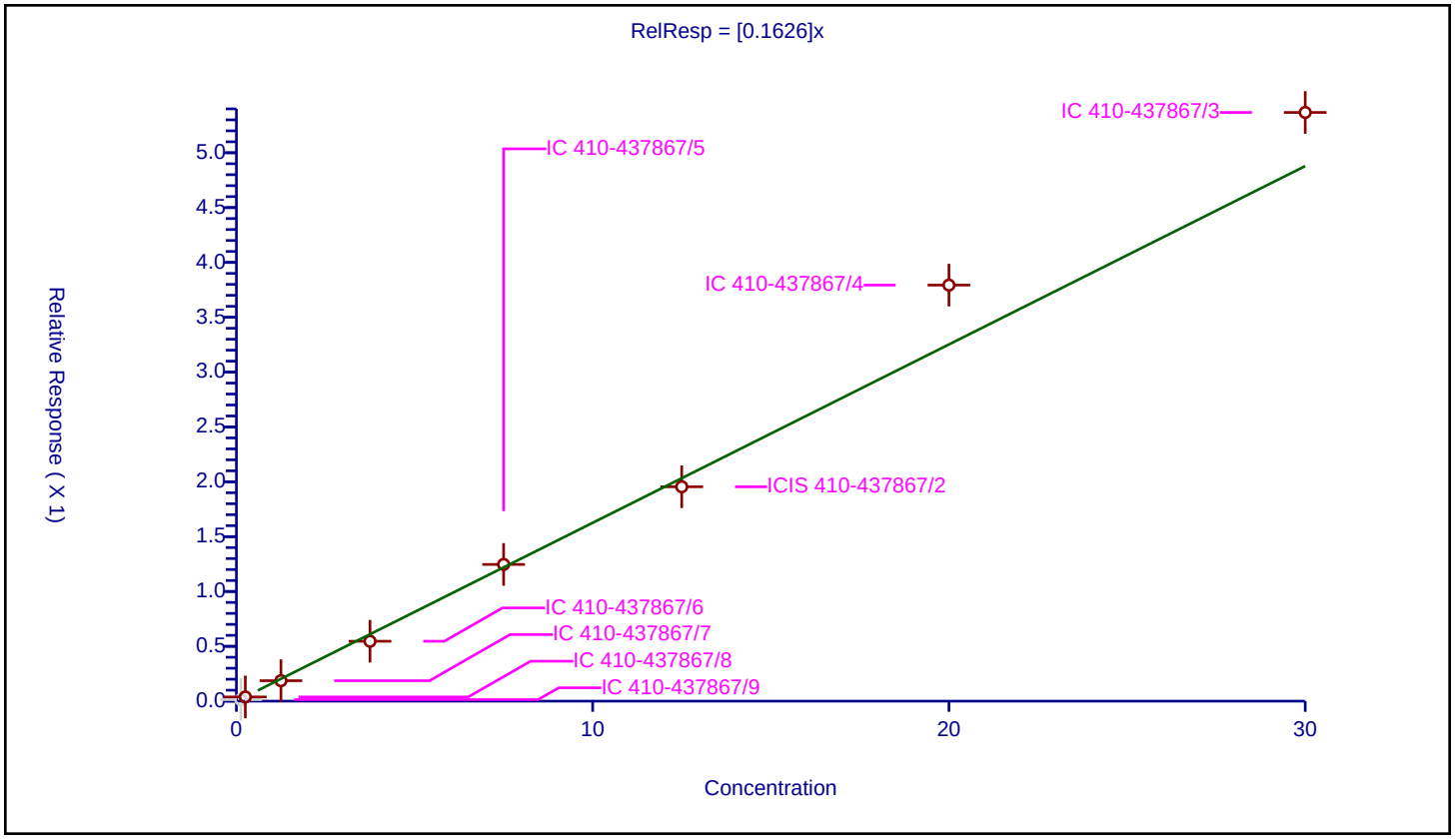
Curve Coefficients

Intercept:	0
Slope:	0.1626

Error Coefficients

Standard Error:	472000
Relative Standard Error:	10.1
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.013861	5.0	737702.0	0.110885	N
2	IC 410-437867/8	0.25	0.038131	5.0	689211.0	0.152522	Y
3	IC 410-437867/7	1.25	0.186284	5.0	806805.0	0.149027	Y
4	IC 410-437867/6	3.75	0.546073	5.0	754176.0	0.145619	Y
5	IC 410-437867/5	7.5	1.246281	5.0	819450.0	0.166171	Y
6	ICIS 410-437867/2	12.5	1.954592	5.0	723852.0	0.156367	Y
7	IC 410-437867/4	20.0	3.793409	5.0	816988.0	0.18967	Y
8	IC 410-437867/3	30.0	5.367356	5.0	844222.0	0.178912	Y



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Calibration / Chlorobenzilate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

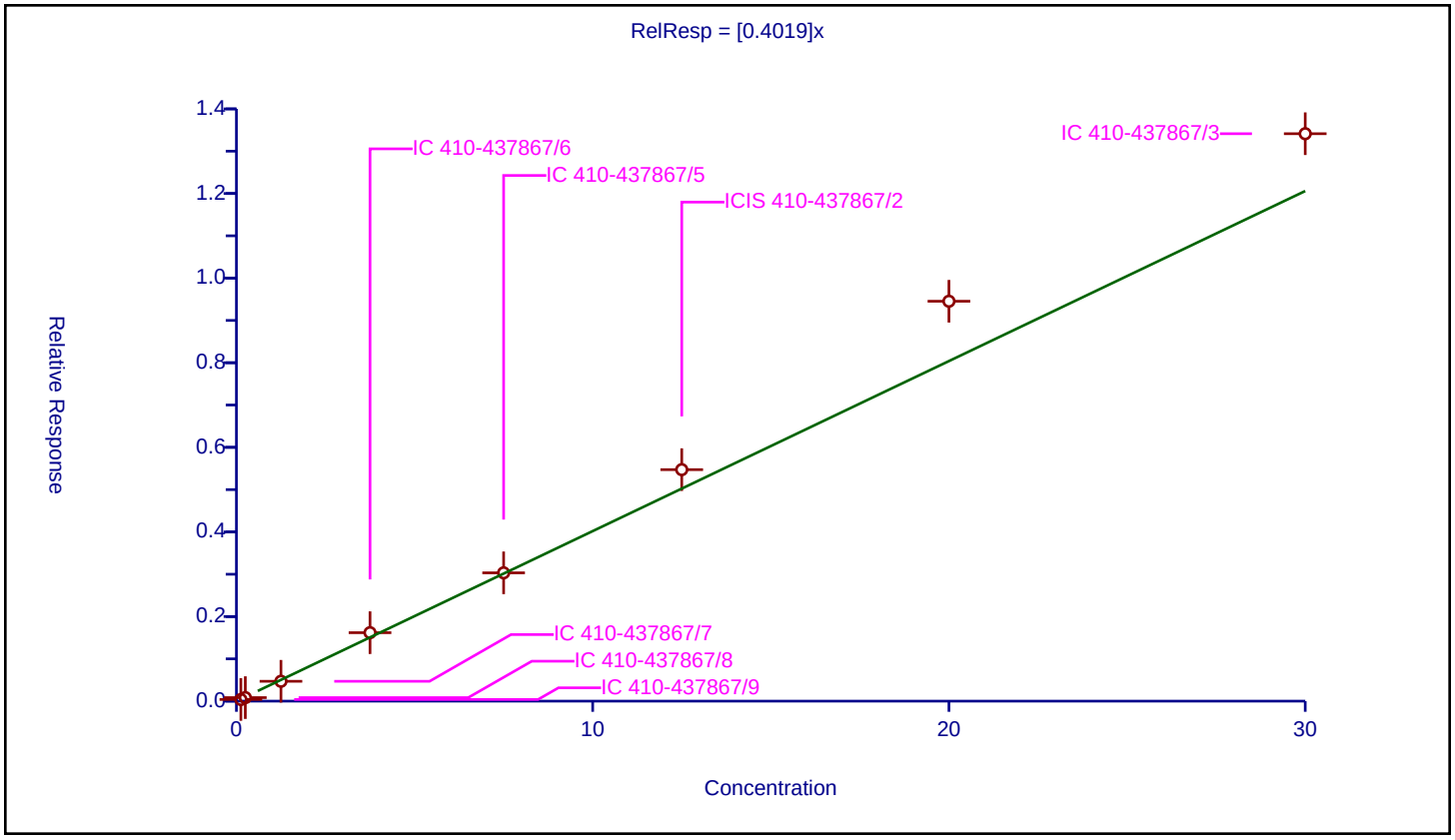
Curve Coefficients

Intercept:	0
Slope:	0.4019

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	14.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.03925	5.0	737702.0	0.314002	Y
2	IC 410-437867/8	0.25	0.083139	5.0	689211.0	0.332554	Y
3	IC 410-437867/7	1.25	0.469426	5.0	806805.0	0.375541	Y
4	IC 410-437867/6	3.75	1.618077	5.0	754176.0	0.431487	Y
5	IC 410-437867/5	7.5	3.032918	5.0	819450.0	0.404389	Y
6	ICIS 410-437867/2	12.5	5.472148	5.0	723852.0	0.437772	Y
7	IC 410-437867/4	20.0	9.452948	5.0	816988.0	0.472647	Y
8	IC 410-437867/3	30.0	13.413445	5.0	844222.0	0.447115	Y



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Calibration / 3,3'-Dimethylbenzidine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

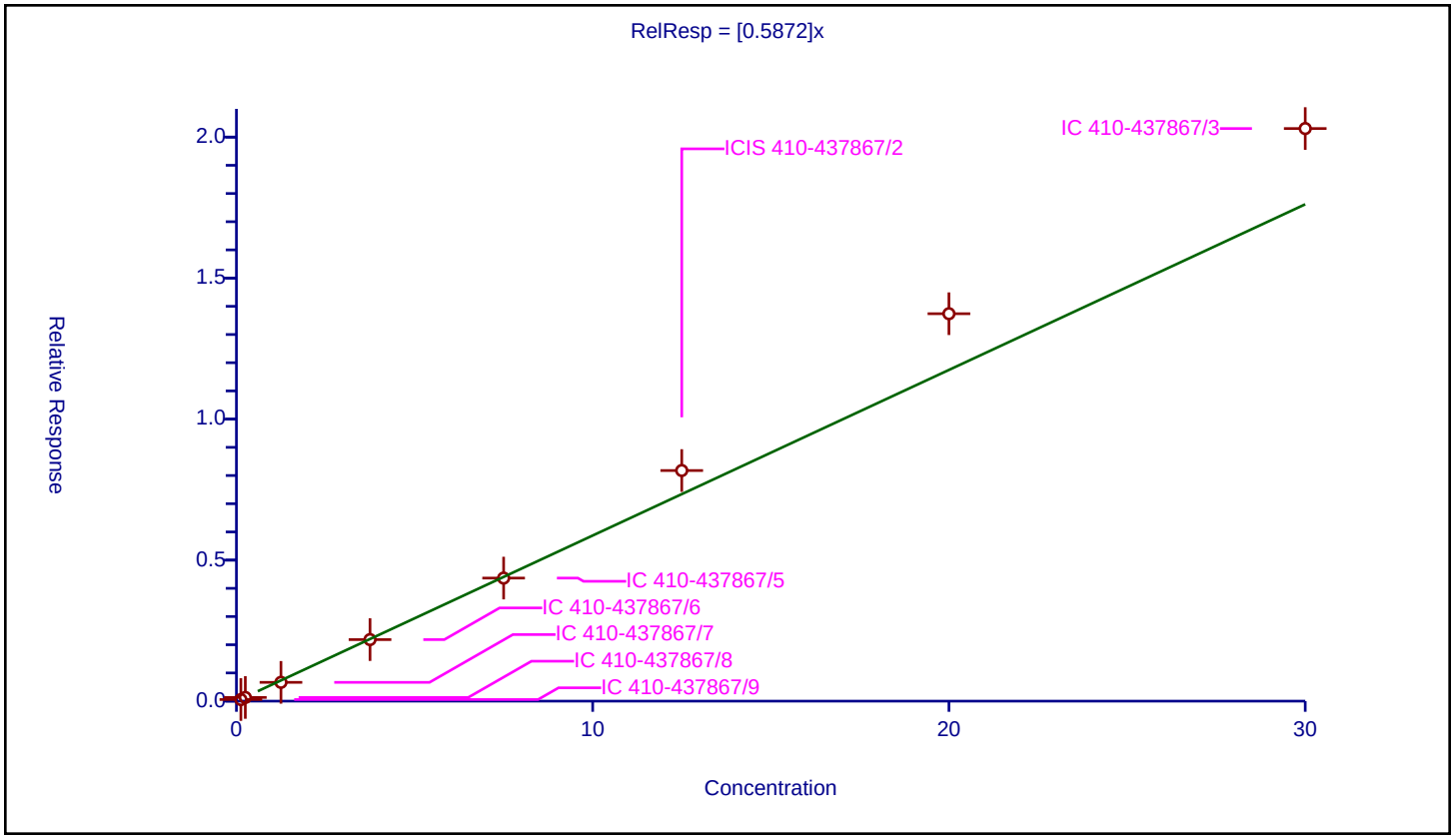
Curve Coefficients

Intercept:	0
Slope:	0.5872

Error Coefficients

Standard Error:	1640000
Relative Standard Error:	13.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.05732	5.0	737702.0	0.458559	Y
2	IC 410-437867/8	0.25	0.131193	5.0	689211.0	0.524774	Y
3	IC 410-437867/7	1.25	0.666072	5.0	806805.0	0.532857	Y
4	IC 410-437867/6	3.75	2.182375	5.0	754176.0	0.581967	Y
5	IC 410-437867/5	7.5	4.363823	5.0	819450.0	0.581843	Y
6	ICIS 410-437867/2	12.5	8.176927	5.0	723852.0	0.654154	Y
7	IC 410-437867/4	20.0	13.737546	5.0	816988.0	0.686877	Y
8	IC 410-437867/3	30.0	20.302871	5.0	844222.0	0.676762	Y



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Calibration / Butyl benzyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

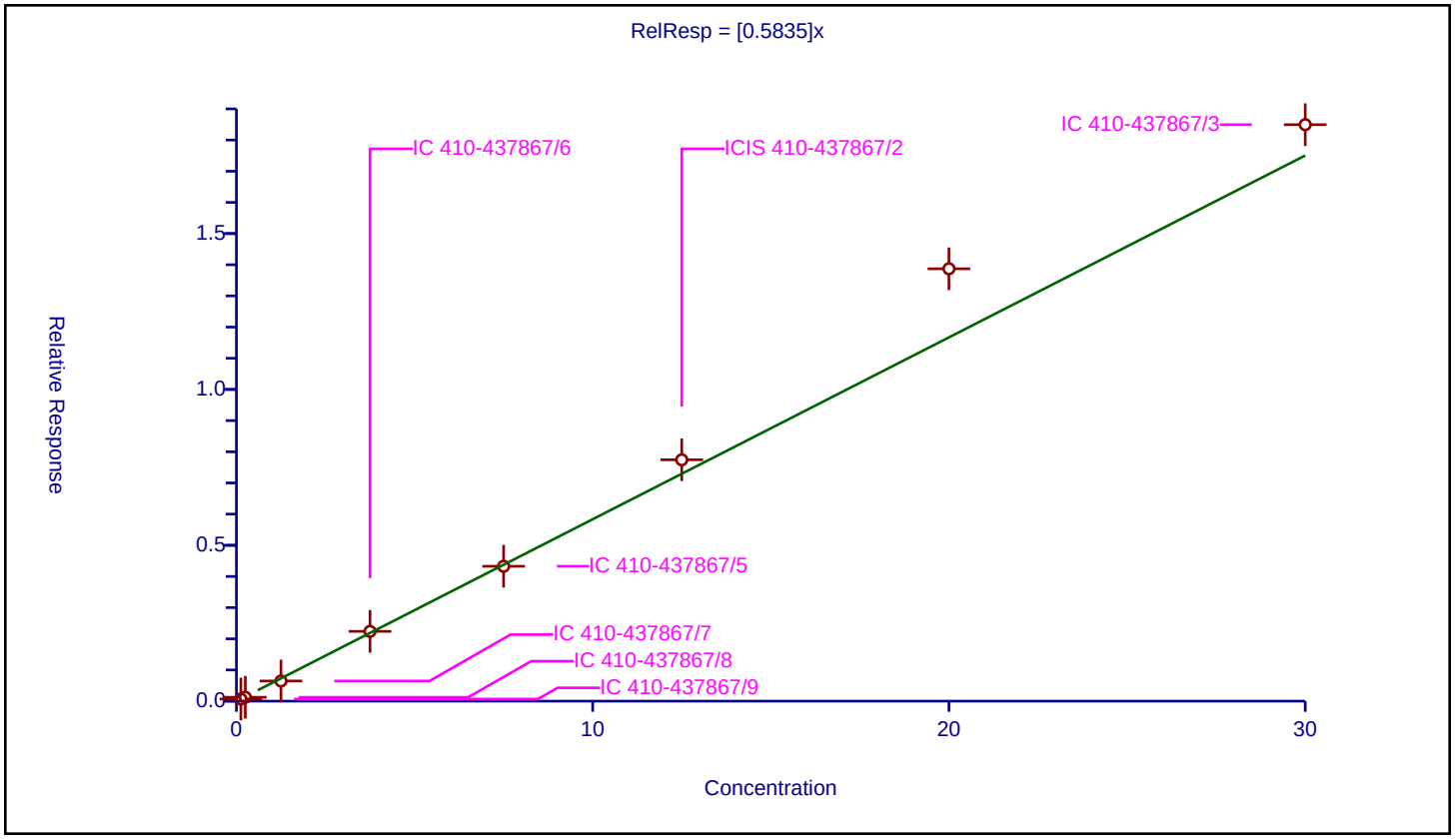
Curve Coefficients

Intercept:	0
Slope:	0.5835

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	10.8
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.068923	5.0	737702.0	0.551388	Y
2	IC 410-437867/8	0.25	0.124135	5.0	689211.0	0.496539	Y
3	IC 410-437867/7	1.25	0.646092	5.0	806805.0	0.516873	Y
4	IC 410-437867/6	3.75	2.237926	5.0	754176.0	0.59678	Y
5	IC 410-437867/5	7.5	4.326341	5.0	819450.0	0.576845	Y
6	ICIS 410-437867/2	12.5	7.742936	5.0	723852.0	0.619435	Y
7	IC 410-437867/4	20.0	13.870889	5.0	816988.0	0.693544	Y
8	IC 410-437867/3	30.0	18.493323	5.0	844222.0	0.616444	Y



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Calibration / 2-Acetylaminofluorene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

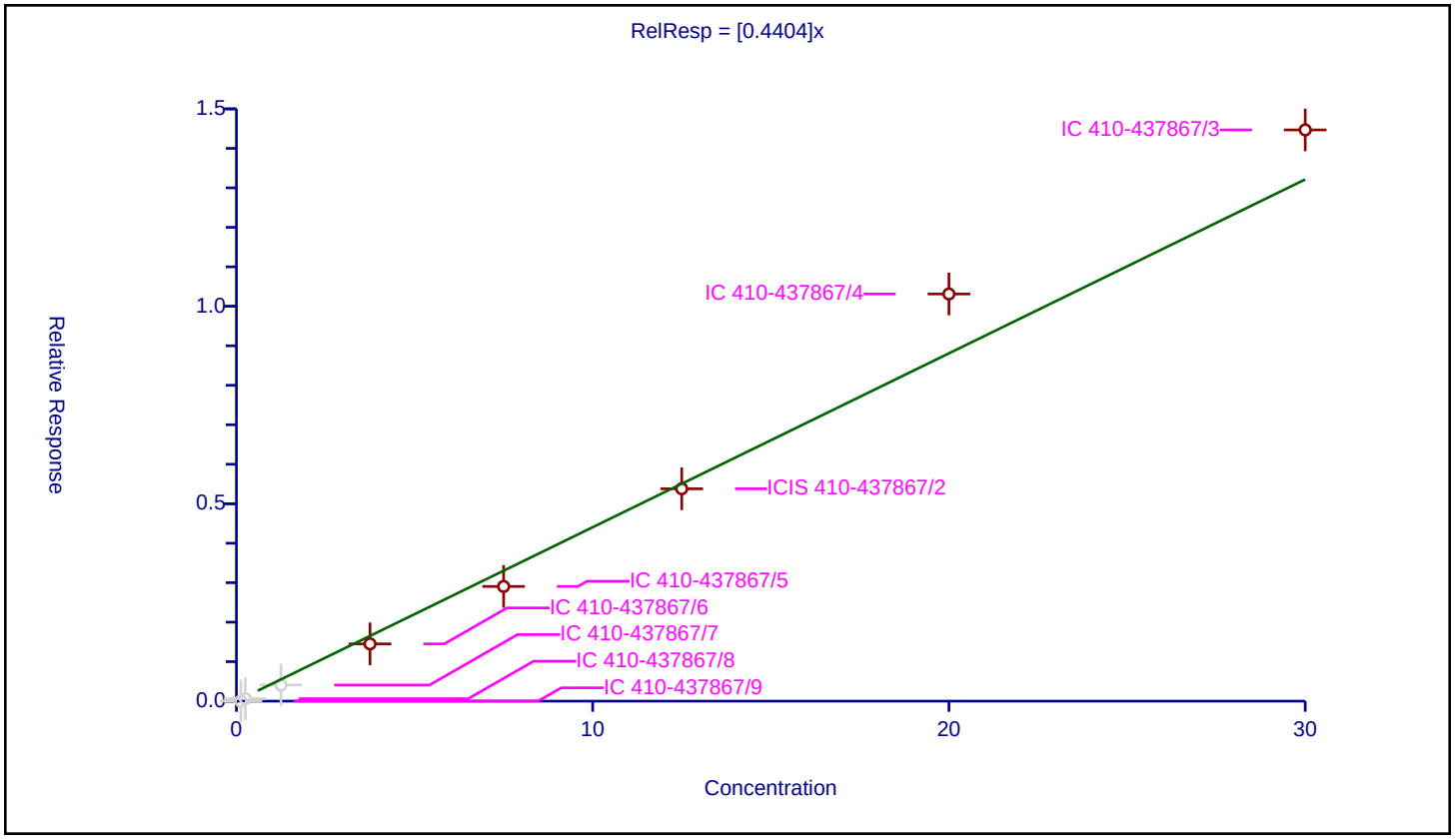
Curve Coefficients

Intercept:	0
Slope:	0.4404

Error Coefficients

Standard Error:	1560000
Relative Standard Error:	13.0
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.001335	5.0	737702.0	0.010682	N
2	IC 410-437867/8	0.25	0.062535	5.0	689211.0	0.250141	N
3	IC 410-437867/7	1.25	0.408209	5.0	806805.0	0.326567	N
4	IC 410-437867/6	3.75	1.450232	5.0	754176.0	0.386728	Y
5	IC 410-437867/5	7.5	2.904875	5.0	819450.0	0.387317	Y
6	ICIS 410-437867/2	12.5	5.378634	5.0	723852.0	0.430291	Y
7	IC 410-437867/4	20.0	10.312459	5.0	816988.0	0.515623	Y
8	IC 410-437867/3	30.0	14.466947	5.0	844222.0	0.482232	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

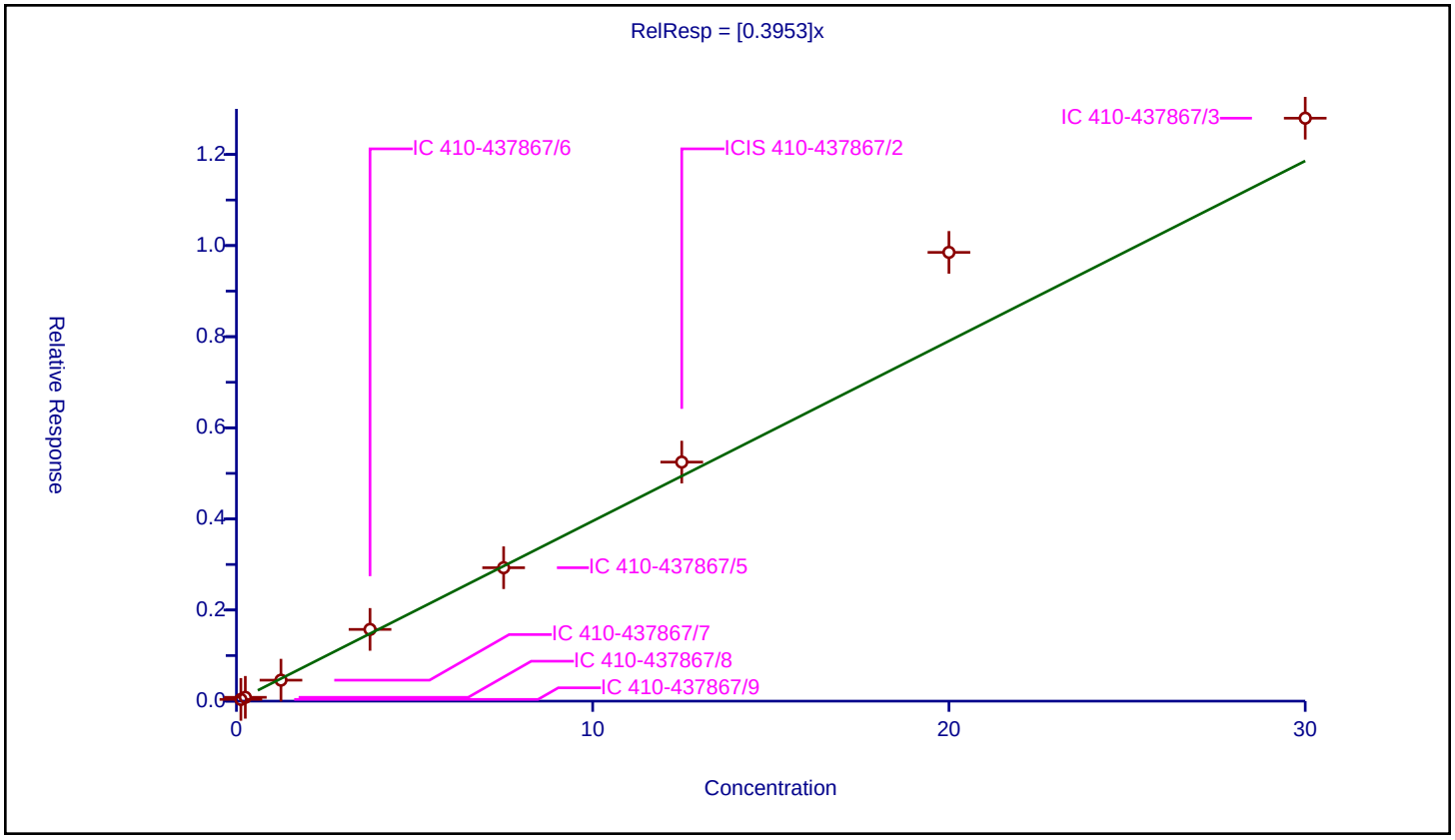
Curve Coefficients

Intercept:	0
Slope:	0.3953

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	14.6
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.038532	5.0	737702.0	0.308255	Y
2	IC 410-437867/8	0.25	0.084045	5.0	689211.0	0.336182	Y
3	IC 410-437867/7	1.25	0.460464	5.0	806805.0	0.368372	Y
4	IC 410-437867/6	3.75	1.574586	5.0	754176.0	0.41989	Y
5	IC 410-437867/5	7.5	2.928617	5.0	819450.0	0.390482	Y
6	ICIS 410-437867/2	12.5	5.247212	5.0	723852.0	0.419777	Y
7	IC 410-437867/4	20.0	9.850793	5.0	816988.0	0.49254	Y
8	IC 410-437867/3	30.0	12.796202	5.0	844222.0	0.42654	Y



Calibration / 4,4'-Methylene bis(2-chloroaniline)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

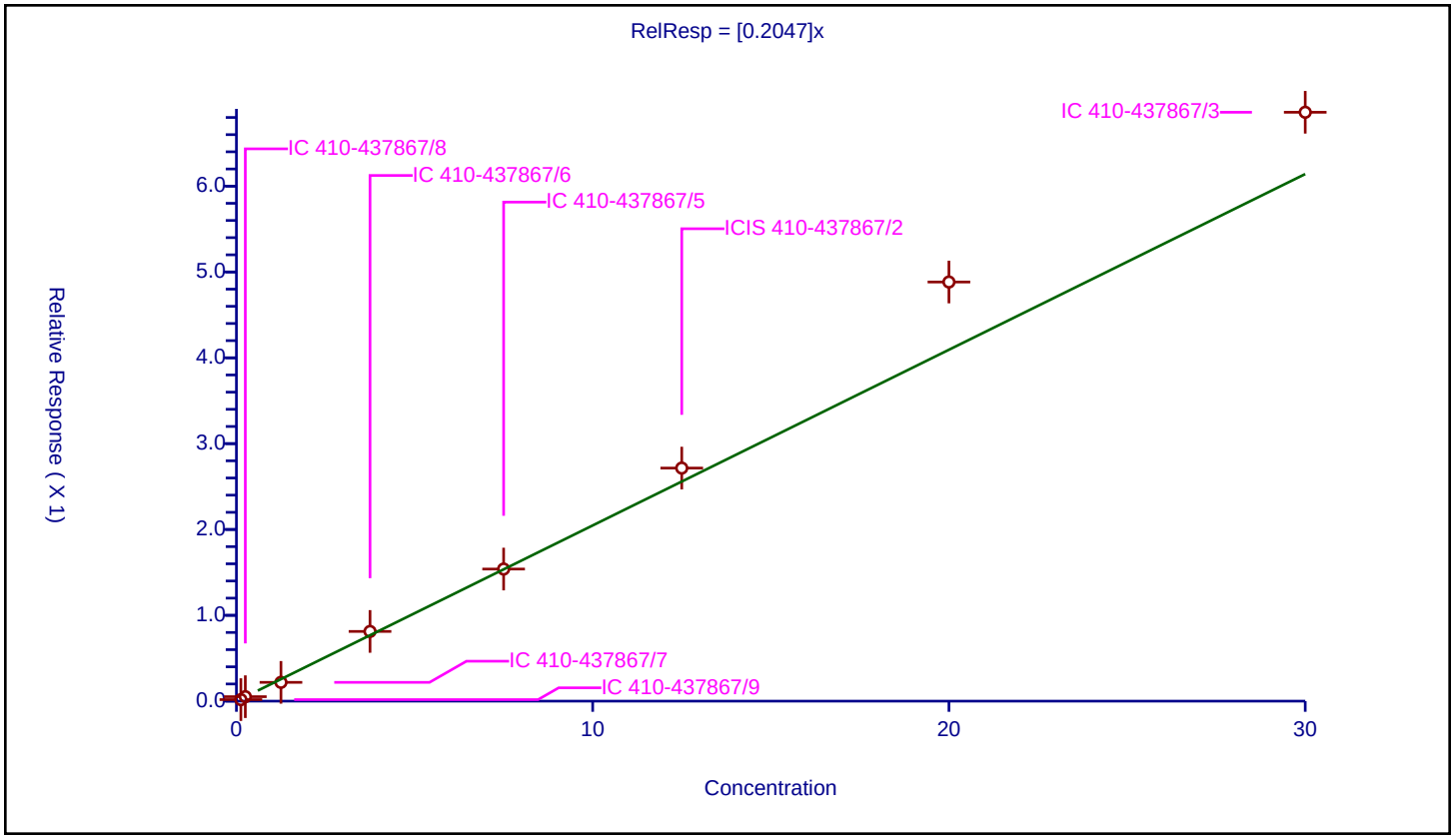
Curve Coefficients

Intercept:	0
Slope:	0.2047

Error Coefficients

Standard Error:	562000
Relative Standard Error:	15.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.017812	5.0	737702.0	0.142497	Y
2	IC 410-437867/8	0.25	0.052031	5.0	689211.0	0.208122	Y
3	IC 410-437867/7	1.25	0.218876	5.0	806805.0	0.175101	Y
4	IC 410-437867/6	3.75	0.812184	5.0	754176.0	0.216583	Y
5	IC 410-437867/5	7.5	1.538953	5.0	819450.0	0.205194	Y
6	ICIS 410-437867/2	12.5	2.715161	5.0	723852.0	0.217213	Y
7	IC 410-437867/4	20.0	4.883187	5.0	816988.0	0.244159	Y
8	IC 410-437867/3	30.0	6.860565	5.0	844222.0	0.228686	Y



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Calibration / Benzo[a]anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

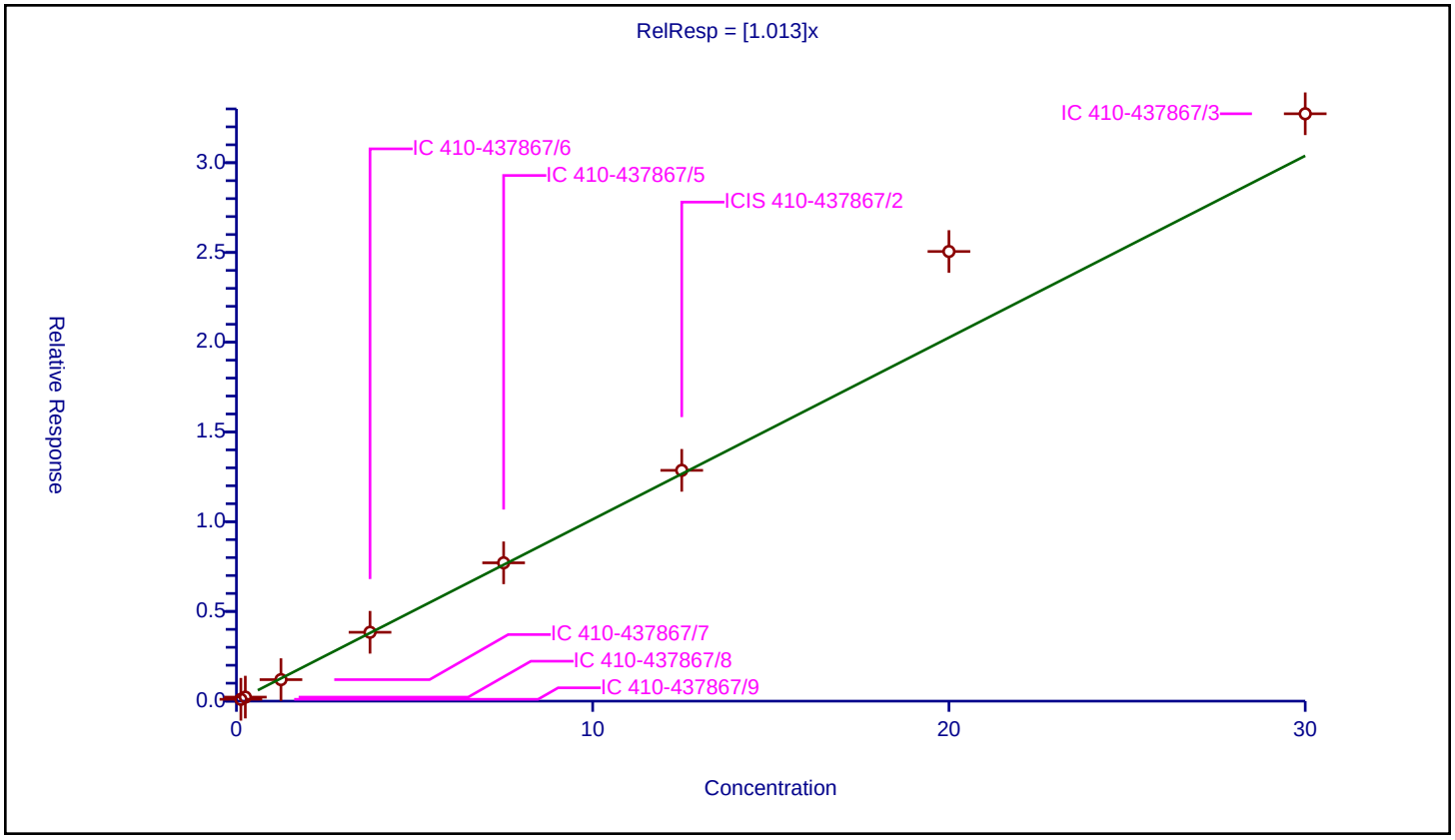
Curve Coefficients

Intercept:	0
Slope:	1.013

Error Coefficients

Standard Error:	2740000
Relative Standard Error:	12.7
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.102765	5.0	737702.0	0.822121	Y
2	IC 410-437867/8	0.25	0.224641	5.0	689211.0	0.898564	Y
3	IC 410-437867/7	1.25	1.198722	5.0	806805.0	0.958978	Y
4	IC 410-437867/6	3.75	3.83675	5.0	754176.0	1.023133	Y
5	IC 410-437867/5	7.5	7.707554	5.0	819450.0	1.027674	Y
6	ICIS 410-437867/2	12.5	12.860115	5.0	723852.0	1.028809	Y
7	IC 410-437867/4	20.0	25.053973	5.0	816988.0	1.252699	Y
8	IC 410-437867/3	30.0	32.72779	5.0	844222.0	1.090926	Y



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Calibration / Chrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

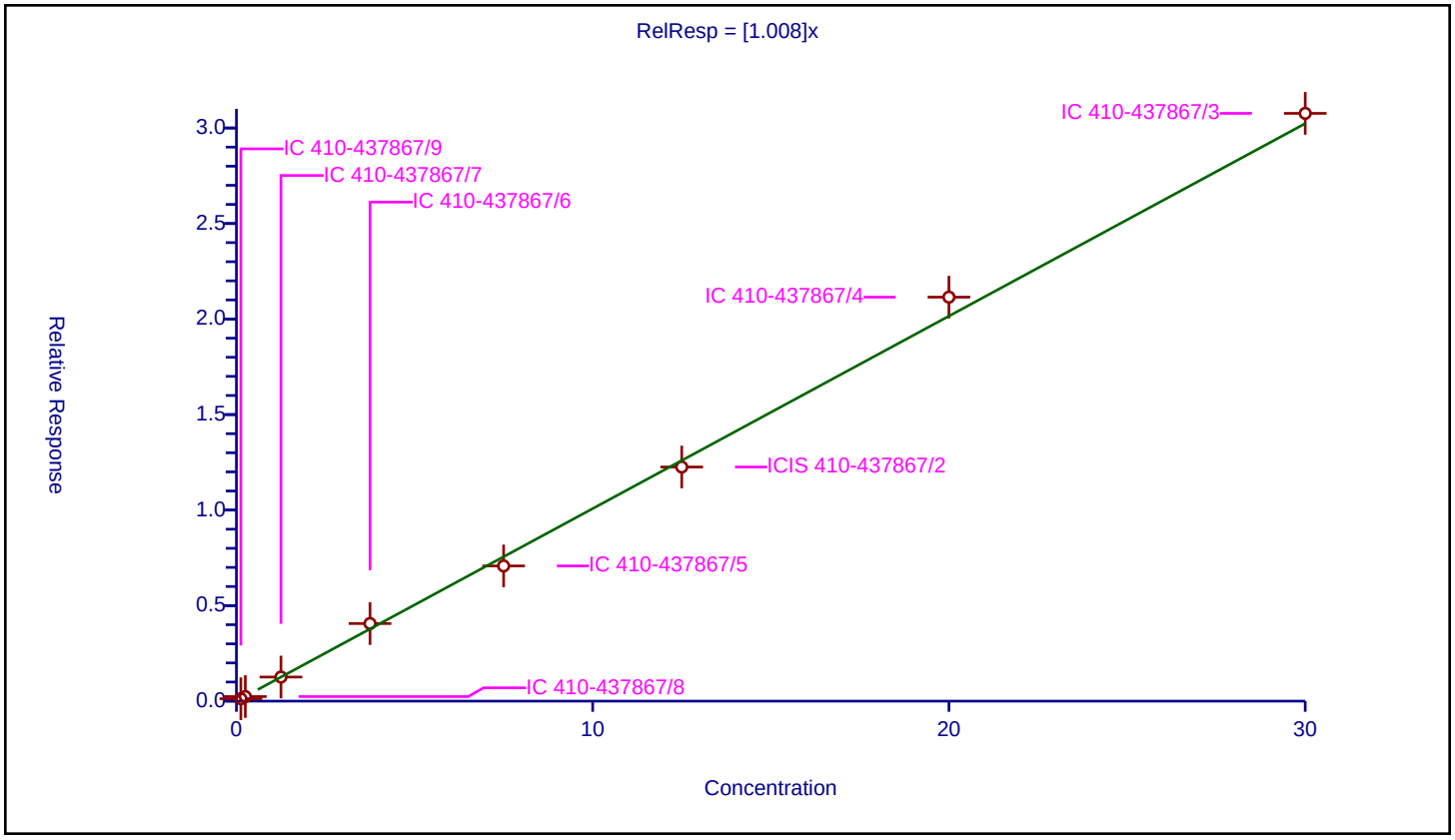
Curve Coefficients

Intercept:	0
Slope:	1.008

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	4.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.126101	5.0	737702.0	1.008808	Y
2	IC 410-437867/8	0.25	0.238555	5.0	689211.0	0.954222	Y
3	IC 410-437867/7	1.25	1.261172	5.0	806805.0	1.008938	Y
4	IC 410-437867/6	3.75	4.062076	5.0	754176.0	1.08322	Y
5	IC 410-437867/5	7.5	7.077064	5.0	819450.0	0.943609	Y
6	ICIS 410-437867/2	12.5	12.255095	5.0	723852.0	0.980408	Y
7	IC 410-437867/4	20.0	21.146253	5.0	816988.0	1.057313	Y
8	IC 410-437867/3	30.0	30.76548	5.0	844222.0	1.025516	Y



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Calibration / Bis(2-ethylhexyl) phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

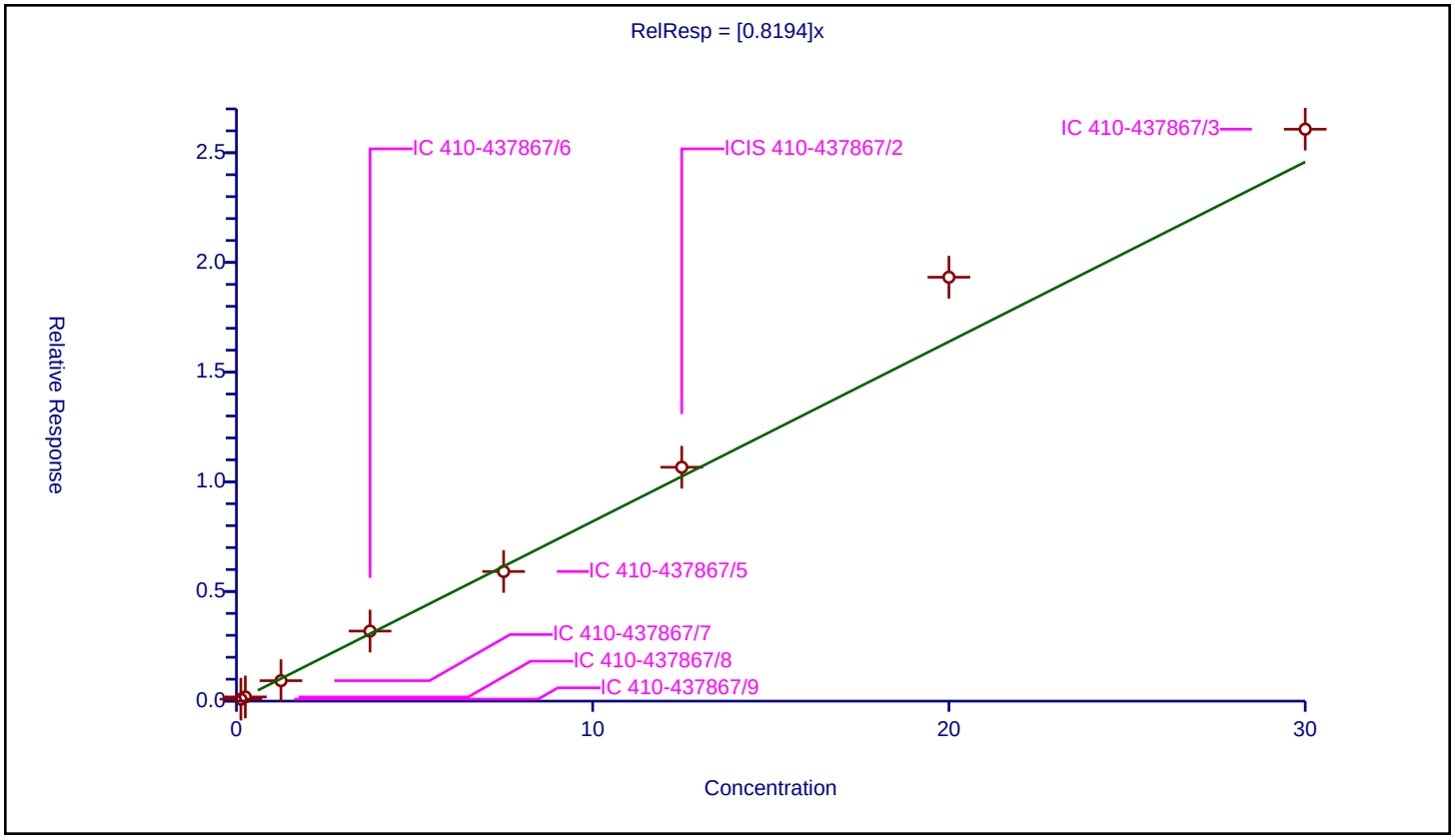
Curve Coefficients

Intercept:	0
Slope:	0.8194

Error Coefficients

Standard Error:	2170000
Relative Standard Error:	9.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.090253	5.0	737702.0	0.722026	Y
2	IC 410-437867/8	0.25	0.189855	5.0	689211.0	0.759419	Y
3	IC 410-437867/7	1.25	0.93183	5.0	806805.0	0.745464	Y
4	IC 410-437867/6	3.75	3.194387	5.0	754176.0	0.851837	Y
5	IC 410-437867/5	7.5	5.909744	5.0	819450.0	0.787966	Y
6	ICIS 410-437867/2	12.5	10.663748	5.0	723852.0	0.8531	Y
7	IC 410-437867/4	20.0	19.326288	5.0	816988.0	0.966314	Y
8	IC 410-437867/3	30.0	26.074812	5.0	844222.0	0.86916	Y



11/14/2023
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Calibration / 6-Methylchrysene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

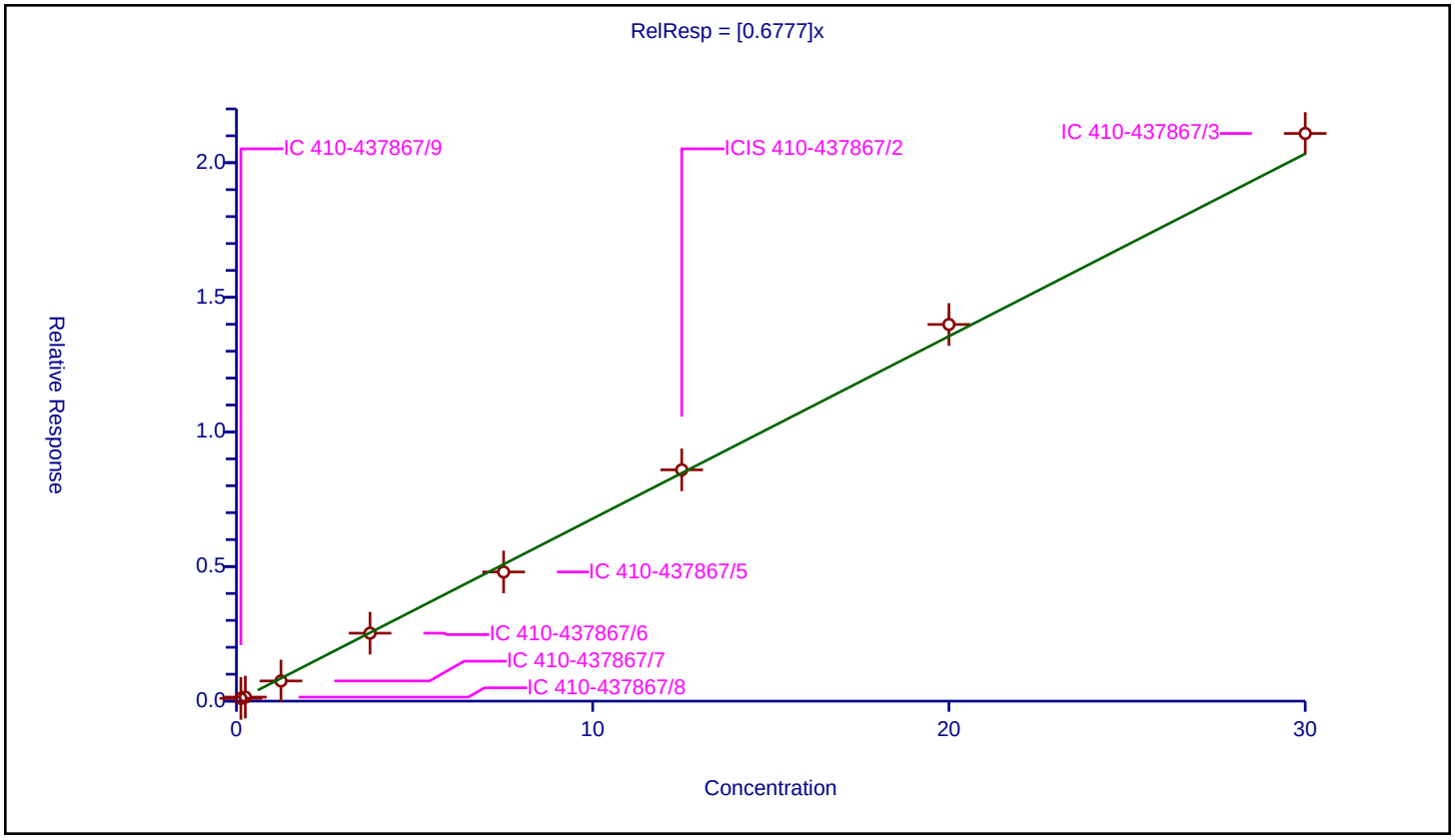
Curve Coefficients

Intercept:	0
Slope:	0.6777

Error Coefficients

Standard Error:	1700000
Relative Standard Error:	10.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.102718	5.0	737702.0	0.821741	Y
2	IC 410-437867/8	0.25	0.149541	5.0	689211.0	0.598162	Y
3	IC 410-437867/7	1.25	0.749097	5.0	806805.0	0.599277	Y
4	IC 410-437867/6	3.75	2.524689	5.0	754176.0	0.67325	Y
5	IC 410-437867/5	7.5	4.797748	5.0	819450.0	0.6397	Y
6	ICIS 410-437867/2	12.5	8.591743	5.0	723852.0	0.687339	Y
7	IC 410-437867/4	20.0	13.991711	5.0	816988.0	0.699586	Y
8	IC 410-437867/3	30.0	21.088138	5.0	844222.0	0.702938	Y



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Calibration / Di-n-octyl phthalate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

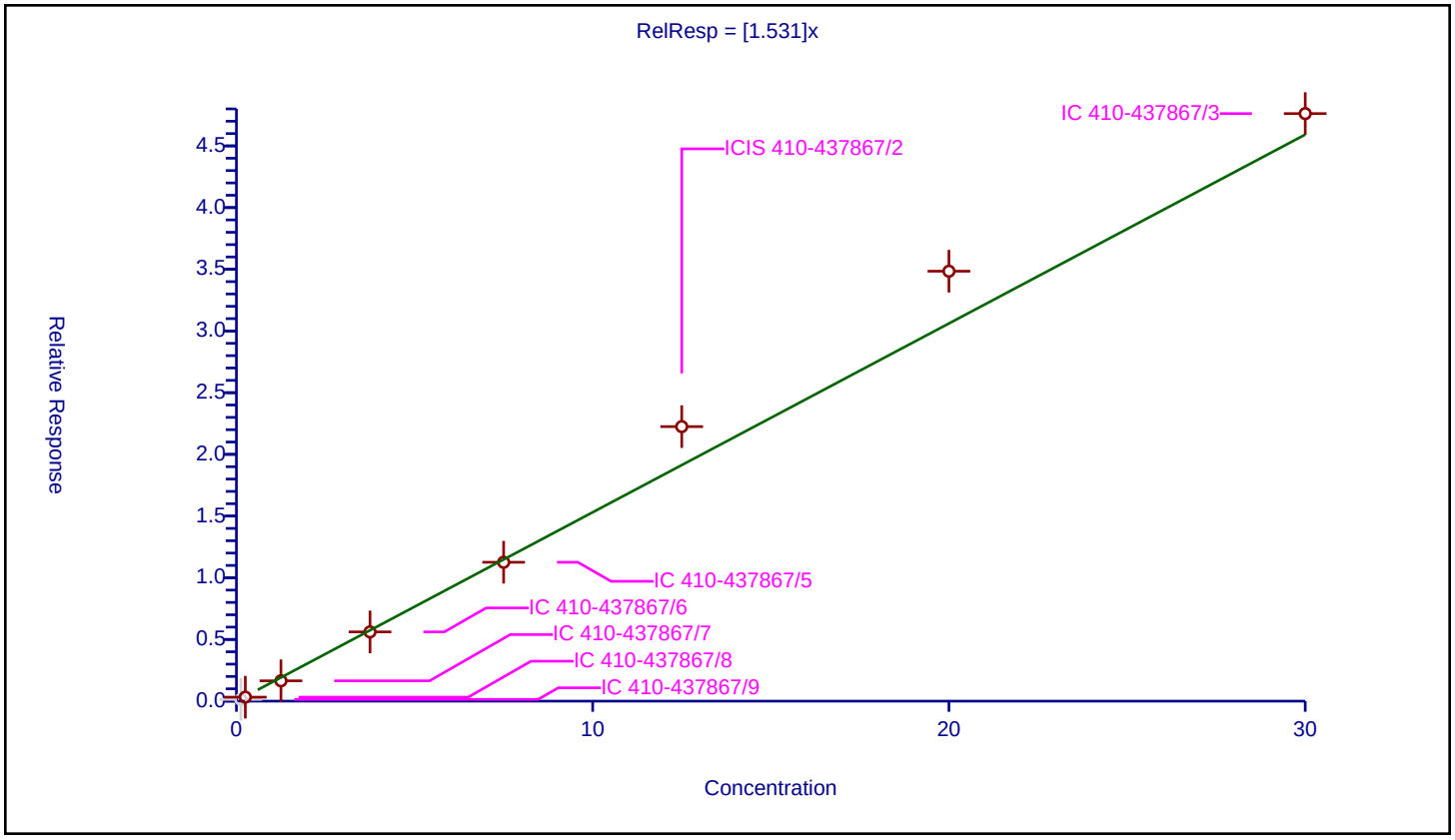
Curve Coefficients

Intercept:	0
Slope:	1.531

Error Coefficients

Standard Error:	3930000
Relative Standard Error:	12.4
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.140937	5.0	600410.0	1.127496	N
2	IC 410-437867/8	0.25	0.322645	5.0	585178.0	1.290582	Y
3	IC 410-437867/7	1.25	1.645395	5.0	674434.0	1.316316	Y
4	IC 410-437867/6	3.75	5.612296	5.0	650805.0	1.496612	Y
5	IC 410-437867/5	7.5	11.255126	5.0	704539.0	1.500683	Y
6	ICIS 410-437867/2	12.5	22.250019	5.0	572713.0	1.780002	Y
7	IC 410-437867/4	20.0	34.844996	5.0	757528.0	1.74225	Y
8	IC 410-437867/3	30.0	47.617988	5.0	779568.0	1.587266	Y



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Calibration / 7,12-Dimethylbenz(a)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

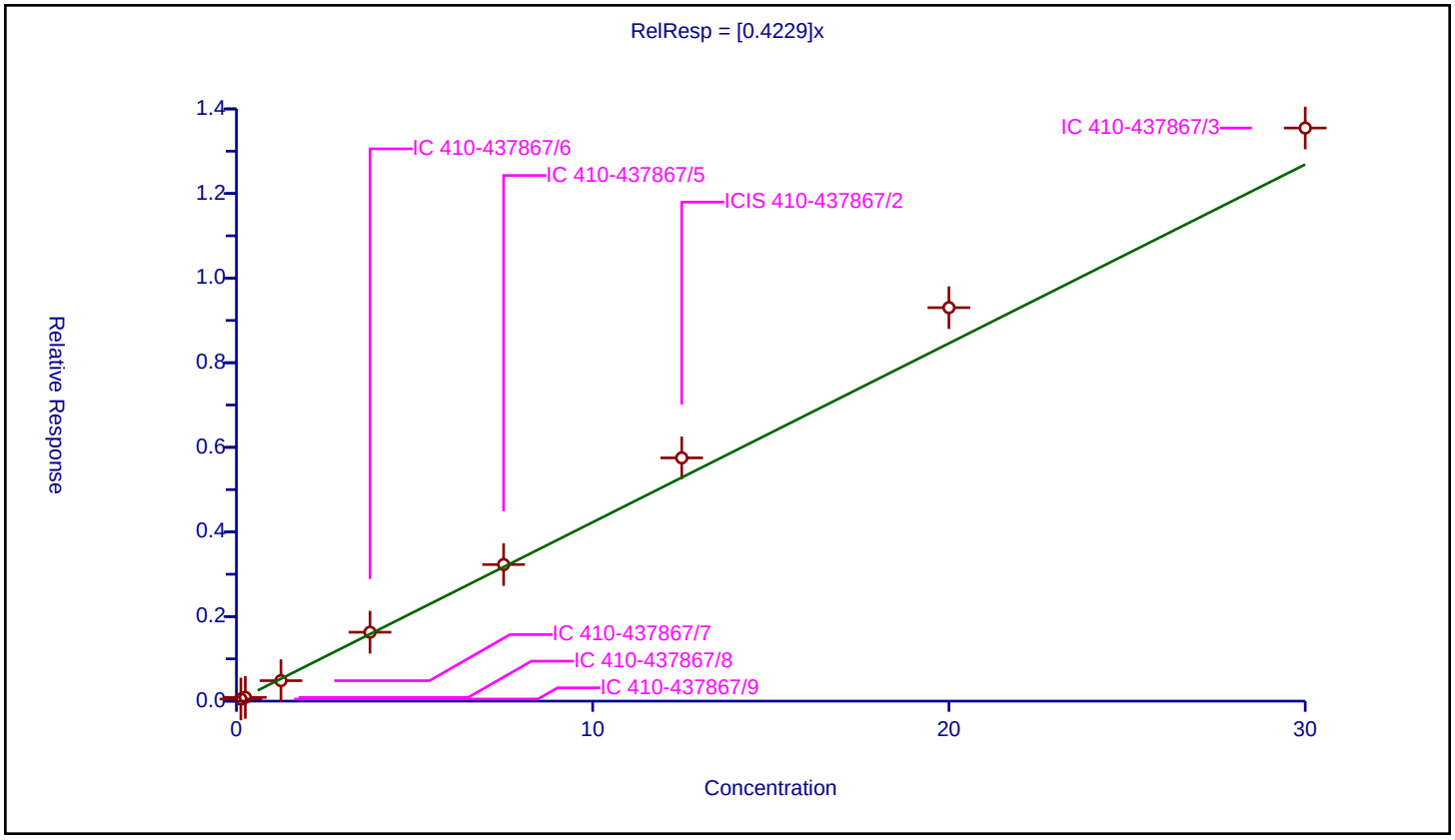
Curve Coefficients

Intercept:	0
Slope:	0.4229

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	9.2
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.049924	5.0	600410.0	0.399394	Y
2	IC 410-437867/8	0.25	0.088751	5.0	585178.0	0.355003	Y
3	IC 410-437867/7	1.25	0.48385	5.0	674434.0	0.38708	Y
4	IC 410-437867/6	3.75	1.629259	5.0	650805.0	0.434469	Y
5	IC 410-437867/5	7.5	3.228714	5.0	704539.0	0.430495	Y
6	ICIS 410-437867/2	12.5	5.750708	5.0	572713.0	0.460057	Y
7	IC 410-437867/4	20.0	9.301293	5.0	757528.0	0.465065	Y
8	IC 410-437867/3	30.0	13.547888	5.0	779568.0	0.451596	Y



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Calibration / Benzo[b]fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

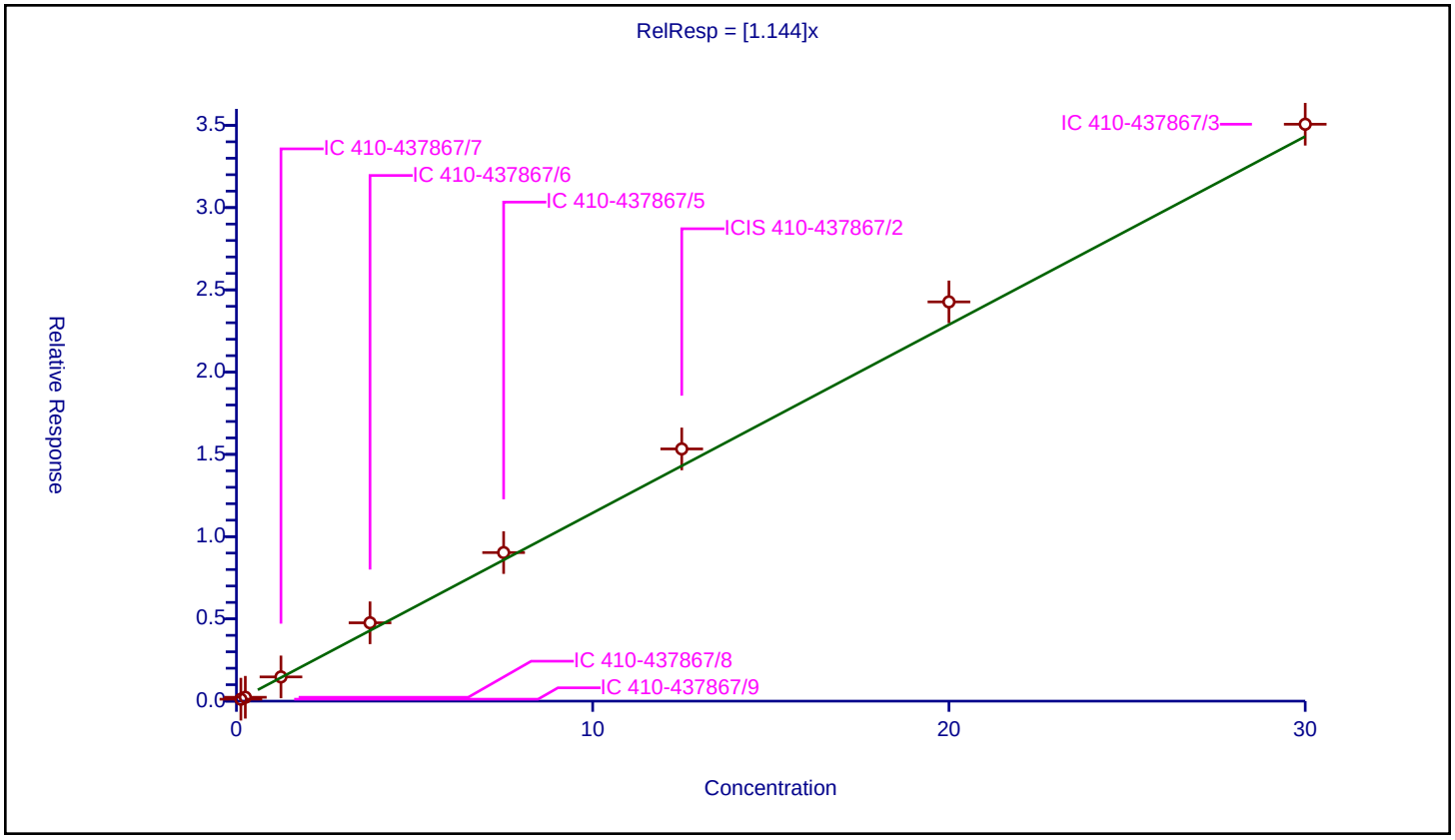
Curve Coefficients

Intercept:	0
Slope:	1.144

Error Coefficients

Standard Error:	2630000
Relative Standard Error:	11.0
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.119044	5.0	600410.0	0.952349	Y
2	IC 410-437867/8	0.25	0.23492	5.0	585178.0	0.93968	Y
3	IC 410-437867/7	1.25	1.473109	5.0	674434.0	1.178487	Y
4	IC 410-437867/6	3.75	4.762133	5.0	650805.0	1.269902	Y
5	IC 410-437867/5	7.5	9.031324	5.0	704539.0	1.204177	Y
6	ICIS 410-437867/2	12.5	15.330602	5.0	572713.0	1.226448	Y
7	IC 410-437867/4	20.0	24.268799	5.0	757528.0	1.21344	Y
8	IC 410-437867/3	30.0	35.068172	5.0	779568.0	1.168939	Y



Calibration / Benzo[k]fluoranthene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

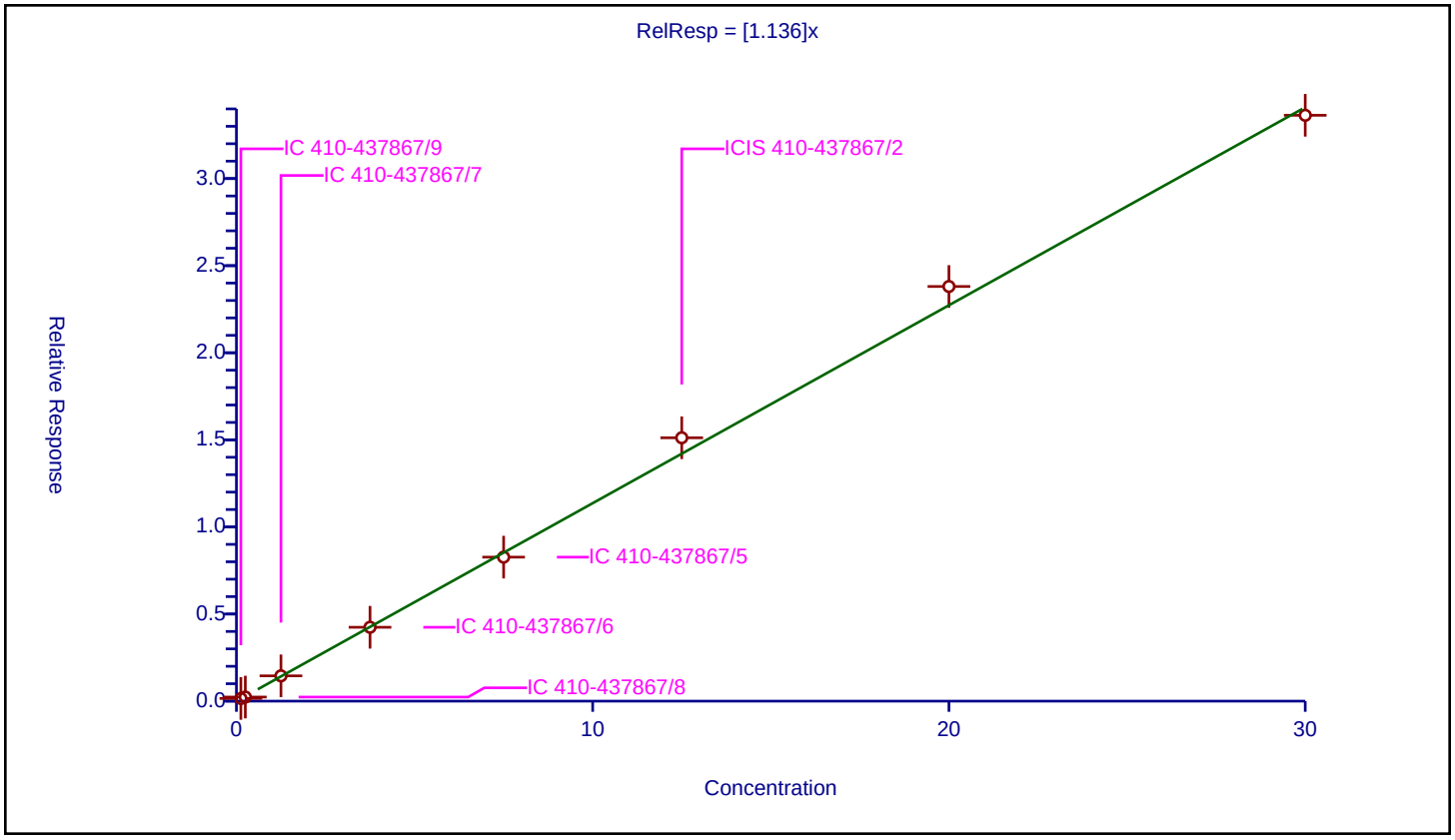
Curve Coefficients

Intercept:	0
Slope:	1.136

Error Coefficients

Standard Error:	2540000
Relative Standard Error:	8.1
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.154578	5.0	600410.0	1.236622	Y
2	IC 410-437867/8	0.25	0.2348	5.0	585178.0	0.939201	Y
3	IC 410-437867/7	1.25	1.451358	5.0	674434.0	1.161086	Y
4	IC 410-437867/6	3.75	4.240917	5.0	650805.0	1.130911	Y
5	IC 410-437867/5	7.5	8.267073	5.0	704539.0	1.102276	Y
6	ICIS 410-437867/2	12.5	15.119239	5.0	572713.0	1.209539	Y
7	IC 410-437867/4	20.0	23.804981	5.0	757528.0	1.190249	Y
8	IC 410-437867/3	30.0	33.633211	5.0	779568.0	1.121107	Y



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Calibration / Benzo[a]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

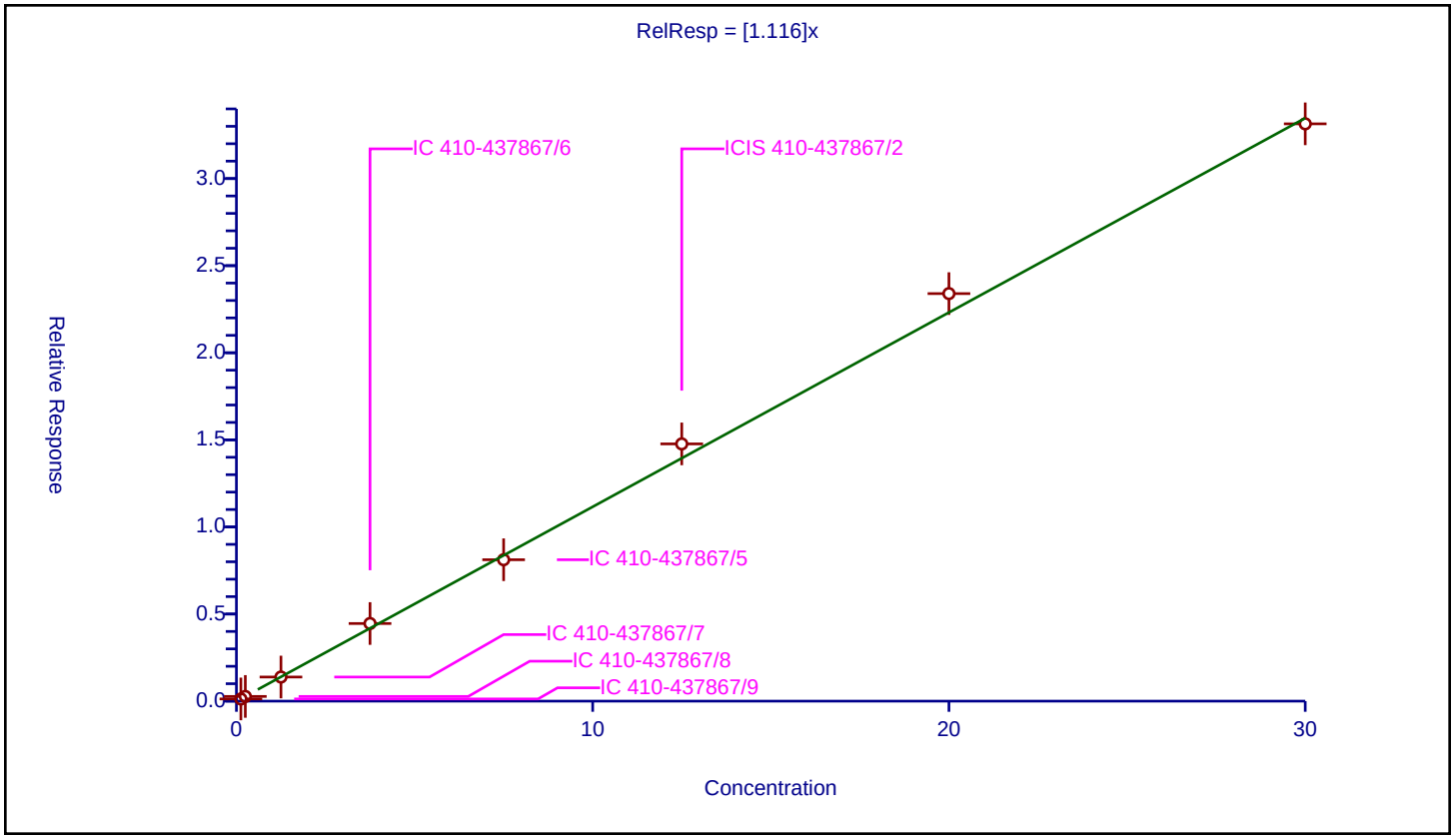
Curve Coefficients

Intercept:	0
Slope:	1.116

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	5.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.12638	5.0	600410.0	1.011042	Y
2	IC 410-437867/8	0.25	0.270029	5.0	585178.0	1.080116	Y
3	IC 410-437867/7	1.25	1.384175	5.0	674434.0	1.10734	Y
4	IC 410-437867/6	3.75	4.456911	5.0	650805.0	1.18851	Y
5	IC 410-437867/5	7.5	8.118387	5.0	704539.0	1.082452	Y
6	ICIS 410-437867/2	12.5	14.767885	5.0	572713.0	1.181431	Y
7	IC 410-437867/4	20.0	23.396568	5.0	757528.0	1.169828	Y
8	IC 410-437867/3	30.0	33.141977	5.0	779568.0	1.104733	Y



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Calibration / 3-Methylcholanthrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

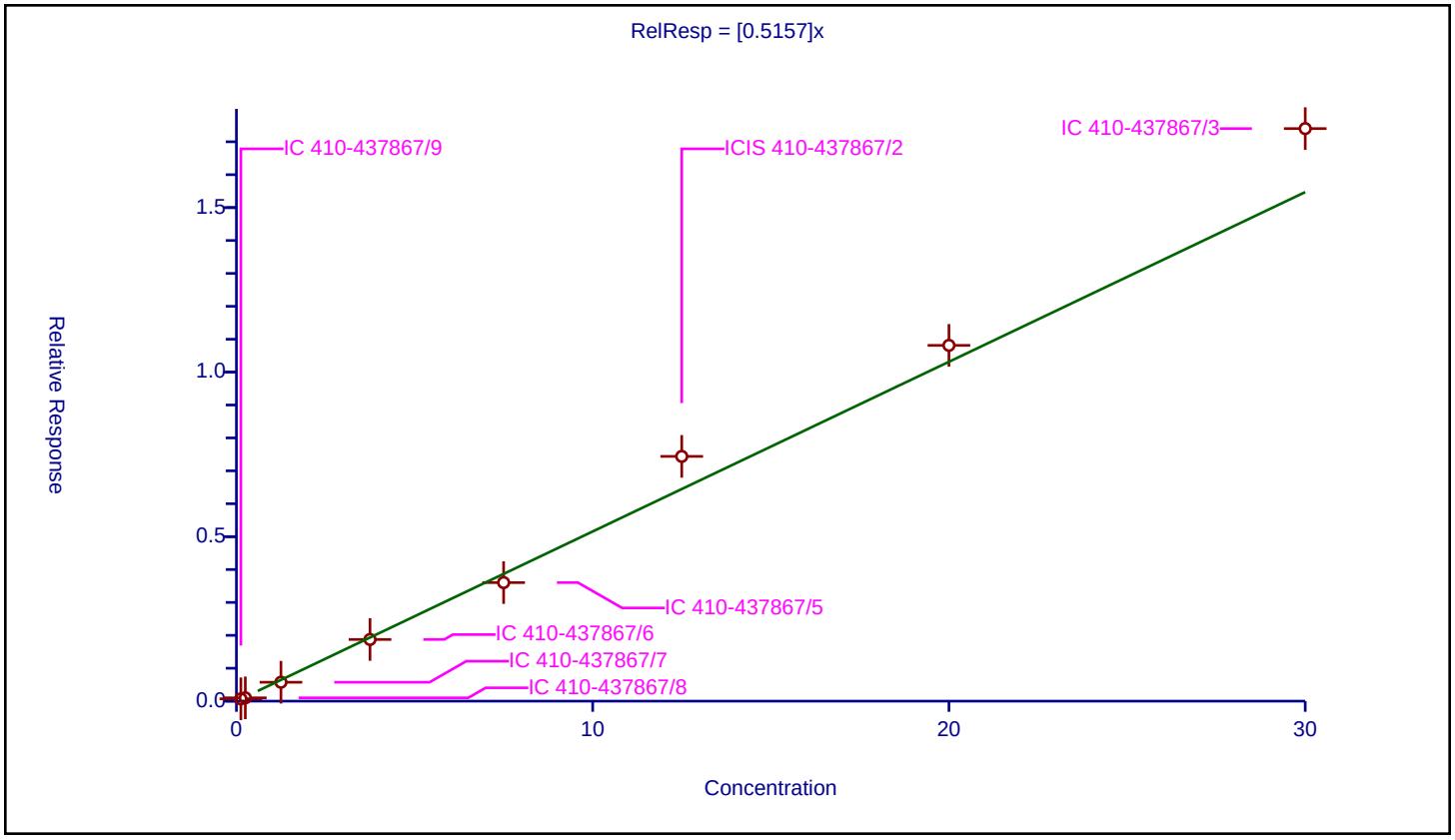
Curve Coefficients

Intercept:	0
Slope:	0.5157

Error Coefficients

Standard Error:	1260000
Relative Standard Error:	12.8
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.070702	5.0	600410.0	0.565613	Y
2	IC 410-437867/8	0.25	0.101063	5.0	585178.0	0.404253	Y
3	IC 410-437867/7	1.25	0.574311	5.0	674434.0	0.459449	Y
4	IC 410-437867/6	3.75	1.874509	5.0	650805.0	0.499869	Y
5	IC 410-437867/5	7.5	3.603605	5.0	704539.0	0.480481	Y
6	ICIS 410-437867/2	12.5	7.438735	5.0	572713.0	0.595099	Y
7	IC 410-437867/4	20.0	10.812868	5.0	757528.0	0.540643	Y
8	IC 410-437867/3	30.0	17.40083	5.0	779568.0	0.580028	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

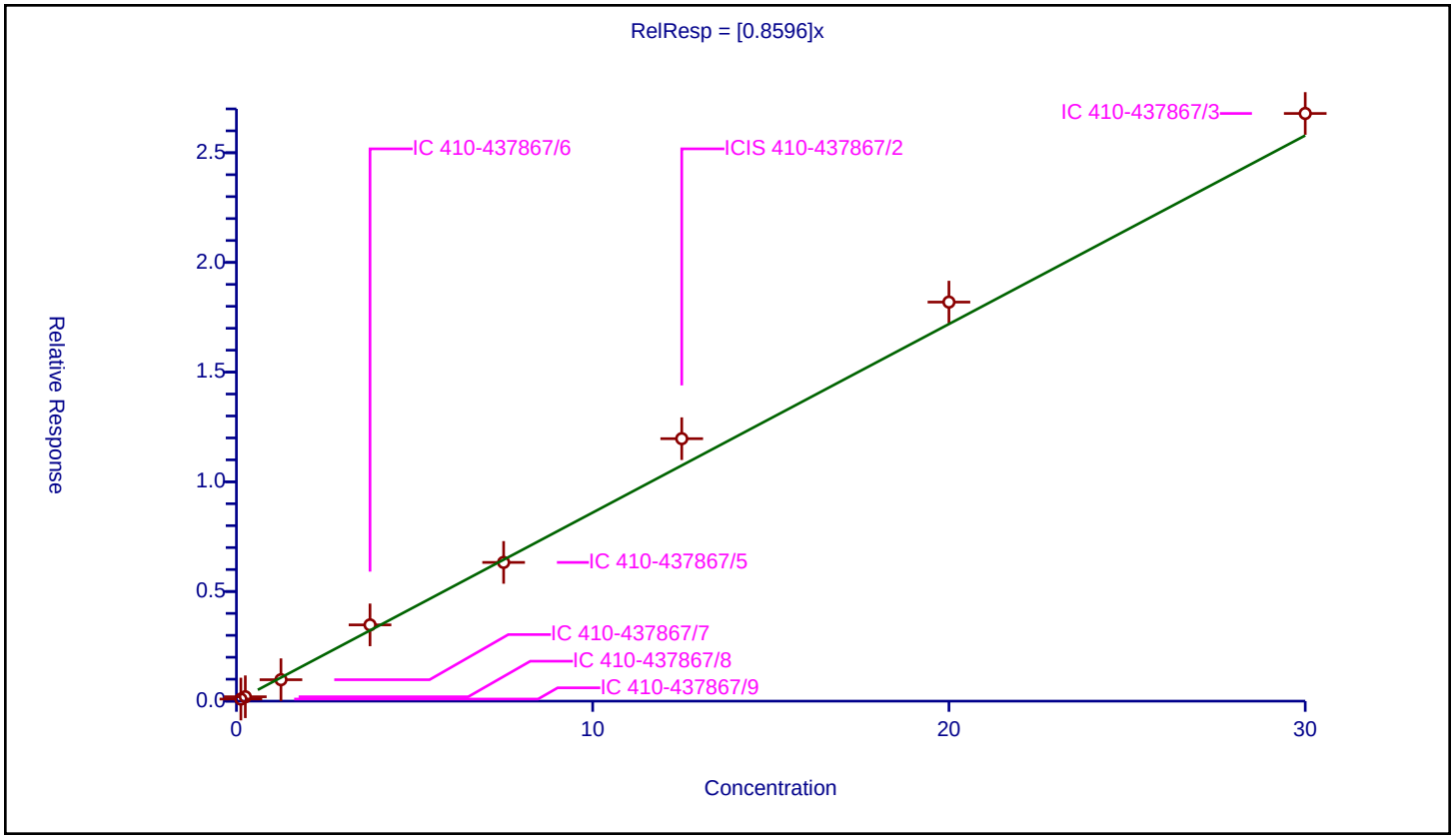
Curve Coefficients

Intercept:	0
Slope:	0.8596

Error Coefficients

Standard Error:	2000000
Relative Standard Error:	8.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.095835	5.0	600410.0	0.766676	Y
2	IC 410-437867/8	0.25	0.199572	5.0	585178.0	0.798287	Y
3	IC 410-437867/7	1.25	0.976789	5.0	674434.0	0.781432	Y
4	IC 410-437867/6	3.75	3.476779	5.0	650805.0	0.927141	Y
5	IC 410-437867/5	7.5	6.324831	5.0	704539.0	0.843311	Y
6	ICIS 410-437867/2	12.5	11.965295	5.0	572713.0	0.957224	Y
7	IC 410-437867/4	20.0	18.191961	5.0	757528.0	0.909598	Y
8	IC 410-437867/3	30.0	26.790947	5.0	779568.0	0.893032	Y



Calibration / Dibenz[a,j]acridine

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

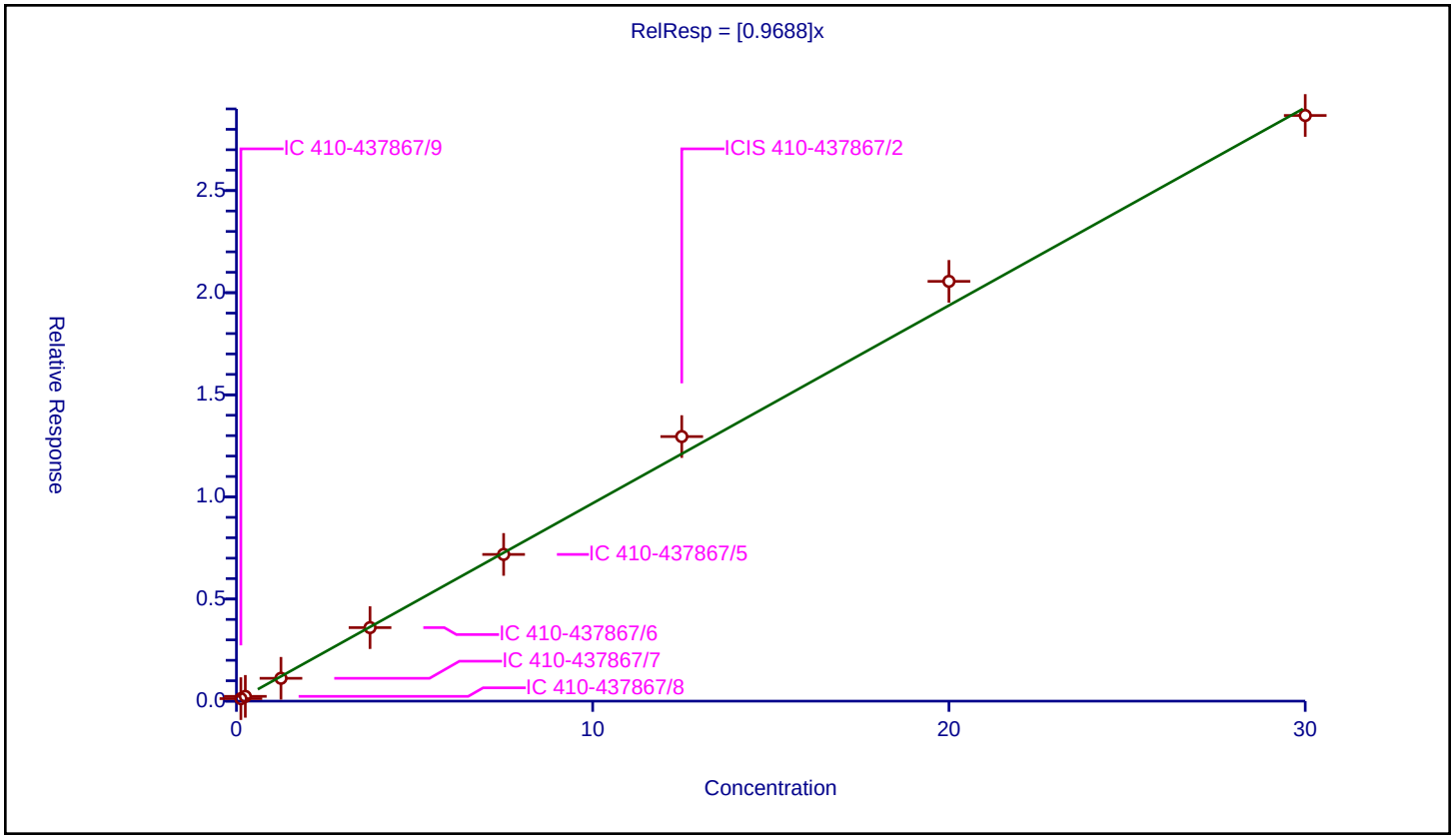
Curve Coefficients

Intercept:	0
Slope:	0.9688

Error Coefficients

Standard Error:	2180000
Relative Standard Error:	4.8
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.122691	5.0	600410.0	0.981529	Y
2	IC 410-437867/8	0.25	0.233997	5.0	585178.0	0.935989	Y
3	IC 410-437867/7	1.25	1.11882	5.0	674434.0	0.895056	Y
4	IC 410-437867/6	3.75	3.59975	5.0	650805.0	0.959933	Y
5	IC 410-437867/5	7.5	7.183662	5.0	704539.0	0.957822	Y
6	ICIS 410-437867/2	12.5	12.954909	5.0	572713.0	1.036393	Y
7	IC 410-437867/4	20.0	20.555319	5.0	757528.0	1.027766	Y
8	IC 410-437867/3	30.0	28.67721	5.0	779568.0	0.955907	Y



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Calibration / Indeno[1,2,3-cd]pyrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

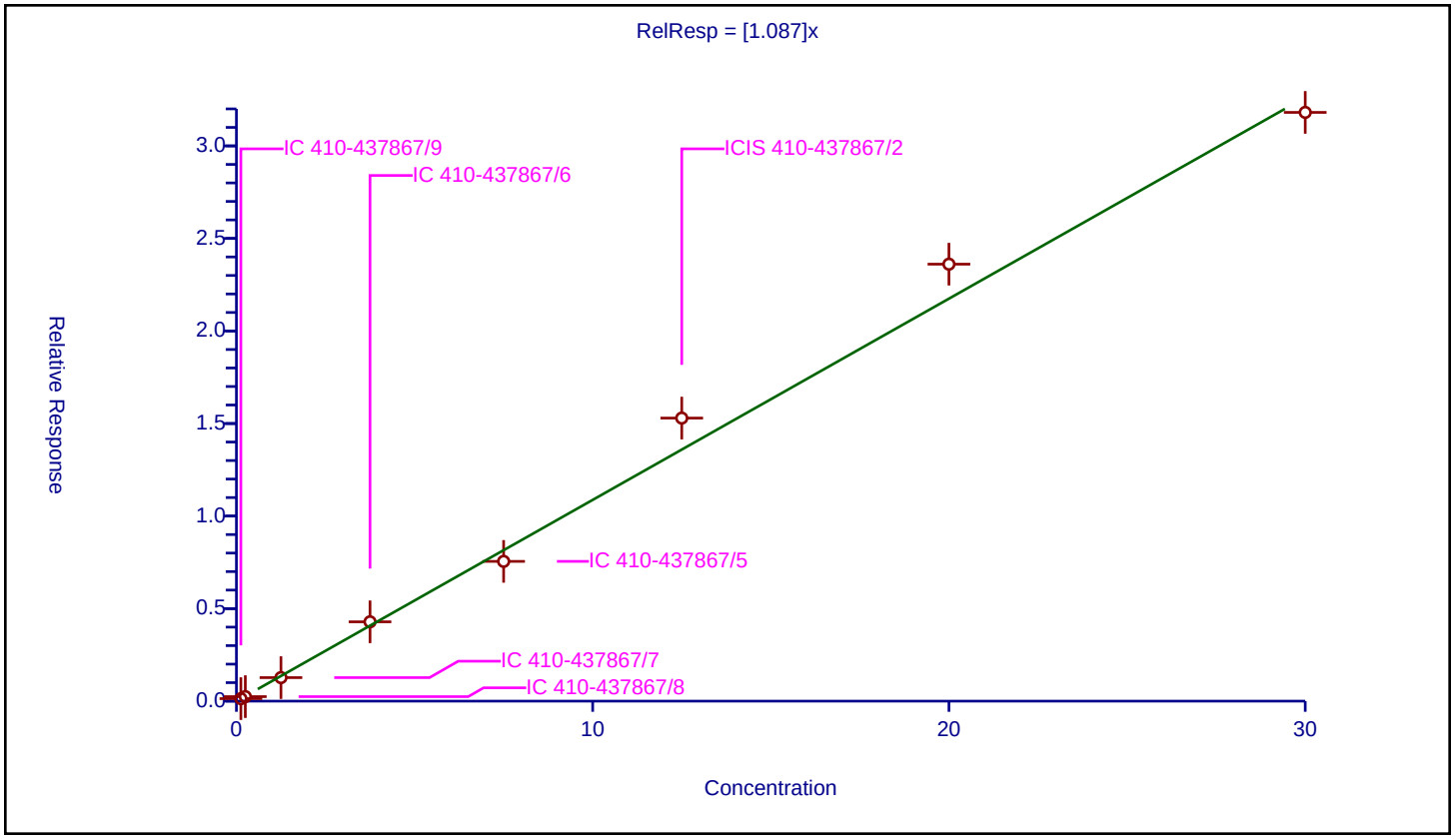
Curve Coefficients

Intercept:	0
Slope:	1.087

Error Coefficients

Standard Error:	2450000
Relative Standard Error:	8.1
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.136315	5.0	600410.0	1.090521	Y
2	IC 410-437867/8	0.25	0.244302	5.0	585178.0	0.977207	Y
3	IC 410-437867/7	1.25	1.271273	5.0	674434.0	1.017019	Y
4	IC 410-437867/6	3.75	4.285639	5.0	650805.0	1.142837	Y
5	IC 410-437867/5	7.5	7.551065	5.0	704539.0	1.006809	Y
6	ICIS 410-437867/2	12.5	15.293157	5.0	572713.0	1.223453	Y
7	IC 410-437867/4	20.0	23.610362	5.0	757528.0	1.180518	Y
8	IC 410-437867/3	30.0	31.810548	5.0	779568.0	1.060352	Y



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Calibration / Dibenz(a,h)anthracene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

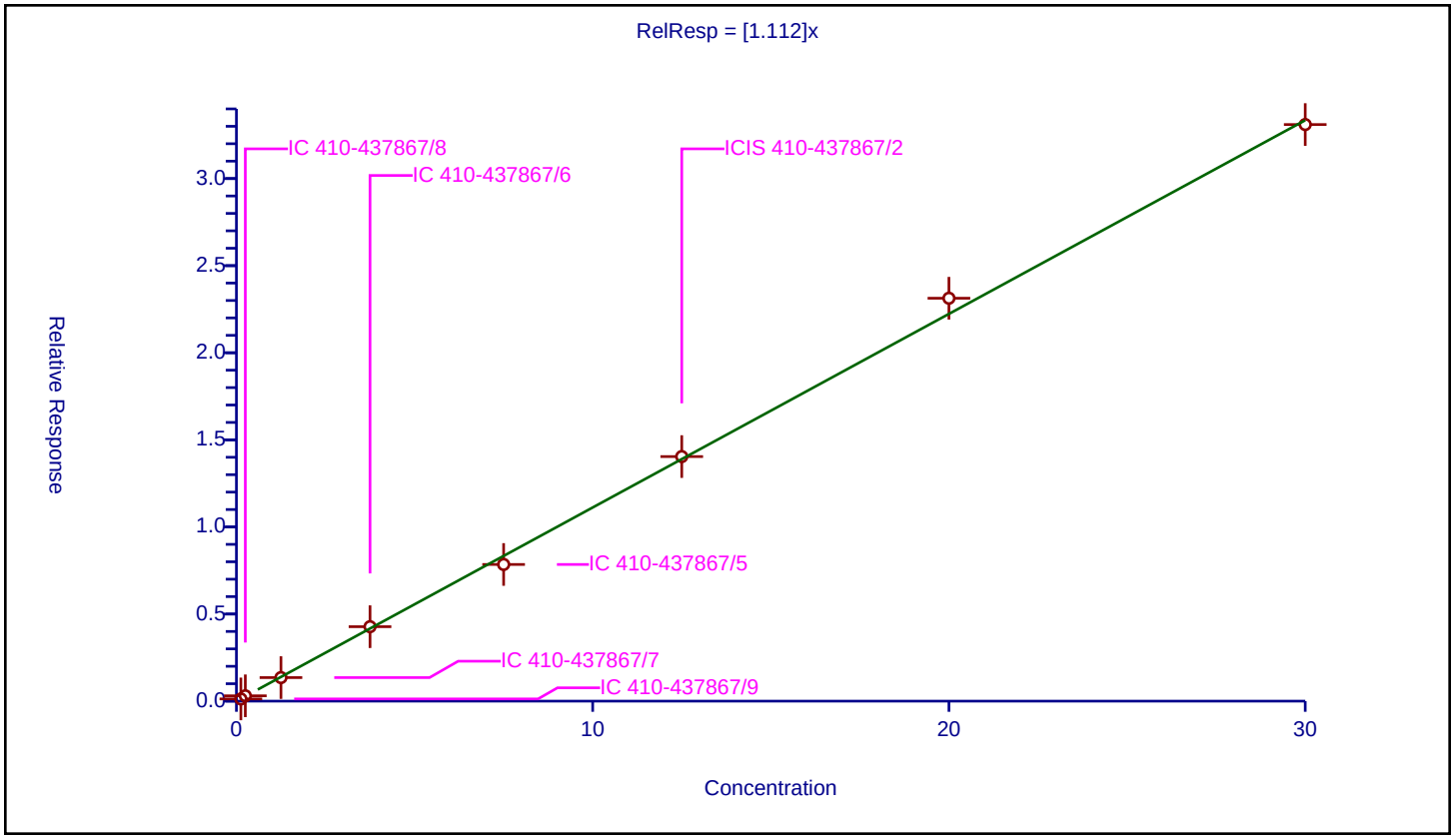
Curve Coefficients

Intercept:	0
Slope:	1.112

Error Coefficients

Standard Error:	2480000
Relative Standard Error:	5.8
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.127313	5.0	600410.0	1.018504	Y
2	IC 410-437867/8	0.25	0.305813	5.0	585178.0	1.223252	Y
3	IC 410-437867/7	1.25	1.352193	5.0	674434.0	1.081754	Y
4	IC 410-437867/6	3.75	4.273991	5.0	650805.0	1.139731	Y
5	IC 410-437867/5	7.5	7.846592	5.0	704539.0	1.046212	Y
6	ICIS 410-437867/2	12.5	14.040811	5.0	572713.0	1.123265	Y
7	IC 410-437867/4	20.0	23.130379	5.0	757528.0	1.156519	Y
8	IC 410-437867/3	30.0	33.10066	5.0	779568.0	1.103355	Y



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Calibration / Benzo[g,h,i]perylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

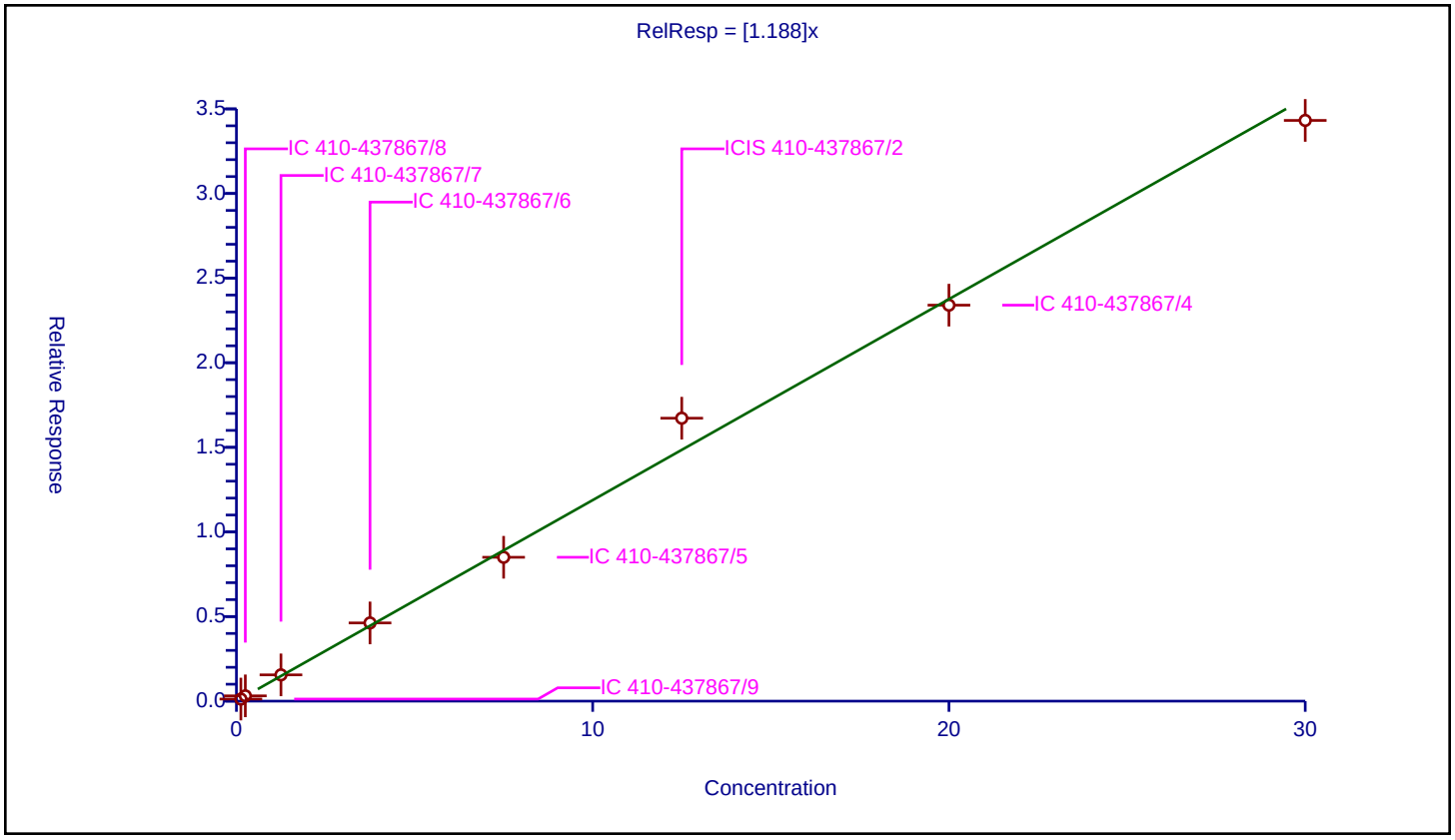
Curve Coefficients

Intercept:	0
Slope:	1.188

Error Coefficients

Standard Error:	2580000
Relative Standard Error:	8.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-437867/9	0.125	0.12379	5.0	600410.0	0.990323	Y
2	IC 410-437867/8	0.25	0.313059	5.0	585178.0	1.252234	Y
3	IC 410-437867/7	1.25	1.553028	5.0	674434.0	1.242423	Y
4	IC 410-437867/6	3.75	4.622452	5.0	650805.0	1.232654	Y
5	IC 410-437867/5	7.5	8.501708	5.0	704539.0	1.133561	Y
6	ICIS 410-437867/2	12.5	16.721002	5.0	572713.0	1.33768	Y
7	IC 410-437867/4	20.0	23.401557	5.0	757528.0	1.170078	Y
8	IC 410-437867/3	30.0	34.318392	5.0	779568.0	1.143946	Y



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FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID (1): ICIS 410-356566/2 Instrument ID (1): HP19760

GC Column (1): DB-5MS 30m 0.25 ID: 0.25(mm) Date Analyzed (1): 03/23/2023 13:34

ANALYTE	RT	RESOLUTION (%)
Benzo[b]fluoranthene	12.97	15.80

Resolution Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2311.D				
Injection Date:	23-Mar-2023 13:34:30	Instrument ID:	HP19760		
Lims ID:	ICIS L6				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

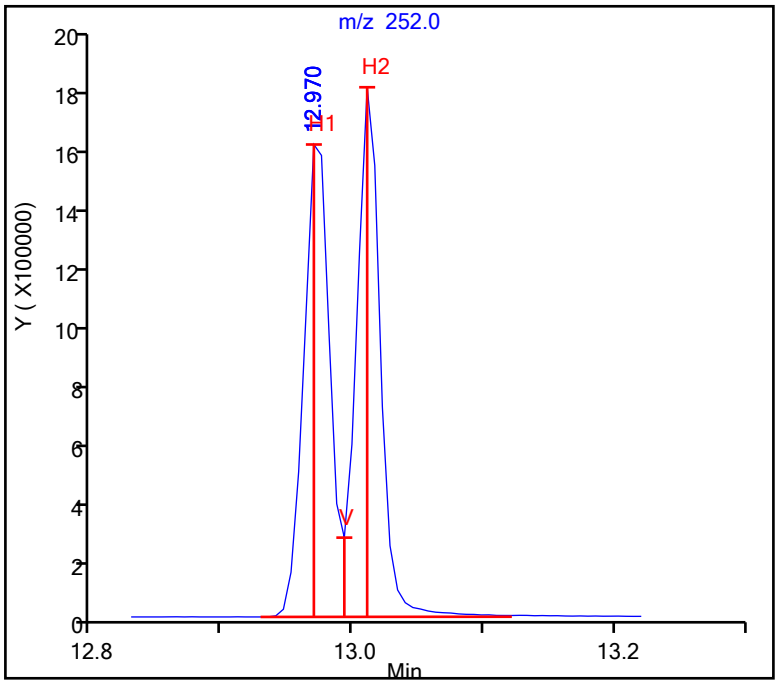
167 Benzo[b]fluoranthene - 168 Benzo[k]fluoranthene

SW-846 Method

Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 263644
H1(167 Benzo[b]fluoranthen) = 1571695
H2(168 Benzo[k]fluoranthen) = 1762013

Version D: %R = 15.8 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID (1): ICIS 410-397829/2 Instrument ID (1): HP23264

GC Column (1): DB-5MS 30m 0.25 ID: 0.25(mm) Date Analyzed (1): 07/18/2023 07:41

ANALYTE	RT	RESOLUTION (%)
Benzo[b]fluoranthene	12.60	14.10

Resolution Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1801a.D				
Injection Date:	18-Jul-2023 07:41:30	Instrument ID:	HP23264		
Lims ID:	ICIS L5				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

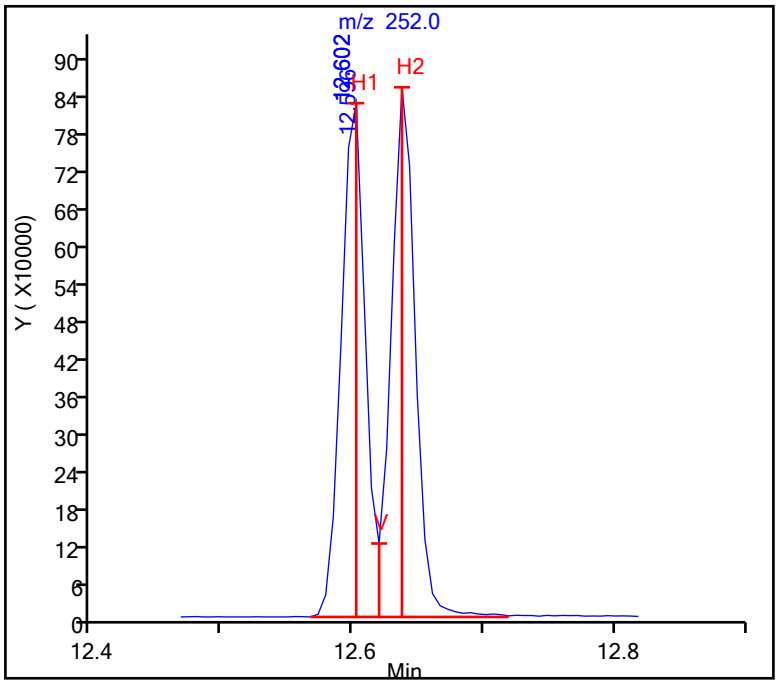
164 Benzo[b]fluoranthene - 165 Benzo[k]fluoranthene

SW-846 Method

Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 118416
H1(164 Benzo[b]fluoranthen) = 828288
H2(165 Benzo[k]fluoranthen) = 853952

Version D: %R = 14.1 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID (1): CCVIS 410-403788/2 Instrument ID (1): HP23264

GC Column (1): DB-5MS 30m 0.25 ID: 0.25(mm) Date Analyzed (1): 08/02/2023 20:32

ANALYTE	RT	RESOLUTION (%)
Benzo[b]fluoranthene	12.59	16.90

Resolution Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0251.D				
Injection Date:	02-Aug-2023 20:32:30	Instrument ID:	HP23264		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

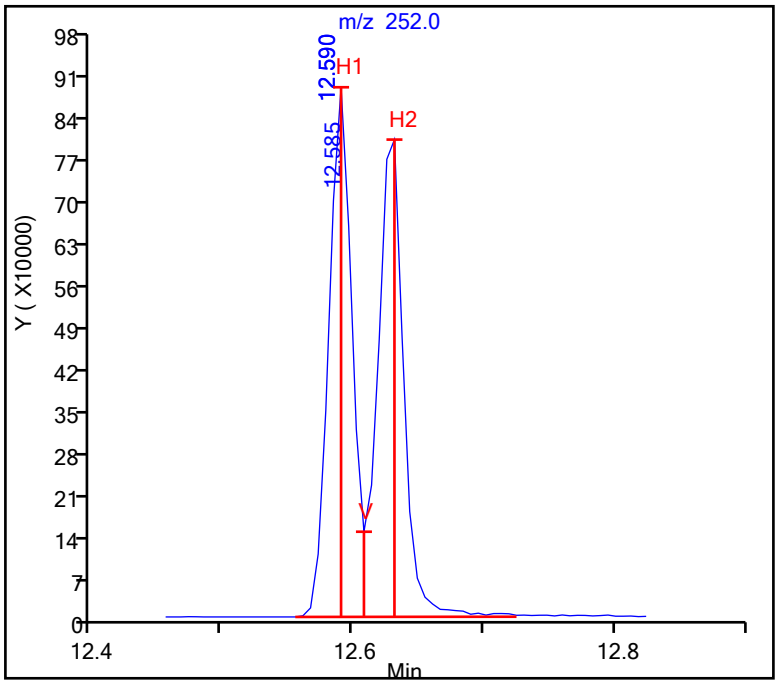
164 Benzo[b]fluoranthene - 165 Benzo[k]fluoranthene

SW-846 Method

Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 142418
H1(164 Benzo[b]fluoranthen) = 885943
H2(165 Benzo[k]fluoranthen) = 798305

Version D: %R = 16.9 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID (1): CCVIS 410-404152/2 Instrument ID (1): HP19760

GC Column (1): DB-5MS 30m 0.25 ID: 0.25(mm) Date Analyzed (1): 08/03/2023 14:43

ANALYTE	RT	RESOLUTION (%)
Benzo[b]fluoranthene	12.23	24.00

Resolution Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D				
Injection Date:	03-Aug-2023 14:43:53	Instrument ID:	HP19760		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

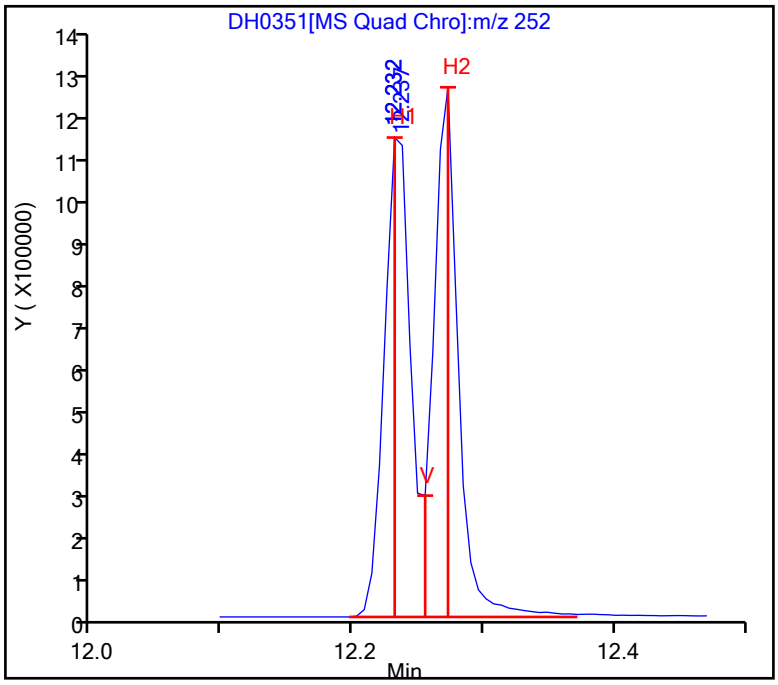
167 Benzo[b]fluoranthene - 168 Benzo[k]fluoranthene

SW-846 Method

Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 273024
H1(167 Benzo[b]fluoranthen) = 1078784
H2(168 Benzo[k]fluoranthen) = 1191936

Version D: %R = 24.0 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID (1): ICIS 410-414994/2 Instrument ID (1): HP19760

GC Column (1): DB-5MS 30m 0.25 ID: 0.25(mm) Date Analyzed (1): 08/31/2023 16:23

ANALYTE	RT	RESOLUTION (%)
Benzo[b]fluoranthene	12.87	16.40

Resolution Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3151.D
Injection Date: 31-Aug-2023 16:23:35 Instrument ID: HP19760
Lims ID: ICIS L6
Client ID:
Operator ID: mem41592 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

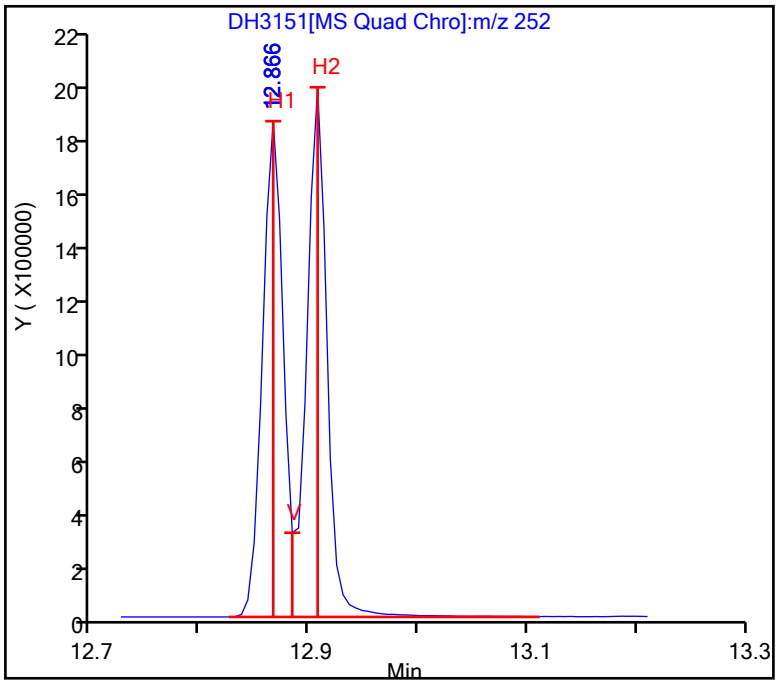
167 Benzo[b]fluoranthene - 168 Benzo[k]fluoranthene

SW-846 Method

Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 313920
H1(167 Benzo[b]fluoranthen) = 1848832
H2(168 Benzo[k]fluoranthen) = 1975296

Version D: %R = 16.4 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID (1): ICIS 410-435991/2 Instrument ID (1): HP19760

GC Column (1): DB-5MS 30m 0.25 ID: 0.25(mm) Date Analyzed (1): 10/26/2023 12:12

ANALYTE	RT	RESOLUTION (%)
Benzo[b]fluoranthene	12.76	16.90

Resolution Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2601b.D
Injection Date: 26-Oct-2023 12:12:55 Instrument ID: HP19760
Lims ID: ICIS L6
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

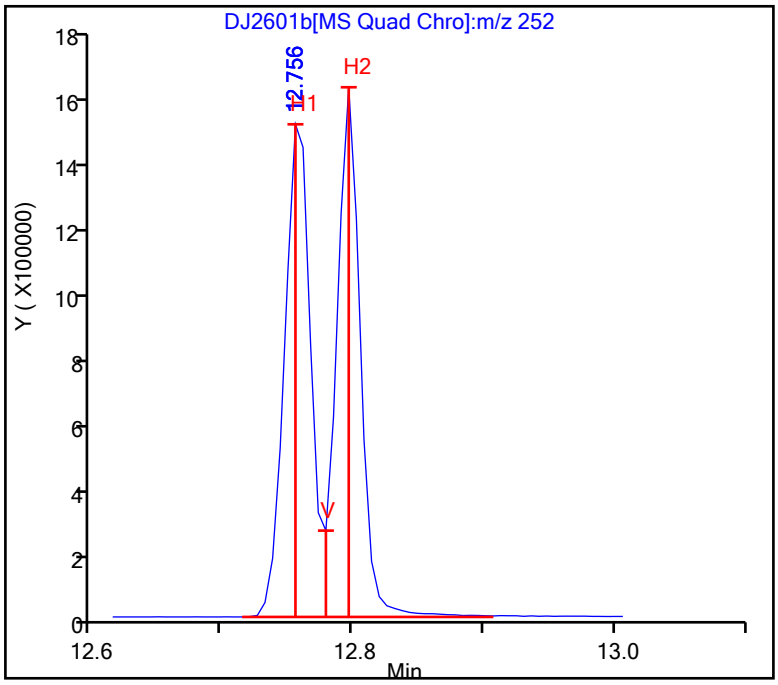
167 Benzo[b]fluoranthene - 168 Benzo[k]fluoranthene

SW-846 Method

Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 254144
H1(167 Benzo[b]fluoranthen) = 1450496
H2(168 Benzo[k]fluoranthen) = 1559552

Version D: %R = 16.9 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID (1): ICIS 410-437867/2 Instrument ID (1): HP23264

GC Column (1): DB-5MS 30m 0.25 ID: 0.25(mm) Date Analyzed (1): 10/31/2023 14:37

ANALYTE	RT	RESOLUTION (%)
Benzo[b]fluoranthene	12.12	20.50

Resolution Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3101e.D				
Injection Date:	31-Oct-2023 14:37:30	Instrument ID:	HP23264		
Lims ID:	ICIS L6				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

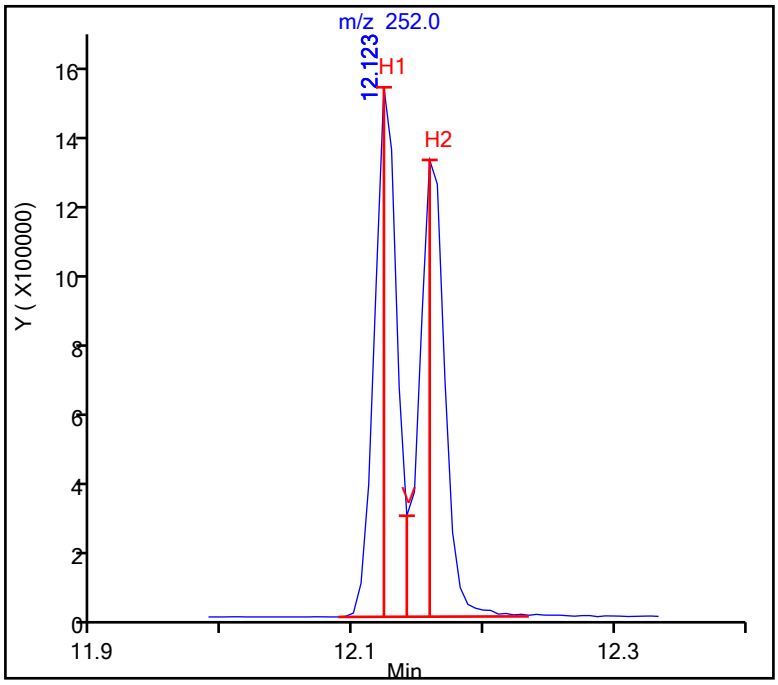
164 Benzo[b]fluoranthene - 165 Benzo[k]fluoranthene

SW-846 Method

Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 283770
H1(164 Benzo[b]fluoranthen) = 1487996
H2(165 Benzo[k]fluoranthen) = 1283320

Version D: %R = 20.5 <= 50.0
Passed



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-356566/12 Calibration Date: 03/23/2023 17:14

Instrument ID: HP19760 Calib Start Date: 11/14/2022 19:39

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 11/14/2022 21:19

Lab File ID: DC2321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Famphur	Lin1					12.5		30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2321.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 23-Mar-2023 17:14:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0079683-012
Operator ID: em10340 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 19:32:37 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 17:46:32

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2	1,4-Dioxane	88	1.965	1.965	0.000	94	400468	12.5	12.1	
3	N-Nitrosodimethylamine	74	2.192	2.192	0.000	93	598189	12.5	11.7	
4	Pyridine	79	2.233	2.233	0.000	98	1897155	25.0	22.6	
7	2-Picoline	93	2.834	2.834	0.000	90	973193	12.5	12.2	
8	N-Nitrosomethylethylamine	88	2.921	2.921	0.000	91	416765	12.5	11.9	
9	Methyl methanesulfonate	80	3.195	3.195	0.000	85	505252	12.5	11.2	
11	N-Nitrosodiethylamine	102	3.574	3.574	0.000	95	398525	12.5	12.5	
12	Ethyl methanesulfonate	109	3.854	3.854	0.000	97	391076	12.5	11.3	
17	Phenol	94	4.227	4.227	0.000	94	1075710	12.5	12.5	
18	Aniline	93	4.279	4.279	0.000	96	1328016	12.5	12.4	
19	Bis(2-chloroethyl)ether	93	4.332	4.332	0.000	96	870008	12.5	12.2	
20	2-Chlorophenol	128	4.390	4.390	0.000	92	676686	12.5	12.9	
21	1,3-Dichlorobenzene	146	4.541	4.541	0.000	93	749490	12.5	12.5	
* 22	1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	95	199616	5.00	5.00	
23	1,4-Dichlorobenzene	146	4.611	4.611	0.000	89	767580	12.5	12.3	
25	Benzyl alcohol	108	4.710	4.710	0.000	89	505343	12.5	12.4	
26	1,2-Dichlorobenzene	146	4.751	4.751	0.000	91	715152	12.5	12.4	
28	2-Methylphenol	108	4.810	4.810	0.000	96	723648	12.5	12.9	
29	2,2'-oxybis[1-chloropropane]	45	4.850	4.850	0.000	93	1037644	12.5	11.4	
31	N-Nitrosopyrrolidine	100	4.944	4.944	0.000	92	420314	12.5	12.5	
32	4-Methylphenol	108	4.955	4.955	0.000	95	763237	12.5	12.9	
33	N-Nitrosodi-n-propylamine	70	4.967	4.967	0.000	74	708410	12.5	12.4	
34	Acetophenone	105	4.973	4.973	0.000	95	1193168	12.5	13.0	
35	N-Nitrosomorpholine	56	4.984	4.984	0.000	90	512670	12.5	11.7	
36	2-Toluidine	106	5.002	5.002	0.000	95	1286385	12.5	12.6	
38	Hexachloroethane	117	5.078	5.078	0.000	97	325013	12.5	12.4	
40	Nitrobenzene	77	5.130	5.130	0.000	85	972845	12.5	12.5	
42	N-Nitrosopiperidine	114	5.276	5.276	0.000	85	364440	12.5	12.7	
43	Isophorone	82	5.357	5.357	0.000	96	1734105	12.5	12.9	
44	2-Nitrophenol	139	5.433	5.433	0.000	89	316137	12.5	13.5	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	45 2,4-Dimethylphenol	107	5.468	5.468	0.000	98	792740	12.5	13.5	
	46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	94	329061	12.5	12.9	
	47 Bis(2-chloroethoxy)methane	93	5.567	5.567	0.000	99	1079856	12.5	13.1	
	48 2,4-Dichlorophenol	162	5.660	5.660	0.000	96	555049	12.5	13.8	
	49 1,2,4-Trichlorobenzene	180	5.748	5.748	0.000	92	630121	12.5	12.9	
*	50 Naphthalene-d8	136	5.800	5.800	0.000	99	728907	5.00	5.00	
	51 Naphthalene	128	5.824	5.824	0.000	98	2000455	12.5	12.8	
	53 4-Chloroaniline	127	5.865	5.865	0.000	93	852591	12.5	13.8	
	54 2,6-Dichlorophenol	162	5.876	5.876	0.000	95	564702	12.5	13.8	
	55 Hexachloropropene	213	5.905	5.905	0.000	90	387002	12.5	11.8	
	56 Hexachlorobutadiene	225	5.940	5.940	0.000	96	356253	12.5	12.8	
	60 Quinoline	129	6.138	6.138	0.000	93	1283944	12.5	12.9	
	62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	92	625397	12.5	10.8	
	63 p-Phenylene diamine	108		6.197				ND	ND	U
	64 4-Chloro-3-methylphenol	107	6.319	6.319	0.000	91	713244	12.5	13.7	
	65 Safrole, Total	162	6.395	6.395	0.000	85	512036	12.5	13.0	
	66 2-Methylnaphthalene	142	6.477	6.477	0.000	91	1300564	12.5	13.1	
	67 1-Methylnaphthalene	142	6.570	6.570	0.000	92	1215238	12.5	13.2	
	68 Hexachlorocyclopentadiene	237		6.628				ND	ND	U
	69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	98	652399	12.5	12.4	
	70 Isosafrole Peak 1	162	6.669	6.669	0.000	84	65344	1.50	1.38	
	71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	95	393100	12.5	12.9	
	72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	93	446787	12.5	13.5	
	74 Isosafrole Peak 2	162	6.885	6.885	0.000	87	532558	11.0	10.6	
	75 1,1'-Biphenyl	154	6.919	6.919	0.000	95	1614824	12.5	12.5	
	76 2-Chloronaphthalene	162	6.937	6.937	0.000	96	1232494	12.5	12.3	
	77 1-Chloronaphthalene	162	6.960	6.960	0.000	96	1174292	12.5	12.2	
	78 Phenyl ether	170	7.024	7.024	0.000	88	859584	12.5	12.1	
	79 2-Nitroaniline	138	7.030	7.030	0.000	74	391875	12.5	13.2	
	81 1,4-Naphthoquinone	158	7.106	7.106	0.000	79	468616	12.5	12.8	
	86 1,3-Dinitrobenzene	168	7.164	7.164	0.000	83	193594	12.5	12.8	
	85 Dimethyl phthalate	163	7.205	7.205	0.000	97	1444952	12.5	13.0	
	84 1,4-Dinitrobenzene	168	7.228	7.228	0.000	83	230375	12.5	13.7	
	87 2,6-Dinitrotoluene	165	7.263	7.263	0.000	87	315218	12.5	13.4	
	88 Acenaphthylene	152	7.333	7.333	0.000	99	2009108	12.5	12.6	
	89 3-Nitroaniline	138	7.415	7.415	0.000	87	352797	12.5	13.8	
*	90 Acenaphthene-d10	164	7.462	7.462	0.000	95	413430	5.00	5.00	
	91 Acenaphthene	153	7.497	7.497	0.000	97	1298132	12.5	12.7	
	92 2,4-Dinitrophenol	184	7.514	7.514	0.000	79	404073	25.0	25.1	
	93 4-Nitrophenol	109	7.566	7.566	0.000	82	513084	25.0	28.0	
	94 Pentachlorobenzene	250	7.619	7.619	0.000	97	521931	12.5	11.8	
	95 2,4-Dinitrotoluene	165	7.642	7.642	0.000	87	435496	12.5	13.8	
	96 Dibenzofuran	168	7.660	7.660	0.000	96	1775110	12.5	12.5	
	97 1-Naphthylamine	143	7.730	7.730	0.000	97	1154243	12.5	12.9	
	98 2,3,4,6-Tetrachlorophenol	232	7.770	7.770	0.000	74	385217	12.5	13.8	
	99 2-Naphthylamine	143	7.805	7.805	0.000	94	1345840	12.5	13.2	
	100 Diethyl phthalate	149	7.875	7.875	0.000	97	1413197	12.5	13.5	
	101 Thionazin	107	7.951	7.951	0.000	78	277153	12.5	13.0	
	102 Fluorene	166	7.980	7.980	0.000	93	1454420	12.5	12.7	
	103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	88	730069	12.5	13.0	
	104 N-Nitro-o-toluidine	152	7.992	7.992	0.000	86	411597	12.5	13.5	
	105 4-Nitroaniline	138	7.992	7.992	0.000	76	379433	12.5	13.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
106 4,6-Dinitro-2-methylphenol	198	8.021	8.021	0.000	77	515624	25.0	27.3	
107 N-Nitrosodiphenylamine	169	8.091	8.091	0.000	63	1049521	10.6	11.1	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	42	2090654	12.5	12.9	
110 Sulfotepp	97	8.248	8.248	0.000	79	299236	12.5	12.1	
112 1,3,5-Trinitrobenzene	213	8.330	8.330	0.000	81	150982	12.5	12.5	
113 cis-Diallate	86	8.371	8.371	0.000	0	632883	9.38	9.26	
114 Phorate	75	8.377	8.377	0.000	95	1173867	12.5	13.2	
115 Phenacetin	108	8.382	8.382	0.000	87	813211	12.5	13.3	
116 4-Bromophenyl phenyl ether	248	8.447	8.447	0.000	70	424920	12.5	12.9	
117 trans-Diallate	86	8.458	8.458	0.000	0	220686	3.13	3.10	
118 Hexachlorobenzene	284	8.499	8.499	0.000	93	428892	12.5	12.1	
119 Dimethoate	87	8.534	8.534	0.000	97	772121	12.5	13.7	
121 Pentachlorophenol	266	8.686	8.686	0.000	92	587664	25.0	27.8	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	91	1586110	12.5	12.4	
123 Pentachloronitrobenzene	237	8.697	8.697	0.000	86	189466	12.5	12.5	
124 Pronamide	173	8.750	8.750	0.000	90	656383	12.5	12.9	
125 Dinoseb	211	8.860	8.860	0.000	95	354129	12.5	12.3	
* 126 Phenanthrene-d10	188	8.872	8.872	0.000	97	785961	5.00	5.00	
127 Disulfoton	88	8.878	8.878	0.000	95	1107187	12.5	10.8	
128 Phenanthrene	178	8.895	8.895	0.000	98	2174879	12.5	12.7	
129 Anthracene	178	8.942	8.942	0.000	99	2214766	12.5	13.0	
130 Carbazole	167	9.094	9.094	0.000	96	2029322	12.5	13.4	
131 Methyl parathion	109	9.228	9.228	0.000	90	566455	12.5	13.4	
133 Di-n-butyl phthalate	149	9.432	9.432	0.000	100	2332675	12.5	14.2	
134 Ethyl Parathion	109	9.601	9.601	0.000	83	327338	12.5	13.2	
135 4-Nitroquinoline-1-oxide	190	9.624	9.624	0.000	81	162394	12.5	12.3	
S 136 Diallate	86				0		12.5	12.4	
140 Octachlorostyrene	308	9.840	9.840	0.000	93	162437	12.5	12.0	
141 Isodrin	193	9.880	9.880	0.000	90	247934	12.5	11.7	
143 Fluoranthene	202	10.020	10.020	0.000	99	2452564	12.5	13.5	
137 Aramite Peak 1	185		10.122				ND	ND	
138 Aramite Peak 2	185		10.140				ND	ND	
147 Benzidine	184	10.149	10.149	0.000	100	1270140	12.5	10.1	M
139 Aramite Peak 3	185		10.186				ND	ND	
* 149 Pyrene-d10 (IS)	212	10.218	10.218	0.000	100	822597	5.00	5.00	
150 Pyrene	202	10.236	10.236	0.000	96	2581961	12.5	12.3	
142 Aramite Peak 4	185	10.318	10.318	0.000	0	5677	NC	NC	
151 Famphur	218		10.458				ND	ND	
154 p-Dimethylamino azobenzene	225	10.539	10.539	0.000	93	437087	12.5	13.7	
155 Chlorobenzilate	139	10.592	10.592	0.000	87	679416	12.5	13.0	
156 3,3'-Dimethylbenzidine	212	10.895	10.895	0.000	99	1432962	12.5	13.0	
157 Butyl benzyl phthalate	149	10.918	10.918	0.000	94	1050829	12.5	13.8	
158 2-Acetylaminofluorene	181	11.169	11.169	0.000	95	789633	12.5	11.5	
159 3,3'-Dichlorobenzidine	252	11.512	11.512	0.000	78	647165	12.5	10.2	
160 4,4'-Methylene bis(2-chloroanil	231	11.524	11.524	0.000	96	458844	12.5	12.8	
161 Benzo[a]anthracene	228	11.536	11.536	0.000	99	2326018	12.5	13.9	
162 Chrysene	228	11.582	11.582	0.000	98	2322896	12.5	13.8	
163 Bis(2-ethylhexyl) phthalate	149	11.612	11.612	0.000	96	1382918	12.5	13.5	
164 6-Methylchrysene	242	12.165	12.165	0.000	99	1461092	12.5	12.8	
165 Di-n-octyl phthalate	149	12.497	12.497	0.000	99	2153329	12.5	12.1	
166 7,12-Dimethylbenz(a)anthracene	256	12.970	12.970	0.000	73	977805	12.5	13.9	
167 Benzo[b]fluoranthene	252	12.970	12.970	0.000	97	2293737	12.5	13.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
168 Benzo[k]fluoranthene	252	13.010	13.010	0.000	100	2350480	12.5	13.1	
169 Benzo[a]pyrene	252	13.436	13.436	0.000	78	2027166	12.5	13.6	
* 170 Perylene-d12	264	13.518	13.518	0.000	97	691313	5.00	5.00	
171 3-Methylcholanthrene	268	13.960	13.960	0.000	91	960204	12.5	12.5	
172 Dibenz[a,h]acridine	279	14.753	14.753	0.000	91	1525370	12.5	13.6	
173 Dibenz[a,j]acridine	279	14.823	14.823	0.000	96	1738445	12.5	13.9	
174 Indeno[1,2,3-cd]pyrene	276	15.068	15.068	0.000	99	1693058	12.5	13.7	
175 Dibenz(a,h)anthracene	278	15.109	15.109	0.000	93	1892847	12.5	13.0	
176 Benzo[g,h,i]perylene	276	15.458	15.458	0.000	97	1934462	12.5	13.2	
S 178 Dinitrotoluene	165				0			27.3	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 182 Isosafrole	162				0		12.5	12.0	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected

Reagents:

MSS_RV8270ICV_00019 Amount Added: 1.00 Units: mL

Report Date: 23-Mar-2023 19:32:37 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2321.D

Injection Date: 23-Mar-2023 17:14:30 Instrument ID: HP19760 Operator ID: em10340

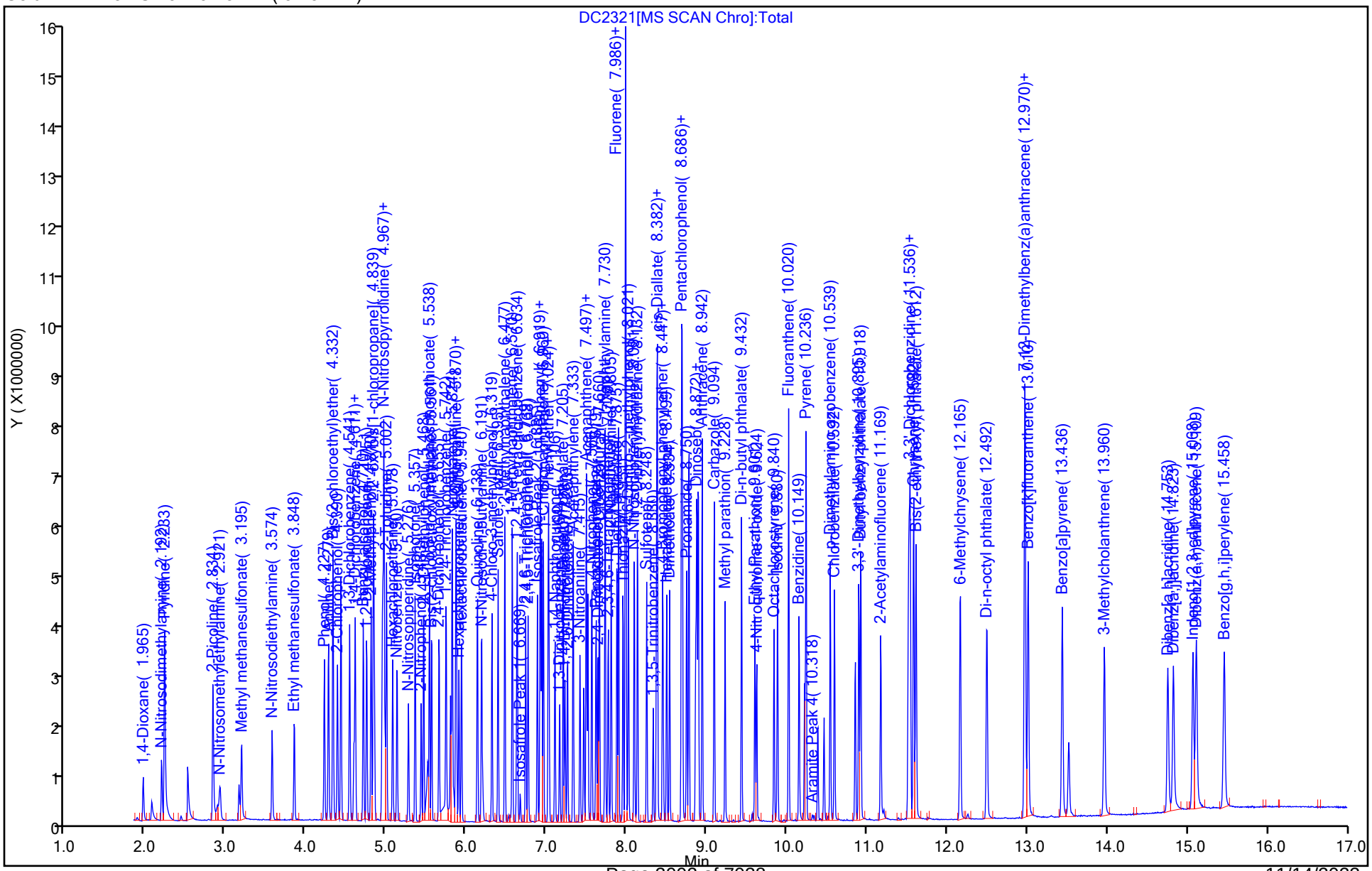
Lims ID: ICV FULL Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-356566/12 Calibration Date: 03/23/2023 17:14

Instrument ID: HP19760 Calib Start Date: 12/06/2022 21:18

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 12/06/2022 21:18

Lab File ID: DC2321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Aramite Peak 4	Ave	0.1357	0.0069			5.00	-94.9*	30.0
Aramite Peak 1	Ave	0.0289				1.25		
Aramite Peak 2	Ave	0.0314				1.25		
Aramite Peak 3	Ave	0.1013				5.00		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2321.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 23-Mar-2023 17:14:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0079683-012
Operator ID: em10340 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 19:32:37 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 17:46:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.965	1.965	0.000	94	400468	12.5	12.1	
3 N-Nitrosodimethylamine	74	2.192	2.192	0.000	93	598189	12.5	11.7	
4 Pyridine	79	2.233	2.233	0.000	98	1897155	25.0	22.6	
7 2-Picoline	93	2.834	2.834	0.000	90	973193	12.5	12.2	
8 N-Nitrosomethylethylamine	88	2.921	2.921	0.000	91	416765	12.5	11.9	
9 Methyl methanesulfonate	80	3.195	3.195	0.000	85	505252	12.5	11.2	
11 N-Nitrosodiethylamine	102	3.574	3.574	0.000	95	398525	12.5	12.5	
12 Ethyl methanesulfonate	109	3.854	3.854	0.000	97	391076	12.5	11.3	
17 Phenol	94	4.227	4.227	0.000	94	1075710	12.5	12.5	
18 Aniline	93	4.279	4.279	0.000	96	1328016	12.5	12.4	
19 Bis(2-chloroethyl)ether	93	4.332	4.332	0.000	96	870008	12.5	12.2	
20 2-Chlorophenol	128	4.390	4.390	0.000	92	676686	12.5	12.9	
21 1,3-Dichlorobenzene	146	4.541	4.541	0.000	93	749490	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	95	199616	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.611	4.611	0.000	89	767580	12.5	12.3	
25 Benzyl alcohol	108	4.710	4.710	0.000	89	505343	12.5	12.4	
26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	91	715152	12.5	12.4	
28 2-Methylphenol	108	4.810	4.810	0.000	96	723648	12.5	12.9	
29 2,2'-oxybis[1-chloropropane]	45	4.850	4.850	0.000	93	1037644	12.5	11.4	
31 N-Nitrosopyrrolidine	100	4.944	4.944	0.000	92	420314	12.5	12.5	
32 4-Methylphenol	108	4.955	4.955	0.000	95	763237	12.5	12.9	
33 N-Nitrosodi-n-propylamine	70	4.967	4.967	0.000	74	708410	12.5	12.4	
34 Acetophenone	105	4.973	4.973	0.000	95	1193168	12.5	13.0	
35 N-Nitrosomorpholine	56	4.984	4.984	0.000	90	512670	12.5	11.7	
36 2-Toluidine	106	5.002	5.002	0.000	95	1286385	12.5	12.6	
38 Hexachloroethane	117	5.078	5.078	0.000	97	325013	12.5	12.4	
40 Nitrobenzene	77	5.130	5.130	0.000	85	972845	12.5	12.5	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	85	364440	12.5	12.7	
43 Isophorone	82	5.357	5.357	0.000	96	1734105	12.5	12.9	
44 2-Nitrophenol	139	5.433	5.433	0.000	89	316137	12.5	13.5	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	45 2,4-Dimethylphenol	107	5.468	5.468	0.000	98	792740	12.5	13.5	
	46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	94	329061	12.5	12.9	
	47 Bis(2-chloroethoxy)methane	93	5.567	5.567	0.000	99	1079856	12.5	13.1	
	48 2,4-Dichlorophenol	162	5.660	5.660	0.000	96	555049	12.5	13.8	
	49 1,2,4-Trichlorobenzene	180	5.748	5.748	0.000	92	630121	12.5	12.9	
*	50 Naphthalene-d8	136	5.800	5.800	0.000	99	728907	5.00	5.00	
	51 Naphthalene	128	5.824	5.824	0.000	98	2000455	12.5	12.8	
	53 4-Chloroaniline	127	5.865	5.865	0.000	93	852591	12.5	13.8	
	54 2,6-Dichlorophenol	162	5.876	5.876	0.000	95	564702	12.5	13.8	
	55 Hexachloropropene	213	5.905	5.905	0.000	90	387002	12.5	11.8	
	56 Hexachlorobutadiene	225	5.940	5.940	0.000	96	356253	12.5	12.8	
	60 Quinoline	129	6.138	6.138	0.000	93	1283944	12.5	12.9	
	62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	92	625397	12.5	10.8	
	63 p-Phenylene diamine	108		6.197				ND	ND	U
	64 4-Chloro-3-methylphenol	107	6.319	6.319	0.000	91	713244	12.5	13.7	
	65 Safrole, Total	162	6.395	6.395	0.000	85	512036	12.5	13.0	
	66 2-Methylnaphthalene	142	6.477	6.477	0.000	91	1300564	12.5	13.1	
	67 1-Methylnaphthalene	142	6.570	6.570	0.000	92	1215238	12.5	13.2	
	68 Hexachlorocyclopentadiene	237		6.628				ND	ND	U
	69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	98	652399	12.5	12.4	
	70 Isosafrole Peak 1	162	6.669	6.669	0.000	84	65344	1.50	1.38	
	71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	95	393100	12.5	12.9	
	72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	93	446787	12.5	13.5	
	74 Isosafrole Peak 2	162	6.885	6.885	0.000	87	532558	11.0	10.6	
	75 1,1'-Biphenyl	154	6.919	6.919	0.000	95	1614824	12.5	12.5	
	76 2-Chloronaphthalene	162	6.937	6.937	0.000	96	1232494	12.5	12.3	
	77 1-Chloronaphthalene	162	6.960	6.960	0.000	96	1174292	12.5	12.2	
	78 Phenyl ether	170	7.024	7.024	0.000	88	859584	12.5	12.1	
	79 2-Nitroaniline	138	7.030	7.030	0.000	74	391875	12.5	13.2	
	81 1,4-Naphthoquinone	158	7.106	7.106	0.000	79	468616	12.5	12.8	
	86 1,3-Dinitrobenzene	168	7.164	7.164	0.000	83	193594	12.5	12.8	
	85 Dimethyl phthalate	163	7.205	7.205	0.000	97	1444952	12.5	13.0	
	84 1,4-Dinitrobenzene	168	7.228	7.228	0.000	83	230375	12.5	13.7	
	87 2,6-Dinitrotoluene	165	7.263	7.263	0.000	87	315218	12.5	13.4	
	88 Acenaphthylene	152	7.333	7.333	0.000	99	2009108	12.5	12.6	
	89 3-Nitroaniline	138	7.415	7.415	0.000	87	352797	12.5	13.8	
*	90 Acenaphthene-d10	164	7.462	7.462	0.000	95	413430	5.00	5.00	
	91 Acenaphthene	153	7.497	7.497	0.000	97	1298132	12.5	12.7	
	92 2,4-Dinitrophenol	184	7.514	7.514	0.000	79	404073	25.0	25.1	
	93 4-Nitrophenol	109	7.566	7.566	0.000	82	513084	25.0	28.0	
	94 Pentachlorobenzene	250	7.619	7.619	0.000	97	521931	12.5	11.8	
	95 2,4-Dinitrotoluene	165	7.642	7.642	0.000	87	435496	12.5	13.8	
	96 Dibenzofuran	168	7.660	7.660	0.000	96	1775110	12.5	12.5	
	97 1-Naphthylamine	143	7.730	7.730	0.000	97	1154243	12.5	12.9	
	98 2,3,4,6-Tetrachlorophenol	232	7.770	7.770	0.000	74	385217	12.5	13.8	
	99 2-Naphthylamine	143	7.805	7.805	0.000	94	1345840	12.5	13.2	
	100 Diethyl phthalate	149	7.875	7.875	0.000	97	1413197	12.5	13.5	
	101 Thionazin	107	7.951	7.951	0.000	78	277153	12.5	13.0	
	102 Fluorene	166	7.980	7.980	0.000	93	1454420	12.5	12.7	
	103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	88	730069	12.5	13.0	
	104 N-Nitro-o-toluidine	152	7.992	7.992	0.000	86	411597	12.5	13.5	
	105 4-Nitroaniline	138	7.992	7.992	0.000	76	379433	12.5	13.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
106 4,6-Dinitro-2-methylphenol	198	8.021	8.021	0.000	77	515624	25.0	27.3	
107 N-Nitrosodiphenylamine	169	8.091	8.091	0.000	63	1049521	10.6	11.1	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	42	2090654	12.5	12.9	
110 Sulfotepp	97	8.248	8.248	0.000	79	299236	12.5	12.1	
112 1,3,5-Trinitrobenzene	213	8.330	8.330	0.000	81	150982	12.5	12.5	
113 cis-Diallate	86	8.371	8.371	0.000	0	632883	9.38	9.26	
114 Phorate	75	8.377	8.377	0.000	95	1173867	12.5	13.2	
115 Phenacetin	108	8.382	8.382	0.000	87	813211	12.5	13.3	
116 4-Bromophenyl phenyl ether	248	8.447	8.447	0.000	70	424920	12.5	12.9	
117 trans-Diallate	86	8.458	8.458	0.000	0	220686	3.13	3.10	
118 Hexachlorobenzene	284	8.499	8.499	0.000	93	428892	12.5	12.1	
119 Dimethoate	87	8.534	8.534	0.000	97	772121	12.5	13.7	
121 Pentachlorophenol	266	8.686	8.686	0.000	92	587664	25.0	27.8	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	91	1586110	12.5	12.4	
123 Pentachloronitrobenzene	237	8.697	8.697	0.000	86	189466	12.5	12.5	
124 Pronamide	173	8.750	8.750	0.000	90	656383	12.5	12.9	
125 Dinoseb	211	8.860	8.860	0.000	95	354129	12.5	12.3	
* 126 Phenanthrene-d10	188	8.872	8.872	0.000	97	785961	5.00	5.00	
127 Disulfoton	88	8.878	8.878	0.000	95	1107187	12.5	10.8	
128 Phenanthrene	178	8.895	8.895	0.000	98	2174879	12.5	12.7	
129 Anthracene	178	8.942	8.942	0.000	99	2214766	12.5	13.0	
130 Carbazole	167	9.094	9.094	0.000	96	2029322	12.5	13.4	
131 Methyl parathion	109	9.228	9.228	0.000	90	566455	12.5	13.4	
133 Di-n-butyl phthalate	149	9.432	9.432	0.000	100	2332675	12.5	14.2	
134 Ethyl Parathion	109	9.601	9.601	0.000	83	327338	12.5	13.2	
135 4-Nitroquinoline-1-oxide	190	9.624	9.624	0.000	81	162394	12.5	12.3	
S 136 Diallate	86				0		12.5	12.4	
140 Octachlorostyrene	308	9.840	9.840	0.000	93	162437	12.5	12.0	
141 Isodrin	193	9.880	9.880	0.000	90	247934	12.5	11.7	
143 Fluoranthene	202	10.020	10.020	0.000	99	2452564	12.5	13.5	
137 Aramite Peak 1	185		10.122				ND	ND	
138 Aramite Peak 2	185		10.140				ND	ND	
147 Benzidine	184	10.149	10.149	0.000	100	1270140	12.5	10.1	M
139 Aramite Peak 3	185		10.186				ND	ND	
* 149 Pyrene-d10 (IS)	212	10.218	10.218	0.000	100	822597	5.00	5.00	
150 Pyrene	202	10.236	10.236	0.000	96	2581961	12.5	12.3	
142 Aramite Peak 4	185	10.318	10.318	0.000	0	5677	NC	NC	
151 Famphur	218		10.458				ND	ND	
154 p-Dimethylamino azobenzene	225	10.539	10.539	0.000	93	437087	12.5	13.7	
155 Chlorobenzilate	139	10.592	10.592	0.000	87	679416	12.5	13.0	
156 3,3'-Dimethylbenzidine	212	10.895	10.895	0.000	99	1432962	12.5	13.0	
157 Butyl benzyl phthalate	149	10.918	10.918	0.000	94	1050829	12.5	13.8	
158 2-Acetylaminofluorene	181	11.169	11.169	0.000	95	789633	12.5	11.5	
159 3,3'-Dichlorobenzidine	252	11.512	11.512	0.000	78	647165	12.5	10.2	
160 4,4'-Methylene bis(2-chloroanil	231	11.524	11.524	0.000	96	458844	12.5	12.8	
161 Benzo[a]anthracene	228	11.536	11.536	0.000	99	2326018	12.5	13.9	
162 Chrysene	228	11.582	11.582	0.000	98	2322896	12.5	13.8	
163 Bis(2-ethylhexyl) phthalate	149	11.612	11.612	0.000	96	1382918	12.5	13.5	
164 6-Methylchrysene	242	12.165	12.165	0.000	99	1461092	12.5	12.8	
165 Di-n-octyl phthalate	149	12.497	12.497	0.000	99	2153329	12.5	12.1	
166 7,12-Dimethylbenz(a)anthracene	256	12.970	12.970	0.000	73	977805	12.5	13.9	
167 Benzo[b]fluoranthene	252	12.970	12.970	0.000	97	2293737	12.5	13.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
168 Benzo[k]fluoranthene	252	13.010	13.010	0.000	100	2350480	12.5	13.1	
169 Benzo[a]pyrene	252	13.436	13.436	0.000	78	2027166	12.5	13.6	
* 170 Perylene-d12	264	13.518	13.518	0.000	97	691313	5.00	5.00	
171 3-Methylcholanthrene	268	13.960	13.960	0.000	91	960204	12.5	12.5	
172 Dibenz[a,h]acridine	279	14.753	14.753	0.000	91	1525370	12.5	13.6	
173 Dibenz[a,j]acridine	279	14.823	14.823	0.000	96	1738445	12.5	13.9	
174 Indeno[1,2,3-cd]pyrene	276	15.068	15.068	0.000	99	1693058	12.5	13.7	
175 Dibenz(a,h)anthracene	278	15.109	15.109	0.000	93	1892847	12.5	13.0	
176 Benzo[g,h,i]perylene	276	15.458	15.458	0.000	97	1934462	12.5	13.2	
S 178 Dinitrotoluene	165				0			27.3	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 182 Isosafrole	162				0		12.5	12.0	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected

Reagents:

MSS_RV8270ICV_00019 Amount Added: 1.00 Units: mL

Report Date: 23-Mar-2023 19:32:37 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2321.D

Injection Date: 23-Mar-2023 17:14:30 Instrument ID: HP19760 Operator ID: em10340

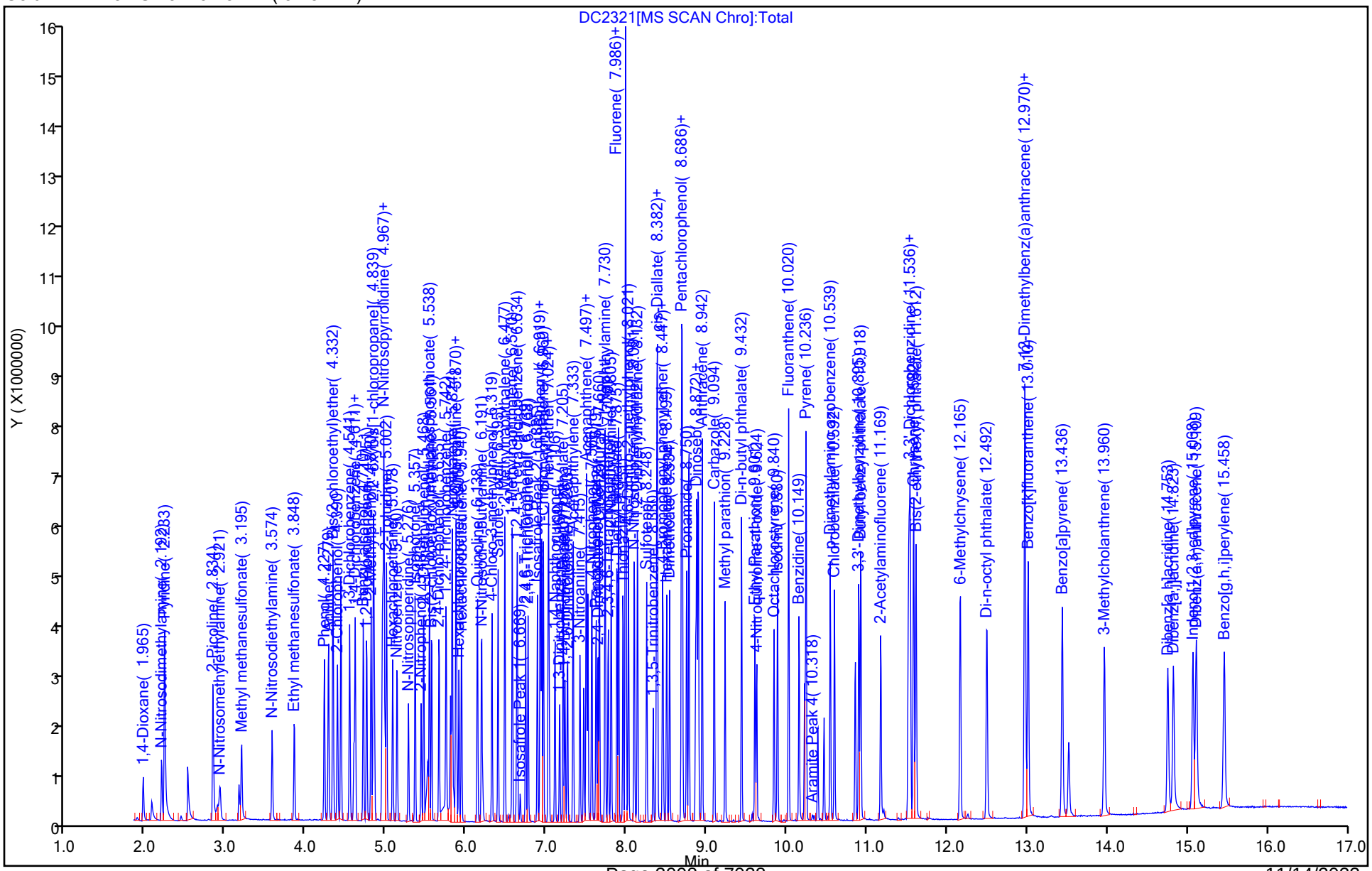
Lims ID: ICV FULL Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-356566/12 Calibration Date: 03/23/2023 17:14

Instrument ID: HP19760 Calib Start Date: 03/23/2023 13:34

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/23/2023 16:08

Lab File ID: DC2321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8306	0.8025		12.1	12.5	-3.4	30.0
N-Nitrosodimethylamine	Ave	1.286	1.199		11.7	12.5	-6.8	30.0
Pyridine	Ave	2.099	1.901		22.6	25.0	-9.5	30.0
2-Picoline	Ave	1.998	1.950		12.2	12.5	-2.4	30.0
N-Nitrosomethylethylamine	Ave	0.8802	0.8351		11.9	12.5	-5.1	30.0
Methyl methanesulfonate	Ave	1.131	1.012		11.2	12.5	-10.4	30.0
N-Nitrosodiethylamine	Ave	0.7960	0.7986		12.5	12.5	0.3	30.0
Ethyl methanesulfonate	Ave	0.8682	0.7837		11.3	12.5	-9.7	30.0
Phenol	Ave	2.158	2.156	0.8000	12.5	12.5	-0.1	30.0
Aniline	Ave	2.673	2.661		12.4	12.5	-0.5	30.0
Bis(2-chloroethyl)ether	Ave	1.782	1.743	0.7000	12.2	12.5	-2.2	30.0
2-Chlorophenol	Ave	1.315	1.356	0.8000	12.9	12.5	3.1	30.0
1,3-Dichlorobenzene	Ave	1.497	1.502		12.5	12.5	0.3	30.0
1,4-Dichlorobenzene	Ave	1.568	1.538		12.3	12.5	-1.9	30.0
Benzyl alcohol	Ave	1.021	1.013		12.4	12.5	-0.9	30.0
1,2-Dichlorobenzene	Ave	1.445	1.433		12.4	12.5	-0.8	30.0
o-Cresol	Ave	1.403	1.450	0.7000	12.9	12.5	3.4	30.0
bis (2-chloroisopropyl) ether	Ave	2.278	2.079	0.0100	11.4	12.5	-8.7	30.0
N-Nitrosopyrrolidine	Ave	0.8447	0.8422		12.5	12.5	-0.3	30.0
m & p-Cresol	Ave	1.487	1.529	0.6000	12.9	12.5	2.8	30.0
N-Nitrosodi-n-propylamine	Ave	1.430	1.420	0.5000	12.4	12.5	-0.7	30.0
Acetophenone	Ave	2.302	2.391	0.0100	13.0	12.5	3.9	30.0
N-Nitrosomorpholine	Ave	1.095	1.027		11.7	12.5	-6.2	30.0
o-Toluidine	Ave	2.550	2.578		12.6	12.5	1.1	30.0
Hexachloroethane	Ave	0.6546	0.6513	0.3000	12.4	12.5	-0.5	30.0
Nitrobenzene	Ave	0.5356	0.5339	0.2000	12.5	12.5	-0.3	30.0
N-Nitrosopiperidine	Ave	0.1976	0.2000		12.7	12.5	1.2	30.0
Isophorone	Ave	0.9220	0.9516	0.4000	12.9	12.5	3.2	30.0
2-Nitrophenol	Ave	0.1612	0.1735	0.1000	13.5	12.5	7.6	30.0
2,4-Dimethylphenol	Ave	0.4026	0.4350	0.2000	13.5	12.5	8.1	30.0
o,o',o''-Triethylphosphorothioate	Ave	0.1753	0.1806		12.9	12.5	3.0	30.0
Bis(2-chloroethoxy)methane	Ave	0.5645	0.5926	0.3000	13.1	12.5	5.0	30.0
2,4-Dichlorophenol	Ave	0.2764	0.3046	0.2000	13.8	12.5	10.2	30.0
1,2,4-Trichlorobenzene	Ave	0.3343	0.3458		12.9	12.5	3.4	30.0
Naphthalene	Ave	1.070	1.098	0.7000	12.8	12.5	2.6	30.0
4-Chloroaniline	Ave	0.4224	0.4679	0.0100	13.8	12.5	10.8	30.0
2,6-Dichlorophenol	Ave	0.2806	0.3099		13.8	12.5	10.4	30.0
Hexachloropropene	Ave	0.2253	0.2124		11.8	12.5	-5.7	30.0
Hexachlorobutadiene	Ave	0.1903	0.1955	0.0100	12.8	12.5	2.7	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-356566/12 Calibration Date: 03/23/2023 17:14

Instrument ID: HP19760 Calib Start Date: 03/23/2023 13:34

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/23/2023 16:08

Lab File ID: DC2321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Quinoline	Ave	0.6804	0.7046		12.9	12.5	3.6	30.0
N-Nitrosodi-n-butylamine	Ave	0.3979	0.3432		10.8	12.5	-13.7	30.0
4-Chloro-3-methylphenol	Ave	0.3575	0.3914	0.2000	13.7	12.5	9.5	30.0
Safrole, Total	Ave	0.2699	0.2810		13.0	12.5	4.1	30.0
2-Methylnaphthalene	Ave	0.6823	0.7137	0.4000	13.1	12.5	4.6	30.0
1-Methylnaphthalene	Ave	0.6326	0.6669		13.2	12.5	5.4	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6387	0.6312	0.0100	12.4	12.5	-1.2	30.0
Isosafrole Peak 1	Ave	0.5741	0.5268		1.38	1.50	-8.2	30.0
2,4,6-Trichlorophenol	Ave	0.3696	0.3803	0.2000	12.9	12.5	2.9	30.0
2,4,5-Trichlorophenol	Ave	0.4000	0.4323	0.2000	13.5	12.5	8.1	30.0
Isosafrole Peak 2	Ave	0.6059	0.5855		10.6	11.0	-3.4	30.0
1,1'-Biphenyl	Ave	1.562	1.562	0.0100	12.5	12.5	0.0	30.0
2-Chloronaphthalene	Ave	1.208	1.192	0.8000	12.3	12.5	-1.3	30.0
1-Chloronaphthalene	Ave	1.168	1.136		12.2	12.5	-2.7	30.0
Diphenyl ether	Ave	0.8608	0.8317		12.1	12.5	-3.4	30.0
2-Nitroaniline	Ave	0.3578	0.3791	0.0100	13.2	12.5	6.0	30.0
1,4-Naphthoquinone	Ave	0.4420	0.4534		12.8	12.5	2.6	30.0
1,3-Dinitrobenzene	Ave	0.1823	0.1873		12.8	12.5	2.7	30.0
Dimethyl phthalate	Ave	1.343	1.398	0.0100	13.0	12.5	4.1	30.0
1,4-Dinitrobenzene	Ave	0.2035	0.2229		13.7	12.5	9.5	30.0
2,6-Dinitrotoluene	Ave	0.2836	0.3050	0.2000	13.4	12.5	7.5	30.0
Acenaphthylene	Ave	1.931	1.944	0.9000	12.6	12.5	0.6	30.0
3-Nitroaniline	Ave	0.3089	0.3413	0.0100	13.8	12.5	10.5	30.0
Acenaphthene	Ave	1.233	1.256	0.9000	12.7	12.5	1.8	30.0
2,4-Dinitrophenol	Lin2		0.1955	0.0100	25.1	25.0	0.3	30.0
4-Nitrophenol	Ave	0.2217	0.2482	0.0100	28.0	25.0	12.0	30.0
Pentachlorobenzene	Ave	0.5330	0.5050		11.8	12.5	-5.3	30.0
2,4-Dinitrotoluene	Ave	0.3813	0.4213	0.2000	13.8	12.5	10.5	30.0
Dibenzofuran	Ave	1.711	1.717	0.8000	12.5	12.5	0.4	30.0
1-Naphthylamine	Ave	1.085	1.117		12.9	12.5	2.9	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3378	0.3727	0.0100	13.8	12.5	10.3	30.0
2-Naphthylamine	Ave	1.233	1.302		13.2	12.5	5.6	30.0
Diethyl phthalate	Ave	1.263	1.367	0.0100	13.5	12.5	8.3	30.0
O,O-Diethyl O-2-pyrazinyl phosphorothioate	Ave	0.2585	0.2681		13.0	12.5	3.7	30.0
Fluorene	Ave	1.383	1.407	0.9000	12.7	12.5	1.7	30.0
4-Chlorophenyl-phenyl ether	Ave	0.6814	0.7064	0.4000	13.0	12.5	3.7	30.0
4-Nitroaniline	Ave	0.3369	0.3671	0.0100	13.6	12.5	9.0	30.0
5-Nitro-o-toluidine	Ave	0.3690	0.3982		13.5	12.5	7.9	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1203	0.1312	0.0100	27.3	25.0	9.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-356566/12 Calibration Date: 03/23/2023 17:14

Instrument ID: HP19760 Calib Start Date: 03/23/2023 13:34

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/23/2023 16:08

Lab File ID: DC2321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Nitrosodiphenylamine(as diphenylamine)	Ave	0.6020	0.6284	0.0100	11.1	10.6	4.4	30.0
1,2-Diphenylhydrazine	Ave	1.029	1.064		12.9	12.5	3.4	30.0
Sulfotepp	Ave	0.1577	0.1523		12.1	12.5	-3.4	30.0
1,3,5-Trinitrobenzene	Ave	0.0767	0.0768			12.5	0.1	30.0
cis-Diallate	Ave	0.4349	0.4295		9.26	9.38	-1.2	30.0
Phorate	Ave	0.5657	0.5974		13.2	12.5	5.6	30.0
Phenacetin	Ave	0.3900	0.4139		13.3	12.5	6.1	30.0
4-Bromophenyl-phenylether	Ave	0.2100	0.2163	0.1000	12.9	12.5	3.0	30.0
trans-Diallate	Ave	0.4524	0.4493		3.10	3.13	-0.7	30.0
Hexachlorobenzene	Ave	0.2254	0.2183	0.1000	12.1	12.5	-3.1	30.0
Dimethoate	Ave	0.3593	0.3930		13.7	12.5	9.4	30.0
Pentachlorophenol	Ave	0.1346	0.1495	0.0500	27.8	25.0	11.1	30.0
4-Aminobiphenyl	Ave	0.8139	0.8072		12.4	12.5	-0.8	30.0
Pentachloronitrobenzene	Ave	0.0962	0.0964		12.5	12.5	0.3	30.0
Pronamide	Ave	0.3241	0.3341		12.9	12.5	3.1	30.0
Dinoseb	Lin2		0.1802		12.3	12.5	-1.2	30.0
Disulfoton	Ave	0.6525	0.5635		10.8	12.5	-13.6	30.0
Phenanthrene	Ave	1.090	1.107	0.7000	12.7	12.5	1.6	30.0
Anthracene	Ave	1.080	1.127	0.7000	13.0	12.5	4.3	30.0
Carbazole	Ave	0.9662	1.033	0.0100	13.4	12.5	6.9	30.0
Methyl parathion	Ave	0.2688	0.2883		13.4	12.5	7.2	30.0
Di-n-butyl phthalate	Ave	1.046	1.187	0.0100	14.2	12.5	13.4	30.0
Parathion	Ave	0.1573	0.1666		13.2	12.5	5.9	30.0
4-Nitroquinoline-1-oxide	Qua2		0.0826		12.3	12.5	-1.7	30.0
Octachlorostyrene	Ave	0.0863	0.0827		12.0	12.5	-4.2	30.0
Isodrin	Ave	0.1342	0.1262		11.7	12.5	-6.0	30.0
Fluoranthene	Ave	1.154	1.248	0.6000	13.5	12.5	8.2	30.0
Benzidine	Ave	0.7650	0.6176		10.1	12.5	-19.3	30.0
Pyrene	Ave	1.273	1.256	0.6000	12.3	12.5	-1.4	30.0
p-Dimethylamino azobenzene	Ave	0.1939	0.2125		13.7	12.5	9.6	30.0
Chlorobenzilate	Ave	0.3186	0.3304		13.0	12.5	3.7	30.0
3,3'-Dimethylbenzidine	Ave	0.6688	0.6968		13.0	12.5	4.2	30.0
Butylbenzylphthalate	Ave	0.4639	0.5110	0.0100	13.8	12.5	10.2	30.0
2-Acetylaminofluorene	Lin1		0.3840		11.5	12.5	-7.7	30.0
3,3'-Dichlorobenzidine	Ave	0.3871	0.3147	0.0100	10.2	12.5	-18.7	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2173	0.2231			12.5	2.7	30.0
Benzo[a]anthracene	Ave	1.018	1.131	0.8000	13.9	12.5	11.1	30.0
Chrysene	Ave	1.020	1.130	0.7000	13.8	12.5	10.8	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.6217	0.6725	0.0100	13.5	12.5	8.2	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-356566/12 Calibration Date: 03/23/2023 17:14

Instrument ID: HP19760 Calib Start Date: 03/23/2023 13:34

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/23/2023 16:08

Lab File ID: DC2321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
6-Methylchrysene	Ave	0.6912	0.7105		12.8	12.5	2.8	30.0
Di-n-octyl phthalate	Lin2		1.246	0.0100	12.1	12.5	-2.8	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5087	0.5658		13.9	12.5	11.2	30.0
Benzo[b]fluoranthene	Ave	1.244	1.327	0.7000	13.3	12.5	6.7	30.0
Benzo[k]fluoranthene	Ave	1.302	1.360	0.7000	13.1	12.5	4.4	30.0
Benzo[a]pyrene	Ave	1.077	1.173	0.7000	13.6	12.5	8.9	30.0
3-Methylcholanthrene	Ave	0.5540	0.5556		12.5	12.5	0.3	30.0
Dibenz[a,h]acridine	Ave	0.8123	0.8826		13.6	12.5	8.7	30.0
Dibenz[a,j]acridine	Ave	0.9026	1.006		13.9	12.5	11.4	30.0
Indeno[1,2,3-cd]pyrene	Ave	0.8938	0.9796	0.5000	13.7	12.5	9.6	30.0
Dibenz(a,h)anthracene	Ave	1.054	1.095	0.4000	13.0	12.5	4.0	30.0
Benzo[g,h,i]perylene	Ave	1.061	1.119	0.5000	13.2	12.5	5.5	30.0
1,4-phenylenediamine	Ave	0.3442				12.5		
Hexachlorocyclopentadiene	Ave	0.3954				12.5		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2321.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 23-Mar-2023 17:14:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0079683-012
Operator ID: em10340 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 19:32:37 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: P7EB Date: 23-Mar-2023 17:46:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.965	1.965	0.000	94	400468	12.5	12.1	
3 N-Nitrosodimethylamine	74	2.192	2.192	0.000	93	598189	12.5	11.7	
4 Pyridine	79	2.233	2.233	0.000	98	1897155	25.0	22.6	
7 2-Picoline	93	2.834	2.834	0.000	90	973193	12.5	12.2	
8 N-Nitrosomethylethylamine	88	2.921	2.921	0.000	91	416765	12.5	11.9	
9 Methyl methanesulfonate	80	3.195	3.195	0.000	85	505252	12.5	11.2	
11 N-Nitrosodiethylamine	102	3.574	3.574	0.000	95	398525	12.5	12.5	
12 Ethyl methanesulfonate	109	3.854	3.854	0.000	97	391076	12.5	11.3	
17 Phenol	94	4.227	4.227	0.000	94	1075710	12.5	12.5	
18 Aniline	93	4.279	4.279	0.000	96	1328016	12.5	12.4	
19 Bis(2-chloroethyl)ether	93	4.332	4.332	0.000	96	870008	12.5	12.2	
20 2-Chlorophenol	128	4.390	4.390	0.000	92	676686	12.5	12.9	
21 1,3-Dichlorobenzene	146	4.541	4.541	0.000	93	749490	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.594	4.594	0.000	95	199616	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.611	4.611	0.000	89	767580	12.5	12.3	
25 Benzyl alcohol	108	4.710	4.710	0.000	89	505343	12.5	12.4	
26 1,2-Dichlorobenzene	146	4.751	4.751	0.000	91	715152	12.5	12.4	
28 2-Methylphenol	108	4.810	4.810	0.000	96	723648	12.5	12.9	
29 2,2'-oxybis[1-chloropropane]	45	4.850	4.850	0.000	93	1037644	12.5	11.4	
31 N-Nitrosopyrrolidine	100	4.944	4.944	0.000	92	420314	12.5	12.5	
32 4-Methylphenol	108	4.955	4.955	0.000	95	763237	12.5	12.9	
33 N-Nitrosodi-n-propylamine	70	4.967	4.967	0.000	74	708410	12.5	12.4	
34 Acetophenone	105	4.973	4.973	0.000	95	1193168	12.5	13.0	
35 N-Nitrosomorpholine	56	4.984	4.984	0.000	90	512670	12.5	11.7	
36 2-Toluidine	106	5.002	5.002	0.000	95	1286385	12.5	12.6	
38 Hexachloroethane	117	5.078	5.078	0.000	97	325013	12.5	12.4	
40 Nitrobenzene	77	5.130	5.130	0.000	85	972845	12.5	12.5	
42 N-Nitrosopiperidine	114	5.276	5.276	0.000	85	364440	12.5	12.7	
43 Isophorone	82	5.357	5.357	0.000	96	1734105	12.5	12.9	
44 2-Nitrophenol	139	5.433	5.433	0.000	89	316137	12.5	13.5	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	45 2,4-Dimethylphenol	107	5.468	5.468	0.000	98	792740	12.5	13.5	
	46 o,o',o''-Triethylphosphorothioat	198	5.538	5.538	0.000	94	329061	12.5	12.9	
	47 Bis(2-chloroethoxy)methane	93	5.567	5.567	0.000	99	1079856	12.5	13.1	
	48 2,4-Dichlorophenol	162	5.660	5.660	0.000	96	555049	12.5	13.8	
	49 1,2,4-Trichlorobenzene	180	5.748	5.748	0.000	92	630121	12.5	12.9	
*	50 Naphthalene-d8	136	5.800	5.800	0.000	99	728907	5.00	5.00	
	51 Naphthalene	128	5.824	5.824	0.000	98	2000455	12.5	12.8	
	53 4-Chloroaniline	127	5.865	5.865	0.000	93	852591	12.5	13.8	
	54 2,6-Dichlorophenol	162	5.876	5.876	0.000	95	564702	12.5	13.8	
	55 Hexachloropropene	213	5.905	5.905	0.000	90	387002	12.5	11.8	
	56 Hexachlorobutadiene	225	5.940	5.940	0.000	96	356253	12.5	12.8	
	60 Quinoline	129	6.138	6.138	0.000	93	1283944	12.5	12.9	
	62 N-Nitrosodi-n-butylamine	84	6.185	6.185	0.000	92	625397	12.5	10.8	
	63 p-Phenylene diamine	108		6.197				ND	ND	U
	64 4-Chloro-3-methylphenol	107	6.319	6.319	0.000	91	713244	12.5	13.7	
	65 Safrole, Total	162	6.395	6.395	0.000	85	512036	12.5	13.0	
	66 2-Methylnaphthalene	142	6.477	6.477	0.000	91	1300564	12.5	13.1	
	67 1-Methylnaphthalene	142	6.570	6.570	0.000	92	1215238	12.5	13.2	
	68 Hexachlorocyclopentadiene	237		6.628				ND	ND	U
	69 1,2,4,5-Tetrachlorobenzene	216	6.634	6.634	0.000	98	652399	12.5	12.4	
	70 Isosafrole Peak 1	162	6.669	6.669	0.000	84	65344	1.50	1.38	
	71 2,4,6-Trichlorophenol	196	6.739	6.739	0.000	95	393100	12.5	12.9	
	72 2,4,5-Trichlorophenol	196	6.768	6.768	0.000	93	446787	12.5	13.5	
	74 Isosafrole Peak 2	162	6.885	6.885	0.000	87	532558	11.0	10.6	
	75 1,1'-Biphenyl	154	6.919	6.919	0.000	95	1614824	12.5	12.5	
	76 2-Chloronaphthalene	162	6.937	6.937	0.000	96	1232494	12.5	12.3	
	77 1-Chloronaphthalene	162	6.960	6.960	0.000	96	1174292	12.5	12.2	
	78 Phenyl ether	170	7.024	7.024	0.000	88	859584	12.5	12.1	
	79 2-Nitroaniline	138	7.030	7.030	0.000	74	391875	12.5	13.2	
	81 1,4-Naphthoquinone	158	7.106	7.106	0.000	79	468616	12.5	12.8	
	86 1,3-Dinitrobenzene	168	7.164	7.164	0.000	83	193594	12.5	12.8	
	85 Dimethyl phthalate	163	7.205	7.205	0.000	97	1444952	12.5	13.0	
	84 1,4-Dinitrobenzene	168	7.228	7.228	0.000	83	230375	12.5	13.7	
	87 2,6-Dinitrotoluene	165	7.263	7.263	0.000	87	315218	12.5	13.4	
	88 Acenaphthylene	152	7.333	7.333	0.000	99	2009108	12.5	12.6	
	89 3-Nitroaniline	138	7.415	7.415	0.000	87	352797	12.5	13.8	
*	90 Acenaphthene-d10	164	7.462	7.462	0.000	95	413430	5.00	5.00	
	91 Acenaphthene	153	7.497	7.497	0.000	97	1298132	12.5	12.7	
	92 2,4-Dinitrophenol	184	7.514	7.514	0.000	79	404073	25.0	25.1	
	93 4-Nitrophenol	109	7.566	7.566	0.000	82	513084	25.0	28.0	
	94 Pentachlorobenzene	250	7.619	7.619	0.000	97	521931	12.5	11.8	
	95 2,4-Dinitrotoluene	165	7.642	7.642	0.000	87	435496	12.5	13.8	
	96 Dibenzofuran	168	7.660	7.660	0.000	96	1775110	12.5	12.5	
	97 1-Naphthylamine	143	7.730	7.730	0.000	97	1154243	12.5	12.9	
	98 2,3,4,6-Tetrachlorophenol	232	7.770	7.770	0.000	74	385217	12.5	13.8	
	99 2-Naphthylamine	143	7.805	7.805	0.000	94	1345840	12.5	13.2	
	100 Diethyl phthalate	149	7.875	7.875	0.000	97	1413197	12.5	13.5	
	101 Thionazin	107	7.951	7.951	0.000	78	277153	12.5	13.0	
	102 Fluorene	166	7.980	7.980	0.000	93	1454420	12.5	12.7	
	103 4-Chlorophenyl phenyl ether	204	7.986	7.986	0.000	88	730069	12.5	13.0	
	104 N-Nitro-o-toluidine	152	7.992	7.992	0.000	86	411597	12.5	13.5	
	105 4-Nitroaniline	138	7.992	7.992	0.000	76	379433	12.5	13.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
106 4,6-Dinitro-2-methylphenol	198	8.021	8.021	0.000	77	515624	25.0	27.3	
107 N-Nitrosodiphenylamine	169	8.091	8.091	0.000	63	1049521	10.6	11.1	
108 1,2-Diphenylhydrazine	77	8.132	8.132	0.000	42	2090654	12.5	12.9	
110 Sulfotepp	97	8.248	8.248	0.000	79	299236	12.5	12.1	
112 1,3,5-Trinitrobenzene	213	8.330	8.330	0.000	81	150982	12.5	12.5	
113 cis-Diallate	86	8.371	8.371	0.000	0	632883	9.38	9.26	
114 Phorate	75	8.377	8.377	0.000	95	1173867	12.5	13.2	
115 Phenacetin	108	8.382	8.382	0.000	87	813211	12.5	13.3	
116 4-Bromophenyl phenyl ether	248	8.447	8.447	0.000	70	424920	12.5	12.9	
117 trans-Diallate	86	8.458	8.458	0.000	0	220686	3.13	3.10	
118 Hexachlorobenzene	284	8.499	8.499	0.000	93	428892	12.5	12.1	
119 Dimethoate	87	8.534	8.534	0.000	97	772121	12.5	13.7	
121 Pentachlorophenol	266	8.686	8.686	0.000	92	587664	25.0	27.8	
122 4-Aminobiphenyl	169	8.691	8.691	0.000	91	1586110	12.5	12.4	
123 Pentachloronitrobenzene	237	8.697	8.697	0.000	86	189466	12.5	12.5	
124 Pronamide	173	8.750	8.750	0.000	90	656383	12.5	12.9	
125 Dinoseb	211	8.860	8.860	0.000	95	354129	12.5	12.3	
* 126 Phenanthrene-d10	188	8.872	8.872	0.000	97	785961	5.00	5.00	
127 Disulfoton	88	8.878	8.878	0.000	95	1107187	12.5	10.8	
128 Phenanthrene	178	8.895	8.895	0.000	98	2174879	12.5	12.7	
129 Anthracene	178	8.942	8.942	0.000	99	2214766	12.5	13.0	
130 Carbazole	167	9.094	9.094	0.000	96	2029322	12.5	13.4	
131 Methyl parathion	109	9.228	9.228	0.000	90	566455	12.5	13.4	
133 Di-n-butyl phthalate	149	9.432	9.432	0.000	100	2332675	12.5	14.2	
134 Ethyl Parathion	109	9.601	9.601	0.000	83	327338	12.5	13.2	
135 4-Nitroquinoline-1-oxide	190	9.624	9.624	0.000	81	162394	12.5	12.3	
S 136 Diallate	86				0		12.5	12.4	
140 Octachlorostyrene	308	9.840	9.840	0.000	93	162437	12.5	12.0	
141 Isodrin	193	9.880	9.880	0.000	90	247934	12.5	11.7	
143 Fluoranthene	202	10.020	10.020	0.000	99	2452564	12.5	13.5	
137 Aramite Peak 1	185		10.122				ND	ND	
138 Aramite Peak 2	185		10.140				ND	ND	
147 Benzidine	184	10.149	10.149	0.000	100	1270140	12.5	10.1	M
139 Aramite Peak 3	185		10.186				ND	ND	
* 149 Pyrene-d10 (IS)	212	10.218	10.218	0.000	100	822597	5.00	5.00	
150 Pyrene	202	10.236	10.236	0.000	96	2581961	12.5	12.3	
142 Aramite Peak 4	185	10.318	10.318	0.000	0	5677	NC	NC	
151 Famphur	218		10.458				ND	ND	
154 p-Dimethylamino azobenzene	225	10.539	10.539	0.000	93	437087	12.5	13.7	
155 Chlorobenzilate	139	10.592	10.592	0.000	87	679416	12.5	13.0	
156 3,3'-Dimethylbenzidine	212	10.895	10.895	0.000	99	1432962	12.5	13.0	
157 Butyl benzyl phthalate	149	10.918	10.918	0.000	94	1050829	12.5	13.8	
158 2-Acetylaminofluorene	181	11.169	11.169	0.000	95	789633	12.5	11.5	
159 3,3'-Dichlorobenzidine	252	11.512	11.512	0.000	78	647165	12.5	10.2	
160 4,4'-Methylene bis(2-chloroanil	231	11.524	11.524	0.000	96	458844	12.5	12.8	
161 Benzo[a]anthracene	228	11.536	11.536	0.000	99	2326018	12.5	13.9	
162 Chrysene	228	11.582	11.582	0.000	98	2322896	12.5	13.8	
163 Bis(2-ethylhexyl) phthalate	149	11.612	11.612	0.000	96	1382918	12.5	13.5	
164 6-Methylchrysene	242	12.165	12.165	0.000	99	1461092	12.5	12.8	
165 Di-n-octyl phthalate	149	12.497	12.497	0.000	99	2153329	12.5	12.1	
166 7,12-Dimethylbenz(a)anthracene	256	12.970	12.970	0.000	73	977805	12.5	13.9	
167 Benzo[b]fluoranthene	252	12.970	12.970	0.000	97	2293737	12.5	13.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
168 Benzo[k]fluoranthene	252	13.010	13.010	0.000	100	2350480	12.5	13.1	
169 Benzo[a]pyrene	252	13.436	13.436	0.000	78	2027166	12.5	13.6	
* 170 Perylene-d12	264	13.518	13.518	0.000	97	691313	5.00	5.00	
171 3-Methylcholanthrene	268	13.960	13.960	0.000	91	960204	12.5	12.5	
172 Dibenz[a,h]acridine	279	14.753	14.753	0.000	91	1525370	12.5	13.6	
173 Dibenz[a,j]acridine	279	14.823	14.823	0.000	96	1738445	12.5	13.9	
174 Indeno[1,2,3-cd]pyrene	276	15.068	15.068	0.000	99	1693058	12.5	13.7	
175 Dibenz(a,h)anthracene	278	15.109	15.109	0.000	93	1892847	12.5	13.0	
176 Benzo[g,h,i]perylene	276	15.458	15.458	0.000	97	1934462	12.5	13.2	
S 178 Dinitrotoluene	165				0			27.3	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 182 Isosafrole	162				0		12.5	12.0	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected

Reagents:

MSS_RV8270ICV_00019 Amount Added: 1.00 Units: mL

Report Date: 23-Mar-2023 19:32:37 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2321.D

Injection Date: 23-Mar-2023 17:14:30 Instrument ID: HP19760 Operator ID: em10340

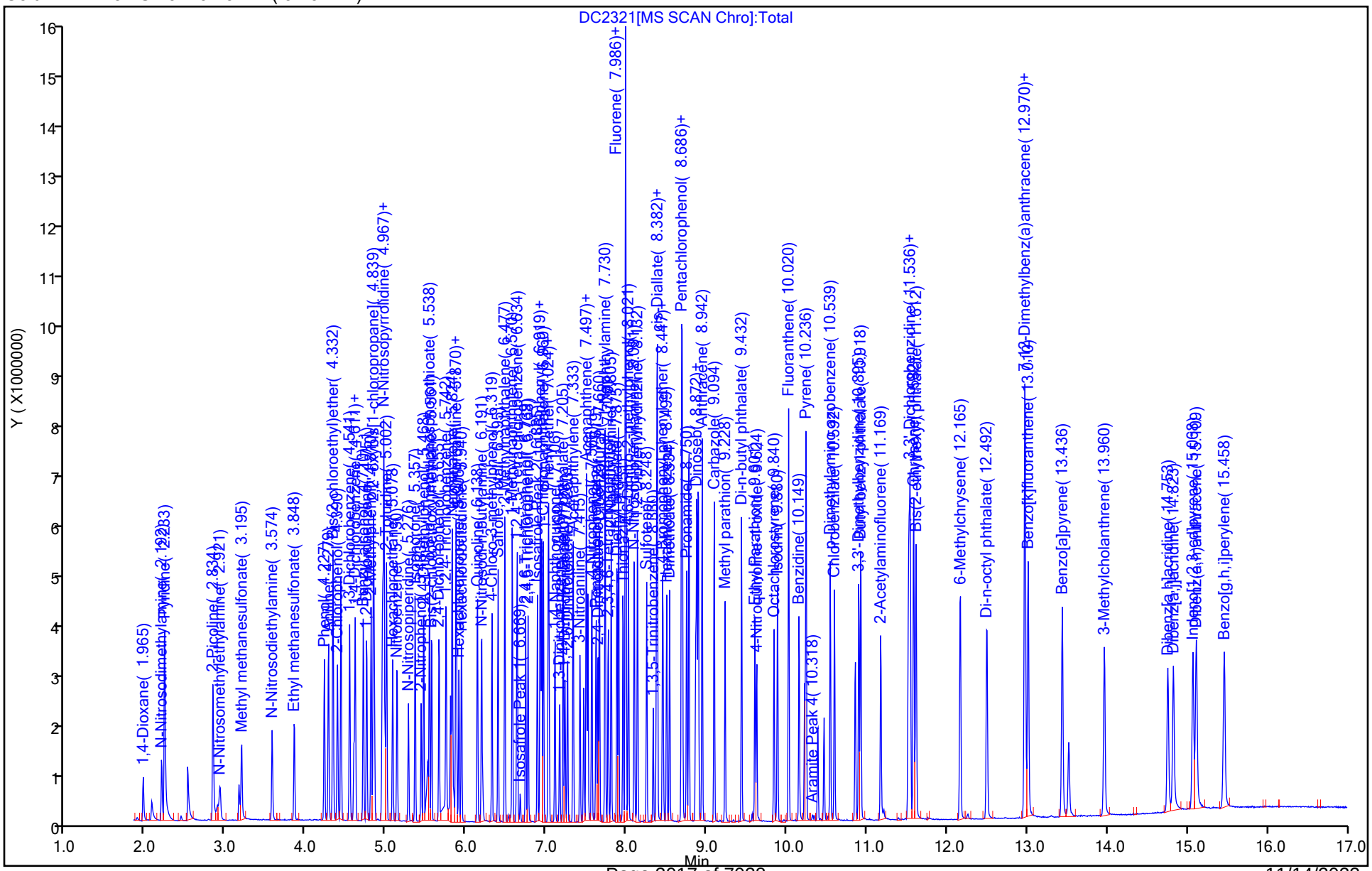
Lims ID: ICV FULL Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

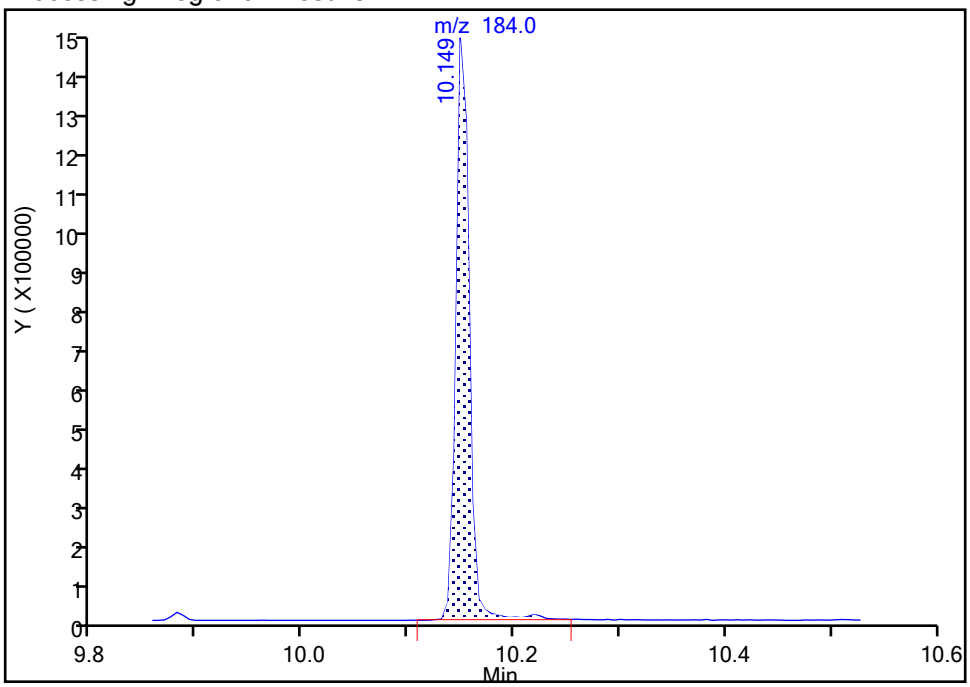
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2321.D				
Injection Date:	23-Mar-2023 17:14:30	Instrument ID:	HP19760		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

147 Benzidine, CAS: 92-87-5

Signal: 1

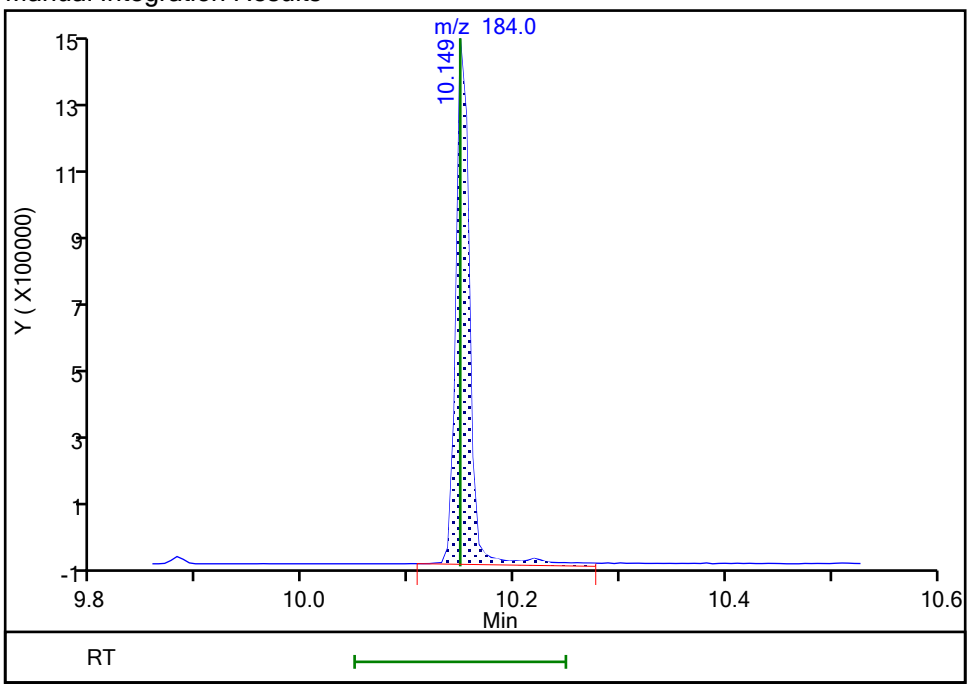
Processing Integration Results

RT: 10.15
Area: 1246891
Amount: 9.907338
Amount Units: ug/ml



Manual Integration Results

RT: 10.15
Area: 1270140
Amount: 10.092066
Amount Units: ug/ml



Reviewer: P7EB, 23-Mar-2023 17:52:26

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

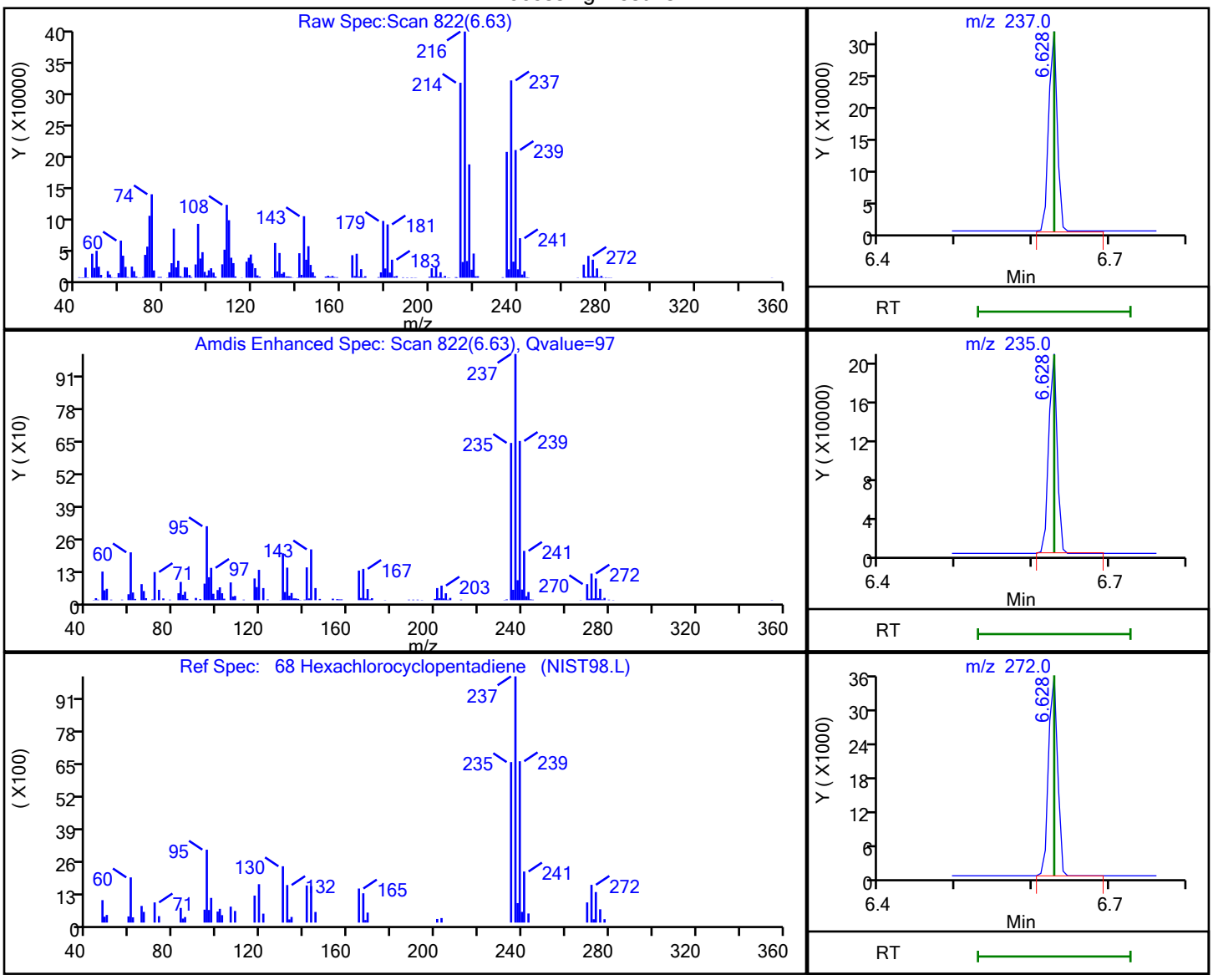
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2321.D				
Injection Date:	23-Mar-2023 17:14:30	Instrument ID:	HP19760		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

68 Hexachlorocyclopentadiene, CAS: 77-47-4

Processing Results



RT	Mass	Response	Amount
6.63	237.00	242686	7.423400
6.63	235.00	153779	
6.63	272.00	28981	

Reviewer: P7EB, 23-Mar-2023 19:32:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

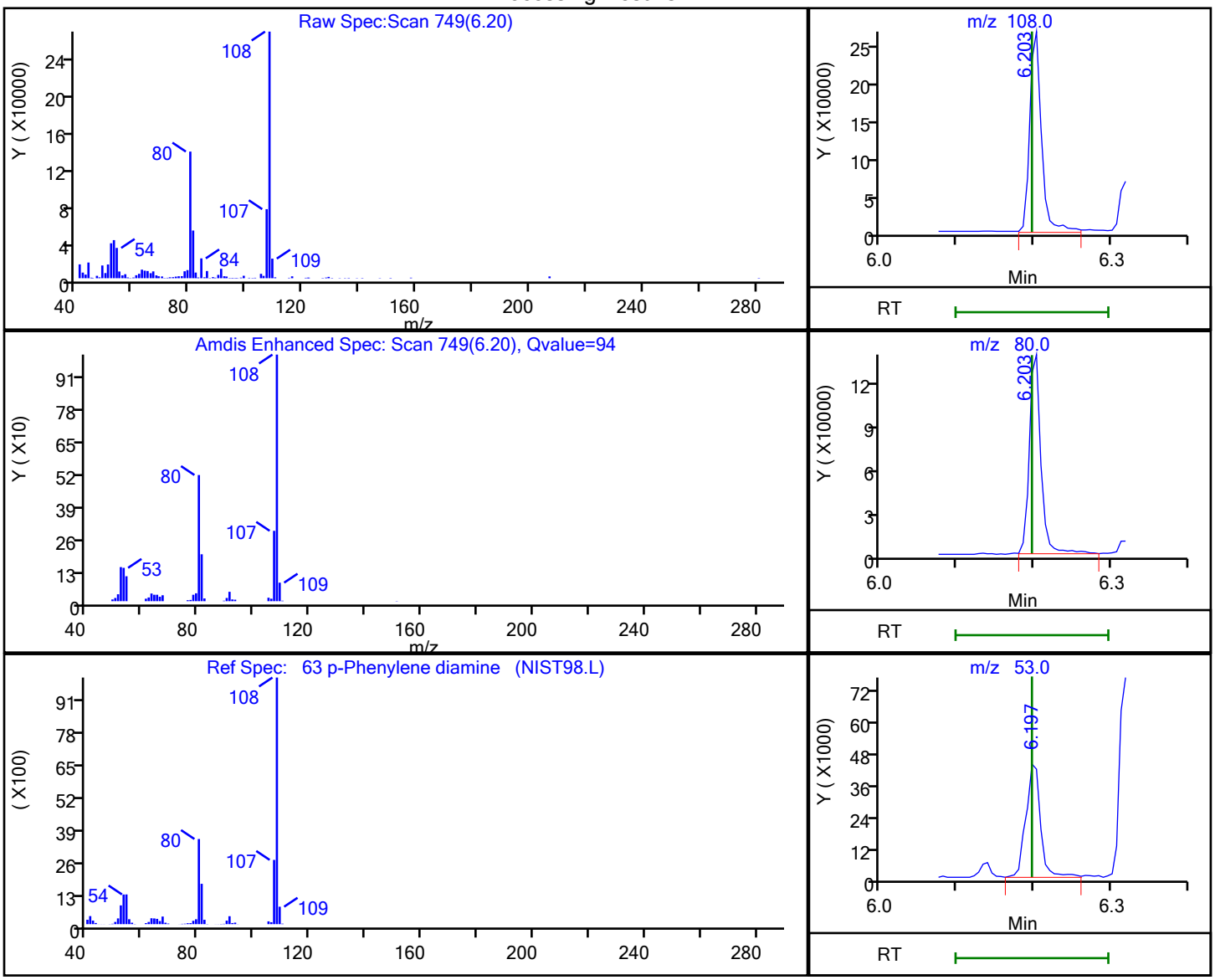
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2321.D				
Injection Date:	23-Mar-2023 17:14:30	Instrument ID:	HP19760		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

63 p-Phenylene diamine, CAS: 106-50-3

Processing Results



RT	Mass	Response	Amount
6.20	108.00	282198	5.623402
6.20	80.00	147476	
6.20	53.00	57550	
6.20	54.00	51809	
6.20	52.00	45180	

Reviewer: P7EB, 23-Mar-2023 19:32:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-404152/2 Calibration Date: 08/03/2023 14:43

Instrument ID: HP19760 Calib Start Date: 03/23/2023 13:34

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/23/2023 16:08

Lab File ID: DH0351.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8306	0.6090		9.17	12.5	-26.7*	20.0
N-Nitrosodimethylamine	Ave	1.286	0.9937		9.66	12.5	-22.7*	20.0
Pyridine	Ave	2.099	1.674		19.9	25.0	-20.3*	20.0
N,N-dimethylformamide	Ave	1.321	0.999		9.45	12.5	-24.4*	20.0
2-Picoline	Ave	1.998	1.631		10.2	12.5	-18.4	20.0
N-Nitrosomethylethylamine	Ave	0.8802	0.7317		10.4	12.5	-16.9	20.0
Methyl methanesulfonate	Ave	1.131	0.8817		9.75	12.5	-22.0*	20.0
N-Nitrosodiethylamine	Ave	0.7960	0.6866		10.8	12.5	-13.7	20.0
Ethyl methanesulfonate	Ave	0.8682	0.7492		10.8	12.5	-13.7	20.0
Benzaldehyde	Ave	1.624	1.124	0.0100	8.65	12.5	-30.8*	20.0
Phenol	Ave	2.158	2.060	0.8000	11.9	12.5	-4.6	20.0
Aniline	Ave	2.673	2.276		10.6	12.5	-14.9	20.0
Bis(2-chloroethyl)ether	Ave	1.782	1.568	0.7000	11.0	12.5	-12.0	20.0
2-Chlorophenol	Ave	1.315	1.358	0.8000	12.9	12.5	3.3	20.0
1,3-Dichlorobenzene	Ave	1.497	1.500		12.5	12.5	0.2	20.0
1,4-Dichlorobenzene	Ave	1.568	1.544		12.3	12.5	-1.5	20.0
Benzyl alcohol	Ave	1.021	0.7261		8.89	12.5	-28.9*	20.0
1,2-Dichlorobenzene	Ave	1.445	1.472		12.7	12.5	1.9	20.0
o-Cresol	Ave	1.403	1.401	0.7000	12.5	12.5	-0.1	20.0
bis (2-chloroisopropyl) ether	Ave	2.278	1.773	0.0100	9.73	12.5	-22.2*	20.0
N-Nitrosopyrrolidine	Ave	0.8447	0.7802		11.5	12.5	-7.6	20.0
Acetophenone	Ave	2.302	2.272	0.0100	12.3	12.5	-1.3	20.0
N-Nitrosodi-n-propylamine	Ave	1.430	1.221	0.5000	10.7	12.5	-14.6	20.0
m & p-Cresol	Ave	1.487	1.656	0.6000	13.9	12.5	11.3	20.0
N-Nitrosomorpholine	Ave	1.095	0.9467		10.8	12.5	-13.5	20.0
o-Toluidine	Ave	2.550	2.541		12.5	12.5	-0.4	20.0
Hexachloroethane	Ave	0.6546	0.6888	0.3000	13.2	12.5	5.2	20.0
Nitrobenzene	Ave	0.5356	0.4626	0.2000	10.8	12.5	-13.6	20.0
N-Nitrosopiperidine	Ave	0.1976	0.1804		11.4	12.5	-8.7	20.0
Isophorone	Ave	0.9220	0.7866	0.4000	10.7	12.5	-14.7	20.0
2-Nitrophenol	Ave	0.1612	0.1691	0.1000	13.1	12.5	4.9	20.0
2,4-Dimethylphenol	Ave	0.4026	0.3519	0.2000	10.9	12.5	-12.6	20.0
o,o',o''-Triethylphosphorothioate	Ave	0.1753	0.1699		12.1	12.5	-3.1	20.0
Bis(2-chloroethoxy)methane	Ave	0.5645	0.5012	0.3000	11.1	12.5	-11.2	20.0
2,4-Dichlorophenol	Ave	0.2764	0.2736	0.2000	12.4	12.5	-1.0	20.0
1,2,4-Trichlorobenzene	Ave	0.3343	0.3136		11.7	12.5	-6.2	20.0
Naphthalene	Ave	1.070	1.029	0.7000	12.0	12.5	-3.9	20.0
a-Terpineol	Ave	0.3488	0.2824		10.1	12.5	-19.0	20.0
4-Chloroaniline	Ave	0.4224	0.4445	0.0100	13.2	12.5	5.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-404152/2 Calibration Date: 08/03/2023 14:43

Instrument ID: HP19760 Calib Start Date: 03/23/2023 13:34

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/23/2023 16:08

Lab File ID: DH0351.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-Dichlorophenol	Ave	0.2806	0.2889		12.9	12.5	2.9	20.0
Hexachloropropene	Ave	0.2253	0.2002		11.1	12.5	-11.1	20.0
Hexachlorobutadiene	Ave	0.1903	0.1774	0.0100	11.7	12.5	-6.8	20.0
Quinoline	Ave	0.6804	0.6627		12.2	12.5	-2.6	20.0
Caprolactam	Ave	0.1114	0.1008	0.0100	11.3	12.5	-9.6	20.0
N-Nitrosodi-n-butylamine	Ave	0.3979	0.3852		12.1	12.5	-3.2	20.0
1,4-phenylenediamine	Ave	0.3442	0.2158			12.5	-37.3*	20.0
4-Chloro-3-methylphenol	Ave	0.3575	0.3278	0.2000	11.5	12.5	-8.3	20.0
Safrole, Total	Ave	0.2699	0.2673		12.4	12.5	-0.9	20.0
2-Methylnaphthalene	Ave	0.6823	0.6799	0.4000	12.5	12.5	-0.4	20.0
1-Methylnaphthalene	Ave	0.6326	0.6218		12.3	12.5	-1.7	20.0
Hexachlorocyclopentadiene	Ave	0.3954	0.2957	0.0500	9.35	12.5	-25.2*	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6387	0.5998	0.0100	11.7	12.5	-6.1	20.0
Isosafrole Peak 1	Ave	0.5741	0.5223		1.82	2.00	-9.0	20.0
2,4,6-Trichlorophenol	Ave	0.3696	0.3794	0.2000	12.8	12.5	2.7	20.0
2,4,5-Trichlorophenol	Ave	0.4000	0.3992	0.2000	12.5	12.5	-0.2	20.0
Isosafrole Peak 2	Ave	0.6059	0.5974		10.4	10.5	-1.4	20.0
1,1'-Biphenyl	Ave	1.562	1.543	0.0100	12.4	12.5	-1.2	20.0
2-Chloronaphthalene	Ave	1.208	1.286	0.8000	13.3	12.5	6.4	20.0
1-Chloronaphthalene	Ave	1.168	1.094		11.7	12.5	-6.3	20.0
Diphenyl ether	Ave	0.8608	0.8300		12.1	12.5	-3.6	20.0
2-Nitroaniline	Ave	0.3578	0.3733	0.0100	13.0	12.5	4.3	20.0
1,4-Naphthoquinone	Ave	0.4420	0.4755		13.4	12.5	7.6	20.0
1,4-Dinitrobenzene	Ave	0.2035	0.1860		11.4	12.5	-8.6	20.0
Dimethyl phthalate	Ave	1.343	1.353	0.0100	12.6	12.5	0.8	20.0
1,3-Dinitrobenzene	Ave	0.1823	0.2179		14.9	12.5	19.5	20.0
2,6-Dinitrotoluene	Ave	0.2836	0.2998	0.2000	13.2	12.5	5.7	20.0
Acenaphthylene	Ave	1.931	1.915	0.9000	12.4	12.5	-0.8	20.0
3-Nitroaniline	Ave	0.3089	0.3434	0.0100	13.9	12.5	11.2	20.0
Acenaphthene	Ave	1.233	1.230	0.9000	12.5	12.5	-0.3	20.0
2,4-Dinitrophenol	Lin2		0.1651	0.0100	21.6	25.0	-13.8	20.0
Pentachlorobenzene	Ave	0.5330	0.4971		11.7	12.5	-6.7	20.0
4-Nitrophenol	Ave	0.2217	0.2277	0.0100	25.7	25.0	2.7	20.0
2,4-Dinitrotoluene	Ave	0.3813	0.4338	0.2000	14.2	12.5	13.8	20.0
Dibenzofuran	Ave	1.711	1.693	0.8000	12.4	12.5	-1.1	20.0
1-Naphthylamine	Ave	1.085	1.091		12.6	12.5	0.6	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3378	0.3486	0.0100	12.9	12.5	3.2	20.0
2-Naphthylamine	Ave	1.233	1.229		12.5	12.5	-0.3	20.0
Diethyl phthalate	Ave	1.263	1.414	0.0100	14.0	12.5	11.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-404152/2 Calibration Date: 08/03/2023 14:43

Instrument ID: HP19760 Calib Start Date: 03/23/2023 13:34

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/23/2023 16:08

Lab File ID: DH0351.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
O,O-Diethyl O-2-pyrazinyl phosphorothioate	Ave	0.2585	0.2526		12.2	12.5	-2.3	20.0
Fluorene	Ave	1.383	1.423	0.9000	12.9	12.5	2.9	20.0
4-Chlorophenyl-phenyl ether	Ave	0.6814	0.6667	0.4000	12.2	12.5	-2.2	20.0
5-Nitro-o-toluidine	Ave	0.3690	0.3983		13.5	12.5	8.0	20.0
4-Nitroaniline	Ave	0.3369	0.3604	0.0100	13.4	12.5	7.0	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1203	0.1198	0.0100	24.9	25.0	-0.4	20.0
n-Nitrosodiphenylamine(as diphenylamine)	Ave	0.6020	0.6183	0.0100	10.9	10.6	2.7	20.0
1,2-Diphenylhydrazine	Ave	1.029	0.9357		11.4	12.5	-9.1	20.0
Sulfotepp	Ave	0.1577	0.1492		11.8	12.5	-5.4	20.0
1,3,5-Trinitrobenzene	Ave	0.0767	0.0732			12.5	-4.6	20.0
cis-Diallate	Ave	0.4349	0.3718		7.91	9.25	-14.5	20.0
Phorate	Ave	0.5657	0.5336		11.8	12.5	-5.7	20.0
Phenacetin	Ave	0.3900	0.4054		13.0	12.5	4.0	20.0
4-Bromophenyl-phenylether	Ave	0.2100	0.2012	0.1000	12.0	12.5	-4.2	20.0
trans-Diallate	Ave	0.4524	0.3735		2.68	3.25	-17.4	20.0
Hexachlorobenzene	Ave	0.2254	0.2090	0.1000	11.6	12.5	-7.3	20.0
Dimethoate	Ave	0.3593	0.3225		11.2	12.5	-10.2	20.0
Atrazine	Ave	0.2118	0.1899	0.0100	11.2	12.5	-10.4	20.0
Pentachloronitrobenzene	Ave	0.0962	0.1059		13.8	12.5	10.1	20.0
Pentachlorophenol	Ave	0.1346	0.1243	0.0500	23.1	25.0	-7.7	20.0
4-Aminobiphenyl	Ave	0.8139	0.8472		13.0	12.5	4.1	20.0
Pronamide	Ave	0.3241	0.3366		13.0	12.5	3.9	20.0
Dinoseb	Lin2		0.1693		11.6	12.5	-6.9	20.0
Disulfoton	Ave	0.6525	0.5585		10.7	12.5	-14.4	20.0
Phenanthrene	Ave	1.090	1.095	0.7000	12.6	12.5	0.5	20.0
Anthracene	Ave	1.080	1.096	0.7000	12.7	12.5	1.5	20.0
Carbazole	Ave	0.9662	0.997	0.0100	12.9	12.5	3.2	20.0
Methyl parathion	Ave	0.2688	0.2629		12.2	12.5	-2.2	20.0
Di-n-butyl phthalate	Ave	1.046	1.233	0.0100	14.7	12.5	17.8	20.0
Parathion	Ave	0.1573	0.1680		13.3	12.5	6.8	20.0
4-Nitroquinoline-1-oxide	Qua2		0.0621		9.72	12.5	-22.2*	20.0
Octachlorostyrene	Ave	0.0863	0.0773		11.2	12.5	-10.5	20.0
Isodrin	Ave	0.1342	0.1283		11.9	12.5	-4.4	20.0
Fluoranthene	Ave	1.154	1.170	0.6000	12.7	12.5	1.4	20.0
Benzidine	Ave	0.7650	0.6901		33.8	37.5	-9.8	20.0
Pyrene	Ave	1.273	1.210	0.6000	11.9	12.5	-5.0	20.0
p-Dimethylamino azobenzene	Ave	0.1939	0.2043		13.2	12.5	5.3	20.0
Chlorobenzilate	Ave	0.3186	0.3611		14.2	12.5	13.3	20.0
3,3'-Dimethylbenzidine	Ave	0.6688	0.6060		11.3	12.5	-9.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-404152/2 Calibration Date: 08/03/2023 14:43

Instrument ID: HP19760 Calib Start Date: 03/23/2023 13:34

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/23/2023 16:08

Lab File ID: DH0351.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Butylbenzylphthalate	Ave	0.4639	0.5251	0.0100	14.1	12.5	13.2	20.0
2-Acetylaminofluorene	Lin1		0.3745		11.3	12.5	-9.9	20.0
3,3'-Dichlorobenzidine	Ave	0.3871	0.3859	0.0100	12.5	12.5	-0.3	20.0
Benzo[a]anthracene	Ave	1.018	1.072	0.8000	13.2	12.5	5.3	20.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2173	0.2167			12.5	-0.3	20.0
Chrysene	Ave	1.020	1.056	0.7000	13.0	12.5	3.6	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6217	0.7285	0.0100	14.6	12.5	17.2	20.0
6-Methylchrysene	Ave	0.6912	0.6730		12.2	12.5	-2.6	20.0
Di-n-octyl phthalate	Lin2		1.531	0.0100	14.8	12.5	18.4	20.0
Benzo[b]fluoranthene	Ave	1.244	1.398	0.7000	14.0	12.5	12.4	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5087	0.5915		14.5	12.5	16.3	20.0
Benzo[k]fluoranthene	Ave	1.302	1.406	0.7000	13.5	12.5	8.0	20.0
Benzo[a]pyrene	Ave	1.077	1.154	0.7000	13.4	12.5	7.1	20.0
3-Methylcholanthrene	Ave	0.5540	0.5534		12.5	12.5	-0.1	20.0
Dibenz[a,h]acridine	Ave	0.8123	0.7547		11.6	12.5	-7.1	20.0
Dibenz[a,j]acridine	Ave	0.9026	0.9424		13.1	12.5	4.4	20.0
Indeno[1,2,3-cd]pyrene	Ave	0.8938	0.8462	0.5000	11.8	12.5	-5.3	20.0
Dibenz(a,h)anthracene	Ave	1.054	1.028	0.4000	12.2	12.5	-2.4	20.0
Benzo[g,h,i]perylene	Ave	1.061	1.019	0.5000	12.0	12.5	-3.9	20.0
2-Fluorophenol (Surr)	Ave	1.463	1.374		23.5	25.0	-6.1	20.0
Phenol-d5 (Surr)	Ave	2.107	1.823		21.6	25.0	-13.5	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5254	0.4477		21.3	25.0	-14.8	20.0
2-Fluorobiphenyl (Surr)	Ave	1.422	1.402		24.6	25.0	-1.5	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1721	0.1663		24.1	25.0	-3.4	20.0
p-Terphenyl-d14 (Surr)	Ave	0.8257	0.8104		24.5	25.0	-1.9	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Aug-2023 14:43:53 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub20

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 07-Aug-2023 10:41:35 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: P7EB Date: 03-Aug-2023 15:10:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.513	1.513	0.000	94	206970	12.5	9.17	
3 N-Nitrosodimethylamine	74	1.728	1.728	0.000	94	337678	12.5	9.66	
4 Pyridine	79	1.757	1.757	0.000	97	1137862	25.0	19.9	
6 Dimethylformamide	73	2.031	2.031	0.000	93	339419	12.5	9.45	
7 2-Picoline	93	2.311	2.311	0.000	91	554183	12.5	10.2	
8 N-Nitrosomethylethylamine	88	2.399	2.399	0.000	94	248649	12.5	10.4	
9 Methyl methanesulfonate	80	2.661	2.661	0.000	86	299632	12.5	9.75	
$ 10 2-Fluorophenol	112	2.824	2.824	0.000	92	933551	25.0	23.5	
11 N-Nitrosodiethylamine	102	3.016	3.016	0.000	94	233327	12.5	10.8	
12 Ethyl methanesulfonate	109	3.314	3.314	0.000	98	254596	12.5	10.8	
15 Benzaldehyde	77	3.640	3.640	0.000	96	381859	12.5	8.65	
$ 16 Phenol-d5	99	3.728	3.728	0.000	96	1238723	25.0	21.6	
17 Phenol	94	3.739	3.739	0.000	88	699926	12.5	11.9	
18 Aniline	93	3.745	3.745	0.000	97	773512	12.5	10.6	
19 Bis(2-chloroethyl)ether	93	3.815	3.815	0.000	98	532780	12.5	11.0	
20 2-Chlorophenol	128	3.867	3.867	0.000	94	461517	12.5	12.9	
21 1,3-Dichlorobenzene	146	4.007	4.007	0.000	94	509620	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.066	4.066	0.000	97	135932	5.00	5.00	s
23 1,4-Dichlorobenzene	146	4.083	4.083	0.000	91	524790	12.5	12.3	
25 Benzyl alcohol	108	4.206	4.206	0.000	90	246765	12.5	8.89	
26 1,2-Dichlorobenzene	146	4.229	4.229	0.000	94	500216	12.5	12.7	
28 2-Methylphenol	108	4.328	4.328	0.000	94	476089	12.5	12.5	
29 2,2'-oxybis[1-chloropropane]	45	4.340	4.340	0.000	92	602468	12.5	9.73	
31 N-Nitrosopyrrolidine	100	4.439	4.439	0.000	88	265138	12.5	11.5	
34 Acetophenone	105	4.456	4.456	0.000	96	772033	12.5	12.3	
33 N-Nitrosodi-n-propylamine	70	4.462	4.462	0.000	81	414970	12.5	10.7	
35 N-Nitrosomorpholine	56	4.479	4.479	0.000	83	321717	12.5	10.8	
32 4-Methylphenol	108	4.479	4.479	0.000	91	562595	12.5	13.9	
36 2-Toluidine	106	4.491	4.491	0.000	97	863410	12.5	12.5	
38 Hexachloroethane	117	4.549	4.549	0.000	96	234080	12.5	13.2	
$ 39 Nitrobenzene-d5	82	4.602	4.602	0.000	88	1235568	25.0	21.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	4.619	4.619	0.000	86	638235	12.5	10.8	
42 N-Nitrosopiperidine	114	4.765	4.765	0.000	83	248937	12.5	11.4	
43 Isophorone	82	4.852	4.852	0.000	97	1085344	12.5	10.7	
44 2-Nitrophenol	139	4.928	4.928	0.000	92	233338	12.5	13.1	
45 2,4-Dimethylphenol	107	4.987	4.987	0.000	97	485536	12.5	10.9	
46 o,o',o''-Triethylphosphorothioat	198	5.051	5.051	0.000	91	234497	12.5	12.1	
47 Bis(2-chloroethoxy)methane	93	5.074	5.074	0.000	99	691603	12.5	11.1	
48 2,4-Dichlorophenol	162	5.167	5.167	0.000	96	377581	12.5	12.4	
49 1,2,4-Trichlorobenzene	180	5.237	5.237	0.000	93	432752	12.5	11.7	
37 alpha,alpha-Dimethyl phenethylam	58		5.237				ND	ND	MU
* 50 Naphthalene-d8	136	5.290	5.290	0.000	100	551921	5.00	5.00	s
51 Naphthalene	128	5.313	5.313	0.000	98	1419224	12.5	12.0	
52 Alpha-Terpineol	59	5.330	5.330	0.000	93	389693	12.5	10.1	
53 4-Chloroaniline	127	5.377	5.377	0.000	94	613343	12.5	13.2	
54 2,6-Dichlorophenol	162	5.383	5.383	0.000	95	398566	12.5	12.9	
55 Hexachloropropene	213	5.395	5.395	0.000	91	276248	12.5	11.1	
56 Hexachlorobutadiene	225	5.435	5.435	0.000	97	244844	12.5	11.7	
60 Quinoline	129	5.634	5.634	0.000	95	914399	12.5	12.2	
61 Caprolactam	113	5.692	5.692	0.000	77	139022	12.5	11.3	
62 N-Nitrosodi-n-butylamine	84	5.703	5.703	0.000	92	531552	12.5	12.1	
63 p-Phenylene diamine	108	5.721	5.721	0.000	96	297828	12.5	7.84	
64 4-Chloro-3-methylphenol	107	5.861	5.861	0.000	93	452279	12.5	11.5	
65 Safrole, Total	162	5.902	5.902	0.000	85	368865	12.5	12.4	
66 2-Methylnaphthalene	142	5.977	5.977	0.000	91	938105	12.5	12.5	
67 1-Methylnaphthalene	142	6.071	6.071	0.000	91	857971	12.5	12.3	
68 Hexachlorocyclopentadiene	237	6.129	6.129	0.000	96	226926	12.5	9.35	
69 1,2,4,5-Tetrachlorobenzene	216	6.135	6.135	0.000	98	460341	12.5	11.7	
70 Isosafrole Peak 1	162	6.181	6.181	0.000	86	64141	2.00	1.82	
71 2,4,6-Trichlorophenol	196	6.251	6.251	0.000	94	291225	12.5	12.8	
72 2,4,5-Trichlorophenol	196	6.298	6.298	0.000	92	306388	12.5	12.5	
$ 73 2-Fluorobiphenyl (Surr)	172	6.333	6.333	0.000	99	2151520	25.0	24.6	
74 Isosafrole Peak 2	162	6.397	6.397	0.000	89	385167	10.5	10.4	
75 1,1'-Biphenyl	154	6.426	6.426	0.000	96	1184350	12.5	12.4	
76 2-Chloronaphthalene	162	6.438	6.438	0.000	97	986862	12.5	13.3	M
77 1-Chloronaphthalene	162	6.455	6.455	0.000	98	840034	12.5	11.7	Ma
78 Phenyl ether	170	6.531	6.531	0.000	88	637057	12.5	12.1	
79 2-Nitroaniline	138	6.543	6.543	0.000	77	286544	12.5	13.0	
81 1,4-Naphthoquinone	158	6.613	6.613	0.000	81	364948	12.5	13.4	
84 1,4-Dinitrobenzene	168	6.683	6.683	0.000	86	142742	12.5	11.4	
85 Dimethyl phthalate	163	6.729	6.729	0.000	97	1038452	12.5	12.6	
86 1,3-Dinitrobenzene	168	6.753	6.753	0.000	83	167254	12.5	14.9	
87 2,6-Dinitrotoluene	165	6.782	6.782	0.000	88	230077	12.5	13.2	
88 Acenaphthylene	152	6.828	6.828	0.000	99	1470186	12.5	12.4	
89 3-Nitroaniline	138	6.939	6.939	0.000	89	263567	12.5	13.9	
* 90 Acenaphthene-d10	164	6.962	6.962	0.000	96	307011	5.00	5.00	
91 Acenaphthene	153	6.992	6.992	0.000	97	943679	12.5	12.5	
92 2,4-Dinitrophenol	184	7.038	7.038	0.000	83	253385	25.0	21.6	
94 Pentachlorobenzene	250	7.120	7.120	0.000	97	381556	12.5	11.7	
93 4-Nitrophenol	109	7.131	7.131	0.000	85	349584	25.0	25.7	
95 2,4-Dinitrotoluene	165	7.161	7.161	0.000	66	332924	12.5	14.2	
96 Dibenzofuran	168	7.161	7.161	0.000	94	1299179	12.5	12.4	
97 1-Naphthylamine	143	7.236	7.236	0.000	97	837472	12.5	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.283	7.283	0.000	81	267573	12.5	12.9	
99 2-Naphthylamine	143	7.312	7.312	0.000	95	943473	12.5	12.5	
100 Diethyl phthalate	149	7.400	7.400	0.000	97	1085177	12.5	14.0	
101 Thionazin	107	7.475	7.475	0.000	78	193857	12.5	12.2	
102 Fluorene	166	7.481	7.481	0.000	93	1092368	12.5	12.9	
103 4-Chlorophenyl phenyl ether	204	7.493	7.493	0.000	94	511705	12.5	12.2	
104 N-Nitro-o-toluidine	152	7.505	7.505	0.000	90	305716	12.5	13.5	
105 4-Nitroaniline	138	7.516	7.516	0.000	79	276597	12.5	13.4	
106 4,6-Dinitro-2-methylphenol	198	7.539	7.539	0.000	78	357450	25.0	24.9	
107 N-Nitrosodiphenylamine	169	7.609	7.609	0.000	63	784278	10.6	10.9	
108 1,2-Diphenylhydrazine	77	7.644	7.644	0.000	41	1396325	12.5	11.4	
$ 109 2,4,6-Tribromophenol	330	7.714	7.714	0.000	90	255242	25.0	24.1	
110 Sulfotepp	97	7.773	7.773	0.000	78	222628	12.5	11.8	
112 1,3,5-Trinitrobenzene	213	7.878	7.878	0.000	83	109238	12.5	11.9	
113 cis-Diallate	86	7.883	7.883	0.000	0	410587	9.25	7.91	
114 Phorate	75	7.895	7.895	0.000	95	796364	12.5	11.8	
115 Phenacetin	108	7.918	7.918	0.000	92	605020	12.5	13.0	
116 4-Bromophenyl phenyl ether	248	7.953	7.953	0.000	69	300191	12.5	12.0	
117 trans-Diallate	86	7.971	7.971	0.000	0	144930	3.25	2.68	
118 Hexachlorobenzene	284	8.000	8.000	0.000	91	311845	12.5	11.6	
119 Dimethoate	87	8.052	8.052	0.000	96	481326	12.5	11.2	
120 Atrazine	200	8.128	8.128	0.000	91	283354	12.5	11.2	
121 Pentachlorophenol	266	8.198	8.198	0.000	89	370976	25.0	23.1	
123 Pentachloronitrobenzene	237	8.198	8.198	0.000	84	158033	12.5	13.8	
122 4-Aminobiphenyl	169	8.204	8.204	0.000	90	1264345	12.5	13.0	
124 Pronamide	173	8.274	8.274	0.000	90	502334	12.5	13.0	
* 126 Phenanthrene-d10	188	8.367	8.367	0.000	98	596922	5.00	5.00	s
125 Dinoseb	211	8.379	8.379	0.000	94	252613	12.5	11.6	
128 Phenanthrene	178	8.390	8.390	0.000	93	1633678	12.5	12.6	
127 Disulfoton	88	8.390	8.390	0.000	74	833409	12.5	10.7	
129 Anthracene	178	8.437	8.437	0.000	98	1636217	12.5	12.7	
130 Carbazole	167	8.600	8.600	0.000	96	1487692	12.5	12.9	
131 Methyl parathion	109	8.746	8.746	0.000	91	392259	12.5	12.2	
133 Di-n-butyl phthalate	149	8.956	8.956	0.000	100	1839403	12.5	14.7	
134 Ethyl Parathion	109	9.119	9.119	0.000	83	250701	12.5	13.3	
135 4-Nitroquinoline-1-oxide	190	9.131	9.131	0.000	74	92629	12.5	9.72	
140 Octachlorostyrene	308	9.341	9.341	0.000	88	115306	12.5	11.2	
141 Isodrin	193	9.370	9.370	0.000	92	191441	12.5	11.9	
143 Fluoranthene	202	9.515	9.515	0.000	99	1746082	12.5	12.7	
S 136 Diallate	86				0		12.5	10.6	
147 Benzidine	184	9.667	9.667	0.000	99	3211233	37.5	33.8	
* 149 Pyrene-d10 (IS)	212	9.714	9.714	0.000	99	620444	5.00	5.00	s
150 Pyrene	202	9.731	9.731	0.000	97	1876926	12.5	11.9	
$ 152 p-Terphenyl-d14	244	9.900	9.900	0.000	98	2514056	25.0	24.5	
154 p-Dimethylamino azobenzene	225	10.040	10.040	0.000	92	316906	12.5	13.2	
155 Chlorobenzilate	139	10.092	10.092	0.000	85	560125	12.5	14.2	
151 Famphur	218		10.337				ND	ND	U
156 3,3'-Dimethylbenzidine	212	10.372	10.372	0.000	99	940045	12.5	11.3	
157 Butyl benzyl phthalate	149	10.396	10.396	0.000	95	814490	12.5	14.1	
158 2-Acetylaminofluorene	181	10.623	10.623	0.000	95	580936	12.5	11.3	
159 3,3'-Dichlorobenzidine	252	10.938	10.938	0.000	77	598549	12.5	12.5	
161 Benzo[a]anthracene	228	10.938	10.938	0.000	100	1662489	12.5	13.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
160 4,4'-Methylene bis(2-chloroanil	231	10.943	10.943	0.000	94	336169	12.5	12.5	
162 Chrysene	228	10.978	10.978	0.000	97	1638652	12.5	13.0	
163 Bis(2-ethylhexyl) phthalate	149	11.037	11.037	0.000	98	1130058	12.5	14.6	
164 6-Methylchrysene	242	11.509	11.509	0.000	99	1043917	12.5	12.2	
165 Di-n-octyl phthalate	149	11.835	11.835	0.000	99	1673491	12.5	14.8	
167 Benzo[b]fluoranthene	252	12.232	12.232	0.000	97	1527883	12.5	14.0	
166 7,12-Dimethylbenz(a)anthracene	256	12.237	12.237	0.000	73	646416	12.5	14.5	
168 Benzo[k]fluoranthene	252	12.272	12.272	0.000	99	1536347	12.5	13.5	
169 Benzo[a]pyrene	252	12.657	12.657	0.000	78	1260852	12.5	13.4	
* 170 Perylene-d12	264	12.733	12.733	0.000	97	437111	5.00	5.00	s
171 3-Methylcholanthrene	268	13.147	13.147	0.000	91	604750	12.5	12.5	
172 Dibenz[a,h]acridine	279	13.899	13.899	0.000	91	824750	12.5	11.6	
173 Dibenz[a,j]acridine	279	13.968	13.968	0.000	96	1029872	12.5	13.1	
174 Indeno[1,2,3-cd]pyrene	276	14.196	14.196	0.000	99	924750	12.5	11.8	
175 Dibenz(a,h)anthracene	278	14.242	14.242	0.000	94	1123324	12.5	12.2	
176 Benzo[g,h,i]perylene	276	14.551	14.551	0.000	97	1113820	12.5	12.0	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 182 Isosafrole	162				0		12.5	12.2	

QC Flag Legend

Processing Flags
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection
- s - Failed ISTD Recovery Test

Review Flags
- M - Manually Integrated
- U - Marked Undetected
- a - User Assigned ID

Reagents:

MSS_RV8270_6_00046 Amount Added: 1.00 Units: mL

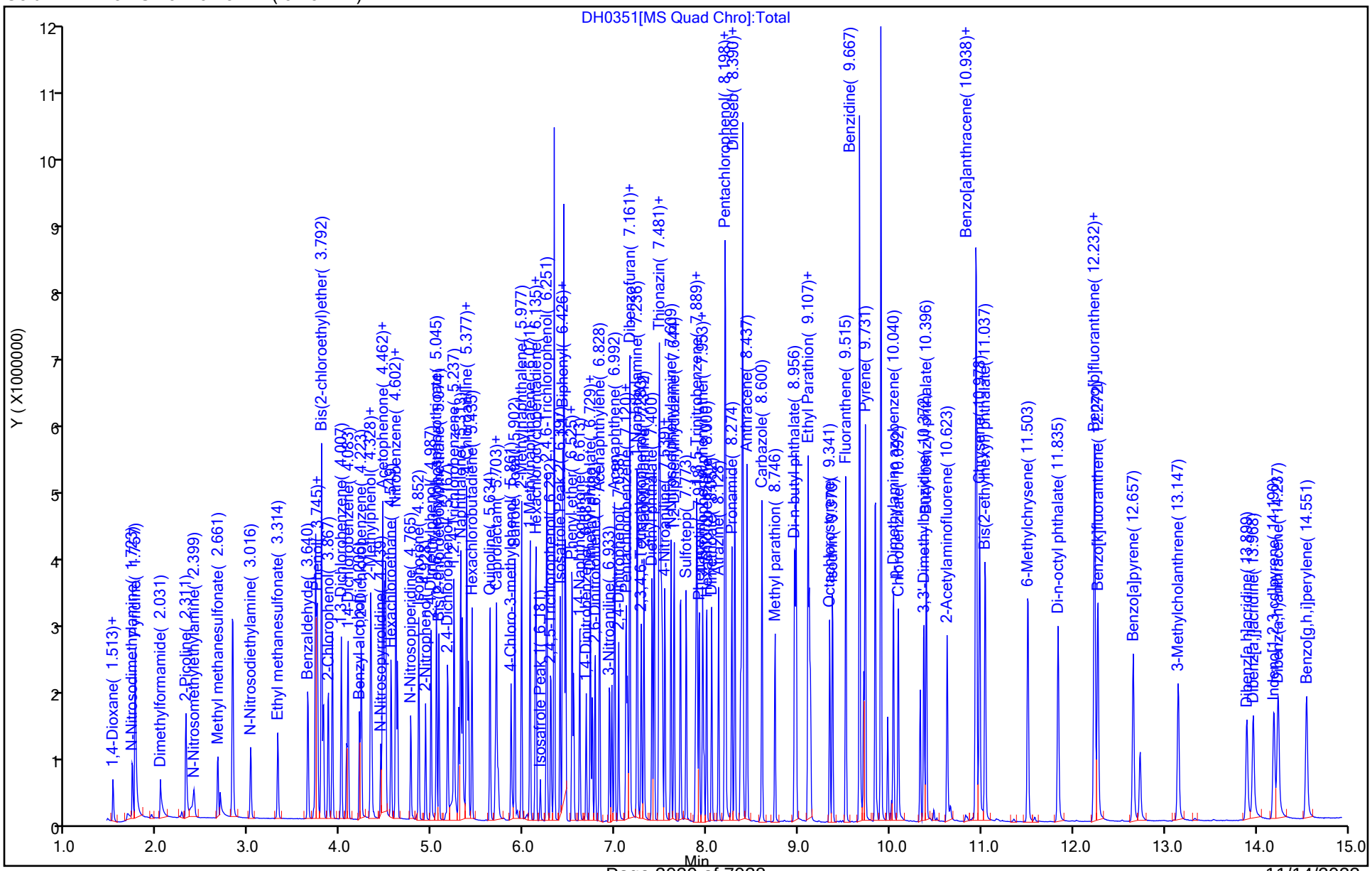
Report Date: 07-Aug-2023 10:41:36 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D

Injection Date:	03-Aug-2023 14:43:53	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

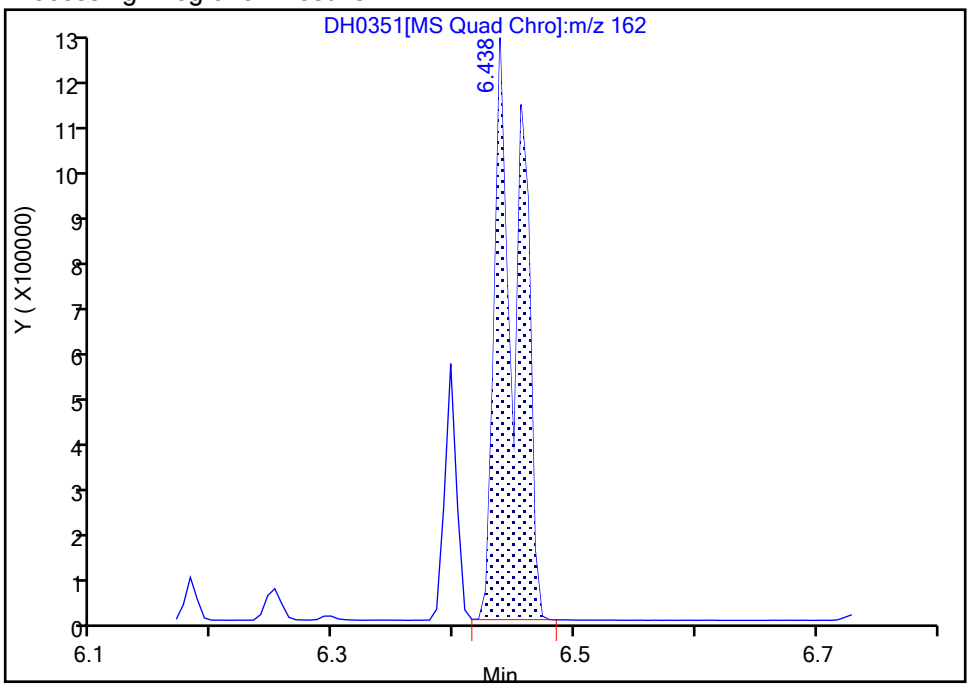
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D				
Injection Date:	03-Aug-2023 14:43:53	Instrument ID:	HP19760		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

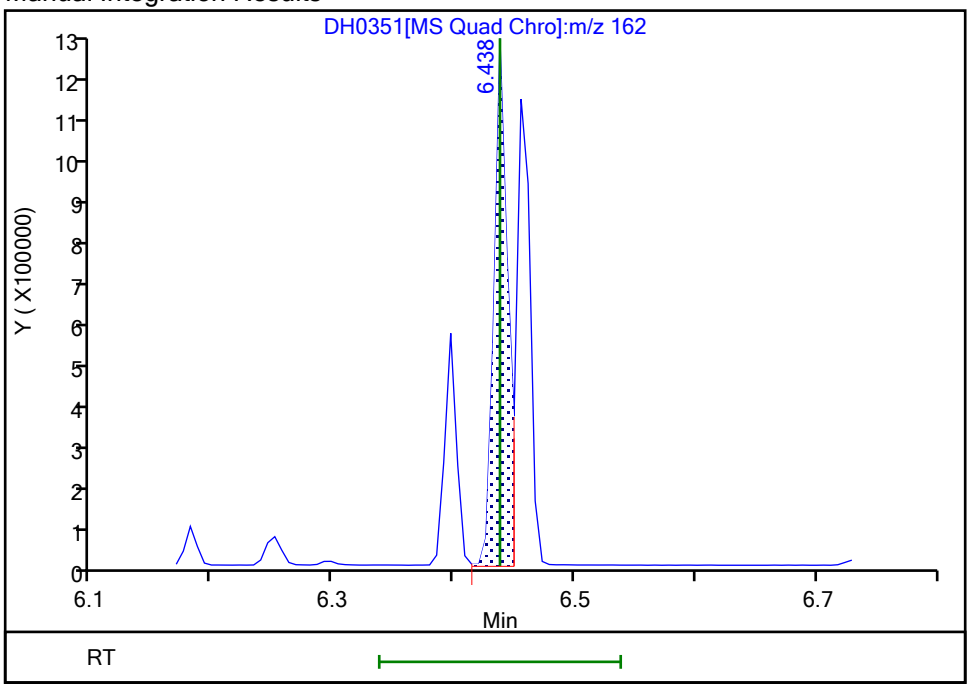
Processing Integration Results

RT: 6.44
Area: 1826897
Amount: 24.628240
Amount Units: ug/ml



Manual Integration Results

RT: 6.44
Area: 986862
Amount: 13.303801
Amount Units: ug/ml



Reviewer: P7EB, 03-Aug-2023 15:06:10 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

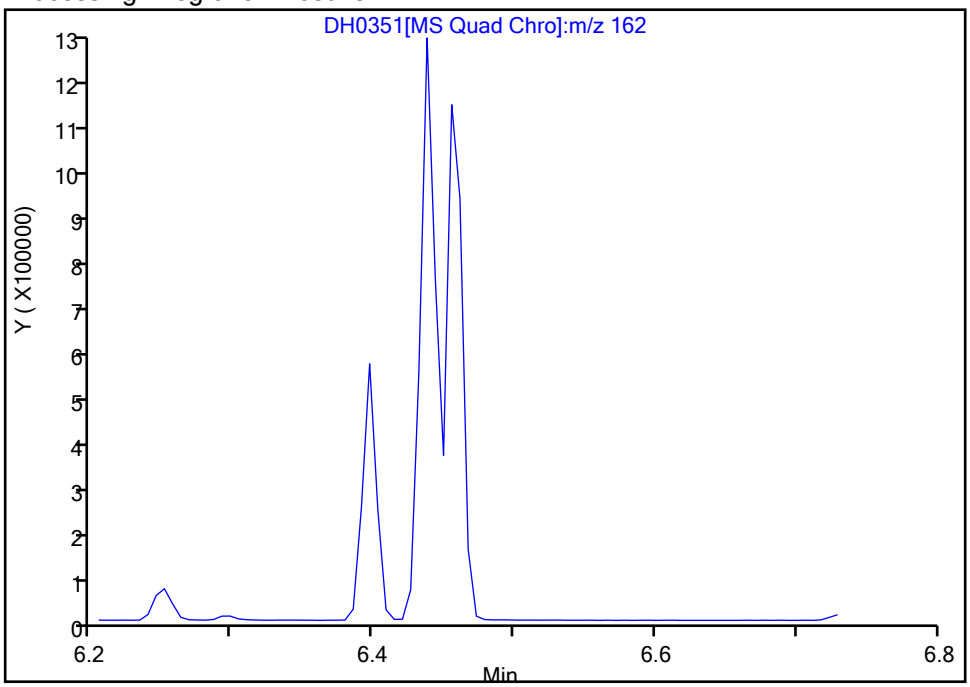
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D				
Injection Date:	03-Aug-2023 14:43:53	Instrument ID:	HP19760		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

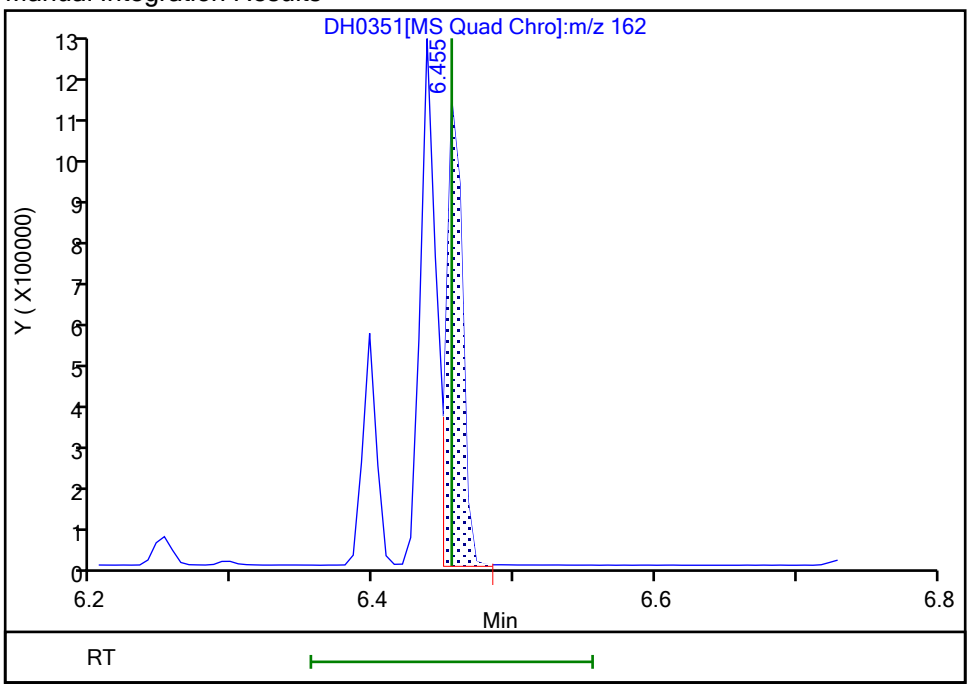
Not Detected
Expected RT: 6.46

Processing Integration Results



Manual Integration Results

RT: 6.46
Area: 840034
Amount: 11.715014
Amount Units: ug/ml



Reviewer: P7EB, 03-Aug-2023 15:06:19 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-404152/2 Calibration Date: 08/03/2023 14:43

Instrument ID: HP19760 Calib Start Date: 03/26/2023 14:52

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/26/2023 16:38

Lab File ID: DH0351.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Famphur	Ave	0.3331				12.5		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Aug-2023 14:43:53 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub20

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 07-Aug-2023 10:41:35 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: P7EB Date: 03-Aug-2023 15:10:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.513	1.513	0.000	94	206970	12.5	9.17	
3 N-Nitrosodimethylamine	74	1.728	1.728	0.000	94	337678	12.5	9.66	
4 Pyridine	79	1.757	1.757	0.000	97	1137862	25.0	19.9	
6 Dimethylformamide	73	2.031	2.031	0.000	93	339419	12.5	9.45	
7 2-Picoline	93	2.311	2.311	0.000	91	554183	12.5	10.2	
8 N-Nitrosomethylethylamine	88	2.399	2.399	0.000	94	248649	12.5	10.4	
9 Methyl methanesulfonate	80	2.661	2.661	0.000	86	299632	12.5	9.75	
$ 10 2-Fluorophenol	112	2.824	2.824	0.000	92	933551	25.0	23.5	
11 N-Nitrosodiethylamine	102	3.016	3.016	0.000	94	233327	12.5	10.8	
12 Ethyl methanesulfonate	109	3.314	3.314	0.000	98	254596	12.5	10.8	
15 Benzaldehyde	77	3.640	3.640	0.000	96	381859	12.5	8.65	
$ 16 Phenol-d5	99	3.728	3.728	0.000	96	1238723	25.0	21.6	
17 Phenol	94	3.739	3.739	0.000	88	699926	12.5	11.9	
18 Aniline	93	3.745	3.745	0.000	97	773512	12.5	10.6	
19 Bis(2-chloroethyl)ether	93	3.815	3.815	0.000	98	532780	12.5	11.0	
20 2-Chlorophenol	128	3.867	3.867	0.000	94	461517	12.5	12.9	
21 1,3-Dichlorobenzene	146	4.007	4.007	0.000	94	509620	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.066	4.066	0.000	97	135932	5.00	5.00	s
23 1,4-Dichlorobenzene	146	4.083	4.083	0.000	91	524790	12.5	12.3	
25 Benzyl alcohol	108	4.206	4.206	0.000	90	246765	12.5	8.89	
26 1,2-Dichlorobenzene	146	4.229	4.229	0.000	94	500216	12.5	12.7	
28 2-Methylphenol	108	4.328	4.328	0.000	94	476089	12.5	12.5	
29 2,2'-oxybis[1-chloropropane]	45	4.340	4.340	0.000	92	602468	12.5	9.73	
31 N-Nitrosopyrrolidine	100	4.439	4.439	0.000	88	265138	12.5	11.5	
34 Acetophenone	105	4.456	4.456	0.000	96	772033	12.5	12.3	
33 N-Nitrosodi-n-propylamine	70	4.462	4.462	0.000	81	414970	12.5	10.7	
35 N-Nitrosomorpholine	56	4.479	4.479	0.000	83	321717	12.5	10.8	
32 4-Methylphenol	108	4.479	4.479	0.000	91	562595	12.5	13.9	
36 2-Toluidine	106	4.491	4.491	0.000	97	863410	12.5	12.5	
38 Hexachloroethane	117	4.549	4.549	0.000	96	234080	12.5	13.2	
$ 39 Nitrobenzene-d5	82	4.602	4.602	0.000	88	1235568	25.0	21.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	4.619	4.619	0.000	86	638235	12.5	10.8	
42 N-Nitrosopiperidine	114	4.765	4.765	0.000	83	248937	12.5	11.4	
43 Isophorone	82	4.852	4.852	0.000	97	1085344	12.5	10.7	
44 2-Nitrophenol	139	4.928	4.928	0.000	92	233338	12.5	13.1	
45 2,4-Dimethylphenol	107	4.987	4.987	0.000	97	485536	12.5	10.9	
46 o,o',o''-Triethylphosphorothioat	198	5.051	5.051	0.000	91	234497	12.5	12.1	
47 Bis(2-chloroethoxy)methane	93	5.074	5.074	0.000	99	691603	12.5	11.1	
48 2,4-Dichlorophenol	162	5.167	5.167	0.000	96	377581	12.5	12.4	
49 1,2,4-Trichlorobenzene	180	5.237	5.237	0.000	93	432752	12.5	11.7	
37 alpha,alpha-Dimethyl phenethylam	58		5.237				ND	ND	MU
* 50 Naphthalene-d8	136	5.290	5.290	0.000	100	551921	5.00	5.00	s
51 Naphthalene	128	5.313	5.313	0.000	98	1419224	12.5	12.0	
52 Alpha-Terpineol	59	5.330	5.330	0.000	93	389693	12.5	10.1	
53 4-Chloroaniline	127	5.377	5.377	0.000	94	613343	12.5	13.2	
54 2,6-Dichlorophenol	162	5.383	5.383	0.000	95	398566	12.5	12.9	
55 Hexachloropropene	213	5.395	5.395	0.000	91	276248	12.5	11.1	
56 Hexachlorobutadiene	225	5.435	5.435	0.000	97	244844	12.5	11.7	
60 Quinoline	129	5.634	5.634	0.000	95	914399	12.5	12.2	
61 Caprolactam	113	5.692	5.692	0.000	77	139022	12.5	11.3	
62 N-Nitrosodi-n-butylamine	84	5.703	5.703	0.000	92	531552	12.5	12.1	
63 p-Phenylene diamine	108	5.721	5.721	0.000	96	297828	12.5	7.84	
64 4-Chloro-3-methylphenol	107	5.861	5.861	0.000	93	452279	12.5	11.5	
65 Safrole, Total	162	5.902	5.902	0.000	85	368865	12.5	12.4	
66 2-Methylnaphthalene	142	5.977	5.977	0.000	91	938105	12.5	12.5	
67 1-Methylnaphthalene	142	6.071	6.071	0.000	91	857971	12.5	12.3	
68 Hexachlorocyclopentadiene	237	6.129	6.129	0.000	96	226926	12.5	9.35	
69 1,2,4,5-Tetrachlorobenzene	216	6.135	6.135	0.000	98	460341	12.5	11.7	
70 Isosafrole Peak 1	162	6.181	6.181	0.000	86	64141	2.00	1.82	
71 2,4,6-Trichlorophenol	196	6.251	6.251	0.000	94	291225	12.5	12.8	
72 2,4,5-Trichlorophenol	196	6.298	6.298	0.000	92	306388	12.5	12.5	
$ 73 2-Fluorobiphenyl (Surr)	172	6.333	6.333	0.000	99	2151520	25.0	24.6	
74 Isosafrole Peak 2	162	6.397	6.397	0.000	89	385167	10.5	10.4	
75 1,1'-Biphenyl	154	6.426	6.426	0.000	96	1184350	12.5	12.4	
76 2-Chloronaphthalene	162	6.438	6.438	0.000	97	986862	12.5	13.3	M
77 1-Chloronaphthalene	162	6.455	6.455	0.000	98	840034	12.5	11.7	Ma
78 Phenyl ether	170	6.531	6.531	0.000	88	637057	12.5	12.1	
79 2-Nitroaniline	138	6.543	6.543	0.000	77	286544	12.5	13.0	
81 1,4-Naphthoquinone	158	6.613	6.613	0.000	81	364948	12.5	13.4	
84 1,4-Dinitrobenzene	168	6.683	6.683	0.000	86	142742	12.5	11.4	
85 Dimethyl phthalate	163	6.729	6.729	0.000	97	1038452	12.5	12.6	
86 1,3-Dinitrobenzene	168	6.753	6.753	0.000	83	167254	12.5	14.9	
87 2,6-Dinitrotoluene	165	6.782	6.782	0.000	88	230077	12.5	13.2	
88 Acenaphthylene	152	6.828	6.828	0.000	99	1470186	12.5	12.4	
89 3-Nitroaniline	138	6.939	6.939	0.000	89	263567	12.5	13.9	
* 90 Acenaphthene-d10	164	6.962	6.962	0.000	96	307011	5.00	5.00	
91 Acenaphthene	153	6.992	6.992	0.000	97	943679	12.5	12.5	
92 2,4-Dinitrophenol	184	7.038	7.038	0.000	83	253385	25.0	21.6	
94 Pentachlorobenzene	250	7.120	7.120	0.000	97	381556	12.5	11.7	
93 4-Nitrophenol	109	7.131	7.131	0.000	85	349584	25.0	25.7	
95 2,4-Dinitrotoluene	165	7.161	7.161	0.000	66	332924	12.5	14.2	
96 Dibenzofuran	168	7.161	7.161	0.000	94	1299179	12.5	12.4	
97 1-Naphthylamine	143	7.236	7.236	0.000	97	837472	12.5	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.283	7.283	0.000	81	267573	12.5	12.9	
99 2-Naphthylamine	143	7.312	7.312	0.000	95	943473	12.5	12.5	
100 Diethyl phthalate	149	7.400	7.400	0.000	97	1085177	12.5	14.0	
101 Thionazin	107	7.475	7.475	0.000	78	193857	12.5	12.2	
102 Fluorene	166	7.481	7.481	0.000	93	1092368	12.5	12.9	
103 4-Chlorophenyl phenyl ether	204	7.493	7.493	0.000	94	511705	12.5	12.2	
104 N-Nitro-o-toluidine	152	7.505	7.505	0.000	90	305716	12.5	13.5	
105 4-Nitroaniline	138	7.516	7.516	0.000	79	276597	12.5	13.4	
106 4,6-Dinitro-2-methylphenol	198	7.539	7.539	0.000	78	357450	25.0	24.9	
107 N-Nitrosodiphenylamine	169	7.609	7.609	0.000	63	784278	10.6	10.9	
108 1,2-Diphenylhydrazine	77	7.644	7.644	0.000	41	1396325	12.5	11.4	
$ 109 2,4,6-Tribromophenol	330	7.714	7.714	0.000	90	255242	25.0	24.1	
110 Sulfotepp	97	7.773	7.773	0.000	78	222628	12.5	11.8	
112 1,3,5-Trinitrobenzene	213	7.878	7.878	0.000	83	109238	12.5	11.9	
113 cis-Diallate	86	7.883	7.883	0.000	0	410587	9.25	7.91	
114 Phorate	75	7.895	7.895	0.000	95	796364	12.5	11.8	
115 Phenacetin	108	7.918	7.918	0.000	92	605020	12.5	13.0	
116 4-Bromophenyl phenyl ether	248	7.953	7.953	0.000	69	300191	12.5	12.0	
117 trans-Diallate	86	7.971	7.971	0.000	0	144930	3.25	2.68	
118 Hexachlorobenzene	284	8.000	8.000	0.000	91	311845	12.5	11.6	
119 Dimethoate	87	8.052	8.052	0.000	96	481326	12.5	11.2	
120 Atrazine	200	8.128	8.128	0.000	91	283354	12.5	11.2	
121 Pentachlorophenol	266	8.198	8.198	0.000	89	370976	25.0	23.1	
123 Pentachloronitrobenzene	237	8.198	8.198	0.000	84	158033	12.5	13.8	
122 4-Aminobiphenyl	169	8.204	8.204	0.000	90	1264345	12.5	13.0	
124 Pronamide	173	8.274	8.274	0.000	90	502334	12.5	13.0	
* 126 Phenanthrene-d10	188	8.367	8.367	0.000	98	596922	5.00	5.00	s
125 Dinoseb	211	8.379	8.379	0.000	94	252613	12.5	11.6	
128 Phenanthrene	178	8.390	8.390	0.000	93	1633678	12.5	12.6	
127 Disulfoton	88	8.390	8.390	0.000	74	833409	12.5	10.7	
129 Anthracene	178	8.437	8.437	0.000	98	1636217	12.5	12.7	
130 Carbazole	167	8.600	8.600	0.000	96	1487692	12.5	12.9	
131 Methyl parathion	109	8.746	8.746	0.000	91	392259	12.5	12.2	
133 Di-n-butyl phthalate	149	8.956	8.956	0.000	100	1839403	12.5	14.7	
134 Ethyl Parathion	109	9.119	9.119	0.000	83	250701	12.5	13.3	
135 4-Nitroquinoline-1-oxide	190	9.131	9.131	0.000	74	92629	12.5	9.72	
140 Octachlorostyrene	308	9.341	9.341	0.000	88	115306	12.5	11.2	
141 Isodrin	193	9.370	9.370	0.000	92	191441	12.5	11.9	
143 Fluoranthene	202	9.515	9.515	0.000	99	1746082	12.5	12.7	
S 136 Diallate	86				0		12.5	10.6	
147 Benzidine	184	9.667	9.667	0.000	99	3211233	37.5	33.8	
* 149 Pyrene-d10 (IS)	212	9.714	9.714	0.000	99	620444	5.00	5.00	s
150 Pyrene	202	9.731	9.731	0.000	97	1876926	12.5	11.9	
$ 152 p-Terphenyl-d14	244	9.900	9.900	0.000	98	2514056	25.0	24.5	
154 p-Dimethylamino azobenzene	225	10.040	10.040	0.000	92	316906	12.5	13.2	
155 Chlorobenzilate	139	10.092	10.092	0.000	85	560125	12.5	14.2	
151 Famphur	218		10.337				ND	ND	U
156 3,3'-Dimethylbenzidine	212	10.372	10.372	0.000	99	940045	12.5	11.3	
157 Butyl benzyl phthalate	149	10.396	10.396	0.000	95	814490	12.5	14.1	
158 2-Acetylaminofluorene	181	10.623	10.623	0.000	95	580936	12.5	11.3	
159 3,3'-Dichlorobenzidine	252	10.938	10.938	0.000	77	598549	12.5	12.5	
161 Benzo[a]anthracene	228	10.938	10.938	0.000	100	1662489	12.5	13.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
160 4,4'-Methylene bis(2-chloroanil	231	10.943	10.943	0.000	94	336169	12.5	12.5	
162 Chrysene	228	10.978	10.978	0.000	97	1638652	12.5	13.0	
163 Bis(2-ethylhexyl) phthalate	149	11.037	11.037	0.000	98	1130058	12.5	14.6	
164 6-Methylchrysene	242	11.509	11.509	0.000	99	1043917	12.5	12.2	
165 Di-n-octyl phthalate	149	11.835	11.835	0.000	99	1673491	12.5	14.8	
167 Benzo[b]fluoranthene	252	12.232	12.232	0.000	97	1527883	12.5	14.0	
166 7,12-Dimethylbenz(a)anthracene	256	12.237	12.237	0.000	73	646416	12.5	14.5	
168 Benzo[k]fluoranthene	252	12.272	12.272	0.000	99	1536347	12.5	13.5	
169 Benzo[a]pyrene	252	12.657	12.657	0.000	78	1260852	12.5	13.4	
* 170 Perylene-d12	264	12.733	12.733	0.000	97	437111	5.00	5.00	s
171 3-Methylcholanthrene	268	13.147	13.147	0.000	91	604750	12.5	12.5	
172 Dibenz[a,h]acridine	279	13.899	13.899	0.000	91	824750	12.5	11.6	
173 Dibenz[a,j]acridine	279	13.968	13.968	0.000	96	1029872	12.5	13.1	
174 Indeno[1,2,3-cd]pyrene	276	14.196	14.196	0.000	99	924750	12.5	11.8	
175 Dibenz(a,h)anthracene	278	14.242	14.242	0.000	94	1123324	12.5	12.2	
176 Benzo[g,h,i]perylene	276	14.551	14.551	0.000	97	1113820	12.5	12.0	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 182 Isosafrole	162				0		12.5	12.2	

QC Flag Legend

Processing Flags
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection
- s - Failed ISTD Recovery Test

Review Flags
- M - Manually Integrated
- U - Marked Undetected
- a - User Assigned ID

Reagents:

MSS_RV8270_6_00046 Amount Added: 1.00 Units: mL

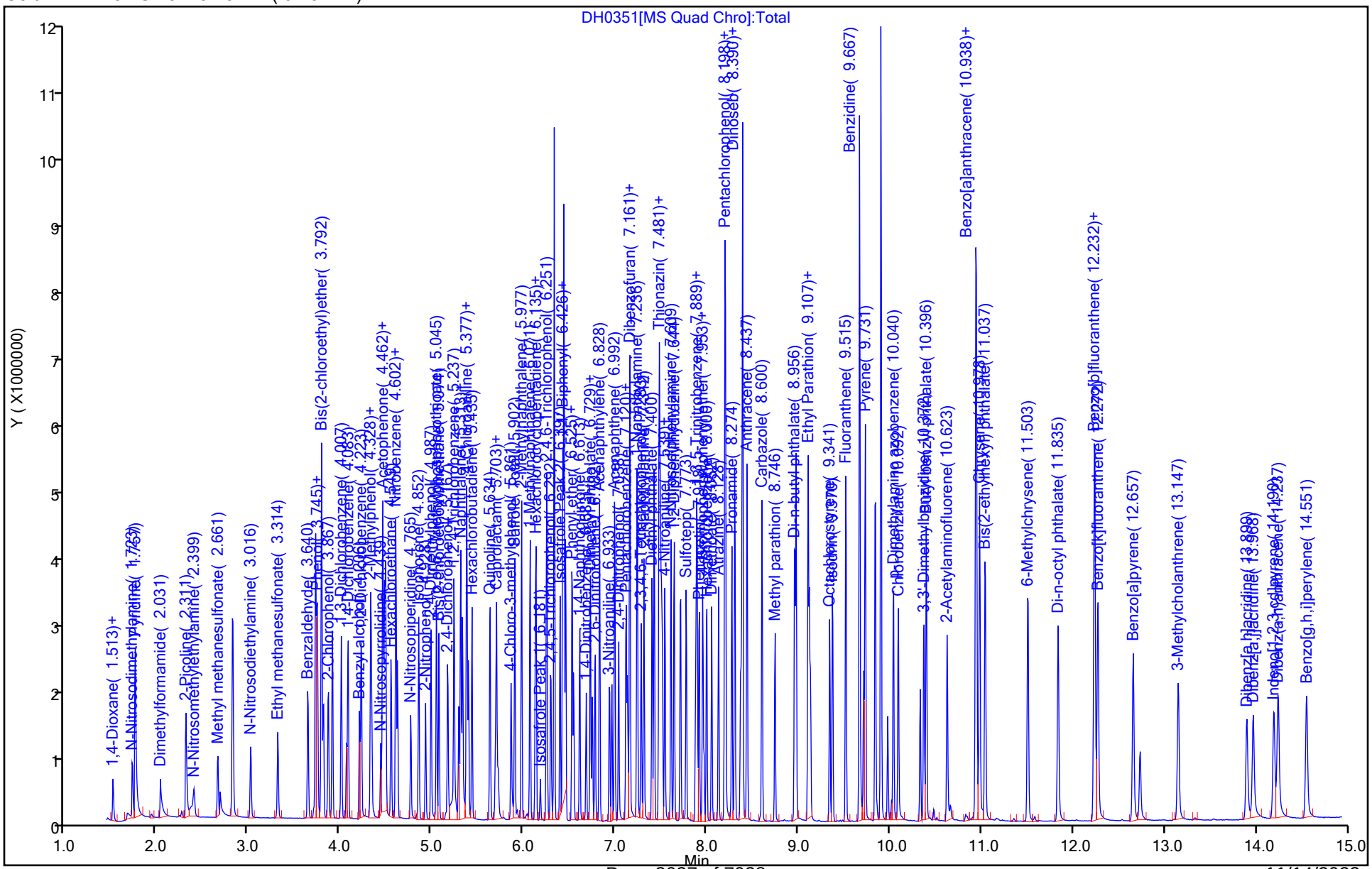
Report Date: 07-Aug-2023 10:41:36 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D

Injection Date:	03-Aug-2023 14:43:53	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

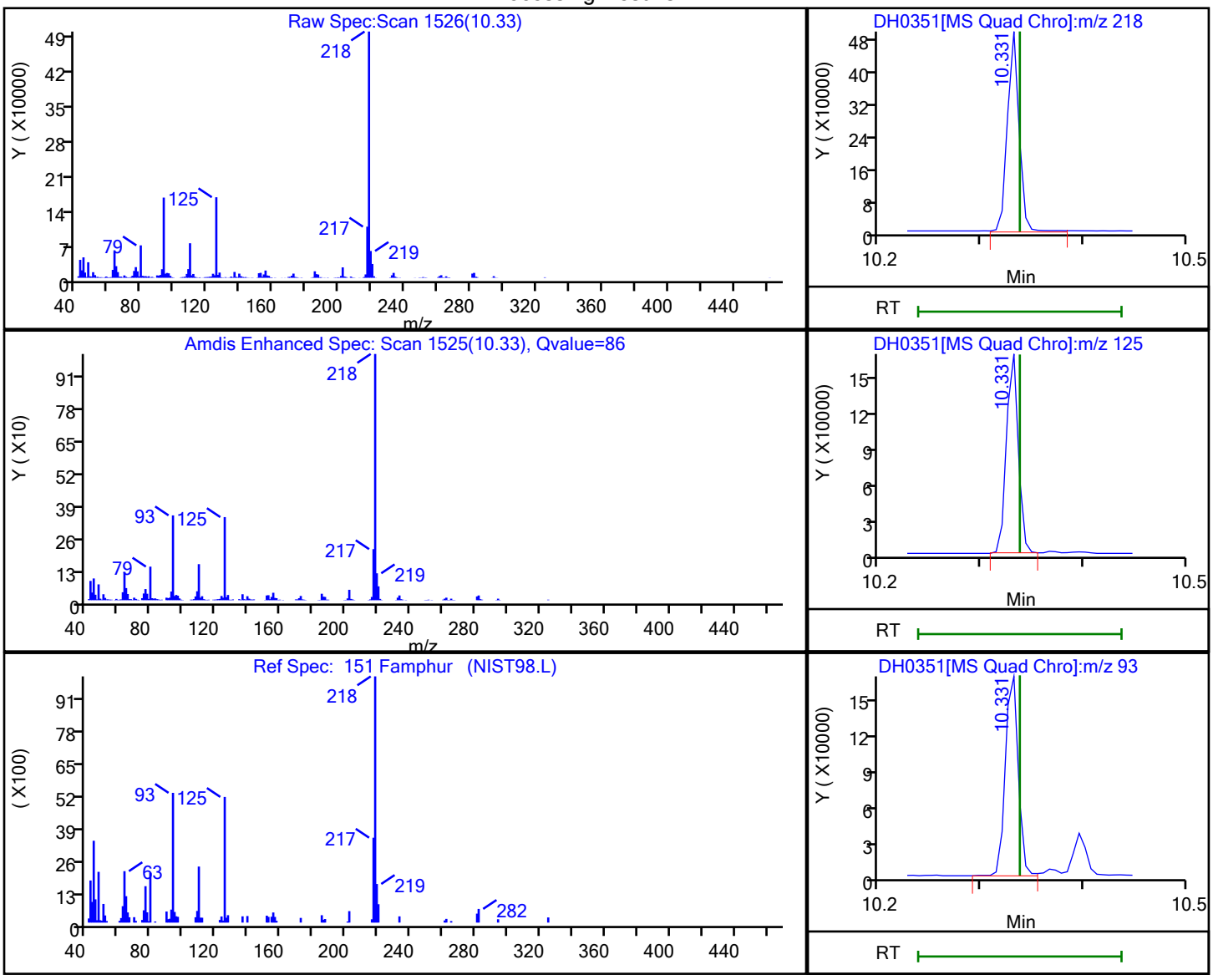
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D				
Injection Date:	03-Aug-2023 14:43:53	Instrument ID:	HP19760		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

151 Famphur, CAS: 52-85-7

Processing Results



RT	Mass	Response	Amount
10.33	218.00	387359	9.370616
10.33	125.00	130806	
10.33	93.00	142119	

Reviewer: P7EB, 03-Aug-2023 15:06:45 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-404152/2 Calibration Date: 08/03/2023 14:43

Instrument ID: HP19760 Calib Start Date: 04/10/2023 21:02

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 04/10/2023 21:02

Lab File ID: DH0351.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
a,a-Dimethylphenethylamine	Ave	0.7121	0.5140			12.5	-27.8*	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Aug-2023 14:43:53 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub20

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 07-Aug-2023 10:41:35 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: P7EB Date: 03-Aug-2023 15:10:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.513	1.513	0.000	94	206970	12.5	9.17	
3 N-Nitrosodimethylamine	74	1.728	1.728	0.000	94	337678	12.5	9.66	
4 Pyridine	79	1.757	1.757	0.000	97	1137862	25.0	19.9	
6 Dimethylformamide	73	2.031	2.031	0.000	93	339419	12.5	9.45	
7 2-Picoline	93	2.311	2.311	0.000	91	554183	12.5	10.2	
8 N-Nitrosomethylethylamine	88	2.399	2.399	0.000	94	248649	12.5	10.4	
9 Methyl methanesulfonate	80	2.661	2.661	0.000	86	299632	12.5	9.75	
$ 10 2-Fluorophenol	112	2.824	2.824	0.000	92	933551	25.0	23.5	
11 N-Nitrosodiethylamine	102	3.016	3.016	0.000	94	233327	12.5	10.8	
12 Ethyl methanesulfonate	109	3.314	3.314	0.000	98	254596	12.5	10.8	
15 Benzaldehyde	77	3.640	3.640	0.000	96	381859	12.5	8.65	
$ 16 Phenol-d5	99	3.728	3.728	0.000	96	1238723	25.0	21.6	
17 Phenol	94	3.739	3.739	0.000	88	699926	12.5	11.9	
18 Aniline	93	3.745	3.745	0.000	97	773512	12.5	10.6	
19 Bis(2-chloroethyl)ether	93	3.815	3.815	0.000	98	532780	12.5	11.0	
20 2-Chlorophenol	128	3.867	3.867	0.000	94	461517	12.5	12.9	
21 1,3-Dichlorobenzene	146	4.007	4.007	0.000	94	509620	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.066	4.066	0.000	97	135932	5.00	5.00	s
23 1,4-Dichlorobenzene	146	4.083	4.083	0.000	91	524790	12.5	12.3	
25 Benzyl alcohol	108	4.206	4.206	0.000	90	246765	12.5	8.89	
26 1,2-Dichlorobenzene	146	4.229	4.229	0.000	94	500216	12.5	12.7	
28 2-Methylphenol	108	4.328	4.328	0.000	94	476089	12.5	12.5	
29 2,2'-oxybis[1-chloropropane]	45	4.340	4.340	0.000	92	602468	12.5	9.73	
31 N-Nitrosopyrrolidine	100	4.439	4.439	0.000	88	265138	12.5	11.5	
34 Acetophenone	105	4.456	4.456	0.000	96	772033	12.5	12.3	
33 N-Nitrosodi-n-propylamine	70	4.462	4.462	0.000	81	414970	12.5	10.7	
35 N-Nitrosomorpholine	56	4.479	4.479	0.000	83	321717	12.5	10.8	
32 4-Methylphenol	108	4.479	4.479	0.000	91	562595	12.5	13.9	
36 2-Toluidine	106	4.491	4.491	0.000	97	863410	12.5	12.5	
38 Hexachloroethane	117	4.549	4.549	0.000	96	234080	12.5	13.2	
$ 39 Nitrobenzene-d5	82	4.602	4.602	0.000	88	1235568	25.0	21.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	4.619	4.619	0.000	86	638235	12.5	10.8	
42 N-Nitrosopiperidine	114	4.765	4.765	0.000	83	248937	12.5	11.4	
43 Isophorone	82	4.852	4.852	0.000	97	1085344	12.5	10.7	
44 2-Nitrophenol	139	4.928	4.928	0.000	92	233338	12.5	13.1	
45 2,4-Dimethylphenol	107	4.987	4.987	0.000	97	485536	12.5	10.9	
46 o,o',o''-Triethylphosphorothioat	198	5.051	5.051	0.000	91	234497	12.5	12.1	
47 Bis(2-chloroethoxy)methane	93	5.074	5.074	0.000	99	691603	12.5	11.1	
48 2,4-Dichlorophenol	162	5.167	5.167	0.000	96	377581	12.5	12.4	
49 1,2,4-Trichlorobenzene	180	5.237	5.237	0.000	93	432752	12.5	11.7	
37 alpha,alpha-Dimethyl phenethylam	58		5.237				ND	ND	MU
* 50 Naphthalene-d8	136	5.290	5.290	0.000	100	551921	5.00	5.00	s
51 Naphthalene	128	5.313	5.313	0.000	98	1419224	12.5	12.0	
52 Alpha-Terpineol	59	5.330	5.330	0.000	93	389693	12.5	10.1	
53 4-Chloroaniline	127	5.377	5.377	0.000	94	613343	12.5	13.2	
54 2,6-Dichlorophenol	162	5.383	5.383	0.000	95	398566	12.5	12.9	
55 Hexachloropropene	213	5.395	5.395	0.000	91	276248	12.5	11.1	
56 Hexachlorobutadiene	225	5.435	5.435	0.000	97	244844	12.5	11.7	
60 Quinoline	129	5.634	5.634	0.000	95	914399	12.5	12.2	
61 Caprolactam	113	5.692	5.692	0.000	77	139022	12.5	11.3	
62 N-Nitrosodi-n-butylamine	84	5.703	5.703	0.000	92	531552	12.5	12.1	
63 p-Phenylene diamine	108	5.721	5.721	0.000	96	297828	12.5	7.84	
64 4-Chloro-3-methylphenol	107	5.861	5.861	0.000	93	452279	12.5	11.5	
65 Safrole, Total	162	5.902	5.902	0.000	85	368865	12.5	12.4	
66 2-Methylnaphthalene	142	5.977	5.977	0.000	91	938105	12.5	12.5	
67 1-Methylnaphthalene	142	6.071	6.071	0.000	91	857971	12.5	12.3	
68 Hexachlorocyclopentadiene	237	6.129	6.129	0.000	96	226926	12.5	9.35	
69 1,2,4,5-Tetrachlorobenzene	216	6.135	6.135	0.000	98	460341	12.5	11.7	
70 Isosafrole Peak 1	162	6.181	6.181	0.000	86	64141	2.00	1.82	
71 2,4,6-Trichlorophenol	196	6.251	6.251	0.000	94	291225	12.5	12.8	
72 2,4,5-Trichlorophenol	196	6.298	6.298	0.000	92	306388	12.5	12.5	
$ 73 2-Fluorobiphenyl (Surr)	172	6.333	6.333	0.000	99	2151520	25.0	24.6	
74 Isosafrole Peak 2	162	6.397	6.397	0.000	89	385167	10.5	10.4	
75 1,1'-Biphenyl	154	6.426	6.426	0.000	96	1184350	12.5	12.4	
76 2-Chloronaphthalene	162	6.438	6.438	0.000	97	986862	12.5	13.3	M
77 1-Chloronaphthalene	162	6.455	6.455	0.000	98	840034	12.5	11.7	Ma
78 Phenyl ether	170	6.531	6.531	0.000	88	637057	12.5	12.1	
79 2-Nitroaniline	138	6.543	6.543	0.000	77	286544	12.5	13.0	
81 1,4-Naphthoquinone	158	6.613	6.613	0.000	81	364948	12.5	13.4	
84 1,4-Dinitrobenzene	168	6.683	6.683	0.000	86	142742	12.5	11.4	
85 Dimethyl phthalate	163	6.729	6.729	0.000	97	1038452	12.5	12.6	
86 1,3-Dinitrobenzene	168	6.753	6.753	0.000	83	167254	12.5	14.9	
87 2,6-Dinitrotoluene	165	6.782	6.782	0.000	88	230077	12.5	13.2	
88 Acenaphthylene	152	6.828	6.828	0.000	99	1470186	12.5	12.4	
89 3-Nitroaniline	138	6.939	6.939	0.000	89	263567	12.5	13.9	
* 90 Acenaphthene-d10	164	6.962	6.962	0.000	96	307011	5.00	5.00	
91 Acenaphthene	153	6.992	6.992	0.000	97	943679	12.5	12.5	
92 2,4-Dinitrophenol	184	7.038	7.038	0.000	83	253385	25.0	21.6	
94 Pentachlorobenzene	250	7.120	7.120	0.000	97	381556	12.5	11.7	
93 4-Nitrophenol	109	7.131	7.131	0.000	85	349584	25.0	25.7	
95 2,4-Dinitrotoluene	165	7.161	7.161	0.000	66	332924	12.5	14.2	
96 Dibenzofuran	168	7.161	7.161	0.000	94	1299179	12.5	12.4	
97 1-Naphthylamine	143	7.236	7.236	0.000	97	837472	12.5	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
98 2,3,4,6-Tetrachlorophenol	232	7.283	7.283	0.000	81	267573	12.5	12.9	
99 2-Naphthylamine	143	7.312	7.312	0.000	95	943473	12.5	12.5	
100 Diethyl phthalate	149	7.400	7.400	0.000	97	1085177	12.5	14.0	
101 Thionazin	107	7.475	7.475	0.000	78	193857	12.5	12.2	
102 Fluorene	166	7.481	7.481	0.000	93	1092368	12.5	12.9	
103 4-Chlorophenyl phenyl ether	204	7.493	7.493	0.000	94	511705	12.5	12.2	
104 N-Nitro-o-toluidine	152	7.505	7.505	0.000	90	305716	12.5	13.5	
105 4-Nitroaniline	138	7.516	7.516	0.000	79	276597	12.5	13.4	
106 4,6-Dinitro-2-methylphenol	198	7.539	7.539	0.000	78	357450	25.0	24.9	
107 N-Nitrosodiphenylamine	169	7.609	7.609	0.000	63	784278	10.6	10.9	
108 1,2-Diphenylhydrazine	77	7.644	7.644	0.000	41	1396325	12.5	11.4	
$ 109 2,4,6-Tribromophenol	330	7.714	7.714	0.000	90	255242	25.0	24.1	
110 Sulfotepp	97	7.773	7.773	0.000	78	222628	12.5	11.8	
112 1,3,5-Trinitrobenzene	213	7.878	7.878	0.000	83	109238	12.5	11.9	
113 cis-Diallate	86	7.883	7.883	0.000	0	410587	9.25	7.91	
114 Phorate	75	7.895	7.895	0.000	95	796364	12.5	11.8	
115 Phenacetin	108	7.918	7.918	0.000	92	605020	12.5	13.0	
116 4-Bromophenyl phenyl ether	248	7.953	7.953	0.000	69	300191	12.5	12.0	
117 trans-Diallate	86	7.971	7.971	0.000	0	144930	3.25	2.68	
118 Hexachlorobenzene	284	8.000	8.000	0.000	91	311845	12.5	11.6	
119 Dimethoate	87	8.052	8.052	0.000	96	481326	12.5	11.2	
120 Atrazine	200	8.128	8.128	0.000	91	283354	12.5	11.2	
121 Pentachlorophenol	266	8.198	8.198	0.000	89	370976	25.0	23.1	
123 Pentachloronitrobenzene	237	8.198	8.198	0.000	84	158033	12.5	13.8	
122 4-Aminobiphenyl	169	8.204	8.204	0.000	90	1264345	12.5	13.0	
124 Pronamide	173	8.274	8.274	0.000	90	502334	12.5	13.0	
* 126 Phenanthrene-d10	188	8.367	8.367	0.000	98	596922	5.00	5.00	s
125 Dinoseb	211	8.379	8.379	0.000	94	252613	12.5	11.6	
128 Phenanthrene	178	8.390	8.390	0.000	93	1633678	12.5	12.6	
127 Disulfoton	88	8.390	8.390	0.000	74	833409	12.5	10.7	
129 Anthracene	178	8.437	8.437	0.000	98	1636217	12.5	12.7	
130 Carbazole	167	8.600	8.600	0.000	96	1487692	12.5	12.9	
131 Methyl parathion	109	8.746	8.746	0.000	91	392259	12.5	12.2	
133 Di-n-butyl phthalate	149	8.956	8.956	0.000	100	1839403	12.5	14.7	
134 Ethyl Parathion	109	9.119	9.119	0.000	83	250701	12.5	13.3	
135 4-Nitroquinoline-1-oxide	190	9.131	9.131	0.000	74	92629	12.5	9.72	
140 Octachlorostyrene	308	9.341	9.341	0.000	88	115306	12.5	11.2	
141 Isodrin	193	9.370	9.370	0.000	92	191441	12.5	11.9	
143 Fluoranthene	202	9.515	9.515	0.000	99	1746082	12.5	12.7	
S 136 Diallate	86				0		12.5	10.6	
147 Benzidine	184	9.667	9.667	0.000	99	3211233	37.5	33.8	
* 149 Pyrene-d10 (IS)	212	9.714	9.714	0.000	99	620444	5.00	5.00	s
150 Pyrene	202	9.731	9.731	0.000	97	1876926	12.5	11.9	
$ 152 p-Terphenyl-d14	244	9.900	9.900	0.000	98	2514056	25.0	24.5	
154 p-Dimethylamino azobenzene	225	10.040	10.040	0.000	92	316906	12.5	13.2	
155 Chlorobenzilate	139	10.092	10.092	0.000	85	560125	12.5	14.2	
151 Famphur	218		10.337				ND	ND	U
156 3,3'-Dimethylbenzidine	212	10.372	10.372	0.000	99	940045	12.5	11.3	
157 Butyl benzyl phthalate	149	10.396	10.396	0.000	95	814490	12.5	14.1	
158 2-Acetylaminofluorene	181	10.623	10.623	0.000	95	580936	12.5	11.3	
159 3,3'-Dichlorobenzidine	252	10.938	10.938	0.000	77	598549	12.5	12.5	
161 Benzo[a]anthracene	228	10.938	10.938	0.000	100	1662489	12.5	13.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
160 4,4'-Methylene bis(2-chloroanil	231	10.943	10.943	0.000	94	336169	12.5	12.5	
162 Chrysene	228	10.978	10.978	0.000	97	1638652	12.5	13.0	
163 Bis(2-ethylhexyl) phthalate	149	11.037	11.037	0.000	98	1130058	12.5	14.6	
164 6-Methylchrysene	242	11.509	11.509	0.000	99	1043917	12.5	12.2	
165 Di-n-octyl phthalate	149	11.835	11.835	0.000	99	1673491	12.5	14.8	
167 Benzo[b]fluoranthene	252	12.232	12.232	0.000	97	1527883	12.5	14.0	
166 7,12-Dimethylbenz(a)anthracene	256	12.237	12.237	0.000	73	646416	12.5	14.5	
168 Benzo[k]fluoranthene	252	12.272	12.272	0.000	99	1536347	12.5	13.5	
169 Benzo[a]pyrene	252	12.657	12.657	0.000	78	1260852	12.5	13.4	
* 170 Perylene-d12	264	12.733	12.733	0.000	97	437111	5.00	5.00	s
171 3-Methylcholanthrene	268	13.147	13.147	0.000	91	604750	12.5	12.5	
172 Dibenz[a,h]acridine	279	13.899	13.899	0.000	91	824750	12.5	11.6	
173 Dibenz[a,j]acridine	279	13.968	13.968	0.000	96	1029872	12.5	13.1	
174 Indeno[1,2,3-cd]pyrene	276	14.196	14.196	0.000	99	924750	12.5	11.8	
175 Dibenz(a,h)anthracene	278	14.242	14.242	0.000	94	1123324	12.5	12.2	
176 Benzo[g,h,i]perylene	276	14.551	14.551	0.000	97	1113820	12.5	12.0	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 182 Isosafrole	162				0		12.5	12.2	

QC Flag Legend

Processing Flags
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection
- s - Failed ISTD Recovery Test

Review Flags
- M - Manually Integrated
- U - Marked Undetected
- a - User Assigned ID

Reagents:

MSS_RV8270_6_00046 Amount Added: 1.00 Units: mL

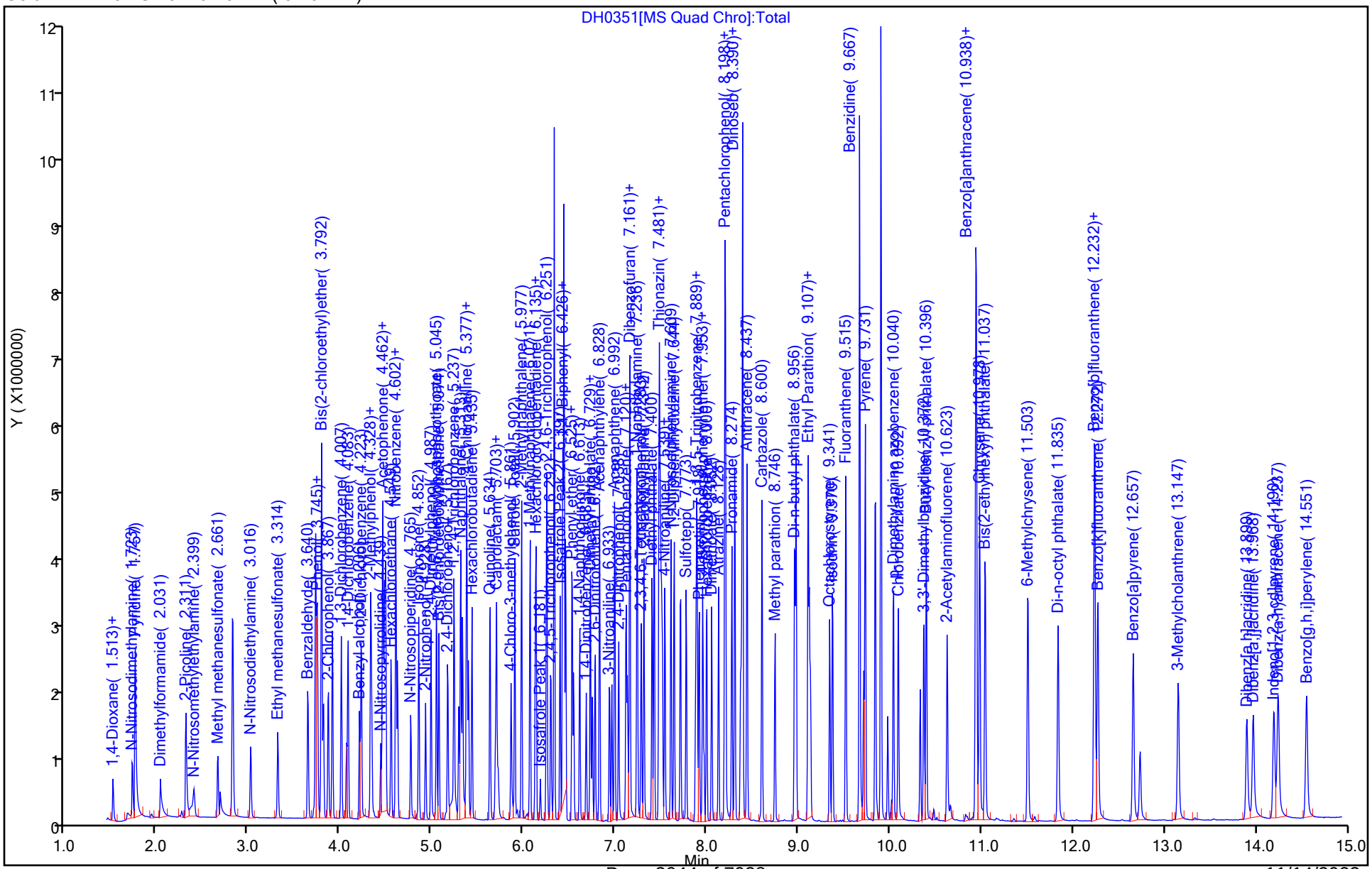
Report Date: 07-Aug-2023 10:41:36 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D

Injection Date:	03-Aug-2023 14:43:53	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

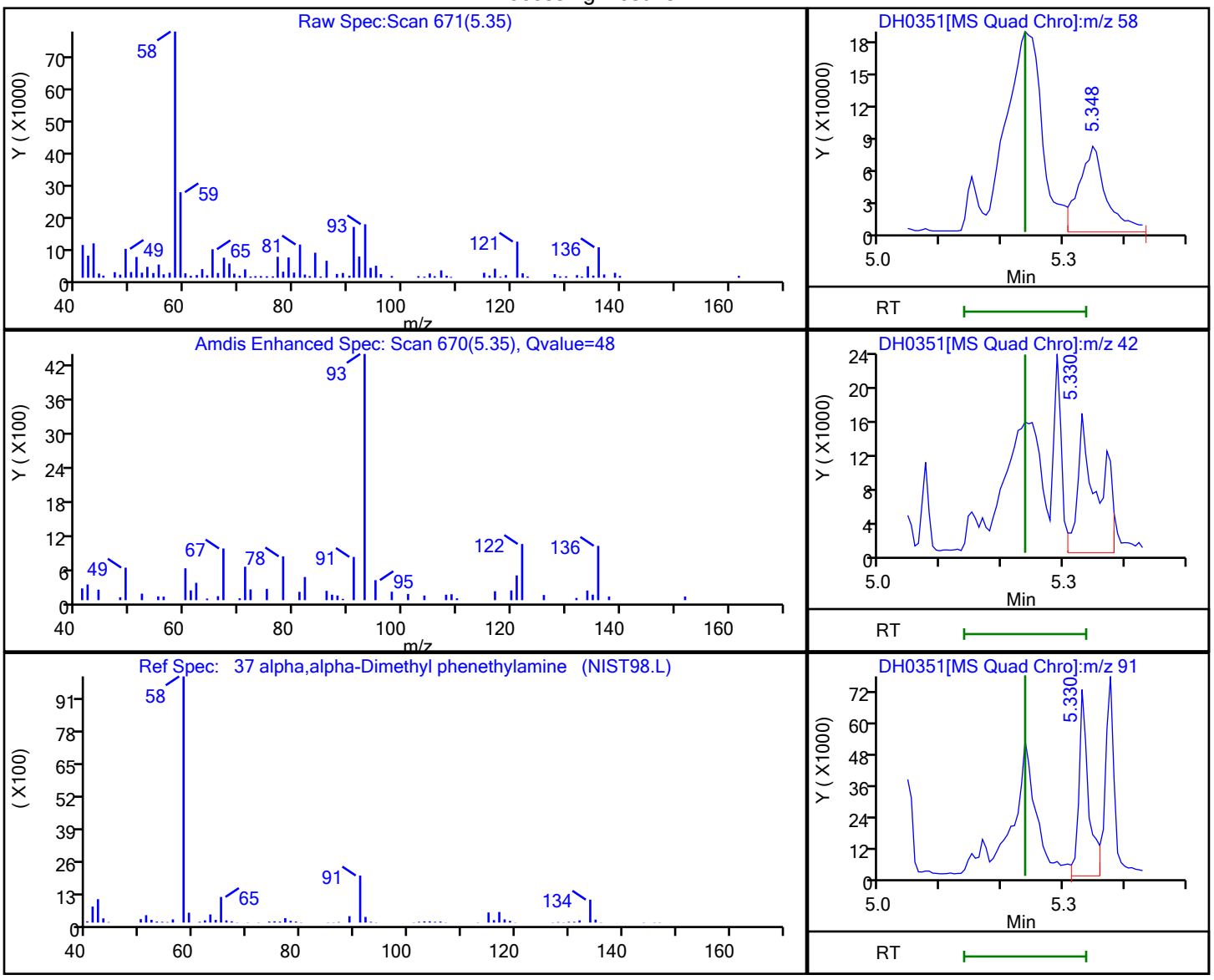
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0351.D				
Injection Date:	03-Aug-2023 14:43:53	Instrument ID:	HP19760		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

37 alpha,alpha-Dimethyl phenethylamine, CAS: 122-09-8

Processing Results



RT	Mass	Response	Amount
5.35	58.00	234906	3.272250
5.33	42.00	36412	
5.33	91.00	77203	
5.33	115.00	7183	
5.36	134.00	11855	

Reviewer: UCA2, 07-Aug-2023 10:40:43 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCV 410-404152/4 Calibration Date: 08/03/2023 15:10

Instrument ID: HP19760 Calib Start Date: 03/26/2023 14:52

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/26/2023 16:38

Lab File ID: DH0352.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methapyrilene	Ave	0.3377	0.2908		10.8	12.5	-13.9	20.0
Famphur	Ave	0.3331	0.2958		11.1	12.5	-11.2	20.0
Kepone	Ave	0.1035	0.1008		58.4	60.0	-2.7	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0352.D
Lims ID: CCV ABC
Client ID:
Sample Type: CCV
Inject. Date: 03-Aug-2023 15:10:47 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV ABC
Operator ID: mem41592 Instrument ID: HP19760
Sublist: chrom-MSSemi_HP19760*sub23

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 18:19:57 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: P7EB Date: 03-Aug-2023 15:44:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.071	4.071	0.000	97	159763	5.00	5.00	s
* 50 Naphthalene-d8	136	5.301	5.301	0.000	100	627226	5.00	5.00	
* 90 Acenaphthene-d10	164	6.968	6.968	0.000	97	332188	5.00	5.00	
* 126 Phenanthrene-d10	188	8.373	8.373	0.000	97	630075	5.00	5.00	
132 Methapyrilene	97	9.230	9.230	0.000	93	458042	12.5	10.8	
* 149 Pyrene-d10 (IS)	212	9.719	9.719	0.000	99	650262	5.00	5.00	s
151 Famphur	218	10.337	10.337	0.000	85	480911	12.5	11.1	
153 Kepone	272	10.396	10.396	0.000	94	786428	60.0	58.4	
* 170 Perylene-d12	264	12.739	12.739	0.000	97	390258	5.00	5.00	s

QC Flag Legend

Processing Flags
s - Failed ISTD Recovery Test

Reagents:

MSS_RVABC_6_00015 Amount Added: 1.00 Units: mL

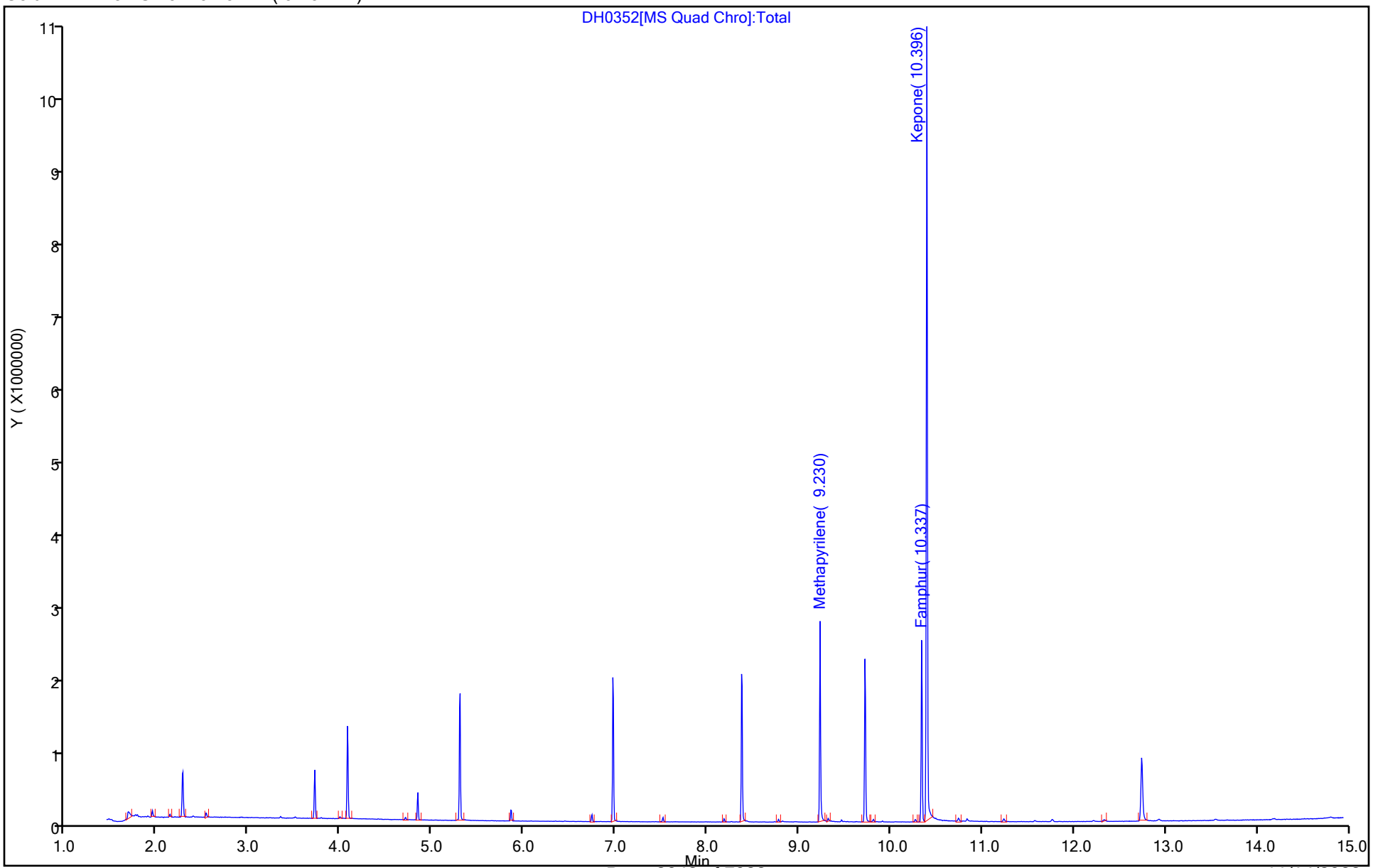
Report Date: 03-Aug-2023 18:19:58 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0352.D

Injection Date:	03-Aug-2023 15:10:47	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	CCV ABC			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
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FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-414994/12 Calibration Date: 08/31/2023 20:24

Instrument ID: HP19760 Calib Start Date: 03/23/2023 21:11

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/23/2023 23:15

Lab File ID: DH3161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzoic acid	Ave	0.2315				12.5		
Indene	Ave	2.837				12.5		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 31-Aug-2023 20:24:20 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0092991-012
Operator ID: mem41592 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:36:39 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: P7EB Date: 05-Sep-2023 15:56:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.903	1.903	0.000	91	216972	12.5	12.4	
3 N-Nitrosodimethylamine	74	2.124	2.124	0.000	94	329551	12.5	12.1	
4 Pyridine	79	2.159	2.159	0.000	97	1091857	25.0	24.4	
7 2-Picoline	93	2.754	2.754	0.000	91	569759	12.5	12.1	
8 N-Nitrosomethylethylamine	88	2.841	2.841	0.000	92	249214	12.5	12.4	
9 Methyl methanesulfonate	80	3.109	3.109	0.000	85	308143	12.5	12.7	
11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	91	247636	12.5	12.9	
12 Ethyl methanesulfonate	109	3.762	3.762	0.000	99	264569	12.5	12.4	
17 Phenol	94	4.141	4.141	0.000	94	639354	12.5	12.2	
18 Aniline	93	4.187	4.187	0.000	97	812672	12.5	12.4	
19 Bis(2-chloroethyl)ether	93	4.252	4.252	0.000	97	544292	12.5	12.2	
14 Indene	115		4.293				ND	ND	
20 2-Chlorophenol	128	4.304	4.304	0.000	94	488506	12.5	12.7	
21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	96	569036	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.508	4.508	0.000	95	143550	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.525	4.525	0.000	93	578909	12.5	12.6	
25 Benzyl alcohol	108	4.625	4.625	0.000	92	328372	12.5	12.6	
26 1,2-Dichlorobenzene	146	4.665	4.665	0.000	96	557839	12.5	12.7	
28 2-Methylphenol	108	4.724	4.724	0.000	95	477044	12.5	12.9	
29 2,2'-oxybis[1-chloropropane]	45	4.759	4.759	0.000	91	572411	12.5	12.5	
31 N-Nitrosopyrrolidine	100	4.858	4.858	0.000	92	276364	12.5	13.1	
32 4-Methylphenol	108	4.869	4.869	0.000	96	488588	12.5	12.8	
33 N-Nitrosodi-n-propylamine	70	4.887	4.887	0.000	64	410305	12.5	12.5	
34 Acetophenone	105	4.887	4.887	0.000	94	757360	12.5	12.6	
35 N-Nitrosomorpholine	56	4.899	4.899	0.000	85	292269	12.5	12.5	
36 2-Toluidine	106	4.916	4.916	0.000	95	848554	12.5	13.0	
38 Hexachloroethane	117	4.992	4.992	0.000	92	226215	12.5	12.8	
40 Nitrobenzene	77	5.050	5.050	0.000	85	550737	12.5	12.0	
30 Benzoic acid	105		5.062				ND	ND	
42 N-Nitrosopiperidine	114	5.190	5.190	0.000	86	249276	12.5	13.3	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	43 Isophorone	82	5.272	5.272	0.000	97	1067613	12.5	12.7	
	44 2-Nitrophenol	139	5.353	5.353	0.000	90	191442	12.5	12.5	
	45 2,4-Dimethylphenol	107	5.382	5.382	0.000	96	503000	12.5	13.5	
	46 o,o',o''-Triethylphosphorothioat	198	5.458	5.458	0.000	81	283257	12.5	13.2	
	47 Bis(2-chloroethoxy)methane	93	5.481	5.481	0.000	97	665281	12.5	12.7	
	48 2,4-Dichlorophenol	162	5.575	5.575	0.000	94	424837	12.5	13.5	
	49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	485799	12.5	12.6	
*	50 Naphthalene-d8	136	5.715	5.715	0.000	100	524644	5.00	5.00	
	51 Naphthalene	128	5.738	5.738	0.000	97	1467080	12.5	12.7	
	53 4-Chloroaniline	127	5.784	5.784	0.000	94	613349	12.5	13.0	
	54 2,6-Dichlorophenol	162	5.790	5.790	0.000	96	423287	12.5	13.2	
	55 Hexachloropropene	213	5.819	5.819	0.000	88	341257	12.5	13.3	
	56 Hexachlorobutadiene	225	5.854	5.854	0.000	95	317087	12.5	13.2	
	60 Quinoline	129	6.053	6.053	0.000	96	936914	12.5	13.0	
	62 N-Nitrosodi-n-butylamine	84	6.105	6.105	0.000	92	391676	12.5	10.4	
	63 p-Phenylene diamine	108	6.117	6.117	0.000	96	241724	12.5	9.22	7a
	64 4-Chloro-3-methylphenol	107	6.239	6.239	0.000	94	431163	12.5	13.2	
	65 Safrole, Total	162	6.315	6.315	0.000	90	393382	12.5	13.1	
	66 2-Methylnaphthalene	142	6.396	6.396	0.000	91	967222	12.5	13.1	
	67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	912107	12.5	13.3	
	68 Hexachlorocyclopentadiene	237	6.542	6.542	0.000	95	271755	12.5	11.9	
	69 1,2,4,5-Tetrachlorobenzene	216	6.554	6.554	0.000	97	564999	12.5	12.3	
	70 Isosafrole Peak 1	162	6.589	6.589	0.000	90	52646	1.50	1.44	
	71 2,4,6-Trichlorophenol	196	6.659	6.659	0.000	92	296446	12.5	13.2	
	72 2,4,5-Trichlorophenol	196	6.688	6.688	0.000	93	355578	12.5	13.3	
	74 Isosafrole Peak 2	162	6.804	6.804	0.000	92	399990	11.0	10.2	
	75 1,1'-Biphenyl	154	6.839	6.839	0.000	95	1256731	12.5	12.3	
	76 2-Chloronaphthalene	162	6.857	6.857	0.000	94	1035248	12.5	12.7	M
	77 1-Chloronaphthalene	162	6.874	6.874	0.000	99	898277	12.5	12.4	Ma
	78 Phenyl ether	170	6.939	6.939	0.000	86	683342	12.5	12.2	
	79 2-Nitroaniline	138	6.950	6.950	0.000	82	266946	12.5	12.9	
	81 1,4-Naphthoquinone	158	7.020	7.020	0.000	86	399600	12.5	13.8	
	86 1,3-Dinitrobenzene	168	7.084	7.084	0.000	87	128425	12.5	13.8	
	85 Dimethyl phthalate	163	7.125	7.125	0.000	98	1095212	12.5	12.5	
	84 1,4-Dinitrobenzene	168	7.148	7.148	0.000	86	157885	12.5	13.9	
	87 2,6-Dinitrotoluene	165	7.183	7.183	0.000	93	228116	12.5	13.4	
	88 Acenaphthylene	152	7.247	7.247	0.000	98	1509478	12.5	12.6	
	89 3-Nitroaniline	138	7.335	7.335	0.000	90	238019	12.5	12.9	
*	90 Acenaphthene-d10	164	7.382	7.382	0.000	95	318023	5.00	5.00	
	91 Acenaphthene	153	7.411	7.411	0.000	95	1013256	12.5	12.5	
	92 2,4-Dinitrophenol	184	7.434	7.434	0.000	87	172926	25.0	21.2	
	93 4-Nitrophenol	109	7.486	7.486	0.000	85	309365	25.0	26.9	
	94 Pentachlorobenzene	250	7.533	7.533	0.000	98	510871	12.5	12.6	
	95 2,4-Dinitrotoluene	165	7.562	7.562	0.000	92	296520	12.5	13.4	
	96 Dibenzofuran	168	7.574	7.574	0.000	97	1438664	12.5	12.5	
	97 1-Naphthylamine	143	7.650	7.650	0.000	98	859455	12.5	12.8	
	98 2,3,4,6-Tetrachlorophenol	232	7.690	7.690	0.000	71	327603	12.5	14.2	
	99 2-Naphthylamine	143	7.725	7.725	0.000	96	1009846	12.5	13.2	
	100 Diethyl phthalate	149	7.801	7.801	0.000	98	1072083	12.5	12.7	
	101 Thionazin	107	7.877	7.877	0.000	79	176820	12.5	12.8	
	102 Fluorene	166	7.900	7.900	0.000	92	1142282	12.5	12.7	
	103 4-Chlorophenyl phenyl ether	204	7.906	7.906	0.000	89	600958	12.5	12.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 N-Nitro-o-toluidine	152	7.906	7.906	0.000	92	291476	12.5	13.5	
105 4-Nitroaniline	138	7.912	7.912	0.000	77	270158	12.5	13.6	
106 4,6-Dinitro-2-methylphenol	198	7.941	7.941	0.000	87	281219	25.0	23.2	
107 N-Nitrosodiphenylamine	169	8.011	8.011	0.000	85	833385	10.6	11.1	
108 1,2-Diphenylhydrazine	77	8.052	8.052	0.000	42	1323588	12.5	12.8	
110 Sulfotepp	97	8.168	8.168	0.000	79	194203	12.5	12.9	
112 1,3,5-Trinitrobenzene	213	8.256	8.256	0.000	83	95901	12.5	12.5	a
113 cis-Diallate	86	8.291	8.291	0.000	0	386843	9.38	9.44	
114 Phorate	75	8.297	8.297	0.000	96	690574	12.5	13.5	
115 Phenacetin	108	8.308	8.308	0.000	89	514190	12.5	12.7	
116 4-Bromophenyl phenyl ether	248	8.367	8.367	0.000	73	379732	12.5	12.4	
117 trans-Diallate	86	8.378	8.378	0.000	0	129513	3.13	3.23	
118 Hexachlorobenzene	284	8.419	8.419	0.000	96	421699	12.5	12.3	
119 Dimethoate	87	8.454	8.454	0.000	96	395888	12.5	12.6	
121 Pentachlorophenol	266	8.606	8.606	0.000	93	468832	25.0	25.5	
122 4-Aminobiphenyl	169	8.611	8.611	0.000	90	1297439	12.5	12.9	
123 Pentachloronitrobenzene	237	8.617	8.617	0.000	90	161436	12.5	13.7	
124 Pronamide	173	8.670	8.670	0.000	90	509565	12.5	13.4	
125 Dinoseb	211	8.780	8.780	0.000	96	185982	12.5	11.1	
* 126 Phenanthrene-d10	188	8.786	8.786	0.000	97	626679	5.00	5.00	
127 Disulfoton	88	8.798	8.798	0.000	96	702211	12.5	12.0	
128 Phenanthrene	178	8.810	8.810	0.000	96	1743192	12.5	12.6	
129 Anthracene	178	8.856	8.856	0.000	97	1768535	12.5	12.8	
130 Carbazole	167	9.008	9.008	0.000	96	1515127	12.5	12.8	
131 Methyl parathion	109	9.148	9.148	0.000	94	323458	12.5	13.0	
132 Methapyrilene	97	9.223	9.223	0.000	1	130	NC	NC	
133 Di-n-butyl phthalate	149	9.357	9.357	0.000	100	1721167	12.5	13.8	
134 Ethyl Parathion	109	9.521	9.521	0.000	85	196099	12.5	12.7	
135 4-Nitroquinoline-1-oxide	190	9.544	9.544	0.000	83	115572	12.5	11.6	
S 136 Diallate	86				0		12.5	12.7	
140 Octachlorostyrene	308	9.760	9.760	0.000	91	172109	12.5	12.7	
141 Isodrin	193	9.800	9.800	0.000	93	212605	12.5	12.5	
137 Aramite Peak 1	185		9.842				ND	ND	
138 Aramite Peak 2	185		9.865				ND	ND	
139 Aramite Peak 3	185		9.906				ND	ND	
143 Fluoranthene	202	9.940	9.940	0.000	97	1975289	12.5	13.3	
142 Aramite Peak 4	185		9.982				ND	ND	
147 Benzidine	184	10.069	10.069	0.000	99	853416	12.5	9.54	
* 149 Pyrene-d10 (IS)	212	10.138	10.138	0.000	98	667790	5.00	5.00	
150 Pyrene	202	10.156	10.156	0.000	98	2054412	12.5	12.4	
151 Famphur	218		10.273				ND	ND	
154 p-Dimethylamino azobenzene	225	10.459	10.459	0.000	92	383218	12.5	15.2	
155 Chlorobenzilate	139	10.511	10.511	0.000	93	521014	12.5	13.9	
156 3,3'-Dimethylbenzidine	212	10.809	10.809	0.000	99	1102106	12.5	13.4	
157 Butyl benzyl phthalate	149	10.838	10.838	0.000	97	711027	12.5	13.2	
158 2-Acetylaminofluorene	181	11.083	11.083	0.000	93	520489	12.5	12.5	
159 3,3'-Dichlorobenzidine	252	11.421	11.421	0.000	77	699891	12.5	12.5	
160 4,4'-Methylene bis(2-chloroani	231	11.432	11.432	0.000	96	391827	12.5	13.2	
161 Benzo[a]anthracene	228	11.438	11.438	0.000	98	1989611	12.5	14.1	
162 Chrysene	228	11.485	11.485	0.000	96	1929583	12.5	14.0	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.520	0.000	97	995280	12.5	13.1	
164 6-Methylchrysene	242	12.056	12.056	0.000	98	1323096	12.5	14.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.394	12.394	0.000	99	1467869	12.5	11.4	
167 Benzo[b]fluoranthene	252	12.855	12.855	0.000	96	1934046	12.5	13.2	
166 7,12-Dimethylbenz(a)anthracene	256	12.855	12.855	0.000	89	846050	12.5	14.6	
168 Benzo[k]fluoranthene	252	12.895	12.895	0.000	98	2067014	12.5	13.4	
169 Benzo[a]pyrene	252	13.315	13.315	0.000	76	1756182	12.5	14.8	
* 170 Perylene-d12	264	13.391	13.391	0.000	99	600068	5.00	5.00	
171 3-Methylcholanthrene	268	13.834	13.834	0.000	90	613911	12.5	10.8	
172 Dibenz[a,h]acridine	279	14.661	14.661	0.000	90	1272658	12.5	13.4	
173 Dibenz[a,j]acridine	279	14.743	14.743	0.000	96	1495213	12.5	14.2	
174 Indeno[1,2,3-cd]pyrene	276	15.023	15.023	0.000	98	1336482	12.5	13.6	
175 Dibenz(a,h)anthracene	278	15.075	15.075	0.000	93	1576959	12.5	13.5	
176 Benzo[g,h,i]perylene	276	15.477	15.477	0.000	98	1609418	12.5	13.5	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 178 Dinitrotoluene	165				0			26.8	
S 182 Isosafrole	162				0		12.5	11.6	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

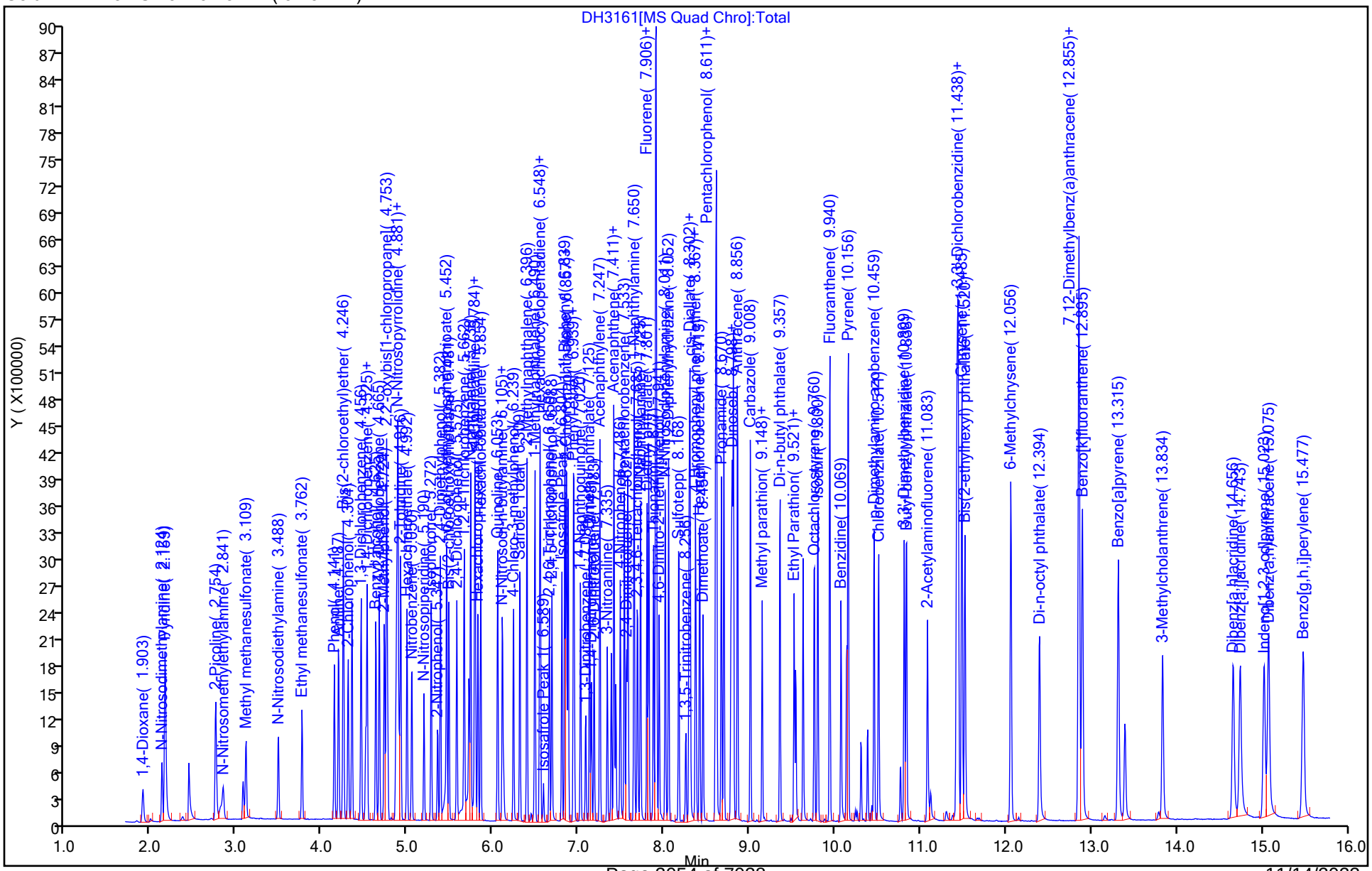
Report Date: 05-Sep-2023 16:36:40 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D

Injection Date:	31-Aug-2023 20:24:20	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	ICV FULL			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-414994/12 Calibration Date: 08/31/2023 20:24

Instrument ID: HP19760 Calib Start Date: 03/26/2023 14:52

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 03/26/2023 16:38

Lab File ID: DH3161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methapyrilene	Ave	0.3377				12.5	-100.0*	30.0
Famphur	Ave	0.3331				12.5		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 31-Aug-2023 20:24:20 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0092991-012
Operator ID: mem41592 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:36:39 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: P7EB Date: 05-Sep-2023 15:56:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.903	1.903	0.000	91	216972	12.5	12.4	
3 N-Nitrosodimethylamine	74	2.124	2.124	0.000	94	329551	12.5	12.1	
4 Pyridine	79	2.159	2.159	0.000	97	1091857	25.0	24.4	
7 2-Picoline	93	2.754	2.754	0.000	91	569759	12.5	12.1	
8 N-Nitrosomethylethylamine	88	2.841	2.841	0.000	92	249214	12.5	12.4	
9 Methyl methanesulfonate	80	3.109	3.109	0.000	85	308143	12.5	12.7	
11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	91	247636	12.5	12.9	
12 Ethyl methanesulfonate	109	3.762	3.762	0.000	99	264569	12.5	12.4	
17 Phenol	94	4.141	4.141	0.000	94	639354	12.5	12.2	
18 Aniline	93	4.187	4.187	0.000	97	812672	12.5	12.4	
19 Bis(2-chloroethyl)ether	93	4.252	4.252	0.000	97	544292	12.5	12.2	
14 Indene	115		4.293				ND	ND	
20 2-Chlorophenol	128	4.304	4.304	0.000	94	488506	12.5	12.7	
21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	96	569036	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.508	4.508	0.000	95	143550	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.525	4.525	0.000	93	578909	12.5	12.6	
25 Benzyl alcohol	108	4.625	4.625	0.000	92	328372	12.5	12.6	
26 1,2-Dichlorobenzene	146	4.665	4.665	0.000	96	557839	12.5	12.7	
28 2-Methylphenol	108	4.724	4.724	0.000	95	477044	12.5	12.9	
29 2,2'-oxybis[1-chloropropane]	45	4.759	4.759	0.000	91	572411	12.5	12.5	
31 N-Nitrosopyrrolidine	100	4.858	4.858	0.000	92	276364	12.5	13.1	
32 4-Methylphenol	108	4.869	4.869	0.000	96	488588	12.5	12.8	
33 N-Nitrosodi-n-propylamine	70	4.887	4.887	0.000	64	410305	12.5	12.5	
34 Acetophenone	105	4.887	4.887	0.000	94	757360	12.5	12.6	
35 N-Nitrosomorpholine	56	4.899	4.899	0.000	85	292269	12.5	12.5	
36 2-Toluidine	106	4.916	4.916	0.000	95	848554	12.5	13.0	
38 Hexachloroethane	117	4.992	4.992	0.000	92	226215	12.5	12.8	
40 Nitrobenzene	77	5.050	5.050	0.000	85	550737	12.5	12.0	
30 Benzoic acid	105		5.062				ND	ND	
42 N-Nitrosopiperidine	114	5.190	5.190	0.000	86	249276	12.5	13.3	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	43 Isophorone	82	5.272	5.272	0.000	97	1067613	12.5	12.7	
	44 2-Nitrophenol	139	5.353	5.353	0.000	90	191442	12.5	12.5	
	45 2,4-Dimethylphenol	107	5.382	5.382	0.000	96	503000	12.5	13.5	
	46 o,o',o''-Triethylphosphorothioat	198	5.458	5.458	0.000	81	283257	12.5	13.2	
	47 Bis(2-chloroethoxy)methane	93	5.481	5.481	0.000	97	665281	12.5	12.7	
	48 2,4-Dichlorophenol	162	5.575	5.575	0.000	94	424837	12.5	13.5	
	49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	485799	12.5	12.6	
*	50 Naphthalene-d8	136	5.715	5.715	0.000	100	524644	5.00	5.00	
	51 Naphthalene	128	5.738	5.738	0.000	97	1467080	12.5	12.7	
	53 4-Chloroaniline	127	5.784	5.784	0.000	94	613349	12.5	13.0	
	54 2,6-Dichlorophenol	162	5.790	5.790	0.000	96	423287	12.5	13.2	
	55 Hexachloropropene	213	5.819	5.819	0.000	88	341257	12.5	13.3	
	56 Hexachlorobutadiene	225	5.854	5.854	0.000	95	317087	12.5	13.2	
	60 Quinoline	129	6.053	6.053	0.000	96	936914	12.5	13.0	
	62 N-Nitrosodi-n-butylamine	84	6.105	6.105	0.000	92	391676	12.5	10.4	
	63 p-Phenylene diamine	108	6.117	6.117	0.000	96	241724	12.5	9.22	7a
	64 4-Chloro-3-methylphenol	107	6.239	6.239	0.000	94	431163	12.5	13.2	
	65 Safrole, Total	162	6.315	6.315	0.000	90	393382	12.5	13.1	
	66 2-Methylnaphthalene	142	6.396	6.396	0.000	91	967222	12.5	13.1	
	67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	912107	12.5	13.3	
	68 Hexachlorocyclopentadiene	237	6.542	6.542	0.000	95	271755	12.5	11.9	
	69 1,2,4,5-Tetrachlorobenzene	216	6.554	6.554	0.000	97	564999	12.5	12.3	
	70 Isosafrole Peak 1	162	6.589	6.589	0.000	90	52646	1.50	1.44	
	71 2,4,6-Trichlorophenol	196	6.659	6.659	0.000	92	296446	12.5	13.2	
	72 2,4,5-Trichlorophenol	196	6.688	6.688	0.000	93	355578	12.5	13.3	
	74 Isosafrole Peak 2	162	6.804	6.804	0.000	92	399990	11.0	10.2	
	75 1,1'-Biphenyl	154	6.839	6.839	0.000	95	1256731	12.5	12.3	
	76 2-Chloronaphthalene	162	6.857	6.857	0.000	94	1035248	12.5	12.7	M
	77 1-Chloronaphthalene	162	6.874	6.874	0.000	99	898277	12.5	12.4	Ma
	78 Phenyl ether	170	6.939	6.939	0.000	86	683342	12.5	12.2	
	79 2-Nitroaniline	138	6.950	6.950	0.000	82	266946	12.5	12.9	
	81 1,4-Naphthoquinone	158	7.020	7.020	0.000	86	399600	12.5	13.8	
	86 1,3-Dinitrobenzene	168	7.084	7.084	0.000	87	128425	12.5	13.8	
	85 Dimethyl phthalate	163	7.125	7.125	0.000	98	1095212	12.5	12.5	
	84 1,4-Dinitrobenzene	168	7.148	7.148	0.000	86	157885	12.5	13.9	
	87 2,6-Dinitrotoluene	165	7.183	7.183	0.000	93	228116	12.5	13.4	
	88 Acenaphthylene	152	7.247	7.247	0.000	98	1509478	12.5	12.6	
	89 3-Nitroaniline	138	7.335	7.335	0.000	90	238019	12.5	12.9	
*	90 Acenaphthene-d10	164	7.382	7.382	0.000	95	318023	5.00	5.00	
	91 Acenaphthene	153	7.411	7.411	0.000	95	1013256	12.5	12.5	
	92 2,4-Dinitrophenol	184	7.434	7.434	0.000	87	172926	25.0	21.2	
	93 4-Nitrophenol	109	7.486	7.486	0.000	85	309365	25.0	26.9	
	94 Pentachlorobenzene	250	7.533	7.533	0.000	98	510871	12.5	12.6	
	95 2,4-Dinitrotoluene	165	7.562	7.562	0.000	92	296520	12.5	13.4	
	96 Dibenzofuran	168	7.574	7.574	0.000	97	1438664	12.5	12.5	
	97 1-Naphthylamine	143	7.650	7.650	0.000	98	859455	12.5	12.8	
	98 2,3,4,6-Tetrachlorophenol	232	7.690	7.690	0.000	71	327603	12.5	14.2	
	99 2-Naphthylamine	143	7.725	7.725	0.000	96	1009846	12.5	13.2	
	100 Diethyl phthalate	149	7.801	7.801	0.000	98	1072083	12.5	12.7	
	101 Thionazin	107	7.877	7.877	0.000	79	176820	12.5	12.8	
	102 Fluorene	166	7.900	7.900	0.000	92	1142282	12.5	12.7	
	103 4-Chlorophenyl phenyl ether	204	7.906	7.906	0.000	89	600958	12.5	12.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 N-Nitro-o-toluidine	152	7.906	7.906	0.000	92	291476	12.5	13.5	
105 4-Nitroaniline	138	7.912	7.912	0.000	77	270158	12.5	13.6	
106 4,6-Dinitro-2-methylphenol	198	7.941	7.941	0.000	87	281219	25.0	23.2	
107 N-Nitrosodiphenylamine	169	8.011	8.011	0.000	85	833385	10.6	11.1	
108 1,2-Diphenylhydrazine	77	8.052	8.052	0.000	42	1323588	12.5	12.8	
110 Sulfotepp	97	8.168	8.168	0.000	79	194203	12.5	12.9	
112 1,3,5-Trinitrobenzene	213	8.256	8.256	0.000	83	95901	12.5	12.5	a
113 cis-Diallate	86	8.291	8.291	0.000	0	386843	9.38	9.44	
114 Phorate	75	8.297	8.297	0.000	96	690574	12.5	13.5	
115 Phenacetin	108	8.308	8.308	0.000	89	514190	12.5	12.7	
116 4-Bromophenyl phenyl ether	248	8.367	8.367	0.000	73	379732	12.5	12.4	
117 trans-Diallate	86	8.378	8.378	0.000	0	129513	3.13	3.23	
118 Hexachlorobenzene	284	8.419	8.419	0.000	96	421699	12.5	12.3	
119 Dimethoate	87	8.454	8.454	0.000	96	395888	12.5	12.6	
121 Pentachlorophenol	266	8.606	8.606	0.000	93	468832	25.0	25.5	
122 4-Aminobiphenyl	169	8.611	8.611	0.000	90	1297439	12.5	12.9	
123 Pentachloronitrobenzene	237	8.617	8.617	0.000	90	161436	12.5	13.7	
124 Pronamide	173	8.670	8.670	0.000	90	509565	12.5	13.4	
125 Dinoseb	211	8.780	8.780	0.000	96	185982	12.5	11.1	
* 126 Phenanthrene-d10	188	8.786	8.786	0.000	97	626679	5.00	5.00	
127 Disulfoton	88	8.798	8.798	0.000	96	702211	12.5	12.0	
128 Phenanthrene	178	8.810	8.810	0.000	96	1743192	12.5	12.6	
129 Anthracene	178	8.856	8.856	0.000	97	1768535	12.5	12.8	
130 Carbazole	167	9.008	9.008	0.000	96	1515127	12.5	12.8	
131 Methyl parathion	109	9.148	9.148	0.000	94	323458	12.5	13.0	
132 Methapyrilene	97	9.223	9.223	0.000	1	130	NC	NC	
133 Di-n-butyl phthalate	149	9.357	9.357	0.000	100	1721167	12.5	13.8	
134 Ethyl Parathion	109	9.521	9.521	0.000	85	196099	12.5	12.7	
135 4-Nitroquinoline-1-oxide	190	9.544	9.544	0.000	83	115572	12.5	11.6	
S 136 Diallate	86				0		12.5	12.7	
140 Octachlorostyrene	308	9.760	9.760	0.000	91	172109	12.5	12.7	
141 Isodrin	193	9.800	9.800	0.000	93	212605	12.5	12.5	
137 Aramite Peak 1	185		9.842				ND	ND	
138 Aramite Peak 2	185		9.865				ND	ND	
139 Aramite Peak 3	185		9.906				ND	ND	
143 Fluoranthene	202	9.940	9.940	0.000	97	1975289	12.5	13.3	
142 Aramite Peak 4	185		9.982				ND	ND	
147 Benzidine	184	10.069	10.069	0.000	99	853416	12.5	9.54	
* 149 Pyrene-d10 (IS)	212	10.138	10.138	0.000	98	667790	5.00	5.00	
150 Pyrene	202	10.156	10.156	0.000	98	2054412	12.5	12.4	
151 Famphur	218		10.273				ND	ND	
154 p-Dimethylamino azobenzene	225	10.459	10.459	0.000	92	383218	12.5	15.2	
155 Chlorobenzilate	139	10.511	10.511	0.000	93	521014	12.5	13.9	
156 3,3'-Dimethylbenzidine	212	10.809	10.809	0.000	99	1102106	12.5	13.4	
157 Butyl benzyl phthalate	149	10.838	10.838	0.000	97	711027	12.5	13.2	
158 2-Acetylaminofluorene	181	11.083	11.083	0.000	93	520489	12.5	12.5	
159 3,3'-Dichlorobenzidine	252	11.421	11.421	0.000	77	699891	12.5	12.5	
160 4,4'-Methylene bis(2-chloroani	231	11.432	11.432	0.000	96	391827	12.5	13.2	
161 Benzo[a]anthracene	228	11.438	11.438	0.000	98	1989611	12.5	14.1	
162 Chrysene	228	11.485	11.485	0.000	96	1929583	12.5	14.0	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.520	0.000	97	995280	12.5	13.1	
164 6-Methylchrysene	242	12.056	12.056	0.000	98	1323096	12.5	14.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.394	12.394	0.000	99	1467869	12.5	11.4	
167 Benzo[b]fluoranthene	252	12.855	12.855	0.000	96	1934046	12.5	13.2	
166 7,12-Dimethylbenz(a)anthracene	256	12.855	12.855	0.000	89	846050	12.5	14.6	
168 Benzo[k]fluoranthene	252	12.895	12.895	0.000	98	2067014	12.5	13.4	
169 Benzo[a]pyrene	252	13.315	13.315	0.000	76	1756182	12.5	14.8	
* 170 Perylene-d12	264	13.391	13.391	0.000	99	600068	5.00	5.00	
171 3-Methylcholanthrene	268	13.834	13.834	0.000	90	613911	12.5	10.8	
172 Dibenz[a,h]acridine	279	14.661	14.661	0.000	90	1272658	12.5	13.4	
173 Dibenz[a,j]acridine	279	14.743	14.743	0.000	96	1495213	12.5	14.2	
174 Indeno[1,2,3-cd]pyrene	276	15.023	15.023	0.000	98	1336482	12.5	13.6	
175 Dibenz(a,h)anthracene	278	15.075	15.075	0.000	93	1576959	12.5	13.5	
176 Benzo[g,h,i]perylene	276	15.477	15.477	0.000	98	1609418	12.5	13.5	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 178 Dinitrotoluene	165				0			26.8	
S 182 Isosafrole	162				0		12.5	11.6	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

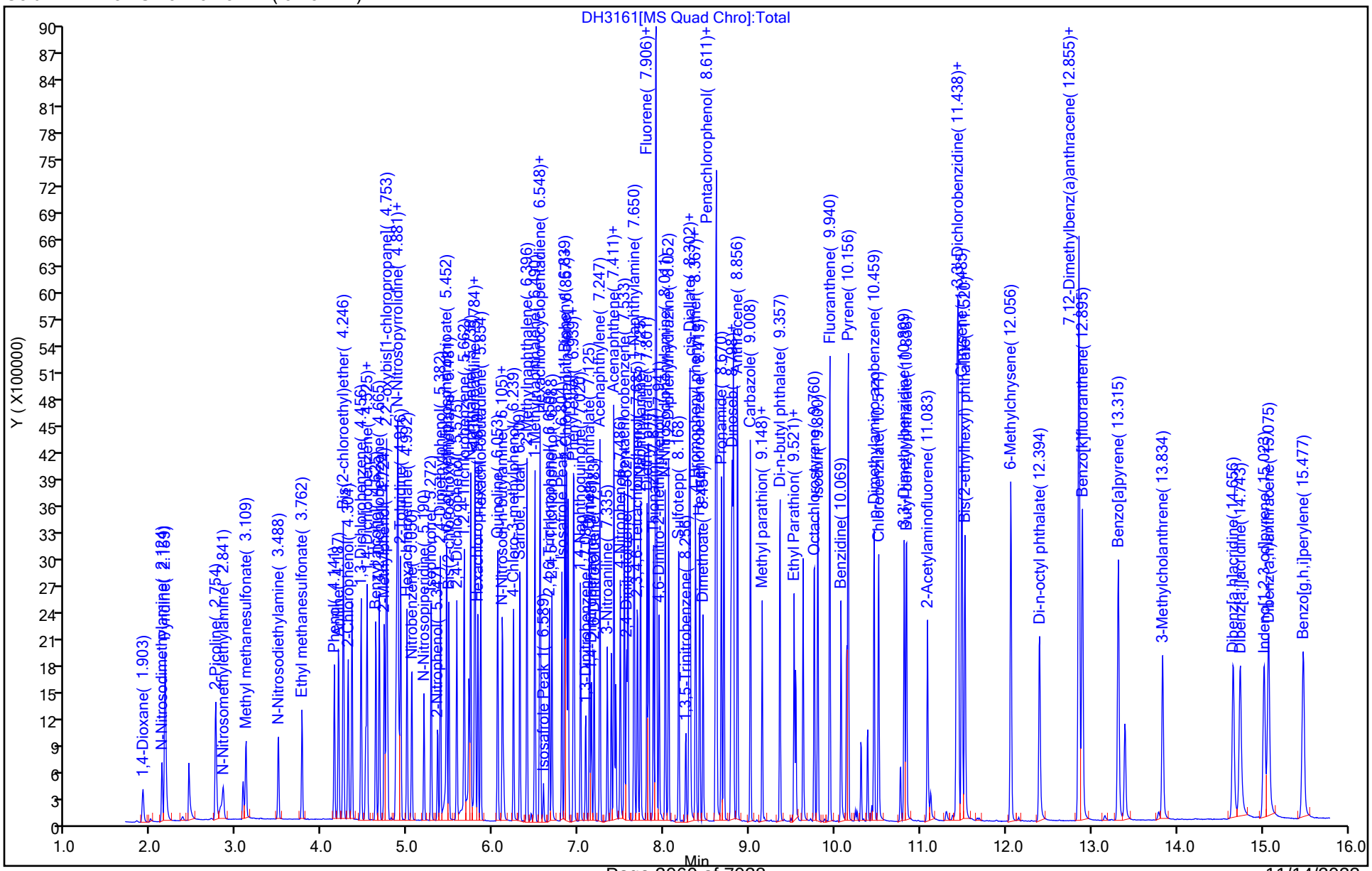
Report Date: 05-Sep-2023 16:36:40 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D

Injection Date:	31-Aug-2023 20:24:20	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	ICV FULL			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-414994/12 Calibration Date: 08/31/2023 20:24

Instrument ID: HP19760 Calib Start Date: 08/03/2023 15:30

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 08/03/2023 15:30

Lab File ID: DH3161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Aramite Peak 1	Ave	0.0260				1.25		
Aramite Peak 2	Ave	0.0249				1.25		
Aramite Peak 3	Ave	0.0904				5.00		
Aramite Peak 4	Ave	0.1255				5.00		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 31-Aug-2023 20:24:20 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0092991-012
Operator ID: mem41592 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:36:39 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: P7EB Date: 05-Sep-2023 15:56:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.903	1.903	0.000	91	216972	12.5	12.4	
3 N-Nitrosodimethylamine	74	2.124	2.124	0.000	94	329551	12.5	12.1	
4 Pyridine	79	2.159	2.159	0.000	97	1091857	25.0	24.4	
7 2-Picoline	93	2.754	2.754	0.000	91	569759	12.5	12.1	
8 N-Nitrosomethylethylamine	88	2.841	2.841	0.000	92	249214	12.5	12.4	
9 Methyl methanesulfonate	80	3.109	3.109	0.000	85	308143	12.5	12.7	
11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	91	247636	12.5	12.9	
12 Ethyl methanesulfonate	109	3.762	3.762	0.000	99	264569	12.5	12.4	
17 Phenol	94	4.141	4.141	0.000	94	639354	12.5	12.2	
18 Aniline	93	4.187	4.187	0.000	97	812672	12.5	12.4	
19 Bis(2-chloroethyl)ether	93	4.252	4.252	0.000	97	544292	12.5	12.2	
14 Indene	115		4.293				ND	ND	
20 2-Chlorophenol	128	4.304	4.304	0.000	94	488506	12.5	12.7	
21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	96	569036	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.508	4.508	0.000	95	143550	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.525	4.525	0.000	93	578909	12.5	12.6	
25 Benzyl alcohol	108	4.625	4.625	0.000	92	328372	12.5	12.6	
26 1,2-Dichlorobenzene	146	4.665	4.665	0.000	96	557839	12.5	12.7	
28 2-Methylphenol	108	4.724	4.724	0.000	95	477044	12.5	12.9	
29 2,2'-oxybis[1-chloropropane]	45	4.759	4.759	0.000	91	572411	12.5	12.5	
31 N-Nitrosopyrrolidine	100	4.858	4.858	0.000	92	276364	12.5	13.1	
32 4-Methylphenol	108	4.869	4.869	0.000	96	488588	12.5	12.8	
33 N-Nitrosodi-n-propylamine	70	4.887	4.887	0.000	64	410305	12.5	12.5	
34 Acetophenone	105	4.887	4.887	0.000	94	757360	12.5	12.6	
35 N-Nitrosomorpholine	56	4.899	4.899	0.000	85	292269	12.5	12.5	
36 2-Toluidine	106	4.916	4.916	0.000	95	848554	12.5	13.0	
38 Hexachloroethane	117	4.992	4.992	0.000	92	226215	12.5	12.8	
40 Nitrobenzene	77	5.050	5.050	0.000	85	550737	12.5	12.0	
30 Benzoic acid	105		5.062				ND	ND	
42 N-Nitrosopiperidine	114	5.190	5.190	0.000	86	249276	12.5	13.3	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	43 Isophorone	82	5.272	5.272	0.000	97	1067613	12.5	12.7	
	44 2-Nitrophenol	139	5.353	5.353	0.000	90	191442	12.5	12.5	
	45 2,4-Dimethylphenol	107	5.382	5.382	0.000	96	503000	12.5	13.5	
	46 o,o',o''-Triethylphosphorothioat	198	5.458	5.458	0.000	81	283257	12.5	13.2	
	47 Bis(2-chloroethoxy)methane	93	5.481	5.481	0.000	97	665281	12.5	12.7	
	48 2,4-Dichlorophenol	162	5.575	5.575	0.000	94	424837	12.5	13.5	
	49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	485799	12.5	12.6	
*	50 Naphthalene-d8	136	5.715	5.715	0.000	100	524644	5.00	5.00	
	51 Naphthalene	128	5.738	5.738	0.000	97	1467080	12.5	12.7	
	53 4-Chloroaniline	127	5.784	5.784	0.000	94	613349	12.5	13.0	
	54 2,6-Dichlorophenol	162	5.790	5.790	0.000	96	423287	12.5	13.2	
	55 Hexachloropropene	213	5.819	5.819	0.000	88	341257	12.5	13.3	
	56 Hexachlorobutadiene	225	5.854	5.854	0.000	95	317087	12.5	13.2	
	60 Quinoline	129	6.053	6.053	0.000	96	936914	12.5	13.0	
	62 N-Nitrosodi-n-butylamine	84	6.105	6.105	0.000	92	391676	12.5	10.4	
	63 p-Phenylene diamine	108	6.117	6.117	0.000	96	241724	12.5	9.22	7a
	64 4-Chloro-3-methylphenol	107	6.239	6.239	0.000	94	431163	12.5	13.2	
	65 Safrole, Total	162	6.315	6.315	0.000	90	393382	12.5	13.1	
	66 2-Methylnaphthalene	142	6.396	6.396	0.000	91	967222	12.5	13.1	
	67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	912107	12.5	13.3	
	68 Hexachlorocyclopentadiene	237	6.542	6.542	0.000	95	271755	12.5	11.9	
	69 1,2,4,5-Tetrachlorobenzene	216	6.554	6.554	0.000	97	564999	12.5	12.3	
	70 Isosafrole Peak 1	162	6.589	6.589	0.000	90	52646	1.50	1.44	
	71 2,4,6-Trichlorophenol	196	6.659	6.659	0.000	92	296446	12.5	13.2	
	72 2,4,5-Trichlorophenol	196	6.688	6.688	0.000	93	355578	12.5	13.3	
	74 Isosafrole Peak 2	162	6.804	6.804	0.000	92	399990	11.0	10.2	
	75 1,1'-Biphenyl	154	6.839	6.839	0.000	95	1256731	12.5	12.3	
	76 2-Chloronaphthalene	162	6.857	6.857	0.000	94	1035248	12.5	12.7	M
	77 1-Chloronaphthalene	162	6.874	6.874	0.000	99	898277	12.5	12.4	Ma
	78 Phenyl ether	170	6.939	6.939	0.000	86	683342	12.5	12.2	
	79 2-Nitroaniline	138	6.950	6.950	0.000	82	266946	12.5	12.9	
	81 1,4-Naphthoquinone	158	7.020	7.020	0.000	86	399600	12.5	13.8	
	86 1,3-Dinitrobenzene	168	7.084	7.084	0.000	87	128425	12.5	13.8	
	85 Dimethyl phthalate	163	7.125	7.125	0.000	98	1095212	12.5	12.5	
	84 1,4-Dinitrobenzene	168	7.148	7.148	0.000	86	157885	12.5	13.9	
	87 2,6-Dinitrotoluene	165	7.183	7.183	0.000	93	228116	12.5	13.4	
	88 Acenaphthylene	152	7.247	7.247	0.000	98	1509478	12.5	12.6	
	89 3-Nitroaniline	138	7.335	7.335	0.000	90	238019	12.5	12.9	
*	90 Acenaphthene-d10	164	7.382	7.382	0.000	95	318023	5.00	5.00	
	91 Acenaphthene	153	7.411	7.411	0.000	95	1013256	12.5	12.5	
	92 2,4-Dinitrophenol	184	7.434	7.434	0.000	87	172926	25.0	21.2	
	93 4-Nitrophenol	109	7.486	7.486	0.000	85	309365	25.0	26.9	
	94 Pentachlorobenzene	250	7.533	7.533	0.000	98	510871	12.5	12.6	
	95 2,4-Dinitrotoluene	165	7.562	7.562	0.000	92	296520	12.5	13.4	
	96 Dibenzofuran	168	7.574	7.574	0.000	97	1438664	12.5	12.5	
	97 1-Naphthylamine	143	7.650	7.650	0.000	98	859455	12.5	12.8	
	98 2,3,4,6-Tetrachlorophenol	232	7.690	7.690	0.000	71	327603	12.5	14.2	
	99 2-Naphthylamine	143	7.725	7.725	0.000	96	1009846	12.5	13.2	
	100 Diethyl phthalate	149	7.801	7.801	0.000	98	1072083	12.5	12.7	
	101 Thionazin	107	7.877	7.877	0.000	79	176820	12.5	12.8	
	102 Fluorene	166	7.900	7.900	0.000	92	1142282	12.5	12.7	
	103 4-Chlorophenyl phenyl ether	204	7.906	7.906	0.000	89	600958	12.5	12.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 N-Nitro-o-toluidine	152	7.906	7.906	0.000	92	291476	12.5	13.5	
105 4-Nitroaniline	138	7.912	7.912	0.000	77	270158	12.5	13.6	
106 4,6-Dinitro-2-methylphenol	198	7.941	7.941	0.000	87	281219	25.0	23.2	
107 N-Nitrosodiphenylamine	169	8.011	8.011	0.000	85	833385	10.6	11.1	
108 1,2-Diphenylhydrazine	77	8.052	8.052	0.000	42	1323588	12.5	12.8	
110 Sulfotepp	97	8.168	8.168	0.000	79	194203	12.5	12.9	
112 1,3,5-Trinitrobenzene	213	8.256	8.256	0.000	83	95901	12.5	12.5	a
113 cis-Diallate	86	8.291	8.291	0.000	0	386843	9.38	9.44	
114 Phorate	75	8.297	8.297	0.000	96	690574	12.5	13.5	
115 Phenacetin	108	8.308	8.308	0.000	89	514190	12.5	12.7	
116 4-Bromophenyl phenyl ether	248	8.367	8.367	0.000	73	379732	12.5	12.4	
117 trans-Diallate	86	8.378	8.378	0.000	0	129513	3.13	3.23	
118 Hexachlorobenzene	284	8.419	8.419	0.000	96	421699	12.5	12.3	
119 Dimethoate	87	8.454	8.454	0.000	96	395888	12.5	12.6	
121 Pentachlorophenol	266	8.606	8.606	0.000	93	468832	25.0	25.5	
122 4-Aminobiphenyl	169	8.611	8.611	0.000	90	1297439	12.5	12.9	
123 Pentachloronitrobenzene	237	8.617	8.617	0.000	90	161436	12.5	13.7	
124 Pronamide	173	8.670	8.670	0.000	90	509565	12.5	13.4	
125 Dinoseb	211	8.780	8.780	0.000	96	185982	12.5	11.1	
* 126 Phenanthrene-d10	188	8.786	8.786	0.000	97	626679	5.00	5.00	
127 Disulfoton	88	8.798	8.798	0.000	96	702211	12.5	12.0	
128 Phenanthrene	178	8.810	8.810	0.000	96	1743192	12.5	12.6	
129 Anthracene	178	8.856	8.856	0.000	97	1768535	12.5	12.8	
130 Carbazole	167	9.008	9.008	0.000	96	1515127	12.5	12.8	
131 Methyl parathion	109	9.148	9.148	0.000	94	323458	12.5	13.0	
132 Methapyrilene	97	9.223	9.223	0.000	1	130	NC	NC	
133 Di-n-butyl phthalate	149	9.357	9.357	0.000	100	1721167	12.5	13.8	
134 Ethyl Parathion	109	9.521	9.521	0.000	85	196099	12.5	12.7	
135 4-Nitroquinoline-1-oxide	190	9.544	9.544	0.000	83	115572	12.5	11.6	
S 136 Diallate	86				0		12.5	12.7	
140 Octachlorostyrene	308	9.760	9.760	0.000	91	172109	12.5	12.7	
141 Isodrin	193	9.800	9.800	0.000	93	212605	12.5	12.5	
137 Aramite Peak 1	185		9.842				ND	ND	
138 Aramite Peak 2	185		9.865				ND	ND	
139 Aramite Peak 3	185		9.906				ND	ND	
143 Fluoranthene	202	9.940	9.940	0.000	97	1975289	12.5	13.3	
142 Aramite Peak 4	185		9.982				ND	ND	
147 Benzidine	184	10.069	10.069	0.000	99	853416	12.5	9.54	
* 149 Pyrene-d10 (IS)	212	10.138	10.138	0.000	98	667790	5.00	5.00	
150 Pyrene	202	10.156	10.156	0.000	98	2054412	12.5	12.4	
151 Famphur	218		10.273				ND	ND	
154 p-Dimethylamino azobenzene	225	10.459	10.459	0.000	92	383218	12.5	15.2	
155 Chlorobenzilate	139	10.511	10.511	0.000	93	521014	12.5	13.9	
156 3,3'-Dimethylbenzidine	212	10.809	10.809	0.000	99	1102106	12.5	13.4	
157 Butyl benzyl phthalate	149	10.838	10.838	0.000	97	711027	12.5	13.2	
158 2-Acetylaminofluorene	181	11.083	11.083	0.000	93	520489	12.5	12.5	
159 3,3'-Dichlorobenzidine	252	11.421	11.421	0.000	77	699891	12.5	12.5	
160 4,4'-Methylene bis(2-chloroani	231	11.432	11.432	0.000	96	391827	12.5	13.2	
161 Benzo[a]anthracene	228	11.438	11.438	0.000	98	1989611	12.5	14.1	
162 Chrysene	228	11.485	11.485	0.000	96	1929583	12.5	14.0	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.520	0.000	97	995280	12.5	13.1	
164 6-Methylchrysene	242	12.056	12.056	0.000	98	1323096	12.5	14.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.394	12.394	0.000	99	1467869	12.5	11.4	
167 Benzo[b]fluoranthene	252	12.855	12.855	0.000	96	1934046	12.5	13.2	
166 7,12-Dimethylbenz(a)anthracene	256	12.855	12.855	0.000	89	846050	12.5	14.6	
168 Benzo[k]fluoranthene	252	12.895	12.895	0.000	98	2067014	12.5	13.4	
169 Benzo[a]pyrene	252	13.315	13.315	0.000	76	1756182	12.5	14.8	
* 170 Perylene-d12	264	13.391	13.391	0.000	99	600068	5.00	5.00	
171 3-Methylcholanthrene	268	13.834	13.834	0.000	90	613911	12.5	10.8	
172 Dibenz[a,h]acridine	279	14.661	14.661	0.000	90	1272658	12.5	13.4	
173 Dibenz[a,j]acridine	279	14.743	14.743	0.000	96	1495213	12.5	14.2	
174 Indeno[1,2,3-cd]pyrene	276	15.023	15.023	0.000	98	1336482	12.5	13.6	
175 Dibenz(a,h)anthracene	278	15.075	15.075	0.000	93	1576959	12.5	13.5	
176 Benzo[g,h,i]perylene	276	15.477	15.477	0.000	98	1609418	12.5	13.5	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 178 Dinitrotoluene	165				0			26.8	
S 182 Isosafrole	162				0		12.5	11.6	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

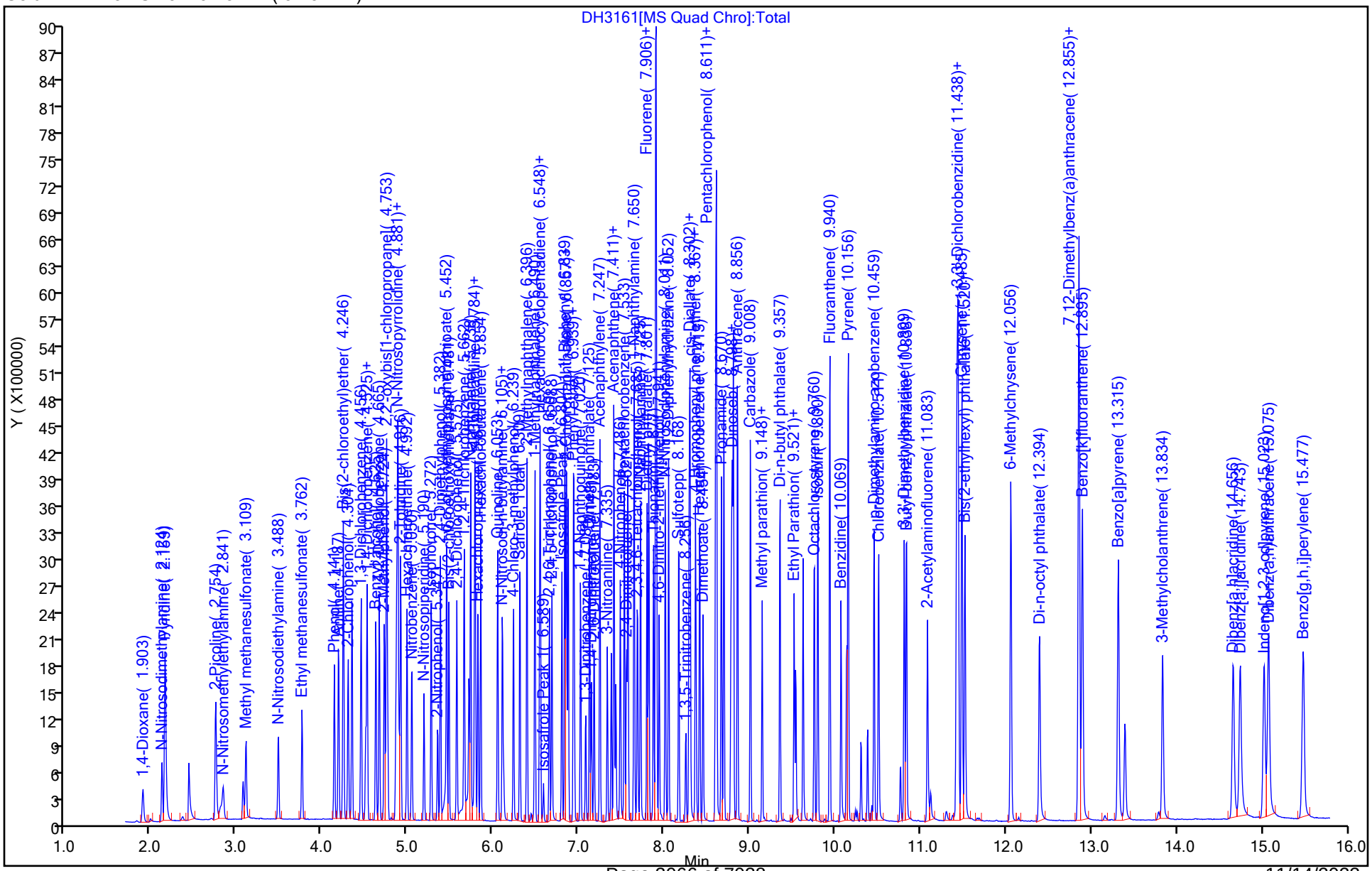
Report Date: 05-Sep-2023 16:36:40 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D

Injection Date:	31-Aug-2023 20:24:20	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	ICV FULL			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
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FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-414994/12 Calibration Date: 08/31/2023 20:24

Instrument ID: HP19760 Calib Start Date: 08/31/2023 16:23

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 08/31/2023 19:21

Lab File ID: DH3161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6099	0.6046		12.4	12.5	-0.9	30.0
N-Nitrosodimethylamine	Ave	0.9498	0.9183		12.1	12.5	-3.3	30.0
Pyridine	Ave	1.561	1.521		24.4	25.0	-2.5	30.0
2-Picoline	Ave	1.640	1.588		12.1	12.5	-3.2	30.0
N-Nitrosomethylethylamine	Ave	0.7016	0.6944		12.4	12.5	-1.0	30.0
Methyl methanesulfonate	Ave	0.8425	0.8586		12.7	12.5	1.9	30.0
N-Nitrosodiethylamine	Ave	0.6709	0.6900		12.9	12.5	2.8	30.0
Ethyl methanesulfonate	Ave	0.7436	0.7372		12.4	12.5	-0.9	30.0
Phenol	Ave	1.826	1.782	0.8000	12.2	12.5	-2.4	30.0
Aniline	Ave	2.274	2.264		12.4	12.5	-0.4	30.0
Bis(2-chloroethyl)ether	Ave	1.557	1.517	0.7000	12.2	12.5	-2.6	30.0
2-Chlorophenol	Ave	1.338	1.361	0.8000	12.7	12.5	1.8	30.0
1,3-Dichlorobenzene	Ave	1.587	1.586		12.5	12.5	-0.0	30.0
1,4-Dichlorobenzene	Ave	1.606	1.613		12.6	12.5	0.4	30.0
Benzyl alcohol	Ave	0.9050	0.9150		12.6	12.5	1.1	30.0
1,2-Dichlorobenzene	Ave	1.530	1.554		12.7	12.5	1.6	30.0
2-Methylphenol	Ave	1.288	1.329	0.7000	12.9	12.5	3.2	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.600	1.595	0.0100	12.5	12.5	-0.3	30.0
N-Nitrosopyrrolidine	Ave	0.7367	0.7701		13.1	12.5	4.5	30.0
3,4-Methylphenol	Ave	1.332	1.361	0.6000	12.8	12.5	2.2	30.0
Acetophenone	Ave	2.098	2.110	0.0100	12.6	12.5	0.6	30.0
N-Nitrosodi-n-propylamine	Ave	1.141	1.143	0.5000	12.5	12.5	0.2	30.0
N-Nitrosomorpholine	Ave	0.8145	0.8144		12.5	12.5	-0.0	30.0
o-Toluidine	Ave	2.266	2.364		13.0	12.5	4.4	30.0
Hexachloroethane	Ave	0.6159	0.6303	0.3000	12.8	12.5	2.3	30.0
Nitrobenzene	Ave	0.4391	0.4199	0.2000	12.0	12.5	-4.4	30.0
N-Nitrosopiperidine	Ave	0.1787	0.1901		13.3	12.5	6.4	30.0
Isophorone	Ave	0.8041	0.8140	0.4000	12.7	12.5	1.2	30.0
2-Nitrophenol	Ave	0.1463	0.1460	0.1000	12.5	12.5	-0.3	30.0
2,4-Dimethylphenol	Ave	0.3546	0.3835	0.2000	13.5	12.5	8.2	30.0
o,o',o''-Triethylphosphorothioate	Ave	0.2046	0.2160		13.2	12.5	5.6	30.0
Bis(2-chloroethoxy)methane	Ave	0.4987	0.5072	0.3000	12.7	12.5	1.7	30.0
2,4-Dichlorophenol	Ave	0.2992	0.3239	0.2000	13.5	12.5	8.2	30.0
1,2,4-Trichlorobenzene	Ave	0.3670	0.3704		12.6	12.5	0.9	30.0
Naphthalene	Ave	1.100	1.119	0.7000	12.7	12.5	1.7	30.0
4-Chloroaniline	Ave	0.4488	0.4676	0.0100	13.0	12.5	4.2	30.0
2,6-Dichlorophenol	Ave	0.3061	0.3227		13.2	12.5	5.4	30.0
Hexachloropropene	Ave	0.2441	0.2602		13.3	12.5	6.6	30.0
Hexachlorobutadiene	Ave	0.2285	0.2418	0.0100	13.2	12.5	5.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-414994/12 Calibration Date: 08/31/2023 20:24

Instrument ID: HP19760 Calib Start Date: 08/31/2023 16:23

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 08/31/2023 19:21

Lab File ID: DH3161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Quinoline	Ave	0.6863	0.7143		13.0	12.5	4.1	30.0
N-Nitrosodi-n-butylamine	Ave	0.3574	0.2986		10.4	12.5	-16.5	30.0
1,4-phenylenediamine	Ave	0.2500	0.1843			12.5	-26.3	30.0
4-Chloro-3-methylphenol	Ave	0.3118	0.3287	0.2000	13.2	12.5	5.4	30.0
Safrole, Total	Ave	0.2859	0.2999		13.1	12.5	4.9	30.0
2-Methylnaphthalene	Ave	0.7025	0.7374	0.4000	13.1	12.5	5.0	30.0
1-Methylnaphthalene	Ave	0.6540	0.6954		13.3	12.5	6.3	30.0
Hexachlorocyclopentadiene	Ave	0.3603	0.3418	0.0500	11.9	12.5	-5.1	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7215	0.7106	0.0100	12.3	12.5	-1.5	30.0
Isosafrole Peak 1	Ave	0.5754	0.5518		1.44	1.50	-4.1	30.0
2,4,6-Trichlorophenol	Ave	0.3534	0.3729	0.2000	13.2	12.5	5.5	30.0
2,4,5-Trichlorophenol	Ave	0.4201	0.4472	0.2000	13.3	12.5	6.5	30.0
Isosafrole Peak 2	Ave	0.6172	0.5717		10.2	11.0	-7.4	30.0
1,1'-Biphenyl	Ave	1.600	1.581	0.0100	12.3	12.5	-1.2	30.0
2-Chloronaphthalene	Ave	1.279	1.302	0.8000	12.7	12.5	1.8	30.0
1-Chloronaphthalene	Ave	1.144	1.130		12.4	12.5	-1.2	30.0
Diphenyl ether	Ave	0.8803	0.8595		12.2	12.5	-2.4	30.0
2-Nitroaniline	Ave	0.3263	0.3358	0.0100	12.9	12.5	2.9	30.0
1,4-Naphthoquinone	Ave	0.4548	0.5026		13.8	12.5	10.5	30.0
1,3-Dinitrobenzene	Ave	0.1466	0.1615		13.8	12.5	10.2	30.0
Dimethyl phthalate	Ave	1.380	1.378	0.0100	12.5	12.5	-0.2	30.0
1,4-Dinitrobenzene	Ave	0.1789	0.1986		13.9	12.5	11.0	30.0
2,6-Dinitrotoluene	Ave	0.2667	0.2869	0.2000	13.4	12.5	7.6	30.0
Acenaphthylene	Ave	1.879	1.899	0.9000	12.6	12.5	1.0	30.0
3-Nitroaniline	Ave	0.2900	0.2994	0.0100	12.9	12.5	3.2	30.0
Acenaphthene	Ave	1.273	1.274	0.9000	12.5	12.5	0.0	30.0
2,4-Dinitrophenol	Lin1		0.1088	0.0100	21.2	25.0	-15.2	30.0
4-Nitrophenol	Ave	0.1805	0.1946	0.0100	26.9	25.0	7.8	30.0
Pentachlorobenzene	Ave	0.6367	0.6426		12.6	12.5	0.9	30.0
2,4-Dinitrotoluene	Ave	0.3485	0.3730	0.2000	13.4	12.5	7.0	30.0
Dibenzofuran	Ave	1.812	1.810	0.8000	12.5	12.5	-0.1	30.0
1-Naphthylamine	Ave	1.057	1.081		12.8	12.5	2.3	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3624	0.4120	0.0100	14.2	12.5	13.7	30.0
2-Naphthylamine	Ave	1.200	1.270		13.2	12.5	5.8	30.0
Diethyl phthalate	Ave	1.330	1.348	0.0100	12.7	12.5	1.4	30.0
Thionazin	Ave	0.2172	0.2224		12.8	12.5	2.4	30.0
Fluorene	Ave	1.414	1.437	0.9000	12.7	12.5	1.6	30.0
4-Chlorophenyl-phenyl ether	Ave	0.7662	0.7559	0.4000	12.3	12.5	-1.3	30.0
5-Nitro-o-toluidine	Ave	0.3398	0.3666		13.5	12.5	7.9	30.0
4-Nitroaniline	Ave	0.3132	0.3398	0.0100	13.6	12.5	8.5	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-414994/12 Calibration Date: 08/31/2023 20:24

Instrument ID: HP19760 Calib Start Date: 08/31/2023 16:23

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 08/31/2023 19:21

Lab File ID: DH3161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4,6-Dinitro-2-methylphenol	Lin2		0.0897	0.0100	23.2	25.0	-7.3	30.0
N-Nitrosodiphenylamine	Ave	0.6015	0.6258	0.0100	11.1	10.6	4.0	30.0
1,2-Diphenylhydrazine	Ave	0.8232	0.8448		12.8	12.5	2.6	30.0
Sulfotepp	Ave	0.1203	0.1240		12.9	12.5	3.0	30.0
1,3,5-Trinitrobenzene	Ave	0.0612	0.0612			12.5	-0.0	30.0
cis-Diallate	Ave	0.3271	0.3292		9.44	9.38	0.7	30.0
Phorate	Ave	0.4094	0.4408		13.5	12.5	7.7	30.0
Phenacetin	Ave	0.3239	0.3282		12.7	12.5	1.3	30.0
4-Bromophenyl-phenylether	Ave	0.2435	0.2424	0.1000	12.4	12.5	-0.4	30.0
trans-Diallate	Ave	0.3197	0.3307		3.23	3.13	3.4	30.0
Hexachlorobenzene	Ave	0.2730	0.2692	0.1000	12.3	12.5	-1.4	30.0
Dimethoate	Ave	0.2506	0.2527		12.6	12.5	0.8	30.0
Pentachlorophenol	Lin2		0.1496	0.0500	25.5	25.0	2.0	30.0
4-Aminobiphenyl	Ave	0.8011	0.8281		12.9	12.5	3.4	30.0
Pentachloronitrobenzene	Ave	0.0943	0.1030		13.7	12.5	9.3	30.0
Pronamide	Ave	0.3035	0.3252		13.4	12.5	7.2	30.0
Dinoseb	Lin1		0.1187		11.1	12.5	-11.5	30.0
Disulfoton	Ave	0.4686	0.4482		12.0	12.5	-4.4	30.0
Phenanthrene	Ave	1.103	1.113	0.7000	12.6	12.5	0.9	30.0
Anthracene	Ave	1.101	1.129	0.7000	12.8	12.5	2.5	30.0
Carbazole	Ave	0.9468	0.9671	0.0100	12.8	12.5	2.1	30.0
Methyl parathion	Ave	0.1990	0.2065		13.0	12.5	3.7	30.0
Di-n-butyl phthalate	Ave	0.9948	1.099	0.0100	13.8	12.5	10.4	30.0
Parathion	Ave	0.1232	0.1252		12.7	12.5	1.6	30.0
4-Nitroquinoline-1-oxide	Qua1		0.0738		11.6	12.5	-7.3	30.0
Octachlorostyrene	Ave	0.1084	0.1099		12.7	12.5	1.4	30.0
Isodrin	Ave	0.1354	0.1357		12.5	12.5	0.2	30.0
Fluoranthene	Ave	1.185	1.261	0.6000	13.3	12.5	6.4	30.0
Benzidine	Ave	0.6700	0.5112		9.54	12.5	-23.7	30.0
Pyrene	Ave	1.238	1.231	0.6000	12.4	12.5	-0.6	30.0
p-Dimethylamino azobenzene	Ave	0.1891	0.2295		15.2	12.5	21.4	30.0
Chlorobenzilate	Ave	0.2815	0.3121		13.9	12.5	10.9	30.0
3,3'-Dimethylbenzidine	Ave	0.6164	0.6602		13.4	12.5	7.1	30.0
Butylbenzylphthalate	Ave	0.4034	0.4259	0.0100	13.2	12.5	5.6	30.0
2-Acetylaminofluorene	Qua2		0.3118		12.5	12.5	-0.1	30.0
3,3'-Dichlorobenzidine	Ave	0.4192	0.4192	0.0100	12.5	12.5	0.0	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2222	0.2347		13.2	12.5	5.6	30.0
Benzo[a]anthracene	Ave	1.057	1.192	0.8000	14.1	12.5	12.8	30.0
Chrysene	Ave	1.035	1.156	0.7000	14.0	12.5	11.7	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-414994/12 Calibration Date: 08/31/2023 20:24

Instrument ID: HP19760 Calib Start Date: 08/31/2023 16:23

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 08/31/2023 19:21

Lab File ID: DH3161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bis(2-ethylhexyl) phthalate	Ave	0.5670	0.5962	0.0100	13.1	12.5	5.1	30.0
6-Methylchrysene	Ave	0.6979	0.7925		14.2	12.5	13.6	30.0
Di-n-octyl phthalate	Lin2		0.9785	0.0100	11.4	12.5	-8.7	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.4834	0.5640		14.6	12.5	16.7	30.0
Benzo[b]fluoranthene	Ave	1.219	1.289	0.7000	13.2	12.5	5.8	30.0
Benzo[k]fluoranthene	Ave	1.285	1.378	0.7000	13.4	12.5	7.3	30.0
Benzo[a]pyrene	Ave	0.9916	1.171	0.7000	14.8	12.5	18.1	30.0
3-Methylcholanthrene	Ave	0.4730	0.4092		10.8	12.5	-13.5	30.0
Dibenz[a,h]acridine	Ave	0.7910	0.8483		13.4	12.5	7.3	30.0
Dibenz[a,j]acridine	Ave	0.8758	0.997		14.2	12.5	13.8	30.0
Indeno[1,2,3-cd]pyrene	Ave	0.8191	0.8909	0.5000	13.6	12.5	8.8	30.0
Dibenz(a,h)anthracene	Ave	0.9753	1.051	0.4000	13.5	12.5	7.8	30.0
Benzo[g,h,i]perylene	Ave	0.9915	1.073	0.5000	13.5	12.5	8.2	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 31-Aug-2023 20:24:20 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0092991-012
Operator ID: mem41592 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:36:39 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: P7EB Date: 05-Sep-2023 15:56:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.903	1.903	0.000	91	216972	12.5	12.4	
3 N-Nitrosodimethylamine	74	2.124	2.124	0.000	94	329551	12.5	12.1	
4 Pyridine	79	2.159	2.159	0.000	97	1091857	25.0	24.4	
7 2-Picoline	93	2.754	2.754	0.000	91	569759	12.5	12.1	
8 N-Nitrosomethylethylamine	88	2.841	2.841	0.000	92	249214	12.5	12.4	
9 Methyl methanesulfonate	80	3.109	3.109	0.000	85	308143	12.5	12.7	
11 N-Nitrosodiethylamine	102	3.488	3.488	0.000	91	247636	12.5	12.9	
12 Ethyl methanesulfonate	109	3.762	3.762	0.000	99	264569	12.5	12.4	
17 Phenol	94	4.141	4.141	0.000	94	639354	12.5	12.2	
18 Aniline	93	4.187	4.187	0.000	97	812672	12.5	12.4	
19 Bis(2-chloroethyl)ether	93	4.252	4.252	0.000	97	544292	12.5	12.2	
14 Indene	115		4.293				ND	ND	
20 2-Chlorophenol	128	4.304	4.304	0.000	94	488506	12.5	12.7	
21 1,3-Dichlorobenzene	146	4.456	4.456	0.000	96	569036	12.5	12.5	
* 22 1,4-Dichlorobenzene-d4	152	4.508	4.508	0.000	95	143550	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.525	4.525	0.000	93	578909	12.5	12.6	
25 Benzyl alcohol	108	4.625	4.625	0.000	92	328372	12.5	12.6	
26 1,2-Dichlorobenzene	146	4.665	4.665	0.000	96	557839	12.5	12.7	
28 2-Methylphenol	108	4.724	4.724	0.000	95	477044	12.5	12.9	
29 2,2'-oxybis[1-chloropropane]	45	4.759	4.759	0.000	91	572411	12.5	12.5	
31 N-Nitrosopyrrolidine	100	4.858	4.858	0.000	92	276364	12.5	13.1	
32 4-Methylphenol	108	4.869	4.869	0.000	96	488588	12.5	12.8	
33 N-Nitrosodi-n-propylamine	70	4.887	4.887	0.000	64	410305	12.5	12.5	
34 Acetophenone	105	4.887	4.887	0.000	94	757360	12.5	12.6	
35 N-Nitrosomorpholine	56	4.899	4.899	0.000	85	292269	12.5	12.5	
36 2-Toluidine	106	4.916	4.916	0.000	95	848554	12.5	13.0	
38 Hexachloroethane	117	4.992	4.992	0.000	92	226215	12.5	12.8	
40 Nitrobenzene	77	5.050	5.050	0.000	85	550737	12.5	12.0	
30 Benzoic acid	105		5.062				ND	ND	
42 N-Nitrosopiperidine	114	5.190	5.190	0.000	86	249276	12.5	13.3	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	43 Isophorone	82	5.272	5.272	0.000	97	1067613	12.5	12.7	
	44 2-Nitrophenol	139	5.353	5.353	0.000	90	191442	12.5	12.5	
	45 2,4-Dimethylphenol	107	5.382	5.382	0.000	96	503000	12.5	13.5	
	46 o,o',o''-Triethylphosphorothioat	198	5.458	5.458	0.000	81	283257	12.5	13.2	
	47 Bis(2-chloroethoxy)methane	93	5.481	5.481	0.000	97	665281	12.5	12.7	
	48 2,4-Dichlorophenol	162	5.575	5.575	0.000	94	424837	12.5	13.5	
	49 1,2,4-Trichlorobenzene	180	5.662	5.662	0.000	93	485799	12.5	12.6	
*	50 Naphthalene-d8	136	5.715	5.715	0.000	100	524644	5.00	5.00	
	51 Naphthalene	128	5.738	5.738	0.000	97	1467080	12.5	12.7	
	53 4-Chloroaniline	127	5.784	5.784	0.000	94	613349	12.5	13.0	
	54 2,6-Dichlorophenol	162	5.790	5.790	0.000	96	423287	12.5	13.2	
	55 Hexachloropropene	213	5.819	5.819	0.000	88	341257	12.5	13.3	
	56 Hexachlorobutadiene	225	5.854	5.854	0.000	95	317087	12.5	13.2	
	60 Quinoline	129	6.053	6.053	0.000	96	936914	12.5	13.0	
	62 N-Nitrosodi-n-butylamine	84	6.105	6.105	0.000	92	391676	12.5	10.4	
	63 p-Phenylene diamine	108	6.117	6.117	0.000	96	241724	12.5	9.22	7a
	64 4-Chloro-3-methylphenol	107	6.239	6.239	0.000	94	431163	12.5	13.2	
	65 Safrole, Total	162	6.315	6.315	0.000	90	393382	12.5	13.1	
	66 2-Methylnaphthalene	142	6.396	6.396	0.000	91	967222	12.5	13.1	
	67 1-Methylnaphthalene	142	6.490	6.490	0.000	92	912107	12.5	13.3	
	68 Hexachlorocyclopentadiene	237	6.542	6.542	0.000	95	271755	12.5	11.9	
	69 1,2,4,5-Tetrachlorobenzene	216	6.554	6.554	0.000	97	564999	12.5	12.3	
	70 Isosafrole Peak 1	162	6.589	6.589	0.000	90	52646	1.50	1.44	
	71 2,4,6-Trichlorophenol	196	6.659	6.659	0.000	92	296446	12.5	13.2	
	72 2,4,5-Trichlorophenol	196	6.688	6.688	0.000	93	355578	12.5	13.3	
	74 Isosafrole Peak 2	162	6.804	6.804	0.000	92	399990	11.0	10.2	
	75 1,1'-Biphenyl	154	6.839	6.839	0.000	95	1256731	12.5	12.3	
	76 2-Chloronaphthalene	162	6.857	6.857	0.000	94	1035248	12.5	12.7	M
	77 1-Chloronaphthalene	162	6.874	6.874	0.000	99	898277	12.5	12.4	Ma
	78 Phenyl ether	170	6.939	6.939	0.000	86	683342	12.5	12.2	
	79 2-Nitroaniline	138	6.950	6.950	0.000	82	266946	12.5	12.9	
	81 1,4-Naphthoquinone	158	7.020	7.020	0.000	86	399600	12.5	13.8	
	86 1,3-Dinitrobenzene	168	7.084	7.084	0.000	87	128425	12.5	13.8	
	85 Dimethyl phthalate	163	7.125	7.125	0.000	98	1095212	12.5	12.5	
	84 1,4-Dinitrobenzene	168	7.148	7.148	0.000	86	157885	12.5	13.9	
	87 2,6-Dinitrotoluene	165	7.183	7.183	0.000	93	228116	12.5	13.4	
	88 Acenaphthylene	152	7.247	7.247	0.000	98	1509478	12.5	12.6	
	89 3-Nitroaniline	138	7.335	7.335	0.000	90	238019	12.5	12.9	
*	90 Acenaphthene-d10	164	7.382	7.382	0.000	95	318023	5.00	5.00	
	91 Acenaphthene	153	7.411	7.411	0.000	95	1013256	12.5	12.5	
	92 2,4-Dinitrophenol	184	7.434	7.434	0.000	87	172926	25.0	21.2	
	93 4-Nitrophenol	109	7.486	7.486	0.000	85	309365	25.0	26.9	
	94 Pentachlorobenzene	250	7.533	7.533	0.000	98	510871	12.5	12.6	
	95 2,4-Dinitrotoluene	165	7.562	7.562	0.000	92	296520	12.5	13.4	
	96 Dibenzofuran	168	7.574	7.574	0.000	97	1438664	12.5	12.5	
	97 1-Naphthylamine	143	7.650	7.650	0.000	98	859455	12.5	12.8	
	98 2,3,4,6-Tetrachlorophenol	232	7.690	7.690	0.000	71	327603	12.5	14.2	
	99 2-Naphthylamine	143	7.725	7.725	0.000	96	1009846	12.5	13.2	
	100 Diethyl phthalate	149	7.801	7.801	0.000	98	1072083	12.5	12.7	
	101 Thionazin	107	7.877	7.877	0.000	79	176820	12.5	12.8	
	102 Fluorene	166	7.900	7.900	0.000	92	1142282	12.5	12.7	
	103 4-Chlorophenyl phenyl ether	204	7.906	7.906	0.000	89	600958	12.5	12.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 N-Nitro-o-toluidine	152	7.906	7.906	0.000	92	291476	12.5	13.5	
105 4-Nitroaniline	138	7.912	7.912	0.000	77	270158	12.5	13.6	
106 4,6-Dinitro-2-methylphenol	198	7.941	7.941	0.000	87	281219	25.0	23.2	
107 N-Nitrosodiphenylamine	169	8.011	8.011	0.000	85	833385	10.6	11.1	
108 1,2-Diphenylhydrazine	77	8.052	8.052	0.000	42	1323588	12.5	12.8	
110 Sulfotepp	97	8.168	8.168	0.000	79	194203	12.5	12.9	
112 1,3,5-Trinitrobenzene	213	8.256	8.256	0.000	83	95901	12.5	12.5	a
113 cis-Diallate	86	8.291	8.291	0.000	0	386843	9.38	9.44	
114 Phorate	75	8.297	8.297	0.000	96	690574	12.5	13.5	
115 Phenacetin	108	8.308	8.308	0.000	89	514190	12.5	12.7	
116 4-Bromophenyl phenyl ether	248	8.367	8.367	0.000	73	379732	12.5	12.4	
117 trans-Diallate	86	8.378	8.378	0.000	0	129513	3.13	3.23	
118 Hexachlorobenzene	284	8.419	8.419	0.000	96	421699	12.5	12.3	
119 Dimethoate	87	8.454	8.454	0.000	96	395888	12.5	12.6	
121 Pentachlorophenol	266	8.606	8.606	0.000	93	468832	25.0	25.5	
122 4-Aminobiphenyl	169	8.611	8.611	0.000	90	1297439	12.5	12.9	
123 Pentachloronitrobenzene	237	8.617	8.617	0.000	90	161436	12.5	13.7	
124 Pronamide	173	8.670	8.670	0.000	90	509565	12.5	13.4	
125 Dinoseb	211	8.780	8.780	0.000	96	185982	12.5	11.1	
* 126 Phenanthrene-d10	188	8.786	8.786	0.000	97	626679	5.00	5.00	
127 Disulfoton	88	8.798	8.798	0.000	96	702211	12.5	12.0	
128 Phenanthrene	178	8.810	8.810	0.000	96	1743192	12.5	12.6	
129 Anthracene	178	8.856	8.856	0.000	97	1768535	12.5	12.8	
130 Carbazole	167	9.008	9.008	0.000	96	1515127	12.5	12.8	
131 Methyl parathion	109	9.148	9.148	0.000	94	323458	12.5	13.0	
132 Methapyrilene	97	9.223	9.223	0.000	1	130	NC	NC	
133 Di-n-butyl phthalate	149	9.357	9.357	0.000	100	1721167	12.5	13.8	
134 Ethyl Parathion	109	9.521	9.521	0.000	85	196099	12.5	12.7	
135 4-Nitroquinoline-1-oxide	190	9.544	9.544	0.000	83	115572	12.5	11.6	
S 136 Diallate	86				0		12.5	12.7	
140 Octachlorostyrene	308	9.760	9.760	0.000	91	172109	12.5	12.7	
141 Isodrin	193	9.800	9.800	0.000	93	212605	12.5	12.5	
137 Aramite Peak 1	185		9.842				ND	ND	
138 Aramite Peak 2	185		9.865				ND	ND	
139 Aramite Peak 3	185		9.906				ND	ND	
143 Fluoranthene	202	9.940	9.940	0.000	97	1975289	12.5	13.3	
142 Aramite Peak 4	185		9.982				ND	ND	
147 Benzidine	184	10.069	10.069	0.000	99	853416	12.5	9.54	
* 149 Pyrene-d10 (IS)	212	10.138	10.138	0.000	98	667790	5.00	5.00	
150 Pyrene	202	10.156	10.156	0.000	98	2054412	12.5	12.4	
151 Famphur	218		10.273				ND	ND	
154 p-Dimethylamino azobenzene	225	10.459	10.459	0.000	92	383218	12.5	15.2	
155 Chlorobenzilate	139	10.511	10.511	0.000	93	521014	12.5	13.9	
156 3,3'-Dimethylbenzidine	212	10.809	10.809	0.000	99	1102106	12.5	13.4	
157 Butyl benzyl phthalate	149	10.838	10.838	0.000	97	711027	12.5	13.2	
158 2-Acetylaminofluorene	181	11.083	11.083	0.000	93	520489	12.5	12.5	
159 3,3'-Dichlorobenzidine	252	11.421	11.421	0.000	77	699891	12.5	12.5	
160 4,4'-Methylene bis(2-chloroani	231	11.432	11.432	0.000	96	391827	12.5	13.2	
161 Benzo[a]anthracene	228	11.438	11.438	0.000	98	1989611	12.5	14.1	
162 Chrysene	228	11.485	11.485	0.000	96	1929583	12.5	14.0	
163 Bis(2-ethylhexyl) phthalate	149	11.520	11.520	0.000	97	995280	12.5	13.1	
164 6-Methylchrysene	242	12.056	12.056	0.000	98	1323096	12.5	14.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.394	12.394	0.000	99	1467869	12.5	11.4	
167 Benzo[b]fluoranthene	252	12.855	12.855	0.000	96	1934046	12.5	13.2	
166 7,12-Dimethylbenz(a)anthracene	256	12.855	12.855	0.000	89	846050	12.5	14.6	
168 Benzo[k]fluoranthene	252	12.895	12.895	0.000	98	2067014	12.5	13.4	
169 Benzo[a]pyrene	252	13.315	13.315	0.000	76	1756182	12.5	14.8	
* 170 Perylene-d12	264	13.391	13.391	0.000	99	600068	5.00	5.00	
171 3-Methylcholanthrene	268	13.834	13.834	0.000	90	613911	12.5	10.8	
172 Dibenz[a,h]acridine	279	14.661	14.661	0.000	90	1272658	12.5	13.4	
173 Dibenz[a,j]acridine	279	14.743	14.743	0.000	96	1495213	12.5	14.2	
174 Indeno[1,2,3-cd]pyrene	276	15.023	15.023	0.000	98	1336482	12.5	13.6	
175 Dibenz(a,h)anthracene	278	15.075	15.075	0.000	93	1576959	12.5	13.5	
176 Benzo[g,h,i]perylene	276	15.477	15.477	0.000	98	1609418	12.5	13.5	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 178 Dinitrotoluene	165				0			26.8	
S 182 Isosafrole	162				0		12.5	11.6	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

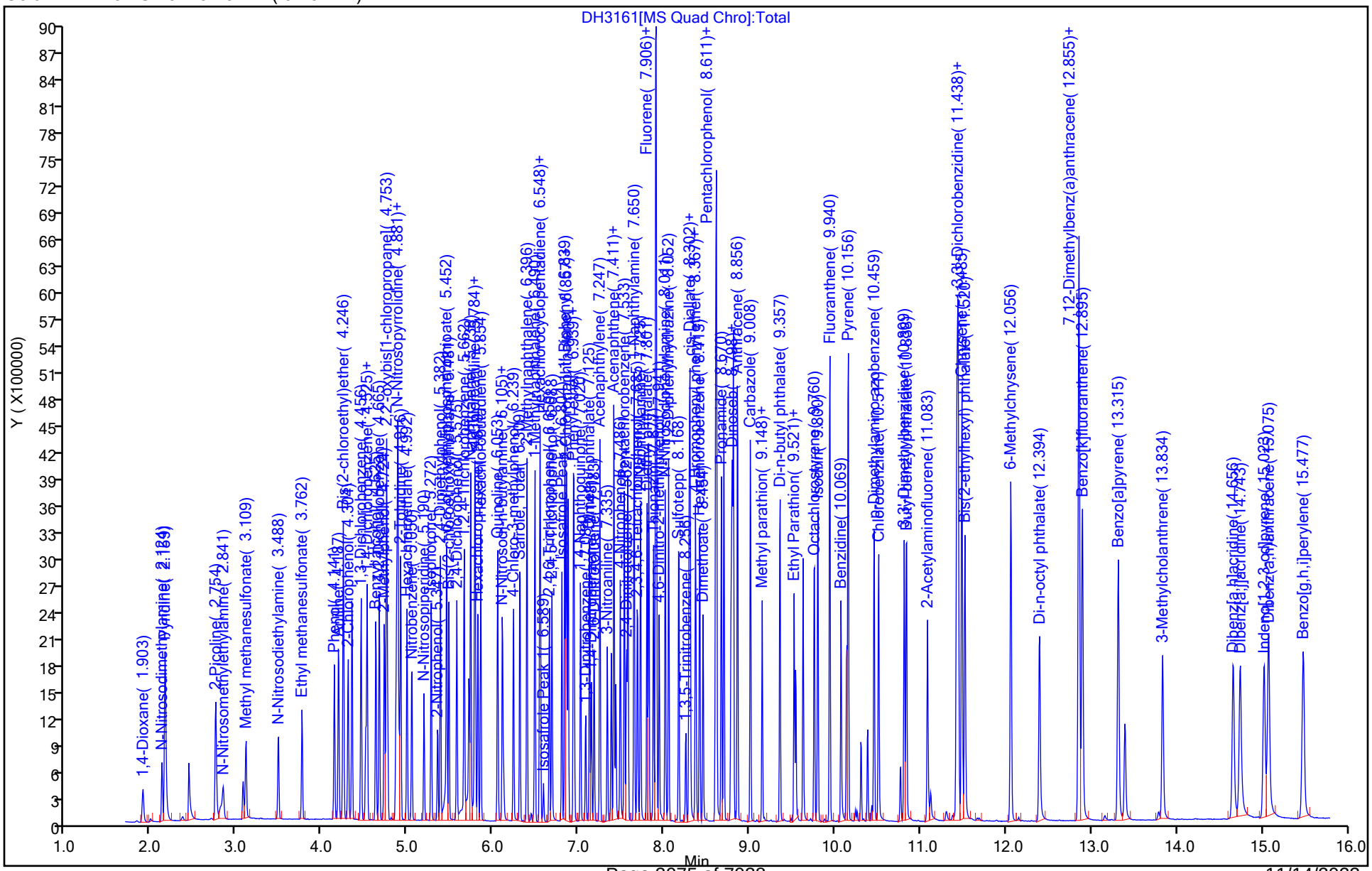
Report Date: 05-Sep-2023 16:36:40 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D

Injection Date:	31-Aug-2023 20:24:20	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	ICV FULL			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

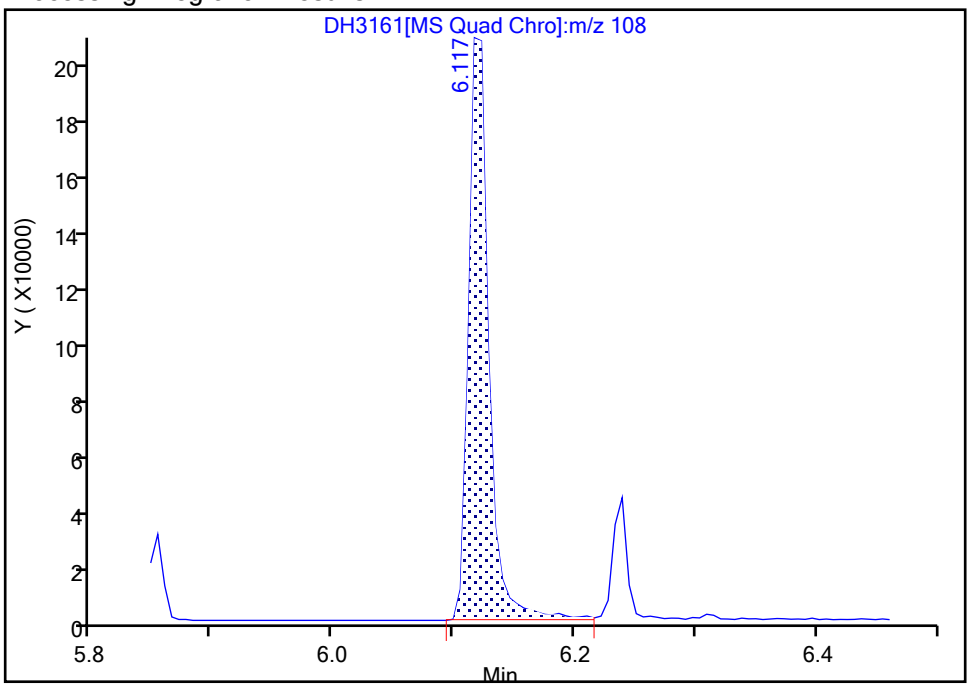
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D				
Injection Date:	31-Aug-2023 20:24:20	Instrument ID:	HP19760		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

63 p-Phenylene diamine, CAS: 106-50-3

Signal: 1

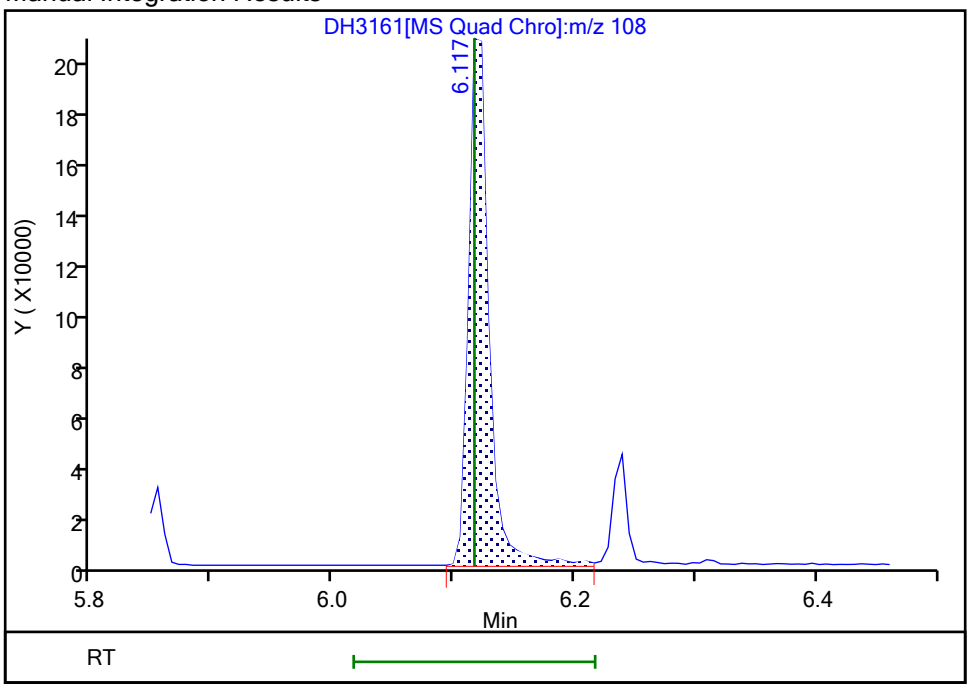
Processing Integration Results

RT: 6.12
Area: 241724
Amount: 9.215691
Amount Units: ug/ml



Manual Integration Results

RT: 6.12
Area: 241724
Amount: 9.215691
Amount Units: ug/ml



Reviewer: P7EB, 05-Sep-2023 15:56:16 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

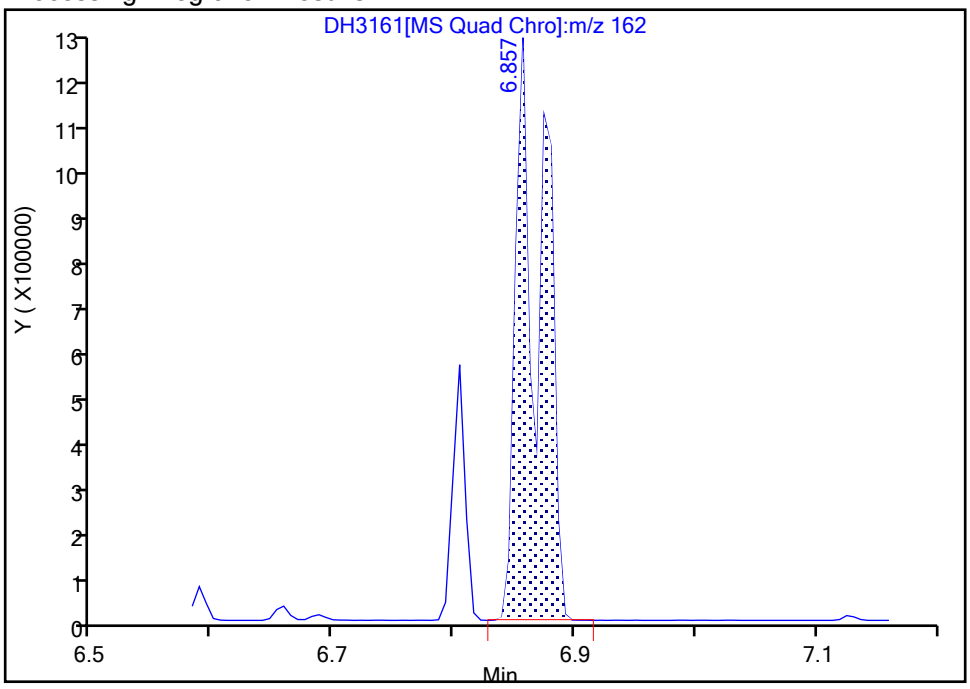
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D				
Injection Date:	31-Aug-2023 20:24:20	Instrument ID:	HP19760		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

76 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

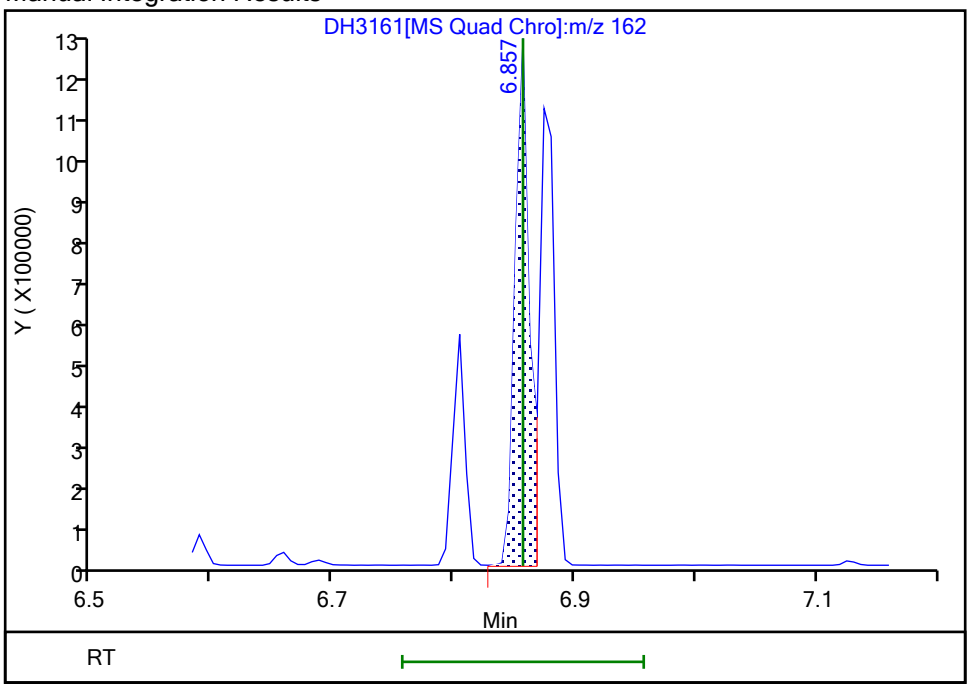
Processing Integration Results

RT: 6.86
Area: 1933525
Amount: 23.767900
Amount Units: ug/ml



Manual Integration Results

RT: 6.86
Area: 1035248
Amount: 12.725810
Amount Units: ug/ml



Reviewer: P7EB, 05-Sep-2023 15:56:06 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

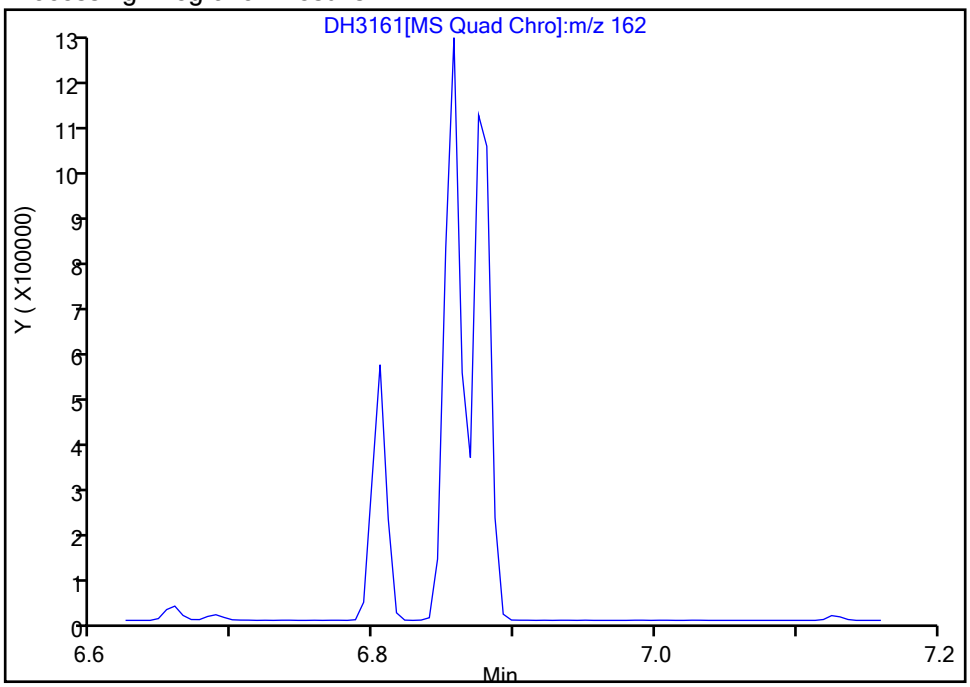
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D				
Injection Date:	31-Aug-2023 20:24:20	Instrument ID:	HP19760		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

77 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

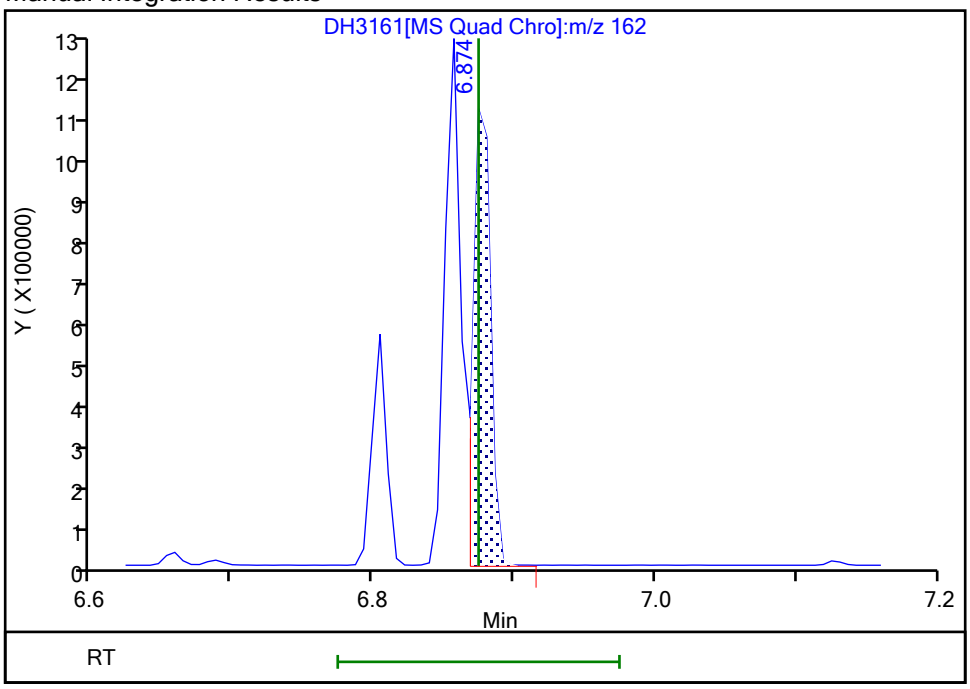
Not Detected
Expected RT: 6.87

Processing Integration Results



Manual Integration Results

RT: 6.87
Area: 898277
Amount: 12.350335
Amount Units: ug/ml



Reviewer: P7EB, 05-Sep-2023 15:56:12 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

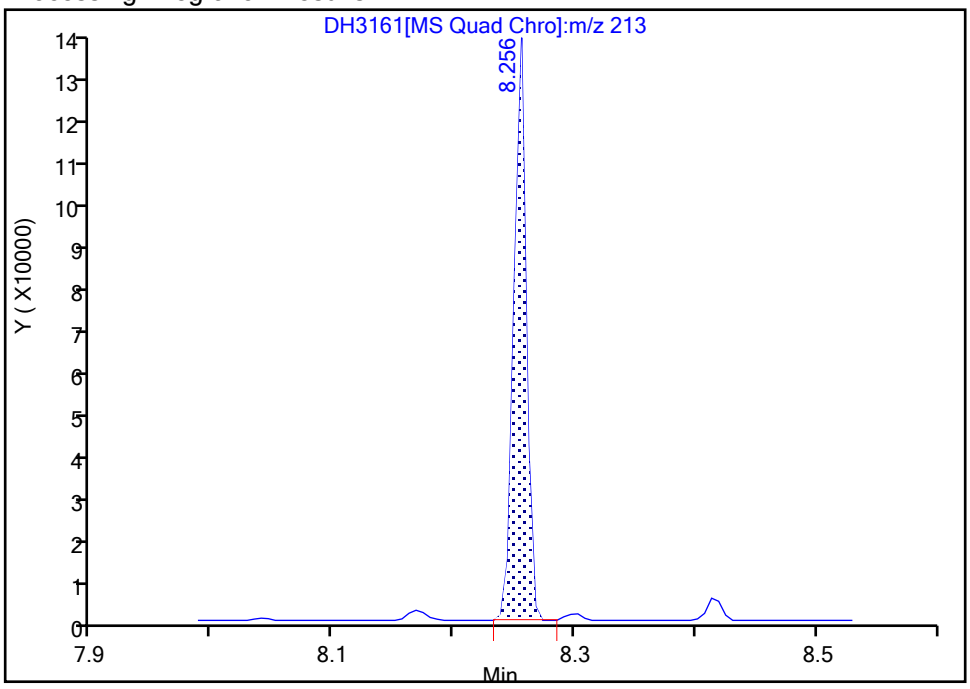
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3161.D				
Injection Date:	31-Aug-2023 20:24:20	Instrument ID:	HP19760		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

112 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

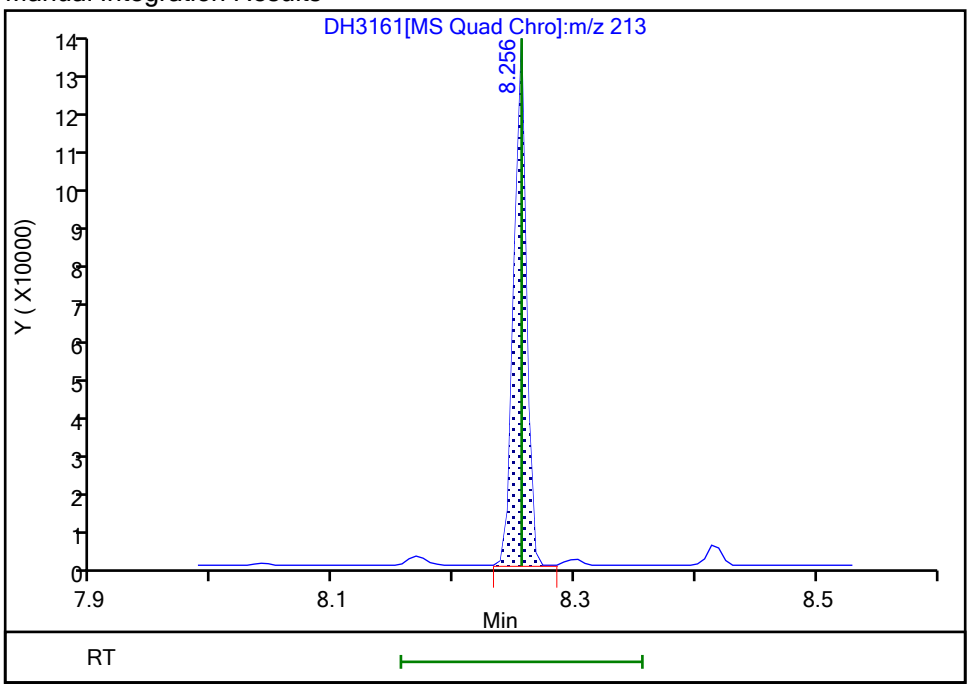
Processing Integration Results

RT: 8.26
Area: 95901
Amount: 11.194536
Amount Units: ug/ml



Manual Integration Results

RT: 8.26
Area: 95901
Amount: 12.495261
Amount Units: ug/ml



Reviewer: P7EB, 05-Sep-2023 15:56:30 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-435991/12 Calibration Date: 10/26/2023 15:50

Instrument ID: HP19760 Calib Start Date: 08/03/2023 15:30

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 08/03/2023 15:30

Lab File ID: DJ2611.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Aramite Peak 1	Ave	0.0260				1.25		
Aramite Peak 2	Ave	0.0249				1.25		
Aramite Peak 3	Ave	0.0904				5.00		
Aramite Peak 4	Ave	0.1255				5.00		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 26-Oct-2023 15:50:33 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 410-0097721-012
Operator ID: kel10217 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:24:43 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: N5QU Date: 26-Oct-2023 20:17:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.838	1.833	0.005	93	294329	12.5	12.9	
3 N-Nitrosodimethylamine	74	2.060	2.054	0.006	96	489278	12.5	13.2	
4 Pyridine	79	2.095	2.095	0.000	89	1613224	25.0	27.3	
7 2-Picoline	93	2.683	2.684	-0.001	91	832390	12.5	13.4	
8 N-Nitrosomethylethylamine	88	2.771	2.771	0.000	94	377555	12.5	13.4	
9 Methyl methanesulfonate	80	3.039	3.033	0.006	86	451977	12.5	13.5	
11 N-Nitrosodiethylamine	102	3.418	3.412	0.006	91	352762	12.5	13.9	
12 Ethyl methanesulfonate	109	3.698	3.692	0.006	98	366018	12.5	13.0	
17 Phenol	94	4.082	4.082	0.000	93	941277	12.5	13.1	
18 Aniline	93	4.123	4.123	0.000	94	1168956	12.5	14.3	
19 Bis(2-chloroethyl)ether	93	4.181	4.181	0.000	94	755226	12.5	12.7	
20 2-Chlorophenol	128	4.240	4.234	0.006	92	675353	12.5	13.3	
21 1,3-Dichlorobenzene	146	4.385	4.385	0.000	97	796665	12.5	12.9	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	96	196616	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.455	4.455	0.000	93	811385	12.5	13.0	
25 Benzyl alcohol	108	4.566	4.560	0.006	90	456241	12.5	13.5	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	760878	12.5	13.1	
28 2-Methylphenol	108	4.665	4.665	0.000	96	646565	12.5	13.3	
29 2,2'-oxybis[1-chloropropane]	45	4.694	4.694	0.000	93	1246267	12.5	12.8	
14 Indene	115	4.683	4.694	-0.011	85	1402192	12.5	13.9	
31 N-Nitrosopyrrolidine	100	4.799	4.793	0.006	90	384459	12.5	14.4	
32 4-Methylphenol	108	4.817	4.811	0.006	96	669788	12.5	13.6	
33 N-Nitrosodi-n-propylamine	70	4.823	4.817	0.006	76	580506	12.5	12.6	
34 Acetophenone	105	4.823	4.817	0.006	91	1013239	12.5	12.8	
35 N-Nitrosomorpholine	56	4.840	4.834	0.006	91	579381	12.5	13.0	
36 2-Toluidine	106	4.852	4.852	0.000	94	1132946	12.5	13.7	
38 Hexachloroethane	117	4.922	4.922	0.000	91	297505	12.5	12.2	
40 Nitrobenzene	77	4.986	4.980	0.006	89	841025	12.5	12.4	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	83	345356	12.5	13.1	
43 Isophorone	82	5.213	5.207	0.006	96	1507470	12.5	12.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
44 2-Nitrophenol	139	5.289	5.283	0.006	91	338055	12.5	12.8	
45 2,4-Dimethylphenol	107	5.324	5.324	0.000	97	702363	12.5	15.5	
46 o,o',o''-Triethylphosphorothioat	198	5.394	5.394	0.000	82	389394	12.5	13.0	
30 Benzoic acid	105		5.406				ND	ND	U
47 Bis(2-chloroethoxy)methane	93	5.423	5.417	0.006	94	880123	12.5	12.9	
48 2,4-Dichlorophenol	162	5.516	5.510	0.006	95	582394	12.5	13.3	
49 1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	93	659833	12.5	12.6	
* 50 Naphthalene-d8	136	5.650	5.650	0.000	99	690223	5.00	5.00	
51 Naphthalene	128	5.674	5.674	0.000	98	1906007	12.5	12.6	
53 4-Chloroaniline	127	5.720	5.720	0.000	93	787079	12.5	13.4	
54 2,6-Dichlorophenol	162	5.732	5.726	0.006	94	574659	12.5	12.6	
55 Hexachloropropene	213	5.755	5.755	0.000	85	554607	12.5	13.9	
56 Hexachlorobutadiene	225	5.790	5.790	0.000	93	454806	12.5	12.9	
60 Quinoline	129	5.994	5.988	0.006	95	1239934	12.5	13.2	
62 N-Nitrosodi-n-butylamine	84	6.047	6.041	0.006	94	545493	12.5	10.0	
63 p-Phenylene diamine	108		6.058				ND	ND	U
64 4-Chloro-3-methylphenol	107	6.181	6.181	0.000	94	585663	12.5	13.2	
65 Safrole, Total	162	6.251	6.251	0.000	89	533067	12.5	13.3	
66 2-Methylnaphthalene	142	6.332	6.332	0.000	91	1239513	12.5	12.9	
67 1-Methylnaphthalene	142	6.425	6.426	-0.001	92	1171778	12.5	13.1	
68 Hexachlorocyclopentadiene	237	6.478	6.478	0.000	94	400865	12.5	13.1	
69 1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	96	743405	12.5	12.4	
70 Isosafrole Peak 1	162	6.525	6.525	0.000	92	72021	1.50	1.63	
71 2,4,6-Trichlorophenol	196	6.594	6.595	-0.001	93	416779	12.5	12.6	
72 2,4,5-Trichlorophenol	196	6.629	6.630	-0.001	94	487563	12.5	13.9	
74 Isosafrole Peak 2	162	6.740	6.740	0.000	92	528851	11.0	11.1	
75 1,1'-Biphenyl	154	6.775	6.775	0.000	93	1610419	12.5	12.8	
76 2-Chloronaphthalene	162	6.793	6.793	0.000	95	1267533	12.5	12.4	
77 1-Chloronaphthalene	162	6.816	6.810	0.006	98	1188192	12.5	13.6	
78 Phenyl ether	170	6.880	6.874	0.006	87	885661	12.5	12.7	
79 2-Nitroaniline	138	6.892	6.886	0.006	78	381910	12.5	13.3	
81 1,4-Naphthoquinone	158	6.962	6.962	0.000	86	520553	12.5	14.7	
84 1,4-Dinitrobenzene	168	7.026	7.020	0.006	90	214247	12.5	13.4	
85 Dimethyl phthalate	163	7.067	7.067	0.000	99	1459280	12.5	12.7	
86 1,3-Dinitrobenzene	168	7.090	7.090	0.000	84	242324	12.5	13.5	
87 2,6-Dinitrotoluene	165	7.125	7.119	0.006	93	328544	12.5	13.0	
88 Acenaphthylene	152	7.183	7.183	0.000	99	1929377	12.5	12.9	
89 3-Nitroaniline	138	7.276	7.276	0.000	86	335971	12.5	13.3	
* 90 Acenaphthene-d10	164	7.317	7.317	0.000	94	415145	5.00	5.00	
91 Acenaphthene	153	7.352	7.346	0.006	95	1293544	12.5	12.4	
92 2,4-Dinitrophenol	184	7.376	7.376	0.000	86	429664	25.0	26.1	
93 4-Nitrophenol	109	7.440	7.434	0.006	84	465471	25.0	27.6	
94 Pentachlorobenzene	250	7.475	7.469	0.006	98	646426	12.5	13.3	
95 2,4-Dinitrotoluene	165	7.504	7.498	0.006	93	437910	12.5	12.9	
96 Dibenzofuran	168	7.515	7.510	0.005	97	1842760	12.5	12.6	
97 1-Naphthylamine	143	7.591	7.585	0.006	98	1030341	12.5	12.1	
98 2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	71	446743	12.5	14.0	
99 2-Naphthylamine	143	7.661	7.661	0.000	96	1260778	12.5	13.4	
100 Diethyl phthalate	149	7.743	7.737	0.006	98	1386953	12.5	12.6	
101 Thionazin	107	7.813	7.813	0.000	79	231647	12.5	12.9	
102 Fluorene	166	7.836	7.836	0.000	93	1410430	12.5	13.0	
103 4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	90	748583	12.5	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 N-Nitro-o-toluidine	152	7.848	7.848	0.000	88	377774	12.5	13.6	
105 4-Nitroaniline	138	7.859	7.854	0.005	79	339291	12.5	13.0	
106 4,6-Dinitro-2-methylphenol	198	7.883	7.883	0.000	84	582348	25.0	26.8	
107 N-Nitrosodiphenylamine	169	7.953	7.953	0.000	62	1041292	10.6	11.0	
108 1,2-Diphenylhydrazine	77	7.993	7.988	0.005	41	1627455	12.5	13.4	
110 Sulfotepp	97	8.110	8.104	0.006	76	266986	12.5	13.6	
112 1,3,5-Trinitrobenzene	213	8.203	8.197	0.006	84	174979	12.5	14.3	
113 cis-Diallate	86	8.227	8.227	-0.001	0	491262	9.38	9.67	
114 Phorate	75	8.238	8.232	0.006	95	943224	12.5	13.3	
115 Phenacetin	108	8.250	8.244	0.006	93	724984	12.5	14.1	
116 4-Bromophenyl phenyl ether	248	8.308	8.302	0.006	70	449438	12.5	12.5	
117 trans-Diallate	86	8.314	8.314	0.000	0	160367	3.13	3.15	
118 Hexachlorobenzene	284	8.355	8.355	0.000	95	486450	12.5	12.4	
119 Dimethoate	87	8.396	8.390	0.006	95	554511	12.5	13.5	
121 Pentachlorophenol	266	8.541	8.541	0.000	93	619642	25.0	25.9	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	91	1601518	12.5	12.9	
123 Pentachloronitrobenzene	237	8.553	8.553	0.000	84	231359	12.5	12.5	
124 Pronamide	173	8.611	8.605	0.006	89	671503	12.5	13.9	
125 Dinoseb	211	8.722	8.716	0.006	96	411821	12.5	14.6	
* 126 Phenanthrene-d10	188	8.728	8.722	0.006	97	791545	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	98	887949	12.5	11.8	
128 Phenanthrene	178	8.745	8.745	0.000	96	2124355	12.5	12.8	
129 Anthracene	178	8.798	8.792	0.006	97	2205206	12.5	13.1	
130 Carbazole	167	8.949	8.949	0.000	96	1853280	12.5	13.1	
131 Methyl parathion	109	9.083	9.083	0.000	94	477099	12.5	14.0	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	100	2281875	12.5	13.3	
134 Ethyl Parathion	109	9.456	9.456	0.000	85	291562	12.5	13.6	
135 4-Nitroquinoline-1-oxide	190	9.480	9.486	0.000	94	206648	12.5	13.6	
132 Methapyrilene	97		9.596				ND	ND	U
S 136 Diallate	86				0		12.5	12.8	
140 Octachlorostyrene	308	9.695	9.695	0.000	90	198868	12.5	12.8	
141 Isodrin	193	9.736	9.730	0.006	94	266769	12.5	13.1	
137 Aramite Peak 1	185		9.842				ND	ND	
138 Aramite Peak 2	185		9.865				ND	ND	
143 Fluoranthene	202	9.876	9.876	0.000	97	2413625	12.5	13.2	
139 Aramite Peak 3	185		9.906				ND	ND	
142 Aramite Peak 4	185		9.982				ND	ND	
147 Benzidine	184	10.010	10.010	0.000	99	1169598	12.5	10.9	
* 149 Pyrene-d10 (IS)	212	10.074	10.068	0.006	98	843738	5.00	5.00	
150 Pyrene	202	10.092	10.086	0.006	98	2491861	12.5	12.6	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	94	495515	12.5	15.3	
155 Chlorobenzilate	139	10.441	10.441	0.000	93	717667	12.5	14.4	
151 Famphur	218		10.739				ND	ND	U
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	99	1425267	12.5	13.6	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	97	971619	12.5	13.5	
158 2-Acetylaminofluorene	181	11.013	11.007	0.006	93	829837	12.5	13.4	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	77	812527	12.5	12.8	
160 4,4'-Methylene bis(2-chloroani	231	11.356	11.351	0.005	95	488204	12.5	14.1	
161 Benzo[a]anthracene	228	11.362	11.362	0.000	98	2286404	12.5	13.0	
162 Chrysene	228	11.409	11.403	0.006	96	2251128	12.5	13.0	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	97	1345528	12.5	13.6	
164 6-Methylchrysene	242	11.974	11.969	0.005	98	1555552	12.5	13.4	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165	Di-n-octyl phthalate	149	12.295	12.295	0.000	99	2221217	12.5	12.6	
166	7,12-Dimethylbenz(a)anthracene	256	12.761	12.755	0.006	74	954475	12.5	14.1	
167	Benzo[b]fluoranthene	252	12.761	12.755	0.006	96	2246515	12.5	13.2	
168	Benzo[k]fluoranthene	252	12.796	12.790	0.006	98	2277579	12.5	13.5	
169	Benzo[a]pyrene	252	13.216	13.210	0.006	76	2095307	12.5	13.4	
* 170	Perylene-d12	264	13.292	13.286	0.006	100	711146	5.00	5.00	
171	3-Methylcholanthrene	268	13.729	13.723	0.006	90	801436	12.5	9.89	
172	Dibenz[a,h]acridine	279	14.539	14.533	0.006	90	1681446	12.5	15.4	
173	Dibenz[a,j]acridine	279	14.615	14.609	0.006	96	1784770	12.5	14.6	
174	Indeno[1,2,3-cd]pyrene	276	14.889	14.883	0.006	98	1680922	12.5	12.0	
175	Dibenz(a,h)anthracene	278	14.941	14.929	0.012	92	1916395	12.5	13.5	
176	Benzo[g,h,i]perylene	276	15.337	15.326	0.011	98	1936736	12.5	13.4	
S 177	Aramite, Total	185		44.000				12.5	ND	7
S 182	Isosafrole	162				0		12.5	12.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

Report Date: 27-Oct-2023 07:25:12 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D

Injection Date: 26-Oct-2023 15:50:33 Instrument ID: HP19760 Operator ID: kel10217

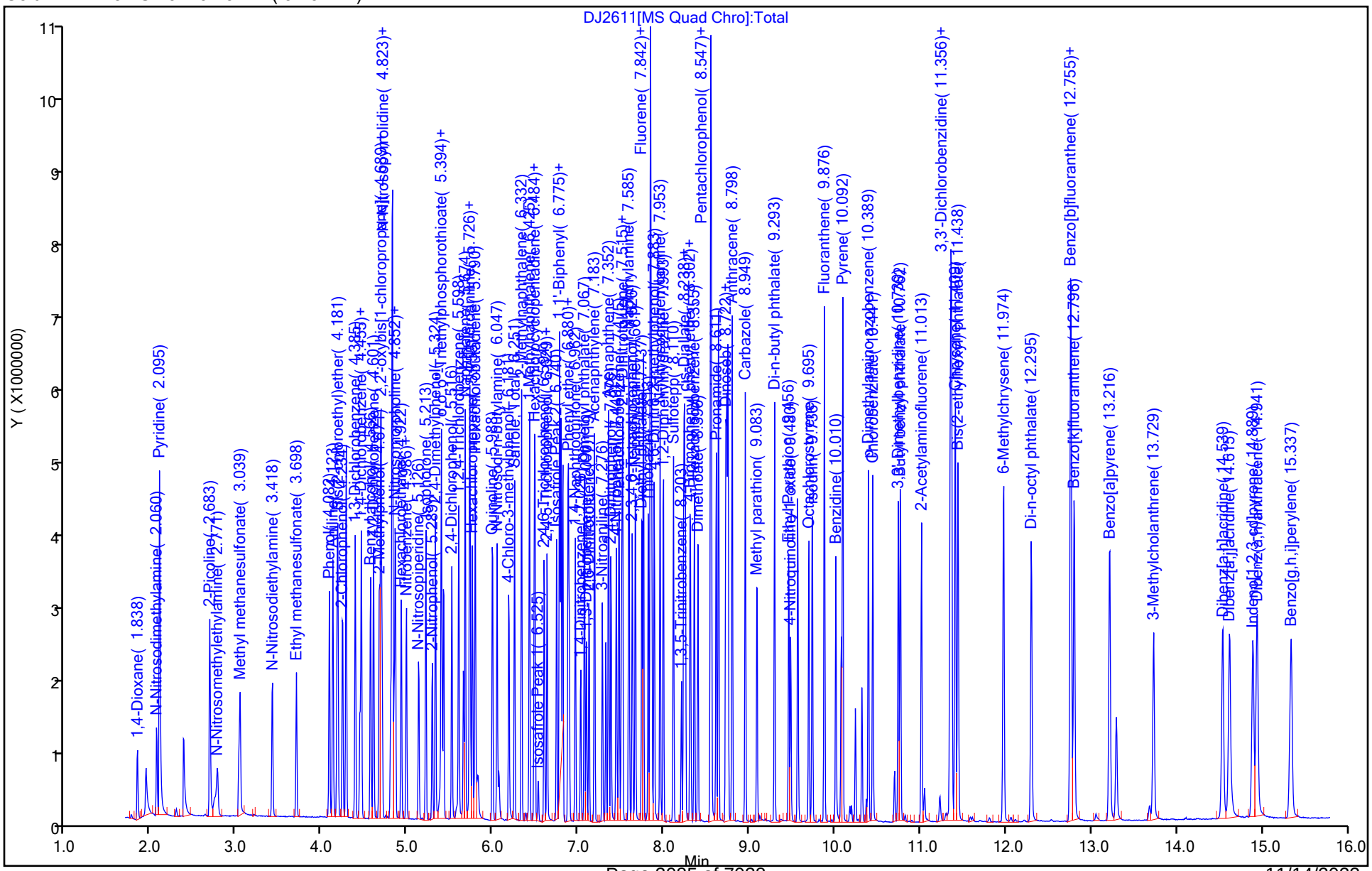
Lims ID: ICV Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-435991/12 Calibration Date: 10/26/2023 15:50

Instrument ID: HP19760 Calib Start Date: 09/20/2023 18:57

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 09/20/2023 20:40

Lab File ID: DJ2611.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Famphur	Ave	0.2953				12.5		
Methapyrilene	Lin1					12.5	-100.0*	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 26-Oct-2023 15:50:33 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 410-0097721-012
Operator ID: kel10217 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:24:43 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: N5QU Date: 26-Oct-2023 20:17:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.838	1.833	0.005	93	294329	12.5	12.9	
3 N-Nitrosodimethylamine	74	2.060	2.054	0.006	96	489278	12.5	13.2	
4 Pyridine	79	2.095	2.095	0.000	89	1613224	25.0	27.3	
7 2-Picoline	93	2.683	2.684	-0.001	91	832390	12.5	13.4	
8 N-Nitrosomethylethylamine	88	2.771	2.771	0.000	94	377555	12.5	13.4	
9 Methyl methanesulfonate	80	3.039	3.033	0.006	86	451977	12.5	13.5	
11 N-Nitrosodiethylamine	102	3.418	3.412	0.006	91	352762	12.5	13.9	
12 Ethyl methanesulfonate	109	3.698	3.692	0.006	98	366018	12.5	13.0	
17 Phenol	94	4.082	4.082	0.000	93	941277	12.5	13.1	
18 Aniline	93	4.123	4.123	0.000	94	1168956	12.5	14.3	
19 Bis(2-chloroethyl)ether	93	4.181	4.181	0.000	94	755226	12.5	12.7	
20 2-Chlorophenol	128	4.240	4.234	0.006	92	675353	12.5	13.3	
21 1,3-Dichlorobenzene	146	4.385	4.385	0.000	97	796665	12.5	12.9	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	96	196616	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.455	4.455	0.000	93	811385	12.5	13.0	
25 Benzyl alcohol	108	4.566	4.560	0.006	90	456241	12.5	13.5	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	760878	12.5	13.1	
28 2-Methylphenol	108	4.665	4.665	0.000	96	646565	12.5	13.3	
29 2,2'-oxybis[1-chloropropane]	45	4.694	4.694	0.000	93	1246267	12.5	12.8	
14 Indene	115	4.683	4.694	-0.011	85	1402192	12.5	13.9	
31 N-Nitrosopyrrolidine	100	4.799	4.793	0.006	90	384459	12.5	14.4	
32 4-Methylphenol	108	4.817	4.811	0.006	96	669788	12.5	13.6	
33 N-Nitrosodi-n-propylamine	70	4.823	4.817	0.006	76	580506	12.5	12.6	
34 Acetophenone	105	4.823	4.817	0.006	91	1013239	12.5	12.8	
35 N-Nitrosomorpholine	56	4.840	4.834	0.006	91	579381	12.5	13.0	
36 2-Toluidine	106	4.852	4.852	0.000	94	1132946	12.5	13.7	
38 Hexachloroethane	117	4.922	4.922	0.000	91	297505	12.5	12.2	
40 Nitrobenzene	77	4.986	4.980	0.006	89	841025	12.5	12.4	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	83	345356	12.5	13.1	
43 Isophorone	82	5.213	5.207	0.006	96	1507470	12.5	12.7	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
44	2-Nitrophenol	139	5.289	5.283	0.006	91	338055	12.5	12.8	
45	2,4-Dimethylphenol	107	5.324	5.324	0.000	97	702363	12.5	15.5	
46	o,o',o''-Triethylphosphorothioat	198	5.394	5.394	0.000	82	389394	12.5	13.0	
30	Benzoic acid	105		5.406				ND	ND	U
47	Bis(2-chloroethoxy)methane	93	5.423	5.417	0.006	94	880123	12.5	12.9	
48	2,4-Dichlorophenol	162	5.516	5.510	0.006	95	582394	12.5	13.3	
49	1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	93	659833	12.5	12.6	
* 50	Naphthalene-d8	136	5.650	5.650	0.000	99	690223	5.00	5.00	
51	Naphthalene	128	5.674	5.674	0.000	98	1906007	12.5	12.6	
53	4-Chloroaniline	127	5.720	5.720	0.000	93	787079	12.5	13.4	
54	2,6-Dichlorophenol	162	5.732	5.726	0.006	94	574659	12.5	12.6	
55	Hexachloropropene	213	5.755	5.755	0.000	85	554607	12.5	13.9	
56	Hexachlorobutadiene	225	5.790	5.790	0.000	93	454806	12.5	12.9	
60	Quinoline	129	5.994	5.988	0.006	95	1239934	12.5	13.2	
62	N-Nitrosodi-n-butylamine	84	6.047	6.041	0.006	94	545493	12.5	10.0	
63	p-Phenylene diamine	108		6.058				ND	ND	U
64	4-Chloro-3-methylphenol	107	6.181	6.181	0.000	94	585663	12.5	13.2	
65	Safrole, Total	162	6.251	6.251	0.000	89	533067	12.5	13.3	
66	2-Methylnaphthalene	142	6.332	6.332	0.000	91	1239513	12.5	12.9	
67	1-Methylnaphthalene	142	6.425	6.426	-0.001	92	1171778	12.5	13.1	
68	Hexachlorocyclopentadiene	237	6.478	6.478	0.000	94	400865	12.5	13.1	
69	1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	96	743405	12.5	12.4	
70	Isosafrole Peak 1	162	6.525	6.525	0.000	92	72021	1.50	1.63	
71	2,4,6-Trichlorophenol	196	6.594	6.595	-0.001	93	416779	12.5	12.6	
72	2,4,5-Trichlorophenol	196	6.629	6.630	-0.001	94	487563	12.5	13.9	
74	Isosafrole Peak 2	162	6.740	6.740	0.000	92	528851	11.0	11.1	
75	1,1'-Biphenyl	154	6.775	6.775	0.000	93	1610419	12.5	12.8	
76	2-Chloronaphthalene	162	6.793	6.793	0.000	95	1267533	12.5	12.4	
77	1-Chloronaphthalene	162	6.816	6.810	0.006	98	1188192	12.5	13.6	
78	Phenyl ether	170	6.880	6.874	0.006	87	885661	12.5	12.7	
79	2-Nitroaniline	138	6.892	6.886	0.006	78	381910	12.5	13.3	
81	1,4-Naphthoquinone	158	6.962	6.962	0.000	86	520553	12.5	14.7	
84	1,4-Dinitrobenzene	168	7.026	7.020	0.006	90	214247	12.5	13.4	
85	Dimethyl phthalate	163	7.067	7.067	0.000	99	1459280	12.5	12.7	
86	1,3-Dinitrobenzene	168	7.090	7.090	0.000	84	242324	12.5	13.5	
87	2,6-Dinitrotoluene	165	7.125	7.119	0.006	93	328544	12.5	13.0	
88	Acenaphthylene	152	7.183	7.183	0.000	99	1929377	12.5	12.9	
89	3-Nitroaniline	138	7.276	7.276	0.000	86	335971	12.5	13.3	
* 90	Acenaphthene-d10	164	7.317	7.317	0.000	94	415145	5.00	5.00	
91	Acenaphthene	153	7.352	7.346	0.006	95	1293544	12.5	12.4	
92	2,4-Dinitrophenol	184	7.376	7.376	0.000	86	429664	25.0	26.1	
93	4-Nitrophenol	109	7.440	7.434	0.006	84	465471	25.0	27.6	
94	Pentachlorobenzene	250	7.475	7.469	0.006	98	646426	12.5	13.3	
95	2,4-Dinitrotoluene	165	7.504	7.498	0.006	93	437910	12.5	12.9	
96	Dibenzofuran	168	7.515	7.510	0.005	97	1842760	12.5	12.6	
97	1-Naphthylamine	143	7.591	7.585	0.006	98	1030341	12.5	12.1	
98	2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	71	446743	12.5	14.0	
99	2-Naphthylamine	143	7.661	7.661	0.000	96	1260778	12.5	13.4	
100	Diethyl phthalate	149	7.743	7.737	0.006	98	1386953	12.5	12.6	
101	Thionazin	107	7.813	7.813	0.000	79	231647	12.5	12.9	
102	Fluorene	166	7.836	7.836	0.000	93	1410430	12.5	13.0	
103	4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	90	748583	12.5	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 N-Nitro-o-toluidine	152	7.848	7.848	0.000	88	377774	12.5	13.6	
105 4-Nitroaniline	138	7.859	7.854	0.005	79	339291	12.5	13.0	
106 4,6-Dinitro-2-methylphenol	198	7.883	7.883	0.000	84	582348	25.0	26.8	
107 N-Nitrosodiphenylamine	169	7.953	7.953	0.000	62	1041292	10.6	11.0	
108 1,2-Diphenylhydrazine	77	7.993	7.988	0.005	41	1627455	12.5	13.4	
110 Sulfotepp	97	8.110	8.104	0.006	76	266986	12.5	13.6	
112 1,3,5-Trinitrobenzene	213	8.203	8.197	0.006	84	174979	12.5	14.3	
113 cis-Diallate	86	8.227	8.227	-0.001	0	491262	9.38	9.67	
114 Phorate	75	8.238	8.232	0.006	95	943224	12.5	13.3	
115 Phenacetin	108	8.250	8.244	0.006	93	724984	12.5	14.1	
116 4-Bromophenyl phenyl ether	248	8.308	8.302	0.006	70	449438	12.5	12.5	
117 trans-Diallate	86	8.314	8.314	0.000	0	160367	3.13	3.15	
118 Hexachlorobenzene	284	8.355	8.355	0.000	95	486450	12.5	12.4	
119 Dimethoate	87	8.396	8.390	0.006	95	554511	12.5	13.5	
121 Pentachlorophenol	266	8.541	8.541	0.000	93	619642	25.0	25.9	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	91	1601518	12.5	12.9	
123 Pentachloronitrobenzene	237	8.553	8.553	0.000	84	231359	12.5	12.5	
124 Pronamide	173	8.611	8.605	0.006	89	671503	12.5	13.9	
125 Dinoseb	211	8.722	8.716	0.006	96	411821	12.5	14.6	
* 126 Phenanthrene-d10	188	8.728	8.722	0.006	97	791545	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	98	887949	12.5	11.8	
128 Phenanthrene	178	8.745	8.745	0.000	96	2124355	12.5	12.8	
129 Anthracene	178	8.798	8.792	0.006	97	2205206	12.5	13.1	
130 Carbazole	167	8.949	8.949	0.000	96	1853280	12.5	13.1	
131 Methyl parathion	109	9.083	9.083	0.000	94	477099	12.5	14.0	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	100	2281875	12.5	13.3	
134 Ethyl Parathion	109	9.456	9.456	0.000	85	291562	12.5	13.6	
135 4-Nitroquinoline-1-oxide	190	9.480	9.486	0.000	94	206648	12.5	13.6	
132 Methapyrilene	97		9.596				ND	ND	U
S 136 Diallate	86				0		12.5	12.8	
140 Octachlorostyrene	308	9.695	9.695	0.000	90	198868	12.5	12.8	
141 Isodrin	193	9.736	9.730	0.006	94	266769	12.5	13.1	
137 Aramite Peak 1	185		9.842				ND	ND	
138 Aramite Peak 2	185		9.865				ND	ND	
143 Fluoranthene	202	9.876	9.876	0.000	97	2413625	12.5	13.2	
139 Aramite Peak 3	185		9.906				ND	ND	
142 Aramite Peak 4	185		9.982				ND	ND	
147 Benzidine	184	10.010	10.010	0.000	99	1169598	12.5	10.9	
* 149 Pyrene-d10 (IS)	212	10.074	10.068	0.006	98	843738	5.00	5.00	
150 Pyrene	202	10.092	10.086	0.006	98	2491861	12.5	12.6	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	94	495515	12.5	15.3	
155 Chlorobenzilate	139	10.441	10.441	0.000	93	717667	12.5	14.4	
151 Famphur	218		10.739				ND	ND	U
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	99	1425267	12.5	13.6	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	97	971619	12.5	13.5	
158 2-Acetylaminofluorene	181	11.013	11.007	0.006	93	829837	12.5	13.4	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	77	812527	12.5	12.8	
160 4,4'-Methylene bis(2-chloroani	231	11.356	11.351	0.005	95	488204	12.5	14.1	
161 Benzo[a]anthracene	228	11.362	11.362	0.000	98	2286404	12.5	13.0	
162 Chrysene	228	11.409	11.403	0.006	96	2251128	12.5	13.0	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	97	1345528	12.5	13.6	
164 6-Methylchrysene	242	11.974	11.969	0.005	98	1555552	12.5	13.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.295	12.295	0.000	99	2221217	12.5	12.6	
166 7,12-Dimethylbenz(a)anthracene	256	12.761	12.755	0.006	74	954475	12.5	14.1	
167 Benzo[b]fluoranthene	252	12.761	12.755	0.006	96	2246515	12.5	13.2	
168 Benzo[k]fluoranthene	252	12.796	12.790	0.006	98	2277579	12.5	13.5	
169 Benzo[a]pyrene	252	13.216	13.210	0.006	76	2095307	12.5	13.4	
* 170 Perylene-d12	264	13.292	13.286	0.006	100	711146	5.00	5.00	
171 3-Methylcholanthrene	268	13.729	13.723	0.006	90	801436	12.5	9.89	
172 Dibenz[a,h]acridine	279	14.539	14.533	0.006	90	1681446	12.5	15.4	
173 Dibenz[a,j]acridine	279	14.615	14.609	0.006	96	1784770	12.5	14.6	
174 Indeno[1,2,3-cd]pyrene	276	14.889	14.883	0.006	98	1680922	12.5	12.0	
175 Dibenz(a,h)anthracene	278	14.941	14.929	0.012	92	1916395	12.5	13.5	
176 Benzo[g,h,i]perylene	276	15.337	15.326	0.011	98	1936736	12.5	13.4	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 182 Isosafrole	162				0		12.5	12.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

Report Date: 27-Oct-2023 07:25:12 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D

Injection Date: 26-Oct-2023 15:50:33 Instrument ID: HP19760 Operator ID: kel10217

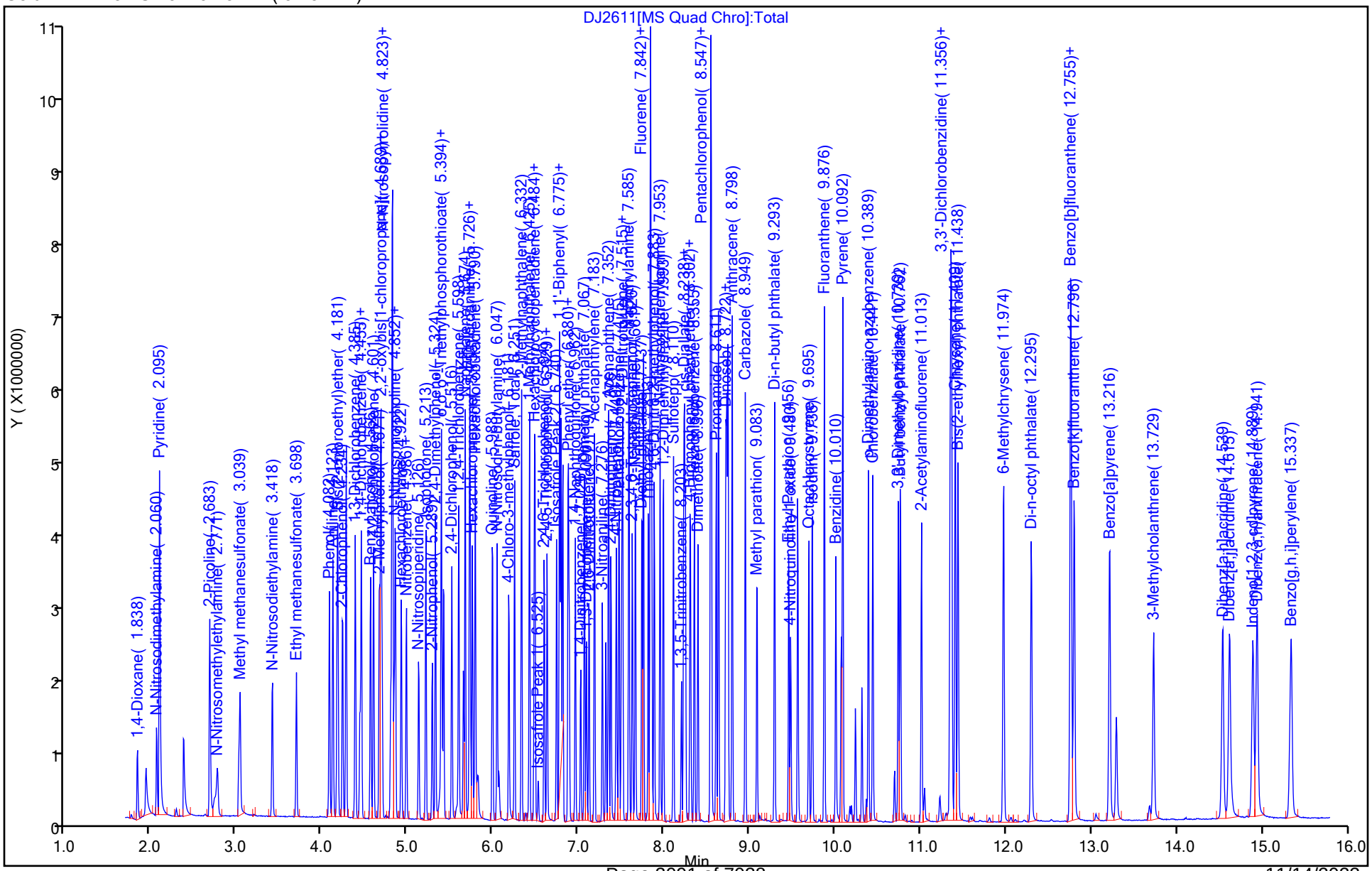
Lims ID: ICV Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

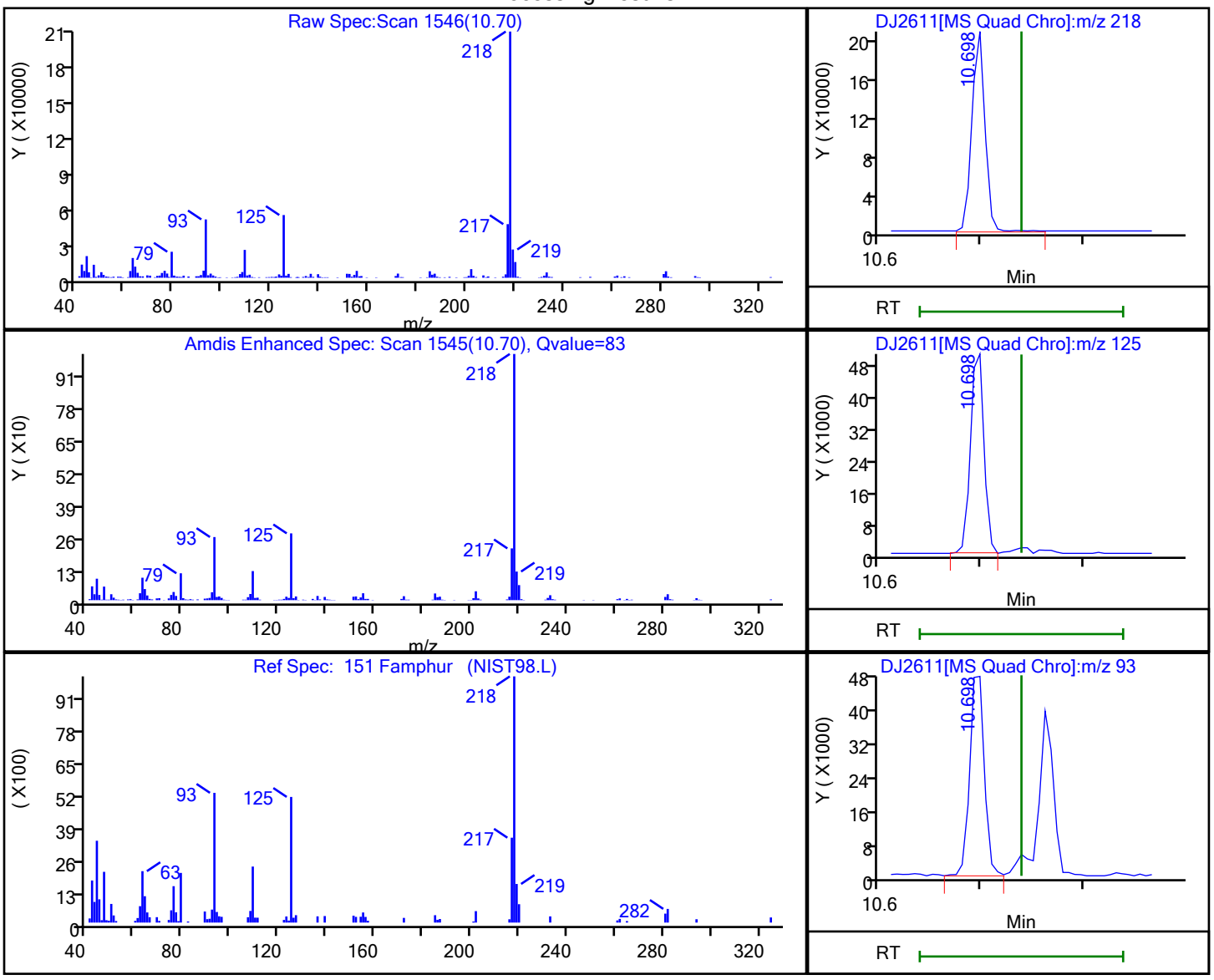
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D				
Injection Date:	26-Oct-2023 15:50:33	Instrument ID:	HP19760		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

151 Famphur, CAS: 52-85-7

Processing Results



RT	Mass	Response	Amount
10.70	218.00	176973	3.551313
10.70	125.00	47502	
10.70	93.00	47838	

Reviewer: SJ89, 27-Oct-2023 07:20:30 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

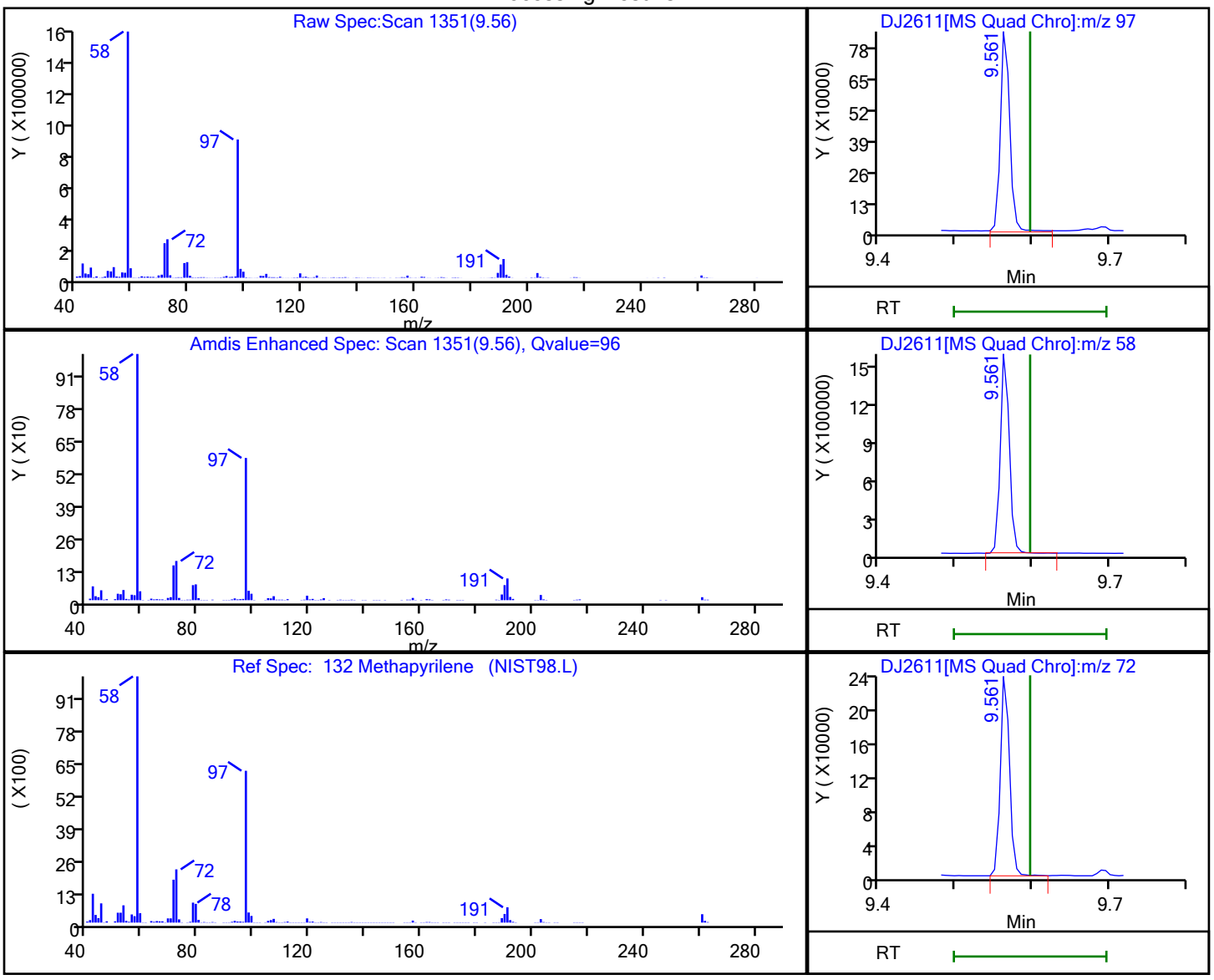
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D				
Injection Date:	26-Oct-2023 15:50:33	Instrument ID:	HP19760		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

132 Methapyrilene, CAS: 91-80-5

Processing Results



RT	Mass	Response	Amount
9.56	97.00	710932	15.565682
9.56	58.00	1241147	
9.56	72.00	195664	
9.57	191.00	105204	
9.57	261.00	13619	

Reviewer: SJ89, 27-Oct-2023 07:14:19 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-435991/12 Calibration Date: 10/26/2023 15:50

Instrument ID: HP19760 Calib Start Date: 10/18/2023 20:12

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/18/2023 22:15

Lab File ID: DJ2611.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Indene	Ave	2.568	2.853		13.9	12.5	11.1	30.0
Benzoic acid	Lin2					12.5	-100.0*	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 26-Oct-2023 15:50:33 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 410-0097721-012
Operator ID: kel10217 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:24:43 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: N5QU Date: 26-Oct-2023 20:17:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.838	1.833	0.005	93	294329	12.5	12.9	
3 N-Nitrosodimethylamine	74	2.060	2.054	0.006	96	489278	12.5	13.2	
4 Pyridine	79	2.095	2.095	0.000	89	1613224	25.0	27.3	
7 2-Picoline	93	2.683	2.684	-0.001	91	832390	12.5	13.4	
8 N-Nitrosomethylethylamine	88	2.771	2.771	0.000	94	377555	12.5	13.4	
9 Methyl methanesulfonate	80	3.039	3.033	0.006	86	451977	12.5	13.5	
11 N-Nitrosodiethylamine	102	3.418	3.412	0.006	91	352762	12.5	13.9	
12 Ethyl methanesulfonate	109	3.698	3.692	0.006	98	366018	12.5	13.0	
17 Phenol	94	4.082	4.082	0.000	93	941277	12.5	13.1	
18 Aniline	93	4.123	4.123	0.000	94	1168956	12.5	14.3	
19 Bis(2-chloroethyl)ether	93	4.181	4.181	0.000	94	755226	12.5	12.7	
20 2-Chlorophenol	128	4.240	4.234	0.006	92	675353	12.5	13.3	
21 1,3-Dichlorobenzene	146	4.385	4.385	0.000	97	796665	12.5	12.9	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	96	196616	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.455	4.455	0.000	93	811385	12.5	13.0	
25 Benzyl alcohol	108	4.566	4.560	0.006	90	456241	12.5	13.5	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	760878	12.5	13.1	
28 2-Methylphenol	108	4.665	4.665	0.000	96	646565	12.5	13.3	
29 2,2'-oxybis[1-chloropropane]	45	4.694	4.694	0.000	93	1246267	12.5	12.8	
14 Indene	115	4.683	4.694	-0.011	85	1402192	12.5	13.9	
31 N-Nitrosopyrrolidine	100	4.799	4.793	0.006	90	384459	12.5	14.4	
32 4-Methylphenol	108	4.817	4.811	0.006	96	669788	12.5	13.6	
33 N-Nitrosodi-n-propylamine	70	4.823	4.817	0.006	76	580506	12.5	12.6	
34 Acetophenone	105	4.823	4.817	0.006	91	1013239	12.5	12.8	
35 N-Nitrosomorpholine	56	4.840	4.834	0.006	91	579381	12.5	13.0	
36 2-Toluidine	106	4.852	4.852	0.000	94	1132946	12.5	13.7	
38 Hexachloroethane	117	4.922	4.922	0.000	91	297505	12.5	12.2	
40 Nitrobenzene	77	4.986	4.980	0.006	89	841025	12.5	12.4	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	83	345356	12.5	13.1	
43 Isophorone	82	5.213	5.207	0.006	96	1507470	12.5	12.7	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
44	2-Nitrophenol	139	5.289	5.283	0.006	91	338055	12.5	12.8	
45	2,4-Dimethylphenol	107	5.324	5.324	0.000	97	702363	12.5	15.5	
46	o,o',o''-Triethylphosphorothioat	198	5.394	5.394	0.000	82	389394	12.5	13.0	
30	Benzoic acid	105		5.406				ND	ND	U
47	Bis(2-chloroethoxy)methane	93	5.423	5.417	0.006	94	880123	12.5	12.9	
48	2,4-Dichlorophenol	162	5.516	5.510	0.006	95	582394	12.5	13.3	
49	1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	93	659833	12.5	12.6	
* 50	Naphthalene-d8	136	5.650	5.650	0.000	99	690223	5.00	5.00	
51	Naphthalene	128	5.674	5.674	0.000	98	1906007	12.5	12.6	
53	4-Chloroaniline	127	5.720	5.720	0.000	93	787079	12.5	13.4	
54	2,6-Dichlorophenol	162	5.732	5.726	0.006	94	574659	12.5	12.6	
55	Hexachloropropene	213	5.755	5.755	0.000	85	554607	12.5	13.9	
56	Hexachlorobutadiene	225	5.790	5.790	0.000	93	454806	12.5	12.9	
60	Quinoline	129	5.994	5.988	0.006	95	1239934	12.5	13.2	
62	N-Nitrosodi-n-butylamine	84	6.047	6.041	0.006	94	545493	12.5	10.0	
63	p-Phenylene diamine	108		6.058				ND	ND	U
64	4-Chloro-3-methylphenol	107	6.181	6.181	0.000	94	585663	12.5	13.2	
65	Safrole, Total	162	6.251	6.251	0.000	89	533067	12.5	13.3	
66	2-Methylnaphthalene	142	6.332	6.332	0.000	91	1239513	12.5	12.9	
67	1-Methylnaphthalene	142	6.425	6.426	-0.001	92	1171778	12.5	13.1	
68	Hexachlorocyclopentadiene	237	6.478	6.478	0.000	94	400865	12.5	13.1	
69	1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	96	743405	12.5	12.4	
70	Isosafrole Peak 1	162	6.525	6.525	0.000	92	72021	1.50	1.63	
71	2,4,6-Trichlorophenol	196	6.594	6.595	-0.001	93	416779	12.5	12.6	
72	2,4,5-Trichlorophenol	196	6.629	6.630	-0.001	94	487563	12.5	13.9	
74	Isosafrole Peak 2	162	6.740	6.740	0.000	92	528851	11.0	11.1	
75	1,1'-Biphenyl	154	6.775	6.775	0.000	93	1610419	12.5	12.8	
76	2-Chloronaphthalene	162	6.793	6.793	0.000	95	1267533	12.5	12.4	
77	1-Chloronaphthalene	162	6.816	6.810	0.006	98	1188192	12.5	13.6	
78	Phenyl ether	170	6.880	6.874	0.006	87	885661	12.5	12.7	
79	2-Nitroaniline	138	6.892	6.886	0.006	78	381910	12.5	13.3	
81	1,4-Naphthoquinone	158	6.962	6.962	0.000	86	520553	12.5	14.7	
84	1,4-Dinitrobenzene	168	7.026	7.020	0.006	90	214247	12.5	13.4	
85	Dimethyl phthalate	163	7.067	7.067	0.000	99	1459280	12.5	12.7	
86	1,3-Dinitrobenzene	168	7.090	7.090	0.000	84	242324	12.5	13.5	
87	2,6-Dinitrotoluene	165	7.125	7.119	0.006	93	328544	12.5	13.0	
88	Acenaphthylene	152	7.183	7.183	0.000	99	1929377	12.5	12.9	
89	3-Nitroaniline	138	7.276	7.276	0.000	86	335971	12.5	13.3	
* 90	Acenaphthene-d10	164	7.317	7.317	0.000	94	415145	5.00	5.00	
91	Acenaphthene	153	7.352	7.346	0.006	95	1293544	12.5	12.4	
92	2,4-Dinitrophenol	184	7.376	7.376	0.000	86	429664	25.0	26.1	
93	4-Nitrophenol	109	7.440	7.434	0.006	84	465471	25.0	27.6	
94	Pentachlorobenzene	250	7.475	7.469	0.006	98	646426	12.5	13.3	
95	2,4-Dinitrotoluene	165	7.504	7.498	0.006	93	437910	12.5	12.9	
96	Dibenzofuran	168	7.515	7.510	0.005	97	1842760	12.5	12.6	
97	1-Naphthylamine	143	7.591	7.585	0.006	98	1030341	12.5	12.1	
98	2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	71	446743	12.5	14.0	
99	2-Naphthylamine	143	7.661	7.661	0.000	96	1260778	12.5	13.4	
100	Diethyl phthalate	149	7.743	7.737	0.006	98	1386953	12.5	12.6	
101	Thionazin	107	7.813	7.813	0.000	79	231647	12.5	12.9	
102	Fluorene	166	7.836	7.836	0.000	93	1410430	12.5	13.0	
103	4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	90	748583	12.5	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 N-Nitro-o-toluidine	152	7.848	7.848	0.000	88	377774	12.5	13.6	
105 4-Nitroaniline	138	7.859	7.854	0.005	79	339291	12.5	13.0	
106 4,6-Dinitro-2-methylphenol	198	7.883	7.883	0.000	84	582348	25.0	26.8	
107 N-Nitrosodiphenylamine	169	7.953	7.953	0.000	62	1041292	10.6	11.0	
108 1,2-Diphenylhydrazine	77	7.993	7.988	0.005	41	1627455	12.5	13.4	
110 Sulfotepp	97	8.110	8.104	0.006	76	266986	12.5	13.6	
112 1,3,5-Trinitrobenzene	213	8.203	8.197	0.006	84	174979	12.5	14.3	
113 cis-Diallate	86	8.227	8.227	-0.001	0	491262	9.38	9.67	
114 Phorate	75	8.238	8.232	0.006	95	943224	12.5	13.3	
115 Phenacetin	108	8.250	8.244	0.006	93	724984	12.5	14.1	
116 4-Bromophenyl phenyl ether	248	8.308	8.302	0.006	70	449438	12.5	12.5	
117 trans-Diallate	86	8.314	8.314	0.000	0	160367	3.13	3.15	
118 Hexachlorobenzene	284	8.355	8.355	0.000	95	486450	12.5	12.4	
119 Dimethoate	87	8.396	8.390	0.006	95	554511	12.5	13.5	
121 Pentachlorophenol	266	8.541	8.541	0.000	93	619642	25.0	25.9	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	91	1601518	12.5	12.9	
123 Pentachloronitrobenzene	237	8.553	8.553	0.000	84	231359	12.5	12.5	
124 Pronamide	173	8.611	8.605	0.006	89	671503	12.5	13.9	
125 Dinoseb	211	8.722	8.716	0.006	96	411821	12.5	14.6	
* 126 Phenanthrene-d10	188	8.728	8.722	0.006	97	791545	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	98	887949	12.5	11.8	
128 Phenanthrene	178	8.745	8.745	0.000	96	2124355	12.5	12.8	
129 Anthracene	178	8.798	8.792	0.006	97	2205206	12.5	13.1	
130 Carbazole	167	8.949	8.949	0.000	96	1853280	12.5	13.1	
131 Methyl parathion	109	9.083	9.083	0.000	94	477099	12.5	14.0	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	100	2281875	12.5	13.3	
134 Ethyl Parathion	109	9.456	9.456	0.000	85	291562	12.5	13.6	
135 4-Nitroquinoline-1-oxide	190	9.480	9.486	0.000	94	206648	12.5	13.6	
132 Methapyrilene	97		9.596				ND	ND	U
S 136 Diallate	86				0		12.5	12.8	
140 Octachlorostyrene	308	9.695	9.695	0.000	90	198868	12.5	12.8	
141 Isodrin	193	9.736	9.730	0.006	94	266769	12.5	13.1	
137 Aramite Peak 1	185		9.842				ND	ND	
138 Aramite Peak 2	185		9.865				ND	ND	
143 Fluoranthene	202	9.876	9.876	0.000	97	2413625	12.5	13.2	
139 Aramite Peak 3	185		9.906				ND	ND	
142 Aramite Peak 4	185		9.982				ND	ND	
147 Benzidine	184	10.010	10.010	0.000	99	1169598	12.5	10.9	
* 149 Pyrene-d10 (IS)	212	10.074	10.068	0.006	98	843738	5.00	5.00	
150 Pyrene	202	10.092	10.086	0.006	98	2491861	12.5	12.6	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	94	495515	12.5	15.3	
155 Chlorobenzilate	139	10.441	10.441	0.000	93	717667	12.5	14.4	
151 Famphur	218		10.739				ND	ND	U
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	99	1425267	12.5	13.6	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	97	971619	12.5	13.5	
158 2-Acetylaminofluorene	181	11.013	11.007	0.006	93	829837	12.5	13.4	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	77	812527	12.5	12.8	
160 4,4'-Methylene bis(2-chloroani	231	11.356	11.351	0.005	95	488204	12.5	14.1	
161 Benzo[a]anthracene	228	11.362	11.362	0.000	98	2286404	12.5	13.0	
162 Chrysene	228	11.409	11.403	0.006	96	2251128	12.5	13.0	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	97	1345528	12.5	13.6	
164 6-Methylchrysene	242	11.974	11.969	0.005	98	1555552	12.5	13.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.295	12.295	0.000	99	2221217	12.5	12.6	
166 7,12-Dimethylbenz(a)anthracene	256	12.761	12.755	0.006	74	954475	12.5	14.1	
167 Benzo[b]fluoranthene	252	12.761	12.755	0.006	96	2246515	12.5	13.2	
168 Benzo[k]fluoranthene	252	12.796	12.790	0.006	98	2277579	12.5	13.5	
169 Benzo[a]pyrene	252	13.216	13.210	0.006	76	2095307	12.5	13.4	
* 170 Perylene-d12	264	13.292	13.286	0.006	100	711146	5.00	5.00	
171 3-Methylcholanthrene	268	13.729	13.723	0.006	90	801436	12.5	9.89	
172 Dibenz[a,h]acridine	279	14.539	14.533	0.006	90	1681446	12.5	15.4	
173 Dibenz[a,j]acridine	279	14.615	14.609	0.006	96	1784770	12.5	14.6	
174 Indeno[1,2,3-cd]pyrene	276	14.889	14.883	0.006	98	1680922	12.5	12.0	
175 Dibenz(a,h)anthracene	278	14.941	14.929	0.012	92	1916395	12.5	13.5	
176 Benzo[g,h,i]perylene	276	15.337	15.326	0.011	98	1936736	12.5	13.4	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 182 Isosafrole	162				0		12.5	12.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

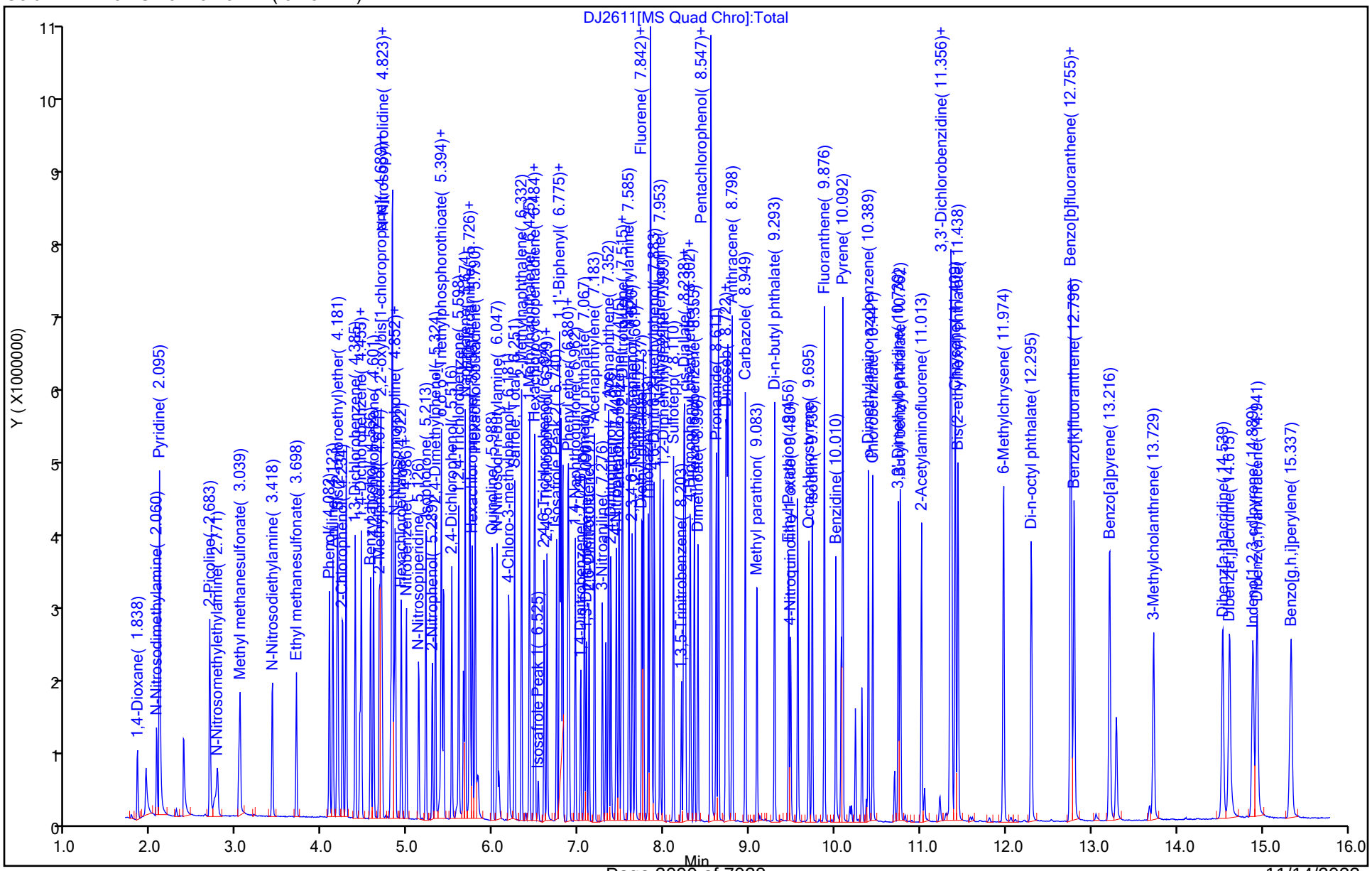
Report Date: 27-Oct-2023 07:25:12 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D

Injection Date:	26-Oct-2023 15:50:33	Instrument ID:	HP19760	Operator ID:	kel10217
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

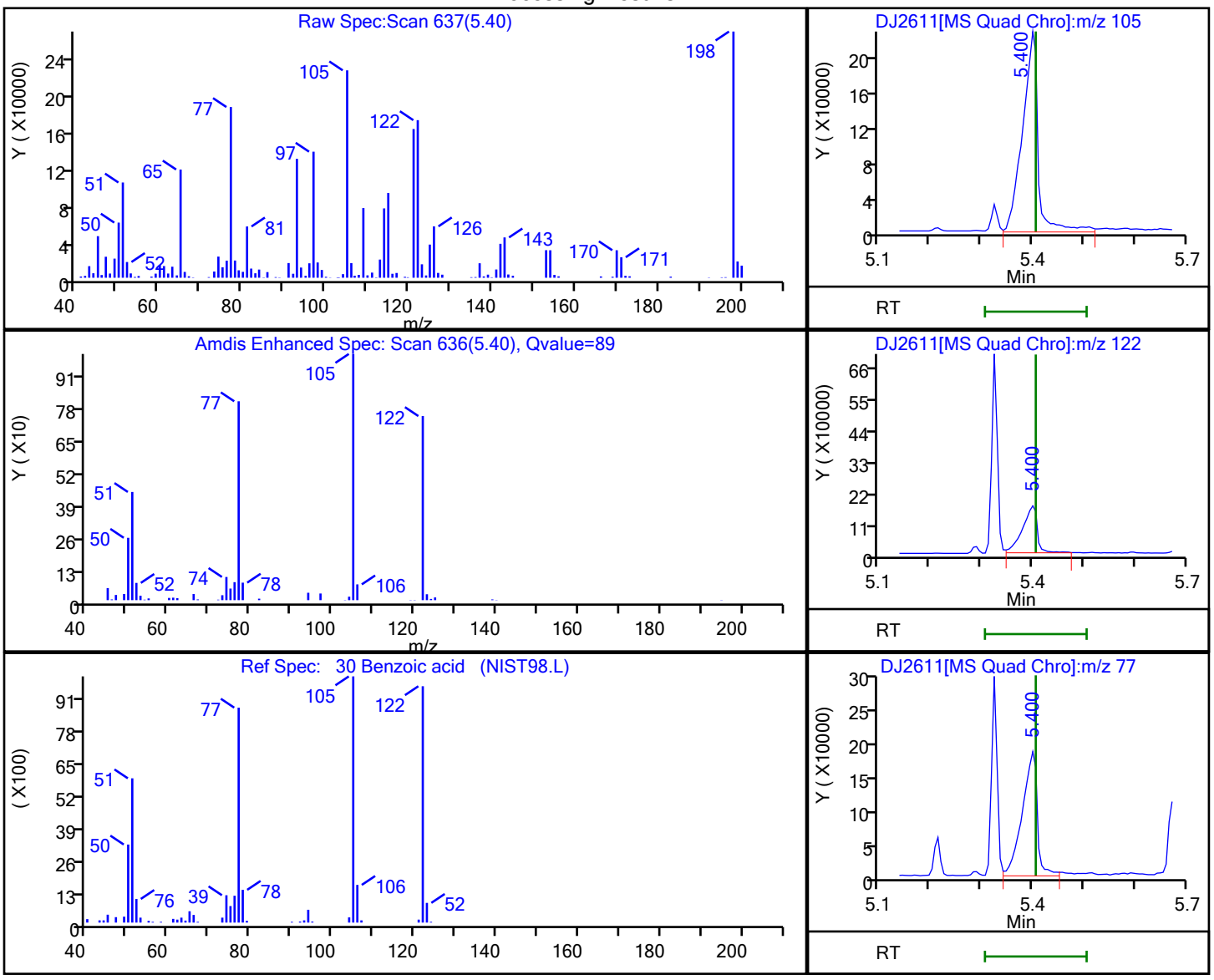
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D				
Injection Date:	26-Oct-2023 15:50:33	Instrument ID:	HP19760		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

30 Benzoic acid, CAS: 65-85-0

Processing Results



RT	Mass	Response	Amount
5.40	105.00	462844	14.297383
5.40	122.00	352098	
5.40	77.00	374538	

Reviewer: SJ89, 27-Oct-2023 07:15:17 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-435991/12 Calibration Date: 10/26/2023 15:50

Instrument ID: HP19760 Calib Start Date: 10/26/2023 12:12

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/26/2023 14:48

Lab File ID: DJ2611.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5782	0.5988		12.9	12.5	3.6	30.0
N-Nitrosodimethylamine	Ave	0.9391	0.995		13.2	12.5	6.0	30.0
Pyridine	Ave	1.502	1.641		27.3	25.0	9.3	30.0
2-Picoline	Ave	1.580	1.693		13.4	12.5	7.1	30.0
N-Nitrosomethylethylamine	Lin2		0.7681		13.4	12.5	7.2	30.0
Methyl methanesulfonate	Ave	0.8544	0.9195		13.5	12.5	7.6	30.0
N-Nitrosodiethylamine	Ave	0.6457	0.7177		13.9	12.5	11.1	30.0
Ethyl methanesulfonate	Ave	0.7135	0.7446		13.0	12.5	4.4	30.0
Phenol	Ave	1.823	1.915	0.8000	13.1	12.5	5.0	30.0
Aniline	Ave	2.086	2.378		14.3	12.5	14.0	30.0
Bis(2-chloroethyl)ether	Ave	1.513	1.536	0.7000	12.7	12.5	1.5	30.0
2-Chlorophenol	Ave	1.291	1.374	0.8000	13.3	12.5	6.4	30.0
1,3-Dichlorobenzene	Ave	1.573	1.621		12.9	12.5	3.1	30.0
1,4-Dichlorobenzene	Ave	1.582	1.651		13.0	12.5	4.4	30.0
Benzyl alcohol	Ave	0.8595	0.9282		13.5	12.5	8.0	30.0
1,2-Dichlorobenzene	Ave	1.476	1.548		13.1	12.5	4.8	30.0
2-Methylphenol	Ave	1.234	1.315	0.7000	13.3	12.5	6.6	30.0
2,2'-oxybis[1-chloropropane]	Ave	2.480	2.535	0.0100	12.8	12.5	2.2	30.0
N-Nitrosopyrrolidine	Ave	0.6789	0.7822		14.4	12.5	15.2	30.0
3,4-Methylphenol	Ave	1.256	1.363	0.6000	13.6	12.5	8.5	30.0
Acetophenone	Ave	2.019	2.061	0.0100	12.8	12.5	2.1	30.0
N-Nitrosodi-n-propylamine	Ave	1.171	1.181	0.5000	12.6	12.5	0.9	30.0
N-Nitrosomorpholine	Ave	1.131	1.179		13.0	12.5	4.2	30.0
o-Toluidine	Ave	2.100	2.305		13.7	12.5	9.7	30.0
Hexachloroethane	Ave	0.6190	0.6053	0.3000	12.2	12.5	-2.2	30.0
Nitrobenzene	Ave	0.4918	0.4874	0.2000	12.4	12.5	-0.9	30.0
N-Nitrosopiperidine	Ave	0.1909	0.2001		13.1	12.5	4.9	30.0
Isophorone	Ave	0.8597	0.8736	0.4000	12.7	12.5	1.6	30.0
2-Nitrophenol	Ave	0.1913	0.1959	0.1000	12.8	12.5	2.4	30.0
2,4-Dimethylphenol	Ave	0.3287	0.4070	0.2000	15.5	12.5	23.8	30.0
o,o',o''-Triethylphosphorothioate	Ave	0.2175	0.2257		13.0	12.5	3.7	30.0
Bis(2-chloroethoxy)methane	Ave	0.4932	0.5101	0.3000	12.9	12.5	3.4	30.0
2,4-Dichlorophenol	Ave	0.3180	0.3375	0.2000	13.3	12.5	6.1	30.0
1,2,4-Trichlorobenzene	Ave	0.3787	0.3824		12.6	12.5	1.0	30.0
Naphthalene	Ave	1.095	1.105	0.7000	12.6	12.5	0.9	30.0
4-Chloroaniline	Ave	0.4246	0.4561	0.0100	13.4	12.5	7.4	30.0
2,6-Dichlorophenol	Ave	0.3294	0.3330		12.6	12.5	1.1	30.0
Hexachloropropene	Ave	0.2897	0.3214		13.9	12.5	10.9	30.0
Hexachlorobutadiene	Ave	0.2552	0.2636	0.0100	12.9	12.5	3.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-435991/12 Calibration Date: 10/26/2023 15:50

Instrument ID: HP19760 Calib Start Date: 10/26/2023 12:12

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/26/2023 14:48

Lab File ID: DJ2611.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Quinoline	Ave	0.6801	0.7186		13.2	12.5	5.7	30.0
N-Nitrosodi-n-butylamine	Ave	0.3951	0.3161		10.0	12.5	-20.0	30.0
4-Chloro-3-methylphenol	Ave	0.3216	0.3394	0.2000	13.2	12.5	5.5	30.0
Safrole, Total	Ave	0.2903	0.3089		13.3	12.5	6.4	30.0
2-Methylnaphthalene	Ave	0.6960	0.7183	0.4000	12.9	12.5	3.2	30.0
1-Methylnaphthalene	Ave	0.6481	0.6791		13.1	12.5	4.8	30.0
Hexachlorocyclopentadiene	Ave	0.3698	0.3862	0.0500	13.1	12.5	4.5	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7246	0.7163	0.0100	12.4	12.5	-1.1	30.0
Isosafrole Peak 1	Ave	0.5332	0.5783		1.63	1.50	8.4	30.0
2,4,6-Trichlorophenol	Ave	0.3974	0.4016	0.2000	12.6	12.5	1.1	30.0
2,4,5-Trichlorophenol	Ave	0.4227	0.4698	0.2000	13.9	12.5	11.1	30.0
Isosafrole Peak 2	Ave	0.5738	0.5790		11.1	11.0	0.9	30.0
1,1'-Biphenyl	Ave	1.517	1.552	0.0100	12.8	12.5	2.3	30.0
2-Chloronaphthalene	Ave	1.232	1.221	0.8000	12.4	12.5	-0.9	30.0
1-Chloronaphthalene	Ave	1.055	1.145		13.6	12.5	8.6	30.0
Diphenyl ether	Ave	0.8368	0.8534		12.7	12.5	2.0	30.0
2-Nitroaniline	Ave	0.3467	0.3680	0.0100	13.3	12.5	6.2	30.0
1,4-Naphthoquinone	Ave	0.4256	0.5016		14.7	12.5	17.9	30.0
1,4-Dinitrobenzene	Ave	0.1924	0.2064		13.4	12.5	7.3	30.0
Dimethyl phthalate	Ave	1.387	1.406	0.0100	12.7	12.5	1.4	30.0
1,3-Dinitrobenzene	Ave	0.2155	0.2335		13.5	12.5	8.4	30.0
2,6-Dinitrotoluene	Ave	0.3036	0.3166	0.2000	13.0	12.5	4.3	30.0
Acenaphthylene	Ave	1.796	1.859	0.9000	12.9	12.5	3.5	30.0
3-Nitroaniline	Ave	0.3047	0.3237	0.0100	13.3	12.5	6.2	30.0
Acenaphthene	Ave	1.254	1.246	0.9000	12.4	12.5	-0.6	30.0
2,4-Dinitrophenol	Ave	0.1982	0.2070	0.0100	26.1	25.0	4.4	30.0
4-Nitrophenol	Ave	0.2030	0.2242	0.0100	27.6	25.0	10.5	30.0
Pentachlorobenzene	Ave	0.5846	0.6228		13.3	12.5	6.5	30.0
2,4-Dinitrotoluene	Ave	0.4074	0.4219	0.2000	12.9	12.5	3.6	30.0
Dibenzofuran	Ave	1.768	1.776	0.8000	12.6	12.5	0.4	30.0
1-Naphthylamine	Ave	1.026	0.9928		12.1	12.5	-3.2	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3855	0.4304	0.0100	14.0	12.5	11.7	30.0
2-Naphthylamine	Ave	1.130	1.215		13.4	12.5	7.5	30.0
Diethyl phthalate	Ave	1.325	1.336	0.0100	12.6	12.5	0.8	30.0
Thionazin	Ave	0.2159	0.2232		12.9	12.5	3.4	30.0
Fluorene	Ave	1.308	1.359	0.9000	13.0	12.5	3.9	30.0
4-Chlorophenyl-phenyl ether	Ave	0.7159	0.7213	0.4000	12.6	12.5	0.7	30.0
5-Nitro-o-toluidine	Ave	0.3355	0.3640		13.6	12.5	8.5	30.0
4-Nitroaniline	Ave	0.3154	0.3269	0.0100	13.0	12.5	3.7	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1372	0.1471	0.0100	26.8	25.0	7.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-435991/12 Calibration Date: 10/26/2023 15:50

Instrument ID: HP19760 Calib Start Date: 10/26/2023 12:12

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/26/2023 14:48

Lab File ID: DJ2611.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodiphenylamine	Ave	0.5983	0.6191	0.0100	11.0	10.6	3.5	30.0
1,2-Diphenylhydrazine	Ave	0.7672	0.8224		13.4	12.5	7.2	30.0
Sulfotepp	Ave	0.1241	0.1349		13.6	12.5	8.7	30.0
1,3,5-Trinitrobenzene	Ave	0.0775	0.0884			12.5	14.2	30.0
cis-Diallate	Ave	0.3210	0.3310		9.67	9.38	3.1	30.0
Phorate	Ave	0.4477	0.4766		13.3	12.5	6.5	30.0
Phenacetin	Ave	0.3249	0.3664		14.1	12.5	12.8	30.0
4-Bromophenyl-phenylether	Ave	0.2276	0.2271	0.1000	12.5	12.5	-0.2	30.0
trans-Diallate	Ave	0.3216	0.3242		3.15	3.13	0.8	30.0
Hexachlorobenzene	Ave	0.2486	0.2458	0.1000	12.4	12.5	-1.1	30.0
Dimethoate	Ave	0.2601	0.2802		13.5	12.5	7.7	30.0
Pentachlorophenol	Ave	0.1509	0.1566	0.0500	25.9	25.0	3.8	30.0
4-Aminobiphenyl	Ave	0.7850	0.8093		12.9	12.5	3.1	30.0
Pentachloronitrobenzene	Ave	0.1166	0.1169		12.5	12.5	0.3	30.0
Pronamide	Ave	0.3052	0.3393		13.9	12.5	11.2	30.0
Dinoseb	Ave	0.1786	0.2081		14.6	12.5	16.5	30.0
Disulfoton	Ave	0.4758	0.4487		11.8	12.5	-5.7	30.0
Phenanthrene	Ave	1.052	1.074	0.7000	12.8	12.5	2.1	30.0
Anthracene	Ave	1.062	1.114	0.7000	13.1	12.5	4.9	30.0
Carbazole	Ave	0.8949	0.9365	0.0100	13.1	12.5	4.6	30.0
Methyl parathion	Ave	0.2159	0.2411		14.0	12.5	11.7	30.0
Di-n-butyl phthalate	Ave	1.086	1.153	0.0100	13.3	12.5	6.2	30.0
Parathion	Ave	0.1354	0.1473		13.6	12.5	8.8	30.0
4-Nitroquinoline-1-oxide	Ave	0.0960	0.1044		13.6	12.5	8.8	30.0
Octachlorostyrene	Ave	0.0985	0.1005		12.8	12.5	2.0	30.0
Isodrin	Ave	0.1291	0.1348		13.1	12.5	4.4	30.0
Fluoranthene	Ave	1.153	1.220	0.6000	13.2	12.5	5.8	30.0
Benzidine	Ave	0.6376	0.5545		10.9	12.5	-13.0	30.0
Pyrene	Ave	1.172	1.181	0.6000	12.6	12.5	0.8	30.0
p-Dimethylamino azobenzene	Ave	0.1924	0.2349		15.3	12.5	22.1	30.0
Chlorobenzilate	Ave	0.2957	0.3402		14.4	12.5	15.1	30.0
3,3'-Dimethylbenzidine	Ave	0.6217	0.6757		13.6	12.5	8.7	30.0
Butylbenzylphthalate	Ave	0.4267	0.4606	0.0100	13.5	12.5	8.0	30.0
2-Acetylaminofluorene	Ave	0.3665	0.3934		13.4	12.5	7.3	30.0
3,3'-Dichlorobenzidine	Ave	0.3758	0.3852	0.0100	12.8	12.5	2.5	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2048	0.2314		14.1	12.5	13.0	30.0
Benzo[a]anthracene	Ave	1.043	1.084	0.8000	13.0	12.5	4.0	30.0
Chrysene	Ave	1.026	1.067	0.7000	13.0	12.5	4.0	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.5884	0.6379	0.0100	13.6	12.5	8.4	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-435991/12 Calibration Date: 10/26/2023 15:50

Instrument ID: HP19760 Calib Start Date: 10/26/2023 12:12

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/26/2023 14:48

Lab File ID: DJ2611.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
6-Methylchrysene	Ave	0.6883	0.7375		13.4	12.5	7.1	30.0
Di-n-octyl phthalate	Ave	1.237	1.249	0.0100	12.6	12.5	1.0	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.4768	0.5369		14.1	12.5	12.6	30.0
Benzo[b]fluoranthene	Ave	1.192	1.264	0.7000	13.2	12.5	6.0	30.0
Benzo[k]fluoranthene	Ave	1.186	1.281	0.7000	13.5	12.5	8.0	30.0
Benzo[a]pyrene	Ave	1.097	1.179	0.7000	13.4	12.5	7.5	30.0
3-Methylcholanthrene	Ave	0.5695	0.4508		9.89	12.5	-20.8	30.0
Dibenz[a,h]acridine	Ave	0.7684	0.9458		15.4	12.5	23.1	30.0
Dibenz[a,j]acridine	Ave	0.8584	1.004		14.6	12.5	16.9	30.0
Indeno[1,2,3-cd]pyrene	Ave	0.9831	0.9455	0.5000	12.0	12.5	-3.8	30.0
Dibenz(a,h)anthracene	Ave	1.001	1.078	0.4000	13.5	12.5	7.7	30.0
Benzo[g,h,i]perylene	Ave	1.016	1.089	0.5000	13.4	12.5	7.3	30.0
1,4-phenylenediamine	Ave	0.3408				12.5		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 26-Oct-2023 15:50:33 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 410-0097721-012
Operator ID: kel10217 Instrument ID: HP19760
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:24:43 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: N5QU Date: 26-Oct-2023 20:17:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	1.838	1.833	0.005	93	294329	12.5	12.9	
3 N-Nitrosodimethylamine	74	2.060	2.054	0.006	96	489278	12.5	13.2	
4 Pyridine	79	2.095	2.095	0.000	89	1613224	25.0	27.3	
7 2-Picoline	93	2.683	2.684	-0.001	91	832390	12.5	13.4	
8 N-Nitrosomethylethylamine	88	2.771	2.771	0.000	94	377555	12.5	13.4	
9 Methyl methanesulfonate	80	3.039	3.033	0.006	86	451977	12.5	13.5	
11 N-Nitrosodiethylamine	102	3.418	3.412	0.006	91	352762	12.5	13.9	
12 Ethyl methanesulfonate	109	3.698	3.692	0.006	98	366018	12.5	13.0	
17 Phenol	94	4.082	4.082	0.000	93	941277	12.5	13.1	
18 Aniline	93	4.123	4.123	0.000	94	1168956	12.5	14.3	
19 Bis(2-chloroethyl)ether	93	4.181	4.181	0.000	94	755226	12.5	12.7	
20 2-Chlorophenol	128	4.240	4.234	0.006	92	675353	12.5	13.3	
21 1,3-Dichlorobenzene	146	4.385	4.385	0.000	97	796665	12.5	12.9	
* 22 1,4-Dichlorobenzene-d4	152	4.438	4.438	0.000	96	196616	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.455	4.455	0.000	93	811385	12.5	13.0	
25 Benzyl alcohol	108	4.566	4.560	0.006	90	456241	12.5	13.5	
26 1,2-Dichlorobenzene	146	4.601	4.601	0.000	96	760878	12.5	13.1	
28 2-Methylphenol	108	4.665	4.665	0.000	96	646565	12.5	13.3	
29 2,2'-oxybis[1-chloropropane]	45	4.694	4.694	0.000	93	1246267	12.5	12.8	
14 Indene	115	4.683	4.694	-0.011	85	1402192	12.5	13.9	
31 N-Nitrosopyrrolidine	100	4.799	4.793	0.006	90	384459	12.5	14.4	
32 4-Methylphenol	108	4.817	4.811	0.006	96	669788	12.5	13.6	
33 N-Nitrosodi-n-propylamine	70	4.823	4.817	0.006	76	580506	12.5	12.6	
34 Acetophenone	105	4.823	4.817	0.006	91	1013239	12.5	12.8	
35 N-Nitrosomorpholine	56	4.840	4.834	0.006	91	579381	12.5	13.0	
36 2-Toluidine	106	4.852	4.852	0.000	94	1132946	12.5	13.7	
38 Hexachloroethane	117	4.922	4.922	0.000	91	297505	12.5	12.2	
40 Nitrobenzene	77	4.986	4.980	0.006	89	841025	12.5	12.4	
42 N-Nitrosopiperidine	114	5.126	5.126	0.000	83	345356	12.5	13.1	
43 Isophorone	82	5.213	5.207	0.006	96	1507470	12.5	12.7	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
44	2-Nitrophenol	139	5.289	5.283	0.006	91	338055	12.5	12.8	
45	2,4-Dimethylphenol	107	5.324	5.324	0.000	97	702363	12.5	15.5	
46	o,o',o''-Triethylphosphorothioat	198	5.394	5.394	0.000	82	389394	12.5	13.0	
30	Benzoic acid	105		5.406				ND	ND	U
47	Bis(2-chloroethoxy)methane	93	5.423	5.417	0.006	94	880123	12.5	12.9	
48	2,4-Dichlorophenol	162	5.516	5.510	0.006	95	582394	12.5	13.3	
49	1,2,4-Trichlorobenzene	180	5.598	5.598	0.000	93	659833	12.5	12.6	
* 50	Naphthalene-d8	136	5.650	5.650	0.000	99	690223	5.00	5.00	
51	Naphthalene	128	5.674	5.674	0.000	98	1906007	12.5	12.6	
53	4-Chloroaniline	127	5.720	5.720	0.000	93	787079	12.5	13.4	
54	2,6-Dichlorophenol	162	5.732	5.726	0.006	94	574659	12.5	12.6	
55	Hexachloropropene	213	5.755	5.755	0.000	85	554607	12.5	13.9	
56	Hexachlorobutadiene	225	5.790	5.790	0.000	93	454806	12.5	12.9	
60	Quinoline	129	5.994	5.988	0.006	95	1239934	12.5	13.2	
62	N-Nitrosodi-n-butylamine	84	6.047	6.041	0.006	94	545493	12.5	10.0	
63	p-Phenylene diamine	108		6.058				ND	ND	U
64	4-Chloro-3-methylphenol	107	6.181	6.181	0.000	94	585663	12.5	13.2	
65	Safrole, Total	162	6.251	6.251	0.000	89	533067	12.5	13.3	
66	2-Methylnaphthalene	142	6.332	6.332	0.000	91	1239513	12.5	12.9	
67	1-Methylnaphthalene	142	6.425	6.426	-0.001	92	1171778	12.5	13.1	
68	Hexachlorocyclopentadiene	237	6.478	6.478	0.000	94	400865	12.5	13.1	
69	1,2,4,5-Tetrachlorobenzene	216	6.490	6.490	0.000	96	743405	12.5	12.4	
70	Isosafrole Peak 1	162	6.525	6.525	0.000	92	72021	1.50	1.63	
71	2,4,6-Trichlorophenol	196	6.594	6.595	-0.001	93	416779	12.5	12.6	
72	2,4,5-Trichlorophenol	196	6.629	6.630	-0.001	94	487563	12.5	13.9	
74	Isosafrole Peak 2	162	6.740	6.740	0.000	92	528851	11.0	11.1	
75	1,1'-Biphenyl	154	6.775	6.775	0.000	93	1610419	12.5	12.8	
76	2-Chloronaphthalene	162	6.793	6.793	0.000	95	1267533	12.5	12.4	
77	1-Chloronaphthalene	162	6.816	6.810	0.006	98	1188192	12.5	13.6	
78	Phenyl ether	170	6.880	6.874	0.006	87	885661	12.5	12.7	
79	2-Nitroaniline	138	6.892	6.886	0.006	78	381910	12.5	13.3	
81	1,4-Naphthoquinone	158	6.962	6.962	0.000	86	520553	12.5	14.7	
84	1,4-Dinitrobenzene	168	7.026	7.020	0.006	90	214247	12.5	13.4	
85	Dimethyl phthalate	163	7.067	7.067	0.000	99	1459280	12.5	12.7	
86	1,3-Dinitrobenzene	168	7.090	7.090	0.000	84	242324	12.5	13.5	
87	2,6-Dinitrotoluene	165	7.125	7.119	0.006	93	328544	12.5	13.0	
88	Acenaphthylene	152	7.183	7.183	0.000	99	1929377	12.5	12.9	
89	3-Nitroaniline	138	7.276	7.276	0.000	86	335971	12.5	13.3	
* 90	Acenaphthene-d10	164	7.317	7.317	0.000	94	415145	5.00	5.00	
91	Acenaphthene	153	7.352	7.346	0.006	95	1293544	12.5	12.4	
92	2,4-Dinitrophenol	184	7.376	7.376	0.000	86	429664	25.0	26.1	
93	4-Nitrophenol	109	7.440	7.434	0.006	84	465471	25.0	27.6	
94	Pentachlorobenzene	250	7.475	7.469	0.006	98	646426	12.5	13.3	
95	2,4-Dinitrotoluene	165	7.504	7.498	0.006	93	437910	12.5	12.9	
96	Dibenzofuran	168	7.515	7.510	0.005	97	1842760	12.5	12.6	
97	1-Naphthylamine	143	7.591	7.585	0.006	98	1030341	12.5	12.1	
98	2,3,4,6-Tetrachlorophenol	232	7.626	7.626	0.000	71	446743	12.5	14.0	
99	2-Naphthylamine	143	7.661	7.661	0.000	96	1260778	12.5	13.4	
100	Diethyl phthalate	149	7.743	7.737	0.006	98	1386953	12.5	12.6	
101	Thionazin	107	7.813	7.813	0.000	79	231647	12.5	12.9	
102	Fluorene	166	7.836	7.836	0.000	93	1410430	12.5	13.0	
103	4-Chlorophenyl phenyl ether	204	7.842	7.842	0.000	90	748583	12.5	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
104 N-Nitro-o-toluidine	152	7.848	7.848	0.000	88	377774	12.5	13.6	
105 4-Nitroaniline	138	7.859	7.854	0.005	79	339291	12.5	13.0	
106 4,6-Dinitro-2-methylphenol	198	7.883	7.883	0.000	84	582348	25.0	26.8	
107 N-Nitrosodiphenylamine	169	7.953	7.953	0.000	62	1041292	10.6	11.0	
108 1,2-Diphenylhydrazine	77	7.993	7.988	0.005	41	1627455	12.5	13.4	
110 Sulfotepp	97	8.110	8.104	0.006	76	266986	12.5	13.6	
112 1,3,5-Trinitrobenzene	213	8.203	8.197	0.006	84	174979	12.5	14.3	
113 cis-Diallate	86	8.227	8.227	-0.001	0	491262	9.38	9.67	
114 Phorate	75	8.238	8.232	0.006	95	943224	12.5	13.3	
115 Phenacetin	108	8.250	8.244	0.006	93	724984	12.5	14.1	
116 4-Bromophenyl phenyl ether	248	8.308	8.302	0.006	70	449438	12.5	12.5	
117 trans-Diallate	86	8.314	8.314	0.000	0	160367	3.13	3.15	
118 Hexachlorobenzene	284	8.355	8.355	0.000	95	486450	12.5	12.4	
119 Dimethoate	87	8.396	8.390	0.006	95	554511	12.5	13.5	
121 Pentachlorophenol	266	8.541	8.541	0.000	93	619642	25.0	25.9	
122 4-Aminobiphenyl	169	8.547	8.547	0.000	91	1601518	12.5	12.9	
123 Pentachloronitrobenzene	237	8.553	8.553	0.000	84	231359	12.5	12.5	
124 Pronamide	173	8.611	8.605	0.006	89	671503	12.5	13.9	
125 Dinoseb	211	8.722	8.716	0.006	96	411821	12.5	14.6	
* 126 Phenanthrene-d10	188	8.728	8.722	0.006	97	791545	5.00	5.00	
127 Disulfoton	88	8.734	8.734	0.000	98	887949	12.5	11.8	
128 Phenanthrene	178	8.745	8.745	0.000	96	2124355	12.5	12.8	
129 Anthracene	178	8.798	8.792	0.006	97	2205206	12.5	13.1	
130 Carbazole	167	8.949	8.949	0.000	96	1853280	12.5	13.1	
131 Methyl parathion	109	9.083	9.083	0.000	94	477099	12.5	14.0	
133 Di-n-butyl phthalate	149	9.293	9.293	0.000	100	2281875	12.5	13.3	
134 Ethyl Parathion	109	9.456	9.456	0.000	85	291562	12.5	13.6	
135 4-Nitroquinoline-1-oxide	190	9.480	9.486	0.000	94	206648	12.5	13.6	
132 Methapyrilene	97		9.596				ND	ND	U
S 136 Diallate	86				0		12.5	12.8	
140 Octachlorostyrene	308	9.695	9.695	0.000	90	198868	12.5	12.8	
141 Isodrin	193	9.736	9.730	0.006	94	266769	12.5	13.1	
137 Aramite Peak 1	185		9.842				ND	ND	
138 Aramite Peak 2	185		9.865				ND	ND	
143 Fluoranthene	202	9.876	9.876	0.000	97	2413625	12.5	13.2	
139 Aramite Peak 3	185		9.906				ND	ND	
142 Aramite Peak 4	185		9.982				ND	ND	
147 Benzidine	184	10.010	10.010	0.000	99	1169598	12.5	10.9	
* 149 Pyrene-d10 (IS)	212	10.074	10.068	0.006	98	843738	5.00	5.00	
150 Pyrene	202	10.092	10.086	0.006	98	2491861	12.5	12.6	
154 p-Dimethylamino azobenzene	225	10.389	10.389	0.000	94	495515	12.5	15.3	
155 Chlorobenzilate	139	10.441	10.441	0.000	93	717667	12.5	14.4	
151 Famphur	218		10.739				ND	ND	U
156 3,3'-Dimethylbenzidine	212	10.739	10.739	0.000	99	1425267	12.5	13.6	
157 Butyl benzyl phthalate	149	10.762	10.762	0.000	97	971619	12.5	13.5	
158 2-Acetylaminofluorene	181	11.013	11.007	0.006	93	829837	12.5	13.4	
159 3,3'-Dichlorobenzidine	252	11.345	11.345	0.000	77	812527	12.5	12.8	
160 4,4'-Methylene bis(2-chloroani	231	11.356	11.351	0.005	95	488204	12.5	14.1	
161 Benzo[a]anthracene	228	11.362	11.362	0.000	98	2286404	12.5	13.0	
162 Chrysene	228	11.409	11.403	0.006	96	2251128	12.5	13.0	
163 Bis(2-ethylhexyl) phthalate	149	11.438	11.438	0.000	97	1345528	12.5	13.6	
164 6-Methylchrysene	242	11.974	11.969	0.005	98	1555552	12.5	13.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Di-n-octyl phthalate	149	12.295	12.295	0.000	99	2221217	12.5	12.6	
166 7,12-Dimethylbenz(a)anthracene	256	12.761	12.755	0.006	74	954475	12.5	14.1	
167 Benzo[b]fluoranthene	252	12.761	12.755	0.006	96	2246515	12.5	13.2	
168 Benzo[k]fluoranthene	252	12.796	12.790	0.006	98	2277579	12.5	13.5	
169 Benzo[a]pyrene	252	13.216	13.210	0.006	76	2095307	12.5	13.4	
* 170 Perylene-d12	264	13.292	13.286	0.006	100	711146	5.00	5.00	
171 3-Methylcholanthrene	268	13.729	13.723	0.006	90	801436	12.5	9.89	
172 Dibenz[a,h]acridine	279	14.539	14.533	0.006	90	1681446	12.5	15.4	
173 Dibenz[a,j]acridine	279	14.615	14.609	0.006	96	1784770	12.5	14.6	
174 Indeno[1,2,3-cd]pyrene	276	14.889	14.883	0.006	98	1680922	12.5	12.0	
175 Dibenz(a,h)anthracene	278	14.941	14.929	0.012	92	1916395	12.5	13.5	
176 Benzo[g,h,i]perylene	276	15.337	15.326	0.011	98	1936736	12.5	13.4	
S 177 Aramite, Total	185		44.000				12.5	ND	7
S 182 Isosafrole	162				0		12.5	12.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

Report Date: 27-Oct-2023 07:25:12 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D

Injection Date: 26-Oct-2023 15:50:33 Instrument ID: HP19760 Operator ID: kel10217

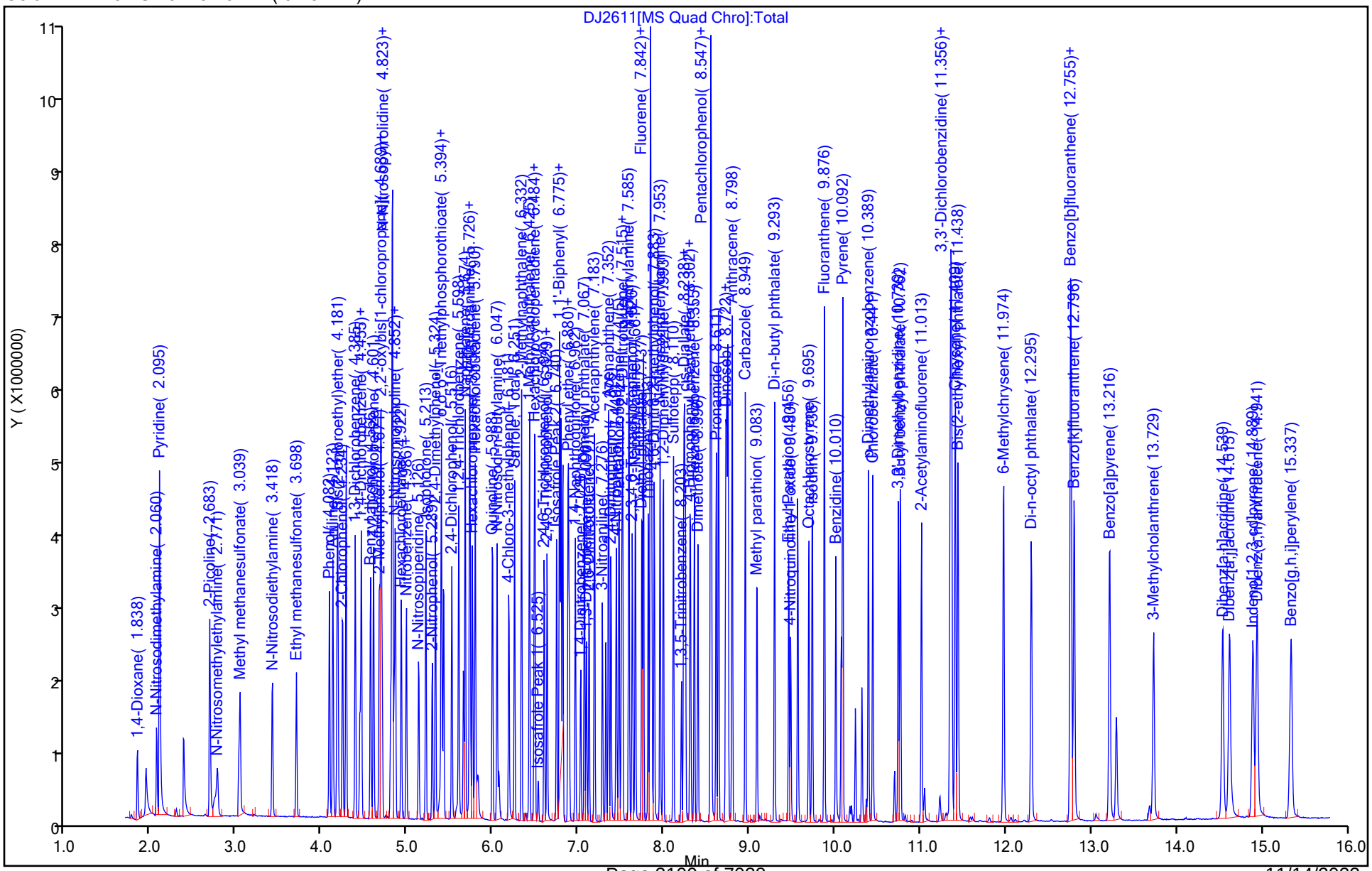
Lims ID: ICV Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



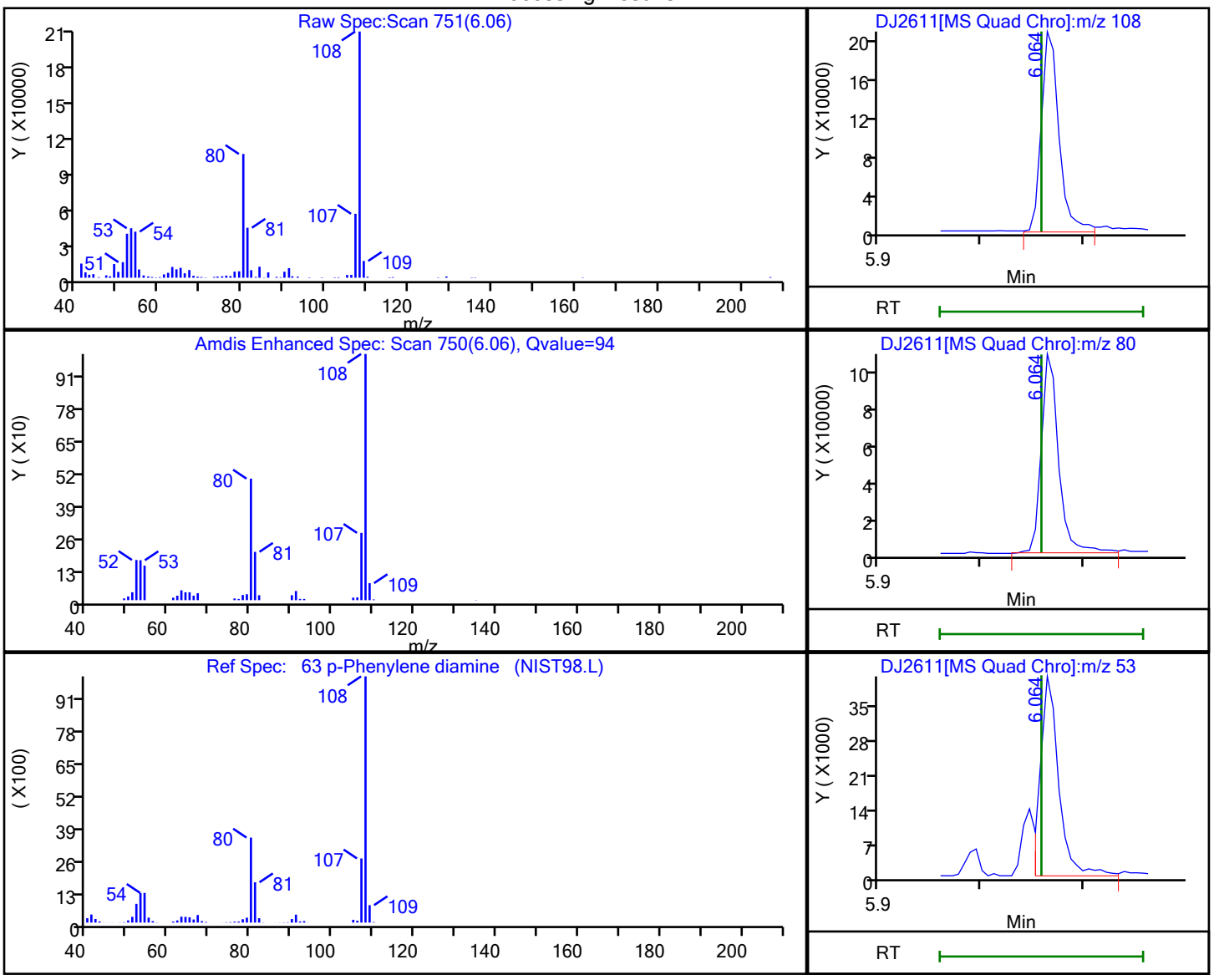
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2611.D				
Injection Date:	26-Oct-2023 15:50:33	Instrument ID:	HP19760		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

63 p-Phenylene diamine, CAS: 106-50-3

Processing Results



RT	Mass	Response	Amount
6.06	108.00	241494	4.946361
6.06	80.00	121232	
6.06	53.00	49440	
6.06	54.00	47347	
6.06	52.00	45571	

Reviewer: SJ89, 27-Oct-2023 07:19:53 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-397829/12 Calibration Date: 07/18/2023 11:17

Instrument ID: HP23264 Calib Start Date: 04/04/2023 02:36

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 04/04/2023 04:43

Lab File ID: JG1811.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzoic acid	Ave	0.3124				18.8		
Indene	Ave	3.080				18.8		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-Jul-2023 11:17:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 410-0089185-012
Operator ID: kel10217 Instrument ID: HP23264
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:19:23 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 15:03:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.695	1.701	-0.006	94	273002	18.8	18.1	
2 N-Nitrosodimethylamine	74	1.928	1.928	0.000	93	454396	18.8	18.5	
3 Pyridine	79	1.964	1.969	-0.005	84	1571503	37.5	37.2	
4 Dimethylformamide	73	2.255	2.267	-0.012	94	592261	18.8	19.6	a
5 2-Picoline	93	2.553	2.559	-0.006	93	829156	18.8	20.2	
6 N-Nitrosomethylethylamine	88	2.641	2.647	-0.005	95	362646	18.8	18.0	
7 Methyl methanesulfonate	80	2.921	2.921	0.000	86	448690	18.8	18.5	a
11 N-Nitrosodiethylamine	102	3.289	3.289	0.000	87	345243	18.8	21.1	
12 Ethyl methanesulfonate	109	3.587	3.587	0.000	96	379684	18.8	18.7	a
17 Aniline	93	4.019	4.019	0.000	95	1091085	18.8	19.1	
16 Phenol	94	4.036	4.036	0.000	97	1054168	18.8	18.5	
18 Bis(2-chloroethyl)ether	93	4.077	4.077	0.000	85	722424	18.8	18.2	
19 2-Chlorophenol	128	4.141	4.147	-0.006	93	651456	18.8	18.6	
21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	95	647848	18.8	18.6	
* 22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	96	184810	7.50	7.50	
23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	92	686200	18.8	18.4	
26 Benzyl alcohol	108	4.474	4.474	0.000	90	465521	18.8	20.0	
27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	96	650863	18.8	18.8	
30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	93	1570403	18.8	17.9	
29 2-Methylphenol	108	4.603	4.603	0.000	97	656506	18.8	19.5	
28 Indene	115		4.603				ND	ND	U
31 N-Nitrosopyrrolidine	100	4.696	4.696	0.000	83	431059	18.8	21.4	
33 N-Nitrosodi-n-propylamine	70	4.714	4.714	0.000	85	640891	18.8	19.2	
32 Acetophenone	105	4.714	4.714	0.000	87	1096176	18.8	20.3	
35 N-Nitrosomorpholine	56	4.737	4.737	0.000	92	648265	18.8	20.9	
36 2-Toluidine	106	4.755	4.754	0.001	83	1196649	18.8	20.4	
34 4-Methylphenol	108	4.749	4.754	-0.005	83	768524	18.8	19.7	
37 Hexachloroethane	117	4.813	4.813	0.000	97	287071	18.8	18.2	
40 Nitrobenzene	77	4.877	4.877	0.000	92	798559	18.8	17.2	
41 N-Nitrosopiperidine	114	5.023	5.023	0.000	80	356593	18.8	19.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Isophorone	82	5.105	5.105	0.000	98	1524789	18.8	18.3	
43 2-Nitrophenol	139	5.187	5.186	0.001	92	322001	18.8	18.8	
44 2,4-Dimethylphenol	107	5.245	5.251	-0.006	98	697612	18.8	19.9	
46 o,o',o''-Triethylphosphorothioat	198	5.292	5.292	0.000	94	248888	18.8	18.4	
47 Bis(2-chloroethoxy)methane	93	5.321	5.321	0.000	91	908952	18.8	18.1	
48 Benzoic acid	105		5.386				ND	ND	U
49 2,4-Dichlorophenol	162	5.432	5.438	-0.006	97	524204	18.8	20.0	
50 1,2,4-Trichlorobenzene	180	5.490	5.490	0.000	94	518483	18.8	17.6	
* 52 Naphthalene-d8	136	5.549	5.549	0.001	98	712856	7.50	7.50	
53 Naphthalene	128	5.566	5.566	0.000	97	1897160	18.8	18.6	
56 4-Chloroaniline	127	5.630	5.630	0.000	94	803888	18.8	18.6	
57 2,6-Dichlorophenol	162	5.636	5.636	0.000	87	508915	18.8	19.7	
58 Hexachloropropene	213	5.648	5.648	0.000	95	370273	18.8	20.0	a
59 Hexachlorobutadiene	225	5.683	5.683	0.000	96	309622	18.8	19.4	
61 Quinoline	129	5.887	5.887	0.000	95	1424779	18.8	20.3	
63 N-Nitrosodi-n-butylamine	84	5.946	5.946	0.000	91	584051	18.8	15.2	
64 p-Phenylene diamine	108	5.969	5.969	0.000	95	316232	18.8	13.9	
65 4-Chloro-3-methylphenol	107	6.121	6.121	0.000	96	621980	18.8	19.2	
66 Safrole, Total	162	6.150	6.150	0.000	84	453301	18.8	20.1	
67 2-Methylnaphthalene	142	6.226	6.226	0.000	91	1157699	18.8	18.6	
69 1-Methylnaphthalene	142	6.319	6.319	0.000	92	1083224	18.8	18.2	
71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	94	357327	18.8	24.0	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.383	0.001	98	552988	18.8	20.5	
72 Isosafrole Peak 1	162	6.425	6.430	-0.005	85	63229	2.25	2.43	a
79 2,4,6-Trichlorophenol	196	6.506	6.506	0.000	96	362087	18.8	21.1	
80 2,4,5-Trichlorophenol	196	6.553	6.553	0.000	92	401661	18.8	21.3	
82 Isosafrole Peak 2	162	6.641	6.640	0.001	88	444024	16.5	16.9	a
83 1,1'-Biphenyl	154	6.676	6.675	0.001	94	1482471	18.8	20.9	
84 2-Chloronaphthalene	162	6.687	6.687	0.000	96	1052684	18.8	19.6	
85 1-Chloronaphthalene	162	6.711	6.710	0.001	96	1099757	18.8	21.4	a
86 Phenyl ether	170	6.775	6.775	0.000	92	818986	18.8	21.7	
87 2-Nitroaniline	138	6.798	6.798	0.000	77	375176	18.8	19.8	
88 1,4-Naphthoquinone	158	6.862	6.862	0.000	80	462033	18.8	21.8	a
89 1,4-Dinitrobenzene	168	6.933	6.932	0.001	89	181556	18.8	21.6	
90 Dimethyl phthalate	163	6.968	6.967	0.001	97	1226443	18.8	19.3	
91 1,3-Dinitrobenzene	168	6.997	6.997	0.000	79	204018	18.8	20.8	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	87	274282	18.8	20.5	
93 Acenaphthylene	152	7.079	7.078	0.001	99	1829360	18.8	19.8	
95 3-Nitroaniline	138	7.189	7.189	0.000	87	329883	18.8	20.1	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	96	341549	7.50	7.50	
97 Acenaphthene	153	7.242	7.242	0.000	98	1138600	18.8	19.0	
98 2,4-Dinitrophenol	184	7.283	7.283	0.000	79	368052	37.5	43.5	
99 Pentachlorobenzene	250	7.370	7.370	0.000	97	474136	18.8	20.3	a
100 4-Nitrophenol	109	7.400	7.399	0.001	92	433410	37.5	43.4	
102 2,4-Dinitrotoluene	165	7.406	7.405	0.001	85	380028	18.8	21.0	
101 Dibenzofuran	168	7.411	7.411	0.000	97	1578508	18.8	19.5	
104 1-Naphthylamine	143	7.487	7.487	0.000	98	1078677	18.8	19.8	
105 2,3,4,6-Tetrachlorophenol	232	7.534	7.534	0.000	76	320764	18.8	19.4	
106 2-Naphthylamine	143	7.563	7.563	0.000	96	1193924	18.8	21.1	
107 Diethyl phthalate	149	7.639	7.639	0.000	96	1414610	18.8	20.7	
109 Thionazin	107	7.715	7.715	0.000	76	256362	18.8	21.1	
108 Fluorene	166	7.733	7.732	0.000	94	1225331	18.8	19.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	94	542524	18.8	19.0	
111 N-Nitro-o-toluidine	152	7.756	7.756	0.000	94	404252	18.8	22.5	
112 4-Nitroaniline	138	7.768	7.767	0.001	83	344166	18.8	21.1	
113 4,6-Dinitro-2-methylphenol	198	7.785	7.785	0.000	69	424347	37.5	43.4	
114 N-Nitrosodiphenylamine	169	7.855	7.855	0.000	66	878053	15.9	17.2	
115 1,2-Diphenylhydrazine	77	7.884	7.884	0.000	41	1803275	18.8	21.1	
117 Sulfotepp	97	8.007	8.013	-0.006	75	300791	18.8	21.4	
118 1,3,5-Trinitrobenzene	213	8.118	8.118	0.000	82	106665	18.8	20.6	
120 cis-Diallate	86	8.124	8.124	0.000	93	501608	14.1	14.7	
119 Phorate	75	8.135	8.135	0.000	92	1061885	18.8	21.1	E
121 Phenacetin	108	8.153	8.153	0.000	90	791910	18.8	23.1	
122 4-Bromophenyl phenyl ether	248	8.200	8.199	0.001	76	323359	18.8	19.6	
123 trans-Diallate	86	8.211	8.211	0.000	92	181493	4.69	5.55	
124 Hexachlorobenzene	284	8.246	8.246	0.000	94	390646	18.8	19.9	
125 Dimethoate	87	8.299	8.299	0.000	96	661915	18.8	20.8	
128 Pentachloronitrobenzene	237	8.451	8.445	0.006	59	170901	18.8	20.3	
127 Pentachlorophenol	266	8.451	8.451	0.000	84	448183	37.5	48.1	E
129 4-Aminobiphenyl	169	8.451	8.451	0.000	91	1249695	18.8	18.6	
130 Pronamide	173	8.515	8.515	0.000	88	651852	18.8	23.1	
* 131 Phenanthrene-d10	188	8.620	8.620	0.000	95	628690	7.50	7.50	
133 Dinoseb	211	8.620	8.620	0.000	80	265374	18.8	19.9	a
134 Disulfoton	88	8.632	8.632	0.000	97	1025881	18.8	18.8	
132 Phenanthrene	178	8.643	8.643	0.000	98	1669425	18.8	18.9	
135 Anthracene	178	8.690	8.690	0.000	98	1704650	18.8	19.4	
136 Carbazole	167	8.854	8.853	0.001	96	1742762	18.8	20.1	
137 Methyl parathion	109	8.988	8.988	0.000	89	561121	18.8	24.1	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	99	2230841	18.8	19.9	
139 Ethyl Parathion	109	9.356	9.356	0.000	81	327520	18.8	23.8	
140 4-Nitroquinoline-1-oxide	190	9.379	9.379	0.000	77	121211	18.8	20.2	
142 Octachlorostyrene	308	9.583	9.583	0.000	90	150868	18.8	20.7	
143 Isodrin	193	9.619	9.624	-0.006	89	222785	18.8	19.1	a
S 68 Diallate	86				0		18.8	20.2	
144 Fluoranthene	202	9.764	9.764	0.000	98	1890712	18.8	20.2	
145 Benzidine	184	9.910	9.910	0.000	99	941026	18.8	15.6	
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	97	642170	7.50	7.50	
147 Pyrene	202	9.981	9.980	0.001	96	1958096	18.8	17.8	
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	92	320942	18.8	22.2	
150 Chlorobenzilate	139	10.331	10.331	0.000	82	661752	18.8	19.0	a
152 3,3'-Dimethylbenzidine	212	10.623	10.628	-0.005	99	1010616	18.8	20.7	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	96	969183	18.8	19.4	
155 2-Acetylaminofluorene	181	10.891	10.897	-0.006	94	675805	18.8	20.4	
S 94 Isosafrole	162				0		18.8	19.3	
157 3,3'-Dichlorobenzidine	252	11.218	11.218	0.000	79	630756	18.8	20.6	
158 4,4'-Methylene bis(2-chloroani	231	11.230	11.230	0.000	83	337412	18.8	21.4	
156 Benzo[a]anthracene	228	11.230	11.230	0.000	98	1600731	18.8	19.7	
159 Chrysene	228	11.271	11.271	0.000	97	1613403	18.8	20.1	
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	95	1273805	18.8	18.8	
161 6-Methylchrysene	242	11.826	11.831	-0.005	98	1050361	18.8	19.1	
162 Di-n-octyl phthalate	149	12.153	12.152	0.001	98	2234017	18.8	19.9	
163 7,12-Dimethylbenz(a)anthracene	256	12.596	12.596	0.000	85	599683	18.8	20.6	a
164 Benzo[b]fluoranthene	252	12.596	12.602	-0.006	96	1532031	18.8	19.5	
165 Benzo[k]fluoranthene	252	12.637	12.637	0.000	97	1528823	18.8	19.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
166 Benzo[a]pyrene	252	13.046	13.046	0.000	82	1502837	18.8	22.5	
* 167 Perylene-d12	264	13.128	13.128	0.000	94	471572	7.50	7.50	
168 3-Methylcholanthrene	268	13.554	13.560	-0.006	95	523305	18.8	17.8	
169 Dibenz[a,h]acridine	279	14.342	14.342	0.000	93	1267622	18.8	22.9	
170 Dibenz[a,j]acridine	279	14.412	14.412	0.000	95	1358545	18.8	21.6	
171 Indeno[1,2,3-cd]pyrene	276	14.634	14.634	0.000	95	1279785	18.8	20.1	
172 Dibenz(a,h)anthracene	278	14.675	14.675	0.000	96	1369505	18.8	19.4	
173 Benzo[g,h,i]perylene	276	14.990	14.984	0.006	92	1525463	18.8	20.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

E - Exceeded Maximum Amount

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270ICV_00022 Amount Added: 1.00 Units: mL

Report Date: 18-Jul-2023 15:33:47 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D

Injection Date: 18-Jul-2023 11:17:30 Instrument ID: HP23264 Operator ID: kel10217

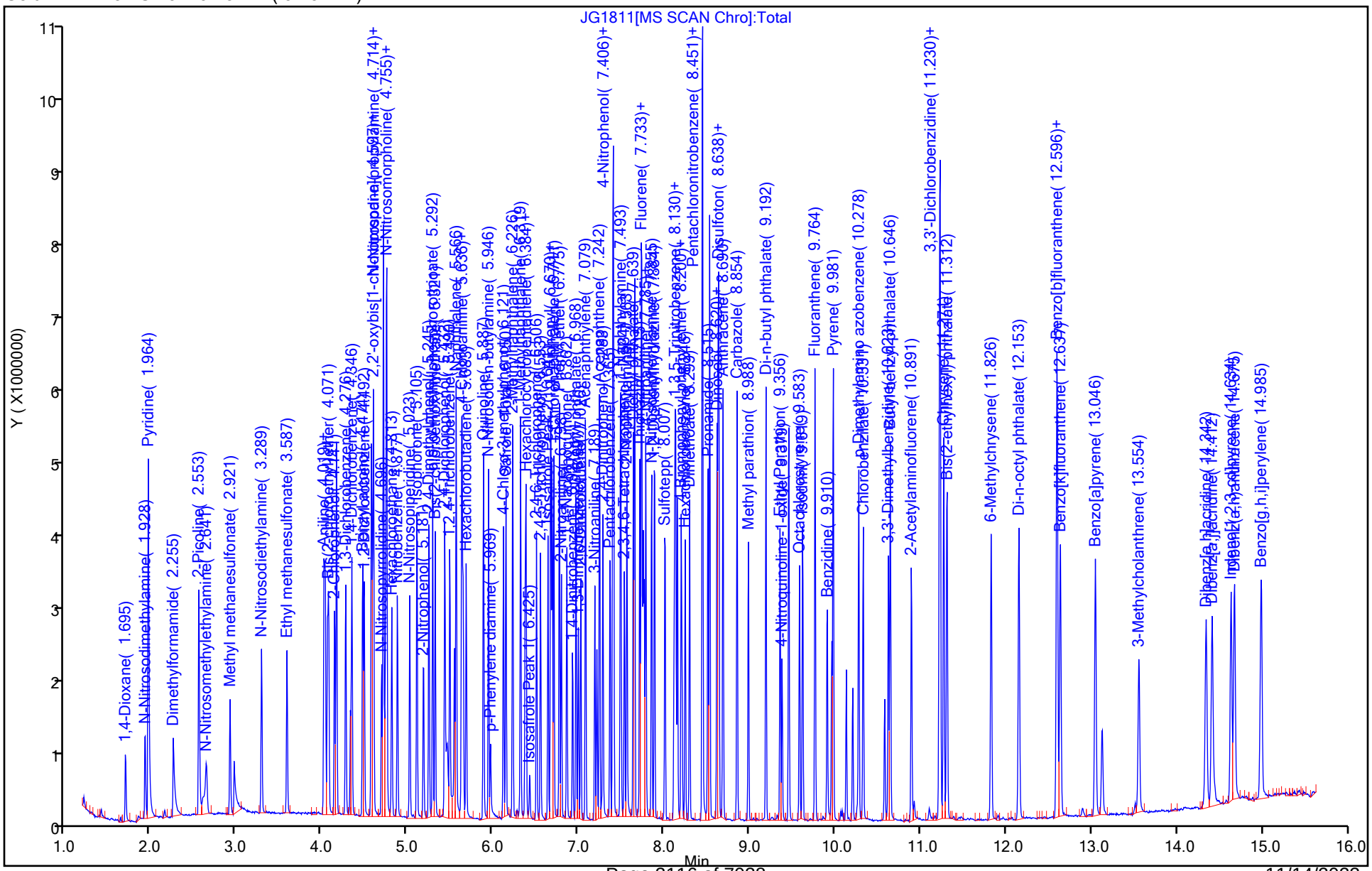
Lims ID: ICV Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

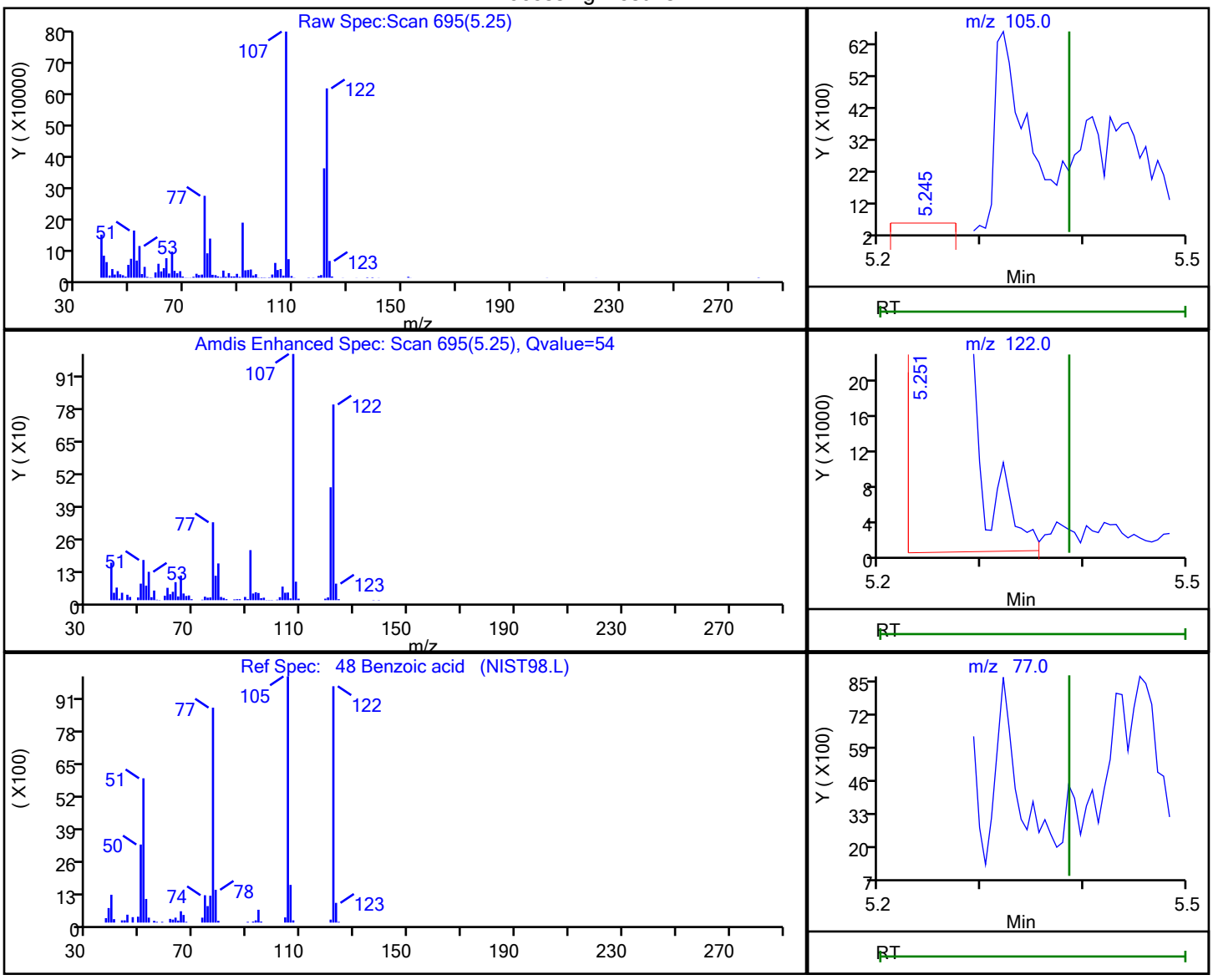
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

48 Benzoic acid, CAS: 65-85-0

Processing Results



RT	Mass	Response	Amount
5.25	105.00	21787	2.171671
5.25	122.00	592335	
5.25	77.00	237149	

Reviewer: SJ89, 18-Jul-2023 15:11:11 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

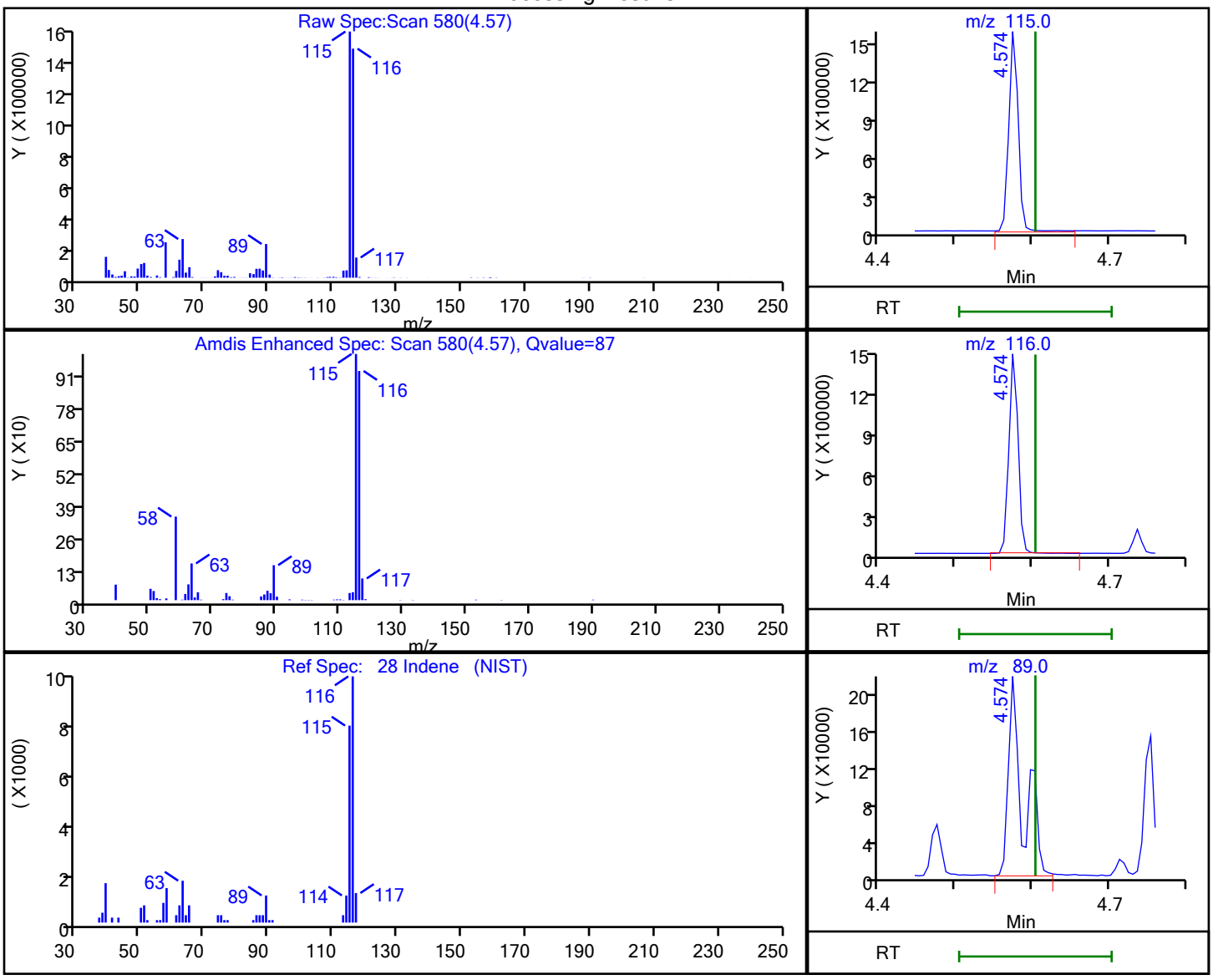
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

28 Indene, CAS: 95-13-6

Processing Results



RT	Mass	Response	Amount
4.57	115.00	1314511	17.320648
4.57	116.00	1219940	
4.57	89.00	283165	

Reviewer: SJ89, 18-Jul-2023 15:00:32 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-397829/12 Calibration Date: 07/18/2023 11:17

Instrument ID: HP23264 Calib Start Date: 07/18/2023 07:41

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 07/18/2023 10:14

Lab File ID: JG1811.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6104	0.5909		18.1	18.8	-3.2	30.0
N-Nitrosodimethylamine	Ave	0.9949	0.9835		18.5	18.8	-1.1	30.0
Pyridine	Ave	1.716	1.701		37.2	37.5	-0.9	30.0
N,N-dimethylformamide	Ave	1.225	1.282		19.6	18.8	4.6	30.0
2-Picoline	Ave	1.665	1.795		20.2	18.8	7.8	30.0
N-Nitrosomethylethylamine	Ave	0.8175	0.7849		18.0	18.8	-4.0	30.0
Methyl methanesulfonate	Ave	0.9846	0.9711		18.5	18.8	-1.4	30.0
N-Nitrosodiethylamine	Ave	0.6642	0.7472		21.1	18.8	12.5	30.0
Ethyl methanesulfonate	Ave	0.8229	0.8218		18.7	18.8	-0.1	30.0
Aniline	Ave	2.323	2.362		19.1	18.8	1.7	30.0
Phenol	Ave	2.313	2.282	0.8000	18.5	18.8	-1.4	30.0
Bis(2-chloroethyl)ether	Ave	1.613	1.564	0.7000	18.2	18.8	-3.0	30.0
2-Chlorophenol	Ave	1.424	1.410	0.8000	18.6	18.8	-1.0	30.0
1,3-Dichlorobenzene	Ave	1.416	1.402		18.6	18.8	-0.9	30.0
1,4-Dichlorobenzene	Ave	1.516	1.485		18.4	18.8	-2.0	30.0
Benzyl alcohol	Ave	0.9439	1.008		20.0	18.8	6.7	30.0
1,2-Dichlorobenzene	Ave	1.402	1.409		18.8	18.8	0.5	30.0
bis (2-chloroisopropyl) ether	Ave	3.552	3.399	0.0100	17.9	18.8	-4.3	30.0
o-Cresol	Ave	1.366	1.421	0.7000	19.5	18.8	4.0	30.0
N-Nitrosopyrrolidine	Ave	0.8193	0.9330		21.4	18.8	13.9	30.0
Acetophenone	Ave	2.194	2.373	0.0100	20.3	18.8	8.1	30.0
N-Nitrosodi-n-propylamine	Ave	1.358	1.387	0.5000	19.2	18.8	2.2	30.0
N-Nitrosomorpholine	Ave	1.260	1.403		20.9	18.8	11.4	30.0
m & p-Cresol	Ave	1.581	1.663	0.6000	19.7	18.8	5.2	30.0
o-Toluidine	Ave	2.376	2.590		20.4	18.8	9.0	30.0
Hexachloroethane	Ave	0.6384	0.6213	0.3000	18.2	18.8	-2.7	30.0
Nitrobenzene	Ave	0.4889	0.4481	0.2000	17.2	18.8	-8.3	30.0
N-Nitrosopiperidine	Ave	0.1972	0.2001		19.0	18.8	1.5	30.0
Isophorone	Ave	0.8743	0.8556	0.4000	18.3	18.8	-2.1	30.0
2-Nitrophenol	Ave	0.1806	0.1807	0.1000	18.8	18.8	0.0	30.0
2,4-Dimethylphenol	Ave	0.3690	0.3914	0.2000	19.9	18.8	6.1	30.0
o,o',o''-Triethylphosphorothioate	Ave	0.1420	0.1397		18.4	18.8	-1.6	30.0
Bis(2-chloroethoxy)methane	Ave	0.5277	0.5100	0.3000	18.1	18.8	-3.3	30.0
2,4-Dichlorophenol	Ave	0.2755	0.2941	0.2000	20.0	18.8	6.8	30.0
1,2,4-Trichlorobenzene	Ave	0.3101	0.2909		17.6	18.8	-6.2	30.0
Naphthalene	Ave	1.076	1.065	0.7000	18.6	18.8	-1.1	30.0
4-Chloroaniline	Ave	0.4545	0.4511	0.0100	18.6	18.8	-0.7	30.0
2,6-Dichlorophenol	Ave	0.2724	0.2856		19.7	18.8	4.8	30.0
Hexachloropropene	Ave	0.1950	0.2078		20.0	18.8	6.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-397829/12 Calibration Date: 07/18/2023 11:17

Instrument ID: HP23264 Calib Start Date: 07/18/2023 07:41

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 07/18/2023 10:14

Lab File ID: JG1811.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobutadiene	Ave	0.1679	0.1737	0.0100	19.4	18.8	3.5	30.0
Quinoline	Ave	0.7388	0.7995		20.3	18.8	8.2	30.0
N-Nitrosodi-n-butylamine	Ave	0.4048	0.3277		15.2	18.8	-19.0	30.0
1,4-phenylenediamine	Ave	0.2402	0.1774			18.8	-26.1	30.0
4-Chloro-3-methylphenol	Ave	0.3400	0.3490	0.2000	19.2	18.8	2.7	30.0
Safrole, Total	Ave	0.2369	0.2544		20.1	18.8	7.4	30.0
2-Methylnaphthalene	Ave	0.6536	0.6496	0.4000	18.6	18.8	-0.6	30.0
1-Methylnaphthalene	Ave	0.6266	0.6078		18.2	18.8	-3.0	30.0
Hexachlorocyclopentadiene	Ave	0.3275	0.4185	0.0500	24.0	18.8	27.8	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5919	0.6476	0.0100	20.5	18.8	9.4	30.0
Isosafrole Peak 1	Ave	0.5720	0.6171		2.43	2.25	7.9	30.0
2,4,6-Trichlorophenol	Ave	0.3761	0.4241	0.2000	21.1	18.8	12.7	30.0
2,4,5-Trichlorophenol	Ave	0.4143	0.4704	0.2000	21.3	18.8	13.5	30.0
Isosafrole Peak 2	Ave	0.5768	0.5909		16.9	16.5	2.4	30.0
1,1'-Biphenyl	Ave	1.555	1.736	0.0100	20.9	18.8	11.7	30.0
2-Chloronaphthalene	Ave	1.178	1.233	0.8000	19.6	18.8	4.6	30.0
1-Chloronaphthalene	Ave	1.131	1.288		21.4	18.8	13.9	30.0
Diphenyl ether	Ave	0.8270	0.9591		21.7	18.8	16.0	30.0
2-Nitroaniline	Ave	0.4152	0.4394	0.0100	19.8	18.8	5.8	30.0
1,4-Naphthoquinone	Ave	0.4664	0.5411		21.8	18.8	16.0	30.0
1,4-Dinitrobenzene	Ave	0.1845	0.2126		21.6	18.8	15.2	30.0
Dimethyl phthalate	Ave	1.395	1.436	0.0100	19.3	18.8	3.0	30.0
1,3-Dinitrobenzene	Ave	0.2150	0.2389		20.8	18.8	11.1	30.0
2,6-Dinitrotoluene	Ave	0.2932	0.3212	0.2000	20.5	18.8	9.5	30.0
Acenaphthylene	Ave	2.033	2.142	0.9000	19.8	18.8	5.4	30.0
3-Nitroaniline	Ave	0.3605	0.3863	0.0100	20.1	18.8	7.2	30.0
Acenaphthene	Ave	1.317	1.333	0.9000	19.0	18.8	1.3	30.0
2,4-Dinitrophenol	Ave	0.1856	0.2155	0.0100	43.5	37.5	16.1	30.0
Pentachlorobenzene	Ave	0.5118	0.5553		20.3	18.8	8.5	30.0
4-Nitrophenol	Ave	0.2191	0.2538	0.0100	43.4	37.5	15.8	30.0
2,4-Dinitrotoluene	Ave	0.3981	0.4451	0.2000	21.0	18.8	11.8	30.0
Dibenzofuran	Ave	1.776	1.849	0.8000	19.5	18.8	4.1	30.0
1-Naphthylamine	Ave	1.195	1.263		19.8	18.8	5.7	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3633	0.3757	0.0100	19.4	18.8	3.4	30.0
2-Naphthylamine	Ave	1.240	1.398		21.1	18.8	12.8	30.0
Diethyl phthalate	Ave	1.503	1.657	0.0100	20.7	18.8	10.2	30.0
O,O-Diethyl O-2-pyrazinyl phosphorothioate	Ave	0.2662	0.3002		21.1	18.8	12.8	30.0
Fluorene	Ave	1.399	1.435	0.9000	19.2	18.8	2.6	30.0
4-Chlorophenyl-phenyl ether	Ave	0.6258	0.6354	0.4000	19.0	18.8	1.5	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-397829/12 Calibration Date: 07/18/2023 11:17

Instrument ID: HP23264 Calib Start Date: 07/18/2023 07:41

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 07/18/2023 10:14

Lab File ID: JG1811.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
5-Nitro-o-toluidine	Ave	0.3937	0.4734		22.5	18.8	20.2	30.0
4-Nitroaniline	Ave	0.3585	0.4031	0.0100	21.1	18.8	12.4	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1166	0.1350	0.0100	43.4	37.5	15.7	30.0
n-Nitrosodiphenylamine(as diphenylamine)	Ave	0.6091	0.6572	0.0100	17.2	15.9	7.9	30.0
1,2-Diphenylhydrazine	Ave	1.022	1.147		21.1	18.8	12.3	30.0
Sulfotepp	Ave	0.1678	0.1914		21.4	18.8	14.1	30.0
1,3,5-Trinitrobenzene	Ave	0.0616	0.0679			18.8	10.1	30.0
cis-Diallate	Ave	0.4078	0.4255		14.7	14.1	4.4	30.0
Phorate	Ave	0.5990	0.6756		21.1	18.8	12.8	30.0
Phenacetin	Ave	0.4090	0.5038		23.1	18.8	23.2	30.0
4-Bromophenyl-phenylether	Ave	0.1972	0.2057	0.1000	19.6	18.8	4.3	30.0
trans-Diallate	Ave	0.3898	0.4619		5.55	4.69	18.5	30.0
Hexachlorobenzene	Ave	0.2340	0.2485	0.1000	19.9	18.8	6.2	30.0
Dimethoate	Ave	0.3793	0.4211		20.8	18.8	11.0	30.0
4-Aminobiphenyl	Ave	0.8013	0.7951		18.6	18.8	-0.8	30.0
Pentachloronitrobenzene	Ave	0.1002	0.1087		20.3	18.8	8.5	30.0
Pentachlorophenol	Ave	0.1110	0.1426	0.0500	48.1	37.5	28.4	30.0
Pronamide	Ave	0.3372	0.4147		23.1	18.8	23.0	30.0
Dinoseb	Ave	0.1593	0.1688		19.9	18.8	6.0	30.0
Disulfoton	Ave	0.6498	0.6527		18.8	18.8	0.5	30.0
Phenanthrene	Ave	1.054	1.062	0.7000	18.9	18.8	0.7	30.0
Anthracene	Ave	1.050	1.085	0.7000	19.4	18.8	3.3	30.0
Carbazole	Ave	1.037	1.109	0.0100	20.1	18.8	7.0	30.0
Methyl parathion	Ave	0.2776	0.3570		24.1	18.8	28.6	30.0
Di-n-butyl phthalate	Ave	1.334	1.419	0.0100	19.9	18.8	6.4	30.0
Parathion	Ave	0.1642	0.2084		23.8	18.8	26.9	30.0
4-Nitroquinoline-1-oxide	Ave	0.0716	0.0771		20.2	18.8	7.8	30.0
Octachlorostyrene	Ave	0.0871	0.0960		20.7	18.8	10.2	30.0
Isodrin	Ave	0.1394	0.1417		19.1	18.8	1.7	30.0
Fluoranthene	Ave	1.116	1.203	0.6000	20.2	18.8	7.8	30.0
Benzidine	Ave	0.7062	0.5862		15.6	18.8	-17.0	30.0
Pyrene	Ave	1.283	1.220	0.6000	17.8	18.8	-4.9	30.0
p-Dimethylamino azobenzene	Ave	0.1687	0.1999		22.2	18.8	18.5	30.0
Chlorobenzilate	Ave	0.4062	0.4122		19.0	18.8	1.5	30.0
3,3'-Dimethylbenzidine	Ave	0.5689	0.6295		20.7	18.8	10.6	30.0
Butylbenzylphthalate	Ave	0.5841	0.6037	0.0100	19.4	18.8	3.3	30.0
2-Acetylaminofluorene	Ave	0.3872	0.4210		20.4	18.8	8.7	30.0
3,3'-Dichlorobenzidine	Ave	0.3581	0.3929	0.0100	20.6	18.8	9.7	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.1840	0.2102		21.4	18.8	14.2	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-397829/12 Calibration Date: 07/18/2023 11:17

Instrument ID: HP23264 Calib Start Date: 07/18/2023 07:41

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 07/18/2023 10:14

Lab File ID: JG1811.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	0.9482	0.997	0.8000	19.7	18.8	5.2	30.0
Chrysene	Ave	0.9376	1.005	0.7000	20.1	18.8	7.2	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7928	0.7934	0.0100	18.8	18.8	0.0	30.0
6-Methylchrysene	Ave	0.6431	0.6543		19.1	18.8	1.7	30.0
Di-n-octyl phthalate	Ave	1.788	1.895	0.0100	19.9	18.8	6.0	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.4631	0.5087		20.6	18.8	9.8	30.0
Benzo[b]fluoranthene	Ave	1.250	1.300	0.7000	19.5	18.8	3.9	30.0
Benzo[k]fluoranthene	Ave	1.272	1.297	0.7000	19.1	18.8	2.0	30.0
Benzo[a]pyrene	Ave	1.064	1.275	0.7000	22.5	18.8	19.8	30.0
3-Methylcholanthrene	Ave	0.4678	0.4439		17.8	18.8	-5.1	30.0
Dibenz[a,h]acridine	Ave	0.8816	1.075		22.9	18.8	22.0	30.0
Dibenz[a,j]acridine	Ave	0.999	1.152		21.6	18.8	15.4	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.014	1.086	0.5000	20.1	18.8	7.1	30.0
Dibenz(a,h)anthracene	Ave	1.121	1.162	0.4000	19.4	18.8	3.6	30.0
Benzo[g,h,i]perylene	Ave	1.192	1.294	0.5000	20.4	18.8	8.5	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-Jul-2023 11:17:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 410-0089185-012
Operator ID: kel10217 Instrument ID: HP23264
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:19:23 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 15:03:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.695	1.701	-0.006	94	273002	18.8	18.1	
2 N-Nitrosodimethylamine	74	1.928	1.928	0.000	93	454396	18.8	18.5	
3 Pyridine	79	1.964	1.969	-0.005	84	1571503	37.5	37.2	
4 Dimethylformamide	73	2.255	2.267	-0.012	94	592261	18.8	19.6	a
5 2-Picoline	93	2.553	2.559	-0.006	93	829156	18.8	20.2	
6 N-Nitrosomethylethylamine	88	2.641	2.647	-0.005	95	362646	18.8	18.0	
7 Methyl methanesulfonate	80	2.921	2.921	0.000	86	448690	18.8	18.5	a
11 N-Nitrosodiethylamine	102	3.289	3.289	0.000	87	345243	18.8	21.1	
12 Ethyl methanesulfonate	109	3.587	3.587	0.000	96	379684	18.8	18.7	a
17 Aniline	93	4.019	4.019	0.000	95	1091085	18.8	19.1	
16 Phenol	94	4.036	4.036	0.000	97	1054168	18.8	18.5	
18 Bis(2-chloroethyl)ether	93	4.077	4.077	0.000	85	722424	18.8	18.2	
19 2-Chlorophenol	128	4.141	4.147	-0.006	93	651456	18.8	18.6	
21 1,3-Dichlorobenzene	146	4.276	4.276	0.000	95	647848	18.8	18.6	
* 22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	96	184810	7.50	7.50	
23 1,4-Dichlorobenzene	146	4.346	4.346	0.000	92	686200	18.8	18.4	
26 Benzyl alcohol	108	4.474	4.474	0.000	90	465521	18.8	20.0	
27 1,2-Dichlorobenzene	146	4.492	4.492	0.000	96	650863	18.8	18.8	
30 2,2'-oxybis[1-chloropropane]	45	4.591	4.591	0.000	93	1570403	18.8	17.9	
29 2-Methylphenol	108	4.603	4.603	0.000	97	656506	18.8	19.5	
28 Indene	115		4.603				ND	ND	U
31 N-Nitrosopyrrolidine	100	4.696	4.696	0.000	83	431059	18.8	21.4	
33 N-Nitrosodi-n-propylamine	70	4.714	4.714	0.000	85	640891	18.8	19.2	
32 Acetophenone	105	4.714	4.714	0.000	87	1096176	18.8	20.3	
35 N-Nitrosomorpholine	56	4.737	4.737	0.000	92	648265	18.8	20.9	
36 2-Toluidine	106	4.755	4.754	0.001	83	1196649	18.8	20.4	
34 4-Methylphenol	108	4.749	4.754	-0.005	83	768524	18.8	19.7	
37 Hexachloroethane	117	4.813	4.813	0.000	97	287071	18.8	18.2	
40 Nitrobenzene	77	4.877	4.877	0.000	92	798559	18.8	17.2	
41 N-Nitrosopiperidine	114	5.023	5.023	0.000	80	356593	18.8	19.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Isophorone	82	5.105	5.105	0.000	98	1524789	18.8	18.3	
43 2-Nitrophenol	139	5.187	5.186	0.001	92	322001	18.8	18.8	
44 2,4-Dimethylphenol	107	5.245	5.251	-0.006	98	697612	18.8	19.9	
46 o,o',o''-Triethylphosphorothioat	198	5.292	5.292	0.000	94	248888	18.8	18.4	
47 Bis(2-chloroethoxy)methane	93	5.321	5.321	0.000	91	908952	18.8	18.1	
48 Benzoic acid	105		5.386				ND	ND	U
49 2,4-Dichlorophenol	162	5.432	5.438	-0.006	97	524204	18.8	20.0	
50 1,2,4-Trichlorobenzene	180	5.490	5.490	0.000	94	518483	18.8	17.6	
* 52 Naphthalene-d8	136	5.549	5.549	0.001	98	712856	7.50	7.50	
53 Naphthalene	128	5.566	5.566	0.000	97	1897160	18.8	18.6	
56 4-Chloroaniline	127	5.630	5.630	0.000	94	803888	18.8	18.6	
57 2,6-Dichlorophenol	162	5.636	5.636	0.000	87	508915	18.8	19.7	
58 Hexachloropropene	213	5.648	5.648	0.000	95	370273	18.8	20.0	a
59 Hexachlorobutadiene	225	5.683	5.683	0.000	96	309622	18.8	19.4	
61 Quinoline	129	5.887	5.887	0.000	95	1424779	18.8	20.3	
63 N-Nitrosodi-n-butylamine	84	5.946	5.946	0.000	91	584051	18.8	15.2	
64 p-Phenylene diamine	108	5.969	5.969	0.000	95	316232	18.8	13.9	
65 4-Chloro-3-methylphenol	107	6.121	6.121	0.000	96	621980	18.8	19.2	
66 Safrole, Total	162	6.150	6.150	0.000	84	453301	18.8	20.1	
67 2-Methylnaphthalene	142	6.226	6.226	0.000	91	1157699	18.8	18.6	
69 1-Methylnaphthalene	142	6.319	6.319	0.000	92	1083224	18.8	18.2	
71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	94	357327	18.8	24.0	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.383	0.001	98	552988	18.8	20.5	
72 Isosafrole Peak 1	162	6.425	6.430	-0.005	85	63229	2.25	2.43	a
79 2,4,6-Trichlorophenol	196	6.506	6.506	0.000	96	362087	18.8	21.1	
80 2,4,5-Trichlorophenol	196	6.553	6.553	0.000	92	401661	18.8	21.3	
82 Isosafrole Peak 2	162	6.641	6.640	0.001	88	444024	16.5	16.9	a
83 1,1'-Biphenyl	154	6.676	6.675	0.001	94	1482471	18.8	20.9	
84 2-Chloronaphthalene	162	6.687	6.687	0.000	96	1052684	18.8	19.6	
85 1-Chloronaphthalene	162	6.711	6.710	0.001	96	1099757	18.8	21.4	a
86 Phenyl ether	170	6.775	6.775	0.000	92	818986	18.8	21.7	
87 2-Nitroaniline	138	6.798	6.798	0.000	77	375176	18.8	19.8	
88 1,4-Naphthoquinone	158	6.862	6.862	0.000	80	462033	18.8	21.8	a
89 1,4-Dinitrobenzene	168	6.933	6.932	0.001	89	181556	18.8	21.6	
90 Dimethyl phthalate	163	6.968	6.967	0.001	97	1226443	18.8	19.3	
91 1,3-Dinitrobenzene	168	6.997	6.997	0.000	79	204018	18.8	20.8	
92 2,6-Dinitrotoluene	165	7.026	7.026	0.000	87	274282	18.8	20.5	
93 Acenaphthylene	152	7.079	7.078	0.001	99	1829360	18.8	19.8	
95 3-Nitroaniline	138	7.189	7.189	0.000	87	329883	18.8	20.1	
* 96 Acenaphthene-d10	164	7.213	7.213	0.000	96	341549	7.50	7.50	
97 Acenaphthene	153	7.242	7.242	0.000	98	1138600	18.8	19.0	
98 2,4-Dinitrophenol	184	7.283	7.283	0.000	79	368052	37.5	43.5	
99 Pentachlorobenzene	250	7.370	7.370	0.000	97	474136	18.8	20.3	a
100 4-Nitrophenol	109	7.400	7.399	0.001	92	433410	37.5	43.4	
102 2,4-Dinitrotoluene	165	7.406	7.405	0.001	85	380028	18.8	21.0	
101 Dibenzofuran	168	7.411	7.411	0.000	97	1578508	18.8	19.5	
104 1-Naphthylamine	143	7.487	7.487	0.000	98	1078677	18.8	19.8	
105 2,3,4,6-Tetrachlorophenol	232	7.534	7.534	0.000	76	320764	18.8	19.4	
106 2-Naphthylamine	143	7.563	7.563	0.000	96	1193924	18.8	21.1	
107 Diethyl phthalate	149	7.639	7.639	0.000	96	1414610	18.8	20.7	
109 Thionazin	107	7.715	7.715	0.000	76	256362	18.8	21.1	
108 Fluorene	166	7.733	7.732	0.000	94	1225331	18.8	19.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
110 4-Chlorophenyl phenyl ether	204	7.738	7.738	0.000	94	542524	18.8	19.0	
111 N-Nitro-o-toluidine	152	7.756	7.756	0.000	94	404252	18.8	22.5	
112 4-Nitroaniline	138	7.768	7.767	0.001	83	344166	18.8	21.1	
113 4,6-Dinitro-2-methylphenol	198	7.785	7.785	0.000	69	424347	37.5	43.4	
114 N-Nitrosodiphenylamine	169	7.855	7.855	0.000	66	878053	15.9	17.2	
115 1,2-Diphenylhydrazine	77	7.884	7.884	0.000	41	1803275	18.8	21.1	
117 Sulfotepp	97	8.007	8.013	-0.006	75	300791	18.8	21.4	
118 1,3,5-Trinitrobenzene	213	8.118	8.118	0.000	82	106665	18.8	20.6	
120 cis-Diallate	86	8.124	8.124	0.000	93	501608	14.1	14.7	
119 Phorate	75	8.135	8.135	0.000	92	1061885	18.8	21.1	E
121 Phenacetin	108	8.153	8.153	0.000	90	791910	18.8	23.1	
122 4-Bromophenyl phenyl ether	248	8.200	8.199	0.001	76	323359	18.8	19.6	
123 trans-Diallate	86	8.211	8.211	0.000	92	181493	4.69	5.55	
124 Hexachlorobenzene	284	8.246	8.246	0.000	94	390646	18.8	19.9	
125 Dimethoate	87	8.299	8.299	0.000	96	661915	18.8	20.8	
128 Pentachloronitrobenzene	237	8.451	8.445	0.006	59	170901	18.8	20.3	
127 Pentachlorophenol	266	8.451	8.451	0.000	84	448183	37.5	48.1	E
129 4-Aminobiphenyl	169	8.451	8.451	0.000	91	1249695	18.8	18.6	
130 Pronamide	173	8.515	8.515	0.000	88	651852	18.8	23.1	
* 131 Phenanthrene-d10	188	8.620	8.620	0.000	95	628690	7.50	7.50	
133 Dinoseb	211	8.620	8.620	0.000	80	265374	18.8	19.9	a
134 Disulfoton	88	8.632	8.632	0.000	97	1025881	18.8	18.8	
132 Phenanthrene	178	8.643	8.643	0.000	98	1669425	18.8	18.9	
135 Anthracene	178	8.690	8.690	0.000	98	1704650	18.8	19.4	
136 Carbazole	167	8.854	8.853	0.001	96	1742762	18.8	20.1	
137 Methyl parathion	109	8.988	8.988	0.000	89	561121	18.8	24.1	
138 Di-n-butyl phthalate	149	9.192	9.192	0.000	99	2230841	18.8	19.9	
139 Ethyl Parathion	109	9.356	9.356	0.000	81	327520	18.8	23.8	
140 4-Nitroquinoline-1-oxide	190	9.379	9.379	0.000	77	121211	18.8	20.2	
142 Octachlorostyrene	308	9.583	9.583	0.000	90	150868	18.8	20.7	
143 Isodrin	193	9.619	9.624	-0.006	89	222785	18.8	19.1	a
S 68 Diallate	86				0		18.8	20.2	
144 Fluoranthene	202	9.764	9.764	0.000	98	1890712	18.8	20.2	
145 Benzidine	184	9.910	9.910	0.000	99	941026	18.8	15.6	
* 146 Pyrene-d10 (IS)	212	9.963	9.963	0.000	97	642170	7.50	7.50	
147 Pyrene	202	9.981	9.980	0.001	96	1958096	18.8	17.8	
149 p-Dimethylamino azobenzene	225	10.278	10.278	0.000	92	320942	18.8	22.2	
150 Chlorobenzilate	139	10.331	10.331	0.000	82	661752	18.8	19.0	a
152 3,3'-Dimethylbenzidine	212	10.623	10.628	-0.005	99	1010616	18.8	20.7	
153 Butyl benzyl phthalate	149	10.646	10.646	0.000	96	969183	18.8	19.4	
155 2-Acetylaminofluorene	181	10.891	10.897	-0.006	94	675805	18.8	20.4	
S 94 Isosafrole	162				0		18.8	19.3	
157 3,3'-Dichlorobenzidine	252	11.218	11.218	0.000	79	630756	18.8	20.6	
158 4,4'-Methylene bis(2-chloroani	231	11.230	11.230	0.000	83	337412	18.8	21.4	
156 Benzo[a]anthracene	228	11.230	11.230	0.000	98	1600731	18.8	19.7	
159 Chrysene	228	11.271	11.271	0.000	97	1613403	18.8	20.1	
160 Bis(2-ethylhexyl) phthalate	149	11.312	11.312	0.000	95	1273805	18.8	18.8	
161 6-Methylchrysene	242	11.826	11.831	-0.005	98	1050361	18.8	19.1	
162 Di-n-octyl phthalate	149	12.153	12.152	0.001	98	2234017	18.8	19.9	
163 7,12-Dimethylbenz(a)anthracene	256	12.596	12.596	0.000	85	599683	18.8	20.6	a
164 Benzo[b]fluoranthene	252	12.596	12.602	-0.006	96	1532031	18.8	19.5	
165 Benzo[k]fluoranthene	252	12.637	12.637	0.000	97	1528823	18.8	19.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
166 Benzo[a]pyrene	252	13.046	13.046	0.000	82	1502837	18.8	22.5	
* 167 Perylene-d12	264	13.128	13.128	0.000	94	471572	7.50	7.50	
168 3-Methylcholanthrene	268	13.554	13.560	-0.006	95	523305	18.8	17.8	
169 Dibenz[a,h]acridine	279	14.342	14.342	0.000	93	1267622	18.8	22.9	
170 Dibenz[a,j]acridine	279	14.412	14.412	0.000	95	1358545	18.8	21.6	
171 Indeno[1,2,3-cd]pyrene	276	14.634	14.634	0.000	95	1279785	18.8	20.1	
172 Dibenz(a,h)anthracene	278	14.675	14.675	0.000	96	1369505	18.8	19.4	
173 Benzo[g,h,i]perylene	276	14.990	14.984	0.006	92	1525463	18.8	20.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

E - Exceeded Maximum Amount

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270ICV_00022 Amount Added: 1.00 Units: mL

Report Date: 18-Jul-2023 15:33:47 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D

Injection Date: 18-Jul-2023 11:17:30 Instrument ID: HP23264 Operator ID: kel10217

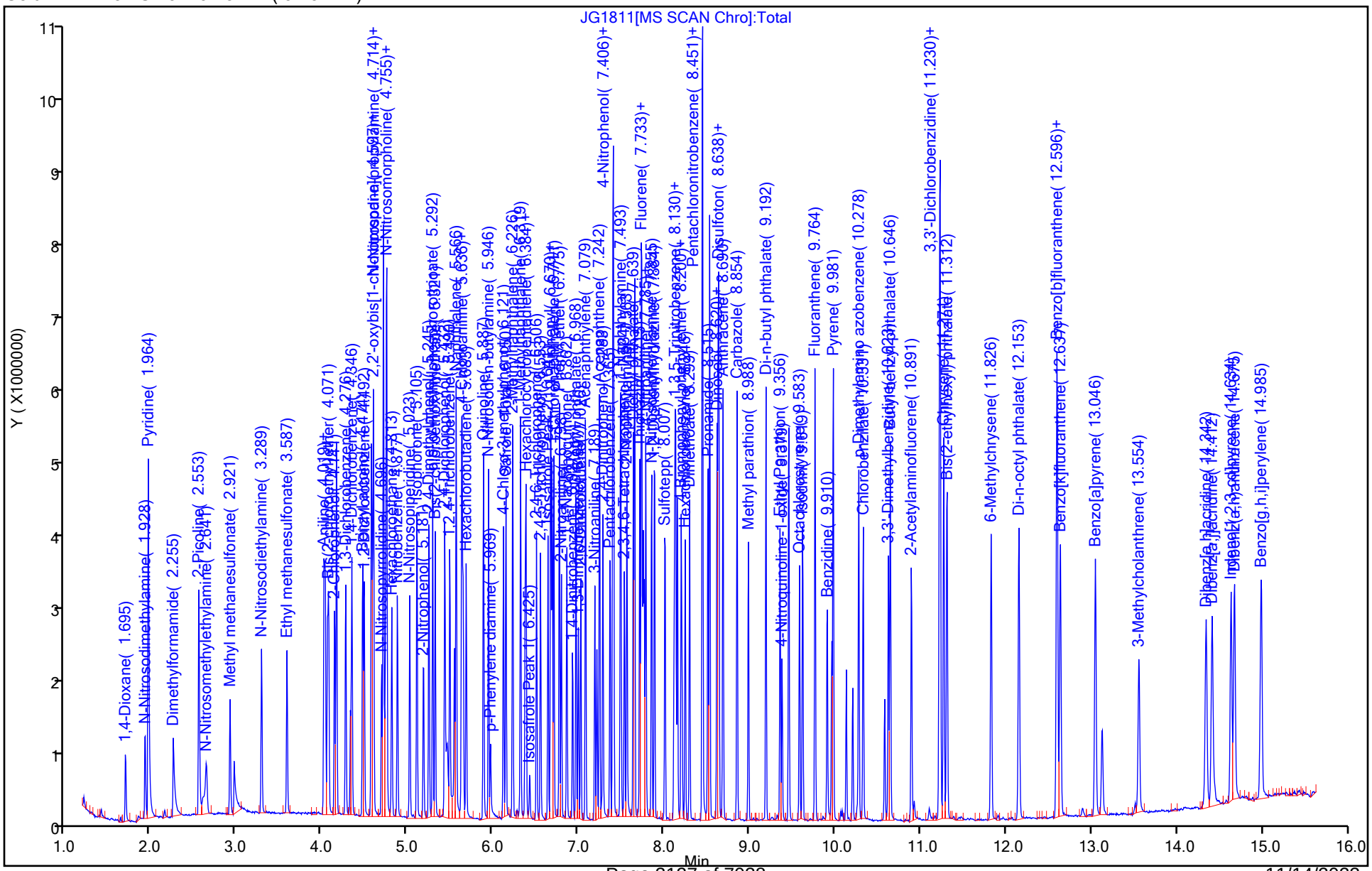
Lims ID: ICV Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

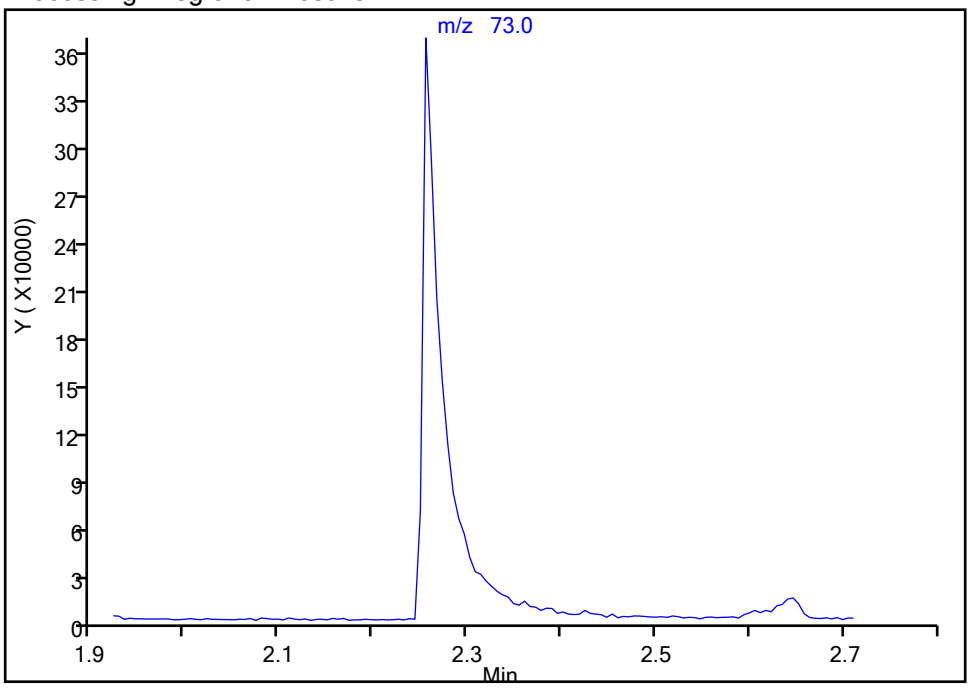
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

4 Dimethylformamide, CAS: 68-12-2

Signal: 1

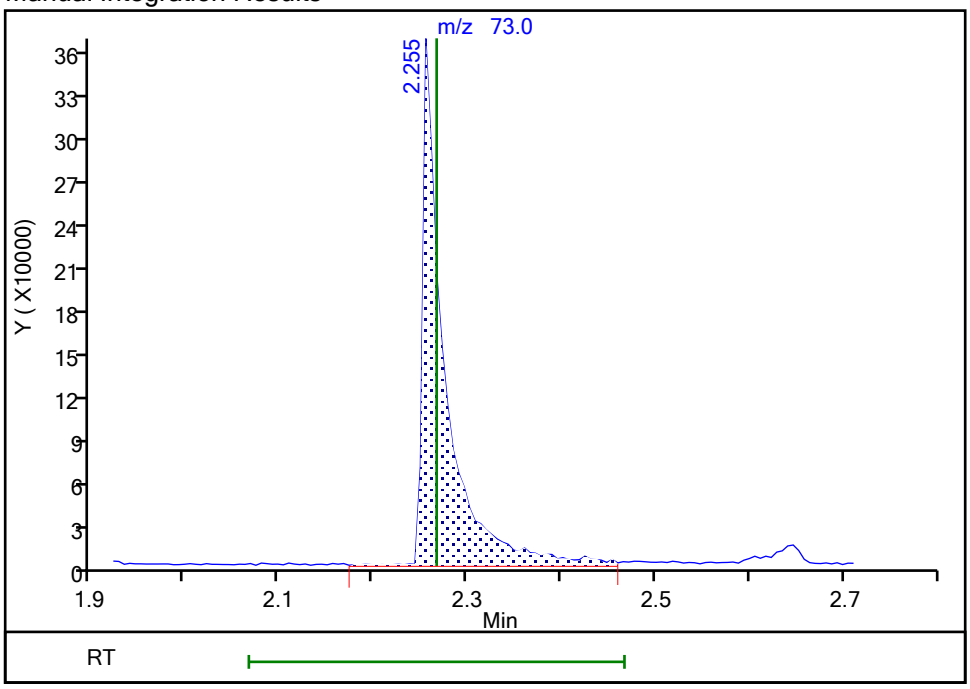
Not Detected
Expected RT: 2.27

Processing Integration Results



Manual Integration Results

RT: 2.26
Area: 592261
Amount: 19.612770
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:00:12 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

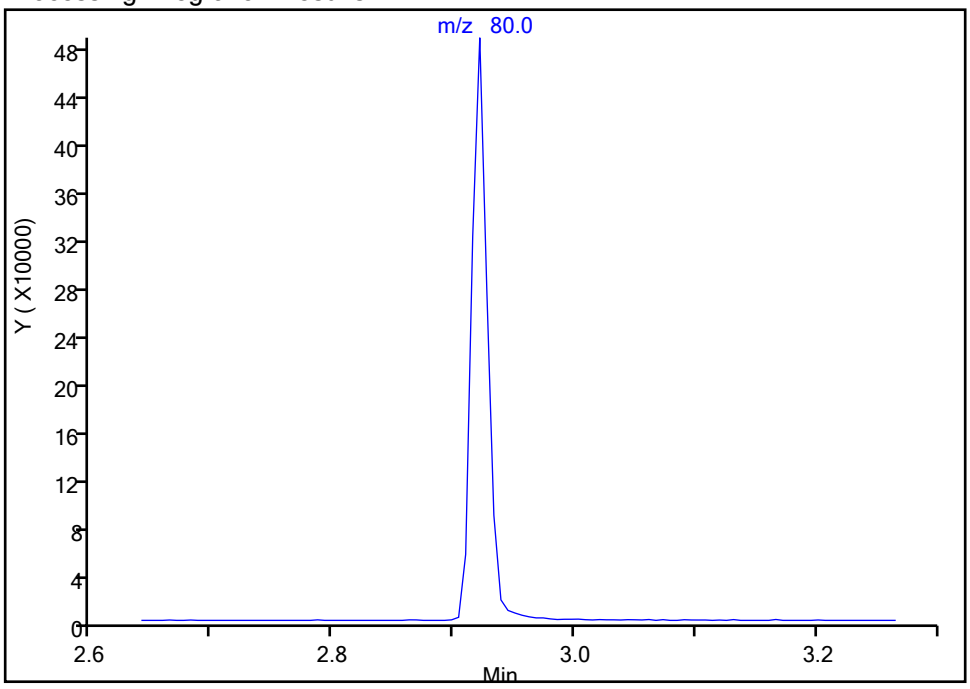
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

7 Methyl methanesulfonate, CAS: 66-27-3

Signal: 1

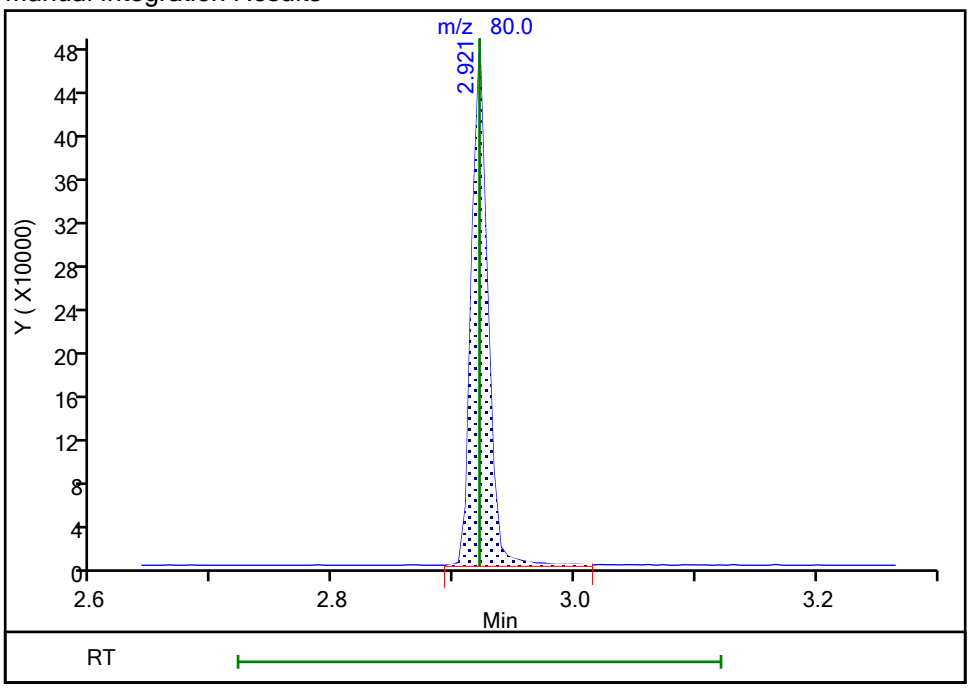
Not Detected
Expected RT: 2.92

Processing Integration Results



RT: 2.92
Area: 448690
Amount: 18.494439
Amount Units: ug/ml

Manual Integration Results



Reviewer: SJ89, 18-Jul-2023 15:00:17 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

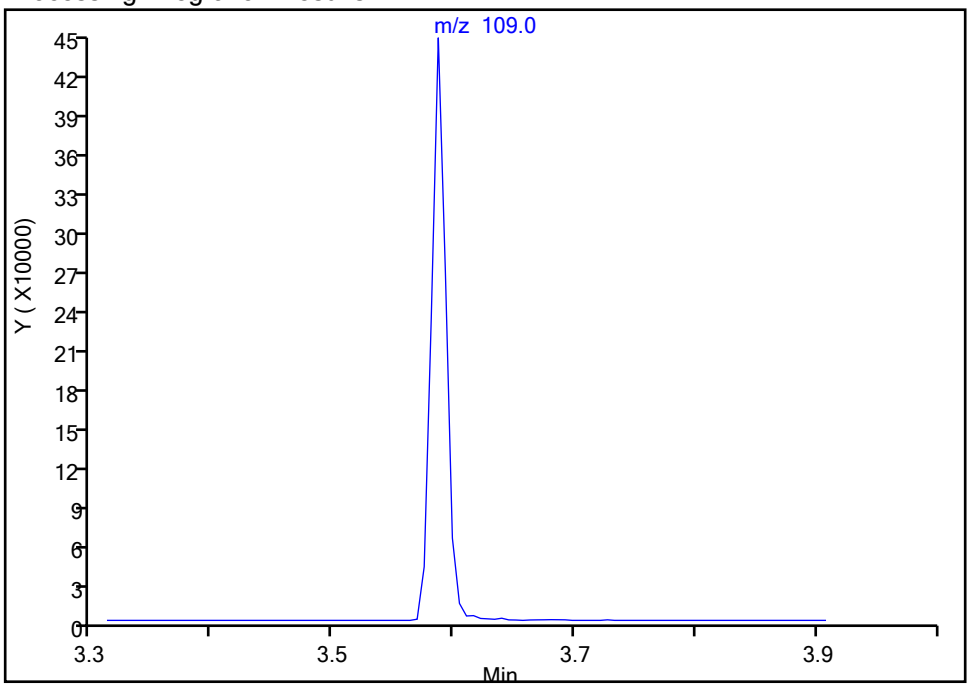
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

12 Ethyl methanesulfonate, CAS: 62-50-0

Signal: 1

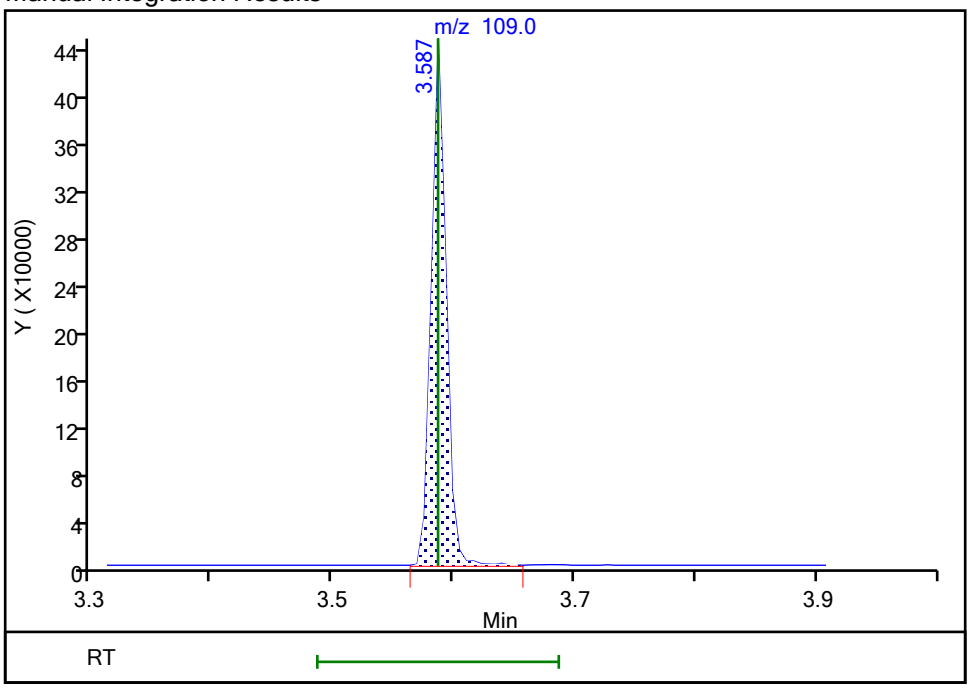
Not Detected
Expected RT: 3.59

Processing Integration Results



Manual Integration Results

RT: 3.59
Area: 379684
Amount: 18.723946
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:00:21 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

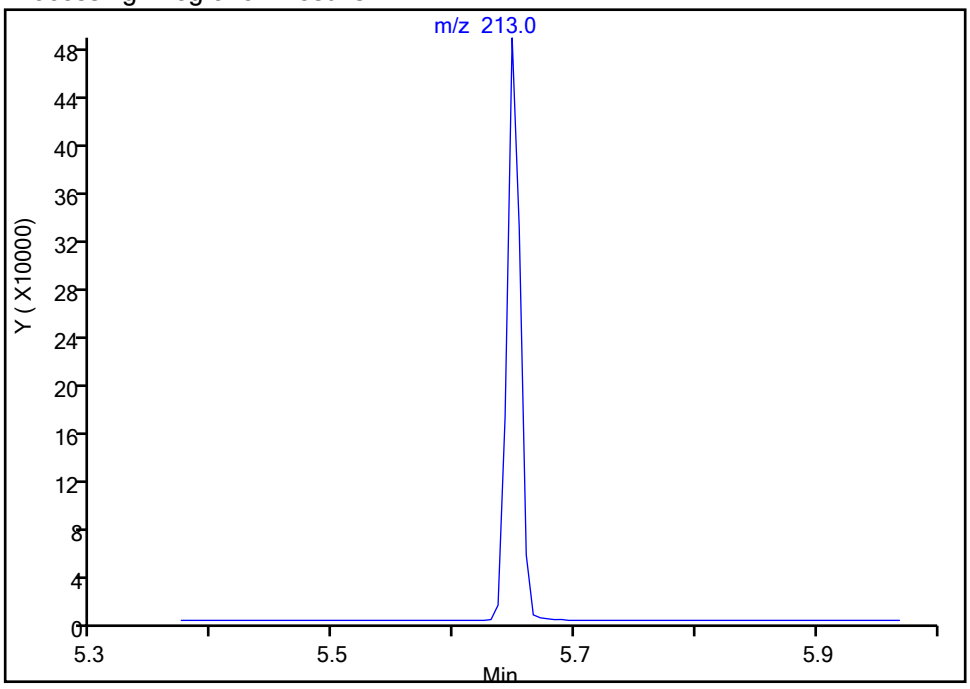
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

58 Hexachloropropene, CAS: 1888-71-7

Signal: 1

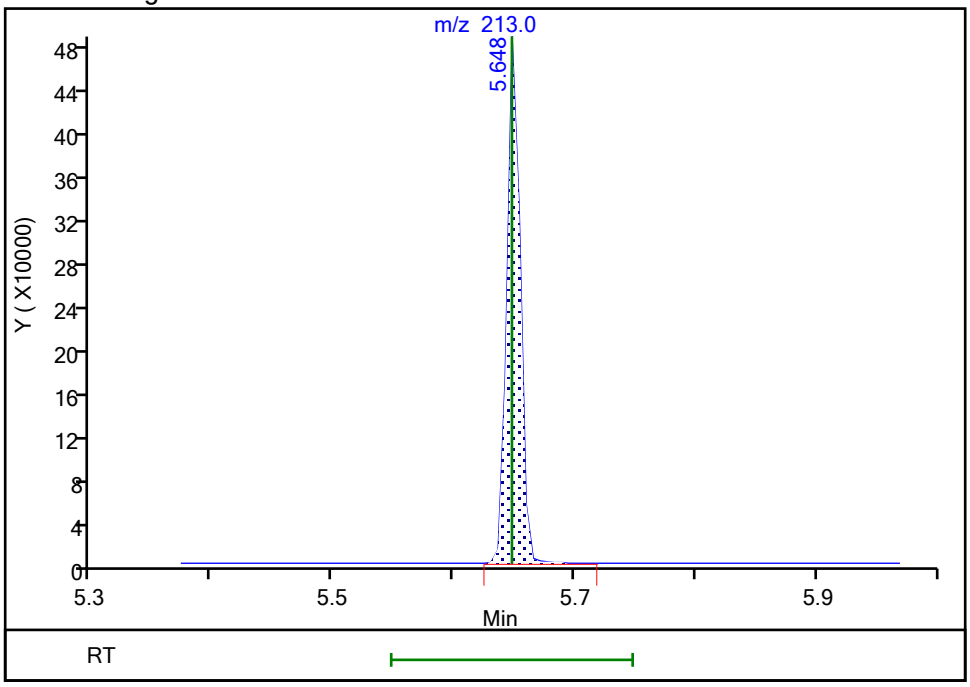
Not Detected
Expected RT: 5.65

Processing Integration Results



Manual Integration Results

RT: 5.65
Area: 370273
Amount: 19.982817
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:00:56 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

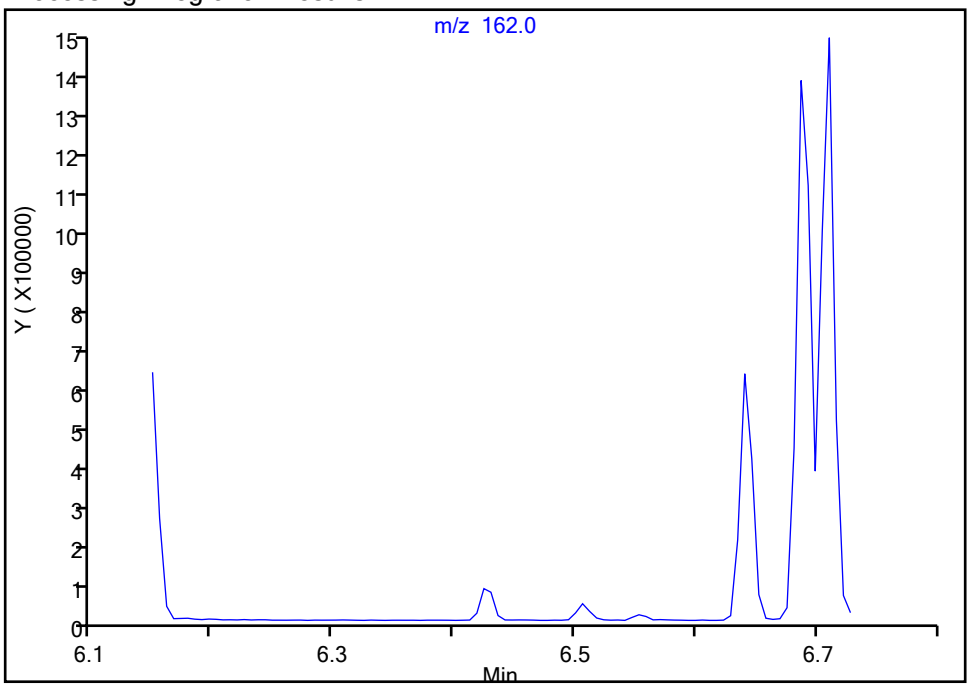
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

72 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

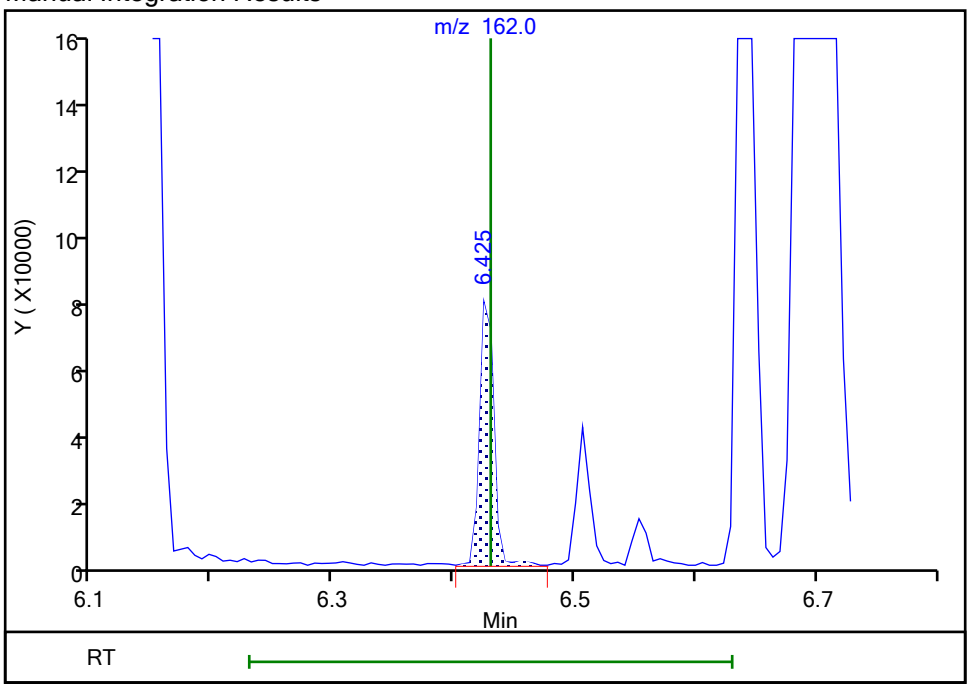
Processing Integration Results

Not Detected
Expected RT: 6.43



Manual Integration Results

RT: 6.42
Area: 63229
Amount: 2.427403
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:01:31 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

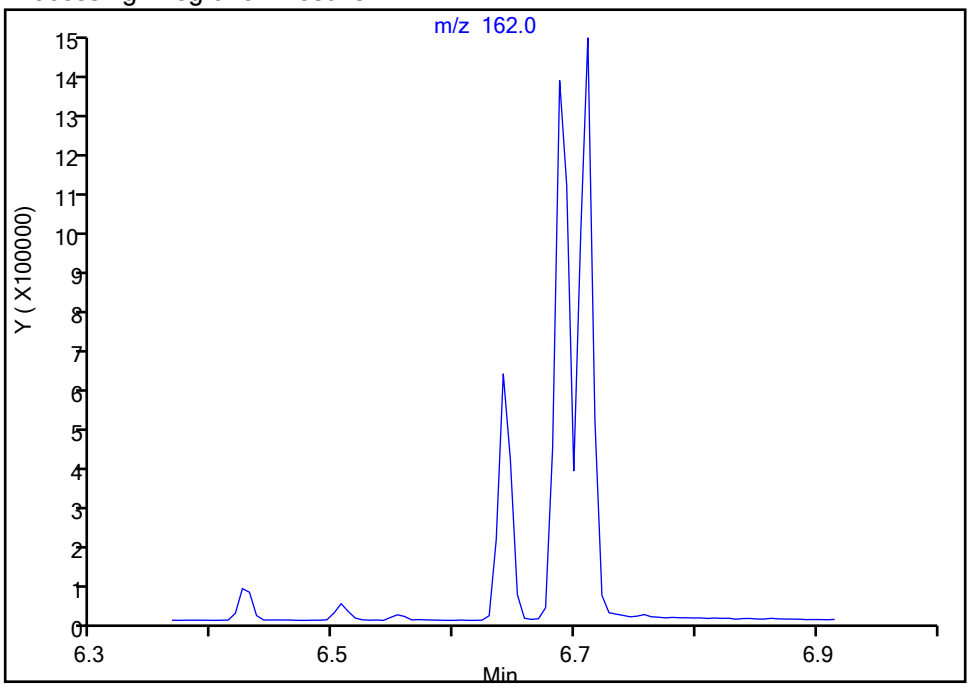
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

82 Isosafrole Peak 2, CAS: 120-58-1

Signal: 1

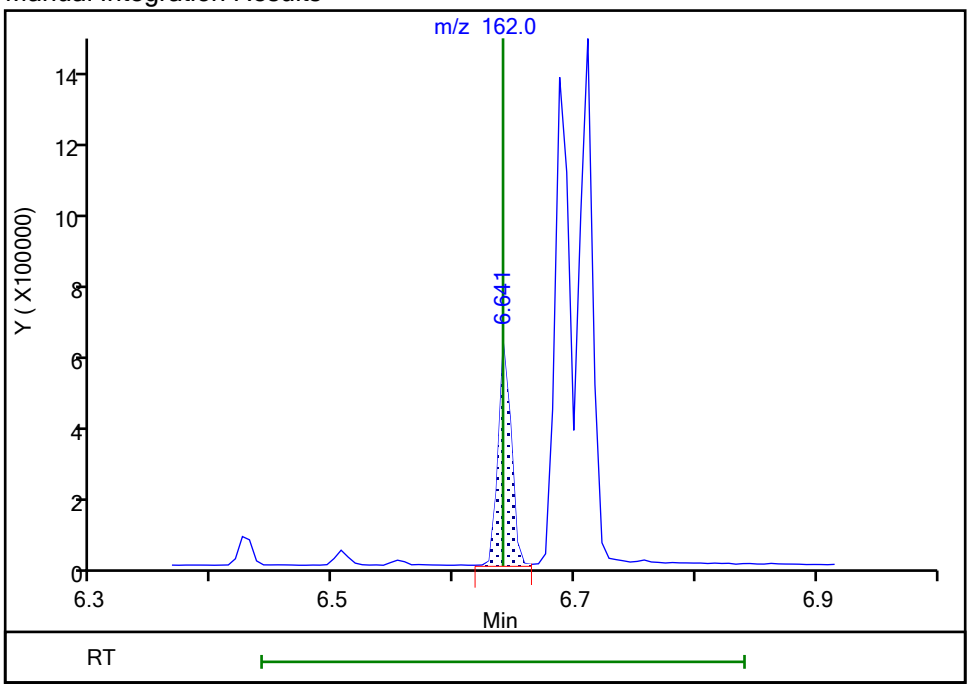
Not Detected
Expected RT: 6.64

Processing Integration Results



RT: 6.64
Area: 444024
Amount: 16.904079
Amount Units: ug/ml

Manual Integration Results



Reviewer: SJ89, 18-Jul-2023 15:01:39 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

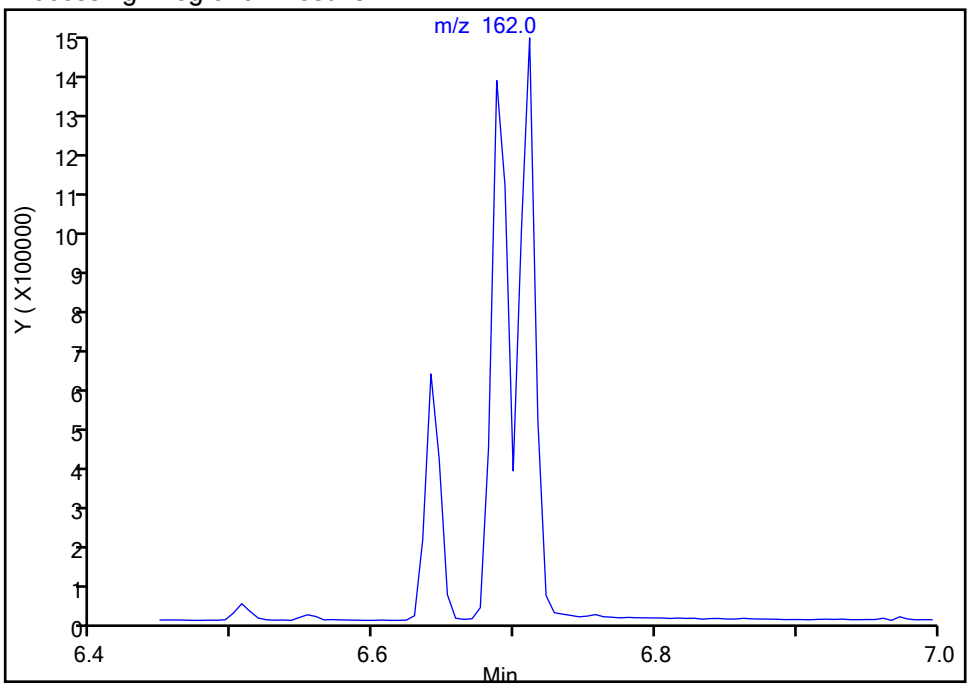
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

85 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

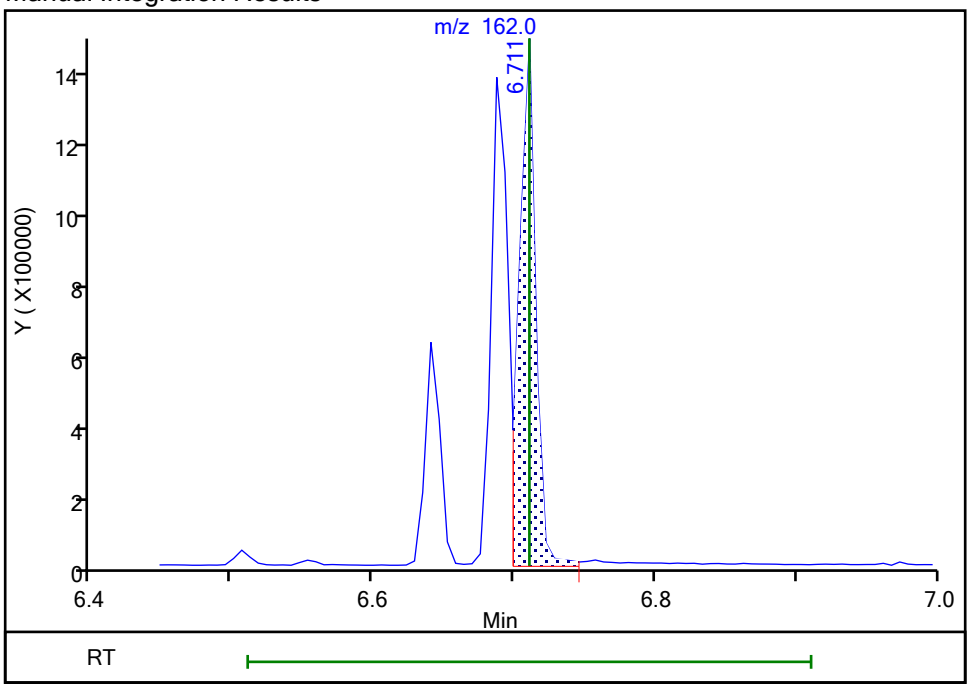
Not Detected
Expected RT: 6.71

Processing Integration Results



Manual Integration Results

RT: 6.71
Area: 1099757
Amount: 21.350267
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:01:44 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

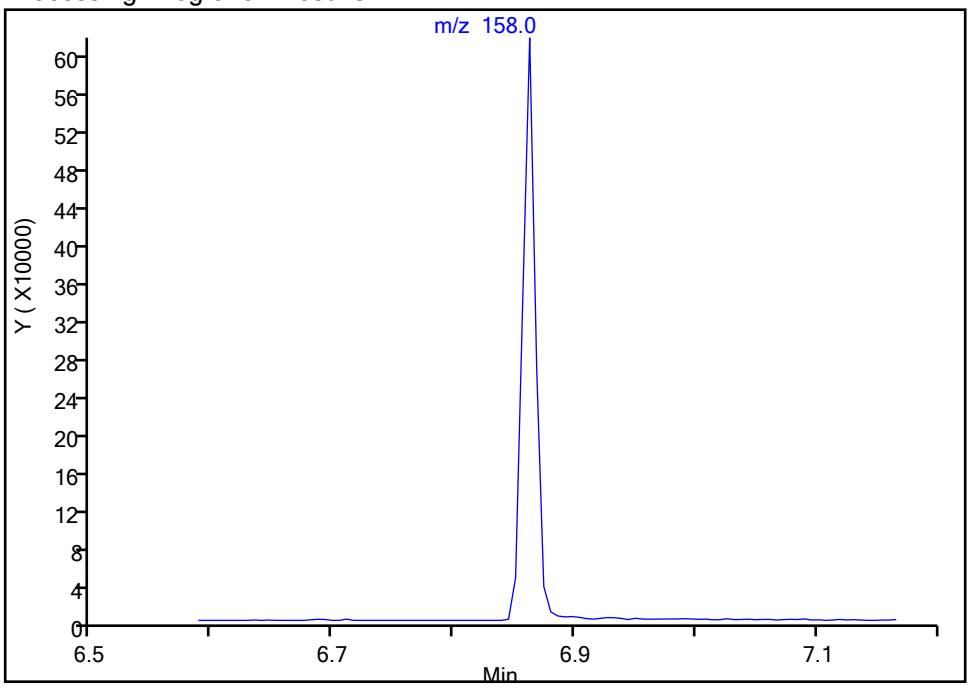
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

88 1,4-Naphthoquinone, CAS: 130-15-4

Signal: 1

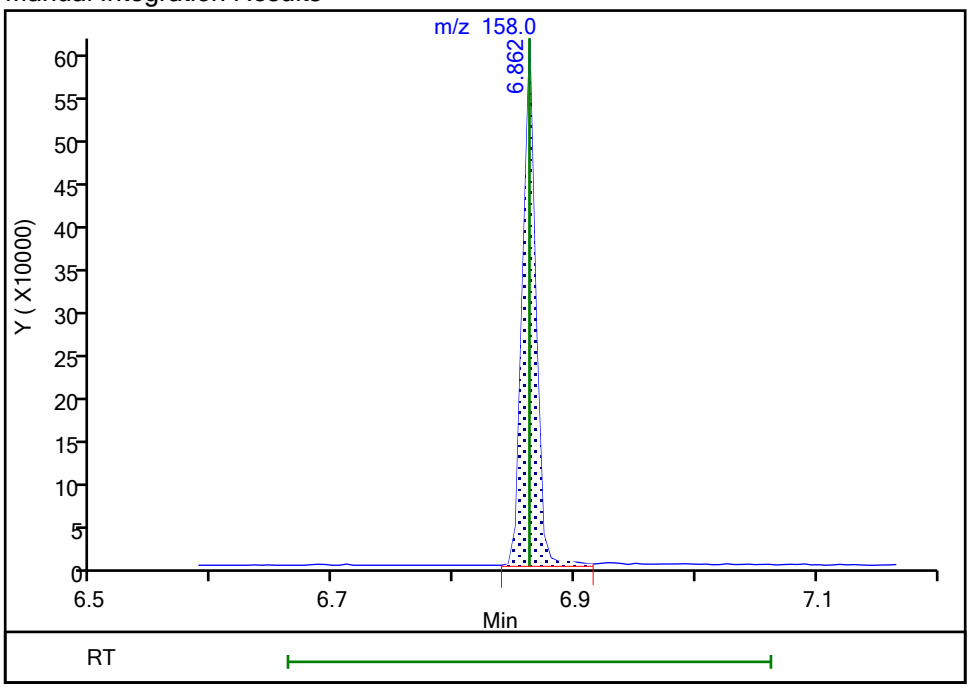
Not Detected
Expected RT: 6.86

Processing Integration Results



RT: 6.86
Area: 462033
Amount: 21.753953
Amount Units: ug/ml

Manual Integration Results



Reviewer: SJ89, 18-Jul-2023 15:01:51 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

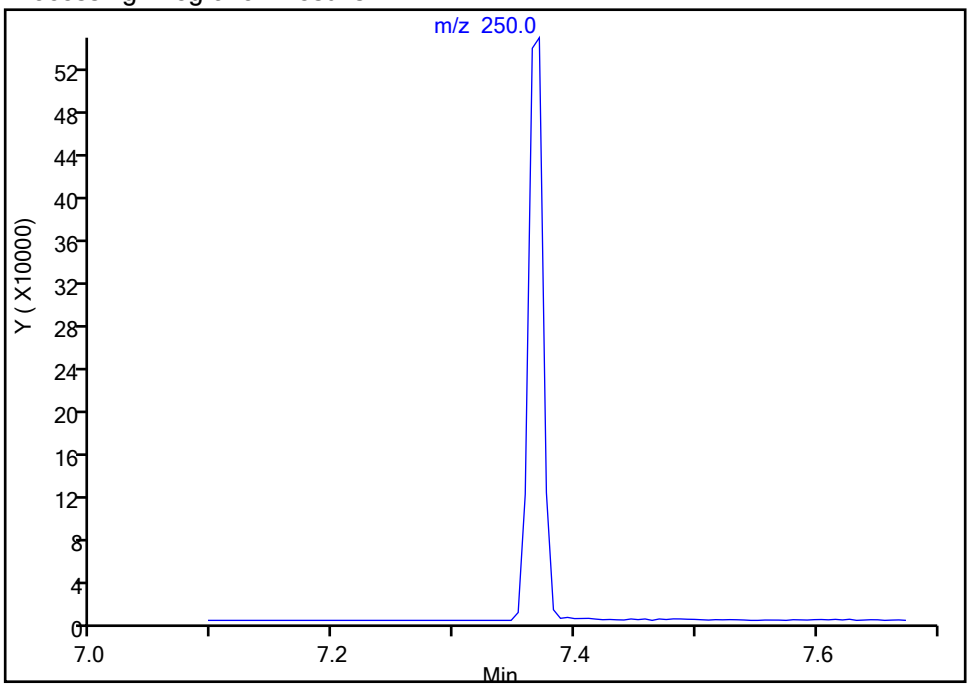
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

99 Pentachlorobenzene, CAS: 608-93-5

Signal: 1

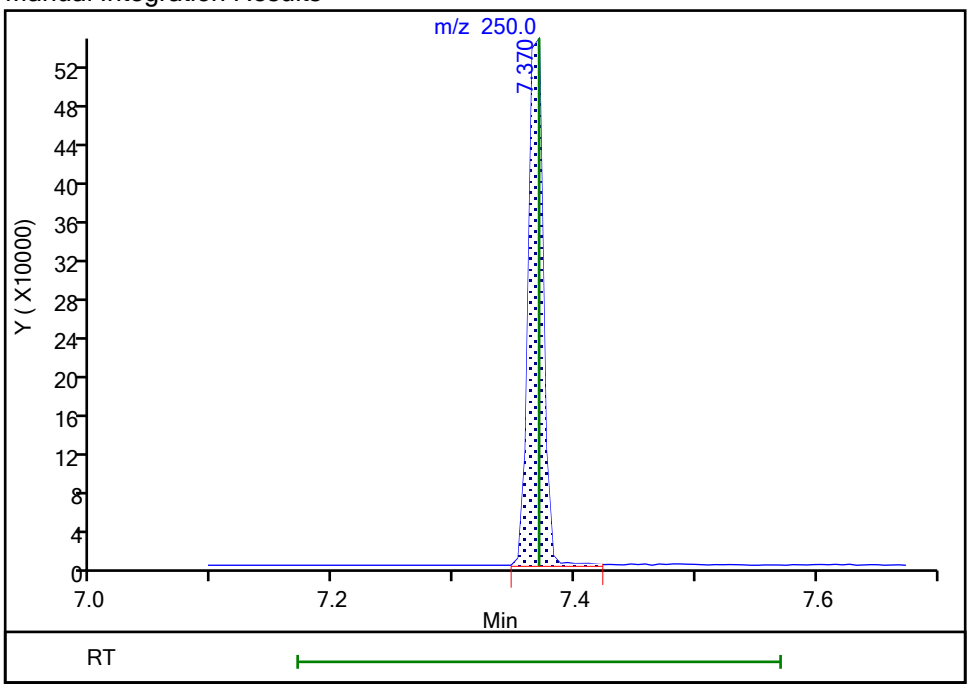
Not Detected
Expected RT: 7.37

Processing Integration Results



Manual Integration Results

RT: 7.37
Area: 474136
Amount: 20.341448
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:02:01 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

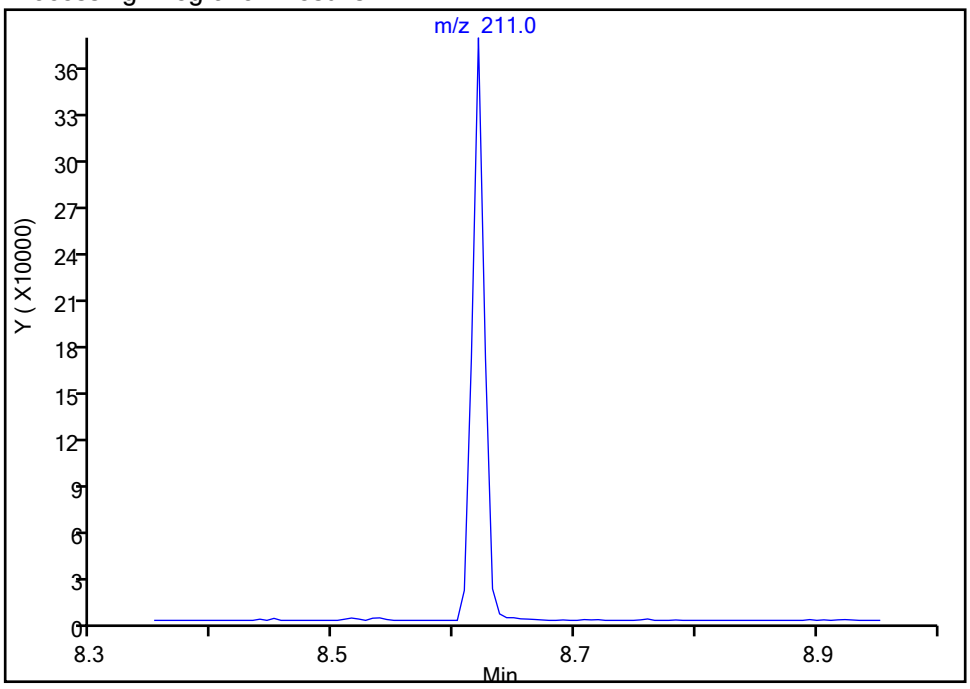
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

133 Dinoseb, CAS: 88-85-7

Signal: 1

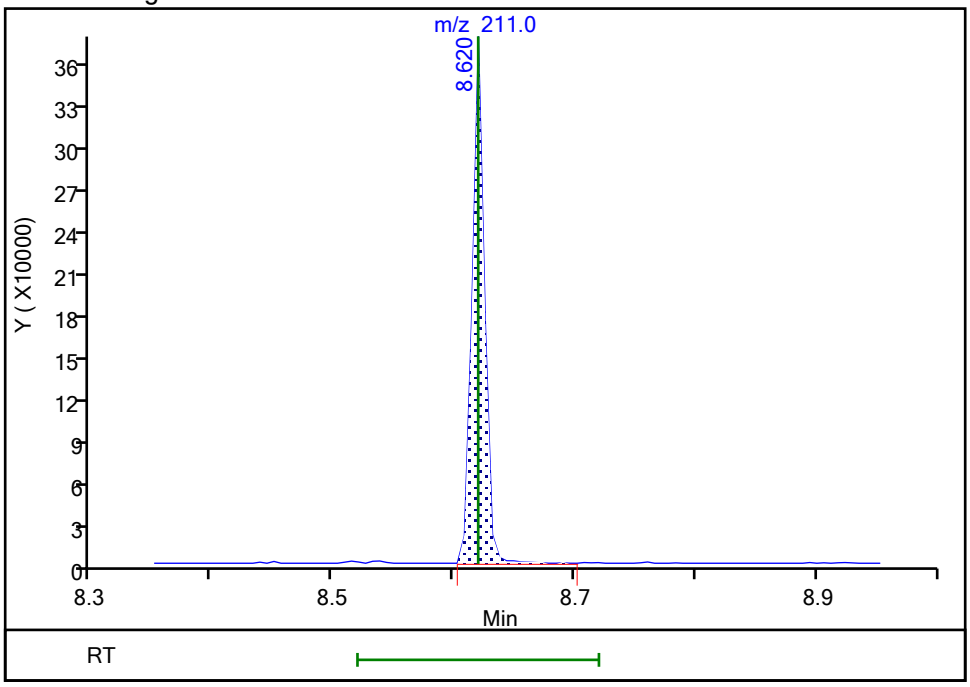
Not Detected
Expected RT: 8.62

Processing Integration Results



Manual Integration Results

RT: 8.62
Area: 265374
Amount: 19.877235
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:02:26 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

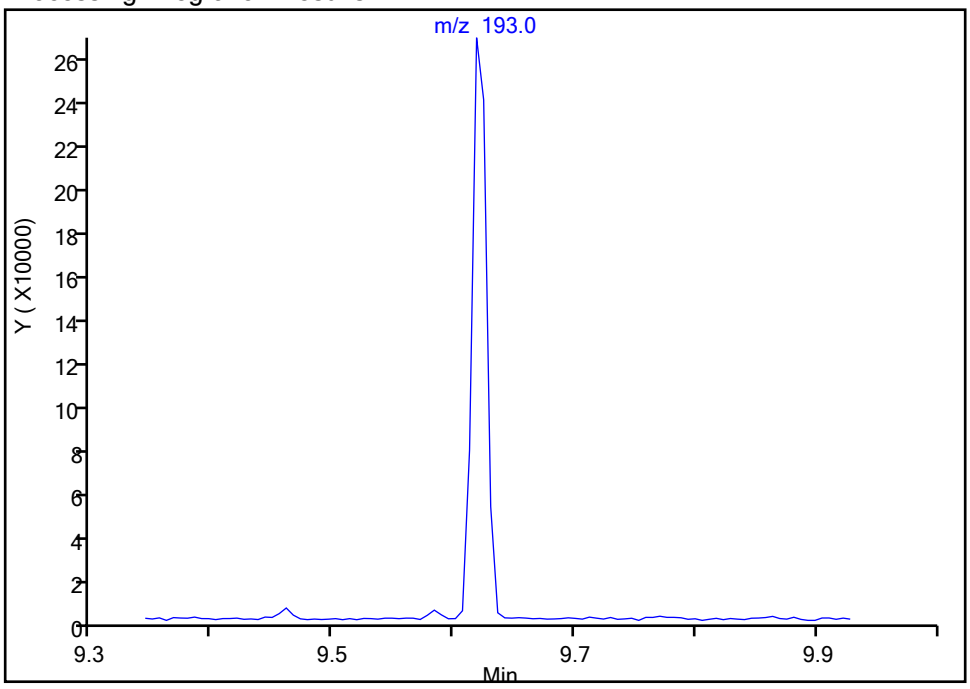
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

143 Isodrin, CAS: 465-73-6

Signal: 1

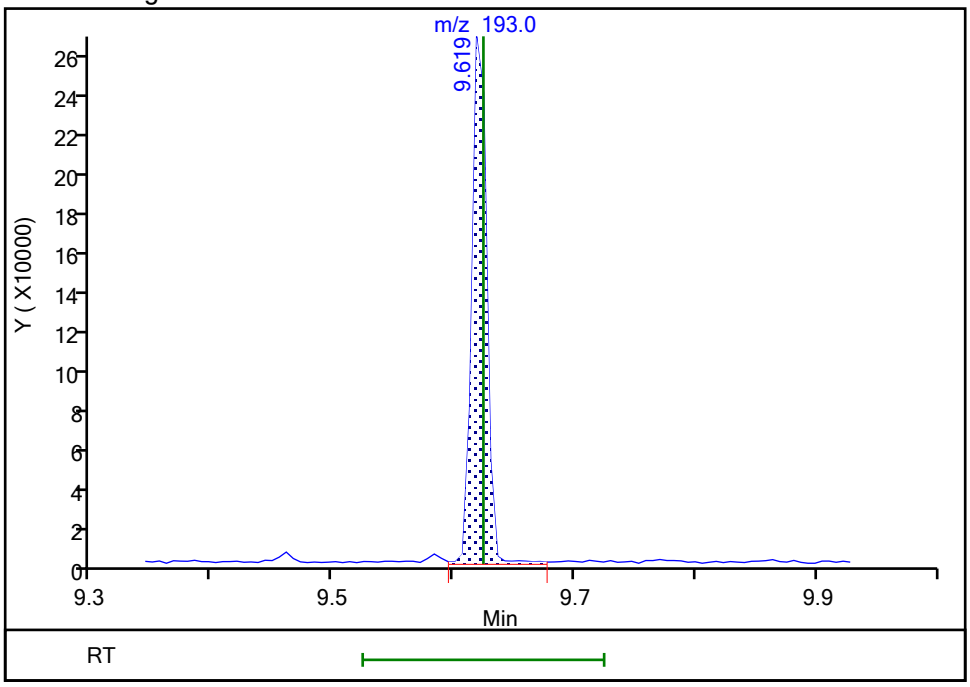
Not Detected
Expected RT: 9.62

Processing Integration Results



Manual Integration Results

RT: 9.62
Area: 222785
Amount: 19.059382
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:02:35 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

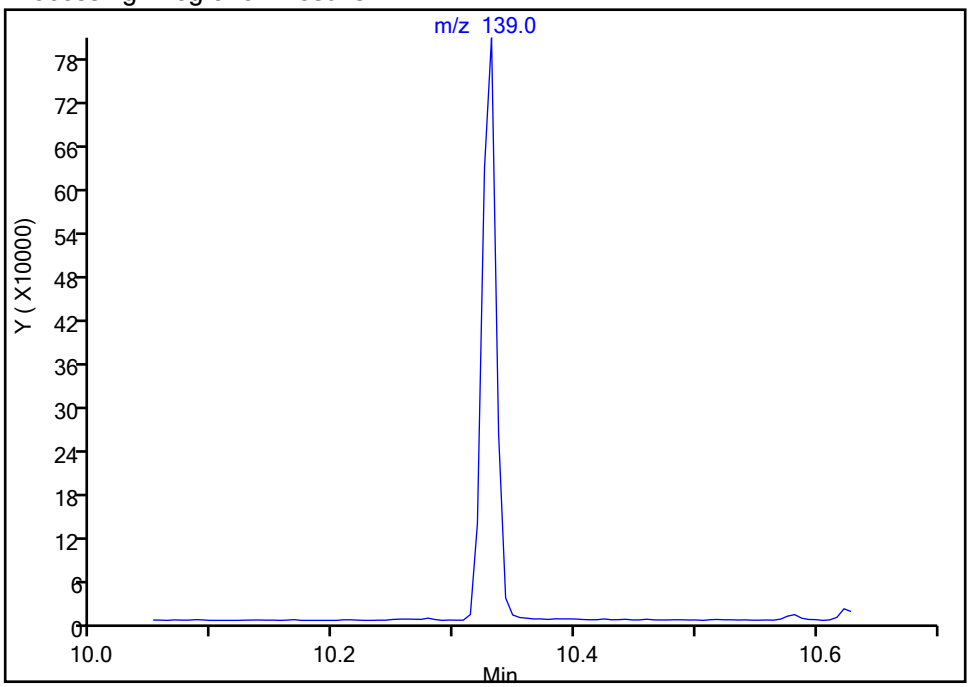
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

150 Chlorobenzilate, CAS: 510-15-6

Signal: 1

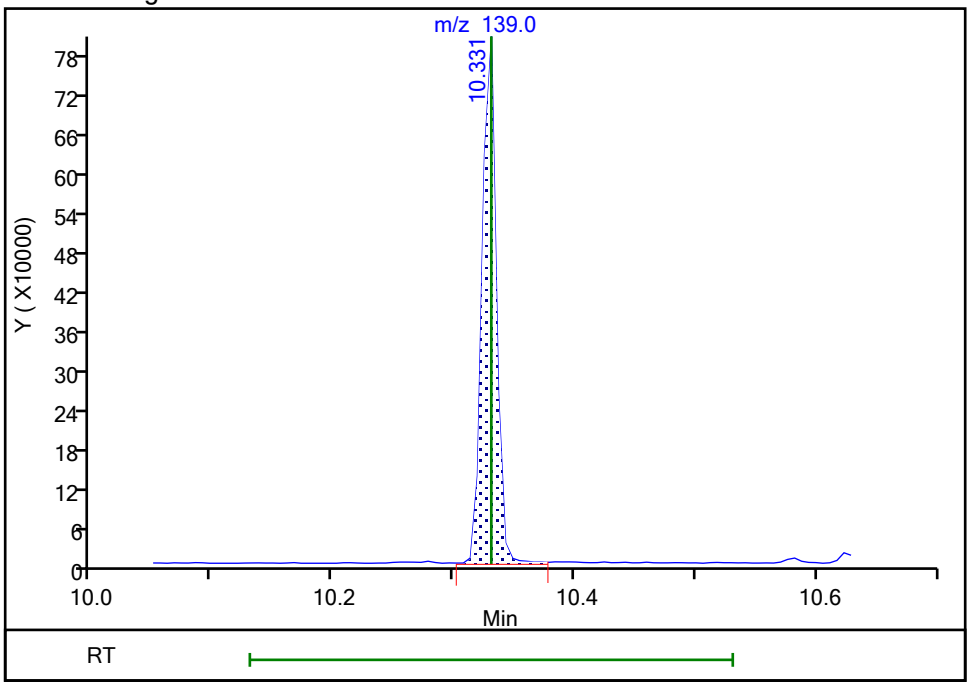
Not Detected
Expected RT: 10.33

Processing Integration Results



Manual Integration Results

RT: 10.33
Area: 661752
Amount: 19.027048
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:02:41 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

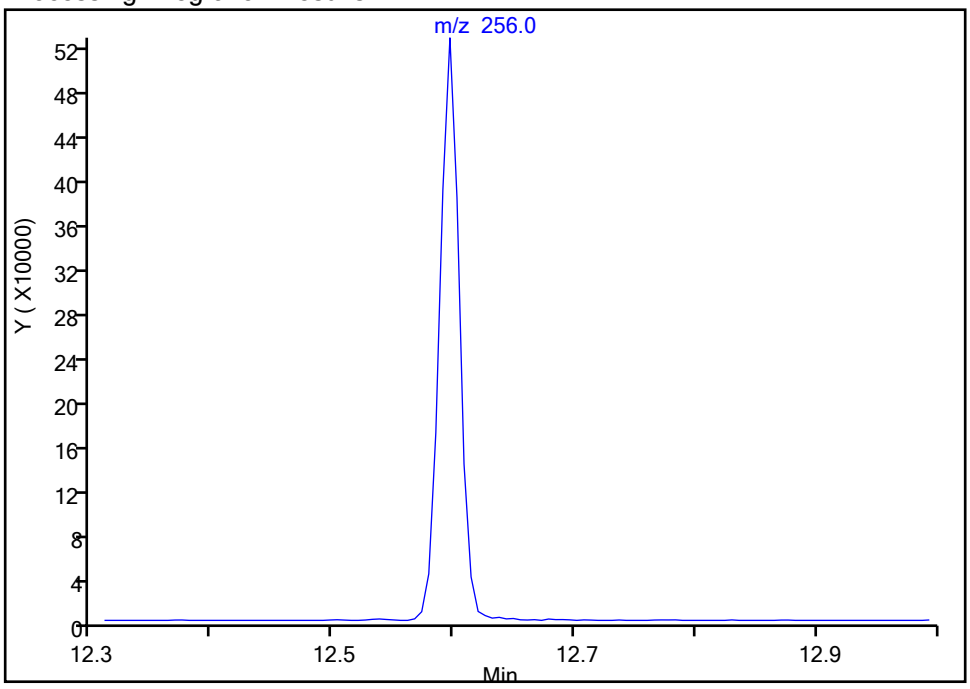
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1811.D				
Injection Date:	18-Jul-2023 11:17:30	Instrument ID:	HP23264		
Lims ID:	ICV				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

163 7,12-Dimethylbenz(a)anthracene, CAS: 57-97-6

Signal: 1

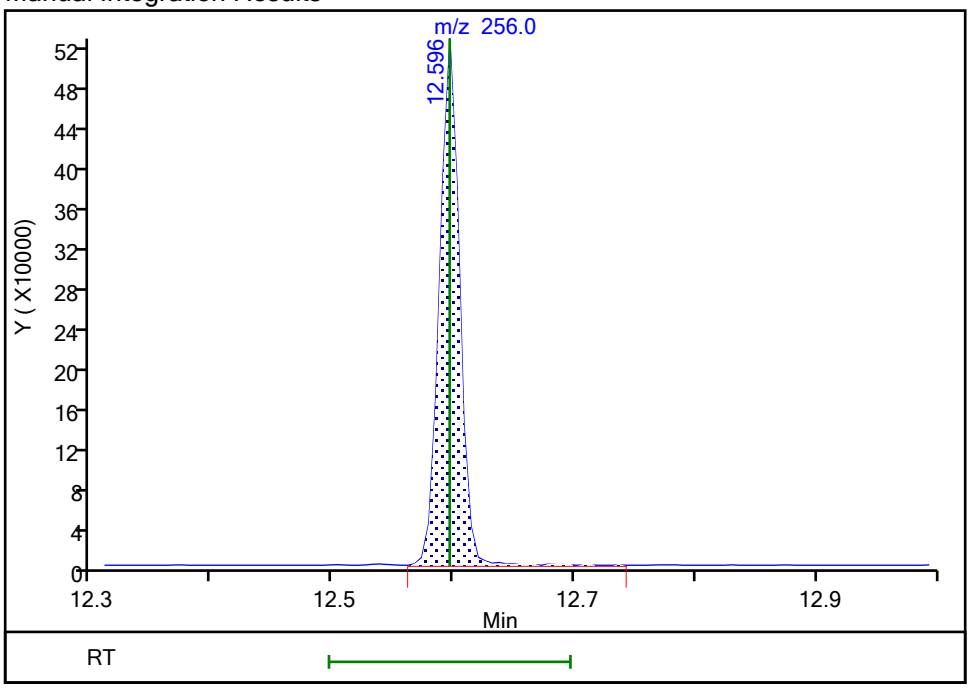
Not Detected
Expected RT: 12.60

Processing Integration Results



Manual Integration Results

RT: 12.60
Area: 599683
Amount: 20.595079
Amount Units: ug/ml



Reviewer: SJ89, 18-Jul-2023 15:02:51 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-403788/2 Calibration Date: 08/02/2023 20:32

Instrument ID: HP23264 Calib Start Date: 07/18/2023 07:41

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 07/18/2023 10:14

Lab File ID: JH0251.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6104	0.5676		6.97	7.50	-7.0	20.0
N-Nitrosodimethylamine	Ave	0.9949	0.9666		7.29	7.50	-2.8	20.0
Pyridine	Ave	1.716	1.711		15.0	15.0	-0.3	20.0
N,N-dimethylformamide	Ave	1.225	1.204		7.37	7.50	-1.8	20.0
2-Picoline	Ave	1.665	1.629		7.34	7.50	-2.2	20.0
N-Nitrosomethylethylamine	Ave	0.8175	0.7583		6.96	7.50	-7.2	20.0
Methyl methanesulfonate	Ave	0.9846	0.9847		7.50	7.50	0.0	20.0
N-Nitrosodiethylamine	Ave	0.6642	0.6629		7.49	7.50	-0.2	20.0
Ethyl methanesulfonate	Ave	0.8229	0.7846		7.15	7.50	-4.7	20.0
Benzaldehyde	Ave	1.336	1.324	0.0100	7.43	7.50	-0.9	20.0
Phenol	Ave	2.313	2.199	0.8000	7.13	7.50	-4.9	20.0
Aniline	Ave	2.323	2.359		7.62	7.50	1.5	20.0
Bis(2-chloroethyl)ether	Ave	1.613	1.578	0.7000	7.34	7.50	-2.2	20.0
2-Chlorophenol	Ave	1.424	1.383	0.8000	7.29	7.50	-2.9	20.0
1,3-Dichlorobenzene	Ave	1.416	1.439		7.63	7.50	1.7	20.0
1,4-Dichlorobenzene	Ave	1.516	1.462		7.23	7.50	-3.6	20.0
Benzyl alcohol	Ave	0.9439	1.027		8.16	7.50	8.8	20.0
1,2-Dichlorobenzene	Ave	1.402	1.388		7.43	7.50	-1.0	20.0
o-Cresol	Ave	1.366	1.395	0.7000	7.66	7.50	2.1	20.0
bis (2-chloroisopropyl) ether	Ave	3.552	3.469	0.0100	7.32	7.50	-2.3	20.0
N-Nitrosopyrrolidine	Ave	0.8193	0.8621		7.89	7.50	5.2	20.0
Acetophenone	Ave	2.194	2.194	0.0100	7.50	7.50	0.0	20.0
N-Nitrosodi-n-propylamine	Ave	1.358	1.318	0.5000	7.28	7.50	-2.9	20.0
m & p-Cresol	Ave	1.581	1.651	0.6000	7.83	7.50	4.5	20.0
N-Nitrosomorpholine	Ave	1.260	1.292		7.69	7.50	2.5	20.0
o-Toluidine	Ave	2.376	2.313		7.30	7.50	-2.7	20.0
Hexachloroethane	Ave	0.6384	0.6410	0.3000	7.53	7.50	0.4	20.0
Nitrobenzene	Ave	0.4889	0.4684	0.2000	7.19	7.50	-4.2	20.0
N-Nitrosopiperidine	Ave	0.1972	0.1813		6.90	7.50	-8.0	20.0
Isophorone	Ave	0.8743	0.8859	0.4000	7.60	7.50	1.3	20.0
2-Nitrophenol	Ave	0.1806	0.1902	0.1000	7.90	7.50	5.3	20.0
2,4-Dimethylphenol	Ave	0.3690	0.3935	0.2000	8.00	7.50	6.6	20.0
o,o',o''-Triethylphosphorothioate	Ave	0.1420	0.1347		7.11	7.50	-5.1	20.0
Bis(2-chloroethoxy)methane	Ave	0.5277	0.5352	0.3000	7.61	7.50	1.4	20.0
2,4-Dichlorophenol	Ave	0.2755	0.2927	0.2000	7.97	7.50	6.2	20.0
1,2,4-Trichlorobenzene	Ave	0.3101	0.2963		7.17	7.50	-4.5	20.0
Naphthalene	Ave	1.076	1.089	0.7000	7.59	7.50	1.2	20.0
a-Terpineol	Ave	0.4727	0.4951		7.85	7.50	4.7	20.0
4-Chloroaniline	Ave	0.4545	0.4811	0.0100	7.94	7.50	5.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-403788/2 Calibration Date: 08/02/2023 20:32

Instrument ID: HP23264 Calib Start Date: 07/18/2023 07:41

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 07/18/2023 10:14

Lab File ID: JH0251.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-Dichlorophenol	Ave	0.2724	0.2976		8.19	7.50	9.2	20.0
Hexachloropropene	Ave	0.1950	0.1965		7.56	7.50	0.8	20.0
Hexachlorobutadiene	Ave	0.1679	0.1752	0.0100	7.83	7.50	4.3	20.0
Quinoline	Ave	0.7388	0.7694		7.81	7.50	4.1	20.0
Caprolactam	Ave	0.0977	0.1074	0.0100	8.24	7.50	9.9	20.0
N-Nitrosodi-n-butylamine	Ave	0.4048	0.3993		7.40	7.50	-1.3	20.0
1,4-phenylenediamine	Ave	0.2402	0.1942			7.50	-19.2	20.0
4-Chloro-3-methylphenol	Ave	0.3400	0.3562	0.2000	7.86	7.50	4.8	20.0
Safrole, Total	Ave	0.2369	0.2394		7.58	7.50	1.0	20.0
2-Methylnaphthalene	Ave	0.6536	0.6552	0.4000	7.52	7.50	0.2	20.0
1-Methylnaphthalene	Ave	0.6266	0.6386		7.64	7.50	1.9	20.0
Hexachlorocyclopentadiene	Ave	0.3275	0.3404	0.0500	7.80	7.50	3.9	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5919	0.6199	0.0100	7.86	7.50	4.7	20.0
Isosafrole Peak 1	Ave	0.5720	0.5560		1.17	1.20	-2.8	20.0
2,4,6-Trichlorophenol	Ave	0.3761	0.4087	0.2000	8.15	7.50	8.7	20.0
2,4,5-Trichlorophenol	Ave	0.4143	0.4537	0.2000	8.21	7.50	9.5	20.0
Isosafrole Peak 2	Ave	0.5768	0.6326		6.91	6.30	9.7	20.0
1,1'-Biphenyl	Ave	1.555	1.558	0.0100	7.52	7.50	0.2	20.0
2-Chloronaphthalene	Ave	1.178	1.136	0.8000	7.23	7.50	-3.6	20.0
1-Chloronaphthalene	Ave	1.131	1.223		8.11	7.50	8.1	20.0
Diphenyl ether	Ave	0.8270	0.8484		7.69	7.50	2.6	20.0
2-Nitroaniline	Ave	0.4152	0.4573	0.0100	8.26	7.50	10.1	20.0
1,4-Naphthoquinone	Ave	0.4664	0.5338		8.58	7.50	14.5	20.0
1,4-Dinitrobenzene	Ave	0.1845	0.1987		8.08	7.50	7.7	20.0
Dimethyl phthalate	Ave	1.395	1.483	0.0100	7.98	7.50	6.4	20.0
1,3-Dinitrobenzene	Ave	0.2150	0.2299		8.02	7.50	6.9	20.0
2,6-Dinitrotoluene	Ave	0.2932	0.3128	0.2000	8.00	7.50	6.7	20.0
Acenaphthylene	Ave	2.033	2.125	0.9000	7.84	7.50	4.6	20.0
3-Nitroaniline	Ave	0.3605	0.4079	0.0100	8.49	7.50	13.1	20.0
Acenaphthene	Ave	1.317	1.312	0.9000	7.47	7.50	-0.3	20.0
2,4-Dinitrophenol	Ave	0.1856	0.1858	0.0100	17.5	17.5	0.1	20.0
Pentachlorobenzene	Ave	0.5118	0.5771		8.46	7.50	12.7	20.0
4-Nitrophenol	Ave	0.2191	0.2552	0.0100	17.5	15.0	16.5	20.0
2,4-Dinitrotoluene	Ave	0.3981	0.4493	0.2000	8.46	7.50	12.8	20.0
Dibenzofuran	Ave	1.776	1.906	0.8000	8.05	7.50	7.3	20.0
1-Naphthylamine	Ave	1.195	1.224		7.68	7.50	2.4	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3633	0.3818	0.0100	7.88	7.50	5.1	20.0
2-Naphthylamine	Ave	1.240	1.348		8.16	7.50	8.8	20.0
Diethyl phthalate	Ave	1.503	1.546	0.0100	7.71	7.50	2.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-403788/2 Calibration Date: 08/02/2023 20:32

Instrument ID: HP23264 Calib Start Date: 07/18/2023 07:41

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 07/18/2023 10:14

Lab File ID: JH0251.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
O,O-Diethyl O-2-pyrazinyl phosphorothioate	Ave	0.2662	0.2655		7.48	7.50	-0.3	20.0
Fluorene	Ave	1.399	1.426	0.9000	7.65	7.50	2.0	20.0
4-Chlorophenyl-phenyl ether	Ave	0.6258	0.6395	0.4000	7.66	7.50	2.2	20.0
5-Nitro-o-toluidine	Ave	0.3937	0.4415		8.41	7.50	12.1	20.0
4-Nitroaniline	Ave	0.3585	0.3932	0.0100	8.23	7.50	9.7	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1166	0.1228	0.0100	15.8	15.0	5.3	20.0
n-Nitrosodiphenylamine(as diphenylamine)	Ave	0.6091	0.6317	0.0100	6.61	6.38	3.7	20.0
1,2-Diphenylhydrazine	Ave	1.022	1.047		7.69	7.50	2.5	20.0
Sulfotepp	Ave	0.1678	0.1669		7.46	7.50	-0.5	20.0
1,3,5-Trinitrobenzene	Ave	0.0616	0.0634			7.50	2.9	20.0
cis-Diallate	Ave	0.4078	0.3819		5.20	5.55	-6.4	20.0
Phorate	Ave	0.5990	0.6313		7.90	7.50	5.4	20.0
Phenacetin	Ave	0.4090	0.4713		8.64	7.50	15.2	20.0
4-Bromophenyl-phenylether	Ave	0.1972	0.2012	0.1000	7.65	7.50	2.1	20.0
trans-Diallate	Ave	0.3898	0.3974		1.99	1.95	1.9	20.0
Hexachlorobenzene	Ave	0.2340	0.2375	0.1000	7.61	7.50	1.5	20.0
Dimethoate	Ave	0.3793	0.3941		7.79	7.50	3.9	20.0
Atrazine	Ave	0.1786	0.1936	0.0100	8.13	7.50	8.4	20.0
Pentachlorophenol	Ave	0.1110	0.1250	0.0500	16.9	15.0	12.6	20.0
4-Aminobiphenyl	Ave	0.8013	0.8405		7.87	7.50	4.9	20.0
Pentachloronitrobenzene	Ave	0.1002	0.1004		7.51	7.50	0.2	20.0
Pronamide	Ave	0.3372	0.3619		8.05	7.50	7.3	20.0
Dinoseb	Ave	0.1593	0.1589		7.48	7.50	-0.2	20.0
Disulfoton	Ave	0.6498	0.6092		7.03	7.50	-6.2	20.0
Phenanthrene	Ave	1.054	1.039	0.7000	7.39	7.50	-1.5	20.0
Anthracene	Ave	1.050	1.014	0.7000	7.24	7.50	-3.5	20.0
Carbazole	Ave	1.037	1.125	0.0100	8.14	7.50	8.5	20.0
Methyl parathion	Ave	0.2776	0.2938		7.94	7.50	5.8	20.0
Di-n-butyl phthalate	Ave	1.334	1.374	0.0100	7.72	7.50	3.0	20.0
Parathion	Ave	0.1642	0.1880		8.59	7.50	14.5	20.0
4-Nitroquinoline-1-oxide	Ave	0.0716	0.0564		5.91	7.50	-21.2*	20.0
Octachlorostyrene	Ave	0.0871	0.0841		7.24	7.50	-3.4	20.0
Isodrin	Ave	0.1394	0.1287		6.92	7.50	-7.7	20.0
Fluoranthene	Ave	1.116	1.127	0.6000	7.57	7.50	1.0	20.0
Benzidine	Ave	0.7062	0.7138		22.7	22.5	1.1	20.0
Pyrene	Ave	1.283	1.255	0.6000	7.34	7.50	-2.1	20.0
p-Dimethylamino azobenzene	Ave	0.1687	0.1741		7.74	7.50	3.2	20.0
Chlorobenzilate	Ave	0.4062	0.4391		8.11	7.50	8.1	20.0
3,3'-Dimethylbenzidine	Ave	0.5689	0.6172		8.14	7.50	8.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCVIS 410-403788/2 Calibration Date: 08/02/2023 20:32

Instrument ID: HP23264 Calib Start Date: 07/18/2023 07:41

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 07/18/2023 10:14

Lab File ID: JH0251.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Butylbenzylphthalate	Ave	0.5841	0.6714	0.0100	8.62	7.50	14.9	20.0
2-Acetylaminofluorene	Ave	0.3872	0.3583		6.94	7.50	-7.5	20.0
3,3'-Dichlorobenzidine	Ave	0.3581	0.3851	0.0100	8.07	7.50	7.6	20.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.1840	0.1994			7.50	8.4	20.0
Benzo[a]anthracene	Ave	0.9482	1.072	0.8000	8.48	7.50	13.0	20.0
Chrysene	Ave	0.9376	0.9911	0.7000	7.93	7.50	5.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7928	0.8511	0.0100	8.05	7.50	7.4	20.0
6-Methylchrysene	Ave	0.6431	0.6666		7.77	7.50	3.6	20.0
Di-n-octyl phthalate	Ave	1.788	1.871	0.0100	7.85	7.50	4.7	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.4631	0.4959		8.03	7.50	7.1	20.0
Benzo[b]fluoranthene	Ave	1.250	1.263	0.7000	7.58	7.50	1.0	20.0
Benzo[k]fluoranthene	Ave	1.272	1.290	0.7000	7.61	7.50	1.4	20.0
Benzo[a]pyrene	Ave	1.064	1.102	0.7000	7.77	7.50	3.6	20.0
3-Methylcholanthrene	Ave	0.4678	0.4377		7.02	7.50	-6.4	20.0
Dibenz[a,h]acridine	Ave	0.8816	0.7077		6.02	7.50	-19.7	20.0
Dibenz[a,j]acridine	Ave	0.999	0.8144		6.11	7.50	-18.5	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.014	0.8551	0.5000	6.32	7.50	-15.7	20.0
Dibenz(a,h)anthracene	Ave	1.121	0.9029	0.4000	6.04	7.50	-19.5	20.0
Benzo[g,h,i]perylene	Ave	1.192	1.035	0.5000	6.51	7.50	-13.2	20.0
2-Fluorophenol (Surr)	Ave	1.537	1.545		15.1	15.0	0.5	20.0
Phenol-d5 (Surr)	Ave	2.203	2.326		15.8	15.0	5.6	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5352	0.5422		15.2	15.0	1.3	20.0
2-Fluorobiphenyl (Surr)	Ave	1.587	1.611		15.2	15.0	1.5	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.2368	0.2678		17.0	15.0	13.1	20.0
p-Terphenyl-d14 (Surr)	Ave	0.8865	0.9746		16.5	15.0	9.9	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0251.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 02-Aug-2023 20:32:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub27

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Aug-2023 22:19:31 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1634

First Level Reviewer: P7EB Date: 02-Aug-2023 20:57:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.701	1.701	0.000	94	164668	7.50	6.97	
2 N-Nitrosodimethylamine	74	1.928	1.928	0.000	89	280438	7.50	7.29	
3 Pyridine	79	1.969	1.969	0.000	82	992911	15.0	15.0	
4 Dimethylformamide	73	2.267	2.267	0.000	94	349285	7.50	7.37	
5 2-Picoline	93	2.553	2.553	0.000	93	472529	7.50	7.34	
6 N-Nitrosomethylethylamine	88	2.641	2.641	0.000	94	219997	7.50	6.96	
7 Methyl methanesulfonate	80	2.915	2.915	0.000	86	285693	7.50	7.50	
$ 9 2-Fluorophenol	112	3.090	3.090	0.000	96	896384	15.0	15.1	
11 N-Nitrosodiethylamine	102	3.283	3.283	0.000	88	192328	7.50	7.49	
12 Ethyl methanesulfonate	109	3.581	3.581	0.000	95	227643	7.50	7.15	
13 Benzaldehyde	77	3.908	3.908	0.000	91	384107	7.50	7.43	
$ 15 Phenol-d5	99	3.990	3.990	0.000	95	1349940	15.0	15.8	
16 Phenol	94	4.001	4.001	0.000	95	638107	7.50	7.13	
17 Aniline	93	4.013	4.013	0.000	91	684436	7.50	7.62	
18 Bis(2-chloroethyl)ether	93	4.071	4.071	0.000	85	457807	7.50	7.34	
19 2-Chlorophenol	128	4.130	4.130	0.000	94	401246	7.50	7.29	
21 1,3-Dichlorobenzene	146	4.270	4.270	0.000	95	417614	7.50	7.63	
* 22 1,4-Dichlorobenzene-d4	152	4.328	4.328	0.000	96	193417	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.340	4.340	0.000	89	424106	7.50	7.23	
26 Benzyl alcohol	108	4.463	4.463	0.000	90	297941	7.50	8.16	
27 1,2-Dichlorobenzene	146	4.486	4.486	0.000	94	402797	7.50	7.43	
29 2-Methylphenol	108	4.579	4.579	0.000	96	404711	7.50	7.66	
30 2,2'-oxybis[1-chloropropane]	45	4.585	4.585	0.000	92	1006482	7.50	7.32	
31 N-Nitrosopyrrolidine	100	4.690	4.690	0.000	82	250106	7.50	7.89	
33 N-Nitrosodi-n-propylamine	70	4.708	4.708	0.000	91	382482	7.50	7.28	
32 Acetophenone	105	4.708	4.708	0.000	87	636638	7.50	7.50	
35 N-Nitrosomorpholine	56	4.731	4.731	0.000	92	374751	7.50	7.69	
34 4-Methylphenol	108	4.731	4.731	0.000	94	479098	7.50	7.83	
36 2-Toluidine	106	4.743	4.743	0.000	96	671038	7.50	7.30	
37 Hexachloroethane	117	4.807	4.807	0.000	96	185960	7.50	7.53	
$ 39 Nitrobenzene-d5	82	4.854	4.854	0.000	93	1226418	15.0	15.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
40 Nitrobenzene	77	4.871	4.871	0.000	94	529777	7.50	7.19	
41 N-Nitrosopiperidine	114	5.017	5.017	0.000	78	205094	7.50	6.90	
42 Isophorone	82	5.099	5.099	0.000	98	1001941	7.50	7.60	
43 2-Nitrophenol	139	5.181	5.181	0.000	90	215056	7.50	7.90	
44 2,4-Dimethylphenol	107	5.233	5.233	0.000	98	445081	7.50	8.00	
46 o,o',o''-Triethylphosphorothioat	198	5.286	5.286	0.000	94	152332	7.50	7.11	
47 Bis(2-chloroethoxy)methane	93	5.315	5.315	0.000	91	605232	7.50	7.61	
49 2,4-Dichlorophenol	162	5.420	5.420	0.000	97	331014	7.50	7.97	
50 1,2,4-Trichlorobenzene	180	5.490	5.490	0.000	93	335086	7.50	7.17	
* 52 Naphthalene-d8	136	5.543	5.543	0.000	99	753961	5.00	5.00	
53 Naphthalene	128	5.560	5.560	0.000	96	1231147	7.50	7.59	
55 Alpha-Terpineol	59	5.572	5.572	0.000	88	559906	7.50	7.85	
56 4-Chloroaniline	127	5.619	5.619	0.000	95	544046	7.50	7.94	
57 2,6-Dichlorophenol	162	5.630	5.630	0.000	91	336621	7.50	8.19	
58 Hexachloropropene	213	5.648	5.648	0.000	97	222210	7.50	7.56	
59 Hexachlorobutadiene	225	5.683	5.683	0.000	96	198153	7.50	7.83	
61 Quinoline	129	5.881	5.881	0.000	94	870162	7.50	7.81	
62 Caprolactam	113	5.928	5.928	0.000	70	121434	7.50	8.24	
63 N-Nitrosodi-n-butylamine	84	5.940	5.940	0.000	89	451608	7.50	7.40	
64 p-Phenylene diamine	108	5.957	5.957	0.000	94	219595	7.50	6.06	
65 4-Chloro-3-methylphenol	107	6.103	6.103	0.000	95	402889	7.50	7.86	
66 Safrole, Total	162	6.144	6.144	0.000	83	270701	7.50	7.58	
67 2-Methylnaphthalene	142	6.220	6.220	0.000	91	740946	7.50	7.52	
69 1-Methylnaphthalene	142	6.314	6.314	0.000	93	722251	7.50	7.64	
71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	95	195727	7.50	7.80	
70 1,2,4,5-Tetrachlorobenzene	216	6.384	6.384	0.000	97	356460	7.50	7.86	
72 Isosafrole Peak 1	162	6.424	6.424	0.000	87	51151	1.20	1.17	
79 2,4,6-Trichlorophenol	196	6.500	6.500	0.000	95	235025	7.50	8.15	
80 2,4,5-Trichlorophenol	196	6.541	6.541	0.000	91	260888	7.50	8.21	
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.576	0.000	99	1852963	15.0	15.2	
82 Isosafrole Peak 2	162	6.635	6.635	0.000	87	305573	6.30	6.91	
83 1,1'-Biphenyl	154	6.670	6.670	0.000	97	895919	7.50	7.52	
84 2-Chloronaphthalene	162	6.681	6.681	0.000	96	652979	7.50	7.23	
85 1-Chloronaphthalene	162	6.705	6.705	0.000	96	703052	7.50	8.11	
86 Phenyl ether	170	6.769	6.769	0.000	90	487863	7.50	7.69	
87 2-Nitroaniline	138	6.786	6.786	0.000	79	262941	7.50	8.26	
88 1,4-Naphthoquinone	158	6.857	6.857	0.000	81	306950	7.50	8.58	
89 1,4-Dinitrobenzene	168	6.927	6.927	0.000	90	114248	7.50	8.08	
90 Dimethyl phthalate	163	6.962	6.962	0.000	97	853011	7.50	7.98	
91 1,3-Dinitrobenzene	168	6.991	6.991	0.000	80	132215	7.50	8.02	
92 2,6-Dinitrotoluene	165	7.020	7.020	0.000	87	179864	7.50	8.00	
93 Acenaphthylene	152	7.078	7.078	0.000	99	1222192	7.50	7.84	
95 3-Nitroaniline	138	7.178	7.178	0.000	87	234532	7.50	8.49	
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	95	383345	5.00	5.00	
97 Acenaphthene	153	7.242	7.242	0.000	97	754623	7.50	7.47	
98 2,4-Dinitrophenol	184	7.277	7.277	0.000	78	249303	17.5	17.5	
99 Pentachlorobenzene	250	7.365	7.365	0.000	98	331828	7.50	8.46	
100 4-Nitrophenol	109	7.370	7.370	0.000	92	293463	15.0	17.5	
102 2,4-Dinitrotoluene	165	7.400	7.400	0.000	88	258329	7.50	8.46	
101 Dibenzofuran	168	7.405	7.405	0.000	96	1096070	7.50	8.05	
104 1-Naphthylamine	143	7.481	7.481	0.000	98	703834	7.50	7.68	
105 2,3,4,6-Tetrachlorophenol	232	7.528	7.528	0.000	75	219564	7.50	7.88	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
106 2-Naphthylamine	143	7.557	7.557	0.000	95	775360	7.50	8.16	
107 Diethyl phthalate	149	7.633	7.633	0.000	96	888841	7.50	7.71	
109 Thionazin	107	7.709	7.709	0.000	76	152669	7.50	7.48	
108 Fluorene	166	7.727	7.727	0.000	94	820081	7.50	7.65	
110 4-Chlorophenyl phenyl ether	204	7.732	7.732	0.000	92	367731	7.50	7.66	
111 N-Nitro-o-toluidine	152	7.744	7.744	0.000	91	253876	7.50	8.41	
112 4-Nitroaniline	138	7.756	7.756	0.000	82	226070	7.50	8.23	
113 4,6-Dinitro-2-methylphenol	198	7.779	7.779	0.000	67	274008	15.0	15.8	
114 N-Nitrosodiphenylamine	169	7.849	7.849	0.000	67	598938	6.38	6.61	
115 1,2-Diphenylhydrazine	77	7.884	7.884	0.000	41	1168154	7.50	7.69	
$ 116 2,4,6-Tribromophenol	330	7.960	7.960	0.000	89	307971	15.0	17.0	
117 Sulfotepp	97	8.001	8.001	0.000	77	186173	7.50	7.46	
118 1,3,5-Trinitrobenzene	213	8.112	8.112	0.000	82	70718	7.50	7.72	
120 cis-Diallate	86	8.118	8.118	0.000	94	315202	5.55	5.20	
119 Phorate	75	8.129	8.129	0.000	93	704144	7.50	7.90	
121 Phenacetin	108	8.147	8.147	0.000	90	525716	7.50	8.64	
122 4-Bromophenyl phenyl ether	248	8.194	8.194	0.000	76	224465	7.50	7.65	
123 trans-Diallate	86	8.205	8.205	0.000	91	115250	1.95	1.99	
124 Hexachlorobenzene	284	8.240	8.240	0.000	93	264875	7.50	7.61	
125 Dimethoate	87	8.287	8.287	0.000	96	439560	7.50	7.79	
126 Atrazine	200	8.357	8.357	0.000	80	215968	7.50	8.13	
127 Pentachlorophenol	266	8.439	8.439	0.000	87	278920	15.0	16.9	
129 4-Aminobiphenyl	169	8.445	8.445	0.000	91	937595	7.50	7.87	
128 Pentachloronitrobenzene	237	8.445	8.445	0.000	48	111948	7.50	7.51	
130 Pronamide	173	8.503	8.503	0.000	89	403653	7.50	8.05	
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	96	743642	5.00	5.00	
133 Dinoseb	211	8.614	8.614	0.000	72	177223	7.50	7.48	
134 Disulfoton	88	8.626	8.626	0.000	98	679528	7.50	7.03	
132 Phenanthrene	178	8.637	8.637	0.000	98	1158488	7.50	7.39	
135 Anthracene	178	8.684	8.684	0.000	98	1130565	7.50	7.24	
136 Carbazole	167	8.848	8.848	0.000	96	1254422	7.50	8.14	
137 Methyl parathion	109	8.982	8.982	0.000	89	327701	7.50	7.94	
138 Di-n-butyl phthalate	149	9.186	9.186	0.000	99	1532846	7.50	7.72	
139 Ethyl Parathion	109	9.350	9.350	0.000	81	209700	7.50	8.59	
140 4-Nitroquinoline-1-oxide	190	9.373	9.373	0.000	78	62880	7.50	5.91	
142 Octachlorostyrene	308	9.578	9.578	0.000	91	93798	7.50	7.24	
143 Isodrin	193	9.618	9.618	0.000	91	143595	7.50	6.92	
S 68 Diallate	86				0		7.50	7.18	
144 Fluoranthene	202	9.759	9.759	0.000	99	1256618	7.50	7.57	
145 Benzidine	184	9.905	9.905	0.000	100	2256973	22.5	22.7	
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	96	702598	5.00	5.00	
147 Pyrene	202	9.975	9.975	0.000	96	1322995	7.50	7.34	
$ 148 p-Terphenyl-d14	244	10.132	10.132	0.000	98	2054249	15.0	16.5	
149 p-Dimethylamino azobenzene	225	10.272	10.272	0.000	92	183520	7.50	7.74	
150 Chlorobenzilate	139	10.325	10.325	0.000	85	462729	7.50	8.11	
152 3,3'-Dimethylbenzidine	212	10.617	10.617	0.000	98	650419	7.50	8.14	
153 Butyl benzyl phthalate	149	10.640	10.640	0.000	96	707606	7.50	8.62	
155 2-Acetylaminofluorene	181	10.885	10.885	0.000	94	377646	7.50	6.94	
S 94 Isosafrole	162				0		7.50	8.08	
157 3,3'-Dichlorobenzidine	252	11.212	11.212	0.000	79	405862	7.50	8.07	
158 4,4'-Methylene bis(2-chloroani	231	11.218	11.218	0.000	92	210199	7.50	8.13	
156 Benzo[a]anthracene	228	11.224	11.224	0.000	99	1129601	7.50	8.48	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
159 Chrysene	228	11.265	11.265	0.000	97	1044534	7.50	7.93	
160 Bis(2-ethylhexyl) phthalate	149	11.300	11.300	0.000	94	896934	7.50	8.05	
161 6-Methylchrysene	242	11.820	11.820	0.000	98	702499	7.50	7.77	
162 Di-n-octyl phthalate	149	12.141	12.141	0.000	98	1602320	7.50	7.85	
163 7,12-Dimethylbenz(a)anthracene	256	12.585	12.585	0.000	89	424648	7.50	8.03	
164 Benzo[b]fluoranthene	252	12.590	12.590	0.000	98	1081568	7.50	7.58	
165 Benzo[k]fluoranthene	252	12.631	12.631	0.000	97	1104855	7.50	7.61	
166 Benzo[a]pyrene	252	13.040	13.040	0.000	82	943809	7.50	7.77	
* 167 Perylene-d12	264	13.116	13.116	0.000	94	570903	5.00	5.00	
168 3-Methylcholanthrene	268	13.548	13.548	0.000	93	374841	7.50	7.02	
169 Dibenz[a,h]acridine	279	14.331	14.331	0.000	93	606035	7.50	6.02	
170 Dibenz[a,j]acridine	279	14.401	14.401	0.000	95	697386	7.50	6.11	
171 Indeno[1,2,3-cd]pyrene	276	14.622	14.622	0.000	93	732290	7.50	6.32	
172 Dibenz(a,h)anthracene	278	14.663	14.663	0.000	95	773182	7.50	6.04	
173 Benzo[g,h,i]perylene	276	14.973	14.973	0.000	92	886100	7.50	6.51	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_5_00037 Amount Added: 1.00 Units: mL

Report Date: 02-Aug-2023 22:19:32 Chrom Revision: 2.3 02-Aug-2023 16:16:36

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0251.D

Injection Date: 02-Aug-2023 20:32:30 Instrument ID: HP23264 Operator ID: mem41592

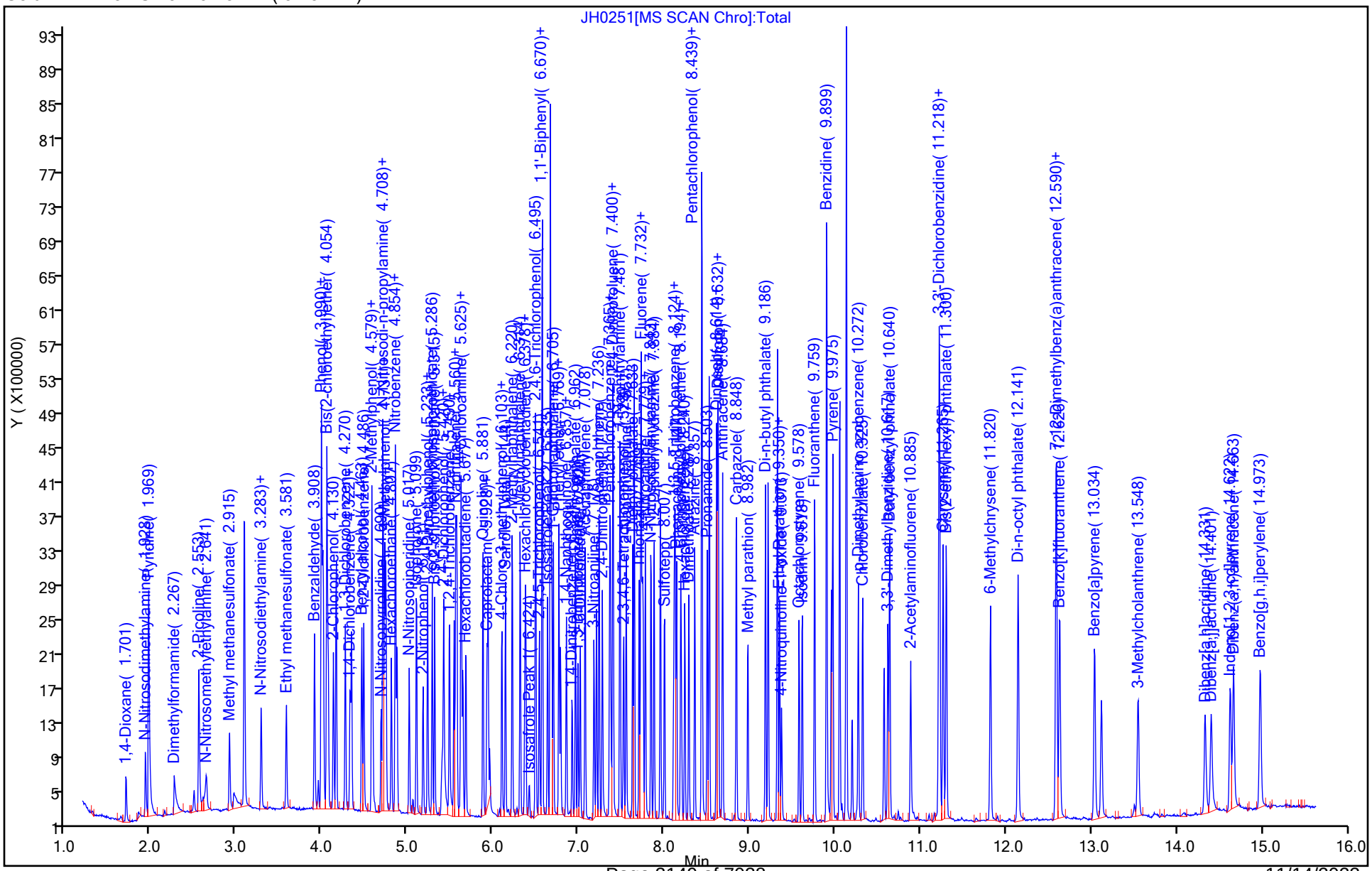
Lims ID: CCVIS Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 2

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: CCV 410-403788/4 Calibration Date: 08/02/2023 21:02

Instrument ID: HP23264 Calib Start Date: 04/11/2023 14:51

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 04/11/2023 16:37

Lab File ID: JH0252.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methapyrilene	Ave	0.4644	0.3545		9.54	12.5	-23.7*	20.0
Famphur	Ave	0.3331	0.3134		11.8	12.5	-5.9	20.0
Kepone	Ave	0.1355	0.1136		50.3	60.0	-16.1	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0252.D
Lims ID: CCV ABC
Client ID:
Sample Type: CCV
Inject. Date: 02-Aug-2023 21:02:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV ABC
Operator ID: mem41592 Instrument ID: HP23264
Sublist: chrom-MSSemi_HP23264*sub21

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Aug-2023 22:19:56 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1634

First Level Reviewer: P7EB Date: 02-Aug-2023 21:59:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 22 1,4-Dichlorobenzene-d4	152	4.322	4.322	0.000	96	185725	5.00	5.00	
* 52 Naphthalene-d8	136	5.543	5.543	0.000	99	731984	5.00	5.00	
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	95	361701	5.00	5.00	
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	96	743378	5.00	5.00	
141 Methapyrilene	97	9.449	9.449	0.000	95	658864	12.5	9.54	
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	96	686721	5.00	5.00	
151 Famphur	218	10.576	10.576	0.000	90	538027	12.5	11.8	
154 Kepone	272	10.646	10.646	0.000	94	936545	60.0	50.3	
* 167 Perylene-d12	264	13.116	13.116	0.000	94	450169	5.00	5.00	

QC Flag Legend
Processing Flags

Reagents:
MSS_RVABC_6_00015 Amount Added: 1.00 Units: mL

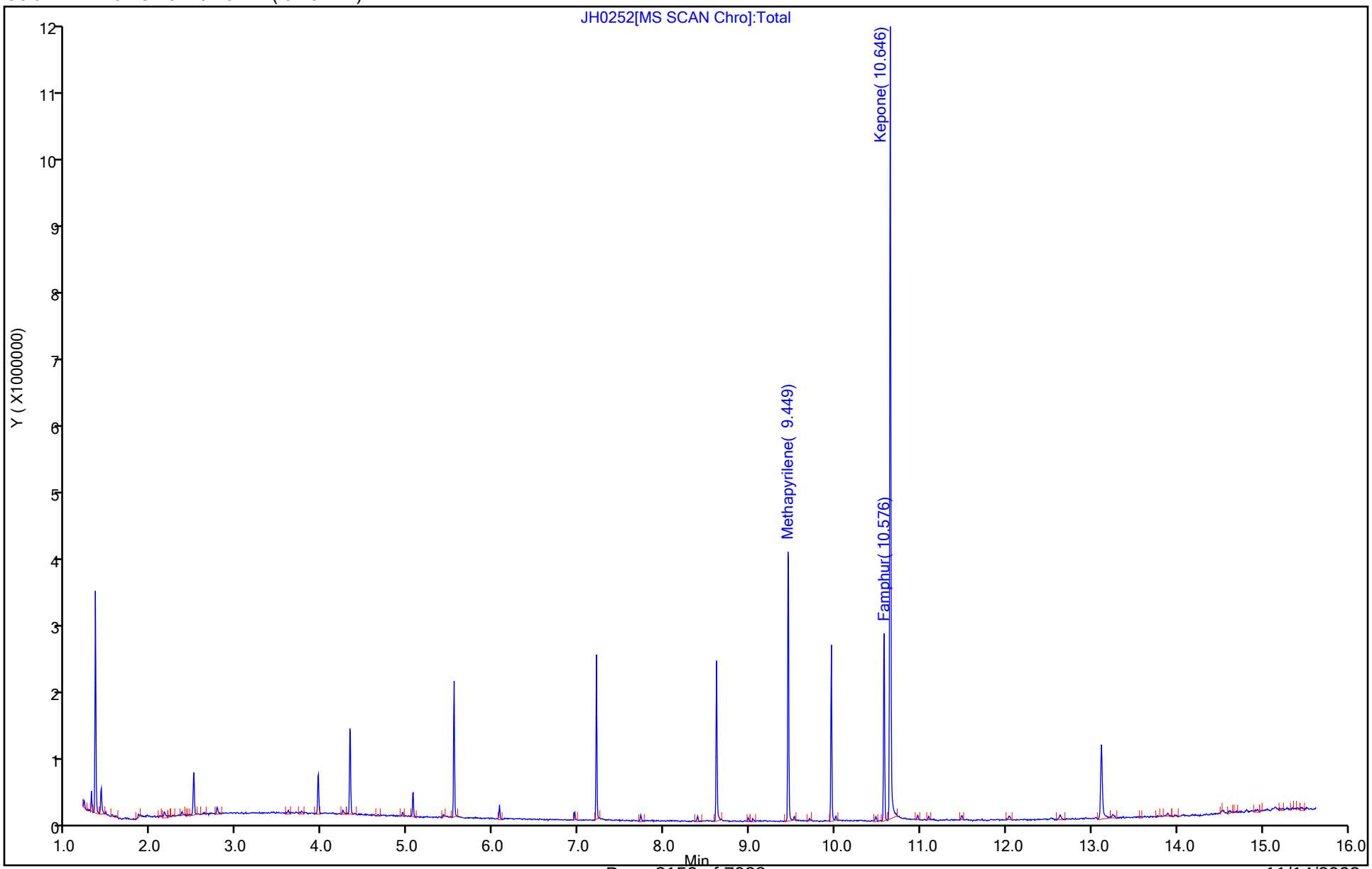
Report Date: 02-Aug-2023 22:19:56 Chrom Revision: 2.3 02-Aug-2023 16:16:36

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0252.D

Injection Date:	02-Aug-2023 21:02:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	CCV ABC			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-437867/12 Calibration Date: 10/31/2023 18:13

Instrument ID: HP23264 Calib Start Date: 04/04/2023 02:36

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 04/04/2023 04:43

Lab File ID: JJ3111.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzoic acid	Ave	0.3124				12.5		
Indene	Ave	3.080				12.5		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 31-Oct-2023 18:13:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0098173-012
Operator ID: mem41592 Instrument ID: HP23264
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 13:04:07 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.432	1.432	0.000	95	267872	12.5	12.0	
2 N-Nitrosodimethylamine	74	1.648	1.648	0.000	94	471757	12.5	12.7	
3 Pyridine	79	1.677	1.677	0.000	93	1465709	25.0	25.5	
5 2-Picoline	93	2.238	2.238	0.000	93	751366	12.5	13.4	
6 N-Nitrosomethylethylamine	88	2.331	2.331	0.000	96	341171	12.5	12.3	
7 Methyl methanesulfonate	80	2.594	2.594	0.000	87	517594	12.5	14.0	
11 N-Nitrosodiethylamine	102	2.944	2.944	0.000	89	335333	12.5	12.8	
12 Ethyl methanesulfonate	109	3.248	3.248	0.000	95	383975	12.5	13.2	
17 Aniline	93	3.686	3.686	0.000	97	1190112	12.5	14.3	
16 Phenol	94	3.692	3.692	0.000	94	1124092	12.5	13.1	
18 Bis(2-chloroethyl)ether	93	3.750	3.750	0.000	86	808483	12.5	14.3	
19 2-Chlorophenol	128	3.803	3.803	0.000	92	677237	12.5	14.6	
21 1,3-Dichlorobenzene	146	3.943	3.943	0.000	95	706814	12.5	13.5	
* 22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	96	172317	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	90	724809	12.5	12.9	
26 Benzyl alcohol	108	4.153	4.153	0.000	88	452349	12.5	12.5	
27 1,2-Dichlorobenzene	146	4.165	4.165	0.000	95	662183	12.5	12.4	
28 Indene	115		4.247				ND	ND	U
30 2,2'-oxybis[1-chloropropane]	45	4.276	4.276	0.000	84	1564904	12.5	12.1	
29 2-Methylphenol	108	4.276	4.276	0.000	79	693144	12.5	13.1	
31 N-Nitrosopyrrolidine	100	4.375	4.375	0.000	85	427621	12.5	14.8	
32 Acetophenone	105	4.398	4.398	0.000	90	1138296	12.5	14.3	
33 N-Nitrosodi-n-propylamine	70	4.398	4.398	0.000	90	754952	12.5	14.0	
35 N-Nitrosomorpholine	56	4.422	4.422	0.000	89	636702	12.5	14.4	
34 4-Methylphenol	108	4.428	4.428	0.000	80	801373	12.5	14.2	
36 2-Toluidine	106	4.433	4.433	0.000	85	1167999	12.5	14.1	
37 Hexachloroethane	117	4.486	4.486	0.000	97	316142	12.5	13.3	
40 Nitrobenzene	77	4.562	4.562	0.000	89	933410	12.5	11.3	
41 N-Nitrosopiperidine	114	4.708	4.708	0.000	80	376614	12.5	13.0	
42 Isophorone	82	4.795	4.795	0.000	98	1785503	12.5	12.3	
43 2-Nitrophenol	139	4.871	4.871	0.000	90	346732	12.5	13.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
44 2,4-Dimethylphenol	107	4.936	4.936	0.000	99	736834	12.5	14.4	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	93	265995	12.5	11.8	
47 Bis(2-chloroethoxy)methane	93	5.017	5.017	0.000	92	1067106	12.5	13.4	
49 2,4-Dichlorophenol	162	5.117	5.117	0.000	97	594458	12.5	14.9	
48 Benzoic acid	105		5.122				ND	ND	U
50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	93	582806	12.5	12.1	
* 52 Naphthalene-d8	136	5.227	5.227	0.000	98	704004	5.00	5.00	
53 Naphthalene	128	5.251	5.251	0.000	97	1978066	12.5	12.6	
56 4-Chloroaniline	127	5.321	5.321	0.000	90	839188	12.5	13.5	
57 2,6-Dichlorophenol	162	5.321	5.321	0.000	86	600698	12.5	13.9	
58 Hexachloropropene	213	5.333	5.333	0.000	97	430558	12.5	13.7	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	95	373661	12.5	12.9	
61 Quinoline	129	5.572	5.572	0.000	94	1355083	12.5	12.9	
63 N-Nitrosodi-n-butylamine	84	5.642	5.642	0.000	94	636301	12.5	10.1	
64 p-Phenylene diamine	108	5.677	5.677	0.000	93	194886	12.5	4.10	7a
65 4-Chloro-3-methylphenol	107	5.811	5.811	0.000	94	701819	12.5	13.3	
66 Safrole, Total	162	5.846	5.846	0.000	82	460087	12.5	12.6	
67 2-Methylnaphthalene	142	5.916	5.916	0.000	90	1184519	12.5	13.0	
69 1-Methylnaphthalene	142	6.010	6.010	0.000	90	1145389	12.5	12.6	
71 Hexachlorocyclopentadiene	237	6.062	6.062	0.000	93	291116	12.5	13.0	
70 1,2,4,5-Tetrachlorobenzene	216	6.074	6.074	0.000	98	640999	12.5	13.4	
72 Isosafrole Peak 1	162	6.127	6.127	0.000	82	69497	1.50	1.68	
79 2,4,6-Trichlorophenol	196	6.197	6.197	0.000	96	391475	12.5	12.2	
80 2,4,5-Trichlorophenol	196	6.243	6.243	0.000	90	467480	12.5	12.7	
82 Isosafrole Peak 2	162	6.337	6.337	0.000	87	485987	11.0	11.2	
83 1,1'-Biphenyl	154	6.366	6.366	0.000	96	1546039	12.5	13.7	
84 2-Chloronaphthalene	162	6.378	6.378	0.000	89	1185896	12.5	12.9	
85 1-Chloronaphthalene	162	6.395	6.395	0.000	97	1325352	12.5	13.8	
86 Phenyl ether	170	6.465	6.465	0.000	89	790803	12.5	13.1	
87 2-Nitroaniline	138	6.489	6.489	0.000	74	397627	12.5	13.0	
S 24 Dinitrotoluene	165				0			26.2	
88 1,4-Naphthoquinone	158	6.553	6.553	0.000	74	514079	12.5	14.7	
89 1,4-Dinitrobenzene	168	6.629	6.629	0.000	85	175920	12.5	12.6	
90 Dimethyl phthalate	163	6.670	6.670	0.000	96	1483393	12.5	12.5	
91 1,3-Dinitrobenzene	168	6.699	6.699	0.000	78	213138	12.5	13.1	
92 2,6-Dinitrotoluene	165	6.722	6.722	0.000	87	341687	12.5	14.0	
93 Acenaphthylene	152	6.763	6.763	0.000	99	1909169	12.5	12.3	
95 3-Nitroaniline	138	6.880	6.880	0.000	86	377321	12.5	13.3	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	95	383730	5.00	5.00	
97 Acenaphthene	153	6.932	6.932	0.000	97	1247775	12.5	13.2	
98 2,4-Dinitrophenol	184	6.985	6.985	0.000	74	394947	25.0	26.0	
99 Pentachlorobenzene	250	7.055	7.055	0.000	97	582073	12.5	14.1	
100 4-Nitrophenol	109	7.084	7.084	0.000	90	525326	25.0	26.6	
101 Dibenzofuran	168	7.096	7.096	0.000	96	1679717	12.5	12.8	
102 2,4-Dinitrotoluene	165	7.102	7.102	0.000	83	416894	12.5	12.2	
104 1-Naphthylamine	143	7.178	7.178	0.000	97	1145144	12.5	13.0	
105 2,3,4,6-Tetrachlorophenol	232	7.184	7.184	0.000	74	318043	12.5	12.2	
106 2-Naphthylamine	143	7.254	7.254	0.000	95	1391062	12.5	14.1	
107 Diethyl phthalate	149	7.335	7.335	0.000	96	1529343	12.5	12.8	
109 Thionazin	107	7.411	7.411	0.000	74	285519	12.5	13.5	
108 Fluorene	166	7.417	7.417	0.000	91	1396071	12.5	13.8	
110 4-Chlorophenyl phenyl ether	204	7.429	7.429	0.000	93	645234	12.5	13.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
111 N-Nitro-o-toluidine	152	7.446	7.446	0.000	89	435087	12.5	14.2	
112 4-Nitroaniline	138	7.458	7.458	0.000	80	378661	12.5	13.5	
113 4,6-Dinitro-2-methylphenol	198	7.481	7.481	0.000	72	549863	25.0	28.3	
114 N-Nitrosodiphenylamine	169	7.546	7.546	0.000	67	915199	10.6	10.3	
115 1,2-Diphenylhydrazine	77	7.575	7.575	0.000	99	2144637	12.5	12.6	
117 Sulfotepp	97	7.709	7.709	0.000	75	361874	12.5	12.3	
120 cis-Diallate	86	7.820	7.820	0.000	95	605213	9.38	10.1	
119 Phorate	75	7.826	7.826	0.000	92	1868042	12.5	14.0	
118 1,3,5-Trinitrobenzene	213	7.832	7.832	0.000	70	122784	12.5	13.3	
121 Phenacetin	108	7.855	7.855	0.000	90	922117	12.5	14.1	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	73	392420	12.5	11.9	
123 trans-Diallate	86	7.902	7.902	0.000	94	200827	3.13	3.39	
124 Hexachlorobenzene	284	7.931	7.931	0.000	93	463872	12.5	13.1	
125 Dimethoate	87	7.989	7.989	0.000	94	782847	12.5	12.9	
129 4-Aminobiphenyl	169	8.135	8.135	0.000	92	1471046	12.5	12.8	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	82	222234	12.5	12.8	
127 Pentachlorophenol	266	8.135	8.135	0.000	88	549341	25.0	25.4	
130 Pronamide	173	8.205	8.205	0.000	90	688580	12.5	13.3	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	96	740293	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	89	366081	12.5	15.7	
134 Disulfoton	88	8.322	8.322	0.000	95	1134309	12.5	12.7	
132 Phenanthrene	178	8.322	8.322	0.000	98	2111038	12.5	12.9	
135 Anthracene	178	8.369	8.369	0.000	99	2100573	12.5	12.6	
136 Carbazole	167	8.538	8.538	0.000	96	1944996	12.5	12.9	
137 Methyl parathion	109	8.678	8.678	0.000	89	603306	12.5	13.4	
138 Di-n-butyl phthalate	149	8.889	8.889	0.000	99	2732581	12.5	13.2	
139 Ethyl Parathion	109	9.046	9.046	0.000	80	358569	12.5	13.1	
140 4-Nitroquinoline-1-oxide	190	9.070	9.070	0.000	78	141030	12.5	12.6	
141 Methapyrilene	97		9.145				ND	ND	U
142 Octachlorostyrene	308	9.268	9.268	0.000	92	187504	12.5	11.9	
143 Isodrin	193	9.297	9.297	0.000	90	290155	12.5	13.3	
144 Fluoranthene	202	9.443	9.443	0.000	99	2302206	12.5	13.5	
145 Benzidine	184	9.595	9.595	0.000	99	1184080	12.5	11.5	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	96	762661	5.00	5.00	
S 68 Diallate	86				0		12.5	13.5	
147 Pyrene	202	9.653	9.653	0.000	96	2455162	12.5	13.4	
200 Aramite Peak 1	185		9.823				ND	ND	U
192 Aramite Peak 2	185		9.823				ND	ND	U
180 Aramite Peak 4	185		9.899				ND	ND	U
185 Aramite Peak 3	185		9.899				ND	ND	U
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	93	374645	12.5	15.1	
150 Chlorobenzilate	139	10.010	10.010	0.000	82	880345	12.5	14.4	
151 Famphur	218		10.249				ND	ND	U
152 3,3'-Dimethylbenzidine	212	10.284	10.284	0.000	99	1291901	12.5	14.4	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	96	1331767	12.5	15.0	
155 2-Acetylaminofluorene	181	10.541	10.541	0.000	92	855168	12.5	12.7	
157 3,3'-Dichlorobenzidine	252	10.845	10.845	0.000	75	758556	12.5	12.6	
156 Benzo[a]anthracene	228	10.850	10.850	0.000	99	2018720	12.5	13.1	
158 4,4'-Methylene bis(2-chloroanil	231	10.850	10.850	0.000	93	418571	12.5	13.4	
159 Chrysene	228	10.886	10.886	0.000	97	2002100	12.5	13.0	
160 Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	95	1627056	12.5	13.0	
S 94 Isosafrole	162				0		12.5	12.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
161 6-Methylchrysene	242	11.405	11.405	0.000	98	1356840	12.5	13.1	
S 103 Aramite, Total	185		11.583				12.5	ND	7
162 Di-n-octyl phthalate	149	11.726	11.726	0.000	99	2845310	12.5	13.8	
163 7,12-Dimethylbenz(a)anthracene	256	12.118	12.118	0.000	89	778567	12.5	13.6	
164 Benzo[b]fluoranthene	252	12.123	12.123	0.000	97	2095804	12.5	13.6	
165 Benzo[k]fluoranthene	252	12.158	12.158	0.000	99	2050030	12.5	13.4	
166 Benzo[a]pyrene	252	12.538	12.538	0.000	80	1941399	12.5	12.9	
* 167 Perylene-d12	264	12.614	12.614	0.000	96	674496	5.00	5.00	
168 3-Methylcholanthrene	268	13.028	13.028	0.000	92	652568	12.5	9.38	
169 Dibenz[a,h]acridine	279	13.770	13.770	0.000	92	1640842	12.5	14.2	
170 Dibenz[a,j]acridine	279	13.840	13.840	0.000	95	1763164	12.5	13.5	
171 Indeno[1,2,3-cd]pyrene	276	14.068	14.068	0.000	96	1853609	12.5	12.6	
172 Dibenz(a,h)anthracene	278	14.109	14.109	0.000	94	1982481	12.5	13.2	
173 Benzo[g,h,i]perylene	276	14.424	14.424	0.000	95	2049749	12.5	12.8	

QC Flag Legend

Processing Flags
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- U - Marked Undetected
- a - User Assigned ID

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 13:04:08 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D

Injection Date: 31-Oct-2023 18:13:30 Instrument ID: HP23264 Operator ID: mem41592

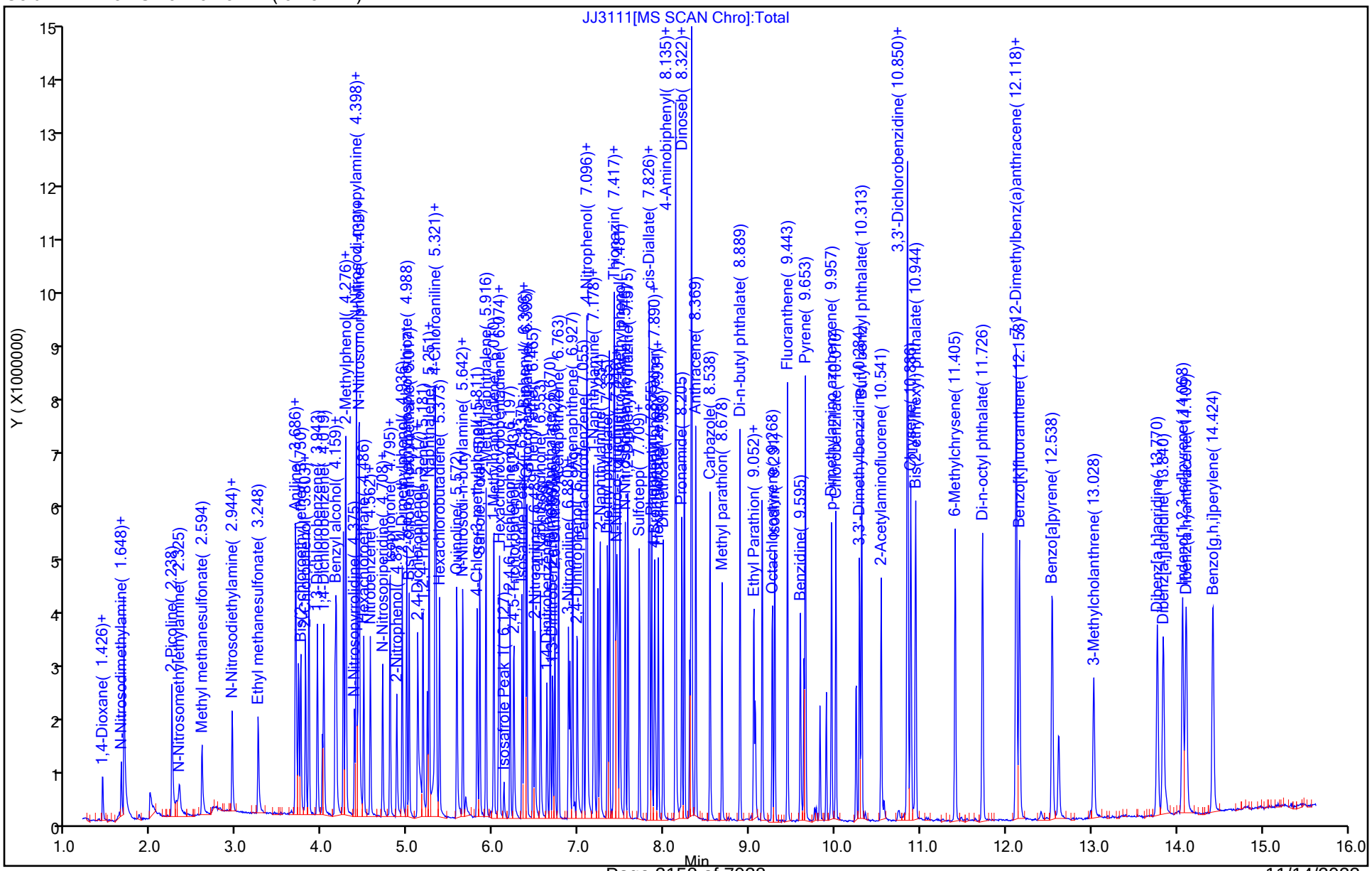
Lims ID: ICV FULL Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



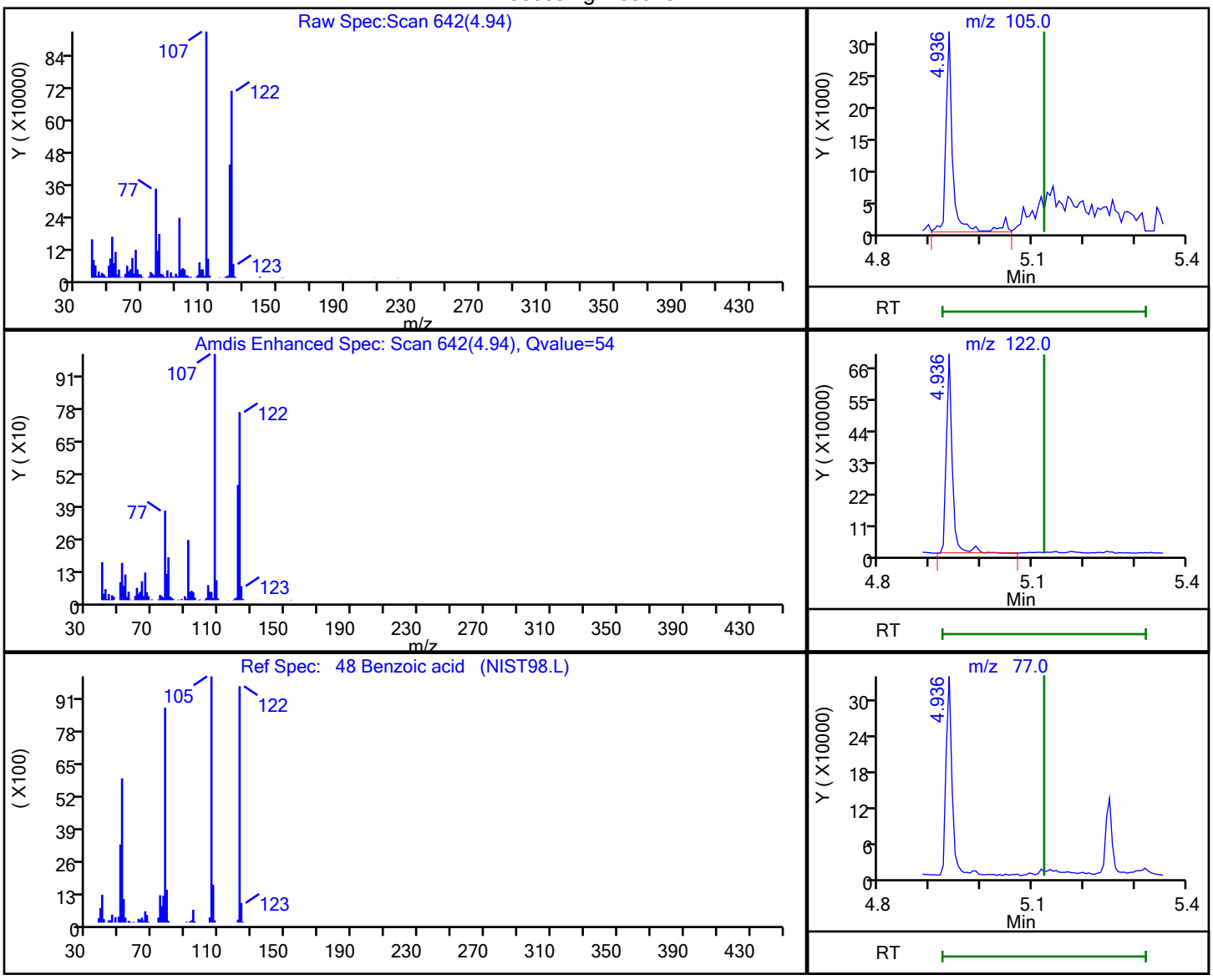
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D				
Injection Date:	31-Oct-2023 18:13:30	Instrument ID:	HP23264		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

48 Benzoic acid, CAS: 65-85-0

Processing Results



RT	Mass	Response	Amount
4.94	105.00	27856	0.633242
4.94	122.00	581725	
4.94	77.00	302781	

Reviewer: P7EB, 01-Nov-2023 08:02:58 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

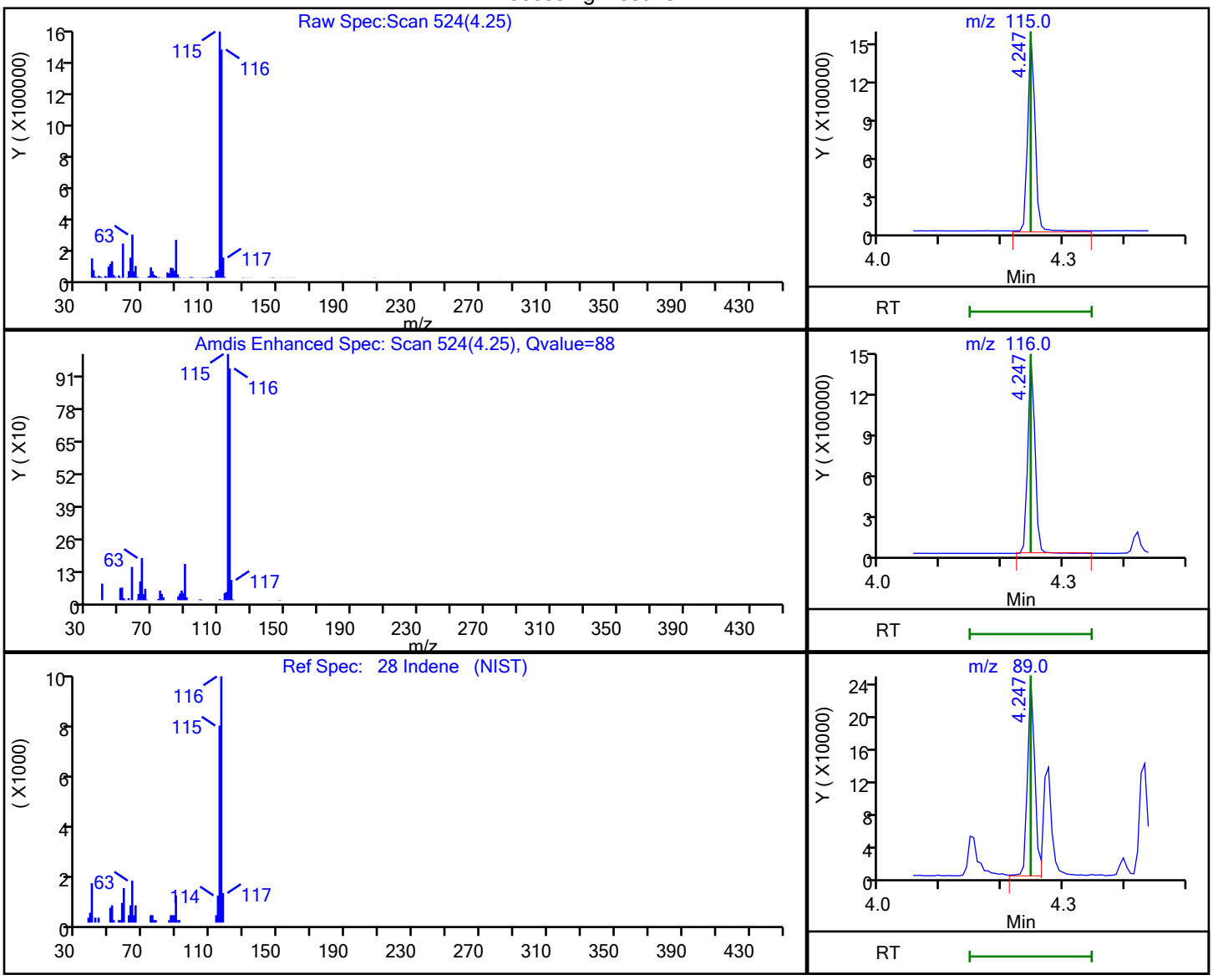
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D				
Injection Date:	31-Oct-2023 18:13:30	Instrument ID:	HP23264		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

28 Indene, CAS: 95-13-6

Processing Results



RT	Mass	Response	Amount
4.25	115.00	1274957	12.011618
4.25	116.00	1165234	
4.25	89.00	195922	

Reviewer: P7EB, 01-Nov-2023 08:02:54 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-437867/12 Calibration Date: 10/31/2023 18:13

Instrument ID: HP23264 Calib Start Date: 04/11/2023 14:51

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 04/11/2023 16:37

Lab File ID: JJ3111.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Famphur	Ave	0.3331				12.5		
Methapyrilene	Ave	0.4644				12.5		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 31-Oct-2023 18:13:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0098173-012
Operator ID: mem41592 Instrument ID: HP23264
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 13:04:07 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.432	1.432	0.000	95	267872	12.5	12.0	
2 N-Nitrosodimethylamine	74	1.648	1.648	0.000	94	471757	12.5	12.7	
3 Pyridine	79	1.677	1.677	0.000	93	1465709	25.0	25.5	
5 2-Picoline	93	2.238	2.238	0.000	93	751366	12.5	13.4	
6 N-Nitrosomethylethylamine	88	2.331	2.331	0.000	96	341171	12.5	12.3	
7 Methyl methanesulfonate	80	2.594	2.594	0.000	87	517594	12.5	14.0	
11 N-Nitrosodiethylamine	102	2.944	2.944	0.000	89	335333	12.5	12.8	
12 Ethyl methanesulfonate	109	3.248	3.248	0.000	95	383975	12.5	13.2	
17 Aniline	93	3.686	3.686	0.000	97	1190112	12.5	14.3	
16 Phenol	94	3.692	3.692	0.000	94	1124092	12.5	13.1	
18 Bis(2-chloroethyl)ether	93	3.750	3.750	0.000	86	808483	12.5	14.3	
19 2-Chlorophenol	128	3.803	3.803	0.000	92	677237	12.5	14.6	
21 1,3-Dichlorobenzene	146	3.943	3.943	0.000	95	706814	12.5	13.5	
* 22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	96	172317	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	90	724809	12.5	12.9	
26 Benzyl alcohol	108	4.153	4.153	0.000	88	452349	12.5	12.5	
27 1,2-Dichlorobenzene	146	4.165	4.165	0.000	95	662183	12.5	12.4	
28 Indene	115		4.247				ND	ND	U
30 2,2'-oxybis[1-chloropropane]	45	4.276	4.276	0.000	84	1564904	12.5	12.1	
29 2-Methylphenol	108	4.276	4.276	0.000	79	693144	12.5	13.1	
31 N-Nitrosopyrrolidine	100	4.375	4.375	0.000	85	427621	12.5	14.8	
32 Acetophenone	105	4.398	4.398	0.000	90	1138296	12.5	14.3	
33 N-Nitrosodi-n-propylamine	70	4.398	4.398	0.000	90	754952	12.5	14.0	
35 N-Nitrosomorpholine	56	4.422	4.422	0.000	89	636702	12.5	14.4	
34 4-Methylphenol	108	4.428	4.428	0.000	80	801373	12.5	14.2	
36 2-Toluidine	106	4.433	4.433	0.000	85	1167999	12.5	14.1	
37 Hexachloroethane	117	4.486	4.486	0.000	97	316142	12.5	13.3	
40 Nitrobenzene	77	4.562	4.562	0.000	89	933410	12.5	11.3	
41 N-Nitrosopiperidine	114	4.708	4.708	0.000	80	376614	12.5	13.0	
42 Isophorone	82	4.795	4.795	0.000	98	1785503	12.5	12.3	
43 2-Nitrophenol	139	4.871	4.871	0.000	90	346732	12.5	13.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
44 2,4-Dimethylphenol	107	4.936	4.936	0.000	99	736834	12.5	14.4	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	93	265995	12.5	11.8	
47 Bis(2-chloroethoxy)methane	93	5.017	5.017	0.000	92	1067106	12.5	13.4	
49 2,4-Dichlorophenol	162	5.117	5.117	0.000	97	594458	12.5	14.9	
48 Benzoic acid	105		5.122				ND	ND	U
50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	93	582806	12.5	12.1	
* 52 Naphthalene-d8	136	5.227	5.227	0.000	98	704004	5.00	5.00	
53 Naphthalene	128	5.251	5.251	0.000	97	1978066	12.5	12.6	
56 4-Chloroaniline	127	5.321	5.321	0.000	90	839188	12.5	13.5	
57 2,6-Dichlorophenol	162	5.321	5.321	0.000	86	600698	12.5	13.9	
58 Hexachloropropene	213	5.333	5.333	0.000	97	430558	12.5	13.7	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	95	373661	12.5	12.9	
61 Quinoline	129	5.572	5.572	0.000	94	1355083	12.5	12.9	
63 N-Nitrosodi-n-butylamine	84	5.642	5.642	0.000	94	636301	12.5	10.1	
64 p-Phenylene diamine	108	5.677	5.677	0.000	93	194886	12.5	4.10	7a
65 4-Chloro-3-methylphenol	107	5.811	5.811	0.000	94	701819	12.5	13.3	
66 Safrole, Total	162	5.846	5.846	0.000	82	460087	12.5	12.6	
67 2-Methylnaphthalene	142	5.916	5.916	0.000	90	1184519	12.5	13.0	
69 1-Methylnaphthalene	142	6.010	6.010	0.000	90	1145389	12.5	12.6	
71 Hexachlorocyclopentadiene	237	6.062	6.062	0.000	93	291116	12.5	13.0	
70 1,2,4,5-Tetrachlorobenzene	216	6.074	6.074	0.000	98	640999	12.5	13.4	
72 Isosafrole Peak 1	162	6.127	6.127	0.000	82	69497	1.50	1.68	
79 2,4,6-Trichlorophenol	196	6.197	6.197	0.000	96	391475	12.5	12.2	
80 2,4,5-Trichlorophenol	196	6.243	6.243	0.000	90	467480	12.5	12.7	
82 Isosafrole Peak 2	162	6.337	6.337	0.000	87	485987	11.0	11.2	
83 1,1'-Biphenyl	154	6.366	6.366	0.000	96	1546039	12.5	13.7	
84 2-Chloronaphthalene	162	6.378	6.378	0.000	89	1185896	12.5	12.9	
85 1-Chloronaphthalene	162	6.395	6.395	0.000	97	1325352	12.5	13.8	
86 Phenyl ether	170	6.465	6.465	0.000	89	790803	12.5	13.1	
87 2-Nitroaniline	138	6.489	6.489	0.000	74	397627	12.5	13.0	
S 24 Dinitrotoluene	165				0			26.2	
88 1,4-Naphthoquinone	158	6.553	6.553	0.000	74	514079	12.5	14.7	
89 1,4-Dinitrobenzene	168	6.629	6.629	0.000	85	175920	12.5	12.6	
90 Dimethyl phthalate	163	6.670	6.670	0.000	96	1483393	12.5	12.5	
91 1,3-Dinitrobenzene	168	6.699	6.699	0.000	78	213138	12.5	13.1	
92 2,6-Dinitrotoluene	165	6.722	6.722	0.000	87	341687	12.5	14.0	
93 Acenaphthylene	152	6.763	6.763	0.000	99	1909169	12.5	12.3	
95 3-Nitroaniline	138	6.880	6.880	0.000	86	377321	12.5	13.3	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	95	383730	5.00	5.00	
97 Acenaphthene	153	6.932	6.932	0.000	97	1247775	12.5	13.2	
98 2,4-Dinitrophenol	184	6.985	6.985	0.000	74	394947	25.0	26.0	
99 Pentachlorobenzene	250	7.055	7.055	0.000	97	582073	12.5	14.1	
100 4-Nitrophenol	109	7.084	7.084	0.000	90	525326	25.0	26.6	
101 Dibenzofuran	168	7.096	7.096	0.000	96	1679717	12.5	12.8	
102 2,4-Dinitrotoluene	165	7.102	7.102	0.000	83	416894	12.5	12.2	
104 1-Naphthylamine	143	7.178	7.178	0.000	97	1145144	12.5	13.0	
105 2,3,4,6-Tetrachlorophenol	232	7.184	7.184	0.000	74	318043	12.5	12.2	
106 2-Naphthylamine	143	7.254	7.254	0.000	95	1391062	12.5	14.1	
107 Diethyl phthalate	149	7.335	7.335	0.000	96	1529343	12.5	12.8	
109 Thionazin	107	7.411	7.411	0.000	74	285519	12.5	13.5	
108 Fluorene	166	7.417	7.417	0.000	91	1396071	12.5	13.8	
110 4-Chlorophenyl phenyl ether	204	7.429	7.429	0.000	93	645234	12.5	13.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
111 N-Nitro-o-toluidine	152	7.446	7.446	0.000	89	435087	12.5	14.2	
112 4-Nitroaniline	138	7.458	7.458	0.000	80	378661	12.5	13.5	
113 4,6-Dinitro-2-methylphenol	198	7.481	7.481	0.000	72	549863	25.0	28.3	
114 N-Nitrosodiphenylamine	169	7.546	7.546	0.000	67	915199	10.6	10.3	
115 1,2-Diphenylhydrazine	77	7.575	7.575	0.000	99	2144637	12.5	12.6	
117 Sulfotepp	97	7.709	7.709	0.000	75	361874	12.5	12.3	
120 cis-Diallate	86	7.820	7.820	0.000	95	605213	9.38	10.1	
119 Phorate	75	7.826	7.826	0.000	92	1868042	12.5	14.0	
118 1,3,5-Trinitrobenzene	213	7.832	7.832	0.000	70	122784	12.5	13.3	
121 Phenacetin	108	7.855	7.855	0.000	90	922117	12.5	14.1	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	73	392420	12.5	11.9	
123 trans-Diallate	86	7.902	7.902	0.000	94	200827	3.13	3.39	
124 Hexachlorobenzene	284	7.931	7.931	0.000	93	463872	12.5	13.1	
125 Dimethoate	87	7.989	7.989	0.000	94	782847	12.5	12.9	
129 4-Aminobiphenyl	169	8.135	8.135	0.000	92	1471046	12.5	12.8	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	82	222234	12.5	12.8	
127 Pentachlorophenol	266	8.135	8.135	0.000	88	549341	25.0	25.4	
130 Pronamide	173	8.205	8.205	0.000	90	688580	12.5	13.3	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	96	740293	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	89	366081	12.5	15.7	
134 Disulfoton	88	8.322	8.322	0.000	95	1134309	12.5	12.7	
132 Phenanthrene	178	8.322	8.322	0.000	98	2111038	12.5	12.9	
135 Anthracene	178	8.369	8.369	0.000	99	2100573	12.5	12.6	
136 Carbazole	167	8.538	8.538	0.000	96	1944996	12.5	12.9	
137 Methyl parathion	109	8.678	8.678	0.000	89	603306	12.5	13.4	
138 Di-n-butyl phthalate	149	8.889	8.889	0.000	99	2732581	12.5	13.2	
139 Ethyl Parathion	109	9.046	9.046	0.000	80	358569	12.5	13.1	
140 4-Nitroquinoline-1-oxide	190	9.070	9.070	0.000	78	141030	12.5	12.6	
141 Methapyrilene	97		9.145				ND	ND	U
142 Octachlorostyrene	308	9.268	9.268	0.000	92	187504	12.5	11.9	
143 Isodrin	193	9.297	9.297	0.000	90	290155	12.5	13.3	
144 Fluoranthene	202	9.443	9.443	0.000	99	2302206	12.5	13.5	
145 Benzidine	184	9.595	9.595	0.000	99	1184080	12.5	11.5	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	96	762661	5.00	5.00	
S 68 Diallate	86				0		12.5	13.5	
147 Pyrene	202	9.653	9.653	0.000	96	2455162	12.5	13.4	
200 Aramite Peak 1	185		9.823				ND	ND	U
192 Aramite Peak 2	185		9.823				ND	ND	U
180 Aramite Peak 4	185		9.899				ND	ND	U
185 Aramite Peak 3	185		9.899				ND	ND	U
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	93	374645	12.5	15.1	
150 Chlorobenzilate	139	10.010	10.010	0.000	82	880345	12.5	14.4	
151 Famphur	218		10.249				ND	ND	U
152 3,3'-Dimethylbenzidine	212	10.284	10.284	0.000	99	1291901	12.5	14.4	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	96	1331767	12.5	15.0	
155 2-Acetylaminofluorene	181	10.541	10.541	0.000	92	855168	12.5	12.7	
157 3,3'-Dichlorobenzidine	252	10.845	10.845	0.000	75	758556	12.5	12.6	
156 Benzo[a]anthracene	228	10.850	10.850	0.000	99	2018720	12.5	13.1	
158 4,4'-Methylene bis(2-chloroanil	231	10.850	10.850	0.000	93	418571	12.5	13.4	
159 Chrysene	228	10.886	10.886	0.000	97	2002100	12.5	13.0	
160 Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	95	1627056	12.5	13.0	
S 94 Isosafrole	162				0		12.5	12.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
161 6-Methylchrysene	242	11.405	11.405	0.000	98	1356840	12.5	13.1	
S 103 Aramite, Total	185		11.583				12.5	ND	7
162 Di-n-octyl phthalate	149	11.726	11.726	0.000	99	2845310	12.5	13.8	
163 7,12-Dimethylbenz(a)anthracene	256	12.118	12.118	0.000	89	778567	12.5	13.6	
164 Benzo[b]fluoranthene	252	12.123	12.123	0.000	97	2095804	12.5	13.6	
165 Benzo[k]fluoranthene	252	12.158	12.158	0.000	99	2050030	12.5	13.4	
166 Benzo[a]pyrene	252	12.538	12.538	0.000	80	1941399	12.5	12.9	
* 167 Perylene-d12	264	12.614	12.614	0.000	96	674496	5.00	5.00	
168 3-Methylcholanthrene	268	13.028	13.028	0.000	92	652568	12.5	9.38	
169 Dibenz[a,h]acridine	279	13.770	13.770	0.000	92	1640842	12.5	14.2	
170 Dibenz[a,j]acridine	279	13.840	13.840	0.000	95	1763164	12.5	13.5	
171 Indeno[1,2,3-cd]pyrene	276	14.068	14.068	0.000	96	1853609	12.5	12.6	
172 Dibenz(a,h)anthracene	278	14.109	14.109	0.000	94	1982481	12.5	13.2	
173 Benzo[g,h,i]perylene	276	14.424	14.424	0.000	95	2049749	12.5	12.8	

QC Flag Legend

Processing Flags
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- U - Marked Undetected
- a - User Assigned ID

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 13:04:08 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D

Injection Date: 31-Oct-2023 18:13:30 Instrument ID: HP23264 Operator ID: mem41592

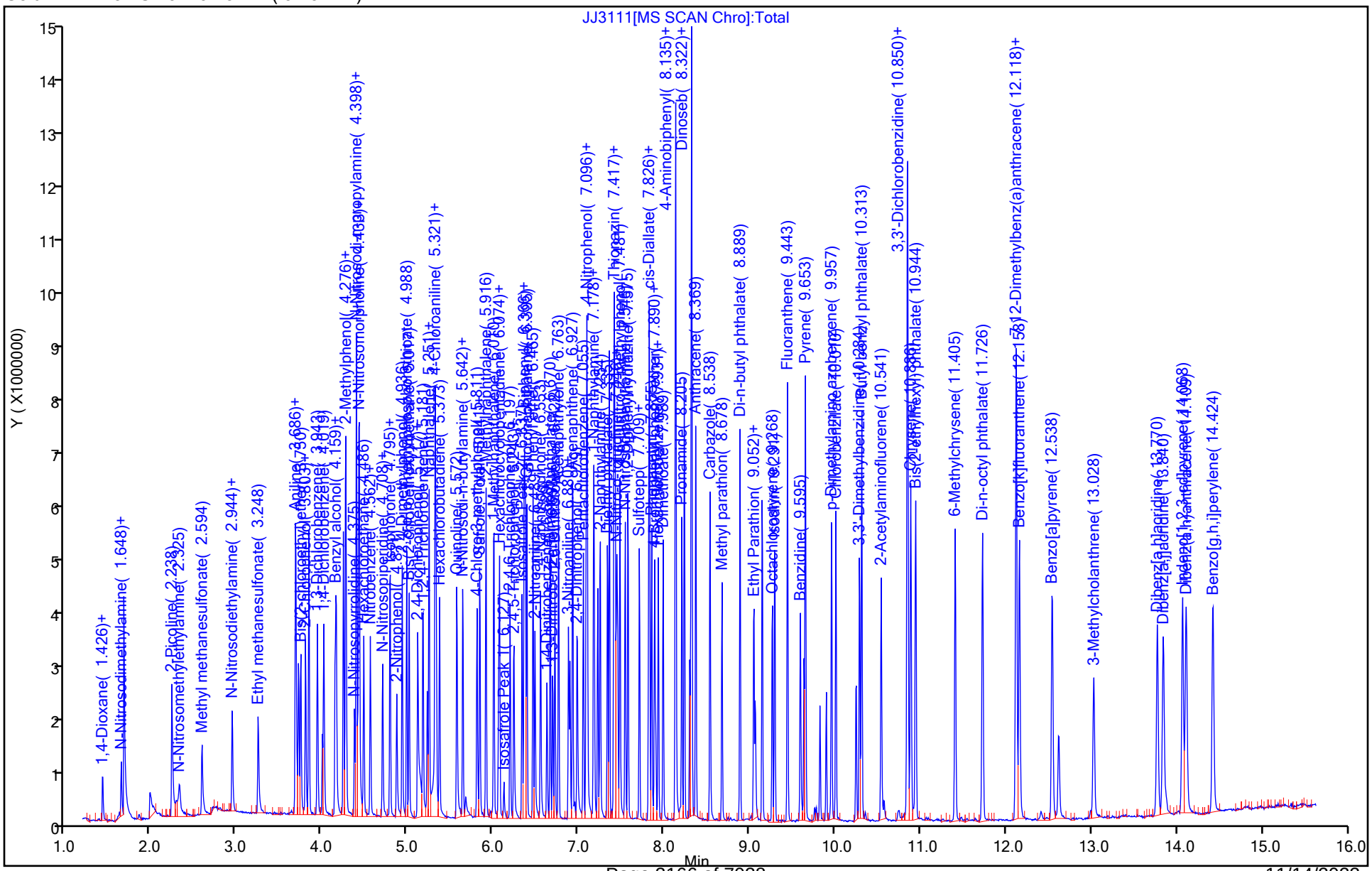
Lims ID: ICV FULL Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



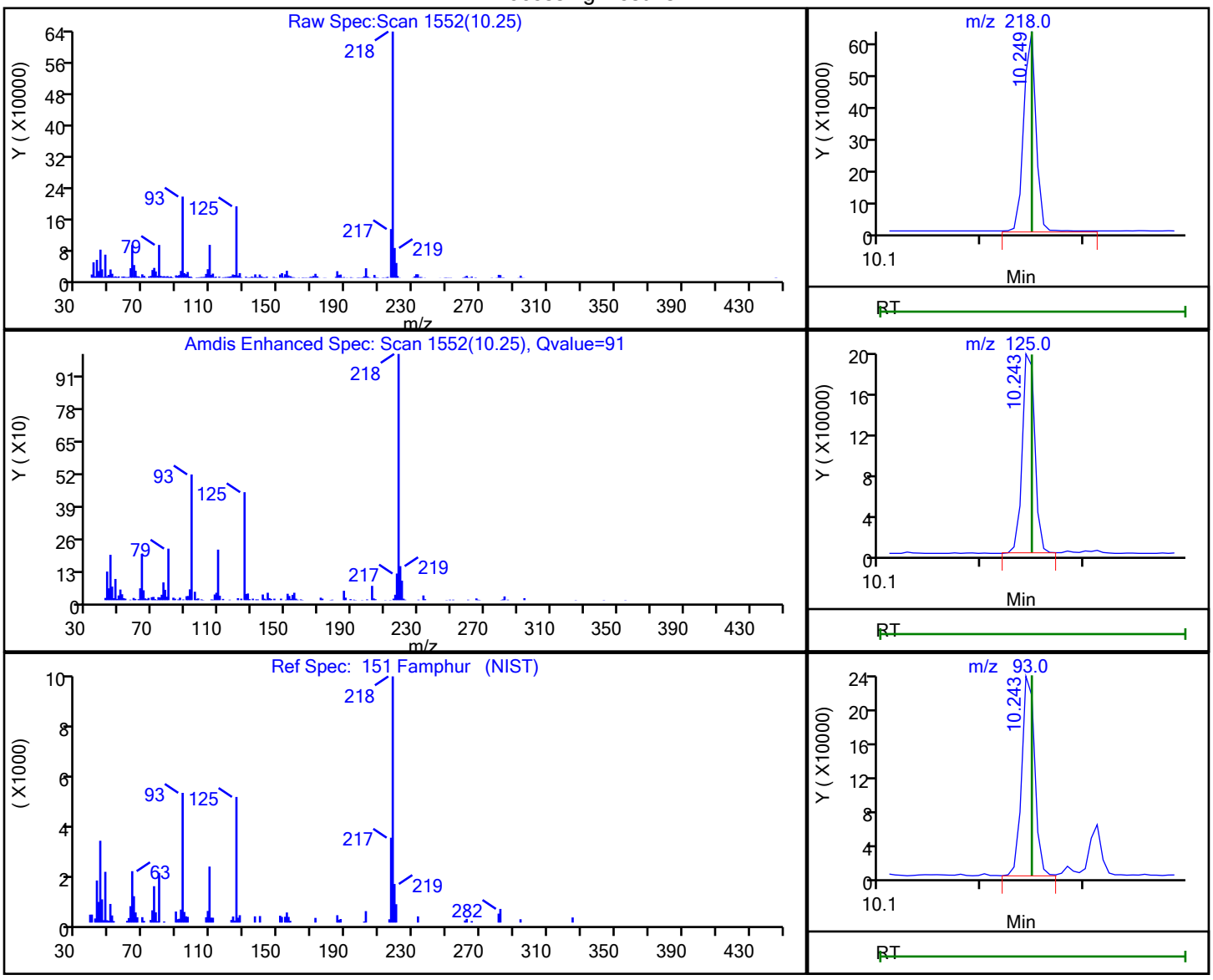
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D				
Injection Date:	31-Oct-2023 18:13:30	Instrument ID:	HP23264		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

151 Famphur, CAS: 52-85-7

Processing Results



RT	Mass	Response	Amount
10.25	218.00	523948	10.311798
10.24	125.00	168393	
10.24	93.00	205623	

Reviewer: P7EB, 01-Nov-2023 08:02:31 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

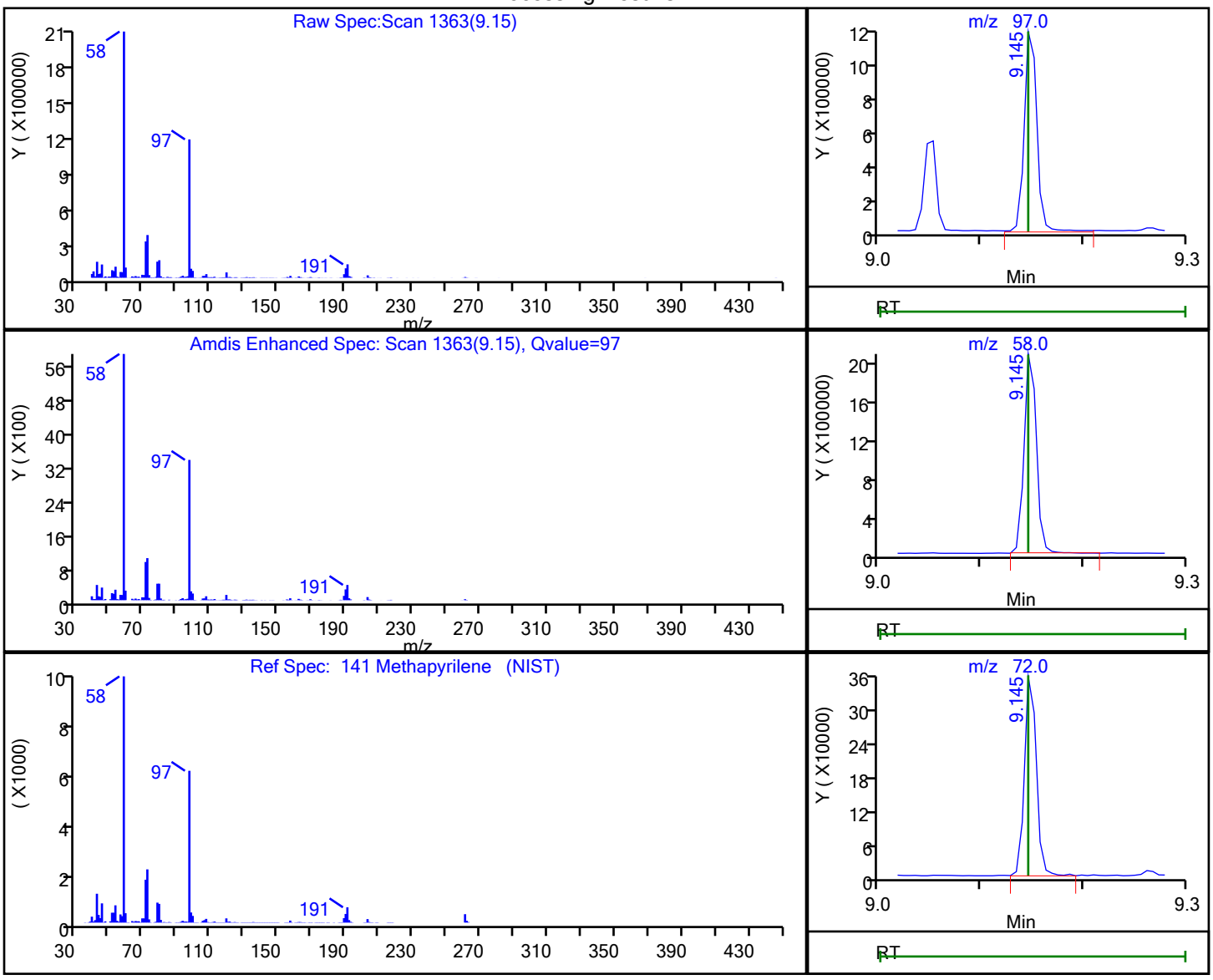
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D				
Injection Date:	31-Oct-2023 18:13:30	Instrument ID:	HP23264		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

141 Methapyrilene, CAS: 91-80-5

Processing Results



RT	Mass	Response	Amount
9.15	97.00	971193	14.123240
9.15	58.00	1717265	
9.15	72.00	287013	
9.15	191.00	106221	
9.15	261.00	6371	

Reviewer: P7EB, 01-Nov-2023 08:02:36 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-437867/12 Calibration Date: 10/31/2023 18:13

Instrument ID: HP23264 Calib Start Date: 10/29/2023 16:11

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/29/2023 16:11

Lab File ID: JJ3111.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Aramite Peak 1	Ave	0.0507				1.25		
Aramite Peak 2	Ave	0.0651				1.25		
Aramite Peak 3	Ave	0.1378				5.00		
Aramite Peak 4	Ave	0.1517				5.00		

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 31-Oct-2023 18:13:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0098173-012
Operator ID: mem41592 Instrument ID: HP23264
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 13:04:07 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.432	1.432	0.000	95	267872	12.5	12.0	
2 N-Nitrosodimethylamine	74	1.648	1.648	0.000	94	471757	12.5	12.7	
3 Pyridine	79	1.677	1.677	0.000	93	1465709	25.0	25.5	
5 2-Picoline	93	2.238	2.238	0.000	93	751366	12.5	13.4	
6 N-Nitrosomethylethylamine	88	2.331	2.331	0.000	96	341171	12.5	12.3	
7 Methyl methanesulfonate	80	2.594	2.594	0.000	87	517594	12.5	14.0	
11 N-Nitrosodiethylamine	102	2.944	2.944	0.000	89	335333	12.5	12.8	
12 Ethyl methanesulfonate	109	3.248	3.248	0.000	95	383975	12.5	13.2	
17 Aniline	93	3.686	3.686	0.000	97	1190112	12.5	14.3	
16 Phenol	94	3.692	3.692	0.000	94	1124092	12.5	13.1	
18 Bis(2-chloroethyl)ether	93	3.750	3.750	0.000	86	808483	12.5	14.3	
19 2-Chlorophenol	128	3.803	3.803	0.000	92	677237	12.5	14.6	
21 1,3-Dichlorobenzene	146	3.943	3.943	0.000	95	706814	12.5	13.5	
* 22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	96	172317	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	90	724809	12.5	12.9	
26 Benzyl alcohol	108	4.153	4.153	0.000	88	452349	12.5	12.5	
27 1,2-Dichlorobenzene	146	4.165	4.165	0.000	95	662183	12.5	12.4	
28 Indene	115		4.247				ND	ND	U
30 2,2'-oxybis[1-chloropropane]	45	4.276	4.276	0.000	84	1564904	12.5	12.1	
29 2-Methylphenol	108	4.276	4.276	0.000	79	693144	12.5	13.1	
31 N-Nitrosopyrrolidine	100	4.375	4.375	0.000	85	427621	12.5	14.8	
32 Acetophenone	105	4.398	4.398	0.000	90	1138296	12.5	14.3	
33 N-Nitrosodi-n-propylamine	70	4.398	4.398	0.000	90	754952	12.5	14.0	
35 N-Nitrosomorpholine	56	4.422	4.422	0.000	89	636702	12.5	14.4	
34 4-Methylphenol	108	4.428	4.428	0.000	80	801373	12.5	14.2	
36 2-Toluidine	106	4.433	4.433	0.000	85	1167999	12.5	14.1	
37 Hexachloroethane	117	4.486	4.486	0.000	97	316142	12.5	13.3	
40 Nitrobenzene	77	4.562	4.562	0.000	89	933410	12.5	11.3	
41 N-Nitrosopiperidine	114	4.708	4.708	0.000	80	376614	12.5	13.0	
42 Isophorone	82	4.795	4.795	0.000	98	1785503	12.5	12.3	
43 2-Nitrophenol	139	4.871	4.871	0.000	90	346732	12.5	13.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
44 2,4-Dimethylphenol	107	4.936	4.936	0.000	99	736834	12.5	14.4	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	93	265995	12.5	11.8	
47 Bis(2-chloroethoxy)methane	93	5.017	5.017	0.000	92	1067106	12.5	13.4	
49 2,4-Dichlorophenol	162	5.117	5.117	0.000	97	594458	12.5	14.9	
48 Benzoic acid	105		5.122				ND	ND	U
50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	93	582806	12.5	12.1	
* 52 Naphthalene-d8	136	5.227	5.227	0.000	98	704004	5.00	5.00	
53 Naphthalene	128	5.251	5.251	0.000	97	1978066	12.5	12.6	
56 4-Chloroaniline	127	5.321	5.321	0.000	90	839188	12.5	13.5	
57 2,6-Dichlorophenol	162	5.321	5.321	0.000	86	600698	12.5	13.9	
58 Hexachloropropene	213	5.333	5.333	0.000	97	430558	12.5	13.7	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	95	373661	12.5	12.9	
61 Quinoline	129	5.572	5.572	0.000	94	1355083	12.5	12.9	
63 N-Nitrosodi-n-butylamine	84	5.642	5.642	0.000	94	636301	12.5	10.1	
64 p-Phenylene diamine	108	5.677	5.677	0.000	93	194886	12.5	4.10	7a
65 4-Chloro-3-methylphenol	107	5.811	5.811	0.000	94	701819	12.5	13.3	
66 Safrole, Total	162	5.846	5.846	0.000	82	460087	12.5	12.6	
67 2-Methylnaphthalene	142	5.916	5.916	0.000	90	1184519	12.5	13.0	
69 1-Methylnaphthalene	142	6.010	6.010	0.000	90	1145389	12.5	12.6	
71 Hexachlorocyclopentadiene	237	6.062	6.062	0.000	93	291116	12.5	13.0	
70 1,2,4,5-Tetrachlorobenzene	216	6.074	6.074	0.000	98	640999	12.5	13.4	
72 Isosafrole Peak 1	162	6.127	6.127	0.000	82	69497	1.50	1.68	
79 2,4,6-Trichlorophenol	196	6.197	6.197	0.000	96	391475	12.5	12.2	
80 2,4,5-Trichlorophenol	196	6.243	6.243	0.000	90	467480	12.5	12.7	
82 Isosafrole Peak 2	162	6.337	6.337	0.000	87	485987	11.0	11.2	
83 1,1'-Biphenyl	154	6.366	6.366	0.000	96	1546039	12.5	13.7	
84 2-Chloronaphthalene	162	6.378	6.378	0.000	89	1185896	12.5	12.9	
85 1-Chloronaphthalene	162	6.395	6.395	0.000	97	1325352	12.5	13.8	
86 Phenyl ether	170	6.465	6.465	0.000	89	790803	12.5	13.1	
87 2-Nitroaniline	138	6.489	6.489	0.000	74	397627	12.5	13.0	
S 24 Dinitrotoluene	165				0			26.2	
88 1,4-Naphthoquinone	158	6.553	6.553	0.000	74	514079	12.5	14.7	
89 1,4-Dinitrobenzene	168	6.629	6.629	0.000	85	175920	12.5	12.6	
90 Dimethyl phthalate	163	6.670	6.670	0.000	96	1483393	12.5	12.5	
91 1,3-Dinitrobenzene	168	6.699	6.699	0.000	78	213138	12.5	13.1	
92 2,6-Dinitrotoluene	165	6.722	6.722	0.000	87	341687	12.5	14.0	
93 Acenaphthylene	152	6.763	6.763	0.000	99	1909169	12.5	12.3	
95 3-Nitroaniline	138	6.880	6.880	0.000	86	377321	12.5	13.3	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	95	383730	5.00	5.00	
97 Acenaphthene	153	6.932	6.932	0.000	97	1247775	12.5	13.2	
98 2,4-Dinitrophenol	184	6.985	6.985	0.000	74	394947	25.0	26.0	
99 Pentachlorobenzene	250	7.055	7.055	0.000	97	582073	12.5	14.1	
100 4-Nitrophenol	109	7.084	7.084	0.000	90	525326	25.0	26.6	
101 Dibenzofuran	168	7.096	7.096	0.000	96	1679717	12.5	12.8	
102 2,4-Dinitrotoluene	165	7.102	7.102	0.000	83	416894	12.5	12.2	
104 1-Naphthylamine	143	7.178	7.178	0.000	97	1145144	12.5	13.0	
105 2,3,4,6-Tetrachlorophenol	232	7.184	7.184	0.000	74	318043	12.5	12.2	
106 2-Naphthylamine	143	7.254	7.254	0.000	95	1391062	12.5	14.1	
107 Diethyl phthalate	149	7.335	7.335	0.000	96	1529343	12.5	12.8	
109 Thionazin	107	7.411	7.411	0.000	74	285519	12.5	13.5	
108 Fluorene	166	7.417	7.417	0.000	91	1396071	12.5	13.8	
110 4-Chlorophenyl phenyl ether	204	7.429	7.429	0.000	93	645234	12.5	13.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
111 N-Nitro-o-toluidine	152	7.446	7.446	0.000	89	435087	12.5	14.2	
112 4-Nitroaniline	138	7.458	7.458	0.000	80	378661	12.5	13.5	
113 4,6-Dinitro-2-methylphenol	198	7.481	7.481	0.000	72	549863	25.0	28.3	
114 N-Nitrosodiphenylamine	169	7.546	7.546	0.000	67	915199	10.6	10.3	
115 1,2-Diphenylhydrazine	77	7.575	7.575	0.000	99	2144637	12.5	12.6	
117 Sulfotepp	97	7.709	7.709	0.000	75	361874	12.5	12.3	
120 cis-Diallate	86	7.820	7.820	0.000	95	605213	9.38	10.1	
119 Phorate	75	7.826	7.826	0.000	92	1868042	12.5	14.0	
118 1,3,5-Trinitrobenzene	213	7.832	7.832	0.000	70	122784	12.5	13.3	
121 Phenacetin	108	7.855	7.855	0.000	90	922117	12.5	14.1	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	73	392420	12.5	11.9	
123 trans-Diallate	86	7.902	7.902	0.000	94	200827	3.13	3.39	
124 Hexachlorobenzene	284	7.931	7.931	0.000	93	463872	12.5	13.1	
125 Dimethoate	87	7.989	7.989	0.000	94	782847	12.5	12.9	
129 4-Aminobiphenyl	169	8.135	8.135	0.000	92	1471046	12.5	12.8	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	82	222234	12.5	12.8	
127 Pentachlorophenol	266	8.135	8.135	0.000	88	549341	25.0	25.4	
130 Pronamide	173	8.205	8.205	0.000	90	688580	12.5	13.3	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	96	740293	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	89	366081	12.5	15.7	
134 Disulfoton	88	8.322	8.322	0.000	95	1134309	12.5	12.7	
132 Phenanthrene	178	8.322	8.322	0.000	98	2111038	12.5	12.9	
135 Anthracene	178	8.369	8.369	0.000	99	2100573	12.5	12.6	
136 Carbazole	167	8.538	8.538	0.000	96	1944996	12.5	12.9	
137 Methyl parathion	109	8.678	8.678	0.000	89	603306	12.5	13.4	
138 Di-n-butyl phthalate	149	8.889	8.889	0.000	99	2732581	12.5	13.2	
139 Ethyl Parathion	109	9.046	9.046	0.000	80	358569	12.5	13.1	
140 4-Nitroquinoline-1-oxide	190	9.070	9.070	0.000	78	141030	12.5	12.6	
141 Methapyrilene	97		9.145				ND	ND	U
142 Octachlorostyrene	308	9.268	9.268	0.000	92	187504	12.5	11.9	
143 Isodrin	193	9.297	9.297	0.000	90	290155	12.5	13.3	
144 Fluoranthene	202	9.443	9.443	0.000	99	2302206	12.5	13.5	
145 Benzidine	184	9.595	9.595	0.000	99	1184080	12.5	11.5	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	96	762661	5.00	5.00	
S 68 Diallate	86				0		12.5	13.5	
147 Pyrene	202	9.653	9.653	0.000	96	2455162	12.5	13.4	
200 Aramite Peak 1	185		9.823				ND	ND	U
192 Aramite Peak 2	185		9.823				ND	ND	U
180 Aramite Peak 4	185		9.899				ND	ND	U
185 Aramite Peak 3	185		9.899				ND	ND	U
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	93	374645	12.5	15.1	
150 Chlorobenzilate	139	10.010	10.010	0.000	82	880345	12.5	14.4	
151 Famphur	218		10.249				ND	ND	U
152 3,3'-Dimethylbenzidine	212	10.284	10.284	0.000	99	1291901	12.5	14.4	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	96	1331767	12.5	15.0	
155 2-Acetylaminofluorene	181	10.541	10.541	0.000	92	855168	12.5	12.7	
157 3,3'-Dichlorobenzidine	252	10.845	10.845	0.000	75	758556	12.5	12.6	
156 Benzo[a]anthracene	228	10.850	10.850	0.000	99	2018720	12.5	13.1	
158 4,4'-Methylene bis(2-chloroanil	231	10.850	10.850	0.000	93	418571	12.5	13.4	
159 Chrysene	228	10.886	10.886	0.000	97	2002100	12.5	13.0	
160 Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	95	1627056	12.5	13.0	
S 94 Isosafrole	162				0		12.5	12.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
161 6-Methylchrysene	242	11.405	11.405	0.000	98	1356840	12.5	13.1	
S 103 Aramite, Total	185		11.583				12.5	ND	7
162 Di-n-octyl phthalate	149	11.726	11.726	0.000	99	2845310	12.5	13.8	
163 7,12-Dimethylbenz(a)anthracene	256	12.118	12.118	0.000	89	778567	12.5	13.6	
164 Benzo[b]fluoranthene	252	12.123	12.123	0.000	97	2095804	12.5	13.6	
165 Benzo[k]fluoranthene	252	12.158	12.158	0.000	99	2050030	12.5	13.4	
166 Benzo[a]pyrene	252	12.538	12.538	0.000	80	1941399	12.5	12.9	
* 167 Perylene-d12	264	12.614	12.614	0.000	96	674496	5.00	5.00	
168 3-Methylcholanthrene	268	13.028	13.028	0.000	92	652568	12.5	9.38	
169 Dibenz[a,h]acridine	279	13.770	13.770	0.000	92	1640842	12.5	14.2	
170 Dibenz[a,j]acridine	279	13.840	13.840	0.000	95	1763164	12.5	13.5	
171 Indeno[1,2,3-cd]pyrene	276	14.068	14.068	0.000	96	1853609	12.5	12.6	
172 Dibenz(a,h)anthracene	278	14.109	14.109	0.000	94	1982481	12.5	13.2	
173 Benzo[g,h,i]perylene	276	14.424	14.424	0.000	95	2049749	12.5	12.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 13:04:08 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D

Injection Date: 31-Oct-2023 18:13:30 Instrument ID: HP23264 Operator ID: mem41592

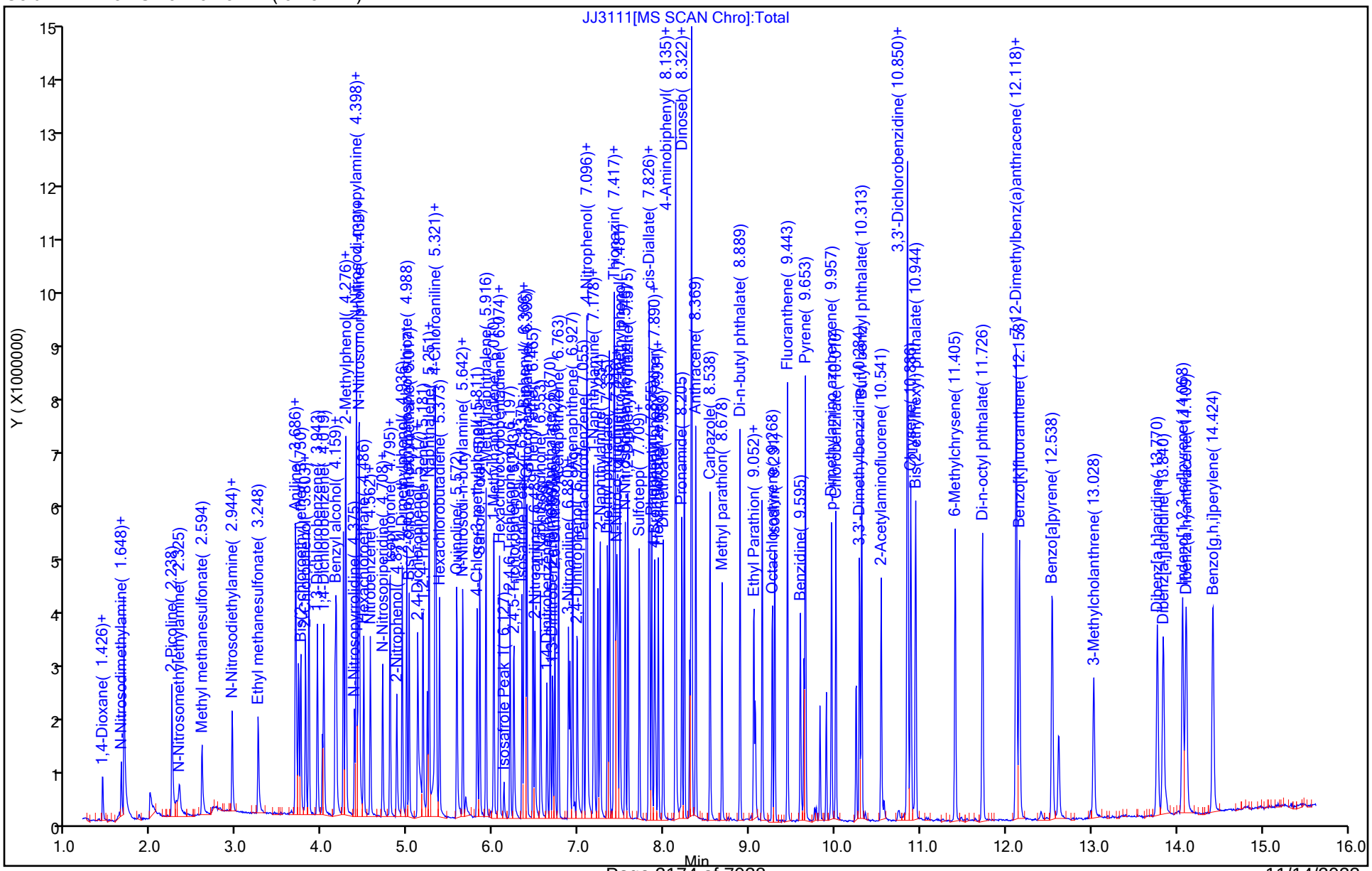
Lims ID: ICV FULL Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



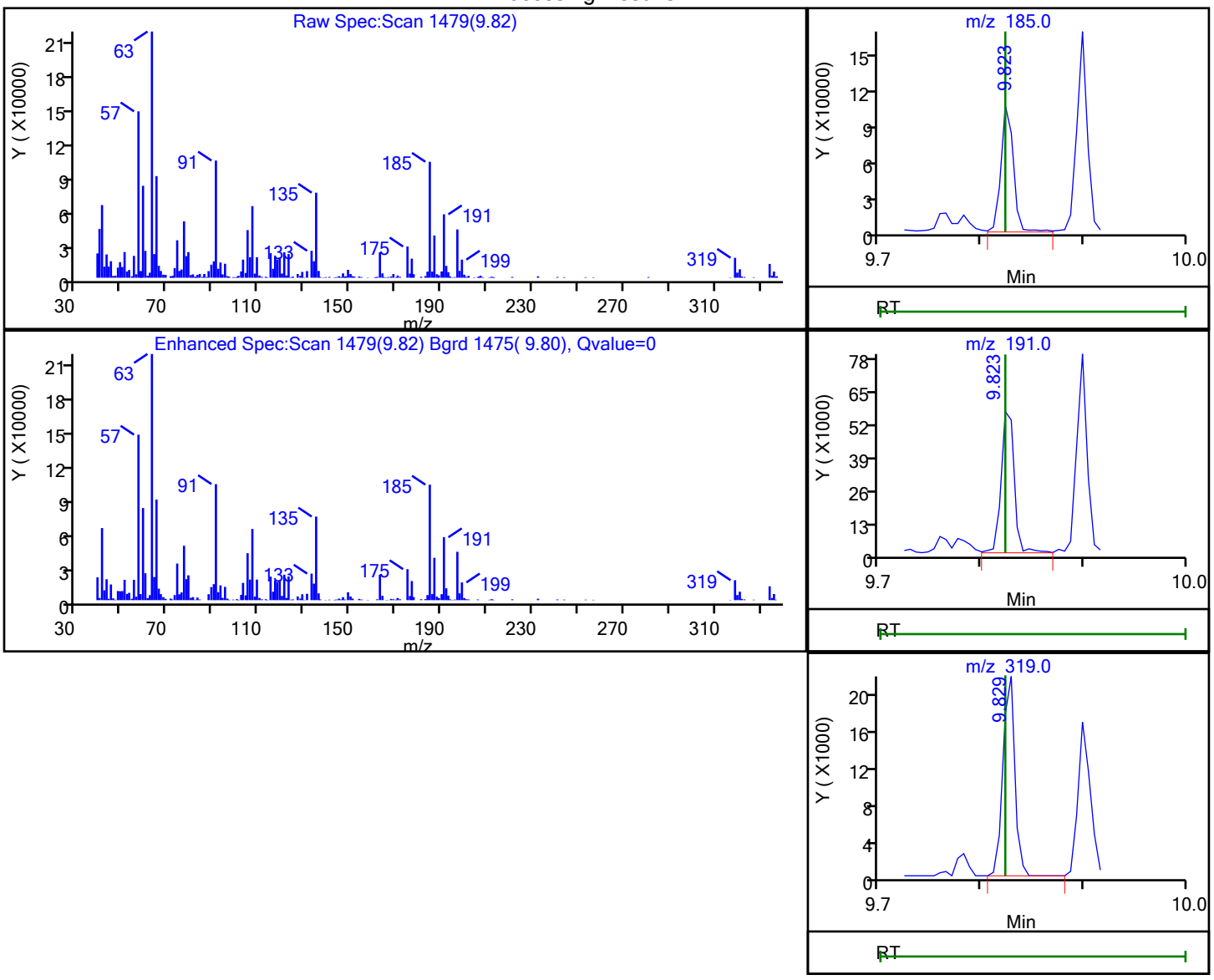
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D				
Injection Date:	31-Oct-2023 18:13:30	Instrument ID:	HP23264		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

200 Aramite Peak 1, CAS: STL00690

Processing Results



RT	Mass	Response	Amount
9.82	185.00	85293	13.151249
9.82	191.00	51540	
9.83	319.00	17766	
9.83	334.00	11648	
9.82	197.00	30624	

Reviewer: P7EB, 01-Nov-2023 08:02:17 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

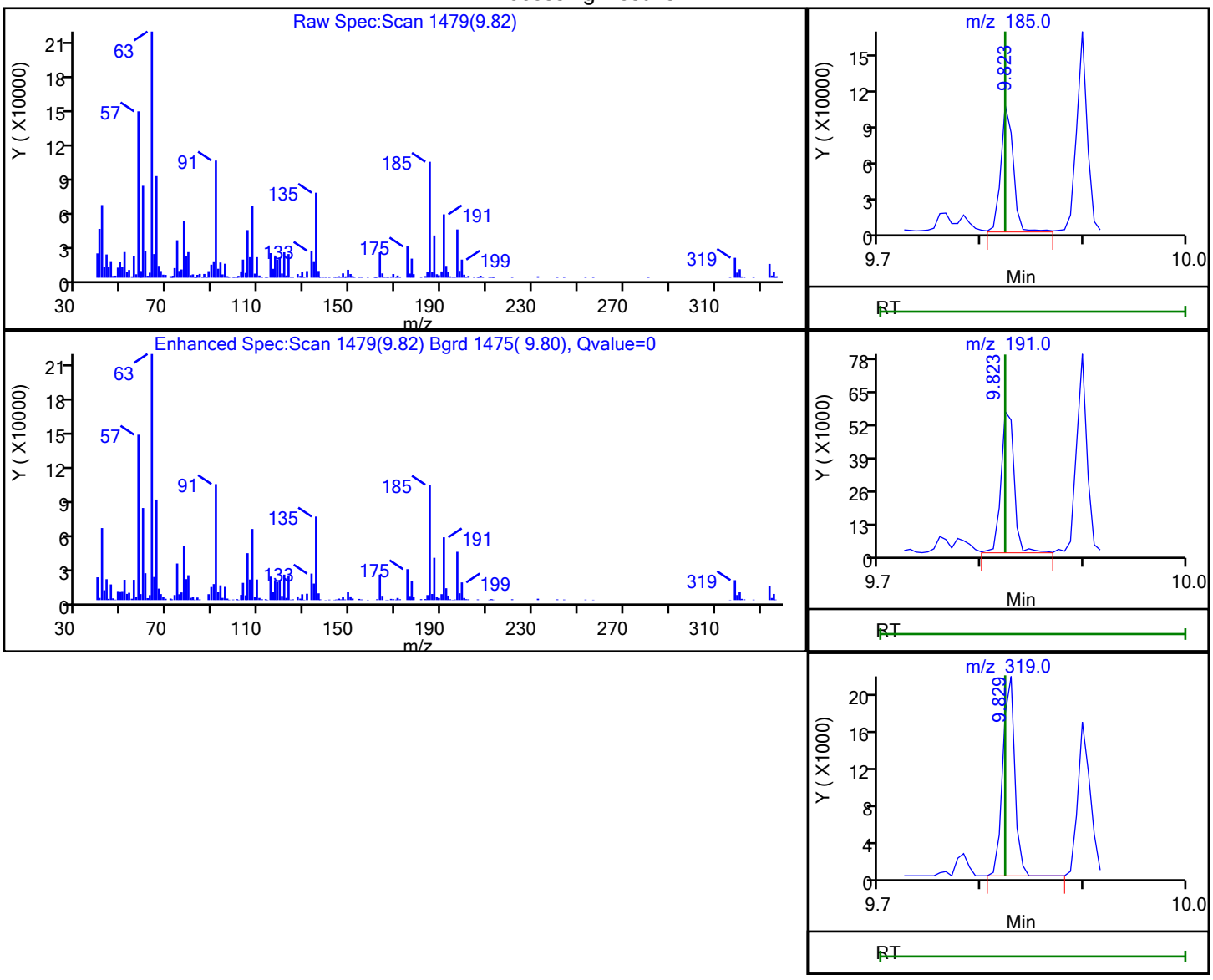
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D				
Injection Date:	31-Oct-2023 18:13:30	Instrument ID:	HP23264		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

192 Aramite Peak 2, CAS: STL00691

Processing Results



RT	Mass	Response	Amount
9.82	185.00	85293	12.210018
9.82	191.00	51540	
9.83	319.00	17766	
9.83	334.00	11648	
9.82	197.00	30624	

Reviewer: P7EB, 01-Nov-2023 08:02:19 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

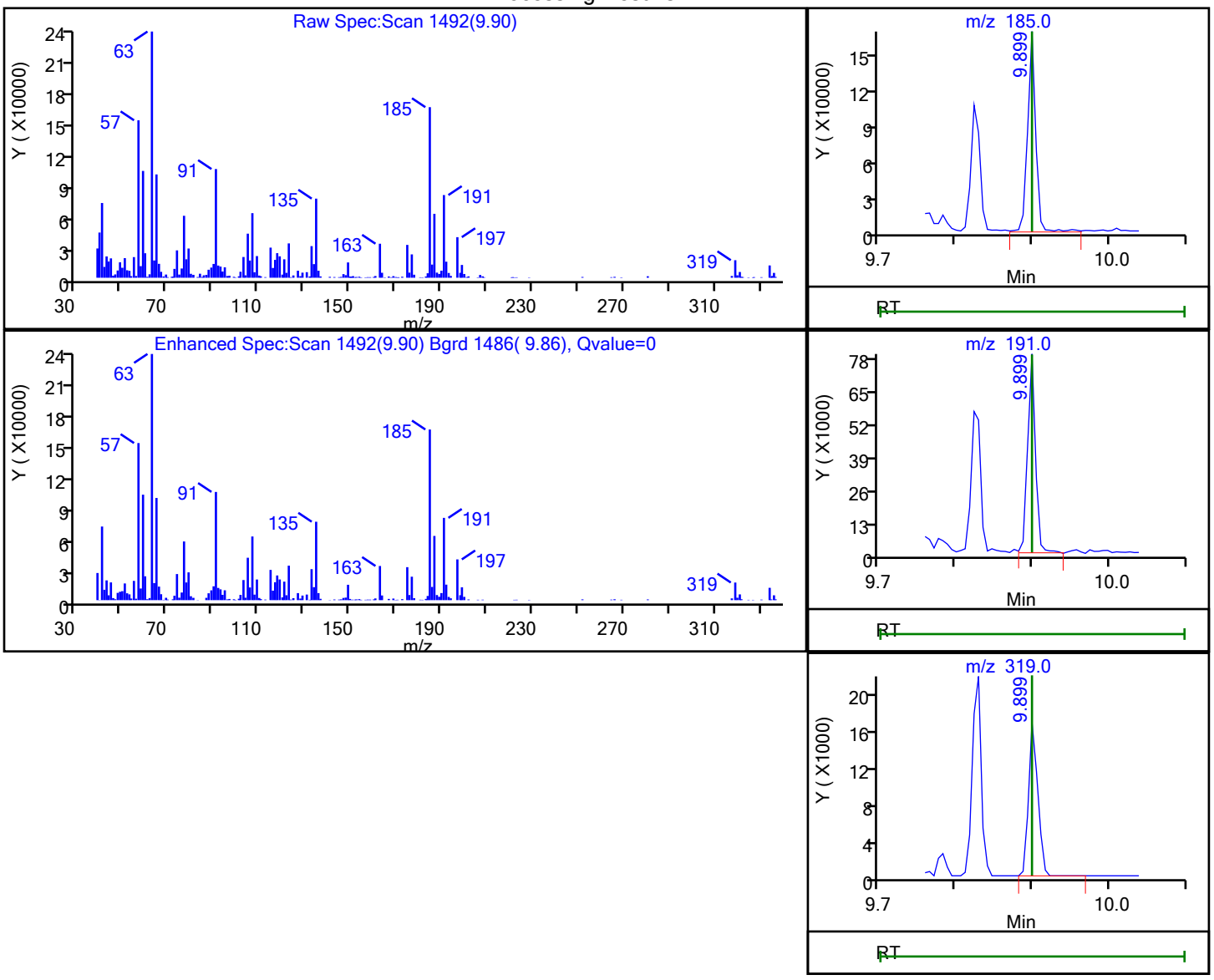
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D				
Injection Date:	31-Oct-2023 18:13:30	Instrument ID:	HP23264		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

185 Aramite Peak 3, CAS: STL02688

Processing Results



RT	Mass	Response	Amount
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9.90	191.00	57360	
9.90	319.00	14181	
9.90	334.00	8433	
9.90	197.00	29290	

Reviewer: P7EB, 01-Nov-2023 08:02:22 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

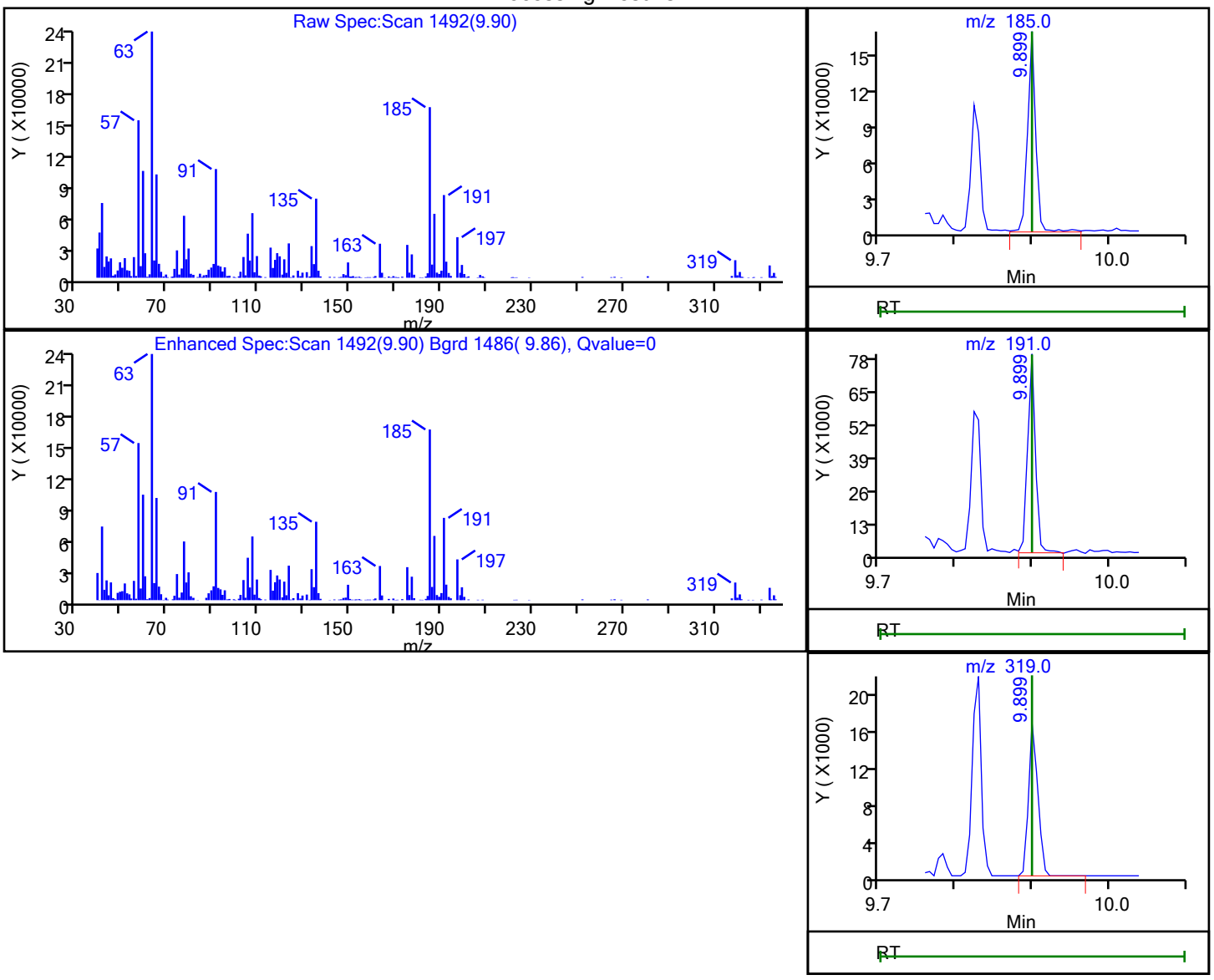
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D				
Injection Date:	31-Oct-2023 18:13:30	Instrument ID:	HP23264		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

180 Aramite Peak 4, CAS: STL02689

Processing Results



RT	Mass	Response	Amount
9.90	185.00	118046	5.203741
9.90	191.00	57360	
9.90	319.00	14181	
9.90	334.00	8433	
9.90	197.00	29290	

Reviewer: P7EB, 01-Nov-2023 08:02:21 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-437867/12 Calibration Date: 10/31/2023 18:13

Instrument ID: HP23264 Calib Start Date: 10/31/2023 14:37

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/31/2023 17:10

Lab File ID: JJ3111.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6497	0.6218		12.0	12.5	-4.3	30.0
N-Nitrosodimethylamine	Ave	1.079	1.095		12.7	12.5	1.5	30.0
Pyridine	Ave	1.666	1.701		25.5	25.0	2.1	30.0
2-Picoline	Ave	1.628	1.744		13.4	12.5	7.1	30.0
N-Nitrosomethylethylamine	Lin1		0.7920		12.3	12.5	-1.3	30.0
Methyl methanesulfonate	Lin2		1.201		14.0	12.5	11.8	30.0
N-Nitrosodiethylamine	Lin2		0.7784		12.8	12.5	2.1	30.0
Ethyl methanesulfonate	Lin1		0.8913		13.2	12.5	5.2	30.0
Aniline	Ave	2.408	2.763		14.3	12.5	14.7	30.0
Phenol	Ave	2.498	2.609	0.8000	13.1	12.5	4.4	30.0
Bis(2-chloroethyl)ether	Ave	1.645	1.877	0.7000	14.3	12.5	14.1	30.0
2-Chlorophenol	Ave	1.347	1.572	0.8000	14.6	12.5	16.7	30.0
1,3-Dichlorobenzene	Ave	1.514	1.641		13.5	12.5	8.4	30.0
1,4-Dichlorobenzene	Ave	1.624	1.683		12.9	12.5	3.6	30.0
Benzyl alcohol	Ave	1.047	1.050		12.5	12.5	0.3	30.0
1,2-Dichlorobenzene	Ave	1.553	1.537		12.4	12.5	-1.0	30.0
2,2'-oxybis[1-chloropropane]	Ave	3.752	3.633	0.0100	12.1	12.5	-3.2	30.0
2-Methylphenol	Ave	1.540	1.609	0.7000	13.1	12.5	4.5	30.0
N-Nitrosopyrrolidine	Ave	0.8400	0.9926		14.8	12.5	18.2	30.0
Acetophenone	Ave	2.305	2.642	0.0100	14.3	12.5	14.6	30.0
N-Nitrosodi-n-propylamine	Ave	1.565	1.752	0.5000	14.0	12.5	11.9	30.0
N-Nitrosomorpholine	Ave	1.279	1.478		14.4	12.5	15.5	30.0
3,4-Methylphenol	Lin2		1.860	0.6000	14.2	12.5	13.4	30.0
o-Toluidine	Ave	2.397	2.711		14.1	12.5	13.1	30.0
Hexachloroethane	Ave	0.6893	0.7339	0.3000	13.3	12.5	6.5	30.0
Nitrobenzene	Lin2		0.5303	0.2000	11.3	12.5	-10.0	30.0
N-Nitrosopiperidine	Ave	0.2055	0.2140		13.0	12.5	4.1	30.0
Isophorone	Ave	1.034	1.014	0.4000	12.3	12.5	-1.9	30.0
2-Nitrophenol	Ave	0.1899	0.1970	0.1000	13.0	12.5	3.8	30.0
2,4-Dimethylphenol	Ave	0.3636	0.4187	0.2000	14.4	12.5	15.1	30.0
o,o',o''-Triethylphosphorothioate	Ave	0.1607	0.1511		11.8	12.5	-5.9	30.0
Bis(2-chloroethoxy)methane	Ave	0.5646	0.6063	0.3000	13.4	12.5	7.4	30.0
2,4-Dichlorophenol	Ave	0.2838	0.3378	0.2000	14.9	12.5	19.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3425	0.3311		12.1	12.5	-3.3	30.0
Naphthalene	Ave	1.118	1.124	0.7000	12.6	12.5	0.6	30.0
2,6-Dichlorophenol	Ave	0.3077	0.3413		13.9	12.5	10.9	30.0
4-Chloroaniline	Ave	0.4417	0.4768	0.0100	13.5	12.5	7.9	30.0
Hexachloropropene	Ave	0.2240	0.2446		13.7	12.5	9.2	30.0
Hexachlorobutadiene	Ave	0.2062	0.2123	0.0100	12.9	12.5	3.0	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-437867/12 Calibration Date: 10/31/2023 18:13

Instrument ID: HP23264 Calib Start Date: 10/31/2023 14:37

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/31/2023 17:10

Lab File ID: JJ3111.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Quinoline	Ave	0.7487	0.7699		12.9	12.5	2.8	30.0
N-Nitrosodi-n-butylamine	Ave	0.4470	0.3615		10.1	12.5	-19.1	30.0
1,4-phenylenediamine	Ave	0.3375	0.1107			12.5	-67.2*	30.0
4-Chloro-3-methylphenol	Ave	0.3742	0.3988	0.2000	13.3	12.5	6.6	30.0
Safrole, Total	Ave	0.2590	0.2614		12.6	12.5	0.9	30.0
2-Methylnaphthalene	Ave	0.6491	0.6730	0.4000	13.0	12.5	3.7	30.0
1-Methylnaphthalene	Ave	0.6463	0.6508		12.6	12.5	0.7	30.0
Hexachlorocyclopentadiene	Ave	0.2915	0.3035	0.0500	13.0	12.5	4.1	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6234	0.6682	0.0100	13.4	12.5	7.2	30.0
Isosafrole Peak 1	Ave	0.5383	0.6037		1.68	1.50	12.1	30.0
2,4,6-Trichlorophenol	Lin2		0.4081	0.2000	12.2	12.5	-2.0	30.0
2,4,5-Trichlorophenol	Lin2		0.4873	0.2000	12.7	12.5	1.2	30.0
Isosafrole Peak 2	Ave	0.5630	0.5757		11.2	11.0	2.2	30.0
1,1'-Biphenyl	Ave	1.472	1.612	0.0100	13.7	12.5	9.5	30.0
2-Chloronaphthalene	Ave	1.198	1.236	0.8000	12.9	12.5	3.2	30.0
1-Chloronaphthalene	Ave	1.256	1.382		13.8	12.5	10.0	30.0
Diphenyl ether	Ave	0.7879	0.8243		13.1	12.5	4.6	30.0
2-Nitroaniline	Ave	0.3995	0.4145	0.0100	13.0	12.5	3.7	30.0
1,4-Naphthoquinone	Ave	0.4562	0.5359		14.7	12.5	17.5	30.0
1,4-Dinitrobenzene	Ave	0.1821	0.1834		12.6	12.5	0.7	30.0
Dimethyl phthalate	Ave	1.543	1.546	0.0100	12.5	12.5	0.2	30.0
1,3-Dinitrobenzene	Ave	0.2114	0.2222		13.1	12.5	5.1	30.0
2,6-Dinitrotoluene	Ave	0.3169	0.3562	0.2000	14.0	12.5	12.4	30.0
Acenaphthylene	Ave	2.016	1.990	0.9000	12.3	12.5	-1.3	30.0
3-Nitroaniline	Ave	0.3705	0.3933	0.0100	13.3	12.5	6.2	30.0
Acenaphthene	Ave	1.232	1.301	0.9000	13.2	12.5	5.6	30.0
2,4-Dinitrophenol	Lin2		0.2058	0.0100	26.0	25.0	4.1	30.0
Pentachlorobenzene	Ave	0.5397	0.6068		14.1	12.5	12.4	30.0
4-Nitrophenol	Ave	0.2569	0.2738	0.0100	26.6	25.0	6.6	30.0
Dibenzofuran	Ave	1.710	1.751	0.8000	12.8	12.5	2.4	30.0
2,4-Dinitrotoluene	Ave	0.4458	0.4346	0.2000	12.2	12.5	-2.5	30.0
1-Naphthylamine	Ave	1.148	1.194		13.0	12.5	4.0	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3405	0.3315	0.0100	12.2	12.5	-2.6	30.0
2-Naphthylamine	Ave	1.284	1.450		14.1	12.5	13.0	30.0
Diethyl phthalate	Ave	1.561	1.594	0.0100	12.8	12.5	2.1	30.0
Thionazin	Ave	0.2755	0.2976		13.5	12.5	8.0	30.0
Fluorene	Ave	1.314	1.455	0.9000	13.8	12.5	10.8	30.0
4-Chlorophenyl-phenyl ether	Ave	0.6223	0.6726	0.4000	13.5	12.5	8.1	30.0
5-Nitro-o-toluidine	Ave	0.3986	0.4535		14.2	12.5	13.8	30.0
4-Nitroaniline	Lin2		0.3947	0.0100	13.5	12.5	7.9	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-437867/12 Calibration Date: 10/31/2023 18:13

Instrument ID: HP23264 Calib Start Date: 10/31/2023 14:37

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/31/2023 17:10

Lab File ID: JJ3111.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4,6-Dinitro-2-methylphenol	Ave	0.1314	0.1486	0.0100	28.3	25.0	13.1	30.0
N-Nitrosodiphenylamine	Ave	0.6004	0.5818	0.0100	10.3	10.6	-3.1	30.0
1,2-Diphenylhydrazine	Ave	1.147	1.159		12.6	12.5	1.0	30.0
Sulfotepp	Ave	0.1980	0.1955		12.3	12.5	-1.2	30.0
cis-Diallate	Ave	0.4063	0.4360		10.1	9.38	7.3	30.0
Phorate	Ave	0.8983	1.009		14.0	12.5	12.4	30.0
1,3,5-Trinitrobenzene	Ave	0.0625	0.0663			12.5	6.1	30.0
Phenacetin	Ave	0.4426	0.4982		14.1	12.5	12.6	30.0
4-Bromophenyl-phenylether	Ave	0.2225	0.2120	0.1000	11.9	12.5	-4.7	30.0
trans-Diallate	Ave	0.3998	0.4340		3.39	3.13	8.6	30.0
Hexachlorobenzene	Ave	0.2398	0.2506	0.1000	13.1	12.5	4.5	30.0
Dimethoate	Ave	0.4100	0.4230		12.9	12.5	3.2	30.0
4-Aminobiphenyl	Ave	0.7763	0.7948		12.8	12.5	2.4	30.0
Pentachloronitrobenzene	Ave	0.1169	0.1201		12.8	12.5	2.7	30.0
Pentachlorophenol	Lin2		0.1484	0.0500	25.4	25.0	1.4	30.0
Pronamide	Ave	0.3507	0.3721		13.3	12.5	6.1	30.0
Dinoseb	Ave	0.1577	0.1978		15.7	12.5	25.5	30.0
Disulfoton	Ave	0.6033	0.6129		12.7	12.5	1.6	30.0
Phenanthrene	Ave	1.106	1.141	0.7000	12.9	12.5	3.2	30.0
Anthracene	Ave	1.124	1.135	0.7000	12.6	12.5	1.0	30.0
Carbazole	Ave	1.017	1.051	0.0100	12.9	12.5	3.3	30.0
Methyl parathion	Ave	0.3038	0.3260		13.4	12.5	7.3	30.0
Di-n-butyl phthalate	Ave	1.396	1.476	0.0100	13.2	12.5	5.7	30.0
Parathion	Ave	0.1851	0.1937		13.1	12.5	4.7	30.0
4-Nitroquinoline-1-oxide	Qua2		0.0762		12.6	12.5	1.1	30.0
Octachlorostyrene	Ave	0.1061	0.1013		11.9	12.5	-4.5	30.0
Isodrin	Ave	0.1476	0.1568		13.3	12.5	6.2	30.0
Fluoranthene	Ave	1.148	1.244	0.6000	13.5	12.5	8.3	30.0
Benzidine	Ave	0.6768	0.6210		11.5	12.5	-8.2	30.0
Pyrene	Ave	1.199	1.288	0.6000	13.4	12.5	7.4	30.0
p-Dimethylamino azobenzene	Ave	0.1626	0.1965		15.1	12.5	20.8	30.0
Chlorobenzilate	Ave	0.4019	0.4617		14.4	12.5	14.9	30.0
3,3'-Dimethylbenzidine	Ave	0.5872	0.6776		14.4	12.5	15.4	30.0
Butylbenzylphthalate	Ave	0.5835	0.6985	0.0100	15.0	12.5	19.7	30.0
2-Acetylaminofluorene	Ave	0.4404	0.4485		12.7	12.5	1.8	30.0
3,3'-Dichlorobenzidine	Ave	0.3953	0.3978	0.0100	12.6	12.5	0.7	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2047	0.2195		13.4	12.5	7.2	30.0
Benzo[a]anthracene	Ave	1.013	1.059	0.8000	13.1	12.5	4.5	30.0
Chrysene	Ave	1.008	1.050	0.7000	13.0	12.5	4.2	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICV 410-437867/12 Calibration Date: 10/31/2023 18:13

Instrument ID: HP23264 Calib Start Date: 10/31/2023 14:37

GC Column: DB-5MS 30m 0.25 ID: 0.25(mm) Calib End Date: 10/31/2023 17:10

Lab File ID: JJ3111.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bis(2-ethylhexyl) phthalate	Ave	0.8194	0.8534	0.0100	13.0	12.5	4.1	30.0
6-Methylchrysene	Ave	0.6777	0.7116		13.1	12.5	5.0	30.0
Di-n-octyl phthalate	Ave	1.531	1.687	0.0100	13.8	12.5	10.2	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.4229	0.4617		13.6	12.5	9.2	30.0
Benzo[b]fluoranthene	Ave	1.144	1.243	0.7000	13.6	12.5	8.6	30.0
Benzo[k]fluoranthene	Ave	1.136	1.216	0.7000	13.4	12.5	7.0	30.0
Benzo[a]pyrene	Ave	1.116	1.151	0.7000	12.9	12.5	3.2	30.0
3-Methylcholanthrene	Ave	0.5157	0.3870		9.38	12.5	-25.0	30.0
Dibenz[a,h]acridine	Ave	0.8596	0.9731		14.2	12.5	13.2	30.0
Dibenz[a,j]acridine	Ave	0.9688	1.046		13.5	12.5	7.9	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.087	1.099	0.5000	12.6	12.5	1.1	30.0
Dibenz(a,h)anthracene	Ave	1.112	1.176	0.4000	13.2	12.5	5.8	30.0
Benzo[g,h,i]perylene	Ave	1.188	1.216	0.5000	12.8	12.5	2.3	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 31-Oct-2023 18:13:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 410-0098173-012
Operator ID: mem41592 Instrument ID: HP23264
Sublist:

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Nov-2023 13:04:07 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1661

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	1.432	1.432	0.000	95	267872	12.5	12.0	
2 N-Nitrosodimethylamine	74	1.648	1.648	0.000	94	471757	12.5	12.7	
3 Pyridine	79	1.677	1.677	0.000	93	1465709	25.0	25.5	
5 2-Picoline	93	2.238	2.238	0.000	93	751366	12.5	13.4	
6 N-Nitrosomethylethylamine	88	2.331	2.331	0.000	96	341171	12.5	12.3	
7 Methyl methanesulfonate	80	2.594	2.594	0.000	87	517594	12.5	14.0	
11 N-Nitrosodiethylamine	102	2.944	2.944	0.000	89	335333	12.5	12.8	
12 Ethyl methanesulfonate	109	3.248	3.248	0.000	95	383975	12.5	13.2	
17 Aniline	93	3.686	3.686	0.000	97	1190112	12.5	14.3	
16 Phenol	94	3.692	3.692	0.000	94	1124092	12.5	13.1	
18 Bis(2-chloroethyl)ether	93	3.750	3.750	0.000	86	808483	12.5	14.3	
19 2-Chlorophenol	128	3.803	3.803	0.000	92	677237	12.5	14.6	
21 1,3-Dichlorobenzene	146	3.943	3.943	0.000	95	706814	12.5	13.5	
* 22 1,4-Dichlorobenzene-d4	152	4.001	4.001	0.000	96	172317	5.00	5.00	
23 1,4-Dichlorobenzene	146	4.019	4.019	0.000	90	724809	12.5	12.9	
26 Benzyl alcohol	108	4.153	4.153	0.000	88	452349	12.5	12.5	
27 1,2-Dichlorobenzene	146	4.165	4.165	0.000	95	662183	12.5	12.4	
28 Indene	115		4.247				ND	ND	U
30 2,2'-oxybis[1-chloropropane]	45	4.276	4.276	0.000	84	1564904	12.5	12.1	
29 2-Methylphenol	108	4.276	4.276	0.000	79	693144	12.5	13.1	
31 N-Nitrosopyrrolidine	100	4.375	4.375	0.000	85	427621	12.5	14.8	
32 Acetophenone	105	4.398	4.398	0.000	90	1138296	12.5	14.3	
33 N-Nitrosodi-n-propylamine	70	4.398	4.398	0.000	90	754952	12.5	14.0	
35 N-Nitrosomorpholine	56	4.422	4.422	0.000	89	636702	12.5	14.4	
34 4-Methylphenol	108	4.428	4.428	0.000	80	801373	12.5	14.2	
36 2-Toluidine	106	4.433	4.433	0.000	85	1167999	12.5	14.1	
37 Hexachloroethane	117	4.486	4.486	0.000	97	316142	12.5	13.3	
40 Nitrobenzene	77	4.562	4.562	0.000	89	933410	12.5	11.3	
41 N-Nitrosopiperidine	114	4.708	4.708	0.000	80	376614	12.5	13.0	
42 Isophorone	82	4.795	4.795	0.000	98	1785503	12.5	12.3	
43 2-Nitrophenol	139	4.871	4.871	0.000	90	346732	12.5	13.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
44 2,4-Dimethylphenol	107	4.936	4.936	0.000	99	736834	12.5	14.4	
46 o,o',o''-Triethylphosphorothioat	198	4.988	4.988	0.000	93	265995	12.5	11.8	
47 Bis(2-chloroethoxy)methane	93	5.017	5.017	0.000	92	1067106	12.5	13.4	
49 2,4-Dichlorophenol	162	5.117	5.117	0.000	97	594458	12.5	14.9	
48 Benzoic acid	105		5.122				ND	ND	U
50 1,2,4-Trichlorobenzene	180	5.181	5.181	0.000	93	582806	12.5	12.1	
* 52 Naphthalene-d8	136	5.227	5.227	0.000	98	704004	5.00	5.00	
53 Naphthalene	128	5.251	5.251	0.000	97	1978066	12.5	12.6	
56 4-Chloroaniline	127	5.321	5.321	0.000	90	839188	12.5	13.5	
57 2,6-Dichlorophenol	162	5.321	5.321	0.000	86	600698	12.5	13.9	
58 Hexachloropropene	213	5.333	5.333	0.000	97	430558	12.5	13.7	
59 Hexachlorobutadiene	225	5.373	5.373	0.000	95	373661	12.5	12.9	
61 Quinoline	129	5.572	5.572	0.000	94	1355083	12.5	12.9	
63 N-Nitrosodi-n-butylamine	84	5.642	5.642	0.000	94	636301	12.5	10.1	
64 p-Phenylene diamine	108	5.677	5.677	0.000	93	194886	12.5	4.10	7a
65 4-Chloro-3-methylphenol	107	5.811	5.811	0.000	94	701819	12.5	13.3	
66 Safrole, Total	162	5.846	5.846	0.000	82	460087	12.5	12.6	
67 2-Methylnaphthalene	142	5.916	5.916	0.000	90	1184519	12.5	13.0	
69 1-Methylnaphthalene	142	6.010	6.010	0.000	90	1145389	12.5	12.6	
71 Hexachlorocyclopentadiene	237	6.062	6.062	0.000	93	291116	12.5	13.0	
70 1,2,4,5-Tetrachlorobenzene	216	6.074	6.074	0.000	98	640999	12.5	13.4	
72 Isosafrole Peak 1	162	6.127	6.127	0.000	82	69497	1.50	1.68	
79 2,4,6-Trichlorophenol	196	6.197	6.197	0.000	96	391475	12.5	12.2	
80 2,4,5-Trichlorophenol	196	6.243	6.243	0.000	90	467480	12.5	12.7	
82 Isosafrole Peak 2	162	6.337	6.337	0.000	87	485987	11.0	11.2	
83 1,1'-Biphenyl	154	6.366	6.366	0.000	96	1546039	12.5	13.7	
84 2-Chloronaphthalene	162	6.378	6.378	0.000	89	1185896	12.5	12.9	
85 1-Chloronaphthalene	162	6.395	6.395	0.000	97	1325352	12.5	13.8	
86 Phenyl ether	170	6.465	6.465	0.000	89	790803	12.5	13.1	
87 2-Nitroaniline	138	6.489	6.489	0.000	74	397627	12.5	13.0	
S 24 Dinitrotoluene	165				0			26.2	
88 1,4-Naphthoquinone	158	6.553	6.553	0.000	74	514079	12.5	14.7	
89 1,4-Dinitrobenzene	168	6.629	6.629	0.000	85	175920	12.5	12.6	
90 Dimethyl phthalate	163	6.670	6.670	0.000	96	1483393	12.5	12.5	
91 1,3-Dinitrobenzene	168	6.699	6.699	0.000	78	213138	12.5	13.1	
92 2,6-Dinitrotoluene	165	6.722	6.722	0.000	87	341687	12.5	14.0	
93 Acenaphthylene	152	6.763	6.763	0.000	99	1909169	12.5	12.3	
95 3-Nitroaniline	138	6.880	6.880	0.000	86	377321	12.5	13.3	
* 96 Acenaphthene-d10	164	6.897	6.897	0.000	95	383730	5.00	5.00	
97 Acenaphthene	153	6.932	6.932	0.000	97	1247775	12.5	13.2	
98 2,4-Dinitrophenol	184	6.985	6.985	0.000	74	394947	25.0	26.0	
99 Pentachlorobenzene	250	7.055	7.055	0.000	97	582073	12.5	14.1	
100 4-Nitrophenol	109	7.084	7.084	0.000	90	525326	25.0	26.6	
101 Dibenzofuran	168	7.096	7.096	0.000	96	1679717	12.5	12.8	
102 2,4-Dinitrotoluene	165	7.102	7.102	0.000	83	416894	12.5	12.2	
104 1-Naphthylamine	143	7.178	7.178	0.000	97	1145144	12.5	13.0	
105 2,3,4,6-Tetrachlorophenol	232	7.184	7.184	0.000	74	318043	12.5	12.2	
106 2-Naphthylamine	143	7.254	7.254	0.000	95	1391062	12.5	14.1	
107 Diethyl phthalate	149	7.335	7.335	0.000	96	1529343	12.5	12.8	
109 Thionazin	107	7.411	7.411	0.000	74	285519	12.5	13.5	
108 Fluorene	166	7.417	7.417	0.000	91	1396071	12.5	13.8	
110 4-Chlorophenyl phenyl ether	204	7.429	7.429	0.000	93	645234	12.5	13.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
111 N-Nitro-o-toluidine	152	7.446	7.446	0.000	89	435087	12.5	14.2	
112 4-Nitroaniline	138	7.458	7.458	0.000	80	378661	12.5	13.5	
113 4,6-Dinitro-2-methylphenol	198	7.481	7.481	0.000	72	549863	25.0	28.3	
114 N-Nitrosodiphenylamine	169	7.546	7.546	0.000	67	915199	10.6	10.3	
115 1,2-Diphenylhydrazine	77	7.575	7.575	0.000	99	2144637	12.5	12.6	
117 Sulfotepp	97	7.709	7.709	0.000	75	361874	12.5	12.3	
120 cis-Diallate	86	7.820	7.820	0.000	95	605213	9.38	10.1	
119 Phorate	75	7.826	7.826	0.000	92	1868042	12.5	14.0	
118 1,3,5-Trinitrobenzene	213	7.832	7.832	0.000	70	122784	12.5	13.3	
121 Phenacetin	108	7.855	7.855	0.000	90	922117	12.5	14.1	
122 4-Bromophenyl phenyl ether	248	7.890	7.890	0.000	73	392420	12.5	11.9	
123 trans-Diallate	86	7.902	7.902	0.000	94	200827	3.13	3.39	
124 Hexachlorobenzene	284	7.931	7.931	0.000	93	463872	12.5	13.1	
125 Dimethoate	87	7.989	7.989	0.000	94	782847	12.5	12.9	
129 4-Aminobiphenyl	169	8.135	8.135	0.000	92	1471046	12.5	12.8	
128 Pentachloronitrobenzene	237	8.135	8.135	0.000	82	222234	12.5	12.8	
127 Pentachlorophenol	266	8.135	8.135	0.000	88	549341	25.0	25.4	
130 Pronamide	173	8.205	8.205	0.000	90	688580	12.5	13.3	
* 131 Phenanthrene-d10	188	8.299	8.299	0.000	96	740293	5.00	5.00	
133 Dinoseb	211	8.316	8.316	0.000	89	366081	12.5	15.7	
134 Disulfoton	88	8.322	8.322	0.000	95	1134309	12.5	12.7	
132 Phenanthrene	178	8.322	8.322	0.000	98	2111038	12.5	12.9	
135 Anthracene	178	8.369	8.369	0.000	99	2100573	12.5	12.6	
136 Carbazole	167	8.538	8.538	0.000	96	1944996	12.5	12.9	
137 Methyl parathion	109	8.678	8.678	0.000	89	603306	12.5	13.4	
138 Di-n-butyl phthalate	149	8.889	8.889	0.000	99	2732581	12.5	13.2	
139 Ethyl Parathion	109	9.046	9.046	0.000	80	358569	12.5	13.1	
140 4-Nitroquinoline-1-oxide	190	9.070	9.070	0.000	78	141030	12.5	12.6	
141 Methapyrilene	97		9.145				ND	ND	U
142 Octachlorostyrene	308	9.268	9.268	0.000	92	187504	12.5	11.9	
143 Isodrin	193	9.297	9.297	0.000	90	290155	12.5	13.3	
144 Fluoranthene	202	9.443	9.443	0.000	99	2302206	12.5	13.5	
145 Benzidine	184	9.595	9.595	0.000	99	1184080	12.5	11.5	
* 146 Pyrene-d10 (IS)	212	9.636	9.636	0.000	96	762661	5.00	5.00	
S 68 Diallate	86				0		12.5	13.5	
147 Pyrene	202	9.653	9.653	0.000	96	2455162	12.5	13.4	
200 Aramite Peak 1	185		9.823				ND	ND	U
192 Aramite Peak 2	185		9.823				ND	ND	U
180 Aramite Peak 4	185		9.899				ND	ND	U
185 Aramite Peak 3	185		9.899				ND	ND	U
149 p-Dimethylamino azobenzene	225	9.963	9.963	0.000	93	374645	12.5	15.1	
150 Chlorobenzilate	139	10.010	10.010	0.000	82	880345	12.5	14.4	
151 Famphur	218		10.249				ND	ND	U
152 3,3'-Dimethylbenzidine	212	10.284	10.284	0.000	99	1291901	12.5	14.4	
153 Butyl benzyl phthalate	149	10.313	10.313	0.000	96	1331767	12.5	15.0	
155 2-Acetylaminofluorene	181	10.541	10.541	0.000	92	855168	12.5	12.7	
157 3,3'-Dichlorobenzidine	252	10.845	10.845	0.000	75	758556	12.5	12.6	
156 Benzo[a]anthracene	228	10.850	10.850	0.000	99	2018720	12.5	13.1	
158 4,4'-Methylene bis(2-chloroanil	231	10.850	10.850	0.000	93	418571	12.5	13.4	
159 Chrysene	228	10.886	10.886	0.000	97	2002100	12.5	13.0	
160 Bis(2-ethylhexyl) phthalate	149	10.944	10.944	0.000	95	1627056	12.5	13.0	
S 94 Isosafrole	162				0		12.5	12.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
161 6-Methylchrysene	242	11.405	11.405	0.000	98	1356840	12.5	13.1	
S 103 Aramite, Total	185		11.583				12.5	ND	7
162 Di-n-octyl phthalate	149	11.726	11.726	0.000	99	2845310	12.5	13.8	
163 7,12-Dimethylbenz(a)anthracene	256	12.118	12.118	0.000	89	778567	12.5	13.6	
164 Benzo[b]fluoranthene	252	12.123	12.123	0.000	97	2095804	12.5	13.6	
165 Benzo[k]fluoranthene	252	12.158	12.158	0.000	99	2050030	12.5	13.4	
166 Benzo[a]pyrene	252	12.538	12.538	0.000	80	1941399	12.5	12.9	
* 167 Perylene-d12	264	12.614	12.614	0.000	96	674496	5.00	5.00	
168 3-Methylcholanthrene	268	13.028	13.028	0.000	92	652568	12.5	9.38	
169 Dibenz[a,h]acridine	279	13.770	13.770	0.000	92	1640842	12.5	14.2	
170 Dibenz[a,j]acridine	279	13.840	13.840	0.000	95	1763164	12.5	13.5	
171 Indeno[1,2,3-cd]pyrene	276	14.068	14.068	0.000	96	1853609	12.5	12.6	
172 Dibenz(a,h)anthracene	278	14.109	14.109	0.000	94	1982481	12.5	13.2	
173 Benzo[g,h,i]perylene	276	14.424	14.424	0.000	95	2049749	12.5	12.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

MSS_RV8270ICV_00024 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2023 13:04:08 Chrom Revision: 2.3 01-Nov-2023 18:43:44

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D

Injection Date: 31-Oct-2023 18:13:30 Instrument ID: HP23264 Operator ID: mem41592

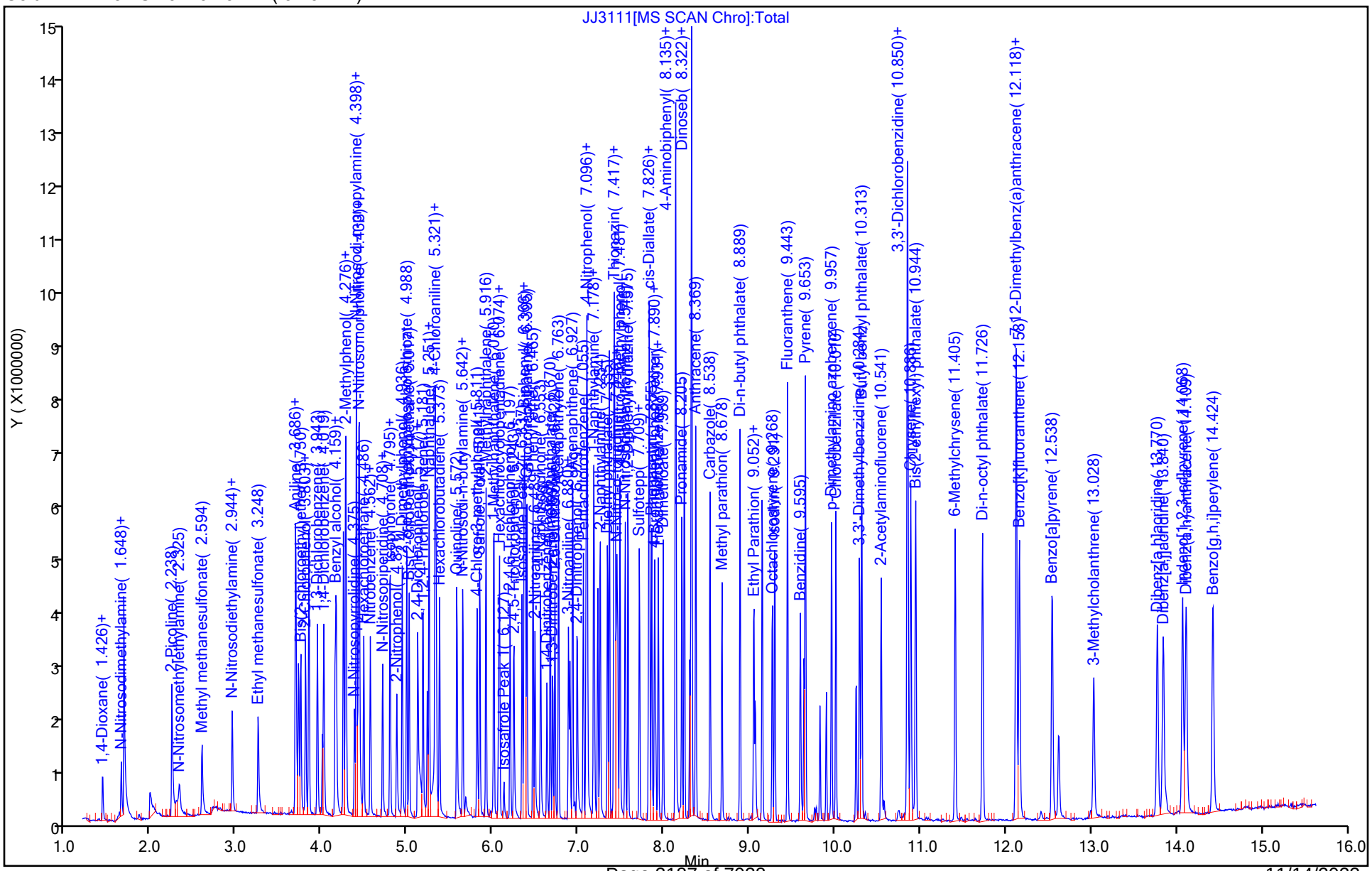
Lims ID: ICV FULL Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

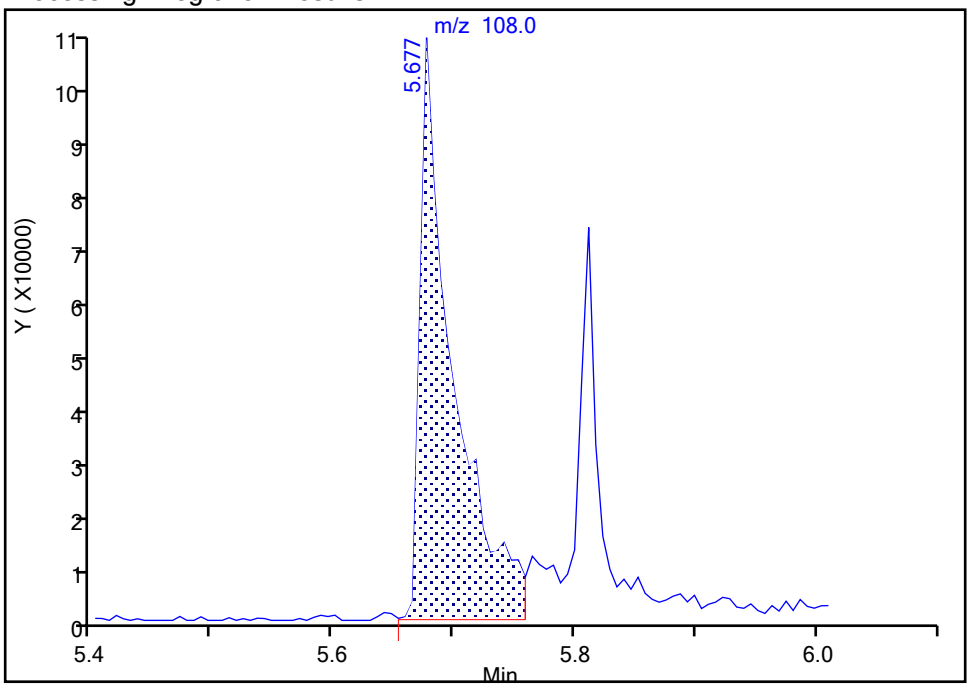
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3111.D				
Injection Date:	31-Oct-2023 18:13:30	Instrument ID:	HP23264		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

64 p-Phenylene diamine, CAS: 106-50-3

Signal: 1

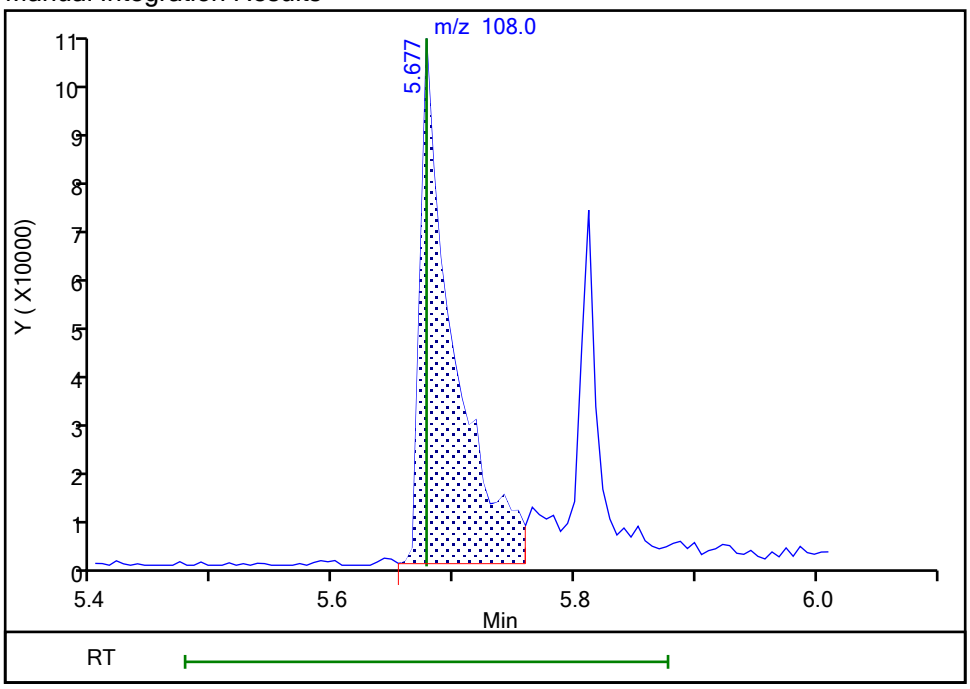
Processing Integration Results

RT: 5.68
Area: 194886
Amount: 4.100831
Amount Units: ug/ml



Manual Integration Results

RT: 5.68
Area: 194886
Amount: 4.100831
Amount Units: ug/ml



Reviewer: P7EB, 01-Nov-2023 08:03:34 -04:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2310.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 23-Mar-2023 13:13:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Misc. Info.: 410-0079683-001
Operator ID: em10340 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 23-Mar-2023 17:58:42 Calib Date: 23-Mar-2023 16:08:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2318.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: W6XI Date: 23-Mar-2023 13:29:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
27 Pentachlorophenol_T	266	4.759	4.759	0.000	91	155241	NR	NR	
57 Benzidine_T	184	6.024	6.024	0.000	99	880831	NR	NR	
243 DFTPP									
244 4,4'-DDE	246		6.186					ND	
245 4,4'-DDD	235		6.504					ND	
246 4,4'-DDT	235	6.729	6.729	0.000	97	372761	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

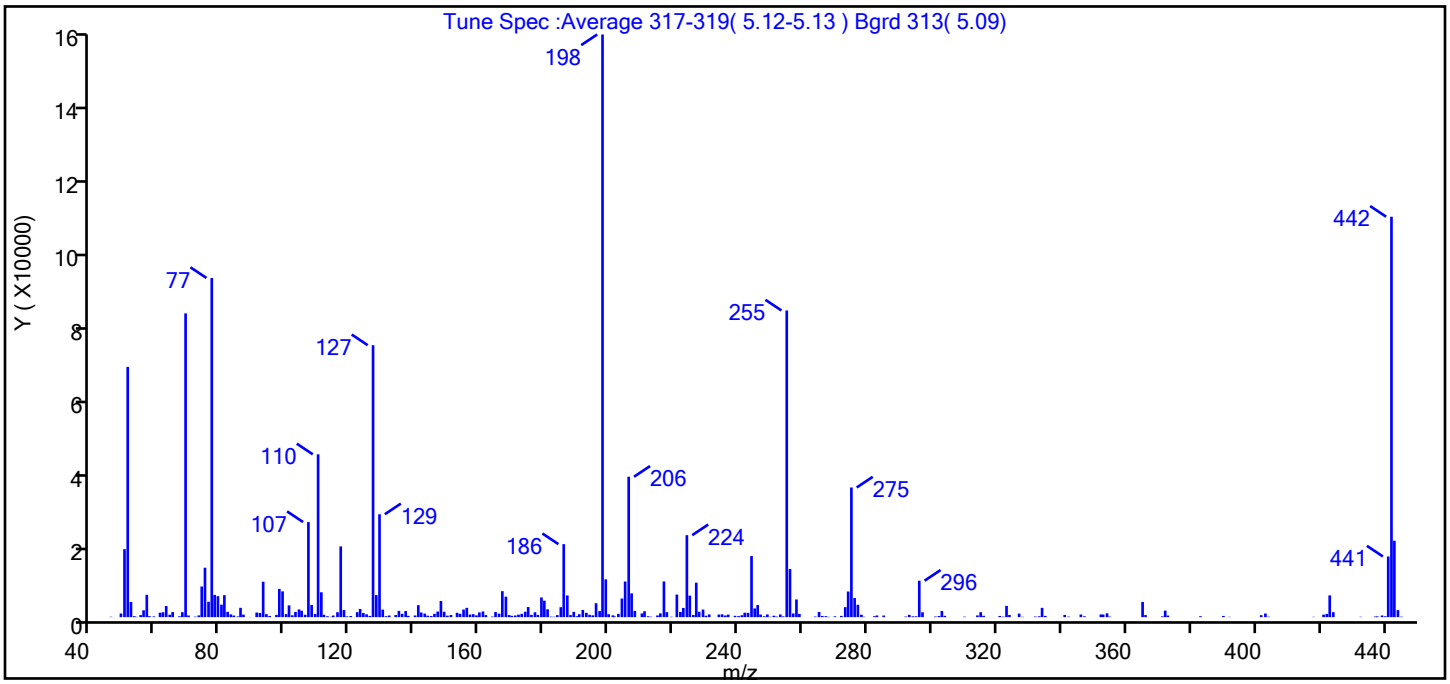
MSS_RVDFTPP_00012 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2310.D
Injection Date: 23-Mar-2023 13:13:30 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: em10340 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI
Tune Method: DFTPP Method 8270D, BP 198

243 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (145.5)
51	10-80% of the base peak	43.0
68	<2% of mass 69	0.8 (1.6)
69	Present	52.1
70	<2% of mass 69	0.3 (0.5)
127	10-80% of the base peak	46.7
197	<2% of mass 198	1.0
199	5-9% of mass 198	6.5
275	10-60% of the base peak	22.3
365	>1% of mass 198	2.6
441	present but <24% of mass 442	10.4 (15.1)
442	base peak, or >50% of 198	68.7
443	15-24% of mass 442	13.1 (19.1)

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2310.D\MSSemi_HP19760.rslt\spectra.c
Injection Date: 23-Mar-2023 13:13:30
Spectrum: Tune Spec :Average 317-319(5.12-5.13) Bgrd 313(5.09)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 272

m/z	Y	m/z	Y	m/z	Y	m/z	Y
46.00	106	122.00	1317	193.00	1150	273.00	2669
47.00	23	123.00	2180	194.00	620	274.00	6830
49.00	972	124.00	1087	195.00	480	275.00	34536
50.00	18104	125.00	750	196.00	3726	276.00	5083
51.00	66664	126.00	331	197.00	1608	277.00	3295
52.00	4024	127.00	72440	198.00	155200	278.00	651
53.00	257	128.00	5873	199.00	10071	279.00	96
54.00	86	129.00	27408	200.00	776	282.00	247
55.00	531	130.00	2009	201.00	482	283.00	442
56.00	1818	131.00	252	202.00	202	285.00	429
57.00	5949	132.00	442	203.00	882	292.00	159
58.00	259	133.00	8	204.00	4961	293.00	619
59.00	192	134.00	559	205.00	9498	294.00	215
61.00	1186	135.00	1670	206.00	37400	295.00	222
62.00	1302	136.00	873	207.00	6331	296.00	9707
63.00	2961	137.00	1625	208.00	1654	297.00	1301
64.00	649	138.00	341	210.00	994	301.00	160
65.00	1353	140.00	447	211.00	1580	302.00	305
67.00	228	141.00	3185	212.00	234	303.00	1633
68.00	1312	142.00	1241	213.00	115	304.00	339
69.00	80912	143.00	940	215.00	445	310.00	134
70.00	441	144.00	384	216.00	1009	314.00	461
72.00	134	145.00	296	217.00	9509	315.00	1316
73.00	462	146.00	882	218.00	1340	316.00	364
74.00	8164	147.00	1493	219.00	104	321.00	313
75.00	13166	148.00	4314	221.00	6006	322.00	130
76.00	4112	149.00	1428	222.00	1363	323.00	2995
77.00	90344	150.00	387	223.00	2447	324.00	568
78.00	5921	151.00	570	224.00	21832	327.00	941
79.00	5589	153.00	1158	225.00	5732	328.00	88
80.00	3327	154.00	901	226.00	563	332.00	159
81.00	5857	155.00	2026	227.00	9179	333.00	231
82.00	1402	156.00	2471	228.00	1429	334.00	2476

Report Date: 23-Mar-2023 17:58:42 Chrom Revision: 2.3 16-Mar-2023 15:40:40
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2310.D\MSSemi_HP19760.rslt\spectra.c
Injection Date: 23-Mar-2023 13:13:30
Spectrum: Tune Spec :Average 317-319(5.12-5.13) Bgrd 313(5.09)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 272

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	728	157.00	694	229.00	2024	335.00	319
84.00	425	158.00	799	230.00	381	341.00	585
85.00	187	159.00	470	231.00	730	342.00	136
86.00	2486	160.00	1249	234.00	689	346.00	698
87.00	672	161.00	1512	235.00	758	347.00	226
89.00	48	162.00	550	236.00	442	352.00	721
91.00	1230	164.00	159	237.00	679	353.00	691
92.00	1115	165.00	1367	239.00	353	354.00	1026
93.00	9436	166.00	921	240.00	277	355.00	147
94.00	801	167.00	6924	241.00	506	365.00	4047
95.00	305	168.00	5458	242.00	1171	366.00	554
97.00	600	169.00	554	243.00	1144	371.00	207
98.00	7518	170.00	357	244.00	16275	372.00	1745
99.00	6871	171.00	435	245.00	2323	373.00	421
100.00	800	172.00	665	246.00	3240	383.00	242
101.00	3145	173.00	886	247.00	694	390.00	316
102.00	496	174.00	1444	248.00	240	392.00	87
103.00	1398	175.00	2698	249.00	720	402.00	522
104.00	2056	176.00	614	250.00	89	403.00	964
105.00	1709	177.00	1302	251.00	379	404.00	121
106.00	633	178.00	600	252.00	152	418.00	83
107.00	25328	179.00	5252	253.00	717	421.00	670
108.00	3244	180.00	4383	254.00	205	422.00	858
109.00	844	181.00	2092	255.00	81688	423.00	5795
110.00	43368	182.00	136	256.00	12820	424.00	1319
111.00	6624	183.00	112	257.00	985	433.00	97
112.00	622	184.00	541	258.00	4713	437.00	159
113.00	243	185.00	2644	259.00	853	438.00	196
114.00	103	186.00	19440	264.00	154	439.00	438
115.00	433	187.00	5789	265.00	1377	440.00	223
116.00	1320	188.00	543	266.00	312	441.00	16157
117.00	18840	189.00	1407	267.00	265	442.00	106656
118.00	1893	190.00	245	268.00	85	443.00	20352
119.00	200	191.00	781	270.00	221	444.00	1876

Report Date: 23-Mar-2023 17:58:42 Chrom Revision: 2.3 16-Mar-2023 15:40:40
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2310.D\MSSemi_HP19760.rslt\spectra.c
Injection Date: 23-Mar-2023 13:13:30
Spectrum: Tune Spec :Average 317-319(5.12-5.13) Bgrd 313(5.09)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 272

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	305	192.00	1914	272.00	329	445.00	127

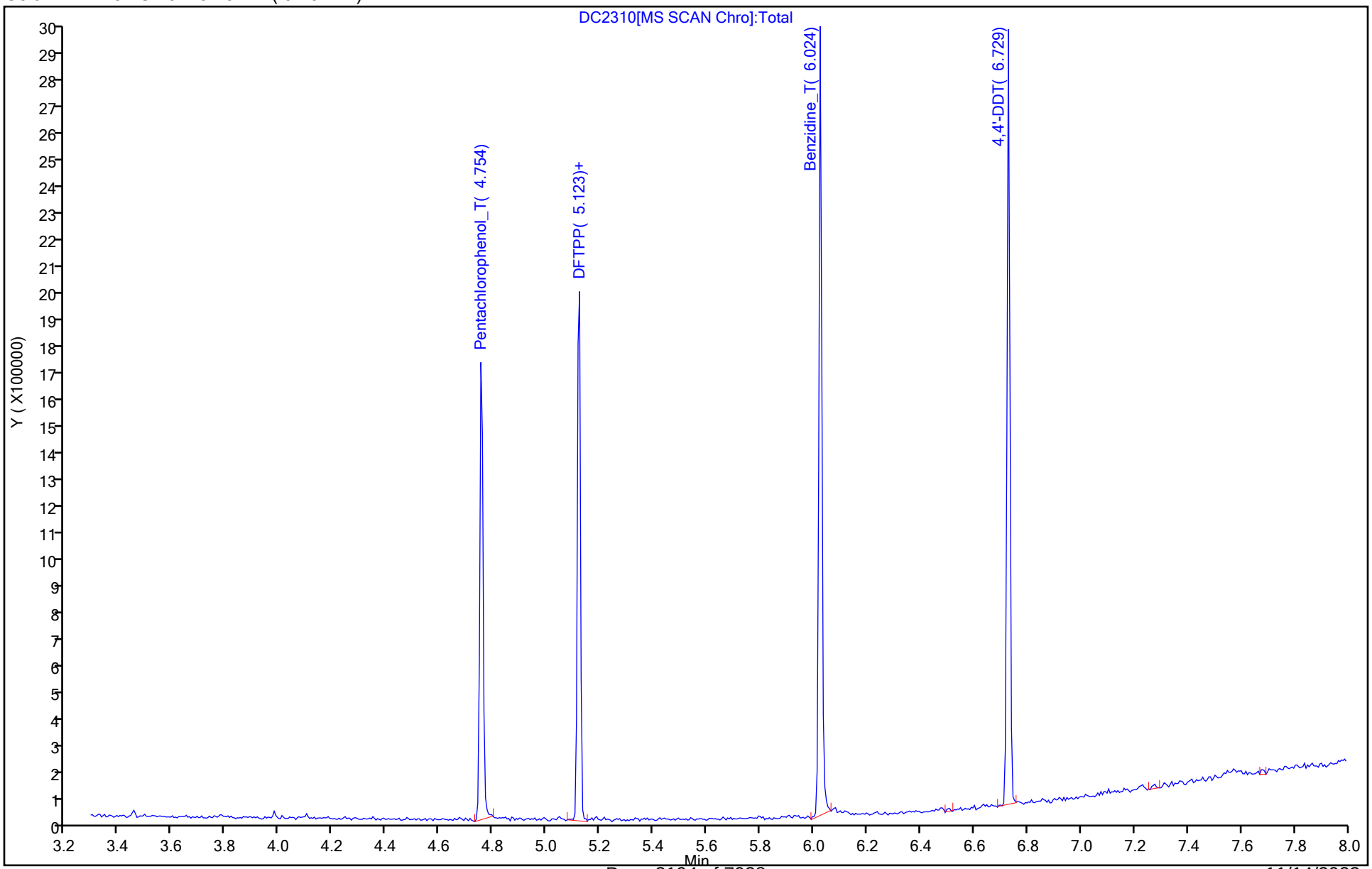
Report Date: 23-Mar-2023 17:58:42 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2310.D

Injection Date:	23-Mar-2023 13:13:30	Instrument ID:	HP19760	Operator ID:	em10340
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Breakdown Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2310.D				
Injection Date:	23-Mar-2023 13:13:30	Instrument ID:	HP19760		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	em10340	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

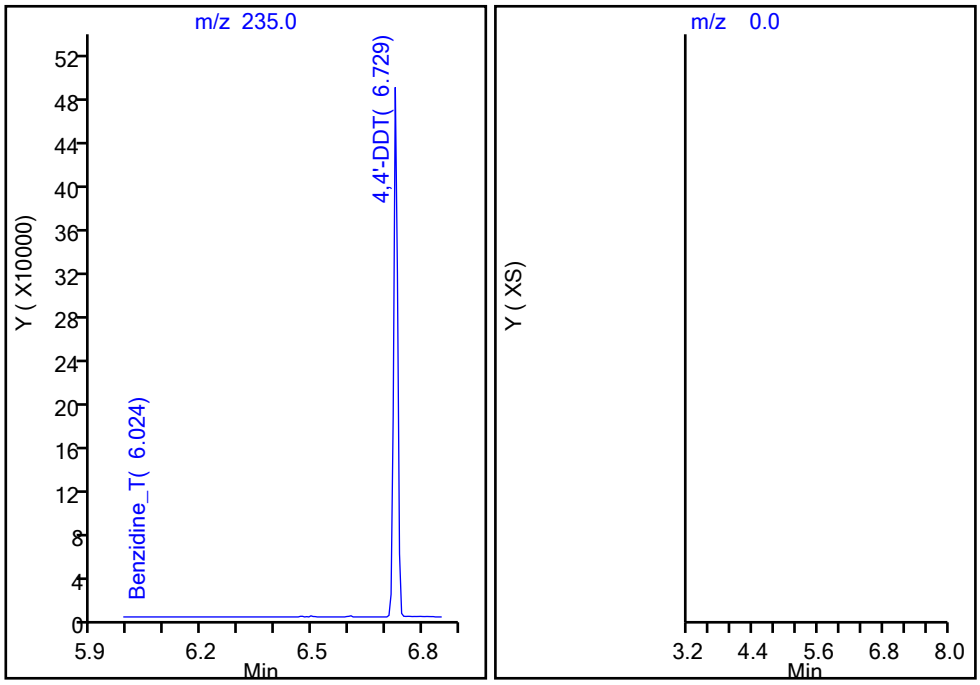
246 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

246 4,4'-DDT, Area = 372761
245 4,4'-DDD, Area = 0
244 4,4'-DDE, Area = 0

%Breakdown: 0.00%, <= 20.00%
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

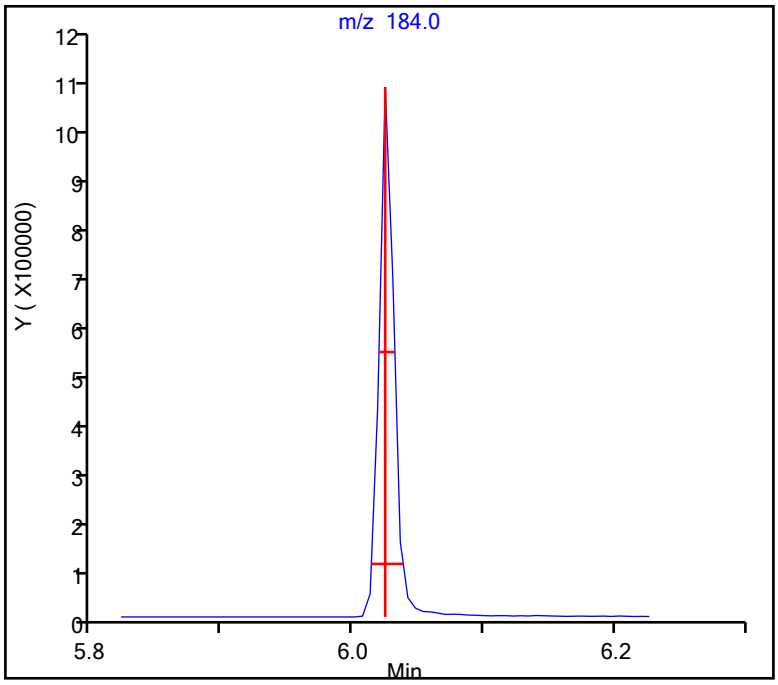
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2310.D
Injection Date: 23-Mar-2023 13:13:30 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: em10340 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

57 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.014 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.27, Max. Tailing <= 2.00
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

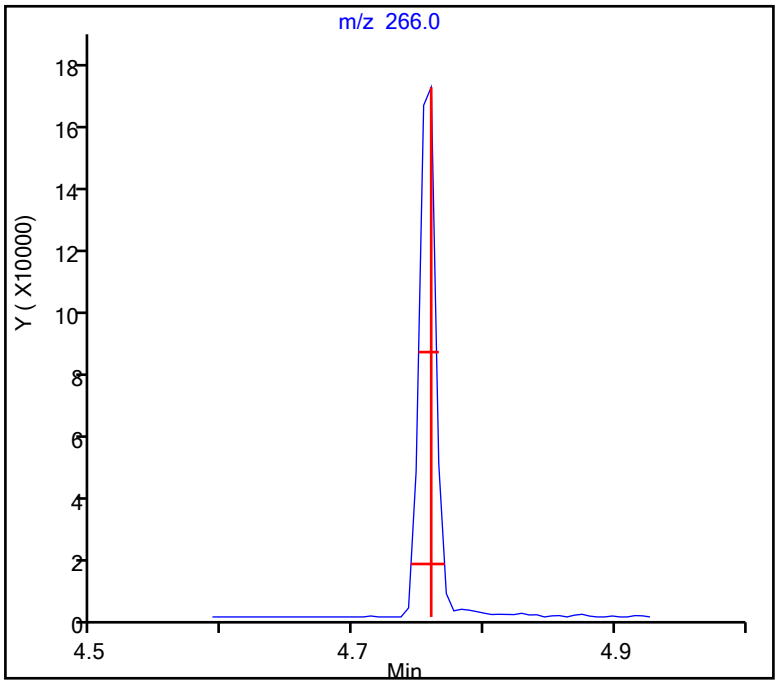
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230323-79683.b\DC2310.D
Injection Date: 23-Mar-2023 13:13:30 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: em10340 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

27 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.015 (min.)

Tailing Factor = 0.67, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0350.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 03-Aug-2023 14:29:26 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 18:19:22 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: P7EB Date: 03-Aug-2023 14:41:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
27 Pentachlorophenol_T	266	4.580	4.580	0.000	87	129952	NR	NR	
57 Benzidine_T	184	5.816	5.816	0.000	99	819982	NR	NR	
243 DFTPP									
245 4,4'-DDD	235		6.067					ND	
244 4,4'-DDE	246		6.318					ND	
246 4,4'-DDT	235	6.504	6.504	0.000	97	385143	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

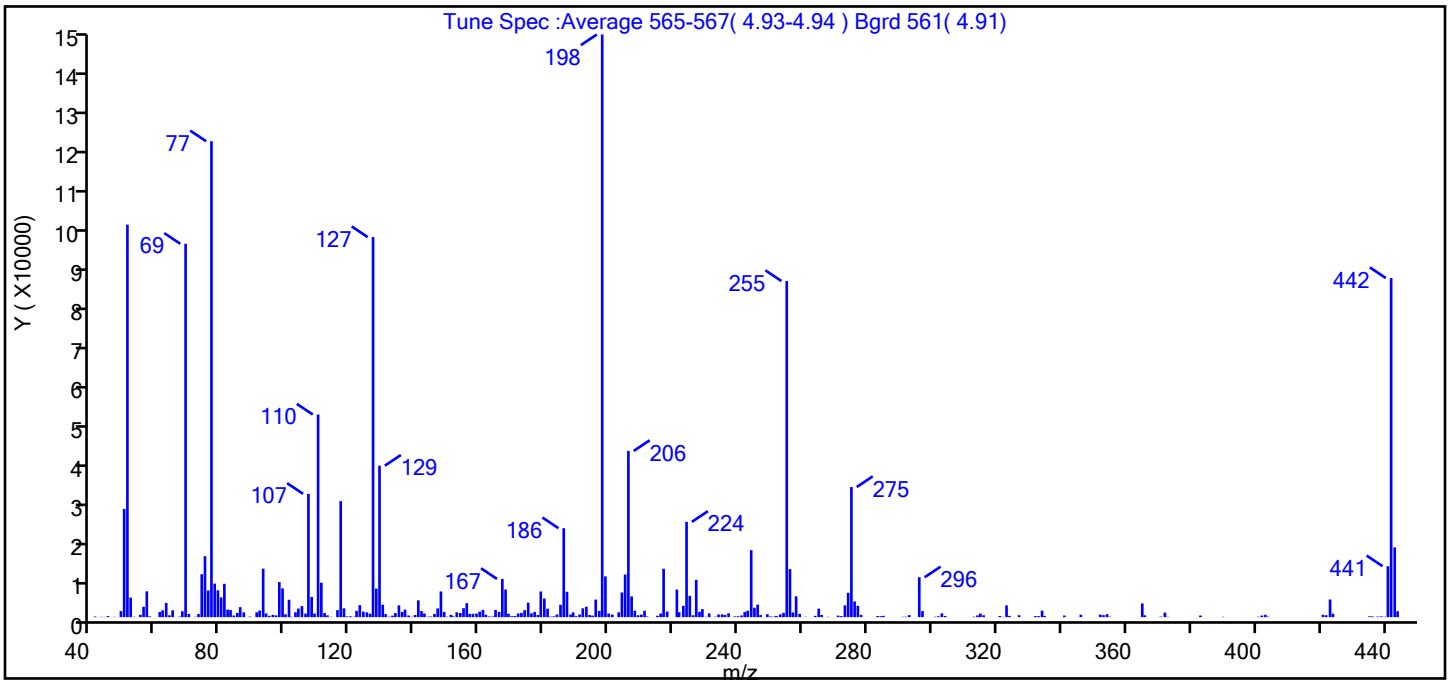
MSS_RVDFTPP_00013 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0350.D
Injection Date: 03-Aug-2023 14:29:26 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI
Tune Method: DFTPP Method 8270D, BP 198

243 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (171.8)
51	10-80% of the base peak	67.4
68	<2% of mass 69	1.0 (1.6)
69	Present	64.1
70	<2% of mass 69	0.5 (0.9)
127	10-80% of the base peak	65.2
197	<2% of mass 198	1.1
199	5-9% of mass 198	7.0
275	10-60% of the base peak	22.3
365	>1% of mass 198	2.4
441	present but <24% of mass 442	8.7 (15.0)
442	base peak, or >50% of 198	58.2
443	15-24% of mass 442	12.0 (20.6)

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0350.D\MSSemi_HP19760.rslt\spectra.c
Injection Date: 03-Aug-2023 14:29:26
Spectrum: Tune Spec :Average 565-567(4.93-4.94) Bgrd 561(4.91)
Base Peak: 197.90
Minimum % Base Peak: 0
Number of Points: 268

m/z	Y	m/z	Y	m/z	Y	m/z	Y
41.00	169	119.00	200	186.00	22080	264.00	314
43.00	76	120.00	212	187.00	6301	265.00	2106
44.00	56	121.00	108	188.00	633	266.00	534
45.00	261	122.00	1573	189.00	1194	268.00	84
47.00	71	123.00	2970	190.00	238	271.00	374
49.00	1495	124.00	1383	191.00	643	272.00	257
50.00	26872	125.00	1184	192.00	2196	273.00	2930
51.00	97440	126.00	836	193.00	2587	274.00	6052
52.00	4850	127.00	94336	194.00	515	275.00	32296
53.00	94	128.00	7082	195.00	373	276.00	3903
55.00	585	129.00	37600	196.00	4364	277.00	2813
56.00	2587	130.00	3086	197.00	1544	278.00	560
57.00	6408	131.00	748	198.00	144640	283.00	275
58.00	199	132.00	114	199.00	10123	284.00	237
61.00	1280	133.00	360	200.00	890	285.00	332
62.00	1690	134.00	1013	201.00	644	291.00	85
63.00	3531	135.00	2921	203.00	1197	292.00	114
64.00	452	136.00	1291	204.00	6128	293.00	495
65.00	1698	137.00	1868	205.00	10592	296.00	9888
67.00	132	138.00	407	206.00	41256	297.00	1508
68.00	1466	139.00	89	207.00	5146	301.00	96
69.00	92680	140.00	533	208.00	1593	302.00	222
70.00	793	141.00	4168	209.00	476	303.00	927
72.00	90	142.00	1520	210.00	630	304.00	290
73.00	774	143.00	897	211.00	1586	313.00	118
74.00	10652	144.00	106	212.00	163	314.00	434
75.00	15136	145.00	147	215.00	346	315.00	887
76.00	6623	146.00	785	216.00	908	316.00	460
77.00	118136	147.00	2178	217.00	12013	321.00	294
78.00	8320	148.00	6381	218.00	1389	322.00	84
79.00	6657	149.00	1313	221.00	6846	323.00	2927
80.00	4900	150.00	98	222.00	1202	324.00	319
81.00	8272	151.00	569	223.00	2802	327.00	473

Report Date: 03-Aug-2023 18:19:22 Chrom Revision: 2.3 01-Aug-2023 10:44:40
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0350.D\MSSemi_HP19760.rslt\spectra.c
Injection Date: 03-Aug-2023 14:29:26
Spectrum: Tune Spec :Average 565-567(4.93-4.94) Bgrd 561(4.91)
Base Peak: 197.90
Minimum % Base Peak: 0
Number of Points: 268

m/z	Y	m/z	Y	m/z	Y	m/z	Y
82.00	1872	152.00	204	224.00	23656	332.00	268
83.00	1770	153.00	1209	225.00	5294	333.00	256
84.00	407	154.00	1027	226.00	474	334.00	1605
85.00	1027	155.00	2215	227.00	9261	335.00	309
86.00	2479	156.00	3463	228.00	1341	341.00	403
87.00	1188	157.00	807	229.00	1992	346.00	611
89.00	142	158.00	837	230.00	90	352.00	641
91.00	1194	159.00	889	231.00	938	353.00	497
92.00	1638	160.00	1368	233.00	102	354.00	744
93.00	12033	161.00	1819	234.00	665	355.00	111
94.00	929	162.00	612	235.00	686	365.00	3400
95.00	334	163.00	172	236.00	543	366.00	462
96.00	591	164.00	160	237.00	946	371.00	135
97.00	446	165.00	1789	239.00	176	372.00	1141
98.00	8706	166.00	1297	240.00	227	373.00	95
99.00	7133	167.00	9478	241.00	408	383.00	398
100.00	705	168.00	6861	242.00	1260	390.00	97
101.00	4310	169.00	856	243.00	1607	401.00	108
102.00	85	170.00	236	244.00	16624	402.00	395
103.00	1204	171.00	300	245.00	2328	403.00	573
104.00	2127	172.00	896	246.00	3093	404.00	121
105.00	2732	173.00	1050	247.00	518	421.00	591
106.00	868	174.00	1725	249.00	734	422.00	476
107.00	30608	175.00	3583	250.00	177	423.00	4383
108.00	4998	176.00	947	251.00	136	424.00	865
109.00	887	177.00	1303	252.00	302	435.00	210
110.00	50296	178.00	532	253.00	671	436.00	195
111.00	8555	179.00	6372	254.00	1070	438.00	142
112.00	1020	180.00	4626	255.00	83440	439.00	200
113.00	440	181.00	2099	256.00	11929	440.00	97
114.00	92	182.00	129	257.00	1167	441.00	12646
116.00	1745	183.00	194	258.00	5174	442.00	84176
117.00	28792	184.00	662	259.00	813	443.00	17312
118.00	2188	185.00	3073	261.00	93	444.00	1465

m/z	Y	m/z	Y	m/z	Y	m/z	Y
82.00	1872	152.00	204	224.00	23656	332.00	268
83.00	1770	153.00	1209	225.00	5294	333.00	256
84.00	407	154.00	1027	226.00	474	334.00	1605
85.00	1027	155.00	2215	227.00	9261	335.00	309
86.00	2479	156.00	3463	228.00	1341	341.00	403
87.00	1188	157.00	807	229.00	1992	346.00	611
89.00	142	158.00	837	230.00	90	352.00	641
91.00	1194	159.00	889	231.00	938	353.00	497
92.00	1638	160.00	1368	233.00	102	354.00	744
93.00	12033	161.00	1819	234.00	665	355.00	111
94.00	929	162.00	612	235.00	686	365.00	3400
95.00	334	163.00	172	236.00	543	366.00	462
96.00	591	164.00	160	237.00	946	371.00	135
97.00	446	165.00	1789	239.00	176	372.00	1141
98.00	8706	166.00	1297	240.00	227	373.00	95
99.00	7133	167.00	9478	241.00	408	383.00	398
100.00	705	168.00	6861	242.00	1260	390.00	97
101.00	4310	169.00	856	243.00	1607	401.00	108
102.00	85	170.00	236	244.00	16624	402.00	395
103.00	1204	171.00	300	245.00	2328	403.00	573
104.00	2127	172.00	896	246.00	3093	404.00	121
105.00	2732	173.00	1050	247.00	518	421.00	591
106.00	868	174.00	1725	249.00	734	422.00	476
107.00	30608	175.00	3583	250.00	177	423.00	4383
108.00	4998	176.00	947	251.00	136	424.00	865
109.00	887	177.00	1303	252.00	302	435.00	210
110.00	50296	178.00	532	253.00	671	436.00	195
111.00	8555	179.00	6372	254.00	1070	438.00	142
112.00	1020	180.00	4626	255.00	83440	439.00	200
113.00	440	181.00	2099	256.00	11929	440.00	97
114.00	92	182.00	129	257.00	1167	441.00	12646
116.00	1745	183.00	194	258.00	5174	442.00	84176
117.00	28792	184.00	662	259.00	813	443.00	17312
118.00	2188	185.00	3073	261.00	93	444.00	1465

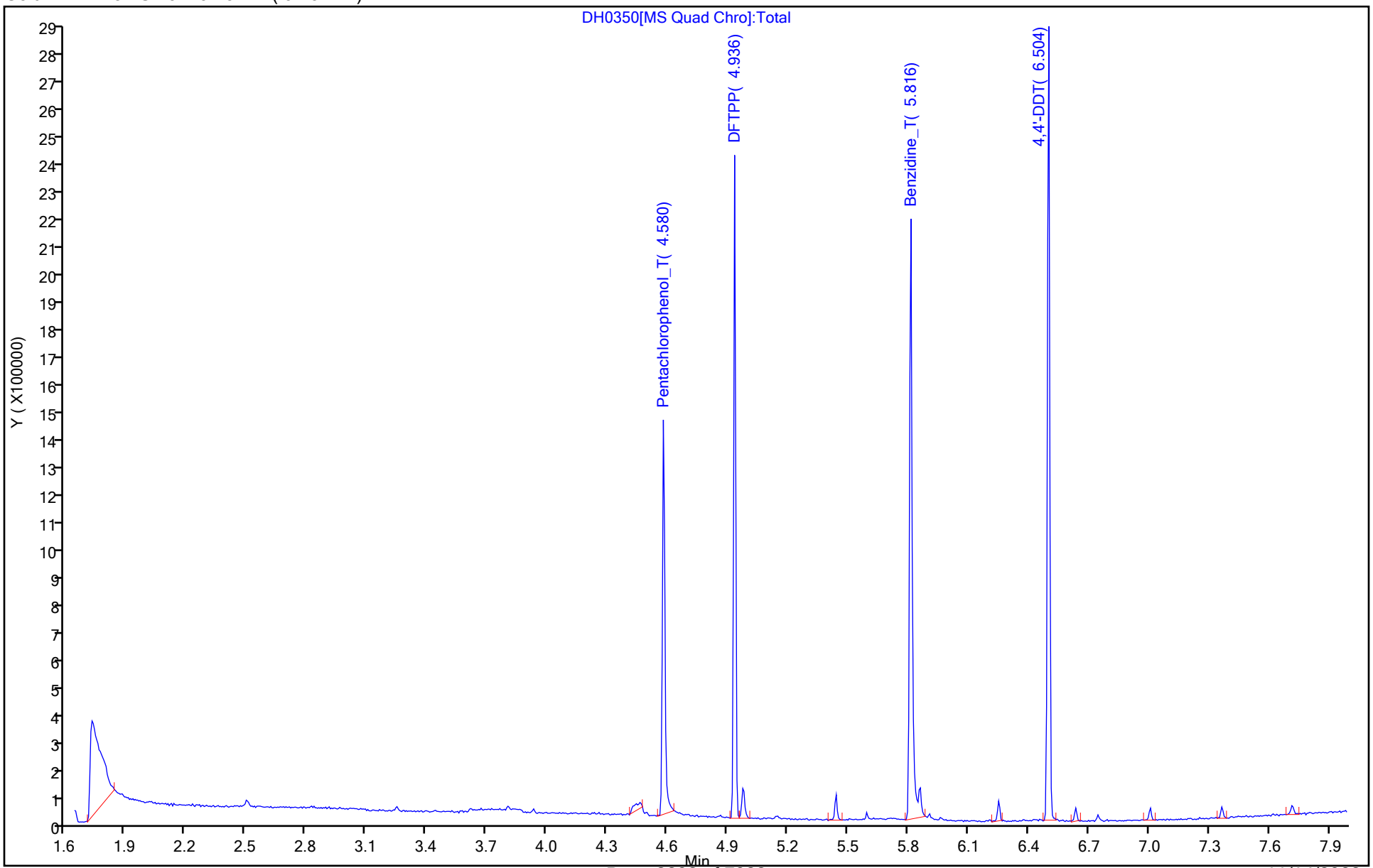
Report Date: 03-Aug-2023 18:19:22 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0350.D

Injection Date:	03-Aug-2023 14:29:26	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Breakdown Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0350.D
Injection Date: 03-Aug-2023 14:29:26 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

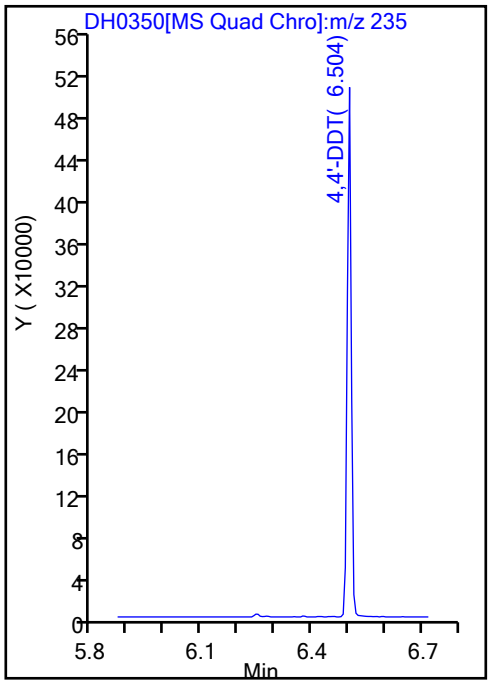
246 4,4'-DDT, Detector: MS Quad

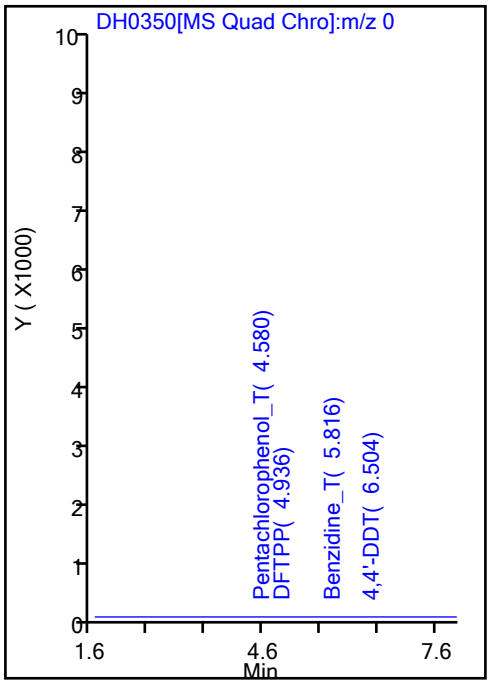
SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

246 4,4'-DDT, Area = 385143
245 4,4'-DDD, Area = 0
244 4,4'-DDE, Area = 0

%Breakdown: 0.00%, <= 20.00%
Passed





Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

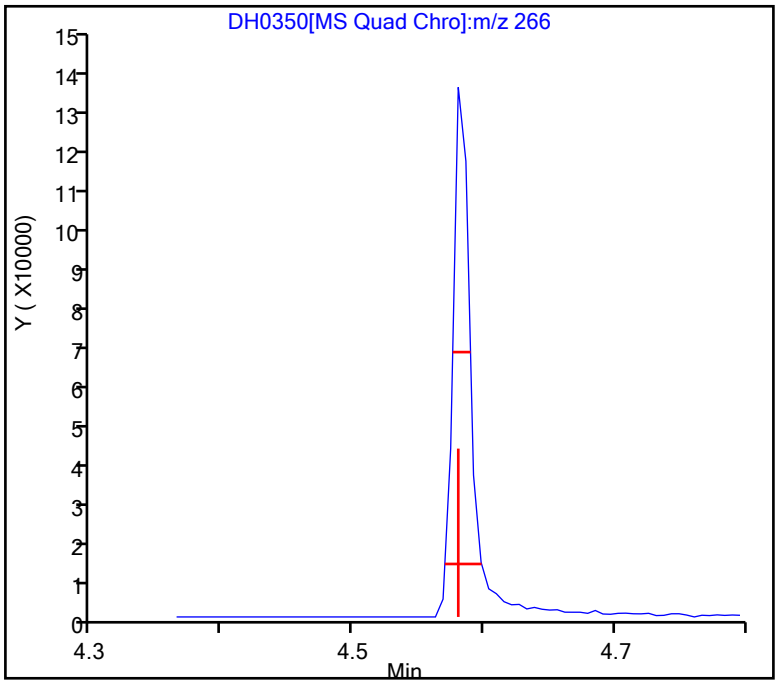
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0350.D
Injection Date: 03-Aug-2023 14:29:26 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

27 Pentachlorophenol_T, Detector: MS Quad

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.018 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.80, Max. Tailing <= 2.00
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

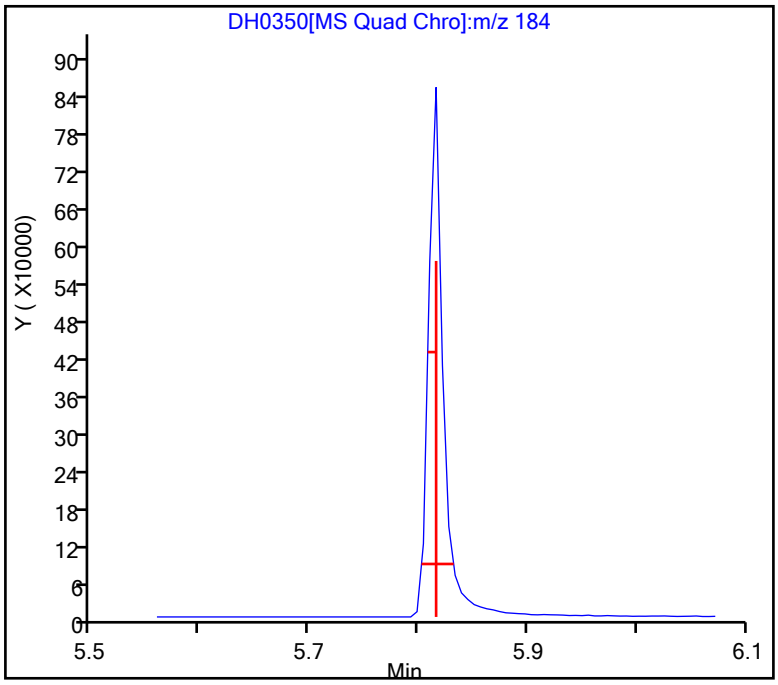
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0350.D
Injection Date: 03-Aug-2023 14:29:26 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

57 Benzidine_T, Detector: MS Quad

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.016 (min.)
Front Width = 0.013 (min.)

Tailing Factor = 1.23, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3150.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 31-Aug-2023 15:57:49 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 05-Sep-2023 16:36:58 Calib Date: 31-Aug-2023 19:21:44
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3158.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1685

First Level Reviewer: P7EB Date: 31-Aug-2023 16:21:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
27 Pentachlorophenol_T	266	5.012	5.012	0.000	93	382732	NR	NR	
57 Benzidine_T	184	6.230	6.230	0.000	99	2553734	NR	NR	
243 DFTPP									
245 4,4'-DDD	235		6.451					ND	
244 4,4'-DDE	246		6.789					ND	
246 4,4'-DDT	235	6.923	6.923	0.000	99	1024535	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

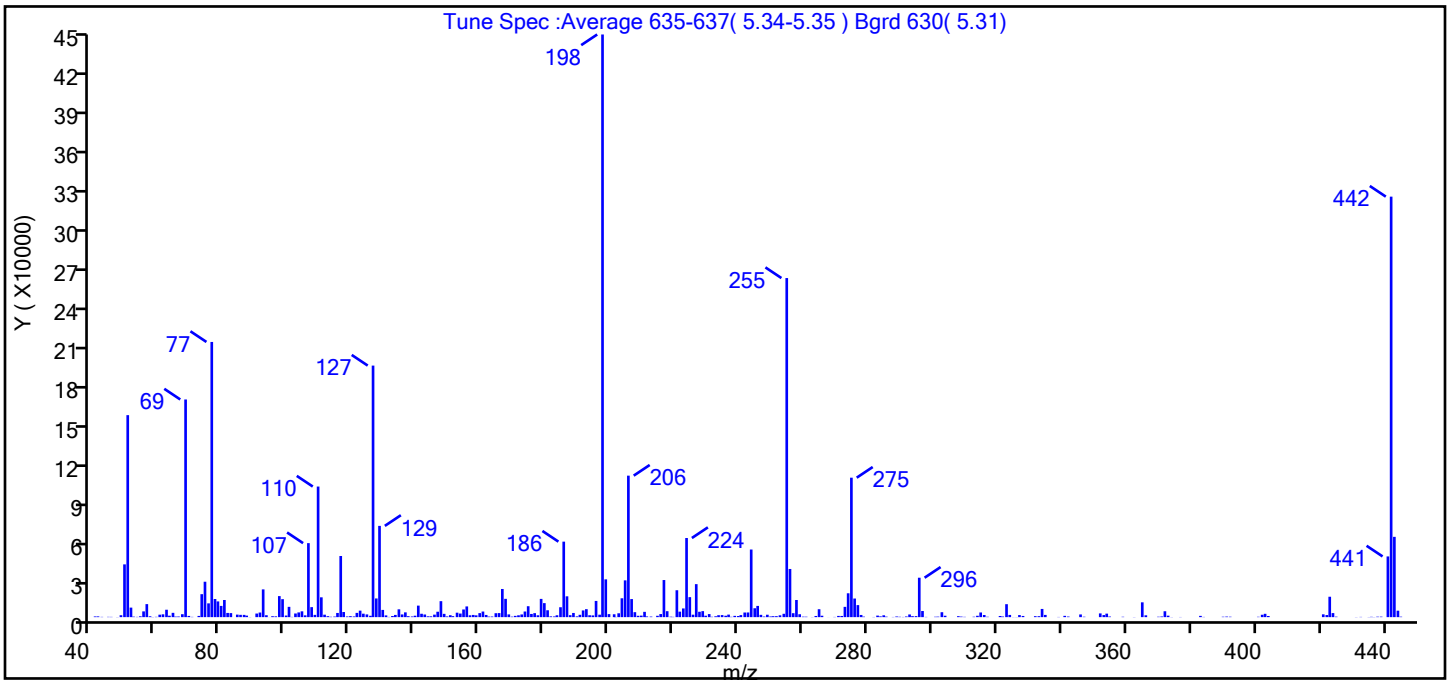
MSS_RVDFTPP_00013 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3150.D
Injection Date: 31-Aug-2023 15:57:49 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI
Tune Method: DFTPP Method 8270D, BP 198

243 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (138.6)
51	10-80% of the base peak	34.7
68	<2% of mass 69	0.5 (1.3)
69	Present	37.4
70	<2% of mass 69	0.2 (0.6)
127	10-80% of the base peak	43.2
197	<2% of mass 198	0.4
199	5-9% of mass 198	6.5
275	10-60% of the base peak	23.9
365	>1% of mass 198	2.5
441	present but <24% of mass 442	10.4 (14.4)
442	base peak, or >50% of 198	72.2
443	15-24% of mass 442	13.8 (19.1)

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3150.D\MSSemi_HP19760.rslt\spectra.c
Injection Date: 31-Aug-2023 15:57:49
Spectrum: Tune Spec :Average 635-637(5.34-5.35) Bgrd 630(5.31)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
41.00	530	125.00	2087	204.00	14396	290.00	287
42.00	565	126.00	1040	205.00	28080	291.00	145
43.00	203	127.00	192000	206.00	108000	292.00	511
45.00	223	128.00	14262	207.00	13789	293.00	2048
46.00	197	129.00	69656	208.00	3790	294.00	758
48.00	97	130.00	5520	209.00	1041	295.00	773
49.00	1458	131.00	1331	210.00	1160	296.00	30088
50.00	40280	132.00	163	211.00	4047	297.00	4675
51.00	154176	133.00	876	212.00	540	298.00	174
52.00	7277	134.00	1694	213.00	434	301.00	301
53.00	394	135.00	5969	215.00	1034	302.00	380
54.00	199	136.00	2060	216.00	2355	303.00	3762
55.00	648	137.00	3653	217.00	28320	304.00	1074
56.00	4399	138.00	733	218.00	4544	308.00	733
57.00	9943	139.00	508	219.00	326	309.00	412
58.00	651	140.00	1088	220.00	215	310.00	226
59.00	113	141.00	8793	221.00	20536	313.00	317
60.00	232	142.00	2579	222.00	4188	314.00	1051
61.00	1878	143.00	2017	223.00	6640	315.00	3555
62.00	2155	144.00	631	224.00	60400	316.00	1634
63.00	5656	145.00	616	225.00	15271	317.00	291
64.00	1101	146.00	1914	226.00	1869	321.00	878
65.00	3288	147.00	4128	227.00	25192	322.00	469
66.00	409	148.00	12192	228.00	4108	323.00	9891
67.00	475	149.00	2512	229.00	4587	324.00	1697
68.00	2242	150.00	539	230.00	1085	325.00	84
69.00	166144	151.00	1477	231.00	2343	326.00	94
70.00	930	152.00	753	232.00	278	327.00	1584
71.00	201	153.00	3396	233.00	658	328.00	906
73.00	931	154.00	2749	234.00	1473	332.00	736
74.00	17536	155.00	5853	235.00	1574	333.00	725
75.00	27032	156.00	8181	236.00	1074	334.00	6260
76.00	10517	157.00	1417	237.00	1933	335.00	1701

Report Date: 05-Sep-2023 16:36:59 Chrom Revision: 2.3 21-Aug-2023 17:14:06
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3150.D\MSSemi_HP19760.rslt\spectra.c
Injection Date: 31-Aug-2023 15:57:49
Spectrum: Tune Spec :Average 635-637(5.34-5.35) Bgrd 630(5.31)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	210048	158.00	1681	238.00	254	339.00	147
78.00	13846	159.00	1373	239.00	984	341.00	989
79.00	12003	160.00	3076	240.00	843	342.00	450
80.00	8574	161.00	4278	241.00	1552	346.00	2058
81.00	13089	162.00	1672	242.00	3527	347.00	313
82.00	3214	163.00	434	243.00	3561	352.00	2851
83.00	3082	164.00	474	244.00	51624	353.00	1593
85.00	1922	165.00	3006	245.00	6789	354.00	2679
86.00	1760	166.00	3098	246.00	8572	355.00	469
87.00	1725	167.00	21488	247.00	1760	359.00	285
88.00	1152	168.00	13968	248.00	453	362.00	106
89.00	89	169.00	2090	249.00	1838	365.00	11306
91.00	2744	170.00	384	250.00	506	366.00	1401
92.00	3509	171.00	979	251.00	718	370.00	313
93.00	21184	172.00	1396	252.00	752	371.00	490
94.00	1464	173.00	2054	253.00	1386	372.00	4497
95.00	35	174.00	4304	254.00	2552	373.00	1125
96.00	705	175.00	8341	255.00	258816	374.00	98
97.00	608	176.00	2434	256.00	36768	377.00	127
98.00	16063	177.00	3041	257.00	3011	383.00	967
99.00	13729	178.00	1425	258.00	13083	384.00	160
100.00	1214	179.00	13928	259.00	2207	390.00	319
101.00	7859	180.00	10695	260.00	369	391.00	438
102.00	178	181.00	5253	261.00	328	392.00	331
103.00	2785	182.00	598	263.00	92	401.00	279
104.00	3595	183.00	520	264.00	895	402.00	1821
105.00	4441	184.00	1424	265.00	6050	403.00	2542
106.00	1373	185.00	7564	266.00	1069	404.00	875
107.00	56488	186.00	57632	268.00	36	421.00	2151
108.00	7637	187.00	15896	270.00	158	422.00	1603
109.00	1735	188.00	1506	271.00	945	423.00	15574
110.00	99680	189.00	3193	272.00	906	424.00	3096
111.00	15129	190.00	582	273.00	7854	425.00	367
112.00	1874	191.00	1781	274.00	18216	431.00	99

Report Date: 05-Sep-2023 16:36:59 Chrom Revision: 2.3 21-Aug-2023 17:14:06
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3150.D\MSSemi_HP19760.rslt\spectra.c
Injection Date: 31-Aug-2023 15:57:49
Spectrum: Tune Spec :Average 635-637(5.34-5.35) Bgrd 630(5.31)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	742	192.00	5126	275.00	106448	433.00	180
114.00	285	193.00	6090	276.00	14211	435.00	115
115.00	441	194.00	1462	277.00	9183	436.00	246
116.00	3197	195.00	1320	278.00	1666	437.00	102
117.00	46672	196.00	12369	279.00	378	438.00	352
118.00	3910	197.00	1865	282.00	123	439.00	387
119.00	507	198.00	444736	283.00	1170	441.00	46336
120.00	753	199.00	28848	284.00	576	442.00	320960
121.00	519	200.00	2315	285.00	1406	443.00	61288
122.00	3247	202.00	2197	286.00	386	444.00	4929
123.00	4960	202.00	179	288.00	138	445.00	356
124.00	2632	203.00	2944	289.00	499		

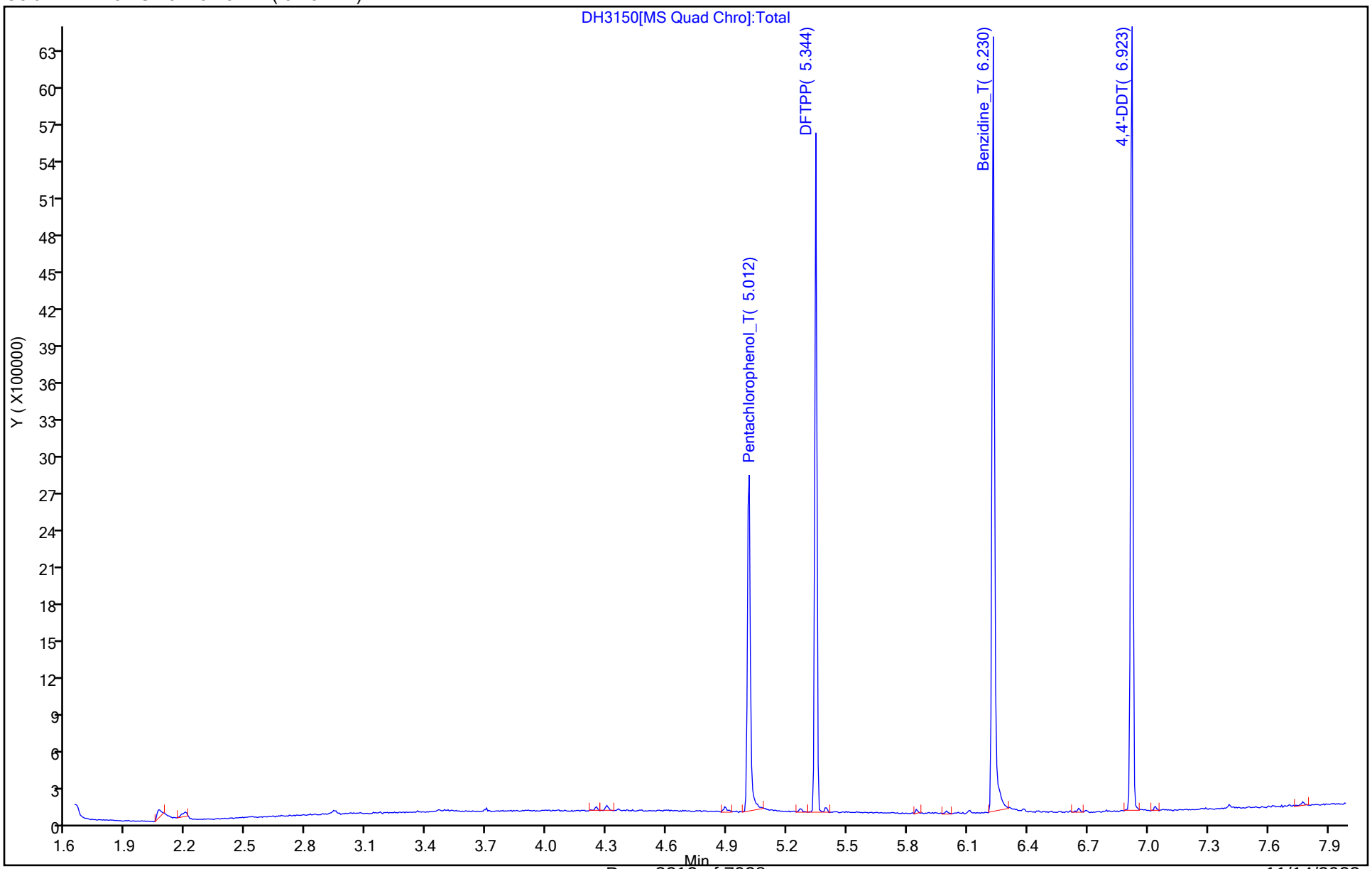
Report Date: 05-Sep-2023 16:36:59 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3150.D

Injection Date:	31-Aug-2023 15:57:49	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Breakdown Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3150.D
Injection Date: 31-Aug-2023 15:57:49 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

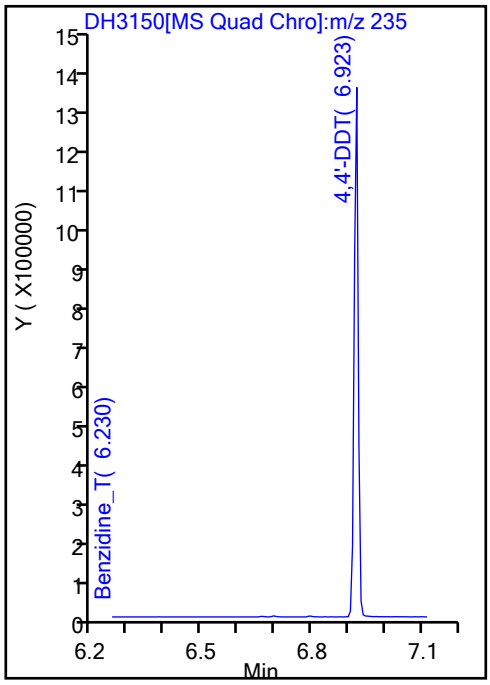
246 4,4'-DDT, Detector: MS Quad

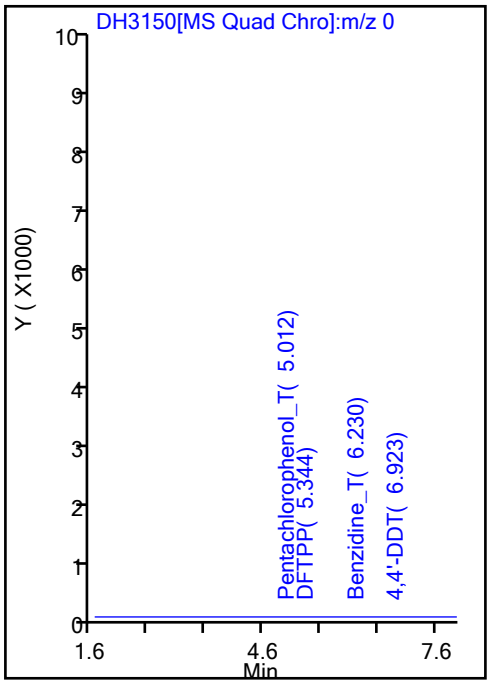
SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

246 4,4'-DDT, Area = 1024535
245 4,4'-DDD, Area = 0
244 4,4'-DDE, Area = 0

%Breakdown: 0.00%, <= 20.00%
Passed





Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

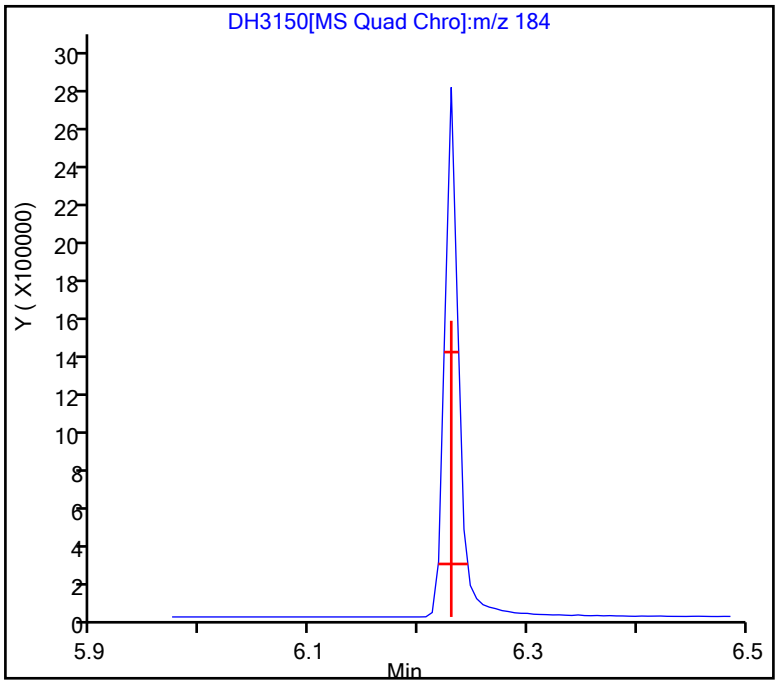
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3150.D
Injection Date: 31-Aug-2023 15:57:49 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

57 Benzidine_T, Detector: MS Quad

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.015 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 1.25, Max. Tailing <= 2.00
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

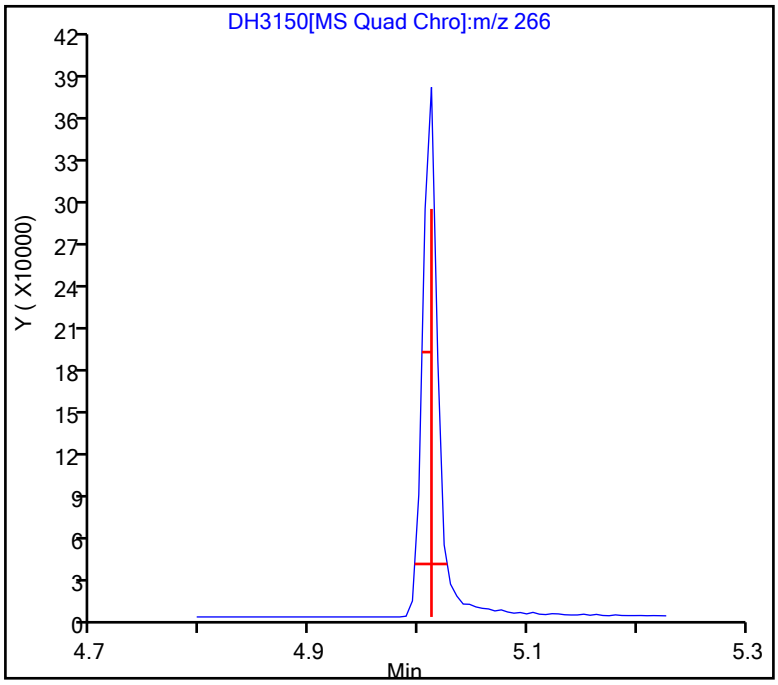
Data File: \\chromfs\Lancaster\ChromData\HP19760\20230831-92991.b\DH3150.D
Injection Date: 31-Aug-2023 15:57:49 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

27 Pentachlorophenol_T, Detector: MS Quad

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.014 (min.)
Front Width = 0.015 (min.)

Tailing Factor = 0.93, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2600b.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 26-Oct-2023 11:53:25 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Misc. Info.: 410-0097721-001
Operator ID: kel10217 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 27-Oct-2023 07:25:29 Calib Date: 26-Oct-2023 14:48:13
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2608.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1691

First Level Reviewer: SJ89 Date: 26-Oct-2023 12:10:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
27 Pentachlorophenol_T	266	4.930	4.930	0.000	94	348517	NR	NR	
57 Benzidine_T	184	6.125	6.125	0.000	99	2100754	NR	NR	
243 DFTPP									
244 4,4'-DDE	246	6.271	6.271	0.000	1	1193		NR	
245 4,4'-DDD	235	6.533	6.533	0.000	1	686		NR	
246 4,4'-DDT	235	6.784	6.784	0.000	99	943034	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

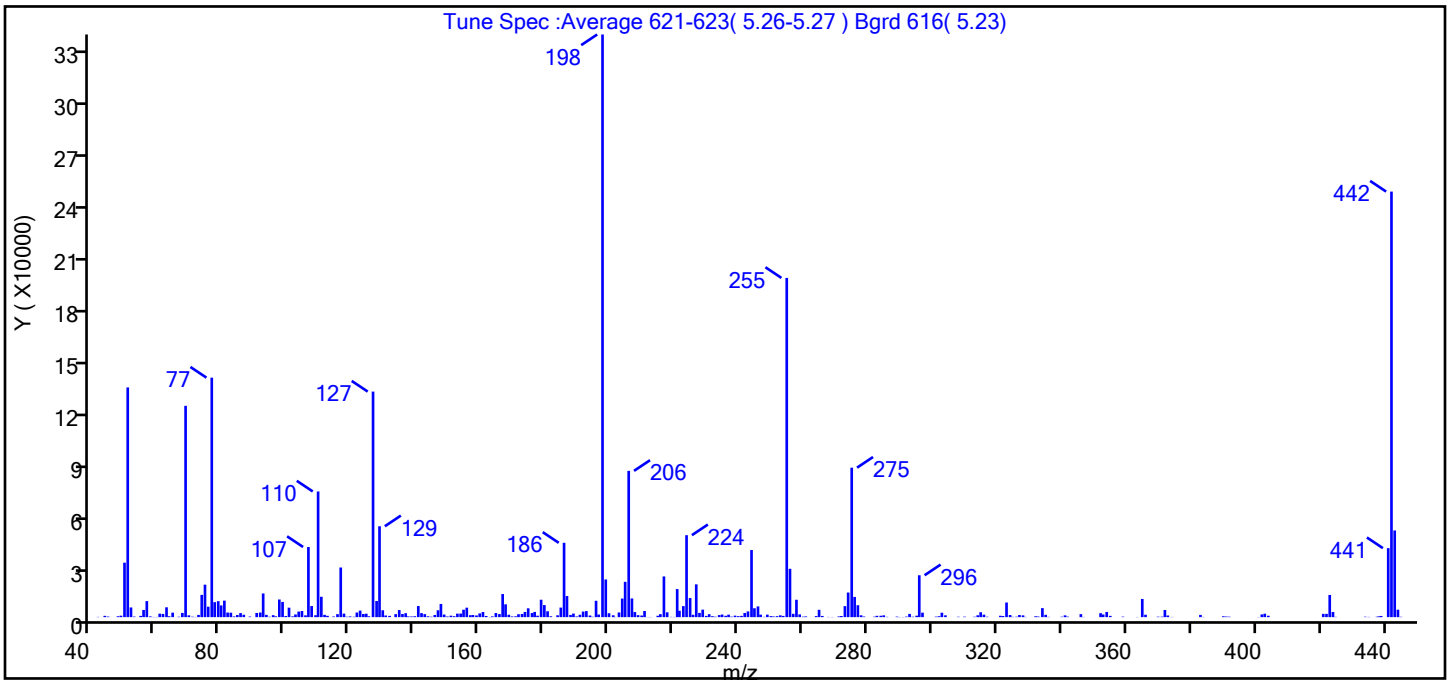
MSS_RVDFTPP_00014 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2600b.D
Injection Date: 26-Oct-2023 11:53:25 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI
Tune Method: DFTPP Method 8270D, BP 198

243 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (136.9)
51	10-80% of the base peak	39.4
68	<2% of mass 69	0.7 (2.0)
69	Present	36.3
70	<2% of mass 69	0.3 (0.9)
127	10-80% of the base peak	38.7
197	<2% of mass 198	0.4
199	5-9% of mass 198	6.5
275	10-60% of the base peak	25.7
365	>1% of mass 198	3.1
441	present but <24% of mass 442	11.8 (16.2)
442	base peak, or >50% of 198	73.0
443	15-24% of mass 442	14.9 (20.4)

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2600b.D\MSSemi_HP19760.rslt\spectra.
Injection Date: 26-Oct-2023 11:53:25
Spectrum: Tune Spec :Average 621-623(5.26-5.27) Bgrd 616(5.23)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
42.00	141	125.00	1948	204.00	10561	290.00	90
43.00	16	126.00	480	205.00	20064	291.00	95
44.00	735	127.00	128080	206.00	83072	292.00	313
45.00	335	128.00	9153	207.00	10613	293.00	1848
48.00	512	129.00	51608	208.00	2889	294.00	243
49.00	832	130.00	3917	209.00	1131	295.00	829
50.00	30920	131.00	927	210.00	913	296.00	23784
51.00	130440	132.00	715	211.00	3475	297.00	2542
52.00	5502	134.00	1714	212.00	103	301.00	291
53.00	317	135.00	4034	213.00	91	302.00	514
55.00	723	136.00	1803	215.00	792	303.00	2511
56.00	4082	137.00	2237	216.00	1706	304.00	1028
57.00	9117	138.00	400	217.00	23120	308.00	215
58.00	418	139.00	373	218.00	2744	310.00	281
59.00	117	140.00	527	219.00	141	313.00	232
60.00	114	141.00	6311	220.00	101	314.00	1061
61.00	1975	142.00	2293	221.00	15938	315.00	2789
62.00	1844	143.00	1711	222.00	3607	316.00	1406
63.00	5589	144.00	474	223.00	6258	317.00	237
64.00	502	145.00	234	224.00	46544	321.00	798
65.00	2555	146.00	1229	225.00	10836	322.00	632
67.00	236	147.00	3903	226.00	1349	323.00	8307
68.00	2403	148.00	7495	227.00	18624	324.00	1206
69.00	120008	149.00	1475	228.00	2422	325.00	179
70.00	1028	150.00	356	229.00	4267	326.00	258
71.00	253	151.00	839	230.00	694	327.00	1228
72.00	119	152.00	532	231.00	1666	328.00	1008
73.00	1282	153.00	1994	232.00	532	329.00	121
74.00	12636	154.00	2031	233.00	254	332.00	496
75.00	18448	155.00	4215	234.00	1158	333.00	350
76.00	5934	156.00	5374	235.00	1475	334.00	5136
77.00	136000	157.00	1109	236.00	766	335.00	1316
78.00	8513	158.00	1202	237.00	1414	336.00	154

Report Date: 27-Oct-2023 07:25:30 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2600b.D\MSSemi_HP19760.rslt\spectra.
Injection Date: 26-Oct-2023 11:53:25
Spectrum: Tune Spec :Average 621-623(5.26-5.27) Bgrd 616(5.23)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	9066	159.00	968	238.00	295	340.00	242
80.00	6657	160.00	2110	239.00	848	341.00	1018
81.00	9387	161.00	2906	240.00	555	342.00	288
82.00	2611	162.00	653	241.00	723	346.00	1706
83.00	2515	163.00	86	242.00	2369	347.00	108
84.00	402	164.00	429	243.00	3252	352.00	2247
85.00	1221	165.00	2329	244.00	38112	353.00	1515
86.00	2302	166.00	1743	245.00	5049	354.00	2938
87.00	1366	167.00	13127	246.00	6094	355.00	729
88.00	5	168.00	7276	247.00	1414	359.00	284
89.00	331	169.00	1356	248.00	172	363.00	101
91.00	2353	170.00	401	249.00	1429	365.00	10338
92.00	2620	171.00	473	250.00	583	366.00	1365
93.00	13454	172.00	1655	251.00	371	370.00	267
94.00	1309	173.00	1801	252.00	560	371.00	273
95.00	223	174.00	2944	253.00	1032	372.00	4060
96.00	1114	175.00	5017	254.00	696	373.00	927
97.00	473	176.00	2334	255.00	192640	374.00	112
98.00	10017	177.00	2969	256.00	27456	383.00	1271
99.00	8644	178.00	818	257.00	1889	384.00	117
100.00	645	179.00	9883	258.00	9871	390.00	500
101.00	5373	180.00	6854	259.00	1562	391.00	332
102.00	441	181.00	3342	260.00	265	392.00	260
103.00	1523	182.00	488	261.00	402	401.00	90
104.00	3164	184.00	1056	264.00	599	402.00	1548
105.00	3476	185.00	5428	265.00	4170	403.00	1948
106.00	1025	186.00	42208	266.00	679	404.00	801
107.00	39840	187.00	11979	268.00	122	421.00	1862
108.00	6304	188.00	1257	269.00	98	422.00	1869
109.00	1099	189.00	2025	271.00	386	423.00	12606
110.00	71368	190.00	377	272.00	657	424.00	2910
111.00	11570	191.00	1342	273.00	6256	425.00	157
112.00	1321	192.00	3166	274.00	13979	434.00	241
113.00	762	193.00	3456	275.00	84880	435.00	131

Report Date: 27-Oct-2023 07:25:30 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2600b.D\MSSemi_HP19760.rslt\spectra.
Injection Date: 26-Oct-2023 11:53:25
Spectrum: Tune Spec :Average 621-623(5.26-5.27) Bgrd 616(5.23)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	361	194.00	925	276.00	11478	438.00	231
116.00	1698	195.00	212	277.00	6775	438.00	434
117.00	28192	196.00	9291	278.00	1041	439.00	674
118.00	1988	197.00	1481	279.00	332	441.00	39184
119.00	235	198.00	330880	282.00	248	442.00	241664
120.00	416	199.00	21392	283.00	753	443.00	49232
121.00	220	200.00	2205	284.00	798	444.00	4219
122.00	2624	201.00	1064	285.00	1027	445.00	199
123.00	3709	202.00	123	286.00	166		
124.00	1790	203.00	2652	289.00	306		

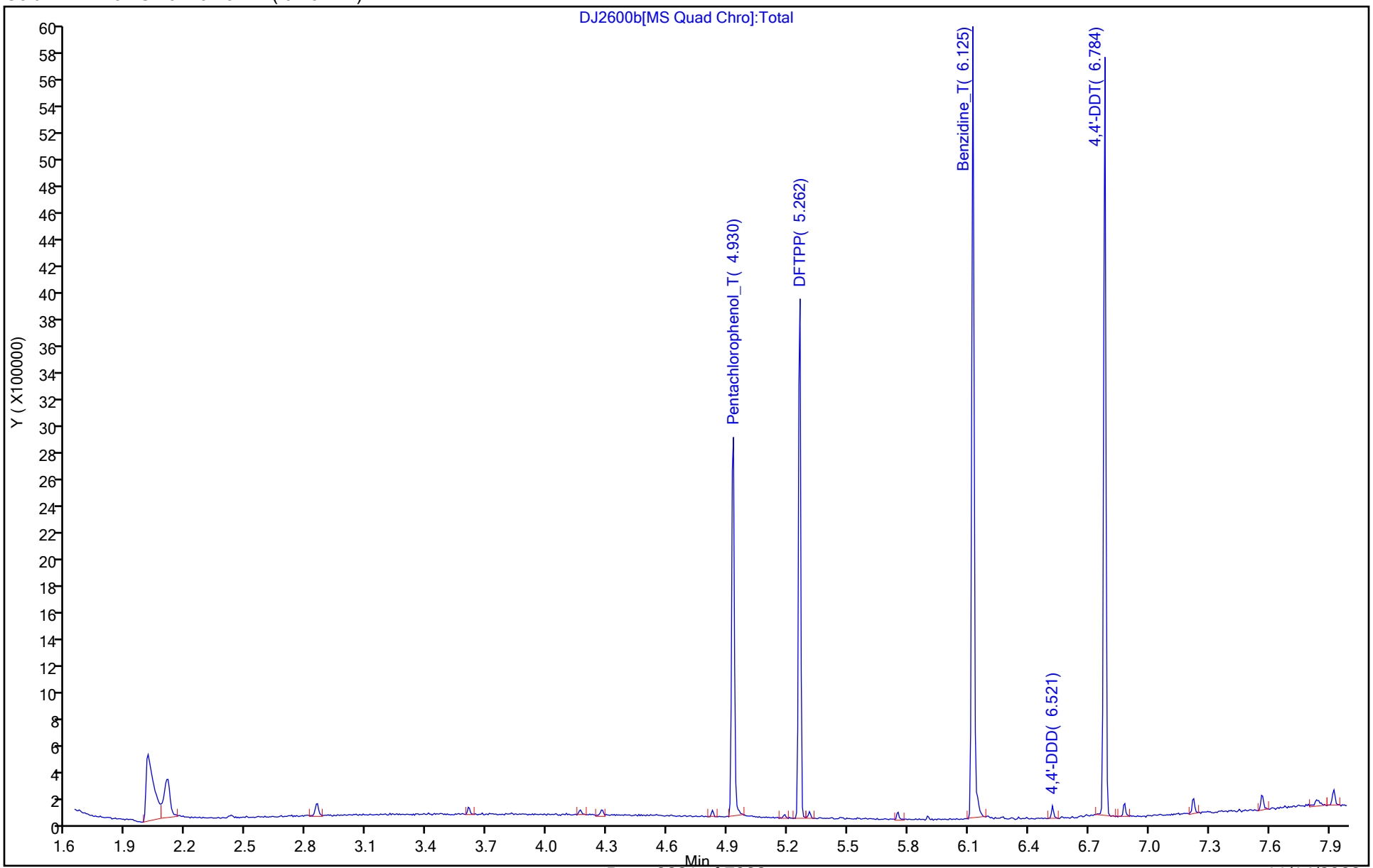
Report Date: 27-Oct-2023 07:25:30 Chrom Revision: 2.3 18-Oct-2023 21:16:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2600b.D

Injection Date:	26-Oct-2023 11:53:25	Instrument ID:	HP19760	Operator ID:	kel10217
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



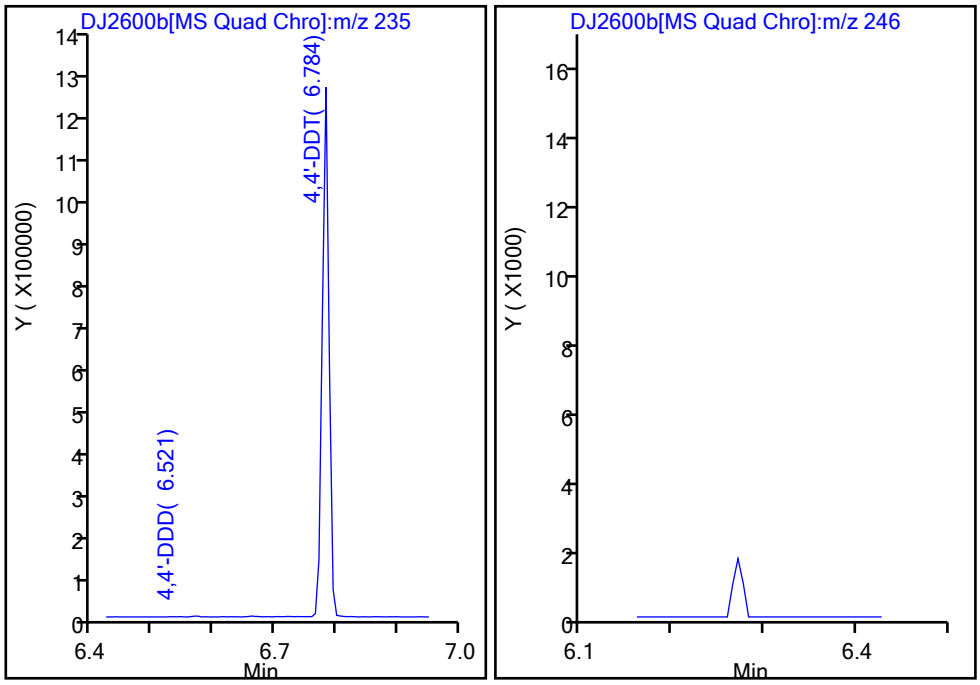
11/14/2023
11:12 AM

Breakdown Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2600b.D
Injection Date: 26-Oct-2023 11:53:25 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

246 4,4'-DDT, Detector: MS Quad



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

246 4,4'-DDT, Area = 943034
245 4,4'-DDD, Area = 686
244 4,4'-DDE, Area = 1193

%Breakdown: 0.20%, <= 20.00%
Passed

Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

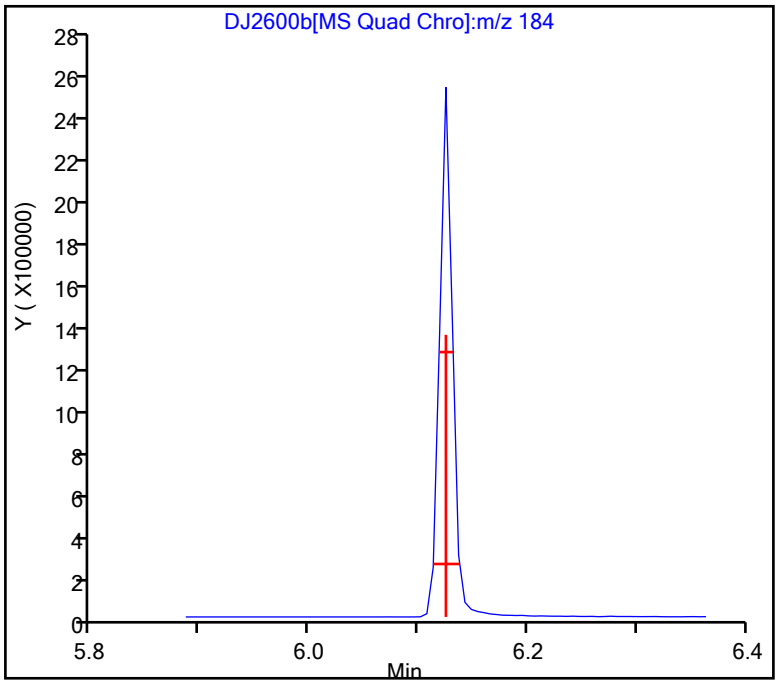
Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2600b.D
Injection Date: 26-Oct-2023 11:53:25 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

57 Benzidine_T, Detector: MS Quad

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.013 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 1.08, Max. Tailing <= 2.00
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

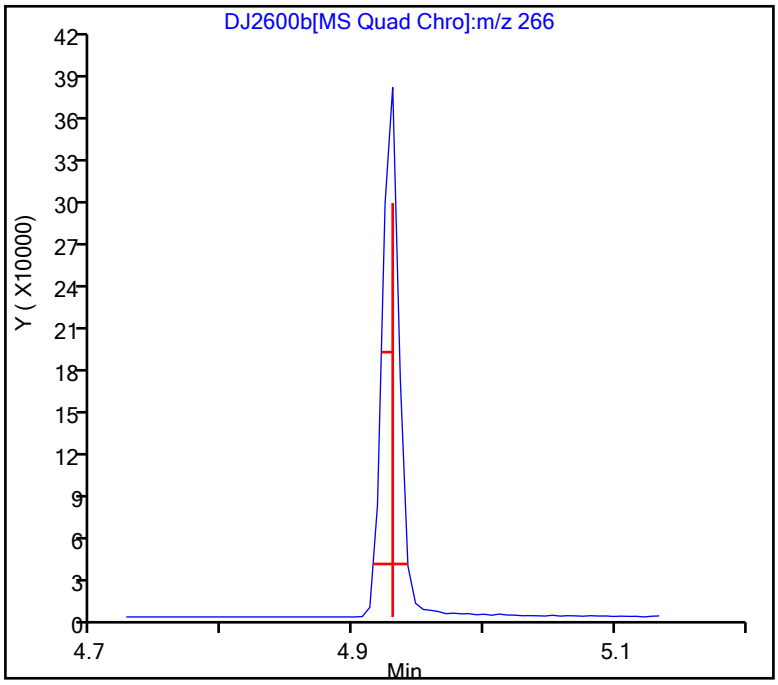
Data File: \\chromfs\Lancaster\ChromData\HP19760\20231026-97721.b\DJ2600b.D
Injection Date: 26-Oct-2023 11:53:25 Instrument ID: HP19760
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP19760 Limit Group: MSSV - 8270D_E LVI

27 Pentachlorophenol_T, Detector: MS Quad

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.012 (min.)
Front Width = 0.015 (min.)

Tailing Factor = 0.80, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1800.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 18-Jul-2023 07:23:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Misc. Info.: 410-0089185-001
Operator ID: kel10217 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 18-Jul-2023 15:34:25 Calib Date: 18-Jul-2023 10:14:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1808.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1640

First Level Reviewer: SJ89 Date: 18-Jul-2023 07:37:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
10 Pentachlorophenol_T	266	4.825	4.825	0.000	90	362808	NR	NR	
14 Benzidine_T	184	6.080	6.080	0.000	100	2483252	NR	NR	
207 DFTPP									
208 4,4'-DDE	246	6.226	6.226	0.000	5	1674		NR	
209 4,4'-DDT	235	6.758	6.758	0.000	98	1047870	NR	NR	
210 4,4'-DDD	235		6.758					ND	U

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
U - Marked Undetected

Reagents:

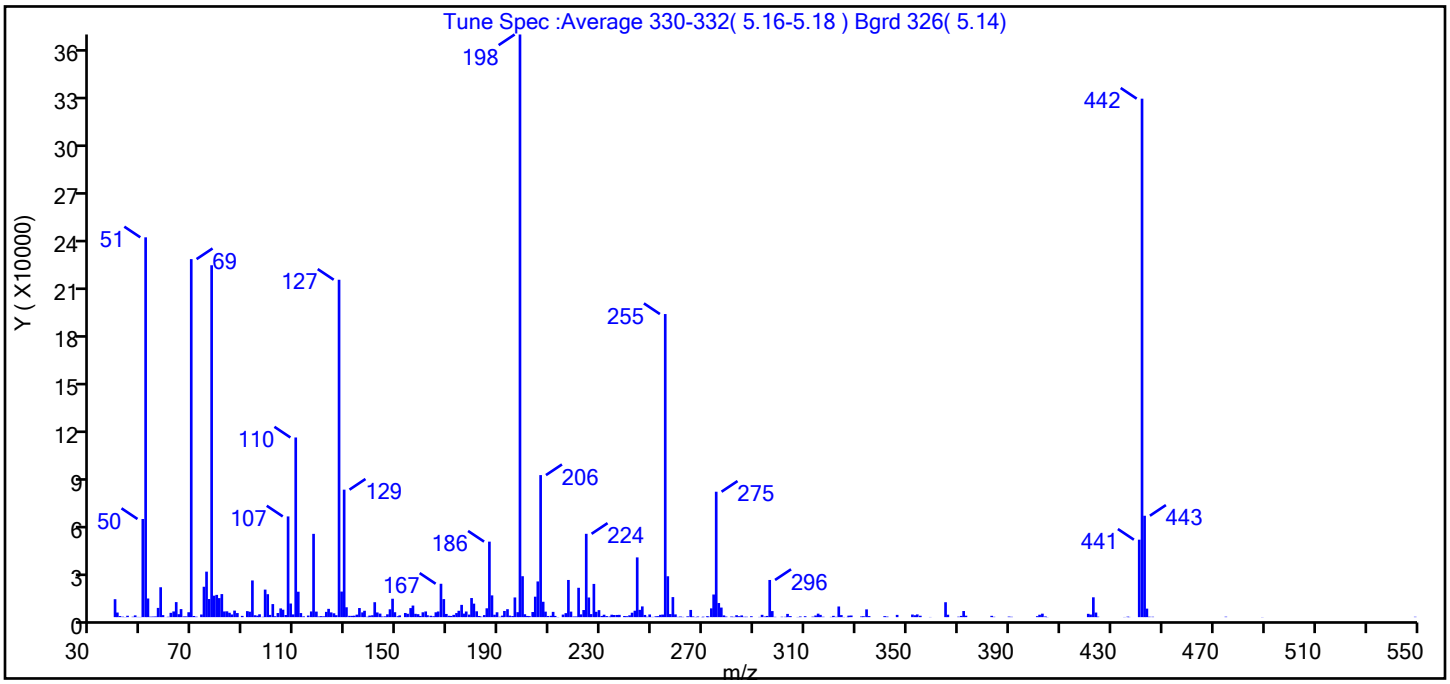
MSS_RVDFTPP_00013 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1800.D
Injection Date: 18-Jul-2023 07:23:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Tune Method: DFTPP Method 8270D, BP 198

207 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (112.4)
51	10-80% of the base peak	65.2
68	<2% of mass 69	0.8 (1.4)
69	Present	61.4
70	<2% of mass 69	0.2 (0.3)
127	10-80% of the base peak	57.9
197	<2% of mass 198	0.9
199	5-9% of mass 198	7.0
275	10-60% of the base peak	21.5
365	>1% of mass 198	2.6
441	present but <24% of mass 442	13.3 (14.9)
442	base peak, or >50% of 198	89.0
443	15-24% of mass 442	17.4 (19.6)

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1800.D\MSSemi_HP23264.rslt\spectra.d
Injection Date: 18-Jul-2023 07:23:30
Spectrum: Tune Spec :Average 330-332(5.16-5.18) Bgrd 326(5.14)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	11178	122.00	3277	201.00	750	283.00	1205
40.00	2874	123.00	5172	202.00	641	284.00	585
41.00	667	124.00	2961	203.00	3192	285.00	1081
42.00	297	125.00	2404	204.00	12749	286.00	233
43.00	90	126.00	1196	205.00	22248	287.00	256
44.00	873	127.00	210240	206.00	88512	289.00	558
46.00	244	128.00	15938	207.00	9583	292.00	144
47.00	1093	129.00	79440	208.00	3423	293.00	1450
48.00	145	130.00	6149	209.00	733	294.00	373
49.00	125	131.00	812	210.00	844	295.00	748
50.00	61160	132.00	812	211.00	3290	296.00	23168
51.00	236672	133.00	877	212.00	762	297.00	3770
52.00	11627	134.00	1563	213.00	96	298.00	201
53.00	305	135.00	5679	215.00	1594	301.00	259
54.00	375	136.00	2962	216.00	2493	302.00	243
55.00	439	137.00	3973	217.00	23168	303.00	2028
56.00	5760	138.00	271	218.00	3442	304.00	655
57.00	18632	139.00	980	219.00	405	307.00	116
58.00	1256	140.00	1177	220.00	412	308.00	424
59.00	36	141.00	9310	221.00	18296	310.00	580
60.00	235	142.00	2925	222.00	1733	313.00	305
61.00	2684	143.00	2207	223.00	4432	314.00	1004
62.00	3563	144.00	396	224.00	51928	315.00	2177
63.00	9381	145.00	508	225.00	12246	316.00	1410
64.00	1848	146.00	1770	226.00	1896	317.00	252
65.00	5015	147.00	4895	227.00	20704	320.00	152
66.00	456	148.00	11475	228.00	3333	321.00	812
67.00	460	149.00	3073	229.00	4363	322.00	213
68.00	3058	150.00	576	230.00	740	323.00	6643
69.00	223104	151.00	1095	231.00	1516	324.00	1269
70.00	720	153.00	2591	232.00	653	325.00	117
71.00	290	154.00	2100	233.00	390	327.00	135
73.00	1643	155.00	5644	234.00	1521	327.00	935

Report Date: 18-Jul-2023 15:34:26 Chrom Revision: 2.3 11-Jul-2023 11:49:10
Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1800.D\MSSemi_HP23264.rslt\spectra.d
Injection Date: 18-Jul-2023 07:23:30
Spectrum: Tune Spec :Average 330-332(5.16-5.18) Bgrd 326(5.14)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	18936	156.00	7215	235.00	1328	328.00	1019
75.00	28352	157.00	2071	236.00	1369	332.00	458
76.00	11290	158.00	1848	237.00	1428	333.00	579
77.00	219264	159.00	752	239.00	715	334.00	4854
78.00	13379	160.00	3031	240.00	583	335.00	648
79.00	13873	161.00	3545	241.00	1138	341.00	632
80.00	11862	162.00	1189	242.00	2761	342.00	362
81.00	14368	163.00	870	243.00	3995	346.00	1409
82.00	3546	164.00	571	244.00	37232	352.00	1628
83.00	3628	165.00	3026	245.00	4548	353.00	1174
84.00	2736	166.00	3522	246.00	6686	354.00	1701
85.00	1659	167.00	20800	247.00	1376	355.00	881
86.00	4072	168.00	11251	248.00	264	359.00	106
87.00	2542	169.00	1994	249.00	1674	365.00	9294
89.00	788	170.00	849	250.00	160	366.00	1514
91.00	3746	171.00	757	251.00	520	370.00	292
92.00	3376	172.00	1419	252.00	606	371.00	773
93.00	22864	173.00	2548	253.00	1430	372.00	3812
94.00	1186	174.00	3962	254.00	1597	373.00	895
95.00	919	175.00	7648	255.00	188864	383.00	825
96.00	1781	176.00	2197	256.00	25472	384.00	224
97.00	196	177.00	3525	257.00	1918	390.00	357
98.00	17160	178.00	1590	258.00	12492	391.00	220
99.00	14303	179.00	11908	259.00	1725	401.00	606
100.00	1401	180.00	8413	260.00	195	402.00	1505
101.00	8137	181.00	3652	261.00	376	403.00	2171
102.00	570	182.00	730	262.00	157	404.00	442
103.00	2565	183.00	313	264.00	497	405.00	93
104.00	5452	184.00	1273	265.00	4488	421.00	2072
105.00	4642	185.00	5513	266.00	428	422.00	1626
106.00	1333	186.00	47056	267.00	105	423.00	12367
107.00	62760	187.00	13560	268.00	401	424.00	2855
108.00	8487	188.00	1506	270.00	114	425.00	302
109.00	1712	189.00	3035	270.00	274	435.00	101

Report Date: 18-Jul-2023 15:34:26 Chrom Revision: 2.3 11-Jul-2023 11:49:10
Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1800.D\MSSemi_HP23264.rslt\spectra.d
Injection Date: 18-Jul-2023 07:23:30
Spectrum: Tune Spec :Average 330-332(5.16-5.18) Bgrd 326(5.14)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
110.00	111952	190.00	249	272.00	551	436.00	295
111.00	15842	191.00	946	272.00	328	437.00	155
112.00	2545	192.00	3854	273.00	5476	441.00	48264
113.00	476	193.00	4966	274.00	14109	442.00	323072
115.00	996	194.00	937	275.00	78152	443.00	63184
116.00	3554	195.00	697	276.00	8793	444.00	5303
117.00	51904	196.00	12269	277.00	5972	445.00	270
118.00	3460	197.00	3097	278.00	1085	446.00	253
119.00	427	198.00	363072	279.00	365	475.00	281
120.00	619	199.00	25504	281.00	376	489.00	91
121.00	522	200.00	1809	282.00	214	549.00	229

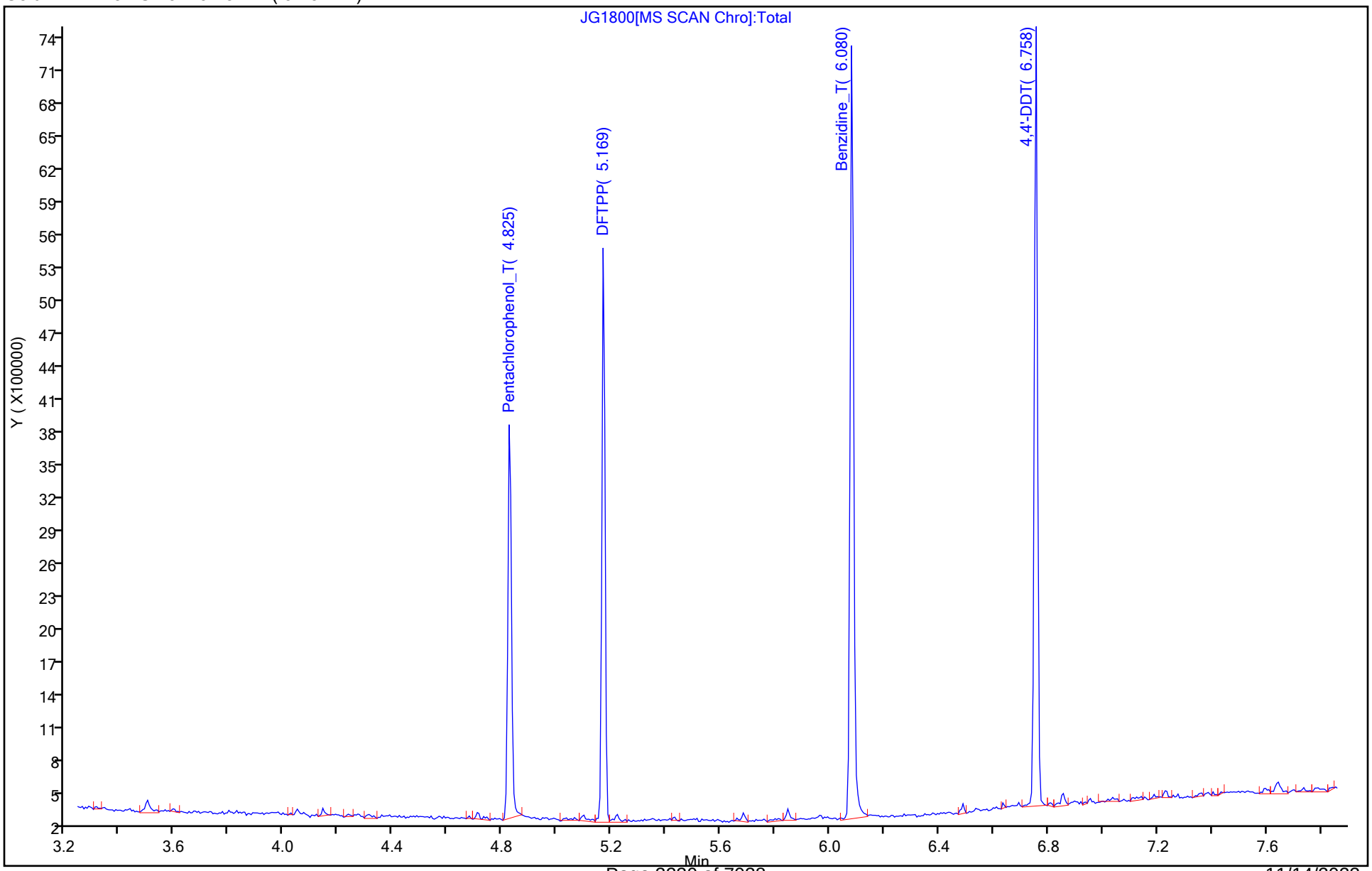
Report Date: 18-Jul-2023 15:34:26 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1800.D

Injection Date:	18-Jul-2023 07:23:30	Instrument ID:	HP23264	Operator ID:	kel10217
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Breakdown Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1800.D				
Injection Date:	18-Jul-2023 07:23:30	Instrument ID:	HP23264		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	kel10217	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

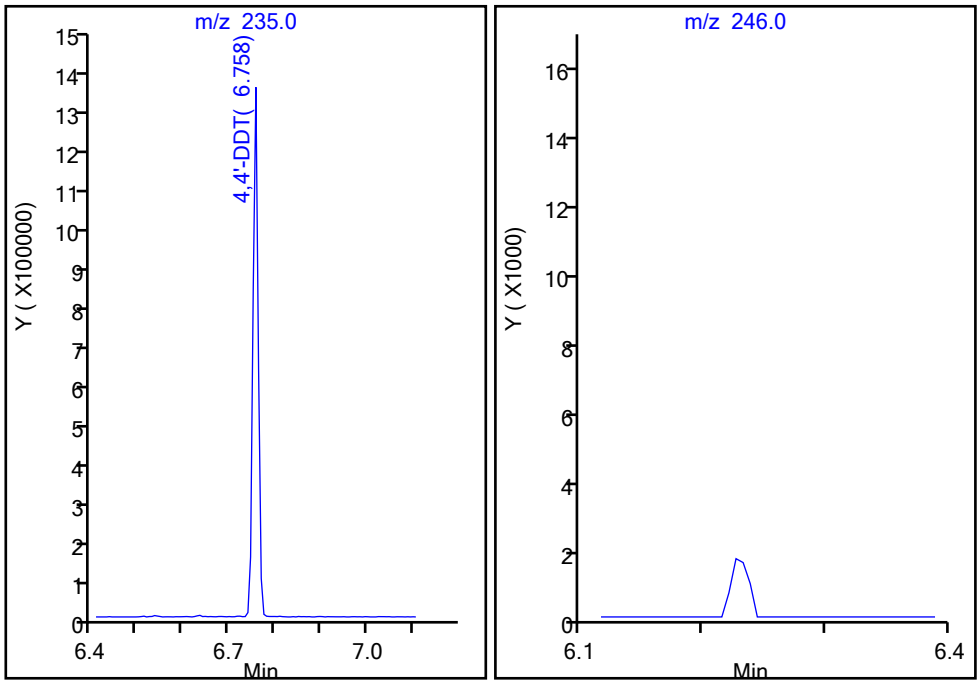
209 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

209 4,4'-DDT, Area = 1047870
210 4,4'-DDD, Area = 0
208 4,4'-DDE, Area = 1674

%Breakdown: 0.16%, <= 20.00%
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

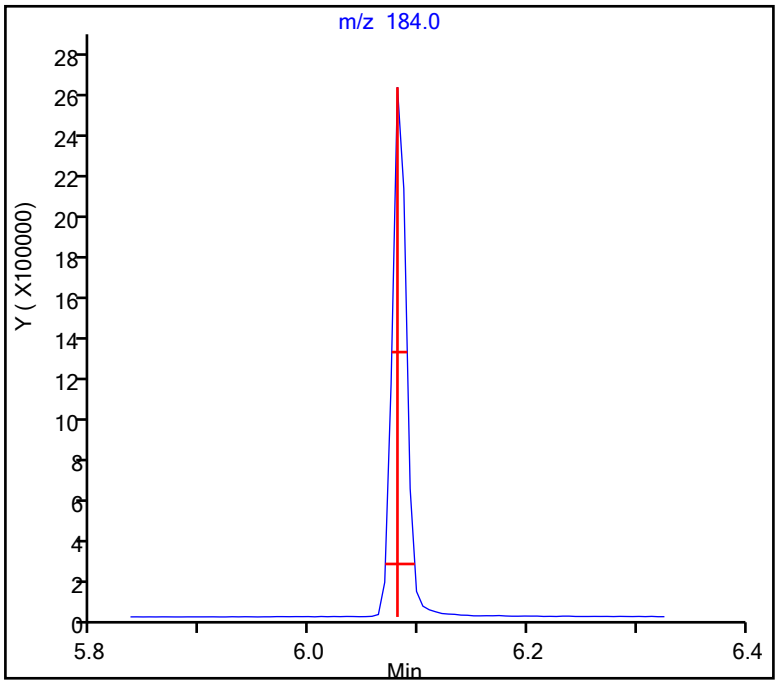
Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1800.D
Injection Date: 18-Jul-2023 07:23:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

14 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.016 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.45, Max. Tailing <= 2.00
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

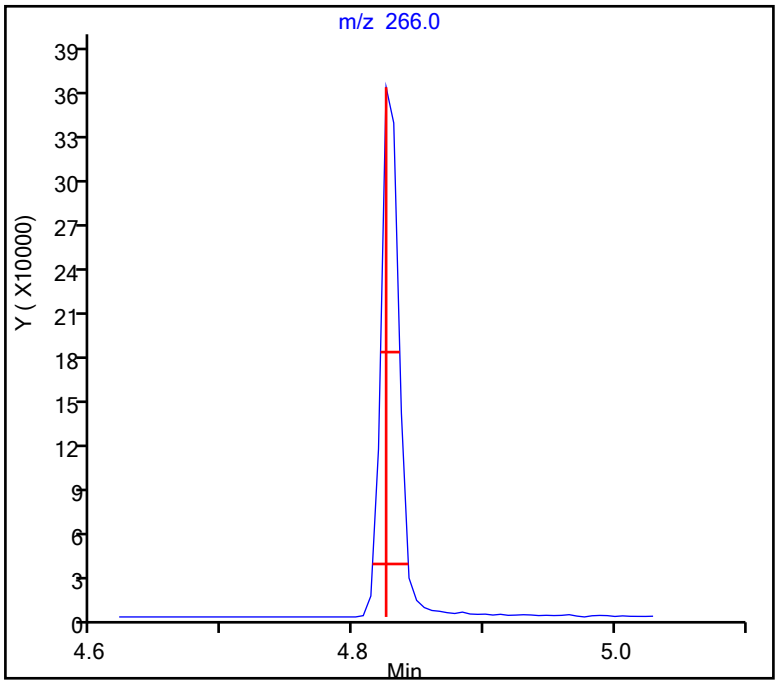
Data File: \\chromfs\Lancaster\ChromData\HP23264\20230718-89185.b\JG1800.D
Injection Date: 18-Jul-2023 07:23:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

10 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.017 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.70, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0250.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 02-Aug-2023 20:15:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 02-Aug-2023 22:19:29 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1634

First Level Reviewer: P7EB Date: 02-Aug-2023 20:28:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
10 Pentachlorophenol_T	266	4.819	4.819	0.000	90	297143	NR	NR	
14 Benzidine_T	184	6.080	6.080	0.000	100	864767	NR	NR	
207 DFTPP									
208 4,4'-DDE	246	6.226	6.226	0.000	87	8708		NR	
210 4,4'-DDD	235	6.507	6.507	0.000	94	12845		NR	
209 4,4'-DDT	235	6.752	6.752	0.000	97	791563	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

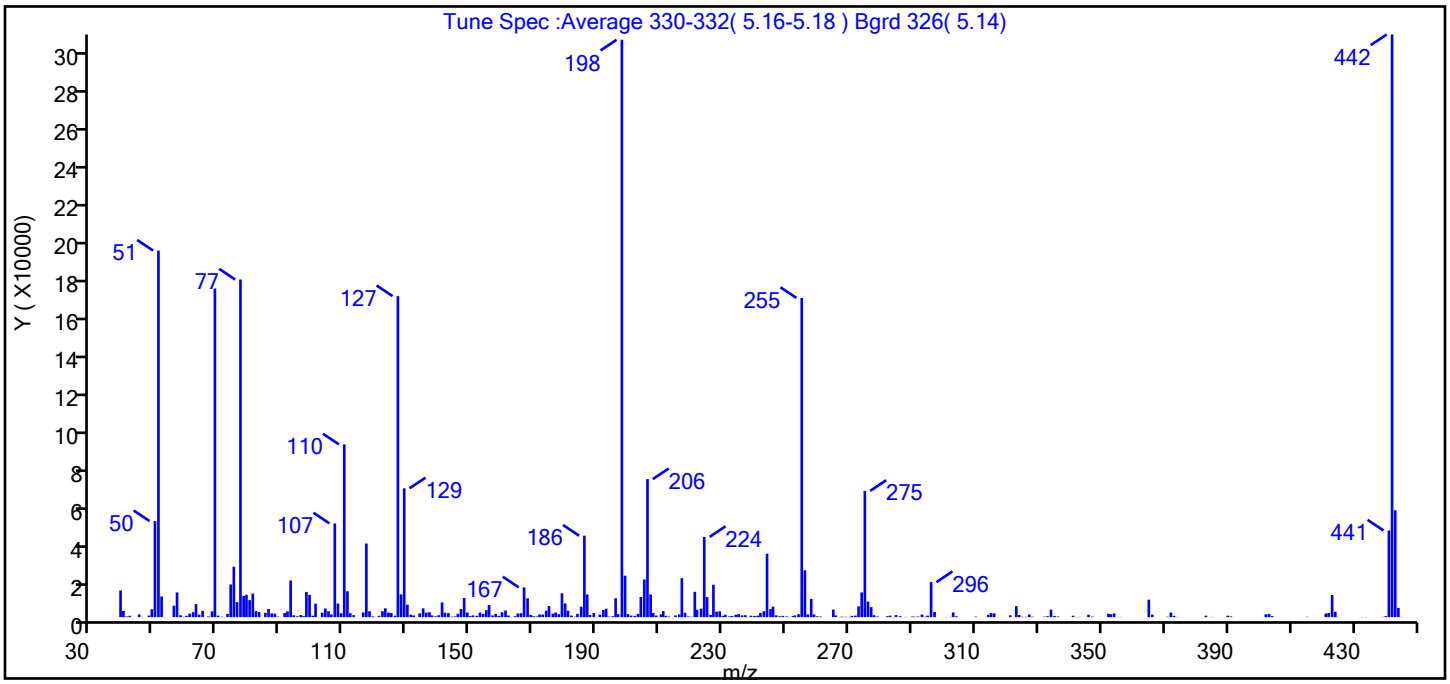
MSS_RVDFTPP_00013 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0250.D
Injection Date: 02-Aug-2023 20:15:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Tune Method: DFTPP Method 8270D, BP 198

207 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (99.1)
51	10-80% of the base peak	63.5
68	<2% of mass 69	1.0 (1.8)
69	Present	56.9
70	<2% of mass 69	0.3 (0.5)
127	10-80% of the base peak	55.6
197	<2% of mass 198	0.5
199	5-9% of mass 198	7.2
275	10-60% of the base peak	21.9
365	>1% of mass 198	3.0
441	present but <24% of mass 442	15.0 (14.9)
442	base peak, or >50% of 198	100.9
443	15-24% of mass 442	18.5 (18.3)

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0250.D\MSSemi_HP23264.rslt\spectra.d
Injection Date: 02-Aug-2023 20:15:30
Spectrum: Tune Spec :Average 330-332(5.16-5.18) Bgrd 326(5.14)
Base Peak: 442.10
Minimum % Base Peak: 0
Number of Points: 299

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	14195	124.00	2445	199.00	22000	278.00	1013
40.00	3304	125.00	2158	200.00	1583	279.00	346
41.00	386	126.00	759	201.00	852	282.00	484
42.00	720	127.00	170560	202.00	672	283.00	806
45.00	1417	128.00	12108	203.00	1777	284.00	120
46.00	129	129.00	68448	204.00	10695	285.00	1105
48.00	847	130.00	6619	205.00	20032	286.00	490
49.00	4189	131.00	1348	206.00	73344	288.00	120
50.00	51000	132.00	902	207.00	12035	290.00	337
51.00	194752	133.00	43	208.00	2245	291.00	218
52.00	10984	134.00	2023	209.00	876	292.00	311
53.00	120	135.00	4677	210.00	1502	293.00	1410
55.00	41	136.00	2452	211.00	3222	294.00	198
56.00	6092	137.00	2616	212.00	639	295.00	788
57.00	13141	138.00	907	213.00	343	296.00	18608
58.00	993	139.00	445	215.00	896	297.00	2728
59.00	158	140.00	1009	216.00	1425	301.00	105
60.00	703	141.00	7814	217.00	20736	302.00	123
61.00	1831	142.00	2374	218.00	2283	303.00	2516
62.00	2600	143.00	2138	219.00	398	304.00	463
63.00	6906	144.00	276	220.00	221	310.00	266
64.00	1318	145.00	405	221.00	13443	314.00	1240
65.00	3359	146.00	1759	222.00	3932	315.00	2142
67.00	412	147.00	4308	223.00	4539	316.00	2003
68.00	3060	148.00	10201	224.00	42616	317.00	86
69.00	174592	149.00	2468	225.00	10640	321.00	979
70.00	797	150.00	555	226.00	1167	323.00	5841
71.00	231	151.00	915	227.00	17232	324.00	1145
72.00	36	152.00	715	228.00	2925	325.00	189
73.00	1729	153.00	2387	229.00	3084	326.00	184
74.00	17336	154.00	1781	230.00	709	327.00	1394
75.00	26800	155.00	3712	231.00	1234	328.00	238
76.00	7981	156.00	6417	232.00	427	332.00	275

Report Date: 02-Aug-2023 22:19:29 Chrom Revision: 2.3 02-Aug-2023 16:16:36
Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0250.D\MSSemi_HP23264.rslt\spectra.d
Injection Date: 02-Aug-2023 20:15:30
Spectrum: Tune Spec :Average 330-332(5.16-5.18) Bgrd 326(5.14)
Base Peak: 442.10
Minimum % Base Peak: 0
Number of Points: 299

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	179392	157.00	887	233.00	584	333.00	499
78.00	11294	158.00	1702	234.00	1326	334.00	3981
79.00	11893	159.00	676	235.00	1574	335.00	602
80.00	9061	160.00	2616	236.00	920	336.00	343
81.00	12493	161.00	3514	237.00	1038	341.00	758
82.00	3227	162.00	847	238.00	99	342.00	108
83.00	2683	163.00	106	239.00	771	343.00	122
85.00	2262	164.00	510	240.00	616	346.00	1283
86.00	4314	165.00	1949	241.00	754	347.00	306
87.00	1951	166.00	2053	242.00	2249	352.00	1775
88.00	1870	167.00	15805	243.00	3135	353.00	1582
89.00	319	168.00	9988	244.00	33712	354.00	1973
91.00	2217	169.00	1199	245.00	4281	356.00	123
92.00	3067	170.00	488	246.00	5569	365.00	9277
93.00	19448	171.00	387	247.00	942	366.00	1318
94.00	1007	172.00	1426	248.00	476	371.00	238
95.00	479	173.00	1396	249.00	658	372.00	2462
96.00	1147	174.00	3440	250.00	367	373.00	720
97.00	541	175.00	5879	251.00	104	374.00	103
98.00	13398	176.00	1874	252.00	555	383.00	781
99.00	11856	177.00	2451	253.00	917	385.00	114
100.00	743	178.00	1569	254.00	1569	390.00	786
101.00	7169	179.00	12679	255.00	169600	391.00	416
103.00	2374	180.00	7287	256.00	24872	402.00	1549
104.00	4594	181.00	3453	257.00	1467	403.00	1730
105.00	3148	182.00	857	258.00	9728	404.00	576
106.00	1377	183.00	251	259.00	1419	415.00	175
107.00	49792	184.00	1744	260.00	445	421.00	1883
108.00	7235	185.00	5538	261.00	318	422.00	2206
109.00	2081	186.00	43288	265.00	3999	423.00	11754
110.00	91792	187.00	12044	266.00	902	424.00	2861
111.00	13776	188.00	1143	267.00	121	425.00	137
112.00	2096	189.00	2181	268.00	229	432.00	93
113.00	1058	190.00	70	269.00	197	434.00	87

Report Date: 02-Aug-2023 22:19:29 Chrom Revision: 2.3 02-Aug-2023 16:16:36
Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0250.D\MSSemi_HP23264.rslt\spectra.d
Injection Date: 02-Aug-2023 20:15:30
Spectrum: Tune Spec :Average 330-332(5.16-5.18) Bgrd 326(5.14)
Base Peak: 442.10
Minimum % Base Peak: 0
Number of Points: 299

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	2483	191.00	1303	270.00	125	439.00	131
117.00	39104	192.00	3812	271.00	686	440.00	576
118.00	3130	193.00	4490	272.00	797	441.00	46008
119.00	406	194.00	302	273.00	5735	442.00	309568
120.00	148	195.00	501	274.00	13142	443.00	56776
121.00	739	196.00	10029	275.00	67088	444.00	4910
122.00	3167	197.00	1560	276.00	8295	445.00	124
123.00	4691	198.00	306752	277.00	5309		

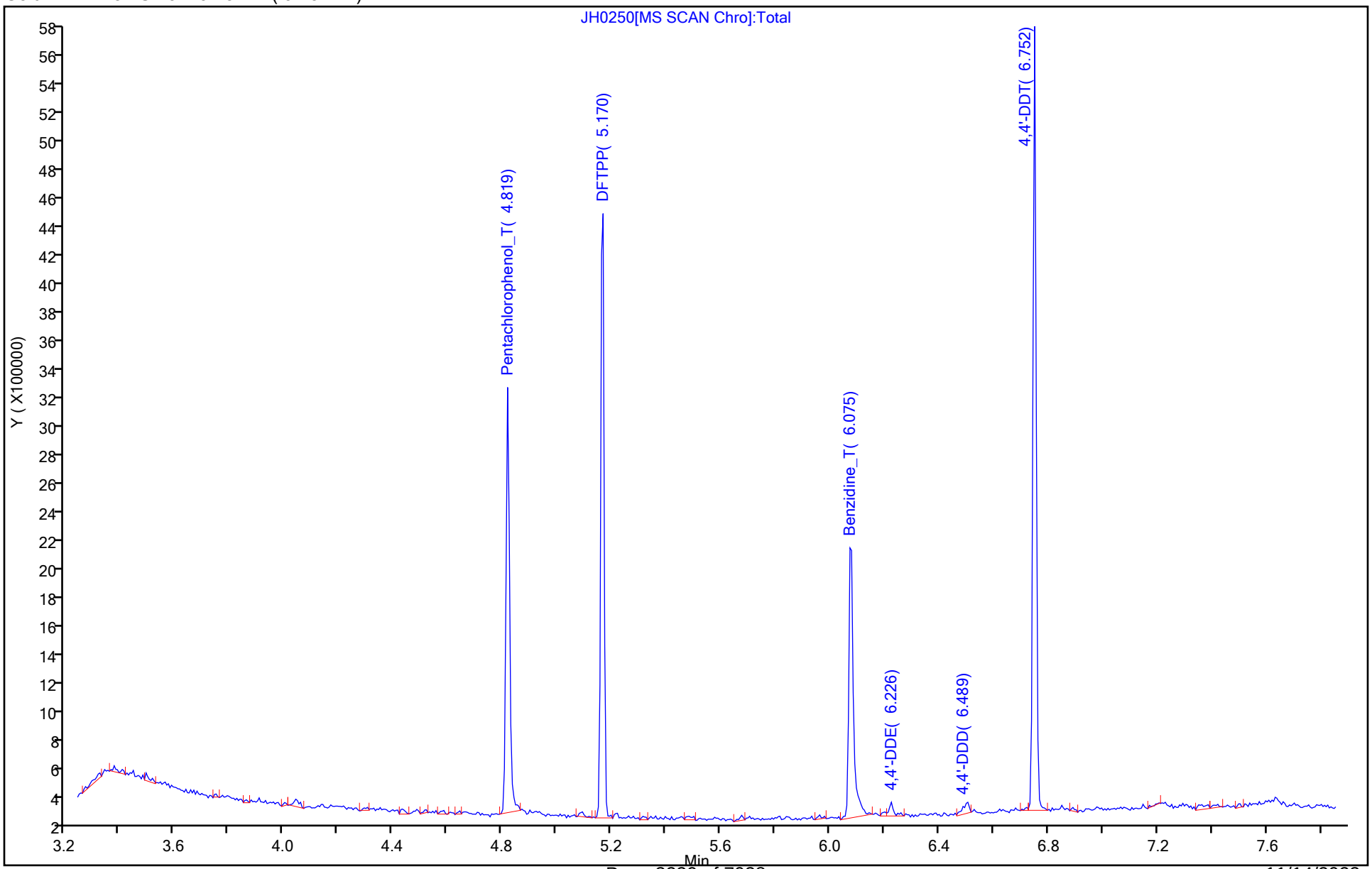
Report Date: 02-Aug-2023 22:19:29 Chrom Revision: 2.3 02-Aug-2023 16:16:36

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0250.D

Injection Date:	02-Aug-2023 20:15:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Breakdown Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0250.D
Injection Date: 02-Aug-2023 20:15:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

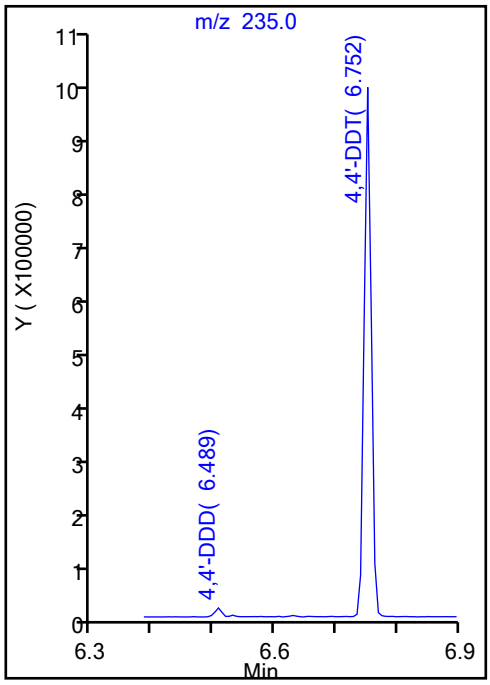
209 4,4'-DDT, Detector: MS SCAN

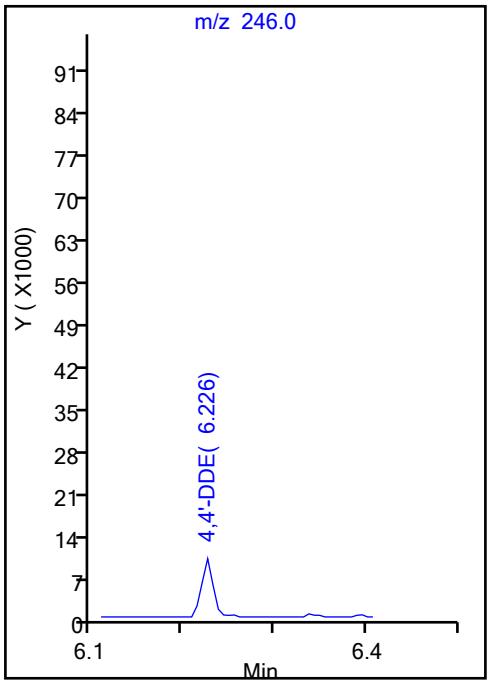
SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

209 4,4'-DDT, Area = 791563
210 4,4'-DDD, Area = 12845
208 4,4'-DDE, Area = 8708

%Breakdown: 2.65%, <= 20.00%
Passed





Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

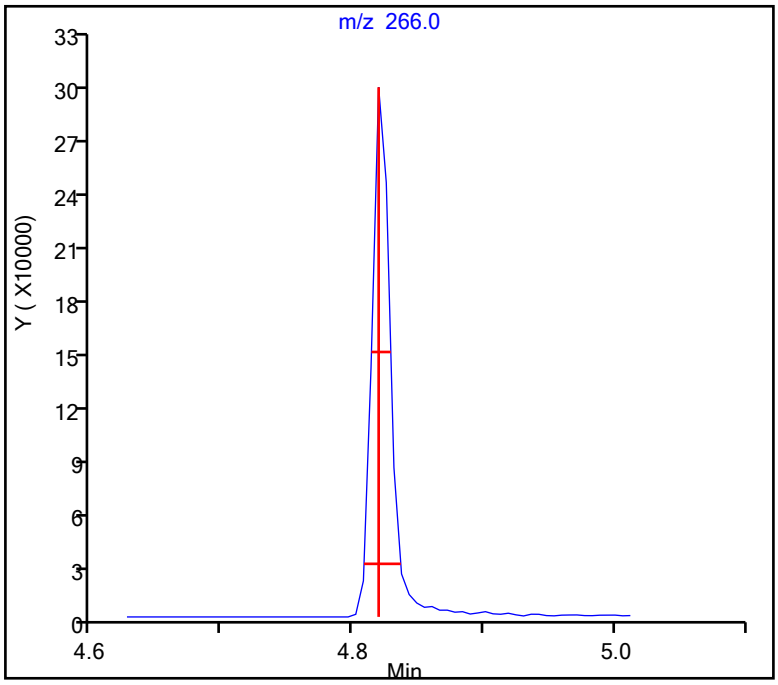
Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0250.D
Injection Date: 02-Aug-2023 20:15:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

10 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.017 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.55, Max. Tailing <= 2.00
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

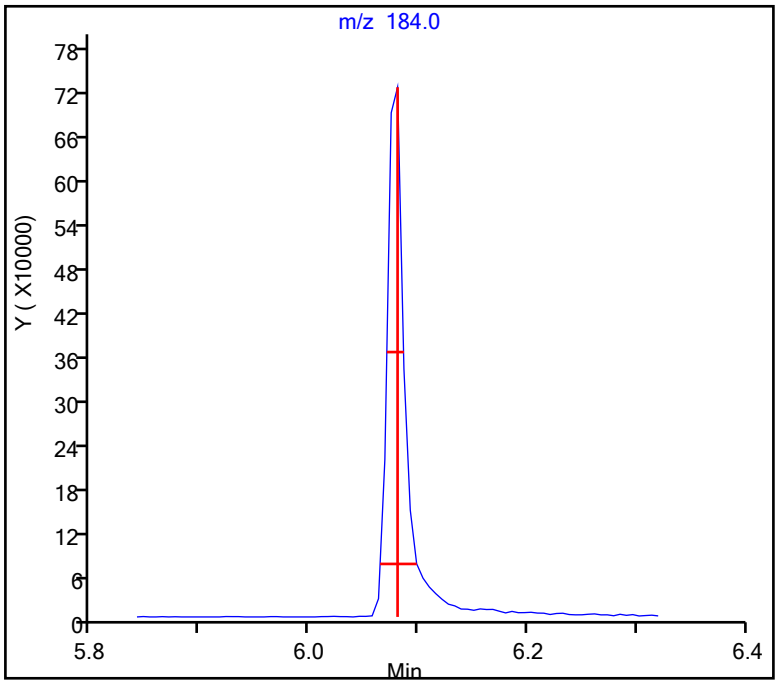
Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0250.D
Injection Date: 02-Aug-2023 20:15:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

14 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.018 (min.)
Front Width = 0.016 (min.)

Tailing Factor = 1.13, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3100a.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 31-Oct-2023 14:09:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 01-Nov-2023 08:36:49 Calib Date: 31-Oct-2023 17:10:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3108.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1662

First Level Reviewer: P7EB Date: 31-Oct-2023 14:32:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
10 Pentachlorophenol_T	266	4.492	4.492	0.000	92	295485	NR	NR	
14 Benzidine_T	184	5.748	5.748	0.000	100	2234203	NR	NR	
207 DFTPP									
208 4,4'-DDE	246		6.419					ND	U
210 4,4'-DDD	235		6.419					ND	U
209 4,4'-DDT	235	6.419	6.419	0.000	98	936024	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
U - Marked Undetected

Reagents:

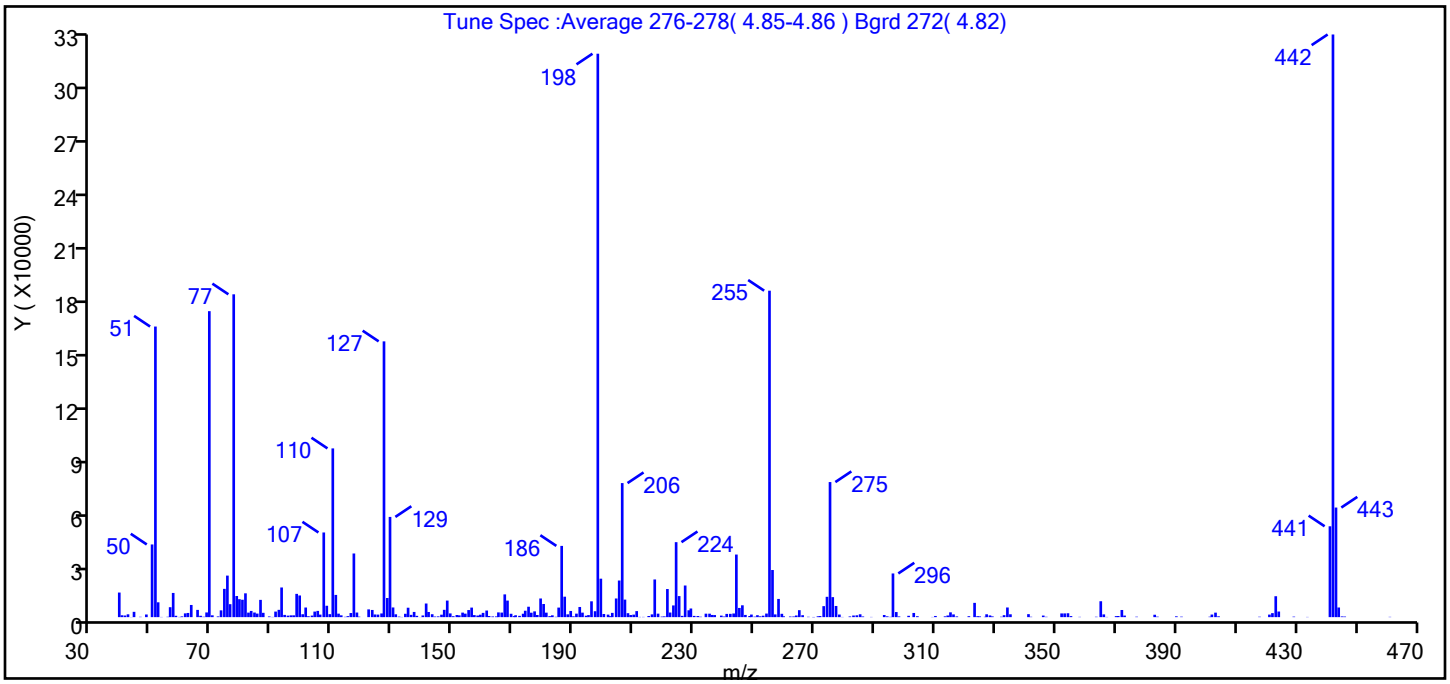
MSS_RVDFTPP_00014 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3100a.D
Injection Date: 31-Oct-2023 14:09:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Tune Method: DFTPP Method 8270D, BP 198

207 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (96.7)
51	10-80% of the base peak	51.6
68	<2% of mass 69	0.8 (1.5)
69	Present	54.3
70	<2% of mass 69	0.3 (0.6)
127	10-80% of the base peak	48.9
197	<2% of mass 198	1.0
199	5-9% of mass 198	6.8
275	10-60% of the base peak	24.0
365	>1% of mass 198	2.8
441	present but <24% of mass 442	16.1 (15.6)
442	base peak, or >50% of 198	103.4
443	15-24% of mass 442	19.5 (18.8)

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3100a.D\MSSemi_HP23264.rslt\spectra.c
Injection Date: 31-Oct-2023 14:09:30
Spectrum: Tune Spec :Average 276-278(4.85-4.86) Bgrd 272(4.82)
Base Peak: 442.10
Minimum % Base Peak: 0
Number of Points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	13914	124.00	1516	200.00	1783	283.00	927
40.00	1056	125.00	1440	201.00	1429	284.00	1045
41.00	917	126.00	2090	202.00	561	285.00	1618
42.00	1598	127.00	156032	203.00	2414	286.00	374
43.00	68	128.00	10824	204.00	10558	289.00	119
44.00	3005	129.00	56712	205.00	20720	293.00	1207
46.00	189	130.00	5478	206.00	75848	294.00	446
48.00	1501	131.00	1611	207.00	9921	295.00	165
50.00	41128	132.00	306	208.00	2238	296.00	24712
51.00	164416	133.00	107	209.00	1193	297.00	2881
52.00	8396	134.00	1900	210.00	1418	298.00	403
53.00	110	135.00	5333	211.00	3415	301.00	760
55.00	204	136.00	1289	212.00	131	303.00	2365
56.00	5623	137.00	2946	213.00	134	304.00	523
57.00	13691	138.00	740	215.00	647	309.00	107
58.00	767	139.00	42	216.00	1564	310.00	665
59.00	125	140.00	946	217.00	21320	313.00	452
60.00	423	141.00	7718	218.00	1970	314.00	932
61.00	2129	142.00	2915	219.00	319	315.00	2720
62.00	2367	143.00	1653	220.00	423	316.00	1544
63.00	6886	144.00	339	221.00	15906	317.00	405
65.00	4101	145.00	426	222.00	2604	321.00	526
66.00	776	146.00	1385	223.00	6629	323.00	8078
67.00	236	147.00	4141	224.00	42424	324.00	540
68.00	2660	148.00	9374	225.00	11911	325.00	425
69.00	173120	149.00	2111	226.00	730	327.00	198
70.00	1034	150.00	518	227.00	17896	327.00	1621
72.00	404	151.00	1206	228.00	3886	328.00	964
73.00	3841	152.00	1003	229.00	4893	329.00	426
74.00	16002	153.00	2561	230.00	699	332.00	233
75.00	23504	154.00	1976	231.00	622	333.00	1114
76.00	7337	155.00	4007	232.00	233	334.00	5463
77.00	182656	156.00	5408	234.00	1960	335.00	1613

Report Date: 01-Nov-2023 08:36:49 Chrom Revision: 2.3 31-Oct-2023 19:36:22
Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3100a.D\MSSemi_HP23264.rslt\spectra.c
Injection Date: 31-Oct-2023 14:09:30
Spectrum: Tune Spec :Average 276-278(4.85-4.86) Bgrd 272(4.82)
Base Peak: 442.10
Minimum % Base Peak: 0
Number of Points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	11952	157.00	1153	235.00	1965	341.00	1692
79.00	10155	158.00	904	236.00	1240	342.00	218
80.00	9843	159.00	1374	237.00	1175	346.00	893
81.00	13476	160.00	2414	239.00	863	347.00	199
82.00	2557	161.00	3733	240.00	347	352.00	2103
83.00	3514	162.00	637	241.00	1833	353.00	2107
84.00	2608	163.00	387	242.00	1863	354.00	2203
85.00	2011	164.00	406	243.00	2066	355.00	594
86.00	9773	165.00	2681	244.00	35416	358.00	157
87.00	2448	166.00	2577	245.00	5208	364.00	225
89.00	388	167.00	12876	246.00	6704	365.00	8998
90.00	119	168.00	9372	247.00	1251	366.00	1554
91.00	3144	169.00	1907	248.00	652	367.00	123
92.00	4132	170.00	582	249.00	1469	370.00	572
93.00	16784	171.00	1070	250.00	282	371.00	641
94.00	1271	172.00	733	251.00	1102	372.00	4049
95.00	855	173.00	1927	252.00	463	373.00	886
96.00	1010	174.00	3626	253.00	827	377.00	249
97.00	1028	175.00	5890	254.00	2030	383.00	1357
98.00	13172	176.00	2505	255.00	184704	384.00	281
99.00	12258	177.00	3265	256.00	26664	390.00	468
100.00	1643	178.00	1221	257.00	1548	392.00	274
101.00	5444	179.00	10558	258.00	10300	401.00	259
102.00	501	180.00	7433	259.00	1889	402.00	1469
103.00	881	181.00	2542	260.00	481	403.00	2540
104.00	3147	182.00	569	262.00	359	404.00	463
105.00	3540	183.00	1025	263.00	378	418.00	235
106.00	1437	184.00	187	264.00	931	421.00	1444
107.00	47904	185.00	5406	265.00	3940	422.00	2269
108.00	6445	186.00	40312	266.00	1097	423.00	11838
109.00	1691	187.00	11572	268.00	206	424.00	3180
110.00	95472	188.00	1588	270.00	96	429.00	285
111.00	12579	189.00	3495	270.00	85	434.00	119
112.00	1969	190.00	447	271.00	470	441.00	51408

Report Date: 01-Nov-2023 08:36:49 Chrom Revision: 2.3 31-Oct-2023 19:36:22
Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3100a.D\MSSemi_HP23264.rslt\spectra.c
Injection Date: 31-Oct-2023 14:09:30
Spectrum: Tune Spec :Average 276-278(4.85-4.86) Bgrd 272(4.82)
Base Peak: 442.10
Minimum % Base Peak: 0
Number of Points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	1021	191.00	1981	272.00	609	442.00	329664
114.00	177	192.00	5752	273.00	6224	443.00	62008
115.00	568	193.00	2550	274.00	11502	444.00	5456
116.00	2329	194.00	810	275.00	76424	445.00	401
117.00	36016	195.00	1162	276.00	11322	446.00	328
118.00	2607	196.00	8957	277.00	6321	461.00	164
119.00	276	197.00	3347	278.00	1471		
122.00	4384	198.00	318784	279.00	108		
123.00	4063	199.00	21760	282.00	397		

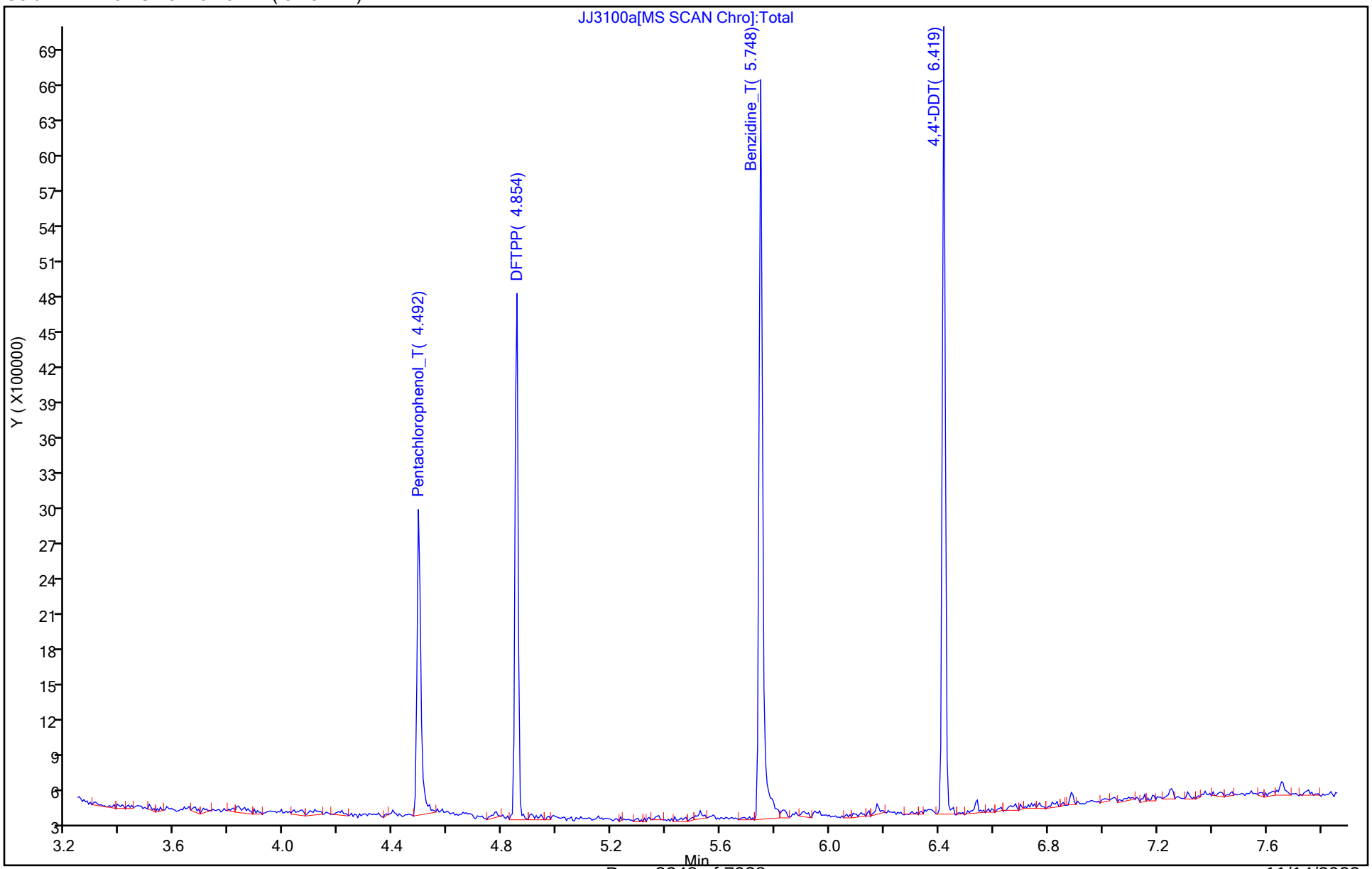
Report Date: 01-Nov-2023 08:36:49 Chrom Revision: 2.3 31-Oct-2023 19:36:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3100a.D

Injection Date:	31-Oct-2023 14:09:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Breakdown Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3100a.D
Injection Date: 31-Oct-2023 14:09:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

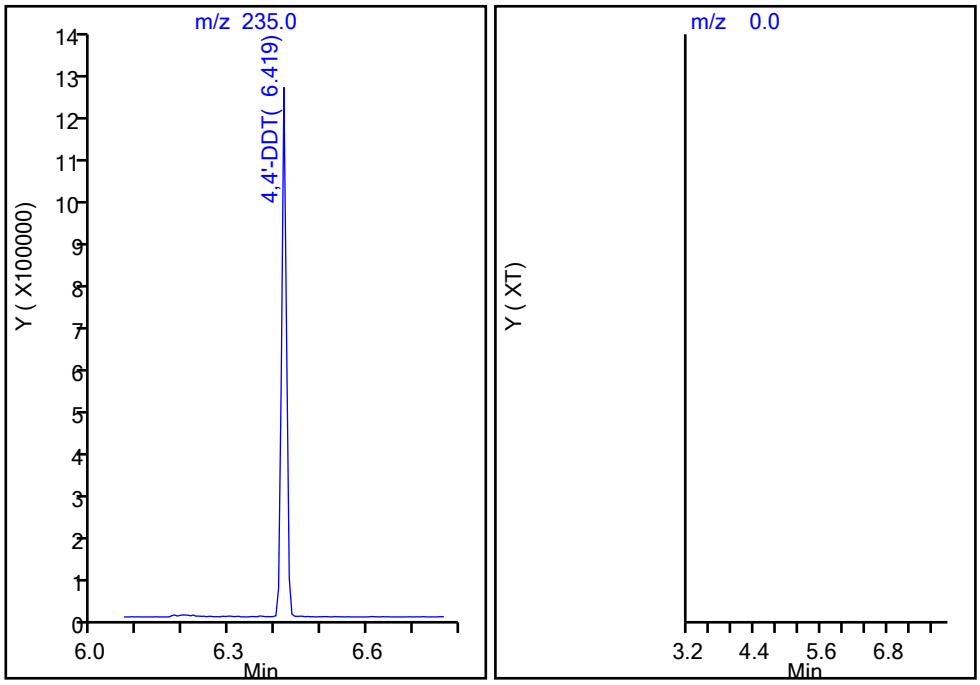
209 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

209 4,4'-DDT, Area = 936024
210 4,4'-DDD, Area = 0
208 4,4'-DDE, Area = 0

%Breakdown: 0.00%, <= 20.00%
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

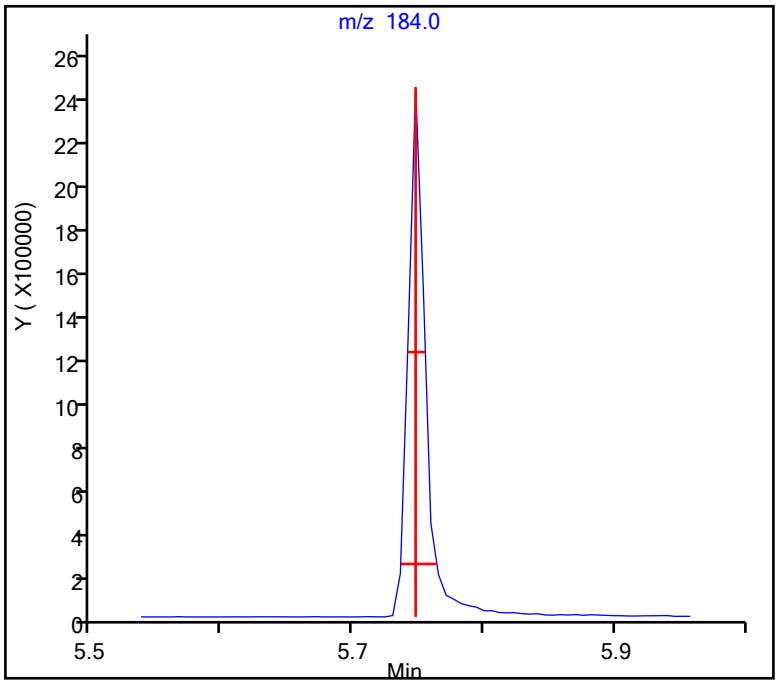
Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3100a.D
Injection Date: 31-Oct-2023 14:09:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

14 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.016 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.45, Max. Tailing <= 2.00
Passed



Peak Tailing Report

Eurofins Lancaster Laboratories Environment Testing, LLC

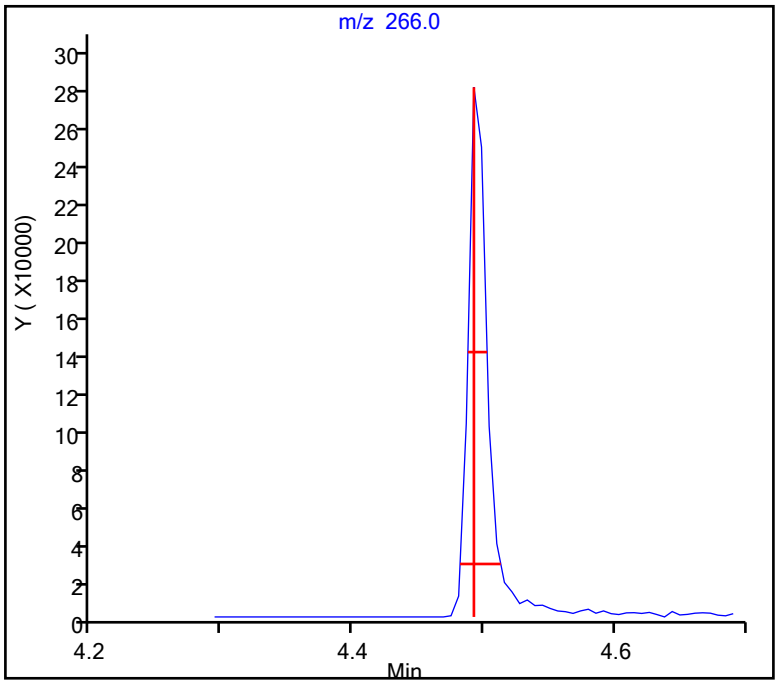
Data File: \\chromfs\Lancaster\ChromData\HP23264\20231031-98173.b\JJ3100a.D
Injection Date: 31-Oct-2023 14:09:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: mem41592 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

10 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.021 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.91, Max. Tailing <= 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-403666/1-A

Matrix: Water
Lab File ID: JH0259.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 250(mL)
Date Analyzed: 08/02/2023 23:30

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		10	2.0
99-65-0	1,3-Dinitrobenzene	ND		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	ND		10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	ND		10	1.8
95-95-4	2,4,5-Trichlorophenol	ND		10	2.0
88-06-2	2,4,6-Trichlorophenol	ND		10	1.8
120-83-2	2,4-Dichlorophenol	ND		10	1.5
121-14-2	2,4-Dinitrotoluene	ND		10	2.1
87-65-0	2,6-Dichlorophenol	ND		10	1.4
606-20-2	2,6-Dinitrotoluene	ND		10	2.1
91-58-7	2-Chloronaphthalene	ND		10	0.50
95-57-8	2-Chlorophenol	ND		10	1.0
91-57-6	2-Methylnaphthalene	ND		10	0.29
95-48-7	o-Cresol	ND		10	0.80
88-74-4	2-Nitroaniline	ND		10	1.0
88-75-5	2-Nitrophenol	ND		10	1.2
101-55-3	4-Bromophenyl-phenylether	ND		10	0.56
59-50-7	4-Chloro-3-methylphenol	ND		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	ND		10	0.60
106-44-5	m & p-Cresol	ND		20	2.4
100-01-6	4-Nitroaniline	ND		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		10	2.0
83-32-9	Acenaphthene	ND		10	0.35
208-96-8	Acenaphthylene	ND		10	0.48
120-12-7	Anthracene	ND		10	0.52
56-55-3	Benzo[a]anthracene	ND		10	0.45
50-32-8	Benzo[a]pyrene	ND		10	1.5
205-99-2	Benzo[b]fluoranthene	ND		10	1.2
191-24-2	Benzo[g,h,i]perylene	ND		10	0.42
207-08-9	Benzo[k]fluoranthene	ND		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-403666/1-A

Matrix: Water
Lab File ID: JH0259.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 250(mL)
Date Analyzed: 08/02/2023 23:30

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	ND		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	ND		10	0.38
132-64-9	Dibenzofuran	ND		10	0.60
84-66-2	Diethyl phthalate	ND		10	2.0
60-51-5	Dimethoate	ND		10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	ND		10	0.42
86-73-7	Fluorene	ND		10	0.38
118-74-1	Hexachlorobenzene	ND		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	ND		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND		50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	ND		10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58
59-89-2	N-Nitrosomorpholine	ND		10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	ND		10	0.60
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	ND		10	3.0
85-01-8	Phenanthrene	ND		10	0.52
108-95-2	Phenol	ND		10	0.60
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	ND		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND		50	5.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-403666/1-A

Matrix: Water
Lab File ID: JH0259.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 250(mL)
Date Analyzed: 08/02/2023 23:30

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	85		13-138
321-60-8	2-Fluorobiphenyl (Surr)	82		44-120
367-12-4	2-Fluorophenol (Surr)	43		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	73		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	86		30-125
4165-62-2	Phenol-d5 (Surr)	30		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0259.D
Lims ID: MB 410-403666/1-A
Client ID:
Sample Type: MB
Inject. Date: 02-Aug-2023 23:30:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 410-403666/1-A
Misc. Info.: 410-0090492-010
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 08:48:58 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:38:21

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88		1.701					ND	U
	2 N-Nitrosodimethylamine	74		1.928					ND	7
$	9 2-Fluorophenol	112	3.085	3.090	-0.005	96	904265	50.0	21.6	
	11 N-Nitrosodiethylamine	102		3.283					ND	
	12 Ethyl methanesulfonate	109		3.581					ND	
	13 Benzaldehyde	77		3.908					ND	7
$	15 Phenol-d5	99	3.990	3.990	0.000	95	908100	50.0	15.2	
	16 Phenol	94		4.001					ND	7
	18 Bis(2-chloroethyl)ether	93		4.071					ND	7
	19 2-Chlorophenol	128		4.130					ND	7
*	22 1,4-Dichlorobenzene-d4	152	4.328	4.322	0.006	97	135972	5.00	5.00	
	29 2-Methylphenol	108		4.579					ND	
	30 2,2'-oxybis[1-chloropropane]	45		4.585					ND	7
	33 N-Nitrosodi-n-propylamine	70		4.708					ND	U
	32 Acetophenone	105		4.708					ND	7
	35 N-Nitrosomorpholine	56		4.731					ND	
	34 4-Methylphenol	108		4.731					ND	7
	37 Hexachloroethane	117		4.807					ND	7
$	39 Nitrobenzene-d5	82	4.854	4.854	0.000	94	1020718	25.0	18.3	
	40 Nitrobenzene	77		4.871					ND	U
	41 N-Nitrosopiperidine	114		5.017					ND	
	42 Isophorone	82		5.099					ND	7
	43 2-Nitrophenol	139		5.181					ND	7
	44 2,4-Dimethylphenol	107		5.233					ND	7
	46 o,o',o''-Triethylphosphorothioat	198		5.286					ND	
	47 Bis(2-chloroethoxy)methane	93		5.315					ND	
	54 alpha,alpha-Dimethyl phenethylam	58		5.379					ND	7
	49 2,4-Dichlorophenol	162		5.420					ND	
*	52 Naphthalene-d8	136	5.543	5.543	0.000	99	520706	5.00	5.00	
	53 Naphthalene	128		5.560					ND	7
	56 4-Chloroaniline	127		5.619					ND	7

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
57 2,6-Dichlorophenol	162		5.630					ND	
58 Hexachloropropene	213		5.648					ND	
59 Hexachlorobutadiene	225		5.683					ND	
62 Caprolactam	113		5.928					ND	
65 4-Chloro-3-methylphenol	107		6.103					ND	7
66 Safrole, Total	162		6.144					ND	7
67 2-Methylnaphthalene	142		6.220					ND	
71 Hexachlorocyclopentadiene	237		6.372					ND	
70 1,2,4,5-Tetrachlorobenzene	216		6.384					ND	
79 2,4,6-Trichlorophenol	196		6.500					ND	7
80 2,4,5-Trichlorophenol	196		6.541					ND	7
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.576	0.000	99	1701984	25.0	20.4	
83 1,1'-Biphenyl	154		6.670					ND	7
84 2-Chloronaphthalene	162		6.681					ND	
87 2-Nitroaniline	138		6.786					ND	7
90 Dimethyl phthalate	163		6.962					ND	7
91 1,3-Dinitrobenzene	168		6.991					ND	7
92 2,6-Dinitrotoluene	165		7.020					ND	U
93 Acenaphthylene	152		7.078					ND	7
95 3-Nitroaniline	138		7.178					ND	
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	95	262215	5.00	5.00	
97 Acenaphthene	153		7.242					ND	
98 2,4-Dinitrophenol	184		7.277					ND	7
99 Pentachlorobenzene	250		7.365					ND	
100 4-Nitrophenol	109		7.370					ND	7
102 2,4-Dinitrotoluene	165		7.400					ND	7
101 Dibenzofuran	168		7.405					ND	7
105 2,3,4,6-Tetrachlorophenol	232		7.528					ND	
107 Diethyl phthalate	149		7.633					ND	7
109 Thionazin	107		7.709					ND	
108 Fluorene	166		7.727					ND	
110 4-Chlorophenyl phenyl ether	204		7.732					ND	
111 N-Nitro-o-toluidine	152		7.744					ND	
112 4-Nitroaniline	138		7.756					ND	
113 4,6-Dinitro-2-methylphenol	198		7.779					ND	7
114 N-Nitrosodiphenylamine	169		7.849					ND	U
$ 116 2,4,6-Tribromophenol	330	7.960	7.960	0.000	89	528703	50.0	42.6	
117 Sulfotepp	97		8.001					ND	7
120 cis-Diallate	86		8.118					ND	7
119 Phorate	75		8.129					ND	7
121 Phenacetin	108		8.147					ND	
122 4-Bromophenyl phenyl ether	248		8.194					ND	7
123 trans-Diallate	86		8.205					ND	7
124 Hexachlorobenzene	284		8.240					ND	
125 Dimethoate	87		8.287					ND	7
126 Atrazine	200		8.357					ND	
127 Pentachlorophenol	266		8.439					ND	
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	97	548571	5.00	5.00	
132 Phenanthrene	178		8.637					ND	7
135 Anthracene	178		8.684					ND	7
136 Carbazole	167		8.848					ND	7
138 Di-n-butyl phthalate	149		9.186					ND	7

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
143 Isodrin	193		9.618					ND	U
S 68 Diallate	86		9.653					ND	7
144 Fluoranthene	202		9.759					ND	7
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	97	509539	5.00	5.00	
147 Pyrene	202		9.975					ND	7
$ 148 p-Terphenyl-d14	244	10.132	10.132	0.000	96	1944335	25.0	21.5	
153 Butyl benzyl phthalate	149		10.640					ND	7
154 Kepone	272		10.646					ND	
157 3,3'-Dichlorobenzidine	252		11.212					ND	7
156 Benzo[a]anthracene	228		11.224					ND	7
159 Chrysene	228		11.265					ND	
160 Bis(2-ethylhexyl) phthalate	149		11.300					ND	MU
162 Di-n-octyl phthalate	149		12.141					ND	7
164 Benzo[b]fluoranthene	252		12.590					ND	7
165 Benzo[k]fluoranthene	252		12.631					ND	7
166 Benzo[a]pyrene	252		13.040					ND	U
* 167 Perylene-d12	264	13.116	13.116	0.000	95	380144	5.00	5.00	
171 Indeno[1,2,3-cd]pyrene	276		14.622					ND	7
172 Dibenz(a,h)anthracene	278		14.663					ND	7
173 Benzo[g,h,i]perylene	276		14.973					ND	

QC Flag Legend

Processing Flags
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected

Reagents:

MSS_RV8270_IS_00059 Amount Added: 20.00 Units: uL Run Reagent

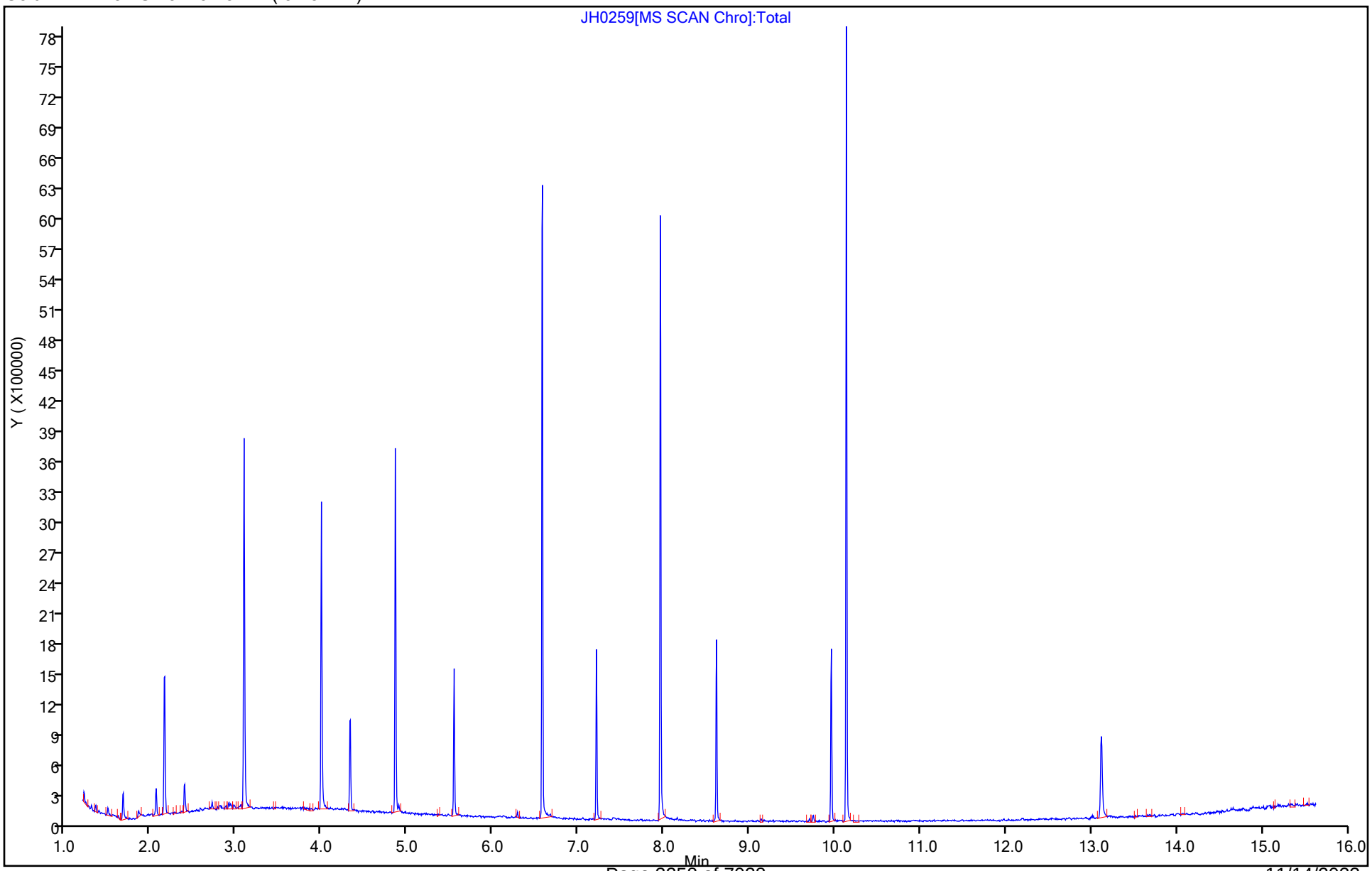
Report Date: 03-Aug-2023 08:54:03 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0259.D

Injection Date:	02-Aug-2023 23:30:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	MB 410-403666/1-A			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0259.D
Lims ID: MB 410-403666/1-A
Client ID:
Sample Type: MB
Inject. Date: 02-Aug-2023 23:30:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 410-403666/1-A
Misc. Info.: 410-0090492-010
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 08:48:58 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:38:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 2-Fluorophenol	50.0	21.6	43.28
$ 15 Phenol-d5	50.0	15.2	30.31
$ 39 Nitrobenzene-d5	25.0	18.3	73.25
$ 81 2-Fluorobiphenyl (Surr)	25.0	20.4	81.80
$ 116 2,4,6-Tribromophenol	50.0	42.6	85.13
$ 148 p-Terphenyl-d14	25.0	21.5	86.08

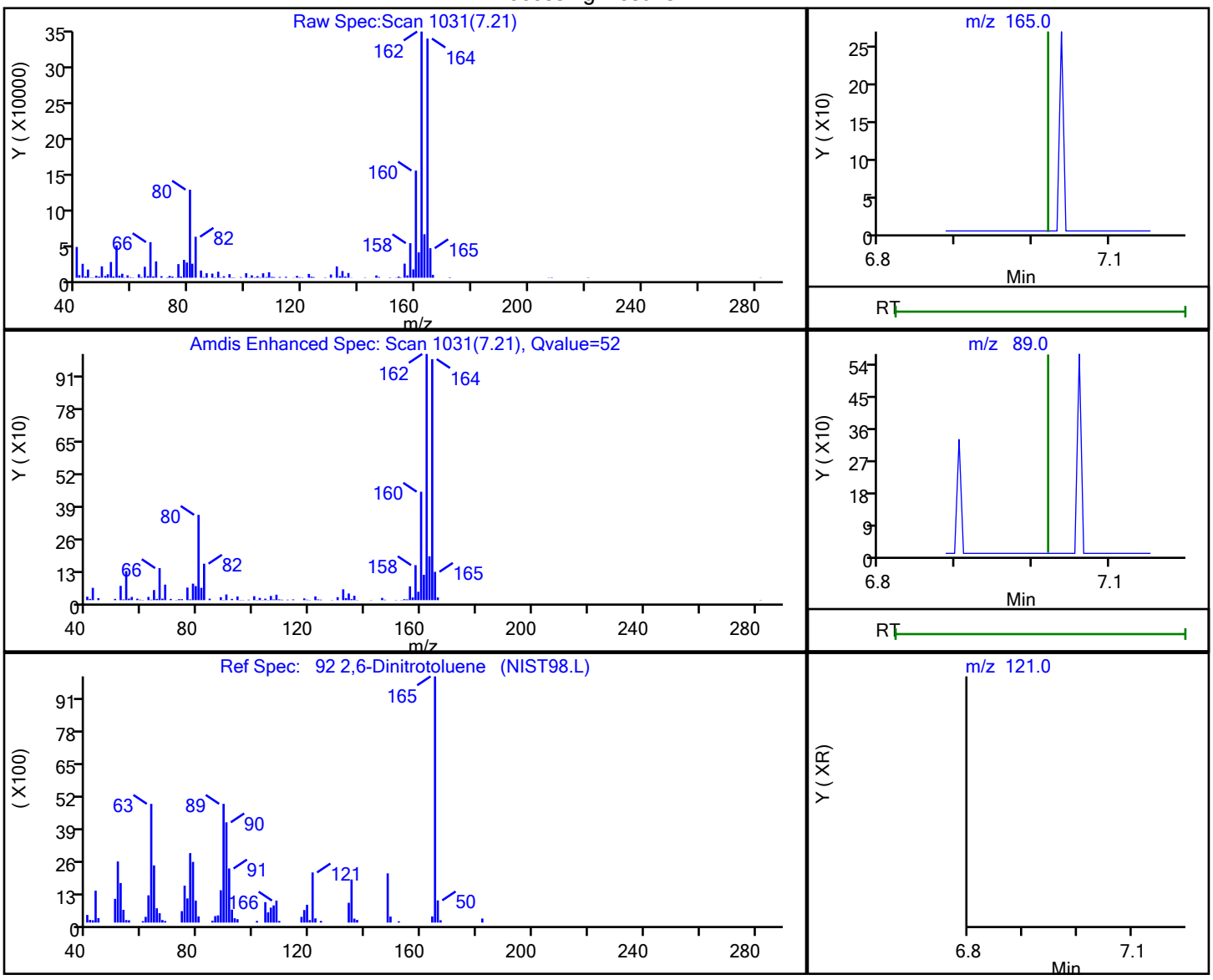
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0259.D				
Injection Date:	02-Aug-2023 23:30:30	Instrument ID:	HP23264		
Lims ID:	MB 410-403666/1-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

92 2,6-Dinitrotoluene, CAS: 606-20-2

Processing Results



RT	Mass	Response	Amount
7.21	165.00	31842	2.070593
7.20	89.00	661	
7.02	121.00	0	
7.20	63.00	2123	

Reviewer: N5QU, 03-Aug-2023 07:34:32 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

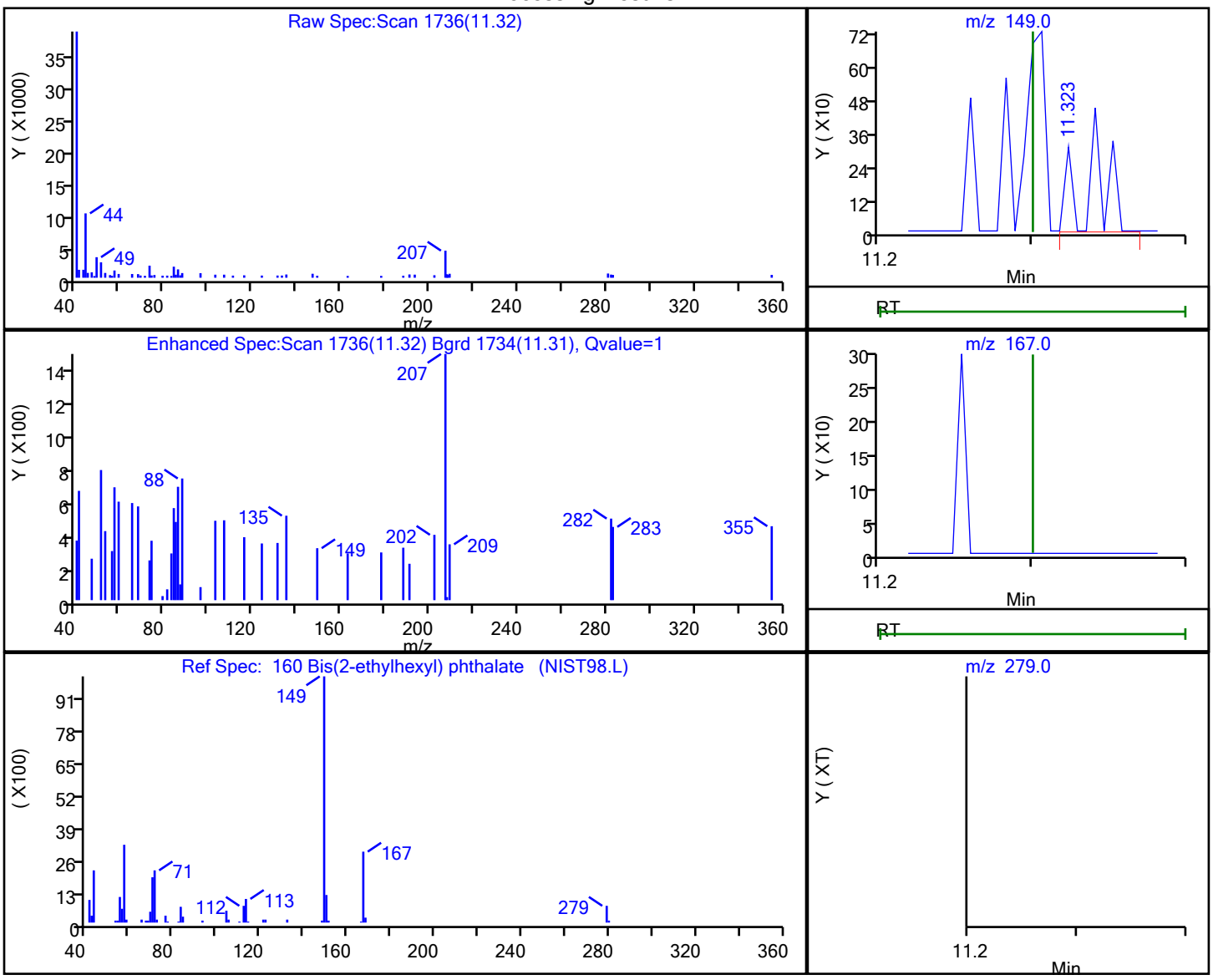
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0259.D				
Injection Date:	02-Aug-2023 23:30:30	Instrument ID:	HP23264		
Lims ID:	MB 410-403666/1-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

160 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

Processing Results



RT	Mass	Response	Amount
11.32	149.00	380	0.004704
11.30	167.00	0	
11.30	279.00	0	

Reviewer: N5QU, 03-Aug-2023 07:37:00 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

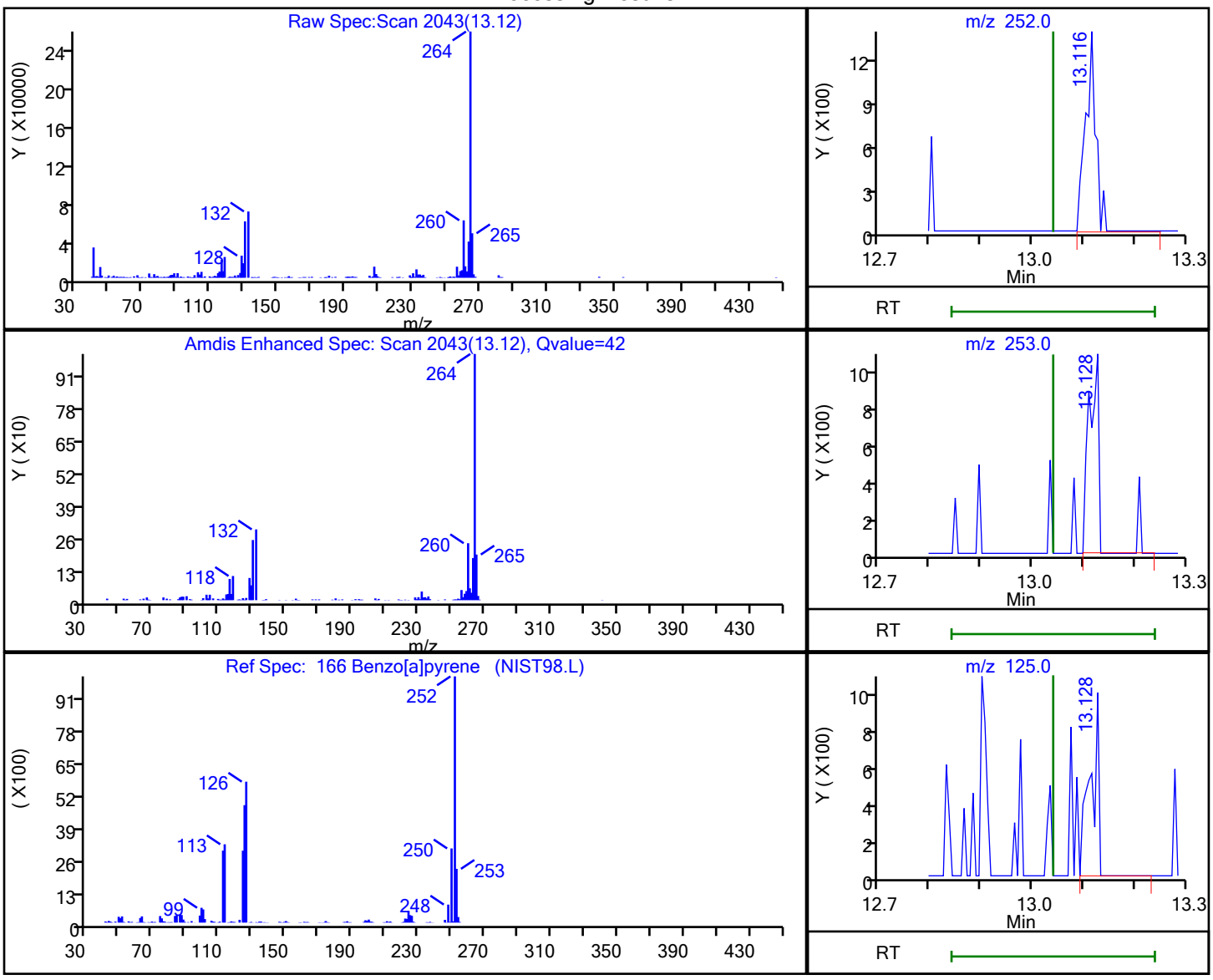
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0259.D				
Injection Date:	02-Aug-2023 23:30:30	Instrument ID:	HP23264		
Lims ID:	MB 410-403666/1-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

166 Benzo[a]pyrene, CAS: 50-32-8

Processing Results



RT	Mass	Response	Amount
13.12	252.00	1818	0.022475
13.13	253.00	1484	
13.13	125.00	1066	

Reviewer: N5QU, 03-Aug-2023 07:37:18 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

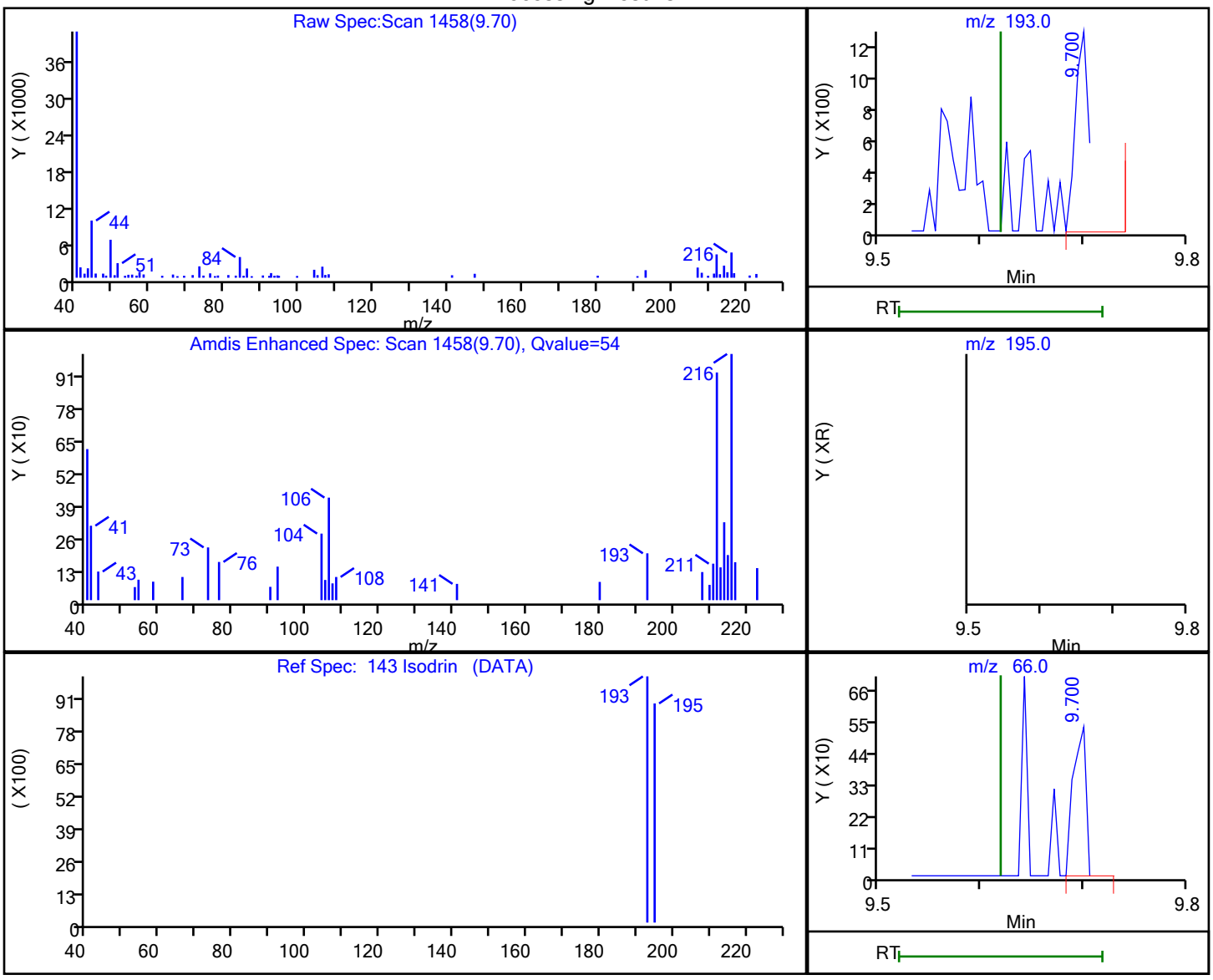
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0259.D				
Injection Date:	02-Aug-2023 23:30:30	Instrument ID:	HP23264		
Lims ID:	MB 410-403666/1-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

143 Isodrin, CAS: 465-73-6

Processing Results



RT	Mass	Response	Amount
9.70	193.00	1726	0.112817
9.62	195.00	0	
9.70	66.00	686	
9.62	263.00	0	

Reviewer: N5QU, 03-Aug-2023 07:36:10 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

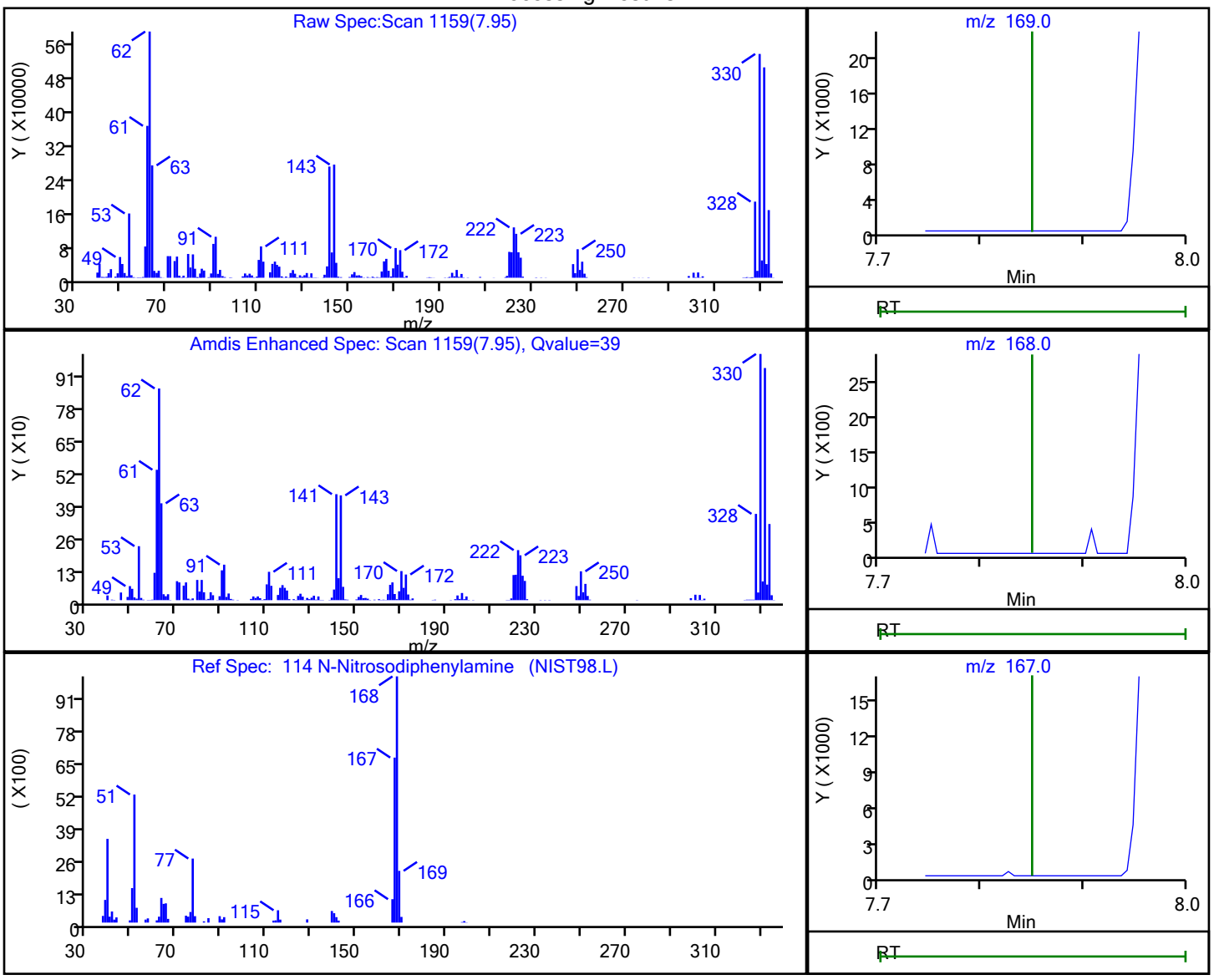
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0259.D				
Injection Date:	02-Aug-2023 23:30:30	Instrument ID:	HP23264		
Lims ID:	MB 410-403666/1-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

114 N-Nitrosodiphenylamine, CAS: 86-30-6

Processing Results



RT	Mass	Response	Amount
7.95	169.00	20229	0.302686
7.95	168.00	2476	
7.95	167.00	12753	

Reviewer: N5QU, 03-Aug-2023 07:34:52 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

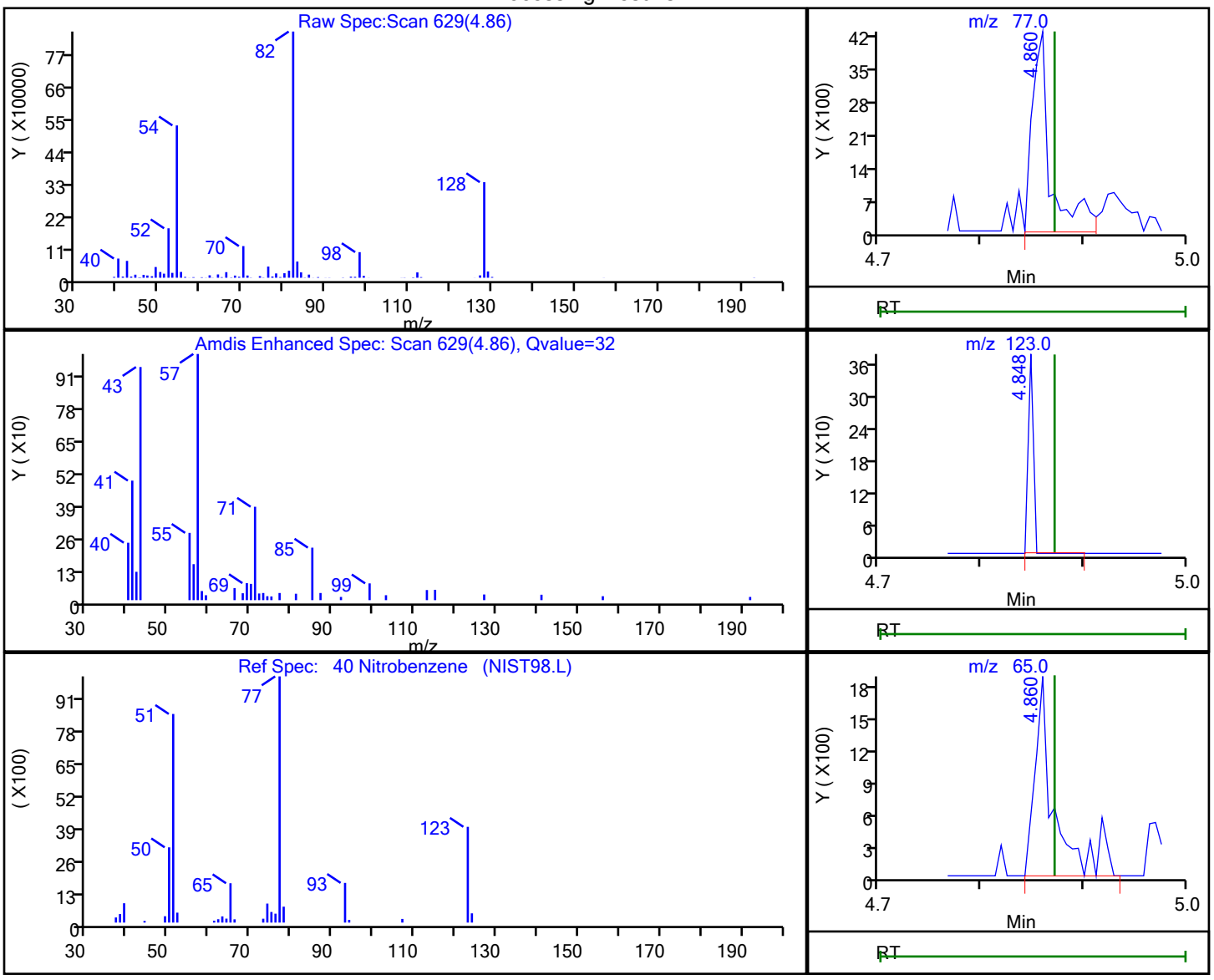
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0259.D				
Injection Date:	02-Aug-2023 23:30:30	Instrument ID:	HP23264		
Lims ID:	MB 410-403666/1-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

40 Nitrobenzene, CAS: 98-95-3

Processing Results



RT	Mass	Response	Amount
4.86	77.00	5101	0.100193
4.85	123.00	132	
4.86	65.00	2506	

Reviewer: N5QU, 03-Aug-2023 07:34:06 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-403918/1-A

Matrix: Water
Lab File ID: DH0355a.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 16:22

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		10	2.0
99-65-0	1,3-Dinitrobenzene	ND		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	ND		10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	ND		10	1.8
95-95-4	2,4,5-Trichlorophenol	ND		10	2.0
88-06-2	2,4,6-Trichlorophenol	ND		10	1.8
120-83-2	2,4-Dichlorophenol	ND		10	1.5
121-14-2	2,4-Dinitrotoluene	ND		10	2.1
87-65-0	2,6-Dichlorophenol	ND		10	1.4
606-20-2	2,6-Dinitrotoluene	ND		10	2.1
91-58-7	2-Chloronaphthalene	ND		10	0.50
95-57-8	2-Chlorophenol	ND		10	1.0
91-57-6	2-Methylnaphthalene	ND		10	0.29
95-48-7	o-Cresol	ND		10	0.80
88-74-4	2-Nitroaniline	ND		10	1.0
88-75-5	2-Nitrophenol	ND		10	1.2
101-55-3	4-Bromophenyl-phenylether	ND		10	0.56
59-50-7	4-Chloro-3-methylphenol	ND		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	ND		10	0.60
106-44-5	m & p-Cresol	ND		20	2.4
100-01-6	4-Nitroaniline	ND		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		10	2.0
83-32-9	Acenaphthene	ND		10	0.35
208-96-8	Acenaphthylene	ND		10	0.48
120-12-7	Anthracene	ND		10	0.52
56-55-3	Benzo[a]anthracene	ND		10	0.45
50-32-8	Benzo[a]pyrene	ND		10	1.5
205-99-2	Benzo[b]fluoranthene	ND		10	1.2
191-24-2	Benzo[g,h,i]perylene	ND		10	0.42
207-08-9	Benzo[k]fluoranthene	ND		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-403918/1-A

Matrix: Water
Lab File ID: DH0355a.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 16:22

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	ND		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	ND		10	0.38
132-64-9	Dibenzofuran	ND		10	0.60
84-66-2	Diethyl phthalate	ND		10	2.0
60-51-5	Dimethoate	ND		10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	ND		10	0.42
86-73-7	Fluorene	ND		10	0.38
118-74-1	Hexachlorobenzene	ND		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	ND		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND		50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	ND		10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	ND		10	0.58
59-89-2	N-Nitrosomorpholine	ND		10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	ND		10	0.60
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	ND		10	3.0
85-01-8	Phenanthrene	ND		10	0.52
108-95-2	Phenol	ND		10	0.60
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	ND		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND		50	5.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-403918/1-A

Matrix: Water
Lab File ID: DH0355a.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 16:22

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	81		13-138
321-60-8	2-Fluorobiphenyl (Surr)	69		44-120
367-12-4	2-Fluorophenol (Surr)	44		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	64		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	98		30-125
4165-62-2	Phenol-d5 (Surr)	26		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0355a.D
Lims ID: MB 410-403918/1-A
Client ID:
Sample Type: MB
Inject. Date: 03-Aug-2023 16:22:21 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 410-403918/1-A
Misc. Info.: 410-0090557-006
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 14:21:25 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1655

First Level Reviewer: P7EB Date: 04-Aug-2023 14:02:29

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	3 N-Nitrosodimethylamine	74		1.728					ND	
$	10 2-Fluorophenol	112	2.824	2.824	0.000	91	1062792	50.0	21.8	
	11 N-Nitrosodiethylamine	102		3.016					ND	
	12 Ethyl methanesulfonate	109		3.314					ND	
	15 Benzaldehyde	77		3.640					ND	7
$	16 Phenol-d5	99	3.733	3.728	0.005	96	930241	50.0	13.2	
	17 Phenol	94		3.739					ND	7
	19 Bis(2-chloroethyl)ether	93		3.815					ND	
	20 2-Chlorophenol	128		3.867					ND	7
*	22 1,4-Dichlorobenzene-d4	152	4.077	4.071	0.006	97	166888	5.00	5.00	
	28 2-Methylphenol	108		4.328					ND	
	29 2,2'-oxybis[1-chloropropane]	45		4.340					ND	
	34 Acetophenone	105		4.456					ND	
	33 N-Nitrosodi-n-propylamine	70		4.462					ND	7
	35 N-Nitrosomorpholine	56		4.479					ND	
	32 4-Methylphenol	108		4.479					ND	
	38 Hexachloroethane	117		4.549					ND	
$	39 Nitrobenzene-d5	82	4.614	4.602	0.012	88	1085976	25.0	16.1	
	40 Nitrobenzene	77		4.619					ND	7
	42 N-Nitrosopiperidine	114		4.765					ND	
	43 Isophorone	82		4.852					ND	7
	44 2-Nitrophenol	139		4.928					ND	
	45 2,4-Dimethylphenol	107		4.987					ND	
	46 o,o',o''-Triethylphosphorothioat	198		5.051					ND	
	47 Bis(2-chloroethoxy)methane	93		5.074					ND	
	48 2,4-Dichlorophenol	162		5.167					ND	
*	50 Naphthalene-d8	136	5.301	5.301	0.000	100	643455	5.00	5.00	
	51 Naphthalene	128		5.313					ND	
	37 alpha,alpha-Dimethyl phenethylam	58	5.226	5.342	-0.122	1	463		0.005532	
	53 4-Chloroaniline	127		5.377					ND	
	54 2,6-Dichlorophenol	162		5.383					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
55 Hexachloropropene	213		5.395					ND	
56 Hexachlorobutadiene	225		5.435					ND	
61 Caprolactam	113		5.692					ND	
64 4-Chloro-3-methylphenol	107		5.861					ND	
65 Safrole, Total	162		5.902					ND	
66 2-Methylnaphthalene	142		5.977					ND	
68 Hexachlorocyclopentadiene	237		6.129					ND	
69 1,2,4,5-Tetrachlorobenzene	216		6.135					ND	
71 2,4,6-Trichlorophenol	196		6.251					ND	
72 2,4,5-Trichlorophenol	196		6.298					ND	
$ 73 2-Fluorobiphenyl (Surr)	172	6.345	6.333	0.012	99	1752580	25.0	17.3	
75 1,1'-Biphenyl	154		6.426					ND	7
76 2-Chloronaphthalene	162		6.438					ND	
79 2-Nitroaniline	138		6.543					ND	
85 Dimethyl phthalate	163		6.729					ND	
86 1,3-Dinitrobenzene	168		6.753					ND	
87 2,6-Dinitrotoluene	165		6.782					ND	
88 Acenaphthylene	152		6.828					ND	
89 3-Nitroaniline	138		6.939					ND	
* 90 Acenaphthene-d10	164	6.974	6.968	0.006	96	356441	5.00	5.00	
91 Acenaphthene	153		6.992					ND	
92 2,4-Dinitrophenol	184		7.038					ND	
94 Pentachlorobenzene	250		7.120					ND	
93 4-Nitrophenol	109		7.131					ND	
95 2,4-Dinitrotoluene	165		7.161					ND	
96 Dibenzofuran	168		7.161					ND	
98 2,3,4,6-Tetrachlorophenol	232		7.283					ND	
100 Diethyl phthalate	149		7.400					ND	
101 Thionazin	107		7.475					ND	
102 Fluorene	166		7.481					ND	
103 4-Chlorophenyl phenyl ether	204		7.493					ND	
104 N-Nitro-o-toluidine	152		7.505					ND	
105 4-Nitroaniline	138		7.516					ND	
106 4,6-Dinitro-2-methylphenol	198		7.539					ND	
107 N-Nitrosodiphenylamine	169		7.609					ND	
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	87	498808	50.0	40.6	
110 Sulfotepp	97		7.773					ND	
113 cis-Diallate	86		7.883					ND	7
114 Phorate	75		7.895					ND	
115 Phenacetin	108		7.918					ND	
116 4-Bromophenyl phenyl ether	248		7.953					ND	
117 trans-Diallate	86		7.971					ND	7
118 Hexachlorobenzene	284		8.000					ND	
119 Dimethoate	87		8.052					ND	7
120 Atrazine	200		8.128					ND	
121 Pentachlorophenol	266		8.198					ND	
* 126 Phenanthrene-d10	188	8.379	8.373	0.006	97	670686	5.00	5.00	
128 Phenanthrene	178		8.390					ND	7
129 Anthracene	178		8.437					ND	7
130 Carbazole	167		8.600					ND	
133 Di-n-butyl phthalate	149		8.956					ND	7
141 Isodrin	193		9.370					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
143 Fluoranthene	202		9.515					ND	7
S 136 Diallate	86		9.653					ND	7
* 149 Pyrene-d10 (IS)	212	9.725	9.719	0.006	99	654777	5.00	5.00	
150 Pyrene	202		9.731					ND	7
$ 152 p-Terphenyl-d14	244	9.912	9.894	0.012	97	2646071	25.0	24.5	
153 Kepone	272		10.396					ND	
157 Butyl benzyl phthalate	149		10.396					ND	
159 3,3'-Dichlorobenzidine	252		10.938					ND	
161 Benzo[a]anthracene	228		10.938					ND	
162 Chrysene	228		10.978					ND	
163 Bis(2-ethylhexyl) phthalate	149		11.037					ND	
165 Di-n-octyl phthalate	149		11.835					ND	7
167 Benzo[b]fluoranthene	252		12.232					ND	
168 Benzo[k]fluoranthene	252		12.272					ND	
169 Benzo[a]pyrene	252		12.657					ND	U
* 170 Perylene-d12	264	12.745	12.739	0.006	97	413481	5.00	5.00	
174 Indeno[1,2,3-cd]pyrene	276		14.196					ND	
175 Dibenz(a,h)anthracene	278		14.242					ND	
176 Benzo[g,h,i]perylene	276		14.551					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

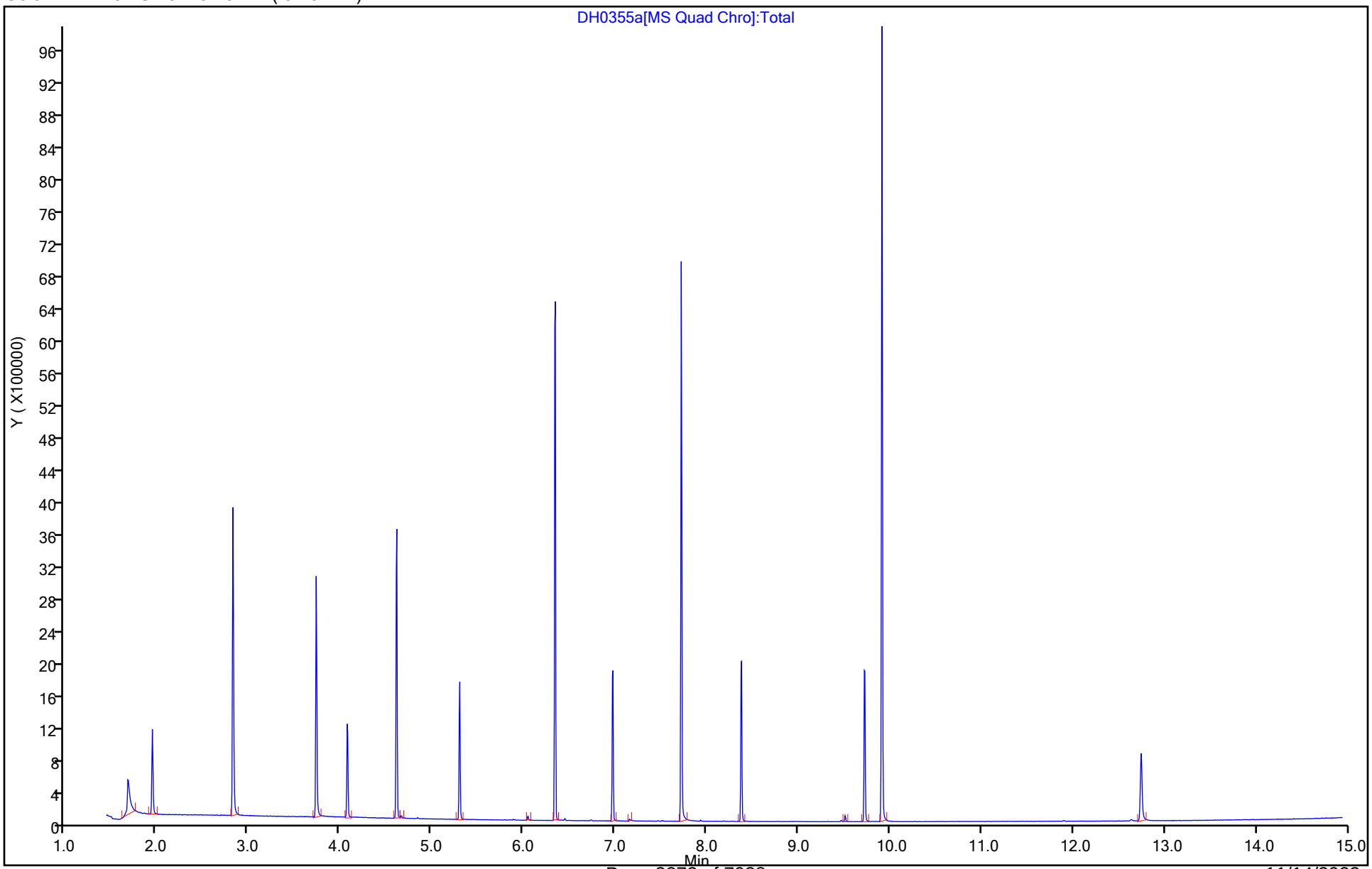
Report Date: 04-Aug-2023 14:21:40 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0355a.D

Injection Date:	03-Aug-2023 16:22:21	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	MB 410-403918/1-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0355a.D
Lims ID: MB 410-403918/1-A
Client ID:
Sample Type: MB
Inject. Date: 03-Aug-2023 16:22:21 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 410-403918/1-A
Misc. Info.: 410-0090557-006
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 14:21:25 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1655

First Level Reviewer: P7EB Date: 04-Aug-2023 14:02:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	21.8	43.52
$ 16 Phenol-d5	50.0	13.2	26.45
$ 39 Nitrobenzene-d5	25.0	16.1	64.25
$ 73 2-Fluorobiphenyl (Surr)	25.0	17.3	69.14
$ 109 2,4,6-Tribromophenol	50.0	40.6	81.29
$ 152 p-Terphenyl-d14	25.0	24.5	97.88

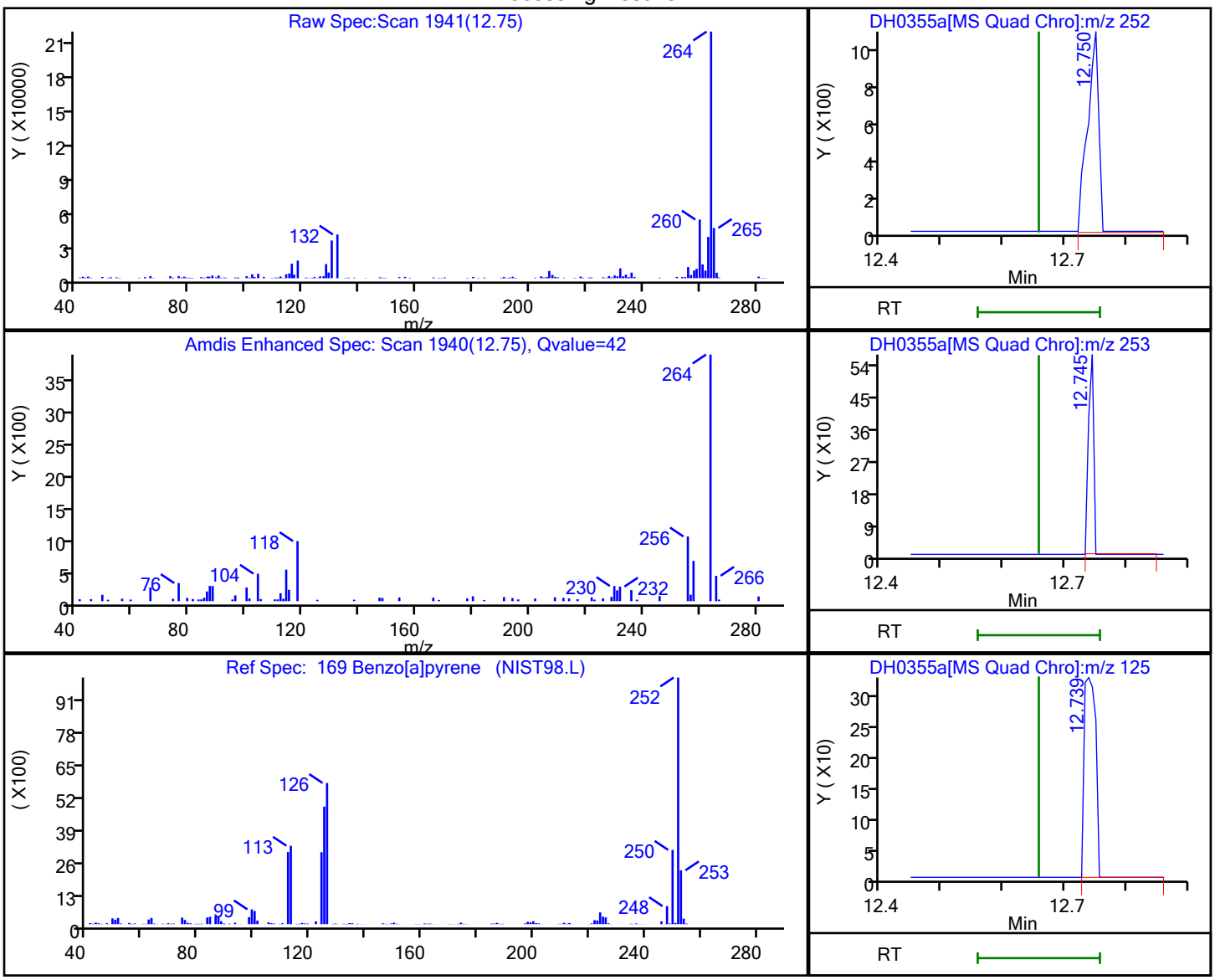
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0355a.D				
Injection Date:	03-Aug-2023 16:22:21	Instrument ID:	HP19760		
Lims ID:	MB 410-403918/1-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

169 Benzo[a]pyrene, CAS: 50-32-8

Processing Results



RT	Mass	Response	Amount
12.75	252.00	1372	0.015407
12.74	253.00	331	
12.74	125.00	421	

Reviewer: P7EB, 04-Aug-2023 14:01:54 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-403666/2-A

Matrix: Water
Lab File ID: JH0260.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 250(mL)
Date Analyzed: 08/02/2023 23:51

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	47.3		10	2.0
99-65-0	1,3-Dinitrobenzene	47.0		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	45.8		10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	47.2		10	1.8
95-95-4	2,4,5-Trichlorophenol	53.0		10	2.0
88-06-2	2,4,6-Trichlorophenol	52.0		10	1.8
120-83-2	2,4-Dichlorophenol	52.7		10	1.5
121-14-2	2,4-Dinitrotoluene	50.4		10	2.1
87-65-0	2,6-Dichlorophenol	52.2		10	1.4
606-20-2	2,6-Dinitrotoluene	51.6		10	2.1
91-58-7	2-Chloronaphthalene	48.6		10	0.50
95-57-8	2-Chlorophenol	47.0		10	1.0
91-57-6	2-Methylnaphthalene	46.8		10	0.29
95-48-7	o-Cresol	45.2		10	0.80
88-74-4	2-Nitroaniline	48.1		10	1.0
88-75-5	2-Nitrophenol	45.7		10	1.2
101-55-3	4-Bromophenyl-phenylether	52.3		10	0.56
59-50-7	4-Chloro-3-methylphenol	47.0		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	49.4		10	0.60
106-44-5	m & p-Cresol	40.9		20	2.4
100-01-6	4-Nitroaniline	48.6		10	1.5
117-81-7	Bis(2-ethylhexyl) phthalate	54.2		10	2.0
83-32-9	Acenaphthene	48.3		10	0.35
208-96-8	Acenaphthylene	51.1		10	0.48
120-12-7	Anthracene	49.8		10	0.52
56-55-3	Benzo[a]anthracene	54.7		10	0.45
50-32-8	Benzo[a]pyrene	54.7		10	1.5
205-99-2	Benzo[b]fluoranthene	47.6		10	1.2
191-24-2	Benzo[g,h,i]perylene	48.8		10	0.42
207-08-9	Benzo[k]fluoranthene	47.9		10	1.6
218-01-9	Chrysene	58.5		10	0.31
53-70-3	Dibenz(a,h)anthracene	46.8		10	0.38

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-403666/2-A

Matrix: Water
Lab File ID: JH0260.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 250(mL)
Date Analyzed: 08/02/2023 23:51

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
132-64-9	Dibenzofuran	46.7		10	0.60
84-66-2	Diethyl phthalate	47.6		10	2.0
206-44-0	Fluoranthene	48.6		10	0.42
86-73-7	Fluorene	50.7		10	0.38
118-74-1	Hexachlorobenzene	49.2		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	50.2		10	0.15
62-75-9	N-Nitrosodimethylamine	31.3		10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	43.0		10	0.58
98-95-3	Nitrobenzene	45.4		10	0.60
87-86-5	Pentachlorophenol	117		10	3.0
85-01-8	Phenanthrene	48.5		10	0.52
108-95-2	Phenol	24.8		10	0.60
129-00-0	Pyrene	50.9		10	0.41

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	79		13-138
321-60-8	2-Fluorobiphenyl (Surr)	78		44-120
367-12-4	2-Fluorophenol (Surr)	53		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	74		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	83		30-125
4165-62-2	Phenol-d5 (Surr)	39		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0260.D
Lims ID: LCS 410-403666/2-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Aug-2023 23:51:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 410-403666/2-A
Misc. Info.: 410-0090492-011
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 08:48:58 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:40:47

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.695	1.701	-0.006	93	108726	12.5	6.14	
	2 N-Nitrosodimethylamine	74	1.922	1.928	-0.006	91	226125	12.5	7.84	
$	9 2-Fluorophenol	112	3.084	3.090	-0.006	96	1190708	50.0	26.7	
	13 Benzaldehyde	77	3.908	3.896	0.000	91	458133	12.5	11.8	
$	15 Phenol-d5	99	3.989	3.990	-0.001	95	1241766	50.0	19.4	
	16 Phenol	94	4.001	4.001	0.000	90	416425	12.5	6.21	
	18 Bis(2-chloroethyl)ether	93	4.071	4.071	0.000	85	530207	12.5	11.3	
	19 2-Chlorophenol	128	4.130	4.130	0.000	94	485004	12.5	11.7	
*	22 1,4-Dichlorobenzene-d4	152	4.322	4.322	0.000	96	145029	5.00	5.00	
	29 2-Methylphenol	108	4.579	4.585	0.000	97	447633	12.5	11.3	
	30 2,2'-oxybis[1-chloropropane]	45	4.585	4.609	0.000	93	1178820	12.5	11.4	
	33 N-Nitrosodi-n-propylamine	70	4.708	4.708	0.000	90	447912	12.5	11.4	
	32 Acetophenone	105	4.708	4.708	0.000	86	818151	12.5	12.9	
	34 4-Methylphenol	108	4.731	4.737	0.000	93	469139	12.5	10.2	
	37 Hexachloroethane	117	4.807	4.801	0.000	97	203162	12.5	11.0	
$	39 Nitrobenzene-d5	82	4.854	4.854	0.000	94	1137751	25.0	18.5	
	40 Nitrobenzene	77	4.871	4.842	0.000	94	636261	12.5	11.3	
	42 Isophorone	82	5.099	5.099	0.000	98	1194682	12.5	11.9	
	43 2-Nitrophenol	139	5.181	5.181	0.000	90	236737	12.5	11.4	
	44 2,4-Dimethylphenol	107	5.233	5.239	0.000	97	492531	12.5	11.6	
	47 Bis(2-chloroethoxy)methane	93	5.315	5.315	0.000	91	729053	12.5	12.0	
	49 2,4-Dichlorophenol	162	5.420	5.420	0.000	97	416732	12.5	13.2	
*	52 Naphthalene-d8	136	5.543	5.543	0.000	98	573579	5.00	5.00	
	53 Naphthalene	128	5.560	5.566	0.000	97	1436462	12.5	11.6	
	56 4-Chloroaniline	127	5.619	5.619	0.000	95	505012	12.5	9.69	
	57 2,6-Dichlorophenol	162	5.624	5.630	-0.006	87	408133	12.5	13.1	
	59 Hexachlorobutadiene	225	5.683	5.683	0.000	97	203693	12.5	10.6	
	62 Caprolactam	113	5.928	5.928	0.000	72	38963	12.5	3.48	
	65 4-Chloro-3-methylphenol	107	6.097	6.097	-0.006	96	458712	12.5	11.8	
	67 2-Methylnaphthalene	142	6.220	6.220	0.000	91	877797	12.5	11.7	
	71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	95	135552	12.5	7.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
70 1,2,4,5-Tetrachlorobenzene	216	6.378	6.384	-0.006	98	409112	12.5	11.8	
79 2,4,6-Trichlorophenol	196	6.500	6.500	0.000	96	285959	12.5	13.0	
80 2,4,5-Trichlorophenol	196	6.541	6.541	0.000	91	320807	12.5	13.2	
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.576	0.000	99	1801094	25.0	19.4	
83 1,1'-Biphenyl	154	6.670	6.670	0.000	97	1166289	12.5	12.8	
84 2-Chloronaphthalene	162	6.681	6.681	0.000	97	836477	12.5	12.1	
87 2-Nitroaniline	138	6.786	6.786	0.000	76	292027	12.5	12.0	
90 Dimethyl phthalate	163	6.962	6.962	0.000	96	881939	12.5	10.8	
91 1,3-Dinitrobenzene	168	6.991	6.991	0.000	78	147771	12.5	11.8	
92 2,6-Dinitrotoluene	165	7.020	7.020	0.000	85	221210	12.5	12.9	
93 Acenaphthylene	152	7.072	7.078	-0.006	99	1518142	12.5	12.8	
95 3-Nitroaniline	138	7.178	7.178	0.000	88	246828	12.5	11.7	
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	96	292405	5.00	5.00	
97 Acenaphthene	153	7.236	7.242	-0.006	98	930654	12.5	12.1	
98 2,4-Dinitrophenol	184	7.277	7.277	0.000	76	248968	25.0	22.9	
100 4-Nitrophenol	109	7.370	7.382	0.000	94	198562	25.0	15.5	
102 2,4-Dinitrotoluene	165	7.399	7.399	-0.001	80	293470	12.5	12.6	
101 Dibenzofuran	168	7.405	7.405	0.000	96	1213848	12.5	11.7	
105 2,3,4,6-Tetrachlorophenol	232	7.528	7.528	0.000	76	250769	12.5	11.8	
107 Diethyl phthalate	149	7.633	7.633	0.000	96	1046533	12.5	11.9	
108 Fluorene	166	7.726	7.727	-0.001	95	1035913	12.5	12.7	
110 4-Chlorophenyl phenyl ether	204	7.732	7.732	0.000	94	452423	12.5	12.4	
112 4-Nitroaniline	138	7.756	7.756	0.000	81	254722	12.5	12.1	
113 4,6-Dinitro-2-methylphenol	198	7.779	7.779	0.000	68	313151	25.0	24.4	
114 N-Nitrosodiphenylamine	169	7.843	7.861	-0.006	78	718694	10.6	10.7	
$ 116 2,4,6-Tribromophenol	330	7.960	7.960	0.000	89	549842	50.0	39.7	
122 4-Bromophenyl phenyl ether	248	8.194	8.194	0.000	74	283267	12.5	13.1	
124 Hexachlorobenzene	284	8.240	8.240	0.000	93	316372	12.5	12.3	
126 Atrazine	200	8.357	8.357	0.000	81	241040	12.5	12.3	
127 Pentachlorophenol	266	8.439	8.439	0.000	90	357903	25.0	29.3	
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	96	549351	5.00	5.00	
132 Phenanthrene	178	8.632	8.643	-0.005	98	1404023	12.5	12.1	
135 Anthracene	178	8.684	8.690	0.000	98	1436935	12.5	12.5	
136 Carbazole	167	8.842	8.848	-0.006	96	1481589	12.5	13.0	
138 Di-n-butyl phthalate	149	9.186	9.186	0.000	99	1770598	12.5	12.1	
144 Fluoranthene	202	9.758	9.758	-0.001	99	1489508	12.5	12.2	
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	97	491276	5.00	5.00	
147 Pyrene	202	9.974	9.975	-0.001	96	1604782	12.5	12.7	
$ 148 p-Terphenyl-d14	244	10.132	10.132	0.000	96	1798575	25.0	20.6	
153 Butyl benzyl phthalate	149	10.640	10.646	0.000	96	673473	12.5	11.7	
157 3,3'-Dichlorobenzidine	252	11.212	11.213	0.000	77	750989	25.0	21.3	
156 Benzo[a]anthracene	228	11.224	11.236	0.000	99	1273730	12.5	13.7	
159 Chrysene	228	11.265	11.265	0.000	96	1346151	12.5	14.6	
160 Bis(2-ethylhexyl) phthalate	149	11.300	11.300	0.000	94	1054768	12.5	13.5	
162 Di-n-octyl phthalate	149	12.141	12.141	0.000	98	1802872	12.5	12.2	
164 Benzo[b]fluoranthene	252	12.585	12.591	-0.005	98	1233572	12.5	11.9	
165 Benzo[k]fluoranthene	252	12.625	12.631	-0.006	97	1261930	12.5	12.0	
166 Benzo[a]pyrene	252	13.034	13.046	-0.006	82	1204184	12.5	13.7	
* 167 Perylene-d12	264	13.116	13.116	0.000	94	414104	5.00	5.00	
171 Indeno[1,2,3-cd]pyrene	276	14.622	14.599	0.000	95	1053578	12.5	12.5	
172 Dibenz(a,h)anthracene	278	14.663	14.669	0.000	94	1085832	12.5	11.7	
173 Benzo[g,h,i]perylene	276	14.973	14.973	0.000	93	1203360	12.5	12.2	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_IS_00059 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 03-Aug-2023 08:54:08 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0260.D

Injection Date: 02-Aug-2023 23:51:30 Instrument ID: HP23264 Operator ID: mem41592

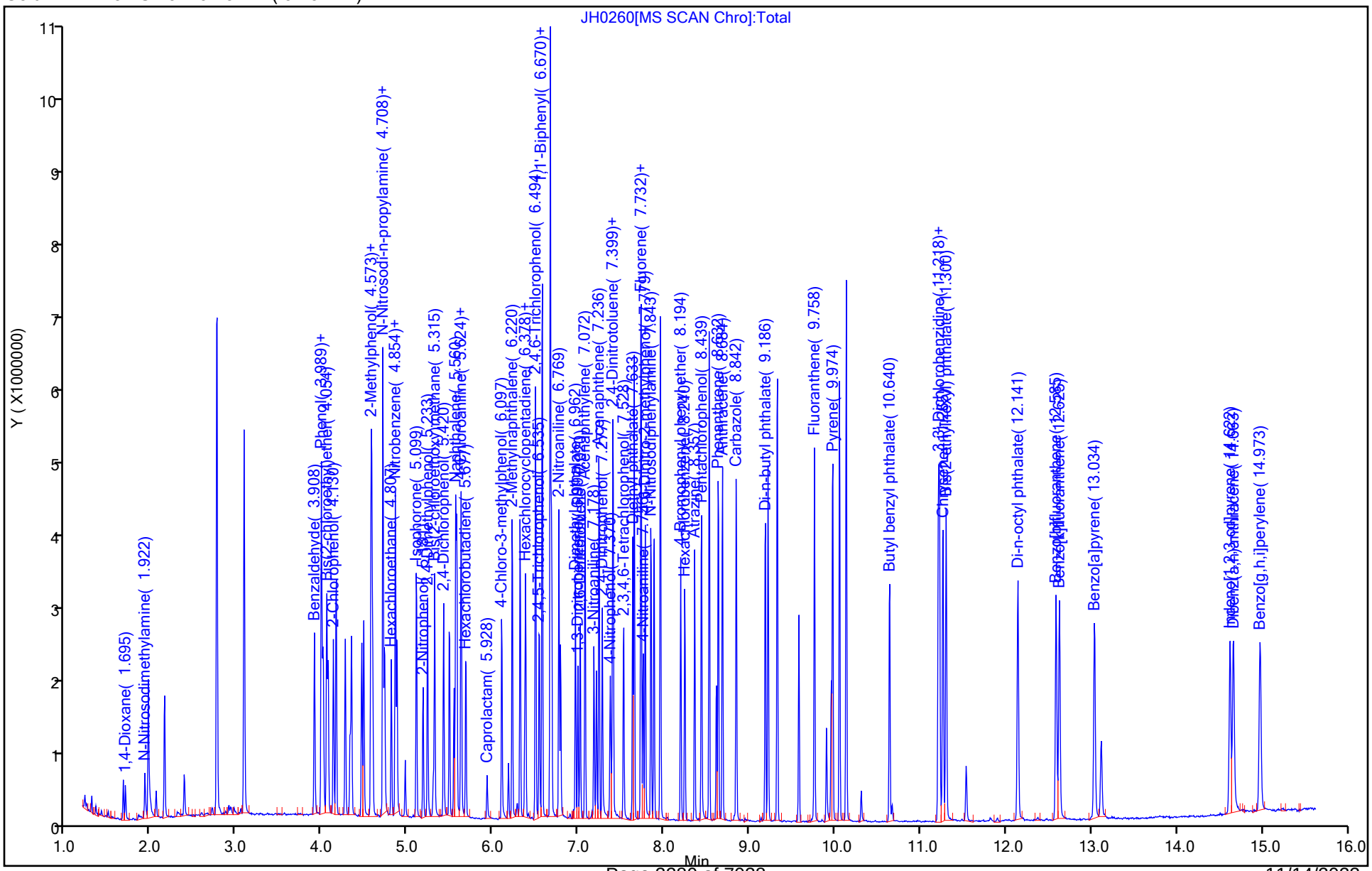
Lims ID: LCS 410-403666/2-A Worklist Smp#: 11

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0260.D				
Lims ID:	LCS 410-403666/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	02-Aug-2023 23:51:30	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 410-403666/2-A				
Misc. Info.:	410-0090492-011				
Operator ID:	mem41592	Instrument ID:	HP23264		
Method:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	03-Aug-2023 08:48:58	Calib Date:	02-Aug-2023 21:45:30		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1602				

First Level Reviewer: N5QU Date: 03-Aug-2023 07:40:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 2-Fluorophenol	50.0	26.7	53.43
$ 15 Phenol-d5	50.0	19.4	38.86
$ 39 Nitrobenzene-d5	25.0	18.5	74.13
$ 81 2-Fluorobiphenyl (Surr)	25.0	19.4	77.63
$ 116 2,4,6-Tribromophenol	50.0	39.7	79.39
$ 148 p-Terphenyl-d14	25.0	20.6	82.59

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-403666/4-A

Matrix: Water
Lab File ID: JH0262.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 00:33

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
99-55-8	5-Nitro-o-toluidine	46.1		10	2.0
1888-71-7	Hexachloropropene	31.3		10	2.0
2303-16-4	Diallate	41.9		10	3.0
60-51-5	Dimethoate	35.6		10	3.0
62-50-0	Ethyl methanesulfonate	40.1		10	1.1
465-73-6	Isodrin	42.4		10	1.1
143-50-0	Kepone	37.1	J	50	25
3689-24-5	Sulfotepp	43.4		10	2.4
55-18-5	N-Nitrosodiethylamine	43.2		10	3.0
59-89-2	N-Nitrosomorpholine	39.5		10	3.0
100-75-4	N-Nitrosopiperidine	40.4		10	1.1
126-68-1	o,o',o''-Triethylphosphorothioate	38.9		10	2.6
608-93-5	Pentachlorobenzene	44.5		10	1.6
62-44-2	Phenacetin	46.9		10	1.4
298-02-2	Phorate	43.6		10	2.5
94-59-7	Safrole, Total	43.5		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	46.1		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND		50	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	83		13-138
321-60-8	2-Fluorobiphenyl (Surr)	76		44-120
367-12-4	2-Fluorophenol (Surr)	48		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	70		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	79		30-125
4165-62-2	Phenol-d5 (Surr)	33		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0262.D
Lims ID: LCS 410-403666/4-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Aug-2023 00:33:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 410-403666/4-A
Misc. Info.: 410-0090492-013
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 10:00:20 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:44:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 9 2-Fluorophenol	112	3.084	3.090	-0.006	96	981517	50.0	24.2	
11 N-Nitrosodiethylamine	102	3.283	3.287	0.000	87	189177	12.5	10.8	
12 Ethyl methanesulfonate	109	3.581	3.586	0.000	95	217560	12.5	10.0	
$ 15 Phenol-d5	99	3.989	3.990	-0.001	96	968415	50.0	16.7	
* 22 1,4-Dichlorobenzene-d4	152	4.322	4.322	0.000	97	131783	5.00	5.00	
35 N-Nitrosomorpholine	56	4.725	4.737	-0.006	91	327971	12.5	9.88	
$ 39 Nitrobenzene-d5	82	4.854	4.854	0.000	93	1005207	25.0	17.4	
41 N-Nitrosopiperidine	114	5.017	5.017	0.000	80	214243	12.5	10.1	
46 o,o',o''-Triethylphosphorothioat	198	5.286	5.286	0.000	95	148828	12.5	9.73	
54 alpha,alpha-Dimethyl phenethylam	58		5.379				12.5	ND	7
* 52 Naphthalene-d8	136	5.543	5.543	0.000	98	538500	5.00	5.00	
58 Hexachloropropene	213	5.642	5.655	-0.006	94	164045	12.5	7.81	
66 Safrole, Total	162	6.144	6.144	0.000	85	277620	12.5	10.9	
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.576	0.000	99	1623633	25.0	18.9	
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	95	270308	5.00	5.00	
99 Pentachlorobenzene	250	7.364	7.364	-0.001	97	307863	12.5	11.1	
109 Thionazin	107	7.709	7.709	0.000	76	165866	12.5	11.5	
111 N-Nitro-o-toluidine	152	7.744	7.744	0.000	90	245231	12.5	11.5	
$ 116 2,4,6-Tribromophenol	330	7.954	7.960	-0.006	89	529102	50.0	41.3	
117 Sulfotepp	97	8.001	8.001	0.000	76	197482	12.5	10.9	
120 cis-Diallate	86	8.118	8.118	0.000	94	341389		7.72	
119 Phorate	75	8.129	8.129	0.000	93	707324	12.5	10.9	
121 Phenacetin	108	8.147	8.147	0.000	90	520027	12.5	11.7	
123 trans-Diallate	86	8.205	8.205	0.000	90	115945		2.74	
125 Dimethoate	87	8.287	8.287	0.000	97	365469	12.5	8.89	
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	96	541959	5.00	5.00	
143 Isodrin	193	9.612	9.618	-0.006	89	160346	12.5	10.6	
S 68 Diallate	86				0		12.5	10.5	
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	96	525648	5.00	5.00	
$ 148 p-Terphenyl-d14	244	10.132	10.132	0.000	97	1842354	25.0	19.8	
154 Kepone	272	10.669	10.669	0.023	92	132041	12.6	9.27	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 167 Perylene-d12	264	13.116	13.116	0.000	94	415412	5.00	5.00	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

Reagents:

MSS_RV8270_IS_00059 Amount Added: 20.00 Units: uL Run Reagent

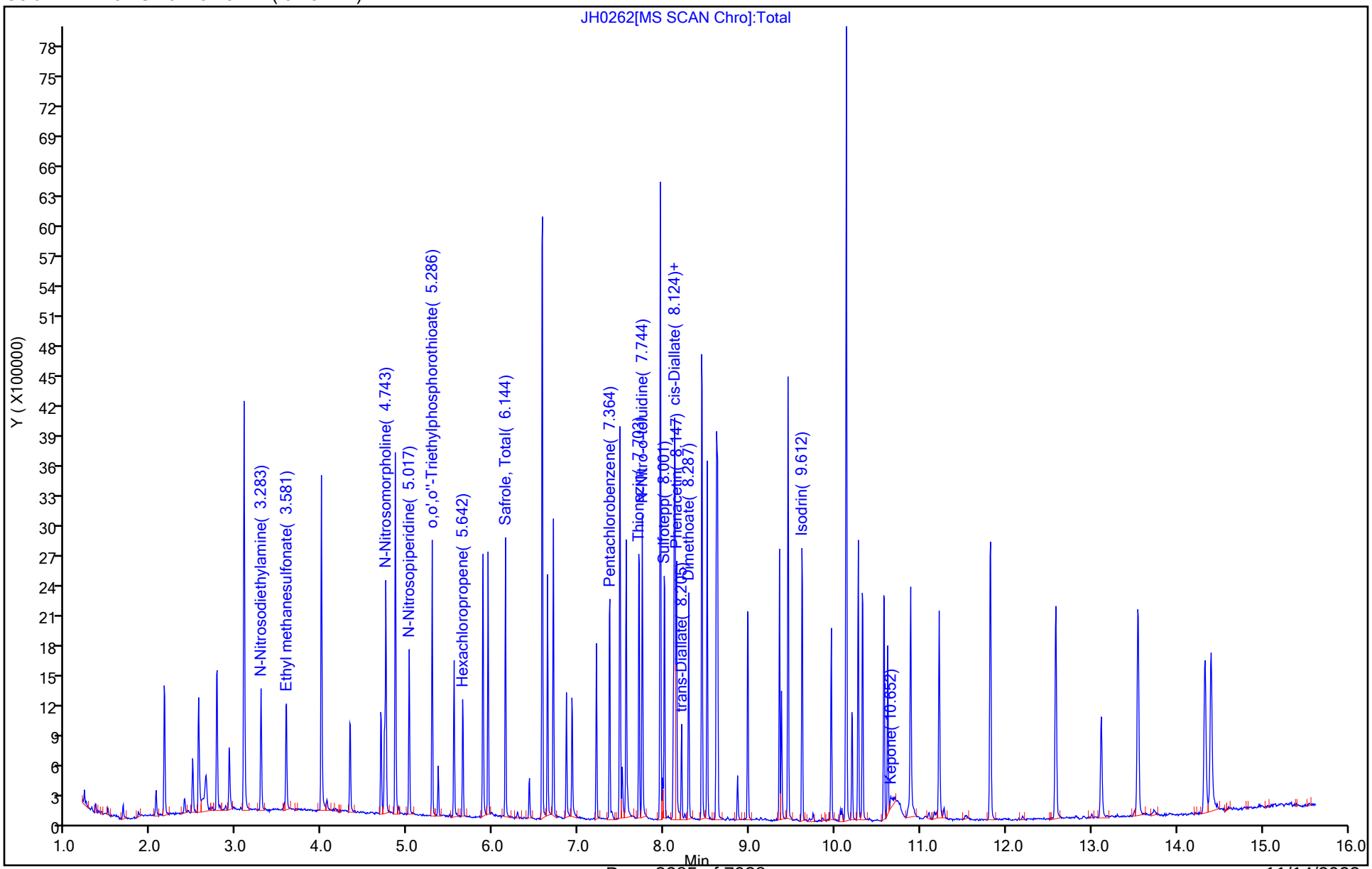
Report Date: 03-Aug-2023 10:00:53 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0262.D

Injection Date:	03-Aug-2023 00:33:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	LCS 410-403666/4-A			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0262.D
Lims ID: LCS 410-403666/4-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Aug-2023 00:33:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 410-403666/4-A
Misc. Info.: 410-0090492-013
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 10:00:20 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:44:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 2-Fluorophenol	50.0	24.2	48.47
$ 15 Phenol-d5	50.0	16.7	33.35
$ 39 Nitrobenzene-d5	25.0	17.4	69.76
$ 81 2-Fluorobiphenyl (Surr)	25.0	18.9	75.70
$ 116 2,4,6-Tribromophenol	50.0	41.3	82.64
$ 148 p-Terphenyl-d14	25.0	19.8	79.07

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

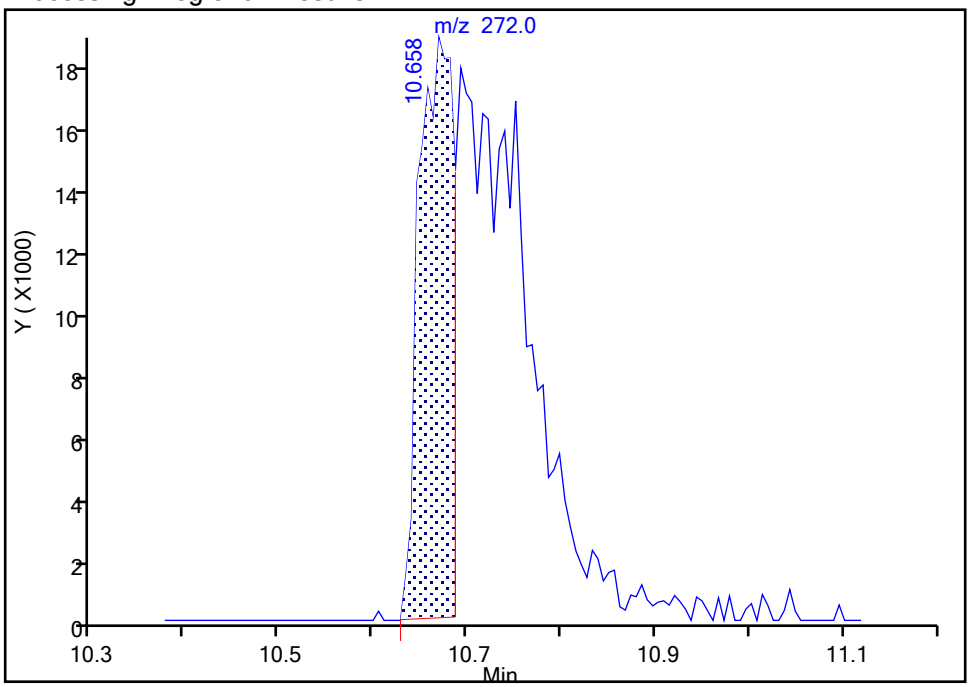
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0262.D				
Injection Date:	03-Aug-2023 00:33:30	Instrument ID:	HP23264		
Lims ID:	LCS 410-403666/4-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

154 Kepone, CAS: 143-50-0

Signal: 1

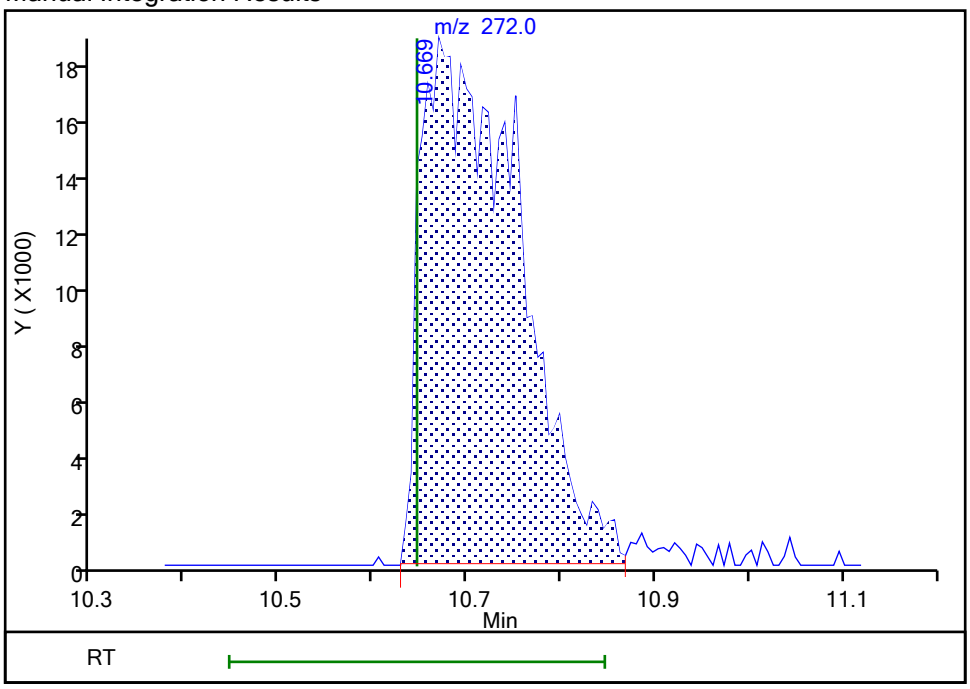
Processing Integration Results

RT: 10.66
Area: 43973
Amount: 3.086452
Amount Units: ug/ml



Manual Integration Results

RT: 10.67
Area: 132041
Amount: 9.267919
Amount Units: ug/ml



Reviewer: N5QU, 03-Aug-2023 10:00:02 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-403918/2-A

Matrix: Water
Lab File ID: DH0356.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 16:42

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	31.2		10	2.0
99-65-0	1,3-Dinitrobenzene	42.4		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	28.1		10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	38.3		10	1.8
95-95-4	2,4,5-Trichlorophenol	41.7		10	2.0
88-06-2	2,4,6-Trichlorophenol	42.9		10	1.8
120-83-2	2,4-Dichlorophenol	40.2		10	1.5
121-14-2	2,4-Dinitrotoluene	43.4		10	2.1
87-65-0	2,6-Dichlorophenol	41.8		10	1.4
606-20-2	2,6-Dinitrotoluene	41.2		10	2.1
91-58-7	2-Chloronaphthalene	37.0		10	0.50
95-57-8	2-Chlorophenol	38.6		10	1.0
91-57-6	2-Methylnaphthalene	36.3		10	0.29
95-48-7	o-Cresol	35.7		10	0.80
88-74-4	2-Nitroaniline	41.3		10	1.0
88-75-5	2-Nitrophenol	41.2		10	1.2
101-55-3	4-Bromophenyl-phenylether	37.6		10	0.56
59-50-7	4-Chloro-3-methylphenol	34.5		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	36.5		10	0.60
106-44-5	m & p-Cresol	33.6		20	2.4
100-01-6	4-Nitroaniline	37.1		10	1.5
117-81-7	Bis(2-ethylhexyl) phthalate	42.2		10	2.0
83-32-9	Acenaphthene	38.5		10	0.35
208-96-8	Acenaphthylene	38.6		10	0.48
120-12-7	Anthracene	41.7		10	0.52
56-55-3	Benzo[a]anthracene	41.3		10	0.45
50-32-8	Benzo[a]pyrene	45.1		10	1.5
205-99-2	Benzo[b]fluoranthene	40.2		10	1.2
191-24-2	Benzo[g,h,i]perylene	38.5		10	0.42
207-08-9	Benzo[k]fluoranthene	44.3		10	1.6
218-01-9	Chrysene	43.0		10	0.31
53-70-3	Dibenz(a,h)anthracene	36.8		10	0.38

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-403918/2-A

Matrix: Water
Lab File ID: DH0356.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 16:42

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
132-64-9	Dibenzofuran	38.3		10	0.60
84-66-2	Diethyl phthalate	39.4		10	2.0
206-44-0	Fluoranthene	41.0		10	0.42
86-73-7	Fluorene	38.5		10	0.38
118-74-1	Hexachlorobenzene	37.5		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	37.5		10	0.15
62-75-9	N-Nitrosodimethylamine	21.4		10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	36.4		10	0.58
98-95-3	Nitrobenzene	33.5		10	0.60
87-86-5	Pentachlorophenol	66.2		10	3.0
85-01-8	Phenanthrene	40.7		10	0.52
108-95-2	Phenol	22.5		10	0.60
129-00-0	Pyrene	40.4		10	0.41

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	69		13-138
321-60-8	2-Fluorobiphenyl (Surr)	65		44-120
367-12-4	2-Fluorophenol (Surr)	48		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	58		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	77		30-125
4165-62-2	Phenol-d5 (Surr)	33		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0356.D
Lims ID: LCS 410-403918/2-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Aug-2023 16:42:14 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 410-403918/2-A
Misc. Info.: 410-0090557-007
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 14:21:25 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1655

First Level Reviewer: P7EB Date: 04-Aug-2023 14:03:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 N-Nitrosodimethylamine	74	1.740	1.728	0.012	93	209722	12.5	5.34	
$ 10 2-Fluorophenol	112	2.830	2.824	0.006	91	1083866	50.0	24.2	
15 Benzaldehyde	77	3.652	3.640	0.012	96	298896	12.5	6.02	
$ 16 Phenol-d5	99	3.733	3.728	0.005	96	1054663	50.0	16.4	
17 Phenol	94	3.751	3.739	0.012	92	371404	12.5	5.63	
19 Bis(2-chloroethyl)ether	93	3.821	3.821	0.006	99	450352	12.5	8.27	
20 2-Chlorophenol	128	3.873	3.867	0.006	94	387948	12.5	9.66	
* 22 1,4-Dichlorobenzene-d4	152	4.077	4.071	0.006	96	152729	5.00	5.00	
28 2-Methylphenol	108	4.334	4.328	0.006	92	382729	12.5	8.93	
29 2,2'-oxybis[1-chloropropane]	45	4.345	4.339	0.005	91	489155	12.5	7.03	
34 Acetophenone	105	4.468	4.463	0.012	97	657298	12.5	9.35	
33 N-Nitrosodi-n-propylamine	70	4.468	4.462	0.006	85	342921	12.5	7.85	
32 4-Methylphenol	108	4.485	4.479	0.006	94	381537	12.5	8.40	
38 Hexachloroethane	117	4.561	4.556	0.012	96	138558	12.5	6.93	
$ 39 Nitrobenzene-d5	82	4.608	4.602	0.006	88	885363	25.0	14.6	
40 Nitrobenzene	77	4.631	4.619	0.012	86	519795	12.5	8.38	
43 Isophorone	82	4.858	4.852	0.006	97	925808	12.5	8.67	
44 2-Nitrophenol	139	4.934	4.928	0.006	92	192232	12.5	10.3	
45 2,4-Dimethylphenol	107	4.998	4.987	0.011	97	371530	12.5	7.97	
47 Bis(2-chloroethoxy)methane	93	5.080	5.074	0.006	98	590831	12.5	9.04	
48 2,4-Dichlorophenol	162	5.179	5.167	0.012	96	321941	12.5	10.1	
* 50 Naphthalene-d8	136	5.301	5.301	0.000	100	578830	5.00	5.00	
51 Naphthalene	128	5.319	5.313	0.006	98	1101235	12.5	8.89	
53 4-Chloroaniline	127	5.383	5.377	0.006	95	405950	12.5	8.30	
54 2,6-Dichlorophenol	162	5.389	5.383	0.006	94	339631	12.5	10.5	
56 Hexachlorobutadiene	225	5.441	5.435	0.006	97	149471	12.5	6.79	
61 Caprolactam	113	5.698	5.692	0.006	83	37454	12.5	2.90	
64 4-Chloro-3-methylphenol	107	5.867	5.861	0.006	93	356910	12.5	8.62	
66 2-Methylnaphthalene	142	5.983	5.977	0.006	91	716276	12.5	9.07	
68 Hexachlorocyclopentadiene	237	6.135	6.134	0.006	97	61160	12.5	2.38	
69 1,2,4,5-Tetrachlorobenzene	216	6.141	6.135	0.006	98	323251	12.5	7.80	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
71 2,4,6-Trichlorophenol	196	6.263	6.251	0.012	94	256887	12.5	10.7	
72 2,4,5-Trichlorophenol	196	6.304	6.298	0.006	92	270728	12.5	10.4	
$ 73 2-Fluorobiphenyl (Surr)	172	6.339	6.333	0.006	99	1498439	25.0	16.2	
75 1,1'-Biphenyl	154	6.432	6.426	0.006	97	923571	12.5	9.12	
76 2-Chloronaphthalene	162	6.444	6.438	0.006	98	724201	12.5	9.24	
79 2-Nitroaniline	138	6.554	6.543	0.011	80	239488	12.5	10.3	
85 Dimethyl phthalate	163	6.735	6.735	0.006	97	619122	12.5	7.11	
86 1,3-Dinitrobenzene	168	6.758	6.753	0.005	84	125444	12.5	10.6	
87 2,6-Dinitrotoluene	165	6.788	6.782	0.006	88	189490	12.5	10.3	
88 Acenaphthylene	152	6.834	6.828	0.006	99	1210558	12.5	9.66	
89 3-Nitroaniline	138	6.945	6.945	0.006	89	188387	12.5	9.40	
* 90 Acenaphthene-d10	164	6.968	6.968	0.000	96	324359	5.00	5.00	
91 Acenaphthene	153	7.003	6.992	0.011	97	771008	12.5	9.64	
92 2,4-Dinitrophenol	184	7.044	7.044	0.006	82	111178	25.0	10.4	
93 4-Nitrophenol	109	7.137	7.138	0.006	84	181825	25.0	12.6	
95 2,4-Dinitrotoluene	165	7.166	7.161	0.005	66	268208	12.5	10.8	
96 Dibenzofuran	168	7.166	7.161	0.005	94	1062057	12.5	9.57	
98 2,3,4,6-Tetrachlorophenol	232	7.289	7.283	0.006	75	210096	12.5	9.59	
100 Diethyl phthalate	149	7.411	7.406	0.011	97	806979	12.5	9.85	
102 Fluorene	166	7.493	7.481	0.012	93	862805	12.5	9.61	
103 4-Chlorophenyl phenyl ether	204	7.499	7.493	0.006	95	403774	12.5	9.13	
105 4-Nitroaniline	138	7.522	7.516	0.006	78	202599	12.5	9.27	
106 4,6-Dinitro-2-methylphenol	198	7.551	7.545	0.012	80	269907	25.0	19.0	
107 N-Nitrosodiphenylamine	169	7.615	7.609	0.006	63	649094	10.6	9.11	
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	85	382521	50.0	34.3	
116 4-Bromophenyl phenyl ether	248	7.965	7.953	0.012	69	233787	12.5	9.40	
118 Hexachlorobenzene	284	8.006	8.000	0.006	91	250158	12.5	9.38	
120 Atrazine	200	8.134	8.134	0.006	92	226549	12.5	9.04	
121 Pentachlorophenol	266	8.204	8.198	0.006	89	263515	25.0	16.5	
* 126 Phenanthrene-d10	188	8.373	8.373	0.000	97	591796	5.00	5.00	
128 Phenanthrene	178	8.396	8.390	0.006	98	1311705	12.5	10.2	
129 Anthracene	178	8.443	8.437	0.006	98	1331675	12.5	10.4	
130 Carbazole	167	8.606	8.606	0.006	96	1197079	12.5	10.5	
133 Di-n-butyl phthalate	149	8.967	8.956	0.011	100	1374911	12.5	11.1	
143 Fluoranthene	202	9.521	9.515	0.006	98	1398119	12.5	10.2	
* 149 Pyrene-d10 (IS)	212	9.719	9.719	0.000	99	581243	5.00	5.00	
150 Pyrene	202	9.737	9.725	0.006	97	1495596	12.5	10.1	
$ 152 p-Terphenyl-d14	244	9.906	9.894	0.006	97	1857118	25.0	19.3	
157 Butyl benzyl phthalate	149	10.401	10.402	0.005	96	435011	12.5	8.07	
159 3,3'-Dichlorobenzidine	252	10.937	10.944	-0.001	75	519993	25.0	11.6	
161 Benzo[a]anthracene	228	10.943	10.931	0.005	99	1221519	12.5	10.3	
162 Chrysene	228	10.984	10.972	0.006	97	1273125	12.5	10.7	
163 Bis(2-ethylhexyl) phthalate	149	11.042	11.030	0.005	97	763209	12.5	10.6	
165 Di-n-octyl phthalate	149	11.841	11.830	0.006	99	1100393	12.5	11.5	
167 Benzo[b]fluoranthene	252	12.237	12.226	0.005	97	937450	12.5	10.1	
168 Benzo[k]fluoranthene	252	12.272	12.267	0.000	99	1081397	12.5	11.1	
169 Benzo[a]pyrene	252	12.663	12.651	0.006	78	908925	12.5	11.3	
* 170 Perylene-d12	264	12.739	12.739	0.000	97	374694	5.00	5.00	
174 Indeno[1,2,3-cd]pyrene	276	14.196	14.189	0.000	99	628028	12.5	9.38	
175 Dibenz(a,h)anthracene	278	14.248	14.236	0.006	93	725642	12.5	9.19	
176 Benzo[g,h,i]perylene	276	14.551	14.545	0.000	98	765158	12.5	9.62	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

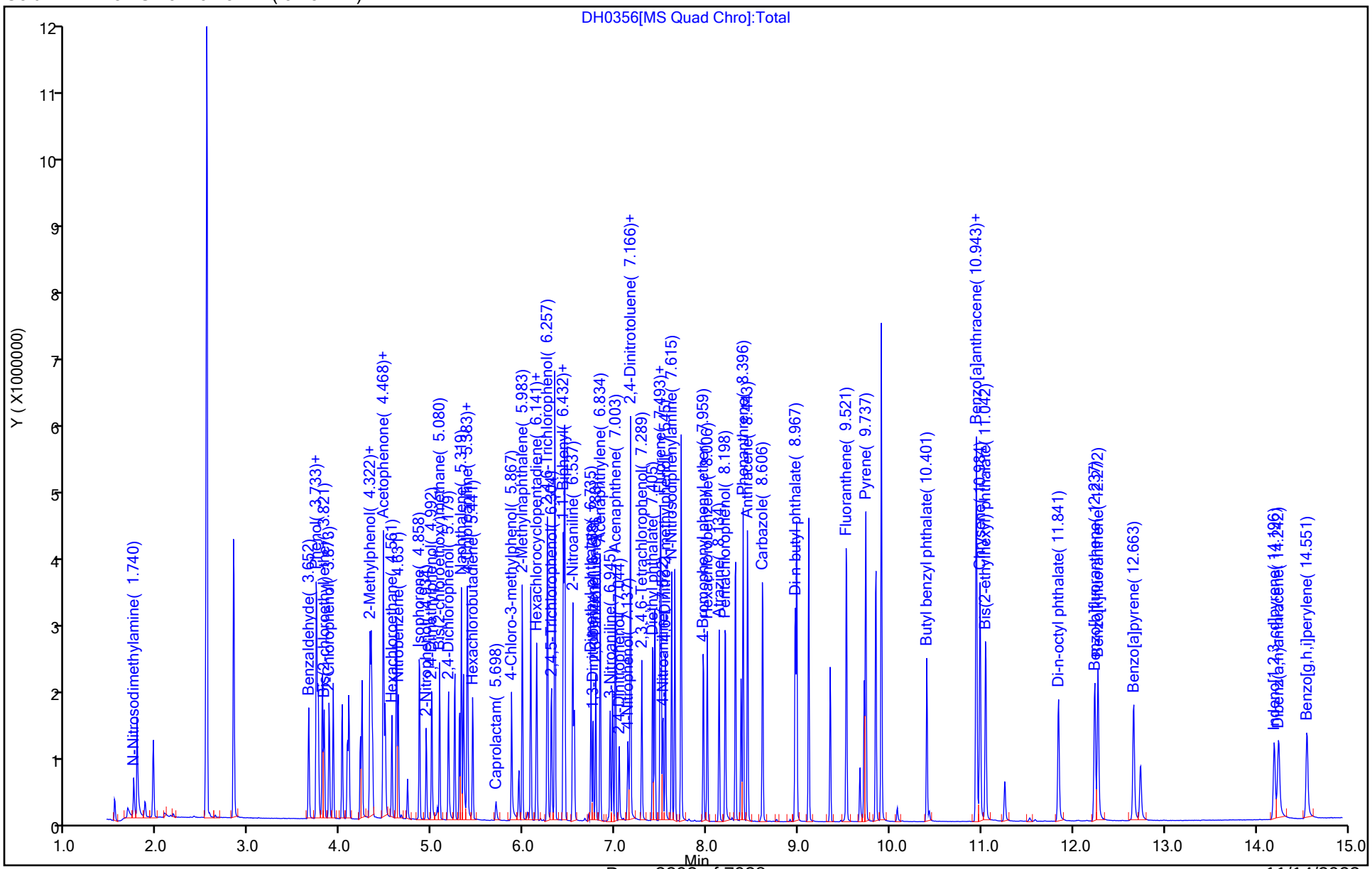
Report Date: 04-Aug-2023 14:21:43 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0356.D

Injection Date:	03-Aug-2023 16:42:14	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	LCS 410-403918/2-A			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0356.D
Lims ID: LCS 410-403918/2-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Aug-2023 16:42:14 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 410-403918/2-A
Misc. Info.: 410-0090557-007
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 14:21:25 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1655

First Level Reviewer: P7EB Date: 04-Aug-2023 14:03:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	24.2	48.49
$ 16 Phenol-d5	50.0	16.4	32.77
$ 39 Nitrobenzene-d5	25.0	14.6	58.23
$ 73 2-Fluorobiphenyl (Surr)	25.0	16.2	64.96
$ 109 2,4,6-Tribromophenol	50.0	34.3	68.51
$ 152 p-Terphenyl-d14	25.0	19.3	77.39

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-403918/3-A

Matrix: Water
Lab File ID: DH0357.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 17:02

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
99-55-8	5-Nitro-o-toluidine	43.0		10	2.0
1888-71-7	Hexachloropropene	23.2		10	2.0
2303-16-4	Diallate	37.4		10	3.0
60-51-5	Dimethoate	17.8		10	3.0
62-50-0	Ethyl methanesulfonate	40.1		10	1.1
465-73-6	Isodrin	42.5		10	1.1
143-50-0	Kepone	ND		50	25
3689-24-5	Sulfotepp	38.5		10	2.4
55-18-5	N-Nitrosodiethylamine	37.9		10	3.0
59-89-2	N-Nitrosomorpholine	31.5		10	3.0
100-75-4	N-Nitrosopiperidine	41.3		10	1.1
126-68-1	o,o',o''-Triethylphosphorothioate	42.8		10	2.6
608-93-5	Pentachlorobenzene	33.4		10	1.6
62-44-2	Phenacetin	46.4		10	1.4
298-02-2	Phorate	41.8		10	2.5
94-59-7	Safrole, Total	41.5		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	43.3		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND		50	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	87		13-138
321-60-8	2-Fluorobiphenyl (Surr)	81		44-120
367-12-4	2-Fluorophenol (Surr)	60		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	73		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	97		30-125
4165-62-2	Phenol-d5 (Surr)	40		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0357.D
Lims ID: LCS 410-403918/3-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Aug-2023 17:02:02 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 410-403918/3-A
Misc. Info.: 410-0090557-008
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 07-Aug-2023 15:27:10 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: P7EB Date: 04-Aug-2023 14:05:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 10 2-Fluorophenol	112	2.830	2.824	0.006	92	1149723	50.0	30.1	
11 N-Nitrosodiethylamine	102	3.028	3.016	0.012	95	197229	12.5	9.49	
12 Ethyl methanesulfonate	109	3.325	3.314	0.011	99	227588	12.5	10.0	
$ 16 Phenol-d5	99	3.733	3.728	0.005	96	1103921	50.0	20.1	
* 22 1,4-Dichlorobenzene-d4	152	4.071	4.066	0.005	97	130606	5.00	5.00	
35 N-Nitrosomorpholine	56	4.485	4.479	0.006	93	225297	12.5	7.88	
$ 39 Nitrobenzene-d5	82	4.608	4.613	0.006	89	968176	25.0	18.1	
42 N-Nitrosopiperidine	114	4.771	4.765	0.006	83	207332	12.5	10.3	
46 o,o',o''-Triethylphosphorothioat	198	5.056	5.051	0.005	91	190540	12.5	10.7	
* 50 Naphthalene-d8	136	5.301	5.290	0.011	100	508337	5.00	5.00	
37 alpha,alpha-Dimethyl phenethylam	58	5.220	5.220	-0.128	96	11146	12.5	0.1686	7M
55 Hexachloropropene	213	5.406	5.395	0.011	91	132861	12.5	5.80	
65 Safrole, Total	162	5.907	5.902	0.005	84	284681	12.5	10.4	
$ 73 2-Fluorobiphenyl (Surr)	172	6.339	6.333	0.006	100	1585324	25.0	20.3	
* 90 Acenaphthene-d10	164	6.968	6.962	0.006	96	274983	5.00	5.00	
94 Pentachlorobenzene	250	7.126	7.120	0.006	97	244898	12.5	8.35	
101 Thionazin	107	7.481	7.475	0.006	78	153759	12.5	10.8	
104 N-Nitro-o-toluidine	152	7.510	7.505	0.005	91	218369	12.5	10.8	
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	86	410670	50.0	43.4	
110 Sulfotepp	97	7.778	7.773	0.005	77	161937	12.5	9.63	
113 cis-Diallate	86	7.895	7.883	0.012	0	326581		7.05	
114 Phorate	75	7.901	7.895	0.006	95	630545	12.5	10.5	
115 Phenacetin	108	7.918	7.918	0.000	91	482420	12.5	11.6	
117 trans-Diallate	86	7.977	7.971	0.006	0	111342		2.31	
119 Dimethoate	87	8.058	8.052	0.006	96	170607	12.5	4.45	
* 126 Phenanthrene-d10	188	8.373	8.367	0.006	97	532921	5.00	5.00	
141 Isodrin	193	9.375	9.370	0.005	91	151889	12.5	10.6	
S 136 Diallate	86				0		12.5	9.35	
* 149 Pyrene-d10 (IS)	212	9.719	9.714	0.005	99	508298	5.00	5.00	
$ 152 p-Terphenyl-d14	244	9.906	9.900	0.006	97	2028229	25.0	24.2	
153 Kepone	272	10.465	10.389	0.069	85	33255	12.6	3.16	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 170 Perylene-d12	264	12.733	12.733	0.000	97	363274	5.00	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

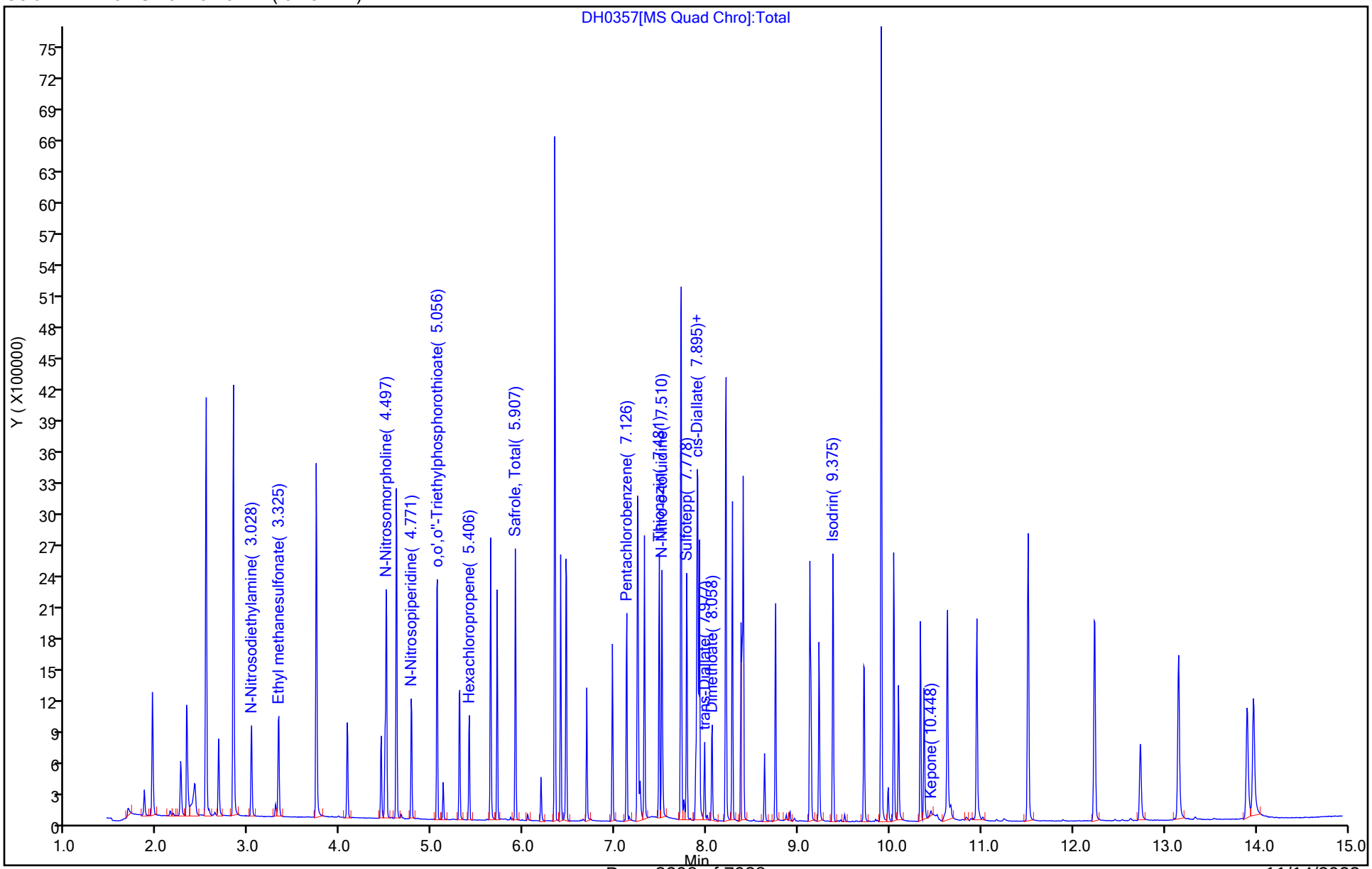
Report Date: 07-Aug-2023 15:27:10 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0357.D

Injection Date:	03-Aug-2023 17:02:02	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	LCS 410-403918/3-A			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0357.D				
Lims ID:	LCS 410-403918/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	03-Aug-2023 17:02:02	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 410-403918/3-A				
Misc. Info.:	410-0090557-008				
Operator ID:	mem41592	Instrument ID:	HP19760		
Method:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	07-Aug-2023 15:27:10	Calib Date:	03-Aug-2023 15:30:40		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1682				

First Level Reviewer: P7EB Date: 04-Aug-2023 14:05:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	30.1	60.15
$ 16 Phenol-d5	50.0	20.1	40.11
$ 39 Nitrobenzene-d5	25.0	18.1	72.50
$ 73 2-Fluorobiphenyl (Surr)	25.0	20.3	81.06
$ 109 2,4,6-Tribromophenol	50.0	43.4	86.75
$ 152 p-Terphenyl-d14	25.0	24.2	96.65

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

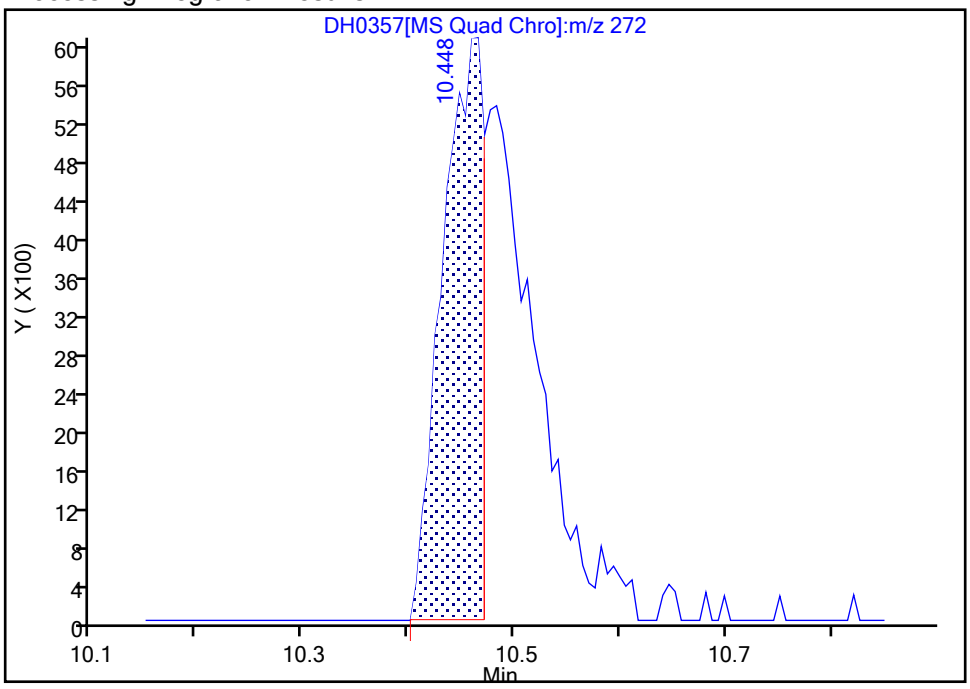
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0357.D				
Injection Date:	03-Aug-2023 17:02:02	Instrument ID:	HP19760		
Lims ID:	LCS 410-403918/3-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

153 Kepone, CAS: 143-50-0

Signal: 1

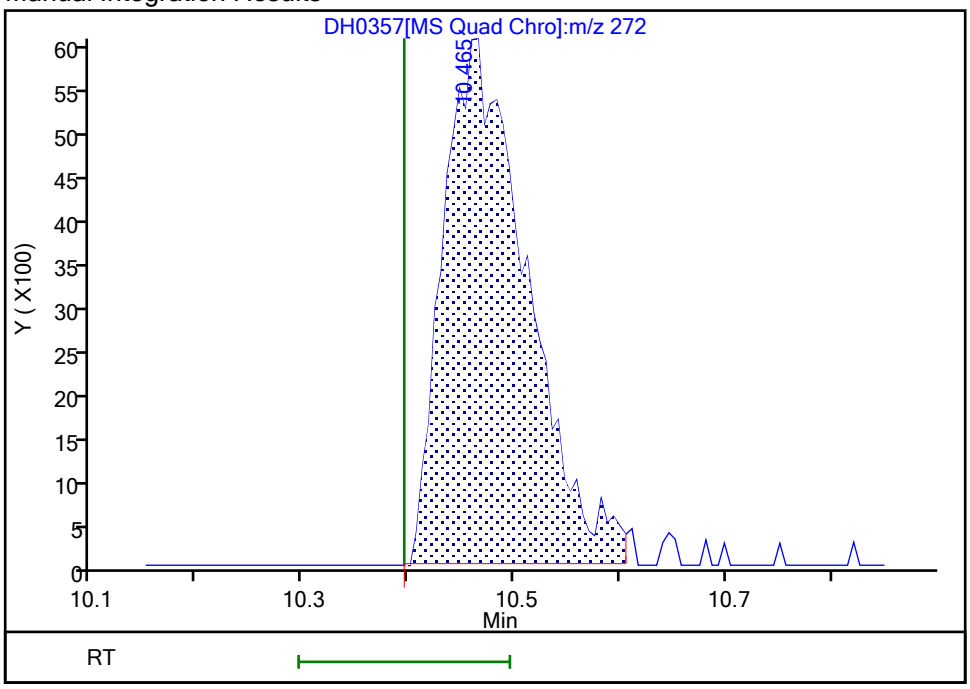
Processing Integration Results

RT: 10.45
Area: 15442
Amount: 1.467086
Amount Units: ug/ml



Manual Integration Results

RT: 10.47
Area: 33255
Amount: 3.159432
Amount Units: ug/ml



Reviewer: P7EB, 04-Aug-2023 14:04:30 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

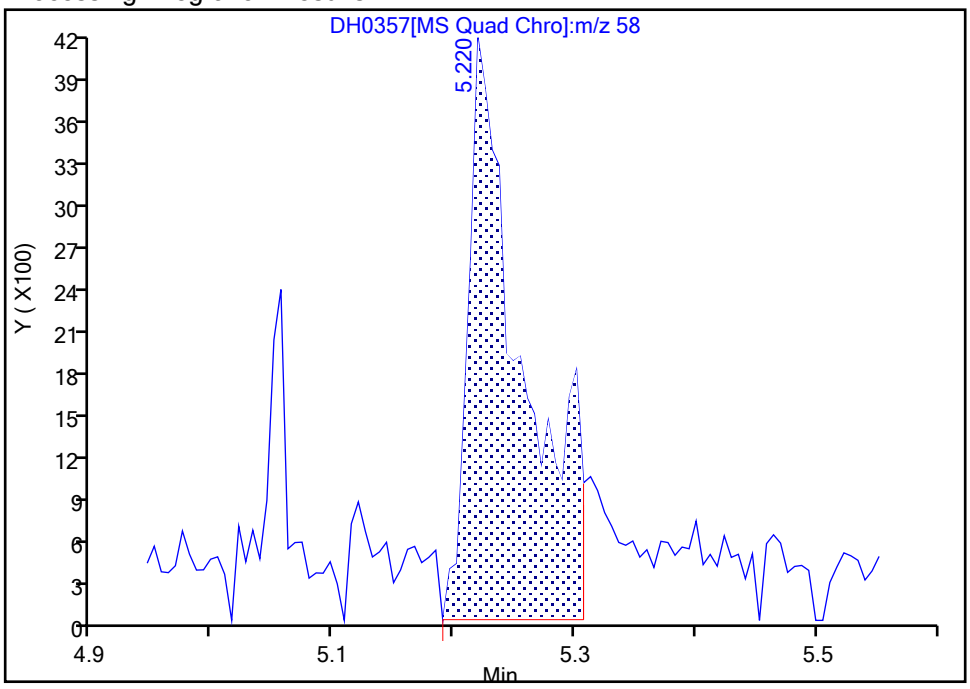
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0357.D				
Injection Date:	03-Aug-2023 17:02:02	Instrument ID:	HP19760		
Lims ID:	LCS 410-403918/3-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

37 alpha,alpha-Dimethyl phenethylam, CAS: 122-09-8

Signal: 1

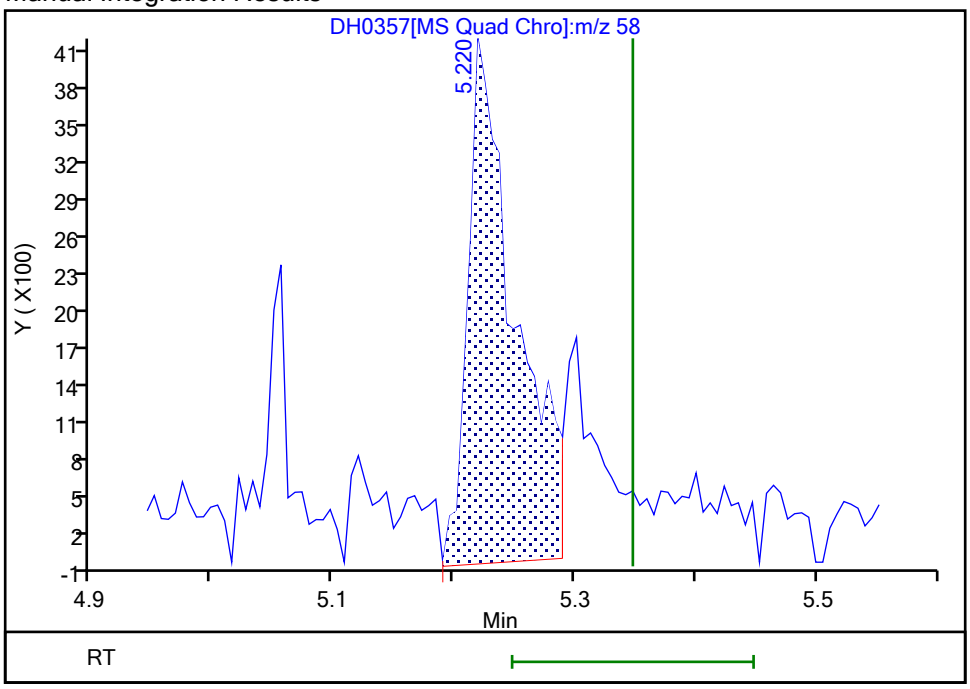
Processing Integration Results

RT: 5.22
Area: 12708
Amount: 0.192201
Amount Units: ug/ml



Manual Integration Results

RT: 5.22
Area: 11146
Amount: 0.168576
Amount Units: ug/ml



Reviewer: phakdeer, 07-Aug-2023 15:27:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCSD 410-403666/3-A

Matrix: Water
Lab File ID: JH0261.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 00:12

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	48.6		10	2.0
99-65-0	1,3-Dinitrobenzene	51.0		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	46.6		10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	44.1		10	1.8
95-95-4	2,4,5-Trichlorophenol	50.7		10	2.0
88-06-2	2,4,6-Trichlorophenol	51.5		10	1.8
120-83-2	2,4-Dichlorophenol	48.3		10	1.5
121-14-2	2,4-Dinitrotoluene	52.3		10	2.1
87-65-0	2,6-Dichlorophenol	49.6		10	1.4
606-20-2	2,6-Dinitrotoluene	49.3		10	2.1
91-58-7	2-Chloronaphthalene	50.6		10	0.50
95-57-8	2-Chlorophenol	43.2		10	1.0
91-57-6	2-Methylnaphthalene	50.1		10	0.29
95-48-7	o-Cresol	43.6		10	0.80
88-74-4	2-Nitroaniline	52.8		10	1.0
88-75-5	2-Nitrophenol	42.4		10	1.2
101-55-3	4-Bromophenyl-phenylether	49.5		10	0.56
59-50-7	4-Chloro-3-methylphenol	45.3		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	46.1		10	0.60
106-44-5	m & p-Cresol	36.7		20	2.4
100-01-6	4-Nitroaniline	50.3		10	1.5
117-81-7	Bis(2-ethylhexyl) phthalate	58.0		10	2.0
83-32-9	Acenaphthene	48.9		10	0.35
208-96-8	Acenaphthylene	51.5		10	0.48
120-12-7	Anthracene	50.2		10	0.52
56-55-3	Benzo[a]anthracene	59.8		10	0.45
50-32-8	Benzo[a]pyrene	52.2		10	1.5
205-99-2	Benzo[b]fluoranthene	47.4		10	1.2
191-24-2	Benzo[g,h,i]perylene	51.7		10	0.42
207-08-9	Benzo[k]fluoranthene	48.2		10	1.6
218-01-9	Chrysene	59.1		10	0.31
53-70-3	Dibenz(a,h)anthracene	46.3		10	0.38

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCSD 410-403666/3-A

Matrix: Water
Lab File ID: JH0261.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 00:12

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
132-64-9	Dibenzofuran	48.4		10	0.60
84-66-2	Diethyl phthalate	51.9		10	2.0
206-44-0	Fluoranthene	54.1		10	0.42
86-73-7	Fluorene	48.0		10	0.38
118-74-1	Hexachlorobenzene	51.5		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	52.5		10	0.15
62-75-9	N-Nitrosodimethylamine	28.8		10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	41.4		10	0.58
98-95-3	Nitrobenzene	46.6		10	0.60
87-86-5	Pentachlorophenol	113		10	3.0
85-01-8	Phenanthrene	50.5		10	0.52
108-95-2	Phenol	23.3		10	0.60
129-00-0	Pyrene	50.3		10	0.41

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	79		13-138
321-60-8	2-Fluorobiphenyl (Surr)	80		44-120
367-12-4	2-Fluorophenol (Surr)	50		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	76		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	90		30-125
4165-62-2	Phenol-d5 (Surr)	38		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0261.D
Lims ID: LCSD 410-403666/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 03-Aug-2023 00:12:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 410-403666/3-A
Misc. Info.: 410-0090492-012
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 08:48:58 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:42:18

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 1,4-Dioxane	88	1.695	1.701	-0.006	97	99125	12.5	5.92	
	2 N-Nitrosodimethylamine	74	1.928	1.928	0.000	92	196174	12.5	7.19	
$	9 2-Fluorophenol	112	3.085	3.090	-0.006	95	1057805	50.0	25.1	
	13 Benzaldehyde	77	3.908	3.896	0.000	91	415632	12.5	11.3	
$	15 Phenol-d5	99	3.990	3.990	0.000	96	1133491	50.0	18.8	
	16 Phenol	94	4.001	4.001	0.000	91	369879	12.5	5.83	
	18 Bis(2-chloroethyl)ether	93	4.071	4.071	0.000	87	527665	12.5	11.9	
	19 2-Chlorophenol	128	4.130	4.130	0.000	93	422098	12.5	10.8	
*	22 1,4-Dichlorobenzene-d4	152	4.328	4.322	0.006	95	137160	5.00	5.00	
	29 2-Methylphenol	108	4.579	4.585	0.000	97	408854	12.5	10.9	
	30 2,2'-oxybis[1-chloropropane]	45	4.585	4.609	0.000	92	1135372	12.5	11.7	
	33 N-Nitrosodi-n-propylamine	70	4.708	4.708	0.000	88	442708	12.5	11.9	
	32 Acetophenone	105	4.708	4.708	0.000	86	761967	12.5	12.7	
	34 4-Methylphenol	108	4.731	4.737	0.000	95	397749	12.5	9.17	
	37 Hexachloroethane	117	4.807	4.801	0.000	96	186005	12.5	10.6	
$	39 Nitrobenzene-d5	82	4.854	4.854	0.000	93	1083271	25.0	19.0	
	40 Nitrobenzene	77	4.871	4.842	0.000	93	605808	12.5	11.6	
	42 Isophorone	82	5.099	5.099	0.000	98	1120898	12.5	12.0	
	43 2-Nitrophenol	139	5.181	5.181	0.000	90	203940	12.5	10.6	
	44 2,4-Dimethylphenol	107	5.233	5.239	0.000	97	451895	12.5	11.5	
	47 Bis(2-chloroethoxy)methane	93	5.315	5.315	0.000	91	675466	12.5	12.0	
	49 2,4-Dichlorophenol	162	5.420	5.420	0.000	97	354486	12.5	12.1	
*	52 Naphthalene-d8	136	5.543	5.543	0.000	98	532198	5.00	5.00	
	53 Naphthalene	128	5.560	5.566	0.000	97	1349402	12.5	11.8	
	56 4-Chloroaniline	127	5.624	5.619	0.005	94	404991	12.5	8.37	
	57 2,6-Dichlorophenol	162	5.630	5.630	0.000	93	359319	12.5	12.4	
	59 Hexachlorobutadiene	225	5.677	5.683	-0.006	96	195750	12.5	11.0	
	62 Caprolactam	113	5.928	5.928	0.000	71	28838	12.5	2.77	
	65 4-Chloro-3-methylphenol	107	6.097	6.097	-0.006	96	409877	12.5	11.3	
	67 2-Methylnaphthalene	142	6.220	6.220	0.000	91	871983	12.5	12.5	
	71 Hexachlorocyclopentadiene	237	6.372	6.372	0.000	94	119167	12.5	6.62	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
70 1,2,4,5-Tetrachlorobenzene	216	6.378	6.384	-0.006	98	395049	12.5	12.1	
79 2,4,6-Trichlorophenol	196	6.500	6.500	0.000	94	266242	12.5	12.9	
80 2,4,5-Trichlorophenol	196	6.541	6.541	0.000	91	288966	12.5	12.7	
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.576	0.000	99	1740725	25.0	19.9	
83 1,1'-Biphenyl	154	6.670	6.670	0.000	96	1098540	12.5	12.9	
84 2-Chloronaphthalene	162	6.681	6.681	0.000	95	819296	12.5	12.6	
87 2-Nitroaniline	138	6.786	6.786	0.000	76	301193	12.5	13.2	
90 Dimethyl phthalate	163	6.962	6.962	0.000	97	897182	12.5	11.7	
91 1,3-Dinitrobenzene	168	6.991	6.991	0.000	77	150773	12.5	12.8	
92 2,6-Dinitrotoluene	165	7.020	7.020	0.000	83	198914	12.5	12.3	
93 Acenaphthylene	152	7.073	7.078	-0.005	99	1438210	12.5	12.9	
95 3-Nitroaniline	138	7.178	7.178	0.000	86	232407	12.5	11.7	
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	95	274938	5.00	5.00	
97 Acenaphthene	153	7.236	7.242	-0.006	98	886060	12.5	12.2	
98 2,4-Dinitrophenol	184	7.277	7.277	0.000	76	218963	25.0	21.5	
100 4-Nitrophenol	109	7.370	7.382	0.000	93	187803	25.0	15.6	
102 2,4-Dinitrotoluene	165	7.400	7.399	0.000	79	286494	12.5	13.1	
101 Dibenzofuran	168	7.405	7.405	0.000	96	1180952	12.5	12.1	
105 2,3,4,6-Tetrachlorophenol	232	7.528	7.528	0.000	76	220046	12.5	11.0	
107 Diethyl phthalate	149	7.633	7.633	0.000	96	1072723	12.5	13.0	
108 Fluorene	166	7.727	7.727	0.000	93	923664	12.5	12.0	
110 4-Chlorophenyl phenyl ether	204	7.732	7.732	0.000	93	396476	12.5	11.5	
112 4-Nitroaniline	138	7.756	7.756	0.000	81	248133	12.5	12.6	
113 4,6-Dinitro-2-methylphenol	198	7.779	7.779	0.000	69	288195	25.0	23.7	
114 N-Nitrosodiphenylamine	169	7.843	7.861	-0.006	68	656656	10.6	10.3	
$ 116 2,4,6-Tribromophenol	330	7.960	7.960	0.000	90	514476	50.0	39.5	
122 4-Bromophenyl phenyl ether	248	8.194	8.194	0.000	76	254129	12.5	12.4	
124 Hexachlorobenzene	284	8.240	8.240	0.000	94	313652	12.5	12.9	
126 Atrazine	200	8.357	8.357	0.000	81	236924	12.5	12.7	
127 Pentachlorophenol	266	8.439	8.439	0.000	89	326625	25.0	28.2	
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	96	520905	5.00	5.00	
132 Phenanthrene	178	8.632	8.643	-0.005	98	1385930	12.5	12.6	
135 Anthracene	178	8.684	8.690	0.000	98	1373704	12.5	12.6	
136 Carbazole	167	8.842	8.848	-0.006	96	1481665	12.5	13.7	
138 Di-n-butyl phthalate	149	9.186	9.186	0.000	99	1839762	12.5	13.2	
144 Fluoranthene	202	9.759	9.758	0.000	99	1571878	12.5	13.5	
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	96	494297	5.00	5.00	
147 Pyrene	202	9.975	9.975	0.000	96	1594501	12.5	12.6	
$ 148 p-Terphenyl-d14	244	10.132	10.132	0.000	96	1976084	25.0	22.5	
153 Butyl benzyl phthalate	149	10.640	10.646	0.000	96	736978	12.5	12.8	
157 3,3'-Dichlorobenzidine	252	11.212	11.213	0.000	76	780624	25.0	22.1	
156 Benzo[a]anthracene	228	11.224	11.236	0.000	99	1401358	12.5	15.0	
159 Chrysene	228	11.265	11.265	0.000	97	1368418	12.5	14.8	
160 Bis(2-ethylhexyl) phthalate	149	11.300	11.300	0.000	94	1136011	12.5	14.5	
162 Di-n-octyl phthalate	149	12.141	12.141	0.000	98	1867252	12.5	11.9	
164 Benzo[b]fluoranthene	252	12.590	12.591	0.000	98	1299711	12.5	11.8	
165 Benzo[k]fluoranthene	252	12.625	12.631	-0.006	98	1345191	12.5	12.0	
166 Benzo[a]pyrene	252	13.034	13.046	-0.006	83	1218586	12.5	13.0	
* 167 Perylene-d12	264	13.116	13.116	0.000	94	439036	5.00	5.00	
171 Indeno[1,2,3-cd]pyrene	276	14.622	14.599	0.000	95	1169560	12.5	13.1	
172 Dibenz(a,h)anthracene	278	14.663	14.669	0.000	95	1138022	12.5	11.6	
173 Benzo[g,h,i]perylene	276	14.973	14.973	0.000	93	1353328	12.5	12.9	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_IS_00059 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 03-Aug-2023 08:54:15 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0261.D

Injection Date: 03-Aug-2023 00:12:30 Instrument ID: HP23264 Operator ID: mem41592

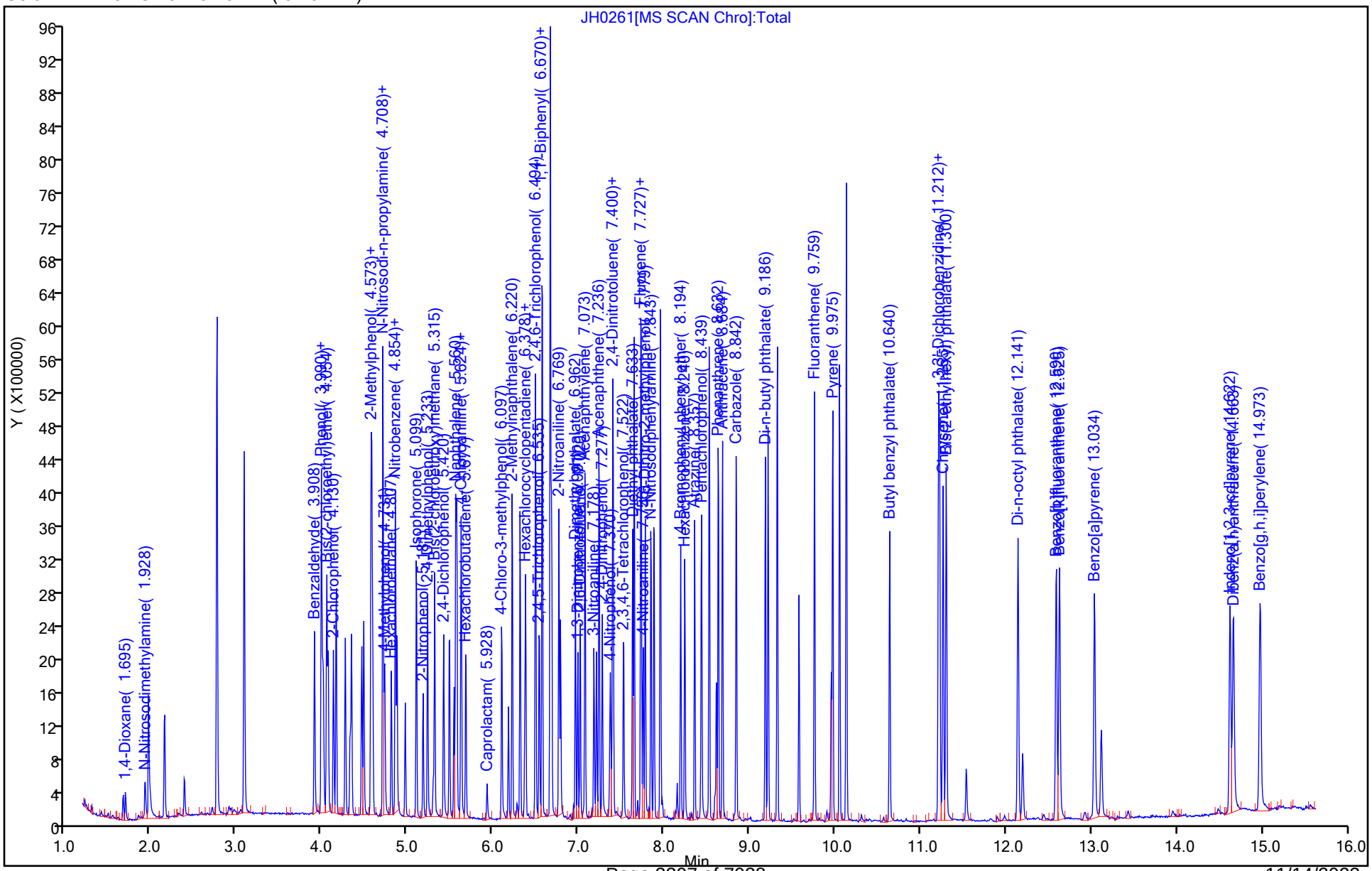
Lims ID: LCSD 410-403666/3-A Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 12

Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0261.D
Lims ID: LCSD 410-403666/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 03-Aug-2023 00:12:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 410-403666/3-A
Misc. Info.: 410-0090492-012
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 08:48:58 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:42:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 2-Fluorophenol	50.0	25.1	50.19
$ 15 Phenol-d5	50.0	18.8	37.51
$ 39 Nitrobenzene-d5	25.0	19.0	76.06
$ 81 2-Fluorobiphenyl (Surr)	25.0	19.9	79.79
$ 116 2,4,6-Tribromophenol	50.0	39.5	79.01
$ 148 p-Terphenyl-d14	25.0	22.5	90.19

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCSD 410-403666/5-A

Matrix: Water
Lab File ID: JH0263.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/02/2023 15:28

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 00:54

Con. Extract Vol.: 1(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 403788
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
99-55-8	5-Nitro-o-toluidine	40.7		10	2.0
1888-71-7	Hexachloropropene	33.6		10	2.0
2303-16-4	Diallate	40.8		10	3.0
60-51-5	Dimethoate	32.9		10	3.0
62-50-0	Ethyl methanesulfonate	43.8		10	1.1
465-73-6	Isodrin	41.3		10	1.1
143-50-0	Kepone	38.1	J	50	25
3689-24-5	Sulfotepp	43.3		10	2.4
55-18-5	N-Nitrosodiethylamine	48.7		10	3.0
59-89-2	N-Nitrosomorpholine	38.0		10	3.0
100-75-4	N-Nitrosopiperidine	38.8		10	1.1
126-68-1	o,o',o''-Triethylphosphorothioate	40.4		10	2.6
608-93-5	Pentachlorobenzene	45.3		10	1.6
62-44-2	Phenacetin	46.6		10	1.4
298-02-2	Phorate	44.6		10	2.5
94-59-7	Safrole, Total	41.0		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	47.1		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND		50	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	82		13-138
321-60-8	2-Fluorobiphenyl (Surr)	79		44-120
367-12-4	2-Fluorophenol (Surr)	45		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	71		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	83		30-125
4165-62-2	Phenol-d5 (Surr)	30		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0263.D
Lims ID: LCSD 410-403666/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 03-Aug-2023 00:54:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 410-403666/5-A
Misc. Info.: 410-0090492-014
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 10:00:20 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:46:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 9 2-Fluorophenol	112	3.085	3.090	-0.005	95	974280	50.0	22.7	
11 N-Nitrosodiethylamine	102	3.283	3.287	0.000	89	226250	12.5	12.2	
12 Ethyl methanesulfonate	109	3.581	3.586	0.000	97	252033	12.5	10.9	
$ 15 Phenol-d5	99	3.990	3.990	0.000	96	930815	50.0	15.1	
* 22 1,4-Dichlorobenzene-d4	152	4.328	4.322	0.006	96	139884	5.00	5.00	
35 N-Nitrosomorpholine	56	4.725	4.737	-0.006	91	334760	12.5	9.50	
$ 39 Nitrobenzene-d5	82	4.854	4.854	0.000	93	1123907	25.0	17.7	
41 N-Nitrosopiperidine	114	5.017	5.017	0.000	80	227090	12.5	9.71	
46 o,o',o''-Triethylphosphorothioat	198	5.286	5.286	0.000	95	170143	12.5	10.1	
54 alpha,alpha-Dimethyl phenethylam	58		5.379				12.5	ND	7
* 52 Naphthalene-d8	136	5.543	5.543	0.000	99	592885	5.00	5.00	
58 Hexachloropropene	213	5.648	5.655	0.000	97	194199	12.5	8.40	
66 Safrole, Total	162	6.144	6.144	0.000	81	287753	12.5	10.2	
$ 81 2-Fluorobiphenyl (Surr)	172	6.576	6.576	0.000	99	1748703	25.0	19.8	
* 96 Acenaphthene-d10	164	7.207	7.207	0.000	95	278179	5.00	5.00	
99 Pentachlorobenzene	250	7.365	7.364	0.000	97	322288	12.5	11.3	
109 Thionazin	107	7.709	7.709	0.000	76	174362	12.5	11.8	
111 N-Nitro-o-toluidine	152	7.744	7.744	0.000	89	222888	12.5	10.2	
$ 116 2,4,6-Tribromophenol	330	7.954	7.960	-0.006	89	537343	50.0	40.8	
117 Sulfotepp	97	8.001	8.001	0.000	75	198945	12.5	10.8	
120 cis-Diallate	86	8.118	8.118	0.000	94	335897		7.51	
119 Phorate	75	8.129	8.129	0.000	93	731938	12.5	11.1	
121 Phenacetin	108	8.147	8.147	0.000	90	521880	12.5	11.6	
123 trans-Diallate	86	8.205	8.205	0.000	91	114288		2.67	
125 Dimethoate	87	8.287	8.287	0.000	95	342235	12.5	8.23	
* 131 Phenanthrene-d10	188	8.614	8.614	0.000	96	548197	5.00	5.00	
143 Isodrin	193	9.613	9.618	-0.005	89	157848	12.5	10.3	
S 68 Diallate	86				0		12.5	10.2	
* 146 Pyrene-d10 (IS)	212	9.957	9.957	0.000	97	499411	5.00	5.00	
$ 148 p-Terphenyl-d14	244	10.132	10.132	0.000	96	1841701	25.0	20.8	
154 Kepone	272	10.757	10.669	0.111	81	128862	12.6	9.52	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 167 Perylene-d12	264	13.116	13.116	0.000	93	400010	5.00	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_IS_00059 Amount Added: 20.00 Units: uL Run Reagent

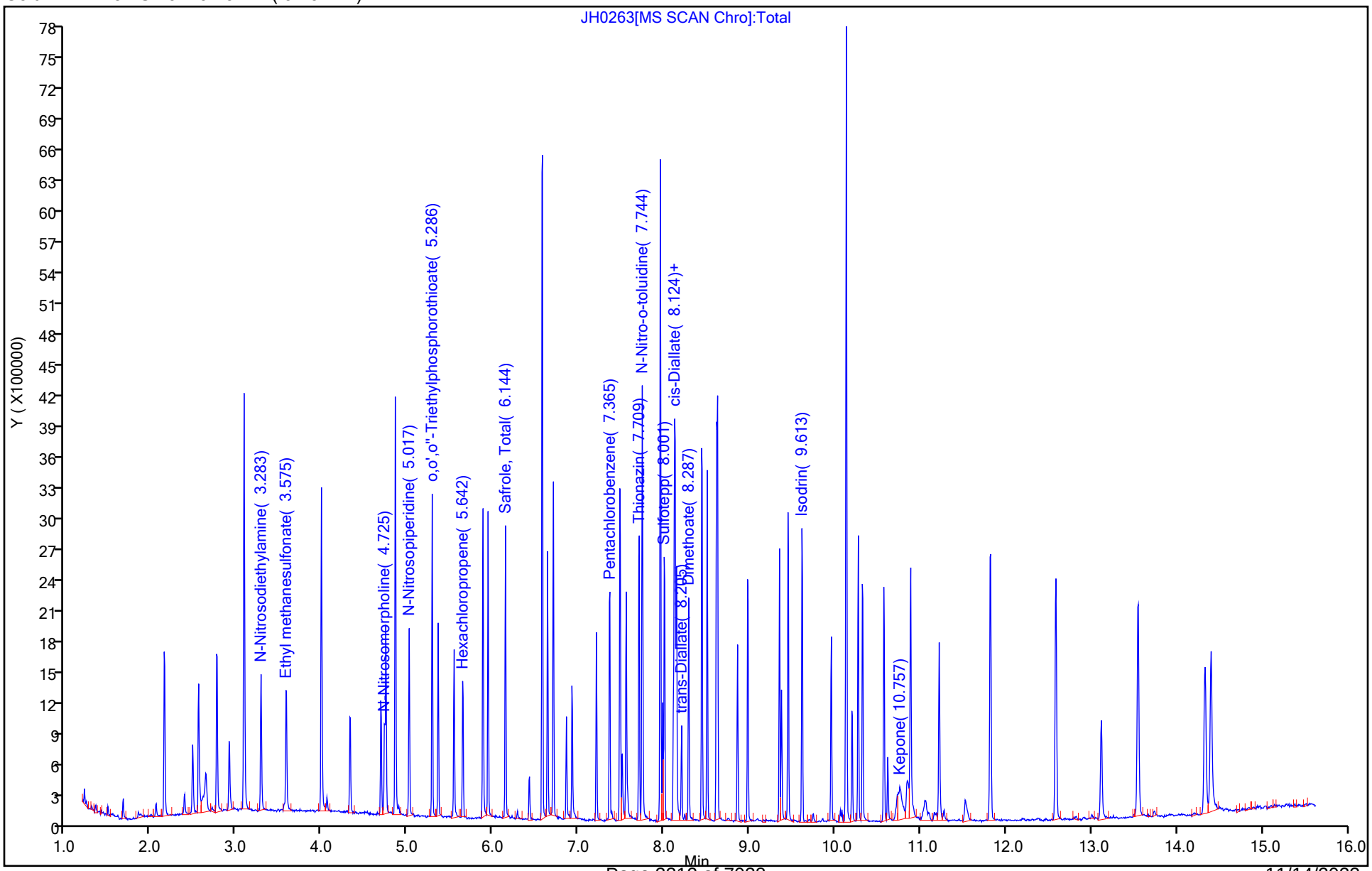
Report Date: 03-Aug-2023 10:39:59 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0263.D

Injection Date:	03-Aug-2023 00:54:30	Instrument ID:	HP23264	Operator ID:	mem41592
Lims ID:	LCSD 410-403666/5-A			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0263.D
Lims ID: LCSD 410-403666/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 03-Aug-2023 00:54:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 410-403666/5-A
Misc. Info.: 410-0090492-014
Operator ID: mem41592 Instrument ID: HP23264

Method: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\MSSemi_HP23264.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 03-Aug-2023 10:00:20 Calib Date: 02-Aug-2023 21:45:30
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0254.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1602

First Level Reviewer: N5QU Date: 03-Aug-2023 07:46:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 2-Fluorophenol	50.0	22.7	45.33
$ 15 Phenol-d5	50.0	15.1	30.20
$ 39 Nitrobenzene-d5	25.0	17.7	70.84
$ 81 2-Fluorobiphenyl (Surr)	25.0	19.8	79.22
$ 116 2,4,6-Tribromophenol	50.0	40.8	81.56
$ 148 p-Terphenyl-d14	25.0	20.8	83.19

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

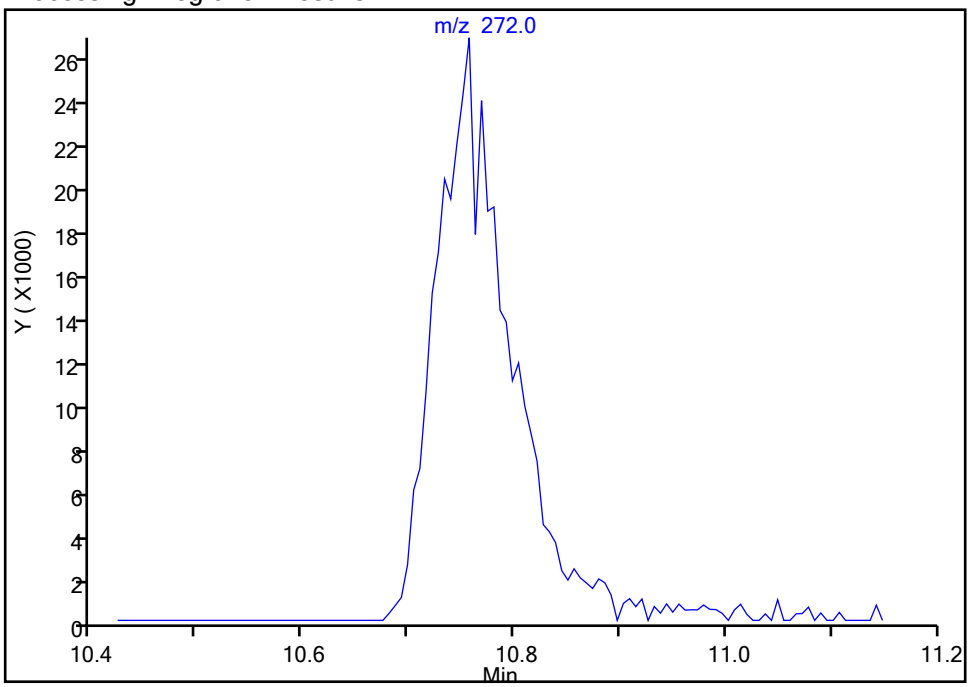
Data File:	\\chromfs\Lancaster\ChromData\HP23264\20230802-90492.b\JH0263.D				
Injection Date:	03-Aug-2023 00:54:30	Instrument ID:	HP23264		
Lims ID:	LCSD 410-403666/5-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP23264	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

154 Kepone, CAS: 143-50-0

Signal: 1

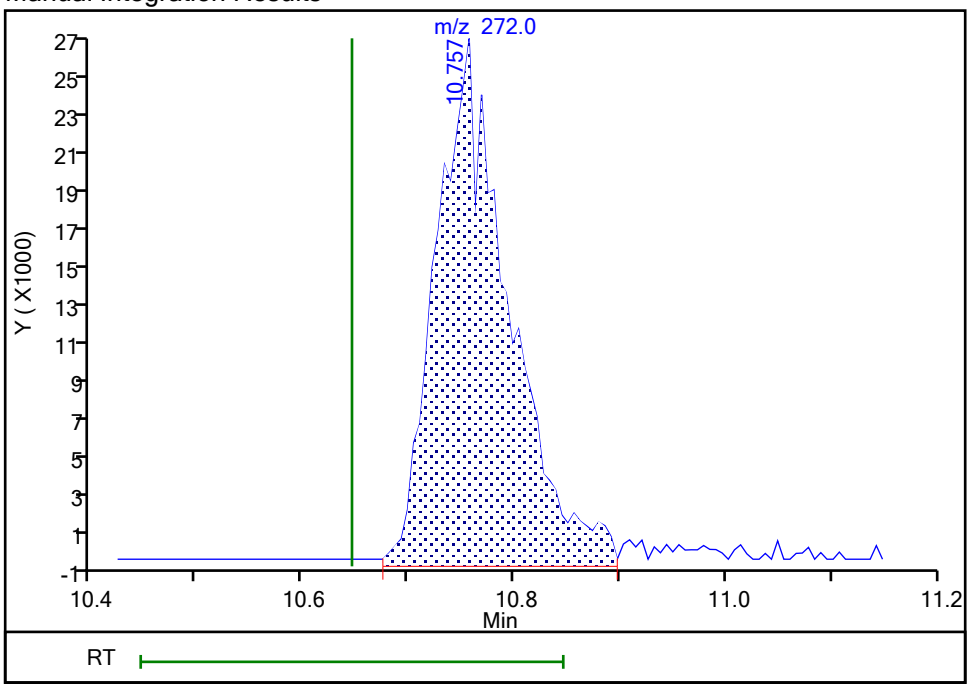
Not Detected
Expected RT: 10.65

Processing Integration Results



Manual Integration Results

RT: 10.76
Area: 128862
Amount: 9.519961
Amount Units: ug/ml



Reviewer: N5QU, 03-Aug-2023 07:45:58 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCSD 410-403918/4-A

Matrix: Water
Lab File ID: DH0358.D

Analysis Method: 8270D
Date Collected:

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 250(mL)
Date Analyzed: 08/03/2023 17:21

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
99-55-8	5-Nitro-o-toluidine	42.0		10	2.0
1888-71-7	Hexachloropropene	24.7		10	2.0
2303-16-4	Diallate	37.7		10	3.0
60-51-5	Dimethoate	26.0		10	3.0
62-50-0	Ethyl methanesulfonate	38.8		10	1.1
465-73-6	Isodrin	41.2		10	1.1
143-50-0	Kepone	ND		50	25
3689-24-5	Sulfotepp	39.3		10	2.4
55-18-5	N-Nitrosodiethylamine	38.4		10	3.0
59-89-2	N-Nitrosomorpholine	30.7		10	3.0
100-75-4	N-Nitrosopiperidine	40.3		10	1.1
126-68-1	o,o',o''-Triethylphosphorothioate	42.7		10	2.6
608-93-5	Pentachlorobenzene	34.9		10	1.6
62-44-2	Phenacetin	45.0		10	1.4
298-02-2	Phorate	39.7		10	2.5
94-59-7	Safrole, Total	41.7		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	42.8		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND		50	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	89		13-138
321-60-8	2-Fluorobiphenyl (Surr)	79		44-120
367-12-4	2-Fluorophenol (Surr)	56		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	71		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	90		30-125
4165-62-2	Phenol-d5 (Surr)	35		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0358.D
Lims ID: LCSD 410-403918/4-A
Client ID:
Sample Type: LCSD
Inject. Date: 03-Aug-2023 17:21:51 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 410-403918/4-A
Misc. Info.: 410-0090557-009
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 07-Aug-2023 15:26:49 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: P7EB Date: 04-Aug-2023 14:05:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
$ 10 2-Fluorophenol	112	2.830	2.824	0.006	92	1097224	50.0	27.9	
11 N-Nitrosodiethylamine	102	3.028	3.016	0.012	93	205383	12.5	9.59	
12 Ethyl methanesulfonate	109	3.319	3.314	0.005	98	226346	12.5	9.69	
$ 16 Phenol-d5	99	3.733	3.728	0.005	96	1004164	50.0	17.7	
* 22 1,4-Dichlorobenzene-d4	152	4.071	4.066	0.005	97	134519	5.00	5.00	
35 N-Nitrosomorpholine	56	4.485	4.479	0.006	92	225678	12.5	7.66	
$ 39 Nitrobenzene-d5	82	4.608	4.613	0.006	88	977483	25.0	17.7	
42 N-Nitrosopiperidine	114	4.771	4.765	0.006	83	209169	12.5	10.1	
46 o,o',o''-Triethylphosphorothioat	198	5.056	5.051	0.005	91	196830	12.5	10.7	
* 50 Naphthalene-d8	136	5.301	5.290	0.011	100	525720	5.00	5.00	
37 alpha,alpha-Dimethyl phenethylam	58	5.225	5.225	-0.123	94	9058	12.5	0.1325	7M
55 Hexachloropropene	213	5.406	5.395	0.011	91	146483	12.5	6.18	
65 Safrole, Total	162	5.913	5.902	0.011	85	295852	12.5	10.4	
$ 73 2-Fluorobiphenyl (Surr)	172	6.339	6.333	0.006	99	1575057	25.0	19.8	
* 90 Acenaphthene-d10	164	6.968	6.962	0.006	96	279694	5.00	5.00	
94 Pentachlorobenzene	250	7.126	7.120	0.006	97	260041	12.5	8.72	
101 Thionazin	107	7.481	7.475	0.006	78	154735	12.5	10.7	
104 N-Nitro-o-toluidine	152	7.510	7.505	0.005	91	216566	12.5	10.5	
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	86	428009	50.0	44.4	
110 Sulfotepp	97	7.778	7.773	0.005	78	168523	12.5	9.83	
113 cis-Diallate	86	7.895	7.883	0.012	0	334053		7.07	
114 Phorate	75	7.901	7.895	0.006	95	610908	12.5	9.94	
115 Phenacetin	108	7.918	7.918	0.000	91	476352	12.5	11.2	
117 trans-Diallate	86	7.977	7.971	0.005	0	115434		2.35	
119 Dimethoate	87	8.058	8.052	0.006	97	253705	12.5	6.50	
* 126 Phenanthrene-d10	188	8.373	8.367	0.006	97	543394	5.00	5.00	
141 Isodrin	193	9.375	9.370	0.005	91	150303	12.5	10.3	
S 136 Diallate	86				0		12.5	9.42	
* 149 Pyrene-d10 (IS)	212	9.713	9.714	-0.001	99	507798	5.00	5.00	
$ 152 p-Terphenyl-d14	244	9.906	9.900	0.006	97	1891863	25.0	22.6	
153 Kepone	272	10.436	10.389	0.040	91	52772	12.6	5.02	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 170 Perylene-d12	264	12.733	12.733	0.000	98	361070	5.00	5.00	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

Reagents:

MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

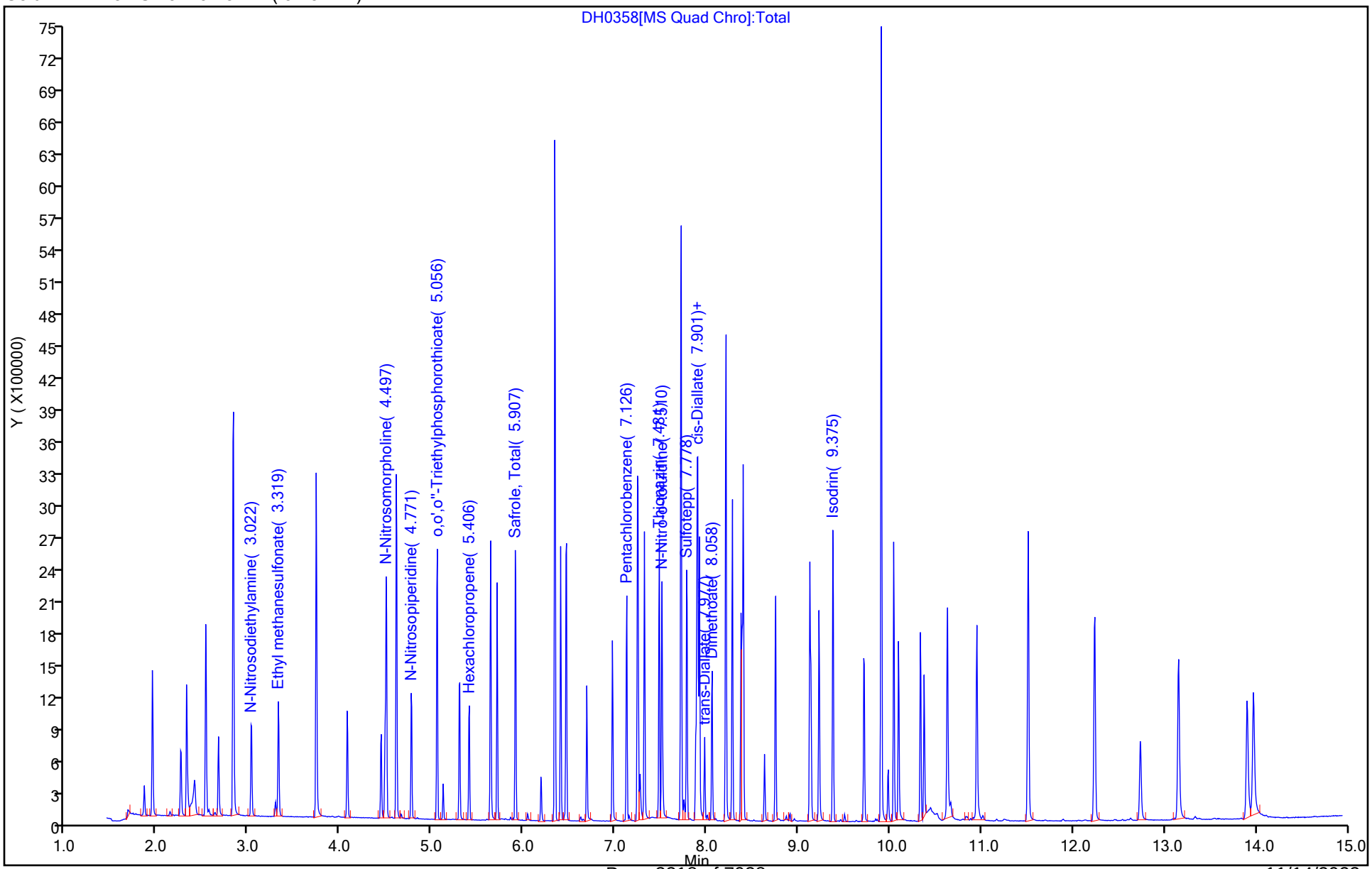
Report Date: 07-Aug-2023 15:26:49 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0358.D

Injection Date:	03-Aug-2023 17:21:51	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	LCSD 410-403918/4-A			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0358.D
Lims ID: LCSD 410-403918/4-A
Client ID:
Sample Type: LCSD
Inject. Date: 03-Aug-2023 17:21:51 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 410-403918/4-A
Misc. Info.: 410-0090557-009
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 07-Aug-2023 15:26:49 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: P7EB Date: 04-Aug-2023 14:05:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	27.9	55.74
$ 16 Phenol-d5	50.0	17.7	35.42
$ 39 Nitrobenzene-d5	25.0	17.7	70.78
$ 73 2-Fluorobiphenyl (Surr)	25.0	19.8	79.18
$ 109 2,4,6-Tribromophenol	50.0	44.4	88.89
$ 152 p-Terphenyl-d14	25.0	22.6	90.24

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

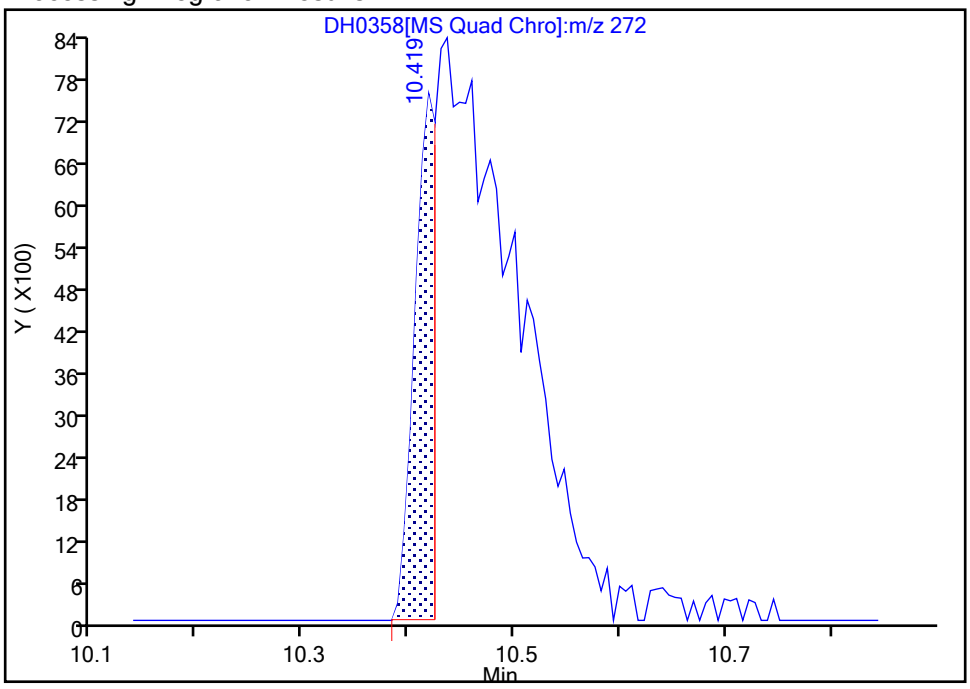
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0358.D				
Injection Date:	03-Aug-2023 17:21:51	Instrument ID:	HP19760		
Lims ID:	LCSD 410-403918/4-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

153 Kepone, CAS: 143-50-0

Signal: 1

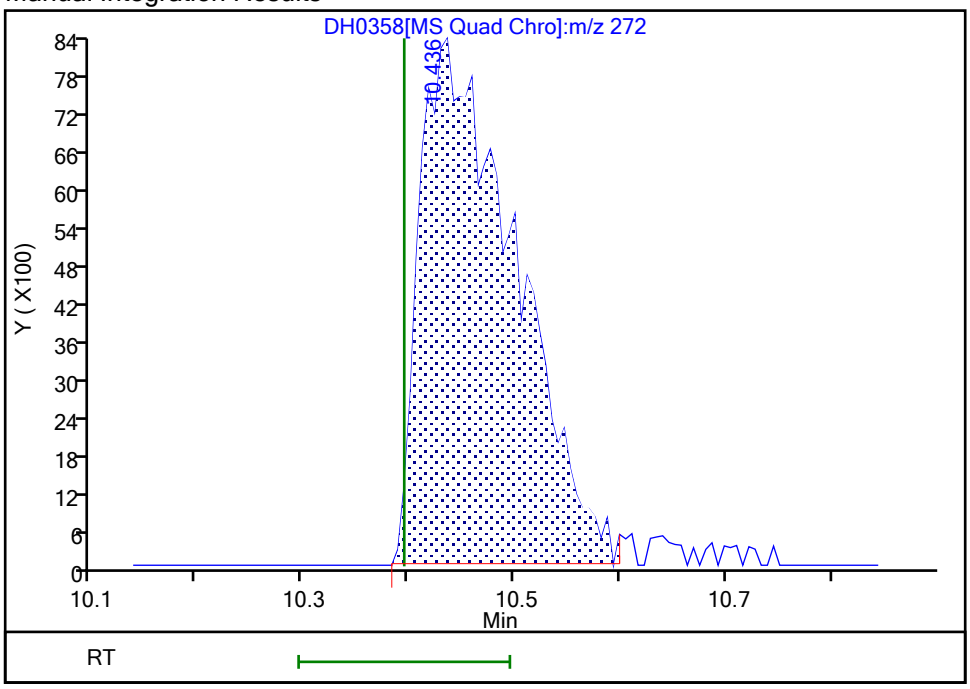
Processing Integration Results

RT: 10.42
Area: 9423
Amount: 0.896125
Amount Units: ug/ml



Manual Integration Results

RT: 10.44
Area: 52772
Amount: 5.018605
Amount Units: ug/ml



Reviewer: P7EB, 04-Aug-2023 14:05:33 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

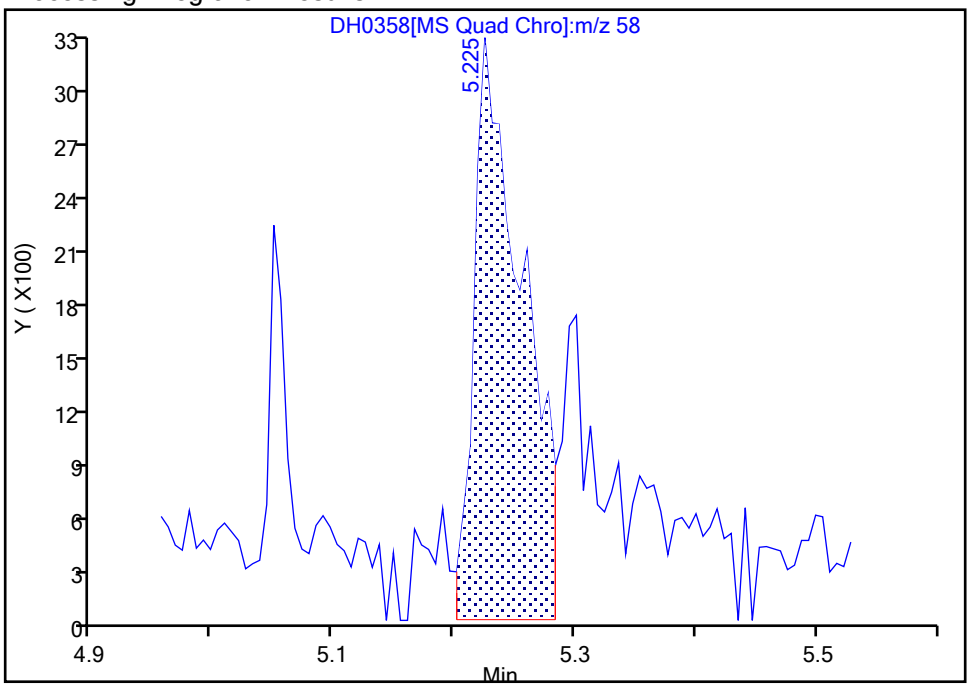
Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0358.D				
Injection Date:	03-Aug-2023 17:21:51	Instrument ID:	HP19760		
Lims ID:	LCSD 410-403918/4-A				
Client ID:					
Operator ID:	mem41592	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		
Column:	DB-5MS 20m 0.25mm (0.25 mm)	Detector	MS SCAN		

37 alpha,alpha-Dimethyl phenethylam, CAS: 122-09-8

Signal: 1

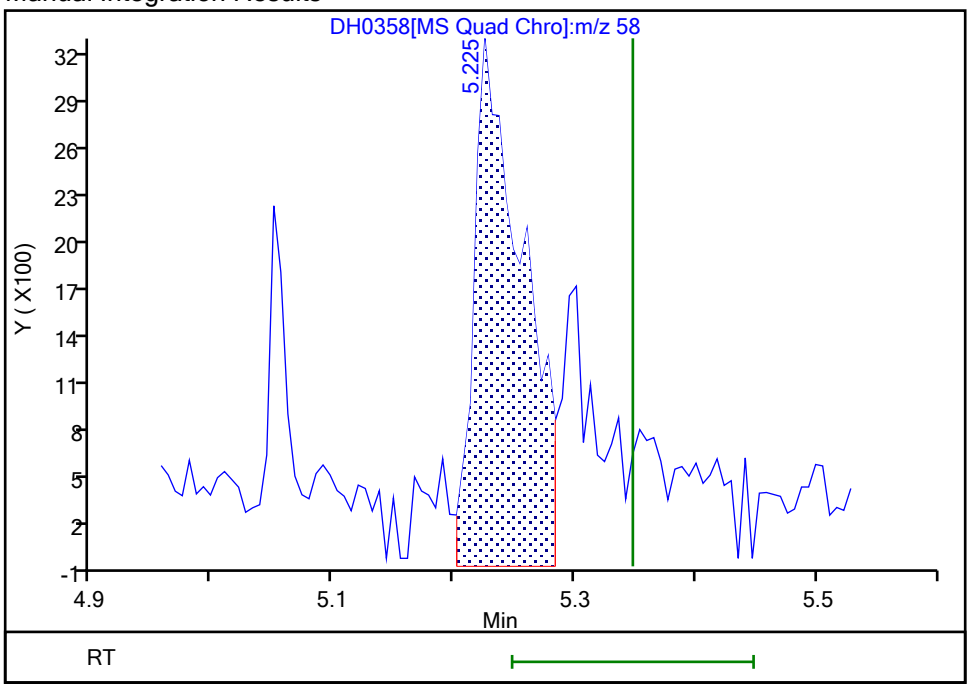
Processing Integration Results

RT: 5.23
Area: 8847
Amount: 0.129381
Amount Units: ug/ml



Manual Integration Results

RT: 5.23
Area: 9058
Amount: 0.132467
Amount Units: ug/ml



Reviewer: phakdeer, 07-Aug-2023 15:26:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MS
Lab Sample ID: 410-136864-4 MS

Matrix: Water
Lab File ID: DH0360.D

Analysis Method: 8270D
Date Collected: 07/27/2023 09:55

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.8(mL)
Date Analyzed: 08/03/2023 18:01

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	37.3		10	2.0
99-65-0	1,3-Dinitrobenzene	47.2		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	31.3		10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	29.9		10	1.8
95-95-4	2,4,5-Trichlorophenol	31.5		10	2.0
88-06-2	2,4,6-Trichlorophenol	27.7		10	1.8
120-83-2	2,4-Dichlorophenol	28.2		10	1.5
121-14-2	2,4-Dinitrotoluene	48.3		10	2.1
87-65-0	2,6-Dichlorophenol	28.1		10	1.4
606-20-2	2,6-Dinitrotoluene	45.1		10	2.1
91-58-7	2-Chloronaphthalene	42.6		10	0.50
95-57-8	2-Chlorophenol	27.7		10	1.0
91-57-6	2-Methylnaphthalene	41.1		10	0.29
95-48-7	o-Cresol	35.6		10	0.80
88-74-4	2-Nitroaniline	44.2		10	1.0
88-75-5	2-Nitrophenol	43.4		10	1.2
101-55-3	4-Bromophenyl-phenylether	41.4		10	0.56
59-50-7	4-Chloro-3-methylphenol	36.1		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	41.6		10	0.60
106-44-5	m & p-Cresol	34.6		20	2.4
100-01-6	4-Nitroaniline	40.2		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	49.3		10	2.0
83-32-9	Acenaphthene	43.6		10	0.35
208-96-8	Acenaphthylene	42.6		10	0.48
120-12-7	Anthracene	44.5		10	0.52
56-55-3	Benzo[a]anthracene	45.4		10	0.45
50-32-8	Benzo[a]pyrene	48.7		10	1.5
205-99-2	Benzo[b]fluoranthene	44.8		10	1.2
191-24-2	Benzo[g,h,i]perylene	41.7		10	0.42
207-08-9	Benzo[k]fluoranthene	46.4		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MS
Lab Sample ID: 410-136864-4 MS

Matrix: Water
Lab File ID: DH0360.D

Analysis Method: 8270D
Date Collected: 07/27/2023 09:55

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.8(mL)
Date Analyzed: 08/03/2023 18:01

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	46.4		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	41.4		10	0.38
132-64-9	Dibenzofuran	42.6		10	0.60
84-66-2	Diethyl phthalate	47.9		10	2.0
60-51-5	Dimethoate	ND		10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	44.2		10	0.42
86-73-7	Fluorene	42.7		10	0.38
118-74-1	Hexachlorobenzene	40.5		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	42.6		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND		50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	21.3		10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	39.7		10	0.58
59-89-2	N-Nitrosomorpholine	ND		10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	35.5		10	0.60
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	77.7		10	3.0
85-01-8	Phenanthrene	44.0		10	0.52
108-95-2	Phenol	20.9		10	0.60
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	43.9		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND		50	5.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MS Lab Sample ID: 410-136864-4 MS

Matrix: Water Lab File ID: DH0360.D

Analysis Method: 8270D Date Collected: 07/27/2023 09:55

Extract. Method: 3510C Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.8(mL) Date Analyzed: 08/03/2023 18:01

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor: Level: (low/med) Low

Analysis Batch No.: 404152 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	47		13-138
321-60-8	2-Fluorobiphenyl (Surr)	72		44-120
367-12-4	2-Fluorophenol (Surr)	25		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	62		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	84		30-125
4165-62-2	Phenol-d5 (Surr)	31		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0360.D
Lims ID: 410-136864-G-4-A MS
Client ID: 16WC1A
Sample Type: MS
Inject. Date: 03-Aug-2023 18:01:31 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 410-136864-G-4-A MS
Misc. Info.: 410-0090557-011
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 14:21:25 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1655

First Level Reviewer: P7EB Date: 04-Aug-2023 14:07:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 N-Nitrosodimethylamine	74	1.740	1.728	0.012	93	203285	12.5	5.31	
$ 10 2-Fluorophenol	112	2.830	2.824	0.006	91	543355	50.0	12.5	
11 N-Nitrosodiethylamine	102		3.016					ND	
12 Ethyl methanesulfonate	109		3.314					ND	
$ 16 Phenol-d5	99	3.733	3.728	0.005	96	977456	50.0	15.6	
17 Phenol	94	3.751	3.739	0.012	91	334619	12.5	5.21	
20 2-Chlorophenol	128	3.873	3.867	0.006	94	269636	12.5	6.88	
* 22 1,4-Dichlorobenzene-d4	152	4.071	4.071	0.000	97	148929	5.00	5.00	
28 2-Methylphenol	108	4.334	4.328	0.006	93	370488	12.5	8.87	
29 2,2'-oxybis[1-chloropropane]	45	4.345	4.339	0.005	91	528688	12.5	7.79	
35 N-Nitrosomorpholine	56	4.468	4.479	-0.011	41	23852		0.7315	
32 4-Methylphenol	108	4.485	4.479	0.006	94	381498	12.5	8.61	
$ 39 Nitrobenzene-d5	82	4.608	4.602	0.006	88	949247	25.0	15.4	
40 Nitrobenzene	77	4.631	4.619	0.012	86	554769	12.5	8.84	
42 N-Nitrosopiperidine	114		4.765					ND	
44 2-Nitrophenol	139	4.934	4.928	0.006	92	204064	12.5	10.8	
46 o,o',o''-Triethylphosphorothioat	198		5.051					ND	
48 2,4-Dichlorophenol	162	5.179	5.167	0.012	96	226942	12.5	7.01	
* 50 Naphthalene-d8	136	5.295	5.301	-0.006	100	585913	5.00	5.00	
37 alpha,alpha-Dimethyl phenethylam	58		5.348					ND	7
54 2,6-Dichlorophenol	162	5.389	5.383	0.006	94	229569	12.5	6.98	
55 Hexachloropropene	213		5.395					ND	
64 4-Chloro-3-methylphenol	107	5.867	5.861	0.006	93	376594	12.5	8.99	
65 Safrole, Total	162		5.902					ND	7
66 2-Methylnaphthalene	142	5.983	5.977	0.006	90	817990	12.5	10.2	
69 1,2,4,5-Tetrachlorobenzene	216	6.141	6.135	0.006	98	382252	12.5	9.27	
71 2,4,6-Trichlorophenol	196	6.263	6.251	0.012	93	164513	12.5	6.90	
72 2,4,5-Trichlorophenol	196	6.304	6.298	0.006	92	202273	12.5	7.84	
$ 73 2-Fluorobiphenyl (Surr)	172	6.339	6.333	0.006	100	1659034	25.0	18.1	
76 2-Chloronaphthalene	162	6.444	6.438	0.006	98	826538	12.5	10.6	
79 2-Nitroaniline	138	6.554	6.543	0.011	79	253873	12.5	11.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
86 1,3-Dinitrobenzene	168	6.758	6.753	0.005	84	138269	12.5	11.8	
87 2,6-Dinitrotoluene	165	6.788	6.782	0.006	88	205560	12.5	11.2	
88 Acenaphthylene	152	6.834	6.828	0.006	99	1321716	12.5	10.6	
* 90 Acenaphthene-d10	164	6.968	6.968	0.000	96	322664	5.00	5.00	
91 Acenaphthene	153	6.997	6.992	0.005	96	863647	12.5	10.9	
94 Pentachlorobenzene	250		7.120					ND	7
95 2,4-Dinitrotoluene	165	7.166	7.161	0.005	66	295653	12.5	12.0	
96 Dibenzofuran	168	7.166	7.161	0.005	94	1170346	12.5	10.6	
98 2,3,4,6-Tetrachlorophenol	232	7.289	7.283	0.006	76	162194	12.5	7.44	
100 Diethyl phthalate	149	7.405	7.406	0.005	97	971721	12.5	11.9	
101 Thionazin	107		7.475					ND	7
102 Fluorene	166	7.487	7.481	0.006	93	949470	12.5	10.6	
103 4-Chlorophenyl phenyl ether	204	7.499	7.493	0.006	92	454946	12.5	10.3	
104 N-Nitro-o-toluidine	152		7.505					ND	7
105 4-Nitroaniline	138	7.522	7.516	0.006	78	217193	12.5	10.0	
107 N-Nitrosodiphenylamine	169	7.615	7.609	0.006	62	704402	10.6	9.87	
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	85	262055	50.0	23.6	
110 Sulfotepp	97		7.773					ND	7
113 cis-Diallate	86		7.883					ND	7
114 Phorate	75		7.895					ND	7
115 Phenacetin	108		7.918					ND	7
116 4-Bromophenyl phenyl ether	248	7.959	7.953	0.006	69	256880	12.5	10.3	
117 trans-Diallate	86		7.971					ND	7
118 Hexachlorobenzene	284	8.006	8.000	0.006	91	269553	12.5	10.1	
119 Dimethoate	87		8.052					ND	7
121 Pentachlorophenol	266	8.198	8.198	0.000	89	308648	25.0	19.3	
* 126 Phenanthrene-d10	188	8.373	8.373	0.000	97	593035	5.00	5.00	
128 Phenanthrene	178	8.396	8.390	0.006	98	1414535	12.5	10.9	
129 Anthracene	178	8.443	8.437	0.006	98	1419169	12.5	11.1	
141 Isodrin	193	9.346	9.376	-0.024	54	3389		0.2129	
143 Fluoranthene	202	9.521	9.515	0.006	98	1506250	12.5	11.0	
S 136 Diallate	86		9.653					ND	7
* 149 Pyrene-d10 (IS)	212	9.714	9.719	-0.005	99	571894	5.00	5.00	
150 Pyrene	202	9.731	9.725	0.000	97	1590842	12.5	10.9	
$ 152 p-Terphenyl-d14	244	9.906	9.894	0.006	97	1990370	25.0	21.1	
153 Kepone	272		10.396					ND	
161 Benzo[a]anthracene	228	10.943	10.931	0.005	99	1315552	12.5	11.3	
162 Chrysene	228	10.984	10.972	0.006	97	1347155	12.5	11.6	
163 Bis(2-ethylhexyl) phthalate	149	11.043	11.030	0.006	97	871366	12.5	12.3	
167 Benzo[b]fluoranthene	252	12.232	12.226	0.000	97	1050137	12.5	11.2	
168 Benzo[k]fluoranthene	252	12.272	12.267	0.000	99	1138595	12.5	11.6	
169 Benzo[a]pyrene	252	12.657	12.651	0.000	78	987229	12.5	12.1	
* 170 Perylene-d12	264	12.733	12.739	-0.006	98	378468	5.00	5.00	
174 Indeno[1,2,3-cd]pyrene	276	14.196	14.189	0.000	99	717297	12.5	10.6	
175 Dibenz(a,h)anthracene	278	14.242	14.236	0.000	94	822181	12.5	10.3	
176 Benzo[g,h,i]perylene	276	14.551	14.545	0.000	97	833879	12.5	10.4	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

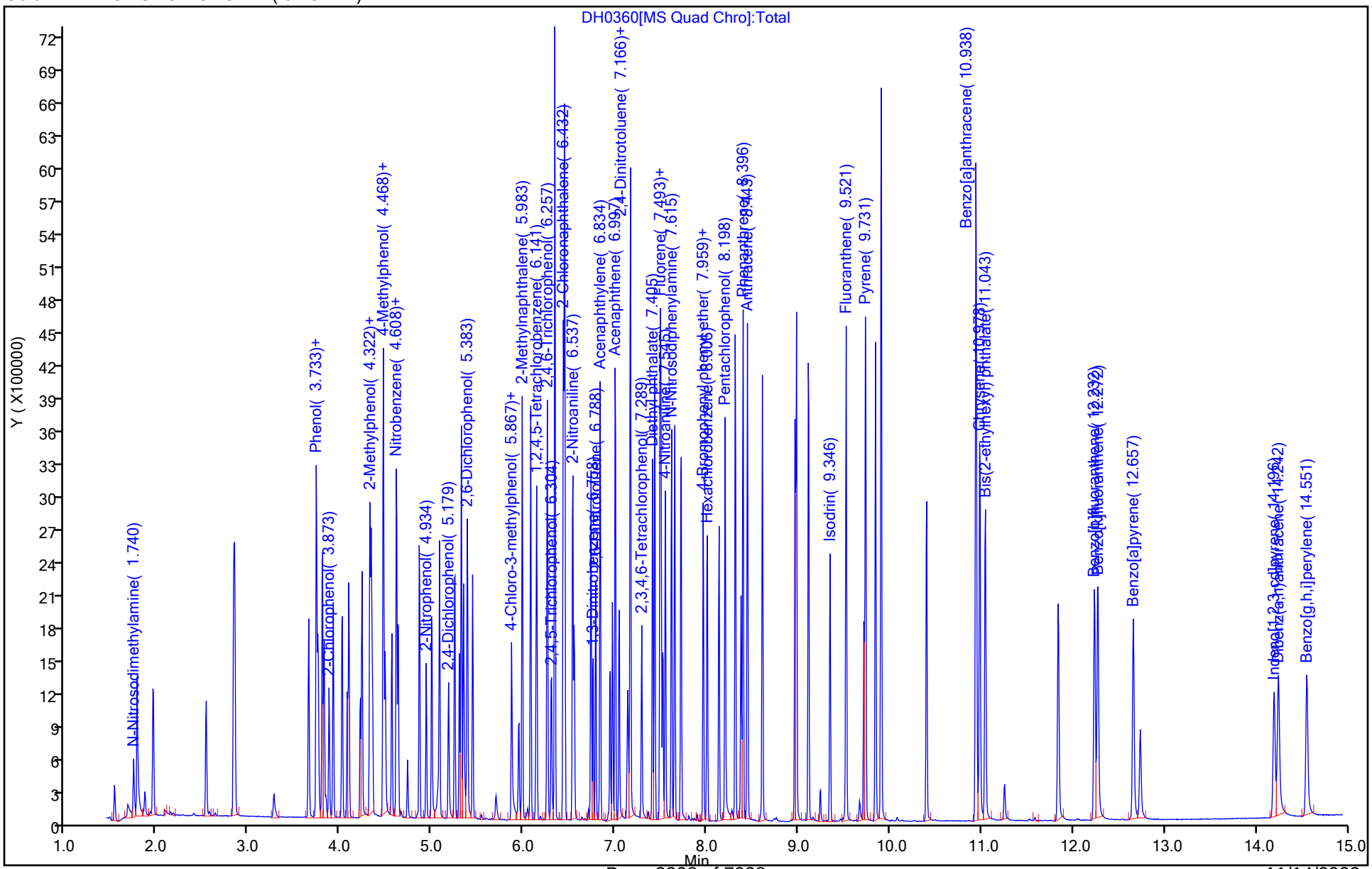
Report Date: 04-Aug-2023 14:22:01 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0360.D

Injection Date:	03-Aug-2023 18:01:31	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	410-136864-G-4-A MS			Worklist Smp#:	11
Client ID:	16WC1A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0360.D				
Lims ID:	410-136864-G-4-A MS				
Client ID:	16WC1A				
Sample Type:	MS				
Inject. Date:	03-Aug-2023 18:01:31	ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	410-136864-G-4-A MS				
Misc. Info.:	410-0090557-011				
Operator ID:	mem41592	Instrument ID:	HP19760		
Method:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	04-Aug-2023 14:21:25	Calib Date:	03-Aug-2023 15:30:40		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1655				

First Level Reviewer: P7EB Date: 04-Aug-2023 14:07:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	12.5	24.93
$ 16 Phenol-d5	50.0	15.6	31.14
$ 39 Nitrobenzene-d5	25.0	15.4	61.67
$ 73 2-Fluorobiphenyl (Surr)	25.0	18.1	72.30
$ 109 2,4,6-Tribromophenol	50.0	23.6	47.18
$ 152 p-Terphenyl-d14	25.0	21.1	84.30

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MSD
Lab Sample ID: 410-136864-4 MSD

Matrix: Water
Lab File ID: DH0361.D

Analysis Method: 8270D
Date Collected: 07/27/2023 09:55

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.6(mL)
Date Analyzed: 08/03/2023 18:21

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	40.7		10	2.0
99-65-0	1,3-Dinitrobenzene	51.5		10	2.3
108-60-1	bis (2-chloroisopropyl) ether	34.6		10	0.60
58-90-2	2,3,4,6-Tetrachlorophenol	30.6		10	1.8
95-95-4	2,4,5-Trichlorophenol	34.2		10	2.0
88-06-2	2,4,6-Trichlorophenol	29.5		10	1.8
120-83-2	2,4-Dichlorophenol	30.5		10	1.5
121-14-2	2,4-Dinitrotoluene	52.1		10	2.1
87-65-0	2,6-Dichlorophenol	30.7		10	1.4
606-20-2	2,6-Dinitrotoluene	48.8		10	2.1
91-58-7	2-Chloronaphthalene	46.0		10	0.50
95-57-8	2-Chlorophenol	30.3		10	1.0
91-57-6	2-Methylnaphthalene	44.7		10	0.29
95-48-7	o-Cresol	38.9		10	0.80
88-74-4	2-Nitroaniline	49.7		10	1.0
88-75-5	2-Nitrophenol	47.6		10	1.2
101-55-3	4-Bromophenyl-phenylether	45.6		10	0.56
59-50-7	4-Chloro-3-methylphenol	39.2		10	1.0
7005-72-3	4-Chlorophenyl-phenyl ether	43.8		10	0.60
106-44-5	m & p-Cresol	37.0		20	2.4
100-01-6	4-Nitroaniline	41.8		10	1.5
99-55-8	5-Nitro-o-toluidine	ND		10	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	50.2		10	2.0
83-32-9	Acenaphthene	46.7		10	0.35
208-96-8	Acenaphthylene	46.6		10	0.48
120-12-7	Anthracene	47.9		10	0.52
56-55-3	Benzo[a]anthracene	47.2		10	0.45
50-32-8	Benzo[a]pyrene	50.0		10	1.5
205-99-2	Benzo[b]fluoranthene	48.0		10	1.2
191-24-2	Benzo[g,h,i]perylene	43.5		10	0.42
207-08-9	Benzo[k]fluoranthene	49.3		10	1.6
1888-71-7	Hexachloropropene	ND		10	2.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MSD
Lab Sample ID: 410-136864-4 MSD

Matrix: Water
Lab File ID: DH0361.D

Analysis Method: 8270D
Date Collected: 07/27/2023 09:55

Extract. Method: 3510C
Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.6(mL)
Date Analyzed: 08/03/2023 18:21

Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1

Injection Volume: 1(uL)
GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids:
GPC Cleanup:(Y/N) N

Cleanup Factor:
Level: (low/med) Low

Analysis Batch No.: 404152
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
218-01-9	Chrysene	48.7		10	0.31
2303-16-4	Diallate	ND		10	3.0
53-70-3	Dibenz(a,h)anthracene	43.9		10	0.38
132-64-9	Dibenzofuran	46.0		10	0.60
84-66-2	Diethyl phthalate	51.3		10	2.0
60-51-5	Dimethoate	ND		10	3.0
62-50-0	Ethyl methanesulfonate	ND		10	1.1
206-44-0	Fluoranthene	46.7		10	0.42
86-73-7	Fluorene	45.8		10	0.38
118-74-1	Hexachlorobenzene	43.0		10	0.70
193-39-5	Indeno[1,2,3-cd]pyrene	45.5		10	0.15
465-73-6	Isodrin	ND		10	1.1
143-50-0	Kepone	ND		50	25
3689-24-5	Sulfotepp	ND		10	2.4
55-18-5	N-Nitrosodiethylamine	ND		10	3.0
62-75-9	N-Nitrosodimethylamine	23.1		10	2.0
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	43.5		10	0.58
59-89-2	N-Nitrosomorpholine	3.14	J	10	3.0
100-75-4	N-Nitrosopiperidine	ND		10	1.1
98-95-3	Nitrobenzene	40.4		10	0.60
126-68-1	o,o',o''-Triethylphosphorothioate	ND		10	2.6
608-93-5	Pentachlorobenzene	ND		10	1.6
62-44-2	Phenacetin	ND		10	1.4
87-86-5	Pentachlorophenol	78.5		10	3.0
85-01-8	Phenanthrene	47.7		10	0.52
108-95-2	Phenol	22.5		10	0.60
298-02-2	Phorate	ND		10	2.5
129-00-0	Pyrene	47.0		10	0.41
94-59-7	Safrole, Total	ND		10	2.2
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate	ND		10	2.4
122-09-8	a,a-Dimethylphenethylamine	ND		50	5.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Client Sample ID: 16WC1A MSD Lab Sample ID: 410-136864-4 MSD

Matrix: Water Lab File ID: DH0361.D

Analysis Method: 8270D Date Collected: 07/27/2023 09:55

Extract. Method: 3510C Date Extracted: 08/03/2023 08:20

Sample wt/vol: 248.6(mL) Date Analyzed: 08/03/2023 18:21

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: DB-5MS 30m 0.25 ID: 0.25(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor: Level: (low/med) Low

Analysis Batch No.: 404152 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	45		13-138
321-60-8	2-Fluorobiphenyl (Surr)	78		44-120
367-12-4	2-Fluorophenol (Surr)	29		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	70		31-120
1718-51-0	p-Terphenyl-d14 (Surr)	87		30-125
4165-62-2	Phenol-d5 (Surr)	33		10-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0361.D
Lims ID: 410-136864-G-4-B MSD
Client ID: 16WC1A
Sample Type: MSD
Inject. Date: 03-Aug-2023 18:21:18 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 410-136864-G-4-B MSD
Misc. Info.: 410-0090557-012
Operator ID: mem41592 Instrument ID: HP19760

Method: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m
Limit Group: MSSV - 8270D_E LVI
Last Update: 04-Aug-2023 15:48:48 Calib Date: 03-Aug-2023 15:30:40
Integrator: Falcon ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D

Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: P7EB Date: 04-Aug-2023 14:08:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 N-Nitrosodimethylamine	74	1.740	1.728	0.012	93	234417	12.5	5.74	
$ 10 2-Fluorophenol	112	2.830	2.824	0.006	92	675874	50.0	14.5	
11 N-Nitrosodiethylamine	102		3.016					ND	
12 Ethyl methanesulfonate	109		3.314					ND	
$ 16 Phenol-d5	99	3.733	3.728	0.005	95	1117849	50.0	16.7	
17 Phenol	94	3.751	3.739	0.012	91	382880	12.5	5.59	
20 2-Chlorophenol	128	3.873	3.867	0.006	94	314899	12.5	7.54	
* 22 1,4-Dichlorobenzene-d4	152	4.072	4.066	0.006	97	158810	5.00	5.00	
28 2-Methylphenol	108	4.334	4.328	0.006	93	430584	12.5	9.66	
29 2,2'-oxybis[1-chloropropane]	45	4.345	4.340	0.005	91	623090	12.5	8.61	
35 N-Nitrosomorpholine	56	4.468	4.479	-0.011	41	27144		0.7807	
32 4-Methylphenol	108	4.485	4.479	0.006	94	434765	12.5	9.20	
$ 39 Nitrobenzene-d5	82	4.608	4.602	0.006	88	1107371	25.0	17.4	
40 Nitrobenzene	77	4.631	4.619	0.012	86	651617	12.5	10.0	
42 N-Nitrosopiperidine	114		4.765					ND	
44 2-Nitrophenol	139	4.934	4.928	0.006	92	231169	12.5	11.8	
46 o,o',o''-Triethylphosphorothioat	198		5.051					ND	
48 2,4-Dichlorophenol	162	5.179	5.167	0.012	96	253978	12.5	7.59	
* 50 Naphthalene-d8	136	5.301	5.290	0.011	100	605594	5.00	5.00	
37 alpha,alpha-Dimethyl phenethylam	58		5.348					ND	7
54 2,6-Dichlorophenol	162	5.389	5.383	0.006	94	259591	12.5	7.64	
55 Hexachloropropene	213		5.395					ND	7
64 4-Chloro-3-methylphenol	107	5.867	5.861	0.006	93	421510	12.5	9.74	
65 Safrole, Total	162		5.902					ND	7
66 2-Methylnaphthalene	142	5.983	5.977	0.006	90	917525	12.5	11.1	
69 1,2,4,5-Tetrachlorobenzene	216	6.141	6.135	0.006	98	428386	12.5	10.1	
71 2,4,6-Trichlorophenol	196	6.263	6.251	0.012	93	179690	12.5	7.34	
72 2,4,5-Trichlorophenol	196	6.304	6.298	0.006	92	225062	12.5	8.50	
$ 73 2-Fluorobiphenyl (Surr)	172	6.339	6.333	0.006	100	1848047	25.0	19.6	
76 2-Chloronaphthalene	162	6.444	6.438	0.006	98	913739	12.5	11.4	
79 2-Nitroaniline	138	6.555	6.543	0.012	80	292460	12.5	12.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
86 1,3-Dinitrobenzene	168	6.759	6.753	0.006	83	154601	12.5	12.8	
87 2,6-Dinitrotoluene	165	6.788	6.782	0.006	89	227595	12.5	12.1	
88 Acenaphthylene	152	6.834	6.828	0.006	99	1481290	12.5	11.6	
* 90 Acenaphthene-d10	164	6.968	6.962	0.006	95	331050	5.00	5.00	
91 Acenaphthene	153	7.003	6.992	0.011	96	948554	12.5	11.6	
94 Pentachlorobenzene	250		7.120					ND	7
95 2,4-Dinitrotoluene	165	7.167	7.161	0.006	66	326736	12.5	12.9	
96 Dibenzofuran	168	7.167	7.161	0.006	94	1296289	12.5	11.4	
98 2,3,4,6-Tetrachlorophenol	232	7.289	7.283	0.006	76	170043	12.5	7.60	
100 Diethyl phthalate	149	7.406	7.400	0.006	97	1066283	12.5	12.8	
101 Thionazin	107		7.475					ND	7
102 Fluorene	166	7.487	7.481	0.006	92	1042764	12.5	11.4	
103 4-Chlorophenyl phenyl ether	204	7.499	7.493	0.006	94	490914	12.5	10.9	
104 N-Nitro-o-toluidine	152		7.505					ND	7
105 4-Nitroaniline	138	7.522	7.516	0.006	78	231742	12.5	10.4	
107 N-Nitrosodiphenylamine	169	7.615	7.609	0.006	63	770739	10.6	10.8	
$ 109 2,4,6-Tribromophenol	330	7.720	7.714	0.006	85	257441	50.0	22.6	
110 Sulfotepp	97		7.773					ND	7
113 cis-Diallate	86		7.883					ND	7
114 Phorate	75		7.895					ND	7
115 Phenacetin	108		7.918					ND	7
116 4-Bromophenyl phenyl ether	248	7.959	7.953	0.006	69	281978	12.5	11.3	
117 trans-Diallate	86		7.971					ND	7
118 Hexachlorobenzene	284	8.006	8.000	0.006	91	285150	12.5	10.7	
119 Dimethoate	87		8.052					ND	7
121 Pentachlorophenol	266	8.198	8.198	0.000	89	310949	25.0	19.5	
* 126 Phenanthrene-d10	188	8.373	8.367	0.006	97	592107	5.00	5.00	
128 Phenanthrene	178	8.396	8.390	0.006	98	1529483	12.5	11.9	
129 Anthracene	178	8.443	8.437	0.006	98	1522252	12.5	11.9	
141 Isodrin	193	9.346	9.370	-0.024	54	3354		0.2110	
143 Fluoranthene	202	9.521	9.515	0.006	98	1585872	12.5	11.6	
S 136 Diallate	86		9.653					ND	7
* 149 Pyrene-d10 (IS)	212	9.719	9.714	0.005	99	559947	5.00	5.00	
150 Pyrene	202	9.737	9.731	0.006	97	1666626	12.5	11.7	
$ 152 p-Terphenyl-d14	244	9.906	9.900	0.006	97	2009493	25.0	21.7	
153 Kepone	272		10.396					ND	
161 Benzo[a]anthracene	228	10.943	10.938	0.005	100	1338707	12.5	11.7	
162 Chrysene	228	10.984	10.978	0.006	97	1381720	12.5	12.1	
163 Bis(2-ethylhexyl) phthalate	149	11.043	11.037	0.006	97	868083	12.5	12.5	
167 Benzo[b]fluoranthene	252	12.232	12.232	0.000	97	1082125	12.5	11.9	
168 Benzo[k]fluoranthene	252	12.272	12.272	0.000	99	1163137	12.5	12.2	
169 Benzo[a]pyrene	252	12.657	12.657	0.000	78	976494	12.5	12.4	
* 170 Perylene-d12	264	12.733	12.733	0.000	97	364564	5.00	5.00	
174 Indeno[1,2,3-cd]pyrene	276	14.196	14.196	0.000	99	736356	12.5	11.3	
175 Dibenz(a,h)anthracene	278	14.243	14.242	0.000	92	838427	12.5	10.9	
176 Benzo[g,h,i]perylene	276	14.551	14.551	0.000	97	836795	12.5	10.8	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSS_RV8270_IS_00038 Amount Added: 20.00 Units: uL Run Reagent

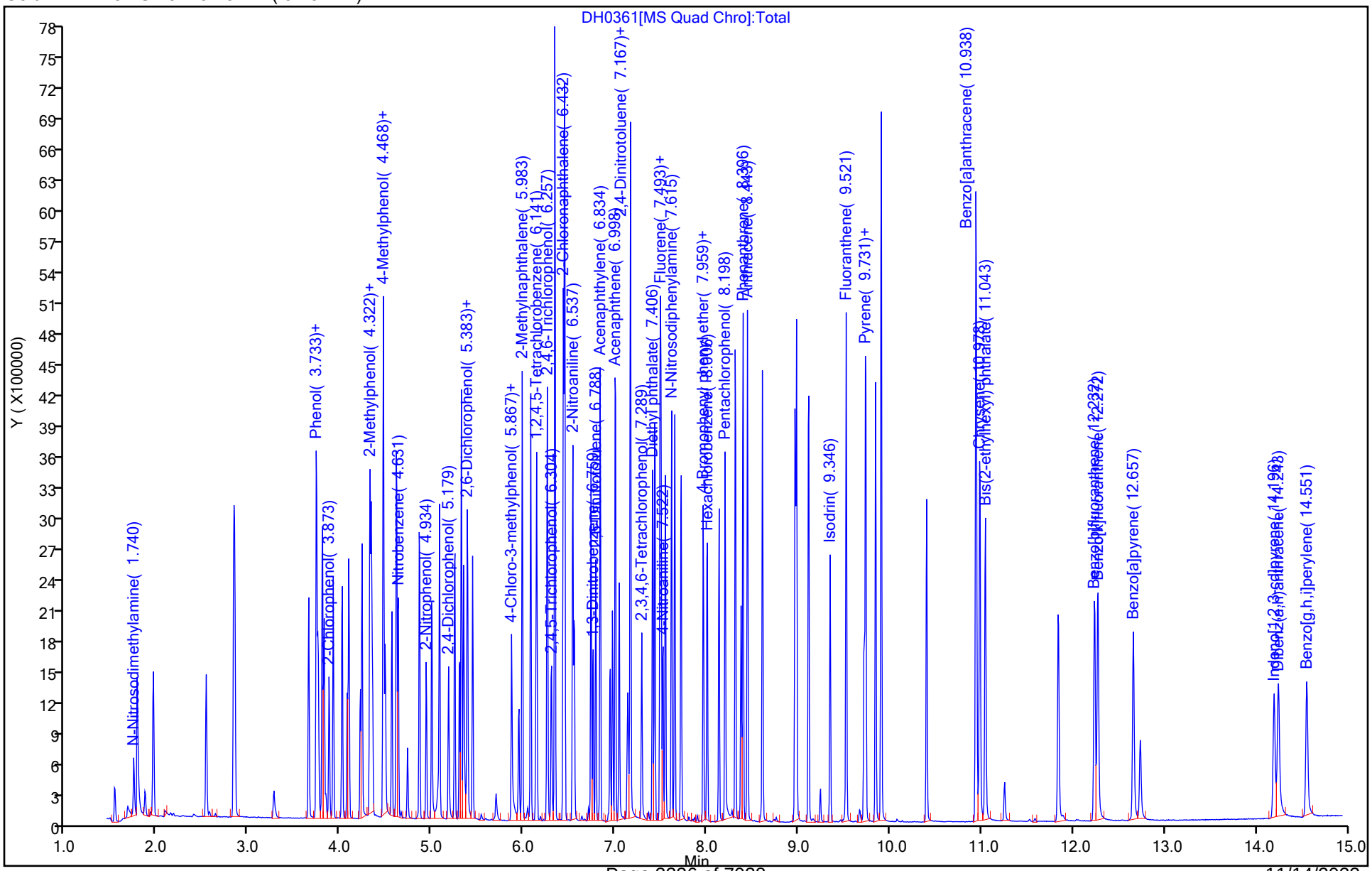
Report Date: 07-Aug-2023 15:03:10 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0361.D

Injection Date:	03-Aug-2023 18:21:18	Instrument ID:	HP19760	Operator ID:	mem41592
Lims ID:	410-136864-G-4-B MSD			Worklist Smp#:	12
Client ID:	16WC1A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	MSSemi_HP19760	Limit Group:	MSSV - 8270D_E LVI		

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/14/2023
11:12 AM

Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0361.D				
Lims ID:	410-136864-G-4-B MSD				
Client ID:	16WC1A				
Sample Type:	MSD				
Inject. Date:	03-Aug-2023 18:21:18	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	410-136864-G-4-B MSD				
Misc. Info.:	410-0090557-012				
Operator ID:	mem41592	Instrument ID:	HP19760		
Method:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\MSSemi_HP19760.m				
Limit Group:	MSSV - 8270D_E LVI				
Last Update:	04-Aug-2023 15:48:48	Calib Date:	03-Aug-2023 15:30:40		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP19760\20230803-90557.b\DH0353.D				
Column 1 :	DB-5MS 20m 0.25mm (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1682				
First Level Reviewer: P7EB		Date:	04-Aug-2023 14:08:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 2-Fluorophenol	50.0	14.5	29.08
$ 16 Phenol-d5	50.0	16.7	33.40
$ 39 Nitrobenzene-d5	25.0	17.4	69.61
$ 73 2-Fluorobiphenyl (Surr)	25.0	19.6	78.49
$ 109 2,4,6-Tribromophenol	50.0	22.6	45.17
$ 152 p-Terphenyl-d14	25.0	21.7	86.92

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Start Date: 03/23/2023 13:13

Analysis Batch Number: 356566 End Date: 03/23/2023 18:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-356566/1		03/23/2023 13:13	1	DC2310.D	DB-5MS 30m 0.25 0.25(mm)
ICIS 410-356566/2		03/23/2023 13:34	1	DC2311.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-356566/3		03/23/2023 13:56	1	DC2312.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-356566/5		03/23/2023 14:18	1	DC2313.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-356566/6		03/23/2023 14:40	1	DC2314.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-356566/7		03/23/2023 15:02	1	DC2315.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-356566/8		03/23/2023 15:24	1	DC2316.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-356566/9		03/23/2023 15:46	1	DC2317.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-356566/4		03/23/2023 16:08	1	DC2318.D	DB-5MS 30m 0.25 0.25(mm)
ICVL 410-356566/10		03/23/2023 16:30	1		DB-5MS 30m 0.25 0.25(mm)
ICVL 410-356566/11		03/23/2023 16:52	1		DB-5MS 30m 0.25 0.25(mm)
ICV 410-356566/12		03/23/2023 17:14	1	DC2321.D	DB-5MS 30m 0.25 0.25(mm)
ICV 410-356566/13		03/23/2023 17:36	1	DC2322.D	DB-5MS 30m 0.25 0.25(mm)
ICV 410-356566/14		03/23/2023 18:00	1	DC2323.D	DB-5MS 30m 0.25 0.25(mm)
ICV 410-356566/15		03/23/2023 18:22	1	DC2324.D	DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Start Date: 03/26/2023 13:53

Analysis Batch Number: 357445 End Date: 03/26/2023 23:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-357445/1		03/26/2023 13:53	1	DC2650a.D	DB-5MS 30m 0.25 0.25(mm)
CCVIS 410-357445/2		03/26/2023 14:14	1		DB-5MS 30m 0.25 0.25(mm)
IC 410-357445/3		03/26/2023 14:52	1	DC2652.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-357445/4		03/26/2023 15:13	1	DC2653.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-357445/5		03/26/2023 15:36	1	DC2654a.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-357445/6		03/26/2023 15:57	1	DC2655.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-357445/7		03/26/2023 16:18	1	DC2656.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-357445/8		03/26/2023 16:38	1	DC2657.D	DB-5MS 30m 0.25 0.25(mm)
ICVL 410-357445/9		03/26/2023 16:59	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 17:19	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 17:40	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 18:01	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 18:21	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 18:42	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 19:03	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 20:25	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 20:46	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 21:07	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 22:01	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 22:21	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 22:42	10		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		03/26/2023 23:03	100		DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Start Date: 04/10/2023 19:57

Analysis Batch Number: 362760 End Date: 04/11/2023 04:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-362760/1		04/10/2023 19:57	1	DD1050a.D	DB-5MS 30m 0.25 0.25(mm)
CCVIS 410-362760/2		04/10/2023 20:13	1		DB-5MS 30m 0.25 0.25(mm)
CCV 410-362760/3		04/10/2023 20:41	1		DB-5MS 30m 0.25 0.25(mm)
IC 410-362760/4		04/10/2023 21:02	1	DD1053.D	DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/10/2023 21:22	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/10/2023 21:43	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/10/2023 22:03	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/10/2023 22:24	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/10/2023 22:44	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/10/2023 23:05	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/10/2023 23:26	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/10/2023 23:46	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 00:07	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 00:28	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 00:48	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 01:09	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 01:29	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 01:50	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 02:11	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 02:31	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 02:52	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 03:12	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 03:33	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 03:53	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 04:14	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 04:34	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		04/11/2023 04:55	1		DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264

Start Date: 04/11/2023 14:08

Analysis Batch Number: 363143

End Date: 04/11/2023 16:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-363143/1		04/11/2023 14:08	1	JD1100.D	DB-5MS 30m 0.25 0.25(mm)
CCVIS 410-363143/2		04/11/2023 14:23	1		DB-5MS 30m 0.25 0.25(mm)
IC 410-363143/3		04/11/2023 14:51	1	JD1102.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-363143/4		04/11/2023 15:12	1	JD1103.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-363143/5		04/11/2023 15:34	1	JD1104.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-363143/6		04/11/2023 15:55	1	JD1105.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-363143/7		04/11/2023 16:16	1	JD1106.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-363143/8		04/11/2023 16:37	1	JD1107.D	DB-5MS 30m 0.25 0.25(mm)
ICVL 410-363143/9		04/11/2023 16:59	1		DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Start Date: 07/18/2023 07:23

Analysis Batch Number: 397829 End Date: 07/18/2023 11:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-397829/1		07/18/2023 07:23	1	JG1800.D	DB-5MS 30m 0.25 0.25(mm)
ICIS 410-397829/2		07/18/2023 07:41	1	JG1801a.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-397829/3		07/18/2023 08:07	1	JG1802.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-397829/4		07/18/2023 08:28	1	JG1803.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-397829/5		07/18/2023 08:49	1	JG1804.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-397829/6		07/18/2023 09:10	1	JG1805.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-397829/7		07/18/2023 09:31	1	JG1806.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-397829/8		07/18/2023 09:52	1	JG1807.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-397829/9		07/18/2023 10:14	1	JG1808.D	DB-5MS 30m 0.25 0.25(mm)
ICVL 410-397829/10		07/18/2023 10:35	1		DB-5MS 30m 0.25 0.25(mm)
ICVL 410-397829/11		07/18/2023 10:56	1		DB-5MS 30m 0.25 0.25(mm)
ICV 410-397829/12		07/18/2023 11:17	1	JG1811.D	DB-5MS 30m 0.25 0.25(mm)
ICV 410-397829/13		07/18/2023 11:38	1	JG1812.D	DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Start Date: 08/02/2023 20:15

Analysis Batch Number: 403788 End Date: 08/03/2023 07:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-403788/1		08/02/2023 20:15	1	JH0250.D	DB-5MS 30m 0.25 0.25(mm)
CCVIS 410-403788/2		08/02/2023 20:32	1	JH0251.D	DB-5MS 30m 0.25 0.25(mm)
CCV 410-403788/4		08/02/2023 21:02	1	JH0252.D	DB-5MS 30m 0.25 0.25(mm)
CCV 410-403788/3		08/02/2023 21:24	1		DB-5MS 30m 0.25 0.25(mm)
IC 410-403788/5		08/02/2023 21:45	1	JH0254.D	DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/02/2023 22:06	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/02/2023 22:27	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/02/2023 22:48	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/02/2023 23:09	1		DB-5MS 30m 0.25 0.25(mm)
MB 410-403666/1-A		08/02/2023 23:30	1	JH0259.D	DB-5MS 30m 0.25 0.25(mm)
LCS 410-403666/2-A		08/02/2023 23:51	1	JH0260.D	DB-5MS 30m 0.25 0.25(mm)
LCSD 410-403666/3-A		08/03/2023 00:12	1	JH0261.D	DB-5MS 30m 0.25 0.25(mm)
LCS 410-403666/4-A		08/03/2023 00:33	1	JH0262.D	DB-5MS 30m 0.25 0.25(mm)
LCSD 410-403666/5-A		08/03/2023 00:54	1	JH0263.D	DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 03:01	1		DB-5MS 30m 0.25 0.25(mm)
410-136864-2	16MW8	08/03/2023 03:22	1	JH0270.D	DB-5MS 30m 0.25 0.25(mm)
410-136864-6	16WC1B	08/03/2023 03:43	1	JH0271.D	DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 04:05	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 04:26	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 04:47	5		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 05:08	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 05:29	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 05:51	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 06:12	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 06:33	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 06:54	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 07:15	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 07:37	1		DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Start Date: 08/03/2023 14:29

Analysis Batch Number: 404152 End Date: 08/03/2023 23:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-404152/1		08/03/2023 14:29	1	DH0350.D	DB-5MS 30m 0.25 0.25(mm)
CCVIS 410-404152/2		08/03/2023 14:43	1	DH0351.D	DB-5MS 30m 0.25 0.25(mm)
CCV 410-404152/4		08/03/2023 15:10	1	DH0352.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-404152/5		08/03/2023 15:30	1	DH0353.D	DB-5MS 30m 0.25 0.25(mm)
ICVL 410-404152/3		08/03/2023 15:50	1		DB-5MS 30m 0.25 0.25(mm)
MB 410-403918/1-A		08/03/2023 16:22	1	DH0355a.D	DB-5MS 30m 0.25 0.25(mm)
LCS 410-403918/2-A		08/03/2023 16:42	1	DH0356.D	DB-5MS 30m 0.25 0.25(mm)
LCS 410-403918/3-A		08/03/2023 17:02	1	DH0357.D	DB-5MS 30m 0.25 0.25(mm)
LCSD 410-403918/4-A		08/03/2023 17:21	1	DH0358.D	DB-5MS 30m 0.25 0.25(mm)
410-136864-4	16WC1A	08/03/2023 17:41	1	DH0359.D	DB-5MS 30m 0.25 0.25(mm)
410-136864-4 MS	16WC1A MS	08/03/2023 18:01	1	DH0360.D	DB-5MS 30m 0.25 0.25(mm)
410-136864-4 MSD	16WC1A MSD	08/03/2023 18:21	1	DH0361.D	DB-5MS 30m 0.25 0.25(mm)
410-136864-1	16C1	08/03/2023 19:16	1	DH0362a.D	DB-5MS 30m 0.25 0.25(mm)
410-136864-3	16MW9	08/03/2023 19:35	1	DH0363.D	DB-5MS 30m 0.25 0.25(mm)
410-136864-5	16WDUP	08/03/2023 19:55	1	DH0364.D	DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 20:15	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 20:35	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 20:55	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 21:44	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 22:04	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 22:24	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 22:44	1		DB-5MS 30m 0.25 0.25(mm)
ZZZZZ		08/03/2023 23:04	1		DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Start Date: 08/31/2023 15:57

Analysis Batch Number: 414994 End Date: 08/31/2023 20:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-414994/1		08/31/2023 15:57	1	DH3150.D	DB-5MS 30m 0.25 0.25(mm)
ICIS 410-414994/2		08/31/2023 16:23	1	DH3151.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-414994/4		08/31/2023 17:16	1	DH3152.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-414994/3		08/31/2023 17:37	1	DH3153.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-414994/5		08/31/2023 17:58	1	DH3154.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-414994/6		08/31/2023 18:19	1	DH3155.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-414994/7		08/31/2023 18:40	1	DH3156.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-414994/8		08/31/2023 19:00	1	DH3157.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-414994/9		08/31/2023 19:21	1	DH3158.D	DB-5MS 30m 0.25 0.25(mm)
ICVL 410-414994/10		08/31/2023 19:42	1		DB-5MS 30m 0.25 0.25(mm)
ICVL 410-414994/11		08/31/2023 20:03	1		DB-5MS 30m 0.25 0.25(mm)
ICV 410-414994/12		08/31/2023 20:24	1	DH3161.D	DB-5MS 30m 0.25 0.25(mm)
ICV 410-414994/13		08/31/2023 20:45	1		DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP19760 Start Date: 10/26/2023 11:53

Analysis Batch Number: 435991 End Date: 10/26/2023 16:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-435991/1		10/26/2023 11:53	1	DJ2600b.D	DB-5MS 30m 0.25 0.25(mm)
ICIS 410-435991/2		10/26/2023 12:12	1	DJ2601b.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-435991/3		10/26/2023 12:44	1	DJ2602.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-435991/4		10/26/2023 13:04	1	DJ2603.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-435991/5		10/26/2023 13:25	1	DJ2604.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-435991/6		10/26/2023 13:46	1	DJ2605.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-435991/7		10/26/2023 14:06	1	DJ2606.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-435991/8		10/26/2023 14:27	1	DJ2607.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-435991/9		10/26/2023 14:48	1	DJ2608.D	DB-5MS 30m 0.25 0.25(mm)
ICVL 410-435991/10		10/26/2023 15:08	1		DB-5MS 30m 0.25 0.25(mm)
ICVL 410-435991/11		10/26/2023 15:29	1		DB-5MS 30m 0.25 0.25(mm)
ICV 410-435991/12		10/26/2023 15:50	1	DJ2611.D	DB-5MS 30m 0.25 0.25(mm)
ICV 410-435991/13		10/26/2023 16:11	1		DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: HP23264 Start Date: 10/31/2023 14:09

Analysis Batch Number: 437867 End Date: 10/31/2023 18:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-437867/1		10/31/2023 14:09	1	JJ3100a.D	DB-5MS 30m 0.25 0.25(mm)
ICIS 410-437867/2		10/31/2023 14:37	1	JJ3101e.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-437867/3		10/31/2023 15:02	1	JJ3102.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-437867/4		10/31/2023 15:23	1	JJ3103.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-437867/5		10/31/2023 15:45	1	JJ3104.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-437867/6		10/31/2023 16:06	1	JJ3105.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-437867/7		10/31/2023 16:27	1	JJ3106.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-437867/8		10/31/2023 16:49	1	JJ3107.D	DB-5MS 30m 0.25 0.25(mm)
IC 410-437867/9		10/31/2023 17:10	1	JJ3108.D	DB-5MS 30m 0.25 0.25(mm)
ICVL 410-437867/10		10/31/2023 17:31	1		DB-5MS 30m 0.25 0.25(mm)
ICVL 410-437867/11		10/31/2023 17:52	1		DB-5MS 30m 0.25 0.25(mm)
ICV 410-437867/12		10/31/2023 18:13	1	JJ3111.D	DB-5MS 30m 0.25 0.25(mm)
ICV 410-437867/13		10/31/2023 18:35	1		DB-5MS 30m 0.25 0.25(mm)
ICV 410-437867/14		10/31/2023 18:56	1		DB-5MS 30m 0.25 0.25(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 356566 Batch Start Date: 03/23/23 13:13 Batch Analyst: McGowan, Madison

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	MSS_RV8270_1 00028	MSS_RV8270_2 00029	MSS_RV8270_3 00026	MSS_RV8270_4 00026	MSS_RV8270_5 00036
DFTPP 410-356566/1		8270D		1 mL					
ICIS 410-356566/2		8270D		1 mL					
IC 410-356566/3		8270D		1 mL	1 mL				
IC 410-356566/4		8270D		1 mL		1 mL			
IC 410-356566/5		8270D		1 mL					
IC 410-356566/6		8270D		1 mL					
IC 410-356566/7		8270D		1 mL					1 mL
IC 410-356566/8		8270D		1 mL				1 mL	
IC 410-356566/9		8270D		1 mL			1 mL		
ICV 410-356566/12		8270D		1 mL					
ICV 410-356566/13		8270D		1 mL					
ICV 410-356566/14		8270D		1 mL					
ICV 410-356566/15		8270D		1 mL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RV8270_6 00042	MSS_RV8270_7 00029	MSS_RV8270_8 00029	MSS_RV8270ICV 00019	MSS_RVBAS_ICV 00011	MSS_RVDFTPP 00012
DFTPP 410-356566/1		8270D							1 mL
ICIS 410-356566/2		8270D		1 mL					
IC 410-356566/3		8270D							
IC 410-356566/4		8270D							
IC 410-356566/5		8270D				1 mL			
IC 410-356566/6		8270D			1 mL				
IC 410-356566/7		8270D							
IC 410-356566/8		8270D							
IC 410-356566/9		8270D							
ICV 410-356566/12		8270D					1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 356566 Batch Start Date: 03/23/23 13:13 Batch Analyst: McGowan, Madison

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RV8270_6 00042	MSS_RV8270_7 00029	MSS_RV8270_8 00029	MSS_RV8270ICV 00019	MSS_RVBAS_ICV 00011	MSS_RVDFTPP 00012
ICV 410-356566/13		8270D						1 mL	
ICV 410-356566/14		8270D							
ICV 410-356566/15		8270D							

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RVHCPICV 00007	MSS_RVPDAICV 00001				
DFTPP 410-356566/1		8270D							
ICIS 410-356566/2		8270D							
IC 410-356566/3		8270D							
IC 410-356566/4		8270D							
IC 410-356566/5		8270D							
IC 410-356566/6		8270D							
IC 410-356566/7		8270D							
IC 410-356566/8		8270D							
IC 410-356566/9		8270D							
ICV 410-356566/12		8270D							
ICV 410-356566/13		8270D							
ICV 410-356566/14		8270D		1 mL					
ICV 410-356566/15		8270D			1 mL				

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 357445 Batch Start Date: 03/26/23 13:53 Batch Analyst: McGowan, Madison

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	MSS_RVABC_3 00011	MSS_RVABC_4 00010	MSS_RVABC_5 00010	MSS_RVABC_6 00015	MSS_RVABC_7 00011
DFTPP 410-357445/1		8270D		1 mL					
IC 410-357445/3		8270D		1 mL					
IC 410-357445/4		8270D		1 mL					1 mL
IC 410-357445/5		8270D		1 mL				1 mL	
IC 410-357445/6		8270D		1 mL			1 mL		
IC 410-357445/7		8270D		1 mL		1 mL			
IC 410-357445/8		8270D		1 mL	1 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RVABC_8 00012	MSS_RVDFTPP 00012				
DFTPP 410-357445/1		8270D			1 mL				
IC 410-357445/3		8270D		1 mL					
IC 410-357445/4		8270D							
IC 410-357445/5		8270D							
IC 410-357445/6		8270D							
IC 410-357445/7		8270D							
IC 410-357445/8		8270D							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 362760 Batch Start Date: 04/10/23 19:57 Batch Analyst: Monborne, Edward M

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	MSS_RVAAP_SP 00008	MSS_RVDFTPP 00012			
DFTPP 410-362760/1		8270D		1 mL		1 mL			
IC 410-362760/4		8270D		1 mL	1 mL				

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 363143 Batch Start Date: 04/11/23 14:08 Batch Analyst: McGowan, Madison

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	CalcMsg	MSS_RVABC_3 00011	MSS_RVABC_4 00010	MSS_RVABC_5 00010	MSS_RVABC_6 00015
DFTPP 410-363143/1		8270D		1 mL	Perform Calculation left blank				
IC 410-363143/3		8270D		1 mL	Perform Calculation left blank				
IC 410-363143/4		8270D		1 mL	Perform Calculation left blank				
IC 410-363143/5		8270D		1 mL	Perform Calculation left blank				1 mL
IC 410-363143/6		8270D		1 mL	Perform Calculation left blank			1 mL	
IC 410-363143/7		8270D		1 mL	Perform Calculation left blank		1 mL		
IC 410-363143/8		8270D		1 mL	Perform Calculation left blank	1 mL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RVABC_7 00011	MSS_RVABC_8 00012	MSS_RVDFTPP 00012			
DFTPP 410-363143/1		8270D				1 mL			
IC 410-363143/3		8270D			1 mL				
IC 410-363143/4		8270D		1 mL					
IC 410-363143/5		8270D							
IC 410-363143/6		8270D							
IC 410-363143/7		8270D							
IC 410-363143/8		8270D							

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 363143 Batch Start Date: 04/11/23 14:08 Batch Analyst: McGowan, Madison

Batch Method: 8270D Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 397829 Batch Start Date: 07/18/23 07:23 Batch Analyst: Lutte, Kate E

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	CalcMsg	MSS_RV8270_1 00029	MSS_RV8270_2 00030	MSS_RV8270_3 00027	MSS_RV8270_4 00027
DFTPP 410-397829/1		8270D		1 mL	Perform Calculation left blank				
ICIS 410-397829/2		8270D		1 mL	Perform Calculation left blank				
IC 410-397829/3		8270D		1 mL	Perform Calculation left blank	1 mL			
IC 410-397829/4		8270D		1 mL	Perform Calculation left blank				
IC 410-397829/5		8270D		1 mL	Perform Calculation left blank				
IC 410-397829/6		8270D		1 mL	Perform Calculation left blank				
IC 410-397829/7		8270D		1 mL	Perform Calculation left blank				1 mL
IC 410-397829/8		8270D		1 mL	Perform Calculation left blank			1 mL	
IC 410-397829/9		8270D		1 mL	Perform Calculation left blank		1 mL		
ICV 410-397829/12		8270D		1 mL	Perform Calculation left blank				
ICV 410-397829/13		8270D		1 mL	Perform Calculation left blank				

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RV8270_5 00037	MSS_RV8270_6 00045	MSS_RV8270_7 00030	MSS_RV8270_8 00030	MSS_RV8270ICV 00022	MSS_RVBAS_ICV 00013
DFTPP 410-397829/1		8270D							
ICIS 410-397829/2		8270D		1 mL					
IC 410-397829/3		8270D							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 397829 Batch Start Date: 07/18/23 07:23 Batch Analyst: Lutte, Kate E

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RV8270_5 00037	MSS_RV8270_6 00045	MSS_RV8270_7 00030	MSS_RV8270_8 00030	MSS_RV8270ICV 00022	MSS_RVBAS_ICV 00013
IC 410-397829/4		8270D					1 mL		
IC 410-397829/5		8270D				1 mL			
IC 410-397829/6		8270D			1 mL				
IC 410-397829/7		8270D							
IC 410-397829/8		8270D							
IC 410-397829/9		8270D							
ICV 410-397829/12		8270D						1 mL	
ICV 410-397829/13		8270D							1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RVDFTPP 00013
DFTPP 410-397829/1		8270D		1 mL
ICIS 410-397829/2		8270D		
IC 410-397829/3		8270D		
IC 410-397829/4		8270D		
IC 410-397829/5		8270D		
IC 410-397829/6		8270D		
IC 410-397829/7		8270D		
IC 410-397829/8		8270D		
IC 410-397829/9		8270D		
ICV 410-397829/12		8270D		
ICV 410-397829/13		8270D		

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 397829 Batch Start Date: 07/18/23 07:23 Batch Analyst: Lutte, Kate E

Batch Method: 8270D Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403666 Batch Start Date: 08/02/23 15:28 Batch Analyst: Battle-Hilacion, Destiny

Batch Method: 3510C Batch End Date: 08/02/23 20:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH
MB 410-403666/1		3510C, 8270D				250 mL	1 mL	n/a SU	11 SU
LCS 410-403666/2		3510C, 8270D				250 mL	1 mL	n/a SU	11 SU
LCSD 410-403666/3		3510C, 8270D				250 mL	1 mL	n/a SU	11 SU
LCS 410-403666/4		3510C, 8270D				250 mL	1 mL	n/a SU	11 SU
LCSD 410-403666/5		3510C, 8270D				250 mL	1 mL	n/a SU	11 SU
410-136864-G-2	16MW8	3510C, 8270D	T	414.54 g	166.52 g	248 mL	1 mL	n/a SU	11 SU
410-136864-G-6	16WC1B	3510C, 8270D	T	416.74 g	168.47 g	248.3 mL	1 mL	n/a SU	11 SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	OP_MINAPP1_MS 00116	OP_MINIBNA_SS 00094	OP_MINLCS1_MS 00178	OP_MINLCS2_MS 00102	AnalysisComment
MB 410-403666/1		3510C, 8270D		2 SU		1 mL			tap water
LCS 410-403666/2		3510C, 8270D		2 SU		1 mL	1 mL	1 mL	tap water
LCSD 410-403666/3		3510C, 8270D		2 SU		1 mL	1 mL	1 mL	tap water
LCS 410-403666/4		3510C, 8270D		2 SU	1 mL	1 mL			tap water
LCSD 410-403666/5		3510C, 8270D		2 SU	1 mL	1 mL			tap water
410-136864-G-2	16MW8	3510C, 8270D	T	2 SU		1 mL			clear
410-136864-G-6	16WC1B	3510C, 8270D	T	2 SU		1 mL			clear

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403666 Batch Start Date: 08/02/23 15:28 Batch Analyst: Battle-Hilacion, Destiny

Batch Method: 3510C Batch End Date: 08/02/23 20:10

Batch Notes	
Balance ID	93158
Pipette/Syringe/Dispenser ID	4
Analyst ID - Extraction	OS11067 DBH82588 AS86224
Analyst ID - Spike Analyst	DBH82588
Acid Used for pH Adjustment ID	H2SO4: 225553
Base Used to Adjust pH ID	NaOH: 4202B64
Prep Solvent ID	MeCl2: 63055
Prep Solvent Volume Used	90 mL
Na2SO4 ID	23212A
Analyst ID - Concentration	OS11067 DBH82588 AS86224
Equipment ID - Concentration 1	BUCHI
Concentration 1 Corrected Temperature	55 Degrees C
Vial Lot Number	23112141

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403918 Batch Start Date: 08/03/23 08:20 Batch Analyst: Hall, Patrick

Batch Method: 3510C Batch End Date: 08/03/23 13:56

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	DensityAcc	InitialAmount	FinalAmount	ReceivedpH
MB 410-403918/1		3510C, 8270D				n/a	250 mL	1.0 mL	n/a SU
LCS 410-403918/2		3510C, 8270D				n/a	250 mL	1.0 mL	n/a SU
LCS 410-403918/3		3510C, 8270D				n/a	250 mL	1.0 mL	n/a SU
LCSD 410-403918/4		3510C, 8270D				n/a	250 mL	1.0 mL	n/a SU
410-136864-G-4 MS	16WC1A	3510C, 8270D	T	415.92 g	167.08 g	n/a	248.8 mL	1.0 mL	n/a SU
410-136864-G-4 MSD	16WC1A	3510C, 8270D	T	417.20 g	168.64 g	n/a	248.6 mL	1.0 mL	n/a SU
410-136864-G-4	16WC1A	3510C, 8270D	T	416.56 g	168.34 g	n/a	248.2 mL	1.0 mL	n/a SU
410-136864-I-1	16C1	3510C, 8270D	T	414.61 g	166.01 g	n/a	248.6 mL	1.0 mL	n/a SU
410-136864-I-3	16MW9	3510C, 8270D	T	414.76 g	166.12 g	n/a	248.6 mL	1.0 mL	n/a SU
410-136864-G-5	16WDUP	3510C, 8270D	T	417.20 g	169.38 g	n/a	247.8 mL	1.0 mL	n/a SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	FirstAdjustpH	SecondAdjustpH	CUPerformed	OP_MINAPP1_MS 00116	OP_MINIBNA_SS 00094	OP_MINLCS1_MS 00178
MB 410-403918/1		3510C, 8270D		>11 SU	<2 SU	n		1 mL	
LCS 410-403918/2		3510C, 8270D		>11 SU	<2 SU	n		1 mL	1 mL
LCS 410-403918/3		3510C, 8270D		>11 SU	<2 SU	n	1 mL	1 mL	
LCSD 410-403918/4		3510C, 8270D		>11 SU	<2 SU	n	1 mL	1 mL	
410-136864-G-4 MS	16WC1A	3510C, 8270D	T	>11 SU	<2 SU	n		1 mL	1 mL
410-136864-G-4 MSD	16WC1A	3510C, 8270D	T	>11 SU	<2 SU	n		1 mL	1 mL
410-136864-G-4	16WC1A	3510C, 8270D	T	>11 SU	<2 SU	n		1 mL	
410-136864-I-1	16C1	3510C, 8270D	T	>11 SU	<2 SU	n		1 mL	
410-136864-I-3	16MW9	3510C, 8270D	T	>11 SU	<2 SU	n		1 mL	
410-136864-G-5	16WDUP	3510C, 8270D	T	>11 SU	<2 SU	n		1 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	OP_MINLCS2_MS 00102	AnalysisComment				
MB 410-403918/1		3510C, 8270D			Tap H2O				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403918 Batch Start Date: 08/03/23 08:20 Batch Analyst: Hall, Patrick

Batch Method: 3510C Batch End Date: 08/03/23 13:56

Lab Sample ID	Client Sample ID	Method Chain	Basis	OP_MINLCS2_MS 00102	AnalysisComment				
LCS 410-403918/2		3510C, 8270D		1 mL	Tap H2O				
LCS 410-403918/3		3510C, 8270D			Tap H2O				
LCSD 410-403918/4		3510C, 8270D			Tap H2O				
410-136864-G-4 MS	16WC1A	3510C, 8270D	T	1 mL	Pale Yellow Tint				
410-136864-G-4 MSD	16WC1A	3510C, 8270D	T	1 mL	Pale Yellow Tint				
410-136864-G-4	16WC1A	3510C, 8270D	T		Pale Yellow Tint				
410-136864-I-1	16C1	3510C, 8270D	T		Clear				
410-136864-I-3	16MW9	3510C, 8270D	T		Pale Yellow Tint				
410-136864-G-5	16WDUP	3510C, 8270D	T		Pale Yellow Tint				

Batch Notes	
Balance ID	93158
Balance is Level? (Y/N)	yes
Pipette/Syringe/Dispenser ID	4
Analyst ID - Extraction	PDH91662, SB93352, HS95678
Analyst ID - Spike Analyst	PDH91662, SB93352, HS95678
Analyst ID - Spike Witness Analyst	PDH91662
Acid Used for pH Adjustment ID	H2SO4: 225894
Base Used to Adjust pH ID	NaOH: 4202B64
Prep Solvent ID	MeCl2: 63146
Prep Solvent Volume Used	90 mL
Na2SO4 ID	23213A
Analyst ID - Concentration	PDH91662, SB93352, HS95678
Equipment ID - Concentration 1	Buchi
Concentration 1 Corrected Temperature	55 Degrees C
Vial Lot Number	23112141

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403918 Batch Start Date: 08/03/23 08:20 Batch Analyst: Hall, Patrick

Batch Method: 3510C Batch End Date: 08/03/23 13:56

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 414994 Batch Start Date: 08/31/23 15:57 Batch Analyst: McGowan, Madison

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	MSS_RV8270_1 00030	MSS_RV8270_2 00031	MSS_RV8270_3 00028	MSS_RV8270_4 00027	MSS_RV8270_5 00037
DFTPP 410-414994/1		8270D		1 mL					
ICIS 410-414994/2		8270D		1 mL					
IC 410-414994/3		8270D		1 mL	1 mL				
IC 410-414994/4		8270D		1 mL					
IC 410-414994/5		8270D		1 mL					
IC 410-414994/6		8270D		1 mL					1 mL
IC 410-414994/7		8270D		1 mL				1 mL	
IC 410-414994/8		8270D		1 mL			1 mL		
IC 410-414994/9		8270D		1 mL		1 mL			
ICV 410-414994/12		8270D		1 mL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RV8270_6 00045	MSS_RV8270_7 00030	MSS_RV8270_8 00030	MSS_RV8270ICV 00024	MSS_RVDFTPP 00013	
DFTPP 410-414994/1		8270D						1 mL	
ICIS 410-414994/2		8270D		1 mL					
IC 410-414994/3		8270D							
IC 410-414994/4		8270D				1 mL			
IC 410-414994/5		8270D			1 mL				
IC 410-414994/6		8270D							
IC 410-414994/7		8270D							
IC 410-414994/8		8270D							
IC 410-414994/9		8270D							
ICV 410-414994/12		8270D					1 mL		

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 414994 Batch Start Date: 08/31/23 15:57 Batch Analyst: McGowan, Madison

Batch Method: 8270D Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 435991 Batch Start Date: 10/26/23 11:53 Batch Analyst: Lutte, Kate E

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	MSS_RV8270_1 00032	MSS_RV8270_2 00033	MSS_RV8270_3 00030	MSS_RV8270_4 00030	MSS_RV8270_5 00039
DFTPP 410-435991/1		8270D		1 mL					
ICIS 410-435991/2		8270D		1 mL					
IC 410-435991/3		8270D		1 mL					
IC 410-435991/4		8270D		1 mL					
IC 410-435991/5		8270D		1 mL					1 mL
IC 410-435991/6		8270D		1 mL				1 mL	
IC 410-435991/7		8270D		1 mL			1 mL		
IC 410-435991/8		8270D		1 mL		1 mL			
IC 410-435991/9		8270D		1 mL	1 mL				
ICV 410-435991/12		8270D		1 mL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RV8270_6 00048	MSS_RV8270_7 00032	MSS_RV8270_8 00032	MSS_RV8270ICV 00024	MSS_RVDFTPP 00014	
DFTPP 410-435991/1		8270D						1 mL	
ICIS 410-435991/2		8270D		1 mL					
IC 410-435991/3		8270D				1 mL			
IC 410-435991/4		8270D			1 mL				
IC 410-435991/5		8270D							
IC 410-435991/6		8270D							
IC 410-435991/7		8270D							
IC 410-435991/8		8270D							
IC 410-435991/9		8270D							
ICV 410-435991/12		8270D					1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 435991 Batch Start Date: 10/26/23 11:53 Batch Analyst: Lutte, Kate E

Batch Method: 8270D Batch End Date:

Batch Notes	
Pipette/Syringe/Dispenser ID	Scan internal syringe
Dilution Solution ID	MeCl2: 63209
Vial Lot Number	23164202

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 437867 Batch Start Date: 10/31/23 14:09 Batch Analyst: McGowan, Madison

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	CalcMsg	MSS_RV8270_1 00032	MSS_RV8270_2 00033	MSS_RV8270_3 00030	MSS_RV8270_4 00030
DFTPP 410-437867/1		8270D		1 mL	Perform Calculation left blank				
ICIS 410-437867/2		8270D		1 mL	Perform Calculation left blank				
IC 410-437867/3		8270D		1 mL	Perform Calculation left blank				
IC 410-437867/4		8270D		1 mL	Perform Calculation left blank				
IC 410-437867/5		8270D		1 mL	Perform Calculation left blank				
IC 410-437867/6		8270D		1 mL	Perform Calculation left blank				1 mL
IC 410-437867/7		8270D		1 mL	Perform Calculation left blank			1 mL	
IC 410-437867/8		8270D		1 mL	Perform Calculation left blank		1 mL		
IC 410-437867/9		8270D		1 mL	Perform Calculation left blank	1 mL			
ICV 410-437867/12		8270D		1 mL	Perform Calculation left blank				

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RV8270_5 00039	MSS_RV8270_6 00047	MSS_RV8270_7 00032	MSS_RV8270_8 00032	MSS_RV8270ICV 00024	MSS_RVDFTPP 00014
DFTPP 410-437867/1		8270D							1 mL
ICIS 410-437867/2		8270D			1 mL				
IC 410-437867/3		8270D					1 mL		
IC 410-437867/4		8270D				1 mL			
IC 410-437867/5		8270D		1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 437867 Batch Start Date: 10/31/23 14:09 Batch Analyst: McGowan, Madison

Batch Method: 8270D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSS_RV8270_5 00039	MSS_RV8270_6 00047	MSS_RV8270_7 00032	MSS_RV8270_8 00032	MSS_RV8270ICV 00024	MSS_RVDFTPP 00014
IC 410-437867/6		8270D							
IC 410-437867/7		8270D							
IC 410-437867/8		8270D							
IC 410-437867/9		8270D							
ICV 410-437867/12		8270D						1 mL	

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG No.:

Project: RFAAP, Radford HWMU16

Client Sample ID	Lab Sample ID
16C1	410-136864-1
16MW8	410-136864-2
16MW9	410-136864-3
16WC1A	410-136864-4
16WDUP	410-136864-5
16WC1B	410-136864-6

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 16C1 | Lab Sample ID: 410-136864-1

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG ID.:

Matrix: Water | Date Sampled: 07/27/2023 12:45

Reporting Basis: WET | Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	2.0	0.20	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 16C1 | Lab Sample ID: 410-136864-1

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG ID.:

Matrix: Water | Date Sampled: 07/27/2023 12:45

Reporting Basis: WET | Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	2.0	0.60	ug/L			1	6020B
7440-38-2	Arsenic	ND	10	2.0	ug/L			1	6020B
7440-39-3	Barium	200	10	1.3	ug/L			1	6020B
7440-41-7	Beryllium	ND	1.0	0.30	ug/L			1	6020B
7440-43-9	Cadmium	ND	1.0	0.20	ug/L			1	6020B
7440-47-3	Chromium	ND	5.0	1.0	ug/L			1	6020B
7440-48-4	Cobalt	ND	5.0	1.0	ug/L			1	6020B
7440-50-8	Copper	ND	5.0	1.7	ug/L			1	6020B
7439-92-1	Lead	ND	3.0	1.0	ug/L			1	6020B
7440-02-0	Nickel	4.0	10	2.0	ug/L	J		1	6020B
7782-49-2	Selenium	ND	10	3.0	ug/L			1	6020B
7440-22-4	Silver	ND	2.0	0.30	ug/L			1	6020B
7440-28-0	Thallium	ND	1.0	0.20	ug/L			1	6020B
7440-66-6	Zinc	ND	30	7.3	ug/L			1	6020B
7440-62-2	Vanadium	ND	10	2.5	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 16MW8 | Lab Sample ID: 410-136864-2

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG ID.:

Matrix: Water | Date Sampled: 07/26/2023 10:05

Reporting Basis: WET | Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	2.0	0.20	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 16MW8 | Lab Sample ID: 410-136864-2

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG ID.:

Matrix: Water | Date Sampled: 07/26/2023 10:05

Reporting Basis: WET | Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	2.0	0.60	ug/L			1	6020B
7440-38-2	Arsenic	ND	10	2.0	ug/L			1	6020B
7440-39-3	Barium	150	10	1.3	ug/L			1	6020B
7440-41-7	Beryllium	0.31	1.0	0.30	ug/L	J		1	6020B
7440-43-9	Cadmium	0.27	1.0	0.20	ug/L	J		1	6020B
7440-47-3	Chromium	ND	5.0	1.0	ug/L			1	6020B
7440-48-4	Cobalt	ND	5.0	1.0	ug/L			1	6020B
7440-50-8	Copper	11	5.0	1.7	ug/L			1	6020B
7439-92-1	Lead	ND	3.0	1.0	ug/L			1	6020B
7440-02-0	Nickel	2.9	10	2.0	ug/L	J		1	6020B
7782-49-2	Selenium	ND	10	3.0	ug/L			1	6020B
7440-22-4	Silver	ND	2.0	0.30	ug/L			1	6020B
7440-28-0	Thallium	ND	1.0	0.20	ug/L			1	6020B
7440-66-6	Zinc	25	30	7.3	ug/L	J		1	6020B
7440-62-2	Vanadium	ND	10	2.5	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 16MW9 | Lab Sample ID: 410-136864-3

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG ID.:

Matrix: Water | Date Sampled: 07/27/2023 11:25

Reporting Basis: WET | Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	2.0	0.20	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 16MW9 | Lab Sample ID: 410-136864-3

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG ID.:

Matrix: Water | Date Sampled: 07/27/2023 11:25

Reporting Basis: WET | Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	2.0	0.60	ug/L			1	6020B
7440-38-2	Arsenic	2.6	10	2.0	ug/L	J		1	6020B
7440-39-3	Barium	660	10	1.3	ug/L			1	6020B
7440-41-7	Beryllium	ND	1.0	0.30	ug/L			1	6020B
7440-43-9	Cadmium	0.37	1.0	0.20	ug/L	J		1	6020B
7440-47-3	Chromium	ND	5.0	1.0	ug/L			1	6020B
7440-48-4	Cobalt	5.7	5.0	1.0	ug/L			1	6020B
7440-50-8	Copper	ND	5.0	1.7	ug/L			1	6020B
7439-92-1	Lead	ND	3.0	1.0	ug/L			1	6020B
7440-02-0	Nickel	17	10	2.0	ug/L			1	6020B
7782-49-2	Selenium	ND	10	3.0	ug/L			1	6020B
7440-22-4	Silver	ND	2.0	0.30	ug/L			1	6020B
7440-28-0	Thallium	ND	1.0	0.20	ug/L			1	6020B
7440-66-6	Zinc	ND	30	7.3	ug/L			1	6020B
7440-62-2	Vanadium	ND	10	2.5	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 16WC1A
Lab Sample ID: 410-136864-4

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG ID.:

Matrix: Water
Date Sampled: 07/27/2023 09:55

Reporting Basis: WET
Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	2.0	0.20	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 16WC1A
Lab Sample ID: 410-136864-4
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1
SDG ID.:
Matrix: Water
Date Sampled: 07/27/2023 09:55
Reporting Basis: WET
Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	2.0	0.60	ug/L			1	6020B
7440-38-2	Arsenic	5.3	10	2.0	ug/L	J		1	6020B
7440-39-3	Barium	510	10	1.3	ug/L			1	6020B
7440-41-7	Beryllium	ND	1.0	0.30	ug/L			1	6020B
7440-43-9	Cadmium	ND	1.0	0.20	ug/L			1	6020B
7440-47-3	Chromium	ND	5.0	1.0	ug/L			1	6020B
7440-48-4	Cobalt	15	5.0	1.0	ug/L			1	6020B
7440-50-8	Copper	ND	5.0	1.7	ug/L			1	6020B
7439-92-1	Lead	ND	3.0	1.0	ug/L			1	6020B
7440-02-0	Nickel	15	10	2.0	ug/L		^2	1	6020B
7782-49-2	Selenium	ND	10	3.0	ug/L			1	6020B
7440-22-4	Silver	ND	2.0	0.30	ug/L			1	6020B
7440-28-0	Thallium	ND	1.0	0.20	ug/L			1	6020B
7440-66-6	Zinc	11	30	7.3	ug/L	J		1	6020B
7440-62-2	Vanadium	ND	10	2.5	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 16WDUP
Lab Sample ID: 410-136864-5

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG ID.:

Matrix: Water
Date Sampled: 07/27/2023 10:20

Reporting Basis: WET
Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	2.0	0.20	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 16WDUP
Lab Sample ID: 410-136864-5
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1
SDG ID.:
Matrix: Water
Date Sampled: 07/27/2023 10:20
Reporting Basis: WET
Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	2.0	0.60	ug/L			1	6020B
7440-38-2	Arsenic	5.1	10	2.0	ug/L	J		1	6020B
7440-39-3	Barium	520	10	1.3	ug/L			1	6020B
7440-41-7	Beryllium	ND	1.0	0.30	ug/L			1	6020B
7440-43-9	Cadmium	ND	1.0	0.20	ug/L			1	6020B
7440-47-3	Chromium	ND	5.0	1.0	ug/L			1	6020B
7440-48-4	Cobalt	15	5.0	1.0	ug/L		^2	1	6020B
7440-50-8	Copper	ND	5.0	1.7	ug/L			1	6020B
7439-92-1	Lead	ND	3.0	1.0	ug/L			1	6020B
7440-02-0	Nickel	15	10	2.0	ug/L		^2	1	6020B
7782-49-2	Selenium	ND	10	3.0	ug/L			1	6020B
7440-22-4	Silver	ND	2.0	0.30	ug/L			1	6020B
7440-28-0	Thallium	ND	1.0	0.20	ug/L			1	6020B
7440-66-6	Zinc	12	30	7.3	ug/L	J		1	6020B
7440-62-2	Vanadium	ND	10	2.5	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 16WC1B
Lab Sample ID: 410-136864-6
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1
SDG ID.:
Matrix: Water
Date Sampled: 07/26/2023 12:05
Reporting Basis: WET
Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.25	2.0	0.20	ug/L	J		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 16WC1B
Lab Sample ID: 410-136864-6

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG ID.:

Matrix: Water
Date Sampled: 07/26/2023 12:05

Reporting Basis: WET
Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	2.0	0.60	ug/L			1	6020B
7440-38-2	Arsenic	ND	10	2.0	ug/L			1	6020B
7440-39-3	Barium	89	10	1.3	ug/L			1	6020B
7440-41-7	Beryllium	ND	1.0	0.30	ug/L			1	6020B
7440-43-9	Cadmium	0.71	1.0	0.20	ug/L	J		1	6020B
7440-47-3	Chromium	3.3	5.0	1.0	ug/L	J		1	6020B
7440-48-4	Cobalt	3.5	5.0	1.0	ug/L	J	^2	1	6020B
7440-50-8	Copper	2.9	5.0	1.7	ug/L	J		1	6020B
7439-92-1	Lead	ND	3.0	1.0	ug/L			1	6020B
7440-02-0	Nickel	4.7	10	2.0	ug/L	J		1	6020B
7782-49-2	Selenium	ND	10	3.0	ug/L			1	6020B
7440-22-4	Silver	0.34	2.0	0.30	ug/L	J		1	6020B
7440-28-0	Thallium	ND	1.0	0.20	ug/L			1	6020B
7440-66-6	Zinc	11	30	7.3	ug/L	J		1	6020B
7440-62-2	Vanadium	ND	10	2.5	ug/L			1	6020B

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	ICV 410-407006/4 08/10/2023 07:45				CCV 410-407006/13 08/10/2023 09:05				CCV 410-407006/15 08/10/2023 11:30			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	52.7		50.0	105	52.7		50.0	105	52.4		50.0	105
Arsenic	485		500	97	513		500	103	532		500	106
Barium	493		500	99	514		500	103	523		500	105
Beryllium	50.5		50.0	101	49.2		50.0	98	51.1		50.0	102
Cadmium	53.3		50.0	107	52.0		50.0	104	53.1		50.0	106
Chromium	492		500	98	522		500	104	542		500	109
Cobalt	493		500	99	521		500	104	537		500	107
Copper	496		500	99	517		500	103	535		500	107
Lead	49.7		50.0	99	51.5		50.0	103	52.6		50.0	105
Nickel	494		500	99	521		500	104	538		500	108
Selenium	48.4		50.0	97	52.7		50.0	105	53.0		50.0	106
Silver	48.7		50.0	97	51.4		50.0	103	53.3		50.0	107
Thallium	49.4		50.0	99	51.7		50.0	103	52.6		50.0	105
Vanadium	495		500	99	523		500	105	539		500	108
Zinc	499		500	100	510		500	102	534		500	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	CCV 410-407006/26 08/10/2023 13:21				CCV 410-407006/37 08/10/2023 13:43							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	53.2		50.0	107	50.9		50.0	102				
Arsenic	523		500	105	510		500	102				
Barium	516		500	103	492		500	98				
Beryllium	49.8		50.0	100	47.0		50.0	94				
Cadmium	52.5		50.0	105	50.3		50.0	101				
Chromium	537		500	107	522		500	104				
Cobalt	536		500	107	517		500	103				
Copper	532		500	106	517		500	103				
Lead	52.7		50.0	105	50.8		50.0	102				
Nickel	537		500	108	518		500	104				
Selenium	53.3		50.0	106	51.1		50.0	102				
Silver	53.2		50.0	106	50.3		50.0	101				
Thallium	53.1		50.0	106	50.9		50.0	102				
Vanadium	534		500	107	521		500	104				
Zinc	531		500	106	514		500	103				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	ICV 410-407005/4 08/10/2023 08:05				CCV 410-407005/16 08/10/2023 08:48				CCV 410-407005/101 08/10/2023 16:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	53.3		50.0	107	50.9		50.0	102	51.5		50.0	103
Arsenic	494		500	99	533		500	107	514		500	103
Barium	502		500	100	514		500	103	518		500	104
Beryllium	50.8		50.0	102	49.9		50.0	100	46.3		50.0	93
Cadmium	54.1		50.0	108	51.3		50.0	103	51.0		50.0	102
Chromium	472		500	94	481		500	96	486		500	97
Cobalt	474		500	95	481		500	96	501		500	100
Copper	484		500	97	507		500	101	482		500	96
Lead	50.1		50.0	100	50.8		50.0	102	51.4		50.0	103
Nickel	504		500	101	537		500	107	506		500	101
Selenium	50.0		50.0	100	53.2		50.0	106	52.7		50.0	105
Silver	49.4		50.0	99	50.4		50.0	101	50.7		50.0	101
Thallium	49.9		50.0	100	50.7		50.0	101	51.0		50.0	102
Vanadium	491		500	98	499		500	100	516		500	103
Zinc	508		500	102	525		500	105	509		500	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	CCV 410-407005/106 08/10/2023 17:09				CCV 410-407005/115 08/10/2023 17:28				CCV 410-407005/136 08/10/2023 18:11			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	52.1		50.0	104	51.2		50.0	102	51.8		50.0	104
Arsenic	521		500	104	517		500	103	518		500	104
Barium	513		500	103	522		500	104	519		500	104
Beryllium	47.3		50.0	95	46.6		50.0	93	46.4		50.0	93
Cadmium	51.2		50.0	102	51.6		50.0	103	50.8		50.0	102
Chromium	487		500	97	493		500	99	486		500	97
Cobalt	485		500	97	493		500	99	486		500	97
Copper	485		500	97	488		500	98	487		500	97
Lead	51.3		50.0	103	51.8		50.0	104	51.6		50.0	103
Nickel	509		500	102	513		500	103	513		500	103
Selenium	52.0		50.0	104	54.3		50.0	109	54.0		50.0	108
Silver	50.5		50.0	101	51.0		50.0	102	50.7		50.0	101
Thallium	51.1		50.0	102	51.7		50.0	103	51.5		50.0	103
Vanadium	512		500	102	519		500	104	511		500	102
Zinc	505		500	101	516		500	103	514		500	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	CCV 410-407005/143 08/10/2023 18:25											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	51.8		50.0	104								
Arsenic	519		500	104								
Barium	522		500	104								
Beryllium	46.9		50.0	94								
Cadmium	50.9		50.0	102								
Chromium	488		500	98								
Cobalt	503		500	101								
Copper	486		500	97								
Lead	51.6		50.0	103								
Nickel	511		500	102								
Selenium	52.1		50.0	104								
Silver	50.9		50.0	102								
Thallium	51.4		50.0	103								
Vanadium	513		500	103								
Zinc	515		500	103								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	ICV 410-407255/4 08/11/2023 07:41				CCV 410-407255/10 08/11/2023 08:06				CCV 410-407255/28 08/11/2023 08:49			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Nickel	512		500	102	546		500	109	547		500	109
Antimony	54.2		50.0	108	52.1		50.0	104	50.8		50.0	102
Arsenic	493		500	99	539		500	108	525		500	105
Barium	509		500	102	528		500	106	510		500	102
Beryllium	50.0		50.0	100	47.7		50.0	95	47.6		50.0	95
Cadmium	54.8		50.0	110	53.2		50.0	106	51.9		50.0	104
Chromium	487		500	97	506		500	101	500		500	100
Cobalt	471		500	94	492		500	98	482		500	96
Copper	495		500	99	523		500	105	526		500	105
Lead	49.2		50.0	98	50.4		50.0	101	50.6		50.0	101
Selenium	49.6		50.0	99	52.5		50.0	105	50.9		50.0	102
Silver	49.4		50.0	99	53.3		50.0	107	51.0		50.0	102
Thallium	49.6		50.0	99	50.6		50.0	101	50.8		50.0	102
Vanadium	486		500	97	508		500	102	500		500	100
Zinc	508		500	102	536		500	107	519		500	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	CCV 410-407255/38 08/11/2023 09:12											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Nickel	537		500	107								
Antimony	51.8		50.0	104								
Arsenic	523		500	105								
Barium	518		500	104								
Beryllium	48.5		50.0	97								
Cadmium	51.8		50.0	104								
Chromium	498		500	100								
Cobalt	483		500	97								
Copper	517		500	103								
Lead	50.5		50.0	101								
Selenium	51.5		50.0	103								
Silver	51.5		50.0	103								
Thallium	51.0		50.0	102								
Vanadium	497		500	99								
Zinc	523		500	105								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	ICV 410-408197/4 08/14/2023 12:12				CCV 410-408197/10 08/14/2023 20:43				CCV 410-408197/31 08/14/2023 23:14			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Zinc	512		500	102	529		500	106	522		500	104
Antimony	52.7		50.0	105	52.1		50.0	104	50.6		50.0	101
Arsenic	495		500	99	525		500	105	510		500	102
Barium	499		500	100	521		500	104	510		500	102
Beryllium	49.8		50.0	100	50.0		50.0	100	45.4		50.0	91
Cadmium	54.5		50.0	109	52.6		50.0	105	51.7		50.0	103
Chromium	497		500	99	508		500	102	505		500	101
Cobalt	485		500	97	505		500	101	503		500	101
Copper	487		500	97	503		500	101	494		500	99
Lead	50.2		50.0	100	53.3		50.0	107	52.7		50.0	105
Nickel	507		500	101	528		500	106	518		500	104
Selenium	50.7		50.0	101	50.8		50.0	102	47.3		50.0	95
Silver	49.0		50.0	98	52.4		50.0	105	53.5		50.0	107
Thallium	50.2		50.0	100	53.4		50.0	107	53.1		50.0	106
Vanadium	499		500	100	514		500	103	507		500	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	CCV 410-408197/36 08/14/2023 23:26											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Zinc	520		500	104								
Antimony	50.8		50.0	102								
Arsenic	511		500	102								
Barium	501		500	100								
Beryllium	45.8		50.0	92								
Cadmium	51.8		50.0	104								
Chromium	507		500	101								
Cobalt	507		500	101								
Copper	497		500	99								
Lead	52.4		50.0	105								
Nickel	522		500	104								
Selenium	48.1		50.0	96								
Silver	52.8		50.0	106								
Thallium	52.7		50.0	105								
Vanadium	510		500	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	ICV 410-408949/4 08/16/2023 06:31				CCV 410-408949/10 08/16/2023 07:03				CCV 410-408949/110 08/16/2023 11:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Thallium	50.2		50.0	100	51.4		50.0	103	51.1		50.0	102
Antimony	53.3		50.0	107	51.0		50.0	102	49.7		50.0	99
Arsenic	490		500	98	526		500	105	522		500	104
Barium	501		500	100	507		500	101	504		500	101
Beryllium	49.4		50.0	99	48.6		50.0	97	48.6		50.0	97
Cadmium	54.6		50.0	109	51.1		50.0	102	51.6		50.0	103
Chromium	505		500	101	514		500	103	520		500	104
Cobalt	476		500	95	482		500	96	485		500	97
Copper	479		500	96	504		500	101	495		500	99
Lead	50.1		50.0	100	51.0		50.0	102	51.2		50.0	102
Nickel	504		500	101	532		500	106	528		500	106
Selenium	51.1		50.0	102	53.5		50.0	107	52.9		50.0	106
Silver	49.3		50.0	99	53.1		50.0	106	52.0		50.0	104
Vanadium	504		500	101	509		500	102	516		500	103
Zinc	505		500	101	522		500	104	522		500	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: MT_MJ_ICV_00088 Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00168

Analyte	CCV 410-408949/118 08/16/2023 11:39											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Thallium	51.1		50.0	102								
Antimony	50.4		50.0	101								
Arsenic	517		500	103								
Barium	506		500	101								
Beryllium	48.8		50.0	98								
Cadmium	50.9		50.0	102								
Chromium	524		500	105								
Cobalt	494		500	99								
Copper	493		500	99								
Lead	51.1		50.0	102								
Nickel	524		500	105								
Selenium	54.2		50.0	108								
Silver	53.0		50.0	106								
Vanadium	519		500	104								
Zinc	516		500	103								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: Hg_1Control_00150 Concentration Units: ug/L

CCV Source: Hg_1Cal_00145

Analyte	ICV 410-403086/7-A 08/04/2023 08:19				CCV 410-403086/11-A 08/04/2023 09:14				CCV 410-403086/11-A 08/04/2023 09:39			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.45		2.50	98	1.06		1.00	106	1.01		1.00	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: Hg_1Control_00150 Concentration Units: ug/L

CCV Source: Hg_1Cal_00145

Analyte	CCV 410-403086/11-A 08/04/2023 10:03				CCV 410-403086/11-A 08/04/2023 10:28				CCV 410-403086/11-A 08/04/2023 11:22			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	1.03		1.00	103	1.03		1.00	103	1.08		1.00	108

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICV Source: Hg_1Control_00150 Concentration Units: ug/L

CCV Source: Hg_1Cal_00145

Analyte	CCV 410-403086/11-A 08/04/2023 11:47				CCV 410-403086/11-A 08/04/2023 12:11				CCV 410-403086/11-A 08/04/2023 12:35			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	1.09		1.00	109	1.03		1.00	103	1.09		1.00	109

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Method: 6020B Instrument ID: E07 - 27813

Lab Sample ID: CRI 410-407006/6 Concentration Units: ug/L

CRQL Check Standard Source: MT_MJ_CRI-V_00152

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.01	0.983	J	97	80-120
Arsenic	2.02	1.96	J	97	80-120
Barium	1.99	2.29		115	80-120
Beryllium	0.499	0.436	J	87	80-120
Cadmium	0.496	0.534		108	80-120
Chromium	2.00	2.38		119	80-120
Cobalt	0.504	0.545		108	80-120
Copper	0.999	1.04		104	80-120
Lead	0.503	0.518		103	80-120
Nickel	1.00	1.09		109	80-120
Selenium	1.00	1.05		105	80-120
Silver	0.496	0.541		109	80-120
Thallium	0.500	0.517		103	80-120
Zinc	10.0	11.6		116	80-120
Vanadium	2.00	2.02	J	101	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Method: 6020B Instrument ID: E09 - 30921

Lab Sample ID: CRI 410-407005/6 Concentration Units: ug/L

CRQL Check Standard Source: MT_MJ_CRI-V_00151

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.01	0.912	J	90	80-120
Arsenic	2.02	2.07		102	80-120
Barium	1.99	1.98	J	100	80-120
Beryllium	0.499	0.488	J	98	80-120
Cadmium	0.496	0.453	J	91	80-120
Chromium	2.00	2.03		101	80-120
Cobalt	0.504	0.497	J	99	80-120
Copper	0.999	1.02		102	80-120
Lead	0.503	0.504		100	80-120
Nickel	1.00	1.14		114	80-120
Selenium	1.00	0.938	J	94	80-120
Silver	0.496	0.534		108	80-120
Thallium	0.500	0.502		100	80-120
Vanadium	2.00	1.89	J	94	80-120

Lab Sample ID: CRI 410-407005/18 Concentration Units: ug/L

CRQL Check Standard Source: MT_MJ_CRI-V_00151

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.01	1.04		103	80-120
Arsenic	2.02	2.05		101	80-120
Barium	1.99	1.68	J	84	80-120
Beryllium	0.499	0.460	J	92	80-120
Cadmium	0.496	0.493	J	99	80-120
Chromium	2.00	1.93	J	96	80-120
Cobalt	0.504	0.489	J	97	80-120
Copper	0.999	1.03		104	80-120
Lead	0.503	0.545		108	80-120
Nickel	1.00	1.06		106	80-120
Selenium	1.00	1.03		103	80-120
Silver	0.496	0.472	J	95	80-120
Thallium	0.500	0.489	J	98	80-120
Zinc	10.0	21.8	^3+	218	80-120
Vanadium	2.00	2.11	J	105	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Method: 6020B Instrument ID: E09 - 30921

Lab Sample ID: CRI 410-407255/6 Concentration Units: ug/L

CRQL Check Standard Source: MT_MJ_CRI-V_00151

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.01	0.968	J	96	80-120
Arsenic	2.02	2.11		104	80-120
Barium	1.99	1.87	J	94	80-120
Beryllium	0.499	0.490	J	98	80-120
Cadmium	0.496	0.532		107	80-120
Chromium	2.00	1.94	J	97	80-120
Cobalt	0.504	0.511		101	80-120
Copper	0.999	1.13		113	80-120
Lead	0.503	0.528		105	80-120
Nickel	1.00	1.11		111	80-120
Selenium	1.00	1.09		109	80-120
Silver	0.496	0.474	J	96	80-120
Thallium	0.500	0.471	J	94	80-120
Zinc	10.0	11.9		119	80-120
Vanadium	2.00	1.86	J	93	80-120

Lab Sample ID: CRI 410-408197/6 Concentration Units: ug/L

CRQL Check Standard Source: MT_MJ_CRI-V_00153

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.01	0.982	J	97	80-120
Arsenic	2.02	2.04		101	80-120
Barium	1.99	1.73	J	87	80-120
Beryllium	0.499	0.509		102	80-120
Cadmium	0.496	0.472	J	95	80-120
Chromium	2.00	1.93	J	97	80-120
Cobalt	0.504	0.520		103	80-120
Copper	0.999	1.10		110	80-120
Lead	0.503	0.527		105	80-120
Nickel	1.00	1.10		110	80-120
Selenium	1.00	1.03		103	80-120
Silver	0.496	0.501		101	80-120
Thallium	0.500	0.524		105	80-120
Zinc	10.0	10.9		109	80-120
Vanadium	2.00	2.12	J	106	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Method: 6020B Instrument ID: E09 - 30921

Lab Sample ID: CRI 410-408949/6 Concentration Units: ug/L

CRQL Check Standard Source: MT_MJ_CRI-V_00153

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.01	0.961	J	95	80-120
Arsenic	2.02	1.98	J	98	80-120
Barium	1.99	1.89	J	95	80-120
Beryllium	0.499	0.531		106	80-120
Cadmium	0.496	0.492	J	99	80-120
Chromium	2.00	2.28		114	80-120
Cobalt	0.504	0.573		114	80-120
Copper	0.999	1.06		106	80-120
Lead	0.503	0.484	J	96	80-120
Nickel	1.00	1.15		115	80-120
Selenium	1.00	1.13		113	80-120
Silver	0.496	0.557		112	80-120
Thallium	0.500	0.519		104	80-120
Zinc	10.0	11.3		113	80-120
Vanadium	2.00	1.98	J	99	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Method: 7470A Instrument ID: M07 - 17384

Lab Sample ID: CRA 410-403086/8-A Concentration Units: ug/L

CRQL Check Standard Source: Hg_0.1Control_00157

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.169	J	85	50-150

Lab Sample ID: CRA 410-403086/8-A Concentration Units: ug/L

CRQL Check Standard Source: Hg_0.1Control_00157

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.235		117	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 410-407006/5 08/10/2023 07:59		CCB 410-407006/14 08/10/2023 09:07		CCB 410-407006/16 08/10/2023 11:32		CCB 410-407006/27 08/10/2023 13:23	
		Found	C	Found	C	Found	C	Found	C
Antimony	1.0	ND		ND		ND		ND	
Arsenic	2.0	ND		ND		ND		ND	
Barium	2.0	ND		ND		ND		ND	
Beryllium	0.50	ND		0.158	J	ND		ND	
Cadmium	0.50	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	0.50	ND		0.198	J	0.203	J	0.240	J
Copper	1.0	ND		ND		ND		ND	
Lead	0.50	ND		ND		ND		ND	
Nickel	1.0	ND		ND		0.539	J	1.04	
Selenium	1.0	ND		ND		ND		ND	
Silver	0.50	ND		ND		ND		ND	
Thallium	0.50	ND				0.281	J	0.391	J
Vanadium	4.0	ND		ND		ND		ND	
Zinc	10	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 410-407006/38 08/10/2023 13:45							
		Found	C	Found	C	Found	C	Found	C
Antimony	1.0	ND							
Arsenic	2.0	ND							
Barium	2.0	ND							
Beryllium	0.50	ND							
Cadmium	0.50	ND							
Chromium	2.0	ND							
Cobalt	0.50	0.286	J						
Copper	1.0	ND							
Lead	0.50	ND							
Nickel	1.0	0.895	J						
Selenium	1.0	ND							
Silver	0.50	ND							
Thallium	0.50	0.245	J						
Vanadium	4.0	ND							
Zinc	10	ND							

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 410-407005/5 08/10/2023 08:07		CCB 410-407005/17 08/10/2023 08:50		CCB 410-407005/102 08/10/2023 17:01		CCB 410-407005/107 08/10/2023 17:11	
		Found	C	Found	C	Found	C	Found	C
Antimony	1.0	ND		ND		ND		ND	
Arsenic	2.0	ND		ND		ND		ND	
Barium	2.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	0.50	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	0.50	ND		ND		ND		ND	
Copper	1.0	ND		ND		ND		ND	
Lead	0.50	ND		ND		ND		ND	
Nickel	1.0	ND		ND		ND		ND	
Selenium	1.0	ND		ND		ND		ND	
Silver	0.50	ND		ND		ND		ND	
Thallium	0.50	ND		ND		ND		ND	
Vanadium	4.0	ND		ND		ND		ND	
Zinc	10	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 410-407005/116 08/10/2023 17:30		CCB 410-407005/137 08/10/2023 18:13		CCB 410-407005/144 08/10/2023 18:27			
		Found	C	Found	C	Found	C	Found	C
Antimony	1.0	ND		ND		ND			
Arsenic	2.0	ND		ND		ND			
Barium	2.0	ND		ND		ND			
Beryllium	0.50	ND		ND		ND			
Cadmium	0.50	ND		ND		ND			
Chromium	2.0	ND		ND		ND			
Cobalt	0.50	ND		ND		ND			
Copper	1.0	ND		ND		ND			
Lead	0.50	ND		ND		ND			
Nickel	1.0	ND		ND		ND			
Selenium	1.0	ND		ND		ND			
Silver	0.50	ND		ND		ND			
Thallium	0.50	ND		ND		ND			
Vanadium	4.0	ND		ND		ND			
Zinc	10	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 410-407255/5 08/11/2023 07:44		CCB 410-407255/11 08/11/2023 08:08		CCB 410-407255/29 08/11/2023 08:51		CCB 410-407255/39 08/11/2023 09:14	
		Found	C	Found	C	Found	C	Found	C
Nickel	1.0	ND		ND		ND		ND	
Antimony	1.0	ND		ND		ND		ND	
Arsenic	2.0	ND		ND		ND		ND	
Barium	2.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	0.50	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	0.50	ND		ND		ND		ND	
Copper	1.0	ND		ND		ND		ND	
Lead	0.50	ND		ND		ND		ND	
Selenium	1.0	ND		ND		ND		ND	
Silver	0.50	ND		ND		ND		ND	
Thallium	0.50	ND		ND		ND		ND	
Vanadium	4.0	ND		ND		ND		ND	
Zinc	10	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 410-408197/5 08/14/2023 12:15		CCB 410-408197/11 08/14/2023 20:45		CCB 410-408197/32 08/14/2023 23:16		CCB 410-408197/37 08/14/2023 23:28	
		Found	C	Found	C	Found	C	Found	C
Zinc	10	ND		ND		ND		ND	
Antimony	1.0	ND		ND		ND		ND	
Arsenic	2.0	ND		ND		ND		ND	
Barium	2.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	0.50	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	0.50	0.205	J	ND		ND		ND	
Copper	1.0	ND		ND		ND		ND	
Lead	0.50	ND		ND		ND		ND	
Nickel	1.0	ND		ND		ND		ND	
Selenium	1.0	ND		0.313	J	ND		ND	
Silver	0.50	ND		ND		ND		ND	
Thallium	0.50	ND		ND		ND		ND	
Vanadium	4.0	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 410-408949/5 08/16/2023 06:34		CCB 410-408949/11 08/16/2023 07:05		CCB 410-408949/111 08/16/2023 11:20		CCB 410-408949/119 08/16/2023 11:41	
		Found	C	Found	C	Found	C	Found	C
Thallium	0.50	ND		ND		ND		ND	
Antimony	1.0	ND		ND		ND		ND	
Arsenic	2.0	ND		ND		ND		ND	
Barium	2.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	0.50	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	0.50	ND		ND		ND		ND	
Copper	1.0	ND		ND		ND		ND	
Lead	0.50	ND		ND		ND		ND	
Nickel	1.0	ND		ND		ND		ND	
Selenium	1.0	ND		ND		ND		ND	
Silver	0.50	ND		ND		ND		ND	
Vanadium	4.0	ND		ND		ND		ND	
Zinc	10	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 410-403086/9-A 08/04/2023 08:21		CCB 410-403086/10-A 08/04/2023 09:16		CCB 410-403086/10-A 08/04/2023 09:41		CCB 410-403086/10-A 08/04/2023 10:05	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 410-403086/10-A 08/04/2023 10:30		CCB 410-403086/10-A 08/04/2023 11:24		CCB 410-403086/10-A 08/04/2023 11:49		CCB 410-403086/10-A 08/04/2023 12:13	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 410-403086/10-A 08/04/2023 12:37							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND							

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 410-403519/1-A

Instrument Code: E09 - 30921 Batch No.: 407005

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			6020B
7440-38-2	Arsenic	ND			6020B
7440-39-3	Barium	ND			6020B
7440-41-7	Beryllium	ND			6020B
7440-43-9	Cadmium	ND			6020B
7440-47-3	Chromium	ND			6020B
7440-48-4	Cobalt	ND			6020B
7440-50-8	Copper	ND			6020B
7439-92-1	Lead	ND			6020B
7440-02-0	Nickel	ND			6020B
7782-49-2	Selenium	ND			6020B
7440-22-4	Silver	ND			6020B
7440-28-0	Thallium	ND			6020B
7440-62-2	Vanadium	ND			6020B

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 410-403837/1-A

Instrument Code: E07 - 27813 Batch No.: 407006

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			6020B
7440-38-2	Arsenic	ND			6020B
7440-39-3	Barium	ND			6020B
7440-41-7	Beryllium	ND			6020B
7440-43-9	Cadmium	ND			6020B
7440-47-3	Chromium	ND			6020B
7440-48-4	Cobalt	ND			6020B
7440-50-8	Copper	ND			6020B
7439-92-1	Lead	ND			6020B
7440-02-0	Nickel	ND			6020B
7782-49-2	Selenium	ND			6020B
7440-22-4	Silver	ND			6020B
7440-28-0	Thallium	ND			6020B
7440-66-6	Zinc	ND			6020B
7440-62-2	Vanadium	ND			6020B

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 410-403519/1-A

Instrument Code: E09 - 30921 Batch No.: 408197

CAS No.	Analyte	Concentration	C	Q	Method
7440-66-6	Zinc	ND			6020B

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 410-403849/1-A

Instrument Code: M07 - 17384 Batch No.: 404633

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 410-403851/1-A

Instrument Code: M07 - 17384 Batch No.: 404633

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSA 410-407006/7 Instrument ID: E07 - 27813

Lab File ID: 027ICSA.d ICS Source: MT_MJ_ICSA_00104

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony	**0.120**	**0.193**	
Arsenic	**7.70**	**0.160**	
Barium	**0.400**	**0.588**	
Beryllium	**0.0110**	**-0.0110**	
Cadmium	**0.450**	**0.300**	
Chromium	**3.60**	**3.14**	
Cobalt	**0.280**	**0.188**	
Copper	**0.440**	**0.0850**	
Lead	**0.0930**	**0.0660**	
Nickel	**1.20**	**0.517**	
Selenium	**0.0720**	**0.0690**	
Silver	**0.300**	**0.0090**	
Thallium	**0.0620**	**0.0180**	
Vanadium	**0.310**	**-0.0640**	
Zinc	**1.10**	**2.04**	
Aluminum	*100000*	*100307*	*100*
Calcium	*299000*	*287814*	*96*
Iron	*260000*	*245539*	*94*
Magnesium	*100000*	*104194*	*104*
Manganese	*0.600*	*-0.435*	
Molybdenum	*2000*	*2081*	*104*
Potassium	*100000*	*98894*	*99*
Sodium	*260000*	*254551*	*98*
Strontium	*1.80*	*2.08*	
Tin	*0.170*	*0.858*	
Titanium	*2000*	*2030*	*101*
Uranium	*0.110*	*0.0640*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSAB 410-407006/8 Instrument ID: E07 - 27813

Lab File ID: 028ICSB.d ICS Source: MT_MJ_ICSAB_00081

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**0.120**	**0.154**	
Arsenic	**108**	**101**	**94**
Barium	**0.400**	**0.589**	
Beryllium	**0.0110**	**-0.0110**	
Cadmium	**100**	**105**	**105**
Chromium	**204**	**210**	**103**
Cobalt	**200**	**204**	**102**
Copper	**201**	**201**	**100**
Lead	**0.0930**	**0.0690**	
Nickel	**201**	**202**	**100**
Selenium	**100**	**101**	**101**
Silver	**50.3**	**51.5**	**102**
Thallium	**0.0620**	**0.0160**	
Vanadium	**200**	**210**	**105**
Zinc	**101**	**105**	**104**
Aluminum	*100000*	*101121*	*101*
Calcium	*299000*	*294066*	*98*
Iron	*260000*	*248103*	*95*
Magnesium	*100000*	*104221*	*104*
Manganese	*201*	*204*	*102*
Molybdenum	*2000*	*2058*	*103*
Potassium	*100000*	*100293*	*100*
Sodium	*260000*	*256123*	*98*
Strontium	*1.80*	*2.02*	
Tin	*0.170*	*0.158*	
Titanium	*2000*	*2020*	*101*
Uranium	*0.110*	*0.0470*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSA 410-407006/57 Instrument ID: E07 - 27813

Lab File ID: 132ICSA.d ICS Source: MT_MJ_ICSA_00104

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony	**0.120**	**0.163**	
Arsenic	**7.70**	**0.243**	
Barium	**0.400**	**0.500**	
Beryllium	**0.0110**	**-0.0060**	
Cadmium	**0.450**	**0.296**	
Chromium	**3.60**	**3.38**	
Cobalt	**0.280**	**0.248**	
Copper	**0.440**	**0.112**	
Lead	**0.0930**	**0.0820**	
Nickel	**1.20**	**1.57**	
Selenium	**0.0720**	**0.0460**	
Silver	**0.300**	**0.0090**	
Thallium	**0.0620**	**0.0310**	
Vanadium	**0.310**	**0.0210**	
Zinc	**1.10**	**2.40**	
Aluminum	*100000*	*101215*	*101*
Calcium	*299000*	*294596*	*99*
Iron	*260000*	*253416*	*97*
Magnesium	*100000*	*105421*	*105*
Manganese	*0.600*	*-0.512*	
Molybdenum	*2000*	*2123*	*106*
Potassium	*100000*	*102122*	*102*
Sodium	*260000*	*260501*	*100*
Strontium	*1.80*	*2.25*	
Tin	*0.170*	*0.188*	
Titanium	*2000*	*2083*	*104*
Uranium	*0.110*	*0.0570*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSAB 410-407006/58 Instrument ID: E07 - 27813

Lab File ID: 133ICSB.d ICS Source: MT_MJ_ICSAB_00081

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**0.120**	**0.139**	
Arsenic	**108**	**101**	**94**
Barium	**0.400**	**0.593**	
Beryllium	**0.0110**	**-0.0040**	
Cadmium	**100**	**105**	**105**
Chromium	**204**	**214**	**105**
Cobalt	**200**	**207**	**103**
Copper	**201**	**202**	**100**
Lead	**0.0930**	**0.0530**	
Nickel	**201**	**205**	**102**
Selenium	**100**	**104**	**104**
Silver	**50.3**	**51.9**	**103**
Thallium	**0.0620**	**0.0210**	
Vanadium	**200**	**212**	**106**
Zinc	**101**	**105**	**104**
Aluminum	*100000*	*101387*	*101*
Calcium	*299000*	*297728*	*100*
Iron	*260000*	*252028*	*97*
Magnesium	*100000*	*105653*	*106*
Manganese	*201*	*207*	*103*
Molybdenum	*2000*	*2091*	*105*
Potassium	*100000*	*102337*	*102*
Sodium	*260000*	*262245*	*101*
Strontium	*1.80*	*2.25*	
Tin	*0.170*	*0.350*	
Titanium	*2000*	*2068*	*103*
Uranium	*0.110*	*0.0630*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSA 410-407005/7 Instrument ID: E09 - 30921

Lab File ID: 029ICSA.d ICS Source: MT_MJ_ICSA_00104

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony	**0.120**	**0.139**	
Arsenic	**7.70**	**0.184**	
Barium	**0.400**	**0.533**	
Beryllium	**0.0110**	**0.0050**	
Cadmium	**0.450**	**0.314**	
Chromium	**3.60**	**3.13**	
Cobalt	**0.280**	**0.209**	
Copper	**0.440**	**0.0400**	
Lead	**0.0930**	**0.0790**	
Nickel	**1.20**	**0.638**	
Selenium	**0.0720**	**0.0320**	
Silver	**0.300**	**0.0080**	
Thallium	**0.0620**	**0.0150**	
Vanadium	**0.310**	**-0.179**	
Aluminum	*100000*	*101206*	*101*
Calcium	*299000*	*288367*	*97*
Iron	*260000*	*242318*	*93*
Magnesium	*100000*	*97432*	*97*
Manganese	*0.600*	*0.854*	
Molybdenum	*2000*	*2139*	*107*
Potassium	*100000*	*98145*	*98*
Sodium	*260000*	*234347*	*90*
Strontium	*1.80*	*1.98*	
Tin	*0.170*	*0.135*	
Titanium	*2000*	*1991*	*100*
Uranium	*0.110*	*0.0550*	
Zinc	*1.10*	*3.07*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSAB 410-407005/8 Instrument ID: E09 - 30921

Lab File ID: 030ICSB.d ICS Source: MT_MJ_ICSAB_00081

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**0.120**	**0.114**	
Arsenic	**108**	**97.4**	**90**
Barium	**0.400**	**0.461**	
Beryllium	**0.0110**	**0.0070**	
Cadmium	**100**	**101**	**101**
Chromium	**204**	**190**	**93**
Cobalt	**200**	**186**	**93**
Copper	**201**	**180**	**90**
Lead	**0.0930**	**0.0680**	
Nickel	**201**	**190**	**94**
Selenium	**100**	**97.8**	**98**
Silver	**50.3**	**49.3**	**98**
Thallium	**0.0620**	**0.0180**	
Vanadium	**200**	**198**	**99**
Aluminum	*100000*	*99640*	*100*
Calcium	*299000*	*287493*	*96*
Iron	*260000*	*242063*	*93*
Magnesium	*100000*	*96712*	*97*
Manganese	*201*	*196*	*98*
Molybdenum	*2000*	*2102*	*105*
Potassium	*100000*	*97543*	*98*
Sodium	*260000*	*231441*	*89*
Strontium	*1.80*	*1.93*	
Tin	*0.170*	*0.145*	
Titanium	*2000*	*1970*	*98*
Uranium	*0.110*	*0.0530*	
Zinc	*101*	*98.6*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSA 410-407005/21 Instrument ID: E09 - 30921

Lab File ID: 105ICSA.d ICS Source: MT_MJ_ICSA_00104

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony	**0.120**	**0.108**	
Arsenic	**7.70**	**0.168**	
Barium	**0.400**	**0.503**	
Beryllium	**0.0110**	**0.0060**	
Cadmium	**0.450**	**0.316**	
Chromium	**3.60**	**3.10**	
Cobalt	**0.280**	**0.228**	
Copper	**0.440**	**0.0670**	
Lead	**0.0930**	**0.0850**	
Nickel	**1.20**	**0.650**	
Selenium	**0.0720**	**0.0500**	
Silver	**0.300**	**0.0060**	
Thallium	**0.0620**	**0.0110**	
Vanadium	**0.310**	**-0.203**	
Aluminum	*100000*	*100417*	*100*
Calcium	*299000*	*293623*	*98*
Iron	*260000*	*249988*	*96*
Magnesium	*100000*	*98259*	*98*
Manganese	*0.600*	*0.768*	
Molybdenum	*2000*	*2194*	*110*
Potassium	*100000*	*100031*	*100*
Sodium	*260000*	*238111*	*92*
Strontium	*1.80*	*1.81*	
Tin	*0.170*	*0.131*	
Titanium	*2000*	*1994*	*100*
Uranium	*0.110*	*0.0610*	
Zinc	*1.10*	*6.46*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSAB 410-407005/22 Instrument ID: E09 - 30921

Lab File ID: 106ICSB.d ICS Source: MT_MJ_ICSAB_00081

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**0.120**	**0.118**	
Arsenic	**108**	**93.3**	**87**
Barium	**0.400**	**0.559**	
Beryllium	**0.0110**	**0.0040**	
Cadmium	**100**	**102**	**102**
Chromium	**204**	**196**	**96**
Cobalt	**200**	**191**	**95**
Copper	**201**	**177**	**88**
Lead	**0.0930**	**0.0710**	
Nickel	**201**	**185**	**92**
Selenium	**100**	**100**	**100**
Silver	**50.3**	**50.0**	**99**
Thallium	**0.0620**	**0.0200**	
Vanadium	**200**	**205**	**102**
Aluminum	*100000*	*98828*	*99*
Calcium	*299000*	*289222*	*97*
Iron	*260000*	*245923*	*95*
Magnesium	*100000*	*96879*	*97*
Manganese	*201*	*198*	*99*
Molybdenum	*2000*	*2147*	*107*
Potassium	*100000*	*98596*	*99*
Sodium	*260000*	*235833*	*91*
Strontium	*1.80*	*2.08*	
Tin	*0.170*	*0.0690*	
Titanium	*2000*	*1954*	*98*
Uranium	*0.110*	*0.0500*	
Zinc	*101*	*99.3*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSA 410-407255/7 Instrument ID: E09 - 30921

Lab File ID: 023ICSA.d ICS Source: MT_MJ_ICSA_00104

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Nickel	**1.20**	**0.492**	
Aluminum	*100000*	*99451*	*99*
Antimony	*0.120*	*0.107*	
Arsenic	*7.70*	*0.119*	
Barium	*0.400*	*0.401*	
Beryllium	*0.0110*	*0.0030*	
Cadmium	*0.450*	*0.342*	
Calcium	*299000*	*287587*	*96*
Chromium	*3.60*	*3.28*	
Cobalt	*0.280*	*0.163*	
Copper	*0.440*	*0.0770*	
Iron	*260000*	*239833*	*92*
Lead	*0.0930*	*0.0640*	
Magnesium	*100000*	*97204*	*97*
Manganese	*0.600*	*0.826*	
Molybdenum	*2000*	*2135*	*107*
Potassium	*100000*	*98727*	*99*
Selenium	*0.0720*	*0.0440*	
Silver	*0.300*	*0.0060*	
Sodium	*260000*	*233759*	*90*
Strontium	*1.80*	*2.19*	
Thallium	*0.0620*	*0.0010*	
Tin	*0.170*	*0.164*	
Titanium	*2000*	*1967*	*98*
Uranium	*0.110*	*0.0490*	
Vanadium	*0.310*	*-0.440*	
Zinc	*1.10*	*2.01*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSAB 410-407255/8 Instrument ID: E09 - 30921

Lab File ID: 024ICSB.d ICS Source: MT_MJ_ICSAB_00081

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Nickel	**201**	**197**	**98**
Aluminum	*100000*	*96426*	*96*
Antimony	*0.120*	*0.140*	
Arsenic	*108*	*107*	*99*
Barium	*0.400*	*0.304*	
Beryllium	*0.0110*	*-0.0030*	
Cadmium	*100*	*104*	*103*
Calcium	*299000*	*279961*	*94*
Chromium	*204*	*196*	*96*
Cobalt	*200*	*185*	*92*
Copper	*201*	*189*	*94*
Iron	*260000*	*232759*	*89*
Lead	*0.0930*	*0.0600*	
Magnesium	*100000*	*94923*	*95*
Manganese	*201*	*193*	*96*
Molybdenum	*2000*	*2172*	*109*
Potassium	*100000*	*96809*	*97*
Selenium	*100*	*106*	*106*
Silver	*50.3*	*51.5*	*102*
Sodium	*260000*	*226226*	*87*
Strontium	*1.80*	*2.34*	
Thallium	*0.0620*	*-0.0020*	
Tin	*0.170*	*-0.0390*	
Titanium	*2000*	*1921*	*96*
Uranium	*0.110*	*0.0520*	
Vanadium	*200*	*197*	*98*
Zinc	*101*	*109*	*108*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSA 410-408197/7 Instrument ID: E09 - 30921

Lab File ID: 017ICSA.d ICS Source: MT_MJ_ICSA_00104

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Zinc	**1.10**	**1.61**	
Aluminum	*100000*	*101573*	*102*
Antimony	*0.120*	*0.161*	
Arsenic	*7.70*	*0.189*	
Barium	*0.400*	*0.397*	
Beryllium	*0.0110*	*0.0090*	
Cadmium	*0.450*	*0.293*	
Calcium	*299000*	*285039*	*95*
Chromium	*3.60*	*3.22*	
Cobalt	*0.280*	*0.236*	
Copper	*0.440*	*0.102*	
Iron	*260000*	*243731*	*94*
Lead	*0.0930*	*0.0610*	
Magnesium	*100000*	*99000*	*99*
Manganese	*0.600*	*0.520*	
Molybdenum	*2000*	*2103*	*105*
Nickel	*1.20*	*0.487*	
Potassium	*100000*	*99049*	*99*
Selenium	*0.0720*	*0.0580*	
Silver	*0.300*	*0.0110*	
Sodium	*260000*	*239578*	*92*
Strontium	*1.80*	*2.03*	
Thallium	*0.0620*	*0.0250*	
Tin	*0.170*	*0.102*	
Titanium	*2000*	*1976*	*99*
Uranium	*0.110*	*0.0560*	
Vanadium	*0.310*	*-0.180*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSAB 410-408197/8 Instrument ID: E09 - 30921

Lab File ID: 018ICSB.d ICS Source: MT_MJ_ICSAB_00081

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Zinc	**101**	**97.5**	**96**
Aluminum	*100000*	*99808*	*100*
Antimony	*0.120*	*0.121*	
Arsenic	*108*	*94.8*	*88*
Barium	*0.400*	*0.430*	
Beryllium	*0.0110*	*0.0070*	
Cadmium	*100*	*103*	*103*
Calcium	*299000*	*281032*	*94*
Chromium	*204*	*196*	*96*
Cobalt	*200*	*188*	*94*
Copper	*201*	*183*	*91*
Iron	*260000*	*238204*	*92*
Lead	*0.0930*	*0.0700*	
Magnesium	*100000*	*95923*	*96*
Manganese	*201*	*194*	*97*
Molybdenum	*2000*	*2144*	*107*
Nickel	*201*	*191*	*95*
Potassium	*100000*	*96723*	*97*
Selenium	*100*	*106*	*105*
Silver	*50.3*	*50.5*	*100*
Sodium	*260000*	*235509*	*91*
Strontium	*1.80*	*2.00*	
Thallium	*0.0620*	*0.0310*	
Tin	*0.170*	*0.0220*	
Titanium	*2000*	*1904*	*95*
Uranium	*0.110*	*0.0500*	
Vanadium	*200*	*199*	*99*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSA 410-408197/12 Instrument ID: E09 - 30921

Lab File ID: 235ICSA.d ICS Source: MT_MJ_ICSA_00104

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Zinc	**1.10**	**2.10**	
Aluminum	*100000*	*99892*	*100*
Antimony	*0.120*	*0.168*	
Arsenic	*7.70*	*0.117*	
Barium	*0.400*	*0.509*	
Beryllium	*0.0110*	*-0.0090*	
Cadmium	*0.450*	*0.282*	
Calcium	*299000*	*277850*	*93*
Chromium	*3.60*	*3.21*	
Cobalt	*0.280*	*0.198*	
Copper	*0.440*	*0.0390*	
Iron	*260000*	*243056*	*93*
Lead	*0.0930*	*0.0650*	
Magnesium	*100000*	*99695*	*100*
Manganese	*0.600*	*0.267*	
Molybdenum	*2000*	*2225*	*111*
Nickel	*1.20*	*0.520*	
Potassium	*100000*	*96031*	*96*
Selenium	*0.0720*	*0.125*	
Silver	*0.300*	*0.0180*	
Sodium	*260000*	*244138*	*94*
Strontium	*1.80*	*2.03*	
Thallium	*0.0620*	*0.0100*	
Tin	*0.170*	*0.0520*	
Titanium	*2000*	*1894*	*95*
Uranium	*0.110*	*0.0590*	
Vanadium	*0.310*	*-0.0100*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSAB 410-408197/13 Instrument ID: E09 - 30921

Lab File ID: 236ICSB.d ICS Source: MT_MJ_ICSAB_00081

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Zinc	**101**	**98.0**	**97**
Aluminum	*100000*	*98420*	*98*
Antimony	*0.120*	*0.184*	
Arsenic	*108*	*94.3*	*88*
Barium	*0.400*	*0.559*	
Beryllium	*0.0110*	*-0.0100*	
Cadmium	*100*	*107*	*107*
Calcium	*299000*	*275981*	*92*
Chromium	*204*	*202*	*99*
Cobalt	*200*	*192*	*96*
Copper	*201*	*180*	*90*
Iron	*260000*	*241954*	*93*
Lead	*0.0930*	*0.0650*	
Magnesium	*100000*	*98828*	*99*
Manganese	*201*	*190*	*95*
Molybdenum	*2000*	*2251*	*112*
Nickel	*201*	*190*	*94*
Potassium	*100000*	*96816*	*97*
Selenium	*100*	*101*	*101*
Silver	*50.3*	*52.8*	*105*
Sodium	*260000*	*243133*	*93*
Strontium	*1.80*	*1.78*	
Thallium	*0.0620*	*0.0230*	
Tin	*0.170*	*0.182*	
Titanium	*2000*	*1903*	*95*
Uranium	*0.110*	*0.0520*	
Vanadium	*200*	*201*	*101*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSA 410-408949/7 Instrument ID: E09 - 30921

Lab File ID: 018ICSA.d ICS Source: MT_MJ_ICSA_00104

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Thallium	**0.0620**	**0.0260**	
Aluminum	*100000*	*103598*	*104*
Antimony	*0.120*	*0.164*	
Arsenic	*7.70*	*0.0340*	
Barium	*0.400*	*0.397*	
Beryllium	*0.0110*	*0.0070*	
Cadmium	*0.450*	*0.247*	
Calcium	*299000*	*294803*	*99*
Chromium	*3.60*	*3.26*	
Cobalt	*0.280*	*0.213*	
Copper	*0.440*	*0.0250*	
Iron	*260000*	*245307*	*94*
Lead	*0.0930*	*0.0660*	
Magnesium	*100000*	*101872*	*102*
Manganese	*0.600*	*0.605*	
Molybdenum	*2000*	*2165*	*108*
Nickel	*1.20*	*0.463*	
Potassium	*100000*	*101468*	*101*
Selenium	*0.0720*	*0.0860*	
Silver	*0.300*	*-0.0020*	
Sodium	*260000*	*244523*	*94*
Strontium	*1.80*	*2.01*	
Tin	*0.170*	*0.162*	
Titanium	*2000*	*2033*	*102*
Uranium	*0.110*	*0.0560*	
Vanadium	*0.310*	*-0.164*	
Zinc	*1.10*	*1.48*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Lab Sample ID: ICSAB 410-408949/8 Instrument ID: E09 - 30921

Lab File ID: 019ICSB.d ICS Source: MT_MJ_ICSAB_00081

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Thallium	**0.0620**	**0.0240**	
Aluminum	*100000*	*101801*	*102*
Antimony	*0.120*	*0.194*	
Arsenic	*108*	*95.1*	*88*
Barium	*0.400*	*0.527*	
Beryllium	*0.0110*	*0.0090*	
Cadmium	*100*	*103*	*102*
Calcium	*299000*	*289751*	*97*
Chromium	*204*	*203*	*100*
Cobalt	*200*	*185*	*93*
Copper	*201*	*178*	*89*
Iron	*260000*	*242128*	*93*
Lead	*0.0930*	*0.0700*	
Magnesium	*100000*	*99617*	*100*
Manganese	*201*	*198*	*98*
Molybdenum	*2000*	*2164*	*108*
Nickel	*201*	*192*	*96*
Potassium	*100000*	*99527*	*100*
Selenium	*100*	*100*	*100*
Silver	*50.3*	*50.3*	*100*
Sodium	*260000*	*242743*	*93*
Strontium	*1.80*	*1.81*	
Tin	*0.170*	*0.131*	
Titanium	*2000*	*1966*	*98*
Uranium	*0.110*	*0.0620*	
Vanadium	*200*	*204*	*102*
Zinc	*101*	*95.5*	*94*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: 16WC1A MS
Lab ID: 410-136864-4 MS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Matrix: Water
Concentration Units: ug/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.977	J	ND		1.00	98	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: 16WC1A MS
Lab ID: 410-136864-4 MS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1

SDG No.:

Matrix: Water
Concentration Units: ug/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	111		ND		100	111	75-125		6020B
Arsenic	531		5.3	J	500	105	75-125		6020B
Barium	1070		510		500	110	75-125	E	6020B
Beryllium	49.2		ND		50.0	98	75-125		6020B
Cadmium	54.9		ND		50.0	110	75-125		6020B
Chromium	530		ND		500	106	75-125		6020B
Cobalt	531		15		500	103	80-125		6020B
Copper	521		ND		500	104	75-125		6020B
Lead	53.1		ND		50.0	106	75-125		6020B
Nickel	534		15		500	104	75-125		6020B
Selenium	106		ND		100	106	75-125		6020B
Silver	53.7		ND		50.0	107	75-125		6020B
Thallium	106		ND		100	106	75-125		6020B
Zinc	582		11	J	500	114	75-125		6020B
Vanadium	530		ND		500	106	75-125		6020B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: 16WC1A MSD Lab ID: 410-136864-4 MSD

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.891	J	1.00	89	80-120	9	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: 16WC1A MSD | Lab ID: 410-136864-4 MSD

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG No.:

Matrix: Water | Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	109		100	109	75-125	1	20		6020B
Arsenic	526		500	104	75-125	1	20		6020B
Barium	1050		500	107	75-125	1	20	E	6020B
Beryllium	49.6		50.0	99	75-125	1	20		6020B
Cadmium	53.7		50.0	107	75-125	2	20		6020B
Chromium	522		500	104	75-125	2	20		6020B
Cobalt	527		500	102	80-125	1	20		6020B
Copper	513		500	103	75-125	1	20		6020B
Lead	53.4		50.0	107	75-125	1	20		6020B
Nickel	525		500	102	75-125	2	20		6020B
Selenium	106		100	106	75-125	1	20		6020B
Silver	52.8		50.0	106	75-125	2	20		6020B
Thallium	106		100	106	75-125	0	20		6020B
Zinc	525		500	103	75-125	10	20		6020B
Vanadium	527		500	105	75-125	1	20		6020B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: 16WC1A PDS | Lab ID: 410-136864-4 PDS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG No.:

Matrix: Water | Concentration Units: ug/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Thallium	104		ND		100	104	85-115		6020B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: 16WC1A DU | Lab ID: 410-136864-4 DU

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG No.:

% Solids for Sample: | % Solids for Duplicate:

Matrix: Water | Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	2.0	ND		ND		NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATES
METALS - TOTAL RECOVERABLE

Client ID: 16WC1A DU | Lab ID: 410-136864-4 DU

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG No.:

% Solids for Sample: | % Solids for Duplicate:

Matrix: Water | Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	2.0	ND		ND		NC		6020B
Arsenic	10	5.3	J	5.51	J	4		6020B
Barium	10	510		521		1		6020B
Beryllium	1.0	ND		ND		NC		6020B
Cadmium	1.0	ND		ND		NC		6020B
Chromium	5.0	ND		ND		NC		6020B
Cobalt	5.0	15		15.4		1		6020B
Copper	5.0	ND		ND		NC		6020B
Lead	3.0	ND		ND		NC		6020B
Nickel	10	15		14.7		2		6020B
Selenium	10	ND		ND		NC		6020B
Silver	2.0	ND		ND		NC		6020B
Thallium	1.0	ND		ND		NC		6020B
Zinc	30	11	J	11.9	J	4		6020B
Vanadium	10	ND		ND		NC		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 410-407005/9

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix:

LCS Source: MT_MJ_LRC_00094

Analyte	(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	2000	2030		101	90	110		6020B
Arsenic	2000	2000		100	90	110		6020B
Barium	2000	1920		96	90	110		6020B
Beryllium	2000	1790		90	90	110	^5-	6020B
Cadmium	2000	1870		93	90	110		6020B
Chromium	2000	1810		90	90	110		6020B
Cobalt	2000	1770		88	90	110	^5-	6020B
Copper	2000	1910		96	90	110		6020B
Lead	2000	2040		102	90	110		6020B
Nickel	2000	1930		97	90	110		6020B
Selenium	2000	2000		100	90	110		6020B
Silver	2000	1900		95	90	110		6020B
Thallium	2000	2030		101	90	110		6020B
Zinc	2000	1980		99	90	110		6020B
Vanadium	2000	1880		94	90	110		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 410-403519/2-A

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix: Water

LCS Source: MT_LCS-SPK-B_00029

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	104		104	80	120		6020B
Arsenic	500	502		100	85	120		6020B
Barium	500	520		104	80	120		6020B
Beryllium	50.0	46.8		94	90	112		6020B
Cadmium	50.0	51.5		103	86	113		6020B
Chromium	500	479		96	90	115		6020B
Cobalt	500	483		97	90	113		6020B
Copper	500	470		94	80	120		6020B
Lead	50.0	51.8		104	90	115		6020B
Nickel	500	487		97	90	114		6020B
Selenium	100	98.7		99	80	120		6020B
Silver	50.0	50.1		100	88	113		6020B
Thallium	100	103		103	80	120		6020B
Vanadium	500	503		101	90	115		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 410-407006/9

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix:

LCS Source: MT_MJ_LRC_00094

Analyte	(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	2000	2090		105	90	110		6020B
Arsenic	2000	2030		101	90	110		6020B
Barium	2000	2100		105	90	110		6020B
Beryllium	2000	1960		98	90	110		6020B
Cadmium	2000	2060		103	90	110		6020B
Chromium	2000	2040		102	90	110		6020B
Cobalt	2000	2020		101	90	110		6020B
Copper	2000	1970		99	90	110		6020B
Lead	2000	2160		108	90	110		6020B
Nickel	2000	1980		99	90	110		6020B
Selenium	2000	2060		103	90	110		6020B
Silver	2000	2010		101	90	110		6020B
Thallium	2000	2190		109	90	110		6020B
Zinc	2000	2020		101	90	110		6020B
Vanadium	2000	2070		104	90	110		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 410-403837/2-A

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix: Water

LCS Source: MT_LCS-SPK-B_00029

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	106		106	80	120		6020B
Arsenic	500	511		102	85	120		6020B
Barium	500	522		104	80	120		6020B
Beryllium	50.0	47.2		94	90	112		6020B
Cadmium	50.0	54.1		108	86	113		6020B
Chromium	500	523		105	90	115		6020B
Cobalt	500	522		104	90	113		6020B
Copper	500	523		105	80	120		6020B
Lead	50.0	52.8		106	90	115		6020B
Nickel	500	523		105	90	114		6020B
Selenium	100	103		103	80	120		6020B
Silver	50.0	53.3		107	88	113		6020B
Thallium	100	106		106	80	120		6020B
Zinc	500	514		103	90	115		6020B
Vanadium	500	521		104	90	115		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 410-407255/9

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix:

LCS Source: MT_MJ_LRC_00094

Analyte	(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	2000	2040		102	90	110		6020B
Arsenic	2000	1970		98	90	110		6020B
Barium	2000	1950		98	90	110		6020B
Cadmium	2000	1930		96	90	110		6020B
Chromium	2000	1920		96	90	110		6020B
Copper	2000	1990		100	90	110		6020B
Lead	2000	2030		102	90	110		6020B
Nickel	2000	2010		101	90	110		6020B
Silver	2000	1940		97	90	110		6020B
Thallium	2000	2050		103	90	110		6020B
Zinc	2000	1930		97	90	110		6020B
Vanadium	2000	1920		96	90	110		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 410-408197/9

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix:

LCS Source: MT_MJ_LRC_00094

Analyte	(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	2000	1960		98	90	110		6020B
Arsenic	2000	1950		98	90	110		6020B
Barium	2000	1870		93	90	110		6020B
Cadmium	2000	1850		93	90	110		6020B
Chromium	2000	1850		93	90	110		6020B
Copper	2000	1890		94	90	110		6020B
Lead	2000	2030		101	90	110		6020B
Nickel	2000	1900		95	90	110		6020B
Silver	2000	1890		94	90	110		6020B
Thallium	2000	2030		101	90	110		6020B
Zinc	2000	1940		97	90	110		6020B
Vanadium	2000	1870		93	90	110		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 410-403519/2-A

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix: Water

LCS Source: MT_LCS-SPK-A_00030

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Zinc	500	505		101	90	115		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 410-408949/9

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix:

LCS Source: MT_MJ_LRC_00094

Analyte	(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	2000	1920		96	90	110		6020B
Arsenic	2000	1970		99	90	110		6020B
Barium	2000	1810		91	90	110		6020B
Cadmium	2000	1830		91	90	110		6020B
Chromium	2000	1940		97	90	110		6020B
Copper	2000	1920		96	90	110		6020B
Lead	2000	2030		102	90	110		6020B
Nickel	2000	1940		97	90	110		6020B
Selenium	2000	2030		102	90	110		6020B
Silver	2000	1870		93	90	110		6020B
Thallium	2000	2040		102	90	110		6020B
Zinc	2000	1970		98	90	110		6020B
Vanadium	2000	1900		95	90	110		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 410-403849/2-A

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix: Water

LCS Source: MP_40Hg_IV_00164

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	1.00	1.00	J	100	80	118		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 410-403851/2-A

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-136864-1

Sample Matrix: Water

LCS Source: MP_40Hg_IV_00164

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	1.00	0.990	J	99	80	118		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 410-136864-4

SDG No:

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No: 410-136864-1

Matrix: Water

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Thallium	ND		1.08	J	NC		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG Number:

Matrix: Water Instrument ID: E07 - 27813

Method: 6020B MDL Date: 02/11/2021 10:57

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121	2	0.6
Arsenic	75	10	2
Barium	137	10	1.3
Beryllium	9	1	0.3
Cadmium	111	1	0.2
Chromium	52	5	1
Cobalt	59	5	1
Copper	63	5	1.7
Lead	208	3	1
Nickel	60	10	2
Selenium	78	10	3
Silver	107	2	0.3
Thallium	203	1	0.2
Vanadium	51	10	2.5
Zinc	66	30	7.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG Number:

Matrix: Water Instrument ID: E07 - 27813

Method: 6020B XMDL Date: 07/31/2023 00:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121	1	0.2
Arsenic	75	2	0.68
Barium	137	2	0.746
Beryllium	9	0.5	0.119
Cadmium	111	0.5	0.151
Chromium	52	2	0.55
Cobalt	59	0.5	0.156
Copper	63	1	0.362
Lead	208	0.5	0.12
Nickel	60	1	0.4
Selenium	78	1	0.278
Silver	107	0.5	0.1
Thallium	203	0.5	0.13
Vanadium	51	4	0.794
Zinc	66	10	4

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG Number:

Matrix: Water Instrument ID: E09 - 30921

Method: 6020B MDL Date: 02/11/2021 10:57

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121	2	0.6
Arsenic	75	10	2
Barium	137	10	1.3
Beryllium	9	1	0.3
Cadmium	111	1	0.2
Chromium	52	5	1
Cobalt	59	5	1
Copper	63	5	1.7
Lead	208	3	1
Nickel	60	10	2
Selenium	78	10	3
Silver	107	2	0.3
Thallium	203	1	0.2
Vanadium	51	10	2.5
Zinc	66	30	7.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG Number:

Matrix: Water Instrument ID: E09 - 30921

Method: 6020B XMDL Date: 07/31/2023 00:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121	1	0.2
Arsenic	75	2	0.68
Barium	137	2	0.746
Beryllium	9	0.5	0.119
Cadmium	111	0.5	0.151
Chromium	52	2	0.55
Cobalt	59	0.5	0.156
Copper	63	1	0.362
Lead	208	0.5	0.12
Nickel	60	1	0.4
Selenium	78	1	0.278
Silver	107	0.5	0.1
Thallium	203	0.5	0.13
Vanadium	51	4	0.794
Zinc	66	10	4

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG Number:

Matrix: Water Instrument ID: M07 - 17384

Method: 7470A MDL Date: 02/11/2021 10:56

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury		2	0.2

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG Number:

Matrix: Water Instrument ID: M07 - 17384

Method: 7470A XMDL Date: 06/27/2018 12:04

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.079

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No: 410-136864-1

SDG No.:

Instrument ID: E07 - 27813 Date: 04/07/2022 16:18

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		1000	6020B
Arsenic		1000	6020B
Barium		1000	6020B
Beryllium		1000	6020B
Cadmium		1000	6020B
Chromium		1000	6020B
Cobalt		1000	6020B
Copper		1000	6020B
Lead		1000	6020B
Nickel		1000	6020B
Selenium		1000	6020B
Silver		100	6020B
Thallium		1000	6020B
Zinc		1000	6020B
Vanadium		1000	6020B

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Date: 04/07/2022 16:25

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		1000	6020B
Arsenic		1000	6020B
Barium		1000	6020B
Beryllium		1000	6020B
Cadmium		1000	6020B
Chromium		1000	6020B
Cobalt		1000	6020B
Copper		1000	6020B
Lead		1000	6020B
Nickel		1000	6020B
Selenium		1000	6020B
Silver		1000	6020B
Thallium		1000	6020B
Zinc		1000	6020B
Vanadium		1000	6020B

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No: 410-136864-1

SDG No.:

Instrument ID: M07 - 17384 Date: 02/20/2020 00:00

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Mercury		4.5	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-403519/1-A	08/02/2023 10:20	403519		50	50
LCS 410-403519/2-A	08/02/2023 10:20	403519		50	50
410-136864-3	08/02/2023 10:20	403519		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-403837/1-A	08/03/2023 03:28	403837		50	50
LCS 410-403837/2-A	08/03/2023 03:28	403837		50	50
410-136864-4	08/03/2023 03:28	403837		50	50
410-136864-4 DU	08/03/2023 03:28	403837		50	50
410-136864-4 MS	08/03/2023 03:28	403837		50	50
410-136864-4 MSD	08/03/2023 03:28	403837		50	50
410-136864-6	08/03/2023 03:28	403837		50	50
410-136864-2	08/03/2023 03:28	403837		50	50
410-136864-1	08/03/2023 03:28	403837		50	50
410-136864-5	08/03/2023 03:28	403837		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-403849/1-A	08/03/2023 05:59	403849		20	20
LCS 410-403849/2-A	08/03/2023 05:59	403849		20	20
410-136864-4	08/03/2023 05:59	403849		20	20
410-136864-4 DU	08/03/2023 05:59	403849		20	20
410-136864-4 MS	08/03/2023 05:59	403849		20	20
410-136864-4 MSD	08/03/2023 05:59	403849		20	20
410-136864-3	08/03/2023 05:59	403849		20	20

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-403851/1-A	08/03/2023 06:08	403851		20	20
LCS 410-403851/2-A	08/03/2023 06:08	403851		20	20
410-136864-2	08/03/2023 06:08	403851		20	20
410-136864-6	08/03/2023 06:08	403851		20	20
410-136864-1	08/03/2023 06:08	403851		20	20
410-136864-5	08/03/2023 06:08	403851		20	20

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E07 - 27813 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:41

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V	Zn											
ITUNE 410-407006/1	1		06:41																									
ICIS 410-407006/2			07:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
STD1 410-407006/3 IC	1		07:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ICV 410-407006/4	1		07:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ICB 410-407006/5	1		07:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CRI 410-407006/6	1		08:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ICSA 410-407006/7	1		08:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ICSAB 410-407006/8	1		08:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
LRC 410-407006/9	1		08:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
RINSE 410-407006/10			08:59																									
RINSE 410-407006/11			09:01																									
RINSE 410-407006/12			09:03																									
CCV 410-407006/13	1		09:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 410-407006/14	1		09:07	X	X	X	X	X	X	X	X	X	X	X	X		X	X											
CCV 410-407006/15	1		11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 410-407006/16	1		11:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MB 410-403837/1-A	1	R	13:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
LCS 410-403837/2-A	1	R	13:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
410-136864-4	1	R	13:07	X	X	X	X	X	X	X	X	X	X	X	X		X	X											
ZZZZZZ			13:09																									
ZZZZZZ			13:11																									
410-136864-4 DU	1	R	13:13	X	X	X	X	X	X	X	X	X	X	X	X		X	X											
410-136864-4 MS	1	R	13:15	X	X	X	X	X	X	X	X	X	X	X	X		X	X											
410-136864-4 MSD	1	R	13:17	X	X	X	X	X	X	X	X	X	X	X	X		X	X											
RINSE 410-407006/25			13:19																									
CCV 410-407006/26	1		13:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 410-407006/27	1		13:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ZZZZZZ			13:25																									
410-136864-6	1	R	13:27	X	X	X	X	X	X	X	X		X	X	X	X	X	X											
410-136864-2	1	R	13:29	X	X	X	X	X	X	X	X		X	X	X	X	X	X											
410-136864-1	1	R	13:31	X	X	X	X	X	X	X	X		X	X	X	X	X	X											
410-136864-5	1	R	13:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ZZZZZZ			13:35																									
ZZZZZZ			13:37																									
ZZZZZZ			13:39																									
RINSE 410-407006/36			13:41																									
CCV 410-407006/37	1		13:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 410-407006/38	1		13:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ZZZZZZ			13:47																									
ZZZZZZ			13:49																									
ZZZZZZ			13:51																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E07 - 27813 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:41

Lab Sample Id	D/F	Type	Time	Analytes																							
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V	Zn										
ZZZZZZ			13:53																								
ZZZZZZ			13:55																								
ZZZZZZ			13:57																								
ZZZZZZ			13:59																								
RINSE 410-407006/46			14:01																								
CCV 410-407006/47			14:03																								
CCB 410-407006/48			14:05																								
ZZZZZZ			14:37																								
ZZZZZZ			14:39																								
ZZZZZZ			14:41																								
RINSE 410-407006/52			14:43																								
CCV 410-407006/53			14:45																								
CCB 410-407006/54			14:47																								
RINSE 410-407006/55			14:50																								
RINSE 410-407006/56			14:52																								
ICSA 410-407006/57	1		14:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ICSAB 410-407006/58	1		14:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
RINSE 410-407006/59			14:58																								
RINSE 410-407006/60			15:00																								
RINSE 410-407006/61			15:02																								
CCV 410-407006/62			15:04																								
CCB 410-407006/63			15:06																								
RINSE 410-407006/64			15:12																								
RINSE 410-407006/65			15:14																								
RINSE 410-407006/66			15:16																								
RINSE 410-407006/67			15:18																								
CCV 410-407006/68			15:20																								
CCB 410-407006/69			15:22																								
ZZZZZZ			15:25																								
ZZZZZZ			15:27																								
RINSE 410-407006/72			15:29																								
CCV 410-407006/73			15:31																								
CCB 410-407006/74			15:33																								
ZZZZZZ			15:35																								
ZZZZZZ			15:37																								
ZZZZZZ			15:39																								
ZZZZZZ			15:41																								
ZZZZZZ			15:43																								
ZZZZZZ			15:45																								
RINSE 410-407006/81			15:47																								
CCV 410-407006/82			15:49																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E07 - 27813 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:41

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V	Zn											
CCB 410-407006/83			15:51																									
ZZZZZZ			15:53																									
ZZZZZZ			15:55																									
ZZZZZZ			15:57																									
ZZZZZZ			15:59																									
ZZZZZZ			16:01																									
ZZZZZZ			16:03																									
ZZZZZZ			16:05																									
RINSE 410-407006/91			16:21																									
RINSE 410-407006/92			16:23																									
CCV 410-407006/93			16:26																									
CCB 410-407006/94			16:28																									
ZZZZZZ			16:32																									
ZZZZZZ			16:34																									
ZZZZZZ			16:36																									
ZZZZZZ			16:38																									
ZZZZZZ			16:40																									
ZZZZZZ			16:42																									
ZZZZZZ			16:44																									
ZZZZZZ			16:46																									
RINSE 410-407006/103			16:48																									
RINSE 410-407006/104			16:50																									
CCV 410-407006/105			16:52																									
CCB 410-407006/106			16:54																									
ZZZZZZ			16:56																									
ZZZZZZ			16:58																									
ZZZZZZ			17:00																									
ZZZZZZ			17:02																									
ZZZZZZ			17:04																									
ZZZZZZ			17:06																									
ZZZZZZ			17:08																									
ZZZZZZ			17:10																									
RINSE 410-407006/115			17:12																									
RINSE 410-407006/116			17:14																									
CCV 410-407006/117			17:16																									
CCB 410-407006/118			17:18																									
ZZZZZZ			17:20																									
ZZZZZZ			17:22																									
ZZZZZZ			17:24																									
ZZZZZZ			17:26																									
ZZZZZZ			17:28																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E07 - 27813 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:41

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V	Zn											
ZZZZZZ			17:30																									
RINSE 410-407006/125			17:32																									
ZZZZZZ			17:34																									
RINSE 410-407006/127			17:36																									
CCV 410-407006/128			17:38																									
CCB 410-407006/129			17:40																									
RINSE 410-407006/130			17:43																									
RINSE 410-407006/131			17:45																									
RINSE 410-407006/132			17:47																									
CCV 410-407006/133			17:49																									
CCB 410-407006/134			17:51																									
ZZZZZZ			17:53																									
ZZZZZZ			17:55																									
RINSE 410-407006/137			17:57																									
CCV 410-407006/138			17:59																									
CCB 410-407006/139			18:01																									
ZZZZZZ			18:03																									
ZZZZZZ			18:05																									
ZZZZZZ			18:07																									
ZZZZZZ			18:09																									
ZZZZZZ			18:11																									
ZZZZZZ			18:13																									
RINSE 410-407006/146			18:15																									
CCV 410-407006/147			18:17																									
CCB 410-407006/148			18:19																									
ZZZZZZ			18:21																									
ZZZZZZ			18:23																									
ZZZZZZ			18:25																									
ZZZZZZ			18:27																									
ZZZZZZ			18:29																									
ZZZZZZ			18:31																									
RINSE 410-407006/155			18:33																									
CCV 410-407006/156			18:35																									
CCB 410-407006/157			18:37																									
ZZZZZZ			18:39																									
ZZZZZZ			18:41																									
ZZZZZZ			18:43																									
ZZZZZZ			18:45																									
ZZZZZZ			18:47																									
ZZZZZZ			18:49																									
ZZZZZZ			18:51																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E07 - 27813 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:41

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V	Zn											
ZZZZZZ			18:53																									
RINSE 410-407006/166			18:55																									
ZZZZZZ			18:57																									
CCV 410-407006/168			18:59																									
CCB 410-407006/169			19:01																									
ZZZZZZ			19:03																									
ZZZZZZ			19:05																									
ZZZZZZ			19:07																									
ZZZZZZ			19:09																									
ZZZZZZ			19:11																									
ZZZZZZ			19:13																									
ZZZZZZ			19:15																									
ZZZZZZ			19:17																									
RINSE 410-407006/178			19:19																									
CCV 410-407006/179			19:21																									
CCB 410-407006/180			19:23																									
ZZZZZZ			19:25																									
ZZZZZZ			19:27																									
ZZZZZZ			19:29																									
ZZZZZZ			19:31																									
ZZZZZZ			19:33																									
ZZZZZZ			19:35																									
ZZZZZZ			19:37																									
ZZZZZZ			19:39																									
RINSE 410-407006/189			19:41																									
CCV 410-407006/190			19:43																									
CCB 410-407006/191			19:45																									
ZZZZZZ			19:47																									
ZZZZZZ			19:49																									
ZZZZZZ			19:51																									
ZZZZZZ			19:53																									
RINSE 410-407006/196			19:55																									
CCV 410-407006/197			19:57																									
CCB 410-407006/198			19:59																									
ZZZZZZ			20:01																									
RINSE 410-407006/200			20:03																									
RINSE 410-407006/201			20:05																									
CCV 410-407006/202			20:07																									
CCB 410-407006/203			20:09																									
RINSE 410-407006/204			20:11																									
RINSE 410-407006/205			20:13																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E07 - 27813 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:41

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V	Zn											
RINSE 410-407006/206			20:15																									
CCV 410-407006/207			20:17																									
CCB 410-407006/208			20:19																									
ZZZZZZ			20:27																									
ZZZZZZ			20:29																									
ZZZZZZ			20:31																									
ZZZZZZ			20:33																									
RINSE 410-407006/213			20:35																									
RINSE 410-407006/214			20:37																									
CCV 410-407006/215			20:39																									
CCB 410-407006/216			20:41																									

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V												
ITUNE 410-407005/1	1		06:41																									
ICIS 410-407005/2			08:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
STD1 410-407005/3 IC	1		08:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ICV 410-407005/4	1		08:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ICB 410-407005/5	1		08:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CRI 410-407005/6	1		08:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ICSA 410-407005/7	1		08:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ICSAB 410-407005/8	1		08:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
LRC 410-407005/9	1		08:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
RINSE 410-407005/10			08:35																									
RINSE 410-407005/11			08:37																									
RINSE 410-407005/12			08:39																									
RINSE 410-407005/13			08:41																									
RINSE 410-407005/14			08:44																									
RINSE 410-407005/15			08:46																									
CCV 410-407005/16	1		08:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCB 410-407005/17	1		08:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CRI 410-407005/18	1		11:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
RINSE 410-407005/19			14:04																									
RINSE 410-407005/20			14:06																									
ICSA 410-407005/21	1		14:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ICSAB 410-407005/22	1		14:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
RINSE 410-407005/23			14:12																									
RINSE 410-407005/24			14:14																									
RINSE 410-407005/25			14:16																									
RINSE 410-407005/26			14:19																									
CCV 410-407005/27			14:21																									
CCB 410-407005/28			14:23																									
ZZZZZZ			14:28																									
ZZZZZZ			14:30																									
RINSE 410-407005/31			14:32																									
CCV 410-407005/32			14:34																									
CCB 410-407005/33			14:36																									
ZZZZZZ			14:38																									
ZZZZZZ			14:40																									
ZZZZZZ			14:42																									
ZZZZZZ			14:44																									
ZZZZZZ			14:47																									
ZZZZZZ			14:49																									
RINSE 410-407005/40			14:51																									
CCV 410-407005/41			14:53																									

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ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V												
CCB 410-407005/42			14:55																									
ZZZZZZ			14:57																									
ZZZZZZ			14:59																									
ZZZZZZ			15:01																									
ZZZZZZ			15:03																									
ZZZZZZ			15:05																									
ZZZZZZ			15:07																									
ZZZZZZ			15:10																									
ZZZZZZ			15:12																									
RINSE 410-407005/51			15:14																									
CCV 410-407005/52			15:17																									
CCB 410-407005/53			15:19																									
ZZZZZZ			15:21																									
ZZZZZZ			15:23																									
ZZZZZZ			15:25																									
ZZZZZZ			15:27																									
ZZZZZZ			15:29																									
ZZZZZZ			15:31																									
RINSE 410-407005/60			15:33																									
CCV 410-407005/61			15:35																									
CCB 410-407005/62			15:37																									
ZZZZZZ			15:39																									
ZZZZZZ			15:41																									
ZZZZZZ			15:43																									
RINSE 410-407005/66			15:45																									
CCV 410-407005/67			15:47																									
CCB 410-407005/68			15:49																									
RINSE 410-407005/69			15:53																									
RINSE 410-407005/70			15:55																									
RINSE 410-407005/71			15:57																									
CCV 410-407005/72			15:59																									
CCB 410-407005/73			16:01																									
ZZZZZZ			16:03																									
ZZZZZZ			16:05																									
RINSE 410-407005/76			16:07																									
CCV 410-407005/77			16:09																									
CCB 410-407005/78			16:11																									
ZZZZZZ			16:13																									
ZZZZZZ			16:15																									
ZZZZZZ			16:18																									
ZZZZZZ			16:20																									

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V											
ZZZZZZ			16:22																									
RINSE 410-407005/84			16:24																									
CCV 410-407005/85			16:26																									
CCB 410-407005/86			16:28																									
ZZZZZZ			16:30																									
RINSE 410-407005/88			16:32																									
RINSE 410-407005/89			16:34																									
RINSE 410-407005/90			16:36																									
CCV 410-407005/91			16:38																									
CCB 410-407005/92			16:40																									
ZZZZZZ			16:42																									
ZZZZZZ			16:44																									
ZZZZZZ			16:47																									
ZZZZZZ			16:49																									
ZZZZZZ			16:51																									
ZZZZZZ			16:53																									
ZZZZZZ			16:55																									
RINSE 410-407005/100			16:57																									
CCV 410-407005/101	1		16:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 410-407005/102	1		17:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MB 410-403519/1-A	1	R	17:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
LCS 410-403519/2-A	1	R	17:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
RINSE 410-407005/105			17:07																									
CCV 410-407005/106	1		17:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 410-407005/107	1		17:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ZZZZZZ			17:13																									
ZZZZZZ			17:15																									
ZZZZZZ			17:17																									
ZZZZZZ			17:19																									
ZZZZZZ			17:22																									
ZZZZZZ			17:24																									
RINSE 410-407005/114			17:26																									
CCV 410-407005/115	1		17:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 410-407005/116	1		17:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ZZZZZZ			17:32																									
ZZZZZZ			17:34																									
ZZZZZZ			17:36																									
ZZZZZZ			17:38																									
ZZZZZZ			17:40																									
ZZZZZZ			17:42																									
ZZZZZZ			17:44																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V											
ZZZZZZ			17:46																									
RINSE 410-407005/125			17:48																									
CCV 410-407005/126			17:50																									
CCB 410-407005/127			17:52																									
ZZZZZZ			17:54																									
ZZZZZZ			17:57																									
ZZZZZZ			17:59																									
ZZZZZZ			18:01																									
ZZZZZZ			18:03																									
ZZZZZZ			18:05																									
ZZZZZZ			18:07																									
RINSE 410-407005/135			18:09																									
CCV 410-407005/136	1		18:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 410-407005/137	1		18:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ZZZZZZ			18:15																									
410-136864-3	1	R	18:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ZZZZZZ			18:19																									
ZZZZZZ			18:21																									
RINSE 410-407005/142			18:23																									
CCV 410-407005/143	1		18:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 410-407005/144	1		18:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
ZZZZZZ			18:30																									
ZZZZZZ			18:32																									
RINSE 410-407005/147			18:34																									
CCV 410-407005/148			18:36																									
CCB 410-407005/149			18:38																									
ZZZZZZ			18:40																									
ZZZZZZ			18:42																									
ZZZZZZ			18:44																									
ZZZZZZ			18:46																									
ZZZZZZ			18:48																									
RINSE 410-407005/155			18:50																									
CCV 410-407005/156			18:52																									
CCB 410-407005/157			18:54																									
ZZZZZZ			18:56																									
ZZZZZZ			18:58																									
ZZZZZZ			19:01																									
RINSE 410-407005/161			19:03																									
CCV 410-407005/162			19:05																									
CCB 410-407005/163			19:07																									
ZZZZZZ			19:09																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/10/2023 06:41 End Date: 08/10/2023 20:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Ni	Pb	Sb	Se	Tl	V												
ZZZZZZ			19:11																									
RINSE 410-407005/166			19:13																									
CCV 410-407005/167			19:15																									
CCB 410-407005/168			19:17																									
ZZZZZZ			19:19																									
ZZZZZZ			19:21																									
ZZZZZZ			19:23																									
RINSE 410-407005/172			19:25																									
CCV 410-407005/173			19:27																									
CCB 410-407005/174			19:29																									
ZZZZZZ			19:31																									
ZZZZZZ			19:33																									
ZZZZZZ			19:36																									
RINSE 410-407005/178			19:38																									
CCV 410-407005/179			19:40																									
CCB 410-407005/180			19:42																									
ZZZZZZ			19:46																									
ZZZZZZ			19:49																									
ZZZZZZ			19:51																									
RINSE 410-407005/184			19:53																									
CCV 410-407005/185			19:55																									
CCB 410-407005/186			19:57																									
ZZZZZZ			19:59																									
ZZZZZZ			20:01																									
ZZZZZZ			20:03																									
ZZZZZZ			20:05																									
ZZZZZZ			20:07																									
ZZZZZZ			20:09																									
RINSE 410-407005/193			20:11																									
CCV 410-407005/194			20:13																									
CCB 410-407005/195			20:15																									
ZZZZZZ			20:17																									
ZZZZZZ			20:19																									
ZZZZZZ			20:21																									
RINSE 410-407005/199			20:23																									
CCV 410-407005/200			20:26																									
CCB 410-407005/201			20:28																									

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/11/2023 06:50 End Date: 08/11/2023 11:03

Lab Sample Id	D/F	Type	Time	Analytes
				Ni
ITUNE 410-407255/1	1		06:50	
ICIS 410-407255/2			07:37	X
STD1 410-407255/3 IC	1		07:39	X
ICV 410-407255/4	1		07:41	X
ICB 410-407255/5	1		07:44	X
CRI 410-407255/6	1		07:47	X
ICSA 410-407255/7	1		07:50	X
ICSAB 410-407255/8	1		07:52	X
LRC 410-407255/9	1		07:54	X
CCV 410-407255/10	1		08:06	X
CCB 410-407255/11	1		08:08	X
ZZZZZZ			08:12	
ZZZZZZ			08:14	
ZZZZZZ			08:17	
ZZZZZZ			08:19	
ZZZZZZ			08:21	
ZZZZZZ			08:23	
ZZZZZZ			08:25	
ZZZZZZ			08:27	
CCV 410-407255/20			08:31	
CCB 410-407255/21			08:33	
ZZZZZZ			08:35	
ZZZZZZ			08:37	
ZZZZZZ			08:39	
ZZZZZZ			08:41	
ZZZZZZ			08:43	
ZZZZZZ			08:45	
CCV 410-407255/28	1		08:49	X
CCB 410-407255/29	1		08:51	X
ZZZZZZ			08:53	
410-136864-6	1	R	08:55	X
410-136864-2	1	R	08:57	X
410-136864-1	1	R	09:00	X
ZZZZZZ			09:02	
ZZZZZZ			09:04	
ZZZZZZ			09:06	
ZZZZZZ			09:08	
CCV 410-407255/38	1		09:12	X
CCB 410-407255/39	1		09:14	X
ZZZZZZ			09:16	
ZZZZZZ			09:18	

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/11/2023 06:50 End Date: 08/11/2023 11:03

Lab Sample Id	D/F	Type	Time	Analytes
				Ni
ZZZZZZ			09:20	
ZZZZZZ			09:22	
ZZZZZZ			09:24	
ZZZZZZ			09:26	
CCV 410-407255/46			09:30	
CCB 410-407255/47			09:32	
ZZZZZZ			09:34	
ZZZZZZ			09:36	
ZZZZZZ			09:39	
ZZZZZZ			09:41	
ZZZZZZ			09:43	
ZZZZZZ			09:45	
CCV 410-407255/54			09:49	
CCB 410-407255/55			09:51	
ZZZZZZ			09:53	
ZZZZZZ			09:55	
ZZZZZZ			09:57	
ZZZZZZ			09:59	
ZZZZZZ			10:01	
ZZZZZZ			10:03	
ZZZZZZ			10:05	
CCV 410-407255/63			10:09	
CCB 410-407255/64			10:11	
ZZZZZZ			10:14	
ZZZZZZ			10:16	
ZZZZZZ			10:18	
ZZZZZZ			10:20	
ZZZZZZ			10:22	
ZZZZZZ			10:24	
ZZZZZZ			10:26	
ZZZZZZ			10:28	
CCV 410-407255/73			10:32	
CCB 410-407255/74			10:34	
ZZZZZZ			10:37	
ZZZZZZ			10:40	
ZZZZZZ			10:42	
ZZZZZZ			10:44	
CCV 410-407255/79			10:48	
CCB 410-407255/80			10:50	
ZZZZZZ			10:52	
ZZZZZZ			10:54	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/11/2023 06:50 End Date: 08/11/2023 11:03

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ni																								
ZZZZZZ			10:56																									
CCV 410-407255/84			11:00																									
CCB 410-407255/85			11:03																									

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/14/2023 06:50 End Date: 08/15/2023 00:24

Lab Sample Id	D/F	Type	Time	Analytes
				Zn
ITUNE 410-408197/1	1		06:50	
ICIS 410-408197/2			12:08	X
STD1 410-408197/3 IC	1		12:10	X
ICV 410-408197/4	1		12:12	X
ICB 410-408197/5	1		12:15	X
CRI 410-408197/6	1		12:20	X
ICSA 410-408197/7	1		12:23	X
ICSAB 410-408197/8	1		12:25	X
LRC 410-408197/9	1		12:27	X
CCV 410-408197/10	1		20:43	X
CCB 410-408197/11	1		20:45	X
ICSA 410-408197/12	1		21:58	X
ICSAB 410-408197/13	1		22:00	X
CCV 410-408197/14			22:25	
CCB 410-408197/15			22:27	
ZZZZZZ			22:29	
ZZZZZZ			22:31	
CCV 410-408197/18			22:35	
CCB 410-408197/19			22:37	
ZZZZZZ			22:39	
ZZZZZZ			22:41	
ZZZZZZ			22:43	
ZZZZZZ			22:45	
ZZZZZZ			22:47	
ZZZZZZ			22:49	
CCV 410-408197/26			22:53	
CCB 410-408197/27			22:55	
ZZZZZZ			22:57	
ZZZZZZ			23:00	
ZZZZZZ			23:02	
CCV 410-408197/31	1		23:14	X
CCB 410-408197/32	1		23:16	X
MB 410-403519/1-A	1	R	23:18	X
LCS 410-403519/2-A	1	R	23:20	X
410-136864-3	1	R	23:22	X
CCV 410-408197/36	1		23:26	X
CCB 410-408197/37	1		23:28	X
ZZZZZZ			23:30	
ZZZZZZ			23:32	
ZZZZZZ			23:34	
ZZZZZZ			23:36	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/14/2023 06:50 End Date: 08/15/2023 00:24

Lab Sample Id	D/F	Type	Time	Analytes
				Zn
CCV 410-408197/42			23:41	
CCB 410-408197/43			23:43	
ZZZZZZ			23:45	
ZZZZZZ			23:47	
CCV 410-408197/46			23:51	
CCB 410-408197/47			23:53	
ZZZZZZ			23:55	
ZZZZZZ			23:57	
ZZZZZZ			23:59	
ZZZZZZ			00:01	
ZZZZZZ			00:03	
ZZZZZZ			00:05	
CCV 410-408197/54			00:09	
CCB 410-408197/55			00:11	
ZZZZZZ			00:13	
ZZZZZZ			00:15	
ZZZZZZ			00:17	
CCV 410-408197/59			00:22	
CCB 410-408197/60			00:24	

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/16/2023 05:34 End Date: 08/16/2023 12:08

Lab Sample Id	D/F	Type	Time	Analytes
				Tl
ZZZZZZ			05:34	
ITUNE 410-408949/131			05:48	
ICIS 410-408949/2			06:23	X
STD1 410-408949/3 IC	1		06:25	X
ICV 410-408949/4	1		06:31	X
ICB 410-408949/5	1		06:34	X
CRI 410-408949/6	1		06:36	X
ICSA 410-408949/7	1		06:39	X
ICSAB 410-408949/8	1		06:41	X
LRC 410-408949/9	1		06:43	X
CCV 410-408949/10	1		07:03	X
CCB 410-408949/11	1		07:05	X
ZZZZZZ			07:20	
ZZZZZZ			07:22	
CCV 410-408949/14			07:26	
CCB 410-408949/15			07:28	
ZZZZZZ			07:30	
ZZZZZZ			07:32	
ZZZZZZ			07:34	
ZZZZZZ			07:36	
CCV 410-408949/20			07:40	
CCB 410-408949/21			07:42	
ZZZZZZ			07:44	
CCV 410-408949/23			07:48	
CCB 410-408949/24			07:50	
ZZZZZZ			07:53	
ZZZZZZ			07:55	
ZZZZZZ			07:57	
ZZZZZZ			07:59	
ZZZZZZ			08:01	
ZZZZZZ			08:03	
ZZZZZZ			08:05	
ZZZZZZ			08:07	
CCV 410-408949/33			08:11	
CCB 410-408949/34			08:13	
ZZZZZZ			08:15	
ZZZZZZ			08:17	
ZZZZZZ			08:19	
ZZZZZZ			08:21	
ZZZZZZ			08:23	
ZZZZZZ			08:25	

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/16/2023 05:34 End Date: 08/16/2023 12:08

Lab Sample Id	D/F	Type	Time	Analytes
				Tl
ZZZZZZ			08:27	
ZZZZZZ			08:29	
ZZZZZZ			08:32	
CCV 410-408949/44			08:36	
CCB 410-408949/45			08:38	
ZZZZZZ			08:40	
ZZZZZZ			08:42	
ZZZZZZ			08:44	
ZZZZZZ			08:46	
ZZZZZZ			08:48	
ZZZZZZ			08:52	
CCV 410-408949/52			08:56	
CCB 410-408949/53			08:58	
ZZZZZZ			09:00	
ZZZZZZ			09:02	
CCV 410-408949/56			09:06	
CCB 410-408949/57			09:09	
ZZZZZZ			09:11	
ZZZZZZ			09:13	
ZZZZZZ			09:15	
ZZZZZZ			09:17	
ZZZZZZ			09:19	
ZZZZZZ			09:21	
ZZZZZZ			09:23	
ZZZZZZ			09:25	
CCV 410-408949/66			09:29	
CCB 410-408949/67			09:31	
ZZZZZZ			09:33	
ZZZZZZ			09:35	
ZZZZZZ			09:37	
CCV 410-408949/71			09:41	
CCB 410-408949/72			09:43	
ZZZZZZ			09:45	
CCV 410-408949/74			09:50	
CCB 410-408949/75			09:52	
ZZZZZZ			09:54	
ZZZZZZ			09:56	
ZZZZZZ			09:58	
ZZZZZZ			10:00	
ZZZZZZ			10:02	
ZZZZZZ			10:04	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/16/2023 05:34 End Date: 08/16/2023 12:08

Lab Sample Id	D/F	Type	Time	Analytes
				Tl
CCV 410-408949/82			10:08	
CCB 410-408949/83			10:10	
ZZZZZZ			10:12	
ZZZZZZ			10:14	
ZZZZZZ			10:16	
ZZZZZZ			10:18	
ZZZZZZ			10:20	
ZZZZZZ			10:22	
ZZZZZZ			10:25	
ZZZZZZ			10:27	
CCV 410-408949/92			10:31	
CCB 410-408949/93			10:33	
ZZZZZZ			10:35	
ZZZZZZ			10:37	
CCV 410-408949/96			10:41	
CCB 410-408949/97			10:43	
ZZZZZZ			10:47	
CCV 410-408949/99			10:51	
CCB 410-408949/100			10:53	
ZZZZZZ			10:55	
ZZZZZZ			10:57	
ZZZZZZ			10:59	
ZZZZZZ			11:02	
ZZZZZZ			11:04	
ZZZZZZ			11:06	
CCV 410-408949/107			11:10	
CCB 410-408949/108			11:12	
ZZZZZZ			11:14	
CCV 410-408949/110	1		11:18	X
CCB 410-408949/111	1		11:20	X
410-136864-4	1	R	11:22	X
410-136864-4 PDS	1	R	11:24	X
410-136864-4 SD	5	R	11:26	X
410-136864-4 DU	1	R	11:28	X
410-136864-4 MS	1	R	11:31	X
410-136864-4 MSD	1	R	11:33	X
CCV 410-408949/118	1		11:39	X
CCB 410-408949/119	1		11:41	X
ZZZZZZ			11:43	
ZZZZZZ			11:45	
ZZZZZZ			11:47	

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: E09 - 30921 Analysis Method: 6020B

Start Date: 08/16/2023 05:34 End Date: 08/16/2023 12:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				Tl																								
ZZZZZZ			11:49																									
CCV 410-408949/124			11:53																									
CCB 410-408949/125			11:55																									
ZZZZZZ			11:57																									
ZZZZZZ			11:59																									
ZZZZZZ			12:01																									
CCV 410-408949/129			12:06																									
CCB 410-408949/130			12:08																									

Prep Types:
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: M07 - 17384 Analysis Method: 7470A

Start Date: 08/04/2023 08:07 End Date: 08/04/2023 13:45

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
IC 410-403086/1-A			08:07	X
IC 410-403086/2-A			08:09	X
IC 410-403086/3-A			08:11	X
IC 410-403086/4-A			08:13	X
IC 410-403086/5-A			08:15	X
IC 410-403086/6-A			08:17	X
ICV 410-403086/7-A	1		08:19	X
ICB 410-403086/9-A	1		08:21	X
CRA 410-403086/8-A	1		08:23	X
CCV 410-403086/11-A			08:26	
CCB 410-403086/10-A			08:28	
ZZZZZZ			08:30	
ZZZZZZ			08:32	
ZZZZZZ			08:34	
ZZZZZZ			08:36	
ZZZZZZ			08:38	
ZZZZZZ			08:40	
ZZZZZZ			08:42	
ZZZZZZ			08:44	
ZZZZZZ			08:46	
ZZZZZZ			08:48	
CCV 410-403086/11-A			08:50	
CCB 410-403086/10-A			08:52	
ZZZZZZ			08:54	
ZZZZZZ			08:56	
ZZZZZZ			08:58	
ZZZZZZ			09:00	
ZZZZZZ			09:02	
ZZZZZZ			09:04	
ZZZZZZ			09:06	
ZZZZZZ			09:08	
ZZZZZZ			09:10	
ZZZZZZ			09:12	
CCV 410-403086/11-A	1		09:14	X
CCB 410-403086/10-A	1		09:16	X
ZZZZZZ			09:18	
ZZZZZZ			09:20	
ZZZZZZ			09:22	
ZZZZZZ			09:24	
ZZZZZZ			09:26	
MB 410-403849/1-A	1	T	09:28	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: M07 - 17384 Analysis Method: 7470A

Start Date: 08/04/2023 08:07 End Date: 08/04/2023 13:45

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
LCS 410-403849/2-A	1	T	09:31	X
410-136864-4	1	T	09:33	X
410-136864-4 DU	1	T	09:35	X
410-136864-4 MS	1	T	09:37	X
CCV 410-403086/11-A	1		09:39	X
CCB 410-403086/10-A	1		09:41	X
410-136864-4 MSD	1	T	09:43	X
ZZZZZZ			09:45	
ZZZZZZ			09:47	
ZZZZZZ			09:49	
ZZZZZZ			09:51	
ZZZZZZ			09:53	
ZZZZZZ			09:55	
ZZZZZZ			09:57	
ZZZZZZ			09:59	
ZZZZZZ			10:01	
CCV 410-403086/11-A	1		10:03	X
CCB 410-403086/10-A	1		10:05	X
ZZZZZZ			10:07	
ZZZZZZ			10:09	
410-136864-3	1	T	10:11	X
ZZZZZZ			10:13	
ZZZZZZ			10:15	
ZZZZZZ			10:17	
ZZZZZZ			10:19	
ZZZZZZ			10:21	
ZZZZZZ			10:24	
ZZZZZZ			10:26	
CCV 410-403086/11-A	1		10:28	X
CCB 410-403086/10-A	1		10:30	X
ZZZZZZ			10:32	
ZZZZZZ			10:34	
ZZZZZZ			10:36	
ZZZZZZ			10:38	
ZZZZZZ			10:40	
ZZZZZZ			10:42	
ZZZZZZ			10:44	
ZZZZZZ			10:46	
ZZZZZZ			10:48	
ZZZZZZ			10:50	
CCV 410-403086/11-A			10:58	

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: M07 - 17384 Analysis Method: 7470A

Start Date: 08/04/2023 08:07 End Date: 08/04/2023 13:45

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
CCB 410-403086/10-A			11:00	
ZZZZZZ			11:02	
ZZZZZZ			11:04	
ZZZZZZ			11:06	
ZZZZZZ			11:08	
ZZZZZZ			11:10	
ZZZZZZ			11:12	
ZZZZZZ			11:14	
ZZZZZZ			11:16	
ZZZZZZ			11:18	
ZZZZZZ			11:20	
CCV 410-403086/11-A	1		11:22	X
CCB 410-403086/10-A	1		11:24	X
ZZZZZZ			11:26	
ZZZZZZ			11:28	
ZZZZZZ			11:30	
ZZZZZZ			11:32	
ZZZZZZ			11:34	
ZZZZZZ			11:36	
ZZZZZZ			11:38	
ZZZZZZ			11:40	
ZZZZZZ			11:42	
MB 410-403851/1-A	1	T	11:44	X
CCV 410-403086/11-A	1		11:47	X
CCB 410-403086/10-A	1		11:49	X
LCS 410-403851/2-A	1	T	11:51	X
ZZZZZZ			11:53	
ZZZZZZ			11:55	
ZZZZZZ			11:57	
ZZZZZZ			11:59	
ZZZZZZ			12:01	
ZZZZZZ			12:03	
ZZZZZZ			12:05	
410-136864-2	1	T	12:07	X
410-136864-6	1	T	12:09	X
CCV 410-403086/11-A	1		12:11	X
CCB 410-403086/10-A	1		12:13	X
ZZZZZZ			12:15	
ZZZZZZ			12:17	
410-136864-1	1	T	12:19	X
410-136864-5	1	T	12:21	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: M07 - 17384 Analysis Method: 7470A

Start Date: 08/04/2023 08:07 End Date: 08/04/2023 13:45

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			12:23																									
ZZZZZZ			12:25																									
ZZZZZZ			12:27																									
ZZZZZZ			12:29																									
ZZZZZZ			12:31																									
ZZZZZZ			12:33																									
CCV 410-403086/11-A	1		12:35	X																								
CCB 410-403086/10-A	1		12:37	X																								
ZZZZZZ			12:39																									
ZZZZZZ			12:41																									
ZZZZZZ			12:44																									
ZZZZZZ			12:46																									
ZZZZZZ			12:48																									
ZZZZZZ			12:50																									
ZZZZZZ			12:52																									
ZZZZZZ			12:54																									
ZZZZZZ			12:56																									
ZZZZZZ			12:58																									
CCV 410-403086/11-A			13:00																									
CCB 410-403086/10-A			13:02																									
ZZZZZZ			13:04																									
ZZZZZZ			13:06																									
ZZZZZZ			13:08																									
ZZZZZZ			13:10																									
ZZZZZZ			13:12																									
ZZZZZZ			13:14																									
ZZZZZZ			13:16																									
ZZZZZZ			13:18																									
ZZZZZZ			13:20																									
ZZZZZZ			13:22																									
CCV 410-403086/11-A			13:34																									
CCB 410-403086/10-A			13:36																									
ZZZZZZ			13:38																									
CRA 410-403086/8-A	1		13:41	X																								
CCV 410-403086/11-A			13:43																									
CCB 410-403086/10-A			13:45																									

Prep Types:
T = Total/NA

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14-IN
ICP-MS TUNE
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICP-MS Instrument ID: E07 - 27813 Analysis Date: 08/10/23

Lab ID: ITUNE 410-407006/1

Element - Mass	Avg. Measured Mass (amu)	Avg. Peak Width at Peak Height (amu)	% RSD	Q
Be-9	9	0.7639	0.332	
Mg-24	24	0.7716	0.147	
Co-59	59	0.7662	0.527	
In-115	115	0.7171	0.433	
Pb-208	208	0.7149	0.708	

14-IN
ICP-MS TUNE
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICP-MS Instrument ID: E09 - 30921 Analysis Date: 08/10/23

Lab ID: ITUNE 410-407005/1

Element - Mass	Avg. Measured Mass (amu)	Avg. Peak Width at Peak Height (amu)	% RSD	Q
Be-9	9	0.7546	0.247	
Mg-24	24	0.7809	0.365	
Co-59	59	0.7718	0.165	
In-115	115	0.7381	0.547	
Pb-208	208	0.7582	0.549	

14-IN
ICP-MS TUNE
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICP-MS Instrument ID: E09 - 30921 Analysis Date: 08/11/23

Lab ID: ITUNE 410-407255/1

Element - Mass	Avg. Measured Mass (amu)	Avg. Peak Width at Peak Height (amu)	% RSD	Q
Be-9	9	0.7977	0.956	
Mg-24	24	0.7800	1.123	
Co-59	59	0.7699	0.784	
In-115	115	0.7478	1.198	
Pb-208	208	0.7334	1.61	

14-IN
ICP-MS TUNE
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

ICP-MS Instrument ID: E09 - 30921 Analysis Date: 08/14/23

Lab ID: ITUNE 410-408197/1

Element - Mass	Avg. Measured Mass (amu)	Avg. Peak Width at Peak Height (amu)	% RSD	Q
Be-9	9	0.7656	0.622	
Mg-24	24	0.7736	0.291	
Co-59	59	0.7634	0.331	
In-115	115	0.7515	0.181	
Pb-208	208	0.7768	0.596	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407006

ICP-MS Instrument ID: E07 - 27813 Start Date: 08/10/2023 End Date: 08/10/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc-45/1	Q	Element Sc-45/2	Q	Element Sc-45/3	Q	Element Ge/1	Q	Element Ge/2	Q
STD1 410-407006/3	07:43	99		101		103		99		101	
IC ICV 410-407006/4	07:45	100		102		102		99		103	
ICB 410-407006/5	07:59	99		96		100		99		97	
CRI 410-407006/6	08:36	103		96		102		103		98	
ICSA 410-407006/7	08:47	100		97		102		103		98	
ICSAB 410-407006/8	08:49	99		98		103		101		99	
LRC 410-407006/9	08:51	106		100		109		100		99	
CCV 410-407006/13	09:05	102		99		105		100		97	
CCB 410-407006/14	09:07	101		99		102		100		98	
CCV 410-407006/15	11:30	99		98		103		99		97	
CCB 410-407006/16	11:32	99		97		103		98		96	
MB 410-403837/1-A	13:03	104		95		101		105		97	
LCS 410-403837/2-A	13:05	104		98		104		105		100	
410-136864-4	13:07	103		98		102		104		100	
410-136864-4 DU	13:13	103		99		104		104		99	
410-136864-4 MS	13:15	103		99		106		103		100	
410-136864-4 MSD	13:17	103		99		106		103		99	
CCV 410-407006/26	13:21	102		99		102		101		97	
CCB 410-407006/27	13:23	101		97		105		100		97	
410-136864-6	13:27	102		101		104		102		99	
410-136864-2	13:29	103		99		104		103		100	
410-136864-1	13:31	102		99		105		102		100	
410-136864-5	13:33	103		99		104		103		99	
CCV 410-407006/37	13:43	103		101		106		102		100	
CCB 410-407006/38	13:45	103		100		105		102		99	
ICSA 410-407006/57	14:54	101		101		106		103		100	
ICSAB 410-407006/58	14:56	102		101		109		103		99	
IS Name on Instrument											

15A-IN
ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407006

ICP-MS Instrument ID: E07 - 27813 Start Date: 08/10/2023 End Date: 08/10/2023

Analyte	Mass	Internal Standard Used:				
		Element In-115/2 115	Element In-115/3 115	Element Tb-159 159	Element Bi-209 209	Element Sc-45/1 45
Antimony	121		X			
Arsenic	75					
Barium	137		X			
Beryllium	9					
Cadmium	111		X			
Chromium	52					
Cobalt	59					
Copper	63					
Lead	208				X	
Nickel	60					
Selenium	78					
Silver	107		X			
Thallium	205				X	
Zinc	66					
Vanadium	51					
Aluminum	27					
Calcium	44					
Iron	57					
Magnesium	24					
Manganese	55					
Molybdenum	98		X			
Potassium	39					
Sodium	23					
Strontium	88		X			
Tin	120		X			
Titanium	47					
Uranium	238				X	
Internal Standard Name on Instrument		In-115 (IS)	In-115 (IS)	Tb-159 (IS)	Bi-209 (IS)	Sc-45 (IS)

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407006

ICP-MS Instrument ID: E07 - 27813 Start Date: 08/10/2023 End Date: 08/10/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Ge/3	Q	Element In-115/2	Q	Element In-115/3	Q	Element Tb-159	Q	Element Bi-209	Q
STD1 410-407006/3	07:43	102		102		100		101		102	
IC ICV 410-407006/4	07:45	101		103		100		101		102	
ICB 410-407006/5	07:59	97		98		96		97		99	
CRI 410-407006/6	08:36	99		98		97		98		99	
ICSA 410-407006/7	08:47	101		93		93		98		93	
ICSAB 410-407006/8	08:49	101		93		95		99		94	
LRC 410-407006/9	08:51	102		119		98		99		95	
CCV 410-407006/13	09:05	101		100		98		99		99	
CCB 410-407006/14	09:07	99		100		97		98		98	
CCV 410-407006/15	11:30	100		100		97		98		99	
CCB 410-407006/16	11:32	100		100		98		98		97	
MB 410-403837/1-A	13:03	98		96		95		96		98	
LCS 410-403837/2-A	13:05	103		100		96		98		98	
410-136864-4	13:07	103		98		96		98		98	
410-136864-4 DU	13:13	103		99		97		98		98	
410-136864-4 MS	13:15	103		100		96		99		97	
410-136864-4 MSD	13:17	105		99		97		98		98	
CCV 410-407006/26	13:21	101		100		98		98		99	
CCB 410-407006/27	13:23	100		100		98		98		99	
410-136864-6	13:27	104		100		97		99		99	
410-136864-2	13:29	103		100		100		100		99	
410-136864-1	13:31	103		99		98		98		98	
410-136864-5	13:33	104		99		98		98		98	
CCV 410-407006/37	13:43	102		102		100		100		99	
CCB 410-407006/38	13:45	101		102		100		98		99	
ICSA 410-407006/57	14:54	104		97		95		98		94	
ICSAB 410-407006/58	14:56	104		96		96		99		94	
IS Name on Instrument											

15A-IN
ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407006

ICP-MS Instrument ID: E07 - 27813 Start Date: 08/10/2023 End Date: 08/10/2023

Analyte	Mass	Internal Standard Used:				
		Element Sc-45/2 45	Element Sc-45/3 45	Element Ge/1 72	Element Ge/2 72	Element Ge/3 72
Antimony	121					
Arsenic	75					X
Barium	137					
Beryllium	9			X		
Cadmium	111					
Chromium	52					X
Cobalt	59					X
Copper	63					X
Lead	208					
Nickel	60					X
Selenium	78				X	
Silver	107					
Thallium	205					
Zinc	66					X
Vanadium	51					X
Aluminum	27					X
Calcium	44					X
Iron	57					X
Magnesium	24					X
Manganese	55					X
Molybdenum	98					
Potassium	39					X
Sodium	23					X
Strontium	88					
Tin	120					
Titanium	47					X
Uranium	238					
Internal Standard Name on Instrument		Sc-45 (IS)	Sc-45 (IS)	Ge Internal Standard	Ge Internal Standard	Ge Internal Standard

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407005

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/10/2023 End Date: 08/10/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc-45/1	Q	Element Sc-45/2	Q	Element Sc-45/3	Q	Element Ge/1	Q	Element Ge/2	Q
STD1 410-407005/3	08:03	101		101		100		104		99	
IC ICV 410-407005/4	08:05	99		100		101		101		99	
ICB 410-407005/5	08:07	99		99		101		100		97	
CRI 410-407005/6	08:18	100		101		102		101		99	
ICSA 410-407005/7	08:29	99		98		101		106		101	
ICSAB 410-407005/8	08:31	100		99		102		105		103	
LRC 410-407005/9	08:33	109		100		109		103		101	
CCV 410-407005/16	08:48	103		104		107		104		101	
CCB 410-407005/17	08:50	103		103		104		102		100	
CRI 410-407005/18	11:08	104		100		106		105		99	
ICSA 410-407005/21	14:08	104		100		100		109		103	
ICSAB 410-407005/22	14:10	105		97		100		110		100	
CCV 410-407005/101	16:59	106		101		105		109		101	
CCB 410-407005/102	17:01	104		101		105		107		99	
MB 410-403519/1-A	17:03	106		102		107		108		100	
LCS 410-403519/2-A	17:05	106		101		106		111		103	
CCV 410-407005/106	17:09	104		99		104		108		98	
CCB 410-407005/107	17:11	104		99		102		106		96	
CCV 410-407005/115	17:28	105		98		102		108		96	
CCB 410-407005/116	17:30	102		99		104		105		97	
CCV 410-407005/136	18:11	104		98		104		106		95	
CCB 410-407005/137	18:13	103		98		102		104		94	
410-136864-3	18:17	105		98		103		107		98	
CCV 410-407005/143	18:25	103		99		103		104		97	
CCB 410-407005/144	18:27	104		98		103		103		95	
IS Name on Instrument											

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ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407005

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/10/2023 End Date: 08/10/2023

Analyte	Mass	Internal Standard Used:				
		Element In-115/2 115	Element In-115/3 115	Element Tb-159 159	Element Bi-209 209	Element Sc-45/1 45
Antimony	121		X			
Arsenic	75					
Barium	137		X			
Beryllium	9					X
Cadmium	111		X			
Chromium	52					
Cobalt	59					
Copper	63					
Lead	208			X		
Nickel	60					
Selenium	78					
Silver	107		X			
Thallium	205			X		
Zinc	66					
Vanadium	51					
Aluminum	27					
Calcium	44					
Iron	57					
Magnesium	24					
Manganese	55					
Molybdenum	98		X			
Potassium	39					
Sodium	23					
Strontium	88		X			
Tin	120		X			
Titanium	47					
Uranium	238				X	
Internal Standard Name on Instrument		In-115 (IS)	In-115 (IS)	Tb-159 (IS)	Bi-209 (IS)	Sc-45 (IS)

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407005

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/10/2023 End Date: 08/10/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Ge/3	Q	Element In-115/2	Q	Element In-115/3	Q	Element Tb-159	Q	Element Bi-209	Q
STD1 410-407005/3	08:03	101		99		98		99		99	
IC ICV 410-407005/4	08:05	100		98		98		100		100	
ICB 410-407005/5	08:07	98		99		98		99		99	
CRI 410-407005/6	08:18	101		100		100		99		100	
ICSA 410-407005/7	08:29	103		94		94		98		93	
ICSAB 410-407005/8	08:31	105		95		97		99		95	
LRC 410-407005/9	08:33	102		124		105		99		94	
CCV 410-407005/16	08:48	102		103		104		103		101	
CCB 410-407005/17	08:50	102		102		102		102		101	
CRI 410-407005/18	11:08	106		103		106		102		101	
ICSA 410-407005/21	14:08	108		96		95		98		94	
ICSAB 410-407005/22	14:10	109		95		96		98		94	
CCV 410-407005/101	16:59	108		103		104		102		101	
CCB 410-407005/102	17:01	104		101		103		100		100	
MB 410-403519/1-A	17:03	107		104		104		102		102	
LCS 410-403519/2-A	17:05	110		102		102		101		101	
CCV 410-407005/106	17:09	104		100		102		100		101	
CCB 410-407005/107	17:11	103		100		101		100		99	
CCV 410-407005/115	17:28	105		101		101		100		100	
CCB 410-407005/116	17:30	102		101		102		100		100	
CCV 410-407005/136	18:11	104		100		102		101		100	
CCB 410-407005/137	18:13	102		100		101		101		100	
410-136864-3	18:17	108		100		99		101		100	
CCV 410-407005/143	18:25	105		101		101		100		100	
CCB 410-407005/144	18:27	102		100		101		100		100	
IS Name on Instrument											

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ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407005

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/10/2023 End Date: 08/10/2023

Analyte	Mass	Internal Standard Used:				
		Element Sc-45/2 45	Element Sc-45/3 45	Element Ge/1 72	Element Ge/2 72	Element Ge/3 72
Antimony	121					
Arsenic	75					X
Barium	137					
Beryllium	9					
Cadmium	111					
Chromium	52		X			
Cobalt	59		X			
Copper	63					X
Lead	208					
Nickel	60					X
Selenium	78				X	
Silver	107					
Thallium	205					
Zinc	66					X
Vanadium	51		X			
Aluminum	27		X			
Calcium	44		X			
Iron	57		X			
Magnesium	24		X			
Manganese	55		X			
Molybdenum	98					
Potassium	39		X			
Sodium	23		X			
Strontium	88					
Tin	120					
Titanium	47		X			
Uranium	238					
Internal Standard Name on Instrument		Sc-45 (IS)	Sc-45 (IS)	Ge Internal Standard	Ge Internal Standard	Ge Internal Standard

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407255

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/11/2023 End Date: 08/11/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc-45/1	Q	Element Sc-45/2	Q	Element Sc-45/3	Q	Element Ge/1	Q	Element Ge/2	Q
STD1 410-407255/3	07:39	101		100		101		102		103	
IC ICV 410-407255/4	07:41	101		101		105		103		103	
ICB 410-407255/5	07:44	101		99		104		101		102	
CRI 410-407255/6	07:47	100		101		105		101		101	
ICSA 410-407255/7	07:50	101		100		106		106		106	
ICSAB 410-407255/8	07:52	103		100		110		106		107	
LRC 410-407255/9	07:54	112		102		116		103		104	
CCV 410-407255/10	08:06	107		102		109		104		100	
CCB 410-407255/11	08:08	103		98		109		101		99	
CCV 410-407255/28	08:49	106		101		112		104		103	
CCB 410-407255/29	08:51	105		100		108		103		99	
MB 410-403837/1-A	08:53	106		100		111		107		103	
410-136864-6	08:55	105		102		111		107		105	
410-136864-2	08:57	107		102		110		109		106	
410-136864-1	09:00	106		101		111		107		105	
410-136864-5	09:02	106		101		109		107		104	
CCV 410-407255/38	09:12	106		101		111		104		102	
CCB 410-407255/39	09:14	103		101		108		101		99	
IS Name on Instrument											

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15A-IN
ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407255

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/11/2023 End Date: 08/11/2023

Analyte	Mass	Internal Standard Used:				
		Element In-115/2 115	Element In-115/3 115	Element Tb-159 159	Element Bi-209 209	Element Sc-45/1 45
Antimony	121		X			
Arsenic	75		X			
Barium	137		X			
Beryllium	9					X
Cadmium	111		X			
Chromium	52					
Cobalt	59					
Copper	63					
Lead	208			X		
Nickel	60					
Selenium	78	X				
Silver	107		X			
Thallium	205			X		
Zinc	66		X			
Vanadium	51					
Aluminum	27					
Calcium	44					
Iron	57					
Magnesium	24					
Manganese	55					
Molybdenum	98		X			
Potassium	39					
Sodium	23					
Strontium	88		X			
Tin	120		X			
Titanium	47					
Uranium	238				X	
Internal Standard Name on Instrument		In-115 (IS)	In-115 (IS)	Tb-159 (IS)	Bi-209 (IS)	Sc-45 (IS)

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407255

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/11/2023 End Date: 08/11/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Ge/3	Q	Element In-115/2	Q	Element In-115/3	Q	Element Tb-159	Q	Element Bi-209	Q
STD1 410-407255/3	07:39	102		102		100		101		100	
IC ICV 410-407255/4	07:41	102		102		100		103		102	
ICB 410-407255/5	07:44	101		101		101		102		100	
CRI 410-407255/6	07:47	102		102		103		103		101	
ICSA 410-407255/7	07:50	107		99		98		102		97	
ICSAB 410-407255/8	07:52	108		100		99		103		97	
LRC 410-407255/9	07:54	106		129		109		103		96	
CCV 410-407255/10	08:06	104		105		102		105		102	
CCB 410-407255/11	08:08	102		104		102		104		102	
CCV 410-407255/28	08:49	104		105		106		106		104	
CCB 410-407255/29	08:51	103		104		104		104		103	
MB 410-403837/1-A	08:53	107		104		104		105		104	
410-136864-6	08:55	109		105		105		106		103	
410-136864-2	08:57	111		106		107		105		103	
410-136864-1	09:00	109		103		103		105		102	
410-136864-5	09:02	107		103		103		105		103	
CCV 410-407255/38	09:12	106		104		105		106		103	
CCB 410-407255/39	09:14	103		104		103		104		103	
IS Name on Instrument											

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ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 407255

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/11/2023 End Date: 08/11/2023

Analyte	Mass	Internal Standard Used:				
		Element Sc-45/2 45	Element Sc-45/3 45	Element Ge/1 72	Element Ge/2 72	Element Ge/3 72
Antimony	121					
Arsenic	75					
Barium	137					
Beryllium	9					
Cadmium	111					
Chromium	52		X			
Cobalt	59		X			
Copper	63					X
Lead	208					
Nickel	60					X
Selenium	78					
Silver	107					
Thallium	205					
Zinc	66					
Vanadium	51		X			
Aluminum	27		X			
Calcium	44		X			
Iron	57		X			
Magnesium	24		X			
Manganese	55		X			
Molybdenum	98					
Potassium	39		X			
Sodium	23		X			
Strontium	88					
Tin	120					
Titanium	47		X			
Uranium	238					
Internal Standard Name on Instrument		Sc-45 (IS)	Sc-45 (IS)	Ge Internal Standard	Ge Internal Standard	Ge Internal Standard

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 408197

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/14/2023 End Date: 08/14/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc-45/1	Q	Element Sc-45/2	Q	Element Sc-45/3	Q	Element Ge/1	Q	Element Ge/2	Q
STD1 410-408197/3	12:10	101		102		99		102		101	
IC ICV 410-408197/4	12:12	102		102		99		102		100	
ICB 410-408197/5	12:15	102		100		99		101		100	
CRI 410-408197/6	12:20	102		101		100		101		98	
ICSA 410-408197/7	12:23	99		99		97		104		100	
ICSAB 410-408197/8	12:25	100		99		99		103		102	
LRC 410-408197/9	12:27	108		99		106		101		99	
CCV 410-408197/10	20:43	96		87		90		98		86	
CCB 410-408197/11	20:45	96		85		87		96		84	
ICSA 410-408197/12	21:58	93		83		85		100		86	
ICSAB 410-408197/13	22:00	93		81		85		99		84	
CCV 410-408197/31	23:14	94		76		86		95		76	
CCB 410-408197/32	23:16	94		77		86		95		77	
MB 410-403519/1-A	23:18	96		78		88		96		78	
LCS 410-403519/2-A	23:20	95		78		87		99		81	
410-136864-3	23:22	96		77		85		98		80	
CCV 410-408197/36	23:26	93		76		85		94		77	
CCB 410-408197/37	23:28	93		76		85		94		75	
IS Name on Instrument											

15A-IN
ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 408197

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/14/2023 End Date: 08/14/2023

Analyte	Mass	Internal Standard Used:				
		Element In-115/2 115	Element In-115/3 115	Element Tb-159 159	Element Bi-209 209	Element Sc-45/1 45
Antimony	121		X			
Arsenic	75					
Barium	137		X			
Beryllium	9					X
Cadmium	111		X			
Chromium	52					
Cobalt	59					
Copper	63					
Lead	208			X		
Nickel	60					
Selenium	78	X				
Silver	107		X			
Thallium	205			X		
Zinc	66					
Vanadium	51					
Aluminum	27					
Calcium	44					
Iron	57					
Magnesium	24					
Manganese	55					
Molybdenum	98		X			
Potassium	39					
Sodium	23					
Strontium	88		X			
Tin	120		X			
Titanium	47					
Uranium	238				X	
Internal Standard Name on Instrument		In-115 (IS)	In-115 (IS)	Tb-159 (IS)	Bi-209 (IS)	Sc-45 (IS)

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 408197

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/14/2023 End Date: 08/14/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Ge/3	Q	Element In-115/2	Q	Element In-115/3	Q	Element Tb-159	Q	Element Bi-209	Q
STD1 410-408197/3	12:10	102		101		100		101		100	
IC ICV 410-408197/4	12:12	102		100		101		101		100	
ICB 410-408197/5	12:15	101		100		101		100		100	
CRI 410-408197/6	12:20	99		100		100		99		100	
ICSA 410-408197/7	12:23	102		94		95		97		93	
ICSAB 410-408197/8	12:25	102		94		94		98		94	
LRC 410-408197/9	12:27	101		121		104		99		93	
CCV 410-408197/10	20:43	92		91		92		94		95	
CCB 410-408197/11	20:45	91		90		91		93		94	
ICSA 410-408197/12	21:58	93		85		83		89		87	
ICSAB 410-408197/13	22:00	92		84		82		89		87	
CCV 410-408197/31	23:14	88		87		88		91		93	
CCB 410-408197/32	23:16	87		86		88		91		93	
MB 410-403519/1-A	23:18	90		88		89		92		95	
LCS 410-403519/2-A	23:20	94		89		89		92		95	
410-136864-3	23:22	92		87		86		91		92	
CCV 410-408197/36	23:26	88		86		88		91		94	
CCB 410-408197/37	23:28	86		86		88		91		92	
IS Name on Instrument											

15A-IN
ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 408197

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/14/2023 End Date: 08/14/2023

Analyte	Mass	Internal Standard Used:				
		Element Sc-45/2 45	Element Sc-45/3 45	Element Ge/1 72	Element Ge/2 72	Element Ge/3 72
Antimony	121					
Arsenic	75					X
Barium	137					
Beryllium	9					
Cadmium	111					
Chromium	52		X			
Cobalt	59		X			
Copper	63					X
Lead	208					
Nickel	60					X
Selenium	78					
Silver	107					
Thallium	205					
Zinc	66					X
Vanadium	51		X			
Aluminum	27		X			
Calcium	44		X			
Iron	57		X			
Magnesium	24		X			
Manganese	55		X			
Molybdenum	98					
Potassium	39		X			
Sodium	23		X			
Strontium	88					
Tin	120					
Titanium	47		X			
Uranium	238					
Internal Standard Name on Instrument		Sc-45 (IS)	Sc-45 (IS)	Ge Internal Standard	Ge Internal Standard	Ge Internal Standard

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 408949

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/16/2023 End Date: 08/16/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc-45/1	Q	Element Sc-45/2	Q	Element Sc-45/3	Q	Element Ge/1	Q	Element Ge/2	Q
STD1 410-408949/3	06:25	102		100		100		103		101	
IC ICV 410-408949/4	06:31	103		98		101		104		98	
ICB 410-408949/5	06:34	102		98		98		101		97	
CRI 410-408949/6	06:36	100		99		99		99		97	
ICSA 410-408949/7	06:39	101		95		99		106		98	
ICSAB 410-408949/8	06:41	103		95		102		107		99	
LRC 410-408949/9	06:43	113		96		111		105		95	
CCV 410-408949/10	07:03	107		93		104		103		92	
CCB 410-408949/11	07:05	105		93		102		102		91	
CCV 410-408949/110	11:18	104		91		101		102		91	
CCB 410-408949/111	11:20	105		91		99		101		89	
410-136864-4	11:22	107		90		102		108		93	
410-136864-4 PDS	11:24	106		89		103		107		93	
410-136864-4 SD	11:26	104		91		100		104		92	
410-136864-4 DU	11:28	103		90		102		105		93	
410-136864-4 MS	11:31	105		90		103		105		92	
410-136864-4 MSD	11:33	105		88		100		105		90	
CCV 410-408949/118	11:39	104		90		101		101		88	
CCB 410-408949/119	11:41	102		89		101		99		86	
IS Name on Instrument											

15A-IN
ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 408949

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/16/2023 End Date: 08/16/2023

Analyte	Mass	Internal Standard Used:				
		Element In-115/2 115	Element In-115/3 115	Element Tb-159 159	Element Bi-209 209	Element Sc-45/1 45
Antimony	121		X			
Arsenic	75					
Barium	137		X			
Beryllium	9					X
Cadmium	111		X			
Chromium	52					
Cobalt	59					
Copper	63					
Lead	208			X		
Nickel	60					
Selenium	78					
Silver	107		X			
Thallium	205			X		
Zinc	66					
Vanadium	51					
Aluminum	27					
Calcium	44					
Iron	57					
Magnesium	24					
Manganese	55					
Molybdenum	98		X			
Potassium	39					
Sodium	23					
Strontium	88		X			
Tin	120		X			
Titanium	47					
Uranium	238				X	
Internal Standard Name on Instrument		In-115 (IS)	In-115 (IS)	Tb-159 (IS)	Bi-209 (IS)	Sc-45 (IS)

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 408949

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/16/2023 End Date: 08/16/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Ge/3	Q	Element In-115/2	Q	Element In-115/3	Q	Element Tb-159	Q	Element Bi-209	Q
STD1 410-408949/3	06:25	100		100		98		99		99	
IC ICV 410-408949/4	06:31	101		100		98		100		99	
ICB 410-408949/5	06:34	98		99		100		100		99	
CRI 410-408949/6	06:36	99		101		98		100		100	
ICSA 410-408949/7	06:39	104		94		94		97		93	
ICSAB 410-408949/8	06:41	107		94		95		98		93	
LRC 410-408949/9	06:43	102		122		106		98		93	
CCV 410-408949/10	07:03	100		98		99		99		99	
CCB 410-408949/11	07:05	99		98		97		99		99	
CCV 410-408949/110	11:18	99		97		98		98		98	
CCB 410-408949/111	11:20	98		95		97		98		98	
410-136864-4	11:22	105		94		96		99		97	
410-136864-4 PDS	11:24	103		94		96		97		97	
410-136864-4 SD	11:26	103		95		97		98		98	
410-136864-4 DU	11:28	103		94		97		98		97	
410-136864-4 MS	11:31	105		94		96		98		96	
410-136864-4 MSD	11:33	103		94		97		98		97	
CCV 410-408949/118	11:39	100		97		98		98		97	
CCB 410-408949/119	11:41	99		95		98		98		98	
IS Name on Instrument											

15A-IN
ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.: Analysis Batch No.: 408949

ICP-MS Instrument ID: E09 - 30921 Start Date: 08/16/2023 End Date: 08/16/2023

Analyte	Mass	Internal Standard Used:				
		Element Sc-45/2 45	Element Sc-45/3 45	Element Ge/1 72	Element Ge/2 72	Element Ge/3 72
Antimony	121					
Arsenic	75					X
Barium	137					
Beryllium	9					
Cadmium	111					
Chromium	52		X			
Cobalt	59		X			
Copper	63					X
Lead	208					
Nickel	60					X
Selenium	78				X	
Silver	107					
Thallium	205					
Zinc	66					X
Vanadium	51		X			
Aluminum	27		X			
Calcium	44		X			
Iron	57		X			
Magnesium	24		X			
Manganese	55		X			
Molybdenum	98					
Potassium	39		X			
Sodium	23		X			
Strontium	88					
Tin	120					
Titanium	47		X			
Uranium	238					
Internal Standard Name on Instrument		Sc-45 (IS)	Sc-45 (IS)	Ge Internal Standard	Ge Internal Standard	Ge Internal Standard

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403519 Batch Start Date: 08/07/23 20:15 Batch Analyst: Kuhns, Annamaria M

Batch Method: 3005A Batch End Date: 08/08/23 00:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00029	MP_1:1HNO3 00045	MT_LCS-SPK-A 00030	MT_LCS-SPK-B 00029
MB 410-403519/1		3005A, 6020B		50 mL	50 mL	5 mL	2 mL		
LCS 410-403519/2		3005A, 6020B		50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
410-136864-M-3	16MW9	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		

Batch Notes	
Digestion Tube/Cup ID	2206050
Pipette/Syringe/Dispenser ID	g20054g
Pipette Tip Lot ID	f169949r
Digestion Unit ID	10
Thermometer ID	3811
Temperature - Uncorrected - Start	95 Degrees C
Temperature - Corrected - Start	95 Degrees C
Temperature - Uncorrected - End	95 Degrees C
Temperature - Corrected - End	95 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403837 Batch Start Date: 08/04/23 08:00 Batch Analyst: Dickens, Emily

Batch Method: 3005A Batch End Date: 08/04/23 12:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00029	MP_1:1HNO3 00045	MT_LCS-SPK-A 00030	MT_LCS-SPK-B 00029
MB 410-403837/1		3005A, 6020B		50 mL	50 mL	5 mL	2 mL		
LCS 410-403837/2		3005A, 6020B		50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
410-136864-K-4	16WC1A	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		
410-136864-C-4 DU	16WC1A	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		
410-136864-K-4 MS	16WC1A	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
410-136864-J-4 MSD	16WC1A	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
410-136864-K-6	16WC1B	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		
410-136864-K-2	16MW8	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		
410-136864-M-1	16C1	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		
410-136864-K-5	16WDUP	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		

Batch Notes	
Digestion Tube/Cup ID	2206050
Pipette/Syringe/Dispenser ID	G20054G
Pipette Tip Lot ID	F169949R
Digestion Unit ID	14
Thermometer ID	3811
Temperature - Uncorrected - Start	95 Degrees C
Temperature - Corrected - Start	95 Degrees C
Temperature - Uncorrected - End	95 Degrees C
Temperature - Corrected - End	95 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403086 Batch Start Date: 08/01/23 09:00 Batch Analyst: Stoltzfus, Elaine F

Batch Method: 7470A Batch End Date: 08/01/23 11:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Hg_0.1Control 00157	Hg_1Cal 00145	Hg_1Control 00150	MP_5%KMnO4 00362
ICV 410-403086/7		7470A, 7470A		100 mL	100 mL			0.25 mL	15 mL
CRA 410-403086/8		7470A, 7470A		100 mL	100 mL	0.2 mL			15 mL
ICB 410-403086/9		7470A, 7470A		100 mL	100 mL				15 mL
CCB 410-403086/10		7470A, 7470A		100 mL	100 mL				15 mL
CCV 410-403086/11		7470A, 7470A		100 mL	100 mL		0.1 mL		15 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MP_5K2S2O8 00091	MP_NaClHNO 00195	MT_HNO3_Fishe 00007	MT_SULF_FI 00019		
ICV 410-403086/7		7470A, 7470A		8 mL	6 mL	2.5 mL	5 mL		
CRA 410-403086/8		7470A, 7470A		8 mL	6 mL	2.5 mL	5 mL		
ICB 410-403086/9		7470A, 7470A		8 mL	6 mL	2.5 mL	5 mL		
CCB 410-403086/10		7470A, 7470A		8 mL	6 mL	2.5 mL	5 mL		
CCV 410-403086/11		7470A, 7470A		8 mL	6 mL	2.5 mL	5 mL		

Batch Notes	
Digestion Tube/Cup ID	2206050
Digestion Unit ID	1
Thermometer ID	3870
Temperature - Uncorrected - Start	95 Degrees C
Temperature - Corrected - Start	95 Degrees C
Temperature - Uncorrected - End	95 Degrees C
Temperature - Corrected - End	95 Degrees C
Batch Comment	Reduced 8-1-2023

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403849 Batch Start Date: 08/03/23 08:40 Batch Analyst: Dickens, Emily

Batch Method: 7470A Batch End Date: 08/03/23 10:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Hg_5%KMnO4 00200	MP_40Hg_IV 00164	MP_5K2S2O8 00092	MP_NaClHNO 00200
MB 410-403849/1		7470A, 7470A		20 mL	20 mL	3 mL		1.6 mL	1.2 mL
LCS 410-403849/2		7470A, 7470A		20 mL	20 mL	3 mL	0.5 mL	1.6 mL	1.2 mL
410-136864-L-4	16WC1A	7470A, 7470A	T	20 mL	20 mL	3 mL		1.6 mL	1.2 mL
410-136864-D-4 DU	16WC1A	7470A, 7470A	T	20 mL	20 mL	3 mL		1.6 mL	1.2 mL
410-136864-L-4 MS	16WC1A	7470A, 7470A	T	20 mL	20 mL	3 mL	0.5 mL	1.6 mL	1.2 mL
410-136864-K-4 MSD	16WC1A	7470A, 7470A	T	20 mL	20 mL	3 mL	0.5 mL	1.6 mL	1.2 mL
410-136864-Q-3	16MW9	7470A, 7470A	T	20 mL	20 mL	3 mL		1.6 mL	1.2 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MT_HNO3_Fishe 00008	MT_SULF_FI 00019				
MB 410-403849/1		7470A, 7470A		0.5 mL	1 mL				
LCS 410-403849/2		7470A, 7470A		0.5 mL	1 mL				
410-136864-L-4	16WC1A	7470A, 7470A	T	0.5 mL	1 mL				
410-136864-D-4 DU	16WC1A	7470A, 7470A	T	0.5 mL	1 mL				
410-136864-L-4 MS	16WC1A	7470A, 7470A	T	0.5 mL	1 mL				
410-136864-K-4 MSD	16WC1A	7470A, 7470A	T	0.5 mL	1 mL				
410-136864-Q-3	16MW9	7470A, 7470A	T	0.5 mL	1 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403849 Batch Start Date: 08/03/23 08:40 Batch Analyst: Dickens, Emily

Batch Method: 7470A Batch End Date: 08/03/23 10:40

Batch Notes	
Digestion Tube/Cup ID	2206050
Pipette/Syringe/Dispenser ID	S/500
Digestion Unit ID	10
Thermometer ID	3898
Temperature - Uncorrected - Start	95 Degrees C
Temperature - Corrected - Start	95 Degrees C
Temperature - Uncorrected - End	95 Degrees C
Temperature - Corrected - End	95 Degrees C
Reflux Cap ID	2204135
Pipette Tip Lot ID	F169949R

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403851 Batch Start Date: 08/03/23 08:40 Batch Analyst: Dickens, Emily

Batch Method: 7470A Batch End Date: 08/03/23 10:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Hg_5%KMnO4 00200	MP_40Hg_IV 00164	MP_5K2S2O8 00092	MP_NaClHNO 00200
MB 410-403851/1		7470A, 7470A		20 mL	20 mL	3 mL		1.6 mL	1.2 mL
LCS 410-403851/2		7470A, 7470A		20 mL	20 mL	3 mL	0.5 mL	1.6 mL	1.2 mL
410-136864-L-2	16MW8	7470A, 7470A	T	20 mL	20 mL	3 mL		1.6 mL	1.2 mL
410-136864-L-6	16WC1B	7470A, 7470A	T	20 mL	20 mL	3 mL		1.6 mL	1.2 mL
410-136864-N-1	16C1	7470A, 7470A	T	20 mL	20 mL	3 mL		1.6 mL	1.2 mL
410-136864-L-5	16WDUP	7470A, 7470A	T	20 mL	20 mL	3 mL		1.6 mL	1.2 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MT_HNO3_Fishe 00008	MT_SULF_FI 00019				
MB 410-403851/1		7470A, 7470A		0.5 mL	1 mL				
LCS 410-403851/2		7470A, 7470A		0.5 mL	1 mL				
410-136864-L-2	16MW8	7470A, 7470A	T	0.5 mL	1 mL				
410-136864-L-6	16WC1B	7470A, 7470A	T	0.5 mL	1 mL				
410-136864-N-1	16C1	7470A, 7470A	T	0.5 mL	1 mL				
410-136864-L-5	16WDUP	7470A, 7470A	T	0.5 mL	1 mL				

Batch Notes	
Digestion Tube/Cup ID	2206050
Pipette/Syringe/Dispenser ID	S/500
Digestion Unit ID	11
Thermometer ID	3848
Temperature - Uncorrected - Start	95 Degrees C
Temperature - Corrected - Start	95 Degrees C
Temperature - Uncorrected - End	95 Degrees C
Temperature - Corrected - End	95 Degrees C
Reflux Cap ID	2204135
Pipette Tip Lot ID	F169949R

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 403851 Batch Start Date: 08/03/23 08:40 Batch Analyst: Dickens, Emily

Batch Method: 7470A Batch End Date: 08/03/23 10:40

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Quantitation Report

Data File Name	019CALB.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 07:41:40
Sample Name	ICIS 4654618
Sample Type	CalBlk
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

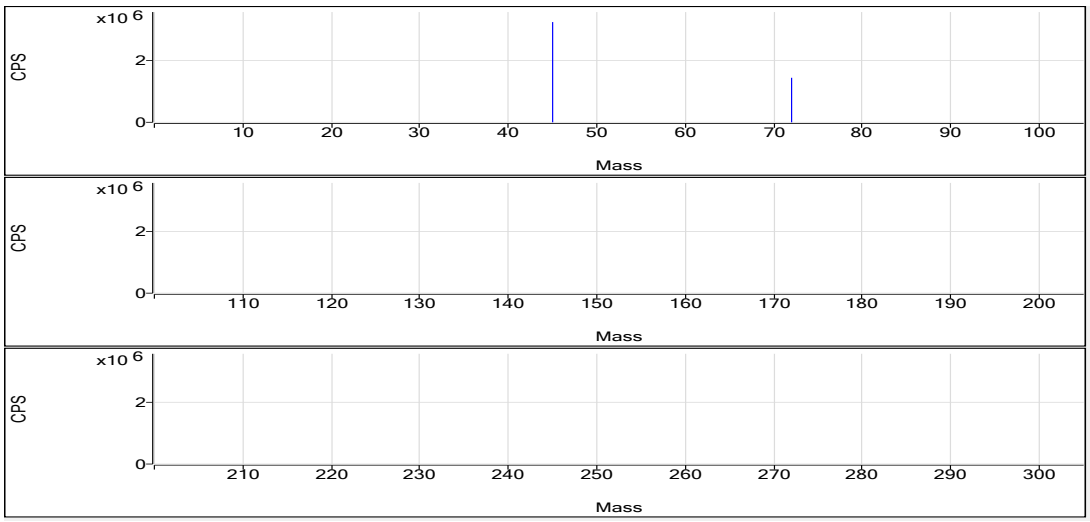
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.000	ppb	N/A	67.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.000	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	72	He	0.000	ppb	N/A	7695.61	0.1065	Pulse	0.1000	3
Mg	24	72	He	0.000	ppb	N/A	350.02	0.0048	Pulse	0.1000	3
Al	27	72	He	0.000	ppb	N/A	76.67	0.0011	Pulse	0.1000	3
K	39	72	He	0.000	ppb	N/A	10377.33	0.1436	Pulse	0.1000	3
Ca	44	72	He	0.000	ppb	N/A	116.67	0.0016	Pulse	0.1000	3
Ti	47	72	He	0.000	ppb	N/A	20.00	0.0003	Pulse	0.1000	3
V	51	72	He	0.000	ppb	N/A	529.35	0.0073	Pulse	0.5000	3
Cr	52	72	He	0.000	ppb	N/A	1833.52	0.0254	Pulse	0.1000	3
Mn	55	72	He	0.000	ppb	N/A	1000.07	0.0139	Pulse	0.1000	3
Fe	57	72	He	0.000	ppb	N/A	283.35	0.0039	Pulse	0.1000	3
Co	59	72	He	0.000	ppb	N/A	223.35	0.0031	Pulse	0.1000	3
Ni	60	72	He	0.000	ppb	N/A	650.04	0.0090	Pulse	0.1000	3
Cu	63	72	He	0.000	ppb	N/A	356.69	0.0049	Pulse	0.1000	3
Zn	66	72	He	0.000	ppb	N/A	350.01	0.0048	Pulse	0.1000	3
As	75	72	He	0.000	ppb	N/A	31.33	0.0004	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	N/A	50.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.000	ppb	N/A	33.33	0.0005	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.000	ppb	N/A	1006.75	0.0156	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	16.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.000	ppb	N/A	20.00	0.0003	Pulse	0.1000	3
Tl	205	209	He	0.000	ppb	N/A	223.35	0.0010	Pulse	0.1000	3
Pb	208	209	He	0.000	ppb	N/A	483.35	0.0022	Pulse	0.1000	3
U	238	209	He	0.000	ppb	N/A	53.33	0.0002	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3241180.79	1.8	100.0	Pulse	0.1000	3
No Gas	Ge	72	1439782.27	1.9	100.0	Pulse	0.1000	3
H2	Sc	45	195377.82	2.9	100.0	Pulse	0.1000	3
H2	Ge	72	163009.91	1.0	100.0	Pulse	0.1000	3
H2	In	115	433302.90	2.7	100.0	Pulse	0.1000	3
He	Sc	45	39985.52	1.6	100.0	Pulse	0.1000	3
He	Ge	72	72288.45	1.6	100.0	Pulse	0.1000	3
He	In	115	64591.54	1.0	100.0	Pulse	0.1000	3
He	Tb	159	285999.72	0.3	100.0	Pulse	0.1000	3
He	Bi	209	222191.19	0.2	100.0	Pulse	0.1000	3

No Gas



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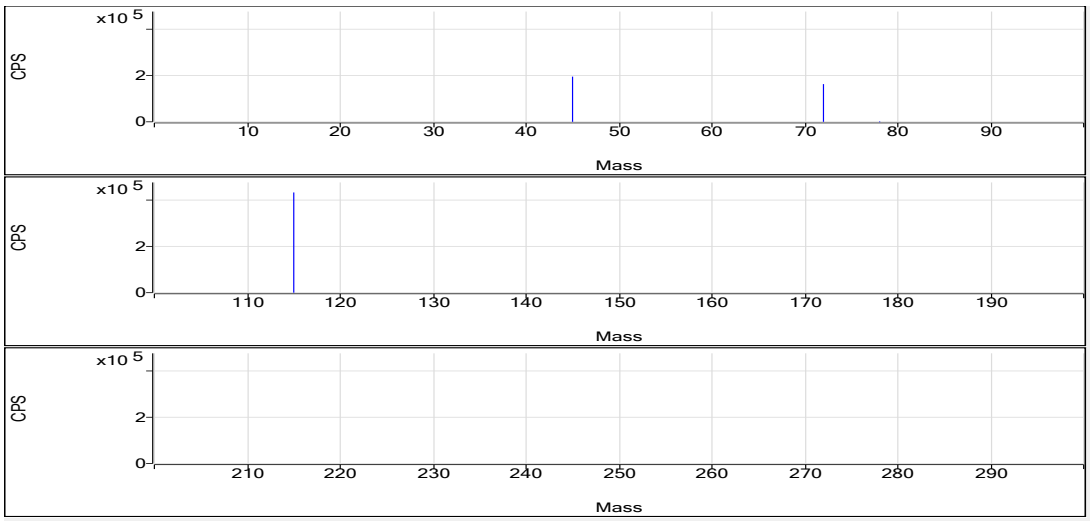
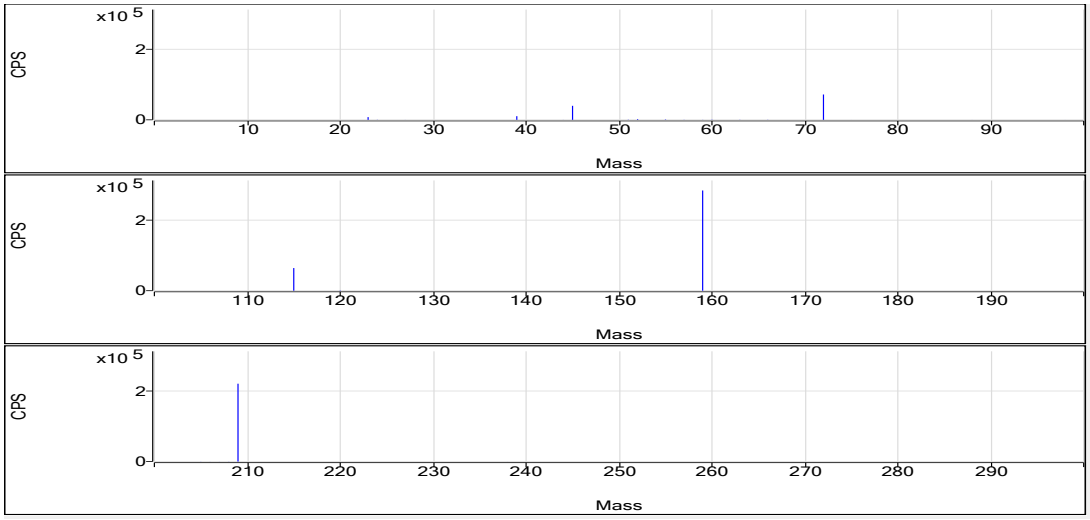


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.013	0	44.00	0.0013	4.694E-05
Be	9	1	No Gas	0.003	0.0001	74.00	0.0013	4.694E-05
Be	9	1	No Gas	0.01	0.0001	84.00	0.0013	4.694E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Na	23	3	He	-0.518	0.1056	7502.18	0.0017	0.1065
Na	23	3	He	1.092	0.1083	7842.32	0.0017	0.1065
Na	23	3	He	-0.574	0.1055	7742.32	0.0017	0.1065
Mg	24	3	He	0.595	0.0053	380.02	0.0008	0.004846
Mg	24	3	He	-0.341	0.0046	330.01	0.0008	0.004846
Mg	24	3	He	-0.254	0.0046	340.02	0.0008	0.004846
Al	27	3	He	2.01	0.0015	110.00	0.0002	0.001063
Al	27	3	He	-2.686	0.0004	30.00	0.0002	0.001063
Al	27	3	He	0.676	0.0012	90.00	0.0002	0.001063
K	39	3	He	9.329	0.1488	10574.08	0.0006	0.1436
K	39	3	He	11.908	0.1502	10874.42	0.0006	0.1436
K	39	3	He	-21.237	0.1319	9683.48	0.0006	0.1436
Ca	44	3	He	-15.622	0.0011	80.00	0	0.001611
Ca	44	3	He	14.851	0.0021	150.01	0	0.001611
Ca	44	3	He	0.77	0.0016	120.01	0	0.001611
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	0.01	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.081	0.0005	40.00	0.0003	0.0002737
V	51	3	He	0.067	0.0081	576.02	0.0117	0.007326
V	51	3	He	-0.085	0.0063	458.01	0.0117	0.007326
V	51	3	He	0.019	0.0075	554.02	0.0117	0.007326
Cr	52	3	He	0.107	0.027	1920.18	0.0152	0.02538
Cr	52	3	He	0.039	0.026	1880.20	0.0152	0.02538
Cr	52	3	He	-0.146	0.0232	1700.17	0.0152	0.02538
Mn	55	3	He	0.252	0.0153	1090.08	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.11	0.0145	1050.07	0.0059	0.01385
Mn	55	3	He	-0.362	0.0117	860.07	0.0059	0.01385
Fe	57	3	He	-1.38	0.0035	250.01	0.0003	0.003918
Fe	57	3	He	1.736	0.0044	320.02	0.0003	0.003918
Fe	57	3	He	-0.356	0.0038	280.02	0.0003	0.003918
Co	59	3	He	0	0.0031	220.01	0.0305	0.003084
Co	59	3	He	-0.038	0.0019	140.01	0.0305	0.003084
Co	59	3	He	0.037	0.0042	310.02	0.0305	0.003084
Ni	60	3	He	0.112	0.01	710.05	0.0088	0.009003
Ni	60	3	He	-0.003	0.009	650.04	0.0088	0.009003
Ni	60	3	He	-0.11	0.008	590.03	0.0088	0.009003
Cu	63	3	He	0.005	0.0051	360.02	0.0249	0.004937
Cu	63	3	He	0.013	0.0052	380.02	0.0249	0.004937
Cu	63	3	He	-0.018	0.0045	330.02	0.0249	0.004937
Zn	66	3	He	-0.136	0.0045	320.01	0.0025	0.004836
Zn	66	3	He	-0.169	0.0044	320.01	0.0025	0.004836
Zn	66	3	He	0.305	0.0056	410.02	0.0025	0.004836
As	75	3	He	0.09	0.0006	42.00	0.0017	0.0004347
As	75	3	He	-0.059	0.0003	24.00	0.0017	0.0004347
As	75	3	He	-0.031	0.0004	28.00	0.0017	0.0004347
Sr	88	3	He	0.041	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	-0.04	0.0005	30.00	0.0078	0.0007762
Sr	88	3	He	0	0.0008	50.00	0.0078	0.0007762
Mo	98	3	He	-0.002	0.0005	30.00	0.022	0.0005162
Mo	98	3	He	-0.003	0.0005	30.00	0.022	0.0005162
Mo	98	3	He	0.005	0.0006	40.00	0.022	0.0005162
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.057	0.0164	1050.08	0.0143	0.01559
Sn	120	3	He	0.014	0.0158	1030.10	0.0143	0.01559
Sn	120	3	He	-0.071	0.0146	940.07	0.0143	0.01559
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Ba	137	3	He	0.001	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.034	0.0005	30.00	0.0044	0.000309
Ba	137	3	He	-0.035	0.0002	10.00	0.0044	0.000309
Tl	205	3	He	-0.002	0.0009	210.01	0.0276	0.001005
Tl	205	3	He	0.008	0.0012	270.02	0.0276	0.001005
Tl	205	3	He	-0.005	0.0009	190.01	0.0276	0.001005
Pb	208	3	He	-0.005	0.002	210.01	0.0364	0.002176
Pb	208	3	He	0.012	0.0026	330.02	0.0364	0.002176
Pb	208	3	He	-0.007	0.0019	220.01	0.0364	0.002176
U	238	3	He	0	0.0002	50.00	0.0421	0.00024
U	238	3	He	0	0.0002	50.00	0.0421	0.00024
U	238	3	He	0.001	0.0003	60.00	0.0421	0.00024
Sc	45	1	No Gas			3295523.70		
Sc	45	1	No Gas			3249515.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3178502.77		
Ge	72	1	No Gas			1461747.32		
Ge	72	1	No Gas			1449307.79		
Ge	72	1	No Gas			1408291.70		
Sc	45	2	H2			189592.73		
Sc	45	2	H2			201052.85		
Sc	45	2	H2			195487.89		
Ge	72	2	H2			162052.74		
Ge	72	2	H2			164873.77		
Ge	72	2	H2			162103.23		
In	115	2	H2			420948.82		
In	115	2	H2			443785.70		
In	115	2	H2			435174.17		
Sc	45	3	He			39624.26		
Sc	45	3	He			39604.69		
Sc	45	3	He			40727.61		
Ge	72	3	He			71065.92		
Ge	72	3	He			72391.72		
Ge	72	3	He			73407.70		
In	115	3	He			64016.75		
In	115	3	He			65281.95		
In	115	3	He			64499.48		
Tb	159	3	He			285156.21		
Tb	159	3	He			286470.89		
Tb	159	3	He			286372.07		
Bi	209	3	He			222571.23		
Bi	209	3	He			221726.97		
Bi	209	3	He			222275.37		

Quantitation Report

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Acq Time	2023-08-10 07:43:41
Sample Name	STD1 4674033
Sample Type	CalStd
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

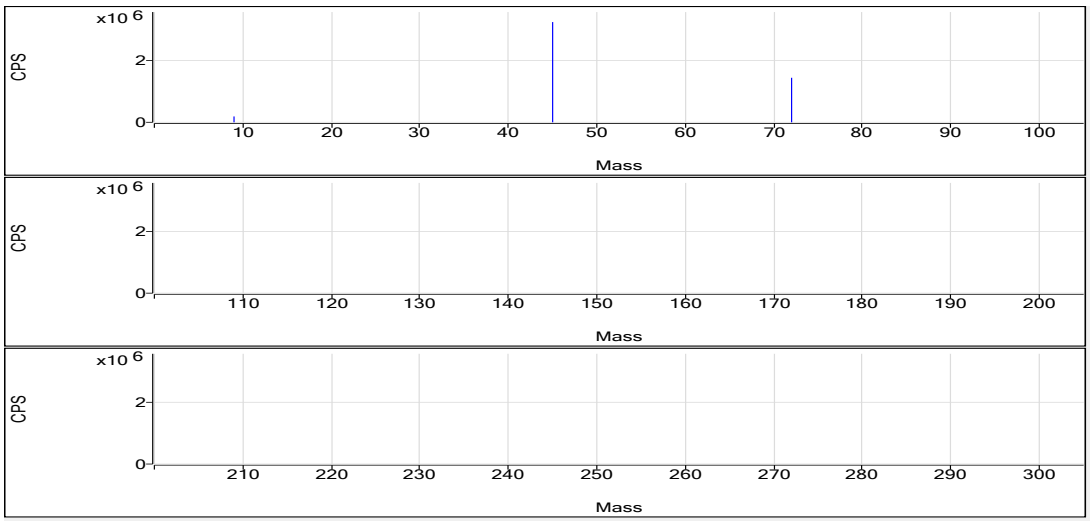
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	100.000	ppb	5.1	187850.85	0.1315	Pulse	0.5000	3
Se	78	72	H2	100.000	ppb	3.2	6430.11	0.0389	Pulse	1.5000	3
Na	23	72	He	10000.000	ppb	1.0	1269293.03	17.2847	Pulse	0.1000	3
Mg	24	72	He	10000.000	ppb	1.0	619490.81	8.4359	Pulse	0.1000	3
Al	27	72	He	10000.000	ppb	1.1	177344.93	2.4150	Pulse	0.1000	3
K	39	72	He	10000.000	ppb	0.2	416082.10	5.6658	Pulse	0.1000	3
Ca	44	72	He	10000.000	ppb	3.8	22928.63	0.3122	Pulse	0.1000	3
Ti	47	72	He	10000.000	ppb	0.9	184179.42	2.5081	Pulse	0.1000	3
V	51	72	He	1000.000	ppb	0.9	859559.81	11.7051	Pulse	0.5000	3
Cr	52	72	He	1000.000	ppb	0.6	1120092.69	15.2527	Pulse	0.1000	3
Mn	55	72	He	1000.000	ppb	0.9	434460.28	5.9163	Pulse	0.1000	3
Fe	57	72	He	10000.000	ppb	0.6	213043.23	2.9011	Pulse	0.1000	3
Co	59	72	He	1000.000	ppb	0.5	2240790.49	30.5136	Pulse	0.1000	3
Ni	60	72	He	1000.000	ppb	1.2	646387.26	8.8023	Pulse	0.1000	3
Cu	63	72	He	1000.000	ppb	0.6	1831635.29	24.9421	Pulse	0.1000	3
Zn	66	72	He	1000.000	ppb	1.0	180767.18	2.4616	Pulse	0.1000	3
As	75	72	He	1000.000	ppb	1.5	127744.59	1.7396	Pulse	0.5000	3
Sr	88	115	He	100.000	ppb	1.9	50587.37	0.7825	Pulse	0.1000	3
Mo	98	115	He	100.000	ppb	0.3	142399.16	2.2027	Pulse	0.1000	3
Ag	107	115	He	100.000	ppb	1.4	294158.91	4.5505	Pulse	0.1000	3
Cd	111	115	He	100.000	ppb	0.9	31034.81	0.4801	Pulse	0.5000	3
Sn	120	115	He	100.000	ppb	0.6	93180.16	1.4414	Pulse	0.1000	3
Sb	121	115	He	100.000	ppb	1.5	80204.47	1.2408	Pulse	0.1000	3
Ba	137	115	He	1000.000	ppb	1.2	282838.66	4.3751	Pulse	0.1000	3
Tl	205	209	He	100.000	ppb	1.5	623982.18	2.7654	Pulse	0.1000	3
Pb	208	209	He	100.000	ppb	0.6	821787.91	3.6419	Pulse	0.1000	3
U	238	209	He	100.000	ppb	1.5	949233.21	4.2070	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3218469.33	2.0	99.3	Pulse	0.1000	3
No Gas	Ge	72	1429778.26	1.8	99.3	Pulse	0.1000	3
H2	Sc	45	197894.53	1.3	101.3	Pulse	0.1000	3
H2	Ge	72	165103.27	0.2	101.3	Pulse	0.1000	3
H2	In	115	440856.58	1.5	101.7	Pulse	0.1000	3
He	Sc	45	41211.95	1.8	103.1	Pulse	0.1000	3
He	Ge	72	73437.41	0.6	101.6	Pulse	0.1000	3
He	In	115	64650.01	1.3	100.1	Pulse	0.1000	3
He	Tb	159	288053.63	0.5	100.7	Pulse	0.1000	3
He	Bi	209	225656.44	1.0	101.6	Pulse	0.1000	3

No Gas



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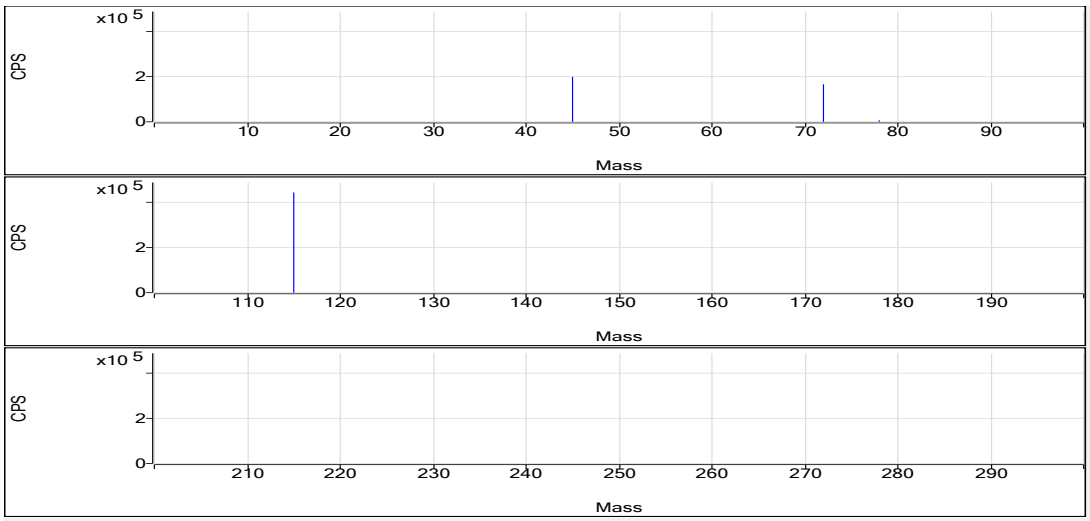
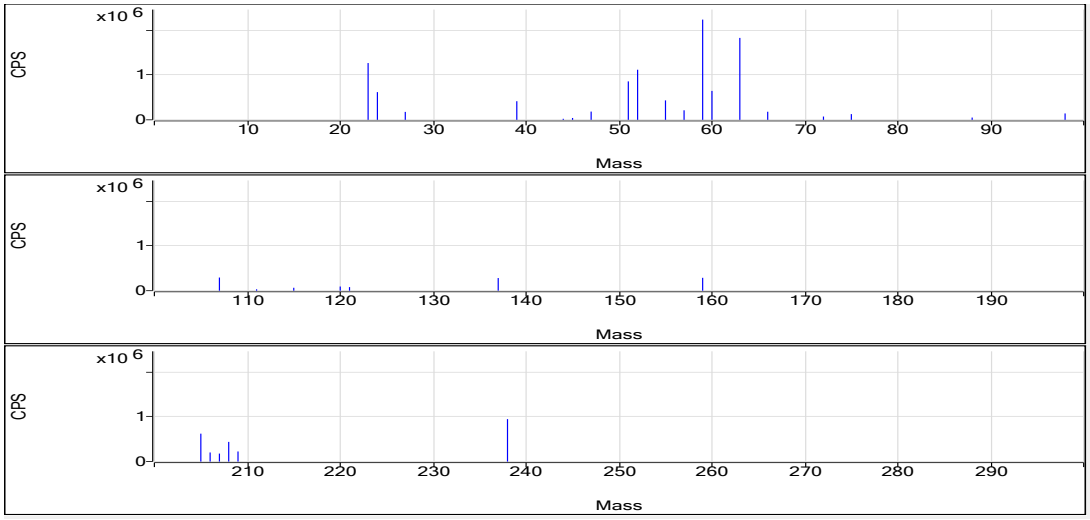


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	94.382	0.1241	179583.27	0.0013	4.694E-05
Be	9	1	No Gas	101.174	0.133	191767.59	0.0013	4.694E-05
Be	9	1	No Gas	104.444	0.1373	192201.69	0.0013	4.694E-05
Se	78	2	H2	102.45	0.0399	6570.17	0.0004	1.089E-05
Se	78	2	H2	96.424	0.0376	6206.67	0.0004	1.089E-05
Se	78	2	H2	101.126	0.0394	6513.48	0.0004	1.089E-05
Na	23	3	He	9906.135	17.1234	1265419.67	0.0017	0.1065
Na	23	3	He	9997.359	17.2801	1268312.40	0.0017	0.1065
Na	23	3	He	10096.506	17.4504	1274147.01	0.0017	0.1065
Mg	24	3	He	9963.232	8.4049	621118.66	0.0008	0.004846
Mg	24	3	He	9926.703	8.3741	614632.49	0.0008	0.004846
Mg	24	3	He	10110.066	8.5287	622721.28	0.0008	0.004846
Al	27	3	He	9927.548	2.3975	177176.19	0.0002	0.001063
Al	27	3	He	9948.19	2.4025	176336.52	0.0002	0.001063
Al	27	3	He	10124.261	2.445	178522.09	0.0002	0.001063
K	39	3	He	10022.567	5.6782	419620.03	0.0006	0.1436
K	39	3	He	9997.461	5.6644	415747.61	0.0006	0.1436
K	39	3	He	9979.972	5.6547	412878.67	0.0006	0.1436
Ca	44	3	He	10273.478	0.3207	23699.98	0	0.001611
Ca	44	3	He	9562.105	0.2986	21917.02	0	0.001611
Ca	44	3	He	10164.417	0.3173	23168.90	0	0.001611
Ti	47	3	He	9904.152	2.484	183569.61	0.0003	0.0002737
Ti	47	3	He	10019.134	2.5129	184437.13	0.0003	0.0002737
Ti	47	3	He	10076.713	2.5273	184531.52	0.0003	0.0002737
V	51	3	He	991.02	11.6	857241.38	0.0117	0.007326
V	51	3	He	1000.337	11.709	859408.56	0.0117	0.007326
V	51	3	He	1008.643	11.8062	862029.50	0.0117	0.007326
Cr	52	3	He	995.92	15.1905	1122578.73	0.0152	0.02538
Cr	52	3	He	997.758	15.2185	1116995.61	0.0152	0.02538
Cr	52	3	He	1006.322	15.3489	1120703.73	0.0152	0.02538
Mn	55	3	He	990.065	5.8576	432878.51	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1002.25	5.9296	435212.30	0.0059	0.01385
Mn	55	3	He	1007.686	5.9616	435290.03	0.0059	0.01385
Fe	57	3	He	9935.14	2.8823	212999.78	0.0003	0.003918
Fe	57	3	He	10057.59	2.9177	214154.47	0.0003	0.003918
Fe	57	3	He	10007.27	2.9032	211975.43	0.0003	0.003918
Co	59	3	He	994.719	30.3524	2243043.40	0.0305	0.003084
Co	59	3	He	999.882	30.51	2239346.06	0.0305	0.003084
Co	59	3	He	1005.399	30.6783	2239982.00	0.0305	0.003084
Ni	60	3	He	988.775	8.7036	643195.19	0.0088	0.009003
Ni	60	3	He	998.258	8.787	644939.72	0.0088	0.009003
Ni	60	3	He	1012.967	8.9163	651026.87	0.0088	0.009003
Cu	63	3	He	993.602	24.7825	1831425.44	0.0249	0.004937
Cu	63	3	He	1000.881	24.964	1832287.32	0.0249	0.004937
Cu	63	3	He	1005.517	25.0796	1831193.10	0.0249	0.004937
Zn	66	3	He	992.908	2.4442	180624.67	0.0025	0.004836
Zn	66	3	He	995.521	2.4506	179866.97	0.0025	0.004836
Zn	66	3	He	1011.571	2.49	181809.90	0.0025	0.004836
As	75	3	He	982.909	1.7099	126360.17	0.0017	0.0004347
As	75	3	He	1005.275	1.7488	128355.53	0.0017	0.0004347
As	75	3	He	1011.816	1.7602	128518.06	0.0017	0.0004347
Sr	88	3	He	97.864	0.7658	49567.07	0.0078	0.0007762
Sr	88	3	He	100.994	0.7903	50400.26	0.0078	0.0007762
Sr	88	3	He	101.142	0.7914	51794.78	0.0078	0.0007762
Mo	98	3	He	99.966	2.2019	142523.45	0.022	0.0005162
Mo	98	3	He	100.327	2.2099	140938.66	0.022	0.0005162
Mo	98	3	He	99.708	2.1962	143735.38	0.022	0.0005162
Ag	107	3	He	99.009	4.5054	291621.50	0.0455	0.0004641
Ag	107	3	He	101.655	4.6258	295019.47	0.0455	0.0004641
Ag	107	3	He	99.336	4.5203	295835.76	0.0455	0.0004641
Cd	111	3	He	99.8	0.4791	31012.09	0.0048	5.152E-05
Cd	111	3	He	101.012	0.4849	30927.86	0.0048	5.152E-05
Cd	111	3	He	99.188	0.4762	31164.47	0.0048	5.152E-05
Sn	120	3	He	99.821	1.4388	93130.67	0.0143	0.01559
Sn	120	3	He	100.714	1.4516	92575.84	0.0143	0.01559
Sn	120	3	He	99.465	1.4338	93833.97	0.0143	0.01559
Sb	121	3	He	99.839	1.2388	80180.63	0.0124	0.000258
Sb	121	3	He	101.555	1.26	80361.86	0.0124	0.000258
Sb	121	3	He	98.606	1.2235	80070.91	0.0124	0.000258
Ba	137	3	He	986.889	4.3177	279474.41	0.0044	0.000309
Ba	137	3	He	1010.482	4.421	281954.94	0.0044	0.000309
Ba	137	3	He	1002.628	4.3866	287086.64	0.0044	0.000309
Tl	205	3	He	98.615	2.7271	618522.37	0.0276	0.001005
Tl	205	3	He	99.774	2.7592	626633.47	0.0276	0.001005
Tl	205	3	He	101.611	2.81	626790.69	0.0276	0.001005
Pb	208	3	He	99.768	3.6335	441855.97	0.0364	0.002176
Pb	208	3	He	99.549	3.6255	438964.17	0.0364	0.002176
Pb	208	3	He	100.683	3.6668	438909.72	0.0364	0.002176
U	238	3	He	99.13	4.1704	945849.75	0.0421	0.00024
U	238	3	He	99.089	4.1686	946730.61	0.0421	0.00024
U	238	3	He	101.781	4.2819	955119.28	0.0421	0.00024
Sc	45	1	No Gas			3284829.95		
Sc	45	1	No Gas			3217104.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3153473.70		
Ge	72	1	No Gas			1447446.07		
Ge	72	1	No Gas			1441930.60		
Ge	72	1	No Gas			1399958.10		
Sc	45	2	H2			198507.61		
Sc	45	2	H2			200162.26		
Sc	45	2	H2			195013.73		
Ge	72	2	H2			164662.07		
Ge	72	2	H2			165269.35		
Ge	72	2	H2			165378.40		
In	115	2	H2			444323.31		
In	115	2	H2			444866.05		
In	115	2	H2			433380.38		
Sc	45	3	He			42010.94		
Sc	45	3	He			40496.72		
Sc	45	3	He			41128.20		
Ge	72	3	He			73899.92		
Ge	72	3	He			73397.15		
Ge	72	3	He			73015.15		
In	115	3	He			65453.33		
In	115	3	He			64498.94		
In	115	3	He			66178.17		
Tb	159	3	He			288698.32		
Tb	159	3	He			286271.77		
Tb	159	3	He			289190.80		
Bi	209	3	He			226801.81		
Bi	209	3	He			227107.75		
Bi	209	3	He			223059.76		

Quantitation Report

Data File Name	021_ICV.d
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Sample Type	ICV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

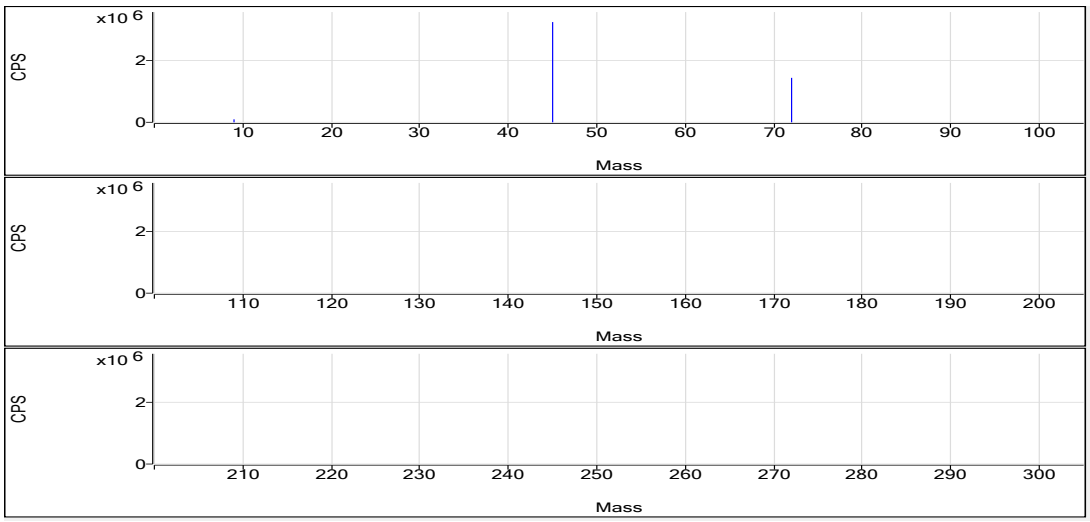
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.488	ppb	1.9	94999.73	0.0664	Pulse	0.5000	3
Se	78	72	H2	48.433	ppb	4.1	3172.58	0.0189	Pulse	1.5000	3
Na	23	72	He	4925.602	ppb	1.3	627812.48	8.5678	Pulse	0.1000	3
Mg	24	72	He	4972.980	ppb	0.7	307592.36	4.1976	Pulse	0.1000	3
Al	27	72	He	4887.818	ppb	0.5	86538.61	1.1810	Pulse	0.1000	3
K	39	72	He	4996.013	ppb	0.3	212691.20	2.9025	Pulse	0.1000	3
Ca	44	72	He	4912.333	ppb	1.5	11298.05	0.1542	Pulse	0.1000	3
Ti	47	72	He	4963.107	ppb	1.2	91223.74	1.2449	Pulse	0.1000	3
V	51	72	He	495.224	ppb	0.3	425039.77	5.8003	Pulse	0.5000	3
Cr	52	72	He	491.974	ppb	0.4	550838.71	7.5168	Pulse	0.1000	3
Mn	55	72	He	495.504	ppb	0.7	215327.64	2.9385	Pulse	0.1000	3
Fe	57	72	He	4925.871	ppb	1.0	104867.28	1.4310	Pulse	0.1000	3
Co	59	72	He	493.079	ppb	0.8	1102615.06	15.0472	Pulse	0.1000	3
Ni	60	72	He	494.154	ppb	0.2	319080.67	4.3542	Pulse	0.1000	3
Cu	63	72	He	496.363	ppb	0.4	907393.01	12.3828	Pulse	0.1000	3
Zn	66	72	He	498.772	ppb	0.8	90150.58	1.2302	Pulse	0.1000	3
As	75	72	He	485.017	ppb	0.3	61844.34	0.8440	Pulse	0.5000	3
Sr	88	115	He	48.893	ppb	0.4	24812.25	0.3830	Pulse	0.1000	3
Mo	98	115	He	48.413	ppb	1.0	69102.50	1.0666	Pulse	0.1000	3
Ag	107	115	He	48.728	ppb	0.8	143670.56	2.2176	Pulse	0.1000	3
Cd	111	115	He	53.306	ppb	0.6	16581.11	0.2559	Pulse	0.5000	3
Sn	120	115	He	50.257	ppb	2.7	47434.75	0.7322	Pulse	0.1000	3
Sb	121	115	He	52.728	ppb	3.2	42388.49	0.6543	Pulse	0.1000	3
Ba	137	115	He	493.189	ppb	1.1	139799.19	2.1579	Pulse	0.1000	3
Tl	205	209	He	49.417	ppb	0.4	308930.31	1.3671	Pulse	0.1000	3
Pb	208	209	He	49.683	ppb	0.1	409124.63	1.8105	Pulse	0.1000	3
U	238	209	He	49.913	ppb	0.6	474528.68	2.1000	Pulse	0.1000	3

ISTD Table:

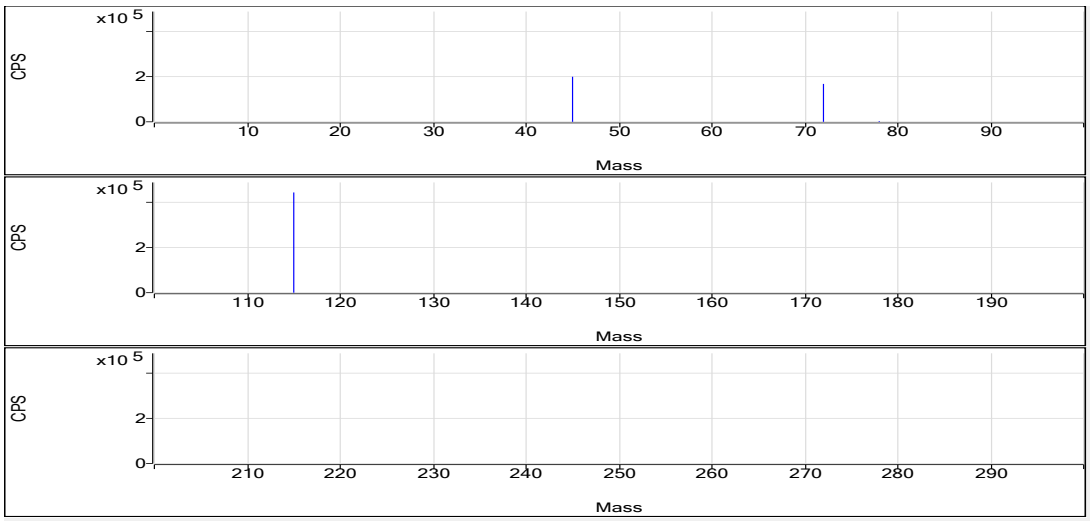
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3226086.10	1.9	99.5	Pulse	0.1000	3
No Gas	Ge	72	1430967.06	1.8	99.4	Pulse	0.1000	3
H2	Sc	45	200072.19	2.3	102.4	Pulse	0.1000	3
H2	Ge	72	168307.92	3.7	103.3	Pulse	0.1000	3
H2	In	115	444972.22	3.0	102.7	Pulse	0.1000	3
He	Sc	45	40757.61	1.1	101.9	Pulse	0.1000	3
He	Ge	72	73279.60	0.7	101.4	Pulse	0.1000	3
He	In	115	64788.87	0.9	100.3	Pulse	0.1000	3
He	Tb	159	287779.03	0.7	100.6	Pulse	0.1000	3
He	Bi	209	225974.44	0.5	101.7	Pulse	0.1000	3

No Gas

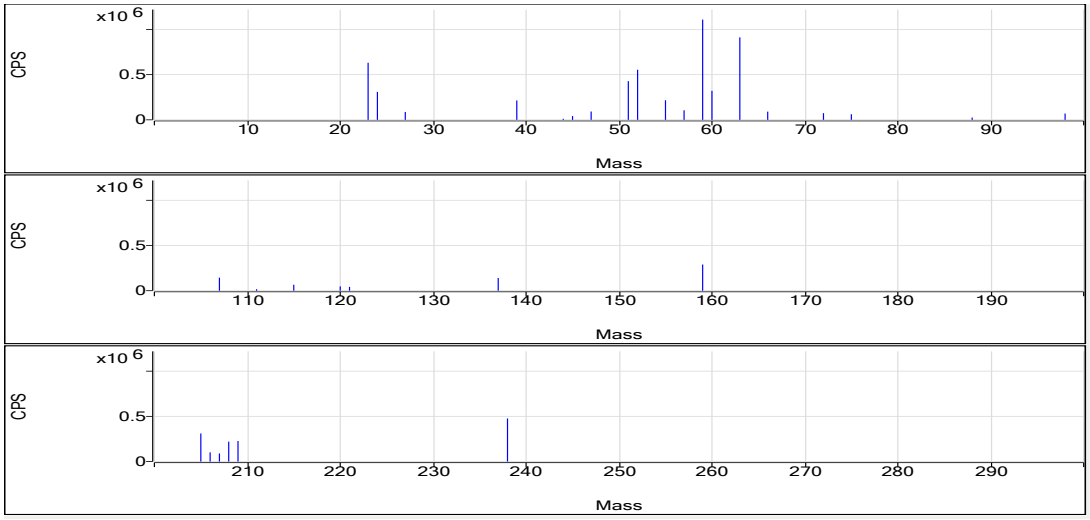


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.598	0.0652	94680.36	0.0013	4.694E-05
Be	9	1	No Gas	51.478	0.0677	97421.51	0.0013	4.694E-05
Be	9	1	No Gas	50.389	0.0663	92897.31	0.0013	4.694E-05
Se	78	2	H2	47.386	0.0185	3168.35	0.0004	1.089E-05
Se	78	2	H2	47.178	0.0184	3163.02	0.0004	1.089E-05
Se	78	2	H2	50.734	0.0198	3186.36	0.0004	1.089E-05
Na	23	3	He	4949.091	8.6081	632243.74	0.0017	0.1065
Na	23	3	He	4976.06	8.6544	629467.18	0.0017	0.1065
Na	23	3	He	4851.656	8.4407	621726.51	0.0017	0.1065
Mg	24	3	He	4999.317	4.2198	309931.99	0.0008	0.004846
Mg	24	3	He	4982.944	4.206	305915.05	0.0008	0.004846
Mg	24	3	He	4936.679	4.167	306930.03	0.0008	0.004846
Al	27	3	He	4864.852	1.1754	86330.86	0.0002	0.001063
Al	27	3	He	4909.247	1.1861	86271.08	0.0002	0.001063
Al	27	3	He	4889.357	1.1813	87013.90	0.0002	0.001063
K	39	3	He	5000.026	2.9047	213343.86	0.0006	0.1436
K	39	3	He	5010.976	2.9108	211709.68	0.0006	0.1436
K	39	3	He	4977.038	2.892	213020.06	0.0006	0.1436
Ca	44	3	He	4899.202	0.1538	11294.71	0	0.001611
Ca	44	3	He	4992.123	0.1567	11394.83	0	0.001611
Ca	44	3	He	4845.675	0.1521	11204.61	0	0.001611
Ti	47	3	He	4904.054	1.2301	90348.37	0.0003	0.0002737
Ti	47	3	He	5020.099	1.2592	91586.73	0.0003	0.0002737
Ti	47	3	He	4965.169	1.2454	91736.11	0.0003	0.0002737
V	51	3	He	494.643	5.7935	425520.47	0.0117	0.007326
V	51	3	He	497.113	5.8224	423485.34	0.0117	0.007326
V	51	3	He	493.916	5.785	426113.50	0.0117	0.007326
Cr	52	3	He	493.316	7.5372	553591.32	0.0152	0.02538
Cr	52	3	He	489.539	7.4797	544026.12	0.0152	0.02538
Cr	52	3	He	493.068	7.5335	554898.70	0.0152	0.02538
Mn	55	3	He	493.499	2.9267	214958.30	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	499.574	2.9626	215476.60	0.0059	0.01385
Mn	55	3	He	493.439	2.9263	215548.02	0.0059	0.01385
Fe	57	3	He	4900.486	1.4237	104564.23	0.0003	0.003918
Fe	57	3	He	4897.166	1.4227	103477.78	0.0003	0.003918
Fe	57	3	He	4979.963	1.4467	106559.83	0.0003	0.003918
Co	59	3	He	490.367	14.9644	1099098.26	0.0305	0.003084
Co	59	3	He	497.473	15.1812	1104184.20	0.0305	0.003084
Co	59	3	He	491.397	14.9959	1104562.72	0.0305	0.003084
Ni	60	3	He	494.611	4.3583	320103.86	0.0088	0.009003
Ni	60	3	He	492.881	4.3431	315885.25	0.0088	0.009003
Ni	60	3	He	494.97	4.3614	321252.91	0.0088	0.009003
Cu	63	3	He	496	12.3738	908820.69	0.0249	0.004937
Cu	63	3	He	498.273	12.4304	904108.03	0.0249	0.004937
Cu	63	3	He	494.817	12.3442	909250.30	0.0249	0.004937
Zn	66	3	He	502.992	1.2406	91116.71	0.0025	0.004836
Zn	66	3	He	495.505	1.2222	88893.07	0.0025	0.004836
Zn	66	3	He	497.821	1.2279	90441.97	0.0025	0.004836
As	75	3	He	483.864	0.842	61839.61	0.0017	0.0004347
As	75	3	He	486.853	0.8472	61616.62	0.0017	0.0004347
As	75	3	He	484.332	0.8428	62076.79	0.0017	0.0004347
Sr	88	3	He	49.099	0.3846	24822.35	0.0078	0.0007762
Sr	88	3	He	48.787	0.3822	24591.65	0.0078	0.0007762
Sr	88	3	He	48.791	0.3822	25022.75	0.0078	0.0007762
Mo	98	3	He	48.593	1.0706	69099.46	0.022	0.0005162
Mo	98	3	He	48.801	1.0752	69189.55	0.022	0.0005162
Mo	98	3	He	47.845	1.0541	69018.48	0.022	0.0005162
Ag	107	3	He	48.502	2.2073	142465.51	0.0455	0.0004641
Ag	107	3	He	49.161	2.2373	143970.95	0.0455	0.0004641
Ag	107	3	He	48.52	2.2081	144575.23	0.0455	0.0004641
Cd	111	3	He	53.335	0.2561	16527.71	0.0048	5.152E-05
Cd	111	3	He	53.617	0.2574	16565.74	0.0048	5.152E-05
Cd	111	3	He	52.965	0.2543	16649.89	0.0048	5.152E-05
Sn	120	3	He	51.747	0.7534	48625.34	0.0143	0.01559
Sn	120	3	He	49.137	0.7162	46086.87	0.0143	0.01559
Sn	120	3	He	49.888	0.7269	47592.04	0.0143	0.01559
Sb	121	3	He	54.497	0.6763	43649.14	0.0124	0.000258
Sb	121	3	He	52.536	0.652	41953.82	0.0124	0.000258
Sb	121	3	He	51.152	0.6348	41562.52	0.0124	0.000258
Ba	137	3	He	496.118	2.1707	140103.52	0.0044	0.000309
Ba	137	3	He	496.495	2.1724	139793.14	0.0044	0.000309
Ba	137	3	He	486.954	2.1306	139500.90	0.0044	0.000309
Tl	205	3	He	49.637	1.3732	309220.95	0.0276	0.001005
Tl	205	3	He	49.217	1.3616	307078.94	0.0276	0.001005
Tl	205	3	He	49.397	1.3666	310491.05	0.0276	0.001005
Pb	208	3	He	49.621	1.8082	218007.26	0.0364	0.002176
Pb	208	3	He	49.719	1.8118	218314.33	0.0364	0.002176
Pb	208	3	He	49.708	1.8114	221250.88	0.0364	0.002176
U	238	3	He	50.242	2.1138	475992.69	0.0421	0.00024
U	238	3	He	49.787	2.0946	472406.87	0.0421	0.00024
U	238	3	He	49.71	2.0914	475186.48	0.0421	0.00024
Sc	45	1	No Gas			3278891.83		
Sc	45	1	No Gas			3238362.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3161004.33		
Ge	72	1	No Gas			1451686.07		
Ge	72	1	No Gas			1439205.92		
Ge	72	1	No Gas			1402009.20		
Sc	45	2	H2			202390.04		
Sc	45	2	H2			203139.49		
Sc	45	2	H2			194687.05		
Ge	72	2	H2			171620.70		
Ge	72	2	H2			172089.72		
Ge	72	2	H2			161213.34		
In	115	2	H2			456507.18		
In	115	2	H2			447823.27		
In	115	2	H2			430586.20		
Sc	45	3	He			40547.24		
Sc	45	3	He			40446.71		
Sc	45	3	He			41278.88		
Ge	72	3	He			73447.46		
Ge	72	3	He			72733.46		
Ge	72	3	He			73657.88		
In	115	3	He			64921.58		
In	115	3	He			64709.89		
In	115	3	He			65845.12		
Tb	159	3	He			289100.70		
Tb	159	3	He			285472.20		
Tb	159	3	He			288764.19		
Bi	209	3	He			225183.86		
Bi	209	3	He			225531.83		
Bi	209	3	He			227207.63		

Quantitation Report

Data File Name	023_ICB.d
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Sample Type	ICB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

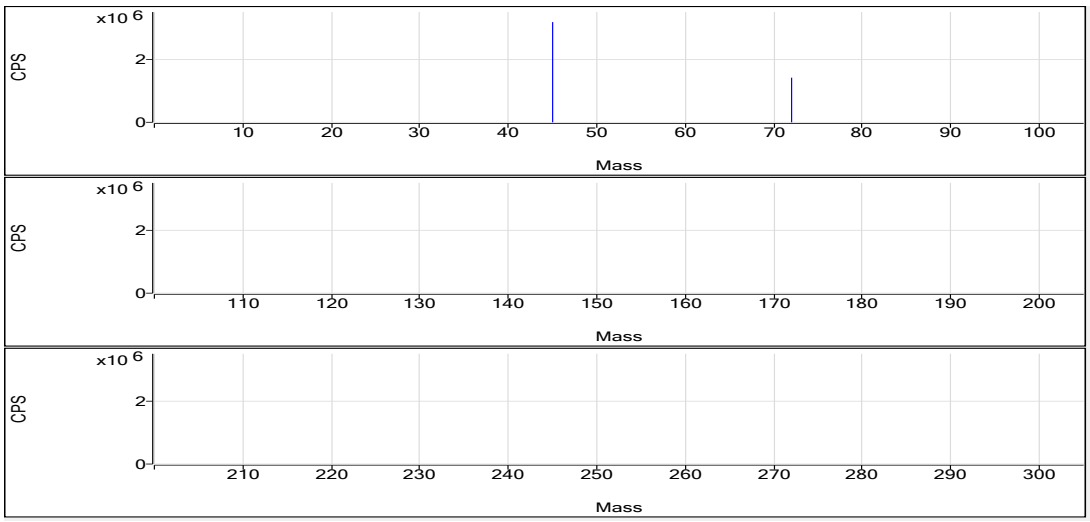
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.007	ppb	79.1	80.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.030	ppb	96.7	3.55	0.0000	Pulse	1.5000	3
Na	23	72	He	0.552	ppb	920.6	7542.18	0.1074	Pulse	0.1000	3
Mg	24	72	He	0.836	ppb	27.8	390.02	0.0056	Pulse	0.1000	3
Al	27	72	He	0.521	ppb	190.8	83.33	0.0012	Pulse	0.1000	3
K	39	72	He	5.883	ppb	401.8	10313.99	0.1469	Pulse	0.1000	3
Ca	44	72	He	10.849	ppb	97.7	136.68	0.0019	Pulse	0.1000	3
Ti	47	72	He	1.178	ppb	126.7	40.00	0.0006	Pulse	0.1000	3
V	51	72	He	0.003	ppb	1492.1	517.34	0.0074	Pulse	0.5000	3
Cr	52	72	He	0.115	ppb	24.6	1906.85	0.0271	Pulse	0.1000	3
Mn	55	72	He	0.106	ppb	365.0	1016.74	0.0145	Pulse	0.1000	3
Fe	57	72	He	2.326	ppb	207.1	323.35	0.0046	Pulse	0.1000	3
Co	59	72	He	0.073	ppb	25.9	373.35	0.0053	Pulse	0.1000	3
Ni	60	72	He	0.173	ppb	34.3	740.04	0.0105	Pulse	0.1000	3
Cu	63	72	He	0.105	ppb	47.7	530.03	0.0076	Pulse	0.1000	3
Zn	66	72	He	-0.151	ppb	N/A	313.35	0.0045	Pulse	0.1000	3
As	75	72	He	0.088	ppb	69.0	41.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.086	ppb	37.9	90.00	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.018	ppb	61.5	56.67	0.0009	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	104.7	53.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	177.7	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.171	ppb	17.8	1120.12	0.0180	Pulse	0.1000	3
Sb	121	115	He	0.066	ppb	61.9	66.67	0.0011	Pulse	0.1000	3
Ba	137	115	He	0.125	ppb	14.4	53.33	0.0009	Pulse	0.1000	3
Tl	205	209	He	0.080	ppb	12.1	710.04	0.0032	Pulse	0.1000	3
Pb	208	209	He	0.009	ppb	90.9	556.69	0.0025	Pulse	0.1000	3
U	238	209	He	0.013	ppb	34.7	170.01	0.0008	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3214459.54	1.0	99.2	Pulse	0.1000	3
No Gas	Ge	72	1430539.77	1.0	99.4	Pulse	0.1000	3
H2	Sc	45	188120.89	3.2	96.3	Pulse	0.1000	3
H2	Ge	72	158312.69	3.4	97.1	Pulse	0.1000	3
H2	In	115	426038.59	2.0	98.3	Pulse	0.1000	3
He	Sc	45	39975.25	0.8	100.0	Pulse	0.1000	3
He	Ge	72	70288.52	1.8	97.2	Pulse	0.1000	3
He	In	115	62133.10	1.6	96.2	Pulse	0.1000	3
He	Tb	159	278019.18	0.1	97.2	Pulse	0.1000	3
He	Bi	209	220883.20	0.8	99.4	Pulse	0.1000	3

No Gas



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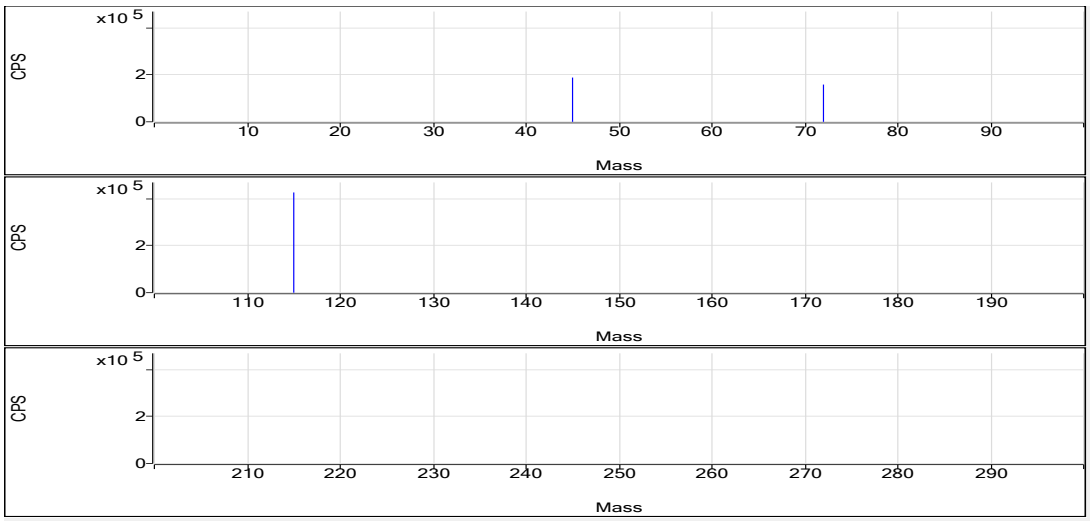
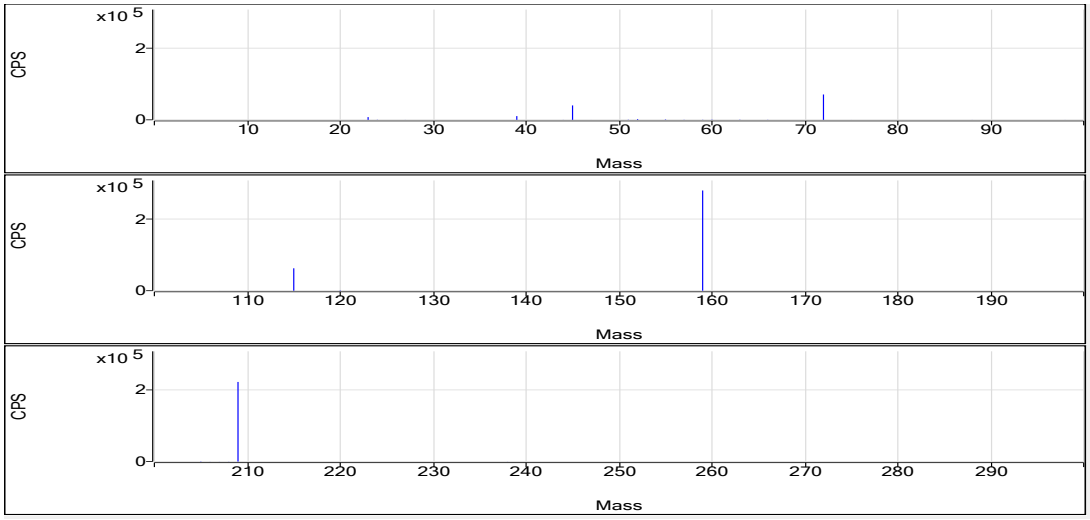


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	70.00	0.0013	4.694E-05
Be	9	1	No Gas	0.013	0.0001	90.00	0.0013	4.694E-05
Be	9	1	No Gas	0.008	0.0001	82.00	0.0013	4.694E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.062	0	5.33	0.0004	1.089E-05
Na	23	3	He	5.531	0.116	7992.40	0.0017	0.1065
Na	23	3	He	0.746	0.1077	7602.22	0.0017	0.1065
Na	23	3	He	-4.622	0.0985	7031.91	0.0017	0.1065
Mg	24	3	He	0.964	0.0057	390.01	0.0008	0.004846
Mg	24	3	He	0.976	0.0057	400.02	0.0008	0.004846
Mg	24	3	He	0.567	0.0053	380.02	0.0008	0.004846
Al	27	3	He	1.608	0.0015	100.00	0.0002	0.001063
Al	27	3	He	0.294	0.0011	80.00	0.0002	0.001063
Al	27	3	He	-0.34	0.001	70.00	0.0002	0.001063
K	39	3	He	29.532	0.1599	11024.50	0.0006	0.1436
K	39	3	He	5.859	0.1469	10363.99	0.0006	0.1436
K	39	3	He	-17.742	0.1338	9553.48	0.0006	0.1436
Ca	44	3	He	22.878	0.0023	160.01	0	0.001611
Ca	44	3	He	2.892	0.0017	120.01	0	0.001611
Ca	44	3	He	6.778	0.0018	130.01	0	0.001611
Ti	47	3	He	0.644	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	2.864	0.001	70.00	0.0003	0.0002737
Ti	47	3	He	0.026	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.058	0.008	552.01	0.0117	0.007326
V	51	3	He	-0.04	0.0069	484.01	0.0117	0.007326
V	51	3	He	-0.008	0.0072	516.01	0.0117	0.007326
Cr	52	3	He	0.124	0.0273	1880.18	0.0152	0.02538
Cr	52	3	He	0.083	0.0266	1880.18	0.0152	0.02538
Cr	52	3	He	0.136	0.0275	1960.20	0.0152	0.02538
Mn	55	3	He	0.234	0.0152	1050.08	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.414	0.0163	1150.08	0.0059	0.01385
Mn	55	3	He	-0.329	0.0119	850.05	0.0059	0.01385
Fe	57	3	He	-2.004	0.0033	230.01	0.0003	0.003918
Fe	57	3	He	7.512	0.0061	430.02	0.0003	0.003918
Fe	57	3	He	1.469	0.0043	310.02	0.0003	0.003918
Co	59	3	He	0.089	0.0058	400.02	0.0305	0.003084
Co	59	3	He	0.052	0.0047	330.01	0.0305	0.003084
Co	59	3	He	0.078	0.0055	390.02	0.0305	0.003084
Ni	60	3	He	0.115	0.01	690.03	0.0088	0.009003
Ni	60	3	He	0.233	0.0111	780.04	0.0088	0.009003
Ni	60	3	He	0.171	0.0105	750.05	0.0088	0.009003
Cu	63	3	He	0.163	0.009	620.03	0.0249	0.004937
Cu	63	3	He	0.075	0.0068	480.02	0.0249	0.004937
Cu	63	3	He	0.077	0.0069	490.03	0.0249	0.004937
Zn	66	3	He	0.217	0.0054	370.02	0.0025	0.004836
Zn	66	3	He	-0.469	0.0037	260.01	0.0025	0.004836
Zn	66	3	He	-0.201	0.0043	310.02	0.0025	0.004836
As	75	3	He	0.034	0.0005	34.00	0.0017	0.0004347
As	75	3	He	0.076	0.0006	40.00	0.0017	0.0004347
As	75	3	He	0.153	0.0007	50.00	0.0017	0.0004347
Sr	88	3	He	0.066	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.067	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.123	0.0017	110.01	0.0078	0.0007762
Mo	98	3	He	0.028	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.006	0.0007	40.00	0.022	0.0005162
Mo	98	3	He	0.02	0.0009	60.00	0.022	0.0005162
Ag	107	3	He	0.008	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	0.03	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.144	0.0176	1090.08	0.0143	0.01559
Sn	120	3	He	0.164	0.0179	1100.08	0.0143	0.01559
Sn	120	3	He	0.204	0.0185	1170.19	0.0143	0.01559
Sb	121	3	He	0.058	0.001	60.00	0.0124	0.000258
Sb	121	3	He	0.111	0.0016	100.01	0.0124	0.000258
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	0.114	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.116	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.146	0.0009	60.00	0.0044	0.000309
Tl	205	3	He	0.09	0.0035	770.05	0.0276	0.001005
Tl	205	3	He	0.079	0.0032	700.04	0.0276	0.001005
Tl	205	3	He	0.071	0.003	660.04	0.0276	0.001005
Pb	208	3	He	0.006	0.0024	300.01	0.0364	0.002176
Pb	208	3	He	0.003	0.0023	240.01	0.0364	0.002176
Pb	208	3	He	0.019	0.0029	310.02	0.0364	0.002176
U	238	3	He	0.008	0.0006	130.00	0.0421	0.00024
U	238	3	He	0.017	0.001	210.01	0.0421	0.00024
U	238	3	He	0.012	0.0008	170.01	0.0421	0.00024
Sc	45	1	No Gas			3229873.39		
Sc	45	1	No Gas			3176013.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3237492.14		
Ge	72	1	No Gas			1438386.54		
Ge	72	1	No Gas			1414006.85		
Ge	72	1	No Gas			1439225.92		
Sc	45	2	H2			193603.57		
Sc	45	2	H2			189045.60		
Sc	45	2	H2			181713.49		
Ge	72	2	H2			163427.49		
Ge	72	2	H2			158726.88		
Ge	72	2	H2			152783.70		
In	115	2	H2			435423.59		
In	115	2	H2			423849.29		
In	115	2	H2			418842.88		
Sc	45	3	He			39684.27		
Sc	45	3	He			39945.06		
Sc	45	3	He			40296.43		
Ge	72	3	He			68925.08		
Ge	72	3	He			70562.61		
Ge	72	3	He			71377.88		
In	115	3	He			61777.04		
In	115	3	He			61374.87		
In	115	3	He			63273.60		
Tb	159	3	He			278382.05		
Tb	159	3	He			277728.45		
Tb	159	3	He			277947.03		
Bi	209	3	He			220352.01		
Bi	209	3	He			219358.73		
Bi	209	3	He			222938.86		

Quantitation Report

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Sample Type	CRI
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

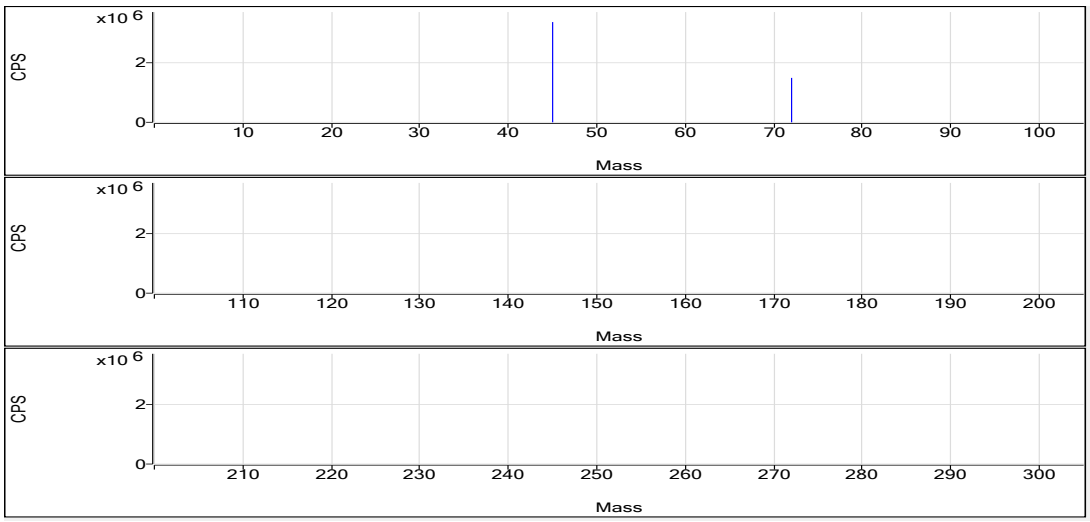
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.436	ppb	4.5	920.70	0.0006	Pulse	0.5000	3
Se	78	72	H2	1.052	ppb	6.5	67.33	0.0004	Pulse	1.5000	3
Na	23	72	He	206.978	ppb	1.8	32967.31	0.4620	Pulse	0.1000	3
Mg	24	72	He	49.381	ppb	2.7	3317.14	0.0465	Pulse	0.1000	3
Al	27	72	He	24.807	ppb	6.1	503.36	0.0071	Pulse	0.1000	3
K	39	72	He	207.795	ppb	16.3	18425.34	0.2584	Pulse	0.1000	3
Ca	44	72	He	104.700	ppb	20.7	346.68	0.0049	Pulse	0.1000	3
Ti	47	72	He	12.493	ppb	24.0	243.35	0.0034	Pulse	0.1000	3
V	51	72	He	2.024	ppb	6.3	2212.18	0.0310	Pulse	0.5000	3
Cr	52	72	He	2.380	ppb	7.4	4397.48	0.0616	Pulse	0.1000	3
Mn	55	72	He	1.747	ppb	12.6	1723.50	0.0242	Pulse	0.1000	3
Fe	57	72	He	48.523	ppb	12.3	1283.44	0.0180	Pulse	0.1000	3
Co	59	72	He	0.545	ppb	20.4	1406.78	0.0197	Pulse	0.1000	3
Ni	60	72	He	1.088	ppb	23.1	1323.44	0.0186	Pulse	0.1000	3
Cu	63	72	He	1.043	ppb	6.9	2210.25	0.0310	Pulse	0.1000	3
Zn	66	72	He	11.630	ppb	10.1	2383.62	0.0334	Pulse	0.1000	3
As	75	72	He	1.959	ppb	4.5	274.00	0.0038	Pulse	0.5000	3
Sr	88	115	He	1.087	ppb	16.7	583.37	0.0093	Pulse	0.1000	3
Mo	98	115	He	0.525	ppb	12.3	760.06	0.0121	Pulse	0.1000	3
Ag	107	115	He	0.541	ppb	5.1	1576.81	0.0251	Pulse	0.1000	3
Cd	111	115	He	0.534	ppb	6.3	164.67	0.0026	Pulse	0.5000	3
Sn	120	115	He	2.068	ppb	2.4	2837.05	0.0451	Pulse	0.1000	3
Sb	121	115	He	0.983	ppb	5.9	783.39	0.0124	Pulse	0.1000	3
Ba	137	115	He	2.290	ppb	10.8	650.04	0.0103	Pulse	0.1000	3
Tl	205	209	He	0.517	ppb	5.9	3350.54	0.0153	Pulse	0.1000	3
Pb	208	209	He	0.518	ppb	4.5	4607.18	0.0210	Pulse	0.1000	3
U	238	209	He	0.997	ppb	4.4	9243.64	0.0422	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3349549.22	1.3	103.3	Pulse	0.1000	3
No Gas	Ge	72	1484443.57	1.1	103.1	Pulse	0.1000	3
H2	Sc	45	187805.23	2.4	96.1	Pulse	0.1000	3
H2	Ge	72	160306.73	1.9	98.3	Pulse	0.1000	3
H2	In	115	423651.57	1.2	97.8	Pulse	0.1000	3
He	Sc	45	40707.15	0.4	101.8	Pulse	0.1000	3
He	Ge	72	71360.67	1.7	98.7	Pulse	0.1000	3
He	In	115	62943.33	0.8	97.4	Pulse	0.1000	3
He	Tb	159	278987.81	0.1	97.5	Pulse	0.1000	3
He	Bi	209	219187.01	1.0	98.6	Pulse	0.1000	3

No Gas



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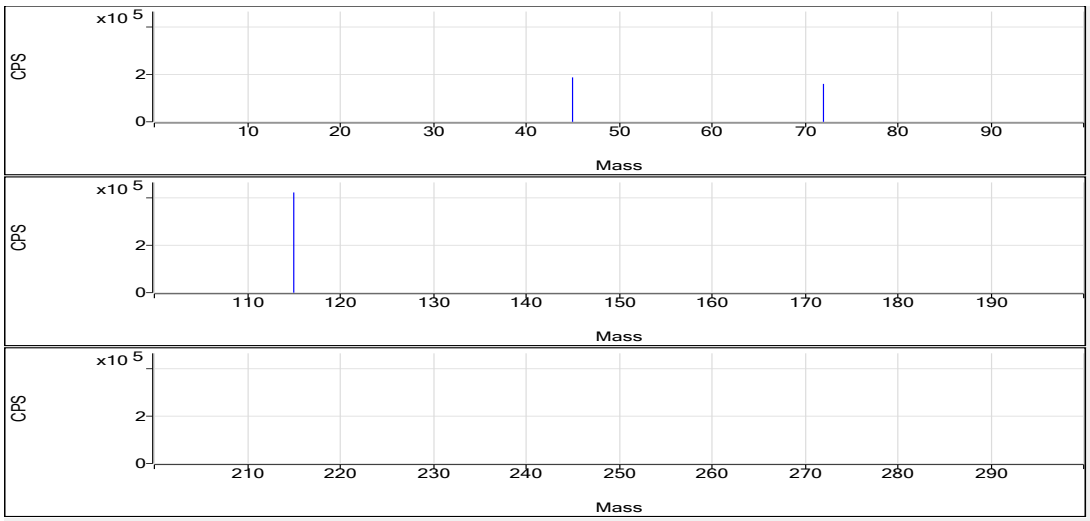
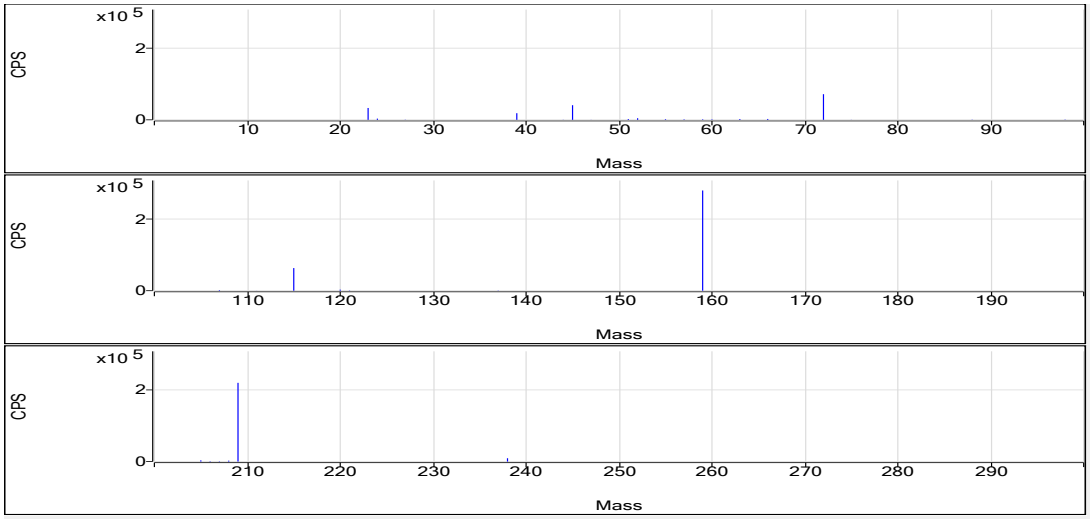


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.419	0.0006	878.03	0.0013	4.694E-05
Be	9	1	No Gas	0.432	0.0006	922.03	0.0013	4.694E-05
Be	9	1	No Gas	0.458	0.0006	962.04	0.0013	4.694E-05
Se	78	2	H2	1.069	0.0004	67.33	0.0004	1.089E-05
Se	78	2	H2	1.11	0.0004	70.67	0.0004	1.089E-05
Se	78	2	H2	0.976	0.0004	64.00	0.0004	1.089E-05
Na	23	3	He	210.321	0.4678	32827.10	0.0017	0.1065
Na	23	3	He	203.048	0.4553	32486.00	0.0017	0.1065
Na	23	3	He	207.565	0.463	33588.82	0.0017	0.1065
Mg	24	3	He	48.173	0.0455	3190.47	0.0008	0.004846
Mg	24	3	He	50.775	0.0477	3400.49	0.0008	0.004846
Mg	24	3	He	49.196	0.0463	3360.47	0.0008	0.004846
Al	27	3	He	24.522	0.007	490.02	0.0002	0.001063
Al	27	3	He	23.465	0.0067	480.02	0.0002	0.001063
Al	27	3	He	26.436	0.0074	540.03	0.0002	0.001063
K	39	3	He	230.214	0.2708	19002.70	0.0006	0.1436
K	39	3	He	224.417	0.2676	19092.89	0.0006	0.1436
K	39	3	He	168.754	0.2368	17180.43	0.0006	0.1436
Ca	44	3	He	108.709	0.005	350.02	0	0.001611
Ca	44	3	He	124.108	0.0055	390.02	0	0.001611
Ca	44	3	He	81.284	0.0041	300.01	0	0.001611
Ti	47	3	He	9.705	0.0027	190.01	0.0003	0.0002737
Ti	47	3	He	15.674	0.0042	300.02	0.0003	0.0002737
Ti	47	3	He	12.101	0.0033	240.01	0.0003	0.0002737
V	51	3	He	1.954	0.0302	2118.16	0.0117	0.007326
V	51	3	He	2.17	0.0327	2334.20	0.0117	0.007326
V	51	3	He	1.948	0.0301	2184.18	0.0117	0.007326
Cr	52	3	He	2.517	0.0637	4470.81	0.0152	0.02538
Cr	52	3	He	2.181	0.0586	4180.76	0.0152	0.02538
Cr	52	3	He	2.444	0.0626	4540.86	0.0152	0.02538
Mn	55	3	He	1.999	0.0257	1800.18	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.595	0.0233	1660.16	0.0059	0.01385
Mn	55	3	He	1.647	0.0236	1710.16	0.0059	0.01385
Fe	57	3	He	48.453	0.018	1260.11	0.0003	0.003918
Fe	57	3	He	42.592	0.0163	1160.09	0.0003	0.003918
Fe	57	3	He	54.523	0.0197	1430.11	0.0003	0.003918
Co	59	3	He	0.623	0.0221	1550.14	0.0305	0.003084
Co	59	3	He	0.418	0.0158	1130.08	0.0305	0.003084
Co	59	3	He	0.595	0.0212	1540.13	0.0305	0.003084
Ni	60	3	He	1.375	0.0211	1480.12	0.0088	0.009003
Ni	60	3	He	0.984	0.0177	1260.09	0.0088	0.009003
Ni	60	3	He	0.905	0.017	1230.11	0.0088	0.009003
Cu	63	3	He	0.962	0.0289	2030.22	0.0249	0.004937
Cu	63	3	He	1.067	0.0315	2250.25	0.0249	0.004937
Cu	63	3	He	1.101	0.0324	2350.28	0.0249	0.004937
Zn	66	3	He	12.533	0.0356	2500.31	0.0025	0.004836
Zn	66	3	He	10.297	0.0301	2150.23	0.0025	0.004836
Zn	66	3	He	12.061	0.0345	2500.31	0.0025	0.004836
As	75	3	He	2.061	0.004	282.01	0.0017	0.0004347
As	75	3	He	1.91	0.0038	268.00	0.0017	0.0004347
As	75	3	He	1.906	0.0037	272.00	0.0017	0.0004347
Sr	88	3	He	1.074	0.0092	580.03	0.0078	0.0007762
Sr	88	3	He	0.912	0.0079	500.03	0.0078	0.0007762
Sr	88	3	He	1.275	0.0107	670.04	0.0078	0.0007762
Mo	98	3	He	0.558	0.0128	810.06	0.022	0.0005162
Mo	98	3	He	0.451	0.0104	660.05	0.022	0.0005162
Mo	98	3	He	0.566	0.013	810.06	0.022	0.0005162
Ag	107	3	He	0.518	0.024	1520.14	0.0455	0.0004641
Ag	107	3	He	0.532	0.0247	1560.14	0.0455	0.0004641
Ag	107	3	He	0.571	0.0265	1650.16	0.0455	0.0004641
Cd	111	3	He	0.503	0.0025	156.00	0.0048	5.152E-05
Cd	111	3	He	0.53	0.0026	164.00	0.0048	5.152E-05
Cd	111	3	He	0.57	0.0028	174.00	0.0048	5.152E-05
Sn	120	3	He	2.079	0.0452	2860.38	0.0143	0.01559
Sn	120	3	He	2.013	0.0443	2800.39	0.0143	0.01559
Sn	120	3	He	2.112	0.0457	2850.38	0.0143	0.01559
Sb	121	3	He	0.923	0.0117	740.05	0.0124	0.000258
Sb	121	3	He	1.038	0.0131	830.06	0.0124	0.000258
Sb	121	3	He	0.987	0.0125	780.07	0.0124	0.000258
Ba	137	3	He	2.098	0.0095	600.04	0.0044	0.000309
Ba	137	3	He	2.569	0.0115	730.05	0.0044	0.000309
Ba	137	3	He	2.202	0.0099	620.04	0.0044	0.000309
Tl	205	3	He	0.505	0.015	3270.50	0.0276	0.001005
Tl	205	3	He	0.494	0.0147	3250.52	0.0276	0.001005
Tl	205	3	He	0.552	0.0163	3530.61	0.0276	0.001005
Pb	208	3	He	0.491	0.02	2520.35	0.0364	0.002176
Pb	208	3	He	0.529	0.0214	2490.35	0.0364	0.002176
Pb	208	3	He	0.533	0.0216	2430.33	0.0364	0.002176
U	238	3	He	1.03	0.0436	9523.85	0.0421	0.00024
U	238	3	He	0.947	0.0401	8883.33	0.0421	0.00024
U	238	3	He	1.015	0.0429	9323.73	0.0421	0.00024
Sc	45	1	No Gas			3317306.83		
Sc	45	1	No Gas			3398539.32		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3332801.51		
Ge	72	1	No Gas			1468623.73		
Ge	72	1	No Gas			1500583.10		
Ge	72	1	No Gas			1484123.88		
Sc	45	2	H2			186247.52		
Sc	45	2	H2			184234.02		
Sc	45	2	H2			192934.16		
Ge	72	2	H2			157694.12		
Ge	72	2	H2			159465.38		
Ge	72	2	H2			163760.69		
In	115	2	H2			421164.56		
In	115	2	H2			420115.31		
In	115	2	H2			429674.84		
Sc	45	3	He			40697.15		
Sc	45	3	He			40546.60		
Sc	45	3	He			40877.70		
Ge	72	3	He			70180.81		
Ge	72	3	He			71357.59		
Ge	72	3	He			72543.60		
In	115	3	He			63263.59		
In	115	3	He			63242.95		
In	115	3	He			62389.82		
Tb	159	3	He			279220.21		
Tb	159	3	He			279165.60		
Tb	159	3	He			278577.61		
Bi	209	3	He			218617.61		
Bi	209	3	He			221719.08		
Bi	209	3	He			217224.35		

Quantitation Report

Data File Name	027ICSA.d
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Sample Type	ICSA
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

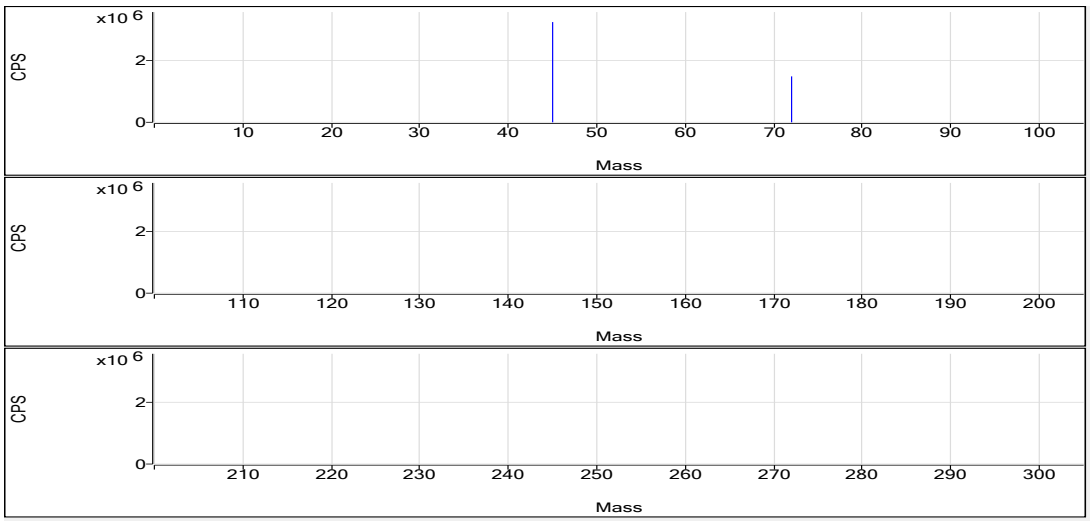
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.011	ppb	N/A	48.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.069	ppb	14.0	6.00	0.0000	Pulse	1.5000	3
Na	23	72	He	254550.711	ppb	0.4	31859793.69	437.3790	Analog	0.1000	3
Mg	24	72	He	104194.359	ppb	0.6	6399185.11	87.8513	Analog	0.1000	3
Al	27	72	He	100306.645	ppb	0.2	1763884.87	24.2145	Pulse	0.1000	3
K	39	72	He	98894.354	ppb	0.2	3988565.26	54.7543	Pulse	0.1000	3
Ca	44	72	He	287813.777	ppb	0.2	651311.42	8.9411	Pulse	0.1000	3
Ti	47	72	He	2030.463	ppb	0.9	37114.39	0.5095	Pulse	0.1000	3
V	51	72	He	-0.064	ppb	N/A	479.34	0.0066	Pulse	0.5000	3
Cr	52	72	He	3.142	ppb	1.5	5334.48	0.0732	Pulse	0.1000	3
Mn	55	72	He	-0.435	ppb	N/A	823.38	0.0113	Pulse	0.1000	3
Fe	57	72	He	245539.249	ppb	0.6	5182368.15	71.1402	Pulse	0.1000	3
Co	59	72	He	0.188	ppb	25.2	643.37	0.0088	Pulse	0.1000	3
Ni	60	72	He	0.517	ppb	21.0	986.74	0.0135	Pulse	0.1000	3
Cu	63	72	He	0.085	ppb	19.4	513.36	0.0070	Pulse	0.1000	3
Zn	66	72	He	2.038	ppb	23.8	716.71	0.0098	Pulse	0.1000	3
As	75	72	He	0.160	ppb	34.1	52.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	2.077	ppb	9.1	1023.41	0.0170	Pulse	0.1000	3
Mo	98	115	He	2080.921	ppb	1.5	2757384.54	45.8257	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	96.8	53.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.300	ppb	20.8	90.00	0.0015	Pulse	0.5000	3
Sn	120	115	He	0.858	ppb	124.8	1676.57	0.0278	Pulse	0.1000	3
Sb	121	115	He	0.193	ppb	17.5	160.01	0.0027	Pulse	0.1000	3
Ba	137	115	He	0.588	ppb	25.7	173.34	0.0029	Pulse	0.1000	3
Tl	205	209	He	0.018	ppb	88.8	313.35	0.0015	Pulse	0.1000	3
Pb	208	209	He	0.066	ppb	40.2	953.38	0.0046	Pulse	0.1000	3
U	238	209	He	0.064	ppb	4.1	606.70	0.0029	Pulse	0.1000	3

ISTD Table:

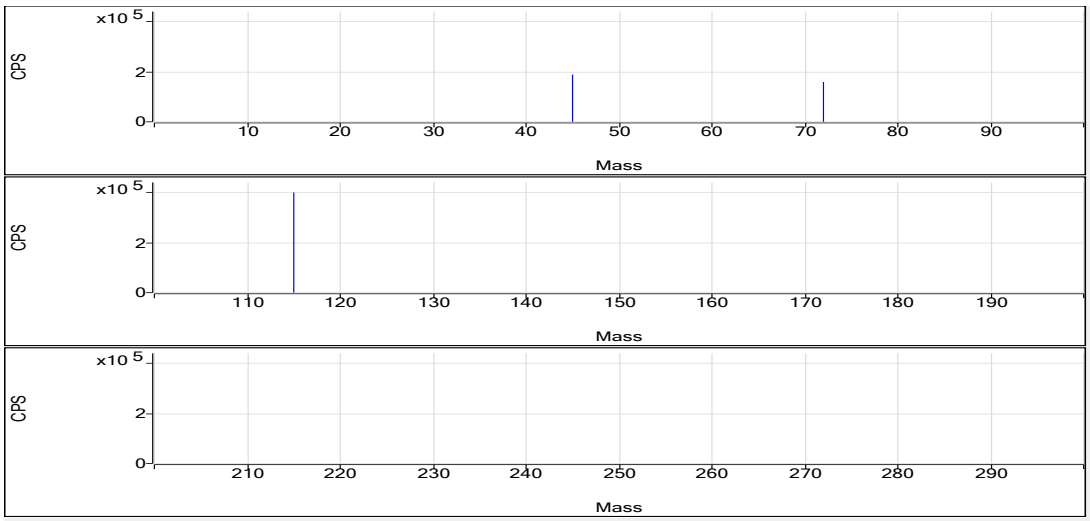
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3235124.22	0.8	99.8	Pulse	0.1000	3
No Gas	Ge	72	1482118.83	1.4	102.9	Pulse	0.1000	3
H2	Sc	45	189277.25	2.8	96.9	Pulse	0.1000	3
H2	Ge	72	159579.33	3.0	97.9	Pulse	0.1000	3
H2	In	115	401746.09	2.7	92.7	Pulse	0.1000	3
He	Sc	45	40637.34	0.8	101.6	Pulse	0.1000	3
He	Ge	72	72844.30	1.1	100.8	Pulse	0.1000	3
He	In	115	60183.73	2.0	93.2	Pulse	0.1000	3
He	Tb	159	279958.58	0.3	97.9	Pulse	0.1000	3
He	Bi	209	207561.35	0.1	93.4	Pulse	0.1000	3

No Gas

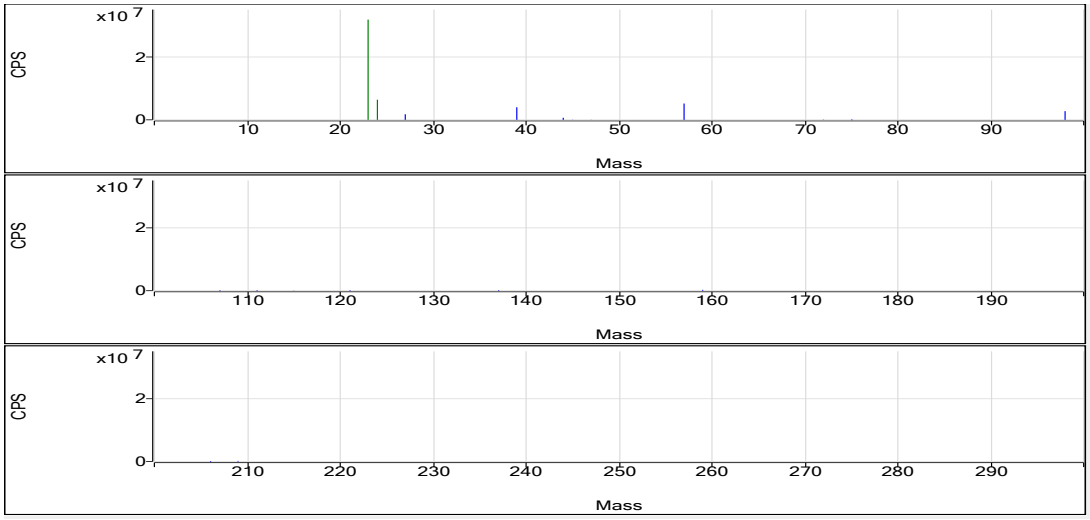


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.007	0	56.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.011	0	48.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.014	0	42.00	0.0013	4.694E-05
Se	78	2	H2	0.066	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.079	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.061	0	5.33	0.0004	1.089E-05
Na	23	3	He	255669.243	439.3005	31598862.03	0.0017	0.1065
Na	23	3	He	254437.243	437.1841	32131862.02	0.0017	0.1065
Na	23	3	He	253545.648	435.6525	31848657.03	0.0017	0.1065
Mg	24	3	He	104862.83	88.4149	6359676.78	0.0008	0.004846
Mg	24	3	He	103658.282	87.3993	6423614.90	0.0008	0.004846
Mg	24	3	He	104061.966	87.7397	6414263.65	0.0008	0.004846
Al	27	3	He	100383.512	24.2331	1743082.79	0.0002	0.001063
Al	27	3	He	100415.341	24.2407	1781629.66	0.0002	0.001063
Al	27	3	He	100121.081	24.1697	1766942.16	0.0002	0.001063
K	39	3	He	98753.728	54.6766	3932885.88	0.0006	0.1436
K	39	3	He	98873.227	54.7426	4023434.32	0.0006	0.1436
K	39	3	He	99056.107	54.8436	4009375.57	0.0006	0.1436
Ca	44	3	He	287552.94	8.933	642547.80	0	0.001611
Ca	44	3	He	288407.177	8.9595	658499.13	0	0.001611
Ca	44	3	He	287481.212	8.9307	652887.33	0	0.001611
Ti	47	3	He	2014.346	0.5054	36355.56	0.0003	0.0002737
Ti	47	3	He	2051.339	0.5147	37829.59	0.0003	0.0002737
Ti	47	3	He	2025.704	0.5083	37158.02	0.0003	0.0002737
V	51	3	He	-0.139	0.0057	410.01	0.0117	0.007326
V	51	3	He	-0.003	0.0073	536.01	0.0117	0.007326
V	51	3	He	-0.051	0.0067	492.01	0.0117	0.007326
Cr	52	3	He	3.173	0.0737	5301.13	0.0152	0.02538
Cr	52	3	He	3.088	0.0724	5321.16	0.0152	0.02538
Cr	52	3	He	3.167	0.0736	5381.16	0.0152	0.02538
Mn	55	3	He	-0.887	0.0086	620.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.272	0.0122	900.05	0.0059	0.01385
Mn	55	3	He	-0.145	0.013	950.06	0.0059	0.01385
Fe	57	3	He	244210.66	70.7553	5089427.11	0.0003	0.003918
Fe	57	3	He	247025.545	71.5708	5260264.92	0.0003	0.003918
Fe	57	3	He	245381.541	71.0945	5197412.42	0.0003	0.003918
Co	59	3	He	0.168	0.0082	590.03	0.0305	0.003084
Co	59	3	He	0.242	0.0105	770.05	0.0305	0.003084
Co	59	3	He	0.154	0.0078	570.03	0.0305	0.003084
Ni	60	3	He	0.589	0.0142	1020.07	0.0088	0.009003
Ni	60	3	He	0.57	0.014	1030.08	0.0088	0.009003
Ni	60	3	He	0.392	0.0124	910.06	0.0088	0.009003
Cu	63	3	He	0.07	0.0067	480.03	0.0249	0.004937
Cu	63	3	He	0.102	0.0075	550.03	0.0249	0.004937
Cu	63	3	He	0.082	0.007	510.03	0.0249	0.004937
Zn	66	3	He	2.389	0.0107	770.05	0.0025	0.004836
Zn	66	3	He	2.241	0.0103	760.05	0.0025	0.004836
Zn	66	3	He	1.484	0.0085	620.03	0.0025	0.004836
As	75	3	He	0.118	0.0006	46.00	0.0017	0.0004347
As	75	3	He	0.141	0.0007	50.00	0.0017	0.0004347
As	75	3	He	0.222	0.0008	60.00	0.0017	0.0004347
Sr	88	3	He	2.141	0.0175	1030.07	0.0078	0.0007762
Sr	88	3	He	2.226	0.0182	1100.08	0.0078	0.0007762
Sr	88	3	He	1.866	0.0154	940.07	0.0078	0.0007762
Mo	98	3	He	2115.828	46.5944	2740484.65	0.022	0.0005162
Mo	98	3	He	2073.963	45.6725	2764548.71	0.022	0.0005162
Mo	98	3	He	2052.972	45.2102	2767120.27	0.022	0.0005162
Ag	107	3	He	0.008	0.0009	50.00	0.0455	0.0004641
Ag	107	3	He	0.001	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.019	0.0013	80.00	0.0455	0.0004641
Cd	111	3	He	0.251	0.0013	74.00	0.0048	5.152E-05
Cd	111	3	He	0.278	0.0014	84.00	0.0048	5.152E-05
Cd	111	3	He	0.37	0.0018	112.00	0.0048	5.152E-05
Sn	120	3	He	0.278	0.0196	1150.09	0.0143	0.01559
Sn	120	3	He	2.093	0.0454	2749.54	0.0143	0.01559
Sn	120	3	He	0.202	0.0185	1130.09	0.0143	0.01559
Sb	121	3	He	0.171	0.0024	140.01	0.0124	0.000258
Sb	121	3	He	0.232	0.0031	190.01	0.0124	0.000258
Sb	121	3	He	0.177	0.0025	150.01	0.0124	0.000258
Ba	137	3	He	0.629	0.0031	180.01	0.0044	0.000309
Ba	137	3	He	0.42	0.0021	130.01	0.0044	0.000309
Ba	137	3	He	0.714	0.0034	210.01	0.0044	0.000309
Tl	205	3	He	0.023	0.0016	340.02	0.0276	0.001005
Tl	205	3	He	0	0.001	210.01	0.0276	0.001005
Tl	205	3	He	0.032	0.0019	390.02	0.0276	0.001005
Pb	208	3	He	0.037	0.0035	380.02	0.0364	0.002176
Pb	208	3	He	0.074	0.0049	570.04	0.0364	0.002176
Pb	208	3	He	0.089	0.0054	540.03	0.0364	0.002176
U	238	3	He	0.065	0.003	620.03	0.0421	0.00024
U	238	3	He	0.061	0.0028	580.04	0.0421	0.00024
U	238	3	He	0.065	0.003	620.04	0.0421	0.00024
Sc	45	1	No Gas			3265660.89		
Sc	45	1	No Gas			3220127.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3219584.01		
Ge	72	1	No Gas			1502929.04		
Ge	72	1	No Gas			1462226.54		
Ge	72	1	No Gas			1481200.92		
Sc	45	2	H2			195043.28		
Sc	45	2	H2			188272.95		
Sc	45	2	H2			184515.51		
Ge	72	2	H2			164215.00		
Ge	72	2	H2			159899.70		
Ge	72	2	H2			154623.28		
In	115	2	H2			412963.12		
In	115	2	H2			400815.42		
In	115	2	H2			391459.72		
Sc	45	3	He			40246.17		
Sc	45	3	He			40877.98		
Sc	45	3	He			40787.86		
Ge	72	3	He			71929.95		
Ge	72	3	He			73497.32		
Ge	72	3	He			73105.64		
In	115	3	He			58824.69		
In	115	3	He			60551.30		
In	115	3	He			61214.44		
Tb	159	3	He			279003.77		
Tb	159	3	He			280796.01		
Tb	159	3	He			280075.95		
Bi	209	3	He			207786.64		
Bi	209	3	He			207477.44		
Bi	209	3	He			207419.98		

Quantitation Report

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Sample Type	ICSAB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

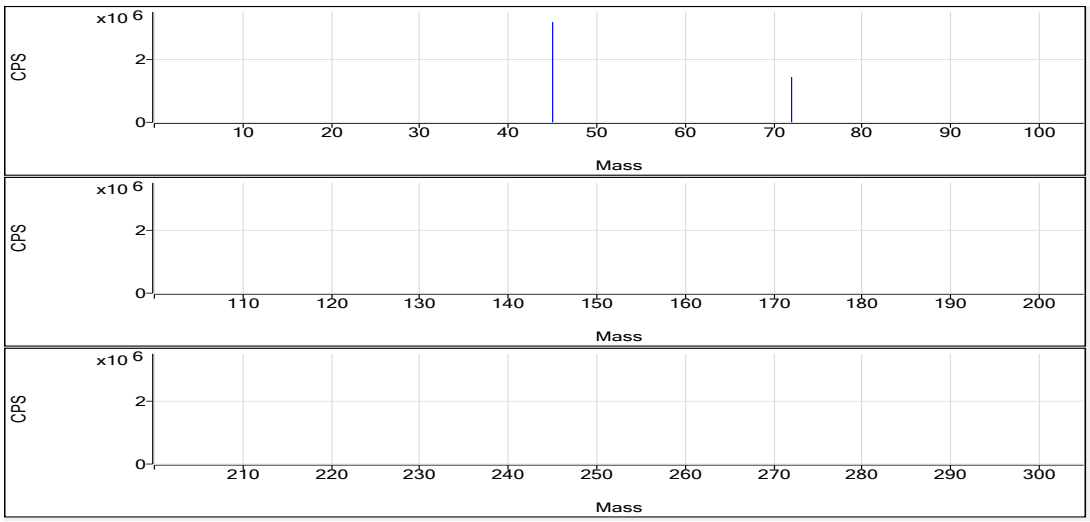
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.011	ppb	N/A	47.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	101.029	ppb	3.5	6332.51	0.0393	Pulse	1.5000	3
Na	23	72	He	256123.479	ppb	1.0	32207817.85	440.0808	Analog	0.1000	3
Mg	24	72	He	104221.257	ppb	0.3	6431516.78	87.8740	Analog	0.1000	3
Al	27	72	He	101120.745	ppb	0.6	1786583.20	24.4110	Pulse	0.1000	3
K	39	72	He	100293.248	ppb	0.7	4063885.46	55.5268	Pulse	0.1000	3
Ca	44	72	He	294066.199	ppb	1.0	668603.84	9.1353	Pulse	0.1000	3
Ti	47	72	He	2020.493	ppb	0.9	37104.72	0.5070	Pulse	0.1000	3
V	51	72	He	210.216	ppb	0.6	180509.28	2.4664	Pulse	0.5000	3
Cr	52	72	He	209.557	ppb	0.7	235399.82	3.2164	Pulse	0.1000	3
Mn	55	72	He	204.215	ppb	1.7	89226.57	1.2192	Pulse	0.1000	3
Fe	57	72	He	248102.902	ppb	0.4	5261045.24	71.8830	Pulse	0.1000	3
Co	59	72	He	204.127	ppb	1.0	456029.16	6.2311	Pulse	0.1000	3
Ni	60	72	He	201.525	ppb	0.4	130354.79	1.7811	Pulse	0.1000	3
Cu	63	72	He	201.375	ppb	0.9	367891.87	5.0267	Pulse	0.1000	3
Zn	66	72	He	104.652	ppb	1.9	19173.27	0.2619	Pulse	0.1000	3
As	75	72	He	101.373	ppb	1.8	12934.52	0.1767	Pulse	0.5000	3
Sr	88	115	He	2.022	ppb	14.6	1020.07	0.0166	Pulse	0.1000	3
Mo	98	115	He	2058.396	ppb	1.8	2785261.83	45.3297	Pulse	0.1000	3
Ag	107	115	He	51.481	ppb	2.5	143947.83	2.3429	Pulse	0.1000	3
Cd	111	115	He	105.221	ppb	1.4	31038.77	0.5051	Pulse	0.5000	3
Sn	120	115	He	0.158	ppb	70.9	1096.75	0.0178	Pulse	0.1000	3
Sb	121	115	He	0.154	ppb	36.7	133.34	0.0022	Pulse	0.1000	3
Ba	137	115	He	0.589	ppb	34.0	176.68	0.0029	Pulse	0.1000	3
Tl	205	209	He	0.016	ppb	18.4	303.35	0.0014	Pulse	0.1000	3
Pb	208	209	He	0.069	ppb	22.0	983.39	0.0047	Pulse	0.1000	3
U	238	209	He	0.047	ppb	22.0	466.69	0.0022	Pulse	0.1000	3

ISTD Table:

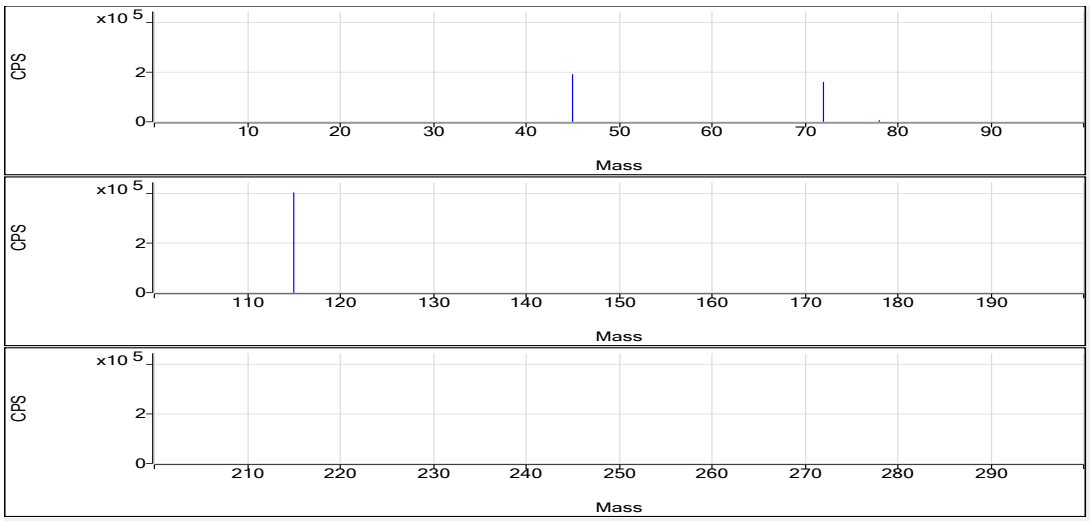
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3214615.37	2.3	99.2	Pulse	0.1000	3
No Gas	Ge	72	1451180.03	2.0	100.8	Pulse	0.1000	3
H2	Sc	45	191878.76	2.0	98.2	Pulse	0.1000	3
H2	Ge	72	160993.63	1.6	98.8	Pulse	0.1000	3
H2	In	115	404259.06	3.0	93.3	Pulse	0.1000	3
He	Sc	45	41178.70	0.9	103.0	Pulse	0.1000	3
He	Ge	72	73189.91	0.8	101.2	Pulse	0.1000	3
He	In	115	61454.02	1.6	95.1	Pulse	0.1000	3
He	Tb	159	282663.39	0.2	98.8	Pulse	0.1000	3
He	Bi	209	209514.84	0.6	94.3	Pulse	0.1000	3

No Gas

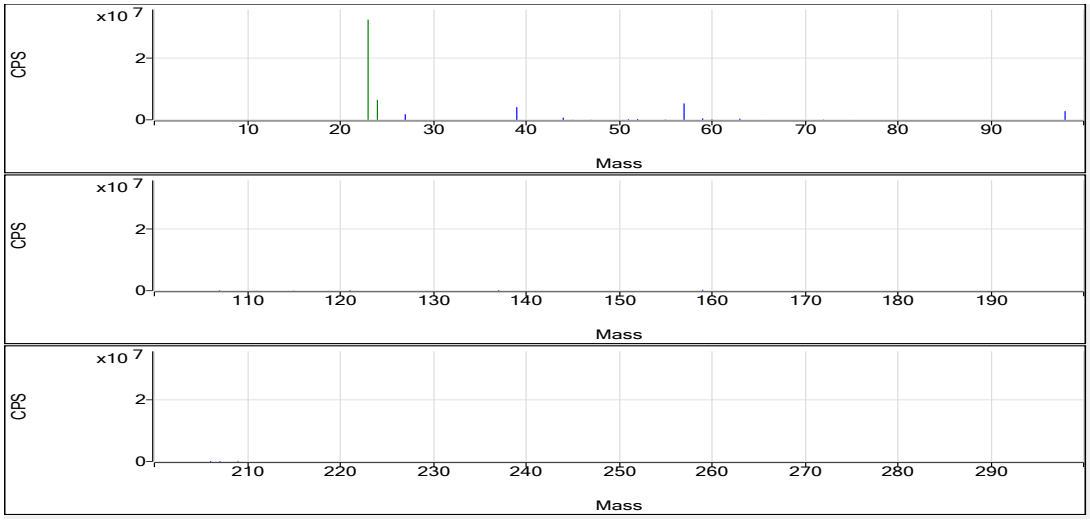


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.019	0	32.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.011	0	46.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.003	0	64.00	0.0013	4.694E-05
Se	78	2	H2	97.121	0.0378	6198.67	0.0004	1.089E-05
Se	78	2	H2	102.147	0.0398	6352.74	0.0004	1.089E-05
Se	78	2	H2	103.819	0.0404	6446.11	0.0004	1.089E-05
Na	23	3	He	256993.924	441.5761	32304472.02	0.0017	0.1065
Na	23	3	He	258050.266	443.3907	32191452.02	0.0017	0.1065
Na	23	3	He	253326.247	435.2756	32127529.52	0.0017	0.1065
Mg	24	3	He	104615.604	88.2064	6452936.15	0.0008	0.004846
Mg	24	3	He	103920.347	87.6203	6361485.53	0.0008	0.004846
Mg	24	3	He	104127.821	87.7952	6480128.65	0.0008	0.004846
Al	27	3	He	101172.28	24.4235	1786752.47	0.0002	0.001063
Al	27	3	He	101685.098	24.5473	1782202.16	0.0002	0.001063
Al	27	3	He	100504.857	24.2624	1790794.97	0.0002	0.001063
K	39	3	He	99679.644	55.1879	4037393.69	0.0006	0.1436
K	39	3	He	101132.266	55.9901	4065041.81	0.0006	0.1436
K	39	3	He	100067.834	55.4023	4089220.88	0.0006	0.1436
Ca	44	3	He	290762.336	9.0326	660803.43	0	0.001611
Ca	44	3	He	296296.923	9.2046	668277.33	0	0.001611
Ca	44	3	He	295139.337	9.1686	676730.77	0	0.001611
Ti	47	3	He	2000.782	0.502	36726.99	0.0003	0.0002737
Ti	47	3	He	2035.893	0.5108	37087.99	0.0003	0.0002737
Ti	47	3	He	2024.804	0.5081	37499.17	0.0003	0.0002737
V	51	3	He	209.671	2.46	179966.77	0.0117	0.007326
V	51	3	He	211.595	2.4825	180237.91	0.0117	0.007326
V	51	3	He	209.383	2.4566	181323.17	0.0117	0.007326
Cr	52	3	He	208.18	3.1954	233766.44	0.0152	0.02538
Cr	52	3	He	211.207	3.2415	235342.16	0.0152	0.02538
Cr	52	3	He	209.283	3.2122	237090.86	0.0152	0.02538
Mn	55	3	He	203.746	1.2164	88992.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	207.807	1.2404	90058.02	0.0059	0.01385
Mn	55	3	He	201.093	1.2008	88629.66	0.0059	0.01385
Fe	57	3	He	247008.74	71.566	5235566.80	0.0003	0.003918
Fe	57	3	He	249233.486	72.2105	5242693.36	0.0003	0.003918
Fe	57	3	He	248066.479	71.8724	5304875.55	0.0003	0.003918
Co	59	3	He	204.182	6.2328	455973.12	0.0305	0.003084
Co	59	3	He	206.111	6.2916	456790.77	0.0305	0.003084
Co	59	3	He	202.088	6.1689	455323.59	0.0305	0.003084
Ni	60	3	He	202.282	1.7877	130785.53	0.0088	0.009003
Ni	60	3	He	201.686	1.7825	129413.61	0.0088	0.009003
Ni	60	3	He	200.608	1.773	130865.22	0.0088	0.009003
Cu	63	3	He	199.63	4.9831	364552.61	0.0249	0.004937
Cu	63	3	He	203.138	5.0706	368141.52	0.0249	0.004937
Cu	63	3	He	201.357	5.0262	370981.48	0.0249	0.004937
Zn	66	3	He	105.546	0.2641	19323.53	0.0025	0.004836
Zn	66	3	He	102.324	0.2562	18602.55	0.0025	0.004836
Zn	66	3	He	106.085	0.2655	19593.74	0.0025	0.004836
As	75	3	He	102.648	0.179	13091.99	0.0017	0.0004347
As	75	3	He	102.165	0.1781	12931.85	0.0017	0.0004347
As	75	3	He	99.306	0.1731	12779.71	0.0017	0.0004347
Sr	88	3	He	2.276	0.0186	1140.08	0.0078	0.0007762
Sr	88	3	He	1.697	0.014	850.06	0.0078	0.0007762
Sr	88	3	He	2.093	0.0171	1070.08	0.0078	0.0007762
Mo	98	3	He	2034.063	44.7938	2750610.58	0.022	0.0005162
Mo	98	3	He	2102.128	46.2927	2801873.40	0.022	0.0005162
Mo	98	3	He	2038.998	44.9025	2803301.52	0.022	0.0005162
Ag	107	3	He	50.792	2.3115	141940.95	0.0455	0.0004641
Ag	107	3	He	52.962	2.4102	145880.29	0.0455	0.0004641
Ag	107	3	He	50.691	2.3069	144022.24	0.0455	0.0004641
Cd	111	3	He	105.62	0.5071	31136.37	0.0048	5.152E-05
Cd	111	3	He	106.481	0.5112	30939.87	0.0048	5.152E-05
Cd	111	3	He	103.564	0.4972	31040.07	0.0048	5.152E-05
Sn	120	3	He	0.266	0.0194	1190.09	0.0143	0.01559
Sn	120	3	He	0.042	0.0162	980.06	0.0143	0.01559
Sn	120	3	He	0.165	0.0179	1120.09	0.0143	0.01559
Sb	121	3	He	0.15	0.0021	130.01	0.0124	0.000258
Sb	121	3	He	0.099	0.0015	90.00	0.0124	0.000258
Sb	121	3	He	0.212	0.0029	180.01	0.0124	0.000258
Ba	137	3	He	0.637	0.0031	190.01	0.0044	0.000309
Ba	137	3	He	0.76	0.0036	220.01	0.0044	0.000309
Ba	137	3	He	0.369	0.0019	120.01	0.0044	0.000309
Tl	205	3	He	0.019	0.0015	320.02	0.0276	0.001005
Tl	205	3	He	0.013	0.0014	290.01	0.0276	0.001005
Tl	205	3	He	0.015	0.0014	300.01	0.0276	0.001005
Pb	208	3	He	0.058	0.0043	550.03	0.0364	0.002176
Pb	208	3	He	0.086	0.0053	670.06	0.0364	0.002176
Pb	208	3	He	0.063	0.0045	460.02	0.0364	0.002176
U	238	3	He	0.039	0.0019	390.02	0.0421	0.00024
U	238	3	He	0.044	0.0021	440.02	0.0421	0.00024
U	238	3	He	0.059	0.0027	570.04	0.0421	0.00024
Sc	45	1	No Gas			3210177.14		
Sc	45	1	No Gas			3141456.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3292212.14		
Ge	72	1	No Gas			1449904.51		
Ge	72	1	No Gas			1423314.82		
Ge	72	1	No Gas			1480320.76		
Sc	45	2	H2			196379.59		
Sc	45	2	H2			189815.86		
Sc	45	2	H2			189440.82		
Ge	72	2	H2			163872.19		
Ge	72	2	H2			159685.52		
Ge	72	2	H2			159423.18		
In	115	2	H2			417067.65		
In	115	2	H2			402597.38		
In	115	2	H2			393112.14		
Sc	45	3	He			40847.77		
Sc	45	3	He			41108.57		
Sc	45	3	He			41579.75		
Ge	72	3	He			73157.21		
Ge	72	3	He			72602.91		
Ge	72	3	He			73809.62		
In	115	3	He			61415.32		
In	115	3	He			60532.79		
In	115	3	He			62439.61		
Tb	159	3	He			282998.41		
Tb	159	3	He			282025.70		
Tb	159	3	He			282966.05		
Bi	209	3	He			208193.12		
Bi	209	3	He			210535.07		
Bi	209	3	He			209816.34		

Quantitation Report

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Sample Name	LRC 4661368
Sample Type	LRC
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

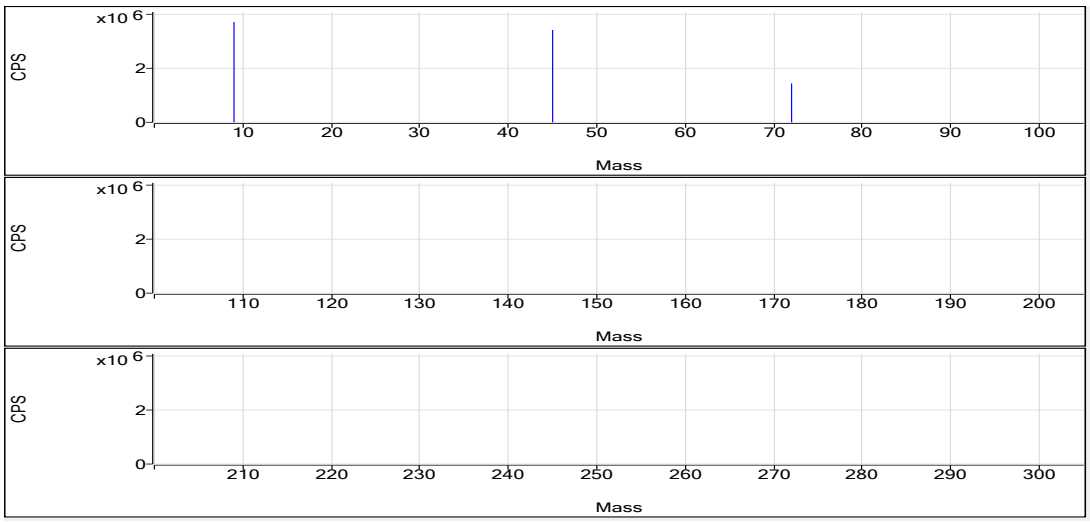
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1964.151	ppb	3.3	3726419.17	2.5810	Pulse	0.5000	3
Se	78	72	H2	2059.862	ppb	5.9	129211.97	0.8020	Pulse	1.5000	3
Na	23	72	He	205702.684	ppb	2.9	26140872.11	353.4669	Analog	0.1000	3
Mg	24	72	He	210769.646	ppb	2.0	13143344.38	177.7051	Analog	0.1000	3
Al	27	72	He	205870.499	ppb	2.7	3675349.53	49.6970	Pulse	0.1000	3
K	39	72	He	211633.411	ppb	2.7	8653728.20	117.0101	Analog	0.1000	3
Ca	44	72	He	206626.521	ppb	2.5	474773.13	6.4194	Pulse	0.1000	3
Ti	47	72	He	2201.116	ppb	2.7	40844.25	0.5523	Pulse	0.1000	3
V	51	72	He	2073.878	ppb	2.3	1794765.54	24.2670	Pulse	0.5000	3
Cr	52	72	He	2039.664	ppb	2.3	2298944.18	31.0839	Pulse	0.1000	3
Mn	55	72	He	6101.943	ppb	2.1	2664817.46	36.0301	Pulse	0.1000	3
Fe	57	72	He	161685.982	ppb	2.1	3464826.93	46.8467	Pulse	0.1000	3
Co	59	72	He	2017.548	ppb	1.7	4553200.87	61.5595	Pulse	0.1000	3
Ni	60	72	He	1983.860	ppb	1.7	1290962.74	17.4537	Pulse	0.1000	3
Cu	63	72	He	1974.099	ppb	1.5	3641665.36	49.2333	Pulse	0.1000	3
Zn	66	72	He	2023.034	ppb	1.8	367970.31	4.9750	Pulse	0.1000	3
As	75	72	He	2029.000	ppb	1.8	261032.75	3.5292	Pulse	0.5000	3
Sr	88	115	He	2127.818	ppb	0.2	1052000.40	16.6341	Pulse	0.1000	3
Mo	98	115	He	2110.530	ppb	0.4	2939378.91	46.4777	Pulse	0.1000	3
Ag	107	115	He	2010.873	ppb	0.1	5786592.41	91.4959	Pulse	0.1000	3
Cd	111	115	He	2060.155	ppb	0.7	625422.14	9.8894	Pulse	0.5000	3
Sn	120	115	He	2089.485	ppb	0.6	1885072.89	29.8073	Pulse	0.1000	3
Sb	121	115	He	2093.297	ppb	0.1	1642271.07	25.9675	Pulse	0.1000	3
Ba	137	115	He	2099.667	ppb	0.6	580968.91	9.1859	Pulse	0.1000	3
Tl	205	209	He	2187.902	ppb	2.5	12717729.39	60.4840	Analog	0.1000	3
Pb	208	209	He	2163.328	ppb	0.8	16557363.09	78.7416	Analog	0.1000	3
U	238	209	He	215.215	ppb	0.7	1903779.97	9.0537	Pulse	0.1000	3

ISTD Table:

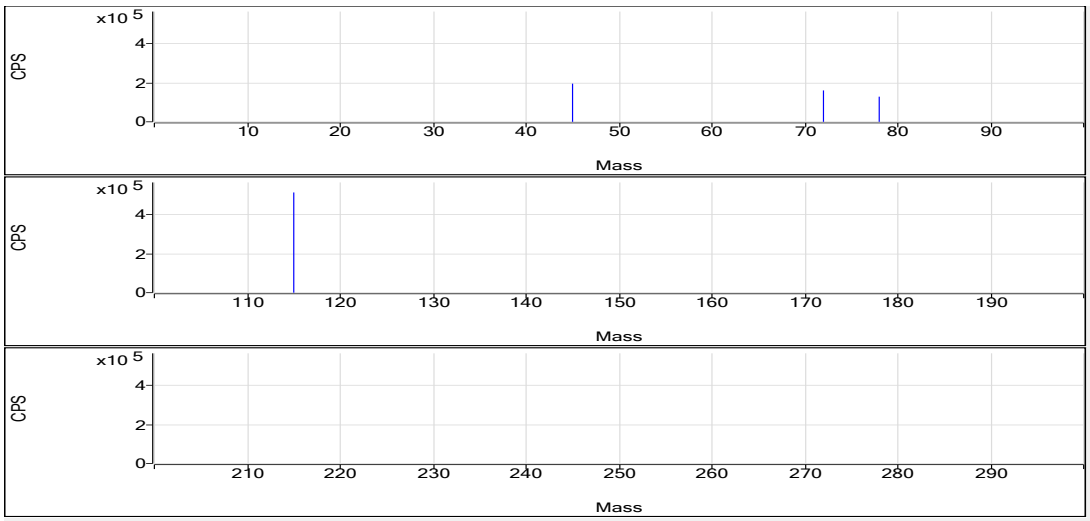
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3431730.47	2.1	105.9	Pulse	0.1000	3
No Gas	Ge	72	1444302.79	1.8	100.3	Pulse	0.1000	3
H2	Sc	45	196116.34	2.3	100.4	Pulse	0.1000	3
H2	Ge	72	161352.83	3.9	99.0	Pulse	0.1000	3
H2	In	115	515155.27	0.8	118.9	Pulse	0.1000	3
He	Sc	45	43498.80	1.6	108.8	Pulse	0.1000	3
He	Ge	72	73980.10	1.9	102.3	Pulse	0.1000	3
He	In	115	63243.80	0.8	97.9	Pulse	0.1000	3
He	Tb	159	284218.19	0.5	99.4	Pulse	0.1000	3
He	Bi	209	210279.46	0.4	94.6	Pulse	0.1000	3

No Gas

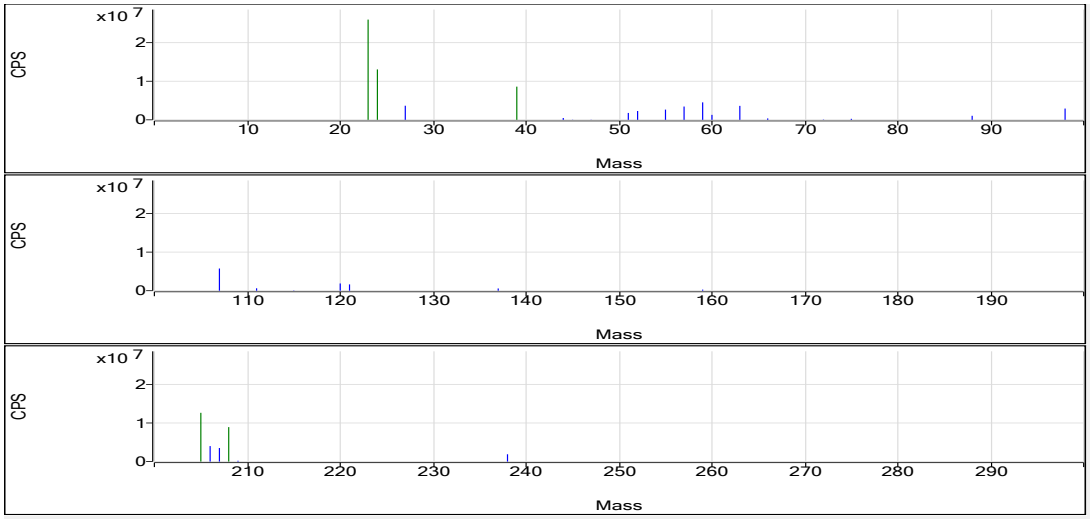


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	2021.327	2.6562	3802410.00	0.0013	4.694E-05
Be	9	1	No Gas	1977.165	2.5981	3706035.50	0.0013	4.694E-05
Be	9	1	No Gas	1893.96	2.4888	3670812.00	0.0013	4.694E-05
Se	78	2	H2	1923.776	0.7491	126062.02	0.0004	1.089E-05
Se	78	2	H2	2157.88	0.8402	130942.01	0.0004	1.089E-05
Se	78	2	H2	2097.931	0.8169	130631.89	0.0004	1.089E-05
Na	23	3	He	210084.958	360.9948	26525189.60	0.0017	0.1065
Na	23	3	He	208024.049	357.4546	26067084.61	0.0017	0.1065
Na	23	3	He	198999.044	341.9512	25830342.12	0.0017	0.1065
Mg	24	3	He	211549.498	178.3626	13105729.80	0.0008	0.004846
Mg	24	3	He	214640.488	180.9686	13196987.30	0.0008	0.004846
Mg	24	3	He	206118.951	173.7841	13127316.05	0.0008	0.004846
Al	27	3	He	208015.48	50.2148	3689684.01	0.0002	0.001063
Al	27	3	He	210076.189	50.7122	3698148.69	0.0002	0.001063
Al	27	3	He	199519.827	48.164	3638215.88	0.0002	0.001063
K	39	3	He	215820.124	119.3221	8767549.24	0.0006	0.1436
K	39	3	He	213926.722	118.2765	8625217.37	0.0006	0.1436
K	39	3	He	205153.387	113.4318	8568418.00	0.0006	0.1436
Ca	44	3	He	210637.927	6.544	480839.95	0	0.001611
Ca	44	3	He	208450.872	6.4761	472261.91	0	0.001611
Ca	44	3	He	200790.763	6.2381	471217.53	0	0.001611
Ti	47	3	He	2245.584	0.5634	41398.96	0.0003	0.0002737
Ti	47	3	He	2223.725	0.5579	40687.17	0.0003	0.0002737
Ti	47	3	He	2134.039	0.5354	40446.61	0.0003	0.0002737
V	51	3	He	2096.081	24.5268	1802177.50	0.0117	0.007326
V	51	3	He	2106.589	24.6497	1797557.75	0.0117	0.007326
V	51	3	He	2018.964	23.6247	1784561.38	0.0117	0.007326
Cr	52	3	He	2067.185	31.503	2314776.53	0.0152	0.02538
Cr	52	3	He	2066.632	31.4945	2296713.87	0.0152	0.02538
Cr	52	3	He	1985.174	30.2542	2285342.15	0.0152	0.02538
Mn	55	3	He	6154.989	36.3432	2670426.21	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	6194.798	36.5782	2667432.77	0.0059	0.01385
Mn	55	3	He	5956.042	35.1689	2656593.40	0.0059	0.01385
Fe	57	3	He	163591.831	47.3989	3482775.57	0.0003	0.003918
Fe	57	3	He	163741.644	47.4423	3459689.32	0.0003	0.003918
Fe	57	3	He	157724.471	45.699	3452015.89	0.0003	0.003918
Co	59	3	He	2035.175	62.0973	4562786.18	0.0305	0.003084
Co	59	3	He	2040.401	62.2567	4540022.74	0.0305	0.003084
Co	59	3	He	1977.069	60.3244	4556793.68	0.0305	0.003084
Ni	60	3	He	1988.6	17.4954	1285524.51	0.0088	0.009003
Ni	60	3	He	2014.323	17.7216	1292329.90	0.0088	0.009003
Ni	60	3	He	1948.656	17.1441	1295033.81	0.0088	0.009003
Cu	63	3	He	1972.72	49.1989	3615037.13	0.0249	0.004937
Cu	63	3	He	2003.559	49.9679	3643869.95	0.0249	0.004937
Cu	63	3	He	1946.017	48.533	3666089.01	0.0249	0.004937
Zn	66	3	He	2024.997	4.9798	365904.49	0.0025	0.004836
Zn	66	3	He	2057.73	5.0602	369010.93	0.0025	0.004836
Zn	66	3	He	1986.374	4.8849	368995.50	0.0025	0.004836
As	75	3	He	2048.773	3.5636	261846.50	0.0017	0.0004347
As	75	3	He	2052.287	3.5697	260318.48	0.0017	0.0004347
As	75	3	He	1985.941	3.4543	260933.27	0.0017	0.0004347
Sr	88	3	He	2125.331	16.6147	1060567.80	0.0078	0.0007762
Sr	88	3	He	2132.037	16.6671	1050158.73	0.0078	0.0007762
Sr	88	3	He	2126.084	16.6206	1045274.67	0.0078	0.0007762
Mo	98	3	He	2103.431	46.3214	2956841.83	0.022	0.0005162
Mo	98	3	He	2108.827	46.4402	2926100.27	0.022	0.0005162
Mo	98	3	He	2119.332	46.6716	2935194.64	0.022	0.0005162
Ag	107	3	He	2013.791	91.6287	5848949.29	0.0455	0.0004641
Ag	107	3	He	2010.51	91.4794	5763921.79	0.0455	0.0004641
Ag	107	3	He	2008.318	91.3797	5746906.16	0.0455	0.0004641
Cd	111	3	He	2044.252	9.8131	626399.69	0.0048	5.152E-05
Cd	111	3	He	2070.863	9.9408	626349.63	0.0048	5.152E-05
Cd	111	3	He	2065.348	9.9143	623517.13	0.0048	5.152E-05
Sn	120	3	He	2076.345	29.6199	1890734.35	0.0143	0.01559
Sn	120	3	He	2097.976	29.9284	1885721.69	0.0143	0.01559
Sn	120	3	He	2094.135	29.8736	1878762.63	0.0143	0.01559
Sb	121	3	He	2089.749	25.9235	1654778.88	0.0124	0.000258
Sb	121	3	He	2094.654	25.9843	1637217.63	0.0124	0.000258
Sb	121	3	He	2095.488	25.9947	1634816.69	0.0124	0.000258
Ba	137	3	He	2111.235	9.2365	589596.51	0.0044	0.000309
Ba	137	3	He	2102.485	9.1982	579561.63	0.0044	0.000309
Ba	137	3	He	2085.283	9.123	573748.59	0.0044	0.000309
Tl	205	3	He	2244.126	62.0383	13007797.31	0.0276	0.001005
Tl	205	3	He	2185.148	60.4079	12675764.81	0.0276	0.001005
Tl	205	3	He	2134.432	59.0059	12469626.06	0.0276	0.001005
Pb	208	3	He	2167.889	78.9076	8940446.12	0.0364	0.002176
Pb	208	3	He	2178.743	79.3027	9044669.87	0.0364	0.002176
Pb	208	3	He	2143.351	78.0145	8969866.74	0.0364	0.002176
U	238	3	He	216.621	9.1129	1910734.35	0.0421	0.00024
U	238	3	He	215.397	9.0614	1901415.91	0.0421	0.00024
U	238	3	He	213.626	8.9869	1899189.66	0.0421	0.00024
Sc	45	1	No Gas			3384588.70		
Sc	45	1	No Gas			3394521.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3516081.20		
Ge	72	1	No Gas			1431545.13		
Ge	72	1	No Gas			1426425.76		
Ge	72	1	No Gas			1474937.48		
Sc	45	2	H2			201163.41		
Sc	45	2	H2			194442.83		
Sc	45	2	H2			192742.77		
Ge	72	2	H2			168294.68		
Ge	72	2	H2			155845.10		
Ge	72	2	H2			159918.70		
In	115	2	H2			519172.57		
In	115	2	H2			510691.28		
In	115	2	H2			515601.95		
Sc	45	3	He			43816.19		
Sc	45	3	He			42683.34		
Sc	45	3	He			43996.87		
Ge	72	3	He			73478.03		
Ge	72	3	He			72924.19		
Ge	72	3	He			75538.09		
In	115	3	He			78580.88		
In	115	3	He			77716.48		
In	115	3	He			77544.75		
Tb	159	3	He			282540.23		
Tb	159	3	He			284841.75		
Tb	159	3	He			285272.59		
Bi	209	3	He			209673.65		
Bi	209	3	He			209836.19		
Bi	209	3	He			211328.55		

Quantitation Report

Data File Name	033SMPL.d
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Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

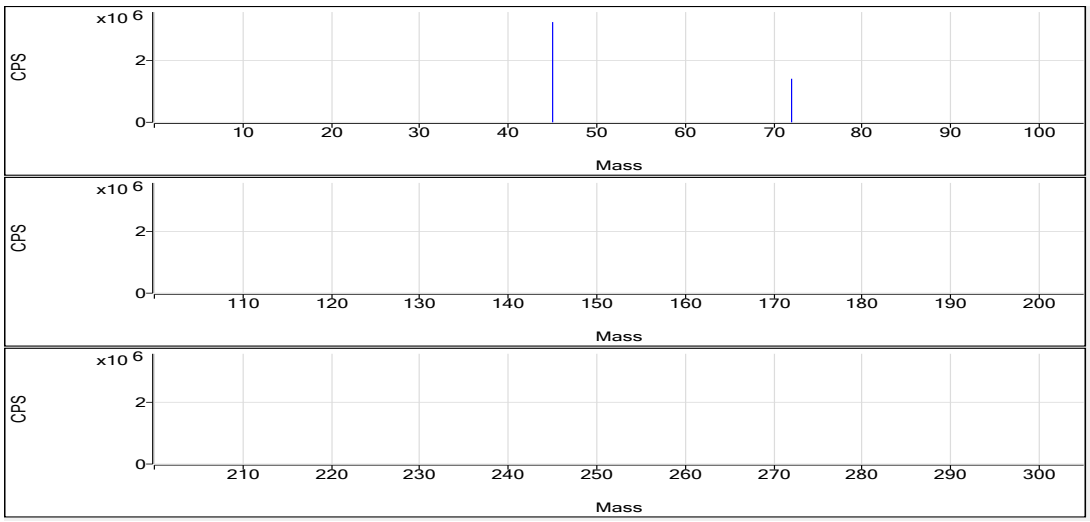
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.202	ppb	12.0	443.34	0.0003	Pulse	0.5000	3
Se	78	72	H2	0.218	ppb	26.8	15.11	0.0001	Pulse	1.5000	3
Na	23	72	He	47.995	ppb	4.7	13686.67	0.1889	Pulse	0.1000	3
Mg	24	72	He	24.693	ppb	4.4	1860.19	0.0257	Pulse	0.1000	3
Al	27	72	He	19.046	ppb	10.5	410.02	0.0057	Pulse	0.1000	3
K	39	72	He	35.156	ppb	28.9	11811.78	0.1631	Pulse	0.1000	3
Ca	44	72	He	40.054	ppb	16.6	206.68	0.0029	Pulse	0.1000	3
Ti	47	72	He	0.186	ppb	439.0	23.33	0.0003	Pulse	0.1000	3
V	51	72	He	0.094	ppb	27.0	610.68	0.0084	Pulse	0.5000	3
Cr	52	72	He	0.198	ppb	30.1	2056.88	0.0284	Pulse	0.1000	3
Mn	55	72	He	-0.265	ppb	N/A	890.06	0.0123	Pulse	0.1000	3
Fe	57	72	He	35.155	ppb	21.1	1020.07	0.0141	Pulse	0.1000	3
Co	59	72	He	0.133	ppb	36.7	516.69	0.0071	Pulse	0.1000	3
Ni	60	72	He	0.261	ppb	79.5	816.71	0.0113	Pulse	0.1000	3
Cu	63	72	He	0.087	ppb	73.4	516.69	0.0071	Pulse	0.1000	3
Zn	66	72	He	0.015	ppb	3396.0	353.35	0.0049	Pulse	0.1000	3
As	75	72	He	0.094	ppb	25.5	43.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.136	ppb	58.8	116.67	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.334	ppb	11.9	500.03	0.0079	Pulse	0.1000	3
Ag	107	115	He	0.116	ppb	9.4	363.35	0.0057	Pulse	0.1000	3
Cd	111	115	He	0.123	ppb	45.2	40.67	0.0006	Pulse	0.5000	3
Sn	120	115	He	0.192	ppb	12.2	1163.43	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.127	ppb	9.9	116.67	0.0018	Pulse	0.1000	3
Ba	137	115	He	0.110	ppb	33.8	50.00	0.0008	Pulse	0.1000	3
Tl	205	209	He	0.434	ppb	6.2	2843.73	0.0130	Pulse	0.1000	3
Pb	208	209	He	0.123	ppb	23.8	1453.43	0.0066	Pulse	0.1000	3
U	238	209	He	0.013	ppb	14.6	170.01	0.0008	Pulse	0.1000	3

ISTD Table:

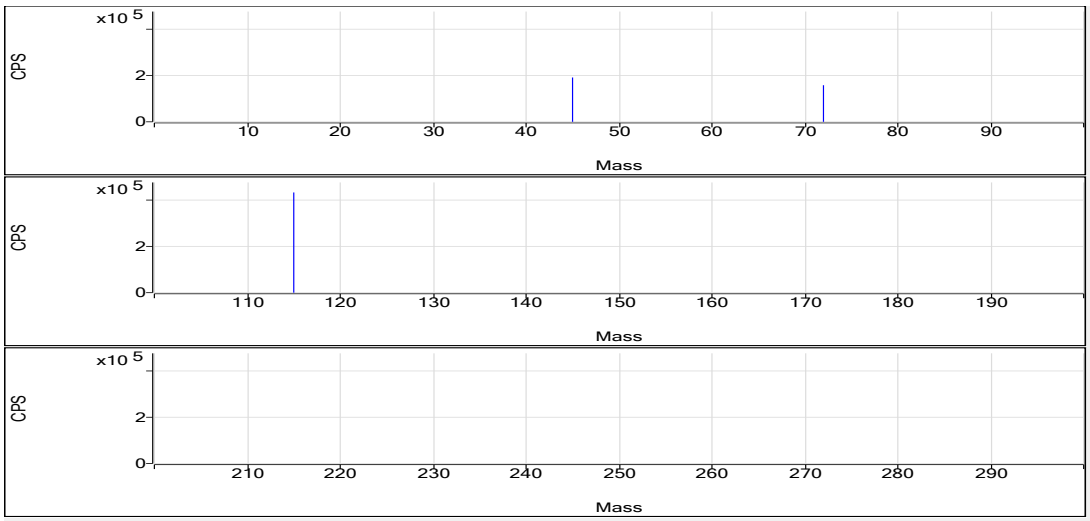
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3257014.01	3.2	100.5	Pulse	0.1000	3
No Gas	Ge	72	1415022.53	2.9	98.3	Pulse	0.1000	3
H2	Sc	45	192061.72	3.9	98.3	Pulse	0.1000	3
H2	Ge	72	158544.23	2.8	97.3	Pulse	0.1000	3
H2	In	115	434258.47	3.6	100.2	Pulse	0.1000	3
He	Sc	45	40857.66	0.5	102.2	Pulse	0.1000	3
He	Ge	72	72449.16	1.8	100.2	Pulse	0.1000	3
He	In	115	63495.63	1.6	98.3	Pulse	0.1000	3
He	Tb	159	282843.42	0.8	98.9	Pulse	0.1000	3
He	Bi	209	218652.19	0.2	98.4	Pulse	0.1000	3

No Gas

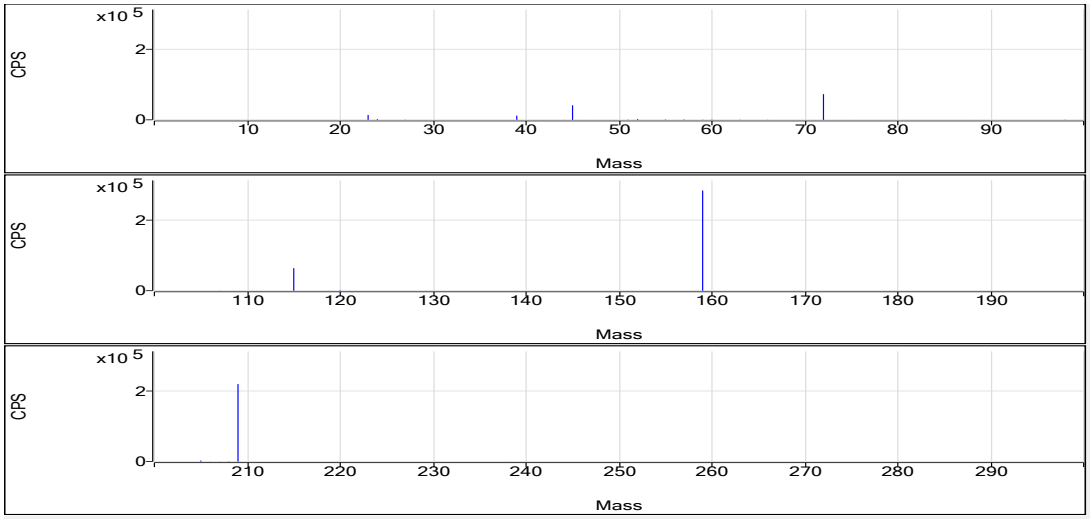


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.177	0.0003	384.01	0.0013	4.694E-05
Be	9	1	No Gas	0.204	0.0003	446.01	0.0013	4.694E-05
Be	9	1	No Gas	0.226	0.0003	500.01	0.0013	4.694E-05
Se	78	2	H2	0.194	0.0001	14.00	0.0004	1.089E-05
Se	78	2	H2	0.284	0.0001	18.67	0.0004	1.089E-05
Se	78	2	H2	0.175	0.0001	12.67	0.0004	1.089E-05
Na	23	3	He	46.054	0.1856	13206.17	0.0017	0.1065
Na	23	3	He	47.431	0.1879	13876.91	0.0017	0.1065
Na	23	3	He	50.5	0.1932	13976.94	0.0017	0.1065
Mg	24	3	He	23.755	0.0249	1770.17	0.0008	0.004846
Mg	24	3	He	25.9	0.0267	1970.21	0.0008	0.004846
Mg	24	3	He	24.423	0.0254	1840.19	0.0008	0.004846
Al	27	3	He	20.63	0.006	430.03	0.0002	0.001063
Al	27	3	He	19.723	0.0058	430.02	0.0002	0.001063
Al	27	3	He	16.786	0.0051	370.01	0.0002	0.001063
K	39	3	He	44.094	0.168	11955.19	0.0006	0.1436
K	39	3	He	37.254	0.1642	12125.40	0.0006	0.1436
K	39	3	He	24.119	0.157	11354.76	0.0006	0.1436
Ca	44	3	He	47.669	0.0031	220.01	0	0.001611
Ca	44	3	He	35.344	0.0027	200.01	0	0.001611
Ca	44	3	He	37.15	0.0028	200.01	0	0.001611
Ti	47	3	He	0.029	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.069	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	-0.54	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.094	0.0084	600.02	0.0117	0.007326
V	51	3	He	0.119	0.0087	644.02	0.0117	0.007326
V	51	3	He	0.069	0.0081	588.01	0.0117	0.007326
Cr	52	3	He	0.197	0.0284	2020.22	0.0152	0.02538
Cr	52	3	He	0.139	0.0275	2030.21	0.0152	0.02538
Cr	52	3	He	0.258	0.0293	2120.21	0.0152	0.02538
Mn	55	3	He	-0.347	0.0118	840.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.443	0.0112	830.06	0.0059	0.01385
Mn	55	3	He	-0.005	0.0138	1000.06	0.0059	0.01385
Fe	57	3	He	43.713	0.0166	1180.09	0.0003	0.003918
Fe	57	3	He	30.421	0.0127	940.06	0.0003	0.003918
Fe	57	3	He	31.331	0.013	940.07	0.0003	0.003918
Co	59	3	He	0.106	0.0063	450.02	0.0305	0.003084
Co	59	3	He	0.103	0.0062	460.03	0.0305	0.003084
Co	59	3	He	0.189	0.0088	640.03	0.0305	0.003084
Ni	60	3	He	0.494	0.0133	950.06	0.0088	0.009003
Ni	60	3	He	0.101	0.0099	730.04	0.0088	0.009003
Ni	60	3	He	0.187	0.0106	770.04	0.0088	0.009003
Cu	63	3	He	0.061	0.0065	460.02	0.0249	0.004937
Cu	63	3	He	0.16	0.0089	660.03	0.0249	0.004937
Cu	63	3	He	0.04	0.0059	430.02	0.0249	0.004937
Zn	66	3	He	0.205	0.0053	380.02	0.0025	0.004836
Zn	66	3	He	0.402	0.0058	430.02	0.0025	0.004836
Zn	66	3	He	-0.562	0.0035	250.01	0.0025	0.004836
As	75	3	He	0.122	0.0006	46.00	0.0017	0.0004347
As	75	3	He	0.077	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.084	0.0006	42.00	0.0017	0.0004347
Sr	88	3	He	0.229	0.0026	160.01	0.0078	0.0007762
Sr	88	3	He	0.099	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.082	0.0014	90.00	0.0078	0.0007762
Mo	98	3	He	0.369	0.0087	540.04	0.022	0.0005162
Mo	98	3	He	0.343	0.0081	520.03	0.022	0.0005162
Mo	98	3	He	0.291	0.0069	440.02	0.022	0.0005162
Ag	107	3	He	0.109	0.0054	340.02	0.0455	0.0004641
Ag	107	3	He	0.109	0.0054	350.02	0.0455	0.0004641
Ag	107	3	He	0.128	0.0063	400.02	0.0455	0.0004641
Cd	111	3	He	0.169	0.0009	54.00	0.0048	5.152E-05
Cd	111	3	He	0.138	0.0007	46.00	0.0048	5.152E-05
Cd	111	3	He	0.061	0.0003	22.00	0.0048	5.152E-05
Sn	120	3	He	0.165	0.0179	1120.08	0.0143	0.01559
Sn	120	3	He	0.201	0.0185	1190.09	0.0143	0.01559
Sn	120	3	He	0.209	0.0186	1180.11	0.0143	0.01559
Sb	121	3	He	0.121	0.0018	110.00	0.0124	0.000258
Sb	121	3	He	0.142	0.002	130.01	0.0124	0.000258
Sb	121	3	He	0.119	0.0017	110.00	0.0124	0.000258
Ba	137	3	He	0.112	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.071	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.145	0.0009	60.00	0.0044	0.000309
Tl	205	3	He	0.442	0.0132	2890.41	0.0276	0.001005
Tl	205	3	He	0.456	0.0136	2970.43	0.0276	0.001005
Tl	205	3	He	0.404	0.0122	2670.36	0.0276	0.001005
Pb	208	3	He	0.095	0.0056	710.05	0.0364	0.002176
Pb	208	3	He	0.12	0.0065	810.06	0.0364	0.002176
Pb	208	3	He	0.153	0.0078	910.08	0.0364	0.002176
U	238	3	He	0.011	0.0007	150.01	0.0421	0.00024
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
Sc	45	1	No Gas			3153708.08		
Sc	45	1	No Gas			3252963.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3364370.57		
Ge	72	1	No Gas			1371844.98		
Ge	72	1	No Gas			1418432.48		
Ge	72	1	No Gas			1454790.13		
Sc	45	2	H2			193877.99		
Sc	45	2	H2			183859.49		
Sc	45	2	H2			198447.67		
Ge	72	2	H2			161810.52		
Ge	72	2	H2			153498.74		
Ge	72	2	H2			160323.42		
In	115	2	H2			438903.20		
In	115	2	H2			416714.37		
In	115	2	H2			447157.84		
Sc	45	3	He			40948.02		
Sc	45	3	He			40607.10		
Sc	45	3	He			41017.85		
Ge	72	3	He			71166.12		
Ge	72	3	He			73839.51		
Ge	72	3	He			72341.86		
In	115	3	He			62440.08		
In	115	3	He			64498.97		
In	115	3	He			63575.07		
Tb	159	3	He			280551.93		
Tb	159	3	He			282729.18		
Tb	159	3	He			285249.14		
Bi	209	3	He			218384.27		
Bi	209	3	He			218354.78		
Bi	209	3	He			219217.52		

Quantitation Report

Data File Name	034SMPL.d
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Acq Time	2023-08-10 09:01:25
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Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

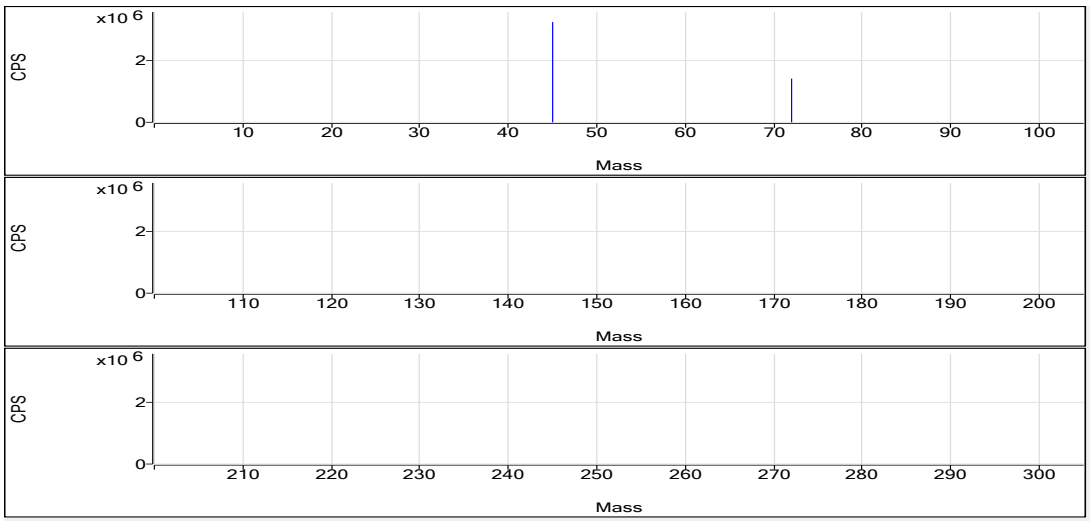
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.166	ppb	10.4	377.34	0.0003	Pulse	0.5000	3
Se	78	72	H2	0.165	ppb	30.6	11.78	0.0001	Pulse	1.5000	3
Na	23	72	He	44.586	ppb	3.3	13169.54	0.1830	Pulse	0.1000	3
Mg	24	72	He	23.603	ppb	6.4	1780.17	0.0247	Pulse	0.1000	3
Al	27	72	He	20.353	ppb	27.0	430.02	0.0060	Pulse	0.1000	3
K	39	72	He	35.029	ppb	26.7	11728.41	0.1630	Pulse	0.1000	3
Ca	44	72	He	48.020	ppb	26.8	223.34	0.0031	Pulse	0.1000	3
Ti	47	72	He	-0.351	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
V	51	72	He	0.113	ppb	18.9	622.02	0.0086	Pulse	0.5000	3
Cr	52	72	He	0.166	ppb	60.2	2006.89	0.0279	Pulse	0.1000	3
Mn	55	72	He	-0.307	ppb	N/A	866.72	0.0120	Pulse	0.1000	3
Fe	57	72	He	28.718	ppb	14.0	880.06	0.0122	Pulse	0.1000	3
Co	59	72	He	0.136	ppb	28.0	520.03	0.0072	Pulse	0.1000	3
Ni	60	72	He	0.114	ppb	66.3	720.04	0.0100	Pulse	0.1000	3
Cu	63	72	He	0.121	ppb	28.1	573.37	0.0080	Pulse	0.1000	3
Zn	66	72	He	-0.137	ppb	N/A	323.35	0.0045	Pulse	0.1000	3
As	75	72	He	0.118	ppb	10.3	46.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.208	ppb	49.5	153.34	0.0024	Pulse	0.1000	3
Mo	98	115	He	0.318	ppb	26.6	480.03	0.0075	Pulse	0.1000	3
Ag	107	115	He	0.092	ppb	6.9	296.68	0.0047	Pulse	0.1000	3
Cd	111	115	He	0.090	ppb	23.8	30.67	0.0005	Pulse	0.5000	3
Sn	120	115	He	0.262	ppb	66.1	1233.66	0.0193	Pulse	0.1000	3
Sb	121	115	He	0.089	ppb	65.2	86.67	0.0014	Pulse	0.1000	3
Ba	137	115	He	0.037	ppb	100.5	30.00	0.0005	Pulse	0.1000	3
Tl	205	209	He	0.379	ppb	11.0	2503.67	0.0115	Pulse	0.1000	3
Pb	208	209	He	0.089	ppb	14.9	1176.73	0.0054	Pulse	0.1000	3
U	238	209	He	0.007	ppb	43.8	120.01	0.0006	Pulse	0.1000	3

ISTD Table:

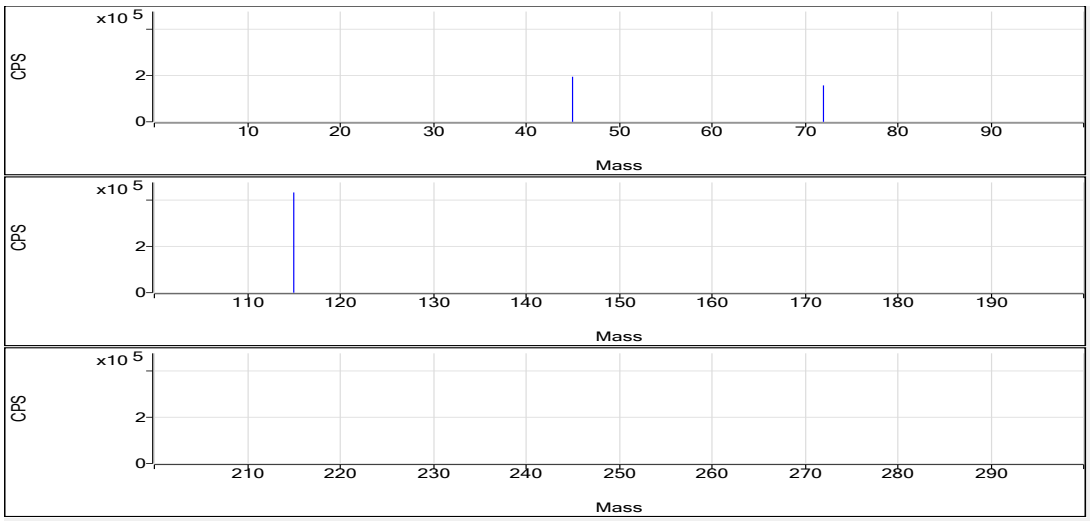
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3261060.26	2.6	100.6	Pulse	0.1000	3
No Gas	Ge	72	1421036.23	2.2	98.7	Pulse	0.1000	3
H2	Sc	45	194060.00	1.8	99.3	Pulse	0.1000	3
H2	Ge	72	156795.45	0.9	96.2	Pulse	0.1000	3
H2	In	115	431588.78	2.4	99.6	Pulse	0.1000	3
He	Sc	45	41963.99	1.0	104.9	Pulse	0.1000	3
He	Ge	72	71943.50	1.2	99.5	Pulse	0.1000	3
He	In	115	63812.87	1.5	98.8	Pulse	0.1000	3
He	Tb	159	280253.02	0.8	98.0	Pulse	0.1000	3
He	Bi	209	217820.17	0.7	98.0	Pulse	0.1000	3

No Gas

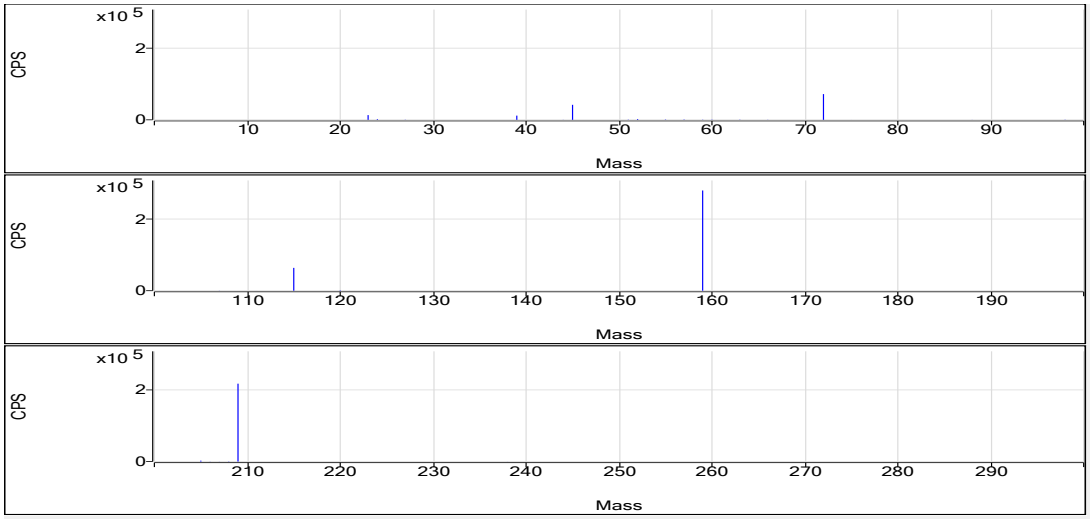


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.176	0.0003	386.01	0.0013	4.694E-05
Be	9	1	No Gas	0.146	0.0002	340.01	0.0013	4.694E-05
Be	9	1	No Gas	0.177	0.0003	406.01	0.0013	4.694E-05
Se	78	2	H2	0.223	0.0001	15.33	0.0004	1.089E-05
Se	78	2	H2	0.137	0.0001	10.00	0.0004	1.089E-05
Se	78	2	H2	0.134	0.0001	10.00	0.0004	1.089E-05
Na	23	3	He	45.366	0.1844	13446.47	0.0017	0.1065
Na	23	3	He	42.901	0.1802	12885.92	0.0017	0.1065
Na	23	3	He	45.49	0.1846	13176.23	0.0017	0.1065
Mg	24	3	He	23.206	0.0244	1780.17	0.0008	0.004846
Mg	24	3	He	25.264	0.0261	1870.16	0.0008	0.004846
Mg	24	3	He	22.338	0.0237	1690.17	0.0008	0.004846
Al	27	3	He	20.593	0.006	440.02	0.0002	0.001063
Al	27	3	He	25.715	0.0073	520.03	0.0002	0.001063
Al	27	3	He	14.751	0.0046	330.02	0.0002	0.001063
K	39	3	He	45.456	0.1687	12305.57	0.0006	0.1436
K	39	3	He	27.35	0.1587	11354.63	0.0006	0.1436
K	39	3	He	32.281	0.1615	11525.04	0.0006	0.1436
Ca	44	3	He	58.512	0.0034	250.01	0	0.001611
Ca	44	3	He	33.662	0.0027	190.01	0	0.001611
Ca	44	3	He	51.885	0.0032	230.01	0	0.001611
Ti	47	3	He	-0.545	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.023	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.533	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.091	0.0084	612.02	0.0117	0.007326
V	51	3	He	0.134	0.0089	636.02	0.0117	0.007326
V	51	3	He	0.114	0.0087	618.02	0.0117	0.007326
Cr	52	3	He	0.053	0.0262	1910.20	0.0152	0.02538
Cr	52	3	He	0.243	0.0291	2080.25	0.0152	0.02538
Cr	52	3	He	0.201	0.0284	2030.21	0.0152	0.02538
Mn	55	3	He	-0.186	0.0128	930.06	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.263	0.0123	880.05	0.0059	0.01385
Mn	55	3	He	-0.472	0.0111	790.05	0.0059	0.01385
Fe	57	3	He	25.765	0.0114	830.05	0.0003	0.003918
Fe	57	3	He	33.289	0.0136	970.07	0.0003	0.003918
Fe	57	3	He	27.1	0.0118	840.05	0.0003	0.003918
Co	59	3	He	0.16	0.008	580.04	0.0305	0.003084
Co	59	3	He	0.156	0.0078	560.03	0.0305	0.003084
Co	59	3	He	0.092	0.0059	420.02	0.0305	0.003084
Ni	60	3	He	0.146	0.0103	750.04	0.0088	0.009003
Ni	60	3	He	0.169	0.0105	750.05	0.0088	0.009003
Ni	60	3	He	0.028	0.0092	660.04	0.0088	0.009003
Cu	63	3	He	0.159	0.0089	650.04	0.0249	0.004937
Cu	63	3	He	0.094	0.0073	520.03	0.0249	0.004937
Cu	63	3	He	0.111	0.0077	550.04	0.0249	0.004937
Zn	66	3	He	-0.406	0.0038	280.01	0.0025	0.004836
Zn	66	3	He	-0.261	0.0042	300.01	0.0025	0.004836
Zn	66	3	He	0.256	0.0055	390.02	0.0025	0.004836
As	75	3	He	0.129	0.0007	48.00	0.0017	0.0004347
As	75	3	He	0.12	0.0006	46.00	0.0017	0.0004347
As	75	3	He	0.105	0.0006	44.00	0.0017	0.0004347
Sr	88	3	He	0.101	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.307	0.0032	200.01	0.0078	0.0007762
Sr	88	3	He	0.217	0.0025	160.01	0.0078	0.0007762
Mo	98	3	He	0.233	0.0056	360.02	0.022	0.0005162
Mo	98	3	He	0.402	0.0094	590.03	0.022	0.0005162
Mo	98	3	He	0.32	0.0076	490.03	0.022	0.0005162
Ag	107	3	He	0.097	0.0049	310.02	0.0455	0.0004641
Ag	107	3	He	0.095	0.0048	300.02	0.0455	0.0004641
Ag	107	3	He	0.085	0.0043	280.01	0.0455	0.0004641
Cd	111	3	He	0.094	0.0005	32.00	0.0048	5.152E-05
Cd	111	3	He	0.108	0.0006	36.00	0.0048	5.152E-05
Cd	111	3	He	0.066	0.0004	24.00	0.0048	5.152E-05
Sn	120	3	He	0.459	0.0221	1410.79	0.0143	0.01559
Sn	120	3	He	0.133	0.0175	1100.08	0.0143	0.01559
Sn	120	3	He	0.195	0.0184	1190.10	0.0143	0.01559
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.146	0.0021	130.01	0.0124	0.000258
Sb	121	3	He	0.091	0.0014	90.00	0.0124	0.000258
Ba	137	3	He	0.037	0.0005	30.00	0.0044	0.000309
Ba	137	3	He	0.075	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0	0.0003	20.00	0.0044	0.000309
Tl	205	3	He	0.427	0.0128	2810.40	0.0276	0.001005
Tl	205	3	He	0.358	0.0109	2360.30	0.0276	0.001005
Tl	205	3	He	0.352	0.0107	2340.30	0.0276	0.001005
Pb	208	3	He	0.099	0.0058	710.04	0.0364	0.002176
Pb	208	3	He	0.093	0.0055	650.04	0.0364	0.002176
Pb	208	3	He	0.074	0.0049	620.03	0.0364	0.002176
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.011	0.0007	150.01	0.0421	0.00024
Sc	45	1	No Gas			3163937.45		
Sc	45	1	No Gas			3294159.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3325084.01		
Ge	72	1	No Gas			1390448.73		
Ge	72	1	No Gas			1420524.20		
Ge	72	1	No Gas			1452135.76		
Sc	45	2	H2			195043.86		
Sc	45	2	H2			190241.13		
Sc	45	2	H2			196895.02		
Ge	72	2	H2			156735.20		
Ge	72	2	H2			155390.75		
Ge	72	2	H2			158260.40		
In	115	2	H2			439349.52		
In	115	2	H2			420028.27		
In	115	2	H2			435388.55		
Sc	45	3	He			41619.54		
Sc	45	3	He			42412.17		
Sc	45	3	He			41860.27		
Ge	72	3	He			72925.27		
Ge	72	3	He			71528.00		
Ge	72	3	He			71377.24		
In	115	3	He			63735.28		
In	115	3	He			62941.69		
In	115	3	He			64790.49		
Tb	159	3	He			278063.65		
Tb	159	3	He			280096.75		
Tb	159	3	He			282598.65		
Bi	209	3	He			219297.30		
Bi	209	3	He			216269.16		
Bi	209	3	He			217894.04		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 09:03:25
Sample Name	RINSE
Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

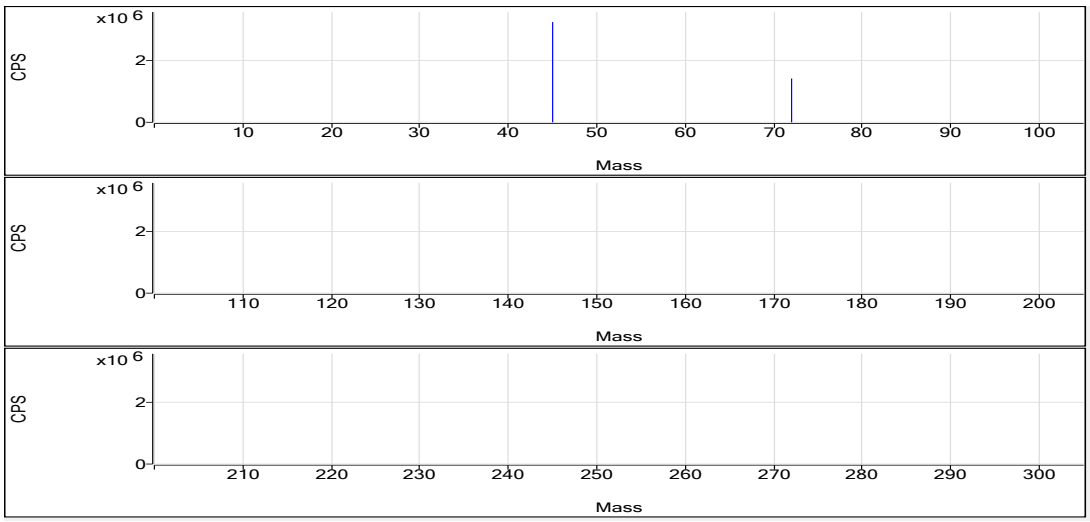
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.153	ppb	14.4	353.34	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.102	ppb	32.2	8.00	0.0001	Pulse	1.5000	3
Na	23	72	He	37.568	ppb	9.1	12205.36	0.1710	Pulse	0.1000	3
Mg	24	72	He	21.601	ppb	10.3	1646.82	0.0231	Pulse	0.1000	3
Al	27	72	He	16.858	ppb	29.0	366.68	0.0051	Pulse	0.1000	3
K	39	72	He	47.589	ppb	37.4	12132.07	0.1699	Pulse	0.1000	3
Ca	44	72	He	35.472	ppb	75.7	193.34	0.0027	Pulse	0.1000	3
Ti	47	72	He	0.212	ppb	401.3	23.33	0.0003	Pulse	0.1000	3
V	51	72	He	0.069	ppb	17.1	580.69	0.0081	Pulse	0.5000	3
Cr	52	72	He	0.038	ppb	115.8	1853.53	0.0260	Pulse	0.1000	3
Mn	55	72	He	-0.558	ppb	N/A	753.38	0.0106	Pulse	0.1000	3
Fe	57	72	He	27.101	ppb	15.9	840.06	0.0118	Pulse	0.1000	3
Co	59	72	He	0.102	ppb	32.8	443.36	0.0062	Pulse	0.1000	3
Ni	60	72	He	0.352	ppb	43.4	863.39	0.0121	Pulse	0.1000	3
Cu	63	72	He	0.028	ppb	161.5	403.35	0.0056	Pulse	0.1000	3
Zn	66	72	He	-0.179	ppb	N/A	313.35	0.0044	Pulse	0.1000	3
As	75	72	He	0.024	ppb	208.1	34.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.150	ppb	77.1	123.34	0.0020	Pulse	0.1000	3
Mo	98	115	He	0.282	ppb	16.5	423.36	0.0067	Pulse	0.1000	3
Ag	107	115	He	0.096	ppb	13.9	306.68	0.0049	Pulse	0.1000	3
Cd	111	115	He	0.105	ppb	20.7	35.33	0.0006	Pulse	0.5000	3
Sn	120	115	He	0.192	ppb	53.0	1156.76	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.064	ppb	30.7	66.67	0.0011	Pulse	0.1000	3
Ba	137	115	He	0.014	ppb	159.8	23.33	0.0004	Pulse	0.1000	3
Tl	205	209	He	0.300	ppb	2.9	2013.57	0.0093	Pulse	0.1000	3
Pb	208	209	He	0.112	ppb	7.0	1353.42	0.0063	Pulse	0.1000	3
U	238	209	He	0.008	ppb	47.6	123.34	0.0006	Pulse	0.1000	3

ISTD Table:

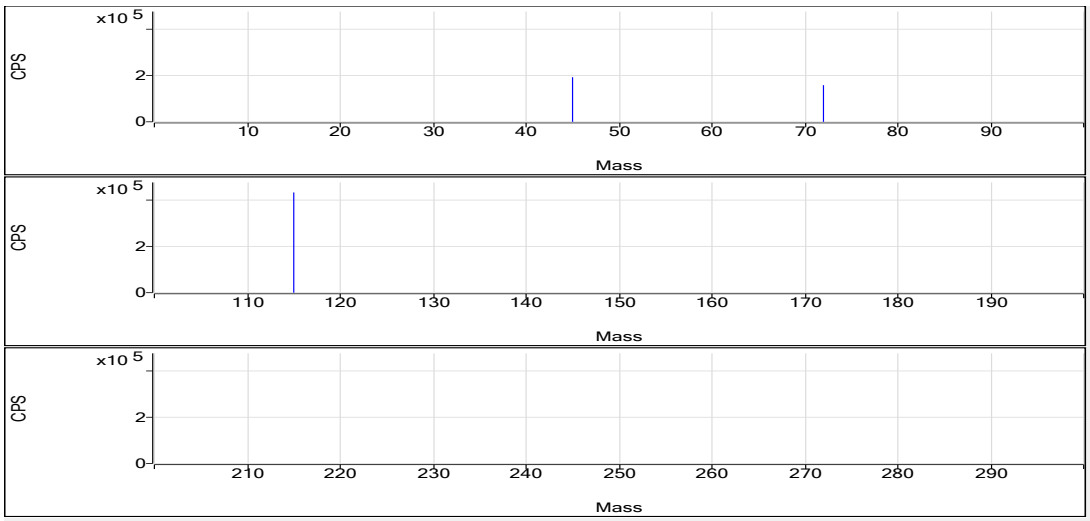
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3258931.83	3.0	100.5	Pulse	0.1000	3
No Gas	Ge	72	1423976.28	3.3	98.9	Pulse	0.1000	3
H2	Sc	45	192765.75	1.5	98.7	Pulse	0.1000	3
H2	Ge	72	158298.59	1.7	97.1	Pulse	0.1000	3
H2	In	115	433094.73	1.5	100.0	Pulse	0.1000	3
He	Sc	45	40276.22	2.1	100.7	Pulse	0.1000	3
He	Ge	72	71390.52	0.8	98.8	Pulse	0.1000	3
He	In	115	63187.57	2.5	97.8	Pulse	0.1000	3
He	Tb	159	279850.64	0.5	97.8	Pulse	0.1000	3
He	Bi	209	216524.71	1.4	97.4	Pulse	0.1000	3

No Gas

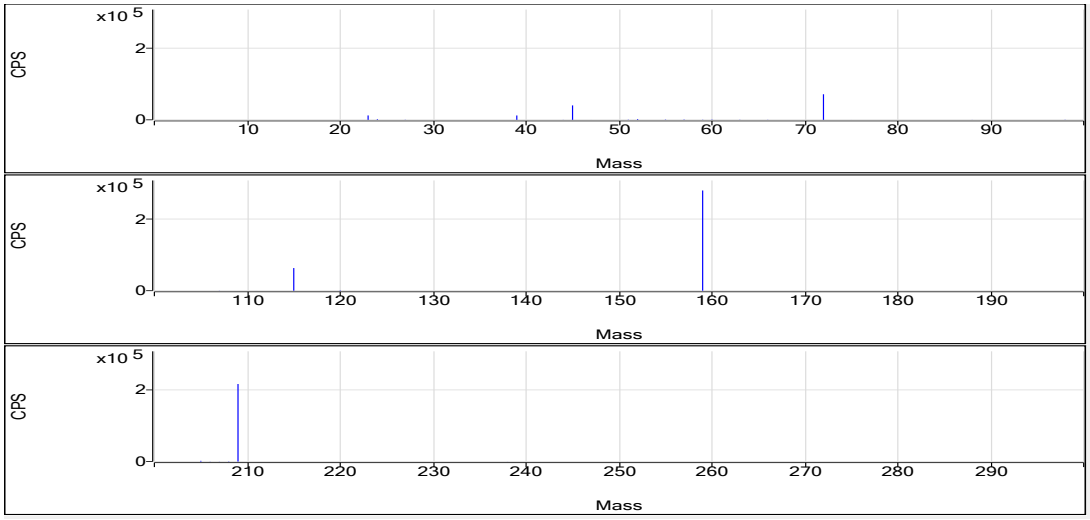


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.173	0.0003	376.01	0.0013	4.694E-05
Be	9	1	No Gas	0.129	0.0002	312.01	0.0013	4.694E-05
Be	9	1	No Gas	0.158	0.0003	372.01	0.0013	4.694E-05
Se	78	2	H2	0.134	0.0001	10.00	0.0004	1.089E-05
Se	78	2	H2	0.104	0.0001	8.00	0.0004	1.089E-05
Se	78	2	H2	0.068	0	6.00	0.0004	1.089E-05
Na	23	3	He	38.673	0.1729	12385.47	0.0017	0.1065
Na	23	3	He	33.741	0.1644	11805.00	0.0017	0.1065
Na	23	3	He	40.289	0.1757	12425.62	0.0017	0.1065
Mg	24	3	He	23.229	0.0244	1750.16	0.0008	0.004846
Mg	24	3	He	22.504	0.0238	1710.16	0.0008	0.004846
Mg	24	3	He	19.071	0.0209	1480.13	0.0008	0.004846
Al	27	3	He	22.199	0.0064	460.02	0.0002	0.001063
Al	27	3	He	15.793	0.0049	350.02	0.0002	0.001063
Al	27	3	He	12.582	0.0041	290.01	0.0002	0.001063
K	39	3	He	68.148	0.1813	12986.10	0.0006	0.1436
K	39	3	He	37.124	0.1641	11785.13	0.0006	0.1436
K	39	3	He	37.496	0.1643	11624.97	0.0006	0.1436
Ca	44	3	He	20.047	0.0022	160.01	0	0.001611
Ca	44	3	He	19.886	0.0022	160.01	0	0.001611
Ca	44	3	He	66.483	0.0037	260.01	0	0.001611
Ti	47	3	He	1.135	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	-0.536	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.036	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.075	0.0082	588.02	0.0117	0.007326
V	51	3	He	0.076	0.0082	590.02	0.0117	0.007326
V	51	3	He	0.055	0.008	564.02	0.0117	0.007326
Cr	52	3	He	-0.008	0.0253	1810.18	0.0152	0.02538
Cr	52	3	He	0.08	0.0266	1910.22	0.0152	0.02538
Cr	52	3	He	0.041	0.026	1840.18	0.0152	0.02538
Mn	55	3	He	-0.692	0.0098	700.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.695	0.0098	700.04	0.0059	0.01385
Mn	55	3	He	-0.287	0.0122	860.06	0.0059	0.01385
Fe	57	3	He	22.134	0.0103	740.04	0.0003	0.003918
Fe	57	3	He	29.747	0.0125	900.06	0.0003	0.003918
Fe	57	3	He	29.423	0.0124	880.07	0.0003	0.003918
Co	59	3	He	0.109	0.0064	460.02	0.0305	0.003084
Co	59	3	He	0.132	0.0071	510.03	0.0305	0.003084
Co	59	3	He	0.066	0.0051	360.02	0.0305	0.003084
Ni	60	3	He	0.405	0.0126	900.06	0.0088	0.009003
Ni	60	3	He	0.18	0.0106	760.06	0.0088	0.009003
Ni	60	3	He	0.471	0.0131	930.06	0.0088	0.009003
Cu	63	3	He	-0.002	0.0049	350.02	0.0249	0.004937
Cu	63	3	He	0.081	0.007	500.02	0.0249	0.004937
Cu	63	3	He	0.006	0.0051	360.02	0.0249	0.004937
Zn	66	3	He	-0.207	0.0043	310.01	0.0025	0.004836
Zn	66	3	He	-0.665	0.0032	230.01	0.0025	0.004836
Zn	66	3	He	0.333	0.0057	400.02	0.0025	0.004836
As	75	3	He	-0.025	0.0004	28.00	0.0017	0.0004347
As	75	3	He	0.022	0.0005	34.00	0.0017	0.0004347
As	75	3	He	0.075	0.0006	40.00	0.0017	0.0004347
Sr	88	3	He	0.024	0.001	60.00	0.0078	0.0007762
Sr	88	3	He	0.176	0.0022	140.01	0.0078	0.0007762
Sr	88	3	He	0.251	0.0027	170.01	0.0078	0.0007762
Mo	98	3	He	0.282	0.0067	420.02	0.022	0.0005162
Mo	98	3	He	0.235	0.0057	370.02	0.022	0.0005162
Mo	98	3	He	0.328	0.0077	480.03	0.022	0.0005162
Ag	107	3	He	0.081	0.0042	260.01	0.0455	0.0004641
Ag	107	3	He	0.101	0.0051	330.02	0.0455	0.0004641
Ag	107	3	He	0.107	0.0053	330.01	0.0455	0.0004641
Cd	111	3	He	0.089	0.0005	30.00	0.0048	5.152E-05
Cd	111	3	He	0.13	0.0007	44.00	0.0048	5.152E-05
Cd	111	3	He	0.097	0.0005	32.00	0.0048	5.152E-05
Sn	120	3	He	0.12	0.0173	1080.08	0.0143	0.01559
Sn	120	3	He	0.147	0.0177	1150.09	0.0143	0.01559
Sn	120	3	He	0.308	0.02	1240.10	0.0143	0.01559
Sb	121	3	He	0.044	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.066	0.0011	70.01	0.0124	0.000258
Sb	121	3	He	0.083	0.0013	80.00	0.0124	0.000258
Ba	137	3	He	0.003	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.04	0.0005	30.00	0.0044	0.000309
Tl	205	3	He	0.297	0.0092	2020.23	0.0276	0.001005
Tl	205	3	He	0.293	0.0091	1980.24	0.0276	0.001005
Tl	205	3	He	0.31	0.0096	2040.25	0.0276	0.001005
Pb	208	3	He	0.103	0.0059	640.04	0.0364	0.002176
Pb	208	3	He	0.119	0.0065	860.07	0.0364	0.002176
Pb	208	3	He	0.114	0.0063	710.05	0.0364	0.002176
U	238	3	He	0.005	0.0005	100.00	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.01	0.0421	0.00024
U	238	3	He	0.012	0.0008	160.01	0.0421	0.00024
Sc	45	1	No Gas			3151847.45		
Sc	45	1	No Gas			3278032.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3346915.89		
Ge	72	1	No Gas			1371304.35		
Ge	72	1	No Gas			1438303.42		
Ge	72	1	No Gas			1462321.07		
Sc	45	2	H2			191546.77		
Sc	45	2	H2			190643.43		
Sc	45	2	H2			196107.05		
Ge	72	2	H2			159050.87		
Ge	72	2	H2			155299.14		
Ge	72	2	H2			160545.75		
In	115	2	H2			433110.97		
In	115	2	H2			426555.23		
In	115	2	H2			439618.00		
Sc	45	3	He			41138.54		
Sc	45	3	He			40236.21		
Sc	45	3	He			39453.90		
Ge	72	3	He			71638.35		
Ge	72	3	He			71798.83		
Ge	72	3	He			70734.37		
In	115	3	He			62460.20		
In	115	3	He			65031.18		
In	115	3	He			62098.38		
Tb	159	3	He			281076.36		
Tb	159	3	He			278451.70		
Tb	159	3	He			280023.86		
Bi	209	3	He			219124.65		
Bi	209	3	He			217297.83		
Bi	209	3	He			213151.66		

Quantitation Report

Data File Name	036_CCV.d
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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

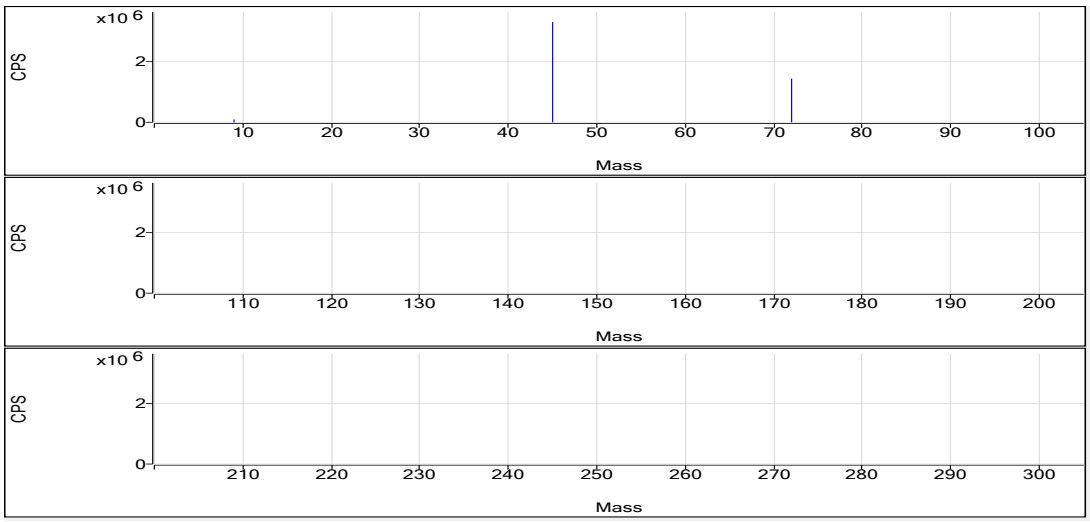
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.189	ppb	3.9	93047.73	0.0647	Pulse	0.5000	3
Se	78	72	H2	52.697	ppb	7.2	3238.37	0.0205	Pulse	1.5000	3
Na	23	72	He	5300.802	ppb	0.4	674504.16	9.2123	Pulse	0.1000	3
Mg	24	72	He	5298.877	ppb	0.7	327466.40	4.4723	Pulse	0.1000	3
Al	27	72	He	5187.674	ppb	1.0	91766.28	1.2533	Pulse	0.1000	3
K	39	72	He	5201.771	ppb	1.7	220839.61	3.0161	Pulse	0.1000	3
Ca	44	72	He	5226.905	ppb	4.9	12001.99	0.1640	Pulse	0.1000	3
Ti	47	72	He	5312.071	ppb	1.3	97557.18	1.3324	Pulse	0.1000	3
V	51	72	He	522.896	ppb	0.5	448385.84	6.1240	Pulse	0.5000	3
Cr	52	72	He	522.249	ppb	0.5	584114.07	7.9778	Pulse	0.1000	3
Mn	55	72	He	519.773	ppb	1.0	225654.15	3.0818	Pulse	0.1000	3
Fe	57	72	He	5122.583	ppb	2.3	108940.09	1.4880	Pulse	0.1000	3
Co	59	72	He	521.499	ppb	1.0	1165174.72	15.9143	Pulse	0.1000	3
Ni	60	72	He	520.698	ppb	1.0	335890.31	4.5877	Pulse	0.1000	3
Cu	63	72	He	517.325	ppb	0.9	944892.88	12.9055	Pulse	0.1000	3
Zn	66	72	He	510.459	ppb	0.8	92173.20	1.2589	Pulse	0.1000	3
As	75	72	He	512.615	ppb	0.3	65308.19	0.8920	Pulse	0.5000	3
Sr	88	115	He	52.227	ppb	2.9	25927.71	0.4090	Pulse	0.1000	3
Mo	98	115	He	51.608	ppb	1.5	72070.05	1.1370	Pulse	0.1000	3
Ag	107	115	He	51.432	ppb	1.6	148362.82	2.3406	Pulse	0.1000	3
Cd	111	115	He	51.985	ppb	1.4	15820.94	0.2496	Pulse	0.5000	3
Sn	120	115	He	52.740	ppb	3.6	48652.27	0.7675	Pulse	0.1000	3
Sb	121	115	He	52.698	ppb	1.6	41452.60	0.6540	Pulse	0.1000	3
Ba	137	115	He	514.238	ppb	0.1	142618.05	2.2500	Pulse	0.1000	3
Tl	205	209	He	51.683	ppb	2.0	314623.72	1.4297	Pulse	0.1000	3
Pb	208	209	He	51.511	ppb	1.3	413079.08	1.8771	Pulse	0.1000	3
U	238	209	He	51.047	ppb	1.3	472621.82	2.1476	Pulse	0.1000	3

ISTD Table:

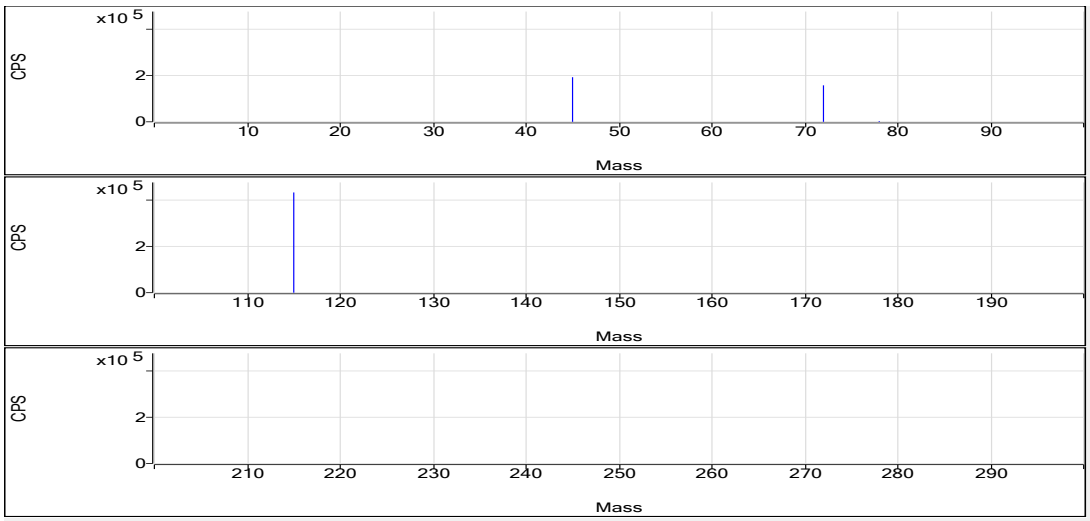
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3304520.26	1.5	102.0	Pulse	0.1000	3
No Gas	Ge	72	1439165.03	1.8	100.0	Pulse	0.1000	3
H2	Sc	45	193216.14	3.3	98.9	Pulse	0.1000	3
H2	Ge	72	158049.17	4.1	97.0	Pulse	0.1000	3
H2	In	115	434192.19	2.5	100.2	Pulse	0.1000	3
He	Sc	45	41947.48	1.0	104.9	Pulse	0.1000	3
He	Ge	72	73219.29	0.8	101.3	Pulse	0.1000	3
He	In	115	63386.04	0.1	98.1	Pulse	0.1000	3
He	Tb	159	281600.82	0.6	98.5	Pulse	0.1000	3
He	Bi	209	220087.69	1.2	99.1	Pulse	0.1000	3

No Gas

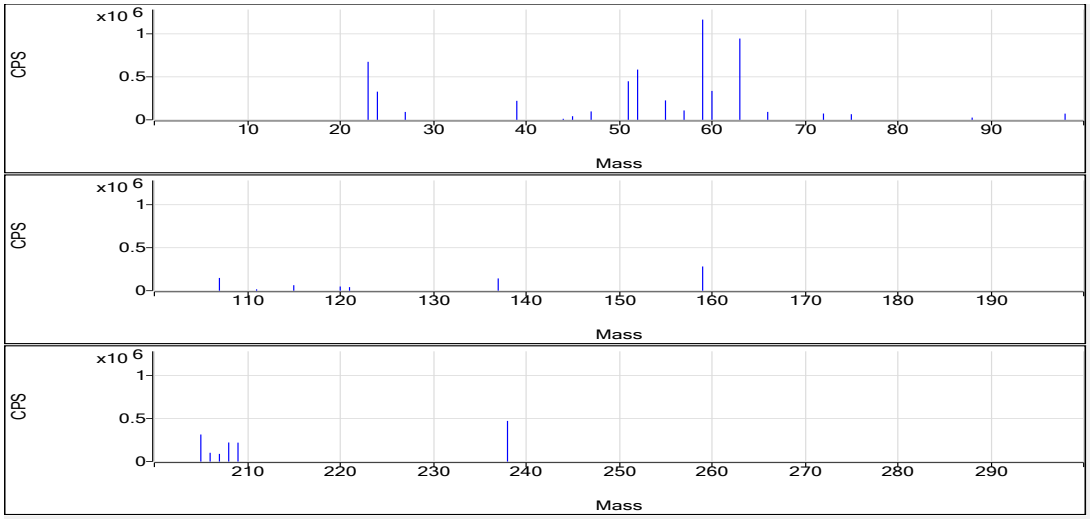


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	51.306	0.0675	95052.62	0.0013	4.694E-05
Be	9	1	No Gas	47.617	0.0626	91132.92	0.0013	4.694E-05
Be	9	1	No Gas	48.644	0.064	92957.66	0.0013	4.694E-05
Se	78	2	H2	55.032	0.0214	3337.73	0.0004	1.089E-05
Se	78	2	H2	54.715	0.0213	3261.04	0.0004	1.089E-05
Se	78	2	H2	48.344	0.0188	3116.35	0.0004	1.089E-05
Na	23	3	He	5279.946	9.1765	676934.99	0.0017	0.1065
Na	23	3	He	5320.505	9.2461	671762.49	0.0017	0.1065
Na	23	3	He	5301.956	9.2143	674814.99	0.0017	0.1065
Mg	24	3	He	5334.085	4.502	332108.04	0.0008	0.004846
Mg	24	3	He	5300.531	4.4737	325031.62	0.0008	0.004846
Mg	24	3	He	5262.015	4.4413	325259.55	0.0008	0.004846
Al	27	3	He	5189.903	1.2539	92496.69	0.0002	0.001063
Al	27	3	He	5236.405	1.2651	91913.80	0.0002	0.001063
Al	27	3	He	5136.714	1.241	90888.35	0.0002	0.001063
K	39	3	He	5156.228	2.991	220639.88	0.0006	0.1436
K	39	3	He	5146.764	2.9857	216924.35	0.0006	0.1436
K	39	3	He	5302.32	3.0716	224954.59	0.0006	0.1436
Ca	44	3	He	4951.888	0.1554	11464.82	0	0.001611
Ca	44	3	He	5454.482	0.171	12425.64	0	0.001611
Ca	44	3	He	5274.345	0.1654	12115.51	0	0.001611
Ti	47	3	He	5248.292	1.3164	97111.75	0.0003	0.0002737
Ti	47	3	He	5304.487	1.3305	96667.39	0.0003	0.0002737
Ti	47	3	He	5383.433	1.3503	98892.40	0.0003	0.0002737
V	51	3	He	520.254	6.0931	449482.00	0.0117	0.007326
V	51	3	He	525.607	6.1557	447235.06	0.0117	0.007326
V	51	3	He	522.828	6.1232	448440.47	0.0117	0.007326
Cr	52	3	He	519.286	7.9327	585184.17	0.0152	0.02538
Cr	52	3	He	524.671	8.0147	582294.29	0.0152	0.02538
Cr	52	3	He	522.789	7.986	584863.74	0.0152	0.02538
Mn	55	3	He	521.779	3.0936	228211.81	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	513.82	3.0466	221348.47	0.0059	0.01385
Mn	55	3	He	523.719	3.1051	227402.16	0.0059	0.01385
Fe	57	3	He	5063.395	1.4709	108503.17	0.0003	0.003918
Fe	57	3	He	5256.737	1.5269	110932.33	0.0003	0.003918
Fe	57	3	He	5047.617	1.4663	107384.77	0.0003	0.003918
Co	59	3	He	515.459	15.73	1160380.69	0.0305	0.003084
Co	59	3	He	525.539	16.0375	1165180.06	0.0305	0.003084
Co	59	3	He	523.498	15.9753	1169963.42	0.0305	0.003084
Ni	60	3	He	514.628	4.5343	334488.00	0.0088	0.009003
Ni	60	3	He	523.619	4.6133	335174.88	0.0088	0.009003
Ni	60	3	He	523.846	4.6153	338008.04	0.0088	0.009003
Cu	63	3	He	512.031	12.7735	942284.28	0.0249	0.004937
Cu	63	3	He	520.803	12.9923	943931.00	0.0249	0.004937
Cu	63	3	He	519.14	12.9508	948463.35	0.0249	0.004937
Zn	66	3	He	505.843	1.2476	92031.87	0.0025	0.004836
Zn	66	3	He	514.036	1.2677	92102.76	0.0025	0.004836
Zn	66	3	He	511.5	1.2615	92384.98	0.0025	0.004836
As	75	3	He	511.146	0.8894	65610.23	0.0017	0.0004347
As	75	3	He	512.923	0.8925	64842.78	0.0017	0.0004347
As	75	3	He	513.778	0.894	65471.56	0.0017	0.0004347
Sr	88	3	He	53.639	0.4201	26645.91	0.0078	0.0007762
Sr	88	3	He	50.649	0.3967	25112.89	0.0078	0.0007762
Sr	88	3	He	52.392	0.4103	26024.32	0.0078	0.0007762
Mo	98	3	He	50.796	1.1191	70988.07	0.022	0.0005162
Mo	98	3	He	51.685	1.1387	72083.27	0.022	0.0005162
Mo	98	3	He	52.343	1.1532	73138.81	0.022	0.0005162
Ag	107	3	He	50.65	2.3051	146213.23	0.0455	0.0004641
Ag	107	3	He	51.367	2.3377	147982.04	0.0455	0.0004641
Ag	107	3	He	52.278	2.3791	150893.19	0.0455	0.0004641
Cd	111	3	He	52.81	0.2536	16083.26	0.0048	5.152E-05
Cd	111	3	He	51.658	0.248	15700.79	0.0048	5.152E-05
Cd	111	3	He	51.488	0.2472	15678.77	0.0048	5.152E-05
Sn	120	3	He	54.913	0.7985	50652.31	0.0143	0.01559
Sn	120	3	He	51.647	0.752	47602.12	0.0143	0.01559
Sn	120	3	He	51.658	0.7521	47702.39	0.0143	0.01559
Sb	121	3	He	52.073	0.6462	40990.83	0.0124	0.000258
Sb	121	3	He	53.687	0.6662	42175.24	0.0124	0.000258
Sb	121	3	He	52.335	0.6495	41191.72	0.0124	0.000258
Ba	137	3	He	514.177	2.2497	142702.96	0.0044	0.000309
Ba	137	3	He	514.52	2.2512	142510.52	0.0044	0.000309
Ba	137	3	He	514.015	2.249	142640.66	0.0044	0.000309
Tl	205	3	He	51.251	1.4178	315318.84	0.0276	0.001005
Tl	205	3	He	50.935	1.4091	311014.78	0.0276	0.001005
Tl	205	3	He	52.863	1.4624	317537.55	0.0276	0.001005
Pb	208	3	He	51.263	1.868	222783.67	0.0364	0.002176
Pb	208	3	He	51.006	1.8587	220960.84	0.0364	0.002176
Pb	208	3	He	52.265	1.9045	221026.85	0.0364	0.002176
U	238	3	He	50.372	2.1192	471318.63	0.0421	0.00024
U	238	3	He	51.055	2.148	474111.01	0.0421	0.00024
U	238	3	He	51.714	2.1757	472435.81	0.0421	0.00024
Sc	45	1	No Gas			3248141.20		
Sc	45	1	No Gas			3335511.20		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3329908.39		
Ge	72	1	No Gas			1408913.89		
Ge	72	1	No Gas			1455371.54		
Ge	72	1	No Gas			1453209.67		
Sc	45	2	H2			189510.66		
Sc	45	2	H2			189531.91		
Sc	45	2	H2			200605.86		
Ge	72	2	H2			155691.68		
Ge	72	2	H2			152994.93		
Ge	72	2	H2			165460.90		
In	115	2	H2			429272.69		
In	115	2	H2			426458.43		
In	115	2	H2			446845.46		
Sc	45	3	He			41499.81		
Sc	45	3	He			41980.58		
Sc	45	3	He			42362.06		
Ge	72	3	He			73768.65		
Ge	72	3	He			72653.35		
Ge	72	3	He			73235.88		
In	115	3	He			63826.29		
In	115	3	He			63674.73		
In	115	3	He			63795.56		
Tb	159	3	He			279858.32		
Tb	159	3	He			281850.33		
Tb	159	3	He			283093.82		
Bi	209	3	He			222399.61		
Bi	209	3	He			220722.71		
Bi	209	3	He			217140.76		

Quantitation Report

Data File Name	037_CCB.d
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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

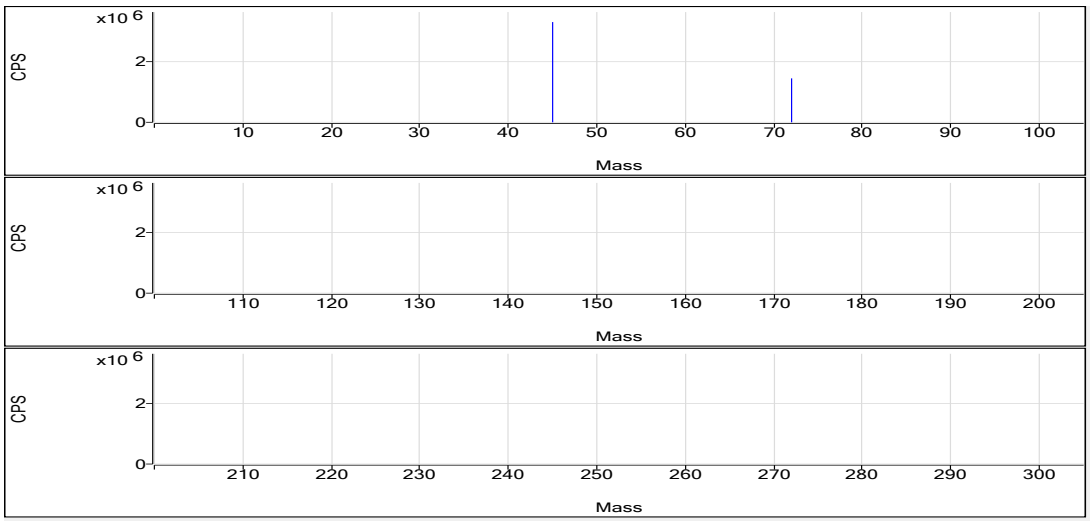
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.158	ppb	9.5	366.01	0.0003	Pulse	0.5000	3
Se	78	72	H2	0.157	ppb	14.1	11.56	0.0001	Pulse	1.5000	3
Na	23	72	He	36.671	ppb	1.9	12175.40	0.1695	Pulse	0.1000	3
Mg	24	72	He	18.130	ppb	6.8	1446.78	0.0201	Pulse	0.1000	3
Al	27	72	He	18.089	ppb	4.5	390.02	0.0054	Pulse	0.1000	3
K	39	72	He	24.590	ppb	16.9	11298.04	0.1572	Pulse	0.1000	3
Ca	44	72	He	37.715	ppb	58.3	200.01	0.0028	Pulse	0.1000	3
Ti	47	72	He	1.316	ppb	147.5	43.33	0.0006	Pulse	0.1000	3
V	51	72	He	0.145	ppb	41.0	648.02	0.0090	Pulse	0.5000	3
Cr	52	72	He	0.297	ppb	34.9	2150.23	0.0299	Pulse	0.1000	3
Mn	55	72	He	-0.248	ppb	N/A	890.06	0.0124	Pulse	0.1000	3
Fe	57	72	He	26.779	ppb	30.2	840.06	0.0117	Pulse	0.1000	3
Co	59	72	He	0.198	ppb	0.7	656.71	0.0091	Pulse	0.1000	3
Ni	60	72	He	0.280	ppb	25.6	823.38	0.0115	Pulse	0.1000	3
Cu	63	72	He	0.221	ppb	27.4	750.05	0.0104	Pulse	0.1000	3
Zn	66	72	He	-0.138	ppb	N/A	323.35	0.0045	Pulse	0.1000	3
As	75	72	He	0.150	ppb	38.4	50.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.174	ppb	36.7	133.34	0.0021	Pulse	0.1000	3
Mo	98	115	He	0.277	ppb	12.6	413.36	0.0066	Pulse	0.1000	3
Ag	107	115	He	0.095	ppb	15.9	300.01	0.0048	Pulse	0.1000	3
Cd	111	115	He	0.124	ppb	36.6	40.67	0.0006	Pulse	0.5000	3
Sn	120	115	He	0.188	ppb	50.2	1143.42	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.112	ppb	27.8	103.34	0.0016	Pulse	0.1000	3
Ba	137	115	He	0.197	ppb	27.0	73.33	0.0012	Pulse	0.1000	3
Tl	205	209	He	0.440	ppb	4.1	2877.10	0.0132	Pulse	0.1000	3
Pb	208	209	He	0.102	ppb	15.0	1290.08	0.0059	Pulse	0.1000	3
U	238	209	He	0.032	ppb	21.2	343.35	0.0016	Pulse	0.1000	3

ISTD Table:

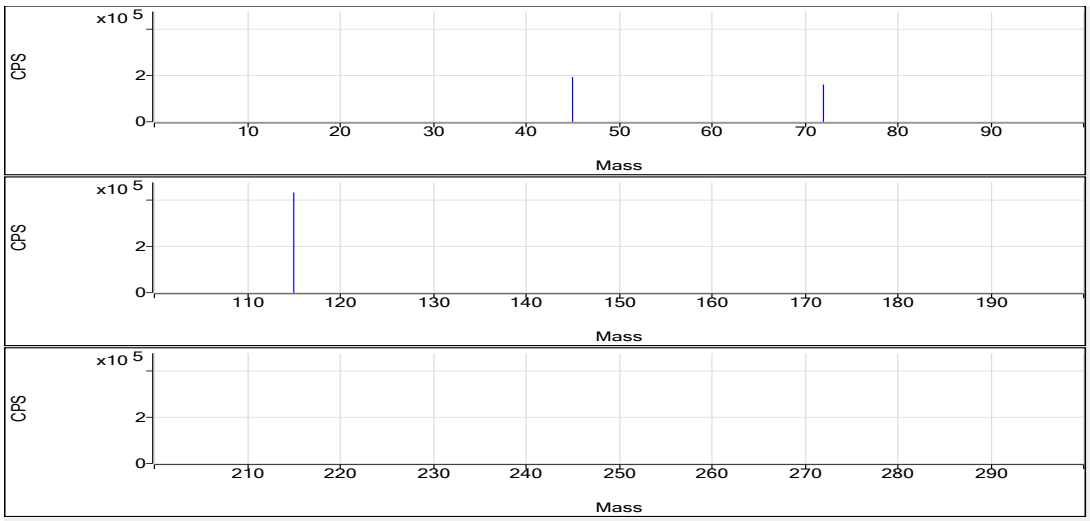
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3284632.03	2.0	101.3	Pulse	0.1000	3
No Gas	Ge	72	1439757.84	1.1	100.0	Pulse	0.1000	3
H2	Sc	45	192577.07	2.5	98.6	Pulse	0.1000	3
H2	Ge	72	160361.71	1.5	98.4	Pulse	0.1000	3
H2	In	115	431103.46	1.4	99.5	Pulse	0.1000	3
He	Sc	45	40727.66	2.9	101.9	Pulse	0.1000	3
He	Ge	72	71856.22	1.3	99.4	Pulse	0.1000	3
He	In	115	62578.66	1.0	96.9	Pulse	0.1000	3
He	Tb	159	279991.92	1.0	97.9	Pulse	0.1000	3
He	Bi	209	218720.65	0.5	98.4	Pulse	0.1000	3

No Gas

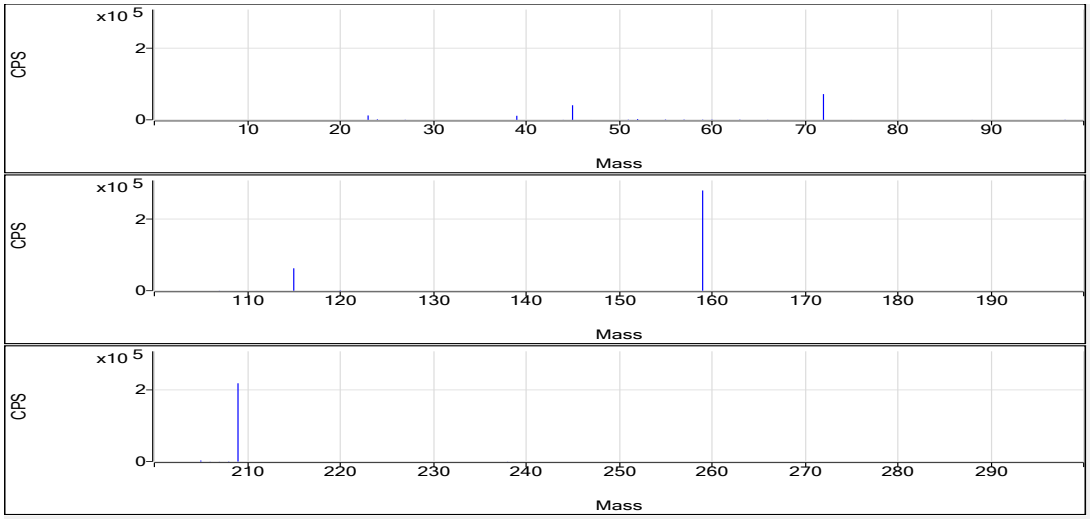


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.172	0.0003	390.01	0.0013	4.694E-05
Be	9	1	No Gas	0.159	0.0003	374.01	0.0013	4.694E-05
Be	9	1	No Gas	0.142	0.0002	334.01	0.0013	4.694E-05
Se	78	2	H2	0.143	0.0001	10.67	0.0004	1.089E-05
Se	78	2	H2	0.145	0.0001	10.67	0.0004	1.089E-05
Se	78	2	H2	0.182	0.0001	13.33	0.0004	1.089E-05
Na	23	3	He	36.213	0.1687	12245.44	0.0017	0.1065
Na	23	3	He	37.458	0.1708	12095.33	0.0017	0.1065
Na	23	3	He	36.344	0.1689	12185.42	0.0017	0.1065
Mg	24	3	He	19.413	0.0212	1540.13	0.0008	0.004846
Mg	24	3	He	18.038	0.0201	1420.11	0.0008	0.004846
Mg	24	3	He	16.94	0.0191	1380.11	0.0008	0.004846
Al	27	3	He	17.851	0.0054	390.02	0.0002	0.001063
Al	27	3	He	18.998	0.0056	400.02	0.0002	0.001063
Al	27	3	He	17.417	0.0053	380.02	0.0002	0.001063
K	39	3	He	29.338	0.1598	11604.95	0.0006	0.1436
K	39	3	He	22.826	0.1562	11064.53	0.0006	0.1436
K	39	3	He	21.606	0.1556	11224.63	0.0006	0.1436
Ca	44	3	He	59.002	0.0034	250.01	0	0.001611
Ca	44	3	He	39.069	0.0028	200.01	0	0.001611
Ca	44	3	He	15.074	0.0021	150.01	0	0.001611
Ti	47	3	He	-0.542	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	1.161	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	3.33	0.0011	80.00	0.0003	0.0002737
V	51	3	He	0.097	0.0085	614.02	0.0117	0.007326
V	51	3	He	0.211	0.0098	694.02	0.0117	0.007326
V	51	3	He	0.127	0.0088	636.02	0.0117	0.007326
Cr	52	3	He	0.405	0.0315	2290.24	0.0152	0.02538
Cr	52	3	He	0.197	0.0284	2010.21	0.0152	0.02538
Cr	52	3	He	0.29	0.0298	2150.24	0.0152	0.02538
Mn	55	3	He	-0.34	0.0118	860.06	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.17	0.0129	910.06	0.0059	0.01385
Mn	55	3	He	-0.234	0.0125	900.06	0.0059	0.01385
Fe	57	3	He	26.891	0.0117	850.06	0.0003	0.003918
Fe	57	3	He	18.649	0.0093	660.04	0.0003	0.003918
Fe	57	3	He	34.799	0.014	1010.07	0.0003	0.003918
Co	59	3	He	0.197	0.0091	660.04	0.0305	0.003084
Co	59	3	He	0.2	0.0092	650.05	0.0305	0.003084
Co	59	3	He	0.199	0.0091	660.05	0.0305	0.003084
Ni	60	3	He	0.198	0.0107	780.04	0.0088	0.009003
Ni	60	3	He	0.309	0.0117	830.05	0.0088	0.009003
Ni	60	3	He	0.332	0.0119	860.06	0.0088	0.009003
Cu	63	3	He	0.244	0.011	800.05	0.0249	0.004937
Cu	63	3	He	0.266	0.0116	820.05	0.0249	0.004937
Cu	63	3	He	0.152	0.0087	630.04	0.0249	0.004937
Zn	66	3	He	-0.062	0.0047	340.02	0.0025	0.004836
Zn	66	3	He	-0.244	0.0042	300.01	0.0025	0.004836
Zn	66	3	He	-0.107	0.0046	330.02	0.0025	0.004836
As	75	3	He	0.194	0.0008	56.00	0.0017	0.0004347
As	75	3	He	0.172	0.0007	52.00	0.0017	0.0004347
As	75	3	He	0.085	0.0006	42.00	0.0017	0.0004347
Sr	88	3	He	0.228	0.0026	160.01	0.0078	0.0007762
Sr	88	3	He	0.19	0.0023	140.01	0.0078	0.0007762
Sr	88	3	He	0.103	0.0016	100.01	0.0078	0.0007762
Mo	98	3	He	0.245	0.0059	370.02	0.022	0.0005162
Mo	98	3	He	0.314	0.0074	460.03	0.022	0.0005162
Mo	98	3	He	0.271	0.0065	410.02	0.022	0.0005162
Ag	107	3	He	0.092	0.0046	290.01	0.0455	0.0004641
Ag	107	3	He	0.082	0.0042	260.01	0.0455	0.0004641
Ag	107	3	He	0.112	0.0055	350.02	0.0455	0.0004641
Cd	111	3	He	0.129	0.0007	42.00	0.0048	5.152E-05
Cd	111	3	He	0.077	0.0004	26.00	0.0048	5.152E-05
Cd	111	3	He	0.167	0.0009	54.00	0.0048	5.152E-05
Sn	120	3	He	0.284	0.0196	1230.10	0.0143	0.01559
Sn	120	3	He	0.096	0.017	1050.08	0.0143	0.01559
Sn	120	3	He	0.184	0.0182	1150.08	0.0143	0.01559
Sb	121	3	He	0.108	0.0016	100.00	0.0124	0.000258
Sb	121	3	He	0.083	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.145	0.0021	130.01	0.0124	0.000258
Ba	137	3	He	0.185	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.151	0.001	60.00	0.0044	0.000309
Ba	137	3	He	0.255	0.0014	90.00	0.0044	0.000309
Tl	205	3	He	0.455	0.0136	2970.44	0.0276	0.001005
Tl	205	3	He	0.444	0.0133	2890.48	0.0276	0.001005
Tl	205	3	He	0.419	0.0126	2770.39	0.0276	0.001005
Pb	208	3	He	0.085	0.0053	640.04	0.0364	0.002176
Pb	208	3	He	0.113	0.0063	640.04	0.0364	0.002176
Pb	208	3	He	0.109	0.0061	800.05	0.0364	0.002176
U	238	3	He	0.039	0.0019	410.03	0.0421	0.00024
U	238	3	He	0.03	0.0015	330.02	0.0421	0.00024
U	238	3	He	0.026	0.0013	290.01	0.0421	0.00024
Sc	45	1	No Gas			3224798.08		
Sc	45	1	No Gas			3355685.57		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3273412.45		
Ge	72	1	No Gas			1429950.76		
Ge	72	1	No Gas			1458737.17		
Ge	72	1	No Gas			1430585.60		
Sc	45	2	H2			192012.93		
Sc	45	2	H2			188142.01		
Sc	45	2	H2			197576.27		
Ge	72	2	H2			160234.68		
Ge	72	2	H2			158080.28		
Ge	72	2	H2			162770.18		
In	115	2	H2			426841.48		
In	115	2	H2			428449.95		
In	115	2	H2			438018.94		
Sc	45	3	He			41038.33		
Sc	45	3	He			41740.69		
Sc	45	3	He			39403.96		
Ge	72	3	He			72602.88		
Ge	72	3	He			70814.95		
Ge	72	3	He			72150.82		
In	115	3	He			62640.88		
In	115	3	He			61958.70		
In	115	3	He			63163.15		
Tb	159	3	He			281716.30		
Tb	159	3	He			276660.29		
Tb	159	3	He			281599.18		
Bi	209	3	He			218698.69		
Bi	209	3	He			217594.70		
Bi	209	3	He			219868.57		

Quantitation Report

Data File Name	090_CCV.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 11:30:22
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

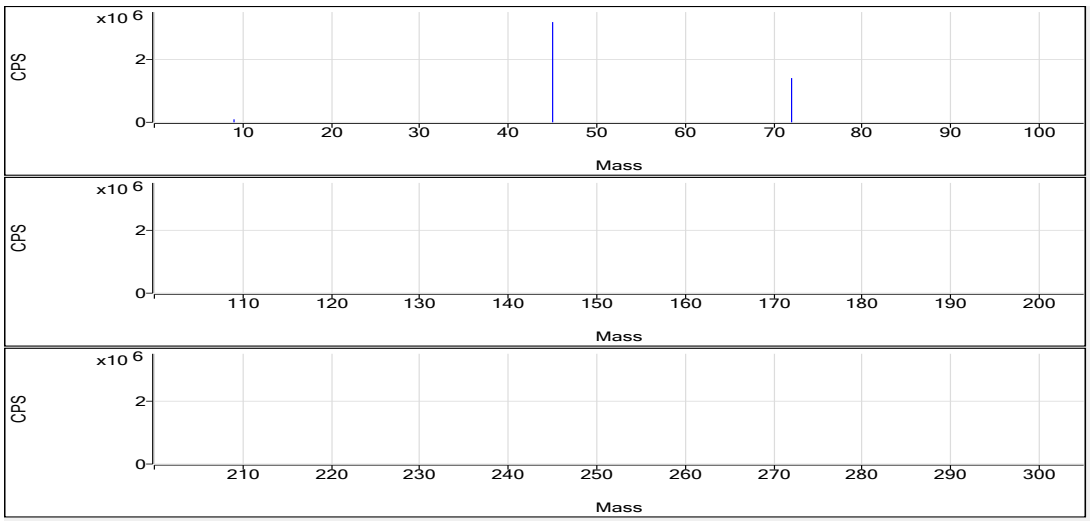
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	51.110	ppb	3.0	95258.61	0.0672	Pulse	0.5000	3
Se	78	72	H2	52.992	ppb	5.1	3263.71	0.0206	Pulse	1.5000	3
Na	23	72	He	5499.517	ppb	0.9	690144.05	9.5536	Pulse	0.1000	3
Mg	24	72	He	5501.307	ppb	1.0	335409.45	4.6430	Pulse	0.1000	3
Al	27	72	He	5349.733	ppb	1.0	93366.71	1.2925	Pulse	0.1000	3
K	39	72	He	5370.772	ppb	1.3	224619.43	3.1094	Pulse	0.1000	3
Ca	44	72	He	5272.078	ppb	3.4	11945.22	0.1654	Pulse	0.1000	3
Ti	47	72	He	5468.314	ppb	2.2	99094.87	1.3716	Pulse	0.1000	3
V	51	72	He	539.302	ppb	0.6	456265.87	6.3159	Pulse	0.5000	3
Cr	52	72	He	542.467	ppb	0.3	598578.15	8.2857	Pulse	0.1000	3
Mn	55	72	He	535.366	ppb	0.5	229280.37	3.1738	Pulse	0.1000	3
Fe	57	72	He	5313.870	ppb	1.2	111498.79	1.5434	Pulse	0.1000	3
Co	59	72	He	536.851	ppb	0.6	1183503.73	16.3827	Pulse	0.1000	3
Ni	60	72	He	538.195	ppb	0.4	342531.62	4.7415	Pulse	0.1000	3
Cu	63	72	He	535.271	ppb	0.7	964623.16	13.3531	Pulse	0.1000	3
Zn	66	72	He	533.975	ppb	1.3	95125.20	1.3167	Pulse	0.1000	3
As	75	72	He	531.658	ppb	0.6	66827.64	0.9251	Pulse	0.5000	3
Sr	88	115	He	52.993	ppb	4.5	26094.68	0.4150	Pulse	0.1000	3
Mo	98	115	He	52.646	ppb	1.4	72954.77	1.1599	Pulse	0.1000	3
Ag	107	115	He	53.295	ppb	2.0	152546.46	2.4254	Pulse	0.1000	3
Cd	111	115	He	53.058	ppb	0.8	16024.50	0.2547	Pulse	0.5000	3
Sn	120	115	He	53.004	ppb	2.5	48508.66	0.7713	Pulse	0.1000	3
Sb	121	115	He	52.403	ppb	0.6	40910.85	0.6503	Pulse	0.1000	3
Ba	137	115	He	523.193	ppb	1.1	143991.28	2.2892	Pulse	0.1000	3
Tl	205	209	He	52.587	ppb	2.0	318158.91	1.4547	Pulse	0.1000	3
Pb	208	209	He	52.570	ppb	1.8	418959.04	1.9156	Pulse	0.1000	3
U	238	209	He	52.007	ppb	1.1	478582.73	2.1880	Pulse	0.1000	3

ISTD Table:

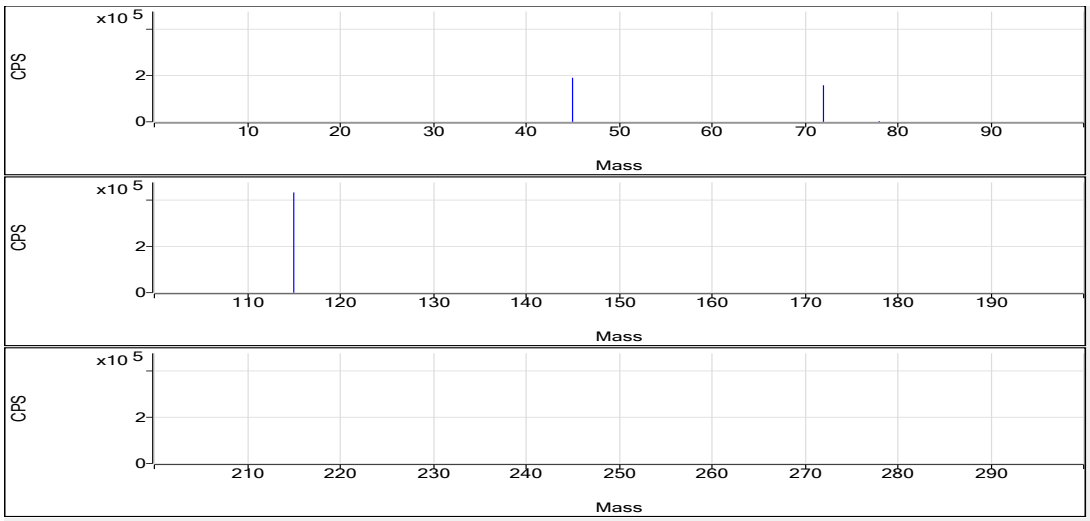
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3214157.04	2.0	99.2	Pulse	0.1000	3
No Gas	Ge	72	1417827.01	2.0	98.5	Pulse	0.1000	3
H2	Sc	45	190571.05	1.5	97.5	Pulse	0.1000	3
H2	Ge	72	158106.60	1.7	97.0	Pulse	0.1000	3
H2	In	115	433515.85	2.4	100.0	Pulse	0.1000	3
He	Sc	45	40967.89	2.8	102.5	Pulse	0.1000	3
He	Ge	72	72241.67	0.7	99.9	Pulse	0.1000	3
He	In	115	62908.52	1.8	97.4	Pulse	0.1000	3
He	Tb	159	279366.51	0.3	97.7	Pulse	0.1000	3
He	Bi	209	218749.74	1.5	98.5	Pulse	0.1000	3

No Gas

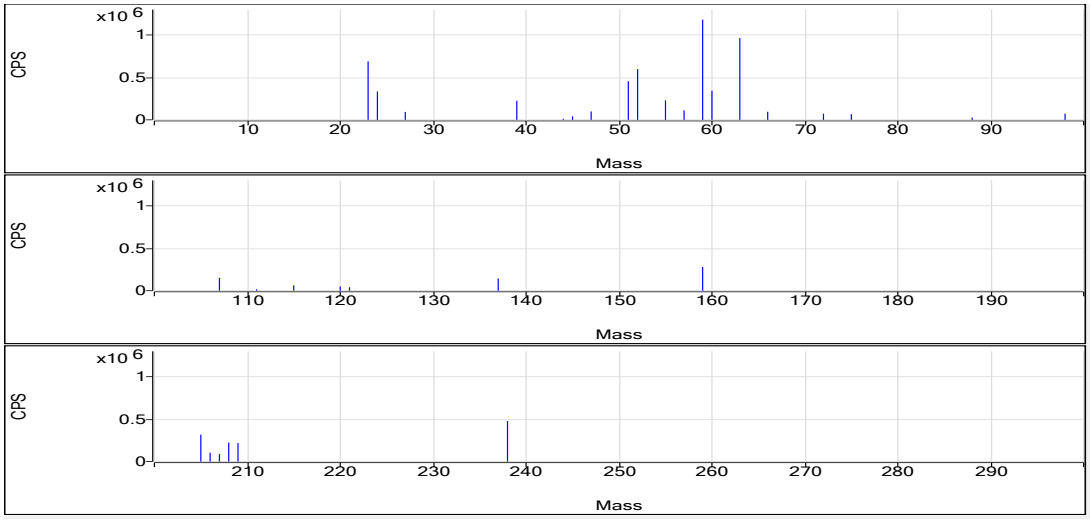


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.026	0.0684	97190.02	0.0013	4.694E-05
Be	9	1	No Gas	51.972	0.0683	94887.69	0.0013	4.694E-05
Be	9	1	No Gas	49.333	0.0649	93698.13	0.0013	4.694E-05
Se	78	2	H2	50.297	0.0196	3134.34	0.0004	1.089E-05
Se	78	2	H2	55.697	0.0217	3457.09	0.0004	1.089E-05
Se	78	2	H2	52.981	0.0206	3199.69	0.0004	1.089E-05
Na	23	3	He	5543.294	9.6288	691731.79	0.0017	0.1065
Na	23	3	He	5448.083	9.4653	689021.16	0.0017	0.1065
Na	23	3	He	5507.174	9.5668	689679.21	0.0017	0.1065
Mg	24	3	He	5491.072	4.6344	332931.60	0.0008	0.004846
Mg	24	3	He	5451.629	4.6011	334936.52	0.0008	0.004846
Mg	24	3	He	5561.221	4.6935	338360.23	0.0008	0.004846
Al	27	3	He	5342.232	1.2906	92719.47	0.0002	0.001063
Al	27	3	He	5301.885	1.2809	93243.01	0.0002	0.001063
Al	27	3	He	5405.083	1.3058	94137.66	0.0002	0.001063
K	39	3	He	5445.458	3.1507	226343.94	0.0006	0.1436
K	39	3	He	5304.768	3.073	223697.26	0.0006	0.1436
K	39	3	He	5362.09	3.1046	223817.09	0.0006	0.1436
Ca	44	3	He	5463.065	0.1713	12305.61	0	0.001611
Ca	44	3	He	5240.132	0.1644	11965.14	0	0.001611
Ca	44	3	He	5113.037	0.1604	11564.91	0	0.001611
Ti	47	3	He	5462.967	1.3703	98439.77	0.0003	0.0002737
Ti	47	3	He	5589.316	1.402	102054.88	0.0003	0.0002737
Ti	47	3	He	5352.658	1.3426	96789.96	0.0003	0.0002737
V	51	3	He	542.85	6.3575	456716.38	0.0117	0.007326
V	51	3	He	537.595	6.296	458312.97	0.0117	0.007326
V	51	3	He	537.459	6.2944	453768.25	0.0117	0.007326
Cr	52	3	He	540.663	8.2582	593266.20	0.0152	0.02538
Cr	52	3	He	543.972	8.3086	604819.68	0.0152	0.02538
Cr	52	3	He	542.764	8.2902	597648.58	0.0152	0.02538
Mn	55	3	He	533.748	3.1643	227319.00	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	534.021	3.1659	230458.14	0.0059	0.01385
Mn	55	3	He	538.33	3.1913	230063.98	0.0059	0.01385
Fe	57	3	He	5372.529	1.5604	112099.73	0.0003	0.003918
Fe	57	3	He	5324.404	1.5465	112574.95	0.0003	0.003918
Fe	57	3	He	5244.676	1.5234	109821.69	0.0003	0.003918
Co	59	3	He	540.187	16.4845	1184235.76	0.0305	0.003084
Co	59	3	He	536.864	16.3831	1192597.95	0.0305	0.003084
Co	59	3	He	533.503	16.2805	1173677.48	0.0305	0.003084
Ni	60	3	He	537.529	4.7357	340207.49	0.0088	0.009003
Ni	60	3	He	536.513	4.7267	344079.37	0.0088	0.009003
Ni	60	3	He	540.542	4.7622	343308.00	0.0088	0.009003
Cu	63	3	He	535.574	13.3606	959819.36	0.0249	0.004937
Cu	63	3	He	531.314	13.2544	964846.70	0.0249	0.004937
Cu	63	3	He	538.925	13.4442	969203.42	0.0249	0.004937
Zn	66	3	He	528.775	1.3039	93672.49	0.0025	0.004836
Zn	66	3	He	541.683	1.3356	97226.09	0.0025	0.004836
Zn	66	3	He	531.467	1.3105	94477.03	0.0025	0.004836
As	75	3	He	535.409	0.9316	66925.99	0.0017	0.0004347
As	75	3	He	529.034	0.9205	67008.55	0.0017	0.0004347
As	75	3	He	530.53	0.9231	66548.37	0.0017	0.0004347
Sr	88	3	He	55.72	0.4363	26886.08	0.0078	0.0007762
Sr	88	3	He	51.951	0.4069	25824.39	0.0078	0.0007762
Sr	88	3	He	51.307	0.4018	25573.58	0.0078	0.0007762
Mo	98	3	He	53.404	1.1766	72495.94	0.022	0.0005162
Mo	98	3	He	51.989	1.1454	72696.57	0.022	0.0005162
Mo	98	3	He	52.545	1.1576	73671.79	0.022	0.0005162
Ag	107	3	He	54.355	2.4736	152417.39	0.0455	0.0004641
Ag	107	3	He	53.353	2.4281	154105.86	0.0455	0.0004641
Ag	107	3	He	52.177	2.3745	151116.13	0.0455	0.0004641
Cd	111	3	He	53.471	0.2567	15818.93	0.0048	5.152E-05
Cd	111	3	He	52.654	0.2528	16045.17	0.0048	5.152E-05
Cd	111	3	He	53.049	0.2547	16209.39	0.0048	5.152E-05
Sn	120	3	He	54.507	0.7927	48846.56	0.0143	0.01559
Sn	120	3	He	52.375	0.7623	48385.00	0.0143	0.01559
Sn	120	3	He	52.131	0.7589	48294.42	0.0143	0.01559
Sb	121	3	He	52.374	0.65	40048.28	0.0124	0.000258
Sb	121	3	He	52.081	0.6463	41021.25	0.0124	0.000258
Sb	121	3	He	52.754	0.6547	41663.03	0.0124	0.000258
Ba	137	3	He	528.939	2.3143	142600.59	0.0044	0.000309
Ba	137	3	He	523.619	2.291	145408.45	0.0044	0.000309
Ba	137	3	He	517.022	2.2622	143964.80	0.0044	0.000309
Tl	205	3	He	53.204	1.4718	318181.87	0.0276	0.001005
Tl	205	3	He	53.203	1.4718	320287.34	0.0276	0.001005
Tl	205	3	He	51.353	1.4206	316007.51	0.0276	0.001005
Pb	208	3	He	53.286	1.9416	225631.23	0.0364	0.002176
Pb	208	3	He	52.949	1.9294	225042.75	0.0364	0.002176
Pb	208	3	He	51.476	1.8758	223962.44	0.0364	0.002176
U	238	3	He	52.418	2.2053	476762.45	0.0421	0.00024
U	238	3	He	52.234	2.1976	478240.85	0.0421	0.00024
U	238	3	He	51.37	2.1612	480744.88	0.0421	0.00024
Sc	45	1	No Gas			3206909.33		
Sc	45	1	No Gas			3152530.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3283031.20		
Ge	72	1	No Gas			1420684.67		
Ge	72	1	No Gas			1388460.14		
Ge	72	1	No Gas			1444336.23		
Sc	45	2	H2			192975.97		
Sc	45	2	H2			191354.31		
Sc	45	2	H2			187382.87		
Ge	72	2	H2			159959.28		
Ge	72	2	H2			159332.75		
Ge	72	2	H2			155027.78		
In	115	2	H2			444582.96		
In	115	2	H2			432439.56		
In	115	2	H2			423525.03		
Sc	45	3	He			39674.56		
Sc	45	3	He			41900.60		
Sc	45	3	He			41328.52		
Ge	72	3	He			71839.55		
Ge	72	3	He			72794.52		
Ge	72	3	He			72090.93		
In	115	3	He			61997.99		
In	115	3	He			63845.93		
In	115	3	He			64016.73		
Tb	159	3	He			279353.24		
Tb	159	3	He			278490.39		
Tb	159	3	He			280255.89		
Bi	209	3	He			216186.31		
Bi	209	3	He			217621.34		
Bi	209	3	He			222441.56		

Quantitation Report

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Sample Type	CCB
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

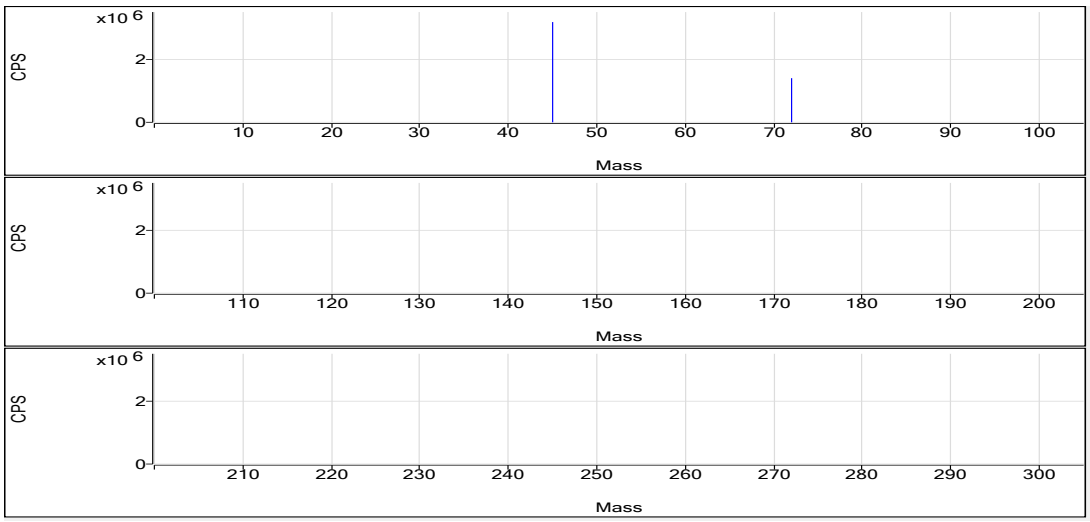
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.032	ppb	27.2	125.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.093	ppb	12.3	7.33	0.0000	Pulse	1.5000	3
Na	23	72	He	9.983	ppb	34.0	8959.63	0.1236	Pulse	0.1000	3
Mg	24	72	He	13.655	ppb	3.3	1186.76	0.0164	Pulse	0.1000	3
Al	27	72	He	9.844	ppb	21.8	250.01	0.0034	Pulse	0.1000	3
K	39	72	He	15.240	ppb	56.2	11024.49	0.1521	Pulse	0.1000	3
Ca	44	72	He	25.032	ppb	155.7	173.34	0.0024	Pulse	0.1000	3
Ti	47	72	He	4.763	ppb	27.4	106.67	0.0015	Pulse	0.1000	3
V	51	72	He	0.212	ppb	21.2	710.69	0.0098	Pulse	0.5000	3
Cr	52	72	He	0.080	ppb	216.8	1930.20	0.0266	Pulse	0.1000	3
Mn	55	72	He	-0.297	ppb	N/A	876.73	0.0121	Pulse	0.1000	3
Fe	57	72	He	16.010	ppb	27.4	620.04	0.0086	Pulse	0.1000	3
Co	59	72	He	0.203	ppb	10.3	673.37	0.0093	Pulse	0.1000	3
Ni	60	72	He	0.539	ppb	10.0	996.74	0.0137	Pulse	0.1000	3
Cu	63	72	He	0.234	ppb	20.1	780.05	0.0108	Pulse	0.1000	3
Zn	66	72	He	-0.399	ppb	N/A	280.01	0.0039	Pulse	0.1000	3
As	75	72	He	0.312	ppb	32.9	70.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.157	ppb	27.9	126.67	0.0020	Pulse	0.1000	3
Mo	98	115	He	0.034	ppb	35.1	80.00	0.0013	Pulse	0.1000	3
Ag	107	115	He	0.023	ppb	8.2	96.67	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.026	ppb	79.3	11.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.122	ppb	116.4	1096.75	0.0173	Pulse	0.1000	3
Sb	121	115	He	0.107	ppb	21.6	100.00	0.0016	Pulse	0.1000	3
Ba	137	115	He	0.338	ppb	39.9	113.34	0.0018	Pulse	0.1000	3
Tl	205	209	He	0.281	ppb	5.7	1893.55	0.0088	Pulse	0.1000	3
Pb	208	209	He	0.005	ppb	164.7	510.02	0.0024	Pulse	0.1000	3
U	238	209	He	0.025	ppb	10.7	276.68	0.0013	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3191669.12	2.2	98.5	Pulse	0.1000	3
No Gas	Ge	72	1405108.26	1.9	97.6	Pulse	0.1000	3
H2	Sc	45	190115.60	2.1	97.3	Pulse	0.1000	3
H2	Ge	72	155748.24	1.0	95.5	Pulse	0.1000	3
H2	In	115	434923.27	1.3	100.4	Pulse	0.1000	3
He	Sc	45	41121.62	1.8	102.8	Pulse	0.1000	3
He	Ge	72	72536.58	2.3	100.3	Pulse	0.1000	3
He	In	115	63315.06	0.8	98.0	Pulse	0.1000	3
He	Tb	159	279723.15	0.3	97.8	Pulse	0.1000	3
He	Bi	209	215695.93	0.8	97.1	Pulse	0.1000	3

No Gas



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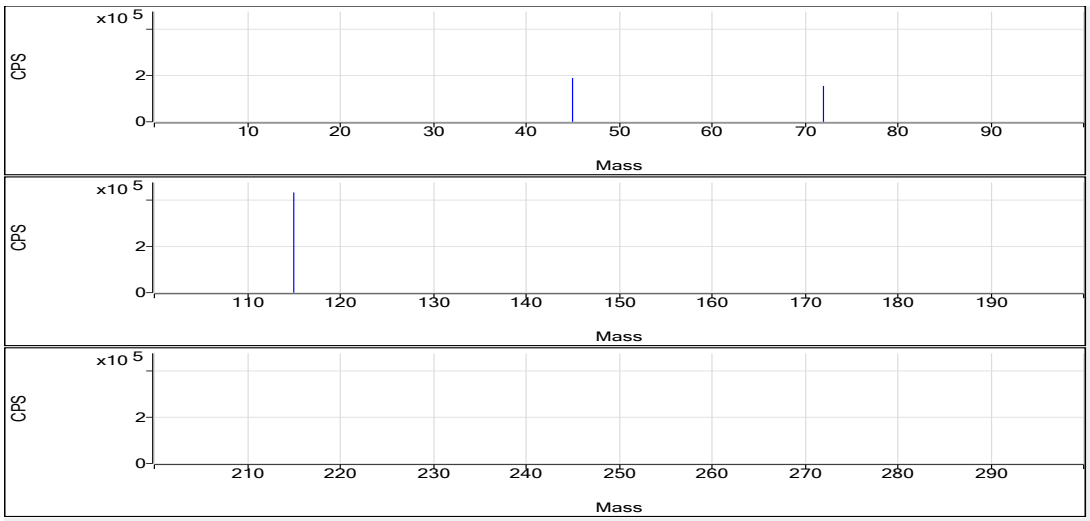
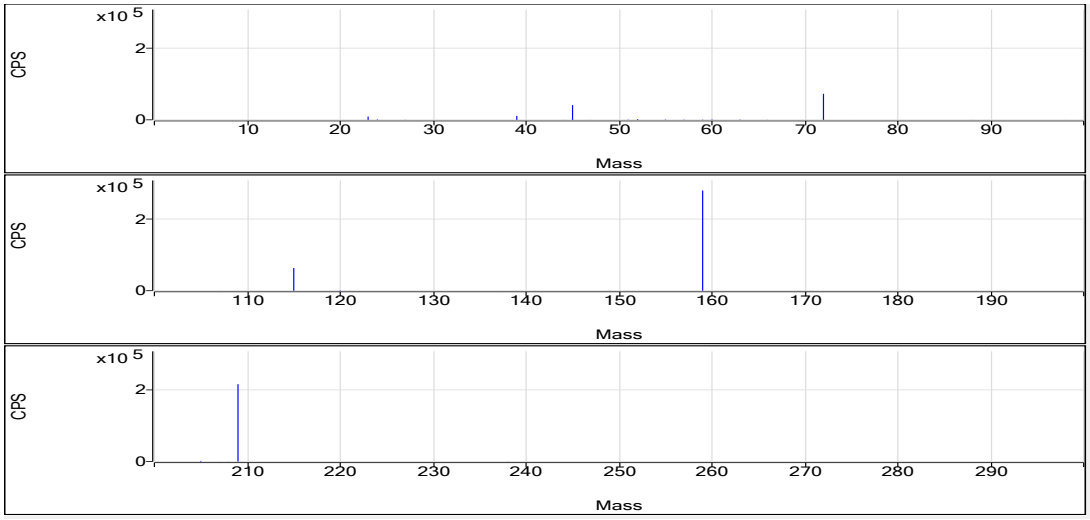


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.023	0.0001	108.00	0.0013	4.694E-05
Be	9	1	No Gas	0.041	0.0001	140.00	0.0013	4.694E-05
Be	9	1	No Gas	0.032	0.0001	128.00	0.0013	4.694E-05
Se	78	2	H2	0.081	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.094	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.104	0.0001	8.00	0.0004	1.089E-05
Na	23	3	He	9.748	0.1232	8892.92	0.0017	0.1065
Na	23	3	He	13.486	0.1296	9213.16	0.0017	0.1065
Na	23	3	He	6.715	0.118	8772.82	0.0017	0.1065
Mg	24	3	He	13.151	0.0159	1150.09	0.0008	0.004846
Mg	24	3	He	13.778	0.0165	1170.10	0.0008	0.004846
Mg	24	3	He	14.035	0.0167	1240.10	0.0008	0.004846
Al	27	3	He	8.798	0.0032	230.01	0.0002	0.001063
Al	27	3	He	8.42	0.0031	220.01	0.0002	0.001063
Al	27	3	He	12.313	0.004	300.01	0.0002	0.001063
K	39	3	He	15.209	0.152	10974.44	0.0006	0.1436
K	39	3	He	23.826	0.1568	11144.62	0.0006	0.1436
K	39	3	He	6.685	0.1473	10954.41	0.0006	0.1436
Ca	44	3	He	68.57	0.0037	270.01	0	0.001611
Ca	44	3	He	-6.567	0.0014	100.00	0	0.001611
Ca	44	3	He	13.093	0.002	150.01	0	0.001611
Ti	47	3	He	3.328	0.0011	80.00	0.0003	0.0002737
Ti	47	3	He	5.08	0.0015	110.00	0.0003	0.0002737
Ti	47	3	He	5.881	0.0017	130.00	0.0003	0.0002737
V	51	3	He	0.262	0.0104	750.02	0.0117	0.007326
V	51	3	He	0.196	0.0096	684.02	0.0117	0.007326
V	51	3	He	0.176	0.0094	698.02	0.0117	0.007326
Cr	52	3	He	-0.12	0.0236	1700.15	0.0152	0.02538
Cr	52	3	He	0.19	0.0283	2010.22	0.0152	0.02538
Cr	52	3	He	0.17	0.028	2080.23	0.0152	0.02538
Mn	55	3	He	-0.305	0.0121	870.06	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.154	0.0129	920.08	0.0059	0.01385
Mn	55	3	He	-0.433	0.0113	840.06	0.0059	0.01385
Fe	57	3	He	20.909	0.01	720.05	0.0003	0.003918
Fe	57	3	He	14.645	0.0082	580.03	0.0003	0.003918
Fe	57	3	He	12.476	0.0075	560.04	0.0003	0.003918
Co	59	3	He	0.199	0.0091	660.04	0.0305	0.003084
Co	59	3	He	0.226	0.01	710.04	0.0305	0.003084
Co	59	3	He	0.185	0.0087	650.04	0.0305	0.003084
Ni	60	3	He	0.599	0.0143	1030.07	0.0088	0.009003
Ni	60	3	He	0.496	0.0134	950.07	0.0088	0.009003
Ni	60	3	He	0.521	0.0136	1010.07	0.0088	0.009003
Cu	63	3	He	0.263	0.0115	830.05	0.0249	0.004937
Cu	63	3	He	0.259	0.0114	810.05	0.0249	0.004937
Cu	63	3	He	0.18	0.0094	700.05	0.0249	0.004937
Zn	66	3	He	-0.502	0.0036	260.01	0.0025	0.004836
Zn	66	3	He	-0.422	0.0038	270.01	0.0025	0.004836
Zn	66	3	He	-0.271	0.0042	310.02	0.0025	0.004836
As	75	3	He	0.26	0.0009	64.00	0.0017	0.0004347
As	75	3	He	0.43	0.0012	84.00	0.0017	0.0004347
As	75	3	He	0.245	0.0009	64.00	0.0017	0.0004347
Sr	88	3	He	0.205	0.0024	150.01	0.0078	0.0007762
Sr	88	3	He	0.121	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.144	0.0019	120.00	0.0078	0.0007762
Mo	98	3	He	0.027	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.048	0.0016	100.00	0.022	0.0005162
Mo	98	3	He	0.027	0.0011	70.00	0.022	0.0005162
Ag	107	3	He	0.025	0.0016	100.00	0.0455	0.0004641
Ag	107	3	He	0.024	0.0016	100.00	0.0455	0.0004641
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Cd	111	3	He	0.036	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.041	0.0003	16.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.099	0.017	1070.08	0.0143	0.01559
Sn	120	3	He	-0.007	0.0155	990.07	0.0143	0.01559
Sn	120	3	He	0.275	0.0195	1230.10	0.0143	0.01559
Sb	121	3	He	0.12	0.0017	110.01	0.0124	0.000258
Sb	121	3	He	0.08	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.12	0.0017	110.00	0.0124	0.000258
Ba	137	3	He	0.401	0.0021	130.00	0.0044	0.000309
Ba	137	3	He	0.43	0.0022	140.01	0.0044	0.000309
Ba	137	3	He	0.183	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.298	0.0092	2010.24	0.0276	0.001005
Tl	205	3	He	0.279	0.0087	1880.20	0.0276	0.001005
Tl	205	3	He	0.266	0.0084	1790.20	0.0276	0.001005
Pb	208	3	He	0.015	0.0027	250.01	0.0364	0.002176
Pb	208	3	He	-0.001	0.0021	220.01	0.0364	0.002176
Pb	208	3	He	0.002	0.0022	290.01	0.0364	0.002176
U	238	3	He	0.025	0.0013	280.01	0.0421	0.00024
U	238	3	He	0.027	0.0014	300.02	0.0421	0.00024
U	238	3	He	0.022	0.0012	250.01	0.0421	0.00024
Sc	45	1	No Gas			3151297.45		
Sc	45	1	No Gas			3150074.02		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3273635.89		
Ge	72	1	No Gas			1389323.89		
Ge	72	1	No Gas			1389532.01		
Ge	72	1	No Gas			1436468.88		
Sc	45	2	H2			193098.42		
Sc	45	2	H2			185649.70		
Sc	45	2	H2			191598.67		
Ge	72	2	H2			157220.63		
Ge	72	2	H2			154147.06		
Ge	72	2	H2			155877.03		
In	115	2	H2			441478.51		
In	115	2	H2			430161.20		
In	115	2	H2			433130.11		
Sc	45	3	He			41790.14		
Sc	45	3	He			41258.71		
Sc	45	3	He			40316.01		
Ge	72	3	He			72181.65		
Ge	72	3	He			71076.37		
Ge	72	3	He			74351.72		
In	115	3	He			62981.69		
In	115	3	He			63916.74		
In	115	3	He			63072.40		
Tb	159	3	He			278773.61		
Tb	159	3	He			280249.04		
Tb	159	3	He			280146.79		
Bi	209	3	He			217377.97		
Bi	209	3	He			215637.46		
Bi	209	3	He			214072.36		

Quantitation Report

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Comment	D29
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

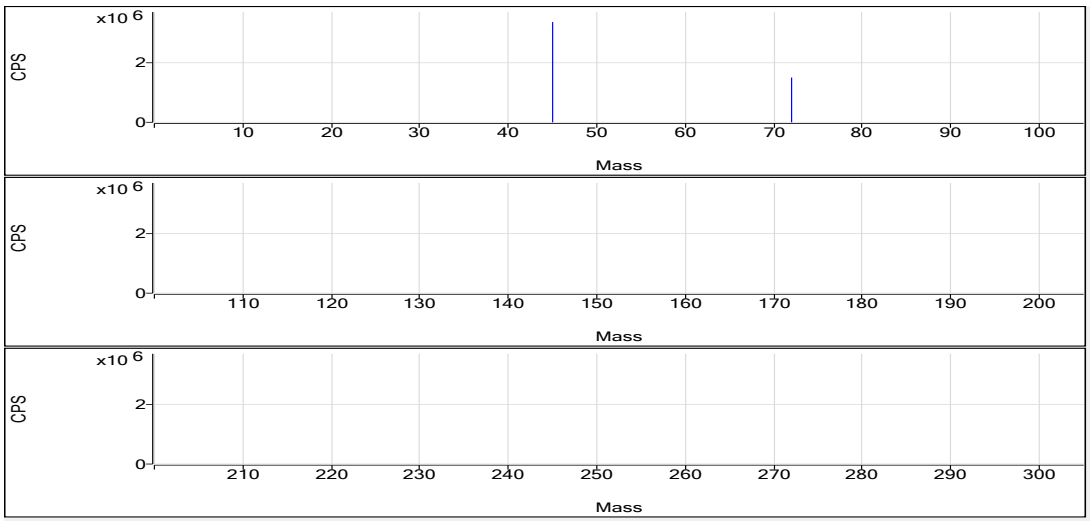
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.011	ppb	N/A	48.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.012	ppb	110.0	2.44	0.0000	Pulse	1.5000	3
Na	23	72	He	2.962	ppb	14.5	7922.42	0.1115	Pulse	0.1000	3
Mg	24	72	He	3.397	ppb	41.1	546.70	0.0077	Pulse	0.1000	3
Al	27	72	He	1.785	ppb	172.5	106.67	0.0015	Pulse	0.1000	3
K	39	72	He	5.884	ppb	242.9	10427.35	0.1469	Pulse	0.1000	3
Ca	44	72	He	32.704	ppb	55.0	186.68	0.0026	Pulse	0.1000	3
Ti	47	72	He	1.158	ppb	85.3	40.00	0.0006	Pulse	0.1000	3
V	51	72	He	-0.016	ppb	N/A	506.68	0.0071	Pulse	0.5000	3
Cr	52	72	He	0.404	ppb	20.0	2240.24	0.0315	Pulse	0.1000	3
Mn	55	72	He	-1.027	ppb	N/A	553.36	0.0078	Pulse	0.1000	3
Fe	57	72	He	3.337	ppb	77.3	346.68	0.0049	Pulse	0.1000	3
Co	59	72	He	-0.019	ppb	N/A	176.68	0.0025	Pulse	0.1000	3
Ni	60	72	He	0.804	ppb	25.0	1140.09	0.0161	Pulse	0.1000	3
Cu	63	72	He	-0.064	ppb	N/A	236.68	0.0033	Pulse	0.1000	3
Zn	66	72	He	-0.879	ppb	N/A	190.01	0.0027	Pulse	0.1000	3
As	75	72	He	0.042	ppb	149.1	36.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.054	ppb	42.9	73.33	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.004	ppb	224.5	36.67	0.0006	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	N/A	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.111	ppb	179.0	1050.07	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.019	ppb	139.9	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.004	ppb	885.2	20.00	0.0003	Pulse	0.1000	3
Tl	205	209	He	0.043	ppb	18.3	480.03	0.0022	Pulse	0.1000	3
Pb	208	209	He	-0.011	ppb	N/A	386.68	0.0018	Pulse	0.1000	3
U	238	209	He	-0.001	ppb	N/A	46.67	0.0002	Pulse	0.1000	3

ISTD Table:

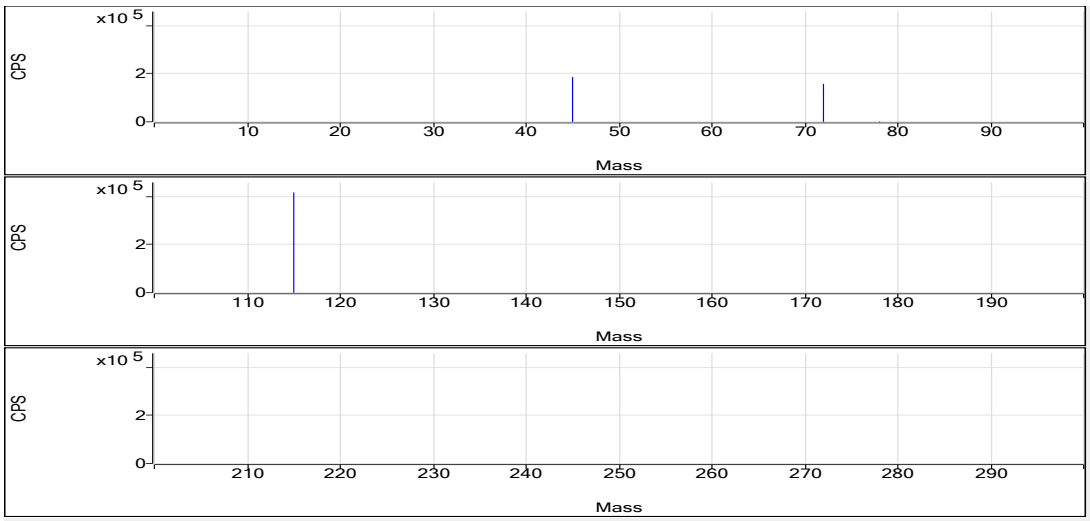
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3371617.24	0.8	104.0	Pulse	0.1000	3
No Gas	Ge	72	1505301.43	1.0	104.6	Pulse	0.1000	3
H2	Sc	45	185946.70	2.0	95.2	Pulse	0.1000	3
H2	Ge	72	158150.12	1.8	97.0	Pulse	0.1000	3
H2	In	115	417152.32	1.7	96.3	Pulse	0.1000	3
He	Sc	45	40479.77	2.6	101.2	Pulse	0.1000	3
He	Ge	72	71029.03	1.7	98.3	Pulse	0.1000	3
He	In	115	61139.07	0.7	94.7	Pulse	0.1000	3
He	Tb	159	275475.73	1.3	96.3	Pulse	0.1000	3
He	Bi	209	218020.56	0.8	98.1	Pulse	0.1000	3

No Gas

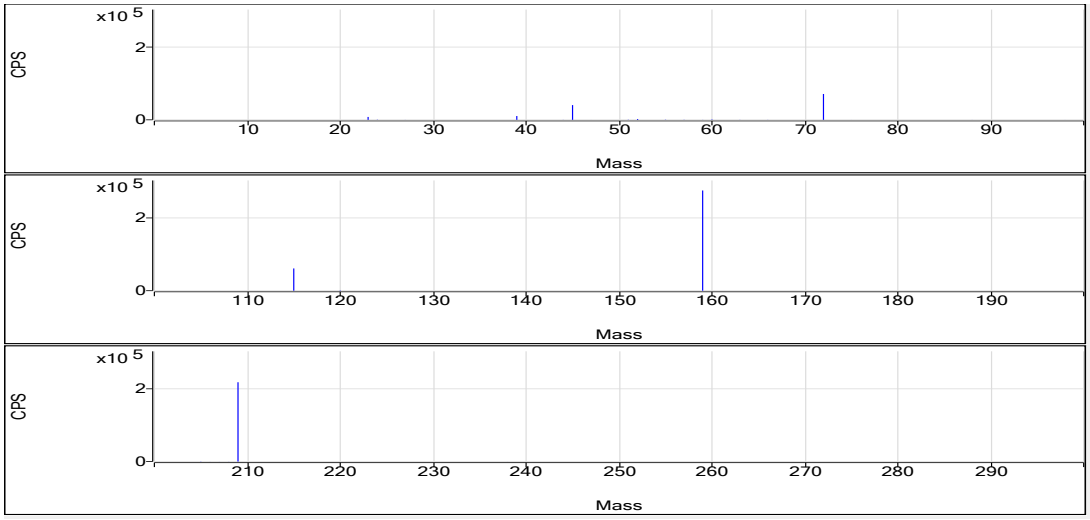


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.015	0	42.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.007	0	58.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.012	0	46.00	0.0013	4.694E-05
Se	78	2	H2	0.027	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.005	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Na	23	3	He	3.006	0.1116	7822.41	0.0017	0.1065
Na	23	3	He	2.513	0.1108	8022.42	0.0017	0.1065
Na	23	3	He	3.368	0.1122	7922.42	0.0017	0.1065
Mg	24	3	He	4.238	0.0084	590.03	0.0008	0.004846
Mg	24	3	He	1.786	0.0064	460.02	0.0008	0.004846
Mg	24	3	He	4.167	0.0084	590.04	0.0008	0.004846
Al	27	3	He	0.326	0.0011	80.00	0.0002	0.001063
Al	27	3	He	5.322	0.0023	170.01	0.0002	0.001063
Al	27	3	He	-0.294	0.001	70.00	0.0002	0.001063
K	39	3	He	20.357	0.1549	10854.30	0.0006	0.1436
K	39	3	He	-8.226	0.1391	10073.81	0.0006	0.1436
K	39	3	He	5.521	0.1467	10353.94	0.0006	0.1436
Ca	44	3	He	44.616	0.003	210.01	0	0.001611
Ca	44	3	He	41.497	0.0029	210.01	0	0.001611
Ca	44	3	He	11.999	0.002	140.01	0	0.001611
Ti	47	3	He	0.615	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	0.56	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	2.298	0.0009	60.00	0.0003	0.0002737
V	51	3	He	0.052	0.0079	556.01	0.0117	0.007326
V	51	3	He	-0.038	0.0069	498.01	0.0117	0.007326
V	51	3	He	-0.062	0.0066	466.01	0.0117	0.007326
Cr	52	3	He	0.31	0.0301	2110.22	0.0152	0.02538
Cr	52	3	He	0.455	0.0323	2340.25	0.0152	0.02538
Cr	52	3	He	0.445	0.0322	2270.25	0.0152	0.02538
Mn	55	3	He	-0.969	0.0081	570.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.99	0.008	580.03	0.0059	0.01385
Mn	55	3	He	-1.123	0.0072	510.02	0.0059	0.01385
Fe	57	3	He	6.179	0.0057	400.02	0.0003	0.003918
Fe	57	3	He	2.683	0.0047	340.02	0.0003	0.003918
Fe	57	3	He	1.148	0.0043	300.01	0.0003	0.003918
Co	59	3	He	-0.026	0.0023	160.01	0.0305	0.003084
Co	59	3	He	-0.033	0.0021	150.01	0.0305	0.003084
Co	59	3	He	0.001	0.0031	220.01	0.0305	0.003084
Ni	60	3	He	1.021	0.018	1260.11	0.0088	0.009003
Ni	60	3	He	0.625	0.0145	1050.07	0.0088	0.009003
Ni	60	3	He	0.765	0.0157	1110.09	0.0088	0.009003
Cu	63	3	He	-0.078	0.003	210.01	0.0249	0.004937
Cu	63	3	He	-0.054	0.0036	260.01	0.0249	0.004937
Cu	63	3	He	-0.062	0.0034	240.01	0.0249	0.004937
Zn	66	3	He	-0.749	0.003	210.01	0.0025	0.004836
Zn	66	3	He	-0.957	0.0025	180.01	0.0025	0.004836
Zn	66	3	He	-0.931	0.0026	180.01	0.0025	0.004836
As	75	3	He	0.095	0.0006	42.00	0.0017	0.0004347
As	75	3	He	-0.028	0.0004	28.00	0.0017	0.0004347
As	75	3	He	0.06	0.0005	38.00	0.0017	0.0004347
Sr	88	3	He	0.067	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.068	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.027	0.001	60.00	0.0078	0.0007762
Mo	98	3	He	-0.001	0.0005	30.00	0.022	0.0005162
Mo	98	3	He	0.014	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	-0.001	0.0005	30.00	0.022	0.0005162
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.01	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	-0.043	0.015	920.06	0.0143	0.01559
Sn	120	3	He	0.336	0.0204	1250.10	0.0143	0.01559
Sn	120	3	He	0.04	0.0162	980.06	0.0143	0.01559
Sb	121	3	He	0.045	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.019	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.004	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	-0.033	0.0002	10.00	0.0044	0.000309
Ba	137	3	He	0.042	0.0005	30.00	0.0044	0.000309
Tl	205	3	He	0.035	0.002	430.03	0.0276	0.001005
Tl	205	3	He	0.051	0.0024	520.03	0.0276	0.001005
Tl	205	3	He	0.044	0.0022	490.02	0.0276	0.001005
Pb	208	3	He	-0.009	0.0018	220.01	0.0364	0.002176
Pb	208	3	He	-0.003	0.0021	220.01	0.0364	0.002176
Pb	208	3	He	-0.021	0.0014	150.01	0.0364	0.002176
U	238	3	He	-0.001	0.0002	40.00	0.0421	0.00024
U	238	3	He	0	0.0002	50.00	0.0421	0.00024
U	238	3	He	0	0.0002	50.00	0.0421	0.00024
Sc	45	1	No Gas			3402484.01		
Sc	45	1	No Gas			3359219.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3353148.70		
Ge	72	1	No Gas			1516555.29		
Ge	72	1	No Gas			1511176.38		
Ge	72	1	No Gas			1488172.63		
Sc	45	2	H2			181826.15		
Sc	45	2	H2			186766.74		
Sc	45	2	H2			189247.20		
Ge	72	2	H2			156188.74		
Ge	72	2	H2			156936.62		
Ge	72	2	H2			161325.01		
In	115	2	H2			410783.04		
In	115	2	H2			415842.57		
In	115	2	H2			424831.36		
Sc	45	3	He			40115.39		
Sc	45	3	He			39644.35		
Sc	45	3	He			41679.57		
Ge	72	3	He			70080.97		
Ge	72	3	He			72422.13		
Ge	72	3	He			70583.99		
In	115	3	He			61435.10		
In	115	3	He			61365.23		
In	115	3	He			60641.45		
Tb	159	3	He			271829.59		
Tb	159	3	He			275617.40		
Tb	159	3	He			278980.19		
Bi	209	3	He			218251.89		
Bi	209	3	He			216094.98		
Bi	209	3	He			219714.80		

Quantitation Report

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Acq Time	2023-08-10 13:05:46
Sample Name	LCS 410-403837/2-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

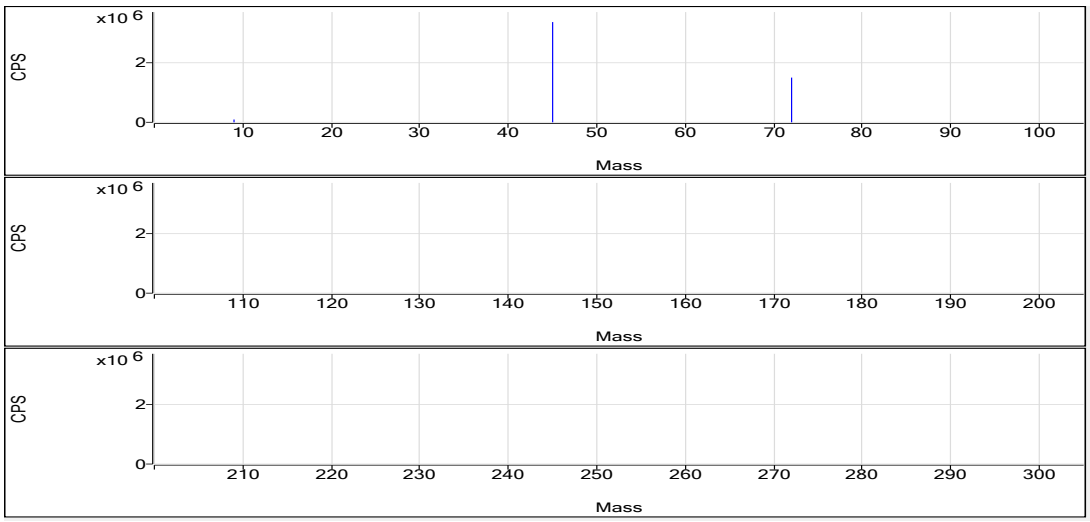
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	47.205	ppb	3.0	93586.46	0.0621	Pulse	0.5000	3
Se	78	72	H2	102.519	ppb	3.4	6483.02	0.0399	Pulse	1.5000	3
Na	23	72	He	5328.323	ppb	0.2	687765.01	9.2596	Pulse	0.1000	3
Mg	24	72	He	5315.403	ppb	0.7	333225.15	4.4863	Pulse	0.1000	3
Al	27	72	He	5145.258	ppb	1.4	92333.58	1.2431	Pulse	0.1000	3
K	39	72	He	5201.908	ppb	0.7	224024.73	3.0162	Pulse	0.1000	3
Ca	44	72	He	5206.712	ppb	3.3	12132.01	0.1633	Pulse	0.1000	3
Ti	47	72	He	534.326	ppb	6.3	9970.41	0.1343	Pulse	0.1000	3
V	51	72	He	521.489	ppb	0.5	453638.17	6.1076	Pulse	0.5000	3
Cr	52	72	He	523.151	ppb	1.1	593546.11	7.9915	Pulse	0.1000	3
Mn	55	72	He	515.353	ppb	0.3	226959.36	3.0557	Pulse	0.1000	3
Fe	57	72	He	5141.611	ppb	1.8	110934.03	1.4935	Pulse	0.1000	3
Co	59	72	He	522.029	ppb	1.0	1183191.98	15.9305	Pulse	0.1000	3
Ni	60	72	He	523.323	ppb	0.7	342477.51	4.6107	Pulse	0.1000	3
Cu	63	72	He	522.525	ppb	0.6	968172.17	13.0352	Pulse	0.1000	3
Zn	66	72	He	514.061	ppb	1.3	94162.75	1.2678	Pulse	0.1000	3
As	75	72	He	510.893	ppb	0.8	66028.03	0.8890	Pulse	0.5000	3
Sr	88	115	He	52.348	ppb	1.5	25503.52	0.4100	Pulse	0.1000	3
Mo	98	115	He	52.021	ppb	2.5	71289.94	1.1461	Pulse	0.1000	3
Ag	107	115	He	53.280	ppb	1.1	150835.26	2.4247	Pulse	0.1000	3
Cd	111	115	He	54.078	ppb	1.7	16151.31	0.2596	Pulse	0.5000	3
Sn	120	115	He	108.301	ppb	1.9	97025.96	1.5597	Pulse	0.1000	3
Sb	121	115	He	105.932	ppb	1.5	81759.24	1.3143	Pulse	0.1000	3
Ba	137	115	He	521.930	ppb	1.6	142058.55	2.2836	Pulse	0.1000	3
Tl	205	209	He	106.117	ppb	1.2	641398.88	2.9345	Pulse	0.1000	3
Pb	208	209	He	52.786	ppb	0.8	420416.20	1.9235	Pulse	0.1000	3
U	238	209	He	52.128	ppb	1.4	479354.16	2.1931	Pulse	0.1000	3

ISTD Table:

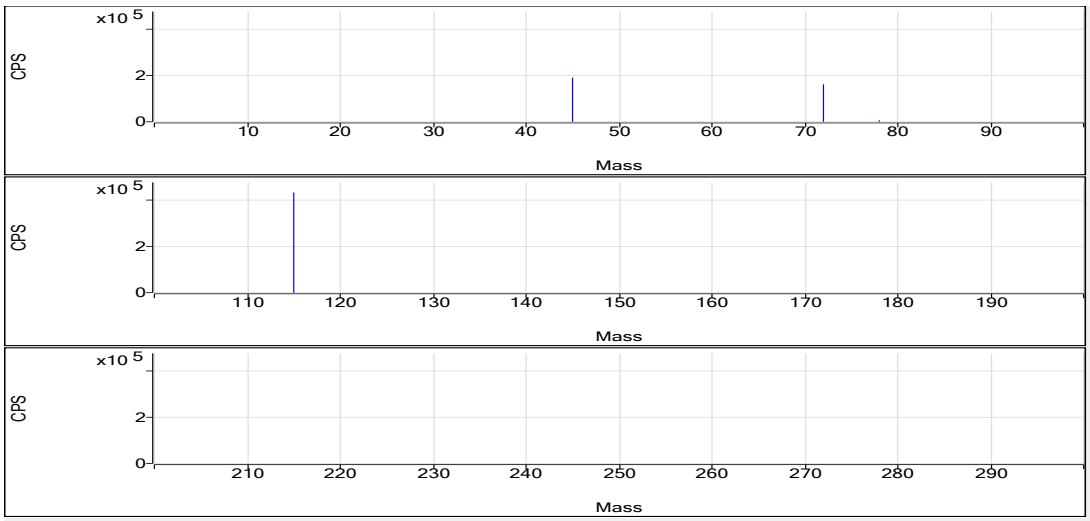
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3381212.66	1.2	104.3	Pulse	0.1000	3
No Gas	Ge	72	1507949.40	1.2	104.7	Pulse	0.1000	3
H2	Sc	45	191258.21	2.7	97.9	Pulse	0.1000	3
H2	Ge	72	162392.93	0.8	99.6	Pulse	0.1000	3
H2	In	115	433664.61	0.7	100.1	Pulse	0.1000	3
He	Sc	45	41379.28	1.5	103.5	Pulse	0.1000	3
He	Ge	72	74275.74	0.7	102.7	Pulse	0.1000	3
He	In	115	62212.04	1.0	96.3	Pulse	0.1000	3
He	Tb	159	281560.17	0.7	98.4	Pulse	0.1000	3
He	Bi	209	218587.29	1.3	98.4	Pulse	0.1000	3

No Gas

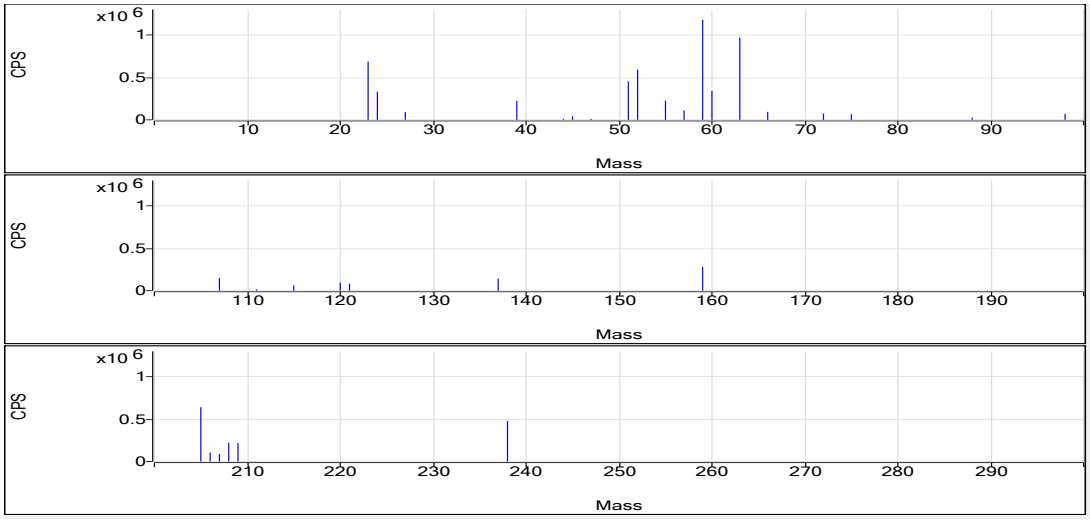


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.302	0.0609	92173.26	0.0013	4.694E-05
Be	9	1	No Gas	46.456	0.0611	92971.95	0.0013	4.694E-05
Be	9	1	No Gas	48.856	0.0642	95614.18	0.0013	4.694E-05
Se	78	2	H2	105.802	0.0412	6670.88	0.0004	1.089E-05
Se	78	2	H2	102.867	0.0401	6464.79	0.0004	1.089E-05
Se	78	2	H2	98.889	0.0385	6313.39	0.0004	1.089E-05
Na	23	3	He	5317.388	9.2408	686060.77	0.0017	0.1065
Na	23	3	He	5340.112	9.2798	694457.33	0.0017	0.1065
Na	23	3	He	5327.468	9.2581	682776.94	0.0017	0.1065
Mg	24	3	He	5355.036	4.5197	335553.86	0.0008	0.004846
Mg	24	3	He	5310.819	4.4824	335442.07	0.0008	0.004846
Mg	24	3	He	5280.353	4.4567	328679.53	0.0008	0.004846
Al	27	3	He	5064.746	1.2237	90848.11	0.0002	0.001063
Al	27	3	He	5199.506	1.2562	94007.57	0.0002	0.001063
Al	27	3	He	5171.522	1.2494	92145.07	0.0002	0.001063
K	39	3	He	5226.845	3.03	224953.00	0.0006	0.1436
K	39	3	He	5163.347	2.9949	224124.27	0.0006	0.1436
K	39	3	He	5215.534	3.0237	222996.93	0.0006	0.1436
Ca	44	3	He	5397.357	0.1693	12565.74	0	0.001611
Ca	44	3	He	5164.746	0.162	12125.35	0	0.001611
Ca	44	3	He	5058.034	0.1587	11704.94	0	0.001611
Ti	47	3	He	518.473	0.1303	9673.53	0.0003	0.0002737
Ti	47	3	He	511.696	0.1286	9623.55	0.0003	0.0002737
Ti	47	3	He	572.809	0.1439	10614.15	0.0003	0.0002737
V	51	3	He	519.341	6.0824	451577.38	0.0117	0.007326
V	51	3	He	521.015	6.102	456647.13	0.0117	0.007326
V	51	3	He	524.11	6.1382	452690.00	0.0117	0.007326
Cr	52	3	He	521.754	7.9703	591735.03	0.0152	0.02538
Cr	52	3	He	518.054	7.9139	592241.24	0.0152	0.02538
Cr	52	3	He	529.644	8.0904	596662.06	0.0152	0.02538
Mn	55	3	He	515.687	3.0577	227008.55	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	513.419	3.0443	227818.51	0.0059	0.01385
Mn	55	3	He	516.954	3.0651	226051.01	0.0059	0.01385
Fe	57	3	He	5036.078	1.4629	108612.94	0.0003	0.003918
Fe	57	3	He	5207.608	1.5126	113198.69	0.0003	0.003918
Fe	57	3	He	5181.146	1.505	110990.45	0.0003	0.003918
Co	59	3	He	519.619	15.8569	1177261.15	0.0305	0.003084
Co	59	3	He	518.224	15.8144	1183472.79	0.0305	0.003084
Co	59	3	He	528.244	16.1201	1188842.01	0.0305	0.003084
Ni	60	3	He	522.28	4.6016	341633.00	0.0088	0.009003
Ni	60	3	He	527.315	4.6458	347672.65	0.0088	0.009003
Ni	60	3	He	520.375	4.5848	338126.87	0.0088	0.009003
Cu	63	3	He	521.024	12.9978	964989.44	0.0249	0.004937
Cu	63	3	He	520.268	12.9789	971281.08	0.0249	0.004937
Cu	63	3	He	526.282	13.1289	968246.00	0.0249	0.004937
Zn	66	3	He	506.857	1.2501	92808.27	0.0025	0.004836
Zn	66	3	He	515.741	1.2719	95182.40	0.0025	0.004836
Zn	66	3	He	519.586	1.2813	94497.59	0.0025	0.004836
As	75	3	He	506.588	0.8815	65443.38	0.0017	0.0004347
As	75	3	He	511.992	0.8909	66669.03	0.0017	0.0004347
As	75	3	He	514.099	0.8945	65971.67	0.0017	0.0004347
Sr	88	3	He	52.062	0.4078	25353.05	0.0078	0.0007762
Sr	88	3	He	53.231	0.4169	25673.94	0.0078	0.0007762
Sr	88	3	He	51.75	0.4053	25483.57	0.0078	0.0007762
Mo	98	3	He	51.572	1.1362	70646.72	0.022	0.0005162
Mo	98	3	He	53.469	1.178	72545.86	0.022	0.0005162
Mo	98	3	He	51.022	1.1241	70677.25	0.022	0.0005162
Ag	107	3	He	53.054	2.4144	150123.67	0.0455	0.0004641
Ag	107	3	He	53.969	2.4561	151256.77	0.0455	0.0004641
Ag	107	3	He	52.816	2.4036	151125.33	0.0455	0.0004641
Cd	111	3	He	53.465	0.2567	15961.07	0.0048	5.152E-05
Cd	111	3	He	55.139	0.2647	16303.49	0.0048	5.152E-05
Cd	111	3	He	53.63	0.2575	16189.38	0.0048	5.152E-05
Sn	120	3	He	106.558	1.5349	95435.68	0.0143	0.01559
Sn	120	3	He	110.563	1.592	98041.91	0.0143	0.01559
Sn	120	3	He	107.781	1.5523	97600.30	0.0143	0.01559
Sb	121	3	He	105.68	1.3112	81528.00	0.0124	0.000258
Sb	121	3	He	107.632	1.3354	82241.77	0.0124	0.000258
Sb	121	3	He	104.484	1.2964	81507.94	0.0124	0.000258
Ba	137	3	He	516.26	2.2588	140449.32	0.0044	0.000309
Ba	137	3	He	531.24	2.3244	143145.61	0.0044	0.000309
Ba	137	3	He	518.291	2.2677	142580.71	0.0044	0.000309
Tl	205	3	He	105.766	2.9248	635847.10	0.0276	0.001005
Tl	205	3	He	107.57	2.9747	644455.15	0.0276	0.001005
Tl	205	3	He	105.016	2.9041	643894.40	0.0276	0.001005
Pb	208	3	He	52.823	1.9248	220252.54	0.0364	0.002176
Pb	208	3	He	53.186	1.938	222268.14	0.0364	0.002176
Pb	208	3	He	52.35	1.9076	226006.46	0.0364	0.002176
U	238	3	He	51.787	2.1788	473660.15	0.0421	0.00024
U	238	3	He	52.943	2.2274	482559.48	0.0421	0.00024
U	238	3	He	51.655	2.1732	481842.84	0.0421	0.00024
Sc	45	1	No Gas			3408992.14		
Sc	45	1	No Gas			3398996.82		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3335649.01		
Ge	72	1	No Gas			1513763.88		
Ge	72	1	No Gas			1521818.88		
Ge	72	1	No Gas			1488265.45		
Sc	45	2	H2			185419.88		
Sc	45	2	H2			195538.59		
Sc	45	2	H2			192816.17		
Ge	72	2	H2			161890.95		
Ge	72	2	H2			161364.84		
Ge	72	2	H2			163922.99		
In	115	2	H2			432807.69		
In	115	2	H2			431001.20		
In	115	2	H2			437184.95		
Sc	45	3	He			41449.03		
Sc	45	3	He			41981.28		
Sc	45	3	He			40707.52		
Ge	72	3	He			74242.75		
Ge	72	3	He			74835.27		
Ge	72	3	He			73749.20		
In	115	3	He			62922.02		
In	115	3	He			62349.34		
In	115	3	He			63635.17		
Tb	159	3	He			280277.07		
Tb	159	3	He			283677.44		
Tb	159	3	He			280726.01		
Bi	209	3	He			217397.05		
Bi	209	3	He			216645.93		
Bi	209	3	He			221718.90		

Quantitation Report

Data File Name	094SMPL.d
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Acq Time	2023-08-10 13:07:46
Sample Name	410-136864-K-4-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

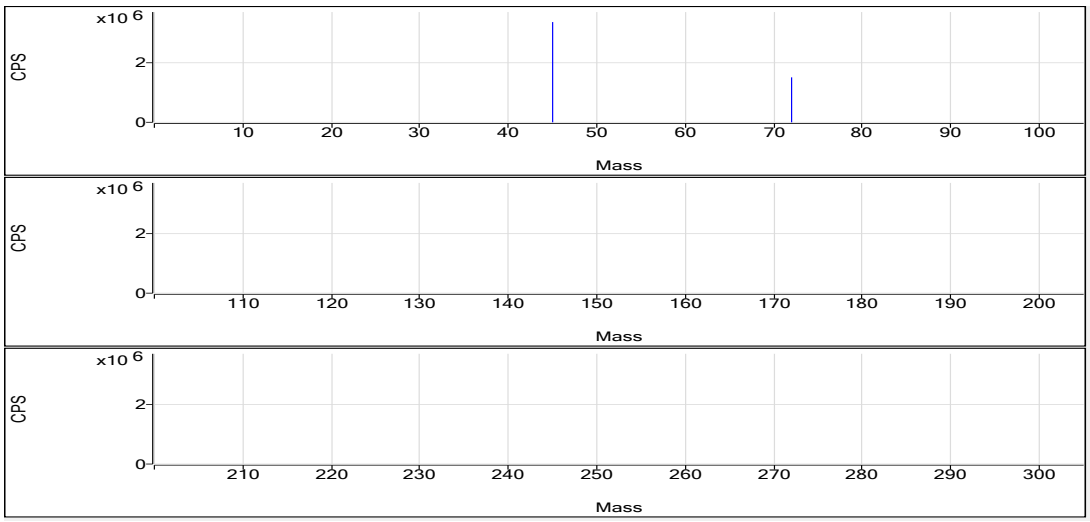
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.103	ppb	9.4	273.33	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.175	ppb	14.7	12.89	0.0001	Pulse	1.5000	3
Na	23	72	He	9599.460	ppb	1.1	1233580.22	16.5966	Pulse	0.1000	3
Mg	24	72	He	41682.046	ppb	0.9	2612386.42	35.1470	Pulse	0.1000	3
Al	27	72	He	3.389	ppb	57.2	140.00	0.0019	Pulse	0.1000	3
K	39	72	He	2934.539	ppb	2.2	131113.59	1.7641	Pulse	0.1000	3
Ca	44	72	He	109551.483	ppb	2.0	253011.28	3.4043	Pulse	0.1000	3
Ti	47	72	He	0.166	ppb	505.0	23.33	0.0003	Pulse	0.1000	3
V	51	72	He	0.205	ppb	15.3	722.69	0.0097	Pulse	0.5000	3
Cr	52	72	He	0.233	ppb	46.9	2150.23	0.0289	Pulse	0.1000	3
Mn	55	72	He	3720.129	ppb	1.5	1633018.67	21.9716	Pulse	0.1000	3
Fe	57	72	He	8715.113	ppb	1.9	187964.34	2.5288	Pulse	0.1000	3
Co	59	72	He	15.204	ppb	1.3	34708.78	0.4670	Pulse	0.1000	3
Ni	60	72	He	14.915	ppb	1.0	10417.42	0.1402	Pulse	0.1000	3
Cu	63	72	He	0.361	ppb	31.5	1036.74	0.0139	Pulse	0.1000	3
Zn	66	72	He	11.387	ppb	13.2	2436.97	0.0328	Pulse	0.1000	3
As	75	72	He	5.317	ppb	7.7	720.02	0.0097	Pulse	0.5000	3
Sr	88	115	He	106.625	ppb	0.5	51674.65	0.8343	Pulse	0.1000	3
Mo	98	115	He	0.734	ppb	11.6	1033.41	0.0167	Pulse	0.1000	3
Ag	107	115	He	0.030	ppb	29.4	113.34	0.0018	Pulse	0.1000	3
Cd	111	115	He	0.014	ppb	222.9	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	1.530	ppb	11.8	2316.95	0.0374	Pulse	0.1000	3
Sb	121	115	He	0.114	ppb	6.9	103.33	0.0017	Pulse	0.1000	3
Ba	137	115	He	514.761	ppb	1.3	139506.22	2.2523	Pulse	0.1000	3
Tl	205	209	He	0.578	ppb	15.0	3677.33	0.0170	Pulse	0.1000	3
Pb	208	209	He	0.021	ppb	24.4	636.70	0.0029	Pulse	0.1000	3
U	238	209	He	0.830	ppb	3.6	7615.85	0.0351	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3339870.26	0.9	103.0	Pulse	0.1000	3
No Gas	Ge	72	1497980.08	0.8	104.0	Pulse	0.1000	3
H2	Sc	45	190551.47	2.8	97.5	Pulse	0.1000	3
H2	Ge	72	163301.18	2.9	100.2	Pulse	0.1000	3
H2	In	115	423527.42	1.8	97.7	Pulse	0.1000	3
He	Sc	45	40794.31	1.4	102.0	Pulse	0.1000	3
He	Ge	72	74331.85	1.1	102.8	Pulse	0.1000	3
He	In	115	61939.36	0.3	95.9	Pulse	0.1000	3
He	Tb	159	280756.00	0.9	98.2	Pulse	0.1000	3
He	Bi	209	216716.50	0.7	97.5	Pulse	0.1000	3

No Gas



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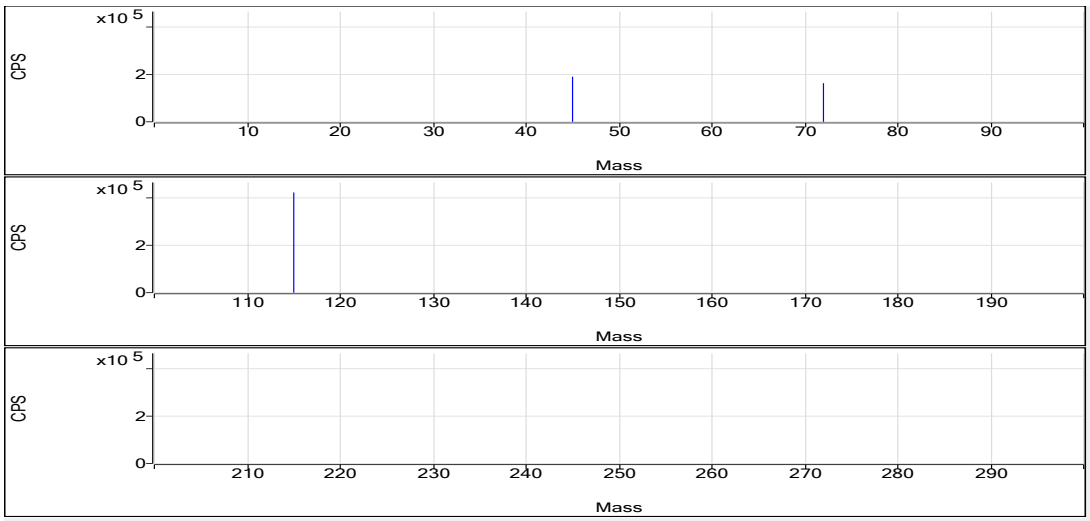
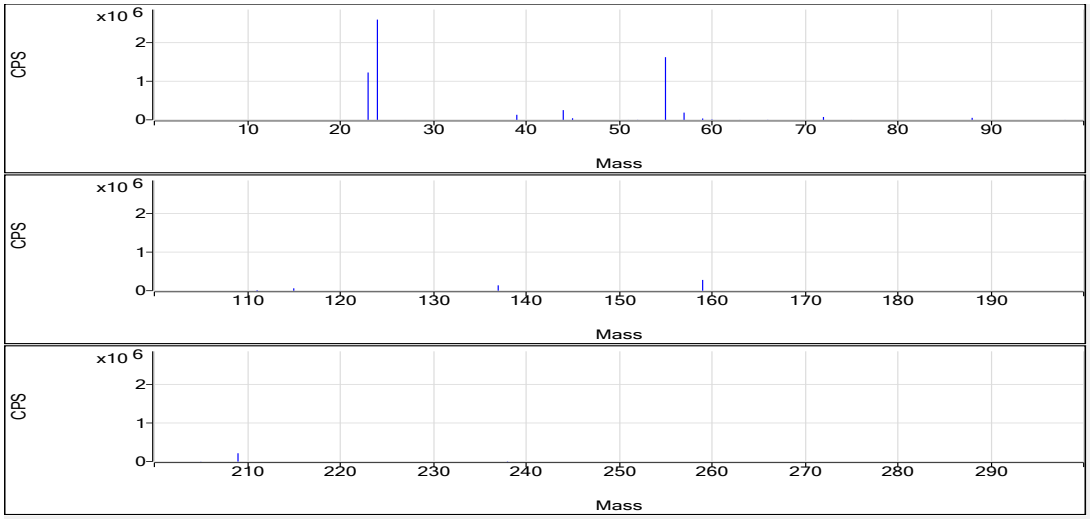


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.114	0.0002	298.00	0.0013	4.694E-05
Be	9	1	No Gas	0.098	0.0002	262.00	0.0013	4.694E-05
Be	9	1	No Gas	0.097	0.0002	260.00	0.0013	4.694E-05
Se	78	2	H2	0.178	0.0001	12.67	0.0004	1.089E-05
Se	78	2	H2	0.199	0.0001	14.67	0.0004	1.089E-05
Se	78	2	H2	0.148	0.0001	11.33	0.0004	1.089E-05
Na	23	3	He	9588.579	16.5779	1242095.53	0.0017	0.1065
Na	23	3	He	9504.43	16.4334	1226808.03	0.0017	0.1065
Na	23	3	He	9705.372	16.7785	1231837.09	0.0017	0.1065
Mg	24	3	He	41527.219	35.0165	2623601.21	0.0008	0.004846
Mg	24	3	He	41414.555	34.9215	2607013.24	0.0008	0.004846
Mg	24	3	He	42104.365	35.5031	2606544.80	0.0008	0.004846
Al	27	3	He	5.55	0.0024	180.01	0.0002	0.001063
Al	27	3	He	2.811	0.0017	130.00	0.0002	0.001063
Al	27	3	He	1.804	0.0015	110.00	0.0002	0.001063
K	39	3	He	2917.793	1.7549	131483.88	0.0006	0.1436
K	39	3	He	2878.922	1.7334	129405.49	0.0006	0.1436
K	39	3	He	3006.903	1.8041	132451.41	0.0006	0.1436
Ca	44	3	He	108842.774	3.3823	253414.23	0	0.001611
Ca	44	3	He	107755.734	3.3485	249976.38	0	0.001611
Ca	44	3	He	112055.941	3.4821	255643.22	0	0.001611
Ti	47	3	He	-0.027	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.557	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	1.081	0.0005	40.00	0.0003	0.0002737
V	51	3	He	0.241	0.0101	760.02	0.0117	0.007326
V	51	3	He	0.184	0.0095	708.02	0.0117	0.007326
V	51	3	He	0.189	0.0095	700.02	0.0117	0.007326
Cr	52	3	He	0.244	0.0291	2180.24	0.0152	0.02538
Cr	52	3	He	0.119	0.0272	2030.19	0.0152	0.02538
Cr	52	3	He	0.337	0.0305	2240.25	0.0152	0.02538
Mn	55	3	He	3679.594	21.7324	1628291.07	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3698.536	21.8442	1630743.26	0.0059	0.01385
Mn	55	3	He	3782.257	22.3383	1640021.69	0.0059	0.01385
Fe	57	3	He	8826.116	2.561	191880.11	0.0003	0.003918
Fe	57	3	He	8520.611	2.4725	184578.02	0.0003	0.003918
Fe	57	3	He	8798.611	2.553	187434.90	0.0003	0.003918
Co	59	3	He	15.22	0.4674	35023.11	0.0305	0.003084
Co	59	3	He	15.007	0.4609	34411.18	0.0305	0.003084
Co	59	3	He	15.386	0.4725	34692.06	0.0305	0.003084
Ni	60	3	He	14.783	0.139	10414.01	0.0088	0.009003
Ni	60	3	He	14.886	0.1399	10444.17	0.0088	0.009003
Ni	60	3	He	15.076	0.1416	10394.07	0.0088	0.009003
Cu	63	3	He	0.471	0.0167	1250.10	0.0249	0.004937
Cu	63	3	He	0.366	0.0141	1050.08	0.0249	0.004937
Cu	63	3	He	0.244	0.011	810.05	0.0249	0.004937
Zn	66	3	He	10.148	0.0298	2230.27	0.0025	0.004836
Zn	66	3	He	10.955	0.0318	2370.29	0.0025	0.004836
Zn	66	3	He	13.058	0.0369	2710.35	0.0025	0.004836
As	75	3	He	5.445	0.0099	742.03	0.0017	0.0004347
As	75	3	He	5.65	0.0103	766.02	0.0017	0.0004347
As	75	3	He	4.857	0.0089	652.02	0.0017	0.0004347
Sr	88	3	He	106.203	0.831	51453.45	0.0078	0.0007762
Sr	88	3	He	107.274	0.8393	52147.21	0.0078	0.0007762
Sr	88	3	He	106.397	0.8325	51423.30	0.0078	0.0007762
Mo	98	3	He	0.82	0.0186	1150.09	0.022	0.0005162
Mo	98	3	He	0.649	0.0148	920.06	0.022	0.0005162
Mo	98	3	He	0.734	0.0167	1030.07	0.022	0.0005162
Ag	107	3	He	0.029	0.0018	110.00	0.0455	0.0004641
Ag	107	3	He	0.039	0.0023	140.01	0.0455	0.0004641
Ag	107	3	He	0.022	0.0015	90.01	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.05	0.0003	18.00	0.0048	5.152E-05
Sn	120	3	He	1.512	0.0371	2300.26	0.0143	0.01559
Sn	120	3	He	1.718	0.0401	2490.36	0.0143	0.01559
Sn	120	3	He	1.36	0.035	2160.24	0.0143	0.01559
Sb	121	3	He	0.109	0.0016	100.00	0.0124	0.000258
Sb	121	3	He	0.109	0.0016	100.00	0.0124	0.000258
Sb	121	3	He	0.123	0.0018	110.00	0.0124	0.000258
Ba	137	3	He	521.879	2.2834	141388.57	0.0044	0.000309
Ba	137	3	He	514.101	2.2494	139751.18	0.0044	0.000309
Ba	137	3	He	508.304	2.224	137378.90	0.0044	0.000309
Tl	205	3	He	0.678	0.0197	4250.88	0.0276	0.001005
Tl	205	3	He	0.526	0.0155	3390.54	0.0276	0.001005
Tl	205	3	He	0.53	0.0157	3390.57	0.0276	0.001005
Pb	208	3	He	0.024	0.0031	350.02	0.0364	0.002176
Pb	208	3	He	0.023	0.003	360.02	0.0364	0.002176
Pb	208	3	He	0.015	0.0027	300.01	0.0364	0.002176
U	238	3	He	0.863	0.0366	7872.73	0.0421	0.00024
U	238	3	He	0.819	0.0347	7572.46	0.0421	0.00024
U	238	3	He	0.807	0.0342	7402.36	0.0421	0.00024
Sc	45	1	No Gas			3370075.89		
Sc	45	1	No Gas			3341825.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3307709.64		
Ge	72	1	No Gas			1511445.13		
Ge	72	1	No Gas			1493313.42		
Ge	72	1	No Gas			1489181.70		
Sc	45	2	H2			184304.96		
Sc	45	2	H2			193310.54		
Sc	45	2	H2			194038.92		
Ge	72	2	H2			157837.19		
Ge	72	2	H2			166280.33		
Ge	72	2	H2			165786.01		
In	115	2	H2			414584.80		
In	115	2	H2			428252.73		
In	115	2	H2			427744.72		
Sc	45	3	He			41278.99		
Sc	45	3	He			40165.83		
Sc	45	3	He			40938.12		
Ge	72	3	He			74924.69		
Ge	72	3	He			74653.48		
Ge	72	3	He			73417.38		
In	115	3	He			61937.55		
In	115	3	He			62147.71		
In	115	3	He			61787.04		
Tb	159	3	He			279061.70		
Tb	159	3	He			283605.41		
Tb	159	3	He			279600.89		
Bi	209	3	He			215342.81		
Bi	209	3	He			218233.51		
Bi	209	3	He			216573.18		

Quantitation Report

Data File Name	095SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:09:46
Sample Name	410-136864-K-4-A PDS
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

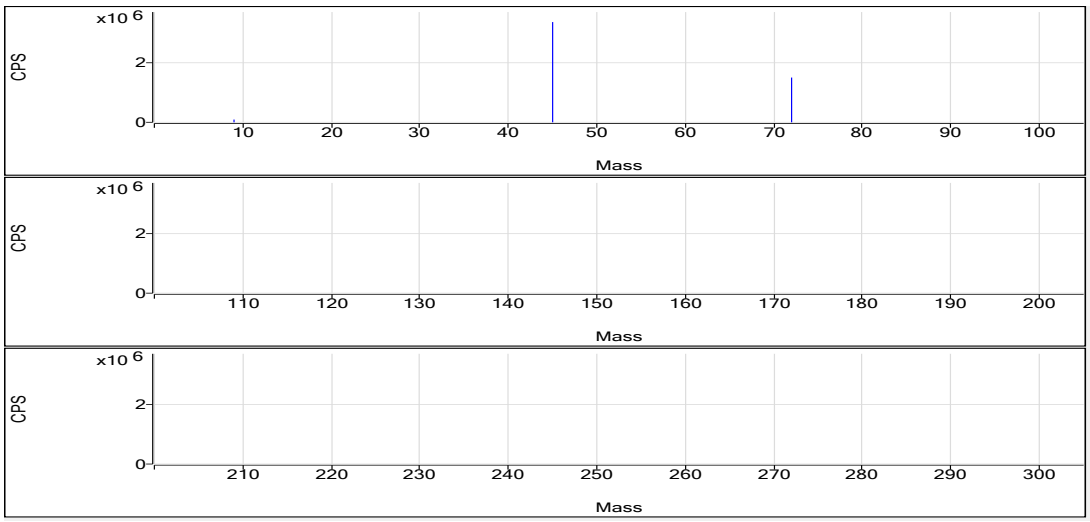
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	46.295	ppb	3.6	91996.10	0.0609	Pulse	0.5000	3
Se	78	72	H2	101.703	ppb	5.0	6451.67	0.0396	Pulse	1.5000	3
Na	23	72	He	14981.378	ppb	0.5	1920961.12	25.8418	Pulse	0.1000	3
Mg	24	72	He	46910.004	ppb	0.8	2940262.98	39.5547	Pulse	0.1000	3
Al	27	72	He	5106.872	ppb	0.9	91716.87	1.2338	Pulse	0.1000	3
K	39	72	He	8097.769	ppb	1.8	343065.46	4.6153	Pulse	0.1000	3
Ca	44	72	He	115287.165	ppb	1.6	266300.02	3.5824	Pulse	0.1000	3
Ti	47	72	He	537.012	ppb	3.5	10030.45	0.1349	Pulse	0.1000	3
V	51	72	He	522.781	ppb	0.7	455128.28	6.1227	Pulse	0.5000	3
Cr	52	72	He	514.477	ppb	0.7	584223.40	7.8595	Pulse	0.1000	3
Mn	55	72	He	4229.202	ppb	0.7	1856592.74	24.9764	Pulse	0.1000	3
Fe	57	72	He	13720.351	ppb	0.6	295769.84	3.9789	Pulse	0.1000	3
Co	59	72	He	520.241	ppb	0.6	1180117.95	15.8759	Pulse	0.1000	3
Ni	60	72	He	518.901	ppb	0.3	339847.20	4.5719	Pulse	0.1000	3
Cu	63	72	He	509.070	ppb	0.6	944027.51	12.6997	Pulse	0.1000	3
Zn	66	72	He	514.256	ppb	0.8	94273.87	1.2682	Pulse	0.1000	3
As	75	72	He	517.776	ppb	1.0	66969.55	0.9009	Pulse	0.5000	3
Sr	88	115	He	159.912	ppb	1.4	77433.67	1.2508	Pulse	0.1000	3
Mo	98	115	He	53.491	ppb	1.8	72958.19	1.1785	Pulse	0.1000	3
Ag	107	115	He	54.813	ppb	1.4	154423.42	2.4945	Pulse	0.1000	3
Cd	111	115	He	53.475	ppb	2.5	15893.68	0.2567	Pulse	0.5000	3
Sn	120	115	He	107.386	ppb	1.0	95751.28	1.5467	Pulse	0.1000	3
Sb	121	115	He	105.604	ppb	0.7	81119.39	1.3103	Pulse	0.1000	3
Ba	137	115	He	1029.621	ppb	1.3	278869.31	4.5047	Pulse	0.1000	3
Tl	205	209	He	104.531	ppb	0.7	628024.03	2.8907	Pulse	0.1000	3
Pb	208	209	He	51.508	ppb	0.6	407787.56	1.8769	Pulse	0.1000	3
U	238	209	He	52.549	ppb	1.0	480328.39	2.2108	Pulse	0.1000	3

ISTD Table:

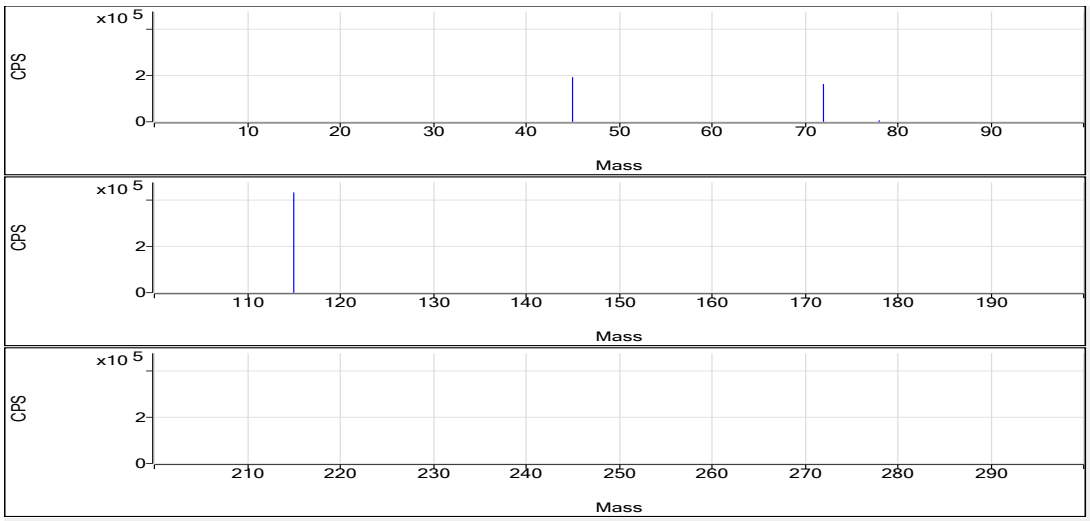
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3385091.10	1.4	104.4	Pulse	0.1000	3
No Gas	Ge	72	1511286.85	0.8	105.0	Pulse	0.1000	3
H2	Sc	45	192455.04	1.8	98.5	Pulse	0.1000	3
H2	Ge	72	162960.06	1.7	100.0	Pulse	0.1000	3
H2	In	115	432273.63	1.4	99.8	Pulse	0.1000	3
He	Sc	45	41980.76	1.3	105.0	Pulse	0.1000	3
He	Ge	72	74335.29	0.5	102.8	Pulse	0.1000	3
He	In	115	61910.24	0.8	95.8	Pulse	0.1000	3
He	Tb	159	280356.24	0.2	98.0	Pulse	0.1000	3
He	Bi	209	217264.75	0.8	97.8	Pulse	0.1000	3

No Gas

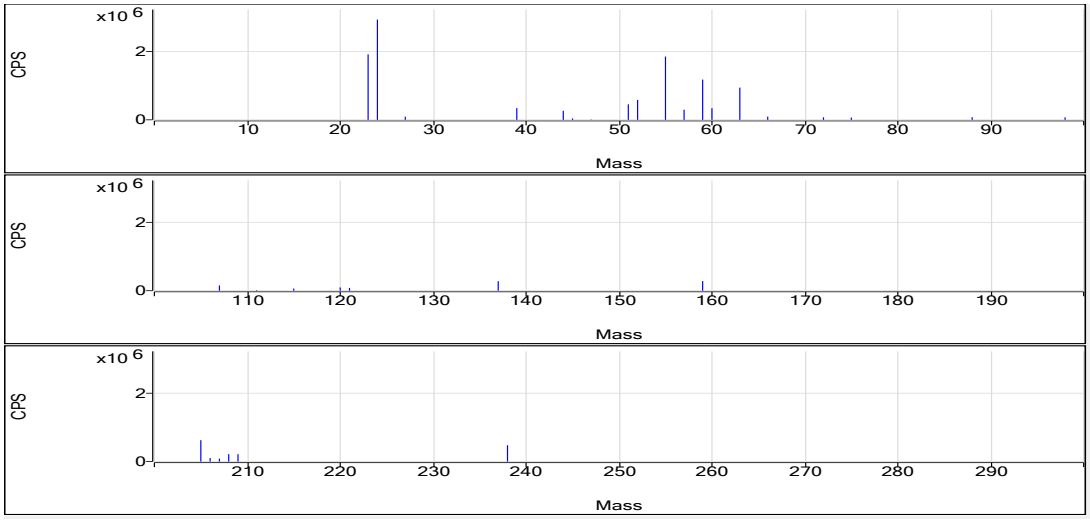


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.459	0.0598	90042.23	0.0013	4.694E-05
Be	9	1	No Gas	45.205	0.0594	90639.94	0.0013	4.694E-05
Be	9	1	No Gas	48.221	0.0634	95306.13	0.0013	4.694E-05
Se	78	2	H2	106.021	0.0413	6597.51	0.0004	1.089E-05
Se	78	2	H2	103.052	0.0401	6581.50	0.0004	1.089E-05
Se	78	2	H2	96.036	0.0374	6175.99	0.0004	1.089E-05
Na	23	3	He	14989.895	25.8564	1912332.94	0.0017	0.1065
Na	23	3	He	15058.168	25.9737	1937735.60	0.0017	0.1065
Na	23	3	He	14896.07	25.6952	1912814.82	0.0017	0.1065
Mg	24	3	He	47284.374	39.8704	2948801.52	0.0008	0.004846
Mg	24	3	He	46919.563	39.5628	2951534.33	0.0008	0.004846
Mg	24	3	He	46526.076	39.2311	2920453.08	0.0008	0.004846
Al	27	3	He	5126.962	1.2387	91612.54	0.0002	0.001063
Al	27	3	He	5136.861	1.2411	92588.59	0.0002	0.001063
Al	27	3	He	5056.793	1.2217	90949.48	0.0002	0.001063
K	39	3	He	8261.943	4.706	348053.12	0.0006	0.1436
K	39	3	He	8050.985	4.5895	342393.20	0.0006	0.1436
K	39	3	He	7980.38	4.5505	338750.07	0.0006	0.1436
Ca	44	3	He	115775.938	3.5976	266077.14	0	0.001611
Ca	44	3	He	116871.545	3.6316	270932.93	0	0.001611
Ca	44	3	He	113214.011	3.518	261889.98	0	0.001611
Ti	47	3	He	555.534	0.1396	10324.05	0.0003	0.0002737
Ti	47	3	He	537.885	0.1352	10083.76	0.0003	0.0002737
Ti	47	3	He	517.616	0.1301	9683.54	0.0003	0.0002737
V	51	3	He	525.426	6.1536	455120.09	0.0117	0.007326
V	51	3	He	524.637	6.1444	458394.88	0.0117	0.007326
V	51	3	He	518.282	6.0701	451869.88	0.0117	0.007326
Cr	52	3	He	518.636	7.9228	585967.65	0.0152	0.02538
Cr	52	3	He	512.554	7.8302	584160.62	0.0152	0.02538
Cr	52	3	He	512.24	7.8254	582541.94	0.0152	0.02538
Mn	55	3	He	4262.621	25.1736	1861834.82	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4221.617	24.9316	1859992.32	0.0059	0.01385
Mn	55	3	He	4203.37	24.8239	1847951.07	0.0059	0.01385
Fe	57	3	He	13755.562	3.9891	295033.10	0.0003	0.003918
Fe	57	3	He	13622.383	3.9505	294723.82	0.0003	0.003918
Fe	57	3	He	13783.107	3.9971	297552.59	0.0003	0.003918
Co	59	3	He	523.82	15.9851	1182251.94	0.0305	0.003084
Co	59	3	He	517.912	15.8048	1179099.90	0.0305	0.003084
Co	59	3	He	518.992	15.8378	1179002.01	0.0305	0.003084
Ni	60	3	He	520.482	4.5858	339161.24	0.0088	0.009003
Ni	60	3	He	517.313	4.5579	340036.21	0.0088	0.009003
Ni	60	3	He	518.908	4.5719	340344.14	0.0088	0.009003
Cu	63	3	He	511.242	12.7538	943270.85	0.0249	0.004937
Cu	63	3	He	510.562	12.7369	950219.44	0.0249	0.004937
Cu	63	3	He	505.406	12.6083	938592.25	0.0249	0.004937
Zn	66	3	He	518.056	1.2776	94489.45	0.0025	0.004836
Zn	66	3	He	514.823	1.2696	94719.66	0.0025	0.004836
Zn	66	3	He	509.89	1.2575	93612.50	0.0025	0.004836
As	75	3	He	522.523	0.9092	67243.54	0.0017	0.0004347
As	75	3	He	512.62	0.892	66544.20	0.0017	0.0004347
As	75	3	He	518.186	0.9016	67120.91	0.0017	0.0004347
Sr	88	3	He	157.738	1.2338	76645.82	0.0078	0.0007762
Sr	88	3	He	159.729	1.2494	77823.10	0.0078	0.0007762
Sr	88	3	He	162.268	1.2692	77832.10	0.0078	0.0007762
Mo	98	3	He	52.391	1.1543	71702.25	0.022	0.0005162
Mo	98	3	He	54.198	1.194	74375.39	0.022	0.0005162
Mo	98	3	He	53.884	1.1871	72796.94	0.022	0.0005162
Ag	107	3	He	54.233	2.4681	153318.34	0.0455	0.0004641
Ag	107	3	He	54.525	2.4814	154562.23	0.0455	0.0004641
Ag	107	3	He	55.682	2.534	155389.69	0.0455	0.0004641
Cd	111	3	He	52.132	0.2503	15548.63	0.0048	5.152E-05
Cd	111	3	He	53.444	0.2566	15983.11	0.0048	5.152E-05
Cd	111	3	He	54.851	0.2634	16149.29	0.0048	5.152E-05
Sn	120	3	He	107.682	1.5509	96342.32	0.0143	0.01559
Sn	120	3	He	106.207	1.5299	95294.19	0.0143	0.01559
Sn	120	3	He	108.268	1.5593	95617.33	0.0143	0.01559
Sb	121	3	He	104.837	1.3008	80803.49	0.0124	0.000258
Sb	121	3	He	106.234	1.3181	82101.69	0.0124	0.000258
Sb	121	3	He	105.742	1.312	80452.98	0.0124	0.000258
Ba	137	3	He	1016.767	4.4485	276338.71	0.0044	0.000309
Ba	137	3	He	1028.106	4.4981	280178.16	0.0044	0.000309
Ba	137	3	He	1043.99	4.5676	280091.07	0.0044	0.000309
Tl	205	3	He	103.725	2.8684	627583.51	0.0276	0.001005
Tl	205	3	He	104.668	2.8945	630308.70	0.0276	0.001005
Tl	205	3	He	105.201	2.9092	626179.87	0.0276	0.001005
Pb	208	3	He	51.234	1.867	216979.33	0.0364	0.002176
Pb	208	3	He	51.815	1.8881	220183.16	0.0364	0.002176
Pb	208	3	He	51.474	1.8757	215192.32	0.0364	0.002176
U	238	3	He	52.025	2.1888	478892.41	0.0421	0.00024
U	238	3	He	53.038	2.2314	485919.52	0.0421	0.00024
U	238	3	He	52.583	2.2123	476173.24	0.0421	0.00024
Sc	45	1	No Gas			3372876.51		
Sc	45	1	No Gas			3436903.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3345493.39		
Ge	72	1	No Gas			1506175.13		
Ge	72	1	No Gas			1524691.07		
Ge	72	1	No Gas			1502994.35		
Sc	45	2	H2			189479.92		
Sc	45	2	H2			191647.67		
Sc	45	2	H2			196237.52		
Ge	72	2	H2			159779.38		
Ge	72	2	H2			163983.18		
Ge	72	2	H2			165117.63		
In	115	2	H2			426215.50		
In	115	2	H2			431988.59		
In	115	2	H2			438616.79		
Sc	45	3	He			42040.91		
Sc	45	3	He			41419.15		
Sc	45	3	He			42482.23		
Ge	72	3	He			73959.71		
Ge	72	3	He			74603.77		
Ge	72	3	He			74442.38		
In	115	3	He			62871.62		
In	115	3	He			63031.93		
In	115	3	He			62067.75		
Tb	159	3	He			280988.39		
Tb	159	3	He			280340.23		
Tb	159	3	He			279740.11		
Bi	209	3	He			218791.25		
Bi	209	3	He			217762.11		
Bi	209	3	He			215240.88		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:11:45
Sample Name	410-136864-K-4-A SD @5
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

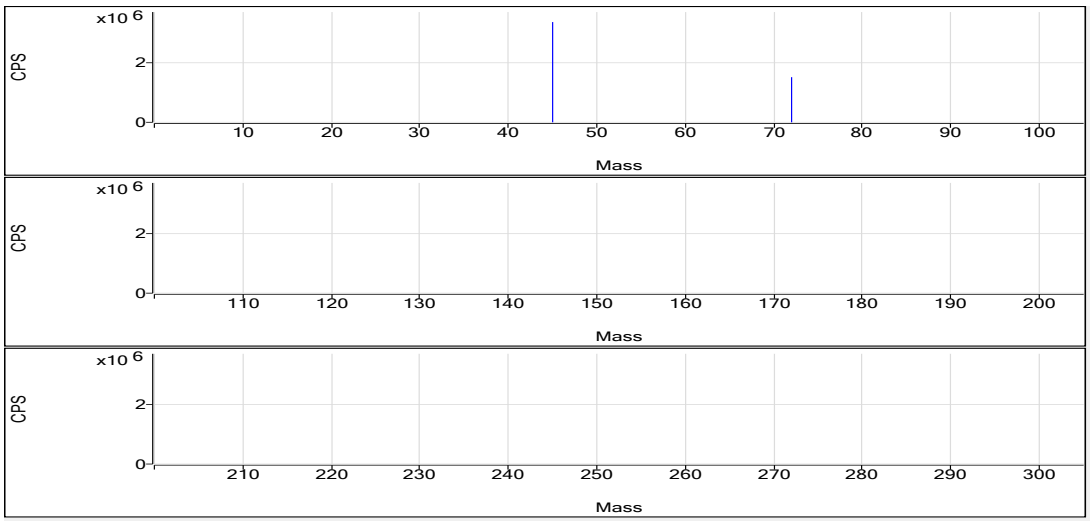
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.066	ppb	11.0	201.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.185	ppb	12.7	13.56	0.0001	Pulse	1.5000	3
Na	23	72	He	1862.644	ppb	1.1	247439.19	3.3061	Pulse	0.1000	3
Mg	24	72	He	8121.338	ppb	1.4	512801.01	6.8520	Pulse	0.1000	3
Al	27	72	He	3.883	ppb	59.5	150.01	0.0020	Pulse	0.1000	3
K	39	72	He	576.624	ppb	3.8	34578.08	0.4621	Pulse	0.1000	3
Ca	44	72	He	21511.872	ppb	1.1	50126.41	0.6698	Pulse	0.1000	3
Ti	47	72	He	0.338	ppb	366.5	26.67	0.0004	Pulse	0.1000	3
V	51	72	He	0.201	ppb	43.5	724.02	0.0097	Pulse	0.5000	3
Cr	52	72	He	0.188	ppb	73.0	2113.56	0.0282	Pulse	0.1000	3
Mn	55	72	He	728.095	ppb	1.3	322668.78	4.3114	Pulse	0.1000	3
Fe	57	72	He	1706.182	ppb	0.9	37288.48	0.4982	Pulse	0.1000	3
Co	59	72	He	3.090	ppb	3.1	7285.43	0.0974	Pulse	0.1000	3
Ni	60	72	He	3.892	ppb	11.3	3233.80	0.0432	Pulse	0.1000	3
Cu	63	72	He	0.400	ppb	5.9	1116.75	0.0149	Pulse	0.1000	3
Zn	66	72	He	4.376	ppb	1.6	1166.76	0.0156	Pulse	0.1000	3
As	75	72	He	1.338	ppb	12.8	206.67	0.0028	Pulse	0.5000	3
Sr	88	115	He	20.933	ppb	3.2	10414.17	0.1644	Pulse	0.1000	3
Mo	98	115	He	0.194	ppb	9.8	303.34	0.0048	Pulse	0.1000	3
Ag	107	115	He	0.029	ppb	59.8	113.34	0.0018	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	58.1	8.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.262	ppb	29.1	1223.44	0.0193	Pulse	0.1000	3
Sb	121	115	He	0.102	ppb	18.6	96.67	0.0015	Pulse	0.1000	3
Ba	137	115	He	100.587	ppb	2.7	27885.50	0.4404	Pulse	0.1000	3
Tl	205	209	He	0.599	ppb	13.7	3860.72	0.0176	Pulse	0.1000	3
Pb	208	209	He	0.030	ppb	6.5	720.04	0.0033	Pulse	0.1000	3
U	238	209	He	0.193	ppb	8.8	1833.54	0.0083	Pulse	0.1000	3

ISTD Table:

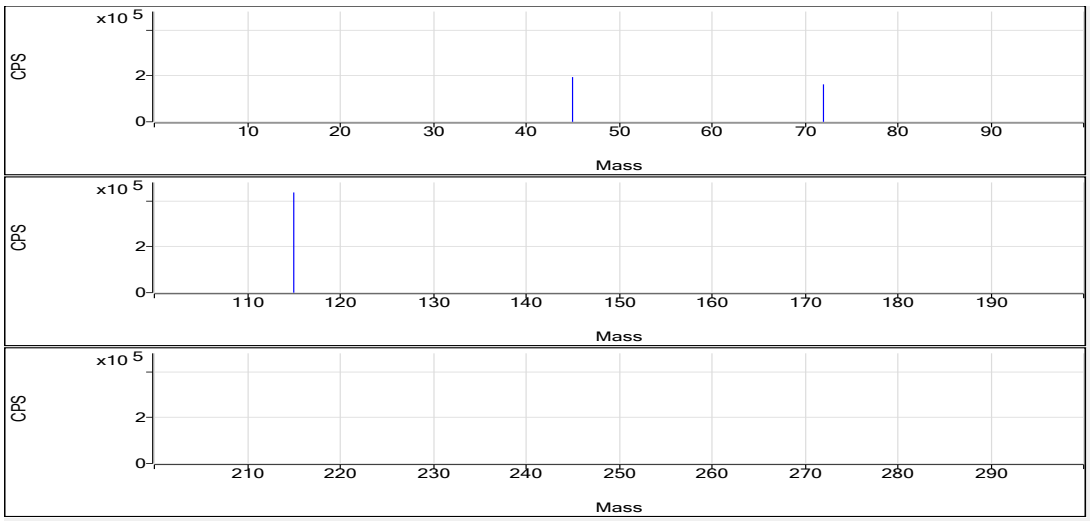
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3340423.91	1.0	103.1	Pulse	0.1000	3
No Gas	Ge	72	1503980.96	1.1	104.5	Pulse	0.1000	3
H2	Sc	45	195005.87	3.2	99.8	Pulse	0.1000	3
H2	Ge	72	163363.64	2.5	100.2	Pulse	0.1000	3
H2	In	115	437057.09	0.9	100.9	Pulse	0.1000	3
He	Sc	45	41152.09	1.5	102.9	Pulse	0.1000	3
He	Ge	72	74847.71	1.1	103.5	Pulse	0.1000	3
He	In	115	63334.54	1.2	98.1	Pulse	0.1000	3
He	Tb	159	281382.64	0.5	98.4	Pulse	0.1000	3
He	Bi	209	219667.55	0.3	98.9	Pulse	0.1000	3

No Gas

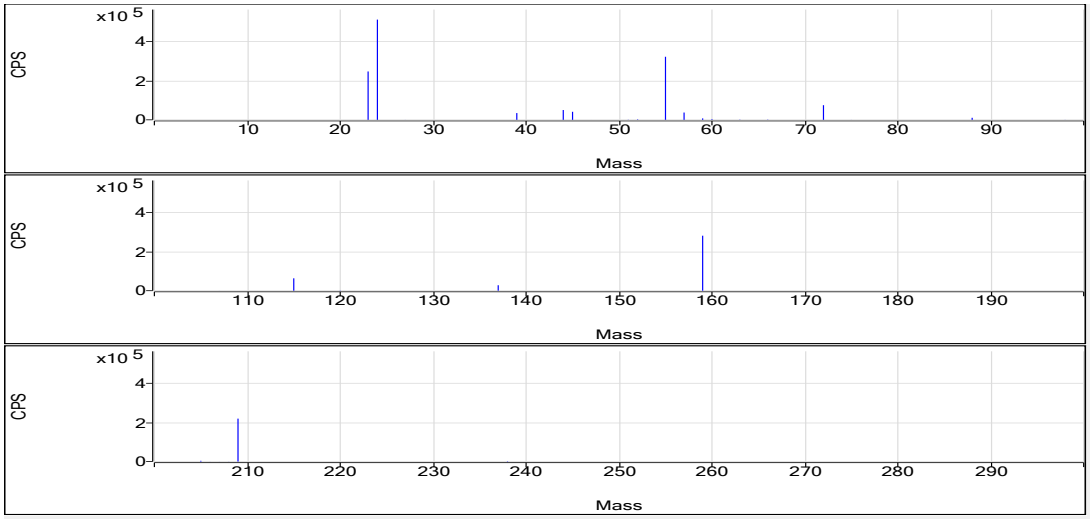


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.065	0.0001	196.00	0.0013	4.694E-05
Be	9	1	No Gas	0.074	0.0001	218.00	0.0013	4.694E-05
Be	9	1	No Gas	0.06	0.0001	190.00	0.0013	4.694E-05
Se	78	2	H2	0.161	0.0001	12.00	0.0004	1.089E-05
Se	78	2	H2	0.208	0.0001	14.67	0.0004	1.089E-05
Se	78	2	H2	0.187	0.0001	14.00	0.0004	1.089E-05
Na	23	3	He	1858.038	3.2982	246458.00	0.0017	0.1065
Na	23	3	He	1884.649	3.3439	247720.04	0.0017	0.1065
Na	23	3	He	1845.246	3.2763	248139.53	0.0017	0.1065
Mg	24	3	He	8175.096	6.8973	515394.41	0.0008	0.004846
Mg	24	3	He	8200.882	6.919	512562.22	0.0008	0.004846
Mg	24	3	He	7988.036	6.7396	510446.40	0.0008	0.004846
Al	27	3	He	2.805	0.0017	130.01	0.0002	0.001063
Al	27	3	He	2.308	0.0016	120.00	0.0002	0.001063
Al	27	3	He	6.537	0.0026	200.01	0.0002	0.001063
K	39	3	He	591.543	0.4703	35142.65	0.0006	0.1436
K	39	3	He	587.189	0.4679	34661.62	0.0006	0.1436
K	39	3	He	551.141	0.448	33929.98	0.0006	0.1436
Ca	44	3	He	21489.446	0.6691	49995.78	0	0.001611
Ca	44	3	He	21764.05	0.6776	50196.66	0	0.001611
Ca	44	3	He	21282.122	0.6626	50186.79	0	0.001611
Ti	47	3	He	1.043	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	1.062	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
V	51	3	He	0.289	0.0107	800.03	0.0117	0.007326
V	51	3	He	0.2	0.0097	716.02	0.0117	0.007326
V	51	3	He	0.114	0.0087	656.02	0.0117	0.007326
Cr	52	3	He	0.337	0.0305	2280.27	0.0152	0.02538
Cr	52	3	He	0.159	0.0278	2060.21	0.0152	0.02538
Cr	52	3	He	0.067	0.0264	2000.21	0.0152	0.02538
Mn	55	3	He	725.327	4.295	320943.82	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	738.288	4.3715	323844.17	0.0059	0.01385
Mn	55	3	He	720.669	4.2675	323218.34	0.0059	0.01385
Fe	57	3	He	1706.591	0.4983	37238.26	0.0003	0.003918
Fe	57	3	He	1721.082	0.5025	37228.28	0.0003	0.003918
Fe	57	3	He	1690.873	0.4938	37398.89	0.0003	0.003918
Co	59	3	He	3.137	0.0988	7382.10	0.0305	0.003084
Co	59	3	He	3.152	0.0992	7352.18	0.0305	0.003084
Co	59	3	He	2.981	0.094	7122.02	0.0305	0.003084
Ni	60	3	He	3.71	0.0416	3110.44	0.0088	0.009003
Ni	60	3	He	4.396	0.0477	3530.53	0.0088	0.009003
Ni	60	3	He	3.571	0.0404	3060.42	0.0088	0.009003
Cu	63	3	He	0.419	0.0154	1150.09	0.0249	0.004937
Cu	63	3	He	0.408	0.0151	1120.08	0.0249	0.004937
Cu	63	3	He	0.374	0.0143	1080.08	0.0249	0.004937
Zn	66	3	He	4.405	0.0157	1170.09	0.0025	0.004836
Zn	66	3	He	4.296	0.0154	1140.09	0.0025	0.004836
Zn	66	3	He	4.427	0.0157	1190.10	0.0025	0.004836
As	75	3	He	1.535	0.0031	232.00	0.0017	0.0004347
As	75	3	He	1.225	0.0026	190.00	0.0017	0.0004347
As	75	3	He	1.253	0.0026	198.00	0.0017	0.0004347
Sr	88	3	He	20.896	0.1641	10264.14	0.0078	0.0007762
Sr	88	3	He	20.282	0.1593	10093.98	0.0078	0.0007762
Sr	88	3	He	21.62	0.1698	10884.40	0.0078	0.0007762
Mo	98	3	He	0.216	0.0053	330.01	0.022	0.0005162
Mo	98	3	He	0.184	0.0046	290.01	0.022	0.0005162
Mo	98	3	He	0.182	0.0045	290.01	0.022	0.0005162
Ag	107	3	He	0.025	0.0016	100.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.048	0.0027	170.01	0.0455	0.0004641
Cd	111	3	He	0.029	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.342	0.0205	1280.12	0.0143	0.01559
Sn	120	3	He	0.191	0.0183	1160.10	0.0143	0.01559
Sn	120	3	He	0.253	0.0192	1230.10	0.0143	0.01559
Sb	121	3	He	0.108	0.0016	100.00	0.0124	0.000258
Sb	121	3	He	0.081	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.118	0.0017	110.00	0.0124	0.000258
Ba	137	3	He	103.546	0.4533	28349.70	0.0044	0.000309
Ba	137	3	He	98.309	0.4304	27267.56	0.0044	0.000309
Ba	137	3	He	99.906	0.4374	28039.25	0.0044	0.000309
Tl	205	3	He	0.691	0.0201	4430.94	0.0276	0.001005
Tl	205	3	He	0.571	0.0168	3690.67	0.0276	0.001005
Tl	205	3	He	0.535	0.0158	3460.56	0.0276	0.001005
Pb	208	3	He	0.031	0.0033	390.02	0.0364	0.002176
Pb	208	3	He	0.032	0.0033	360.02	0.0364	0.002176
Pb	208	3	He	0.028	0.0032	410.02	0.0364	0.002176
U	238	3	He	0.18	0.0078	1720.18	0.0421	0.00024
U	238	3	He	0.212	0.0092	2010.23	0.0421	0.00024
U	238	3	He	0.186	0.0081	1770.20	0.0421	0.00024
Sc	45	1	No Gas			3303321.20		
Sc	45	1	No Gas			3351340.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3366610.26		
Ge	72	1	No Gas			1485221.85		
Ge	72	1	No Gas			1511662.16		
Ge	72	1	No Gas			1515058.88		
Sc	45	2	H2			192782.71		
Sc	45	2	H2			190260.54		
Sc	45	2	H2			201974.37		
Ge	72	2	H2			163002.70		
Ge	72	2	H2			159493.30		
Ge	72	2	H2			167594.92		
In	115	2	H2			432636.09		
In	115	2	H2			437856.83		
In	115	2	H2			440678.35		
Sc	45	3	He			41630.25		
Sc	45	3	He			40436.25		
Sc	45	3	He			41389.76		
Ge	72	3	He			74724.27		
Ge	72	3	He			74080.15		
Ge	72	3	He			75738.70		
In	115	3	He			62550.57		
In	115	3	He			63364.17		
In	115	3	He			64117.49		
Tb	159	3	He			282954.72		
Tb	159	3	He			281038.04		
Tb	159	3	He			280155.15		
Bi	209	3	He			220253.75		
Bi	209	3	He			219633.28		
Bi	209	3	He			219115.62		

Quantitation Report

Data File Name	097SMPL.d
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Acq Time	2023-08-10 13:13:44
Sample Name	410-136864-C-4-A DU
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

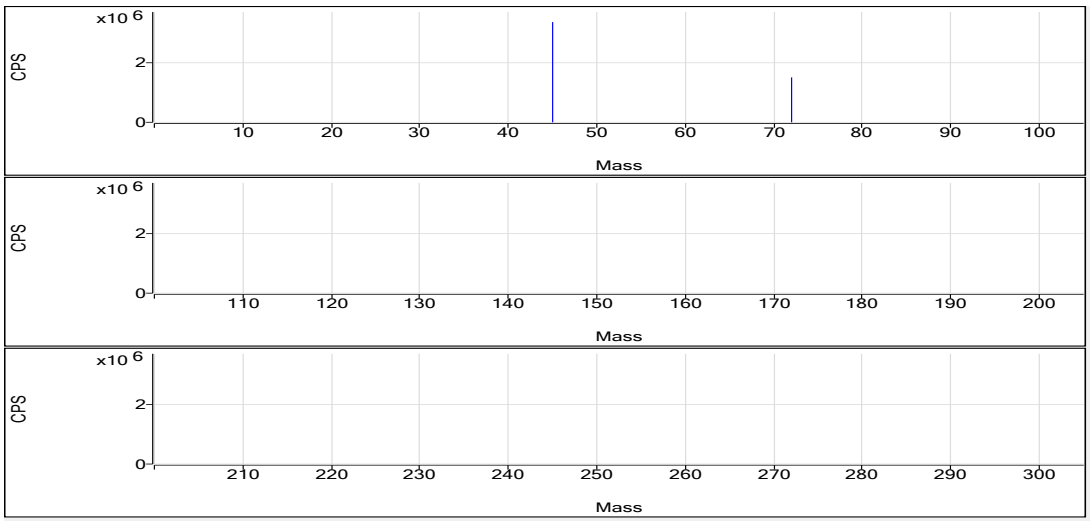
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.030	ppb	9.6	128.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.086	ppb	52.5	7.11	0.0000	Pulse	1.5000	3
Na	23	72	He	9786.665	ppb	1.3	1262924.77	16.9182	Pulse	0.1000	3
Mg	24	72	He	42474.788	ppb	1.3	2673587.88	35.8154	Pulse	0.1000	3
Al	27	72	He	4.099	ppb	26.2	153.34	0.0021	Pulse	0.1000	3
K	39	72	He	2997.148	ppb	1.6	134270.24	1.7987	Pulse	0.1000	3
Ca	44	72	He	112420.298	ppb	0.9	260793.23	3.4934	Pulse	0.1000	3
Ti	47	72	He	-0.911	ppb	N/A	3.33	0.0000	Pulse	0.1000	3
V	51	72	He	0.041	ppb	84.9	583.35	0.0078	Pulse	0.5000	3
Cr	52	72	He	0.169	ppb	64.6	2086.90	0.0280	Pulse	0.1000	3
Mn	55	72	He	3783.738	ppb	1.0	1668222.48	22.3471	Pulse	0.1000	3
Fe	57	72	He	8963.861	ppb	1.3	194153.78	2.6009	Pulse	0.1000	3
Co	59	72	He	15.414	ppb	2.6	35337.29	0.4734	Pulse	0.1000	3
Ni	60	72	He	14.681	ppb	3.2	10307.36	0.1381	Pulse	0.1000	3
Cu	63	72	He	0.105	ppb	19.3	563.37	0.0076	Pulse	0.1000	3
Zn	66	72	He	11.891	ppb	9.2	2540.30	0.0340	Pulse	0.1000	3
As	75	72	He	5.513	ppb	3.4	748.03	0.0100	Pulse	0.5000	3
Sr	88	115	He	107.592	ppb	2.2	52684.60	0.8418	Pulse	0.1000	3
Mo	98	115	He	0.642	ppb	6.6	916.73	0.0147	Pulse	0.1000	3
Ag	107	115	He	0.017	ppb	30.3	76.67	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	451.8	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	1.528	ppb	29.9	2336.96	0.0374	Pulse	0.1000	3
Sb	121	115	He	0.039	ppb	76.3	46.67	0.0007	Pulse	0.1000	3
Ba	137	115	He	520.793	ppb	1.4	142611.44	2.2787	Pulse	0.1000	3
Tl	205	209	He	0.229	ppb	5.9	1596.82	0.0073	Pulse	0.1000	3
Pb	208	209	He	0.010	ppb	54.5	550.03	0.0025	Pulse	0.1000	3
U	238	209	He	0.797	ppb	4.2	7352.39	0.0338	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3347404.43	0.6	103.3	Pulse	0.1000	3
No Gas	Ge	72	1499488.26	0.7	104.1	Pulse	0.1000	3
H2	Sc	45	192758.87	1.8	98.7	Pulse	0.1000	3
H2	Ge	72	161132.21	0.8	98.8	Pulse	0.1000	3
H2	In	115	427648.78	1.6	98.7	Pulse	0.1000	3
He	Sc	45	41613.04	0.4	104.1	Pulse	0.1000	3
He	Ge	72	74656.96	1.3	103.3	Pulse	0.1000	3
He	In	115	62592.60	1.3	96.9	Pulse	0.1000	3
He	Tb	159	281001.96	1.0	98.3	Pulse	0.1000	3
He	Bi	209	217656.88	0.8	98.0	Pulse	0.1000	3

No Gas



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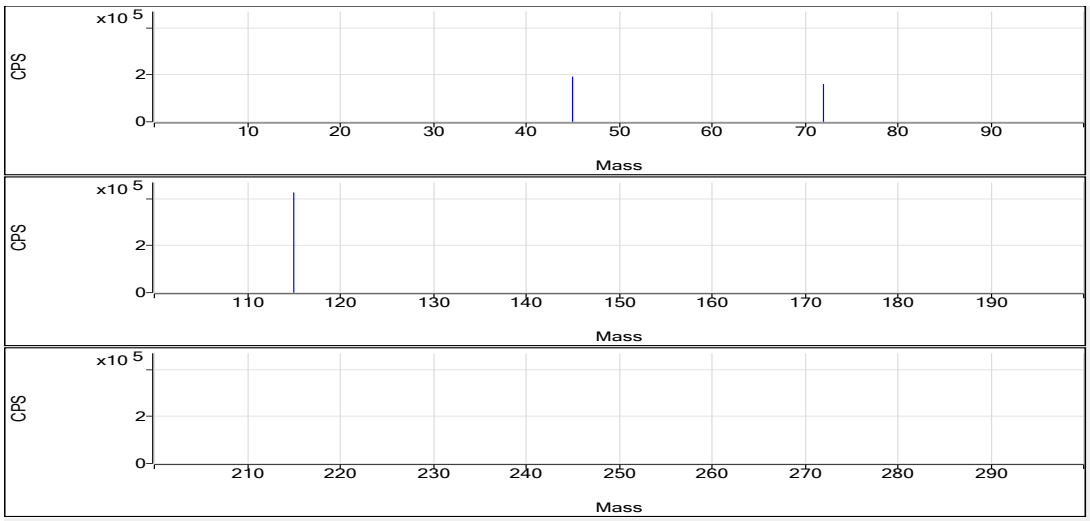
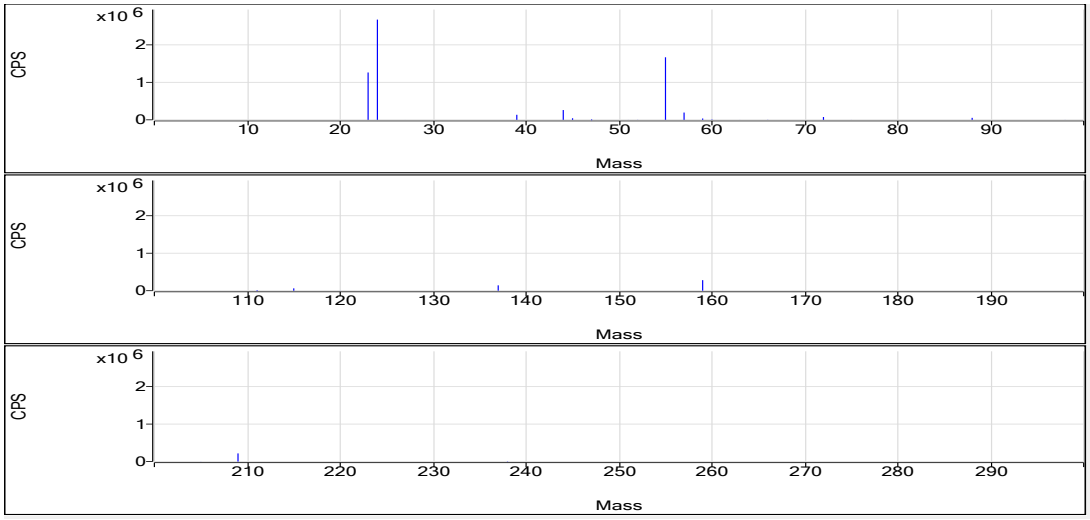


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.027	0.0001	122.00	0.0013	4.694E-05
Be	9	1	No Gas	0.032	0.0001	134.00	0.0013	4.694E-05
Be	9	1	No Gas	0.03	0.0001	130.00	0.0013	4.694E-05
Se	78	2	H2	0.122	0.0001	9.33	0.0004	1.089E-05
Se	78	2	H2	0.099	0	8.00	0.0004	1.089E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Na	23	3	He	9807.536	16.954	1268577.87	0.0017	0.1065
Na	23	3	He	9900.913	17.1145	1259584.04	0.0017	0.1065
Na	23	3	He	9651.547	16.6861	1260612.40	0.0017	0.1065
Mg	24	3	He	42608.405	35.9281	2688298.40	0.0008	0.004846
Mg	24	3	He	42938.489	36.2064	2664703.71	0.0008	0.004846
Mg	24	3	He	41877.47	35.3118	2667761.52	0.0008	0.004846
Al	27	3	He	5.01	0.0023	170.01	0.0002	0.001063
Al	27	3	He	2.915	0.0018	130.00	0.0002	0.001063
Al	27	3	He	4.371	0.0021	160.01	0.0002	0.001063
K	39	3	He	2962.285	1.7794	133146.37	0.0006	0.1436
K	39	3	He	3052.775	1.8294	134641.01	0.0006	0.1436
K	39	3	He	2976.385	1.7872	135023.34	0.0006	0.1436
Ca	44	3	He	111309.057	3.4589	258807.03	0	0.001611
Ca	44	3	He	113384.394	3.5233	259307.79	0	0.001611
Ca	44	3	He	112567.443	3.4979	264264.88	0	0.001611
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	-0.55	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
V	51	3	He	0.059	0.008	600.02	0.0117	0.007326
V	51	3	He	0.001	0.0073	540.01	0.0117	0.007326
V	51	3	He	0.064	0.0081	610.02	0.0117	0.007326
Cr	52	3	He	0.071	0.0265	1980.21	0.0152	0.02538
Cr	52	3	He	0.287	0.0298	2190.25	0.0152	0.02538
Cr	52	3	He	0.15	0.0277	2090.24	0.0152	0.02538
Mn	55	3	He	3781.101	22.3315	1670943.10	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3821.612	22.5706	1661144.98	0.0059	0.01385
Mn	55	3	He	3748.501	22.1391	1672579.35	0.0059	0.01385
Fe	57	3	He	9005.783	2.613	195518.24	0.0003	0.003918
Fe	57	3	He	9054.388	2.6271	193348.96	0.0003	0.003918
Fe	57	3	He	8831.413	2.5625	193594.14	0.0003	0.003918
Co	59	3	He	15.78	0.4846	36256.30	0.0305	0.003084
Co	59	3	He	15.487	0.4756	35002.92	0.0305	0.003084
Co	59	3	He	14.976	0.46	34752.66	0.0305	0.003084
Ni	60	3	He	14.652	0.1378	10314.04	0.0088	0.009003
Ni	60	3	He	15.161	0.1423	10474.21	0.0088	0.009003
Ni	60	3	He	14.231	0.1341	10133.82	0.0088	0.009003
Cu	63	3	He	0.108	0.0076	570.03	0.0249	0.004937
Cu	63	3	He	0.124	0.008	590.04	0.0249	0.004937
Cu	63	3	He	0.083	0.007	530.03	0.0249	0.004937
Zn	66	3	He	11.47	0.033	2470.30	0.0025	0.004836
Zn	66	3	He	13.132	0.0371	2730.33	0.0025	0.004836
Zn	66	3	He	11.071	0.032	2420.28	0.0025	0.004836
As	75	3	He	5.56	0.0101	756.03	0.0017	0.0004347
As	75	3	He	5.672	0.0103	758.03	0.0017	0.0004347
As	75	3	He	5.306	0.0097	730.02	0.0017	0.0004347
Sr	88	3	He	105.56	0.8259	51874.95	0.0078	0.0007762
Sr	88	3	He	110.111	0.8615	53169.96	0.0078	0.0007762
Sr	88	3	He	107.103	0.838	53008.90	0.0078	0.0007762
Mo	98	3	He	0.656	0.015	940.07	0.022	0.0005162
Mo	98	3	He	0.676	0.0154	950.06	0.022	0.0005162
Mo	98	3	He	0.594	0.0136	860.05	0.022	0.0005162
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	1.062	0.0307	1930.21	0.0143	0.01559
Sn	120	3	He	1.976	0.0438	2700.36	0.0143	0.01559
Sn	120	3	He	1.546	0.0376	2380.30	0.0143	0.01559
Sb	121	3	He	0.056	0.001	60.00	0.0124	0.000258
Sb	121	3	He	0.058	0.001	60.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	518.595	2.2691	142511.39	0.0044	0.000309
Ba	137	3	He	528.732	2.3134	142773.91	0.0044	0.000309
Ba	137	3	He	515.05	2.2535	142549.03	0.0044	0.000309
Tl	205	3	He	0.245	0.0078	1680.16	0.0276	0.001005
Tl	205	3	He	0.221	0.0071	1540.13	0.0276	0.001005
Tl	205	3	He	0.222	0.0071	1570.17	0.0276	0.001005
Pb	208	3	He	0.004	0.0023	250.01	0.0364	0.002176
Pb	208	3	He	0.014	0.0027	310.02	0.0364	0.002176
Pb	208	3	He	0.011	0.0026	270.01	0.0364	0.002176
U	238	3	He	0.816	0.0346	7482.47	0.0421	0.00024
U	238	3	He	0.759	0.0322	6972.14	0.0421	0.00024
U	238	3	He	0.817	0.0346	7602.55	0.0421	0.00024
Sc	45	1	No Gas			3361845.57		
Sc	45	1	No Gas			3354279.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3326088.70		
Ge	72	1	No Gas			1489223.26		
Ge	72	1	No Gas			1498804.04		
Ge	72	1	No Gas			1510437.48		
Sc	45	2	H2			188873.26		
Sc	45	2	H2			193865.62		
Sc	45	2	H2			195537.73		
Ge	72	2	H2			159665.28		
Ge	72	2	H2			161638.34		
Ge	72	2	H2			162093.01		
In	115	2	H2			425303.24		
In	115	2	H2			422099.72		
In	115	2	H2			435543.39		
Sc	45	3	He			41780.52		
Sc	45	3	He			41569.55		
Sc	45	3	He			41489.05		
Ge	72	3	He			74824.48		
Ge	72	3	He			73597.68		
Ge	72	3	He			75548.71		
In	115	3	He			62821.50		
In	115	3	He			61737.04		
In	115	3	He			63273.95		
Tb	159	3	He			280437.48		
Tb	159	3	He			278460.93		
Tb	159	3	He			284107.48		
Bi	209	3	He			216369.65		
Bi	209	3	He			216826.68		
Bi	209	3	He			219774.31		

Quantitation Report

Data File Name	098SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:15:44
Sample Name	410-136864-K-4-B MS
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

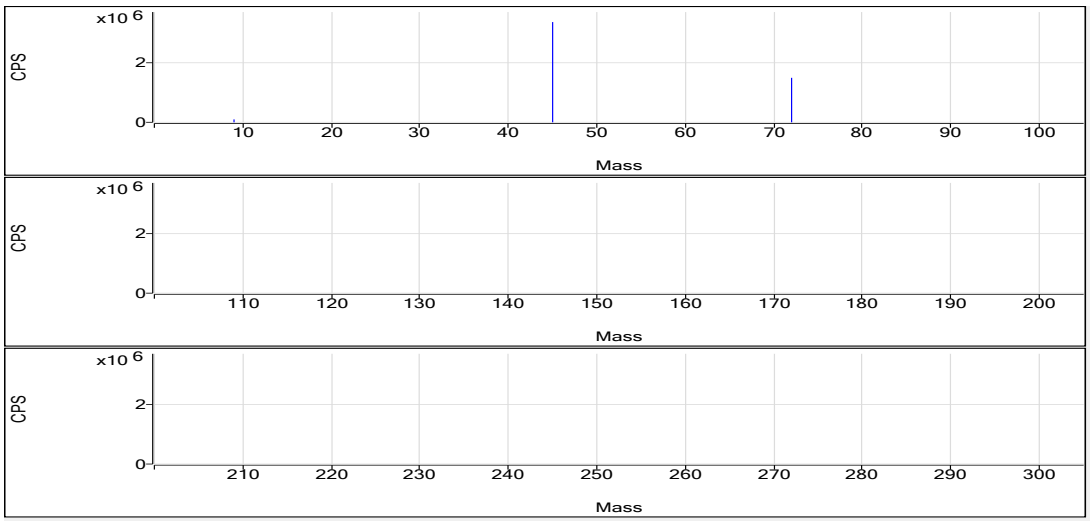
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.245	ppb	3.1	95916.67	0.0648	Pulse	0.5000	3
Se	78	72	H2	105.608	ppb	2.9	6723.13	0.0411	Pulse	1.5000	3
Na	23	72	He	15087.862	ppb	1.0	1945542.47	26.0247	Pulse	0.1000	3
Mg	24	72	He	47438.856	ppb	1.3	2990312.66	40.0006	Pulse	0.1000	3
Al	27	72	He	5357.310	ppb	2.4	96754.67	1.2943	Pulse	0.1000	3
K	39	72	He	8303.065	ppb	1.0	353507.75	4.7287	Pulse	0.1000	3
Ca	44	72	He	116002.003	ppb	0.7	269476.46	3.6046	Pulse	0.1000	3
Ti	47	72	He	528.563	ppb	1.2	9930.37	0.1328	Pulse	0.1000	3
V	51	72	He	530.427	ppb	1.0	464404.14	6.2121	Pulse	0.5000	3
Cr	52	72	He	529.991	ppb	0.8	605221.83	8.0957	Pulse	0.1000	3
Mn	55	72	He	4292.395	ppb	0.7	1895080.86	25.3494	Pulse	0.1000	3
Fe	57	72	He	14088.370	ppb	1.3	305426.56	4.0855	Pulse	0.1000	3
Co	59	72	He	530.986	ppb	1.3	1211345.21	16.2037	Pulse	0.1000	3
Ni	60	72	He	533.824	ppb	0.8	351592.60	4.7031	Pulse	0.1000	3
Cu	63	72	He	520.971	ppb	0.7	971601.96	12.9964	Pulse	0.1000	3
Zn	66	72	He	582.141	ppb	1.5	107276.10	1.4350	Pulse	0.1000	3
As	75	72	He	531.349	ppb	1.6	69115.85	0.9245	Pulse	0.5000	3
Sr	88	115	He	164.766	ppb	2.8	79417.57	1.2888	Pulse	0.1000	3
Mo	98	115	He	54.925	ppb	1.2	74593.65	1.2100	Pulse	0.1000	3
Ag	107	115	He	53.670	ppb	2.6	150524.63	2.4425	Pulse	0.1000	3
Cd	111	115	He	54.923	ppb	4.1	16246.07	0.2637	Pulse	0.5000	3
Sn	120	115	He	112.449	ppb	4.3	99735.73	1.6189	Pulse	0.1000	3
Sb	121	115	He	110.534	ppb	3.8	84495.82	1.3714	Pulse	0.1000	3
Ba	137	115	He	1066.580	ppb	3.9	287499.81	4.6664	Pulse	0.1000	3
Tl	205	209	He	107.616	ppb	0.2	644326.11	2.9760	Pulse	0.1000	3
Pb	208	209	He	53.071	ppb	1.8	418639.41	1.9338	Pulse	0.1000	3
U	238	209	He	54.346	ppb	1.2	494991.07	2.2864	Pulse	0.1000	3

ISTD Table:

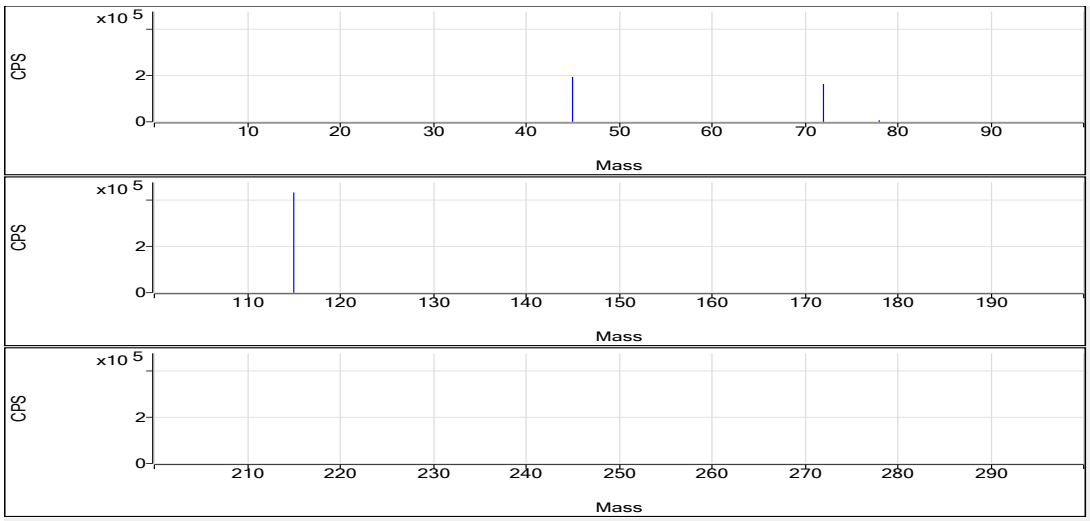
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3337879.74	1.6	103.0	Pulse	0.1000	3
No Gas	Ge	72	1481606.12	1.5	102.9	Pulse	0.1000	3
H2	Sc	45	193829.33	3.3	99.2	Pulse	0.1000	3
H2	Ge	72	163495.20	1.2	100.3	Pulse	0.1000	3
H2	In	115	432672.22	2.0	99.9	Pulse	0.1000	3
He	Sc	45	42181.35	1.7	105.5	Pulse	0.1000	3
He	Ge	72	74760.74	0.7	103.4	Pulse	0.1000	3
He	In	115	61654.98	2.8	95.5	Pulse	0.1000	3
He	Tb	159	282600.63	0.6	98.8	Pulse	0.1000	3
He	Bi	209	216511.97	1.2	97.4	Pulse	0.1000	3

No Gas

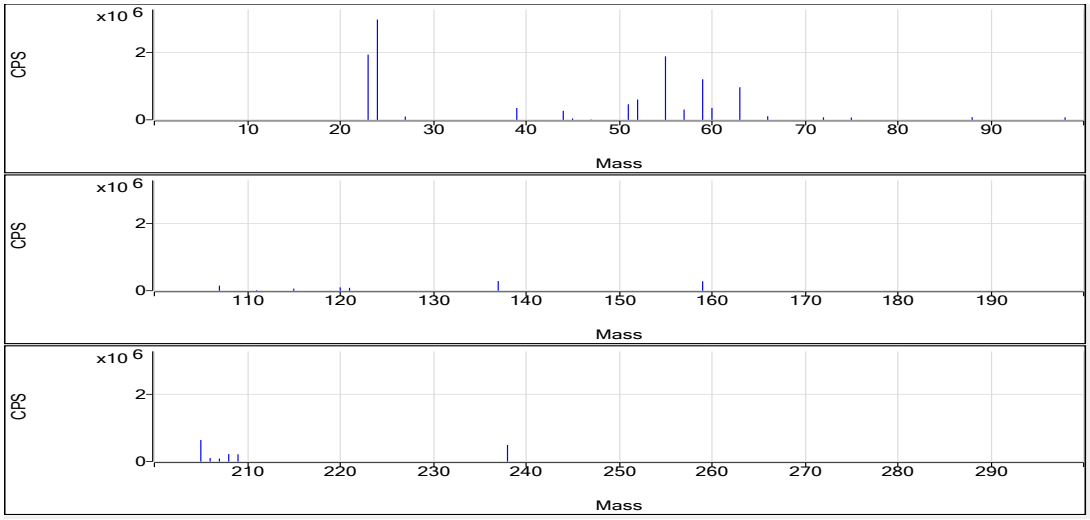


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.942	0.067	97876.43	0.0013	4.694E-05
Be	9	1	No Gas	48.729	0.0641	94728.65	0.0013	4.694E-05
Be	9	1	No Gas	48.063	0.0632	95144.92	0.0013	4.694E-05
Se	78	2	H2	106.774	0.0416	6776.26	0.0004	1.089E-05
Se	78	2	H2	107.944	0.042	6807.61	0.0004	1.089E-05
Se	78	2	H2	102.106	0.0398	6585.51	0.0004	1.089E-05
Na	23	3	He	15032.442	25.9295	1943552.31	0.0017	0.1065
Na	23	3	He	14975.021	25.8309	1940554.97	0.0017	0.1065
Na	23	3	He	15256.124	26.3137	1952520.13	0.0017	0.1065
Mg	24	3	He	47047.477	39.6706	2973523.39	0.0008	0.004846
Mg	24	3	He	47129.625	39.7399	2985478.08	0.0008	0.004846
Mg	24	3	He	48139.464	40.5913	3011936.52	0.0008	0.004846
Al	27	3	He	5224.505	1.2622	94610.62	0.0002	0.001063
Al	27	3	He	5369.735	1.2973	97459.16	0.0002	0.001063
Al	27	3	He	5477.69	1.3233	98194.24	0.0002	0.001063
K	39	3	He	8230.205	4.6885	351424.45	0.0006	0.1436
K	39	3	He	8288.1	4.7204	354624.17	0.0006	0.1436
K	39	3	He	8390.889	4.7772	354474.64	0.0006	0.1436
Ca	44	3	He	115198.373	3.5797	268314.06	0	0.001611
Ca	44	3	He	115885.549	3.601	270526.73	0	0.001611
Ca	44	3	He	116922.086	3.6332	269588.59	0	0.001611
Ti	47	3	He	523.117	0.1315	9853.67	0.0003	0.0002737
Ti	47	3	He	535.208	0.1345	10103.84	0.0003	0.0002737
Ti	47	3	He	527.363	0.1325	9833.59	0.0003	0.0002737
V	51	3	He	525.875	6.1589	461640.38	0.0117	0.007326
V	51	3	He	528.834	6.1935	465289.06	0.0117	0.007326
V	51	3	He	536.572	6.284	466282.97	0.0117	0.007326
Cr	52	3	He	531.124	8.113	608108.82	0.0152	0.02538
Cr	52	3	He	525.072	8.0208	602565.46	0.0152	0.02538
Cr	52	3	He	533.777	8.1534	604991.20	0.0152	0.02538
Mn	55	3	He	4294.29	25.3606	1900907.32	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4259.407	25.1547	1889755.44	0.0059	0.01385
Mn	55	3	He	4323.487	25.5329	1894579.82	0.0059	0.01385
Fe	57	3	He	13889.316	4.0279	301908.98	0.0003	0.003918
Fe	57	3	He	14135.283	4.0991	307947.94	0.0003	0.003918
Fe	57	3	He	14240.509	4.1296	306422.75	0.0003	0.003918
Co	59	3	He	524.705	16.0121	1200190.06	0.0305	0.003084
Co	59	3	He	529.995	16.1735	1215041.54	0.0305	0.003084
Co	59	3	He	538.258	16.4256	1218804.04	0.0305	0.003084
Ni	60	3	He	532.032	4.6873	351339.14	0.0088	0.009003
Ni	60	3	He	530.56	4.6744	351164.29	0.0088	0.009003
Ni	60	3	He	538.88	4.7475	352274.37	0.0088	0.009003
Cu	63	3	He	517.635	12.9133	967916.94	0.0249	0.004937
Cu	63	3	He	520.828	12.9929	976096.31	0.0249	0.004937
Cu	63	3	He	524.449	13.0832	970792.64	0.0249	0.004937
Zn	66	3	He	578.13	1.4252	106823.81	0.0025	0.004836
Zn	66	3	He	575.933	1.4198	106660.83	0.0025	0.004836
Zn	66	3	He	592.36	1.4601	108343.67	0.0025	0.004836
As	75	3	He	522.623	0.9094	68161.80	0.0017	0.0004347
As	75	3	He	531.885	0.9255	69526.59	0.0017	0.0004347
As	75	3	He	539.538	0.9388	69659.15	0.0017	0.0004347
Sr	88	3	He	161.32	1.2618	79219.58	0.0078	0.0007762
Sr	88	3	He	162.914	1.2743	79632.33	0.0078	0.0007762
Sr	88	3	He	170.063	1.3302	79400.81	0.0078	0.0007762
Mo	98	3	He	54.187	1.1938	74948.47	0.022	0.0005162
Mo	98	3	He	55.162	1.2153	75944.36	0.022	0.0005162
Mo	98	3	He	55.425	1.2211	72888.13	0.022	0.0005162
Ag	107	3	He	53.283	2.4248	152235.76	0.0455	0.0004641
Ag	107	3	He	52.528	2.3905	149384.87	0.0455	0.0004641
Ag	107	3	He	55.201	2.5121	149953.27	0.0455	0.0004641
Cd	111	3	He	53.104	0.255	16007.13	0.0048	5.152E-05
Cd	111	3	He	54.225	0.2603	16269.45	0.0048	5.152E-05
Cd	111	3	He	57.439	0.2758	16461.64	0.0048	5.152E-05
Sn	120	3	He	108.154	1.5576	97791.43	0.0143	0.01559
Sn	120	3	He	111.477	1.605	100299.69	0.0143	0.01559
Sn	120	3	He	117.715	1.694	101116.06	0.0143	0.01559
Sb	121	3	He	107.711	1.3364	83901.66	0.0124	0.000258
Sb	121	3	He	108.498	1.3462	84124.35	0.0124	0.000258
Sb	121	3	He	115.393	1.4317	85461.45	0.0124	0.000258
Ba	137	3	He	1038.347	4.5429	285208.00	0.0044	0.000309
Ba	137	3	He	1047.389	4.5824	286361.79	0.0044	0.000309
Ba	137	3	He	1114.004	4.8738	290929.64	0.0044	0.000309
Tl	205	3	He	107.371	2.9692	645320.15	0.0276	0.001005
Tl	205	3	He	107.794	2.9809	636908.08	0.0276	0.001005
Tl	205	3	He	107.683	2.9778	650750.11	0.0276	0.001005
Pb	208	3	He	52.422	1.9102	223555.86	0.0364	0.002176
Pb	208	3	He	54.145	1.9729	222267.09	0.0364	0.002176
Pb	208	3	He	52.645	1.9183	223545.58	0.0364	0.002176
U	238	3	He	54.102	2.2762	494696.20	0.0421	0.00024
U	238	3	He	55.105	2.3184	495352.45	0.0421	0.00024
U	238	3	He	53.831	2.2648	494924.56	0.0421	0.00024
Sc	45	1	No Gas			3276207.76		
Sc	45	1	No Gas			3363239.32		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3374192.14		
Ge	72	1	No Gas			1461117.01		
Ge	72	1	No Gas			1478321.38		
Ge	72	1	No Gas			1505379.98		
Sc	45	2	H2			190874.98		
Sc	45	2	H2			189450.64		
Sc	45	2	H2			201162.38		
Ge	72	2	H2			162951.17		
Ge	72	2	H2			161931.39		
Ge	72	2	H2			165603.04		
In	115	2	H2			427332.38		
In	115	2	H2			427980.54		
In	115	2	H2			442703.74		
Sc	45	3	He			42903.11		
Sc	45	3	He			41489.33		
Sc	45	3	He			42151.60		
Ge	72	3	He			74955.25		
Ge	72	3	He			75125.44		
Ge	72	3	He			74201.52		
In	115	3	He			63544.34		
In	115	3	He			63273.72		
In	115	3	He			60480.70		
Tb	159	3	He			284613.71		
Tb	159	3	He			281154.55		
Tb	159	3	He			282033.63		
Bi	209	3	He			217338.84		
Bi	209	3	He			213664.27		
Bi	209	3	He			218532.79		

Quantitation Report

Data File Name	099SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:17:44
Sample Name	410-136864-J-4-A MSD
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

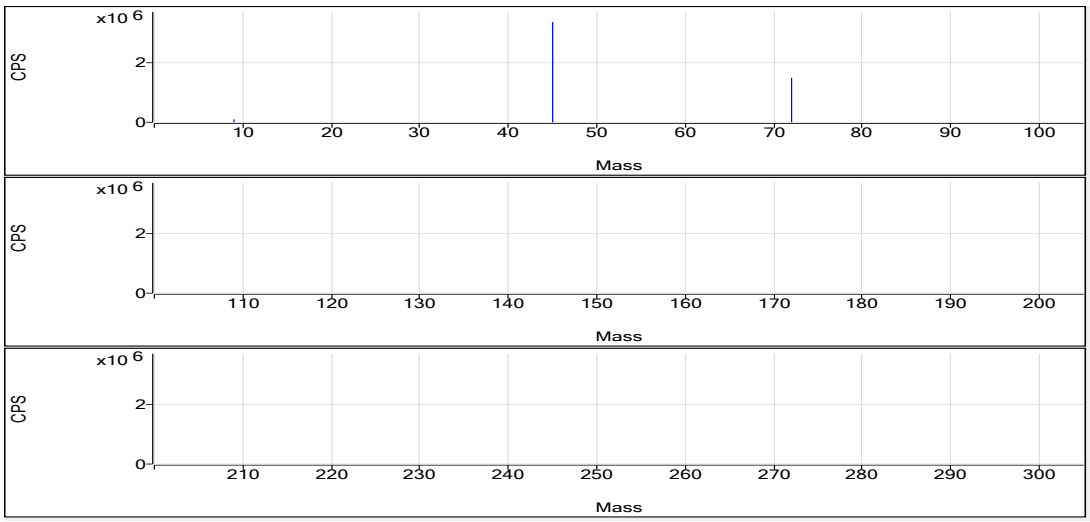
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.554	ppb	2.5	96600.37	0.0652	Pulse	0.5000	3
Se	78	72	H2	106.276	ppb	3.1	6647.76	0.0414	Pulse	1.5000	3
Na	23	72	He	15001.096	ppb	0.4	1956067.42	25.8757	Pulse	0.1000	3
Mg	24	72	He	47265.907	ppb	0.8	3012781.52	39.8548	Pulse	0.1000	3
Al	27	72	He	5183.505	ppb	0.2	94671.10	1.2523	Pulse	0.1000	3
K	39	72	He	8141.547	ppb	1.0	350733.68	4.6395	Pulse	0.1000	3
Ca	44	72	He	115756.878	ppb	0.5	271923.67	3.5970	Pulse	0.1000	3
Ti	47	72	He	543.473	ppb	0.5	10323.97	0.1366	Pulse	0.1000	3
V	51	72	He	527.150	ppb	0.1	466711.83	6.1738	Pulse	0.5000	3
Cr	52	72	He	522.079	ppb	0.3	602890.62	7.9752	Pulse	0.1000	3
Mn	55	72	He	4259.327	ppb	0.7	1901499.50	25.1542	Pulse	0.1000	3
Fe	57	72	He	14137.222	ppb	0.5	309919.29	4.0997	Pulse	0.1000	3
Co	59	72	He	526.836	ppb	0.6	1215368.73	16.0771	Pulse	0.1000	3
Ni	60	72	He	524.550	ppb	0.2	349365.23	4.6215	Pulse	0.1000	3
Cu	63	72	He	513.448	ppb	0.0	968290.43	12.8088	Pulse	0.1000	3
Zn	66	72	He	525.398	ppb	0.5	97941.04	1.2956	Pulse	0.1000	3
As	75	72	He	525.683	ppb	0.7	69144.39	0.9147	Pulse	0.5000	3
Sr	88	115	He	159.839	ppb	0.7	78493.30	1.2503	Pulse	0.1000	3
Mo	98	115	He	54.793	ppb	0.9	75786.50	1.2072	Pulse	0.1000	3
Ag	107	115	He	52.800	ppb	0.9	150853.95	2.4029	Pulse	0.1000	3
Cd	111	115	He	53.741	ppb	1.4	16199.37	0.2580	Pulse	0.5000	3
Sn	120	115	He	110.641	ppb	0.5	100018.20	1.5931	Pulse	0.1000	3
Sb	121	115	He	109.158	ppb	0.3	85028.63	1.3544	Pulse	0.1000	3
Ba	137	115	He	1051.796	ppb	0.8	288899.44	4.6017	Pulse	0.1000	3
Tl	205	209	He	107.541	ppb	1.2	646733.36	2.9739	Pulse	0.1000	3
Pb	208	209	He	53.399	ppb	1.0	423126.60	1.9457	Pulse	0.1000	3
U	238	209	He	53.881	ppb	0.6	492968.79	2.2669	Pulse	0.1000	3

ISTD Table:

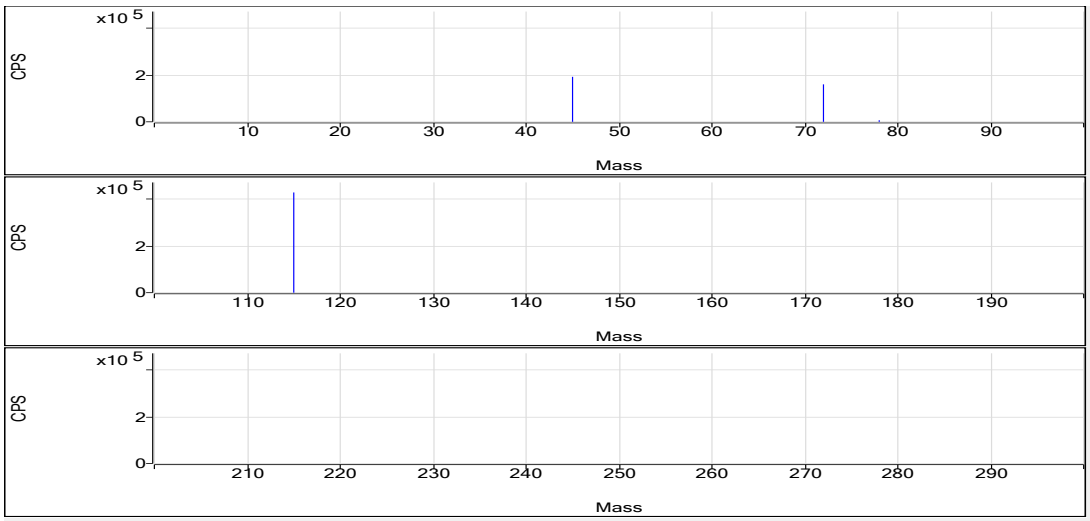
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3337585.47	1.3	103.0	Pulse	0.1000	3
No Gas	Ge	72	1482604.15	1.0	103.0	Pulse	0.1000	3
H2	Sc	45	192926.98	2.2	98.7	Pulse	0.1000	3
H2	Ge	72	160681.49	2.2	98.6	Pulse	0.1000	3
H2	In	115	429807.88	2.4	99.2	Pulse	0.1000	3
He	Sc	45	42539.31	1.2	106.4	Pulse	0.1000	3
He	Ge	72	75595.65	0.6	104.6	Pulse	0.1000	3
He	In	115	62781.61	0.5	97.2	Pulse	0.1000	3
He	Tb	159	279054.79	1.3	97.6	Pulse	0.1000	3
He	Bi	209	217471.28	0.8	97.9	Pulse	0.1000	3

No Gas

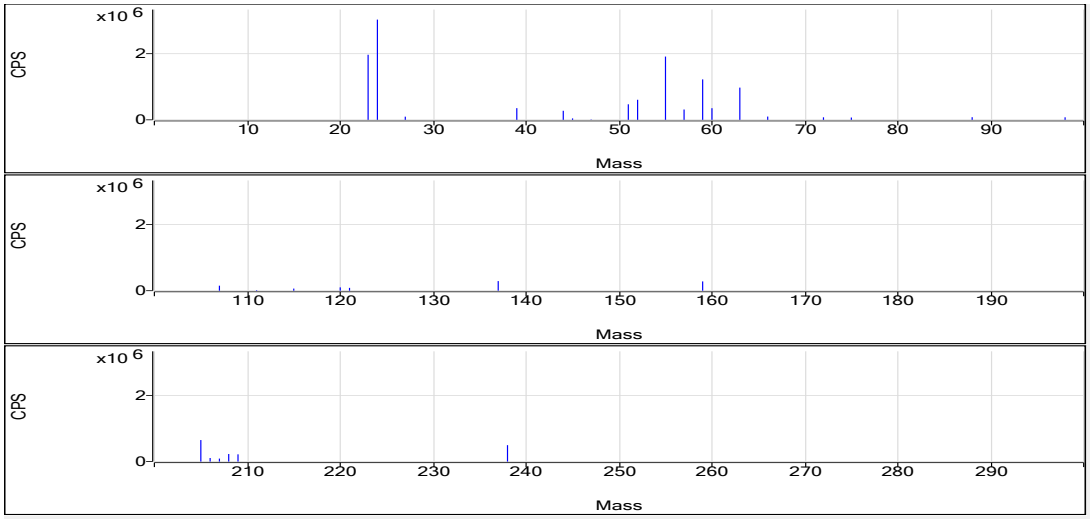


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.9	0.0669	98687.73	0.0013	4.694E-05
Be	9	1	No Gas	49.231	0.0647	95408.69	0.0013	4.694E-05
Be	9	1	No Gas	48.532	0.0638	95704.69	0.0013	4.694E-05
Se	78	2	H2	108.554	0.0423	6652.88	0.0004	1.089E-05
Se	78	2	H2	107.71	0.0419	6718.24	0.0004	1.089E-05
Se	78	2	H2	102.563	0.0399	6572.17	0.0004	1.089E-05
Na	23	3	He	15033.201	25.9308	1945749.19	0.0017	0.1065
Na	23	3	He	15040.334	25.9431	1966738.41	0.0017	0.1065
Na	23	3	He	14929.754	25.7531	1955714.66	0.0017	0.1065
Mg	24	3	He	47511.322	40.0617	3006079.02	0.0008	0.004846
Mg	24	3	He	47428.806	39.9921	3031797.14	0.0008	0.004846
Mg	24	3	He	46857.592	39.5106	3000468.39	0.0008	0.004846
Al	27	3	He	5177.193	1.2508	93855.81	0.0002	0.001063
Al	27	3	He	5194.717	1.255	95144.13	0.0002	0.001063
Al	27	3	He	5178.607	1.2511	95013.37	0.0002	0.001063
K	39	3	He	8082.215	4.6067	345671.91	0.0006	0.1436
K	39	3	He	8229.86	4.6883	355416.56	0.0006	0.1436
K	39	3	He	8112.567	4.6235	351112.57	0.0006	0.1436
Ca	44	3	He	115136.465	3.5777	268459.55	0	0.001611
Ca	44	3	He	115729.548	3.5962	272623.82	0	0.001611
Ca	44	3	He	116404.62	3.6171	274687.65	0	0.001611
Ti	47	3	He	540.631	0.1359	10193.88	0.0003	0.0002737
Ti	47	3	He	543.525	0.1366	10354.00	0.0003	0.0002737
Ti	47	3	He	546.262	0.1373	10424.02	0.0003	0.0002737
V	51	3	He	527.026	6.1723	463149.16	0.0117	0.007326
V	51	3	He	527.659	6.1798	468485.72	0.0117	0.007326
V	51	3	He	526.764	6.1693	468500.63	0.0117	0.007326
Cr	52	3	He	522.59	7.983	599014.76	0.0152	0.02538
Cr	52	3	He	520.54	7.9518	602823.55	0.0152	0.02538
Cr	52	3	He	523.106	7.9909	606833.55	0.0152	0.02538
Mn	55	3	He	4290.217	25.3365	1901156.22	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4232.75	24.9973	1895042.47	0.0059	0.01385
Mn	55	3	He	4255.014	25.1287	1908299.82	0.0059	0.01385
Fe	57	3	He	14131.132	4.0979	307491.89	0.0003	0.003918
Fe	57	3	He	14064.06	4.0785	309188.96	0.0003	0.003918
Fe	57	3	He	14216.475	4.1226	313077.03	0.0003	0.003918
Co	59	3	He	526.226	16.0585	1204968.73	0.0305	0.003084
Co	59	3	He	524.102	15.9937	1212479.20	0.0305	0.003084
Co	59	3	He	530.18	16.1791	1228658.26	0.0305	0.003084
Ni	60	3	He	525.51	4.63	347415.50	0.0088	0.009003
Ni	60	3	He	524.056	4.6172	350027.61	0.0088	0.009003
Ni	60	3	He	524.085	4.6174	350652.57	0.0088	0.009003
Cu	63	3	He	513.736	12.816	961666.24	0.0249	0.004937
Cu	63	3	He	513.276	12.8046	970711.78	0.0249	0.004937
Cu	63	3	He	513.33	12.8059	972493.27	0.0249	0.004937
Zn	66	3	He	528.113	1.3023	97718.55	0.0025	0.004836
Zn	66	3	He	525.304	1.2954	98203.02	0.0025	0.004836
Zn	66	3	He	522.778	1.2892	97901.55	0.0025	0.004836
As	75	3	He	530.035	0.9223	69202.66	0.0017	0.0004347
As	75	3	He	522.78	0.9096	68959.52	0.0017	0.0004347
As	75	3	He	524.235	0.9122	69270.99	0.0017	0.0004347
Sr	88	3	He	158.906	1.243	77661.94	0.0078	0.0007762
Sr	88	3	He	159.618	1.2485	78758.38	0.0078	0.0007762
Sr	88	3	He	160.992	1.2593	79059.58	0.0078	0.0007762
Mo	98	3	He	54.681	1.2047	75270.73	0.022	0.0005162
Mo	98	3	He	54.385	1.1982	75581.87	0.022	0.0005162
Mo	98	3	He	55.313	1.2186	76506.91	0.022	0.0005162
Ag	107	3	He	53.144	2.4185	151113.87	0.0455	0.0004641
Ag	107	3	He	52.23	2.377	149941.47	0.0455	0.0004641
Ag	107	3	He	53.027	2.4132	151506.51	0.0455	0.0004641
Cd	111	3	He	53.138	0.2551	15941.05	0.0048	5.152E-05
Cd	111	3	He	53.506	0.2569	16205.36	0.0048	5.152E-05
Cd	111	3	He	54.578	0.262	16451.69	0.0048	5.152E-05
Sn	120	3	He	110.024	1.5843	98989.60	0.0143	0.01559
Sn	120	3	He	110.919	1.5971	100744.33	0.0143	0.01559
Sn	120	3	He	110.979	1.5979	100320.67	0.0143	0.01559
Sb	121	3	He	108.852	1.3506	84385.15	0.0124	0.000258
Sb	121	3	He	109.038	1.3529	85340.81	0.0124	0.000258
Sb	121	3	He	109.582	1.3596	85359.94	0.0124	0.000258
Ba	137	3	He	1050.146	4.5945	287070.19	0.0044	0.000309
Ba	137	3	He	1044.058	4.5678	288144.49	0.0044	0.000309
Ba	137	3	He	1061.184	4.6428	291483.63	0.0044	0.000309
Tl	205	3	He	107.147	2.963	639326.28	0.0276	0.001005
Tl	205	3	He	106.496	2.945	645053.27	0.0276	0.001005
Tl	205	3	He	108.981	3.0137	655820.54	0.0276	0.001005
Pb	208	3	He	53.676	1.9558	225945.06	0.0364	0.002176
Pb	208	3	He	52.754	1.9223	225787.79	0.0364	0.002176
Pb	208	3	He	53.766	1.9591	229002.16	0.0364	0.002176
U	238	3	He	54.103	2.2762	491139.21	0.0421	0.00024
U	238	3	He	53.523	2.2518	493218.94	0.0421	0.00024
U	238	3	He	54.017	2.2726	494548.23	0.0421	0.00024
Sc	45	1	No Gas			3301119.01		
Sc	45	1	No Gas			3326808.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3384828.70		
Ge	72	1	No Gas			1474446.23		
Ge	72	1	No Gas			1473749.98		
Ge	72	1	No Gas			1499616.23		
Sc	45	2	H2			191151.85		
Sc	45	2	H2			189767.09		
Sc	45	2	H2			197861.99		
Ge	72	2	H2			157361.57		
Ge	72	2	H2			160152.14		
Ge	72	2	H2			164530.76		
In	115	2	H2			424838.39		
In	115	2	H2			422922.61		
In	115	2	H2			441662.65		
Sc	45	3	He			41961.10		
Sc	45	3	He			42923.60		
Sc	45	3	He			42733.23		
Ge	72	3	He			75036.20		
Ge	72	3	He			75809.81		
Ge	72	3	He			75940.93		
In	115	3	He			63253.65		
In	115	3	He			63866.86		
In	115	3	He			63564.76		
Tb	159	3	He			275104.51		
Tb	159	3	He			279528.59		
Tb	159	3	He			282531.28		
Bi	209	3	He			215768.73		
Bi	209	3	He			219032.38		
Bi	209	3	He			217612.73		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

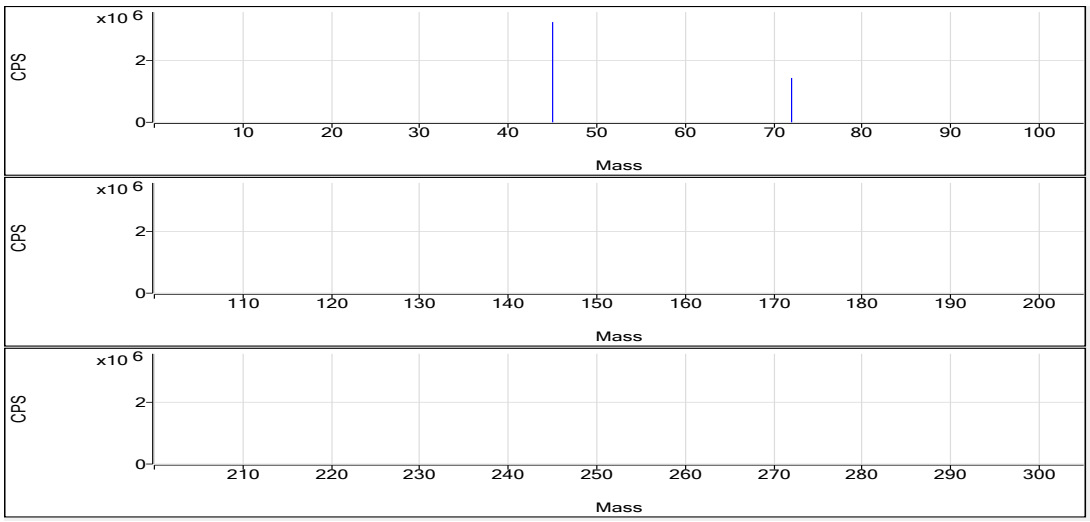
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.066	ppb	17.2	193.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.252	ppb	10.1	17.33	0.0001	Pulse	1.5000	3
Na	23	72	He	16.877	ppb	8.5	9803.52	0.1354	Pulse	0.1000	3
Mg	24	72	He	36.712	ppb	6.4	2590.32	0.0358	Pulse	0.1000	3
Al	27	72	He	5.921	ppb	61.5	180.01	0.0025	Pulse	0.1000	3
K	39	72	He	21.670	ppb	69.6	11261.38	0.1556	Pulse	0.1000	3
Ca	44	72	He	83.278	ppb	42.0	303.35	0.0042	Pulse	0.1000	3
Ti	47	72	He	0.374	ppb	165.8	26.67	0.0004	Pulse	0.1000	3
V	51	72	He	0.345	ppb	29.2	822.69	0.0114	Pulse	0.5000	3
Cr	52	72	He	0.387	ppb	45.5	2263.59	0.0313	Pulse	0.1000	3
Mn	55	72	He	2.822	ppb	18.5	2206.91	0.0305	Pulse	0.1000	3
Fe	57	72	He	9.526	ppb	23.0	483.36	0.0067	Pulse	0.1000	3
Co	59	72	He	0.366	ppb	22.0	1030.07	0.0142	Pulse	0.1000	3
Ni	60	72	He	1.255	ppb	5.2	1450.12	0.0200	Pulse	0.1000	3
Cu	63	72	He	0.292	ppb	16.9	883.39	0.0122	Pulse	0.1000	3
Zn	66	72	He	-0.149	ppb	N/A	323.35	0.0045	Pulse	0.1000	3
As	75	72	He	0.392	ppb	29.6	80.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.205	ppb	17.6	150.01	0.0024	Pulse	0.1000	3
Mo	98	115	He	0.065	ppb	40.1	123.34	0.0020	Pulse	0.1000	3
Ag	107	115	He	0.022	ppb	88.6	93.34	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.036	ppb	81.5	14.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.258	ppb	34.7	1216.77	0.0193	Pulse	0.1000	3
Sb	121	115	He	0.115	ppb	16.2	106.67	0.0017	Pulse	0.1000	3
Ba	137	115	He	0.762	ppb	15.1	230.01	0.0036	Pulse	0.1000	3
Tl	205	209	He	0.750	ppb	10.9	4784.37	0.0217	Pulse	0.1000	3
Pb	208	209	He	0.033	ppb	77.1	740.04	0.0034	Pulse	0.1000	3
U	238	209	He	0.052	ppb	1.2	536.70	0.0024	Pulse	0.1000	3

ISTD Table:

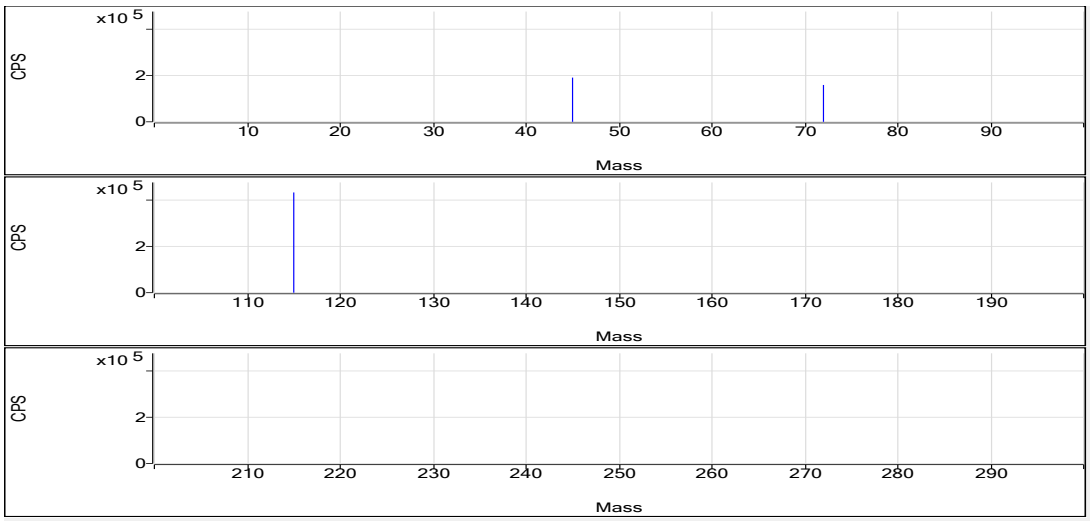
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3268892.45	2.8	100.9	Pulse	0.1000	3
No Gas	Ge	72	1445864.04	3.1	100.4	Pulse	0.1000	3
H2	Sc	45	190849.06	2.6	97.7	Pulse	0.1000	3
H2	Ge	72	159053.18	2.1	97.6	Pulse	0.1000	3
H2	In	115	432651.18	1.1	99.8	Pulse	0.1000	3
He	Sc	45	41643.18	0.6	104.1	Pulse	0.1000	3
He	Ge	72	72371.85	0.9	100.1	Pulse	0.1000	3
He	In	115	63157.44	1.2	97.8	Pulse	0.1000	3
He	Tb	159	280221.01	0.3	98.0	Pulse	0.1000	3
He	Bi	209	220214.42	0.8	99.1	Pulse	0.1000	3

No Gas

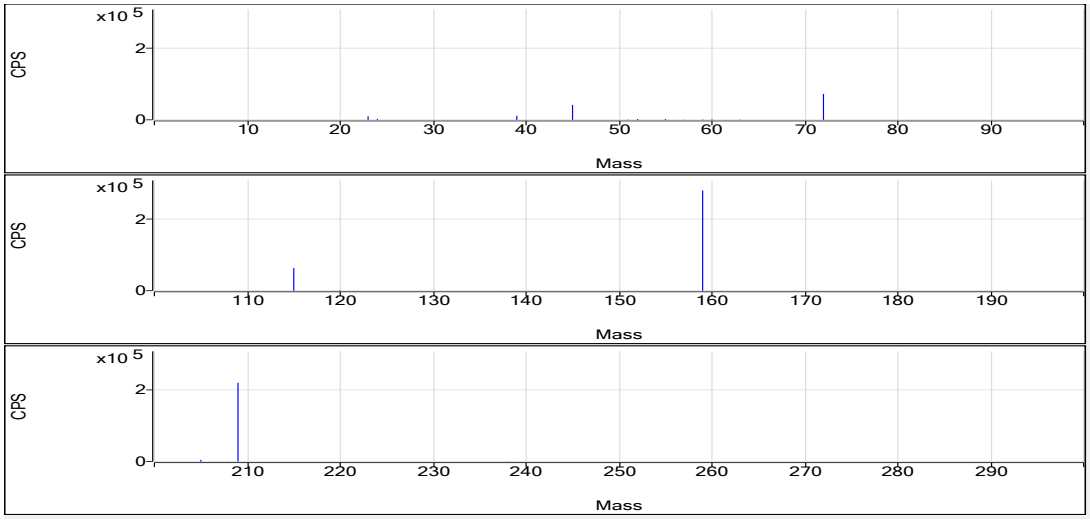


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.054	0.0001	164.00	0.0013	4.694E-05
Be	9	1	No Gas	0.068	0.0001	198.00	0.0013	4.694E-05
Be	9	1	No Gas	0.076	0.0001	218.00	0.0013	4.694E-05
Se	78	2	H2	0.279	0.0001	19.33	0.0004	1.089E-05
Se	78	2	H2	0.247	0.0001	16.67	0.0004	1.089E-05
Se	78	2	H2	0.229	0.0001	16.00	0.0004	1.089E-05
Na	23	3	He	15.393	0.1329	9563.32	0.0017	0.1065
Na	23	3	He	18.266	0.1378	10073.69	0.0017	0.1065
Na	23	3	He	16.972	0.1356	9773.56	0.0017	0.1065
Mg	24	3	He	39.421	0.0381	2740.35	0.0008	0.004846
Mg	24	3	He	35.478	0.0348	2540.29	0.0008	0.004846
Mg	24	3	He	35.236	0.0346	2490.31	0.0008	0.004846
Al	27	3	He	7.112	0.0028	200.01	0.0002	0.001063
Al	27	3	He	1.832	0.0015	110.00	0.0002	0.001063
Al	27	3	He	8.818	0.0032	230.01	0.0002	0.001063
K	39	3	He	36.46	0.1638	11785.15	0.0006	0.1436
K	39	3	He	22.219	0.1559	11394.77	0.0006	0.1436
K	39	3	He	6.33	0.1471	10604.22	0.0006	0.1436
Ca	44	3	He	113.688	0.0051	370.02	0	0.001611
Ca	44	3	He	45.055	0.003	220.01	0	0.001611
Ca	44	3	He	91.092	0.0044	320.01	0	0.001611
Ti	47	3	He	0.017	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.091	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	0.015	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.441	0.0125	898.03	0.0117	0.007326
V	51	3	He	0.356	0.0115	840.03	0.0117	0.007326
V	51	3	He	0.24	0.0101	730.02	0.0117	0.007326
Cr	52	3	He	0.551	0.0338	2430.28	0.0152	0.02538
Cr	52	3	He	0.409	0.0316	2310.26	0.0152	0.02538
Cr	52	3	He	0.201	0.0284	2050.22	0.0152	0.02538
Mn	55	3	He	3.375	0.0338	2430.30	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2.336	0.0276	2020.20	0.0059	0.01385
Mn	55	3	He	2.755	0.0301	2170.24	0.0059	0.01385
Fe	57	3	He	7.104	0.006	430.02	0.0003	0.003918
Fe	57	3	He	10.092	0.0068	500.02	0.0003	0.003918
Fe	57	3	He	11.383	0.0072	520.03	0.0003	0.003918
Co	59	3	He	0.455	0.017	1220.10	0.0305	0.003084
Co	59	3	He	0.298	0.0122	890.05	0.0305	0.003084
Co	59	3	He	0.345	0.0136	980.07	0.0305	0.003084
Ni	60	3	He	1.331	0.0207	1490.13	0.0088	0.009003
Ni	60	3	He	1.217	0.0197	1440.13	0.0088	0.009003
Ni	60	3	He	1.217	0.0197	1420.11	0.0088	0.009003
Cu	63	3	He	0.348	0.0136	980.07	0.0249	0.004937
Cu	63	3	He	0.257	0.0114	830.06	0.0249	0.004937
Cu	63	3	He	0.269	0.0117	840.05	0.0249	0.004937
Zn	66	3	He	0.181	0.0053	380.02	0.0025	0.004836
Zn	66	3	He	-0.409	0.0038	280.01	0.0025	0.004836
Zn	66	3	He	-0.218	0.0043	310.02	0.0025	0.004836
As	75	3	He	0.405	0.0011	82.00	0.0017	0.0004347
As	75	3	He	0.269	0.0009	66.00	0.0017	0.0004347
As	75	3	He	0.5	0.0013	94.00	0.0017	0.0004347
Sr	88	3	He	0.181	0.0022	140.00	0.0078	0.0007762
Sr	88	3	He	0.246	0.0027	170.01	0.0078	0.0007762
Sr	88	3	He	0.187	0.0022	140.01	0.0078	0.0007762
Mo	98	3	He	0.04	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.063	0.0019	120.00	0.022	0.0005162
Mo	98	3	He	0.093	0.0026	160.01	0.022	0.0005162
Ag	107	3	He	0.045	0.0025	160.01	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.069	0.0004	24.00	0.0048	5.152E-05
Cd	111	3	He	0.023	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	0.31	0.02	1280.11	0.0143	0.01559
Sn	120	3	He	0.155	0.0178	1120.09	0.0143	0.01559
Sn	120	3	He	0.309	0.02	1250.11	0.0143	0.01559
Sb	121	3	He	0.13	0.0019	120.01	0.0124	0.000258
Sb	121	3	He	0.094	0.0014	90.00	0.0124	0.000258
Sb	121	3	He	0.121	0.0018	110.00	0.0124	0.000258
Ba	137	3	He	0.644	0.0031	200.01	0.0044	0.000309
Ba	137	3	He	0.873	0.0041	260.01	0.0044	0.000309
Ba	137	3	He	0.77	0.0037	230.01	0.0044	0.000309
Tl	205	3	He	0.831	0.024	5261.23	0.0276	0.001005
Tl	205	3	He	0.75	0.0217	4761.00	0.0276	0.001005
Tl	205	3	He	0.668	0.0195	4330.88	0.0276	0.001005
Pb	208	3	He	0.029	0.0032	470.02	0.0364	0.002176
Pb	208	3	He	0.059	0.0043	580.03	0.0364	0.002176
Pb	208	3	He	0.009	0.0025	370.02	0.0364	0.002176
U	238	3	He	0.052	0.0024	530.03	0.0421	0.00024
U	238	3	He	0.053	0.0025	540.04	0.0421	0.00024
U	238	3	He	0.052	0.0024	540.03	0.0421	0.00024
Sc	45	1	No Gas			3172477.14		
Sc	45	1	No Gas			3279112.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3355088.08		
Ge	72	1	No Gas			1396741.70		
Ge	72	1	No Gas			1454924.35		
Ge	72	1	No Gas			1485926.07		
Sc	45	2	H2			189937.59		
Sc	45	2	H2			186391.60		
Sc	45	2	H2			196218.00		
Ge	72	2	H2			161749.48		
Ge	72	2	H2			155421.00		
Ge	72	2	H2			159989.06		
In	115	2	H2			430720.54		
In	115	2	H2			429130.27		
In	115	2	H2			438102.73		
Sc	45	3	He			41349.03		
Sc	45	3	He			41730.24		
Sc	45	3	He			41850.28		
Ge	72	3	He			71959.52		
Ge	72	3	He			73085.35		
Ge	72	3	He			72070.67		
In	115	3	He			63987.09		
In	115	3	He			62962.62		
In	115	3	He			62551.07		
Tb	159	3	He			279768.32		
Tb	159	3	He			279799.84		
Tb	159	3	He			281094.88		
Bi	209	3	He			219410.97		
Bi	209	3	He			218909.72		
Bi	209	3	He			222322.57		

Quantitation Report

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Auto Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

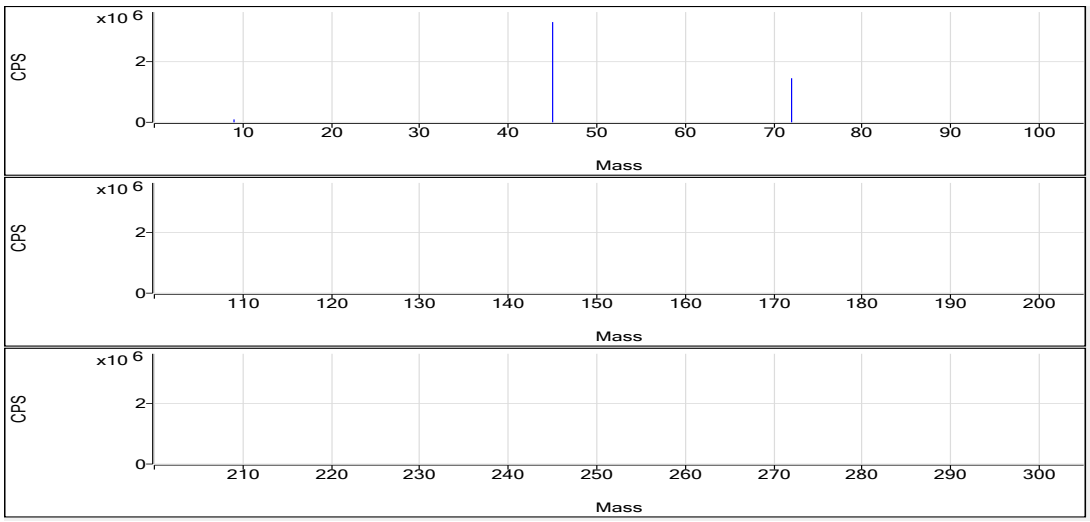
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.809	ppb	2.8	95210.38	0.0655	Pulse	0.5000	3
Se	78	72	H2	53.250	ppb	4.9	3283.05	0.0207	Pulse	1.5000	3
Na	23	72	He	5412.240	ppb	1.1	686672.47	9.4037	Pulse	0.1000	3
Mg	24	72	He	5453.869	ppb	1.5	336108.99	4.6030	Pulse	0.1000	3
Al	27	72	He	5267.646	ppb	1.6	92926.93	1.2726	Pulse	0.1000	3
K	39	72	He	5346.128	ppb	1.9	226054.55	3.0958	Pulse	0.1000	3
Ca	44	72	He	5351.837	ppb	2.5	12255.52	0.1678	Pulse	0.1000	3
Ti	47	72	He	5394.465	ppb	1.5	98806.10	1.3531	Pulse	0.1000	3
V	51	72	He	534.360	ppb	1.4	456965.20	6.2581	Pulse	0.5000	3
Cr	52	72	He	537.353	ppb	2.0	599316.27	8.2078	Pulse	0.1000	3
Mn	55	72	He	528.095	ppb	1.3	228617.72	3.1309	Pulse	0.1000	3
Fe	57	72	He	5299.445	ppb	1.2	112395.82	1.5392	Pulse	0.1000	3
Co	59	72	He	535.724	ppb	0.7	1193795.32	16.3483	Pulse	0.1000	3
Ni	60	72	He	537.489	ppb	1.3	345777.01	4.7353	Pulse	0.1000	3
Cu	63	72	He	531.992	ppb	1.2	969071.55	13.2713	Pulse	0.1000	3
Zn	66	72	He	531.397	ppb	0.6	95685.72	1.3104	Pulse	0.1000	3
As	75	72	He	523.111	ppb	0.9	66465.38	0.9102	Pulse	0.5000	3
Sr	88	115	He	52.896	ppb	1.6	26101.18	0.4143	Pulse	0.1000	3
Mo	98	115	He	52.648	ppb	1.6	73082.38	1.1599	Pulse	0.1000	3
Ag	107	115	He	53.245	ppb	1.2	152674.08	2.4231	Pulse	0.1000	3
Cd	111	115	He	52.493	ppb	0.9	15880.32	0.2520	Pulse	0.5000	3
Sn	120	115	He	53.105	ppb	3.2	48683.43	0.7728	Pulse	0.1000	3
Sb	121	115	He	53.219	ppb	3.5	41606.51	0.6604	Pulse	0.1000	3
Ba	137	115	He	515.823	ppb	1.0	142204.18	2.2569	Pulse	0.1000	3
Tl	205	209	He	53.074	ppb	0.9	321785.89	1.4682	Pulse	0.1000	3
Pb	208	209	He	52.714	ppb	0.7	420991.45	1.9208	Pulse	0.1000	3
U	238	209	He	52.451	ppb	1.0	483656.84	2.2067	Pulse	0.1000	3

ISTD Table:

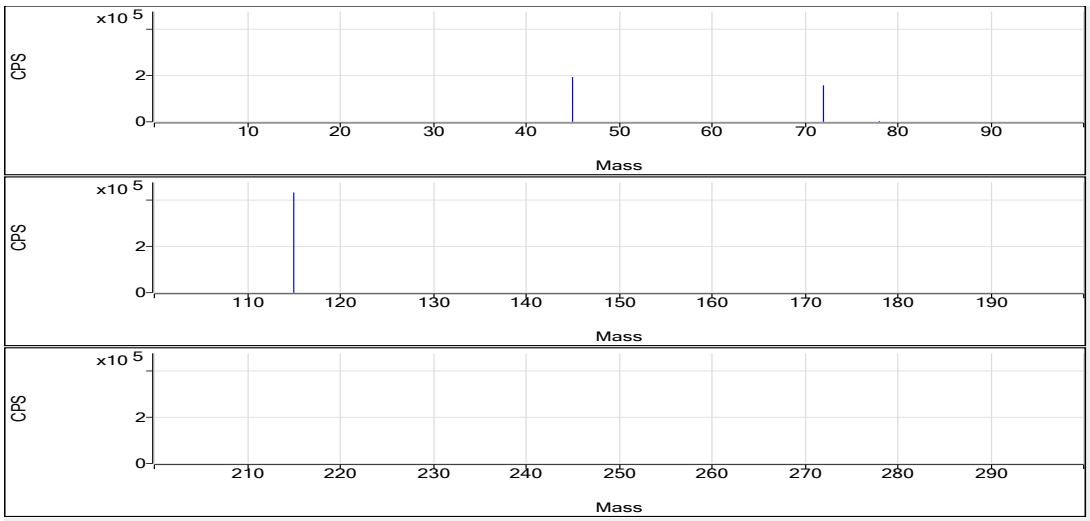
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3306613.18	0.4	102.0	Pulse	0.1000	3
No Gas	Ge	72	1453532.11	0.5	101.0	Pulse	0.1000	3
H2	Sc	45	194194.75	2.5	99.4	Pulse	0.1000	3
H2	Ge	72	158373.76	2.4	97.2	Pulse	0.1000	3
H2	In	115	434802.01	2.3	100.3	Pulse	0.1000	3
He	Sc	45	40871.38	3.7	102.2	Pulse	0.1000	3
He	Ge	72	73025.56	0.9	101.0	Pulse	0.1000	3
He	In	115	63011.17	0.9	97.6	Pulse	0.1000	3
He	Tb	159	280065.66	0.7	97.9	Pulse	0.1000	3
He	Bi	209	219176.51	0.6	98.6	Pulse	0.1000	3

No Gas

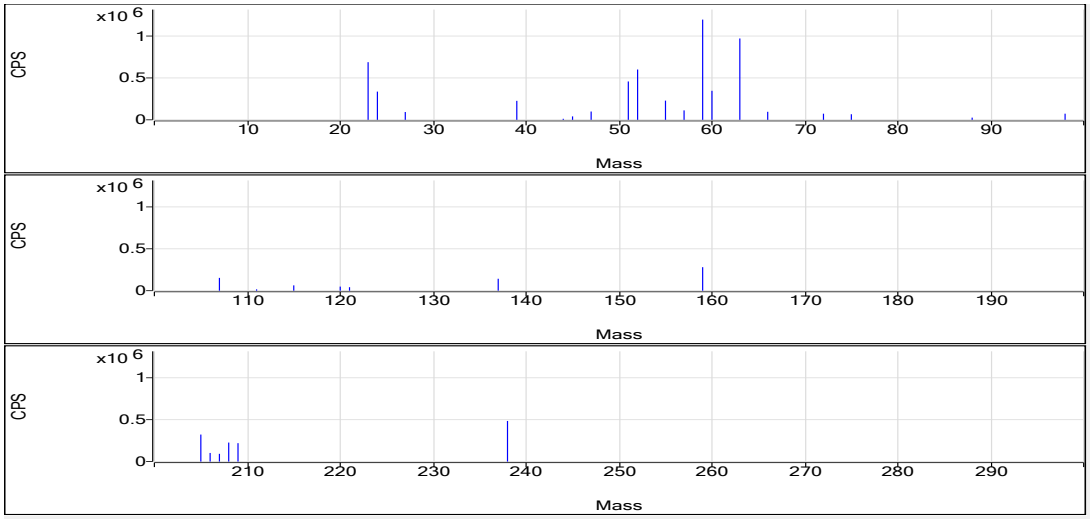


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.995	0.0671	97926.77	0.0013	4.694E-05
Be	9	1	No Gas	48.297	0.0635	91915.20	0.0013	4.694E-05
Be	9	1	No Gas	50.133	0.0659	95789.18	0.0013	4.694E-05
Se	78	2	H2	54.425	0.0212	3365.73	0.0004	1.089E-05
Se	78	2	H2	55.089	0.0215	3313.72	0.0004	1.089E-05
Se	78	2	H2	50.235	0.0196	3169.69	0.0004	1.089E-05
Na	23	3	He	5431.748	9.4372	690208.04	0.0017	0.1065
Na	23	3	He	5348.064	9.2935	684266.71	0.0017	0.1065
Na	23	3	He	5456.909	9.4804	685542.65	0.0017	0.1065
Mg	24	3	He	5405.349	4.5621	333657.42	0.0008	0.004846
Mg	24	3	He	5407.25	4.5637	336019.99	0.0008	0.004846
Mg	24	3	He	5549.009	4.6832	338649.57	0.0008	0.004846
Al	27	3	He	5223.991	1.2621	92306.17	0.0002	0.001063
Al	27	3	He	5215.108	1.26	92769.23	0.0002	0.001063
Al	27	3	He	5363.84	1.2959	93705.38	0.0002	0.001063
K	39	3	He	5399.642	3.1254	228580.60	0.0006	0.1436
K	39	3	He	5227.69	3.0304	223126.95	0.0006	0.1436
K	39	3	He	5411.052	3.1317	226456.09	0.0006	0.1436
Ca	44	3	He	5470.941	0.1715	12545.70	0	0.001611
Ca	44	3	He	5206.523	0.1633	12025.40	0	0.001611
Ca	44	3	He	5378.046	0.1687	12195.45	0	0.001611
Ti	47	3	He	5309.018	1.3317	97393.66	0.0003	0.0002737
Ti	47	3	He	5408.74	1.3567	99890.17	0.0003	0.0002737
Ti	47	3	He	5465.637	1.3709	99134.47	0.0003	0.0002737
V	51	3	He	533.844	6.2521	457258.44	0.0117	0.007326
V	51	3	He	527.24	6.1748	454646.25	0.0117	0.007326
V	51	3	He	541.994	6.3474	458990.91	0.0117	0.007326
Cr	52	3	He	541.644	8.2732	605071.24	0.0152	0.02538
Cr	52	3	He	525.18	8.0224	590682.61	0.0152	0.02538
Cr	52	3	He	545.235	8.3278	602194.95	0.0152	0.02538
Mn	55	3	He	526.221	3.1198	228174.31	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	522.553	3.0982	228115.41	0.0059	0.01385
Mn	55	3	He	535.51	3.1747	229563.45	0.0059	0.01385
Fe	57	3	He	5299.85	1.5394	112583.92	0.0003	0.003918
Fe	57	3	He	5233.195	1.5201	111919.45	0.0003	0.003918
Fe	57	3	He	5365.291	1.5583	112684.08	0.0003	0.003918
Co	59	3	He	536.333	16.3669	1197019.75	0.0305	0.003084
Co	59	3	He	531.748	16.227	1194771.39	0.0305	0.003084
Co	59	3	He	539.092	16.451	1189594.83	0.0305	0.003084
Ni	60	3	He	532.164	4.6885	342900.50	0.0088	0.009003
Ni	60	3	He	535.263	4.7157	347213.08	0.0088	0.009003
Ni	60	3	He	545.041	4.8017	347217.46	0.0088	0.009003
Cu	63	3	He	529.915	13.2195	966831.00	0.0249	0.004937
Cu	63	3	He	526.712	13.1396	967453.27	0.0249	0.004937
Cu	63	3	He	539.35	13.4548	972930.38	0.0249	0.004937
Zn	66	3	He	530.951	1.3093	95755.01	0.0025	0.004836
Zn	66	3	He	528.238	1.3026	95908.35	0.0025	0.004836
Zn	66	3	He	535.002	1.3192	95393.81	0.0025	0.004836
As	75	3	He	523.682	0.9112	66642.73	0.0017	0.0004347
As	75	3	He	518.08	0.9015	66373.72	0.0017	0.0004347
As	75	3	He	527.572	0.918	66379.70	0.0017	0.0004347
Sr	88	3	He	53.767	0.4211	26254.79	0.0078	0.0007762
Sr	88	3	He	52.083	0.4079	25854.10	0.0078	0.0007762
Sr	88	3	He	52.838	0.4138	26194.64	0.0078	0.0007762
Mo	98	3	He	53.236	1.1729	73129.38	0.022	0.0005162
Mo	98	3	He	51.708	1.1392	72205.12	0.022	0.0005162
Mo	98	3	He	53	1.1677	73912.63	0.022	0.0005162
Ag	107	3	He	54	2.4575	153227.65	0.0455	0.0004641
Ag	107	3	He	52.845	2.4049	152427.08	0.0455	0.0004641
Ag	107	3	He	52.892	2.4071	152367.50	0.0455	0.0004641
Cd	111	3	He	52.895	0.254	15834.94	0.0048	5.152E-05
Cd	111	3	He	52.002	0.2497	15824.92	0.0048	5.152E-05
Cd	111	3	He	52.583	0.2525	15981.11	0.0048	5.152E-05
Sn	120	3	He	55.04	0.8003	49902.49	0.0143	0.01559
Sn	120	3	He	52.049	0.7577	48023.69	0.0143	0.01559
Sn	120	3	He	52.228	0.7603	48124.10	0.0143	0.01559
Sb	121	3	He	55.271	0.6859	42767.00	0.0124	0.000258
Sb	121	3	He	51.694	0.6415	40660.29	0.0124	0.000258
Sb	121	3	He	52.692	0.6539	41392.23	0.0124	0.000258
Ba	137	3	He	521.117	2.2801	142167.60	0.0044	0.000309
Ba	137	3	He	515.307	2.2547	142904.62	0.0044	0.000309
Ba	137	3	He	511.043	2.236	141540.32	0.0044	0.000309
Tl	205	3	He	53.162	1.4706	321012.75	0.0276	0.001005
Tl	205	3	He	52.572	1.4543	320776.40	0.0276	0.001005
Tl	205	3	He	53.489	1.4797	323568.51	0.0276	0.001005
Pb	208	3	He	53.002	1.9313	228786.42	0.0364	0.002176
Pb	208	3	He	52.306	1.906	225794.86	0.0364	0.002176
Pb	208	3	He	52.835	1.9252	224310.95	0.0364	0.002176
U	238	3	He	52.105	2.1921	478508.43	0.0421	0.00024
U	238	3	He	52.163	2.1946	484063.31	0.0421	0.00024
U	238	3	He	53.086	2.2334	488398.78	0.0421	0.00024
Sc	45	1	No Gas			3290967.14		
Sc	45	1	No Gas			3315310.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3313561.51		
Ge	72	1	No Gas			1460347.63		
Ge	72	1	No Gas			1447224.67		
Ge	72	1	No Gas			1453024.04		
Sc	45	2	H2			193300.54		
Sc	45	2	H2			189853.69		
Sc	45	2	H2			199430.02		
Ge	72	2	H2			158747.28		
Ge	72	2	H2			154411.03		
Ge	72	2	H2			161962.97		
In	115	2	H2			435871.24		
In	115	2	H2			424471.48		
In	115	2	H2			444063.31		
Sc	45	3	He			39604.69		
Sc	45	3	He			42522.59		
Sc	45	3	He			40486.85		
Ge	72	3	He			73136.74		
Ge	72	3	He			73628.74		
Ge	72	3	He			72311.20		
In	115	3	He			62741.07		
In	115	3	He			63756.11		
In	115	3	He			63675.52		
Tb	159	3	He			281607.30		
Tb	159	3	He			280578.12		
Tb	159	3	He			278011.56		
Bi	209	3	He			218283.24		
Bi	209	3	He			220568.81		
Bi	209	3	He			218677.48		

Quantitation Report

Data File Name	102_CCB.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:23:44
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

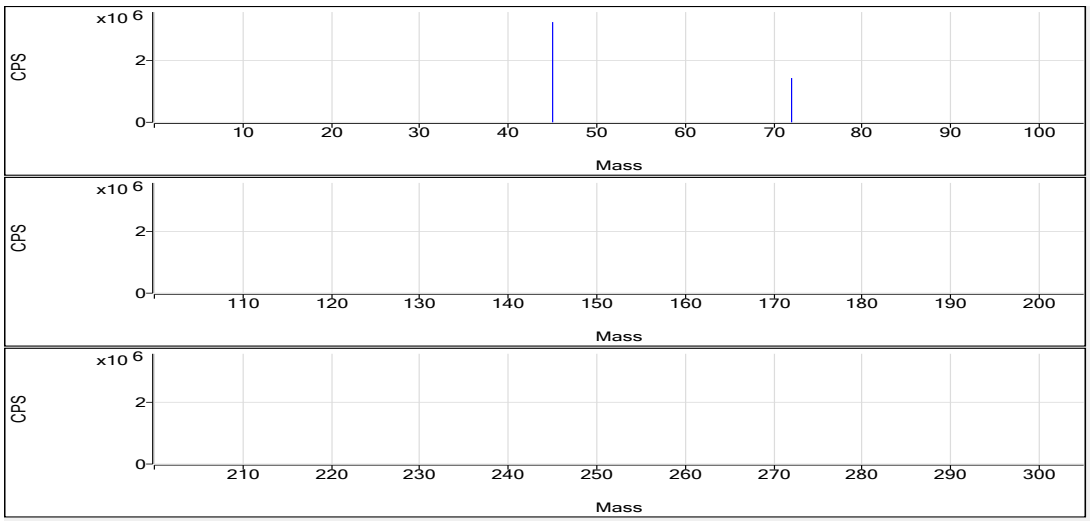
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.046	ppb	21.2	154.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.103	ppb	30.0	8.00	0.0001	Pulse	1.5000	3
Na	23	72	He	12.140	ppb	22.6	9226.49	0.1273	Pulse	0.1000	3
Mg	24	72	He	14.638	ppb	28.5	1246.76	0.0172	Pulse	0.1000	3
Al	27	72	He	6.434	ppb	74.3	190.01	0.0026	Pulse	0.1000	3
K	39	72	He	13.785	ppb	114.6	10961.15	0.1513	Pulse	0.1000	3
Ca	44	72	He	29.470	ppb	74.7	183.34	0.0025	Pulse	0.1000	3
Ti	47	72	He	2.035	ppb	69.1	56.67	0.0008	Pulse	0.1000	3
V	51	72	He	0.278	ppb	6.0	766.70	0.0106	Pulse	0.5000	3
Cr	52	72	He	0.274	ppb	101.1	2143.58	0.0296	Pulse	0.1000	3
Mn	55	72	He	0.375	ppb	131.8	1163.42	0.0161	Pulse	0.1000	3
Fe	57	72	He	6.016	ppb	64.0	410.02	0.0057	Pulse	0.1000	3
Co	59	72	He	0.240	ppb	23.6	753.38	0.0104	Pulse	0.1000	3
Ni	60	72	He	1.036	ppb	23.1	1313.43	0.0181	Pulse	0.1000	3
Cu	63	72	He	0.239	ppb	3.8	790.05	0.0109	Pulse	0.1000	3
Zn	66	72	He	-0.171	ppb	N/A	320.01	0.0044	Pulse	0.1000	3
As	75	72	He	0.268	ppb	44.4	65.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.143	ppb	62.2	120.01	0.0019	Pulse	0.1000	3
Mo	98	115	He	0.060	ppb	25.0	116.67	0.0018	Pulse	0.1000	3
Ag	107	115	He	0.026	ppb	8.3	103.33	0.0016	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	29.9	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.183	ppb	126.5	1153.43	0.0182	Pulse	0.1000	3
Sb	121	115	He	0.089	ppb	42.2	86.67	0.0014	Pulse	0.1000	3
Ba	137	115	He	0.266	ppb	29.3	93.34	0.0015	Pulse	0.1000	3
Tl	205	209	He	0.391	ppb	10.2	2600.36	0.0118	Pulse	0.1000	3
Pb	208	209	He	0.014	ppb	42.5	593.37	0.0027	Pulse	0.1000	3
U	238	209	He	0.031	ppb	24.0	336.68	0.0015	Pulse	0.1000	3

ISTD Table:

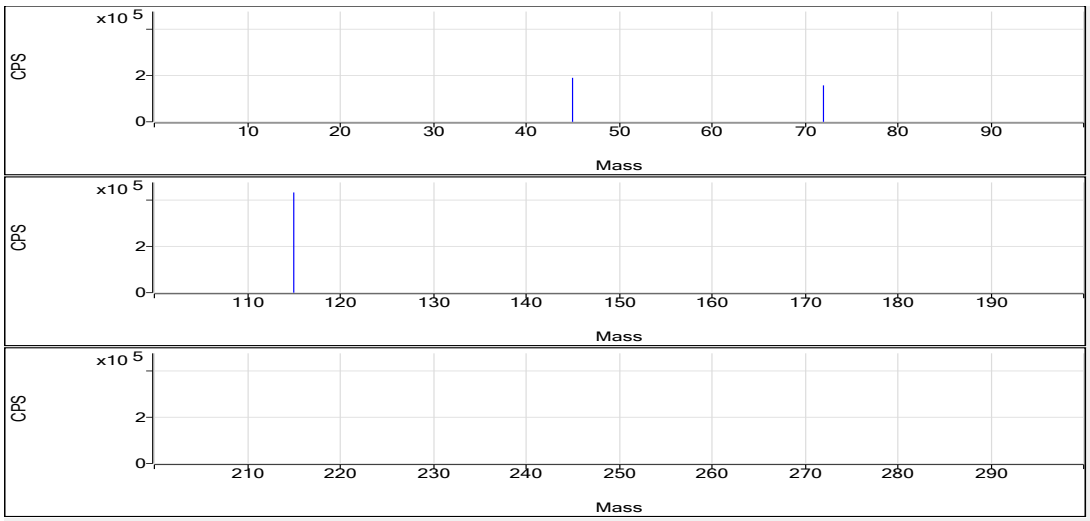
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3274455.27	1.4	101.0	Pulse	0.1000	3
No Gas	Ge	72	1445643.67	1.2	100.4	Pulse	0.1000	3
H2	Sc	45	190348.93	2.0	97.4	Pulse	0.1000	3
H2	Ge	72	157692.39	2.1	96.7	Pulse	0.1000	3
H2	In	115	433686.45	3.0	100.1	Pulse	0.1000	3
He	Sc	45	41860.66	1.7	104.7	Pulse	0.1000	3
He	Ge	72	72462.94	0.9	100.2	Pulse	0.1000	3
He	In	115	63434.91	1.0	98.2	Pulse	0.1000	3
He	Tb	159	279690.30	0.4	97.8	Pulse	0.1000	3
He	Bi	209	219908.45	0.3	99.0	Pulse	0.1000	3

No Gas

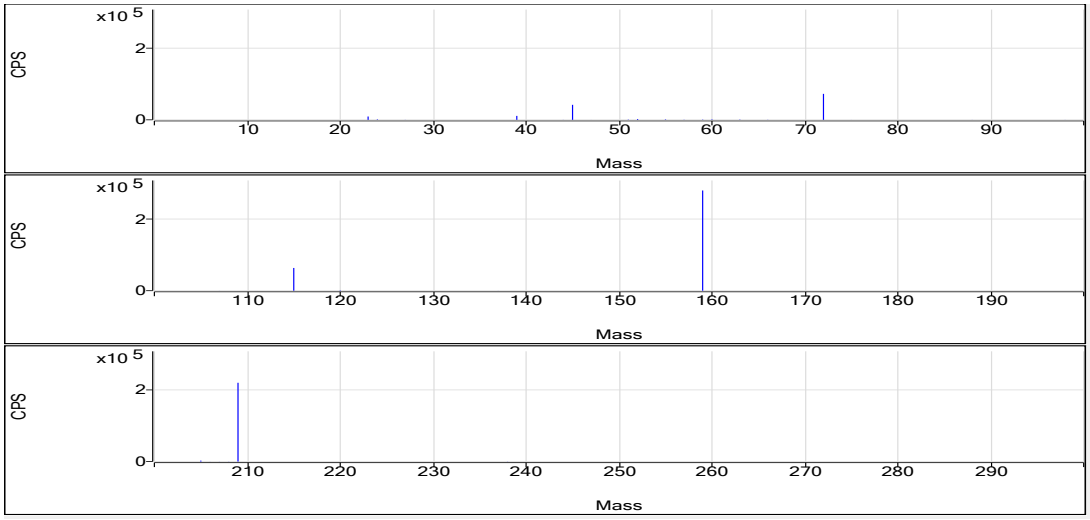


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.049	0.0001	160.00	0.0013	4.694E-05
Be	9	1	No Gas	0.035	0.0001	136.00	0.0013	4.694E-05
Be	9	1	No Gas	0.053	0.0001	168.00	0.0013	4.694E-05
Se	78	2	H2	0.081	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.138	0.0001	10.00	0.0004	1.089E-05
Se	78	2	H2	0.089	0	7.33	0.0004	1.089E-05
Na	23	3	He	13.242	0.1292	9313.18	0.0017	0.1065
Na	23	3	He	14.156	0.1308	9573.41	0.0017	0.1065
Na	23	3	He	9.021	0.122	8792.89	0.0017	0.1065
Mg	24	3	He	14.493	0.0171	1230.09	0.0008	0.004846
Mg	24	3	He	18.881	0.0208	1520.13	0.0008	0.004846
Mg	24	3	He	10.539	0.0137	990.07	0.0008	0.004846
Al	27	3	He	1.919	0.0015	110.00	0.0002	0.001063
Al	27	3	He	11.443	0.0038	280.01	0.0002	0.001063
Al	27	3	He	5.94	0.0025	180.01	0.0002	0.001063
K	39	3	He	26.656	0.1584	11414.82	0.0006	0.1436
K	39	3	He	18.536	0.1539	11264.76	0.0006	0.1436
K	39	3	He	-3.838	0.1415	10203.88	0.0006	0.1436
Ca	44	3	He	10.668	0.0019	140.00	0	0.001611
Ca	44	3	He	53.69	0.0033	240.01	0	0.001611
Ca	44	3	He	24.051	0.0024	170.01	0	0.001611
Ti	47	3	He	3.334	0.0011	80.00	0.0003	0.0002737
Ti	47	3	He	0.543	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	2.227	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.294	0.0108	776.03	0.0117	0.007326
V	51	3	He	0.28	0.0106	776.03	0.0117	0.007326
V	51	3	He	0.261	0.0104	748.03	0.0117	0.007326
Cr	52	3	He	0.119	0.0272	1960.21	0.0152	0.02538
Cr	52	3	He	0.594	0.0344	2520.33	0.0152	0.02538
Cr	52	3	He	0.109	0.027	1950.21	0.0152	0.02538
Mn	55	3	He	0.944	0.0194	1400.11	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.06	0.0142	1040.07	0.0059	0.01385
Mn	55	3	He	0.12	0.0146	1050.07	0.0059	0.01385
Fe	57	3	He	3.238	0.0049	350.02	0.0003	0.003918
Fe	57	3	He	4.395	0.0052	380.02	0.0003	0.003918
Fe	57	3	He	10.415	0.0069	500.03	0.0003	0.003918
Co	59	3	He	0.176	0.0085	610.04	0.0305	0.003084
Co	59	3	He	0.257	0.0109	800.05	0.0305	0.003084
Co	59	3	He	0.285	0.0118	850.05	0.0305	0.003084
Ni	60	3	He	0.948	0.0173	1250.09	0.0088	0.009003
Ni	60	3	He	1.307	0.0205	1500.13	0.0088	0.009003
Ni	60	3	He	0.853	0.0165	1190.08	0.0088	0.009003
Cu	63	3	He	0.247	0.0111	800.05	0.0249	0.004937
Cu	63	3	He	0.229	0.0107	780.05	0.0249	0.004937
Cu	63	3	He	0.241	0.011	790.05	0.0249	0.004937
Zn	66	3	He	-0.218	0.0043	310.01	0.0025	0.004836
Zn	66	3	He	-0.078	0.0046	340.01	0.0025	0.004836
Zn	66	3	He	-0.218	0.0043	310.02	0.0025	0.004836
As	75	3	He	0.356	0.0011	76.00	0.0017	0.0004347
As	75	3	He	0.316	0.001	72.00	0.0017	0.0004347
As	75	3	He	0.133	0.0007	48.00	0.0017	0.0004347
Sr	88	3	He	0.245	0.0027	170.01	0.0078	0.0007762
Sr	88	3	He	0.104	0.0016	100.01	0.0078	0.0007762
Sr	88	3	He	0.08	0.0014	90.00	0.0078	0.0007762
Mo	98	3	He	0.077	0.0022	140.00	0.022	0.0005162
Mo	98	3	He	0.049	0.0016	100.00	0.022	0.0005162
Mo	98	3	He	0.054	0.0017	110.00	0.022	0.0005162
Ag	107	3	He	0.028	0.0017	110.00	0.0455	0.0004641
Ag	107	3	He	0.025	0.0016	100.00	0.0455	0.0004641
Ag	107	3	He	0.024	0.0016	100.00	0.0455	0.0004641
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.449	0.022	1390.12	0.0143	0.01559
Sn	120	3	He	0.055	0.0164	1030.08	0.0143	0.01559
Sn	120	3	He	0.044	0.0162	1040.08	0.0143	0.01559
Sb	121	3	He	0.081	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.056	0.001	60.00	0.0124	0.000258
Sb	121	3	He	0.13	0.0019	120.00	0.0124	0.000258
Ba	137	3	He	0.291	0.0016	100.01	0.0044	0.000309
Ba	137	3	He	0.329	0.0017	110.01	0.0044	0.000309
Ba	137	3	He	0.179	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.431	0.0129	2830.39	0.0276	0.001005
Tl	205	3	He	0.35	0.0107	2360.32	0.0276	0.001005
Tl	205	3	He	0.393	0.0119	2610.38	0.0276	0.001005
Pb	208	3	He	0.017	0.0028	330.02	0.0364	0.002176
Pb	208	3	He	0.007	0.0024	220.01	0.0364	0.002176
Pb	208	3	He	0.019	0.0029	330.02	0.0364	0.002176
U	238	3	He	0.037	0.0018	390.02	0.0421	0.00024
U	238	3	He	0.033	0.0016	360.02	0.0421	0.00024
U	238	3	He	0.022	0.0012	260.01	0.0421	0.00024
Sc	45	1	No Gas			3264779.33		
Sc	45	1	No Gas			3325299.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3233287.14		
Ge	72	1	No Gas			1438365.29		
Ge	72	1	No Gas			1465428.10		
Ge	72	1	No Gas			1433137.63		
Sc	45	2	H2			186511.72		
Sc	45	2	H2			190241.23		
Sc	45	2	H2			194293.84		
Ge	72	2	H2			157007.27		
Ge	72	2	H2			154855.69		
Ge	72	2	H2			161214.20		
In	115	2	H2			425697.22		
In	115	2	H2			426850.27		
In	115	2	H2			448511.87		
Sc	45	3	He			42653.14		
Sc	45	3	He			41549.65		
Sc	45	3	He			41379.20		
Ge	72	3	He			72081.19		
Ge	72	3	He			73206.45		
Ge	72	3	He			72101.17		
In	115	3	He			63222.84		
In	115	3	He			62951.63		
In	115	3	He			64157.25		
Tb	159	3	He			280567.87		
Tb	159	3	He			280097.11		
Tb	159	3	He			278405.91		
Bi	209	3	He			219298.96		
Bi	209	3	He			220700.97		
Bi	209	3	He			219725.41		

Quantitation Report

Data File Name	103SMPL.d
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Acq Time	2023-08-10 13:25:44
Sample Name	410-136514-G-1-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

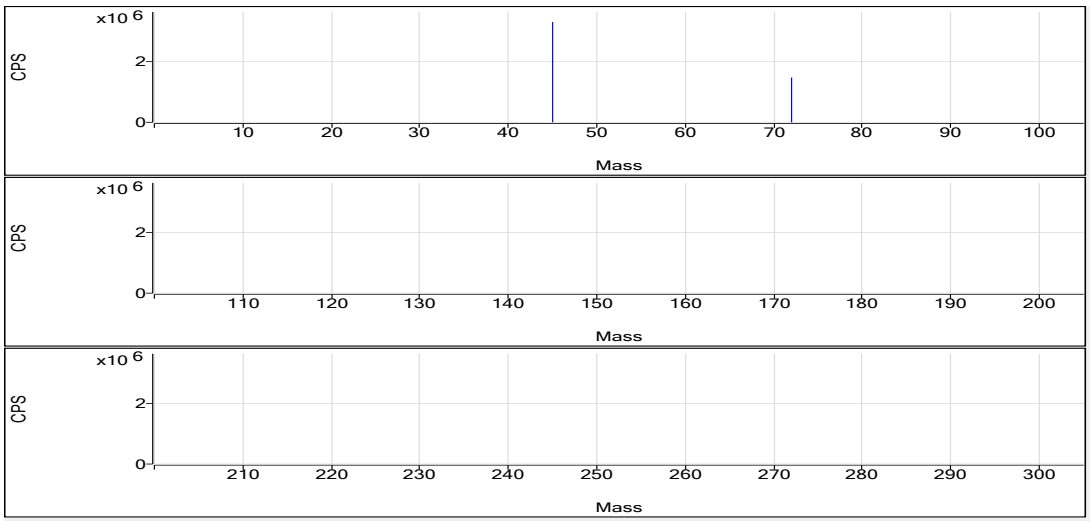
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.009	ppb	33.1	88.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.183	ppb	29.7	13.33	0.0001	Pulse	1.5000	3
Na	23	72	He	6240.520	ppb	0.1	794492.49	10.8266	Pulse	0.1000	3
Mg	24	72	He	24640.608	ppb	0.5	1524860.29	20.7794	Pulse	0.1000	3
Al	27	72	He	15.922	ppb	25.6	360.01	0.0049	Pulse	0.1000	3
K	39	72	He	3802.649	ppb	1.1	164634.25	2.2435	Pulse	0.1000	3
Ca	44	72	He	86872.092	ppb	0.6	198124.16	2.6998	Pulse	0.1000	3
Ti	47	72	He	0.720	ppb	115.3	33.33	0.0005	Pulse	0.1000	3
V	51	72	He	0.309	ppb	34.7	802.69	0.0109	Pulse	0.5000	3
Cr	52	72	He	1.084	ppb	7.6	3073.75	0.0419	Pulse	0.1000	3
Mn	55	72	He	1.425	ppb	34.8	1633.50	0.0223	Pulse	0.1000	3
Fe	57	72	He	33.825	ppb	8.1	1006.73	0.0137	Pulse	0.1000	3
Co	59	72	He	0.183	ppb	5.9	636.71	0.0087	Pulse	0.1000	3
Ni	60	72	He	1.347	ppb	12.7	1530.13	0.0208	Pulse	0.1000	3
Cu	63	72	He	0.228	ppb	31.2	780.05	0.0106	Pulse	0.1000	3
Zn	66	72	He	-0.009	ppb	N/A	353.35	0.0048	Pulse	0.1000	3
As	75	72	He	0.220	ppb	49.4	60.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	48.431	ppb	3.7	23700.31	0.3794	Pulse	0.1000	3
Mo	98	115	He	0.323	ppb	12.1	476.69	0.0076	Pulse	0.1000	3
Ag	107	115	He	0.019	ppb	56.5	83.34	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.023	ppb	29.7	10.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.228	ppb	32.3	1176.76	0.0188	Pulse	0.1000	3
Sb	121	115	He	0.057	ppb	47.0	60.00	0.0010	Pulse	0.1000	3
Ba	137	115	He	239.704	ppb	1.8	65542.80	1.0490	Pulse	0.1000	3
Tl	205	209	He	0.119	ppb	4.4	926.73	0.0043	Pulse	0.1000	3
Pb	208	209	He	0.028	ppb	78.6	690.03	0.0032	Pulse	0.1000	3
U	238	209	He	0.309	ppb	6.3	2860.41	0.0132	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3322997.24	1.0	102.5	Pulse	0.1000	3
No Gas	Ge	72	1483146.80	0.9	103.0	Pulse	0.1000	3
H2	Sc	45	195408.45	1.8	100.0	Pulse	0.1000	3
H2	Ge	72	162397.74	2.4	99.6	Pulse	0.1000	3
H2	In	115	435732.14	1.6	100.6	Pulse	0.1000	3
He	Sc	45	41820.19	1.9	104.6	Pulse	0.1000	3
He	Ge	72	73383.82	0.3	101.5	Pulse	0.1000	3
He	In	115	62494.32	1.5	96.8	Pulse	0.1000	3
He	Tb	159	282063.92	0.6	98.6	Pulse	0.1000	3
He	Bi	209	215917.23	0.9	97.2	Pulse	0.1000	3

No Gas



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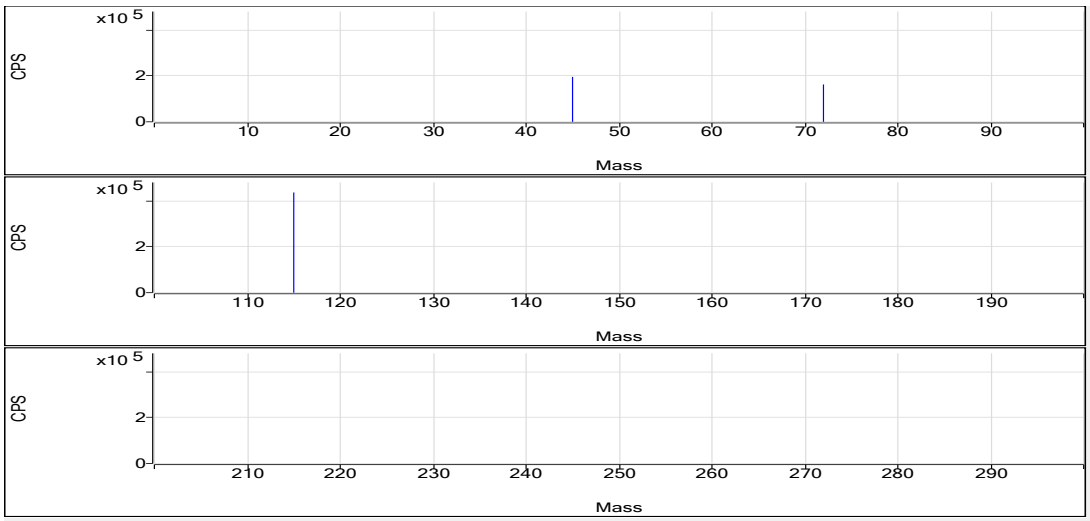
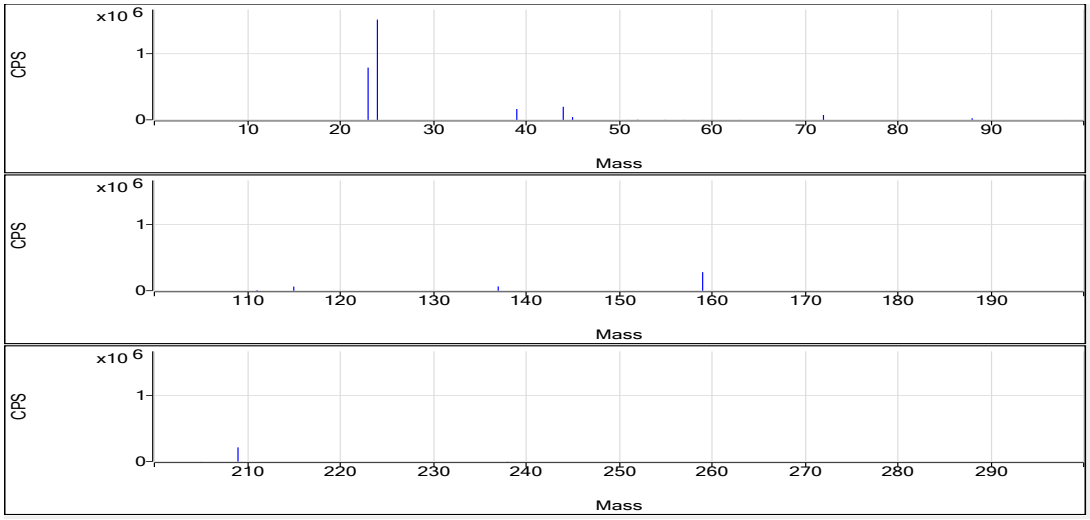


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0.0001	88.00	0.0013	4.694E-05
Be	9	1	No Gas	0.012	0.0001	94.00	0.0013	4.694E-05
Be	9	1	No Gas	0.006	0.0001	82.00	0.0013	4.694E-05
Se	78	2	H2	0.12	0.0001	9.33	0.0004	1.089E-05
Se	78	2	H2	0.219	0.0001	15.33	0.0004	1.089E-05
Se	78	2	H2	0.208	0.0001	15.33	0.0004	1.089E-05
Na	23	3	He	6242.541	10.83	795111.79	0.0017	0.1065
Na	23	3	He	6245.858	10.8357	792915.69	0.0017	0.1065
Na	23	3	He	6233.16	10.8139	795449.99	0.0017	0.1065
Mg	24	3	He	24546.611	20.7001	1519748.88	0.0008	0.004846
Mg	24	3	He	24769.377	20.8879	1528498.10	0.0008	0.004846
Mg	24	3	He	24605.835	20.7501	1526333.88	0.0008	0.004846
Al	27	3	He	20.426	0.006	440.02	0.0002	0.001063
Al	27	3	He	14.846	0.0046	340.01	0.0002	0.001063
Al	27	3	He	12.493	0.0041	300.01	0.0002	0.001063
K	39	3	He	3807.895	2.2464	164925.11	0.0006	0.1436
K	39	3	He	3843.056	2.2658	165803.94	0.0006	0.1436
K	39	3	He	3756.997	2.2183	163173.69	0.0006	0.1436
Ca	44	3	He	86283.929	2.6816	196874.35	0	0.001611
Ca	44	3	He	87308.381	2.7134	198555.78	0	0.001611
Ca	44	3	He	87023.967	2.7046	198942.36	0	0.001611
Ti	47	3	He	1.624	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	0.543	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	-0.007	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.431	0.0124	908.04	0.0117	0.007326
V	51	3	He	0.264	0.0104	762.02	0.0117	0.007326
V	51	3	He	0.231	0.01	738.02	0.0117	0.007326
Cr	52	3	He	1.044	0.0413	3030.42	0.0152	0.02538
Cr	52	3	He	1.178	0.0433	3170.45	0.0152	0.02538
Cr	52	3	He	1.03	0.0411	3020.39	0.0152	0.02538
Mn	55	3	He	1.553	0.023	1690.17	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.844	0.0247	1810.19	0.0059	0.01385
Mn	55	3	He	0.878	0.019	1400.13	0.0059	0.01385
Fe	57	3	He	34.435	0.0139	1020.06	0.0003	0.003918
Fe	57	3	He	30.819	0.0128	940.06	0.0003	0.003918
Fe	57	3	He	36.221	0.0144	1060.08	0.0003	0.003918
Co	59	3	He	0.194	0.009	660.04	0.0305	0.003084
Co	59	3	He	0.172	0.0083	610.04	0.0305	0.003084
Co	59	3	He	0.184	0.0087	640.04	0.0305	0.003084
Ni	60	3	He	1.47	0.0219	1610.14	0.0088	0.009003
Ni	60	3	He	1.152	0.0191	1400.12	0.0088	0.009003
Ni	60	3	He	1.419	0.0215	1580.14	0.0088	0.009003
Cu	63	3	He	0.255	0.0113	830.05	0.0249	0.004937
Cu	63	3	He	0.147	0.0086	630.04	0.0249	0.004937
Cu	63	3	He	0.282	0.012	880.06	0.0249	0.004937
Zn	66	3	He	-0.361	0.004	290.01	0.0025	0.004836
Zn	66	3	He	0.145	0.0052	380.02	0.0025	0.004836
Zn	66	3	He	0.19	0.0053	390.02	0.0025	0.004836
As	75	3	He	0.142	0.0007	50.00	0.0017	0.0004347
As	75	3	He	0.174	0.0007	54.00	0.0017	0.0004347
As	75	3	He	0.344	0.001	76.00	0.0017	0.0004347
Sr	88	3	He	46.468	0.364	23139.43	0.0078	0.0007762
Sr	88	3	He	50.018	0.3918	24301.31	0.0078	0.0007762
Sr	88	3	He	48.808	0.3823	23660.19	0.0078	0.0007762
Mo	98	3	He	0.362	0.0085	540.03	0.022	0.0005162
Mo	98	3	He	0.284	0.0068	420.02	0.022	0.0005162
Mo	98	3	He	0.321	0.0076	470.02	0.022	0.0005162
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.008	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.029	0.0018	110.01	0.0455	0.0004641
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.03	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.154	0.0178	1130.08	0.0143	0.01559
Sn	120	3	He	0.23	0.0189	1170.10	0.0143	0.01559
Sn	120	3	He	0.301	0.0199	1230.10	0.0143	0.01559
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.057	0.001	60.00	0.0124	0.000258
Sb	121	3	He	0.083	0.0013	80.00	0.0124	0.000258
Ba	137	3	He	234.799	1.0275	65314.70	0.0044	0.000309
Ba	137	3	He	241.844	1.0583	65646.88	0.0044	0.000309
Ba	137	3	He	242.47	1.0611	65666.81	0.0044	0.000309
Tl	205	3	He	0.124	0.0044	960.07	0.0276	0.001005
Tl	205	3	He	0.113	0.0041	900.06	0.0276	0.001005
Tl	205	3	He	0.119	0.0043	920.07	0.0276	0.001005
Pb	208	3	He	0.004	0.0023	250.01	0.0364	0.002176
Pb	208	3	He	0.046	0.0039	380.03	0.0364	0.002176
Pb	208	3	He	0.034	0.0034	490.03	0.0364	0.002176
U	238	3	He	0.331	0.0142	3070.49	0.0421	0.00024
U	238	3	He	0.303	0.013	2820.40	0.0421	0.00024
U	238	3	He	0.294	0.0126	2690.35	0.0421	0.00024
Sc	45	1	No Gas			3283221.51		
Sc	45	1	No Gas			3347456.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3338313.39		
Ge	72	1	No Gas			1467916.38		
Ge	72	1	No Gas			1489478.73		
Ge	72	1	No Gas			1492045.29		
Sc	45	2	H2			194164.51		
Sc	45	2	H2			192651.85		
Sc	45	2	H2			199409.00		
Ge	72	2	H2			161396.59		
Ge	72	2	H2			159171.72		
Ge	72	2	H2			166624.92		
In	115	2	H2			438270.85		
In	115	2	H2			428043.70		
In	115	2	H2			440881.87		
Sc	45	3	He			42582.44		
Sc	45	3	He			41900.32		
Sc	45	3	He			40977.80		
Ge	72	3	He			73417.35		
Ge	72	3	He			73176.08		
Ge	72	3	He			73558.03		
In	115	3	He			63575.17		
In	115	3	He			62038.14		
In	115	3	He			61897.19		
Tb	159	3	He			280195.05		
Tb	159	3	He			282643.53		
Tb	159	3	He			283353.18		
Bi	209	3	He			216760.06		
Bi	209	3	He			217355.19		
Bi	209	3	He			213636.44		

Quantitation Report

Data File Name	104SMPL.d
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Acq Time	2023-08-10 13:27:45
Sample Name	410-136864-K-6-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

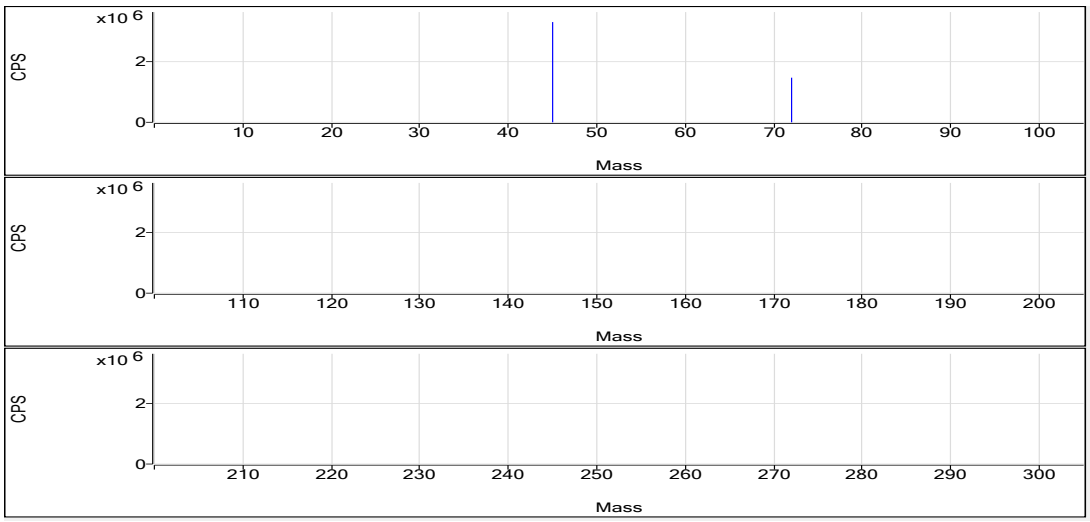
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.030	ppb	20.6	126.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.078	ppb	48.5	6.67	0.0000	Pulse	1.5000	3
Na	23	72	He	2542.998	ppb	1.1	334831.72	4.4749	Pulse	0.1000	3
Mg	24	72	He	22982.678	ppb	1.1	1450192.68	19.3816	Pulse	0.1000	3
Al	27	72	He	33.990	ppb	13.8	693.38	0.0093	Pulse	0.1000	3
K	39	72	He	3640.674	ppb	0.7	161180.65	2.1541	Pulse	0.1000	3
Ca	44	72	He	48527.545	ppb	1.7	112895.17	1.5089	Pulse	0.1000	3
Ti	47	72	He	2.115	ppb	76.8	60.00	0.0008	Pulse	0.1000	3
V	51	72	He	0.339	ppb	38.0	844.70	0.0113	Pulse	0.5000	3
Cr	52	72	He	3.273	ppb	7.9	5627.97	0.0752	Pulse	0.1000	3
Mn	55	72	He	2085.606	ppb	0.4	922153.69	12.3240	Pulse	0.1000	3
Fe	57	72	He	455.549	ppb	4.6	10167.24	0.1359	Pulse	0.1000	3
Co	59	72	He	3.504	ppb	10.7	8225.95	0.1100	Pulse	0.1000	3
Ni	60	72	He	5.758	ppb	7.1	4460.83	0.0596	Pulse	0.1000	3
Cu	63	72	He	2.866	ppb	3.5	5718.01	0.0764	Pulse	0.1000	3
Zn	66	72	He	10.872	ppb	9.1	2360.28	0.0315	Pulse	0.1000	3
As	75	72	He	0.354	ppb	36.7	78.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	177.536	ppb	2.1	86864.24	1.3886	Pulse	0.1000	3
Mo	98	115	He	0.168	ppb	12.7	263.34	0.0042	Pulse	0.1000	3
Ag	107	115	He	0.343	ppb	11.1	1006.74	0.0161	Pulse	0.1000	3
Cd	111	115	He	0.708	ppb	3.0	216.00	0.0035	Pulse	0.5000	3
Sn	120	115	He	0.501	ppb	24.7	1423.46	0.0227	Pulse	0.1000	3
Sb	121	115	He	0.495	ppb	21.3	400.02	0.0064	Pulse	0.1000	3
Ba	137	115	He	89.471	ppb	1.2	24508.93	0.3917	Pulse	0.1000	3
Tl	205	209	He	0.087	ppb	20.7	753.39	0.0034	Pulse	0.1000	3
Pb	208	209	He	0.458	ppb	3.4	4157.08	0.0188	Pulse	0.1000	3
U	238	209	He	0.096	ppb	11.6	943.41	0.0043	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3302949.12	1.5	101.9	Pulse	0.1000	3
No Gas	Ge	72	1470020.03	0.9	102.1	Pulse	0.1000	3
H2	Sc	45	196661.18	2.0	100.7	Pulse	0.1000	3
H2	Ge	72	162024.12	2.3	99.4	Pulse	0.1000	3
H2	In	115	434619.13	1.6	100.3	Pulse	0.1000	3
He	Sc	45	41623.32	2.3	104.1	Pulse	0.1000	3
He	Ge	72	74827.59	0.8	103.5	Pulse	0.1000	3
He	In	115	62565.93	1.2	96.9	Pulse	0.1000	3
He	Tb	159	282637.26	0.7	98.8	Pulse	0.1000	3
He	Bi	209	220591.55	1.1	99.3	Pulse	0.1000	3

No Gas



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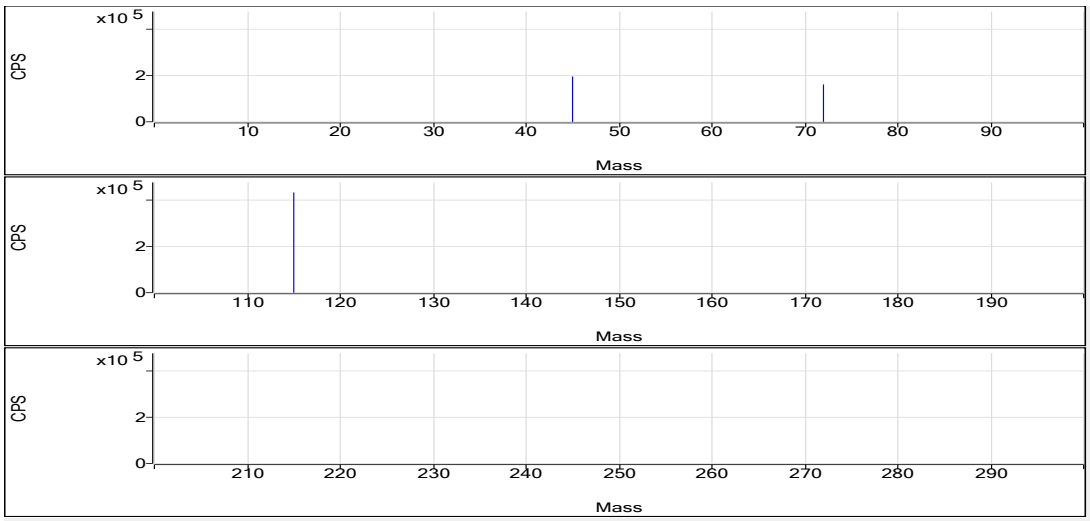
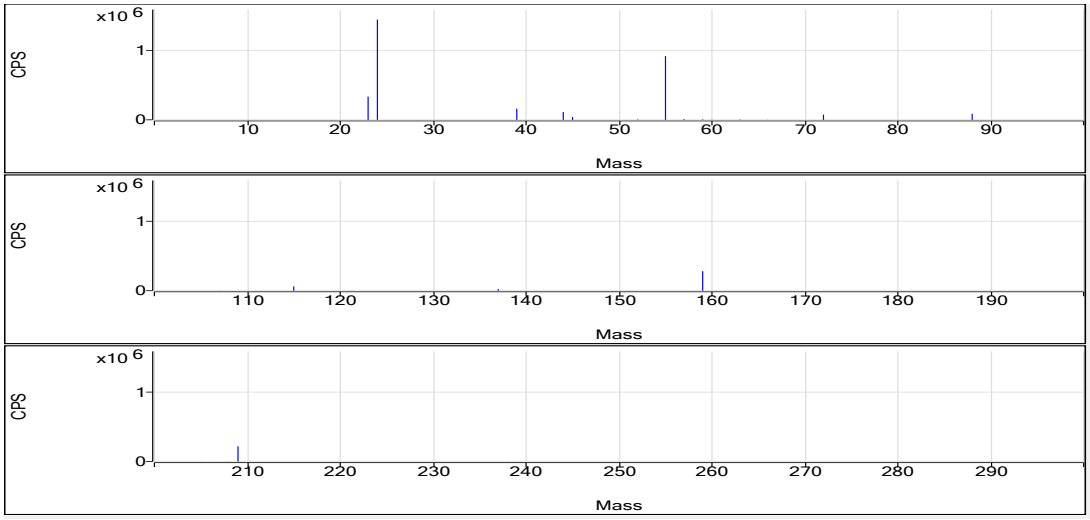


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.024	0.0001	114.00	0.0013	4.694E-05
Be	9	1	No Gas	0.036	0.0001	140.00	0.0013	4.694E-05
Be	9	1	No Gas	0.029	0.0001	126.00	0.0013	4.694E-05
Se	78	2	H2	0.091	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.107	0.0001	8.67	0.0004	1.089E-05
Na	23	3	He	2573.841	4.5279	336200.23	0.0017	0.1065
Na	23	3	He	2519.799	4.435	331579.14	0.0017	0.1065
Na	23	3	He	2535.353	4.4617	336715.78	0.0017	0.1065
Mg	24	3	He	23262.932	19.6179	1456656.38	0.0008	0.004846
Mg	24	3	He	22923.91	19.332	1445336.85	0.0008	0.004846
Mg	24	3	He	22761.194	19.1948	1448584.82	0.0008	0.004846
Al	27	3	He	31.865	0.0088	650.06	0.0002	0.001063
Al	27	3	He	39.373	0.0106	790.05	0.0002	0.001063
Al	27	3	He	30.73	0.0085	640.03	0.0002	0.001063
K	39	3	He	3636.922	2.152	159788.70	0.0006	0.1436
K	39	3	He	3668.535	2.1694	162196.36	0.0006	0.1436
K	39	3	He	3616.566	2.1408	161556.89	0.0006	0.1436
Ca	44	3	He	49388.101	1.5356	114020.56	0	0.001611
Ca	44	3	He	48402.728	1.505	112519.06	0	0.001611
Ca	44	3	He	47791.805	1.486	112145.89	0	0.001611
Ti	47	3	He	3.742	0.0012	90.01	0.0003	0.0002737
Ti	47	3	He	2.109	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	0.494	0.0004	30.00	0.0003	0.0002737
V	51	3	He	0.477	0.0129	958.04	0.0117	0.007326
V	51	3	He	0.32	0.0111	828.03	0.0117	0.007326
V	51	3	He	0.221	0.0099	748.02	0.0117	0.007326
Cr	52	3	He	3.225	0.0745	5531.28	0.0152	0.02538
Cr	52	3	He	3.552	0.0795	5941.40	0.0152	0.02538
Cr	52	3	He	3.042	0.0717	5411.22	0.0152	0.02538
Mn	55	3	He	2093.674	12.3716	918610.30	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2086.175	12.3273	921639.13	0.0059	0.01385
Mn	55	3	He	2076.97	12.273	926211.63	0.0059	0.01385
Fe	57	3	He	457.566	0.1365	10133.94	0.0003	0.003918
Fe	57	3	He	475.587	0.1417	10594.20	0.0003	0.003918
Fe	57	3	He	433.494	0.1295	9773.57	0.0003	0.003918
Co	59	3	He	3.935	0.1231	9143.12	0.0305	0.003084
Co	59	3	He	3.297	0.1037	7752.31	0.0305	0.003084
Co	59	3	He	3.279	0.1031	7782.43	0.0305	0.003084
Ni	60	3	He	6.191	0.0634	4710.94	0.0088	0.009003
Ni	60	3	He	5.701	0.0591	4420.80	0.0088	0.009003
Ni	60	3	He	5.382	0.0563	4250.75	0.0088	0.009003
Cu	63	3	He	2.941	0.0783	5811.34	0.0249	0.004937
Cu	63	3	He	2.753	0.0736	5501.27	0.0249	0.004937
Cu	63	3	He	2.906	0.0774	5841.42	0.0249	0.004937
Zn	66	3	He	11.738	0.0337	2500.30	0.0025	0.004836
Zn	66	3	He	9.792	0.0289	2160.23	0.0025	0.004836
Zn	66	3	He	11.086	0.0321	2420.31	0.0025	0.004836
As	75	3	He	0.385	0.0011	82.00	0.0017	0.0004347
As	75	3	He	0.212	0.0008	60.00	0.0017	0.0004347
As	75	3	He	0.466	0.0012	94.00	0.0017	0.0004347
Sr	88	3	He	180.712	1.4134	87528.49	0.0078	0.0007762
Sr	88	3	He	173.361	1.356	85928.70	0.0078	0.0007762
Sr	88	3	He	178.536	1.3964	87135.54	0.0078	0.0007762
Mo	98	3	He	0.16	0.004	250.01	0.022	0.0005162
Mo	98	3	He	0.192	0.0047	300.01	0.022	0.0005162
Mo	98	3	He	0.151	0.0038	240.01	0.022	0.0005162
Ag	107	3	He	0.359	0.0168	1040.07	0.0455	0.0004641
Ag	107	3	He	0.371	0.0174	1100.08	0.0455	0.0004641
Ag	107	3	He	0.3	0.0141	880.07	0.0455	0.0004641
Cd	111	3	He	0.723	0.0035	218.00	0.0048	5.152E-05
Cd	111	3	He	0.719	0.0035	222.00	0.0048	5.152E-05
Cd	111	3	He	0.684	0.0033	208.00	0.0048	5.152E-05
Sn	120	3	He	0.425	0.0216	1340.11	0.0143	0.01559
Sn	120	3	He	0.644	0.0248	1570.14	0.0143	0.01559
Sn	120	3	He	0.435	0.0218	1360.12	0.0143	0.01559
Sb	121	3	He	0.617	0.0079	490.02	0.0124	0.000258
Sb	121	3	He	0.437	0.0057	360.02	0.0124	0.000258
Sb	121	3	He	0.431	0.0056	350.02	0.0124	0.000258
Ba	137	3	He	88.559	0.3877	24011.35	0.0044	0.000309
Ba	137	3	He	89.177	0.3904	24742.56	0.0044	0.000309
Ba	137	3	He	90.677	0.397	24772.88	0.0044	0.000309
Tl	205	3	He	0.107	0.004	870.06	0.0276	0.001005
Tl	205	3	He	0.072	0.003	660.05	0.0276	0.001005
Tl	205	3	He	0.082	0.0033	730.05	0.0276	0.001005
Pb	208	3	He	0.476	0.0195	2310.29	0.0364	0.002176
Pb	208	3	He	0.451	0.0186	2210.27	0.0364	0.002176
Pb	208	3	He	0.447	0.0185	2130.25	0.0364	0.002176
U	238	3	He	0.102	0.0045	990.08	0.0421	0.00024
U	238	3	He	0.083	0.0037	820.06	0.0421	0.00024
U	238	3	He	0.103	0.0046	1020.08	0.0421	0.00024
Sc	45	1	No Gas			3267705.89		
Sc	45	1	No Gas			3357879.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3283261.83		
Ge	72	1	No Gas			1456500.45		
Ge	72	1	No Gas			1482556.70		
Ge	72	1	No Gas			1471002.95		
Sc	45	2	H2			192114.27		
Sc	45	2	H2			199216.68		
Sc	45	2	H2			198652.59		
Ge	72	2	H2			157918.14		
Ge	72	2	H2			162773.85		
Ge	72	2	H2			165380.37		
In	115	2	H2			426772.92		
In	115	2	H2			437816.79		
In	115	2	H2			439267.69		
Sc	45	3	He			42401.86		
Sc	45	3	He			40566.87		
Sc	45	3	He			41901.23		
Ge	72	3	He			74251.54		
Ge	72	3	He			74763.84		
Ge	72	3	He			75467.39		
In	115	3	He			61937.31		
In	115	3	He			63383.53		
In	115	3	He			62410.26		
Tb	159	3	He			280656.58		
Tb	159	3	He			284643.24		
Tb	159	3	He			282611.97		
Bi	209	3	He			219026.31		
Bi	209	3	He			219461.81		
Bi	209	3	He			223286.54		

Quantitation Report

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Acq Time	2023-08-10 13:29:44
Sample Name	410-136864-K-2-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

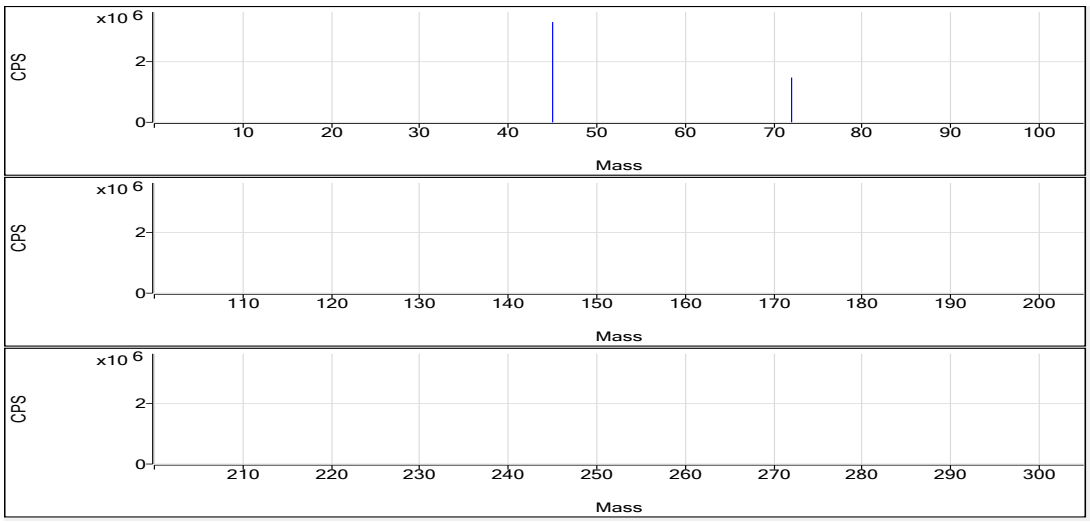
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.312	ppb	4.2	680.02	0.0005	Pulse	0.5000	3
Se	78	72	H2	0.050	ppb	33.5	4.89	0.0000	Pulse	1.5000	3
Na	23	72	He	7201.975	ppb	1.1	925562.17	12.4782	Pulse	0.1000	3
Mg	24	72	He	5485.811	ppb	1.5	343411.19	4.6299	Pulse	0.1000	3
Al	27	72	He	24.276	ppb	15.8	513.36	0.0069	Pulse	0.1000	3
K	39	72	He	4270.677	ppb	2.5	185565.94	2.5020	Pulse	0.1000	3
Ca	44	72	He	9593.659	ppb	2.0	22220.74	0.2996	Pulse	0.1000	3
Ti	47	72	He	-0.380	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
V	51	72	He	0.010	ppb	585.1	551.35	0.0074	Pulse	0.5000	3
Cr	52	72	He	0.393	ppb	45.2	2326.95	0.0314	Pulse	0.1000	3
Mn	55	72	He	276.578	ppb	1.6	122115.87	1.6463	Pulse	0.1000	3
Fe	57	72	He	20.869	ppb	27.4	740.05	0.0100	Pulse	0.1000	3
Co	59	72	He	0.657	ppb	8.6	1716.83	0.0231	Pulse	0.1000	3
Ni	60	72	He	3.800	ppb	13.2	3147.12	0.0424	Pulse	0.1000	3
Cu	63	72	He	10.609	ppb	1.7	19994.47	0.2695	Pulse	0.1000	3
Zn	66	72	He	25.456	ppb	6.3	4997.70	0.0674	Pulse	0.1000	3
As	75	72	He	0.157	ppb	70.3	52.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	41.308	ppb	1.1	20875.90	0.3237	Pulse	0.1000	3
Mo	98	115	He	0.028	ppb	59.9	73.33	0.0011	Pulse	0.1000	3
Ag	107	115	He	0.046	ppb	55.4	166.67	0.0026	Pulse	0.1000	3
Cd	111	115	He	0.267	ppb	8.1	86.00	0.0013	Pulse	0.5000	3
Sn	120	115	He	0.162	ppb	85.0	1153.42	0.0179	Pulse	0.1000	3
Sb	121	115	He	0.063	ppb	113.9	66.67	0.0010	Pulse	0.1000	3
Ba	137	115	He	149.742	ppb	3.4	42258.85	0.6554	Pulse	0.1000	3
Tl	205	209	He	0.124	ppb	9.1	976.74	0.0044	Pulse	0.1000	3
Pb	208	209	He	0.345	ppb	4.8	3253.62	0.0147	Pulse	0.1000	3
U	238	209	He	0.012	ppb	36.3	166.67	0.0008	Pulse	0.1000	3

ISTD Table:

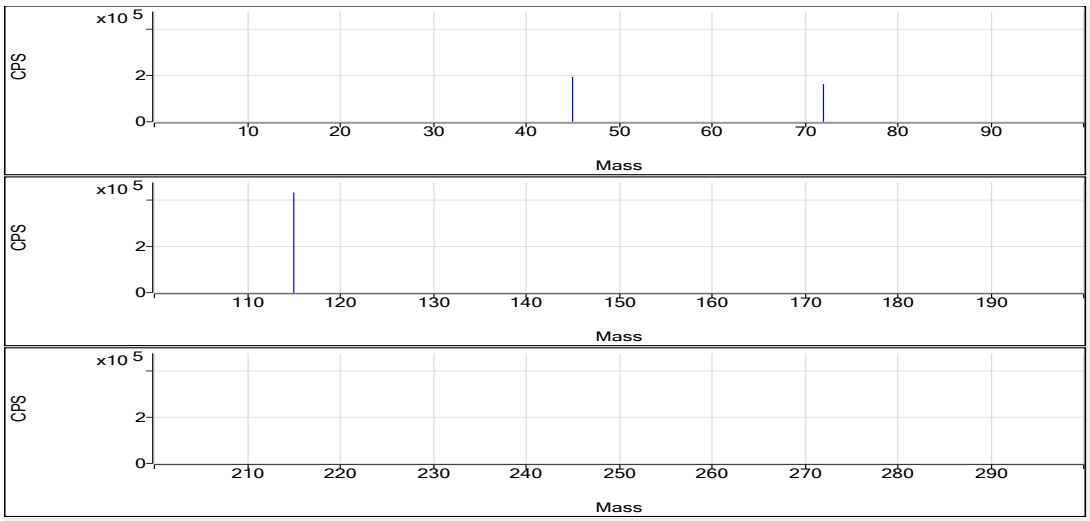
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3335082.87	0.7	102.9	Pulse	0.1000	3
No Gas	Ge	72	1488993.94	0.8	103.4	Pulse	0.1000	3
H2	Sc	45	193509.83	2.5	99.0	Pulse	0.1000	3
H2	Ge	72	162143.62	1.9	99.5	Pulse	0.1000	3
H2	In	115	431337.66	1.7	99.5	Pulse	0.1000	3
He	Sc	45	41486.18	3.1	103.8	Pulse	0.1000	3
He	Ge	72	74181.89	1.4	102.6	Pulse	0.1000	3
He	In	115	64503.26	1.8	99.9	Pulse	0.1000	3
He	Tb	159	285745.88	0.7	99.9	Pulse	0.1000	3
He	Bi	209	220782.31	0.8	99.4	Pulse	0.1000	3

No Gas

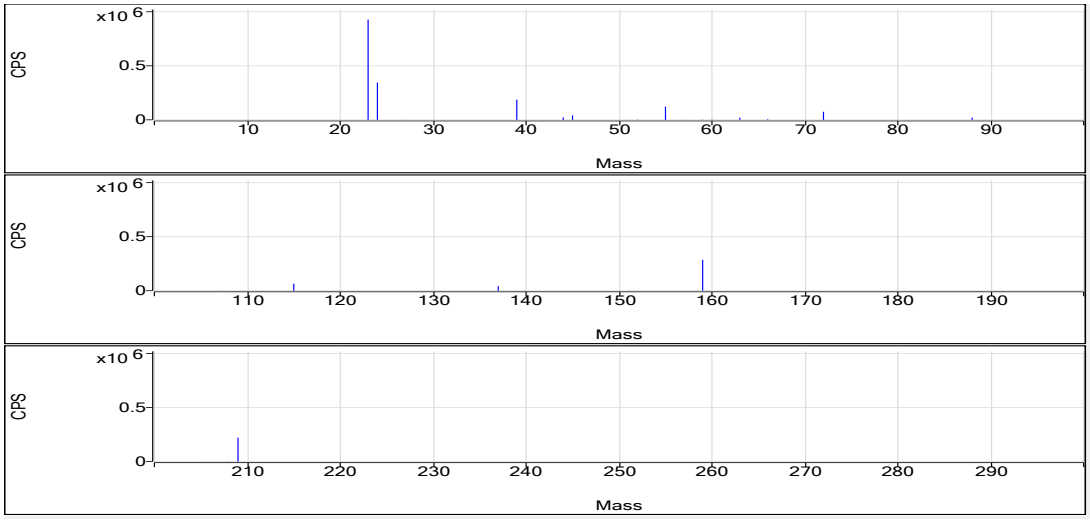


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.297	0.0004	646.02	0.0013	4.694E-05
Be	9	1	No Gas	0.315	0.0005	688.02	0.0013	4.694E-05
Be	9	1	No Gas	0.323	0.0005	706.02	0.0013	4.694E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.068	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.044	0	4.67	0.0004	1.089E-05
Na	23	3	He	7209.051	12.4903	924792.33	0.0017	0.1065
Na	23	3	He	7121.29	12.3396	928884.99	0.0017	0.1065
Na	23	3	He	7275.584	12.6046	923009.20	0.0017	0.1065
Mg	24	3	He	5513.559	4.6533	344536.52	0.0008	0.004846
Mg	24	3	He	5393.839	4.5524	342691.01	0.0008	0.004846
Mg	24	3	He	5550.034	4.6841	343006.05	0.0008	0.004846
Al	27	3	He	20.217	0.0059	440.02	0.0002	0.001063
Al	27	3	He	24.766	0.007	530.04	0.0002	0.001063
Al	27	3	He	27.845	0.0078	570.03	0.0002	0.001063
K	39	3	He	4347.838	2.5446	188401.74	0.0006	0.1436
K	39	3	He	4149.638	2.4351	183308.49	0.0006	0.1436
K	39	3	He	4314.556	2.5262	184987.58	0.0006	0.1436
Ca	44	3	He	9744.153	0.3043	22527.86	0	0.001611
Ca	44	3	He	9377.673	0.2929	22047.14	0	0.001611
Ca	44	3	He	9659.15	0.3016	22087.21	0	0.001611
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	0.498	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	-0.547	0.0001	10.00	0.0003	0.0002737
V	51	3	He	-0.007	0.0072	536.01	0.0117	0.007326
V	51	3	He	-0.036	0.0069	520.01	0.0117	0.007326
V	51	3	He	0.072	0.0082	598.02	0.0117	0.007326
Cr	52	3	He	0.205	0.0285	2110.24	0.0152	0.02538
Cr	52	3	He	0.418	0.0318	2390.29	0.0152	0.02538
Cr	52	3	He	0.557	0.0339	2480.31	0.0152	0.02538
Mn	55	3	He	280.459	1.6692	123591.93	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	271.951	1.619	121875.32	0.0059	0.01385
Mn	55	3	He	277.325	1.6507	120880.35	0.0059	0.01385
Fe	57	3	He	16.315	0.0086	640.04	0.0003	0.003918
Fe	57	3	He	27.289	0.0118	890.06	0.0003	0.003918
Fe	57	3	He	19.003	0.0094	690.04	0.0003	0.003918
Co	59	3	He	0.629	0.0223	1650.16	0.0305	0.003084
Co	59	3	He	0.722	0.0251	1890.19	0.0305	0.003084
Co	59	3	He	0.62	0.022	1610.14	0.0305	0.003084
Ni	60	3	He	4.337	0.0471	3490.54	0.0088	0.009003
Ni	60	3	He	3.721	0.0417	3140.49	0.0088	0.009003
Ni	60	3	He	3.341	0.0384	2810.34	0.0088	0.009003
Cu	63	3	He	10.658	0.2707	20044.49	0.0249	0.004937
Cu	63	3	He	10.763	0.2733	20575.37	0.0249	0.004937
Cu	63	3	He	10.406	0.2644	19363.54	0.0249	0.004937
Zn	66	3	He	23.655	0.063	4660.88	0.0025	0.004836
Zn	66	3	He	25.939	0.0686	5161.11	0.0025	0.004836
Zn	66	3	He	26.775	0.0706	5171.11	0.0025	0.004836
As	75	3	He	0.154	0.0007	52.00	0.0017	0.0004347
As	75	3	He	0.269	0.0009	68.00	0.0017	0.0004347
As	75	3	He	0.048	0.0005	38.00	0.0017	0.0004347
Sr	88	3	He	41.67	0.3265	20905.94	0.0078	0.0007762
Sr	88	3	He	41.464	0.3249	20675.56	0.0078	0.0007762
Sr	88	3	He	40.789	0.3196	21046.20	0.0078	0.0007762
Mo	98	3	He	0.019	0.0009	60.00	0.022	0.0005162
Mo	98	3	He	0.048	0.0016	100.00	0.022	0.0005162
Mo	98	3	He	0.018	0.0009	60.00	0.022	0.0005162
Ag	107	3	He	0.055	0.003	190.01	0.0455	0.0004641
Ag	107	3	He	0.017	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.067	0.0035	230.01	0.0455	0.0004641
Cd	111	3	He	0.282	0.0014	90.00	0.0048	5.152E-05
Cd	111	3	He	0.277	0.0014	88.00	0.0048	5.152E-05
Cd	111	3	He	0.242	0.0012	80.00	0.0048	5.152E-05
Sn	120	3	He	0.32	0.0201	1290.11	0.0143	0.01559
Sn	120	3	He	0.086	0.0168	1070.08	0.0143	0.01559
Sn	120	3	He	0.078	0.0167	1100.08	0.0143	0.01559
Sb	121	3	He	0.143	0.002	130.00	0.0124	0.000258
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	149.784	0.6556	41974.84	0.0044	0.000309
Ba	137	3	He	154.845	0.6777	43128.10	0.0044	0.000309
Ba	137	3	He	144.597	0.6329	41673.60	0.0044	0.000309
Tl	205	3	He	0.122	0.0044	970.07	0.0276	0.001005
Tl	205	3	He	0.136	0.0048	1040.08	0.0276	0.001005
Tl	205	3	He	0.113	0.0041	920.07	0.0276	0.001005
Pb	208	3	He	0.364	0.0154	1750.19	0.0364	0.002176
Pb	208	3	He	0.332	0.0143	1560.15	0.0364	0.002176
Pb	208	3	He	0.339	0.0145	1590.15	0.0364	0.002176
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
U	238	3	He	0.007	0.0005	120.00	0.0421	0.00024
Sc	45	1	No Gas			3318891.20		
Sc	45	1	No Gas			3362495.57		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3323861.83		
Ge	72	1	No Gas			1476353.73		
Ge	72	1	No Gas			1492584.67		
Ge	72	1	No Gas			1498043.42		
Sc	45	2	H2			190697.01		
Sc	45	2	H2			190643.49		
Sc	45	2	H2			199189.00		
Ge	72	2	H2			160201.94		
Ge	72	2	H2			160454.30		
Ge	72	2	H2			165774.61		
In	115	2	H2			434773.51		
In	115	2	H2			423077.45		
In	115	2	H2			436162.02		
Sc	45	3	He			41539.96		
Sc	45	3	He			40165.72		
Sc	45	3	He			42752.86		
Ge	72	3	He			74040.75		
Ge	72	3	He			75277.00		
Ge	72	3	He			73227.92		
In	115	3	He			64036.97		
In	115	3	He			63644.86		
In	115	3	He			65854.95		
Tb	159	3	He			283338.16		
Tb	159	3	He			287300.91		
Tb	159	3	He			286598.57		
Bi	209	3	He			221149.06		
Bi	209	3	He			218749.76		
Bi	209	3	He			222448.12		

Quantitation Report

Data File Name	106SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:31:44
Sample Name	410-136864-M-1-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

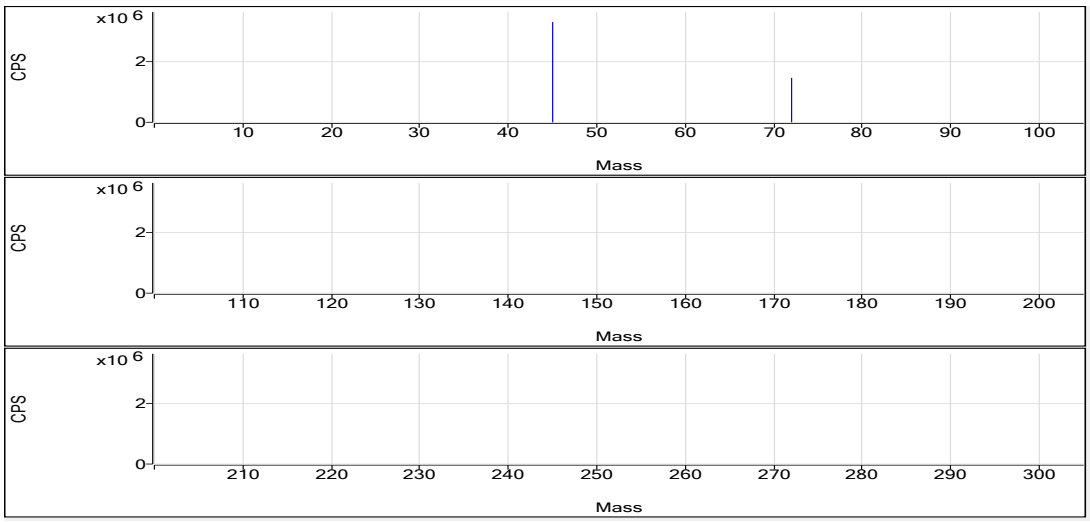
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.006	ppb	241.4	80.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.053	ppb	8.2	5.11	0.0000	Pulse	1.5000	3
Na	23	72	He	5576.366	ppb	1.1	719196.37	9.6857	Pulse	0.1000	3
Mg	24	72	He	31599.071	ppb	0.9	1978501.90	26.6461	Pulse	0.1000	3
Al	27	72	He	1.732	ppb	111.0	110.00	0.0015	Pulse	0.1000	3
K	39	72	He	3897.866	ppb	1.1	170485.12	2.2961	Pulse	0.1000	3
Ca	44	72	He	93893.944	ppb	1.1	216657.59	2.9179	Pulse	0.1000	3
Ti	47	72	He	-0.375	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
V	51	72	He	0.114	ppb	30.0	643.35	0.0087	Pulse	0.5000	3
Cr	52	72	He	0.192	ppb	124.1	2100.23	0.0283	Pulse	0.1000	3
Mn	55	72	He	134.320	ppb	1.5	59893.83	0.8067	Pulse	0.1000	3
Fe	57	72	He	42.100	ppb	10.8	1196.75	0.0161	Pulse	0.1000	3
Co	59	72	He	0.762	ppb	5.1	1956.86	0.0263	Pulse	0.1000	3
Ni	60	72	He	5.147	ppb	9.0	4030.69	0.0543	Pulse	0.1000	3
Cu	63	72	He	0.133	ppb	18.0	613.37	0.0083	Pulse	0.1000	3
Zn	66	72	He	0.224	ppb	146.6	400.02	0.0054	Pulse	0.1000	3
As	75	72	He	0.096	ppb	94.0	44.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	52.684	ppb	0.3	26084.57	0.4126	Pulse	0.1000	3
Mo	98	115	He	0.046	ppb	70.8	96.67	0.0015	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	247.8	40.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.055	ppb	37.2	20.00	0.0003	Pulse	0.5000	3
Sn	120	115	He	3.223	ppb	12.2	3890.70	0.0615	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	221.0	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	196.931	ppb	2.4	54474.80	0.8618	Pulse	0.1000	3
Tl	205	209	He	0.067	ppb	6.0	623.37	0.0029	Pulse	0.1000	3
Pb	208	209	He	0.000	ppb	3912.4	476.68	0.0022	Pulse	0.1000	3
U	238	209	He	0.211	ppb	2.0	1993.57	0.0091	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3313974.95	1.8	102.2	Pulse	0.1000	3
No Gas	Ge	72	1471006.54	1.6	102.2	Pulse	0.1000	3
H2	Sc	45	193677.81	1.7	99.1	Pulse	0.1000	3
H2	Ge	72	162281.55	2.2	99.6	Pulse	0.1000	3
H2	In	115	428534.51	1.8	98.9	Pulse	0.1000	3
He	Sc	45	41780.30	2.4	104.5	Pulse	0.1000	3
He	Ge	72	74254.84	0.9	102.7	Pulse	0.1000	3
He	In	115	63219.43	1.2	97.9	Pulse	0.1000	3
He	Tb	159	281468.97	0.9	98.4	Pulse	0.1000	3
He	Bi	209	218380.41	1.7	98.3	Pulse	0.1000	3

No Gas



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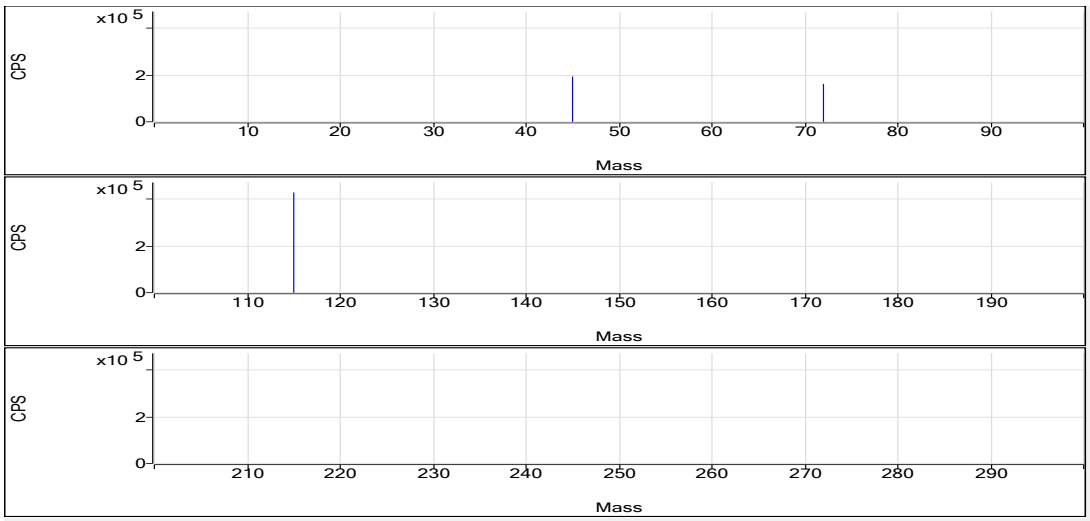
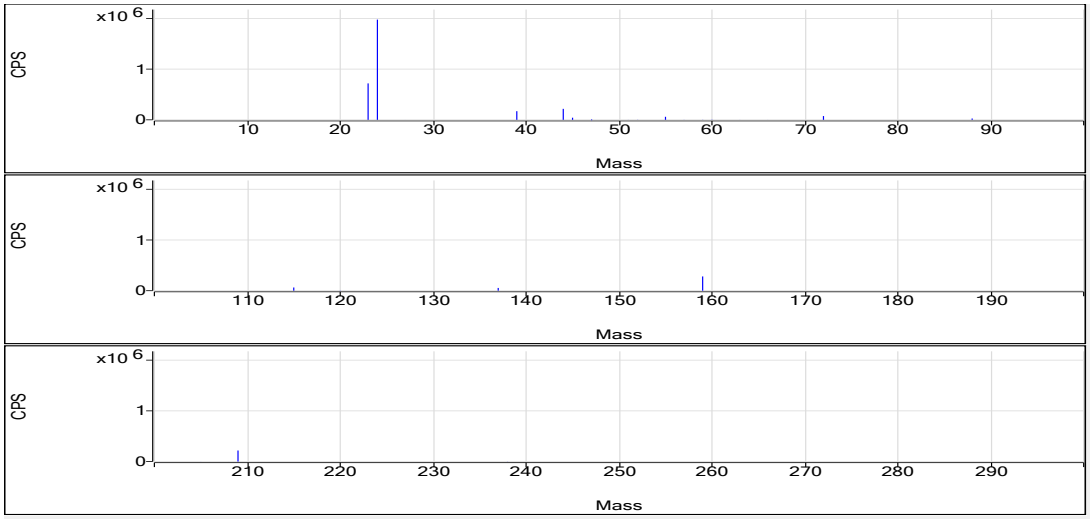


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0.0001	98.00	0.0013	4.694E-05
Be	9	1	No Gas	0.011	0.0001	92.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.01	0	50.00	0.0013	4.694E-05
Se	78	2	H2	0.056	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.048	0	4.67	0.0004	1.089E-05
Se	78	2	H2	0.055	0	5.33	0.0004	1.089E-05
Na	23	3	He	5634.317	9.7852	721353.11	0.0017	0.1065
Na	23	3	He	5577.961	9.6884	726479.83	0.0017	0.1065
Na	23	3	He	5516.821	9.5834	709756.16	0.0017	0.1065
Mg	24	3	He	31919.361	26.9161	1984222.00	0.0008	0.004846
Mg	24	3	He	31340.009	26.4277	1981665.44	0.0008	0.004846
Mg	24	3	He	31537.842	26.5945	1969618.25	0.0008	0.004846
Al	27	3	He	2.903	0.0018	130.00	0.0002	0.001063
Al	27	3	He	2.78	0.0017	130.01	0.0002	0.001063
Al	27	3	He	-0.487	0.0009	70.00	0.0002	0.001063
K	39	3	He	3927.145	2.3123	170456.66	0.0006	0.1436
K	39	3	He	3846.503	2.2677	170044.29	0.0006	0.1436
K	39	3	He	3919.951	2.3083	170954.41	0.0006	0.1436
Ca	44	3	He	94801.076	2.9461	217184.24	0	0.001611
Ca	44	3	He	92777.521	2.8833	216200.50	0	0.001611
Ca	44	3	He	94103.235	2.9244	216588.02	0	0.001611
Ti	47	3	He	-0.551	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	-0.56	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	-0.015	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.093	0.0084	620.02	0.0117	0.007326
V	51	3	He	0.097	0.0085	634.02	0.0117	0.007326
V	51	3	He	0.154	0.0091	676.02	0.0117	0.007326
Cr	52	3	He	0.453	0.0323	2380.29	0.0152	0.02538
Cr	52	3	He	-0.012	0.0252	1890.19	0.0152	0.02538
Cr	52	3	He	0.133	0.0274	2030.21	0.0152	0.02538
Mn	55	3	He	135.856	0.8157	60134.80	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	132.094	0.7935	59502.28	0.0059	0.01385
Mn	55	3	He	135.01	0.8107	60044.42	0.0059	0.01385
Fe	57	3	He	37.517	0.0148	1090.07	0.0003	0.003918
Fe	57	3	He	42.179	0.0161	1210.08	0.0003	0.003918
Fe	57	3	He	46.604	0.0174	1290.11	0.0003	0.003918
Co	59	3	He	0.726	0.0252	1860.18	0.0305	0.003084
Co	59	3	He	0.804	0.0276	2070.22	0.0305	0.003084
Co	59	3	He	0.758	0.0262	1940.19	0.0305	0.003084
Ni	60	3	He	5.086	0.0537	3960.67	0.0088	0.009003
Ni	60	3	He	5.635	0.0586	4390.82	0.0088	0.009003
Ni	60	3	He	4.72	0.0505	3740.59	0.0088	0.009003
Cu	63	3	He	0.128	0.0081	600.03	0.0249	0.004937
Cu	63	3	He	0.112	0.0077	580.03	0.0249	0.004937
Cu	63	3	He	0.159	0.0089	660.05	0.0249	0.004937
Zn	66	3	He	0.406	0.0058	430.03	0.0025	0.004836
Zn	66	3	He	0.42	0.0059	440.03	0.0025	0.004836
Zn	66	3	He	-0.155	0.0045	330.01	0.0025	0.004836
As	75	3	He	0.046	0.0005	38.00	0.0017	0.0004347
As	75	3	He	0.041	0.0005	38.00	0.0017	0.0004347
As	75	3	He	0.2	0.0008	58.00	0.0017	0.0004347
Sr	88	3	He	52.809	0.4136	25804.18	0.0078	0.0007762
Sr	88	3	He	52.717	0.4129	26184.58	0.0078	0.0007762
Sr	88	3	He	52.525	0.4114	26264.95	0.0078	0.0007762
Mo	98	3	He	0.028	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.027	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.083	0.0023	150.01	0.022	0.0005162
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.076	0.0004	26.00	0.0048	5.152E-05
Cd	111	3	He	0.055	0.0003	20.00	0.0048	5.152E-05
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Sn	120	3	He	3.033	0.0588	3670.62	0.0143	0.01559
Sn	120	3	He	3.674	0.068	4310.85	0.0143	0.01559
Sn	120	3	He	2.961	0.0578	3690.62	0.0143	0.01559
Sb	121	3	He	-0.021	0	0.00	0.0124	0.000258
Sb	121	3	He	0.055	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	202.282	0.8853	55231.33	0.0044	0.000309
Ba	137	3	He	195.411	0.8552	54236.86	0.0044	0.000309
Ba	137	3	He	193.101	0.8451	53956.22	0.0044	0.000309
Tl	205	3	He	0.067	0.0029	620.04	0.0276	0.001005
Tl	205	3	He	0.063	0.0027	610.03	0.0276	0.001005
Tl	205	3	He	0.071	0.003	640.04	0.0276	0.001005
Pb	208	3	He	0.011	0.0026	290.02	0.0364	0.002176
Pb	208	3	He	-0.005	0.002	220.01	0.0364	0.002176
Pb	208	3	He	-0.005	0.002	290.01	0.0364	0.002176
U	238	3	He	0.215	0.0093	2010.23	0.0421	0.00024
U	238	3	He	0.207	0.0089	1990.24	0.0421	0.00024
U	238	3	He	0.212	0.0092	1980.24	0.0421	0.00024
Sc	45	1	No Gas			3256101.51		
Sc	45	1	No Gas			3376890.57		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3308932.76		
Ge	72	1	No Gas			1443316.85		
Ge	72	1	No Gas			1485575.45		
Ge	72	1	No Gas			1484127.32		
Sc	45	2	H2			193583.61		
Sc	45	2	H2			190412.22		
Sc	45	2	H2			197037.59		
Ge	72	2	H2			163691.43		
Ge	72	2	H2			158178.87		
Ge	72	2	H2			164974.35		
In	115	2	H2			429519.25		
In	115	2	H2			420444.21		
In	115	2	H2			435640.07		
Sc	45	3	He			40677.44		
Sc	45	3	He			42602.51		
Sc	45	3	He			42060.96		
Ge	72	3	He			73718.75		
Ge	72	3	He			74984.53		
Ge	72	3	He			74061.25		
In	115	3	He			62419.15		
In	115	3	He			63454.24		
In	115	3	He			63875.93		
Tb	159	3	He			278522.38		
Tb	159	3	He			282981.54		
Tb	159	3	He			282903.00		
Bi	209	3	He			216300.06		
Bi	209	3	He			222603.55		
Bi	209	3	He			216237.63		

Quantitation Report

Data File Name	107SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:33:44
Sample Name	410-136864-K-5-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

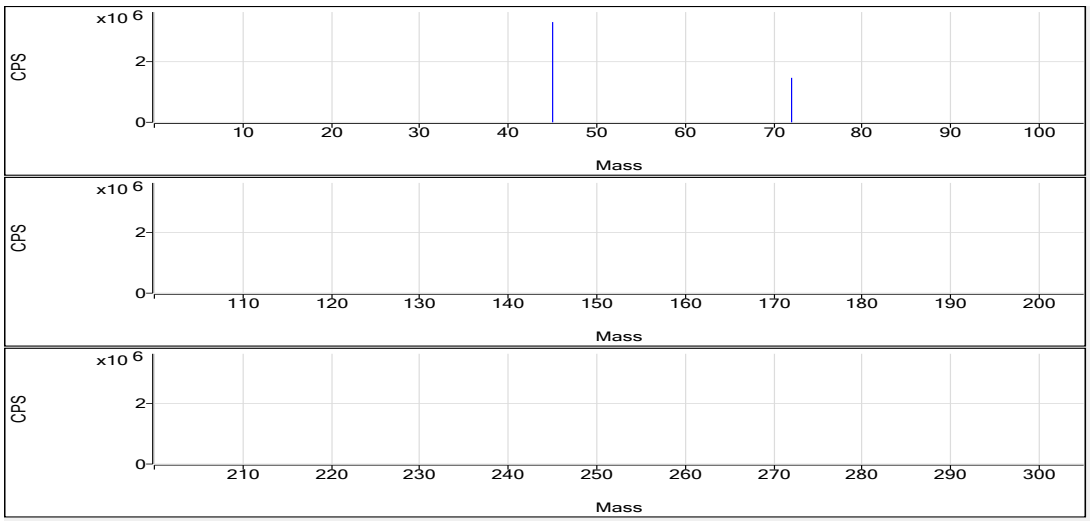
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.025	ppb	43.1	117.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.022	ppb	31.8	3.11	0.0000	Pulse	1.5000	3
Na	23	72	He	9614.149	ppb	1.0	1245843.08	16.6218	Pulse	0.1000	3
Mg	24	72	He	42136.065	ppb	0.6	2663065.80	35.5298	Pulse	0.1000	3
Al	27	72	He	1.692	ppb	166.1	110.00	0.0015	Pulse	0.1000	3
K	39	72	He	2942.010	ppb	1.5	132535.16	1.7683	Pulse	0.1000	3
Ca	44	72	He	111237.421	ppb	1.8	259070.61	3.4566	Pulse	0.1000	3
Ti	47	72	He	-0.562	ppb	N/A	10.00	0.0001	Pulse	0.1000	3
V	51	72	He	0.063	ppb	53.7	604.68	0.0081	Pulse	0.5000	3
Cr	52	72	He	0.036	ppb	705.6	1943.53	0.0259	Pulse	0.1000	3
Mn	55	72	He	3740.324	ppb	0.9	1655753.73	22.0908	Pulse	0.1000	3
Fe	57	72	He	8937.927	ppb	1.5	194371.07	2.5934	Pulse	0.1000	3
Co	59	72	He	15.439	ppb	0.3	35537.65	0.4741	Pulse	0.1000	3
Ni	60	72	He	15.491	ppb	6.7	10881.06	0.1452	Pulse	0.1000	3
Cu	63	72	He	0.143	ppb	34.0	636.70	0.0085	Pulse	0.1000	3
Zn	66	72	He	11.859	ppb	5.7	2546.99	0.0340	Pulse	0.1000	3
As	75	72	He	5.136	ppb	1.3	702.02	0.0094	Pulse	0.5000	3
Sr	88	115	He	106.502	ppb	5.5	52510.74	0.8333	Pulse	0.1000	3
Mo	98	115	He	0.669	ppb	10.3	963.41	0.0152	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	194.9	53.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	78.1	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	1.511	ppb	9.4	2340.28	0.0371	Pulse	0.1000	3
Sb	121	115	He	0.077	ppb	25.5	76.67	0.0012	Pulse	0.1000	3
Ba	137	115	He	520.667	ppb	2.8	143631.54	2.2781	Pulse	0.1000	3
Tl	205	209	He	0.114	ppb	12.2	903.40	0.0041	Pulse	0.1000	3
Pb	208	209	He	0.015	ppb	30.6	590.02	0.0027	Pulse	0.1000	3
U	238	209	He	0.776	ppb	3.1	7168.89	0.0329	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3331204.64	1.2	102.8	Pulse	0.1000	3
No Gas	Ge	72	1478151.80	0.9	102.7	Pulse	0.1000	3
H2	Sc	45	193724.22	3.2	99.2	Pulse	0.1000	3
H2	Ge	72	160958.45	2.0	98.7	Pulse	0.1000	3
H2	In	115	429469.42	2.1	99.1	Pulse	0.1000	3
He	Sc	45	41629.89	1.3	104.1	Pulse	0.1000	3
He	Ge	72	74955.37	0.8	103.7	Pulse	0.1000	3
He	In	115	63085.05	3.1	97.7	Pulse	0.1000	3
He	Tb	159	280281.41	1.1	98.0	Pulse	0.1000	3
He	Bi	209	217980.25	0.3	98.1	Pulse	0.1000	3

No Gas



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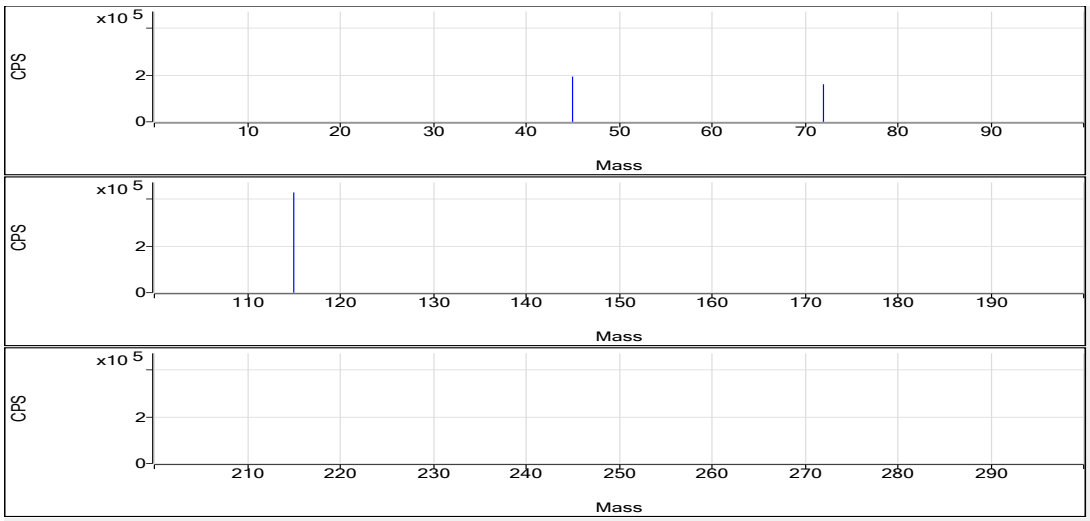
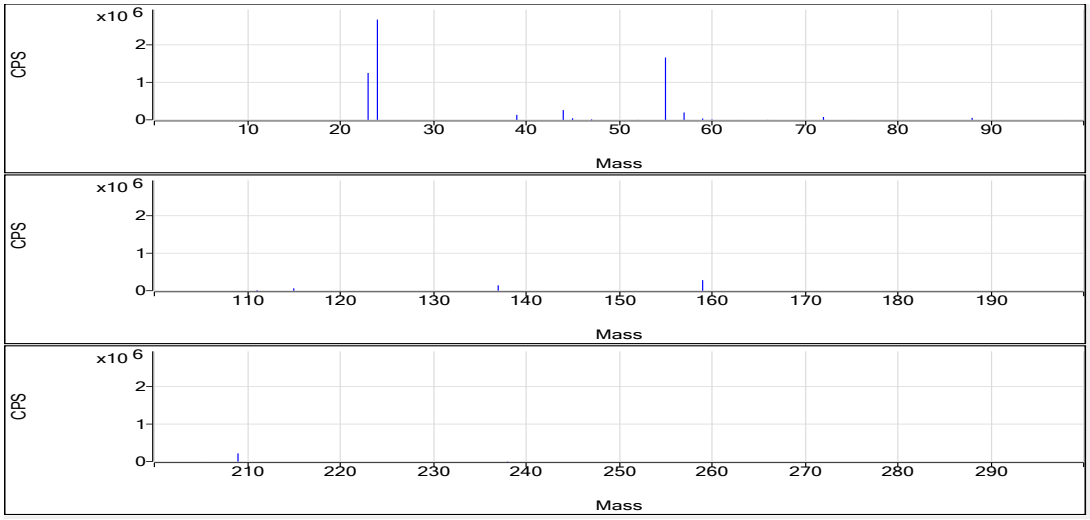


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.024	0.0001	114.00	0.0013	4.694E-05
Be	9	1	No Gas	0.036	0.0001	140.00	0.0013	4.694E-05
Be	9	1	No Gas	0.015	0.0001	98.00	0.0013	4.694E-05
Se	78	2	H2	0.025	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.014	0	2.67	0.0004	1.089E-05
Na	23	3	He	9689.254	16.7509	1254224.04	0.0017	0.1065
Na	23	3	He	9647.515	16.6792	1240969.51	0.0017	0.1065
Na	23	3	He	9505.677	16.4355	1242335.68	0.0017	0.1065
Mg	24	3	He	42280.961	35.652	2669449.96	0.0008	0.004846
Mg	24	3	He	42305.606	35.6728	2654139.34	0.0008	0.004846
Mg	24	3	He	41821.627	35.2647	2665608.09	0.0008	0.004846
Al	27	3	He	1.683	0.0015	110.00	0.0002	0.001063
Al	27	3	He	4.506	0.0022	160.01	0.0002	0.001063
Al	27	3	He	-1.114	0.0008	60.00	0.0002	0.001063
K	39	3	He	2990.396	1.795	134398.94	0.0006	0.1436
K	39	3	He	2935.407	1.7646	131290.99	0.0006	0.1436
K	39	3	He	2900.226	1.7452	131915.54	0.0006	0.1436
Ca	44	3	He	112423.252	3.4935	261573.65	0	0.001611
Ca	44	3	He	112345.397	3.491	259741.99	0	0.001611
Ca	44	3	He	108943.616	3.3854	255896.19	0	0.001611
Ti	47	3	He	-0.559	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	-0.036	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.082	0.0083	620.02	0.0117	0.007326
V	51	3	He	0.024	0.0076	566.01	0.0117	0.007326
V	51	3	He	0.084	0.0083	628.02	0.0117	0.007326
Cr	52	3	He	0.315	0.0302	2260.25	0.0152	0.02538
Cr	52	3	He	-0.016	0.0251	1870.18	0.0152	0.02538
Cr	52	3	He	-0.19	0.0225	1700.16	0.0152	0.02538
Mn	55	3	He	3732.271	22.0433	1650495.76	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3776.01	22.3015	1659281.54	0.0059	0.01385
Mn	55	3	He	3712.691	21.9277	1657483.88	0.0059	0.01385
Fe	57	3	He	8980.022	2.6056	195091.97	0.0003	0.003918
Fe	57	3	He	9049.159	2.6256	195350.31	0.0003	0.003918
Fe	57	3	He	8784.598	2.5489	192670.92	0.0003	0.003918
Co	59	3	He	15.427	0.4738	35474.19	0.0305	0.003084
Co	59	3	He	15.491	0.4757	35393.83	0.0305	0.003084
Co	59	3	He	15.398	0.4729	35744.94	0.0305	0.003084
Ni	60	3	He	15.705	0.1471	11014.44	0.0088	0.009003
Ni	60	3	He	16.408	0.1533	11404.82	0.0088	0.009003
Ni	60	3	He	14.358	0.1353	10223.92	0.0088	0.009003
Cu	63	3	He	0.182	0.0095	710.04	0.0249	0.004937
Cu	63	3	He	0.158	0.0089	660.04	0.0249	0.004937
Cu	63	3	He	0.089	0.0071	540.03	0.0249	0.004937
Zn	66	3	He	11.569	0.0333	2490.30	0.0025	0.004836
Zn	66	3	He	11.382	0.0328	2440.31	0.0025	0.004836
Zn	66	3	He	12.627	0.0359	2710.36	0.0025	0.004836
As	75	3	He	5.172	0.0094	706.02	0.0017	0.0004347
As	75	3	He	5.175	0.0094	702.02	0.0017	0.0004347
As	75	3	He	5.06	0.0092	698.02	0.0017	0.0004347
Sr	88	3	He	113.107	0.8849	53852.50	0.0078	0.0007762
Sr	88	3	He	102.127	0.7991	51503.82	0.0078	0.0007762
Sr	88	3	He	104.274	0.8159	52175.89	0.0078	0.0007762
Mo	98	3	He	0.611	0.014	850.06	0.022	0.0005162
Mo	98	3	He	0.745	0.0169	1090.08	0.022	0.0005162
Mo	98	3	He	0.651	0.0149	950.08	0.022	0.0005162
Ag	107	3	He	0.022	0.0015	90.00	0.0455	0.0004641
Ag	107	3	He	-0.01	0	0.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.017	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	1.673	0.0394	2400.31	0.0143	0.01559
Sn	120	3	He	1.453	0.0363	2340.28	0.0143	0.01559
Sn	120	3	He	1.408	0.0357	2280.25	0.0143	0.01559
Sb	121	3	He	0.085	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.092	0.0014	90.00	0.0124	0.000258
Sb	121	3	He	0.055	0.0009	60.00	0.0124	0.000258
Ba	137	3	He	537.349	2.3511	143074.76	0.0044	0.000309
Ba	137	3	He	509.083	2.2274	143561.55	0.0044	0.000309
Ba	137	3	He	515.569	2.2558	144258.30	0.0044	0.000309
Tl	205	3	He	0.098	0.0037	810.06	0.0276	0.001005
Tl	205	3	He	0.12	0.0043	940.07	0.0276	0.001005
Tl	205	3	He	0.123	0.0044	960.07	0.0276	0.001005
Pb	208	3	He	0.013	0.0027	330.01	0.0364	0.002176
Pb	208	3	He	0.011	0.0026	320.01	0.0364	0.002176
Pb	208	3	He	0.02	0.0029	380.02	0.0364	0.002176
U	238	3	He	0.75	0.0318	6952.09	0.0421	0.00024
U	238	3	He	0.799	0.0338	7352.33	0.0421	0.00024
U	238	3	He	0.779	0.033	7202.25	0.0421	0.00024
Sc	45	1	No Gas			3292986.20		
Sc	45	1	No Gas			3375571.20		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3325056.51		
Ge	72	1	No Gas			1462597.17		
Ge	72	1	No Gas			1489887.63		
Ge	72	1	No Gas			1481970.60		
Sc	45	2	H2			190826.23		
Sc	45	2	H2			189569.29		
Sc	45	2	H2			200777.15		
Ge	72	2	H2			160921.45		
Ge	72	2	H2			157746.67		
Ge	72	2	H2			164207.22		
In	115	2	H2			428748.27		
In	115	2	H2			421008.47		
In	115	2	H2			438651.52		
Sc	45	3	He			40998.03		
Sc	45	3	He			41940.90		
Sc	45	3	He			41950.73		
Ge	72	3	He			74875.20		
Ge	72	3	He			74402.39		
Ge	72	3	He			75588.51		
In	115	3	He			60873.09		
In	115	3	He			64469.54		
In	115	3	He			63967.27		
Tb	159	3	He			281663.53		
Tb	159	3	He			276676.42		
Tb	159	3	He			282504.27		
Bi	209	3	He			218557.56		
Bi	209	3	He			217294.80		
Bi	209	3	He			218088.40		

Quantitation Report

Data File Name	108SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:35:44
Sample Name	410-136848-W-3-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

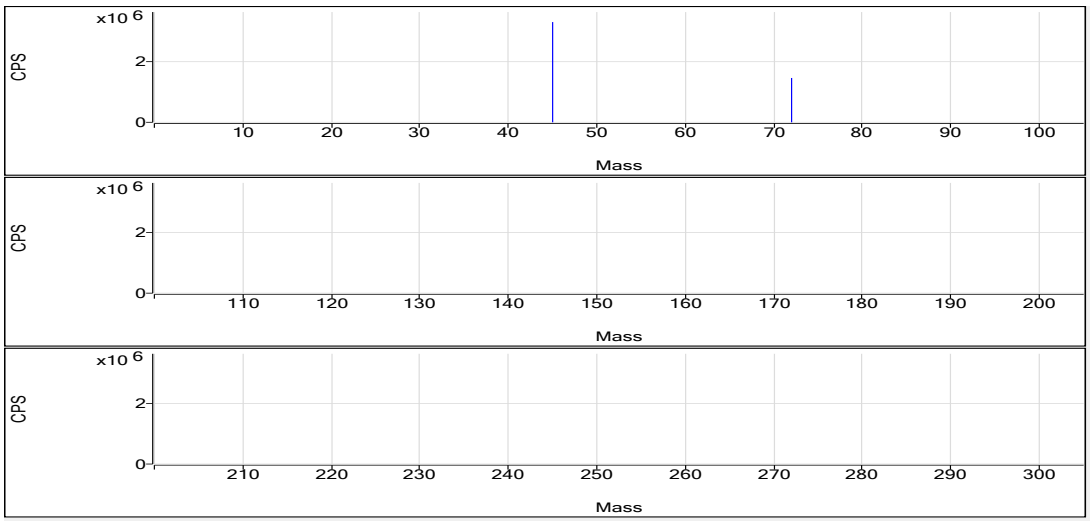
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.003	ppb	92.8	75.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.114	ppb	49.6	8.89	0.0001	Pulse	1.5000	3
Na	23	72	He	71508.656	ppb	0.5	9157525.70	122.9455	Analog	0.1000	3
Mg	24	72	He	11947.274	ppb	1.0	750599.65	10.0776	Pulse	0.1000	3
Al	27	72	He	41.372	ppb	11.8	823.39	0.0110	Pulse	0.1000	3
K	39	72	He	2279.778	ppb	1.8	104462.37	1.4026	Pulse	0.1000	3
Ca	44	72	He	89720.694	ppb	0.8	207681.92	2.7883	Pulse	0.1000	3
Ti	47	72	He	0.331	ppb	243.8	26.67	0.0004	Pulse	0.1000	3
V	51	72	He	0.112	ppb	43.4	642.69	0.0086	Pulse	0.5000	3
Cr	52	72	He	0.255	ppb	64.3	2180.25	0.0293	Pulse	0.1000	3
Mn	55	72	He	877.136	ppb	1.3	386634.07	5.1911	Pulse	0.1000	3
Fe	57	72	He	243.751	ppb	2.3	5551.26	0.0745	Pulse	0.1000	3
Co	59	72	He	0.179	ppb	17.3	636.70	0.0086	Pulse	0.1000	3
Ni	60	72	He	1.052	ppb	29.7	1360.12	0.0183	Pulse	0.1000	3
Cu	63	72	He	0.428	ppb	4.0	1163.42	0.0156	Pulse	0.1000	3
Zn	66	72	He	4.697	ppb	15.8	1220.10	0.0164	Pulse	0.1000	3
As	75	72	He	0.548	ppb	18.1	103.33	0.0014	Pulse	0.5000	3
Sr	88	115	He	298.369	ppb	3.2	148573.11	2.3332	Pulse	0.1000	3
Mo	98	115	He	0.642	ppb	13.3	933.40	0.0146	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	159.2	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	88.8	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.159	ppb	56.8	1136.76	0.0178	Pulse	0.1000	3
Sb	121	115	He	0.076	ppb	26.1	76.67	0.0012	Pulse	0.1000	3
Ba	137	115	He	29.154	ppb	7.1	8142.70	0.1279	Pulse	0.1000	3
Tl	205	209	He	0.030	ppb	35.0	390.02	0.0018	Pulse	0.1000	3
Pb	208	209	He	0.145	ppb	5.4	1593.43	0.0074	Pulse	0.1000	3
U	238	209	He	0.333	ppb	1.0	3047.14	0.0142	Pulse	0.1000	3

ISTD Table:

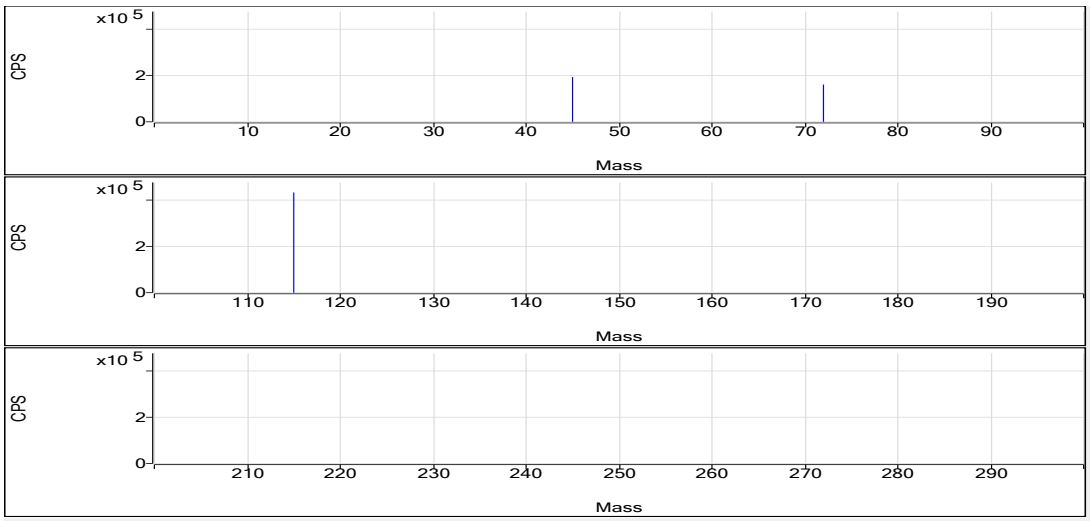
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3328454.33	1.5	102.7	Pulse	0.1000	3
No Gas	Ge	72	1471943.26	1.0	102.2	Pulse	0.1000	3
H2	Sc	45	194176.50	4.8	99.4	Pulse	0.1000	3
H2	Ge	72	161779.37	3.5	99.2	Pulse	0.1000	3
H2	In	115	435120.46	2.2	100.4	Pulse	0.1000	3
He	Sc	45	42732.90	0.9	106.9	Pulse	0.1000	3
He	Ge	72	74486.05	1.0	103.0	Pulse	0.1000	3
He	In	115	63686.40	0.8	98.6	Pulse	0.1000	3
He	Tb	159	282066.79	0.8	98.6	Pulse	0.1000	3
He	Bi	209	214117.64	0.8	96.4	Pulse	0.1000	3

No Gas

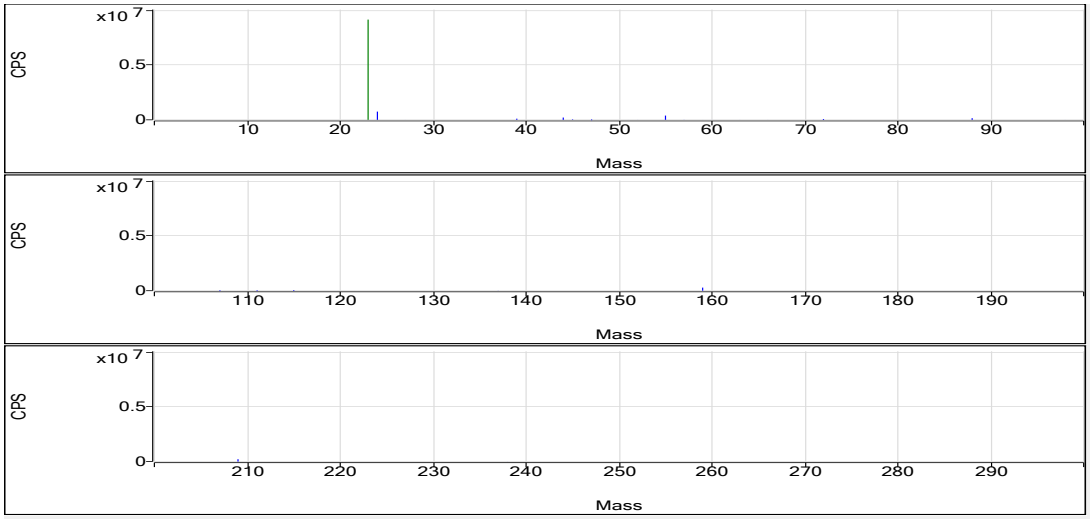


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0.0001	74.00	0.0013	4.694E-05
Be	9	1	No Gas	0.006	0.0001	82.00	0.0013	4.694E-05
Be	9	1	No Gas	0	0	70.00	0.0013	4.694E-05
Se	78	2	H2	0.09	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.179	0.0001	12.67	0.0004	1.089E-05
Se	78	2	H2	0.074	0	6.67	0.0004	1.089E-05
Na	23	3	He	71870.841	123.5677	9105604.24	0.0017	0.1065
Na	23	3	He	71517.764	122.9612	9233928.61	0.0017	0.1065
Na	23	3	He	71137.363	122.3077	9133044.24	0.0017	0.1065
Mg	24	3	He	12084.842	10.1936	751157.80	0.0008	0.004846
Mg	24	3	He	11915.307	10.0507	754767.33	0.0008	0.004846
Mg	24	3	He	11841.672	9.9886	745873.82	0.0008	0.004846
Al	27	3	He	39.45	0.0106	780.05	0.0002	0.001063
Al	27	3	He	46.903	0.0124	930.06	0.0002	0.001063
Al	27	3	He	37.763	0.0102	760.05	0.0002	0.001063
K	39	3	He	2324.262	1.4271	105163.73	0.0006	0.1436
K	39	3	He	2269.286	1.3968	104892.06	0.0006	0.1436
K	39	3	He	2245.786	1.3838	103331.32	0.0006	0.1436
Ca	44	3	He	90496.884	2.8124	207245.82	0	0.001611
Ca	44	3	He	89407.909	2.7786	208663.18	0	0.001611
Ca	44	3	He	89257.289	2.7739	207136.77	0	0.001611
Ti	47	3	He	-0.55	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	1.032	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	0.511	0.0004	30.00	0.0003	0.0002737
V	51	3	He	0.167	0.0093	684.02	0.0117	0.007326
V	51	3	He	0.089	0.0084	628.02	0.0117	0.007326
V	51	3	He	0.079	0.0082	616.02	0.0117	0.007326
Cr	52	3	He	0.347	0.0307	2260.26	0.0152	0.02538
Cr	52	3	He	0.353	0.0308	2310.27	0.0152	0.02538
Cr	52	3	He	0.066	0.0264	1970.23	0.0152	0.02538
Mn	55	3	He	889.926	5.2666	388089.41	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	871.951	5.1605	387532.73	0.0059	0.01385
Mn	55	3	He	869.531	5.1462	384280.07	0.0059	0.01385
Fe	57	3	He	249.783	0.0763	5621.28	0.0003	0.003918
Fe	57	3	He	242.552	0.0742	5571.28	0.0003	0.003918
Fe	57	3	He	238.917	0.0731	5461.23	0.0003	0.003918
Co	59	3	He	0.197	0.0091	670.04	0.0305	0.003084
Co	59	3	He	0.143	0.0075	560.03	0.0305	0.003084
Co	59	3	He	0.197	0.0091	680.04	0.0305	0.003084
Ni	60	3	He	0.859	0.0166	1220.10	0.0088	0.009003
Ni	60	3	He	0.884	0.0168	1260.11	0.0088	0.009003
Ni	60	3	He	1.413	0.0214	1600.14	0.0088	0.009003
Cu	63	3	He	0.417	0.0153	1130.08	0.0249	0.004937
Cu	63	3	He	0.448	0.0161	1210.09	0.0249	0.004937
Cu	63	3	He	0.42	0.0154	1150.08	0.0249	0.004937
Zn	66	3	He	4.66	0.0163	1200.10	0.0025	0.004836
Zn	66	3	He	5.458	0.0182	1370.11	0.0025	0.004836
Zn	66	3	He	3.973	0.0146	1090.08	0.0025	0.004836
As	75	3	He	0.655	0.0016	116.00	0.0017	0.0004347
As	75	3	He	0.531	0.0014	102.00	0.0017	0.0004347
As	75	3	He	0.458	0.0012	92.00	0.0017	0.0004347
Sr	88	3	He	292.359	2.2862	146953.44	0.0078	0.0007762
Sr	88	3	He	309.489	2.4201	153225.75	0.0078	0.0007762
Sr	88	3	He	293.259	2.2932	145540.13	0.0078	0.0007762
Mo	98	3	He	0.733	0.0166	1070.08	0.022	0.0005162
Mo	98	3	He	0.629	0.0144	910.07	0.022	0.0005162
Mo	98	3	He	0.563	0.0129	820.05	0.022	0.0005162
Ag	107	3	He	0.017	0.0012	80.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.194	0.0184	1180.11	0.0143	0.01559
Sn	120	3	He	0.225	0.0188	1190.09	0.0143	0.01559
Sn	120	3	He	0.056	0.0164	1040.09	0.0143	0.01559
Sb	121	3	He	0.054	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.081	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.094	0.0014	90.00	0.0124	0.000258
Ba	137	3	He	28.992	0.1271	8172.67	0.0044	0.000309
Ba	137	3	He	27.159	0.1191	7542.38	0.0044	0.000309
Ba	137	3	He	31.311	0.1373	8713.04	0.0044	0.000309
Tl	205	3	He	0.03	0.0018	390.02	0.0276	0.001005
Tl	205	3	He	0.019	0.0015	330.02	0.0276	0.001005
Tl	205	3	He	0.04	0.0021	450.02	0.0276	0.001005
Pb	208	3	He	0.154	0.0078	800.06	0.0364	0.002176
Pb	208	3	He	0.14	0.0073	880.07	0.0364	0.002176
Pb	208	3	He	0.14	0.0073	790.05	0.0364	0.002176
U	238	3	He	0.329	0.0141	2990.44	0.0421	0.00024
U	238	3	He	0.333	0.0142	3070.47	0.0421	0.00024
U	238	3	He	0.336	0.0144	3080.51	0.0421	0.00024
Sc	45	1	No Gas			3274825.89		
Sc	45	1	No Gas			3373693.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3336843.39		
Ge	72	1	No Gas			1455483.57		
Ge	72	1	No Gas			1483965.45		
Ge	72	1	No Gas			1476380.76		
Sc	45	2	H2			191768.69		
Sc	45	2	H2			186270.47		
Sc	45	2	H2			204490.35		
Ge	72	2	H2			160060.15		
Ge	72	2	H2			157259.69		
Ge	72	2	H2			168018.26		
In	115	2	H2			429236.71		
In	115	2	H2			429713.67		
In	115	2	H2			446411.01		
Sc	45	3	He			43013.49		
Sc	45	3	He			42281.73		
Sc	45	3	He			42903.47		
Ge	72	3	He			73689.19		
Ge	72	3	He			75096.29		
Ge	72	3	He			74672.67		
In	115	3	He			64288.45		
In	115	3	He			63323.52		
In	115	3	He			63473.81		
Tb	159	3	He			282884.39		
Tb	159	3	He			279527.26		
Tb	159	3	He			283788.73		
Bi	209	3	He			212297.50		
Bi	209	3	He			215789.41		
Bi	209	3	He			214266.01		

Quantitation Report

Data File Name	109SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:37:43
Sample Name	410-136848-U-5-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

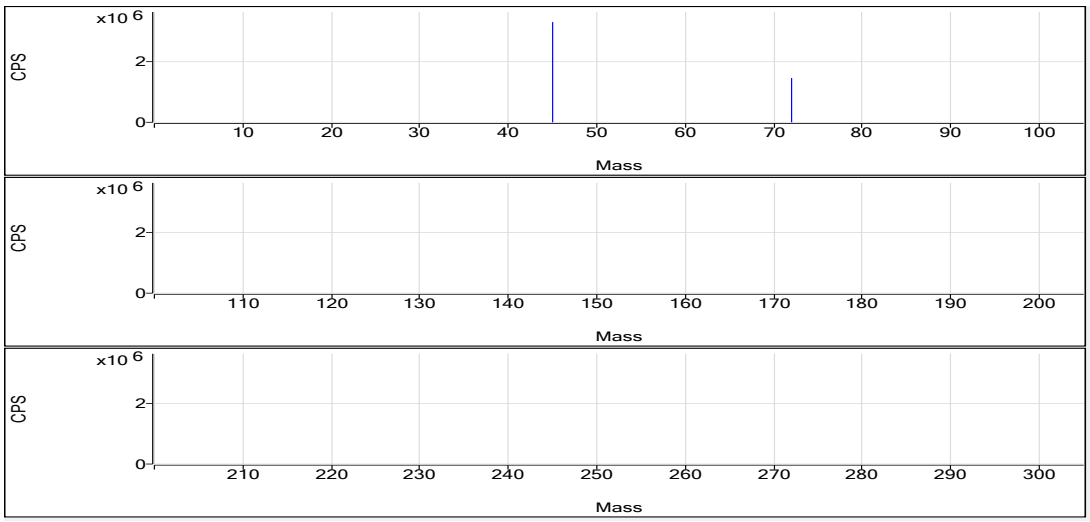
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.000	ppb	2864.3	68.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.133	ppb	14.1	10.00	0.0001	Pulse	1.5000	3
Na	23	72	He	8739.887	ppb	0.9	1131309.36	15.1200	Pulse	0.1000	3
Mg	24	72	He	14892.022	ppb	0.8	939791.62	12.5603	Pulse	0.1000	3
Al	27	72	He	15.512	ppb	31.9	360.02	0.0048	Pulse	0.1000	3
K	39	72	He	2104.370	ppb	1.8	97696.48	1.3057	Pulse	0.1000	3
Ca	44	72	He	141208.345	ppb	0.5	328290.52	4.3875	Pulse	0.1000	3
Ti	47	72	He	-0.204	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
V	51	72	He	0.161	ppb	30.1	689.35	0.0092	Pulse	0.5000	3
Cr	52	72	He	0.270	ppb	50.7	2206.90	0.0295	Pulse	0.1000	3
Mn	55	72	He	2713.643	ppb	0.9	1199461.05	16.0309	Pulse	0.1000	3
Fe	57	72	He	7678.309	ppb	1.4	166733.28	2.2284	Pulse	0.1000	3
Co	59	72	He	0.768	ppb	3.0	1983.55	0.0265	Pulse	0.1000	3
Ni	60	72	He	2.497	ppb	10.6	2316.93	0.0310	Pulse	0.1000	3
Cu	63	72	He	0.541	ppb	10.3	1380.11	0.0184	Pulse	0.1000	3
Zn	66	72	He	7.461	ppb	9.9	1733.50	0.0232	Pulse	0.1000	3
As	75	72	He	1.242	ppb	16.7	194.00	0.0026	Pulse	0.5000	3
Sr	88	115	He	487.640	ppb	2.3	241286.66	3.8127	Pulse	0.1000	3
Mo	98	115	He	0.412	ppb	12.4	606.70	0.0096	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	20.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.077	ppb	29.3	26.67	0.0004	Pulse	0.5000	3
Sn	120	115	He	0.215	ppb	70.6	1180.10	0.0186	Pulse	0.1000	3
Sb	121	115	He	0.064	ppb	44.6	66.67	0.0010	Pulse	0.1000	3
Ba	137	115	He	87.462	ppb	2.0	24235.33	0.3829	Pulse	0.1000	3
Tl	205	209	He	0.026	ppb	40.7	373.35	0.0017	Pulse	0.1000	3
Pb	208	209	He	0.229	ppb	2.8	2290.16	0.0105	Pulse	0.1000	3
U	238	209	He	0.316	ppb	8.2	2943.79	0.0135	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3296189.74	3.0	101.7	Pulse	0.1000	3
No Gas	Ge	72	1455723.52	2.8	101.1	Pulse	0.1000	3
H2	Sc	45	191773.48	2.3	98.2	Pulse	0.1000	3
H2	Ge	72	159744.51	2.6	98.0	Pulse	0.1000	3
H2	In	115	428956.06	2.4	99.0	Pulse	0.1000	3
He	Sc	45	42402.14	1.5	106.0	Pulse	0.1000	3
He	Ge	72	74824.35	0.6	103.5	Pulse	0.1000	3
He	In	115	63301.31	1.7	98.0	Pulse	0.1000	3
He	Tb	159	283853.59	0.9	99.2	Pulse	0.1000	3
He	Bi	209	217844.01	0.8	98.0	Pulse	0.1000	3

No Gas



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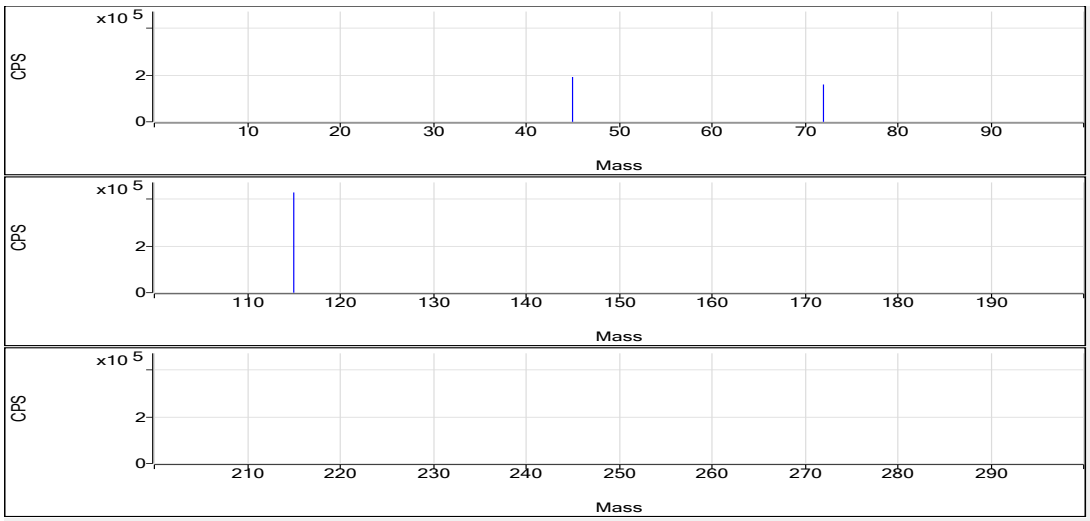
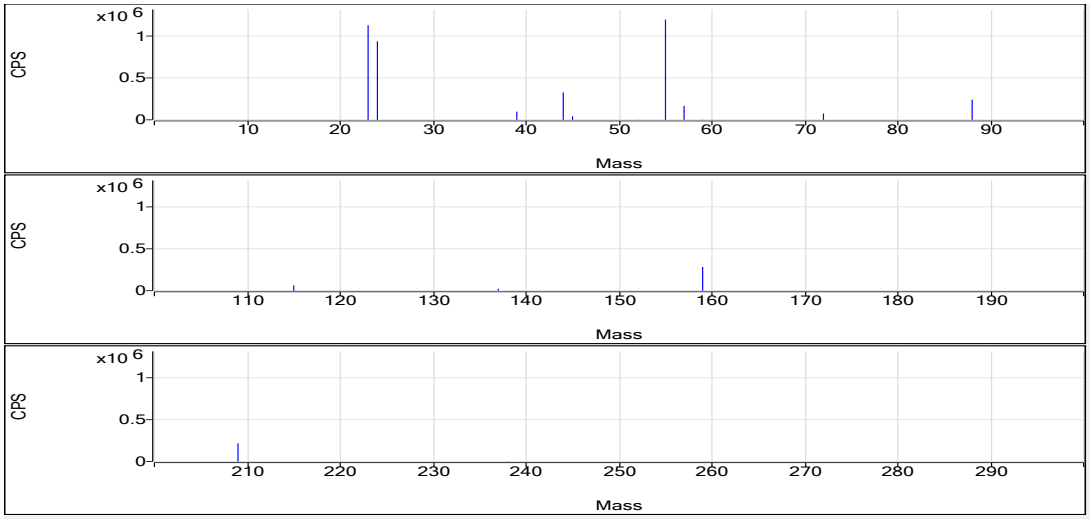


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	64.00	0.0013	4.694E-05
Be	9	1	No Gas	0.007	0.0001	82.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.005	0	60.00	0.0013	4.694E-05
Se	78	2	H2	0.118	0.0001	9.33	0.0004	1.089E-05
Se	78	2	H2	0.126	0.0001	9.33	0.0004	1.089E-05
Se	78	2	H2	0.154	0.0001	11.33	0.0004	1.089E-05
Na	23	3	He	8765.26	15.1636	1131717.64	0.0017	0.1065
Na	23	3	He	8654.946	14.9741	1127658.58	0.0017	0.1065
Na	23	3	He	8799.456	15.2223	1134551.86	0.0017	0.1065
Mg	24	3	He	14922.375	12.5859	939335.45	0.0008	0.004846
Mg	24	3	He	14763.664	12.4521	937734.36	0.0008	0.004846
Mg	24	3	He	14990.027	12.643	942305.06	0.0008	0.004846
Al	27	3	He	14.47	0.0046	340.02	0.0002	0.001063
Al	27	3	He	20.903	0.0061	460.03	0.0002	0.001063
Al	27	3	He	11.161	0.0038	280.01	0.0002	0.001063
K	39	3	He	2147.401	1.3295	99222.75	0.0006	0.1436
K	39	3	He	2087.639	1.2965	97632.79	0.0006	0.1436
K	39	3	He	2078.07	1.2912	96233.89	0.0006	0.1436
Ca	44	3	He	140741.458	4.373	326375.25	0	0.001611
Ca	44	3	He	140894.909	4.3778	329679.10	0	0.001611
Ca	44	3	He	141988.667	4.4118	328817.22	0	0.001611
Ti	47	3	He	-0.023	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.032	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.556	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.143	0.009	672.02	0.0117	0.007326
V	51	3	He	0.216	0.0099	742.02	0.0117	0.007326
V	51	3	He	0.124	0.0088	654.02	0.0117	0.007326
Cr	52	3	He	0.155	0.0277	2070.20	0.0152	0.02538
Cr	52	3	He	0.234	0.029	2180.23	0.0152	0.02538
Cr	52	3	He	0.421	0.0318	2370.27	0.0152	0.02538
Mn	55	3	He	2720.105	16.0691	1199295.14	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2685.443	15.8645	1194709.59	0.0059	0.01385
Mn	55	3	He	2735.379	16.1592	1204378.42	0.0059	0.01385
Fe	57	3	He	7757.121	2.2513	168020.82	0.0003	0.003918
Fe	57	3	He	7560.684	2.1944	165251.11	0.0003	0.003918
Fe	57	3	He	7717.123	2.2397	166927.91	0.0003	0.003918
Co	59	3	He	0.742	0.0257	1920.21	0.0305	0.003084
Co	59	3	He	0.787	0.0271	2040.23	0.0305	0.003084
Co	59	3	He	0.774	0.0267	1990.20	0.0305	0.003084
Ni	60	3	He	2.237	0.0287	2140.23	0.0088	0.009003
Ni	60	3	He	2.767	0.0333	2510.31	0.0088	0.009003
Ni	60	3	He	2.486	0.0309	2300.26	0.0088	0.009003
Cu	63	3	He	0.49	0.0172	1280.11	0.0249	0.004937
Cu	63	3	He	0.601	0.0199	1500.11	0.0249	0.004937
Cu	63	3	He	0.534	0.0182	1360.12	0.0249	0.004937
Zn	66	3	He	8.122	0.0248	1850.19	0.0025	0.004836
Zn	66	3	He	7.599	0.0235	1770.16	0.0025	0.004836
Zn	66	3	He	6.661	0.0212	1580.14	0.0025	0.004836
As	75	3	He	1.353	0.0028	208.00	0.0017	0.0004347
As	75	3	He	1.002	0.0022	164.00	0.0017	0.0004347
As	75	3	He	1.37	0.0028	210.00	0.0017	0.0004347
Sr	88	3	He	486.079	3.8005	240134.82	0.0078	0.0007762
Sr	88	3	He	477.173	3.7309	240415.88	0.0078	0.0007762
Sr	88	3	He	499.669	3.9067	243309.27	0.0078	0.0007762
Mo	98	3	He	0.422	0.0098	620.03	0.022	0.0005162
Mo	98	3	He	0.357	0.0084	540.03	0.022	0.0005162
Mo	98	3	He	0.458	0.0106	660.04	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	-0.01	0	0.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	0.068	0.0004	24.00	0.0048	5.152E-05
Cd	111	3	He	0.06	0.0003	22.00	0.0048	5.152E-05
Cd	111	3	He	0.103	0.0005	34.00	0.0048	5.152E-05
Sn	120	3	He	0.05	0.0163	1030.08	0.0143	0.01559
Sn	120	3	He	0.246	0.0191	1230.10	0.0143	0.01559
Sn	120	3	He	0.348	0.0206	1280.11	0.0143	0.01559
Sb	121	3	He	0.081	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.079	0.0012	80.00	0.0124	0.000258
Sb	121	3	He	0.031	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	86.868	0.3803	24031.72	0.0044	0.000309
Ba	137	3	He	86.098	0.377	24291.80	0.0044	0.000309
Ba	137	3	He	89.42	0.3915	24382.48	0.0044	0.000309
Tl	205	3	He	0.015	0.0014	310.01	0.0276	0.001005
Tl	205	3	He	0.026	0.0017	380.02	0.0276	0.001005
Tl	205	3	He	0.036	0.002	430.03	0.0276	0.001005
Pb	208	3	He	0.234	0.0107	1180.10	0.0364	0.002176
Pb	208	3	He	0.231	0.0106	1140.09	0.0364	0.002176
Pb	208	3	He	0.222	0.0102	1240.10	0.0364	0.002176
U	238	3	He	0.288	0.0123	2700.41	0.0421	0.00024
U	238	3	He	0.32	0.0137	3000.46	0.0421	0.00024
U	238	3	He	0.339	0.0145	3130.50	0.0421	0.00024
Sc	45	1	No Gas			3196630.89		
Sc	45	1	No Gas			3298126.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3393811.82		
Ge	72	1	No Gas			1416627.32		
Ge	72	1	No Gas			1452378.42		
Ge	72	1	No Gas			1498164.82		
Sc	45	2	H2			193623.71		
Sc	45	2	H2			186746.81		
Sc	45	2	H2			194949.92		
Ge	72	2	H2			163791.87		
Ge	72	2	H2			155472.29		
Ge	72	2	H2			159969.37		
In	115	2	H2			436176.09		
In	115	2	H2			417213.16		
In	115	2	H2			433478.94		
Sc	45	3	He			42111.37		
Sc	45	3	He			43154.28		
Sc	45	3	He			41940.77		
Ge	72	3	He			74633.81		
Ge	72	3	He			75307.24		
Ge	72	3	He			74531.99		
In	115	3	He			63193.14		
In	115	3	He			64449.01		
In	115	3	He			62289.38		
Tb	159	3	He			285111.91		
Tb	159	3	He			285465.17		
Tb	159	3	He			280983.69		
Bi	209	3	He			218758.24		
Bi	209	3	He			219051.42		
Bi	209	3	He			215722.36		

Quantitation Report

Data File Name	110SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:39:43
Sample Name	410-136848-W-2-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

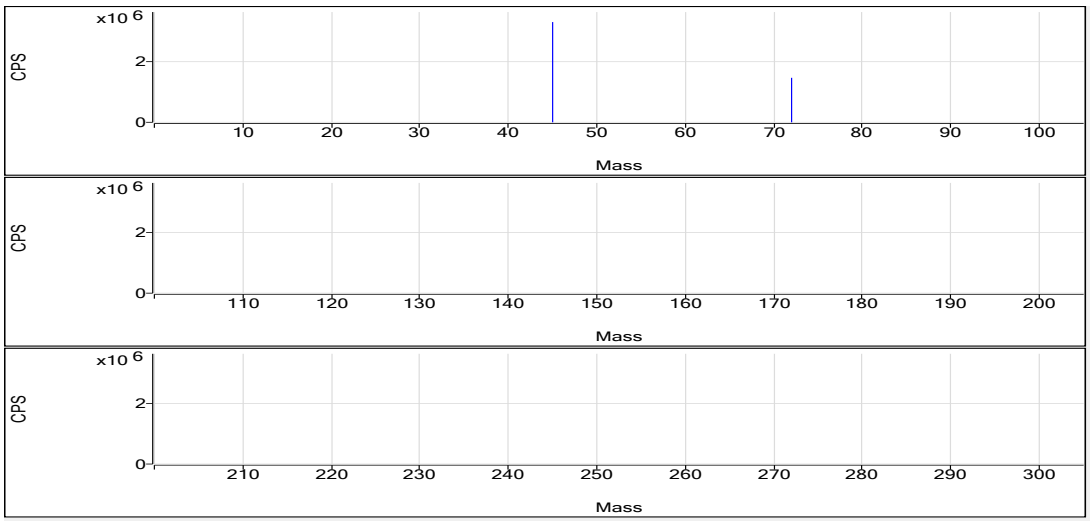
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.006	ppb	N/A	58.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.126	ppb	28.1	9.78	0.0001	Pulse	1.5000	3
Na	23	72	He	28882.150	ppb	0.4	3729747.65	49.7208	Pulse	0.1000	3
Mg	24	72	He	7188.422	ppb	0.5	454995.74	6.0654	Pulse	0.1000	3
Al	27	72	He	6.467	ppb	33.4	196.68	0.0026	Pulse	0.1000	3
K	39	72	He	2536.850	ppb	1.9	115870.73	1.5445	Pulse	0.1000	3
Ca	44	72	He	45285.344	ppb	0.3	105635.18	1.4082	Pulse	0.1000	3
Ti	47	72	He	-0.024	ppb	N/A	20.00	0.0003	Pulse	0.1000	3
V	51	72	He	0.096	ppb	30.4	634.02	0.0085	Pulse	0.5000	3
Cr	52	72	He	0.008	ppb	560.9	1913.52	0.0255	Pulse	0.1000	3
Mn	55	72	He	1136.415	ppb	2.0	504165.31	6.7215	Pulse	0.1000	3
Fe	57	72	He	59.976	ppb	8.0	1596.82	0.0213	Pulse	0.1000	3
Co	59	72	He	0.505	ppb	14.0	1386.79	0.0185	Pulse	0.1000	3
Ni	60	72	He	1.144	ppb	5.1	1430.13	0.0191	Pulse	0.1000	3
Cu	63	72	He	0.761	ppb	8.4	1793.51	0.0239	Pulse	0.1000	3
Zn	66	72	He	6.228	ppb	8.4	1510.14	0.0201	Pulse	0.1000	3
As	75	72	He	0.654	ppb	19.9	118.00	0.0016	Pulse	0.5000	3
Sr	88	115	He	155.944	ppb	1.1	78188.02	1.2198	Pulse	0.1000	3
Mo	98	115	He	1.016	ppb	6.0	1466.80	0.0229	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	86.9	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	285.7	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.239	ppb	54.8	1216.77	0.0190	Pulse	0.1000	3
Sb	121	115	He	0.184	ppb	23.0	163.34	0.0025	Pulse	0.1000	3
Ba	137	115	He	18.785	ppb	2.0	5287.87	0.0825	Pulse	0.1000	3
Tl	205	209	He	0.034	ppb	50.1	426.69	0.0019	Pulse	0.1000	3
Pb	208	209	He	-0.011	ppb	N/A	386.68	0.0018	Pulse	0.1000	3
U	238	209	He	0.438	ppb	6.3	4080.81	0.0187	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3305469.53	1.9	102.0	Pulse	0.1000	3
No Gas	Ge	72	1467404.56	1.9	101.9	Pulse	0.1000	3
H2	Sc	45	196063.87	3.0	100.4	Pulse	0.1000	3
H2	Ge	72	163141.63	2.1	100.1	Pulse	0.1000	3
H2	In	115	440386.96	2.5	101.6	Pulse	0.1000	3
He	Sc	45	41389.18	0.3	103.5	Pulse	0.1000	3
He	Ge	72	75015.56	0.8	103.8	Pulse	0.1000	3
He	In	115	64098.12	0.9	99.2	Pulse	0.1000	3
He	Tb	159	283549.52	0.5	99.1	Pulse	0.1000	3
He	Bi	209	218576.59	0.9	98.4	Pulse	0.1000	3

No Gas



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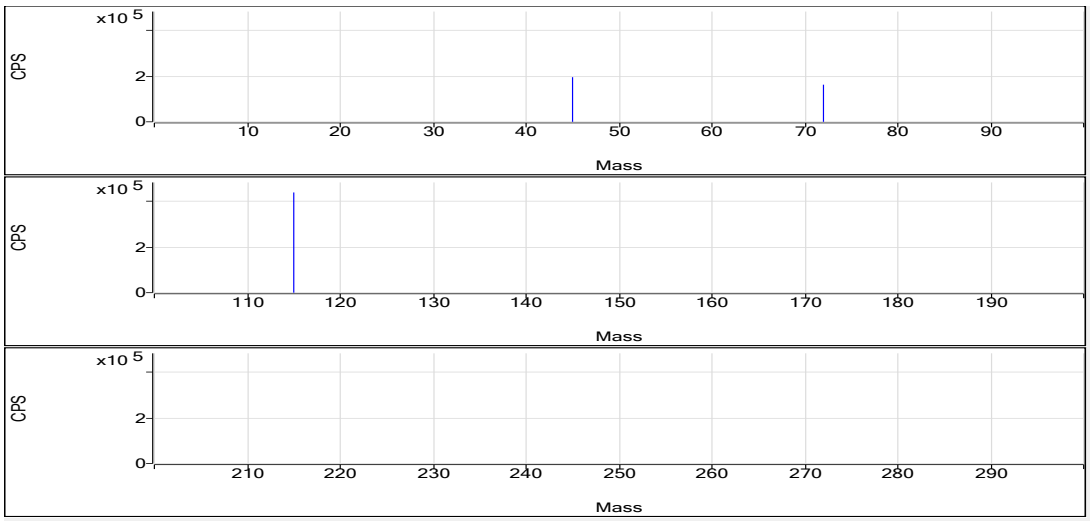
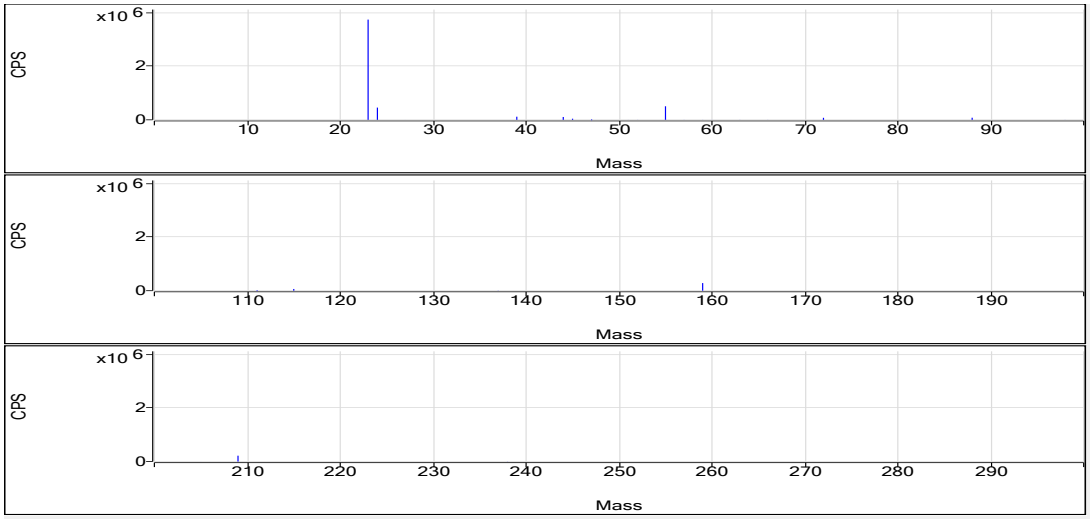


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	66.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.004	0	62.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.012	0	46.00	0.0013	4.694E-05
Se	78	2	H2	0.119	0.0001	9.33	0.0004	1.089E-05
Se	78	2	H2	0.165	0.0001	12.00	0.0004	1.089E-05
Se	78	2	H2	0.096	0	8.00	0.0004	1.089E-05
Na	23	3	He	28737.354	49.4721	3744008.69	0.0017	0.1065
Na	23	3	He	28977.184	49.8841	3714994.32	0.0017	0.1065
Na	23	3	He	28931.913	49.8063	3730239.94	0.0017	0.1065
Mg	24	3	He	7187.096	6.0643	458941.28	0.0008	0.004846
Mg	24	3	He	7226.778	6.0978	454115.27	0.0008	0.004846
Mg	24	3	He	7151.392	6.0342	451930.66	0.0008	0.004846
Al	27	3	He	5.451	0.0024	180.01	0.0002	0.001063
Al	27	3	He	8.948	0.0032	240.01	0.0002	0.001063
Al	27	3	He	5.001	0.0023	170.01	0.0002	0.001063
K	39	3	He	2587.839	1.5727	119018.88	0.0006	0.1436
K	39	3	He	2532.013	1.5418	114825.38	0.0006	0.1436
K	39	3	He	2490.699	1.519	113767.94	0.0006	0.1436
Ca	44	3	He	45292.08	1.4084	106584.84	0	0.001611
Ca	44	3	He	45138.867	1.4036	104531.01	0	0.001611
Ca	44	3	He	45425.086	1.4125	105789.68	0	0.001611
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	0.515	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	0.506	0.0004	30.00	0.0003	0.0002737
V	51	3	He	0.115	0.0087	656.02	0.0117	0.007326
V	51	3	He	0.062	0.0081	600.02	0.0117	0.007326
V	51	3	He	0.111	0.0086	646.02	0.0117	0.007326
Cr	52	3	He	-0.027	0.025	1890.18	0.0152	0.02538
Cr	52	3	He	-0.009	0.0252	1880.18	0.0152	0.02538
Cr	52	3	He	0.061	0.0263	1970.19	0.0152	0.02538
Mn	55	3	He	1118.929	6.6182	500863.55	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1162.02	6.8726	511818.82	0.0059	0.01385
Mn	55	3	He	1128.296	6.6735	499813.55	0.0059	0.01385
Fe	57	3	He	54.441	0.0197	1490.13	0.0003	0.003918
Fe	57	3	He	62.96	0.0222	1650.18	0.0003	0.003918
Fe	57	3	He	62.527	0.022	1650.15	0.0003	0.003918
Co	59	3	He	0.432	0.0163	1230.11	0.0305	0.003084
Co	59	3	He	0.572	0.0205	1530.14	0.0305	0.003084
Co	59	3	He	0.512	0.0187	1400.13	0.0305	0.003084
Ni	60	3	He	1.08	0.0185	1400.14	0.0088	0.009003
Ni	60	3	He	1.16	0.0192	1430.12	0.0088	0.009003
Ni	60	3	He	1.193	0.0195	1460.12	0.0088	0.009003
Cu	63	3	He	0.687	0.0221	1670.15	0.0249	0.004937
Cu	63	3	He	0.798	0.0248	1850.18	0.0249	0.004937
Cu	63	3	He	0.798	0.0248	1860.20	0.0249	0.004937
Zn	66	3	He	5.938	0.0194	1470.13	0.0025	0.004836
Zn	66	3	He	6.832	0.0216	1610.15	0.0025	0.004836
Zn	66	3	He	5.913	0.0194	1450.14	0.0025	0.004836
As	75	3	He	0.753	0.0017	132.00	0.0017	0.0004347
As	75	3	He	0.507	0.0013	98.00	0.0017	0.0004347
As	75	3	He	0.702	0.0017	124.00	0.0017	0.0004347
Sr	88	3	He	156.178	1.2216	79079.26	0.0078	0.0007762
Sr	88	3	He	157.502	1.232	78607.34	0.0078	0.0007762
Sr	88	3	He	154.152	1.2058	76877.46	0.0078	0.0007762
Mo	98	3	He	1.05	0.0236	1530.14	0.022	0.0005162
Mo	98	3	He	1.051	0.0237	1510.14	0.022	0.0005162
Mo	98	3	He	0.945	0.0213	1360.12	0.022	0.0005162
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.099	0.017	1100.10	0.0143	0.01559
Sn	120	3	He	0.358	0.0207	1320.11	0.0143	0.01559
Sn	120	3	He	0.26	0.0193	1230.10	0.0143	0.01559
Sb	121	3	He	0.228	0.0031	200.01	0.0124	0.000258
Sb	121	3	He	0.143	0.002	130.01	0.0124	0.000258
Sb	121	3	He	0.182	0.0025	160.01	0.0124	0.000258
Ba	137	3	He	19.179	0.0842	5451.29	0.0044	0.000309
Ba	137	3	He	18.455	0.081	5171.11	0.0044	0.000309
Ba	137	3	He	18.72	0.0822	5241.20	0.0044	0.000309
Tl	205	3	He	0.049	0.0024	520.03	0.0276	0.001005
Tl	205	3	He	0.015	0.0014	310.02	0.0276	0.001005
Tl	205	3	He	0.038	0.0021	450.02	0.0276	0.001005
Pb	208	3	He	-0.022	0.0014	220.01	0.0364	0.002176
Pb	208	3	He	0.002	0.0023	260.01	0.0364	0.002176
Pb	208	3	He	-0.013	0.0017	150.01	0.0364	0.002176
U	238	3	He	0.459	0.0195	4300.89	0.0421	0.00024
U	238	3	He	0.449	0.0191	4140.84	0.0421	0.00024
U	238	3	He	0.407	0.0173	3800.69	0.0421	0.00024
Sc	45	1	No Gas			3231641.20		
Sc	45	1	No Gas			3336300.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3348466.51		
Ge	72	1	No Gas			1437390.29		
Ge	72	1	No Gas			1474336.38		
Ge	72	1	No Gas			1490487.01		
Sc	45	2	H2			194679.92		
Sc	45	2	H2			190928.86		
Sc	45	2	H2			202582.83		
Ge	72	2	H2			163457.97		
Ge	72	2	H2			159585.14		
Ge	72	2	H2			166381.77		
In	115	2	H2			437012.38		
In	115	2	H2			431419.76		
In	115	2	H2			452728.74		
Sc	45	3	He			41519.76		
Sc	45	3	He			41368.94		
Sc	45	3	He			41278.83		
Ge	72	3	He			75679.21		
Ge	72	3	He			74472.55		
Ge	72	3	He			74894.93		
In	115	3	He			64740.89		
In	115	3	He			63815.84		
In	115	3	He			63766.10		
Tb	159	3	He			284125.29		
Tb	159	3	He			282020.39		
Tb	159	3	He			284502.89		
Bi	209	3	He			220171.03		
Bi	209	3	He			216389.82		
Bi	209	3	He			219168.92		

Quantitation Report

Data File Name	111SMPL.d
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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

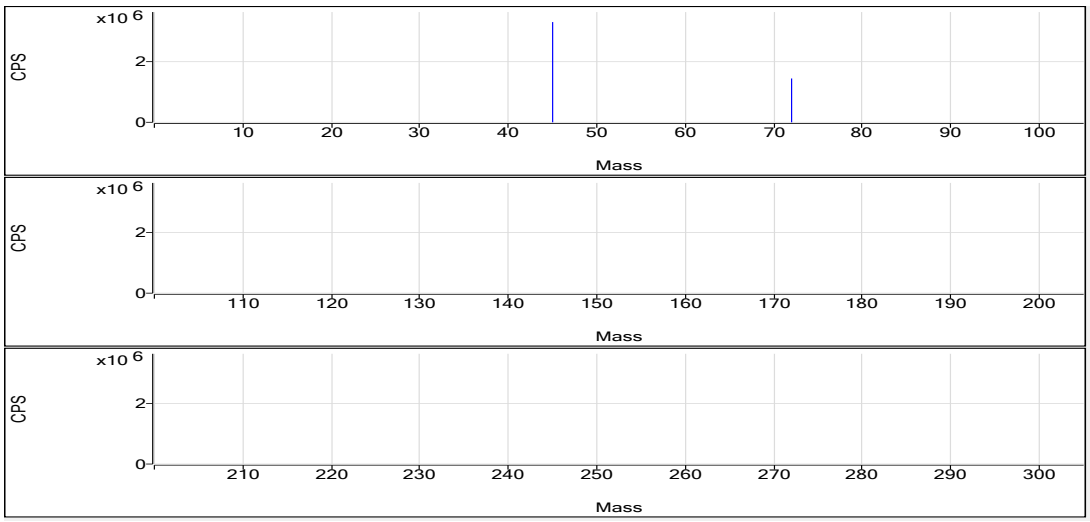
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.007	ppb	47.0	80.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.012	ppb	144.5	2.44	0.0000	Pulse	1.5000	3
Na	23	72	He	30.549	ppb	23.9	11428.10	0.1589	Pulse	0.1000	3
Mg	24	72	He	22.139	ppb	13.6	1690.16	0.0235	Pulse	0.1000	3
Al	27	72	He	4.614	ppb	35.2	156.68	0.0022	Pulse	0.1000	3
K	39	72	He	11.859	ppb	135.4	10800.99	0.1502	Pulse	0.1000	3
Ca	44	72	He	68.778	ppb	34.5	270.01	0.0037	Pulse	0.1000	3
Ti	47	72	He	0.572	ppb	97.0	30.00	0.0004	Pulse	0.1000	3
V	51	72	He	0.064	ppb	30.2	581.35	0.0081	Pulse	0.5000	3
Cr	52	72	He	0.025	ppb	174.8	1853.52	0.0258	Pulse	0.1000	3
Mn	55	72	He	1.059	ppb	13.3	1446.79	0.0201	Pulse	0.1000	3
Fe	57	72	He	4.580	ppb	81.6	376.69	0.0052	Pulse	0.1000	3
Co	59	72	He	0.055	ppb	49.0	343.35	0.0048	Pulse	0.1000	3
Ni	60	72	He	0.766	ppb	18.2	1133.41	0.0157	Pulse	0.1000	3
Cu	63	72	He	0.056	ppb	51.7	456.69	0.0063	Pulse	0.1000	3
Zn	66	72	He	-0.366	ppb	N/A	283.35	0.0039	Pulse	0.1000	3
As	75	72	He	0.054	ppb	59.1	38.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.373	ppb	68.0	236.68	0.0037	Pulse	0.1000	3
Mo	98	115	He	0.012	ppb	3.0	50.00	0.0008	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	78.3	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	229.7	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.119	ppb	144.4	1110.09	0.0173	Pulse	0.1000	3
Sb	121	115	He	0.008	ppb	225.2	23.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.262	ppb	40.2	93.33	0.0015	Pulse	0.1000	3
Tl	205	209	He	0.065	ppb	2.5	620.04	0.0028	Pulse	0.1000	3
Pb	208	209	He	-0.007	ppb	N/A	423.35	0.0019	Pulse	0.1000	3
U	238	209	He	0.010	ppb	31.9	146.68	0.0007	Pulse	0.1000	3

ISTD Table:

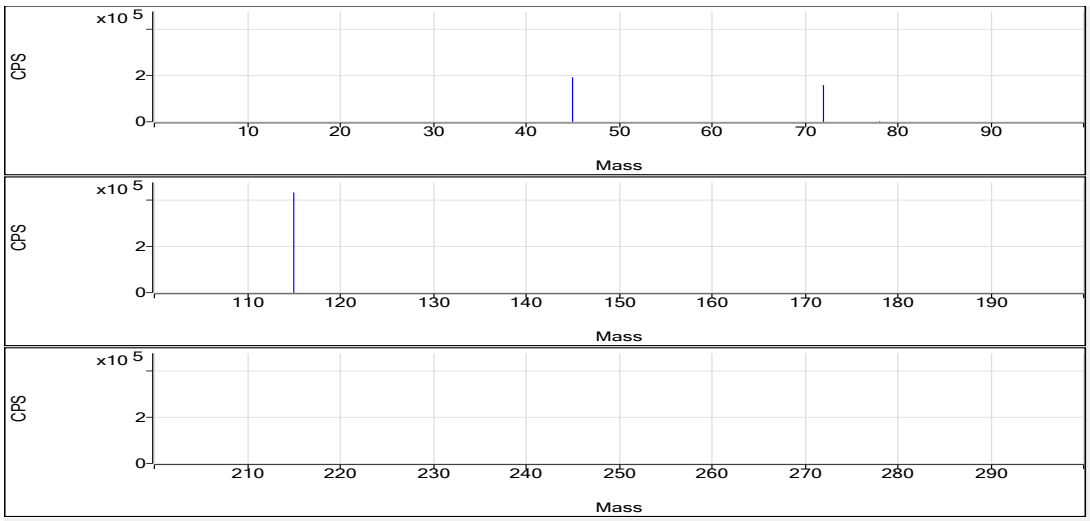
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3295631.51	2.7	101.7	Pulse	0.1000	3
No Gas	Ge	72	1440971.80	2.9	100.1	Pulse	0.1000	3
H2	Sc	45	192043.58	2.9	98.3	Pulse	0.1000	3
H2	Ge	72	158294.98	2.3	97.1	Pulse	0.1000	3
H2	In	115	432845.98	2.2	99.9	Pulse	0.1000	3
He	Sc	45	42131.31	1.2	105.4	Pulse	0.1000	3
He	Ge	72	71953.51	1.3	99.5	Pulse	0.1000	3
He	In	115	64286.32	1.0	99.5	Pulse	0.1000	3
He	Tb	159	284215.39	2.1	99.4	Pulse	0.1000	3
He	Bi	209	221795.58	0.6	99.8	Pulse	0.1000	3

No Gas

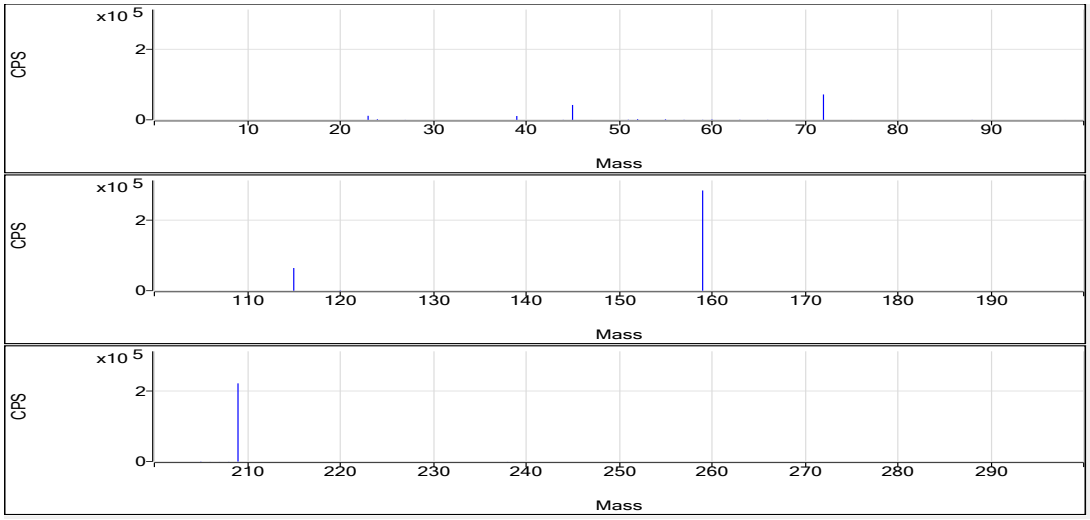


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.008	0.0001	80.00	0.0013	4.694E-05
Be	9	1	No Gas	0.003	0.0001	74.00	0.0013	4.694E-05
Be	9	1	No Gas	0.009	0.0001	86.00	0.0013	4.694E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.027	0	3.33	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Na	23	3	He	38.949	0.1734	12285.49	0.0017	0.1065
Na	23	3	He	25.905	0.151	10914.38	0.0017	0.1065
Na	23	3	He	26.792	0.1525	11084.44	0.0017	0.1065
Mg	24	3	He	25.219	0.0261	1850.18	0.0008	0.004846
Mg	24	3	He	21.979	0.0234	1690.16	0.0008	0.004846
Mg	24	3	He	19.218	0.021	1530.13	0.0008	0.004846
Al	27	3	He	3.782	0.002	140.01	0.0002	0.001063
Al	27	3	He	6.484	0.0026	190.01	0.0002	0.001063
Al	27	3	He	3.576	0.0019	140.01	0.0002	0.001063
K	39	3	He	29.786	0.1601	11344.73	0.0006	0.1436
K	39	3	He	6.984	0.1475	10664.26	0.0006	0.1436
K	39	3	He	-1.192	0.143	10393.99	0.0006	0.1436
Ca	44	3	He	43.548	0.003	210.01	0	0.001611
Ca	44	3	He	90.636	0.0044	320.01	0	0.001611
Ca	44	3	He	72.15	0.0039	280.01	0	0.001611
Ti	47	3	He	0.597	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	1.115	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	0.006	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.044	0.0078	556.01	0.0117	0.007326
V	51	3	He	0.083	0.0083	600.02	0.0117	0.007326
V	51	3	He	0.065	0.0081	588.02	0.0117	0.007326
Cr	52	3	He	0.075	0.0265	1880.19	0.0152	0.02538
Cr	52	3	He	0.004	0.0255	1840.18	0.0152	0.02538
Cr	52	3	He	-0.005	0.0253	1840.18	0.0152	0.02538
Mn	55	3	He	1	0.0198	1400.11	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.957	0.0195	1410.12	0.0059	0.01385
Mn	55	3	He	1.219	0.021	1530.15	0.0059	0.01385
Fe	57	3	He	8.884	0.0065	460.02	0.0003	0.003918
Fe	57	3	He	2.71	0.0047	340.02	0.0003	0.003918
Fe	57	3	He	2.147	0.0045	330.02	0.0003	0.003918
Co	59	3	He	0.079	0.0055	390.02	0.0305	0.003084
Co	59	3	He	0.026	0.0039	280.01	0.0305	0.003084
Co	59	3	He	0.061	0.005	360.02	0.0305	0.003084
Ni	60	3	He	0.613	0.0144	1020.07	0.0088	0.009003
Ni	60	3	He	0.801	0.016	1160.08	0.0088	0.009003
Ni	60	3	He	0.885	0.0168	1220.09	0.0088	0.009003
Cu	63	3	He	0.023	0.0055	390.02	0.0249	0.004937
Cu	63	3	He	0.074	0.0068	490.03	0.0249	0.004937
Cu	63	3	He	0.072	0.0067	490.03	0.0249	0.004937
Zn	66	3	He	-0.36	0.004	280.02	0.0025	0.004836
Zn	66	3	He	-0.786	0.0029	210.01	0.0025	0.004836
Zn	66	3	He	0.047	0.005	360.02	0.0025	0.004836
As	75	3	He	0.091	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.036	0.0005	36.00	0.0017	0.0004347
As	75	3	He	0.035	0.0005	36.00	0.0017	0.0004347
Sr	88	3	He	0.137	0.0018	120.00	0.0078	0.0007762
Sr	88	3	He	0.641	0.0058	370.02	0.0078	0.0007762
Sr	88	3	He	0.341	0.0034	220.01	0.0078	0.0007762
Mo	98	3	He	0.011	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.017	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Sn	120	3	He	-0.069	0.0146	950.07	0.0143	0.01559
Sn	120	3	He	0.157	0.0178	1140.09	0.0143	0.01559
Sn	120	3	He	0.269	0.0194	1240.10	0.0143	0.01559
Sb	121	3	He	0.029	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	0.14	0.0009	60.00	0.0044	0.000309
Ba	137	3	He	0.322	0.0017	110.00	0.0044	0.000309
Ba	137	3	He	0.323	0.0017	110.00	0.0044	0.000309
Tl	205	3	He	0.066	0.0028	630.04	0.0276	0.001005
Tl	205	3	He	0.063	0.0027	610.04	0.0276	0.001005
Tl	205	3	He	0.065	0.0028	620.04	0.0276	0.001005
Pb	208	3	He	-0.008	0.0019	260.01	0.0364	0.002176
Pb	208	3	He	0.003	0.0023	280.01	0.0364	0.002176
Pb	208	3	He	-0.017	0.0015	170.01	0.0364	0.002176
U	238	3	He	0.013	0.0008	180.01	0.0421	0.00024
U	238	3	He	0.009	0.0006	140.01	0.0421	0.00024
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
Sc	45	1	No Gas			3198494.95		
Sc	45	1	No Gas			3367673.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3320725.89		
Ge	72	1	No Gas			1394479.67		
Ge	72	1	No Gas			1453838.42		
Ge	72	1	No Gas			1474597.32		
Sc	45	2	H2			188163.10		
Sc	45	2	H2			189559.39		
Sc	45	2	H2			198408.24		
Ge	72	2	H2			156239.69		
Ge	72	2	H2			156158.10		
Ge	72	2	H2			162487.16		
In	115	2	H2			431728.63		
In	115	2	H2			423925.58		
In	115	2	H2			442883.74		
Sc	45	3	He			42662.91		
Sc	45	3	He			41700.28		
Sc	45	3	He			42030.75		
Ge	72	3	He			70865.14		
Ge	72	3	He			72301.39		
Ge	72	3	He			72694.01		
In	115	3	He			65041.91		
In	115	3	He			63967.13		
In	115	3	He			63875.90		
Tb	159	3	He			287136.48		
Tb	159	3	He			288015.13		
Tb	159	3	He			277494.55		
Bi	209	3	He			222815.19		
Bi	209	3	He			222245.74		
Bi	209	3	He			220325.82		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

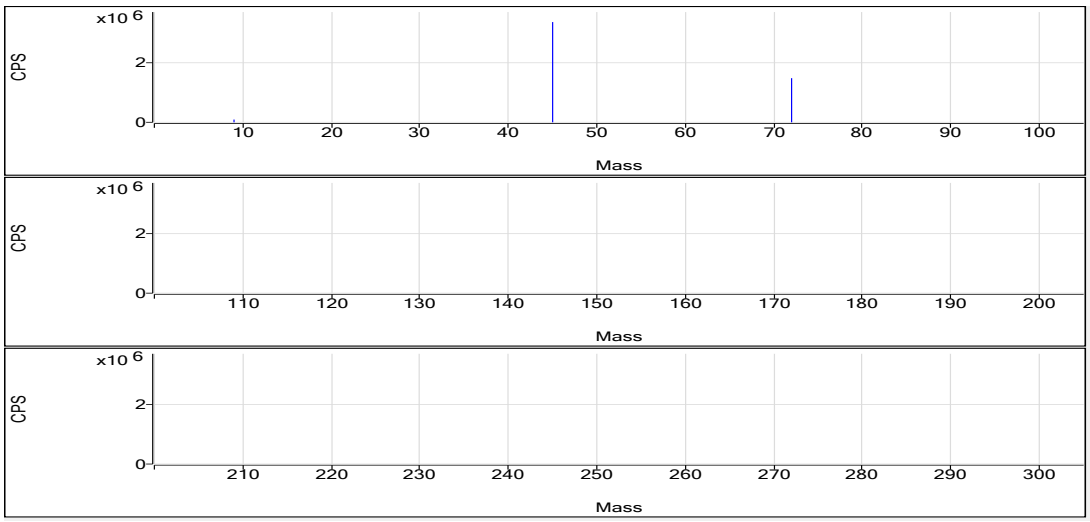
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	47.015	ppb	4.0	90929.75	0.0618	Pulse	0.5000	3
Se	78	72	H2	51.118	ppb	4.4	3243.93	0.0199	Pulse	1.5000	3
Na	23	72	He	5297.868	ppb	1.0	677191.08	9.2072	Pulse	0.1000	3
Mg	24	72	He	5310.185	ppb	1.1	329638.86	4.4819	Pulse	0.1000	3
Al	27	72	He	5177.233	ppb	2.0	91991.28	1.2508	Pulse	0.1000	3
K	39	72	He	5236.493	ppb	0.4	223257.36	3.0353	Pulse	0.1000	3
Ca	44	72	He	5150.797	ppb	4.2	11885.16	0.1616	Pulse	0.1000	3
Ti	47	72	He	5247.392	ppb	1.8	96802.36	1.3162	Pulse	0.1000	3
V	51	72	He	520.540	ppb	1.1	448391.98	6.0965	Pulse	0.5000	3
Cr	52	72	He	522.240	ppb	1.6	586732.85	7.9777	Pulse	0.1000	3
Mn	55	72	He	516.323	ppb	1.0	225166.96	3.0614	Pulse	0.1000	3
Fe	57	72	He	5134.922	ppb	2.8	109691.17	1.4916	Pulse	0.1000	3
Co	59	72	He	516.515	ppb	1.1	1159301.39	15.7622	Pulse	0.1000	3
Ni	60	72	He	518.120	ppb	1.2	335749.84	4.5650	Pulse	0.1000	3
Cu	63	72	He	516.668	ppb	1.6	947953.76	12.8891	Pulse	0.1000	3
Zn	66	72	He	513.718	ppb	1.9	93176.56	1.2669	Pulse	0.1000	3
As	75	72	He	509.845	ppb	0.6	65251.41	0.8871	Pulse	0.5000	3
Sr	88	115	He	51.112	ppb	2.6	25753.94	0.4003	Pulse	0.1000	3
Mo	98	115	He	50.264	ppb	0.4	71256.04	1.1074	Pulse	0.1000	3
Ag	107	115	He	50.260	ppb	1.8	147158.74	2.2873	Pulse	0.1000	3
Cd	111	115	He	50.257	ppb	2.0	15524.60	0.2413	Pulse	0.5000	3
Sn	120	115	He	50.636	ppb	1.7	47451.97	0.7375	Pulse	0.1000	3
Sb	121	115	He	50.917	ppb	0.5	40656.85	0.6319	Pulse	0.1000	3
Ba	137	115	He	491.806	ppb	0.7	138452.75	2.1519	Pulse	0.1000	3
Tl	205	209	He	50.886	ppb	1.2	310930.82	1.4077	Pulse	0.1000	3
Pb	208	209	He	50.754	ppb	1.3	408507.16	1.8495	Pulse	0.1000	3
U	238	209	He	50.301	ppb	0.9	467457.86	2.1163	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3341692.14	1.3	103.1	Pulse	0.1000	3
No Gas	Ge	72	1471283.00	1.5	102.2	Pulse	0.1000	3
H2	Sc	45	197031.42	3.1	100.8	Pulse	0.1000	3
H2	Ge	72	162942.70	1.1	100.0	Pulse	0.1000	3
H2	In	115	441623.11	1.4	101.9	Pulse	0.1000	3
He	Sc	45	42174.87	0.5	105.5	Pulse	0.1000	3
He	Ge	72	73555.11	1.1	101.8	Pulse	0.1000	3
He	In	115	64343.32	1.0	99.6	Pulse	0.1000	3
He	Tb	159	284797.38	0.6	99.6	Pulse	0.1000	3
He	Bi	209	220900.83	1.4	99.4	Pulse	0.1000	3

No Gas



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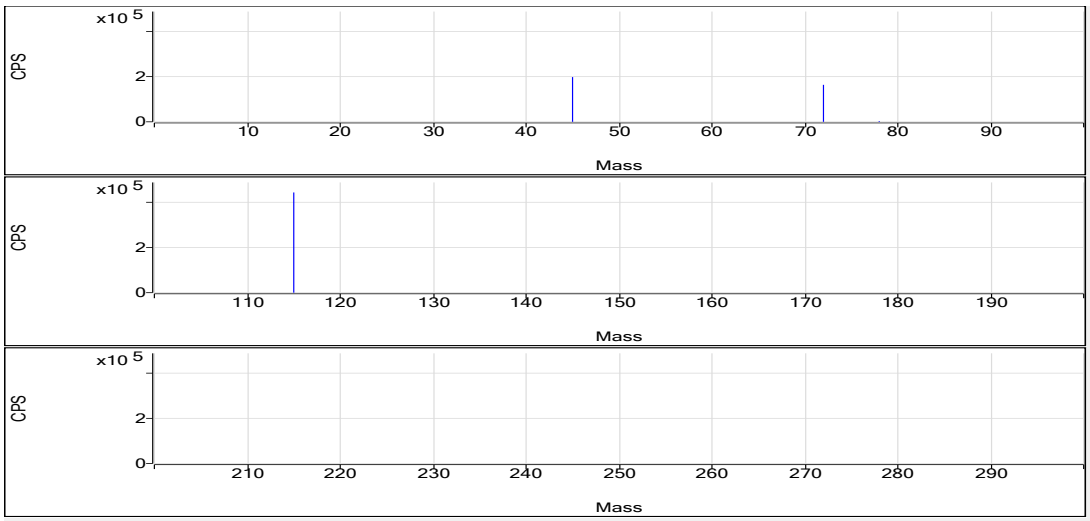
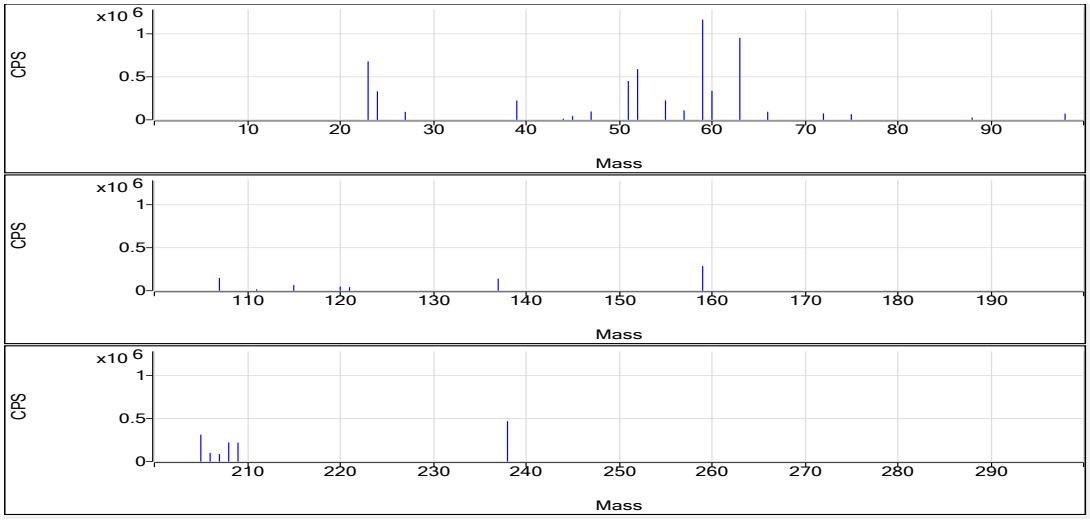


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.865	0.0629	91718.29	0.0013	4.694E-05
Be	9	1	No Gas	44.87	0.059	88316.30	0.0013	4.694E-05
Be	9	1	No Gas	48.311	0.0635	92754.65	0.0013	4.694E-05
Se	78	2	H2	52.99	0.0206	3325.05	0.0004	1.089E-05
Se	78	2	H2	51.728	0.0202	3287.05	0.0004	1.089E-05
Se	78	2	H2	48.637	0.0189	3119.68	0.0004	1.089E-05
Na	23	3	He	5250.932	9.1266	677304.29	0.0017	0.1065
Na	23	3	He	5286.457	9.1876	677949.83	0.0017	0.1065
Na	23	3	He	5356.217	9.3075	676319.13	0.0017	0.1065
Mg	24	3	He	5251.952	4.4328	328964.96	0.0008	0.004846
Mg	24	3	He	5309.1	4.481	330646.67	0.0008	0.004846
Mg	24	3	He	5369.503	4.5319	329304.96	0.0008	0.004846
Al	27	3	He	5078.603	1.227	91058.68	0.0002	0.001063
Al	27	3	He	5172.707	1.2497	92216.29	0.0002	0.001063
Al	27	3	He	5280.39	1.2757	92698.86	0.0002	0.001063
K	39	3	He	5210.585	3.021	224193.40	0.0006	0.1436
K	39	3	He	5252.671	3.0442	224631.44	0.0006	0.1436
K	39	3	He	5246.225	3.0407	220947.24	0.0006	0.1436
Ca	44	3	He	5278.012	0.1655	12285.44	0	0.001611
Ca	44	3	He	4898.059	0.1537	11344.66	0	0.001611
Ca	44	3	He	5276.32	0.1655	12025.37	0	0.001611
Ti	47	3	He	5143.32	1.2901	95741.73	0.0003	0.0002737
Ti	47	3	He	5266.377	1.321	97473.61	0.0003	0.0002737
Ti	47	3	He	5332.48	1.3375	97191.75	0.0003	0.0002737
V	51	3	He	516.315	6.0471	448763.69	0.0117	0.007326
V	51	3	He	518.452	6.0721	448052.53	0.0117	0.007326
V	51	3	He	526.852	6.1703	448359.72	0.0117	0.007326
Cr	52	3	He	516.049	7.8834	585043.23	0.0152	0.02538
Cr	52	3	He	519.214	7.9316	585267.06	0.0152	0.02538
Cr	52	3	He	531.457	8.118	589888.27	0.0152	0.02538
Mn	55	3	He	513.041	3.042	225755.45	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	513.891	3.0471	224840.21	0.0059	0.01385
Mn	55	3	He	522.037	3.0951	224905.23	0.0059	0.01385
Fe	57	3	He	5013.376	1.4564	108079.81	0.0003	0.003918
Fe	57	3	He	5098.225	1.4809	109278.15	0.0003	0.003918
Fe	57	3	He	5293.165	1.5374	111715.55	0.0003	0.003918
Co	59	3	He	510.433	15.5766	1155973.50	0.0305	0.003084
Co	59	3	He	517.095	15.7799	1164389.44	0.0305	0.003084
Co	59	3	He	522.016	15.93	1157541.23	0.0305	0.003084
Ni	60	3	He	513.066	4.5205	335478.90	0.0088	0.009003
Ni	60	3	He	516.399	4.5499	335730.46	0.0088	0.009003
Ni	60	3	He	524.896	4.6246	336040.15	0.0088	0.009003
Cu	63	3	He	510.011	12.7231	944208.89	0.0249	0.004937
Cu	63	3	He	514.238	12.8285	946609.75	0.0249	0.004937
Cu	63	3	He	525.755	13.1157	953042.64	0.0249	0.004937
Zn	66	3	He	508.771	1.2548	93118.87	0.0025	0.004836
Zn	66	3	He	507.595	1.2519	92375.19	0.0025	0.004836
Zn	66	3	He	524.787	1.2941	94035.62	0.0025	0.004836
As	75	3	He	506.443	0.8812	65397.54	0.0017	0.0004347
As	75	3	He	510.705	0.8886	65571.98	0.0017	0.0004347
As	75	3	He	512.388	0.8916	64784.71	0.0017	0.0004347
Sr	88	3	He	52.341	0.4099	26094.62	0.0078	0.0007762
Sr	88	3	He	49.71	0.3894	25253.00	0.0078	0.0007762
Sr	88	3	He	51.284	0.4017	25914.21	0.0078	0.0007762
Mo	98	3	He	50.179	1.1055	70374.74	0.022	0.0005162
Mo	98	3	He	50.51	1.1128	72174.41	0.022	0.0005162
Mo	98	3	He	50.104	1.1039	71218.97	0.022	0.0005162
Ag	107	3	He	51.264	2.333	148510.12	0.0455	0.0004641
Ag	107	3	He	50.04	2.2773	147700.52	0.0455	0.0004641
Ag	107	3	He	49.475	2.2516	145265.58	0.0455	0.0004641
Cd	111	3	He	50.9	0.2444	15556.64	0.0048	5.152E-05
Cd	111	3	He	49.108	0.2358	15292.36	0.0048	5.152E-05
Cd	111	3	He	50.764	0.2437	15724.81	0.0048	5.152E-05
Sn	120	3	He	51.3	0.747	47552.74	0.0143	0.01559
Sn	120	3	He	49.635	0.7233	46909.51	0.0143	0.01559
Sn	120	3	He	50.972	0.7423	47893.66	0.0143	0.01559
Sb	121	3	He	51.039	0.6334	40319.10	0.0124	0.000258
Sb	121	3	He	50.629	0.6283	40750.42	0.0124	0.000258
Sb	121	3	He	51.085	0.634	40901.04	0.0124	0.000258
Ba	137	3	He	494.077	2.1618	137611.43	0.0044	0.000309
Ba	137	3	He	487.737	2.1341	138409.25	0.0044	0.000309
Ba	137	3	He	493.603	2.1597	139337.57	0.0044	0.000309
Tl	205	3	He	51.512	1.425	310144.21	0.0276	0.001005
Tl	205	3	He	50.829	1.4061	311450.23	0.0276	0.001005
Tl	205	3	He	50.317	1.392	311198.02	0.0276	0.001005
Pb	208	3	He	51.513	1.8771	219959.76	0.0364	0.002176
Pb	208	3	He	50.471	1.8392	220412.67	0.0364	0.002176
Pb	208	3	He	50.279	1.8322	221558.34	0.0364	0.002176
U	238	3	He	50.795	2.137	465108.35	0.0421	0.00024
U	238	3	He	49.968	2.1023	465639.52	0.0421	0.00024
U	238	3	He	50.142	2.1096	471625.70	0.0421	0.00024
Sc	45	1	No Gas			3326582.14		
Sc	45	1	No Gas			3391313.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3307180.89		
Ge	72	1	No Gas			1457149.35		
Ge	72	1	No Gas			1496684.82		
Ge	72	1	No Gas			1460014.82		
Sc	45	2	H2			190412.71		
Sc	45	2	H2			198389.90		
Sc	45	2	H2			202291.66		
Ge	72	2	H2			161071.80		
Ge	72	2	H2			163115.12		
Ge	72	2	H2			164641.17		
In	115	2	H2			440252.42		
In	115	2	H2			436283.98		
In	115	2	H2			448332.92		
Sc	45	3	He			41921.14		
Sc	45	3	He			42251.47		
Sc	45	3	He			42352.00		
Ge	72	3	He			74211.97		
Ge	72	3	He			73789.31		
Ge	72	3	He			72664.05		
In	115	3	He			64027.08		
In	115	3	He			65223.16		
In	115	3	He			64890.09		
Tb	159	3	He			286565.70		
Tb	159	3	He			284949.25		
Tb	159	3	He			282877.18		
Bi	209	3	He			217641.74		
Bi	209	3	He			221495.19		
Bi	209	3	He			223565.56		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:45:45
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

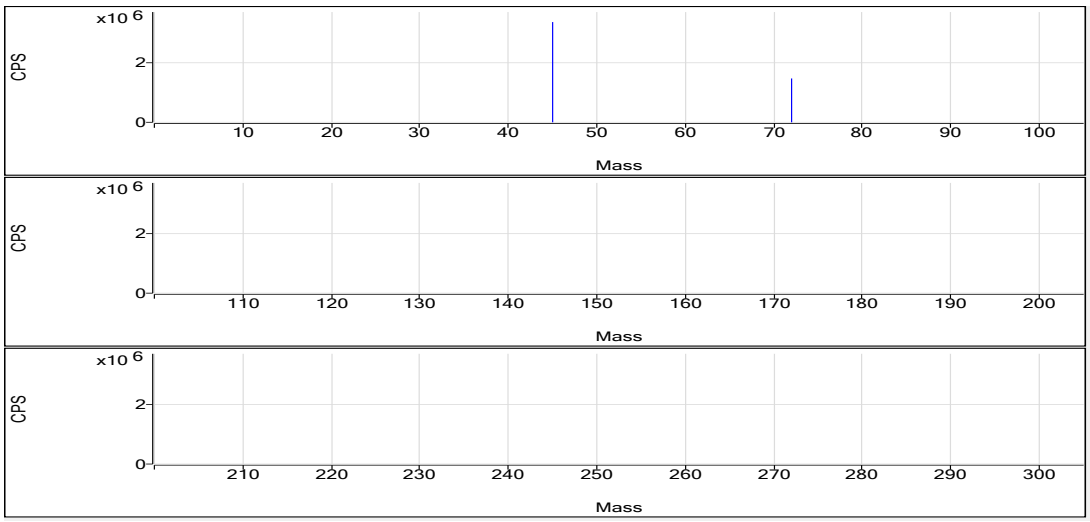
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.032	ppb	41.3	130.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.065	ppb	37.1	5.78	0.0000	Pulse	1.5000	3
Na	23	72	He	16.659	ppb	13.9	9890.21	0.1351	Pulse	0.1000	3
Mg	24	72	He	17.078	ppb	17.8	1410.13	0.0192	Pulse	0.1000	3
Al	27	72	He	1.435	ppb	78.6	103.34	0.0014	Pulse	0.1000	3
K	39	72	He	1.859	ppb	449.8	10597.49	0.1447	Pulse	0.1000	3
Ca	44	72	He	33.120	ppb	55.1	193.34	0.0026	Pulse	0.1000	3
Ti	47	72	He	1.816	ppb	19.7	53.33	0.0007	Pulse	0.1000	3
V	51	72	He	0.201	ppb	9.2	708.69	0.0097	Pulse	0.5000	3
Cr	52	72	He	0.158	ppb	61.2	2036.88	0.0278	Pulse	0.1000	3
Mn	55	72	He	0.624	ppb	39.9	1283.44	0.0175	Pulse	0.1000	3
Fe	57	72	He	5.028	ppb	49.9	393.35	0.0054	Pulse	0.1000	3
Co	59	72	He	0.286	ppb	21.9	866.73	0.0118	Pulse	0.1000	3
Ni	60	72	He	0.895	ppb	15.7	1236.77	0.0169	Pulse	0.1000	3
Cu	63	72	He	0.215	ppb	19.7	753.38	0.0103	Pulse	0.1000	3
Zn	66	72	He	-0.172	ppb	N/A	323.35	0.0044	Pulse	0.1000	3
As	75	72	He	0.289	ppb	27.8	68.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.230	ppb	45.9	166.68	0.0026	Pulse	0.1000	3
Mo	98	115	He	0.042	ppb	26.5	93.33	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.022	ppb	73.5	93.34	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	113.8	10.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.193	ppb	45.5	1183.42	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.121	ppb	43.7	113.34	0.0018	Pulse	0.1000	3
Ba	137	115	He	0.319	ppb	11.2	110.00	0.0017	Pulse	0.1000	3
Tl	205	209	He	0.245	ppb	11.7	1720.18	0.0078	Pulse	0.1000	3
Pb	208	209	He	0.007	ppb	256.0	536.69	0.0024	Pulse	0.1000	3
U	238	209	He	0.021	ppb	26.3	250.01	0.0011	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3351835.06	0.8	103.4	Pulse	0.1000	3
No Gas	Ge	72	1466041.75	1.1	101.8	Pulse	0.1000	3
H2	Sc	45	194390.72	2.0	99.5	Pulse	0.1000	3
H2	Ge	72	160785.91	2.2	98.6	Pulse	0.1000	3
H2	In	115	441370.71	2.4	101.9	Pulse	0.1000	3
He	Sc	45	42070.97	0.9	105.2	Pulse	0.1000	3
He	Ge	72	73236.77	1.7	101.3	Pulse	0.1000	3
He	In	115	64550.01	0.9	99.9	Pulse	0.1000	3
He	Tb	159	281469.72	0.4	98.4	Pulse	0.1000	3
He	Bi	209	220779.45	0.6	99.4	Pulse	0.1000	3

No Gas



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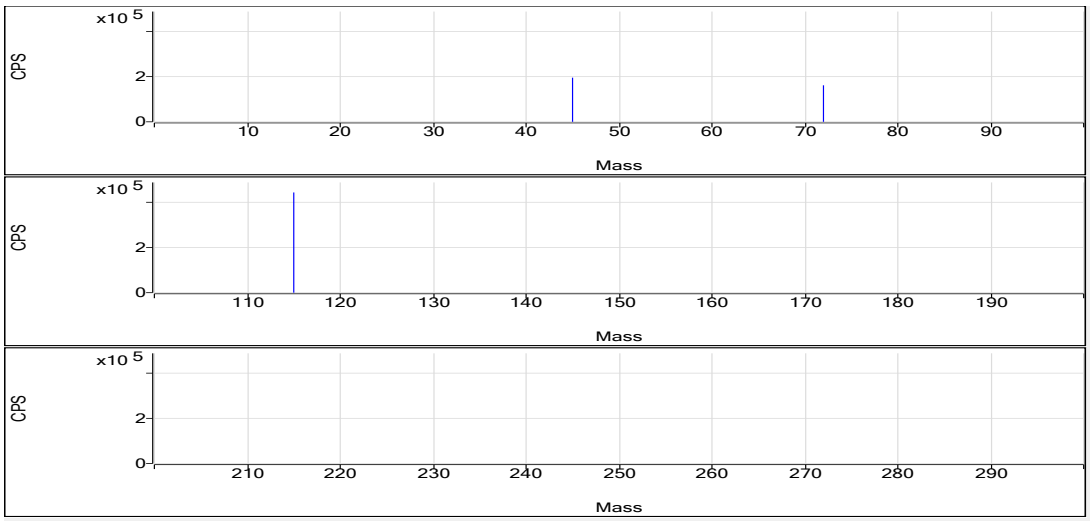
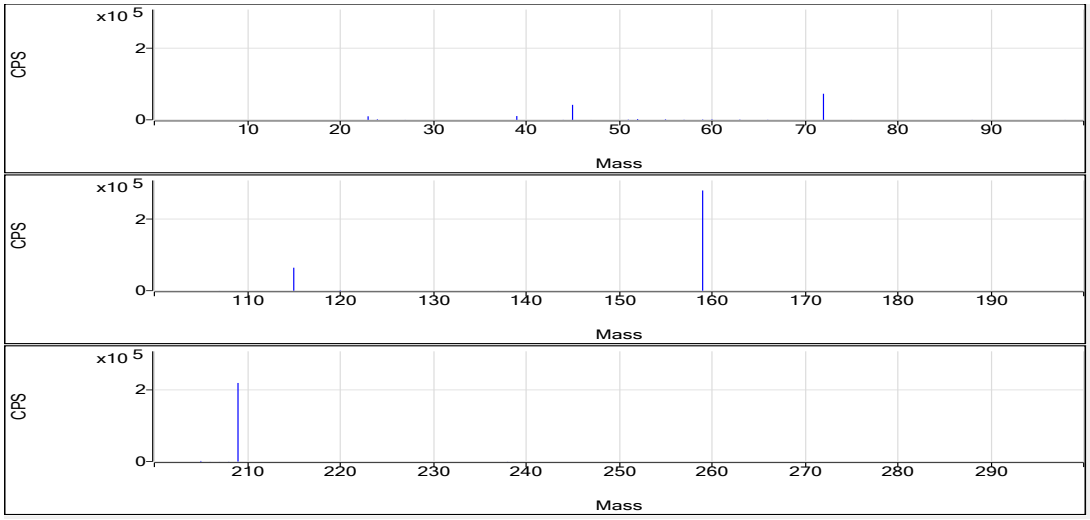


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.045	0.0001	156.00	0.0013	4.694E-05
Be	9	1	No Gas	0.032	0.0001	132.00	0.0013	4.694E-05
Be	9	1	No Gas	0.019	0.0001	104.00	0.0013	4.694E-05
Se	78	2	H2	0.058	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.091	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.045	0	4.67	0.0004	1.089E-05
Na	23	3	He	15.952	0.1339	9983.66	0.0017	0.1065
Na	23	3	He	19.246	0.1395	10053.71	0.0017	0.1065
Na	23	3	He	14.779	0.1318	9633.27	0.0017	0.1065
Mg	24	3	He	16.836	0.019	1420.13	0.0008	0.004846
Mg	24	3	He	14.17	0.0168	1210.11	0.0008	0.004846
Mg	24	3	He	20.228	0.0219	1600.15	0.0008	0.004846
Al	27	3	He	1.708	0.0015	110.01	0.0002	0.001063
Al	27	3	He	0.196	0.0011	80.00	0.0002	0.001063
Al	27	3	He	2.401	0.0016	120.00	0.0002	0.001063
K	39	3	He	10.473	0.1494	11144.58	0.0006	0.1436
K	39	3	He	1.334	0.1444	10403.94	0.0006	0.1436
K	39	3	He	-6.228	0.1402	10243.96	0.0006	0.1436
Ca	44	3	He	25.841	0.0024	180.01	0	0.001611
Ca	44	3	He	19.626	0.0022	160.01	0	0.001611
Ca	44	3	He	53.893	0.0033	240.01	0	0.001611
Ti	47	3	He	1.582	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	2.229	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	1.637	0.0007	50.00	0.0003	0.0002737
V	51	3	He	0.206	0.0097	726.02	0.0117	0.007326
V	51	3	He	0.18	0.0094	680.02	0.0117	0.007326
V	51	3	He	0.216	0.0099	720.02	0.0117	0.007326
Cr	52	3	He	0.27	0.0295	2200.23	0.0152	0.02538
Cr	52	3	He	0.101	0.0269	1940.20	0.0152	0.02538
Cr	52	3	He	0.104	0.027	1970.22	0.0152	0.02538
Mn	55	3	He	0.379	0.0161	1200.09	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.616	0.0175	1260.10	0.0059	0.01385
Mn	55	3	He	0.876	0.019	1390.12	0.0059	0.01385
Fe	57	3	He	4.99	0.0054	400.02	0.0003	0.003918
Fe	57	3	He	7.554	0.0061	440.02	0.0003	0.003918
Fe	57	3	He	2.539	0.0047	340.01	0.0003	0.003918
Co	59	3	He	0.352	0.0138	1030.07	0.0305	0.003084
Co	59	3	He	0.226	0.01	720.05	0.0305	0.003084
Co	59	3	He	0.28	0.0116	850.06	0.0305	0.003084
Ni	60	3	He	1.05	0.0182	1360.12	0.0088	0.009003
Ni	60	3	He	0.775	0.0158	1140.08	0.0088	0.009003
Ni	60	3	He	0.86	0.0166	1210.11	0.0088	0.009003
Cu	63	3	He	0.173	0.0093	690.04	0.0249	0.004937
Cu	63	3	He	0.214	0.0103	740.04	0.0249	0.004937
Cu	63	3	He	0.258	0.0114	830.06	0.0249	0.004937
Zn	66	3	He	-0.058	0.0047	350.02	0.0025	0.004836
Zn	66	3	He	-0.217	0.0043	310.02	0.0025	0.004836
Zn	66	3	He	-0.242	0.0042	310.02	0.0025	0.004836
As	75	3	He	0.367	0.0011	80.00	0.0017	0.0004347
As	75	3	He	0.293	0.0009	68.00	0.0017	0.0004347
As	75	3	He	0.207	0.0008	58.00	0.0017	0.0004347
Sr	88	3	He	0.18	0.0022	140.01	0.0078	0.0007762
Sr	88	3	He	0.16	0.002	130.01	0.0078	0.0007762
Sr	88	3	He	0.352	0.0035	230.01	0.0078	0.0007762
Mo	98	3	He	0.054	0.0017	110.00	0.022	0.0005162
Mo	98	3	He	0.04	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.032	0.0012	80.00	0.022	0.0005162
Ag	107	3	He	0.031	0.0019	120.01	0.0455	0.0004641
Ag	107	3	He	0.031	0.0019	120.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.054	0.0003	20.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.141	0.0176	1130.08	0.0143	0.01559
Sn	120	3	He	0.294	0.0198	1270.10	0.0143	0.01559
Sn	120	3	He	0.143	0.0176	1150.08	0.0143	0.01559
Sb	121	3	He	0.18	0.0025	160.01	0.0124	0.000258
Sb	121	3	He	0.105	0.0016	100.00	0.0124	0.000258
Sb	121	3	He	0.078	0.0012	80.00	0.0124	0.000258
Ba	137	3	He	0.285	0.0016	100.00	0.0044	0.000309
Ba	137	3	He	0.357	0.0019	120.01	0.0044	0.000309
Ba	137	3	He	0.315	0.0017	110.00	0.0044	0.000309
Tl	205	3	He	0.256	0.0081	1790.19	0.0276	0.001005
Tl	205	3	He	0.267	0.0084	1860.19	0.0276	0.001005
Tl	205	3	He	0.213	0.0069	1510.15	0.0276	0.001005
Pb	208	3	He	-0.013	0.0017	160.01	0.0364	0.002176
Pb	208	3	He	0.011	0.0026	300.02	0.0364	0.002176
Pb	208	3	He	0.023	0.003	410.02	0.0364	0.002176
U	238	3	He	0.025	0.0013	290.01	0.0421	0.00024
U	238	3	He	0.023	0.0012	270.01	0.0421	0.00024
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
Sc	45	1	No Gas			3328557.14		
Sc	45	1	No Gas			3382960.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3343987.14		
Ge	72	1	No Gas			1464176.54		
Ge	72	1	No Gas			1483660.92		
Ge	72	1	No Gas			1450287.79		
Sc	45	2	H2			190877.20		
Sc	45	2	H2			193696.36		
Sc	45	2	H2			198598.61		
Ge	72	2	H2			159644.95		
Ge	72	2	H2			157928.21		
Ge	72	2	H2			164784.57		
In	115	2	H2			430468.98		
In	115	2	H2			442427.69		
In	115	2	H2			451215.46		
Sc	45	3	He			41950.69		
Sc	45	3	He			41769.96		
Sc	45	3	He			42492.27		
Ge	72	3	He			74583.60		
Ge	72	3	He			72060.74		
Ge	72	3	He			73065.96		
In	115	3	He			64227.41		
In	115	3	He			64217.97		
In	115	3	He			65232.34		
Tb	159	3	He			281400.82		
Tb	159	3	He			280353.55		
Tb	159	3	He			282654.80		
Bi	209	3	He			221239.63		
Bi	209	3	He			221789.00		
Bi	209	3	He			219309.72		

Quantitation Report

Data File Name	114SMPL.d
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Acq Time	2023-08-10 13:47:45
Sample Name	410-136514-G-5-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

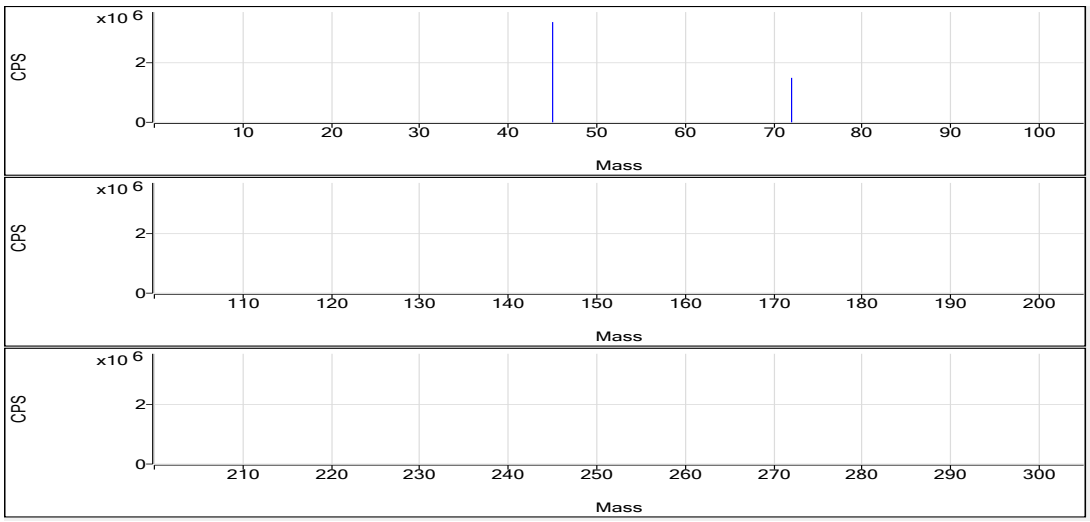
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.003	ppb	284.0	76.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.193	ppb	11.0	14.22	0.0001	Pulse	1.5000	3
Na	23	72	He	5801.519	ppb	0.5	763856.68	10.0724	Pulse	0.1000	3
Mg	24	72	He	27393.178	ppb	1.0	1751773.05	23.1001	Pulse	0.1000	3
Al	27	72	He	96.270	ppb	9.0	1843.52	0.0243	Pulse	0.1000	3
K	39	72	He	2587.821	ppb	0.7	119263.91	1.5727	Pulse	0.1000	3
Ca	44	72	He	77017.263	ppb	0.7	181530.62	2.3938	Pulse	0.1000	3
Ti	47	72	He	1.709	ppb	46.1	53.33	0.0007	Pulse	0.1000	3
V	51	72	He	0.442	ppb	3.1	947.37	0.0125	Pulse	0.5000	3
Cr	52	72	He	0.844	ppb	29.8	2897.04	0.0382	Pulse	0.1000	3
Mn	55	72	He	32.327	ppb	2.2	15518.76	0.2047	Pulse	0.1000	3
Fe	57	72	He	247.818	ppb	3.6	5741.33	0.0757	Pulse	0.1000	3
Co	59	72	He	0.128	ppb	26.6	530.03	0.0070	Pulse	0.1000	3
Ni	60	72	He	3.505	ppb	2.5	3020.43	0.0398	Pulse	0.1000	3
Cu	63	72	He	0.184	ppb	30.7	723.38	0.0095	Pulse	0.1000	3
Zn	66	72	He	0.107	ppb	678.6	386.69	0.0051	Pulse	0.1000	3
As	75	72	He	0.194	ppb	26.5	58.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	70.993	ppb	1.9	35418.28	0.5557	Pulse	0.1000	3
Mo	98	115	He	0.514	ppb	8.8	753.38	0.0118	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	48.4	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.029	ppb	64.1	12.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.309	ppb	87.4	1276.87	0.0200	Pulse	0.1000	3
Sb	121	115	He	0.051	ppb	38.3	56.67	0.0009	Pulse	0.1000	3
Ba	137	115	He	224.144	ppb	2.3	62502.00	0.9809	Pulse	0.1000	3
Tl	205	209	He	0.065	ppb	21.2	616.71	0.0028	Pulse	0.1000	3
Pb	208	209	He	0.075	ppb	12.1	1080.07	0.0049	Pulse	0.1000	3
U	238	209	He	0.514	ppb	5.3	4804.42	0.0219	Pulse	0.1000	3

ISTD Table:

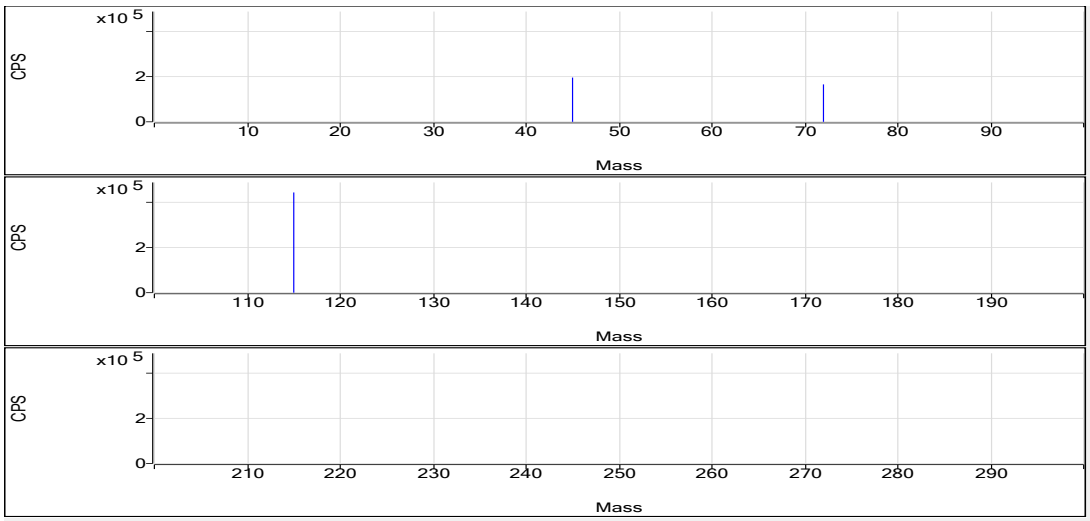
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3385546.62	2.0	104.5	Pulse	0.1000	3
No Gas	Ge	72	1501503.41	1.0	104.3	Pulse	0.1000	3
H2	Sc	45	195657.90	2.0	100.1	Pulse	0.1000	3
H2	Ge	72	165475.36	0.8	101.5	Pulse	0.1000	3
H2	In	115	443205.96	1.5	102.3	Pulse	0.1000	3
He	Sc	45	42352.20	1.4	105.9	Pulse	0.1000	3
He	Ge	72	75839.55	1.4	104.9	Pulse	0.1000	3
He	In	115	63742.60	2.3	98.7	Pulse	0.1000	3
He	Tb	159	283573.42	0.6	99.2	Pulse	0.1000	3
He	Bi	209	219753.78	1.2	98.9	Pulse	0.1000	3

No Gas

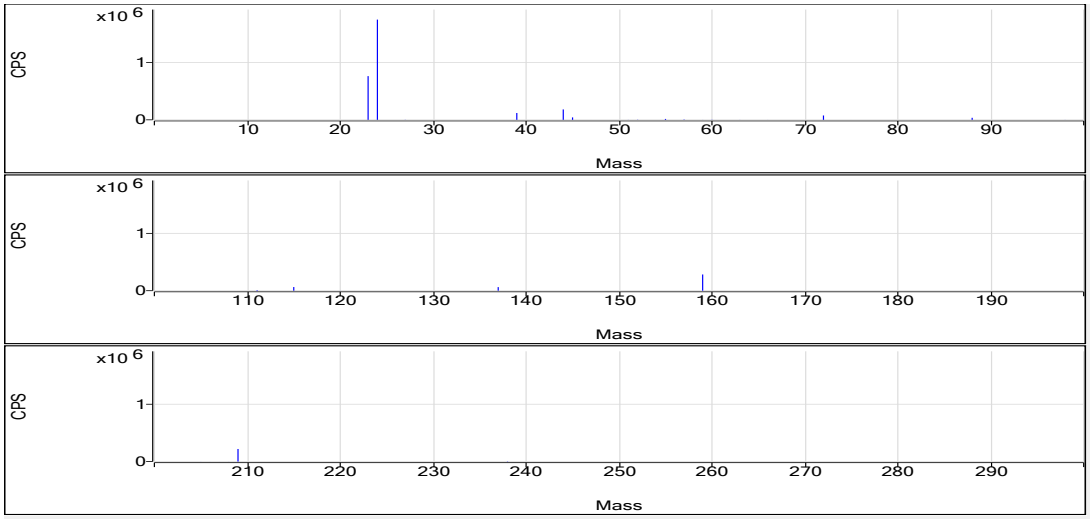


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.004	0.0001	78.00	0.0013	4.694E-05
Be	9	1	No Gas	0.011	0.0001	94.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.006	0	58.00	0.0013	4.694E-05
Se	78	2	H2	0.17	0.0001	12.67	0.0004	1.089E-05
Se	78	2	H2	0.211	0.0001	15.33	0.0004	1.089E-05
Se	78	2	H2	0.198	0.0001	14.67	0.0004	1.089E-05
Na	23	3	He	5824.814	10.1124	755027.72	0.0017	0.1065
Na	23	3	He	5808.395	10.0842	766812.64	0.0017	0.1065
Na	23	3	He	5771.347	10.0206	769729.68	0.0017	0.1065
Mg	24	3	He	27546.853	23.2296	1734399.82	0.0008	0.004846
Mg	24	3	He	27547.79	23.2304	1766458.25	0.0008	0.004846
Mg	24	3	He	27084.892	22.8402	1754461.07	0.0008	0.004846
Al	27	3	He	89.929	0.0228	1700.16	0.0002	0.001063
Al	27	3	He	106.201	0.0267	2030.22	0.0002	0.001063
Al	27	3	He	92.68	0.0234	1800.17	0.0002	0.001063
K	39	3	He	2600.68	1.5798	117950.47	0.0006	0.1436
K	39	3	He	2596.842	1.5776	119965.43	0.0006	0.1436
K	39	3	He	2565.941	1.5606	119875.84	0.0006	0.1436
Ca	44	3	He	77468.199	2.4078	179771.31	0	0.001611
Ca	44	3	He	77112.453	2.3967	182247.75	0	0.001611
Ca	44	3	He	76471.135	2.3768	182572.81	0	0.001611
Ti	47	3	He	1.045	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	2.579	0.0009	70.00	0.0003	0.0002737
Ti	47	3	He	1.504	0.0007	50.00	0.0003	0.0002737
V	51	3	He	0.457	0.0127	946.04	0.0117	0.007326
V	51	3	He	0.437	0.0124	946.04	0.0117	0.007326
V	51	3	He	0.431	0.0124	950.04	0.0117	0.007326
Cr	52	3	He	1.13	0.0426	3180.47	0.0152	0.02538
Cr	52	3	He	0.743	0.0367	2790.34	0.0152	0.02538
Cr	52	3	He	0.659	0.0354	2720.32	0.0152	0.02538
Mn	55	3	He	32.89	0.208	15528.75	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	32.541	0.2059	15658.84	0.0059	0.01385
Mn	55	3	He	31.55	0.2001	15368.68	0.0059	0.01385
Fe	57	3	He	248.664	0.076	5671.36	0.0003	0.003918
Fe	57	3	He	256.173	0.0781	5941.42	0.0003	0.003918
Fe	57	3	He	238.617	0.073	5611.22	0.0003	0.003918
Co	59	3	He	0.167	0.0082	610.03	0.0305	0.003084
Co	59	3	He	0.101	0.0062	470.02	0.0305	0.003084
Co	59	3	He	0.117	0.0066	510.03	0.0305	0.003084
Ni	60	3	He	3.409	0.039	2910.39	0.0088	0.009003
Ni	60	3	He	3.583	0.0405	3080.44	0.0088	0.009003
Ni	60	3	He	3.522	0.04	3070.45	0.0088	0.009003
Cu	63	3	He	0.119	0.0079	590.03	0.0249	0.004937
Cu	63	3	He	0.219	0.0104	790.05	0.0249	0.004937
Cu	63	3	He	0.214	0.0103	790.06	0.0249	0.004937
Zn	66	3	He	-0.115	0.0046	340.02	0.0025	0.004836
Zn	66	3	He	0.922	0.0071	540.03	0.0025	0.004836
Zn	66	3	He	-0.485	0.0036	280.01	0.0025	0.004836
As	75	3	He	0.135	0.0007	50.00	0.0017	0.0004347
As	75	3	He	0.219	0.0008	62.00	0.0017	0.0004347
As	75	3	He	0.229	0.0008	64.00	0.0017	0.0004347
Sr	88	3	He	71.759	0.5617	34843.67	0.0078	0.0007762
Sr	88	3	He	69.414	0.5434	35134.23	0.0078	0.0007762
Sr	88	3	He	71.805	0.5621	36276.95	0.0078	0.0007762
Mo	98	3	He	0.533	0.0123	760.05	0.022	0.0005162
Mo	98	3	He	0.545	0.0125	810.05	0.022	0.0005162
Mo	98	3	He	0.462	0.0107	690.04	0.022	0.0005162
Ag	107	3	He	0.008	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.05	0.0003	18.00	0.0048	5.152E-05
Cd	111	3	He	0.021	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.139	0.0176	1090.08	0.0143	0.01559
Sn	120	3	He	0.621	0.0244	1580.45	0.0143	0.01559
Sn	120	3	He	0.167	0.018	1160.08	0.0143	0.01559
Sb	121	3	He	0.057	0.001	60.00	0.0124	0.000258
Sb	121	3	He	0.029	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.067	0.0011	70.00	0.0124	0.000258
Ba	137	3	He	230.177	1.0073	62481.94	0.0044	0.000309
Ba	137	3	He	221.21	0.9681	62592.23	0.0044	0.000309
Ba	137	3	He	221.045	0.9673	62431.83	0.0044	0.000309
Tl	205	3	He	0.08	0.0032	700.04	0.0276	0.001005
Tl	205	3	He	0.053	0.0025	550.04	0.0276	0.001005
Tl	205	3	He	0.062	0.0027	600.04	0.0276	0.001005
Pb	208	3	He	0.07	0.0047	620.04	0.0364	0.002176
Pb	208	3	He	0.07	0.0047	540.04	0.0364	0.002176
Pb	208	3	He	0.086	0.0053	680.05	0.0364	0.002176
U	238	3	He	0.482	0.0205	4450.89	0.0421	0.00024
U	238	3	He	0.53	0.0225	4991.21	0.0421	0.00024
U	238	3	He	0.529	0.0225	4971.16	0.0421	0.00024
Sc	45	1	No Gas			3380044.64		
Sc	45	1	No Gas			3454297.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3322297.45		
Ge	72	1	No Gas			1498598.88		
Ge	72	1	No Gas			1518440.13		
Ge	72	1	No Gas			1487471.23		
Sc	45	2	H2			191487.01		
Sc	45	2	H2			199463.06		
Sc	45	2	H2			196023.63		
Ge	72	2	H2			164735.17		
Ge	72	2	H2			164722.09		
Ge	72	2	H2			166968.83		
In	115	2	H2			436106.79		
In	115	2	H2			444125.27		
In	115	2	H2			449385.81		
Sc	45	3	He			42993.75		
Sc	45	3	He			41770.61		
Sc	45	3	He			42292.24		
Ge	72	3	He			74663.22		
Ge	72	3	He			76040.70		
Ge	72	3	He			76814.74		
In	115	3	He			62038.61		
In	115	3	He			64669.94		
In	115	3	He			64549.13		
Tb	159	3	He			282638.08		
Tb	159	3	He			282469.88		
Tb	159	3	He			285612.30		
Bi	209	3	He			216768.82		
Bi	209	3	He			221607.83		
Bi	209	3	He			220884.70		

Quantitation Report

Data File Name	115SMPL.d
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Sample Name	410-136848-W-8-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

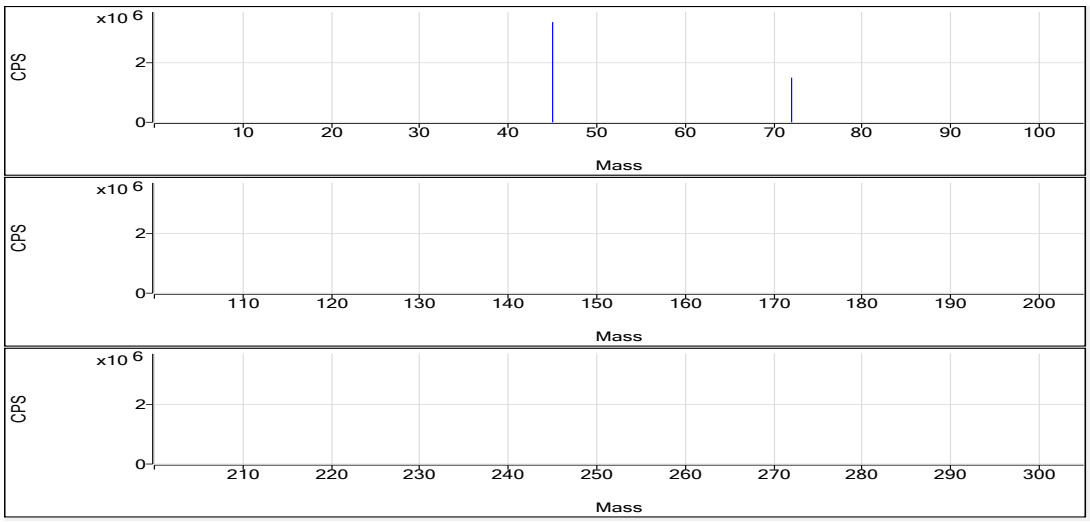
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.002	ppb	147.7	73.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.013	ppb	136.1	2.67	0.0000	Pulse	1.5000	3
Na	23	72	He	12435.735	ppb	0.5	1610121.17	21.4688	Pulse	0.1000	3
Mg	24	72	He	17818.619	ppb	0.7	1127047.17	15.0278	Pulse	0.1000	3
Al	27	72	He	4.065	ppb	43.2	153.34	0.0020	Pulse	0.1000	3
K	39	72	He	6690.105	ppb	0.7	287850.63	3.8380	Pulse	0.1000	3
Ca	44	72	He	104024.494	ppb	0.9	242446.91	3.2326	Pulse	0.1000	3
Ti	47	72	He	-0.029	ppb	N/A	20.00	0.0003	Pulse	0.1000	3
V	51	72	He	0.145	ppb	45.2	676.69	0.0090	Pulse	0.5000	3
Cr	52	72	He	0.135	ppb	119.2	2056.89	0.0274	Pulse	0.1000	3
Mn	55	72	He	451.556	ppb	0.7	200927.43	2.6791	Pulse	0.1000	3
Fe	57	72	He	232.422	ppb	5.7	5344.50	0.0713	Pulse	0.1000	3
Co	59	72	He	0.286	ppb	1.8	886.73	0.0118	Pulse	0.1000	3
Ni	60	72	He	1.402	ppb	11.2	1600.14	0.0213	Pulse	0.1000	3
Cu	63	72	He	0.233	ppb	16.8	806.72	0.0108	Pulse	0.1000	3
Zn	66	72	He	7.292	ppb	9.2	1706.83	0.0228	Pulse	0.1000	3
As	75	72	He	0.589	ppb	45.5	109.33	0.0015	Pulse	0.5000	3
Sr	88	115	He	350.254	ppb	2.6	175344.32	2.7387	Pulse	0.1000	3
Mo	98	115	He	0.211	ppb	13.1	330.01	0.0052	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	15662.0	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.052	ppb	46.2	19.33	0.0003	Pulse	0.5000	3
Sn	120	115	He	0.354	ppb	171.1	1317.15	0.0206	Pulse	0.1000	3
Sb	121	115	He	0.071	ppb	35.5	73.34	0.0011	Pulse	0.1000	3
Ba	137	115	He	46.315	ppb	2.4	12996.61	0.2029	Pulse	0.1000	3
Tl	205	209	He	0.041	ppb	25.8	470.03	0.0021	Pulse	0.1000	3
Pb	208	209	He	0.049	ppb	39.6	876.71	0.0040	Pulse	0.1000	3
U	238	209	He	0.785	ppb	2.8	7348.98	0.0332	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3352298.91	0.8	103.4	Pulse	0.1000	3
No Gas	Ge	72	1491545.13	1.1	103.6	Pulse	0.1000	3
H2	Sc	45	196570.74	0.9	100.6	Pulse	0.1000	3
H2	Ge	72	165670.12	1.1	101.6	Pulse	0.1000	3
H2	In	115	442787.69	1.7	102.2	Pulse	0.1000	3
He	Sc	45	42275.09	0.4	105.7	Pulse	0.1000	3
He	Ge	72	74998.53	0.6	103.7	Pulse	0.1000	3
He	In	115	64036.79	1.3	99.1	Pulse	0.1000	3
He	Tb	159	285760.95	1.2	99.9	Pulse	0.1000	3
He	Bi	209	221058.13	0.8	99.5	Pulse	0.1000	3

No Gas



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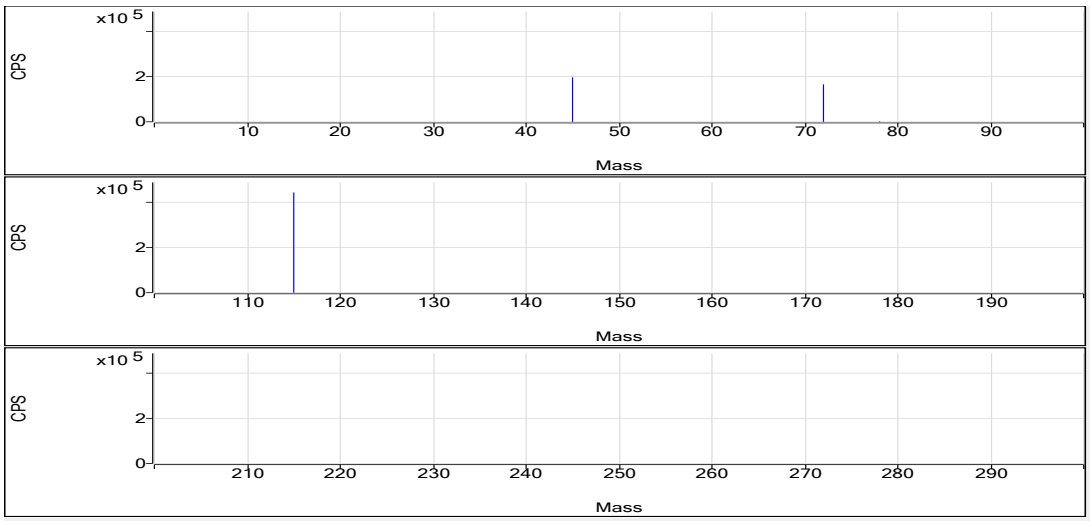
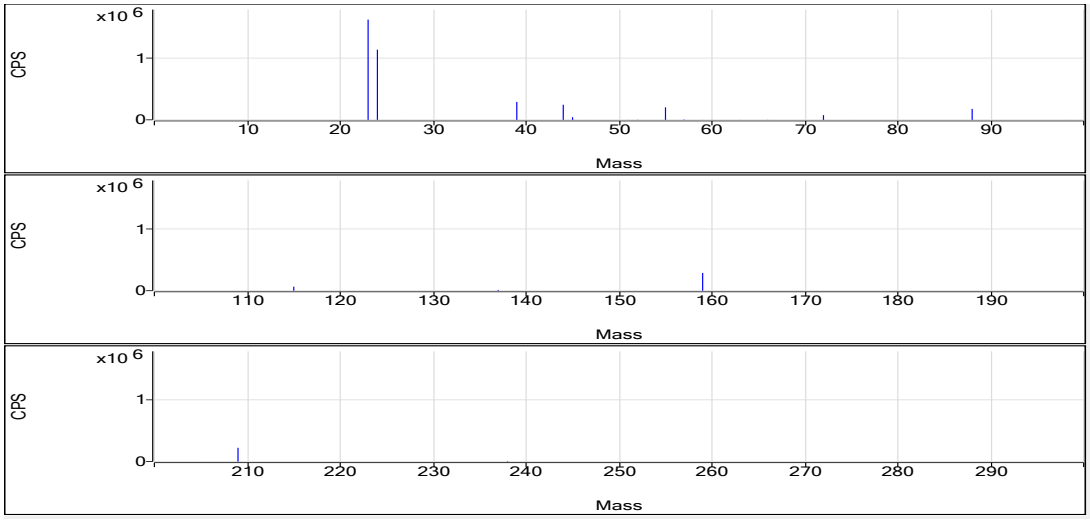


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	68.00	0.0013	4.694E-05
Be	9	1	No Gas	0.002	0	74.00	0.0013	4.694E-05
Be	9	1	No Gas	0.004	0.0001	78.00	0.0013	4.694E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.089E-05
Na	23	3	He	12475.162	21.5366	1605184.82	0.0017	0.1065
Na	23	3	He	12365.219	21.3477	1603542.01	0.0017	0.1065
Na	23	3	He	12466.824	21.5222	1621636.69	0.0017	0.1065
Mg	24	3	He	17914.086	15.1082	1126063.11	0.0008	0.004846
Mg	24	3	He	17669.134	14.9017	1119349.91	0.0008	0.004846
Mg	24	3	He	17872.638	15.0733	1135728.50	0.0008	0.004846
Al	27	3	He	2.823	0.0017	130.01	0.0002	0.001063
Al	27	3	He	6.076	0.0025	190.01	0.0002	0.001063
Al	27	3	He	3.295	0.0019	140.01	0.0002	0.001063
K	39	3	He	6646.373	3.8138	284257.55	0.0006	0.1436
K	39	3	He	6688.691	3.8372	288234.21	0.0006	0.1436
K	39	3	He	6735.252	3.8629	291060.13	0.0006	0.1436
Ca	44	3	He	103320.818	3.2107	239306.32	0	0.001611
Ca	44	3	He	103636.052	3.2205	241911.85	0	0.001611
Ca	44	3	He	105116.612	3.2665	246122.57	0	0.001611
Ti	47	3	He	-0.556	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.501	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	-0.033	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.073	0.0082	610.02	0.0117	0.007326
V	51	3	He	0.159	0.0092	690.02	0.0117	0.007326
V	51	3	He	0.202	0.0097	730.02	0.0117	0.007326
Cr	52	3	He	0.307	0.0301	2240.27	0.0152	0.02538
Cr	52	3	He	0.108	0.027	2030.21	0.0152	0.02538
Cr	52	3	He	-0.011	0.0252	1900.19	0.0152	0.02538
Mn	55	3	He	454.437	2.6961	200951.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	448.263	2.6597	199784.08	0.0059	0.01385
Mn	55	3	He	451.967	2.6816	202047.15	0.0059	0.01385
Fe	57	3	He	228.271	0.0701	5221.12	0.0003	0.003918
Fe	57	3	He	221.798	0.0682	5121.07	0.0003	0.003918
Fe	57	3	He	247.198	0.0755	5691.32	0.0003	0.003918
Co	59	3	He	0.282	0.0117	870.06	0.0305	0.003084
Co	59	3	He	0.292	0.012	900.06	0.0305	0.003084
Co	59	3	He	0.286	0.0118	890.06	0.0305	0.003084
Ni	60	3	He	1.265	0.0201	1500.14	0.0088	0.009003
Ni	60	3	He	1.368	0.021	1580.13	0.0088	0.009003
Ni	60	3	He	1.572	0.0228	1720.16	0.0088	0.009003
Cu	63	3	He	0.189	0.0097	720.04	0.0249	0.004937
Cu	63	3	He	0.245	0.0111	830.06	0.0249	0.004937
Cu	63	3	He	0.265	0.0115	870.06	0.0249	0.004937
Zn	66	3	He	6.552	0.0209	1560.14	0.0025	0.004836
Zn	66	3	He	7.461	0.0232	1740.18	0.0025	0.004836
Zn	66	3	He	7.864	0.0242	1820.18	0.0025	0.004836
As	75	3	He	0.876	0.002	146.00	0.0017	0.0004347
As	75	3	He	0.546	0.0014	104.00	0.0017	0.0004347
As	75	3	He	0.345	0.001	78.00	0.0017	0.0004347
Sr	88	3	He	346.245	2.7074	175094.26	0.0078	0.0007762
Sr	88	3	He	343.874	2.6889	172948.90	0.0078	0.0007762
Sr	88	3	He	360.644	2.82	177989.80	0.0078	0.0007762
Mo	98	3	He	0.194	0.0048	310.01	0.022	0.0005162
Mo	98	3	He	0.195	0.0048	310.01	0.022	0.0005162
Mo	98	3	He	0.243	0.0059	370.02	0.022	0.0005162
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	0.079	0.0004	28.00	0.0048	5.152E-05
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.042	0.0003	16.00	0.0048	5.152E-05
Sn	120	3	He	-0.041	0.015	970.08	0.0143	0.01559
Sn	120	3	He	0.052	0.0163	1050.07	0.0143	0.01559
Sn	120	3	He	1.053	0.0306	1931.29	0.0143	0.01559
Sb	121	3	He	0.079	0.0012	80.00	0.0124	0.000258
Sb	121	3	He	0.092	0.0014	90.01	0.0124	0.000258
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Ba	137	3	He	47.599	0.2085	13487.05	0.0044	0.000309
Ba	137	3	He	45.726	0.2004	12886.60	0.0044	0.000309
Ba	137	3	He	45.619	0.1999	12616.18	0.0044	0.000309
Tl	205	3	He	0.048	0.0023	520.03	0.0276	0.001005
Tl	205	3	He	0.045	0.0022	490.03	0.0276	0.001005
Tl	205	3	He	0.029	0.0018	400.03	0.0276	0.001005
Pb	208	3	He	0.042	0.0037	430.02	0.0364	0.002176
Pb	208	3	He	0.034	0.0034	340.02	0.0364	0.002176
Pb	208	3	He	0.071	0.0048	590.04	0.0364	0.002176
U	238	3	He	0.776	0.0329	7292.30	0.0421	0.00024
U	238	3	He	0.81	0.0343	7512.39	0.0421	0.00024
U	238	3	He	0.768	0.0326	7242.26	0.0421	0.00024
Sc	45	1	No Gas			3332690.26		
Sc	45	1	No Gas			3381809.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3342396.83		
Ge	72	1	No Gas			1479657.95		
Ge	72	1	No Gas			1510148.41		
Ge	72	1	No Gas			1484829.04		
Sc	45	2	H2			195153.14		
Sc	45	2	H2			198475.19		
Sc	45	2	H2			196083.88		
Ge	72	2	H2			164115.74		
Ge	72	2	H2			165269.20		
Ge	72	2	H2			167625.43		
In	115	2	H2			434880.89		
In	115	2	H2			443924.17		
In	115	2	H2			449558.00		
Sc	45	3	He			42181.50		
Sc	45	3	He			42452.27		
Sc	45	3	He			42191.50		
Ge	72	3	He			74533.04		
Ge	72	3	He			75115.48		
Ge	72	3	He			75347.06		
In	115	3	He			64679.95		
In	115	3	He			64328.40		
In	115	3	He			63132.83		
Tb	159	3	He			284087.59		
Tb	159	3	He			283392.73		
Tb	159	3	He			289802.52		
Bi	209	3	He			221780.19		
Bi	209	3	He			218955.80		
Bi	209	3	He			222438.40		

Quantitation Report

Data File Name	116SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:51:44
Sample Name	410-136848-W-7-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

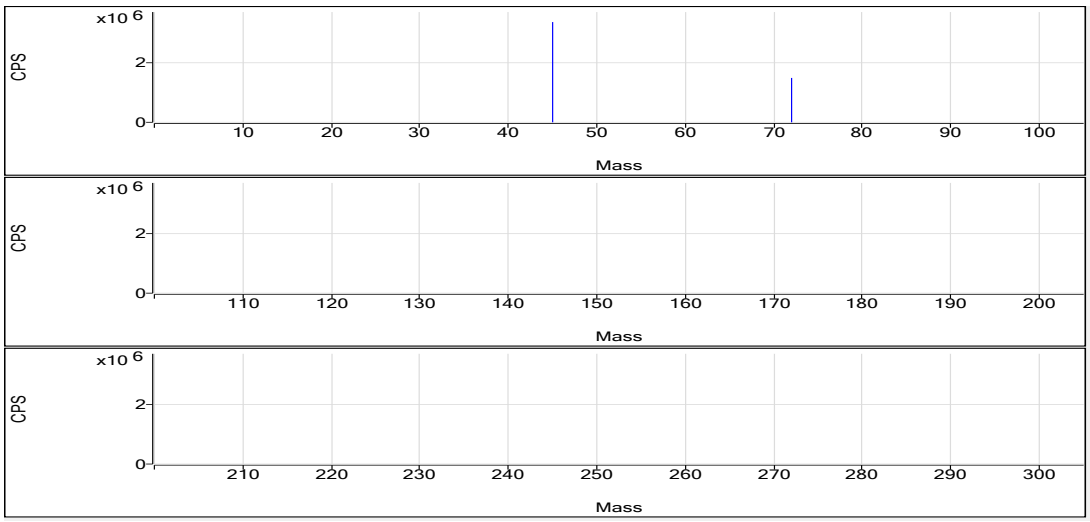
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.002	ppb	N/A	66.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.084	ppb	17.3	7.11	0.0000	Pulse	1.5000	3
Na	23	72	He	11852.741	ppb	0.8	1561422.74	20.4673	Pulse	0.1000	3
Mg	24	72	He	14198.132	ppb	0.9	913575.04	11.9753	Pulse	0.1000	3
Al	27	72	He	60.375	ppb	6.5	1193.42	0.0156	Pulse	0.1000	3
K	39	72	He	3005.314	ppb	0.1	137571.48	1.8032	Pulse	0.1000	3
Ca	44	72	He	127701.795	ppb	1.2	302704.90	3.9680	Pulse	0.1000	3
Ti	47	72	He	0.298	ppb	264.2	26.67	0.0003	Pulse	0.1000	3
V	51	72	He	0.118	ppb	37.1	664.02	0.0087	Pulse	0.5000	3
Cr	52	72	He	0.167	ppb	108.3	2130.24	0.0279	Pulse	0.1000	3
Mn	55	72	He	445.273	ppb	0.7	201558.57	2.6420	Pulse	0.1000	3
Fe	57	72	He	441.086	ppb	2.4	10047.13	0.1317	Pulse	0.1000	3
Co	59	72	He	0.306	ppb	3.3	946.74	0.0124	Pulse	0.1000	3
Ni	60	72	He	1.601	ppb	14.2	1760.17	0.0231	Pulse	0.1000	3
Cu	63	72	He	1.193	ppb	10.2	2647.00	0.0347	Pulse	0.1000	3
Zn	66	72	He	4.945	ppb	18.9	1296.77	0.0170	Pulse	0.1000	3
As	75	72	He	0.719	ppb	34.7	128.67	0.0017	Pulse	0.5000	3
Sr	88	115	He	471.818	ppb	1.0	237896.11	3.6890	Pulse	0.1000	3
Mo	98	115	He	0.301	ppb	12.5	460.03	0.0071	Pulse	0.1000	3
Ag	107	115	He	0.010	ppb	66.4	60.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	15.1	10.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.114	ppb	53.7	1110.09	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.175	ppb	29.9	156.67	0.0024	Pulse	0.1000	3
Ba	137	115	He	41.030	ppb	1.5	11595.24	0.1798	Pulse	0.1000	3
Tl	205	209	He	0.020	ppb	19.1	343.35	0.0016	Pulse	0.1000	3
Pb	208	209	He	0.199	ppb	13.3	2076.81	0.0094	Pulse	0.1000	3
U	238	209	He	0.591	ppb	4.2	5524.75	0.0251	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3383476.30	1.3	104.4	Pulse	0.1000	3
No Gas	Ge	72	1497976.80	1.2	104.0	Pulse	0.1000	3
H2	Sc	45	197059.30	0.3	100.9	Pulse	0.1000	3
H2	Ge	72	163452.42	1.6	100.3	Pulse	0.1000	3
H2	In	115	442056.38	0.3	102.0	Pulse	0.1000	3
He	Sc	45	42459.15	1.3	106.2	Pulse	0.1000	3
He	Ge	72	76292.32	1.0	105.5	Pulse	0.1000	3
He	In	115	64490.18	0.7	99.8	Pulse	0.1000	3
He	Tb	159	284716.13	0.5	99.6	Pulse	0.1000	3
He	Bi	209	220167.62	0.6	99.1	Pulse	0.1000	3

No Gas



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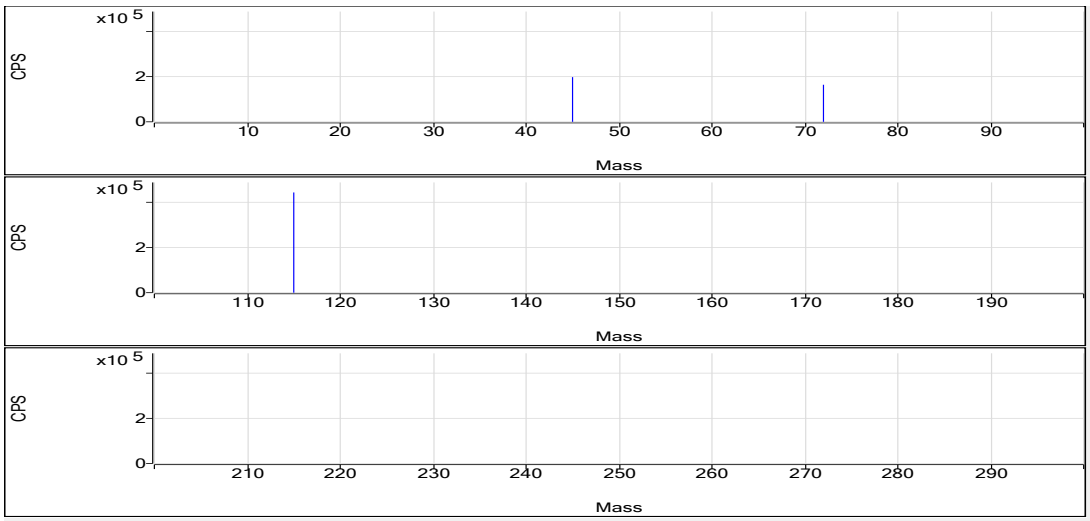
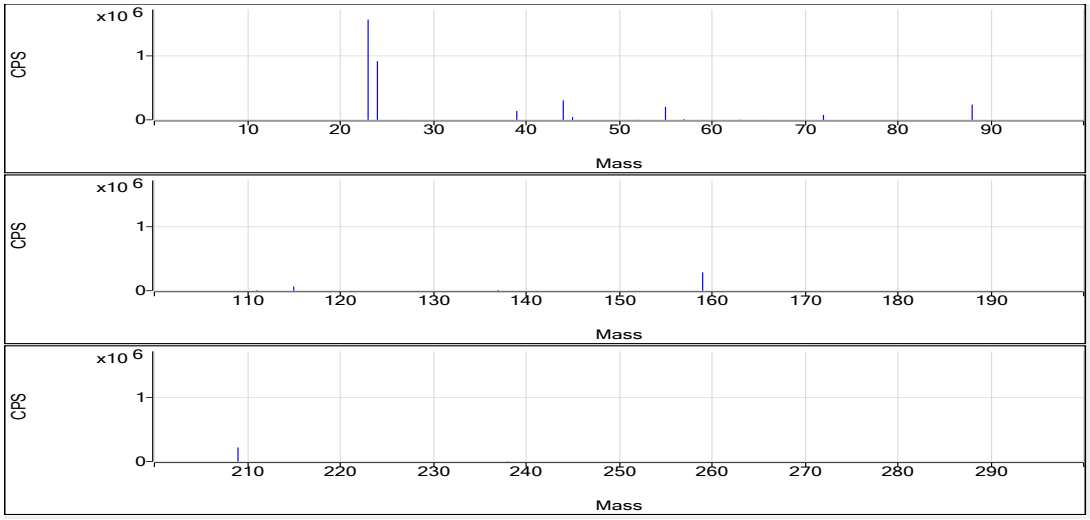


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	68.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.004	0	62.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.001	0	68.00	0.0013	4.694E-05
Se	78	2	H2	0.088	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.068	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.096	0	8.00	0.0004	1.089E-05
Na	23	3	He	11753.615	20.2971	1565238.10	0.0017	0.1065
Na	23	3	He	11953.922	20.6412	1563353.26	0.0017	0.1065
Na	23	3	He	11850.688	20.4638	1555676.85	0.0017	0.1065
Mg	24	3	He	14062.421	11.8609	914670.53	0.0008	0.004846
Mg	24	3	He	14294.066	12.0562	913131.71	0.0008	0.004846
Mg	24	3	He	14237.908	12.0088	912922.88	0.0008	0.004846
Al	27	3	He	64.9	0.0167	1290.11	0.0002	0.001063
Al	27	3	He	58.501	0.0152	1150.08	0.0002	0.001063
Al	27	3	He	57.724	0.015	1140.08	0.0002	0.001063
K	39	3	He	3007.324	1.8043	139142.85	0.0006	0.1436
K	39	3	He	3005.912	1.8035	136599.51	0.0006	0.1436
K	39	3	He	3002.705	1.8018	136972.08	0.0006	0.1436
Ca	44	3	He	125924.439	3.9128	301741.89	0	0.001611
Ca	44	3	He	128976.372	4.0076	303534.06	0	0.001611
Ca	44	3	He	128204.574	3.9836	302838.75	0	0.001611
Ti	47	3	He	0.977	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	-0.565	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.482	0.0004	30.00	0.0003	0.0002737
V	51	3	He	0.132	0.0089	684.02	0.0117	0.007326
V	51	3	He	0.153	0.0091	690.02	0.0117	0.007326
V	51	3	He	0.069	0.0081	618.02	0.0117	0.007326
Cr	52	3	He	0.028	0.0258	1990.20	0.0152	0.02538
Cr	52	3	He	0.102	0.0269	2040.21	0.0152	0.02538
Cr	52	3	He	0.372	0.031	2360.30	0.0152	0.02538
Mn	55	3	He	442.028	2.6229	202267.93	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	448.498	2.6611	201549.02	0.0059	0.01385
Mn	55	3	He	445.292	2.6422	200858.77	0.0059	0.01385
Fe	57	3	He	430.657	0.1287	9923.77	0.0003	0.003918
Fe	57	3	He	440.553	0.1316	9963.73	0.0003	0.003918
Fe	57	3	He	452.047	0.1349	10253.88	0.0003	0.003918
Co	59	3	He	0.298	0.0122	940.07	0.0305	0.003084
Co	59	3	He	0.301	0.0123	930.06	0.0305	0.003084
Co	59	3	He	0.317	0.0128	970.08	0.0305	0.003084
Ni	60	3	He	1.365	0.021	1620.14	0.0088	0.009003
Ni	60	3	He	1.619	0.0232	1760.17	0.0088	0.009003
Ni	60	3	He	1.819	0.025	1900.19	0.0088	0.009003
Cu	63	3	He	1.331	0.0381	2940.40	0.0249	0.004937
Cu	63	3	He	1.147	0.0335	2540.31	0.0249	0.004937
Cu	63	3	He	1.1	0.0324	2460.30	0.0249	0.004937
Zn	66	3	He	5.897	0.0193	1490.13	0.0025	0.004836
Zn	66	3	He	4.911	0.0169	1280.10	0.0025	0.004836
Zn	66	3	He	4.029	0.0147	1120.09	0.0025	0.004836
As	75	3	He	0.868	0.0019	150.00	0.0017	0.0004347
As	75	3	He	0.858	0.0019	146.00	0.0017	0.0004347
As	75	3	He	0.431	0.0012	90.00	0.0017	0.0004347
Sr	88	3	He	471.436	3.686	238456.13	0.0078	0.0007762
Sr	88	3	He	467.514	3.6554	236833.38	0.0078	0.0007762
Sr	88	3	He	476.505	3.7257	238398.81	0.0078	0.0007762
Mo	98	3	He	0.257	0.0062	400.03	0.022	0.0005162
Mo	98	3	He	0.32	0.0076	490.02	0.022	0.0005162
Mo	98	3	He	0.324	0.0077	490.03	0.022	0.0005162
Ag	107	3	He	0.017	0.0012	80.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Cd	111	3	He	0.021	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.028	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	0.045	0.0162	1050.08	0.0143	0.01559
Sn	120	3	He	0.163	0.0179	1160.09	0.0143	0.01559
Sn	120	3	He	0.134	0.0175	1120.10	0.0143	0.01559
Sb	121	3	He	0.216	0.0029	190.01	0.0124	0.000258
Sb	121	3	He	0.116	0.0017	110.00	0.0124	0.000258
Sb	121	3	He	0.193	0.0027	170.01	0.0124	0.000258
Ba	137	3	He	41.43	0.1816	11745.32	0.0044	0.000309
Ba	137	3	He	40.308	0.1766	11445.09	0.0044	0.000309
Ba	137	3	He	41.351	0.1812	11595.32	0.0044	0.000309
Tl	205	3	He	0.017	0.0015	320.02	0.0276	0.001005
Tl	205	3	He	0.019	0.0015	340.02	0.0276	0.001005
Tl	205	3	He	0.024	0.0017	370.02	0.0276	0.001005
Pb	208	3	He	0.228	0.0105	1100.10	0.0364	0.002176
Pb	208	3	He	0.176	0.0086	850.06	0.0364	0.002176
Pb	208	3	He	0.195	0.0093	1120.09	0.0364	0.002176
U	238	3	He	0.57	0.0242	5291.30	0.0421	0.00024
U	238	3	He	0.585	0.0248	5481.38	0.0421	0.00024
U	238	3	He	0.618	0.0262	5801.56	0.0421	0.00024
Sc	45	1	No Gas			3339616.51		
Sc	45	1	No Gas			3429165.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3381646.51		
Ge	72	1	No Gas			1477384.04		
Ge	72	1	No Gas			1504380.29		
Ge	72	1	No Gas			1512166.07		
Sc	45	2	H2			196666.03		
Sc	45	2	H2			196703.49		
Sc	45	2	H2			197808.38		
Ge	72	2	H2			162689.70		
Ge	72	2	H2			161295.52		
Ge	72	2	H2			166372.03		
In	115	2	H2			441748.67		
In	115	2	H2			440976.87		
In	115	2	H2			443443.59		
Sc	45	3	He			42562.75		
Sc	45	3	He			41880.82		
Sc	45	3	He			42933.87		
Ge	72	3	He			77116.48		
Ge	72	3	He			75739.62		
Ge	72	3	He			76020.85		
In	115	3	He			64699.99		
In	115	3	He			64799.50		
In	115	3	He			63997.02		
Tb	159	3	He			285268.43		
Tb	159	3	He			283110.48		
Tb	159	3	He			285769.49		
Bi	209	3	He			218645.29		
Bi	209	3	He			220660.04		
Bi	209	3	He			221197.52		

Quantitation Report

Data File Name	117SMPL.d
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Acq Time	2023-08-10 13:53:43
Sample Name	410-136848-X-11-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

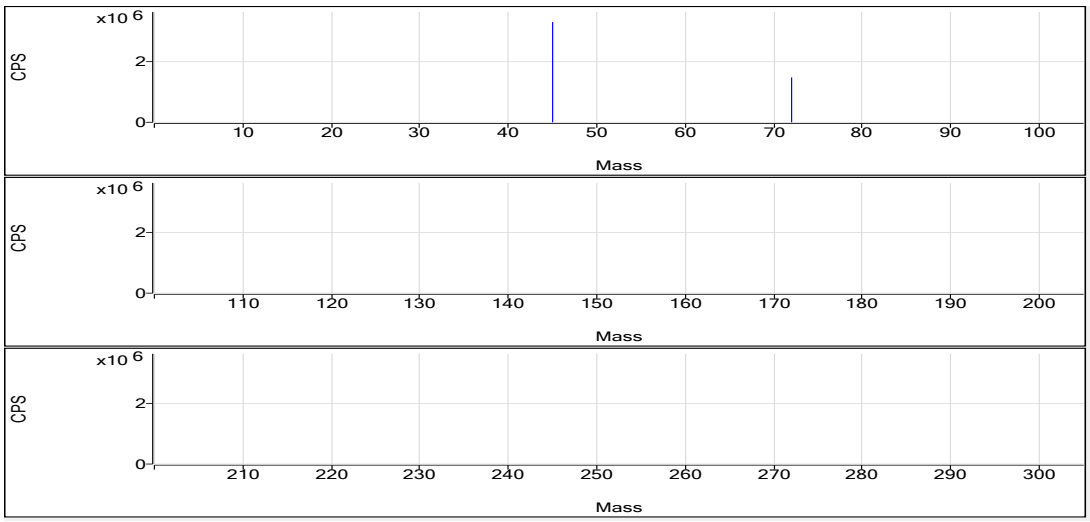
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.006	ppb	34.4	81.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	6.133	ppb	7.7	397.12	0.0024	Pulse	1.5000	3
Na	23	72	He	4297.471	ppb	1.2	575317.36	7.4887	Pulse	0.1000	3
Mg	24	72	He	7371.710	ppb	1.0	477845.27	6.2199	Pulse	0.1000	3
Al	27	72	He	127.380	ppb	2.4	2443.66	0.0318	Pulse	0.1000	3
K	39	72	He	2889.922	ppb	1.8	133629.47	1.7395	Pulse	0.1000	3
Ca	44	72	He	70350.531	ppb	1.7	167982.22	2.1867	Pulse	0.1000	3
Ti	47	72	He	0.987	ppb	54.3	40.00	0.0005	Pulse	0.1000	3
V	51	72	He	0.403	ppb	11.2	924.70	0.0120	Pulse	0.5000	3
Cr	52	72	He	0.396	ppb	24.8	2413.61	0.0314	Pulse	0.1000	3
Mn	55	72	He	1223.850	ppb	1.8	555983.34	7.2375	Pulse	0.1000	3
Fe	57	72	He	152.579	ppb	0.4	3697.28	0.0481	Pulse	0.1000	3
Co	59	72	He	0.828	ppb	0.2	2176.91	0.0283	Pulse	0.1000	3
Ni	60	72	He	2.923	ppb	7.1	2667.01	0.0347	Pulse	0.1000	3
Cu	63	72	He	0.695	ppb	6.1	1710.16	0.0223	Pulse	0.1000	3
Zn	66	72	He	0.893	ppb	21.1	540.03	0.0070	Pulse	0.1000	3
As	75	72	He	0.320	ppb	28.4	76.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	237.987	ppb	3.4	119579.11	1.8611	Pulse	0.1000	3
Mo	98	115	He	4.146	ppb	4.9	5898.11	0.0918	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	189.9	46.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.039	ppb	10.5	15.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.741	ppb	79.1	1674.20	0.0262	Pulse	0.1000	3
Sb	121	115	He	0.129	ppb	65.5	120.00	0.0019	Pulse	0.1000	3
Ba	137	115	He	34.641	ppb	6.7	9750.46	0.1519	Pulse	0.1000	3
Tl	205	209	He	0.029	ppb	71.6	396.69	0.0018	Pulse	0.1000	3
Pb	208	209	He	0.130	ppb	13.3	1523.43	0.0069	Pulse	0.1000	3
U	238	209	He	1.015	ppb	3.4	9457.16	0.0429	Pulse	0.1000	3

ISTD Table:

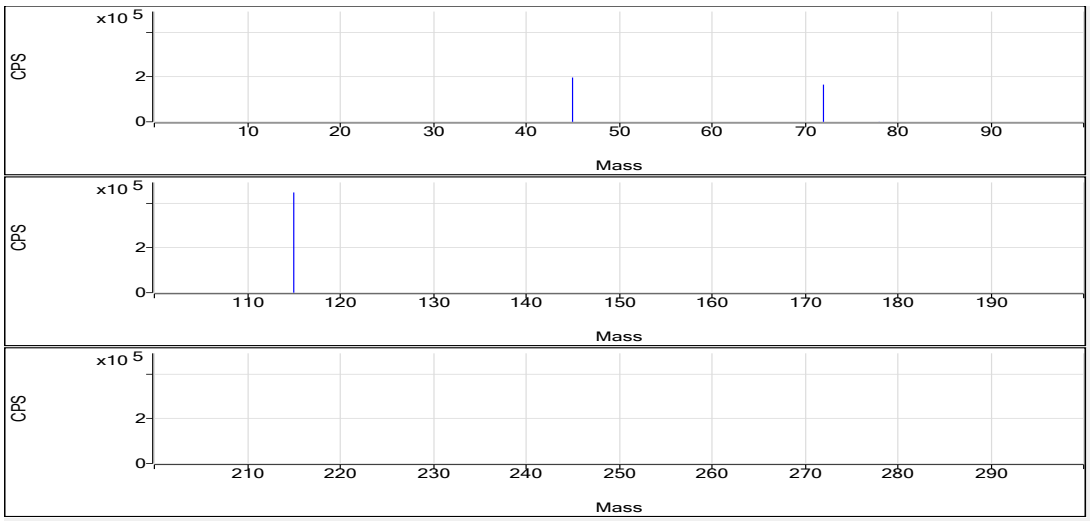
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3330584.22	1.9	102.8	Pulse	0.1000	3
No Gas	Ge	72	1491370.76	2.1	103.6	Pulse	0.1000	3
H2	Sc	45	197238.29	1.9	101.0	Pulse	0.1000	3
H2	Ge	72	165676.66	1.4	101.6	Pulse	0.1000	3
H2	In	115	446376.80	1.0	103.0	Pulse	0.1000	3
He	Sc	45	42268.07	2.5	105.7	Pulse	0.1000	3
He	Ge	72	76831.58	1.3	106.3	Pulse	0.1000	3
He	In	115	64291.68	3.0	99.5	Pulse	0.1000	3
He	Tb	159	284165.46	0.9	99.4	Pulse	0.1000	3
He	Bi	209	220260.68	0.4	99.1	Pulse	0.1000	3

No Gas

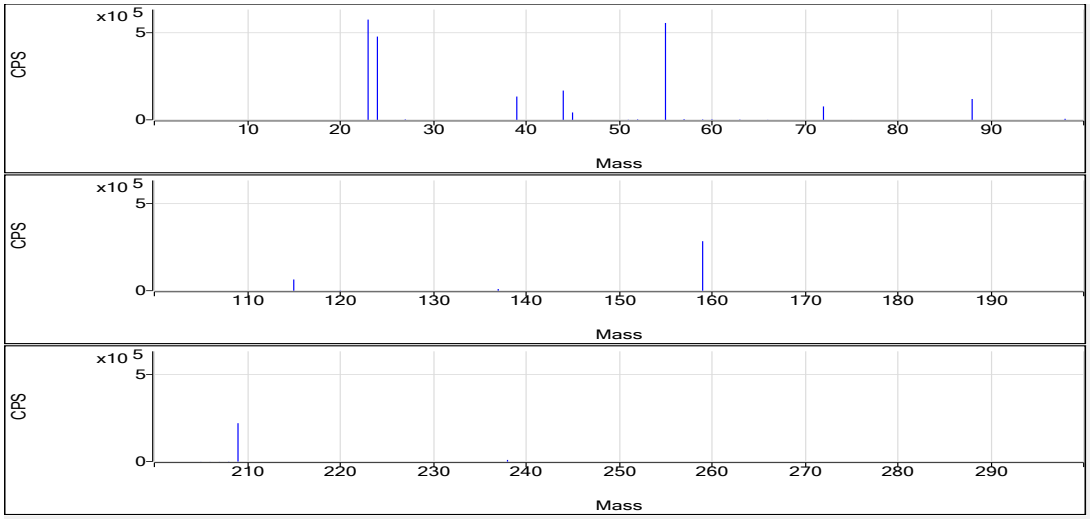


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.008	0.0001	84.00	0.0013	4.694E-05
Be	9	1	No Gas	0.005	0.0001	80.00	0.0013	4.694E-05
Be	9	1	No Gas	0.004	0.0001	80.00	0.0013	4.694E-05
Se	78	2	H2	5.852	0.0023	382.01	0.0004	1.089E-05
Se	78	2	H2	6.675	0.0026	425.34	0.0004	1.089E-05
Se	78	2	H2	5.871	0.0023	384.01	0.0004	1.089E-05
Na	23	3	He	4356.134	7.5895	575821.55	0.0017	0.1065
Na	23	3	He	4258.058	7.421	577729.52	0.0017	0.1065
Na	23	3	He	4278.222	7.4557	572401.01	0.0017	0.1065
Mg	24	3	He	7445.948	6.2825	476660.23	0.0008	0.004846
Mg	24	3	He	7291.579	6.1524	478964.76	0.0008	0.004846
Mg	24	3	He	7377.604	6.2249	477910.81	0.0008	0.004846
Al	27	3	He	130.482	0.0326	2470.37	0.0002	0.001063
Al	27	3	He	124.387	0.0311	2420.30	0.0002	0.001063
Al	27	3	He	127.272	0.0318	2440.30	0.0002	0.001063
K	39	3	He	2928.03	1.7605	133572.84	0.0006	0.1436
K	39	3	He	2829.585	1.7062	132825.78	0.0006	0.1436
K	39	3	He	2912.152	1.7518	134489.79	0.0006	0.1436
Ca	44	3	He	71536.869	2.2235	168701.19	0	0.001611
Ca	44	3	He	69143.312	2.1492	167315.13	0	0.001611
Ca	44	3	He	70371.41	2.1873	167930.33	0	0.001611
Ti	47	3	He	1.536	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	0.957	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	0.467	0.0004	30.00	0.0003	0.0002737
V	51	3	He	0.442	0.0125	948.04	0.0117	0.007326
V	51	3	He	0.413	0.0122	946.04	0.0117	0.007326
V	51	3	He	0.354	0.0115	880.03	0.0117	0.007326
Cr	52	3	He	0.497	0.033	2500.29	0.0152	0.02538
Cr	52	3	He	0.392	0.0313	2440.28	0.0152	0.02538
Cr	52	3	He	0.301	0.03	2300.27	0.0152	0.02538
Mn	55	3	He	1244.235	7.3579	558245.07	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1199.612	7.0945	552305.93	0.0059	0.01385
Mn	55	3	He	1227.702	7.2603	557399.02	0.0059	0.01385
Fe	57	3	He	153.012	0.0482	3660.57	0.0003	0.003918
Fe	57	3	He	152.772	0.0482	3750.66	0.0003	0.003918
Fe	57	3	He	151.954	0.0479	3680.61	0.0003	0.003918
Co	59	3	He	0.828	0.0283	2150.23	0.0305	0.003084
Co	59	3	He	0.829	0.0284	2210.26	0.0305	0.003084
Co	59	3	He	0.825	0.0283	2170.25	0.0305	0.003084
Ni	60	3	He	2.709	0.0328	2490.31	0.0088	0.009003
Ni	60	3	He	2.935	0.0348	2710.36	0.0088	0.009003
Ni	60	3	He	3.124	0.0365	2800.36	0.0088	0.009003
Cu	63	3	He	0.743	0.0235	1780.17	0.0249	0.004937
Cu	63	3	He	0.678	0.0218	1700.16	0.0249	0.004937
Cu	63	3	He	0.664	0.0215	1650.15	0.0249	0.004937
Zn	66	3	He	0.821	0.0069	520.03	0.0025	0.004836
Zn	66	3	He	0.75	0.0067	520.03	0.0025	0.004836
Zn	66	3	He	1.107	0.0076	580.04	0.0025	0.004836
As	75	3	He	0.417	0.0012	88.00	0.0017	0.0004347
As	75	3	He	0.238	0.0008	66.00	0.0017	0.0004347
As	75	3	He	0.304	0.001	74.00	0.0017	0.0004347
Sr	88	3	He	231.663	1.8117	119961.60	0.0078	0.0007762
Sr	88	3	He	246.952	1.9312	120416.39	0.0078	0.0007762
Sr	88	3	He	235.347	1.8405	118359.35	0.0078	0.0007762
Mo	98	3	He	3.921	0.0869	5751.39	0.022	0.0005162
Mo	98	3	He	4.318	0.0956	5961.49	0.022	0.0005162
Mo	98	3	He	4.2	0.093	5981.44	0.022	0.0005162
Ag	107	3	He	0.013	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Cd	111	3	He	0.04	0.0002	16.00	0.0048	5.152E-05
Cd	111	3	He	0.043	0.0003	16.00	0.0048	5.152E-05
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Sn	120	3	He	0.602	0.0242	1600.15	0.0143	0.01559
Sn	120	3	He	1.384	0.0353	2202.34	0.0143	0.01559
Sn	120	3	He	0.237	0.019	1220.10	0.0143	0.01559
Sb	121	3	He	0.211	0.0029	190.01	0.0124	0.000258
Sb	121	3	He	0.134	0.0019	120.00	0.0124	0.000258
Sb	121	3	He	0.042	0.0008	50.00	0.0124	0.000258
Ba	137	3	He	32.703	0.1434	9493.59	0.0044	0.000309
Ba	137	3	He	37.228	0.1632	10174.20	0.0044	0.000309
Ba	137	3	He	33.994	0.149	9583.58	0.0044	0.000309
Tl	205	3	He	0.021	0.0016	350.02	0.0276	0.001005
Tl	205	3	He	0.052	0.0024	540.03	0.0276	0.001005
Tl	205	3	He	0.013	0.0014	300.01	0.0276	0.001005
Pb	208	3	He	0.113	0.0063	800.05	0.0364	0.002176
Pb	208	3	He	0.148	0.0076	950.08	0.0364	0.002176
Pb	208	3	He	0.13	0.0069	960.07	0.0364	0.002176
U	238	3	He	0.979	0.0414	9143.58	0.0421	0.00024
U	238	3	He	1.019	0.0431	9523.84	0.0421	0.00024
U	238	3	He	1.047	0.0443	9704.05	0.0421	0.00024
Sc	45	1	No Gas			3267242.76		
Sc	45	1	No Gas			3331899.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3392610.89		
Ge	72	1	No Gas			1459940.92		
Ge	72	1	No Gas			1492010.13		
Ge	72	1	No Gas			1522161.23		
Sc	45	2	H2			197452.28		
Sc	45	2	H2			193432.03		
Sc	45	2	H2			200830.56		
Ge	72	2	H2			166865.17		
Ge	72	2	H2			162974.74		
Ge	72	2	H2			167190.08		
In	115	2	H2			446717.61		
In	115	2	H2			441689.72		
In	115	2	H2			450723.08		
Sc	45	3	He			41088.27		
Sc	45	3	He			43093.70		
Sc	45	3	He			42622.24		
Ge	72	3	He			75870.67		
Ge	72	3	He			77850.22		
Ge	72	3	He			76773.86		
In	115	3	He			66227.17		
In	115	3	He			62369.47		
In	115	3	He			64317.58		
Tb	159	3	He			281452.77		
Tb	159	3	He			286522.83		
Tb	159	3	He			284520.78		
Bi	209	3	He			220731.87		
Bi	209	3	He			220882.89		
Bi	209	3	He			219167.28		

Quantitation Report

Data File Name	118SMPL.d
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Acq Time	2023-08-10 13:55:42
Sample Name	410-136848-W-10-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

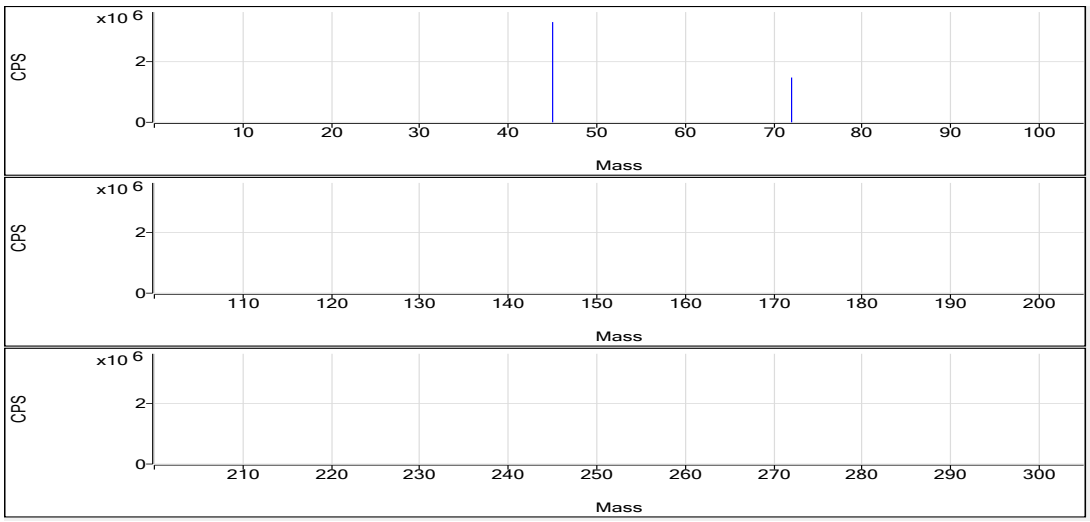
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.033	ppb	30.1	134.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.347	ppb	33.0	24.22	0.0001	Pulse	1.5000	3
Na	23	72	He	4767.278	ppb	1.5	630844.81	8.2958	Pulse	0.1000	3
Mg	24	72	He	8024.438	ppb	2.0	514821.51	6.7703	Pulse	0.1000	3
Al	27	72	He	856.294	ppb	1.9	15798.86	0.2078	Pulse	0.1000	3
K	39	72	He	23872.977	ppb	2.1	1013351.00	13.3266	Pulse	0.1000	3
Ca	44	72	He	28632.762	ppb	2.0	67750.13	0.8909	Pulse	0.1000	3
Ti	47	72	He	8.169	ppb	6.5	176.68	0.0023	Pulse	0.1000	3
V	51	72	He	1.473	ppb	5.1	1868.13	0.0246	Pulse	0.5000	3
Cr	52	72	He	1.126	ppb	22.7	3233.80	0.0425	Pulse	0.1000	3
Mn	55	72	He	545.096	ppb	1.7	245718.98	3.2312	Pulse	0.1000	3
Fe	57	72	He	1118.823	ppb	2.0	24948.85	0.3281	Pulse	0.1000	3
Co	59	72	He	1.158	ppb	7.7	2920.40	0.0384	Pulse	0.1000	3
Ni	60	72	He	3.707	ppb	0.6	3163.79	0.0416	Pulse	0.1000	3
Cu	63	72	He	2.000	ppb	4.5	4170.74	0.0548	Pulse	0.1000	3
Zn	66	72	He	12.713	ppb	4.1	2743.68	0.0361	Pulse	0.1000	3
As	75	72	He	0.813	ppb	16.6	140.67	0.0018	Pulse	0.5000	3
Sr	88	115	He	81.308	ppb	2.3	41748.73	0.6364	Pulse	0.1000	3
Mo	98	115	He	0.399	ppb	15.8	610.03	0.0093	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	211.8	40.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.081	ppb	40.9	28.67	0.0004	Pulse	0.5000	3
Sn	120	115	He	0.358	ppb	49.5	1356.78	0.0207	Pulse	0.1000	3
Sb	121	115	He	0.184	ppb	10.2	166.68	0.0025	Pulse	0.1000	3
Ba	137	115	He	67.127	ppb	2.9	19284.06	0.2940	Pulse	0.1000	3
Tl	205	209	He	0.044	ppb	15.2	486.69	0.0022	Pulse	0.1000	3
Pb	208	209	He	0.824	ppb	2.5	7064.33	0.0322	Pulse	0.1000	3
U	238	209	He	0.081	ppb	1.8	803.39	0.0037	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3328965.99	3.1	102.7	Pulse	0.1000	3
No Gas	Ge	72	1486708.10	2.6	103.3	Pulse	0.1000	3
H2	Sc	45	195275.62	2.3	99.9	Pulse	0.1000	3
H2	Ge	72	165262.00	2.2	101.4	Pulse	0.1000	3
H2	In	115	441571.00	2.3	101.9	Pulse	0.1000	3
He	Sc	45	42154.71	2.1	105.4	Pulse	0.1000	3
He	Ge	72	76054.04	1.4	105.2	Pulse	0.1000	3
He	In	115	65613.52	1.6	101.6	Pulse	0.1000	3
He	Tb	159	283231.52	0.2	99.0	Pulse	0.1000	3
He	Bi	209	219724.96	1.4	98.9	Pulse	0.1000	3

No Gas



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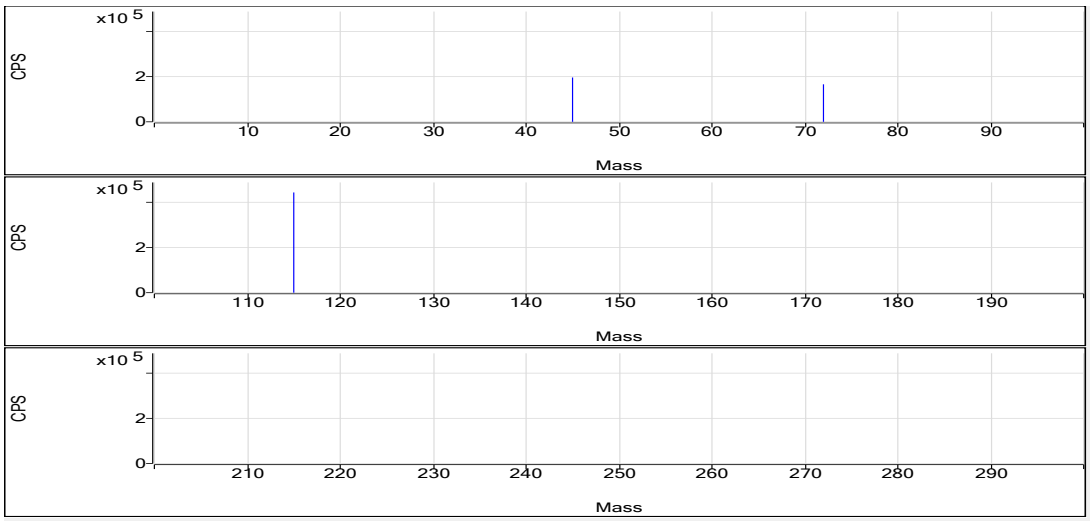
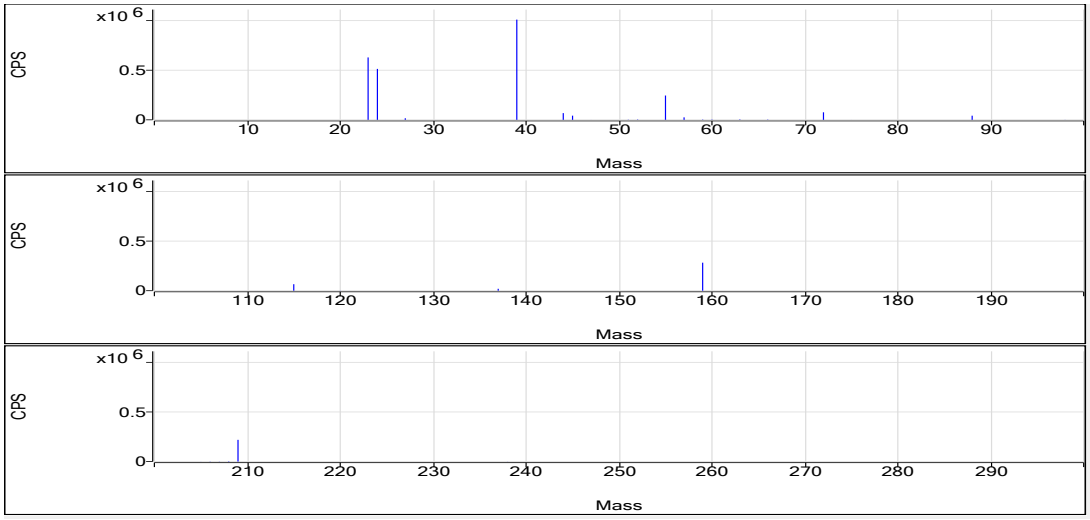


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.039	0.0001	142.00	0.0013	4.694E-05
Be	9	1	No Gas	0.022	0.0001	112.00	0.0013	4.694E-05
Be	9	1	No Gas	0.039	0.0001	150.00	0.0013	4.694E-05
Se	78	2	H2	0.429	0.0002	30.00	0.0004	1.089E-05
Se	78	2	H2	0.216	0.0001	15.33	0.0004	1.089E-05
Se	78	2	H2	0.395	0.0002	27.33	0.0004	1.089E-05
Na	23	3	He	4848.472	8.4353	631502.26	0.0017	0.1065
Na	23	3	He	4728.181	8.2286	629184.83	0.0017	0.1065
Na	23	3	He	4725.18	8.2235	631847.33	0.0017	0.1065
Mg	24	3	He	8203.319	6.9211	518143.35	0.0008	0.004846
Mg	24	3	He	7883.021	6.651	508557.49	0.0008	0.004846
Mg	24	3	He	7986.973	6.7387	517763.70	0.0008	0.004846
Al	27	3	He	873.693	0.212	15868.82	0.0002	0.001063
Al	27	3	He	853.717	0.2071	15838.92	0.0002	0.001063
Al	27	3	He	841.473	0.2042	15688.83	0.0002	0.001063
K	39	3	He	24433.608	13.6362	1020865.45	0.0006	0.1436
K	39	3	He	23667.238	13.213	1010302.25	0.0006	0.1436
K	39	3	He	23518.087	13.1306	1008885.30	0.0006	0.1436
Ca	44	3	He	29208.379	0.9088	68038.34	0	0.001611
Ca	44	3	He	28050.812	0.8729	66741.84	0	0.001611
Ca	44	3	He	28639.093	0.8911	68470.21	0	0.001611
Ti	47	3	He	7.964	0.0023	170.01	0.0003	0.0002737
Ti	47	3	He	7.775	0.0022	170.01	0.0003	0.0002737
Ti	47	3	He	8.77	0.0025	190.01	0.0003	0.0002737
V	51	3	He	1.486	0.0247	1850.13	0.0117	0.007326
V	51	3	He	1.393	0.0236	1806.12	0.0117	0.007326
V	51	3	He	1.541	0.0254	1948.14	0.0117	0.007326
Cr	52	3	He	1.246	0.0444	3320.49	0.0152	0.02538
Cr	52	3	He	0.833	0.0381	2910.37	0.0152	0.02538
Cr	52	3	He	1.299	0.0452	3470.55	0.0152	0.02538
Mn	55	3	He	554.608	3.2874	246108.28	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	535.672	3.1756	242816.89	0.0059	0.01385
Mn	55	3	He	545.009	3.2307	248231.77	0.0059	0.01385
Fe	57	3	He	1121.199	0.3287	24611.38	0.0003	0.003918
Fe	57	3	He	1140.46	0.3343	25563.53	0.0003	0.003918
Fe	57	3	He	1094.81	0.3211	24671.63	0.0003	0.003918
Co	59	3	He	1.16	0.0385	2880.39	0.0305	0.003084
Co	59	3	He	1.245	0.0411	3140.44	0.0305	0.003084
Co	59	3	He	1.068	0.0357	2740.38	0.0305	0.003084
Ni	60	3	He	3.731	0.0418	3130.45	0.0088	0.009003
Ni	60	3	He	3.692	0.0415	3170.46	0.0088	0.009003
Ni	60	3	He	3.698	0.0415	3190.45	0.0088	0.009003
Cu	63	3	He	1.907	0.0525	3930.64	0.0249	0.004937
Cu	63	3	He	2.005	0.0549	4200.76	0.0249	0.004937
Cu	63	3	He	2.088	0.057	4380.81	0.0249	0.004937
Zn	66	3	He	12.55	0.0357	2670.32	0.0025	0.004836
Zn	66	3	He	12.3	0.0351	2680.36	0.0025	0.004836
Zn	66	3	He	13.29	0.0375	2880.36	0.0025	0.004836
As	75	3	He	0.749	0.0017	130.00	0.0017	0.0004347
As	75	3	He	0.968	0.0021	162.00	0.0017	0.0004347
As	75	3	He	0.723	0.0017	130.00	0.0017	0.0004347
Sr	88	3	He	79.239	0.6202	40899.66	0.0078	0.0007762
Sr	88	3	He	82.883	0.6487	41812.26	0.0078	0.0007762
Sr	88	3	He	81.8	0.6402	42534.26	0.0078	0.0007762
Mo	98	3	He	0.348	0.0082	540.03	0.022	0.0005162
Mo	98	3	He	0.47	0.0109	700.04	0.022	0.0005162
Mo	98	3	He	0.38	0.0089	590.03	0.022	0.0005162
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	-0.004	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	0.059	0.0003	22.00	0.0048	5.152E-05
Cd	111	3	He	0.119	0.0006	40.00	0.0048	5.152E-05
Cd	111	3	He	0.065	0.0004	24.00	0.0048	5.152E-05
Sn	120	3	He	0.162	0.0179	1180.09	0.0143	0.01559
Sn	120	3	He	0.506	0.0228	1470.14	0.0143	0.01559
Sn	120	3	He	0.406	0.0214	1420.12	0.0143	0.01559
Sb	121	3	He	0.163	0.0023	150.01	0.0124	0.000258
Sb	121	3	He	0.192	0.0026	170.01	0.0124	0.000258
Sb	121	3	He	0.198	0.0027	180.01	0.0124	0.000258
Ba	137	3	He	65.418	0.2865	18893.48	0.0044	0.000309
Ba	137	3	He	69.203	0.3031	19534.34	0.0044	0.000309
Ba	137	3	He	66.76	0.2924	19424.35	0.0044	0.000309
Tl	205	3	He	0.045	0.0023	490.03	0.0276	0.001005
Tl	205	3	He	0.037	0.002	450.02	0.0276	0.001005
Tl	205	3	He	0.05	0.0024	520.03	0.0276	0.001005
Pb	208	3	He	0.829	0.0323	3920.72	0.0364	0.002176
Pb	208	3	He	0.801	0.0313	3660.61	0.0364	0.002176
Pb	208	3	He	0.842	0.0328	3920.70	0.0364	0.002176
U	238	3	He	0.08	0.0036	780.05	0.0421	0.00024
U	238	3	He	0.082	0.0037	820.06	0.0421	0.00024
U	238	3	He	0.082	0.0037	810.06	0.0421	0.00024
Sc	45	1	No Gas			3225886.20		
Sc	45	1	No Gas			3331694.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3429316.82		
Ge	72	1	No Gas			1449574.20		
Ge	72	1	No Gas			1485116.07		
Ge	72	1	No Gas			1525434.04		
Sc	45	2	H2			195812.75		
Sc	45	2	H2			190492.44		
Sc	45	2	H2			199521.68		
Ge	72	2	H2			168638.34		
Ge	72	2	H2			161385.13		
Ge	72	2	H2			165762.54		
In	115	2	H2			445441.75		
In	115	2	H2			429844.88		
In	115	2	H2			449426.36		
Sc	45	3	He			42171.56		
Sc	45	3	He			41279.00		
Sc	45	3	He			43013.56		
Ge	72	3	He			74864.55		
Ge	72	3	He			76462.93		
Ge	72	3	He			76834.64		
In	115	3	He			65955.41		
In	115	3	He			64468.64		
In	115	3	He			66448.27		
Tb	159	3	He			282725.60		
Tb	159	3	He			283870.33		
Tb	159	3	He			283098.63		
Bi	209	3	He			217385.33		
Bi	209	3	He			223211.48		
Bi	209	3	He			218578.08		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 13:57:41
Sample Name	410-136848-U-4-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

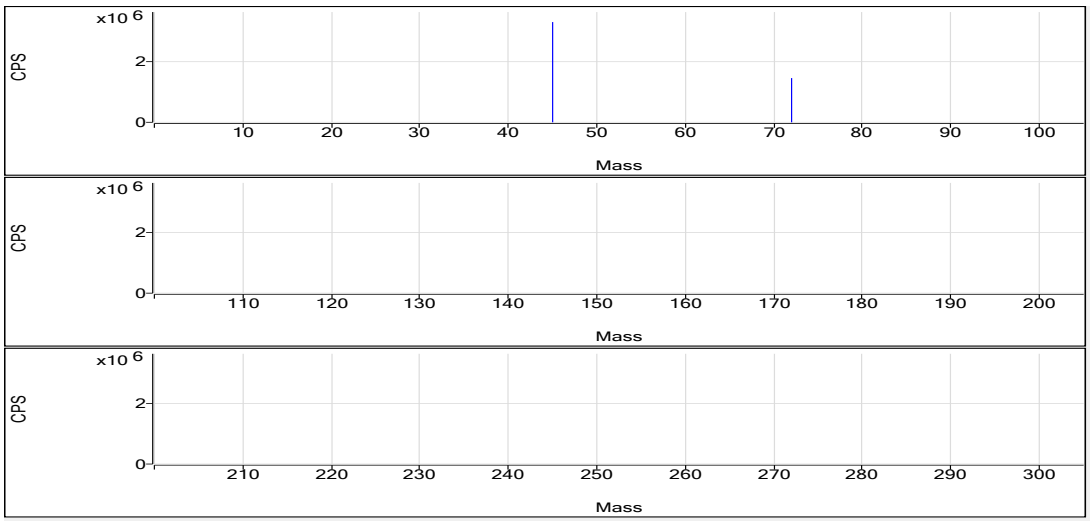
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.004	ppb	N/A	61.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.039	ppb	16.5	4.22	0.0000	Pulse	1.5000	3
Na	23	72	He	67782.947	ppb	0.7	8760202.99	116.5454	Analog	0.1000	3
Mg	24	72	He	11859.966	ppb	0.7	751963.37	10.0040	Pulse	0.1000	3
Al	27	72	He	20.219	ppb	12.8	446.69	0.0059	Pulse	0.1000	3
K	39	72	He	1962.295	ppb	1.2	92248.33	1.2272	Pulse	0.1000	3
Ca	44	72	He	87020.140	ppb	1.9	203284.31	2.7044	Pulse	0.1000	3
Ti	47	72	He	-0.383	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
V	51	72	He	0.119	ppb	15.0	655.35	0.0087	Pulse	0.5000	3
Cr	52	72	He	0.002	ppb	8272.3	1910.21	0.0254	Pulse	0.1000	3
Mn	55	72	He	14.060	ppb	6.3	7278.74	0.0968	Pulse	0.1000	3
Fe	57	72	He	21.983	ppb	22.9	773.38	0.0103	Pulse	0.1000	3
Co	59	72	He	0.159	ppb	23.3	596.70	0.0079	Pulse	0.1000	3
Ni	60	72	He	1.125	ppb	28.1	1420.12	0.0189	Pulse	0.1000	3
Cu	63	72	He	0.320	ppb	12.0	970.07	0.0129	Pulse	0.1000	3
Zn	66	72	He	1.859	ppb	44.5	706.71	0.0094	Pulse	0.1000	3
As	75	72	He	0.418	ppb	25.8	87.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	294.004	ppb	1.8	147608.91	2.2990	Pulse	0.1000	3
Mo	98	115	He	0.632	ppb	5.0	926.73	0.0144	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	149.5	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.218	ppb	19.1	1200.10	0.0187	Pulse	0.1000	3
Sb	121	115	He	0.092	ppb	34.6	90.00	0.0014	Pulse	0.1000	3
Ba	137	115	He	14.030	ppb	7.2	3964.06	0.0617	Pulse	0.1000	3
Tl	205	209	He	0.019	ppb	52.5	333.35	0.0015	Pulse	0.1000	3
Pb	208	209	He	0.027	ppb	13.2	686.70	0.0031	Pulse	0.1000	3
U	238	209	He	0.583	ppb	3.7	5404.65	0.0248	Pulse	0.1000	3

ISTD Table:

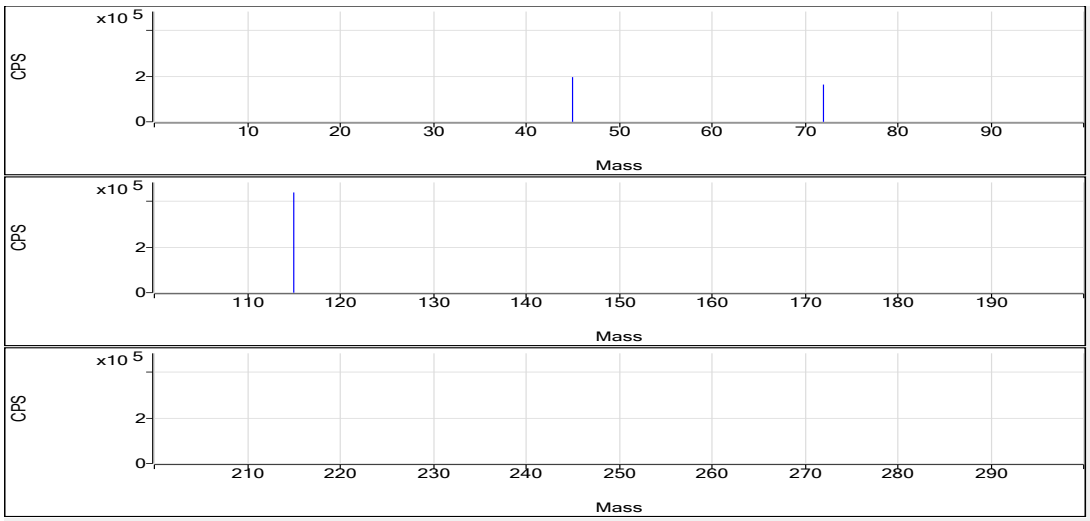
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3319952.76	1.9	102.4	Pulse	0.1000	3
No Gas	Ge	72	1464375.66	1.6	101.7	Pulse	0.1000	3
H2	Sc	45	195482.19	2.3	100.1	Pulse	0.1000	3
H2	Ge	72	162955.93	1.6	100.0	Pulse	0.1000	3
H2	In	115	438533.03	2.2	101.2	Pulse	0.1000	3
He	Sc	45	41957.16	0.9	104.9	Pulse	0.1000	3
He	Ge	72	75166.39	0.3	104.0	Pulse	0.1000	3
He	In	115	64215.34	1.6	99.4	Pulse	0.1000	3
He	Tb	159	287966.38	0.6	100.7	Pulse	0.1000	3
He	Bi	209	218293.94	0.9	98.2	Pulse	0.1000	3

No Gas

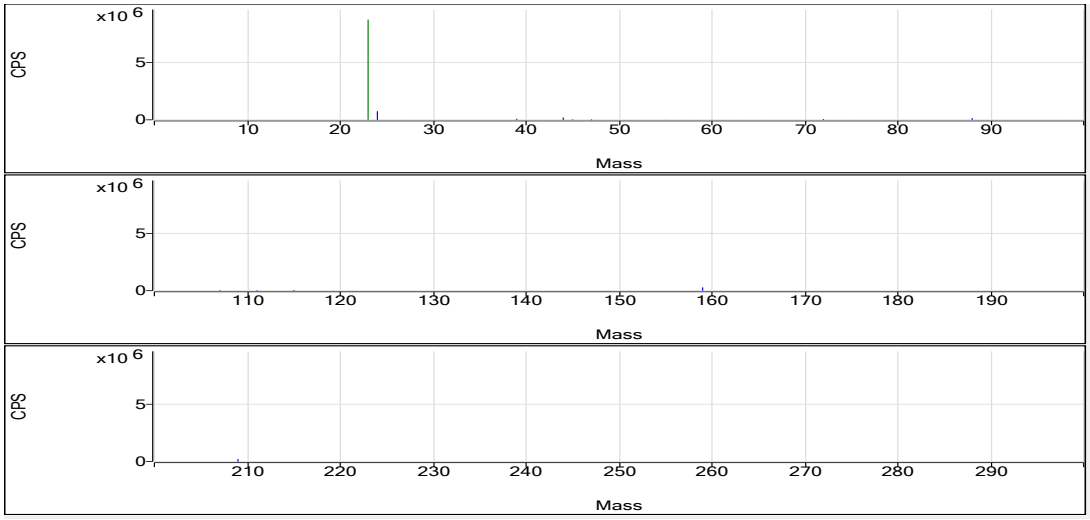


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.007	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	0.001	0	70.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.005	0	60.00	0.0013	4.694E-05
Se	78	2	H2	0.034	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.046	0	4.67	0.0004	1.089E-05
Na	23	3	He	67214.026	115.5681	8710127.37	0.0017	0.1065
Na	23	3	He	68089.92	117.0728	8796421.12	0.0017	0.1065
Na	23	3	He	68044.894	116.9954	8774060.49	0.0017	0.1065
Mg	24	3	He	11812.868	9.9643	750987.88	0.0008	0.004846
Mg	24	3	He	11950.095	10.08	757373.74	0.0008	0.004846
Mg	24	3	He	11816.936	9.9677	747528.50	0.0008	0.004846
Al	27	3	He	18.684	0.0056	420.02	0.0002	0.001063
Al	27	3	He	18.755	0.0056	420.02	0.0002	0.001063
Al	27	3	He	23.218	0.0067	500.02	0.0002	0.001063
K	39	3	He	1967.496	1.2301	92711.19	0.0006	0.1436
K	39	3	He	1982.125	1.2382	93033.36	0.0006	0.1436
K	39	3	He	1937.265	1.2134	91000.43	0.0006	0.1436
Ca	44	3	He	86591.282	2.6911	202824.39	0	0.001611
Ca	44	3	He	88817.321	2.7603	207396.25	0	0.001611
Ca	44	3	He	85651.816	2.6619	199632.30	0	0.001611
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	-0.03	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.028	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.102	0.0085	642.02	0.0117	0.007326
V	51	3	He	0.118	0.0087	654.02	0.0117	0.007326
V	51	3	He	0.137	0.0089	670.02	0.0117	0.007326
Cr	52	3	He	0.032	0.0259	1950.21	0.0152	0.02538
Cr	52	3	He	-0.172	0.0228	1710.18	0.0152	0.02538
Cr	52	3	He	0.146	0.0276	2070.24	0.0152	0.02538
Mn	55	3	He	13.055	0.0909	6851.87	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	14.727	0.1008	7572.20	0.0059	0.01385
Mn	55	3	He	14.398	0.0988	7412.15	0.0059	0.01385
Fe	57	3	He	27.698	0.0119	900.06	0.0003	0.003918
Fe	57	3	He	20.014	0.0097	730.04	0.0003	0.003918
Fe	57	3	He	18.237	0.0092	690.05	0.0003	0.003918
Co	59	3	He	0.199	0.0092	690.04	0.0305	0.003084
Co	59	3	He	0.126	0.0069	520.03	0.0305	0.003084
Co	59	3	He	0.152	0.0077	580.03	0.0305	0.003084
Ni	60	3	He	0.802	0.0161	1210.09	0.0088	0.009003
Ni	60	3	He	1.141	0.019	1430.12	0.0088	0.009003
Ni	60	3	He	1.433	0.0216	1620.15	0.0088	0.009003
Cu	63	3	He	0.276	0.0118	890.06	0.0249	0.004937
Cu	63	3	He	0.346	0.0136	1020.08	0.0249	0.004937
Cu	63	3	He	0.337	0.0133	1000.07	0.0249	0.004937
Zn	66	3	He	1.488	0.0085	640.03	0.0025	0.004836
Zn	66	3	He	1.282	0.008	600.03	0.0025	0.004836
Zn	66	3	He	2.808	0.0117	880.07	0.0025	0.004836
As	75	3	He	0.513	0.0013	100.00	0.0017	0.0004347
As	75	3	He	0.301	0.001	72.00	0.0017	0.0004347
As	75	3	He	0.44	0.0012	90.00	0.0017	0.0004347
Sr	88	3	He	295.734	2.3126	146465.39	0.0078	0.0007762
Sr	88	3	He	288.104	2.2529	147236.66	0.0078	0.0007762
Sr	88	3	He	298.174	2.3316	149124.67	0.0078	0.0007762
Mo	98	3	He	0.665	0.0152	960.07	0.022	0.0005162
Mo	98	3	He	0.602	0.0138	900.07	0.022	0.0005162
Mo	98	3	He	0.63	0.0144	920.06	0.022	0.0005162
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.028	0.0002	12.00	0.0048	5.152E-05
Sn	120	3	He	0.225	0.0188	1190.11	0.0143	0.01559
Sn	120	3	He	0.173	0.0181	1180.10	0.0143	0.01559
Sn	120	3	He	0.256	0.0192	1230.10	0.0143	0.01559
Sb	121	3	He	0.056	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.115	0.0017	110.00	0.0124	0.000258
Sb	121	3	He	0.105	0.0016	100.00	0.0124	0.000258
Ba	137	3	He	13.61	0.0599	3790.66	0.0044	0.000309
Ba	137	3	He	15.182	0.0667	4360.84	0.0044	0.000309
Ba	137	3	He	13.299	0.0585	3740.69	0.0044	0.000309
Tl	205	3	He	0.03	0.0018	400.02	0.0276	0.001005
Tl	205	3	He	0.016	0.0015	320.02	0.0276	0.001005
Tl	205	3	He	0.011	0.0013	280.01	0.0276	0.001005
Pb	208	3	He	0.031	0.0033	240.01	0.0364	0.002176
Pb	208	3	He	0.025	0.0031	330.02	0.0364	0.002176
Pb	208	3	He	0.024	0.0031	340.02	0.0364	0.002176
U	238	3	He	0.607	0.0258	5641.44	0.0421	0.00024
U	238	3	He	0.567	0.0241	5301.26	0.0421	0.00024
U	238	3	He	0.574	0.0244	5271.25	0.0421	0.00024
Sc	45	1	No Gas			3285286.51		
Sc	45	1	No Gas			3280259.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3394312.45		
Ge	72	1	No Gas			1447570.45		
Ge	72	1	No Gas			1454379.98		
Ge	72	1	No Gas			1491176.54		
Sc	45	2	H2			200443.41		
Sc	45	2	H2			191560.08		
Sc	45	2	H2			194443.08		
Ge	72	2	H2			165763.67		
Ge	72	2	H2			160717.64		
Ge	72	2	H2			162386.48		
In	115	2	H2			448365.46		
In	115	2	H2			429540.70		
In	115	2	H2			437692.92		
Sc	45	3	He			42281.21		
Sc	45	3	He			42030.77		
Sc	45	3	He			41559.49		
Ge	72	3	He			75367.90		
Ge	72	3	He			75136.36		
Ge	72	3	He			74994.91		
In	115	3	He			63344.09		
In	115	3	He			65363.14		
In	115	3	He			63966.87		
Tb	159	3	He			288412.98		
Tb	159	3	He			289523.00		
Tb	159	3	He			285963.16		
Bi	209	3	He			218739.08		
Bi	209	3	He			220077.99		
Bi	209	3	He			216064.74		

Quantitation Report

Data File Name	120SMPL.d
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Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

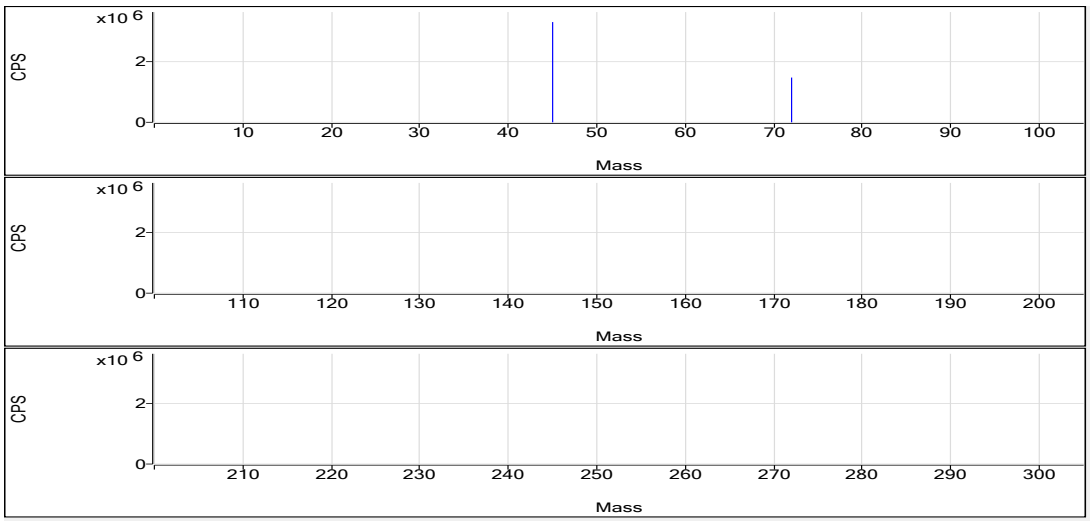
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.008	ppb	N/A	52.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.117	ppb	24.6	9.33	0.0001	Pulse	1.5000	3
Na	23	72	He	31360.419	ppb	1.1	4073873.27	53.9780	Pulse	0.1000	3
Mg	24	72	He	7865.190	ppb	0.8	500845.30	6.6360	Pulse	0.1000	3
Al	27	72	He	20.310	ppb	15.0	450.02	0.0060	Pulse	0.1000	3
K	39	72	He	3076.303	ppb	2.0	139050.85	1.8424	Pulse	0.1000	3
Ca	44	72	He	50584.644	ppb	1.0	118700.74	1.5728	Pulse	0.1000	3
Ti	47	72	He	0.852	ppb	181.1	36.67	0.0005	Pulse	0.1000	3
V	51	72	He	0.631	ppb	5.5	1110.05	0.0147	Pulse	0.5000	3
Cr	52	72	He	0.203	ppb	56.9	2150.24	0.0285	Pulse	0.1000	3
Mn	55	72	He	48.771	ppb	1.5	22771.79	0.3017	Pulse	0.1000	3
Fe	57	72	He	45.915	ppb	5.6	1300.10	0.0172	Pulse	0.1000	3
Co	59	72	He	0.107	ppb	12.6	480.02	0.0064	Pulse	0.1000	3
Ni	60	72	He	1.212	ppb	23.0	1483.46	0.0197	Pulse	0.1000	3
Cu	63	72	He	0.850	ppb	14.9	1973.53	0.0261	Pulse	0.1000	3
Zn	66	72	He	1.590	ppb	16.9	660.04	0.0087	Pulse	0.1000	3
As	75	72	He	0.999	ppb	6.1	164.00	0.0022	Pulse	0.5000	3
Sr	88	115	He	182.893	ppb	2.9	90714.98	1.4305	Pulse	0.1000	3
Mo	98	115	He	1.507	ppb	11.1	2140.24	0.0337	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	152.2	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	116.1	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.310	ppb	27.8	1270.18	0.0200	Pulse	0.1000	3
Sb	121	115	He	0.234	ppb	17.8	200.01	0.0032	Pulse	0.1000	3
Ba	137	115	He	18.216	ppb	2.1	5074.45	0.0800	Pulse	0.1000	3
Tl	205	209	He	0.008	ppb	71.9	270.01	0.0012	Pulse	0.1000	3
Pb	208	209	He	0.034	ppb	15.8	750.03	0.0034	Pulse	0.1000	3
U	238	209	He	0.583	ppb	2.3	5451.32	0.0248	Pulse	0.1000	3

ISTD Table:

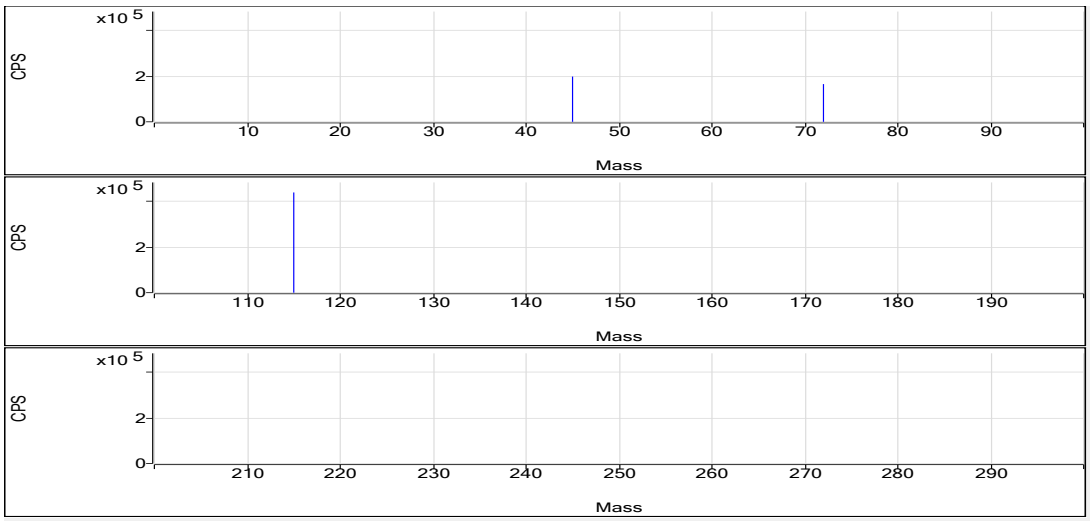
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3281748.39	1.7	101.3	Pulse	0.1000	3
No Gas	Ge	72	1464791.91	1.3	101.7	Pulse	0.1000	3
H2	Sc	45	198248.69	2.0	101.5	Pulse	0.1000	3
H2	Ge	72	165281.53	1.2	101.4	Pulse	0.1000	3
H2	In	115	439165.98	2.4	101.4	Pulse	0.1000	3
He	Sc	45	42726.73	2.0	106.9	Pulse	0.1000	3
He	Ge	72	75478.09	1.1	104.4	Pulse	0.1000	3
He	In	115	63440.99	2.1	98.2	Pulse	0.1000	3
He	Tb	159	284207.94	0.6	99.4	Pulse	0.1000	3
He	Bi	209	220107.29	0.5	99.1	Pulse	0.1000	3

No Gas

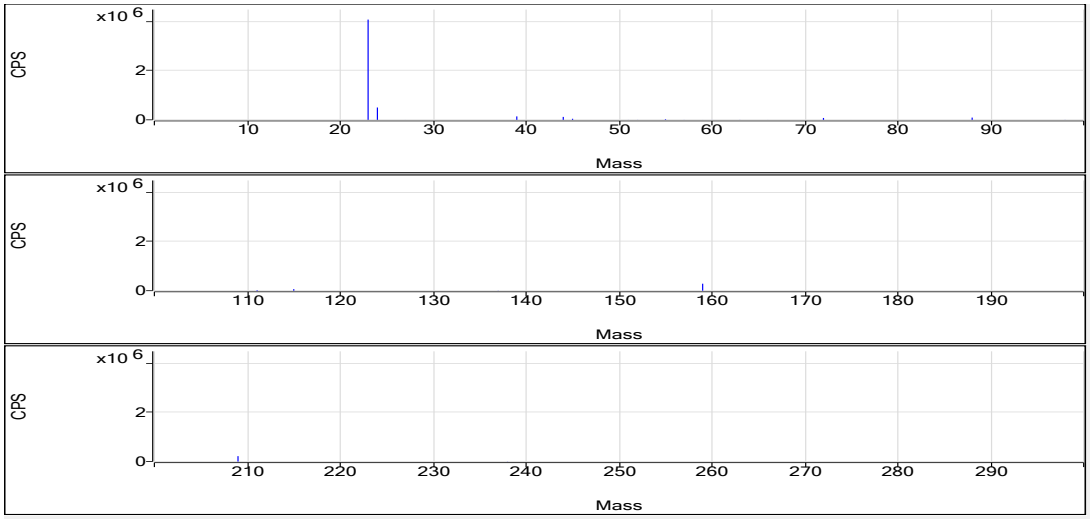


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.006	0	58.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.007	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.012	0	46.00	0.0013	4.694E-05
Se	78	2	H2	0.095	0	8.00	0.0004	1.089E-05
Se	78	2	H2	0.107	0.0001	8.67	0.0004	1.089E-05
Se	78	2	H2	0.15	0.0001	11.33	0.0004	1.089E-05
Na	23	3	He	31734.525	54.6207	4092444.63	0.0017	0.1065
Na	23	3	He	31322.491	53.9129	4049750.56	0.0017	0.1065
Na	23	3	He	31024.24	53.4006	4079424.63	0.0017	0.1065
Mg	24	3	He	7907.242	6.6715	499857.41	0.0008	0.004846
Mg	24	3	He	7893.031	6.6595	500236.63	0.0008	0.004846
Mg	24	3	He	7795.297	6.5771	502441.87	0.0008	0.004846
Al	27	3	He	19.373	0.0057	430.02	0.0002	0.001063
Al	27	3	He	23.724	0.0068	510.02	0.0002	0.001063
Al	27	3	He	17.832	0.0054	410.02	0.0002	0.001063
K	39	3	He	3148.499	1.8823	141029.39	0.0006	0.1436
K	39	3	He	3039.524	1.8221	136869.98	0.0006	0.1436
K	39	3	He	3040.887	1.8229	139253.18	0.0006	0.1436
Ca	44	3	He	50897.005	1.5825	118565.87	0	0.001611
Ca	44	3	He	50862.494	1.5814	118788.79	0	0.001611
Ca	44	3	He	49994.432	1.5544	118747.55	0	0.001611
Ti	47	3	He	2.634	0.0009	70.00	0.0003	0.0002737
Ti	47	3	He	-0.03	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.048	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.665	0.0151	1132.05	0.0117	0.007326
V	51	3	He	0.596	0.0143	1074.05	0.0117	0.007326
V	51	3	He	0.632	0.0147	1124.05	0.0117	0.007326
Cr	52	3	He	0.244	0.0291	2180.27	0.0152	0.02538
Cr	52	3	He	0.073	0.0265	1990.19	0.0152	0.02538
Cr	52	3	He	0.293	0.0298	2280.27	0.0152	0.02538
Mn	55	3	He	49.636	0.3068	22988.82	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	48.419	0.2996	22508.01	0.0059	0.01385
Mn	55	3	He	48.259	0.2987	22818.54	0.0059	0.01385
Fe	57	3	He	44.989	0.017	1270.10	0.0003	0.003918
Fe	57	3	He	43.92	0.0166	1250.09	0.0003	0.003918
Fe	57	3	He	48.835	0.0181	1380.12	0.0003	0.003918
Co	59	3	He	0.113	0.0065	490.02	0.0305	0.003084
Co	59	3	He	0.117	0.0067	500.02	0.0305	0.003084
Co	59	3	He	0.092	0.0059	450.02	0.0305	0.003084
Ni	60	3	He	1.511	0.0223	1670.14	0.0088	0.009003
Ni	60	3	He	0.96	0.0174	1310.11	0.0088	0.009003
Ni	60	3	He	1.165	0.0192	1470.13	0.0088	0.009003
Cu	63	3	He	0.931	0.0282	2110.23	0.0249	0.004937
Cu	63	3	He	0.704	0.0225	1690.15	0.0249	0.004937
Cu	63	3	He	0.915	0.0278	2120.22	0.0249	0.004937
Zn	66	3	He	1.78	0.0092	690.04	0.0025	0.004836
Zn	66	3	He	1.283	0.008	600.03	0.0025	0.004836
Zn	66	3	He	1.708	0.009	690.05	0.0025	0.004836
As	75	3	He	0.932	0.0021	154.00	0.0017	0.0004347
As	75	3	He	1.051	0.0023	170.00	0.0017	0.0004347
As	75	3	He	1.015	0.0022	168.00	0.0017	0.0004347
Sr	88	3	He	187.725	1.4682	91190.26	0.0078	0.0007762
Sr	88	3	He	177.217	1.3861	89692.94	0.0078	0.0007762
Sr	88	3	He	183.738	1.4371	91261.75	0.0078	0.0007762
Mo	98	3	He	1.49	0.0333	2070.23	0.022	0.0005162
Mo	98	3	He	1.682	0.0376	2430.31	0.022	0.0005162
Mo	98	3	He	1.35	0.0302	1920.19	0.022	0.0005162
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.296	0.0198	1230.11	0.0143	0.01559
Sn	120	3	He	0.403	0.0213	1380.33	0.0143	0.01559
Sn	120	3	He	0.232	0.0189	1200.10	0.0143	0.01559
Sb	121	3	He	0.278	0.0037	230.01	0.0124	0.000258
Sb	121	3	He	0.228	0.0031	200.01	0.0124	0.000258
Sb	121	3	He	0.195	0.0027	170.01	0.0124	0.000258
Ba	137	3	He	18.63	0.0818	5081.07	0.0044	0.000309
Ba	137	3	He	18.161	0.0798	5161.19	0.0044	0.000309
Ba	137	3	He	17.858	0.0784	4981.10	0.0044	0.000309
Tl	205	3	He	0.011	0.0013	290.01	0.0276	0.001005
Tl	205	3	He	0.012	0.0013	290.01	0.0276	0.001005
Tl	205	3	He	0.001	0.001	230.01	0.0276	0.001005
Pb	208	3	He	0.033	0.0034	370.02	0.0364	0.002176
Pb	208	3	He	0.039	0.0036	410.02	0.0364	0.002176
Pb	208	3	He	0.029	0.0032	290.01	0.0364	0.002176
U	238	3	He	0.57	0.0242	5351.24	0.0421	0.00024
U	238	3	He	0.597	0.0254	5551.39	0.0421	0.00024
U	238	3	He	0.582	0.0247	5451.34	0.0421	0.00024
Sc	45	1	No Gas			3324766.83		
Sc	45	1	No Gas			3217681.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3302796.83		
Ge	72	1	No Gas			1481967.17		
Ge	72	1	No Gas			1443415.13		
Ge	72	1	No Gas			1468993.42		
Sc	45	2	H2			201733.20		
Sc	45	2	H2			199086.62		
Sc	45	2	H2			193926.25		
Ge	72	2	H2			167534.88		
Ge	72	2	H2			164548.98		
Ge	72	2	H2			163760.72		
In	115	2	H2			449075.62		
In	115	2	H2			440102.22		
In	115	2	H2			428320.11		
Sc	45	3	He			42041.09		
Sc	45	3	He			42462.65		
Sc	45	3	He			43676.44		
Ge	72	3	He			74924.80		
Ge	72	3	He			75116.55		
Ge	72	3	He			76392.93		
In	115	3	He			62118.27		
In	115	3	He			64719.74		
In	115	3	He			63514.67		
Tb	159	3	He			285249.21		
Tb	159	3	He			285056.83		
Tb	159	3	He			282317.79		
Bi	209	3	He			220976.95		
Bi	209	3	He			218859.70		
Bi	209	3	He			220485.21		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

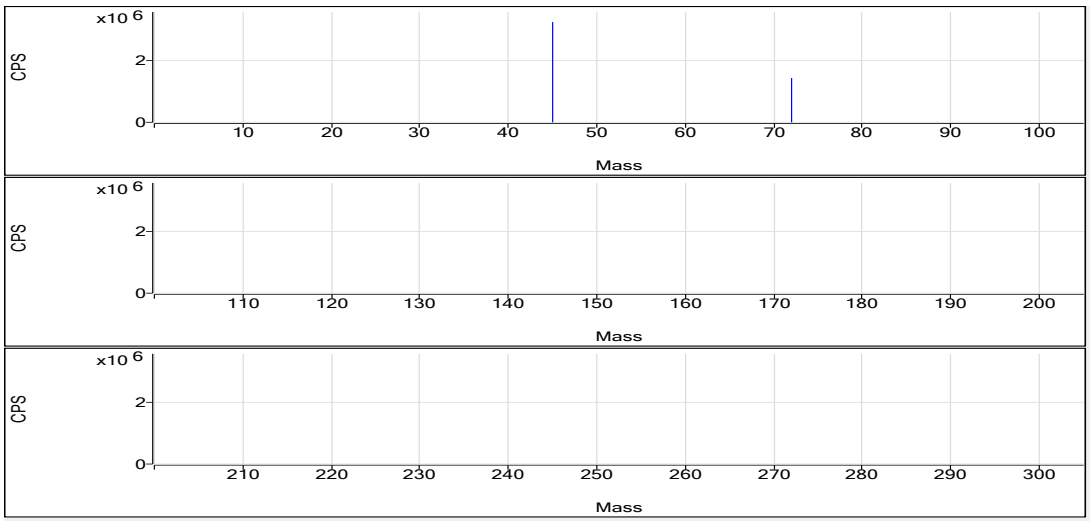
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.008	ppb	N/A	52.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.010	ppb	N/A	1.11	0.0000	Pulse	1.5000	3
Na	23	72	He	36.652	ppb	9.3	12562.31	0.1694	Pulse	0.1000	3
Mg	24	72	He	23.109	ppb	7.9	1803.50	0.0243	Pulse	0.1000	3
Al	27	72	He	3.038	ppb	86.5	133.34	0.0018	Pulse	0.1000	3
K	39	72	He	11.115	ppb	121.9	11104.53	0.1498	Pulse	0.1000	3
Ca	44	72	He	98.297	ppb	33.5	346.68	0.0047	Pulse	0.1000	3
Ti	47	72	He	0.517	ppb	99.7	30.00	0.0004	Pulse	0.1000	3
V	51	72	He	0.032	ppb	159.7	571.35	0.0077	Pulse	0.5000	3
Cr	52	72	He	0.010	ppb	1065.6	1893.52	0.0255	Pulse	0.1000	3
Mn	55	72	He	0.051	ppb	180.1	1050.07	0.0142	Pulse	0.1000	3
Fe	57	72	He	5.529	ppb	79.5	410.02	0.0055	Pulse	0.1000	3
Co	59	72	He	0.061	ppb	64.4	366.68	0.0050	Pulse	0.1000	3
Ni	60	72	He	0.924	ppb	5.1	1270.10	0.0171	Pulse	0.1000	3
Cu	63	72	He	0.062	ppb	74.6	480.03	0.0065	Pulse	0.1000	3
Zn	66	72	He	-0.159	ppb	N/A	330.02	0.0044	Pulse	0.1000	3
As	75	72	He	0.060	ppb	51.4	40.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.288	ppb	26.2	193.34	0.0030	Pulse	0.1000	3
Mo	98	115	He	0.036	ppb	31.4	83.33	0.0013	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	28.4	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	N/A	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.107	ppb	179.0	1090.08	0.0171	Pulse	0.1000	3
Sb	121	115	He	0.021	ppb	87.1	33.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.183	ppb	122.9	70.00	0.0011	Pulse	0.1000	3
Tl	205	209	He	0.048	ppb	19.4	510.03	0.0023	Pulse	0.1000	3
Pb	208	209	He	-0.008	ppb	N/A	413.34	0.0019	Pulse	0.1000	3
U	238	209	He	0.008	ppb	33.2	130.01	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3230111.31	1.7	99.7	Pulse	0.1000	3
No Gas	Ge	72	1425397.84	1.3	99.0	Pulse	0.1000	3
H2	Sc	45	193080.11	1.2	98.8	Pulse	0.1000	3
H2	Ge	72	160060.82	2.5	98.2	Pulse	0.1000	3
H2	In	115	444344.69	1.4	102.5	Pulse	0.1000	3
He	Sc	45	41315.63	0.7	103.3	Pulse	0.1000	3
He	Ge	72	74175.04	1.5	102.6	Pulse	0.1000	3
He	In	115	63743.93	2.0	98.7	Pulse	0.1000	3
He	Tb	159	284222.64	1.0	99.4	Pulse	0.1000	3
He	Bi	209	219072.16	0.6	98.6	Pulse	0.1000	3

No Gas



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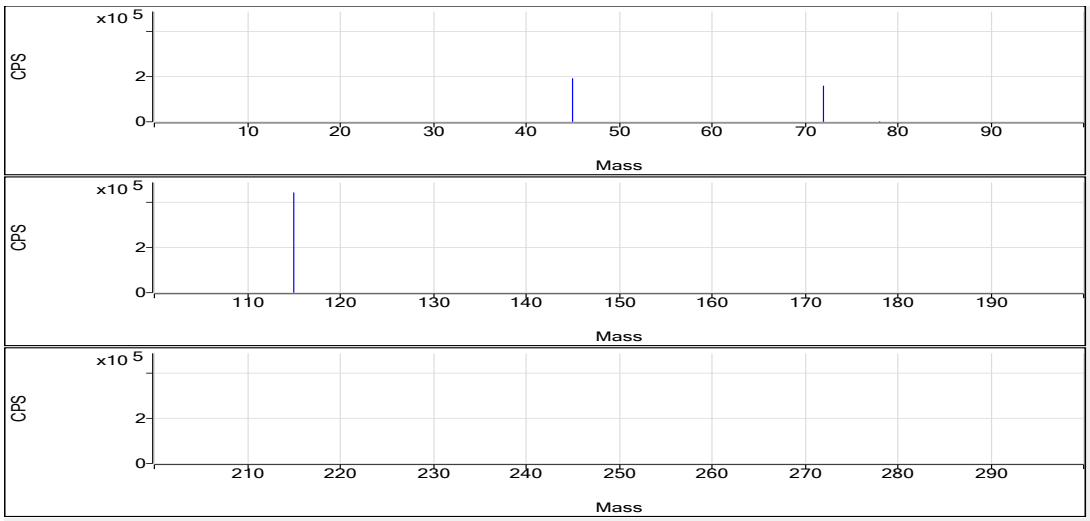
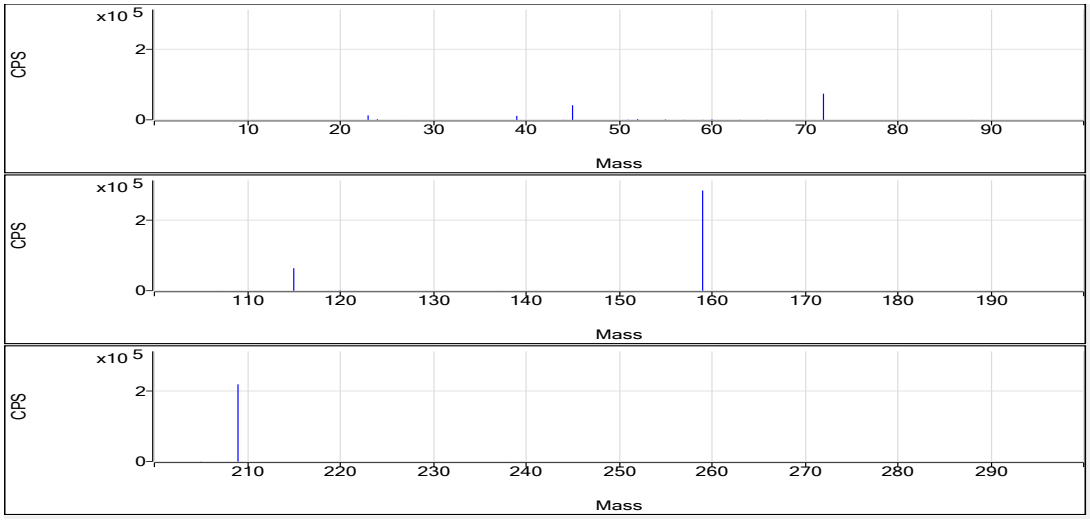


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.007	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.006	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.01	0	48.00	0.0013	4.694E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Se	78	2	H2	-0.028	0	0.00	0.0004	1.089E-05
Na	23	3	He	38.673	0.1729	12715.73	0.0017	0.1065
Na	23	3	He	38.58	0.1727	12705.79	0.0017	0.1065
Na	23	3	He	32.702	0.1626	12265.41	0.0017	0.1065
Mg	24	3	He	24.251	0.0253	1860.18	0.0008	0.004846
Mg	24	3	He	24.085	0.0252	1850.17	0.0008	0.004846
Mg	24	3	He	20.991	0.0225	1700.16	0.0008	0.004846
Al	27	3	He	5.173	0.0023	170.01	0.0002	0.001063
Al	27	3	He	0.103	0.0011	80.00	0.0002	0.001063
Al	27	3	He	3.837	0.002	150.01	0.0002	0.001063
K	39	3	He	21.18	0.1553	11424.79	0.0006	0.1436
K	39	3	He	16.459	0.1527	11234.62	0.0006	0.1436
K	39	3	He	-4.295	0.1413	10654.18	0.0006	0.1436
Ca	44	3	He	83.842	0.0042	310.01	0	0.001611
Ca	44	3	He	75.069	0.0039	290.01	0	0.001611
Ca	44	3	He	135.98	0.0058	440.02	0	0.001611
Ti	47	3	He	0.535	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	-0.007	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.023	0.0005	40.00	0.0003	0.0002737
V	51	3	He	-0.01	0.0072	530.01	0.0117	0.007326
V	51	3	He	0.09	0.0084	616.02	0.0117	0.007326
V	51	3	He	0.018	0.0075	568.01	0.0117	0.007326
Cr	52	3	He	0.056	0.0262	1930.20	0.0152	0.02538
Cr	52	3	He	0.092	0.0268	1970.21	0.0152	0.02538
Cr	52	3	He	-0.117	0.0236	1780.16	0.0152	0.02538
Mn	55	3	He	0.141	0.0147	1080.07	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.044	0.0136	1000.07	0.0059	0.01385
Mn	55	3	He	0.057	0.0142	1070.08	0.0059	0.01385
Fe	57	3	He	0.557	0.0041	300.01	0.0003	0.003918
Fe	57	3	He	7.125	0.006	440.02	0.0003	0.003918
Fe	57	3	He	8.905	0.0065	490.03	0.0003	0.003918
Co	59	3	He	0.099	0.0061	450.02	0.0305	0.003084
Co	59	3	He	0.064	0.005	370.02	0.0305	0.003084
Co	59	3	He	0.021	0.0037	280.01	0.0305	0.003084
Ni	60	3	He	0.925	0.0171	1260.11	0.0088	0.009003
Ni	60	3	He	0.971	0.0175	1290.10	0.0088	0.009003
Ni	60	3	He	0.876	0.0167	1260.10	0.0088	0.009003
Cu	63	3	He	0.08	0.0069	510.03	0.0249	0.004937
Cu	63	3	He	0.096	0.0073	540.03	0.0249	0.004937
Cu	63	3	He	0.009	0.0052	390.02	0.0249	0.004937
Zn	66	3	He	-0.198	0.0044	320.02	0.0025	0.004836
Zn	66	3	He	-0.253	0.0042	310.01	0.0025	0.004836
Zn	66	3	He	-0.026	0.0048	360.02	0.0025	0.004836
As	75	3	He	0.078	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.078	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.025	0.0005	36.00	0.0017	0.0004347
Sr	88	3	He	0.373	0.0037	240.01	0.0078	0.0007762
Sr	88	3	He	0.228	0.0026	160.01	0.0078	0.0007762
Sr	88	3	He	0.262	0.0028	180.01	0.0078	0.0007762
Mo	98	3	He	0.025	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.035	0.0013	80.00	0.022	0.0005162
Mo	98	3	He	0.048	0.0016	100.00	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	0.003	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	-0.059	0.0148	960.07	0.0143	0.01559
Sn	120	3	He	0.063	0.0165	1030.07	0.0143	0.01559
Sn	120	3	He	0.317	0.0201	1280.10	0.0143	0.01559
Sb	121	3	He	0.041	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.07	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.441	0.0022	140.01	0.0044	0.000309
Ba	137	3	He	0.037	0.0005	30.00	0.0044	0.000309
Tl	205	3	He	0.046	0.0023	500.03	0.0276	0.001005
Tl	205	3	He	0.058	0.0026	570.03	0.0276	0.001005
Tl	205	3	He	0.04	0.0021	460.03	0.0276	0.001005
Pb	208	3	He	-0.002	0.0021	270.01	0.0364	0.002176
Pb	208	3	He	-0.012	0.0017	190.01	0.0364	0.002176
Pb	208	3	He	-0.009	0.0018	230.01	0.0364	0.002176
U	238	3	He	0.012	0.0007	160.01	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.01	0.0421	0.00024
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
Sc	45	1	No Gas			3242821.51		
Sc	45	1	No Gas			3171002.77		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3276509.64		
Ge	72	1	No Gas			1434639.20		
Ge	72	1	No Gas			1403860.29		
Ge	72	1	No Gas			1437694.04		
Sc	45	2	H2			192953.22		
Sc	45	2	H2			195539.25		
Sc	45	2	H2			190747.85		
Ge	72	2	H2			163124.27		
Ge	72	2	H2			161456.52		
Ge	72	2	H2			155601.66		
In	115	2	H2			450063.59		
In	115	2	H2			444984.09		
In	115	2	H2			437986.40		
Sc	45	3	He			41028.13		
Sc	45	3	He			41569.81		
Sc	45	3	He			41348.95		
Ge	72	3	He			73548.60		
Ge	72	3	He			73558.84		
Ge	72	3	He			75417.69		
In	115	3	He			65081.93		
In	115	3	He			62510.34		
In	115	3	He			63665.03		
Tb	159	3	He			281133.86		
Tb	159	3	He			286888.98		
Tb	159	3	He			284645.09		
Bi	209	3	He			220500.19		
Bi	209	3	He			218414.35		
Bi	209	3	He			218301.95		

Quantitation Report

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Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

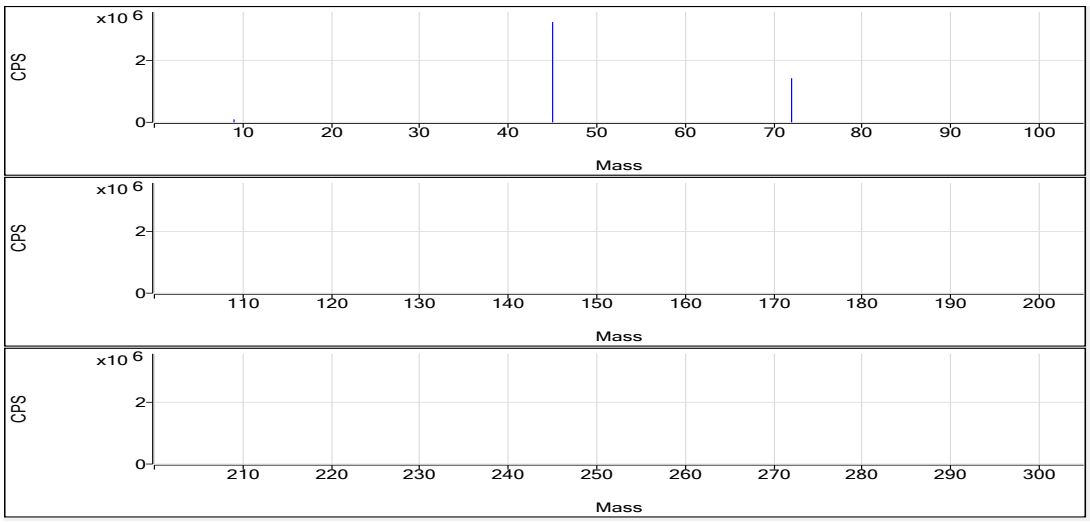
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.727	ppb	3.5	95496.10	0.0667	Pulse	0.5000	3
Se	78	72	H2	53.021	ppb	6.3	3323.72	0.0207	Pulse	1.5000	3
Na	23	72	He	5458.469	ppb	0.9	697824.08	9.4831	Pulse	0.1000	3
Mg	24	72	He	5381.238	ppb	0.8	334210.48	4.5418	Pulse	0.1000	3
Al	27	72	He	5288.934	ppb	0.7	94027.67	1.2778	Pulse	0.1000	3
K	39	72	He	5344.495	ppb	1.3	227744.20	3.0949	Pulse	0.1000	3
Ca	44	72	He	5343.204	ppb	4.2	12328.90	0.1676	Pulse	0.1000	3
Ti	47	72	He	5408.759	ppb	0.7	99832.50	1.3567	Pulse	0.1000	3
V	51	72	He	534.005	ppb	0.8	460205.43	6.2540	Pulse	0.5000	3
Cr	52	72	He	536.857	ppb	0.5	603435.76	8.2003	Pulse	0.1000	3
Mn	55	72	He	528.862	ppb	2.5	230720.34	3.1354	Pulse	0.1000	3
Fe	57	72	He	5281.768	ppb	0.7	112890.11	1.5341	Pulse	0.1000	3
Co	59	72	He	531.867	ppb	1.3	1194325.74	16.2306	Pulse	0.1000	3
Ni	60	72	He	530.720	ppb	1.8	344057.85	4.6758	Pulse	0.1000	3
Cu	63	72	He	531.548	ppb	1.2	975742.69	13.2602	Pulse	0.1000	3
Zn	66	72	He	523.527	ppb	0.7	95001.53	1.2910	Pulse	0.1000	3
As	75	72	He	522.605	ppb	0.2	66916.80	0.9093	Pulse	0.5000	3
Sr	88	115	He	53.801	ppb	1.4	26679.08	0.4213	Pulse	0.1000	3
Mo	98	115	He	53.202	ppb	2.1	74191.51	1.1721	Pulse	0.1000	3
Ag	107	115	He	52.924	ppb	1.5	152465.87	2.4085	Pulse	0.1000	3
Cd	111	115	He	52.652	ppb	0.4	16005.81	0.2528	Pulse	0.5000	3
Sn	120	115	He	52.145	ppb	0.8	48056.95	0.7591	Pulse	0.1000	3
Sb	121	115	He	52.534	ppb	1.7	41268.50	0.6519	Pulse	0.1000	3
Ba	137	115	He	520.978	ppb	2.0	144284.22	2.2795	Pulse	0.1000	3
Tl	205	209	He	52.091	ppb	0.6	317605.43	1.4410	Pulse	0.1000	3
Pb	208	209	He	52.100	ppb	0.3	418440.52	1.8985	Pulse	0.1000	3
U	238	209	He	51.917	ppb	0.6	481408.17	2.1842	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3260400.79	2.2	100.6	Pulse	0.1000	3
No Gas	Ge	72	1432181.49	1.8	99.5	Pulse	0.1000	3
H2	Sc	45	195207.41	2.9	99.9	Pulse	0.1000	3
H2	Ge	72	161071.45	2.5	98.8	Pulse	0.1000	3
H2	In	115	439334.17	1.3	101.4	Pulse	0.1000	3
He	Sc	45	41395.83	1.7	103.5	Pulse	0.1000	3
He	Ge	72	73588.42	0.7	101.8	Pulse	0.1000	3
He	In	115	63317.15	2.4	98.0	Pulse	0.1000	3
He	Tb	159	283818.71	0.5	99.2	Pulse	0.1000	3
He	Bi	209	220409.77	1.0	99.2	Pulse	0.1000	3

No Gas



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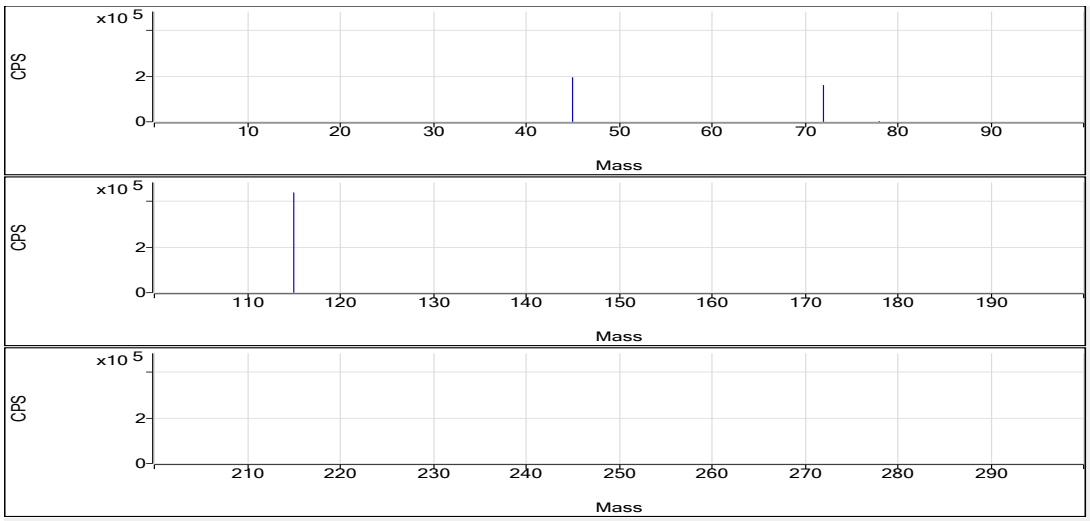
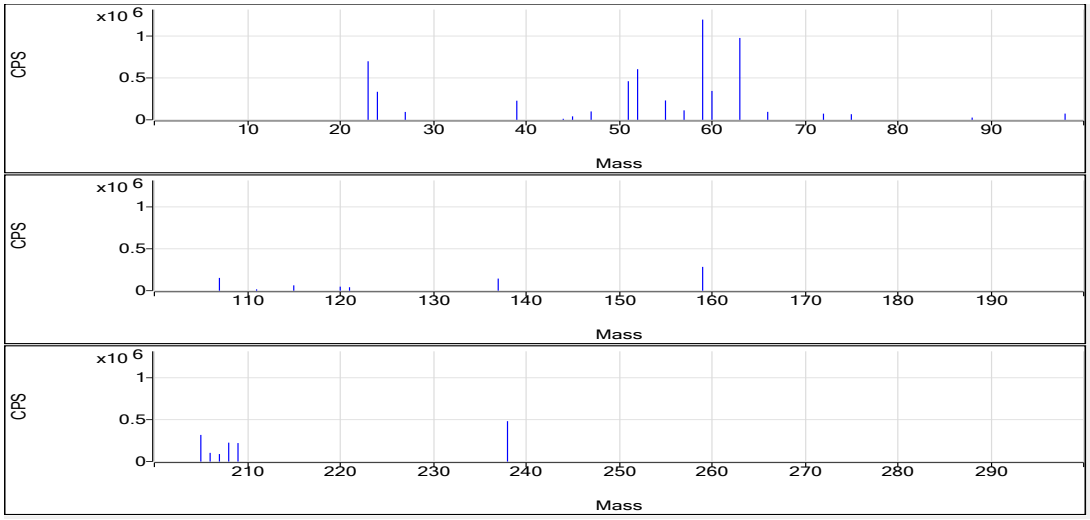


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.101	0.0685	97419.59	0.0013	4.694E-05
Be	9	1	No Gas	51.374	0.0676	95489.36	0.0013	4.694E-05
Be	9	1	No Gas	48.707	0.0641	93579.34	0.0013	4.694E-05
Se	78	2	H2	49.185	0.0192	3165.69	0.0004	1.089E-05
Se	78	2	H2	54.636	0.0213	3423.08	0.0004	1.089E-05
Se	78	2	H2	55.241	0.0215	3382.40	0.0004	1.089E-05
Na	23	3	He	5403.676	9.389	694325.77	0.0017	0.1065
Na	23	3	He	5501.331	9.5568	697501.16	0.0017	0.1065
Na	23	3	He	5470.401	9.5036	701645.30	0.0017	0.1065
Mg	24	3	He	5370.332	4.5326	335188.63	0.0008	0.004846
Mg	24	3	He	5429.019	4.5821	334422.22	0.0008	0.004846
Mg	24	3	He	5344.365	4.5107	333020.58	0.0008	0.004846
Al	27	3	He	5248.155	1.2679	93765.13	0.0002	0.001063
Al	27	3	He	5315.423	1.2842	93725.66	0.0002	0.001063
Al	27	3	He	5303.225	1.2812	94592.23	0.0002	0.001063
K	39	3	He	5264.005	3.0505	225586.34	0.0006	0.1436
K	39	3	He	5378.604	3.1138	227258.81	0.0006	0.1436
K	39	3	He	5390.876	3.1205	230387.44	0.0006	0.1436
Ca	44	3	He	5261.957	0.165	12205.35	0	0.001611
Ca	44	3	He	5597.231	0.1755	12805.98	0	0.001611
Ca	44	3	He	5170.423	0.1622	11975.36	0	0.001611
Ti	47	3	He	5393.297	1.3528	100040.90	0.0003	0.0002737
Ti	47	3	He	5453.678	1.3679	99839.50	0.0003	0.0002737
Ti	47	3	He	5379.302	1.3493	99617.11	0.0003	0.0002737
V	51	3	He	529.155	6.1973	458292.69	0.0117	0.007326
V	51	3	He	537.942	6.3	459808.59	0.0117	0.007326
V	51	3	He	534.918	6.2647	462515.00	0.0117	0.007326
Cr	52	3	He	533.827	8.1541	603003.78	0.0152	0.02538
Cr	52	3	He	538.349	8.223	600154.33	0.0152	0.02538
Cr	52	3	He	538.397	8.2237	607149.17	0.0152	0.02538
Mn	55	3	He	514.208	3.0489	225471.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	532.934	3.1595	230593.26	0.0059	0.01385
Mn	55	3	He	539.444	3.1979	236096.72	0.0059	0.01385
Fe	57	3	He	5246.114	1.5238	112686.00	0.0003	0.003918
Fe	57	3	He	5320.888	1.5455	112795.36	0.0003	0.003918
Fe	57	3	He	5278.301	1.5331	113188.96	0.0003	0.003918
Co	59	3	He	524.17	15.9958	1182902.72	0.0305	0.003084
Co	59	3	He	537.604	16.4057	1197368.89	0.0305	0.003084
Co	59	3	He	533.826	16.2904	1202705.61	0.0305	0.003084
Ni	60	3	He	520.795	4.5885	339324.68	0.0088	0.009003
Ni	60	3	He	539.673	4.7545	347008.16	0.0088	0.009003
Ni	60	3	He	531.692	4.6843	345840.70	0.0088	0.009003
Cu	63	3	He	525.178	13.1014	968858.50	0.0249	0.004937
Cu	63	3	He	538.382	13.4306	980236.24	0.0249	0.004937
Cu	63	3	He	531.082	13.2486	978133.34	0.0249	0.004937
Zn	66	3	He	523.323	1.2905	95435.07	0.0025	0.004836
Zn	66	3	He	527.179	1.3	94880.10	0.0025	0.004836
Zn	66	3	He	520.078	1.2825	94689.41	0.0025	0.004836
As	75	3	He	522.21	0.9086	67195.36	0.0017	0.0004347
As	75	3	He	521.986	0.9083	66289.33	0.0017	0.0004347
As	75	3	He	523.619	0.9111	67265.70	0.0017	0.0004347
Sr	88	3	He	54.26	0.4249	26325.19	0.0078	0.0007762
Sr	88	3	He	52.952	0.4147	26154.90	0.0078	0.0007762
Sr	88	3	He	54.192	0.4244	27557.14	0.0078	0.0007762
Mo	98	3	He	54.405	1.1986	74254.96	0.022	0.0005162
Mo	98	3	He	52.956	1.1667	73581.86	0.022	0.0005162
Mo	98	3	He	52.244	1.151	74737.72	0.022	0.0005162
Ag	107	3	He	53.797	2.4482	151671.73	0.0455	0.0004641
Ag	107	3	He	52.73	2.3997	151345.96	0.0455	0.0004641
Ag	107	3	He	52.244	2.3776	154379.93	0.0455	0.0004641
Cd	111	3	He	52.873	0.2539	15726.82	0.0048	5.152E-05
Cd	111	3	He	52.525	0.2522	15905.03	0.0048	5.152E-05
Cd	111	3	He	52.559	0.2524	16385.57	0.0048	5.152E-05
Sn	120	3	He	52.344	0.7619	47200.82	0.0143	0.01559
Sn	120	3	He	52.413	0.7629	48113.88	0.0143	0.01559
Sn	120	3	He	51.679	0.7524	48856.14	0.0143	0.01559
Sb	121	3	He	53.461	0.6634	41101.13	0.0124	0.000258
Sb	121	3	He	52.45	0.6509	41051.46	0.0124	0.000258
Sb	121	3	He	51.691	0.6415	41652.91	0.0124	0.000258
Ba	137	3	He	531.83	2.327	144157.59	0.0044	0.000309
Ba	137	3	He	520.494	2.2774	143629.86	0.0044	0.000309
Ba	137	3	He	510.609	2.2341	145065.22	0.0044	0.000309
Tl	205	3	He	52.267	1.4459	316939.00	0.0276	0.001005
Tl	205	3	He	52.25	1.4454	316695.95	0.0276	0.001005
Tl	205	3	He	51.757	1.4318	319181.34	0.0276	0.001005
Pb	208	3	He	52.257	1.9042	225255.47	0.0364	0.002176
Pb	208	3	He	51.98	1.8941	222181.70	0.0364	0.002176
Pb	208	3	He	52.062	1.8971	228247.81	0.0364	0.002176
U	238	3	He	52.068	2.1906	480174.13	0.0421	0.00024
U	238	3	He	52.11	2.1924	480356.16	0.0421	0.00024
U	238	3	He	51.572	2.1697	483694.21	0.0421	0.00024
Sc	45	1	No Gas			3220513.39		
Sc	45	1	No Gas			3217722.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3342966.83		
Ge	72	1	No Gas			1421986.07		
Ge	72	1	No Gas			1413524.98		
Ge	72	1	No Gas			1461033.42		
Sc	45	2	H2			201609.82		
Sc	45	2	H2			190490.92		
Sc	45	2	H2			193521.50		
Ge	72	2	H2			165208.79		
Ge	72	2	H2			160827.10		
Ge	72	2	H2			157178.45		
In	115	2	H2			445251.99		
In	115	2	H2			439011.63		
In	115	2	H2			433738.90		
Sc	45	3	He			40586.86		
Sc	45	3	He			41660.01		
Sc	45	3	He			41940.62		
Ge	72	3	He			73950.94		
Ge	72	3	He			72985.12		
Ge	72	3	He			73829.21		
In	115	3	He			62319.34		
In	115	3	He			63443.80		
In	115	3	He			65312.86		
Tb	159	3	He			282317.18		
Tb	159	3	He			285134.02		
Tb	159	3	He			284004.94		
Bi	209	3	He			219198.20		
Bi	209	3	He			219104.59		
Bi	209	3	He			222926.52		

Quantitation Report

Data File Name	123_CCB.d
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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

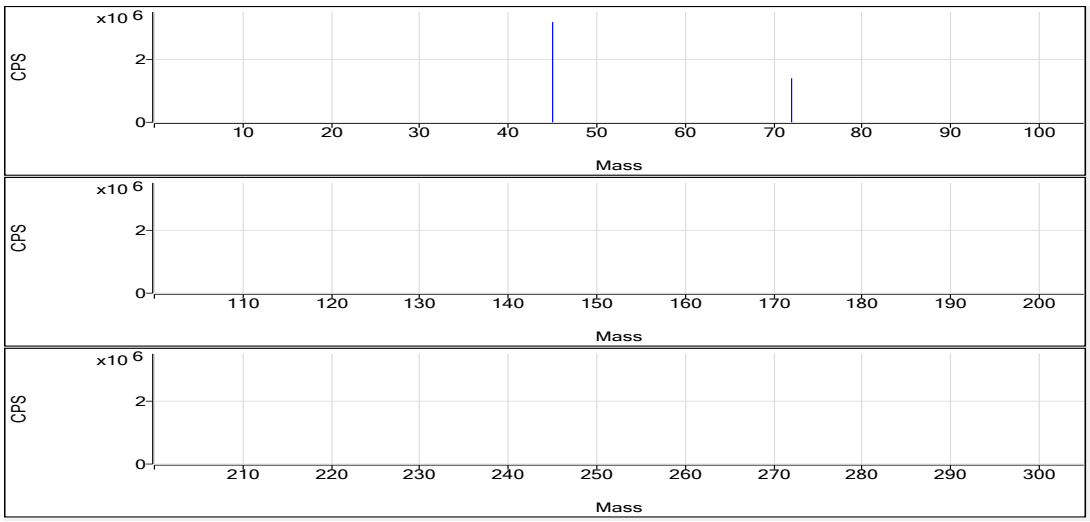
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.037	ppb	8.5	136.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.084	ppb	33.6	6.89	0.0000	Pulse	1.5000	3
Na	23	72	He	23.000	ppb	14.0	10680.86	0.1460	Pulse	0.1000	3
Mg	24	72	He	17.915	ppb	10.1	1460.12	0.0199	Pulse	0.1000	3
Al	27	72	He	3.713	ppb	47.3	143.34	0.0020	Pulse	0.1000	3
K	39	72	He	11.289	ppb	93.2	10971.10	0.1499	Pulse	0.1000	3
Ca	44	72	He	65.317	ppb	67.3	266.68	0.0036	Pulse	0.1000	3
Ti	47	72	He	2.887	ppb	102.7	73.34	0.0010	Pulse	0.1000	3
V	51	72	He	0.184	ppb	21.0	694.02	0.0095	Pulse	0.5000	3
Cr	52	72	He	0.170	ppb	55.3	2046.87	0.0280	Pulse	0.1000	3
Mn	55	72	He	0.030	ppb	443.1	1026.74	0.0140	Pulse	0.1000	3
Fe	57	72	He	4.700	ppb	61.4	386.69	0.0053	Pulse	0.1000	3
Co	59	72	He	0.241	ppb	8.8	763.38	0.0104	Pulse	0.1000	3
Ni	60	72	He	1.296	ppb	18.4	1493.47	0.0204	Pulse	0.1000	3
Cu	63	72	He	0.231	ppb	18.8	783.38	0.0107	Pulse	0.1000	3
Zn	66	72	He	-0.133	ppb	N/A	330.02	0.0045	Pulse	0.1000	3
As	75	72	He	0.191	ppb	84.3	56.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.240	ppb	13.8	170.01	0.0027	Pulse	0.1000	3
Mo	98	115	He	0.043	ppb	56.8	93.34	0.0015	Pulse	0.1000	3
Ag	107	115	He	0.022	ppb	15.5	93.33	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.031	ppb	25.5	12.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.276	ppb	7.6	1250.10	0.0195	Pulse	0.1000	3
Sb	121	115	He	0.106	ppb	34.1	100.00	0.0016	Pulse	0.1000	3
Ba	137	115	He	0.300	ppb	44.2	103.34	0.0016	Pulse	0.1000	3
Tl	205	209	He	0.226	ppb	26.2	1593.48	0.0073	Pulse	0.1000	3
Pb	208	209	He	0.005	ppb	156.6	516.69	0.0024	Pulse	0.1000	3
U	238	209	He	0.026	ppb	9.5	290.02	0.0013	Pulse	0.1000	3

ISTD Table:

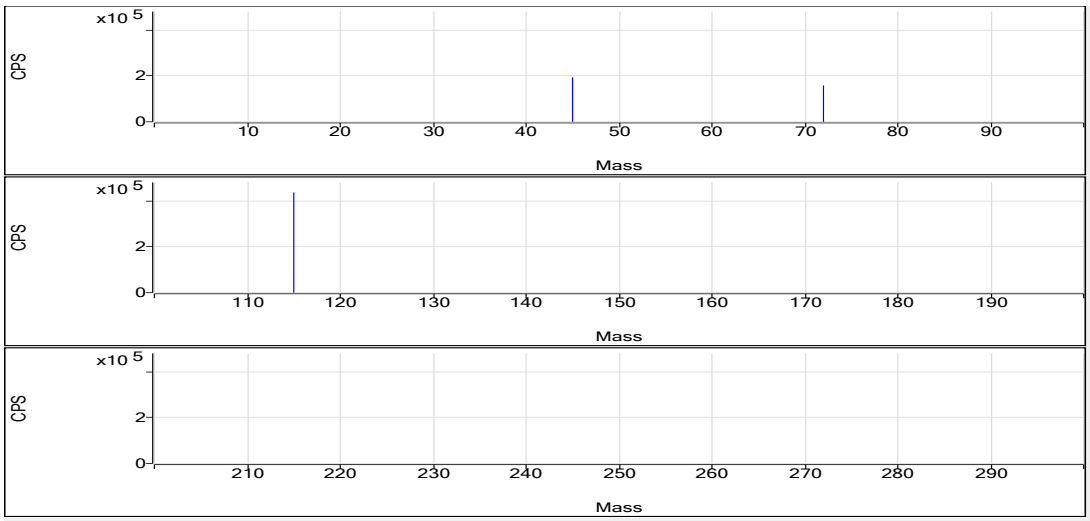
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3215961.20	2.3	99.2	Pulse	0.1000	3
No Gas	Ge	72	1414381.39	1.6	98.2	Pulse	0.1000	3
H2	Sc	45	194323.46	2.2	99.5	Pulse	0.1000	3
H2	Ge	72	159006.40	1.9	97.5	Pulse	0.1000	3
H2	In	115	437861.50	2.4	101.1	Pulse	0.1000	3
He	Sc	45	42101.09	2.0	105.3	Pulse	0.1000	3
He	Ge	72	73189.27	0.9	101.2	Pulse	0.1000	3
He	In	115	64027.46	2.0	99.1	Pulse	0.1000	3
He	Tb	159	282316.06	1.2	98.7	Pulse	0.1000	3
He	Bi	209	219219.94	0.9	98.7	Pulse	0.1000	3

No Gas

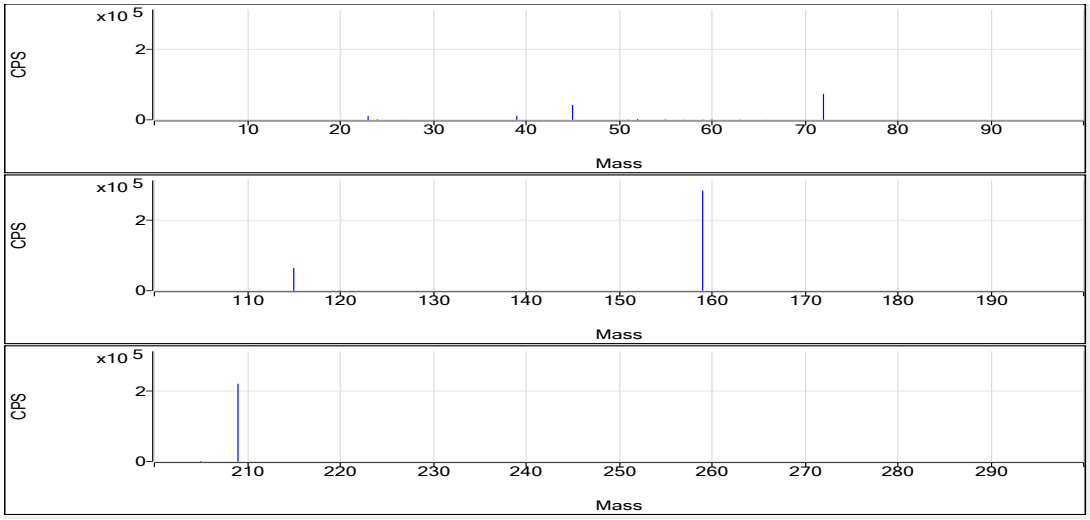


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.041	0.0001	142.00	0.0013	4.694E-05
Be	9	1	No Gas	0.035	0.0001	130.00	0.0013	4.694E-05
Be	9	1	No Gas	0.036	0.0001	136.00	0.0013	4.694E-05
Se	78	2	H2	0.056	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.112	0.0001	8.67	0.0004	1.089E-05
Se	78	2	H2	0.082	0	6.67	0.0004	1.089E-05
Na	23	3	He	19.319	0.1396	10314.00	0.0017	0.1065
Na	23	3	He	25.244	0.1498	10874.31	0.0017	0.1065
Na	23	3	He	24.436	0.1484	10854.27	0.0017	0.1065
Mg	24	3	He	18.824	0.0207	1530.12	0.0008	0.004846
Mg	24	3	He	19.093	0.0209	1520.13	0.0008	0.004846
Mg	24	3	He	15.826	0.0182	1330.11	0.0008	0.004846
Al	27	3	He	4.011	0.002	150.00	0.0002	0.001063
Al	27	3	He	5.301	0.0023	170.01	0.0002	0.001063
Al	27	3	He	1.829	0.0015	110.00	0.0002	0.001063
K	39	3	He	22.939	0.1563	11544.83	0.0006	0.1436
K	39	3	He	8.447	0.1483	10764.36	0.0006	0.1436
K	39	3	He	2.483	0.145	10604.10	0.0006	0.1436
Ca	44	3	He	70.193	0.0038	280.01	0	0.001611
Ca	44	3	He	19.112	0.0022	160.01	0	0.001611
Ca	44	3	He	106.645	0.0049	360.02	0	0.001611
Ti	47	3	He	5.928	0.0018	130.01	0.0003	0.0002737
Ti	47	3	He	0.007	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	2.726	0.001	70.00	0.0003	0.0002737
V	51	3	He	0.214	0.0098	726.02	0.0117	0.007326
V	51	3	He	0.198	0.0096	700.02	0.0117	0.007326
V	51	3	He	0.141	0.009	656.02	0.0117	0.007326
Cr	52	3	He	0.111	0.0271	2000.20	0.0152	0.02538
Cr	52	3	He	0.278	0.0296	2150.21	0.0152	0.02538
Cr	52	3	He	0.12	0.0272	1990.21	0.0152	0.02538
Mn	55	3	He	-0.076	0.0134	990.07	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.013	0.0138	1000.08	0.0059	0.01385
Mn	55	3	He	0.178	0.0149	1090.08	0.0059	0.01385
Fe	57	3	He	7.976	0.0062	460.03	0.0003	0.003918
Fe	57	3	He	3.598	0.005	360.02	0.0003	0.003918
Fe	57	3	He	2.527	0.0046	340.02	0.0003	0.003918
Co	59	3	He	0.241	0.0104	770.05	0.0305	0.003084
Co	59	3	He	0.22	0.0098	710.05	0.0305	0.003084
Co	59	3	He	0.262	0.0111	810.05	0.0305	0.003084
Ni	60	3	He	1.563	0.0227	1680.17	0.0088	0.009003
Ni	60	3	He	1.217	0.0197	1430.13	0.0088	0.009003
Ni	60	3	He	1.107	0.0187	1370.10	0.0088	0.009003
Cu	63	3	He	0.242	0.011	810.05	0.0249	0.004937
Cu	63	3	He	0.183	0.0095	690.04	0.0249	0.004937
Cu	63	3	He	0.268	0.0116	850.06	0.0249	0.004937
Zn	66	3	He	-0.15	0.0045	330.01	0.0025	0.004836
Zn	66	3	He	0.106	0.0051	370.02	0.0025	0.004836
Zn	66	3	He	-0.354	0.004	290.02	0.0025	0.004836
As	75	3	He	0.03	0.0005	36.00	0.0017	0.0004347
As	75	3	He	0.352	0.001	76.00	0.0017	0.0004347
As	75	3	He	0.19	0.0008	56.00	0.0017	0.0004347
Sr	88	3	He	0.228	0.0026	160.01	0.0078	0.0007762
Sr	88	3	He	0.215	0.0025	160.01	0.0078	0.0007762
Sr	88	3	He	0.278	0.0029	190.01	0.0078	0.0007762
Mo	98	3	He	0.042	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.067	0.002	130.01	0.022	0.0005162
Mo	98	3	He	0.019	0.0009	60.00	0.022	0.0005162
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.024	0.0015	100.00	0.0455	0.0004641
Ag	107	3	He	0.024	0.0016	100.00	0.0455	0.0004641
Cd	111	3	He	0.036	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.034	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	0.296	0.0198	1240.10	0.0143	0.01559
Sn	120	3	He	0.254	0.0192	1250.10	0.0143	0.01559
Sn	120	3	He	0.279	0.0196	1260.11	0.0143	0.01559
Sb	121	3	He	0.147	0.0021	130.01	0.0124	0.000258
Sb	121	3	He	0.091	0.0014	90.00	0.0124	0.000258
Sb	121	3	He	0.079	0.0012	80.00	0.0124	0.000258
Ba	137	3	He	0.441	0.0022	140.01	0.0044	0.000309
Ba	137	3	He	0.281	0.0015	100.00	0.0044	0.000309
Ba	137	3	He	0.178	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.29	0.009	2000.21	0.0276	0.001005
Tl	205	3	He	0.216	0.007	1520.13	0.0276	0.001005
Tl	205	3	He	0.173	0.0058	1260.11	0.0276	0.001005
Pb	208	3	He	0.013	0.0027	280.02	0.0364	0.002176
Pb	208	3	He	0.003	0.0023	220.01	0.0364	0.002176
Pb	208	3	He	-0.002	0.0021	250.01	0.0364	0.002176
U	238	3	He	0.023	0.0012	270.01	0.0421	0.00024
U	238	3	He	0.026	0.0013	290.02	0.0421	0.00024
U	238	3	He	0.028	0.0014	310.02	0.0421	0.00024
Sc	45	1	No Gas			3201589.33		
Sc	45	1	No Gas			3150234.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3296059.64		
Ge	72	1	No Gas			1407064.04		
Ge	72	1	No Gas			1396833.89		
Ge	72	1	No Gas			1439246.23		
Sc	45	2	H2			199311.68		
Sc	45	2	H2			191395.25		
Sc	45	2	H2			192263.45		
Ge	72	2	H2			162215.91		
Ge	72	2	H2			158523.08		
Ge	72	2	H2			156280.20		
In	115	2	H2			449756.83		
In	115	2	H2			433212.22		
In	115	2	H2			430615.46		
Sc	45	3	He			41268.42		
Sc	45	3	He			42953.56		
Sc	45	3	He			42081.29		
Ge	72	3	He			73859.54		
Ge	72	3	He			72582.49		
Ge	72	3	He			73125.79		
In	115	3	He			62611.01		
In	115	3	He			65071.84		
In	115	3	He			64428.79		
Tb	159	3	He			286086.68		
Tb	159	3	He			279600.37		
Tb	159	3	He			281261.13		
Bi	209	3	He			221573.53		
Bi	209	3	He			218321.05		
Bi	209	3	He			217765.25		

Quantitation Report

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Comment	D29
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

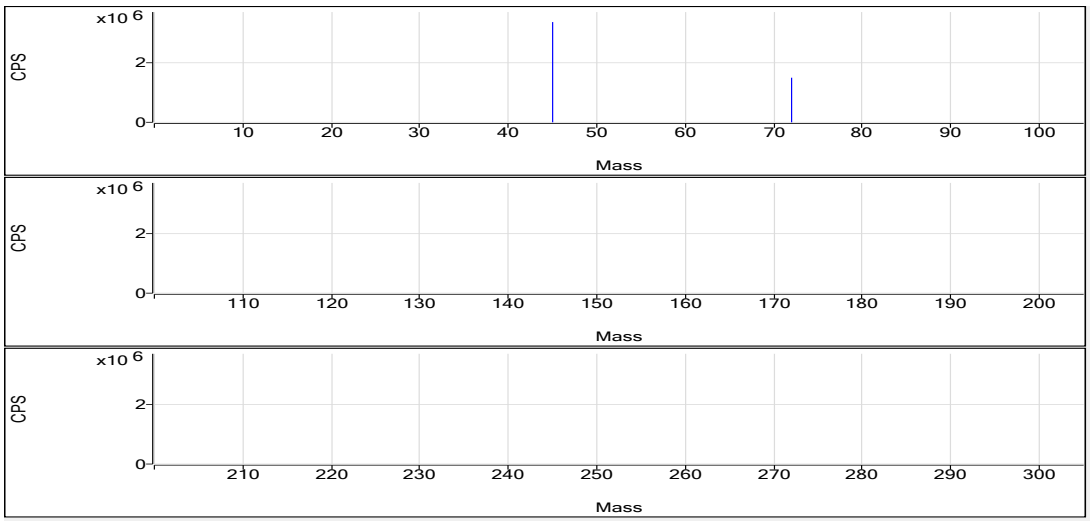
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.013	ppb	N/A	44.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.022	ppb	50.9	3.11	0.0000	Pulse	1.5000	3
Na	23	72	He	1703.290	ppb	1.4	219226.19	3.0324	Pulse	0.1000	3
Mg	24	72	He	2933.170	ppb	2.2	179113.09	2.4778	Pulse	0.1000	3
Al	27	72	He	3.823	ppb	54.3	143.34	0.0020	Pulse	0.1000	3
K	39	72	He	405.951	ppb	5.5	26594.62	0.3678	Pulse	0.1000	3
Ca	44	72	He	27667.637	ppb	1.2	62242.39	0.8610	Pulse	0.1000	3
Ti	47	72	He	0.747	ppb	154.6	33.33	0.0005	Pulse	0.1000	3
V	51	72	He	-0.037	ppb	N/A	498.68	0.0069	Pulse	0.5000	3
Cr	52	72	He	0.109	ppb	140.3	1953.54	0.0270	Pulse	0.1000	3
Mn	55	72	He	529.710	ppb	1.9	227025.17	3.1404	Pulse	0.1000	3
Fe	57	72	He	1469.696	ppb	1.9	31063.89	0.4297	Pulse	0.1000	3
Co	59	72	He	0.127	ppb	17.1	503.36	0.0070	Pulse	0.1000	3
Ni	60	72	He	1.450	ppb	9.8	1573.48	0.0218	Pulse	0.1000	3
Cu	63	72	He	0.218	ppb	24.4	750.05	0.0104	Pulse	0.1000	3
Zn	66	72	He	1.425	ppb	27.2	603.37	0.0083	Pulse	0.1000	3
As	75	72	He	0.311	ppb	50.4	70.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	92.691	ppb	1.4	45035.41	0.7254	Pulse	0.1000	3
Mo	98	115	He	0.050	ppb	25.7	100.00	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	116.5	46.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	140.2	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.092	ppb	68.1	1050.08	0.0169	Pulse	0.1000	3
Sb	121	115	He	0.036	ppb	214.7	43.34	0.0007	Pulse	0.1000	3
Ba	137	115	He	17.655	ppb	7.4	4811.02	0.0775	Pulse	0.1000	3
Tl	205	209	He	0.056	ppb	18.3	560.04	0.0025	Pulse	0.1000	3
Pb	208	209	He	0.026	ppb	49.3	690.04	0.0031	Pulse	0.1000	3
U	238	209	He	0.065	ppb	21.1	653.38	0.0030	Pulse	0.1000	3

ISTD Table:

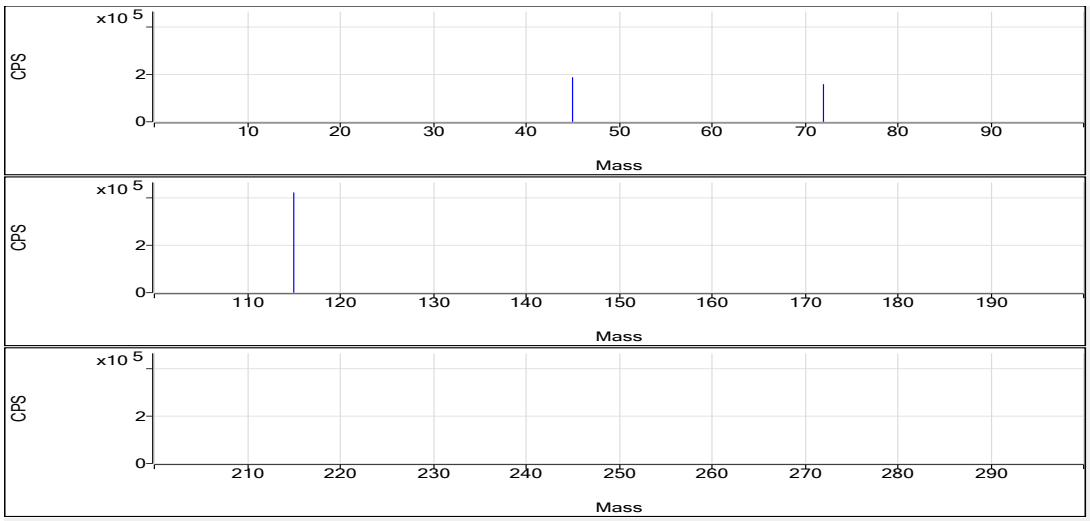
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3394349.74	3.4	104.7	Pulse	0.1000	3
No Gas	Ge	72	1509894.46	3.2	104.9	Pulse	0.1000	3
H2	Sc	45	187769.76	2.3	96.1	Pulse	0.1000	3
H2	Ge	72	158618.47	2.2	97.3	Pulse	0.1000	3
H2	In	115	422409.80	1.7	97.5	Pulse	0.1000	3
He	Sc	45	41208.70	1.4	103.1	Pulse	0.1000	3
He	Ge	72	72301.60	1.4	100.0	Pulse	0.1000	3
He	In	115	62100.50	2.4	96.1	Pulse	0.1000	3
He	Tb	159	278860.50	0.3	97.5	Pulse	0.1000	3
He	Bi	209	220298.73	0.3	99.1	Pulse	0.1000	3

No Gas

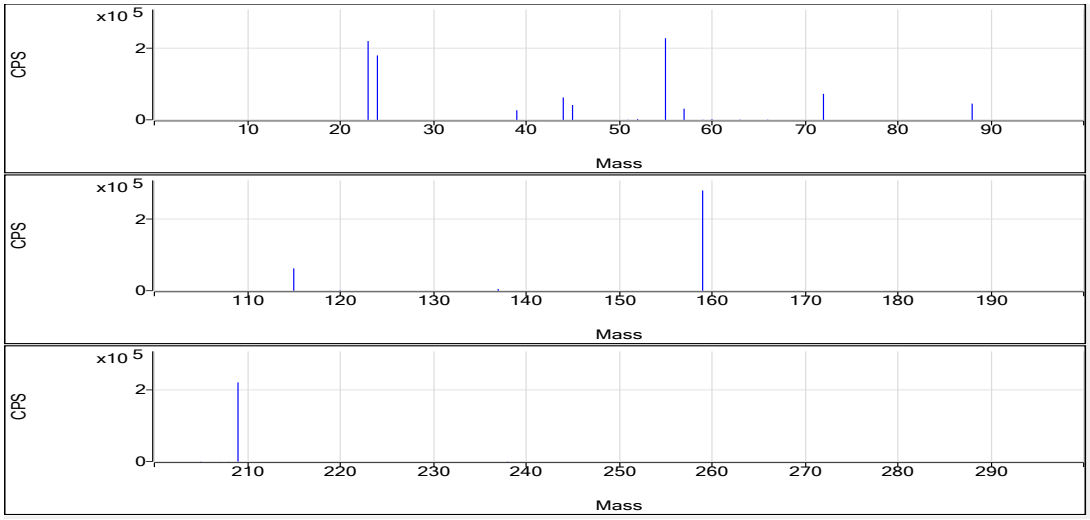


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.01	0	50.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.018	0	36.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.012	0	48.00	0.0013	4.694E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Na	23	3	He	1706.256	3.0375	216990.76	0.0017	0.1065
Na	23	3	He	1725.648	3.0708	221191.05	0.0017	0.1065
Na	23	3	He	1677.966	2.9889	219496.77	0.0017	0.1065
Mg	24	3	He	2980.612	2.5178	179865.23	0.0008	0.004846
Mg	24	3	He	2957.375	2.4982	179946.77	0.0008	0.004846
Mg	24	3	He	2861.522	2.4174	177527.26	0.0008	0.004846
Al	27	3	He	3.716	0.002	140.01	0.0002	0.001063
Al	27	3	He	5.95	0.0025	180.01	0.0002	0.001063
Al	27	3	He	1.802	0.0015	110.00	0.0002	0.001063
K	39	3	He	420.639	0.3759	26854.90	0.0006	0.1436
K	39	3	He	380.285	0.3536	25472.66	0.0006	0.1436
K	39	3	He	416.929	0.3739	27456.29	0.0006	0.1436
Ca	44	3	He	27877.798	0.8675	61971.27	0	0.001611
Ca	44	3	He	27827.509	0.8659	62373.07	0	0.001611
Ca	44	3	He	27297.603	0.8495	62382.82	0	0.001611
Ti	47	3	He	1.699	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	-0.538	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	1.08	0.0005	40.00	0.0003	0.0002737
V	51	3	He	-0.033	0.0069	496.01	0.0117	0.007326
V	51	3	He	-0.021	0.0071	510.01	0.0117	0.007326
V	51	3	He	-0.056	0.0067	490.01	0.0117	0.007326
Cr	52	3	He	0.282	0.0297	2120.23	0.0152	0.02538
Cr	52	3	He	0.047	0.0261	1880.20	0.0152	0.02538
Cr	52	3	He	-0.004	0.0253	1860.19	0.0152	0.02538
Mn	55	3	He	531.685	3.1521	225176.21	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	538.667	3.1933	230013.41	0.0059	0.01385
Mn	55	3	He	518.778	3.0759	225885.90	0.0059	0.01385
Fe	57	3	He	1479.178	0.4325	30893.59	0.0003	0.003918
Fe	57	3	He	1491.855	0.4361	31414.53	0.0003	0.003918
Fe	57	3	He	1438.054	0.4205	30883.54	0.0003	0.003918
Co	59	3	He	0.147	0.0076	540.03	0.0305	0.003084
Co	59	3	He	0.104	0.0062	450.02	0.0305	0.003084
Co	59	3	He	0.131	0.0071	520.03	0.0305	0.003084
Ni	60	3	He	1.476	0.022	1570.15	0.0088	0.009003
Ni	60	3	He	1.297	0.0204	1470.12	0.0088	0.009003
Ni	60	3	He	1.578	0.0229	1680.16	0.0088	0.009003
Cu	63	3	He	0.201	0.0099	710.05	0.0249	0.004937
Cu	63	3	He	0.175	0.0093	670.04	0.0249	0.004937
Cu	63	3	He	0.277	0.0118	870.07	0.0249	0.004937
Zn	66	3	He	0.994	0.0073	520.03	0.0025	0.004836
Zn	66	3	He	1.535	0.0086	620.04	0.0025	0.004836
Zn	66	3	He	1.745	0.0091	670.03	0.0025	0.004836
As	75	3	He	0.185	0.0008	54.00	0.0017	0.0004347
As	75	3	He	0.261	0.0009	64.00	0.0017	0.0004347
As	75	3	He	0.486	0.0013	94.00	0.0017	0.0004347
Sr	88	3	He	93.117	0.7287	45222.28	0.0078	0.0007762
Sr	88	3	He	91.265	0.7142	45413.33	0.0078	0.0007762
Sr	88	3	He	93.691	0.7332	44470.63	0.0078	0.0007762
Mo	98	3	He	0.064	0.0019	120.00	0.022	0.0005162
Mo	98	3	He	0.041	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.044	0.0015	90.00	0.022	0.0005162
Ag	107	3	He	0.015	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.001	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.01	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.093	0.0169	1050.09	0.0143	0.01559
Sn	120	3	He	0.153	0.0178	1130.08	0.0143	0.01559
Sn	120	3	He	0.028	0.016	970.07	0.0143	0.01559
Sb	121	3	He	-0.021	0	0.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.125	0.0018	110.01	0.0124	0.000258
Ba	137	3	He	16.876	0.0741	4600.92	0.0044	0.000309
Ba	137	3	He	16.937	0.0744	4731.00	0.0044	0.000309
Ba	137	3	He	19.153	0.0841	5101.13	0.0044	0.000309
Tl	205	3	He	0.067	0.0029	630.04	0.0276	0.001005
Tl	205	3	He	0.048	0.0023	510.03	0.0276	0.001005
Tl	205	3	He	0.052	0.0024	540.04	0.0276	0.001005
Pb	208	3	He	0.041	0.0037	410.02	0.0364	0.002176
Pb	208	3	He	0.018	0.0028	300.01	0.0364	0.002176
Pb	208	3	He	0.02	0.0029	380.02	0.0364	0.002176
U	238	3	He	0.049	0.0023	510.03	0.0421	0.00024
U	238	3	He	0.07	0.0032	700.05	0.0421	0.00024
U	238	3	He	0.075	0.0034	750.06	0.0421	0.00024
Sc	45	1	No Gas			3267510.26		
Sc	45	1	No Gas			3427897.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3487641.51		
Ge	72	1	No Gas			1454202.95		
Ge	72	1	No Gas			1530609.51		
Ge	72	1	No Gas			1544870.91		
Sc	45	2	H2			190725.25		
Sc	45	2	H2			182897.28		
Sc	45	2	H2			189686.74		
Ge	72	2	H2			158613.82		
Ge	72	2	H2			155137.29		
Ge	72	2	H2			162104.31		
In	115	2	H2			421635.35		
In	115	2	H2			415764.13		
In	115	2	H2			429829.92		
Sc	45	3	He			41860.73		
Sc	45	3	He			41008.19		
Sc	45	3	He			40757.19		
Ge	72	3	He			71437.32		
Ge	72	3	He			72030.19		
Ge	72	3	He			73437.28		
In	115	3	He			62068.69		
In	115	3	He			63594.63		
In	115	3	He			60662.75		
Tb	159	3	He			279639.12		
Tb	159	3	He			278040.11		
Tb	159	3	He			278902.26		
Bi	209	3	He			220457.40		
Bi	209	3	He			219674.82		
Bi	209	3	He			220763.96		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
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Sample Name	410-136848-W-8-A @5
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

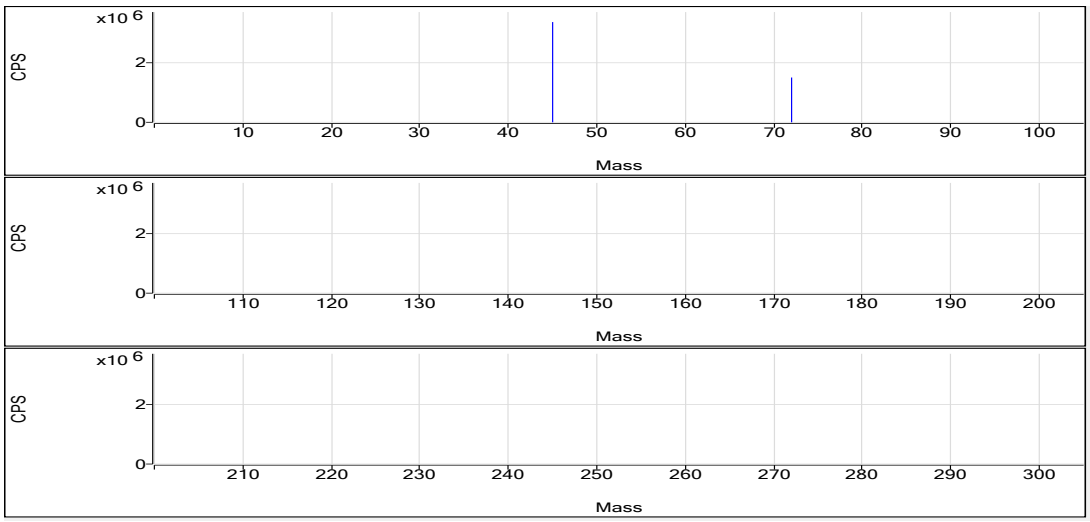
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.076	ppb	28.0	220.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.106	ppb	27.7	8.67	0.0001	Pulse	1.5000	3
Na	23	72	He	2516.594	ppb	1.6	327186.87	4.4295	Pulse	0.1000	3
Mg	24	72	He	3594.923	ppb	0.9	224237.13	3.0357	Pulse	0.1000	3
Al	27	72	He	26.422	ppb	12.8	550.03	0.0074	Pulse	0.1000	3
K	39	72	He	1315.844	ppb	1.9	64280.70	0.8703	Pulse	0.1000	3
Ca	44	72	He	20453.295	ppb	3.3	47036.38	0.6369	Pulse	0.1000	3
Ti	47	72	He	2.689	ppb	53.6	70.00	0.0009	Pulse	0.1000	3
V	51	72	He	0.609	ppb	20.8	1067.38	0.0144	Pulse	0.5000	3
Cr	52	72	He	0.879	ppb	11.4	2863.73	0.0388	Pulse	0.1000	3
Mn	55	72	He	95.342	ppb	0.3	42593.14	0.5766	Pulse	0.1000	3
Fe	57	72	He	98.964	ppb	5.1	2406.94	0.0326	Pulse	0.1000	3
Co	59	72	He	0.496	ppb	8.8	1346.78	0.0182	Pulse	0.1000	3
Ni	60	72	He	2.041	ppb	6.8	1990.21	0.0270	Pulse	0.1000	3
Cu	63	72	He	0.619	ppb	10.0	1503.47	0.0204	Pulse	0.1000	3
Zn	66	72	He	19.511	ppb	5.5	3897.34	0.0528	Pulse	0.1000	3
As	75	72	He	0.694	ppb	6.7	121.33	0.0016	Pulse	0.5000	3
Sr	88	115	He	69.867	ppb	1.4	34388.99	0.5469	Pulse	0.1000	3
Mo	98	115	He	0.261	ppb	5.3	393.35	0.0063	Pulse	0.1000	3
Ag	107	115	He	0.081	ppb	47.1	260.01	0.0041	Pulse	0.1000	3
Cd	111	115	He	0.086	ppb	12.3	29.33	0.0005	Pulse	0.5000	3
Sn	120	115	He	0.183	ppb	31.5	1143.43	0.0182	Pulse	0.1000	3
Sb	121	115	He	0.120	ppb	30.9	110.01	0.0017	Pulse	0.1000	3
Ba	137	115	He	10.639	ppb	7.7	2947.08	0.0469	Pulse	0.1000	3
Tl	205	209	He	0.111	ppb	7.0	903.40	0.0041	Pulse	0.1000	3
Pb	208	209	He	0.218	ppb	3.4	2246.83	0.0101	Pulse	0.1000	3
U	238	209	He	0.194	ppb	2.1	1860.21	0.0084	Pulse	0.1000	3

ISTD Table:

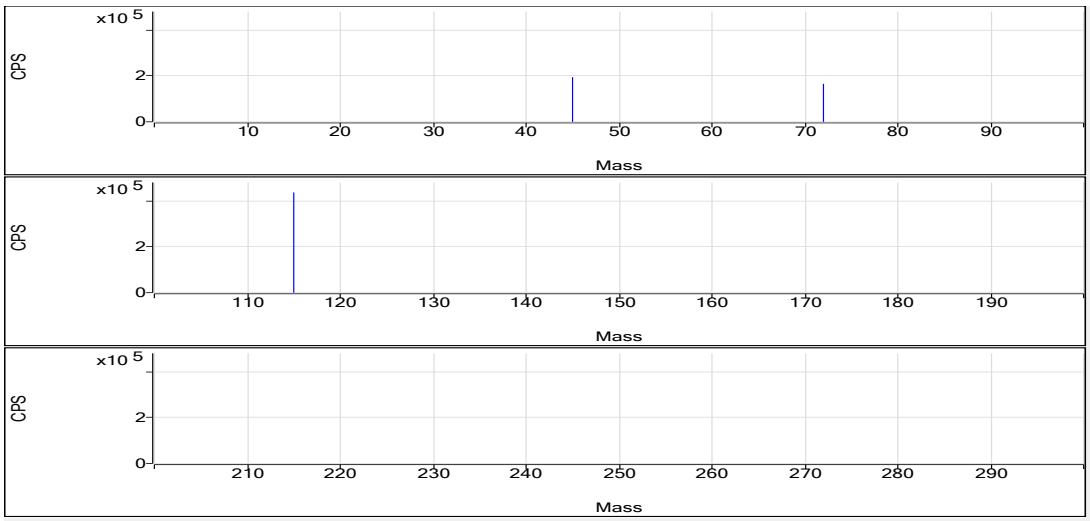
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3350383.39	2.0	103.4	Pulse	0.1000	3
No Gas	Ge	72	1497017.95	1.6	104.0	Pulse	0.1000	3
H2	Sc	45	194836.86	1.5	99.7	Pulse	0.1000	3
H2	Ge	72	166058.51	1.7	101.9	Pulse	0.1000	3
H2	In	115	437569.65	2.4	101.0	Pulse	0.1000	3
He	Sc	45	41773.92	1.6	104.5	Pulse	0.1000	3
He	Ge	72	73869.79	1.1	102.2	Pulse	0.1000	3
He	In	115	62876.12	1.0	97.3	Pulse	0.1000	3
He	Tb	159	284096.45	0.2	99.3	Pulse	0.1000	3
He	Bi	209	221938.58	0.2	99.9	Pulse	0.1000	3

No Gas

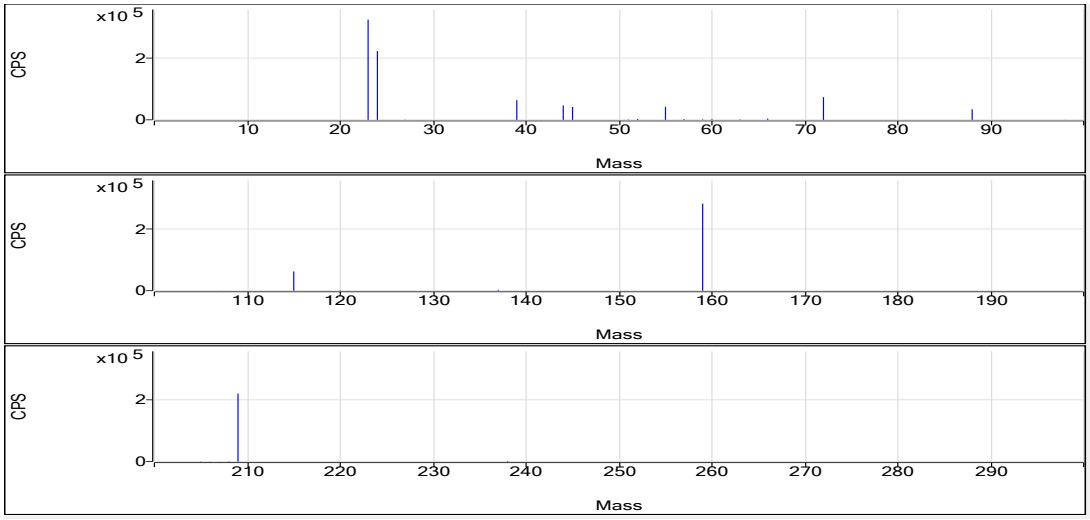


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.098	0.0002	260.00	0.0013	4.694E-05
Be	9	1	No Gas	0.055	0.0001	178.00	0.0013	4.694E-05
Be	9	1	No Gas	0.075	0.0001	222.00	0.0013	4.694E-05
Se	78	2	H2	0.083	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.14	0.0001	10.67	0.0004	1.089E-05
Se	78	2	H2	0.096	0	8.00	0.0004	1.089E-05
Na	23	3	He	2497.326	4.3964	328651.40	0.0017	0.1065
Na	23	3	He	2490.644	4.3849	322594.60	0.0017	0.1065
Na	23	3	He	2561.812	4.5072	330314.60	0.0017	0.1065
Mg	24	3	He	3560.376	3.0066	224756.95	0.0008	0.004846
Mg	24	3	He	3627.269	3.063	225341.44	0.0008	0.004846
Mg	24	3	He	3597.124	3.0376	222613.00	0.0008	0.004846
Al	27	3	He	29.403	0.0082	610.03	0.0002	0.001063
Al	27	3	He	27.132	0.0076	560.03	0.0002	0.001063
Al	27	3	He	22.732	0.0066	480.03	0.0002	0.001063
K	39	3	He	1290.248	0.8561	63999.56	0.0006	0.1436
K	39	3	He	1340.936	0.8841	65043.77	0.0006	0.1436
K	39	3	He	1316.347	0.8705	63798.76	0.0006	0.1436
Ca	44	3	He	19769.882	0.6157	46023.35	0	0.001611
Ca	44	3	He	20462.188	0.6372	46875.38	0	0.001611
Ca	44	3	He	21127.817	0.6578	48210.41	0	0.001611
Ti	47	3	He	2.109	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	4.329	0.0014	100.00	0.0003	0.0002737
Ti	47	3	He	1.629	0.0007	50.00	0.0003	0.0002737
V	51	3	He	0.636	0.0148	1104.05	0.0117	0.007326
V	51	3	He	0.471	0.0128	944.04	0.0117	0.007326
V	51	3	He	0.72	0.0157	1154.05	0.0117	0.007326
Cr	52	3	He	0.811	0.0377	2820.37	0.0152	0.02538
Cr	52	3	He	0.833	0.0381	2800.37	0.0152	0.02538
Cr	52	3	He	0.995	0.0405	2970.45	0.0152	0.02538
Mn	55	3	He	95.344	0.5766	43104.48	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	95.048	0.5749	42292.26	0.0059	0.01385
Mn	55	3	He	95.633	0.5783	42382.68	0.0059	0.01385
Fe	57	3	He	96.844	0.032	2390.27	0.0003	0.003918
Fe	57	3	He	95.338	0.0315	2320.25	0.0003	0.003918
Fe	57	3	He	104.709	0.0343	2510.30	0.0003	0.003918
Co	59	3	He	0.495	0.0182	1360.11	0.0305	0.003084
Co	59	3	He	0.541	0.0196	1440.14	0.0305	0.003084
Co	59	3	He	0.454	0.0169	1240.10	0.0305	0.003084
Ni	60	3	He	1.882	0.0256	1910.20	0.0088	0.009003
Ni	60	3	He	2.13	0.0277	2040.22	0.0088	0.009003
Ni	60	3	He	2.111	0.0276	2020.22	0.0088	0.009003
Cu	63	3	He	0.548	0.0186	1390.11	0.0249	0.004937
Cu	63	3	He	0.647	0.0211	1550.15	0.0249	0.004937
Cu	63	3	He	0.661	0.0214	1570.14	0.0249	0.004937
Zn	66	3	He	18.944	0.0514	3840.65	0.0025	0.004836
Zn	66	3	He	18.838	0.0511	3760.62	0.0025	0.004836
Zn	66	3	He	20.752	0.0558	4090.74	0.0025	0.004836
As	75	3	He	0.719	0.0017	126.00	0.0017	0.0004347
As	75	3	He	0.641	0.0015	114.00	0.0017	0.0004347
As	75	3	He	0.723	0.0017	124.00	0.0017	0.0004347
Sr	88	3	He	69.522	0.5442	33850.97	0.0078	0.0007762
Sr	88	3	He	69.115	0.5411	34322.43	0.0078	0.0007762
Sr	88	3	He	70.964	0.5555	34993.56	0.0078	0.0007762
Mo	98	3	He	0.276	0.0066	410.02	0.022	0.0005162
Mo	98	3	He	0.249	0.006	380.02	0.022	0.0005162
Mo	98	3	He	0.258	0.0062	390.02	0.022	0.0005162
Ag	107	3	He	0.082	0.0042	260.01	0.0455	0.0004641
Ag	107	3	He	0.118	0.0058	370.02	0.0455	0.0004641
Ag	107	3	He	0.042	0.0024	150.01	0.0455	0.0004641
Cd	111	3	He	0.09	0.0005	30.00	0.0048	5.152E-05
Cd	111	3	He	0.075	0.0004	26.00	0.0048	5.152E-05
Cd	111	3	He	0.095	0.0005	32.00	0.0048	5.152E-05
Sn	120	3	He	0.249	0.0191	1190.10	0.0143	0.01559
Sn	120	3	He	0.145	0.0177	1120.09	0.0143	0.01559
Sn	120	3	He	0.154	0.0178	1120.09	0.0143	0.01559
Sb	121	3	He	0.083	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.157	0.0022	140.01	0.0124	0.000258
Sb	121	3	He	0.12	0.0017	110.01	0.0124	0.000258
Ba	137	3	He	9.743	0.0429	2670.33	0.0044	0.000309
Ba	137	3	He	10.813	0.0476	3020.44	0.0044	0.000309
Ba	137	3	He	11.361	0.05	3150.47	0.0044	0.000309
Tl	205	3	He	0.102	0.0038	850.07	0.0276	0.001005
Tl	205	3	He	0.116	0.0042	930.08	0.0276	0.001005
Tl	205	3	He	0.115	0.0042	930.06	0.0276	0.001005
Pb	208	3	He	0.226	0.0104	1170.09	0.0364	0.002176
Pb	208	3	He	0.211	0.0098	1190.10	0.0364	0.002176
Pb	208	3	He	0.219	0.0101	1020.09	0.0364	0.002176
U	238	3	He	0.19	0.0082	1830.22	0.0421	0.00024
U	238	3	He	0.193	0.0084	1850.20	0.0421	0.00024
U	238	3	He	0.198	0.0086	1900.22	0.0421	0.00024
Sc	45	1	No Gas			3298808.08		
Sc	45	1	No Gas			3326228.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3426113.39		
Ge	72	1	No Gas			1479385.92		
Ge	72	1	No Gas			1487347.32		
Ge	72	1	No Gas			1524320.60		
Sc	45	2	H2			194140.06		
Sc	45	2	H2			192407.67		
Sc	45	2	H2			197962.85		
Ge	72	2	H2			168971.60		
Ge	72	2	H2			163521.44		
Ge	72	2	H2			165682.48		
In	115	2	H2			448334.92		
In	115	2	H2			427630.35		
In	115	2	H2			436743.67		
Sc	45	3	He			42512.96		
Sc	45	3	He			41560.17		
Sc	45	3	He			41248.63		
Ge	72	3	He			74754.40		
Ge	72	3	He			73568.82		
Ge	72	3	He			73286.14		
In	115	3	He			62208.18		
In	115	3	He			63444.84		
In	115	3	He			63002.09		
Tb	159	3	He			283668.16		
Tb	159	3	He			284906.05		
Tb	159	3	He			283715.15		
Bi	209	3	He			222431.13		
Bi	209	3	He			221440.39		
Bi	209	3	He			221944.22		

Quantitation Report

Data File Name	126SMPL.d
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Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

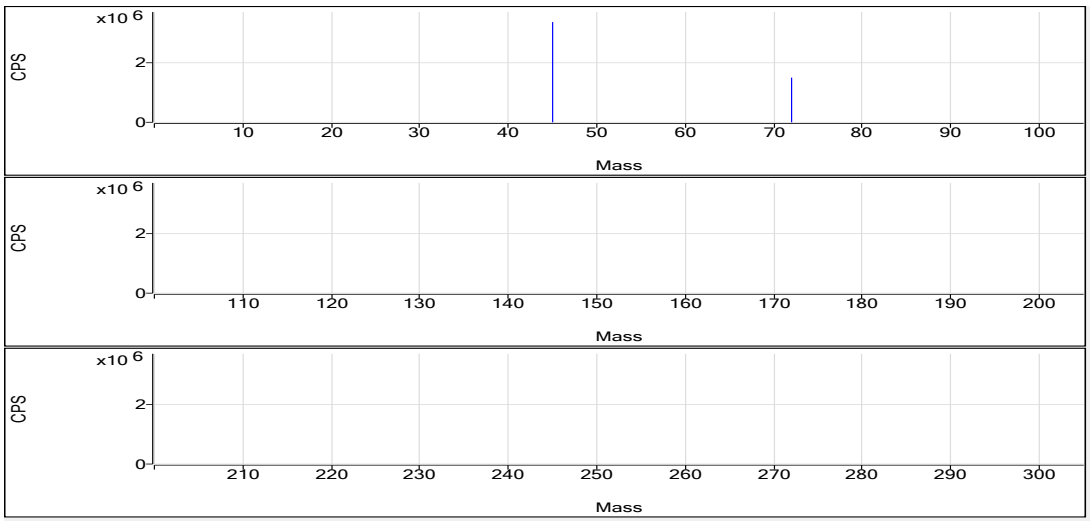
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.017	ppb	31.2	103.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.084	ppb	6.1	7.11	0.0000	Pulse	1.5000	3
Na	23	72	He	2370.193	ppb	0.5	312903.17	4.1780	Pulse	0.1000	3
Mg	24	72	He	2863.862	ppb	1.4	181178.48	2.4194	Pulse	0.1000	3
Al	27	72	He	21.787	ppb	14.9	473.36	0.0063	Pulse	0.1000	3
K	39	72	He	593.131	ppb	3.1	35286.15	0.4712	Pulse	0.1000	3
Ca	44	72	He	24981.310	ppb	2.0	58222.86	0.7775	Pulse	0.1000	3
Ti	47	72	He	1.219	ppb	68.1	43.33	0.0006	Pulse	0.1000	3
V	51	72	He	0.196	ppb	20.5	720.69	0.0096	Pulse	0.5000	3
Cr	52	72	He	0.386	ppb	20.6	2340.28	0.0313	Pulse	0.1000	3
Mn	55	72	He	88.579	ppb	1.4	40196.42	0.5367	Pulse	0.1000	3
Fe	57	72	He	108.288	ppb	7.1	2643.67	0.0353	Pulse	0.1000	3
Co	59	72	He	0.246	ppb	13.4	793.38	0.0106	Pulse	0.1000	3
Ni	60	72	He	1.458	ppb	13.3	1633.49	0.0218	Pulse	0.1000	3
Cu	63	72	He	0.443	ppb	11.2	1196.76	0.0160	Pulse	0.1000	3
Zn	66	72	He	8.128	ppb	9.0	1856.85	0.0248	Pulse	0.1000	3
As	75	72	He	0.328	ppb	12.6	75.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	93.428	ppb	2.9	46396.29	0.7311	Pulse	0.1000	3
Mo	98	115	He	0.125	ppb	31.9	206.68	0.0033	Pulse	0.1000	3
Ag	107	115	He	0.024	ppb	37.6	100.00	0.0016	Pulse	0.1000	3
Cd	111	115	He	0.022	ppb	59.1	10.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.171	ppb	78.5	1143.43	0.0180	Pulse	0.1000	3
Sb	121	115	He	0.077	ppb	58.4	76.67	0.0012	Pulse	0.1000	3
Ba	137	115	He	8.708	ppb	6.9	2436.98	0.0384	Pulse	0.1000	3
Tl	205	209	He	0.052	ppb	19.0	536.70	0.0024	Pulse	0.1000	3
Pb	208	209	He	0.133	ppb	17.1	1543.43	0.0070	Pulse	0.1000	3
U	238	209	He	0.144	ppb	9.0	1386.79	0.0063	Pulse	0.1000	3

ISTD Table:

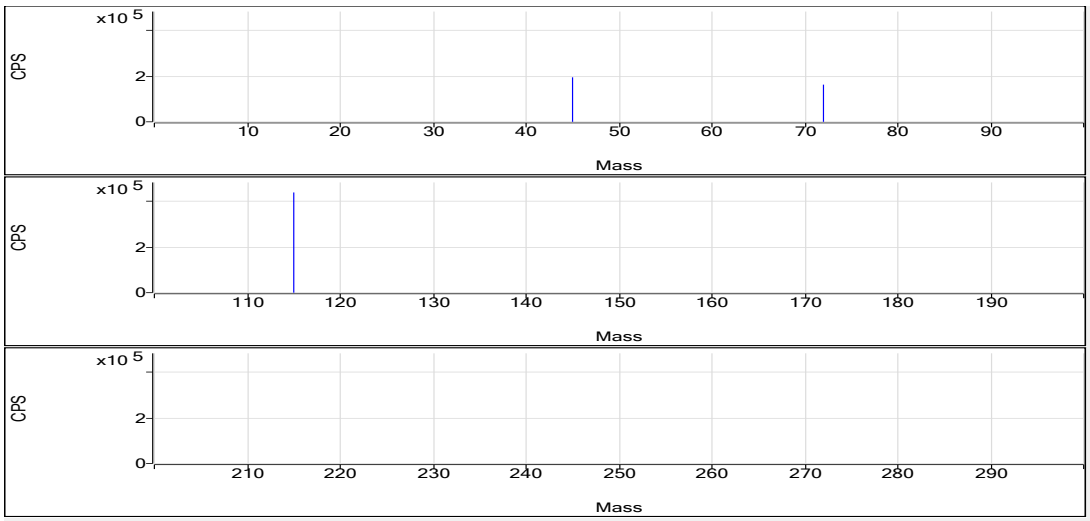
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3361831.20	2.5	103.7	Pulse	0.1000	3
No Gas	Ge	72	1498147.58	2.4	104.1	Pulse	0.1000	3
H2	Sc	45	195393.27	2.1	100.0	Pulse	0.1000	3
H2	Ge	72	163245.28	1.6	100.1	Pulse	0.1000	3
H2	In	115	440140.12	0.9	101.6	Pulse	0.1000	3
He	Sc	45	42124.77	1.7	105.4	Pulse	0.1000	3
He	Ge	72	74891.55	1.0	103.6	Pulse	0.1000	3
He	In	115	63462.19	0.3	98.3	Pulse	0.1000	3
He	Tb	159	284321.53	0.7	99.4	Pulse	0.1000	3
He	Bi	209	219464.01	1.1	98.8	Pulse	0.1000	3

No Gas

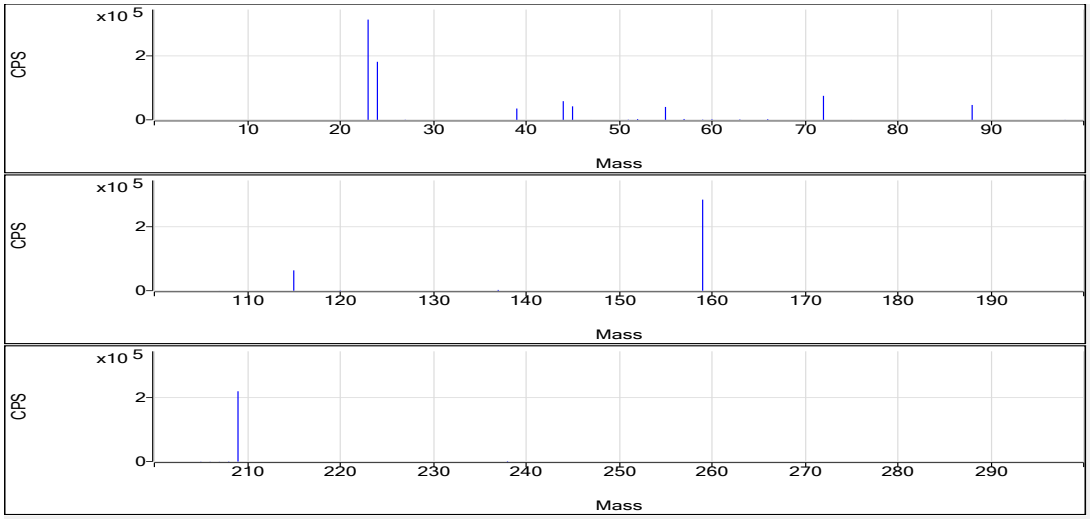


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.021	0.0001	108.00	0.0013	4.694E-05
Be	9	1	No Gas	0.011	0.0001	92.00	0.0013	4.694E-05
Be	9	1	No Gas	0.019	0.0001	110.00	0.0013	4.694E-05
Se	78	2	H2	0.085	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.078	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.088	0	7.33	0.0004	1.089E-05
Na	23	3	He	2372.496	4.182	316490.41	0.0017	0.1065
Na	23	3	He	2379.973	4.1948	313493.20	0.0017	0.1065
Na	23	3	He	2358.11	4.1573	308725.91	0.0017	0.1065
Mg	24	3	He	2821.943	2.384	180422.38	0.0008	0.004846
Mg	24	3	He	2898.732	2.4488	183004.88	0.0008	0.004846
Mg	24	3	He	2870.911	2.4253	180108.18	0.0008	0.004846
Al	27	3	He	19.684	0.0058	440.02	0.0002	0.001063
Al	27	3	He	25.533	0.0072	540.04	0.0002	0.001063
Al	27	3	He	20.143	0.0059	440.02	0.0002	0.001063
K	39	3	He	596.379	0.473	35794.02	0.0006	0.1436
K	39	3	He	573.463	0.4603	34400.81	0.0006	0.1436
K	39	3	He	609.551	0.4802	35663.61	0.0006	0.1436
Ca	44	3	He	24441.11	0.7607	57573.11	0	0.001611
Ca	44	3	He	25101.636	0.7813	58386.50	0	0.001611
Ca	44	3	He	25401.183	0.7906	58708.97	0	0.001611
Ti	47	3	He	1.016	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	0.509	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	2.13	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.234	0.0101	762.03	0.0117	0.007326
V	51	3	He	0.2	0.0097	722.02	0.0117	0.007326
V	51	3	He	0.154	0.0091	678.02	0.0117	0.007326
Cr	52	3	He	0.294	0.0299	2260.26	0.0152	0.02538
Cr	52	3	He	0.425	0.0319	2380.27	0.0152	0.02538
Cr	52	3	He	0.438	0.0321	2380.30	0.0152	0.02538
Mn	55	3	He	89.997	0.5451	41249.50	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	87.961	0.533	39835.38	0.0059	0.01385
Mn	55	3	He	87.779	0.532	39504.39	0.0059	0.01385
Fe	57	3	He	116.024	0.0375	2840.38	0.0003	0.003918
Fe	57	3	He	100.572	0.0331	2470.30	0.0003	0.003918
Fe	57	3	He	108.269	0.0353	2620.32	0.0003	0.003918
Co	59	3	He	0.267	0.0112	850.05	0.0305	0.003084
Co	59	3	He	0.263	0.0111	830.05	0.0305	0.003084
Co	59	3	He	0.208	0.0094	700.04	0.0305	0.003084
Ni	60	3	He	1.245	0.02	1510.13	0.0088	0.009003
Ni	60	3	He	1.624	0.0233	1740.17	0.0088	0.009003
Ni	60	3	He	1.503	0.0222	1650.16	0.0088	0.009003
Cu	63	3	He	0.449	0.0161	1220.10	0.0249	0.004937
Cu	63	3	He	0.489	0.0171	1280.10	0.0249	0.004937
Cu	63	3	He	0.391	0.0147	1090.08	0.0249	0.004937
Zn	66	3	He	7.283	0.0227	1720.16	0.0025	0.004836
Zn	66	3	He	8.599	0.026	1940.21	0.0025	0.004836
Zn	66	3	He	8.501	0.0257	1910.19	0.0025	0.004836
As	75	3	He	0.373	0.0011	82.00	0.0017	0.0004347
As	75	3	He	0.319	0.001	74.00	0.0017	0.0004347
As	75	3	He	0.292	0.0009	70.00	0.0017	0.0004347
Sr	88	3	He	92.003	0.72	45824.24	0.0078	0.0007762
Sr	88	3	He	96.574	0.7557	47861.12	0.0078	0.0007762
Sr	88	3	He	91.706	0.7177	45503.52	0.0078	0.0007762
Mo	98	3	He	0.084	0.0024	150.01	0.022	0.0005162
Mo	98	3	He	0.163	0.0041	260.01	0.022	0.0005162
Mo	98	3	He	0.127	0.0033	210.01	0.022	0.0005162
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.035	0.0021	130.01	0.0455	0.0004641
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	0.108	0.0171	1090.09	0.0143	0.01559
Sn	120	3	He	0.324	0.0202	1280.11	0.0143	0.01559
Sn	120	3	He	0.079	0.0167	1060.09	0.0143	0.01559
Sb	121	3	He	0.081	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.119	0.0017	110.00	0.0124	0.000258
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	8.226	0.0363	2310.27	0.0044	0.000309
Ba	137	3	He	9.387	0.0414	2620.34	0.0044	0.000309
Ba	137	3	He	8.511	0.0375	2380.32	0.0044	0.000309
Tl	205	3	He	0.061	0.0027	600.03	0.0276	0.001005
Tl	205	3	He	0.053	0.0025	540.03	0.0276	0.001005
Tl	205	3	He	0.042	0.0022	470.03	0.0276	0.001005
Pb	208	3	He	0.158	0.0079	980.07	0.0364	0.002176
Pb	208	3	He	0.129	0.0069	890.06	0.0364	0.002176
Pb	208	3	He	0.113	0.0063	610.04	0.0364	0.002176
U	238	3	He	0.152	0.0066	1470.14	0.0421	0.00024
U	238	3	He	0.129	0.0057	1240.10	0.0421	0.00024
U	238	3	He	0.152	0.0067	1450.14	0.0421	0.00024
Sc	45	1	No Gas			3271007.14		
Sc	45	1	No Gas			3378648.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3435838.07		
Ge	72	1	No Gas			1459645.60		
Ge	72	1	No Gas			1504752.79		
Ge	72	1	No Gas			1530044.35		
Sc	45	2	H2			195335.23		
Sc	45	2	H2			191355.23		
Sc	45	2	H2			199489.35		
Ge	72	2	H2			166137.79		
Ge	72	2	H2			161334.57		
Ge	72	2	H2			162263.48		
In	115	2	H2			444617.18		
In	115	2	H2			437133.27		
In	115	2	H2			438669.92		
Sc	45	3	He			41639.99		
Sc	45	3	He			41790.45		
Sc	45	3	He			42943.88		
Ge	72	3	He			75679.56		
Ge	72	3	He			74733.35		
Ge	72	3	He			74261.74		
In	115	3	He			63655.68		
In	115	3	He			63343.29		
In	115	3	He			63414.36		
Tb	159	3	He			282117.01		
Tb	159	3	He			284729.66		
Tb	159	3	He			286117.93		
Bi	209	3	He			222264.47		
Bi	209	3	He			218088.41		
Bi	209	3	He			218039.14		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

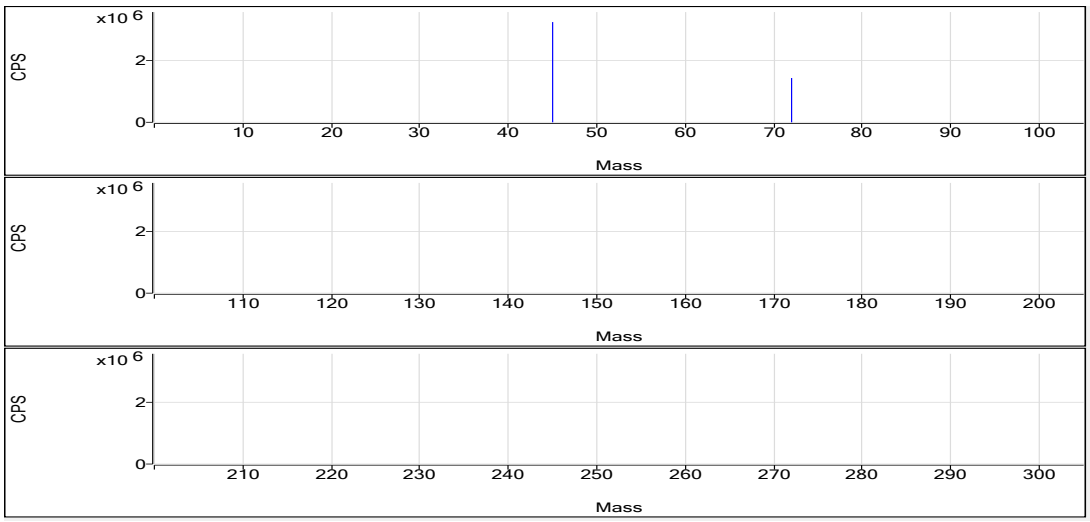
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.005	ppb	75.3	76.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.040	ppb	68.6	4.22	0.0000	Pulse	1.5000	3
Na	23	72	He	23.435	ppb	23.1	10604.14	0.1467	Pulse	0.1000	3
Mg	24	72	He	18.101	ppb	2.7	1453.46	0.0201	Pulse	0.1000	3
Al	27	72	He	4.765	ppb	31.4	160.01	0.0022	Pulse	0.1000	3
K	39	72	He	13.687	ppb	100.4	10931.10	0.1512	Pulse	0.1000	3
Ca	44	72	He	52.120	ppb	50.1	233.34	0.0032	Pulse	0.1000	3
Ti	47	72	He	-0.539	ppb	N/A	10.00	0.0001	Pulse	0.1000	3
V	51	72	He	0.037	ppb	86.2	560.68	0.0078	Pulse	0.5000	3
Cr	52	72	He	0.120	ppb	145.0	1966.88	0.0272	Pulse	0.1000	3
Mn	55	72	He	0.426	ppb	54.9	1183.42	0.0164	Pulse	0.1000	3
Fe	57	72	He	7.642	ppb	46.7	443.36	0.0061	Pulse	0.1000	3
Co	59	72	He	0.055	ppb	30.1	343.35	0.0048	Pulse	0.1000	3
Ni	60	72	He	1.137	ppb	29.3	1373.45	0.0190	Pulse	0.1000	3
Cu	63	72	He	0.087	ppb	41.4	513.36	0.0071	Pulse	0.1000	3
Zn	66	72	He	2.273	ppb	34.5	753.38	0.0104	Pulse	0.1000	3
As	75	72	He	0.031	ppb	299.4	35.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.182	ppb	57.3	140.01	0.0022	Pulse	0.1000	3
Mo	98	115	He	0.029	ppb	74.3	73.33	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.011	ppb	34.5	60.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	3035.7	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.126	ppb	85.9	1103.43	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.009	ppb	86.5	23.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.097	ppb	149.5	46.67	0.0007	Pulse	0.1000	3
Tl	205	209	He	0.019	ppb	38.3	336.68	0.0015	Pulse	0.1000	3
Pb	208	209	He	0.018	ppb	51.3	620.04	0.0028	Pulse	0.1000	3
U	238	209	He	0.005	ppb	91.0	100.00	0.0005	Pulse	0.1000	3

ISTD Table:

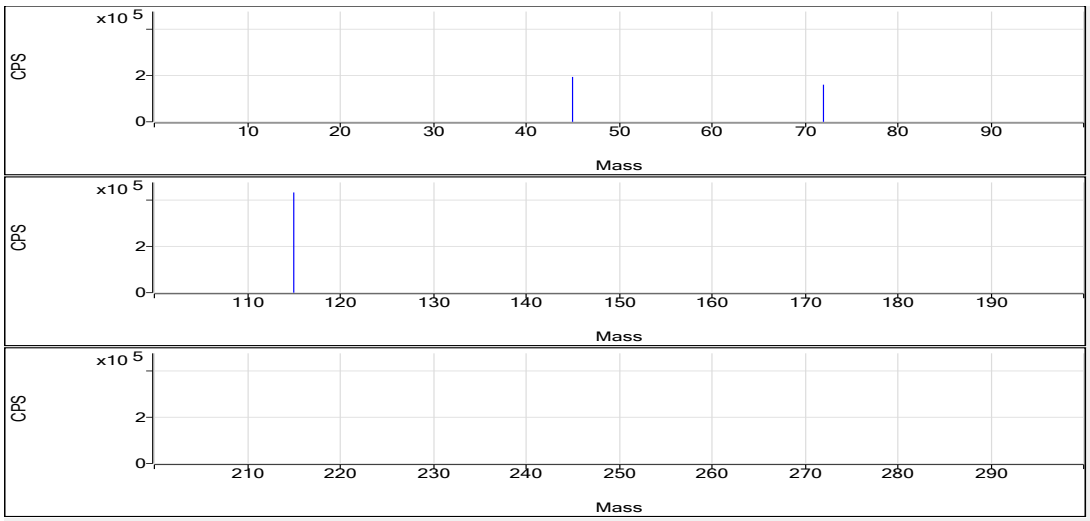
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3232083.70	1.6	99.7	Pulse	0.1000	3
No Gas	Ge	72	1427724.56	1.1	99.2	Pulse	0.1000	3
H2	Sc	45	194054.44	0.6	99.3	Pulse	0.1000	3
H2	Ge	72	160536.81	0.9	98.5	Pulse	0.1000	3
H2	In	115	433339.81	2.1	100.0	Pulse	0.1000	3
He	Sc	45	41275.32	2.0	103.2	Pulse	0.1000	3
He	Ge	72	72288.18	0.3	100.0	Pulse	0.1000	3
He	In	115	63506.35	1.0	98.3	Pulse	0.1000	3
He	Tb	159	280128.63	0.9	97.9	Pulse	0.1000	3
He	Bi	209	218613.23	1.4	98.4	Pulse	0.1000	3

No Gas

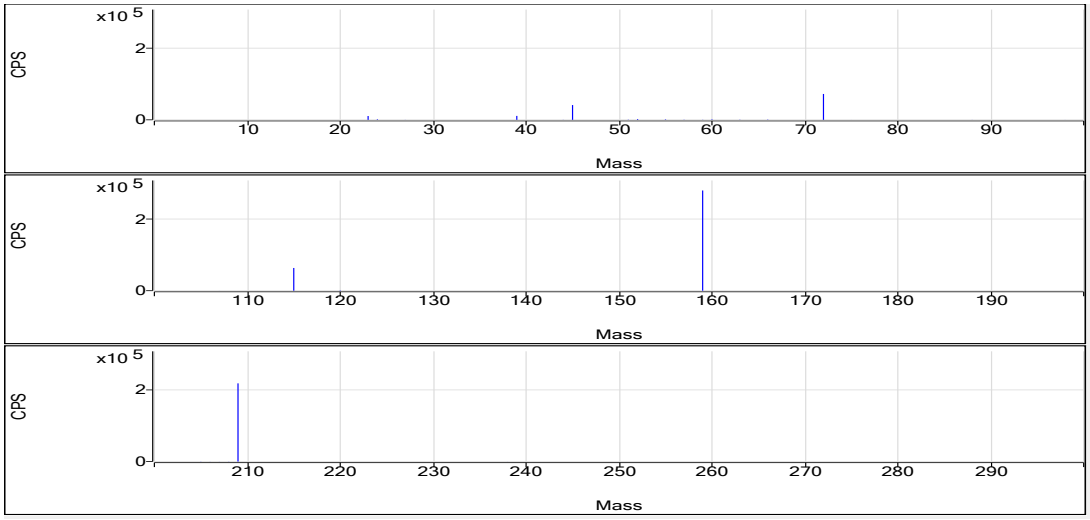


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	70.00	0.0013	4.694E-05
Be	9	1	No Gas	0.004	0.0001	74.00	0.0013	4.694E-05
Be	9	1	No Gas	0.009	0.0001	84.00	0.0013	4.694E-05
Se	78	2	H2	0.014	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.069	0	6.00	0.0004	1.089E-05
Na	23	3	He	19.726	0.1403	10163.81	0.0017	0.1065
Na	23	3	He	20.92	0.1424	10313.90	0.0017	0.1065
Na	23	3	He	29.659	0.1574	11334.70	0.0017	0.1065
Mg	24	3	He	17.674	0.0197	1430.12	0.0008	0.004846
Mg	24	3	He	17.998	0.02	1450.13	0.0008	0.004846
Mg	24	3	He	18.632	0.0206	1480.13	0.0008	0.004846
Al	27	3	He	4.178	0.0021	150.01	0.0002	0.001063
Al	27	3	He	6.465	0.0026	190.01	0.0002	0.001063
Al	27	3	He	3.651	0.0019	140.00	0.0002	0.001063
K	39	3	He	23.556	0.1566	11344.82	0.0006	0.1436
K	39	3	He	19.506	0.1544	11184.52	0.0006	0.1436
K	39	3	He	-2.001	0.1425	10263.96	0.0006	0.1436
Ca	44	3	He	37.051	0.0028	200.01	0	0.001611
Ca	44	3	He	37.038	0.0028	200.01	0	0.001611
Ca	44	3	He	82.271	0.0042	300.01	0	0.001611
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	-0.541	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.016	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.063	0.0081	584.02	0.0117	0.007326
V	51	3	He	0.002	0.0073	532.01	0.0117	0.007326
V	51	3	He	0.046	0.0079	566.02	0.0117	0.007326
Cr	52	3	He	0.038	0.026	1880.21	0.0152	0.02538
Cr	52	3	He	0.319	0.0302	2190.24	0.0152	0.02538
Cr	52	3	He	0.002	0.0254	1830.19	0.0152	0.02538
Mn	55	3	He	0.694	0.018	1300.10	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.32	0.0157	1140.09	0.0059	0.01385
Mn	55	3	He	0.265	0.0154	1110.08	0.0059	0.01385
Fe	57	3	He	6.019	0.0057	410.02	0.0003	0.003918
Fe	57	3	He	11.735	0.0073	530.03	0.0003	0.003918
Fe	57	3	He	5.172	0.0054	390.02	0.0003	0.003918
Co	59	3	He	0.053	0.0047	340.01	0.0305	0.003084
Co	59	3	He	0.039	0.0043	310.01	0.0305	0.003084
Co	59	3	He	0.072	0.0053	380.02	0.0305	0.003084
Ni	60	3	He	0.766	0.0157	1140.09	0.0088	0.009003
Ni	60	3	He	1.41	0.0214	1550.13	0.0088	0.009003
Ni	60	3	He	1.235	0.0199	1430.12	0.0088	0.009003
Cu	63	3	He	0.112	0.0077	560.04	0.0249	0.004937
Cu	63	3	He	0.046	0.0061	440.02	0.0249	0.004937
Cu	63	3	He	0.103	0.0075	540.03	0.0249	0.004937
Zn	66	3	He	3.146	0.0126	910.06	0.0025	0.004836
Zn	66	3	He	1.628	0.0088	640.03	0.0025	0.004836
Zn	66	3	He	2.045	0.0099	710.04	0.0025	0.004836
As	75	3	He	-0.075	0.0003	22.00	0.0017	0.0004347
As	75	3	He	0.099	0.0006	44.00	0.0017	0.0004347
As	75	3	He	0.069	0.0006	40.00	0.0017	0.0004347
Sr	88	3	He	0.064	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.261	0.0028	180.01	0.0078	0.0007762
Sr	88	3	He	0.221	0.0025	160.01	0.0078	0.0007762
Mo	98	3	He	0.006	0.0006	40.00	0.022	0.0005162
Mo	98	3	He	0.033	0.0013	80.00	0.022	0.0005162
Mo	98	3	He	0.048	0.0016	100.00	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.158	0.0178	1120.08	0.0143	0.01559
Sn	120	3	He	0.213	0.0186	1190.13	0.0143	0.01559
Sn	120	3	He	0.005	0.0157	1000.08	0.0143	0.01559
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	-0.034	0.0002	10.00	0.0044	0.000309
Ba	137	3	He	0.072	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.252	0.0014	90.00	0.0044	0.000309
Tl	205	3	He	0.027	0.0018	390.02	0.0276	0.001005
Tl	205	3	He	0.017	0.0015	320.02	0.0276	0.001005
Tl	205	3	He	0.013	0.0014	300.01	0.0276	0.001005
Pb	208	3	He	0.01	0.0025	300.02	0.0364	0.002176
Pb	208	3	He	0.028	0.0032	390.02	0.0364	0.002176
Pb	208	3	He	0.017	0.0028	310.02	0.0364	0.002176
U	238	3	He	0.002	0.0003	70.00	0.0421	0.00024
U	238	3	He	0.003	0.0004	80.00	0.0421	0.00024
U	238	3	He	0.011	0.0007	150.01	0.0421	0.00024
Sc	45	1	No Gas			3230974.01		
Sc	45	1	No Gas			3181348.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3283928.70		
Ge	72	1	No Gas			1431687.01		
Ge	72	1	No Gas			1409739.51		
Ge	72	1	No Gas			1441747.17		
Sc	45	2	H2			195496.29		
Sc	45	2	H2			193501.87		
Sc	45	2	H2			193165.15		
Ge	72	2	H2			162277.09		
Ge	72	2	H2			159605.66		
Ge	72	2	H2			159727.67		
In	115	2	H2			443490.46		
In	115	2	H2			429793.90		
In	115	2	H2			426735.07		
Sc	45	3	He			41910.13		
Sc	45	3	He			41589.75		
Sc	45	3	He			40326.08		
Ge	72	3	He			72422.09		
Ge	72	3	He			72432.70		
Ge	72	3	He			72009.74		
In	115	3	He			62771.63		
In	115	3	He			63907.04		
In	115	3	He			63866.21		
Tb	159	3	He			282929.10		
Tb	159	3	He			278258.77		
Tb	159	3	He			279198.02		
Bi	209	3	He			221006.32		
Bi	209	3	He			215232.44		
Bi	209	3	He			219600.93		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 14:45:22
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

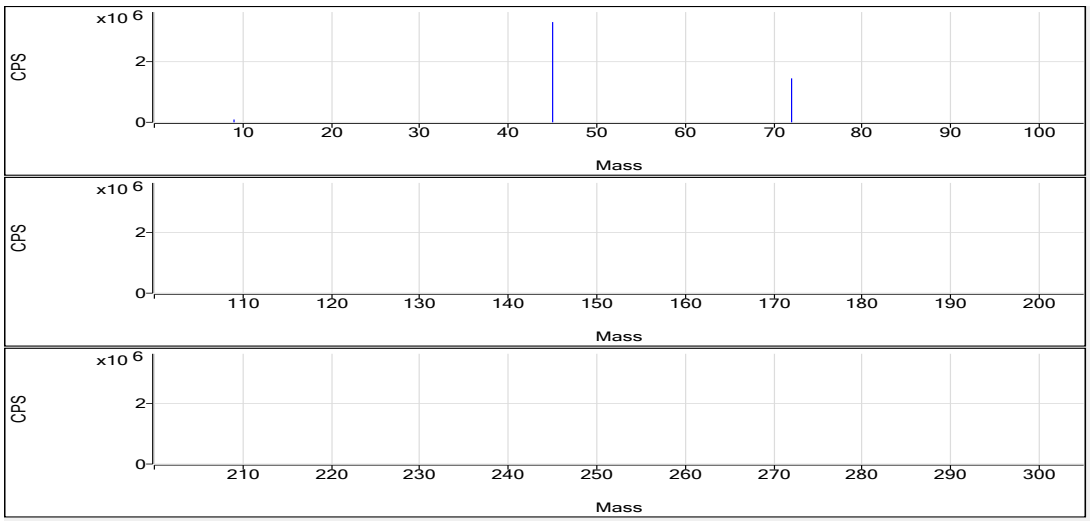
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	48.368	ppb	4.8	92499.79	0.0636	Pulse	0.5000	3
Se	78	72	H2	52.111	ppb	3.4	3292.60	0.0203	Pulse	1.5000	3
Na	23	72	He	5409.203	ppb	1.2	688321.08	9.3985	Pulse	0.1000	3
Mg	24	72	He	5348.155	ppb	1.8	330562.08	4.5139	Pulse	0.1000	3
Al	27	72	He	5206.041	ppb	1.9	92118.53	1.2578	Pulse	0.1000	3
K	39	72	He	5308.465	ppb	1.0	225214.01	3.0750	Pulse	0.1000	3
Ca	44	72	He	5154.155	ppb	1.8	11845.19	0.1617	Pulse	0.1000	3
Ti	47	72	He	5364.716	ppb	1.5	98557.14	1.3456	Pulse	0.1000	3
V	51	72	He	531.530	ppb	0.9	455915.72	6.2250	Pulse	0.5000	3
Cr	52	72	He	532.097	ppb	1.3	595244.41	8.1278	Pulse	0.1000	3
Mn	55	72	He	519.317	ppb	1.0	225511.85	3.0791	Pulse	0.1000	3
Fe	57	72	He	5196.596	ppb	0.6	110554.70	1.5094	Pulse	0.1000	3
Co	59	72	He	529.235	ppb	0.6	1182877.64	16.1503	Pulse	0.1000	3
Ni	60	72	He	528.236	ppb	1.2	340843.80	4.6539	Pulse	0.1000	3
Cu	63	72	He	526.307	ppb	1.9	961495.43	13.1295	Pulse	0.1000	3
Zn	66	72	He	525.852	ppb	1.3	94971.43	1.2967	Pulse	0.1000	3
As	75	72	He	519.200	ppb	1.3	66162.02	0.9034	Pulse	0.5000	3
Sr	88	115	He	51.839	ppb	3.5	25560.21	0.4060	Pulse	0.1000	3
Mo	98	115	He	52.369	ppb	1.2	72643.69	1.1538	Pulse	0.1000	3
Ag	107	115	He	52.163	ppb	2.2	149456.84	2.3739	Pulse	0.1000	3
Cd	111	115	He	52.964	ppb	1.3	16011.81	0.2543	Pulse	0.5000	3
Sn	120	115	He	52.195	ppb	2.4	47849.46	0.7598	Pulse	0.1000	3
Sb	121	115	He	51.664	ppb	2.7	40362.52	0.6412	Pulse	0.1000	3
Ba	137	115	He	520.353	ppb	0.7	143358.99	2.2767	Pulse	0.1000	3
Tl	205	209	He	52.180	ppb	0.4	318175.01	1.4435	Pulse	0.1000	3
Pb	208	209	He	51.673	ppb	1.2	415021.11	1.8829	Pulse	0.1000	3
U	238	209	He	51.638	ppb	0.4	478863.45	2.1725	Pulse	0.1000	3

ISTD Table:

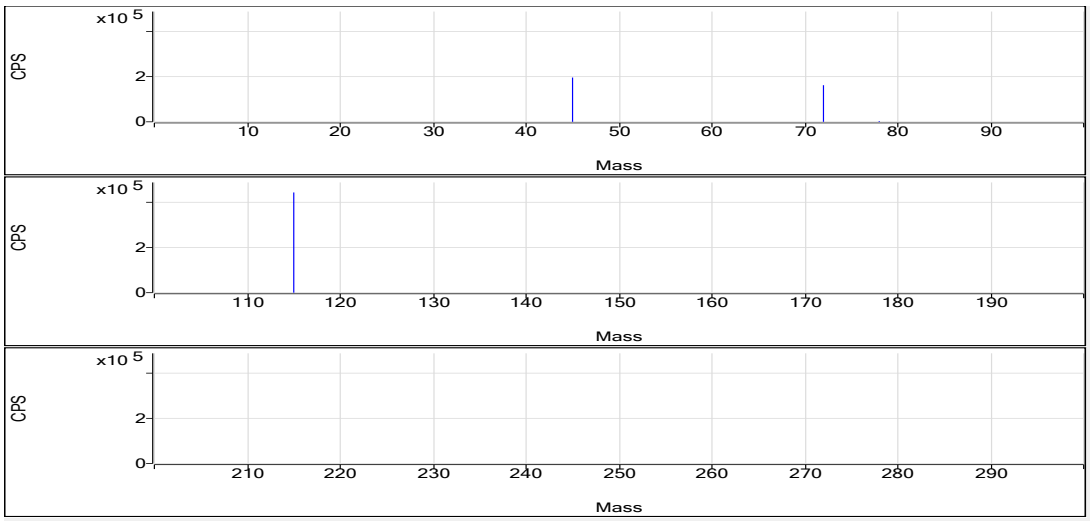
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3319701.41	1.2	102.4	Pulse	0.1000	3
No Gas	Ge	72	1455244.98	2.2	101.1	Pulse	0.1000	3
H2	Sc	45	196156.70	2.3	100.4	Pulse	0.1000	3
H2	Ge	72	162201.71	0.4	99.5	Pulse	0.1000	3
H2	In	115	444053.94	1.3	102.5	Pulse	0.1000	3
He	Sc	45	41767.10	0.9	104.5	Pulse	0.1000	3
He	Ge	72	73246.26	1.6	101.3	Pulse	0.1000	3
He	In	115	62971.01	1.7	97.5	Pulse	0.1000	3
He	Tb	159	282971.83	0.7	98.9	Pulse	0.1000	3
He	Bi	209	220423.08	0.6	99.2	Pulse	0.1000	3

No Gas

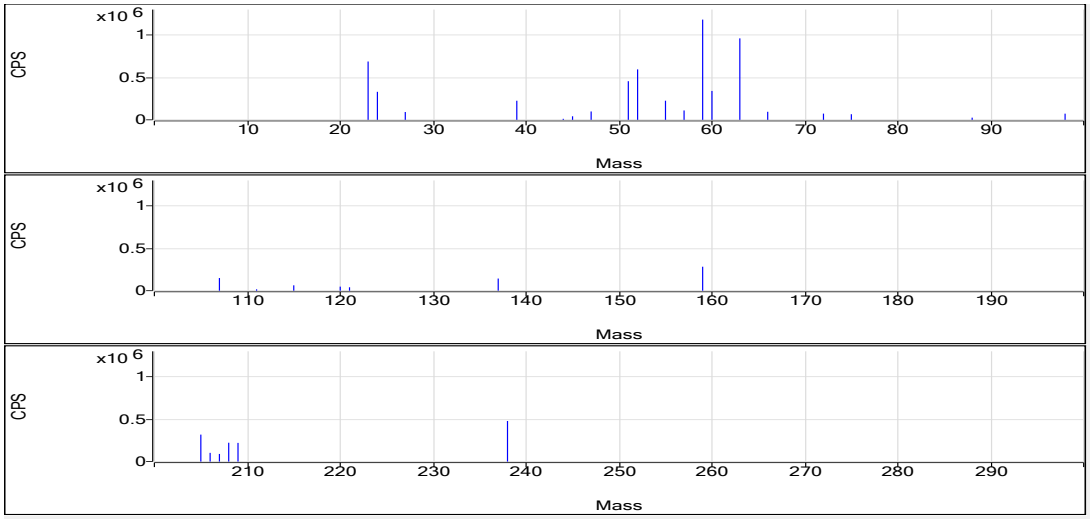


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.3	0.0661	93960.05	0.0013	4.694E-05
Be	9	1	No Gas	48.979	0.0644	94090.44	0.0013	4.694E-05
Be	9	1	No Gas	45.825	0.0603	89448.89	0.0013	4.694E-05
Se	78	2	H2	51.858	0.0202	3283.71	0.0004	1.089E-05
Se	78	2	H2	54.021	0.021	3398.40	0.0004	1.089E-05
Se	78	2	H2	50.455	0.0197	3195.69	0.0004	1.089E-05
Na	23	3	He	5425.005	9.4256	682624.29	0.0017	0.1065
Na	23	3	He	5336.238	9.2732	692086.55	0.0017	0.1065
Na	23	3	He	5466.365	9.4967	690252.41	0.0017	0.1065
Mg	24	3	He	5384.988	4.5449	329153.63	0.0008	0.004846
Mg	24	3	He	5237.99	4.421	329954.21	0.0008	0.004846
Mg	24	3	He	5421.487	4.5757	332578.39	0.0008	0.004846
Al	27	3	He	5153.033	1.245	90163.61	0.0002	0.001063
Al	27	3	He	5144.814	1.243	92768.55	0.0002	0.001063
Al	27	3	He	5320.277	1.2853	93423.42	0.0002	0.001063
K	39	3	He	5316.679	3.0796	223028.98	0.0006	0.1436
K	39	3	He	5250.975	3.0433	227130.91	0.0006	0.1436
K	39	3	He	5357.742	3.1022	225482.13	0.0006	0.1436
Ca	44	3	He	5049.445	0.1584	11474.98	0	0.001611
Ca	44	3	He	5209.088	0.1634	12195.42	0	0.001611
Ca	44	3	He	5203.932	0.1632	11865.16	0	0.001611
Ti	47	3	He	5455.626	1.3684	99104.60	0.0003	0.0002737
Ti	47	3	He	5343.399	1.3403	100030.11	0.0003	0.0002737
Ti	47	3	He	5295.121	1.3282	96536.72	0.0003	0.0002737
V	51	3	He	534.053	6.2545	452966.38	0.0117	0.007326
V	51	3	He	525.977	6.1601	459746.63	0.0117	0.007326
V	51	3	He	534.562	6.2605	455034.16	0.0117	0.007326
Cr	52	3	He	535.324	8.1769	592188.16	0.0152	0.02538
Cr	52	3	He	524.042	8.0051	597448.23	0.0152	0.02538
Cr	52	3	He	536.924	8.2013	596096.83	0.0152	0.02538
Mn	55	3	He	525.236	3.114	225523.51	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	515.024	3.0537	227910.91	0.0059	0.01385
Mn	55	3	He	517.692	3.0695	223101.13	0.0059	0.01385
Fe	57	3	He	5225.439	1.5178	109922.46	0.0003	0.003918
Fe	57	3	He	5164.826	1.5002	111968.16	0.0003	0.003918
Fe	57	3	He	5199.522	1.5103	109773.47	0.0003	0.003918
Co	59	3	He	529.833	16.1686	1170960.30	0.0305	0.003084
Co	59	3	He	525.668	16.0415	1197228.42	0.0305	0.003084
Co	59	3	He	532.204	16.2409	1180444.20	0.0305	0.003084
Ni	60	3	He	534.814	4.7118	341237.07	0.0088	0.009003
Ni	60	3	He	522.136	4.6003	343335.78	0.0088	0.009003
Ni	60	3	He	527.757	4.6497	337958.55	0.0088	0.009003
Cu	63	3	He	530.176	13.226	957853.58	0.0249	0.004937
Cu	63	3	He	514.897	12.845	958663.58	0.0249	0.004937
Cu	63	3	He	533.849	13.3176	967969.13	0.0249	0.004937
Zn	66	3	He	524.509	1.2934	93673.07	0.0025	0.004836
Zn	66	3	He	519.833	1.2819	95675.85	0.0025	0.004836
Zn	66	3	He	533.213	1.3148	95565.38	0.0025	0.004836
As	75	3	He	523.463	0.9108	65963.95	0.0017	0.0004347
As	75	3	He	511.288	0.8897	66397.65	0.0017	0.0004347
As	75	3	He	522.85	0.9098	66124.47	0.0017	0.0004347
Sr	88	3	He	52.994	0.415	25623.52	0.0078	0.0007762
Sr	88	3	He	52.786	0.4134	26234.72	0.0078	0.0007762
Sr	88	3	He	49.738	0.3896	24822.40	0.0078	0.0007762
Mo	98	3	He	53.04	1.1685	72143.60	0.022	0.0005162
Mo	98	3	He	52.227	1.1506	73019.38	0.022	0.0005162
Mo	98	3	He	51.838	1.1421	72768.10	0.022	0.0005162
Ag	107	3	He	53.079	2.4156	149133.77	0.0455	0.0004641
Ag	107	3	He	52.504	2.3894	151629.74	0.0455	0.0004641
Ag	107	3	He	50.905	2.3167	147607.02	0.0455	0.0004641
Cd	111	3	He	53.333	0.2561	15808.93	0.0048	5.152E-05
Cd	111	3	He	53.417	0.2565	16275.42	0.0048	5.152E-05
Cd	111	3	He	52.142	0.2503	15951.09	0.0048	5.152E-05
Sn	120	3	He	51.48	0.7496	46277.61	0.0143	0.01559
Sn	120	3	He	53.646	0.7805	49528.30	0.0143	0.01559
Sn	120	3	He	51.461	0.7493	47742.47	0.0143	0.01559
Sb	121	3	He	53.083	0.6587	40669.99	0.0124	0.000258
Sb	121	3	He	51.592	0.6403	40630.01	0.0124	0.000258
Sb	121	3	He	50.319	0.6245	39787.57	0.0124	0.000258
Ba	137	3	He	524.201	2.2936	141601.44	0.0044	0.000309
Ba	137	3	He	517.081	2.2624	143572.41	0.0044	0.000309
Ba	137	3	He	519.776	2.2742	144903.12	0.0044	0.000309
Tl	205	3	He	52.367	1.4486	317818.35	0.0276	0.001005
Tl	205	3	He	52.217	1.4445	317588.39	0.0276	0.001005
Tl	205	3	He	51.957	1.4373	319118.28	0.0276	0.001005
Pb	208	3	He	51.783	1.8869	221158.08	0.0364	0.002176
Pb	208	3	He	52.216	1.9027	223527.26	0.0364	0.002176
Pb	208	3	He	51.019	1.8591	222203.90	0.0364	0.002176
U	238	3	He	51.867	2.1821	478738.39	0.0421	0.00024
U	238	3	He	51.6	2.1709	477290.34	0.0421	0.00024
U	238	3	He	51.447	2.1645	480561.63	0.0421	0.00024
Sc	45	1	No Gas			3275871.20		
Sc	45	1	No Gas			3332589.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3350643.70		
Ge	72	1	No Gas			1420565.14		
Ge	72	1	No Gas			1460871.07		
Ge	72	1	No Gas			1484298.73		
Sc	45	2	H2			196692.83		
Sc	45	2	H2			191495.41		
Sc	45	2	H2			200281.85		
Ge	72	2	H2			162539.04		
Ge	72	2	H2			161485.32		
Ge	72	2	H2			162580.78		
In	115	2	H2			446465.38		
In	115	2	H2			437473.63		
In	115	2	H2			448222.81		
Sc	45	3	He			42121.43		
Sc	45	3	He			41379.19		
Sc	45	3	He			41800.68		
Ge	72	3	He			72422.03		
Ge	72	3	He			74633.32		
Ge	72	3	He			72683.44		
In	115	3	He			62099.16		
In	115	3	He			63845.70		
In	115	3	He			64087.84		
Tb	159	3	He			283724.96		
Tb	159	3	He			284482.59		
Tb	159	3	He			280707.93		
Bi	209	3	He			219389.74		
Bi	209	3	He			219858.14		
Bi	209	3	He			222021.36		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

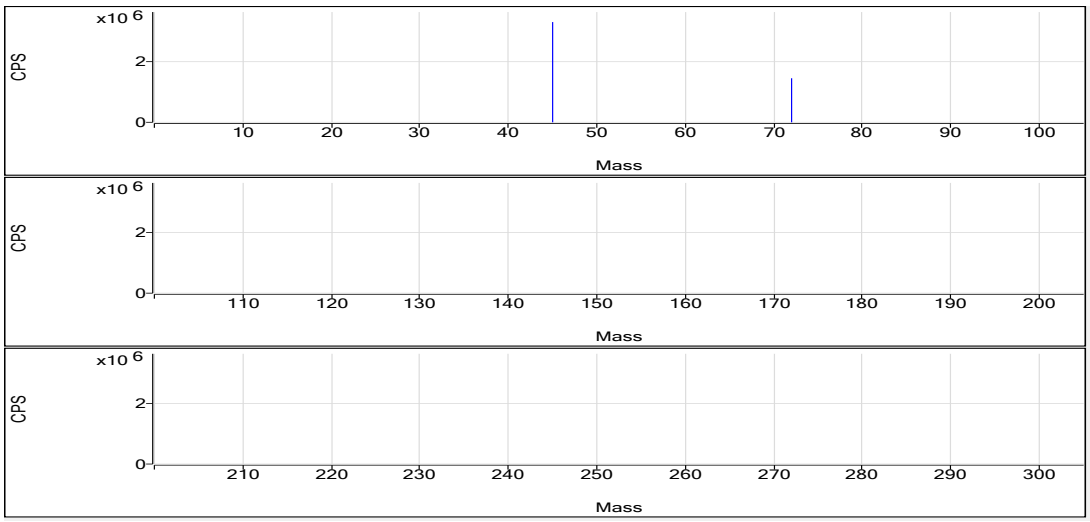
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.031	ppb	16.1	126.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.037	ppb	75.9	4.00	0.0000	Pulse	1.5000	3
Na	23	72	He	16.354	ppb	2.5	9866.90	0.1345	Pulse	0.1000	3
Mg	24	72	He	10.080	ppb	24.7	976.73	0.0133	Pulse	0.1000	3
Al	27	72	He	1.413	ppb	71.1	103.33	0.0014	Pulse	0.1000	3
K	39	72	He	6.215	ppb	314.9	10780.95	0.1471	Pulse	0.1000	3
Ca	44	72	He	33.620	ppb	86.7	193.34	0.0027	Pulse	0.1000	3
Ti	47	72	He	3.790	ppb	21.5	90.00	0.0012	Pulse	0.1000	3
V	51	72	He	0.155	ppb	3.4	670.02	0.0091	Pulse	0.5000	3
Cr	52	72	He	0.296	ppb	29.6	2190.25	0.0299	Pulse	0.1000	3
Mn	55	72	He	-0.124	ppb	N/A	963.40	0.0131	Pulse	0.1000	3
Fe	57	72	He	4.051	ppb	65.7	373.35	0.0051	Pulse	0.1000	3
Co	59	72	He	0.185	ppb	4.1	640.04	0.0087	Pulse	0.1000	3
Ni	60	72	He	1.333	ppb	13.2	1520.14	0.0207	Pulse	0.1000	3
Cu	63	72	He	0.205	ppb	5.4	736.71	0.0100	Pulse	0.1000	3
Zn	66	72	He	0.557	ppb	81.7	456.69	0.0062	Pulse	0.1000	3
As	75	72	He	0.301	ppb	39.8	70.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.098	ppb	57.3	100.00	0.0015	Pulse	0.1000	3
Mo	98	115	He	0.063	ppb	16.8	123.34	0.0019	Pulse	0.1000	3
Ag	107	115	He	0.019	ppb	24.6	86.67	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.019	ppb	125.2	9.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.072	ppb	251.5	1080.09	0.0166	Pulse	0.1000	3
Sb	121	115	He	0.057	ppb	85.8	63.34	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.198	ppb	39.0	76.67	0.0012	Pulse	0.1000	3
Tl	205	209	He	0.237	ppb	15.1	1683.51	0.0076	Pulse	0.1000	3
Pb	208	209	He	0.023	ppb	33.1	670.03	0.0030	Pulse	0.1000	3
U	238	209	He	0.030	ppb	40.3	330.02	0.0015	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3282431.41	2.3	101.3	Pulse	0.1000	3
No Gas	Ge	72	1442410.40	1.8	100.2	Pulse	0.1000	3
H2	Sc	45	191616.35	1.3	98.1	Pulse	0.1000	3
H2	Ge	72	157775.79	1.3	96.8	Pulse	0.1000	3
H2	In	115	439319.26	1.2	101.4	Pulse	0.1000	3
He	Sc	45	41877.24	2.4	104.7	Pulse	0.1000	3
He	Ge	72	73337.04	3.2	101.5	Pulse	0.1000	3
He	In	115	65123.46	1.8	100.8	Pulse	0.1000	3
He	Tb	159	282903.14	0.3	98.9	Pulse	0.1000	3
He	Bi	209	222353.54	0.7	100.1	Pulse	0.1000	3

No Gas



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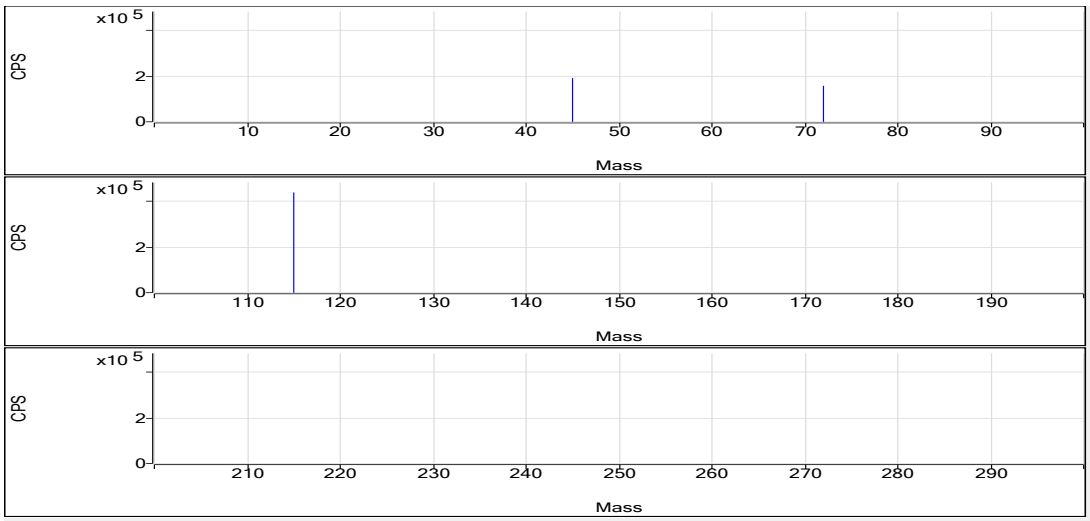
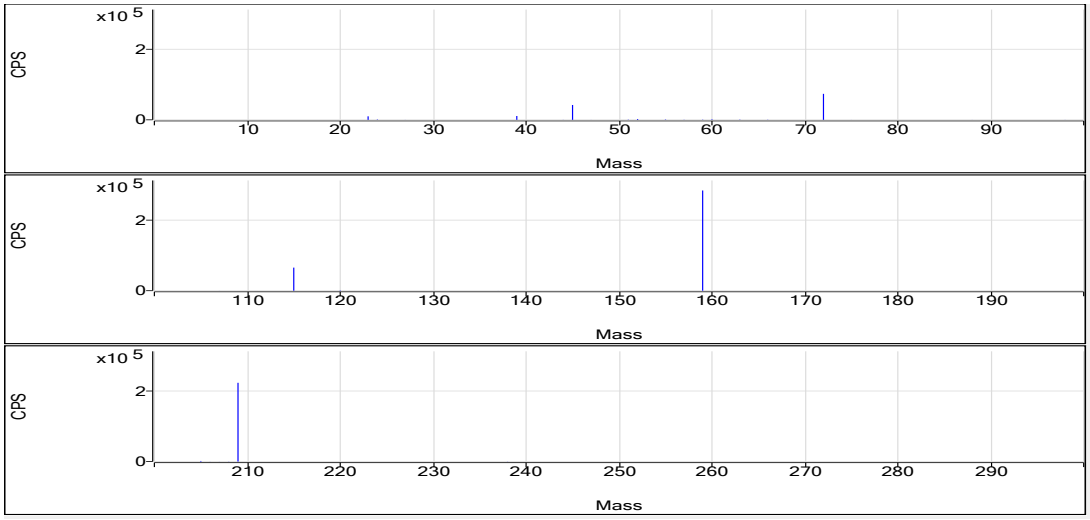


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.036	0.0001	134.00	0.0013	4.694E-05
Be	9	1	No Gas	0.027	0.0001	120.00	0.0013	4.694E-05
Be	9	1	No Gas	0.029	0.0001	124.00	0.0013	4.694E-05
Se	78	2	H2	0.058	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.005	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.048	0	4.67	0.0004	1.089E-05
Na	23	3	He	16.744	0.1352	9973.61	0.0017	0.1065
Na	23	3	He	16.398	0.1346	9533.36	0.0017	0.1065
Na	23	3	He	15.919	0.1338	10093.73	0.0017	0.1065
Mg	24	3	He	12.103	0.0151	1110.08	0.0008	0.004846
Mg	24	3	He	10.835	0.014	990.07	0.0008	0.004846
Mg	24	3	He	7.303	0.011	830.05	0.0008	0.004846
Al	27	3	He	1.775	0.0015	110.00	0.0002	0.001063
Al	27	3	He	0.277	0.0011	80.00	0.0002	0.001063
Al	27	3	He	2.187	0.0016	120.00	0.0002	0.001063
K	39	3	He	26.519	0.1583	11674.92	0.0006	0.1436
K	39	3	He	4.661	0.1462	10354.05	0.0006	0.1436
K	39	3	He	-12.533	0.1367	10313.88	0.0006	0.1436
Ca	44	3	He	35.44	0.0027	200.01	0	0.001611
Ca	44	3	He	61.803	0.0035	250.01	0	0.001611
Ca	44	3	He	3.617	0.0017	130.00	0	0.001611
Ti	47	3	He	3.233	0.0011	80.00	0.0003	0.0002737
Ti	47	3	He	3.413	0.0011	80.00	0.0003	0.0002737
Ti	47	3	He	4.723	0.0015	110.00	0.0003	0.0002737
V	51	3	He	0.153	0.0091	672.02	0.0117	0.007326
V	51	3	He	0.161	0.0092	652.02	0.0117	0.007326
V	51	3	He	0.151	0.0091	686.02	0.0117	0.007326
Cr	52	3	He	0.221	0.0287	2120.22	0.0152	0.02538
Cr	52	3	He	0.392	0.0314	2220.26	0.0152	0.02538
Cr	52	3	He	0.274	0.0296	2230.26	0.0152	0.02538
Mn	55	3	He	-0.119	0.0132	970.06	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.242	0.0124	880.06	0.0059	0.01385
Mn	55	3	He	-0.011	0.0138	1040.07	0.0059	0.01385
Fe	57	3	He	7.069	0.006	440.02	0.0003	0.003918
Fe	57	3	He	3.05	0.0048	340.01	0.0003	0.003918
Fe	57	3	He	2.034	0.0045	340.01	0.0003	0.003918
Co	59	3	He	0.192	0.0089	660.04	0.0305	0.003084
Co	59	3	He	0.186	0.0088	620.04	0.0305	0.003084
Co	59	3	He	0.177	0.0085	640.04	0.0305	0.003084
Ni	60	3	He	1.536	0.0225	1660.17	0.0088	0.009003
Ni	60	3	He	1.241	0.0199	1410.11	0.0088	0.009003
Ni	60	3	He	1.223	0.0198	1490.13	0.0088	0.009003
Cu	63	3	He	0.193	0.0098	720.04	0.0249	0.004937
Cu	63	3	He	0.215	0.0103	730.04	0.0249	0.004937
Cu	63	3	He	0.206	0.0101	760.05	0.0249	0.004937
Zn	66	3	He	0.46	0.006	440.02	0.0025	0.004836
Zn	66	3	He	0.158	0.0052	370.02	0.0025	0.004836
Zn	66	3	He	1.053	0.0074	560.04	0.0025	0.004836
As	75	3	He	0.311	0.001	72.00	0.0017	0.0004347
As	75	3	He	0.416	0.0012	82.00	0.0017	0.0004347
As	75	3	He	0.177	0.0007	56.00	0.0017	0.0004347
Sr	88	3	He	0.162	0.002	130.01	0.0078	0.0007762
Sr	88	3	He	0.056	0.0012	80.00	0.0078	0.0007762
Sr	88	3	He	0.075	0.0014	90.00	0.0078	0.0007762
Mo	98	3	He	0.062	0.0019	120.00	0.022	0.0005162
Mo	98	3	He	0.073	0.0021	140.01	0.022	0.0005162
Mo	98	3	He	0.052	0.0017	110.00	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.02	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.023	0.0015	100.00	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.046	0.0003	18.00	0.0048	5.152E-05
Sn	120	3	He	0.26	0.0193	1230.10	0.0143	0.01559
Sn	120	3	He	-0.1	0.0142	930.07	0.0143	0.01559
Sn	120	3	He	0.056	0.0164	1080.09	0.0143	0.01559
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.114	0.0017	110.01	0.0124	0.000258
Sb	121	3	He	0.028	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	0.109	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.242	0.0014	90.00	0.0044	0.000309
Ba	137	3	He	0.241	0.0014	90.00	0.0044	0.000309
Tl	205	3	He	0.276	0.0086	1930.21	0.0276	0.001005
Tl	205	3	He	0.232	0.0074	1650.18	0.0276	0.001005
Tl	205	3	He	0.204	0.0067	1470.14	0.0276	0.001005
Pb	208	3	He	0.026	0.0031	370.02	0.0364	0.002176
Pb	208	3	He	0.014	0.0027	350.02	0.0364	0.002176
Pb	208	3	He	0.029	0.0032	390.02	0.0364	0.002176
U	238	3	He	0.043	0.0021	460.03	0.0421	0.00024
U	238	3	He	0.024	0.0013	280.01	0.0421	0.00024
U	238	3	He	0.021	0.0011	250.01	0.0421	0.00024
Sc	45	1	No Gas			3204469.33		
Sc	45	1	No Gas			3290809.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3352015.58		
Ge	72	1	No Gas			1412731.23		
Ge	72	1	No Gas			1451555.76		
Ge	72	1	No Gas			1462944.20		
Sc	45	2	H2			192516.79		
Sc	45	2	H2			188811.01		
Sc	45	2	H2			193521.25		
Ge	72	2	H2			159797.30		
Ge	72	2	H2			155641.94		
Ge	72	2	H2			157888.14		
In	115	2	H2			440977.53		
In	115	2	H2			433586.32		
In	115	2	H2			443393.94		
Sc	45	3	He			40747.79		
Sc	45	3	He			42572.23		
Sc	45	3	He			42311.69		
Ge	72	3	He			73758.98		
Ge	72	3	He			70814.11		
Ge	72	3	He			75438.03		
In	115	3	He			63765.30		
In	115	3	He			65704.72		
In	115	3	He			65925.61		
Tb	159	3	He			283156.58		
Tb	159	3	He			282010.33		
Tb	159	3	He			283542.52		
Bi	209	3	He			223791.56		
Bi	209	3	He			222478.86		
Bi	209	3	He			220790.19		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

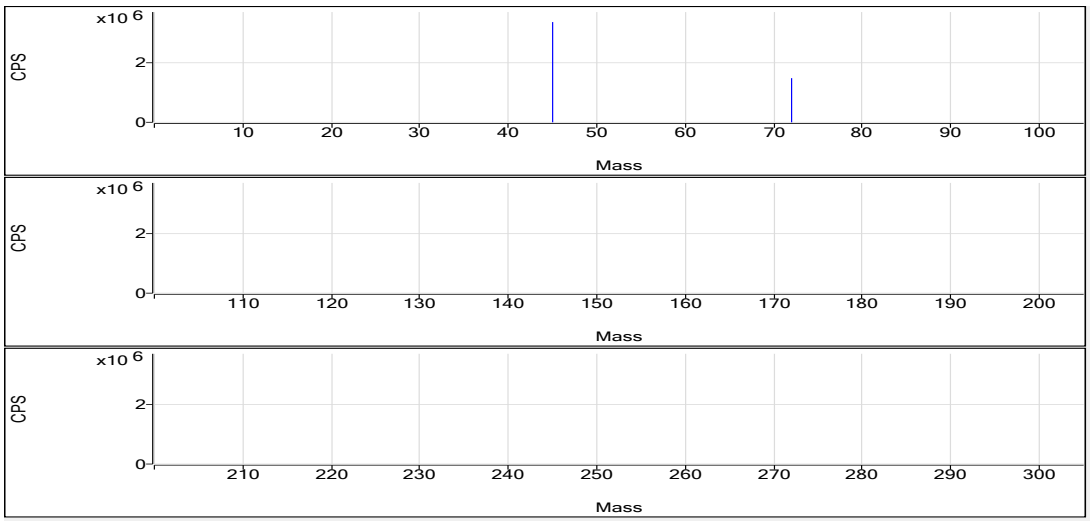
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.004	ppb	N/A	62.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.032	ppb	52.4	3.78	0.0000	Pulse	1.5000	3
Na	23	72	He	12.115	ppb	9.6	9193.12	0.1273	Pulse	0.1000	3
Mg	24	72	He	8.347	ppb	22.6	856.72	0.0119	Pulse	0.1000	3
Al	27	72	He	0.925	ppb	204.1	93.33	0.0013	Pulse	0.1000	3
K	39	72	He	14.484	ppb	143.0	10941.12	0.1516	Pulse	0.1000	3
Ca	44	72	He	28.505	ppb	83.9	180.01	0.0025	Pulse	0.1000	3
Ti	47	72	He	0.746	ppb	84.3	33.33	0.0005	Pulse	0.1000	3
V	51	72	He	0.054	ppb	63.3	574.68	0.0080	Pulse	0.5000	3
Cr	52	72	He	0.080	ppb	251.8	1920.20	0.0266	Pulse	0.1000	3
Mn	55	72	He	-0.465	ppb	N/A	800.05	0.0111	Pulse	0.1000	3
Fe	57	72	He	1.142	ppb	74.9	306.68	0.0042	Pulse	0.1000	3
Co	59	72	He	0.075	ppb	54.4	386.68	0.0054	Pulse	0.1000	3
Ni	60	72	He	1.201	ppb	8.3	1413.45	0.0196	Pulse	0.1000	3
Cu	63	72	He	0.059	ppb	31.0	463.36	0.0064	Pulse	0.1000	3
Zn	66	72	He	0.776	ppb	21.1	486.69	0.0067	Pulse	0.1000	3
As	75	72	He	0.041	ppb	104.8	36.67	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.198	ppb	5.1	146.68	0.0023	Pulse	0.1000	3
Mo	98	115	He	0.005	ppb	130.2	40.00	0.0006	Pulse	0.1000	3
Ag	107	115	He	0.014	ppb	25.1	70.00	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	3487.0	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	1.123	ppb	175.1	2007.46	0.0316	Pulse	0.1000	3
Sb	121	115	He	0.018	ppb	74.2	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.171	ppb	32.1	66.67	0.0011	Pulse	0.1000	3
Tl	205	209	He	0.060	ppb	15.4	583.37	0.0027	Pulse	0.1000	3
Pb	208	209	He	-0.003	ppb	N/A	453.35	0.0021	Pulse	0.1000	3
U	238	209	He	0.008	ppb	49.1	123.34	0.0006	Pulse	0.1000	3

ISTD Table:

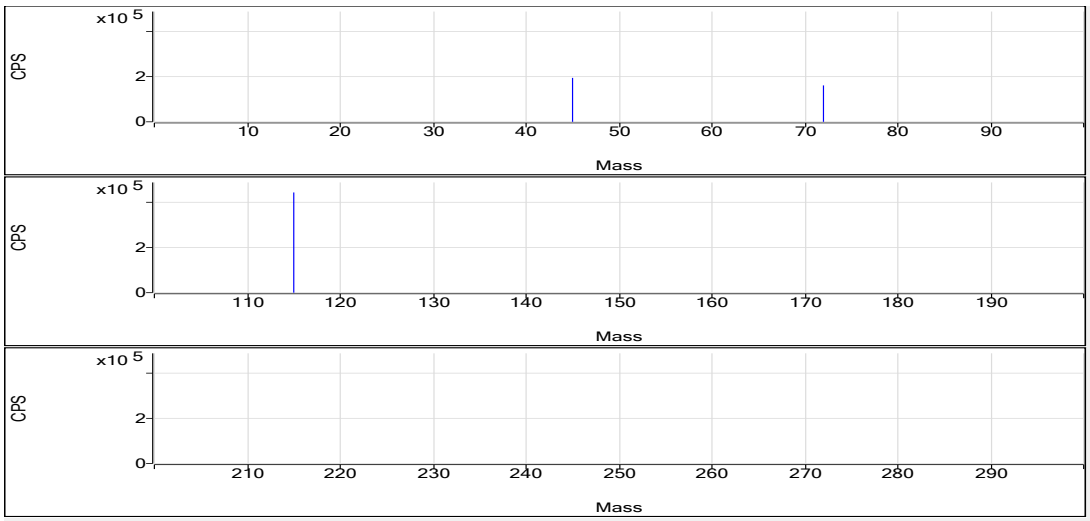
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3348928.08	1.9	103.3	Pulse	0.1000	3
No Gas	Ge	72	1474823.89	1.7	102.4	Pulse	0.1000	3
H2	Sc	45	194591.72	2.6	99.6	Pulse	0.1000	3
H2	Ge	72	161258.06	3.0	98.9	Pulse	0.1000	3
H2	In	115	443991.49	1.9	102.5	Pulse	0.1000	3
He	Sc	45	41379.49	0.9	103.5	Pulse	0.1000	3
He	Ge	72	72244.79	2.6	99.9	Pulse	0.1000	3
He	In	115	63127.25	1.1	97.7	Pulse	0.1000	3
He	Tb	159	281800.64	0.9	98.5	Pulse	0.1000	3
He	Bi	209	219805.39	0.8	98.9	Pulse	0.1000	3

No Gas

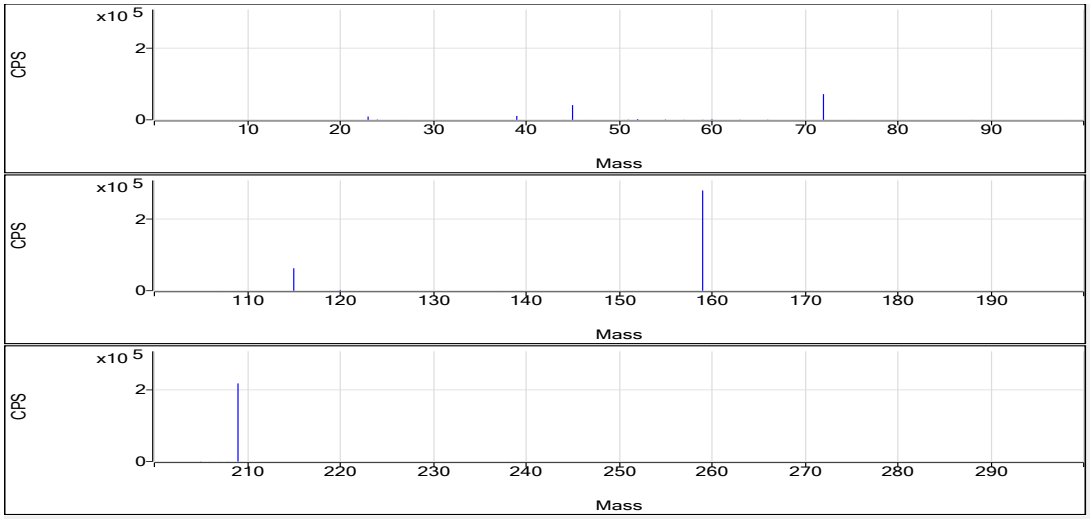


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	62.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.005	0	60.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.002	0	64.00	0.0013	4.694E-05
Se	78	2	H2	0.038	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.046	0	4.67	0.0004	1.089E-05
Se	78	2	H2	0.013	0	2.67	0.0004	1.089E-05
Na	23	3	He	11.74	0.1266	8962.92	0.0017	0.1065
Na	23	3	He	13.415	0.1295	9273.23	0.0017	0.1065
Na	23	3	He	11.19	0.1257	9343.20	0.0017	0.1065
Mg	24	3	He	8.999	0.0124	880.06	0.0008	0.004846
Mg	24	3	He	9.823	0.0131	940.06	0.0008	0.004846
Mg	24	3	He	6.219	0.0101	750.05	0.0008	0.004846
Al	27	3	He	0.865	0.0013	90.00	0.0002	0.001063
Al	27	3	He	-0.932	0.0008	60.00	0.0002	0.001063
Al	27	3	He	2.841	0.0017	130.00	0.0002	0.001063
K	39	3	He	27.811	0.159	11254.65	0.0006	0.1436
K	39	3	He	25.011	0.1575	11274.78	0.0006	0.1436
K	39	3	He	-9.37	0.1385	10293.93	0.0006	0.1436
Ca	44	3	He	16.366	0.0021	150.01	0	0.001611
Ca	44	3	He	56.047	0.0034	240.01	0	0.001611
Ca	44	3	He	13.101	0.002	150.01	0	0.001611
Ti	47	3	He	1.162	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	0.022	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.054	0.0005	40.00	0.0003	0.0002737
V	51	3	He	0.067	0.0081	574.02	0.0117	0.007326
V	51	3	He	0.08	0.0083	592.02	0.0117	0.007326
V	51	3	He	0.015	0.0075	558.01	0.0117	0.007326
Cr	52	3	He	0.291	0.0298	2110.24	0.0152	0.02538
Cr	52	3	He	-0.108	0.0237	1700.16	0.0152	0.02538
Cr	52	3	He	0.056	0.0262	1950.21	0.0152	0.02538
Mn	55	3	He	-0.241	0.0124	880.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.265	0.0123	880.06	0.0059	0.01385
Mn	55	3	He	-0.888	0.0086	640.04	0.0059	0.01385
Fe	57	3	He	2.082	0.0045	320.01	0.0003	0.003918
Fe	57	3	He	0.938	0.0042	300.01	0.0003	0.003918
Fe	57	3	He	0.407	0.004	300.01	0.0003	0.003918
Co	59	3	He	0.121	0.0068	480.02	0.0305	0.003084
Co	59	3	He	0.059	0.0049	350.01	0.0305	0.003084
Co	59	3	He	0.044	0.0044	330.01	0.0305	0.003084
Ni	60	3	He	1.097	0.0186	1320.11	0.0088	0.009003
Ni	60	3	He	1.295	0.0204	1460.11	0.0088	0.009003
Ni	60	3	He	1.21	0.0196	1460.13	0.0088	0.009003
Cu	63	3	He	0.04	0.0059	420.02	0.0249	0.004937
Cu	63	3	He	0.076	0.0068	490.02	0.0249	0.004937
Cu	63	3	He	0.061	0.0065	480.03	0.0249	0.004937
Zn	66	3	He	0.792	0.0068	480.03	0.0025	0.004836
Zn	66	3	He	0.931	0.0071	510.03	0.0025	0.004836
Zn	66	3	He	0.605	0.0063	470.02	0.0025	0.004836
As	75	3	He	0.01	0.0005	32.00	0.0017	0.0004347
As	75	3	He	0.023	0.0005	34.00	0.0017	0.0004347
As	75	3	He	0.09	0.0006	44.00	0.0017	0.0004347
Sr	88	3	He	0.201	0.0023	150.01	0.0078	0.0007762
Sr	88	3	He	0.206	0.0024	150.01	0.0078	0.0007762
Sr	88	3	He	0.187	0.0022	140.01	0.0078	0.0007762
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	0.005	0.0006	40.00	0.022	0.0005162
Mo	98	3	He	-0.002	0.0005	30.00	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	3.386	0.0639	4082.26	0.0143	0.01559
Sn	120	3	He	-0.167	0.0132	830.05	0.0143	0.01559
Sn	120	3	He	0.15	0.0177	1110.08	0.0143	0.01559
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.031	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.18	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.22	0.0013	80.00	0.0044	0.000309
Ba	137	3	He	0.112	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	0.07	0.0029	650.03	0.0276	0.001005
Tl	205	3	He	0.052	0.0025	540.04	0.0276	0.001005
Tl	205	3	He	0.057	0.0026	560.03	0.0276	0.001005
Pb	208	3	He	-0.011	0.0018	210.01	0.0364	0.002176
Pb	208	3	He	0.005	0.0024	270.01	0.0364	0.002176
Pb	208	3	He	-0.003	0.0021	190.01	0.0364	0.002176
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
U	238	3	He	0.012	0.0007	160.01	0.0421	0.00024
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
Sc	45	1	No Gas			3329601.83		
Sc	45	1	No Gas			3420853.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3296328.70		
Ge	72	1	No Gas			1465497.17		
Ge	72	1	No Gas			1503519.98		
Ge	72	1	No Gas			1455454.51		
Sc	45	2	H2			188984.14		
Sc	45	2	H2			196311.27		
Sc	45	2	H2			198479.74		
Ge	72	2	H2			156200.85		
Ge	72	2	H2			161830.01		
Ge	72	2	H2			165743.32		
In	115	2	H2			434246.32		
In	115	2	H2			447858.70		
In	115	2	H2			449869.45		
Sc	45	3	He			41119.08		
Sc	45	3	He			41188.79		
Sc	45	3	He			41830.59		
Ge	72	3	He			70784.55		
Ge	72	3	He			71607.64		
Ge	72	3	He			74342.17		
In	115	3	He			63956.33		
In	115	3	He			62831.62		
In	115	3	He			62640.77		
Tb	159	3	He			280644.04		
Tb	159	3	He			279940.86		
Tb	159	3	He			284817.03		
Bi	209	3	He			221261.60		
Bi	209	3	He			220250.99		
Bi	209	3	He			217903.59		

Quantitation Report

Data File Name	131SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 14:52:04
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

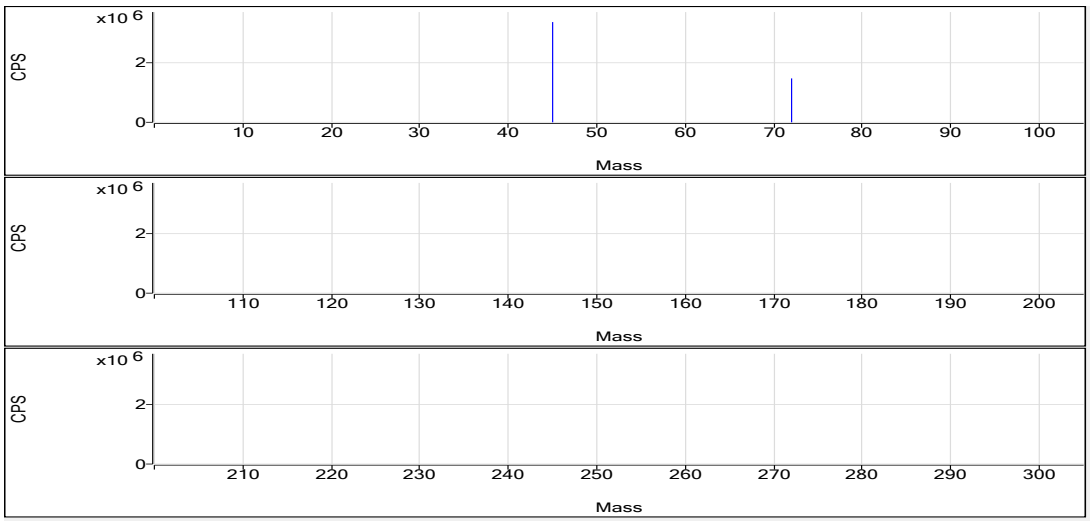
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.008	ppb	N/A	53.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.003	ppb	N/A	1.55	0.0000	Pulse	1.5000	3
Na	23	72	He	14.116	ppb	10.8	9433.31	0.1307	Pulse	0.1000	3
Mg	24	72	He	8.316	ppb	19.2	856.72	0.0119	Pulse	0.1000	3
Al	27	72	He	1.922	ppb	64.7	110.00	0.0015	Pulse	0.1000	3
K	39	72	He	13.699	ppb	55.1	10911.05	0.1512	Pulse	0.1000	3
Ca	44	72	He	22.165	ppb	111.1	166.67	0.0023	Pulse	0.1000	3
Ti	47	72	He	0.013	ppb	7570.1	20.00	0.0003	Pulse	0.1000	3
V	51	72	He	-0.011	ppb	N/A	519.34	0.0072	Pulse	0.5000	3
Cr	52	72	He	-0.065	ppb	N/A	1760.16	0.0244	Pulse	0.1000	3
Mn	55	72	He	-0.859	ppb	N/A	633.37	0.0088	Pulse	0.1000	3
Fe	57	72	He	3.839	ppb	27.9	363.35	0.0050	Pulse	0.1000	3
Co	59	72	He	0.023	ppb	61.8	273.34	0.0038	Pulse	0.1000	3
Ni	60	72	He	1.156	ppb	14.9	1383.46	0.0192	Pulse	0.1000	3
Cu	63	72	He	0.039	ppb	33.7	426.69	0.0059	Pulse	0.1000	3
Zn	66	72	He	0.763	ppb	97.7	483.36	0.0067	Pulse	0.1000	3
As	75	72	He	0.053	ppb	42.3	38.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.132	ppb	60.9	116.67	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.007	ppb	119.4	43.33	0.0007	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	20.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.015	ppb	115.6	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.027	ppb	N/A	983.41	0.0152	Pulse	0.1000	3
Sb	121	115	He	0.004	ppb	297.3	20.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.095	ppb	59.6	46.67	0.0007	Pulse	0.1000	3
Tl	205	209	He	0.028	ppb	69.0	393.35	0.0018	Pulse	0.1000	3
Pb	208	209	He	0.001	ppb	782.6	493.35	0.0022	Pulse	0.1000	3
U	238	209	He	0.002	ppb	130.7	76.67	0.0003	Pulse	0.1000	3

ISTD Table:

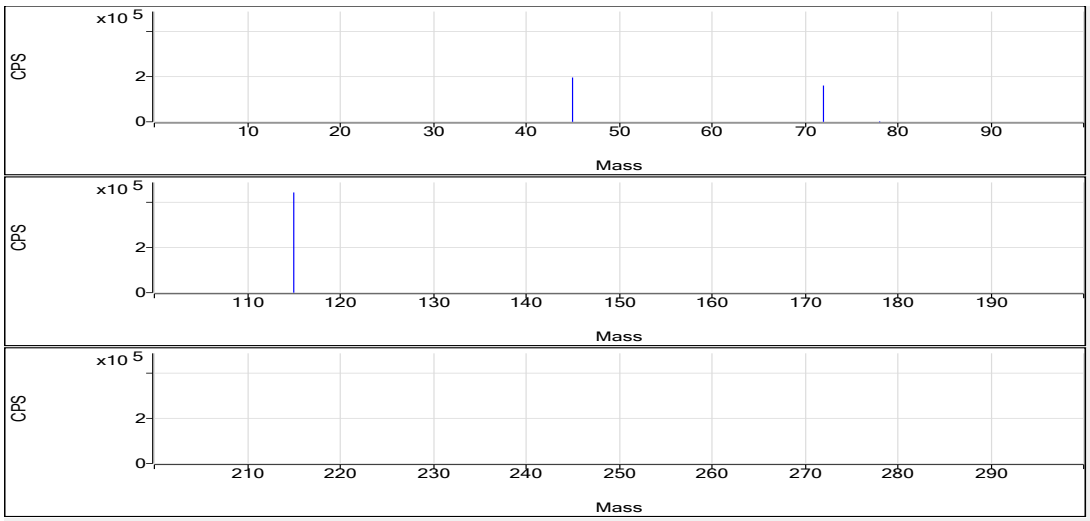
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3345300.26	0.3	103.2	Pulse	0.1000	3
No Gas	Ge	72	1464967.22	0.3	101.7	Pulse	0.1000	3
H2	Sc	45	196101.48	3.5	100.4	Pulse	0.1000	3
H2	Ge	72	160548.44	3.3	98.5	Pulse	0.1000	3
H2	In	115	443587.29	2.5	102.4	Pulse	0.1000	3
He	Sc	45	41195.39	2.2	103.0	Pulse	0.1000	3
He	Ge	72	72184.12	2.1	99.9	Pulse	0.1000	3
He	In	115	64615.61	1.7	100.0	Pulse	0.1000	3
He	Tb	159	282629.62	0.6	98.8	Pulse	0.1000	3
He	Bi	209	222006.08	1.4	99.9	Pulse	0.1000	3

No Gas

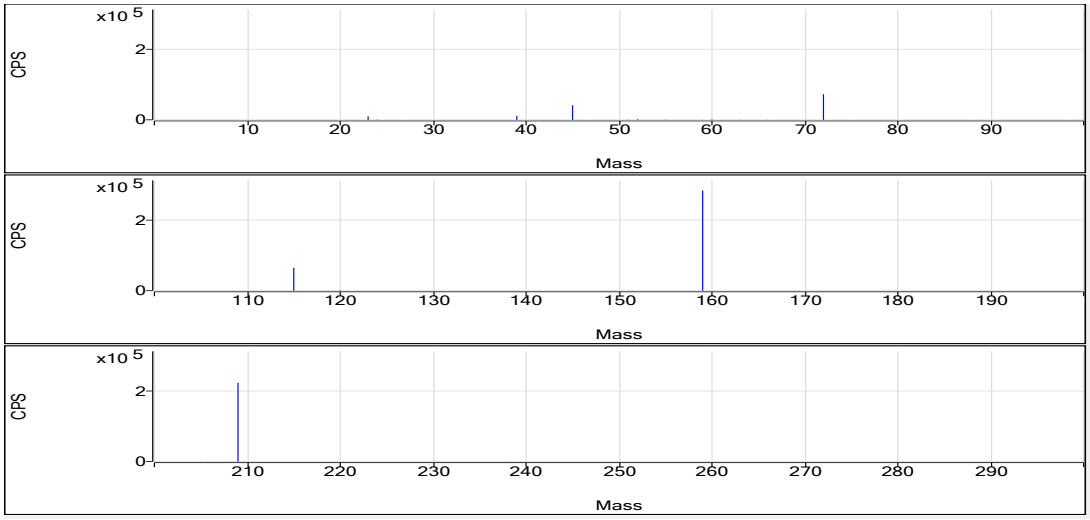


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.008	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.009	0	52.00	0.0013	4.694E-05
Se	78	2	H2	-0.006	0	1.33	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.089E-05
Na	23	3	He	12.61	0.1281	9263.14	0.0017	0.1065
Na	23	3	He	14.074	0.1306	9623.51	0.0017	0.1065
Na	23	3	He	15.664	0.1334	9413.28	0.0017	0.1065
Mg	24	3	He	6.885	0.0107	770.04	0.0008	0.004846
Mg	24	3	He	10.032	0.0133	980.07	0.0008	0.004846
Mg	24	3	He	8.033	0.0116	820.05	0.0008	0.004846
Al	27	3	He	0.754	0.0012	90.00	0.0002	0.001063
Al	27	3	He	1.783	0.0015	110.00	0.0002	0.001063
Al	27	3	He	3.228	0.0018	130.01	0.0002	0.001063
K	39	3	He	18.011	0.1536	11104.52	0.0006	0.1436
K	39	3	He	4.979	0.1464	10784.31	0.0006	0.1436
K	39	3	He	18.106	0.1536	10844.31	0.0006	0.1436
Ca	44	3	He	37.2	0.0028	200.01	0	0.001611
Ca	44	3	He	35.547	0.0027	200.01	0	0.001611
Ca	44	3	He	-6.251	0.0014	100.00	0	0.001611
Ti	47	3	He	1.115	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	-0.55	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	-0.527	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.01	0.0074	538.01	0.0117	0.007326
V	51	3	He	-0.009	0.0072	532.01	0.0117	0.007326
V	51	3	He	-0.035	0.0069	488.01	0.0117	0.007326
Cr	52	3	He	-0.105	0.0238	1720.17	0.0152	0.02538
Cr	52	3	He	-0.08	0.0242	1780.17	0.0152	0.02538
Cr	52	3	He	-0.011	0.0252	1780.15	0.0152	0.02538
Mn	55	3	He	-0.707	0.0097	700.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.082	0.0075	550.03	0.0059	0.01385
Mn	55	3	He	-0.787	0.0092	650.04	0.0059	0.01385
Fe	57	3	He	4.619	0.0053	380.02	0.0003	0.003918
Fe	57	3	He	4.283	0.0052	380.02	0.0003	0.003918
Fe	57	3	He	2.616	0.0047	330.02	0.0003	0.003918
Co	59	3	He	0.039	0.0043	310.01	0.0305	0.003084
Co	59	3	He	0.015	0.0035	260.01	0.0305	0.003084
Co	59	3	He	0.015	0.0035	250.01	0.0305	0.003084
Ni	60	3	He	0.958	0.0174	1260.12	0.0088	0.009003
Ni	60	3	He	1.277	0.0202	1490.14	0.0088	0.009003
Ni	60	3	He	1.232	0.0198	1400.12	0.0088	0.009003
Cu	63	3	He	0.024	0.0055	400.02	0.0249	0.004937
Cu	63	3	He	0.047	0.0061	450.03	0.0249	0.004937
Cu	63	3	He	0.046	0.0061	430.02	0.0249	0.004937
Zn	66	3	He	0.002	0.0048	350.02	0.0025	0.004836
Zn	66	3	He	0.794	0.0068	500.03	0.0025	0.004836
Zn	66	3	He	1.492	0.0085	600.03	0.0025	0.004836
As	75	3	He	0.052	0.0005	38.00	0.0017	0.0004347
As	75	3	He	0.031	0.0005	36.00	0.0017	0.0004347
As	75	3	He	0.076	0.0006	40.00	0.0017	0.0004347
Sr	88	3	He	0.217	0.0025	160.01	0.0078	0.0007762
Sr	88	3	He	0.057	0.0012	80.00	0.0078	0.0007762
Sr	88	3	He	0.123	0.0017	110.00	0.0078	0.0007762
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	-0.003	0.0005	30.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	-0.004	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.008	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Sn	120	3	He	-0.119	0.0139	900.07	0.0143	0.01559
Sn	120	3	He	0.115	0.0172	1130.09	0.0143	0.01559
Sn	120	3	He	-0.076	0.0145	920.06	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	0.106	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.034	0.0005	30.00	0.0044	0.000309
Ba	137	3	He	0.146	0.0009	60.00	0.0044	0.000309
Tl	205	3	He	0.006	0.0012	260.01	0.0276	0.001005
Tl	205	3	He	0.042	0.0022	490.03	0.0276	0.001005
Tl	205	3	He	0.035	0.002	430.02	0.0276	0.001005
Pb	208	3	He	0.012	0.0026	280.01	0.0364	0.002176
Pb	208	3	He	-0.009	0.0019	210.01	0.0364	0.002176
Pb	208	3	He	0	0.0022	290.01	0.0364	0.002176
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
U	238	3	He	0.002	0.0003	70.00	0.0421	0.00024
U	238	3	He	0	0.0002	50.00	0.0421	0.00024
Sc	45	1	No Gas			3334965.89		
Sc	45	1	No Gas			3346648.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3354286.20		
Ge	72	1	No Gas			1460264.51		
Ge	72	1	No Gas			1464280.76		
Ge	72	1	No Gas			1470356.38		
Sc	45	2	H2			188711.42		
Sc	45	2	H2			197273.83		
Sc	45	2	H2			202319.18		
Ge	72	2	H2			154676.60		
Ge	72	2	H2			162184.76		
Ge	72	2	H2			164783.96		
In	115	2	H2			433497.02		
In	115	2	H2			441849.52		
In	115	2	H2			455415.34		
Sc	45	3	He			41168.34		
Sc	45	3	He			42121.84		
Sc	45	3	He			40295.98		
Ge	72	3	He			72301.24		
Ge	72	3	He			73668.21		
Ge	72	3	He			70582.92		
In	115	3	He			64790.54		
In	115	3	He			65634.56		
In	115	3	He			63444.75		
Tb	159	3	He			280895.07		
Tb	159	3	He			284441.13		
Tb	159	3	He			282552.65		
Bi	209	3	He			221645.31		
Bi	209	3	He			225206.21		
Bi	209	3	He			219166.72		

Quantitation Report

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Acq Time	2023-08-10 14:54:05
Sample Name	ICSA 4677791
Sample Type	ICSA
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

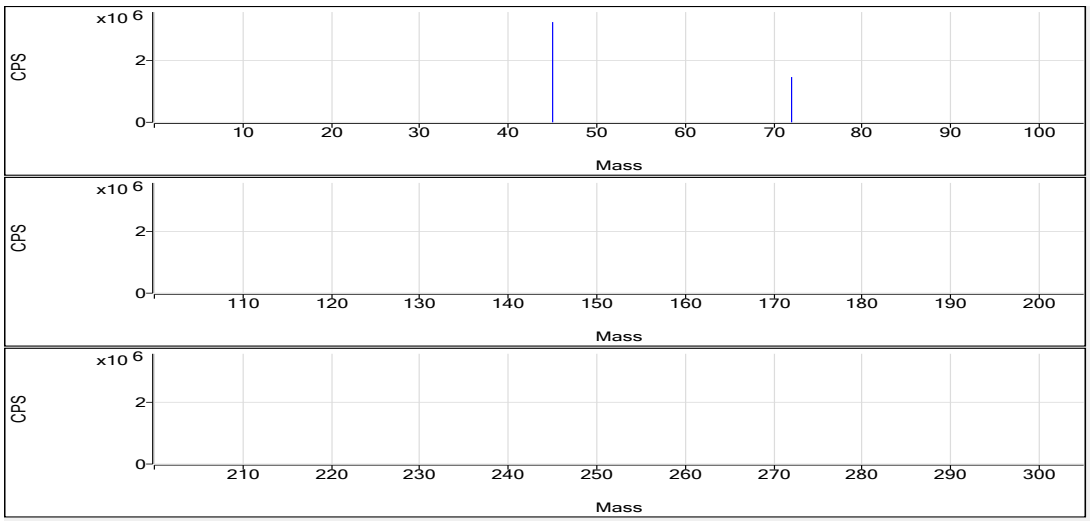
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.006	ppb	N/A	57.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.046	ppb	38.7	4.66	0.0000	Pulse	1.5000	3
Na	23	72	He	260500.769	ppb	0.9	33763625.33	447.6002	Analog	0.1000	3
Mg	24	72	He	105420.699	ppb	1.4	6704233.23	88.8852	Analog	0.1000	3
Al	27	72	He	101214.797	ppb	1.4	1842928.98	24.4337	Pulse	0.1000	3
K	39	72	He	102121.562	ppb	1.3	4264320.46	56.5364	Pulse	0.1000	3
Ca	44	72	He	294595.771	ppb	1.1	690300.09	9.1517	Pulse	0.1000	3
Ti	47	72	He	2082.698	ppb	3.2	39424.07	0.5226	Pulse	0.1000	3
V	51	72	He	0.021	ppb	52.5	571.35	0.0076	Pulse	0.5000	3
Cr	52	72	He	3.375	ppb	2.9	5791.36	0.0768	Pulse	0.1000	3
Mn	55	72	He	-0.512	ppb	N/A	816.72	0.0108	Pulse	0.1000	3
Fe	57	72	He	253415.837	ppb	1.5	5538420.33	73.4222	Mix	0.1000	3
Co	59	72	He	0.248	ppb	29.6	803.39	0.0106	Pulse	0.1000	3
Ni	60	72	He	1.571	ppb	9.5	1720.16	0.0228	Pulse	0.1000	3
Cu	63	72	He	0.112	ppb	49.0	583.36	0.0077	Pulse	0.1000	3
Zn	66	72	He	2.402	ppb	2.7	810.05	0.0107	Pulse	0.1000	3
As	75	72	He	0.243	ppb	29.7	64.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	2.252	ppb	5.8	1130.09	0.0184	Pulse	0.1000	3
Mo	98	115	He	2123.033	ppb	0.5	2874227.87	46.7531	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	116.6	53.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.296	ppb	8.3	90.67	0.0015	Pulse	0.5000	3
Sn	120	115	He	0.188	ppb	42.6	1123.43	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.163	ppb	28.9	140.01	0.0023	Pulse	0.1000	3
Ba	137	115	He	0.500	ppb	24.1	153.34	0.0025	Pulse	0.1000	3
Tl	205	209	He	0.031	ppb	43.0	390.02	0.0019	Pulse	0.1000	3
Pb	208	209	He	0.082	ppb	23.9	1080.06	0.0052	Pulse	0.1000	3
U	238	209	He	0.057	ppb	16.9	553.37	0.0026	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3268955.47	1.0	100.9	Pulse	0.1000	3
No Gas	Ge	72	1476019.67	1.2	102.5	Pulse	0.1000	3
H2	Sc	45	196376.66	2.9	100.5	Pulse	0.1000	3
H2	Ge	72	162254.47	2.0	99.5	Pulse	0.1000	3
H2	In	115	418443.11	1.5	96.6	Pulse	0.1000	3
He	Sc	45	42275.14	2.8	105.7	Pulse	0.1000	3
He	Ge	72	75434.46	1.3	104.4	Pulse	0.1000	3
He	In	115	61477.57	0.4	95.2	Pulse	0.1000	3
He	Tb	159	281219.60	0.6	98.3	Pulse	0.1000	3
He	Bi	209	208868.71	1.4	94.0	Pulse	0.1000	3

No Gas



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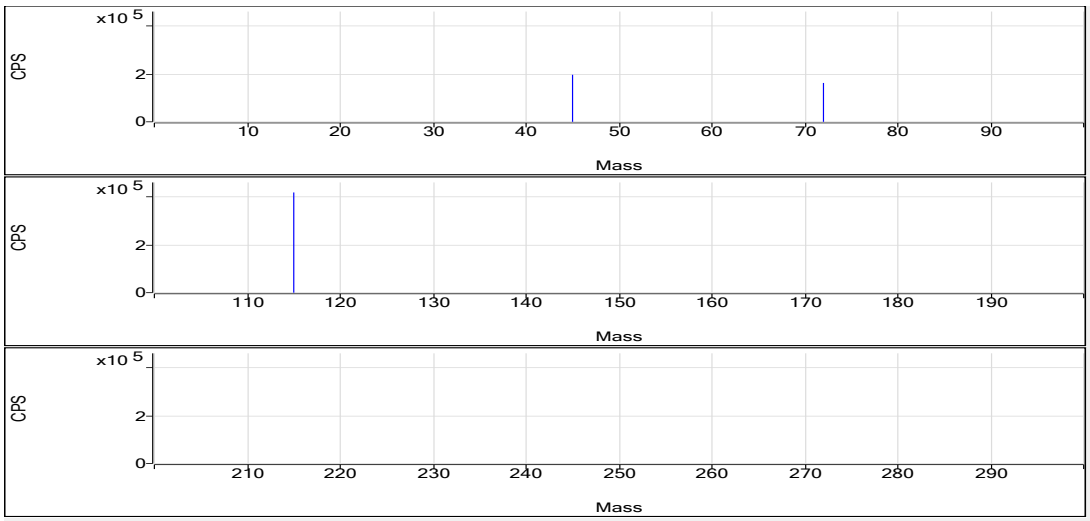
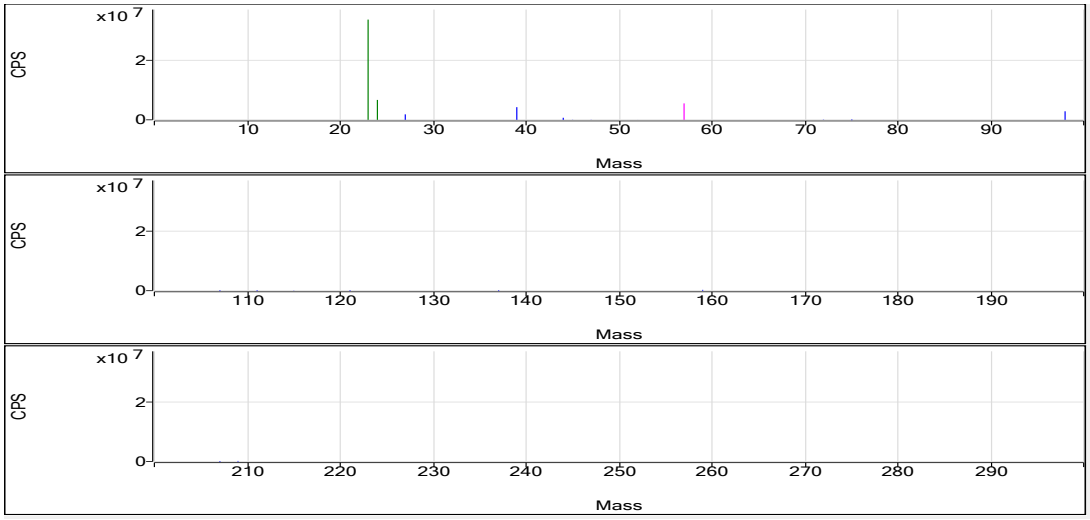


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.009	0	52.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.002	0	66.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.007	0	54.00	0.0013	4.694E-05
Se	78	2	H2	0.057	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.055	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.025	0	3.33	0.0004	1.089E-05
Na	23	3	He	261575.583	449.4465	34284791.99	0.0017	0.1065
Na	23	3	He	257889.515	443.1145	33543414.50	0.0017	0.1065
Na	23	3	He	262037.208	450.2395	33462669.50	0.0017	0.1065
Mg	24	3	He	104750.88	88.3205	6737284.90	0.0008	0.004846
Mg	24	3	He	104373.821	88.0026	6661724.90	0.0008	0.004846
Mg	24	3	He	107137.397	90.3326	6713689.90	0.0008	0.004846
Al	27	3	He	100428	24.2438	1849371.53	0.0002	0.001063
Al	27	3	He	100385.231	24.2335	1834454.66	0.0002	0.001063
Al	27	3	He	102831.16	24.8239	1844960.75	0.0002	0.001063
K	39	3	He	101366.561	56.1194	4280917.75	0.0006	0.1436
K	39	3	He	101342.523	56.1062	4247192.44	0.0006	0.1436
K	39	3	He	103655.602	57.3835	4264851.19	0.0006	0.1436
Ca	44	3	He	293843.11	9.1283	696330.15	0	0.001611
Ca	44	3	He	291836.863	9.066	686290.77	0	0.001611
Ca	44	3	He	298107.341	9.2608	688279.36	0	0.001611
Ti	47	3	He	2055.026	0.5156	39333.54	0.0003	0.0002737
Ti	47	3	He	2158.57	0.5416	40998.57	0.0003	0.0002737
Ti	47	3	He	2034.496	0.5105	37940.10	0.0003	0.0002737
V	51	3	He	0.017	0.0075	574.02	0.0117	0.007326
V	51	3	He	0.013	0.0075	566.02	0.0117	0.007326
V	51	3	He	0.034	0.0077	574.01	0.0117	0.007326
Cr	52	3	He	3.388	0.077	5871.42	0.0152	0.02538
Cr	52	3	He	3.27	0.0752	5691.28	0.0152	0.02538
Cr	52	3	He	3.468	0.0782	5811.38	0.0152	0.02538
Mn	55	3	He	-0.57	0.0105	800.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.557	0.0106	800.05	0.0059	0.01385
Mn	55	3	He	-0.409	0.0114	850.06	0.0059	0.01385
Fe	57	3	He	255681.94	74.0787	5650891.79	0.0003	0.003918
Fe	57	3	He	249109.433	72.1746	5463557.42	0.0003	0.003918
Fe	57	3	He	255456.139	74.0133	5500811.79	0.0003	0.003918
Co	59	3	He	0.195	0.009	690.04	0.0305	0.003084
Co	59	3	He	0.332	0.0132	1000.07	0.0305	0.003084
Co	59	3	He	0.216	0.0097	720.05	0.0305	0.003084
Ni	60	3	He	1.406	0.0214	1630.15	0.0088	0.009003
Ni	60	3	He	1.605	0.0231	1750.16	0.0088	0.009003
Ni	60	3	He	1.7	0.024	1780.18	0.0088	0.009003
Cu	63	3	He	0.096	0.0073	560.03	0.0249	0.004937
Cu	63	3	He	0.173	0.0092	700.04	0.0249	0.004937
Cu	63	3	He	0.066	0.0066	490.02	0.0249	0.004937
Zn	66	3	He	2.461	0.0109	830.06	0.0025	0.004836
Zn	66	3	He	2.333	0.0106	800.05	0.0025	0.004836
Zn	66	3	He	2.413	0.0108	800.05	0.0025	0.004836
As	75	3	He	0.278	0.0009	70.00	0.0017	0.0004347
As	75	3	He	0.16	0.0007	54.00	0.0017	0.0004347
As	75	3	He	0.292	0.0009	70.00	0.0017	0.0004347
Sr	88	3	He	2.109	0.0173	1060.09	0.0078	0.0007762
Sr	88	3	He	2.283	0.0186	1150.09	0.0078	0.0007762
Sr	88	3	He	2.365	0.0193	1180.10	0.0078	0.0007762
Mo	98	3	He	2127.013	46.8407	2876378.71	0.022	0.0005162
Mo	98	3	He	2111.864	46.5071	2872636.52	0.022	0.0005162
Mo	98	3	He	2130.222	46.9114	2873668.39	0.022	0.0005162
Ag	107	3	He	0.015	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0.015	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.308	0.0015	94.00	0.0048	5.152E-05
Cd	111	3	He	0.313	0.0016	96.00	0.0048	5.152E-05
Cd	111	3	He	0.268	0.0013	82.00	0.0048	5.152E-05
Sn	120	3	He	0.186	0.0182	1120.09	0.0143	0.01559
Sn	120	3	He	0.269	0.0194	1200.11	0.0143	0.01559
Sn	120	3	He	0.109	0.0171	1050.08	0.0143	0.01559
Sb	121	3	He	0.202	0.0028	170.01	0.0124	0.000258
Sb	121	3	He	0.175	0.0024	150.01	0.0124	0.000258
Sb	121	3	He	0.111	0.0016	100.00	0.0124	0.000258
Ba	137	3	He	0.637	0.0031	190.01	0.0044	0.000309
Ba	137	3	He	0.41	0.0021	130.00	0.0044	0.000309
Ba	137	3	He	0.452	0.0023	140.01	0.0044	0.000309
Tl	205	3	He	0.016	0.0015	300.01	0.0276	0.001005
Tl	205	3	He	0.034	0.0019	410.02	0.0276	0.001005
Tl	205	3	He	0.043	0.0022	460.03	0.0276	0.001005
Pb	208	3	He	0.098	0.0057	670.05	0.0364	0.002176
Pb	208	3	He	0.06	0.0044	460.03	0.0364	0.002176
Pb	208	3	He	0.089	0.0054	640.04	0.0364	0.002176
U	238	3	He	0.049	0.0023	470.03	0.0421	0.00024
U	238	3	He	0.055	0.0026	540.04	0.0421	0.00024
U	238	3	He	0.068	0.0031	650.04	0.0421	0.00024
Sc	45	1	No Gas			3297695.89		
Sc	45	1	No Gas			3277796.20		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3231374.33		
Ge	72	1	No Gas			1486457.32		
Ge	72	1	No Gas			1486057.95		
Ge	72	1	No Gas			1455543.73		
Sc	45	2	H2			191040.72		
Sc	45	2	H2			202377.03		
Sc	45	2	H2			195712.24		
Ge	72	2	H2			160495.70		
Ge	72	2	H2			165976.62		
Ge	72	2	H2			160291.08		
In	115	2	H2			411832.77		
In	115	2	H2			424252.92		
In	115	2	H2			419243.63		
Sc	45	3	He			42251.67		
Sc	45	3	He			41088.66		
Sc	45	3	He			43485.09		
Ge	72	3	He			76282.25		
Ge	72	3	He			75699.20		
Ge	72	3	He			74321.93		
In	115	3	He			61416.39		
In	115	3	He			61777.04		
In	115	3	He			61265.56		
Tb	159	3	He			279358.16		
Tb	159	3	He			282677.09		
Tb	159	3	He			281623.55		
Bi	209	3	He			205456.56		
Bi	209	3	He			210580.29		
Bi	209	3	He			210569.29		

Quantitation Report

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Sample Type	ICSAB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

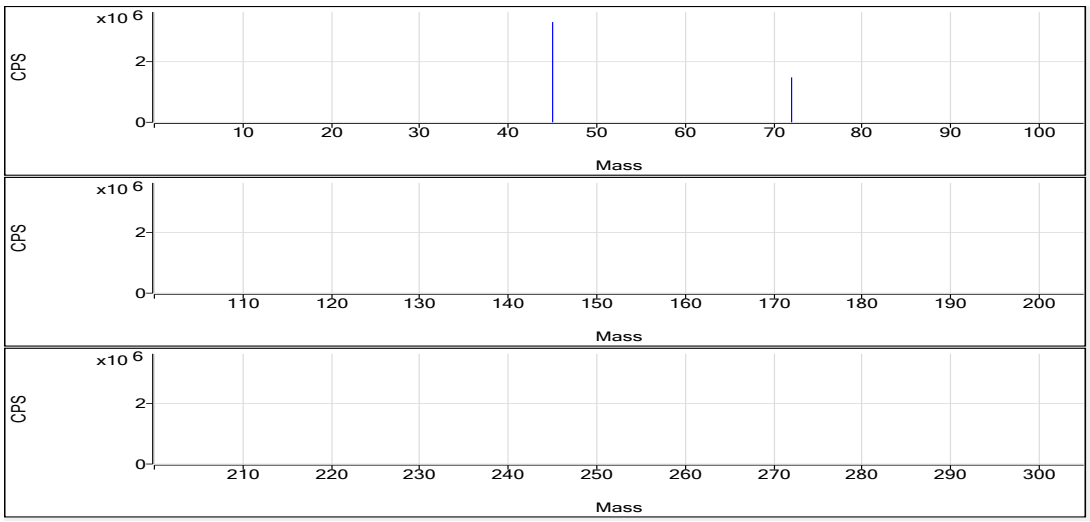
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.004	ppb	N/A	62.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	104.094	ppb	5.9	6563.50	0.0405	Pulse	1.5000	3
Na	23	72	He	262244.558	ppb	1.4	33726489.50	450.5957	Analog	0.1000	3
Mg	24	72	He	105652.801	ppb	1.7	6667147.82	89.0809	Analog	0.1000	3
Al	27	72	He	101386.558	ppb	1.4	1831894.19	24.4752	Pulse	0.1000	3
K	39	72	He	102336.624	ppb	1.4	4240363.58	56.6551	Pulse	0.1000	3
Ca	44	72	He	297728.150	ppb	1.4	692243.25	9.2490	Pulse	0.1000	3
Ti	47	72	He	2067.522	ppb	0.8	38829.20	0.5188	Pulse	0.1000	3
V	51	72	He	212.493	ppb	1.0	186594.94	2.4930	Pulse	0.5000	3
Cr	52	72	He	214.476	ppb	0.9	246348.61	3.2913	Pulse	0.1000	3
Mn	55	72	He	207.383	ppb	0.2	92660.44	1.2379	Pulse	0.1000	3
Fe	57	72	He	252027.576	ppb	0.8	5465402.83	73.0200	Mix	0.1000	3
Co	59	72	He	207.162	ppb	1.3	473302.91	6.3237	Pulse	0.1000	3
Ni	60	72	He	204.750	ppb	1.3	135430.15	1.8094	Pulse	0.1000	3
Cu	63	72	He	201.529	ppb	0.6	376531.27	5.0305	Pulse	0.1000	3
Zn	66	72	He	105.460	ppb	1.2	19754.12	0.2639	Pulse	0.1000	3
As	75	72	He	100.797	ppb	2.1	13152.71	0.1757	Pulse	0.5000	3
Sr	88	115	He	2.248	ppb	8.4	1140.10	0.0184	Pulse	0.1000	3
Mo	98	115	He	2091.424	ppb	1.1	2861579.02	46.0570	Pulse	0.1000	3
Ag	107	115	He	51.883	ppb	1.1	146708.63	2.3612	Pulse	0.1000	3
Cd	111	115	He	104.972	ppb	0.2	31312.71	0.5039	Pulse	0.5000	3
Sn	120	115	He	0.350	ppb	89.6	1280.11	0.0206	Pulse	0.1000	3
Sb	121	115	He	0.139	ppb	14.2	123.34	0.0020	Pulse	0.1000	3
Ba	137	115	He	0.593	ppb	45.9	180.01	0.0029	Pulse	0.1000	3
Tl	205	209	He	0.021	ppb	27.3	330.02	0.0016	Pulse	0.1000	3
Pb	208	209	He	0.053	ppb	28.3	863.38	0.0041	Pulse	0.1000	3
U	238	209	He	0.063	ppb	21.2	603.37	0.0029	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3304208.28	2.1	101.9	Pulse	0.1000	3
No Gas	Ge	72	1480808.21	1.9	102.8	Pulse	0.1000	3
H2	Sc	45	197500.21	2.0	101.1	Pulse	0.1000	3
H2	Ge	72	162079.46	2.9	99.4	Pulse	0.1000	3
H2	In	115	417720.04	2.1	96.4	Pulse	0.1000	3
He	Sc	45	43528.69	3.0	108.9	Pulse	0.1000	3
He	Ge	72	74851.62	0.9	103.5	Pulse	0.1000	3
He	In	115	62135.09	0.9	96.2	Pulse	0.1000	3
He	Tb	159	284142.82	1.3	99.4	Pulse	0.1000	3
He	Bi	209	209512.92	0.6	94.3	Pulse	0.1000	3

No Gas



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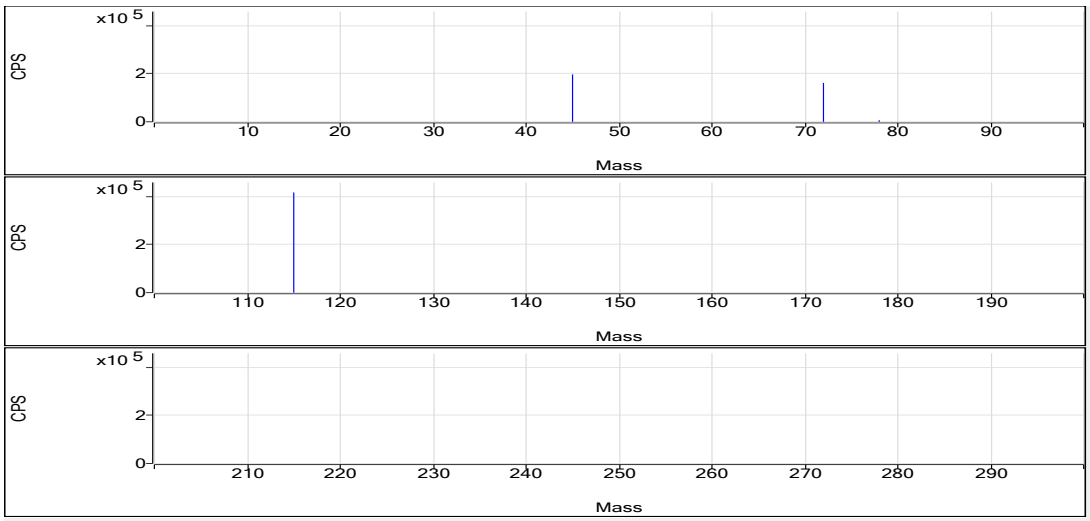
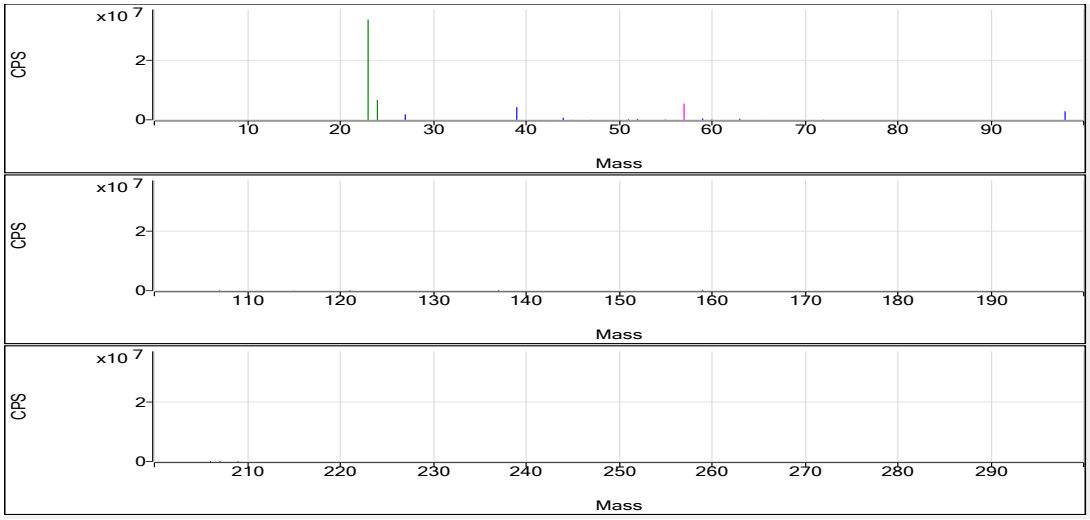


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0.0001	82.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	52.00	0.0013	4.694E-05
Se	78	2	H2	108.406	0.0422	6697.57	0.0004	1.089E-05
Se	78	2	H2	97.069	0.0378	6326.06	0.0004	1.089E-05
Se	78	2	H2	106.807	0.0416	6666.88	0.0004	1.089E-05
Na	23	3	He	263981.038	453.5787	34180649.49	0.0017	0.1065
Na	23	3	He	264820.046	455.0199	33703444.50	0.0017	0.1065
Na	23	3	He	257932.589	443.1885	33295374.50	0.0017	0.1065
Mg	24	3	He	104023.755	87.7074	6609431.78	0.0008	0.004846
Mg	24	3	He	107658.108	90.7716	6723473.65	0.0008	0.004846
Mg	24	3	He	105276.54	88.7637	6668538.03	0.0008	0.004846
Al	27	3	He	99701.692	24.0685	1813744.97	0.0002	0.001063
Al	27	3	He	102352.09	24.7083	1830147.47	0.0002	0.001063
Al	27	3	He	102105.892	24.6488	1851790.13	0.0002	0.001063
K	39	3	He	101004.193	55.9193	4213953.69	0.0006	0.1436
K	39	3	He	103919.839	57.5294	4261217.44	0.0006	0.1436
K	39	3	He	102085.842	56.5166	4245919.62	0.0006	0.1436
Ca	44	3	He	293950.781	9.1317	688142.65	0	0.001611
Ca	44	3	He	302377.079	9.3934	695771.71	0	0.001611
Ca	44	3	He	296856.59	9.2219	692815.38	0	0.001611
Ti	47	3	He	2047.904	0.5138	38722.23	0.0003	0.0002737
Ti	47	3	He	2077.05	0.5212	38602.07	0.0003	0.0002737
Ti	47	3	He	2077.611	0.5213	39163.31	0.0003	0.0002737
V	51	3	He	211.15	2.4773	186683.67	0.0117	0.007326
V	51	3	He	215.029	2.5227	186855.61	0.0117	0.007326
V	51	3	He	211.302	2.4791	186245.53	0.0117	0.007326
Cr	52	3	He	214.976	3.2989	248596.11	0.0152	0.02538
Cr	52	3	He	216.044	3.3151	245553.92	0.0152	0.02538
Cr	52	3	He	212.407	3.2598	244895.80	0.0152	0.02538
Mn	55	3	He	207.75	1.2401	93449.53	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	207.256	1.2372	91637.37	0.0059	0.01385
Mn	55	3	He	207.143	1.2365	92894.43	0.0059	0.01385
Fe	57	3	He	251048.252	72.7363	5481239.29	0.0003	0.003918
Fe	57	3	He	254387.05	73.7036	5459243.04	0.0003	0.003918
Fe	57	3	He	250647.426	72.6202	5455726.17	0.0003	0.003918
Co	59	3	He	205.43	6.2709	472557.18	0.0305	0.003084
Co	59	3	He	210.187	6.416	475234.80	0.0305	0.003084
Co	59	3	He	205.869	6.2843	472116.75	0.0305	0.003084
Ni	60	3	He	204.629	1.8084	136274.43	0.0088	0.009003
Ni	60	3	He	207.49	1.8335	135809.98	0.0088	0.009003
Ni	60	3	He	202.13	1.7864	134206.03	0.0088	0.009003
Cu	63	3	He	201.621	5.0328	379259.21	0.0249	0.004937
Cu	63	3	He	202.607	5.0574	374601.28	0.0249	0.004937
Cu	63	3	He	200.359	5.0013	375733.31	0.0249	0.004937
Zn	66	3	He	105.219	0.2633	19844.22	0.0025	0.004836
Zn	66	3	He	106.862	0.2674	19804.27	0.0025	0.004836
Zn	66	3	He	104.3	0.2611	19613.87	0.0025	0.004836
As	75	3	He	98.788	0.1722	12979.87	0.0017	0.0004347
As	75	3	He	102.996	0.1796	13300.19	0.0017	0.0004347
As	75	3	He	100.609	0.1754	13178.07	0.0017	0.0004347
Sr	88	3	He	2.424	0.0197	1230.10	0.0078	0.0007762
Sr	88	3	He	2.272	0.0185	1140.11	0.0078	0.0007762
Sr	88	3	He	2.049	0.0168	1050.09	0.0078	0.0007762
Mo	98	3	He	2074.232	45.6784	2848375.27	0.022	0.0005162
Mo	98	3	He	2117.815	46.6382	2868617.46	0.022	0.0005162
Mo	98	3	He	2082.225	45.8544	2867744.33	0.022	0.0005162
Ag	107	3	He	51.22	2.331	145354.67	0.0455	0.0004641
Ag	107	3	He	52.22	2.3765	146173.47	0.0455	0.0004641
Ag	107	3	He	52.21	2.376	148597.75	0.0455	0.0004641
Cd	111	3	He	104.718	0.5027	31348.79	0.0048	5.152E-05
Cd	111	3	He	105.044	0.5043	31018.05	0.0048	5.152E-05
Cd	111	3	He	105.153	0.5048	31571.29	0.0048	5.152E-05
Sn	120	3	He	0.65	0.0249	1550.16	0.0143	0.01559
Sn	120	3	He	0.024	0.0159	980.07	0.0143	0.01559
Sn	120	3	He	0.376	0.0209	1310.10	0.0143	0.01559
Sb	121	3	He	0.16	0.0022	140.01	0.0124	0.000258
Sb	121	3	He	0.136	0.002	120.00	0.0124	0.000258
Sb	121	3	He	0.121	0.0018	110.00	0.0124	0.000258
Ba	137	3	He	0.516	0.0026	160.01	0.0044	0.000309
Ba	137	3	He	0.896	0.0042	260.01	0.0044	0.000309
Ba	137	3	He	0.368	0.0019	120.00	0.0044	0.000309
Tl	205	3	He	0.017	0.0015	310.02	0.0276	0.001005
Tl	205	3	He	0.027	0.0018	370.02	0.0276	0.001005
Tl	205	3	He	0.017	0.0015	310.02	0.0276	0.001005
Pb	208	3	He	0.06	0.0044	470.03	0.0364	0.002176
Pb	208	3	He	0.064	0.0045	490.03	0.0364	0.002176
Pb	208	3	He	0.036	0.0035	500.03	0.0364	0.002176
U	238	3	He	0.078	0.0035	730.05	0.0421	0.00024
U	238	3	He	0.052	0.0024	510.03	0.0421	0.00024
U	238	3	He	0.059	0.0027	570.04	0.0421	0.00024
Sc	45	1	No Gas			3378073.39		
Sc	45	1	No Gas			3292374.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3242176.51		
Ge	72	1	No Gas			1508802.48		
Ge	72	1	No Gas			1480479.98		
Ge	72	1	No Gas			1453142.17		
Sc	45	2	H2			194240.29		
Sc	45	2	H2			202004.12		
Sc	45	2	H2			196256.21		
Ge	72	2	H2			158635.48		
Ge	72	2	H2			167331.15		
Ge	72	2	H2			160271.74		
In	115	2	H2			408155.89		
In	115	2	H2			425633.43		
In	115	2	H2			419370.81		
Sc	45	3	He			43705.74		
Sc	45	3	He			44718.87		
Sc	45	3	He			42161.47		
Ge	72	3	He			75357.71		
Ge	72	3	He			74070.26		
Ge	72	3	He			75126.89		
In	115	3	He			62369.25		
In	115	3	He			61515.58		
In	115	3	He			62550.40		
Tb	159	3	He			280462.93		
Tb	159	3	He			284112.59		
Tb	159	3	He			287852.93		
Bi	209	3	He			208291.19		
Bi	209	3	He			210976.66		
Bi	209	3	He			209270.91		

Quantitation Report

Data File Name	134SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 14:58:06
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

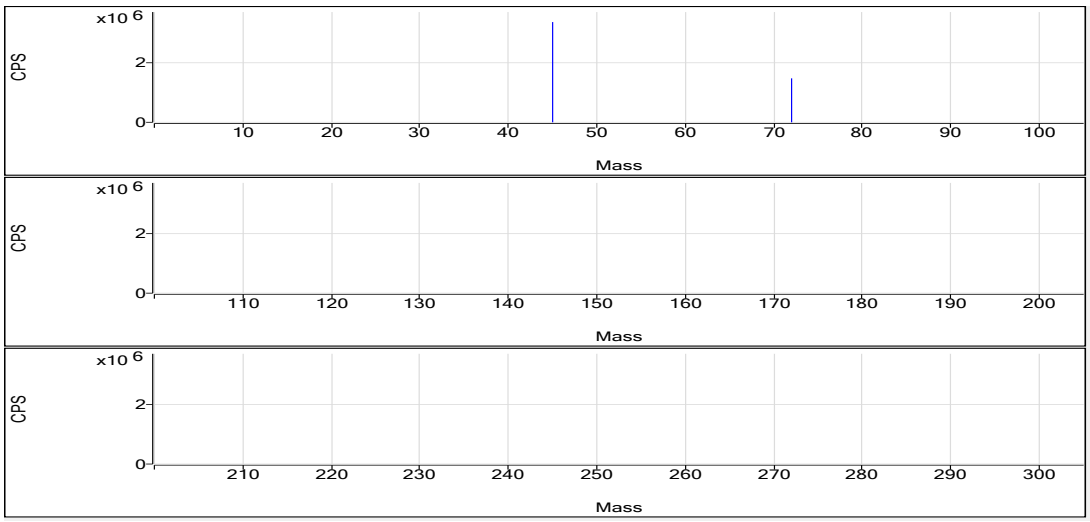
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.001	ppb	N/A	68.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.083	ppb	31.3	6.89	0.0000	Pulse	1.5000	3
Na	23	72	He	111.713	ppb	7.6	22427.37	0.2984	Pulse	0.1000	3
Mg	24	72	He	38.638	ppb	12.6	2813.69	0.0374	Pulse	0.1000	3
Al	27	72	He	30.470	ppb	6.9	633.37	0.0084	Pulse	0.1000	3
K	39	72	He	36.108	ppb	57.8	12295.55	0.1636	Pulse	0.1000	3
Ca	44	72	He	118.022	ppb	5.1	396.69	0.0053	Pulse	0.1000	3
Ti	47	72	He	0.337	ppb	336.8	26.67	0.0004	Pulse	0.1000	3
V	51	72	He	0.070	ppb	68.3	612.02	0.0081	Pulse	0.5000	3
Cr	52	72	He	0.093	ppb	91.6	2016.88	0.0268	Pulse	0.1000	3
Mn	55	72	He	-1.046	ppb	N/A	576.70	0.0077	Pulse	0.1000	3
Fe	57	72	He	74.501	ppb	21.1	1913.54	0.0255	Pulse	0.1000	3
Co	59	72	He	0.088	ppb	15.1	433.36	0.0058	Pulse	0.1000	3
Ni	60	72	He	1.210	ppb	15.0	1476.80	0.0196	Pulse	0.1000	3
Cu	63	72	He	0.097	ppb	18.6	553.37	0.0074	Pulse	0.1000	3
Zn	66	72	He	0.476	ppb	157.3	450.03	0.0060	Pulse	0.1000	3
As	75	72	He	0.071	ppb	74.5	42.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.072	ppb	41.6	86.67	0.0013	Pulse	0.1000	3
Mo	98	115	He	1.237	ppb	8.1	1790.18	0.0278	Pulse	0.1000	3
Ag	107	115	He	0.018	ppb	67.8	83.33	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	42.8	10.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.148	ppb	42.2	1143.42	0.0177	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	16.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.127	ppb	147.9	56.67	0.0009	Pulse	0.1000	3
Tl	205	209	He	0.000	ppb	2862.2	223.34	0.0010	Pulse	0.1000	3
Pb	208	209	He	-0.009	ppb	N/A	406.69	0.0018	Pulse	0.1000	3
U	238	209	He	0.008	ppb	44.5	123.34	0.0006	Pulse	0.1000	3

ISTD Table:

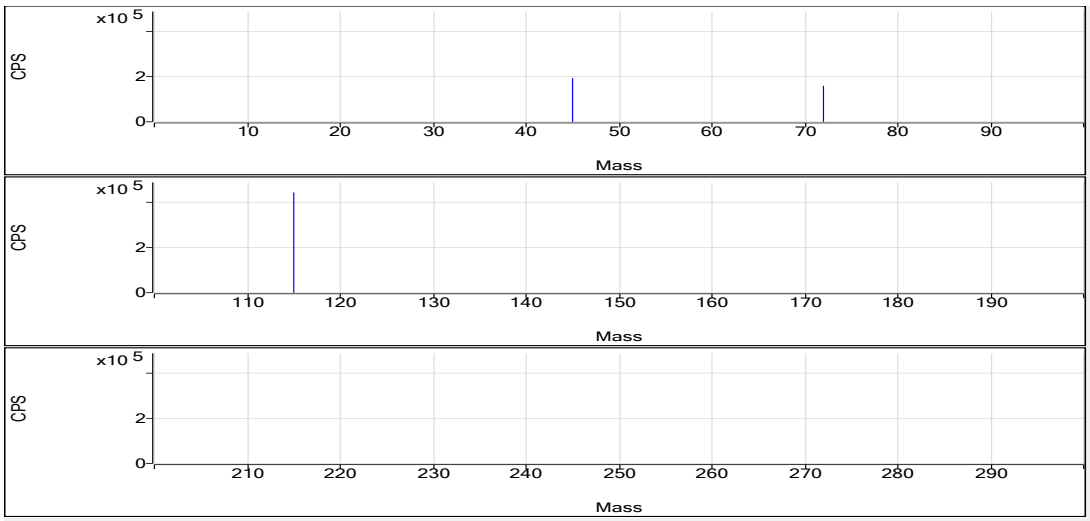
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3385321.72	1.6	104.4	Pulse	0.1000	3
No Gas	Ge	72	1484688.57	1.4	103.1	Pulse	0.1000	3
H2	Sc	45	193278.33	1.5	98.9	Pulse	0.1000	3
H2	Ge	72	159805.26	1.1	98.0	Pulse	0.1000	3
H2	In	115	443939.67	1.8	102.5	Pulse	0.1000	3
He	Sc	45	42401.89	1.2	106.0	Pulse	0.1000	3
He	Ge	72	75182.73	2.2	104.0	Pulse	0.1000	3
He	In	115	64553.86	2.3	99.9	Pulse	0.1000	3
He	Tb	159	283036.46	1.5	99.0	Pulse	0.1000	3
He	Bi	209	220002.31	0.8	99.0	Pulse	0.1000	3

No Gas

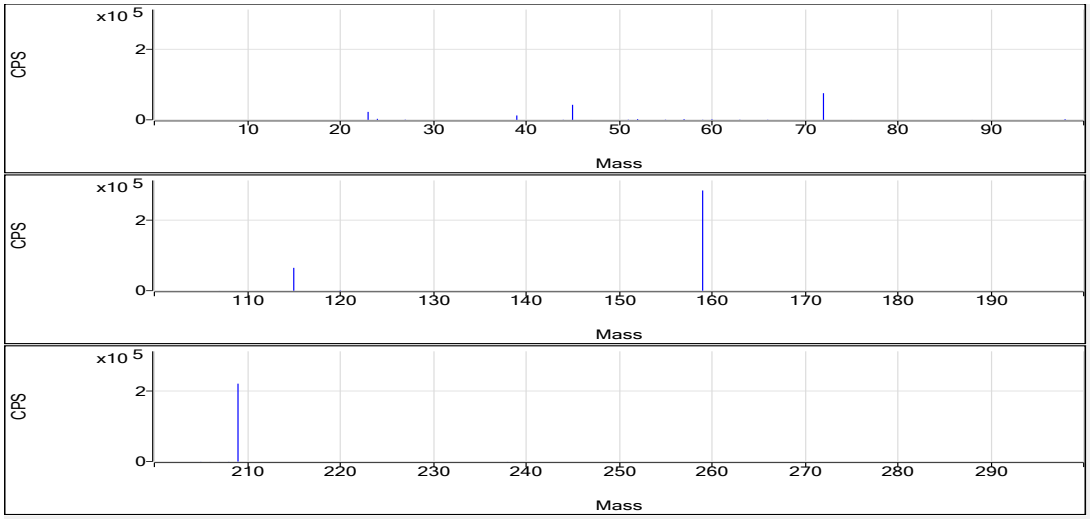


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	72.00	0.0013	4.694E-05
Be	9	1	No Gas	0	0	70.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.004	0	62.00	0.0013	4.694E-05
Se	78	2	H2	0.069	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.067	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.113	0.0001	8.67	0.0004	1.089E-05
Na	23	3	He	120.214	0.313	23118.41	0.0017	0.1065
Na	23	3	He	111.582	0.2981	22958.04	0.0017	0.1065
Na	23	3	He	103.343	0.284	21205.67	0.0017	0.1065
Mg	24	3	He	42.428	0.0406	3000.40	0.0008	0.004846
Mg	24	3	He	40.312	0.0388	2990.40	0.0008	0.004846
Mg	24	3	He	33.172	0.0328	2450.27	0.0008	0.004846
Al	27	3	He	28.125	0.0079	580.03	0.0002	0.001063
Al	27	3	He	32.181	0.0088	680.04	0.0002	0.001063
Al	27	3	He	31.105	0.0086	640.04	0.0002	0.001063
K	39	3	He	56.762	0.175	12926.09	0.0006	0.1436
K	39	3	He	36.559	0.1638	12615.77	0.0006	0.1436
K	39	3	He	15.004	0.1519	11344.78	0.0006	0.1436
Ca	44	3	He	113.766	0.0051	380.02	0	0.001611
Ca	44	3	He	115.382	0.0052	400.02	0	0.001611
Ca	44	3	He	124.919	0.0055	410.02	0	0.001611
Ti	47	3	He	1.608	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	-0.574	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	-0.023	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.091	0.0084	620.02	0.0117	0.007326
V	51	3	He	0.015	0.0075	578.02	0.0117	0.007326
V	51	3	He	0.104	0.0085	638.02	0.0117	0.007326
Cr	52	3	He	0.013	0.0256	1890.18	0.0152	0.02538
Cr	52	3	He	0.184	0.0282	2170.24	0.0152	0.02538
Cr	52	3	He	0.083	0.0267	1990.22	0.0152	0.02538
Mn	55	3	He	-1.017	0.0079	580.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.159	0.007	540.03	0.0059	0.01385
Mn	55	3	He	-0.963	0.0082	610.03	0.0059	0.01385
Fe	57	3	He	92.559	0.0307	2270.26	0.0003	0.003918
Fe	57	3	He	64.03	0.0225	1730.17	0.0003	0.003918
Fe	57	3	He	66.915	0.0233	1740.18	0.0003	0.003918
Co	59	3	He	0.103	0.0062	460.03	0.0305	0.003084
Co	59	3	He	0.078	0.0055	420.02	0.0305	0.003084
Co	59	3	He	0.083	0.0056	420.02	0.0305	0.003084
Ni	60	3	He	1.378	0.0211	1560.15	0.0088	0.009003
Ni	60	3	He	1.236	0.0199	1530.16	0.0088	0.009003
Ni	60	3	He	1.017	0.0179	1340.10	0.0088	0.009003
Cu	63	3	He	0.117	0.0079	580.04	0.0249	0.004937
Cu	63	3	He	0.094	0.0073	560.03	0.0249	0.004937
Cu	63	3	He	0.081	0.007	520.03	0.0249	0.004937
Zn	66	3	He	1.338	0.0081	600.04	0.0025	0.004836
Zn	66	3	He	-0.013	0.0048	370.02	0.0025	0.004836
Zn	66	3	He	0.103	0.0051	380.02	0.0025	0.004836
As	75	3	He	0.015	0.0005	34.00	0.0017	0.0004347
As	75	3	He	0.079	0.0006	44.00	0.0017	0.0004347
As	75	3	He	0.12	0.0006	48.00	0.0017	0.0004347
Sr	88	3	He	0.041	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	0.101	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.075	0.0014	90.00	0.0078	0.0007762
Mo	98	3	He	1.324	0.0297	1890.21	0.022	0.0005162
Mo	98	3	He	1.259	0.0282	1800.17	0.022	0.0005162
Mo	98	3	He	1.128	0.0254	1680.17	0.022	0.0005162
Ag	107	3	He	0.017	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.031	0.0019	120.00	0.0455	0.0004641
Ag	107	3	He	0.006	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.021	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	0.151	0.0177	1130.09	0.0143	0.01559
Sn	120	3	He	0.084	0.0168	1070.08	0.0143	0.01559
Sn	120	3	He	0.209	0.0186	1230.10	0.0143	0.01559
Sb	121	3	He	-0.021	0	0.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.037	0.0005	30.00	0.0044	0.000309
Ba	137	3	He	0.001	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.344	0.0018	120.01	0.0044	0.000309
Tl	205	3	He	0.006	0.0012	260.01	0.0276	0.001005
Tl	205	3	He	0.005	0.0011	250.01	0.0276	0.001005
Tl	205	3	He	-0.01	0.0007	160.01	0.0276	0.001005
Pb	208	3	He	-0.016	0.0016	220.01	0.0364	0.002176
Pb	208	3	He	0	0.0022	290.02	0.0364	0.002176
Pb	208	3	He	-0.011	0.0018	180.01	0.0364	0.002176
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.008	0.0006	130.01	0.0421	0.00024
U	238	3	He	0.011	0.0007	150.01	0.0421	0.00024
Sc	45	1	No Gas			3448021.20		
Sc	45	1	No Gas			3357567.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3350376.20		
Ge	72	1	No Gas			1507919.67		
Ge	72	1	No Gas			1478664.35		
Ge	72	1	No Gas			1467481.70		
Sc	45	2	H2			190158.47		
Sc	45	2	H2			193833.55		
Sc	45	2	H2			195842.97		
Ge	72	2	H2			159555.99		
Ge	72	2	H2			161728.65		
Ge	72	2	H2			158131.14		
In	115	2	H2			438017.02		
In	115	2	H2			453184.17		
In	115	2	H2			440617.81		
Sc	45	3	He			42191.17		
Sc	45	3	He			42050.61		
Sc	45	3	He			42963.90		
Ge	72	3	He			73869.55		
Ge	72	3	He			77005.67		
Ge	72	3	He			74672.97		
In	115	3	He			63695.36		
In	115	3	He			63745.85		
In	115	3	He			66247.13		
Tb	159	3	He			286646.13		
Tb	159	3	He			284299.18		
Tb	159	3	He			278164.08		
Bi	209	3	He			221646.31		
Bi	209	3	He			220313.45		
Bi	209	3	He			218047.16		

Quantitation Report

Data File Name	135SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:00:06
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

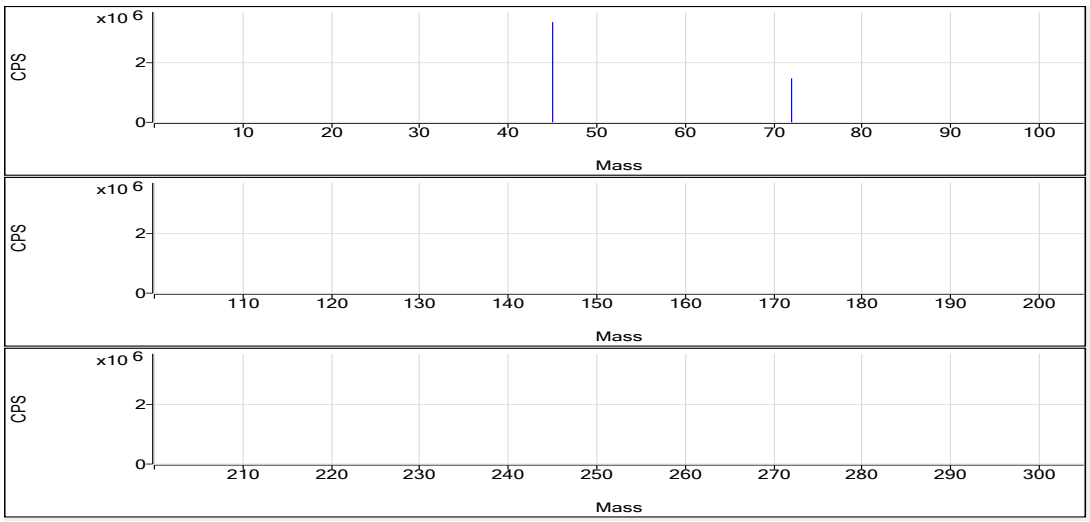
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.005	ppb	N/A	60.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.008	ppb	316.8	2.22	0.0000	Pulse	1.5000	3
Na	23	72	He	59.825	ppb	5.1	15441.80	0.2092	Pulse	0.1000	3
Mg	24	72	He	20.523	ppb	10.6	1633.48	0.0221	Pulse	0.1000	3
Al	27	72	He	11.339	ppb	18.1	280.01	0.0038	Pulse	0.1000	3
K	39	72	He	24.106	ppb	47.7	11594.95	0.1570	Pulse	0.1000	3
Ca	44	72	He	71.775	ppb	22.0	283.35	0.0038	Pulse	0.1000	3
Ti	47	72	He	0.153	ppb	1110.3	23.33	0.0003	Pulse	0.1000	3
V	51	72	He	0.029	ppb	137.8	565.35	0.0077	Pulse	0.5000	3
Cr	52	72	He	0.075	ppb	225.1	1960.20	0.0265	Pulse	0.1000	3
Mn	55	72	He	-1.139	ppb	N/A	526.70	0.0071	Pulse	0.1000	3
Fe	57	72	He	30.091	ppb	9.4	933.40	0.0126	Pulse	0.1000	3
Co	59	72	He	0.055	ppb	44.5	353.35	0.0048	Pulse	0.1000	3
Ni	60	72	He	0.870	ppb	3.8	1230.09	0.0167	Pulse	0.1000	3
Cu	63	72	He	0.067	ppb	22.6	486.69	0.0066	Pulse	0.1000	3
Zn	66	72	He	-0.122	ppb	N/A	336.68	0.0045	Pulse	0.1000	3
As	75	72	He	0.036	ppb	206.9	36.67	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.126	ppb	64.4	113.34	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.327	ppb	14.9	496.69	0.0077	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	912.1	33.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	73.6	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.030	ppb	709.0	1030.08	0.0160	Pulse	0.1000	3
Sb	121	115	He	0.004	ppb	294.4	20.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.084	ppb	50.0	43.33	0.0007	Pulse	0.1000	3
Tl	205	209	He	0.002	ppb	464.4	233.35	0.0011	Pulse	0.1000	3
Pb	208	209	He	-0.010	ppb	N/A	396.68	0.0018	Pulse	0.1000	3
U	238	209	He	0.003	ppb	81.4	83.34	0.0004	Pulse	0.1000	3

ISTD Table:

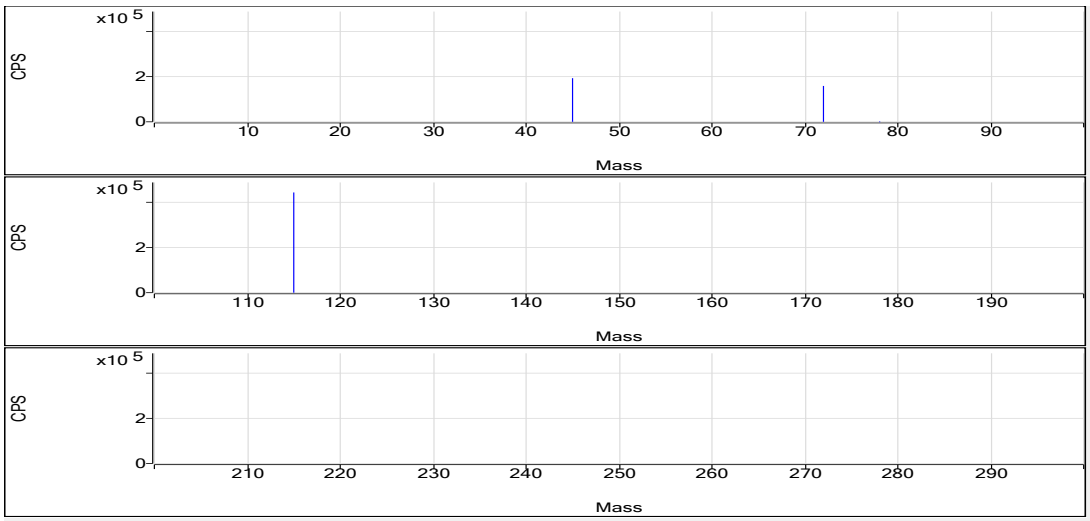
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3359346.51	1.4	103.6	Pulse	0.1000	3
No Gas	Ge	72	1473891.54	1.1	102.4	Pulse	0.1000	3
H2	Sc	45	193669.93	2.5	99.1	Pulse	0.1000	3
H2	Ge	72	159234.84	1.7	97.7	Pulse	0.1000	3
H2	In	115	444896.52	2.4	102.7	Pulse	0.1000	3
He	Sc	45	42559.38	2.3	106.4	Pulse	0.1000	3
He	Ge	72	73836.31	2.7	102.1	Pulse	0.1000	3
He	In	115	64319.91	0.5	99.6	Pulse	0.1000	3
He	Tb	159	280999.52	0.9	98.3	Pulse	0.1000	3
He	Bi	209	218007.11	1.1	98.1	Pulse	0.1000	3

No Gas

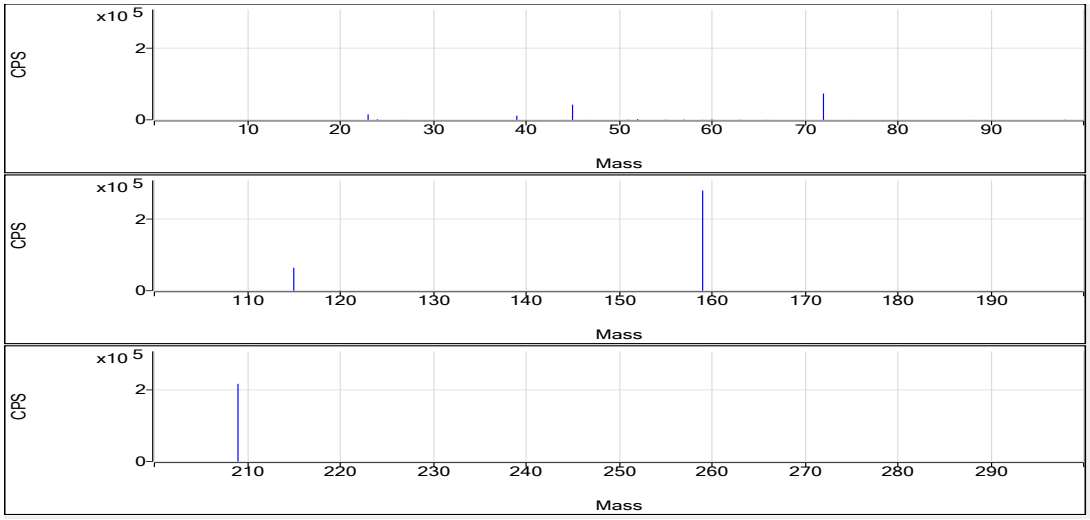


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	70.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.003	0	64.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.012	0	46.00	0.0013	4.694E-05
Se	78	2	H2	0.038	0	4.00	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Na	23	3	He	58.697	0.2073	15618.57	0.0017	0.1065
Na	23	3	He	57.48	0.2052	15308.36	0.0017	0.1065
Na	23	3	He	63.297	0.2152	15398.46	0.0017	0.1065
Mg	24	3	He	20.386	0.022	1660.15	0.0008	0.004846
Mg	24	3	He	18.42	0.0204	1520.14	0.0008	0.004846
Mg	24	3	He	22.764	0.024	1720.16	0.0008	0.004846
Al	27	3	He	10.992	0.0037	280.01	0.0002	0.001063
Al	27	3	He	9.48	0.0034	250.01	0.0002	0.001063
Al	27	3	He	13.545	0.0043	310.02	0.0002	0.001063
K	39	3	He	37.316	0.1642	12375.63	0.0006	0.1436
K	39	3	He	18.659	0.1539	11484.80	0.0006	0.1436
K	39	3	He	16.343	0.1527	10924.43	0.0006	0.1436
Ca	44	3	He	54.964	0.0033	250.01	0	0.001611
Ca	44	3	He	86.243	0.0043	320.02	0	0.001611
Ca	44	3	He	74.12	0.0039	280.01	0	0.001611
Ti	47	3	He	2.084	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	-0.534	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.048	0.0079	594.02	0.0117	0.007326
V	51	3	He	-0.017	0.0071	532.01	0.0117	0.007326
V	51	3	He	0.055	0.008	570.02	0.0117	0.007326
Cr	52	3	He	0.268	0.0295	2220.24	0.0152	0.02538
Cr	52	3	He	-0.03	0.0249	1860.17	0.0152	0.02538
Cr	52	3	He	-0.015	0.0252	1800.18	0.0152	0.02538
Mn	55	3	He	-1.335	0.006	450.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.871	0.0087	650.04	0.0059	0.01385
Mn	55	3	He	-1.211	0.0067	480.03	0.0059	0.01385
Fe	57	3	He	33.207	0.0135	1020.07	0.0003	0.003918
Fe	57	3	He	27.657	0.0119	890.06	0.0003	0.003918
Fe	57	3	He	29.41	0.0124	890.06	0.0003	0.003918
Co	59	3	He	0.073	0.0053	400.02	0.0305	0.003084
Co	59	3	He	0.066	0.0051	380.02	0.0305	0.003084
Co	59	3	He	0.027	0.0039	280.01	0.0305	0.003084
Ni	60	3	He	0.908	0.017	1280.10	0.0088	0.009003
Ni	60	3	He	0.851	0.0165	1230.09	0.0088	0.009003
Ni	60	3	He	0.852	0.0165	1180.09	0.0088	0.009003
Cu	63	3	He	0.052	0.0062	470.03	0.0249	0.004937
Cu	63	3	He	0.065	0.0066	490.03	0.0249	0.004937
Cu	63	3	He	0.082	0.007	500.02	0.0249	0.004937
Zn	66	3	He	0.462	0.006	450.02	0.0025	0.004836
Zn	66	3	He	-0.168	0.0044	330.01	0.0025	0.004836
Zn	66	3	He	-0.66	0.0032	230.01	0.0025	0.004836
As	75	3	He	0.086	0.0006	44.00	0.0017	0.0004347
As	75	3	He	-0.05	0.0003	26.00	0.0017	0.0004347
As	75	3	He	0.071	0.0006	40.00	0.0017	0.0004347
Sr	88	3	He	0.14	0.0019	120.00	0.0078	0.0007762
Sr	88	3	He	0.039	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	0.2	0.0023	150.01	0.0078	0.0007762
Mo	98	3	He	0.316	0.0075	480.03	0.022	0.0005162
Mo	98	3	He	0.285	0.0068	440.02	0.022	0.0005162
Mo	98	3	He	0.381	0.0089	570.03	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.196	0.0184	1180.11	0.0143	0.01559
Sn	120	3	He	0.099	0.017	1100.09	0.0143	0.01559
Sn	120	3	He	-0.206	0.0126	810.05	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.107	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.035	0.0005	30.00	0.0044	0.000309
Ba	137	3	He	0.108	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	0.014	0.0014	310.02	0.0276	0.001005
Tl	205	3	He	-0.005	0.0009	190.01	0.0276	0.001005
Tl	205	3	He	-0.003	0.0009	200.01	0.0276	0.001005
Pb	208	3	He	-0.006	0.0019	240.01	0.0364	0.002176
Pb	208	3	He	-0.008	0.0019	230.01	0.0364	0.002176
Pb	208	3	He	-0.015	0.0016	180.01	0.0364	0.002176
U	238	3	He	0.003	0.0004	80.00	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.01	0.0421	0.00024
U	238	3	He	0.001	0.0003	60.00	0.0421	0.00024
Sc	45	1	No Gas			3400116.82		
Sc	45	1	No Gas			3372219.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3305703.70		
Ge	72	1	No Gas			1490510.92		
Ge	72	1	No Gas			1473160.92		
Ge	72	1	No Gas			1458002.79		
Sc	45	2	H2			188751.64		
Sc	45	2	H2			198432.79		
Sc	45	2	H2			193825.35		
Ge	72	2	H2			156240.17		
Ge	72	2	H2			161212.81		
Ge	72	2	H2			160251.53		
In	115	2	H2			437646.05		
In	115	2	H2			457180.89		
In	115	2	H2			439862.61		
Sc	45	3	He			42492.30		
Sc	45	3	He			41620.17		
Sc	45	3	He			43565.67		
Ge	72	3	He			75347.61		
Ge	72	3	He			74603.54		
Ge	72	3	He			71557.77		
In	115	3	He			64217.53		
In	115	3	He			64719.80		
In	115	3	He			64046.49		
Tb	159	3	He			278185.89		
Tb	159	3	He			281586.60		
Tb	159	3	He			283226.07		
Bi	209	3	He			220832.65		
Bi	209	3	He			217124.24		
Bi	209	3	He			216064.43		

Quantitation Report

Data File Name	136SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:02:06
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

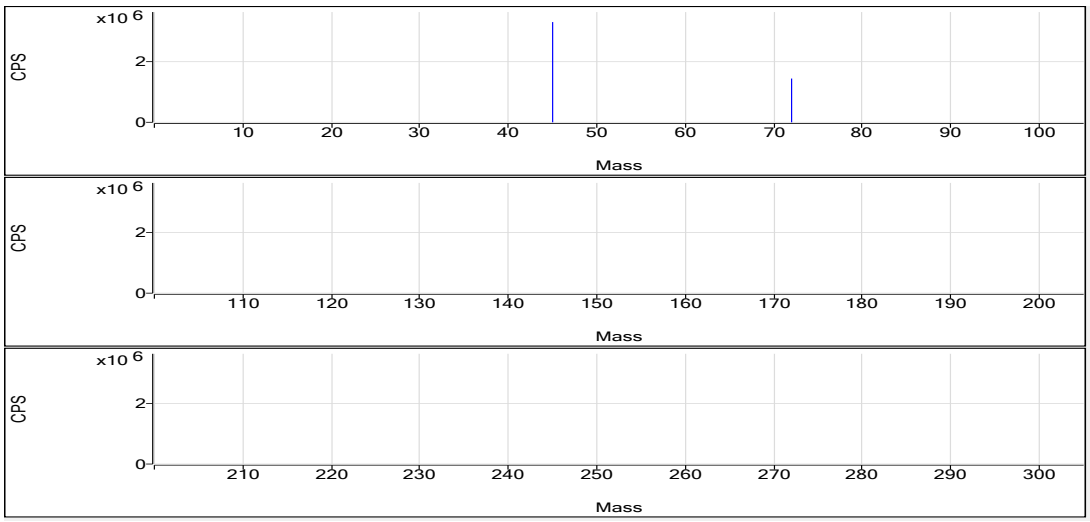
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.009	ppb	N/A	51.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.015	ppb	189.2	2.67	0.0000	Pulse	1.5000	3
Na	23	72	He	46.274	ppb	0.7	13826.80	0.1859	Pulse	0.1000	3
Mg	24	72	He	18.024	ppb	5.8	1490.13	0.0200	Pulse	0.1000	3
Al	27	72	He	10.445	ppb	16.1	266.68	0.0036	Pulse	0.1000	3
K	39	72	He	13.252	ppb	82.8	11227.97	0.1510	Pulse	0.1000	3
Ca	44	72	He	43.318	ppb	32.6	220.01	0.0030	Pulse	0.1000	3
Ti	47	72	He	0.691	ppb	115.9	33.33	0.0004	Pulse	0.1000	3
V	51	72	He	0.013	ppb	399.4	556.02	0.0075	Pulse	0.5000	3
Cr	52	72	He	0.062	ppb	252.8	1956.87	0.0263	Pulse	0.1000	3
Mn	55	72	He	-1.132	ppb	N/A	533.36	0.0072	Pulse	0.1000	3
Fe	57	72	He	26.977	ppb	23.0	873.39	0.0117	Pulse	0.1000	3
Co	59	72	He	0.056	ppb	62.7	356.68	0.0048	Pulse	0.1000	3
Ni	60	72	He	0.782	ppb	27.2	1180.09	0.0159	Pulse	0.1000	3
Cu	63	72	He	0.020	ppb	131.7	403.36	0.0054	Pulse	0.1000	3
Zn	66	72	He	0.259	ppb	75.7	406.69	0.0055	Pulse	0.1000	3
As	75	72	He	0.045	ppb	224.0	38.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.084	ppb	11.4	93.33	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.262	ppb	28.5	410.02	0.0063	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	48.5	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	71.1	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.054	ppb	135.6	1066.74	0.0164	Pulse	0.1000	3
Sb	121	115	He	-0.008	ppb	N/A	10.00	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.093	ppb	21.2	46.67	0.0007	Pulse	0.1000	3
Tl	205	209	He	-0.002	ppb	N/A	206.68	0.0009	Pulse	0.1000	3
Pb	208	209	He	-0.008	ppb	N/A	413.35	0.0019	Pulse	0.1000	3
U	238	209	He	0.002	ppb	362.9	70.00	0.0003	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3330524.01	1.5	102.8	Pulse	0.1000	3
No Gas	Ge	72	1453699.14	1.5	101.0	Pulse	0.1000	3
H2	Sc	45	193242.36	0.9	98.9	Pulse	0.1000	3
H2	Ge	72	159465.07	1.3	97.8	Pulse	0.1000	3
H2	In	115	443239.13	2.3	102.3	Pulse	0.1000	3
He	Sc	45	43057.27	0.7	107.7	Pulse	0.1000	3
He	Ge	72	74358.94	1.0	102.9	Pulse	0.1000	3
He	In	115	65220.81	1.0	101.0	Pulse	0.1000	3
He	Tb	159	283237.27	0.9	99.0	Pulse	0.1000	3
He	Bi	209	220194.90	0.6	99.1	Pulse	0.1000	3

No Gas



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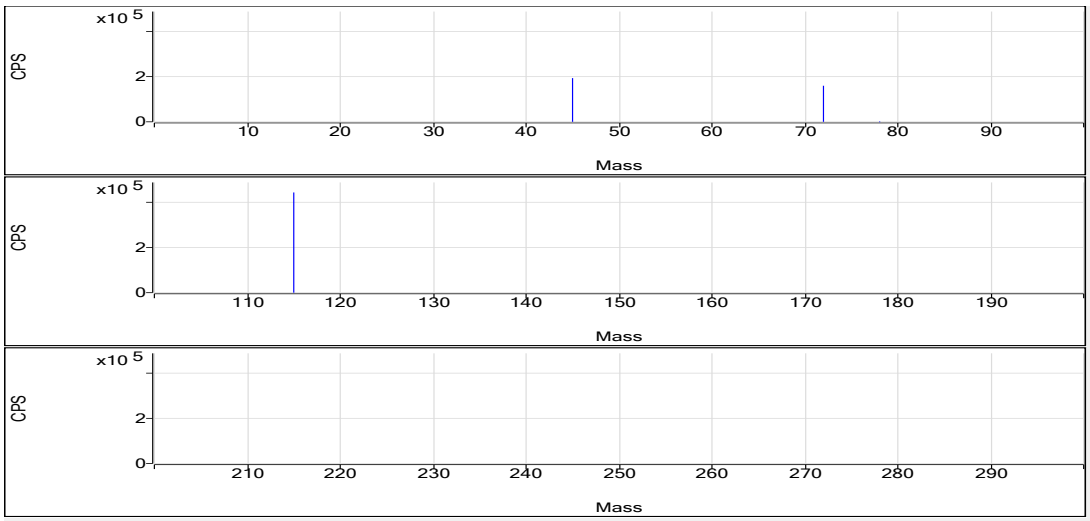
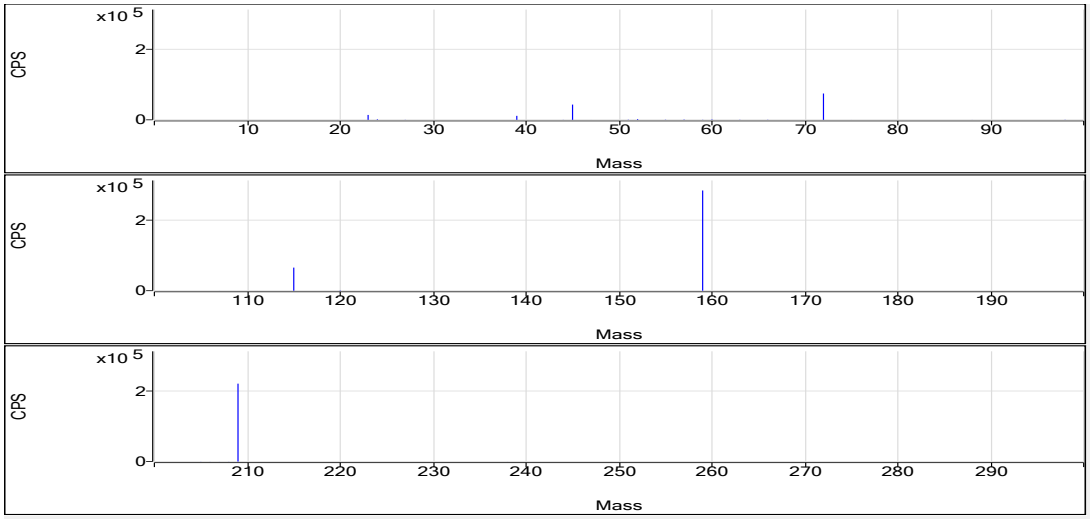


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.008	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.011	0	46.00	0.0013	4.694E-05
Se	78	2	H2	0.005	0	2.00	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Se	78	2	H2	0.047	0	4.67	0.0004	1.089E-05
Na	23	3	He	46.094	0.1856	13936.84	0.0017	0.1065
Na	23	3	He	46.637	0.1866	13886.85	0.0017	0.1065
Na	23	3	He	46.091	0.1856	13656.70	0.0017	0.1065
Mg	24	3	He	18.268	0.0202	1520.14	0.0008	0.004846
Mg	24	3	He	16.882	0.0191	1420.11	0.0008	0.004846
Mg	24	3	He	18.921	0.0208	1530.13	0.0008	0.004846
Al	27	3	He	11.048	0.0037	280.01	0.0002	0.001063
Al	27	3	He	11.739	0.0039	290.02	0.0002	0.001063
Al	27	3	He	8.549	0.0031	230.01	0.0002	0.001063
K	39	3	He	25.595	0.1578	11845.07	0.0006	0.1436
K	39	3	He	9.561	0.1489	11084.55	0.0006	0.1436
K	39	3	He	4.6	0.1462	10754.29	0.0006	0.1436
Ca	44	3	He	59.639	0.0035	260.01	0	0.001611
Ca	44	3	He	34.65	0.0027	200.01	0	0.001611
Ca	44	3	He	35.666	0.0027	200.01	0	0.001611
Ti	47	3	He	1.564	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	0.516	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	-0.007	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.016	0.0075	564.02	0.0117	0.007326
V	51	3	He	-0.041	0.0069	510.01	0.0117	0.007326
V	51	3	He	0.064	0.0081	594.02	0.0117	0.007326
Cr	52	3	He	-0.11	0.0237	1780.18	0.0152	0.02538
Cr	52	3	He	0.098	0.0269	2000.20	0.0152	0.02538
Cr	52	3	He	0.199	0.0284	2090.22	0.0152	0.02538
Mn	55	3	He	-1.151	0.0071	530.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.959	0.0082	610.04	0.0059	0.01385
Mn	55	3	He	-1.288	0.0063	460.02	0.0059	0.01385
Fe	57	3	He	32.456	0.0133	1000.07	0.0003	0.003918
Fe	57	3	He	28.216	0.0121	900.06	0.0003	0.003918
Fe	57	3	He	20.26	0.0098	720.05	0.0003	0.003918
Co	59	3	He	0.026	0.0039	290.01	0.0305	0.003084
Co	59	3	He	0.049	0.0046	340.02	0.0305	0.003084
Co	59	3	He	0.095	0.006	440.02	0.0305	0.003084
Ni	60	3	He	0.552	0.0139	1040.08	0.0088	0.009003
Ni	60	3	He	0.825	0.0163	1210.10	0.0088	0.009003
Ni	60	3	He	0.97	0.0175	1290.10	0.0088	0.009003
Cu	63	3	He	0.016	0.0053	400.02	0.0249	0.004937
Cu	63	3	He	-0.004	0.0048	360.02	0.0249	0.004937
Cu	63	3	He	0.047	0.0061	450.03	0.0249	0.004937
Zn	66	3	He	0.038	0.0049	370.02	0.0025	0.004836
Zn	66	3	He	0.328	0.0056	420.02	0.0025	0.004836
Zn	66	3	He	0.411	0.0058	430.02	0.0025	0.004836
As	75	3	He	-0.035	0.0004	28.00	0.0017	0.0004347
As	75	3	He	0.013	0.0005	34.00	0.0017	0.0004347
As	75	3	He	0.156	0.0007	52.00	0.0017	0.0004347
Sr	88	3	He	0.078	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.078	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.095	0.0015	100.00	0.0078	0.0007762
Mo	98	3	He	0.208	0.0051	330.01	0.022	0.0005162
Mo	98	3	He	0.347	0.0082	530.03	0.022	0.0005162
Mo	98	3	He	0.231	0.0056	370.02	0.022	0.0005162
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.108	0.0171	1110.08	0.0143	0.01559
Sn	120	3	He	0.085	0.0168	1090.08	0.0143	0.01559
Sn	120	3	He	-0.03	0.0152	1000.07	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	-0.009	0.0002	10.00	0.0124	0.000258
Ba	137	3	He	0.106	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.07	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.103	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	-0.008	0.0008	170.01	0.0276	0.001005
Tl	205	3	He	0.001	0.001	230.01	0.0276	0.001005
Tl	205	3	He	0	0.001	220.01	0.0276	0.001005
Pb	208	3	He	-0.021	0.0014	150.01	0.0364	0.002176
Pb	208	3	He	-0.001	0.0021	280.01	0.0364	0.002176
Pb	208	3	He	-0.003	0.0021	170.01	0.0364	0.002176
U	238	3	He	0.01	0.0006	140.01	0.0421	0.00024
U	238	3	He	-0.004	0.0001	20.00	0.0421	0.00024
U	238	3	He	0	0.0002	50.00	0.0421	0.00024
Sc	45	1	No Gas			3388446.51		
Sc	45	1	No Gas			3302884.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3300240.89		
Ge	72	1	No Gas			1474678.88		
Ge	72	1	No Gas			1456385.29		
Ge	72	1	No Gas			1430033.26		
Sc	45	2	H2			191356.72		
Sc	45	2	H2			194861.91		
Sc	45	2	H2			193508.45		
Ge	72	2	H2			157269.78		
Ge	72	2	H2			161174.36		
Ge	72	2	H2			159951.08		
In	115	2	H2			435819.52		
In	115	2	H2			454652.88		
In	115	2	H2			439244.99		
Sc	45	3	He			43073.99		
Sc	45	3	He			42733.21		
Sc	45	3	He			43364.61		
Ge	72	3	He			75075.88		
Ge	72	3	He			74432.51		
Ge	72	3	He			73568.43		
In	115	3	He			64820.81		
In	115	3	He			64910.44		
In	115	3	He			65956.14		
Tb	159	3	He			285689.25		
Tb	159	3	He			283278.53		
Tb	159	3	He			280744.02		
Bi	209	3	He			218757.13		
Bi	209	3	He			220618.34		
Bi	209	3	He			221209.23		

Quantitation Report

Data File Name	137_CCV.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:04:07
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

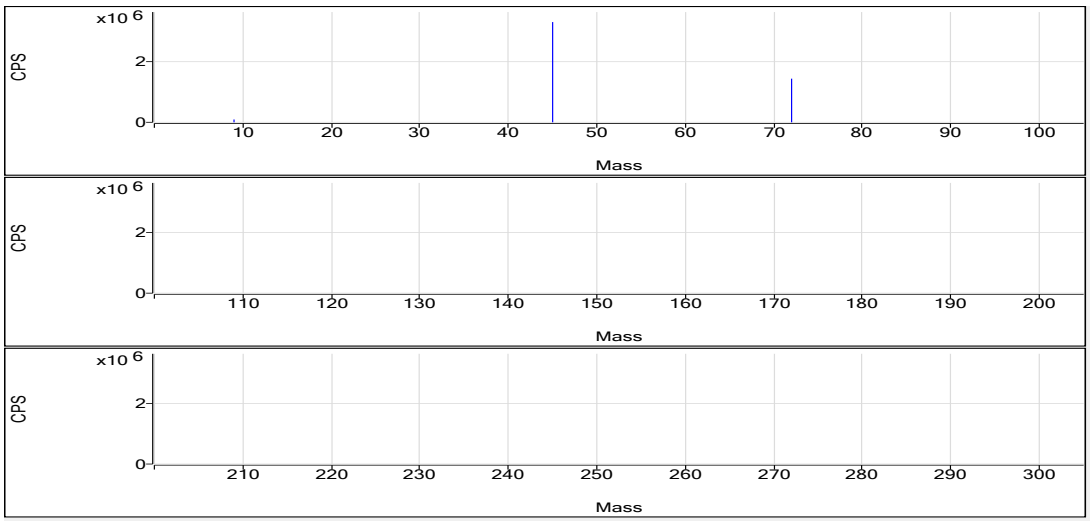
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	48.806	ppb	4.5	92358.10	0.0642	Pulse	0.5000	3
Se	78	72	H2	52.194	ppb	3.2	3260.60	0.0203	Pulse	1.5000	3
Na	23	72	He	5475.030	ppb	2.0	700928.22	9.5116	Pulse	0.1000	3
Mg	24	72	He	5444.299	ppb	2.4	338591.26	4.5949	Pulse	0.1000	3
Al	27	72	He	5308.127	ppb	2.4	94503.40	1.2824	Pulse	0.1000	3
K	39	72	He	5357.757	ppb	3.7	228563.23	3.1023	Pulse	0.1000	3
Ca	44	72	He	5435.163	ppb	4.1	12555.72	0.1704	Pulse	0.1000	3
Ti	47	72	He	5391.139	ppb	2.2	99650.92	1.3523	Pulse	0.1000	3
V	51	72	He	536.982	ppb	2.0	463433.21	6.2888	Pulse	0.5000	3
Cr	52	72	He	538.293	ppb	2.1	605892.45	8.2221	Pulse	0.1000	3
Mn	55	72	He	526.446	ppb	1.5	230035.44	3.1212	Pulse	0.1000	3
Fe	57	72	He	5281.171	ppb	1.7	113044.25	1.5340	Pulse	0.1000	3
Co	59	72	He	533.355	ppb	1.0	1199572.38	16.2760	Pulse	0.1000	3
Ni	60	72	He	533.017	ppb	1.3	346088.51	4.6960	Pulse	0.1000	3
Cu	63	72	He	533.424	ppb	1.4	980704.70	13.3070	Pulse	0.1000	3
Zn	66	72	He	530.639	ppb	2.4	96420.72	1.3085	Pulse	0.1000	3
As	75	72	He	522.457	ppb	2.4	66989.89	0.9091	Pulse	0.5000	3
Sr	88	115	He	52.155	ppb	2.6	26111.36	0.4085	Pulse	0.1000	3
Mo	98	115	He	51.990	ppb	2.9	73219.63	1.1454	Pulse	0.1000	3
Ag	107	115	He	52.325	ppb	2.3	152227.25	2.3813	Pulse	0.1000	3
Cd	111	115	He	52.185	ppb	1.4	16019.16	0.2506	Pulse	0.5000	3
Sn	120	115	He	51.831	ppb	3.1	48237.35	0.7546	Pulse	0.1000	3
Sb	121	115	He	51.798	ppb	4.9	41078.29	0.6428	Pulse	0.1000	3
Ba	137	115	He	518.969	ppb	2.4	145161.07	2.2707	Pulse	0.1000	3
Tl	205	209	He	51.439	ppb	0.7	315478.80	1.4230	Pulse	0.1000	3
Pb	208	209	He	51.749	ppb	0.5	418069.27	1.8857	Pulse	0.1000	3
U	238	209	He	50.886	ppb	1.4	474625.42	2.1409	Pulse	0.1000	3

ISTD Table:

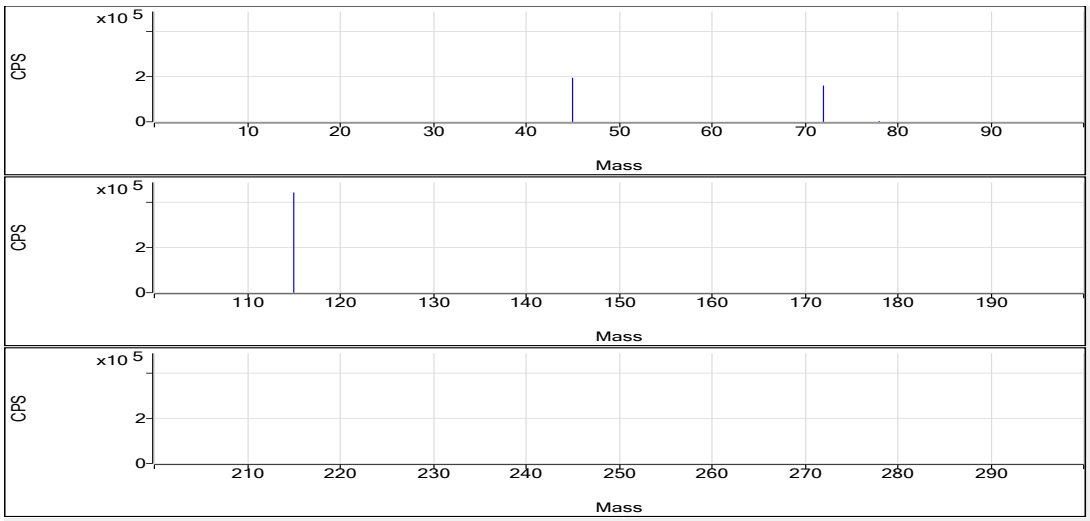
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3308007.24	2.4	102.1	Pulse	0.1000	3
No Gas	Ge	72	1439735.86	1.7	100.0	Pulse	0.1000	3
H2	Sc	45	194847.22	2.3	99.7	Pulse	0.1000	3
H2	Ge	72	160426.33	2.1	98.4	Pulse	0.1000	3
H2	In	115	443444.21	2.3	102.3	Pulse	0.1000	3
He	Sc	45	42488.83	1.6	106.3	Pulse	0.1000	3
He	Ge	72	73711.99	2.1	102.0	Pulse	0.1000	3
He	In	115	63945.68	2.1	99.0	Pulse	0.1000	3
He	Tb	159	288128.93	1.9	100.7	Pulse	0.1000	3
He	Bi	209	221704.03	0.5	99.8	Pulse	0.1000	3

No Gas

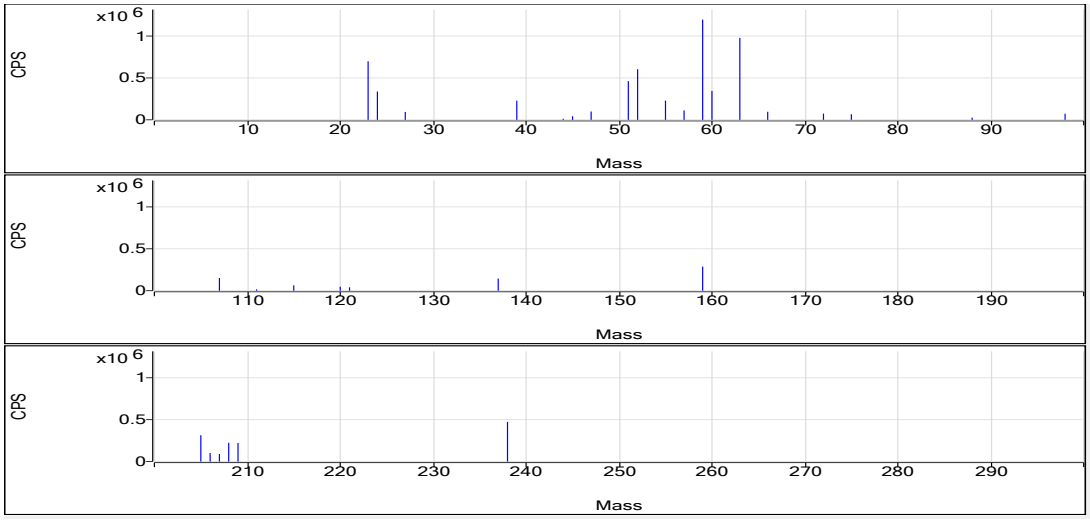


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.337	0.0609	89309.83	0.0013	4.694E-05
Be	9	1	No Gas	49.646	0.0653	93714.37	0.0013	4.694E-05
Be	9	1	No Gas	50.436	0.0663	94050.10	0.0013	4.694E-05
Se	78	2	H2	52.161	0.0203	3235.04	0.0004	1.089E-05
Se	78	2	H2	50.562	0.0197	3235.70	0.0004	1.089E-05
Se	78	2	H2	53.859	0.021	3311.05	0.0004	1.089E-05
Na	23	3	He	5445.573	9.461	703062.72	0.0017	0.1065
Na	23	3	He	5595.093	9.7178	699393.51	0.0017	0.1065
Na	23	3	He	5384.424	9.3559	700328.43	0.0017	0.1065
Mg	24	3	He	5399.396	4.5571	338645.50	0.0008	0.004846
Mg	24	3	He	5589.888	4.7177	339532.92	0.0008	0.004846
Mg	24	3	He	5343.614	4.5101	337595.35	0.0008	0.004846
Al	27	3	He	5346.67	1.2917	95989.95	0.0002	0.001063
Al	27	3	He	5412.357	1.3076	94106.34	0.0002	0.001063
Al	27	3	He	5165.354	1.2479	93413.91	0.0002	0.001063
K	39	3	He	5238.323	3.0363	225633.41	0.0006	0.1436
K	39	3	He	5588.023	3.2294	232421.40	0.0006	0.1436
K	39	3	He	5246.925	3.0411	227634.88	0.0006	0.1436
Ca	44	3	He	5422.634	0.17	12635.78	0	0.001611
Ca	44	3	He	5663.436	0.1775	12775.89	0	0.001611
Ca	44	3	He	5219.42	0.1637	12255.49	0	0.001611
Ti	47	3	He	5404.312	1.3556	100734.43	0.0003	0.0002737
Ti	47	3	He	5499.933	1.3795	99285.94	0.0003	0.0002737
Ti	47	3	He	5269.172	1.3217	98932.40	0.0003	0.0002737
V	51	3	He	532.216	6.2331	463189.78	0.0117	0.007326
V	51	3	He	549.177	6.4315	462873.34	0.0117	0.007326
V	51	3	He	529.553	6.2019	464236.50	0.0117	0.007326
Cr	52	3	He	536.169	8.1898	608597.88	0.0152	0.02538
Cr	52	3	He	550.739	8.4116	605386.87	0.0152	0.02538
Cr	52	3	He	527.971	8.0649	603692.61	0.0152	0.02538
Mn	55	3	He	531.11	3.1487	233984.70	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	531.106	3.1487	226609.76	0.0059	0.01385
Mn	55	3	He	517.123	3.0661	229511.87	0.0059	0.01385
Fe	57	3	He	5241.134	1.5224	113128.74	0.0003	0.003918
Fe	57	3	He	5383.047	1.5635	112522.86	0.0003	0.003918
Fe	57	3	He	5219.332	1.516	113481.16	0.0003	0.003918
Co	59	3	He	533.095	16.2681	1208911.23	0.0305	0.003084
Co	59	3	He	539.01	16.4485	1183804.67	0.0305	0.003084
Co	59	3	He	527.96	16.1114	1206001.23	0.0305	0.003084
Ni	60	3	He	531.262	4.6805	347820.19	0.0088	0.009003
Ni	60	3	He	540.67	4.7633	342813.67	0.0088	0.009003
Ni	60	3	He	527.121	4.6441	347631.67	0.0088	0.009003
Cu	63	3	He	533.627	13.312	989242.95	0.0249	0.004937
Cu	63	3	He	540.921	13.4939	971161.78	0.0249	0.004937
Cu	63	3	He	525.725	13.115	981709.36	0.0249	0.004937
Zn	66	3	He	529.256	1.3051	96984.04	0.0025	0.004836
Zn	66	3	He	543.982	1.3413	96531.71	0.0025	0.004836
Zn	66	3	He	518.679	1.2791	95746.40	0.0025	0.004836
As	75	3	He	524.042	0.9118	67760.12	0.0017	0.0004347
As	75	3	He	534.134	0.9294	66888.06	0.0017	0.0004347
As	75	3	He	509.195	0.886	66321.50	0.0017	0.0004347
Sr	88	3	He	50.58	0.3962	25924.42	0.0078	0.0007762
Sr	88	3	He	53.097	0.4158	26405.21	0.0078	0.0007762
Sr	88	3	He	52.788	0.4134	26004.46	0.0078	0.0007762
Mo	98	3	He	50.744	1.118	73158.62	0.022	0.0005162
Mo	98	3	He	51.591	1.1366	72174.04	0.022	0.0005162
Mo	98	3	He	53.635	1.1817	74326.24	0.022	0.0005162
Ag	107	3	He	51.157	2.3281	152348.20	0.0455	0.0004641
Ag	107	3	He	52.276	2.379	151065.13	0.0455	0.0004641
Ag	107	3	He	53.543	2.4367	153268.43	0.0455	0.0004641
Cd	111	3	He	51.502	0.2473	16181.33	0.0048	5.152E-05
Cd	111	3	He	52.09	0.2501	15881.02	0.0048	5.152E-05
Cd	111	3	He	52.964	0.2543	15995.12	0.0048	5.152E-05
Sn	120	3	He	50.733	0.7389	48354.33	0.0143	0.01559
Sn	120	3	He	51.108	0.7443	47260.79	0.0143	0.01559
Sn	120	3	He	53.652	0.7806	49096.93	0.0143	0.01559
Sb	121	3	He	49.203	0.6106	39958.21	0.0124	0.000258
Sb	121	3	He	51.892	0.644	40891.47	0.0124	0.000258
Sb	121	3	He	54.3	0.6738	42385.20	0.0124	0.000258
Ba	137	3	He	505.531	2.2119	144743.12	0.0044	0.000309
Ba	137	3	He	530.365	2.3205	147351.05	0.0044	0.000309
Ba	137	3	He	521.011	2.2796	143389.05	0.0044	0.000309
Tl	205	3	He	51.202	1.4164	315014.10	0.0276	0.001005
Tl	205	3	He	51.237	1.4174	315126.87	0.0276	0.001005
Tl	205	3	He	51.88	1.4352	316295.42	0.0276	0.001005
Pb	208	3	He	51.659	1.8824	225001.50	0.0364	0.002176
Pb	208	3	He	52.057	1.8969	228380.35	0.0364	0.002176
Pb	208	3	He	51.529	1.8777	221354.86	0.0364	0.002176
U	238	3	He	51.223	2.155	479278.08	0.0421	0.00024
U	238	3	He	50.071	2.1066	468350.19	0.0421	0.00024
U	238	3	He	51.364	2.161	476248.00	0.0421	0.00024
Sc	45	1	No Gas			3397503.70		
Sc	45	1	No Gas			3286098.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3240419.95		
Ge	72	1	No Gas			1465635.29		
Ge	72	1	No Gas			1435498.73		
Ge	72	1	No Gas			1418073.57		
Sc	45	2	H2			194435.37		
Sc	45	2	H2			199612.58		
Sc	45	2	H2			190493.71		
Ge	72	2	H2			159202.77		
Ge	72	2	H2			164268.24		
Ge	72	2	H2			157807.99		
In	115	2	H2			443860.11		
In	115	2	H2			453209.29		
In	115	2	H2			433263.24		
Sc	45	3	He			41980.52		
Sc	45	3	He			42201.24		
Sc	45	3	He			43284.74		
Ge	72	3	He			74311.86		
Ge	72	3	He			71970.17		
Ge	72	3	He			74853.93		
In	115	3	He			65815.45		
In	115	3	He			63867.10		
In	115	3	He			63283.24		
Tb	159	3	He			283983.20		
Tb	159	3	He			294223.57		
Tb	159	3	He			286180.02		
Bi	209	3	He			222398.98		
Bi	209	3	He			222326.89		
Bi	209	3	He			220386.23		

Quantitation Report

Data File Name	138_CCB.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:06:08
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

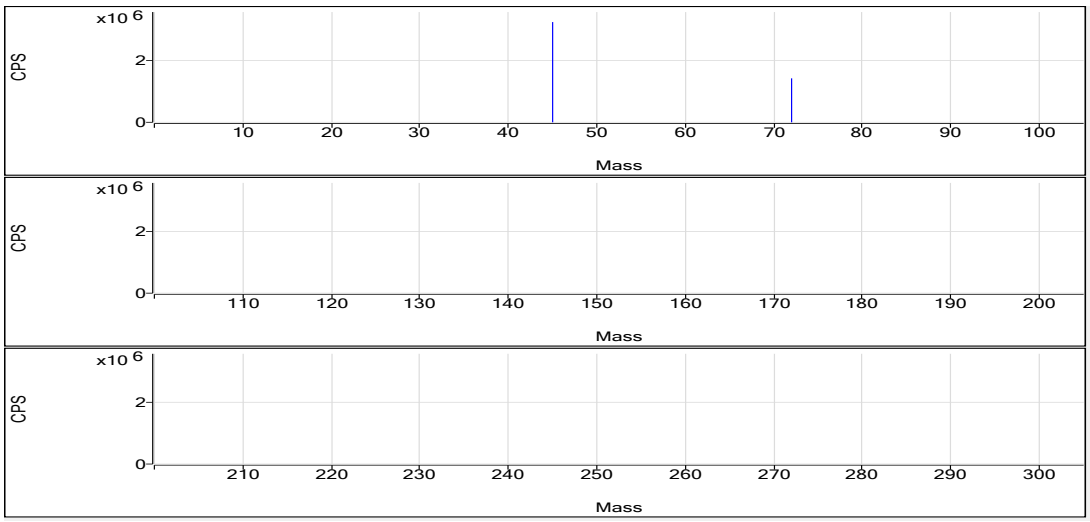
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.038	ppb	20.2	137.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.071	ppb	44.8	6.22	0.0000	Pulse	1.5000	3
Na	23	72	He	42.515	ppb	11.6	13192.91	0.1795	Pulse	0.1000	3
Mg	24	72	He	17.870	ppb	11.5	1463.45	0.0199	Pulse	0.1000	3
Al	27	72	He	12.515	ppb	20.3	300.01	0.0041	Pulse	0.1000	3
K	39	72	He	18.607	ppb	89.1	11314.71	0.1539	Pulse	0.1000	3
Ca	44	72	He	28.472	ppb	24.9	183.34	0.0025	Pulse	0.1000	3
Ti	47	72	He	2.341	ppb	52.7	63.33	0.0009	Pulse	0.1000	3
V	51	72	He	0.181	ppb	43.1	694.02	0.0094	Pulse	0.5000	3
Cr	52	72	He	0.219	ppb	39.0	2110.22	0.0287	Pulse	0.1000	3
Mn	55	72	He	-0.910	ppb	N/A	623.37	0.0085	Pulse	0.1000	3
Fe	57	72	He	22.658	ppb	27.6	770.05	0.0105	Pulse	0.1000	3
Co	59	72	He	0.172	ppb	15.7	613.37	0.0083	Pulse	0.1000	3
Ni	60	72	He	1.030	ppb	14.6	1326.78	0.0181	Pulse	0.1000	3
Cu	63	72	He	0.133	ppb	20.5	606.70	0.0083	Pulse	0.1000	3
Zn	66	72	He	0.301	ppb	106.5	410.02	0.0056	Pulse	0.1000	3
As	75	72	He	0.235	ppb	22.9	62.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.135	ppb	38.0	116.67	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.247	ppb	12.0	380.02	0.0060	Pulse	0.1000	3
Ag	107	115	He	0.012	ppb	104.3	63.33	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	31.1	10.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.099	ppb	70.4	1083.45	0.0170	Pulse	0.1000	3
Sb	121	115	He	0.059	ppb	32.6	63.33	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.121	ppb	46.1	53.33	0.0008	Pulse	0.1000	3
Tl	205	209	He	0.201	ppb	5.3	1443.47	0.0066	Pulse	0.1000	3
Pb	208	209	He	-0.001	ppb	N/A	466.68	0.0021	Pulse	0.1000	3
U	238	209	He	0.026	ppb	23.7	290.02	0.0013	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3250413.70	1.4	100.3	Pulse	0.1000	3
No Gas	Ge	72	1425599.77	1.4	99.0	Pulse	0.1000	3
H2	Sc	45	196319.53	1.9	100.5	Pulse	0.1000	3
H2	Ge	72	161322.72	2.5	99.0	Pulse	0.1000	3
H2	In	115	446323.61	2.3	103.0	Pulse	0.1000	3
He	Sc	45	41867.36	2.2	104.7	Pulse	0.1000	3
He	Ge	72	73497.55	0.5	101.7	Pulse	0.1000	3
He	In	115	63770.94	0.5	98.7	Pulse	0.1000	3
He	Tb	159	281524.05	0.8	98.4	Pulse	0.1000	3
He	Bi	209	219588.76	0.3	98.8	Pulse	0.1000	3

No Gas



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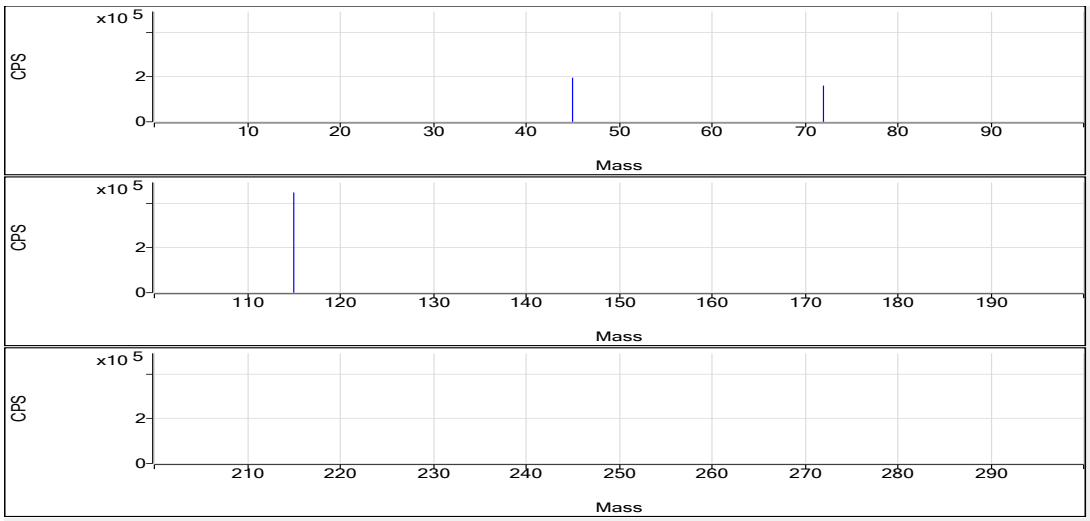
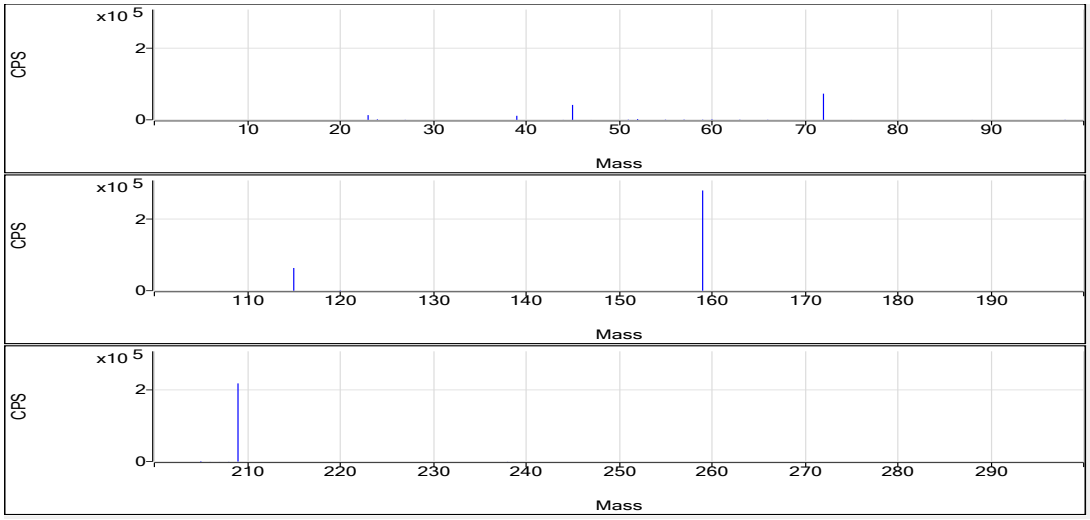


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.046	0.0001	156.00	0.0013	4.694E-05
Be	9	1	No Gas	0.033	0.0001	128.00	0.0013	4.694E-05
Be	9	1	No Gas	0.033	0.0001	128.00	0.0013	4.694E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.097	0	8.00	0.0004	1.089E-05
Se	78	2	H2	0.081	0	6.67	0.0004	1.089E-05
Na	23	3	He	42.927	0.1802	13316.35	0.0017	0.1065
Na	23	3	He	47.237	0.1876	13776.81	0.0017	0.1065
Na	23	3	He	37.38	0.1707	12485.56	0.0017	0.1065
Mg	24	3	He	18.49	0.0204	1510.12	0.0008	0.004846
Mg	24	3	He	15.573	0.018	1320.10	0.0008	0.004846
Mg	24	3	He	19.547	0.0213	1560.13	0.0008	0.004846
Al	27	3	He	10.733	0.0037	270.01	0.0002	0.001063
Al	27	3	He	11.393	0.0038	280.01	0.0002	0.001063
Al	27	3	He	15.418	0.0048	350.02	0.0002	0.001063
K	39	3	He	35.294	0.1631	12055.23	0.0006	0.1436
K	39	3	He	18.402	0.1538	11294.75	0.0006	0.1436
K	39	3	He	2.125	0.1448	10594.15	0.0006	0.1436
Ca	44	3	He	22.204	0.0023	170.01	0	0.001611
Ca	44	3	He	27.055	0.0025	180.01	0	0.001611
Ca	44	3	He	36.158	0.0027	200.01	0	0.001611
Ti	47	3	He	3.765	0.0012	90.00	0.0003	0.0002737
Ti	47	3	He	1.623	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	1.634	0.0007	50.00	0.0003	0.0002737
V	51	3	He	0.253	0.0103	760.03	0.0117	0.007326
V	51	3	He	0.191	0.0096	702.02	0.0117	0.007326
V	51	3	He	0.098	0.0085	620.02	0.0117	0.007326
Cr	52	3	He	0.164	0.0279	2060.22	0.0152	0.02538
Cr	52	3	He	0.175	0.0281	2060.23	0.0152	0.02538
Cr	52	3	He	0.317	0.0302	2210.22	0.0152	0.02538
Mn	55	3	He	-0.994	0.008	590.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.801	0.0091	670.05	0.0059	0.01385
Mn	55	3	He	-0.934	0.0083	610.03	0.0059	0.01385
Fe	57	3	He	19.175	0.0095	700.04	0.0003	0.003918
Fe	57	3	He	18.911	0.0094	690.05	0.0003	0.003918
Fe	57	3	He	29.887	0.0126	920.06	0.0003	0.003918
Co	59	3	He	0.161	0.008	590.03	0.0305	0.003084
Co	59	3	He	0.153	0.0078	570.03	0.0305	0.003084
Co	59	3	He	0.204	0.0093	680.04	0.0305	0.003084
Ni	60	3	He	0.885	0.0168	1240.10	0.0088	0.009003
Ni	60	3	He	1.02	0.018	1320.11	0.0088	0.009003
Ni	60	3	He	1.184	0.0194	1420.12	0.0088	0.009003
Cu	63	3	He	0.155	0.0088	650.04	0.0249	0.004937
Cu	63	3	He	0.102	0.0075	550.03	0.0249	0.004937
Cu	63	3	He	0.142	0.0085	620.04	0.0249	0.004937
Zn	66	3	He	0.62	0.0064	470.03	0.0025	0.004836
Zn	66	3	He	0.304	0.0056	410.02	0.0025	0.004836
Zn	66	3	He	-0.021	0.0048	350.02	0.0025	0.004836
As	75	3	He	0.264	0.0009	66.00	0.0017	0.0004347
As	75	3	He	0.173	0.0007	54.00	0.0017	0.0004347
As	75	3	He	0.269	0.0009	66.00	0.0017	0.0004347
Sr	88	3	He	0.142	0.0019	120.01	0.0078	0.0007762
Sr	88	3	He	0.08	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.182	0.0022	140.01	0.0078	0.0007762
Mo	98	3	He	0.227	0.0055	350.02	0.022	0.0005162
Mo	98	3	He	0.281	0.0067	430.02	0.022	0.0005162
Mo	98	3	He	0.233	0.0057	360.02	0.022	0.0005162
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.024	0.0016	100.00	0.0455	0.0004641
Cd	111	3	He	0.029	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.028	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.177	0.0181	1150.09	0.0143	0.01559
Sn	120	3	He	0.045	0.0162	1040.17	0.0143	0.01559
Sn	120	3	He	0.074	0.0166	1060.09	0.0143	0.01559
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.055	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.08	0.0013	80.00	0.0124	0.000258
Ba	137	3	He	0.181	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.072	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.109	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	0.197	0.0064	1410.13	0.0276	0.001005
Tl	205	3	He	0.194	0.0064	1400.13	0.0276	0.001005
Tl	205	3	He	0.214	0.0069	1520.14	0.0276	0.001005
Pb	208	3	He	0.002	0.0022	280.01	0.0364	0.002176
Pb	208	3	He	-0.007	0.0019	260.01	0.0364	0.002176
Pb	208	3	He	0.001	0.0022	250.01	0.0364	0.002176
U	238	3	He	0.031	0.0016	340.02	0.0421	0.00024
U	238	3	He	0.027	0.0014	300.02	0.0421	0.00024
U	238	3	He	0.019	0.001	230.01	0.0421	0.00024
Sc	45	1	No Gas			3299757.14		
Sc	45	1	No Gas			3244380.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3207103.39		
Ge	72	1	No Gas			1447682.95		
Ge	72	1	No Gas			1417663.10		
Ge	72	1	No Gas			1411453.26		
Sc	45	2	H2			196389.12		
Sc	45	2	H2			200048.00		
Sc	45	2	H2			192521.48		
Ge	72	2	H2			162114.68		
Ge	72	2	H2			164824.00		
Ge	72	2	H2			157029.48		
In	115	2	H2			445814.95		
In	115	2	H2			456838.35		
In	115	2	H2			436317.53		
Sc	45	3	He			42121.13		
Sc	45	3	He			42633.01		
Sc	45	3	He			40847.93		
Ge	72	3	He			73899.17		
Ge	72	3	He			73436.61		
Ge	72	3	He			73156.88		
In	115	3	He			63524.85		
In	115	3	He			64127.86		
In	115	3	He			63685.45		
Tb	159	3	He			283962.48		
Tb	159	3	He			280017.32		
Tb	159	3	He			280592.34		
Bi	209	3	He			218896.85		
Bi	209	3	He			219959.20		
Bi	209	3	He			219910.23		

Quantitation Report

Data File Name	139SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:12:01
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

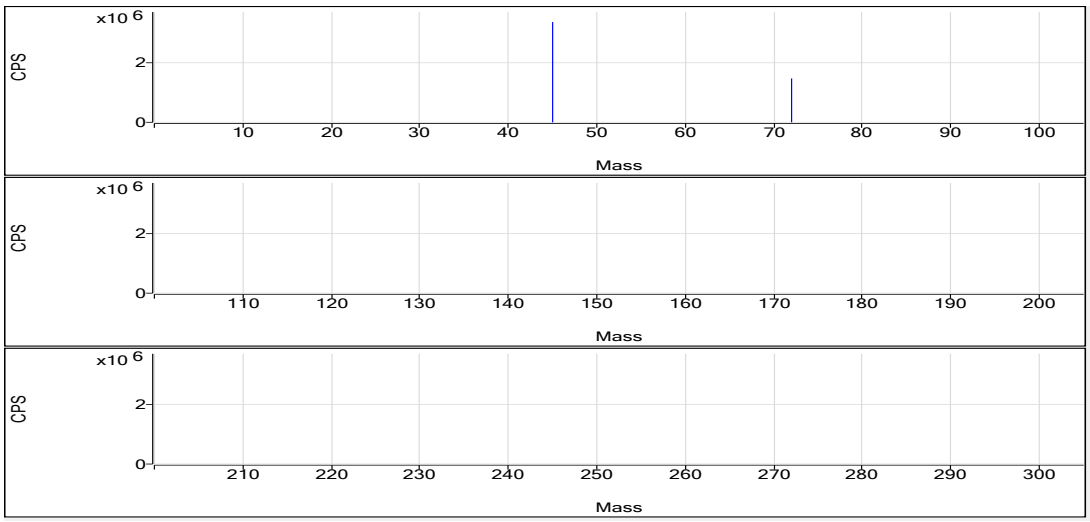
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.006	ppb	N/A	57.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.038	ppb	49.6	4.00	0.0000	Pulse	1.5000	3
Na	23	72	He	31.006	ppb	13.2	11644.87	0.1597	Pulse	0.1000	3
Mg	24	72	He	13.506	ppb	7.3	1183.42	0.0162	Pulse	0.1000	3
Al	27	72	He	9.612	ppb	4.4	246.68	0.0034	Pulse	0.1000	3
K	39	72	He	13.699	ppb	96.2	11024.46	0.1512	Pulse	0.1000	3
Ca	44	72	He	26.121	ppb	75.5	176.67	0.0024	Pulse	0.1000	3
Ti	47	72	He	0.729	ppb	113.1	33.33	0.0005	Pulse	0.1000	3
V	51	72	He	0.058	ppb	38.9	584.02	0.0080	Pulse	0.5000	3
Cr	52	72	He	0.218	ppb	36.2	2093.56	0.0287	Pulse	0.1000	3
Mn	55	72	He	-0.869	ppb	N/A	636.70	0.0087	Pulse	0.1000	3
Fe	57	72	He	21.052	ppb	24.3	730.05	0.0100	Pulse	0.1000	3
Co	59	72	He	0.019	ppb	40.3	266.68	0.0037	Pulse	0.1000	3
Ni	60	72	He	0.900	ppb	13.1	1233.43	0.0169	Pulse	0.1000	3
Cu	63	72	He	0.022	ppb	156.3	400.02	0.0055	Pulse	0.1000	3
Zn	66	72	He	-0.048	ppb	N/A	343.35	0.0047	Pulse	0.1000	3
As	75	72	He	0.039	ppb	158.6	36.67	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.091	ppb	27.7	93.33	0.0015	Pulse	0.1000	3
Mo	98	115	He	0.179	ppb	25.7	280.01	0.0045	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	41.2	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	124.6	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.623	ppb	190.2	1526.20	0.0245	Pulse	0.1000	3
Sb	121	115	He	0.022	ppb	87.5	33.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.112	ppb	67.0	50.00	0.0008	Pulse	0.1000	3
Tl	205	209	He	0.049	ppb	15.6	510.03	0.0024	Pulse	0.1000	3
Pb	208	209	He	-0.010	ppb	N/A	393.35	0.0018	Pulse	0.1000	3
U	238	209	He	0.003	ppb	92.1	80.00	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3352441.51	3.4	103.4	Pulse	0.1000	3
No Gas	Ge	72	1467166.91	3.0	101.9	Pulse	0.1000	3
H2	Sc	45	189833.27	2.4	97.2	Pulse	0.1000	3
H2	Ge	72	155253.01	2.2	95.2	Pulse	0.1000	3
H2	In	115	427884.25	1.5	98.7	Pulse	0.1000	3
He	Sc	45	41633.40	2.2	104.1	Pulse	0.1000	3
He	Ge	72	72924.53	0.9	100.9	Pulse	0.1000	3
He	In	115	62688.90	1.2	97.1	Pulse	0.1000	3
He	Tb	159	278872.18	1.0	97.5	Pulse	0.1000	3
He	Bi	209	215073.90	0.5	96.8	Pulse	0.1000	3

No Gas



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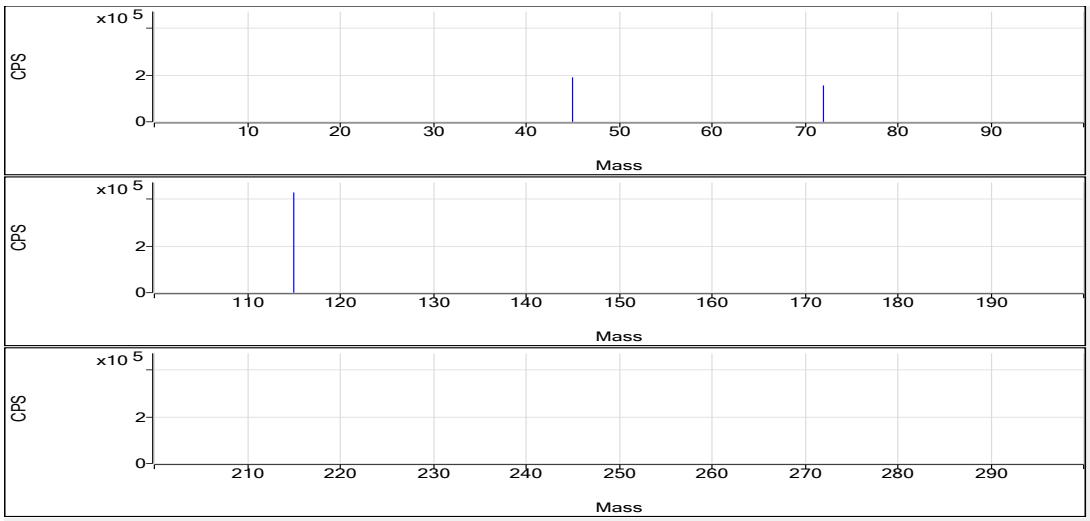
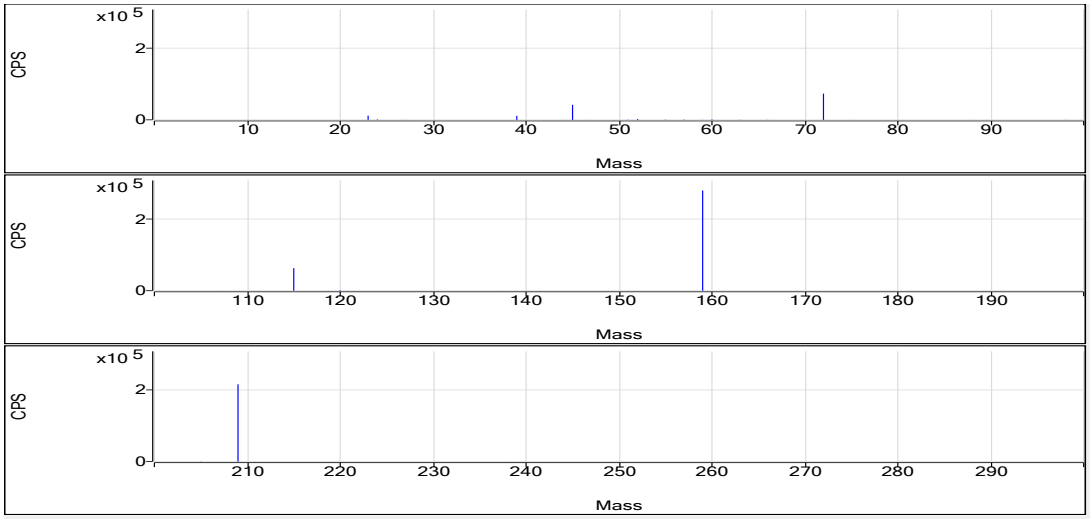


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	60.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.001	0	68.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.014	0	44.00	0.0013	4.694E-05
Se	78	2	H2	0.028	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.06	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Na	23	3	He	34.189	0.1652	11925.10	0.0017	0.1065
Na	23	3	He	26.371	0.1518	11144.52	0.0017	0.1065
Na	23	3	He	32.457	0.1622	11865.00	0.0017	0.1065
Mg	24	3	He	14.463	0.017	1230.10	0.0008	0.004846
Mg	24	3	He	12.504	0.0154	1130.08	0.0008	0.004846
Mg	24	3	He	13.55	0.0163	1190.08	0.0008	0.004846
Al	27	3	He	9.944	0.0035	250.01	0.0002	0.001063
Al	27	3	He	9.136	0.0033	240.01	0.0002	0.001063
Al	27	3	He	9.757	0.0034	250.01	0.0002	0.001063
K	39	3	He	26.218	0.1581	11414.82	0.0006	0.1436
K	39	3	He	14.943	0.1519	11154.51	0.0006	0.1436
K	39	3	He	-0.064	0.1436	10504.06	0.0006	0.1436
Ca	44	3	He	28.416	0.0025	180.01	0	0.001611
Ca	44	3	He	44.591	0.003	220.01	0	0.001611
Ca	44	3	He	5.356	0.0018	130.00	0	0.001611
Ti	47	3	He	0.566	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	1.623	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	-0.001	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.034	0.0077	558.01	0.0117	0.007326
V	51	3	He	0.061	0.008	590.02	0.0117	0.007326
V	51	3	He	0.08	0.0083	604.02	0.0117	0.007326
Cr	52	3	He	0.143	0.0276	1990.21	0.0152	0.02538
Cr	52	3	He	0.301	0.03	2200.24	0.0152	0.02538
Cr	52	3	He	0.21	0.0286	2090.22	0.0152	0.02538
Mn	55	3	He	-1.127	0.0072	520.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.801	0.0091	670.03	0.0059	0.01385
Mn	55	3	He	-0.679	0.0098	720.04	0.0059	0.01385
Fe	57	3	He	23.774	0.0108	780.05	0.0003	0.003918
Fe	57	3	He	15.15	0.0083	610.04	0.0003	0.003918
Fe	57	3	He	24.231	0.0109	800.05	0.0003	0.003918
Co	59	3	He	0.026	0.0039	280.01	0.0305	0.003084
Co	59	3	He	0.019	0.0037	270.01	0.0305	0.003084
Co	59	3	He	0.011	0.0034	250.01	0.0305	0.003084
Ni	60	3	He	0.961	0.0175	1260.11	0.0088	0.009003
Ni	60	3	He	0.974	0.0176	1290.10	0.0088	0.009003
Ni	60	3	He	0.764	0.0157	1150.09	0.0088	0.009003
Cu	63	3	He	0.035	0.0058	420.02	0.0249	0.004937
Cu	63	3	He	0.048	0.0061	450.02	0.0249	0.004937
Cu	63	3	He	-0.017	0.0045	330.01	0.0249	0.004937
Zn	66	3	He	0.682	0.0065	470.02	0.0025	0.004836
Zn	66	3	He	-0.805	0.0029	210.01	0.0025	0.004836
Zn	66	3	He	-0.021	0.0048	350.02	0.0025	0.004836
As	75	3	He	0.005	0.0004	32.00	0.0017	0.0004347
As	75	3	He	0.11	0.0006	46.00	0.0017	0.0004347
As	75	3	He	0.002	0.0004	32.00	0.0017	0.0004347
Sr	88	3	He	0.104	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.062	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.108	0.0016	100.00	0.0078	0.0007762
Mo	98	3	He	0.136	0.0035	220.01	0.022	0.0005162
Mo	98	3	He	0.227	0.0055	350.02	0.022	0.0005162
Mo	98	3	He	0.175	0.0044	270.01	0.022	0.0005162
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	-0.133	0.0137	860.06	0.0143	0.01559
Sn	120	3	He	0.013	0.0158	1000.08	0.0143	0.01559
Sn	120	3	He	1.99	0.044	2718.47	0.0143	0.01559
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.111	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.038	0.0005	30.00	0.0044	0.000309
Ba	137	3	He	0.188	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.044	0.0022	480.03	0.0276	0.001005
Tl	205	3	He	0.046	0.0023	490.03	0.0276	0.001005
Tl	205	3	He	0.058	0.0026	560.04	0.0276	0.001005
Pb	208	3	He	-0.009	0.0019	230.01	0.0364	0.002176
Pb	208	3	He	-0.013	0.0017	190.01	0.0364	0.002176
Pb	208	3	He	-0.007	0.0019	210.01	0.0364	0.002176
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
U	238	3	He	0.002	0.0003	70.00	0.0421	0.00024
U	238	3	He	0.001	0.0003	60.00	0.0421	0.00024
Sc	45	1	No Gas			3233193.70		
Sc	45	1	No Gas			3363228.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3460902.45		
Ge	72	1	No Gas			1420453.73		
Ge	72	1	No Gas			1471433.73		
Ge	72	1	No Gas			1509613.26		
Sc	45	2	H2			186736.99		
Sc	45	2	H2			187628.22		
Sc	45	2	H2			195134.61		
Ge	72	2	H2			151662.02		
Ge	72	2	H2			155795.81		
Ge	72	2	H2			158301.19		
In	115	2	H2			427880.89		
In	115	2	H2			421639.88		
In	115	2	H2			434131.99		
Sc	45	3	He			42522.68		
Sc	45	3	He			40667.33		
Sc	45	3	He			41710.19		
Ge	72	3	He			72191.43		
Ge	72	3	He			73436.92		
Ge	72	3	He			73145.24		
In	115	3	He			62841.49		
In	115	3	He			63393.96		
In	115	3	He			61866.97		
Tb	159	3	He			279468.34		
Tb	159	3	He			275858.12		
Tb	159	3	He			281290.07		
Bi	209	3	He			216026.83		
Bi	209	3	He			215160.86		
Bi	209	3	He			214034.00		

Quantitation Report

Data File Name	140SMPL.d
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Acq Time	2023-08-10 15:14:02
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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

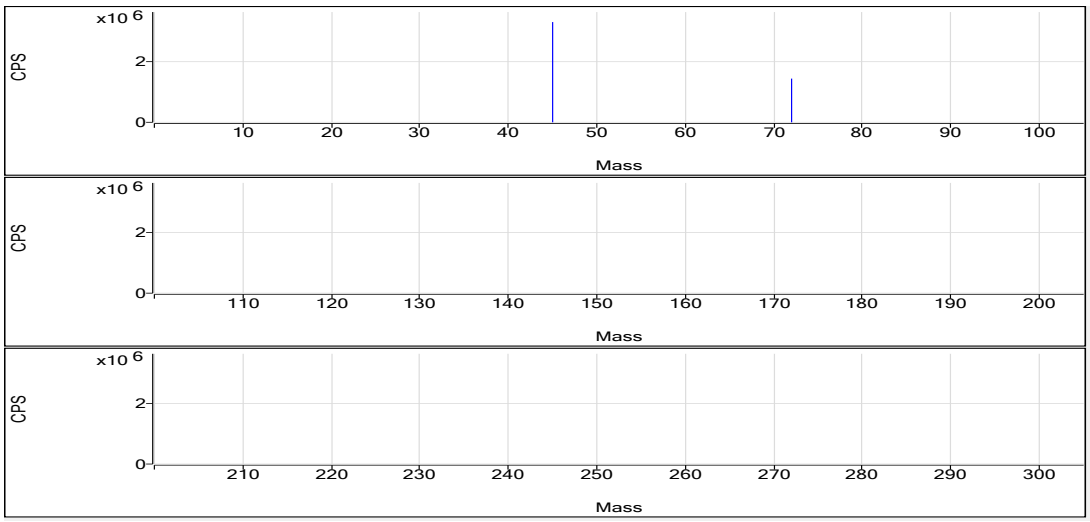
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.002	ppb	N/A	63.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.023	ppb	97.6	3.11	0.0000	Pulse	1.5000	3
Na	23	72	He	33.149	ppb	8.9	11931.80	0.1634	Pulse	0.1000	3
Mg	24	72	He	12.987	ppb	9.8	1153.42	0.0158	Pulse	0.1000	3
Al	27	72	He	9.801	ppb	33.5	250.01	0.0034	Pulse	0.1000	3
K	39	72	He	12.257	ppb	118.5	10984.44	0.1504	Pulse	0.1000	3
Ca	44	72	He	30.385	ppb	34.1	186.68	0.0026	Pulse	0.1000	3
Ti	47	72	He	0.726	ppb	85.5	33.33	0.0005	Pulse	0.1000	3
V	51	72	He	0.023	ppb	204.6	554.01	0.0076	Pulse	0.5000	3
Cr	52	72	He	-0.023	ppb	N/A	1826.85	0.0250	Pulse	0.1000	3
Mn	55	72	He	-1.071	ppb	N/A	550.03	0.0075	Pulse	0.1000	3
Fe	57	72	He	19.412	ppb	23.5	696.70	0.0095	Pulse	0.1000	3
Co	59	72	He	0.045	ppb	62.7	326.68	0.0045	Pulse	0.1000	3
Ni	60	72	He	0.955	ppb	6.4	1270.11	0.0174	Pulse	0.1000	3
Cu	63	72	He	0.040	ppb	60.1	433.36	0.0059	Pulse	0.1000	3
Zn	66	72	He	0.317	ppb	43.6	410.02	0.0056	Pulse	0.1000	3
As	75	72	He	0.050	ppb	60.7	38.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.102	ppb	17.0	100.00	0.0016	Pulse	0.1000	3
Mo	98	115	He	0.163	ppb	20.4	260.01	0.0041	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	98.6	40.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.020	ppb	50.6	9.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.150	ppb	33.9	1123.42	0.0177	Pulse	0.1000	3
Sb	121	115	He	0.022	ppb	91.4	33.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	-0.022	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Tl	205	209	He	0.012	ppb	52.4	290.02	0.0013	Pulse	0.1000	3
Pb	208	209	He	-0.001	ppb	N/A	463.35	0.0021	Pulse	0.1000	3
U	238	209	He	0.002	ppb	254.8	70.00	0.0003	Pulse	0.1000	3

ISTD Table:

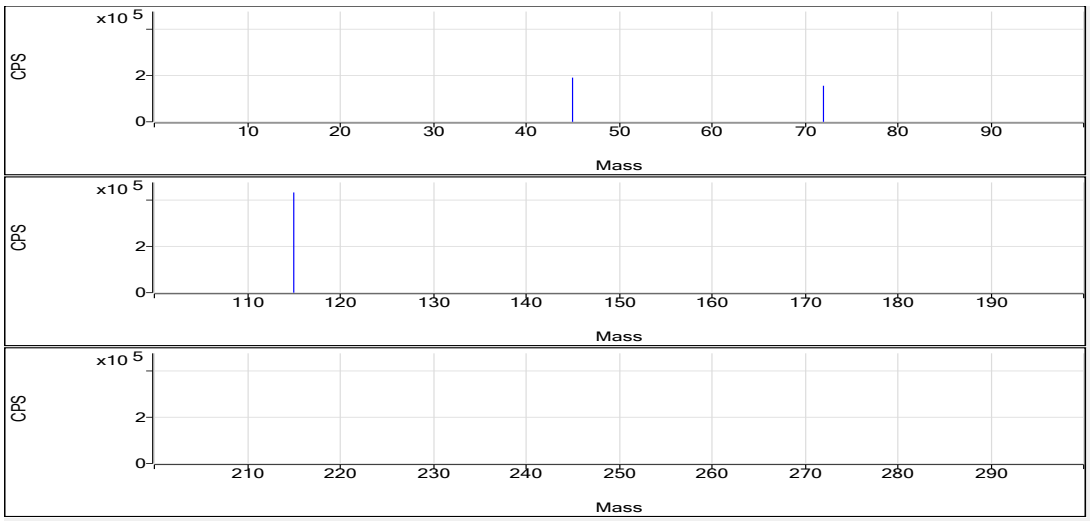
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3291165.99	2.8	101.5	Pulse	0.1000	3
No Gas	Ge	72	1434444.62	2.7	99.6	Pulse	0.1000	3
H2	Sc	45	190773.91	1.3	97.6	Pulse	0.1000	3
H2	Ge	72	155674.42	1.6	95.5	Pulse	0.1000	3
H2	In	115	432714.46	0.9	99.9	Pulse	0.1000	3
He	Sc	45	41215.30	1.4	103.1	Pulse	0.1000	3
He	Ge	72	73018.57	1.0	101.0	Pulse	0.1000	3
He	In	115	63418.91	1.6	98.2	Pulse	0.1000	3
He	Tb	159	279641.22	0.8	97.8	Pulse	0.1000	3
He	Bi	209	216879.90	0.7	97.6	Pulse	0.1000	3

No Gas

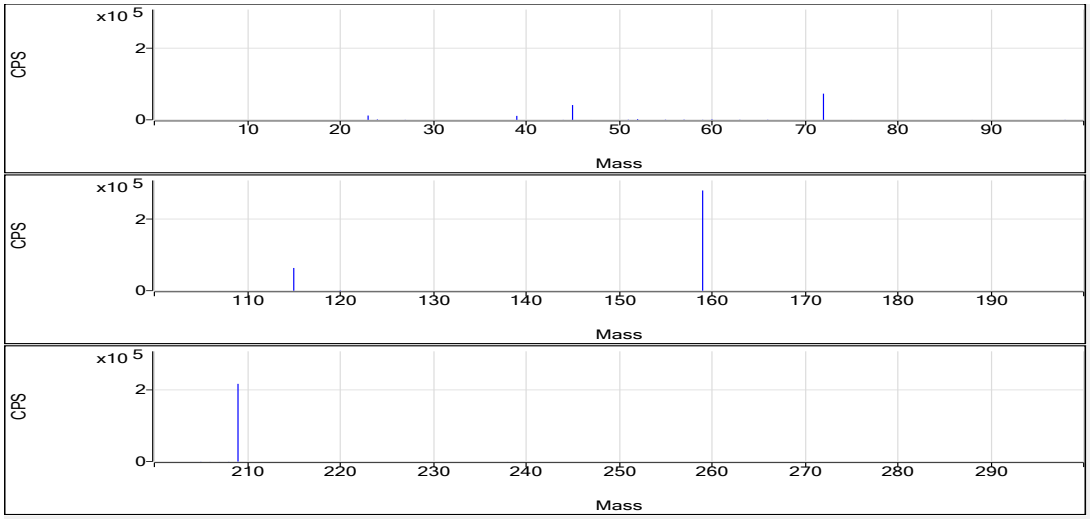


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.005	0	56.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.002	0	64.00	0.0013	4.694E-05
Be	9	1	No Gas	0.001	0	70.00	0.0013	4.694E-05
Se	78	2	H2	0.049	0	4.67	0.0004	1.089E-05
Se	78	2	H2	0.006	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Na	23	3	He	34.476	0.1657	12235.34	0.0017	0.1065
Na	23	3	He	35.198	0.1669	12095.31	0.0017	0.1065
Na	23	3	He	29.774	0.1576	11464.74	0.0017	0.1065
Mg	24	3	He	12.884	0.0157	1160.08	0.0008	0.004846
Mg	24	3	He	11.768	0.0148	1070.08	0.0008	0.004846
Mg	24	3	He	14.309	0.0169	1230.10	0.0008	0.004846
Al	27	3	He	6.817	0.0027	200.01	0.0002	0.001063
Al	27	3	He	13.321	0.0043	310.02	0.0002	0.001063
Al	27	3	He	9.265	0.0033	240.01	0.0002	0.001063
K	39	3	He	22.488	0.1561	11524.83	0.0006	0.1436
K	39	3	He	18.645	0.1539	11154.57	0.0006	0.1436
K	39	3	He	-4.361	0.1412	10273.92	0.0006	0.1436
Ca	44	3	He	39.693	0.0028	210.01	0	0.001611
Ca	44	3	He	19.23	0.0022	160.01	0	0.001611
Ca	44	3	He	32.231	0.0026	190.01	0	0.001611
Ti	47	3	He	1.068	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	0.009	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.101	0.0005	40.00	0.0003	0.0002737
V	51	3	He	-0.029	0.007	516.01	0.0117	0.007326
V	51	3	He	0.06	0.008	582.02	0.0117	0.007326
V	51	3	He	0.036	0.0078	564.01	0.0117	0.007326
Cr	52	3	He	-0.164	0.0229	1690.16	0.0152	0.02538
Cr	52	3	He	-0.063	0.0244	1770.17	0.0152	0.02538
Cr	52	3	He	0.157	0.0278	2020.21	0.0152	0.02538
Mn	55	3	He	-1.039	0.0077	570.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.921	0.0084	610.04	0.0059	0.01385
Mn	55	3	He	-1.252	0.0065	470.02	0.0059	0.01385
Fe	57	3	He	18.261	0.0092	680.03	0.0003	0.003918
Fe	57	3	He	15.536	0.0084	610.03	0.0003	0.003918
Fe	57	3	He	24.439	0.011	800.05	0.0003	0.003918
Co	59	3	He	0.076	0.0054	400.02	0.0305	0.003084
Co	59	3	He	0.039	0.0043	310.02	0.0305	0.003084
Co	59	3	He	0.021	0.0037	270.01	0.0305	0.003084
Ni	60	3	He	0.886	0.0168	1240.10	0.0088	0.009003
Ni	60	3	He	1.001	0.0178	1290.11	0.0088	0.009003
Ni	60	3	He	0.977	0.0176	1280.11	0.0088	0.009003
Cu	63	3	He	0.052	0.0062	460.03	0.0249	0.004937
Cu	63	3	He	0.012	0.0052	380.02	0.0249	0.004937
Cu	63	3	He	0.056	0.0063	460.02	0.0249	0.004937
Zn	66	3	He	0.347	0.0057	420.03	0.0025	0.004836
Zn	66	3	He	0.166	0.0052	380.02	0.0025	0.004836
Zn	66	3	He	0.438	0.0059	430.02	0.0025	0.004836
As	75	3	He	0.015	0.0005	34.00	0.0017	0.0004347
As	75	3	He	0.067	0.0006	40.00	0.0017	0.0004347
As	75	3	He	0.066	0.0005	40.00	0.0017	0.0004347
Sr	88	3	He	0.104	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.084	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.119	0.0017	110.01	0.0078	0.0007762
Mo	98	3	He	0.15	0.0038	240.01	0.022	0.0005162
Mo	98	3	He	0.201	0.0049	310.02	0.022	0.0005162
Mo	98	3	He	0.138	0.0036	230.01	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.029	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	0.144	0.0176	1110.07	0.0143	0.01559
Sn	120	3	He	0.203	0.0185	1160.09	0.0143	0.01559
Sn	120	3	He	0.102	0.017	1100.09	0.0143	0.01559
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.002	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.002	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	-0.071	0	0.00	0.0044	0.000309
Tl	205	3	He	0.019	0.0015	330.02	0.0276	0.001005
Tl	205	3	He	0.01	0.0013	280.02	0.0276	0.001005
Tl	205	3	He	0.007	0.0012	260.01	0.0276	0.001005
Pb	208	3	He	-0.006	0.0019	220.01	0.0364	0.002176
Pb	208	3	He	-0.005	0.002	240.01	0.0364	0.002176
Pb	208	3	He	0.008	0.0025	250.02	0.0364	0.002176
U	238	3	He	0.001	0.0003	60.00	0.0421	0.00024
U	238	3	He	0.007	0.0006	120.01	0.0421	0.00024
U	238	3	He	-0.002	0.0001	30.00	0.0421	0.00024
Sc	45	1	No Gas			3191819.33		
Sc	45	1	No Gas			3312185.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3369493.07		
Ge	72	1	No Gas			1393277.17		
Ge	72	1	No Gas			1441293.26		
Ge	72	1	No Gas			1468763.42		
Sc	45	2	H2			191667.30		
Sc	45	2	H2			187962.63		
Sc	45	2	H2			192691.81		
Ge	72	2	H2			155856.08		
Ge	72	2	H2			153115.66		
Ge	72	2	H2			158051.52		
In	115	2	H2			431720.35		
In	115	2	H2			429408.67		
In	115	2	H2			437014.37		
Sc	45	3	He			41399.02		
Sc	45	3	He			40556.89		
Sc	45	3	He			41689.98		
Ge	72	3	He			73849.23		
Ge	72	3	He			72461.96		
Ge	72	3	He			72744.51		
In	115	3	He			62942.07		
In	115	3	He			62781.56		
In	115	3	He			64559.40		
Tb	159	3	He			277502.28		
Tb	159	3	He			279552.14		
Tb	159	3	He			281869.25		
Bi	209	3	He			215732.99		
Bi	209	3	He			216280.07		
Bi	209	3	He			218626.64		

Quantitation Report

Data File Name	141SMPL.d
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Sample Name	RINSE
Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

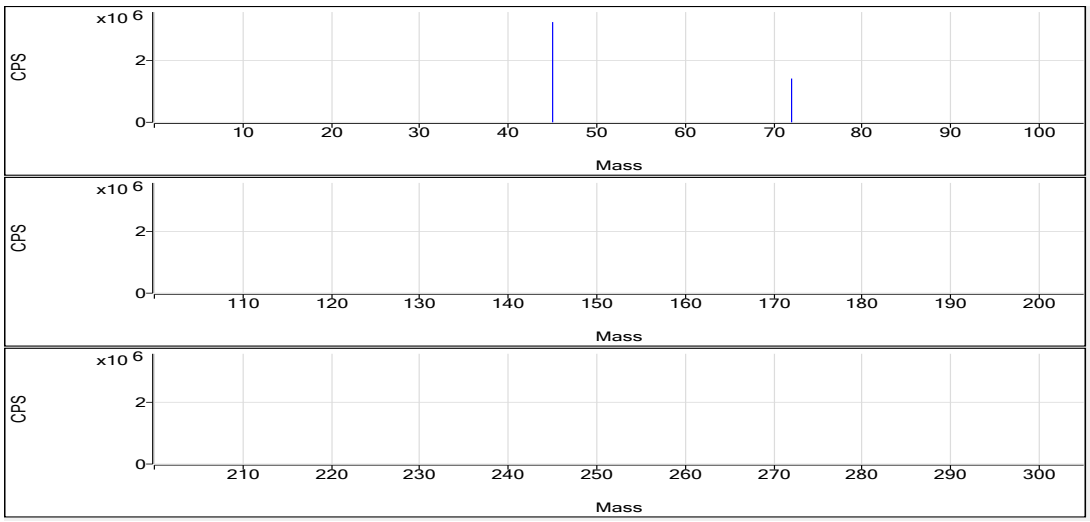
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.006	ppb	N/A	55.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.034	ppb	69.6	3.78	0.0000	Pulse	1.5000	3
Na	23	72	He	30.215	ppb	6.4	11618.21	0.1584	Pulse	0.1000	3
Mg	24	72	He	11.241	ppb	24.1	1050.07	0.0143	Pulse	0.1000	3
Al	27	72	He	7.085	ppb	74.3	203.34	0.0028	Pulse	0.1000	3
K	39	72	He	17.441	ppb	25.6	11244.70	0.1533	Pulse	0.1000	3
Ca	44	72	He	28.595	ppb	17.6	183.34	0.0025	Pulse	0.1000	3
Ti	47	72	He	0.177	ppb	640.1	23.33	0.0003	Pulse	0.1000	3
V	51	72	He	0.078	ppb	25.2	604.02	0.0082	Pulse	0.5000	3
Cr	52	72	He	0.070	ppb	35.0	1940.20	0.0264	Pulse	0.1000	3
Mn	55	72	He	-1.023	ppb	N/A	573.36	0.0078	Pulse	0.1000	3
Fe	57	72	He	18.176	ppb	22.6	673.38	0.0092	Pulse	0.1000	3
Co	59	72	He	0.051	ppb	38.4	340.02	0.0046	Pulse	0.1000	3
Ni	60	72	He	1.007	ppb	9.5	1310.11	0.0179	Pulse	0.1000	3
Cu	63	72	He	0.030	ppb	55.0	416.69	0.0057	Pulse	0.1000	3
Zn	66	72	He	0.120	ppb	364.6	376.68	0.0051	Pulse	0.1000	3
As	75	72	He	0.032	ppb	85.2	36.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.109	ppb	22.1	103.33	0.0016	Pulse	0.1000	3
Mo	98	115	He	0.117	ppb	43.6	196.68	0.0031	Pulse	0.1000	3
Ag	107	115	He	0.012	ppb	45.4	63.33	0.0010	Pulse	0.1000	3
Cd	111	115	He	-0.004	ppb	N/A	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.057	ppb	217.3	1040.08	0.0164	Pulse	0.1000	3
Sb	121	115	He	0.022	ppb	68.6	33.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.025	ppb	162.1	26.67	0.0004	Pulse	0.1000	3
Tl	205	209	He	0.012	ppb	43.6	286.68	0.0013	Pulse	0.1000	3
Pb	208	209	He	-0.010	ppb	N/A	390.01	0.0018	Pulse	0.1000	3
U	238	209	He	0.005	ppb	89.9	96.67	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3255333.28	2.6	100.4	Pulse	0.1000	3
No Gas	Ge	72	1421073.47	2.4	98.7	Pulse	0.1000	3
H2	Sc	45	189577.76	2.5	97.0	Pulse	0.1000	3
H2	Ge	72	156304.35	3.8	95.9	Pulse	0.1000	3
H2	In	115	432816.75	1.4	99.9	Pulse	0.1000	3
He	Sc	45	42522.35	1.2	106.3	Pulse	0.1000	3
He	Ge	72	73363.87	0.6	101.5	Pulse	0.1000	3
He	In	115	63413.06	0.4	98.2	Pulse	0.1000	3
He	Tb	159	279876.29	0.5	97.9	Pulse	0.1000	3
He	Bi	209	216243.31	0.5	97.3	Pulse	0.1000	3

No Gas



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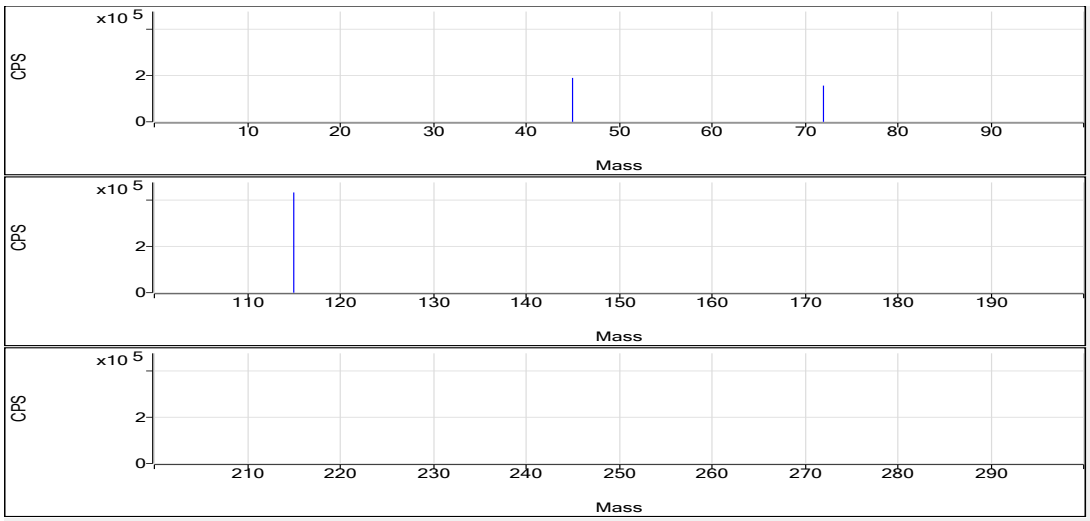
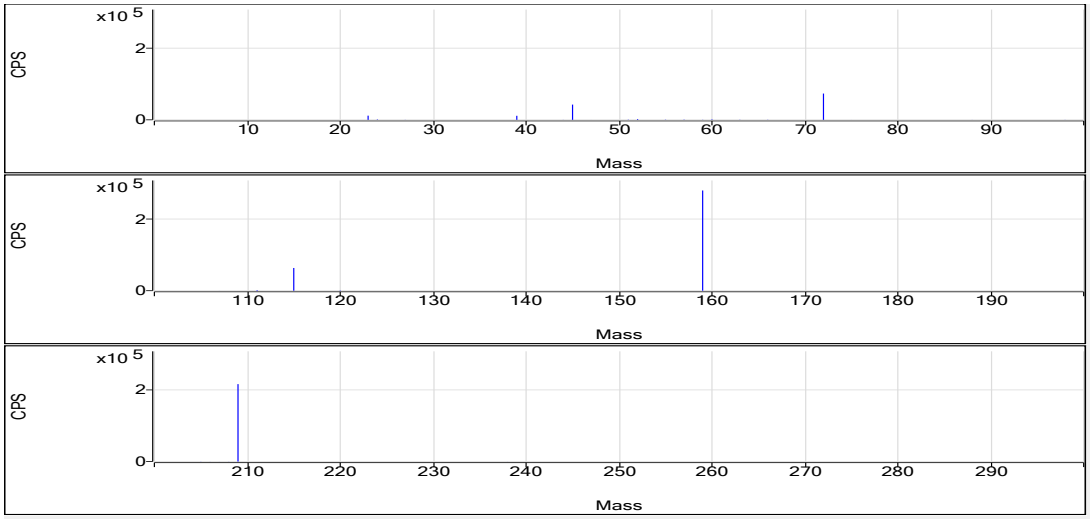


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.002	0	62.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.01	0	48.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.006	0	56.00	0.0013	4.694E-05
Se	78	2	H2	0.061	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.028	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.014	0	2.67	0.0004	1.089E-05
Na	23	3	He	31.532	0.1606	11865.06	0.0017	0.1065
Na	23	3	He	31.132	0.1599	11664.91	0.0017	0.1065
Na	23	3	He	27.982	0.1545	11324.66	0.0017	0.1065
Mg	24	3	He	8.383	0.0119	880.05	0.0008	0.004846
Mg	24	3	He	13.768	0.0165	1200.09	0.0008	0.004846
Mg	24	3	He	11.571	0.0146	1070.08	0.0008	0.004846
Al	27	3	He	3.449	0.0019	140.01	0.0002	0.001063
Al	27	3	He	4.686	0.0022	160.01	0.0002	0.001063
Al	27	3	He	13.121	0.0042	310.01	0.0002	0.001063
K	39	3	He	19.716	0.1545	11414.84	0.0006	0.1436
K	39	3	He	20.316	0.1549	11294.71	0.0006	0.1436
K	39	3	He	12.292	0.1504	11024.54	0.0006	0.1436
Ca	44	3	He	30.951	0.0026	190.01	0	0.001611
Ca	44	3	He	32.011	0.0026	190.01	0	0.001611
Ca	44	3	He	22.822	0.0023	170.01	0	0.001611
Ti	47	3	He	0.528	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	1.095	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
V	51	3	He	0.089	0.0084	618.02	0.0117	0.007326
V	51	3	He	0.089	0.0084	610.02	0.0117	0.007326
V	51	3	He	0.055	0.008	584.02	0.0117	0.007326
Cr	52	3	He	0.093	0.0268	1980.21	0.0152	0.02538
Cr	52	3	He	0.071	0.0265	1930.21	0.0152	0.02538
Cr	52	3	He	0.045	0.0261	1910.19	0.0152	0.02538
Mn	55	3	He	-1.04	0.0077	570.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.814	0.009	660.04	0.0059	0.01385
Mn	55	3	He	-1.214	0.0067	490.02	0.0059	0.01385
Fe	57	3	He	13.58	0.0079	580.03	0.0003	0.003918
Fe	57	3	He	21.5	0.0101	740.05	0.0003	0.003918
Fe	57	3	He	19.448	0.0096	700.05	0.0003	0.003918
Co	59	3	He	0.072	0.0053	390.02	0.0305	0.003084
Co	59	3	He	0.034	0.0041	300.01	0.0305	0.003084
Co	59	3	He	0.046	0.0045	330.02	0.0305	0.003084
Ni	60	3	He	1.116	0.0188	1390.12	0.0088	0.009003
Ni	60	3	He	0.941	0.0173	1260.10	0.0088	0.009003
Ni	60	3	He	0.963	0.0175	1280.10	0.0088	0.009003
Cu	63	3	He	0.041	0.006	440.03	0.0249	0.004937
Cu	63	3	He	0.011	0.0052	380.02	0.0249	0.004937
Cu	63	3	He	0.037	0.0059	430.02	0.0249	0.004937
Zn	66	3	He	0.511	0.0061	450.02	0.0025	0.004836
Zn	66	3	He	-0.35	0.004	290.01	0.0025	0.004836
Zn	66	3	He	0.198	0.0053	390.02	0.0025	0.004836
As	75	3	He	0.015	0.0005	34.00	0.0017	0.0004347
As	75	3	He	0.018	0.0005	34.00	0.0017	0.0004347
As	75	3	He	0.064	0.0005	40.00	0.0017	0.0004347
Sr	88	3	He	0.123	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.123	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.081	0.0014	90.00	0.0078	0.0007762
Mo	98	3	He	0.084	0.0024	150.01	0.022	0.0005162
Mo	98	3	He	0.092	0.0025	160.01	0.022	0.0005162
Mo	98	3	He	0.176	0.0044	280.01	0.022	0.0005162
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Sn	120	3	He	-0.086	0.0144	910.06	0.0143	0.01559
Sn	120	3	He	0.139	0.0176	1110.09	0.0143	0.01559
Sn	120	3	He	0.117	0.0173	1100.08	0.0143	0.01559
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	0.002	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.002	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.073	0.0006	40.00	0.0044	0.000309
Tl	205	3	He	0.009	0.0012	270.01	0.0276	0.001005
Tl	205	3	He	0.009	0.0012	270.01	0.0276	0.001005
Tl	205	3	He	0.017	0.0015	320.02	0.0276	0.001005
Pb	208	3	He	-0.008	0.0019	240.01	0.0364	0.002176
Pb	208	3	He	-0.01	0.0018	180.01	0.0364	0.002176
Pb	208	3	He	-0.013	0.0017	210.01	0.0364	0.002176
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.01	0.0006	140.01	0.0421	0.00024
U	238	3	He	0.001	0.0003	60.00	0.0421	0.00024
Sc	45	1	No Gas			3165184.64		
Sc	45	1	No Gas			3270094.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3330721.20		
Ge	72	1	No Gas			1382403.89		
Ge	72	1	No Gas			1436539.67		
Ge	72	1	No Gas			1444276.85		
Sc	45	2	H2			186804.80		
Sc	45	2	H2			186895.99		
Sc	45	2	H2			195032.50		
Ge	72	2	H2			154065.98		
Ge	72	2	H2			151731.87		
Ge	72	2	H2			163115.19		
In	115	2	H2			432889.25		
In	115	2	H2			426678.55		
In	115	2	H2			438882.45		
Sc	45	3	He			41950.70		
Sc	45	3	He			42622.88		
Sc	45	3	He			42993.48		
Ge	72	3	He			73868.86		
Ge	72	3	He			72935.27		
Ge	72	3	He			73287.47		
In	115	3	He			63344.37		
In	115	3	He			63183.73		
In	115	3	He			63735.42		
Tb	159	3	He			279944.08		
Tb	159	3	He			281101.66		
Tb	159	3	He			278583.14		
Bi	209	3	He			216950.88		
Bi	209	3	He			216647.69		
Bi	209	3	He			215131.36		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:18:02
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

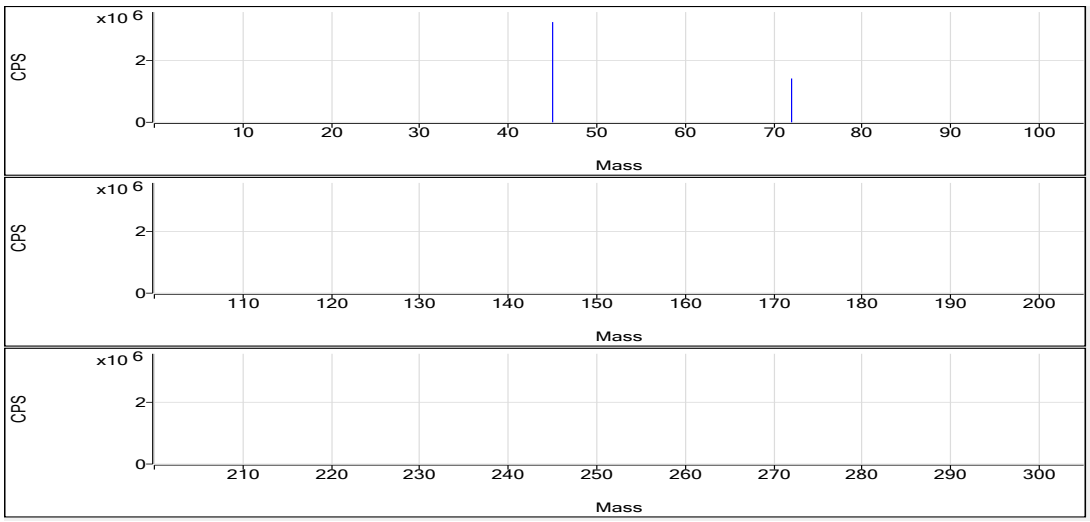
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.008	ppb	N/A	52.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.019	ppb	115.5	2.89	0.0000	Pulse	1.5000	3
Na	23	72	He	29.206	ppb	7.1	11277.97	0.1566	Pulse	0.1000	3
Mg	24	72	He	12.804	ppb	17.2	1126.75	0.0156	Pulse	0.1000	3
Al	27	72	He	7.308	ppb	30.9	203.34	0.0028	Pulse	0.1000	3
K	39	72	He	27.155	ppb	46.1	11421.48	0.1586	Pulse	0.1000	3
Ca	44	72	He	30.068	ppb	28.6	183.34	0.0025	Pulse	0.1000	3
Ti	47	72	He	-0.354	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
V	51	72	He	0.007	ppb	473.9	533.34	0.0074	Pulse	0.5000	3
Cr	52	72	He	0.087	ppb	283.8	1923.52	0.0267	Pulse	0.1000	3
Mn	55	72	He	-1.084	ppb	N/A	536.70	0.0075	Pulse	0.1000	3
Fe	57	72	He	18.306	ppb	25.8	663.37	0.0092	Pulse	0.1000	3
Co	59	72	He	0.044	ppb	79.6	320.01	0.0044	Pulse	0.1000	3
Ni	60	72	He	1.140	ppb	18.6	1370.12	0.0190	Pulse	0.1000	3
Cu	63	72	He	0.028	ppb	142.0	406.68	0.0056	Pulse	0.1000	3
Zn	66	72	He	0.273	ppb	90.2	396.69	0.0055	Pulse	0.1000	3
As	75	72	He	0.000	ppb	21160.2	31.33	0.0004	Pulse	0.5000	3
Sr	88	115	He	0.172	ppb	23.1	133.34	0.0021	Pulse	0.1000	3
Mo	98	115	He	0.140	ppb	25.7	226.68	0.0036	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	26.6	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	N/A	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.278	ppb	63.7	1230.24	0.0195	Pulse	0.1000	3
Sb	121	115	He	0.001	ppb	1426.2	16.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.074	ppb	127.8	40.00	0.0006	Pulse	0.1000	3
Tl	205	209	He	0.014	ppb	63.6	303.35	0.0014	Pulse	0.1000	3
Pb	208	209	He	-0.009	ppb	N/A	400.02	0.0019	Pulse	0.1000	3
U	238	209	He	0.002	ppb	71.5	73.33	0.0003	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3263393.08	2.2	100.7	Pulse	0.1000	3
No Gas	Ge	72	1426512.27	2.2	99.1	Pulse	0.1000	3
H2	Sc	45	189490.39	1.2	97.0	Pulse	0.1000	3
H2	Ge	72	155869.72	1.6	95.6	Pulse	0.1000	3
H2	In	115	435923.91	1.8	100.6	Pulse	0.1000	3
He	Sc	45	42161.30	1.2	105.4	Pulse	0.1000	3
He	Ge	72	72000.00	1.0	99.6	Pulse	0.1000	3
He	In	115	62912.37	1.1	97.4	Pulse	0.1000	3
He	Tb	159	278507.43	0.2	97.4	Pulse	0.1000	3
He	Bi	209	216079.99	0.1	97.2	Pulse	0.1000	3

No Gas



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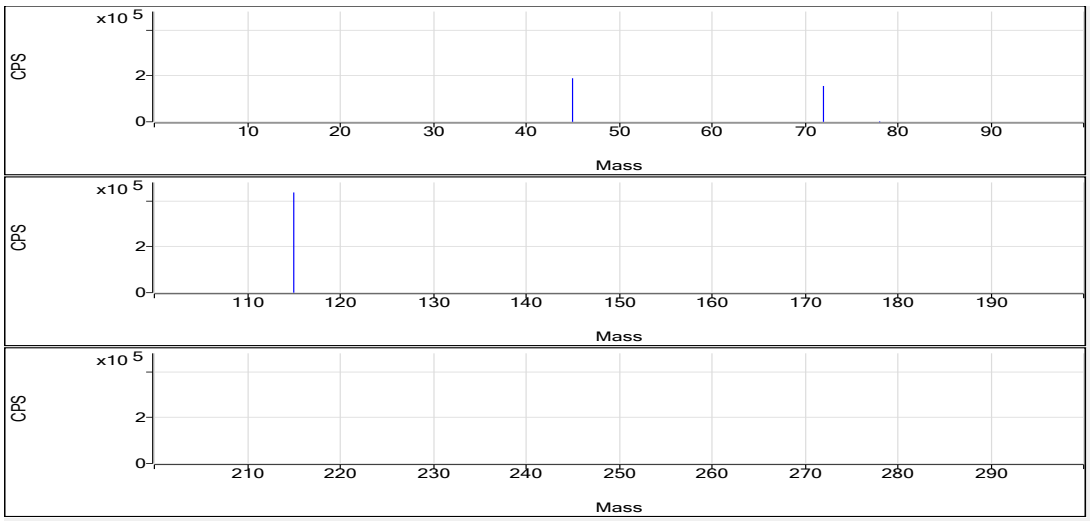
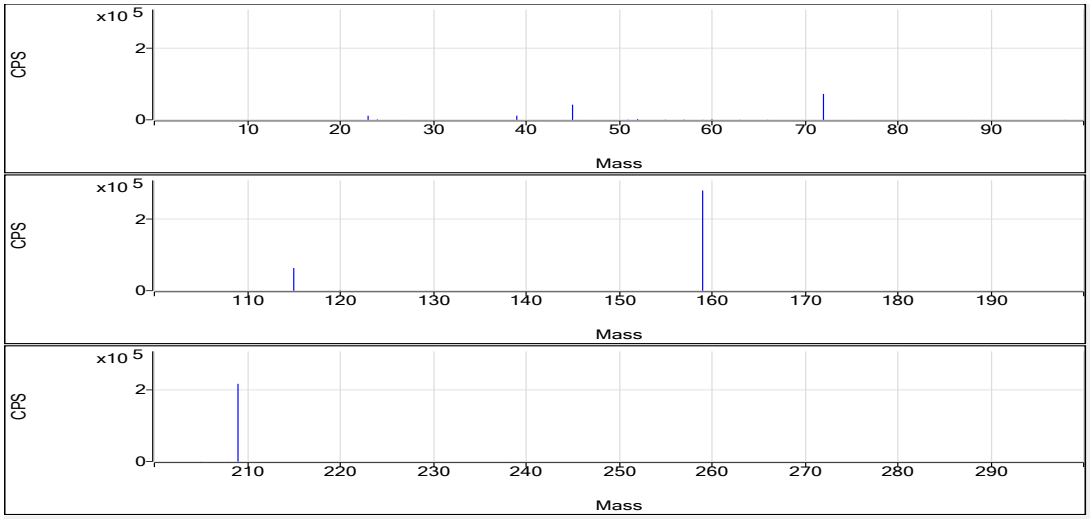


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	58.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.014	0	42.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.006	0	56.00	0.0013	4.694E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	-0.006	0	1.33	0.0004	1.089E-05
Se	78	2	H2	0.037	0	4.00	0.0004	1.089E-05
Na	23	3	He	27.691	0.154	11134.59	0.0017	0.1065
Na	23	3	He	28.358	0.1552	11044.42	0.0017	0.1065
Na	23	3	He	31.569	0.1607	11654.91	0.0017	0.1065
Mg	24	3	He	11.645	0.0147	1060.08	0.0008	0.004846
Mg	24	3	He	11.418	0.0145	1030.08	0.0008	0.004846
Mg	24	3	He	15.349	0.0178	1290.10	0.0008	0.004846
Al	27	3	He	8.205	0.003	220.01	0.0002	0.001063
Al	27	3	He	8.984	0.0032	230.01	0.0002	0.001063
Al	27	3	He	4.736	0.0022	160.01	0.0002	0.001063
K	39	3	He	40.112	0.1658	11985.17	0.0006	0.1436
K	39	3	He	26.226	0.1581	11254.68	0.0006	0.1436
K	39	3	He	15.128	0.152	11024.58	0.0006	0.1436
Ca	44	3	He	37.213	0.0028	200.01	0	0.001611
Ca	44	3	He	20.514	0.0022	160.01	0	0.001611
Ca	44	3	He	32.477	0.0026	190.01	0	0.001611
Ti	47	3	He	0.012	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.531	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	-0.542	0.0001	10.00	0.0003	0.0002737
V	51	3	He	-0.028	0.007	506.01	0.0117	0.007326
V	51	3	He	0.039	0.0078	554.01	0.0117	0.007326
V	51	3	He	0.01	0.0074	540.01	0.0117	0.007326
Cr	52	3	He	-0.15	0.0231	1670.16	0.0152	0.02538
Cr	52	3	He	0.068	0.0264	1880.18	0.0152	0.02538
Cr	52	3	He	0.343	0.0306	2220.23	0.0152	0.02538
Mn	55	3	He	-1.246	0.0065	470.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.943	0.0083	590.03	0.0059	0.01385
Mn	55	3	He	-1.062	0.0076	550.03	0.0059	0.01385
Fe	57	3	He	19.425	0.0095	690.04	0.0003	0.003918
Fe	57	3	He	22.366	0.0104	740.05	0.0003	0.003918
Fe	57	3	He	13.128	0.0077	560.03	0.0003	0.003918
Co	59	3	He	0.085	0.0057	410.02	0.0305	0.003084
Co	59	3	He	0.019	0.0037	260.01	0.0305	0.003084
Co	59	3	He	0.03	0.004	290.01	0.0305	0.003084
Ni	60	3	He	1.383	0.0212	1530.14	0.0088	0.009003
Ni	60	3	He	1.037	0.0181	1290.10	0.0088	0.009003
Ni	60	3	He	0.999	0.0178	1290.12	0.0088	0.009003
Cu	63	3	He	0.046	0.0061	440.02	0.0249	0.004937
Cu	63	3	He	-0.018	0.0045	320.01	0.0249	0.004937
Cu	63	3	He	0.056	0.0063	460.02	0.0249	0.004937
Zn	66	3	He	0.115	0.0051	370.02	0.0025	0.004836
Zn	66	3	He	0.147	0.0052	370.02	0.0025	0.004836
Zn	66	3	He	0.557	0.0062	450.02	0.0025	0.004836
As	75	3	He	0.052	0.0005	38.00	0.0017	0.0004347
As	75	3	He	-0.024	0.0004	28.00	0.0017	0.0004347
As	75	3	He	-0.028	0.0004	28.00	0.0017	0.0004347
Sr	88	3	He	0.204	0.0024	150.01	0.0078	0.0007762
Sr	88	3	He	0.183	0.0022	140.01	0.0078	0.0007762
Sr	88	3	He	0.127	0.0018	110.00	0.0078	0.0007762
Mo	98	3	He	0.177	0.0044	280.01	0.022	0.0005162
Mo	98	3	He	0.106	0.0028	180.01	0.022	0.0005162
Mo	98	3	He	0.137	0.0035	220.01	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.148	0.0177	1120.09	0.0143	0.01559
Sn	120	3	He	0.479	0.0224	1420.54	0.0143	0.01559
Sn	120	3	He	0.206	0.0185	1150.09	0.0143	0.01559
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Ba	137	3	He	0.182	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.002	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.04	0.0005	30.00	0.0044	0.000309
Tl	205	3	He	0.014	0.0014	300.01	0.0276	0.001005
Tl	205	3	He	0.006	0.0012	250.01	0.0276	0.001005
Tl	205	3	He	0.024	0.0017	360.02	0.0276	0.001005
Pb	208	3	He	-0.003	0.0021	270.02	0.0364	0.002176
Pb	208	3	He	-0.022	0.0014	150.01	0.0364	0.002176
Pb	208	3	He	-0.003	0.0021	260.01	0.0364	0.002176
U	238	3	He	0.002	0.0003	70.00	0.0421	0.00024
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.001	0.0003	60.00	0.0421	0.00024
Sc	45	1	No Gas			3182565.89		
Sc	45	1	No Gas			3289582.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3318031.20		
Ge	72	1	No Gas			1390564.82		
Ge	72	1	No Gas			1441000.29		
Ge	72	1	No Gas			1447971.70		
Sc	45	2	H2			191495.08		
Sc	45	2	H2			187131.40		
Sc	45	2	H2			189844.70		
Ge	72	2	H2			157543.29		
Ge	72	2	H2			153055.31		
Ge	72	2	H2			157010.55		
In	115	2	H2			439151.13		
In	115	2	H2			426851.87		
In	115	2	H2			441768.74		
Sc	45	3	He			41770.14		
Sc	45	3	He			42713.10		
Sc	45	3	He			42000.67		
Ge	72	3	He			72290.87		
Ge	72	3	He			71176.59		
Ge	72	3	He			72532.55		
In	115	3	He			63303.58		
In	115	3	He			63374.24		
In	115	3	He			62088.07		
Tb	159	3	He			278134.61		
Tb	159	3	He			278116.17		
Tb	159	3	He			279271.52		
Bi	209	3	He			216037.05		
Bi	209	3	He			215834.31		
Bi	209	3	He			216368.61		

Quantitation Report

Data File Name	143_CCV.d
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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

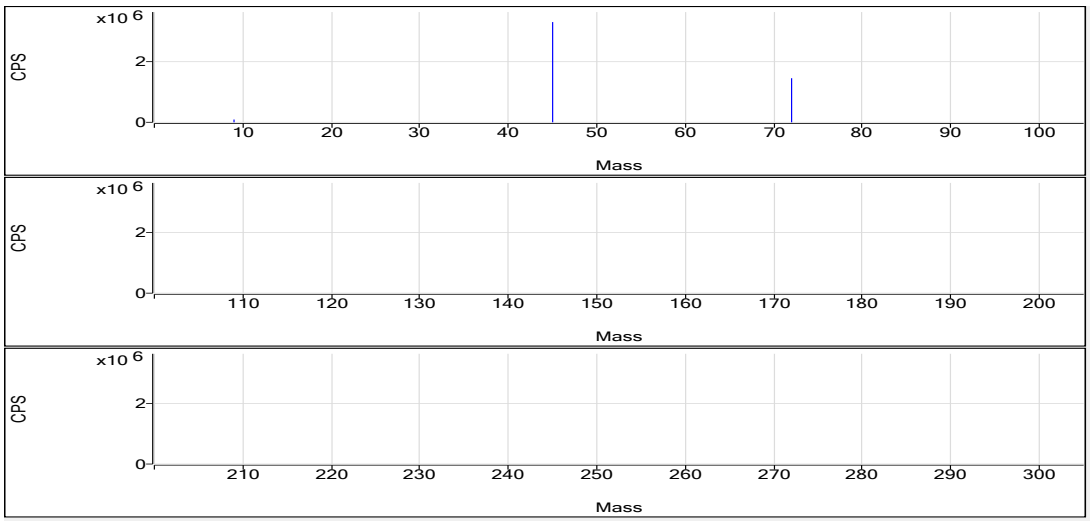
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	47.754	ppb	3.4	90593.57	0.0628	Pulse	0.5000	3
Se	78	72	H2	53.848	ppb	2.6	3318.17	0.0210	Pulse	1.5000	3
Na	23	72	He	5536.765	ppb	1.1	705182.49	9.6176	Pulse	0.1000	3
Mg	24	72	He	5431.794	ppb	1.0	336140.96	4.5844	Pulse	0.1000	3
Al	27	72	He	5341.088	ppb	1.7	94611.24	1.2904	Pulse	0.1000	3
K	39	72	He	5326.937	ppb	1.5	226210.69	3.0852	Pulse	0.1000	3
Ca	44	72	He	5439.955	ppb	3.2	12509.07	0.1706	Pulse	0.1000	3
Ti	47	72	He	5422.179	ppb	0.2	99728.79	1.3600	Pulse	0.1000	3
V	51	72	He	537.686	ppb	0.6	461724.97	6.2970	Pulse	0.5000	3
Cr	52	72	He	536.555	ppb	1.2	600917.22	8.1957	Pulse	0.1000	3
Mn	55	72	He	525.643	ppb	1.5	228500.84	3.1164	Pulse	0.1000	3
Fe	57	72	He	5329.580	ppb	0.6	113510.63	1.5480	Pulse	0.1000	3
Co	59	72	He	534.970	ppb	1.1	1196999.07	16.3253	Pulse	0.1000	3
Ni	60	72	He	532.433	ppb	1.2	343939.15	4.6909	Pulse	0.1000	3
Cu	63	72	He	535.053	ppb	1.3	978668.66	13.3476	Pulse	0.1000	3
Zn	66	72	He	527.947	ppb	0.7	95460.49	1.3019	Pulse	0.1000	3
As	75	72	He	529.623	ppb	1.5	67567.20	0.9215	Pulse	0.5000	3
Sr	88	115	He	54.119	ppb	1.6	26692.37	0.4238	Pulse	0.1000	3
Mo	98	115	He	53.331	ppb	3.5	73963.50	1.1749	Pulse	0.1000	3
Ag	107	115	He	53.285	ppb	2.5	152675.59	2.4250	Pulse	0.1000	3
Cd	111	115	He	52.952	ppb	3.3	16004.48	0.2542	Pulse	0.5000	3
Sn	120	115	He	52.956	ppb	2.6	48518.46	0.7706	Pulse	0.1000	3
Sb	121	115	He	53.299	ppb	3.4	41639.58	0.6614	Pulse	0.1000	3
Ba	137	115	He	523.942	ppb	2.0	144352.43	2.2924	Pulse	0.1000	3
Tl	205	209	He	52.651	ppb	1.0	317661.79	1.4565	Pulse	0.1000	3
Pb	208	209	He	52.301	ppb	0.7	415661.80	1.9058	Pulse	0.1000	3
U	238	209	He	52.028	ppb	1.4	477402.79	2.1889	Pulse	0.1000	3

ISTD Table:

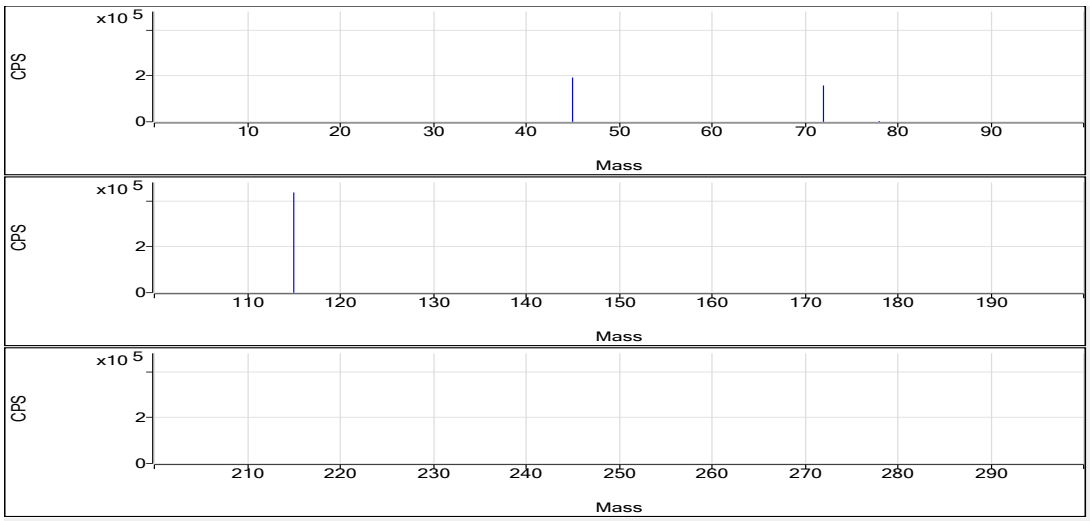
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3281858.18	2.5	101.3	Pulse	0.1000	3
No Gas	Ge	72	1443305.60	2.1	100.2	Pulse	0.1000	3
H2	Sc	45	192826.64	1.3	98.7	Pulse	0.1000	3
H2	Ge	72	158217.26	1.4	97.1	Pulse	0.1000	3
H2	In	115	436324.75	2.2	100.7	Pulse	0.1000	3
He	Sc	45	42422.07	1.2	106.1	Pulse	0.1000	3
He	Ge	72	73327.04	1.0	101.4	Pulse	0.1000	3
He	In	115	62989.19	2.8	97.5	Pulse	0.1000	3
He	Tb	159	283896.89	1.1	99.3	Pulse	0.1000	3
He	Bi	209	218108.11	0.7	98.2	Pulse	0.1000	3

No Gas

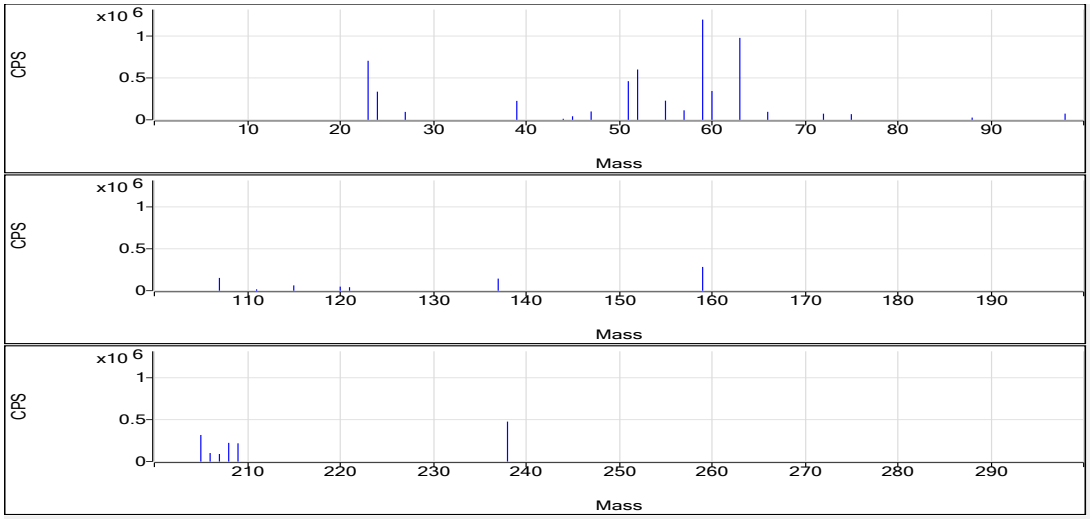


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.582	0.0652	91850.85	0.0013	4.694E-05
Be	9	1	No Gas	47.097	0.0619	89992.14	0.0013	4.694E-05
Be	9	1	No Gas	46.583	0.0613	89937.73	0.0013	4.694E-05
Se	78	2	H2	53.835	0.021	3329.72	0.0004	1.089E-05
Se	78	2	H2	55.262	0.0215	3352.40	0.0004	1.089E-05
Se	78	2	H2	52.447	0.0204	3272.38	0.0004	1.089E-05
Na	23	3	He	5482.926	9.5251	703622.18	0.0017	0.1065
Na	23	3	He	5599.982	9.7262	704784.91	0.0017	0.1065
Na	23	3	He	5527.388	9.6015	707140.38	0.0017	0.1065
Mg	24	3	He	5372.31	4.5342	334944.96	0.0008	0.004846
Mg	24	3	He	5479.397	4.6245	335104.57	0.0008	0.004846
Mg	24	3	He	5443.676	4.5944	338373.35	0.0008	0.004846
Al	27	3	He	5236.5	1.2651	93454.66	0.0002	0.001063
Al	27	3	He	5403.283	1.3054	94591.18	0.0002	0.001063
Al	27	3	He	5383.479	1.3006	95787.88	0.0002	0.001063
K	39	3	He	5303.061	3.0721	226932.57	0.0006	0.1436
K	39	3	He	5417.311	3.1351	227179.84	0.0006	0.1436
K	39	3	He	5260.44	3.0485	224519.66	0.0006	0.1436
Ca	44	3	He	5638.654	0.1767	13056.28	0	0.001611
Ca	44	3	He	5371.177	0.1684	12205.48	0	0.001611
Ca	44	3	He	5310.034	0.1665	12265.46	0	0.001611
Ti	47	3	He	5420.951	1.3597	100443.67	0.0003	0.0002737
Ti	47	3	He	5413.804	1.3579	98399.76	0.0003	0.0002737
Ti	47	3	He	5431.781	1.3625	100342.95	0.0003	0.0002737
V	51	3	He	534.752	6.2627	462626.84	0.0117	0.007326
V	51	3	He	541.192	6.3381	459270.22	0.0117	0.007326
V	51	3	He	537.115	6.2904	463277.84	0.0117	0.007326
Cr	52	3	He	529.856	8.0936	597877.84	0.0152	0.02538
Cr	52	3	He	542.958	8.2931	600940.85	0.0152	0.02538
Cr	52	3	He	536.852	8.2002	603932.96	0.0152	0.02538
Mn	55	3	He	516.557	3.0628	226248.18	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	531.334	3.15	228256.97	0.0059	0.01385
Mn	55	3	He	529.04	3.1365	230997.38	0.0059	0.01385
Fe	57	3	He	5313.969	1.5435	114014.83	0.0003	0.003918
Fe	57	3	He	5307.539	1.5416	111707.20	0.0003	0.003918
Fe	57	3	He	5367.23	1.5589	114809.86	0.0003	0.003918
Co	59	3	He	529.287	16.1519	1193139.98	0.0305	0.003084
Co	59	3	He	541.102	16.5124	1196524.90	0.0305	0.003084
Co	59	3	He	534.523	16.3116	1201332.33	0.0305	0.003084
Ni	60	3	He	529.364	4.6639	344518.94	0.0088	0.009003
Ni	60	3	He	539.632	4.7541	344496.75	0.0088	0.009003
Ni	60	3	He	528.305	4.6545	342801.75	0.0088	0.009003
Cu	63	3	He	527.278	13.1537	971665.38	0.0249	0.004937
Cu	63	3	He	540.969	13.4951	977889.99	0.0249	0.004937
Cu	63	3	He	536.912	13.394	986450.61	0.0249	0.004937
Zn	66	3	He	523.892	1.2919	95433.83	0.0025	0.004836
Zn	66	3	He	529.64	1.306	94638.62	0.0025	0.004836
Zn	66	3	He	530.308	1.3077	96309.02	0.0025	0.004836
As	75	3	He	521.438	0.9073	67022.59	0.0017	0.0004347
As	75	3	He	537.63	0.9355	67786.04	0.0017	0.0004347
As	75	3	He	529.8	0.9218	67892.98	0.0017	0.0004347
Sr	88	3	He	54.46	0.4265	26024.39	0.0078	0.0007762
Sr	88	3	He	54.736	0.4287	27226.71	0.0078	0.0007762
Sr	88	3	He	53.161	0.4163	26826.01	0.0078	0.0007762
Mo	98	3	He	55.117	1.2143	74094.19	0.022	0.0005162
Mo	98	3	He	53.459	1.1778	74808.25	0.022	0.0005162
Mo	98	3	He	51.416	1.1328	72988.05	0.022	0.0005162
Ag	107	3	He	54.772	2.4926	152096.40	0.0455	0.0004641
Ag	107	3	He	52.817	2.4036	152671.18	0.0455	0.0004641
Ag	107	3	He	52.266	2.3786	153259.19	0.0455	0.0004641
Cd	111	3	He	54.754	0.2629	16041.20	0.0048	5.152E-05
Cd	111	3	He	52.844	0.2537	16115.27	0.0048	5.152E-05
Cd	111	3	He	51.257	0.2461	15856.97	0.0048	5.152E-05
Sn	120	3	He	54.383	0.791	48264.31	0.0143	0.01559
Sn	120	3	He	52.799	0.7684	48805.87	0.0143	0.01559
Sn	120	3	He	51.684	0.7525	48485.20	0.0143	0.01559
Sb	121	3	He	54.862	0.6808	41542.68	0.0124	0.000258
Sb	121	3	He	53.697	0.6664	42324.85	0.0124	0.000258
Sb	121	3	He	51.339	0.6371	41051.20	0.0124	0.000258
Ba	137	3	He	535.795	2.3443	143046.61	0.0044	0.000309
Ba	137	3	He	514.972	2.2532	143115.47	0.0044	0.000309
Ba	137	3	He	521.06	2.2798	146895.21	0.0044	0.000309
Tl	205	3	He	53.219	1.4722	318648.04	0.0276	0.001005
Tl	205	3	He	52.21	1.4443	317128.76	0.0276	0.001005
Tl	205	3	He	52.524	1.453	317208.57	0.0276	0.001005
Pb	208	3	He	52.483	1.9124	221891.11	0.0364	0.002176
Pb	208	3	He	51.892	1.8909	223252.20	0.0364	0.002176
Pb	208	3	He	52.529	1.9141	225294.31	0.0364	0.002176
U	238	3	He	52.304	2.2005	476285.27	0.0421	0.00024
U	238	3	He	51.211	2.1546	473081.91	0.0421	0.00024
U	238	3	He	52.57	2.2117	482841.20	0.0421	0.00024
Sc	45	1	No Gas			3188113.39		
Sc	45	1	No Gas			3310388.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3347073.08		
Ge	72	1	No Gas			1408749.35		
Ge	72	1	No Gas			1453015.29		
Ge	72	1	No Gas			1468152.17		
Sc	45	2	H2			192073.67		
Sc	45	2	H2			190757.07		
Sc	45	2	H2			195649.18		
Ge	72	2	H2			158767.24		
Ge	72	2	H2			155723.86		
Ge	72	2	H2			160160.68		
In	115	2	H2			436108.51		
In	115	2	H2			426724.10		
In	115	2	H2			446141.63		
Sc	45	3	He			42913.25		
Sc	45	3	He			41910.40		
Sc	45	3	He			42442.56		
Ge	72	3	He			73869.99		
Ge	72	3	He			72462.34		
Ge	72	3	He			73648.80		
In	115	3	He			61395.30		
In	115	3	He			63897.11		
In	115	3	He			64810.48		
Tb	159	3	He			280454.37		
Tb	159	3	He			284373.37		
Tb	159	3	He			286862.94		
Bi	209	3	He			216441.25		
Bi	209	3	He			219571.48		
Bi	209	3	He			218311.60		

Quantitation Report

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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

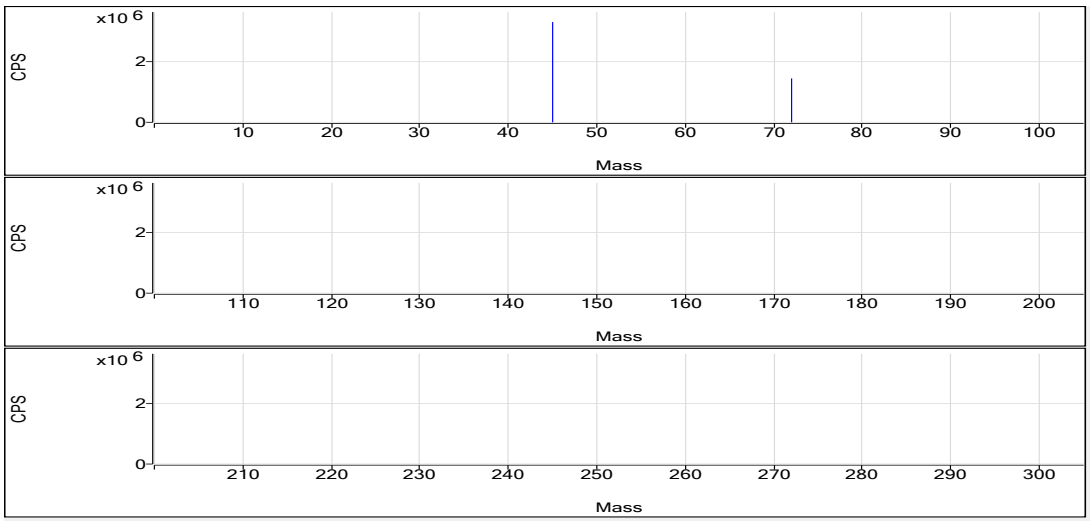
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.026	ppb	18.9	116.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.070	ppb	54.1	6.00	0.0000	Pulse	1.5000	3
Na	23	72	He	26.766	ppb	7.2	11107.80	0.1524	Pulse	0.1000	3
Mg	24	72	He	12.494	ppb	10.0	1120.08	0.0154	Pulse	0.1000	3
Al	27	72	He	8.684	ppb	13.6	230.01	0.0032	Pulse	0.1000	3
K	39	72	He	27.540	ppb	56.1	11574.91	0.1588	Pulse	0.1000	3
Ca	44	72	He	51.569	ppb	68.3	233.35	0.0032	Pulse	0.1000	3
Ti	47	72	He	2.378	ppb	58.1	63.33	0.0009	Pulse	0.1000	3
V	51	72	He	0.176	ppb	18.8	683.35	0.0094	Pulse	0.5000	3
Cr	52	72	He	0.070	ppb	117.5	1926.85	0.0265	Pulse	0.1000	3
Mn	55	72	He	-0.874	ppb	N/A	633.37	0.0087	Pulse	0.1000	3
Fe	57	72	He	14.772	ppb	24.4	596.70	0.0082	Pulse	0.1000	3
Co	59	72	He	0.197	ppb	3.8	663.38	0.0091	Pulse	0.1000	3
Ni	60	72	He	1.094	ppb	3.1	1356.78	0.0186	Pulse	0.1000	3
Cu	63	72	He	0.145	ppb	54.4	623.37	0.0086	Pulse	0.1000	3
Zn	66	72	He	0.062	ppb	391.5	363.35	0.0050	Pulse	0.1000	3
As	75	72	He	0.187	ppb	51.3	55.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.178	ppb	28.4	136.67	0.0022	Pulse	0.1000	3
Mo	98	115	He	0.150	ppb	4.6	240.01	0.0038	Pulse	0.1000	3
Ag	107	115	He	0.024	ppb	22.4	96.67	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	251.5	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.140	ppb	75.4	1106.76	0.0176	Pulse	0.1000	3
Sb	121	115	He	0.090	ppb	59.3	86.67	0.0014	Pulse	0.1000	3
Ba	137	115	He	0.232	ppb	45.2	83.34	0.0013	Pulse	0.1000	3
Tl	205	209	He	0.246	ppb	15.8	1706.85	0.0078	Pulse	0.1000	3
Pb	208	209	He	0.013	ppb	80.4	576.70	0.0026	Pulse	0.1000	3
U	238	209	He	0.029	ppb	26.0	323.35	0.0015	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3298272.77	1.5	101.8	Pulse	0.1000	3
No Gas	Ge	72	1443967.27	1.2	100.3	Pulse	0.1000	3
H2	Sc	45	193654.87	1.7	99.1	Pulse	0.1000	3
H2	Ge	72	157778.79	0.2	96.8	Pulse	0.1000	3
H2	In	115	433081.76	1.1	99.9	Pulse	0.1000	3
He	Sc	45	42937.06	1.7	107.4	Pulse	0.1000	3
He	Ge	72	72874.57	1.5	100.8	Pulse	0.1000	3
He	In	115	62953.63	0.4	97.5	Pulse	0.1000	3
He	Tb	159	280903.91	0.8	98.2	Pulse	0.1000	3
He	Bi	209	218460.99	0.9	98.3	Pulse	0.1000	3

No Gas



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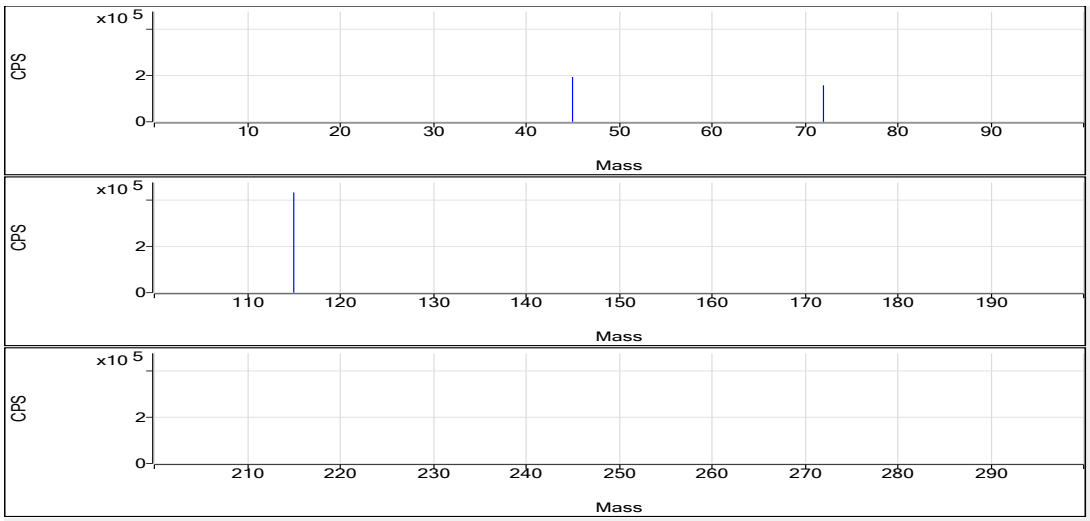
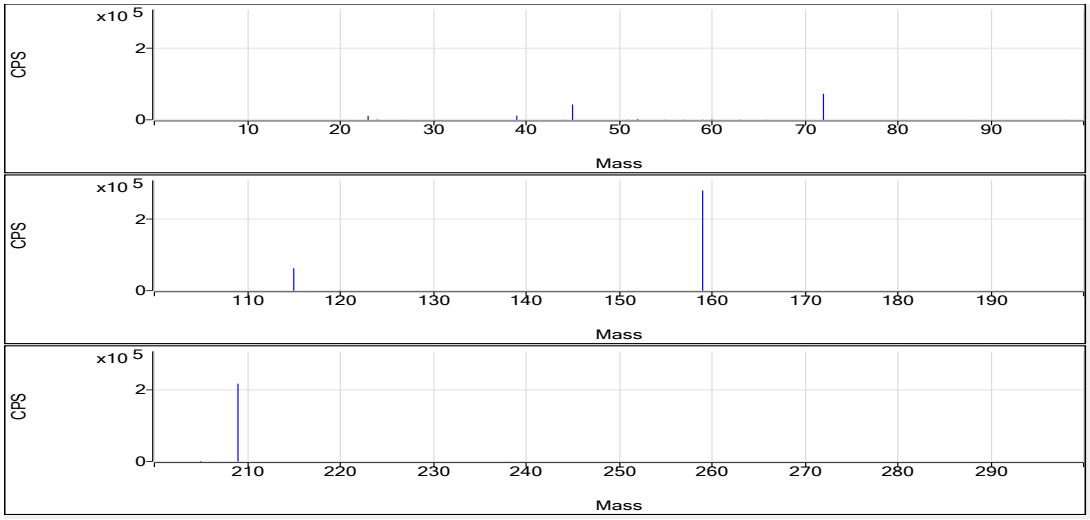


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.031	0.0001	126.00	0.0013	4.694E-05
Be	9	1	No Gas	0.023	0.0001	112.00	0.0013	4.694E-05
Be	9	1	No Gas	0.023	0.0001	112.00	0.0013	4.694E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.092	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.091	0	7.33	0.0004	1.089E-05
Na	23	3	He	28.721	0.1558	11384.72	0.0017	0.1065
Na	23	3	He	26.723	0.1524	10924.29	0.0017	0.1065
Na	23	3	He	24.853	0.1491	11014.40	0.0017	0.1065
Mg	24	3	He	11.783	0.0148	1080.08	0.0008	0.004846
Mg	24	3	He	13.939	0.0166	1190.09	0.0008	0.004846
Mg	24	3	He	11.76	0.0148	1090.08	0.0008	0.004846
Al	27	3	He	8.07	0.003	220.01	0.0002	0.001063
Al	27	3	He	10.043	0.0035	250.02	0.0002	0.001063
Al	27	3	He	7.939	0.003	220.01	0.0002	0.001063
K	39	3	He	44.33	0.1681	12285.52	0.0006	0.1436
K	39	3	He	24.389	0.1571	11264.63	0.0006	0.1436
K	39	3	He	13.901	0.1513	11174.57	0.0006	0.1436
Ca	44	3	He	36.256	0.0027	200.01	0	0.001611
Ca	44	3	He	91.837	0.0045	320.02	0	0.001611
Ca	44	3	He	26.614	0.0024	180.01	0	0.001611
Ti	47	3	He	3.82	0.0012	90.00	0.0003	0.0002737
Ti	47	3	He	2.245	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	1.068	0.0005	40.00	0.0003	0.0002737
V	51	3	He	0.15	0.0091	664.02	0.0117	0.007326
V	51	3	He	0.213	0.0098	704.02	0.0117	0.007326
V	51	3	He	0.163	0.0092	682.02	0.0117	0.007326
Cr	52	3	He	0.095	0.0268	1960.18	0.0152	0.02538
Cr	52	3	He	0.138	0.0275	1970.19	0.0152	0.02538
Cr	52	3	He	-0.022	0.0251	1850.19	0.0152	0.02538
Mn	55	3	He	-0.701	0.0097	710.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.906	0.0085	610.04	0.0059	0.01385
Mn	55	3	He	-1.016	0.0079	580.03	0.0059	0.01385
Fe	57	3	He	15.764	0.0085	620.04	0.0003	0.003918
Fe	57	3	He	17.77	0.0091	650.03	0.0003	0.003918
Fe	57	3	He	10.783	0.007	520.02	0.0003	0.003918
Co	59	3	He	0.19	0.0089	650.05	0.0305	0.003084
Co	59	3	He	0.196	0.0091	650.04	0.0305	0.003084
Co	59	3	He	0.205	0.0093	690.04	0.0305	0.003084
Ni	60	3	He	1.108	0.0187	1370.11	0.0088	0.009003
Ni	60	3	He	1.118	0.0188	1350.12	0.0088	0.009003
Ni	60	3	He	1.055	0.0183	1350.11	0.0088	0.009003
Cu	63	3	He	0.06	0.0064	470.02	0.0249	0.004937
Cu	63	3	He	0.216	0.0103	740.04	0.0249	0.004937
Cu	63	3	He	0.16	0.0089	660.04	0.0249	0.004937
Zn	66	3	He	-0.186	0.0044	320.02	0.0025	0.004836
Zn	66	3	He	0.302	0.0056	400.02	0.0025	0.004836
Zn	66	3	He	0.071	0.005	370.02	0.0025	0.004836
As	75	3	He	0.254	0.0009	64.00	0.0017	0.0004347
As	75	3	He	0.231	0.0008	60.00	0.0017	0.0004347
As	75	3	He	0.077	0.0006	42.00	0.0017	0.0004347
Sr	88	3	He	0.184	0.0022	140.01	0.0078	0.0007762
Sr	88	3	He	0.125	0.0018	110.00	0.0078	0.0007762
Sr	88	3	He	0.226	0.0025	160.01	0.0078	0.0007762
Mo	98	3	He	0.156	0.004	250.01	0.022	0.0005162
Mo	98	3	He	0.15	0.0038	240.02	0.022	0.0005162
Mo	98	3	He	0.143	0.0037	230.01	0.022	0.0005162
Ag	107	3	He	0.028	0.0017	110.00	0.0455	0.0004641
Ag	107	3	He	0.025	0.0016	100.00	0.0455	0.0004641
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.26	0.0193	1220.11	0.0143	0.01559
Sn	120	3	He	0.07	0.0166	1040.08	0.0143	0.01559
Sn	120	3	He	0.088	0.0168	1060.08	0.0143	0.01559
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.108	0.0016	100.00	0.0124	0.000258
Sb	121	3	He	0.133	0.0019	120.01	0.0124	0.000258
Ba	137	3	He	0.291	0.0016	100.01	0.0044	0.000309
Ba	137	3	He	0.294	0.0016	100.01	0.0044	0.000309
Ba	137	3	He	0.111	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	0.286	0.0089	1930.22	0.0276	0.001005
Tl	205	3	He	0.245	0.0078	1700.18	0.0276	0.001005
Tl	205	3	He	0.208	0.0068	1490.15	0.0276	0.001005
Pb	208	3	He	0.007	0.0024	270.01	0.0364	0.002176
Pb	208	3	He	0.025	0.0031	350.02	0.0364	0.002176
Pb	208	3	He	0.006	0.0024	310.02	0.0364	0.002176
U	238	3	He	0.021	0.0011	240.01	0.0421	0.00024
U	238	3	He	0.035	0.0017	370.02	0.0421	0.00024
U	238	3	He	0.033	0.0016	360.02	0.0421	0.00024
Sc	45	1	No Gas			3243299.64		
Sc	45	1	No Gas			3313591.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3337926.83		
Ge	72	1	No Gas			1428445.60		
Ge	72	1	No Gas			1440991.23		
Ge	72	1	No Gas			1462464.98		
Sc	45	2	H2			192874.82		
Sc	45	2	H2			190909.14		
Sc	45	2	H2			197180.64		
Ge	72	2	H2			158027.37		
Ge	72	2	H2			157473.09		
Ge	72	2	H2			157835.91		
In	115	2	H2			436123.27		
In	115	2	H2			427714.88		
In	115	2	H2			435407.14		
Sc	45	3	He			43575.64		
Sc	45	3	He			43104.11		
Sc	45	3	He			42131.43		
Ge	72	3	He			73075.64		
Ge	72	3	He			71699.45		
Ge	72	3	He			73848.62		
In	115	3	He			63223.13		
In	115	3	He			62731.60		
In	115	3	He			62932.07		
Tb	159	3	He			278594.70		
Tb	159	3	He			283279.72		
Tb	159	3	He			280837.30		
Bi	209	3	He			216594.80		
Bi	209	3	He			218229.74		
Bi	209	3	He			220558.43		

Quantitation Report

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Acq Time	2023-08-10 15:25:17
Sample Name	MB 410-402409/1-A @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

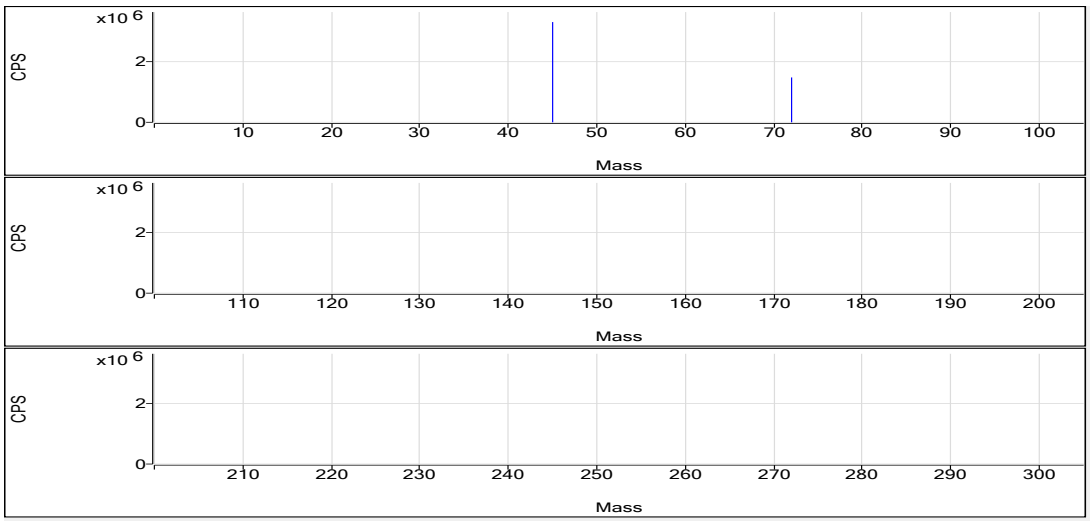
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.009	ppb	N/A	52.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.000	ppb	3399.0	1.78	0.0000	Pulse	1.5000	3
Na	23	72	He	27.348	ppb	7.6	11391.36	0.1534	Pulse	0.1000	3
Mg	24	72	He	9.550	ppb	19.4	956.73	0.0129	Pulse	0.1000	3
Al	27	72	He	8.216	ppb	32.7	226.68	0.0030	Pulse	0.1000	3
K	39	72	He	18.739	ppb	51.5	11431.46	0.1540	Pulse	0.1000	3
Ca	44	72	He	15.997	ppb	79.5	156.68	0.0021	Pulse	0.1000	3
Ti	47	72	He	-0.017	ppb	N/A	20.00	0.0003	Pulse	0.1000	3
V	51	72	He	-0.013	ppb	N/A	532.68	0.0072	Pulse	0.5000	3
Cr	52	72	He	0.193	ppb	56.3	2103.56	0.0283	Pulse	0.1000	3
Mn	55	72	He	-1.183	ppb	N/A	510.03	0.0069	Pulse	0.1000	3
Fe	57	72	He	28.327	ppb	14.8	900.06	0.0121	Pulse	0.1000	3
Co	59	72	He	0.033	ppb	26.7	303.34	0.0041	Pulse	0.1000	3
Ni	60	72	He	1.090	ppb	5.8	1380.12	0.0186	Pulse	0.1000	3
Cu	63	72	He	0.234	ppb	13.2	800.05	0.0108	Pulse	0.1000	3
Zn	66	72	He	1.592	ppb	15.9	650.04	0.0087	Pulse	0.1000	3
As	75	72	He	0.024	ppb	240.8	35.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.108	ppb	56.5	103.33	0.0016	Pulse	0.1000	3
Mo	98	115	He	0.107	ppb	39.6	183.35	0.0029	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	169.0	40.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.015	ppb	40.2	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.135	ppb	85.2	1116.75	0.0175	Pulse	0.1000	3
Sb	121	115	He	0.034	ppb	57.4	43.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.108	ppb	31.1	50.00	0.0008	Pulse	0.1000	3
Tl	205	209	He	0.033	ppb	21.7	420.02	0.0019	Pulse	0.1000	3
Pb	208	209	He	0.004	ppb	415.0	506.69	0.0023	Pulse	0.1000	3
U	238	209	He	0.002	ppb	103.7	73.33	0.0003	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3312269.33	1.9	102.2	Pulse	0.1000	3
No Gas	Ge	72	1482340.29	1.3	103.0	Pulse	0.1000	3
H2	Sc	45	192620.98	1.5	98.6	Pulse	0.1000	3
H2	Ge	72	160515.78	0.6	98.5	Pulse	0.1000	3
H2	In	115	438224.68	0.9	101.1	Pulse	0.1000	3
He	Sc	45	41382.79	2.4	103.5	Pulse	0.1000	3
He	Ge	72	74258.28	1.5	102.7	Pulse	0.1000	3
He	In	115	63771.12	1.4	98.7	Pulse	0.1000	3
He	Tb	159	280607.17	0.5	98.1	Pulse	0.1000	3
He	Bi	209	219948.45	1.0	99.0	Pulse	0.1000	3

No Gas



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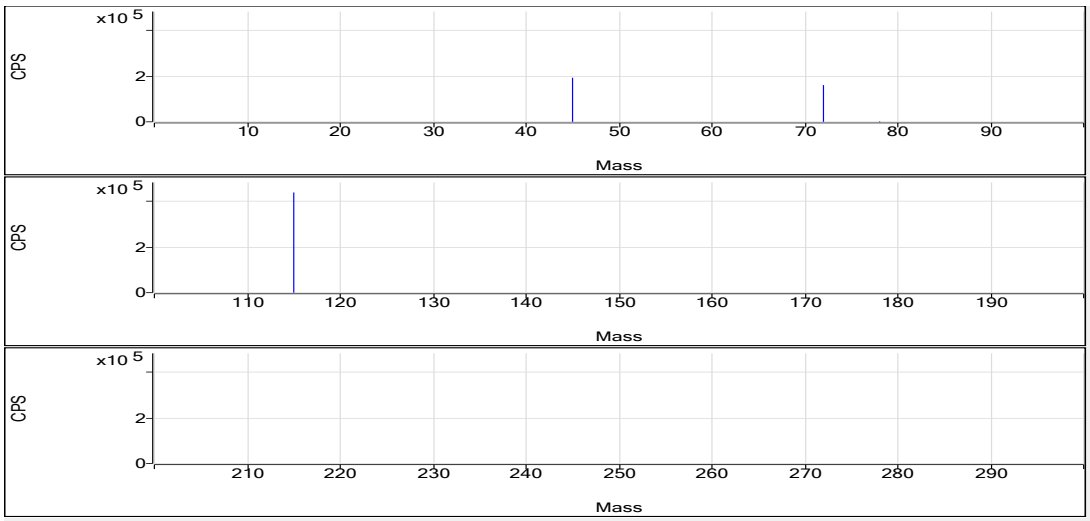
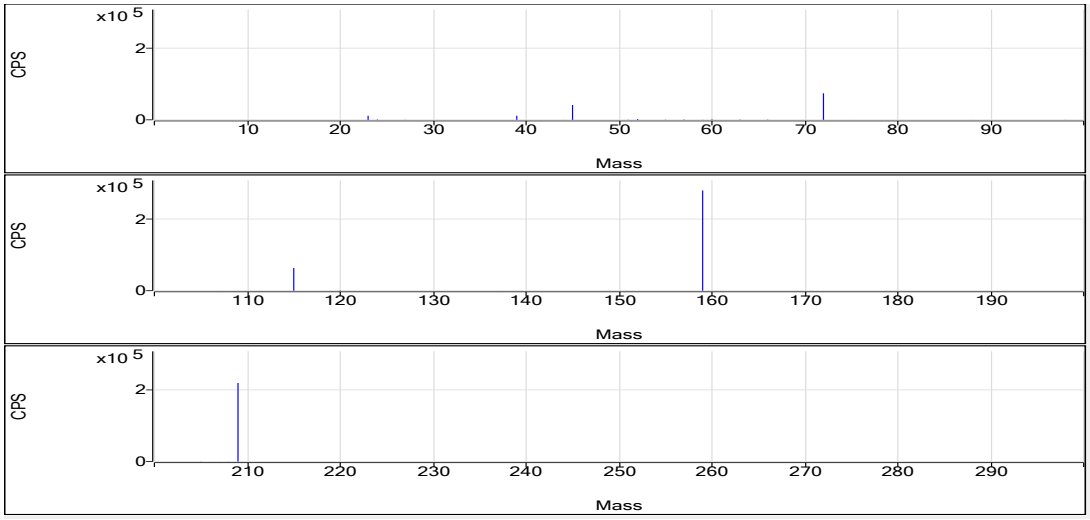


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	68.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.012	0	46.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.014	0	42.00	0.0013	4.694E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.089E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Na	23	3	He	29.354	0.1569	11454.67	0.0017	0.1065
Na	23	3	He	27.464	0.1536	11464.75	0.0017	0.1065
Na	23	3	He	25.227	0.1498	11254.67	0.0017	0.1065
Mg	24	3	He	11.148	0.0142	1040.07	0.0008	0.004846
Mg	24	3	He	9.989	0.0133	990.06	0.0008	0.004846
Mg	24	3	He	7.513	0.0112	840.05	0.0008	0.004846
Al	27	3	He	5.243	0.0023	170.01	0.0002	0.001063
Al	27	3	He	8.921	0.0032	240.01	0.0002	0.001063
Al	27	3	He	10.484	0.0036	270.01	0.0002	0.001063
K	39	3	He	27.206	0.1587	11584.92	0.0006	0.1436
K	39	3	He	20.769	0.1551	11574.88	0.0006	0.1436
K	39	3	He	8.243	0.1482	11134.59	0.0006	0.1436
Ca	44	3	He	5.463	0.0018	130.01	0	0.001611
Ca	44	3	He	30.113	0.0025	190.01	0	0.001611
Ca	44	3	He	12.415	0.002	150.01	0	0.001611
Ti	47	3	He	0.001	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.023	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.03	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.006	0.0074	540.01	0.0117	0.007326
V	51	3	He	-0.024	0.007	526.01	0.0117	0.007326
V	51	3	He	-0.021	0.0071	532.01	0.0117	0.007326
Cr	52	3	He	0.141	0.0275	2010.20	0.0152	0.02538
Cr	52	3	He	0.12	0.0272	2030.22	0.0152	0.02538
Cr	52	3	He	0.317	0.0302	2270.26	0.0152	0.02538
Mn	55	3	He	-1.164	0.007	510.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.121	0.0072	540.03	0.0059	0.01385
Mn	55	3	He	-1.265	0.0064	480.02	0.0059	0.01385
Fe	57	3	He	30.917	0.0129	940.06	0.0003	0.003918
Fe	57	3	He	23.483	0.0107	800.05	0.0003	0.003918
Fe	57	3	He	30.582	0.0128	960.06	0.0003	0.003918
Co	59	3	He	0.043	0.0044	320.01	0.0305	0.003084
Co	59	3	He	0.031	0.004	300.01	0.0305	0.003084
Co	59	3	He	0.025	0.0039	290.01	0.0305	0.003084
Ni	60	3	He	1.11	0.0188	1370.11	0.0088	0.009003
Ni	60	3	He	1.14	0.019	1420.13	0.0088	0.009003
Ni	60	3	He	1.02	0.018	1350.13	0.0088	0.009003
Cu	63	3	He	0.214	0.0103	750.05	0.0249	0.004937
Cu	63	3	He	0.27	0.0117	870.07	0.0249	0.004937
Cu	63	3	He	0.218	0.0104	780.04	0.0249	0.004937
Zn	66	3	He	1.321	0.0081	590.04	0.0025	0.004836
Zn	66	3	He	1.632	0.0088	660.04	0.0025	0.004836
Zn	66	3	He	1.824	0.0093	700.05	0.0025	0.004836
As	75	3	He	0.081	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.027	0.0005	36.00	0.0017	0.0004347
As	75	3	He	-0.036	0.0004	28.00	0.0017	0.0004347
Sr	88	3	He	0.043	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	0.118	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.163	0.0021	130.00	0.0078	0.0007762
Mo	98	3	He	0.156	0.004	250.02	0.022	0.0005162
Mo	98	3	He	0.082	0.0023	150.01	0.022	0.0005162
Mo	98	3	He	0.084	0.0024	150.01	0.022	0.0005162
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.021	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.207	0.0185	1170.10	0.0143	0.01559
Sn	120	3	He	0.195	0.0184	1190.09	0.0143	0.01559
Sn	120	3	He	0.002	0.0156	990.06	0.0143	0.01559
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.029	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.056	0.0009	60.00	0.0124	0.000258
Ba	137	3	He	0.11	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.141	0.0009	60.00	0.0044	0.000309
Ba	137	3	He	0.074	0.0006	40.00	0.0044	0.000309
Tl	205	3	He	0.037	0.002	440.02	0.0276	0.001005
Tl	205	3	He	0.025	0.0017	370.02	0.0276	0.001005
Tl	205	3	He	0.037	0.002	450.03	0.0276	0.001005
Pb	208	3	He	0.018	0.0028	340.02	0.0364	0.002176
Pb	208	3	He	0.004	0.0023	250.01	0.0364	0.002176
Pb	208	3	He	-0.012	0.0018	160.01	0.0364	0.002176
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.003	0.0004	80.00	0.0421	0.00024
U	238	3	He	0	0.0002	50.00	0.0421	0.00024
Sc	45	1	No Gas			3357112.45		
Sc	45	1	No Gas			3337262.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3242433.08		
Ge	72	1	No Gas			1497208.88		
Ge	72	1	No Gas			1488552.32		
Ge	72	1	No Gas			1461259.67		
Sc	45	2	H2			194393.42		
Sc	45	2	H2			189377.65		
Sc	45	2	H2			194091.87		
Ge	72	2	H2			159758.64		
Ge	72	2	H2			160262.19		
Ge	72	2	H2			161526.51		
In	115	2	H2			435230.50		
In	115	2	H2			437015.23		
In	115	2	H2			442428.31		
Sc	45	3	He			40296.61		
Sc	45	3	He			41590.05		
Sc	45	3	He			42261.71		
Ge	72	3	He			73015.25		
Ge	72	3	He			74623.82		
Ge	72	3	He			75135.77		
In	115	3	He			63133.03		
In	115	3	He			64821.52		
In	115	3	He			63384.93		
Tb	159	3	He			279138.55		
Tb	159	3	He			282207.52		
Tb	159	3	He			280475.45		
Bi	209	3	He			217864.31		
Bi	209	3	He			219846.25		
Bi	209	3	He			222134.80		

Quantitation Report

Data File Name	146SMPL.d
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Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

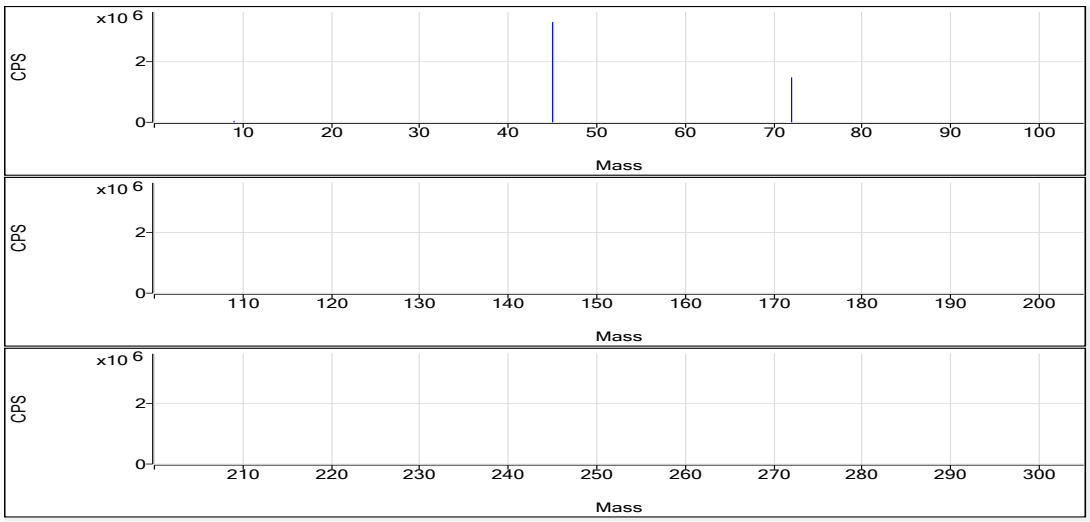
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	25.040	ppb	4.3	48414.62	0.0330	Pulse	0.5000	3
Se	78	72	H2	52.306	ppb	3.1	3325.72	0.0204	Pulse	1.5000	3
Na	23	72	He	2726.313	ppb	1.8	358440.45	4.7898	Pulse	0.1000	3
Mg	24	72	He	2688.706	ppb	1.3	170005.19	2.2717	Pulse	0.1000	3
Al	27	72	He	2651.436	ppb	1.0	47981.71	0.6411	Pulse	0.1000	3
K	39	72	He	2644.703	ppb	2.4	120032.67	1.6041	Pulse	0.1000	3
Ca	44	72	He	2731.270	ppb	4.3	6471.66	0.0864	Pulse	0.1000	3
Ti	47	72	He	271.383	ppb	0.4	5114.38	0.0683	Pulse	0.1000	3
V	51	72	He	265.800	ppb	1.7	233228.63	3.1166	Pulse	0.5000	3
Cr	52	72	He	269.074	ppb	2.0	308506.35	4.1226	Pulse	0.1000	3
Mn	55	72	He	263.895	ppb	1.4	117612.43	1.5715	Pulse	0.1000	3
Fe	57	72	He	2665.056	ppb	0.7	58079.69	0.7760	Pulse	0.1000	3
Co	59	72	He	264.980	ppb	1.3	605261.78	8.0878	Pulse	0.1000	3
Ni	60	72	He	266.528	ppb	1.9	176060.83	2.3527	Pulse	0.1000	3
Cu	63	72	He	266.745	ppb	1.2	498194.35	6.6568	Pulse	0.1000	3
Zn	66	72	He	261.954	ppb	3.0	48515.59	0.6484	Pulse	0.1000	3
As	75	72	He	261.122	ppb	1.6	34018.66	0.4546	Pulse	0.5000	3
Sr	88	115	He	27.624	ppb	2.2	13730.40	0.2167	Pulse	0.1000	3
Mo	98	115	He	26.345	ppb	0.6	36802.15	0.5807	Pulse	0.1000	3
Ag	107	115	He	26.428	ppb	1.6	76216.96	1.2030	Pulse	0.1000	3
Cd	111	115	He	26.836	ppb	2.4	8165.07	0.1289	Pulse	0.5000	3
Sn	120	115	He	53.900	ppb	0.6	49692.73	0.7841	Pulse	0.1000	3
Sb	121	115	He	53.268	ppb	2.6	41876.93	0.6610	Pulse	0.1000	3
Ba	137	115	He	264.493	ppb	1.6	73355.90	1.1574	Pulse	0.1000	3
Tl	205	209	He	52.839	ppb	1.0	320358.29	1.4617	Pulse	0.1000	3
Pb	208	209	He	26.630	ppb	0.9	212912.39	0.9714	Pulse	0.1000	3
U	238	209	He	26.295	ppb	1.1	242487.64	1.1064	Pulse	0.1000	3

ISTD Table:

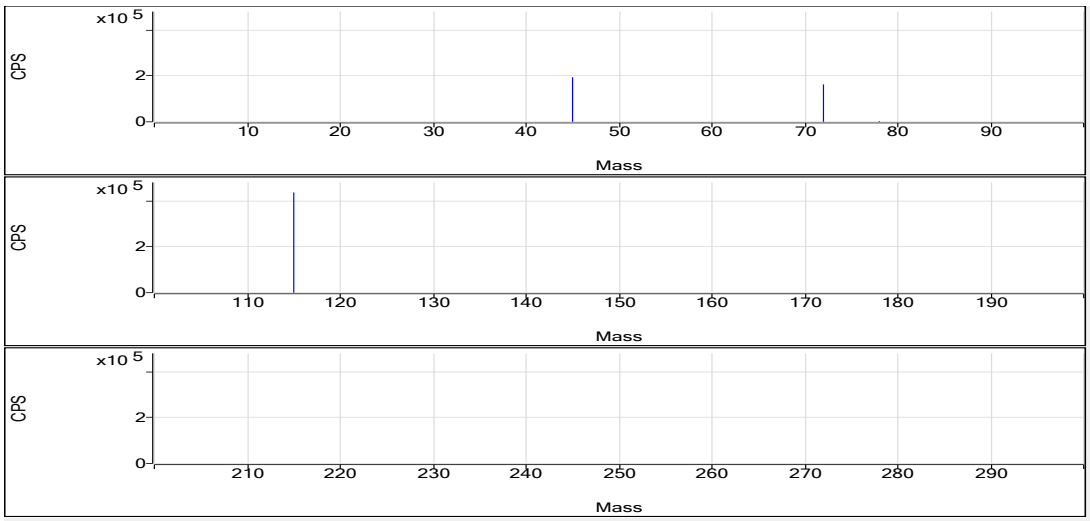
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3276104.02	1.0	101.1	Pulse	0.1000	3
No Gas	Ge	72	1469915.91	1.4	102.1	Pulse	0.1000	3
H2	Sc	45	194767.86	1.9	99.7	Pulse	0.1000	3
H2	Ge	72	163286.45	2.4	100.2	Pulse	0.1000	3
H2	In	115	437853.64	1.3	101.1	Pulse	0.1000	3
He	Sc	45	42756.62	0.8	106.9	Pulse	0.1000	3
He	Ge	72	74844.66	1.4	103.5	Pulse	0.1000	3
He	In	115	63371.99	2.2	98.1	Pulse	0.1000	3
He	Tb	159	281692.94	0.6	98.5	Pulse	0.1000	3
He	Bi	209	219173.77	0.8	98.6	Pulse	0.1000	3

No Gas

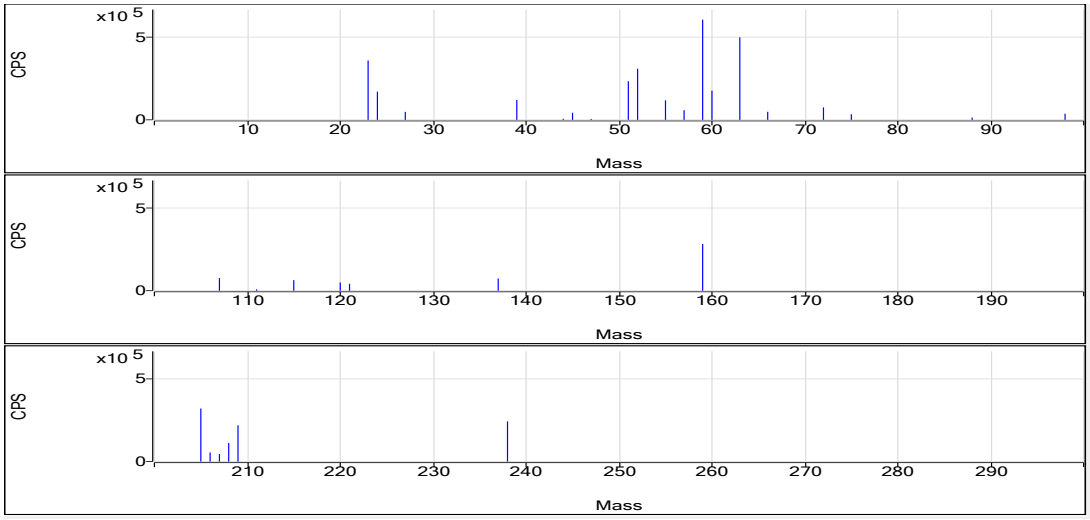


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.836	0.0314	46818.18	0.0013	4.694E-05
Be	9	1	No Gas	25.354	0.0334	48898.85	0.0013	4.694E-05
Be	9	1	No Gas	25.929	0.0341	49526.84	0.0013	4.694E-05
Se	78	2	H2	53.284	0.0208	3316.39	0.0004	1.089E-05
Se	78	2	H2	50.463	0.0197	3294.38	0.0004	1.089E-05
Se	78	2	H2	53.172	0.0207	3366.40	0.0004	1.089E-05
Na	23	3	He	2707.568	4.7576	354548.43	0.0017	0.1065
Na	23	3	He	2689.466	4.7265	359310.15	0.0017	0.1065
Na	23	3	He	2781.904	4.8853	361462.77	0.0017	0.1065
Mg	24	3	He	2684.025	2.2678	168999.51	0.0008	0.004846
Mg	24	3	He	2656.143	2.2442	170609.06	0.0008	0.004846
Mg	24	3	He	2725.949	2.3031	170407.01	0.0008	0.004846
Al	27	3	He	2625.823	0.6349	47316.19	0.0002	0.001063
Al	27	3	He	2648.915	0.6405	48690.91	0.0002	0.001063
Al	27	3	He	2679.572	0.6479	47938.04	0.0002	0.001063
K	39	3	He	2675.342	1.621	120801.41	0.0006	0.1436
K	39	3	He	2572.629	1.5643	118917.43	0.0006	0.1436
K	39	3	He	2686.138	1.627	120379.17	0.0006	0.1436
Ca	44	3	He	2800.271	0.0886	6601.76	0	0.001611
Ca	44	3	He	2799.143	0.0886	6731.78	0	0.001611
Ca	44	3	He	2594.395	0.0822	6081.45	0	0.001611
Ti	47	3	He	271.854	0.0684	5101.02	0.0003	0.0002737
Ti	47	3	He	272.25	0.0685	5211.10	0.0003	0.0002737
Ti	47	3	He	270.046	0.068	5031.03	0.0003	0.0002737
V	51	3	He	264.071	3.0964	230750.11	0.0117	0.007326
V	51	3	He	262.329	3.076	233838.75	0.0117	0.007326
V	51	3	He	270.999	3.1774	235097.03	0.0117	0.007326
Cr	52	3	He	268.089	4.1076	306113.98	0.0152	0.02538
Cr	52	3	He	264.362	4.0509	307951.75	0.0152	0.02538
Cr	52	3	He	274.77	4.2094	311453.32	0.0152	0.02538
Mn	55	3	He	260.269	1.5501	115516.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	263.855	1.5712	119446.46	0.0059	0.01385
Mn	55	3	He	267.561	1.5931	117874.79	0.0059	0.01385
Fe	57	3	He	2684.766	0.7817	58257.11	0.0003	0.003918
Fe	57	3	He	2652.114	0.7723	58708.81	0.0003	0.003918
Fe	57	3	He	2658.287	0.7741	57273.15	0.0003	0.003918
Co	59	3	He	263.848	8.0532	600150.23	0.0305	0.003084
Co	59	3	He	262.193	8.0027	608373.00	0.0305	0.003084
Co	59	3	He	268.899	8.2073	607262.10	0.0305	0.003084
Ni	60	3	He	263.874	2.3293	173587.95	0.0088	0.009003
Ni	60	3	He	263.24	2.3238	176653.47	0.0088	0.009003
Ni	60	3	He	272.471	2.4049	177941.07	0.0088	0.009003
Cu	63	3	He	264.254	6.5947	491453.98	0.0249	0.004937
Cu	63	3	He	265.609	6.6285	503900.73	0.0249	0.004937
Cu	63	3	He	270.371	6.7472	499228.35	0.0249	0.004937
Zn	66	3	He	263.712	0.6527	48642.26	0.0025	0.004836
Zn	66	3	He	253.485	0.6276	47709.87	0.0025	0.004836
Zn	66	3	He	268.663	0.6649	49194.64	0.0025	0.004836
As	75	3	He	258.552	0.4501	33542.91	0.0017	0.0004347
As	75	3	He	258.806	0.4505	34250.54	0.0017	0.0004347
As	75	3	He	266.008	0.4631	34262.52	0.0017	0.0004347
Sr	88	3	He	28.259	0.2217	13707.18	0.0078	0.0007762
Sr	88	3	He	27.045	0.2122	13536.77	0.0078	0.0007762
Sr	88	3	He	27.568	0.2163	13947.24	0.0078	0.0007762
Mo	98	3	He	26.184	0.5771	35685.91	0.022	0.0005162
Mo	98	3	He	26.327	0.5803	37019.63	0.022	0.0005162
Mo	98	3	He	26.525	0.5846	37700.91	0.022	0.0005162
Ag	107	3	He	26.919	1.2253	75764.30	0.0455	0.0004641
Ag	107	3	He	26.133	1.1895	75885.75	0.0455	0.0004641
Ag	107	3	He	26.233	1.1941	77000.82	0.0455	0.0004641
Cd	111	3	He	27.125	0.1303	8054.34	0.0048	5.152E-05
Cd	111	3	He	27.29	0.1311	8360.53	0.0048	5.152E-05
Cd	111	3	He	26.092	0.1253	8080.35	0.0048	5.152E-05
Sn	120	3	He	53.561	0.7793	48184.03	0.0143	0.01559
Sn	120	3	He	54.207	0.7885	50301.26	0.0143	0.01559
Sn	120	3	He	53.932	0.7845	50592.90	0.0143	0.01559
Sb	121	3	He	54.544	0.6769	41853.42	0.0124	0.000258
Sb	121	3	He	53.448	0.6633	42314.91	0.0124	0.000258
Sb	121	3	He	51.81	0.643	41462.47	0.0124	0.000258
Ba	137	3	He	261.074	1.1425	70641.64	0.0044	0.000309
Ba	137	3	He	269.357	1.1787	75195.73	0.0044	0.000309
Ba	137	3	He	263.049	1.1511	74230.33	0.0044	0.000309
Tl	205	3	He	52.579	1.4545	316664.90	0.0276	0.001005
Tl	205	3	He	52.48	1.4518	321044.35	0.0276	0.001005
Tl	205	3	He	53.457	1.4788	323365.62	0.0276	0.001005
Pb	208	3	He	26.825	0.9786	112700.37	0.0364	0.002176
Pb	208	3	He	26.699	0.9739	113959.50	0.0364	0.002176
Pb	208	3	He	26.365	0.9618	111125.93	0.0364	0.002176
U	238	3	He	26.202	1.1025	240023.73	0.0421	0.00024
U	238	3	He	26.059	1.0965	242473.71	0.0421	0.00024
U	238	3	He	26.624	1.1203	244965.48	0.0421	0.00024
Sc	45	1	No Gas			3308125.58		
Sc	45	1	No Gas			3244832.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3275354.33		
Ge	72	1	No Gas			1492499.04		
Ge	72	1	No Gas			1465673.57		
Ge	72	1	No Gas			1451575.13		
Sc	45	2	H2			191212.54		
Sc	45	2	H2			198677.34		
Sc	45	2	H2			194413.71		
Ge	72	2	H2			159767.52		
Ge	72	2	H2			167574.16		
Ge	72	2	H2			162517.66		
In	115	2	H2			436160.38		
In	115	2	H2			444085.93		
In	115	2	H2			433314.60		
Sc	45	3	He			42382.29		
Sc	45	3	He			43003.91		
Sc	45	3	He			42883.67		
Ge	72	3	He			74522.94		
Ge	72	3	He			76020.70		
Ge	72	3	He			73990.35		
In	115	3	He			62209.06		
In	115	3	He			64188.42		
In	115	3	He			64881.29		
Tb	159	3	He			279882.69		
Tb	159	3	He			282624.08		
Tb	159	3	He			282572.05		
Bi	209	3	He			217713.06		
Bi	209	3	He			221139.86		
Bi	209	3	He			218668.40		

Quantitation Report

Data File Name	147SMPL.d
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Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

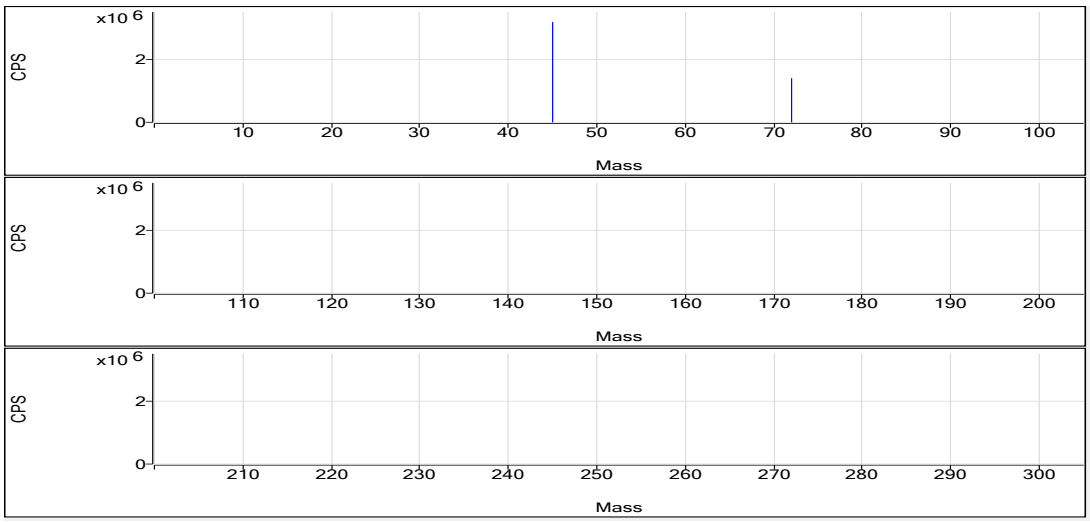
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.016	ppb	72.1	96.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.071	ppb	32.3	6.00	0.0000	Pulse	1.5000	3
Na	23	72	He	25.478	ppb	8.5	10867.62	0.1502	Pulse	0.1000	3
Mg	24	72	He	10.445	ppb	15.3	986.73	0.0137	Pulse	0.1000	3
Al	27	72	He	6.107	ppb	21.2	183.34	0.0025	Pulse	0.1000	3
K	39	72	He	11.018	ppb	106.1	10827.60	0.1497	Pulse	0.1000	3
Ca	44	72	He	4.454	ppb	542.7	126.67	0.0017	Pulse	0.1000	3
Ti	47	72	He	0.575	ppb	259.2	30.00	0.0004	Pulse	0.1000	3
V	51	72	He	0.123	ppb	24.9	634.02	0.0088	Pulse	0.5000	3
Cr	52	72	He	0.171	ppb	58.7	2023.56	0.0280	Pulse	0.1000	3
Mn	55	72	He	-1.174	ppb	N/A	500.03	0.0069	Pulse	0.1000	3
Fe	57	72	He	10.779	ppb	42.4	510.03	0.0070	Pulse	0.1000	3
Co	59	72	He	0.145	ppb	9.9	543.36	0.0075	Pulse	0.1000	3
Ni	60	72	He	1.252	ppb	7.4	1446.79	0.0200	Pulse	0.1000	3
Cu	63	72	He	0.157	ppb	10.7	640.04	0.0088	Pulse	0.1000	3
Zn	66	72	He	0.206	ppb	237.3	386.69	0.0053	Pulse	0.1000	3
As	75	72	He	0.127	ppb	34.7	47.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.096	ppb	29.1	96.67	0.0015	Pulse	0.1000	3
Mo	98	115	He	0.142	ppb	46.0	230.01	0.0037	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	33.1	46.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	13.3	10.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.006	ppb	1784.8	990.08	0.0157	Pulse	0.1000	3
Sb	121	115	He	0.077	ppb	64.5	76.67	0.0012	Pulse	0.1000	3
Ba	137	115	He	0.111	ppb	88.1	50.00	0.0008	Pulse	0.1000	3
Tl	205	209	He	0.236	ppb	22.1	1633.50	0.0075	Pulse	0.1000	3
Pb	208	209	He	0.006	ppb	140.3	520.03	0.0024	Pulse	0.1000	3
U	238	209	He	0.016	ppb	16.1	196.68	0.0009	Pulse	0.1000	3

ISTD Table:

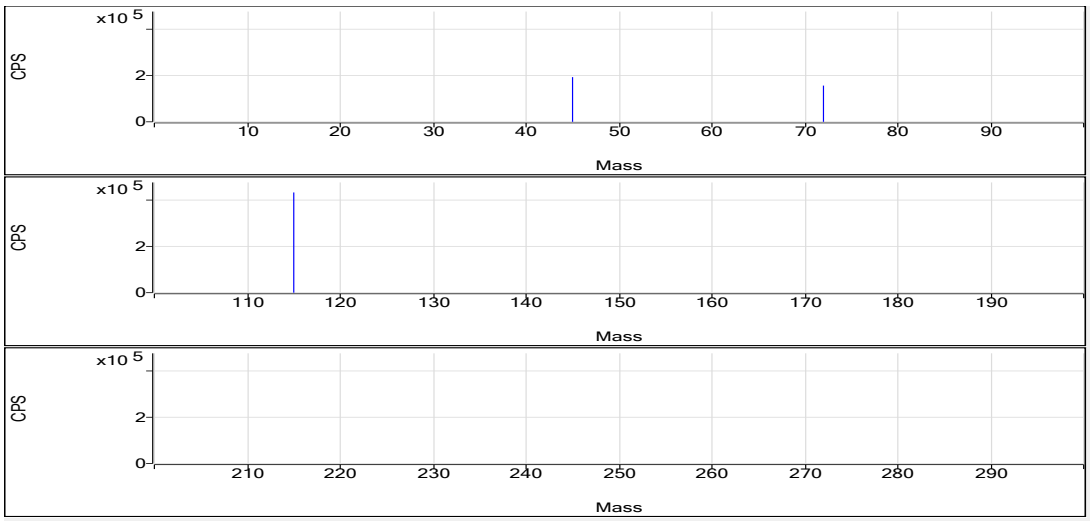
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3197454.64	1.1	98.7	Pulse	0.1000	3
No Gas	Ge	72	1407326.44	0.7	97.7	Pulse	0.1000	3
H2	Sc	45	192763.13	2.0	98.7	Pulse	0.1000	3
H2	Ge	72	156227.65	2.2	95.8	Pulse	0.1000	3
H2	In	115	432423.47	1.8	99.8	Pulse	0.1000	3
He	Sc	45	41258.82	1.3	103.2	Pulse	0.1000	3
He	Ge	72	72328.47	1.3	100.1	Pulse	0.1000	3
He	In	115	63235.86	1.7	97.9	Pulse	0.1000	3
He	Tb	159	276348.48	1.2	96.6	Pulse	0.1000	3
He	Bi	209	217048.52	0.6	97.7	Pulse	0.1000	3

No Gas

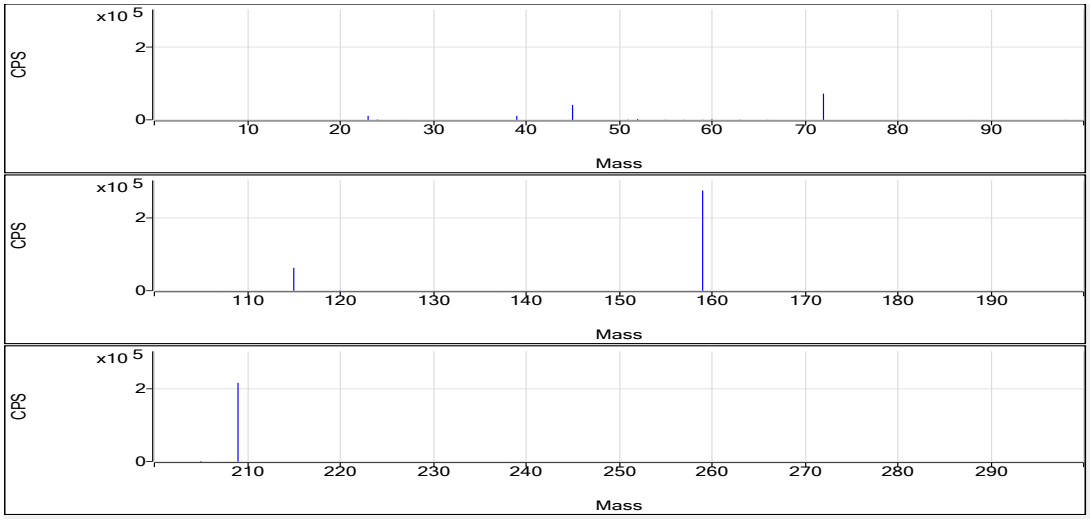


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0.0001	72.00	0.0013	4.694E-05
Be	9	1	No Gas	0.02	0.0001	104.00	0.0013	4.694E-05
Be	9	1	No Gas	0.025	0.0001	112.00	0.0013	4.694E-05
Se	78	2	H2	0.093	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.047	0	4.67	0.0004	1.089E-05
Se	78	2	H2	0.073	0	6.00	0.0004	1.089E-05
Na	23	3	He	23.024	0.146	10403.90	0.0017	0.1065
Na	23	3	He	27.163	0.1531	11144.57	0.0017	0.1065
Na	23	3	He	26.247	0.1515	11054.39	0.0017	0.1065
Mg	24	3	He	11.898	0.0149	1060.07	0.0008	0.004846
Mg	24	3	He	10.712	0.0139	1010.07	0.0008	0.004846
Mg	24	3	He	8.725	0.0122	890.06	0.0008	0.004846
Al	27	3	He	7.225	0.0028	200.01	0.0002	0.001063
Al	27	3	He	6.412	0.0026	190.01	0.0002	0.001063
Al	27	3	He	4.684	0.0022	160.01	0.0002	0.001063
K	39	3	He	15.983	0.1525	10864.21	0.0006	0.1436
K	39	3	He	19.4	0.1544	11234.57	0.0006	0.1436
K	39	3	He	-2.33	0.1424	10384.01	0.0006	0.1436
Ca	44	3	He	-6.682	0.0014	100.00	0	0.001611
Ca	44	3	He	32.185	0.0026	190.01	0	0.001611
Ca	44	3	He	-12.141	0.0012	90.00	0	0.001611
Ti	47	3	He	2.266	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	-0.544	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.002	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.139	0.009	638.02	0.0117	0.007326
V	51	3	He	0.088	0.0084	608.02	0.0117	0.007326
V	51	3	He	0.142	0.009	656.02	0.0117	0.007326
Cr	52	3	He	0.287	0.0298	2120.25	0.0152	0.02538
Cr	52	3	He	0.111	0.0271	1970.22	0.0152	0.02538
Cr	52	3	He	0.116	0.0271	1980.20	0.0152	0.02538
Mn	55	3	He	-0.944	0.0083	590.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.3	0.0062	450.02	0.0059	0.01385
Mn	55	3	He	-1.279	0.0063	460.03	0.0059	0.01385
Fe	57	3	He	5.854	0.0056	400.02	0.0003	0.003918
Fe	57	3	He	11.613	0.0073	530.03	0.0003	0.003918
Fe	57	3	He	14.87	0.0082	600.03	0.0003	0.003918
Co	59	3	He	0.161	0.008	570.03	0.0305	0.003084
Co	59	3	He	0.133	0.0071	520.03	0.0305	0.003084
Co	59	3	He	0.142	0.0074	540.03	0.0305	0.003084
Ni	60	3	He	1.354	0.0209	1490.12	0.0088	0.009003
Ni	60	3	He	1.226	0.0198	1440.13	0.0088	0.009003
Ni	60	3	He	1.175	0.0193	1410.12	0.0088	0.009003
Cu	63	3	He	0.162	0.009	640.04	0.0249	0.004937
Cu	63	3	He	0.138	0.0084	610.03	0.0249	0.004937
Cu	63	3	He	0.17	0.0092	670.04	0.0249	0.004937
Zn	66	3	He	-0.026	0.0048	340.01	0.0025	0.004836
Zn	66	3	He	-0.123	0.0045	330.02	0.0025	0.004836
Zn	66	3	He	0.766	0.0067	490.03	0.0025	0.004836
As	75	3	He	0.17	0.0007	52.00	0.0017	0.0004347
As	75	3	He	0.082	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.128	0.0007	48.00	0.0017	0.0004347
Sr	88	3	He	0.104	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.119	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.065	0.0013	80.00	0.0078	0.0007762
Mo	98	3	He	0.193	0.0048	300.01	0.022	0.0005162
Mo	98	3	He	0.068	0.002	130.01	0.022	0.0005162
Mo	98	3	He	0.166	0.0042	260.01	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.028	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.023	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	-0.059	0.0148	930.07	0.0143	0.01559
Sn	120	3	He	-0.047	0.0149	960.08	0.0143	0.01559
Sn	120	3	He	0.123	0.0173	1080.09	0.0143	0.01559
Sb	121	3	He	0.056	0.001	60.00	0.0124	0.000258
Sb	121	3	He	0.042	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.135	0.0019	120.01	0.0124	0.000258
Ba	137	3	He	0.147	0.001	60.00	0.0044	0.000309
Ba	137	3	He	0	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.186	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.293	0.0091	1980.23	0.0276	0.001005
Tl	205	3	He	0.222	0.0072	1560.14	0.0276	0.001005
Tl	205	3	He	0.192	0.0063	1360.13	0.0276	0.001005
Pb	208	3	He	0.011	0.0026	290.02	0.0364	0.002176
Pb	208	3	He	0.011	0.0026	280.02	0.0364	0.002176
Pb	208	3	He	-0.004	0.002	220.01	0.0364	0.002176
U	238	3	He	0.013	0.0008	170.01	0.0421	0.00024
U	238	3	He	0.017	0.001	210.01	0.0421	0.00024
U	238	3	He	0.017	0.001	210.01	0.0421	0.00024
Sc	45	1	No Gas			3236204.95		
Sc	45	1	No Gas			3187897.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3168261.83		
Ge	72	1	No Gas			1414014.98		
Ge	72	1	No Gas			1411152.48		
Ge	72	1	No Gas			1396811.85		
Sc	45	2	H2			192399.45		
Sc	45	2	H2			196785.49		
Sc	45	2	H2			189104.45		
Ge	72	2	H2			155948.18		
Ge	72	2	H2			159738.26		
Ge	72	2	H2			152996.51		
In	115	2	H2			429517.34		
In	115	2	H2			441370.42		
In	115	2	H2			426382.65		
Sc	45	3	He			41680.21		
Sc	45	3	He			41449.18		
Sc	45	3	He			40647.06		
Ge	72	3	He			71256.15		
Ge	72	3	He			72784.44		
Ge	72	3	He			72944.83		
In	115	3	He			63053.38		
In	115	3	He			64378.44		
In	115	3	He			62298.91		
Tb	159	3	He			279831.87		
Tb	159	3	He			276138.34		
Tb	159	3	He			273075.23		
Bi	209	3	He			217315.49		
Bi	209	3	He			218149.24		
Bi	209	3	He			215680.82		

Quantitation Report

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Acq Time	2023-08-10 15:31:19
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

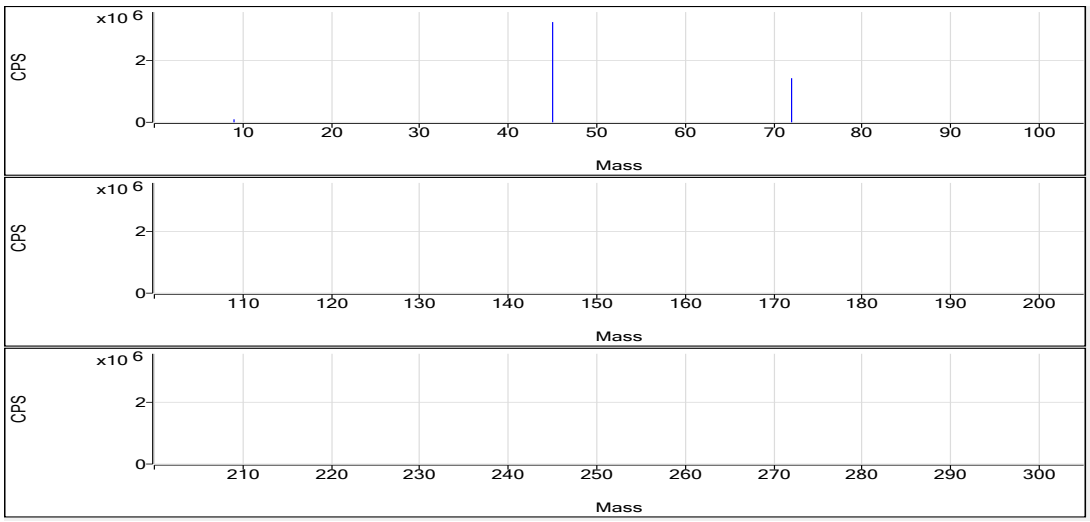
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	51.356	ppb	1.5	95912.67	0.0675	Pulse	0.5000	3
Se	78	72	H2	53.786	ppb	4.6	3329.50	0.0210	Pulse	1.5000	3
Na	23	72	He	5508.557	ppb	1.0	701104.78	9.5692	Pulse	0.1000	3
Mg	24	72	He	5459.499	ppb	1.1	337591.92	4.6078	Pulse	0.1000	3
Al	27	72	He	5330.951	ppb	2.0	94352.80	1.2879	Pulse	0.1000	3
K	39	72	He	5399.246	ppb	0.9	228969.07	3.1252	Pulse	0.1000	3
Ca	44	72	He	5321.858	ppb	2.1	12232.14	0.1669	Pulse	0.1000	3
Ti	47	72	He	5432.154	ppb	0.8	99829.25	1.3625	Pulse	0.1000	3
V	51	72	He	539.867	ppb	1.5	463196.43	6.3226	Pulse	0.5000	3
Cr	52	72	He	540.489	ppb	1.1	604840.21	8.2556	Pulse	0.1000	3
Mn	55	72	He	532.428	ppb	1.5	231249.76	3.1565	Pulse	0.1000	3
Fe	57	72	He	5336.195	ppb	1.0	113554.58	1.5499	Pulse	0.1000	3
Co	59	72	He	538.102	ppb	1.3	1203044.07	16.4209	Pulse	0.1000	3
Ni	60	72	He	539.086	ppb	0.3	348000.97	4.7493	Pulse	0.1000	3
Cu	63	72	He	533.687	ppb	1.2	975414.65	13.3136	Pulse	0.1000	3
Zn	66	72	He	527.757	ppb	0.7	95356.81	1.3014	Pulse	0.1000	3
As	75	72	He	528.112	ppb	1.5	67320.62	0.9189	Pulse	0.5000	3
Sr	88	115	He	51.716	ppb	1.7	25981.20	0.4050	Pulse	0.1000	3
Mo	98	115	He	52.176	ppb	2.4	73731.80	1.1495	Pulse	0.1000	3
Ag	107	115	He	52.088	ppb	1.2	152054.98	2.3705	Pulse	0.1000	3
Cd	111	115	He	52.474	ppb	0.9	16161.99	0.2519	Pulse	0.5000	3
Sn	120	115	He	52.211	ppb	1.5	48749.39	0.7600	Pulse	0.1000	3
Sb	121	115	He	52.257	ppb	1.7	41599.53	0.6485	Pulse	0.1000	3
Ba	137	115	He	513.539	ppb	2.0	144122.37	2.2469	Pulse	0.1000	3
Tl	205	209	He	52.825	ppb	0.4	318846.47	1.4613	Pulse	0.1000	3
Pb	208	209	He	52.895	ppb	1.1	420532.81	1.9274	Pulse	0.1000	3
U	238	209	He	52.335	ppb	0.6	480410.98	2.2018	Pulse	0.1000	3

ISTD Table:

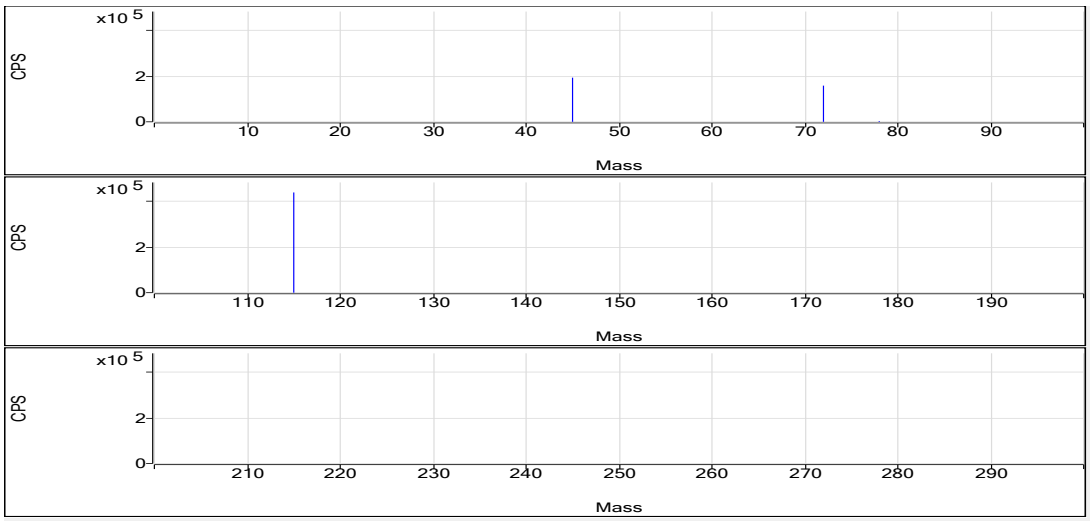
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3228556.83	0.7	99.6	Pulse	0.1000	3
No Gas	Ge	72	1420313.52	0.3	98.6	Pulse	0.1000	3
H2	Sc	45	194051.71	2.7	99.3	Pulse	0.1000	3
H2	Ge	72	158986.48	1.8	97.5	Pulse	0.1000	3
H2	In	115	440542.01	2.1	101.7	Pulse	0.1000	3
He	Sc	45	41639.73	1.7	104.1	Pulse	0.1000	3
He	Ge	72	73273.40	1.7	101.4	Pulse	0.1000	3
He	In	115	64149.27	0.9	99.3	Pulse	0.1000	3
He	Tb	159	280872.17	1.2	98.2	Pulse	0.1000	3
He	Bi	209	218190.03	0.3	98.2	Pulse	0.1000	3

No Gas

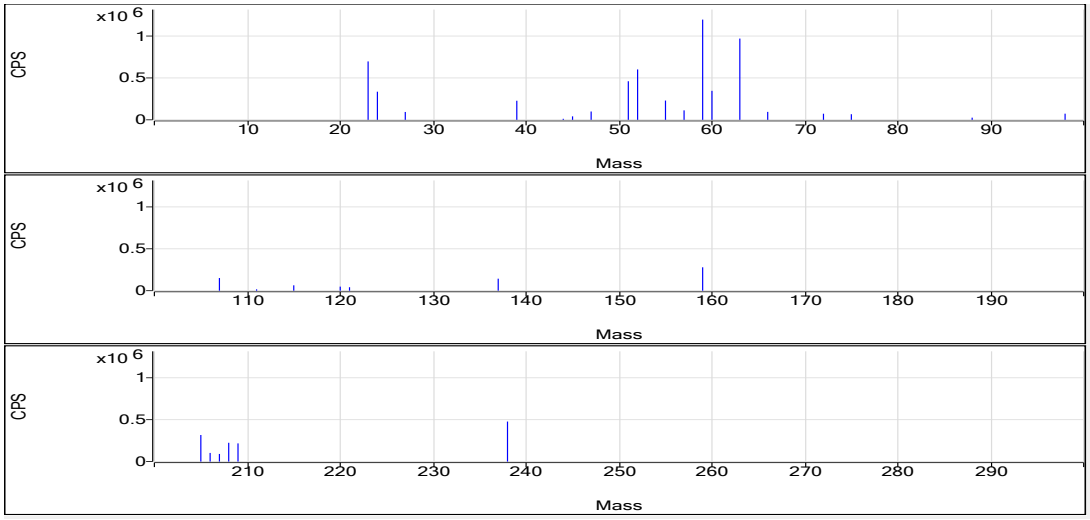


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	51.361	0.0675	95958.26	0.0013	4.694E-05
Be	9	1	No Gas	52.142	0.0686	97051.25	0.0013	4.694E-05
Be	9	1	No Gas	50.566	0.0665	94728.49	0.0013	4.694E-05
Se	78	2	H2	50.913	0.0198	3217.03	0.0004	1.089E-05
Se	78	2	H2	55.342	0.0216	3401.07	0.0004	1.089E-05
Se	78	2	H2	55.105	0.0215	3370.40	0.0004	1.089E-05
Na	23	3	He	5462.249	9.4896	708629.21	0.0017	0.1065
Na	23	3	He	5496.471	9.5484	694202.88	0.0017	0.1065
Na	23	3	He	5566.951	9.6695	700482.26	0.0017	0.1065
Mg	24	3	He	5397.624	4.5556	340184.76	0.0008	0.004846
Mg	24	3	He	5522.275	4.6607	338848.12	0.0008	0.004846
Mg	24	3	He	5458.598	4.607	333742.89	0.0008	0.004846
Al	27	3	He	5220.745	1.2613	94187.98	0.0002	0.001063
Al	27	3	He	5428.937	1.3116	95356.22	0.0002	0.001063
Al	27	3	He	5343.172	1.2909	93514.21	0.0002	0.001063
K	39	3	He	5341.867	3.0935	231003.06	0.0006	0.1436
K	39	3	He	5419.034	3.1361	228005.11	0.0006	0.1436
K	39	3	He	5436.838	3.1459	227899.04	0.0006	0.1436
Ca	44	3	He	5417.669	0.1699	12685.86	0	0.001611
Ca	44	3	He	5348.755	0.1677	12195.47	0	0.001611
Ca	44	3	He	5199.149	0.1631	11815.08	0	0.001611
Ti	47	3	He	5379.763	1.3494	100765.76	0.0003	0.0002737
Ti	47	3	He	5463.708	1.3705	99637.14	0.0003	0.0002737
Ti	47	3	He	5452.99	1.3678	99084.84	0.0003	0.0002737
V	51	3	He	530.426	6.2121	463884.50	0.0117	0.007326
V	51	3	He	543.247	6.3621	462546.63	0.0117	0.007326
V	51	3	He	545.928	6.3935	463158.16	0.0117	0.007326
Cr	52	3	He	533.847	8.1544	608923.86	0.0152	0.02538
Cr	52	3	He	542.703	8.2893	602658.94	0.0152	0.02538
Cr	52	3	He	544.917	8.323	602937.84	0.0152	0.02538
Mn	55	3	He	524.308	3.1085	232127.52	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	533.022	3.16	229740.99	0.0059	0.01385
Mn	55	3	He	539.954	3.2009	231880.78	0.0059	0.01385
Fe	57	3	He	5278.96	1.5333	114498.56	0.0003	0.003918
Fe	57	3	He	5379.362	1.5624	113591.81	0.0003	0.003918
Fe	57	3	He	5350.261	1.554	112573.36	0.0003	0.003918
Co	59	3	He	530.223	16.1805	1208261.54	0.0305	0.003084
Co	59	3	He	542.299	16.5489	1203163.03	0.0305	0.003084
Co	59	3	He	541.784	16.5332	1197707.64	0.0305	0.003084
Ni	60	3	He	538.887	4.7476	354522.49	0.0088	0.009003
Ni	60	3	He	540.891	4.7652	346448.24	0.0088	0.009003
Ni	60	3	He	537.48	4.7352	343032.18	0.0088	0.009003
Cu	63	3	He	526.796	13.1417	981345.45	0.0249	0.004937
Cu	63	3	He	539.844	13.4671	979105.30	0.0249	0.004937
Cu	63	3	He	534.421	13.3318	965793.19	0.0249	0.004937
Zn	66	3	He	526.953	1.2994	97034.33	0.0025	0.004836
Zn	66	3	He	524.777	1.2941	94084.97	0.0025	0.004836
Zn	66	3	He	531.541	1.3107	94951.12	0.0025	0.004836
As	75	3	He	518.991	0.903	67434.42	0.0017	0.0004347
As	75	3	He	532.272	0.9261	67334.09	0.0017	0.0004347
As	75	3	He	533.073	0.9275	67193.35	0.0017	0.0004347
Sr	88	3	He	52.033	0.4075	25944.40	0.0078	0.0007762
Sr	88	3	He	50.728	0.3973	25744.13	0.0078	0.0007762
Sr	88	3	He	52.389	0.4103	26255.06	0.0078	0.0007762
Mo	98	3	He	53.535	1.1794	75088.69	0.022	0.0005162
Mo	98	3	He	51.15	1.1269	73017.86	0.022	0.0005162
Mo	98	3	He	51.844	1.1422	73088.85	0.022	0.0005162
Ag	107	3	He	52.757	2.4009	152853.84	0.0455	0.0004641
Ag	107	3	He	51.463	2.3421	151752.24	0.0455	0.0004641
Ag	107	3	He	52.045	2.3685	151558.86	0.0455	0.0004641
Cd	111	3	He	52.793	0.2535	16137.32	0.0048	5.152E-05
Cd	111	3	He	52.709	0.2531	16397.57	0.0048	5.152E-05
Cd	111	3	He	51.919	0.2493	15951.07	0.0048	5.152E-05
Sn	120	3	He	52.951	0.7706	49057.16	0.0143	0.01559
Sn	120	3	He	51.421	0.7488	48515.01	0.0143	0.01559
Sn	120	3	He	52.259	0.7607	48675.99	0.0143	0.01559
Sb	121	3	He	51.908	0.6442	41010.94	0.0124	0.000258
Sb	121	3	He	51.589	0.6402	41482.74	0.0124	0.000258
Sb	121	3	He	53.275	0.6611	42304.92	0.0124	0.000258
Ba	137	3	He	520.451	2.2772	144974.44	0.0044	0.000309
Ba	137	3	He	501.998	2.1964	142317.93	0.0044	0.000309
Ba	137	3	He	518.167	2.2672	145074.73	0.0044	0.000309
Tl	205	3	He	52.621	1.4557	316520.29	0.0276	0.001005
Tl	205	3	He	52.841	1.4617	319607.34	0.0276	0.001005
Tl	205	3	He	53.013	1.4665	320411.77	0.0276	0.001005
Pb	208	3	He	53.507	1.9497	227991.34	0.0364	0.002176
Pb	208	3	He	52.418	1.9101	224001.60	0.0364	0.002176
Pb	208	3	He	52.759	1.9225	224544.27	0.0364	0.002176
U	238	3	He	52.707	2.2175	482168.08	0.0421	0.00024
U	238	3	He	52.142	2.1937	479646.32	0.0421	0.00024
U	238	3	He	52.156	2.1943	479418.55	0.0421	0.00024
Sc	45	1	No Gas			3208759.64		
Sc	45	1	No Gas			3221860.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3255050.58		
Ge	72	1	No Gas			1420813.57		
Ge	72	1	No Gas			1415485.76		
Ge	72	1	No Gas			1424641.23		
Sc	45	2	H2			200015.06		
Sc	45	2	H2			192111.50		
Sc	45	2	H2			190028.57		
Ge	72	2	H2			162195.10		
Ge	72	2	H2			157757.27		
Ge	72	2	H2			157007.08		
In	115	2	H2			448342.88		
In	115	2	H2			442972.65		
In	115	2	H2			430310.50		
Sc	45	3	He			40997.76		
Sc	45	3	He			41539.53		
Sc	45	3	He			42381.89		
Ge	72	3	He			74674.11		
Ge	72	3	He			72703.51		
Ge	72	3	He			72442.58		
In	115	3	He			64046.83		
In	115	3	He			65173.02		
In	115	3	He			64368.71		
Tb	159	3	He			278736.64		
Tb	159	3	He			279111.32		
Tb	159	3	He			284768.55		
Bi	209	3	He			217437.93		
Bi	209	3	He			218647.50		
Bi	209	3	He			218484.66		

Quantitation Report

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Sample Type	CCB
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

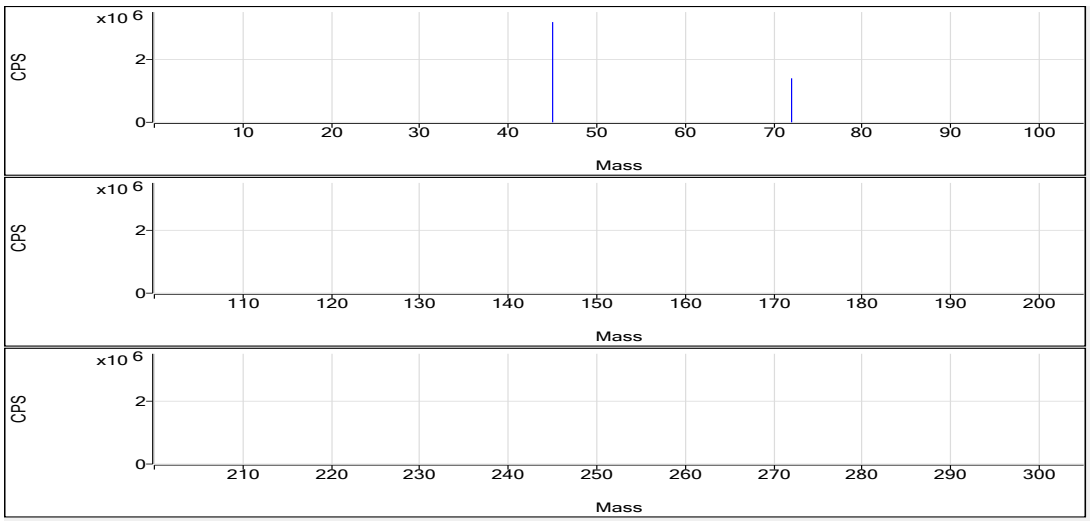
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.035	ppb	33.6	130.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.081	ppb	50.6	6.67	0.0000	Pulse	1.5000	3
Na	23	72	He	23.597	ppb	14.9	10610.76	0.1470	Pulse	0.1000	3
Mg	24	72	He	10.631	ppb	10.1	996.74	0.0138	Pulse	0.1000	3
Al	27	72	He	7.645	ppb	22.1	210.01	0.0029	Pulse	0.1000	3
K	39	72	He	11.408	ppb	58.6	10824.30	0.1499	Pulse	0.1000	3
Ca	44	72	He	38.777	ppb	39.6	203.34	0.0028	Pulse	0.1000	3
Ti	47	72	He	2.587	ppb	31.7	66.67	0.0009	Pulse	0.1000	3
V	51	72	He	0.162	ppb	15.8	666.02	0.0092	Pulse	0.5000	3
Cr	52	72	He	0.298	ppb	28.2	2160.23	0.0299	Pulse	0.1000	3
Mn	55	72	He	-0.883	ppb	N/A	623.37	0.0086	Pulse	0.1000	3
Fe	57	72	He	13.087	ppb	26.5	556.70	0.0077	Pulse	0.1000	3
Co	59	72	He	0.229	ppb	8.3	726.72	0.0101	Pulse	0.1000	3
Ni	60	72	He	1.313	ppb	15.3	1483.46	0.0205	Pulse	0.1000	3
Cu	63	72	He	0.234	ppb	23.1	776.72	0.0108	Pulse	0.1000	3
Zn	66	72	He	0.174	ppb	174.2	380.02	0.0053	Pulse	0.1000	3
As	75	72	He	0.233	ppb	24.3	60.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.058	ppb	73.8	76.67	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.122	ppb	9.0	200.01	0.0032	Pulse	0.1000	3
Ag	107	115	He	0.025	ppb	26.2	100.00	0.0016	Pulse	0.1000	3
Cd	111	115	He	0.016	ppb	43.0	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.137	ppb	86.1	1096.75	0.0175	Pulse	0.1000	3
Sb	121	115	He	0.078	ppb	35.9	76.67	0.0012	Pulse	0.1000	3
Ba	137	115	He	0.186	ppb	21.8	70.00	0.0011	Pulse	0.1000	3
Tl	205	209	He	0.298	ppb	5.6	2000.23	0.0092	Pulse	0.1000	3
Pb	208	209	He	0.011	ppb	106.8	556.69	0.0026	Pulse	0.1000	3
U	238	209	He	0.027	ppb	7.5	300.01	0.0014	Pulse	0.1000	3

ISTD Table:

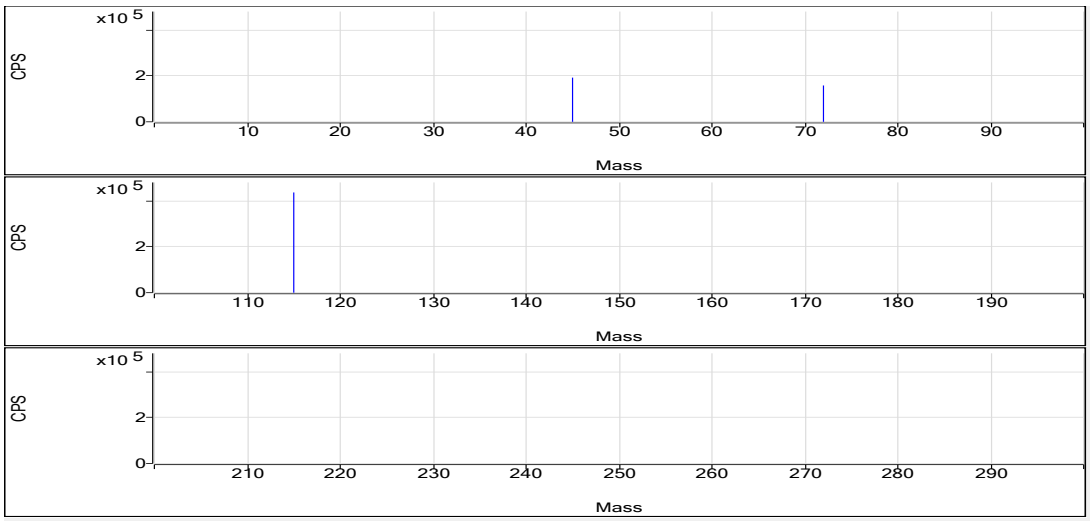
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3214699.85	1.9	99.2	Pulse	0.1000	3
No Gas	Ge	72	1410928.11	1.9	98.0	Pulse	0.1000	3
H2	Sc	45	192480.64	2.8	98.5	Pulse	0.1000	3
H2	Ge	72	158282.44	3.2	97.1	Pulse	0.1000	3
H2	In	115	436561.18	2.0	100.8	Pulse	0.1000	3
He	Sc	45	41726.71	2.3	104.4	Pulse	0.1000	3
He	Ge	72	72197.44	0.7	99.9	Pulse	0.1000	3
He	In	115	62451.56	1.6	96.7	Pulse	0.1000	3
He	Tb	159	278924.34	0.4	97.5	Pulse	0.1000	3
He	Bi	209	216657.30	0.6	97.5	Pulse	0.1000	3

No Gas

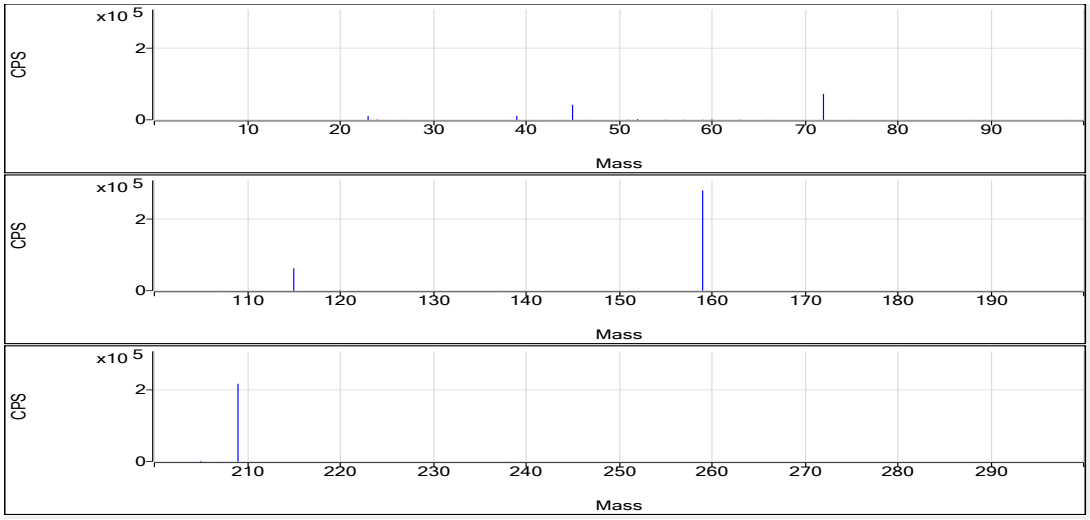


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.035	0.0001	132.00	0.0013	4.694E-05
Be	9	1	No Gas	0.046	0.0001	148.00	0.0013	4.694E-05
Be	9	1	No Gas	0.023	0.0001	110.00	0.0013	4.694E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.113	0.0001	8.67	0.0004	1.089E-05
Se	78	2	H2	0.095	0	7.33	0.0004	1.089E-05
Na	23	3	He	20.852	0.1423	10283.87	0.0017	0.1065
Na	23	3	He	27.576	0.1538	11024.42	0.0017	0.1065
Na	23	3	He	22.363	0.1449	10524.00	0.0017	0.1065
Mg	24	3	He	9.678	0.013	940.07	0.0008	0.004846
Mg	24	3	He	11.796	0.0148	1060.08	0.0008	0.004846
Mg	24	3	He	10.418	0.0136	990.07	0.0008	0.004846
Al	27	3	He	5.914	0.0025	180.01	0.0002	0.001063
Al	27	3	He	7.736	0.0029	210.01	0.0002	0.001063
Al	27	3	He	9.284	0.0033	240.01	0.0002	0.001063
K	39	3	He	14.582	0.1517	10964.47	0.0006	0.1436
K	39	3	He	15.915	0.1524	10924.31	0.0006	0.1436
K	39	3	He	3.728	0.1457	10584.12	0.0006	0.1436
Ca	44	3	He	55.042	0.0033	240.01	0	0.001611
Ca	44	3	He	24.51	0.0024	170.01	0	0.001611
Ca	44	3	He	36.78	0.0028	200.01	0	0.001611
Ti	47	3	He	2.77	0.001	70.00	0.0003	0.0002737
Ti	47	3	He	1.69	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	3.3	0.0011	80.00	0.0003	0.0002737
V	51	3	He	0.14	0.009	648.02	0.0117	0.007326
V	51	3	He	0.156	0.0092	656.02	0.0117	0.007326
V	51	3	He	0.19	0.0096	694.02	0.0117	0.007326
Cr	52	3	He	0.323	0.0303	2190.23	0.0152	0.02538
Cr	52	3	He	0.367	0.031	2220.26	0.0152	0.02538
Cr	52	3	He	0.204	0.0285	2070.21	0.0152	0.02538
Mn	55	3	He	-0.988	0.008	580.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.621	0.0102	730.04	0.0059	0.01385
Mn	55	3	He	-1.041	0.0077	560.03	0.0059	0.01385
Fe	57	3	He	17.041	0.0089	640.04	0.0003	0.003918
Fe	57	3	He	10.559	0.007	500.02	0.0003	0.003918
Fe	57	3	He	11.662	0.0073	530.03	0.0003	0.003918
Co	59	3	He	0.248	0.0107	770.06	0.0305	0.003084
Co	59	3	He	0.21	0.0095	680.05	0.0305	0.003084
Co	59	3	He	0.228	0.01	730.04	0.0305	0.003084
Ni	60	3	He	1.541	0.0226	1630.15	0.0088	0.009003
Ni	60	3	He	1.166	0.0193	1380.12	0.0088	0.009003
Ni	60	3	He	1.231	0.0198	1440.12	0.0088	0.009003
Cu	63	3	He	0.29	0.0122	880.06	0.0249	0.004937
Cu	63	3	He	0.227	0.0106	760.05	0.0249	0.004937
Cu	63	3	He	0.183	0.0095	690.04	0.0249	0.004937
Zn	66	3	He	-0.166	0.0044	320.01	0.0025	0.004836
Zn	66	3	He	0.417	0.0059	420.02	0.0025	0.004836
Zn	66	3	He	0.273	0.0055	400.02	0.0025	0.004836
As	75	3	He	0.291	0.0009	68.00	0.0017	0.0004347
As	75	3	He	0.231	0.0008	60.00	0.0017	0.0004347
As	75	3	He	0.177	0.0007	54.00	0.0017	0.0004347
Sr	88	3	He	0.025	0.001	60.00	0.0078	0.0007762
Sr	88	3	He	0.042	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	0.106	0.0016	100.01	0.0078	0.0007762
Mo	98	3	He	0.109	0.0029	180.01	0.022	0.0005162
Mo	98	3	He	0.127	0.0033	210.01	0.022	0.0005162
Mo	98	3	He	0.13	0.0034	210.01	0.022	0.0005162
Ag	107	3	He	0.029	0.0018	110.00	0.0455	0.0004641
Ag	107	3	He	0.017	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.029	0.0018	110.01	0.0455	0.0004641
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.023	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	0.001	0.0156	960.07	0.0143	0.01559
Sn	120	3	He	0.21	0.0186	1180.09	0.0143	0.01559
Sn	120	3	He	0.201	0.0185	1150.09	0.0143	0.01559
Sb	121	3	He	0.11	0.0016	100.00	0.0124	0.000258
Sb	121	3	He	0.068	0.0011	70.00	0.0124	0.000258
Sb	121	3	He	0.057	0.001	60.00	0.0124	0.000258
Ba	137	3	He	0.227	0.0013	80.00	0.0044	0.000309
Ba	137	3	He	0.145	0.0009	60.00	0.0044	0.000309
Ba	137	3	He	0.186	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.308	0.0095	2070.23	0.0276	0.001005
Tl	205	3	He	0.307	0.0095	2040.24	0.0276	0.001005
Tl	205	3	He	0.278	0.0087	1890.23	0.0276	0.001005
Pb	208	3	He	0.007	0.0024	200.01	0.0364	0.002176
Pb	208	3	He	0.002	0.0022	210.01	0.0364	0.002176
Pb	208	3	He	0.024	0.003	330.01	0.0364	0.002176
U	238	3	He	0.027	0.0014	300.01	0.0421	0.00024
U	238	3	He	0.025	0.0013	280.01	0.0421	0.00024
U	238	3	He	0.029	0.0015	320.02	0.0421	0.00024
Sc	45	1	No Gas			3229059.01		
Sc	45	1	No Gas			3147847.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3267193.39		
Ge	72	1	No Gas			1417706.39		
Ge	72	1	No Gas			1381247.17		
Ge	72	1	No Gas			1433830.76		
Sc	45	2	H2			197668.88		
Sc	45	2	H2			192985.88		
Sc	45	2	H2			186787.15		
Ge	72	2	H2			163530.33		
Ge	72	2	H2			157927.60		
Ge	72	2	H2			153389.39		
In	115	2	H2			445996.75		
In	115	2	H2			434807.26		
In	115	2	H2			428879.52		
Sc	45	3	He			41699.81		
Sc	45	3	He			42702.88		
Sc	45	3	He			40777.44		
Ge	72	3	He			72280.68		
Ge	72	3	He			71668.14		
Ge	72	3	He			72643.50		
In	115	3	He			61546.29		
In	115	3	He			63504.45		
In	115	3	He			62329.61		
Tb	159	3	He			279562.53		
Tb	159	3	He			279547.67		
Tb	159	3	He			277662.81		
Bi	209	3	He			217497.91		
Bi	209	3	He			215179.59		
Bi	209	3	He			217294.39		

Quantitation Report

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Comment	G3 ICP
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

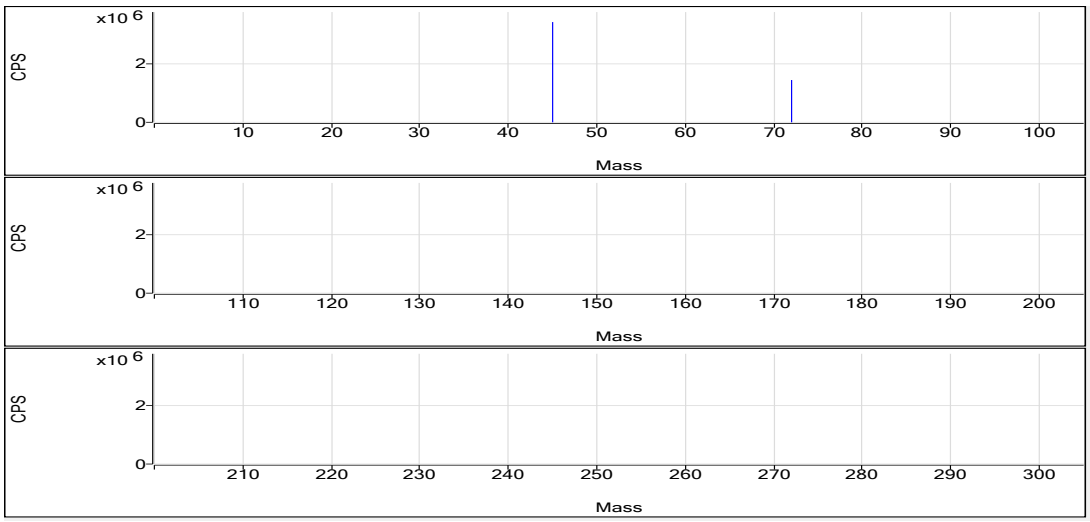
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.516	ppb	2.9	2960.31	0.0020	Pulse	0.5000	3
Se	78	72	H2	2.230	ppb	5.0	142.00	0.0009	Pulse	1.5000	3
Na	23	72	He	419.015	ppb	4.5	62649.21	0.8262	Pulse	0.1000	3
Mg	24	72	He	8280.256	ppb	2.6	529757.27	6.9859	Pulse	0.1000	3
Al	27	72	He	41509.482	ppb	1.8	759985.95	10.0212	Pulse	0.1000	3
K	39	72	He	4584.004	ppb	3.6	202833.78	2.6750	Pulse	0.1000	3
Ca	44	72	He	12554.612	ppb	3.1	29697.66	0.3916	Pulse	0.1000	3
Ti	47	72	He	259.893	ppb	0.4	4964.36	0.0654	Pulse	0.1000	3
V	51	72	He	82.437	ppb	2.2	73685.21	0.9717	Pulse	0.5000	3
Cr	52	72	He	46.375	ppb	0.5	55486.34	0.7316	Pulse	0.1000	3
Mn	55	72	He	376.404	ppb	1.5	169543.51	2.2355	Pulse	0.1000	3
Fe	57	72	He	33160.139	ppb	2.2	728838.09	9.6109	Pulse	0.1000	3
Co	59	72	He	13.633	ppb	1.1	31782.02	0.4190	Pulse	0.1000	3
Ni	60	72	He	41.900	ppb	2.6	28622.40	0.3774	Pulse	0.1000	3
Cu	63	72	He	68.277	ppb	2.5	129489.31	1.7076	Pulse	0.1000	3
Zn	66	72	He	217.279	ppb	2.0	40848.34	0.5386	Pulse	0.1000	3
As	75	72	He	9.411	ppb	4.8	1274.07	0.0168	Pulse	0.5000	3
Sr	88	115	He	75.555	ppb	2.9	37680.87	0.5914	Pulse	0.1000	3
Mo	98	115	He	2.061	ppb	5.5	2927.07	0.0459	Pulse	0.1000	3
Ag	107	115	He	0.409	ppb	1.2	1216.77	0.0191	Pulse	0.1000	3
Cd	111	115	He	1.784	ppb	8.5	549.35	0.0086	Pulse	0.5000	3
Sn	120	115	He	4.176	ppb	3.9	4787.68	0.0751	Pulse	0.1000	3
Sb	121	115	He	1.055	ppb	3.6	850.06	0.0133	Pulse	0.1000	3
Ba	137	115	He	262.756	ppb	3.0	73258.07	1.1498	Pulse	0.1000	3
Tl	205	209	He	0.576	ppb	2.7	3780.67	0.0169	Pulse	0.1000	3
Pb	208	209	He	109.304	ppb	0.4	889366.44	3.9806	Pulse	0.1000	3
U	238	209	He	3.225	ppb	2.9	30363.02	0.1359	Pulse	0.1000	3

ISTD Table:

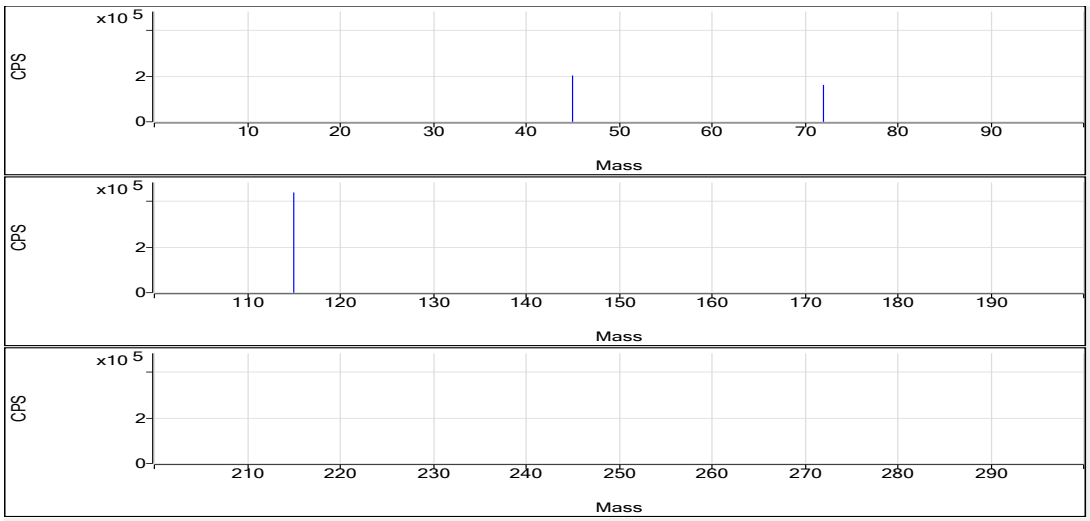
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3443224.95	1.7	106.2	Pulse	0.1000	3
No Gas	Ge	72	1452322.84	0.9	100.9	Pulse	0.1000	3
H2	Sc	45	202813.77	1.4	103.8	Pulse	0.1000	3
H2	Ge	72	161527.03	0.2	99.1	Pulse	0.1000	3
H2	In	115	438707.65	2.0	101.2	Pulse	0.1000	3
He	Sc	45	43354.73	0.9	108.4	Pulse	0.1000	3
He	Ge	72	75849.98	1.4	104.9	Pulse	0.1000	3
He	In	115	63741.74	2.4	98.7	Pulse	0.1000	3
He	Tb	159	293291.06	0.7	102.5	Pulse	0.1000	3
He	Bi	209	223426.94	1.0	100.6	Pulse	0.1000	3

No Gas

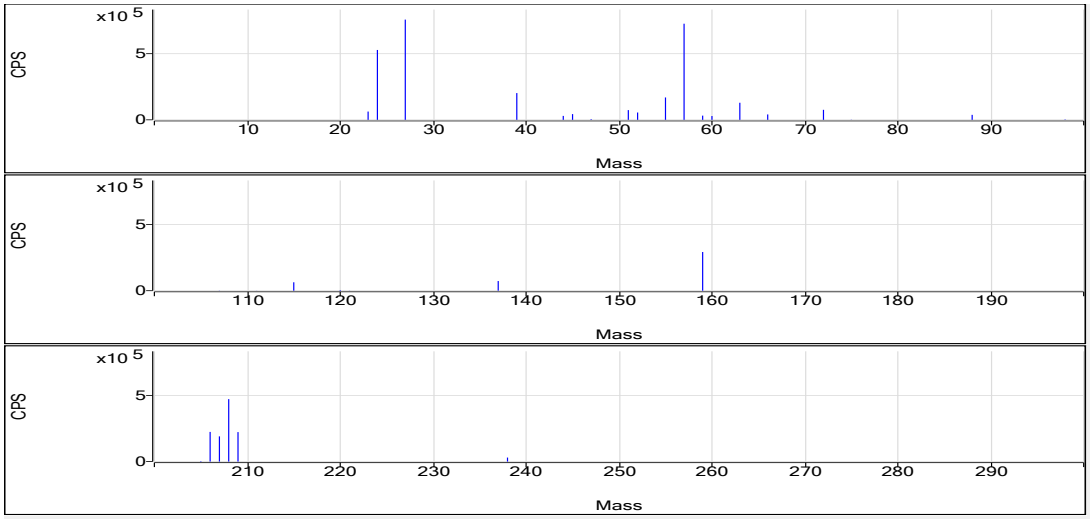


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.484	0.002	2912.30	0.0013	4.694E-05
Be	9	1	No Gas	1.567	0.0021	3026.32	0.0013	4.694E-05
Be	9	1	No Gas	1.496	0.002	2942.30	0.0013	4.694E-05
Se	78	2	H2	2.322	0.0009	148.00	0.0004	1.089E-05
Se	78	2	H2	2.107	0.0008	134.00	0.0004	1.089E-05
Se	78	2	H2	2.26	0.0009	144.00	0.0004	1.089E-05
Na	23	3	He	439.148	0.8608	64228.85	0.0017	0.1065
Na	23	3	He	415.648	0.8205	62702.68	0.0017	0.1065
Na	23	3	He	402.249	0.7974	61016.10	0.0017	0.1065
Mg	24	3	He	8519.213	7.1874	536270.03	0.0008	0.004846
Mg	24	3	He	8228.109	6.942	530529.05	0.0008	0.004846
Mg	24	3	He	8093.446	6.8284	522472.73	0.0008	0.004846
Al	27	3	He	42319.626	10.2168	762298.50	0.0002	0.001063
Al	27	3	He	41339.042	9.9801	762709.99	0.0002	0.001063
Al	27	3	He	40869.779	9.8668	754949.36	0.0002	0.001063
K	39	3	He	4768.226	2.7767	207177.22	0.0006	0.1436
K	39	3	He	4526.589	2.6433	202007.99	0.0006	0.1436
K	39	3	He	4457.196	2.605	199316.13	0.0006	0.1436
Ca	44	3	He	12630.248	0.3939	29390.19	0	0.001611
Ca	44	3	He	12903.994	0.4024	30753.30	0	0.001611
Ca	44	3	He	12129.594	0.3784	28949.48	0	0.001611
Ti	47	3	He	259.768	0.0654	4881.01	0.0003	0.0002737
Ti	47	3	He	260.894	0.0657	5021.06	0.0003	0.0002737
Ti	47	3	He	259.018	0.0652	4991.02	0.0003	0.0002737
V	51	3	He	84.519	0.996	74315.05	0.0117	0.007326
V	51	3	He	81.49	0.9606	73410.41	0.0117	0.007326
V	51	3	He	81.303	0.9584	73330.18	0.0117	0.007326
Cr	52	3	He	46.596	0.7349	54833.70	0.0152	0.02538
Cr	52	3	He	46.367	0.7314	55898.18	0.0152	0.02538
Cr	52	3	He	46.163	0.7283	55727.13	0.0152	0.02538
Mn	55	3	He	382.575	2.272	169517.56	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	375.224	2.2286	170315.62	0.0059	0.01385
Mn	55	3	He	371.413	2.2061	168797.34	0.0059	0.01385
Fe	57	3	He	33983.956	9.8496	734900.30	0.0003	0.003918
Fe	57	3	He	32810.145	9.5095	726747.49	0.0003	0.003918
Fe	57	3	He	32686.316	9.4736	724866.47	0.0003	0.003918
Co	59	3	He	13.778	0.4235	31595.05	0.0305	0.003084
Co	59	3	He	13.483	0.4145	31675.09	0.0305	0.003084
Co	59	3	He	13.639	0.4192	32075.92	0.0305	0.003084
Ni	60	3	He	43.116	0.3881	28959.77	0.0088	0.009003
Ni	60	3	He	41.608	0.3749	28649.10	0.0088	0.009003
Ni	60	3	He	40.976	0.3693	28258.33	0.0088	0.009003
Cu	63	3	He	70.258	1.757	131091.20	0.0249	0.004937
Cu	63	3	He	67.036	1.6766	128133.69	0.0249	0.004937
Cu	63	3	He	67.538	1.6891	129243.04	0.0249	0.004937
Zn	66	3	He	222.188	0.5507	41089.13	0.0025	0.004836
Zn	66	3	He	215.434	0.5341	40818.35	0.0025	0.004836
Zn	66	3	He	214.214	0.5311	40637.53	0.0025	0.004836
As	75	3	He	9.8	0.0175	1304.07	0.0017	0.0004347
As	75	3	He	8.914	0.0159	1218.06	0.0017	0.0004347
As	75	3	He	9.52	0.017	1300.07	0.0017	0.0004347
Sr	88	3	He	77.384	0.6057	38272.42	0.0078	0.0007762
Sr	88	3	He	73.098	0.5722	37470.28	0.0078	0.0007762
Sr	88	3	He	76.183	0.5963	37299.92	0.0078	0.0007762
Mo	98	3	He	1.932	0.0431	2720.35	0.022	0.0005162
Mo	98	3	He	2.147	0.0478	3130.47	0.022	0.0005162
Mo	98	3	He	2.104	0.0468	2930.39	0.022	0.0005162
Ag	107	3	He	0.407	0.019	1200.10	0.0455	0.0004641
Ag	107	3	He	0.406	0.0189	1240.11	0.0455	0.0004641
Ag	107	3	He	0.415	0.0193	1210.10	0.0455	0.0004641
Cd	111	3	He	1.611	0.0078	492.01	0.0048	5.152E-05
Cd	111	3	He	1.892	0.0091	598.02	0.0048	5.152E-05
Cd	111	3	He	1.848	0.0089	558.02	0.0048	5.152E-05
Sn	120	3	He	4.047	0.0733	4630.93	0.0143	0.01559
Sn	120	3	He	4.124	0.0744	4871.05	0.0143	0.01559
Sn	120	3	He	4.357	0.0777	4861.05	0.0143	0.01559
Sb	121	3	He	1.089	0.0138	870.06	0.0124	0.000258
Sb	121	3	He	1.013	0.0128	840.06	0.0124	0.000258
Sb	121	3	He	1.062	0.0134	840.06	0.0124	0.000258
Ba	137	3	He	268.239	1.1738	74169.58	0.0044	0.000309
Ba	137	3	He	253.837	1.1108	72741.35	0.0044	0.000309
Ba	137	3	He	266.192	1.1648	72863.27	0.0044	0.000309
Tl	205	3	He	0.589	0.0173	3900.73	0.0276	0.001005
Tl	205	3	He	0.559	0.0165	3640.63	0.0276	0.001005
Tl	205	3	He	0.579	0.017	3800.64	0.0276	0.001005
Pb	208	3	He	109.576	3.9904	480188.16	0.0364	0.002176
Pb	208	3	He	109.47	3.9866	470035.74	0.0364	0.002176
Pb	208	3	He	108.867	3.9646	470063.24	0.0364	0.002176
U	238	3	He	3.234	0.1363	30747.40	0.0421	0.00024
U	238	3	He	3.315	0.1397	30897.47	0.0421	0.00024
U	238	3	He	3.126	0.1317	29444.19	0.0421	0.00024
Sc	45	1	No Gas			3458260.89		
Sc	45	1	No Gas			3380200.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3491213.07		
Ge	72	1	No Gas			1457968.88		
Ge	72	1	No Gas			1437376.70		
Ge	72	1	No Gas			1461622.95		
Sc	45	2	H2			205970.62		
Sc	45	2	H2			200210.47		
Sc	45	2	H2			202260.23		
Ge	72	2	H2			161729.71		
Ge	72	2	H2			161203.56		
Ge	72	2	H2			161647.81		
In	115	2	H2			447634.68		
In	115	2	H2			438321.17		
In	115	2	H2			430167.10		
Sc	45	3	He			43605.31		
Sc	45	3	He			43545.34		
Sc	45	3	He			42913.55		
Ge	72	3	He			74612.44		
Ge	72	3	He			76423.33		
Ge	72	3	He			76514.18		
In	115	3	He			63223.62		
In	115	3	He			65523.84		
In	115	3	He			62589.80		
Tb	159	3	He			290837.96		
Tb	159	3	He			293961.56		
Tb	159	3	He			295073.65		
Bi	209	3	He			225605.62		
Bi	209	3	He			221180.29		
Bi	209	3	He			223494.92		

Quantitation Report

Data File Name	151SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:37:19
Sample Name	410-136624-C-1-C @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

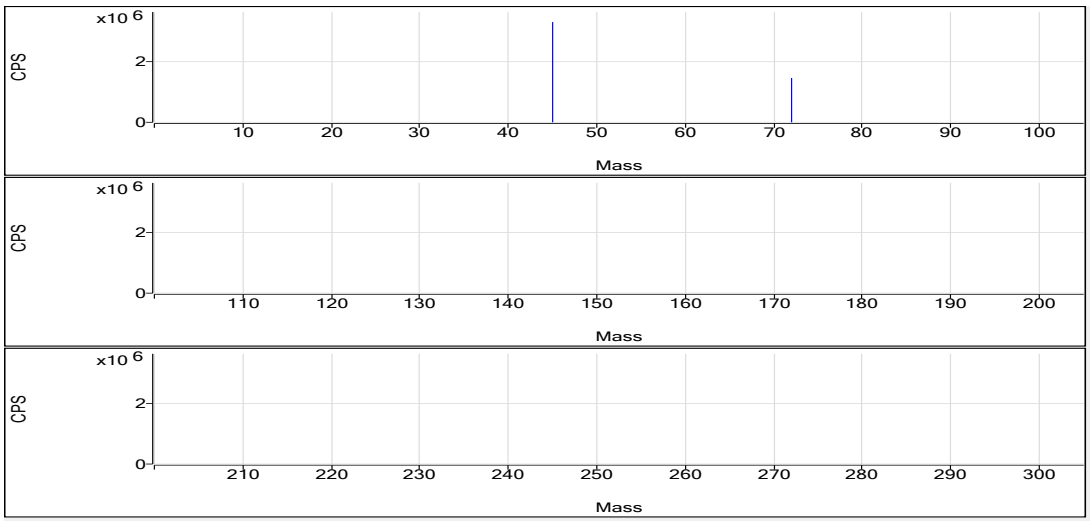
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.287	ppb	5.6	615.35	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.415	ppb	27.6	27.55	0.0002	Pulse	1.5000	3
Na	23	72	He	93.437	ppb	1.7	19770.46	0.2670	Pulse	0.1000	3
Mg	24	72	He	1618.942	ppb	0.8	101434.92	1.3698	Pulse	0.1000	3
Al	27	72	He	8079.543	ppb	0.5	144508.20	1.9514	Pulse	0.1000	3
K	39	72	He	911.616	ppb	2.0	47915.17	0.6470	Pulse	0.1000	3
Ca	44	72	He	2348.737	ppb	3.4	5521.23	0.0746	Pulse	0.1000	3
Ti	47	72	He	49.367	ppb	10.5	936.73	0.0127	Pulse	0.1000	3
V	51	72	He	15.843	ppb	0.5	14266.34	0.1927	Pulse	0.5000	3
Cr	52	72	He	8.847	ppb	4.4	11855.20	0.1601	Pulse	0.1000	3
Mn	55	72	He	72.540	ppb	3.6	32734.16	0.4420	Pulse	0.1000	3
Fe	57	72	He	6466.283	ppb	1.0	139016.64	1.8773	Pulse	0.1000	3
Co	59	72	He	2.609	ppb	6.5	6124.82	0.0827	Pulse	0.1000	3
Ni	60	72	He	9.473	ppb	3.5	6835.20	0.0923	Pulse	0.1000	3
Cu	63	72	He	13.064	ppb	1.5	24491.42	0.3307	Pulse	0.1000	3
Zn	66	72	He	43.219	ppb	5.0	8222.62	0.1110	Pulse	0.1000	3
As	75	72	He	2.147	ppb	1.8	308.68	0.0042	Pulse	0.5000	3
Sr	88	115	He	14.447	ppb	2.4	7275.44	0.1137	Pulse	0.1000	3
Mo	98	115	He	0.476	ppb	9.1	703.38	0.0110	Pulse	0.1000	3
Ag	107	115	He	0.077	ppb	9.4	253.34	0.0040	Pulse	0.1000	3
Cd	111	115	He	0.334	ppb	19.3	106.00	0.0017	Pulse	0.5000	3
Sn	120	115	He	0.771	ppb	35.3	1700.16	0.0266	Pulse	0.1000	3
Sb	121	115	He	0.206	ppb	23.7	180.01	0.0028	Pulse	0.1000	3
Ba	137	115	He	50.070	ppb	2.4	14034.27	0.2194	Pulse	0.1000	3
Tl	205	209	He	0.153	ppb	9.0	1166.76	0.0052	Pulse	0.1000	3
Pb	208	209	He	20.807	ppb	1.2	168966.96	0.7595	Pulse	0.1000	3
U	238	209	He	0.637	ppb	5.7	6011.61	0.0270	Pulse	0.1000	3

ISTD Table:

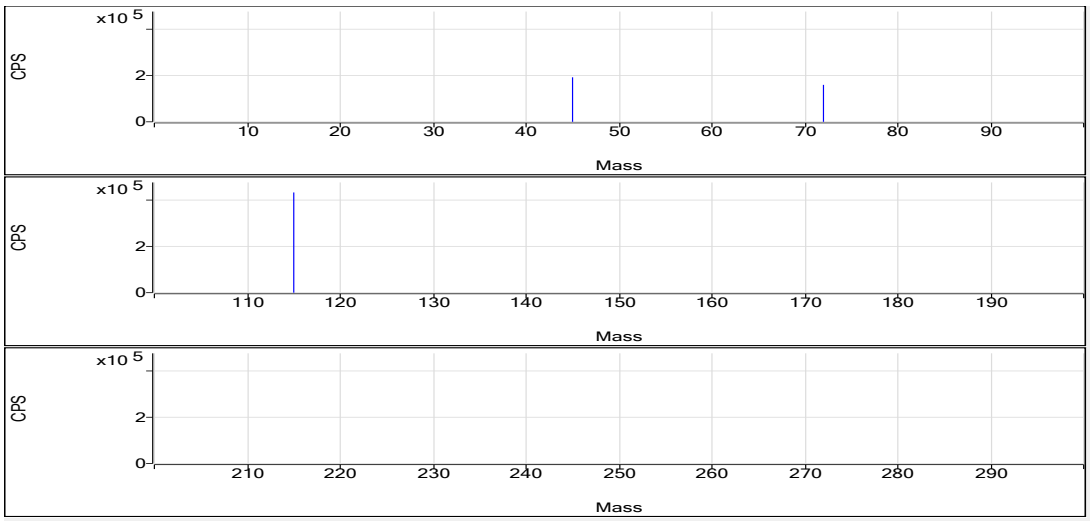
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3280717.55	1.0	101.2	Pulse	0.1000	3
No Gas	Ge	72	1448752.58	1.4	100.6	Pulse	0.1000	3
H2	Sc	45	192847.91	1.5	98.7	Pulse	0.1000	3
H2	Ge	72	160098.74	1.4	98.2	Pulse	0.1000	3
H2	In	115	434239.58	2.2	100.2	Pulse	0.1000	3
He	Sc	45	41709.98	1.0	104.3	Pulse	0.1000	3
He	Ge	72	74054.00	0.5	102.4	Pulse	0.1000	3
He	In	115	63987.06	1.1	99.1	Pulse	0.1000	3
He	Tb	159	286413.03	0.5	100.1	Pulse	0.1000	3
He	Bi	209	222482.97	0.8	100.1	Pulse	0.1000	3

No Gas

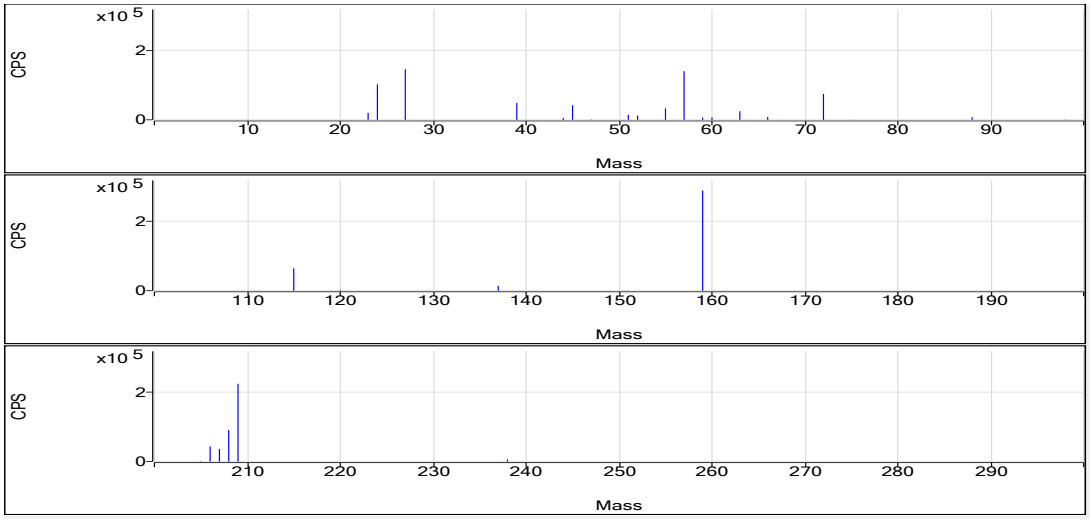


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.289	0.0004	620.02	0.0013	4.694E-05
Be	9	1	No Gas	0.271	0.0004	574.02	0.0013	4.694E-05
Be	9	1	No Gas	0.303	0.0004	652.02	0.0013	4.694E-05
Se	78	2	H2	0.288	0.0001	20.00	0.0004	1.089E-05
Se	78	2	H2	0.509	0.0002	33.33	0.0004	1.089E-05
Se	78	2	H2	0.448	0.0002	29.33	0.0004	1.089E-05
Na	23	3	He	91.6	0.2638	19413.26	0.0017	0.1065
Na	23	3	He	94.556	0.2689	19984.01	0.0017	0.1065
Na	23	3	He	94.154	0.2682	19914.10	0.0017	0.1065
Mg	24	3	He	1633.232	1.3818	101686.22	0.0008	0.004846
Mg	24	3	He	1617.538	1.3686	101716.16	0.0008	0.004846
Mg	24	3	He	1606.057	1.3589	100902.38	0.0008	0.004846
Al	27	3	He	8114.134	1.9598	144215.91	0.0002	0.001063
Al	27	3	He	8038.523	1.9415	144296.53	0.0002	0.001063
Al	27	3	He	8085.971	1.953	145012.16	0.0002	0.001063
K	39	3	He	922.293	0.6529	48048.86	0.0006	0.1436
K	39	3	He	922.361	0.653	48530.46	0.0006	0.1436
K	39	3	He	890.194	0.6352	47166.18	0.0006	0.1436
Ca	44	3	He	2398.777	0.0761	5601.29	0	0.001611
Ca	44	3	He	2257.569	0.0717	5331.14	0	0.001611
Ca	44	3	He	2389.866	0.0758	5631.27	0	0.001611
Ti	47	3	He	55.267	0.0141	1040.07	0.0003	0.0002737
Ti	47	3	He	47.199	0.0121	900.06	0.0003	0.0002737
Ti	47	3	He	45.633	0.0117	870.06	0.0003	0.0002737
V	51	3	He	15.917	0.1935	14240.98	0.0117	0.007326
V	51	3	He	15.77	0.1918	14254.97	0.0117	0.007326
V	51	3	He	15.841	0.1926	14303.06	0.0117	0.007326
Cr	52	3	He	9.127	0.1644	12095.38	0.0152	0.02538
Cr	52	3	He	8.402	0.1533	11394.83	0.0152	0.02538
Cr	52	3	He	9.013	0.1626	12075.39	0.0152	0.02538
Mn	55	3	He	72.032	0.439	32306.40	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	75.343	0.4586	34080.71	0.0059	0.01385
Mn	55	3	He	70.246	0.4285	31815.36	0.0059	0.01385
Fe	57	3	He	6535.629	1.8974	139625.30	0.0003	0.003918
Fe	57	3	He	6448.551	1.8722	139141.73	0.0003	0.003918
Fe	57	3	He	6414.67	1.8623	138282.88	0.0003	0.003918
Co	59	3	He	2.461	0.0782	5751.34	0.0305	0.003084
Co	59	3	He	2.793	0.0883	6561.65	0.0305	0.003084
Co	59	3	He	2.574	0.0816	6061.46	0.0305	0.003084
Ni	60	3	He	9.689	0.0942	6931.91	0.0088	0.009003
Ni	60	3	He	9.644	0.0938	6971.98	0.0088	0.009003
Ni	60	3	He	9.087	0.0889	6601.70	0.0088	0.009003
Cu	63	3	He	12.924	0.3272	24080.66	0.0249	0.004937
Cu	63	3	He	13.287	0.3363	24992.32	0.0249	0.004937
Cu	63	3	He	12.98	0.3286	24401.28	0.0249	0.004937
Zn	66	3	He	40.746	0.1049	7722.36	0.0025	0.004836
Zn	66	3	He	44.544	0.1143	8492.70	0.0025	0.004836
Zn	66	3	He	44.368	0.1138	8452.80	0.0025	0.004836
As	75	3	He	2.172	0.0042	310.01	0.0017	0.0004347
As	75	3	He	2.102	0.0041	304.01	0.0017	0.0004347
As	75	3	He	2.166	0.0042	312.01	0.0017	0.0004347
Sr	88	3	He	14.781	0.1163	7472.22	0.0078	0.0007762
Sr	88	3	He	14.1	0.111	7162.05	0.0078	0.0007762
Sr	88	3	He	14.459	0.1138	7192.04	0.0078	0.0007762
Mo	98	3	He	0.45	0.0104	670.04	0.022	0.0005162
Mo	98	3	He	0.526	0.0121	780.06	0.022	0.0005162
Mo	98	3	He	0.451	0.0104	660.04	0.022	0.0005162
Ag	107	3	He	0.068	0.0036	230.01	0.0455	0.0004641
Ag	107	3	He	0.082	0.0042	270.01	0.0455	0.0004641
Ag	107	3	He	0.08	0.0041	260.01	0.0455	0.0004641
Cd	111	3	He	0.275	0.0014	88.00	0.0048	5.152E-05
Cd	111	3	He	0.403	0.002	128.00	0.0048	5.152E-05
Cd	111	3	He	0.325	0.0016	102.00	0.0048	5.152E-05
Sn	120	3	He	0.457	0.0221	1420.12	0.0143	0.01559
Sn	120	3	He	0.918	0.0287	1850.18	0.0143	0.01559
Sn	120	3	He	0.938	0.029	1830.18	0.0143	0.01559
Sb	121	3	He	0.255	0.0034	220.01	0.0124	0.000258
Sb	121	3	He	0.204	0.0028	180.01	0.0124	0.000258
Sb	121	3	He	0.158	0.0022	140.01	0.0124	0.000258
Ba	137	3	He	50.843	0.2227	14307.98	0.0044	0.000309
Ba	137	3	He	48.7	0.2134	13767.27	0.0044	0.000309
Ba	137	3	He	50.665	0.222	14027.56	0.0044	0.000309
Tl	205	3	He	0.145	0.005	1120.09	0.0276	0.001005
Tl	205	3	He	0.169	0.0057	1270.10	0.0276	0.001005
Tl	205	3	He	0.146	0.005	1110.09	0.0276	0.001005
Pb	208	3	He	20.579	0.7512	89323.28	0.0364	0.002176
Pb	208	3	He	20.778	0.7585	90449.02	0.0364	0.002176
Pb	208	3	He	21.065	0.7689	89423.73	0.0364	0.002176
U	238	3	He	0.595	0.0253	5651.43	0.0421	0.00024
U	238	3	He	0.663	0.0281	6281.74	0.0421	0.00024
U	238	3	He	0.652	0.0277	6101.66	0.0421	0.00024
Sc	45	1	No Gas			3294048.70		
Sc	45	1	No Gas			3242878.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3305225.26		
Ge	72	1	No Gas			1455193.10		
Ge	72	1	No Gas			1425324.82		
Ge	72	1	No Gas			1465739.82		
Sc	45	2	H2			195518.98		
Sc	45	2	H2			193279.33		
Sc	45	2	H2			189745.43		
Ge	72	2	H2			162639.28		
Ge	72	2	H2			159302.68		
Ge	72	2	H2			158354.27		
In	115	2	H2			445345.27		
In	115	2	H2			429666.48		
In	115	2	H2			427706.99		
Sc	45	3	He			41559.71		
Sc	45	3	He			41378.76		
Sc	45	3	He			42191.48		
Ge	72	3	He			73588.27		
Ge	72	3	He			74321.59		
Ge	72	3	He			74252.15		
In	115	3	He			64248.23		
In	115	3	He			64539.81		
In	115	3	He			63212.94		
Tb	159	3	He			287903.10		
Tb	159	3	He			285553.00		
Tb	159	3	He			285783.00		
Bi	209	3	He			223660.11		
Bi	209	3	He			223416.03		
Bi	209	3	He			220372.77		

Quantitation Report

Data File Name	152SMPL.d
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Acq Time	2023-08-10 15:39:20
Sample Name	410-136624-C-1-C PDS @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

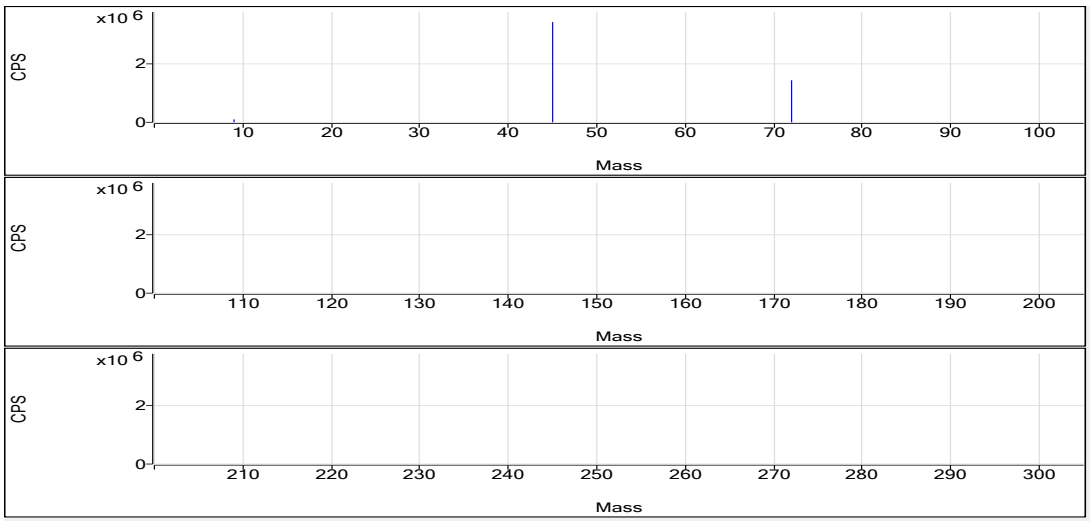
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	52.682	ppb	2.3	100456.13	0.0693	Pulse	0.5000	3
Se	78	72	H2	108.405	ppb	5.1	6798.72	0.0422	Pulse	1.5000	3
Na	23	72	He	5753.693	ppb	0.2	753170.75	9.9903	Pulse	0.1000	3
Mg	24	72	He	13979.255	ppb	0.6	888922.98	11.7908	Pulse	0.1000	3
Al	27	72	He	48757.932	ppb	0.4	887417.75	11.7709	Pulse	0.1000	3
K	39	72	He	10019.630	ppb	0.7	427967.87	5.6766	Pulse	0.1000	3
Ca	44	72	He	18074.611	ppb	0.1	42445.69	0.5630	Pulse	0.1000	3
Ti	47	72	He	815.069	ppb	3.0	15432.01	0.2047	Pulse	0.1000	3
V	51	72	He	616.121	ppb	0.3	543914.85	7.2146	Pulse	0.5000	3
Cr	52	72	He	576.119	ppb	0.8	663313.56	8.7981	Pulse	0.1000	3
Mn	55	72	He	913.972	ppb	0.9	407740.61	5.4085	Pulse	0.1000	3
Fe	57	72	He	39905.849	ppb	0.7	871912.46	11.5652	Pulse	0.1000	3
Co	59	72	He	538.301	ppb	0.9	1238420.42	16.4269	Pulse	0.1000	3
Ni	60	72	He	568.055	ppb	0.9	377269.72	5.0041	Pulse	0.1000	3
Cu	63	72	He	598.400	ppb	0.6	1125367.98	14.9273	Pulse	0.1000	3
Zn	66	72	He	753.282	ppb	0.9	139881.02	1.8555	Pulse	0.1000	3
As	75	72	He	525.354	ppb	0.1	68916.06	0.9141	Pulse	0.5000	3
Sr	88	115	He	129.950	ppb	0.5	65715.23	1.0166	Pulse	0.1000	3
Mo	98	115	He	53.943	ppb	2.4	76818.67	1.1884	Pulse	0.1000	3
Ag	107	115	He	52.243	ppb	1.8	153671.10	2.3775	Pulse	0.1000	3
Cd	111	115	He	53.867	ppb	1.0	16717.97	0.2586	Pulse	0.5000	3
Sn	120	115	He	107.766	ppb	2.2	100319.53	1.5521	Pulse	0.1000	3
Sb	121	115	He	104.179	ppb	0.8	83550.14	1.2926	Pulse	0.1000	3
Ba	137	115	He	780.665	ppb	1.6	220785.04	3.4156	Pulse	0.1000	3
Tl	205	209	He	103.610	ppb	0.3	648735.03	2.8652	Pulse	0.1000	3
Pb	208	209	He	163.919	ppb	0.4	1351345.99	5.9684	Pulse	0.1000	3
U	238	209	He	54.658	ppb	0.7	520676.75	2.2996	Pulse	0.1000	3

ISTD Table:

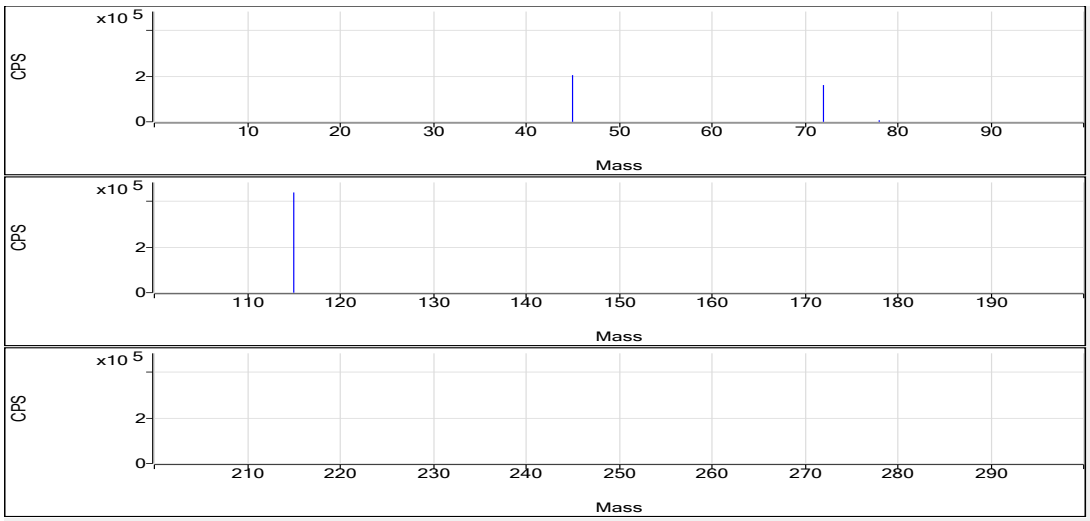
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3457547.24	1.6	106.7	Pulse	0.1000	3
No Gas	Ge	72	1450485.92	2.0	100.7	Pulse	0.1000	3
H2	Sc	45	204757.07	1.3	104.8	Pulse	0.1000	3
H2	Ge	72	161170.01	2.6	98.9	Pulse	0.1000	3
H2	In	115	439501.16	2.0	101.4	Pulse	0.1000	3
He	Sc	45	44334.57	1.8	110.9	Pulse	0.1000	3
He	Ge	72	75391.18	0.8	104.3	Pulse	0.1000	3
He	In	115	64640.95	1.0	100.1	Pulse	0.1000	3
He	Tb	159	295410.65	0.9	103.3	Pulse	0.1000	3
He	Bi	209	226418.12	0.6	101.9	Pulse	0.1000	3

No Gas

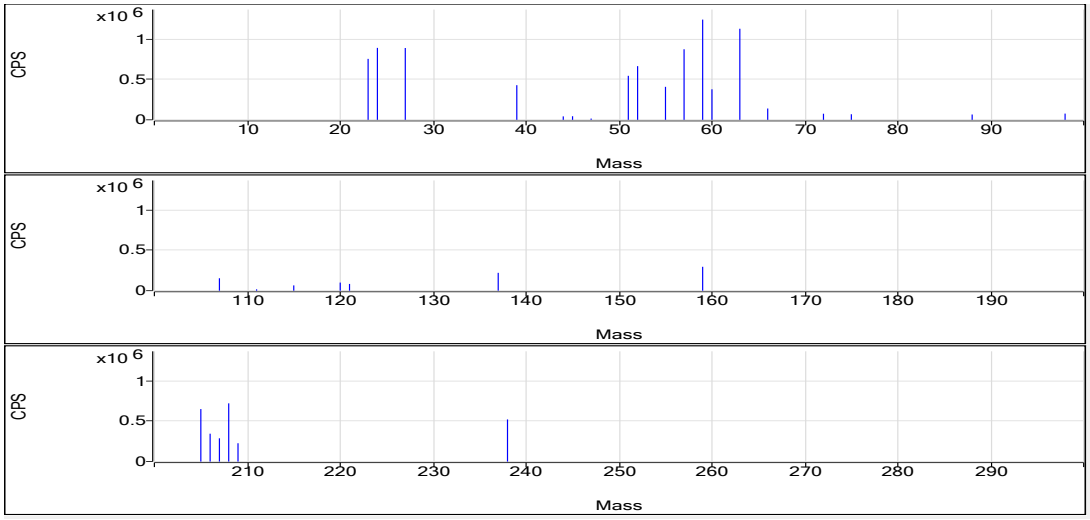


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	53.508	0.0704	102358.00	0.0013	4.694E-05
Be	9	1	No Gas	53.276	0.0701	99402.36	0.0013	4.694E-05
Be	9	1	No Gas	51.261	0.0674	99608.03	0.0013	4.694E-05
Se	78	2	H2	102.212	0.0398	6610.85	0.0004	1.089E-05
Se	78	2	H2	112.649	0.0439	6973.02	0.0004	1.089E-05
Se	78	2	H2	110.355	0.043	6812.28	0.0004	1.089E-05
Na	23	3	He	5766.326	10.012	747731.24	0.0017	0.1065
Na	23	3	He	5744.201	9.974	755232.18	0.0017	0.1065
Na	23	3	He	5750.551	9.9849	756548.82	0.0017	0.1065
Mg	24	3	He	13975.436	11.7876	880338.58	0.0008	0.004846
Mg	24	3	He	13899.668	11.7237	887721.00	0.0008	0.004846
Mg	24	3	He	14062.661	11.8611	898709.36	0.0008	0.004846
Al	27	3	He	48856.259	11.7947	880870.46	0.0002	0.001063
Al	27	3	He	48527.33	11.7153	887084.99	0.0002	0.001063
Al	27	3	He	48890.206	11.8029	894297.80	0.0002	0.001063
K	39	3	He	10010.623	5.6716	423577.96	0.0006	0.1436
K	39	3	He	9954.174	5.6405	427097.06	0.0006	0.1436
K	39	3	He	10094.094	5.7177	433228.59	0.0006	0.1436
Ca	44	3	He	18072.108	0.5629	42041.56	0	0.001611
Ca	44	3	He	18100.943	0.5638	42692.93	0	0.001611
Ca	44	3	He	18050.782	0.5623	42602.59	0	0.001611
Ti	47	3	He	800.241	0.201	15008.25	0.0003	0.0002737
Ti	47	3	He	843.043	0.2117	16029.35	0.0003	0.0002737
Ti	47	3	He	801.924	0.2014	15258.44	0.0003	0.0002737
V	51	3	He	615.876	7.2117	538595.69	0.0117	0.007326
V	51	3	He	614.659	7.1975	544993.56	0.0117	0.007326
V	51	3	He	617.827	7.2345	548155.31	0.0117	0.007326
Cr	52	3	He	573.621	8.7601	654234.52	0.0152	0.02538
Cr	52	3	He	573.475	8.7578	663147.10	0.0152	0.02538
Cr	52	3	He	581.26	8.8764	672559.05	0.0152	0.02538
Mn	55	3	He	920.442	5.4467	406778.94	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	904.805	5.3544	405436.52	0.0059	0.01385
Mn	55	3	He	916.671	5.4244	411006.36	0.0059	0.01385
Fe	57	3	He	39955.589	11.5796	864810.30	0.0003	0.003918
Fe	57	3	He	39588.466	11.4733	868760.53	0.0003	0.003918
Fe	57	3	He	40173.492	11.6428	882166.55	0.0003	0.003918
Co	59	3	He	540.667	16.4991	1232213.42	0.0305	0.003084
Co	59	3	He	532.447	16.2483	1230327.56	0.0305	0.003084
Co	59	3	He	541.788	16.5333	1252720.29	0.0305	0.003084
Ni	60	3	He	566.304	4.9887	372573.31	0.0088	0.009003
Ni	60	3	He	564.124	4.9695	376293.24	0.0088	0.009003
Ni	60	3	He	573.737	5.054	382942.61	0.0088	0.009003
Cu	63	3	He	600.676	14.9841	1119065.06	0.0249	0.004937
Cu	63	3	He	593.926	14.8157	1121852.80	0.0249	0.004937
Cu	63	3	He	600.597	14.9821	1135186.08	0.0249	0.004937
Zn	66	3	He	759.255	1.8701	139669.63	0.0025	0.004836
Zn	66	3	He	754.202	1.8577	140668.32	0.0025	0.004836
Zn	66	3	He	746.388	1.8385	139305.12	0.0025	0.004836
As	75	3	He	525.561	0.9145	68296.44	0.0017	0.0004347
As	75	3	He	525.444	0.9143	69228.98	0.0017	0.0004347
As	75	3	He	525.056	0.9136	69222.75	0.0017	0.0004347
Sr	88	3	He	129.304	1.0116	65370.96	0.0078	0.0007762
Sr	88	3	He	130.048	1.0174	65128.63	0.0078	0.0007762
Sr	88	3	He	130.498	1.0209	66646.09	0.0078	0.0007762
Mo	98	3	He	52.501	1.1567	74748.32	0.022	0.0005162
Mo	98	3	He	54.917	1.2099	77451.68	0.022	0.0005162
Mo	98	3	He	54.411	1.1987	78256.02	0.022	0.0005162
Ag	107	3	He	51.746	2.3549	152185.29	0.0455	0.0004641
Ag	107	3	He	53.299	2.4256	155277.93	0.0455	0.0004641
Ag	107	3	He	51.684	2.3521	153550.08	0.0455	0.0004641
Cd	111	3	He	53.255	0.2557	16523.75	0.0048	5.152E-05
Cd	111	3	He	54.223	0.2603	16665.88	0.0048	5.152E-05
Cd	111	3	He	54.124	0.2599	16964.29	0.0048	5.152E-05
Sn	120	3	He	105.848	1.5248	98536.81	0.0143	0.01559
Sn	120	3	He	110.395	1.5896	101760.11	0.0143	0.01559
Sn	120	3	He	107.054	1.5419	100661.66	0.0143	0.01559
Sb	121	3	He	103.824	1.2882	83248.33	0.0124	0.000258
Sb	121	3	He	105.178	1.305	83540.53	0.0124	0.000258
Sb	121	3	He	103.535	1.2846	83861.56	0.0124	0.000258
Ba	137	3	He	766.178	3.3522	216632.01	0.0044	0.000309
Ba	137	3	He	788.133	3.4482	220743.71	0.0044	0.000309
Ba	137	3	He	787.684	3.4463	224979.41	0.0044	0.000309
Tl	205	3	He	103.32	2.8572	645116.20	0.0276	0.001005
Tl	205	3	He	103.966	2.8751	648351.20	0.0276	0.001005
Tl	205	3	He	103.543	2.8634	652737.69	0.0276	0.001005
Pb	208	3	He	163.313	5.9463	716159.68	0.0364	0.002176
Pb	208	3	He	164.697	5.9967	719586.79	0.0364	0.002176
Pb	208	3	He	163.748	5.9622	722661.63	0.0364	0.002176
U	238	3	He	54.354	2.2868	516317.38	0.0421	0.00024
U	238	3	He	54.527	2.294	517320.58	0.0421	0.00024
U	238	3	He	55.094	2.3179	528392.30	0.0421	0.00024
Sc	45	1	No Gas			3461840.26		
Sc	45	1	No Gas			3399247.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3511553.70		
Ge	72	1	No Gas			1454796.38		
Ge	72	1	No Gas			1418941.39		
Ge	72	1	No Gas			1477719.98		
Sc	45	2	H2			206584.51		
Sc	45	2	H2			205968.02		
Sc	45	2	H2			201718.67		
Ge	72	2	H2			166067.50		
Ge	72	2	H2			158939.41		
Ge	72	2	H2			158503.12		
In	115	2	H2			449516.20		
In	115	2	H2			435398.59		
In	115	2	H2			433588.70		
Sc	45	3	He			43514.96		
Sc	45	3	He			45120.48		
Sc	45	3	He			44368.28		
Ge	72	3	He			74683.71		
Ge	72	3	He			75720.35		
Ge	72	3	He			75769.49		
In	115	3	He			65392.78		
In	115	3	He			64810.27		
In	115	3	He			66067.27		
Tb	159	3	He			292508.32		
Tb	159	3	He			296423.02		
Tb	159	3	He			297300.62		
Bi	209	3	He			225785.06		
Bi	209	3	He			225507.85		
Bi	209	3	He			227961.46		

Quantitation Report

Data File Name	153SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:41:21
Sample Name	410-136624-C-1-C PDS @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

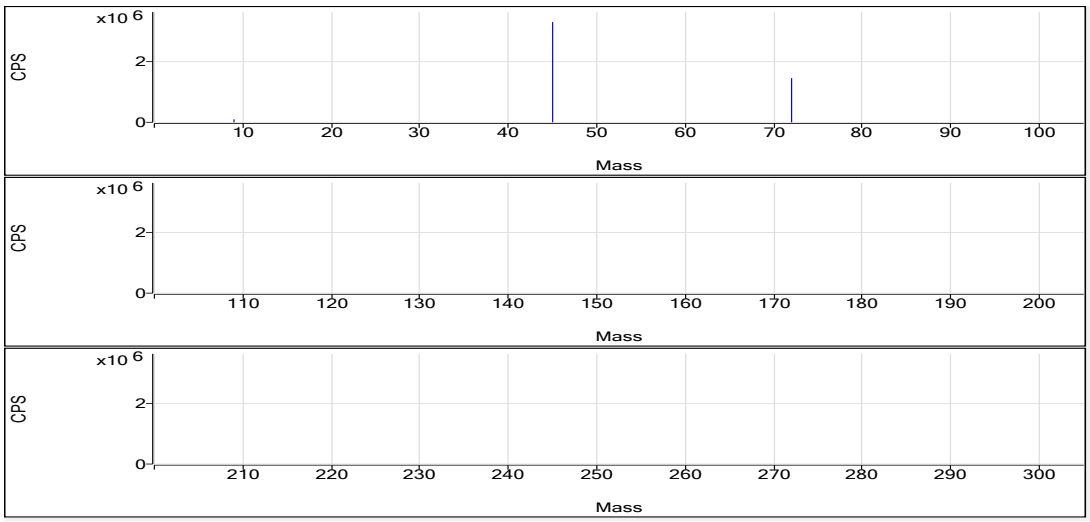
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	51.531	ppb	3.7	98548.48	0.0678	Pulse	0.5000	3
Se	78	72	H2	108.027	ppb	3.6	6751.14	0.0421	Pulse	1.5000	3
Na	23	72	He	5536.925	ppb	0.7	723018.40	9.6179	Pulse	0.1000	3
Mg	24	72	He	7062.636	ppb	1.0	447993.47	5.9594	Pulse	0.1000	3
Al	27	72	He	13370.986	ppb	0.8	242717.88	3.2287	Pulse	0.1000	3
K	39	72	He	6253.612	ppb	0.5	270401.53	3.5970	Pulse	0.1000	3
Ca	44	72	He	7904.646	ppb	3.0	18575.67	0.2471	Pulse	0.1000	3
Ti	47	72	He	598.679	ppb	5.1	11308.07	0.1504	Pulse	0.1000	3
V	51	72	He	555.345	ppb	0.8	488903.19	6.5036	Pulse	0.5000	3
Cr	52	72	He	547.326	ppb	0.7	628429.09	8.3597	Pulse	0.1000	3
Mn	55	72	He	604.363	ppb	0.6	269204.46	3.5811	Pulse	0.1000	3
Fe	57	72	He	11706.007	ppb	0.7	255241.16	3.3953	Pulse	0.1000	3
Co	59	72	He	539.561	ppb	0.3	1237782.82	16.4654	Pulse	0.1000	3
Ni	60	72	He	545.068	ppb	0.3	360997.52	4.8020	Pulse	0.1000	3
Cu	63	72	He	552.136	ppb	0.3	1035438.81	13.7736	Pulse	0.1000	3
Zn	66	72	He	571.815	ppb	0.6	105972.95	1.4097	Pulse	0.1000	3
As	75	72	He	532.257	ppb	0.5	69620.84	0.9261	Pulse	0.5000	3
Sr	88	115	He	68.125	ppb	3.5	33790.86	0.5333	Pulse	0.1000	3
Mo	98	115	He	53.802	ppb	1.7	75106.24	1.1853	Pulse	0.1000	3
Ag	107	115	He	54.110	ppb	1.8	156027.86	2.4625	Pulse	0.1000	3
Cd	111	115	He	55.008	ppb	1.7	16734.65	0.2641	Pulse	0.5000	3
Sn	120	115	He	110.925	ppb	3.6	101189.70	1.5971	Pulse	0.1000	3
Sb	121	115	He	108.413	ppb	2.0	85233.21	1.3451	Pulse	0.1000	3
Ba	137	115	He	580.709	ppb	1.0	161014.81	2.5408	Pulse	0.1000	3
Tl	205	209	He	108.743	ppb	0.8	664093.27	3.0071	Pulse	0.1000	3
Pb	208	209	He	75.464	ppb	0.4	607065.74	2.7489	Pulse	0.1000	3
U	238	209	He	53.904	ppb	1.2	500820.07	2.2678	Pulse	0.1000	3

ISTD Table:

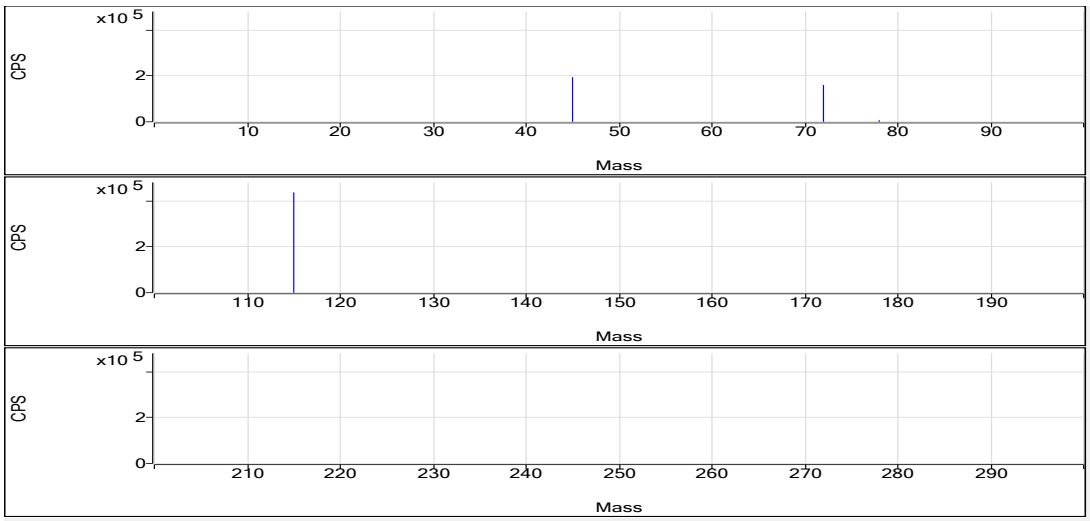
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3300546.51	0.9	101.8	Pulse	0.1000	3
No Gas	Ge	72	1454703.78	1.1	101.0	Pulse	0.1000	3
H2	Sc	45	194201.48	1.5	99.4	Pulse	0.1000	3
H2	Ge	72	160498.47	1.3	98.5	Pulse	0.1000	3
H2	In	115	436258.39	2.3	100.7	Pulse	0.1000	3
He	Sc	45	43468.30	1.1	108.7	Pulse	0.1000	3
He	Ge	72	75176.18	0.7	104.0	Pulse	0.1000	3
He	In	115	63371.91	1.4	98.1	Pulse	0.1000	3
He	Tb	159	284841.65	0.6	99.6	Pulse	0.1000	3
He	Bi	209	220846.38	0.8	99.4	Pulse	0.1000	3

No Gas

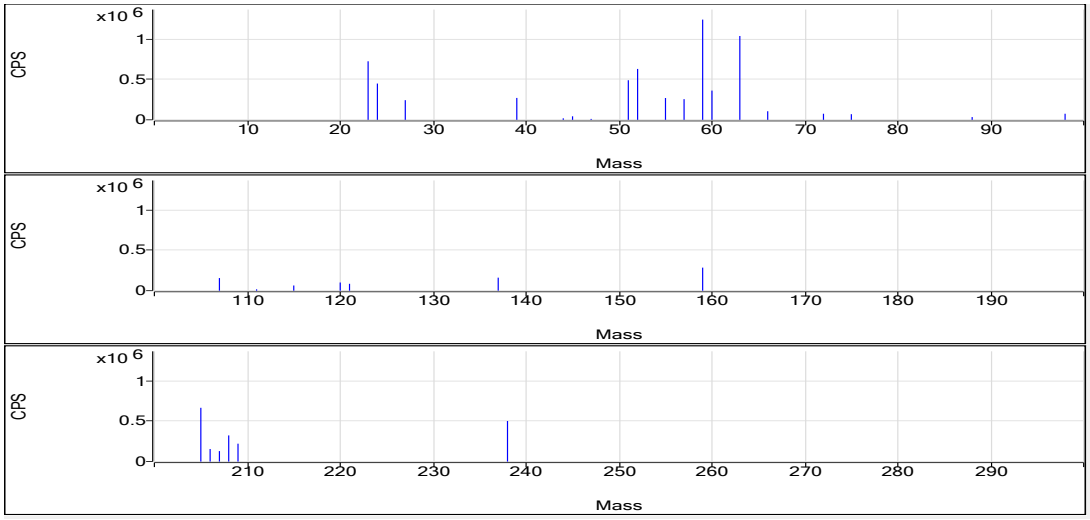


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.855	0.0695	100747.45	0.0013	4.694E-05
Be	9	1	No Gas	52.388	0.0689	99370.11	0.0013	4.694E-05
Be	9	1	No Gas	49.351	0.0649	95527.89	0.0013	4.694E-05
Se	78	2	H2	105.41	0.0411	6688.89	0.0004	1.089E-05
Se	78	2	H2	112.456	0.0438	6967.69	0.0004	1.089E-05
Se	78	2	H2	106.214	0.0414	6596.85	0.0004	1.089E-05
Na	23	3	He	5553.561	9.6465	720045.30	0.0017	0.1065
Na	23	3	He	5566.506	9.6687	726952.10	0.0017	0.1065
Na	23	3	He	5490.707	9.5385	722057.80	0.0017	0.1065
Mg	24	3	He	7056.651	5.9543	444450.19	0.0008	0.004846
Mg	24	3	He	7136.348	6.0215	452733.35	0.0008	0.004846
Mg	24	3	He	6994.908	5.9023	446796.87	0.0008	0.004846
Al	27	3	He	13406.981	3.2374	241652.54	0.0002	0.001063
Al	27	3	He	13455.554	3.2492	244290.97	0.0002	0.001063
Al	27	3	He	13250.423	3.1996	242210.13	0.0002	0.001063
K	39	3	He	6262.59	3.6019	268859.04	0.0006	0.1436
K	39	3	He	6278.468	3.6107	271472.91	0.0006	0.1436
K	39	3	He	6219.777	3.5783	270872.65	0.0006	0.1436
Ca	44	3	He	8170.537	0.2554	19062.91	0	0.001611
Ca	44	3	He	7823.917	0.2446	18392.05	0	0.001611
Ca	44	3	He	7719.486	0.2414	18272.06	0	0.001611
Ti	47	3	He	572.884	0.1439	10744.24	0.0003	0.0002737
Ti	47	3	He	632.44	0.1589	11945.29	0.0003	0.0002737
Ti	47	3	He	590.713	0.1484	11234.69	0.0003	0.0002737
V	51	3	He	560.215	6.5606	489703.56	0.0117	0.007326
V	51	3	He	551.961	6.464	486004.56	0.0117	0.007326
V	51	3	He	553.858	6.4862	491001.44	0.0117	0.007326
Cr	52	3	He	549.962	8.3998	626989.56	0.0152	0.02538
Cr	52	3	He	548.948	8.3844	630386.12	0.0152	0.02538
Cr	52	3	He	543.068	8.2948	627911.59	0.0152	0.02538
Mn	55	3	He	608.49	3.6054	269120.43	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	601.67	3.5652	268050.15	0.0059	0.01385
Mn	55	3	He	602.929	3.5726	270442.81	0.0059	0.01385
Fe	57	3	He	11799.58	3.4224	255461.46	0.0003	0.003918
Fe	57	3	He	11634.448	3.3746	253721.73	0.0003	0.003918
Fe	57	3	He	11683.993	3.3889	256540.29	0.0003	0.003918
Co	59	3	He	541.219	16.5159	1232804.67	0.0305	0.003084
Co	59	3	He	539.933	16.4767	1238816.86	0.0305	0.003084
Co	59	3	He	537.531	16.4034	1241726.93	0.0305	0.003084
Ni	60	3	He	542.897	4.7829	357008.24	0.0088	0.009003
Ni	60	3	He	546.144	4.8114	361750.39	0.0088	0.009003
Ni	60	3	He	546.165	4.8116	364233.94	0.0088	0.009003
Cu	63	3	He	553.825	13.8157	1031252.25	0.0249	0.004937
Cu	63	3	He	550.753	13.7391	1032990.38	0.0249	0.004937
Cu	63	3	He	551.83	13.766	1042073.81	0.0249	0.004937
Zn	66	3	He	572.859	1.4122	105412.53	0.0025	0.004836
Zn	66	3	He	568.164	1.4007	105311.64	0.0025	0.004836
Zn	66	3	He	574.423	1.4161	107194.69	0.0025	0.004836
As	75	3	He	535.213	0.9313	69512.48	0.0017	0.0004347
As	75	3	He	530.779	0.9235	69438.00	0.0017	0.0004347
As	75	3	He	530.779	0.9236	69912.03	0.0017	0.0004347
Sr	88	3	He	67.745	0.5303	34091.81	0.0078	0.0007762
Sr	88	3	He	70.677	0.5533	34582.82	0.0078	0.0007762
Sr	88	3	He	65.953	0.5163	32697.95	0.0078	0.0007762
Mo	98	3	He	52.78	1.1628	74748.23	0.022	0.0005162
Mo	98	3	He	54.221	1.1945	74667.14	0.022	0.0005162
Mo	98	3	He	54.405	1.1986	75903.35	0.022	0.0005162
Ag	107	3	He	53.203	2.4212	155643.20	0.0455	0.0004641
Ag	107	3	He	55.099	2.5075	156735.14	0.0455	0.0004641
Ag	107	3	He	54.028	2.4588	155705.23	0.0455	0.0004641
Cd	111	3	He	53.96	0.2591	16653.87	0.0048	5.152E-05
Cd	111	3	He	55.439	0.2662	16637.88	0.0048	5.152E-05
Cd	111	3	He	55.624	0.2671	16912.21	0.0048	5.152E-05
Sn	120	3	He	106.55	1.5348	98658.23	0.0143	0.01559
Sn	120	3	He	112.025	1.6128	100813.69	0.0143	0.01559
Sn	120	3	He	114.199	1.6438	104097.17	0.0143	0.01559
Sb	121	3	He	106.168	1.3173	84676.91	0.0124	0.000258
Sb	121	3	He	108.639	1.3479	84254.16	0.0124	0.000258
Sb	121	3	He	110.434	1.3702	86768.57	0.0124	0.000258
Ba	137	3	He	577.759	2.5279	162498.52	0.0044	0.000309
Ba	137	3	He	577.266	2.5257	157875.82	0.0044	0.000309
Ba	137	3	He	587.102	2.5688	162670.10	0.0044	0.000309
Tl	205	3	He	109.21	3.02	667235.62	0.0276	0.001005
Tl	205	3	He	109.256	3.0213	661981.24	0.0276	0.001005
Tl	205	3	He	107.764	2.9801	663062.96	0.0276	0.001005
Pb	208	3	He	75.469	2.749	323931.40	0.0364	0.002176
Pb	208	3	He	75.774	2.7602	319987.73	0.0364	0.002176
Pb	208	3	He	75.149	2.7374	324942.38	0.0364	0.002176
U	238	3	He	53.456	2.249	496883.08	0.0421	0.00024
U	238	3	He	54.623	2.2981	503523.23	0.0421	0.00024
U	238	3	He	53.633	2.2564	502053.90	0.0421	0.00024
Sc	45	1	No Gas			3299765.89		
Sc	45	1	No Gas			3271605.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3330268.39		
Ge	72	1	No Gas			1449586.38		
Ge	72	1	No Gas			1442508.10		
Ge	72	1	No Gas			1472016.85		
Sc	45	2	H2			197452.97		
Sc	45	2	H2			193248.18		
Sc	45	2	H2			191903.28		
Ge	72	2	H2			162930.87		
Ge	72	2	H2			159091.32		
Ge	72	2	H2			159473.22		
In	115	2	H2			445219.41		
In	115	2	H2			425349.17		
In	115	2	H2			438206.60		
Sc	45	3	He			43845.89		
Sc	45	3	He			43625.39		
Sc	45	3	He			42933.63		
Ge	72	3	He			74643.32		
Ge	72	3	He			75185.99		
Ge	72	3	He			75699.23		
In	115	3	He			65051.87		
In	115	3	He			63293.39		
In	115	3	He			64138.30		
Tb	159	3	He			283096.27		
Tb	159	3	He			284723.61		
Tb	159	3	He			286705.07		
Bi	209	3	He			220936.21		
Bi	209	3	He			219104.25		
Bi	209	3	He			222498.69		

Quantitation Report

Data File Name	154SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:43:20
Sample Name	410-136624-C-1-C SD @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

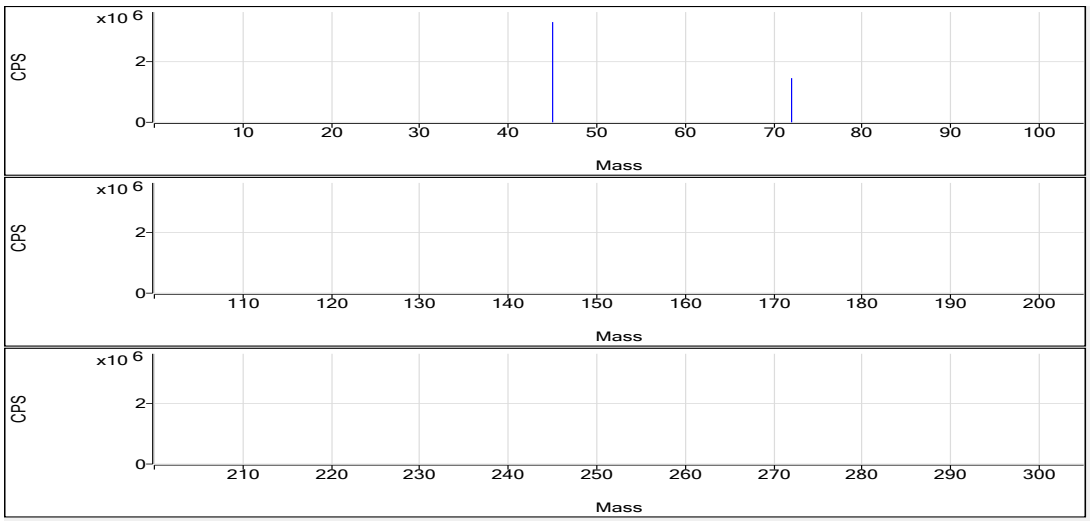
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.329	ppb	8.5	694.69	0.0005	Pulse	0.5000	3
Se	78	72	H2	0.579	ppb	18.9	38.44	0.0002	Pulse	1.5000	3
Na	23	72	He	96.745	ppb	1.1	20447.86	0.2726	Pulse	0.1000	3
Mg	24	72	He	1605.508	ppb	1.9	101863.70	1.3585	Pulse	0.1000	3
Al	27	72	He	7937.284	ppb	0.6	143773.92	1.9171	Pulse	0.1000	3
K	39	72	He	896.310	ppb	1.1	47888.64	0.6386	Pulse	0.1000	3
Ca	44	72	He	2436.226	ppb	2.2	5794.69	0.0773	Pulse	0.1000	3
Ti	47	72	He	46.039	ppb	6.4	886.73	0.0118	Pulse	0.1000	3
V	51	72	He	15.815	ppb	2.1	14421.14	0.1923	Pulse	0.5000	3
Cr	52	72	He	9.106	ppb	1.0	12302.22	0.1640	Pulse	0.1000	3
Mn	55	72	He	70.944	ppb	1.2	32443.33	0.4326	Pulse	0.1000	3
Fe	57	72	He	6414.468	ppb	0.3	139659.26	1.8623	Pulse	0.1000	3
Co	59	72	He	2.880	ppb	7.3	6818.51	0.0909	Pulse	0.1000	3
Ni	60	72	He	9.121	ppb	4.4	6688.46	0.0892	Pulse	0.1000	3
Cu	63	72	He	13.316	ppb	1.8	25269.45	0.3370	Pulse	0.1000	3
Zn	66	72	He	43.373	ppb	2.9	8352.70	0.1114	Pulse	0.1000	3
As	75	72	He	2.044	ppb	9.7	299.34	0.0040	Pulse	0.5000	3
Sr	88	115	He	14.322	ppb	3.4	7085.38	0.1127	Pulse	0.1000	3
Mo	98	115	He	0.501	ppb	7.8	726.71	0.0115	Pulse	0.1000	3
Ag	107	115	He	0.122	ppb	9.3	376.69	0.0060	Pulse	0.1000	3
Cd	111	115	He	0.404	ppb	14.0	125.33	0.0020	Pulse	0.5000	3
Sn	120	115	He	1.395	ppb	23.3	2230.26	0.0355	Pulse	0.1000	3
Sb	121	115	He	0.334	ppb	5.8	276.68	0.0044	Pulse	0.1000	3
Ba	137	115	He	51.075	ppb	2.5	14074.33	0.2238	Pulse	0.1000	3
Tl	205	209	He	0.495	ppb	5.9	3267.19	0.0147	Pulse	0.1000	3
Pb	208	209	He	20.888	ppb	0.8	169490.80	0.7624	Pulse	0.1000	3
U	238	209	He	0.655	ppb	7.1	6181.71	0.0278	Pulse	0.1000	3

ISTD Table:

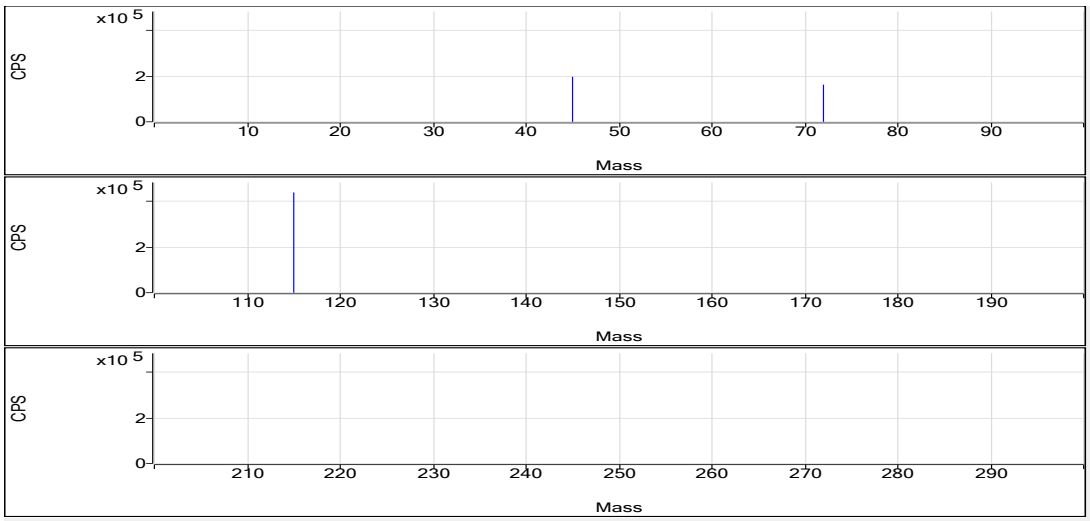
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3291690.16	1.8	101.6	Pulse	0.1000	3
No Gas	Ge	72	1450024.35	1.7	100.7	Pulse	0.1000	3
H2	Sc	45	196625.24	2.1	100.6	Pulse	0.1000	3
H2	Ge	72	162684.56	1.4	99.8	Pulse	0.1000	3
H2	In	115	438599.59	1.3	101.2	Pulse	0.1000	3
He	Sc	45	42020.98	1.3	105.1	Pulse	0.1000	3
He	Ge	72	74995.25	1.1	103.7	Pulse	0.1000	3
He	In	115	62880.99	2.1	97.4	Pulse	0.1000	3
He	Tb	159	286378.78	1.2	100.1	Pulse	0.1000	3
He	Bi	209	222314.13	1.2	100.1	Pulse	0.1000	3

No Gas

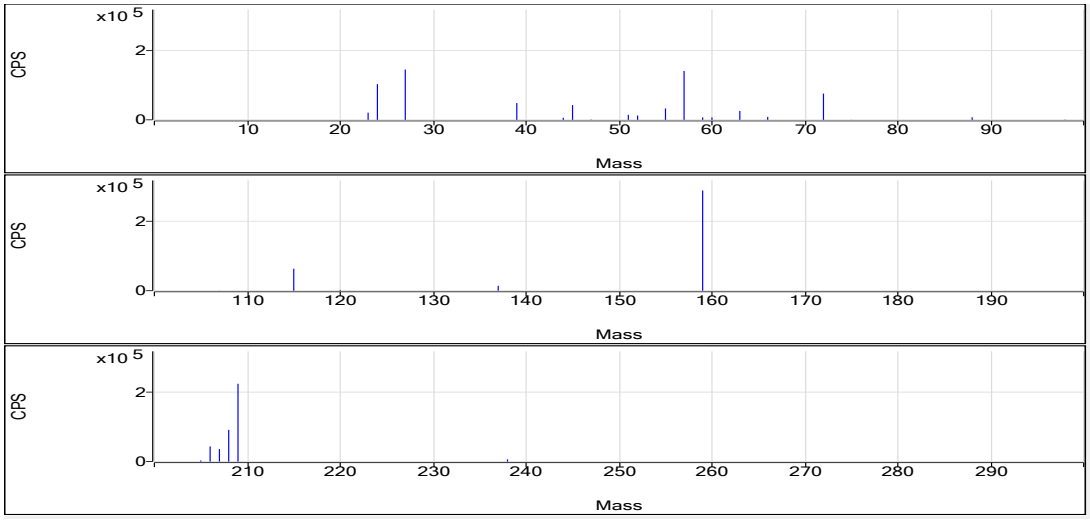


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.361	0.0005	744.02	0.0013	4.694E-05
Be	9	1	No Gas	0.319	0.0005	674.02	0.0013	4.694E-05
Be	9	1	No Gas	0.308	0.0005	666.02	0.0013	4.694E-05
Se	78	2	H2	0.573	0.0002	38.67	0.0004	1.089E-05
Se	78	2	H2	0.691	0.0003	45.33	0.0004	1.089E-05
Se	78	2	H2	0.472	0.0002	31.33	0.0004	1.089E-05
Na	23	3	He	96.705	0.2726	20644.91	0.0017	0.1065
Na	23	3	He	95.694	0.2708	20063.91	0.0017	0.1065
Na	23	3	He	97.837	0.2745	20634.77	0.0017	0.1065
Mg	24	3	He	1574.061	1.3319	100880.53	0.0008	0.004846
Mg	24	3	He	1634.1	1.3826	102419.97	0.0008	0.004846
Mg	24	3	He	1608.364	1.3609	102290.60	0.0008	0.004846
Al	27	3	He	7919.354	1.9127	144870.78	0.0002	0.001063
Al	27	3	He	7902.057	1.9086	141387.20	0.0002	0.001063
Al	27	3	He	7990.441	1.9299	145063.78	0.0002	0.001063
K	39	3	He	891.59	0.636	48169.40	0.0006	0.1436
K	39	3	He	908.077	0.6451	47788.43	0.0006	0.1436
K	39	3	He	889.262	0.6347	47708.08	0.0006	0.1436
Ca	44	3	He	2384.461	0.0757	5731.36	0	0.001611
Ca	44	3	He	2491.192	0.079	5851.36	0	0.001611
Ca	44	3	He	2433.026	0.0772	5801.35	0	0.001611
Ti	47	3	He	49.455	0.0127	960.07	0.0003	0.0002737
Ti	47	3	He	44.127	0.0113	840.06	0.0003	0.0002737
Ti	47	3	He	44.534	0.0114	860.05	0.0003	0.0002737
V	51	3	He	15.581	0.1896	14359.07	0.0117	0.007326
V	51	3	He	16.202	0.1969	14583.29	0.0117	0.007326
V	51	3	He	15.661	0.1905	14321.06	0.0117	0.007326
Cr	52	3	He	9.185	0.1652	12515.77	0.0152	0.02538
Cr	52	3	He	9.126	0.1644	12175.41	0.0152	0.02538
Cr	52	3	He	9.005	0.1625	12215.48	0.0152	0.02538
Mn	55	3	He	71.78	0.4375	33138.09	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	71.011	0.433	32076.00	0.0059	0.01385
Mn	55	3	He	70.041	0.4273	32115.89	0.0059	0.01385
Fe	57	3	He	6402.545	1.8588	140786.90	0.0003	0.003918
Fe	57	3	He	6438.064	1.8691	138464.44	0.0003	0.003918
Fe	57	3	He	6402.796	1.8589	139726.44	0.0003	0.003918
Co	59	3	He	2.903	0.0917	6941.93	0.0305	0.003084
Co	59	3	He	3.076	0.0969	7182.01	0.0305	0.003084
Co	59	3	He	2.66	0.0842	6331.58	0.0305	0.003084
Ni	60	3	He	8.663	0.0852	6451.69	0.0088	0.009003
Ni	60	3	He	9.295	0.0907	6721.79	0.0088	0.009003
Ni	60	3	He	9.403	0.0917	6891.90	0.0088	0.009003
Cu	63	3	He	13.098	0.3316	25112.62	0.0249	0.004937
Cu	63	3	He	13.569	0.3433	25432.99	0.0249	0.004937
Cu	63	3	He	13.28	0.3361	25262.73	0.0249	0.004937
Zn	66	3	He	43.243	0.1111	8412.76	0.0025	0.004836
Zn	66	3	He	44.696	0.1146	8492.75	0.0025	0.004836
Zn	66	3	He	42.179	0.1085	8152.59	0.0025	0.004836
As	75	3	He	2.271	0.0044	332.01	0.0017	0.0004347
As	75	3	He	1.954	0.0038	284.01	0.0017	0.0004347
As	75	3	He	1.907	0.0038	282.00	0.0017	0.0004347
Sr	88	3	He	14.651	0.1153	7182.07	0.0078	0.0007762
Sr	88	3	He	14.556	0.1146	7102.08	0.0078	0.0007762
Sr	88	3	He	13.758	0.1083	6971.98	0.0078	0.0007762
Mo	98	3	He	0.458	0.0106	660.04	0.022	0.0005162
Mo	98	3	He	0.511	0.0118	730.04	0.022	0.0005162
Mo	98	3	He	0.534	0.0123	790.05	0.022	0.0005162
Ag	107	3	He	0.124	0.0061	380.02	0.0455	0.0004641
Ag	107	3	He	0.132	0.0065	400.02	0.0455	0.0004641
Ag	107	3	He	0.109	0.0054	350.02	0.0455	0.0004641
Cd	111	3	He	0.364	0.0018	112.00	0.0048	5.152E-05
Cd	111	3	He	0.379	0.0019	116.00	0.0048	5.152E-05
Cd	111	3	He	0.468	0.0023	148.00	0.0048	5.152E-05
Sn	120	3	He	1.756	0.0406	2530.31	0.0143	0.01559
Sn	120	3	He	1.124	0.0316	1960.20	0.0143	0.01559
Sn	120	3	He	1.304	0.0342	2200.27	0.0143	0.01559
Sb	121	3	He	0.329	0.0043	270.01	0.0124	0.000258
Sb	121	3	He	0.317	0.0042	260.01	0.0124	0.000258
Sb	121	3	He	0.355	0.0047	300.02	0.0124	0.000258
Ba	137	3	He	50.194	0.2199	13697.18	0.0044	0.000309
Ba	137	3	He	50.509	0.2213	13717.31	0.0044	0.000309
Ba	137	3	He	52.522	0.2301	14808.51	0.0044	0.000309
Tl	205	3	He	0.529	0.0156	3510.59	0.0276	0.001005
Tl	205	3	He	0.478	0.0142	3120.49	0.0276	0.001005
Tl	205	3	He	0.479	0.0142	3170.50	0.0276	0.001005
Pb	208	3	He	20.704	0.7557	91507.84	0.0364	0.002176
Pb	208	3	He	20.967	0.7653	90670.45	0.0364	0.002176
Pb	208	3	He	20.992	0.7662	89422.11	0.0364	0.002176
U	238	3	He	0.627	0.0266	5981.57	0.0421	0.00024
U	238	3	He	0.63	0.0267	5871.57	0.0421	0.00024
U	238	3	He	0.709	0.0301	6692.00	0.0421	0.00024
Sc	45	1	No Gas			3246859.01		
Sc	45	1	No Gas			3269572.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3358639.01		
Ge	72	1	No Gas			1428491.85		
Ge	72	1	No Gas			1444900.92		
Ge	72	1	No Gas			1476680.29		
Sc	45	2	H2			201226.95		
Sc	45	2	H2			193079.86		
Sc	45	2	H2			195568.92		
Ge	72	2	H2			165319.86		
Ge	72	2	H2			161882.64		
Ge	72	2	H2			160851.19		
In	115	2	H2			445005.74		
In	115	2	H2			435154.88		
In	115	2	H2			435638.16		
Sc	45	3	He			42432.34		
Sc	45	3	He			41419.28		
Sc	45	3	He			42211.31		
Ge	72	3	He			75739.57		
Ge	72	3	He			74080.04		
Ge	72	3	He			75166.13		
In	115	3	He			62308.71		
In	115	3	He			62007.67		
In	115	3	He			64378.79		
Tb	159	3	He			287796.56		
Tb	159	3	He			282469.55		
Tb	159	3	He			288870.23		
Bi	209	3	He			224780.56		
Bi	209	3	He			219652.59		
Bi	209	3	He			222509.23		

Quantitation Report

Data File Name	155SMPL.d
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Sample Name	410-136624-C-1-C SD@50
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

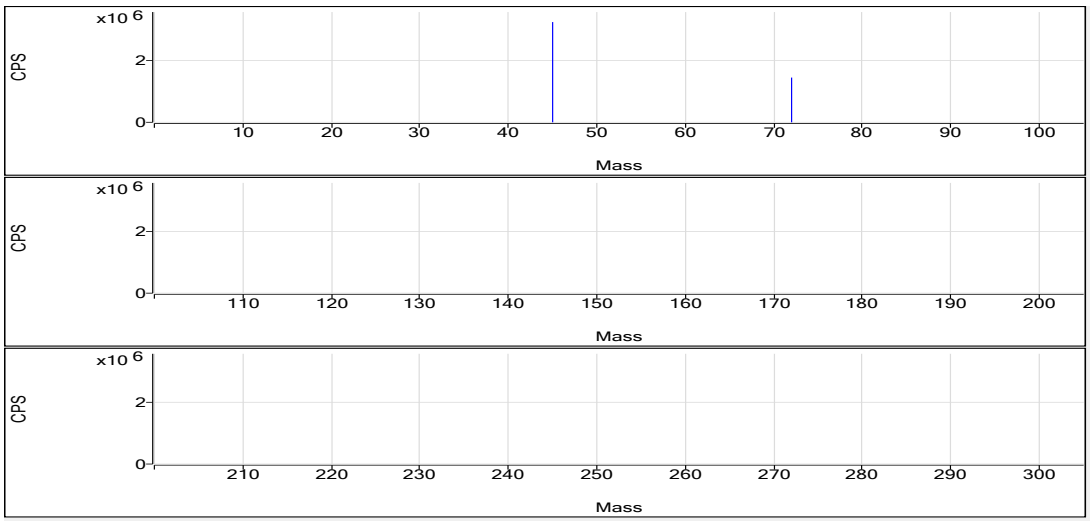
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.068	ppb	9.2	198.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.141	ppb	24.4	10.67	0.0001	Pulse	1.5000	3
Na	23	72	He	30.590	ppb	17.7	11895.15	0.1590	Pulse	0.1000	3
Mg	24	72	He	364.241	ppb	1.4	23345.50	0.3119	Pulse	0.1000	3
Al	27	72	He	1764.847	ppb	1.6	31964.99	0.4271	Pulse	0.1000	3
K	39	72	He	206.491	ppb	7.9	19279.79	0.2577	Pulse	0.1000	3
Ca	44	72	He	518.827	ppb	2.6	1326.78	0.0177	Pulse	0.1000	3
Ti	47	72	He	9.011	ppb	25.6	190.01	0.0025	Pulse	0.1000	3
V	51	72	He	3.553	ppb	0.8	3659.81	0.0489	Pulse	0.5000	3
Cr	52	72	He	2.057	ppb	3.5	4244.10	0.0567	Pulse	0.1000	3
Mn	55	72	He	14.371	ppb	3.0	7385.50	0.0987	Pulse	0.1000	3
Fe	57	72	He	1428.612	ppb	1.9	31267.55	0.4178	Pulse	0.1000	3
Co	59	72	He	0.631	ppb	7.0	1670.15	0.0223	Pulse	0.1000	3
Ni	60	72	He	3.044	ppb	7.8	2677.01	0.0358	Pulse	0.1000	3
Cu	63	72	He	3.150	ppb	5.5	6251.57	0.0835	Pulse	0.1000	3
Zn	66	72	He	9.635	ppb	7.7	2133.56	0.0285	Pulse	0.1000	3
As	75	72	He	0.565	ppb	13.1	106.00	0.0014	Pulse	0.5000	3
Sr	88	115	He	3.343	ppb	1.7	1733.51	0.0269	Pulse	0.1000	3
Mo	98	115	He	0.143	ppb	7.8	236.68	0.0037	Pulse	0.1000	3
Ag	107	115	He	0.033	ppb	27.2	126.67	0.0020	Pulse	0.1000	3
Cd	111	115	He	0.058	ppb	53.6	21.33	0.0003	Pulse	0.5000	3
Sn	120	115	He	0.103	ppb	145.4	1096.75	0.0170	Pulse	0.1000	3
Sb	121	115	He	0.096	ppb	9.9	93.33	0.0015	Pulse	0.1000	3
Ba	137	115	He	11.315	ppb	7.9	3207.18	0.0498	Pulse	0.1000	3
Tl	205	209	He	0.178	ppb	10.5	1300.12	0.0059	Pulse	0.1000	3
Pb	208	209	He	4.700	ppb	1.4	38026.05	0.1732	Pulse	0.1000	3
U	238	209	He	0.136	ppb	3.9	1306.78	0.0060	Pulse	0.1000	3

ISTD Table:

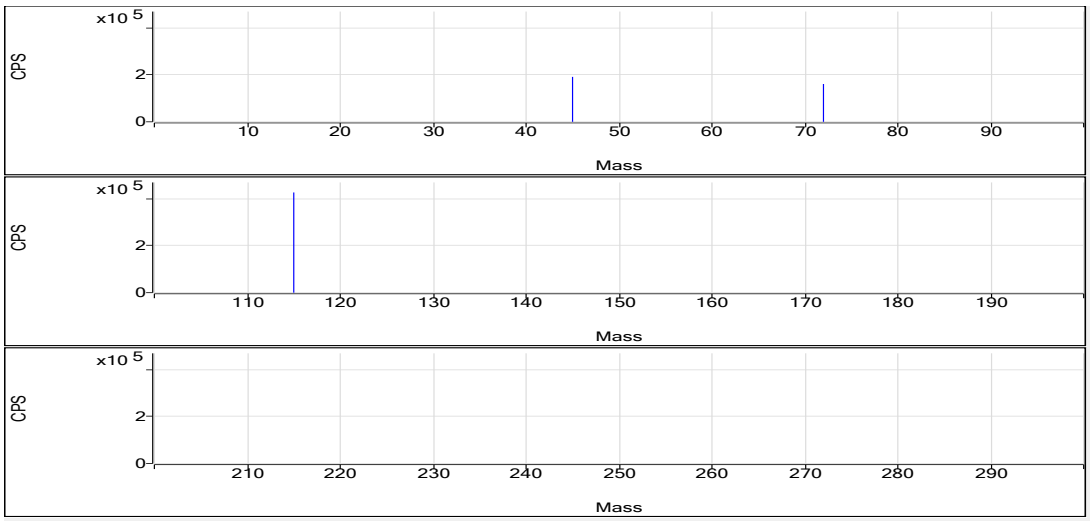
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3257542.24	1.3	100.5	Pulse	0.1000	3
No Gas	Ge	72	1453530.13	1.5	101.0	Pulse	0.1000	3
H2	Sc	45	191717.52	2.1	98.1	Pulse	0.1000	3
H2	Ge	72	161368.49	2.6	99.0	Pulse	0.1000	3
H2	In	115	427693.80	1.5	98.7	Pulse	0.1000	3
He	Sc	45	40897.88	1.8	102.3	Pulse	0.1000	3
He	Ge	72	74851.34	1.7	103.5	Pulse	0.1000	3
He	In	115	64427.10	2.2	99.7	Pulse	0.1000	3
He	Tb	159	280354.76	0.9	98.0	Pulse	0.1000	3
He	Bi	209	219505.09	0.7	98.8	Pulse	0.1000	3

No Gas

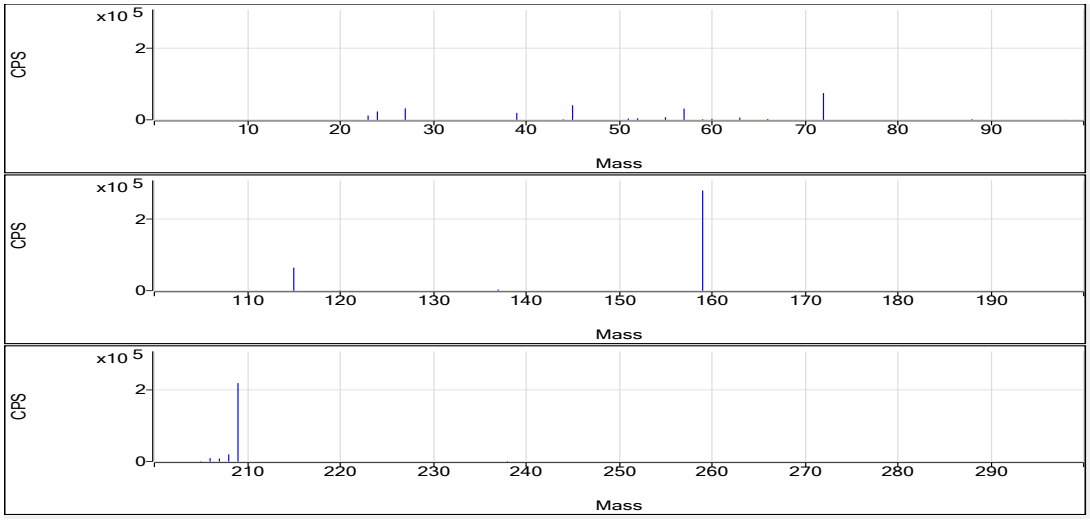


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.062	0.0001	184.00	0.0013	4.694E-05
Be	9	1	No Gas	0.075	0.0001	212.00	0.0013	4.694E-05
Be	9	1	No Gas	0.067	0.0001	198.00	0.0013	4.694E-05
Se	78	2	H2	0.171	0.0001	12.67	0.0004	1.089E-05
Se	78	2	H2	0.103	0.0001	8.00	0.0004	1.089E-05
Se	78	2	H2	0.15	0.0001	11.33	0.0004	1.089E-05
Na	23	3	He	35.613	0.1676	12305.53	0.0017	0.1065
Na	23	3	He	31.291	0.1602	12095.31	0.0017	0.1065
Na	23	3	He	24.866	0.1492	11284.61	0.0017	0.1065
Mg	24	3	He	369.899	0.3167	23248.84	0.0008	0.004846
Mg	24	3	He	361.857	0.3099	23398.88	0.0008	0.004846
Mg	24	3	He	360.965	0.3092	23388.78	0.0008	0.004846
Al	27	3	He	1783.648	0.4316	31684.57	0.0002	0.001063
Al	27	3	He	1733.027	0.4194	31664.12	0.0002	0.001063
Al	27	3	He	1777.865	0.4302	32546.28	0.0002	0.001063
K	39	3	He	223.484	0.2671	19603.60	0.0006	0.1436
K	39	3	He	204.81	0.2567	19383.22	0.0006	0.1436
K	39	3	He	191.178	0.2492	18852.55	0.0006	0.1436
Ca	44	3	He	518.351	0.0177	1300.11	0	0.001611
Ca	44	3	He	532.417	0.0181	1370.11	0	0.001611
Ca	44	3	He	505.714	0.0173	1310.11	0	0.001611
Ti	47	3	He	7.057	0.002	150.01	0.0003	0.0002737
Ti	47	3	He	8.416	0.0024	180.01	0.0003	0.0002737
Ti	47	3	He	11.56	0.0032	240.01	0.0003	0.0002737
V	51	3	He	3.541	0.0487	3578.46	0.0117	0.007326
V	51	3	He	3.586	0.0493	3720.49	0.0117	0.007326
V	51	3	He	3.533	0.0487	3680.48	0.0117	0.007326
Cr	52	3	He	2.136	0.0579	4250.77	0.0152	0.02538
Cr	52	3	He	2.039	0.0564	4260.79	0.0152	0.02538
Cr	52	3	He	1.997	0.0558	4220.75	0.0152	0.02538
Mn	55	3	He	14.529	0.0996	7312.22	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	13.882	0.0958	7232.03	0.0059	0.01385
Mn	55	3	He	14.701	0.1006	7612.24	0.0059	0.01385
Fe	57	3	He	1457.481	0.4262	31284.22	0.0003	0.003918
Fe	57	3	He	1404.386	0.4108	31013.60	0.0003	0.003918
Fe	57	3	He	1423.968	0.4165	31504.84	0.0003	0.003918
Co	59	3	He	0.671	0.0236	1730.15	0.0305	0.003084
Co	59	3	He	0.637	0.0225	1700.16	0.0305	0.003084
Co	59	3	He	0.584	0.0209	1580.14	0.0305	0.003084
Ni	60	3	He	3.144	0.0366	2690.33	0.0088	0.009003
Ni	60	3	He	2.773	0.0334	2520.32	0.0088	0.009003
Ni	60	3	He	3.216	0.0373	2820.39	0.0088	0.009003
Cu	63	3	He	3.08	0.0818	6001.47	0.0249	0.004937
Cu	63	3	He	3.022	0.0803	6061.47	0.0249	0.004937
Cu	63	3	He	3.349	0.0885	6691.77	0.0249	0.004937
Zn	66	3	He	9.843	0.029	2130.23	0.0025	0.004836
Zn	66	3	He	8.815	0.0265	2000.20	0.0025	0.004836
Zn	66	3	He	10.247	0.03	2270.25	0.0025	0.004836
As	75	3	He	0.612	0.0015	110.00	0.0017	0.0004347
As	75	3	He	0.603	0.0015	112.00	0.0017	0.0004347
As	75	3	He	0.48	0.0013	96.00	0.0017	0.0004347
Sr	88	3	He	3.28	0.0264	1700.18	0.0078	0.0007762
Sr	88	3	He	3.39	0.0273	1720.19	0.0078	0.0007762
Sr	88	3	He	3.359	0.027	1780.17	0.0078	0.0007762
Mo	98	3	He	0.139	0.0036	230.01	0.022	0.0005162
Mo	98	3	He	0.135	0.0035	220.01	0.022	0.0005162
Mo	98	3	He	0.156	0.0039	260.01	0.022	0.0005162
Ag	107	3	He	0.027	0.0017	110.00	0.0455	0.0004641
Ag	107	3	He	0.028	0.0017	110.00	0.0455	0.0004641
Ag	107	3	He	0.043	0.0024	160.01	0.0455	0.0004641
Cd	111	3	He	0.054	0.0003	20.00	0.0048	5.152E-05
Cd	111	3	He	0.029	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.091	0.0005	32.00	0.0048	5.152E-05
Sn	120	3	He	0.018	0.0158	1020.08	0.0143	0.01559
Sn	120	3	He	0.275	0.0195	1230.10	0.0143	0.01559
Sn	120	3	He	0.015	0.0158	1040.07	0.0143	0.01559
Sb	121	3	He	0.092	0.0014	90.00	0.0124	0.000258
Sb	121	3	He	0.107	0.0016	100.00	0.0124	0.000258
Sb	121	3	He	0.089	0.0014	90.00	0.0124	0.000258
Ba	137	3	He	10.479	0.0462	2970.44	0.0044	0.000309
Ba	137	3	He	12.253	0.0539	3400.56	0.0044	0.000309
Ba	137	3	He	11.213	0.0494	3250.53	0.0044	0.000309
Tl	205	3	He	0.173	0.0058	1280.10	0.0276	0.001005
Tl	205	3	He	0.162	0.0055	1200.10	0.0276	0.001005
Tl	205	3	He	0.198	0.0065	1420.15	0.0276	0.001005
Pb	208	3	He	4.714	0.1738	20146.00	0.0364	0.002176
Pb	208	3	He	4.759	0.1754	20306.25	0.0364	0.002176
Pb	208	3	He	4.627	0.1706	19865.56	0.0364	0.002176
U	238	3	He	0.142	0.0062	1370.14	0.0421	0.00024
U	238	3	He	0.135	0.0059	1290.10	0.0421	0.00024
U	238	3	He	0.131	0.0058	1260.11	0.0421	0.00024
Sc	45	1	No Gas			3213305.26		
Sc	45	1	No Gas			3263399.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3295921.83		
Ge	72	1	No Gas			1428602.01		
Ge	72	1	No Gas			1462445.60		
Ge	72	1	No Gas			1469542.79		
Sc	45	2	H2			194138.45		
Sc	45	2	H2			186965.15		
Sc	45	2	H2			194048.96		
Ge	72	2	H2			163842.71		
Ge	72	2	H2			156562.52		
Ge	72	2	H2			163700.23		
In	115	2	H2			432501.75		
In	115	2	H2			420358.08		
In	115	2	H2			430221.56		
Sc	45	3	He			40326.06		
Sc	45	3	He			41720.21		
Sc	45	3	He			40647.37		
Ge	72	3	He			73407.63		
Ge	72	3	He			75497.64		
Ge	72	3	He			75648.74		
In	115	3	He			64368.42		
In	115	3	He			63082.74		
In	115	3	He			65855.80		
Tb	159	3	He			278505.80		
Tb	159	3	He			283221.32		
Tb	159	3	He			279337.16		
Bi	209	3	He			221187.89		
Bi	209	3	He			218578.73		
Bi	209	3	He			218748.65		

Quantitation Report

Data File Name	156SMPL.d
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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

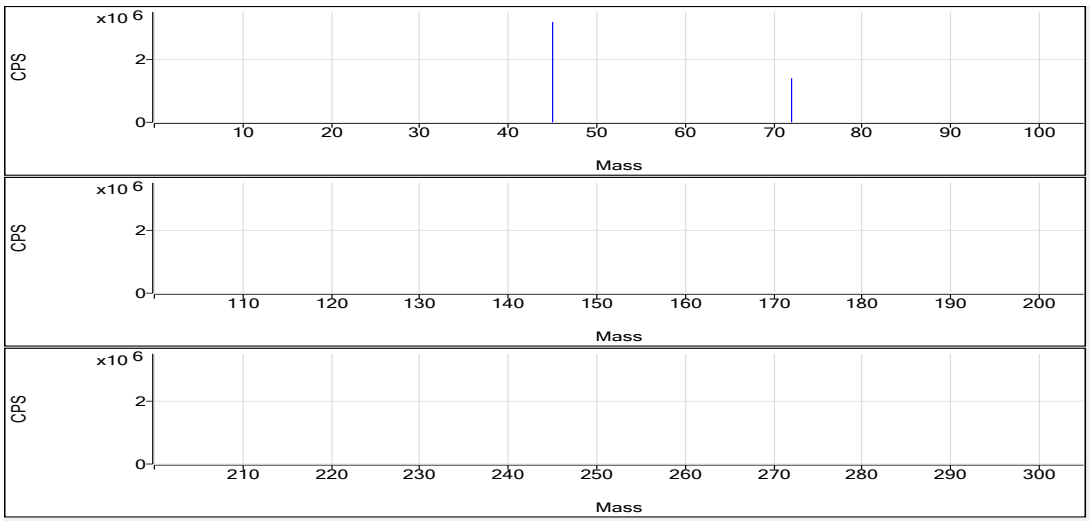
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.003	ppb	99.2	72.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.048	ppb	58.5	4.67	0.0000	Pulse	1.5000	3
Na	23	72	He	15.300	ppb	8.6	9533.40	0.1327	Pulse	0.1000	3
Mg	24	72	He	9.516	ppb	23.0	923.39	0.0129	Pulse	0.1000	3
Al	27	72	He	14.831	ppb	21.6	333.35	0.0046	Pulse	0.1000	3
K	39	72	He	18.102	ppb	100.0	11027.83	0.1536	Pulse	0.1000	3
Ca	44	72	He	-2.679	ppb	N/A	110.00	0.0015	Pulse	0.1000	3
Ti	47	72	He	0.395	ppb	168.5	26.67	0.0004	Pulse	0.1000	3
V	51	72	He	0.135	ppb	18.9	640.02	0.0089	Pulse	0.5000	3
Cr	52	72	He	0.223	ppb	22.5	2066.90	0.0288	Pulse	0.1000	3
Mn	55	72	He	-0.979	ppb	N/A	580.03	0.0081	Pulse	0.1000	3
Fe	57	72	He	15.811	ppb	15.6	610.03	0.0085	Pulse	0.1000	3
Co	59	72	He	0.126	ppb	25.7	496.69	0.0069	Pulse	0.1000	3
Ni	60	72	He	1.034	ppb	40.0	1300.10	0.0181	Pulse	0.1000	3
Cu	63	72	He	0.118	ppb	39.3	566.70	0.0079	Pulse	0.1000	3
Zn	66	72	He	-0.327	ppb	N/A	290.01	0.0040	Pulse	0.1000	3
As	75	72	He	0.157	ppb	63.6	50.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.143	ppb	86.8	120.00	0.0019	Pulse	0.1000	3
Mo	98	115	He	0.115	ppb	33.5	193.34	0.0030	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	106.1	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	-0.004	ppb	N/A	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.036	ppb	227.3	1020.08	0.0161	Pulse	0.1000	3
Sb	121	115	He	0.030	ppb	41.0	40.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.157	ppb	92.6	63.33	0.0010	Pulse	0.1000	3
Tl	205	209	He	0.098	ppb	9.6	806.72	0.0037	Pulse	0.1000	3
Pb	208	209	He	0.010	ppb	15.0	553.35	0.0026	Pulse	0.1000	3
U	238	209	He	0.011	ppb	37.6	153.34	0.0007	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3213316.10	1.9	99.1	Pulse	0.1000	3
No Gas	Ge	72	1410287.22	2.0	98.0	Pulse	0.1000	3
H2	Sc	45	191162.11	1.0	97.8	Pulse	0.1000	3
H2	Ge	72	156603.05	1.3	96.1	Pulse	0.1000	3
H2	In	115	430501.53	2.0	99.4	Pulse	0.1000	3
He	Sc	45	40807.94	1.4	102.1	Pulse	0.1000	3
He	Ge	72	71819.54	1.3	99.4	Pulse	0.1000	3
He	In	115	63389.38	0.8	98.1	Pulse	0.1000	3
He	Tb	159	279439.34	1.3	97.7	Pulse	0.1000	3
He	Bi	209	216513.55	0.7	97.4	Pulse	0.1000	3

No Gas



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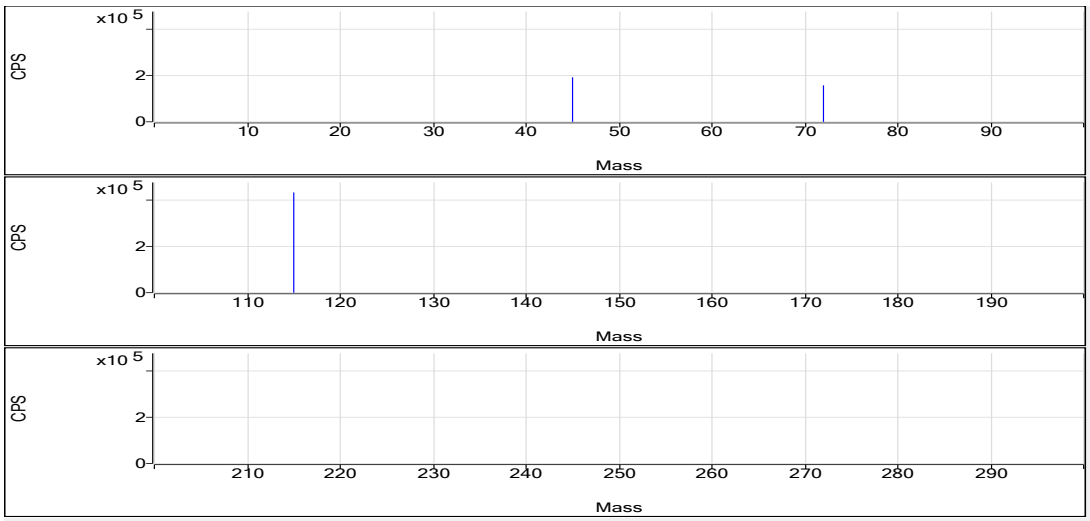
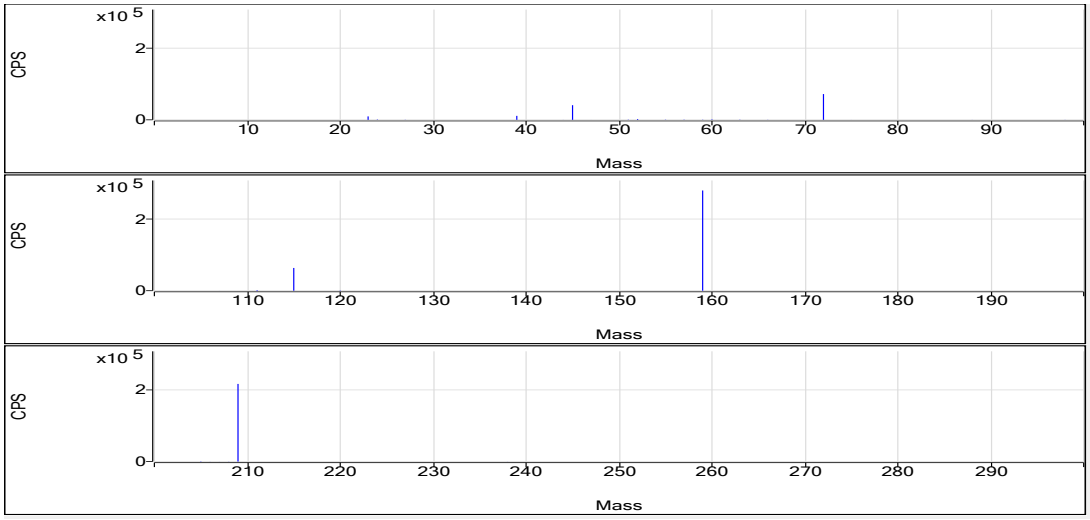


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0.0001	70.00	0.0013	4.694E-05
Be	9	1	No Gas	0.006	0.0001	78.00	0.0013	4.694E-05
Be	9	1	No Gas	0	0	68.00	0.0013	4.694E-05
Se	78	2	H2	0.08	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.039	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Na	23	3	He	14.91	0.1321	9343.22	0.0017	0.1065
Na	23	3	He	16.772	0.1353	9763.65	0.0017	0.1065
Na	23	3	He	14.219	0.1309	9493.32	0.0017	0.1065
Mg	24	3	He	11.019	0.0141	1000.07	0.0008	0.004846
Mg	24	3	He	10.521	0.0137	990.06	0.0008	0.004846
Mg	24	3	He	7.008	0.0108	780.05	0.0008	0.004846
Al	27	3	He	14.922	0.0047	330.01	0.0002	0.001063
Al	27	3	He	17.981	0.0054	390.02	0.0002	0.001063
Al	27	3	He	11.59	0.0039	280.01	0.0002	0.001063
K	39	3	He	38.478	0.1649	11665.03	0.0006	0.1436
K	39	3	He	11.947	0.1502	10844.31	0.0006	0.1436
K	39	3	He	3.881	0.1458	10574.16	0.0006	0.1436
Ca	44	3	He	-10.906	0.0013	90.00	0	0.001611
Ca	44	3	He	-38.484	0.0004	30.00	0	0.001611
Ca	44	3	He	41.354	0.0029	210.01	0	0.001611
Ti	47	3	He	1.163	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	0.013	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	0.008	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.14	0.009	634.02	0.0117	0.007326
V	51	3	He	0.108	0.0086	620.02	0.0117	0.007326
V	51	3	He	0.159	0.0092	666.02	0.0117	0.007326
Cr	52	3	He	0.227	0.0288	2040.23	0.0152	0.02538
Cr	52	3	He	0.271	0.0295	2130.25	0.0152	0.02538
Cr	52	3	He	0.171	0.028	2030.21	0.0152	0.02538
Mn	55	3	He	-0.958	0.0082	580.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.962	0.0082	590.04	0.0059	0.01385
Mn	55	3	He	-1.016	0.0079	570.03	0.0059	0.01385
Fe	57	3	He	18.192	0.0092	650.03	0.0003	0.003918
Fe	57	3	He	13.258	0.0078	560.03	0.0003	0.003918
Fe	57	3	He	15.983	0.0085	620.03	0.0003	0.003918
Co	59	3	He	0.112	0.0065	460.02	0.0305	0.003084
Co	59	3	He	0.162	0.008	580.03	0.0305	0.003084
Co	59	3	He	0.102	0.0062	450.02	0.0305	0.003084
Ni	60	3	He	0.905	0.017	1200.09	0.0088	0.009003
Ni	60	3	He	1.497	0.0222	1600.13	0.0088	0.009003
Ni	60	3	He	0.701	0.0152	1100.08	0.0088	0.009003
Cu	63	3	He	0.114	0.0078	550.03	0.0249	0.004937
Cu	63	3	He	0.074	0.0068	490.03	0.0249	0.004937
Cu	63	3	He	0.167	0.0091	660.04	0.0249	0.004937
Zn	66	3	He	-0.588	0.0034	240.01	0.0025	0.004836
Zn	66	3	He	-0.051	0.0047	340.02	0.0025	0.004836
Zn	66	3	He	-0.341	0.004	290.01	0.0025	0.004836
As	75	3	He	0.27	0.0009	64.00	0.0017	0.0004347
As	75	3	He	0.085	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.115	0.0006	46.00	0.0017	0.0004347
Sr	88	3	He	0.081	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.063	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.287	0.003	190.01	0.0078	0.0007762
Mo	98	3	He	0.154	0.0039	250.01	0.022	0.0005162
Mo	98	3	He	0.077	0.0022	140.01	0.022	0.0005162
Mo	98	3	He	0.114	0.003	190.01	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Sn	120	3	He	-0.052	0.0149	950.06	0.0143	0.01559
Sn	120	3	He	0.05	0.0163	1030.07	0.0143	0.01559
Sn	120	3	He	0.11	0.0171	1080.10	0.0143	0.01559
Sb	121	3	He	0.042	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.179	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.291	0.0016	100.00	0.0044	0.000309
Ba	137	3	He	0.002	0.0003	20.00	0.0044	0.000309
Tl	205	3	He	0.107	0.004	850.06	0.0276	0.001005
Tl	205	3	He	0.088	0.0034	750.05	0.0276	0.001005
Tl	205	3	He	0.101	0.0038	820.06	0.0276	0.001005
Pb	208	3	He	0.012	0.0026	280.01	0.0364	0.002176
Pb	208	3	He	0.011	0.0026	410.02	0.0364	0.002176
Pb	208	3	He	0.009	0.0025	250.01	0.0364	0.002176
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
U	238	3	He	0.013	0.0008	170.01	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.01	0.0421	0.00024
Sc	45	1	No Gas			3146987.77		
Sc	45	1	No Gas			3227814.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3265145.58		
Ge	72	1	No Gas			1383830.60		
Ge	72	1	No Gas			1407488.26		
Ge	72	1	No Gas			1439542.79		
Sc	45	2	H2			191011.83		
Sc	45	2	H2			189296.27		
Sc	45	2	H2			193178.24		
Ge	72	2	H2			158038.54		
Ge	72	2	H2			154358.90		
Ge	72	2	H2			157411.71		
In	115	2	H2			430588.47		
In	115	2	H2			421751.95		
In	115	2	H2			439164.17		
Sc	45	3	He			40376.64		
Sc	45	3	He			40597.28		
Sc	45	3	He			41449.89		
Ge	72	3	He			70744.74		
Ge	72	3	He			72180.73		
Ge	72	3	He			72533.16		
In	115	3	He			63976.80		
In	115	3	He			63223.22		
In	115	3	He			62991.97		
Tb	159	3	He			277312.48		
Tb	159	3	He			277331.09		
Tb	159	3	He			283674.45		
Bi	209	3	He			214999.29		
Bi	209	3	He			217925.88		
Bi	209	3	He			216615.47		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:49:22
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

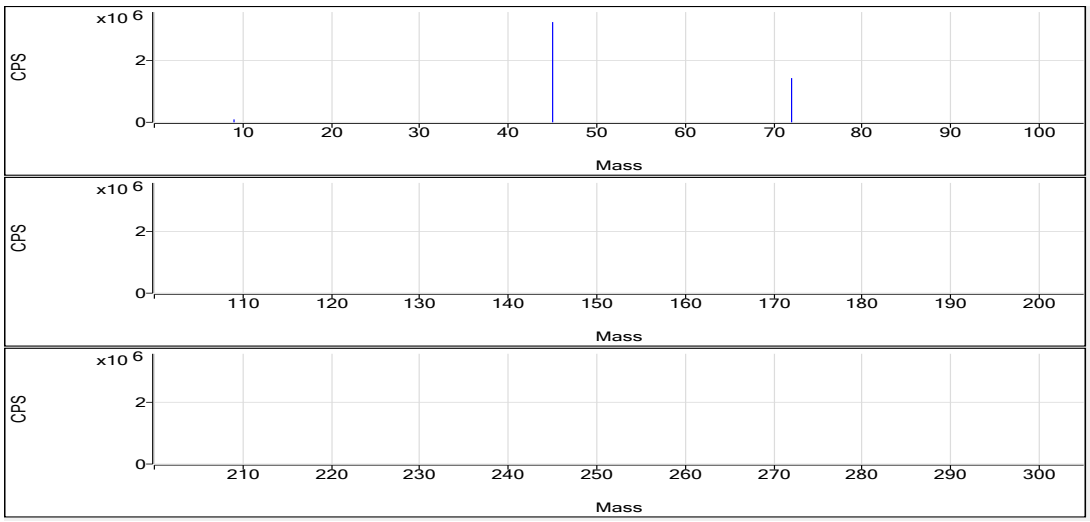
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.990	ppb	3.6	93709.80	0.0657	Pulse	0.5000	3
Se	78	72	H2	53.806	ppb	3.7	3291.05	0.0210	Pulse	1.5000	3
Na	23	72	He	5468.872	ppb	2.6	697567.21	9.5010	Pulse	0.1000	3
Mg	24	72	He	5442.304	ppb	2.9	337227.35	4.5933	Pulse	0.1000	3
Al	27	72	He	5277.147	ppb	1.1	93624.44	1.2749	Pulse	0.1000	3
K	39	72	He	5369.788	ppb	0.6	228313.37	3.1089	Pulse	0.1000	3
Ca	44	72	He	5345.889	ppb	3.5	12308.85	0.1677	Pulse	0.1000	3
Ti	47	72	He	5361.475	ppb	2.2	98752.51	1.3448	Pulse	0.1000	3
V	51	72	He	535.842	ppb	1.9	460782.91	6.2755	Pulse	0.5000	3
Cr	52	72	He	535.251	ppb	2.4	600276.33	8.1758	Pulse	0.1000	3
Mn	55	72	He	531.517	ppb	1.6	231380.93	3.1511	Pulse	0.1000	3
Fe	57	72	He	5261.863	ppb	1.7	112235.28	1.5284	Pulse	0.1000	3
Co	59	72	He	533.254	ppb	2.1	1194827.48	16.2729	Pulse	0.1000	3
Ni	60	72	He	533.887	ppb	2.4	345377.44	4.7036	Pulse	0.1000	3
Cu	63	72	He	530.723	ppb	1.5	972205.46	13.2396	Pulse	0.1000	3
Zn	66	72	He	531.507	ppb	2.2	96235.46	1.3106	Pulse	0.1000	3
As	75	72	He	526.248	ppb	2.0	67232.88	0.9157	Pulse	0.5000	3
Sr	88	115	He	54.232	ppb	0.4	26345.05	0.4247	Pulse	0.1000	3
Mo	98	115	He	54.311	ppb	1.4	74221.61	1.1965	Pulse	0.1000	3
Ag	107	115	He	53.608	ppb	1.1	151326.62	2.4396	Pulse	0.1000	3
Cd	111	115	He	54.225	ppb	1.9	16147.98	0.2604	Pulse	0.5000	3
Sn	120	115	He	54.546	ppb	1.0	49207.60	0.7933	Pulse	0.1000	3
Sb	121	115	He	54.256	ppb	2.2	41760.02	0.6733	Pulse	0.1000	3
Ba	137	115	He	538.164	ppb	1.3	146059.22	2.3547	Pulse	0.1000	3
Tl	205	209	He	53.315	ppb	2.0	319820.03	1.4749	Pulse	0.1000	3
Pb	208	209	He	53.225	ppb	1.4	420581.98	1.9394	Pulse	0.1000	3
U	238	209	He	52.534	ppb	2.0	479283.99	2.2102	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3234296.83	1.7	99.8	Pulse	0.1000	3
No Gas	Ge	72	1426123.10	1.7	99.1	Pulse	0.1000	3
H2	Sc	45	192398.05	2.6	98.5	Pulse	0.1000	3
H2	Ge	72	157051.74	1.1	96.3	Pulse	0.1000	3
H2	In	115	434432.47	0.8	100.3	Pulse	0.1000	3
He	Sc	45	41188.46	1.3	103.0	Pulse	0.1000	3
He	Ge	72	73443.69	1.9	101.6	Pulse	0.1000	3
He	In	115	62032.34	1.0	96.0	Pulse	0.1000	3
He	Tb	159	282232.64	0.4	98.7	Pulse	0.1000	3
He	Bi	209	216878.52	1.0	97.6	Pulse	0.1000	3

No Gas



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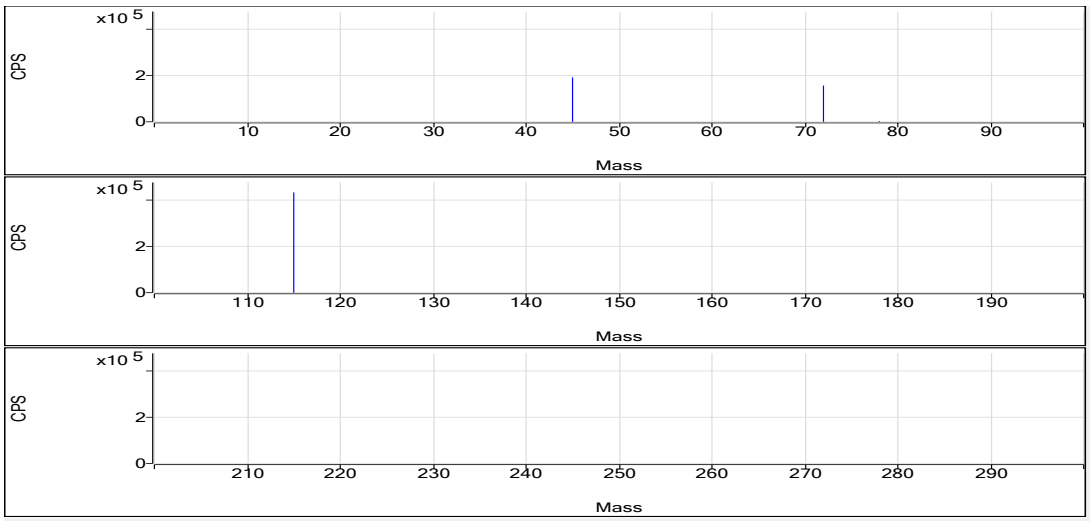
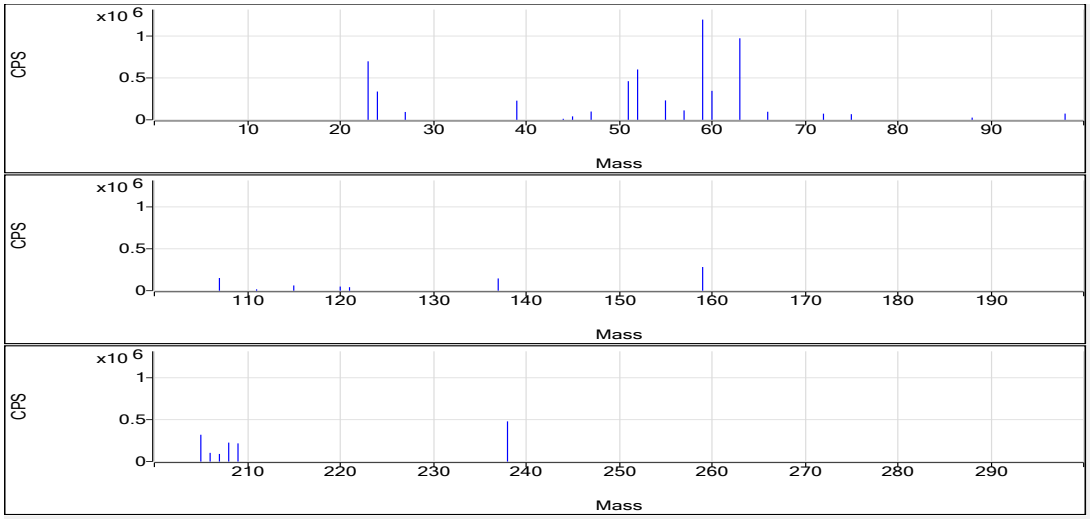


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.069	0.0685	95757.01	0.0013	4.694E-05
Be	9	1	No Gas	49.089	0.0646	92547.38	0.0013	4.694E-05
Be	9	1	No Gas	48.813	0.0642	92825.00	0.0013	4.694E-05
Se	78	2	H2	55.497	0.0216	3367.07	0.0004	1.089E-05
Se	78	2	H2	54.3	0.0212	3307.72	0.0004	1.089E-05
Se	78	2	H2	51.622	0.0201	3198.36	0.0004	1.089E-05
Na	23	3	He	5518.302	9.5859	696148.90	0.0017	0.1065
Na	23	3	He	5577.407	9.6874	703625.54	0.0017	0.1065
Na	23	3	He	5310.907	9.2296	692927.18	0.0017	0.1065
Mg	24	3	He	5481.871	4.6266	335994.80	0.0008	0.004846
Mg	24	3	He	5575.392	4.7055	341771.01	0.0008	0.004846
Mg	24	3	He	5269.648	4.4477	333916.25	0.0008	0.004846
Al	27	3	He	5337.376	1.2895	93644.31	0.0002	0.001063
Al	27	3	He	5275.263	1.2745	92569.02	0.0002	0.001063
Al	27	3	He	5218.802	1.2609	94660.00	0.0002	0.001063
K	39	3	He	5383.84	3.1167	226338.36	0.0006	0.1436
K	39	3	He	5390.761	3.1205	226649.20	0.0006	0.1436
K	39	3	He	5334.762	3.0896	231952.56	0.0006	0.1436
Ca	44	3	He	5314.835	0.1667	12105.30	0	0.001611
Ca	44	3	He	5544.743	0.1738	12625.74	0	0.001611
Ca	44	3	He	5178.088	0.1624	12195.51	0	0.001611
Ti	47	3	He	5303.524	1.3303	96608.25	0.0003	0.0002737
Ti	47	3	He	5498.409	1.3792	100172.22	0.0003	0.0002737
Ti	47	3	He	5282.493	1.325	99477.06	0.0003	0.0002737
V	51	3	He	541.648	6.3434	460670.38	0.0117	0.007326
V	51	3	He	541.66	6.3435	460748.13	0.0117	0.007326
V	51	3	He	524.218	6.1395	460930.22	0.0117	0.007326
Cr	52	3	He	545.044	8.3249	604572.45	0.0152	0.02538
Cr	52	3	He	540.231	8.2516	599338.27	0.0152	0.02538
Cr	52	3	He	520.477	7.9508	596918.27	0.0152	0.02538
Mn	55	3	He	536.5	3.1805	230974.59	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	536.226	3.1789	230891.34	0.0059	0.01385
Mn	55	3	He	521.824	3.0939	232276.85	0.0059	0.01385
Fe	57	3	He	5211.111	1.5137	109924.62	0.0003	0.003918
Fe	57	3	He	5367.391	1.5589	113229.34	0.0003	0.003918
Fe	57	3	He	5207.086	1.5125	113551.87	0.0003	0.003918
Co	59	3	He	537.576	16.4048	1191349.90	0.0305	0.003084
Co	59	3	He	541.632	16.5285	1200513.11	0.0305	0.003084
Co	59	3	He	520.554	15.8854	1192619.44	0.0305	0.003084
Ni	60	3	He	529.845	4.6681	339006.60	0.0088	0.009003
Ni	60	3	He	548.335	4.8307	350865.07	0.0088	0.009003
Ni	60	3	He	523.48	4.6121	346260.66	0.0088	0.009003
Cu	63	3	He	530.357	13.2305	960827.41	0.0249	0.004937
Cu	63	3	He	539.051	13.4473	976715.38	0.0249	0.004937
Cu	63	3	He	522.76	13.0411	979073.58	0.0249	0.004937
Zn	66	3	He	529.708	1.3062	94859.35	0.0025	0.004836
Zn	66	3	He	544.189	1.3418	97457.29	0.0025	0.004836
Zn	66	3	He	520.625	1.2839	96389.73	0.0025	0.004836
As	75	3	He	531.342	0.9245	67141.33	0.0017	0.0004347
As	75	3	He	533.378	0.9281	67408.34	0.0017	0.0004347
As	75	3	He	514.024	0.8944	67148.98	0.0017	0.0004347
Sr	88	3	He	54.262	0.425	26395.02	0.0078	0.0007762
Sr	88	3	He	54.442	0.4264	26154.86	0.0078	0.0007762
Sr	88	3	He	53.99	0.4228	26485.26	0.0078	0.0007762
Mo	98	3	He	53.448	1.1775	73139.47	0.022	0.0005162
Mo	98	3	He	54.839	1.2082	74114.17	0.022	0.0005162
Mo	98	3	He	54.646	1.2039	75411.20	0.022	0.0005162
Ag	107	3	He	53.188	2.4205	150346.29	0.0455	0.0004641
Ag	107	3	He	54.28	2.4702	151536.83	0.0455	0.0004641
Ag	107	3	He	53.355	2.4281	152096.74	0.0455	0.0004641
Cd	111	3	He	54.266	0.2605	16183.35	0.0048	5.152E-05
Cd	111	3	He	55.245	0.2652	16271.44	0.0048	5.152E-05
Cd	111	3	He	53.165	0.2553	15989.14	0.0048	5.152E-05
Sn	120	3	He	54.856	0.7977	49549.05	0.0143	0.01559
Sn	120	3	He	54.891	0.7982	48966.45	0.0143	0.01559
Sn	120	3	He	53.892	0.784	49107.30	0.0143	0.01559
Sb	121	3	He	53.999	0.6701	41622.62	0.0124	0.000258
Sb	121	3	He	55.533	0.6891	42275.30	0.0124	0.000258
Sb	121	3	He	53.236	0.6606	41382.13	0.0124	0.000258
Ba	137	3	He	544.797	2.3837	148057.96	0.0044	0.000309
Ba	137	3	He	538.733	2.3572	144599.24	0.0044	0.000309
Ba	137	3	He	530.962	2.3232	145520.47	0.0044	0.000309
Tl	205	3	He	52.147	1.4426	316442.59	0.0276	0.001005
Tl	205	3	He	53.611	1.483	320746.62	0.0276	0.001005
Tl	205	3	He	54.186	1.4989	322270.89	0.0276	0.001005
Pb	208	3	He	52.352	1.9077	224086.34	0.0364	0.002176
Pb	208	3	He	53.643	1.9546	227932.34	0.0364	0.002176
Pb	208	3	He	53.681	1.956	225620.35	0.0364	0.002176
U	238	3	He	51.324	2.1593	473666.79	0.0421	0.00024
U	238	3	He	53.269	2.2411	484701.40	0.0421	0.00024
U	238	3	He	53.008	2.2302	479483.78	0.0421	0.00024
Sc	45	1	No Gas			3171206.20		
Sc	45	1	No Gas			3264528.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3267156.20		
Ge	72	1	No Gas			1398559.35		
Ge	72	1	No Gas			1433686.38		
Ge	72	1	No Gas			1446123.57		
Sc	45	2	H2			191039.67		
Sc	45	2	H2			188235.08		
Sc	45	2	H2			197919.39		
Ge	72	2	H2			155744.13		
Ge	72	2	H2			156370.88		
Ge	72	2	H2			159040.20		
In	115	2	H2			434046.99		
In	115	2	H2			431025.54		
In	115	2	H2			438224.88		
Sc	45	3	He			41569.79		
Sc	45	3	He			40566.43		
Sc	45	3	He			41429.16		
Ge	72	3	He			72622.08		
Ge	72	3	He			72632.74		
Ge	72	3	He			75076.26		
In	115	3	He			62499.62		
In	115	3	He			61726.74		
In	115	3	He			63022.12		
Tb	159	3	He			281601.91		
Tb	159	3	He			281583.43		
Tb	159	3	He			283512.59		
Bi	209	3	He			219359.12		
Bi	209	3	He			216277.26		
Bi	209	3	He			214999.18		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

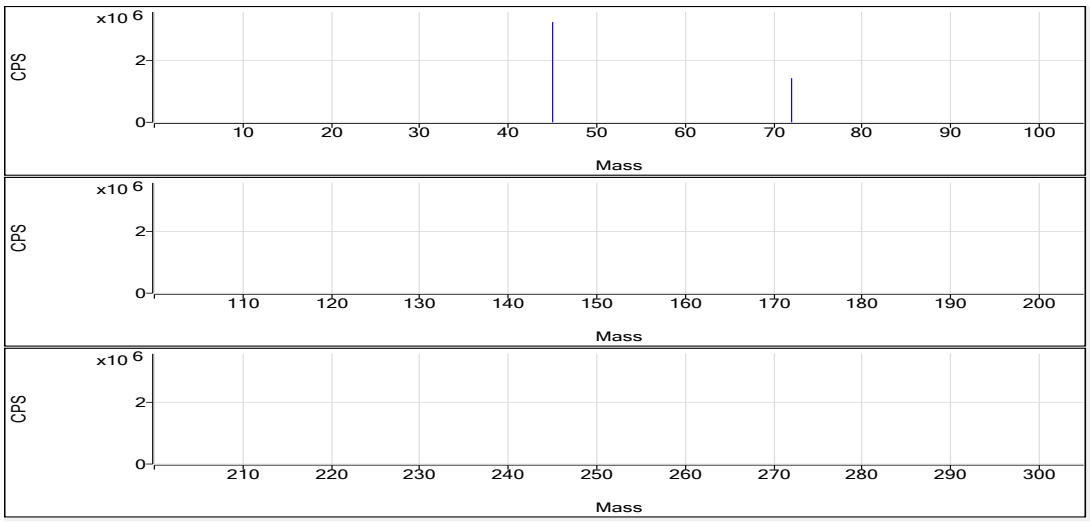
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.036	ppb	36.7	132.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.063	ppb	52.4	5.55	0.0000	Pulse	1.5000	3
Na	23	72	He	16.015	ppb	22.6	9626.75	0.1340	Pulse	0.1000	3
Mg	24	72	He	7.841	ppb	16.2	823.38	0.0115	Pulse	0.1000	3
Al	27	72	He	10.975	ppb	6.7	266.68	0.0037	Pulse	0.1000	3
K	39	72	He	21.485	ppb	69.6	11171.21	0.1555	Pulse	0.1000	3
Ca	44	72	He	25.848	ppb	62.1	173.34	0.0024	Pulse	0.1000	3
Ti	47	72	He	3.160	ppb	43.8	76.67	0.0011	Pulse	0.1000	3
V	51	72	He	0.225	ppb	24.3	716.02	0.0100	Pulse	0.5000	3
Cr	52	72	He	0.310	ppb	42.0	2163.56	0.0301	Pulse	0.1000	3
Mn	55	72	He	-1.097	ppb	N/A	530.03	0.0074	Pulse	0.1000	3
Fe	57	72	He	9.857	ppb	13.9	486.69	0.0068	Pulse	0.1000	3
Co	59	72	He	0.285	ppb	4.5	846.72	0.0118	Pulse	0.1000	3
Ni	60	72	He	0.992	ppb	5.8	1273.43	0.0177	Pulse	0.1000	3
Cu	63	72	He	0.198	ppb	34.8	710.04	0.0099	Pulse	0.1000	3
Zn	66	72	He	0.203	ppb	184.9	383.35	0.0053	Pulse	0.1000	3
As	75	72	He	0.215	ppb	49.9	58.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.137	ppb	84.3	116.67	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.089	ppb	27.7	156.67	0.0025	Pulse	0.1000	3
Ag	107	115	He	0.035	ppb	10.6	130.01	0.0021	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	55.6	8.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.322	ppb	74.0	1273.44	0.0202	Pulse	0.1000	3
Sb	121	115	He	0.090	ppb	41.2	86.67	0.0014	Pulse	0.1000	3
Ba	137	115	He	0.279	ppb	60.6	96.67	0.0015	Pulse	0.1000	3
Tl	205	209	He	0.262	ppb	6.1	1790.19	0.0082	Pulse	0.1000	3
Pb	208	209	He	0.021	ppb	18.7	640.03	0.0029	Pulse	0.1000	3
U	238	209	He	0.021	ppb	28.9	243.34	0.0011	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3218241.72	1.5	99.3	Pulse	0.1000	3
No Gas	Ge	72	1414661.59	1.5	98.3	Pulse	0.1000	3
H2	Sc	45	192422.79	3.6	98.5	Pulse	0.1000	3
H2	Ge	72	156054.70	1.9	95.7	Pulse	0.1000	3
H2	In	115	433869.54	1.8	100.1	Pulse	0.1000	3
He	Sc	45	40366.30	2.4	101.0	Pulse	0.1000	3
He	Ge	72	71849.91	0.5	99.4	Pulse	0.1000	3
He	In	115	63136.49	0.5	97.7	Pulse	0.1000	3
He	Tb	159	278806.25	0.4	97.5	Pulse	0.1000	3
He	Bi	209	217157.32	0.8	97.7	Pulse	0.1000	3

No Gas



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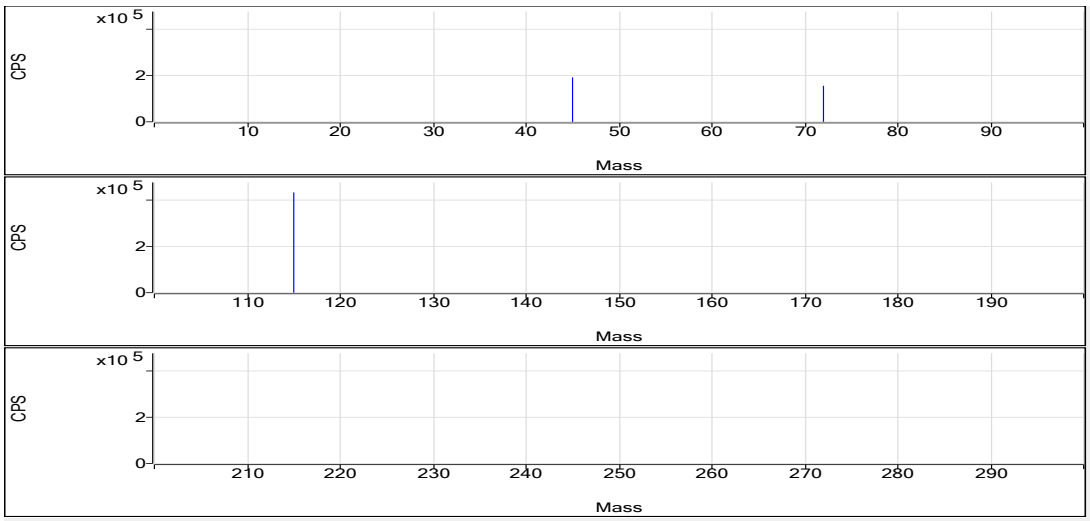
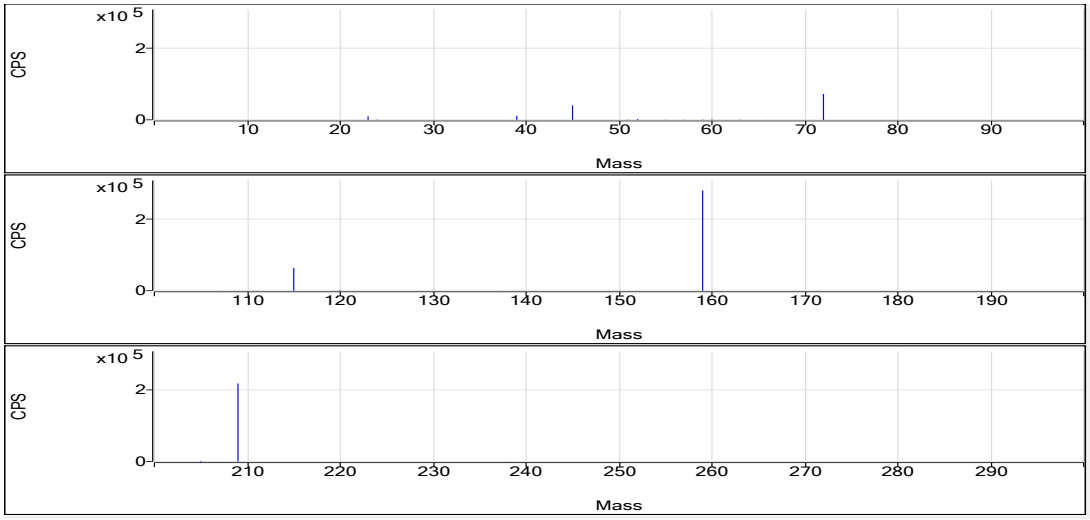


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.021	0.0001	104.00	0.0013	4.694E-05
Be	9	1	No Gas	0.047	0.0001	154.00	0.0013	4.694E-05
Be	9	1	No Gas	0.039	0.0001	140.00	0.0013	4.694E-05
Se	78	2	H2	0.093	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.028	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.069	0	6.00	0.0004	1.089E-05
Na	23	3	He	11.932	0.127	9073.09	0.0017	0.1065
Na	23	3	He	17.276	0.1361	9823.51	0.0017	0.1065
Na	23	3	He	18.837	0.1388	9983.65	0.0017	0.1065
Mg	24	3	He	6.7	0.0105	750.04	0.0008	0.004846
Mg	24	3	He	9.211	0.0126	910.06	0.0008	0.004846
Mg	24	3	He	7.611	0.0113	810.04	0.0008	0.004846
Al	27	3	He	11.828	0.0039	280.01	0.0002	0.001063
Al	27	3	He	10.524	0.0036	260.01	0.0002	0.001063
Al	27	3	He	10.574	0.0036	260.01	0.0002	0.001063
K	39	3	He	34.694	0.1628	11634.96	0.0006	0.1436
K	39	3	He	5.24	0.1465	10574.12	0.0006	0.1436
K	39	3	He	24.52	0.1572	11304.54	0.0006	0.1436
Ca	44	3	He	42.743	0.0029	210.01	0	0.001611
Ca	44	3	He	23.988	0.0024	170.01	0	0.001611
Ca	44	3	He	10.812	0.0019	140.01	0	0.001611
Ti	47	3	He	1.698	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	3.329	0.0011	80.00	0.0003	0.0002737
Ti	47	3	He	4.453	0.0014	100.00	0.0003	0.0002737
V	51	3	He	0.187	0.0095	680.02	0.0117	0.007326
V	51	3	He	0.288	0.0107	772.03	0.0117	0.007326
V	51	3	He	0.201	0.0097	696.02	0.0117	0.007326
Cr	52	3	He	0.244	0.0291	2080.22	0.0152	0.02538
Cr	52	3	He	0.226	0.0288	2080.21	0.0152	0.02538
Cr	52	3	He	0.461	0.0324	2330.26	0.0152	0.02538
Mn	55	3	He	-1.162	0.007	500.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.22	0.0067	480.02	0.0059	0.01385
Mn	55	3	He	-0.91	0.0085	610.03	0.0059	0.01385
Fe	57	3	He	9.178	0.0066	470.02	0.0003	0.003918
Fe	57	3	He	8.96	0.0065	470.02	0.0003	0.003918
Fe	57	3	He	11.435	0.0072	520.03	0.0003	0.003918
Co	59	3	He	0.28	0.0116	830.06	0.0305	0.003084
Co	59	3	He	0.276	0.0115	830.06	0.0305	0.003084
Co	59	3	He	0.3	0.0122	880.05	0.0305	0.003084
Ni	60	3	He	1.045	0.0182	1300.11	0.0088	0.009003
Ni	60	3	He	0.93	0.0172	1240.09	0.0088	0.009003
Ni	60	3	He	1	0.0178	1280.09	0.0088	0.009003
Cu	63	3	He	0.195	0.0098	700.04	0.0249	0.004937
Cu	63	3	He	0.269	0.0116	840.05	0.0249	0.004937
Cu	63	3	He	0.131	0.0082	590.03	0.0249	0.004937
Zn	66	3	He	0.31	0.0056	400.02	0.0025	0.004836
Zn	66	3	He	0.513	0.0061	440.02	0.0025	0.004836
Zn	66	3	He	-0.214	0.0043	310.01	0.0025	0.004836
As	75	3	He	0.313	0.001	70.00	0.0017	0.0004347
As	75	3	He	0.101	0.0006	44.00	0.0017	0.0004347
As	75	3	He	0.23	0.0008	60.00	0.0017	0.0004347
Sr	88	3	He	0.266	0.0029	180.01	0.0078	0.0007762
Sr	88	3	He	0.042	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	0.104	0.0016	100.00	0.0078	0.0007762
Mo	98	3	He	0.092	0.0025	160.01	0.022	0.0005162
Mo	98	3	He	0.112	0.003	190.01	0.022	0.0005162
Mo	98	3	He	0.063	0.0019	120.00	0.022	0.0005162
Ag	107	3	He	0.035	0.0021	130.01	0.0455	0.0004641
Ag	107	3	He	0.031	0.0019	120.00	0.0455	0.0004641
Ag	107	3	He	0.039	0.0022	140.01	0.0455	0.0004641
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.029	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.564	0.0236	1490.15	0.0143	0.01559
Sn	120	3	He	0.088	0.0168	1070.08	0.0143	0.01559
Sn	120	3	He	0.313	0.0201	1260.10	0.0143	0.01559
Sb	121	3	He	0.133	0.0019	120.00	0.0124	0.000258
Sb	121	3	He	0.068	0.0011	70.00	0.0124	0.000258
Sb	121	3	He	0.069	0.0011	70.00	0.0124	0.000258
Ba	137	3	He	0.219	0.0013	80.00	0.0044	0.000309
Ba	137	3	He	0.469	0.0024	150.01	0.0044	0.000309
Ba	137	3	He	0.148	0.001	60.00	0.0044	0.000309
Tl	205	3	He	0.28	0.0087	1910.21	0.0276	0.001005
Tl	205	3	He	0.251	0.0079	1730.19	0.0276	0.001005
Tl	205	3	He	0.255	0.008	1730.17	0.0276	0.001005
Pb	208	3	He	0.022	0.003	350.02	0.0364	0.002176
Pb	208	3	He	0.025	0.0031	230.01	0.0364	0.002176
Pb	208	3	He	0.017	0.0028	280.01	0.0364	0.002176
U	238	3	He	0.023	0.0012	260.01	0.0421	0.00024
U	238	3	He	0.026	0.0013	290.01	0.0421	0.00024
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
Sc	45	1	No Gas			3177701.83		
Sc	45	1	No Gas			3206914.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3270109.33		
Ge	72	1	No Gas			1390270.14		
Ge	72	1	No Gas			1421204.04		
Ge	72	1	No Gas			1432510.60		
Sc	45	2	H2			187687.48		
Sc	45	2	H2			189176.03		
Sc	45	2	H2			200404.86		
Ge	72	2	H2			155227.65		
Ge	72	2	H2			153661.62		
Ge	72	2	H2			159274.82		
In	115	2	H2			437862.18		
In	115	2	H2			424662.88		
In	115	2	H2			439083.55		
Sc	45	3	He			39584.19		
Sc	45	3	He			40065.34		
Sc	45	3	He			41449.37		
Ge	72	3	He			71468.14		
Ge	72	3	He			72161.20		
Ge	72	3	He			71920.40		
In	115	3	He			63063.07		
In	115	3	He			63524.68		
In	115	3	He			62851.52		
Tb	159	3	He			277854.70		
Tb	159	3	He			279870.13		
Tb	159	3	He			278693.92		
Bi	209	3	He			218394.31		
Bi	209	3	He			218008.77		
Bi	209	3	He			215068.88		

Quantitation Report

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Comment	G3 ICP
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

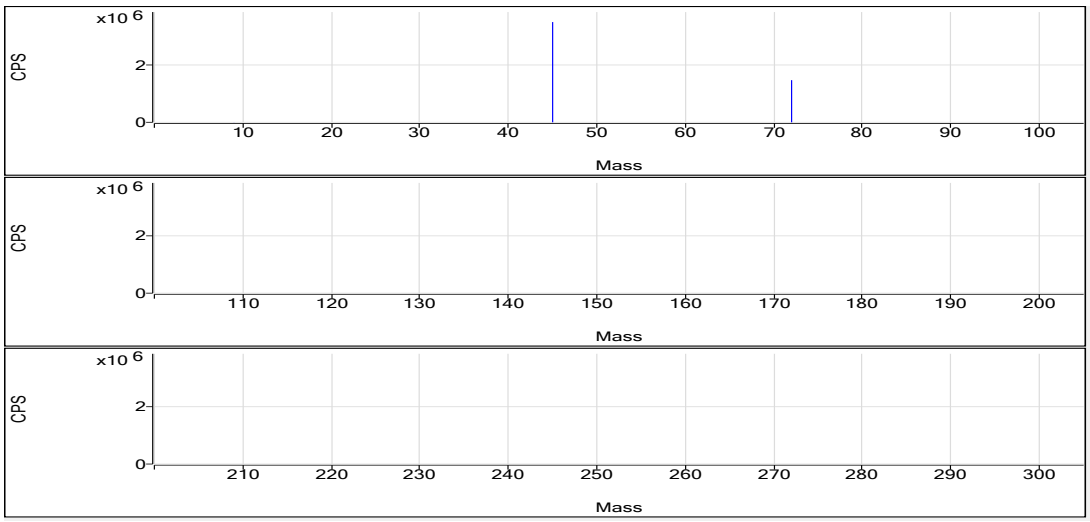
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.527	ppb	4.0	3022.32	0.0021	Pulse	0.5000	3
Se	78	72	H2	2.604	ppb	7.5	165.78	0.0010	Pulse	1.5000	3
Na	23	72	He	429.715	ppb	1.1	62421.46	0.8446	Pulse	0.1000	3
Mg	24	72	He	9189.320	ppb	0.6	572947.71	7.7524	Pulse	0.1000	3
Al	27	72	He	43336.497	ppb	1.3	773168.55	10.4622	Pulse	0.1000	3
K	39	72	He	4898.470	ppb	1.8	210513.23	2.8486	Pulse	0.1000	3
Ca	44	72	He	12915.179	ppb	2.5	29774.26	0.4028	Pulse	0.1000	3
Ti	47	72	He	262.414	ppb	0.4	4884.29	0.0661	Pulse	0.1000	3
V	51	72	He	93.325	ppb	1.0	81220.47	1.0990	Pulse	0.5000	3
Cr	52	72	He	49.743	ppb	2.1	57848.50	0.7828	Pulse	0.1000	3
Mn	55	72	He	405.618	ppb	0.3	177968.46	2.4080	Pulse	0.1000	3
Fe	57	72	He	36911.977	ppb	0.6	790636.66	10.6979	Pulse	0.1000	3
Co	59	72	He	14.371	ppb	2.9	32627.45	0.4416	Pulse	0.1000	3
Ni	60	72	He	45.721	ppb	1.5	30375.98	0.4110	Pulse	0.1000	3
Cu	63	72	He	76.113	ppb	0.6	140640.21	1.9030	Pulse	0.1000	3
Zn	66	72	He	230.419	ppb	3.0	42188.87	0.5709	Pulse	0.1000	3
As	75	72	He	8.971	ppb	5.5	1184.72	0.0160	Pulse	0.5000	3
Sr	88	115	He	76.771	ppb	2.7	38024.73	0.6009	Pulse	0.1000	3
Mo	98	115	He	1.583	ppb	2.8	2240.27	0.0354	Pulse	0.1000	3
Ag	107	115	He	0.720	ppb	1.6	2103.57	0.0332	Pulse	0.1000	3
Cd	111	115	He	1.892	ppb	1.4	578.02	0.0091	Pulse	0.5000	3
Sn	120	115	He	5.239	ppb	1.9	5714.72	0.0903	Pulse	0.1000	3
Sb	121	115	He	1.106	ppb	8.4	883.40	0.0140	Pulse	0.1000	3
Ba	137	115	He	259.143	ppb	3.2	71743.64	1.1340	Pulse	0.1000	3
Tl	205	209	He	0.555	ppb	2.6	3694.00	0.0163	Pulse	0.1000	3
Pb	208	209	He	107.182	ppb	1.3	882532.69	3.9033	Pulse	0.1000	3
U	238	209	He	3.367	ppb	1.8	32080.73	0.1419	Pulse	0.1000	3

ISTD Table:

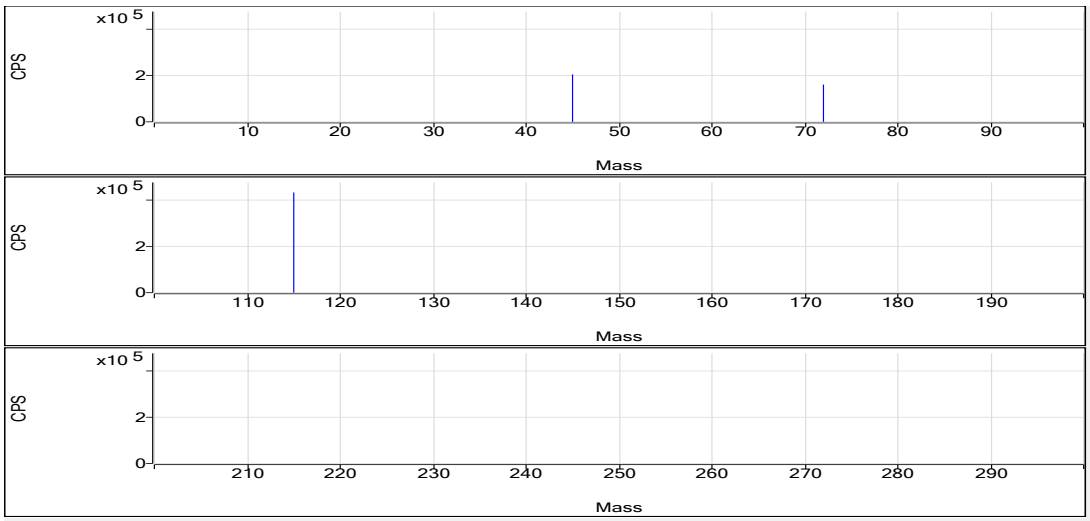
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3500474.01	1.1	108.0	Pulse	0.1000	3
No Gas	Ge	72	1471837.11	1.2	102.2	Pulse	0.1000	3
H2	Sc	45	205765.81	2.0	105.3	Pulse	0.1000	3
H2	Ge	72	161884.55	2.6	99.3	Pulse	0.1000	3
H2	In	115	435212.16	1.2	100.4	Pulse	0.1000	3
He	Sc	45	43344.61	0.8	108.4	Pulse	0.1000	3
He	Ge	72	73909.79	1.4	102.2	Pulse	0.1000	3
He	In	115	63298.98	2.6	98.0	Pulse	0.1000	3
He	Tb	159	291934.72	0.7	102.1	Pulse	0.1000	3
He	Bi	209	226110.84	0.8	101.8	Pulse	0.1000	3

No Gas

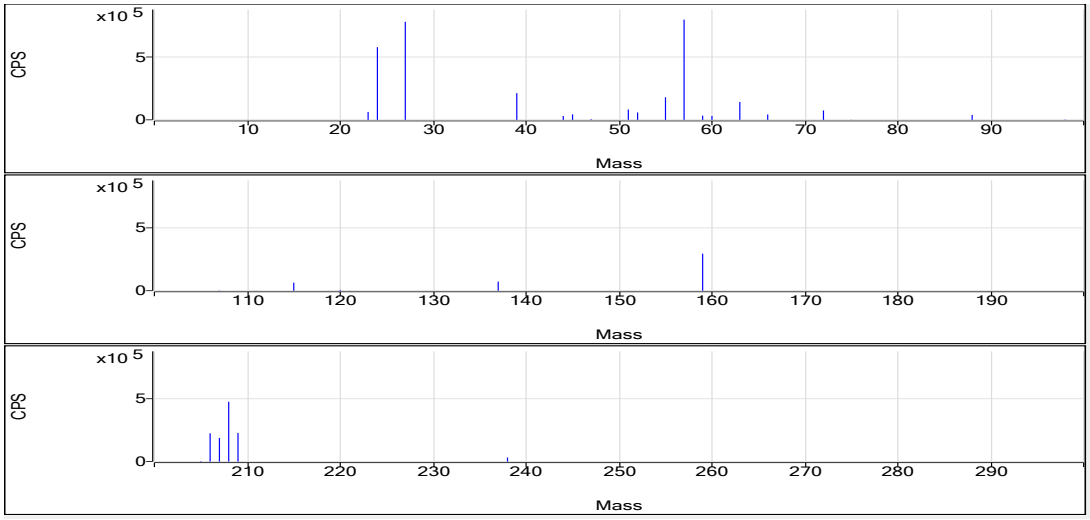


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.576	0.0021	3078.34	0.0013	4.694E-05
Be	9	1	No Gas	1.46	0.002	2926.30	0.0013	4.694E-05
Be	9	1	No Gas	1.547	0.0021	3062.33	0.0013	4.694E-05
Se	78	2	H2	2.677	0.0011	174.00	0.0004	1.089E-05
Se	78	2	H2	2.752	0.0011	170.00	0.0004	1.089E-05
Se	78	2	H2	2.383	0.0009	153.33	0.0004	1.089E-05
Na	23	3	He	430.908	0.8467	62994.15	0.0017	0.1065
Na	23	3	He	424.296	0.8353	62351.29	0.0017	0.1065
Na	23	3	He	433.941	0.8519	61918.94	0.0017	0.1065
Mg	24	3	He	9136.35	7.7077	573465.58	0.0008	0.004846
Mg	24	3	He	9183.384	7.7474	578291.63	0.0008	0.004846
Mg	24	3	He	9248.227	7.802	567085.93	0.0008	0.004846
Al	27	3	He	42968.61	10.3734	771798.97	0.0002	0.001063
Al	27	3	He	43065.466	10.3968	776055.69	0.0002	0.001063
Al	27	3	He	43975.415	10.6165	771651.00	0.0002	0.001063
K	39	3	He	4915.467	2.858	212640.90	0.0006	0.1436
K	39	3	He	4804.019	2.7965	208739.04	0.0006	0.1436
K	39	3	He	4975.924	2.8914	210159.76	0.0006	0.1436
Ca	44	3	He	13182.235	0.411	30582.68	0	0.001611
Ca	44	3	He	13014	0.4058	30292.16	0	0.001611
Ca	44	3	He	12549.302	0.3914	28447.95	0	0.001611
Ti	47	3	He	262.65	0.0661	4920.98	0.0003	0.0002737
Ti	47	3	He	263.398	0.0663	4950.99	0.0003	0.0002737
Ti	47	3	He	261.196	0.0658	4780.90	0.0003	0.0002737
V	51	3	He	93.008	1.0953	81492.73	0.0117	0.007326
V	51	3	He	92.58	1.0903	81383.93	0.0117	0.007326
V	51	3	He	94.387	1.1114	80784.74	0.0117	0.007326
Cr	52	3	He	49.364	0.7771	57814.87	0.0152	0.02538
Cr	52	3	He	48.952	0.7708	57534.22	0.0152	0.02538
Cr	52	3	He	50.915	0.8007	58196.40	0.0152	0.02538
Mn	55	3	He	405.254	2.4058	178997.58	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	404.667	2.4024	179321.25	0.0059	0.01385
Mn	55	3	He	406.933	2.4157	175586.56	0.0059	0.01385
Fe	57	3	He	36905.451	10.696	795795.85	0.0003	0.003918
Fe	57	3	He	36706.939	10.6385	794092.57	0.0003	0.003918
Fe	57	3	He	37123.542	10.7592	782021.55	0.0003	0.003918
Co	59	3	He	13.998	0.4302	32006.20	0.0305	0.003084
Co	59	3	He	14.291	0.4391	32777.75	0.0305	0.003084
Co	59	3	He	14.824	0.4554	33098.40	0.0305	0.003084
Ni	60	3	He	45.738	0.4112	30592.98	0.0088	0.009003
Ni	60	3	He	45.021	0.4049	30222.41	0.0088	0.009003
Ni	60	3	He	46.404	0.417	30312.56	0.0088	0.009003
Cu	63	3	He	76.043	1.9012	141453.80	0.0249	0.004937
Cu	63	3	He	75.71	1.8929	141293.90	0.0249	0.004937
Cu	63	3	He	76.586	1.9148	139172.94	0.0249	0.004937
Zn	66	3	He	222.714	0.552	41068.98	0.0025	0.004836
Zn	66	3	He	232.319	0.5756	42964.15	0.0025	0.004836
Zn	66	3	He	236.223	0.5852	42533.49	0.0025	0.004836
As	75	3	He	8.669	0.0155	1154.05	0.0017	0.0004347
As	75	3	He	8.702	0.0156	1162.06	0.0017	0.0004347
As	75	3	He	9.544	0.017	1238.06	0.0017	0.0004347
Sr	88	3	He	78.249	0.6125	38964.34	0.0078	0.0007762
Sr	88	3	He	74.429	0.5826	37720.34	0.0078	0.0007762
Sr	88	3	He	77.633	0.6076	37389.52	0.0078	0.0007762
Mo	98	3	He	1.597	0.0357	2270.28	0.022	0.0005162
Mo	98	3	He	1.618	0.0361	2340.29	0.022	0.0005162
Mo	98	3	He	1.534	0.0343	2110.24	0.022	0.0005162
Ag	107	3	He	0.719	0.0332	2110.25	0.0455	0.0004641
Ag	107	3	He	0.71	0.0327	2120.24	0.0455	0.0004641
Ag	107	3	He	0.733	0.0338	2080.23	0.0455	0.0004641
Cd	111	3	He	1.862	0.009	572.02	0.0048	5.152E-05
Cd	111	3	He	1.913	0.0092	598.02	0.0048	5.152E-05
Cd	111	3	He	1.899	0.0092	564.01	0.0048	5.152E-05
Sn	120	3	He	5.336	0.0917	5831.48	0.0143	0.01559
Sn	120	3	He	5.137	0.0888	5751.39	0.0143	0.01559
Sn	120	3	He	5.246	0.0904	5561.30	0.0143	0.01559
Sb	121	3	He	1.107	0.014	890.07	0.0124	0.000258
Sb	121	3	He	1.013	0.0128	830.05	0.0124	0.000258
Sb	121	3	He	1.198	0.0151	930.07	0.0124	0.000258
Ba	137	3	He	259.735	1.1366	72309.88	0.0044	0.000309
Ba	137	3	He	250.679	1.097	71023.74	0.0044	0.000309
Ba	137	3	He	267.016	1.1684	71897.29	0.0044	0.000309
Tl	205	3	He	0.551	0.0162	3640.63	0.0276	0.001005
Tl	205	3	He	0.542	0.016	3640.66	0.0276	0.001005
Tl	205	3	He	0.571	0.0168	3800.70	0.0276	0.001005
Pb	208	3	He	108.752	3.9605	473885.66	0.0364	0.002176
Pb	208	3	He	106.472	3.8775	472261.16	0.0364	0.002176
Pb	208	3	He	106.324	3.8721	470175.81	0.0364	0.002176
U	238	3	He	3.397	0.1431	32090.89	0.0421	0.00024
U	238	3	He	3.299	0.139	31639.62	0.0421	0.00024
U	238	3	He	3.406	0.1435	32511.67	0.0421	0.00024
Sc	45	1	No Gas			3459958.07		
Sc	45	1	No Gas			3534796.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3506667.45		
Ge	72	1	No Gas			1453337.79		
Ge	72	1	No Gas			1489287.17		
Ge	72	1	No Gas			1472886.38		
Sc	45	2	H2			208565.08		
Sc	45	2	H2			200981.46		
Sc	45	2	H2			207750.90		
Ge	72	2	H2			165238.61		
Ge	72	2	H2			157058.84		
Ge	72	2	H2			163356.21		
In	115	2	H2			436720.66		
In	115	2	H2			429419.33		
In	115	2	H2			439496.48		
Sc	45	3	He			43184.01		
Sc	45	3	He			43735.91		
Sc	45	3	He			43113.92		
Ge	72	3	He			74401.48		
Ge	72	3	He			74643.59		
Ge	72	3	He			72684.31		
In	115	3	He			63665.20		
In	115	3	He			64789.89		
In	115	3	He			61575.58		
Tb	159	3	He			289752.89		
Tb	159	3	He			292732.36		
Tb	159	3	He			293318.90		
Bi	209	3	He			224210.04		
Bi	209	3	He			227613.90		
Bi	209	3	He			226508.59		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:55:24
Sample Name	410-136624-C-1-D DU @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

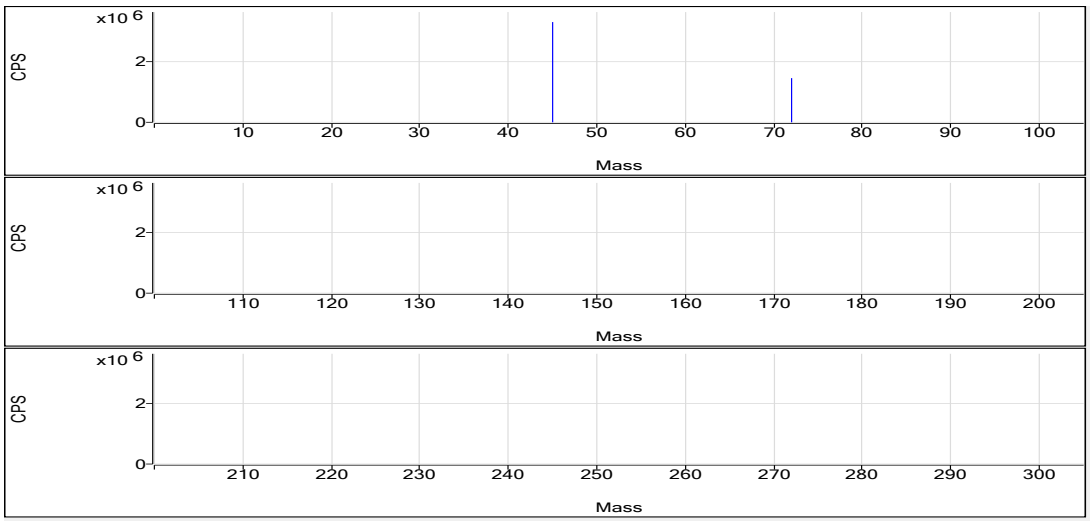
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.255	ppb	11.1	561.35	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.368	ppb	11.6	25.11	0.0002	Pulse	1.5000	3
Na	23	72	He	80.204	ppb	5.2	18154.93	0.2442	Pulse	0.1000	3
Mg	24	72	He	1548.247	ppb	1.4	97398.28	1.3102	Pulse	0.1000	3
Al	27	72	He	7255.003	ppb	1.6	130271.44	1.7524	Pulse	0.1000	3
K	39	72	He	835.083	ppb	5.5	44952.68	0.6048	Pulse	0.1000	3
Ca	44	72	He	2127.143	ppb	2.5	5031.03	0.0677	Pulse	0.1000	3
Ti	47	72	He	45.353	ppb	24.0	866.72	0.0116	Pulse	0.1000	3
V	51	72	He	15.642	ppb	1.3	14146.86	0.1903	Pulse	0.5000	3
Cr	52	72	He	8.373	ppb	3.4	11364.76	0.1529	Pulse	0.1000	3
Mn	55	72	He	66.629	ppb	1.2	30268.73	0.4071	Pulse	0.1000	3
Fe	57	72	He	6153.755	ppb	1.2	132835.66	1.7868	Pulse	0.1000	3
Co	59	72	He	2.550	ppb	2.1	6014.78	0.0809	Pulse	0.1000	3
Ni	60	72	He	8.626	ppb	2.9	6308.26	0.0849	Pulse	0.1000	3
Cu	63	72	He	12.777	ppb	1.6	24053.97	0.3236	Pulse	0.1000	3
Zn	66	72	He	39.330	ppb	3.0	7542.26	0.1015	Pulse	0.1000	3
As	75	72	He	1.534	ppb	10.7	230.67	0.0031	Pulse	0.5000	3
Sr	88	115	He	13.779	ppb	5.0	6878.57	0.1085	Pulse	0.1000	3
Mo	98	115	He	0.306	ppb	19.7	460.03	0.0073	Pulse	0.1000	3
Ag	107	115	He	0.108	ppb	27.4	340.01	0.0054	Pulse	0.1000	3
Cd	111	115	He	0.272	ppb	9.7	86.00	0.0014	Pulse	0.5000	3
Sn	120	115	He	0.748	ppb	26.1	1663.50	0.0263	Pulse	0.1000	3
Sb	121	115	He	0.182	ppb	47.5	160.00	0.0025	Pulse	0.1000	3
Ba	137	115	He	43.808	ppb	6.4	12169.11	0.1920	Pulse	0.1000	3
Tl	205	209	He	0.155	ppb	22.2	1173.44	0.0053	Pulse	0.1000	3
Pb	208	209	He	18.377	ppb	1.8	148728.33	0.6711	Pulse	0.1000	3
U	238	209	He	0.574	ppb	5.0	5404.68	0.0244	Pulse	0.1000	3

ISTD Table:

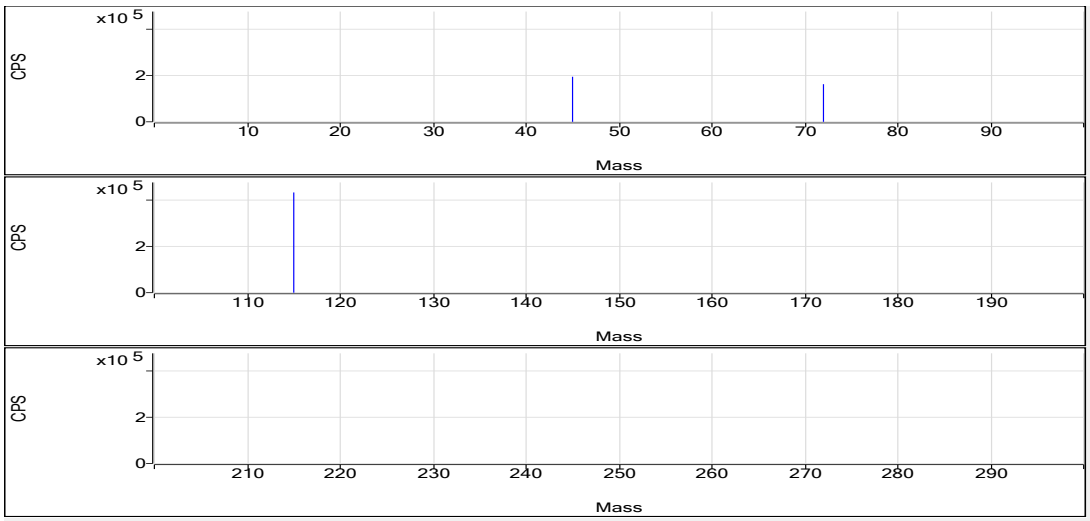
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3335410.89	0.3	102.9	Pulse	0.1000	3
No Gas	Ge	72	1469829.87	1.1	102.1	Pulse	0.1000	3
H2	Sc	45	195051.65	1.2	99.8	Pulse	0.1000	3
H2	Ge	72	162878.83	1.2	99.9	Pulse	0.1000	3
H2	In	115	433837.86	0.9	100.1	Pulse	0.1000	3
He	Sc	45	41713.30	1.9	104.3	Pulse	0.1000	3
He	Ge	72	74345.56	0.8	102.8	Pulse	0.1000	3
He	In	115	63444.94	1.9	98.2	Pulse	0.1000	3
He	Tb	159	282799.92	0.9	98.9	Pulse	0.1000	3
He	Bi	209	221648.88	0.7	99.8	Pulse	0.1000	3

No Gas

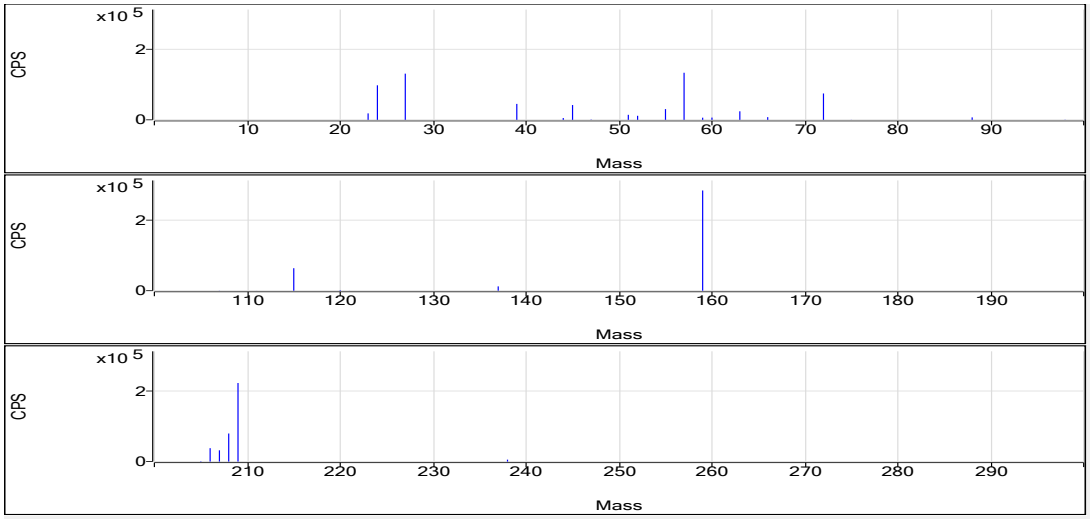


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.278	0.0004	600.02	0.0013	4.694E-05
Be	9	1	No Gas	0.224	0.0003	506.01	0.0013	4.694E-05
Be	9	1	No Gas	0.263	0.0004	578.02	0.0013	4.694E-05
Se	78	2	H2	0.371	0.0002	25.33	0.0004	1.089E-05
Se	78	2	H2	0.408	0.0002	28.00	0.0004	1.089E-05
Se	78	2	H2	0.323	0.0001	22.00	0.0004	1.089E-05
Na	23	3	He	84.37	0.2514	18512.06	0.0017	0.1065
Na	23	3	He	80.273	0.2444	18241.78	0.0017	0.1065
Na	23	3	He	75.968	0.237	17710.94	0.0017	0.1065
Mg	24	3	He	1573.075	1.3311	98021.54	0.0008	0.004846
Mg	24	3	He	1537.24	1.3009	97116.85	0.0008	0.004846
Mg	24	3	He	1534.425	1.2985	97056.46	0.0008	0.004846
Al	27	3	He	7377.747	1.782	131225.38	0.0002	0.001063
Al	27	3	He	7143.692	1.7255	128815.86	0.0002	0.001063
Al	27	3	He	7243.569	1.7496	130773.08	0.0002	0.001063
K	39	3	He	886.948	0.6334	46644.76	0.0006	0.1436
K	39	3	He	819.764	0.5963	44517.90	0.0006	0.1436
K	39	3	He	798.536	0.5846	43695.37	0.0006	0.1436
Ca	44	3	He	2187.129	0.0695	5121.07	0	0.001611
Ca	44	3	He	2091.973	0.0666	4971.00	0	0.001611
Ca	44	3	He	2102.325	0.0669	5001.02	0	0.001611
Ti	47	3	He	35.733	0.0092	680.04	0.0003	0.0002737
Ti	47	3	He	57.134	0.0146	1090.08	0.0003	0.0002737
Ti	47	3	He	43.192	0.0111	830.05	0.0003	0.0002737
V	51	3	He	15.855	0.1928	14196.90	0.0117	0.007326
V	51	3	He	15.628	0.1901	14194.91	0.0117	0.007326
V	51	3	He	15.442	0.188	14048.78	0.0117	0.007326
Cr	52	3	He	8.682	0.1576	11605.07	0.0152	0.02538
Cr	52	3	He	8.128	0.1491	11134.58	0.0152	0.02538
Cr	52	3	He	8.309	0.1519	11354.64	0.0152	0.02538
Mn	55	3	He	66.378	0.4056	29871.23	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	65.967	0.4032	30101.86	0.0059	0.01385
Mn	55	3	He	67.542	0.4125	30833.09	0.0059	0.01385
Fe	57	3	He	6172.989	1.7923	131984.98	0.0003	0.003918
Fe	57	3	He	6070.691	1.7627	131591.30	0.0003	0.003918
Fe	57	3	He	6217.585	1.8052	134930.71	0.0003	0.003918
Co	59	3	He	2.49	0.0791	5821.34	0.0305	0.003084
Co	59	3	He	2.565	0.0813	6071.56	0.0305	0.003084
Co	59	3	He	2.596	0.0823	6151.45	0.0305	0.003084
Ni	60	3	He	8.692	0.0854	6291.57	0.0088	0.009003
Ni	60	3	He	8.347	0.0824	6151.49	0.0088	0.009003
Ni	60	3	He	8.838	0.0867	6481.71	0.0088	0.009003
Cu	63	3	He	13.008	0.3293	24250.83	0.0249	0.004937
Cu	63	3	He	12.705	0.3218	24020.92	0.0249	0.004937
Cu	63	3	He	12.619	0.3196	23890.16	0.0249	0.004937
Zn	66	3	He	40.495	0.1043	7682.30	0.0025	0.004836
Zn	66	3	He	38.118	0.0985	7352.11	0.0025	0.004836
Zn	66	3	He	39.378	0.1016	7592.38	0.0025	0.004836
As	75	3	He	1.515	0.0031	226.00	0.0017	0.0004347
As	75	3	He	1.706	0.0034	254.00	0.0017	0.0004347
As	75	3	He	1.381	0.0028	212.00	0.0017	0.0004347
Sr	88	3	He	14.573	0.1147	7122.03	0.0078	0.0007762
Sr	88	3	He	13.355	0.1052	6771.86	0.0078	0.0007762
Sr	88	3	He	13.407	0.1056	6741.83	0.0078	0.0007762
Mo	98	3	He	0.357	0.0084	520.03	0.022	0.0005162
Mo	98	3	He	0.322	0.0076	490.03	0.022	0.0005162
Mo	98	3	He	0.24	0.0058	370.02	0.022	0.0005162
Ag	107	3	He	0.142	0.0069	430.02	0.0455	0.0004641
Ag	107	3	He	0.089	0.0045	290.01	0.0455	0.0004641
Ag	107	3	He	0.093	0.0047	300.01	0.0455	0.0004641
Cd	111	3	He	0.284	0.0014	88.00	0.0048	5.152E-05
Cd	111	3	He	0.242	0.0012	78.00	0.0048	5.152E-05
Cd	111	3	He	0.289	0.0014	92.00	0.0048	5.152E-05
Sn	120	3	He	0.929	0.0288	1790.18	0.0143	0.01559
Sn	120	3	He	0.541	0.0233	1500.12	0.0143	0.01559
Sn	120	3	He	0.774	0.0266	1700.19	0.0143	0.01559
Sb	121	3	He	0.135	0.0019	120.00	0.0124	0.000258
Sb	121	3	He	0.129	0.0019	120.00	0.0124	0.000258
Sb	121	3	He	0.282	0.0038	240.01	0.0124	0.000258
Ba	137	3	He	47.035	0.2061	12796.24	0.0044	0.000309
Ba	137	3	He	42.054	0.1843	11865.58	0.0044	0.000309
Ba	137	3	He	42.334	0.1855	11845.52	0.0044	0.000309
Tl	205	3	He	0.128	0.0045	1010.09	0.0276	0.001005
Tl	205	3	He	0.144	0.005	1110.08	0.0276	0.001005
Tl	205	3	He	0.194	0.0064	1400.14	0.0276	0.001005
Pb	208	3	He	18.109	0.6613	79036.85	0.0364	0.002176
Pb	208	3	He	18.287	0.6678	78613.99	0.0364	0.002176
Pb	208	3	He	18.735	0.6841	79932.77	0.0364	0.002176
U	238	3	He	0.605	0.0257	5721.48	0.0421	0.00024
U	238	3	He	0.569	0.0242	5371.32	0.0421	0.00024
U	238	3	He	0.548	0.0233	5121.23	0.0421	0.00024
Sc	45	1	No Gas			3325550.58		
Sc	45	1	No Gas			3346640.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3334041.20		
Ge	72	1	No Gas			1453354.35		
Ge	72	1	No Gas			1485506.70		
Ge	72	1	No Gas			1470628.57		
Sc	45	2	H2			193227.54		
Sc	45	2	H2			197685.33		
Sc	45	2	H2			194242.09		
Ge	72	2	H2			163034.58		
Ge	72	2	H2			164784.70		
Ge	72	2	H2			160817.21		
In	115	2	H2			429435.38		
In	115	2	H2			436869.29		
In	115	2	H2			435208.90		
Sc	45	3	He			41037.96		
Sc	45	3	He			41519.58		
Sc	45	3	He			42582.37		
Ge	72	3	He			73639.05		
Ge	72	3	He			74653.85		
Ge	72	3	He			74743.78		
In	115	3	He			62108.17		
In	115	3	He			64399.01		
In	115	3	He			63866.55		
Tb	159	3	He			280831.85		
Tb	159	3	He			282013.94		
Tb	159	3	He			285553.98		
Bi	209	3	He			222722.15		
Bi	209	3	He			222224.96		
Bi	209	3	He			219999.53		

Quantitation Report

Data File Name	161SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 15:57:24
Sample Name	410-136624-J-1-A MS @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

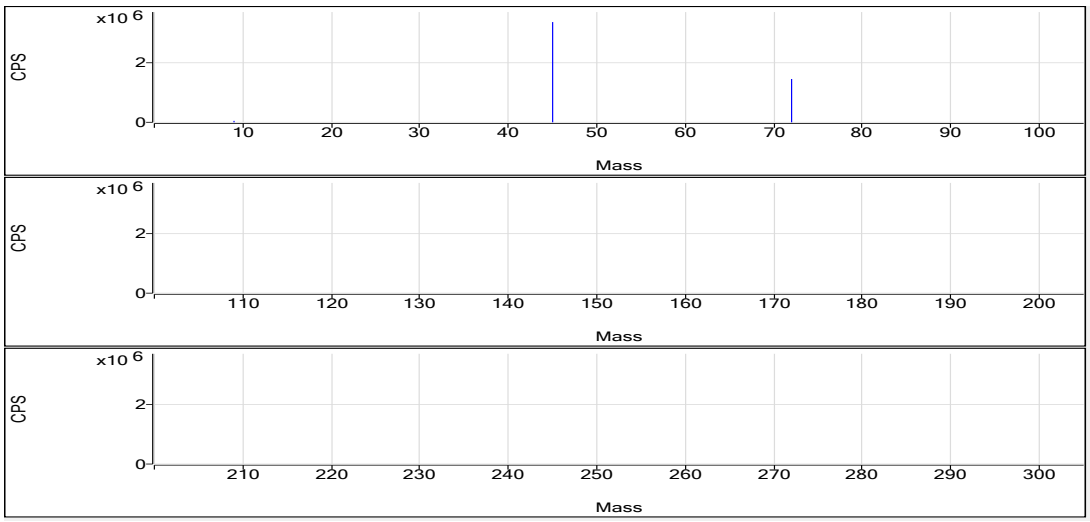
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	25.216	ppb	2.8	48543.03	0.0332	Pulse	0.5000	3
Se	78	72	H2	53.302	ppb	3.5	3343.95	0.0208	Pulse	1.5000	3
Na	23	72	He	3061.202	ppb	2.5	395695.77	5.3651	Pulse	0.1000	3
Mg	24	72	He	7539.927	ppb	1.3	469257.65	6.3618	Pulse	0.1000	3
Al	27	72	He	28176.596	ppb	1.3	501784.56	6.8027	Pulse	0.1000	3
K	39	72	He	8042.889	ppb	2.7	338158.03	4.5850	Pulse	0.1000	3
Ca	44	72	He	10562.503	ppb	3.4	24314.15	0.3297	Pulse	0.1000	3
Ti	47	72	He	485.959	ppb	2.5	9009.75	0.1221	Pulse	0.1000	3
V	51	72	He	312.584	ppb	1.3	270256.77	3.6639	Pulse	0.5000	3
Cr	52	72	He	290.755	ppb	1.4	328443.76	4.4528	Pulse	0.1000	3
Mn	55	72	He	477.816	ppb	1.8	209044.78	2.8341	Pulse	0.1000	3
Fe	57	72	He	22339.057	ppb	1.6	477664.93	6.4759	Pulse	0.1000	3
Co	59	72	He	267.471	ppb	1.1	602192.06	8.1638	Pulse	0.1000	3
Ni	60	72	He	283.660	ppb	1.1	184657.72	2.5033	Pulse	0.1000	3
Cu	63	72	He	301.027	ppb	1.8	554067.71	7.5117	Pulse	0.1000	3
Zn	66	72	He	374.641	ppb	1.8	68244.68	0.9252	Pulse	0.1000	3
As	75	72	He	261.033	ppb	0.8	33524.18	0.4544	Pulse	0.5000	3
Sr	88	115	He	76.418	ppb	2.4	37861.47	0.5981	Pulse	0.1000	3
Mo	98	115	He	27.286	ppb	2.7	38058.85	0.6014	Pulse	0.1000	3
Ag	107	115	He	25.810	ppb	2.9	74350.02	1.1748	Pulse	0.1000	3
Cd	111	115	He	26.672	ppb	2.2	8107.70	0.1281	Pulse	0.5000	3
Sn	120	115	He	54.393	ppb	3.5	50060.80	0.7911	Pulse	0.1000	3
Sb	121	115	He	49.997	ppb	2.6	39272.88	0.6205	Pulse	0.1000	3
Ba	137	115	He	431.214	ppb	2.0	119420.63	1.8868	Pulse	0.1000	3
Tl	205	209	He	51.463	ppb	0.5	316304.80	1.4237	Pulse	0.1000	3
Pb	208	209	He	60.431	ppb	0.2	489164.11	2.2017	Pulse	0.1000	3
U	238	209	He	27.638	ppb	0.4	258361.09	1.1629	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3387452.97	0.7	104.5	Pulse	0.1000	3
No Gas	Ge	72	1462852.64	0.9	101.6	Pulse	0.1000	3
H2	Sc	45	198176.74	1.9	101.4	Pulse	0.1000	3
H2	Ge	72	161095.91	1.5	98.8	Pulse	0.1000	3
H2	In	115	437760.49	2.3	101.0	Pulse	0.1000	3
He	Sc	45	43605.68	1.5	109.1	Pulse	0.1000	3
He	Ge	72	73772.09	1.5	102.1	Pulse	0.1000	3
He	In	115	63315.19	2.6	98.0	Pulse	0.1000	3
He	Tb	159	288073.86	1.0	100.7	Pulse	0.1000	3
He	Bi	209	222174.16	0.3	100.0	Pulse	0.1000	3

No Gas



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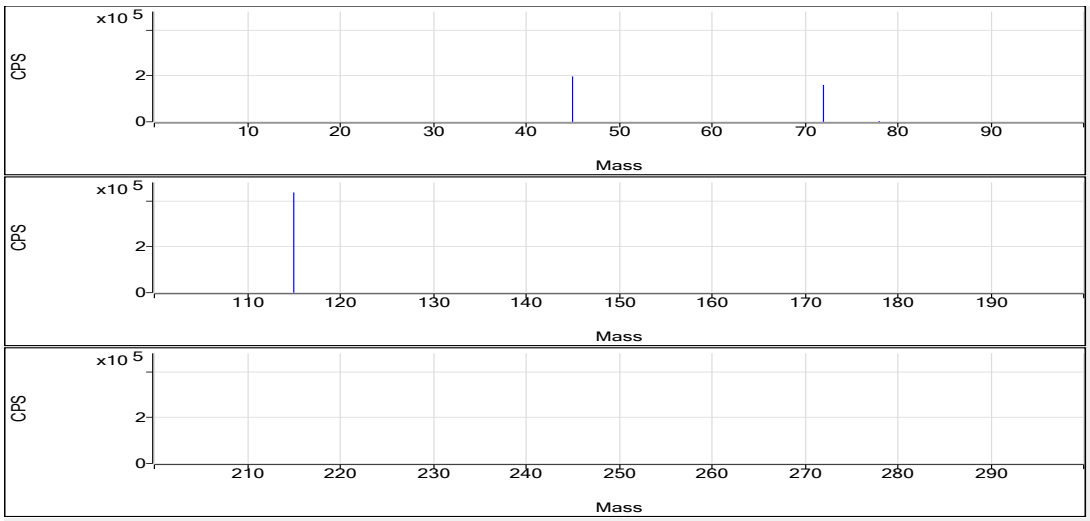
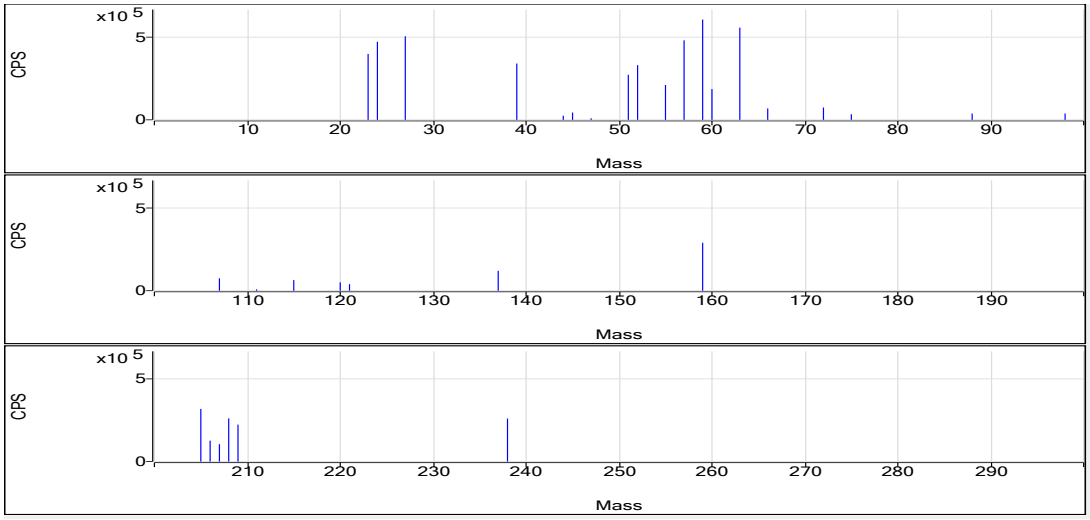


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	24.647	0.0324	47016.88	0.0013	4.694E-05
Be	9	1	No Gas	25.005	0.0329	48539.64	0.0013	4.694E-05
Be	9	1	No Gas	25.997	0.0342	50072.57	0.0013	4.694E-05
Se	78	2	H2	54.629	0.0213	3396.41	0.0004	1.089E-05
Se	78	2	H2	54.093	0.0211	3369.07	0.0004	1.089E-05
Se	78	2	H2	51.183	0.0199	3266.38	0.0004	1.089E-05
Na	23	3	He	3146.713	5.5119	400737.53	0.0017	0.1065
Na	23	3	He	2996.286	5.2535	393882.53	0.0017	0.1065
Na	23	3	He	3040.607	5.3297	392467.26	0.0017	0.1065
Mg	24	3	He	7639.285	6.4455	468613.04	0.0008	0.004846
Mg	24	3	He	7440.434	6.2779	470682.69	0.0008	0.004846
Mg	24	3	He	7540.062	6.3619	468477.22	0.0008	0.004846
Al	27	3	He	28540.582	6.8906	500969.99	0.0002	0.001063
Al	27	3	He	27808.071	6.7138	503362.80	0.0002	0.001063
Al	27	3	He	28181.135	6.8038	501020.89	0.0002	0.001063
K	39	3	He	8264.105	4.7072	342228.04	0.0006	0.1436
K	39	3	He	7838.249	4.472	335287.89	0.0006	0.1436
K	39	3	He	8026.314	4.5759	336958.16	0.0006	0.1436
Ca	44	3	He	10713.862	0.3344	24310.73	0	0.001611
Ca	44	3	He	10155.57	0.317	23770.09	0	0.001611
Ca	44	3	He	10818.076	0.3376	24861.62	0	0.001611
Ti	47	3	He	498.188	0.1252	9103.12	0.0003	0.0002737
Ti	47	3	He	486.258	0.1222	9163.19	0.0003	0.0002737
Ti	47	3	He	473.43	0.119	8762.95	0.0003	0.0002737
V	51	3	He	316.962	3.7151	270098.38	0.0117	0.007326
V	51	3	He	309.148	3.6237	271683.16	0.0117	0.007326
V	51	3	He	311.643	3.6528	268988.78	0.0117	0.007326
Cr	52	3	He	294.781	4.5141	328189.92	0.0152	0.02538
Cr	52	3	He	286.595	4.3894	329096.64	0.0152	0.02538
Cr	52	3	He	290.889	4.4548	328044.72	0.0152	0.02538
Mn	55	3	He	482.157	2.8597	207913.61	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	467.667	2.7742	207996.50	0.0059	0.01385
Mn	55	3	He	483.624	2.8684	211224.24	0.0059	0.01385
Fe	57	3	He	22549.279	6.5368	475246.13	0.0003	0.003918
Fe	57	3	He	21916.355	6.3534	476344.72	0.0003	0.003918
Fe	57	3	He	22551.536	6.5374	481403.94	0.0003	0.003918
Co	59	3	He	269.937	8.239	599003.19	0.0305	0.003084
Co	59	3	He	264.319	8.0676	604864.09	0.0305	0.003084
Co	59	3	He	268.159	8.1847	602708.90	0.0305	0.003084
Ni	60	3	He	284.735	2.5128	182686.68	0.0088	0.009003
Ni	60	3	He	280.116	2.4721	185348.57	0.0088	0.009003
Ni	60	3	He	286.129	2.525	185937.91	0.0088	0.009003
Cu	63	3	He	303.205	7.566	550074.17	0.0249	0.004937
Cu	63	3	He	294.918	7.3593	551763.74	0.0249	0.004937
Cu	63	3	He	304.958	7.6097	560365.23	0.0249	0.004937
Zn	66	3	He	380.033	0.9385	68231.36	0.0025	0.004836
Zn	66	3	He	367.099	0.9067	67980.59	0.0025	0.004836
Zn	66	3	He	376.791	0.9305	68522.10	0.0025	0.004836
As	75	3	He	261.7	0.4556	33121.94	0.0017	0.0004347
As	75	3	He	262.758	0.4574	34294.62	0.0017	0.0004347
As	75	3	He	258.641	0.4503	33155.99	0.0017	0.0004347
Sr	88	3	He	75.674	0.5923	36909.04	0.0078	0.0007762
Sr	88	3	He	78.544	0.6148	38352.69	0.0078	0.0007762
Sr	88	3	He	75.037	0.5873	38322.67	0.0078	0.0007762
Mo	98	3	He	27.817	0.6131	38202.33	0.022	0.0005162
Mo	98	3	He	27.608	0.6085	37961.91	0.022	0.0005162
Mo	98	3	He	26.432	0.5826	38012.31	0.022	0.0005162
Ag	107	3	He	26.496	1.206	75150.50	0.0455	0.0004641
Ag	107	3	He	25.916	1.1796	73593.16	0.0455	0.0004641
Ag	107	3	He	25.019	1.1388	74306.39	0.0455	0.0004641
Cd	111	3	He	27.331	0.1313	8178.42	0.0048	5.152E-05
Cd	111	3	He	26.47	0.1271	7930.26	0.0048	5.152E-05
Cd	111	3	He	26.216	0.1259	8214.43	0.0048	5.152E-05
Sn	120	3	He	55.085	0.801	49910.47	0.0143	0.01559
Sn	120	3	He	55.83	0.8116	50633.00	0.0143	0.01559
Sn	120	3	He	52.265	0.7608	49638.93	0.0143	0.01559
Sb	121	3	He	51.452	0.6385	39787.48	0.0124	0.000258
Sb	121	3	He	49.525	0.6146	38343.64	0.0124	0.000258
Sb	121	3	He	49.013	0.6083	39687.52	0.0124	0.000258
Ba	137	3	He	438.014	1.9165	119422.25	0.0044	0.000309
Ba	137	3	He	434.139	1.8996	118507.96	0.0044	0.000309
Ba	137	3	He	421.49	1.8442	120331.69	0.0044	0.000309
Tl	205	3	He	51.184	1.4159	314417.09	0.0276	0.001005
Tl	205	3	He	51.506	1.4248	315619.88	0.0276	0.001005
Tl	205	3	He	51.7	1.4302	318877.44	0.0276	0.001005
Pb	208	3	He	60.27	2.1959	259877.79	0.0364	0.002176
Pb	208	3	He	60.51	2.2046	257594.96	0.0364	0.002176
Pb	208	3	He	60.514	2.2047	260622.20	0.0364	0.002176
U	238	3	He	27.555	1.1594	257454.59	0.0421	0.00024
U	238	3	He	27.757	1.1679	258702.98	0.0421	0.00024
U	238	3	He	27.601	1.1613	258925.70	0.0421	0.00024
Sc	45	1	No Gas			3384464.32		
Sc	45	1	No Gas			3413098.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3364795.89		
Ge	72	1	No Gas			1449635.45		
Ge	72	1	No Gas			1475157.17		
Ge	72	1	No Gas			1463765.29		
Sc	45	2	H2			194314.51		
Sc	45	2	H2			198506.72		
Sc	45	2	H2			201708.98		
Ge	72	2	H2			159595.79		
Ge	72	2	H2			159879.57		
Ge	72	2	H2			163812.38		
In	115	2	H2			431228.86		
In	115	2	H2			432789.13		
In	115	2	H2			449263.47		
Sc	45	3	He			44157.04		
Sc	45	3	He			42903.44		
Sc	45	3	He			43756.55		
Ge	72	3	He			72703.46		
Ge	72	3	He			74974.69		
Ge	72	3	He			73638.12		
In	115	3	He			62701.05		
In	115	3	He			62781.42		
In	115	3	He			65634.51		
Tb	159	3	He			288067.67		
Tb	159	3	He			290883.63		
Tb	159	3	He			285270.27		
Bi	209	3	He			222055.37		
Bi	209	3	He			221511.60		
Bi	209	3	He			222955.52		

Quantitation Report

Data File Name	162SMPL.d
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Acq Time	2023-08-10 15:59:25
Sample Name	Z410-136624-J-1-A MS @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

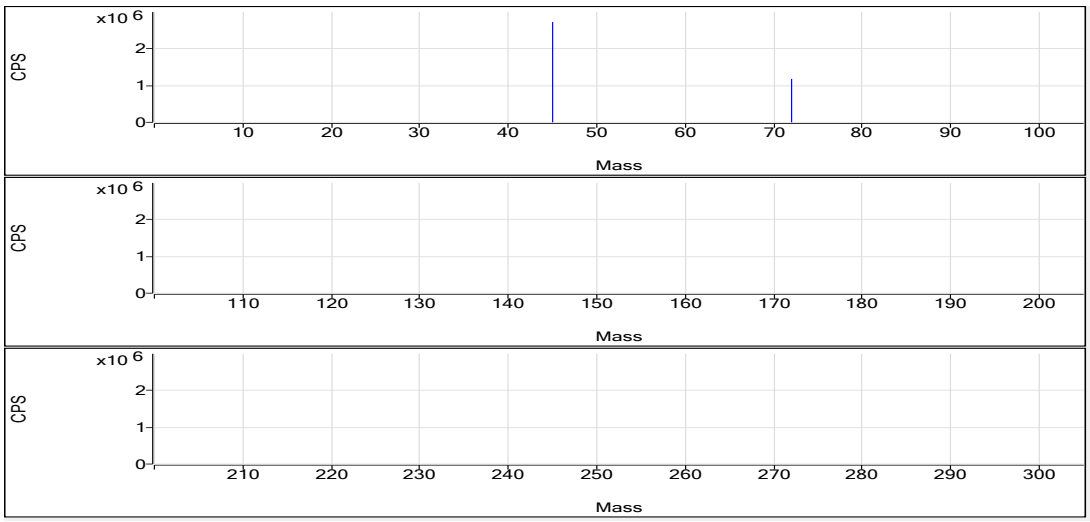
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb	0.0166846177008839			Pulse	0.5000	3
Se	78	72	H2		ppb	0.0102980350114202			Pulse	1.5000	3
Na	23	72	He		ppb	1.22043983836455			Pulse	0.1000	3
Mg	24	72	He		ppb	4.39137059401543			Pulse	0.1000	3
Al	27	72	He		ppb	9.30289006794839			Pulse	0.1000	3
K	39	72	He		ppb	11.2089298322962			Pulse	0.1000	3
Ca	44	72	He		ppb	11.2645131320175			Pulse	0.1000	3
Ti	47	72	He		ppb	0.755533471908958			Pulse	0.1000	3
V	51	72	He		ppb	0.126737549918007			Pulse	0.5000	3
Cr	52	72	He		ppb	0.12281542387312			Pulse	0.1000	3
Mn	55	72	He		ppb	0.266869391205535			Pulse	0.1000	3
Fe	57	72	He		ppb	8.83959362275316			Pulse	0.1000	3
Co	59	72	He		ppb	0.0991789625483277			Pulse	0.1000	3
Ni	60	72	He		ppb	0.042575984603097			Pulse	0.1000	3
Cu	63	72	He		ppb	0.120111351312831			Pulse	0.1000	3
Zn	66	72	He		ppb	0.200294288144121			Pulse	0.1000	3
As	75	72	He		ppb	0.083308877831158			Pulse	0.5000	3
Sr	88	115	He		ppb	0.0586578034584313			Pulse	0.1000	3
Mo	98	115	He		ppb	0.0169439279901295			Pulse	0.1000	3
Ag	107	115	He		ppb	0.0291012560284636			Pulse	0.1000	3
Cd	111	115	He		ppb	0.0188009563962153			Pulse	0.5000	3
Sn	120	115	He		ppb	0.0860714971042724			Pulse	0.1000	3
Sb	121	115	He		ppb	0.0446408235425343			Pulse	0.1000	3
Ba	137	115	He		ppb	0.0839919326072803			Pulse	0.1000	3
Tl	205	209	He		ppb	0.162938135860108			Pulse	0.1000	3
Pb	208	209	He		ppb	0.0247026009805416			Pulse	0.1000	3
U	238	209	He		ppb	0.013153382986492			Pulse	0.1000	3

ISTD Table:

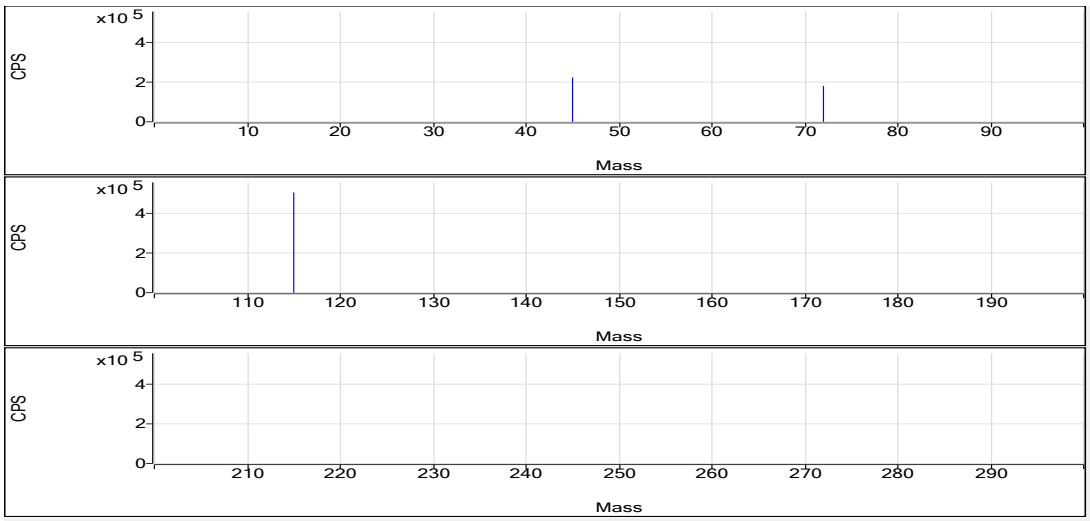
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45				Pulse	0.1000	3
No Gas	Ge	72				Pulse	0.1000	3
H2	Sc	45				Pulse	0.1000	3
H2	Ge	72				Pulse	0.1000	3
H2	In	115				Pulse	0.1000	3
He	Sc	45				Pulse	0.1000	3
He	Ge	72				Pulse	0.1000	3
He	In	115				Pulse	0.1000	3
He	Tb	159				Pulse	0.1000	3
He	Bi	209				Pulse	0.1000	3

No Gas

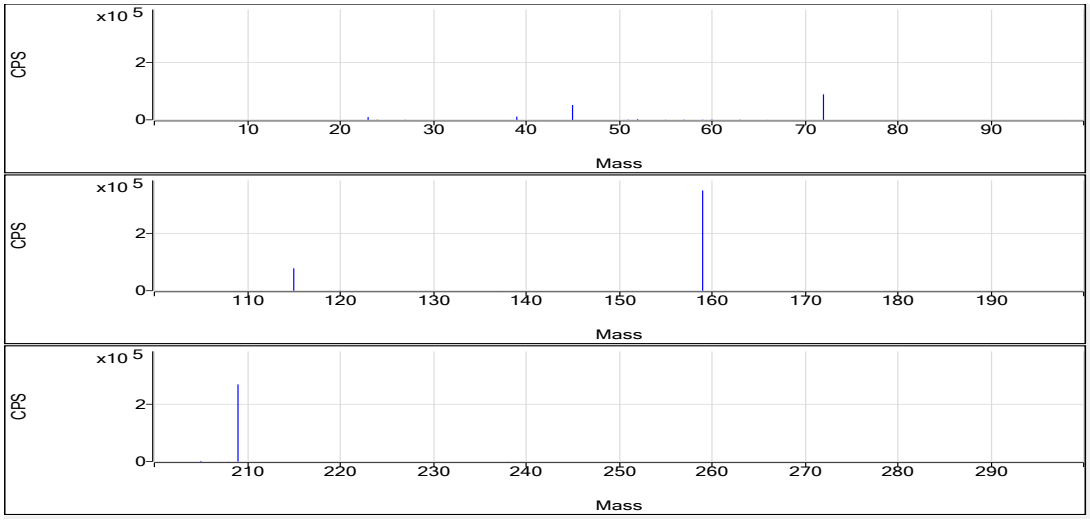


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.057		124.00		
Be	9	1	No Gas	0.035		116.00		
Be	9	1	No Gas	0.025		108.00		
Se	78	2	H2	0.049		5.33		
Se	78	2	H2	0.068		6.67		
Se	78	2	H2	0.066		6.67		
Na	23	3	He	-1.883		9363.27		
Na	23	3	He	-0.908		9663.45		
Na	23	3	He	-3.333		9583.33		
Mg	24	3	He	3.993		740.04		
Mg	24	3	He	2.926		670.04		
Mg	24	3	He	11.009		1330.12		
Al	27	3	He	9.456		300.01		
Al	27	3	He	16.085		450.02		
Al	27	3	He	27.826		730.05		
K	39	3	He	-34.866		11304.57		
K	39	3	He	-45.019		10974.49		
K	39	3	He	-57.251		10694.16		
Ca	44	3	He	-5.877		130.01		
Ca	44	3	He	0.49		150.01		
Ca	44	3	He	16.022		200.01		
Ti	47	3	He	0.229		30.00		
Ti	47	3	He	-1.109		0.00		
Ti	47	3	He	0.168		30.00		
V	51	3	He	-0.032		630.02		
V	51	3	He	0.045		722.02		
V	51	3	He	0.215		932.04		
Cr	52	3	He	-0.177		2060.23		
Cr	52	3	He	-0.374		1820.17		
Cr	52	3	He	-0.149		2200.23		
Mn	55	3	He	-1.509		460.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.597		420.02		
Mn	55	3	He	-1.097		710.04		
Fe	57	3	He	16.011		770.04		
Fe	57	3	He	12.126		680.04		
Fe	57	3	He	29.005		1160.10		
Co	59	3	He	0.114		590.04		
Co	59	3	He	0.114		600.04		
Co	59	3	He	0.286		1110.08		
Ni	60	3	He	0.564		1220.09		
Ni	60	3	He	0.516		1190.10		
Ni	60	3	He	0.601		1270.11		
Cu	63	3	He	0.105		660.04		
Cu	63	3	He	0.144		750.04		
Cu	63	3	He	0.33		1170.09		
Zn	66	3	He	-0.431		330.02		
Zn	66	3	He	-0.579		300.01		
Zn	66	3	He	-0.183		390.02		
As	75	3	He	0.066		48.00		
As	75	3	He	0.116		56.00		
As	75	3	He	0.229		74.00		
Sr	88	3	He	0.003		60.00		
Sr	88	3	He	0.099		120.00		
Sr	88	3	He	0.11		130.01		
Mo	98	3	He	0.055		130.00		
Mo	98	3	He	0.088		190.01		
Mo	98	3	He	0.079		180.01		
Ag	107	3	He	0.007		60.00		
Ag	107	3	He	0.004		50.00		
Ag	107	3	He	0.056		240.01		
Cd	111	3	He	-0.005		2.00		
Cd	111	3	He	0.032		16.00		
Cd	111	3	He	0.015		10.00		
Sn	120	3	He	-0.213		940.07		
Sn	120	3	He	-0.213		970.07		
Sn	120	3	He	-0.362		830.06		
Sb	121	3	He	0.011		30.00		
Sb	121	3	He	0.052		70.00		
Sb	121	3	He	0.101		120.00		
Ba	137	3	He	0.326		130.01		
Ba	137	3	He	0.284		120.01		
Ba	137	3	He	0.446		180.01		
Tl	205	3	He	0.094		940.08		
Tl	205	3	He	0.288		2400.31		
Tl	205	3	He	0.418		3410.58		
Pb	208	3	He	0.007		360.02		
Pb	208	3	He	0.02		430.02		
Pb	208	3	He	0.054		570.04		
U	238	3	He	0.015		230.01		
U	238	3	He	0.029		390.02		
U	238	3	He	0.042		540.03		
Sc	45	1	No Gas			2283683.40		
Sc	45	1	No Gas			2817666.52		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3062402.45		
Ge	72	1	No Gas			992688.97		
Ge	72	1	No Gas			1218333.26		
Ge	72	1	No Gas			1322612.79		
Sc	45	2	H2			219032.34		
Sc	45	2	H2			222949.65		
Sc	45	2	H2			223877.48		
Ge	72	2	H2			177330.08		
Ge	72	2	H2			178148.30		
Ge	72	2	H2			182948.04		
In	115	2	H2			495535.66		
In	115	2	H2			501132.41		
In	115	2	H2			509356.24		
Sc	45	3	He			50146.59		
Sc	45	3	He			50939.58		
Sc	45	3	He			52575.11		
Ge	72	3	He			87385.16		
Ge	72	3	He			87897.66		
Ge	72	3	He			88904.62		
In	115	3	He			74921.14		
In	115	3	He			77333.90		
In	115	3	He			79656.46		
Tb	159	3	He			339400.70		
Tb	159	3	He			345981.75		
Tb	159	3	He			354420.39		
Bi	209	3	He			261082.61		
Bi	209	3	He			267871.48		
Bi	209	3	He			271733.18		

Quantitation Report

Data File Name	163SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 16:01:26
Sample Name	410-136624-J-1-B MSD @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

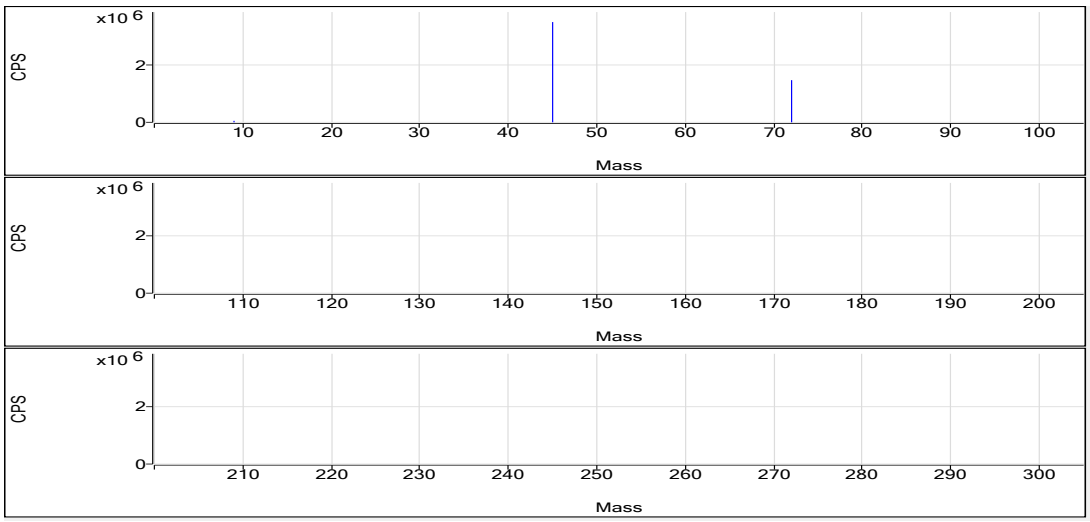
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	26.489	ppb	4.7	51162.30	0.0349	Pulse	0.5000	3
Se	78	72	H2	54.490	ppb	3.5	3439.31	0.0212	Pulse	1.5000	3
Na	23	72	He	3314.665	ppb	1.5	435992.56	5.8005	Pulse	0.1000	3
Mg	24	72	He	11593.199	ppb	2.0	735007.96	9.7791	Pulse	0.1000	3
Al	27	72	He	50832.840	ppb	2.3	922325.97	12.2718	Pulse	0.1000	3
K	39	72	He	12326.078	ppb	1.7	522408.82	6.9502	Pulse	0.1000	3
Ca	44	72	He	16014.263	ppb	0.7	37512.17	0.4990	Pulse	0.1000	3
Ti	47	72	He	628.855	ppb	3.5	11871.94	0.1580	Pulse	0.1000	3
V	51	72	He	362.210	ppb	2.1	319007.08	4.2444	Pulse	0.5000	3
Cr	52	72	He	312.875	ppb	1.7	360003.94	4.7896	Pulse	0.1000	3
Mn	55	72	He	628.363	ppb	2.5	279787.95	3.7227	Pulse	0.1000	3
Fe	57	72	He	33566.638	ppb	2.3	731195.02	9.7287	Pulse	0.1000	3
Co	59	72	He	270.564	ppb	2.0	620696.56	8.2581	Pulse	0.1000	3
Ni	60	72	He	299.558	ppb	3.0	198638.42	2.6431	Pulse	0.1000	3
Cu	63	72	He	323.014	ppb	1.7	605833.42	8.0600	Pulse	0.1000	3
Zn	66	72	He	484.894	ppb	0.5	89916.14	1.1961	Pulse	0.1000	3
As	75	72	He	267.574	ppb	2.3	35008.31	0.4658	Pulse	0.5000	3
Sr	88	115	He	106.852	ppb	1.5	53400.77	0.8360	Pulse	0.1000	3
Mo	98	115	He	28.076	ppb	2.7	39519.49	0.6188	Pulse	0.1000	3
Ag	107	115	He	26.145	ppb	0.9	76006.23	1.1901	Pulse	0.1000	3
Cd	111	115	He	28.138	ppb	2.9	8629.35	0.1351	Pulse	0.5000	3
Sn	120	115	He	53.455	ppb	1.5	49672.49	0.7777	Pulse	0.1000	3
Sb	121	115	He	47.567	ppb	1.4	37701.94	0.5903	Pulse	0.1000	3
Ba	137	115	He	546.105	ppb	1.9	152599.26	2.3894	Pulse	0.1000	3
Tl	205	209	He	52.250	ppb	1.2	321945.70	1.4454	Pulse	0.1000	3
Pb	208	209	He	100.492	ppb	0.9	815177.27	3.6598	Pulse	0.1000	3
U	238	209	He	28.442	ppb	1.2	266555.12	1.1967	Pulse	0.1000	3

ISTD Table:

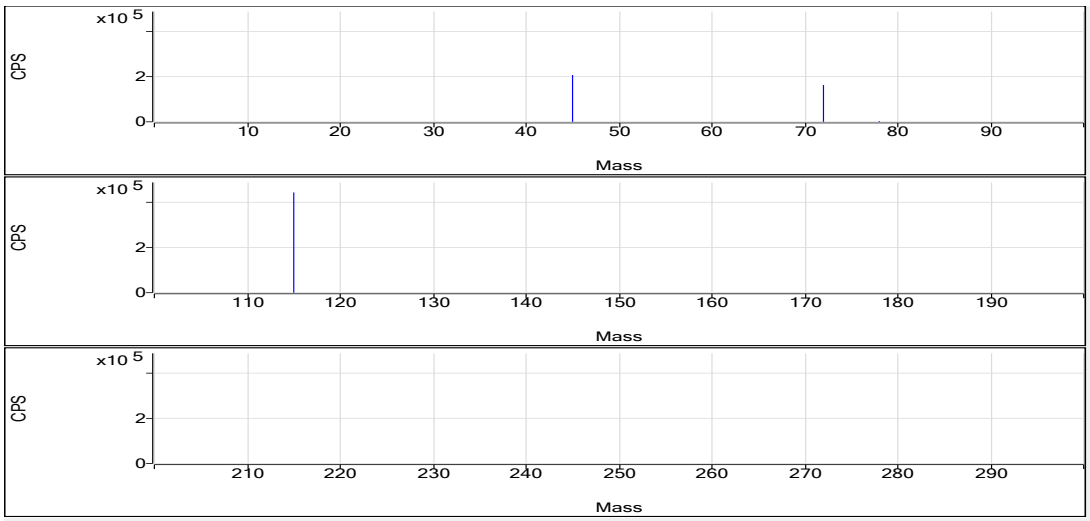
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3492519.74	1.2	107.8	Pulse	0.1000	3
No Gas	Ge	72	1468709.67	1.8	102.0	Pulse	0.1000	3
H2	Sc	45	205963.13	1.7	105.4	Pulse	0.1000	3
H2	Ge	72	162039.15	0.5	99.4	Pulse	0.1000	3
H2	In	115	441426.65	0.8	101.9	Pulse	0.1000	3
He	Sc	45	44725.77	0.5	111.9	Pulse	0.1000	3
He	Ge	72	75176.33	1.6	104.0	Pulse	0.1000	3
He	In	115	63870.44	0.7	98.9	Pulse	0.1000	3
He	Tb	159	291862.33	0.4	102.0	Pulse	0.1000	3
He	Bi	209	222747.54	0.7	100.3	Pulse	0.1000	3

No Gas

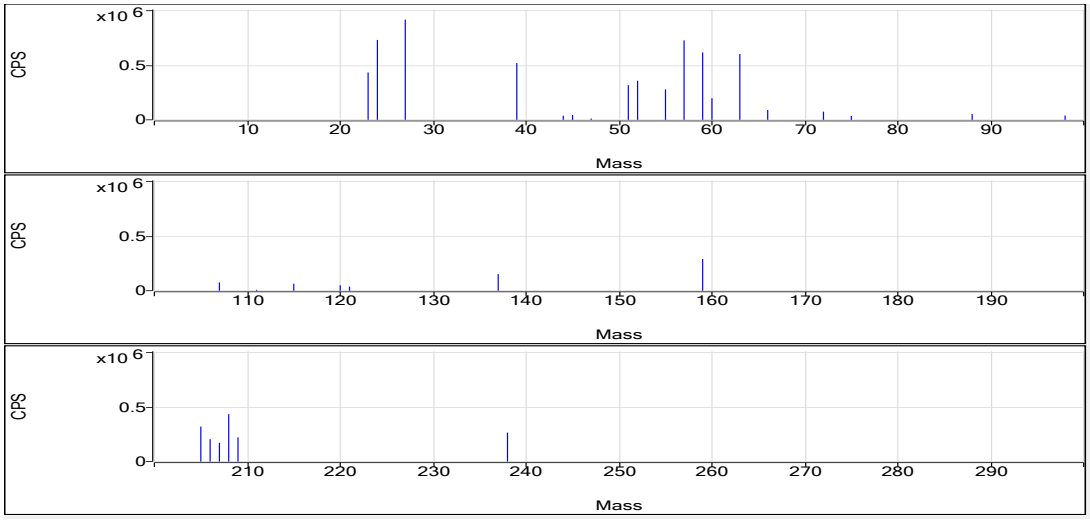


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	25.26	0.0332	49657.25	0.0013	4.694E-05
Be	9	1	No Gas	26.475	0.0348	51216.32	0.0013	4.694E-05
Be	9	1	No Gas	27.731	0.0365	52613.34	0.0013	4.694E-05
Se	78	2	H2	54.707	0.0213	3442.42	0.0004	1.089E-05
Se	78	2	H2	52.479	0.0204	3330.39	0.0004	1.089E-05
Se	78	2	H2	56.283	0.0219	3545.11	0.0004	1.089E-05
Na	23	3	He	3306.564	5.7865	436060.62	0.0017	0.1065
Na	23	3	He	3366.497	5.8895	435404.88	0.0017	0.1065
Na	23	3	He	3270.933	5.7253	436512.18	0.0017	0.1065
Mg	24	3	He	11626.812	9.8074	739065.54	0.0008	0.004846
Mg	24	3	He	11808.265	9.9604	736363.90	0.0008	0.004846
Mg	24	3	He	11344.519	9.5694	729594.44	0.0008	0.004846
Al	27	3	He	50715.404	12.2435	922639.75	0.0002	0.001063
Al	27	3	He	52081.585	12.5733	929528.81	0.0002	0.001063
Al	27	3	He	49701.532	11.9987	914809.36	0.0002	0.001063
K	39	3	He	12216.151	6.8895	519180.27	0.0006	0.1436
K	39	3	He	12568.104	7.0839	523705.66	0.0006	0.1436
K	39	3	He	12193.978	6.8773	524340.54	0.0006	0.1436
Ca	44	3	He	16101.874	0.5017	37809.45	0	0.001611
Ca	44	3	He	16051.692	0.5002	36977.41	0	0.001611
Ca	44	3	He	15889.223	0.4951	37749.66	0	0.001611
Ti	47	3	He	623.054	0.1565	11795.20	0.0003	0.0002737
Ti	47	3	He	652.936	0.164	12125.58	0.0003	0.0002737
Ti	47	3	He	610.575	0.1534	11695.04	0.0003	0.0002737
V	51	3	He	360.295	4.222	318158.13	0.0117	0.007326
V	51	3	He	370.534	4.3417	320980.75	0.0117	0.007326
V	51	3	He	355.799	4.1694	317882.38	0.0117	0.007326
Cr	52	3	He	311.663	4.7712	359543.47	0.0152	0.02538
Cr	52	3	He	318.63	4.8773	360570.70	0.0152	0.02538
Cr	52	3	He	308.333	4.7205	359897.65	0.0152	0.02538
Mn	55	3	He	625.756	3.7073	279375.72	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	645.252	3.8224	282586.46	0.0059	0.01385
Mn	55	3	He	614.082	3.6384	277401.68	0.0059	0.01385
Fe	57	3	He	33271.246	9.6431	726680.93	0.0003	0.003918
Fe	57	3	He	34442.004	9.9823	737979.83	0.0003	0.003918
Fe	57	3	He	32986.665	9.5606	728924.29	0.0003	0.003918
Co	59	3	He	268.003	8.18	616425.65	0.0305	0.003084
Co	59	3	He	276.635	8.4433	624208.78	0.0305	0.003084
Co	59	3	He	267.055	8.1511	621455.26	0.0305	0.003084
Ni	60	3	He	296.285	2.6143	197009.72	0.0088	0.009003
Ni	60	3	He	309.702	2.7323	201996.79	0.0088	0.009003
Ni	60	3	He	292.685	2.5827	196908.75	0.0088	0.009003
Cu	63	3	He	318.604	7.95	599093.04	0.0249	0.004937
Cu	63	3	He	329.182	8.2138	607237.10	0.0249	0.004937
Cu	63	3	He	321.257	8.0162	611170.11	0.0249	0.004937
Zn	66	3	He	482.477	1.1902	89688.54	0.0025	0.004836
Zn	66	3	He	487.292	1.202	88862.59	0.0025	0.004836
Zn	66	3	He	484.912	1.1962	91197.30	0.0025	0.004836
As	75	3	He	264.694	0.4608	34723.54	0.0017	0.0004347
As	75	3	He	274.758	0.4783	35359.18	0.0017	0.0004347
As	75	3	He	263.269	0.4583	34942.20	0.0017	0.0004347
Sr	88	3	He	106.46	0.833	53491.23	0.0078	0.0007762
Sr	88	3	He	105.523	0.8257	52336.77	0.0078	0.0007762
Sr	88	3	He	108.573	0.8495	54374.30	0.0078	0.0007762
Mo	98	3	He	28.189	0.6213	39897.24	0.022	0.0005162
Mo	98	3	He	28.774	0.6342	40198.23	0.022	0.0005162
Mo	98	3	He	27.264	0.6009	38463.01	0.022	0.0005162
Ag	107	3	He	25.968	1.182	75905.39	0.0455	0.0004641
Ag	107	3	He	26.42	1.2026	76228.27	0.0455	0.0004641
Ag	107	3	He	26.046	1.1856	75885.03	0.0455	0.0004641
Cd	111	3	He	27.617	0.1326	8516.63	0.0048	5.152E-05
Cd	111	3	He	29.07	0.1396	8848.82	0.0048	5.152E-05
Cd	111	3	He	27.727	0.1332	8522.61	0.0048	5.152E-05
Sn	120	3	He	52.508	0.7642	49077.05	0.0143	0.01559
Sn	120	3	He	53.953	0.7848	49749.51	0.0143	0.01559
Sn	120	3	He	53.904	0.7841	50190.90	0.0143	0.01559
Sb	121	3	He	46.804	0.5809	37300.34	0.0124	0.000258
Sb	121	3	He	48.08	0.5967	37822.55	0.0124	0.000258
Sb	121	3	He	47.816	0.5934	37982.93	0.0124	0.000258
Ba	137	3	He	539.395	2.3601	151554.21	0.0044	0.000309
Ba	137	3	He	558.228	2.4424	154820.58	0.0044	0.000309
Ba	137	3	He	540.69	2.3657	151423.00	0.0044	0.000309
Tl	205	3	He	52.773	1.4599	323677.01	0.0276	0.001005
Tl	205	3	He	52.415	1.45	321781.21	0.0276	0.001005
Tl	205	3	He	51.562	1.4264	320378.88	0.0276	0.001005
Pb	208	3	He	100.872	3.6736	435513.55	0.0364	0.002176
Pb	208	3	He	101.161	3.6842	437037.30	0.0364	0.002176
Pb	208	3	He	99.441	3.6216	436645.03	0.0364	0.002176
U	238	3	He	28.555	1.2015	266386.36	0.0421	0.00024
U	238	3	He	28.726	1.2087	268231.05	0.0421	0.00024
U	238	3	He	28.046	1.1801	265047.95	0.0421	0.00024
Sc	45	1	No Gas			3539966.20		
Sc	45	1	No Gas			3475925.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3461667.14		
Ge	72	1	No Gas			1493931.85		
Ge	72	1	No Gas			1470190.45		
Ge	72	1	No Gas			1442006.70		
Sc	45	2	H2			202392.63		
Sc	45	2	H2			206251.34		
Sc	45	2	H2			209245.41		
Ge	72	2	H2			161527.17		
Ge	72	2	H2			162901.40		
Ge	72	2	H2			161688.88		
In	115	2	H2			437523.94		
In	115	2	H2			444020.07		
In	115	2	H2			442735.93		
Sc	45	3	He			44708.89		
Sc	45	3	He			44959.82		
Sc	45	3	He			44508.61		
Ge	72	3	He			75357.72		
Ge	72	3	He			73929.05		
Ge	72	3	He			76242.22		
In	115	3	He			64599.25		
In	115	3	He			63775.67		
In	115	3	He			64398.73		
Tb	159	3	He			293235.27		
Tb	159	3	He			291515.89		
Tb	159	3	He			290835.84		
Bi	209	3	He			221715.04		
Bi	209	3	He			221920.76		
Bi	209	3	He			224606.83		

Quantitation Report

Data File Name	164SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 16:03:26
Sample Name	410-136624-J-1-B MSD @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

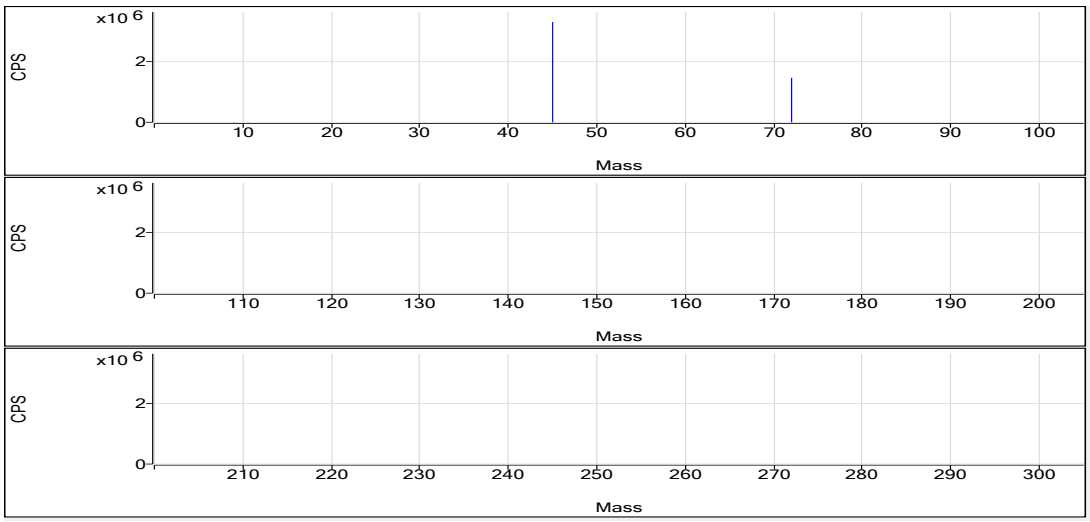
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	5.268	ppb	5.1	10188.16	0.0070	Pulse	0.5000	3
Se	78	72	H2	11.271	ppb	3.5	714.02	0.0044	Pulse	1.5000	3
Na	23	72	He	663.473	ppb	2.4	92959.43	1.2462	Pulse	0.1000	3
Mg	24	72	He	2336.768	ppb	0.5	147323.27	1.9750	Pulse	0.1000	3
Al	27	72	He	10310.543	ppb	1.0	185732.38	2.4900	Pulse	0.1000	3
K	39	72	He	2455.170	ppb	2.0	111838.80	1.4994	Pulse	0.1000	3
Ca	44	72	He	3224.388	ppb	4.4	7592.26	0.1018	Pulse	0.1000	3
Ti	47	72	He	128.427	ppb	4.9	2423.61	0.0325	Pulse	0.1000	3
V	51	72	He	73.249	ppb	0.6	64463.49	0.8642	Pulse	0.5000	3
Cr	52	72	He	62.921	ppb	1.6	73357.74	0.9835	Pulse	0.1000	3
Mn	55	72	He	127.601	ppb	0.7	57213.28	0.7670	Pulse	0.1000	3
Fe	57	72	He	6831.212	ppb	1.0	147918.68	1.9830	Pulse	0.1000	3
Co	59	72	He	54.732	ppb	1.8	124782.89	1.6730	Pulse	0.1000	3
Ni	60	72	He	61.365	ppb	3.4	40915.16	0.5486	Pulse	0.1000	3
Cu	63	72	He	65.315	ppb	1.2	121858.60	1.6337	Pulse	0.1000	3
Zn	66	72	He	98.070	ppb	5.2	18332.17	0.2458	Pulse	0.1000	3
As	75	72	He	52.842	ppb	1.4	6887.68	0.0923	Pulse	0.5000	3
Sr	88	115	He	21.941	ppb	3.7	10951.25	0.1723	Pulse	0.1000	3
Mo	98	115	He	5.692	ppb	6.5	7995.88	0.1259	Pulse	0.1000	3
Ag	107	115	He	5.264	ppb	3.8	15248.64	0.2400	Pulse	0.1000	3
Cd	111	115	He	5.803	ppb	6.4	1772.79	0.0279	Pulse	0.5000	3
Sn	120	115	He	10.994	ppb	7.4	10944.69	0.1723	Pulse	0.1000	3
Sb	121	115	He	9.620	ppb	1.9	7602.34	0.1196	Pulse	0.1000	3
Ba	137	115	He	110.164	ppb	3.4	30651.38	0.4823	Pulse	0.1000	3
Tl	205	209	He	10.696	ppb	2.0	65773.59	0.2967	Pulse	0.1000	3
Pb	208	209	He	20.103	ppb	2.1	162695.46	0.7339	Pulse	0.1000	3
U	238	209	He	5.783	ppb	3.1	53979.74	0.2435	Pulse	0.1000	3

ISTD Table:

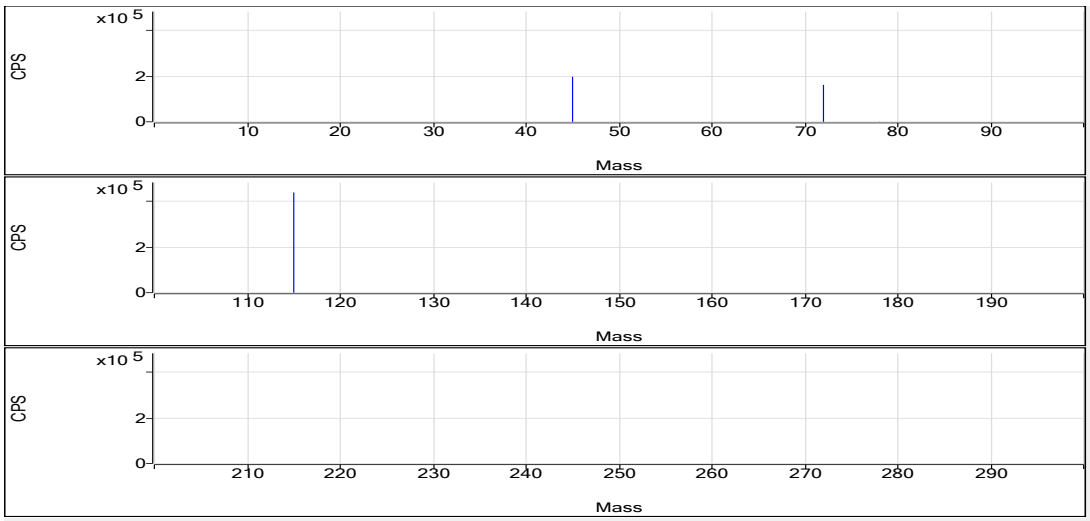
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3296088.81	1.3	101.7	Pulse	0.1000	3
No Gas	Ge	72	1462200.76	0.8	101.6	Pulse	0.1000	3
H2	Sc	45	197822.12	1.4	101.3	Pulse	0.1000	3
H2	Ge	72	162322.17	0.8	99.6	Pulse	0.1000	3
H2	In	115	440651.14	2.0	101.7	Pulse	0.1000	3
He	Sc	45	43110.91	2.1	107.8	Pulse	0.1000	3
He	Ge	72	74596.74	1.1	103.2	Pulse	0.1000	3
He	In	115	63589.88	3.2	98.4	Pulse	0.1000	3
He	Tb	159	282881.09	0.0	98.9	Pulse	0.1000	3
He	Bi	209	221741.36	1.7	99.8	Pulse	0.1000	3

No Gas

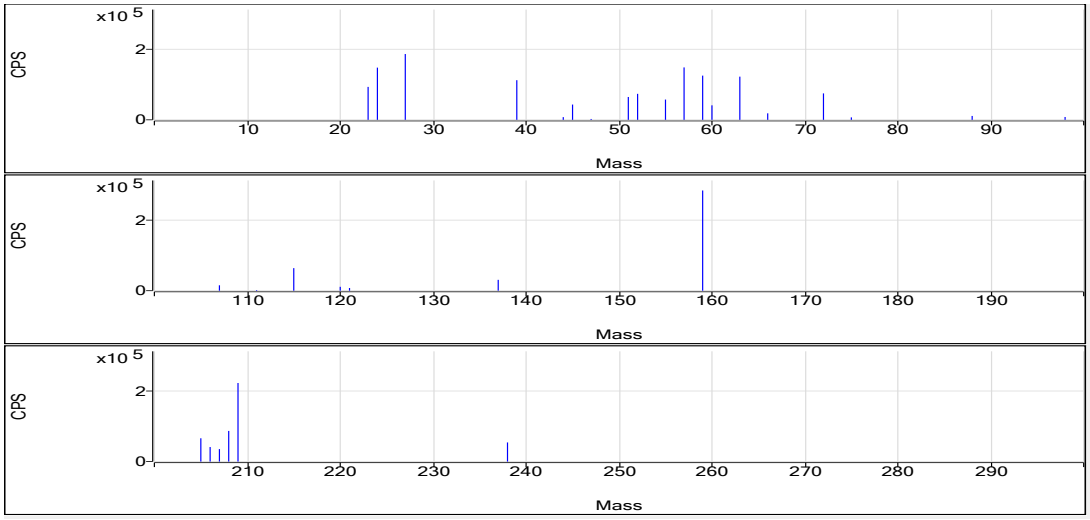


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	4.958	0.0066	9645.13	0.0013	4.694E-05
Be	9	1	No Gas	5.406	0.0072	10491.70	0.0013	4.694E-05
Be	9	1	No Gas	5.439	0.0072	10427.65	0.0013	4.694E-05
Se	78	2	H2	11.634	0.0045	731.35	0.0004	1.089E-05
Se	78	2	H2	10.847	0.0042	692.69	0.0004	1.089E-05
Se	78	2	H2	11.333	0.0044	718.02	0.0004	1.089E-05
Na	23	3	He	645.483	1.2153	90957.21	0.0017	0.1065
Na	23	3	He	674.828	1.2657	95213.39	0.0017	0.1065
Na	23	3	He	670.107	1.2576	92707.70	0.0017	0.1065
Mg	24	3	He	2342.409	1.9797	148172.56	0.0008	0.004846
Mg	24	3	He	2323.785	1.964	147747.25	0.0008	0.004846
Mg	24	3	He	2344.109	1.9812	146049.99	0.0008	0.004846
Al	27	3	He	10222.344	2.4687	184767.28	0.0002	0.001063
Al	27	3	He	10284.712	2.4837	186842.40	0.0002	0.001063
Al	27	3	He	10424.573	2.5175	185587.46	0.0002	0.001063
K	39	3	He	2465.701	1.5052	112658.41	0.0006	0.1436
K	39	3	He	2401.658	1.4699	110572.73	0.0006	0.1436
K	39	3	He	2498.152	1.5231	112285.26	0.0006	0.1436
Ca	44	3	He	3119.384	0.0985	7372.09	0	0.001611
Ca	44	3	He	3385.926	0.1068	8032.48	0	0.001611
Ca	44	3	He	3167.854	0.1	7372.21	0	0.001611
Ti	47	3	He	125.724	0.0318	2380.27	0.0003	0.0002737
Ti	47	3	He	135.683	0.0343	2580.29	0.0003	0.0002737
Ti	47	3	He	123.874	0.0313	2310.26	0.0003	0.0002737
V	51	3	He	73.526	0.8674	64921.02	0.0117	0.007326
V	51	3	He	72.783	0.8587	64599.16	0.0117	0.007326
V	51	3	He	73.439	0.8664	63870.29	0.0117	0.007326
Cr	52	3	He	62.829	0.9821	73505.37	0.0152	0.02538
Cr	52	3	He	61.975	0.9691	72901.84	0.0152	0.02538
Cr	52	3	He	63.957	0.9993	73666.01	0.0152	0.02538
Mn	55	3	He	127.324	0.7654	57284.13	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	126.845	0.7625	57363.81	0.0059	0.01385
Mn	55	3	He	128.632	0.7731	56991.90	0.0059	0.01385
Fe	57	3	He	6764.692	1.9637	146976.05	0.0003	0.003918
Fe	57	3	He	6824.882	1.9812	149037.63	0.0003	0.003918
Fe	57	3	He	6904.061	2.0041	147742.37	0.0003	0.003918
Co	59	3	He	54.419	1.6634	124500.17	0.0305	0.003084
Co	59	3	He	53.923	1.6483	123996.28	0.0305	0.003084
Co	59	3	He	55.853	1.7072	125852.23	0.0305	0.003084
Ni	60	3	He	60.023	0.5368	40176.64	0.0088	0.009003
Ni	60	3	He	60.319	0.5394	40577.51	0.0088	0.009003
Ni	60	3	He	63.754	0.5696	41991.33	0.0088	0.009003
Cu	63	3	He	64.984	1.6255	121656.71	0.0249	0.004937
Cu	63	3	He	64.772	1.6202	121879.23	0.0249	0.004937
Cu	63	3	He	66.188	1.6555	122039.86	0.0249	0.004937
Zn	66	3	He	103.177	0.2583	19333.64	0.0025	0.004836
Zn	66	3	He	92.998	0.2333	17551.05	0.0025	0.004836
Zn	66	3	He	98.036	0.2457	18111.83	0.0025	0.004836
As	75	3	He	53.54	0.0936	7001.74	0.0017	0.0004347
As	75	3	He	52.059	0.091	6843.66	0.0017	0.0004347
As	75	3	He	52.926	0.0925	6817.64	0.0017	0.0004347
Sr	88	3	He	21.024	0.1651	10754.43	0.0078	0.0007762
Sr	88	3	He	22.522	0.1768	11385.02	0.0078	0.0007762
Sr	88	3	He	22.275	0.1749	10714.30	0.0078	0.0007762
Mo	98	3	He	5.27	0.1166	7592.37	0.022	0.0005162
Mo	98	3	He	5.854	0.1294	8332.71	0.022	0.0005162
Mo	98	3	He	5.953	0.1316	8062.55	0.022	0.0005162
Ag	107	3	He	5.166	0.2355	15338.68	0.0455	0.0004641
Ag	107	3	He	5.13	0.2339	15058.41	0.0455	0.0004641
Ag	107	3	He	5.497	0.2506	15348.82	0.0455	0.0004641
Cd	111	3	He	5.382	0.0259	1686.11	0.0048	5.152E-05
Cd	111	3	He	5.95	0.0286	1842.13	0.0048	5.152E-05
Cd	111	3	He	6.077	0.0292	1790.13	0.0048	5.152E-05
Sn	120	3	He	10.143	0.1602	10434.22	0.0143	0.01559
Sn	120	3	He	11.081	0.1736	11174.92	0.0143	0.01559
Sn	120	3	He	11.759	0.1832	11224.94	0.0143	0.01559
Sb	121	3	He	9.599	0.1193	7772.44	0.0124	0.000258
Sb	121	3	He	9.448	0.1175	7562.35	0.0124	0.000258
Sb	121	3	He	9.812	0.122	7472.23	0.0124	0.000258
Ba	137	3	He	105.862	0.4634	30183.57	0.0044	0.000309
Ba	137	3	He	112.183	0.4911	31616.85	0.0044	0.000309
Ba	137	3	He	112.448	0.4922	30153.71	0.0044	0.000309
Tl	205	3	He	10.694	0.2966	66476.90	0.0276	0.001005
Tl	205	3	He	10.484	0.2908	65070.25	0.0276	0.001005
Tl	205	3	He	10.909	0.3026	65773.61	0.0276	0.001005
Pb	208	3	He	19.713	0.7197	86432.51	0.0364	0.002176
Pb	208	3	He	20.037	0.7315	86624.76	0.0364	0.002176
Pb	208	3	He	20.561	0.7505	86453.43	0.0364	0.002176
U	238	3	He	5.652	0.238	53340.90	0.0421	0.00024
U	238	3	He	5.709	0.2404	53792.16	0.0421	0.00024
U	238	3	He	5.988	0.2521	54806.15	0.0421	0.00024
Sc	45	1	No Gas			3328747.76		
Sc	45	1	No Gas			3313051.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3246466.83		
Ge	72	1	No Gas			1469935.45		
Ge	72	1	No Gas			1467149.98		
Ge	72	1	No Gas			1449516.85		
Sc	45	2	H2			197949.20		
Sc	45	2	H2			200585.04		
Sc	45	2	H2			194932.11		
Ge	72	2	H2			161061.62		
Ge	72	2	H2			163588.52		
Ge	72	2	H2			162316.38		
In	115	2	H2			437127.77		
In	115	2	H2			450913.98		
In	115	2	H2			433911.67		
Sc	45	3	He			44087.03		
Sc	45	3	He			42361.99		
Sc	45	3	He			42883.70		
Ge	72	3	He			74844.65		
Ge	72	3	He			75226.46		
Ge	72	3	He			73719.12		
In	115	3	He			65211.77		
In	115	3	He			64468.76		
In	115	3	He			61345.22		
Tb	159	3	He			282976.71		
Tb	159	3	He			282724.21		
Tb	159	3	He			282942.34		
Bi	209	3	He			224106.38		
Bi	209	3	He			223741.89		
Bi	209	3	He			217375.80		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 16:05:26
Sample Name	410-136624-J-1-A MS @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

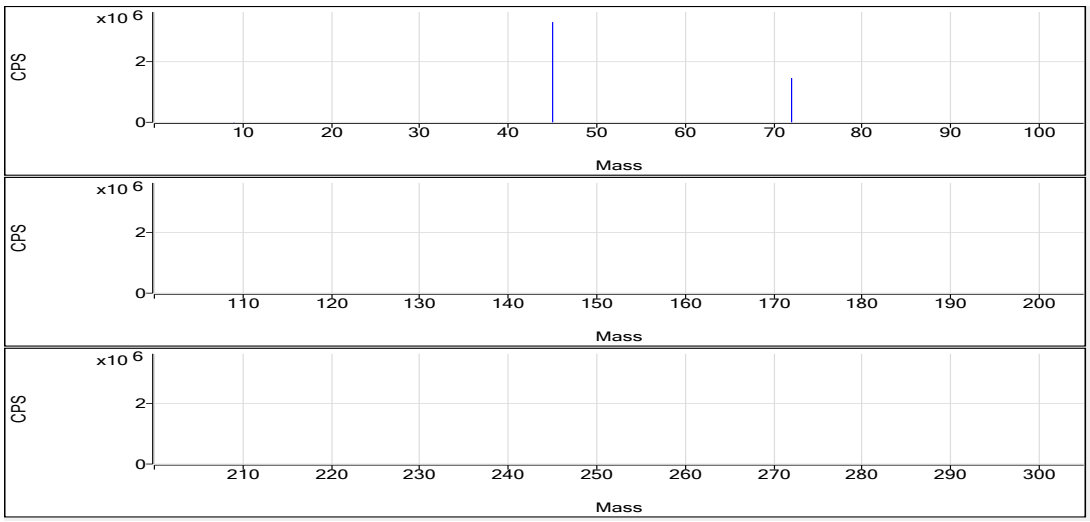
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	4.745	ppb	2.6	9088.77	0.0063	Pulse	0.5000	3
Se	78	72	H2	9.623	ppb	5.8	606.01	0.0038	Pulse	1.5000	3
Na	23	72	He	581.155	ppb	0.6	81479.36	1.1048	Pulse	0.1000	3
Mg	24	72	He	1411.190	ppb	0.9	88103.99	1.1946	Pulse	0.1000	3
Al	27	72	He	5249.694	ppb	1.3	93537.18	1.2683	Pulse	0.1000	3
K	39	72	He	1504.247	ppb	2.7	71852.13	0.9743	Pulse	0.1000	3
Ca	44	72	He	1935.103	ppb	6.9	4550.87	0.0617	Pulse	0.1000	3
Ti	47	72	He	95.878	ppb	8.7	1793.51	0.0243	Pulse	0.1000	3
V	51	72	He	57.481	ppb	1.2	50129.32	0.6797	Pulse	0.5000	3
Cr	52	72	He	53.513	ppb	0.4	61968.58	0.8402	Pulse	0.1000	3
Mn	55	72	He	87.189	ppb	0.2	38976.55	0.5285	Pulse	0.1000	3
Fe	57	72	He	4129.643	ppb	0.7	88525.85	1.2003	Pulse	0.1000	3
Co	59	72	He	49.031	ppb	1.1	110555.14	1.4991	Pulse	0.1000	3
Ni	60	72	He	53.421	ppb	2.1	35307.07	0.4788	Pulse	0.1000	3
Cu	63	72	He	55.413	ppb	0.5	102280.16	1.3868	Pulse	0.1000	3
Zn	66	72	He	68.459	ppb	3.8	12759.46	0.1730	Pulse	0.1000	3
As	75	72	He	47.507	ppb	2.3	6125.34	0.0831	Pulse	0.5000	3
Sr	88	115	He	13.947	ppb	7.9	7005.32	0.1098	Pulse	0.1000	3
Mo	98	115	He	5.179	ppb	7.6	7315.53	0.1146	Pulse	0.1000	3
Ag	107	115	He	4.726	ppb	5.1	13757.17	0.2155	Pulse	0.1000	3
Cd	111	115	He	4.843	ppb	6.5	1486.76	0.0233	Pulse	0.5000	3
Sn	120	115	He	9.928	ppb	5.4	10033.98	0.1571	Pulse	0.1000	3
Sb	121	115	He	9.489	ppb	1.7	7535.61	0.1180	Pulse	0.1000	3
Ba	137	115	He	76.445	ppb	6.4	21360.50	0.3347	Pulse	0.1000	3
Tl	205	209	He	9.570	ppb	1.2	58610.52	0.2656	Pulse	0.1000	3
Pb	208	209	He	11.133	ppb	0.6	89915.69	0.4074	Pulse	0.1000	3
U	238	209	He	5.014	ppb	0.9	46604.52	0.2112	Pulse	0.1000	3

ISTD Table:

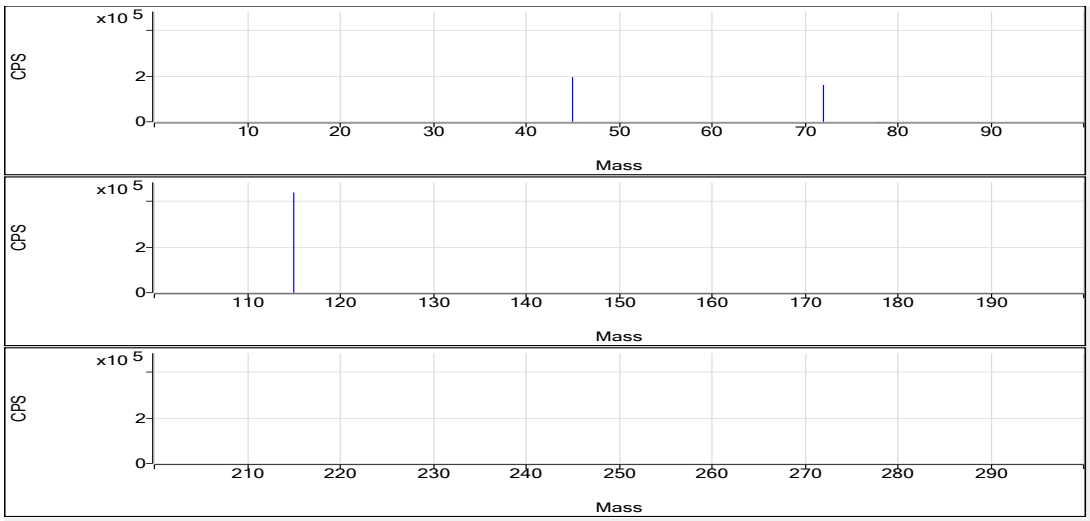
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3276468.39	1.9	101.1	Pulse	0.1000	3
No Gas	Ge	72	1447399.09	2.0	100.5	Pulse	0.1000	3
H2	Sc	45	195426.49	1.3	100.0	Pulse	0.1000	3
H2	Ge	72	161310.39	0.8	99.0	Pulse	0.1000	3
H2	In	115	438587.76	1.1	101.2	Pulse	0.1000	3
He	Sc	45	42552.60	1.6	106.4	Pulse	0.1000	3
He	Ge	72	73752.41	0.5	102.0	Pulse	0.1000	3
He	In	115	63875.05	2.4	98.9	Pulse	0.1000	3
He	Tb	159	281653.15	0.7	98.5	Pulse	0.1000	3
He	Bi	209	220708.07	0.2	99.3	Pulse	0.1000	3

No Gas

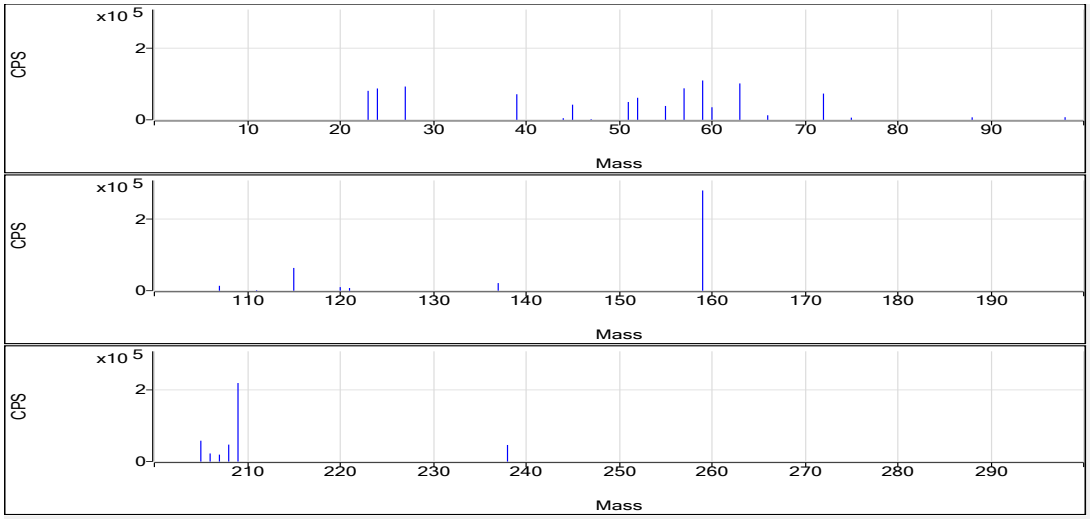


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	4.621	0.0061	9026.73	0.0013	4.694E-05
Be	9	1	No Gas	4.744	0.0063	9104.78	0.0013	4.694E-05
Be	9	1	No Gas	4.868	0.0064	9134.81	0.0013	4.694E-05
Se	78	2	H2	9.677	0.0038	612.68	0.0004	1.089E-05
Se	78	2	H2	9.043	0.0035	572.01	0.0004	1.089E-05
Se	78	2	H2	10.149	0.004	633.35	0.0004	1.089E-05
Na	23	3	He	580.763	1.1041	81060.65	0.0017	0.1065
Na	23	3	He	577.991	1.0993	81472.53	0.0017	0.1065
Na	23	3	He	584.713	1.1109	81904.89	0.0017	0.1065
Mg	24	3	He	1419.007	1.2012	88190.30	0.0008	0.004846
Mg	24	3	He	1395.897	1.1817	87578.35	0.0008	0.004846
Mg	24	3	He	1418.667	1.2009	88543.33	0.0008	0.004846
Al	27	3	He	5298.244	1.28	93976.69	0.0002	0.001063
Al	27	3	He	5171.082	1.2493	92588.46	0.0002	0.001063
Al	27	3	He	5279.757	1.2756	94046.39	0.0002	0.001063
K	39	3	He	1547.943	0.9984	73302.66	0.0006	0.1436
K	39	3	He	1466.716	0.9536	70670.08	0.0006	0.1436
K	39	3	He	1498.083	0.9709	71583.65	0.0006	0.1436
Ca	44	3	He	2088.589	0.0665	4880.97	0	0.001611
Ca	44	3	He	1868.679	0.0597	4420.82	0	0.001611
Ca	44	3	He	1848.041	0.059	4350.82	0	0.001611
Ti	47	3	He	90.707	0.023	1690.16	0.0003	0.0002737
Ti	47	3	He	91.463	0.0232	1720.16	0.0003	0.0002737
Ti	47	3	He	105.465	0.0267	1970.20	0.0003	0.0002737
V	51	3	He	58.185	0.688	50508.54	0.0117	0.007326
V	51	3	He	56.832	0.6721	49812.15	0.0117	0.007326
V	51	3	He	57.425	0.6791	50067.27	0.0117	0.007326
Cr	52	3	He	53.668	0.8426	61861.31	0.0152	0.02538
Cr	52	3	He	53.284	0.8368	62012.40	0.0152	0.02538
Cr	52	3	He	53.586	0.8413	62032.04	0.0152	0.02538
Mn	55	3	He	87.358	0.5295	38873.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	87.207	0.5286	39173.88	0.0059	0.01385
Mn	55	3	He	87.001	0.5274	38882.74	0.0059	0.01385
Fe	57	3	He	4164.681	1.2105	88871.14	0.0003	0.003918
Fe	57	3	He	4109.271	1.1944	88519.93	0.0003	0.003918
Fe	57	3	He	4114.976	1.1961	88186.49	0.0003	0.003918
Co	59	3	He	49.637	1.5175	111414.76	0.0305	0.003084
Co	59	3	He	48.638	1.4871	110205.97	0.0305	0.003084
Co	59	3	He	48.818	1.4926	110044.70	0.0305	0.003084
Ni	60	3	He	53.987	0.4837	35514.16	0.0088	0.009003
Ni	60	3	He	52.15	0.4676	34652.29	0.0088	0.009003
Ni	60	3	He	54.126	0.4849	35754.77	0.0088	0.009003
Cu	63	3	He	55.084	1.3786	101212.47	0.0249	0.004937
Cu	63	3	He	55.543	1.39	103015.27	0.0249	0.004937
Cu	63	3	He	55.612	1.3918	102612.74	0.0249	0.004937
Zn	66	3	He	71.251	0.1799	13206.57	0.0025	0.004836
Zn	66	3	He	66.168	0.1674	12405.76	0.0025	0.004836
Zn	66	3	He	67.957	0.1718	12666.04	0.0025	0.004836
As	75	3	He	48.741	0.0852	6255.40	0.0017	0.0004347
As	75	3	He	46.979	0.0821	6087.32	0.0017	0.0004347
As	75	3	He	46.802	0.0818	6033.30	0.0017	0.0004347
Sr	88	3	He	14.343	0.1129	7212.11	0.0078	0.0007762
Sr	88	3	He	12.7	0.1001	6541.77	0.0078	0.0007762
Sr	88	3	He	14.798	0.1165	7262.09	0.0078	0.0007762
Mo	98	3	He	4.74	0.1049	6701.75	0.022	0.0005162
Mo	98	3	He	5.291	0.117	7652.48	0.022	0.0005162
Mo	98	3	He	5.505	0.1218	7592.36	0.022	0.0005162
Ag	107	3	He	4.554	0.2077	13266.64	0.0455	0.0004641
Ag	107	3	He	4.624	0.2109	13787.16	0.0455	0.0004641
Ag	107	3	He	5.001	0.228	14217.70	0.0455	0.0004641
Cd	111	3	He	4.848	0.0233	1490.09	0.0048	5.152E-05
Cd	111	3	He	4.527	0.0218	1424.08	0.0048	5.152E-05
Cd	111	3	He	5.154	0.0248	1546.10	0.0048	5.152E-05
Sn	120	3	He	9.374	0.1492	9533.62	0.0143	0.01559
Sn	120	3	He	9.96	0.1576	10304.21	0.0143	0.01559
Sn	120	3	He	10.451	0.1646	10264.10	0.0143	0.01559
Sb	121	3	He	9.307	0.1157	7392.21	0.0124	0.000258
Sb	121	3	He	9.587	0.1192	7792.36	0.0124	0.000258
Sb	121	3	He	9.574	0.119	7422.27	0.0124	0.000258
Ba	137	3	He	75.059	0.3287	20996.54	0.0044	0.000309
Ba	137	3	He	72.389	0.317	20726.14	0.0044	0.000309
Ba	137	3	He	81.887	0.3585	22358.83	0.0044	0.000309
Tl	205	3	He	9.626	0.2671	59021.92	0.0276	0.001005
Tl	205	3	He	9.439	0.262	57857.58	0.0276	0.001005
Tl	205	3	He	9.644	0.2676	58952.05	0.0276	0.001005
Pb	208	3	He	11.193	0.4096	48159.31	0.0364	0.002176
Pb	208	3	He	11.066	0.4049	47085.52	0.0364	0.002176
Pb	208	3	He	11.14	0.4077	47616.64	0.0364	0.002176
U	238	3	He	4.993	0.2103	46464.00	0.0421	0.00024
U	238	3	He	4.981	0.2098	46333.74	0.0421	0.00024
U	238	3	He	5.068	0.2134	47015.81	0.0421	0.00024
Sc	45	1	No Gas			3347955.58		
Sc	45	1	No Gas			3255025.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3226424.01		
Ge	72	1	No Gas			1475077.32		
Ge	72	1	No Gas			1449527.01		
Ge	72	1	No Gas			1417592.95		
Sc	45	2	H2			198354.78		
Sc	45	2	H2			194625.50		
Sc	45	2	H2			193299.18		
Ge	72	2	H2			162143.12		
Ge	72	2	H2			161960.14		
Ge	72	2	H2			159827.92		
In	115	2	H2			441234.37		
In	115	2	H2			441514.06		
In	115	2	H2			433014.84		
Sc	45	3	He			42482.17		
Sc	45	3	He			41900.72		
Sc	45	3	He			43274.90		
Ge	72	3	He			73417.68		
Ge	72	3	He			74110.37		
Ge	72	3	He			73729.18		
In	115	3	He			63956.78		
In	115	3	He			65463.61		
In	115	3	He			62439.56		
Tb	159	3	He			283780.23		
Tb	159	3	He			280083.51		
Tb	159	3	He			281095.70		
Bi	209	3	He			220965.21		
Bi	209	3	He			220872.56		
Bi	209	3	He			220286.44		

Quantitation Report

Data File Name	166SMPL.d
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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

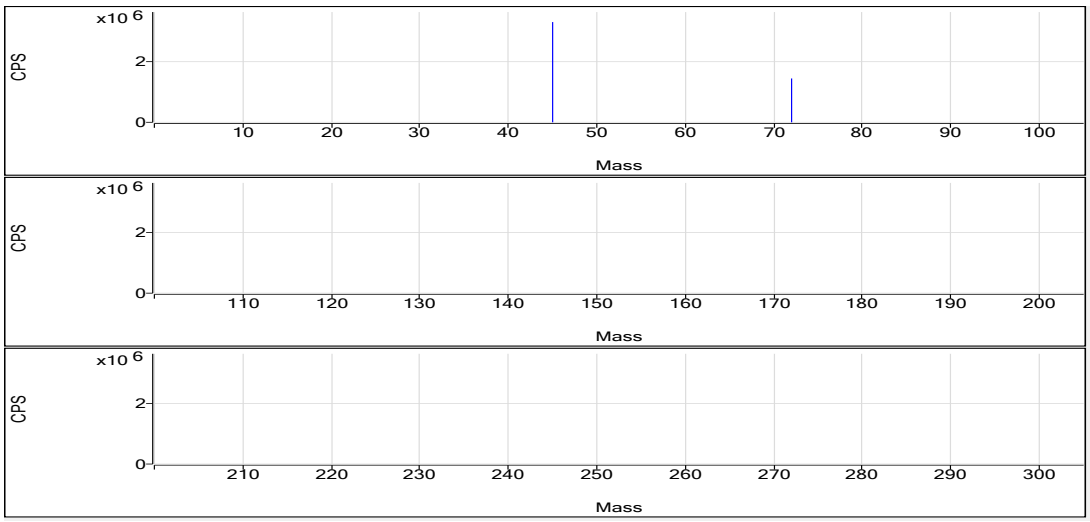
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.005	ppb	N/A	57.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.031	ppb	49.6	3.56	0.0000	Pulse	1.5000	3
Na	23	72	He	9.570	ppb	15.4	8646.15	0.1229	Pulse	0.1000	3
Mg	24	72	He	4.490	ppb	33.7	606.70	0.0086	Pulse	0.1000	3
Al	27	72	He	9.925	ppb	39.5	243.34	0.0035	Pulse	0.1000	3
K	39	72	He	21.722	ppb	62.3	10951.13	0.1556	Pulse	0.1000	3
Ca	44	72	He	12.266	ppb	78.5	140.01	0.0020	Pulse	0.1000	3
Ti	47	72	He	0.040	ppb	1410.2	20.00	0.0003	Pulse	0.1000	3
V	51	72	He	0.070	ppb	37.5	573.35	0.0081	Pulse	0.5000	3
Cr	52	72	He	0.051	ppb	176.5	1840.18	0.0262	Pulse	0.1000	3
Mn	55	72	He	-1.159	ppb	N/A	493.36	0.0070	Pulse	0.1000	3
Fe	57	72	He	4.759	ppb	136.0	373.35	0.0053	Pulse	0.1000	3
Co	59	72	He	0.051	ppb	75.6	326.68	0.0047	Pulse	0.1000	3
Ni	60	72	He	0.845	ppb	30.0	1156.75	0.0164	Pulse	0.1000	3
Cu	63	72	He	0.064	ppb	90.5	460.03	0.0065	Pulse	0.1000	3
Zn	66	72	He	-0.134	ppb	N/A	316.68	0.0045	Pulse	0.1000	3
As	75	72	He	0.034	ppb	189.4	34.67	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.106	ppb	121.1	100.00	0.0016	Pulse	0.1000	3
Mo	98	115	He	0.030	ppb	27.8	73.33	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	32.1	46.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	N/A	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.044	ppb	298.4	1010.08	0.0162	Pulse	0.1000	3
Sb	121	115	He	0.009	ppb	285.5	23.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.149	ppb	42.3	60.00	0.0010	Pulse	0.1000	3
Tl	205	209	He	0.014	ppb	13.0	300.02	0.0014	Pulse	0.1000	3
Pb	208	209	He	0.005	ppb	320.0	506.69	0.0023	Pulse	0.1000	3
U	238	209	He	0.012	ppb	11.0	163.34	0.0008	Pulse	0.1000	3

ISTD Table:

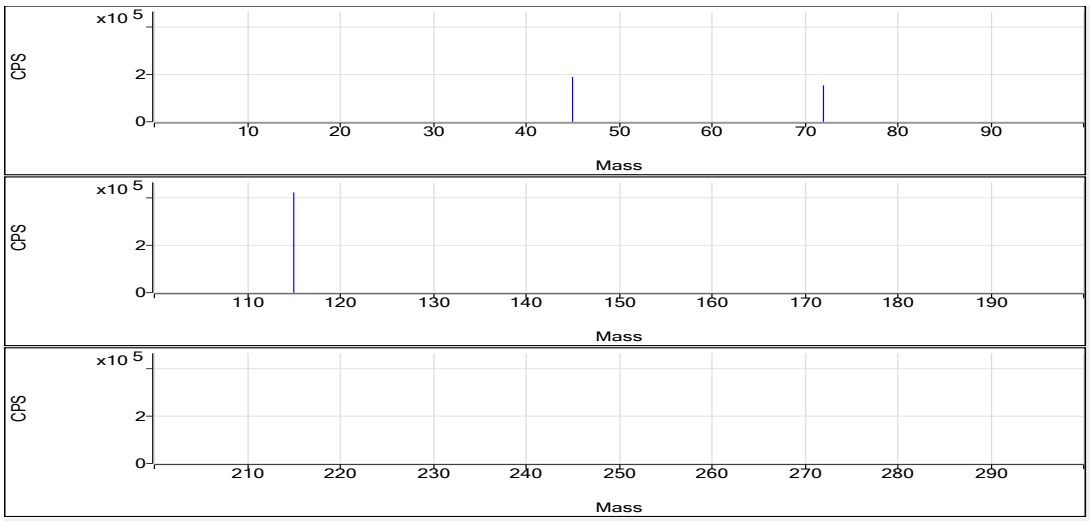
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3288083.18	1.9	101.4	Pulse	0.1000	3
No Gas	Ge	72	1438104.25	1.9	99.9	Pulse	0.1000	3
H2	Sc	45	188707.03	1.2	96.6	Pulse	0.1000	3
H2	Ge	72	153642.38	2.4	94.3	Pulse	0.1000	3
H2	In	115	423015.30	1.7	97.6	Pulse	0.1000	3
He	Sc	45	39541.03	0.6	98.9	Pulse	0.1000	3
He	Ge	72	70345.37	0.9	97.3	Pulse	0.1000	3
He	In	115	62287.98	0.3	96.4	Pulse	0.1000	3
He	Tb	159	277787.85	0.5	97.1	Pulse	0.1000	3
He	Bi	209	216290.34	0.5	97.3	Pulse	0.1000	3

No Gas

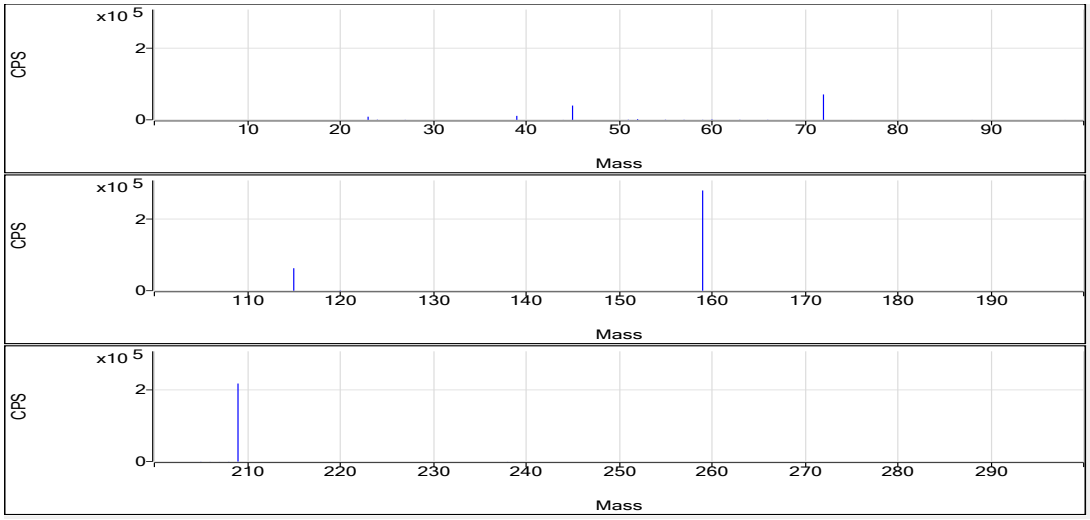


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.009	0	50.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.01	0	48.00	0.0013	4.694E-05
Be	9	1	No Gas	0.003	0.0001	74.00	0.0013	4.694E-05
Se	78	2	H2	0.048	0	4.67	0.0004	1.089E-05
Se	78	2	H2	0.028	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.017	0	2.67	0.0004	1.089E-05
Na	23	3	He	11.213	0.1257	8932.97	0.0017	0.1065
Na	23	3	He	9.134	0.1221	8552.76	0.0017	0.1065
Na	23	3	He	8.363	0.1208	8452.73	0.0017	0.1065
Mg	24	3	He	2.933	0.0073	520.03	0.0008	0.004846
Mg	24	3	He	4.586	0.0087	610.04	0.0008	0.004846
Mg	24	3	He	5.951	0.0099	690.04	0.0008	0.004846
Al	27	3	He	10.756	0.0037	260.01	0.0002	0.001063
Al	27	3	He	5.656	0.0024	170.01	0.0002	0.001063
Al	27	3	He	13.362	0.0043	300.01	0.0002	0.001063
K	39	3	He	35.898	0.1635	11615.05	0.0006	0.1436
K	39	3	He	20.342	0.1549	10844.33	0.0006	0.1436
K	39	3	He	8.928	0.1486	10394.01	0.0006	0.1436
Ca	44	3	He	2.513	0.0017	120.01	0	0.001611
Ca	44	3	He	12.513	0.002	140.01	0	0.001611
Ca	44	3	He	21.772	0.0023	160.01	0	0.001611
Ti	47	3	He	0.592	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	-0.522	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.048	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.081	0.0083	588.02	0.0117	0.007326
V	51	3	He	0.04	0.0078	546.01	0.0117	0.007326
V	51	3	He	0.09	0.0084	586.02	0.0117	0.007326
Cr	52	3	He	0.108	0.027	1920.19	0.0152	0.02538
Cr	52	3	He	0.096	0.0269	1880.19	0.0152	0.02538
Cr	52	3	He	-0.052	0.0246	1720.15	0.0152	0.02538
Mn	55	3	He	-1.083	0.0075	530.02	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.186	0.0069	480.02	0.0059	0.01385
Mn	55	3	He	-1.209	0.0067	470.03	0.0059	0.01385
Fe	57	3	He	12.224	0.0075	530.03	0.0003	0.003918
Fe	57	3	He	0.773	0.0041	290.01	0.0003	0.003918
Fe	57	3	He	1.279	0.0043	300.01	0.0003	0.003918
Co	59	3	He	0.01	0.0034	240.01	0.0305	0.003084
Co	59	3	He	0.058	0.0049	340.02	0.0305	0.003084
Co	59	3	He	0.086	0.0057	400.02	0.0305	0.003084
Ni	60	3	He	1.137	0.019	1350.12	0.0088	0.009003
Ni	60	3	He	0.682	0.015	1050.07	0.0088	0.009003
Ni	60	3	He	0.716	0.0153	1070.07	0.0088	0.009003
Cu	63	3	He	0.129	0.0082	580.04	0.0249	0.004937
Cu	63	3	He	0.02	0.0054	380.02	0.0249	0.004937
Cu	63	3	He	0.043	0.006	420.02	0.0249	0.004937
Zn	66	3	He	-0.536	0.0035	250.01	0.0025	0.004836
Zn	66	3	He	0.415	0.0059	410.03	0.0025	0.004836
Zn	66	3	He	-0.281	0.0041	290.01	0.0025	0.004836
As	75	3	He	-0.04	0.0004	26.00	0.0017	0.0004347
As	75	3	He	0.079	0.0006	40.00	0.0017	0.0004347
As	75	3	He	0.062	0.0005	38.00	0.0017	0.0004347
Sr	88	3	He	0.25	0.0027	170.01	0.0078	0.0007762
Sr	88	3	He	0.003	0.0008	50.00	0.0078	0.0007762
Sr	88	3	He	0.065	0.0013	80.00	0.0078	0.0007762
Mo	98	3	He	0.035	0.0013	80.00	0.022	0.0005162
Mo	98	3	He	0.035	0.0013	80.00	0.022	0.0005162
Mo	98	3	He	0.02	0.001	60.00	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Sn	120	3	He	0.192	0.0183	1140.09	0.0143	0.01559
Sn	120	3	He	-0.061	0.0147	920.06	0.0143	0.01559
Sn	120	3	He	0.001	0.0156	970.08	0.0143	0.01559
Sb	121	3	He	0.031	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	-0.021	0	0.00	0.0124	0.000258
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.187	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.185	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.076	0.0006	40.00	0.0044	0.000309
Tl	205	3	He	0.014	0.0014	300.02	0.0276	0.001005
Tl	205	3	He	0.015	0.0014	310.02	0.0276	0.001005
Tl	205	3	He	0.012	0.0013	290.01	0.0276	0.001005
Pb	208	3	He	-0.009	0.0019	180.01	0.0364	0.002176
Pb	208	3	He	0.02	0.0029	360.02	0.0364	0.002176
Pb	208	3	He	0.002	0.0023	220.01	0.0364	0.002176
U	238	3	He	0.013	0.0008	170.01	0.0421	0.00024
U	238	3	He	0.013	0.0008	170.01	0.0421	0.00024
U	238	3	He	0.011	0.0007	150.01	0.0421	0.00024
Sc	45	1	No Gas			3283554.95		
Sc	45	1	No Gas			3228592.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3352102.14		
Ge	72	1	No Gas			1428209.51		
Ge	72	1	No Gas			1416536.54		
Ge	72	1	No Gas			1469566.70		
Sc	45	2	H2			191050.17		
Sc	45	2	H2			188335.66		
Sc	45	2	H2			186735.27		
Ge	72	2	H2			157816.82		
Ge	72	2	H2			152176.95		
Ge	72	2	H2			150933.37		
In	115	2	H2			430959.99		
In	115	2	H2			420337.53		
In	115	2	H2			417748.39		
Sc	45	3	He			39644.68		
Sc	45	3	He			39704.96		
Sc	45	3	He			39273.44		
Ge	72	3	He			71055.69		
Ge	72	3	He			70020.47		
Ge	72	3	He			69959.95		
In	115	3	He			62199.20		
In	115	3	He			62509.85		
In	115	3	He			62178.53		
Tb	159	3	He			279074.82		
Tb	159	3	He			276507.44		
Tb	159	3	He			277781.30		
Bi	209	3	He			215082.42		
Bi	209	3	He			216422.79		
Bi	209	3	He			217365.80		

Quantitation Report

Data File Name	167SMPL.d
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Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

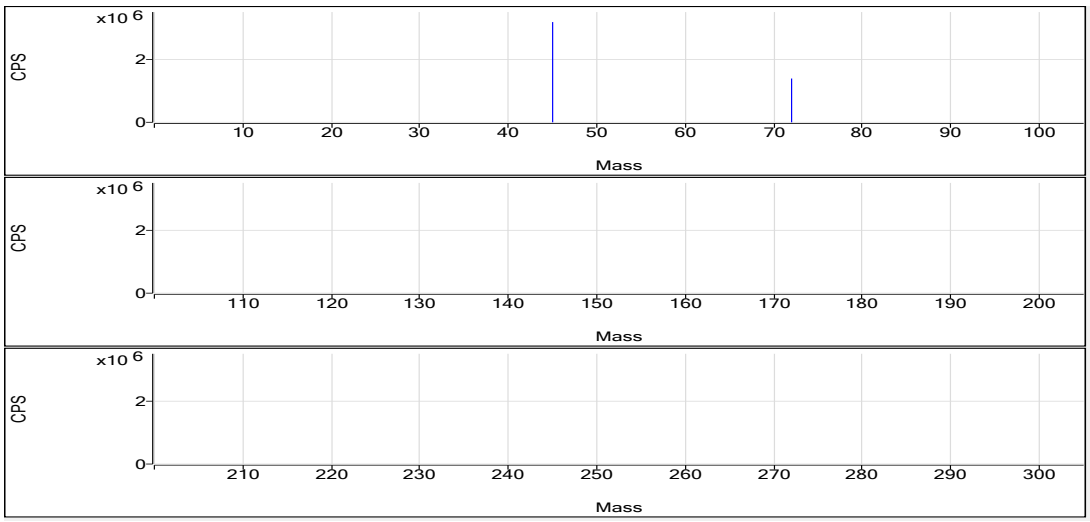
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.006	ppb	N/A	55.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.019	ppb	81.3	2.89	0.0000	Pulse	1.5000	3
Na	23	72	He	10.996	ppb	23.1	9039.69	0.1253	Pulse	0.1000	3
Mg	24	72	He	5.544	ppb	4.4	686.71	0.0095	Pulse	0.1000	3
Al	27	72	He	8.832	ppb	42.2	230.01	0.0032	Pulse	0.1000	3
K	39	72	He	17.245	ppb	86.8	11044.58	0.1532	Pulse	0.1000	3
Ca	44	72	He	13.451	ppb	110.2	146.67	0.0020	Pulse	0.1000	3
Ti	47	72	He	-0.173	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
V	51	72	He	0.093	ppb	26.7	607.35	0.0084	Pulse	0.5000	3
Cr	52	72	He	0.044	ppb	221.4	1880.19	0.0260	Pulse	0.1000	3
Mn	55	72	He	-1.042	ppb	N/A	556.82	0.0077	Pulse	0.1000	3
Fe	57	72	He	3.219	ppb	90.6	350.01	0.0049	Pulse	0.1000	3
Co	59	72	He	0.065	ppb	69.7	366.68	0.0051	Pulse	0.1000	3
Ni	60	72	He	0.726	ppb	2.1	1110.08	0.0154	Pulse	0.1000	3
Cu	63	72	He	0.032	ppb	27.2	413.35	0.0057	Pulse	0.1000	3
Zn	66	72	He	-0.444	ppb	N/A	270.01	0.0037	Pulse	0.1000	3
As	75	72	He	0.048	ppb	85.4	37.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.074	ppb	90.1	86.67	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.032	ppb	56.7	76.67	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	93.4	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	121.2	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.047	ppb	264.1	1033.41	0.0163	Pulse	0.1000	3
Sb	121	115	He	-0.008	ppb	N/A	10.00	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.085	ppb	22.2	43.33	0.0007	Pulse	0.1000	3
Tl	205	209	He	0.011	ppb	61.3	280.01	0.0013	Pulse	0.1000	3
Pb	208	209	He	0.007	ppb	204.8	523.36	0.0024	Pulse	0.1000	3
U	238	209	He	0.005	ppb	90.0	100.00	0.0005	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3190413.70	2.2	98.4	Pulse	0.1000	3
No Gas	Ge	72	1393375.14	2.1	96.8	Pulse	0.1000	3
H2	Sc	45	190617.35	1.8	97.6	Pulse	0.1000	3
H2	Ge	72	156400.44	2.2	95.9	Pulse	0.1000	3
H2	In	115	430146.28	2.3	99.3	Pulse	0.1000	3
He	Sc	45	41175.02	1.4	103.0	Pulse	0.1000	3
He	Ge	72	72144.22	1.5	99.8	Pulse	0.1000	3
He	In	115	63406.03	3.1	98.2	Pulse	0.1000	3
He	Tb	159	277116.39	1.5	96.9	Pulse	0.1000	3
He	Bi	209	215052.33	0.3	96.8	Pulse	0.1000	3

No Gas



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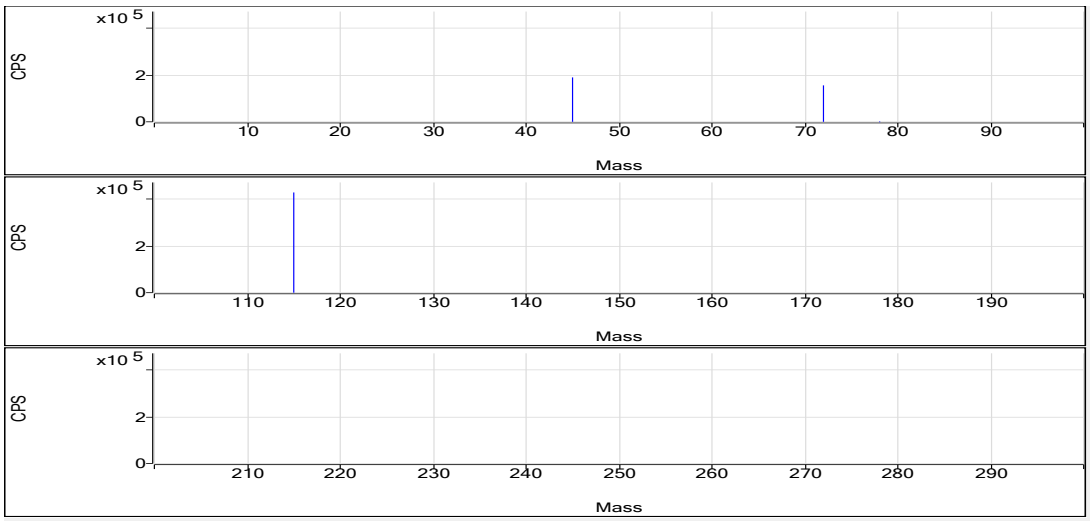
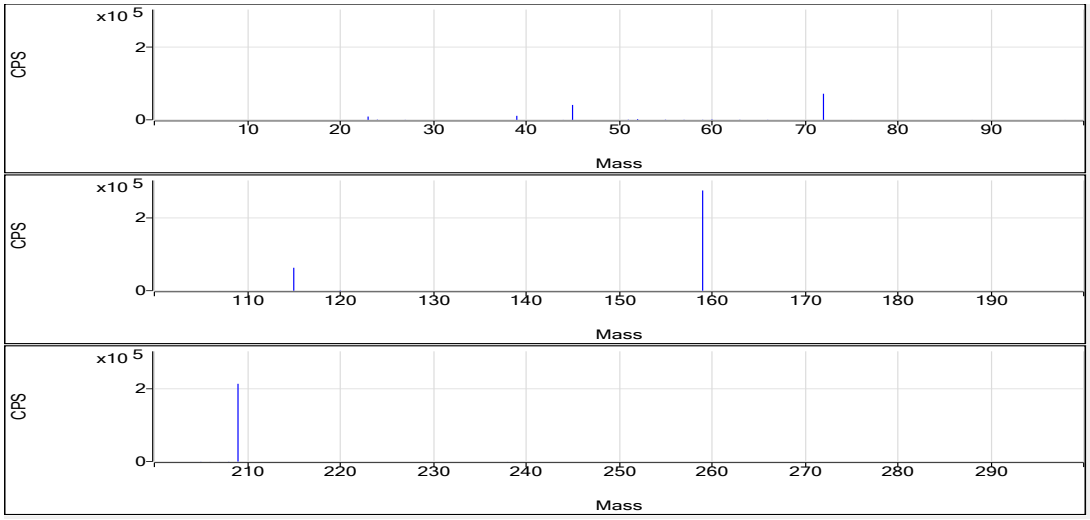


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.006	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.013	0	40.00	0.0013	4.694E-05
Be	9	1	No Gas	0.003	0.0001	72.00	0.0013	4.694E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.006	0	2.00	0.0004	1.089E-05
Na	23	3	He	13.887	0.1303	9233.16	0.0017	0.1065
Na	23	3	He	10.004	0.1236	8992.97	0.0017	0.1065
Na	23	3	He	9.097	0.1221	8892.93	0.0017	0.1065
Mg	24	3	He	5.803	0.0097	690.04	0.0008	0.004846
Mg	24	3	He	5.505	0.0095	690.04	0.0008	0.004846
Mg	24	3	He	5.325	0.0093	680.04	0.0008	0.004846
Al	27	3	He	11.968	0.004	280.01	0.0002	0.001063
Al	27	3	He	4.711	0.0022	160.01	0.0002	0.001063
Al	27	3	He	9.815	0.0034	250.01	0.0002	0.001063
K	39	3	He	31.622	0.1611	11414.90	0.0006	0.1436
K	39	3	He	18.352	0.1538	11184.71	0.0006	0.1436
K	39	3	He	1.76	0.1446	10534.13	0.0006	0.1436
Ca	44	3	He	-1.882	0.0016	110.00	0	0.001611
Ca	44	3	He	14.537	0.0021	150.01	0	0.001611
Ca	44	3	He	27.697	0.0025	180.01	0	0.001611
Ti	47	3	He	-0.529	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.005	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	0.003	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.073	0.0082	580.02	0.0117	0.007326
V	51	3	He	0.121	0.0087	636.02	0.0117	0.007326
V	51	3	He	0.085	0.0083	606.02	0.0117	0.007326
Cr	52	3	He	-0.054	0.0246	1740.17	0.0152	0.02538
Cr	52	3	He	0.139	0.0275	2000.19	0.0152	0.02538
Cr	52	3	He	0.046	0.0261	1900.20	0.0152	0.02538
Mn	55	3	He	-1.343	0.0059	420.02	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.599	0.0103	750.43	0.0059	0.01385
Mn	55	3	He	-1.184	0.0069	500.02	0.0059	0.01385
Fe	57	3	He	2.554	0.0047	330.01	0.0003	0.003918
Fe	57	3	He	6.41	0.0058	420.02	0.0003	0.003918
Fe	57	3	He	0.693	0.0041	300.01	0.0003	0.003918
Co	59	3	He	0.056	0.0048	340.01	0.0305	0.003084
Co	59	3	He	0.025	0.0038	280.01	0.0305	0.003084
Co	59	3	He	0.115	0.0066	480.02	0.0305	0.003084
Ni	60	3	He	0.71	0.0152	1080.08	0.0088	0.009003
Ni	60	3	He	0.727	0.0154	1120.09	0.0088	0.009003
Ni	60	3	He	0.74	0.0155	1130.08	0.0088	0.009003
Cu	63	3	He	0.04	0.0059	420.02	0.0249	0.004937
Cu	63	3	He	0.023	0.0055	400.02	0.0249	0.004937
Cu	63	3	He	0.033	0.0058	420.02	0.0249	0.004937
Zn	66	3	He	-0.36	0.004	280.01	0.0025	0.004836
Zn	66	3	He	-0.346	0.004	290.01	0.0025	0.004836
Zn	66	3	He	-0.627	0.0033	240.01	0.0025	0.004836
As	75	3	He	0.058	0.0005	38.00	0.0017	0.0004347
As	75	3	He	0.082	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.003	0.0004	32.00	0.0017	0.0004347
Sr	88	3	He	0.079	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.139	0.0019	120.00	0.0078	0.0007762
Sr	88	3	He	0.005	0.0008	50.00	0.0078	0.0007762
Mo	98	3	He	0.047	0.0015	100.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	0.036	0.0013	80.00	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.001	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.021	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.099	0.017	1100.09	0.0143	0.01559
Sn	120	3	He	0.138	0.0176	1130.09	0.0143	0.01559
Sn	120	3	He	-0.095	0.0142	870.05	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Ba	137	3	He	0.071	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.107	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.079	0.0007	40.00	0.0044	0.000309
Tl	205	3	He	0.017	0.0015	320.02	0.0276	0.001005
Tl	205	3	He	0.011	0.0013	280.01	0.0276	0.001005
Tl	205	3	He	0.004	0.0011	240.01	0.0276	0.001005
Pb	208	3	He	-0.009	0.0019	310.02	0.0364	0.002176
Pb	208	3	He	0.011	0.0026	350.02	0.0364	0.002176
Pb	208	3	He	0.02	0.0029	330.01	0.0364	0.002176
U	238	3	He	0.009	0.0006	130.00	0.0421	0.00024
U	238	3	He	0	0.0002	50.00	0.0421	0.00024
U	238	3	He	0.008	0.0006	120.00	0.0421	0.00024
Sc	45	1	No Gas			3202301.20		
Sc	45	1	No Gas			3113879.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3255060.26		
Ge	72	1	No Gas			1396671.54		
Ge	72	1	No Gas			1363244.20		
Ge	72	1	No Gas			1420209.67		
Sc	45	2	H2			194170.29		
Sc	45	2	H2			190249.57		
Sc	45	2	H2			187432.18		
Ge	72	2	H2			159715.52		
Ge	72	2	H2			156561.59		
Ge	72	2	H2			152924.20		
In	115	2	H2			440981.87		
In	115	2	H2			428156.91		
In	115	2	H2			421300.07		
Sc	45	3	He			41840.38		
Sc	45	3	He			40726.97		
Sc	45	3	He			40957.70		
Ge	72	3	He			70854.80		
Ge	72	3	He			72734.17		
Ge	72	3	He			72843.70		
In	115	3	He			64699.92		
In	115	3	He			64388.74		
In	115	3	He			61153.62		
Tb	159	3	He			272473.65		
Tb	159	3	He			278328.67		
Tb	159	3	He			280546.85		
Bi	209	3	He			215803.10		
Bi	209	3	He			214978.22		
Bi	209	3	He			214375.66		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 16:26:00
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

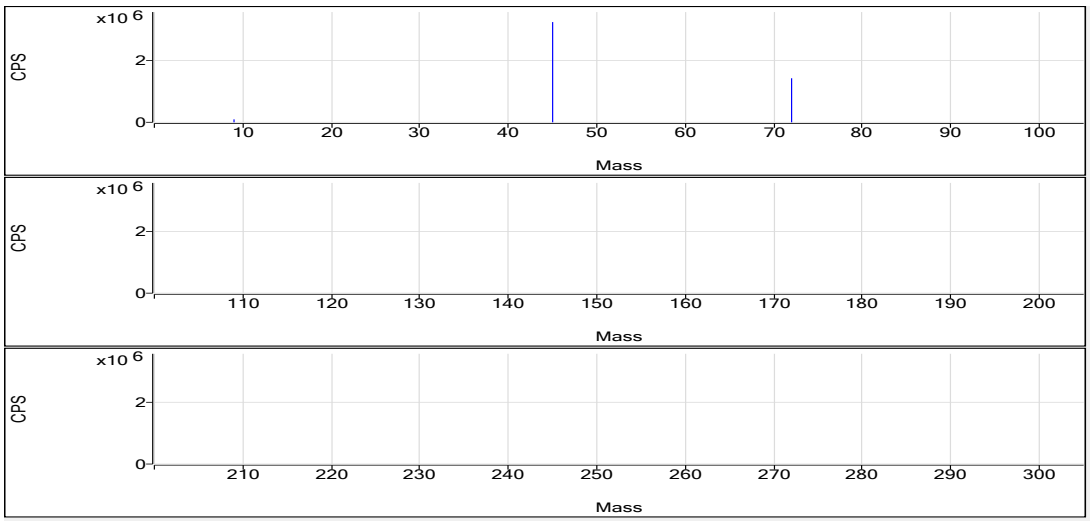
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.657	ppb	4.1	94375.38	0.0666	Pulse	0.5000	3
Se	78	72	H2	51.661	ppb	6.6	3159.02	0.0201	Pulse	1.5000	3
Na	23	72	He	5376.680	ppb	2.1	675536.32	9.3426	Pulse	0.1000	3
Mg	24	72	He	5327.149	ppb	1.9	325108.11	4.4962	Pulse	0.1000	3
Al	27	72	He	5261.727	ppb	1.0	91924.63	1.2712	Pulse	0.1000	3
K	39	72	He	5289.254	ppb	2.1	221580.60	3.0644	Pulse	0.1000	3
Ca	44	72	He	5315.724	ppb	3.0	12055.32	0.1667	Pulse	0.1000	3
Ti	47	72	He	5333.064	ppb	1.3	96728.88	1.3377	Pulse	0.1000	3
V	51	72	He	525.480	ppb	1.0	445025.28	6.1543	Pulse	0.5000	3
Cr	52	72	He	525.767	ppb	1.5	580745.43	8.0314	Pulse	0.1000	3
Mn	55	72	He	516.942	ppb	1.6	221631.03	3.0651	Pulse	0.1000	3
Fe	57	72	He	5202.831	ppb	0.3	109285.52	1.5113	Pulse	0.1000	3
Co	59	72	He	524.332	ppb	0.8	1157039.46	16.0007	Pulse	0.1000	3
Ni	60	72	He	525.351	ppb	0.8	334701.69	4.6286	Pulse	0.1000	3
Cu	63	72	He	520.600	ppb	0.6	939141.86	12.9872	Pulse	0.1000	3
Zn	66	72	He	508.705	ppb	1.2	90720.84	1.2546	Pulse	0.1000	3
As	75	72	He	511.507	ppb	1.0	64359.87	0.8900	Pulse	0.5000	3
Sr	88	115	He	52.006	ppb	3.8	25944.42	0.4073	Pulse	0.1000	3
Mo	98	115	He	50.774	ppb	2.4	71266.47	1.1186	Pulse	0.1000	3
Ag	107	115	He	50.489	ppb	1.8	146399.28	2.2977	Pulse	0.1000	3
Cd	111	115	He	50.660	ppb	1.4	15497.93	0.2432	Pulse	0.5000	3
Sn	120	115	He	50.940	ppb	2.1	47271.06	0.7419	Pulse	0.1000	3
Sb	121	115	He	51.107	ppb	4.2	40395.96	0.6342	Pulse	0.1000	3
Ba	137	115	He	498.959	ppb	1.2	139106.98	2.1831	Pulse	0.1000	3
Tl	205	209	He	50.603	ppb	0.8	303937.75	1.3999	Pulse	0.1000	3
Pb	208	209	He	50.941	ppb	0.4	403031.20	1.8563	Pulse	0.1000	3
U	238	209	He	50.607	ppb	0.7	462288.01	2.1291	Pulse	0.1000	3

ISTD Table:

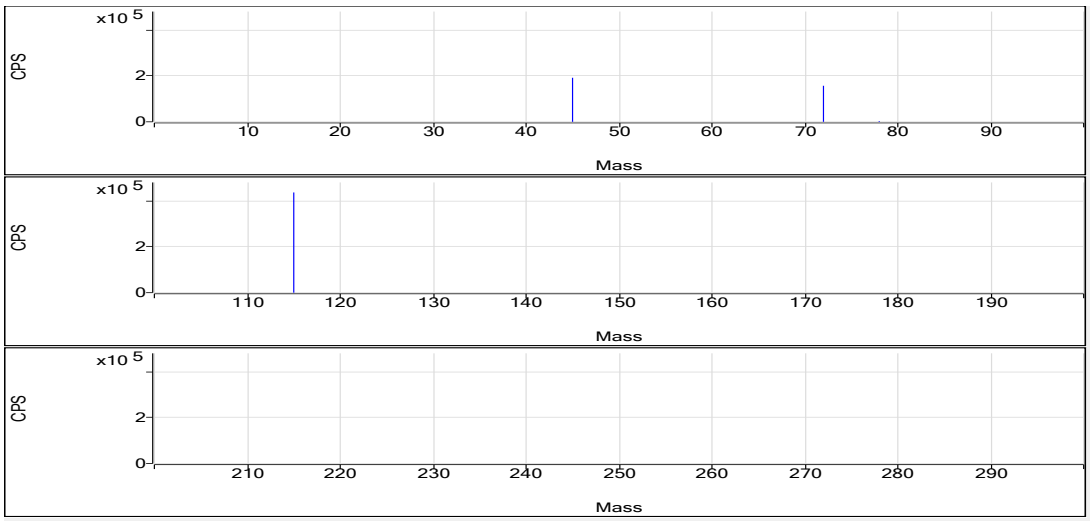
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3225659.43	1.6	99.5	Pulse	0.1000	3
No Gas	Ge	72	1417329.82	1.4	98.4	Pulse	0.1000	3
H2	Sc	45	191876.13	1.6	98.2	Pulse	0.1000	3
H2	Ge	72	157007.21	0.7	96.3	Pulse	0.1000	3
H2	In	115	436628.19	1.7	100.8	Pulse	0.1000	3
He	Sc	45	41215.41	2.0	103.1	Pulse	0.1000	3
He	Ge	72	72315.19	0.8	100.0	Pulse	0.1000	3
He	In	115	63728.65	2.1	98.7	Pulse	0.1000	3
He	Tb	159	280545.72	0.4	98.1	Pulse	0.1000	3
He	Bi	209	217119.21	0.7	97.7	Pulse	0.1000	3

No Gas

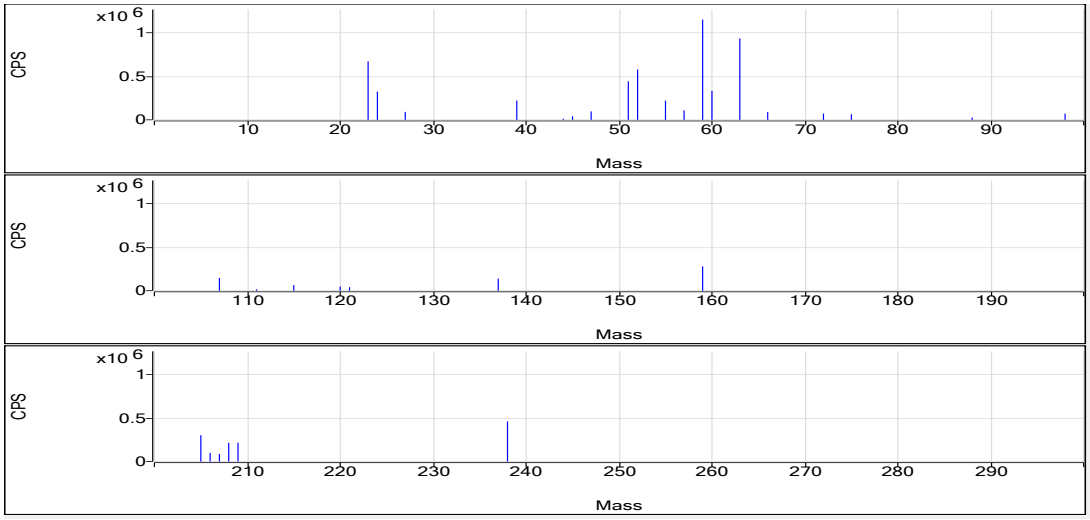


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.369	0.0689	96733.22	0.0013	4.694E-05
Be	9	1	No Gas	51.268	0.0674	94825.53	0.0013	4.694E-05
Be	9	1	No Gas	48.333	0.0636	91567.38	0.0013	4.694E-05
Se	78	2	H2	48.093	0.0187	2965.64	0.0004	1.089E-05
Se	78	2	H2	54.927	0.0214	3345.73	0.0004	1.089E-05
Se	78	2	H2	51.964	0.0202	3165.69	0.0004	1.089E-05
Na	23	3	He	5506.124	9.565	685026.86	0.0017	0.1065
Na	23	3	He	5298.245	9.2079	669266.87	0.0017	0.1065
Na	23	3	He	5325.671	9.255	672315.22	0.0017	0.1065
Mg	24	3	He	5440.691	4.5919	328863.39	0.0008	0.004846
Mg	24	3	He	5255.17	4.4355	322389.21	0.0008	0.004846
Mg	24	3	He	5285.584	4.4611	324071.73	0.0008	0.004846
Al	27	3	He	5300.583	1.2806	91713.65	0.0002	0.001063
Al	27	3	He	5203.254	1.2571	91370.97	0.0002	0.001063
Al	27	3	He	5281.345	1.2759	92689.28	0.0002	0.001063
K	39	3	He	5415.735	3.1343	224470.80	0.0006	0.1436
K	39	3	He	5246.763	3.041	221029.63	0.0006	0.1436
K	39	3	He	5205.265	3.018	219241.38	0.0006	0.1436
Ca	44	3	He	5385.611	0.1689	12095.39	0	0.001611
Ca	44	3	He	5132.962	0.161	11705.04	0	0.001611
Ca	44	3	He	5428.599	0.1702	12365.54	0	0.001611
Ti	47	3	He	5412.065	1.3575	97222.15	0.0003	0.0002737
Ti	47	3	He	5312.807	1.3326	96859.89	0.0003	0.0002737
Ti	47	3	He	5274.32	1.323	96104.61	0.0003	0.0002737
V	51	3	He	530.598	6.2141	445044.31	0.0117	0.007326
V	51	3	He	520.429	6.0952	443021.44	0.0117	0.007326
V	51	3	He	525.414	6.1535	447010.09	0.0117	0.007326
Cr	52	3	He	534.399	8.1628	584605.93	0.0152	0.02538
Cr	52	3	He	523.369	7.9949	581098.74	0.0152	0.02538
Cr	52	3	He	519.534	7.9365	576531.63	0.0152	0.02538
Mn	55	3	He	526.523	3.1216	223564.12	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	511.924	3.0354	220628.51	0.0059	0.01385
Mn	55	3	He	512.38	3.0381	220700.47	0.0059	0.01385
Fe	57	3	He	5214.385	1.5146	108472.92	0.0003	0.003918
Fe	57	3	He	5209.934	1.5133	109993.64	0.0003	0.003918
Fe	57	3	He	5184.174	1.5058	109390.00	0.0003	0.003918
Co	59	3	He	529.432	16.1563	1157085.22	0.0305	0.003084
Co	59	3	He	521.612	15.9177	1156964.83	0.0305	0.003084
Co	59	3	He	521.951	15.9281	1157068.34	0.0305	0.003084
Ni	60	3	He	530.073	4.6701	334463.16	0.0088	0.009003
Ni	60	3	He	523.85	4.6154	335463.75	0.0088	0.009003
Ni	60	3	He	522.131	4.6003	334178.16	0.0088	0.009003
Cu	63	3	He	523.91	13.0697	936030.45	0.0249	0.004937
Cu	63	3	He	517.271	12.9042	937928.66	0.0249	0.004937
Cu	63	3	He	520.618	12.9876	943466.47	0.0249	0.004937
Zn	66	3	He	515.831	1.2721	91106.33	0.0025	0.004836
Zn	66	3	He	504.072	1.2432	90362.49	0.0025	0.004836
Zn	66	3	He	506.211	1.2485	90693.70	0.0025	0.004836
As	75	3	He	516.63	0.8989	64380.66	0.0017	0.0004347
As	75	3	He	511.069	0.8893	64635.80	0.0017	0.0004347
As	75	3	He	506.822	0.8819	64063.16	0.0017	0.0004347
Sr	88	3	He	54.212	0.4246	26405.24	0.0078	0.0007762
Sr	88	3	He	51.42	0.4027	26014.57	0.0078	0.0007762
Sr	88	3	He	50.385	0.3946	25413.46	0.0078	0.0007762
Mo	98	3	He	52.138	1.1487	71440.91	0.022	0.0005162
Mo	98	3	He	49.719	1.0954	70757.76	0.022	0.0005162
Mo	98	3	He	50.467	1.1119	71600.75	0.022	0.0005162
Ag	107	3	He	51.373	2.3379	145406.71	0.0455	0.0004641
Ag	107	3	He	49.538	2.2545	145627.94	0.0455	0.0004641
Ag	107	3	He	50.556	2.3008	148163.20	0.0455	0.0004641
Cd	111	3	He	51.493	0.2472	15376.45	0.0048	5.152E-05
Cd	111	3	He	50.354	0.2418	15616.74	0.0048	5.152E-05
Cd	111	3	He	50.133	0.2407	15500.59	0.0048	5.152E-05
Sn	120	3	He	51.762	0.7536	46869.81	0.0143	0.01559
Sn	120	3	He	51.301	0.747	48254.86	0.0143	0.01559
Sn	120	3	He	49.757	0.725	46688.52	0.0143	0.01559
Sb	121	3	He	53.564	0.6647	41341.86	0.0124	0.000258
Sb	121	3	He	49.746	0.6174	39877.82	0.0124	0.000258
Sb	121	3	He	50.012	0.6207	39968.21	0.0124	0.000258
Ba	137	3	He	505.358	2.2111	137521.36	0.0044	0.000309
Ba	137	3	He	493.185	2.1579	139388.88	0.0044	0.000309
Ba	137	3	He	498.332	2.1804	140410.69	0.0044	0.000309
Tl	205	3	He	50.391	1.394	304999.43	0.0276	0.001005
Tl	205	3	He	50.339	1.3926	301612.85	0.0276	0.001005
Tl	205	3	He	51.08	1.4131	305200.97	0.0276	0.001005
Pb	208	3	He	50.797	1.851	217294.02	0.0364	0.002176
Pb	208	3	He	50.832	1.8523	214472.30	0.0364	0.002176
Pb	208	3	He	51.194	1.8655	217184.68	0.0364	0.002176
U	238	3	He	50.918	2.1422	468699.17	0.0421	0.00024
U	238	3	He	50.257	2.1144	457950.31	0.0421	0.00024
U	238	3	He	50.646	2.1308	460214.56	0.0421	0.00024
Sc	45	1	No Gas			3208434.33		
Sc	45	1	No Gas			3184579.02		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3283964.95		
Ge	72	1	No Gas			1404727.95		
Ge	72	1	No Gas			1406588.10		
Ge	72	1	No Gas			1440673.42		
Sc	45	2	H2			192033.38		
Sc	45	2	H2			194876.42		
Sc	45	2	H2			188718.59		
Ge	72	2	H2			158281.58		
Ge	72	2	H2			156360.83		
Ge	72	2	H2			156379.23		
In	115	2	H2			444687.73		
In	115	2	H2			435555.74		
In	115	2	H2			429641.09		
Sc	45	3	He			40556.77		
Sc	45	3	He			40978.08		
Sc	45	3	He			42111.38		
Ge	72	3	He			71618.13		
Ge	72	3	He			72684.04		
Ge	72	3	He			72643.41		
In	115	3	He			62560.15		
In	115	3	He			64971.30		
In	115	3	He			64760.64		
Tb	159	3	He			281377.65		
Tb	159	3	He			279299.43		
Tb	159	3	He			280960.09		
Bi	209	3	He			218791.40		
Bi	209	3	He			216582.75		
Bi	209	3	He			215983.47		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

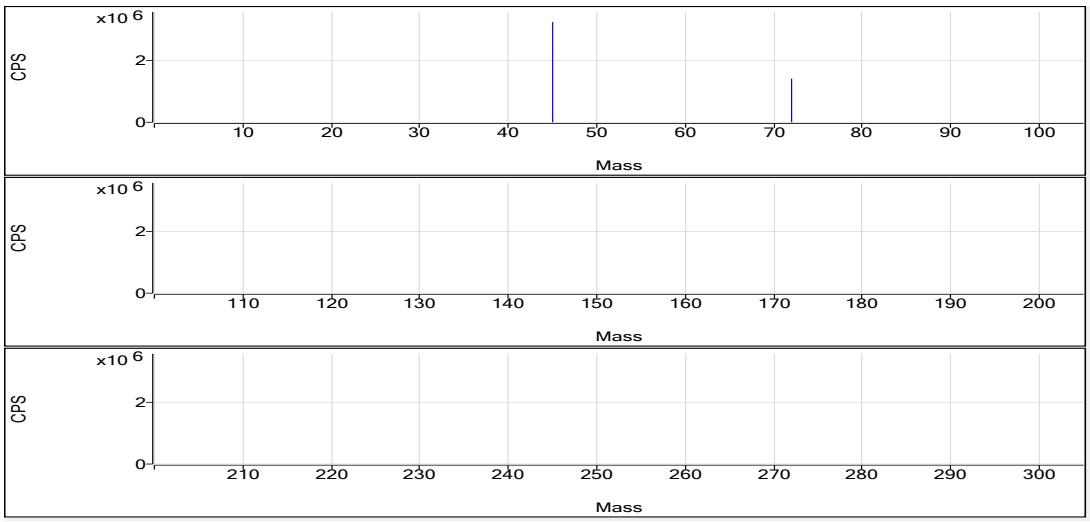
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.026	ppb	27.6	115.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.023	ppb	69.2	3.11	0.0000	Pulse	1.5000	3
Na	23	72	He	8.260	ppb	32.9	8809.57	0.1206	Pulse	0.1000	3
Mg	24	72	He	4.869	ppb	30.8	653.37	0.0090	Pulse	0.1000	3
Al	27	72	He	5.428	ppb	33.1	173.34	0.0024	Pulse	0.1000	3
K	39	72	He	19.217	ppb	84.5	11264.73	0.1543	Pulse	0.1000	3
Ca	44	72	He	15.781	ppb	99.6	153.34	0.0021	Pulse	0.1000	3
Ti	47	72	He	0.730	ppb	44.1	33.33	0.0005	Pulse	0.1000	3
V	51	72	He	0.104	ppb	12.5	624.02	0.0085	Pulse	0.5000	3
Cr	52	72	He	0.210	ppb	30.9	2086.89	0.0286	Pulse	0.1000	3
Mn	55	72	He	-1.202	ppb	N/A	493.36	0.0068	Pulse	0.1000	3
Fe	57	72	He	8.554	ppb	81.5	466.69	0.0064	Pulse	0.1000	3
Co	59	72	He	0.144	ppb	21.1	546.69	0.0075	Pulse	0.1000	3
Ni	60	72	He	1.006	ppb	15.9	1303.44	0.0178	Pulse	0.1000	3
Cu	63	72	He	0.106	ppb	81.1	553.36	0.0076	Pulse	0.1000	3
Zn	66	72	He	-0.259	ppb	N/A	306.68	0.0042	Pulse	0.1000	3
As	75	72	He	0.107	ppb	104.1	45.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.096	ppb	65.0	96.67	0.0015	Pulse	0.1000	3
Mo	98	115	He	0.094	ppb	60.0	163.34	0.0026	Pulse	0.1000	3
Ag	107	115	He	0.018	ppb	35.6	80.00	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	30.0	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.119	ppb	78.7	1093.42	0.0173	Pulse	0.1000	3
Sb	121	115	He	0.013	ppb	58.0	26.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.242	ppb	36.4	86.67	0.0014	Pulse	0.1000	3
Tl	205	209	He	0.133	ppb	15.1	1026.75	0.0047	Pulse	0.1000	3
Pb	208	209	He	0.015	ppb	100.5	593.36	0.0027	Pulse	0.1000	3
U	238	209	He	0.016	ppb	14.0	203.34	0.0009	Pulse	0.1000	3

ISTD Table:

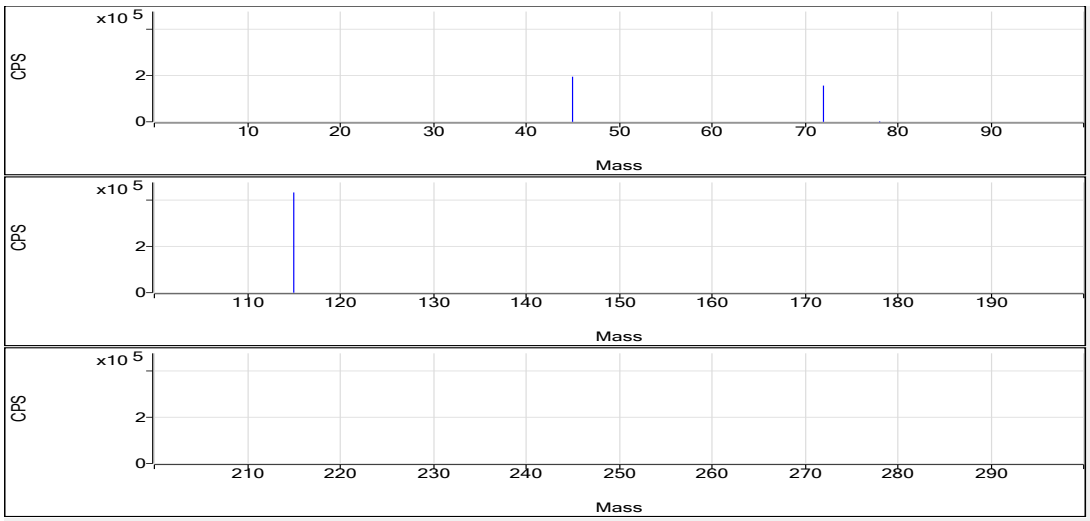
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3274158.18	2.6	101.0	Pulse	0.1000	3
No Gas	Ge	72	1427150.66	1.9	99.1	Pulse	0.1000	3
H2	Sc	45	195758.64	2.0	100.2	Pulse	0.1000	3
H2	Ge	72	157174.42	2.3	96.4	Pulse	0.1000	3
H2	In	115	435000.85	2.0	100.4	Pulse	0.1000	3
He	Sc	45	42074.60	1.4	105.2	Pulse	0.1000	3
He	Ge	72	73018.67	0.3	101.0	Pulse	0.1000	3
He	In	115	63298.43	1.0	98.0	Pulse	0.1000	3
He	Tb	159	281420.14	1.1	98.4	Pulse	0.1000	3
He	Bi	209	218625.86	0.3	98.4	Pulse	0.1000	3

No Gas

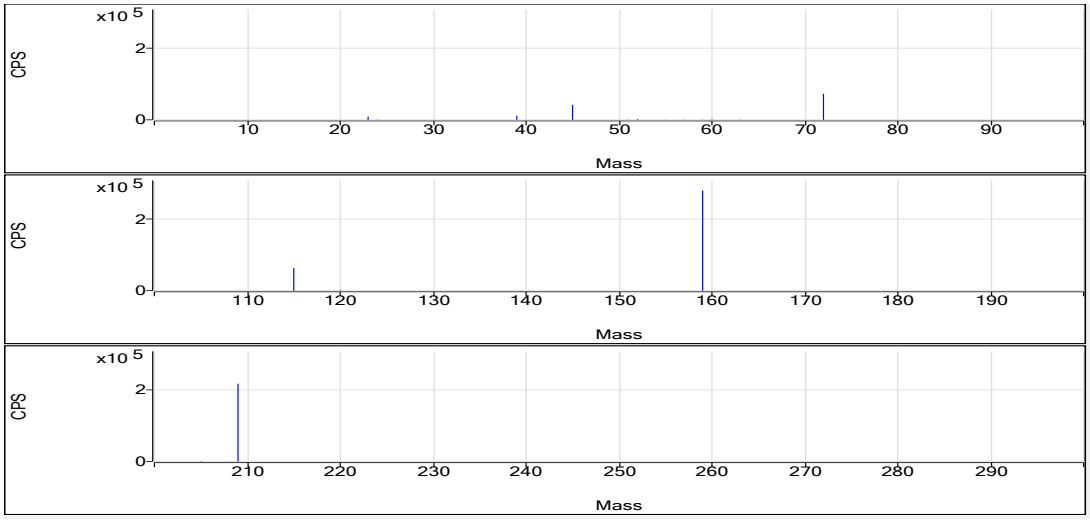


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.034	0.0001	128.00	0.0013	4.694E-05
Be	9	1	No Gas	0.024	0.0001	112.00	0.0013	4.694E-05
Be	9	1	No Gas	0.02	0.0001	106.00	0.0013	4.694E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.005	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.027	0	3.33	0.0004	1.089E-05
Na	23	3	He	10.952	0.1253	9173.09	0.0017	0.1065
Na	23	3	He	5.523	0.1159	8472.72	0.0017	0.1065
Na	23	3	He	8.304	0.1207	8782.90	0.0017	0.1065
Mg	24	3	He	3.323	0.0076	560.03	0.0008	0.004846
Mg	24	3	He	4.965	0.009	660.04	0.0008	0.004846
Mg	24	3	He	6.317	0.0102	740.04	0.0008	0.004846
Al	27	3	He	7.478	0.0029	210.01	0.0002	0.001063
Al	27	3	He	4.668	0.0022	160.01	0.0002	0.001063
Al	27	3	He	4.139	0.0021	150.01	0.0002	0.001063
K	39	3	He	30.34	0.1604	11745.12	0.0006	0.1436
K	39	3	He	26.72	0.1584	11574.95	0.0006	0.1436
K	39	3	He	0.59	0.144	10474.13	0.0006	0.1436
Ca	44	3	He	0.896	0.0016	120.00	0	0.001611
Ca	44	3	He	14.227	0.0021	150.01	0	0.001611
Ca	44	3	He	32.221	0.0026	190.01	0	0.001611
Ti	47	3	He	0.542	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	0.546	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	1.101	0.0005	40.00	0.0003	0.0002737
V	51	3	He	0.091	0.0084	614.02	0.0117	0.007326
V	51	3	He	0.106	0.0086	626.02	0.0117	0.007326
V	51	3	He	0.116	0.0087	632.02	0.0117	0.007326
Cr	52	3	He	0.225	0.0288	2110.22	0.0152	0.02538
Cr	52	3	He	0.265	0.0294	2150.22	0.0152	0.02538
Cr	52	3	He	0.138	0.0275	2000.23	0.0152	0.02538
Mn	55	3	He	-1.26	0.0064	470.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.42	0.0055	400.02	0.0059	0.01385
Mn	55	3	He	-0.926	0.0084	610.04	0.0059	0.01385
Fe	57	3	He	2.976	0.0048	350.02	0.0003	0.003918
Fe	57	3	He	6.316	0.0057	420.02	0.0003	0.003918
Fe	57	3	He	16.368	0.0087	630.04	0.0003	0.003918
Co	59	3	He	0.109	0.0064	470.02	0.0305	0.003084
Co	59	3	He	0.164	0.0081	590.03	0.0305	0.003084
Co	59	3	He	0.16	0.008	580.03	0.0305	0.003084
Ni	60	3	He	0.995	0.0178	1300.10	0.0088	0.009003
Ni	60	3	He	1.171	0.0193	1410.12	0.0088	0.009003
Ni	60	3	He	0.852	0.0165	1200.09	0.0088	0.009003
Cu	63	3	He	0.076	0.0068	500.02	0.0249	0.004937
Cu	63	3	He	0.203	0.01	730.05	0.0249	0.004937
Cu	63	3	He	0.039	0.0059	430.02	0.0249	0.004937
Zn	66	3	He	-0.412	0.0038	280.01	0.0025	0.004836
Zn	66	3	He	-0.353	0.004	290.01	0.0025	0.004836
Zn	66	3	He	-0.01	0.0048	350.02	0.0025	0.004836
As	75	3	He	0.096	0.0006	44.00	0.0017	0.0004347
As	75	3	He	0.002	0.0004	32.00	0.0017	0.0004347
As	75	3	He	0.224	0.0008	60.00	0.0017	0.0004347
Sr	88	3	He	0.043	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	0.08	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.165	0.0021	130.01	0.0078	0.0007762
Mo	98	3	He	0.157	0.004	250.01	0.022	0.0005162
Mo	98	3	He	0.076	0.0022	140.01	0.022	0.0005162
Mo	98	3	He	0.049	0.0016	100.00	0.022	0.0005162
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.155	0.0178	1120.09	0.0143	0.01559
Sn	120	3	He	0.013	0.0158	1010.08	0.0143	0.01559
Sn	120	3	He	0.189	0.0183	1150.09	0.0143	0.01559
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.256	0.0014	90.00	0.0044	0.000309
Ba	137	3	He	0.322	0.0017	110.00	0.0044	0.000309
Ba	137	3	He	0.147	0.001	60.00	0.0044	0.000309
Tl	205	3	He	0.153	0.0052	1150.10	0.0276	0.001005
Tl	205	3	He	0.134	0.0047	1030.08	0.0276	0.001005
Tl	205	3	He	0.113	0.0041	900.07	0.0276	0.001005
Pb	208	3	He	0.012	0.0026	280.01	0.0364	0.002176
Pb	208	3	He	0.002	0.0022	260.01	0.0364	0.002176
Pb	208	3	He	0.031	0.0033	480.03	0.0364	0.002176
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
U	238	3	He	0.018	0.001	220.01	0.0421	0.00024
U	238	3	He	0.017	0.001	210.01	0.0421	0.00024
Sc	45	1	No Gas			3215250.26		
Sc	45	1	No Gas			3236392.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3370831.82		
Ge	72	1	No Gas			1403582.48		
Ge	72	1	No Gas			1422063.26		
Ge	72	1	No Gas			1455806.23		
Sc	45	2	H2			195142.85		
Sc	45	2	H2			192094.16		
Sc	45	2	H2			200038.92		
Ge	72	2	H2			161155.31		
Ge	72	2	H2			154379.57		
Ge	72	2	H2			155988.38		
In	115	2	H2			443421.05		
In	115	2	H2			425712.92		
In	115	2	H2			435868.59		
Sc	45	3	He			42612.82		
Sc	45	3	He			41449.57		
Sc	45	3	He			42161.42		
Ge	72	3	He			73226.26		
Ge	72	3	He			73075.95		
Ge	72	3	He			72753.80		
In	115	3	He			62931.76		
In	115	3	He			64066.99		
In	115	3	He			62922.13		
Tb	159	3	He			278057.63		
Tb	159	3	He			282522.57		
Tb	159	3	He			283680.23		
Bi	209	3	He			219276.05		
Bi	209	3	He			218767.52		
Bi	209	3	He			217834.02		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

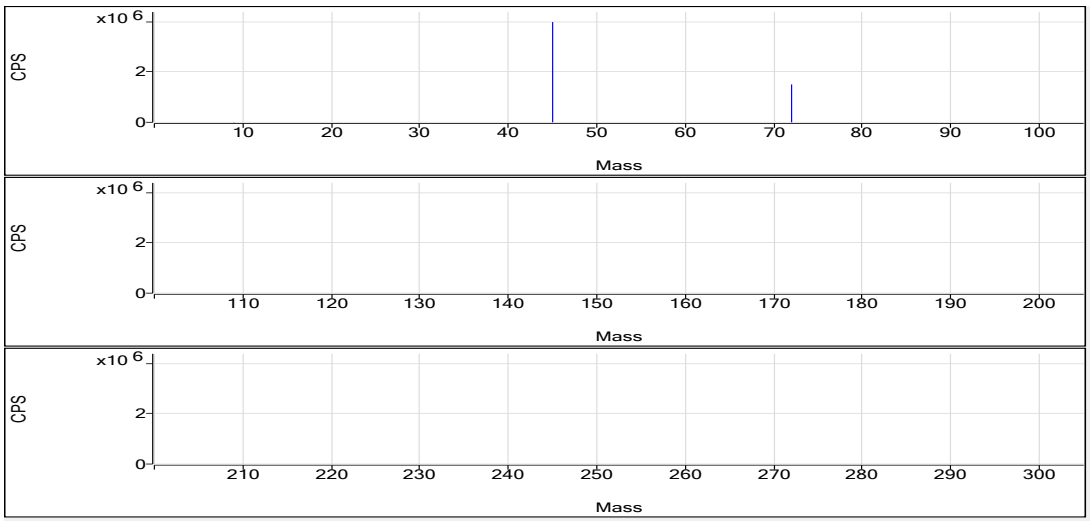
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	5.040	ppb	5.3	10052.06	0.0067	Pulse	0.5000	3
Se	78	72	H2	1.015	ppb	12.8	64.22	0.0004	Pulse	1.5000	3
Na	23	72	He	244.280	ppb	4.6	39706.88	0.5261	Pulse	0.1000	3
Mg	24	72	He	48308.500	ppb	1.6	3075029.43	40.7338	Pulse	0.1000	3
Al	27	72	He	127427.689	ppb	1.9	2322146.58	30.7614	Pulse	0.1000	3
K	39	72	He	17197.661	ppb	1.3	727789.81	9.6404	Pulse	0.1000	3
Ca	44	72	He	3084.530	ppb	3.5	7355.43	0.0974	Pulse	0.1000	3
Ti	47	72	He	628.847	ppb	1.0	11928.66	0.1580	Pulse	0.1000	3
V	51	72	He	176.527	ppb	1.7	156437.65	2.0723	Pulse	0.5000	3
Cr	52	72	He	144.716	ppb	1.7	168267.82	2.2290	Pulse	0.1000	3
Mn	55	72	He	4986.467	ppb	1.7	2222889.55	29.4461	Pulse	0.1000	3
Fe	57	72	He	207098.035	ppb	1.2	4529903.27	60.0033	Pulse	0.1000	3
Co	59	72	He	78.197	ppb	2.1	180330.93	2.3889	Pulse	0.1000	3
Ni	60	72	He	184.063	ppb	1.6	122864.23	1.6275	Pulse	0.1000	3
Cu	63	72	He	249.325	ppb	1.7	469738.69	6.2224	Pulse	0.1000	3
Zn	66	72	He	620.793	ppb	1.1	115505.89	1.5300	Pulse	0.1000	3
As	75	72	He	47.448	ppb	0.5	6263.40	0.0830	Pulse	0.5000	3
Sr	88	115	He	36.579	ppb	2.9	18041.98	0.2867	Pulse	0.1000	3
Mo	98	115	He	4.179	ppb	1.3	5824.70	0.0925	Pulse	0.1000	3
Ag	107	115	He	0.533	ppb	9.3	1553.48	0.0247	Pulse	0.1000	3
Cd	111	115	He	1.499	ppb	3.1	456.01	0.0072	Pulse	0.5000	3
Sn	120	115	He	10.612	ppb	3.6	10500.97	0.1669	Pulse	0.1000	3
Sb	121	115	He	1.813	ppb	13.2	1430.13	0.0227	Pulse	0.1000	3
Ba	137	115	He	401.315	ppb	1.4	110507.89	1.7560	Pulse	0.1000	3
Tl	205	209	He	0.744	ppb	11.3	4751.03	0.0216	Pulse	0.1000	3
Pb	208	209	He	112.725	ppb	1.5	904160.06	4.1051	Pulse	0.1000	3
U	238	209	He	4.615	ppb	1.8	42821.63	0.1944	Pulse	0.1000	3

ISTD Table:

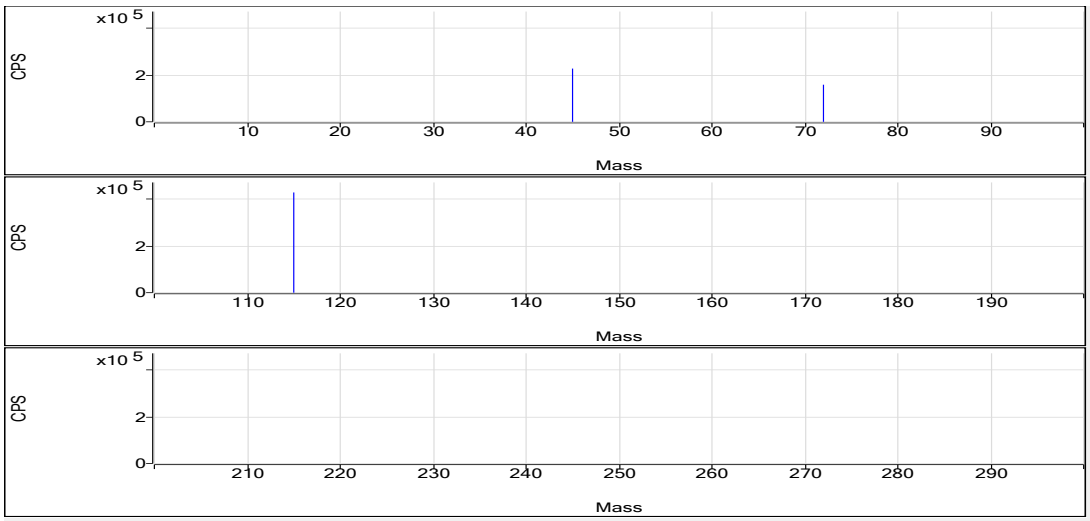
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3991277.86	1.6	123.1	Pulse	0.1000	3
No Gas	Ge	72	1507973.57	1.6	104.7	Pulse	0.1000	3
H2	Sc	45	227461.02	2.5	116.4	Pulse	0.1000	3
H2	Ge	72	158534.66	2.7	97.3	Pulse	0.1000	3
H2	In	115	428261.18	2.5	98.8	Pulse	0.1000	3
He	Sc	45	49313.83	1.5	123.3	Pulse	0.1000	3
He	Ge	72	75504.77	1.7	104.4	Pulse	0.1000	3
He	In	115	62937.29	1.7	97.4	Pulse	0.1000	3
He	Tb	159	312554.41	0.7	109.3	Pulse	0.1000	3
He	Bi	209	220268.35	0.7	99.1	Pulse	0.1000	3

No Gas

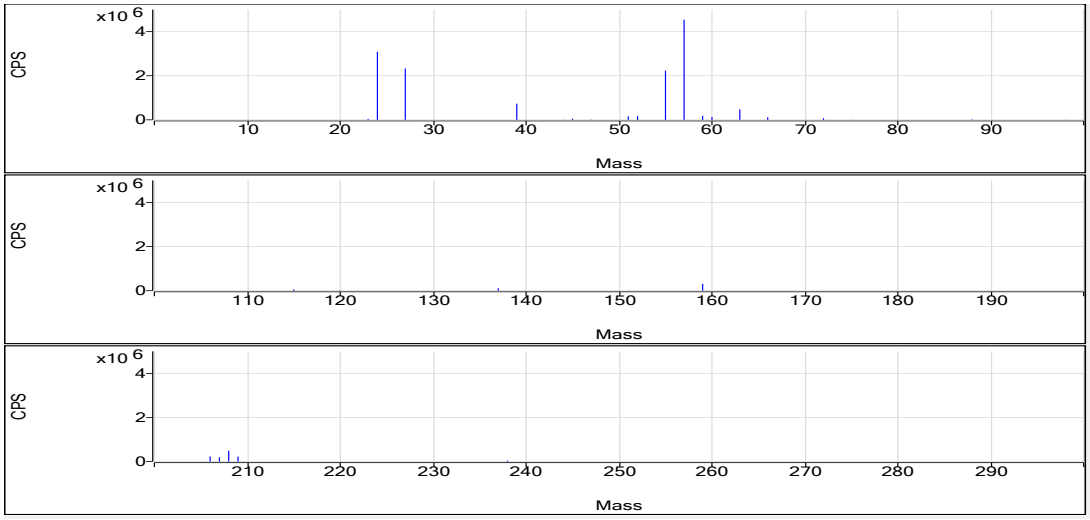


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	4.839	0.0064	9791.24	0.0013	4.694E-05
Be	9	1	No Gas	4.938	0.0065	9893.28	0.0013	4.694E-05
Be	9	1	No Gas	5.342	0.0071	10471.67	0.0013	4.694E-05
Se	78	2	H2	1.165	0.0005	71.33	0.0004	1.089E-05
Se	78	2	H2	0.929	0.0004	60.00	0.0004	1.089E-05
Se	78	2	H2	0.951	0.0004	61.33	0.0004	1.089E-05
Na	23	3	He	231.88	0.5048	38861.29	0.0017	0.1065
Na	23	3	He	254.139	0.543	40686.10	0.0017	0.1065
Na	23	3	He	246.821	0.5304	39573.26	0.0017	0.1065
Mg	24	3	He	47426.573	39.9903	3078682.14	0.0008	0.004846
Mg	24	3	He	48553.269	40.9402	3067455.58	0.0008	0.004846
Mg	24	3	He	48945.659	41.271	3078950.58	0.0008	0.004846
Al	27	3	He	124834.676	30.1354	2319999.81	0.0002	0.001063
Al	27	3	He	127953.338	30.8883	2314311.84	0.0002	0.001063
Al	27	3	He	129495.054	31.2604	2332128.09	0.0002	0.001063
K	39	3	He	16944.078	9.5004	731392.72	0.0006	0.1436
K	39	3	He	17289.565	9.6911	726111.71	0.0006	0.1436
K	39	3	He	17359.34	9.7297	725864.99	0.0006	0.1436
Ca	44	3	He	3102.326	0.098	7542.20	0	0.001611
Ca	44	3	He	2969.784	0.0939	7031.89	0	0.001611
Ca	44	3	He	3181.481	0.1004	7492.20	0	0.001611
Ti	47	3	He	632.148	0.1588	12225.61	0.0003	0.0002737
Ti	47	3	He	632.516	0.1589	11905.31	0.0003	0.0002737
Ti	47	3	He	621.876	0.1562	11655.06	0.0003	0.0002737
V	51	3	He	173.103	2.0322	156453.61	0.0117	0.007326
V	51	3	He	177.472	2.0834	156095.92	0.0117	0.007326
V	51	3	He	179.006	2.1013	156763.42	0.0117	0.007326
Cr	52	3	He	141.839	2.1852	168229.68	0.0152	0.02538
Cr	52	3	He	145.894	2.2469	168353.38	0.0152	0.02538
Cr	52	3	He	146.414	2.2549	168220.39	0.0152	0.02538
Mn	55	3	He	4891.008	28.8826	2223553.09	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5013.563	29.606	2218239.50	0.0059	0.01385
Mn	55	3	He	5054.831	29.8496	2226876.06	0.0059	0.01385
Fe	57	3	He	204294.046	59.1909	4556858.06	0.0003	0.003918
Fe	57	3	He	207621.366	60.1549	4507121.81	0.0003	0.003918
Fe	57	3	He	209378.691	60.664	4525729.93	0.0003	0.003918
Co	59	3	He	76.287	2.3306	179425.47	0.0305	0.003084
Co	59	3	He	78.925	2.4111	180653.42	0.0305	0.003084
Co	59	3	He	79.38	2.425	180913.90	0.0305	0.003084
Ni	60	3	He	180.771	1.5986	123067.79	0.0088	0.009003
Ni	60	3	He	185.362	1.6389	122798.37	0.0088	0.009003
Ni	60	3	He	186.057	1.6451	122726.53	0.0088	0.009003
Cu	63	3	He	245.316	6.1224	471339.37	0.0249	0.004937
Cu	63	3	He	248.893	6.2116	465406.44	0.0249	0.004937
Cu	63	3	He	253.765	6.3331	472470.27	0.0249	0.004937
Zn	66	3	He	612.799	1.5103	116274.78	0.0025	0.004836
Zn	66	3	He	623.467	1.5365	115126.45	0.0025	0.004836
Zn	66	3	He	626.113	1.543	115116.44	0.0025	0.004836
As	75	3	He	47.382	0.0828	6377.45	0.0017	0.0004347
As	75	3	He	47.233	0.0826	6187.36	0.0017	0.0004347
As	75	3	He	47.731	0.0834	6225.38	0.0017	0.0004347
Sr	88	3	He	37.569	0.2945	18562.73	0.0078	0.0007762
Sr	88	3	He	36.723	0.2878	17801.68	0.0078	0.0007762
Sr	88	3	He	35.443	0.2778	17761.52	0.0078	0.0007762
Mo	98	3	He	4.119	0.0912	5751.32	0.022	0.0005162
Mo	98	3	He	4.2	0.093	5751.34	0.022	0.0005162
Mo	98	3	He	4.218	0.0934	5971.45	0.022	0.0005162
Ag	107	3	He	0.537	0.0249	1570.15	0.0455	0.0004641
Ag	107	3	He	0.58	0.0268	1660.15	0.0455	0.0004641
Ag	107	3	He	0.481	0.0224	1430.13	0.0455	0.0004641
Cd	111	3	He	1.476	0.0071	450.01	0.0048	5.152E-05
Cd	111	3	He	1.552	0.0075	464.01	0.0048	5.152E-05
Cd	111	3	He	1.469	0.0071	454.01	0.0048	5.152E-05
Sn	120	3	He	10.816	0.1698	10704.33	0.0143	0.01559
Sn	120	3	He	10.853	0.1703	10534.37	0.0143	0.01559
Sn	120	3	He	10.168	0.1606	10264.21	0.0143	0.01559
Sb	121	3	He	2	0.0251	1580.16	0.0124	0.000258
Sb	121	3	He	1.895	0.0238	1470.14	0.0124	0.000258
Sb	121	3	He	1.543	0.0194	1240.10	0.0124	0.000258
Ba	137	3	He	406.453	1.7785	112113.67	0.0044	0.000309
Ba	137	3	He	402.011	1.759	108786.84	0.0044	0.000309
Ba	137	3	He	395.482	1.7305	110623.17	0.0044	0.000309
Tl	205	3	He	0.807	0.0233	5111.16	0.0276	0.001005
Tl	205	3	He	0.648	0.0189	4200.81	0.0276	0.001005
Tl	205	3	He	0.777	0.0225	4941.11	0.0276	0.001005
Pb	208	3	He	113.653	4.1388	489858.16	0.0364	0.002176
Pb	208	3	He	110.736	4.0327	483005.38	0.0364	0.002176
Pb	208	3	He	113.788	4.1437	487371.83	0.0364	0.002176
U	238	3	He	4.624	0.1948	42701.13	0.0421	0.00024
U	238	3	He	4.694	0.1977	43875.13	0.0421	0.00024
U	238	3	He	4.528	0.1907	41888.62	0.0421	0.00024
Sc	45	1	No Gas			4031039.00		
Sc	45	1	No Gas			4027126.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3915668.07		
Ge	72	1	No Gas			1528570.29		
Ge	72	1	No Gas			1513584.20		
Ge	72	1	No Gas			1481766.23		
Sc	45	2	H2			221045.82		
Sc	45	2	H2			229378.20		
Sc	45	2	H2			231959.04		
Ge	72	2	H2			153612.62		
Ge	72	2	H2			161051.10		
Ge	72	2	H2			160940.25		
In	115	2	H2			417205.46		
In	115	2	H2			438208.74		
In	115	2	H2			429369.33		
Sc	45	3	He			49464.67		
Sc	45	3	He			49945.66		
Sc	45	3	He			48531.16		
Ge	72	3	He			76985.79		
Ge	72	3	He			74925.30		
Ge	72	3	He			74603.23		
In	115	3	He			63123.37		
In	115	3	He			61927.18		
In	115	3	He			64007.04		
Tb	159	3	He			309891.68		
Tb	159	3	He			314210.33		
Tb	159	3	He			313561.23		
Bi	209	3	He			219257.09		
Bi	209	3	He			221925.04		
Bi	209	3	He			219622.93		

Quantitation Report

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Acq Time	2023-08-10 16:34:04
Sample Name	410-136258-J-13-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

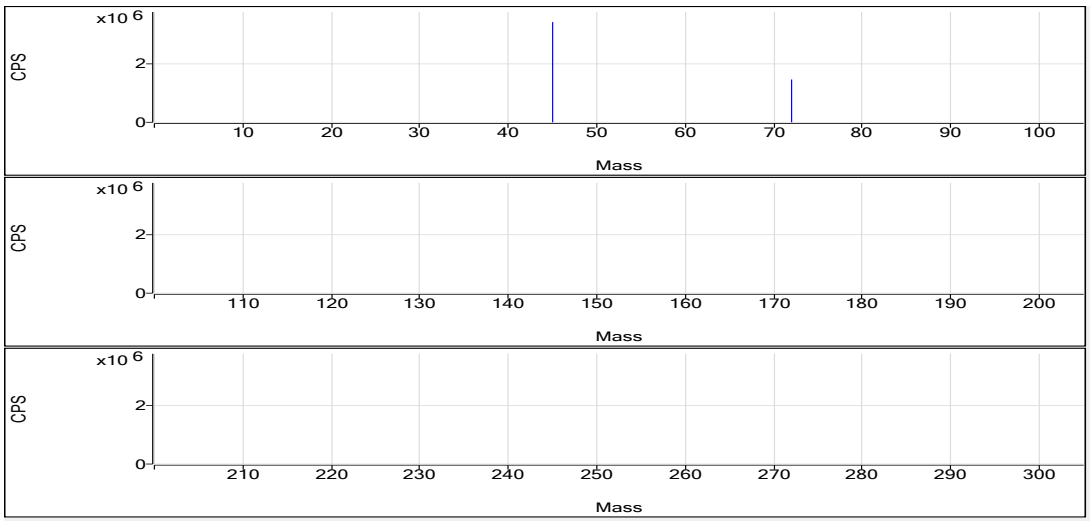
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.018	ppb	4.6	2044.15	0.0014	Pulse	0.5000	3
Se	78	72	H2	0.249	ppb	30.2	17.33	0.0001	Pulse	1.5000	3
Na	23	72	He	50.870	ppb	6.6	14344.00	0.1938	Pulse	0.1000	3
Mg	24	72	He	9879.543	ppb	1.2	616767.32	8.3343	Pulse	0.1000	3
Al	27	72	He	26043.057	ppb	1.6	465297.86	6.2877	Pulse	0.1000	3
K	39	72	He	3541.711	ppb	1.6	155365.87	2.0994	Pulse	0.1000	3
Ca	44	72	He	655.893	ppb	2.6	1626.81	0.0220	Pulse	0.1000	3
Ti	47	72	He	120.336	ppb	1.2	2253.58	0.0305	Pulse	0.1000	3
V	51	72	He	36.066	ppb	0.9	31765.03	0.4292	Pulse	0.5000	3
Cr	52	72	He	30.160	ppb	5.1	35854.85	0.4846	Pulse	0.1000	3
Mn	55	72	He	1027.412	ppb	1.3	449793.75	6.0781	Pulse	0.1000	3
Fe	57	72	He	42469.179	ppb	1.4	910813.66	12.3079	Pulse	0.1000	3
Co	59	72	He	15.993	ppb	2.1	36336.25	0.4910	Pulse	0.1000	3
Ni	60	72	He	38.014	ppb	0.7	25406.22	0.3433	Pulse	0.1000	3
Cu	63	72	He	51.490	ppb	1.7	95407.08	1.2889	Pulse	0.1000	3
Zn	66	72	He	125.995	ppb	1.7	23265.96	0.3144	Pulse	0.1000	3
As	75	72	He	9.596	ppb	2.9	1267.40	0.0171	Pulse	0.5000	3
Sr	88	115	He	7.176	ppb	5.7	3627.29	0.0569	Pulse	0.1000	3
Mo	98	115	He	0.862	ppb	10.3	1243.44	0.0195	Pulse	0.1000	3
Ag	107	115	He	0.117	ppb	17.0	370.02	0.0058	Pulse	0.1000	3
Cd	111	115	He	0.335	ppb	7.8	106.00	0.0017	Pulse	0.5000	3
Sn	120	115	He	1.922	ppb	14.6	2743.72	0.0430	Pulse	0.1000	3
Sb	121	115	He	0.409	ppb	13.7	340.02	0.0053	Pulse	0.1000	3
Ba	137	115	He	80.223	ppb	3.0	22405.56	0.3513	Pulse	0.1000	3
Tl	205	209	He	0.169	ppb	2.1	1260.10	0.0057	Pulse	0.1000	3
Pb	208	209	He	22.447	ppb	1.0	181696.09	0.8192	Pulse	0.1000	3
U	238	209	He	0.943	ppb	1.5	8853.33	0.0399	Pulse	0.1000	3

ISTD Table:

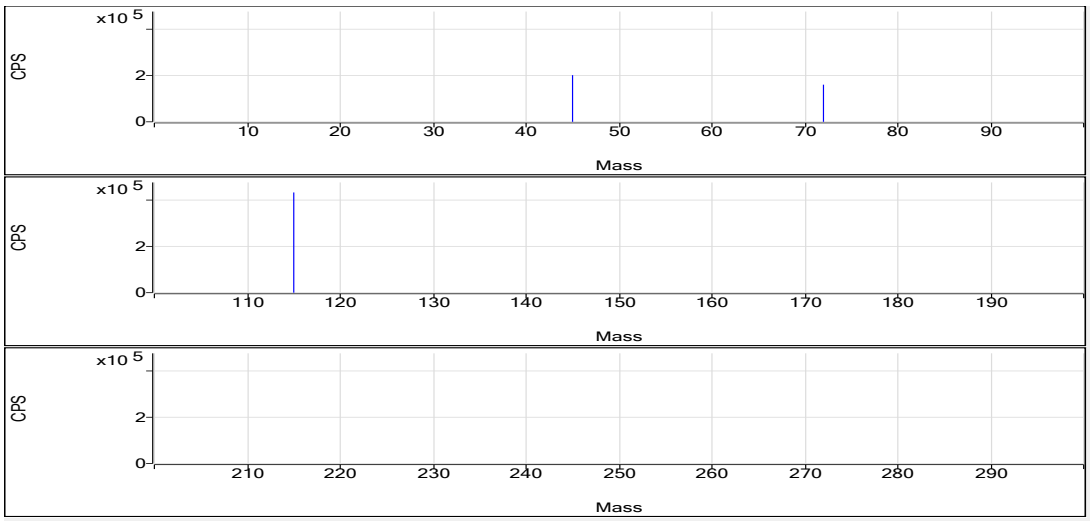
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3461348.80	2.4	106.8	Pulse	0.1000	3
No Gas	Ge	72	1477706.12	2.4	102.6	Pulse	0.1000	3
H2	Sc	45	202173.88	2.9	103.5	Pulse	0.1000	3
H2	Ge	72	160930.93	1.9	98.7	Pulse	0.1000	3
H2	In	115	434307.69	1.2	100.2	Pulse	0.1000	3
He	Sc	45	44137.34	0.9	110.4	Pulse	0.1000	3
He	Ge	72	74010.49	1.2	102.4	Pulse	0.1000	3
He	In	115	63791.40	0.7	98.8	Pulse	0.1000	3
He	Tb	159	290625.05	0.4	101.6	Pulse	0.1000	3
He	Bi	209	221811.42	1.2	99.8	Pulse	0.1000	3

No Gas

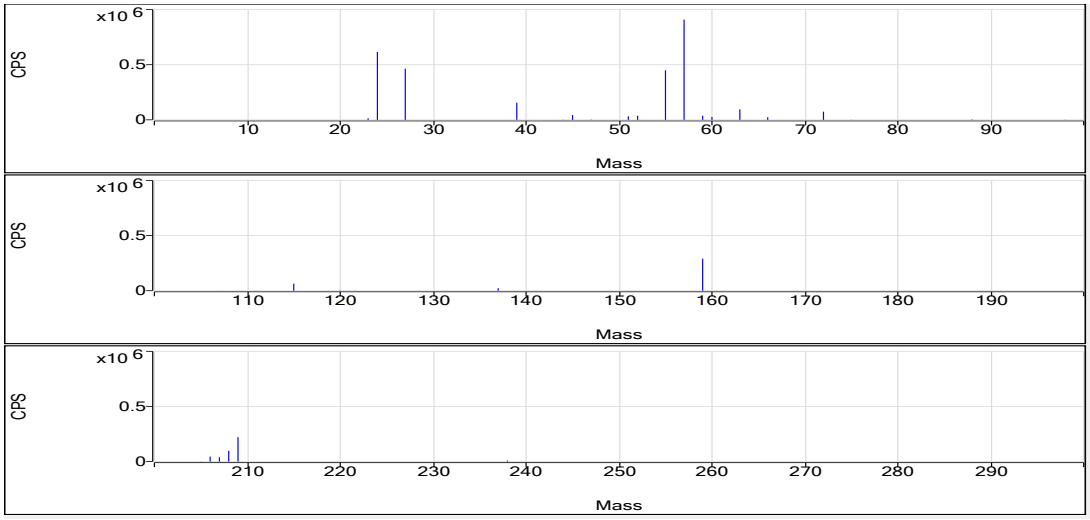


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.989	0.0013	2028.15	0.0013	4.694E-05
Be	9	1	No Gas	0.992	0.0014	2012.15	0.0013	4.694E-05
Be	9	1	No Gas	1.072	0.0015	2092.16	0.0013	4.694E-05
Se	78	2	H2	0.308	0.0001	20.67	0.0004	1.089E-05
Se	78	2	H2	0.275	0.0001	19.33	0.0004	1.089E-05
Se	78	2	H2	0.164	0.0001	12.00	0.0004	1.089E-05
Na	23	3	He	53.246	0.1979	14447.37	0.0017	0.1065
Na	23	3	He	47.012	0.1872	13967.02	0.0017	0.1065
Na	23	3	He	52.353	0.1964	14617.60	0.0017	0.1065
Mg	24	3	He	10018.236	8.4512	616898.08	0.0008	0.004846
Mg	24	3	He	9825.677	8.2889	618387.88	0.0008	0.004846
Mg	24	3	He	9794.718	8.2628	615016.01	0.0008	0.004846
Al	27	3	He	26523.049	6.4036	467428.86	0.0002	0.001063
Al	27	3	He	25841.707	6.2391	465464.56	0.0002	0.001063
Al	27	3	He	25764.416	6.2204	463000.15	0.0002	0.001063
K	39	3	He	3591.69	2.127	155261.45	0.0006	0.1436
K	39	3	He	3552.974	2.1056	157089.70	0.0006	0.1436
K	39	3	He	3480.467	2.0656	153746.46	0.0006	0.1436
Ca	44	3	He	667.145	0.0223	1630.15	0	0.001611
Ca	44	3	He	664.581	0.0223	1660.15	0	0.001611
Ca	44	3	He	635.953	0.0214	1590.13	0	0.001611
Ti	47	3	He	121.288	0.0307	2240.24	0.0003	0.0002737
Ti	47	3	He	118.649	0.03	2240.26	0.0003	0.0002737
Ti	47	3	He	121.069	0.0306	2280.25	0.0003	0.0002737
V	51	3	He	36.346	0.4325	31569.98	0.0117	0.007326
V	51	3	He	35.702	0.425	31704.21	0.0117	0.007326
V	51	3	He	36.15	0.4302	32020.91	0.0117	0.007326
Cr	52	3	He	31.925	0.5115	37338.41	0.0152	0.02538
Cr	52	3	He	29.162	0.4694	35022.82	0.0152	0.02538
Cr	52	3	He	29.393	0.473	35203.32	0.0152	0.02538
Mn	55	3	He	1042.846	6.1692	450318.55	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1016.6	6.0143	448689.92	0.0059	0.01385
Mn	55	3	He	1022.79	6.0508	450372.77	0.0059	0.01385
Fe	57	3	He	43131.344	12.4997	912415.77	0.0003	0.003918
Fe	57	3	He	42152.114	12.216	911367.96	0.0003	0.003918
Fe	57	3	He	42124.079	12.2079	908657.25	0.0003	0.003918
Co	59	3	He	16.34	0.5016	36616.89	0.0305	0.003084
Co	59	3	He	15.682	0.4815	35925.17	0.0305	0.003084
Co	59	3	He	15.957	0.4899	36466.69	0.0305	0.003084
Ni	60	3	He	37.991	0.3431	25042.41	0.0088	0.009003
Ni	60	3	He	38.279	0.3456	25783.48	0.0088	0.009003
Ni	60	3	He	37.773	0.3412	25392.78	0.0088	0.009003
Cu	63	3	He	50.521	1.2648	92323.28	0.0249	0.004937
Cu	63	3	He	51.835	1.2976	96803.28	0.0249	0.004937
Cu	63	3	He	52.113	1.3045	97094.69	0.0249	0.004937
Zn	66	3	He	127.229	0.3174	23169.17	0.0025	0.004836
Zn	66	3	He	127.283	0.3175	23689.96	0.0025	0.004836
Zn	66	3	He	123.474	0.3082	22938.75	0.0025	0.004836
As	75	3	He	9.487	0.0169	1236.06	0.0017	0.0004347
As	75	3	He	9.384	0.0168	1250.06	0.0017	0.0004347
As	75	3	He	9.917	0.0177	1316.07	0.0017	0.0004347
Sr	88	3	He	7.641	0.0605	3850.69	0.0078	0.0007762
Sr	88	3	He	6.999	0.0555	3520.60	0.0078	0.0007762
Sr	88	3	He	6.887	0.0546	3510.59	0.0078	0.0007762
Mo	98	3	He	0.761	0.0173	1100.09	0.022	0.0005162
Mo	98	3	He	0.929	0.021	1330.11	0.022	0.0005162
Mo	98	3	He	0.895	0.0202	1300.11	0.022	0.0005162
Ag	107	3	He	0.121	0.006	380.02	0.0455	0.0004641
Ag	107	3	He	0.135	0.0066	420.02	0.0455	0.0004641
Ag	107	3	He	0.096	0.0048	310.02	0.0455	0.0004641
Cd	111	3	He	0.323	0.0016	102.00	0.0048	5.152E-05
Cd	111	3	He	0.318	0.0016	100.00	0.0048	5.152E-05
Cd	111	3	He	0.365	0.0018	116.00	0.0048	5.152E-05
Sn	120	3	He	1.838	0.0418	2660.37	0.0143	0.01559
Sn	120	3	He	1.693	0.0397	2520.32	0.0143	0.01559
Sn	120	3	He	2.235	0.0475	3050.46	0.0143	0.01559
Sb	121	3	He	0.347	0.0046	290.01	0.0124	0.000258
Sb	121	3	He	0.424	0.0055	350.02	0.0124	0.000258
Sb	121	3	He	0.456	0.0059	380.02	0.0124	0.000258
Ba	137	3	He	79.08	0.3463	22038.25	0.0044	0.000309
Ba	137	3	He	82.975	0.3633	23050.02	0.0044	0.000309
Ba	137	3	He	78.614	0.3442	22128.42	0.0044	0.000309
Tl	205	3	He	0.17	0.0057	1250.10	0.0276	0.001005
Tl	205	3	He	0.165	0.0056	1240.10	0.0276	0.001005
Tl	205	3	He	0.172	0.0058	1290.11	0.0276	0.001005
Pb	208	3	He	22.575	0.8239	97419.21	0.0364	0.002176
Pb	208	3	He	22.588	0.8243	98979.31	0.0364	0.002176
Pb	208	3	He	22.178	0.8094	96601.62	0.0364	0.002176
U	238	3	He	0.936	0.0396	8673.18	0.0421	0.00024
U	238	3	He	0.959	0.0406	9033.48	0.0421	0.00024
U	238	3	He	0.934	0.0395	8853.34	0.0421	0.00024
Sc	45	1	No Gas			3538766.82		
Sc	45	1	No Gas			3472648.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3372630.89		
Ge	72	1	No Gas			1506618.10		
Ge	72	1	No Gas			1489278.42		
Ge	72	1	No Gas			1437221.85		
Sc	45	2	H2			195852.44		
Sc	45	2	H2			207499.63		
Sc	45	2	H2			203169.57		
Ge	72	2	H2			158212.08		
Ge	72	2	H2			164125.58		
Ge	72	2	H2			160455.13		
In	115	2	H2			428751.13		
In	115	2	H2			438722.85		
In	115	2	H2			435449.10		
Sc	45	3	He			44578.43		
Sc	45	3	He			44087.10		
Sc	45	3	He			43746.48		
Ge	72	3	He			72995.01		
Ge	72	3	He			74604.43		
Ge	72	3	He			74432.02		
In	115	3	He			63665.50		
In	115	3	He			63464.75		
In	115	3	He			64308.15		
Tb	159	3	He			289691.52		
Tb	159	3	He			291951.48		
Tb	159	3	He			290232.16		
Bi	209	3	He			218913.00		
Bi	209	3	He			222518.14		
Bi	209	3	He			224003.12		

Quantitation Report

Data File Name	172SMPL.d
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Acq Time	2023-08-10 16:36:05
Sample Name	410-136610-H-7-A @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

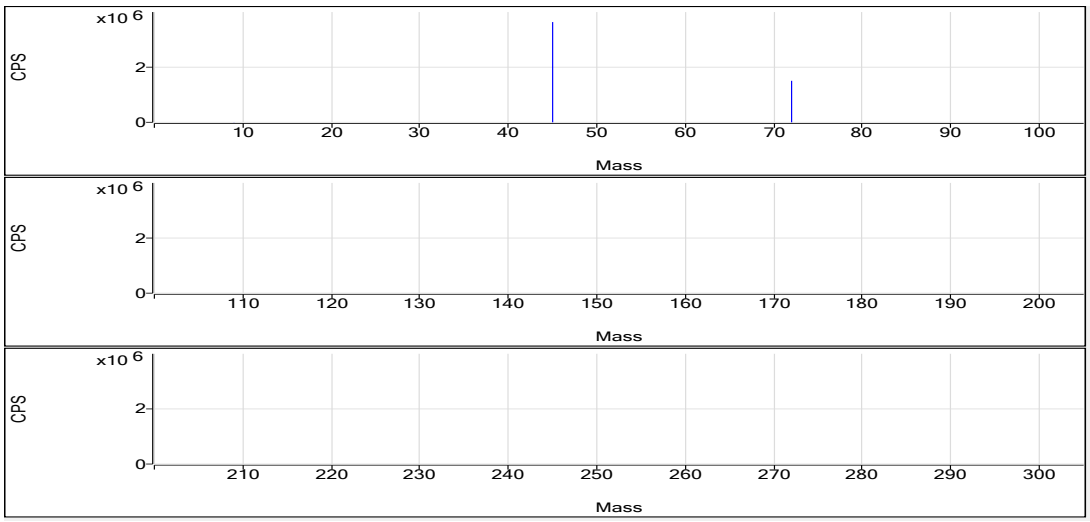
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	2.376	ppb	6.8	4721.43	0.0032	Pulse	0.5000	3
Se	78	72	H2	0.347	ppb	7.5	23.56	0.0001	Pulse	1.5000	3
Na	23	72	He	84.543	ppb	4.4	19089.36	0.2517	Pulse	0.1000	3
Mg	24	72	He	4339.135	ppb	0.8	277838.31	3.6632	Pulse	0.1000	3
Al	27	72	He	40152.242	ppb	1.3	735205.17	9.6936	Pulse	0.1000	3
K	39	72	He	6238.286	ppb	1.1	272168.31	3.5885	Pulse	0.1000	3
Ca	44	72	He	5595.455	ppb	4.4	13303.13	0.1754	Pulse	0.1000	3
Ti	47	72	He	643.116	ppb	5.3	12252.17	0.1616	Pulse	0.1000	3
V	51	72	He	194.542	ppb	1.3	173155.62	2.2830	Pulse	0.5000	3
Cr	52	72	He	128.163	ppb	1.8	149939.81	1.9770	Pulse	0.1000	3
Mn	55	72	He	2110.881	ppb	1.0	946029.28	12.4732	Pulse	0.1000	3
Fe	57	72	He	123089.875	ppb	1.5	2704986.31	35.6649	Pulse	0.1000	3
Co	59	72	He	18.624	ppb	2.3	43331.99	0.5713	Pulse	0.1000	3
Ni	60	72	He	36.164	ppb	0.4	24801.98	0.3270	Pulse	0.1000	3
Cu	63	72	He	20.029	ppb	1.4	38258.01	0.5044	Pulse	0.1000	3
Zn	66	72	He	121.444	ppb	1.7	22995.65	0.3032	Pulse	0.1000	3
As	75	72	He	33.578	ppb	2.6	4462.04	0.0588	Pulse	0.5000	3
Sr	88	115	He	52.697	ppb	1.8	26214.74	0.4127	Pulse	0.1000	3
Mo	98	115	He	1.366	ppb	3.9	1943.53	0.0306	Pulse	0.1000	3
Ag	107	115	He	0.050	ppb	26.6	173.34	0.0027	Pulse	0.1000	3
Cd	111	115	He	0.490	ppb	4.0	152.67	0.0024	Pulse	0.5000	3
Sn	120	115	He	2.014	ppb	2.9	2813.72	0.0443	Pulse	0.1000	3
Sb	121	115	He	1.620	ppb	6.0	1293.45	0.0204	Pulse	0.1000	3
Ba	137	115	He	102.996	ppb	0.3	28640.42	0.4509	Pulse	0.1000	3
Tl	205	209	He	0.322	ppb	15.5	2203.59	0.0099	Pulse	0.1000	3
Pb	208	209	He	31.956	ppb	0.9	259478.26	1.1653	Pulse	0.1000	3
U	238	209	He	3.511	ppb	1.4	32942.57	0.1479	Pulse	0.1000	3

ISTD Table:

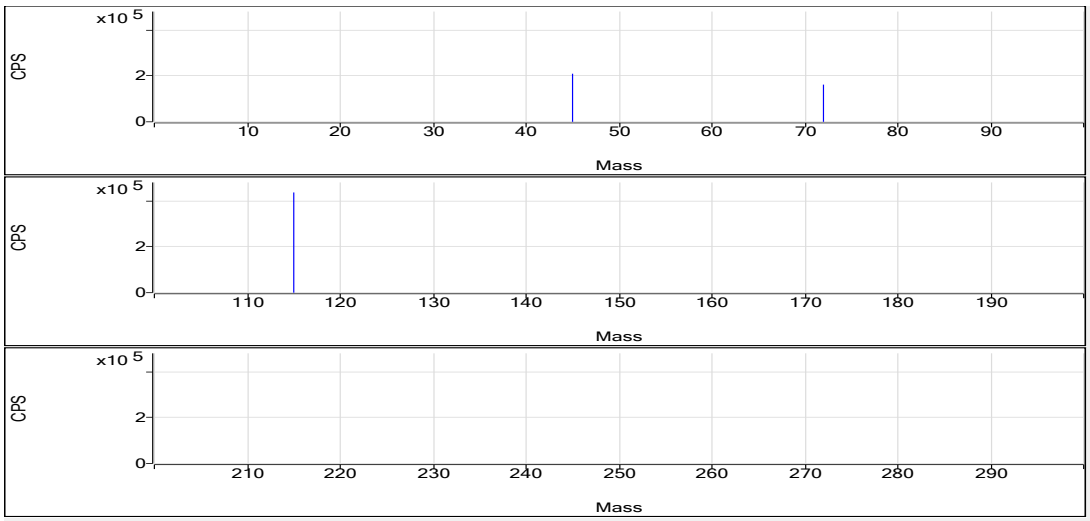
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3601267.86	2.0	111.1	Pulse	0.1000	3
No Gas	Ge	72	1490897.27	1.9	103.6	Pulse	0.1000	3
H2	Sc	45	209233.41	2.8	107.1	Pulse	0.1000	3
H2	Ge	72	161808.34	4.2	99.3	Pulse	0.1000	3
H2	In	115	436007.87	3.1	100.6	Pulse	0.1000	3
He	Sc	45	45511.38	0.9	113.8	Pulse	0.1000	3
He	Ge	72	75845.87	0.2	104.9	Pulse	0.1000	3
He	In	115	63519.45	0.4	98.3	Pulse	0.1000	3
He	Tb	159	294596.60	0.3	103.0	Pulse	0.1000	3
He	Bi	209	222668.76	0.2	100.2	Pulse	0.1000	3

No Gas

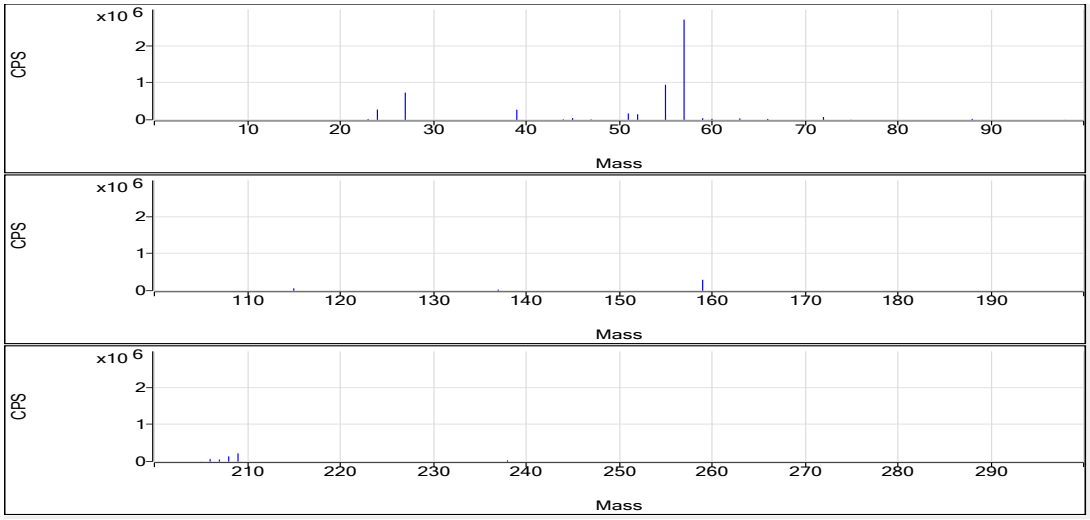


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	2.237	0.003	4510.70	0.0013	4.694E-05
Be	9	1	No Gas	2.337	0.0031	4686.75	0.0013	4.694E-05
Be	9	1	No Gas	2.554	0.0034	4966.85	0.0013	4.694E-05
Se	78	2	H2	0.376	0.0002	24.67	0.0004	1.089E-05
Se	78	2	H2	0.325	0.0001	23.33	0.0004	1.089E-05
Se	78	2	H2	0.339	0.0001	22.67	0.0004	1.089E-05
Na	23	3	He	80.24	0.2443	18532.01	0.0017	0.1065
Na	23	3	He	86.993	0.2559	19453.11	0.0017	0.1065
Na	23	3	He	86.397	0.2549	19282.97	0.0017	0.1065
Mg	24	3	He	4303.982	3.6335	275638.82	0.0008	0.004846
Mg	24	3	He	4373.007	3.6917	280645.56	0.0008	0.004846
Mg	24	3	He	4340.415	3.6643	277230.56	0.0008	0.004846
Al	27	3	He	39835.534	9.6171	729551.40	0.0002	0.001063
Al	27	3	He	39886.563	9.6294	732030.22	0.0002	0.001063
Al	27	3	He	40734.629	9.8342	744033.90	0.0002	0.001063
K	39	3	He	6204.672	3.5699	270813.69	0.0006	0.1436
K	39	3	He	6193.11	3.5635	270900.84	0.0006	0.1436
K	39	3	He	6317.076	3.632	274790.41	0.0006	0.1436
Ca	44	3	He	5374.722	0.1685	12786.06	0	0.001611
Ca	44	3	He	5554.005	0.1741	13236.41	0	0.001611
Ca	44	3	He	5857.637	0.1835	13886.91	0	0.001611
Ti	47	3	He	634.703	0.1594	12095.36	0.0003	0.0002737
Ti	47	3	He	613.937	0.1542	11725.04	0.0003	0.0002737
Ti	47	3	He	680.709	0.171	12936.12	0.0003	0.0002737
V	51	3	He	192.336	2.2572	171231.95	0.0117	0.007326
V	51	3	He	194.093	2.2778	173156.14	0.0117	0.007326
V	51	3	He	197.196	2.3141	175078.77	0.0117	0.007326
Cr	52	3	He	126.845	1.9569	148448.80	0.0152	0.02538
Cr	52	3	He	126.878	1.9574	148801.15	0.0152	0.02538
Cr	52	3	He	130.764	2.0166	152569.48	0.0152	0.02538
Mn	55	3	He	2089.123	12.3447	936466.55	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2111.218	12.4752	948360.61	0.0059	0.01385
Mn	55	3	He	2132.301	12.5996	953260.69	0.0059	0.01385
Fe	57	3	He	121559.383	35.2215	2671884.65	0.0003	0.003918
Fe	57	3	He	122630.437	35.5318	2701122.46	0.0003	0.003918
Fe	57	3	He	125079.805	36.2414	2741951.83	0.0003	0.003918
Co	59	3	He	18.167	0.5574	42282.39	0.0305	0.003084
Co	59	3	He	19.002	0.5828	44308.13	0.0305	0.003084
Co	59	3	He	18.702	0.5737	43405.46	0.0305	0.003084
Ni	60	3	He	36.338	0.3285	24922.19	0.0088	0.009003
Ni	60	3	He	36.019	0.3257	24762.00	0.0088	0.009003
Ni	60	3	He	36.136	0.3268	24721.75	0.0088	0.009003
Cu	63	3	He	19.975	0.5031	38161.35	0.0249	0.004937
Cu	63	3	He	20.329	0.5119	38913.04	0.0249	0.004937
Cu	63	3	He	19.784	0.4983	37699.65	0.0249	0.004937
Zn	66	3	He	120.363	0.3005	22798.84	0.0025	0.004836
Zn	66	3	He	120.211	0.3002	22818.57	0.0025	0.004836
Zn	66	3	He	123.759	0.3089	23369.53	0.0025	0.004836
As	75	3	He	34.349	0.0602	4564.75	0.0017	0.0004347
As	75	3	He	32.642	0.0572	4348.67	0.0017	0.0004347
As	75	3	He	33.742	0.0591	4472.71	0.0017	0.0004347
Sr	88	3	He	52.81	0.4136	26164.55	0.0078	0.0007762
Sr	88	3	He	51.719	0.4051	25804.13	0.0078	0.0007762
Sr	88	3	He	53.561	0.4195	26675.53	0.0078	0.0007762
Mo	98	3	He	1.427	0.0319	2020.22	0.022	0.0005162
Mo	98	3	He	1.331	0.0298	1900.20	0.022	0.0005162
Mo	98	3	He	1.341	0.03	1910.18	0.022	0.0005162
Ag	107	3	He	0.059	0.0032	200.01	0.0455	0.0004641
Ag	107	3	He	0.035	0.002	130.01	0.0455	0.0004641
Ag	107	3	He	0.055	0.003	190.01	0.0455	0.0004641
Cd	111	3	He	0.477	0.0023	148.00	0.0048	5.152E-05
Cd	111	3	He	0.512	0.0025	160.00	0.0048	5.152E-05
Cd	111	3	He	0.481	0.0024	150.00	0.0048	5.152E-05
Sn	120	3	He	2.078	0.0452	2860.41	0.0143	0.01559
Sn	120	3	He	2.001	0.0441	2810.36	0.0143	0.01559
Sn	120	3	He	1.962	0.0436	2770.38	0.0143	0.01559
Sb	121	3	He	1.508	0.019	1200.10	0.0124	0.000258
Sb	121	3	He	1.675	0.021	1340.13	0.0124	0.000258
Sb	121	3	He	1.678	0.0211	1340.11	0.0124	0.000258
Ba	137	3	He	103.344	0.4524	28620.34	0.0044	0.000309
Ba	137	3	He	102.77	0.4499	28660.62	0.0044	0.000309
Ba	137	3	He	102.874	0.4504	28640.30	0.0044	0.000309
Tl	205	3	He	0.377	0.0114	2540.32	0.0276	0.001005
Tl	205	3	He	0.28	0.0088	1950.21	0.0276	0.001005
Tl	205	3	He	0.307	0.0095	2120.25	0.0276	0.001005
Pb	208	3	He	31.643	1.1539	138623.45	0.0364	0.002176
Pb	208	3	He	32.125	1.1715	140602.77	0.0364	0.002176
Pb	208	3	He	32.101	1.1706	139632.94	0.0364	0.002176
U	238	3	He	3.458	0.1457	32391.17	0.0421	0.00024
U	238	3	He	3.519	0.1483	33012.82	0.0421	0.00024
U	238	3	He	3.556	0.1498	33423.73	0.0421	0.00024
Sc	45	1	No Gas			3656093.70		
Sc	45	1	No Gas			3628689.63		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3519020.26		
Ge	72	1	No Gas			1510366.23		
Ge	72	1	No Gas			1503002.32		
Ge	72	1	No Gas			1459323.26		
Sc	45	2	H2			204710.64		
Sc	45	2	H2			215744.86		
Sc	45	2	H2			207244.74		
Ge	72	2	H2			156990.83		
Ge	72	2	H2			169618.10		
Ge	72	2	H2			158816.09		
In	115	2	H2			424839.21		
In	115	2	H2			450771.01		
In	115	2	H2			432413.39		
Sc	45	3	He			45561.23		
Sc	45	3	He			45882.61		
Sc	45	3	He			45090.31		
Ge	72	3	He			75859.58		
Ge	72	3	He			76019.96		
Ge	72	3	He			75658.06		
In	115	3	He			63283.02		
In	115	3	He			63725.36		
In	115	3	He			63615.81		
Tb	159	3	He			294843.12		
Tb	159	3	He			293710.15		
Tb	159	3	He			295236.54		
Bi	209	3	He			222276.15		
Bi	209	3	He			222654.74		
Bi	209	3	He			223075.39		

Quantitation Report

Data File Name	173SMPL.d
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Acq Time	2023-08-10 16:38:04
Sample Name	410-136610-H-7-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

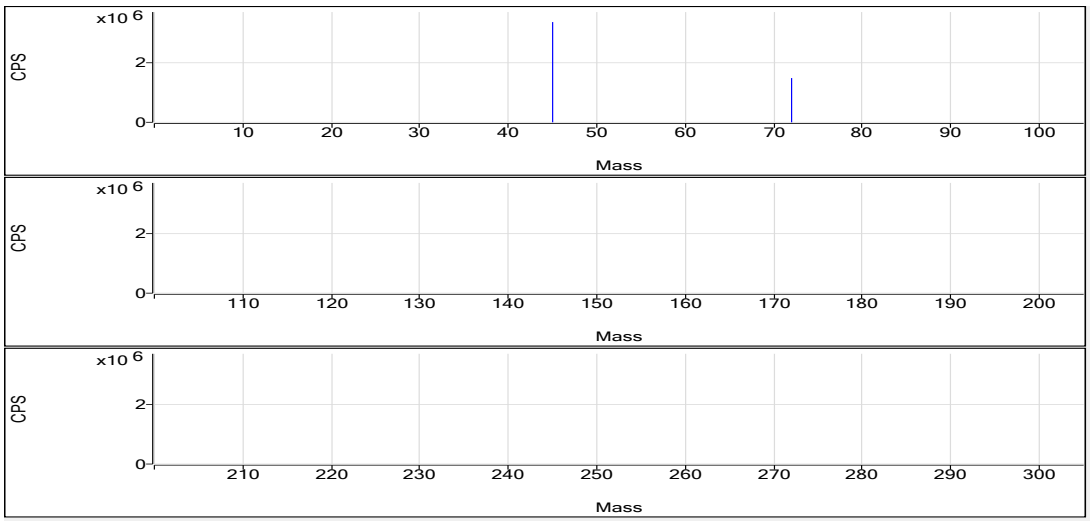
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.413	ppb	14.6	869.36	0.0006	Pulse	0.5000	3
Se	78	72	H2	0.068	ppb	41.9	6.00	0.0000	Pulse	1.5000	3
Na	23	72	He	14.900	ppb	22.5	9957.01	0.1321	Pulse	0.1000	3
Mg	24	72	He	769.563	ppb	0.4	49295.64	0.6537	Pulse	0.1000	3
Al	27	72	He	7112.266	ppb	1.0	129550.76	1.7179	Pulse	0.1000	3
K	39	72	He	1117.072	ppb	2.9	57349.50	0.7605	Pulse	0.1000	3
Ca	44	72	He	917.509	ppb	5.1	2270.26	0.0301	Pulse	0.1000	3
Ti	47	72	He	119.257	ppb	12.5	2276.94	0.0302	Pulse	0.1000	3
V	51	72	He	34.649	ppb	0.7	31118.31	0.4126	Pulse	0.5000	3
Cr	52	72	He	22.060	ppb	1.1	27246.08	0.3613	Pulse	0.1000	3
Mn	55	72	He	376.184	ppb	0.7	168494.94	2.2342	Pulse	0.1000	3
Fe	57	72	He	21811.736	ppb	0.6	476847.12	6.3231	Pulse	0.1000	3
Co	59	72	He	3.216	ppb	3.7	7632.33	0.1012	Pulse	0.1000	3
Ni	60	72	He	7.201	ppb	5.1	5454.53	0.0723	Pulse	0.1000	3
Cu	63	72	He	3.705	ppb	5.1	7338.76	0.0973	Pulse	0.1000	3
Zn	66	72	He	22.613	ppb	2.8	4554.20	0.0604	Pulse	0.1000	3
As	75	72	He	5.757	ppb	7.4	788.03	0.0104	Pulse	0.5000	3
Sr	88	115	He	9.730	ppb	4.1	4891.02	0.0768	Pulse	0.1000	3
Mo	98	115	He	0.298	ppb	14.5	450.02	0.0071	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	96.6	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.077	ppb	47.9	26.67	0.0004	Pulse	0.5000	3
Sn	120	115	He	0.300	ppb	18.9	1263.44	0.0199	Pulse	0.1000	3
Sb	121	115	He	0.355	ppb	15.6	296.68	0.0047	Pulse	0.1000	3
Ba	137	115	He	18.302	ppb	5.7	5111.15	0.0804	Pulse	0.1000	3
Tl	205	209	He	0.070	ppb	14.8	650.04	0.0029	Pulse	0.1000	3
Pb	208	209	He	5.765	ppb	2.5	46723.96	0.2120	Pulse	0.1000	3
U	238	209	He	0.640	ppb	3.1	5991.63	0.0272	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3348215.26	2.0	103.3	Pulse	0.1000	3
No Gas	Ge	72	1477395.24	1.3	102.6	Pulse	0.1000	3
H2	Sc	45	196215.30	3.2	100.4	Pulse	0.1000	3
H2	Ge	72	160610.46	2.2	98.5	Pulse	0.1000	3
H2	In	115	435246.65	2.9	100.4	Pulse	0.1000	3
He	Sc	45	43538.63	0.9	108.9	Pulse	0.1000	3
He	Ge	72	75414.22	0.6	104.3	Pulse	0.1000	3
He	In	115	63628.77	1.6	98.5	Pulse	0.1000	3
He	Tb	159	285801.62	0.3	99.9	Pulse	0.1000	3
He	Bi	209	220430.57	1.1	99.2	Pulse	0.1000	3

No Gas



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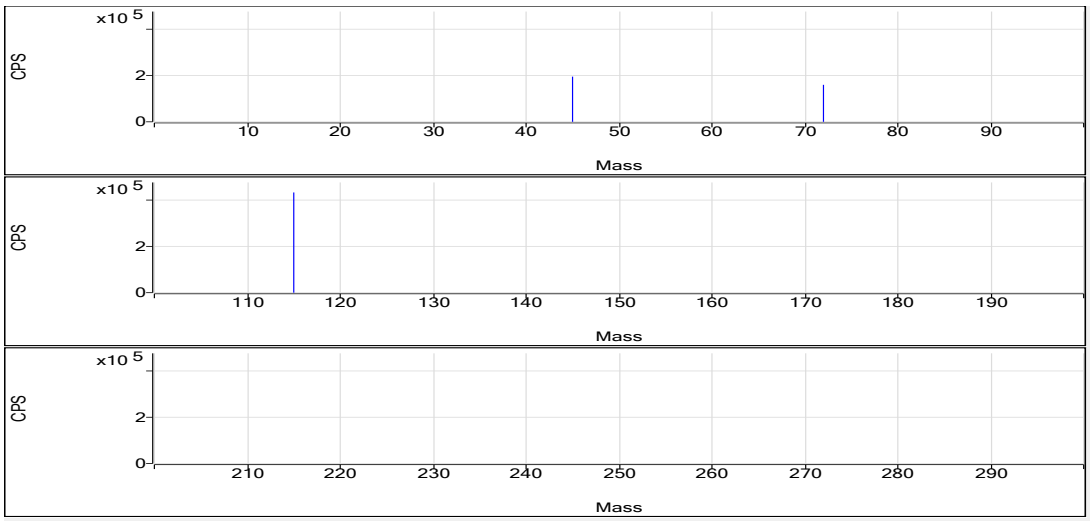
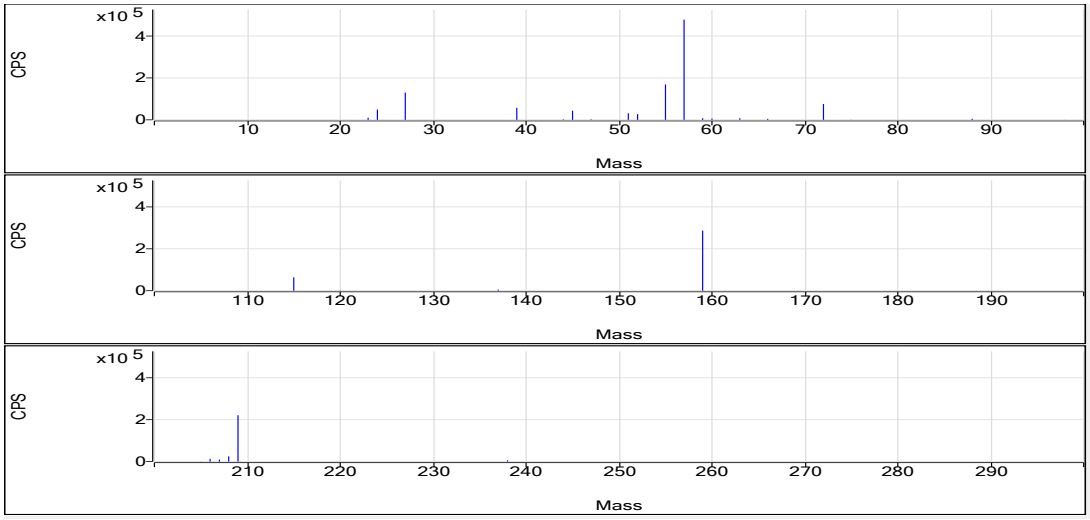


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.345	0.0005	748.02	0.0013	4.694E-05
Be	9	1	No Gas	0.434	0.0006	912.03	0.0013	4.694E-05
Be	9	1	No Gas	0.459	0.0007	948.04	0.0013	4.694E-05
Se	78	2	H2	0.081	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.087	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Na	23	3	He	11.071	0.1255	9523.41	0.0017	0.1065
Na	23	3	He	16.361	0.1346	10103.74	0.0017	0.1065
Na	23	3	He	17.268	0.1361	10243.88	0.0017	0.1065
Mg	24	3	He	768.463	0.6527	49542.78	0.0008	0.004846
Mg	24	3	He	766.87	0.6514	48911.02	0.0008	0.004846
Mg	24	3	He	773.356	0.6569	49433.12	0.0008	0.004846
Al	27	3	He	7028.512	1.6977	128855.57	0.0002	0.001063
Al	27	3	He	7162.484	1.73	129903.07	0.0002	0.001063
Al	27	3	He	7145.802	1.726	129893.65	0.0002	0.001063
K	39	3	He	1100.83	0.7515	57041.21	0.0006	0.1436
K	39	3	He	1154.083	0.7809	58638.02	0.0006	0.1436
K	39	3	He	1096.301	0.749	56369.28	0.0006	0.1436
Ca	44	3	He	877.219	0.0289	2190.26	0	0.001611
Ca	44	3	He	968.761	0.0317	2380.28	0	0.001611
Ca	44	3	He	906.547	0.0298	2240.24	0	0.001611
Ti	47	3	He	134.997	0.0341	2590.33	0.0003	0.0002737
Ti	47	3	He	117.349	0.0297	2230.26	0.0003	0.0002737
Ti	47	3	He	105.424	0.0267	2010.23	0.0003	0.0002737
V	51	3	He	34.468	0.4105	31159.04	0.0117	0.007326
V	51	3	He	34.536	0.4113	30884.51	0.0117	0.007326
V	51	3	He	34.942	0.4161	31311.38	0.0117	0.007326
Cr	52	3	He	21.916	0.3591	27256.21	0.0152	0.02538
Cr	52	3	He	22.329	0.3654	27436.54	0.0152	0.02538
Cr	52	3	He	21.934	0.3594	27045.49	0.0152	0.02538
Mn	55	3	He	377.354	2.2412	170103.51	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	377.975	2.2448	168555.97	0.0059	0.01385
Mn	55	3	He	373.221	2.2168	166825.35	0.0059	0.01385
Fe	57	3	He	21782.16	6.3145	479271.91	0.0003	0.003918
Fe	57	3	He	21965.466	6.3676	478123.63	0.0003	0.003918
Fe	57	3	He	21687.584	6.2871	473145.81	0.0003	0.003918
Co	59	3	He	3.333	0.1048	7952.52	0.0305	0.003084
Co	59	3	He	3.095	0.0975	7322.13	0.0305	0.003084
Co	59	3	He	3.219	0.1013	7622.33	0.0305	0.003084
Ni	60	3	He	7.144	0.0718	5451.19	0.0088	0.009003
Ni	60	3	He	6.869	0.0694	5211.13	0.0088	0.009003
Ni	60	3	He	7.592	0.0758	5701.27	0.0088	0.009003
Cu	63	3	He	3.586	0.0944	7162.04	0.0249	0.004937
Cu	63	3	He	3.921	0.1027	7712.29	0.0249	0.004937
Cu	63	3	He	3.608	0.0949	7141.94	0.0249	0.004937
Zn	66	3	He	22.169	0.0593	4500.85	0.0025	0.004836
Zn	66	3	He	22.322	0.0597	4480.83	0.0025	0.004836
Zn	66	3	He	23.349	0.0622	4680.93	0.0025	0.004836
As	75	3	He	6.22	0.0113	854.03	0.0017	0.0004347
As	75	3	He	5.677	0.0103	774.03	0.0017	0.0004347
As	75	3	He	5.374	0.0098	736.02	0.0017	0.0004347
Sr	88	3	He	9.271	0.0732	4580.94	0.0078	0.0007762
Sr	88	3	He	9.932	0.0784	5001.08	0.0078	0.0007762
Sr	88	3	He	9.987	0.0788	5091.05	0.0078	0.0007762
Mo	98	3	He	0.282	0.0067	420.02	0.022	0.0005162
Mo	98	3	He	0.347	0.0082	520.03	0.022	0.0005162
Mo	98	3	He	0.265	0.0064	410.02	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.017	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.096	0.0005	32.00	0.0048	5.152E-05
Cd	111	3	He	0.1	0.0005	34.00	0.0048	5.152E-05
Cd	111	3	He	0.034	0.0002	14.00	0.0048	5.152E-05
Sn	120	3	He	0.365	0.0208	1300.12	0.0143	0.01559
Sn	120	3	He	0.26	0.0193	1230.10	0.0143	0.01559
Sn	120	3	He	0.275	0.0195	1260.09	0.0143	0.01559
Sb	121	3	He	0.405	0.0053	330.02	0.0124	0.000258
Sb	121	3	He	0.295	0.0039	250.01	0.0124	0.000258
Sb	121	3	He	0.366	0.0048	310.02	0.0124	0.000258
Ba	137	3	He	19.305	0.0848	5301.28	0.0044	0.000309
Ba	137	3	He	18.392	0.0808	5151.14	0.0044	0.000309
Ba	137	3	He	17.209	0.0756	4881.02	0.0044	0.000309
Tl	205	3	He	0.062	0.0027	600.04	0.0276	0.001005
Tl	205	3	He	0.066	0.0028	620.04	0.0276	0.001005
Tl	205	3	He	0.082	0.0033	730.05	0.0276	0.001005
Pb	208	3	He	5.717	0.2103	24623.72	0.0364	0.002176
Pb	208	3	He	5.927	0.2179	25174.53	0.0364	0.002176
Pb	208	3	He	5.65	0.2078	24483.46	0.0364	0.002176
U	238	3	He	0.618	0.0262	5761.54	0.0421	0.00024
U	238	3	He	0.652	0.0277	6041.61	0.0421	0.00024
U	238	3	He	0.652	0.0277	6171.74	0.0421	0.00024
Sc	45	1	No Gas			3391483.07		
Sc	45	1	No Gas			3381252.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3271910.26		
Ge	72	1	No Gas			1496196.07		
Ge	72	1	No Gas			1479083.42		
Ge	72	1	No Gas			1456906.23		
Sc	45	2	H2			189065.13		
Sc	45	2	H2			199500.47		
Sc	45	2	H2			200080.29		
Ge	72	2	H2			156582.95		
Ge	72	2	H2			163054.12		
Ge	72	2	H2			162194.30		
In	115	2	H2			426065.15		
In	115	2	H2			449478.08		
In	115	2	H2			430196.71		
Sc	45	3	He			43976.43		
Sc	45	3	He			43324.74		
Sc	45	3	He			43314.73		
Ge	72	3	He			75899.87		
Ge	72	3	He			75086.53		
Ge	72	3	He			75256.26		
In	115	3	He			62549.96		
In	115	3	He			63786.16		
In	115	3	He			64579.74		
Tb	159	3	He			286149.66		
Tb	159	3	He			284811.07		
Tb	159	3	He			286444.12		
Bi	209	3	He			219745.93		
Bi	209	3	He			218416.13		
Bi	209	3	He			223129.65		

Quantitation Report

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Acq Time	2023-08-10 16:40:05
Sample Name	410-136610-H-3-A @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

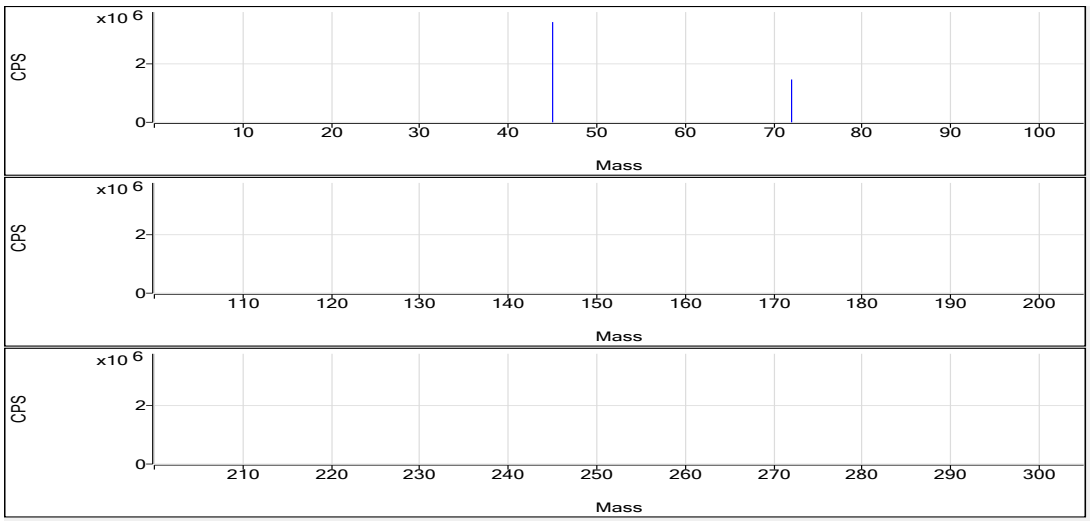
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.126	ppb	3.9	2248.85	0.0015	Pulse	0.5000	3
Se	78	72	H2	0.200	ppb	2.9	14.22	0.0001	Pulse	1.5000	3
Na	23	72	He	118.879	ppb	2.3	23285.37	0.3107	Pulse	0.1000	3
Mg	24	72	He	2547.618	ppb	1.2	161350.85	2.1527	Pulse	0.1000	3
Al	27	72	He	31638.790	ppb	0.6	572519.76	7.6385	Pulse	0.1000	3
K	39	72	He	3123.791	ppb	0.6	140057.65	1.8686	Pulse	0.1000	3
Ca	44	72	He	3838.233	ppb	5.5	9056.43	0.1208	Pulse	0.1000	3
Ti	47	72	He	618.101	ppb	3.3	11638.34	0.1553	Pulse	0.1000	3
V	51	72	He	66.056	ppb	0.6	58465.21	0.7800	Pulse	0.5000	3
Cr	52	72	He	49.790	ppb	0.7	58728.88	0.7836	Pulse	0.1000	3
Mn	55	72	He	163.399	ppb	1.3	73325.03	0.9783	Pulse	0.1000	3
Fe	57	72	He	30139.569	ppb	0.3	654764.22	8.7358	Pulse	0.1000	3
Co	59	72	He	8.020	ppb	3.9	18572.45	0.2478	Pulse	0.1000	3
Ni	60	72	He	18.811	ppb	5.3	13072.96	0.1744	Pulse	0.1000	3
Cu	63	72	He	10.833	ppb	3.3	20618.54	0.2751	Pulse	0.1000	3
Zn	66	72	He	50.838	ppb	2.5	9723.61	0.1297	Pulse	0.1000	3
As	75	72	He	6.056	ppb	8.2	822.03	0.0110	Pulse	0.5000	3
Sr	88	115	He	36.629	ppb	2.4	18242.31	0.2871	Pulse	0.1000	3
Mo	98	115	He	1.258	ppb	9.9	1790.18	0.0282	Pulse	0.1000	3
Ag	107	115	He	0.054	ppb	10.3	186.68	0.0029	Pulse	0.1000	3
Cd	111	115	He	0.105	ppb	38.4	35.33	0.0006	Pulse	0.5000	3
Sn	120	115	He	2.440	ppb	4.4	3200.49	0.0504	Pulse	0.1000	3
Sb	121	115	He	0.327	ppb	23.9	273.35	0.0043	Pulse	0.1000	3
Ba	137	115	He	75.988	ppb	4.5	21123.50	0.3327	Pulse	0.1000	3
Tl	205	209	He	0.309	ppb	13.6	2136.93	0.0095	Pulse	0.1000	3
Pb	208	209	He	29.343	ppb	1.8	239798.27	1.0702	Pulse	0.1000	3
U	238	209	He	2.033	ppb	1.7	19221.53	0.0858	Pulse	0.1000	3

ISTD Table:

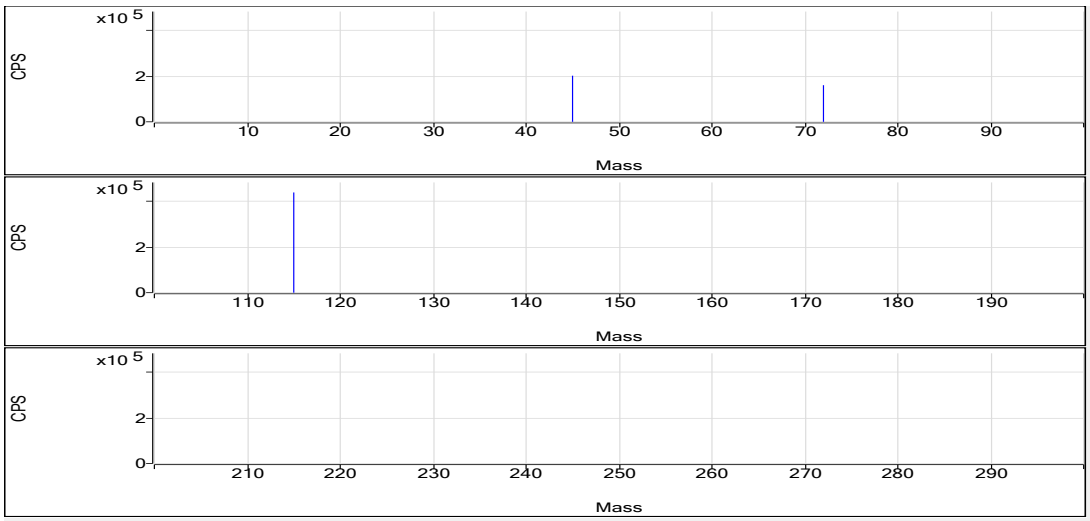
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3448625.47	1.7	106.4	Pulse	0.1000	3
No Gas	Ge	72	1473499.98	1.5	102.3	Pulse	0.1000	3
H2	Sc	45	201689.54	2.3	103.2	Pulse	0.1000	3
H2	Ge	72	160151.41	1.1	98.2	Pulse	0.1000	3
H2	In	115	438330.70	1.4	101.2	Pulse	0.1000	3
He	Sc	45	43786.07	1.3	109.5	Pulse	0.1000	3
He	Ge	72	74951.72	0.1	103.7	Pulse	0.1000	3
He	In	115	63526.62	2.4	98.4	Pulse	0.1000	3
He	Tb	159	291481.50	0.6	101.9	Pulse	0.1000	3
He	Bi	209	224103.55	1.8	100.9	Pulse	0.1000	3

No Gas

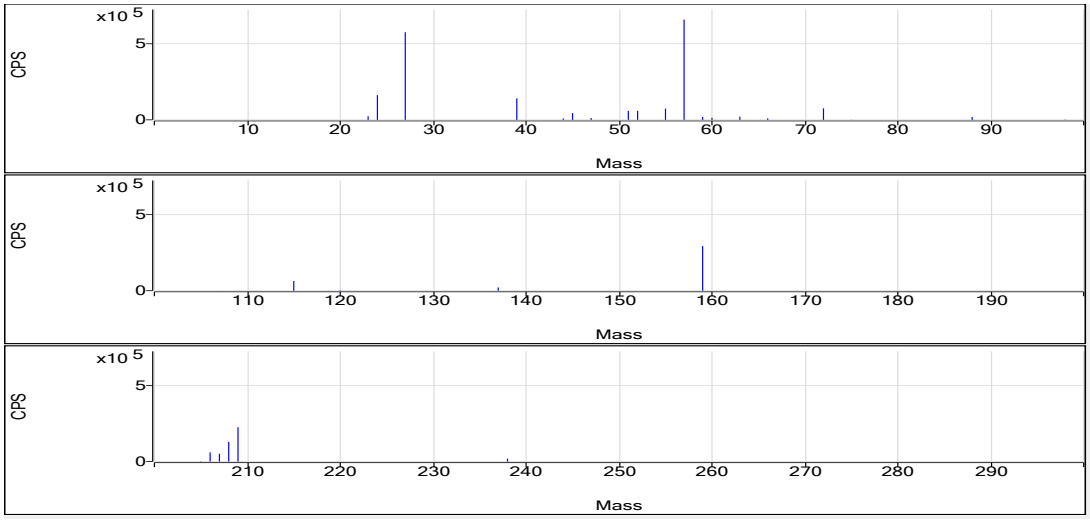


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.079	0.0015	2190.17	0.0013	4.694E-05
Be	9	1	No Gas	1.165	0.0016	2324.19	0.0013	4.694E-05
Be	9	1	No Gas	1.134	0.0015	2232.18	0.0013	4.694E-05
Se	78	2	H2	0.199	0.0001	14.00	0.0004	1.089E-05
Se	78	2	H2	0.206	0.0001	14.67	0.0004	1.089E-05
Se	78	2	H2	0.195	0.0001	14.00	0.0004	1.089E-05
Na	23	3	He	117.249	0.3079	23048.41	0.0017	0.1065
Na	23	3	He	122.093	0.3162	23719.25	0.0017	0.1065
Na	23	3	He	117.295	0.3079	23088.46	0.0017	0.1065
Mg	24	3	He	2574.553	2.1755	162863.72	0.0008	0.004846
Mg	24	3	He	2515.005	2.1253	159427.18	0.0008	0.004846
Mg	24	3	He	2553.295	2.1575	161761.66	0.0008	0.004846
Al	27	3	He	31428.125	7.5876	568041.67	0.0002	0.001063
Al	27	3	He	31772.573	7.6708	575428.66	0.0002	0.001063
Al	27	3	He	31715.672	7.657	574088.94	0.0002	0.001063
K	39	3	He	3118.552	1.8657	139677.26	0.0006	0.1436
K	39	3	He	3143.901	1.8797	141010.00	0.0006	0.1436
K	39	3	He	3108.919	1.8604	139485.70	0.0006	0.1436
Ca	44	3	He	3643.549	0.1148	8592.84	0	0.001611
Ca	44	3	He	4065.536	0.1279	9593.45	0	0.001611
Ca	44	3	He	3805.615	0.1198	8983.00	0	0.001611
Ti	47	3	He	639.959	0.1608	12035.33	0.0003	0.0002737
Ti	47	3	He	615.258	0.1546	11595.01	0.0003	0.0002737
Ti	47	3	He	599.086	0.1505	11284.68	0.0003	0.0002737
V	51	3	He	65.624	0.775	58018.18	0.0117	0.007326
V	51	3	He	66.229	0.7821	58666.60	0.0117	0.007326
V	51	3	He	66.316	0.7831	58710.86	0.0117	0.007326
Cr	52	3	He	49.727	0.7826	58588.20	0.0152	0.02538
Cr	52	3	He	49.465	0.7786	58407.55	0.0152	0.02538
Cr	52	3	He	50.179	0.7895	59190.88	0.0152	0.02538
Mn	55	3	He	165.867	0.9929	74330.25	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	161.757	0.9686	72661.04	0.0059	0.01385
Mn	55	3	He	162.575	0.9734	72983.81	0.0059	0.01385
Fe	57	3	He	30027.043	8.7032	651557.37	0.0003	0.003918
Fe	57	3	He	30219.025	8.7588	657048.35	0.0003	0.003918
Fe	57	3	He	30172.64	8.7454	655686.94	0.0003	0.003918
Co	59	3	He	7.701	0.2381	17821.60	0.0305	0.003084
Co	59	3	He	8.324	0.2571	19283.22	0.0305	0.003084
Co	59	3	He	8.035	0.2482	18612.53	0.0305	0.003084
Ni	60	3	He	18.125	0.1684	12605.87	0.0088	0.009003
Ni	60	3	He	19.953	0.1845	13837.05	0.0088	0.009003
Ni	60	3	He	18.355	0.1704	12775.95	0.0088	0.009003
Cu	63	3	He	10.946	0.2779	20805.41	0.0249	0.004937
Cu	63	3	He	11.117	0.2822	21165.99	0.0249	0.004937
Cu	63	3	He	10.437	0.2652	19884.21	0.0249	0.004937
Zn	66	3	He	51.933	0.1324	9913.80	0.0025	0.004836
Zn	66	3	He	51.172	0.1306	9793.65	0.0025	0.004836
Zn	66	3	He	49.408	0.1262	9463.38	0.0025	0.004836
As	75	3	He	6.34	0.0115	858.03	0.0017	0.0004347
As	75	3	He	5.484	0.01	748.02	0.0017	0.0004347
As	75	3	He	6.346	0.0115	860.03	0.0017	0.0004347
Sr	88	3	He	36.082	0.2828	18232.35	0.0078	0.0007762
Sr	88	3	He	37.662	0.2952	18993.32	0.0078	0.0007762
Sr	88	3	He	36.144	0.2833	17501.25	0.0078	0.0007762
Mo	98	3	He	1.139	0.0256	1650.15	0.022	0.0005162
Mo	98	3	He	1.247	0.028	1800.18	0.022	0.0005162
Mo	98	3	He	1.388	0.0311	1920.22	0.022	0.0005162
Ag	107	3	He	0.051	0.0028	180.01	0.0455	0.0004641
Ag	107	3	He	0.051	0.0028	180.01	0.0455	0.0004641
Ag	107	3	He	0.061	0.0032	200.01	0.0455	0.0004641
Cd	111	3	He	0.151	0.0008	50.00	0.0048	5.152E-05
Cd	111	3	He	0.086	0.0005	30.00	0.0048	5.152E-05
Cd	111	3	He	0.077	0.0004	26.00	0.0048	5.152E-05
Sn	120	3	He	2.563	0.0521	3360.54	0.0143	0.01559
Sn	120	3	He	2.363	0.0493	3170.50	0.0143	0.01559
Sn	120	3	He	2.393	0.0497	3070.44	0.0143	0.01559
Sb	121	3	He	0.254	0.0034	220.01	0.0124	0.000258
Sb	121	3	He	0.317	0.0042	270.01	0.0124	0.000258
Sb	121	3	He	0.41	0.0053	330.02	0.0124	0.000258
Ba	137	3	He	75.023	0.3285	21177.06	0.0044	0.000309
Ba	137	3	He	73.168	0.3204	20615.97	0.0044	0.000309
Ba	137	3	He	79.773	0.3493	21577.46	0.0044	0.000309
Tl	205	3	He	0.312	0.0096	2190.26	0.0276	0.001005
Tl	205	3	He	0.265	0.0083	1880.21	0.0276	0.001005
Tl	205	3	He	0.349	0.0107	2340.31	0.0276	0.001005
Pb	208	3	He	28.737	1.0481	127441.43	0.0364	0.002176
Pb	208	3	He	29.638	1.0809	131370.96	0.0364	0.002176
Pb	208	3	He	29.655	1.0815	127593.66	0.0364	0.002176
U	238	3	He	2.042	0.0861	19575.46	0.0421	0.00024
U	238	3	He	2.061	0.0869	19595.46	0.0421	0.00024
U	238	3	He	1.995	0.0842	18493.66	0.0421	0.00024
Sc	45	1	No Gas			3507332.76		
Sc	45	1	No Gas			3444832.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3393711.20		
Ge	72	1	No Gas			1495002.48		
Ge	72	1	No Gas			1473270.92		
Ge	72	1	No Gas			1452226.54		
Sc	45	2	H2			196398.04		
Sc	45	2	H2			205116.07		
Sc	45	2	H2			203554.51		
Ge	72	2	H2			158170.98		
Ge	72	2	H2			160858.83		
Ge	72	2	H2			161424.43		
In	115	2	H2			435009.33		
In	115	2	H2			445295.74		
In	115	2	H2			434687.02		
Sc	45	3	He			44448.06		
Sc	45	3	He			43344.35		
Sc	45	3	He			43565.79		
Ge	72	3	He			74864.18		
Ge	72	3	He			75015.69		
Ge	72	3	He			74975.29		
In	115	3	He			64488.74		
In	115	3	He			64368.61		
In	115	3	He			61797.41		
Tb	159	3	He			290045.15		
Tb	159	3	He			290894.68		
Tb	159	3	He			293504.66		
Bi	209	3	He			227248.79		
Bi	209	3	He			225377.67		
Bi	209	3	He			219684.18		

Quantitation Report

Data File Name	175SMPL.d
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Acq Time	2023-08-10 16:42:05
Sample Name	410-136610-H-3-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

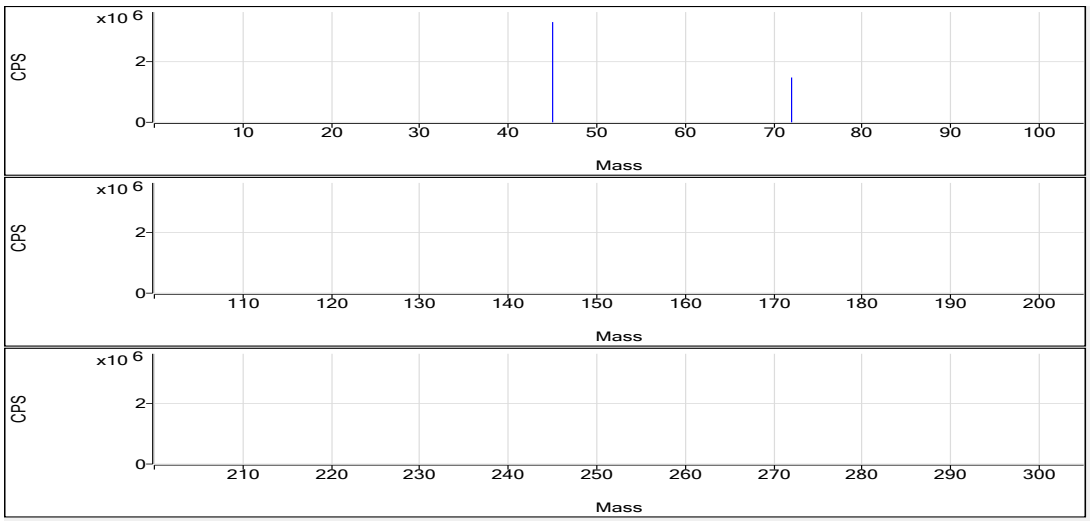
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.178	ppb	14.2	414.01	0.0003	Pulse	0.5000	3
Se	78	72	H2	0.068	ppb	16.4	6.00	0.0000	Pulse	1.5000	3
Na	23	72	He	22.988	ppb	10.8	10884.27	0.1459	Pulse	0.1000	3
Mg	24	72	He	483.126	ppb	0.6	30735.69	0.4122	Pulse	0.1000	3
Al	27	72	He	6000.999	ppb	0.8	108106.34	1.4497	Pulse	0.1000	3
K	39	72	He	585.114	ppb	3.1	34798.46	0.4667	Pulse	0.1000	3
Ca	44	72	He	676.534	ppb	11.6	1686.83	0.0226	Pulse	0.1000	3
Ti	47	72	He	114.087	ppb	2.6	2153.56	0.0289	Pulse	0.1000	3
V	51	72	He	12.389	ppb	1.3	11352.44	0.1523	Pulse	0.5000	3
Cr	52	72	He	9.389	ppb	6.1	12549.13	0.1684	Pulse	0.1000	3
Mn	55	72	He	29.323	ppb	0.8	13940.49	0.1869	Pulse	0.1000	3
Fe	57	72	He	5771.010	ppb	1.2	124960.25	1.6759	Pulse	0.1000	3
Co	59	72	He	1.592	ppb	6.2	3850.64	0.0517	Pulse	0.1000	3
Ni	60	72	He	4.042	ppb	6.2	3320.51	0.0445	Pulse	0.1000	3
Cu	63	72	He	2.137	ppb	7.2	4340.82	0.0582	Pulse	0.1000	3
Zn	66	72	He	14.261	ppb	7.6	2973.75	0.0399	Pulse	0.1000	3
As	75	72	He	1.201	ppb	23.7	188.00	0.0025	Pulse	0.5000	3
Sr	88	115	He	7.066	ppb	4.8	3573.91	0.0560	Pulse	0.1000	3
Mo	98	115	He	0.273	ppb	4.4	416.69	0.0065	Pulse	0.1000	3
Ag	107	115	He	0.010	ppb	56.6	60.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.026	ppb	58.2	11.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.445	ppb	12.9	1400.13	0.0219	Pulse	0.1000	3
Sb	121	115	He	0.038	ppb	18.2	46.67	0.0007	Pulse	0.1000	3
Ba	137	115	He	14.208	ppb	3.4	3987.41	0.0625	Pulse	0.1000	3
Tl	205	209	He	0.058	ppb	17.2	576.70	0.0026	Pulse	0.1000	3
Pb	208	209	He	5.533	ppb	2.6	45198.50	0.2036	Pulse	0.1000	3
U	238	209	He	0.373	ppb	6.5	3537.30	0.0159	Pulse	0.1000	3

ISTD Table:

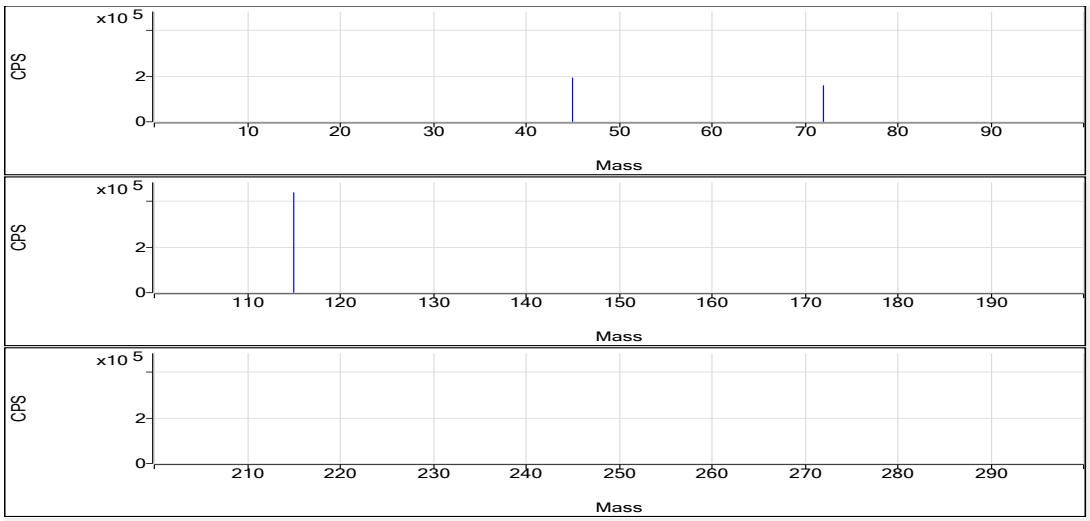
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3307503.28	2.1	102.0	Pulse	0.1000	3
No Gas	Ge	72	1478202.58	1.7	102.7	Pulse	0.1000	3
H2	Sc	45	193079.62	2.2	98.8	Pulse	0.1000	3
H2	Ge	72	159847.69	0.7	98.1	Pulse	0.1000	3
H2	In	115	438927.09	0.6	101.3	Pulse	0.1000	3
He	Sc	45	42188.12	1.9	105.5	Pulse	0.1000	3
He	Ge	72	74569.95	1.4	103.2	Pulse	0.1000	3
He	In	115	63822.28	1.0	98.8	Pulse	0.1000	3
He	Tb	159	286220.55	0.5	100.1	Pulse	0.1000	3
He	Bi	209	222064.88	1.0	99.9	Pulse	0.1000	3

No Gas

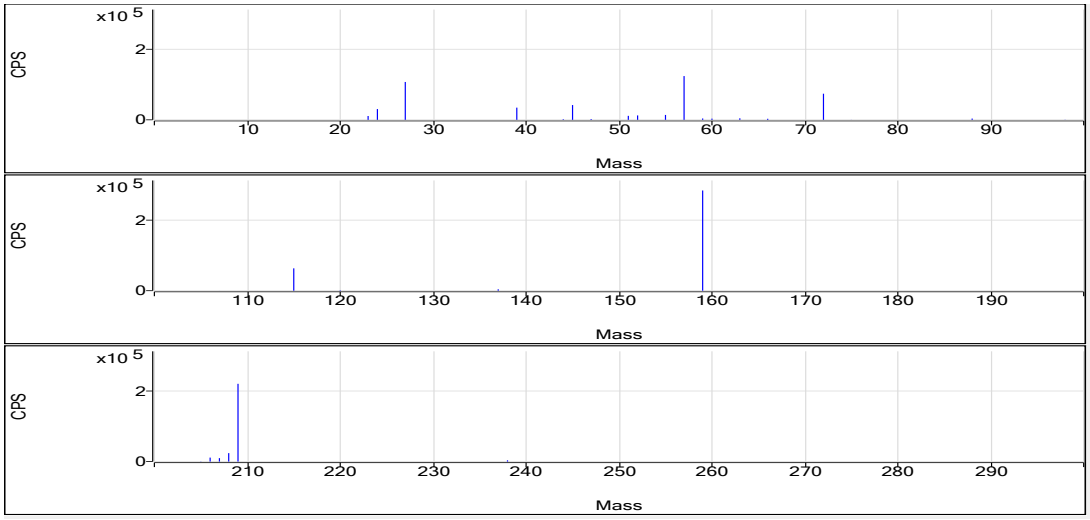


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.156	0.0003	378.01	0.0013	4.694E-05
Be	9	1	No Gas	0.172	0.0003	404.01	0.0013	4.694E-05
Be	9	1	No Gas	0.205	0.0003	460.01	0.0013	4.694E-05
Se	78	2	H2	0.069	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.057	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.079	0	6.67	0.0004	1.089E-05
Na	23	3	He	23.205	0.1463	10754.15	0.0017	0.1065
Na	23	3	He	25.345	0.15	11334.66	0.0017	0.1065
Na	23	3	He	20.415	0.1415	10564.00	0.0017	0.1065
Mg	24	3	He	484.222	0.4131	30361.66	0.0008	0.004846
Mg	24	3	He	485.114	0.4138	31273.39	0.0008	0.004846
Mg	24	3	He	480.042	0.4096	30572.02	0.0008	0.004846
Al	27	3	He	5991.592	1.4474	106381.10	0.0002	0.001063
Al	27	3	He	6051.051	1.4618	110461.03	0.0002	0.001063
Al	27	3	He	5960.353	1.4399	107476.89	0.0002	0.001063
K	39	3	He	602.785	0.4765	35022.29	0.0006	0.1436
K	39	3	He	566.427	0.4564	34491.21	0.0006	0.1436
K	39	3	He	586.13	0.4673	34881.87	0.0006	0.1436
Ca	44	3	He	727.944	0.0242	1780.18	0	0.001611
Ca	44	3	He	715.105	0.0238	1800.17	0	0.001611
Ca	44	3	He	586.552	0.0198	1480.13	0	0.001611
Ti	47	3	He	115.025	0.0291	2140.23	0.0003	0.0002737
Ti	47	3	He	110.789	0.0281	2120.23	0.0003	0.0002737
Ti	47	3	He	116.447	0.0295	2200.22	0.0003	0.0002737
V	51	3	He	12.473	0.1532	11262.36	0.0117	0.007326
V	51	3	He	12.205	0.1501	11342.44	0.0117	0.007326
V	51	3	He	12.49	0.1534	11452.52	0.0117	0.007326
Cr	52	3	He	9.793	0.1745	12825.96	0.0152	0.02538
Cr	52	3	He	8.731	0.1583	11965.33	0.0152	0.02538
Cr	52	3	He	9.644	0.1722	12856.10	0.0152	0.02538
Mn	55	3	He	29.064	0.1854	13626.84	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	29.528	0.1881	14217.48	0.0059	0.01385
Mn	55	3	He	29.377	0.1873	13977.16	0.0059	0.01385
Fe	57	3	He	5790.697	1.6816	123592.11	0.0003	0.003918
Fe	57	3	He	5696.242	1.6542	125004.10	0.0003	0.003918
Fe	57	3	He	5826.091	1.6918	126284.54	0.0003	0.003918
Co	59	3	He	1.705	0.0551	4050.71	0.0305	0.003084
Co	59	3	He	1.547	0.0503	3800.61	0.0305	0.003084
Co	59	3	He	1.524	0.0496	3700.61	0.0305	0.003084
Ni	60	3	He	4.331	0.0471	3460.53	0.0088	0.009003
Ni	60	3	He	3.868	0.043	3250.50	0.0088	0.009003
Ni	60	3	He	3.928	0.0435	3250.50	0.0088	0.009003
Cu	63	3	He	2.198	0.0597	4390.79	0.0249	0.004937
Cu	63	3	He	1.962	0.0539	4070.76	0.0249	0.004937
Cu	63	3	He	2.252	0.0611	4560.92	0.0249	0.004937
Zn	66	3	He	13.429	0.0378	2780.37	0.0025	0.004836
Zn	66	3	He	13.87	0.0389	2940.42	0.0025	0.004836
Zn	66	3	He	15.484	0.0429	3200.46	0.0025	0.004836
As	75	3	He	1.502	0.003	224.00	0.0017	0.0004347
As	75	3	He	1.165	0.0025	186.00	0.0017	0.0004347
As	75	3	He	0.936	0.0021	154.00	0.0017	0.0004347
Sr	88	3	He	6.901	0.0547	3480.54	0.0078	0.0007762
Sr	88	3	He	6.842	0.0543	3500.59	0.0078	0.0007762
Sr	88	3	He	7.455	0.0591	3740.61	0.0078	0.0007762
Mo	98	3	He	0.269	0.0064	410.02	0.022	0.0005162
Mo	98	3	He	0.286	0.0068	440.03	0.022	0.0005162
Mo	98	3	He	0.263	0.0063	400.02	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Sn	120	3	He	0.44	0.0219	1390.12	0.0143	0.01559
Sn	120	3	He	0.505	0.0228	1470.13	0.0143	0.01559
Sn	120	3	He	0.391	0.0212	1340.13	0.0143	0.01559
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.042	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	14.307	0.0629	4000.76	0.0044	0.000309
Ba	137	3	He	14.635	0.0643	4150.80	0.0044	0.000309
Ba	137	3	He	13.68	0.0602	3810.67	0.0044	0.000309
Tl	205	3	He	0.05	0.0024	530.03	0.0276	0.001005
Tl	205	3	He	0.054	0.0025	550.03	0.0276	0.001005
Tl	205	3	He	0.069	0.0029	650.04	0.0276	0.001005
Pb	208	3	He	5.446	0.2004	24262.95	0.0364	0.002176
Pb	208	3	He	5.698	0.2096	24052.73	0.0364	0.002176
Pb	208	3	He	5.455	0.2007	23962.34	0.0364	0.002176
U	238	3	He	0.399	0.017	3790.69	0.0421	0.00024
U	238	3	He	0.351	0.015	3300.58	0.0421	0.00024
U	238	3	He	0.368	0.0157	3520.63	0.0421	0.00024
Sc	45	1	No Gas			3369310.57		
Sc	45	1	No Gas			3322887.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3230311.83		
Ge	72	1	No Gas			1502133.73		
Ge	72	1	No Gas			1479581.23		
Ge	72	1	No Gas			1452892.79		
Sc	45	2	H2			189084.61		
Sc	45	2	H2			197492.07		
Sc	45	2	H2			192662.17		
Ge	72	2	H2			158856.39		
Ge	72	2	H2			161101.87		
Ge	72	2	H2			159584.81		
In	115	2	H2			436256.95		
In	115	2	H2			441889.64		
In	115	2	H2			438634.68		
Sc	45	3	He			41389.35		
Sc	45	3	He			42191.01		
Sc	45	3	He			42984.00		
Ge	72	3	He			73498.15		
Ge	72	3	He			75567.59		
Ge	72	3	He			74644.12		
In	115	3	He			63614.68		
In	115	3	He			64530.38		
In	115	3	He			63354.54		
Tb	159	3	He			287781.60		
Tb	159	3	He			285167.26		
Tb	159	3	He			285712.79		
Bi	209	3	He			222569.18		
Bi	209	3	He			219733.49		
Bi	209	3	He			223891.97		

Quantitation Report

Data File Name	176SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 16:44:06
Sample Name	410-136610-H-6-A @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

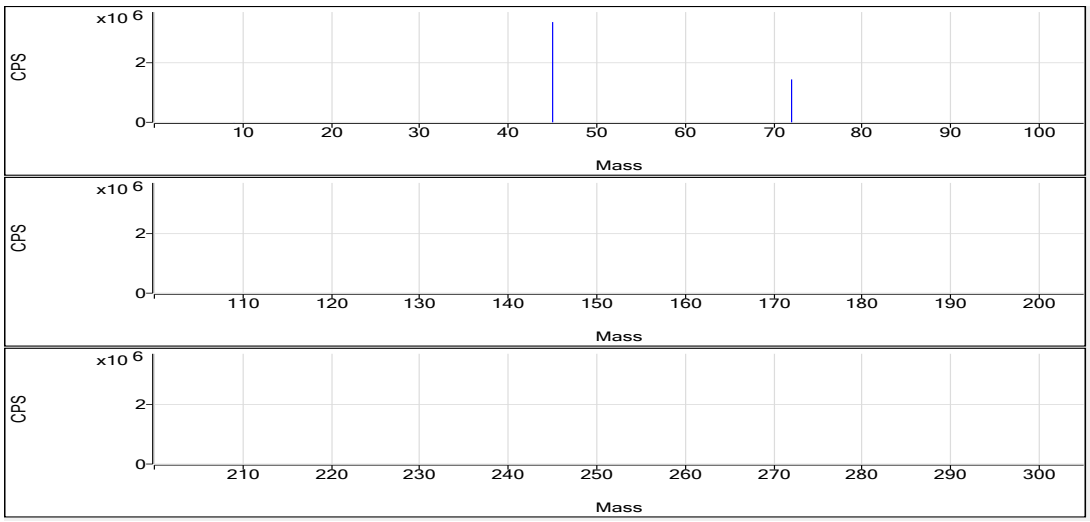
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.272	ppb	5.4	2498.22	0.0017	Pulse	0.5000	3
Se	78	72	H2	0.264	ppb	14.4	18.45	0.0001	Pulse	1.5000	3
Na	23	72	He	81.176	ppb	2.1	18248.34	0.2459	Pulse	0.1000	3
Mg	24	72	He	2843.985	ppb	1.0	178286.70	2.4026	Pulse	0.1000	3
Al	27	72	He	30458.766	ppb	1.3	545667.61	7.3536	Pulse	0.1000	3
K	39	72	He	3623.596	ppb	2.3	159120.72	2.1446	Pulse	0.1000	3
Ca	44	72	He	3404.446	ppb	1.6	7965.78	0.1074	Pulse	0.1000	3
Ti	47	72	He	584.071	ppb	2.9	10887.72	0.1467	Pulse	0.1000	3
V	51	72	He	69.460	ppb	0.5	60837.48	0.8199	Pulse	0.5000	3
Cr	52	72	He	50.994	ppb	1.7	59498.60	0.8019	Pulse	0.1000	3
Mn	55	72	He	272.574	ppb	1.5	120411.69	1.6227	Pulse	0.1000	3
Fe	57	72	He	43282.728	ppb	0.8	930780.82	12.5436	Pulse	0.1000	3
Co	59	72	He	10.563	ppb	1.9	24144.12	0.3254	Pulse	0.1000	3
Ni	60	72	He	29.203	ppb	2.9	19720.65	0.2658	Pulse	0.1000	3
Cu	63	72	He	19.596	ppb	2.0	36623.99	0.4936	Pulse	0.1000	3
Zn	66	72	He	70.318	ppb	2.8	13176.40	0.1776	Pulse	0.1000	3
As	75	72	He	17.107	ppb	1.9	2240.19	0.0302	Pulse	0.5000	3
Sr	88	115	He	34.326	ppb	2.6	17134.10	0.2691	Pulse	0.1000	3
Mo	98	115	He	1.070	ppb	2.6	1533.47	0.0241	Pulse	0.1000	3
Ag	107	115	He	0.059	ppb	15.5	200.01	0.0031	Pulse	0.1000	3
Cd	111	115	He	0.177	ppb	14.9	57.33	0.0009	Pulse	0.5000	3
Sn	120	115	He	2.234	ppb	9.1	3020.44	0.0474	Pulse	0.1000	3
Sb	121	115	He	0.465	ppb	12.7	383.35	0.0060	Pulse	0.1000	3
Ba	137	115	He	73.222	ppb	1.9	20415.70	0.3206	Pulse	0.1000	3
Tl	205	209	He	0.258	ppb	0.3	1806.85	0.0082	Pulse	0.1000	3
Pb	208	209	He	31.810	ppb	0.6	257127.32	1.1600	Pulse	0.1000	3
U	238	209	He	2.694	ppb	0.4	25172.02	0.1136	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3398282.35	2.0	104.8	Pulse	0.1000	3
No Gas	Ge	72	1454363.99	1.4	101.0	Pulse	0.1000	3
H2	Sc	45	202826.52	2.2	103.8	Pulse	0.1000	3
H2	Ge	72	162210.21	1.8	99.5	Pulse	0.1000	3
H2	In	115	436747.08	1.5	100.8	Pulse	0.1000	3
He	Sc	45	43130.95	1.1	107.9	Pulse	0.1000	3
He	Ge	72	74207.89	1.3	102.7	Pulse	0.1000	3
He	In	115	63671.63	0.1	98.6	Pulse	0.1000	3
He	Tb	159	287581.68	0.2	100.6	Pulse	0.1000	3
He	Bi	209	221669.18	0.4	99.8	Pulse	0.1000	3

No Gas



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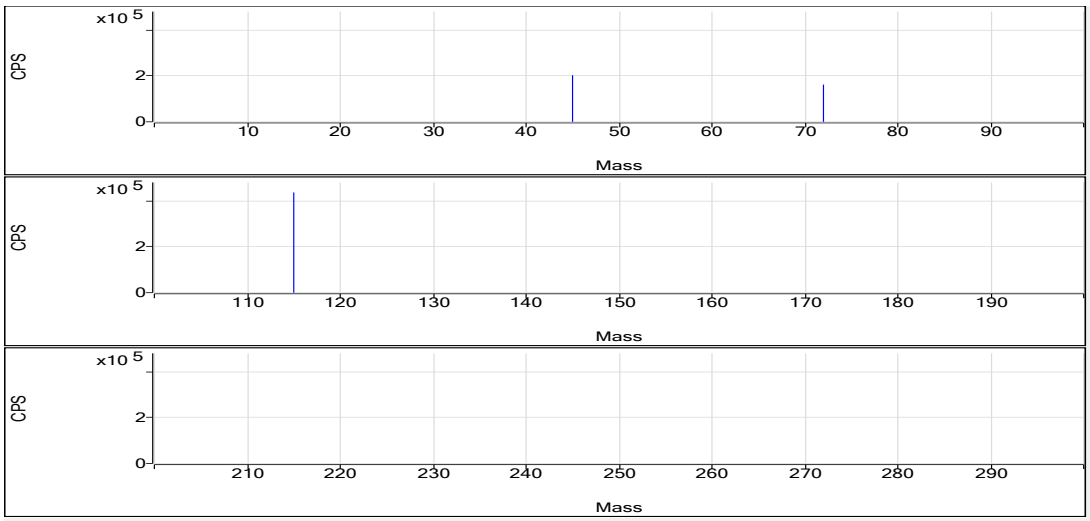
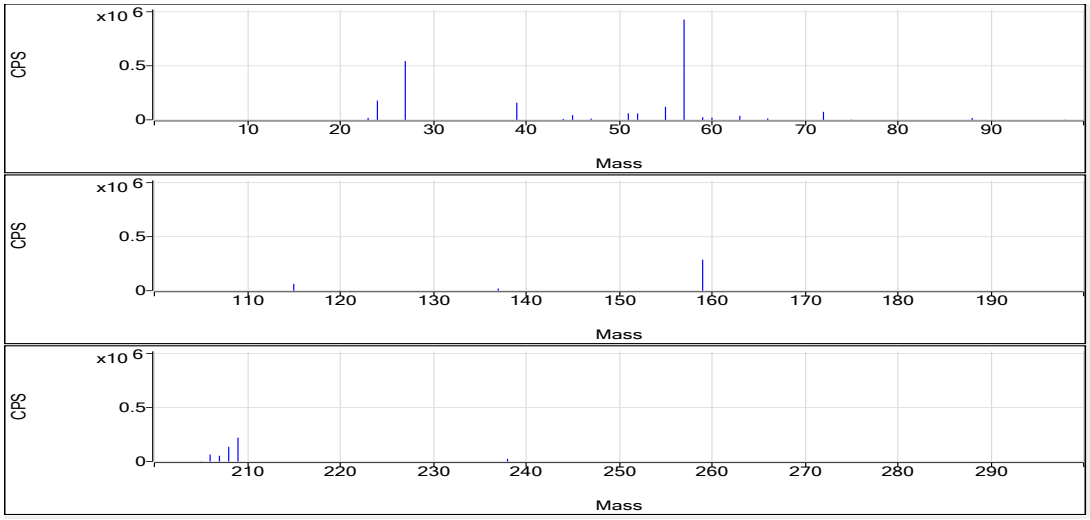


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.194	0.0016	2388.20	0.0013	4.694E-05
Be	9	1	No Gas	1.305	0.0018	2544.22	0.0013	4.694E-05
Be	9	1	No Gas	1.318	0.0018	2562.23	0.0013	4.694E-05
Se	78	2	H2	0.303	0.0001	20.67	0.0004	1.089E-05
Se	78	2	H2	0.262	0.0001	18.67	0.0004	1.089E-05
Se	78	2	H2	0.227	0.0001	16.00	0.0004	1.089E-05
Na	23	3	He	79.922	0.2437	17851.20	0.0017	0.1065
Na	23	3	He	83.065	0.2491	18511.98	0.0017	0.1065
Na	23	3	He	80.541	0.2448	18381.84	0.0017	0.1065
Mg	24	3	He	2868.442	2.4232	177468.42	0.0008	0.004846
Mg	24	3	He	2814.617	2.3779	176678.08	0.0008	0.004846
Mg	24	3	He	2848.896	2.4068	180713.59	0.0008	0.004846
Al	27	3	He	30834.226	7.4443	545189.68	0.0002	0.001063
Al	27	3	He	30047.303	7.2543	539005.70	0.0002	0.001063
Al	27	3	He	30494.769	7.3623	552807.45	0.0002	0.001063
K	39	3	He	3715.693	2.1955	160789.33	0.0006	0.1436
K	39	3	He	3600.067	2.1316	158384.01	0.0006	0.1436
K	39	3	He	3555.027	2.1068	158188.83	0.0006	0.1436
Ca	44	3	He	3417.748	0.1078	7892.35	0	0.001611
Ca	44	3	He	3450.428	0.1088	8082.57	0	0.001611
Ca	44	3	He	3345.16	0.1055	7922.41	0	0.001611
Ti	47	3	He	592.632	0.1489	10904.39	0.0003	0.0002737
Ti	47	3	He	594.857	0.1495	11104.46	0.0003	0.0002737
Ti	47	3	He	564.724	0.1419	10654.32	0.0003	0.0002737
V	51	3	He	69.769	0.8235	60307.29	0.0117	0.007326
V	51	3	He	69.492	0.8202	60943.95	0.0117	0.007326
V	51	3	He	69.12	0.8159	61261.19	0.0117	0.007326
Cr	52	3	He	51.833	0.8147	59662.18	0.0152	0.02538
Cr	52	3	He	51.03	0.8024	59622.29	0.0152	0.02538
Cr	52	3	He	50.12	0.7886	59211.34	0.0152	0.02538
Mn	55	3	He	276.054	1.6432	120344.50	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	268.041	1.5959	118580.81	0.0059	0.01385
Mn	55	3	He	273.629	1.6289	122309.77	0.0059	0.01385
Fe	57	3	He	43686.084	12.6604	927200.69	0.0003	0.003918
Fe	57	3	He	42994.398	12.46	925798.19	0.0003	0.003918
Fe	57	3	He	43167.703	12.5102	939343.58	0.0003	0.003918
Co	59	3	He	10.492	0.3232	23670.07	0.0305	0.003084
Co	59	3	He	10.791	0.3323	24691.79	0.0305	0.003084
Co	59	3	He	10.406	0.3206	24070.51	0.0305	0.003084
Ni	60	3	He	29.495	0.2684	19653.90	0.0088	0.009003
Ni	60	3	He	29.87	0.2717	20184.67	0.0088	0.009003
Ni	60	3	He	28.243	0.2573	19323.37	0.0088	0.009003
Cu	63	3	He	20.022	0.5042	36927.88	0.0249	0.004937
Cu	63	3	He	19.283	0.4858	36095.93	0.0249	0.004937
Cu	63	3	He	19.481	0.4907	36848.16	0.0249	0.004937
Zn	66	3	He	71.32	0.1801	13186.32	0.0025	0.004836
Zn	66	3	He	71.585	0.1807	13426.63	0.0025	0.004836
Zn	66	3	He	68.05	0.172	12916.26	0.0025	0.004836
As	75	3	He	16.883	0.0298	2182.18	0.0017	0.0004347
As	75	3	He	17.473	0.0308	2290.20	0.0017	0.0004347
As	75	3	He	16.966	0.0299	2248.19	0.0017	0.0004347
Sr	88	3	He	33.368	0.2616	16670.19	0.0078	0.0007762
Sr	88	3	He	34.461	0.2702	17190.81	0.0078	0.0007762
Sr	88	3	He	35.148	0.2755	17541.30	0.0078	0.0007762
Mo	98	3	He	1.096	0.0246	1570.14	0.022	0.0005162
Mo	98	3	He	1.04	0.0234	1490.12	0.022	0.0005162
Mo	98	3	He	1.075	0.0242	1540.14	0.022	0.0005162
Ag	107	3	He	0.062	0.0033	210.01	0.0455	0.0004641
Ag	107	3	He	0.066	0.0035	220.01	0.0455	0.0004641
Ag	107	3	He	0.048	0.0027	170.01	0.0455	0.0004641
Cd	111	3	He	0.192	0.001	62.00	0.0048	5.152E-05
Cd	111	3	He	0.192	0.001	62.00	0.0048	5.152E-05
Cd	111	3	He	0.146	0.0008	48.00	0.0048	5.152E-05
Sn	120	3	He	2.429	0.0502	3200.49	0.0143	0.01559
Sn	120	3	He	2.247	0.0476	3030.45	0.0143	0.01559
Sn	120	3	He	2.025	0.0445	2830.39	0.0143	0.01559
Sb	121	3	He	0.397	0.0052	330.02	0.0124	0.000258
Sb	121	3	He	0.499	0.0064	410.02	0.0124	0.000258
Sb	121	3	He	0.498	0.0064	410.02	0.0124	0.000258
Ba	137	3	He	72.017	0.3154	20095.23	0.0044	0.000309
Ba	137	3	He	72.944	0.3194	20325.59	0.0044	0.000309
Ba	137	3	He	74.706	0.3271	20826.28	0.0044	0.000309
Tl	205	3	He	0.258	0.0081	1800.18	0.0276	0.001005
Tl	205	3	He	0.258	0.0081	1810.21	0.0276	0.001005
Tl	205	3	He	0.259	0.0082	1810.17	0.0276	0.001005
Pb	208	3	He	31.646	1.154	136369.79	0.0364	0.002176
Pb	208	3	He	31.767	1.1584	139401.29	0.0364	0.002176
Pb	208	3	He	32.015	1.1674	137419.38	0.0364	0.002176
U	238	3	He	2.682	0.1131	24974.93	0.0421	0.00024
U	238	3	He	2.694	0.1136	25285.74	0.0421	0.00024
U	238	3	He	2.705	0.114	25255.38	0.0421	0.00024
Sc	45	1	No Gas			3473539.64		
Sc	45	1	No Gas			3379474.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3341833.39		
Ge	72	1	No Gas			1478156.23		
Ge	72	1	No Gas			1444041.23		
Ge	72	1	No Gas			1440894.51		
Sc	45	2	H2			200415.00		
Sc	45	2	H2			207925.37		
Sc	45	2	H2			200139.18		
Ge	72	2	H2			160202.92		
Ge	72	2	H2			165458.45		
Ge	72	2	H2			160969.25		
In	115	2	H2			432122.14		
In	115	2	H2			444382.81		
In	115	2	H2			433736.28		
Sc	45	3	He			43314.76		
Sc	45	3	He			42612.79		
Sc	45	3	He			43465.29		
Ge	72	3	He			73236.19		
Ge	72	3	He			74301.47		
Ge	72	3	He			75086.01		
In	115	3	He			63745.12		
In	115	3	He			63655.27		
In	115	3	He			63685.17		
Tb	159	3	He			287340.58		
Tb	159	3	He			287079.84		
Tb	159	3	He			288324.62		
Bi	209	3	He			220914.94		
Bi	209	3	He			222639.66		
Bi	209	3	He			221452.95		

Quantitation Report

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Sample Name	410-136610-H-6-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

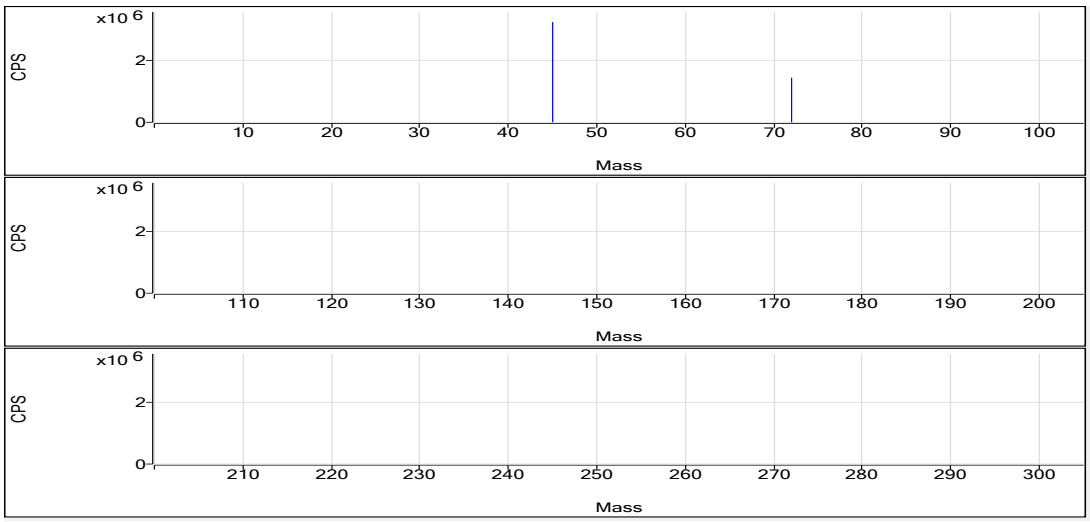
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.233	ppb	6.3	509.34	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.044	ppb	54.5	4.44	0.0000	Pulse	1.5000	3
Na	23	72	He	19.339	ppb	9.4	10303.90	0.1397	Pulse	0.1000	3
Mg	24	72	He	520.883	ppb	2.7	32750.18	0.4440	Pulse	0.1000	3
Al	27	72	He	5621.839	ppb	0.7	100200.84	1.3581	Pulse	0.1000	3
K	39	72	He	670.332	ppb	1.4	37909.34	0.5138	Pulse	0.1000	3
Ca	44	72	He	626.480	ppb	8.6	1553.47	0.0211	Pulse	0.1000	3
Ti	47	72	He	102.825	ppb	10.9	1923.53	0.0261	Pulse	0.1000	3
V	51	72	He	12.848	ppb	1.1	11627.98	0.1576	Pulse	0.5000	3
Cr	52	72	He	9.331	ppb	3.4	12352.31	0.1675	Pulse	0.1000	3
Mn	55	72	He	48.587	ppb	1.5	22177.57	0.3006	Pulse	0.1000	3
Fe	57	72	He	7863.014	ppb	0.8	168343.45	2.2819	Pulse	0.1000	3
Co	59	72	He	1.981	ppb	4.8	4684.25	0.0635	Pulse	0.1000	3
Ni	60	72	He	6.010	ppb	4.0	4564.19	0.0618	Pulse	0.1000	3
Cu	63	72	He	3.579	ppb	2.2	6948.55	0.0942	Pulse	0.1000	3
Zn	66	72	He	13.489	ppb	8.2	2800.37	0.0380	Pulse	0.1000	3
As	75	72	He	3.272	ppb	11.1	452.01	0.0061	Pulse	0.5000	3
Sr	88	115	He	6.287	ppb	6.9	3183.79	0.0499	Pulse	0.1000	3
Mo	98	115	He	0.285	ppb	18.0	433.36	0.0068	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	57.0	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	68.5	10.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.256	ppb	17.9	1226.77	0.0192	Pulse	0.1000	3
Sb	121	115	He	0.084	ppb	56.5	83.33	0.0013	Pulse	0.1000	3
Ba	137	115	He	13.122	ppb	8.2	3680.62	0.0577	Pulse	0.1000	3
Tl	205	209	He	0.037	ppb	36.5	443.36	0.0020	Pulse	0.1000	3
Pb	208	209	He	5.829	ppb	3.5	47091.19	0.2143	Pulse	0.1000	3
U	238	209	He	0.497	ppb	6.1	4644.35	0.0211	Pulse	0.1000	3

ISTD Table:

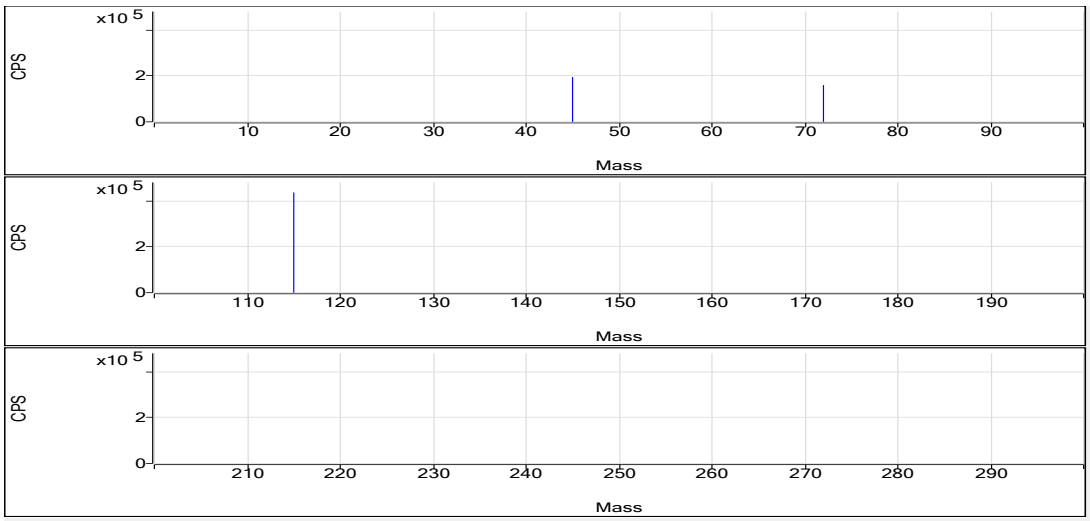
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3237962.14	1.3	99.9	Pulse	0.1000	3
No Gas	Ge	72	1440905.08	1.4	100.1	Pulse	0.1000	3
H2	Sc	45	195788.34	0.8	100.2	Pulse	0.1000	3
H2	Ge	72	160314.56	2.1	98.3	Pulse	0.1000	3
H2	In	115	437872.34	2.7	101.1	Pulse	0.1000	3
He	Sc	45	41683.48	1.7	104.2	Pulse	0.1000	3
He	Ge	72	73775.81	1.1	102.1	Pulse	0.1000	3
He	In	115	63782.92	0.3	98.7	Pulse	0.1000	3
He	Tb	159	280342.67	0.1	98.0	Pulse	0.1000	3
He	Bi	209	219801.18	2.0	98.9	Pulse	0.1000	3

No Gas

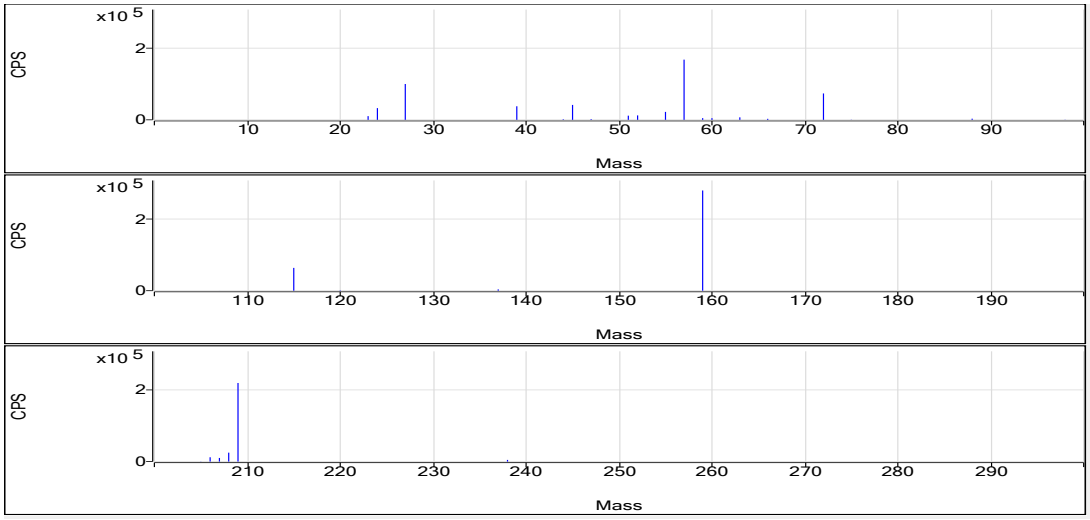


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.217	0.0003	484.01	0.0013	4.694E-05
Be	9	1	No Gas	0.238	0.0004	520.01	0.0013	4.694E-05
Be	9	1	No Gas	0.245	0.0004	524.01	0.0013	4.694E-05
Se	78	2	H2	0.024	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.07	0	6.00	0.0004	1.089E-05
Na	23	3	He	18.056	0.1375	10273.85	0.0017	0.1065
Na	23	3	He	21.429	0.1433	10514.10	0.0017	0.1065
Na	23	3	He	18.533	0.1383	10123.76	0.0017	0.1065
Mg	24	3	He	504.913	0.4305	32175.82	0.0008	0.004846
Mg	24	3	He	527.23	0.4494	32977.16	0.0008	0.004846
Mg	24	3	He	530.506	0.4521	33097.55	0.0008	0.004846
Al	27	3	He	5650.079	1.365	102008.61	0.0002	0.001063
Al	27	3	He	5576.588	1.3472	98869.41	0.0002	0.001063
Al	27	3	He	5638.849	1.3622	99724.49	0.0002	0.001063
K	39	3	He	681.313	0.5199	38851.85	0.0006	0.1436
K	39	3	He	664.191	0.5104	37458.21	0.0006	0.1436
K	39	3	He	665.492	0.5111	37417.95	0.0006	0.1436
Ca	44	3	He	564.241	0.0191	1430.12	0	0.001611
Ca	44	3	He	654.523	0.0219	1610.15	0	0.001611
Ca	44	3	He	660.676	0.0221	1620.15	0	0.001611
Ti	47	3	He	111.503	0.0282	2110.21	0.0003	0.0002737
Ti	47	3	He	90.202	0.0229	1680.17	0.0003	0.0002737
Ti	47	3	He	106.772	0.027	1980.21	0.0003	0.0002737
V	51	3	He	12.765	0.1566	11706.71	0.0117	0.007326
V	51	3	He	13.008	0.1595	11704.70	0.0117	0.007326
V	51	3	He	12.771	0.1567	11472.53	0.0117	0.007326
Cr	52	3	He	8.97	0.162	12105.42	0.0152	0.02538
Cr	52	3	He	9.578	0.1712	12565.86	0.0152	0.02538
Cr	52	3	He	9.444	0.1692	12385.66	0.0152	0.02538
Mn	55	3	He	47.862	0.2964	22147.68	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	48.551	0.3004	22047.17	0.0059	0.01385
Mn	55	3	He	49.35	0.3051	22337.87	0.0059	0.01385
Fe	57	3	He	7794.876	2.2622	169063.43	0.0003	0.003918
Fe	57	3	He	7915.281	2.2971	168578.42	0.0003	0.003918
Fe	57	3	He	7878.886	2.2865	167388.51	0.0003	0.003918
Co	59	3	He	1.882	0.0605	4520.83	0.0305	0.003084
Co	59	3	He	2.07	0.0662	4860.97	0.0305	0.003084
Co	59	3	He	1.99	0.0638	4670.94	0.0305	0.003084
Ni	60	3	He	6.282	0.0642	4800.91	0.0088	0.009003
Ni	60	3	He	5.92	0.0611	4480.86	0.0088	0.009003
Ni	60	3	He	5.828	0.0603	4410.81	0.0088	0.009003
Cu	63	3	He	3.581	0.0942	7041.92	0.0249	0.004937
Cu	63	3	He	3.655	0.0961	7051.87	0.0249	0.004937
Cu	63	3	He	3.501	0.0922	6751.85	0.0249	0.004937
Zn	66	3	He	12.303	0.0351	2620.33	0.0025	0.004836
Zn	66	3	He	14.506	0.0405	2970.39	0.0025	0.004836
Zn	66	3	He	13.658	0.0384	2810.40	0.0025	0.004836
As	75	3	He	3.412	0.0064	476.01	0.0017	0.0004347
As	75	3	He	3.542	0.0066	484.01	0.0017	0.0004347
As	75	3	He	2.86	0.0054	396.01	0.0017	0.0004347
Sr	88	3	He	6.608	0.0524	3340.47	0.0078	0.0007762
Sr	88	3	He	5.797	0.0461	2950.41	0.0078	0.0007762
Sr	88	3	He	6.456	0.0512	3260.49	0.0078	0.0007762
Mo	98	3	He	0.226	0.0055	350.01	0.022	0.0005162
Mo	98	3	He	0.317	0.0075	480.03	0.022	0.0005162
Mo	98	3	He	0.312	0.0074	470.03	0.022	0.0005162
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.042	0.0003	16.00	0.0048	5.152E-05
Sn	120	3	He	0.261	0.0193	1230.09	0.0143	0.01559
Sn	120	3	He	0.298	0.0198	1270.11	0.0143	0.01559
Sn	120	3	He	0.208	0.0185	1180.11	0.0143	0.01559
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.118	0.0017	110.00	0.0124	0.000258
Sb	121	3	He	0.106	0.0016	100.00	0.0124	0.000258
Ba	137	3	He	13.887	0.0611	3890.65	0.0044	0.000309
Ba	137	3	He	11.895	0.0523	3350.54	0.0044	0.000309
Ba	137	3	He	13.584	0.0597	3800.67	0.0044	0.000309
Tl	205	3	He	0.042	0.0022	470.03	0.0276	0.001005
Tl	205	3	He	0.047	0.0023	500.03	0.0276	0.001005
Tl	205	3	He	0.022	0.0016	360.02	0.0276	0.001005
Pb	208	3	He	6.025	0.2215	25785.92	0.0364	0.002176
Pb	208	3	He	5.843	0.2149	24724.02	0.0364	0.002176
Pb	208	3	He	5.618	0.2067	24282.98	0.0364	0.002176
U	238	3	He	0.476	0.0203	4410.96	0.0421	0.00024
U	238	3	He	0.531	0.0226	4901.09	0.0421	0.00024
U	238	3	He	0.483	0.0206	4621.00	0.0421	0.00024
Sc	45	1	No Gas			3271901.51		
Sc	45	1	No Gas			3251440.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3190544.64		
Ge	72	1	No Gas			1456669.98		
Ge	72	1	No Gas			1447917.63		
Ge	72	1	No Gas			1418127.64		
Sc	45	2	H2			196916.56		
Sc	45	2	H2			196530.00		
Sc	45	2	H2			193918.45		
Ge	72	2	H2			164087.71		
Ge	72	2	H2			159465.83		
Ge	72	2	H2			157390.14		
In	115	2	H2			443133.86		
In	115	2	H2			445959.45		
In	115	2	H2			424523.70		
Sc	45	3	He			40847.47		
Sc	45	3	He			42181.50		
Sc	45	3	He			42021.46		
Ge	72	3	He			74733.83		
Ge	72	3	He			73387.79		
Ge	72	3	He			73205.82		
In	115	3	He			63725.44		
In	115	3	He			64017.26		
In	115	3	He			63634.76		
Tb	159	3	He			280617.95		
Tb	159	3	He			279939.88		
Tb	159	3	He			280470.19		
Bi	209	3	He			217672.71		
Bi	209	3	He			216910.11		
Bi	209	3	He			224820.72		

Quantitation Report

Data File Name	178SMPL.d
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Acq Time	2023-08-10 16:48:08
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

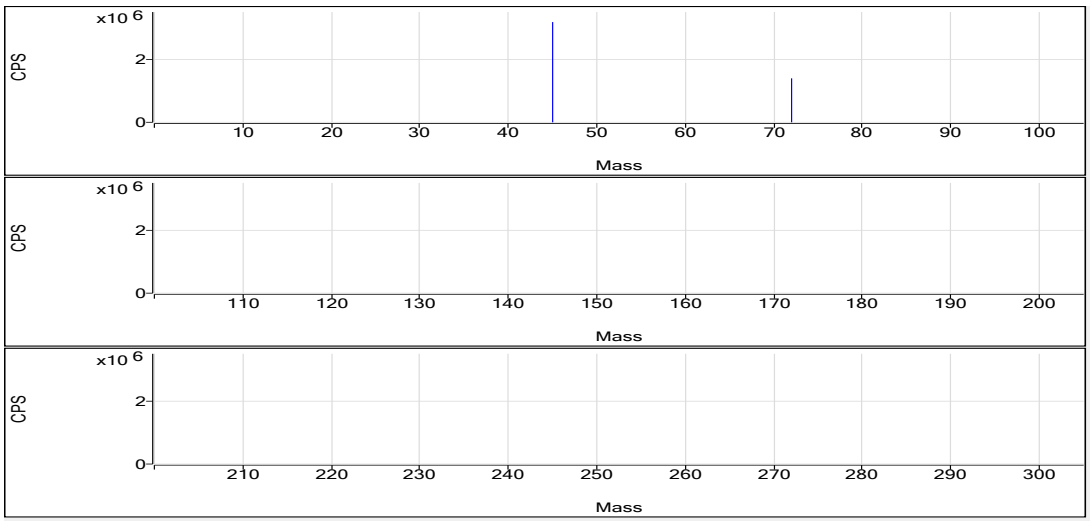
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.004	ppb	N/A	58.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.001	ppb	2111.3	1.78	0.0000	Pulse	1.5000	3
Na	23	72	He	5.767	ppb	25.2	8396.02	0.1164	Pulse	0.1000	3
Mg	24	72	He	6.419	ppb	10.9	740.04	0.0103	Pulse	0.1000	3
Al	27	72	He	15.324	ppb	21.4	343.35	0.0048	Pulse	0.1000	3
K	39	72	He	8.126	ppb	256.3	10680.90	0.1481	Pulse	0.1000	3
Ca	44	72	He	11.968	ppb	237.2	143.34	0.0020	Pulse	0.1000	3
Ti	47	72	He	-0.167	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
V	51	72	He	0.082	ppb	107.8	597.35	0.0083	Pulse	0.5000	3
Cr	52	72	He	0.103	ppb	104.5	1943.54	0.0269	Pulse	0.1000	3
Mn	55	72	He	-0.936	ppb	N/A	600.04	0.0083	Pulse	0.1000	3
Fe	57	72	He	23.003	ppb	15.1	763.38	0.0106	Pulse	0.1000	3
Co	59	72	He	0.044	ppb	73.9	320.02	0.0044	Pulse	0.1000	3
Ni	60	72	He	0.993	ppb	19.2	1280.11	0.0177	Pulse	0.1000	3
Cu	63	72	He	0.025	ppb	225.4	400.02	0.0056	Pulse	0.1000	3
Zn	66	72	He	-0.404	ppb	N/A	276.68	0.0038	Pulse	0.1000	3
As	75	72	He	0.075	ppb	90.6	40.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.056	ppb	57.0	76.67	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.041	ppb	60.2	90.00	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	48.8	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	-0.004	ppb	N/A	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.056	ppb	56.8	1036.74	0.0164	Pulse	0.1000	3
Sb	121	115	He	0.005	ppb	12.9	20.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.063	ppb	92.5	36.67	0.0006	Pulse	0.1000	3
Tl	205	209	He	0.009	ppb	199.6	273.35	0.0013	Pulse	0.1000	3
Pb	208	209	He	-0.002	ppb	N/A	453.36	0.0021	Pulse	0.1000	3
U	238	209	He	0.007	ppb	72.5	113.34	0.0005	Pulse	0.1000	3

ISTD Table:

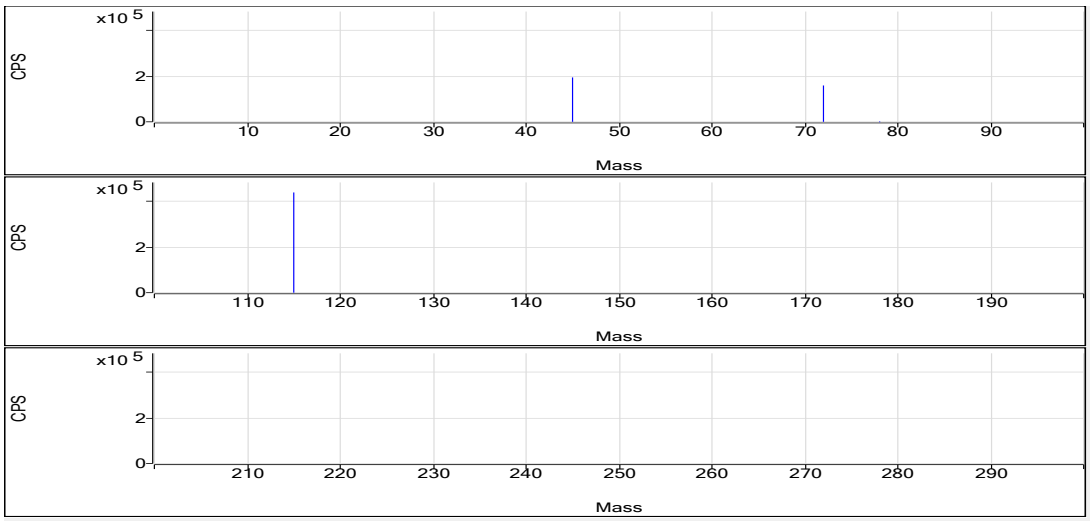
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3166487.66	1.0	97.7	Pulse	0.1000	3
No Gas	Ge	72	1389185.71	0.8	96.5	Pulse	0.1000	3
H2	Sc	45	194214.50	1.9	99.4	Pulse	0.1000	3
H2	Ge	72	158986.65	2.6	97.5	Pulse	0.1000	3
H2	In	115	438581.63	2.5	101.2	Pulse	0.1000	3
He	Sc	45	41703.36	0.9	104.3	Pulse	0.1000	3
He	Ge	72	72143.84	1.0	99.8	Pulse	0.1000	3
He	In	115	63255.56	2.4	97.9	Pulse	0.1000	3
He	Tb	159	280927.80	1.4	98.2	Pulse	0.1000	3
He	Bi	209	216970.41	0.8	97.7	Pulse	0.1000	3

No Gas

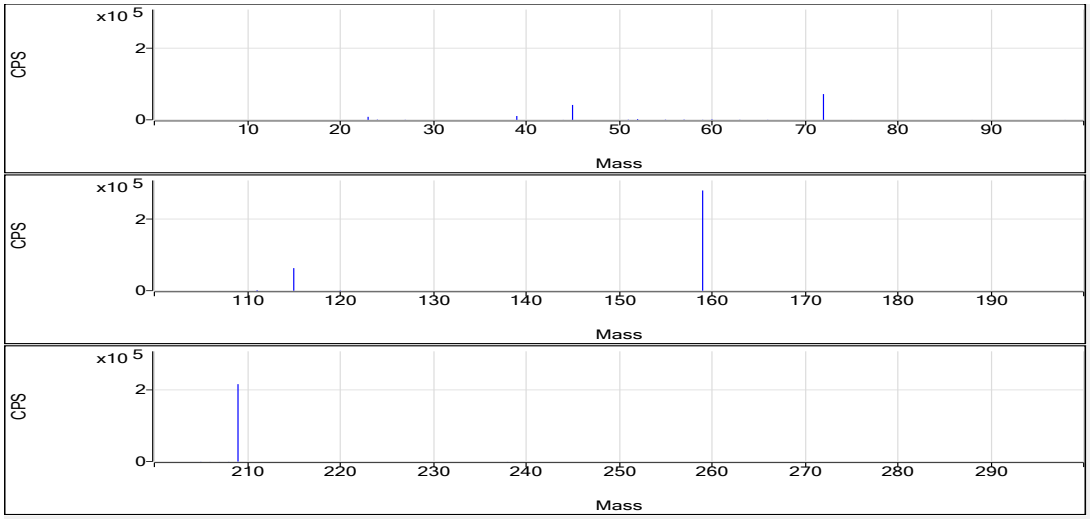


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.006	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	0.01	0.0001	82.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.014	0	40.00	0.0013	4.694E-05
Se	78	2	H2	0.014	0	2.67	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Se	78	2	H2	-0.006	0	1.33	0.0004	1.089E-05
Na	23	3	He	4.698	0.1145	8182.53	0.0017	0.1065
Na	23	3	He	7.422	0.1192	8692.91	0.0017	0.1065
Na	23	3	He	5.181	0.1154	8312.62	0.0017	0.1065
Mg	24	3	He	6.87	0.0106	760.04	0.0008	0.004846
Mg	24	3	He	6.777	0.0106	770.04	0.0008	0.004846
Mg	24	3	He	5.61	0.0096	690.04	0.0008	0.004846
Al	27	3	He	18.791	0.0056	400.02	0.0002	0.001063
Al	27	3	He	14.913	0.0047	340.02	0.0002	0.001063
Al	27	3	He	12.269	0.004	290.01	0.0002	0.001063
K	39	3	He	29.199	0.1598	11414.73	0.0006	0.1436
K	39	3	He	-12.445	0.1368	9973.71	0.0006	0.1436
K	39	3	He	7.625	0.1479	10654.25	0.0006	0.1436
Ca	44	3	He	-20.321	0.001	70.00	0	0.001611
Ca	44	3	He	23.194	0.0023	170.01	0	0.001611
Ca	44	3	He	33.03	0.0026	190.01	0	0.001611
Ti	47	3	He	0.583	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	-0.545	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	-0.538	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.183	0.0095	676.02	0.0117	0.007326
V	51	3	He	0.016	0.0075	548.01	0.0117	0.007326
V	51	3	He	0.048	0.0079	568.02	0.0117	0.007326
Cr	52	3	He	0.227	0.0288	2060.23	0.0152	0.02538
Cr	52	3	He	0.035	0.0259	1890.20	0.0152	0.02538
Cr	52	3	He	0.046	0.0261	1880.20	0.0152	0.02538
Mn	55	3	He	-0.569	0.0105	750.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.116	0.0073	530.03	0.0059	0.01385
Mn	55	3	He	-1.124	0.0072	520.03	0.0059	0.01385
Fe	57	3	He	25.611	0.0113	810.05	0.0003	0.003918
Fe	57	3	He	24.346	0.011	800.05	0.0003	0.003918
Fe	57	3	He	19.051	0.0094	680.04	0.0003	0.003918
Co	59	3	He	0.059	0.0049	350.02	0.0305	0.003084
Co	59	3	He	0.007	0.0033	240.01	0.0305	0.003084
Co	59	3	He	0.067	0.0051	370.02	0.0305	0.003084
Ni	60	3	He	0.839	0.0164	1170.09	0.0088	0.009003
Ni	60	3	He	1.206	0.0196	1430.13	0.0088	0.009003
Ni	60	3	He	0.933	0.0172	1240.10	0.0088	0.009003
Cu	63	3	He	0.088	0.0071	510.03	0.0249	0.004937
Cu	63	3	He	0	0.0049	360.02	0.0249	0.004937
Cu	63	3	He	-0.014	0.0046	330.02	0.0249	0.004937
Zn	66	3	He	0.139	0.0052	370.02	0.0025	0.004836
Zn	66	3	He	-0.852	0.0027	200.01	0.0025	0.004836
Zn	66	3	He	-0.5	0.0036	260.01	0.0025	0.004836
As	75	3	He	0.136	0.0007	48.00	0.0017	0.0004347
As	75	3	He	0.002	0.0004	32.00	0.0017	0.0004347
As	75	3	He	0.085	0.0006	42.00	0.0017	0.0004347
Sr	88	3	He	0.081	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.067	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.02	0.0009	60.00	0.0078	0.0007762
Mo	98	3	He	0.033	0.0013	80.00	0.022	0.0005162
Mo	98	3	He	0.021	0.001	60.00	0.022	0.0005162
Mo	98	3	He	0.068	0.002	130.01	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.008	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	0.01	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Sn	120	3	He	0.093	0.0169	1080.08	0.0143	0.01559
Sn	120	3	He	0.035	0.0161	990.07	0.0143	0.01559
Sn	120	3	He	0.041	0.0162	1040.08	0.0143	0.01559
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	0.072	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.115	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0	0.0003	20.00	0.0044	0.000309
Tl	205	3	He	0.015	0.0014	310.01	0.0276	0.001005
Tl	205	3	He	-0.011	0.0007	150.01	0.0276	0.001005
Tl	205	3	He	0.024	0.0017	360.02	0.0276	0.001005
Pb	208	3	He	-0.002	0.0021	240.01	0.0364	0.002176
Pb	208	3	He	-0.008	0.0019	180.01	0.0364	0.002176
Pb	208	3	He	0.003	0.0023	200.01	0.0364	0.002176
U	238	3	He	0.012	0.0007	160.01	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
U	238	3	He	0.002	0.0003	70.00	0.0421	0.00024
Sc	45	1	No Gas			3198846.83		
Sc	45	1	No Gas			3163712.77		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3136903.39		
Ge	72	1	No Gas			1401098.89		
Ge	72	1	No Gas			1379794.51		
Ge	72	1	No Gas			1386663.73		
Sc	45	2	H2			196634.04		
Sc	45	2	H2			195991.15		
Sc	45	2	H2			190018.30		
Ge	72	2	H2			163075.76		
Ge	72	2	H2			159079.12		
Ge	72	2	H2			154805.07		
In	115	2	H2			449388.00		
In	115	2	H2			439228.20		
In	115	2	H2			427128.70		
Sc	45	3	He			41269.08		
Sc	45	3	He			41890.38		
Sc	45	3	He			41950.62		
Ge	72	3	He			71447.10		
Ge	72	3	He			72923.91		
Ge	72	3	He			72060.50		
In	115	3	He			63885.87		
In	115	3	He			61566.05		
In	115	3	He			64339.02		
Tb	159	3	He			284200.02		
Tb	159	3	He			276624.92		
Tb	159	3	He			281958.47		
Bi	209	3	He			218576.52		
Bi	209	3	He			217072.81		
Bi	209	3	He			215261.91		

Quantitation Report

Data File Name	179SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 16:50:08
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

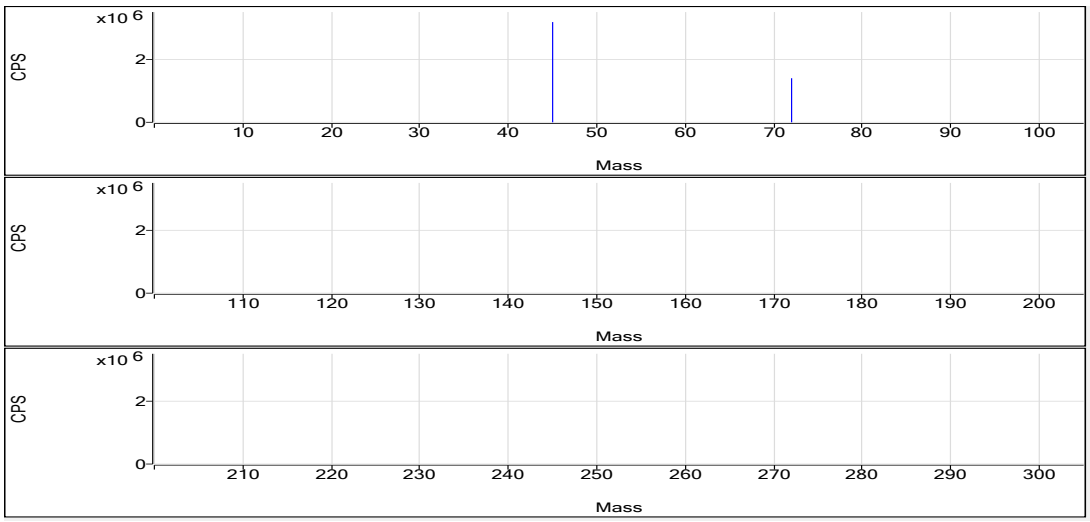
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.007	ppb	N/A	52.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.027	ppb	85.9	3.33	0.0000	Pulse	1.5000	3
Na	23	72	He	6.251	ppb	58.3	8659.42	0.1172	Pulse	0.1000	3
Mg	24	72	He	6.123	ppb	11.4	740.04	0.0100	Pulse	0.1000	3
Al	27	72	He	17.265	ppb	21.3	386.68	0.0052	Pulse	0.1000	3
K	39	72	He	7.739	ppb	240.2	10934.44	0.1479	Pulse	0.1000	3
Ca	44	72	He	11.942	ppb	142.0	146.68	0.0020	Pulse	0.1000	3
Ti	47	72	He	-0.010	ppb	N/A	20.00	0.0003	Pulse	0.1000	3
V	51	72	He	0.012	ppb	411.7	551.35	0.0075	Pulse	0.5000	3
Cr	52	72	He	0.066	ppb	93.0	1950.20	0.0264	Pulse	0.1000	3
Mn	55	72	He	-0.828	ppb	N/A	663.37	0.0090	Pulse	0.1000	3
Fe	57	72	He	19.461	ppb	16.3	706.71	0.0096	Pulse	0.1000	3
Co	59	72	He	0.020	ppb	72.8	273.35	0.0037	Pulse	0.1000	3
Ni	60	72	He	0.878	ppb	25.0	1236.76	0.0167	Pulse	0.1000	3
Cu	63	72	He	0.022	ppb	108.6	406.69	0.0055	Pulse	0.1000	3
Zn	66	72	He	-0.238	ppb	N/A	313.35	0.0043	Pulse	0.1000	3
As	75	72	He	-0.001	ppb	N/A	32.00	0.0004	Pulse	0.5000	3
Sr	88	115	He	0.054	ppb	115.2	76.67	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.010	ppb	154.7	46.67	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	25.9	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	-0.004	ppb	N/A	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.085	ppb	72.9	1076.75	0.0168	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	2.7	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.084	ppb	87.4	43.33	0.0007	Pulse	0.1000	3
Tl	205	209	He	0.000	ppb	N/A	216.68	0.0010	Pulse	0.1000	3
Pb	208	209	He	0.002	ppb	444.1	490.02	0.0023	Pulse	0.1000	3
U	238	209	He	0.005	ppb	92.1	93.34	0.0004	Pulse	0.1000	3

ISTD Table:

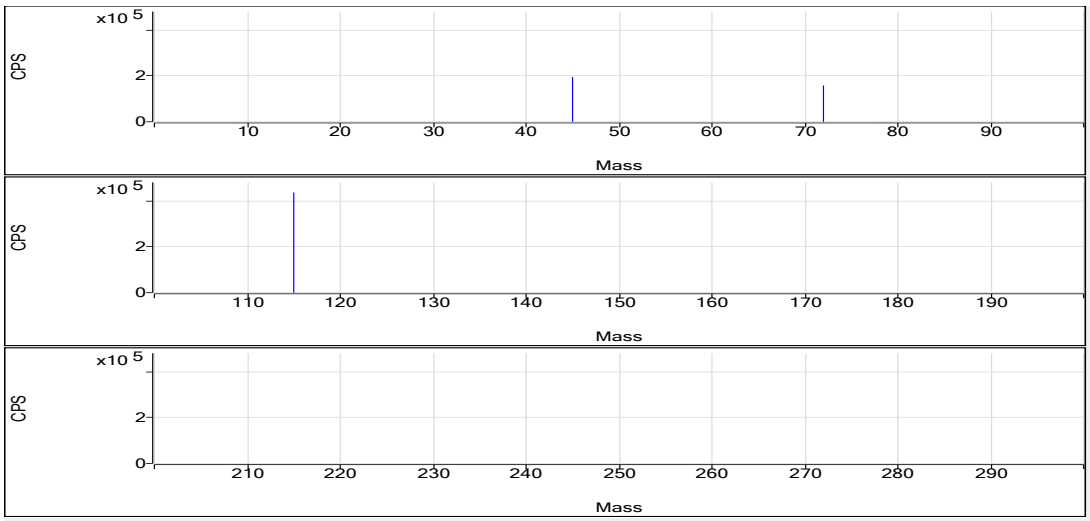
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3168614.95	0.7	97.8	Pulse	0.1000	3
No Gas	Ge	72	1393173.10	0.5	96.8	Pulse	0.1000	3
H2	Sc	45	194657.33	3.3	99.6	Pulse	0.1000	3
H2	Ge	72	157733.06	2.5	96.8	Pulse	0.1000	3
H2	In	115	435780.76	2.3	100.6	Pulse	0.1000	3
He	Sc	45	41974.18	3.0	105.0	Pulse	0.1000	3
He	Ge	72	73906.20	1.3	102.2	Pulse	0.1000	3
He	In	115	64092.70	1.2	99.2	Pulse	0.1000	3
He	Tb	159	282479.70	0.5	98.8	Pulse	0.1000	3
He	Bi	209	216997.65	0.7	97.7	Pulse	0.1000	3

No Gas

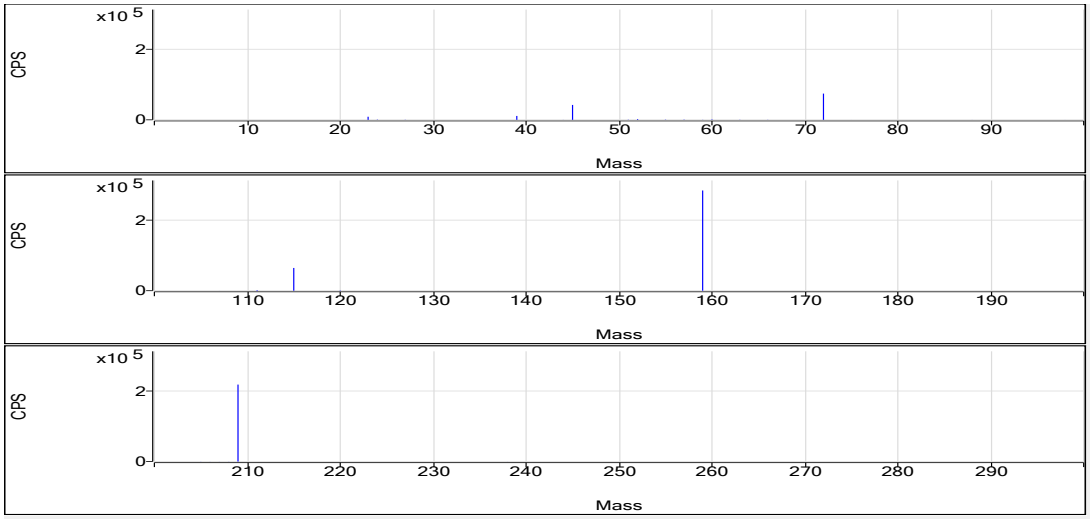


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.005	0	56.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.007	0	52.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	50.00	0.0013	4.694E-05
Se	78	2	H2	0.025	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.005	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.05	0	4.67	0.0004	1.089E-05
Na	23	3	He	2.725	0.1111	8322.52	0.0017	0.1065
Na	23	3	He	6.024	0.1168	8522.64	0.0017	0.1065
Na	23	3	He	10.003	0.1236	9133.10	0.0017	0.1065
Mg	24	3	He	6.924	0.0107	800.05	0.0008	0.004846
Mg	24	3	He	5.632	0.0096	700.04	0.0008	0.004846
Mg	24	3	He	5.814	0.0097	720.04	0.0008	0.004846
Al	27	3	He	16.067	0.0049	370.02	0.0002	0.001063
Al	27	3	He	14.334	0.0045	330.01	0.0002	0.001063
Al	27	3	He	21.396	0.0062	460.02	0.0002	0.001063
K	39	3	He	24.632	0.1572	11775.12	0.0006	0.1436
K	39	3	He	10.764	0.1496	10914.46	0.0006	0.1436
K	39	3	He	-12.18	0.1369	10113.75	0.0006	0.1436
Ca	44	3	He	29.828	0.0025	190.01	0	0.001611
Ca	44	3	He	9.915	0.0019	140.01	0	0.001611
Ca	44	3	He	-3.917	0.0015	110.01	0	0.001611
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	-0.545	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	1.608	0.0007	50.00	0.0003	0.0002737
V	51	3	He	-0.042	0.0068	512.01	0.0117	0.007326
V	51	3	He	0.025	0.0076	556.01	0.0117	0.007326
V	51	3	He	0.052	0.0079	586.02	0.0117	0.007326
Cr	52	3	He	0.061	0.0263	1970.20	0.0152	0.02538
Cr	52	3	He	0.007	0.0255	1860.18	0.0152	0.02538
Cr	52	3	He	0.129	0.0273	2020.23	0.0152	0.02538
Mn	55	3	He	-0.695	0.0097	730.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.07	0.0075	550.03	0.0059	0.01385
Mn	55	3	He	-0.719	0.0096	710.04	0.0059	0.01385
Fe	57	3	He	21.049	0.01	750.05	0.0003	0.003918
Fe	57	3	He	15.809	0.0085	620.04	0.0003	0.003918
Fe	57	3	He	21.524	0.0102	750.04	0.0003	0.003918
Co	59	3	He	0.035	0.0041	310.02	0.0305	0.003084
Co	59	3	He	0.02	0.0037	270.01	0.0305	0.003084
Co	59	3	He	0.005	0.0032	240.01	0.0305	0.003084
Ni	60	3	He	0.966	0.0175	1310.10	0.0088	0.009003
Ni	60	3	He	0.628	0.0145	1060.07	0.0088	0.009003
Ni	60	3	He	1.039	0.0181	1340.10	0.0088	0.009003
Cu	63	3	He	0.048	0.0061	460.02	0.0249	0.004937
Cu	63	3	He	0	0.0049	360.02	0.0249	0.004937
Cu	63	3	He	0.019	0.0054	400.02	0.0249	0.004937
Zn	66	3	He	-0.718	0.0031	230.01	0.0025	0.004836
Zn	66	3	He	0.375	0.0058	420.02	0.0025	0.004836
Zn	66	3	He	-0.371	0.0039	290.01	0.0025	0.004836
As	75	3	He	-0.035	0.0004	28.00	0.0017	0.0004347
As	75	3	He	-0.029	0.0004	28.00	0.0017	0.0004347
As	75	3	He	0.061	0.0005	40.00	0.0017	0.0004347
Sr	88	3	He	-0.001	0.0008	50.00	0.0078	0.0007762
Sr	88	3	He	0.122	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.041	0.0011	70.00	0.0078	0.0007762
Mo	98	3	He	-0.002	0.0005	30.00	0.022	0.0005162
Mo	98	3	He	0.005	0.0006	40.00	0.022	0.0005162
Mo	98	3	He	0.026	0.0011	70.00	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.0009	60.00	0.0455	0.0004641
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.072	0.0166	1080.08	0.0143	0.01559
Sn	120	3	He	0.153	0.0178	1130.09	0.0143	0.01559
Sn	120	3	He	0.03	0.016	1020.09	0.0143	0.01559
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.14	0.0009	60.00	0.0044	0.000309
Ba	137	3	He	0.109	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.001	0.0003	20.00	0.0044	0.000309
Tl	205	3	He	-0.008	0.0008	170.01	0.0276	0.001005
Tl	205	3	He	0.006	0.0012	250.01	0.0276	0.001005
Tl	205	3	He	0.002	0.0011	230.01	0.0276	0.001005
Pb	208	3	He	0.007	0.0024	270.01	0.0364	0.002176
Pb	208	3	He	0.009	0.0025	230.01	0.0364	0.002176
Pb	208	3	He	-0.009	0.0018	190.01	0.0364	0.002176
U	238	3	He	0	0.0002	50.00	0.0421	0.00024
U	238	3	He	0.008	0.0006	120.01	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
Sc	45	1	No Gas			3195362.14		
Sc	45	1	No Gas			3159227.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3151255.58		
Ge	72	1	No Gas			1399652.01		
Ge	72	1	No Gas			1393698.26		
Ge	72	1	No Gas			1386169.04		
Sc	45	2	H2			201800.11		
Sc	45	2	H2			193106.48		
Sc	45	2	H2			189065.41		
Ge	72	2	H2			161537.41		
Ge	72	2	H2			157928.39		
Ge	72	2	H2			153733.37		
In	115	2	H2			445400.42		
In	115	2	H2			436394.45		
In	115	2	H2			425547.42		
Sc	45	3	He			40606.90		
Sc	45	3	He			42281.85		
Sc	45	3	He			43033.79		
Ge	72	3	He			74884.85		
Ge	72	3	He			72964.96		
Ge	72	3	He			73868.80		
In	115	3	He			65002.21		
In	115	3	He			63625.31		
In	115	3	He			63675.78		
Tb	159	3	He			284093.59		
Tb	159	3	He			282334.53		
Tb	159	3	He			281010.99		
Bi	209	3	He			217154.24		
Bi	209	3	He			215426.07		
Bi	209	3	He			218412.63		

Quantitation Report

Data File Name	180_CCV.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 16:52:09
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

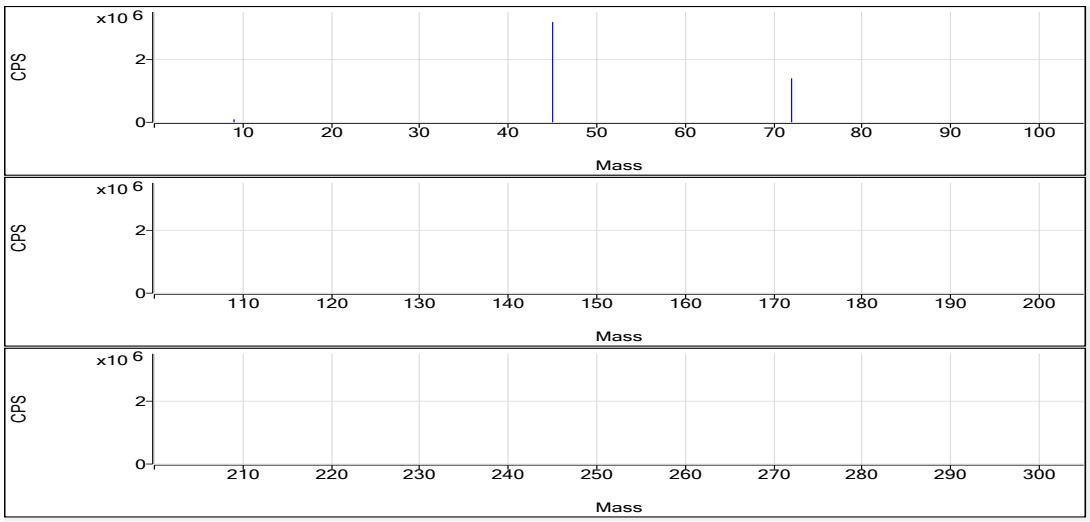
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	51.919	ppb	1.2	96195.22	0.0683	Pulse	0.5000	3
Se	78	72	H2	52.804	ppb	4.9	3253.04	0.0206	Pulse	1.5000	3
Na	23	72	He	5461.679	ppb	1.7	689462.75	9.4886	Pulse	0.1000	3
Mg	24	72	He	5435.251	ppb	2.6	333280.94	4.5873	Pulse	0.1000	3
Al	27	72	He	5396.538	ppb	1.2	94735.85	1.3038	Pulse	0.1000	3
K	39	72	He	5361.881	ppb	2.8	225567.71	3.1045	Pulse	0.1000	3
Ca	44	72	He	5170.354	ppb	3.5	11791.81	0.1622	Pulse	0.1000	3
Ti	47	72	He	5505.165	ppb	2.2	100330.28	1.3809	Pulse	0.1000	3
V	51	72	He	538.790	ppb	1.9	458462.41	6.3100	Pulse	0.5000	3
Cr	52	72	He	538.067	ppb	1.9	597140.36	8.2187	Pulse	0.1000	3
Mn	55	72	He	533.132	ppb	1.1	229663.88	3.1606	Pulse	0.1000	3
Fe	57	72	He	5372.622	ppb	1.2	113389.80	1.5604	Pulse	0.1000	3
Co	59	72	He	536.969	ppb	1.3	1190666.78	16.3863	Pulse	0.1000	3
Ni	60	72	He	539.314	ppb	2.5	345194.19	4.7514	Pulse	0.1000	3
Cu	63	72	He	534.403	ppb	1.9	968618.79	13.3314	Pulse	0.1000	3
Zn	66	72	He	526.401	ppb	1.7	94319.82	1.2981	Pulse	0.1000	3
As	75	72	He	529.671	ppb	1.8	66963.06	0.9216	Pulse	0.5000	3
Sr	88	115	He	52.883	ppb	1.9	26575.46	0.4142	Pulse	0.1000	3
Mo	98	115	He	51.204	ppb	2.0	72385.34	1.1281	Pulse	0.1000	3
Ag	107	115	He	51.327	ppb	2.0	149881.17	2.3358	Pulse	0.1000	3
Cd	111	115	He	51.859	ppb	1.9	15976.44	0.2490	Pulse	0.5000	3
Sn	120	115	He	51.909	ppb	1.2	48491.75	0.7557	Pulse	0.1000	3
Sb	121	115	He	51.546	ppb	2.9	41044.71	0.6397	Pulse	0.1000	3
Ba	137	115	He	515.047	ppb	0.0	144604.43	2.2535	Pulse	0.1000	3
Tl	205	209	He	53.115	ppb	1.1	317912.13	1.4693	Pulse	0.1000	3
Pb	208	209	He	52.802	ppb	0.9	416286.03	1.9240	Pulse	0.1000	3
U	238	209	He	52.373	ppb	0.2	476742.77	2.2034	Pulse	0.1000	3

ISTD Table:

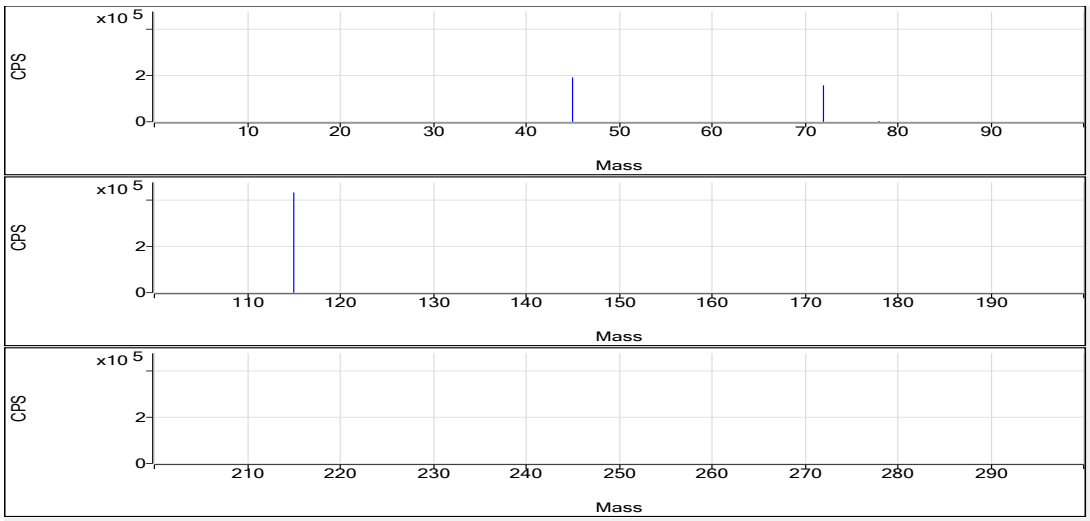
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3214694.22	2.2	99.2	Pulse	0.1000	3
No Gas	Ge	72	1409179.61	1.7	97.9	Pulse	0.1000	3
H2	Sc	45	192495.92	2.5	98.5	Pulse	0.1000	3
H2	Ge	72	158225.14	1.7	97.1	Pulse	0.1000	3
H2	In	115	434939.30	2.2	100.4	Pulse	0.1000	3
He	Sc	45	42312.04	1.2	105.8	Pulse	0.1000	3
He	Ge	72	72673.53	1.9	100.5	Pulse	0.1000	3
He	In	115	64167.89	0.4	99.3	Pulse	0.1000	3
He	Tb	159	282012.05	0.6	98.6	Pulse	0.1000	3
He	Bi	209	216365.86	0.4	97.4	Pulse	0.1000	3

No Gas

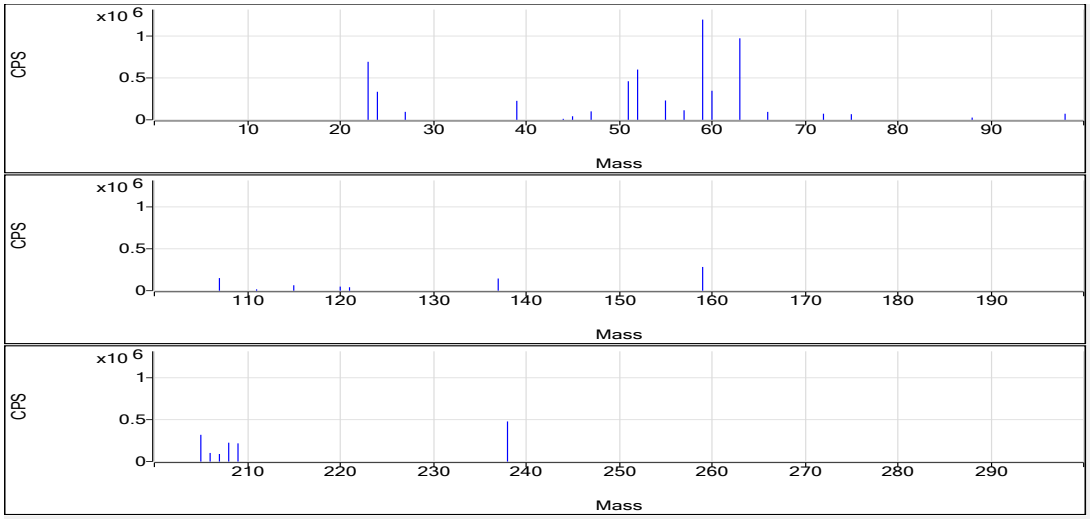


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.06	0.0685	96900.33	0.0013	4.694E-05
Be	9	1	No Gas	52.438	0.069	95390.89	0.0013	4.694E-05
Be	9	1	No Gas	51.26	0.0674	96294.43	0.0013	4.694E-05
Se	78	2	H2	49.925	0.0194	3137.68	0.0004	1.089E-05
Se	78	2	H2	53.632	0.0209	3281.05	0.0004	1.089E-05
Se	78	2	H2	54.857	0.0214	3340.39	0.0004	1.089E-05
Na	23	3	He	5526.057	9.5992	683141.94	0.0017	0.1065
Na	23	3	He	5501.033	9.5562	698518.51	0.0017	0.1065
Na	23	3	He	5357.948	9.3105	686727.80	0.0017	0.1065
Mg	24	3	He	5559.627	4.6922	333924.84	0.0008	0.004846
Mg	24	3	He	5460.884	4.6089	336891.67	0.0008	0.004846
Mg	24	3	He	5285.242	4.4608	329026.32	0.0008	0.004846
Al	27	3	He	5471.358	1.3218	94068.81	0.0002	0.001063
Al	27	3	He	5341.626	1.2905	94329.73	0.0002	0.001063
Al	27	3	He	5376.63	1.299	95809.00	0.0002	0.001063
K	39	3	He	5443.433	3.1496	224143.16	0.0006	0.1436
K	39	3	He	5450.901	3.1537	230520.66	0.0006	0.1436
K	39	3	He	5191.31	3.0103	222039.31	0.0006	0.1436
Ca	44	3	He	4976.416	0.1562	11114.59	0	0.001611
Ca	44	3	He	5337.426	0.1674	12235.50	0	0.001611
Ca	44	3	He	5197.22	0.163	12025.33	0	0.001611
Ti	47	3	He	5589.748	1.4021	99779.90	0.0003	0.0002737
Ti	47	3	He	5559.19	1.3944	101924.58	0.0003	0.0002737
Ti	47	3	He	5366.557	1.3461	99286.36	0.0003	0.0002737
V	51	3	He	550.35	6.4452	458680.03	0.0117	0.007326
V	51	3	He	533.962	6.2535	457100.78	0.0117	0.007326
V	51	3	He	532.058	6.2312	459606.41	0.0117	0.007326
Cr	52	3	He	549.086	8.3865	596833.27	0.0152	0.02538
Cr	52	3	He	536.398	8.1933	598890.50	0.0152	0.02538
Cr	52	3	He	528.716	8.0763	595697.30	0.0152	0.02538
Mn	55	3	He	539.207	3.1965	227481.77	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	532.221	3.1552	230634.18	0.0059	0.01385
Mn	55	3	He	527.968	3.1301	230875.68	0.0059	0.01385
Fe	57	3	He	5419.023	1.5739	112007.79	0.0003	0.003918
Fe	57	3	He	5398.065	1.5678	114600.29	0.0003	0.003918
Fe	57	3	He	5300.778	1.5396	113561.33	0.0003	0.003918
Co	59	3	He	543.561	16.5874	1180464.83	0.0305	0.003084
Co	59	3	He	538.136	16.4219	1200364.59	0.0305	0.003084
Co	59	3	He	529.21	16.1495	1191170.92	0.0305	0.003084
Ni	60	3	He	553.355	4.8748	346922.69	0.0088	0.009003
Ni	60	3	He	537.616	4.7364	346211.21	0.0088	0.009003
Ni	60	3	He	526.971	4.6428	342448.67	0.0088	0.009003
Cu	63	3	He	544.62	13.5862	966878.03	0.0249	0.004937
Cu	63	3	He	534.615	13.3367	974852.56	0.0249	0.004937
Cu	63	3	He	523.974	13.0713	964125.77	0.0249	0.004937
Zn	66	3	He	536.039	1.3218	94064.73	0.0025	0.004836
Zn	66	3	He	518.531	1.2787	93470.63	0.0025	0.004836
Zn	66	3	He	524.631	1.2937	95424.10	0.0025	0.004836
As	75	3	He	539.78	0.9392	66839.79	0.0017	0.0004347
As	75	3	He	528.009	0.9187	67155.26	0.0017	0.0004347
As	75	3	He	521.223	0.9069	66894.14	0.0017	0.0004347
Sr	88	3	He	53.755	0.421	27046.37	0.0078	0.0007762
Sr	88	3	He	53.139	0.4162	26585.63	0.0078	0.0007762
Sr	88	3	He	51.755	0.4053	26094.38	0.0078	0.0007762
Mo	98	3	He	50.422	1.1109	71370.26	0.022	0.0005162
Mo	98	3	He	52.338	1.1531	73661.71	0.022	0.0005162
Mo	98	3	He	50.852	1.1204	72124.06	0.022	0.0005162
Ag	107	3	He	50.201	2.2846	146779.19	0.0455	0.0004641
Ag	107	3	He	52.257	2.3782	151922.55	0.0455	0.0004641
Ag	107	3	He	51.522	2.3447	150941.78	0.0455	0.0004641
Cd	111	3	He	51.198	0.2458	15792.91	0.0048	5.152E-05
Cd	111	3	He	52.966	0.2543	16245.38	0.0048	5.152E-05
Cd	111	3	He	51.413	0.2468	15891.04	0.0048	5.152E-05
Sn	120	3	He	52.582	0.7653	49167.27	0.0143	0.01559
Sn	120	3	He	51.83	0.7546	48204.08	0.0143	0.01559
Sn	120	3	He	51.316	0.7472	48103.90	0.0143	0.01559
Sb	121	3	He	49.991	0.6204	39857.92	0.0124	0.000258
Sb	121	3	He	52.959	0.6572	41984.02	0.0124	0.000258
Sb	121	3	He	51.687	0.6414	41292.20	0.0124	0.000258
Ba	137	3	He	515.16	2.254	144812.58	0.0044	0.000309
Ba	137	3	He	515.063	2.2536	143965.19	0.0044	0.000309
Ba	137	3	He	514.917	2.253	145035.52	0.0044	0.000309
Tl	205	3	He	53.146	1.4702	316650.85	0.0276	0.001005
Tl	205	3	He	53.708	1.4857	322130.11	0.0276	0.001005
Tl	205	3	He	52.491	1.4521	314955.44	0.0276	0.001005
Pb	208	3	He	53.047	1.9329	224218.00	0.0364	0.002176
Pb	208	3	He	53.106	1.9351	226145.07	0.0364	0.002176
Pb	208	3	He	52.252	1.904	221957.59	0.0364	0.002176
U	238	3	He	52.447	2.2065	475245.50	0.0421	0.00024
U	238	3	He	52.41	2.205	478084.02	0.0421	0.00024
U	238	3	He	52.261	2.1987	476898.78	0.0421	0.00024
Sc	45	1	No Gas			3218683.70		
Sc	45	1	No Gas			3143434.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3281964.01		
Ge	72	1	No Gas			1415509.98		
Ge	72	1	No Gas			1383416.07		
Ge	72	1	No Gas			1428612.79		
Sc	45	2	H2			198062.65		
Sc	45	2	H2			190208.32		
Sc	45	2	H2			189216.79		
Ge	72	2	H2			161323.42		
Ge	72	2	H2			157039.78		
Ge	72	2	H2			156312.21		
In	115	2	H2			444815.97		
In	115	2	H2			434022.02		
In	115	2	H2			425979.92		
Sc	45	3	He			41880.63		
Sc	45	3	He			42883.87		
Sc	45	3	He			42171.61		
Ge	72	3	He			71166.30		
Ge	72	3	He			73095.48		
Ge	72	3	He			73758.80		
In	115	3	He			64629.61		
In	115	3	He			64258.17		
In	115	3	He			64750.58		
Tb	159	3	He			281121.56		
Tb	159	3	He			280860.27		
Tb	159	3	He			284054.33		
Bi	209	3	He			215379.88		
Bi	209	3	He			216818.57		
Bi	209	3	He			216899.14		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

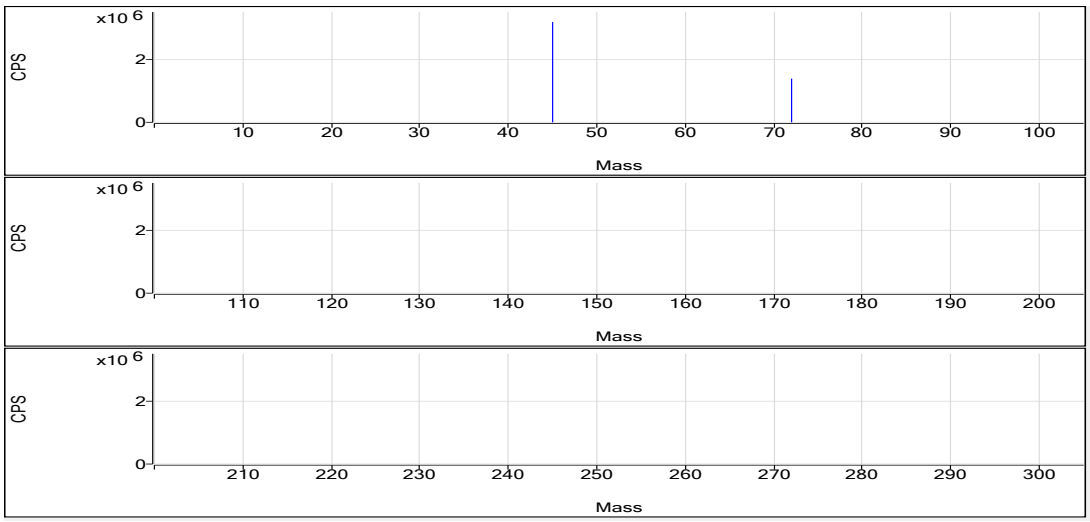
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.030	ppb	31.1	120.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.033	ppb	112.2	3.78	0.0000	Pulse	1.5000	3
Na	23	72	He	6.027	ppb	37.3	8382.69	0.1168	Pulse	0.1000	3
Mg	24	72	He	5.820	ppb	9.1	700.04	0.0098	Pulse	0.1000	3
Al	27	72	He	14.078	ppb	19.4	320.02	0.0045	Pulse	0.1000	3
K	39	72	He	17.227	ppb	70.6	10991.10	0.1532	Pulse	0.1000	3
Ca	44	72	He	-1.079	ppb	N/A	113.34	0.0016	Pulse	0.1000	3
Ti	47	72	He	0.205	ppb	313.2	23.33	0.0003	Pulse	0.1000	3
V	51	72	He	0.153	ppb	13.7	654.02	0.0091	Pulse	0.5000	3
Cr	52	72	He	0.141	ppb	98.5	1976.87	0.0275	Pulse	0.1000	3
Mn	55	72	He	-0.844	ppb	N/A	636.71	0.0089	Pulse	0.1000	3
Fe	57	72	He	20.616	ppb	22.7	710.05	0.0099	Pulse	0.1000	3
Co	59	72	He	0.117	ppb	27.0	476.69	0.0066	Pulse	0.1000	3
Ni	60	72	He	0.942	ppb	23.3	1240.10	0.0173	Pulse	0.1000	3
Cu	63	72	He	0.124	ppb	50.9	576.70	0.0080	Pulse	0.1000	3
Zn	66	72	He	-0.474	ppb	N/A	263.34	0.0037	Pulse	0.1000	3
As	75	72	He	0.146	ppb	57.4	49.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.002	ppb	1630.5	50.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.041	ppb	19.2	90.00	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	128.0	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.005	ppb	294.8	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.167	ppb	16.7	1133.44	0.0180	Pulse	0.1000	3
Sb	121	115	He	0.048	ppb	68.4	53.33	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.184	ppb	72.7	70.00	0.0011	Pulse	0.1000	3
Tl	205	209	He	0.141	ppb	13.6	1076.75	0.0049	Pulse	0.1000	3
Pb	208	209	He	0.016	ppb	84.2	603.36	0.0027	Pulse	0.1000	3
U	238	209	He	0.015	ppb	8.1	190.01	0.0009	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3206683.60	1.8	98.9	Pulse	0.1000	3
No Gas	Ge	72	1395628.26	1.7	96.9	Pulse	0.1000	3
H2	Sc	45	194766.50	2.9	99.7	Pulse	0.1000	3
H2	Ge	72	158471.34	3.1	97.2	Pulse	0.1000	3
H2	In	115	436535.18	2.9	100.7	Pulse	0.1000	3
He	Sc	45	41091.77	2.0	102.8	Pulse	0.1000	3
He	Ge	72	71768.96	0.5	99.3	Pulse	0.1000	3
He	In	115	63076.74	1.2	97.7	Pulse	0.1000	3
He	Tb	159	280427.27	0.8	98.1	Pulse	0.1000	3
He	Bi	209	219724.53	0.7	98.9	Pulse	0.1000	3

No Gas



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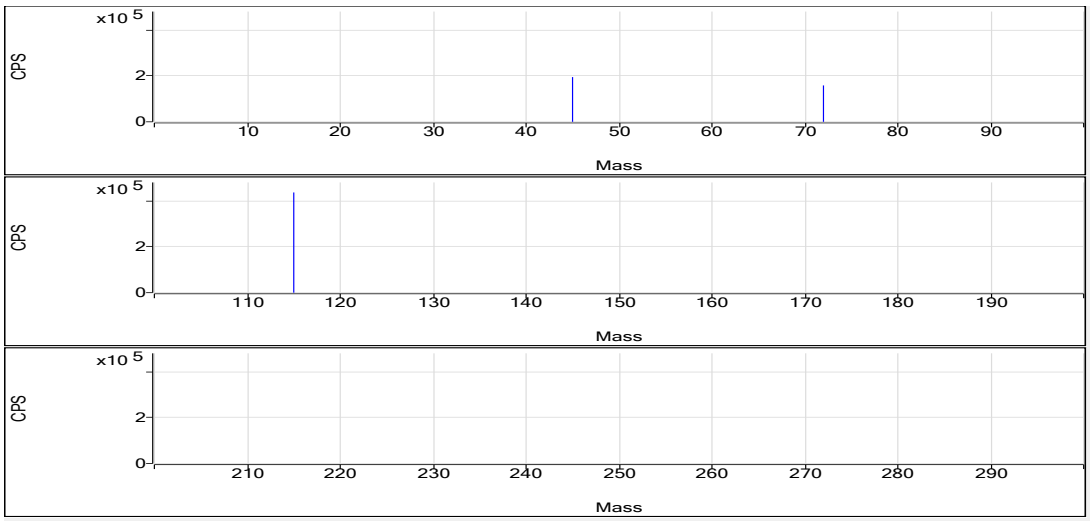
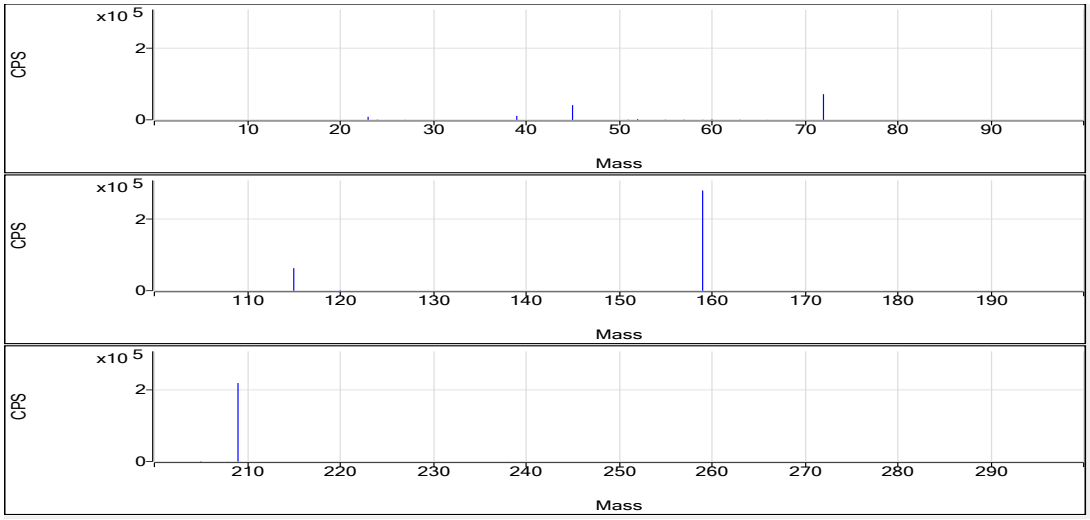


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.02	0.0001	102.00	0.0013	4.694E-05
Be	9	1	No Gas	0.038	0.0001	132.00	0.0013	4.694E-05
Be	9	1	No Gas	0.032	0.0001	126.00	0.0013	4.694E-05
Se	78	2	H2	0.067	0	6.00	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Se	78	2	H2	0.039	0	4.00	0.0004	1.089E-05
Na	23	3	He	6.011	0.1168	8342.65	0.0017	0.1065
Na	23	3	He	3.787	0.113	8152.56	0.0017	0.1065
Na	23	3	He	8.282	0.1207	8652.86	0.0017	0.1065
Mg	24	3	He	5.211	0.0092	660.03	0.0008	0.004846
Mg	24	3	He	6.086	0.01	720.04	0.0008	0.004846
Mg	24	3	He	6.164	0.01	720.04	0.0008	0.004846
Al	27	3	He	17.055	0.0052	370.02	0.0002	0.001063
Al	27	3	He	11.671	0.0039	280.02	0.0002	0.001063
Al	27	3	He	13.509	0.0043	310.01	0.0002	0.001063
K	39	3	He	29.493	0.1599	11424.78	0.0006	0.1436
K	39	3	He	17.006	0.153	11044.44	0.0006	0.1436
K	39	3	He	5.183	0.1465	10504.07	0.0006	0.1436
Ca	44	3	He	-20.317	0.001	70.00	0	0.001611
Ca	44	3	He	15.055	0.0021	150.01	0	0.001611
Ca	44	3	He	2.025	0.0017	120.01	0	0.001611
Ti	47	3	He	0.583	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	0.566	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	-0.535	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.175	0.0094	670.02	0.0117	0.007326
V	51	3	He	0.148	0.0091	654.02	0.0117	0.007326
V	51	3	He	0.134	0.0089	638.02	0.0117	0.007326
Cr	52	3	He	0.034	0.0259	1850.18	0.0152	0.02538
Cr	52	3	He	0.299	0.0299	2160.24	0.0152	0.02538
Cr	52	3	He	0.092	0.0268	1920.19	0.0152	0.02538
Mn	55	3	He	-0.877	0.0087	620.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.68	0.0098	710.05	0.0059	0.01385
Mn	55	3	He	-0.977	0.0081	580.03	0.0059	0.01385
Fe	57	3	He	20.785	0.0099	710.04	0.0003	0.003918
Fe	57	3	He	25.219	0.0112	810.06	0.0003	0.003918
Fe	57	3	He	15.845	0.0085	610.04	0.0003	0.003918
Co	59	3	He	0.151	0.0077	550.03	0.0305	0.003084
Co	59	3	He	0.09	0.0058	420.02	0.0305	0.003084
Co	59	3	He	0.109	0.0064	460.02	0.0305	0.003084
Ni	60	3	He	1.11	0.0188	1340.11	0.0088	0.009003
Ni	60	3	He	0.694	0.0151	1090.09	0.0088	0.009003
Ni	60	3	He	1.022	0.018	1290.10	0.0088	0.009003
Cu	63	3	He	0.184	0.0095	680.05	0.0249	0.004937
Cu	63	3	He	0.058	0.0064	460.02	0.0249	0.004937
Cu	63	3	He	0.132	0.0082	590.04	0.0249	0.004937
Zn	66	3	He	-0.145	0.0045	320.01	0.0025	0.004836
Zn	66	3	He	-0.559	0.0035	250.01	0.0025	0.004836
Zn	66	3	He	-0.72	0.0031	220.01	0.0025	0.004836
As	75	3	He	0.169	0.0007	52.00	0.0017	0.0004347
As	75	3	He	0.053	0.0005	38.00	0.0017	0.0004347
As	75	3	He	0.215	0.0008	58.00	0.0017	0.0004347
Sr	88	3	He	0.043	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	-0.019	0.0006	40.00	0.0078	0.0007762
Sr	88	3	He	-0.017	0.0006	40.00	0.0078	0.0007762
Mo	98	3	He	0.042	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.033	0.0013	80.00	0.022	0.0005162
Mo	98	3	He	0.049	0.0016	100.01	0.022	0.0005162
Ag	107	3	He	0.018	0.0013	80.01	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.155	0.0178	1120.08	0.0143	0.01559
Sn	120	3	He	0.147	0.0177	1130.09	0.0143	0.01559
Sn	120	3	He	0.199	0.0184	1150.15	0.0143	0.01559
Sb	121	3	He	0.082	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.044	0.0008	50.00	0.0124	0.000258
Ba	137	3	He	0.147	0.001	60.00	0.0044	0.000309
Ba	137	3	He	0.072	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.332	0.0018	110.00	0.0044	0.000309
Tl	205	3	He	0.159	0.0054	1180.09	0.0276	0.001005
Tl	205	3	He	0.144	0.005	1090.09	0.0276	0.001005
Tl	205	3	He	0.12	0.0043	960.07	0.0276	0.001005
Pb	208	3	He	0.022	0.003	310.01	0.0364	0.002176
Pb	208	3	He	0.001	0.0022	300.01	0.0364	0.002176
Pb	208	3	He	0.025	0.0031	370.03	0.0364	0.002176
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
U	238	3	He	0.016	0.0009	200.01	0.0421	0.00024
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
Sc	45	1	No Gas			3219952.76		
Sc	45	1	No Gas			3142627.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3257470.89		
Ge	72	1	No Gas			1402982.32		
Ge	72	1	No Gas			1368526.39		
Ge	72	1	No Gas			1415376.07		
Sc	45	2	H2			199310.43		
Sc	45	2	H2			196500.82		
Sc	45	2	H2			188488.26		
Ge	72	2	H2			161995.00		
Ge	72	2	H2			160646.95		
Ge	72	2	H2			152772.07		
In	115	2	H2			448025.58		
In	115	2	H2			438504.88		
In	115	2	H2			423075.07		
Sc	45	3	He			40266.11		
Sc	45	3	He			41910.39		
Sc	45	3	He			41098.82		
Ge	72	3	He			71437.32		
Ge	72	3	He			72170.86		
Ge	72	3	He			71698.70		
In	115	3	He			62931.69		
In	115	3	He			63895.41		
In	115	3	He			62429.64		
Tb	159	3	He			282678.94		
Tb	159	3	He			280345.68		
Tb	159	3	He			278257.18		
Bi	209	3	He			218999.45		
Bi	209	3	He			218718.94		
Bi	209	3	He			221455.19		

Quantitation Report

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Comment	G3 ICP
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

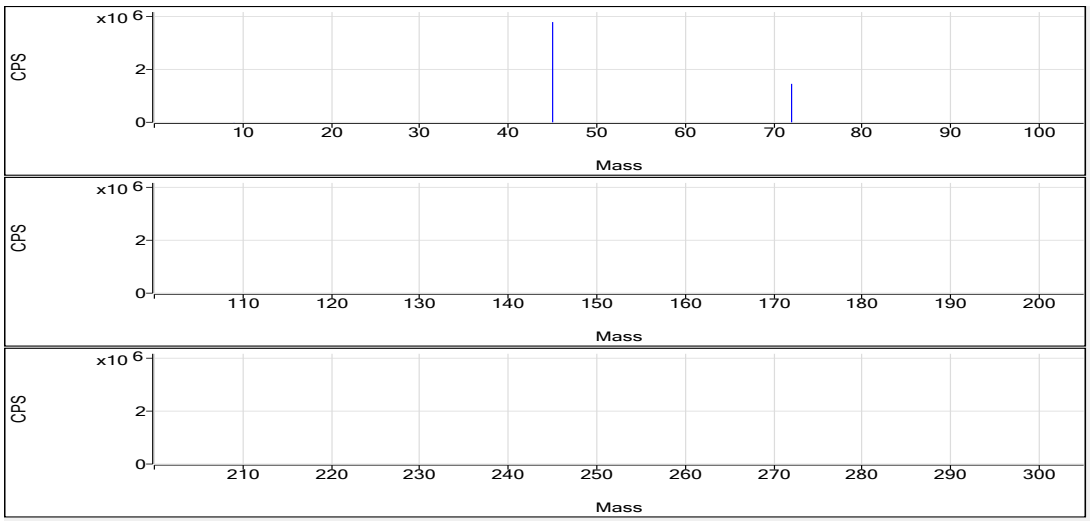
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	2.169	ppb	5.2	4205.94	0.0029	Pulse	0.5000	3
Se	78	72	H2	2.392	ppb	3.2	152.89	0.0009	Pulse	1.5000	3
Na	23	72	He	410.258	ppb	4.9	60721.28	0.8112	Pulse	0.1000	3
Mg	24	72	He	14474.417	ppb	1.7	914023.11	12.2082	Pulse	0.1000	3
Al	27	72	He	53524.565	ppb	1.4	967438.53	12.9216	Pulse	0.1000	3
K	39	72	He	4027.786	ppb	2.1	177271.55	2.3678	Pulse	0.1000	3
Ca	44	72	He	64946.048	ppb	3.4	151124.64	2.0188	Pulse	0.1000	3
Ti	47	72	He	1167.708	ppb	1.9	21950.52	0.2931	Pulse	0.1000	3
V	51	72	He	156.879	ppb	1.6	137942.58	1.8425	Pulse	0.5000	3
Cr	52	72	He	160.584	ppb	0.6	185002.74	2.4706	Pulse	0.1000	3
Mn	55	72	He	837.957	ppb	1.3	371345.07	4.9598	Pulse	0.1000	3
Fe	57	72	He	63827.636	ppb	1.3	1384792.69	18.4957	Pulse	0.1000	3
Co	59	72	He	21.461	ppb	1.0	49257.44	0.6579	Pulse	0.1000	3
Ni	60	72	He	59.771	ppb	1.4	40029.50	0.5346	Pulse	0.1000	3
Cu	63	72	He	144.647	ppb	0.8	270444.05	3.6120	Pulse	0.1000	3
Zn	66	72	He	430.619	ppb	1.6	79568.69	1.0628	Pulse	0.1000	3
As	75	72	He	14.462	ppb	4.1	1915.47	0.0256	Pulse	0.5000	3
Sr	88	115	He	104.035	ppb	2.3	52397.30	0.8140	Pulse	0.1000	3
Mo	98	115	He	6.296	ppb	4.8	8956.50	0.1392	Pulse	0.1000	3
Ag	107	115	He	0.637	ppb	8.0	1896.86	0.0295	Pulse	0.1000	3
Cd	111	115	He	1.377	ppb	4.6	428.68	0.0067	Pulse	0.5000	3
Sn	120	115	He	9.389	ppb	5.7	9620.31	0.1495	Pulse	0.1000	3
Sb	121	115	He	6.889	ppb	1.0	5517.96	0.0857	Pulse	0.1000	3
Ba	137	115	He	630.788	ppb	0.7	177660.46	2.7599	Pulse	0.1000	3
Tl	205	209	He	0.529	ppb	3.8	3460.60	0.0156	Pulse	0.1000	3
Pb	208	209	He	1282.245	ppb	1.0	10337695.26	46.6725	Pulse	0.1000	3
U	238	209	He	8.414	ppb	2.4	78447.69	0.3542	Pulse	0.1000	3

ISTD Table:

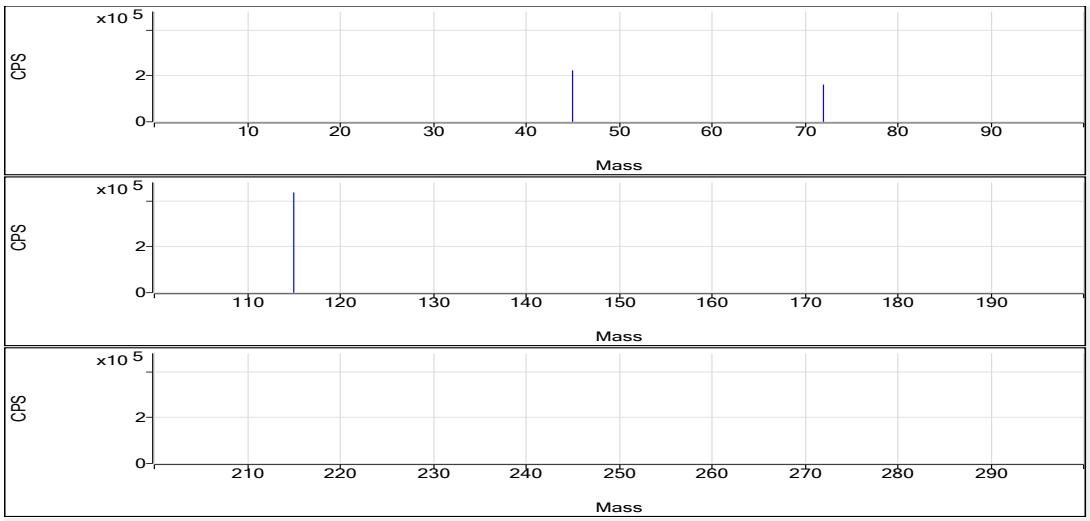
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3785977.03	1.4	116.8	Pulse	0.1000	3
No Gas	Ge	72	1452040.81	1.3	100.9	Pulse	0.1000	3
H2	Sc	45	224643.71	1.1	115.0	Pulse	0.1000	3
H2	Ge	72	162315.50	1.9	99.6	Pulse	0.1000	3
H2	In	115	437279.56	2.9	100.9	Pulse	0.1000	3
He	Sc	45	48089.91	1.3	120.3	Pulse	0.1000	3
He	Ge	72	74878.25	1.2	103.6	Pulse	0.1000	3
He	In	115	64373.78	0.6	99.7	Pulse	0.1000	3
He	Tb	159	299007.28	0.2	104.5	Pulse	0.1000	3
He	Bi	209	221509.08	1.1	99.7	Pulse	0.1000	3

No Gas

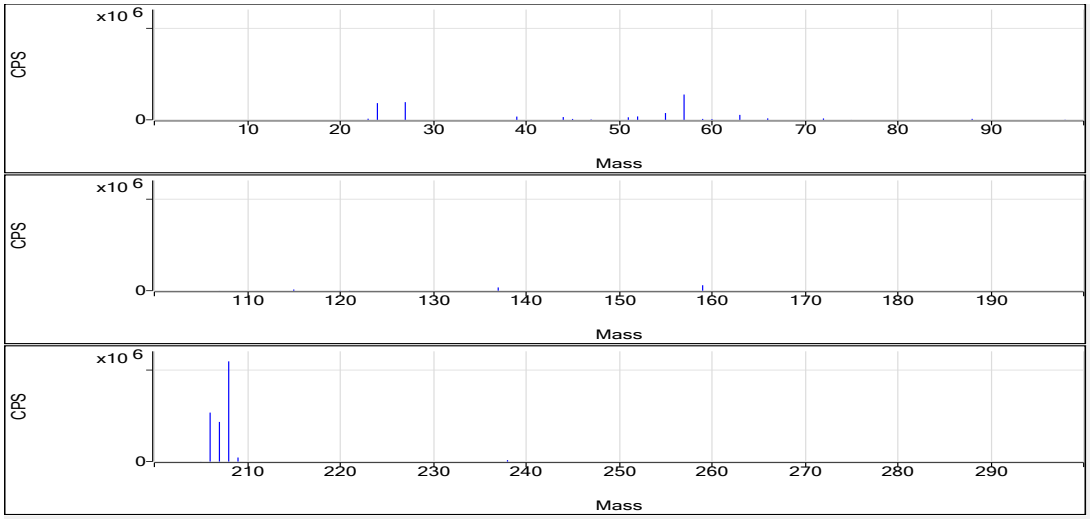


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	2.296	0.0031	4468.68	0.0013	4.694E-05
Be	9	1	No Gas	2.129	0.0028	4068.57	0.0013	4.694E-05
Be	9	1	No Gas	2.08	0.0028	4080.57	0.0013	4.694E-05
Se	78	2	H2	2.306	0.0009	149.33	0.0004	1.089E-05
Se	78	2	H2	2.449	0.001	158.00	0.0004	1.089E-05
Se	78	2	H2	2.42	0.001	151.33	0.0004	1.089E-05
Na	23	3	He	432.426	0.8493	62813.10	0.0017	0.1065
Na	23	3	He	405.037	0.8022	60092.32	0.0017	0.1065
Na	23	3	He	393.31	0.7821	59258.42	0.0017	0.1065
Mg	24	3	He	14765.085	12.4533	921044.52	0.0008	0.004846
Mg	24	3	He	14315.524	12.0743	904435.22	0.0008	0.004846
Mg	24	3	He	14342.64	12.0971	916589.60	0.0008	0.004846
Al	27	3	He	54259.24	13.0989	968794.13	0.0002	0.001063
Al	27	3	He	53524.264	12.9215	967897.17	0.0002	0.001063
Al	27	3	He	52790.191	12.7443	965624.28	0.0002	0.001063
K	39	3	He	4104.009	2.4099	178237.42	0.0006	0.1436
K	39	3	He	4041.264	2.3753	177922.05	0.0006	0.1436
K	39	3	He	3938.083	2.3183	175655.17	0.0006	0.1436
Ca	44	3	He	67321.372	2.0926	154768.54	0	0.001611
Ca	44	3	He	64615.956	2.0086	150454.00	0	0.001611
Ca	44	3	He	62900.816	1.9553	148151.37	0	0.001611
Ti	47	3	He	1154.118	0.2897	21426.35	0.0003	0.0002737
Ti	47	3	He	1156.057	0.2902	21736.86	0.0003	0.0002737
Ti	47	3	He	1192.95	0.2994	22688.35	0.0003	0.0002737
V	51	3	He	159.444	1.8725	138486.95	0.0117	0.007326
V	51	3	He	156.736	1.8408	137885.36	0.0117	0.007326
V	51	3	He	154.458	1.8141	137455.44	0.0117	0.007326
Cr	52	3	He	159.481	2.4538	181485.64	0.0152	0.02538
Cr	52	3	He	161.555	2.4854	186173.14	0.0152	0.02538
Cr	52	3	He	160.715	2.4726	187349.45	0.0152	0.02538
Mn	55	3	He	849.683	5.029	371946.67	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	835.949	4.948	370632.77	0.0059	0.01385
Mn	55	3	He	828.24	4.9025	371455.78	0.0059	0.01385
Fe	57	3	He	64770.285	18.7688	1388138.10	0.0003	0.003918
Fe	57	3	He	63464.528	18.3905	1377558.42	0.0003	0.003918
Fe	57	3	He	63248.094	18.3278	1388681.54	0.0003	0.003918
Co	59	3	He	21.695	0.665	49183.67	0.0305	0.003084
Co	59	3	He	21.402	0.6561	49144.55	0.0305	0.003084
Co	59	3	He	21.287	0.6526	49444.10	0.0305	0.003084
Ni	60	3	He	60.074	0.5373	39735.28	0.0088	0.009003
Ni	60	3	He	58.846	0.5265	39434.34	0.0088	0.009003
Ni	60	3	He	60.392	0.54	40918.89	0.0088	0.009003
Cu	63	3	He	145.984	3.6453	269609.04	0.0249	0.004937
Cu	63	3	He	144.226	3.6015	269774.16	0.0249	0.004937
Cu	63	3	He	143.731	3.5892	271948.94	0.0249	0.004937
Zn	66	3	He	435.94	1.0758	79568.82	0.0025	0.004836
Zn	66	3	He	432.864	1.0683	80020.67	0.0025	0.004836
Zn	66	3	He	423.054	1.0442	79116.59	0.0025	0.004836
As	75	3	He	14.6	0.0258	1910.14	0.0017	0.0004347
As	75	3	He	14.981	0.0265	1984.15	0.0017	0.0004347
As	75	3	He	13.805	0.0244	1852.13	0.0017	0.0004347
Sr	88	3	He	104.637	0.8187	52808.64	0.0078	0.0007762
Sr	88	3	He	101.364	0.7931	51323.58	0.0078	0.0007762
Sr	88	3	He	106.103	0.8302	53059.67	0.0078	0.0007762
Mo	98	3	He	6.047	0.1337	8622.88	0.022	0.0005162
Mo	98	3	He	6.203	0.1371	8873.09	0.022	0.0005162
Mo	98	3	He	6.637	0.1467	9373.54	0.022	0.0005162
Ag	107	3	He	0.593	0.0274	1770.18	0.0455	0.0004641
Ag	107	3	He	0.693	0.032	2070.22	0.0455	0.0004641
Ag	107	3	He	0.626	0.0289	1850.19	0.0455	0.0004641
Cd	111	3	He	1.372	0.0066	428.01	0.0048	5.152E-05
Cd	111	3	He	1.316	0.0064	412.01	0.0048	5.152E-05
Cd	111	3	He	1.443	0.007	446.01	0.0048	5.152E-05
Sn	120	3	He	9.937	0.1573	10144.07	0.0143	0.01559
Sn	120	3	He	8.86	0.1419	9183.34	0.0143	0.01559
Sn	120	3	He	9.369	0.1492	9533.52	0.0143	0.01559
Sb	121	3	He	6.955	0.0865	5581.33	0.0124	0.000258
Sb	121	3	He	6.895	0.0858	5551.31	0.0124	0.000258
Sb	121	3	He	6.817	0.0848	5421.24	0.0124	0.000258
Ba	137	3	He	626.38	2.7406	176768.90	0.0044	0.000309
Ba	137	3	He	631.34	2.7623	178744.43	0.0044	0.000309
Ba	137	3	He	634.644	2.7767	177468.04	0.0044	0.000309
Tl	205	3	He	0.511	0.0151	3390.57	0.0276	0.001005
Tl	205	3	He	0.526	0.0155	3410.58	0.0276	0.001005
Tl	205	3	He	0.55	0.0162	3580.64	0.0276	0.001005
Pb	208	3	He	1268.13	46.1587	5498806.17	0.0364	0.002176
Pb	208	3	He	1289.839	46.9489	5465257.42	0.0364	0.002176
Pb	208	3	He	1288.765	46.9098	5496172.42	0.0364	0.002176
U	238	3	He	8.251	0.3473	77853.62	0.0421	0.00024
U	238	3	He	8.639	0.3636	79846.18	0.0421	0.00024
U	238	3	He	8.353	0.3516	77643.26	0.0421	0.00024
Sc	45	1	No Gas			3793459.63		
Sc	45	1	No Gas			3728914.94		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3835556.51		
Ge	72	1	No Gas			1458516.07		
Ge	72	1	No Gas			1430064.67		
Ge	72	1	No Gas			1467541.70		
Sc	45	2	H2			226738.51		
Sc	45	2	H2			225193.88		
Sc	45	2	H2			221998.75		
Ge	72	2	H2			164356.81		
Ge	72	2	H2			163793.77		
Ge	72	2	H2			158795.91		
In	115	2	H2			446944.09		
In	115	2	H2			441927.06		
In	115	2	H2			422967.53		
Sc	45	3	He			47808.80		
Sc	45	3	He			47668.51		
Sc	45	3	He			48792.42		
Ge	72	3	He			73959.80		
Ge	72	3	He			74905.89		
Ge	72	3	He			75769.06		
In	115	3	He			64579.40		
In	115	3	He			64780.42		
In	115	3	He			63986.64		
Tb	159	3	He			299048.80		
Tb	159	3	He			298459.62		
Tb	159	3	He			299513.43		
Bi	209	3	He			224137.52		
Bi	209	3	He			219573.98		
Bi	209	3	He			220815.74		

Quantitation Report

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Acq Time	2023-08-10 16:58:10
Sample Name	410-136531-H-1-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

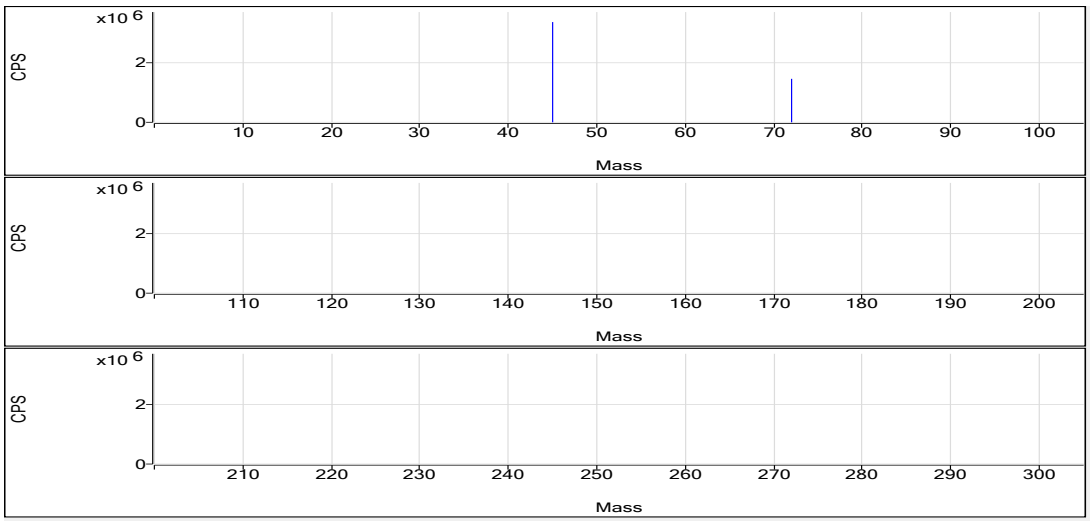
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.380	ppb	6.5	794.69	0.0005	Pulse	0.5000	3
Se	78	72	H2	0.522	ppb	32.9	33.78	0.0002	Pulse	1.5000	3
Na	23	72	He	79.851	ppb	5.7	18031.49	0.2436	Pulse	0.1000	3
Mg	24	72	He	2755.613	ppb	2.4	172321.42	2.3281	Pulse	0.1000	3
Al	27	72	He	10184.017	ppb	2.1	182058.69	2.4594	Pulse	0.1000	3
K	39	72	He	752.978	ppb	2.7	41412.38	0.5594	Pulse	0.1000	3
Ca	44	72	He	12456.291	ppb	2.5	28755.60	0.3885	Pulse	0.1000	3
Ti	47	72	He	211.098	ppb	1.6	3940.66	0.0532	Pulse	0.1000	3
V	51	72	He	29.747	ppb	1.5	26301.55	0.3553	Pulse	0.5000	3
Cr	52	72	He	30.535	ppb	0.2	36305.92	0.4903	Pulse	0.1000	3
Mn	55	72	He	159.962	ppb	2.1	70913.27	0.9580	Pulse	0.1000	3
Fe	57	72	He	12214.357	ppb	1.4	262250.96	3.5426	Pulse	0.1000	3
Co	59	72	He	4.211	ppb	2.8	9736.95	0.1316	Pulse	0.1000	3
Ni	60	72	He	11.882	ppb	7.3	8396.01	0.1135	Pulse	0.1000	3
Cu	63	72	He	27.779	ppb	0.9	51649.39	0.6977	Pulse	0.1000	3
Zn	66	72	He	82.588	ppb	0.8	15382.02	0.2077	Pulse	0.1000	3
As	75	72	He	2.612	ppb	7.5	368.68	0.0050	Pulse	0.5000	3
Sr	88	115	He	19.794	ppb	5.4	9890.46	0.1555	Pulse	0.1000	3
Mo	98	115	He	1.231	ppb	8.4	1756.85	0.0276	Pulse	0.1000	3
Ag	107	115	He	0.104	ppb	4.1	330.02	0.0052	Pulse	0.1000	3
Cd	111	115	He	0.251	ppb	18.0	80.00	0.0013	Pulse	0.5000	3
Sn	120	115	He	1.770	ppb	12.0	2597.00	0.0408	Pulse	0.1000	3
Sb	121	115	He	1.390	ppb	3.3	1113.42	0.0175	Pulse	0.1000	3
Ba	137	115	He	119.551	ppb	1.0	33294.23	0.5233	Pulse	0.1000	3
Tl	205	209	He	0.119	ppb	11.3	953.41	0.0043	Pulse	0.1000	3
Pb	208	209	He	238.118	ppb	0.2	1917793.64	8.6690	Pulse	0.1000	3
U	238	209	He	1.585	ppb	2.0	14805.61	0.0669	Pulse	0.1000	3

ISTD Table:

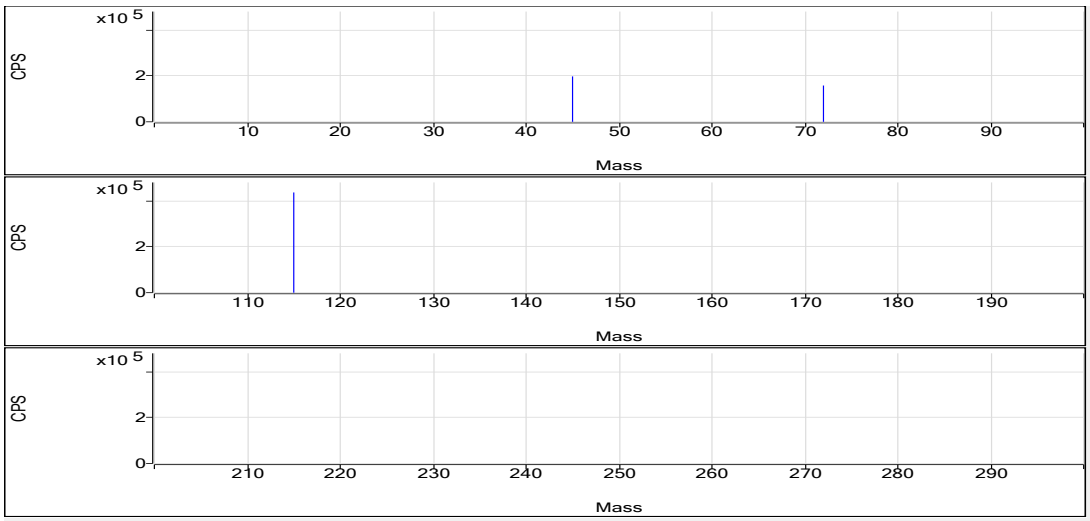
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3355731.41	2.9	103.5	Pulse	0.1000	3
No Gas	Ge	72	1455325.03	3.0	101.1	Pulse	0.1000	3
H2	Sc	45	197346.60	0.4	101.0	Pulse	0.1000	3
H2	Ge	72	157689.08	0.8	96.7	Pulse	0.1000	3
H2	In	115	435527.73	1.1	100.5	Pulse	0.1000	3
He	Sc	45	43575.65	3.1	109.0	Pulse	0.1000	3
He	Ge	72	74040.46	1.9	102.4	Pulse	0.1000	3
He	In	115	63625.05	1.1	98.5	Pulse	0.1000	3
He	Tb	159	283641.22	0.6	99.2	Pulse	0.1000	3
He	Bi	209	221224.89	0.6	99.6	Pulse	0.1000	3

No Gas

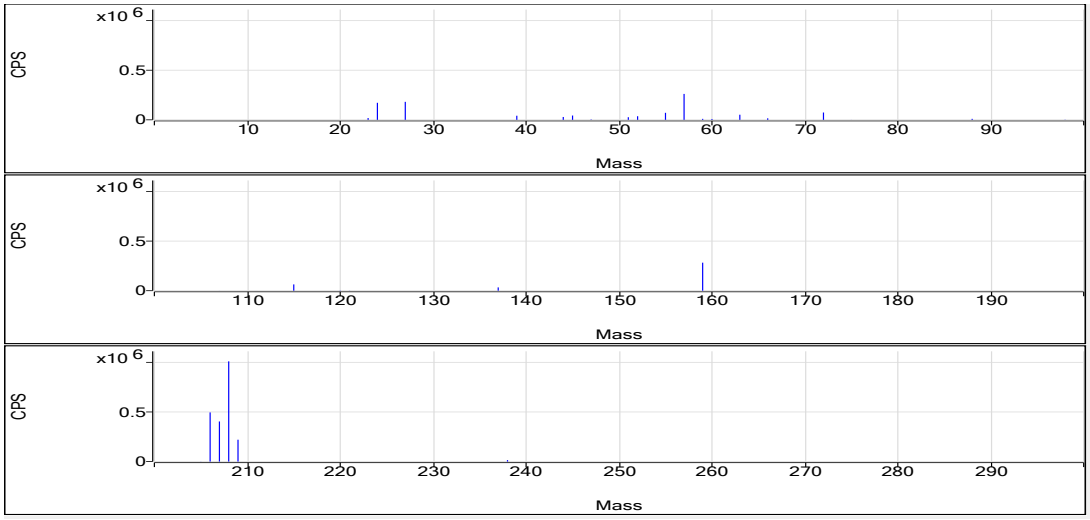


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.379	0.0005	766.02	0.0013	4.694E-05
Be	9	1	No Gas	0.405	0.0006	854.03	0.0013	4.694E-05
Be	9	1	No Gas	0.355	0.0005	764.03	0.0013	4.694E-05
Se	78	2	H2	0.447	0.0002	29.33	0.0004	1.089E-05
Se	78	2	H2	0.718	0.0003	46.00	0.0004	1.089E-05
Se	78	2	H2	0.399	0.0002	26.00	0.0004	1.089E-05
Na	23	3	He	75.765	0.2366	17901.32	0.0017	0.1065
Na	23	3	He	78.982	0.2421	17801.21	0.0017	0.1065
Na	23	3	He	84.805	0.2521	18391.94	0.0017	0.1065
Mg	24	3	He	2680.467	2.2648	171347.34	0.0008	0.004846
Mg	24	3	He	2783.787	2.3519	172904.96	0.0008	0.004846
Mg	24	3	He	2802.586	2.3677	172711.95	0.0008	0.004846
Al	27	3	He	9965.084	2.4066	182077.54	0.0002	0.001063
Al	27	3	He	10390.198	2.5092	184471.97	0.0002	0.001063
Al	27	3	He	10196.769	2.4625	179626.56	0.0002	0.001063
K	39	3	He	731.009	0.5473	41408.76	0.0006	0.1436
K	39	3	He	770.488	0.5691	41840.28	0.0006	0.1436
K	39	3	He	757.437	0.5619	40988.11	0.0006	0.1436
Ca	44	3	He	12113.812	0.3779	28588.58	0	0.001611
Ca	44	3	He	12520.602	0.3905	28708.85	0	0.001611
Ca	44	3	He	12734.458	0.3971	28969.36	0	0.001611
Ti	47	3	He	214.509	0.0541	4090.70	0.0003	0.0002737
Ti	47	3	He	211.018	0.0532	3910.63	0.0003	0.0002737
Ti	47	3	He	207.767	0.0524	3820.66	0.0003	0.0002737
V	51	3	He	29.241	0.3494	26433.75	0.0117	0.007326
V	51	3	He	29.88	0.3569	26235.48	0.0117	0.007326
V	51	3	He	30.12	0.3597	26235.41	0.0117	0.007326
Cr	52	3	He	30.595	0.4913	37168.24	0.0152	0.02538
Cr	52	3	He	30.459	0.4892	35965.11	0.0152	0.02538
Cr	52	3	He	30.549	0.4906	35784.40	0.0152	0.02538
Mn	55	3	He	156.18	0.9357	70793.12	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	161.164	0.9651	70953.43	0.0059	0.01385
Mn	55	3	He	162.542	0.9732	70993.25	0.0059	0.01385
Fe	57	3	He	12015.375	3.4849	263665.35	0.0003	0.003918
Fe	57	3	He	12352.898	3.5827	263396.64	0.0003	0.003918
Fe	57	3	He	12274.798	3.5601	259690.89	0.0003	0.003918
Co	59	3	He	4.077	0.1275	9643.61	0.0305	0.003084
Co	59	3	He	4.283	0.1338	9833.70	0.0305	0.003084
Co	59	3	He	4.272	0.1334	9733.55	0.0305	0.003084
Ni	60	3	He	11.11	0.1067	8072.47	0.0088	0.009003
Ni	60	3	He	11.711	0.112	8232.61	0.0088	0.009003
Ni	60	3	He	12.825	0.1218	8882.96	0.0088	0.009003
Cu	63	3	He	27.514	0.6911	52284.72	0.0249	0.004937
Cu	63	3	He	27.818	0.6986	51361.79	0.0249	0.004937
Cu	63	3	He	28.005	0.7033	51301.67	0.0249	0.004937
Zn	66	3	He	83.084	0.209	15809.05	0.0025	0.004836
Zn	66	3	He	82.844	0.2084	15318.70	0.0025	0.004836
Zn	66	3	He	81.835	0.2059	15018.30	0.0025	0.004836
As	75	3	He	2.775	0.0053	398.01	0.0017	0.0004347
As	75	3	He	2.394	0.0046	338.01	0.0017	0.0004347
As	75	3	He	2.667	0.0051	370.01	0.0017	0.0004347
Sr	88	3	He	18.577	0.146	9393.40	0.0078	0.0007762
Sr	88	3	He	20.555	0.1615	10174.05	0.0078	0.0007762
Sr	88	3	He	20.248	0.1591	10103.92	0.0078	0.0007762
Mo	98	3	He	1.113	0.025	1610.15	0.022	0.0005162
Mo	98	3	He	1.274	0.0286	1800.19	0.022	0.0005162
Mo	98	3	He	1.306	0.0293	1860.20	0.022	0.0005162
Ag	107	3	He	0.099	0.005	320.02	0.0455	0.0004641
Ag	107	3	He	0.105	0.0052	330.02	0.0455	0.0004641
Ag	107	3	He	0.107	0.0054	340.01	0.0455	0.0004641
Cd	111	3	He	0.274	0.0014	88.00	0.0048	5.152E-05
Cd	111	3	He	0.28	0.0014	88.00	0.0048	5.152E-05
Cd	111	3	He	0.199	0.001	64.00	0.0048	5.152E-05
Sn	120	3	He	1.578	0.0381	2450.32	0.0143	0.01559
Sn	120	3	He	1.734	0.0403	2540.30	0.0143	0.01559
Sn	120	3	He	1.999	0.0441	2800.38	0.0143	0.01559
Sb	121	3	He	1.408	0.0177	1140.09	0.0124	0.000258
Sb	121	3	He	1.425	0.0179	1130.09	0.0124	0.000258
Sb	121	3	He	1.337	0.0168	1070.09	0.0124	0.000258
Ba	137	3	He	118.809	0.5201	33461.26	0.0044	0.000309
Ba	137	3	He	120.912	0.5293	33351.17	0.0044	0.000309
Ba	137	3	He	118.93	0.5206	33070.27	0.0044	0.000309
Tl	205	3	He	0.121	0.0044	970.08	0.0276	0.001005
Tl	205	3	He	0.132	0.0047	1030.07	0.0276	0.001005
Tl	205	3	He	0.105	0.0039	860.07	0.0276	0.001005
Pb	208	3	He	237.482	8.6459	1019252.02	0.0364	0.002176
Pb	208	3	He	238.347	8.6774	1017921.08	0.0364	0.002176
Pb	208	3	He	238.525	8.6839	1006212.64	0.0364	0.002176
U	238	3	He	1.574	0.0664	14779.02	0.0421	0.00024
U	238	3	He	1.62	0.0684	15149.30	0.0421	0.00024
U	238	3	He	1.561	0.0659	14488.52	0.0421	0.00024
Sc	45	1	No Gas			3245645.58		
Sc	45	1	No Gas			3395871.20		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3425677.45		
Ge	72	1	No Gas			1404579.51		
Ge	72	1	No Gas			1475175.29		
Ge	72	1	No Gas			1486220.29		
Sc	45	2	H2			197636.58		
Sc	45	2	H2			196443.08		
Sc	45	2	H2			197960.15		
Ge	72	2	H2			158463.16		
Ge	72	2	H2			158342.83		
Ge	72	2	H2			156261.26		
In	115	2	H2			440035.50		
In	115	2	H2			430372.61		
In	115	2	H2			436175.07		
Sc	45	3	He			45130.52		
Sc	45	3	He			42983.34		
Sc	45	3	He			42613.09		
Ge	72	3	He			75658.33		
Ge	72	3	He			73518.35		
Ge	72	3	He			72944.69		
In	115	3	He			64358.66		
In	115	3	He			63032.64		
In	115	3	He			63544.61		
Tb	159	3	He			284889.62		
Tb	159	3	He			284450.39		
Tb	159	3	He			281583.65		
Bi	209	3	He			222439.90		
Bi	209	3	He			221450.80		
Bi	209	3	He			219783.96		

Quantitation Report

Data File Name	184SMPL.d
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Sample Name	410-136610-H-4-A @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

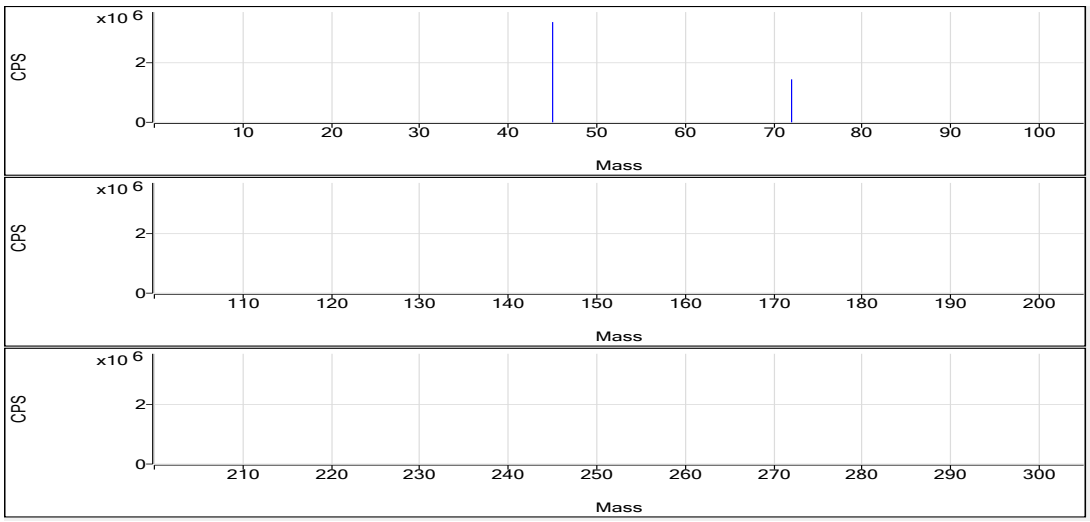
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.233	ppb	6.4	2412.88	0.0017	Pulse	0.5000	3
Se	78	72	H2	0.521	ppb	17.9	34.44	0.0002	Pulse	1.5000	3
Na	23	72	He	63.463	ppb	7.1	16015.73	0.2155	Pulse	0.1000	3
Mg	24	72	He	2451.014	ppb	1.0	153984.13	2.0713	Pulse	0.1000	3
Al	27	72	He	29273.191	ppb	0.8	525404.73	7.0674	Pulse	0.1000	3
K	39	72	He	3222.009	ppb	0.6	142951.76	1.9229	Pulse	0.1000	3
Ca	44	72	He	1981.067	ppb	2.1	4694.26	0.0631	Pulse	0.1000	3
Ti	47	72	He	612.860	ppb	2.5	11444.81	0.1540	Pulse	0.1000	3
V	51	72	He	74.187	ppb	0.8	65066.18	0.8751	Pulse	0.5000	3
Cr	52	72	He	44.877	ppb	0.7	52689.46	0.7087	Pulse	0.1000	3
Mn	55	72	He	148.729	ppb	2.3	66287.99	0.8917	Pulse	0.1000	3
Fe	57	72	He	43617.646	ppb	0.7	939731.13	12.6406	Pulse	0.1000	3
Co	59	72	He	10.095	ppb	2.9	23132.37	0.3111	Pulse	0.1000	3
Ni	60	72	He	46.323	ppb	1.6	30950.46	0.4163	Pulse	0.1000	3
Cu	63	72	He	9.798	ppb	3.0	18529.15	0.2493	Pulse	0.1000	3
Zn	66	72	He	51.713	ppb	3.3	9806.94	0.1319	Pulse	0.1000	3
As	75	72	He	18.656	ppb	3.0	2444.89	0.0329	Pulse	0.5000	3
Sr	88	115	He	23.248	ppb	1.6	11725.19	0.1825	Pulse	0.1000	3
Mo	98	115	He	1.552	ppb	6.6	2226.92	0.0347	Pulse	0.1000	3
Ag	107	115	He	0.037	ppb	52.2	136.67	0.0021	Pulse	0.1000	3
Cd	111	115	He	0.115	ppb	35.1	38.67	0.0006	Pulse	0.5000	3
Sn	120	115	He	4.986	ppb	2.2	5571.32	0.0867	Pulse	0.1000	3
Sb	121	115	He	0.519	ppb	10.5	430.02	0.0067	Pulse	0.1000	3
Ba	137	115	He	72.813	ppb	2.6	20482.62	0.3188	Pulse	0.1000	3
Tl	205	209	He	0.264	ppb	10.3	1840.20	0.0083	Pulse	0.1000	3
Pb	208	209	He	87.564	ppb	1.7	707884.22	3.1893	Pulse	0.1000	3
U	238	209	He	2.311	ppb	4.3	21625.47	0.0974	Pulse	0.1000	3

ISTD Table:

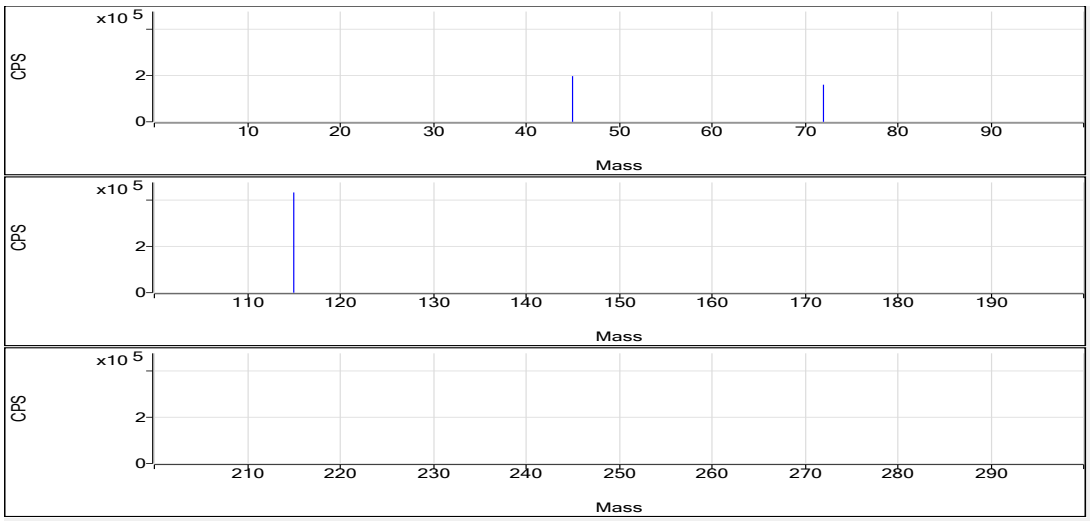
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3376694.85	1.7	104.2	Pulse	0.1000	3
No Gas	Ge	72	1447607.74	1.5	100.5	Pulse	0.1000	3
H2	Sc	45	197973.01	1.7	101.3	Pulse	0.1000	3
H2	Ge	72	160856.16	0.9	98.7	Pulse	0.1000	3
H2	In	115	434376.80	2.2	100.2	Pulse	0.1000	3
He	Sc	45	43629.27	1.0	109.1	Pulse	0.1000	3
He	Ge	72	74345.26	1.0	102.8	Pulse	0.1000	3
He	In	115	64258.03	2.0	99.5	Pulse	0.1000	3
He	Tb	159	287961.93	0.8	100.7	Pulse	0.1000	3
He	Bi	209	221981.57	0.9	99.9	Pulse	0.1000	3

No Gas

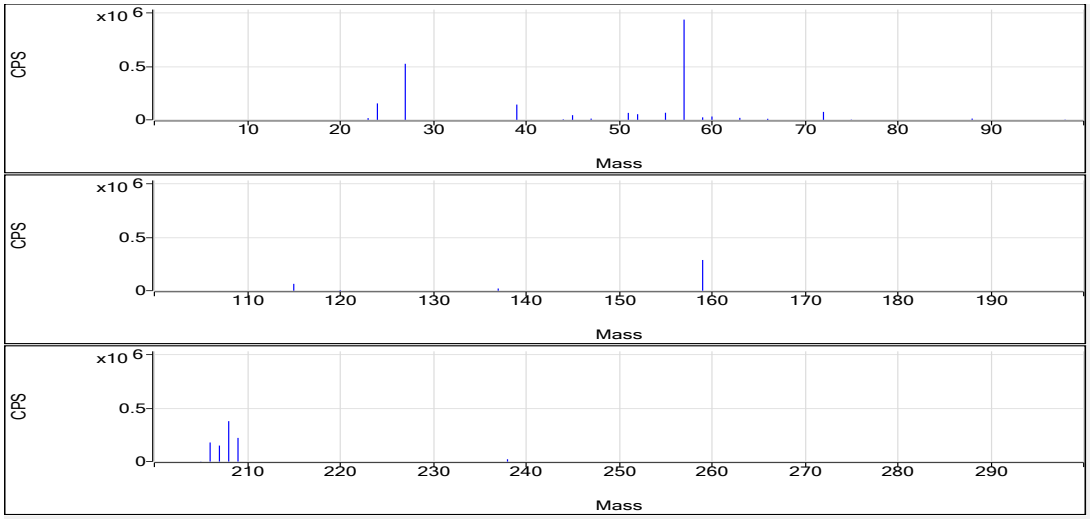


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.287	0.0017	2478.22	0.0013	4.694E-05
Be	9	1	No Gas	1.271	0.0017	2486.22	0.0013	4.694E-05
Be	9	1	No Gas	1.142	0.0015	2274.19	0.0013	4.694E-05
Se	78	2	H2	0.625	0.0003	41.33	0.0004	1.089E-05
Se	78	2	H2	0.495	0.0002	32.67	0.0004	1.089E-05
Se	78	2	H2	0.444	0.0002	29.33	0.0004	1.089E-05
Na	23	3	He	65.65	0.2192	16269.49	0.0017	0.1065
Na	23	3	He	66.432	0.2206	16249.26	0.0017	0.1065
Na	23	3	He	58.306	0.2066	15528.44	0.0017	0.1065
Mg	24	3	He	2472.547	2.0895	155061.39	0.0008	0.004846
Mg	24	3	He	2454.571	2.0743	152809.62	0.0008	0.004846
Mg	24	3	He	2425.924	2.0501	154081.38	0.0008	0.004846
Al	27	3	He	29204.847	7.0509	523260.58	0.0002	0.001063
Al	27	3	He	29534.062	7.1304	525283.98	0.0002	0.001063
Al	27	3	He	29080.664	7.021	527669.64	0.0002	0.001063
K	39	3	He	3233.249	1.9291	143159.69	0.0006	0.1436
K	39	3	He	3231.96	1.9284	142059.13	0.0006	0.1436
K	39	3	He	3200.819	1.9112	143636.45	0.0006	0.1436
Ca	44	3	He	1935.522	0.0617	4580.92	0	0.001611
Ca	44	3	He	2015.736	0.0642	4730.92	0	0.001611
Ca	44	3	He	1991.943	0.0635	4770.95	0	0.001611
Ti	47	3	He	619.246	0.1556	11544.90	0.0003	0.0002737
Ti	47	3	He	623.822	0.1567	11544.92	0.0003	0.0002737
Ti	47	3	He	595.514	0.1496	11244.60	0.0003	0.0002737
V	51	3	He	74.403	0.8777	65133.86	0.0117	0.007326
V	51	3	He	73.523	0.8674	63898.39	0.0117	0.007326
V	51	3	He	74.635	0.8804	66166.29	0.0117	0.007326
Cr	52	3	He	45.151	0.7129	52906.66	0.0152	0.02538
Cr	52	3	He	44.915	0.7093	52254.42	0.0152	0.02538
Cr	52	3	He	44.563	0.704	52907.30	0.0152	0.02538
Mn	55	3	He	146.401	0.878	65155.88	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	152.583	0.9145	67366.93	0.0059	0.01385
Mn	55	3	He	147.203	0.8827	66341.16	0.0059	0.01385
Fe	57	3	He	43507.165	12.6086	935700.85	0.0003	0.003918
Fe	57	3	He	43943.835	12.7351	938169.83	0.0003	0.003918
Fe	57	3	He	43401.937	12.5781	945322.72	0.0003	0.003918
Co	59	3	He	10.061	0.31	23008.73	0.0305	0.003084
Co	59	3	He	9.819	0.3027	22297.78	0.0305	0.003084
Co	59	3	He	10.405	0.3205	24090.60	0.0305	0.003084
Ni	60	3	He	45.766	0.4114	30533.09	0.0088	0.009003
Ni	60	3	He	47.162	0.4237	31214.26	0.0088	0.009003
Ni	60	3	He	46.041	0.4139	31104.04	0.0088	0.009003
Cu	63	3	He	9.697	0.2468	18312.03	0.0249	0.004937
Cu	63	3	He	10.125	0.2574	18963.21	0.0249	0.004937
Cu	63	3	He	9.573	0.2437	18312.21	0.0249	0.004937
Zn	66	3	He	51.968	0.1325	9833.64	0.0025	0.004836
Zn	66	3	He	49.877	0.1274	9383.28	0.0025	0.004836
Zn	66	3	He	53.295	0.1358	10203.91	0.0025	0.004836
As	75	3	He	18.161	0.032	2376.21	0.0017	0.0004347
As	75	3	He	18.546	0.0327	2408.22	0.0017	0.0004347
As	75	3	He	19.261	0.0339	2550.24	0.0017	0.0004347
Sr	88	3	He	23.665	0.1858	11705.20	0.0078	0.0007762
Sr	88	3	He	22.911	0.1799	11785.22	0.0078	0.0007762
Sr	88	3	He	23.168	0.1819	11685.14	0.0078	0.0007762
Mo	98	3	He	1.642	0.0367	2310.26	0.022	0.0005162
Mo	98	3	He	1.439	0.0322	2110.23	0.022	0.0005162
Mo	98	3	He	1.574	0.0352	2260.28	0.022	0.0005162
Ag	107	3	He	0.039	0.0022	140.01	0.0455	0.0004641
Ag	107	3	He	0.017	0.0012	80.00	0.0455	0.0004641
Ag	107	3	He	0.055	0.003	190.01	0.0455	0.0004641
Cd	111	3	He	0.161	0.0008	52.00	0.0048	5.152E-05
Cd	111	3	He	0.097	0.0005	34.00	0.0048	5.152E-05
Cd	111	3	He	0.087	0.0005	30.00	0.0048	5.152E-05
Sn	120	3	He	4.863	0.0849	5351.18	0.0143	0.01559
Sn	120	3	He	5.074	0.0879	5761.42	0.0143	0.01559
Sn	120	3	He	5.022	0.0872	5601.37	0.0143	0.01559
Sb	121	3	He	0.555	0.0071	450.02	0.0124	0.000258
Sb	121	3	He	0.545	0.007	460.03	0.0124	0.000258
Sb	121	3	He	0.456	0.0059	380.02	0.0124	0.000258
Ba	137	3	He	73.92	0.3237	20395.98	0.0044	0.000309
Ba	137	3	He	70.632	0.3093	20265.61	0.0044	0.000309
Ba	137	3	He	73.886	0.3235	20786.26	0.0044	0.000309
Tl	205	3	He	0.251	0.008	1770.18	0.0276	0.001005
Tl	205	3	He	0.245	0.0078	1740.18	0.0276	0.001005
Tl	205	3	He	0.295	0.0092	2010.25	0.0276	0.001005
Pb	208	3	He	87.584	3.19	382091.01	0.0364	0.002176
Pb	208	3	He	86.037	3.1337	375565.62	0.0364	0.002176
Pb	208	3	He	89.071	3.2441	379212.49	0.0364	0.002176
U	238	3	He	2.307	0.0973	21648.79	0.0421	0.00024
U	238	3	He	2.212	0.0933	20877.52	0.0421	0.00024
U	238	3	He	2.413	0.1017	22350.10	0.0421	0.00024
Sc	45	1	No Gas			3314611.51		
Sc	45	1	No Gas			3383443.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3432029.64		
Ge	72	1	No Gas			1425522.64		
Ge	72	1	No Gas			1448079.35		
Ge	72	1	No Gas			1469221.23		
Sc	45	2	H2			201841.29		
Sc	45	2	H2			196601.99		
Sc	45	2	H2			195475.74		
Ge	72	2	H2			162506.47		
Ge	72	2	H2			160434.14		
Ge	72	2	H2			159627.87		
In	115	2	H2			443164.52		
In	115	2	H2			424432.49		
In	115	2	H2			435533.39		
Sc	45	3	He			43104.22		
Sc	45	3	He			43876.88		
Sc	45	3	He			43906.71		
Ge	72	3	He			74211.43		
Ge	72	3	He			73668.09		
Ge	72	3	He			75156.27		
In	115	3	He			63051.81		
In	115	3	He			65563.95		
In	115	3	He			64288.70		
Tb	159	3	He			285451.87		
Tb	159	3	He			288751.52		
Tb	159	3	He			289682.40		
Bi	209	3	He			222519.29		
Bi	209	3	He			223760.68		
Bi	209	3	He			219664.74		

Quantitation Report

Data File Name	185SMPL.d
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Sample Name	410-136610-H-4-A @10
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Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

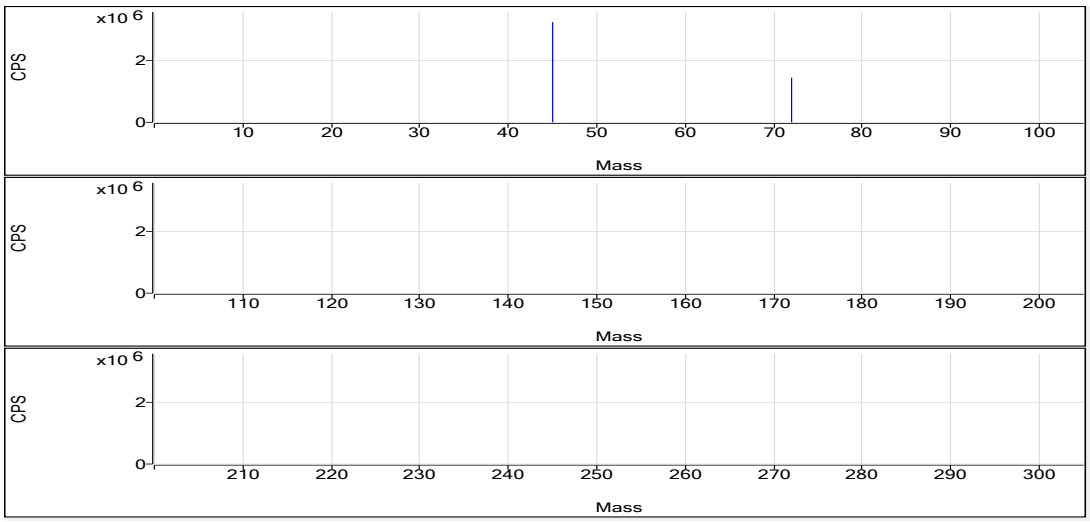
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.219	ppb	3.3	483.34	0.0003	Pulse	0.5000	3
Se	78	72	H2	0.119	ppb	45.8	9.33	0.0001	Pulse	1.5000	3
Na	23	72	He	11.071	ppb	28.5	9329.90	0.1255	Pulse	0.1000	3
Mg	24	72	He	438.895	ppb	2.3	27876.96	0.3749	Pulse	0.1000	3
Al	27	72	He	5298.819	ppb	1.9	95198.34	1.2802	Pulse	0.1000	3
K	39	72	He	574.584	ppb	3.7	34280.66	0.4609	Pulse	0.1000	3
Ca	44	72	He	373.826	ppb	6.4	983.40	0.0132	Pulse	0.1000	3
Ti	47	72	He	110.066	ppb	8.9	2073.55	0.0279	Pulse	0.1000	3
V	51	72	He	13.076	ppb	1.9	11919.58	0.1603	Pulse	0.5000	3
Cr	52	72	He	8.158	ppb	4.0	11127.95	0.1496	Pulse	0.1000	3
Mn	55	72	He	26.424	ppb	0.4	12629.16	0.1698	Pulse	0.1000	3
Fe	57	72	He	7788.242	ppb	1.6	168084.60	2.2603	Pulse	0.1000	3
Co	59	72	He	1.749	ppb	4.1	4197.41	0.0564	Pulse	0.1000	3
Ni	60	72	He	9.015	ppb	0.9	6565.02	0.0883	Pulse	0.1000	3
Cu	63	72	He	1.824	ppb	4.5	3750.61	0.0504	Pulse	0.1000	3
Zn	66	72	He	8.504	ppb	6.0	1913.53	0.0257	Pulse	0.1000	3
As	75	72	He	3.268	ppb	20.2	454.68	0.0061	Pulse	0.5000	3
Sr	88	115	He	4.605	ppb	5.8	2333.60	0.0368	Pulse	0.1000	3
Mo	98	115	He	0.266	ppb	25.4	403.35	0.0064	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	70.8	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.022	ppb	48.9	10.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.840	ppb	10.3	1750.17	0.0276	Pulse	0.1000	3
Sb	121	115	He	0.127	ppb	20.7	116.67	0.0018	Pulse	0.1000	3
Ba	137	115	He	13.070	ppb	3.7	3650.64	0.0575	Pulse	0.1000	3
Tl	205	209	He	0.054	ppb	9.9	553.36	0.0025	Pulse	0.1000	3
Pb	208	209	He	15.600	ppb	1.5	126840.52	0.5700	Pulse	0.1000	3
U	238	209	He	0.402	ppb	0.9	3817.37	0.0172	Pulse	0.1000	3

ISTD Table:

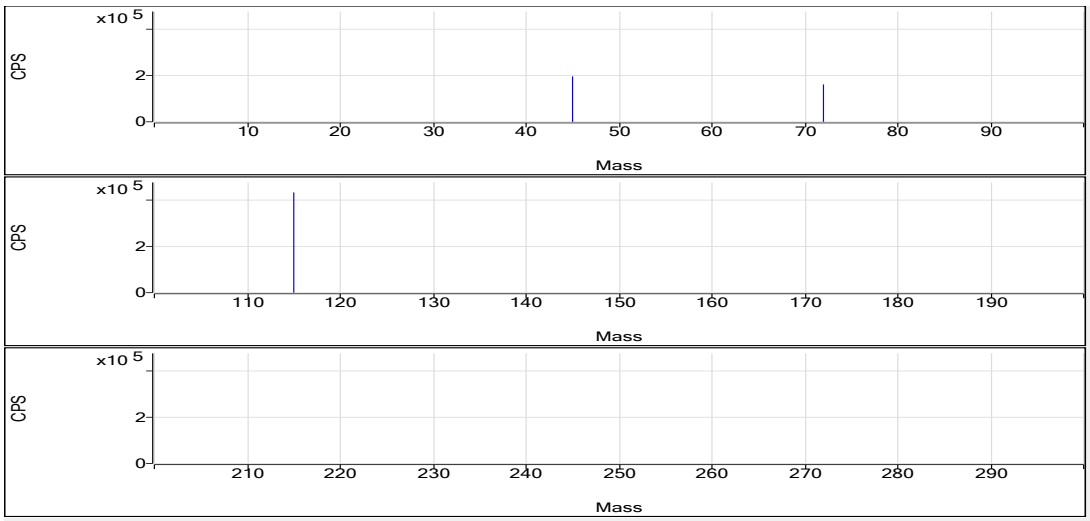
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3245923.39	2.1	100.1	Pulse	0.1000	3
No Gas	Ge	72	1445034.25	1.4	100.4	Pulse	0.1000	3
H2	Sc	45	196101.20	2.6	100.4	Pulse	0.1000	3
H2	Ge	72	161489.02	2.7	99.1	Pulse	0.1000	3
H2	In	115	432826.97	1.8	99.9	Pulse	0.1000	3
He	Sc	45	42669.51	1.6	106.7	Pulse	0.1000	3
He	Ge	72	74368.61	0.6	102.9	Pulse	0.1000	3
He	In	115	63477.30	2.2	98.3	Pulse	0.1000	3
He	Tb	159	281212.49	0.4	98.3	Pulse	0.1000	3
He	Bi	209	222528.17	0.3	100.2	Pulse	0.1000	3

No Gas

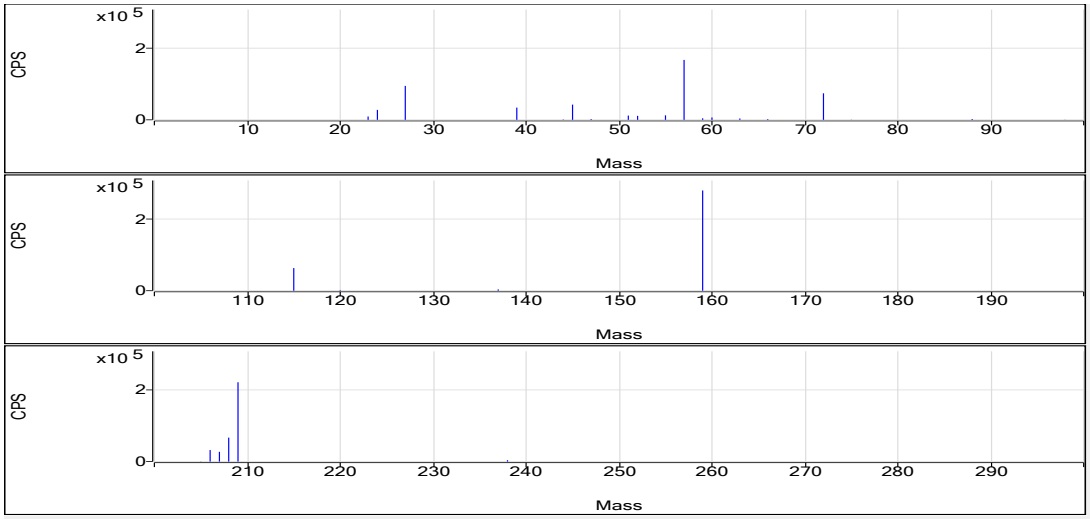


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.224	0.0003	490.01	0.0013	4.694E-05
Be	9	1	No Gas	0.221	0.0003	484.01	0.0013	4.694E-05
Be	9	1	No Gas	0.211	0.0003	476.01	0.0013	4.694E-05
Se	78	2	H2	0.178	0.0001	13.33	0.0004	1.089E-05
Se	78	2	H2	0.07	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.11	0.0001	8.67	0.0004	1.089E-05
Na	23	3	He	8.999	0.1219	9083.14	0.0017	0.1065
Na	23	3	He	14.703	0.1317	9733.46	0.0017	0.1065
Na	23	3	He	9.511	0.1228	9173.10	0.0017	0.1065
Mg	24	3	He	438.53	0.3746	27906.99	0.0008	0.004846
Mg	24	3	He	449.082	0.3835	28337.84	0.0008	0.004846
Mg	24	3	He	429.073	0.3666	27386.04	0.0008	0.004846
Al	27	3	He	5218.156	1.2607	93926.55	0.0002	0.001063
Al	27	3	He	5409.876	1.307	96584.04	0.0002	0.001063
Al	27	3	He	5268.424	1.2728	95084.43	0.0002	0.001063
K	39	3	He	598.439	0.4741	35322.66	0.0006	0.1436
K	39	3	He	557.096	0.4513	33348.78	0.0006	0.1436
K	39	3	He	568.218	0.4574	34170.53	0.0006	0.1436
Ca	44	3	He	354.37	0.0126	940.06	0	0.001611
Ca	44	3	He	366.409	0.013	960.06	0	0.001611
Ca	44	3	He	400.699	0.0141	1050.07	0	0.001611
Ti	47	3	He	120.416	0.0305	2270.24	0.0003	0.0002737
Ti	47	3	He	100.903	0.0256	1890.20	0.0003	0.0002737
Ti	47	3	He	108.88	0.0276	2060.20	0.0003	0.0002737
V	51	3	He	13.102	0.1606	11964.93	0.0117	0.007326
V	51	3	He	13.31	0.163	12047.03	0.0117	0.007326
V	51	3	He	12.816	0.1572	11746.77	0.0117	0.007326
Cr	52	3	He	8.421	0.1536	11444.88	0.0152	0.02538
Cr	52	3	He	7.792	0.144	10644.25	0.0152	0.02538
Cr	52	3	He	8.262	0.1512	11294.72	0.0152	0.02538
Mn	55	3	He	26.364	0.1695	12625.81	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	26.553	0.1706	12605.83	0.0059	0.01385
Mn	55	3	He	26.356	0.1694	12655.84	0.0059	0.01385
Fe	57	3	He	7765.486	2.2537	167908.61	0.0003	0.003918
Fe	57	3	He	7919.023	2.2982	169832.56	0.0003	0.003918
Fe	57	3	He	7680.219	2.229	166512.63	0.0003	0.003918
Co	59	3	He	1.76	0.0568	4230.74	0.0305	0.003084
Co	59	3	He	1.815	0.0585	4320.82	0.0305	0.003084
Co	59	3	He	1.672	0.0541	4040.66	0.0305	0.003084
Ni	60	3	He	9.068	0.0887	6611.70	0.0088	0.009003
Ni	60	3	He	8.92	0.0874	6461.64	0.0088	0.009003
Ni	60	3	He	9.057	0.0886	6621.72	0.0088	0.009003
Cu	63	3	He	1.896	0.0522	3890.65	0.0249	0.004937
Cu	63	3	He	1.734	0.0482	3560.57	0.0249	0.004937
Cu	63	3	He	1.842	0.0509	3800.61	0.0249	0.004937
Zn	66	3	He	8.03	0.0246	1830.18	0.0025	0.004836
Zn	66	3	He	8.443	0.0256	1890.18	0.0025	0.004836
Zn	66	3	He	9.039	0.027	2020.22	0.0025	0.004836
As	75	3	He	2.914	0.0055	410.01	0.0017	0.0004347
As	75	3	He	4.03	0.0074	550.01	0.0017	0.0004347
As	75	3	He	2.86	0.0054	404.01	0.0017	0.0004347
Sr	88	3	He	4.307	0.0344	2200.25	0.0078	0.0007762
Sr	88	3	He	4.82	0.0385	2380.27	0.0078	0.0007762
Sr	88	3	He	4.689	0.0374	2420.29	0.0078	0.0007762
Mo	98	3	He	0.261	0.0063	400.02	0.022	0.0005162
Mo	98	3	He	0.336	0.0079	490.02	0.022	0.0005162
Mo	98	3	He	0.201	0.0049	320.02	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.034	0.0002	14.00	0.0048	5.152E-05
Sn	120	3	He	0.927	0.0288	1840.17	0.0143	0.01559
Sn	120	3	He	0.754	0.0263	1630.15	0.0143	0.01559
Sn	120	3	He	0.838	0.0275	1780.18	0.0143	0.01559
Sb	121	3	He	0.156	0.0022	140.01	0.0124	0.000258
Sb	121	3	He	0.122	0.0018	110.00	0.0124	0.000258
Sb	121	3	He	0.104	0.0015	100.00	0.0124	0.000258
Ba	137	3	He	13.529	0.0595	3800.69	0.0044	0.000309
Ba	137	3	He	12.562	0.0553	3420.58	0.0044	0.000309
Ba	137	3	He	13.119	0.0577	3730.66	0.0044	0.000309
Tl	205	3	He	0.051	0.0024	540.03	0.0276	0.001005
Tl	205	3	He	0.06	0.0027	590.03	0.0276	0.001005
Tl	205	3	He	0.05	0.0024	530.03	0.0276	0.001005
Pb	208	3	He	15.847	0.579	68477.93	0.0364	0.002176
Pb	208	3	He	15.391	0.5624	65704.35	0.0364	0.002176
Pb	208	3	He	15.562	0.5686	67180.93	0.0364	0.002176
U	238	3	He	0.401	0.0171	3820.71	0.0421	0.00024
U	238	3	He	0.406	0.0173	3850.72	0.0421	0.00024
U	238	3	He	0.399	0.017	3780.69	0.0421	0.00024
Sc	45	1	No Gas			3219850.58		
Sc	45	1	No Gas			3196134.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3321784.95		
Ge	72	1	No Gas			1433220.29		
Ge	72	1	No Gas			1432819.04		
Ge	72	1	No Gas			1469063.42		
Sc	45	2	H2			201670.47		
Sc	45	2	H2			191923.24		
Sc	45	2	H2			194709.90		
Ge	72	2	H2			165904.04		
Ge	72	2	H2			157087.76		
Ge	72	2	H2			161475.26		
In	115	2	H2			441779.13		
In	115	2	H2			428676.28		
In	115	2	H2			428025.50		
Sc	45	3	He			42793.34		
Sc	45	3	He			43294.71		
Sc	45	3	He			41920.49		
Ge	72	3	He			74503.77		
Ge	72	3	He			73898.89		
Ge	72	3	He			74703.18		
In	115	3	He			63896.18		
In	115	3	He			61907.09		
In	115	3	He			64669.60		
Tb	159	3	He			280868.34		
Tb	159	3	He			280390.84		
Tb	159	3	He			282378.30		
Bi	209	3	He			223346.23		
Bi	209	3	He			222206.52		
Bi	209	3	He			222031.75		

Quantitation Report

Data File Name	186SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:04:10
Sample Name	410-136610-H-2-A @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

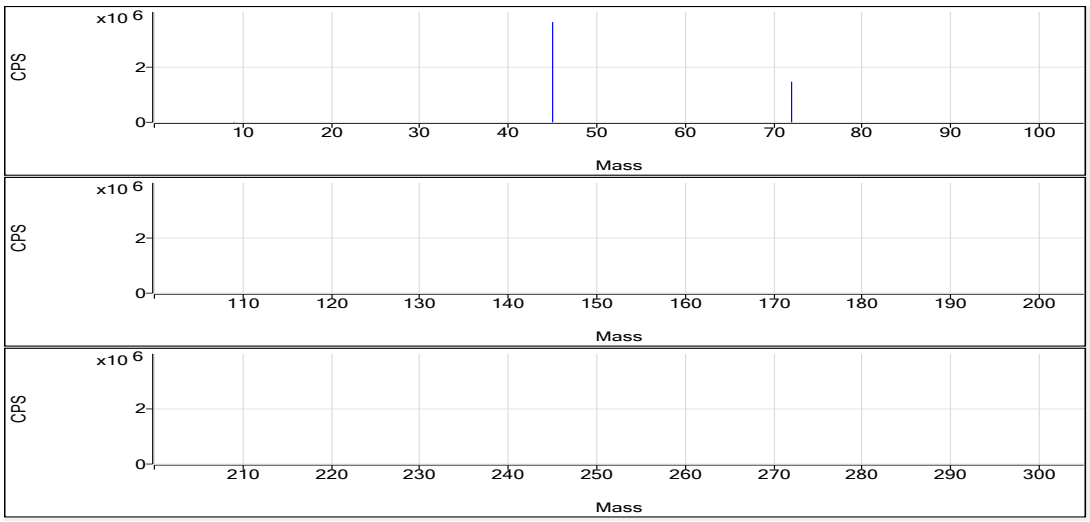
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	8.334	ppb	6.6	16142.71	0.0110	Pulse	0.5000	3
Se	78	72	H2	1.743	ppb	5.0	108.22	0.0007	Pulse	1.5000	3
Na	23	72	He	193.199	ppb	0.8	32877.07	0.4383	Pulse	0.1000	3
Mg	24	72	He	4993.339	ppb	0.6	316105.89	4.2147	Pulse	0.1000	3
Al	27	72	He	79265.433	ppb	0.6	1435139.93	19.1353	Pulse	0.1000	3
K	39	72	He	8031.497	ppb	1.0	343394.87	4.5787	Pulse	0.1000	3
Ca	44	72	He	34254.852	ppb	2.2	79924.66	1.0656	Pulse	0.1000	3
Ti	47	72	He	700.465	ppb	5.3	13193.04	0.1759	Pulse	0.1000	3
V	51	72	He	202.735	ppb	1.1	178408.06	2.3789	Pulse	0.5000	3
Cr	52	72	He	162.761	ppb	1.5	187771.72	2.5038	Pulse	0.1000	3
Mn	55	72	He	3791.708	ppb	0.4	1679571.18	22.3941	Pulse	0.1000	3
Fe	57	72	He	688999.925	ppb	1.0	14970793.11	199.6173	Analog	0.1000	3
Co	59	72	He	69.278	ppb	0.8	158756.96	2.1168	Pulse	0.1000	3
Ni	60	72	He	65.222	ppb	0.9	43690.07	0.5825	Pulse	0.1000	3
Cu	63	72	He	24.169	ppb	1.2	45572.18	0.6076	Pulse	0.1000	3
Zn	66	72	He	371.273	ppb	0.6	68773.93	0.9170	Pulse	0.1000	3
As	75	72	He	251.329	ppb	2.1	32811.89	0.4375	Pulse	0.5000	3
Sr	88	115	He	113.243	ppb	1.1	55542.48	0.8860	Pulse	0.1000	3
Mo	98	115	He	6.905	ppb	3.3	9563.57	0.1526	Pulse	0.1000	3
Ag	107	115	He	0.034	ppb	84.6	126.67	0.0020	Pulse	0.1000	3
Cd	111	115	He	0.568	ppb	9.7	174.00	0.0028	Pulse	0.5000	3
Sn	120	115	He	2.085	ppb	9.2	2840.39	0.0453	Pulse	0.1000	3
Sb	121	115	He	0.652	ppb	17.1	523.36	0.0083	Pulse	0.1000	3
Ba	137	115	He	145.807	ppb	0.3	40008.97	0.6382	Pulse	0.1000	3
Tl	205	209	He	0.742	ppb	7.5	4664.33	0.0215	Pulse	0.1000	3
Pb	208	209	He	53.685	ppb	1.0	423969.79	1.9562	Pulse	0.1000	3
U	238	209	He	12.214	ppb	0.7	111419.77	0.5141	Pulse	0.1000	3

ISTD Table:

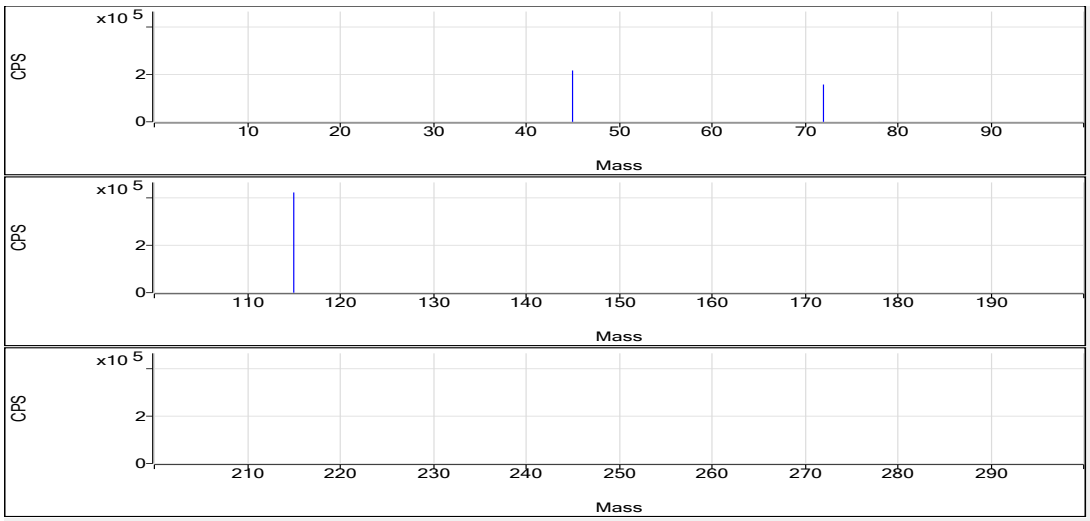
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3626400.15	0.6	111.9	Pulse	0.1000	3
No Gas	Ge	72	1468202.11	0.7	102.0	Pulse	0.1000	3
H2	Sc	45	216087.38	1.2	110.6	Pulse	0.1000	3
H2	Ge	72	156973.03	1.0	96.3	Pulse	0.1000	3
H2	In	115	421900.83	1.2	97.4	Pulse	0.1000	3
He	Sc	45	46564.59	1.6	116.5	Pulse	0.1000	3
He	Ge	72	75002.54	1.0	103.8	Pulse	0.1000	3
He	In	115	62692.34	0.9	97.1	Pulse	0.1000	3
He	Tb	159	343068.45	0.4	120.0	Pulse	0.1000	3
He	Bi	209	216742.77	0.7	97.5	Pulse	0.1000	3

No Gas

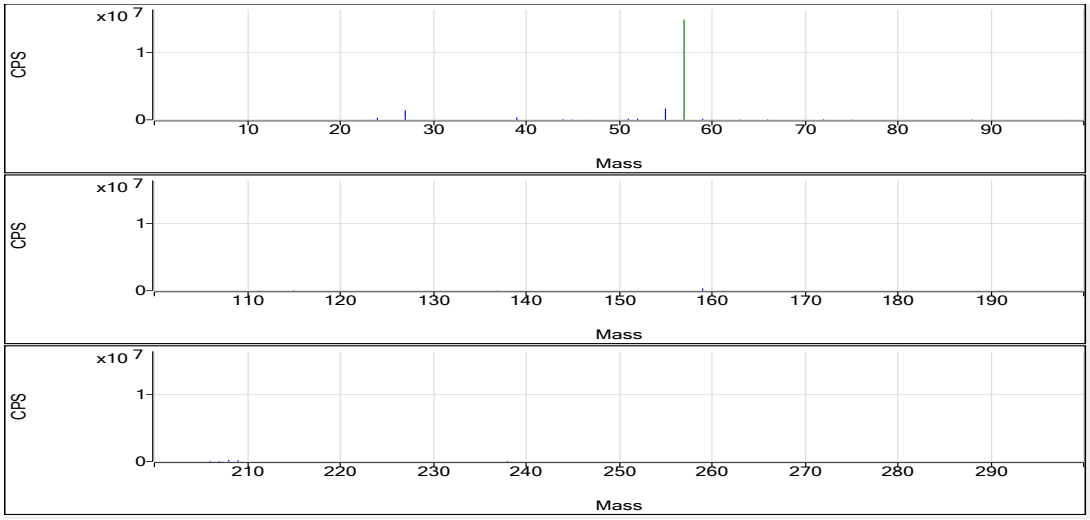


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	8.91	0.0118	17161.83	0.0013	4.694E-05
Be	9	1	No Gas	8.276	0.0109	16004.50	0.0013	4.694E-05
Be	9	1	No Gas	7.816	0.0103	15261.79	0.0013	4.694E-05
Se	78	2	H2	1.752	0.0007	110.00	0.0004	1.089E-05
Se	78	2	H2	1.825	0.0007	112.67	0.0004	1.089E-05
Se	78	2	H2	1.651	0.0007	102.00	0.0004	1.089E-05
Na	23	3	He	193.579	0.439	33297.57	0.0017	0.1065
Na	23	3	He	191.411	0.4353	32376.21	0.0017	0.1065
Na	23	3	He	194.608	0.4408	32957.43	0.0017	0.1065
Mg	24	3	He	4961.811	4.1882	317673.39	0.0008	0.004846
Mg	24	3	He	4998.919	4.2194	313853.53	0.0008	0.004846
Mg	24	3	He	5019.285	4.2366	316790.74	0.0008	0.004846
Al	27	3	He	78817.872	19.0272	1443223.73	0.0002	0.001063
Al	27	3	He	79766.283	19.2562	1432326.70	0.0002	0.001063
Al	27	3	He	79212.143	19.1224	1429869.35	0.0002	0.001063
K	39	3	He	7956.675	4.5374	344164.41	0.0006	0.1436
K	39	3	He	8122.035	4.6287	344296.99	0.0006	0.1436
K	39	3	He	8015.78	4.57	341723.20	0.0006	0.1436
Ca	44	3	He	34796.614	1.0824	82099.64	0	0.001611
Ca	44	3	He	34557.557	1.075	79958.72	0	0.001611
Ca	44	3	He	33410.385	1.0393	77715.62	0	0.001611
Ti	47	3	He	668.458	0.1679	12735.97	0.0003	0.0002737
Ti	47	3	He	691.862	0.1738	12926.10	0.0003	0.0002737
Ti	47	3	He	741.075	0.1861	13917.04	0.0003	0.0002737
V	51	3	He	200.418	2.3518	178381.95	0.0117	0.007326
V	51	3	He	204.822	2.4033	178762.34	0.0117	0.007326
V	51	3	He	202.965	2.3816	178079.88	0.0117	0.007326
Cr	52	3	He	160.297	2.4663	187067.73	0.0152	0.02538
Cr	52	3	He	165.254	2.5417	189061.91	0.0152	0.02538
Cr	52	3	He	162.731	2.5033	187185.51	0.0152	0.02538
Mn	55	3	He	3776.096	22.302	1691612.79	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3806.08	22.4789	1672044.51	0.0059	0.01385
Mn	55	3	He	3792.948	22.4014	1675056.23	0.0059	0.01385
Fe	57	3	He	681568.363	197.4643	14977743.53	0.0003	0.003918
Fe	57	3	He	695320.004	201.4483	14984269.78	0.0003	0.003918
Fe	57	3	He	690111.409	199.9393	14950366.03	0.0003	0.003918
Co	59	3	He	68.653	2.0977	159114.16	0.0305	0.003084
Co	59	3	He	69.743	2.131	158506.88	0.0305	0.003084
Co	59	3	He	69.439	2.1217	158649.83	0.0305	0.003084
Ni	60	3	He	65.258	0.5828	44208.38	0.0088	0.009003
Ni	60	3	He	65.814	0.5877	43716.64	0.0088	0.009003
Ni	60	3	He	64.595	0.577	43145.20	0.0088	0.009003
Cu	63	3	He	23.922	0.6015	45622.35	0.0249	0.004937
Cu	63	3	He	24.079	0.6054	45030.76	0.0249	0.004937
Cu	63	3	He	24.505	0.616	46063.42	0.0249	0.004937
Zn	66	3	He	369.848	0.9135	69286.83	0.0025	0.004836
Zn	66	3	He	370.309	0.9146	68030.26	0.0025	0.004836
Zn	66	3	He	373.662	0.9228	69004.71	0.0025	0.004836
As	75	3	He	245.909	0.4281	32472.46	0.0017	0.0004347
As	75	3	He	256.685	0.4469	33238.21	0.0017	0.0004347
As	75	3	He	251.392	0.4376	32725.00	0.0017	0.0004347
Sr	88	3	He	112.736	0.882	55569.22	0.0078	0.0007762
Sr	88	3	He	112.287	0.8785	55358.28	0.0078	0.0007762
Sr	88	3	He	114.707	0.8974	55699.95	0.0078	0.0007762
Mo	98	3	He	6.891	0.1523	9593.56	0.022	0.0005162
Mo	98	3	He	6.681	0.1476	9303.39	0.022	0.0005162
Mo	98	3	He	7.142	0.1578	9793.76	0.022	0.0005162
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.068	0.0035	220.01	0.0455	0.0004641
Cd	111	3	He	0.518	0.0025	160.00	0.0048	5.152E-05
Cd	111	3	He	0.558	0.0027	172.00	0.0048	5.152E-05
Cd	111	3	He	0.627	0.0031	190.00	0.0048	5.152E-05
Sn	120	3	He	2.091	0.0454	2860.38	0.0143	0.01559
Sn	120	3	He	1.89	0.0425	2680.36	0.0143	0.01559
Sn	120	3	He	2.275	0.048	2980.43	0.0143	0.01559
Sb	121	3	He	0.747	0.0095	600.03	0.0124	0.000258
Sb	121	3	He	0.529	0.0068	430.02	0.0124	0.000258
Sb	121	3	He	0.681	0.0087	540.03	0.0124	0.000258
Ba	137	3	He	145.384	0.6363	40089.37	0.0044	0.000309
Ba	137	3	He	146.047	0.6392	40279.44	0.0044	0.000309
Ba	137	3	He	145.989	0.639	39658.10	0.0044	0.000309
Tl	205	3	He	0.744	0.0216	4681.00	0.0276	0.001005
Tl	205	3	He	0.796	0.023	5021.13	0.0276	0.001005
Tl	205	3	He	0.685	0.0199	4290.85	0.0276	0.001005
Pb	208	3	He	53.722	1.9575	226213.96	0.0364	0.002176
Pb	208	3	He	53.138	1.9363	225436.95	0.0364	0.002176
Pb	208	3	He	54.196	1.9748	228488.69	0.0364	0.002176
U	238	3	He	12.123	0.5102	110680.26	0.0421	0.00024
U	238	3	He	12.271	0.5165	112646.74	0.0421	0.00024
U	238	3	He	12.249	0.5155	110932.32	0.0421	0.00024
Sc	45	1	No Gas			3612519.63		
Sc	45	1	No Gas			3615704.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3650976.82		
Ge	72	1	No Gas			1459900.29		
Ge	72	1	No Gas			1465411.70		
Ge	72	1	No Gas			1479294.35		
Sc	45	2	H2			219147.48		
Sc	45	2	H2			214708.40		
Sc	45	2	H2			214406.25		
Ge	72	2	H2			158706.23		
Ge	72	2	H2			156197.89		
Ge	72	2	H2			156014.96		
In	115	2	H2			427515.81		
In	115	2	H2			417635.62		
In	115	2	H2			420551.05		
Sc	45	3	He			45751.64		
Sc	45	3	He			46675.26		
Sc	45	3	He			47266.88		
Ge	72	3	He			75850.40		
Ge	72	3	He			74382.70		
Ge	72	3	He			74774.52		
In	115	3	He			63022.63		
In	115	3	He			63032.86		
In	115	3	He			62088.01		
Tb	159	3	He			341860.35		
Tb	159	3	He			342652.81		
Tb	159	3	He			344692.18		
Bi	209	3	He			216930.45		
Bi	209	3	He			218117.05		
Bi	209	3	He			215180.80		

Quantitation Report

Data File Name	187SMPL.d
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Sample Name	410-136610-H-2-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

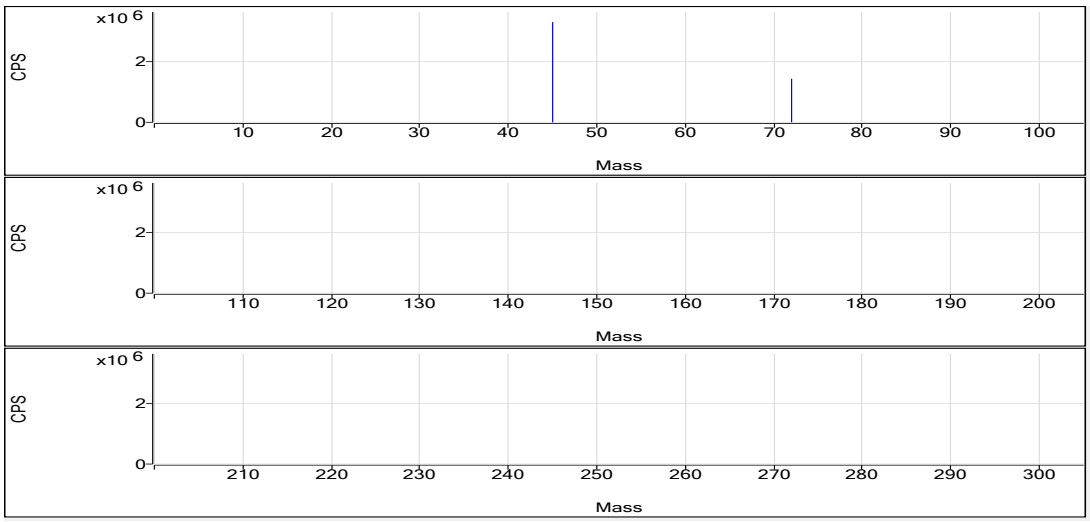
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.670	ppb	7.0	3234.37	0.0022	Pulse	0.5000	3
Se	78	72	H2	0.330	ppb	15.6	22.00	0.0001	Pulse	1.5000	3
Na	23	72	He	45.320	ppb	13.8	13199.65	0.1843	Pulse	0.1000	3
Mg	24	72	He	1020.585	ppb	2.4	62000.09	0.8653	Pulse	0.1000	3
Al	27	72	He	16269.048	ppb	1.8	281491.80	3.9283	Pulse	0.1000	3
K	39	72	He	1640.445	ppb	3.6	75195.34	1.0495	Pulse	0.1000	3
Ca	44	72	He	6922.404	ppb	3.7	15518.73	0.2166	Pulse	0.1000	3
Ti	47	72	He	151.786	ppb	3.1	2747.01	0.0383	Pulse	0.1000	3
V	51	72	He	41.401	ppb	1.7	35228.88	0.4916	Pulse	0.5000	3
Cr	52	72	He	33.294	ppb	1.9	38147.34	0.5324	Pulse	0.1000	3
Mn	55	72	He	783.832	ppb	2.2	332504.53	4.6404	Pulse	0.1000	3
Fe	57	72	He	138502.875	ppb	1.8	2875629.33	40.1302	Pulse	0.1000	3
Co	59	72	He	14.155	ppb	1.8	31167.74	0.4350	Pulse	0.1000	3
Ni	60	72	He	14.517	ppb	4.4	9790.30	0.1367	Pulse	0.1000	3
Cu	63	72	He	4.869	ppb	3.3	9053.11	0.1263	Pulse	0.1000	3
Zn	66	72	He	78.116	ppb	1.0	14100.65	0.1967	Pulse	0.1000	3
As	75	72	He	52.087	ppb	4.4	6520.18	0.0910	Pulse	0.5000	3
Sr	88	115	He	22.535	ppb	2.5	11194.75	0.1769	Pulse	0.1000	3
Mo	98	115	He	1.326	ppb	5.9	1880.19	0.0297	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	210.0	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.084	ppb	32.4	28.67	0.0005	Pulse	0.5000	3
Sn	120	115	He	0.407	ppb	48.1	1353.46	0.0214	Pulse	0.1000	3
Sb	121	115	He	0.145	ppb	23.9	130.00	0.0021	Pulse	0.1000	3
Ba	137	115	He	29.324	ppb	3.1	8135.99	0.1286	Pulse	0.1000	3
Tl	205	209	He	0.157	ppb	7.1	1186.77	0.0053	Pulse	0.1000	3
Pb	208	209	He	10.390	ppb	1.1	84378.32	0.3803	Pulse	0.1000	3
U	238	209	He	2.366	ppb	0.6	22132.91	0.0998	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3327273.08	2.4	102.7	Pulse	0.1000	3
No Gas	Ge	72	1444084.93	1.7	100.3	Pulse	0.1000	3
H2	Sc	45	199436.23	0.8	102.1	Pulse	0.1000	3
H2	Ge	72	158088.50	1.8	97.0	Pulse	0.1000	3
H2	In	115	433775.75	2.2	100.1	Pulse	0.1000	3
He	Sc	45	42412.16	2.4	106.1	Pulse	0.1000	3
He	Ge	72	71675.82	2.2	99.2	Pulse	0.1000	3
He	In	115	63265.98	0.5	97.9	Pulse	0.1000	3
He	Tb	159	296867.64	1.1	103.8	Pulse	0.1000	3
He	Bi	209	221852.52	0.2	99.8	Pulse	0.1000	3

No Gas



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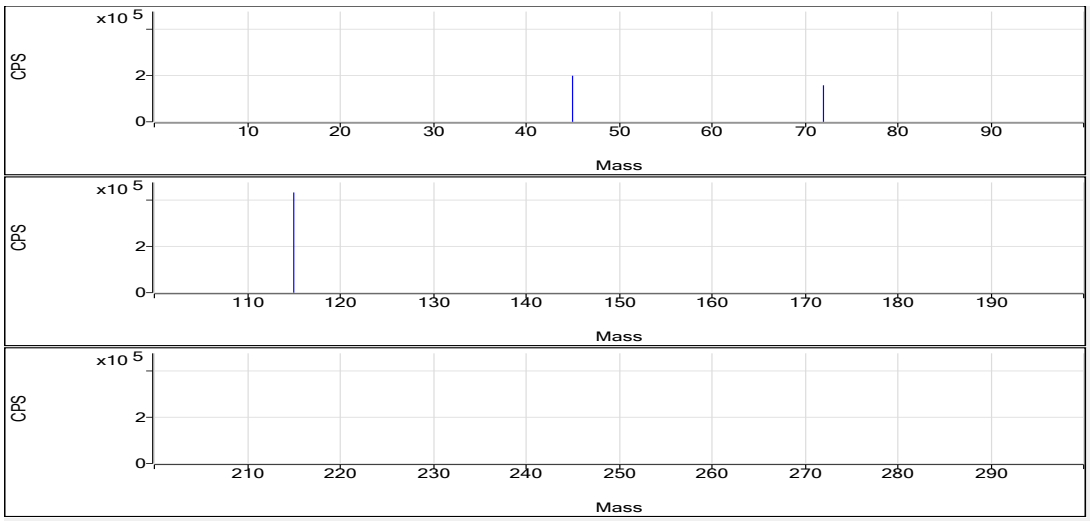
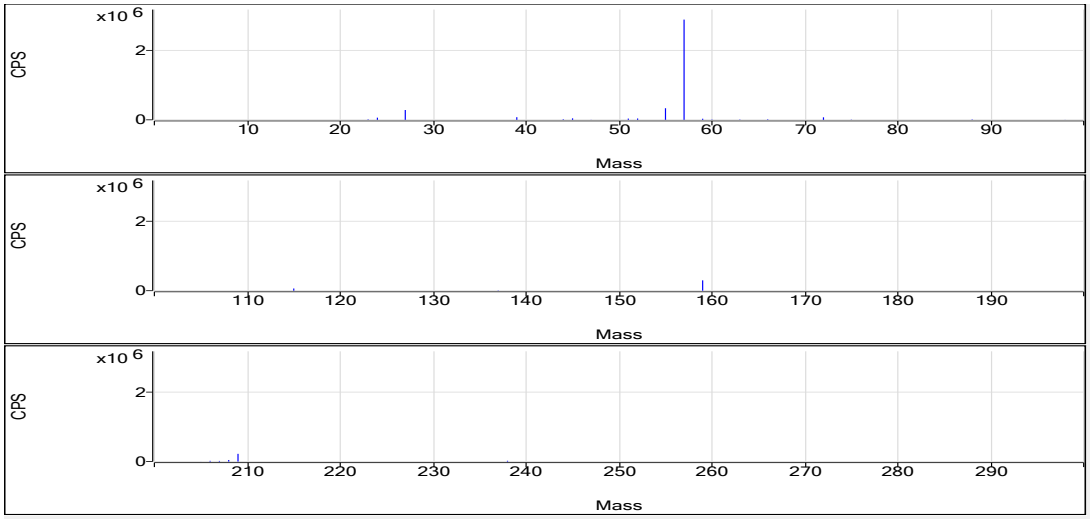


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.797	0.0024	3428.41	0.0013	4.694E-05
Be	9	1	No Gas	1.645	0.0022	3172.35	0.0013	4.694E-05
Be	9	1	No Gas	1.568	0.0021	3102.34	0.0013	4.694E-05
Se	78	2	H2	0.27	0.0001	18.67	0.0004	1.089E-05
Se	78	2	H2	0.358	0.0002	23.33	0.0004	1.089E-05
Se	78	2	H2	0.361	0.0002	24.00	0.0004	1.089E-05
Na	23	3	He	46.058	0.1856	13186.27	0.0017	0.1065
Na	23	3	He	51.154	0.1943	13706.72	0.0017	0.1065
Na	23	3	He	38.747	0.173	12705.97	0.0017	0.1065
Mg	24	3	He	1031.19	0.8742	62120.59	0.0008	0.004846
Mg	24	3	He	1037.865	0.8799	62060.40	0.0008	0.004846
Mg	24	3	He	992.701	0.8418	61819.28	0.0008	0.004846
Al	27	3	He	16341.508	3.9458	280374.86	0.0002	0.001063
Al	27	3	He	16524.269	3.9899	281423.36	0.0002	0.001063
Al	27	3	He	15941.368	3.8492	282677.18	0.0002	0.001063
K	39	3	He	1691.527	1.0777	76579.02	0.0006	0.1436
K	39	3	He	1653.611	1.0568	74538.70	0.0006	0.1436
K	39	3	He	1576.197	1.014	74468.31	0.0006	0.1436
Ca	44	3	He	6916.263	0.2164	15378.67	0	0.001611
Ca	44	3	He	7182.586	0.2247	15848.95	0	0.001611
Ca	44	3	He	6668.362	0.2087	15328.58	0	0.001611
Ti	47	3	He	149.887	0.0379	2690.36	0.0003	0.0002737
Ti	47	3	He	157.224	0.0397	2800.34	0.0003	0.0002737
Ti	47	3	He	148.248	0.0375	2750.33	0.0003	0.0002737
V	51	3	He	41.546	0.4933	35053.84	0.0117	0.007326
V	51	3	He	42.039	0.4991	35202.12	0.0117	0.007326
V	51	3	He	40.618	0.4825	35430.69	0.0117	0.007326
Cr	52	3	He	33.528	0.5359	38080.80	0.0152	0.02538
Cr	52	3	He	33.788	0.5399	38080.35	0.0152	0.02538
Cr	52	3	He	32.566	0.5213	38280.87	0.0152	0.02538
Mn	55	3	He	797.634	4.7218	335515.74	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	789.478	4.6737	329651.40	0.0059	0.01385
Mn	55	3	He	764.383	4.5256	332346.44	0.0059	0.01385
Fe	57	3	He	139599.549	40.448	2874085.58	0.0003	0.003918
Fe	57	3	He	140235.247	40.6321	2865925.58	0.0003	0.003918
Fe	57	3	He	135673.828	39.3106	2886876.83	0.0003	0.003918
Co	59	3	He	14.168	0.4353	30934.13	0.0305	0.003084
Co	59	3	He	14.404	0.4425	31214.27	0.0305	0.003084
Co	59	3	He	13.893	0.427	31354.81	0.0305	0.003084
Ni	60	3	He	15.163	0.1423	10113.86	0.0088	0.009003
Ni	60	3	He	14.492	0.1364	9623.57	0.0088	0.009003
Ni	60	3	He	13.894	0.1312	9633.46	0.0088	0.009003
Cu	63	3	He	5.035	0.1305	9273.30	0.0249	0.004937
Cu	63	3	He	4.858	0.1261	8892.98	0.0249	0.004937
Cu	63	3	He	4.713	0.1225	8993.06	0.0249	0.004937
Zn	66	3	He	78.843	0.1985	14107.20	0.0025	0.004836
Zn	66	3	He	78.173	0.1969	13887.23	0.0025	0.004836
Zn	66	3	He	77.333	0.1948	14307.53	0.0025	0.004836
As	75	3	He	53.736	0.0939	6671.58	0.0017	0.0004347
As	75	3	He	53.076	0.0927	6541.52	0.0017	0.0004347
As	75	3	He	49.448	0.0864	6347.44	0.0017	0.0004347
Sr	88	3	He	22.802	0.179	11344.80	0.0078	0.0007762
Sr	88	3	He	21.894	0.1719	10814.48	0.0078	0.0007762
Sr	88	3	He	22.908	0.1799	11424.97	0.0078	0.0007762
Mo	98	3	He	1.238	0.0278	1760.18	0.022	0.0005162
Mo	98	3	He	1.384	0.031	1950.20	0.022	0.0005162
Mo	98	3	He	1.356	0.0304	1930.20	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	0.068	0.0004	24.00	0.0048	5.152E-05
Cd	111	3	He	0.115	0.0006	38.00	0.0048	5.152E-05
Cd	111	3	He	0.068	0.0004	24.00	0.0048	5.152E-05
Sn	120	3	He	0.611	0.0243	1540.15	0.0143	0.01559
Sn	120	3	He	0.39	0.0211	1330.12	0.0143	0.01559
Sn	120	3	He	0.221	0.0187	1190.11	0.0143	0.01559
Sb	121	3	He	0.132	0.0019	120.00	0.0124	0.000258
Sb	121	3	He	0.184	0.0025	160.01	0.0124	0.000258
Sb	121	3	He	0.119	0.0017	110.00	0.0124	0.000258
Ba	137	3	He	28.434	0.1247	7902.46	0.0044	0.000309
Ba	137	3	He	29.301	0.1285	8082.65	0.0044	0.000309
Ba	137	3	He	30.237	0.1326	8422.85	0.0044	0.000309
Tl	205	3	He	0.159	0.0054	1200.11	0.0276	0.001005
Tl	205	3	He	0.145	0.005	1110.09	0.0276	0.001005
Tl	205	3	He	0.167	0.0056	1250.10	0.0276	0.001005
Pb	208	3	He	10.45	0.3825	45007.78	0.0364	0.002176
Pb	208	3	He	10.459	0.3828	45498.99	0.0364	0.002176
Pb	208	3	He	10.261	0.3757	44917.00	0.0364	0.002176
U	238	3	He	2.351	0.0991	21999.18	0.0421	0.00024
U	238	3	He	2.366	0.0998	22079.47	0.0421	0.00024
U	238	3	He	2.381	0.1004	22320.09	0.0421	0.00024
Sc	45	1	No Gas			3262449.95		
Sc	45	1	No Gas			3303791.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3415577.45		
Ge	72	1	No Gas			1423934.20		
Ge	72	1	No Gas			1436518.26		
Ge	72	1	No Gas			1471802.32		
Sc	45	2	H2			200026.36		
Sc	45	2	H2			197654.20		
Sc	45	2	H2			200628.12		
Ge	72	2	H2			160717.28		
Ge	72	2	H2			155086.67		
Ge	72	2	H2			158461.56		
In	115	2	H2			439190.15		
In	115	2	H2			422902.06		
In	115	2	H2			439235.03		
Sc	45	3	He			41529.63		
Sc	45	3	He			42211.41		
Sc	45	3	He			43495.44		
Ge	72	3	He			71056.39		
Ge	72	3	He			70533.49		
Ge	72	3	He			73437.59		
In	115	3	He			63383.55		
In	115	3	He			62912.00		
In	115	3	He			63534.04		
Tb	159	3	He			297171.95		
Tb	159	3	He			293522.57		
Tb	159	3	He			299908.41		
Bi	209	3	He			221893.59		
Bi	209	3	He			221345.58		
Bi	209	3	He			222318.38		

Quantitation Report

Data File Name	188SMPL.d
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Sample Name	410-136610-H-8-A @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

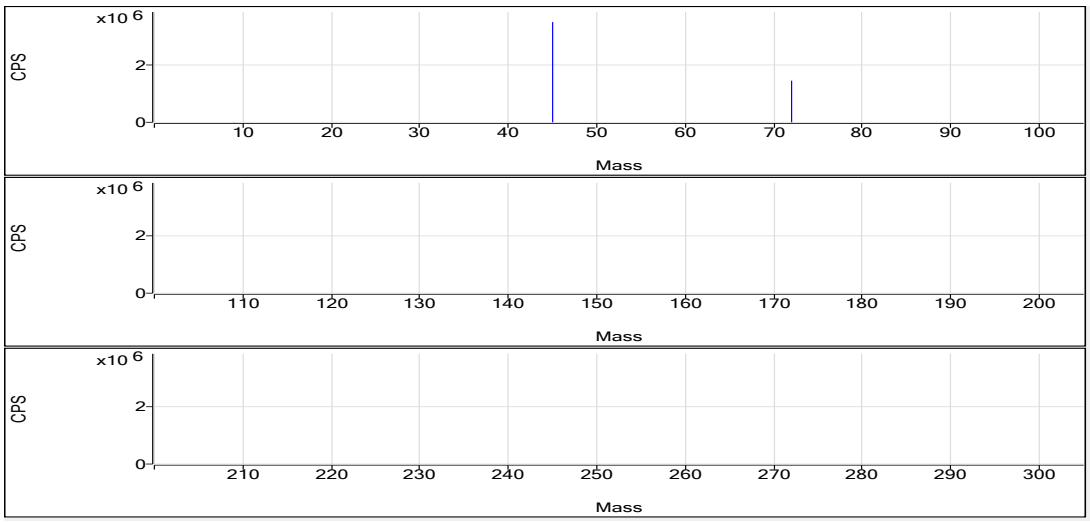
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	3.514	ppb	4.1	6754.89	0.0047	Pulse	0.5000	3
Se	78	72	H2	0.651	ppb	7.2	42.44	0.0003	Pulse	1.5000	3
Na	23	72	He	517.709	ppb	2.1	74365.79	0.9958	Pulse	0.1000	3
Mg	24	72	He	5035.302	ppb	0.3	317398.76	4.2501	Pulse	0.1000	3
Al	27	72	He	63057.383	ppb	0.9	1136844.07	15.2227	Pulse	0.1000	3
K	39	72	He	6108.983	ppb	0.9	262643.60	3.5171	Pulse	0.1000	3
Ca	44	72	He	40583.801	ppb	1.7	94248.74	1.2621	Pulse	0.1000	3
Ti	47	72	He	903.810	ppb	3.4	16943.56	0.2269	Pulse	0.1000	3
V	51	72	He	174.424	ppb	1.1	152911.46	2.0477	Pulse	0.5000	3
Cr	52	72	He	111.741	ppb	1.2	128958.55	1.7269	Pulse	0.1000	3
Mn	55	72	He	581.677	ppb	0.4	257428.88	3.4472	Pulse	0.1000	3
Fe	57	72	He	127960.523	ppb	1.0	2768680.48	37.0760	Pulse	0.1000	3
Co	59	72	He	28.131	ppb	0.8	64329.67	0.8614	Pulse	0.1000	3
Ni	60	72	He	43.208	ppb	2.5	29042.98	0.3889	Pulse	0.1000	3
Cu	63	72	He	16.182	ppb	2.4	30509.53	0.4085	Pulse	0.1000	3
Zn	66	72	He	126.422	ppb	1.8	23553.17	0.3154	Pulse	0.1000	3
As	75	72	He	36.205	ppb	0.9	4734.80	0.0634	Pulse	0.5000	3
Sr	88	115	He	292.046	ppb	1.6	145541.90	2.2837	Pulse	0.1000	3
Mo	98	115	He	1.554	ppb	10.7	2213.58	0.0347	Pulse	0.1000	3
Ag	107	115	He	0.043	ppb	56.9	153.34	0.0024	Pulse	0.1000	3
Cd	111	115	He	0.419	ppb	4.4	131.33	0.0021	Pulse	0.5000	3
Sn	120	115	He	2.590	ppb	3.9	3347.22	0.0525	Pulse	0.1000	3
Sb	121	115	He	0.819	ppb	12.4	663.37	0.0104	Pulse	0.1000	3
Ba	137	115	He	150.172	ppb	2.1	41887.88	0.6573	Pulse	0.1000	3
Tl	205	209	He	0.514	ppb	5.0	3410.56	0.0152	Pulse	0.1000	3
Pb	208	209	He	41.689	ppb	0.4	340547.91	1.5196	Pulse	0.1000	3
U	238	209	He	5.617	ppb	3.5	53012.90	0.2365	Pulse	0.1000	3

ISTD Table:

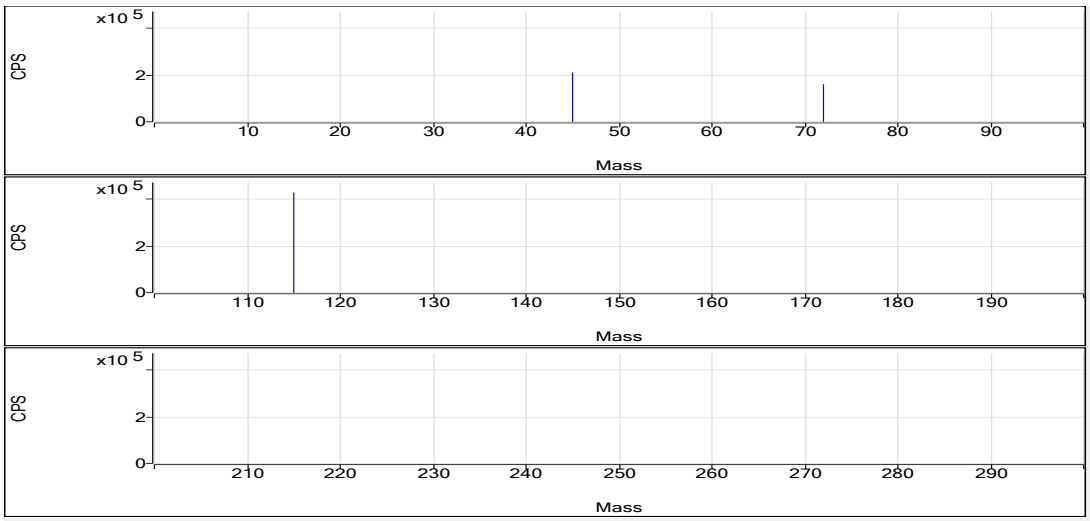
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3488337.76	2.5	107.6	Pulse	0.1000	3
No Gas	Ge	72	1449039.04	2.0	100.6	Pulse	0.1000	3
H2	Sc	45	210945.42	0.9	108.0	Pulse	0.1000	3
H2	Ge	72	160581.08	1.0	98.5	Pulse	0.1000	3
H2	In	115	428982.89	1.5	99.0	Pulse	0.1000	3
He	Sc	45	44568.42	3.1	111.5	Pulse	0.1000	3
He	Ge	72	74680.73	1.1	103.3	Pulse	0.1000	3
He	In	115	63732.91	0.5	98.7	Pulse	0.1000	3
He	Tb	159	305517.84	0.3	106.8	Pulse	0.1000	3
He	Bi	209	224116.65	1.1	100.9	Pulse	0.1000	3

No Gas

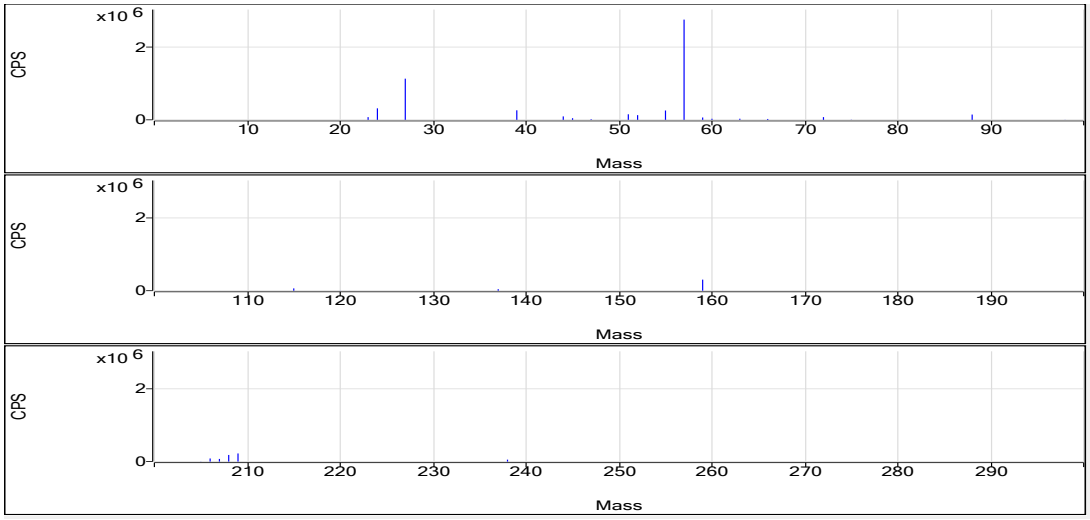


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	3.608	0.0048	6823.58	0.0013	4.694E-05
Be	9	1	No Gas	3.584	0.0048	6849.60	0.0013	4.694E-05
Be	9	1	No Gas	3.349	0.0044	6591.48	0.0013	4.694E-05
Se	78	2	H2	0.702	0.0003	46.00	0.0004	1.089E-05
Se	78	2	H2	0.641	0.0003	41.33	0.0004	1.089E-05
Se	78	2	H2	0.61	0.0002	40.00	0.0004	1.089E-05
Na	23	3	He	526.362	1.0107	74747.87	0.0017	0.1065
Na	23	3	He	521.422	1.0022	75742.52	0.0017	0.1065
Na	23	3	He	505.344	0.9745	72606.98	0.0017	0.1065
Mg	24	3	He	5053.045	4.2651	315445.19	0.0008	0.004846
Mg	24	3	He	5033.965	4.249	321133.84	0.0008	0.004846
Mg	24	3	He	5018.897	4.2363	315617.26	0.0008	0.004846
Al	27	3	He	63503.339	15.3304	1133837.01	0.0002	0.001063
Al	27	3	He	63259.661	15.2716	1154208.58	0.0002	0.001063
Al	27	3	He	62409.149	15.0663	1122486.62	0.0002	0.001063
K	39	3	He	6145.084	3.537	261598.77	0.0006	0.1436
K	39	3	He	6048.848	3.4839	263308.14	0.0006	0.1436
K	39	3	He	6133.019	3.5304	263023.88	0.0006	0.1436
Ca	44	3	He	41358.35	1.2862	95127.08	0	0.001611
Ca	44	3	He	40196.758	1.2501	94482.41	0	0.001611
Ca	44	3	He	40196.296	1.2501	93136.74	0	0.001611
Ti	47	3	He	938.69	0.2357	17430.73	0.0003	0.0002737
Ti	47	3	He	879.48	0.2208	16690.01	0.0003	0.0002737
Ti	47	3	He	893.259	0.2243	16709.94	0.0003	0.0002737
V	51	3	He	176.472	2.0717	153219.36	0.0117	0.007326
V	51	3	He	172.578	2.0261	153130.25	0.0117	0.007326
V	51	3	He	174.223	2.0453	152384.77	0.0117	0.007326
Cr	52	3	He	113.32	1.7509	129499.72	0.0152	0.02538
Cr	52	3	He	111.217	1.7189	129913.46	0.0152	0.02538
Cr	52	3	He	110.686	1.7108	127462.47	0.0152	0.02538
Mn	55	3	He	583.761	3.4595	255861.73	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	579.358	3.4335	259497.69	0.0059	0.01385
Mn	55	3	He	581.911	3.4485	256927.22	0.0059	0.01385
Fe	57	3	He	129373.252	37.4852	2772410.27	0.0003	0.003918
Fe	57	3	He	126948.768	36.7828	2780005.27	0.0003	0.003918
Fe	57	3	He	127559.549	36.9598	2753625.90	0.0003	0.003918
Co	59	3	He	28.266	0.8655	64011.99	0.0305	0.003084
Co	59	3	He	28.255	0.8652	65387.19	0.0305	0.003084
Co	59	3	He	27.873	0.8535	63589.82	0.0305	0.003084
Ni	60	3	He	44.43	0.3997	29560.77	0.0088	0.009003
Ni	60	3	He	42.657	0.3841	29029.54	0.0088	0.009003
Ni	60	3	He	42.538	0.3831	28538.62	0.0088	0.009003
Cu	63	3	He	15.868	0.4006	29630.95	0.0249	0.004937
Cu	63	3	He	16.608	0.4191	31675.18	0.0249	0.004937
Cu	63	3	He	16.069	0.4057	30222.46	0.0249	0.004937
Zn	66	3	He	127.858	0.319	23589.87	0.0025	0.004836
Zn	66	3	He	123.783	0.3089	23349.58	0.0025	0.004836
Zn	66	3	He	127.623	0.3184	23720.07	0.0025	0.004836
As	75	3	He	36.544	0.064	4732.80	0.0017	0.0004347
As	75	3	He	36.198	0.0634	4790.82	0.0017	0.0004347
As	75	3	He	35.875	0.0628	4680.79	0.0017	0.0004347
Sr	88	3	He	288.656	2.2572	144417.15	0.0078	0.0007762
Sr	88	3	He	297.307	2.3249	147437.28	0.0078	0.0007762
Sr	88	3	He	290.177	2.2691	144771.28	0.0078	0.0007762
Mo	98	3	He	1.623	0.0363	2320.27	0.022	0.0005162
Mo	98	3	He	1.674	0.0374	2370.28	0.022	0.0005162
Mo	98	3	He	1.365	0.0306	1950.19	0.022	0.0005162
Ag	107	3	He	0.069	0.0036	230.01	0.0455	0.0004641
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.038	0.0022	140.00	0.0455	0.0004641
Cd	111	3	He	0.4	0.002	126.00	0.0048	5.152E-05
Cd	111	3	He	0.436	0.0021	136.00	0.0048	5.152E-05
Cd	111	3	He	0.42	0.0021	132.00	0.0048	5.152E-05
Sn	120	3	He	2.678	0.0538	3440.59	0.0143	0.01559
Sn	120	3	He	2.612	0.0528	3350.54	0.0143	0.01559
Sn	120	3	He	2.48	0.0509	3250.53	0.0143	0.01559
Sb	121	3	He	0.786	0.01	640.04	0.0124	0.000258
Sb	121	3	He	0.933	0.0118	750.04	0.0124	0.000258
Sb	121	3	He	0.737	0.0094	600.03	0.0124	0.000258
Ba	137	3	He	147.349	0.6449	41262.65	0.0044	0.000309
Ba	137	3	He	153.499	0.6718	42606.37	0.0044	0.000309
Ba	137	3	He	149.669	0.6551	41794.62	0.0044	0.000309
Tl	205	3	He	0.502	0.0149	3340.54	0.0276	0.001005
Tl	205	3	He	0.498	0.0148	3340.54	0.0276	0.001005
Tl	205	3	He	0.544	0.016	3550.61	0.0276	0.001005
Pb	208	3	He	41.594	1.5161	182697.75	0.0364	0.002176
Pb	208	3	He	41.577	1.5155	183664.55	0.0364	0.002176
Pb	208	3	He	41.897	1.5271	181707.79	0.0364	0.002176
U	238	3	He	5.843	0.2461	55258.89	0.0421	0.00024
U	238	3	He	5.516	0.2323	52567.15	0.0421	0.00024
U	238	3	He	5.492	0.2313	51212.66	0.0421	0.00024
Sc	45	1	No Gas			3412445.26		
Sc	45	1	No Gas			3470505.57		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3582062.45		
Ge	72	1	No Gas			1425284.67		
Ge	72	1	No Gas			1439971.54		
Ge	72	1	No Gas			1481860.92		
Sc	45	2	H2			210774.80		
Sc	45	2	H2			209092.54		
Sc	45	2	H2			212968.92		
Ge	72	2	H2			161933.35		
Ge	72	2	H2			158767.97		
Ge	72	2	H2			161041.91		
In	115	2	H2			431824.60		
In	115	2	H2			421807.45		
In	115	2	H2			433316.63		
Sc	45	3	He			44708.86		
Sc	45	3	He			45892.54		
Sc	45	3	He			43103.87		
Ge	72	3	He			73960.04		
Ge	72	3	He			75578.87		
Ge	72	3	He			74503.29		
In	115	3	He			64006.83		
In	115	3	He			63444.06		
In	115	3	He			63826.16		
Tb	159	3	He			305891.36		
Tb	159	3	He			306169.62		
Tb	159	3	He			304492.55		
Bi	209	3	He			224574.86		
Bi	209	3	He			226322.15		
Bi	209	3	He			221452.93		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:10:11
Sample Name	410-136610-H-8-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

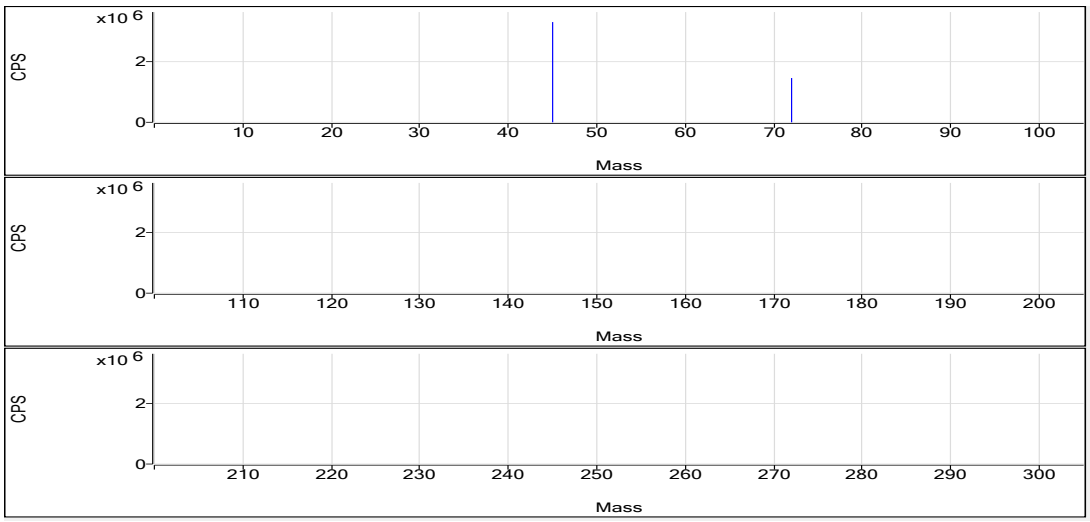
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.679	ppb	3.0	1362.74	0.0009	Pulse	0.5000	3
Se	78	72	H2	0.088	ppb	65.6	7.33	0.0000	Pulse	1.5000	3
Na	23	72	He	101.078	ppb	3.0	20875.21	0.2801	Pulse	0.1000	3
Mg	24	72	He	997.440	ppb	1.5	63040.31	0.8458	Pulse	0.1000	3
Al	27	72	He	12365.844	ppb	1.6	222562.29	2.9861	Pulse	0.1000	3
K	39	72	He	1204.322	ppb	2.9	60267.26	0.8087	Pulse	0.1000	3
Ca	44	72	He	7939.714	ppb	1.7	18505.47	0.2482	Pulse	0.1000	3
Ti	47	72	He	163.349	ppb	1.9	3073.77	0.0412	Pulse	0.1000	3
V	51	72	He	34.826	ppb	1.7	30909.90	0.4147	Pulse	0.5000	3
Cr	52	72	He	22.313	ppb	4.0	27209.29	0.3651	Pulse	0.1000	3
Mn	55	72	He	114.911	ppb	2.0	51582.36	0.6921	Pulse	0.1000	3
Fe	57	72	He	25431.311	ppb	1.7	549446.22	7.3717	Pulse	0.1000	3
Co	59	72	He	5.605	ppb	1.8	12976.15	0.1741	Pulse	0.1000	3
Ni	60	72	He	9.976	ppb	3.9	7208.75	0.0967	Pulse	0.1000	3
Cu	63	72	He	3.388	ppb	4.1	6665.06	0.0894	Pulse	0.1000	3
Zn	66	72	He	24.229	ppb	8.8	4800.98	0.0644	Pulse	0.1000	3
As	75	72	He	7.157	ppb	3.2	960.70	0.0129	Pulse	0.5000	3
Sr	88	115	He	57.461	ppb	1.9	28883.36	0.4500	Pulse	0.1000	3
Mo	98	115	He	0.302	ppb	23.0	460.03	0.0072	Pulse	0.1000	3
Ag	107	115	He	0.016	ppb	76.0	76.67	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.052	ppb	20.2	19.33	0.0003	Pulse	0.5000	3
Sn	120	115	He	0.421	ppb	30.5	1386.80	0.0216	Pulse	0.1000	3
Sb	121	115	He	0.218	ppb	11.2	190.01	0.0030	Pulse	0.1000	3
Ba	137	115	He	29.398	ppb	4.5	8279.41	0.1289	Pulse	0.1000	3
Tl	205	209	He	0.095	ppb	9.7	806.72	0.0036	Pulse	0.1000	3
Pb	208	209	He	8.484	ppb	0.6	69146.83	0.3110	Pulse	0.1000	3
U	238	209	He	1.112	ppb	4.5	10454.56	0.0470	Pulse	0.1000	3

ISTD Table:

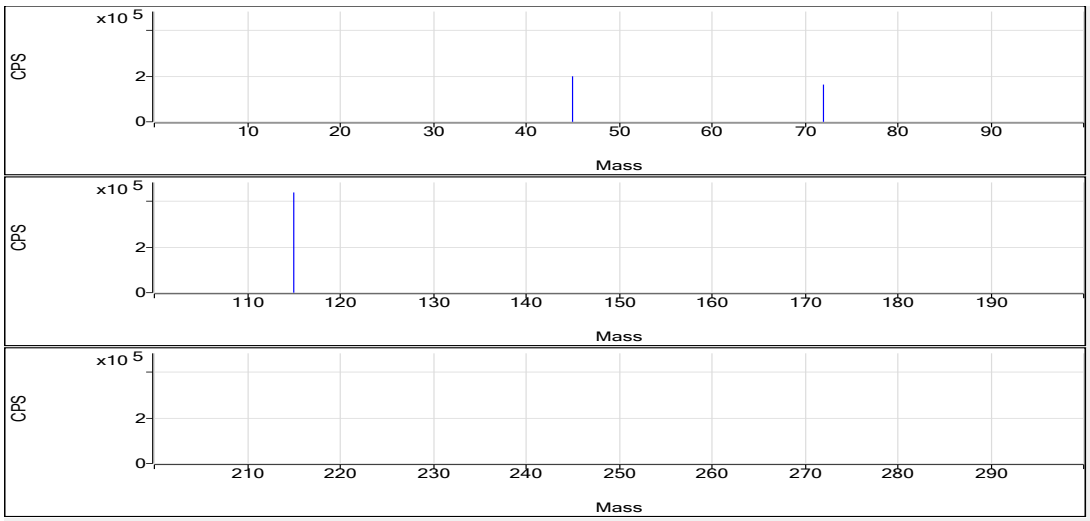
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3287963.28	3.3	101.4	Pulse	0.1000	3
No Gas	Ge	72	1451918.05	3.6	100.8	Pulse	0.1000	3
H2	Sc	45	199278.11	1.3	102.0	Pulse	0.1000	3
H2	Ge	72	163000.67	1.7	100.0	Pulse	0.1000	3
H2	In	115	438780.19	3.2	101.3	Pulse	0.1000	3
He	Sc	45	41623.18	2.2	104.1	Pulse	0.1000	3
He	Ge	72	74546.40	1.8	103.1	Pulse	0.1000	3
He	In	115	64200.24	1.2	99.4	Pulse	0.1000	3
He	Tb	159	287440.09	1.5	100.5	Pulse	0.1000	3
He	Bi	209	222361.51	0.5	100.1	Pulse	0.1000	3

No Gas

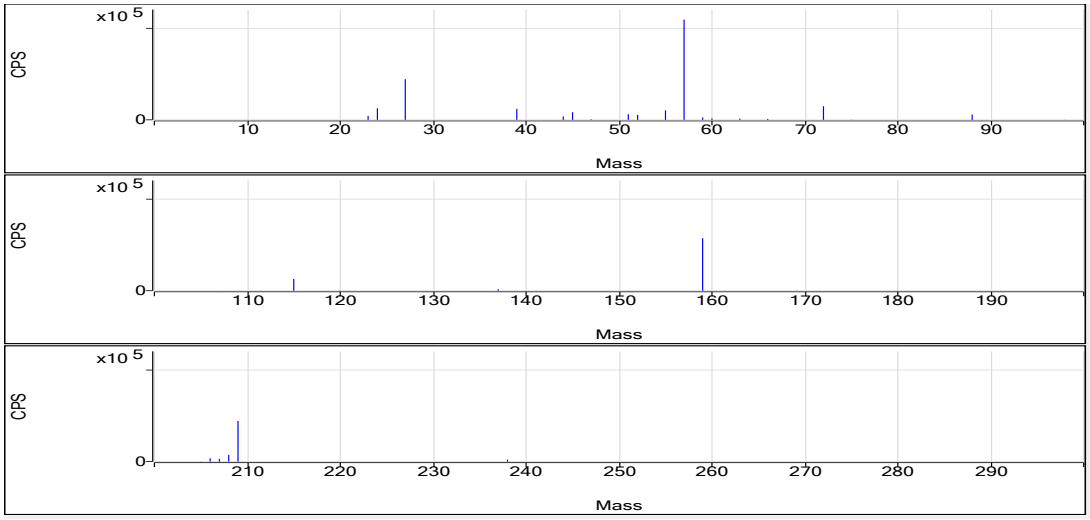


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.701	0.001	1352.07	0.0013	4.694E-05
Be	9	1	No Gas	0.674	0.0009	1362.07	0.0013	4.694E-05
Be	9	1	No Gas	0.662	0.0009	1374.07	0.0013	4.694E-05
Se	78	2	H2	0.066	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.154	0.0001	11.33	0.0004	1.089E-05
Se	78	2	H2	0.045	0	4.67	0.0004	1.089E-05
Na	23	3	He	103.673	0.2845	20844.95	0.0017	0.1065
Na	23	3	He	97.787	0.2744	20835.31	0.0017	0.1065
Na	23	3	He	101.775	0.2813	20945.36	0.0017	0.1065
Mg	24	3	He	1007.352	0.8541	62571.67	0.0008	0.004846
Mg	24	3	He	980.59	0.8316	63133.84	0.0008	0.004846
Mg	24	3	He	1004.379	0.8516	63415.41	0.0008	0.004846
Al	27	3	He	12525.895	3.0247	221581.64	0.0002	0.001063
Al	27	3	He	12147.632	2.9334	222706.29	0.0002	0.001063
Al	27	3	He	12424.004	3.0001	223398.94	0.0002	0.001063
K	39	3	He	1240.028	0.8284	60685.52	0.0006	0.1436
K	39	3	He	1170.39	0.7899	59972.59	0.0006	0.1436
K	39	3	He	1202.548	0.8077	60143.66	0.0006	0.1436
Ca	44	3	He	7802.53	0.244	17871.37	0	0.001611
Ca	44	3	He	7943.051	0.2483	18852.55	0	0.001611
Ca	44	3	He	8073.562	0.2524	18792.50	0	0.001611
Ti	47	3	He	163.32	0.0412	3020.44	0.0003	0.0002737
Ti	47	3	He	160.178	0.0404	3070.44	0.0003	0.0002737
Ti	47	3	He	166.547	0.042	3130.44	0.0003	0.0002737
V	51	3	He	35.508	0.4227	30964.67	0.0117	0.007326
V	51	3	He	34.405	0.4098	31111.01	0.0117	0.007326
V	51	3	He	34.566	0.4117	30654.02	0.0117	0.007326
Cr	52	3	He	22.83	0.373	27326.11	0.0152	0.02538
Cr	52	3	He	21.277	0.3494	26524.92	0.0152	0.02538
Cr	52	3	He	22.83	0.373	27776.83	0.0152	0.02538
Mn	55	3	He	117.321	0.7063	51743.31	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	112.762	0.6794	51581.83	0.0059	0.01385
Mn	55	3	He	114.651	0.6906	51421.94	0.0059	0.01385
Fe	57	3	He	25612.192	7.4241	543866.16	0.0003	0.003918
Fe	57	3	He	24937.639	7.2287	548804.80	0.0003	0.003918
Fe	57	3	He	25744.103	7.4624	555667.69	0.0003	0.003918
Co	59	3	He	5.705	0.1771	12976.22	0.0305	0.003084
Co	59	3	He	5.605	0.1741	13216.35	0.0305	0.003084
Co	59	3	He	5.505	0.171	12735.88	0.0305	0.003084
Ni	60	3	He	10.405	0.1005	7362.17	0.0088	0.009003
Ni	60	3	He	9.884	0.0959	7282.11	0.0088	0.009003
Ni	60	3	He	9.639	0.0938	6981.97	0.0088	0.009003
Cu	63	3	He	3.405	0.0898	6581.66	0.0249	0.004937
Cu	63	3	He	3.241	0.0858	6511.67	0.0249	0.004937
Cu	63	3	He	3.519	0.0927	6901.85	0.0249	0.004937
Zn	66	3	He	21.872	0.0586	4290.75	0.0025	0.004836
Zn	66	3	He	24.79	0.0657	4991.02	0.0025	0.004836
Zn	66	3	He	26.025	0.0688	5121.16	0.0025	0.004836
As	75	3	He	6.971	0.0126	920.03	0.0017	0.0004347
As	75	3	He	7.415	0.0133	1012.04	0.0017	0.0004347
As	75	3	He	7.086	0.0128	950.04	0.0017	0.0004347
Sr	88	3	He	58.606	0.4589	29220.79	0.0078	0.0007762
Sr	88	3	He	57.377	0.4493	28699.58	0.0078	0.0007762
Sr	88	3	He	56.4	0.4417	28729.70	0.0078	0.0007762
Mo	98	3	He	0.255	0.0061	390.02	0.022	0.0005162
Mo	98	3	He	0.382	0.0089	570.04	0.022	0.0005162
Mo	98	3	He	0.27	0.0065	420.02	0.022	0.0005162
Ag	107	3	He	0.028	0.0017	110.00	0.0455	0.0004641
Ag	107	3	He	0.017	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.055	0.0003	20.00	0.0048	5.152E-05
Cd	111	3	He	0.061	0.0003	22.00	0.0048	5.152E-05
Cd	111	3	He	0.041	0.0002	16.00	0.0048	5.152E-05
Sn	120	3	He	0.328	0.0203	1290.12	0.0143	0.01559
Sn	120	3	He	0.367	0.0208	1330.12	0.0143	0.01559
Sn	120	3	He	0.567	0.0237	1540.15	0.0143	0.01559
Sb	121	3	He	0.232	0.0031	200.01	0.0124	0.000258
Sb	121	3	He	0.232	0.0031	200.01	0.0124	0.000258
Sb	121	3	He	0.19	0.0026	170.01	0.0124	0.000258
Ba	137	3	He	28.442	0.1247	7942.50	0.0044	0.000309
Ba	137	3	He	28.853	0.1265	8082.66	0.0044	0.000309
Ba	137	3	He	30.898	0.1355	8813.08	0.0044	0.000309
Tl	205	3	He	0.088	0.0034	760.05	0.0276	0.001005
Tl	205	3	He	0.105	0.0039	870.06	0.0276	0.001005
Tl	205	3	He	0.091	0.0035	790.05	0.0276	0.001005
Pb	208	3	He	8.468	0.3104	36892.27	0.0364	0.002176
Pb	208	3	He	8.544	0.3132	37323.79	0.0364	0.002176
Pb	208	3	He	8.439	0.3093	36441.49	0.0364	0.002176
U	238	3	He	1.165	0.0492	10894.90	0.0421	0.00024
U	238	3	He	1.106	0.0468	10394.44	0.0421	0.00024
U	238	3	He	1.066	0.0451	10074.33	0.0421	0.00024
Sc	45	1	No Gas			3170178.70		
Sc	45	1	No Gas			3307495.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3386215.89		
Ge	72	1	No Gas			1396333.57		
Ge	72	1	No Gas			1459962.01		
Ge	72	1	No Gas			1499458.57		
Sc	45	2	H2			199912.93		
Sc	45	2	H2			196471.34		
Sc	45	2	H2			201450.06		
Ge	72	2	H2			163640.99		
Ge	72	2	H2			160021.77		
Ge	72	2	H2			165339.26		
In	115	2	H2			439567.81		
In	115	2	H2			424479.72		
In	115	2	H2			452293.04		
Sc	45	3	He			42662.61		
Sc	45	3	He			41208.72		
Sc	45	3	He			40998.21		
Ge	72	3	He			73256.40		
Ge	72	3	He			75920.08		
Ge	72	3	He			74462.71		
In	115	3	He			63685.12		
In	115	3	He			63886.53		
In	115	3	He			65061.52		
Tb	159	3	He			286312.14		
Tb	159	3	He			292263.49		
Tb	159	3	He			283744.64		
Bi	209	3	He			221310.72		
Bi	209	3	He			222256.75		
Bi	209	3	He			223517.05		

Quantitation Report

Data File Name	190SMPL.d
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Sample Type	Sample
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Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

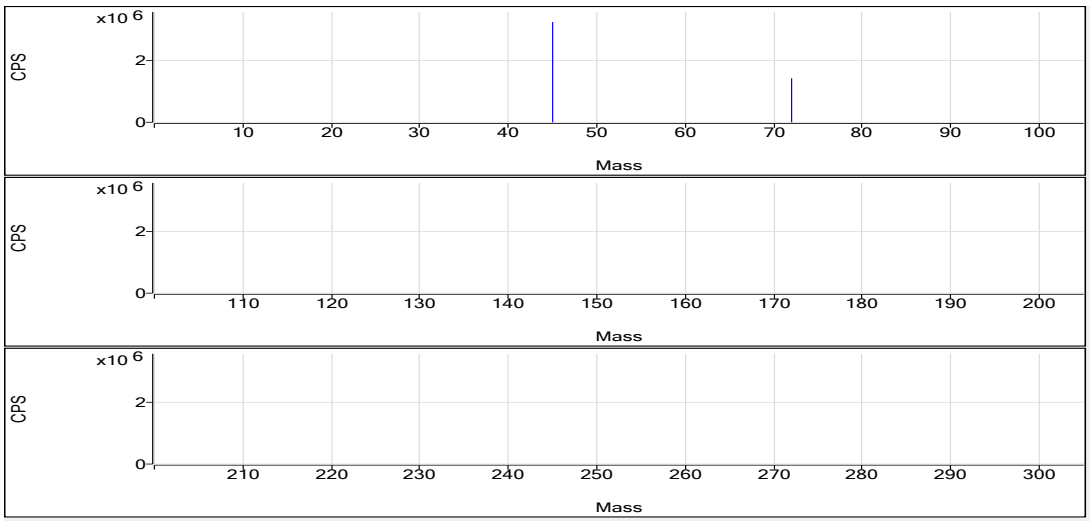
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.001	ppb	741.4	68.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.003	ppb	N/A	1.56	0.0000	Pulse	1.5000	3
Na	23	72	He	4.629	ppb	52.4	8199.20	0.1144	Pulse	0.1000	3
Mg	24	72	He	4.405	ppb	6.0	613.37	0.0086	Pulse	0.1000	3
Al	27	72	He	17.768	ppb	10.4	383.35	0.0054	Pulse	0.1000	3
K	39	72	He	10.092	ppb	138.7	10694.22	0.1492	Pulse	0.1000	3
Ca	44	72	He	-7.009	ppb	N/A	100.01	0.0014	Pulse	0.1000	3
Ti	47	72	He	0.394	ppb	215.1	26.67	0.0004	Pulse	0.1000	3
V	51	72	He	0.031	ppb	76.5	550.68	0.0077	Pulse	0.5000	3
Cr	52	72	He	-0.104	ppb	N/A	1703.49	0.0238	Pulse	0.1000	3
Mn	55	72	He	-0.827	ppb	N/A	643.38	0.0090	Pulse	0.1000	3
Fe	57	72	He	72.833	ppb	4.1	1793.51	0.0250	Pulse	0.1000	3
Co	59	72	He	0.036	ppb	54.0	300.02	0.0042	Pulse	0.1000	3
Ni	60	72	He	0.836	ppb	41.9	1170.09	0.0164	Pulse	0.1000	3
Cu	63	72	He	0.056	ppb	67.8	453.36	0.0063	Pulse	0.1000	3
Zn	66	72	He	-0.470	ppb	N/A	263.34	0.0037	Pulse	0.1000	3
As	75	72	He	-0.009	ppb	N/A	30.00	0.0004	Pulse	0.5000	3
Sr	88	115	He	0.129	ppb	49.8	113.34	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.010	ppb	180.9	46.67	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	3217.3	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	5.8	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.094	ppb	158.5	1076.75	0.0169	Pulse	0.1000	3
Sb	121	115	He	0.009	ppb	218.9	23.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.085	ppb	23.1	43.33	0.0007	Pulse	0.1000	3
Tl	205	209	He	-0.001	ppb	N/A	213.34	0.0010	Pulse	0.1000	3
Pb	208	209	He	0.112	ppb	9.0	1370.08	0.0063	Pulse	0.1000	3
U	238	209	He	0.008	ppb	33.4	130.01	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3233715.79	2.5	99.8	Pulse	0.1000	3
No Gas	Ge	72	1419671.86	2.1	98.6	Pulse	0.1000	3
H2	Sc	45	193666.42	3.4	99.1	Pulse	0.1000	3
H2	Ge	72	158052.05	1.7	97.0	Pulse	0.1000	3
H2	In	115	433263.19	2.4	100.0	Pulse	0.1000	3
He	Sc	45	41689.98	0.8	104.3	Pulse	0.1000	3
He	Ge	72	71665.40	1.5	99.1	Pulse	0.1000	3
He	In	115	63570.07	1.0	98.4	Pulse	0.1000	3
He	Tb	159	280039.04	0.8	97.9	Pulse	0.1000	3
He	Bi	209	218703.41	0.8	98.4	Pulse	0.1000	3

No Gas



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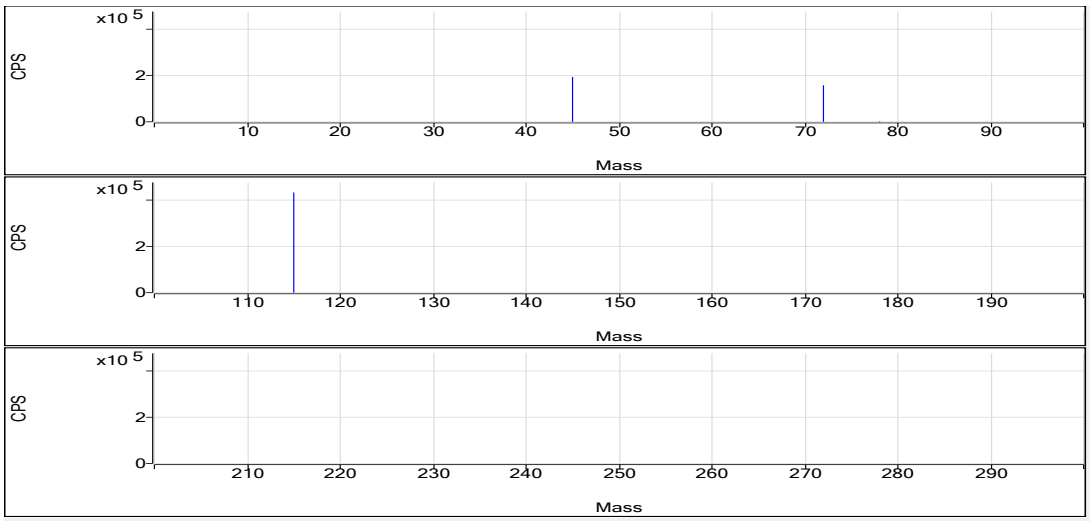
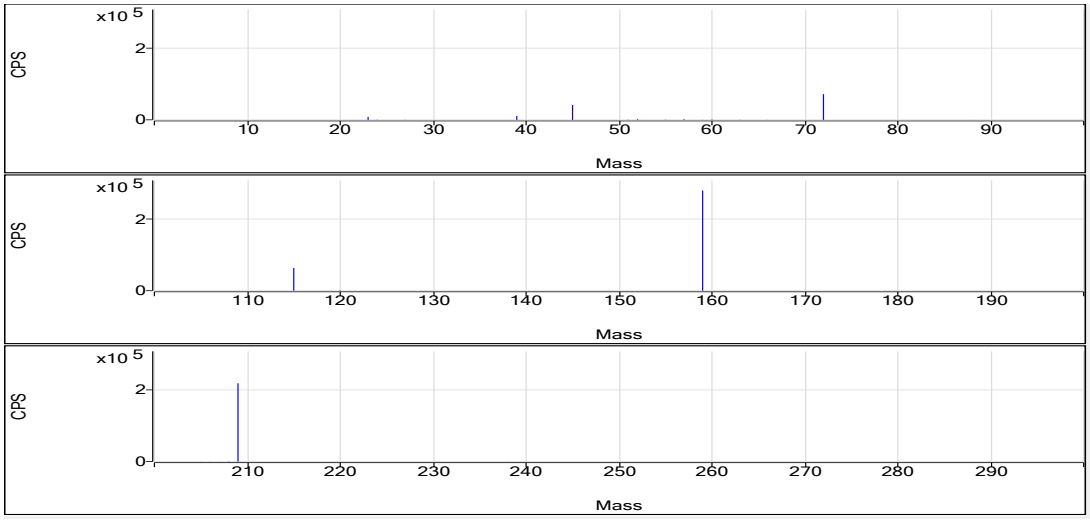


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.006	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	0.009	0.0001	84.00	0.0013	4.694E-05
Be	9	1	No Gas	0	0	68.00	0.0013	4.694E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Na	23	3	He	2.191	0.1102	7962.47	0.0017	0.1065
Na	23	3	He	4.656	0.1145	8062.40	0.0017	0.1065
Na	23	3	He	7.041	0.1186	8572.72	0.0017	0.1065
Mg	24	3	He	4.104	0.0083	600.03	0.0008	0.004846
Mg	24	3	He	4.524	0.0087	610.03	0.0008	0.004846
Mg	24	3	He	4.586	0.0087	630.04	0.0008	0.004846
Al	27	3	He	15.669	0.0048	350.02	0.0002	0.001063
Al	27	3	He	19.122	0.0057	400.02	0.0002	0.001063
Al	27	3	He	18.514	0.0055	400.02	0.0002	0.001063
K	39	3	He	25.265	0.1576	11384.73	0.0006	0.1436
K	39	3	He	7.342	0.1477	10403.98	0.0006	0.1436
K	39	3	He	-2.33	0.1424	10293.95	0.0006	0.1436
Ca	44	3	He	-7.294	0.0014	100.01	0	0.001611
Ca	44	3	He	-15.301	0.0011	80.00	0	0.001611
Ca	44	3	He	1.568	0.0017	120.01	0	0.001611
Ti	47	3	He	-0.54	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.607	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	1.114	0.0006	40.00	0.0003	0.0002737
V	51	3	He	0.008	0.0074	536.01	0.0117	0.007326
V	51	3	He	0.029	0.0077	540.01	0.0117	0.007326
V	51	3	He	0.055	0.008	576.02	0.0117	0.007326
Cr	52	3	He	-0.067	0.0244	1760.16	0.0152	0.02538
Cr	52	3	He	0.086	0.0267	1880.19	0.0152	0.02538
Cr	52	3	He	-0.332	0.0203	1470.13	0.0152	0.02538
Mn	55	3	He	-0.752	0.0094	680.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.976	0.0081	570.04	0.0059	0.01385
Mn	55	3	He	-0.754	0.0094	680.05	0.0059	0.01385
Fe	57	3	He	72.967	0.0251	1810.19	0.0003	0.003918
Fe	57	3	He	69.785	0.0241	1700.16	0.0003	0.003918
Fe	57	3	He	75.747	0.0259	1870.19	0.0003	0.003918
Co	59	3	He	0.03	0.004	290.02	0.0305	0.003084
Co	59	3	He	0.02	0.0037	260.01	0.0305	0.003084
Co	59	3	He	0.058	0.0048	350.02	0.0305	0.003084
Ni	60	3	He	0.487	0.0133	960.06	0.0088	0.009003
Ni	60	3	He	1.188	0.0195	1370.12	0.0088	0.009003
Ni	60	3	He	0.832	0.0163	1180.09	0.0088	0.009003
Cu	63	3	He	0.024	0.0055	400.02	0.0249	0.004937
Cu	63	3	He	0.098	0.0074	520.03	0.0249	0.004937
Cu	63	3	He	0.046	0.0061	440.02	0.0249	0.004937
Zn	66	3	He	-0.785	0.0029	210.01	0.0025	0.004836
Zn	66	3	He	-0.119	0.0045	320.01	0.0025	0.004836
Zn	66	3	He	-0.505	0.0036	260.01	0.0025	0.004836
As	75	3	He	0.005	0.0004	32.00	0.0017	0.0004347
As	75	3	He	-0.038	0.0004	26.00	0.0017	0.0004347
As	75	3	He	0.005	0.0004	32.00	0.0017	0.0004347
Sr	88	3	He	0.201	0.0024	150.01	0.0078	0.0007762
Sr	88	3	He	0.104	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.08	0.0014	90.00	0.0078	0.0007762
Mo	98	3	He	0.026	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.013	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	-0.009	0.0003	20.00	0.022	0.0005162
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.003	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.094	0.0169	1080.08	0.0143	0.01559
Sn	120	3	He	-0.055	0.0148	930.07	0.0143	0.01559
Sn	120	3	He	0.242	0.019	1220.09	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	0.073	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.075	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.108	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	0.007	0.0012	260.01	0.0276	0.001005
Tl	205	3	He	-0.01	0.0007	160.01	0.0276	0.001005
Tl	205	3	He	0	0.001	220.01	0.0276	0.001005
Pb	208	3	He	0.122	0.0066	840.05	0.0364	0.002176
Pb	208	3	He	0.112	0.0063	730.05	0.0364	0.002176
Pb	208	3	He	0.102	0.0059	710.05	0.0364	0.002176
U	238	3	He	0.011	0.0007	150.01	0.0421	0.00024
U	238	3	He	0.005	0.0005	100.00	0.0421	0.00024
U	238	3	He	0.009	0.0006	140.01	0.0421	0.00024
Sc	45	1	No Gas			3146166.52		
Sc	45	1	No Gas			3251958.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3303022.45		
Ge	72	1	No Gas			1385989.20		
Ge	72	1	No Gas			1432641.70		
Ge	72	1	No Gas			1440384.67		
Sc	45	2	H2			190107.73		
Sc	45	2	H2			189645.08		
Sc	45	2	H2			201246.46		
Ge	72	2	H2			156987.14		
Ge	72	2	H2			156016.49		
Ge	72	2	H2			161152.53		
In	115	2	H2			431726.20		
In	115	2	H2			423808.27		
In	115	2	H2			444255.11		
Sc	45	3	He			41750.16		
Sc	45	3	He			41319.35		
Sc	45	3	He			42000.42		
Ge	72	3	He			72241.70		
Ge	72	3	He			70442.22		
Ge	72	3	He			72312.28		
In	115	3	He			63836.86		
In	115	3	He			62821.35		
In	115	3	He			64077.18		
Tb	159	3	He			279748.22		
Tb	159	3	He			277986.27		
Tb	159	3	He			282382.63		
Bi	209	3	He			218619.33		
Bi	209	3	He			217000.78		
Bi	209	3	He			220490.13		

Quantitation Report

Data File Name	191SMPL.d
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Acq Time	2023-08-10 17:14:11
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

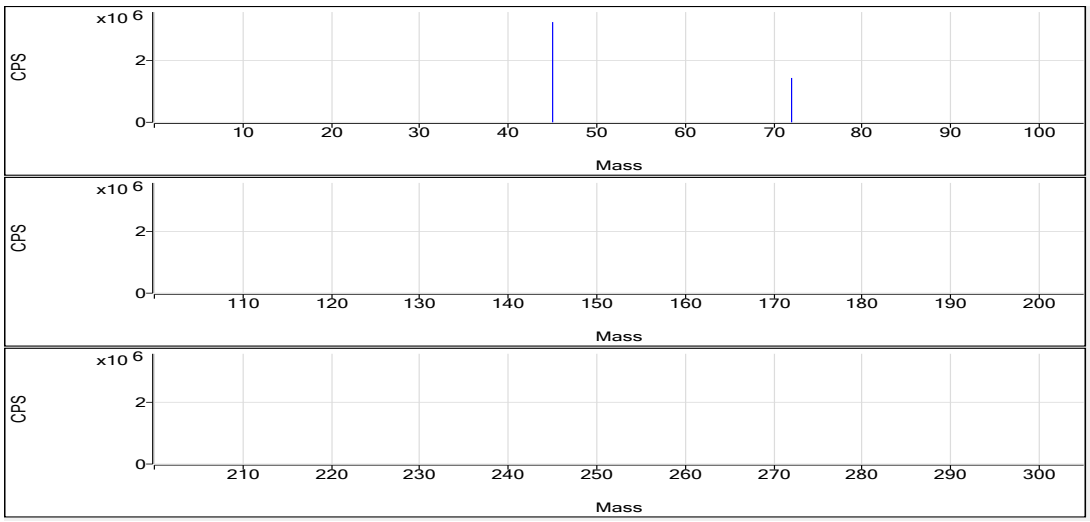
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.006	ppb	N/A	55.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.003	ppb	N/A	1.56	0.0000	Pulse	1.5000	3
Na	23	72	He	5.578	ppb	8.1	8415.98	0.1160	Pulse	0.1000	3
Mg	24	72	He	4.705	ppb	23.9	640.03	0.0088	Pulse	0.1000	3
Al	27	72	He	23.417	ppb	10.2	486.69	0.0067	Pulse	0.1000	3
K	39	72	He	1.249	ppb	491.9	10470.79	0.1443	Pulse	0.1000	3
Ca	44	72	He	-9.006	ppb	N/A	96.67	0.0013	Pulse	0.1000	3
Ti	47	72	He	0.189	ppb	158.2	23.33	0.0003	Pulse	0.1000	3
V	51	72	He	0.032	ppb	189.1	558.68	0.0077	Pulse	0.5000	3
Cr	52	72	He	0.045	ppb	342.1	1890.19	0.0261	Pulse	0.1000	3
Mn	55	72	He	-0.734	ppb	N/A	690.04	0.0095	Pulse	0.1000	3
Fe	57	72	He	63.920	ppb	7.6	1626.82	0.0224	Pulse	0.1000	3
Co	59	72	He	0.034	ppb	86.3	300.01	0.0041	Pulse	0.1000	3
Ni	60	72	He	1.024	ppb	11.8	1306.77	0.0180	Pulse	0.1000	3
Cu	63	72	He	0.036	ppb	104.5	423.36	0.0058	Pulse	0.1000	3
Zn	66	72	He	-0.532	ppb	N/A	256.68	0.0035	Pulse	0.1000	3
As	75	72	He	0.035	ppb	110.2	36.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.197	ppb	38.8	146.67	0.0023	Pulse	0.1000	3
Mo	98	115	He	0.020	ppb	60.6	60.00	0.0009	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	579.1	33.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	365.6	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.244	ppb	44.2	1203.43	0.0191	Pulse	0.1000	3
Sb	121	115	He	0.018	ppb	76.8	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.134	ppb	38.5	56.67	0.0009	Pulse	0.1000	3
Tl	205	209	He	0.001	ppb	437.0	226.68	0.0010	Pulse	0.1000	3
Pb	208	209	He	0.096	ppb	12.1	1240.07	0.0057	Pulse	0.1000	3
U	238	209	He	0.006	ppb	19.2	110.00	0.0005	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3224466.52	2.9	99.5	Pulse	0.1000	3
No Gas	Ge	72	1426720.76	3.0	99.1	Pulse	0.1000	3
H2	Sc	45	195786.22	1.3	100.2	Pulse	0.1000	3
H2	Ge	72	159133.86	0.7	97.6	Pulse	0.1000	3
H2	In	115	437537.35	1.6	101.0	Pulse	0.1000	3
He	Sc	45	41532.92	0.1	103.9	Pulse	0.1000	3
He	Ge	72	72533.61	1.9	100.3	Pulse	0.1000	3
He	In	115	63069.96	2.2	97.6	Pulse	0.1000	3
He	Tb	159	280983.39	0.1	98.2	Pulse	0.1000	3
He	Bi	209	218274.53	1.1	98.2	Pulse	0.1000	3

No Gas



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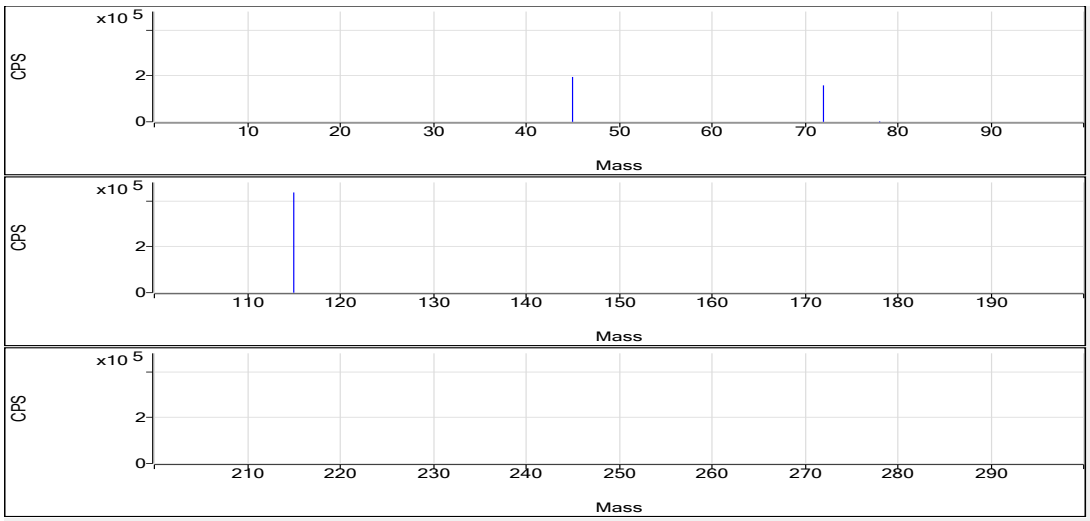
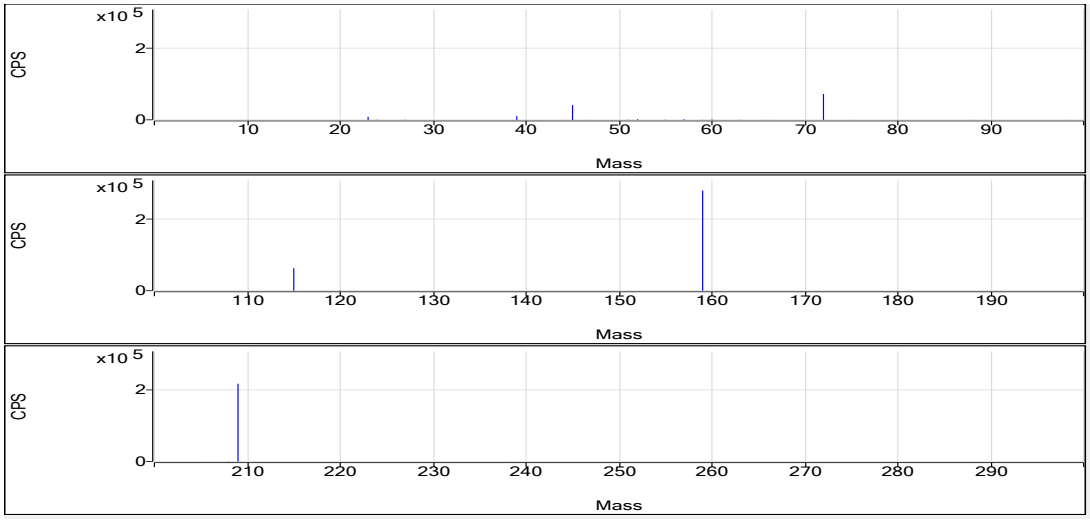


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.007	0	52.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.009	0	50.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.002	0	64.00	0.0013	4.694E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Na	23	3	He	5.174	0.1153	8492.68	0.0017	0.1065
Na	23	3	He	6.067	0.1169	8302.54	0.0017	0.1065
Na	23	3	He	5.493	0.1159	8452.71	0.0017	0.1065
Mg	24	3	He	5.851	0.0098	720.04	0.0008	0.004846
Mg	24	3	He	3.603	0.0079	560.03	0.0008	0.004846
Mg	24	3	He	4.66	0.0088	640.03	0.0008	0.004846
Al	27	3	He	23.168	0.0067	490.03	0.0002	0.001063
Al	27	3	He	25.924	0.0073	520.03	0.0002	0.001063
Al	27	3	He	21.158	0.0062	450.02	0.0002	0.001063
K	39	3	He	8.321	0.1482	10914.46	0.0006	0.1436
K	39	3	He	-1.78	0.1427	10133.87	0.0006	0.1436
K	39	3	He	-2.794	0.1421	10364.03	0.0006	0.1436
Ca	44	3	He	0.608	0.0016	120.00	0	0.001611
Ca	44	3	He	-11.074	0.0013	90.00	0	0.001611
Ca	44	3	He	-16.551	0.0011	80.00	0	0.001611
Ti	47	3	He	0.533	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	0.031	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	0.002	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.073	0.0082	602.02	0.0117	0.007326
V	51	3	He	0.062	0.0081	572.02	0.0117	0.007326
V	51	3	He	-0.038	0.0069	502.01	0.0117	0.007326
Cr	52	3	He	0.09	0.0268	1970.19	0.0152	0.02538
Cr	52	3	He	0.173	0.028	1990.21	0.0152	0.02538
Cr	52	3	He	-0.127	0.0234	1710.16	0.0152	0.02538
Mn	55	3	He	-0.736	0.0095	700.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.558	0.0106	750.05	0.0059	0.01385
Mn	55	3	He	-0.907	0.0085	620.04	0.0059	0.01385
Fe	57	3	He	65.711	0.023	1690.16	0.0003	0.003918
Fe	57	3	He	67.631	0.0235	1670.17	0.0003	0.003918
Fe	57	3	He	58.418	0.0208	1520.14	0.0003	0.003918
Co	59	3	He	0.068	0.0052	380.02	0.0305	0.003084
Co	59	3	He	0.014	0.0035	250.01	0.0305	0.003084
Co	59	3	He	0.02	0.0037	270.01	0.0305	0.003084
Ni	60	3	He	1.139	0.019	1400.12	0.0088	0.009003
Ni	60	3	He	0.897	0.0169	1200.08	0.0088	0.009003
Ni	60	3	He	1.034	0.0181	1320.10	0.0088	0.009003
Cu	63	3	He	-0.007	0.0048	350.01	0.0249	0.004937
Cu	63	3	He	0.062	0.0065	460.03	0.0249	0.004937
Cu	63	3	He	0.055	0.0063	460.03	0.0249	0.004937
Zn	66	3	He	-0.089	0.0046	340.02	0.0025	0.004836
Zn	66	3	He	-0.823	0.0028	200.01	0.0025	0.004836
Zn	66	3	He	-0.685	0.0032	230.01	0.0025	0.004836
As	75	3	He	0.078	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.025	0.0005	34.00	0.0017	0.0004347
As	75	3	He	0.002	0.0004	32.00	0.0017	0.0004347
Sr	88	3	He	0.241	0.0027	170.01	0.0078	0.0007762
Sr	88	3	He	0.109	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.241	0.0027	170.01	0.0078	0.0007762
Mo	98	3	He	0.033	0.0013	80.00	0.022	0.0005162
Mo	98	3	He	0.013	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.191	0.0183	1170.10	0.0143	0.01559
Sn	120	3	He	0.173	0.0181	1110.09	0.0143	0.01559
Sn	120	3	He	0.368	0.0208	1330.11	0.0143	0.01559
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.032	0.0007	40.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.18	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.078	0.0007	40.00	0.0044	0.000309
Ba	137	3	He	0.144	0.0009	60.00	0.0044	0.000309
Tl	205	3	He	0	0.001	220.01	0.0276	0.001005
Tl	205	3	He	0.007	0.0012	260.01	0.0276	0.001005
Tl	205	3	He	-0.004	0.0009	200.01	0.0276	0.001005
Pb	208	3	He	0.109	0.0061	710.05	0.0364	0.002176
Pb	208	3	He	0.086	0.0053	700.04	0.0364	0.002176
Pb	208	3	He	0.094	0.0056	740.05	0.0364	0.002176
U	238	3	He	0.007	0.0006	120.00	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
U	238	3	He	0.005	0.0005	100.00	0.0421	0.00024
Sc	45	1	No Gas			3117930.27		
Sc	45	1	No Gas			3259788.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3295680.58		
Ge	72	1	No Gas			1377762.64		
Ge	72	1	No Gas			1445719.67		
Ge	72	1	No Gas			1456679.98		
Sc	45	2	H2			197027.46		
Sc	45	2	H2			192761.48		
Sc	45	2	H2			197569.72		
Ge	72	2	H2			157826.82		
Ge	72	2	H2			160019.52		
Ge	72	2	H2			159555.23		
In	115	2	H2			443283.39		
In	115	2	H2			430041.52		
In	115	2	H2			439287.14		
Sc	45	3	He			41519.67		
Sc	45	3	He			41489.26		
Sc	45	3	He			41589.84		
Ge	72	3	He			73629.03		
Ge	72	3	He			71036.09		
Ge	72	3	He			72935.71		
In	115	3	He			63896.21		
In	115	3	He			61506.00		
In	115	3	He			63835.82		
Tb	159	3	He			280626.38		
Tb	159	3	He			280972.40		
Tb	159	3	He			281351.38		
Bi	209	3	He			216666.93		
Bi	209	3	He			217029.82		
Bi	209	3	He			221126.85		

Quantitation Report

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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

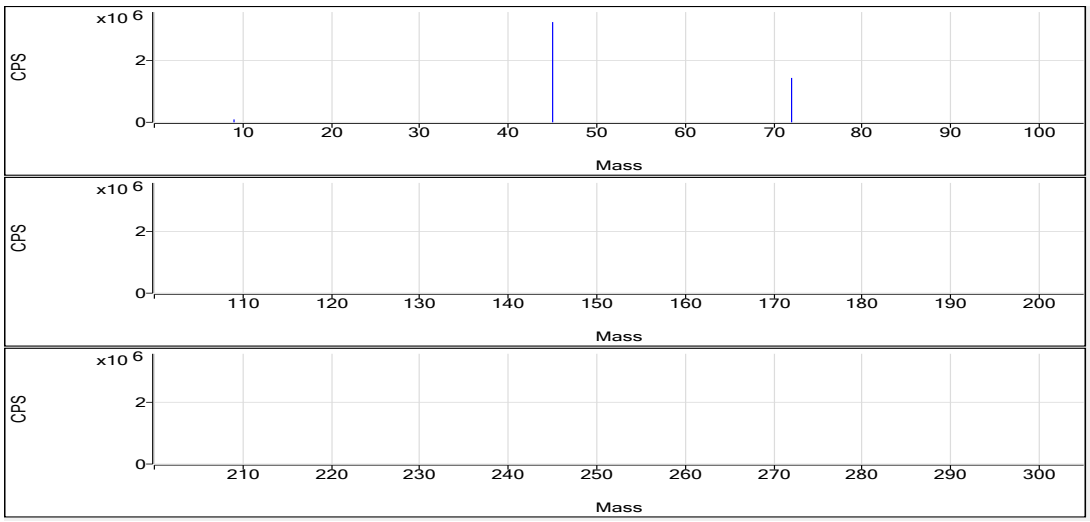
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.350	ppb	4.1	93499.87	0.0649	Pulse	0.5000	3
Se	78	72	H2	51.190	ppb	3.6	3244.15	0.0199	Pulse	1.5000	3
Na	23	72	He	5371.617	ppb	0.6	679344.28	9.3339	Pulse	0.1000	3
Mg	24	72	He	5379.684	ppb	0.7	330464.76	4.5405	Pulse	0.1000	3
Al	27	72	He	5319.723	ppb	0.5	93540.69	1.2852	Pulse	0.1000	3
K	39	72	He	5371.311	ppb	0.5	226346.19	3.1097	Pulse	0.1000	3
Ca	44	72	He	5396.960	ppb	2.7	12318.89	0.1692	Pulse	0.1000	3
Ti	47	72	He	5446.073	ppb	1.8	99423.41	1.3660	Pulse	0.1000	3
V	51	72	He	537.935	ppb	0.4	458528.48	6.3000	Pulse	0.5000	3
Cr	52	72	He	538.140	ppb	0.7	598274.95	8.2198	Pulse	0.1000	3
Mn	55	72	He	534.193	ppb	0.9	230495.23	3.1669	Pulse	0.1000	3
Fe	57	72	He	5345.896	ppb	1.4	113010.63	1.5527	Pulse	0.1000	3
Co	59	72	He	533.690	ppb	1.2	1185329.28	16.2862	Pulse	0.1000	3
Ni	60	72	He	531.838	ppb	1.3	341014.72	4.6856	Pulse	0.1000	3
Cu	63	72	He	534.830	ppb	0.9	971051.76	13.3421	Pulse	0.1000	3
Zn	66	72	He	532.209	ppb	1.3	95518.52	1.3123	Pulse	0.1000	3
As	75	72	He	525.689	ppb	0.2	66575.19	0.9147	Pulse	0.5000	3
Sr	88	115	He	52.932	ppb	3.7	26645.58	0.4145	Pulse	0.1000	3
Mo	98	115	He	51.912	ppb	1.6	73514.82	1.1437	Pulse	0.1000	3
Ag	107	115	He	52.512	ppb	0.7	153610.92	2.3898	Pulse	0.1000	3
Cd	111	115	He	52.400	ppb	1.5	16171.34	0.2516	Pulse	0.5000	3
Sn	120	115	He	51.975	ppb	2.4	48635.72	0.7566	Pulse	0.1000	3
Sb	121	115	He	51.911	ppb	1.9	41409.01	0.6442	Pulse	0.1000	3
Ba	137	115	He	524.792	ppb	1.5	147585.83	2.2962	Pulse	0.1000	3
Tl	205	209	He	52.709	ppb	0.7	322075.88	1.4581	Pulse	0.1000	3
Pb	208	209	He	52.592	ppb	1.1	423292.32	1.9164	Pulse	0.1000	3
U	238	209	He	52.183	ppb	1.1	484933.43	2.1954	Pulse	0.1000	3

ISTD Table:

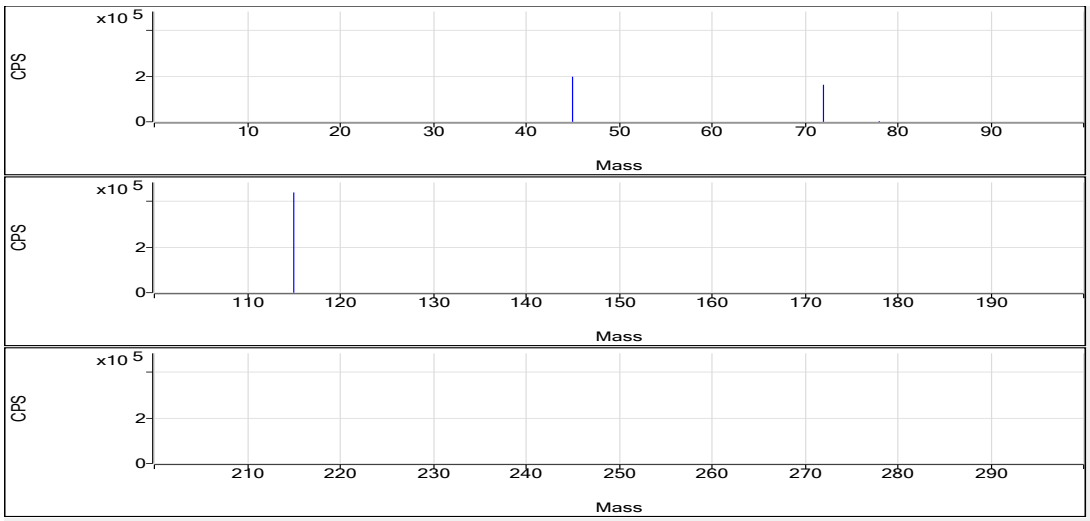
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3254998.91	1.2	100.4	Pulse	0.1000	3
No Gas	Ge	72	1441324.87	1.5	100.1	Pulse	0.1000	3
H2	Sc	45	197960.66	0.7	101.3	Pulse	0.1000	3
H2	Ge	72	162692.08	0.5	99.8	Pulse	0.1000	3
H2	In	115	439806.52	1.5	101.5	Pulse	0.1000	3
He	Sc	45	41218.68	2.6	103.1	Pulse	0.1000	3
He	Ge	72	72784.40	0.8	100.7	Pulse	0.1000	3
He	In	115	64280.15	0.8	99.5	Pulse	0.1000	3
He	Tb	159	284306.97	0.9	99.4	Pulse	0.1000	3
He	Bi	209	220890.69	0.6	99.4	Pulse	0.1000	3

No Gas

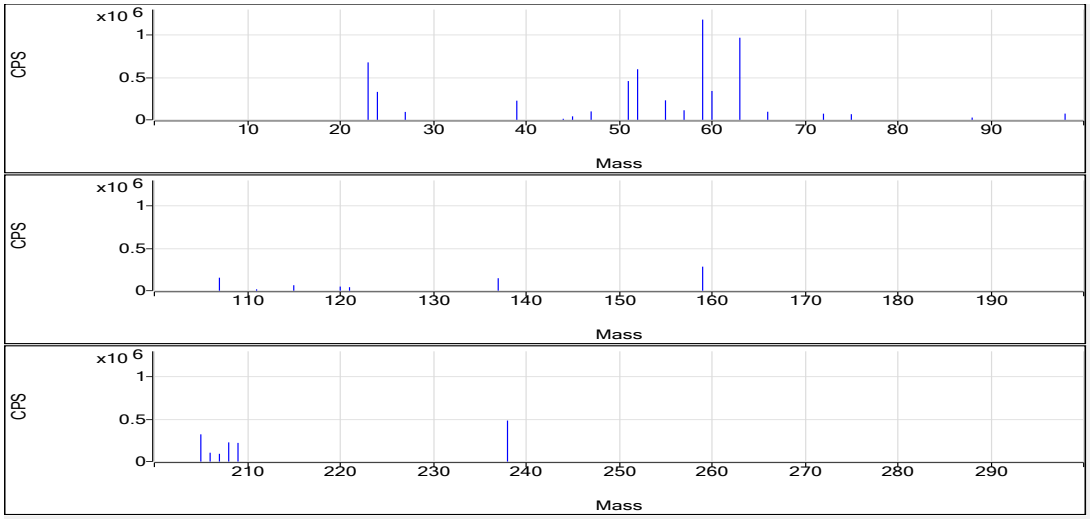


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	51.092	0.0672	95366.52	0.0013	4.694E-05
Be	9	1	No Gas	47.124	0.062	90553.37	0.0013	4.694E-05
Be	9	1	No Gas	49.835	0.0655	94579.73	0.0013	4.694E-05
Se	78	2	H2	53.268	0.0208	3365.06	0.0004	1.089E-05
Se	78	2	H2	50.573	0.0197	3198.36	0.0004	1.089E-05
Se	78	2	H2	49.728	0.0194	3169.02	0.0004	1.089E-05
Na	23	3	He	5380.763	9.3496	675998.97	0.0017	0.1065
Na	23	3	He	5399.921	9.3826	681019.44	0.0017	0.1065
Na	23	3	He	5334.167	9.2696	681014.44	0.0017	0.1065
Mg	24	3	He	5388.745	4.5481	328837.65	0.0008	0.004846
Mg	24	3	He	5409.328	4.5655	331377.38	0.0008	0.004846
Mg	24	3	He	5340.978	4.5078	331179.25	0.0008	0.004846
Al	27	3	He	5344.84	1.2913	93361.99	0.0002	0.001063
Al	27	3	He	5325.306	1.2866	93383.18	0.0002	0.001063
Al	27	3	He	5289.022	1.2778	93876.91	0.0002	0.001063
K	39	3	He	5341.331	3.0932	223643.92	0.0006	0.1436
K	39	3	He	5376.909	3.1128	225940.60	0.0006	0.1436
K	39	3	He	5395.691	3.1232	229454.06	0.0006	0.1436
Ca	44	3	He	5236.127	0.1642	11875.21	0	0.001611
Ca	44	3	He	5513.026	0.1728	12545.69	0	0.001611
Ca	44	3	He	5441.729	0.1706	12535.78	0	0.001611
Ti	47	3	He	5547.398	1.3914	100604.50	0.0003	0.0002737
Ti	47	3	He	5348.892	1.3417	97382.85	0.0003	0.0002737
Ti	47	3	He	5441.927	1.365	100282.87	0.0003	0.0002737
V	51	3	He	539.242	6.3152	456605.66	0.0117	0.007326
V	51	3	He	539.003	6.3124	458179.69	0.0117	0.007326
V	51	3	He	535.559	6.2722	460800.09	0.0117	0.007326
Cr	52	3	He	540.956	8.2627	597408.62	0.0152	0.02538
Cr	52	3	He	533.773	8.1533	591795.11	0.0152	0.02538
Cr	52	3	He	539.69	8.2434	605621.12	0.0152	0.02538
Mn	55	3	He	539.319	3.1971	231160.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	530.129	3.1429	228122.67	0.0059	0.01385
Mn	55	3	He	533.132	3.1606	232202.98	0.0059	0.01385
Fe	57	3	He	5421.816	1.5747	113853.94	0.0003	0.003918
Fe	57	3	He	5267.531	1.53	111052.78	0.0003	0.003918
Fe	57	3	He	5348.34	1.5534	114125.17	0.0003	0.003918
Co	59	3	He	540.944	16.5075	1193530.22	0.0305	0.003084
Co	59	3	He	530.165	16.1787	1174307.40	0.0305	0.003084
Co	59	3	He	529.961	16.1725	1188150.22	0.0305	0.003084
Ni	60	3	He	538.262	4.7421	342864.14	0.0088	0.009003
Ni	60	3	He	532.927	4.6952	340793.94	0.0088	0.009003
Ni	60	3	He	524.324	4.6195	339386.09	0.0088	0.009003
Cu	63	3	He	539.884	13.4681	973771.24	0.0249	0.004937
Cu	63	3	He	533.888	13.3186	966708.81	0.0249	0.004937
Cu	63	3	He	530.719	13.2395	972675.22	0.0249	0.004937
Zn	66	3	He	538.249	1.3272	95958.59	0.0025	0.004836
Zn	66	3	He	524.351	1.293	93853.77	0.0025	0.004836
Zn	66	3	He	534.027	1.3168	96743.21	0.0025	0.004836
As	75	3	He	526.567	0.9162	66244.95	0.0017	0.0004347
As	75	3	He	525.718	0.9147	66395.73	0.0017	0.0004347
As	75	3	He	524.784	0.9131	67084.90	0.0017	0.0004347
Sr	88	3	He	50.674	0.3969	25623.78	0.0078	0.0007762
Sr	88	3	He	53.74	0.4209	26795.87	0.0078	0.0007762
Sr	88	3	He	54.381	0.4259	27517.09	0.0078	0.0007762
Mo	98	3	He	50.983	1.1232	72515.90	0.022	0.0005162
Mo	98	3	He	52.393	1.1543	73491.68	0.022	0.0005162
Mo	98	3	He	52.361	1.1536	74536.87	0.022	0.0005162
Ag	107	3	He	52.118	2.3718	153125.36	0.0455	0.0004641
Ag	107	3	He	52.827	2.4041	153066.32	0.0455	0.0004641
Ag	107	3	He	52.591	2.3934	154641.09	0.0455	0.0004641
Cd	111	3	He	52.778	0.2534	16359.56	0.0048	5.152E-05
Cd	111	3	He	52.901	0.254	16171.34	0.0048	5.152E-05
Cd	111	3	He	51.521	0.2474	15983.11	0.0048	5.152E-05
Sn	120	3	He	50.567	0.7366	47552.08	0.0143	0.01559
Sn	120	3	He	52.417	0.7629	48575.63	0.0143	0.01559
Sn	120	3	He	52.942	0.7704	49779.45	0.0143	0.01559
Sb	121	3	He	50.8	0.6304	40700.03	0.0124	0.000258
Sb	121	3	He	52.235	0.6482	41272.22	0.0124	0.000258
Sb	121	3	He	52.698	0.654	42254.77	0.0124	0.000258
Ba	137	3	He	518.456	2.2684	146449.99	0.0044	0.000309
Ba	137	3	He	533.877	2.3359	148723.78	0.0044	0.000309
Ba	137	3	He	522.042	2.2841	147583.72	0.0044	0.000309
Tl	205	3	He	52.921	1.464	321839.33	0.0276	0.001005
Tl	205	3	He	52.909	1.4636	322728.04	0.0276	0.001005
Tl	205	3	He	52.297	1.4467	321660.27	0.0276	0.001005
Pb	208	3	He	53.245	1.9402	228879.16	0.0364	0.002176
Pb	208	3	He	52.46	1.9116	225305.76	0.0364	0.002176
Pb	208	3	He	52.07	1.8974	226376.13	0.0364	0.002176
U	238	3	He	52.769	2.2201	488061.32	0.0421	0.00024
U	238	3	He	52.174	2.1951	484002.22	0.0421	0.00024
U	238	3	He	51.607	2.1712	482736.75	0.0421	0.00024
Sc	45	1	No Gas			3210901.20		
Sc	45	1	No Gas			3289060.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3265034.95		
Ge	72	1	No Gas			1419486.70		
Ge	72	1	No Gas			1461242.63		
Ge	72	1	No Gas			1443245.29		
Sc	45	2	H2			198436.62		
Sc	45	2	H2			196420.74		
Sc	45	2	H2			199024.61		
Ge	72	2	H2			162162.11		
Ge	72	2	H2			162335.46		
Ge	72	2	H2			163578.67		
In	115	2	H2			440941.40		
In	115	2	H2			432773.94		
In	115	2	H2			445704.21		
Sc	45	3	He			41640.15		
Sc	45	3	He			40015.22		
Sc	45	3	He			42000.68		
Ge	72	3	He			72302.11		
Ge	72	3	He			72583.58		
Ge	72	3	He			73467.50		
In	115	3	He			64930.44		
In	115	3	He			64047.33		
In	115	3	He			65000.76		
Tb	159	3	He			282147.53		
Tb	159	3	He			283521.46		
Tb	159	3	He			287251.91		
Bi	209	3	He			219838.18		
Bi	209	3	He			220496.34		
Bi	209	3	He			222337.54		

Quantitation Report

Data File Name	193_CCB.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:18:12
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

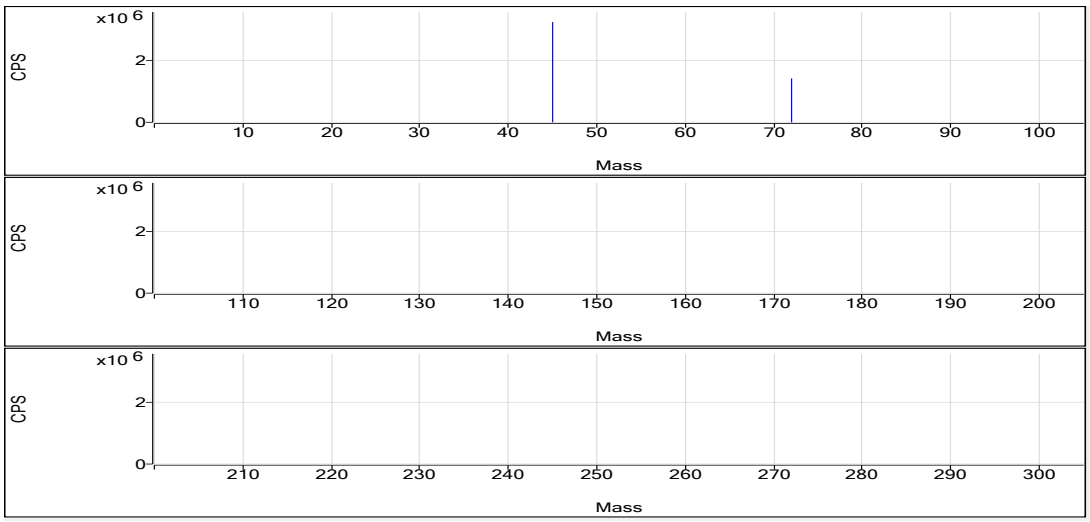
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.026	ppb	33.9	116.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.037	ppb	86.4	4.00	0.0000	Pulse	1.5000	3
Na	23	72	He	5.771	ppb	47.4	8469.35	0.1164	Pulse	0.1000	3
Mg	24	72	He	3.495	ppb	21.0	566.70	0.0078	Pulse	0.1000	3
Al	27	72	He	17.984	ppb	6.3	393.35	0.0054	Pulse	0.1000	3
K	39	72	He	14.248	ppb	97.8	11021.09	0.1515	Pulse	0.1000	3
Ca	44	72	He	7.083	ppb	276.8	133.34	0.0018	Pulse	0.1000	3
Ti	47	72	He	1.098	ppb	98.5	40.00	0.0005	Pulse	0.1000	3
V	51	72	He	0.098	ppb	49.6	616.02	0.0085	Pulse	0.5000	3
Cr	52	72	He	0.082	ppb	180.8	1936.86	0.0266	Pulse	0.1000	3
Mn	55	72	He	-0.835	ppb	N/A	650.04	0.0089	Pulse	0.1000	3
Fe	57	72	He	55.465	ppb	10.9	1453.45	0.0200	Pulse	0.1000	3
Co	59	72	He	0.117	ppb	18.4	483.36	0.0066	Pulse	0.1000	3
Ni	60	72	He	0.846	ppb	6.6	1196.76	0.0164	Pulse	0.1000	3
Cu	63	72	He	0.109	ppb	66.6	556.70	0.0077	Pulse	0.1000	3
Zn	66	72	He	-0.383	ppb	N/A	283.34	0.0039	Pulse	0.1000	3
As	75	72	He	0.150	ppb	126.4	50.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.086	ppb	65.9	93.33	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.038	ppb	65.9	86.67	0.0013	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	151.1	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	147.9	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.088	ppb	97.9	1083.41	0.0168	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	258.1	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.273	ppb	40.3	96.67	0.0015	Pulse	0.1000	3
Tl	205	209	He	0.131	ppb	11.1	1013.41	0.0046	Pulse	0.1000	3
Pb	208	209	He	0.104	ppb	5.3	1306.74	0.0060	Pulse	0.1000	3
U	238	209	He	0.015	ppb	41.1	186.68	0.0009	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3262045.68	1.1	100.6	Pulse	0.1000	3
No Gas	Ge	72	1426583.36	1.1	99.1	Pulse	0.1000	3
H2	Sc	45	194617.10	1.4	99.6	Pulse	0.1000	3
H2	Ge	72	158298.36	2.5	97.1	Pulse	0.1000	3
H2	In	115	435104.81	1.7	100.4	Pulse	0.1000	3
He	Sc	45	40476.81	0.2	101.2	Pulse	0.1000	3
He	Ge	72	72771.14	1.2	100.7	Pulse	0.1000	3
He	In	115	64350.17	1.0	99.6	Pulse	0.1000	3
He	Tb	159	281849.53	0.4	98.5	Pulse	0.1000	3
He	Bi	209	219503.85	0.3	98.8	Pulse	0.1000	3

No Gas



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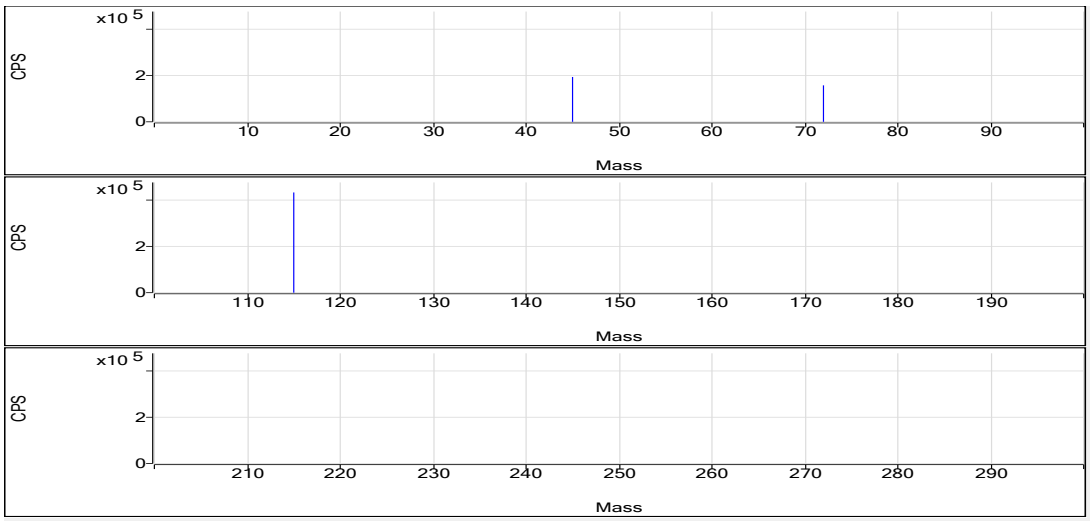
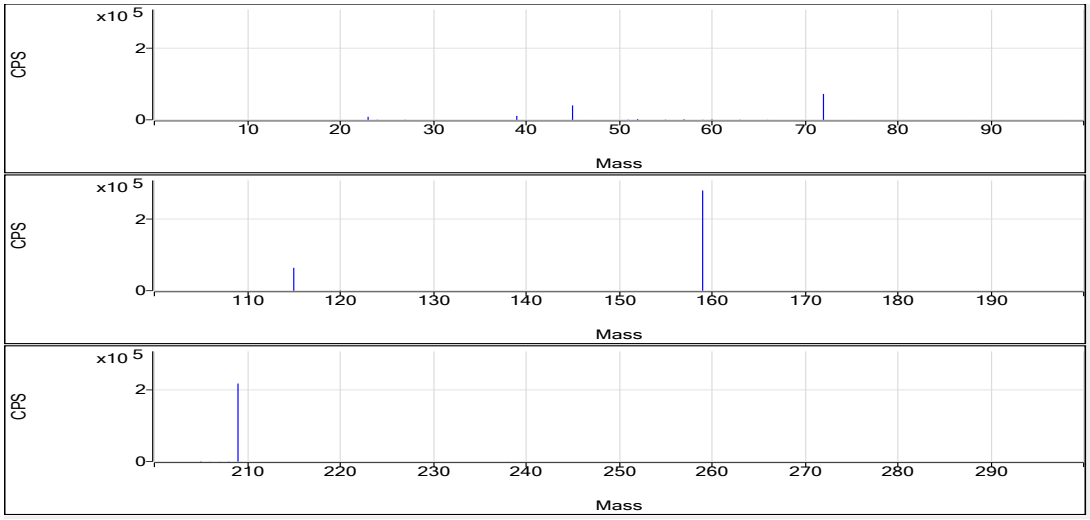


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.035	0.0001	132.00	0.0013	4.694E-05
Be	9	1	No Gas	0.025	0.0001	116.00	0.0013	4.694E-05
Be	9	1	No Gas	0.018	0.0001	100.00	0.0013	4.694E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.039	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.068	0	6.00	0.0004	1.089E-05
Na	23	3	He	8.91	0.1218	8892.96	0.0017	0.1065
Na	23	3	He	3.893	0.1131	8122.48	0.0017	0.1065
Na	23	3	He	4.51	0.1142	8392.62	0.0017	0.1065
Mg	24	3	He	3.185	0.0075	550.04	0.0008	0.004846
Mg	24	3	He	4.331	0.0085	610.03	0.0008	0.004846
Mg	24	3	He	2.968	0.0073	540.03	0.0008	0.004846
Al	27	3	He	17.152	0.0052	380.02	0.0002	0.001063
Al	27	3	He	17.526	0.0053	380.02	0.0002	0.001063
Al	27	3	He	19.274	0.0057	420.02	0.0002	0.001063
K	39	3	He	13.97	0.1514	11054.38	0.0006	0.1436
K	39	3	He	28.323	0.1593	11434.75	0.0006	0.1436
K	39	3	He	0.45	0.1439	10574.13	0.0006	0.1436
Ca	44	3	He	-12.191	0.0012	90.00	0	0.001611
Ca	44	3	He	6.441	0.0018	130.01	0	0.001611
Ca	44	3	He	27	0.0024	180.01	0	0.001611
Ti	47	3	He	0	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.13	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	2.164	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.099	0.0085	620.02	0.0117	0.007326
V	51	3	He	0.145	0.009	648.02	0.0117	0.007326
V	51	3	He	0.048	0.0079	580.02	0.0117	0.007326
Cr	52	3	He	0.105	0.027	1970.19	0.0152	0.02538
Cr	52	3	He	0.218	0.0287	2060.22	0.0152	0.02538
Cr	52	3	He	-0.076	0.0242	1780.17	0.0152	0.02538
Mn	55	3	He	-0.955	0.0082	600.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.978	0.0081	580.03	0.0059	0.01385
Mn	55	3	He	-0.572	0.0105	770.05	0.0059	0.01385
Fe	57	3	He	52.174	0.019	1390.12	0.0003	0.003918
Fe	57	3	He	62.451	0.022	1580.14	0.0003	0.003918
Fe	57	3	He	51.769	0.0189	1390.10	0.0003	0.003918
Co	59	3	He	0.11	0.0064	470.03	0.0305	0.003084
Co	59	3	He	0.141	0.0074	530.03	0.0305	0.003084
Co	59	3	He	0.1	0.0061	450.02	0.0305	0.003084
Ni	60	3	He	0.814	0.0162	1180.09	0.0088	0.009003
Ni	60	3	He	0.814	0.0162	1160.10	0.0088	0.009003
Ni	60	3	He	0.911	0.017	1250.09	0.0088	0.009003
Cu	63	3	He	0.142	0.0085	620.04	0.0249	0.004937
Cu	63	3	He	0.16	0.0089	640.04	0.0249	0.004937
Cu	63	3	He	0.026	0.0056	410.02	0.0249	0.004937
Zn	66	3	He	-0.241	0.0042	310.01	0.0025	0.004836
Zn	66	3	He	-0.268	0.0042	300.01	0.0025	0.004836
Zn	66	3	He	-0.639	0.0033	240.01	0.0025	0.004836
As	75	3	He	0.364	0.0011	78.00	0.0017	0.0004347
As	75	3	He	0.086	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0	0.0004	32.00	0.0017	0.0004347
Sr	88	3	He	0.117	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.021	0.0009	60.00	0.0078	0.0007762
Sr	88	3	He	0.121	0.0017	110.00	0.0078	0.0007762
Mo	98	3	He	0.039	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.062	0.0019	120.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.024	0.0016	100.00	0.0455	0.0004641
Cd	111	3	He	0.021	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.006	0.0157	1020.06	0.0143	0.01559
Sn	120	3	He	0.178	0.0181	1160.09	0.0143	0.01559
Sn	120	3	He	0.081	0.0167	1070.09	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.067	0.0011	70.00	0.0124	0.000258
Ba	137	3	He	0.245	0.0014	90.00	0.0044	0.000309
Ba	137	3	He	0.179	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.394	0.002	130.01	0.0044	0.000309
Tl	205	3	He	0.128	0.0045	1000.08	0.0276	0.001005
Tl	205	3	He	0.146	0.005	1110.09	0.0276	0.001005
Tl	205	3	He	0.117	0.0043	930.07	0.0276	0.001005
Pb	208	3	He	0.098	0.0057	630.04	0.0364	0.002176
Pb	208	3	He	0.105	0.006	710.05	0.0364	0.002176
Pb	208	3	He	0.109	0.0061	690.05	0.0364	0.002176
U	238	3	He	0.02	0.0011	240.01	0.0421	0.00024
U	238	3	He	0.008	0.0006	130.01	0.0421	0.00024
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
Sc	45	1	No Gas			3227742.45		
Sc	45	1	No Gas			3301617.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3256777.45		
Ge	72	1	No Gas			1412034.98		
Ge	72	1	No Gas			1443185.13		
Ge	72	1	No Gas			1424529.98		
Sc	45	2	H2			195631.31		
Sc	45	2	H2			191626.97		
Sc	45	2	H2			196593.02		
Ge	72	2	H2			160303.80		
Ge	72	2	H2			153661.03		
Ge	72	2	H2			160930.26		
In	115	2	H2			435963.35		
In	115	2	H2			427137.73		
In	115	2	H2			442213.35		
Sc	45	3	He			40527.23		
Sc	45	3	He			40396.43		
Sc	45	3	He			40506.76		
Ge	72	3	He			73035.94		
Ge	72	3	He			71789.66		
Ge	72	3	He			73487.83		
In	115	3	He			65102.77		
In	115	3	He			64026.95		
In	115	3	He			63946.15		
Tb	159	3	He			282118.36		
Tb	159	3	He			282897.71		
Tb	159	3	He			280532.53		
Bi	209	3	He			219804.68		
Bi	209	3	He			219968.04		
Bi	209	3	He			218738.84		

Quantitation Report

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Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

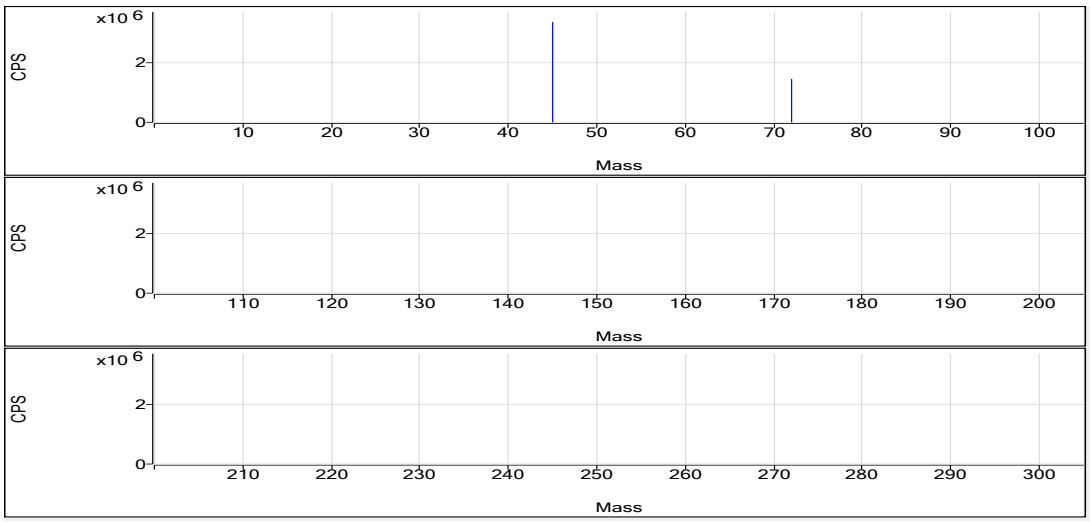
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.157	ppb	4.3	2298.86	0.0016	Pulse	0.5000	3
Se	78	72	H2	0.470	ppb	12.6	31.56	0.0002	Pulse	1.5000	3
Na	23	72	He	44.882	ppb	1.1	13576.61	0.1836	Pulse	0.1000	3
Mg	24	72	He	1800.943	ppb	1.1	112661.13	1.5232	Pulse	0.1000	3
Al	27	72	He	19518.989	ppb	1.2	348577.02	4.7128	Pulse	0.1000	3
K	39	72	He	2592.063	ppb	1.5	116495.63	1.5750	Pulse	0.1000	3
Ca	44	72	He	1417.819	ppb	11.1	3373.84	0.0456	Pulse	0.1000	3
Ti	47	72	He	352.882	ppb	2.5	6565.01	0.0888	Pulse	0.1000	3
V	51	72	He	53.149	ppb	1.1	46528.86	0.6291	Pulse	0.5000	3
Cr	52	72	He	35.031	ppb	2.6	41332.40	0.5588	Pulse	0.1000	3
Mn	55	72	He	78.041	ppb	1.4	35099.71	0.4745	Pulse	0.1000	3
Fe	57	72	He	67520.102	ppb	1.0	1447125.03	19.5655	Pulse	0.1000	3
Co	59	72	He	7.417	ppb	1.2	16967.10	0.2294	Pulse	0.1000	3
Ni	60	72	He	11.587	ppb	5.8	8202.57	0.1109	Pulse	0.1000	3
Cu	63	72	He	8.428	ppb	5.1	15912.71	0.2151	Pulse	0.1000	3
Zn	66	72	He	685.658	ppb	0.7	124960.76	1.6893	Pulse	0.1000	3
As	75	72	He	15.942	ppb	3.6	2082.84	0.0282	Pulse	0.5000	3
Sr	88	115	He	16.490	ppb	3.0	8296.09	0.1297	Pulse	0.1000	3
Mo	98	115	He	3.077	ppb	5.6	4370.82	0.0683	Pulse	0.1000	3
Ag	107	115	He	0.022	ppb	11.3	93.33	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.197	ppb	16.1	64.00	0.0010	Pulse	0.5000	3
Sn	120	115	He	0.912	ppb	17.3	1830.19	0.0286	Pulse	0.1000	3
Sb	121	115	He	0.357	ppb	26.3	300.02	0.0047	Pulse	0.1000	3
Ba	137	115	He	42.394	ppb	3.7	11885.51	0.1858	Pulse	0.1000	3
Tl	205	209	He	0.203	ppb	14.7	1490.14	0.0066	Pulse	0.1000	3
Pb	208	209	He	120.322	ppb	0.5	985367.15	4.3816	Pulse	0.1000	3
U	238	209	He	4.228	ppb	1.5	40053.08	0.1781	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3391544.12	1.1	104.6	Pulse	0.1000	3
No Gas	Ge	72	1467545.65	1.0	101.9	Pulse	0.1000	3
H2	Sc	45	203319.77	2.3	104.1	Pulse	0.1000	3
H2	Ge	72	162666.57	2.4	99.8	Pulse	0.1000	3
H2	In	115	435861.80	1.5	100.6	Pulse	0.1000	3
He	Sc	45	42432.46	1.8	106.1	Pulse	0.1000	3
He	Ge	72	73967.39	1.1	102.3	Pulse	0.1000	3
He	In	115	63989.42	1.4	99.1	Pulse	0.1000	3
He	Tb	159	291469.88	0.6	101.9	Pulse	0.1000	3
He	Bi	209	224888.56	0.6	101.2	Pulse	0.1000	3

No Gas



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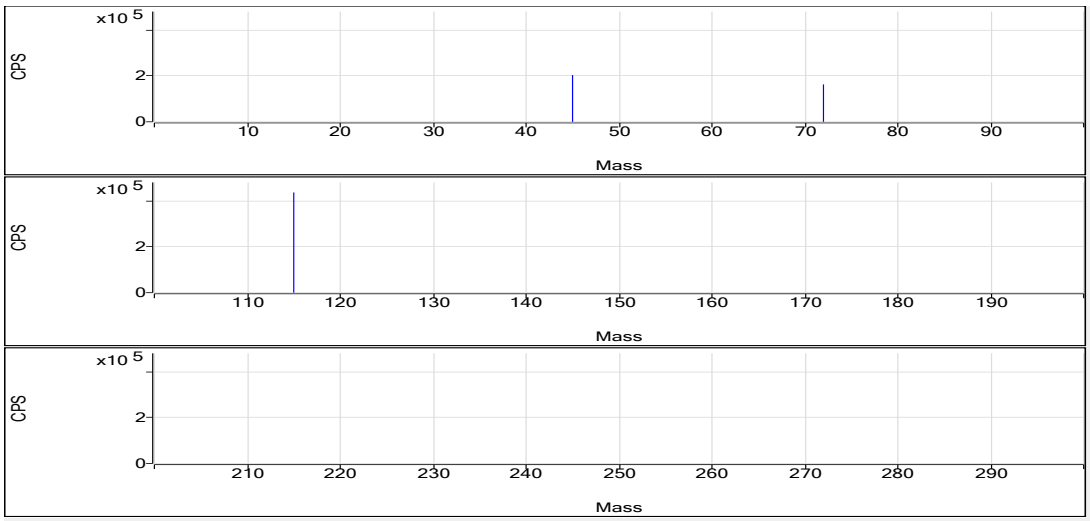
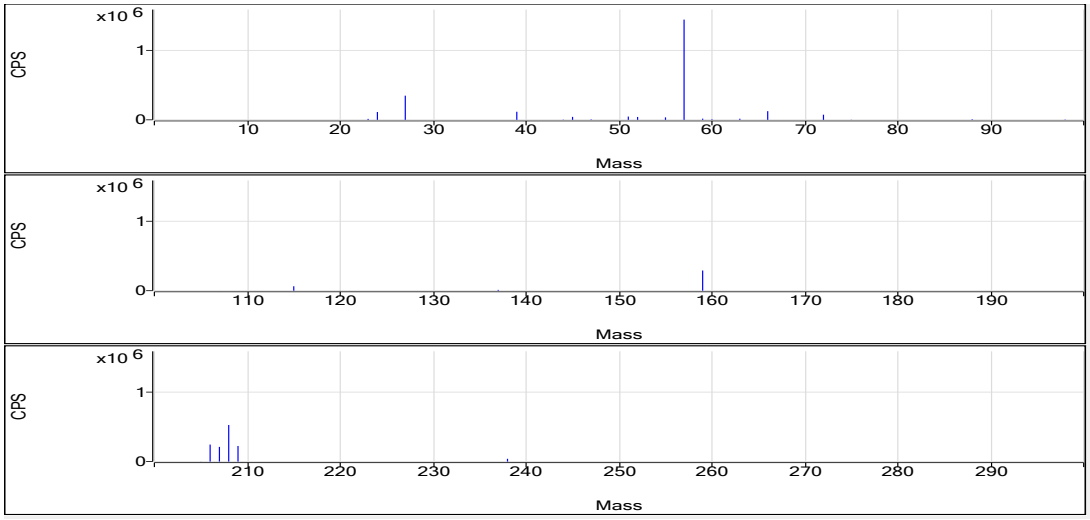


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.198	0.0016	2352.20	0.0013	4.694E-05
Be	9	1	No Gas	1.101	0.0015	2198.17	0.0013	4.694E-05
Be	9	1	No Gas	1.171	0.0016	2346.20	0.0013	4.694E-05
Se	78	2	H2	0.528	0.0002	34.67	0.0004	1.089E-05
Se	78	2	H2	0.409	0.0002	27.33	0.0004	1.089E-05
Se	78	2	H2	0.474	0.0002	32.67	0.0004	1.089E-05
Na	23	3	He	44.637	0.1831	13616.62	0.0017	0.1065
Na	23	3	He	45.444	0.1845	13476.60	0.0017	0.1065
Na	23	3	He	44.564	0.183	13636.61	0.0017	0.1065
Mg	24	3	He	1783.301	1.5083	112151.01	0.0008	0.004846
Mg	24	3	He	1821.613	1.5407	112522.39	0.0008	0.004846
Mg	24	3	He	1797.916	1.5207	113309.98	0.0008	0.004846
Al	27	3	He	19252.298	4.6485	345628.67	0.0002	0.001063
Al	27	3	He	19707.569	4.7584	347529.49	0.0002	0.001063
Al	27	3	He	19597.102	4.7317	352572.89	0.0002	0.001063
K	39	3	He	2624.139	1.5927	118424.30	0.0006	0.1436
K	39	3	He	2601.967	1.5805	115431.19	0.0006	0.1436
K	39	3	He	2550.082	1.5518	115631.41	0.0006	0.1436
Ca	44	3	He	1355.634	0.0437	3250.49	0	0.001611
Ca	44	3	He	1597.083	0.0512	3740.60	0	0.001611
Ca	44	3	He	1300.738	0.042	3130.42	0	0.001611
Ti	47	3	He	344.372	0.0866	6441.61	0.0003	0.0002737
Ti	47	3	He	362.075	0.0911	6651.69	0.0003	0.0002737
Ti	47	3	He	352.201	0.0886	6601.74	0.0003	0.0002737
V	51	3	He	52.522	0.6217	46226.71	0.0117	0.007326
V	51	3	He	53.29	0.6307	46063.91	0.0117	0.007326
V	51	3	He	53.635	0.6347	47295.97	0.0117	0.007326
Cr	52	3	He	35.899	0.572	42532.49	0.0152	0.02538
Cr	52	3	He	35.089	0.5597	40877.73	0.0152	0.02538
Cr	52	3	He	34.104	0.5447	40586.97	0.0152	0.02538
Mn	55	3	He	78.028	0.4744	35273.67	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	76.966	0.4681	34190.76	0.0059	0.01385
Mn	55	3	He	79.131	0.4809	35834.70	0.0059	0.01385
Fe	57	3	He	66772.718	19.349	1438661.23	0.0003	0.003918
Fe	57	3	He	68179.982	19.7567	1442939.98	0.0003	0.003918
Fe	57	3	He	67607.607	19.5908	1459773.88	0.0003	0.003918
Co	59	3	He	7.508	0.2321	17260.98	0.0305	0.003084
Co	59	3	He	7.42	0.2295	16760.09	0.0305	0.003084
Co	59	3	He	7.324	0.2265	16880.23	0.0305	0.003084
Ni	60	3	He	10.925	0.1051	7812.35	0.0088	0.009003
Ni	60	3	He	11.577	0.1108	8092.46	0.0088	0.009003
Ni	60	3	He	12.259	0.1168	8702.89	0.0088	0.009003
Cu	63	3	He	8.08	0.2064	15348.75	0.0249	0.004937
Cu	63	3	He	8.301	0.2119	15478.85	0.0249	0.004937
Cu	63	3	He	8.903	0.2269	16910.52	0.0249	0.004937
Zn	66	3	He	683.921	1.6851	125290.72	0.0025	0.004836
Zn	66	3	He	681.792	1.6798	122688.13	0.0025	0.004836
Zn	66	3	He	691.261	1.7031	126903.42	0.0025	0.004836
As	75	3	He	16.424	0.029	2156.20	0.0017	0.0004347
As	75	3	He	16.095	0.0284	2076.17	0.0017	0.0004347
As	75	3	He	15.308	0.0271	2016.15	0.0017	0.0004347
Sr	88	3	He	16.421	0.1291	8332.73	0.0078	0.0007762
Sr	88	3	He	17.023	0.1338	8422.85	0.0078	0.0007762
Sr	88	3	He	16.027	0.1261	8132.69	0.0078	0.0007762
Mo	98	3	He	3.179	0.0705	4550.90	0.022	0.0005162
Mo	98	3	He	2.878	0.0639	4020.68	0.022	0.0005162
Mo	98	3	He	3.173	0.0704	4540.87	0.022	0.0005162
Ag	107	3	He	0.02	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.025	0.0016	100.00	0.0455	0.0004641
Ag	107	3	He	0.02	0.0014	90.00	0.0455	0.0004641
Cd	111	3	He	0.222	0.0011	72.00	0.0048	5.152E-05
Cd	111	3	He	0.161	0.0008	52.00	0.0048	5.152E-05
Cd	111	3	He	0.209	0.0011	68.00	0.0048	5.152E-05
Sn	120	3	He	0.798	0.027	1740.18	0.0143	0.01559
Sn	120	3	He	0.846	0.0277	1740.17	0.0143	0.01559
Sn	120	3	He	1.092	0.0312	2010.22	0.0143	0.01559
Sb	121	3	He	0.454	0.0059	380.02	0.0124	0.000258
Sb	121	3	He	0.351	0.0046	290.02	0.0124	0.000258
Sb	121	3	He	0.267	0.0036	230.01	0.0124	0.000258
Ba	137	3	He	40.58	0.1778	11475.08	0.0044	0.000309
Ba	137	3	He	43.284	0.1897	11935.59	0.0044	0.000309
Ba	137	3	He	43.319	0.1898	12245.85	0.0044	0.000309
Tl	205	3	He	0.193	0.0064	1420.14	0.0276	0.001005
Tl	205	3	He	0.18	0.006	1350.13	0.0276	0.001005
Tl	205	3	He	0.237	0.0076	1700.16	0.0276	0.001005
Pb	208	3	He	120.174	4.3762	522861.67	0.0364	0.002176
Pb	208	3	He	119.789	4.3622	530666.98	0.0364	0.002176
Pb	208	3	He	121.004	4.4064	530131.55	0.0364	0.002176
U	238	3	He	4.188	0.1764	39431.74	0.0421	0.00024
U	238	3	He	4.196	0.1768	39962.79	0.0421	0.00024
U	238	3	He	4.299	0.1811	40764.71	0.0421	0.00024
Sc	45	1	No Gas			3348057.45		
Sc	45	1	No Gas			3412213.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3414361.20		
Ge	72	1	No Gas			1450785.13		
Ge	72	1	No Gas			1471957.32		
Ge	72	1	No Gas			1479894.51		
Sc	45	2	H2			199502.38		
Sc	45	2	H2			202002.63		
Sc	45	2	H2			208454.29		
Ge	72	2	H2			160282.76		
Ge	72	2	H2			160597.19		
Ge	72	2	H2			167119.76		
In	115	2	H2			432149.52		
In	115	2	H2			431802.53		
In	115	2	H2			443633.35		
Sc	45	3	He			41810.60		
Sc	45	3	He			42181.81		
Sc	45	3	He			43304.97		
Ge	72	3	He			74353.44		
Ge	72	3	He			73035.63		
Ge	72	3	He			74513.11		
In	115	3	He			64539.42		
In	115	3	He			62942.75		
In	115	3	He			64528.90		
Tb	159	3	He			292177.24		
Tb	159	3	He			289459.35		
Tb	159	3	He			292773.06		
Bi	209	3	He			223507.67		
Bi	209	3	He			226069.31		
Bi	209	3	He			225088.69		

Quantitation Report

Data File Name	195SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:22:13
Sample Name	410-136610-H-5-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

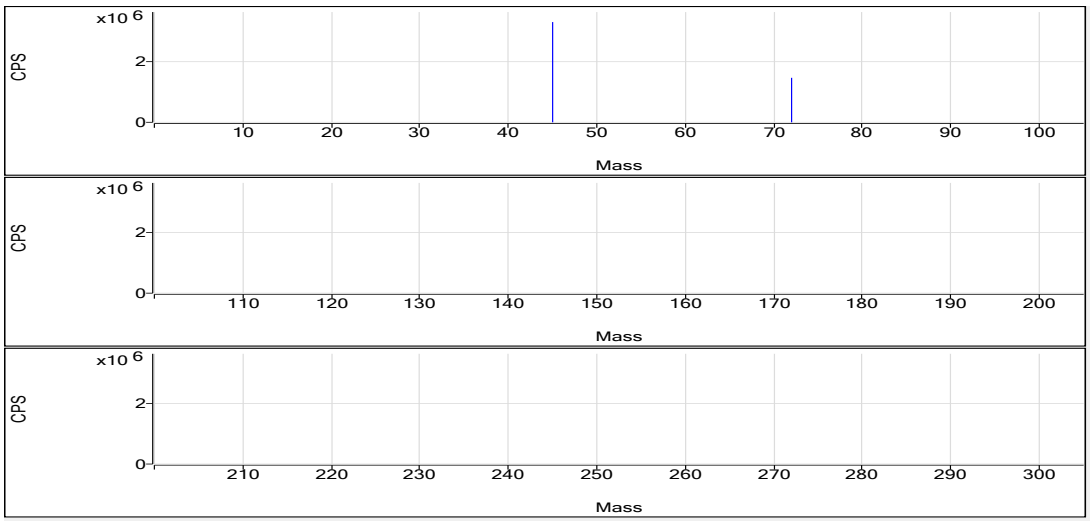
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.221	ppb	4.8	494.01	0.0003	Pulse	0.5000	3
Se	78	72	H2	0.092	ppb	8.1	7.55	0.0000	Pulse	1.5000	3
Na	23	72	He	7.671	ppb	22.9	8842.93	0.1196	Pulse	0.1000	3
Mg	24	72	He	352.976	ppb	1.3	22360.81	0.3024	Pulse	0.1000	3
Al	27	72	He	3845.188	ppb	2.4	68682.95	0.9293	Pulse	0.1000	3
K	39	72	He	507.488	ppb	3.0	31344.17	0.4239	Pulse	0.1000	3
Ca	44	72	He	294.659	ppb	22.1	793.38	0.0108	Pulse	0.1000	3
Ti	47	72	He	64.721	ppb	1.3	1220.10	0.0165	Pulse	0.1000	3
V	51	72	He	10.197	ppb	3.5	9356.37	0.1266	Pulse	0.5000	3
Cr	52	72	He	6.656	ppb	3.3	9373.34	0.1267	Pulse	0.1000	3
Mn	55	72	He	14.243	ppb	3.1	7238.68	0.0979	Pulse	0.1000	3
Fe	57	72	He	13274.003	ppb	2.4	284528.72	3.8496	Pulse	0.1000	3
Co	59	72	He	1.376	ppb	7.0	3330.49	0.0451	Pulse	0.1000	3
Ni	60	72	He	2.963	ppb	7.0	2590.30	0.0351	Pulse	0.1000	3
Cu	63	72	He	1.692	ppb	4.5	3483.90	0.0471	Pulse	0.1000	3
Zn	66	72	He	132.984	ppb	3.3	24501.32	0.3315	Pulse	0.1000	3
As	75	72	He	3.023	ppb	5.5	420.68	0.0057	Pulse	0.5000	3
Sr	88	115	He	3.527	ppb	7.0	1836.86	0.0283	Pulse	0.1000	3
Mo	98	115	He	0.626	ppb	10.7	926.73	0.0143	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	191.7	33.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.041	ppb	46.1	16.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.399	ppb	63.1	1380.13	0.0213	Pulse	0.1000	3
Sb	121	115	He	0.062	ppb	65.3	66.67	0.0010	Pulse	0.1000	3
Ba	137	115	He	8.256	ppb	6.4	2360.28	0.0364	Pulse	0.1000	3
Tl	205	209	He	0.044	ppb	17.5	493.36	0.0022	Pulse	0.1000	3
Pb	208	209	He	23.687	ppb	1.1	192834.67	0.8643	Pulse	0.1000	3
U	238	209	He	0.865	ppb	2.0	8169.53	0.0366	Pulse	0.1000	3

ISTD Table:

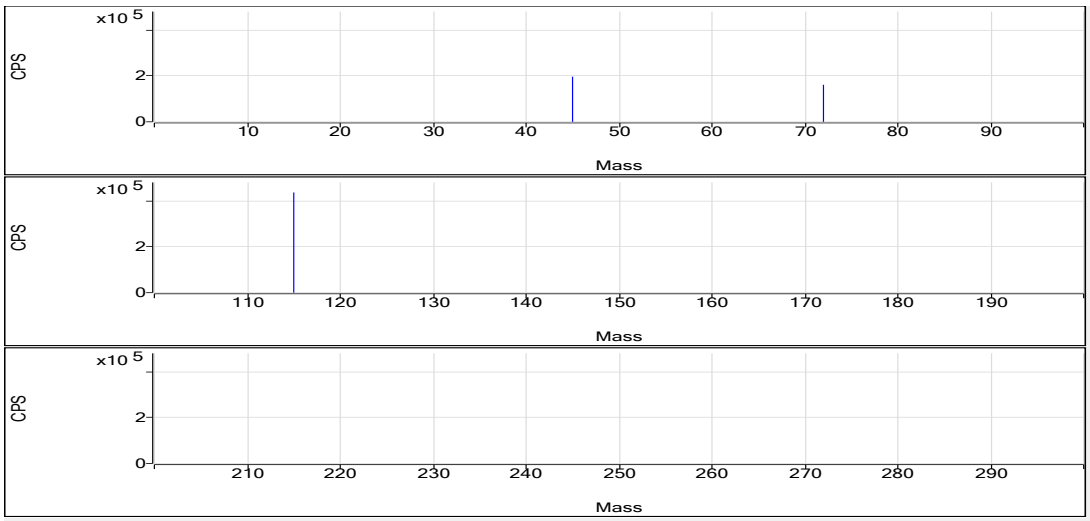
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3297447.76	1.2	101.7	Pulse	0.1000	3
No Gas	Ge	72	1463794.61	0.9	101.7	Pulse	0.1000	3
H2	Sc	45	196400.20	2.3	100.5	Pulse	0.1000	3
H2	Ge	72	161145.77	1.3	98.9	Pulse	0.1000	3
H2	In	115	436257.21	2.3	100.7	Pulse	0.1000	3
He	Sc	45	41629.91	0.4	104.1	Pulse	0.1000	3
He	Ge	72	73940.02	2.5	102.3	Pulse	0.1000	3
He	In	115	64819.57	1.6	100.4	Pulse	0.1000	3
He	Tb	159	285147.19	1.1	99.7	Pulse	0.1000	3
He	Bi	209	223112.11	0.6	100.4	Pulse	0.1000	3

No Gas

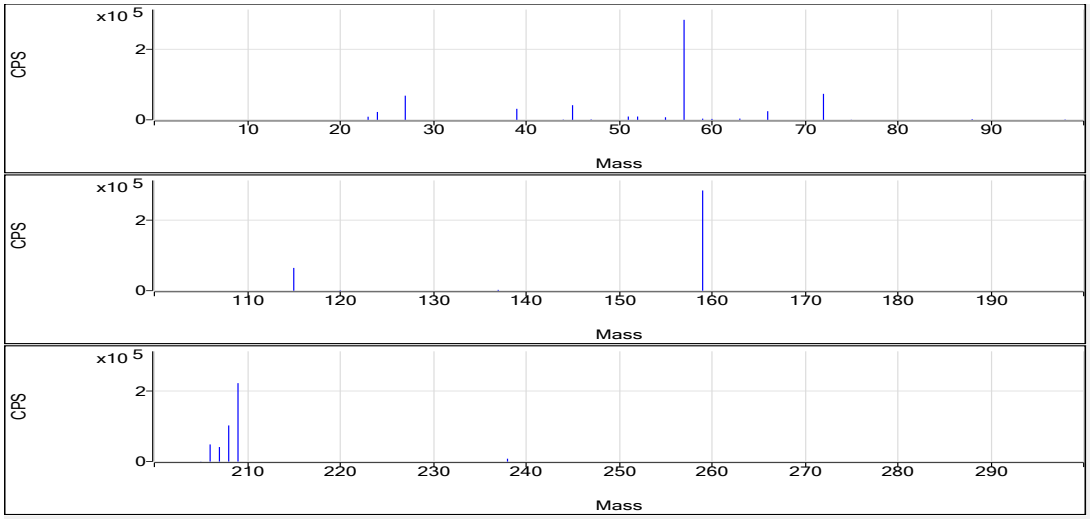


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.214	0.0003	478.01	0.0013	4.694E-05
Be	9	1	No Gas	0.217	0.0003	490.01	0.0013	4.694E-05
Be	9	1	No Gas	0.233	0.0004	514.01	0.0013	4.694E-05
Se	78	2	H2	0.101	0.0001	8.00	0.0004	1.089E-05
Se	78	2	H2	0.089	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.087	0	7.33	0.0004	1.089E-05
Na	23	3	He	6.7	0.118	8962.99	0.0017	0.1065
Na	23	3	He	6.613	0.1178	8662.81	0.0017	0.1065
Na	23	3	He	9.7	0.1231	8902.98	0.0017	0.1065
Mg	24	3	He	349.679	0.2997	22768.20	0.0008	0.004846
Mg	24	3	He	358.136	0.3068	22557.72	0.0008	0.004846
Mg	24	3	He	351.112	0.3009	21756.52	0.0008	0.004846
Al	27	3	He	3737.442	0.9033	68629.54	0.0002	0.001063
Al	27	3	He	3892.216	0.9406	69161.92	0.0002	0.001063
Al	27	3	He	3905.906	0.9439	68257.40	0.0002	0.001063
K	39	3	He	516.79	0.429	32596.74	0.0006	0.1436
K	39	3	He	489.881	0.4142	30452.24	0.0006	0.1436
K	39	3	He	515.795	0.4285	30983.54	0.0006	0.1436
Ca	44	3	He	232.055	0.0088	670.03	0	0.001611
Ca	44	3	He	289.693	0.0106	780.04	0	0.001611
Ca	44	3	He	362.23	0.0129	930.06	0	0.001611
Ti	47	3	He	63.992	0.0163	1240.11	0.0003	0.0002737
Ti	47	3	He	64.534	0.0165	1210.09	0.0003	0.0002737
Ti	47	3	He	65.637	0.0167	1210.09	0.0003	0.0002737
V	51	3	He	9.8	0.122	9266.98	0.0117	0.007326
V	51	3	He	10.304	0.1279	9401.07	0.0117	0.007326
V	51	3	He	10.487	0.13	9401.05	0.0117	0.007326
Cr	52	3	He	6.85	0.1297	9853.71	0.0152	0.02538
Cr	52	3	He	6.419	0.1231	9053.13	0.0152	0.02538
Cr	52	3	He	6.7	0.1274	9213.17	0.0152	0.02538
Mn	55	3	He	14.158	0.0974	7402.09	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	13.856	0.0956	7031.85	0.0059	0.01385
Mn	55	3	He	14.714	0.1007	7282.10	0.0059	0.01385
Fe	57	3	He	12906.677	3.7432	284405.66	0.0003	0.003918
Fe	57	3	He	13444.309	3.8989	286680.35	0.0003	0.003918
Fe	57	3	He	13471.021	3.9067	282500.15	0.0003	0.003918
Co	59	3	He	1.366	0.0448	3400.52	0.0305	0.003084
Co	59	3	He	1.285	0.0423	3110.43	0.0305	0.003084
Co	59	3	He	1.476	0.0481	3480.53	0.0305	0.003084
Ni	60	3	He	2.733	0.033	2510.30	0.0088	0.009003
Ni	60	3	He	3.137	0.0366	2690.33	0.0088	0.009003
Ni	60	3	He	3.018	0.0355	2570.28	0.0088	0.009003
Cu	63	3	He	1.687	0.047	3570.63	0.0249	0.004937
Cu	63	3	He	1.618	0.0453	3330.51	0.0249	0.004937
Cu	63	3	He	1.771	0.0491	3550.55	0.0249	0.004937
Zn	66	3	He	128.055	0.3194	24270.90	0.0025	0.004836
Zn	66	3	He	134.499	0.3353	24651.62	0.0025	0.004836
Zn	66	3	He	136.398	0.3399	24581.44	0.0025	0.004836
As	75	3	He	2.883	0.0054	414.01	0.0017	0.0004347
As	75	3	He	3.207	0.006	442.01	0.0017	0.0004347
As	75	3	He	2.978	0.0056	406.01	0.0017	0.0004347
Sr	88	3	He	3.62	0.0291	1850.18	0.0078	0.0007762
Sr	88	3	He	3.713	0.0298	1950.22	0.0078	0.0007762
Sr	88	3	He	3.247	0.0262	1710.17	0.0078	0.0007762
Mo	98	3	He	0.683	0.0156	990.08	0.022	0.0005162
Mo	98	3	He	0.553	0.0127	830.05	0.022	0.0005162
Mo	98	3	He	0.643	0.0147	960.06	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.04	0.0002	16.00	0.0048	5.152E-05
Cd	111	3	He	0.059	0.0003	22.00	0.0048	5.152E-05
Sn	120	3	He	0.296	0.0198	1260.11	0.0143	0.01559
Sn	120	3	He	0.686	0.0254	1660.18	0.0143	0.01559
Sn	120	3	He	0.216	0.0187	1220.10	0.0143	0.01559
Sb	121	3	He	0.093	0.0014	90.00	0.0124	0.000258
Sb	121	3	He	0.078	0.0012	80.00	0.0124	0.000258
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	8.551	0.0377	2400.30	0.0044	0.000309
Ba	137	3	He	7.65	0.0338	2210.23	0.0044	0.000309
Ba	137	3	He	8.566	0.0378	2470.32	0.0044	0.000309
Tl	205	3	He	0.037	0.002	450.02	0.0276	0.001005
Tl	205	3	He	0.043	0.0022	490.03	0.0276	0.001005
Tl	205	3	He	0.052	0.0024	540.03	0.0276	0.001005
Pb	208	3	He	23.911	0.8725	103624.42	0.0364	0.002176
Pb	208	3	He	23.385	0.8533	102042.75	0.0364	0.002176
Pb	208	3	He	23.764	0.8671	102638.17	0.0364	0.002176
U	238	3	He	0.864	0.0366	8172.85	0.0421	0.00024
U	238	3	He	0.848	0.0359	8052.81	0.0421	0.00024
U	238	3	He	0.882	0.0373	8282.93	0.0421	0.00024
Sc	45	1	No Gas			3271581.20		
Sc	45	1	No Gas			3341635.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3279126.83		
Ge	72	1	No Gas			1458257.48		
Ge	72	1	No Gas			1478488.73		
Ge	72	1	No Gas			1454637.63		
Sc	45	2	H2			191577.05		
Sc	45	2	H2			197291.83		
Sc	45	2	H2			200331.72		
Ge	72	2	H2			159342.81		
Ge	72	2	H2			160557.22		
Ge	72	2	H2			163537.29		
In	115	2	H2			426177.38		
In	115	2	H2			436777.61		
In	115	2	H2			445816.63		
Sc	45	3	He			41449.57		
Sc	45	3	He			41770.39		
Sc	45	3	He			41669.78		
Ge	72	3	He			75979.87		
Ge	72	3	He			73527.93		
Ge	72	3	He			72312.26		
In	115	3	He			63645.15		
In	115	3	He			65452.71		
In	115	3	He			65393.16		
Tb	159	3	He			281441.44		
Tb	159	3	He			287138.41		
Tb	159	3	He			286861.71		
Bi	209	3	He			223356.58		
Bi	209	3	He			224199.16		
Bi	209	3	He			221780.58		

Quantitation Report

Data File Name	196SMPL.d
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Acq Time	2023-08-10 17:24:13
Sample Name	410-136610-H-1-A @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

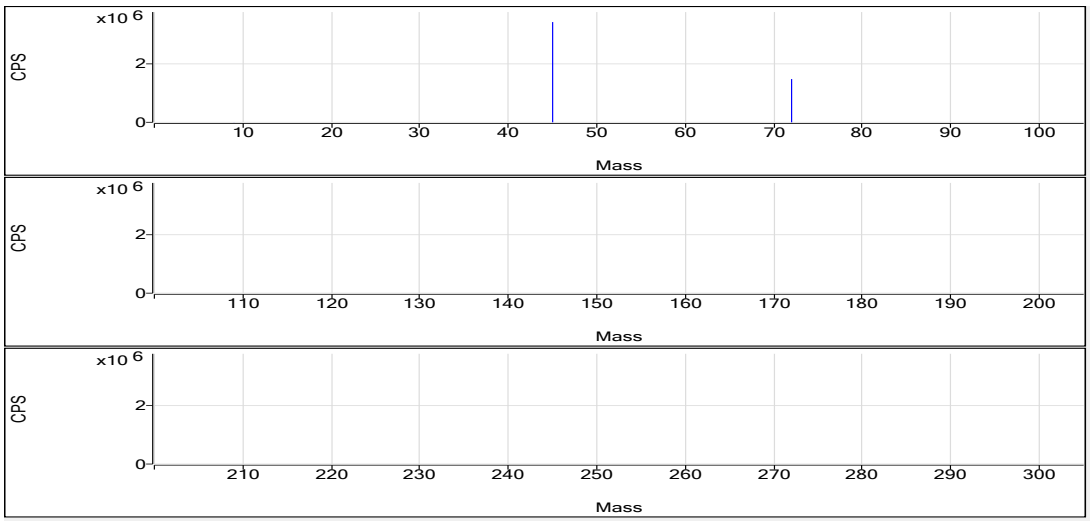
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.311	ppb	1.7	2619.58	0.0018	Pulse	0.5000	3
Se	78	72	H2	0.306	ppb	24.7	21.33	0.0001	Pulse	1.5000	3
Na	23	72	He	73.715	ppb	2.7	17490.70	0.2331	Pulse	0.1000	3
Mg	24	72	He	2672.450	ppb	0.1	169424.50	2.2580	Pulse	0.1000	3
Al	27	72	He	35265.890	ppb	2.9	638560.03	8.5140	Pulse	0.1000	3
K	39	72	He	2868.030	ppb	2.6	129565.31	1.7274	Pulse	0.1000	3
Ca	44	72	He	2209.422	ppb	2.3	5271.12	0.0702	Pulse	0.1000	3
Ti	47	72	He	664.287	ppb	0.8	12519.07	0.1669	Pulse	0.1000	3
V	51	72	He	69.195	ppb	2.2	61265.85	0.8167	Pulse	0.5000	3
Cr	52	72	He	45.810	ppb	4.0	54214.91	0.7229	Pulse	0.1000	3
Mn	55	72	He	117.853	ppb	3.6	53211.24	0.7095	Pulse	0.1000	3
Fe	57	72	He	31803.807	ppb	2.9	691355.74	9.2179	Pulse	0.1000	3
Co	59	72	He	15.150	ppb	4.4	34896.09	0.4653	Pulse	0.1000	3
Ni	60	72	He	56.484	ppb	3.5	37923.64	0.5057	Pulse	0.1000	3
Cu	63	72	He	16.527	ppb	2.3	31284.55	0.4171	Pulse	0.1000	3
Zn	66	72	He	59.778	ppb	3.0	11384.91	0.1517	Pulse	0.1000	3
As	75	72	He	10.246	ppb	4.9	1368.74	0.0183	Pulse	0.5000	3
Sr	88	115	He	29.809	ppb	2.6	15271.97	0.2338	Pulse	0.1000	3
Mo	98	115	He	1.372	ppb	10.1	2006.88	0.0307	Pulse	0.1000	3
Ag	107	115	He	0.080	ppb	35.3	270.01	0.0041	Pulse	0.1000	3
Cd	111	115	He	0.359	ppb	23.4	116.00	0.0018	Pulse	0.5000	3
Sn	120	115	He	2.383	ppb	5.2	3237.15	0.0496	Pulse	0.1000	3
Sb	121	115	He	0.391	ppb	13.2	333.35	0.0051	Pulse	0.1000	3
Ba	137	115	He	134.815	ppb	4.4	38534.66	0.5901	Pulse	0.1000	3
Tl	205	209	He	0.317	ppb	6.1	2193.60	0.0098	Pulse	0.1000	3
Pb	208	209	He	24.369	ppb	0.1	199851.35	0.8891	Pulse	0.1000	3
U	238	209	He	2.931	ppb	0.7	27770.47	0.1236	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3433028.49	1.1	105.9	Pulse	0.1000	3
No Gas	Ge	72	1480590.03	0.9	102.8	Pulse	0.1000	3
H2	Sc	45	205094.68	2.4	105.0	Pulse	0.1000	3
H2	Ge	72	164341.36	0.9	100.8	Pulse	0.1000	3
H2	In	115	440795.51	1.4	101.7	Pulse	0.1000	3
He	Sc	45	43572.27	2.2	109.0	Pulse	0.1000	3
He	Ge	72	75032.26	2.2	103.8	Pulse	0.1000	3
He	In	115	65321.05	1.0	101.1	Pulse	0.1000	3
He	Tb	159	293668.19	0.5	102.7	Pulse	0.1000	3
He	Bi	209	224768.19	1.1	101.2	Pulse	0.1000	3

No Gas



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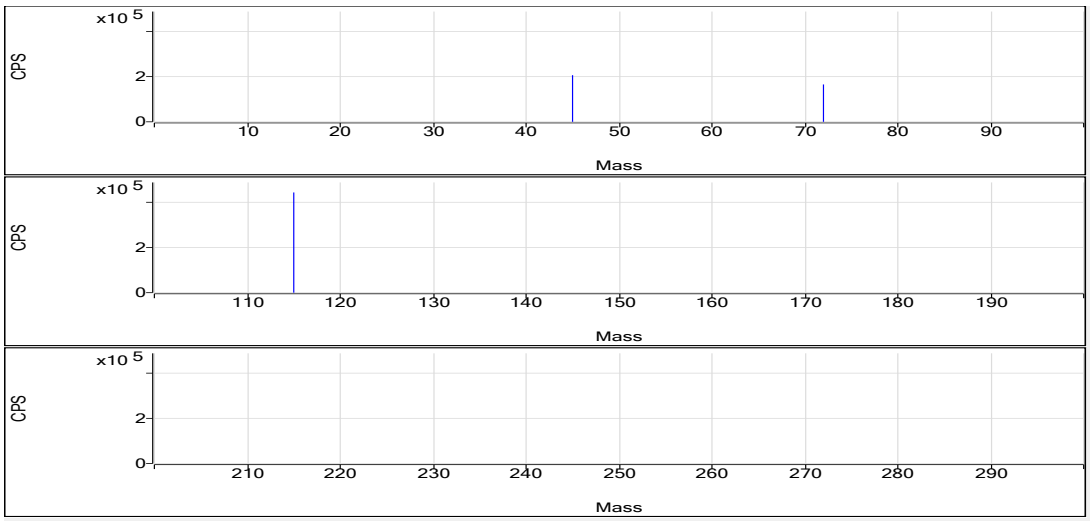
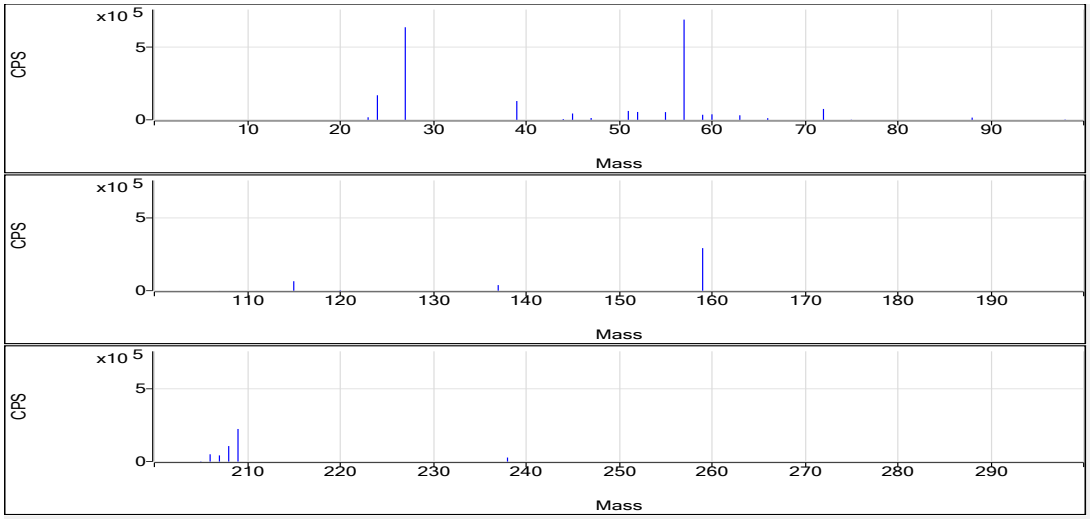


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.331	0.0018	2632.24	0.0013	4.694E-05
Be	9	1	No Gas	1.286	0.0017	2592.24	0.0013	4.694E-05
Be	9	1	No Gas	1.316	0.0018	2634.25	0.0013	4.694E-05
Se	78	2	H2	0.338	0.0001	23.33	0.0004	1.089E-05
Se	78	2	H2	0.36	0.0002	24.67	0.0004	1.089E-05
Se	78	2	H2	0.22	0.0001	16.00	0.0004	1.089E-05
Na	23	3	He	75.711	0.2365	17720.93	0.0017	0.1065
Na	23	3	He	71.714	0.2296	16859.99	0.0017	0.1065
Na	23	3	He	73.721	0.2331	17891.19	0.0017	0.1065
Mg	24	3	He	2670.532	2.2564	169059.53	0.0008	0.004846
Mg	24	3	He	2671.128	2.2569	165692.67	0.0008	0.004846
Mg	24	3	He	2675.689	2.2607	173521.31	0.0008	0.004846
Al	27	3	He	35151.792	8.4865	635853.31	0.0002	0.001063
Al	27	3	He	36325.964	8.7699	643860.46	0.0002	0.001063
Al	27	3	He	34319.916	8.2857	635966.32	0.0002	0.001063
K	39	3	He	2873.105	1.7302	129635.92	0.0006	0.1436
K	39	3	He	2939.241	1.7667	129707.16	0.0006	0.1436
K	39	3	He	2791.743	1.6853	129352.85	0.0006	0.1436
Ca	44	3	He	2165.89	0.0689	5161.09	0	0.001611
Ca	44	3	He	2198.29	0.0699	5131.06	0	0.001611
Ca	44	3	He	2264.086	0.0719	5521.21	0	0.001611
Ti	47	3	He	660.738	0.166	12435.58	0.0003	0.0002737
Ti	47	3	He	669.997	0.1683	12355.67	0.0003	0.0002737
Ti	47	3	He	662.127	0.1663	12765.97	0.0003	0.0002737
V	51	3	He	68.367	0.8071	60469.90	0.0117	0.007326
V	51	3	He	70.924	0.837	61447.86	0.0117	0.007326
V	51	3	He	68.293	0.8062	61879.80	0.0117	0.007326
Cr	52	3	He	45.234	0.7142	53509.19	0.0152	0.02538
Cr	52	3	He	47.867	0.7543	55375.57	0.0152	0.02538
Cr	52	3	He	44.33	0.7004	53759.97	0.0152	0.02538
Mn	55	3	He	115.039	0.6929	51912.90	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	122.733	0.7383	54201.91	0.0059	0.01385
Mn	55	3	He	115.786	0.6973	53518.92	0.0059	0.01385
Fe	57	3	He	31547.108	9.1436	685084.91	0.0003	0.003918
Fe	57	3	He	32836.832	9.5172	698724.05	0.0003	0.003918
Fe	57	3	He	31027.482	8.993	690258.27	0.0003	0.003918
Co	59	3	He	14.742	0.4529	33930.54	0.0305	0.003084
Co	59	3	He	15.915	0.4886	35875.08	0.0305	0.003084
Co	59	3	He	14.794	0.4545	34882.66	0.0305	0.003084
Ni	60	3	He	56.304	0.5041	37769.92	0.0088	0.009003
Ni	60	3	He	58.553	0.5239	38461.59	0.0088	0.009003
Ni	60	3	He	54.596	0.4891	37539.40	0.0088	0.009003
Cu	63	3	He	16.734	0.4222	31635.18	0.0249	0.004937
Cu	63	3	He	16.764	0.423	31053.73	0.0249	0.004937
Cu	63	3	He	16.084	0.406	31164.75	0.0249	0.004937
Zn	66	3	He	58.033	0.1474	11044.65	0.0025	0.004836
Zn	66	3	He	59.709	0.1515	11124.63	0.0025	0.004836
Zn	66	3	He	61.592	0.1562	11985.44	0.0025	0.004836
As	75	3	He	10.141	0.0181	1354.07	0.0017	0.0004347
As	75	3	He	10.794	0.0192	1410.08	0.0017	0.0004347
As	75	3	He	9.804	0.0175	1342.08	0.0017	0.0004347
Sr	88	3	He	28.925	0.2269	14858.19	0.0078	0.0007762
Sr	88	3	He	30.104	0.2361	15248.58	0.0078	0.0007762
Sr	88	3	He	30.399	0.2384	15709.13	0.0078	0.0007762
Mo	98	3	He	1.253	0.0281	1840.19	0.022	0.0005162
Mo	98	3	He	1.524	0.0341	2200.23	0.022	0.0005162
Mo	98	3	He	1.341	0.0301	1980.22	0.022	0.0005162
Ag	107	3	He	0.097	0.0049	320.01	0.0455	0.0004641
Ag	107	3	He	0.048	0.0026	170.01	0.0455	0.0004641
Ag	107	3	He	0.097	0.0049	320.02	0.0455	0.0004641
Cd	111	3	He	0.441	0.0022	142.00	0.0048	5.152E-05
Cd	111	3	He	0.273	0.0014	88.00	0.0048	5.152E-05
Cd	111	3	He	0.362	0.0018	118.00	0.0048	5.152E-05
Sn	120	3	He	2.506	0.0513	3360.52	0.0143	0.01559
Sn	120	3	He	2.382	0.0496	3200.47	0.0143	0.01559
Sn	120	3	He	2.26	0.0478	3150.46	0.0143	0.01559
Sb	121	3	He	0.435	0.0057	370.02	0.0124	0.000258
Sb	121	3	He	0.404	0.0053	340.01	0.0124	0.000258
Sb	121	3	He	0.334	0.0044	290.02	0.0124	0.000258
Ba	137	3	He	131.179	0.5742	37602.15	0.0044	0.000309
Ba	137	3	He	141.708	0.6203	40058.78	0.0044	0.000309
Ba	137	3	He	131.557	0.5758	37943.06	0.0044	0.000309
Tl	205	3	He	0.295	0.0092	2070.23	0.0276	0.001005
Tl	205	3	He	0.332	0.0102	2310.29	0.0276	0.001005
Tl	205	3	He	0.322	0.0099	2200.28	0.0276	0.001005
Pb	208	3	He	24.358	0.8887	107607.06	0.0364	0.002176
Pb	208	3	He	24.409	0.8906	108564.58	0.0364	0.002176
Pb	208	3	He	24.34	0.8881	104744.83	0.0364	0.002176
U	238	3	He	2.944	0.1241	28031.07	0.0421	0.00024
U	238	3	He	2.909	0.1226	27780.47	0.0421	0.00024
U	238	3	He	2.941	0.124	27499.88	0.0421	0.00024
Sc	45	1	No Gas			3392385.89		
Sc	45	1	No Gas			3469534.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3437164.64		
Ge	72	1	No Gas			1465957.17		
Ge	72	1	No Gas			1492293.57		
Ge	72	1	No Gas			1483519.35		
Sc	45	2	H2			202897.05		
Sc	45	2	H2			201679.88		
Sc	45	2	H2			210707.11		
Ge	72	2	H2			163802.90		
Ge	72	2	H2			163215.73		
Ge	72	2	H2			166005.45		
In	115	2	H2			436547.49		
In	115	2	H2			437956.71		
In	115	2	H2			447882.34		
Sc	45	3	He			42592.49		
Sc	45	3	He			43645.84		
Sc	45	3	He			44478.47		
Ge	72	3	He			74925.26		
Ge	72	3	He			73416.75		
Ge	72	3	He			76754.77		
In	115	3	He			65513.62		
In	115	3	He			64609.65		
In	115	3	He			65915.61		
Tb	159	3	He			292594.88		
Tb	159	3	He			295489.68		
Tb	159	3	He			292920.00		
Bi	209	3	He			225887.75		
Bi	209	3	He			226578.30		
Bi	209	3	He			221838.53		

Quantitation Report

Data File Name	197SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:26:13
Sample Name	410-136610-H-1-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

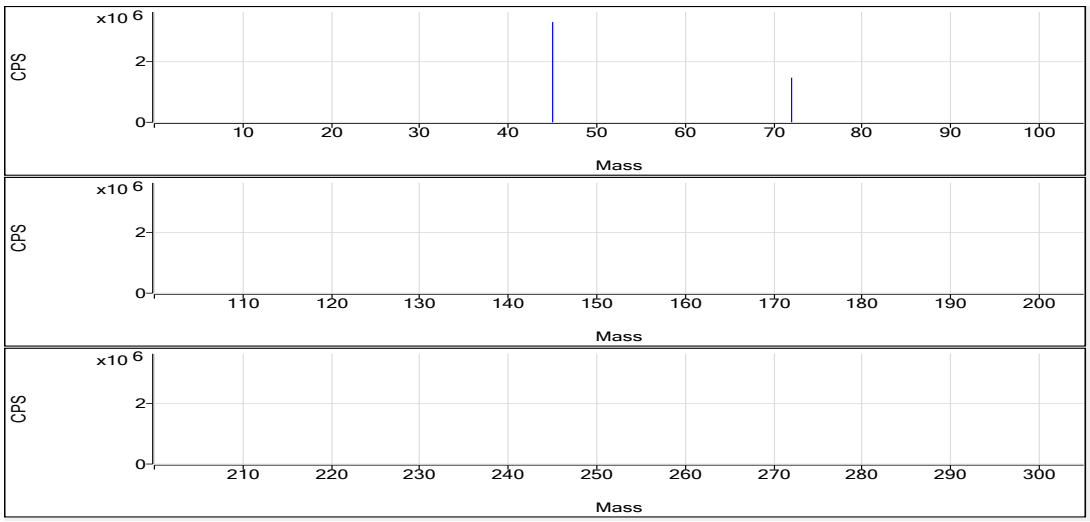
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.245	ppb	5.7	538.68	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.068	ppb	60.1	6.22	0.0000	Pulse	1.5000	3
Na	23	72	He	16.095	ppb	4.9	9987.07	0.1341	Pulse	0.1000	3
Mg	24	72	He	514.104	ppb	1.8	32643.32	0.4383	Pulse	0.1000	3
Al	27	72	He	6737.204	ppb	1.8	121185.37	1.6274	Pulse	0.1000	3
K	39	72	He	534.219	ppb	7.9	32653.53	0.4386	Pulse	0.1000	3
Ca	44	72	He	383.907	ppb	16.9	1006.74	0.0135	Pulse	0.1000	3
Ti	47	72	He	129.167	ppb	10.1	2433.63	0.0327	Pulse	0.1000	3
V	51	72	He	13.180	ppb	2.4	12025.65	0.1615	Pulse	0.5000	3
Cr	52	72	He	8.840	ppb	5.7	11918.63	0.1600	Pulse	0.1000	3
Mn	55	72	He	21.715	ppb	3.0	10577.53	0.1420	Pulse	0.1000	3
Fe	57	72	He	6103.187	ppb	2.9	131944.97	1.7721	Pulse	0.1000	3
Co	59	72	He	2.928	ppb	4.2	6885.25	0.0924	Pulse	0.1000	3
Ni	60	72	He	11.154	ppb	3.7	7975.77	0.1071	Pulse	0.1000	3
Cu	63	72	He	3.217	ppb	7.4	6338.26	0.0852	Pulse	0.1000	3
Zn	66	72	He	10.772	ppb	6.3	2330.27	0.0313	Pulse	0.1000	3
As	75	72	He	1.979	ppb	3.3	288.68	0.0039	Pulse	0.5000	3
Sr	88	115	He	5.587	ppb	5.4	2853.72	0.0444	Pulse	0.1000	3
Mo	98	115	He	0.293	ppb	3.6	446.69	0.0070	Pulse	0.1000	3
Ag	107	115	He	0.011	ppb	35.2	63.33	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.054	ppb	41.9	20.00	0.0003	Pulse	0.5000	3
Sn	120	115	He	0.329	ppb	18.6	1303.44	0.0203	Pulse	0.1000	3
Sb	121	115	He	0.059	ppb	35.2	63.33	0.0010	Pulse	0.1000	3
Ba	137	115	He	25.712	ppb	2.6	7242.22	0.1128	Pulse	0.1000	3
Tl	205	209	He	0.065	ppb	19.2	630.04	0.0028	Pulse	0.1000	3
Pb	208	209	He	4.724	ppb	3.1	39040.81	0.1741	Pulse	0.1000	3
U	238	209	He	0.550	ppb	4.8	5244.57	0.0234	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3285088.18	1.1	101.4	Pulse	0.1000	3
No Gas	Ge	72	1462251.65	0.8	101.6	Pulse	0.1000	3
H2	Sc	45	199542.81	2.2	102.1	Pulse	0.1000	3
H2	Ge	72	165814.84	1.5	101.7	Pulse	0.1000	3
H2	In	115	443838.78	1.7	102.4	Pulse	0.1000	3
He	Sc	45	42308.50	0.9	105.8	Pulse	0.1000	3
He	Ge	72	74480.04	1.6	103.0	Pulse	0.1000	3
He	In	115	64231.24	2.2	99.4	Pulse	0.1000	3
He	Tb	159	289362.08	0.7	101.2	Pulse	0.1000	3
He	Bi	209	224260.31	0.8	100.9	Pulse	0.1000	3

No Gas



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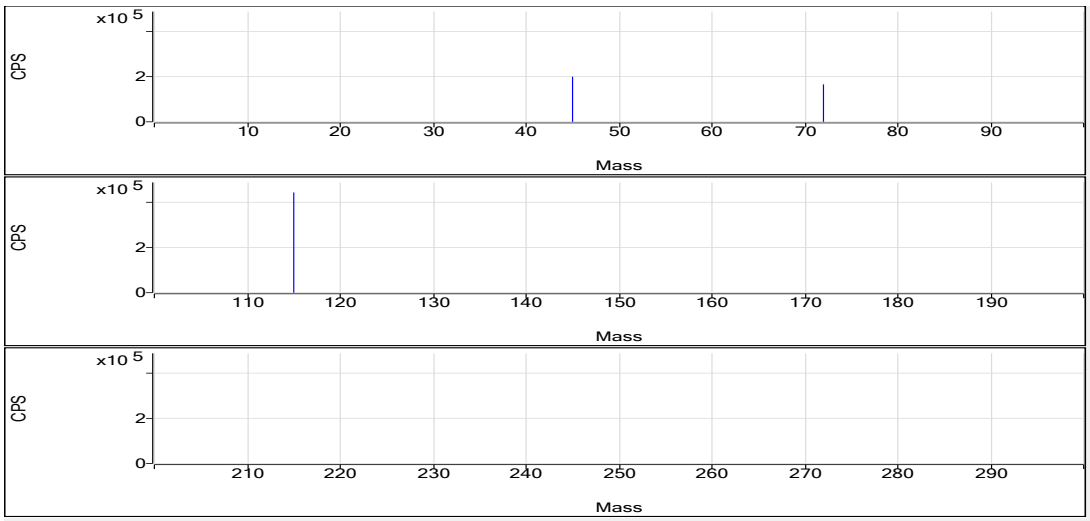
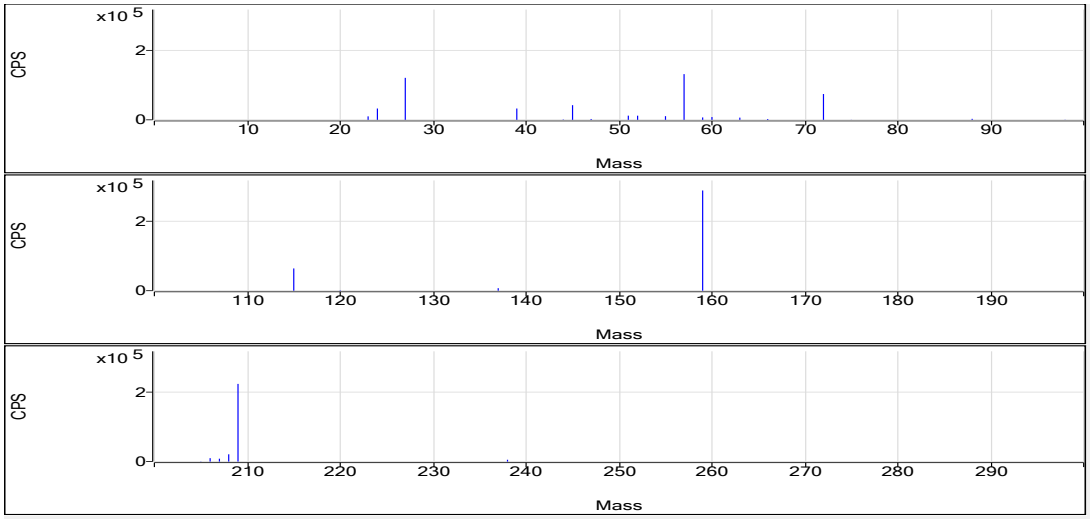


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.245	0.0004	536.01	0.0013	4.694E-05
Be	9	1	No Gas	0.23	0.0003	516.01	0.0013	4.694E-05
Be	9	1	No Gas	0.259	0.0004	564.01	0.0013	4.694E-05
Se	78	2	H2	0.077	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.024	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.104	0.0001	8.67	0.0004	1.089E-05
Na	23	3	He	16.023	0.134	10073.74	0.0017	0.1065
Na	23	3	He	15.348	0.1328	9983.73	0.0017	0.1065
Na	23	3	He	16.912	0.1355	9903.75	0.0017	0.1065
Mg	24	3	He	523.009	0.4458	33518.35	0.0008	0.004846
Mg	24	3	He	504.502	0.4302	32336.13	0.0008	0.004846
Mg	24	3	He	514.799	0.4389	32075.47	0.0008	0.004846
Al	27	3	He	6634.663	1.6026	120498.27	0.0002	0.001063
Al	27	3	He	6707.559	1.6202	121787.06	0.0002	0.001063
Al	27	3	He	6869.39	1.6593	121270.79	0.0002	0.001063
K	39	3	He	532.212	0.4375	32897.25	0.0006	0.1436
K	39	3	He	492.846	0.4158	31253.98	0.0006	0.1436
K	39	3	He	577.6	0.4626	33809.36	0.0006	0.1436
Ca	44	3	He	316.418	0.0114	860.06	0	0.001611
Ca	44	3	He	389.338	0.0137	1030.06	0	0.001611
Ca	44	3	He	445.964	0.0155	1130.09	0	0.001611
Ti	47	3	He	143.713	0.0363	2730.36	0.0003	0.0002737
Ti	47	3	He	118.285	0.0299	2250.28	0.0003	0.0002737
Ti	47	3	He	125.502	0.0317	2320.26	0.0003	0.0002737
V	51	3	He	13.032	0.1598	12012.97	0.0117	0.007326
V	51	3	He	12.97	0.159	11954.94	0.0117	0.007326
V	51	3	He	13.537	0.1657	12109.05	0.0117	0.007326
Cr	52	3	He	9.413	0.1687	12685.95	0.0152	0.02538
Cr	52	3	He	8.472	0.1544	11605.00	0.0152	0.02538
Cr	52	3	He	8.635	0.1569	11464.93	0.0152	0.02538
Mn	55	3	He	21.029	0.138	10374.06	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	22.344	0.1457	10954.48	0.0059	0.01385
Mn	55	3	He	21.771	0.1424	10404.05	0.0059	0.01385
Fe	57	3	He	6021.005	1.7483	131450.07	0.0003	0.003918
Fe	57	3	He	5981.497	1.7368	130552.73	0.0003	0.003918
Fe	57	3	He	6307.057	1.8312	133832.12	0.0003	0.003918
Co	59	3	He	2.895	0.0914	6871.94	0.0305	0.003084
Co	59	3	He	3.065	0.0966	7262.08	0.0305	0.003084
Co	59	3	He	2.824	0.0892	6521.72	0.0305	0.003084
Ni	60	3	He	11.579	0.1108	8332.59	0.0088	0.009003
Ni	60	3	He	10.751	0.1035	7782.42	0.0088	0.009003
Ni	60	3	He	11.132	0.1069	7812.31	0.0088	0.009003
Cu	63	3	He	3.232	0.0855	6431.64	0.0249	0.004937
Cu	63	3	He	2.972	0.079	5941.44	0.0249	0.004937
Cu	63	3	He	3.446	0.0909	6641.70	0.0249	0.004937
Zn	66	3	He	10.863	0.0315	2370.27	0.0025	0.004836
Zn	66	3	He	10.055	0.0295	2220.27	0.0025	0.004836
Zn	66	3	He	11.399	0.0328	2400.28	0.0025	0.004836
As	75	3	He	1.998	0.0039	294.01	0.0017	0.0004347
As	75	3	He	1.907	0.0038	282.01	0.0017	0.0004347
As	75	3	He	2.032	0.004	290.01	0.0017	0.0004347
Sr	88	3	He	5.25	0.0418	2740.36	0.0078	0.0007762
Sr	88	3	He	5.671	0.0451	2830.38	0.0078	0.0007762
Sr	88	3	He	5.84	0.0464	2990.41	0.0078	0.0007762
Mo	98	3	He	0.281	0.0067	440.02	0.022	0.0005162
Mo	98	3	He	0.302	0.0072	450.02	0.022	0.0005162
Mo	98	3	He	0.294	0.007	450.02	0.022	0.0005162
Ag	107	3	He	0.013	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	0.059	0.0003	22.00	0.0048	5.152E-05
Cd	111	3	He	0.029	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.073	0.0004	26.00	0.0048	5.152E-05
Sn	120	3	He	0.373	0.0209	1370.11	0.0143	0.01559
Sn	120	3	He	0.259	0.0193	1210.10	0.0143	0.01559
Sn	120	3	He	0.355	0.0207	1330.12	0.0143	0.01559
Sb	121	3	He	0.053	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.082	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.042	0.0008	50.00	0.0124	0.000258
Ba	137	3	He	24.946	0.1094	7172.14	0.0044	0.000309
Ba	137	3	He	26.237	0.1151	7222.23	0.0044	0.000309
Ba	137	3	He	25.951	0.1138	7332.28	0.0044	0.000309
Tl	205	3	He	0.069	0.0029	660.05	0.0276	0.001005
Tl	205	3	He	0.075	0.0031	690.05	0.0276	0.001005
Tl	205	3	He	0.051	0.0024	540.03	0.0276	0.001005
Pb	208	3	He	4.598	0.1695	20456.40	0.0364	0.002176
Pb	208	3	He	4.69	0.1729	20596.95	0.0364	0.002176
Pb	208	3	He	4.884	0.1799	21818.54	0.0364	0.002176
U	238	3	He	0.556	0.0236	5351.27	0.0421	0.00024
U	238	3	He	0.573	0.0244	5441.36	0.0421	0.00024
U	238	3	He	0.521	0.0222	4941.08	0.0421	0.00024
Sc	45	1	No Gas			3269293.39		
Sc	45	1	No Gas			3327138.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3258832.76		
Ge	72	1	No Gas			1452252.79		
Ge	72	1	No Gas			1475680.92		
Ge	72	1	No Gas			1458821.23		
Sc	45	2	H2			196267.52		
Sc	45	2	H2			197829.43		
Sc	45	2	H2			204531.48		
Ge	72	2	H2			163254.51		
Ge	72	2	H2			165845.23		
Ge	72	2	H2			168344.78		
In	115	2	H2			436900.19		
In	115	2	H2			442855.11		
In	115	2	H2			451761.05		
Sc	45	3	He			42562.40		
Sc	45	3	He			41860.23		
Sc	45	3	He			42502.88		
Ge	72	3	He			75187.74		
Ge	72	3	He			75166.59		
Ge	72	3	He			73085.79		
In	115	3	He			65544.06		
In	115	3	He			62761.58		
In	115	3	He			64418.59		
Tb	159	3	He			289943.14		
Tb	159	3	He			287120.03		
Tb	159	3	He			291023.08		
Bi	209	3	He			226365.25		
Bi	209	3	He			223404.27		
Bi	209	3	He			223011.42		

Quantitation Report

Data File Name	198SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:28:13
Sample Name	410-136541-F-1-A @2
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

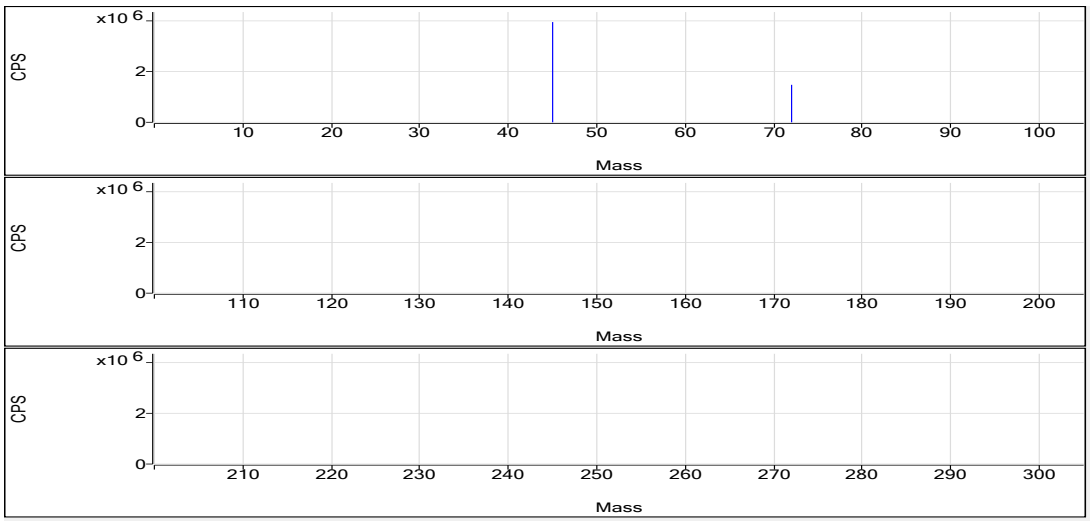
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.416	ppb	4.2	874.70	0.0006	Pulse	0.5000	3
Se	78	72	H2	0.207	ppb	24.6	15.11	0.0001	Pulse	1.5000	3
Na	23	72	He	409.451	ppb	1.7	61119.54	0.8098	Pulse	0.1000	3
Mg	24	72	He	12320.820	ppb	0.3	784365.14	10.3925	Pulse	0.1000	3
Al	27	72	He	31741.515	ppb	0.7	578397.67	7.6633	Pulse	0.1000	3
K	39	72	He	1011.319	ppb	1.2	52992.34	0.7021	Pulse	0.1000	3
Ca	44	72	He	21426.097	ppb	3.0	50343.82	0.6671	Pulse	0.1000	3
Ti	47	72	He	2257.030	ppb	2.8	42746.67	0.5663	Pulse	0.1000	3
V	51	72	He	68.994	ppb	0.4	61466.03	0.8144	Pulse	0.5000	3
Cr	52	72	He	175.274	ppb	0.3	203350.39	2.6943	Pulse	0.1000	3
Mn	55	72	He	3570.650	ppb	0.6	1591671.33	21.0893	Pulse	0.1000	3
Fe	57	72	He	92566.812	ppb	0.1	2024378.15	26.8219	Pulse	0.1000	3
Co	59	72	He	17.639	ppb	1.6	40855.14	0.5413	Pulse	0.1000	3
Ni	60	72	He	138.501	ppb	0.8	92594.80	1.2269	Pulse	0.1000	3
Cu	63	72	He	172.416	ppb	0.8	324872.73	4.3045	Pulse	0.1000	3
Zn	66	72	He	15579.763	ppb	0.7	2889114.02	38.2807	Pulse	0.1000	3
As	75	72	He	9.865	ppb	5.4	1327.40	0.0176	Pulse	0.5000	3
Sr	88	115	He	85.900	ppb	1.1	43604.29	0.6723	Pulse	0.1000	3
Mo	98	115	He	19.939	ppb	2.7	28512.74	0.4396	Pulse	0.1000	3
Ag	107	115	He	0.133	ppb	7.3	423.35	0.0065	Pulse	0.1000	3
Cd	111	115	He	0.514	ppb	11.4	163.33	0.0025	Pulse	0.5000	3
Sn	120	115	He	4.769	ppb	2.4	5421.26	0.0836	Pulse	0.1000	3
Sb	121	115	He	2.154	ppb	10.0	1750.18	0.0270	Pulse	0.1000	3
Ba	137	115	He	264.425	ppb	0.4	75047.50	1.1571	Pulse	0.1000	3
Tl	205	209	He	0.044	ppb	19.9	536.70	0.0022	Pulse	0.1000	3
Pb	208	209	He	19.914	ppb	0.2	174741.79	0.7270	Pulse	0.1000	3
U	238	209	He	2.119	ppb	2.3	21481.71	0.0894	Pulse	0.1000	3

ISTD Table:

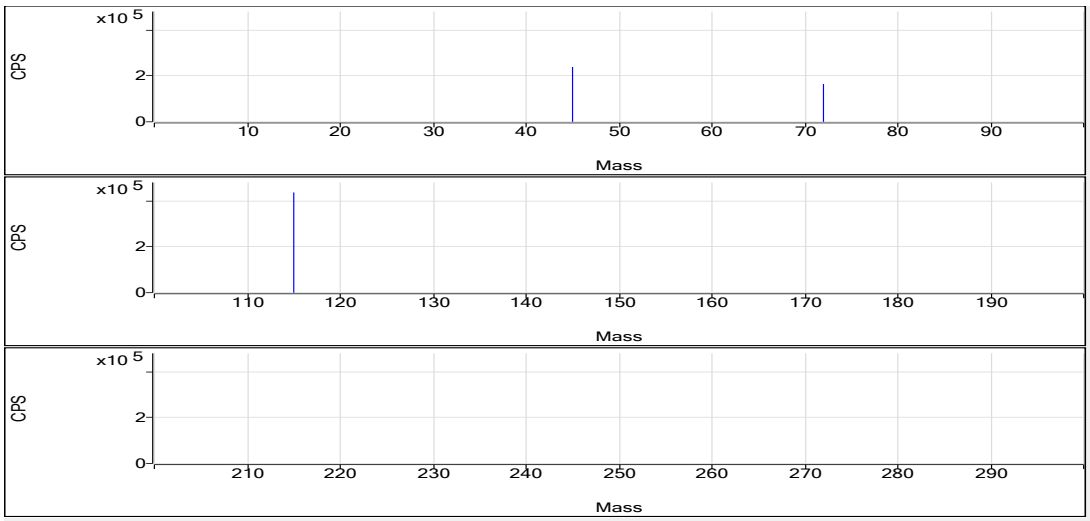
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3944196.19	0.9	121.7	Pulse	0.1000	3
No Gas	Ge	72	1474899.51	0.5	102.4	Pulse	0.1000	3
H2	Sc	45	239410.07	1.0	122.5	Pulse	0.1000	3
H2	Ge	72	165268.55	1.7	101.4	Pulse	0.1000	3
H2	In	115	437496.88	0.9	101.0	Pulse	0.1000	3
He	Sc	45	50216.90	1.5	125.6	Pulse	0.1000	3
He	Ge	72	75474.68	0.8	104.4	Pulse	0.1000	3
He	In	115	64858.45	0.8	100.4	Pulse	0.1000	3
He	Tb	159	305932.00	0.6	107.0	Pulse	0.1000	3
He	Bi	209	240360.71	0.9	108.2	Pulse	0.1000	3

No Gas

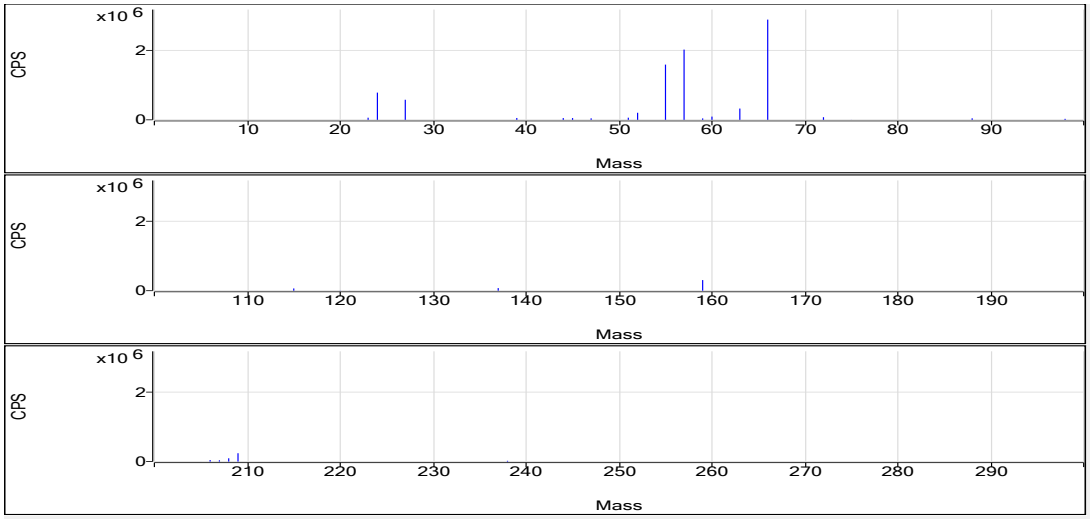


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.434	0.0006	916.03	0.0013	4.694E-05
Be	9	1	No Gas	0.4	0.0006	842.03	0.0013	4.694E-05
Be	9	1	No Gas	0.412	0.0006	866.03	0.0013	4.694E-05
Se	78	2	H2	0.266	0.0001	18.67	0.0004	1.089E-05
Se	78	2	H2	0.18	0.0001	13.33	0.0004	1.089E-05
Se	78	2	H2	0.175	0.0001	13.33	0.0004	1.089E-05
Na	23	3	He	402.526	0.7979	60634.29	0.0017	0.1065
Na	23	3	He	416.639	0.8222	62180.55	0.0017	0.1065
Na	23	3	He	409.187	0.8094	60543.77	0.0017	0.1065
Mg	24	3	He	12315.238	10.3878	789373.74	0.0008	0.004846
Mg	24	3	He	12289.349	10.366	783981.55	0.0008	0.004846
Mg	24	3	He	12357.872	10.4238	779740.14	0.0008	0.004846
Al	27	3	He	31994.814	7.7244	586980.23	0.0002	0.001063
Al	27	3	He	31588.741	7.6264	576784.60	0.0002	0.001063
Al	27	3	He	31640.989	7.639	571428.19	0.0002	0.001063
K	39	3	He	1025.047	0.7097	53928.98	0.0006	0.1436
K	39	3	He	1000.404	0.6961	52644.20	0.0006	0.1436
K	39	3	He	1008.505	0.7005	52403.83	0.0006	0.1436
Ca	44	3	He	21411.279	0.6666	50658.25	0	0.001611
Ca	44	3	He	20800.04	0.6477	48982.31	0	0.001611
Ca	44	3	He	22066.974	0.687	51390.90	0	0.001611
Ti	47	3	He	2321.336	0.5824	44257.93	0.0003	0.0002737
Ti	47	3	He	2253.061	0.5653	42753.22	0.0003	0.0002737
Ti	47	3	He	2196.694	0.5512	41228.85	0.0003	0.0002737
V	51	3	He	68.715	0.8111	61638.72	0.0117	0.007326
V	51	3	He	69.323	0.8182	61883.79	0.0117	0.007326
V	51	3	He	68.943	0.8138	60875.57	0.0117	0.007326
Cr	52	3	He	175.025	2.6905	204453.81	0.0152	0.02538
Cr	52	3	He	174.961	2.6896	203411.36	0.0152	0.02538
Cr	52	3	He	175.836	2.7029	202186.01	0.0152	0.02538
Mn	55	3	He	3567.925	21.0733	1601359.51	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3550.375	20.9697	1585935.29	0.0059	0.01385
Mn	55	3	He	3593.648	21.2251	1587719.20	0.0059	0.01385
Fe	57	3	He	92617.742	26.8366	2039319.97	0.0003	0.003918
Fe	57	3	He	92559.066	26.8196	2028368.56	0.0003	0.003918
Fe	57	3	He	92523.628	26.8094	2005445.91	0.0003	0.003918
Co	59	3	He	17.677	0.5424	41219.18	0.0305	0.003084
Co	59	3	He	17.901	0.5493	41540.80	0.0305	0.003084
Co	59	3	He	17.34	0.5321	39805.44	0.0305	0.003084
Ni	60	3	He	137.7	1.2198	92695.79	0.0088	0.009003
Ni	60	3	He	138.013	1.2226	92464.64	0.0088	0.009003
Ni	60	3	He	139.791	1.2382	92623.96	0.0088	0.009003
Cu	63	3	He	170.854	4.2656	324140.01	0.0249	0.004937
Cu	63	3	He	173.494	4.3314	327581.75	0.0249	0.004937
Cu	63	3	He	172.9	4.3166	322896.44	0.0249	0.004937
Zn	66	3	He	15486.32	38.0511	2891509.33	0.0025	0.004836
Zn	66	3	He	15554.63	38.2189	2890496.83	0.0025	0.004836
Zn	66	3	He	15698.339	38.572	2885335.89	0.0025	0.004836
As	75	3	He	9.436	0.0168	1280.06	0.0017	0.0004347
As	75	3	He	9.695	0.0173	1308.07	0.0017	0.0004347
As	75	3	He	10.466	0.0186	1394.08	0.0017	0.0004347
Sr	88	3	He	86.565	0.6775	44339.99	0.0078	0.0007762
Sr	88	3	He	84.774	0.6635	42744.98	0.0078	0.0007762
Sr	88	3	He	86.361	0.6759	43727.91	0.0078	0.0007762
Mo	98	3	He	20.257	0.4466	29230.99	0.022	0.0005162
Mo	98	3	He	20.233	0.4461	28739.77	0.022	0.0005162
Mo	98	3	He	19.325	0.4261	27567.46	0.022	0.0005162
Ag	107	3	He	0.144	0.007	460.02	0.0455	0.0004641
Ag	107	3	He	0.126	0.0062	400.02	0.0455	0.0004641
Ag	107	3	He	0.129	0.0063	410.02	0.0455	0.0004641
Cd	111	3	He	0.581	0.0028	186.00	0.0048	5.152E-05
Cd	111	3	He	0.481	0.0024	152.00	0.0048	5.152E-05
Cd	111	3	He	0.479	0.0023	152.00	0.0048	5.152E-05
Sn	120	3	He	4.898	0.0854	5591.37	0.0143	0.01559
Sn	120	3	He	4.721	0.0829	5341.19	0.0143	0.01559
Sn	120	3	He	4.686	0.0824	5331.22	0.0143	0.01559
Sb	121	3	He	2.295	0.0287	1880.20	0.0124	0.000258
Sb	121	3	He	1.906	0.0239	1540.14	0.0124	0.000258
Sb	121	3	He	2.26	0.0283	1830.20	0.0124	0.000258
Ba	137	3	He	263.879	1.1547	75576.63	0.0044	0.000309
Ba	137	3	He	265.683	1.1626	74903.96	0.0044	0.000309
Ba	137	3	He	263.712	1.154	74661.90	0.0044	0.000309
Tl	205	3	He	0.055	0.0025	610.04	0.0276	0.001005
Tl	205	3	He	0.039	0.0021	500.03	0.0276	0.001005
Tl	205	3	He	0.039	0.0021	500.03	0.0276	0.001005
Pb	208	3	He	19.922	0.7273	95625.41	0.0364	0.002176
Pb	208	3	He	19.88	0.7258	92633.28	0.0364	0.002176
Pb	208	3	He	19.94	0.7279	95312.86	0.0364	0.002176
U	238	3	He	2.175	0.0917	22269.87	0.0421	0.00024
U	238	3	He	2.093	0.0883	21117.60	0.0421	0.00024
U	238	3	He	2.087	0.088	21057.66	0.0421	0.00024
Sc	45	1	No Gas			3984394.00		
Sc	45	1	No Gas			3913176.19		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3935018.38		
Ge	72	1	No Gas			1483084.35		
Ge	72	1	No Gas			1469989.20		
Ge	72	1	No Gas			1471624.98		
Sc	45	2	H2			238450.64		
Sc	45	2	H2			237548.22		
Sc	45	2	H2			242231.34		
Ge	72	2	H2			163021.77		
Ge	72	2	H2			164287.75		
Ge	72	2	H2			168496.13		
In	115	2	H2			433316.24		
In	115	2	H2			438357.69		
In	115	2	H2			440816.71		
Sc	45	3	He			51009.54		
Sc	45	3	He			50136.65		
Sc	45	3	He			49504.51		
Ge	72	3	He			75990.15		
Ge	72	3	He			75629.98		
Ge	72	3	He			74803.92		
In	115	3	He			65493.46		
In	115	3	He			64468.60		
In	115	3	He			64740.15		
Tb	159	3	He			306725.72		
Tb	159	3	He			303985.76		
Tb	159	3	He			307084.51		
Bi	209	3	He			242768.94		
Bi	209	3	He			239157.14		
Bi	209	3	He			239156.05		

Quantitation Report

Data File Name	199SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:30:14
Sample Name	410-136541-F-1-A @10
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

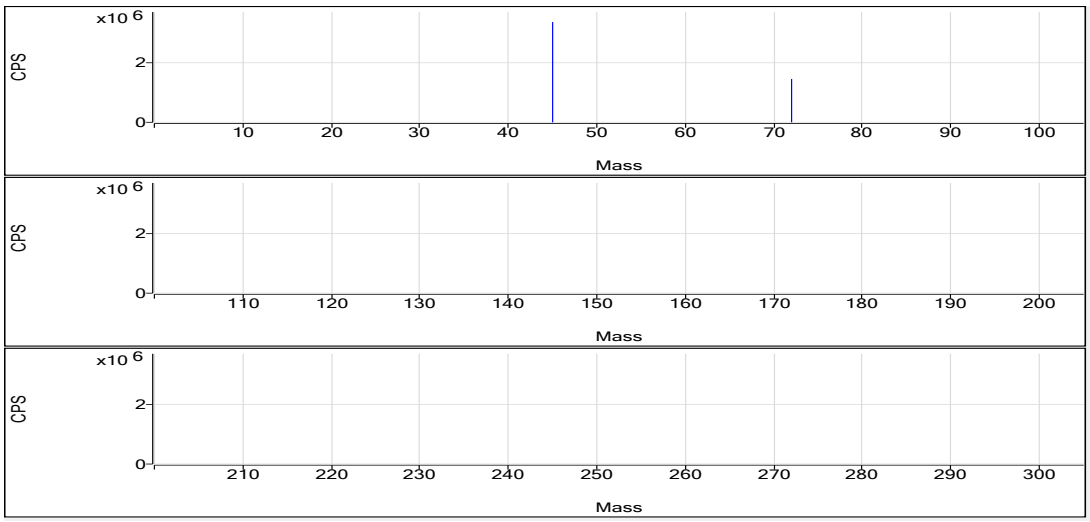
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.075	ppb	20.4	214.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.017	ppb	71.8	2.89	0.0000	Pulse	1.5000	3
Na	23	72	He	79.514	ppb	3.3	17927.93	0.2430	Pulse	0.1000	3
Mg	24	72	He	2328.442	ppb	2.3	145132.13	1.9680	Pulse	0.1000	3
Al	27	72	He	6028.759	ppb	1.8	107410.68	1.4564	Pulse	0.1000	3
K	39	72	He	196.225	ppb	15.4	18575.57	0.2520	Pulse	0.1000	3
Ca	44	72	He	4152.138	ppb	5.1	9630.14	0.1306	Pulse	0.1000	3
Ti	47	72	He	428.796	ppb	3.6	7949.07	0.1078	Pulse	0.1000	3
V	51	72	He	12.978	ppb	1.1	11738.07	0.1591	Pulse	0.5000	3
Cr	52	72	He	32.963	ppb	1.5	38892.85	0.5273	Pulse	0.1000	3
Mn	55	72	He	682.657	ppb	1.9	298187.10	4.0432	Pulse	0.1000	3
Fe	57	72	He	17711.820	ppb	2.1	378719.10	5.1353	Pulse	0.1000	3
Co	59	72	He	3.385	ppb	3.4	7849.06	0.1064	Pulse	0.1000	3
Ni	60	72	He	27.185	ppb	2.9	18292.08	0.2480	Pulse	0.1000	3
Cu	63	72	He	32.433	ppb	3.4	60001.36	0.8137	Pulse	0.1000	3
Zn	66	72	He	2924.743	ppb	1.7	530305.41	7.1902	Pulse	0.1000	3
As	75	72	He	1.870	ppb	21.9	271.34	0.0037	Pulse	0.5000	3
Sr	88	115	He	16.305	ppb	5.5	8179.29	0.1282	Pulse	0.1000	3
Mo	98	115	He	3.790	ppb	2.6	5357.86	0.0840	Pulse	0.1000	3
Ag	107	115	He	0.016	ppb	65.0	76.67	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.091	ppb	58.8	31.33	0.0005	Pulse	0.5000	3
Sn	120	115	He	0.941	ppb	25.7	1850.20	0.0290	Pulse	0.1000	3
Sb	121	115	He	0.379	ppb	5.6	316.68	0.0050	Pulse	0.1000	3
Ba	137	115	He	50.028	ppb	2.4	13980.91	0.2192	Pulse	0.1000	3
Tl	205	209	He	0.005	ppb	76.2	256.68	0.0011	Pulse	0.1000	3
Pb	208	209	He	3.942	ppb	0.5	32560.31	0.1457	Pulse	0.1000	3
U	238	209	He	0.418	ppb	5.1	3984.10	0.0178	Pulse	0.1000	3

ISTD Table:

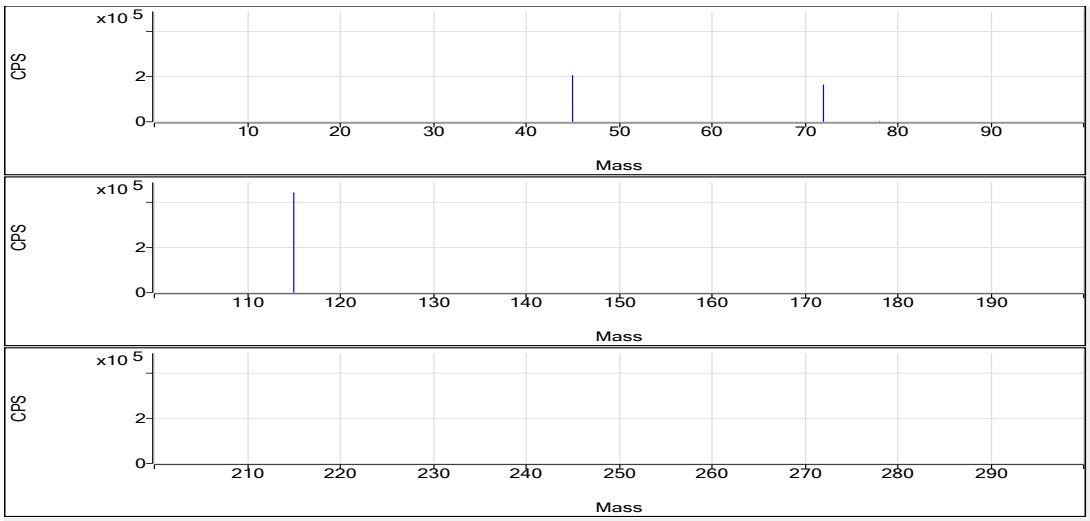
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3396567.97	1.0	104.8	Pulse	0.1000	3
No Gas	Ge	72	1468750.60	1.4	102.0	Pulse	0.1000	3
H2	Sc	45	204838.06	2.3	104.8	Pulse	0.1000	3
H2	Ge	72	163660.75	2.0	100.4	Pulse	0.1000	3
H2	In	115	441047.84	2.0	101.8	Pulse	0.1000	3
He	Sc	45	42710.02	2.0	106.8	Pulse	0.1000	3
He	Ge	72	73769.42	2.0	102.0	Pulse	0.1000	3
He	In	115	63795.25	0.5	98.8	Pulse	0.1000	3
He	Tb	159	288492.16	1.0	100.9	Pulse	0.1000	3
He	Bi	209	223537.50	0.7	100.6	Pulse	0.1000	3

No Gas

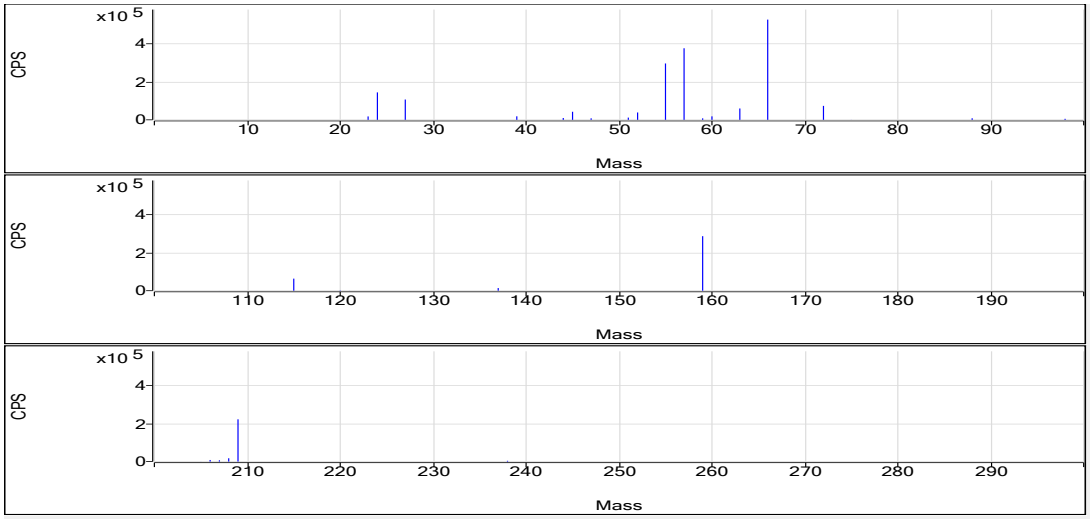


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.069	0.0001	204.00	0.0013	4.694E-05
Be	9	1	No Gas	0.064	0.0001	194.00	0.0013	4.694E-05
Be	9	1	No Gas	0.093	0.0002	244.00	0.0013	4.694E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.024	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.089E-05
Na	23	3	He	81.388	0.2463	17760.97	0.0017	0.1065
Na	23	3	He	80.656	0.245	18391.89	0.0017	0.1065
Na	23	3	He	76.498	0.2379	17630.94	0.0017	0.1065
Mg	24	3	He	2378.123	2.0098	144951.63	0.0008	0.004846
Mg	24	3	He	2271.312	1.9198	144111.60	0.0008	0.004846
Mg	24	3	He	2335.892	1.9742	146333.16	0.0008	0.004846
Al	27	3	He	6151.122	1.4859	107164.86	0.0002	0.001063
Al	27	3	He	5960.213	1.4398	108082.12	0.0002	0.001063
Al	27	3	He	5974.943	1.4434	106985.06	0.0002	0.001063
K	39	3	He	230.099	0.2707	19523.42	0.0006	0.1436
K	39	3	He	186.229	0.2465	18502.22	0.0006	0.1436
K	39	3	He	172.346	0.2388	17701.08	0.0006	0.1436
Ca	44	3	He	4306.777	0.1354	9763.63	0	0.001611
Ca	44	3	He	4238.716	0.1333	10003.69	0	0.001611
Ca	44	3	He	3910.922	0.1231	9123.11	0	0.001611
Ti	47	3	He	444.131	0.1117	8052.48	0.0003	0.0002737
Ti	47	3	He	413.373	0.1039	7802.31	0.0003	0.0002737
Ti	47	3	He	428.884	0.1078	7992.41	0.0003	0.0002737
V	51	3	He	13.146	0.1611	11618.63	0.0117	0.007326
V	51	3	He	12.913	0.1584	11888.86	0.0117	0.007326
V	51	3	He	12.875	0.1579	11706.71	0.0117	0.007326
Cr	52	3	He	33.456	0.5348	38572.09	0.0152	0.02538
Cr	52	3	He	32.472	0.5198	39023.10	0.0152	0.02538
Cr	52	3	He	32.961	0.5273	39083.35	0.0152	0.02538
Mn	55	3	He	696.578	4.1253	297523.41	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	671.226	3.9757	298441.83	0.0059	0.01385
Mn	55	3	He	680.166	4.0285	298596.07	0.0059	0.01385
Fe	57	3	He	18096.799	5.2468	378405.27	0.0003	0.003918
Fe	57	3	He	17338.743	5.0272	377373.39	0.0003	0.003918
Fe	57	3	He	17699.919	5.1318	380378.63	0.0003	0.003918
Co	59	3	He	3.258	0.1025	7392.17	0.0305	0.003084
Co	59	3	He	3.415	0.1073	8052.46	0.0305	0.003084
Co	59	3	He	3.482	0.1093	8102.56	0.0305	0.003084
Ni	60	3	He	27.804	0.2535	18281.98	0.0088	0.009003
Ni	60	3	He	26.309	0.2403	18041.91	0.0088	0.009003
Ni	60	3	He	27.441	0.2503	18552.34	0.0088	0.009003
Cu	63	3	He	33.456	0.8392	60526.78	0.0249	0.004937
Cu	63	3	He	31.267	0.7846	58900.19	0.0249	0.004937
Cu	63	3	He	32.575	0.8173	60577.11	0.0249	0.004937
Zn	66	3	He	2980.751	7.3278	528490.11	0.0025	0.004836
Zn	66	3	He	2894.801	7.1167	534222.88	0.0025	0.004836
Zn	66	3	He	2898.676	7.1262	528203.23	0.0025	0.004836
As	75	3	He	2.174	0.0042	304.01	0.0017	0.0004347
As	75	3	He	1.405	0.0029	216.00	0.0017	0.0004347
As	75	3	He	2.031	0.004	294.01	0.0017	0.0004347
Sr	88	3	He	17.169	0.135	8572.84	0.0078	0.0007762
Sr	88	3	He	15.374	0.121	7762.31	0.0078	0.0007762
Sr	88	3	He	16.373	0.1288	8202.71	0.0078	0.0007762
Mo	98	3	He	3.681	0.0816	5181.12	0.022	0.0005162
Mo	98	3	He	3.869	0.0857	5501.24	0.022	0.0005162
Mo	98	3	He	3.82	0.0846	5391.21	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.028	0.0017	110.00	0.0455	0.0004641
Cd	111	3	He	0.075	0.0004	26.00	0.0048	5.152E-05
Cd	111	3	He	0.152	0.0008	50.00	0.0048	5.152E-05
Cd	111	3	He	0.048	0.0003	18.00	0.0048	5.152E-05
Sn	120	3	He	1.215	0.0329	2090.25	0.0143	0.01559
Sn	120	3	He	0.852	0.0277	1780.18	0.0143	0.01559
Sn	120	3	He	0.757	0.0264	1680.17	0.0143	0.01559
Sb	121	3	He	0.398	0.0052	330.02	0.0124	0.000258
Sb	121	3	He	0.356	0.0047	300.01	0.0124	0.000258
Sb	121	3	He	0.384	0.005	320.01	0.0124	0.000258
Ba	137	3	He	51.103	0.2239	14218.00	0.0044	0.000309
Ba	137	3	He	48.717	0.2134	13697.08	0.0044	0.000309
Ba	137	3	He	50.264	0.2202	14027.65	0.0044	0.000309
Tl	205	3	He	0.001	0.001	230.01	0.0276	0.001005
Tl	205	3	He	0.009	0.0012	280.01	0.0276	0.001005
Tl	205	3	He	0.006	0.0012	260.02	0.0276	0.001005
Pb	208	3	He	3.955	0.1461	17922.67	0.0364	0.002176
Pb	208	3	He	3.922	0.1449	17171.70	0.0364	0.002176
Pb	208	3	He	3.95	0.1459	17301.83	0.0364	0.002176
U	238	3	He	0.42	0.0179	4000.79	0.0421	0.00024
U	238	3	He	0.396	0.0169	3800.68	0.0421	0.00024
U	238	3	He	0.438	0.0187	4150.83	0.0421	0.00024
Sc	45	1	No Gas			3425480.89		
Sc	45	1	No Gas			3403001.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3361221.51		
Ge	72	1	No Gas			1484094.67		
Ge	72	1	No Gas			1477474.04		
Ge	72	1	No Gas			1444683.10		
Sc	45	2	H2			199545.84		
Sc	45	2	H2			208484.59		
Sc	45	2	H2			206483.75		
Ge	72	2	H2			159929.24		
Ge	72	2	H2			165267.42		
Ge	72	2	H2			165785.60		
In	115	2	H2			431011.01		
In	115	2	H2			448098.31		
In	115	2	H2			444034.21		
Sc	45	3	He			41730.41		
Sc	45	3	He			43124.62		
Sc	45	3	He			43275.04		
Ge	72	3	He			72120.80		
Ge	72	3	He			75066.23		
Ge	72	3	He			74121.24		
In	115	3	He			63524.91		
In	115	3	He			64188.05		
In	115	3	He			63716.10		
Tb	159	3	He			291785.00		
Tb	159	3	He			287226.97		
Tb	159	3	He			286464.51		
Bi	209	3	He			223333.41		
Bi	209	3	He			225145.19		
Bi	209	3	He			222133.90		

Quantitation Report

Data File Name	200SMPL.d
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Acq Time	2023-08-10 17:32:14
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

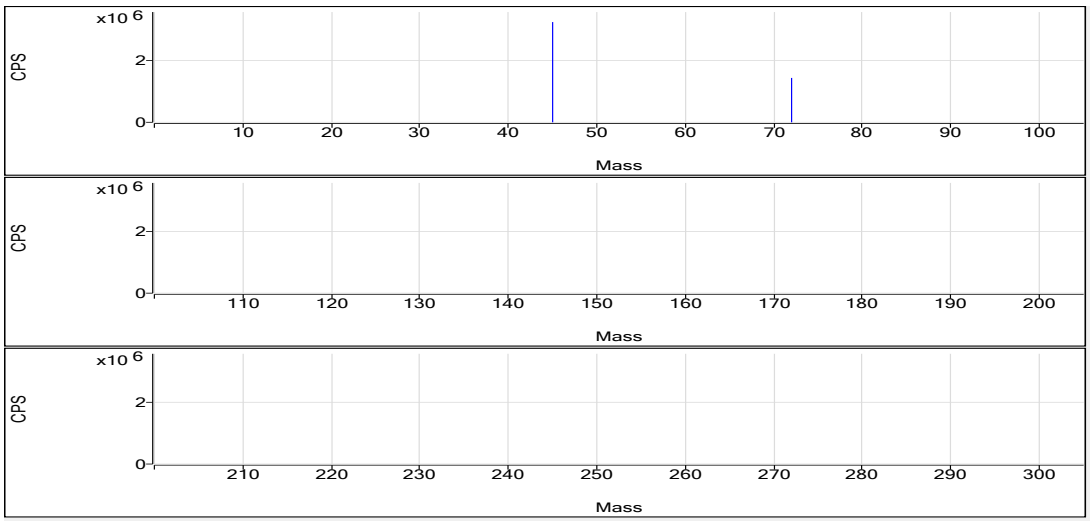
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.011	ppb	N/A	47.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.000	ppb	8332.0	1.78	0.0000	Pulse	1.5000	3
Na	23	72	He	3.205	ppb	85.9	8045.78	0.1120	Pulse	0.1000	3
Mg	24	72	He	5.824	ppb	30.9	700.06	0.0098	Pulse	0.1000	3
Al	27	72	He	18.254	ppb	18.8	393.35	0.0055	Pulse	0.1000	3
K	39	72	He	6.093	ppb	190.2	10557.46	0.1470	Pulse	0.1000	3
Ca	44	72	He	6.430	ppb	77.8	130.01	0.0018	Pulse	0.1000	3
Ti	47	72	He	-0.158	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
V	51	72	He	0.045	ppb	103.8	564.68	0.0079	Pulse	0.5000	3
Cr	52	72	He	0.070	ppb	147.8	1900.20	0.0264	Pulse	0.1000	3
Mn	55	72	He	-0.680	ppb	N/A	706.71	0.0098	Pulse	0.1000	3
Fe	57	72	He	49.572	ppb	3.7	1313.44	0.0183	Pulse	0.1000	3
Co	59	72	He	0.023	ppb	146.7	273.35	0.0038	Pulse	0.1000	3
Ni	60	72	He	0.656	ppb	26.1	1060.08	0.0148	Pulse	0.1000	3
Cu	63	72	He	0.030	ppb	203.5	410.02	0.0057	Pulse	0.1000	3
Zn	66	72	He	1.411	ppb	14.5	596.70	0.0083	Pulse	0.1000	3
As	75	72	He	0.038	ppb	219.8	36.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.026	ppb	165.3	63.33	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.018	ppb	35.1	60.00	0.0009	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	N/A	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.190	ppb	49.9	1190.13	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.005	ppb	566.4	20.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.128	ppb	27.4	56.67	0.0009	Pulse	0.1000	3
Tl	205	209	He	-0.003	ppb	N/A	203.34	0.0009	Pulse	0.1000	3
Pb	208	209	He	0.062	ppb	4.2	973.38	0.0044	Pulse	0.1000	3
U	238	209	He	0.011	ppb	18.1	150.01	0.0007	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3232391.83	1.6	99.7	Pulse	0.1000	3
No Gas	Ge	72	1431281.85	1.2	99.4	Pulse	0.1000	3
H2	Sc	45	195792.26	1.6	100.2	Pulse	0.1000	3
H2	Ge	72	160239.49	2.7	98.3	Pulse	0.1000	3
H2	In	115	441899.59	1.3	102.0	Pulse	0.1000	3
He	Sc	45	40560.13	2.6	101.4	Pulse	0.1000	3
He	Ge	72	71839.90	1.2	99.4	Pulse	0.1000	3
He	In	115	65009.36	3.0	100.6	Pulse	0.1000	3
He	Tb	159	283019.96	0.5	99.0	Pulse	0.1000	3
He	Bi	209	219346.77	0.5	98.7	Pulse	0.1000	3

No Gas



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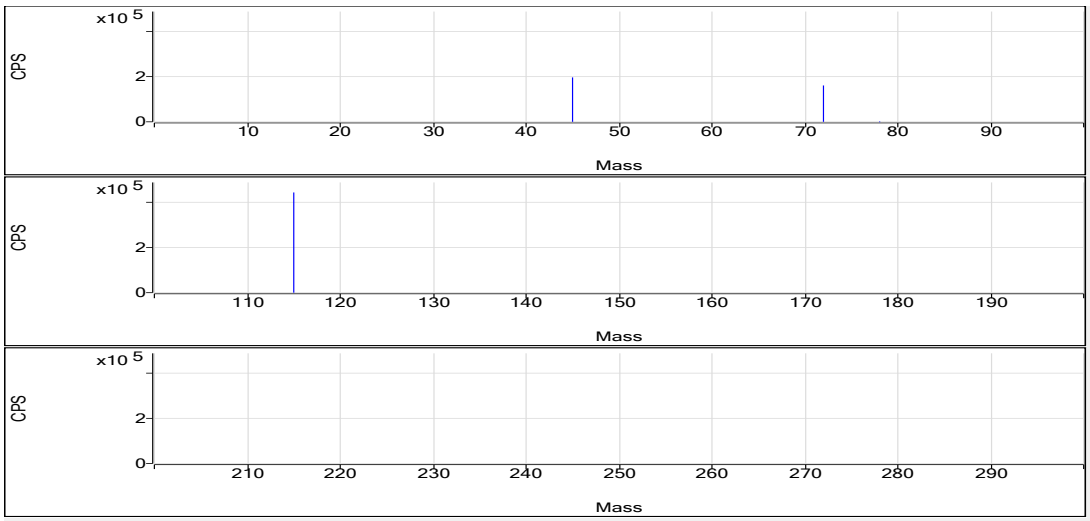
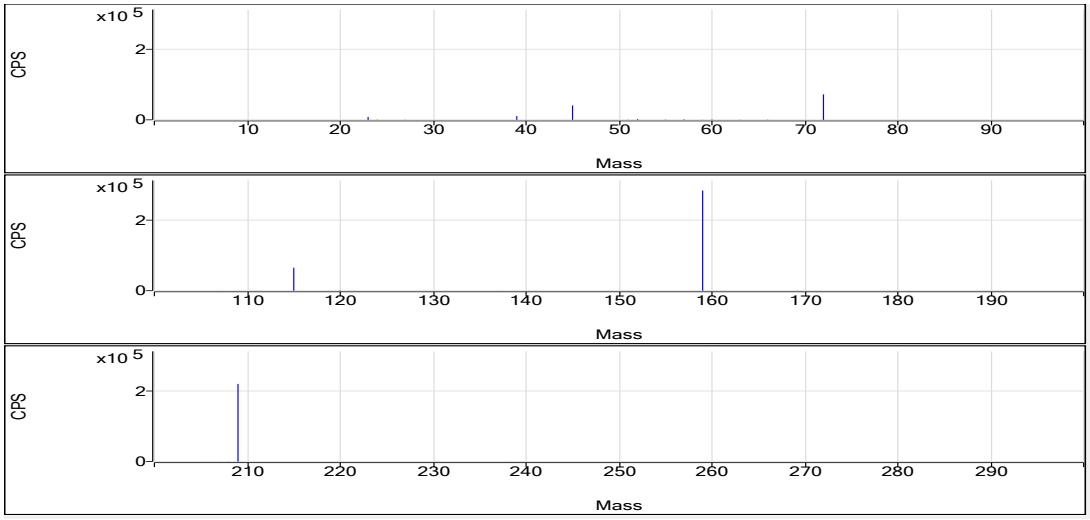


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.014	0	42.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.01	0	48.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	52.00	0.0013	4.694E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Se	78	2	H2	0.025	0	3.33	0.0004	1.089E-05
Na	23	3	He	0.032	0.1065	7552.21	0.0017	0.1065
Na	23	3	He	4.938	0.1149	8282.56	0.0017	0.1065
Na	23	3	He	4.644	0.1144	8302.58	0.0017	0.1065
Mg	24	3	He	7.469	0.0111	790.11	0.0008	0.004846
Mg	24	3	He	6.104	0.01	720.04	0.0008	0.004846
Mg	24	3	He	3.898	0.0081	590.03	0.0008	0.004846
Al	27	3	He	14.294	0.0045	320.02	0.0002	0.001063
Al	27	3	He	20.318	0.006	430.02	0.0002	0.001063
Al	27	3	He	20.15	0.0059	430.02	0.0002	0.001063
K	39	3	He	16.842	0.1529	10844.30	0.0006	0.1436
K	39	3	He	7.622	0.1478	10654.21	0.0006	0.1436
K	39	3	He	-6.184	0.1402	10173.87	0.0006	0.1436
Ca	44	3	He	11.709	0.002	140.01	0	0.001611
Ca	44	3	He	1.754	0.0017	120.01	0	0.001611
Ca	44	3	He	5.827	0.0018	130.01	0	0.001611
Ti	47	3	He	1.158	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
Ti	47	3	He	-0.542	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.005	0.0074	524.01	0.0117	0.007326
V	51	3	He	0.033	0.0077	556.01	0.0117	0.007326
V	51	3	He	0.097	0.0085	614.02	0.0117	0.007326
Cr	52	3	He	0.074	0.0265	1880.18	0.0152	0.02538
Cr	52	3	He	-0.036	0.0248	1790.18	0.0152	0.02538
Cr	52	3	He	0.171	0.028	2030.23	0.0152	0.02538
Mn	55	3	He	-0.579	0.0104	740.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.936	0.0083	600.04	0.0059	0.01385
Mn	55	3	He	-0.526	0.0108	780.05	0.0059	0.01385
Fe	57	3	He	48.306	0.0179	1270.10	0.0003	0.003918
Fe	57	3	He	48.751	0.018	1300.10	0.0003	0.003918
Fe	57	3	He	51.659	0.0189	1370.11	0.0003	0.003918
Co	59	3	He	0.014	0.0035	250.01	0.0305	0.003084
Co	59	3	He	-0.006	0.0029	210.01	0.0305	0.003084
Co	59	3	He	0.062	0.005	360.02	0.0305	0.003084
Ni	60	3	He	0.853	0.0165	1170.08	0.0088	0.009003
Ni	60	3	He	0.57	0.014	1010.07	0.0088	0.009003
Ni	60	3	He	0.544	0.0138	1000.08	0.0088	0.009003
Cu	63	3	He	-0.034	0.0041	290.01	0.0249	0.004937
Cu	63	3	He	0.036	0.0058	420.02	0.0249	0.004937
Cu	63	3	He	0.089	0.0072	520.02	0.0249	0.004937
Zn	66	3	He	1.189	0.0078	550.03	0.0025	0.004836
Zn	66	3	He	1.59	0.0087	630.04	0.0025	0.004836
Zn	66	3	He	1.454	0.0084	610.03	0.0025	0.004836
As	75	3	He	-0.023	0.0004	28.00	0.0017	0.0004347
As	75	3	He	0.133	0.0007	48.00	0.0017	0.0004347
As	75	3	He	0.004	0.0004	32.00	0.0017	0.0004347
Sr	88	3	He	0.043	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	0.058	0.0012	80.00	0.0078	0.0007762
Sr	88	3	He	-0.023	0.0006	40.00	0.0078	0.0007762
Mo	98	3	He	0.013	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	0.025	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.017	0.0009	60.00	0.022	0.0005162
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0001	10.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.176	0.0181	1140.20	0.0143	0.01559
Sn	120	3	He	0.103	0.0171	1110.07	0.0143	0.01559
Sn	120	3	He	0.29	0.0197	1320.12	0.0143	0.01559
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	-0.021	0	0.00	0.0124	0.000258
Ba	137	3	He	0.111	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.105	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.168	0.001	70.00	0.0044	0.000309
Tl	205	3	He	-0.003	0.0009	200.01	0.0276	0.001005
Tl	205	3	He	-0.005	0.0009	190.01	0.0276	0.001005
Tl	205	3	He	0	0.001	220.01	0.0276	0.001005
Pb	208	3	He	0.06	0.0044	550.03	0.0364	0.002176
Pb	208	3	He	0.061	0.0044	400.02	0.0364	0.002176
Pb	208	3	He	0.065	0.0045	550.03	0.0364	0.002176
U	238	3	He	0.012	0.0007	160.01	0.0421	0.00024
U	238	3	He	0.008	0.0006	130.01	0.0421	0.00024
U	238	3	He	0.012	0.0007	160.01	0.0421	0.00024
Sc	45	1	No Gas			3292600.89		
Sc	45	1	No Gas			3203960.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3200614.33		
Ge	72	1	No Gas			1449951.38		
Ge	72	1	No Gas			1425265.45		
Ge	72	1	No Gas			1418628.73		
Sc	45	2	H2			193744.76		
Sc	45	2	H2			199420.72		
Sc	45	2	H2			194211.29		
Ge	72	2	H2			155248.67		
Ge	72	2	H2			163134.82		
Ge	72	2	H2			162334.98		
In	115	2	H2			438061.95		
In	115	2	H2			448498.24		
In	115	2	H2			439138.59		
Sc	45	3	He			39333.48		
Sc	45	3	He			41048.09		
Sc	45	3	He			41298.83		
Ge	72	3	He			70905.03		
Ge	72	3	He			72061.16		
Ge	72	3	He			72553.50		
In	115	3	He			63011.63		
In	115	3	He			65112.77		
In	115	3	He			66931.53		
Tb	159	3	He			284423.69		
Tb	159	3	He			282839.98		
Tb	159	3	He			281796.21		
Bi	209	3	He			218036.72		
Bi	209	3	He			219895.97		
Bi	209	3	He			220107.63		

Quantitation Report

Data File Name	201SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:34:25
Sample Name	410-136541-F-1-A @50
Sample Type	Sample
Comment	G3 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

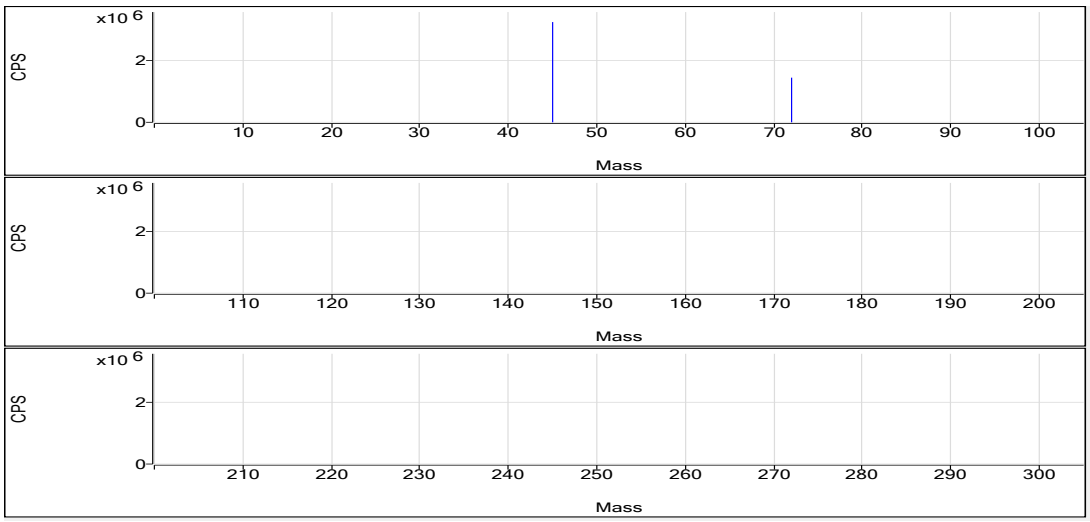
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.007	ppb	92.5	80.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.018	ppb	71.8	2.89	0.0000	Pulse	1.5000	3
Na	23	72	He	13.369	ppb	18.7	9663.48	0.1294	Pulse	0.1000	3
Mg	24	72	He	441.749	ppb	2.6	28170.77	0.3773	Pulse	0.1000	3
Al	27	72	He	1150.767	ppb	1.3	20821.90	0.2789	Pulse	0.1000	3
K	39	72	He	32.263	ppb	27.4	12055.33	0.1615	Pulse	0.1000	3
Ca	44	72	He	777.330	ppb	4.9	1923.53	0.0258	Pulse	0.1000	3
Ti	47	72	He	79.910	ppb	3.0	1516.79	0.0203	Pulse	0.1000	3
V	51	72	He	2.422	ppb	2.1	2662.93	0.0357	Pulse	0.5000	3
Cr	52	72	He	6.187	ppb	6.3	8929.72	0.1196	Pulse	0.1000	3
Mn	55	72	He	128.101	ppb	3.3	57487.66	0.7700	Pulse	0.1000	3
Fe	57	72	He	3375.078	ppb	1.2	73305.45	0.9817	Pulse	0.1000	3
Co	59	72	He	0.654	ppb	2.8	1720.17	0.0230	Pulse	0.1000	3
Ni	60	72	He	5.653	ppb	4.7	4384.16	0.0587	Pulse	0.1000	3
Cu	63	72	He	6.217	ppb	2.0	11945.32	0.1600	Pulse	0.1000	3
Zn	66	72	He	554.842	ppb	1.0	102146.20	1.3680	Pulse	0.1000	3
As	75	72	He	0.273	ppb	19.0	68.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	3.125	ppb	9.5	1616.82	0.0252	Pulse	0.1000	3
Mo	98	115	He	0.709	ppb	2.5	1033.40	0.0161	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	150.9	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.015	ppb	83.1	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.109	ppb	150.9	1096.76	0.0171	Pulse	0.1000	3
Sb	121	115	He	0.071	ppb	24.4	73.33	0.0011	Pulse	0.1000	3
Ba	137	115	He	9.594	ppb	7.6	2710.38	0.0423	Pulse	0.1000	3
Tl	205	209	He	-0.012	ppb	N/A	153.34	0.0007	Pulse	0.1000	3
Pb	208	209	He	0.804	ppb	3.1	7037.69	0.0314	Pulse	0.1000	3
U	238	209	He	0.088	ppb	2.0	886.74	0.0040	Pulse	0.1000	3

ISTD Table:

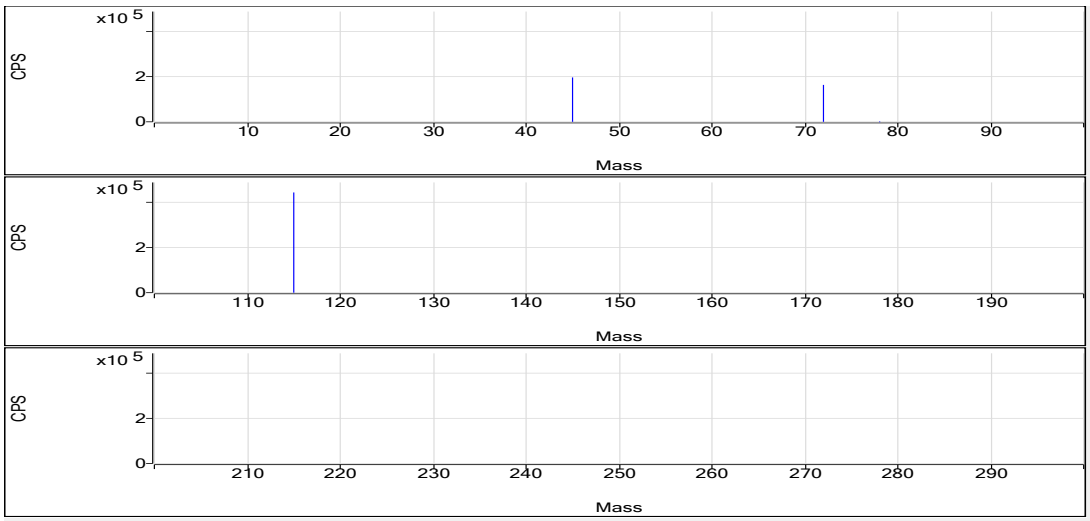
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3260287.24	1.5	100.6	Pulse	0.1000	3
No Gas	Ge	72	1451990.92	1.4	100.8	Pulse	0.1000	3
H2	Sc	45	195303.90	1.6	100.0	Pulse	0.1000	3
H2	Ge	72	162464.13	1.9	99.7	Pulse	0.1000	3
H2	In	115	441109.19	1.3	101.8	Pulse	0.1000	3
He	Sc	45	41282.31	2.0	103.2	Pulse	0.1000	3
He	Ge	72	74673.97	0.7	103.3	Pulse	0.1000	3
He	In	115	64068.98	1.9	99.2	Pulse	0.1000	3
He	Tb	159	284493.42	0.6	99.5	Pulse	0.1000	3
He	Bi	209	223842.86	0.2	100.7	Pulse	0.1000	3

No Gas

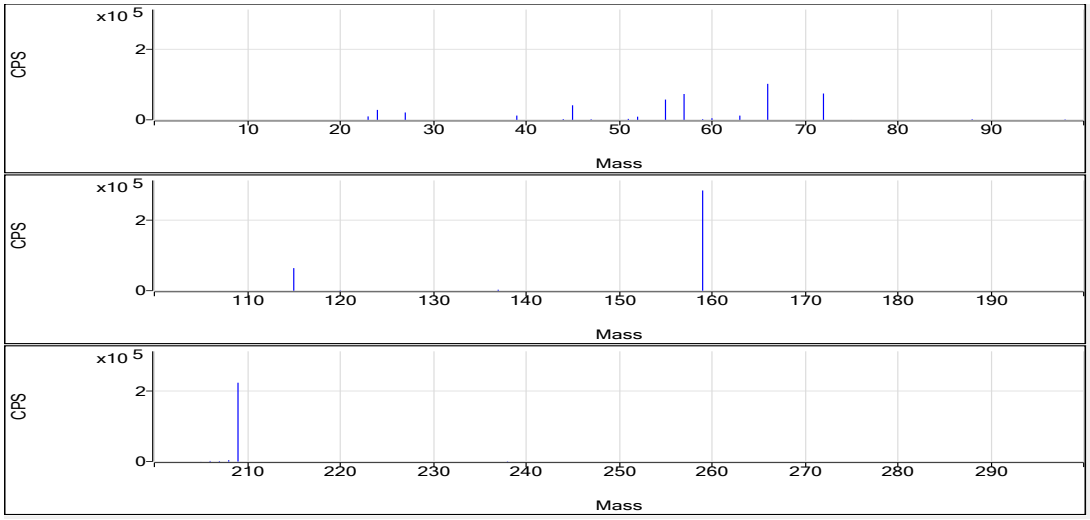


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	70.00	0.0013	4.694E-05
Be	9	1	No Gas	0.013	0.0001	92.00	0.0013	4.694E-05
Be	9	1	No Gas	0.007	0.0001	80.00	0.0013	4.694E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.025	0	3.33	0.0004	1.089E-05
Na	23	3	He	11.06	0.1255	9373.30	0.0017	0.1065
Na	23	3	He	13.023	0.1288	9683.47	0.0017	0.1065
Na	23	3	He	16.024	0.134	9933.68	0.0017	0.1065
Mg	24	3	He	432.985	0.3699	27636.39	0.0008	0.004846
Mg	24	3	He	437.458	0.3737	28087.34	0.0008	0.004846
Mg	24	3	He	454.805	0.3883	28788.57	0.0008	0.004846
Al	27	3	He	1160.265	0.2811	21005.37	0.0002	0.001063
Al	27	3	He	1132.845	0.2745	20635.11	0.0002	0.001063
Al	27	3	He	1159.193	0.2809	20825.21	0.0002	0.001063
K	39	3	He	38.141	0.1647	12305.59	0.0006	0.1436
K	39	3	He	22.115	0.1559	11714.96	0.0006	0.1436
K	39	3	He	36.532	0.1638	12145.43	0.0006	0.1436
Ca	44	3	He	805.752	0.0266	1990.19	0	0.001611
Ca	44	3	He	792.038	0.0262	1970.23	0	0.001611
Ca	44	3	He	734.201	0.0244	1810.17	0	0.001611
Ti	47	3	He	82.175	0.0209	1560.14	0.0003	0.0002737
Ti	47	3	He	77.428	0.0197	1480.12	0.0003	0.0002737
Ti	47	3	He	80.128	0.0204	1510.12	0.0003	0.0002737
V	51	3	He	2.479	0.0363	2714.27	0.0117	0.007326
V	51	3	He	2.401	0.0354	2662.26	0.0117	0.007326
V	51	3	He	2.386	0.0352	2612.25	0.0117	0.007326
Cr	52	3	He	5.745	0.1129	8432.69	0.0152	0.02538
Cr	52	3	He	6.33	0.1218	9153.21	0.0152	0.02538
Cr	52	3	He	6.485	0.1241	9203.26	0.0152	0.02538
Mn	55	3	He	128.824	0.7742	57845.44	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	123.532	0.743	55848.38	0.0059	0.01385
Mn	55	3	He	131.948	0.7927	58769.16	0.0059	0.01385
Fe	57	3	He	3370.276	0.9803	73244.74	0.0003	0.003918
Fe	57	3	He	3336.968	0.9707	72963.20	0.0003	0.003918
Fe	57	3	He	3417.992	0.9942	73708.40	0.0003	0.003918
Co	59	3	He	0.667	0.0234	1750.17	0.0305	0.003084
Co	59	3	He	0.662	0.0233	1750.18	0.0305	0.003084
Co	59	3	He	0.633	0.0224	1660.15	0.0305	0.003084
Ni	60	3	He	5.934	0.0612	4570.89	0.0088	0.009003
Ni	60	3	He	5.407	0.0566	4250.79	0.0088	0.009003
Ni	60	3	He	5.619	0.0584	4330.79	0.0088	0.009003
Cu	63	3	He	6.084	0.1567	11705.10	0.0249	0.004937
Cu	63	3	He	6.239	0.1605	12065.46	0.0249	0.004937
Cu	63	3	He	6.328	0.1627	12065.40	0.0249	0.004937
Zn	66	3	He	556.184	1.3713	102451.57	0.0025	0.004836
Zn	66	3	He	548.949	1.3535	101736.22	0.0025	0.004836
Zn	66	3	He	559.392	1.3791	102250.81	0.0025	0.004836
As	75	3	He	0.258	0.0009	66.00	0.0017	0.0004347
As	75	3	He	0.331	0.001	76.00	0.0017	0.0004347
As	75	3	He	0.231	0.0008	62.00	0.0017	0.0004347
Sr	88	3	He	3.425	0.0275	1800.17	0.0078	0.0007762
Sr	88	3	He	3.12	0.0252	1610.14	0.0078	0.0007762
Sr	88	3	He	2.83	0.0229	1440.14	0.0078	0.0007762
Mo	98	3	He	0.692	0.0158	1030.07	0.022	0.0005162
Mo	98	3	He	0.708	0.0161	1030.07	0.022	0.0005162
Mo	98	3	He	0.728	0.0165	1040.07	0.022	0.0005162
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	0.028	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.066	0.0165	1080.09	0.0143	0.01559
Sn	120	3	He	-0.03	0.0152	970.08	0.0143	0.01559
Sn	120	3	He	0.29	0.0197	1240.11	0.0143	0.01559
Sb	121	3	He	0.09	0.0014	90.00	0.0124	0.000258
Sb	121	3	He	0.067	0.0011	70.00	0.0124	0.000258
Sb	121	3	He	0.056	0.001	60.00	0.0124	0.000258
Ba	137	3	He	10.32	0.0455	2970.45	0.0044	0.000309
Ba	137	3	He	8.862	0.0391	2500.32	0.0044	0.000309
Ba	137	3	He	9.6	0.0423	2660.37	0.0044	0.000309
Tl	205	3	He	-0.012	0.0007	150.01	0.0276	0.001005
Tl	205	3	He	-0.002	0.0009	210.01	0.0276	0.001005
Tl	205	3	He	-0.02	0.0004	100.00	0.0276	0.001005
Pb	208	3	He	0.825	0.0322	4030.76	0.0364	0.002176
Pb	208	3	He	0.776	0.0304	3500.58	0.0364	0.002176
Pb	208	3	He	0.812	0.0317	3950.73	0.0364	0.002176
U	238	3	He	0.09	0.004	900.07	0.0421	0.00024
U	238	3	He	0.089	0.004	890.07	0.0421	0.00024
U	238	3	He	0.087	0.0039	870.07	0.0421	0.00024
Sc	45	1	No Gas			3310004.95		
Sc	45	1	No Gas			3260025.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3210831.51		
Ge	72	1	No Gas			1473720.76		
Ge	72	1	No Gas			1447851.70		
Ge	72	1	No Gas			1434400.29		
Sc	45	2	H2			192286.38		
Sc	45	2	H2			198494.45		
Sc	45	2	H2			195130.86		
Ge	72	2	H2			159443.86		
Ge	72	2	H2			165540.99		
Ge	72	2	H2			162407.54		
In	115	2	H2			436696.40		
In	115	2	H2			447457.10		
In	115	2	H2			439174.06		
Sc	45	3	He			41379.08		
Sc	45	3	He			40416.36		
Sc	45	3	He			42051.49		
Ge	72	3	He			74713.91		
Ge	72	3	He			75166.62		
Ge	72	3	He			74141.38		
In	115	3	He			65353.19		
In	115	3	He			63986.91		
In	115	3	He			62892.51		
Tb	159	3	He			286194.14		
Tb	159	3	He			282757.07		
Tb	159	3	He			284529.04		
Bi	209	3	He			223397.95		
Bi	209	3	He			223912.87		
Bi	209	3	He			224217.77		

US EPA Tune Check Report

Operator Name	us19_usr_ins21905
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA_ICPMS.b
Acq. Date-Time	2023-08-10 06:41:30
Report Comment	E07 Tune Report
Instrument Name	G8403A SG18254097

[No Gas]

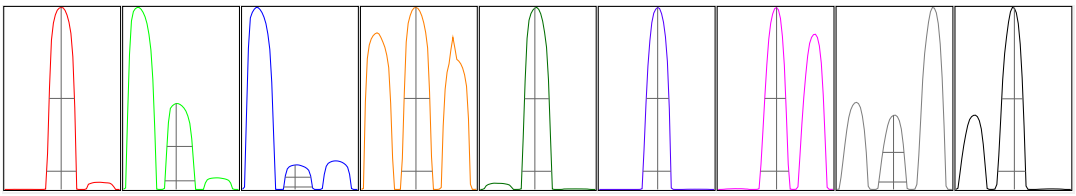
Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)	RSD% (Flag)
9	10.00	5901	59010.60			0.332	5.000	
24	10.00	29668	296677.99			0.147	5.000	
25	10.00	4030	40301.68			0.348	5.000	
26	10.00	4655	46550.20			0.476	5.000	
59	10.00	48519	485194.01			0.527	5.000	
115	10.00	66364	663636.93			0.433	5.000	
206	10.00	13010	130101.89			0.646	5.000	
207	10.00	11230	112301.51			0.976	5.000	
208	10.00	27344	273443.84			0.708	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	5880	5930	5895	5910	5890
24	29639	29707	29617	29718	29658
25	4051	4022	4019	4038	4021
26	4633	4658	4632	4681	4671
59	48160	48337	48721	48685	48695
115	66029	66541	66729	66386	66135
206	12872	12989	13049	13073	13067
207	11046	11286	11239	11333	11247
208	27061	27228	27444	27468	27521

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	9461.64	9.00	8.90 - 9.10	
24	47212.98	23.90	23.90 - 24.10	
25	6337.91	24.90	24.90 - 25.10	
26	7409.25	25.95	25.90 - 26.10	
59	79669.42	58.95	58.90 - 59.10	

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
115	119456.44	115.05	114.90 - 115.10	
206	24992.29	206.05	205.90 - 206.10	
207	21260.48	207.00	206.90 - 207.10	
208	52021.79	208.05	207.90 - 208.10	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
9	0.65	0.764	0.900	
24	0.65	0.772	0.900	
25	0.66	0.737	0.900	
26	0.66	0.793	0.900	
59	0.63	0.766	0.900	
115	0.58	0.717	0.900	
206	0.54	0.728	0.900	
207	0.55	0.715	0.900	
208	0.55	0.715	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	235
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	0.90 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.3 V	Deflect	16.2 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-50 V
Omega Bias	-105 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.5 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	126	Axis Gain	0.9995	QP Bias	-2.5 V
Mass Offset	125	Axis Offset	0.10		

Hardware Settings

Torch

Torch H	0.7 mm	Torch V	-0.8 mm		

EM

Discriminator	3.8 mV	Analog HV	2165 V	Pulse HV	1340 V

Quantitation Report

Data File Name	202SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:36:26
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

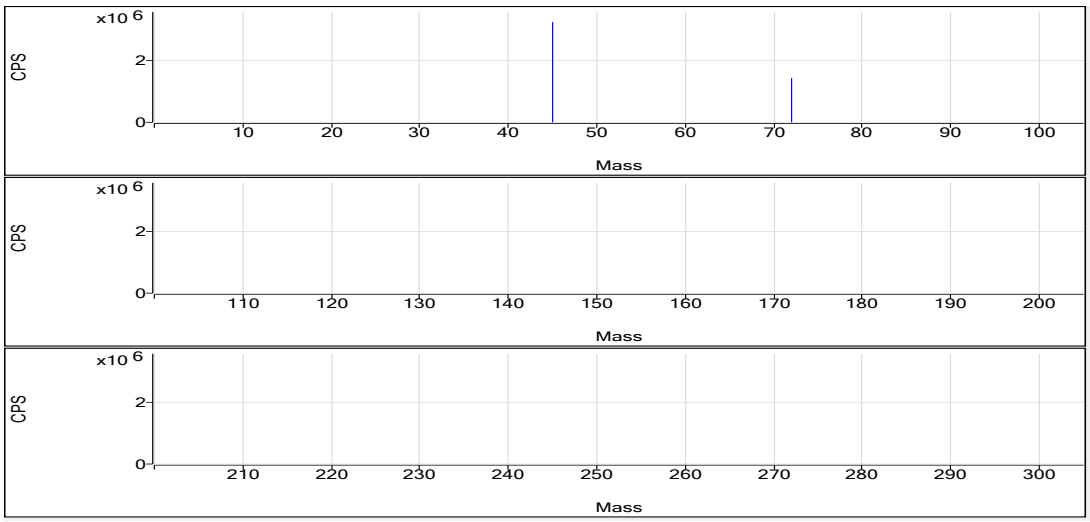
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.010	ppb	N/A	48.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.019	ppb	36.2	2.89	0.0000	Pulse	1.5000	3
Na	23	72	He	4.755	ppb	72.6	8275.91	0.1146	Pulse	0.1000	3
Mg	24	72	He	2.623	ppb	18.4	510.03	0.0071	Pulse	0.1000	3
Al	27	72	He	17.047	ppb	24.6	373.35	0.0052	Pulse	0.1000	3
K	39	72	He	19.377	ppb	46.8	11144.58	0.1543	Pulse	0.1000	3
Ca	44	72	He	-5.667	ppb	N/A	103.34	0.0014	Pulse	0.1000	3
Ti	47	72	He	0.013	ppb	132.5	20.00	0.0003	Pulse	0.1000	3
V	51	72	He	0.063	ppb	12.3	582.69	0.0081	Pulse	0.5000	3
Cr	52	72	He	0.043	ppb	123.3	1880.19	0.0260	Pulse	0.1000	3
Mn	55	72	He	-0.870	ppb	N/A	630.04	0.0087	Pulse	0.1000	3
Fe	57	72	He	51.131	ppb	20.1	1353.44	0.0187	Pulse	0.1000	3
Co	59	72	He	0.020	ppb	96.9	266.68	0.0037	Pulse	0.1000	3
Ni	60	72	He	0.887	ppb	3.7	1213.43	0.0168	Pulse	0.1000	3
Cu	63	72	He	0.037	ppb	17.6	423.35	0.0059	Pulse	0.1000	3
Zn	66	72	He	1.051	ppb	56.2	536.70	0.0074	Pulse	0.1000	3
As	75	72	He	0.073	ppb	116.4	40.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.062	ppb	130.7	80.00	0.0013	Pulse	0.1000	3
Mo	98	115	He	0.017	ppb	48.6	56.67	0.0009	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	26.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	276.9	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.017	ppb	N/A	976.74	0.0154	Pulse	0.1000	3
Sb	121	115	He	0.005	ppb	738.0	20.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.145	ppb	42.9	60.00	0.0009	Pulse	0.1000	3
Tl	205	209	He	-0.011	ppb	N/A	153.34	0.0007	Pulse	0.1000	3
Pb	208	209	He	0.043	ppb	39.9	830.04	0.0038	Pulse	0.1000	3
U	238	209	He	0.004	ppb	75.0	93.34	0.0004	Pulse	0.1000	3

ISTD Table:

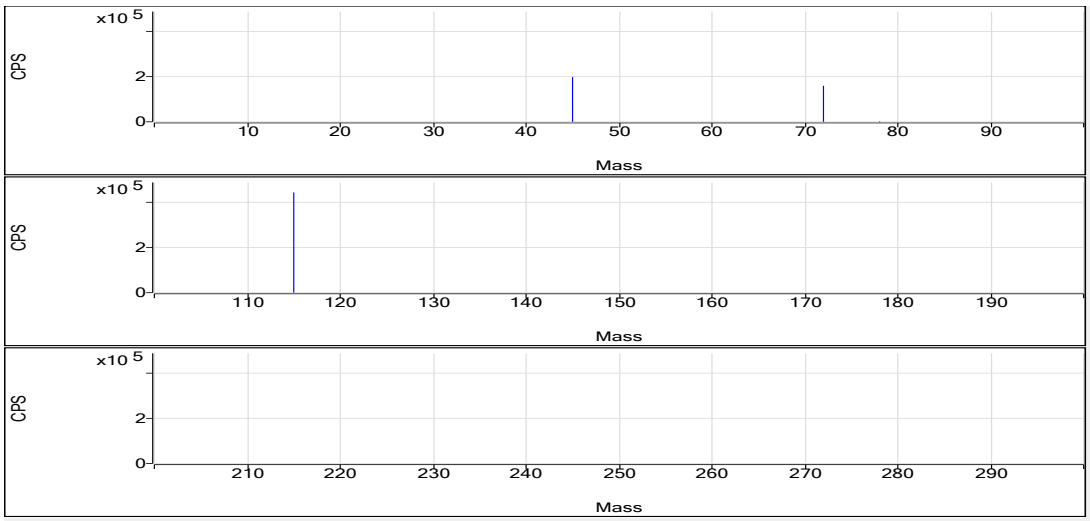
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3221242.45	2.5	99.4	Pulse	0.1000	3
No Gas	Ge	72	1419957.64	2.0	98.6	Pulse	0.1000	3
H2	Sc	45	197308.58	2.1	101.0	Pulse	0.1000	3
H2	Ge	72	159104.48	2.0	97.6	Pulse	0.1000	3
H2	In	115	442229.42	1.8	102.1	Pulse	0.1000	3
He	Sc	45	42091.03	1.7	105.3	Pulse	0.1000	3
He	Ge	72	72231.30	1.5	99.9	Pulse	0.1000	3
He	In	115	63631.24	0.1	98.5	Pulse	0.1000	3
He	Tb	159	284321.92	0.5	99.4	Pulse	0.1000	3
He	Bi	209	221238.90	0.7	99.6	Pulse	0.1000	3

No Gas

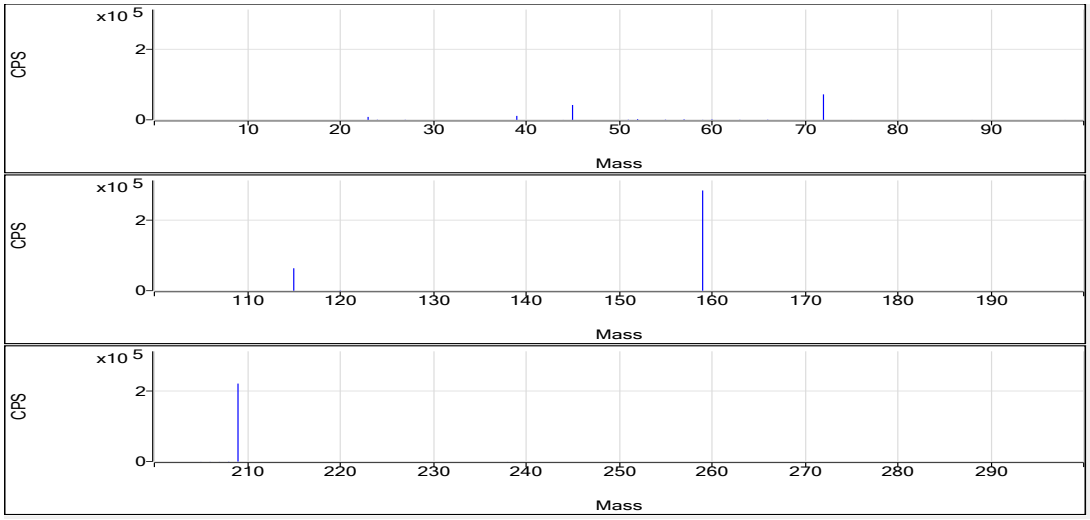


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	60.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.013	0	42.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.012	0	44.00	0.0013	4.694E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.014	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.027	0	3.33	0.0004	1.089E-05
Na	23	3	He	7.851	0.1199	8622.72	0.0017	0.1065
Na	23	3	He	5.382	0.1157	8252.61	0.0017	0.1065
Na	23	3	He	1.032	0.1082	7952.39	0.0017	0.1065
Mg	24	3	He	2.172	0.0067	480.02	0.0008	0.004846
Mg	24	3	He	2.567	0.007	500.03	0.0008	0.004846
Mg	24	3	He	3.131	0.0075	550.03	0.0008	0.004846
Al	27	3	He	15.767	0.0049	350.02	0.0002	0.001063
Al	27	3	He	21.734	0.0063	450.02	0.0002	0.001063
Al	27	3	He	13.639	0.0044	320.01	0.0002	0.001063
K	39	3	He	20.362	0.1549	11134.67	0.0006	0.1436
K	39	3	He	27.912	0.1591	11344.75	0.0006	0.1436
K	39	3	He	9.857	0.1491	10954.33	0.0006	0.1436
Ca	44	3	He	-16.037	0.0011	80.00	0	0.001611
Ca	44	3	He	15.848	0.0021	150.01	0	0.001611
Ca	44	3	He	-16.811	0.0011	80.00	0	0.001611
Ti	47	3	He	0.018	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	0.027	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	-0.006	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.066	0.0081	582.02	0.0117	0.007326
V	51	3	He	0.054	0.008	568.02	0.0117	0.007326
V	51	3	He	0.069	0.0081	598.02	0.0117	0.007326
Cr	52	3	He	0.051	0.0262	1880.21	0.0152	0.02538
Cr	52	3	He	0.092	0.0268	1910.19	0.0152	0.02538
Cr	52	3	He	-0.013	0.0252	1850.18	0.0152	0.02538
Mn	55	3	He	-1.074	0.0075	540.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.779	0.0093	660.04	0.0059	0.01385
Mn	55	3	He	-0.756	0.0094	690.04	0.0059	0.01385
Fe	57	3	He	39.296	0.0153	1100.08	0.0003	0.003918
Fe	57	3	He	57.62	0.0206	1470.12	0.0003	0.003918
Fe	57	3	He	56.477	0.0203	1490.12	0.0003	0.003918
Co	59	3	He	-0.001	0.0031	220.01	0.0305	0.003084
Co	59	3	He	0.023	0.0038	270.01	0.0305	0.003084
Co	59	3	He	0.037	0.0042	310.01	0.0305	0.003084
Ni	60	3	He	0.922	0.0171	1230.10	0.0088	0.009003
Ni	60	3	He	0.858	0.0165	1180.09	0.0088	0.009003
Ni	60	3	He	0.88	0.0167	1230.10	0.0088	0.009003
Cu	63	3	He	0.031	0.0057	410.02	0.0249	0.004937
Cu	63	3	He	0.044	0.006	430.02	0.0249	0.004937
Cu	63	3	He	0.037	0.0059	430.02	0.0249	0.004937
Zn	66	3	He	0.523	0.0061	440.02	0.0025	0.004836
Zn	66	3	He	0.942	0.0072	510.03	0.0025	0.004836
Zn	66	3	He	1.688	0.009	660.04	0.0025	0.004836
As	75	3	He	0.134	0.0007	48.00	0.0017	0.0004347
As	75	3	He	-0.024	0.0004	28.00	0.0017	0.0004347
As	75	3	He	0.11	0.0006	46.00	0.0017	0.0004347
Sr	88	3	He	0.062	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.142	0.0019	120.00	0.0078	0.0007762
Sr	88	3	He	-0.019	0.0006	40.00	0.0078	0.0007762
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	0.027	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.109	0.0171	1090.09	0.0143	0.01559
Sn	120	3	He	0.02	0.0159	1010.07	0.0143	0.01559
Sn	120	3	He	-0.179	0.013	830.05	0.0143	0.01559
Sb	121	3	He	-0.021	0	0.00	0.0124	0.000258
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Ba	137	3	He	0.073	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.181	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.181	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	-0.014	0.0006	140.01	0.0276	0.001005
Tl	205	3	He	-0.01	0.0007	160.01	0.0276	0.001005
Tl	205	3	He	-0.01	0.0007	160.01	0.0276	0.001005
Pb	208	3	He	0.05	0.004	430.02	0.0364	0.002176
Pb	208	3	He	0.056	0.0042	570.03	0.0364	0.002176
Pb	208	3	He	0.024	0.003	350.02	0.0364	0.002176
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
U	238	3	He	0.005	0.0005	100.00	0.0421	0.00024
U	238	3	He	0.001	0.0003	60.00	0.0421	0.00024
Sc	45	1	No Gas			3304246.20		
Sc	45	1	No Gas			3219369.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3140112.14		
Ge	72	1	No Gas			1448284.04		
Ge	72	1	No Gas			1420144.67		
Ge	72	1	No Gas			1391444.20		
Sc	45	2	H2			197999.82		
Sc	45	2	H2			200992.36		
Sc	45	2	H2			192933.55		
Ge	72	2	H2			157756.20		
Ge	72	2	H2			162669.30		
Ge	72	2	H2			156887.93		
In	115	2	H2			440776.17		
In	115	2	H2			450623.43		
In	115	2	H2			435288.67		
Sc	45	3	He			42692.65		
Sc	45	3	He			41319.01		
Sc	45	3	He			42261.44		
Ge	72	3	He			71889.93		
Ge	72	3	He			71326.29		
Ge	72	3	He			73477.69		
In	115	3	He			63585.55		
In	115	3	He			63615.75		
In	115	3	He			63715.26		
Tb	159	3	He			282865.39		
Tb	159	3	He			284762.73		
Tb	159	3	He			285337.65		
Bi	209	3	He			222915.99		
Bi	209	3	He			220263.69		
Bi	209	3	He			220537.03		

Quantitation Report

Data File Name	203_CCV.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:38:27
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

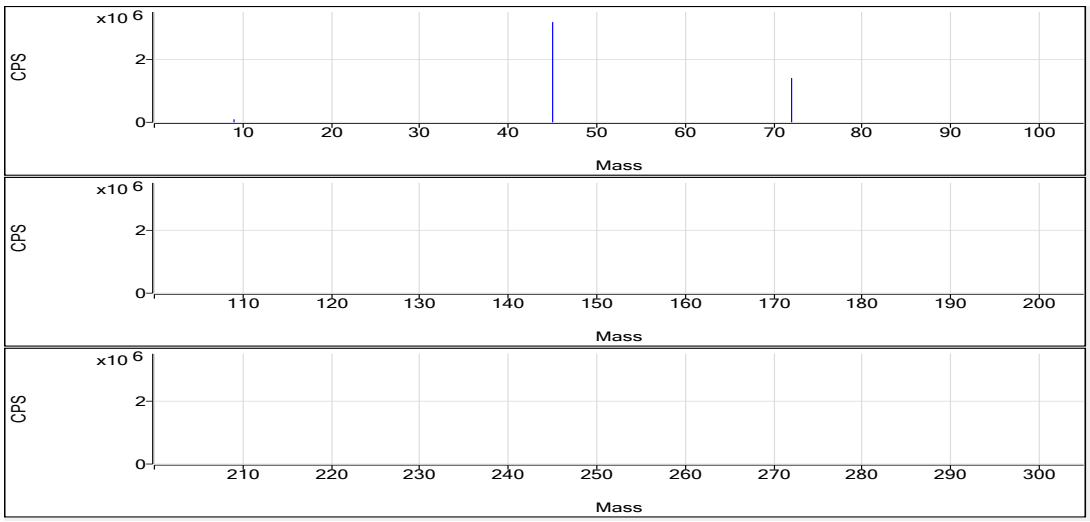
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	51.458	ppb	2.1	95431.03	0.0677	Pulse	0.5000	3
Se	78	72	H2	52.153	ppb	4.6	3237.70	0.0203	Pulse	1.5000	3
Na	23	72	He	5258.983	ppb	1.8	671324.13	9.1404	Pulse	0.1000	3
Mg	24	72	He	5263.970	ppb	2.8	326292.36	4.4429	Pulse	0.1000	3
Al	27	72	He	5229.233	ppb	1.7	92789.29	1.2634	Pulse	0.1000	3
K	39	72	He	5217.326	ppb	2.2	222146.68	3.0247	Pulse	0.1000	3
Ca	44	72	He	5139.421	ppb	2.8	11841.82	0.1612	Pulse	0.1000	3
Ti	47	72	He	5288.416	ppb	1.2	97433.46	1.3265	Pulse	0.1000	3
V	51	72	He	525.830	ppb	2.1	452294.91	6.1584	Pulse	0.5000	3
Cr	52	72	He	525.873	ppb	2.0	589980.81	8.0330	Pulse	0.1000	3
Mn	55	72	He	525.924	ppb	1.3	229016.34	3.1181	Pulse	0.1000	3
Fe	57	72	He	5237.644	ppb	1.9	111734.64	1.5213	Pulse	0.1000	3
Co	59	72	He	524.420	ppb	1.2	1175430.84	16.0034	Pulse	0.1000	3
Ni	60	72	He	521.751	ppb	1.7	337626.74	4.5969	Pulse	0.1000	3
Cu	63	72	He	523.563	ppb	1.9	959275.06	13.0611	Pulse	0.1000	3
Zn	66	72	He	521.761	ppb	1.0	94508.37	1.2867	Pulse	0.1000	3
As	75	72	He	515.841	ppb	1.4	65924.92	0.8976	Pulse	0.5000	3
Sr	88	115	He	52.360	ppb	3.2	26518.81	0.4101	Pulse	0.1000	3
Mo	98	115	He	50.733	ppb	1.2	72274.98	1.1177	Pulse	0.1000	3
Ag	107	115	He	50.769	ppb	0.7	149406.86	2.3105	Pulse	0.1000	3
Cd	111	115	He	51.902	ppb	0.8	16114.59	0.2492	Pulse	0.5000	3
Sn	120	115	He	51.524	ppb	1.0	48512.03	0.7502	Pulse	0.1000	3
Sb	121	115	He	51.960	ppb	1.9	41703.39	0.6448	Pulse	0.1000	3
Ba	137	115	He	514.825	ppb	0.3	145662.93	2.2526	Pulse	0.1000	3
Tl	205	209	He	51.795	ppb	1.1	317281.92	1.4328	Pulse	0.1000	3
Pb	208	209	He	51.888	ppb	0.6	418688.15	1.8908	Pulse	0.1000	3
U	238	209	He	51.317	ppb	1.1	478072.96	2.1590	Pulse	0.1000	3

ISTD Table:

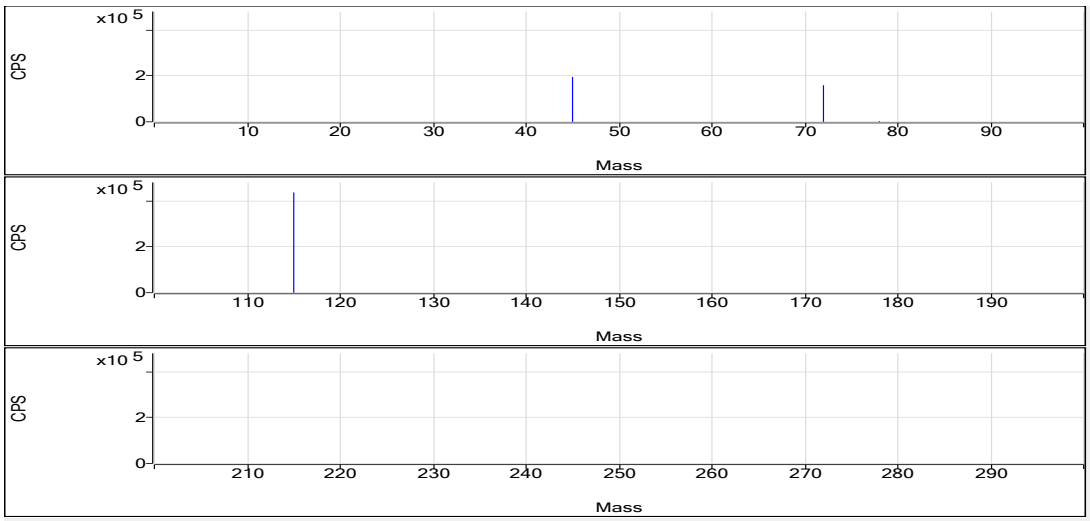
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3196048.18	1.5	98.6	Pulse	0.1000	3
No Gas	Ge	72	1410512.59	1.5	98.0	Pulse	0.1000	3
H2	Sc	45	195764.68	3.3	100.2	Pulse	0.1000	3
H2	Ge	72	159562.64	4.2	97.9	Pulse	0.1000	3
H2	In	115	437160.83	4.1	100.9	Pulse	0.1000	3
He	Sc	45	42004.16	0.3	105.0	Pulse	0.1000	3
He	Ge	72	73454.15	1.0	101.6	Pulse	0.1000	3
He	In	115	64666.71	1.0	100.1	Pulse	0.1000	3
He	Tb	159	285809.87	0.6	99.9	Pulse	0.1000	3
He	Bi	209	221439.05	0.6	99.7	Pulse	0.1000	3

No Gas

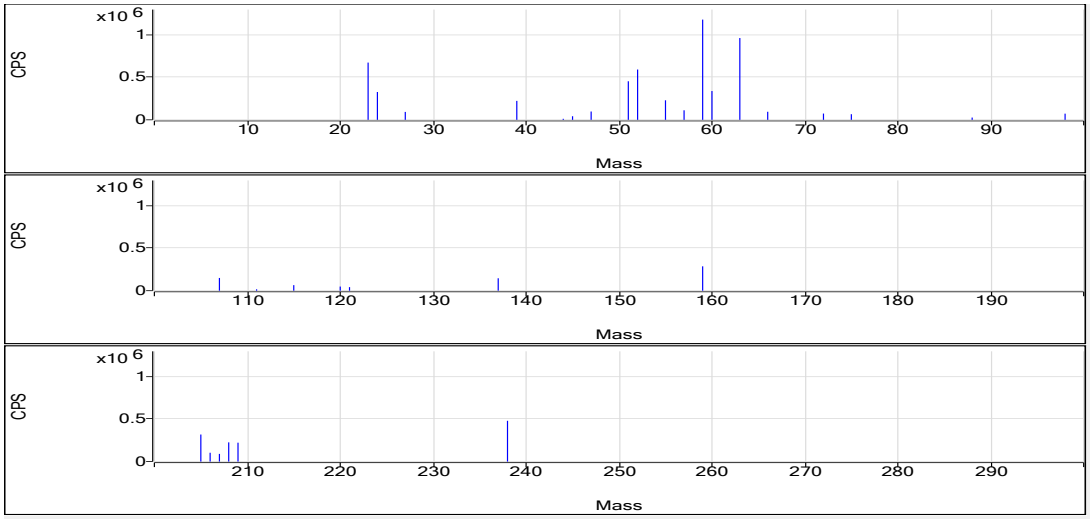


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.278	0.0661	94589.77	0.0013	4.694E-05
Be	9	1	No Gas	52.385	0.0689	97352.93	0.0013	4.694E-05
Be	9	1	No Gas	51.712	0.068	94350.40	0.0013	4.694E-05
Se	78	2	H2	49.76	0.0194	3217.70	0.0004	1.089E-05
Se	78	2	H2	52.094	0.0203	3247.71	0.0004	1.089E-05
Se	78	2	H2	54.606	0.0213	3247.70	0.0004	1.089E-05
Na	23	3	He	5256.004	9.1353	672340.93	0.0017	0.1065
Na	23	3	He	5165.398	8.9797	665493.43	0.0017	0.1065
Na	23	3	He	5355.548	9.3063	676138.04	0.0017	0.1065
Mg	24	3	He	5188.964	4.3797	322334.43	0.0008	0.004846
Mg	24	3	He	5171.907	4.3653	323515.87	0.0008	0.004846
Mg	24	3	He	5431.039	4.5838	333026.79	0.0008	0.004846
Al	27	3	He	5212.195	1.2593	92678.60	0.0002	0.001063
Al	27	3	He	5151.35	1.2446	92236.22	0.0002	0.001063
Al	27	3	He	5324.155	1.2863	93453.04	0.0002	0.001063
K	39	3	He	5177.239	3.0026	220983.00	0.0006	0.1436
K	39	3	He	5128.528	2.9757	220530.19	0.0006	0.1436
K	39	3	He	5346.211	3.0959	224926.85	0.0006	0.1436
Ca	44	3	He	5182.419	0.1626	11965.26	0	0.001611
Ca	44	3	He	4980.953	0.1563	11584.93	0	0.001611
Ca	44	3	He	5254.892	0.1648	11975.28	0	0.001611
Ti	47	3	He	5217.941	1.3088	96326.75	0.0003	0.0002737
Ti	47	3	He	5306.351	1.331	98641.48	0.0003	0.0002737
Ti	47	3	He	5340.956	1.3397	97332.16	0.0003	0.0002737
V	51	3	He	520.734	6.0987	448854.03	0.0117	0.007326
V	51	3	He	518.245	6.0696	449826.25	0.0117	0.007326
V	51	3	He	538.512	6.3067	458204.44	0.0117	0.007326
Cr	52	3	He	520.791	7.9556	585515.85	0.0152	0.02538
Cr	52	3	He	518.951	7.9276	587522.06	0.0152	0.02538
Cr	52	3	He	537.876	8.2158	596904.52	0.0152	0.02538
Mn	55	3	He	526.895	3.1238	229905.97	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	518.554	3.0746	227860.21	0.0059	0.01385
Mn	55	3	He	532.321	3.1558	229282.83	0.0059	0.01385
Fe	57	3	He	5212.259	1.514	111426.14	0.0003	0.003918
Fe	57	3	He	5153.997	1.4971	110952.03	0.0003	0.003918
Fe	57	3	He	5346.675	1.5529	112825.75	0.0003	0.003918
Co	59	3	He	520.701	15.8899	1169466.08	0.0305	0.003084
Co	59	3	He	521.142	15.9034	1178615.22	0.0305	0.003084
Co	59	3	He	531.416	16.2168	1178211.23	0.0305	0.003084
Ni	60	3	He	523.592	4.6131	339514.60	0.0088	0.009003
Ni	60	3	He	512.206	4.513	334461.52	0.0088	0.009003
Ni	60	3	He	529.455	4.6647	338904.10	0.0088	0.009003
Cu	63	3	He	517.534	12.9107	950203.27	0.0249	0.004937
Cu	63	3	He	517.882	12.9194	957470.45	0.0249	0.004937
Cu	63	3	He	535.274	13.3531	970151.47	0.0249	0.004937
Zn	66	3	He	525.672	1.2963	95404.17	0.0025	0.004836
Zn	66	3	He	516.103	1.2728	94327.01	0.0025	0.004836
Zn	66	3	He	523.509	1.291	93793.93	0.0025	0.004836
As	75	3	He	510.873	0.8889	65423.38	0.0017	0.0004347
As	75	3	He	512.758	0.8922	66122.48	0.0017	0.0004347
As	75	3	He	523.891	0.9116	66228.90	0.0017	0.0004347
Sr	88	3	He	53.806	0.4214	27076.53	0.0078	0.0007762
Sr	88	3	He	50.546	0.3959	25483.62	0.0078	0.0007762
Sr	88	3	He	52.727	0.4129	26996.27	0.0078	0.0007762
Mo	98	3	He	51.267	1.1295	72576.75	0.022	0.0005162
Mo	98	3	He	50.83	1.1199	72084.39	0.022	0.0005162
Mo	98	3	He	50.102	1.1038	72163.81	0.022	0.0005162
Ag	107	3	He	50.702	2.3074	148265.46	0.0455	0.0004641
Ag	107	3	He	51.13	2.3269	149779.78	0.0455	0.0004641
Ag	107	3	He	50.476	2.2971	150175.33	0.0455	0.0004641
Cd	111	3	He	52.294	0.2511	16133.25	0.0048	5.152E-05
Cd	111	3	He	51.509	0.2473	15919.04	0.0048	5.152E-05
Cd	111	3	He	51.903	0.2492	16291.47	0.0048	5.152E-05
Sn	120	3	He	51.216	0.7458	47923.38	0.0143	0.01559
Sn	120	3	He	52.141	0.759	48856.44	0.0143	0.01559
Sn	120	3	He	51.214	0.7458	48756.27	0.0143	0.01559
Sb	121	3	He	51.631	0.6407	41171.54	0.0124	0.000258
Sb	121	3	He	51.202	0.6354	40901.06	0.0124	0.000258
Sb	121	3	He	53.048	0.6583	43037.58	0.0124	0.000258
Ba	137	3	He	515.95	2.2575	145057.54	0.0044	0.000309
Ba	137	3	He	515.472	2.2554	145177.01	0.0044	0.000309
Ba	137	3	He	513.053	2.2448	146754.25	0.0044	0.000309
Tl	205	3	He	51.157	1.4152	314069.57	0.0276	0.001005
Tl	205	3	He	52.117	1.4418	317055.46	0.0276	0.001005
Tl	205	3	He	52.11	1.4416	320720.74	0.0276	0.001005
Pb	208	3	He	51.53	1.8777	225442.38	0.0364	0.002176
Pb	208	3	He	52.051	1.8967	221820.39	0.0364	0.002176
Pb	208	3	He	52.083	1.8979	228400.23	0.0364	0.002176
U	238	3	He	50.913	2.142	475363.16	0.0421	0.00024
U	238	3	He	51.944	2.1854	480587.53	0.0421	0.00024
U	238	3	He	51.095	2.1497	478268.20	0.0421	0.00024
Sc	45	1	No Gas			3238041.20		
Sc	45	1	No Gas			3205245.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3144857.45		
Ge	72	1	No Gas			1430684.98		
Ge	72	1	No Gas			1413310.14		
Ge	72	1	No Gas			1387542.64		
Sc	45	2	H2			202184.92		
Sc	45	2	H2			196004.65		
Sc	45	2	H2			189104.47		
Ge	72	2	H2			165985.64		
Ge	72	2	H2			160029.61		
Ge	72	2	H2			152672.68		
In	115	2	H2			456826.40		
In	115	2	H2			433516.95		
In	115	2	H2			421139.13		
Sc	45	3	He			41910.51		
Sc	45	3	He			41960.98		
Sc	45	3	He			42140.99		
Ge	72	3	He			73597.88		
Ge	72	3	He			74110.99		
Ge	72	3	He			72653.57		
In	115	3	He			64630.14		
In	115	3	He			64749.97		
In	115	3	He			65755.19		
Tb	159	3	He			284639.59		
Tb	159	3	He			285156.42		
Tb	159	3	He			287633.61		
Bi	209	3	He			221925.21		
Bi	209	3	He			219909.39		
Bi	209	3	He			222482.56		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:40:27
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

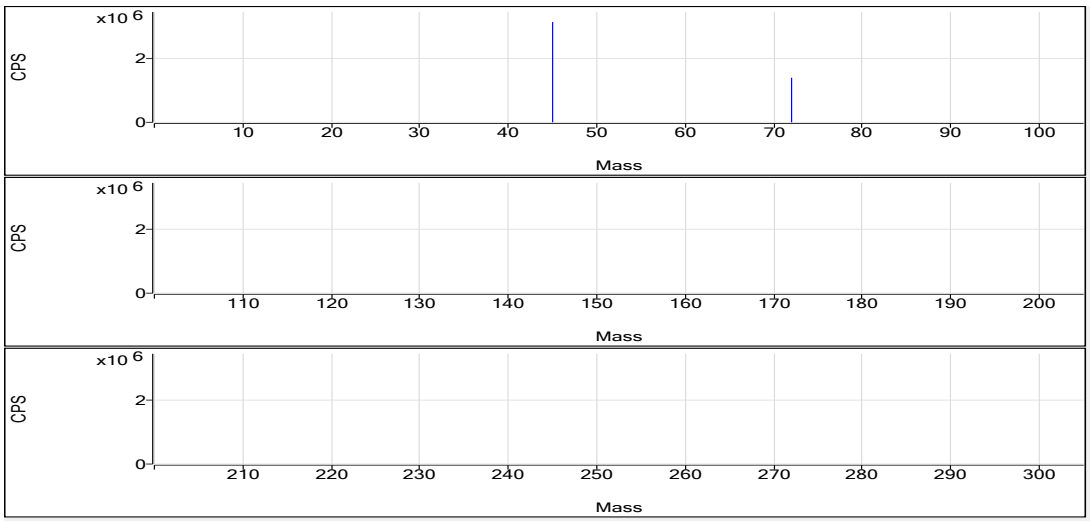
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.008	ppb	27.7	81.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.050	ppb	25.8	4.89	0.0000	Pulse	1.5000	3
Na	23	72	He	0.650	ppb	615.8	7892.32	0.1076	Pulse	0.1000	3
Mg	24	72	He	4.811	ppb	19.5	653.37	0.0089	Pulse	0.1000	3
Al	27	72	He	15.368	ppb	19.1	350.01	0.0048	Pulse	0.1000	3
K	39	72	He	3.562	ppb	775.7	10684.24	0.1456	Pulse	0.1000	3
Ca	44	72	He	11.000	ppb	238.9	143.34	0.0020	Pulse	0.1000	3
Ti	47	72	He	0.904	ppb	92.9	36.67	0.0005	Pulse	0.1000	3
V	51	72	He	0.081	ppb	60.5	607.35	0.0083	Pulse	0.5000	3
Cr	52	72	He	0.090	ppb	50.6	1963.53	0.0268	Pulse	0.1000	3
Mn	55	72	He	-0.792	ppb	N/A	673.38	0.0092	Pulse	0.1000	3
Fe	57	72	He	46.560	ppb	13.9	1276.78	0.0174	Pulse	0.1000	3
Co	59	72	He	0.097	ppb	22.5	443.36	0.0060	Pulse	0.1000	3
Ni	60	72	He	0.945	ppb	19.4	1270.10	0.0173	Pulse	0.1000	3
Cu	63	72	He	0.090	ppb	45.7	526.69	0.0072	Pulse	0.1000	3
Zn	66	72	He	1.063	ppb	39.1	546.70	0.0074	Pulse	0.1000	3
As	75	72	He	0.189	ppb	28.9	56.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.191	ppb	4.6	146.68	0.0023	Pulse	0.1000	3
Mo	98	115	He	0.021	ppb	70.2	63.33	0.0010	Pulse	0.1000	3
Ag	107	115	He	0.012	ppb	17.1	66.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	73.2	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.131	ppb	37.5	1130.08	0.0175	Pulse	0.1000	3
Sb	121	115	He	0.050	ppb	77.7	56.67	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.200	ppb	39.8	76.67	0.0012	Pulse	0.1000	3
Tl	205	209	He	0.131	ppb	26.7	1020.08	0.0046	Pulse	0.1000	3
Pb	208	209	He	0.066	ppb	6.5	1006.72	0.0046	Pulse	0.1000	3
U	238	209	He	0.020	ppb	37.0	236.68	0.0011	Pulse	0.1000	3

ISTD Table:

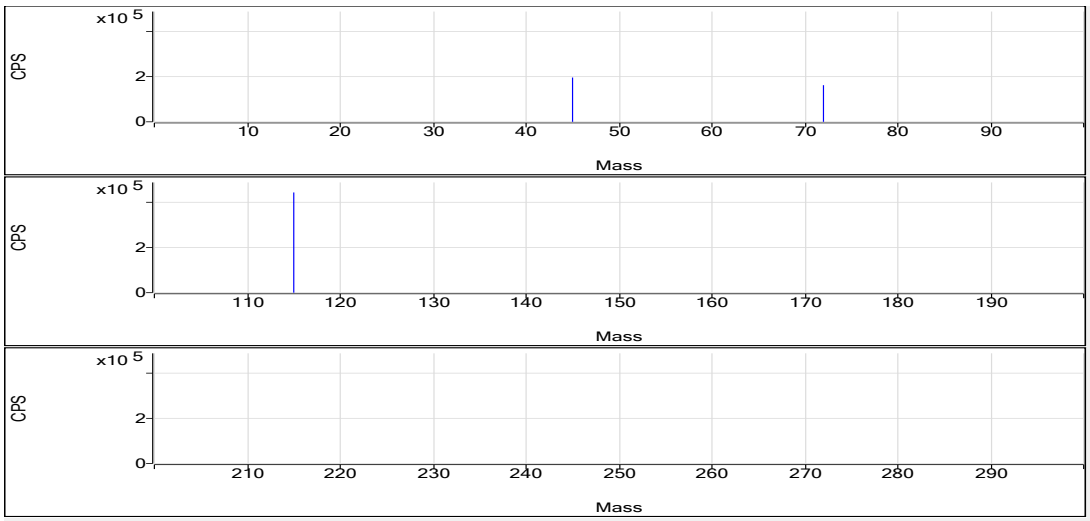
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3152187.56	1.2	97.3	Pulse	0.1000	3
No Gas	Ge	72	1400859.51	1.5	97.3	Pulse	0.1000	3
H2	Sc	45	195632.18	1.6	100.1	Pulse	0.1000	3
H2	Ge	72	161811.58	0.9	99.3	Pulse	0.1000	3
H2	In	115	442721.15	2.2	102.2	Pulse	0.1000	3
He	Sc	45	41670.19	1.3	104.2	Pulse	0.1000	3
He	Ge	72	73377.18	0.5	101.5	Pulse	0.1000	3
He	In	115	64718.15	1.0	100.2	Pulse	0.1000	3
He	Tb	159	284739.74	0.4	99.6	Pulse	0.1000	3
He	Bi	209	220208.61	0.5	99.1	Pulse	0.1000	3

No Gas

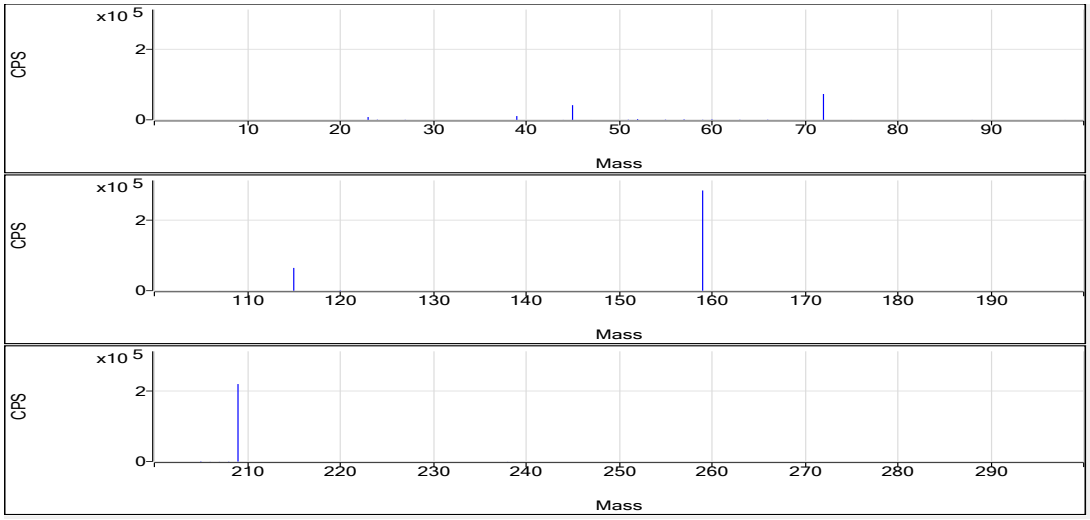


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0.0001	86.00	0.0013	4.694E-05
Be	9	1	No Gas	0.006	0.0001	76.00	0.0013	4.694E-05
Be	9	1	No Gas	0.009	0.0001	82.00	0.0013	4.694E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.057	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.057	0	5.33	0.0004	1.089E-05
Na	23	3	He	4.168	0.1136	8342.60	0.0017	0.1065
Na	23	3	He	1.483	0.109	7952.36	0.0017	0.1065
Na	23	3	He	-3.702	0.1001	7382.01	0.0017	0.1065
Mg	24	3	He	5.722	0.0097	710.04	0.0008	0.004846
Mg	24	3	He	3.845	0.0081	590.04	0.0008	0.004846
Mg	24	3	He	4.867	0.0089	660.04	0.0008	0.004846
Al	27	3	He	15.344	0.0048	350.01	0.0002	0.001063
Al	27	3	He	18.312	0.0055	400.02	0.0002	0.001063
Al	27	3	He	12.449	0.0041	300.01	0.0002	0.001063
K	39	3	He	35.218	0.1631	11975.27	0.0006	0.1436
K	39	3	He	-8.823	0.1388	10123.82	0.0006	0.1436
K	39	3	He	-15.709	0.135	9953.63	0.0006	0.1436
Ca	44	3	He	-16.787	0.0011	80.00	0	0.001611
Ca	44	3	He	14.337	0.0021	150.01	0	0.001611
Ca	44	3	He	35.451	0.0027	200.01	0	0.001611
Ti	47	3	He	1.081	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	1.641	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	-0.01	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.13	0.0089	650.02	0.0117	0.007326
V	51	3	He	0.032	0.0077	562.01	0.0117	0.007326
V	51	3	He	0.081	0.0083	610.02	0.0117	0.007326
Cr	52	3	He	0.077	0.0266	1950.19	0.0152	0.02538
Cr	52	3	He	0.052	0.0262	1910.19	0.0152	0.02538
Cr	52	3	He	0.141	0.0275	2030.22	0.0152	0.02538
Mn	55	3	He	-0.778	0.0093	680.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.791	0.0092	670.05	0.0059	0.01385
Mn	55	3	He	-0.808	0.0091	670.04	0.0059	0.01385
Fe	57	3	He	47.123	0.0176	1290.12	0.0003	0.003918
Fe	57	3	He	52.721	0.0192	1400.13	0.0003	0.003918
Fe	57	3	He	39.836	0.0155	1140.08	0.0003	0.003918
Co	59	3	He	0.122	0.0068	500.03	0.0305	0.003084
Co	59	3	He	0.083	0.0056	410.02	0.0305	0.003084
Co	59	3	He	0.086	0.0057	420.02	0.0305	0.003084
Ni	60	3	He	1.036	0.0181	1330.11	0.0088	0.009003
Ni	60	3	He	1.065	0.0184	1340.10	0.0088	0.009003
Ni	60	3	He	0.734	0.0155	1140.09	0.0088	0.009003
Cu	63	3	He	0.102	0.0075	550.03	0.0249	0.004937
Cu	63	3	He	0.044	0.006	440.02	0.0249	0.004937
Cu	63	3	He	0.123	0.008	590.03	0.0249	0.004937
Zn	66	3	He	1.191	0.0078	570.03	0.0025	0.004836
Zn	66	3	He	0.598	0.0063	460.02	0.0025	0.004836
Zn	66	3	He	1.398	0.0083	610.04	0.0025	0.004836
As	75	3	He	0.126	0.0007	48.00	0.0017	0.0004347
As	75	3	He	0.223	0.0008	60.00	0.0017	0.0004347
As	75	3	He	0.218	0.0008	60.00	0.0017	0.0004347
Sr	88	3	He	0.195	0.0023	150.01	0.0078	0.0007762
Sr	88	3	He	0.197	0.0023	150.01	0.0078	0.0007762
Sr	88	3	He	0.181	0.0022	140.01	0.0078	0.0007762
Mo	98	3	He	0.004	0.0006	40.00	0.022	0.0005162
Mo	98	3	He	0.033	0.0012	80.00	0.022	0.0005162
Mo	98	3	He	0.026	0.0011	70.00	0.022	0.0005162
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.163	0.0179	1170.09	0.0143	0.01559
Sn	120	3	He	0.075	0.0167	1080.08	0.0143	0.01559
Sn	120	3	He	0.156	0.0178	1140.08	0.0143	0.01559
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.041	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.093	0.0014	90.00	0.0124	0.000258
Ba	137	3	He	0.244	0.0014	90.00	0.0044	0.000309
Ba	137	3	He	0.247	0.0014	90.00	0.0044	0.000309
Ba	137	3	He	0.108	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	0.16	0.0054	1200.10	0.0276	0.001005
Tl	205	3	He	0.142	0.0049	1080.08	0.0276	0.001005
Tl	205	3	He	0.092	0.0036	780.05	0.0276	0.001005
Pb	208	3	He	0.062	0.0044	510.03	0.0364	0.002176
Pb	208	3	He	0.065	0.0046	550.03	0.0364	0.002176
Pb	208	3	He	0.07	0.0047	530.03	0.0364	0.002176
U	238	3	He	0.022	0.0012	260.01	0.0421	0.00024
U	238	3	He	0.026	0.0013	290.01	0.0421	0.00024
U	238	3	He	0.012	0.0007	160.01	0.0421	0.00024
Sc	45	1	No Gas			3194328.70		
Sc	45	1	No Gas			3126531.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3135702.14		
Ge	72	1	No Gas			1425039.35		
Ge	72	1	No Gas			1393066.85		
Ge	72	1	No Gas			1384472.32		
Sc	45	2	H2			198920.33		
Sc	45	2	H2			195275.80		
Sc	45	2	H2			192700.41		
Ge	72	2	H2			163460.64		
Ge	72	2	H2			161468.32		
Ge	72	2	H2			160505.79		
In	115	2	H2			448969.25		
In	115	2	H2			447503.78		
In	115	2	H2			431690.42		
Sc	45	3	He			41600.28		
Sc	45	3	He			41148.46		
Sc	45	3	He			42261.84		
Ge	72	3	He			73427.87		
Ge	72	3	He			72954.50		
Ge	72	3	He			73749.16		
In	115	3	He			65312.89		
In	115	3	He			64871.30		
In	115	3	He			63996.70		
Tb	159	3	He			284520.99		
Tb	159	3	He			283704.92		
Tb	159	3	He			285993.30		
Bi	209	3	He			221502.87		
Bi	209	3	He			219437.83		
Bi	209	3	He			219685.13		

Quantitation Report

Data File Name	205SMPL.d
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Acq Time	2023-08-10 17:43:07
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

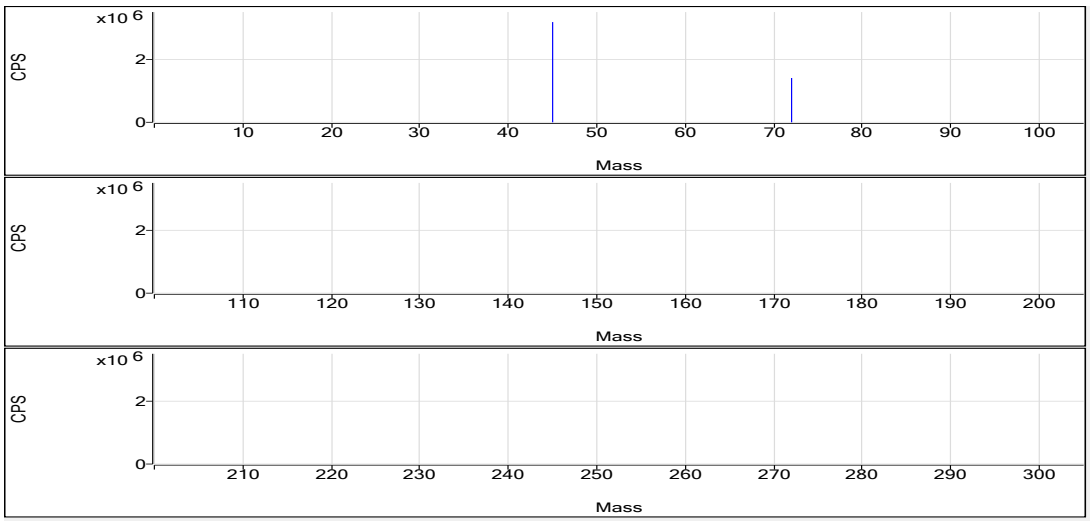
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.006	ppb	N/A	54.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.015	ppb	143.5	2.67	0.0000	Pulse	1.5000	3
Na	23	72	He	0.842	ppb	169.3	7825.63	0.1079	Pulse	0.1000	3
Mg	24	72	He	3.693	ppb	53.2	576.70	0.0080	Pulse	0.1000	3
Al	27	72	He	12.374	ppb	30.7	293.35	0.0040	Pulse	0.1000	3
K	39	72	He	13.588	ppb	23.0	10964.42	0.1511	Pulse	0.1000	3
Ca	44	72	He	7.250	ppb	117.9	133.34	0.0018	Pulse	0.1000	3
Ti	47	72	He	0.558	ppb	3.7	30.00	0.0004	Pulse	0.1000	3
V	51	72	He	0.054	ppb	39.0	577.35	0.0080	Pulse	0.5000	3
Cr	52	72	He	-0.022	ppb	N/A	1816.85	0.0250	Pulse	0.1000	3
Mn	55	72	He	-1.002	ppb	N/A	576.70	0.0079	Pulse	0.1000	3
Fe	57	72	He	35.236	ppb	25.7	1023.41	0.0141	Pulse	0.1000	3
Co	59	72	He	0.043	ppb	64.5	320.02	0.0044	Pulse	0.1000	3
Ni	60	72	He	0.928	ppb	33.2	1243.43	0.0172	Pulse	0.1000	3
Cu	63	72	He	0.047	ppb	74.5	443.36	0.0061	Pulse	0.1000	3
Zn	66	72	He	0.741	ppb	82.9	483.36	0.0067	Pulse	0.1000	3
As	75	72	He	0.046	ppb	44.9	37.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.080	ppb	148.2	90.00	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.014	ppb	76.1	53.33	0.0008	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	153.6	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	75.3	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.004	ppb	1282.1	1003.41	0.0156	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	21360.8	16.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.156	ppb	67.0	63.33	0.0010	Pulse	0.1000	3
Tl	205	209	He	0.042	ppb	29.5	476.70	0.0022	Pulse	0.1000	3
Pb	208	209	He	0.050	ppb	14.4	883.38	0.0040	Pulse	0.1000	3
U	238	209	He	0.006	ppb	93.3	110.00	0.0005	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3182948.91	2.0	98.2	Pulse	0.1000	3
No Gas	Ge	72	1406527.84	1.9	97.7	Pulse	0.1000	3
H2	Sc	45	194909.21	1.9	99.8	Pulse	0.1000	3
H2	Ge	72	160070.94	1.9	98.2	Pulse	0.1000	3
H2	In	115	437890.41	1.7	101.1	Pulse	0.1000	3
He	Sc	45	41760.27	1.6	104.4	Pulse	0.1000	3
He	Ge	72	72536.31	1.3	100.3	Pulse	0.1000	3
He	In	115	64143.28	0.9	99.3	Pulse	0.1000	3
He	Tb	159	282786.78	0.8	98.9	Pulse	0.1000	3
He	Bi	209	220392.95	0.9	99.2	Pulse	0.1000	3

No Gas



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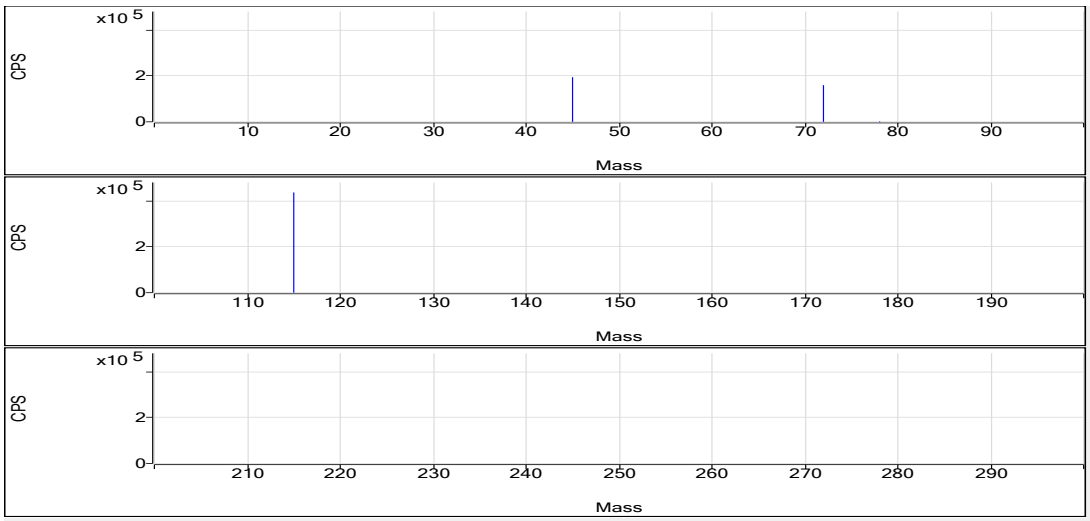
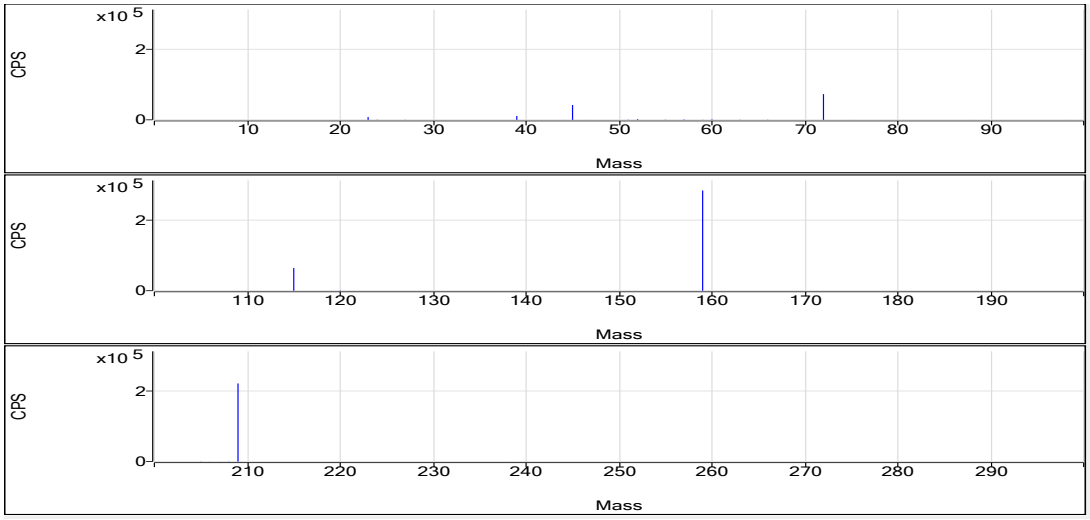


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.009	0	50.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.005	0	56.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.005	0	56.00	0.0013	4.694E-05
Se	78	2	H2	0.014	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.089E-05
Se	78	2	H2	-0.006	0	1.33	0.0004	1.089E-05
Na	23	3	He	-0.195	0.1061	7712.23	0.0017	0.1065
Na	23	3	He	0.253	0.1069	7842.32	0.0017	0.1065
Na	23	3	He	2.469	0.1107	7922.35	0.0017	0.1065
Mg	24	3	He	1.76	0.0063	460.02	0.0008	0.004846
Mg	24	3	He	3.629	0.0079	580.03	0.0008	0.004846
Mg	24	3	He	5.688	0.0096	690.04	0.0008	0.004846
Al	27	3	He	14.979	0.0047	340.02	0.0002	0.001063
Al	27	3	He	8.02	0.003	220.01	0.0002	0.001063
Al	27	3	He	14.121	0.0045	320.02	0.0002	0.001063
K	39	3	He	15.339	0.1521	11054.49	0.0006	0.1436
K	39	3	He	15.45	0.1522	11164.57	0.0006	0.1436
K	39	3	He	9.974	0.1491	10674.21	0.0006	0.1436
Ca	44	3	He	10.162	0.0019	140.01	0	0.001611
Ca	44	3	He	13.964	0.002	150.01	0	0.001611
Ca	44	3	He	-2.375	0.0015	110.01	0	0.001611
Ti	47	3	He	0.555	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	0.539	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	0.58	0.0004	30.00	0.0003	0.0002737
V	51	3	He	0.077	0.0082	598.02	0.0117	0.007326
V	51	3	He	0.036	0.0077	568.02	0.0117	0.007326
V	51	3	He	0.05	0.0079	566.02	0.0117	0.007326
Cr	52	3	He	-0.076	0.0242	1760.18	0.0152	0.02538
Cr	52	3	He	0.007	0.0255	1870.18	0.0152	0.02538
Cr	52	3	He	0.003	0.0254	1820.19	0.0152	0.02538
Mn	55	3	He	-1.018	0.0078	570.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.8	0.0091	670.04	0.0059	0.01385
Mn	55	3	He	-1.187	0.0068	490.02	0.0059	0.01385
Fe	57	3	He	27.801	0.012	870.06	0.0003	0.003918
Fe	57	3	He	32.586	0.0134	980.07	0.0003	0.003918
Fe	57	3	He	45.322	0.017	1220.09	0.0003	0.003918
Co	59	3	He	0.048	0.0045	330.02	0.0305	0.003084
Co	59	3	He	0.069	0.0052	380.02	0.0305	0.003084
Co	59	3	He	0.013	0.0035	250.01	0.0305	0.003084
Ni	60	3	He	0.792	0.016	1160.09	0.0088	0.009003
Ni	60	3	He	0.712	0.0153	1120.09	0.0088	0.009003
Ni	60	3	He	1.28	0.0203	1450.12	0.0088	0.009003
Cu	63	3	He	0.012	0.0052	380.02	0.0249	0.004937
Cu	63	3	He	0.048	0.0061	450.02	0.0249	0.004937
Cu	63	3	He	0.082	0.007	500.03	0.0249	0.004937
Zn	66	3	He	0.216	0.0054	390.02	0.0025	0.004836
Zn	66	3	He	1.416	0.0083	610.04	0.0025	0.004836
Zn	66	3	He	0.591	0.0063	450.02	0.0025	0.004836
As	75	3	He	0.051	0.0005	38.00	0.0017	0.0004347
As	75	3	He	0.064	0.0005	40.00	0.0017	0.0004347
As	75	3	He	0.023	0.0005	34.00	0.0017	0.0004347
Sr	88	3	He	-0.039	0.0005	30.00	0.0078	0.0007762
Sr	88	3	He	0.081	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.197	0.0023	150.01	0.0078	0.0007762
Mo	98	3	He	0.026	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.005	0.0006	40.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	-0.006	0.0155	990.08	0.0143	0.01559
Sn	120	3	He	0.062	0.0165	1050.08	0.0143	0.01559
Sn	120	3	He	-0.043	0.015	970.06	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.216	0.0013	80.00	0.0044	0.000309
Ba	137	3	He	0.216	0.0013	80.00	0.0044	0.000309
Ba	137	3	He	0.035	0.0005	30.00	0.0044	0.000309
Tl	205	3	He	0.034	0.002	430.02	0.0276	0.001005
Tl	205	3	He	0.035	0.002	440.03	0.0276	0.001005
Tl	205	3	He	0.056	0.0026	560.04	0.0276	0.001005
Pb	208	3	He	0.044	0.0038	410.03	0.0364	0.002176
Pb	208	3	He	0.049	0.004	470.02	0.0364	0.002176
Pb	208	3	He	0.058	0.0043	470.02	0.0364	0.002176
U	238	3	He	0.013	0.0008	170.01	0.0421	0.00024
U	238	3	He	0.002	0.0003	70.00	0.0421	0.00024
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
Sc	45	1	No Gas			3257186.51		
Sc	45	1	No Gas			3143209.02		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3148451.20		
Ge	72	1	No Gas			1436344.04		
Ge	72	1	No Gas			1397665.45		
Ge	72	1	No Gas			1385574.04		
Sc	45	2	H2			198465.33		
Sc	45	2	H2			195192.01		
Sc	45	2	H2			191070.29		
Ge	72	2	H2			162477.11		
Ge	72	2	H2			161153.84		
Ge	72	2	H2			156581.88		
In	115	2	H2			438869.52		
In	115	2	H2			444937.45		
In	115	2	H2			429864.25		
Sc	45	3	He			41940.55		
Sc	45	3	He			41008.33		
Sc	45	3	He			42331.93		
Ge	72	3	He			72673.60		
Ge	72	3	He			73367.82		
Ge	72	3	He			71567.51		
In	115	3	He			63886.28		
In	115	3	He			63766.09		
In	115	3	He			64800.94		
Tb	159	3	He			283390.35		
Tb	159	3	He			284793.26		
Tb	159	3	He			280176.73		
Bi	209	3	He			219644.10		
Bi	209	3	He			222704.31		
Bi	209	3	He			218830.45		

Quantitation Report

Data File Name	206SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:45:07
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

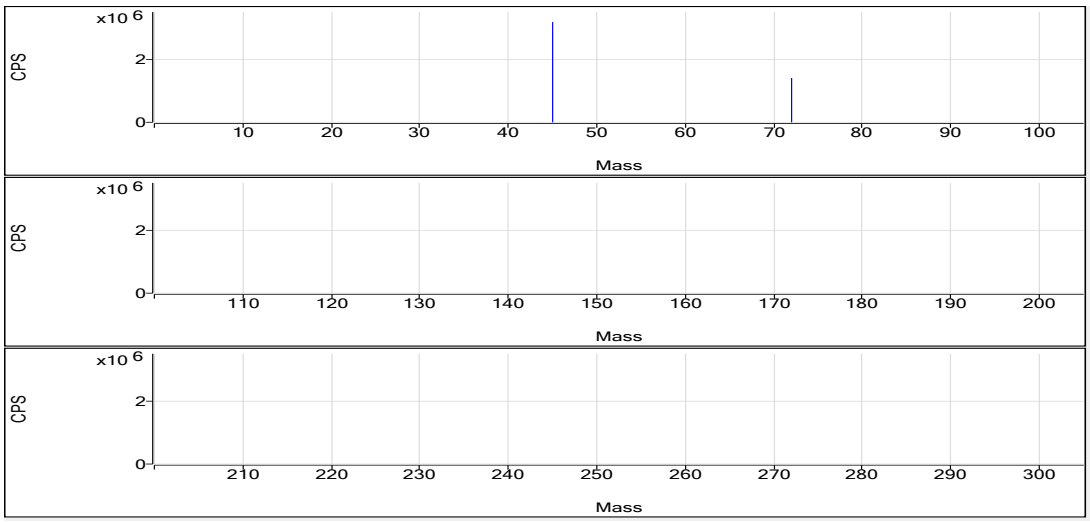
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.000	ppb	522.6	66.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.004	ppb	248.2	2.00	0.0000	Pulse	1.5000	3
Na	23	72	He	2.768	ppb	46.3	8089.10	0.1112	Pulse	0.1000	3
Mg	24	72	He	2.956	ppb	31.2	533.36	0.0073	Pulse	0.1000	3
Al	27	72	He	12.287	ppb	19.4	293.35	0.0040	Pulse	0.1000	3
K	39	72	He	-0.730	ppb	N/A	10424.04	0.1432	Pulse	0.1000	3
Ca	44	72	He	10.137	ppb	177.2	140.01	0.0019	Pulse	0.1000	3
Ti	47	72	He	0.547	ppb	197.1	30.00	0.0004	Pulse	0.1000	3
V	51	72	He	0.056	ppb	18.0	580.69	0.0080	Pulse	0.5000	3
Cr	52	72	He	-0.057	ppb	N/A	1783.51	0.0245	Pulse	0.1000	3
Mn	55	72	He	-1.121	ppb	N/A	526.69	0.0072	Pulse	0.1000	3
Fe	57	72	He	31.740	ppb	10.1	953.40	0.0131	Pulse	0.1000	3
Co	59	72	He	0.034	ppb	77.2	300.02	0.0041	Pulse	0.1000	3
Ni	60	72	He	0.873	ppb	16.9	1213.43	0.0167	Pulse	0.1000	3
Cu	63	72	He	0.056	ppb	15.1	460.02	0.0063	Pulse	0.1000	3
Zn	66	72	He	0.256	ppb	231.5	396.69	0.0055	Pulse	0.1000	3
As	75	72	He	0.087	ppb	85.0	42.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.129	ppb	34.5	116.67	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.007	ppb	259.9	43.33	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	96.4	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	-0.006	ppb	N/A	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.063	ppb	255.9	1076.75	0.0165	Pulse	0.1000	3
Sb	121	115	He	0.016	ppb	73.5	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.080	ppb	137.0	43.33	0.0007	Pulse	0.1000	3
Tl	205	209	He	0.026	ppb	55.0	380.02	0.0017	Pulse	0.1000	3
Pb	208	209	He	0.042	ppb	23.8	816.71	0.0037	Pulse	0.1000	3
U	238	209	He	0.007	ppb	40.3	120.00	0.0005	Pulse	0.1000	3

ISTD Table:

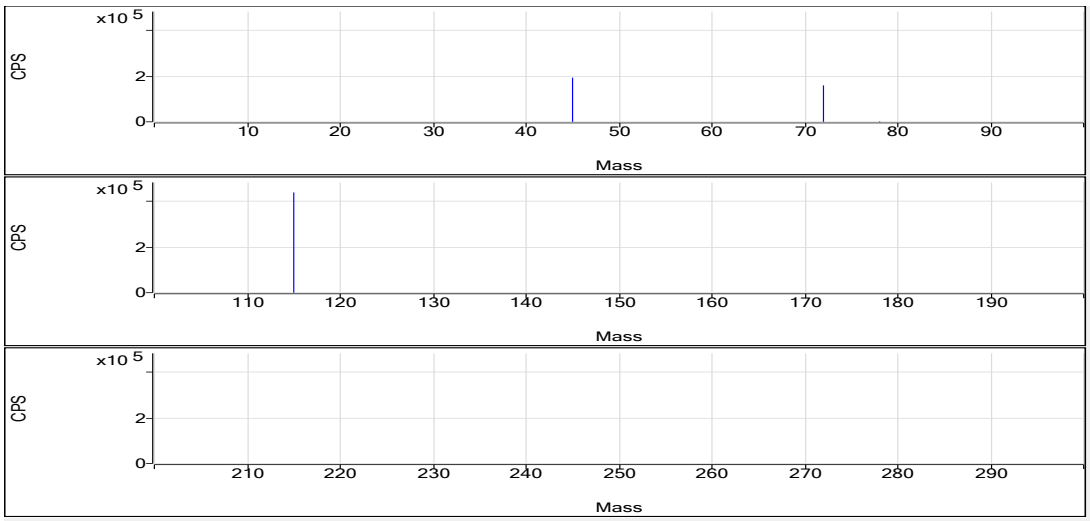
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3172774.02	1.9	97.9	Pulse	0.1000	3
No Gas	Ge	72	1403030.45	1.5	97.4	Pulse	0.1000	3
H2	Sc	45	193522.07	2.7	99.1	Pulse	0.1000	3
H2	Ge	72	159608.48	2.2	97.9	Pulse	0.1000	3
H2	In	115	439292.43	2.9	101.4	Pulse	0.1000	3
He	Sc	45	41830.29	1.1	104.6	Pulse	0.1000	3
He	Ge	72	72737.28	1.1	100.6	Pulse	0.1000	3
He	In	115	65267.74	1.3	101.0	Pulse	0.1000	3
He	Tb	159	282697.93	0.6	98.8	Pulse	0.1000	3
He	Bi	209	219547.72	0.7	98.8	Pulse	0.1000	3

No Gas

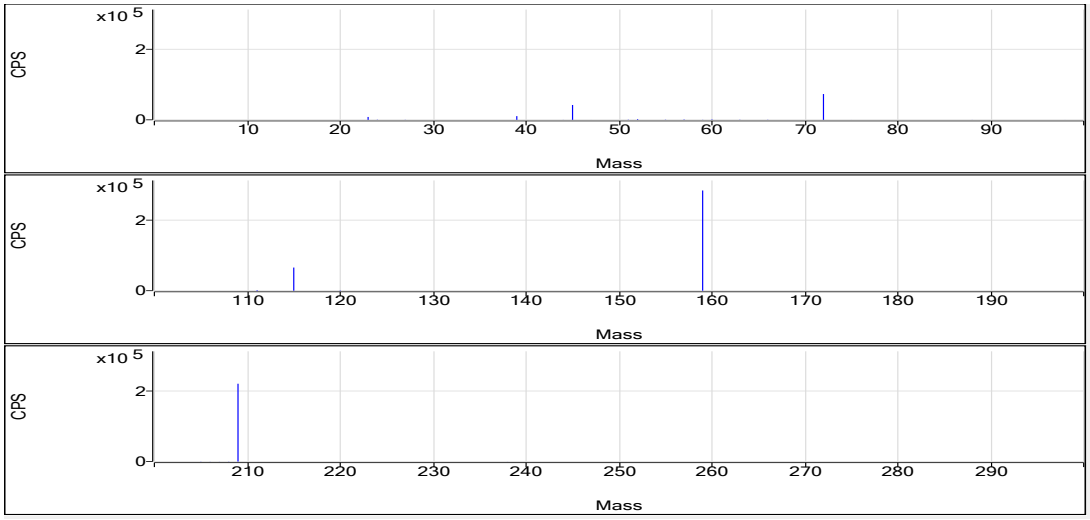


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	68.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.002	0	62.00	0.0013	4.694E-05
Be	9	1	No Gas	0.003	0.0001	70.00	0.0013	4.694E-05
Se	78	2	H2	0.014	0	2.67	0.0004	1.089E-05
Se	78	2	H2	-0.006	0	1.33	0.0004	1.089E-05
Se	78	2	H2	0.005	0	2.00	0.0004	1.089E-05
Na	23	3	He	2.37	0.1105	8142.48	0.0017	0.1065
Na	23	3	He	4.202	0.1137	8232.59	0.0017	0.1065
Na	23	3	He	1.732	0.1094	7892.24	0.0017	0.1065
Mg	24	3	He	2.142	0.0067	490.03	0.0008	0.004846
Mg	24	3	He	2.769	0.0072	520.03	0.0008	0.004846
Mg	24	3	He	3.956	0.0082	590.03	0.0008	0.004846
Al	27	3	He	14.718	0.0046	340.02	0.0002	0.001063
Al	27	3	He	12.186	0.004	290.01	0.0002	0.001063
Al	27	3	He	9.958	0.0035	250.01	0.0002	0.001063
K	39	3	He	19.738	0.1545	11384.82	0.0006	0.1436
K	39	3	He	-9.98	0.1381	10003.70	0.0006	0.1436
K	39	3	He	-11.948	0.137	9883.59	0.0006	0.1436
Ca	44	3	He	9.324	0.0019	140.01	0	0.001611
Ca	44	3	He	-7.409	0.0014	100.00	0	0.001611
Ca	44	3	He	28.495	0.0025	180.01	0	0.001611
Ti	47	3	He	1.615	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	-0.541	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.567	0.0004	30.00	0.0003	0.0002737
V	51	3	He	0.068	0.0081	598.02	0.0117	0.007326
V	51	3	He	0.049	0.0079	572.02	0.0117	0.007326
V	51	3	He	0.052	0.0079	572.02	0.0117	0.007326
Cr	52	3	He	0.009	0.0255	1880.18	0.0152	0.02538
Cr	52	3	He	-0.062	0.0244	1770.18	0.0152	0.02538
Cr	52	3	He	-0.119	0.0236	1700.16	0.0152	0.02538
Mn	55	3	He	-1.013	0.0079	580.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.967	0.0081	590.03	0.0059	0.01385
Mn	55	3	He	-1.384	0.0057	410.02	0.0059	0.01385
Fe	57	3	He	29.117	0.0124	910.06	0.0003	0.003918
Fe	57	3	He	30.804	0.0128	930.06	0.0003	0.003918
Fe	57	3	He	35.298	0.0141	1020.07	0.0003	0.003918
Co	59	3	He	0.006	0.0033	240.01	0.0305	0.003084
Co	59	3	He	0.039	0.0043	310.02	0.0305	0.003084
Co	59	3	He	0.058	0.0049	350.02	0.0305	0.003084
Ni	60	3	He	0.844	0.0164	1210.10	0.0088	0.009003
Ni	60	3	He	1.033	0.0181	1310.09	0.0088	0.009003
Ni	60	3	He	0.742	0.0155	1120.10	0.0088	0.009003
Cu	63	3	He	0.063	0.0065	480.02	0.0249	0.004937
Cu	63	3	He	0.057	0.0064	460.02	0.0249	0.004937
Cu	63	3	He	0.047	0.0061	440.02	0.0249	0.004937
Zn	66	3	He	-0.421	0.0038	280.01	0.0025	0.004836
Zn	66	3	He	0.673	0.0065	470.03	0.0025	0.004836
Zn	66	3	He	0.515	0.0061	440.02	0.0025	0.004836
As	75	3	He	0.172	0.0007	54.00	0.0017	0.0004347
As	75	3	He	0.052	0.0005	38.00	0.0017	0.0004347
As	75	3	He	0.037	0.0005	36.00	0.0017	0.0004347
Sr	88	3	He	0.158	0.002	130.01	0.0078	0.0007762
Sr	88	3	He	0.078	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.152	0.002	130.01	0.0078	0.0007762
Mo	98	3	He	-0.009	0.0003	20.00	0.022	0.0005162
Mo	98	3	He	0.005	0.0006	40.00	0.022	0.0005162
Mo	98	3	He	0.025	0.0011	70.00	0.022	0.0005162
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Sn	120	3	He	0.046	0.0162	1050.08	0.0143	0.01559
Sn	120	3	He	-0.089	0.0143	930.06	0.0143	0.01559
Sn	120	3	He	0.231	0.0189	1250.12	0.0143	0.01559
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.028	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	0.035	0.0005	30.00	0.0044	0.000309
Ba	137	3	He	0	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.205	0.0012	80.00	0.0044	0.000309
Tl	205	3	He	0.041	0.0021	470.03	0.0276	0.001005
Tl	205	3	He	0.012	0.0013	290.02	0.0276	0.001005
Tl	205	3	He	0.026	0.0017	380.02	0.0276	0.001005
Pb	208	3	He	0.031	0.0033	390.02	0.0364	0.002176
Pb	208	3	He	0.046	0.0039	440.03	0.0364	0.002176
Pb	208	3	He	0.05	0.004	430.03	0.0364	0.002176
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.01	0.0006	140.01	0.0421	0.00024
U	238	3	He	0.008	0.0006	130.00	0.0421	0.00024
Sc	45	1	No Gas			3229838.39		
Sc	45	1	No Gas			3177161.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3111321.83		
Ge	72	1	No Gas			1427049.04		
Ge	72	1	No Gas			1396733.26		
Ge	72	1	No Gas			1385309.04		
Sc	45	2	H2			198761.74		
Sc	45	2	H2			193328.77		
Sc	45	2	H2			188475.70		
Ge	72	2	H2			163660.05		
Ge	72	2	H2			158289.97		
Ge	72	2	H2			156875.42		
In	115	2	H2			451761.95		
In	115	2	H2			440032.81		
In	115	2	H2			426082.53		
Sc	45	3	He			42341.80		
Sc	45	3	He			41619.70		
Sc	45	3	He			41529.38		
Ge	72	3	He			73668.97		
Ge	72	3	He			72422.43		
Ge	72	3	He			72120.45		
In	115	3	He			64629.79		
In	115	3	He			64961.69		
In	115	3	He			66236.94		
Tb	159	3	He			280809.55		
Tb	159	3	He			283667.30		
Tb	159	3	He			283616.93		
Bi	209	3	He			220947.36		
Bi	209	3	He			217754.37		
Bi	209	3	He			219941.44		

Quantitation Report

Data File Name	207SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:47:07
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

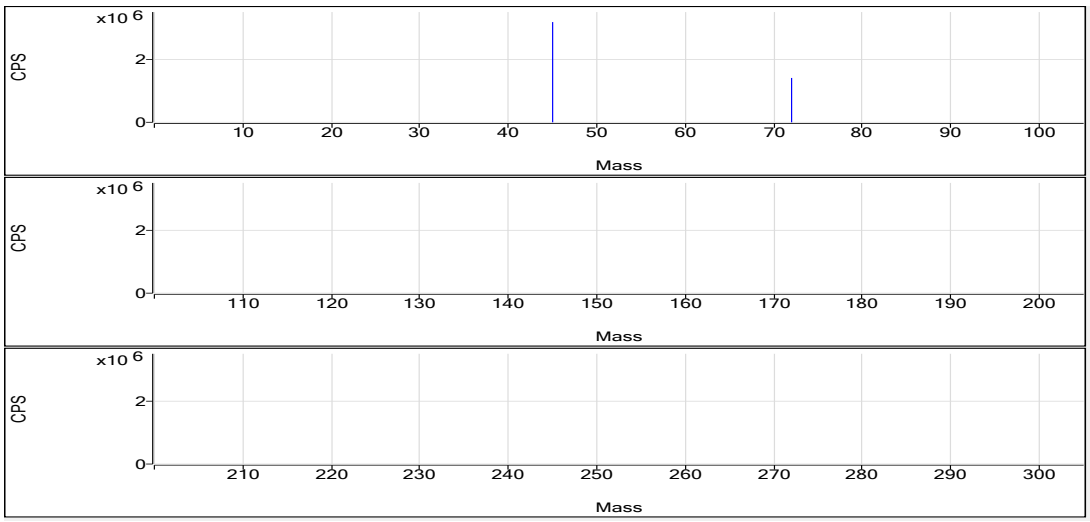
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.005	ppb	N/A	56.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.012	ppb	57.0	2.45	0.0000	Pulse	1.5000	3
Na	23	72	He	2.472	ppb	23.6	7992.40	0.1107	Pulse	0.1000	3
Mg	24	72	He	3.390	ppb	33.9	556.70	0.0077	Pulse	0.1000	3
Al	27	72	He	9.749	ppb	21.9	246.68	0.0034	Pulse	0.1000	3
K	39	72	He	12.469	ppb	135.7	10864.34	0.1505	Pulse	0.1000	3
Ca	44	72	He	-5.804	ppb	N/A	103.33	0.0014	Pulse	0.1000	3
Ti	47	72	He	0.381	ppb	220.2	26.67	0.0004	Pulse	0.1000	3
V	51	72	He	0.078	ppb	38.1	594.68	0.0082	Pulse	0.5000	3
Cr	52	72	He	0.089	ppb	202.1	1930.20	0.0267	Pulse	0.1000	3
Mn	55	72	He	-1.018	ppb	N/A	566.70	0.0078	Pulse	0.1000	3
Fe	57	72	He	29.857	ppb	15.9	906.72	0.0126	Pulse	0.1000	3
Co	59	72	He	0.049	ppb	32.3	330.02	0.0046	Pulse	0.1000	3
Ni	60	72	He	0.909	ppb	19.3	1226.76	0.0170	Pulse	0.1000	3
Cu	63	72	He	0.039	ppb	88.3	426.69	0.0059	Pulse	0.1000	3
Zn	66	72	He	0.586	ppb	65.7	453.36	0.0063	Pulse	0.1000	3
As	75	72	He	0.075	ppb	130.1	40.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.133	ppb	44.5	116.67	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.024	ppb	45.5	66.67	0.0010	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	432.4	33.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	N/A	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.154	ppb	72.7	1143.43	0.0178	Pulse	0.1000	3
Sb	121	115	He	-0.004	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.096	ppb	141.6	46.67	0.0007	Pulse	0.1000	3
Tl	205	209	He	0.002	ppb	658.1	230.01	0.0010	Pulse	0.1000	3
Pb	208	209	He	0.032	ppb	27.5	730.04	0.0033	Pulse	0.1000	3
U	238	209	He	0.011	ppb	62.5	150.01	0.0007	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3171342.97	1.3	97.8	Pulse	0.1000	3
No Gas	Ge	72	1403381.70	1.1	97.5	Pulse	0.1000	3
H2	Sc	45	193107.75	1.2	98.8	Pulse	0.1000	3
H2	Ge	72	158863.99	1.6	97.5	Pulse	0.1000	3
H2	In	115	437252.90	2.2	100.9	Pulse	0.1000	3
He	Sc	45	41456.02	1.2	103.7	Pulse	0.1000	3
He	Ge	72	72197.67	1.0	99.9	Pulse	0.1000	3
He	In	115	64249.08	0.7	99.5	Pulse	0.1000	3
He	Tb	159	283791.49	1.3	99.2	Pulse	0.1000	3
He	Bi	209	219291.11	0.5	98.7	Pulse	0.1000	3

No Gas



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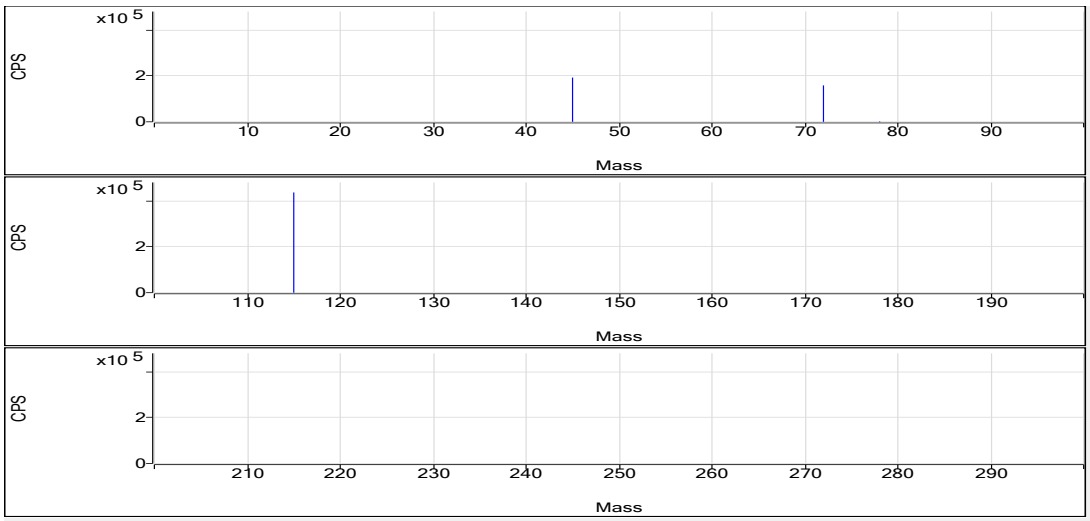
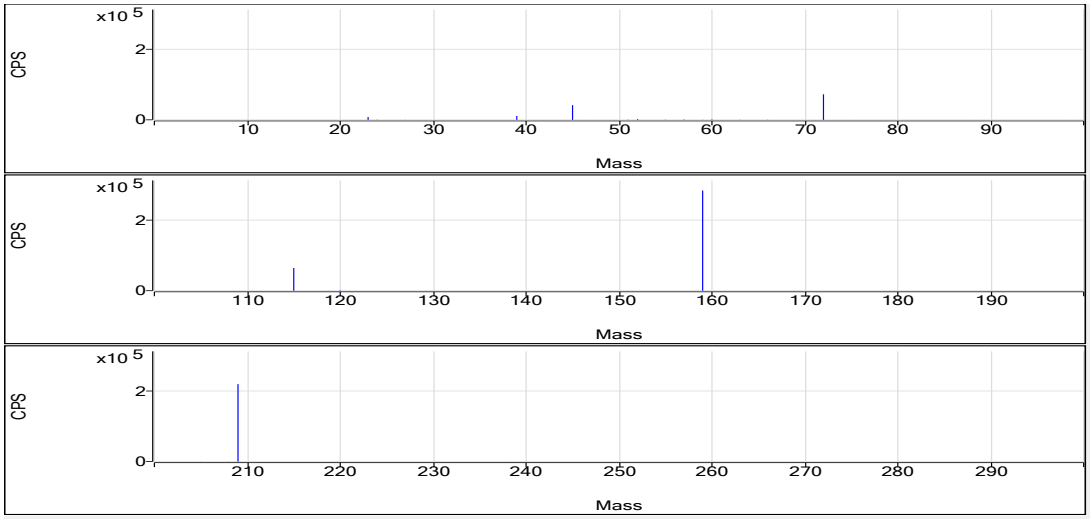


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.007	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.007	0	52.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.002	0	62.00	0.0013	4.694E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Na	23	3	He	2.632	0.111	7922.37	0.0017	0.1065
Na	23	3	He	1.825	0.1096	7942.35	0.0017	0.1065
Na	23	3	He	2.958	0.1115	8112.49	0.0017	0.1065
Mg	24	3	He	2.062	0.0066	470.02	0.0008	0.004846
Mg	24	3	He	4.072	0.0083	600.03	0.0008	0.004846
Mg	24	3	He	4.037	0.0082	600.04	0.0008	0.004846
Al	27	3	He	8.945	0.0032	230.01	0.0002	0.001063
Al	27	3	He	12.175	0.004	290.01	0.0002	0.001063
Al	27	3	He	8.128	0.003	220.01	0.0002	0.001063
K	39	3	He	29.191	0.1598	11404.80	0.0006	0.1436
K	39	3	He	-4.652	0.1411	10223.81	0.0006	0.1436
K	39	3	He	12.868	0.1507	10964.40	0.0006	0.1436
Ca	44	3	He	-11.274	0.0013	90.00	0	0.001611
Ca	44	3	He	5.888	0.0018	130.00	0	0.001611
Ca	44	3	He	-12.026	0.0012	90.00	0	0.001611
Ti	47	3	He	0.584	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	-0.541	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	1.101	0.0005	40.00	0.0003	0.0002737
V	51	3	He	0.097	0.0085	604.02	0.0117	0.007326
V	51	3	He	0.044	0.0078	568.01	0.0117	0.007326
V	51	3	He	0.093	0.0084	612.02	0.0117	0.007326
Cr	52	3	He	0.099	0.0269	1920.23	0.0152	0.02538
Cr	52	3	He	0.263	0.0294	2130.21	0.0152	0.02538
Cr	52	3	He	-0.096	0.0239	1740.17	0.0152	0.02538
Mn	55	3	He	-1.065	0.0076	540.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-1.038	0.0077	560.03	0.0059	0.01385
Mn	55	3	He	-0.949	0.0082	600.04	0.0059	0.01385
Fe	57	3	He	35.316	0.0141	1010.07	0.0003	0.003918
Fe	57	3	He	27.439	0.0119	860.05	0.0003	0.003918
Fe	57	3	He	26.817	0.0117	850.05	0.0003	0.003918
Co	59	3	He	0.046	0.0045	320.01	0.0305	0.003084
Co	59	3	He	0.035	0.0041	300.02	0.0305	0.003084
Co	59	3	He	0.066	0.0051	370.02	0.0305	0.003084
Ni	60	3	He	1.047	0.0182	1300.10	0.0088	0.009003
Ni	60	3	He	0.969	0.0175	1270.10	0.0088	0.009003
Ni	60	3	He	0.712	0.0153	1110.09	0.0088	0.009003
Cu	63	3	He	0.027	0.0056	400.02	0.0249	0.004937
Cu	63	3	He	0.012	0.0052	380.02	0.0249	0.004937
Cu	63	3	He	0.078	0.0069	500.03	0.0249	0.004937
Zn	66	3	He	0.255	0.0055	390.02	0.0025	0.004836
Zn	66	3	He	1.008	0.0073	530.03	0.0025	0.004836
Zn	66	3	He	0.494	0.006	440.02	0.0025	0.004836
As	75	3	He	0.185	0.0008	54.00	0.0017	0.0004347
As	75	3	He	0.036	0.0005	36.00	0.0017	0.0004347
As	75	3	He	0.003	0.0004	32.00	0.0017	0.0004347
Sr	88	3	He	0.197	0.0023	150.01	0.0078	0.0007762
Sr	88	3	He	0.121	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.081	0.0014	90.00	0.0078	0.0007762
Mo	98	3	He	0.026	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	0.033	0.0013	80.00	0.022	0.0005162
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Sn	120	3	He	0.281	0.0196	1270.11	0.0143	0.01559
Sn	120	3	He	0.113	0.0172	1100.08	0.0143	0.01559
Sn	120	3	He	0.069	0.0166	1060.10	0.0143	0.01559
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Ba	137	3	He	0	0.0003	20.00	0.0044	0.000309
Ba	137	3	He	0.251	0.0014	90.00	0.0044	0.000309
Ba	137	3	He	0.037	0.0005	30.00	0.0044	0.000309
Tl	205	3	He	-0.01	0.0007	160.01	0.0276	0.001005
Tl	205	3	He	0.01	0.0013	280.02	0.0276	0.001005
Tl	205	3	He	0.005	0.0011	250.01	0.0276	0.001005
Pb	208	3	He	0.026	0.0031	430.02	0.0364	0.002176
Pb	208	3	He	0.042	0.0037	500.03	0.0364	0.002176
Pb	208	3	He	0.028	0.0032	340.02	0.0364	0.002176
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
U	238	3	He	0.018	0.001	220.01	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
Sc	45	1	No Gas			3214295.58		
Sc	45	1	No Gas			3165133.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3134599.64		
Ge	72	1	No Gas			1420686.39		
Ge	72	1	No Gas			1390792.01		
Ge	72	1	No Gas			1398666.70		
Sc	45	2	H2			194891.44		
Sc	45	2	H2			193956.95		
Sc	45	2	H2			190474.86		
Ge	72	2	H2			160049.03		
Ge	72	2	H2			160635.97		
Ge	72	2	H2			155906.98		
In	115	2	H2			447968.31		
In	115	2	H2			434140.15		
In	115	2	H2			429650.23		
Sc	45	3	He			41990.85		
Sc	45	3	He			41319.08		
Sc	45	3	He			41058.12		
Ge	72	3	He			71386.92		
Ge	72	3	He			72472.22		
Ge	72	3	He			72733.88		
In	115	3	He			64810.69		
In	115	3	He			63976.24		
In	115	3	He			63987.08		
Tb	159	3	He			288117.40		
Tb	159	3	He			281022.44		
Tb	159	3	He			282234.64		
Bi	209	3	He			218209.92		
Bi	209	3	He			219308.14		
Bi	209	3	He			220355.27		

Quantitation Report

Data File Name	208_CCV.d
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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

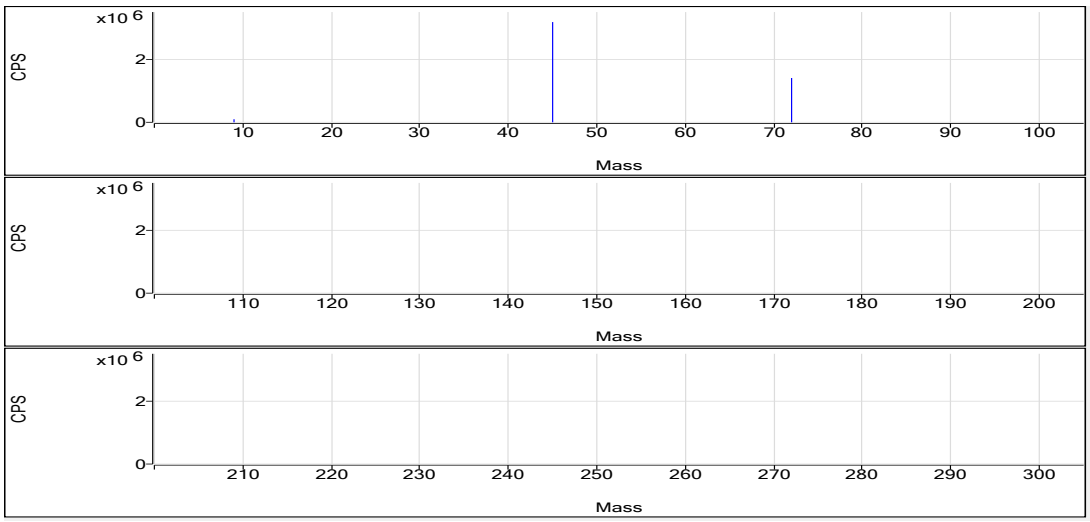
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	52.127	ppb	2.0	96167.57	0.0685	Pulse	0.5000	3
Se	78	72	H2	51.629	ppb	5.5	3224.81	0.0201	Pulse	1.5000	3
Na	23	72	He	5329.356	ppb	1.3	679241.65	9.2613	Pulse	0.1000	3
Mg	24	72	He	5302.694	ppb	1.3	328251.84	4.4756	Pulse	0.1000	3
Al	27	72	He	5269.248	ppb	1.4	93366.45	1.2730	Pulse	0.1000	3
K	39	72	He	5316.621	ppb	1.8	225858.81	3.0795	Pulse	0.1000	3
Ca	44	72	He	5347.084	ppb	1.6	12298.88	0.1677	Pulse	0.1000	3
Ti	47	72	He	5329.202	ppb	1.1	98040.42	1.3367	Pulse	0.1000	3
V	51	72	He	530.097	ppb	0.8	455328.01	6.2083	Pulse	0.5000	3
Cr	52	72	He	531.538	ppb	1.0	595481.66	8.1193	Pulse	0.1000	3
Mn	55	72	He	527.060	ppb	1.1	229179.76	3.1248	Pulse	0.1000	3
Fe	57	72	He	5253.671	ppb	0.9	111919.14	1.5260	Pulse	0.1000	3
Co	59	72	He	528.795	ppb	0.6	1183527.19	16.1369	Pulse	0.1000	3
Ni	60	72	He	528.313	ppb	1.4	341382.17	4.6546	Pulse	0.1000	3
Cu	63	72	He	526.561	ppb	0.8	963420.25	13.1359	Pulse	0.1000	3
Zn	66	72	He	526.622	ppb	0.6	95246.53	1.2986	Pulse	0.1000	3
As	75	72	He	521.168	ppb	0.2	66510.22	0.9068	Pulse	0.5000	3
Sr	88	115	He	52.820	ppb	1.2	26575.57	0.4137	Pulse	0.1000	3
Mo	98	115	He	50.869	ppb	0.8	71993.74	1.1207	Pulse	0.1000	3
Ag	107	115	He	51.587	ppb	2.2	150784.20	2.3477	Pulse	0.1000	3
Cd	111	115	He	51.778	ppb	2.1	15967.10	0.2486	Pulse	0.5000	3
Sn	120	115	He	52.322	ppb	1.8	48919.71	0.7616	Pulse	0.1000	3
Sb	121	115	He	52.264	ppb	1.7	41662.93	0.6486	Pulse	0.1000	3
Ba	137	115	He	514.103	ppb	0.9	144493.74	2.2494	Pulse	0.1000	3
Tl	205	209	He	52.087	ppb	1.2	317706.10	1.4409	Pulse	0.1000	3
Pb	208	209	He	52.404	ppb	0.8	421038.53	1.9095	Pulse	0.1000	3
U	238	209	He	51.701	ppb	1.1	479599.24	2.1752	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3175599.74	0.8	98.0	Pulse	0.1000	3
No Gas	Ge	72	1403255.60	1.4	97.5	Pulse	0.1000	3
H2	Sc	45	194104.10	0.9	99.3	Pulse	0.1000	3
H2	Ge	72	160421.44	1.7	98.4	Pulse	0.1000	3
H2	In	115	438559.23	2.5	101.2	Pulse	0.1000	3
He	Sc	45	41583.14	2.2	104.0	Pulse	0.1000	3
He	Ge	72	73343.22	0.3	101.5	Pulse	0.1000	3
He	In	115	64241.40	1.6	99.5	Pulse	0.1000	3
He	Tb	159	285569.53	0.8	99.8	Pulse	0.1000	3
He	Bi	209	220496.77	0.5	99.2	Pulse	0.1000	3

No Gas



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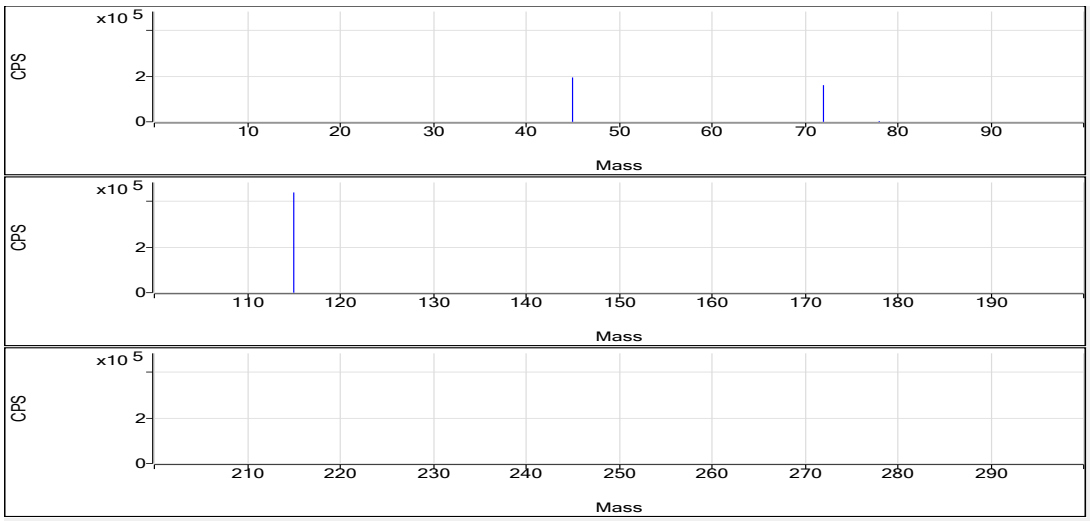
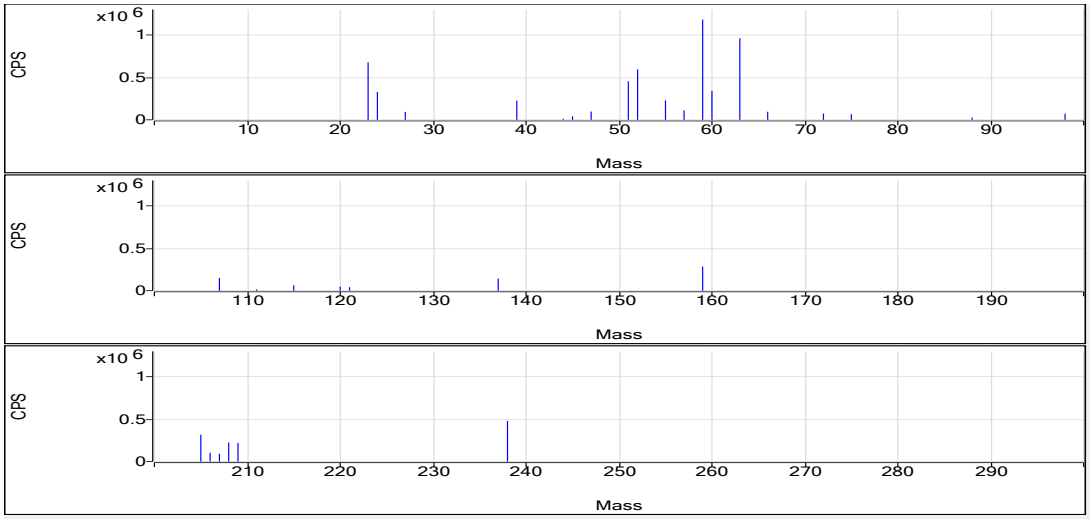


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.664	0.0692	96954.55	0.0013	4.694E-05
Be	9	1	No Gas	52.816	0.0694	96201.98	0.0013	4.694E-05
Be	9	1	No Gas	50.902	0.0669	95346.18	0.0013	4.694E-05
Se	78	2	H2	48.422	0.0189	3084.34	0.0004	1.089E-05
Se	78	2	H2	52.617	0.0205	3239.03	0.0004	1.089E-05
Se	78	2	H2	53.849	0.021	3351.06	0.0004	1.089E-05
Na	23	3	He	5407.253	9.3952	686837.80	0.0017	0.1065
Na	23	3	He	5282.335	9.1806	673172.80	0.0017	0.1065
Na	23	3	He	5298.481	9.2083	677714.36	0.0017	0.1065
Mg	24	3	He	5344.686	4.511	329776.25	0.0008	0.004846
Mg	24	3	He	5224.561	4.4097	323343.82	0.0008	0.004846
Mg	24	3	He	5338.834	4.506	331635.46	0.0008	0.004846
Al	27	3	He	5347.779	1.292	94451.34	0.0002	0.001063
Al	27	3	He	5199.08	1.2561	92103.94	0.0002	0.001063
Al	27	3	He	5260.885	1.271	93544.07	0.0002	0.001063
K	39	3	He	5416.664	3.1348	229170.35	0.0006	0.1436
K	39	3	He	5229.33	3.0313	222275.54	0.0006	0.1436
K	39	3	He	5303.87	3.0725	226130.54	0.0006	0.1436
Ca	44	3	He	5416.012	0.1698	12415.63	0	0.001611
Ca	44	3	He	5254.556	0.1648	12085.33	0	0.001611
Ca	44	3	He	5370.684	0.1684	12395.68	0	0.001611
Ti	47	3	He	5352.4	1.3425	98147.49	0.0003	0.0002737
Ti	47	3	He	5263.539	1.3203	96809.24	0.0003	0.0002737
Ti	47	3	He	5371.669	1.3474	99164.54	0.0003	0.0002737
V	51	3	He	535.122	6.267	458155.75	0.0117	0.007326
V	51	3	He	526.605	6.1674	452231.53	0.0117	0.007326
V	51	3	He	528.563	6.1903	455596.75	0.0117	0.007326
Cr	52	3	He	537.846	8.2153	600585.15	0.0152	0.02538
Cr	52	3	He	528.174	8.068	591595.85	0.0152	0.02538
Cr	52	3	He	528.594	8.0744	594263.98	0.0152	0.02538
Mn	55	3	He	532.266	3.1555	230685.35	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	521.194	3.0902	226588.71	0.0059	0.01385
Mn	55	3	He	527.72	3.1287	230265.21	0.0059	0.01385
Fe	57	3	He	5304.057	1.5406	112625.03	0.0003	0.003918
Fe	57	3	He	5215.041	1.5148	111073.43	0.0003	0.003918
Fe	57	3	He	5241.914	1.5226	112058.96	0.0003	0.003918
Co	59	3	He	531.604	16.2226	1185961.15	0.0305	0.003084
Co	59	3	He	525.464	16.0352	1175798.42	0.0305	0.003084
Co	59	3	He	529.319	16.1529	1188822.01	0.0305	0.003084
Ni	60	3	He	534.323	4.7075	344141.79	0.0088	0.009003
Ni	60	3	He	520.203	4.5833	336074.80	0.0088	0.009003
Ni	60	3	He	530.412	4.6731	343929.92	0.0088	0.009003
Cu	63	3	He	530.591	13.2364	967651.08	0.0249	0.004937
Cu	63	3	He	521.803	13.0172	954497.41	0.0249	0.004937
Cu	63	3	He	527.29	13.154	968112.25	0.0249	0.004937
Zn	66	3	He	523.173	1.2901	94317.09	0.0025	0.004836
Zn	66	3	He	527.41	1.3006	95364.73	0.0025	0.004836
Zn	66	3	He	529.284	1.3052	96057.77	0.0025	0.004836
As	75	3	He	520.319	0.9054	66186.77	0.0017	0.0004347
As	75	3	He	522.473	0.9091	66660.87	0.0017	0.0004347
As	75	3	He	520.711	0.906	66683.03	0.0017	0.0004347
Sr	88	3	He	52.185	0.4087	25994.58	0.0078	0.0007762
Sr	88	3	He	53.418	0.4183	26645.58	0.0078	0.0007762
Sr	88	3	He	52.858	0.414	27086.56	0.0078	0.0007762
Mo	98	3	He	50.754	1.1182	71119.57	0.022	0.0005162
Mo	98	3	He	51.305	1.1303	71993.90	0.022	0.0005162
Mo	98	3	He	50.548	1.1137	72867.74	0.022	0.0005162
Ag	107	3	He	52.187	2.375	151053.84	0.0455	0.0004641
Ag	107	3	He	52.284	2.3794	151550.12	0.0455	0.0004641
Ag	107	3	He	50.29	2.2887	149748.65	0.0455	0.0004641
Cd	111	3	He	52.105	0.2502	15911.06	0.0048	5.152E-05
Cd	111	3	He	52.672	0.2529	16107.26	0.0048	5.152E-05
Cd	111	3	He	50.558	0.2427	15882.98	0.0048	5.152E-05
Sn	120	3	He	53.392	0.7768	49408.14	0.0143	0.01559
Sn	120	3	He	51.866	0.7551	48093.52	0.0143	0.01559
Sn	120	3	He	51.707	0.7528	49257.46	0.0143	0.01559
Sb	121	3	He	53.269	0.6611	42043.95	0.0124	0.000258
Sb	121	3	He	51.734	0.642	40891.13	0.0124	0.000258
Sb	121	3	He	51.791	0.6427	42053.71	0.0124	0.000258
Ba	137	3	He	513.889	2.2485	143005.33	0.0044	0.000309
Ba	137	3	He	518.703	2.2695	144551.03	0.0044	0.000309
Ba	137	3	He	509.718	2.2302	145924.86	0.0044	0.000309
Tl	205	3	He	52.813	1.461	320493.55	0.0276	0.001005
Tl	205	3	He	51.768	1.4321	317183.94	0.0276	0.001005
Tl	205	3	He	51.68	1.4297	315440.80	0.0276	0.001005
Pb	208	3	He	52.803	1.9241	224735.84	0.0364	0.002176
Pb	208	3	He	51.975	1.8939	222785.64	0.0364	0.002176
Pb	208	3	He	52.434	1.9106	226271.60	0.0364	0.002176
U	238	3	He	52.1	2.192	480844.52	0.0421	0.00024
U	238	3	He	51.033	2.1471	475541.67	0.0421	0.00024
U	238	3	He	51.969	2.1864	482411.52	0.0421	0.00024
Sc	45	1	No Gas			3168357.45		
Sc	45	1	No Gas			3154655.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3203786.20		
Ge	72	1	No Gas			1400080.60		
Ge	72	1	No Gas			1385207.17		
Ge	72	1	No Gas			1424479.04		
Sc	45	2	H2			196047.65		
Sc	45	2	H2			193702.59		
Sc	45	2	H2			192562.07		
Ge	72	2	H2			163499.96		
Ge	72	2	H2			158018.92		
Ge	72	2	H2			159745.43		
In	115	2	H2			449180.11		
In	115	2	H2			439469.37		
In	115	2	H2			427028.20		
Sc	45	3	He			41820.70		
Sc	45	3	He			40576.74		
Sc	45	3	He			42351.97		
Ge	72	3	He			73105.57		
Ge	72	3	He			73325.88		
Ge	72	3	He			73598.22		
In	115	3	He			63986.67		
In	115	3	He			64067.31		
In	115	3	He			65814.95		
Tb	159	3	He			283359.45		
Tb	159	3	He			287648.02		
Tb	159	3	He			285701.11		
Bi	209	3	He			219367.09		
Bi	209	3	He			221484.18		
Bi	209	3	He			220639.04		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

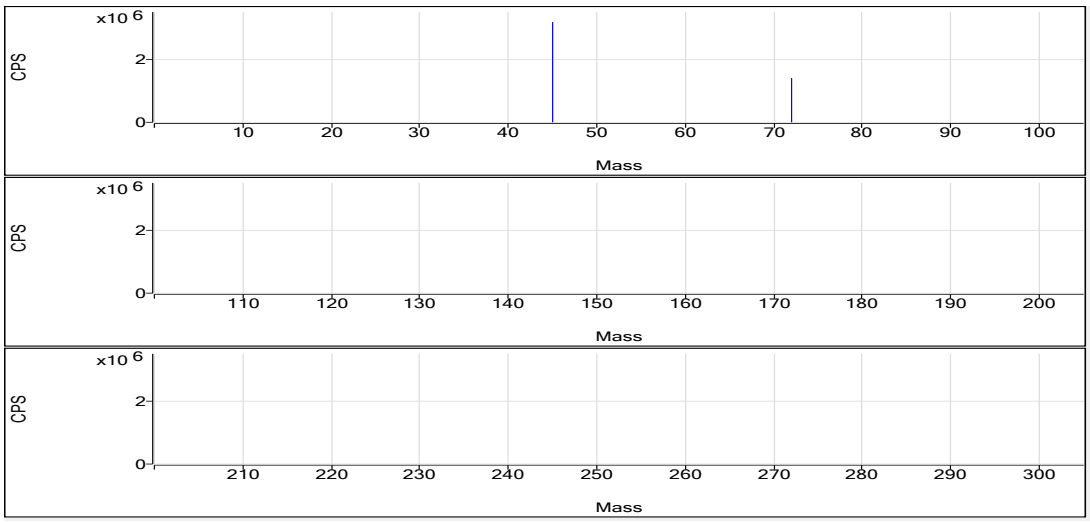
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.023	ppb	20.9	109.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.026	ppb	38.7	3.33	0.0000	Pulse	1.5000	3
Na	23	72	He	4.020	ppb	70.2	8219.19	0.1134	Pulse	0.1000	3
Mg	24	72	He	3.367	ppb	53.0	556.70	0.0077	Pulse	0.1000	3
Al	27	72	He	9.507	ppb	18.3	243.34	0.0034	Pulse	0.1000	3
K	39	72	He	14.446	ppb	143.2	10994.48	0.1516	Pulse	0.1000	3
Ca	44	72	He	4.452	ppb	387.3	126.67	0.0017	Pulse	0.1000	3
Ti	47	72	He	2.023	ppb	14.8	56.67	0.0008	Pulse	0.1000	3
V	51	72	He	0.093	ppb	53.2	610.02	0.0084	Pulse	0.5000	3
Cr	52	72	He	0.057	ppb	378.2	1903.53	0.0262	Pulse	0.1000	3
Mn	55	72	He	-0.820	ppb	N/A	653.37	0.0090	Pulse	0.1000	3
Fe	57	72	He	26.001	ppb	11.3	830.05	0.0115	Pulse	0.1000	3
Co	59	72	He	0.093	ppb	8.6	430.02	0.0059	Pulse	0.1000	3
Ni	60	72	He	1.024	ppb	25.5	1306.78	0.0180	Pulse	0.1000	3
Cu	63	72	He	0.097	ppb	12.1	533.37	0.0074	Pulse	0.1000	3
Zn	66	72	He	0.633	ppb	55.2	463.36	0.0064	Pulse	0.1000	3
As	75	72	He	0.099	ppb	57.5	44.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.115	ppb	124.4	106.67	0.0017	Pulse	0.1000	3
Mo	98	115	He	0.007	ppb	61.6	43.33	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	95.4	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	36.9	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.126	ppb	29.1	1113.42	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.047	ppb	79.3	53.33	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.143	ppb	47.6	60.00	0.0009	Pulse	0.1000	3
Tl	205	209	He	0.128	ppb	11.9	1003.41	0.0045	Pulse	0.1000	3
Pb	208	209	He	0.052	ppb	19.4	900.05	0.0041	Pulse	0.1000	3
U	238	209	He	0.015	ppb	14.2	190.01	0.0009	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3195738.39	2.2	98.6	Pulse	0.1000	3
No Gas	Ge	72	1410258.94	2.5	97.9	Pulse	0.1000	3
H2	Sc	45	194600.17	2.7	99.6	Pulse	0.1000	3
H2	Ge	72	158220.45	1.8	97.1	Pulse	0.1000	3
H2	In	115	438481.40	2.8	101.2	Pulse	0.1000	3
He	Sc	45	40861.08	2.0	102.2	Pulse	0.1000	3
He	Ge	72	72516.62	0.7	100.3	Pulse	0.1000	3
He	In	115	64024.99	1.6	99.1	Pulse	0.1000	3
He	Tb	159	281548.63	0.8	98.4	Pulse	0.1000	3
He	Bi	209	220974.31	0.4	99.5	Pulse	0.1000	3

No Gas



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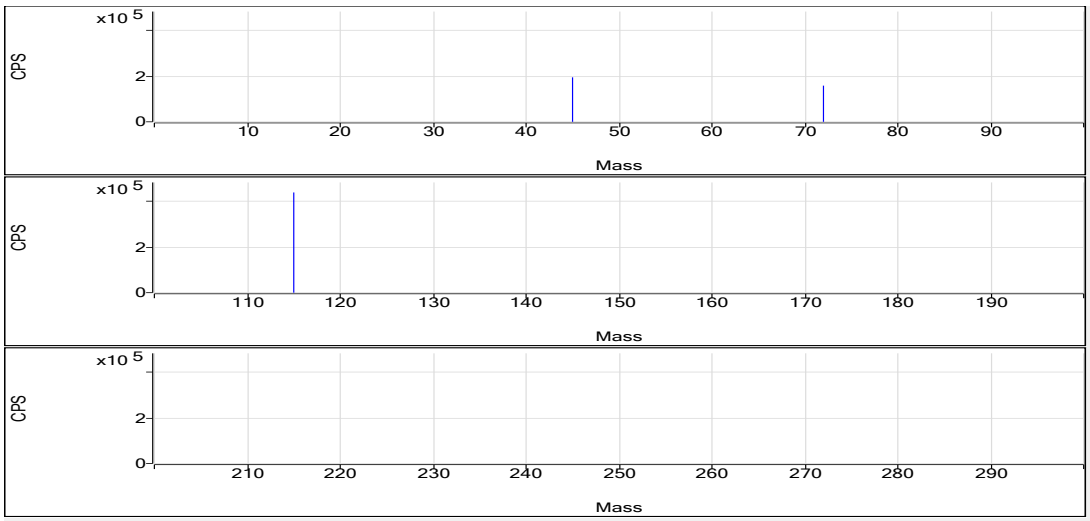
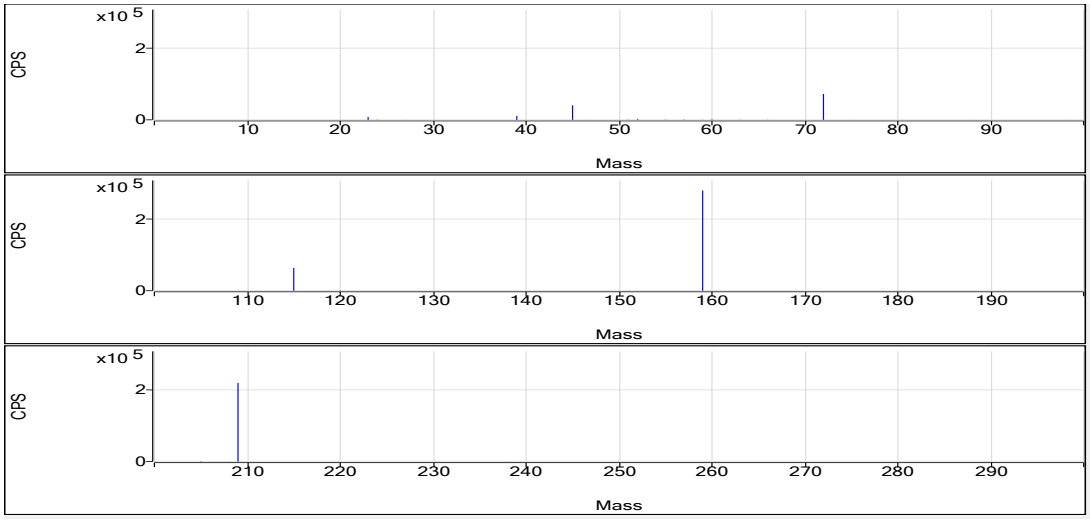


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0.0001	112.00	0.0013	4.694E-05
Be	9	1	No Gas	0.027	0.0001	114.00	0.0013	4.694E-05
Be	9	1	No Gas	0.018	0.0001	102.00	0.0013	4.694E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.025	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Na	23	3	He	6.155	0.117	8482.70	0.0017	0.1065
Na	23	3	He	5.084	0.1152	8292.53	0.0017	0.1065
Na	23	3	He	0.82	0.1079	7882.35	0.0017	0.1065
Mg	24	3	He	3.416	0.0077	560.03	0.0008	0.004846
Mg	24	3	He	5.127	0.0092	660.04	0.0008	0.004846
Mg	24	3	He	1.556	0.0062	450.02	0.0008	0.004846
Al	27	3	He	10.458	0.0036	260.01	0.0002	0.001063
Al	27	3	He	10.559	0.0036	260.01	0.0002	0.001063
Al	27	3	He	7.503	0.0029	210.01	0.0002	0.001063
K	39	3	He	38.314	0.1648	11945.19	0.0006	0.1436
K	39	3	He	3.105	0.1454	10464.18	0.0006	0.1436
K	39	3	He	1.917	0.1447	10574.07	0.0006	0.1436
Ca	44	3	He	-3.005	0.0015	110.00	0	0.001611
Ca	44	3	He	24.168	0.0024	170.01	0	0.001611
Ca	44	3	He	-7.807	0.0014	100.00	0	0.001611
Ti	47	3	He	2.209	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	1.678	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	2.183	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.15	0.0091	658.02	0.0117	0.007326
V	51	3	He	0.062	0.0081	580.02	0.0117	0.007326
V	51	3	He	0.066	0.0081	592.02	0.0117	0.007326
Cr	52	3	He	0.299	0.0299	2170.23	0.0152	0.02538
Cr	52	3	He	-0.107	0.0238	1710.16	0.0152	0.02538
Cr	52	3	He	-0.022	0.025	1830.19	0.0152	0.02538
Mn	55	3	He	-0.664	0.0099	720.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.723	0.0096	690.04	0.0059	0.01385
Mn	55	3	He	-1.072	0.0075	550.03	0.0059	0.01385
Fe	57	3	He	25.528	0.0113	820.05	0.0003	0.003918
Fe	57	3	He	29.152	0.0124	890.06	0.0003	0.003918
Fe	57	3	He	23.322	0.0107	780.05	0.0003	0.003918
Co	59	3	He	0.102	0.0062	450.02	0.0305	0.003084
Co	59	3	He	0.09	0.0058	420.02	0.0305	0.003084
Co	59	3	He	0.087	0.0057	420.02	0.0305	0.003084
Ni	60	3	He	0.875	0.0167	1210.09	0.0088	0.009003
Ni	60	3	He	0.872	0.0167	1200.10	0.0088	0.009003
Ni	60	3	He	1.326	0.0207	1510.14	0.0088	0.009003
Cu	63	3	He	0.095	0.0073	530.03	0.0249	0.004937
Cu	63	3	He	0.086	0.0071	510.03	0.0249	0.004937
Cu	63	3	He	0.109	0.0077	560.04	0.0249	0.004937
Zn	66	3	He	0.952	0.0072	520.03	0.0025	0.004836
Zn	66	3	He	0.689	0.0065	470.02	0.0025	0.004836
Zn	66	3	He	0.26	0.0055	400.02	0.0025	0.004836
As	75	3	He	0.131	0.0007	48.00	0.0017	0.0004347
As	75	3	He	0.133	0.0007	48.00	0.0017	0.0004347
As	75	3	He	0.033	0.0005	36.00	0.0017	0.0004347
Sr	88	3	He	0.144	0.0019	120.00	0.0078	0.0007762
Sr	88	3	He	0.241	0.0027	170.01	0.0078	0.0007762
Sr	88	3	He	-0.04	0.0005	30.00	0.0078	0.0007762
Mo	98	3	He	0.013	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	0.005	0.0006	40.00	0.022	0.0005162
Mo	98	3	He	0.004	0.0006	40.00	0.022	0.0005162
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.008	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.096	0.017	1070.09	0.0143	0.01559
Sn	120	3	He	0.115	0.0172	1100.09	0.0143	0.01559
Sn	120	3	He	0.167	0.018	1170.09	0.0143	0.01559
Sb	121	3	He	0.069	0.0011	70.00	0.0124	0.000258
Sb	121	3	He	0.068	0.0011	70.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	0.074	0.0006	40.00	0.0044	0.000309
Ba	137	3	He	0.144	0.0009	60.00	0.0044	0.000309
Ba	137	3	He	0.21	0.0012	80.00	0.0044	0.000309
Tl	205	3	He	0.133	0.0047	1040.08	0.0276	0.001005
Tl	205	3	He	0.14	0.0049	1070.08	0.0276	0.001005
Tl	205	3	He	0.111	0.0041	900.07	0.0276	0.001005
Pb	208	3	He	0.043	0.0037	490.03	0.0364	0.002176
Pb	208	3	He	0.05	0.004	540.03	0.0364	0.002176
Pb	208	3	He	0.063	0.0045	530.03	0.0364	0.002176
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
U	238	3	He	0.013	0.0008	170.01	0.0421	0.00024
U	238	3	He	0.017	0.0009	210.01	0.0421	0.00024
Sc	45	1	No Gas			3183537.45		
Sc	45	1	No Gas			3130918.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3272759.33		
Ge	72	1	No Gas			1406604.82		
Ge	72	1	No Gas			1376382.64		
Ge	72	1	No Gas			1447789.35		
Sc	45	2	H2			197421.40		
Sc	45	2	H2			197779.98		
Sc	45	2	H2			188599.12		
Ge	72	2	H2			159585.01		
Ge	72	2	H2			160191.97		
Ge	72	2	H2			154884.38		
In	115	2	H2			450085.34		
In	115	2	H2			439515.46		
In	115	2	H2			425843.39		
Sc	45	3	He			41800.08		
Sc	45	3	He			40316.71		
Sc	45	3	He			40466.44		
Ge	72	3	He			72483.70		
Ge	72	3	He			71990.15		
Ge	72	3	He			73076.00		
In	115	3	He			63112.90		
In	115	3	He			63855.93		
In	115	3	He			65132.19		
Tb	159	3	He			283953.04		
Tb	159	3	He			280943.55		
Tb	159	3	He			279749.29		
Bi	209	3	He			221491.11		
Bi	209	3	He			220058.79		
Bi	209	3	He			221373.02		

Quantitation Report

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Acq Time	2023-08-10 17:53:08
Sample Name	MB 410-402395/1-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

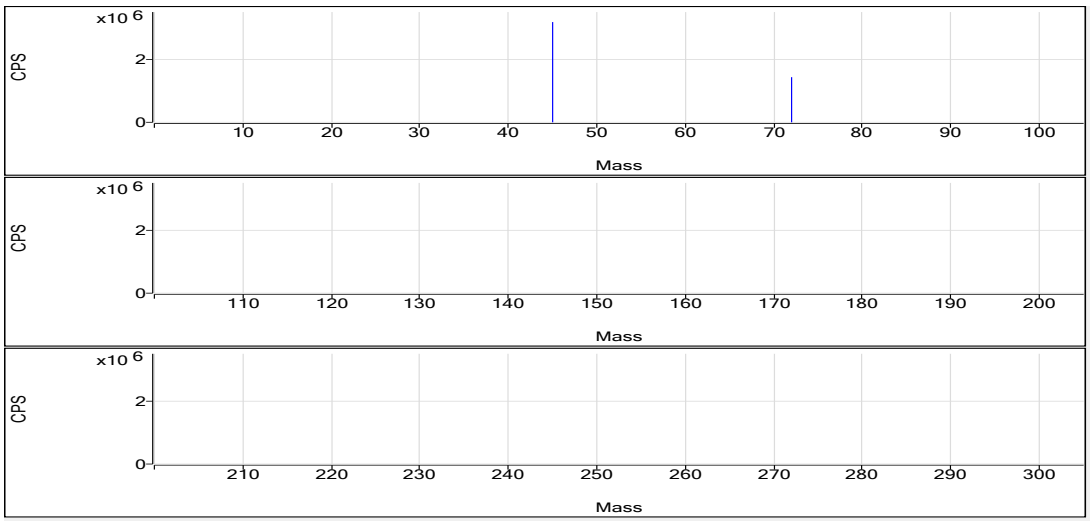
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.004	ppb	N/A	60.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.028	ppb	78.5	3.56	0.0000	Pulse	1.5000	3
Na	23	72	He	105.333	ppb	2.4	21539.45	0.2874	Pulse	0.1000	3
Mg	24	72	He	3.965	ppb	52.0	613.37	0.0082	Pulse	0.1000	3
Al	27	72	He	15.860	ppb	9.3	366.69	0.0049	Pulse	0.1000	3
K	39	72	He	4.758	ppb	301.3	10964.43	0.1463	Pulse	0.1000	3
Ca	44	72	He	8.319	ppb	140.4	140.01	0.0019	Pulse	0.1000	3
Ti	47	72	He	0.684	ppb	90.9	33.33	0.0004	Pulse	0.1000	3
V	51	72	He	-0.041	ppb	N/A	512.68	0.0068	Pulse	0.5000	3
Cr	52	72	He	0.229	ppb	20.9	2163.57	0.0289	Pulse	0.1000	3
Mn	55	72	He	-0.463	ppb	N/A	833.39	0.0111	Pulse	0.1000	3
Fe	57	72	He	35.626	ppb	15.4	1066.75	0.0142	Pulse	0.1000	3
Co	59	72	He	0.036	ppb	49.8	313.34	0.0042	Pulse	0.1000	3
Ni	60	72	He	0.919	ppb	23.2	1280.10	0.0171	Pulse	0.1000	3
Cu	63	72	He	0.155	ppb	40.4	660.04	0.0088	Pulse	0.1000	3
Zn	66	72	He	2.090	ppb	40.3	746.71	0.0100	Pulse	0.1000	3
As	75	72	He	0.011	ppb	505.7	34.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.080	ppb	65.6	90.00	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.014	ppb	173.9	53.33	0.0008	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	43.2	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	90.2	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.906	ppb	25.4	1830.20	0.0285	Pulse	0.1000	3
Sb	121	115	He	0.025	ppb	104.0	36.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.191	ppb	47.4	73.33	0.0011	Pulse	0.1000	3
Tl	205	209	He	0.034	ppb	16.2	436.69	0.0020	Pulse	0.1000	3
Pb	208	209	He	0.047	ppb	23.6	870.04	0.0039	Pulse	0.1000	3
U	238	209	He	0.005	ppb	37.5	100.00	0.0004	Pulse	0.1000	3

ISTD Table:

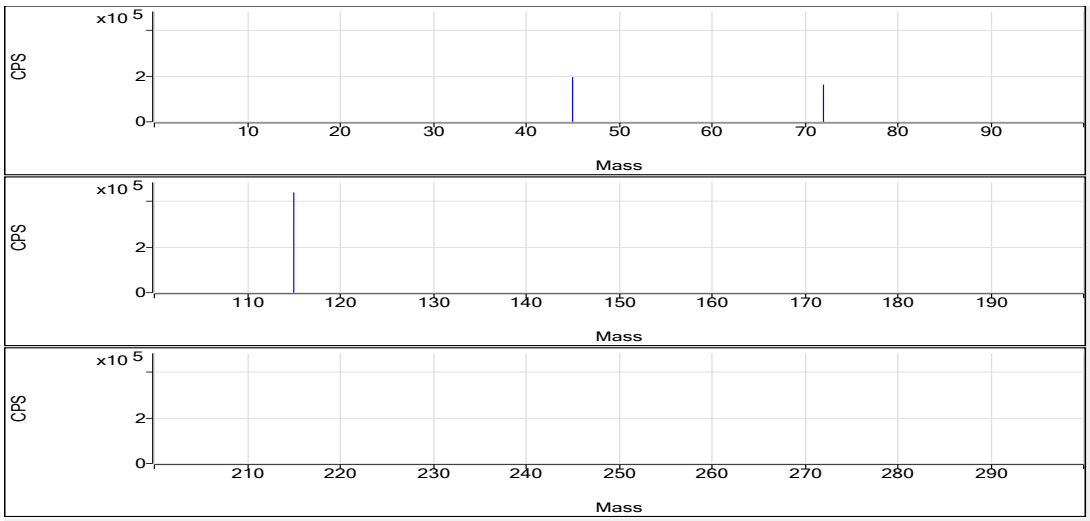
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3187488.08	1.3	98.3	Pulse	0.1000	3
No Gas	Ge	72	1435092.89	1.2	99.7	Pulse	0.1000	3
H2	Sc	45	196084.93	1.1	100.4	Pulse	0.1000	3
H2	Ge	72	163483.48	3.3	100.3	Pulse	0.1000	3
H2	In	115	440125.66	2.5	101.6	Pulse	0.1000	3
He	Sc	45	42408.96	1.3	106.1	Pulse	0.1000	3
He	Ge	72	74945.23	0.6	103.7	Pulse	0.1000	3
He	In	115	64210.23	0.4	99.4	Pulse	0.1000	3
He	Tb	159	284060.90	0.8	99.3	Pulse	0.1000	3
He	Bi	209	223992.28	0.6	100.8	Pulse	0.1000	3

No Gas

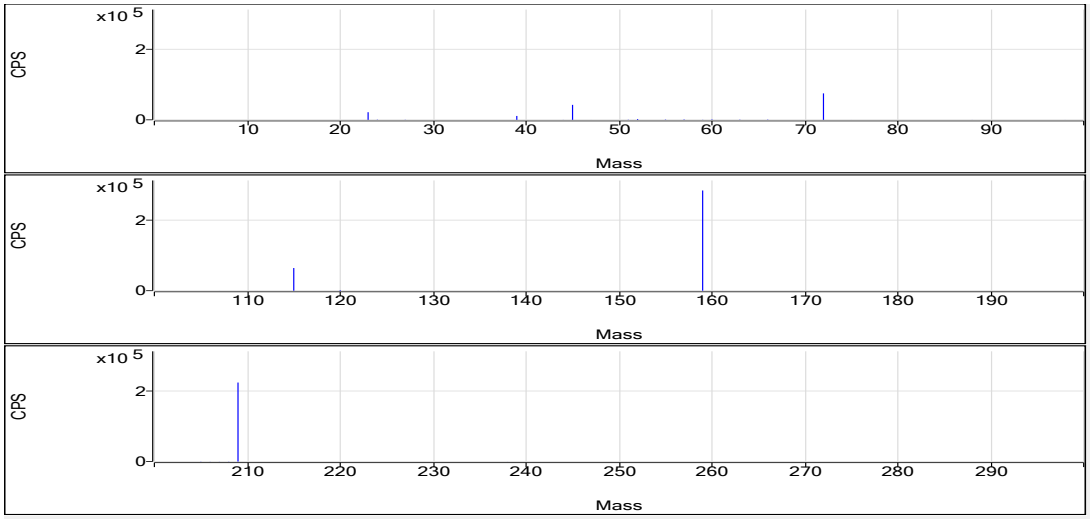


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.007	0	54.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	52.00	0.0013	4.694E-05
Be	9	1	No Gas	0.003	0.0001	74.00	0.0013	4.694E-05
Se	78	2	H2	0.044	0	4.67	0.0004	1.089E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.037	0	4.00	0.0004	1.089E-05
Na	23	3	He	104.99	0.2868	21636.29	0.0017	0.1065
Na	23	3	He	108.016	0.292	21846.58	0.0017	0.1065
Na	23	3	He	102.994	0.2834	21135.48	0.0017	0.1065
Mg	24	3	He	2.9	0.0073	550.03	0.0008	0.004846
Mg	24	3	He	2.655	0.0071	530.03	0.0008	0.004846
Mg	24	3	He	6.339	0.0102	760.05	0.0008	0.004846
Al	27	3	He	17.564	0.0053	400.02	0.0002	0.001063
Al	27	3	He	14.978	0.0047	350.02	0.0002	0.001063
Al	27	3	He	15.039	0.0047	350.02	0.0002	0.001063
K	39	3	He	20.623	0.155	11695.02	0.0006	0.1436
K	39	3	He	0.914	0.1441	10784.26	0.0006	0.1436
K	39	3	He	-7.264	0.1396	10414.02	0.0006	0.1436
Ca	44	3	He	-0.65	0.0016	120.00	0	0.001611
Ca	44	3	He	4.084	0.0017	130.01	0	0.001611
Ca	44	3	He	21.525	0.0023	170.01	0	0.001611
Ti	47	3	He	-0.034	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.04	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	1.047	0.0005	40.00	0.0003	0.0002737
V	51	3	He	-0.064	0.0066	496.01	0.0117	0.007326
V	51	3	He	-0.021	0.0071	530.01	0.0117	0.007326
V	51	3	He	-0.039	0.0069	512.01	0.0117	0.007326
Cr	52	3	He	0.24	0.029	2190.24	0.0152	0.02538
Cr	52	3	He	0.177	0.0281	2100.23	0.0152	0.02538
Cr	52	3	He	0.27	0.0295	2200.24	0.0152	0.02538
Mn	55	3	He	-0.46	0.0111	840.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.241	0.0124	930.06	0.0059	0.01385
Mn	55	3	He	-0.689	0.0098	730.05	0.0059	0.01385
Fe	57	3	He	29.491	0.0125	940.08	0.0003	0.003918
Fe	57	3	He	39.999	0.0155	1160.08	0.0003	0.003918
Fe	57	3	He	37.389	0.0147	1100.09	0.0003	0.003918
Co	59	3	He	0.025	0.0038	290.01	0.0305	0.003084
Co	59	3	He	0.057	0.0048	360.01	0.0305	0.003084
Co	59	3	He	0.026	0.0039	290.01	0.0305	0.003084
Ni	60	3	He	0.876	0.0167	1260.09	0.0088	0.009003
Ni	60	3	He	1.15	0.0191	1430.14	0.0088	0.009003
Ni	60	3	He	0.73	0.0154	1150.08	0.0088	0.009003
Cu	63	3	He	0.227	0.0106	800.05	0.0249	0.004937
Cu	63	3	He	0.118	0.0079	590.03	0.0249	0.004937
Cu	63	3	He	0.119	0.0079	590.03	0.0249	0.004937
Zn	66	3	He	1.485	0.0085	640.03	0.0025	0.004836
Zn	66	3	He	1.731	0.0091	680.04	0.0025	0.004836
Zn	66	3	He	3.053	0.0123	920.07	0.0025	0.004836
As	75	3	He	0.024	0.0005	36.00	0.0017	0.0004347
As	75	3	He	0.057	0.0005	40.00	0.0017	0.0004347
As	75	3	He	-0.049	0.0003	26.00	0.0017	0.0004347
Sr	88	3	He	0.12	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.099	0.0015	100.00	0.0078	0.0007762
Sr	88	3	He	0.021	0.0009	60.00	0.0078	0.0007762
Mo	98	3	He	0.04	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	-0.009	0.0003	20.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	1.15	0.032	2050.25	0.0143	0.01559
Sn	120	3	He	0.874	0.028	1810.19	0.0143	0.01559
Sn	120	3	He	0.693	0.0255	1630.17	0.0143	0.01559
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.055	0.0009	60.00	0.0124	0.000258
Ba	137	3	He	0.286	0.0016	100.00	0.0044	0.000309
Ba	137	3	He	0.106	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.179	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.038	0.0021	460.03	0.0276	0.001005
Tl	205	3	He	0.028	0.0018	400.02	0.0276	0.001005
Tl	205	3	He	0.036	0.002	450.03	0.0276	0.001005
Pb	208	3	He	0.038	0.0035	420.02	0.0364	0.002176
Pb	208	3	He	0.044	0.0038	390.02	0.0364	0.002176
Pb	208	3	He	0.059	0.0043	460.02	0.0364	0.002176
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
Sc	45	1	No Gas			3176172.14		
Sc	45	1	No Gas			3154489.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3231802.76		
Ge	72	1	No Gas			1429513.88		
Ge	72	1	No Gas			1420680.60		
Ge	72	1	No Gas			1455084.20		
Sc	45	2	H2			198375.04		
Sc	45	2	H2			195952.65		
Sc	45	2	H2			193927.09		
Ge	72	2	H2			166937.38		
Ge	72	2	H2			166312.24		
Ge	72	2	H2			157200.83		
In	115	2	H2			451180.54		
In	115	2	H2			439774.41		
In	115	2	H2			429422.02		
Sc	45	3	He			42412.07		
Sc	45	3	He			42943.91		
Sc	45	3	He			41870.90		
Ge	72	3	He			75437.56		
Ge	72	3	He			74814.98		
Ge	72	3	He			74583.15		
In	115	3	He			64117.60		
In	115	3	He			64549.33		
In	115	3	He			64006.59		
Tb	159	3	He			284564.80		
Tb	159	3	He			285910.37		
Tb	159	3	He			281707.52		
Bi	209	3	He			222754.55		
Bi	209	3	He			225255.48		
Bi	209	3	He			223966.81		

Quantitation Report

Data File Name	211SMPL.d
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Acq Time	2023-08-10 17:55:08
Sample Name	LCS 410-402395/2-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

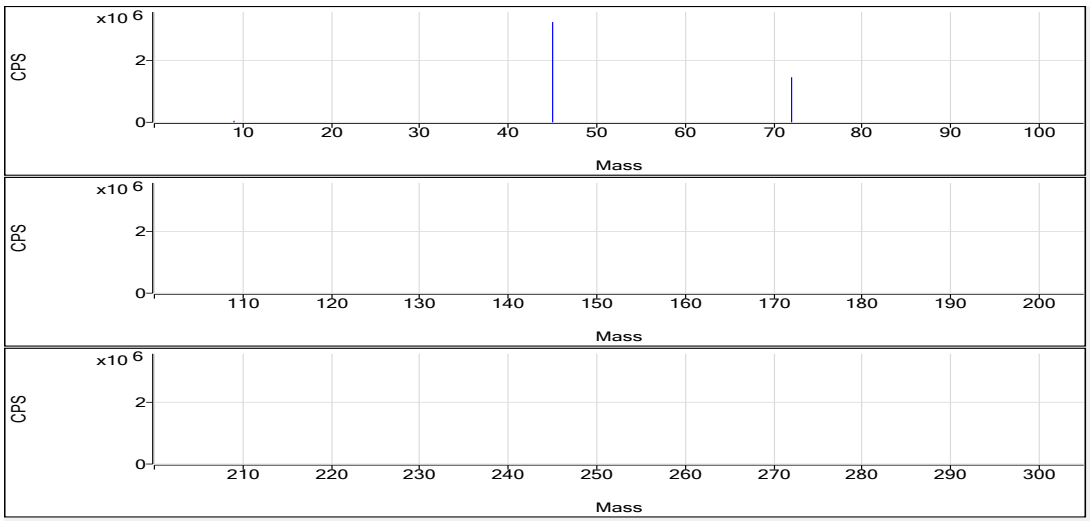
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	25.339	ppb	1.1	48500.29	0.0333	Pulse	0.5000	3
Se	78	72	H2	51.884	ppb	1.9	3337.95	0.0202	Pulse	1.5000	3
Na	23	72	He	2707.102	ppb	1.7	358270.18	4.7568	Pulse	0.1000	3
Mg	24	72	He	2613.682	ppb	1.0	166351.63	2.2084	Pulse	0.1000	3
Al	27	72	He	2578.687	ppb	2.8	46958.48	0.6235	Pulse	0.1000	3
K	39	72	He	2599.315	ppb	1.6	118930.67	1.5790	Pulse	0.1000	3
Ca	44	72	He	2547.957	ppb	5.8	6081.47	0.0808	Pulse	0.1000	3
Ti	47	72	He	253.933	ppb	0.9	4817.65	0.0640	Pulse	0.1000	3
V	51	72	He	258.764	ppb	1.4	228540.77	3.0343	Pulse	0.5000	3
Cr	52	72	He	259.878	ppb	1.4	299971.30	3.9826	Pulse	0.1000	3
Mn	55	72	He	254.827	ppb	1.7	114339.30	1.5179	Pulse	0.1000	3
Fe	57	72	He	2617.709	ppb	2.3	57414.10	0.7623	Pulse	0.1000	3
Co	59	72	He	258.319	ppb	1.4	593864.93	7.8845	Pulse	0.1000	3
Ni	60	72	He	257.687	ppb	0.5	171365.18	2.2749	Pulse	0.1000	3
Cu	63	72	He	258.887	ppb	1.6	486628.91	6.4608	Pulse	0.1000	3
Zn	66	72	He	258.152	ppb	1.2	48134.34	0.6391	Pulse	0.1000	3
As	75	72	He	256.009	ppb	0.7	33571.67	0.4457	Pulse	0.5000	3
Sr	88	115	He	27.125	ppb	2.6	13543.57	0.2128	Pulse	0.1000	3
Mo	98	115	He	26.035	ppb	1.1	36524.72	0.5738	Pulse	0.1000	3
Ag	107	115	He	25.813	ppb	1.8	74778.61	1.1750	Pulse	0.1000	3
Cd	111	115	He	26.297	ppb	1.4	8037.67	0.1263	Pulse	0.5000	3
Sn	120	115	He	54.377	ppb	1.8	50335.13	0.7909	Pulse	0.1000	3
Sb	121	115	He	51.958	ppb	1.5	41037.87	0.6448	Pulse	0.1000	3
Ba	137	115	He	259.850	ppb	0.9	72376.94	1.1371	Pulse	0.1000	3
Tl	205	209	He	51.980	ppb	0.5	319099.78	1.4380	Pulse	0.1000	3
Pb	208	209	He	26.042	ppb	0.6	210826.82	0.9500	Pulse	0.1000	3
U	238	209	He	25.803	ppb	1.2	240925.15	1.0857	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3237024.01	1.0	99.9	Pulse	0.1000	3
No Gas	Ge	72	1454728.57	1.5	101.0	Pulse	0.1000	3
H2	Sc	45	197655.87	0.9	101.2	Pulse	0.1000	3
H2	Ge	72	165171.43	1.5	101.3	Pulse	0.1000	3
H2	In	115	440469.58	2.2	101.7	Pulse	0.1000	3
He	Sc	45	42348.48	1.3	105.9	Pulse	0.1000	3
He	Ge	72	75330.59	1.5	104.2	Pulse	0.1000	3
He	In	115	63654.52	1.5	98.5	Pulse	0.1000	3
He	Tb	159	284113.69	0.0	99.3	Pulse	0.1000	3
He	Bi	209	221917.35	0.7	99.9	Pulse	0.1000	3

No Gas



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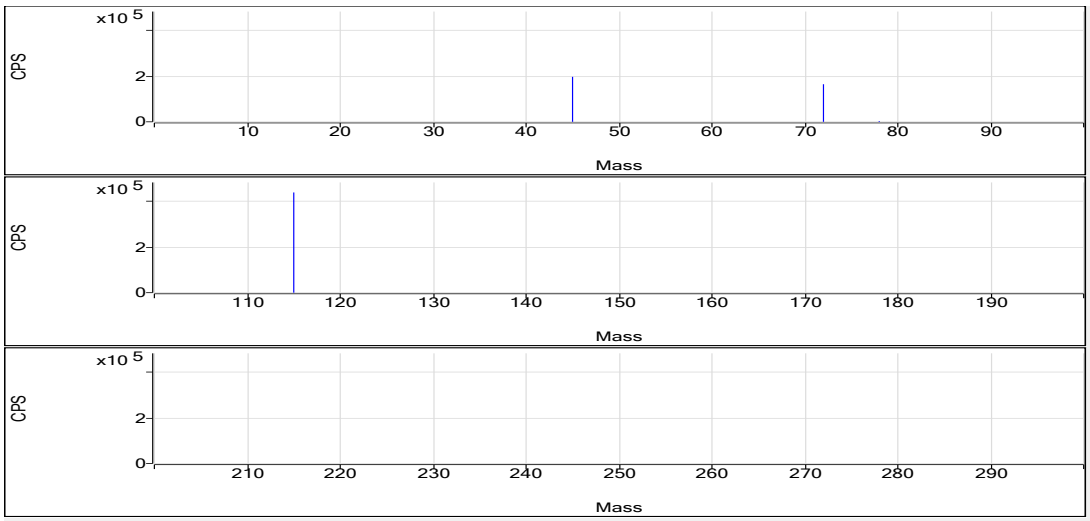
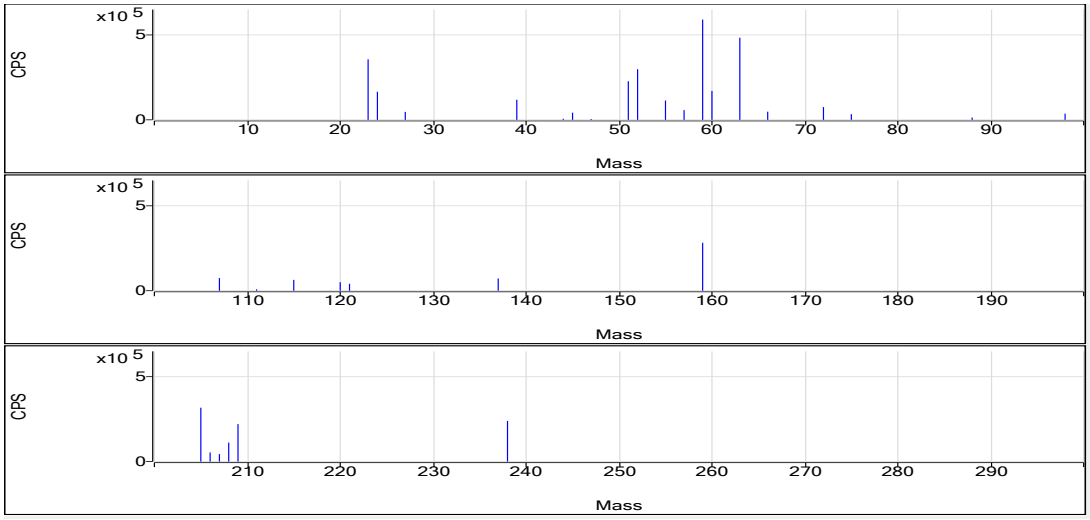


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	25.429	0.0335	48762.50	0.0013	4.694E-05
Be	9	1	No Gas	25.563	0.0336	48146.38	0.0013	4.694E-05
Be	9	1	No Gas	25.025	0.0329	48591.98	0.0013	4.694E-05
Se	78	2	H2	50.906	0.0198	3329.73	0.0004	1.089E-05
Se	78	2	H2	51.905	0.0202	3327.72	0.0004	1.089E-05
Se	78	2	H2	52.842	0.0206	3356.39	0.0004	1.089E-05
Na	23	3	He	2729.201	4.7947	359386.71	0.0017	0.1065
Na	23	3	He	2654.358	4.6662	357587.42	0.0017	0.1065
Na	23	3	He	2737.748	4.8094	357836.40	0.0017	0.1065
Mg	24	3	He	2640.077	2.2307	167200.82	0.0008	0.004846
Mg	24	3	He	2588.19	2.187	167595.08	0.0008	0.004846
Mg	24	3	He	2612.78	2.2077	164258.98	0.0008	0.004846
Al	27	3	He	2610.136	0.6311	47306.32	0.0002	0.001063
Al	27	3	He	2496.427	0.6037	46262.89	0.0002	0.001063
Al	27	3	He	2629.498	0.6358	47306.23	0.0002	0.001063
K	39	3	He	2619.766	1.5903	119200.53	0.0006	0.1436
K	39	3	He	2552.083	1.5529	119007.40	0.0006	0.1436
K	39	3	He	2626.096	1.5938	118584.09	0.0006	0.1436
Ca	44	3	He	2418.563	0.0767	5751.34	0	0.001611
Ca	44	3	He	2515.717	0.0797	6111.47	0	0.001611
Ca	44	3	He	2709.59	0.0858	6381.60	0	0.001611
Ti	47	3	He	251.659	0.0634	4750.96	0.0003	0.0002737
Ti	47	3	He	253.927	0.064	4901.01	0.0003	0.0002737
Ti	47	3	He	256.212	0.0645	4800.97	0.0003	0.0002737
V	51	3	He	259.605	3.0441	228170.61	0.0117	0.007326
V	51	3	He	254.742	2.9872	228923.52	0.0117	0.007326
V	51	3	He	261.944	3.0715	228528.19	0.0117	0.007326
Cr	52	3	He	260.199	3.9875	298881.03	0.0152	0.02538
Cr	52	3	He	256.134	3.9256	300835.46	0.0152	0.02538
Cr	52	3	He	263.301	4.0347	300197.42	0.0152	0.02538
Mn	55	3	He	251.148	1.4962	112149.27	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	253.744	1.5116	115836.93	0.0059	0.01385
Mn	55	3	He	259.589	1.5461	115031.71	0.0059	0.01385
Fe	57	3	He	2596.197	0.7561	56671.10	0.0003	0.003918
Fe	57	3	He	2572.47	0.7492	57414.23	0.0003	0.003918
Fe	57	3	He	2684.461	0.7816	58156.98	0.0003	0.003918
Co	59	3	He	258.491	7.8898	591372.96	0.0305	0.003084
Co	59	3	He	254.731	7.775	595833.08	0.0305	0.003084
Co	59	3	He	261.735	7.9887	594388.74	0.0305	0.003084
Ni	60	3	He	256.82	2.2673	169944.20	0.0088	0.009003
Ni	60	3	He	256.982	2.2687	173861.19	0.0088	0.009003
Ni	60	3	He	259.259	2.2887	170290.15	0.0088	0.009003
Cu	63	3	He	257.664	6.4303	481982.53	0.0249	0.004937
Cu	63	3	He	255.433	6.3747	488518.43	0.0249	0.004937
Cu	63	3	He	263.565	6.5775	489385.77	0.0249	0.004937
Zn	66	3	He	258.588	0.6401	47980.41	0.0025	0.004836
Zn	66	3	He	254.743	0.6307	48331.51	0.0025	0.004836
Zn	66	3	He	261.124	0.6464	48091.10	0.0025	0.004836
As	75	3	He	257.847	0.4489	33645.18	0.0017	0.0004347
As	75	3	He	254.372	0.4428	33935.89	0.0017	0.0004347
As	75	3	He	255.808	0.4453	33133.95	0.0017	0.0004347
Sr	88	3	He	27.743	0.2176	13747.08	0.0078	0.0007762
Sr	88	3	He	26.348	0.2067	13386.75	0.0078	0.0007762
Sr	88	3	He	27.285	0.2141	13496.88	0.0078	0.0007762
Mo	98	3	He	25.914	0.5712	36076.88	0.022	0.0005162
Mo	98	3	He	25.826	0.5692	36858.94	0.022	0.0005162
Mo	98	3	He	26.364	0.5811	36638.33	0.022	0.0005162
Ag	107	3	He	25.887	1.1784	74426.51	0.0455	0.0004641
Ag	107	3	He	25.323	1.1527	74637.65	0.0455	0.0004641
Ag	107	3	He	26.227	1.1938	75271.68	0.0455	0.0004641
Cd	111	3	He	26.627	0.1279	8076.38	0.0048	5.152E-05
Cd	111	3	He	25.909	0.1244	8056.35	0.0048	5.152E-05
Cd	111	3	He	26.356	0.1266	7980.29	0.0048	5.152E-05
Sn	120	3	He	54.93	0.7988	50452.03	0.0143	0.01559
Sn	120	3	He	53.273	0.7751	50191.39	0.0143	0.01559
Sn	120	3	He	54.928	0.7987	50361.96	0.0143	0.01559
Sb	121	3	He	52.283	0.6488	40981.18	0.0124	0.000258
Sb	121	3	He	51.074	0.6338	41041.18	0.0124	0.000258
Sb	121	3	He	52.516	0.6517	41091.25	0.0124	0.000258
Ba	137	3	He	262.31	1.1479	72500.78	0.0044	0.000309
Ba	137	3	He	257.894	1.1285	73073.89	0.0044	0.000309
Ba	137	3	He	259.345	1.1349	71556.15	0.0044	0.000309
Tl	205	3	He	52.053	1.44	318505.15	0.0276	0.001005
Tl	205	3	He	52.172	1.4433	318865.42	0.0276	0.001005
Tl	205	3	He	51.715	1.4306	319928.78	0.0276	0.001005
Pb	208	3	He	26.093	0.9519	112629.61	0.0364	0.002176
Pb	208	3	He	26.16	0.9543	112526.87	0.0364	0.002176
Pb	208	3	He	25.874	0.9439	111810.92	0.0364	0.002176
U	238	3	He	26.063	1.0967	242567.38	0.0421	0.00024
U	238	3	He	25.895	1.0896	240727.46	0.0421	0.00024
U	238	3	He	25.451	1.0709	239480.60	0.0421	0.00024
Sc	45	1	No Gas			3246603.70		
Sc	45	1	No Gas			3200428.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3264040.26		
Ge	72	1	No Gas			1457273.26		
Ge	72	1	No Gas			1431322.32		
Ge	72	1	No Gas			1475590.13		
Sc	45	2	H2			198911.97		
Sc	45	2	H2			195678.02		
Sc	45	2	H2			198377.61		
Ge	72	2	H2			167897.89		
Ge	72	2	H2			164570.52		
Ge	72	2	H2			163045.87		
In	115	2	H2			451736.83		
In	115	2	H2			435834.95		
In	115	2	H2			433836.95		
Sc	45	3	He			42502.64		
Sc	45	3	He			42812.94		
Sc	45	3	He			41729.87		
Ge	72	3	He			74954.44		
Ge	72	3	He			76634.05		
Ge	72	3	He			74403.28		
In	115	3	He			63555.07		
In	115	3	He			65142.29		
In	115	3	He			63444.03		
Tb	159	3	He			284006.21		
Tb	159	3	He			284127.40		
Tb	159	3	He			284207.46		
Bi	209	3	He			221188.69		
Bi	209	3	He			220934.96		
Bi	209	3	He			223628.41		

Quantitation Report

Data File Name	212SMPL.d
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Acq Time	2023-08-10 17:57:08
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

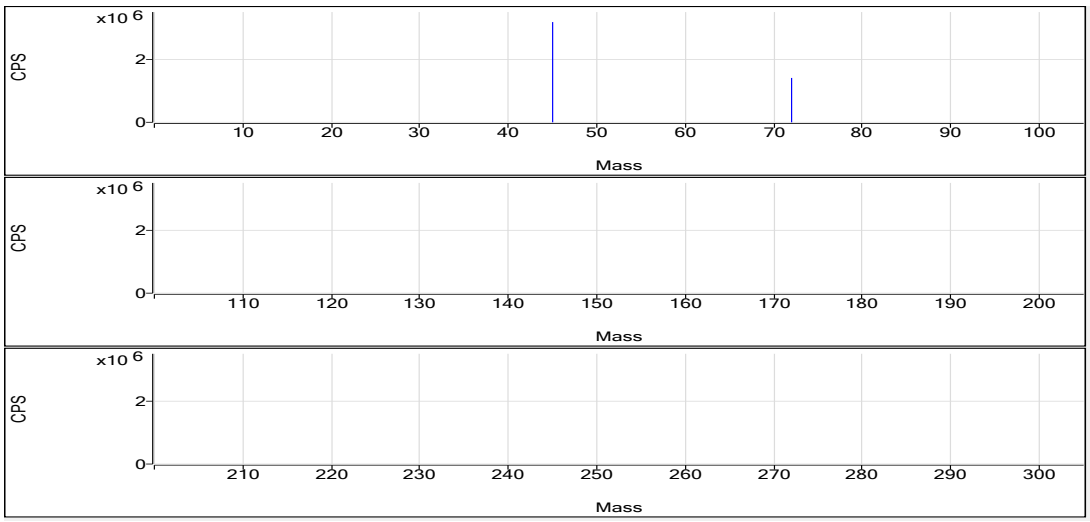
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.012	ppb	42.4	88.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.043	ppb	55.2	4.44	0.0000	Pulse	1.5000	3
Na	23	72	He	4.756	ppb	35.8	8385.97	0.1146	Pulse	0.1000	3
Mg	24	72	He	4.145	ppb	22.1	610.04	0.0083	Pulse	0.1000	3
Al	27	72	He	11.051	ppb	27.9	273.35	0.0037	Pulse	0.1000	3
K	39	72	He	14.021	ppb	100.1	11081.22	0.1514	Pulse	0.1000	3
Ca	44	72	He	-13.765	ppb	N/A	86.67	0.0012	Pulse	0.1000	3
Ti	47	72	He	0.546	ppb	174.5	30.00	0.0004	Pulse	0.1000	3
V	51	72	He	0.120	ppb	8.2	638.69	0.0087	Pulse	0.5000	3
Cr	52	72	He	0.024	ppb	202.5	1883.53	0.0257	Pulse	0.1000	3
Mn	55	72	He	-0.926	ppb	N/A	613.37	0.0084	Pulse	0.1000	3
Fe	57	72	He	28.297	ppb	17.5	886.72	0.0121	Pulse	0.1000	3
Co	59	72	He	0.117	ppb	15.9	486.69	0.0067	Pulse	0.1000	3
Ni	60	72	He	0.956	ppb	17.3	1273.44	0.0174	Pulse	0.1000	3
Cu	63	72	He	0.054	ppb	65.7	460.02	0.0063	Pulse	0.1000	3
Zn	66	72	He	0.293	ppb	42.1	406.69	0.0056	Pulse	0.1000	3
As	75	72	He	0.059	ppb	103.6	39.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.122	ppb	62.9	110.00	0.0017	Pulse	0.1000	3
Mo	98	115	He	0.005	ppb	242.3	40.00	0.0006	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	104.3	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	76.0	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.023	ppb	680.7	1013.41	0.0159	Pulse	0.1000	3
Sb	121	115	He	0.025	ppb	122.4	36.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.217	ppb	29.6	80.00	0.0013	Pulse	0.1000	3
Tl	205	209	He	0.144	ppb	19.6	1096.76	0.0050	Pulse	0.1000	3
Pb	208	209	He	0.036	ppb	9.8	766.71	0.0035	Pulse	0.1000	3
U	238	209	He	0.011	ppb	43.9	153.34	0.0007	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3165055.27	2.4	97.7	Pulse	0.1000	3
No Gas	Ge	72	1400972.01	2.2	97.3	Pulse	0.1000	3
H2	Sc	45	195434.89	3.2	100.0	Pulse	0.1000	3
H2	Ge	72	161072.00	2.9	98.8	Pulse	0.1000	3
H2	In	115	439407.61	2.0	101.4	Pulse	0.1000	3
He	Sc	45	41459.22	2.8	103.7	Pulse	0.1000	3
He	Ge	72	73172.76	1.1	101.2	Pulse	0.1000	3
He	In	115	63690.86	2.7	98.6	Pulse	0.1000	3
He	Tb	159	283725.91	0.5	99.2	Pulse	0.1000	3
He	Bi	209	220215.48	0.8	99.1	Pulse	0.1000	3

No Gas



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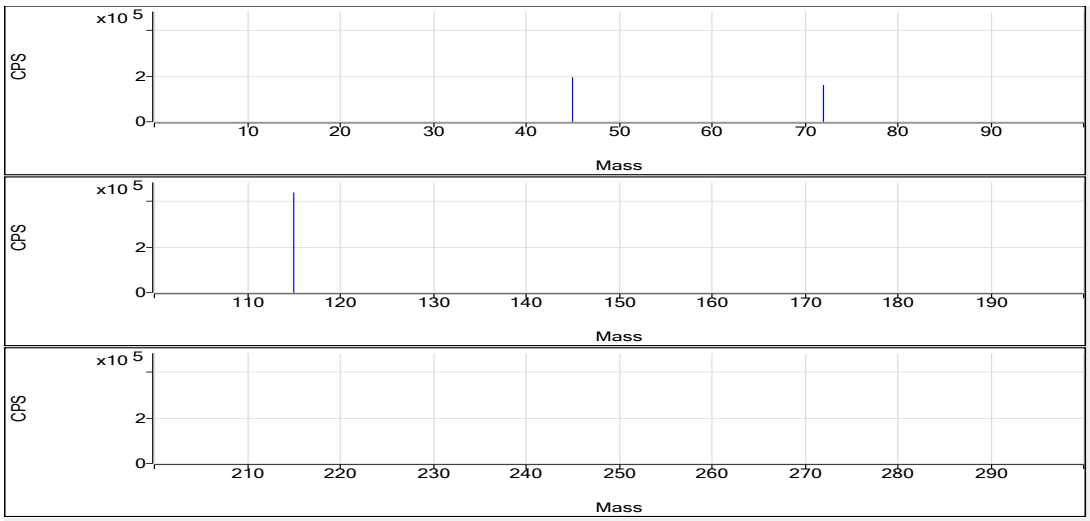
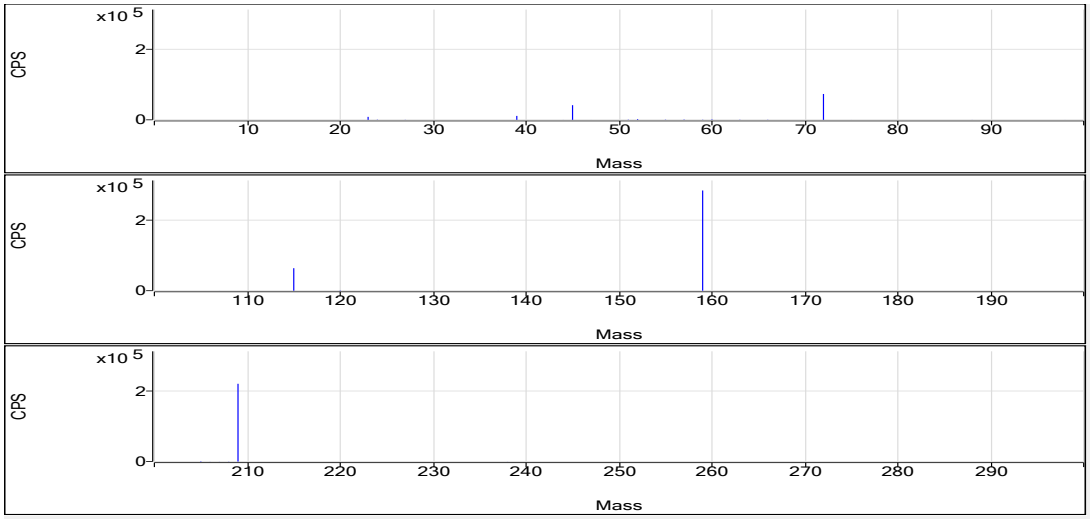


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.017	0.0001	98.00	0.0013	4.694E-05
Be	9	1	No Gas	0.007	0.0001	76.00	0.0013	4.694E-05
Be	9	1	No Gas	0.014	0.0001	92.00	0.0013	4.694E-05
Se	78	2	H2	0.023	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.037	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.07	0	6.00	0.0004	1.089E-05
Na	23	3	He	2.799	0.1113	8242.55	0.0017	0.1065
Na	23	3	He	5.552	0.116	8422.69	0.0017	0.1065
Na	23	3	He	5.916	0.1166	8492.67	0.0017	0.1065
Mg	24	3	He	3.539	0.0078	580.04	0.0008	0.004846
Mg	24	3	He	5.197	0.0092	670.04	0.0008	0.004846
Mg	24	3	He	3.699	0.008	580.03	0.0008	0.004846
Al	27	3	He	14.611	0.0046	340.02	0.0002	0.001063
Al	27	3	He	9.29	0.0033	240.01	0.0002	0.001063
Al	27	3	He	9.25	0.0033	240.01	0.0002	0.001063
K	39	3	He	29.925	0.1602	11865.14	0.0006	0.1436
K	39	3	He	3.34	0.1455	10564.20	0.0006	0.1436
K	39	3	He	8.798	0.1485	10814.32	0.0006	0.1436
Ca	44	3	He	-8.404	0.0013	100.00	0	0.001611
Ca	44	3	He	-16.394	0.0011	80.00	0	0.001611
Ca	44	3	He	-16.497	0.0011	80.00	0	0.001611
Ti	47	3	He	-0.015	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	0.007	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.646	0.0007	50.00	0.0003	0.0002737
V	51	3	He	0.126	0.0088	652.02	0.0117	0.007326
V	51	3	He	0.125	0.0088	638.02	0.0117	0.007326
V	51	3	He	0.109	0.0086	626.02	0.0117	0.007326
Cr	52	3	He	0	0.0254	1880.19	0.0152	0.02538
Cr	52	3	He	0.079	0.0266	1930.21	0.0152	0.02538
Cr	52	3	He	-0.008	0.0253	1840.19	0.0152	0.02538
Mn	55	3	He	-1.021	0.0078	580.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.76	0.0094	680.05	0.0059	0.01385
Mn	55	3	He	-0.998	0.008	580.03	0.0059	0.01385
Fe	57	3	He	28.88	0.0123	910.06	0.0003	0.003918
Fe	57	3	He	23.081	0.0106	770.05	0.0003	0.003918
Fe	57	3	He	32.929	0.0135	980.06	0.0003	0.003918
Co	59	3	He	0.12	0.0067	500.03	0.0305	0.003084
Co	59	3	He	0.134	0.0072	520.03	0.0305	0.003084
Co	59	3	He	0.097	0.006	440.02	0.0305	0.003084
Ni	60	3	He	0.865	0.0166	1230.10	0.0088	0.009003
Ni	60	3	He	0.856	0.0165	1200.10	0.0088	0.009003
Ni	60	3	He	1.147	0.0191	1390.12	0.0088	0.009003
Cu	63	3	He	0.056	0.0063	470.02	0.0249	0.004937
Cu	63	3	He	0.017	0.0054	390.02	0.0249	0.004937
Cu	63	3	He	0.088	0.0071	520.03	0.0249	0.004937
Zn	66	3	He	0.394	0.0058	430.02	0.0025	0.004836
Zn	66	3	He	0.33	0.0056	410.02	0.0025	0.004836
Zn	66	3	He	0.155	0.0052	380.02	0.0025	0.004836
As	75	3	He	0.029	0.0005	36.00	0.0017	0.0004347
As	75	3	He	0.13	0.0007	48.00	0.0017	0.0004347
As	75	3	He	0.019	0.0005	34.00	0.0017	0.0004347
Sr	88	3	He	0.062	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.209	0.0024	150.01	0.0078	0.0007762
Sr	88	3	He	0.096	0.0015	100.00	0.0078	0.0007762
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	-0.009	0.0003	20.00	0.022	0.0005162
Mo	98	3	He	0.011	0.0008	50.00	0.022	0.0005162
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	-0.151	0.0134	850.05	0.0143	0.01559
Sn	120	3	He	0.147	0.0177	1100.09	0.0143	0.01559
Sn	120	3	He	0.072	0.0166	1090.08	0.0143	0.01559
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.053	0.0009	60.00	0.0124	0.000258
Ba	137	3	He	0.291	0.0016	100.00	0.0044	0.000309
Ba	137	3	He	0.187	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.173	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.161	0.0055	1210.09	0.0276	0.001005
Tl	205	3	He	0.159	0.0054	1180.11	0.0276	0.001005
Tl	205	3	He	0.111	0.0041	900.07	0.0276	0.001005
Pb	208	3	He	0.034	0.0034	380.02	0.0364	0.002176
Pb	208	3	He	0.033	0.0034	400.02	0.0364	0.002176
Pb	208	3	He	0.04	0.0036	470.03	0.0364	0.002176
U	238	3	He	0.016	0.0009	200.01	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
U	238	3	He	0.01	0.0007	150.01	0.0421	0.00024
Sc	45	1	No Gas			3177676.83		
Sc	45	1	No Gas			3083884.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3233604.33		
Ge	72	1	No Gas			1417283.57		
Ge	72	1	No Gas			1365696.54		
Ge	72	1	No Gas			1419935.92		
Sc	45	2	H2			202684.61		
Sc	45	2	H2			192265.33		
Sc	45	2	H2			191354.74		
Ge	72	2	H2			166442.60		
Ge	72	2	H2			159129.57		
Ge	72	2	H2			157643.82		
In	115	2	H2			448880.42		
In	115	2	H2			437806.09		
In	115	2	H2			431536.32		
Sc	45	3	He			42381.62		
Sc	45	3	He			40155.70		
Sc	45	3	He			41840.35		
Ge	72	3	He			74080.48		
Ge	72	3	He			72613.67		
Ge	72	3	He			72824.14		
In	115	3	He			63293.54		
In	115	3	He			62198.76		
In	115	3	He			65603.99		
Tb	159	3	He			285309.59		
Tb	159	3	He			282443.32		
Tb	159	3	He			283424.82		
Bi	209	3	He			221664.47		
Bi	209	3	He			218403.20		
Bi	209	3	He			220578.77		

Quantitation Report

Data File Name	213_CCV.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 17:59:09
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

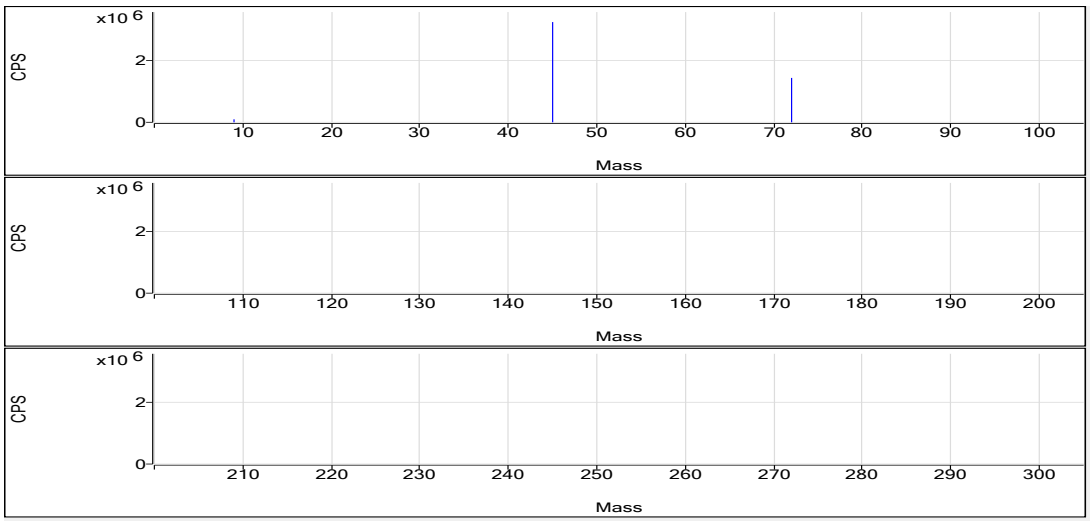
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.895	ppb	3.3	95860.61	0.0669	Pulse	0.5000	3
Se	78	72	H2	53.343	ppb	5.3	3337.50	0.0208	Pulse	1.5000	3
Na	23	72	He	5308.727	ppb	2.8	678267.59	9.2259	Pulse	0.1000	3
Mg	24	72	He	5366.496	ppb	1.4	333027.77	4.5293	Pulse	0.1000	3
Al	27	72	He	5249.071	ppb	1.5	93242.40	1.2682	Pulse	0.1000	3
K	39	72	He	5341.829	ppb	2.2	227442.52	3.0935	Pulse	0.1000	3
Ca	44	72	He	5246.630	ppb	2.7	12098.69	0.1646	Pulse	0.1000	3
Ti	47	72	He	5419.582	ppb	2.5	99939.79	1.3594	Pulse	0.1000	3
V	51	72	He	531.781	ppb	1.9	457904.74	6.2280	Pulse	0.5000	3
Cr	52	72	He	532.146	ppb	1.6	597655.63	8.1285	Pulse	0.1000	3
Mn	55	72	He	524.290	ppb	2.0	228540.29	3.1084	Pulse	0.1000	3
Fe	57	72	He	5270.110	ppb	2.5	112549.71	1.5307	Pulse	0.1000	3
Co	59	72	He	529.698	ppb	1.8	1188475.74	16.1644	Pulse	0.1000	3
Ni	60	72	He	530.550	ppb	2.0	343670.92	4.6743	Pulse	0.1000	3
Cu	63	72	He	530.323	ppb	1.4	972738.01	13.2297	Pulse	0.1000	3
Zn	66	72	He	529.733	ppb	1.6	96067.73	1.3063	Pulse	0.1000	3
As	75	72	He	522.589	ppb	1.9	66858.53	0.9093	Pulse	0.5000	3
Sr	88	115	He	53.004	ppb	1.6	26675.65	0.4151	Pulse	0.1000	3
Mo	98	115	He	51.605	ppb	1.6	73048.92	1.1369	Pulse	0.1000	3
Ag	107	115	He	51.619	ppb	0.7	150966.16	2.3492	Pulse	0.1000	3
Cd	111	115	He	52.236	ppb	1.8	16115.94	0.2508	Pulse	0.5000	3
Sn	120	115	He	52.302	ppb	1.5	48916.58	0.7613	Pulse	0.1000	3
Sb	121	115	He	53.104	ppb	0.2	42351.95	0.6590	Pulse	0.1000	3
Ba	137	115	He	520.062	ppb	1.8	146201.02	2.2755	Pulse	0.1000	3
Tl	205	209	He	52.856	ppb	1.2	322359.67	1.4622	Pulse	0.1000	3
Pb	208	209	He	52.854	ppb	0.7	424603.43	1.9259	Pulse	0.1000	3
U	238	209	He	52.102	ppb	0.2	483277.42	2.1920	Pulse	0.1000	3

ISTD Table:

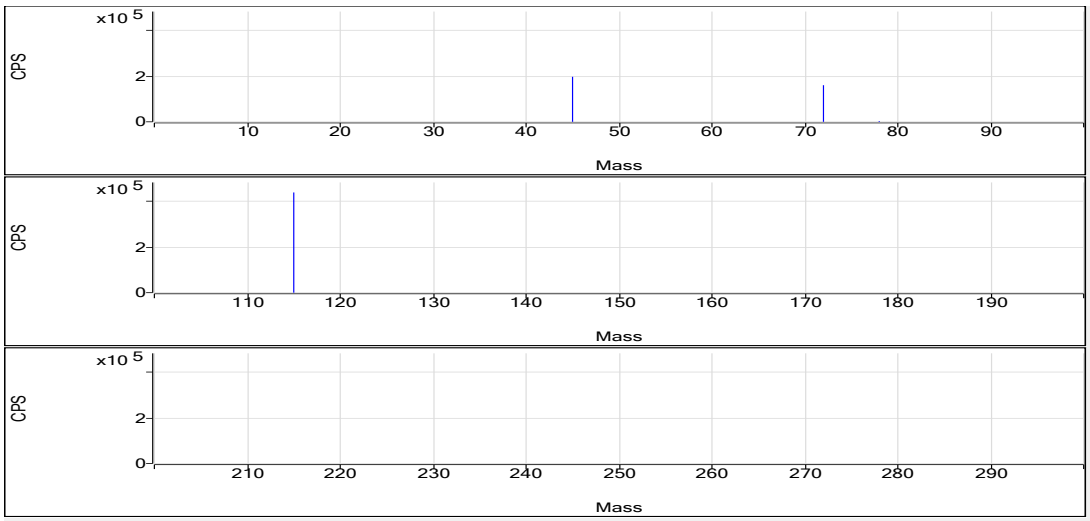
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3234780.68	2.3	99.8	Pulse	0.1000	3
No Gas	Ge	72	1432699.51	1.3	99.5	Pulse	0.1000	3
H2	Sc	45	197599.80	1.8	101.1	Pulse	0.1000	3
H2	Ge	72	160681.78	1.5	98.6	Pulse	0.1000	3
H2	In	115	439918.82	1.3	101.5	Pulse	0.1000	3
He	Sc	45	41843.92	2.0	104.6	Pulse	0.1000	3
He	Ge	72	73538.27	1.7	101.7	Pulse	0.1000	3
He	In	115	64264.73	2.1	99.5	Pulse	0.1000	3
He	Tb	159	285277.77	1.4	99.7	Pulse	0.1000	3
He	Bi	209	220473.15	0.5	99.2	Pulse	0.1000	3

No Gas

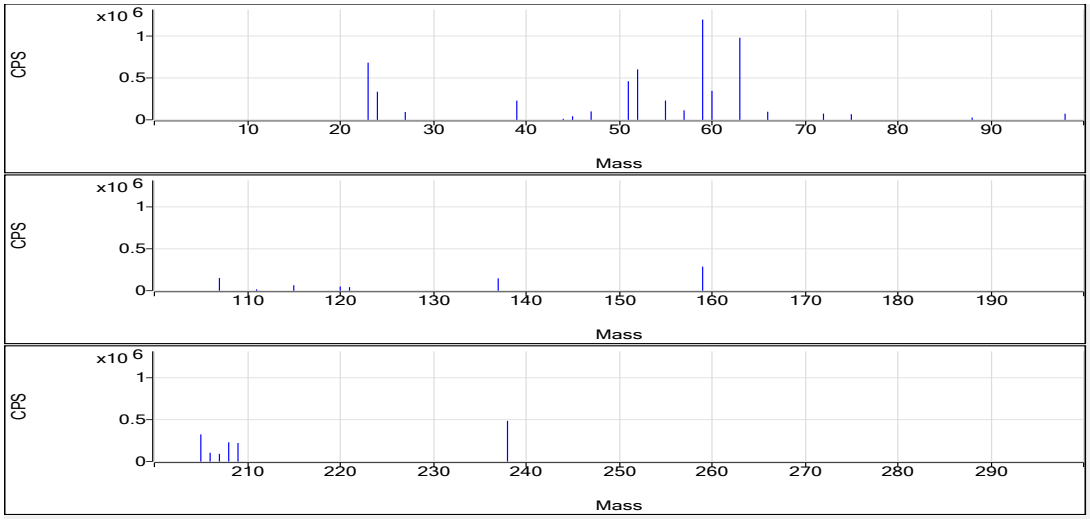


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.465	0.069	98335.47	0.0013	4.694E-05
Be	9	1	No Gas	51.125	0.0672	95421.22	0.0013	4.694E-05
Be	9	1	No Gas	49.094	0.0646	93825.15	0.0013	4.694E-05
Se	78	2	H2	50.329	0.0196	3184.36	0.0004	1.089E-05
Se	78	2	H2	55.997	0.0218	3445.75	0.0004	1.089E-05
Se	78	2	H2	53.703	0.0209	3382.40	0.0004	1.089E-05
Na	23	3	He	5430.376	9.4349	681209.05	0.0017	0.1065
Na	23	3	He	5144.593	8.9439	667436.24	0.0017	0.1065
Na	23	3	He	5351.214	9.2989	686157.49	0.0017	0.1065
Mg	24	3	He	5443.974	4.5947	331740.70	0.0008	0.004846
Mg	24	3	He	5289.873	4.4647	333178.86	0.0008	0.004846
Mg	24	3	He	5365.639	4.5286	334163.75	0.0008	0.004846
Al	27	3	He	5330.424	1.2878	92980.45	0.0002	0.001063
Al	27	3	He	5169.538	1.249	93202.79	0.0002	0.001063
Al	27	3	He	5247.25	1.2677	93543.97	0.0002	0.001063
K	39	3	He	5426.309	3.1401	226719.92	0.0006	0.1436
K	39	3	He	5207.946	3.0195	225330.47	0.0006	0.1436
K	39	3	He	5391.231	3.1207	230277.16	0.0006	0.1436
Ca	44	3	He	5399.7	0.1693	12225.46	0	0.001611
Ca	44	3	He	5127.703	0.1609	12005.32	0	0.001611
Ca	44	3	He	5212.487	0.1635	12065.28	0	0.001611
Ti	47	3	He	5557.945	1.3941	100655.06	0.0003	0.0002737
Ti	47	3	He	5287.573	1.3263	98973.35	0.0003	0.0002737
Ti	47	3	He	5413.228	1.3578	100190.96	0.0003	0.0002737
V	51	3	He	540.509	6.3301	457038.56	0.0117	0.007326
V	51	3	He	520.939	6.1011	455293.56	0.0117	0.007326
V	51	3	He	533.896	6.2527	461382.09	0.0117	0.007326
Cr	52	3	He	541.775	8.2751	597475.46	0.0152	0.02538
Cr	52	3	He	526.508	8.0427	600178.12	0.0152	0.02538
Cr	52	3	He	528.156	8.0678	595313.31	0.0152	0.02538
Mn	55	3	He	533.738	3.1642	228458.92	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	512.686	3.0399	226853.82	0.0059	0.01385
Mn	55	3	He	526.446	3.1212	230308.14	0.0059	0.01385
Fe	57	3	He	5314.803	1.5437	111456.58	0.0003	0.003918
Fe	57	3	He	5123.508	1.4883	111061.43	0.0003	0.003918
Fe	57	3	He	5372.018	1.5603	115131.13	0.0003	0.003918
Co	59	3	He	538.79	16.4418	1187119.67	0.0305	0.003084
Co	59	3	He	519.947	15.8669	1184059.75	0.0305	0.003084
Co	59	3	He	530.358	16.1846	1194247.79	0.0305	0.003084
Ni	60	3	He	538.71	4.746	342669.72	0.0088	0.009003
Ni	60	3	He	518.288	4.5665	340769.64	0.0088	0.009003
Ni	60	3	He	534.651	4.7104	347573.39	0.0088	0.009003
Cu	63	3	He	537.802	13.4162	968662.72	0.0249	0.004937
Cu	63	3	He	523.062	13.0486	973742.33	0.0249	0.004937
Cu	63	3	He	530.107	13.2243	975808.97	0.0249	0.004937
Zn	66	3	He	522.82	1.2893	93087.79	0.0025	0.004836
Zn	66	3	He	527.141	1.2999	97004.03	0.0025	0.004836
Zn	66	3	He	539.237	1.3296	98111.38	0.0025	0.004836
As	75	3	He	527.96	0.9186	66327.52	0.0017	0.0004347
As	75	3	He	511.427	0.8899	66407.82	0.0017	0.0004347
As	75	3	He	528.38	0.9194	67840.25	0.0017	0.0004347
Sr	88	3	He	52.474	0.411	25974.43	0.0078	0.0007762
Sr	88	3	He	53.961	0.4226	26966.00	0.0078	0.0007762
Sr	88	3	He	52.576	0.4118	27086.51	0.0078	0.0007762
Mo	98	3	He	52.042	1.1466	72466.14	0.022	0.0005162
Mo	98	3	He	52.14	1.1487	73300.34	0.022	0.0005162
Mo	98	3	He	50.633	1.1155	73380.28	0.022	0.0005162
Ag	107	3	He	51.957	2.3645	149446.38	0.0455	0.0004641
Ag	107	3	He	51.254	2.3325	148840.99	0.0455	0.0004641
Ag	107	3	He	51.647	2.3504	154611.12	0.0455	0.0004641
Cd	111	3	He	53.251	0.2557	16159.33	0.0048	5.152E-05
Cd	111	3	He	51.391	0.2467	15744.85	0.0048	5.152E-05
Cd	111	3	He	52.064	0.25	16443.65	0.0048	5.152E-05
Sn	120	3	He	53.201	0.7741	48926.53	0.0143	0.01559
Sn	120	3	He	52.033	0.7575	48334.73	0.0143	0.01559
Sn	120	3	He	51.672	0.7523	49488.49	0.0143	0.01559
Sb	121	3	He	52.966	0.6573	41542.81	0.0124	0.000258
Sb	121	3	He	53.196	0.6602	42124.94	0.0124	0.000258
Sb	121	3	He	53.15	0.6596	43388.09	0.0124	0.000258
Ba	137	3	He	530.17	2.3197	146611.50	0.0044	0.000309
Ba	137	3	He	517.849	2.2658	144581.37	0.0044	0.000309
Ba	137	3	He	512.167	2.2409	147410.20	0.0044	0.000309
Tl	205	3	He	52.581	1.4546	321958.75	0.0276	0.001005
Tl	205	3	He	52.395	1.4494	319884.98	0.0276	0.001005
Tl	205	3	He	53.592	1.4825	325235.27	0.0276	0.001005
Pb	208	3	He	52.458	1.9115	226640.06	0.0364	0.002176
Pb	208	3	He	52.992	1.931	229323.20	0.0364	0.002176
Pb	208	3	He	53.11	1.9352	230037.89	0.0364	0.002176
U	238	3	He	51.997	2.1876	484212.30	0.0421	0.00024
U	238	3	He	52.111	2.1924	483860.15	0.0421	0.00024
U	238	3	He	52.196	2.196	481759.80	0.0421	0.00024
Sc	45	1	No Gas			3183805.27		
Sc	45	1	No Gas			3199722.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3320814.33		
Ge	72	1	No Gas			1425388.10		
Ge	72	1	No Gas			1419383.73		
Ge	72	1	No Gas			1453326.70		
Sc	45	2	H2			201783.10		
Sc	45	2	H2			195214.51		
Sc	45	2	H2			195801.79		
Ge	72	2	H2			162407.30		
Ge	72	2	H2			157960.57		
Ge	72	2	H2			161677.47		
In	115	2	H2			445460.70		
In	115	2	H2			434069.72		
In	115	2	H2			440226.05		
Sc	45	3	He			42281.54		
Sc	45	3	He			42352.60		
Sc	45	3	He			40897.62		
Ge	72	3	He			72201.21		
Ge	72	3	He			74624.36		
Ge	72	3	He			73789.23		
In	115	3	He			63584.54		
In	115	3	He			64187.53		
In	115	3	He			66166.77		
Tb	159	3	He			285269.64		
Tb	159	3	He			281318.61		
Tb	159	3	He			289245.05		
Bi	209	3	He			221341.36		
Bi	209	3	He			220697.83		
Bi	209	3	He			219380.27		

Quantitation Report

Data File Name	214_CCB.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:01:09
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

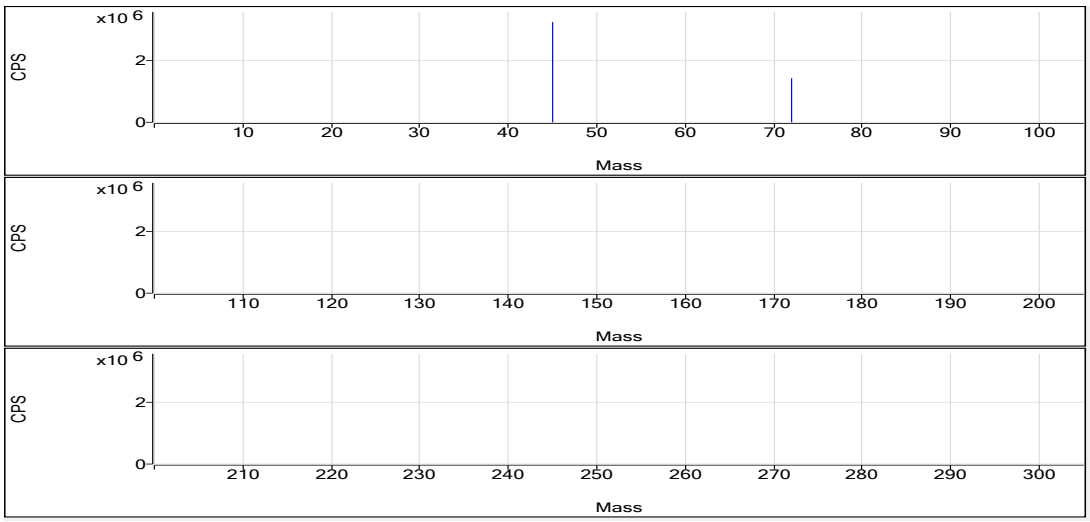
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.017	ppb	42.1	98.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.037	ppb	52.9	4.00	0.0000	Pulse	1.5000	3
Na	23	72	He	3.644	ppb	18.0	8285.93	0.1127	Pulse	0.1000	3
Mg	24	72	He	3.123	ppb	21.1	550.03	0.0075	Pulse	0.1000	3
Al	27	72	He	9.885	ppb	18.6	253.34	0.0034	Pulse	0.1000	3
K	39	72	He	3.296	ppb	321.2	10694.26	0.1455	Pulse	0.1000	3
Ca	44	72	He	21.105	ppb	28.9	166.68	0.0023	Pulse	0.1000	3
Ti	47	72	He	2.345	ppb	58.0	63.33	0.0009	Pulse	0.1000	3
V	51	72	He	0.182	ppb	32.9	694.69	0.0095	Pulse	0.5000	3
Cr	52	72	He	0.023	ppb	810.2	1893.52	0.0257	Pulse	0.1000	3
Mn	55	72	He	-0.963	ppb	N/A	600.03	0.0082	Pulse	0.1000	3
Fe	57	72	He	25.351	ppb	33.1	826.72	0.0113	Pulse	0.1000	3
Co	59	72	He	0.132	ppb	8.4	523.36	0.0071	Pulse	0.1000	3
Ni	60	72	He	1.069	ppb	19.7	1353.45	0.0184	Pulse	0.1000	3
Cu	63	72	He	0.100	ppb	32.9	546.70	0.0074	Pulse	0.1000	3
Zn	66	72	He	0.060	ppb	838.7	366.69	0.0050	Pulse	0.1000	3
As	75	72	He	0.146	ppb	79.2	50.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.075	ppb	45.0	86.67	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.033	ppb	20.0	80.00	0.0013	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	67.7	46.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	44.9	8.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.094	ppb	74.3	1080.08	0.0169	Pulse	0.1000	3
Sb	121	115	He	0.055	ppb	20.5	60.00	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.156	ppb	11.0	63.33	0.0010	Pulse	0.1000	3
Tl	205	209	He	0.178	ppb	15.2	1306.78	0.0059	Pulse	0.1000	3
Pb	208	209	He	0.028	ppb	74.0	703.37	0.0032	Pulse	0.1000	3
U	238	209	He	0.017	ppb	34.2	213.34	0.0010	Pulse	0.1000	3

ISTD Table:

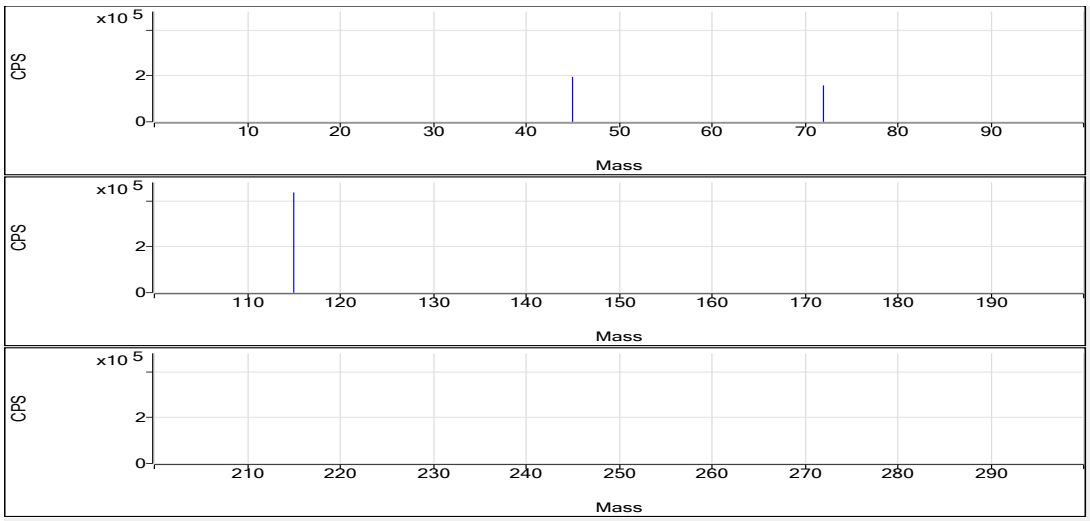
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3234914.95	1.4	99.8	Pulse	0.1000	3
No Gas	Ge	72	1421607.69	0.7	98.7	Pulse	0.1000	3
H2	Sc	45	195691.55	0.8	100.2	Pulse	0.1000	3
H2	Ge	72	158642.57	2.2	97.3	Pulse	0.1000	3
H2	In	115	436745.19	0.8	100.8	Pulse	0.1000	3
He	Sc	45	42198.35	0.2	105.5	Pulse	0.1000	3
He	Ge	72	73507.58	1.0	101.7	Pulse	0.1000	3
He	In	115	63864.50	1.8	98.9	Pulse	0.1000	3
He	Tb	159	284363.25	0.5	99.4	Pulse	0.1000	3
He	Bi	209	220597.59	0.1	99.3	Pulse	0.1000	3

No Gas

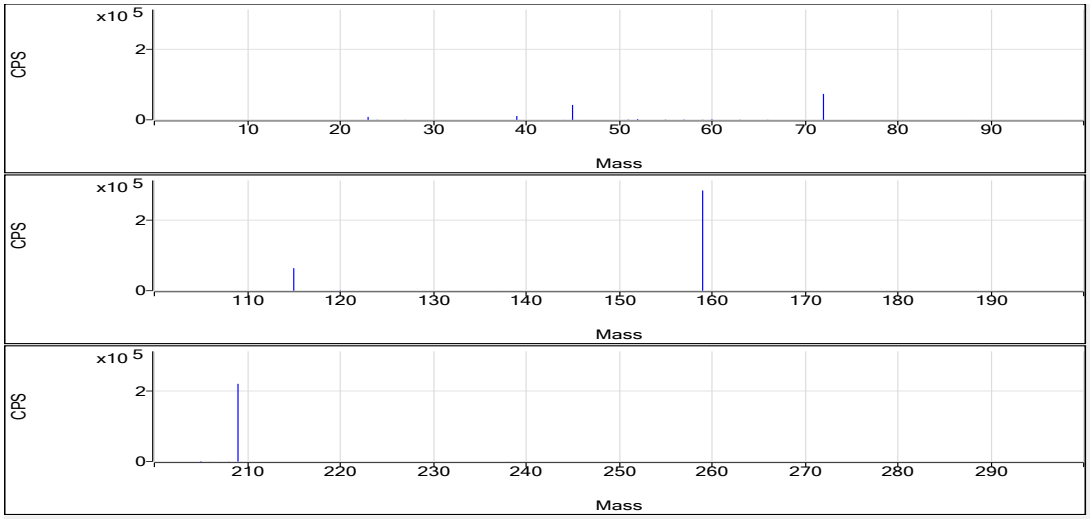


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0.0001	88.00	0.0013	4.694E-05
Be	9	1	No Gas	0.025	0.0001	112.00	0.0013	4.694E-05
Be	9	1	No Gas	0.014	0.0001	94.00	0.0013	4.694E-05
Se	78	2	H2	0.025	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.027	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.059	0	5.33	0.0004	1.089E-05
Na	23	3	He	3.648	0.1127	8342.62	0.0017	0.1065
Na	23	3	He	4.299	0.1138	8402.62	0.0017	0.1065
Na	23	3	He	2.986	0.1116	8112.56	0.0017	0.1065
Mg	24	3	He	3.708	0.008	590.03	0.0008	0.004846
Mg	24	3	He	3.252	0.0076	560.03	0.0008	0.004846
Mg	24	3	He	2.41	0.0069	500.03	0.0008	0.004846
Al	27	3	He	7.912	0.003	220.01	0.0002	0.001063
Al	27	3	He	10.191	0.0035	260.01	0.0002	0.001063
Al	27	3	He	11.552	0.0039	280.01	0.0002	0.001063
K	39	3	He	15.511	0.1522	11264.76	0.0006	0.1436
K	39	3	He	-2.406	0.1423	10504.05	0.0006	0.1436
K	39	3	He	-3.216	0.1419	10313.98	0.0006	0.1436
Ca	44	3	He	22.093	0.0023	170.01	0	0.001611
Ca	44	3	He	26.655	0.0024	180.01	0	0.001611
Ca	44	3	He	14.566	0.0021	150.01	0	0.001611
Ti	47	3	He	1.064	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	3.771	0.0012	90.00	0.0003	0.0002737
Ti	47	3	He	2.199	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.152	0.0091	674.02	0.0117	0.007326
V	51	3	He	0.143	0.009	664.02	0.0117	0.007326
V	51	3	He	0.251	0.0103	746.02	0.0117	0.007326
Cr	52	3	He	0.152	0.0277	2050.21	0.0152	0.02538
Cr	52	3	He	0.113	0.0271	2000.20	0.0152	0.02538
Cr	52	3	He	-0.195	0.0224	1630.14	0.0152	0.02538
Mn	55	3	He	-1.134	0.0072	530.03	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.993	0.008	590.03	0.0059	0.01385
Mn	55	3	He	-0.762	0.0094	680.04	0.0059	0.01385
Fe	57	3	He	19.126	0.0095	700.04	0.0003	0.003918
Fe	57	3	He	22.02	0.0103	760.05	0.0003	0.003918
Fe	57	3	He	34.906	0.014	1020.07	0.0003	0.003918
Co	59	3	He	0.12	0.0068	500.03	0.0305	0.003084
Co	59	3	He	0.134	0.0072	530.03	0.0305	0.003084
Co	59	3	He	0.142	0.0074	540.03	0.0305	0.003084
Ni	60	3	He	1.251	0.02	1480.13	0.0088	0.009003
Ni	60	3	He	1.118	0.0188	1390.11	0.0088	0.009003
Ni	60	3	He	0.838	0.0164	1190.10	0.0088	0.009003
Cu	63	3	He	0.078	0.0069	510.02	0.0249	0.004937
Cu	63	3	He	0.085	0.007	520.03	0.0249	0.004937
Cu	63	3	He	0.139	0.0084	610.04	0.0249	0.004937
Zn	66	3	He	-0.099	0.0046	340.02	0.0025	0.004836
Zn	66	3	He	0.623	0.0064	470.03	0.0025	0.004836
Zn	66	3	He	-0.345	0.004	290.01	0.0025	0.004836
As	75	3	He	0.076	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.28	0.0009	68.00	0.0017	0.0004347
As	75	3	He	0.082	0.0006	42.00	0.0017	0.0004347
Sr	88	3	He	0.105	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.081	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.038	0.0011	70.00	0.0078	0.0007762
Mo	98	3	He	0.027	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.041	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.032	0.0012	80.00	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.023	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.008	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.171	0.018	1130.08	0.0143	0.01559
Sn	120	3	He	0.037	0.0161	1030.09	0.0143	0.01559
Sn	120	3	He	0.072	0.0166	1080.08	0.0143	0.01559
Sb	121	3	He	0.044	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.055	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.066	0.0011	70.00	0.0124	0.000258
Ba	137	3	He	0.148	0.001	60.00	0.0044	0.000309
Ba	137	3	He	0.144	0.0009	60.00	0.0044	0.000309
Ba	137	3	He	0.175	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.171	0.0057	1260.10	0.0276	0.001005
Tl	205	3	He	0.208	0.0068	1490.15	0.0276	0.001005
Tl	205	3	He	0.155	0.0053	1170.10	0.0276	0.001005
Pb	208	3	He	0.051	0.004	490.03	0.0364	0.002176
Pb	208	3	He	0.02	0.0029	360.02	0.0364	0.002176
Pb	208	3	He	0.012	0.0026	270.01	0.0364	0.002176
U	238	3	He	0.01	0.0007	150.01	0.0421	0.00024
U	238	3	He	0.02	0.0011	240.01	0.0421	0.00024
U	238	3	He	0.021	0.0011	250.01	0.0421	0.00024
Sc	45	1	No Gas			3215790.89		
Sc	45	1	No Gas			3203234.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3285719.01		
Ge	72	1	No Gas			1425749.67		
Ge	72	1	No Gas			1409752.95		
Ge	72	1	No Gas			1429320.45		
Sc	45	2	H2			196684.47		
Sc	45	2	H2			196401.21		
Sc	45	2	H2			193988.96		
Ge	72	2	H2			162630.43		
Ge	72	2	H2			156624.11		
Ge	72	2	H2			156673.18		
In	115	2	H2			437756.40		
In	115	2	H2			439805.11		
In	115	2	H2			432674.06		
Sc	45	3	He			42171.56		
Sc	45	3	He			42111.76		
Sc	45	3	He			42311.74		
Ge	72	3	He			74009.95		
Ge	72	3	He			73809.89		
Ge	72	3	He			72702.91		
In	115	3	He			62691.05		
In	115	3	He			63906.82		
In	115	3	He			65020.89		
Tb	159	3	He			283432.16		
Tb	159	3	He			285871.17		
Tb	159	3	He			283786.42		
Bi	209	3	He			220298.41		
Bi	209	3	He			220762.50		
Bi	209	3	He			220731.85		

Quantitation Report

Data File Name	215SMPL.d
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Acq Time	2023-08-10 18:03:09
Sample Name	410-136577-H-21-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

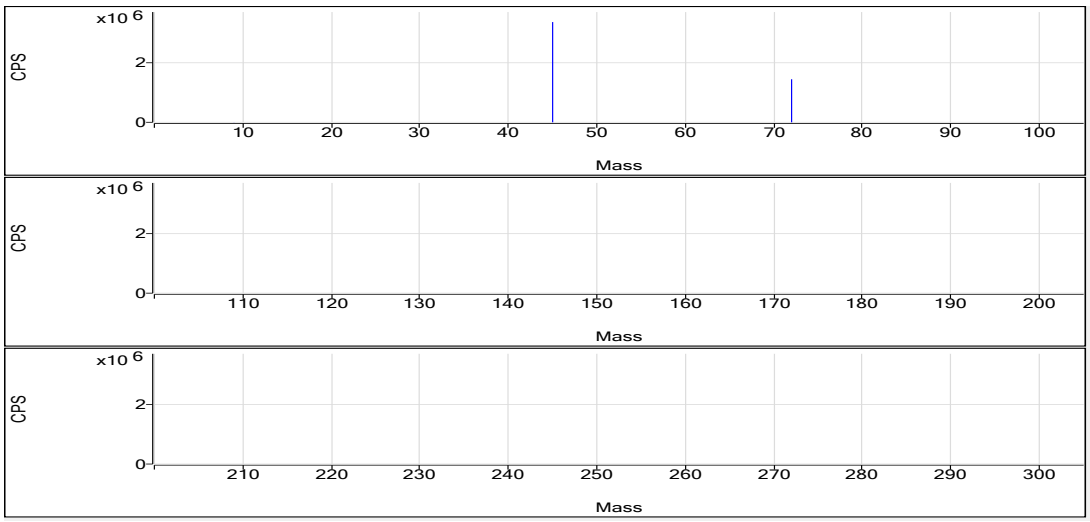
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.683	ppb	2.0	3287.71	0.0023	Pulse	0.5000	3
Se	78	72	H2	0.934	ppb	18.4	62.00	0.0004	Pulse	1.5000	3
Na	23	72	He	8025.150	ppb	1.8	1051106.89	13.8922	Pulse	0.1000	3
Mg	24	72	He	13977.886	ppb	2.1	891994.70	11.7896	Pulse	0.1000	3
Al	27	72	He	29917.484	ppb	2.4	546472.16	7.2230	Pulse	0.1000	3
K	39	72	He	5505.880	ppb	2.0	240911.98	3.1841	Pulse	0.1000	3
Ca	44	72	He	61154.029	ppb	1.3	143845.73	1.9010	Pulse	0.1000	3
Ti	47	72	He	1506.022	ppb	2.2	28595.23	0.3780	Pulse	0.1000	3
V	51	72	He	77.266	ppb	1.3	68944.29	0.9112	Pulse	0.5000	3
Cr	52	72	He	38.867	ppb	3.8	46692.03	0.6172	Pulse	0.1000	3
Mn	55	72	He	2174.314	ppb	1.9	972056.23	12.8476	Pulse	0.1000	3
Fe	57	72	He	37349.791	ppb	2.1	818992.18	10.8247	Pulse	0.1000	3
Co	59	72	He	12.547	ppb	5.4	29186.63	0.3859	Pulse	0.1000	3
Ni	60	72	He	33.827	ppb	3.7	23182.51	0.3065	Pulse	0.1000	3
Cu	63	72	He	193.685	ppb	2.0	365811.96	4.8349	Pulse	0.1000	3
Zn	66	72	He	258.514	ppb	2.8	48415.25	0.6399	Pulse	0.1000	3
As	75	72	He	8.379	ppb	5.6	1135.39	0.0150	Pulse	0.5000	3
Sr	88	115	He	173.491	ppb	1.3	87713.34	1.3570	Pulse	0.1000	3
Mo	98	115	He	2.394	ppb	1.0	3440.55	0.0532	Pulse	0.1000	3
Ag	107	115	He	0.442	ppb	5.2	1330.11	0.0206	Pulse	0.1000	3
Cd	111	115	He	1.053	ppb	3.6	330.01	0.0051	Pulse	0.5000	3
Sn	120	115	He	39.192	ppb	1.2	37126.99	0.5744	Pulse	0.1000	3
Sb	121	115	He	9.419	ppb	4.8	7568.97	0.1171	Pulse	0.1000	3
Ba	137	115	He	519.320	ppb	1.0	146872.49	2.2722	Pulse	0.1000	3
Tl	205	209	He	0.305	ppb	4.2	2120.25	0.0094	Pulse	0.1000	3
Pb	208	209	He	177.447	ppb	0.7	1451233.52	6.4608	Pulse	0.1000	3
U	238	209	He	3.194	ppb	3.7	30226.18	0.1346	Pulse	0.1000	3

ISTD Table:

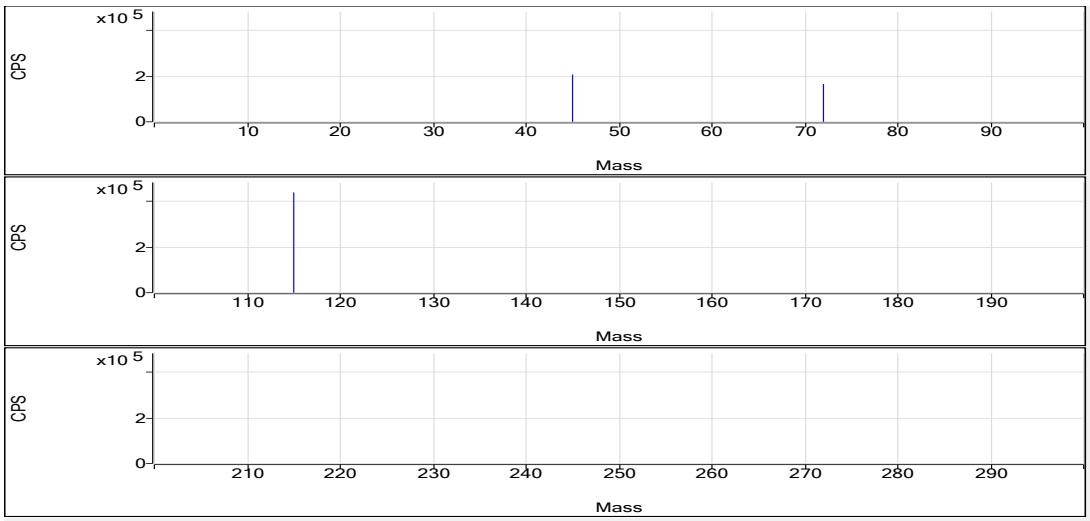
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3390902.35	2.4	104.6	Pulse	0.1000	3
No Gas	Ge	72	1456320.71	2.1	101.1	Pulse	0.1000	3
H2	Sc	45	206564.65	2.2	105.7	Pulse	0.1000	3
H2	Ge	72	165473.60	1.6	101.5	Pulse	0.1000	3
H2	In	115	438384.20	2.2	101.2	Pulse	0.1000	3
He	Sc	45	43455.03	1.6	108.7	Pulse	0.1000	3
He	Ge	72	75675.39	1.5	104.7	Pulse	0.1000	3
He	In	115	64638.01	0.2	100.1	Pulse	0.1000	3
He	Tb	159	297668.23	0.5	104.1	Pulse	0.1000	3
He	Bi	209	224633.90	1.1	101.1	Pulse	0.1000	3

No Gas

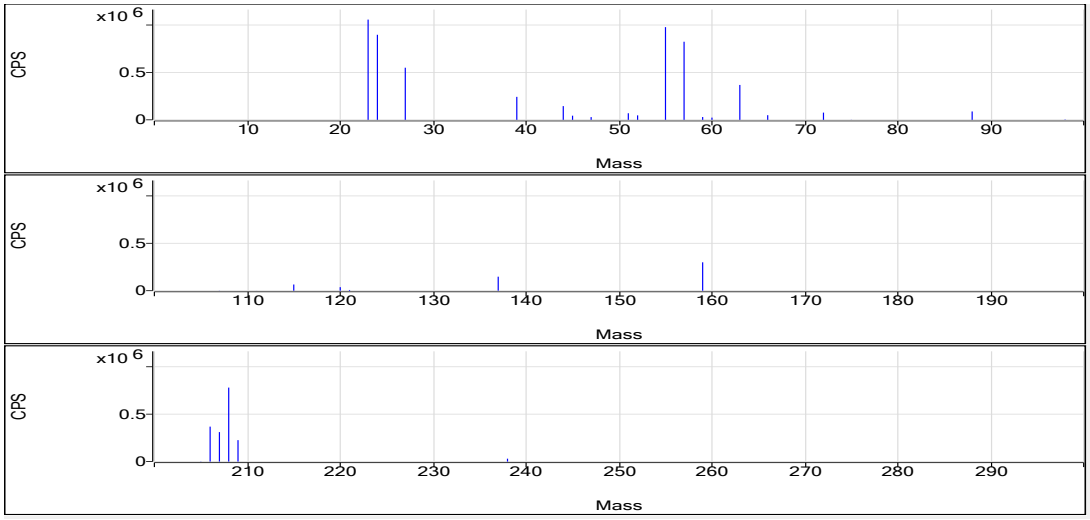


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.692	0.0023	3302.38	0.0013	4.694E-05
Be	9	1	No Gas	1.71	0.0023	3272.38	0.0013	4.694E-05
Be	9	1	No Gas	1.646	0.0022	3288.38	0.0013	4.694E-05
Se	78	2	H2	0.858	0.0003	58.00	0.0004	1.089E-05
Se	78	2	H2	0.813	0.0003	53.33	0.0004	1.089E-05
Se	78	2	H2	1.131	0.0005	74.67	0.0004	1.089E-05
Na	23	3	He	7989.503	13.831	1051574.83	0.0017	0.1065
Na	23	3	He	8184.118	14.1653	1053497.72	0.0017	0.1065
Na	23	3	He	7901.829	13.6804	1048248.11	0.0017	0.1065
Mg	24	3	He	13837.137	11.671	887346.71	0.0008	0.004846
Mg	24	3	He	14314.617	12.0735	897928.11	0.0008	0.004846
Mg	24	3	He	13781.903	11.6244	890709.28	0.0008	0.004846
Al	27	3	He	29459.95	7.1125	540767.45	0.0002	0.001063
Al	27	3	He	30749.225	7.4237	552116.55	0.0002	0.001063
Al	27	3	He	29543.277	7.1326	546532.49	0.0002	0.001063
K	39	3	He	5526.128	3.1952	242934.63	0.0006	0.1436
K	39	3	He	5602.933	3.2376	240789.18	0.0006	0.1436
K	39	3	He	5388.581	3.1193	239012.13	0.0006	0.1436
Ca	44	3	He	61367.513	1.9077	145041.33	0	0.001611
Ca	44	3	He	61814.656	1.9216	142910.07	0	0.001611
Ca	44	3	He	60279.919	1.8739	143585.80	0	0.001611
Ti	47	3	He	1500.925	0.3767	28638.70	0.0003	0.0002737
Ti	47	3	He	1541.943	0.387	28778.94	0.0003	0.0002737
Ti	47	3	He	1475.199	0.3702	28368.04	0.0003	0.0002737
V	51	3	He	76.83	0.9061	68888.66	0.0117	0.007326
V	51	3	He	78.378	0.9242	68732.17	0.0117	0.007326
V	51	3	He	76.591	0.9033	69212.03	0.0117	0.007326
Cr	52	3	He	38.805	0.6163	46855.87	0.0152	0.02538
Cr	52	3	He	40.372	0.6401	47608.41	0.0152	0.02538
Cr	52	3	He	37.425	0.5953	45611.82	0.0152	0.02538
Mn	55	3	He	2151.657	12.7138	966637.09	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2222.843	13.134	976798.34	0.0059	0.01385
Mn	55	3	He	2148.442	12.6949	972733.27	0.0059	0.01385
Fe	57	3	He	36841.234	10.6774	811803.35	0.0003	0.003918
Fe	57	3	He	38270.963	11.0916	824899.21	0.0003	0.003918
Fe	57	3	He	36937.177	10.7052	820273.97	0.0003	0.003918
Co	59	3	He	12.327	0.3792	28829.06	0.0305	0.003084
Co	59	3	He	13.311	0.4092	30432.54	0.0305	0.003084
Co	59	3	He	12.003	0.3693	28298.28	0.0305	0.003084
Ni	60	3	He	33.392	0.3026	23008.91	0.0088	0.009003
Ni	60	3	He	35.247	0.3189	23720.20	0.0088	0.009003
Ni	60	3	He	32.842	0.2978	22818.42	0.0088	0.009003
Cu	63	3	He	190.872	4.7647	362263.98	0.0249	0.004937
Cu	63	3	He	198.155	4.9463	367867.73	0.0249	0.004937
Cu	63	3	He	192.029	4.7936	367304.17	0.0249	0.004937
Zn	66	3	He	259.036	0.6412	48752.78	0.0025	0.004836
Zn	66	3	He	265.355	0.6568	48843.67	0.0025	0.004836
Zn	66	3	He	251.152	0.6219	47649.31	0.0025	0.004836
As	75	3	He	7.858	0.0141	1072.05	0.0017	0.0004347
As	75	3	He	8.765	0.0157	1166.06	0.0017	0.0004347
As	75	3	He	8.515	0.0152	1168.06	0.0017	0.0004347
Sr	88	3	He	171.111	1.3384	86341.67	0.0078	0.0007762
Sr	88	3	He	175.735	1.3745	89018.22	0.0078	0.0007762
Sr	88	3	He	173.627	1.358	87780.13	0.0078	0.0007762
Mo	98	3	He	2.412	0.0536	3460.56	0.022	0.0005162
Mo	98	3	He	2.368	0.0527	3410.53	0.022	0.0005162
Mo	98	3	He	2.401	0.0534	3450.56	0.022	0.0005162
Ag	107	3	He	0.467	0.0217	1400.12	0.0455	0.0004641
Ag	107	3	He	0.438	0.0204	1320.11	0.0455	0.0004641
Ag	107	3	He	0.422	0.0196	1270.11	0.0455	0.0004641
Cd	111	3	He	1.023	0.005	320.01	0.0048	5.152E-05
Cd	111	3	He	1.096	0.0053	344.01	0.0048	5.152E-05
Cd	111	3	He	1.04	0.005	326.01	0.0048	5.152E-05
Sn	120	3	He	38.936	0.5707	36819.61	0.0143	0.01559
Sn	120	3	He	38.911	0.5704	36939.88	0.0143	0.01559
Sn	120	3	He	39.729	0.582	37621.48	0.0143	0.01559
Sb	121	3	He	9.929	0.1234	7962.53	0.0124	0.000258
Sb	121	3	He	9.056	0.1126	7292.10	0.0124	0.000258
Sb	121	3	He	9.273	0.1153	7452.28	0.0124	0.000258
Ba	137	3	He	515.577	2.2559	145531.47	0.0044	0.000309
Ba	137	3	He	517.254	2.2632	146571.78	0.0044	0.000309
Ba	137	3	He	525.129	2.2976	148514.21	0.0044	0.000309
Tl	205	3	He	0.316	0.0097	2170.28	0.0276	0.001005
Tl	205	3	He	0.309	0.0095	2170.26	0.0276	0.001005
Tl	205	3	He	0.291	0.009	2020.22	0.0276	0.001005
Pb	208	3	He	178.186	6.4877	772921.16	0.0364	0.002176
Pb	208	3	He	176.083	6.4111	783568.50	0.0364	0.002176
Pb	208	3	He	178.07	6.4835	770927.96	0.0364	0.002176
U	238	3	He	3.225	0.1359	30296.52	0.0421	0.00024
U	238	3	He	3.064	0.1291	29384.02	0.0421	0.00024
U	238	3	He	3.293	0.1388	30998.00	0.0421	0.00024
Sc	45	1	No Gas			3367070.57		
Sc	45	1	No Gas			3324330.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3481305.89		
Ge	72	1	No Gas			1454356.07		
Ge	72	1	No Gas			1426605.29		
Ge	72	1	No Gas			1488000.76		
Sc	45	2	H2			210452.01		
Sc	45	2	H2			201660.13		
Sc	45	2	H2			207581.81		
Ge	72	2	H2			168129.67		
Ge	72	2	H2			162871.62		
Ge	72	2	H2			165419.51		
In	115	2	H2			449330.85		
In	115	2	H2			433842.85		
In	115	2	H2			431978.90		
Sc	45	3	He			42913.31		
Sc	45	3	He			44237.44		
Sc	45	3	He			43214.35		
Ge	72	3	He			76030.32		
Ge	72	3	He			74371.68		
Ge	72	3	He			76624.17		
In	115	3	He			64800.01		
In	115	3	He			65051.59		
In	115	3	He			64931.19		
Tb	159	3	He			296246.46		
Tb	159	3	He			297514.23		
Tb	159	3	He			299244.00		
Bi	209	3	He			222946.81		
Bi	209	3	He			227557.36		
Bi	209	3	He			223397.52		

Quantitation Report

Data File Name	216SMPL.d
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Acq Time	2023-08-10 18:05:09
Sample Name	410-136577-H-21-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

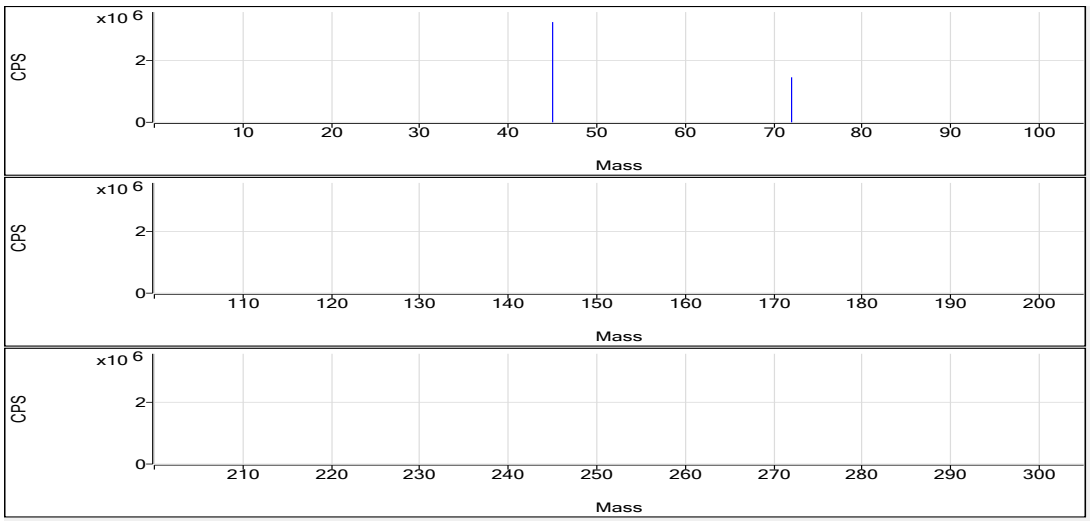
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.262	ppb	2.1	573.35	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.138	ppb	12.5	10.66	0.0001	Pulse	1.5000	3
Na	23	72	He	1215.958	ppb	1.7	164027.56	2.1953	Pulse	0.1000	3
Mg	24	72	He	2138.807	ppb	0.9	135098.78	1.8081	Pulse	0.1000	3
Al	27	72	He	4580.416	ppb	1.3	82696.85	1.1067	Pulse	0.1000	3
K	39	72	He	825.458	ppb	1.6	44791.99	0.5995	Pulse	0.1000	3
Ca	44	72	He	9367.190	ppb	3.1	21860.15	0.2926	Pulse	0.1000	3
Ti	47	72	He	241.410	ppb	5.9	4544.20	0.0608	Pulse	0.1000	3
V	51	72	He	11.967	ppb	1.5	11007.51	0.1473	Pulse	0.5000	3
Cr	52	72	He	6.073	ppb	9.3	8806.32	0.1179	Pulse	0.1000	3
Mn	55	72	He	330.115	ppb	0.4	146625.95	1.9623	Pulse	0.1000	3
Fe	57	72	He	5723.417	ppb	2.1	124187.14	1.6621	Pulse	0.1000	3
Co	59	72	He	2.002	ppb	2.6	4794.28	0.0642	Pulse	0.1000	3
Ni	60	72	He	6.081	ppb	6.2	4667.54	0.0625	Pulse	0.1000	3
Cu	63	72	He	30.180	ppb	0.5	56604.80	0.7576	Pulse	0.1000	3
Zn	66	72	He	39.464	ppb	3.0	7605.57	0.1018	Pulse	0.1000	3
As	75	72	He	1.140	ppb	9.4	180.67	0.0024	Pulse	0.5000	3
Sr	88	115	He	26.638	ppb	1.2	13353.38	0.2090	Pulse	0.1000	3
Mo	98	115	He	0.408	ppb	11.4	606.70	0.0095	Pulse	0.1000	3
Ag	107	115	He	0.085	ppb	15.0	276.68	0.0043	Pulse	0.1000	3
Cd	111	115	He	0.141	ppb	21.3	46.67	0.0007	Pulse	0.5000	3
Sn	120	115	He	5.954	ppb	4.2	6418.36	0.1005	Pulse	0.1000	3
Sb	121	115	He	1.401	ppb	7.9	1126.75	0.0176	Pulse	0.1000	3
Ba	137	115	He	77.369	ppb	1.4	21644.16	0.3388	Pulse	0.1000	3
Tl	205	209	He	0.071	ppb	9.9	670.04	0.0030	Pulse	0.1000	3
Pb	208	209	He	26.799	ppb	0.1	220544.62	0.9776	Pulse	0.1000	3
U	238	209	He	0.471	ppb	3.9	4527.62	0.0201	Pulse	0.1000	3

ISTD Table:

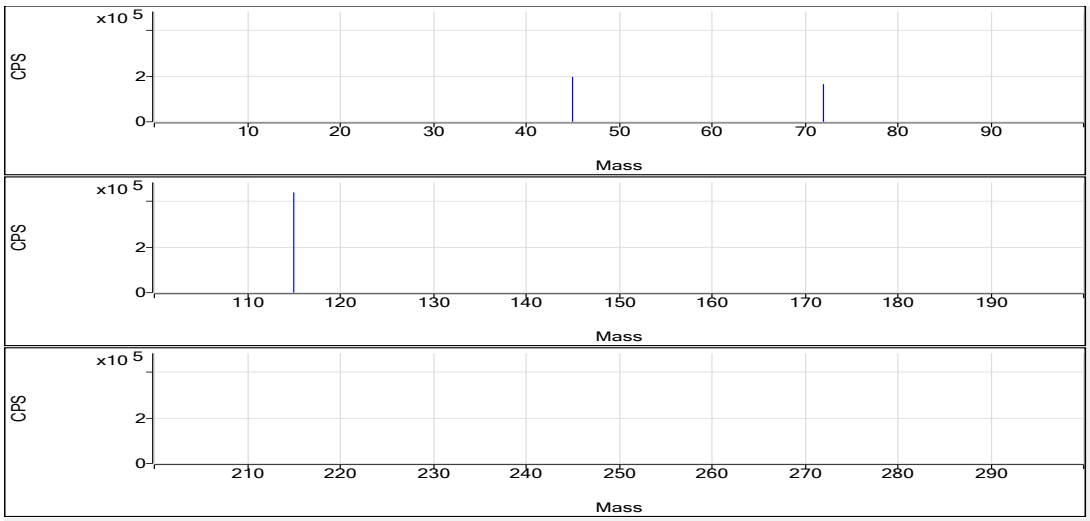
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3262117.03	1.5	100.6	Pulse	0.1000	3
No Gas	Ge	72	1464626.96	0.9	101.7	Pulse	0.1000	3
H2	Sc	45	197150.19	0.9	100.9	Pulse	0.1000	3
H2	Ge	72	165241.88	1.3	101.4	Pulse	0.1000	3
H2	In	115	439935.15	0.7	101.5	Pulse	0.1000	3
He	Sc	45	42358.59	1.8	105.9	Pulse	0.1000	3
He	Ge	72	74720.64	0.2	103.4	Pulse	0.1000	3
He	In	115	63886.35	0.5	98.9	Pulse	0.1000	3
He	Tb	159	285335.66	0.9	99.8	Pulse	0.1000	3
He	Bi	209	225602.03	0.3	101.5	Pulse	0.1000	3

No Gas

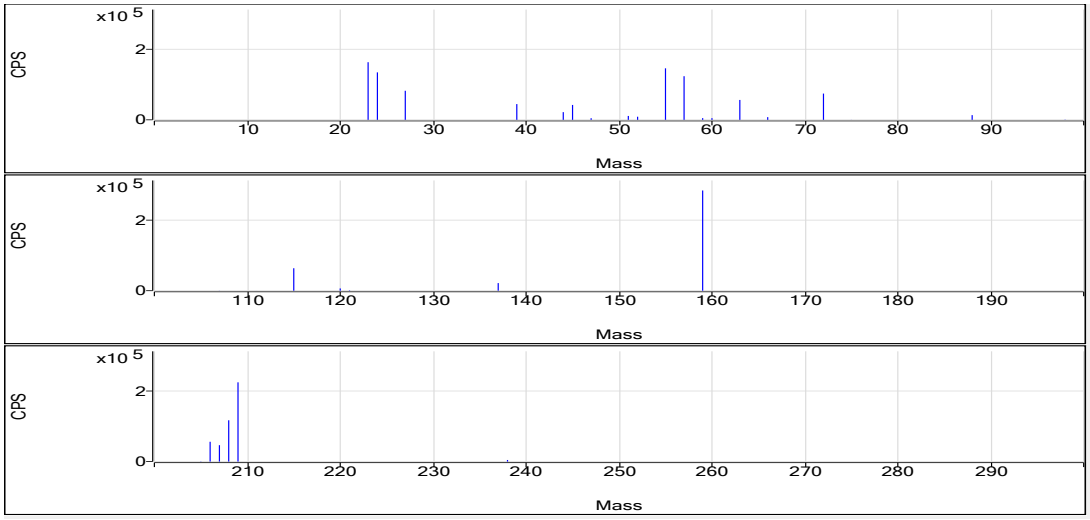


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.256	0.0004	558.01	0.0013	4.694E-05
Be	9	1	No Gas	0.264	0.0004	574.02	0.0013	4.694E-05
Be	9	1	No Gas	0.267	0.0004	588.02	0.0013	4.694E-05
Se	78	2	H2	0.118	0.0001	9.33	0.0004	1.089E-05
Se	78	2	H2	0.15	0.0001	11.33	0.0004	1.089E-05
Se	78	2	H2	0.146	0.0001	11.33	0.0004	1.089E-05
Na	23	3	He	1204.566	2.1757	162486.98	0.0017	0.1065
Na	23	3	He	1239.507	2.2357	166702.93	0.0017	0.1065
Na	23	3	He	1203.801	2.1744	162892.77	0.0017	0.1065
Mg	24	3	He	2149.293	1.8169	135693.19	0.0008	0.004846
Mg	24	3	He	2151.324	1.8186	135604.11	0.0008	0.004846
Mg	24	3	He	2115.803	1.7887	133999.03	0.0008	0.004846
Al	27	3	He	4512.606	1.0904	81432.99	0.0002	0.001063
Al	27	3	He	4629.334	1.1186	83403.93	0.0002	0.001063
Al	27	3	He	4599.308	1.1113	83253.62	0.0002	0.001063
K	39	3	He	837.333	0.606	45259.94	0.0006	0.1436
K	39	3	He	827.893	0.6008	44798.92	0.0006	0.1436
K	39	3	He	811.147	0.5916	44317.11	0.0006	0.1436
Ca	44	3	He	9664.188	0.3018	22537.83	0	0.001611
Ca	44	3	He	9091.629	0.284	21175.81	0	0.001611
Ca	44	3	He	9345.753	0.2919	21866.82	0	0.001611
Ti	47	3	He	256.314	0.0646	4820.95	0.0003	0.0002737
Ti	47	3	He	227.838	0.0574	4280.77	0.0003	0.0002737
Ti	47	3	He	240.078	0.0605	4530.87	0.0003	0.0002737
V	51	3	He	12.093	0.1488	11112.25	0.0117	0.007326
V	51	3	He	12.047	0.1483	11054.21	0.0117	0.007326
V	51	3	He	11.762	0.1449	10856.06	0.0117	0.007326
Cr	52	3	He	5.643	0.1113	8312.63	0.0152	0.02538
Cr	52	3	He	6.712	0.1276	9513.46	0.0152	0.02538
Cr	52	3	He	5.866	0.1147	8592.87	0.0152	0.02538
Mn	55	3	He	330.43	1.9642	146691.93	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	331.081	1.968	146744.22	0.0059	0.01385
Mn	55	3	He	328.835	1.9548	146441.71	0.0059	0.01385
Fe	57	3	He	5756.836	1.6718	124852.13	0.0003	0.003918
Fe	57	3	He	5825.429	1.6916	126134.44	0.0003	0.003918
Fe	57	3	He	5587.985	1.6228	121574.85	0.0003	0.003918
Co	59	3	He	2.041	0.0654	4880.95	0.0305	0.003084
Co	59	3	He	2.022	0.0648	4830.99	0.0305	0.003084
Co	59	3	He	1.942	0.0623	4670.91	0.0305	0.003084
Ni	60	3	He	6.378	0.0651	4860.93	0.0088	0.009003
Ni	60	3	He	6.207	0.0636	4740.91	0.0088	0.009003
Ni	60	3	He	5.657	0.0587	4400.78	0.0088	0.009003
Cu	63	3	He	30	0.7531	56240.17	0.0249	0.004937
Cu	63	3	He	30.275	0.7599	56661.96	0.0249	0.004937
Cu	63	3	He	30.266	0.7597	56912.27	0.0249	0.004937
Zn	66	3	He	38.647	0.0998	7452.13	0.0025	0.004836
Zn	66	3	He	40.842	0.1052	7842.35	0.0025	0.004836
Zn	66	3	He	38.902	0.1004	7522.22	0.0025	0.004836
As	75	3	He	1.244	0.0026	194.00	0.0017	0.0004347
As	75	3	He	1.03	0.0022	166.00	0.0017	0.0004347
As	75	3	He	1.147	0.0024	182.00	0.0017	0.0004347
Sr	88	3	He	26.323	0.2065	13116.50	0.0078	0.0007762
Sr	88	3	He	26.937	0.2113	13546.94	0.0078	0.0007762
Sr	88	3	He	26.655	0.2091	13396.70	0.0078	0.0007762
Mo	98	3	He	0.413	0.0096	610.03	0.022	0.0005162
Mo	98	3	He	0.359	0.0084	540.03	0.022	0.0005162
Mo	98	3	He	0.452	0.0105	670.04	0.022	0.0005162
Ag	107	3	He	0.08	0.0041	260.01	0.0455	0.0004641
Ag	107	3	He	0.1	0.005	320.02	0.0455	0.0004641
Ag	107	3	He	0.076	0.0039	250.01	0.0455	0.0004641
Cd	111	3	He	0.107	0.0006	36.00	0.0048	5.152E-05
Cd	111	3	He	0.152	0.0008	50.00	0.0048	5.152E-05
Cd	111	3	He	0.165	0.0008	54.00	0.0048	5.152E-05
Sn	120	3	He	6.209	0.1041	6611.79	0.0143	0.01559
Sn	120	3	He	5.703	0.0969	6211.62	0.0143	0.01559
Sn	120	3	He	5.949	0.1004	6431.68	0.0143	0.01559
Sb	121	3	He	1.528	0.0192	1220.09	0.0124	0.000258
Sb	121	3	He	1.325	0.0167	1070.08	0.0124	0.000258
Sb	121	3	He	1.351	0.017	1090.09	0.0124	0.000258
Ba	137	3	He	76.696	0.3358	21326.81	0.0044	0.000309
Ba	137	3	He	76.805	0.3363	21557.39	0.0044	0.000309
Ba	137	3	He	78.608	0.3442	22048.27	0.0044	0.000309
Tl	205	3	He	0.079	0.0032	720.05	0.0276	0.001005
Tl	205	3	He	0.07	0.0029	660.04	0.0276	0.001005
Tl	205	3	He	0.065	0.0028	630.04	0.0276	0.001005
Pb	208	3	He	26.842	0.9792	118700.12	0.0364	0.002176
Pb	208	3	He	26.767	0.9764	116593.45	0.0364	0.002176
Pb	208	3	He	26.787	0.9772	117307.76	0.0364	0.002176
U	238	3	He	0.491	0.0209	4731.06	0.0421	0.00024
U	238	3	He	0.468	0.0199	4490.94	0.0421	0.00024
U	238	3	He	0.455	0.0194	4360.85	0.0421	0.00024
Sc	45	1	No Gas			3247478.08		
Sc	45	1	No Gas			3223136.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3315736.51		
Ge	72	1	No Gas			1456040.29		
Ge	72	1	No Gas			1457192.17		
Ge	72	1	No Gas			1480648.42		
Sc	45	2	H2			196632.87		
Sc	45	2	H2			195761.83		
Sc	45	2	H2			199055.86		
Ge	72	2	H2			164157.63		
Ge	72	2	H2			163901.54		
Ge	72	2	H2			167666.46		
In	115	2	H2			442514.25		
In	115	2	H2			436818.51		
In	115	2	H2			440472.69		
Sc	45	3	He			43124.37		
Sc	45	3	He			42321.76		
Sc	45	3	He			41629.63		
Ge	72	3	He			74683.16		
Ge	72	3	He			74563.85		
Ge	72	3	He			74914.92		
In	115	3	He			63555.00		
In	115	3	He			64147.64		
In	115	3	He			64106.61		
Tb	159	3	He			284686.36		
Tb	159	3	He			283020.19		
Tb	159	3	He			288300.43		
Bi	209	3	He			226373.43		
Bi	209	3	He			225359.74		
Bi	209	3	He			225072.91		

Quantitation Report

Data File Name	217SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:07:09
Sample Name	410-136577-H-21-A PDS @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

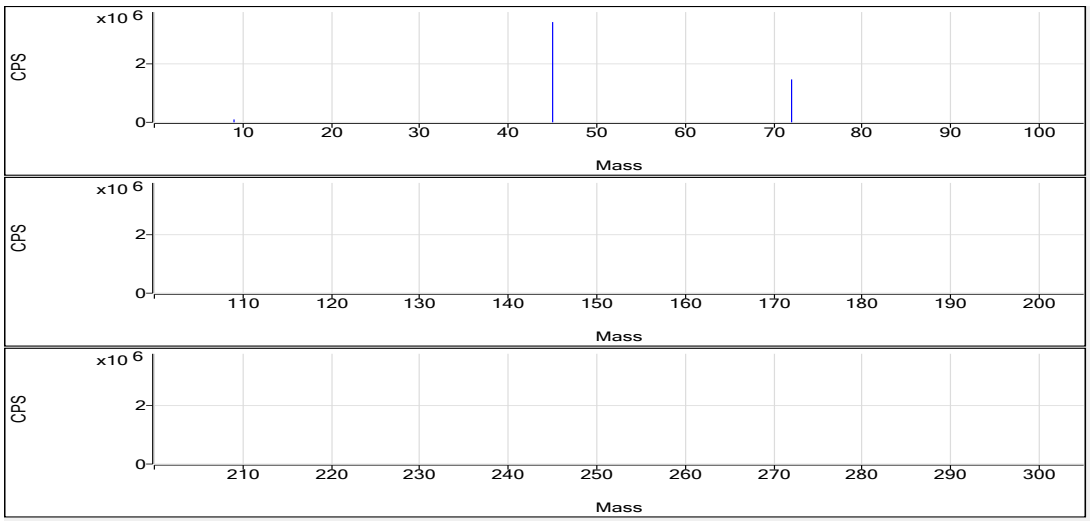
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.712	ppb	4.3	97510.25	0.0667	Pulse	0.5000	3
Se	78	72	H2	105.288	ppb	4.4	6708.01	0.0410	Pulse	1.5000	3
Na	23	72	He	12923.384	ppb	1.9	1664759.04	22.3065	Pulse	0.1000	3
Mg	24	72	He	18603.442	ppb	1.9	1170899.23	15.6894	Pulse	0.1000	3
Al	27	72	He	33885.010	ppb	2.0	610522.28	8.1807	Pulse	0.1000	3
K	39	72	He	10385.183	ppb	1.2	438750.24	5.8785	Pulse	0.1000	3
Ca	44	72	He	64563.894	ppb	1.5	149784.79	2.0070	Pulse	0.1000	3
Ti	47	72	He	1974.808	ppb	1.9	36980.73	0.4955	Pulse	0.1000	3
V	51	72	He	593.717	ppb	1.4	518890.48	6.9525	Pulse	0.5000	3
Cr	52	72	He	551.765	ppb	0.2	629030.58	8.4273	Pulse	0.1000	3
Mn	55	72	He	2618.687	ppb	1.6	1154595.79	15.4704	Pulse	0.1000	3
Fe	57	72	He	41173.461	ppb	0.9	890605.48	11.9325	Pulse	0.1000	3
Co	59	72	He	523.579	ppb	1.9	1192417.25	15.9777	Pulse	0.1000	3
Ni	60	72	He	538.689	ppb	1.2	354215.48	4.7459	Pulse	0.1000	3
Cu	63	72	He	697.405	ppb	1.4	1298356.13	17.3962	Pulse	0.1000	3
Zn	66	72	He	756.972	ppb	1.3	139160.36	1.8645	Pulse	0.1000	3
As	75	72	He	519.038	ppb	1.6	67402.99	0.9031	Pulse	0.5000	3
Sr	88	115	He	218.416	ppb	2.5	111120.68	1.7082	Pulse	0.1000	3
Mo	98	115	He	52.202	ppb	2.5	74818.13	1.1501	Pulse	0.1000	3
Ag	107	115	He	53.708	ppb	0.8	159026.52	2.4442	Pulse	0.1000	3
Cd	111	115	He	52.502	ppb	0.8	16400.27	0.2521	Pulse	0.5000	3
Sn	120	115	He	140.701	ppb	1.2	131528.64	2.0217	Pulse	0.1000	3
Sb	121	115	He	111.609	ppb	1.2	90090.64	1.3848	Pulse	0.1000	3
Ba	137	115	He	980.679	ppb	1.8	279130.46	4.2906	Pulse	0.1000	3
Tl	205	209	He	101.750	ppb	1.1	633459.03	2.8138	Pulse	0.1000	3
Pb	208	209	He	220.396	ppb	1.1	1806403.37	8.0240	Pulse	0.1000	3
U	238	209	He	53.001	ppb	1.4	501992.87	2.2298	Pulse	0.1000	3

ISTD Table:

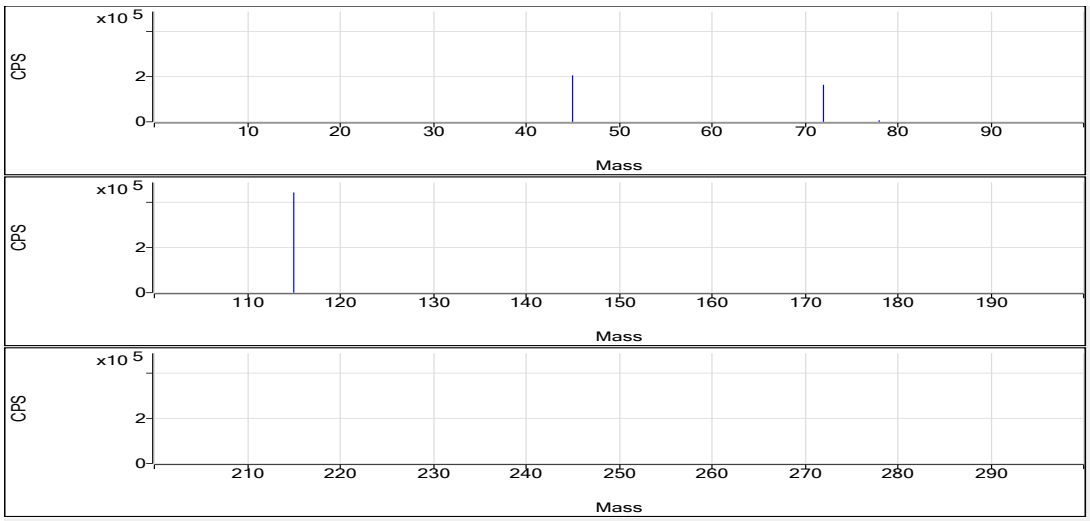
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3418602.86	1.8	105.5	Pulse	0.1000	3
No Gas	Ge	72	1462988.63	1.7	101.6	Pulse	0.1000	3
H2	Sc	45	205340.97	0.5	105.1	Pulse	0.1000	3
H2	Ge	72	163699.24	2.7	100.4	Pulse	0.1000	3
H2	In	115	442981.25	0.7	102.2	Pulse	0.1000	3
He	Sc	45	44892.76	0.8	112.3	Pulse	0.1000	3
He	Ge	72	74643.56	1.4	103.3	Pulse	0.1000	3
He	In	115	65063.98	1.0	100.7	Pulse	0.1000	3
He	Tb	159	299025.19	0.6	104.6	Pulse	0.1000	3
He	Bi	209	225138.48	0.8	101.3	Pulse	0.1000	3

No Gas

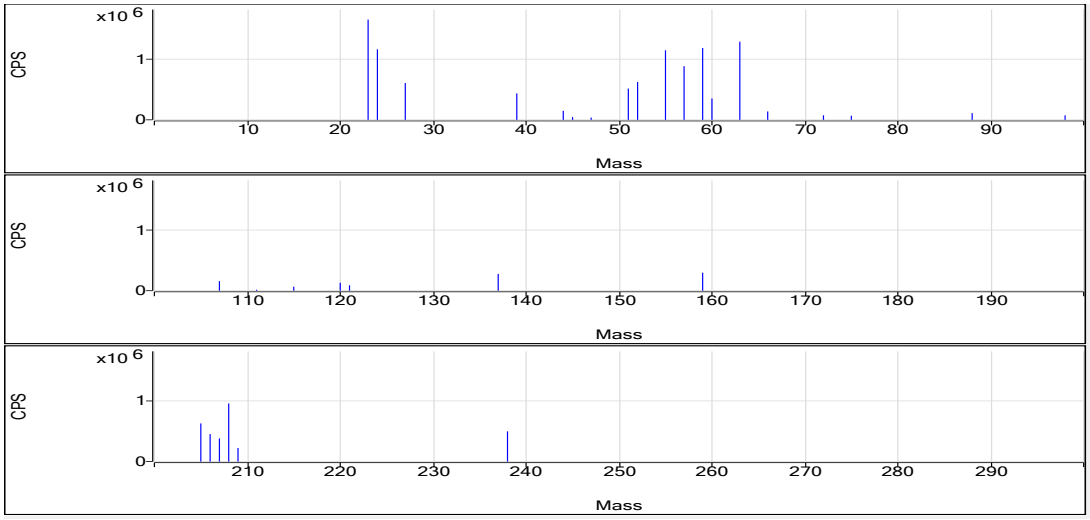


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.197	0.0686	99170.89	0.0013	4.694E-05
Be	9	1	No Gas	51.72	0.068	98769.96	0.0013	4.694E-05
Be	9	1	No Gas	48.218	0.0634	94589.91	0.0013	4.694E-05
Se	78	2	H2	101.404	0.0395	6522.81	0.0004	1.089E-05
Se	78	2	H2	110.423	0.043	6825.62	0.0004	1.089E-05
Se	78	2	H2	104.036	0.0405	6775.60	0.0004	1.089E-05
Na	23	3	He	13021.044	22.4743	1658573.88	0.0017	0.1065
Na	23	3	He	13103.277	22.6155	1679690.76	0.0017	0.1065
Na	23	3	He	12645.831	21.8297	1656012.48	0.0017	0.1065
Mg	24	3	He	18897.572	15.9374	1176161.62	0.0008	0.004846
Mg	24	3	He	18706.011	15.7759	1171701.08	0.0008	0.004846
Mg	24	3	He	18206.741	15.355	1164834.98	0.0008	0.004846
Al	27	3	He	34295.656	8.2798	611041.48	0.0002	0.001063
Al	27	3	He	34250.468	8.2689	614145.77	0.0002	0.001063
Al	27	3	He	33108.906	7.9934	606379.60	0.0002	0.001063
K	39	3	He	10400.28	5.8868	434438.31	0.0006	0.1436
K	39	3	He	10499.01	5.9413	441270.70	0.0006	0.1436
K	39	3	He	10256.259	5.8073	440541.71	0.0006	0.1436
Ca	44	3	He	65325.932	2.0306	149857.62	0	0.001611
Ca	44	3	He	64888.342	2.017	149808.18	0	0.001611
Ca	44	3	He	63477.407	1.9732	149688.56	0	0.001611
Ti	47	3	He	1990.956	0.4996	36867.21	0.0003	0.0002737
Ti	47	3	He	2000.861	0.502	37287.89	0.0003	0.0002737
Ti	47	3	He	1932.606	0.4849	36787.08	0.0003	0.0002737
V	51	3	He	598.477	7.0082	517193.25	0.0117	0.007326
V	51	3	He	598.462	7.008	520493.41	0.0117	0.007326
V	51	3	He	584.214	6.8413	518984.78	0.0117	0.007326
Cr	52	3	He	553.053	8.4469	623368.27	0.0152	0.02538
Cr	52	3	He	551.333	8.4207	625416.32	0.0152	0.02538
Cr	52	3	He	550.91	8.4142	638307.14	0.0152	0.02538
Mn	55	3	He	2652.837	15.672	1156575.22	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2629.891	15.5366	1153925.22	0.0059	0.01385
Mn	55	3	He	2573.333	15.2028	1153286.94	0.0059	0.01385
Fe	57	3	He	41477.784	12.0206	887108.19	0.0003	0.003918
Fe	57	3	He	41278.955	11.963	888512.88	0.0003	0.003918
Fe	57	3	He	40763.643	11.8137	896195.38	0.0003	0.003918
Co	59	3	He	531.411	16.2167	1196771.39	0.0305	0.003084
Co	59	3	He	526.956	16.0808	1194343.03	0.0305	0.003084
Co	59	3	He	512.371	15.6358	1186137.33	0.0305	0.003084
Ni	60	3	He	546.414	4.8138	355251.52	0.0088	0.009003
Ni	60	3	He	535.524	4.718	350414.92	0.0088	0.009003
Ni	60	3	He	534.128	4.7057	356979.99	0.0088	0.009003
Cu	63	3	He	700.402	17.4709	1289332.95	0.0249	0.004937
Cu	63	3	He	705.578	17.6	1307179.82	0.0249	0.004937
Cu	63	3	He	686.237	17.1177	1298555.61	0.0249	0.004937
Zn	66	3	He	759.916	1.8718	138134.50	0.0025	0.004836
Zn	66	3	He	765.076	1.8845	139960.97	0.0025	0.004836
Zn	66	3	He	745.923	1.8374	139385.60	0.0025	0.004836
As	75	3	He	523.725	0.9113	67251.49	0.0017	0.0004347
As	75	3	He	523.704	0.9112	67679.66	0.0017	0.0004347
As	75	3	He	509.684	0.8869	67277.82	0.0017	0.0004347
Sr	88	3	He	214.102	1.6744	109850.11	0.0078	0.0007762
Sr	88	3	He	224.515	1.7558	112944.76	0.0078	0.0007762
Sr	88	3	He	216.631	1.6942	110567.17	0.0078	0.0007762
Mo	98	3	He	50.79	1.119	73410.81	0.022	0.0005162
Mo	98	3	He	53.297	1.1742	75531.49	0.022	0.0005162
Mo	98	3	He	52.519	1.1571	75512.08	0.022	0.0005162
Ag	107	3	He	53.272	2.4244	159048.74	0.0455	0.0004641
Ag	107	3	He	53.71	2.4443	157230.62	0.0455	0.0004641
Ag	107	3	He	54.141	2.4639	160800.21	0.0455	0.0004641
Cd	111	3	He	52.268	0.251	16463.67	0.0048	5.152E-05
Cd	111	3	He	52.957	0.2543	16355.53	0.0048	5.152E-05
Cd	111	3	He	52.28	0.251	16381.60	0.0048	5.152E-05
Sn	120	3	He	139.377	2.0028	131393.04	0.0143	0.01559
Sn	120	3	He	142.578	2.0485	131768.18	0.0143	0.01559
Sn	120	3	He	140.148	2.0138	131424.69	0.0143	0.01559
Sb	121	3	He	110.741	1.374	90140.17	0.0124	0.000258
Sb	121	3	He	113.159	1.404	90312.64	0.0124	0.000258
Sb	121	3	He	110.926	1.3763	89819.10	0.0124	0.000258
Ba	137	3	He	962.019	4.2089	276125.09	0.0044	0.000309
Ba	137	3	He	996.913	4.3616	280562.34	0.0044	0.000309
Ba	137	3	He	983.104	4.3012	280703.96	0.0044	0.000309
Tl	205	3	He	100.629	2.7828	630306.63	0.0276	0.001005
Tl	205	3	He	102.937	2.8466	635030.54	0.0276	0.001005
Tl	205	3	He	101.683	2.812	635039.91	0.0276	0.001005
Pb	208	3	He	219.036	7.9745	961429.13	0.0364	0.002176
Pb	208	3	He	223.232	8.1272	971663.42	0.0364	0.002176
Pb	208	3	He	218.919	7.9702	963548.89	0.0364	0.002176
U	238	3	He	52.179	2.1953	497222.18	0.0421	0.00024
U	238	3	He	53.541	2.2526	502507.26	0.0421	0.00024
U	238	3	He	53.282	2.2417	506249.17	0.0421	0.00024
Sc	45	1	No Gas			3363994.95		
Sc	45	1	No Gas			3405624.32		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3486189.32		
Ge	72	1	No Gas			1444868.42		
Ge	72	1	No Gas			1452312.17		
Ge	72	1	No Gas			1491785.29		
Sc	45	2	H2			206052.61		
Sc	45	2	H2			204112.87		
Sc	45	2	H2			205857.42		
Ge	72	2	H2			165160.04		
Ge	72	2	H2			158715.90		
Ge	72	2	H2			167221.79		
In	115	2	H2			444033.63		
In	115	2	H2			439459.02		
In	115	2	H2			445451.09		
Sc	45	3	He			44779.04		
Sc	45	3	He			44608.49		
Sc	45	3	He			45290.74		
Ge	72	3	He			73798.75		
Ge	72	3	He			74271.52		
Ge	72	3	He			75860.41		
In	115	3	He			66629.23		
In	115	3	He			65353.35		
In	115	3	He			66287.12		
Tb	159	3	He			299843.94		
Tb	159	3	He			297017.10		
Tb	159	3	He			300214.53		
Bi	209	3	He			226497.95		
Bi	209	3	He			223081.85		
Bi	209	3	He			225835.64		

Quantitation Report

Data File Name	218SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:09:09
Sample Name	410-136577-H-21-A PDS @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

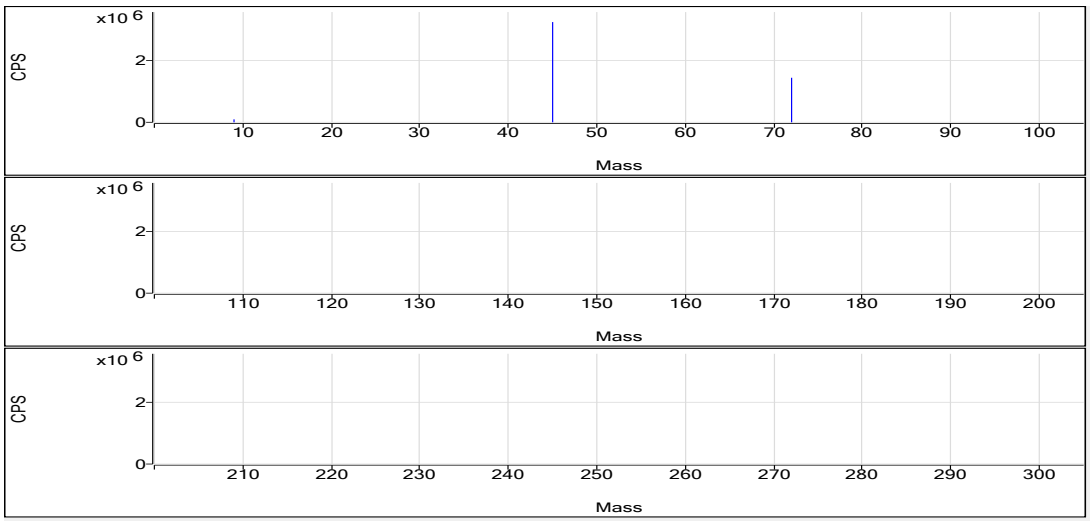
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.096	ppb	4.1	95376.92	0.0659	Pulse	0.5000	3
Se	78	72	H2	103.618	ppb	3.6	6612.64	0.0404	Pulse	1.5000	3
Na	23	72	He	6150.201	ppb	1.6	805107.43	10.6714	Pulse	0.1000	3
Mg	24	72	He	6868.098	ppb	1.4	437241.44	5.7954	Pulse	0.1000	3
Al	27	72	He	8729.360	ppb	1.8	159058.26	2.1083	Pulse	0.1000	3
K	39	72	He	5782.116	ppb	1.5	251744.48	3.3366	Pulse	0.1000	3
Ca	44	72	He	12539.601	ppb	1.3	29507.07	0.3911	Pulse	0.1000	3
Ti	47	72	He	701.446	ppb	0.8	13293.21	0.1762	Pulse	0.1000	3
V	51	72	He	525.399	ppb	1.0	464269.02	6.1533	Pulse	0.5000	3
Cr	52	72	He	522.502	ppb	1.3	602201.00	7.9817	Pulse	0.1000	3
Mn	55	72	He	777.816	ppb	1.7	347413.10	4.6049	Pulse	0.1000	3
Fe	57	72	He	9692.893	ppb	1.2	212177.38	2.8121	Pulse	0.1000	3
Co	59	72	He	514.165	ppb	1.0	1183871.99	15.6905	Pulse	0.1000	3
Ni	60	72	He	514.998	ppb	1.2	342351.19	4.5375	Pulse	0.1000	3
Cu	63	72	He	538.204	ppb	1.3	1012973.40	13.4262	Pulse	0.1000	3
Zn	66	72	He	544.188	ppb	1.4	101236.23	1.3418	Pulse	0.1000	3
As	75	72	He	509.770	ppb	0.7	66931.55	0.8870	Pulse	0.5000	3
Sr	88	115	He	73.200	ppb	0.1	37109.10	0.5730	Pulse	0.1000	3
Mo	98	115	He	51.075	ppb	1.9	72875.14	1.1253	Pulse	0.1000	3
Ag	107	115	He	55.129	ppb	0.3	162482.55	2.5089	Pulse	0.1000	3
Cd	111	115	He	51.590	ppb	1.3	16041.85	0.2477	Pulse	0.5000	3
Sn	120	115	He	109.086	ppb	0.1	101739.49	1.5709	Pulse	0.1000	3
Sb	121	115	He	103.962	ppb	0.7	83539.63	1.2899	Pulse	0.1000	3
Ba	137	115	He	570.978	ppb	0.8	161794.24	2.4982	Pulse	0.1000	3
Tl	205	209	He	104.536	ppb	0.8	642050.67	2.8908	Pulse	0.1000	3
Pb	208	209	He	73.936	ppb	0.9	598161.65	2.6932	Pulse	0.1000	3
U	238	209	He	51.786	ppb	0.4	483900.81	2.1787	Pulse	0.1000	3

ISTD Table:

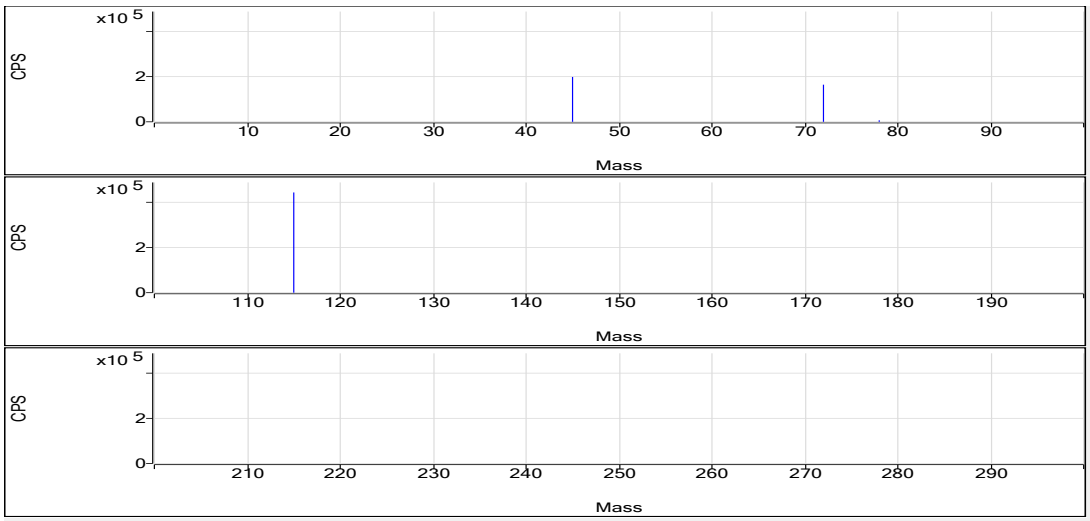
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3259569.01	2.6	100.6	Pulse	0.1000	3
No Gas	Ge	72	1448640.86	2.2	100.6	Pulse	0.1000	3
H2	Sc	45	198007.48	4.7	101.3	Pulse	0.1000	3
H2	Ge	72	163961.94	2.8	100.6	Pulse	0.1000	3
H2	In	115	442561.15	1.8	102.1	Pulse	0.1000	3
He	Sc	45	42525.88	1.7	106.4	Pulse	0.1000	3
He	Ge	72	75458.14	1.6	104.4	Pulse	0.1000	3
He	In	115	64763.90	0.4	100.3	Pulse	0.1000	3
He	Tb	159	287369.21	0.4	100.5	Pulse	0.1000	3
He	Bi	209	222099.61	0.5	100.0	Pulse	0.1000	3

No Gas

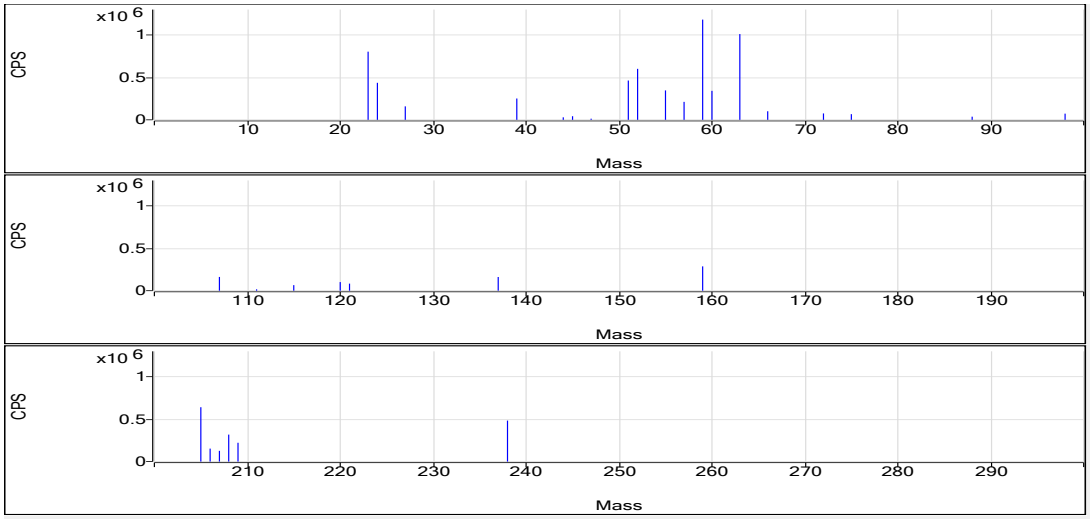


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	51.691	0.068	96185.98	0.0013	4.694E-05
Be	9	1	No Gas	50.824	0.0668	97063.30	0.0013	4.694E-05
Be	9	1	No Gas	47.773	0.0628	92881.48	0.0013	4.694E-05
Se	78	2	H2	99.884	0.0389	6583.51	0.0004	1.089E-05
Se	78	2	H2	107.252	0.0418	6706.24	0.0004	1.089E-05
Se	78	2	H2	103.719	0.0404	6548.16	0.0004	1.089E-05
Na	23	3	He	6159.065	10.6866	805105.14	0.0017	0.1065
Na	23	3	He	6241.561	10.8283	804344.13	0.0017	0.1065
Na	23	3	He	6049.976	10.4992	805873.03	0.0017	0.1065
Mg	24	3	He	6903.278	5.825	438842.45	0.0008	0.004846
Mg	24	3	He	6941.306	5.8571	435071.40	0.0008	0.004846
Mg	24	3	He	6759.71	5.704	437810.46	0.0008	0.004846
Al	27	3	He	8658.208	2.0911	157538.80	0.0002	0.001063
Al	27	3	He	8913.832	2.1528	159913.71	0.0002	0.001063
Al	27	3	He	8616.04	2.0809	159722.26	0.0002	0.001063
K	39	3	He	5853.784	3.3762	254352.57	0.0006	0.1436
K	39	3	He	5803.969	3.3487	248743.14	0.0006	0.1436
K	39	3	He	5688.595	3.285	252137.73	0.0006	0.1436
Ca	44	3	He	12632.324	0.394	29680.70	0	0.001611
Ca	44	3	He	12634.619	0.394	29269.87	0	0.001611
Ca	44	3	He	12351.86	0.3853	29570.64	0	0.001611
Ti	47	3	He	703.745	0.1768	13316.55	0.0003	0.0002737
Ti	47	3	He	705.703	0.1772	13166.34	0.0003	0.0002737
Ti	47	3	He	694.891	0.1745	13396.73	0.0003	0.0002737
V	51	3	He	526.538	6.1666	464579.78	0.0117	0.007326
V	51	3	He	529.732	6.204	460841.25	0.0117	0.007326
V	51	3	He	519.926	6.0893	467386.03	0.0117	0.007326
Cr	52	3	He	520.867	7.9568	599444.13	0.0152	0.02538
Cr	52	3	He	529.812	8.093	601157.33	0.0152	0.02538
Cr	52	3	He	516.826	7.8952	606001.55	0.0152	0.02538
Mn	55	3	He	773.193	4.5776	344862.77	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	792.863	4.6937	348651.99	0.0059	0.01385
Mn	55	3	He	767.391	4.5433	348724.53	0.0059	0.01385
Fe	57	3	He	9603.568	2.7862	209906.60	0.0003	0.003918
Fe	57	3	He	9818.486	2.8485	211588.81	0.0003	0.003918
Fe	57	3	He	9656.625	2.8016	215036.72	0.0003	0.003918
Co	59	3	He	510.66	15.5836	1174028.89	0.0305	0.003084
Co	59	3	He	520.311	15.878	1179441.15	0.0305	0.003084
Co	59	3	He	511.523	15.6099	1198145.92	0.0305	0.003084
Ni	60	3	He	517.312	4.5579	343379.76	0.0088	0.009003
Ni	60	3	He	519.56	4.5776	340034.10	0.0088	0.009003
Ni	60	3	He	508.122	4.4771	343639.72	0.0088	0.009003
Cu	63	3	He	538.488	13.4333	1012031.00	0.0249	0.004937
Cu	63	3	He	544.988	13.5954	1009882.02	0.0249	0.004937
Cu	63	3	He	531.137	13.25	1017007.17	0.0249	0.004937
Zn	66	3	He	550.634	1.3576	102279.45	0.0025	0.004836
Zn	66	3	He	546.415	1.3473	100075.67	0.0025	0.004836
Zn	66	3	He	535.516	1.3205	101353.57	0.0025	0.004836
As	75	3	He	505.708	0.8799	66293.21	0.0017	0.0004347
As	75	3	He	512.609	0.8919	66255.21	0.0017	0.0004347
As	75	3	He	510.993	0.8891	68246.23	0.0017	0.0004347
Sr	88	3	He	73.253	0.5734	37179.30	0.0078	0.0007762
Sr	88	3	He	73.084	0.5721	36888.58	0.0078	0.0007762
Sr	88	3	He	73.264	0.5735	37259.42	0.0078	0.0007762
Mo	98	3	He	49.953	1.1006	71360.20	0.022	0.0005162
Mo	98	3	He	51.774	1.1407	73551.65	0.022	0.0005162
Mo	98	3	He	51.498	1.1346	73713.58	0.022	0.0005162
Ag	107	3	He	54.974	2.5018	162216.23	0.0455	0.0004641
Ag	107	3	He	55.245	2.5141	162115.57	0.0455	0.0004641
Ag	107	3	He	55.168	2.5106	163115.86	0.0455	0.0004641
Cd	111	3	He	52.247	0.2509	16265.46	0.0048	5.152E-05
Cd	111	3	He	51.645	0.248	15989.10	0.0048	5.152E-05
Cd	111	3	He	50.878	0.2443	15871.00	0.0048	5.152E-05
Sn	120	3	He	109.119	1.5714	101890.07	0.0143	0.01559
Sn	120	3	He	109.164	1.572	101367.35	0.0143	0.01559
Sn	120	3	He	108.976	1.5694	101961.05	0.0143	0.01559
Sb	121	3	He	104.753	1.2997	84273.85	0.0124	0.000258
Sb	121	3	He	103.412	1.2831	82735.00	0.0124	0.000258
Sb	121	3	He	103.72	1.2869	83610.05	0.0124	0.000258
Ba	137	3	He	566.122	2.477	160607.77	0.0044	0.000309
Ba	137	3	He	572.462	2.5047	161507.48	0.0044	0.000309
Ba	137	3	He	574.349	2.513	163267.46	0.0044	0.000309
Tl	205	3	He	105.125	2.9071	642590.81	0.0276	0.001005
Tl	205	3	He	103.537	2.8632	635738.51	0.0276	0.001005
Tl	205	3	He	104.945	2.9021	647822.69	0.0276	0.001005
Pb	208	3	He	74.549	2.7156	319262.77	0.0364	0.002176
Pb	208	3	He	73.269	2.669	315975.33	0.0364	0.002176
Pb	208	3	He	73.99	2.6952	320090.05	0.0364	0.002176
U	238	3	He	51.601	2.1709	479863.70	0.0421	0.00024
U	238	3	He	51.976	2.1868	485537.41	0.0421	0.00024
U	238	3	He	51.781	2.1785	486301.32	0.0421	0.00024
Sc	45	1	No Gas			3175113.39		
Sc	45	1	No Gas			3259042.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3344550.89		
Ge	72	1	No Gas			1415096.23		
Ge	72	1	No Gas			1452342.01		
Ge	72	1	No Gas			1478484.35		
Sc	45	2	H2			207728.16		
Sc	45	2	H2			188984.47		
Sc	45	2	H2			197309.80		
Ge	72	2	H2			169233.96		
Ge	72	2	H2			160548.44		
Ge	72	2	H2			162103.43		
In	115	2	H2			450784.41		
In	115	2	H2			434943.67		
In	115	2	H2			441955.38		
Sc	45	3	He			42452.12		
Sc	45	3	He			41840.74		
Sc	45	3	He			43284.79		
Ge	72	3	He			75337.62		
Ge	72	3	He			74281.38		
Ge	72	3	He			76755.42		
In	115	3	He			65634.99		
In	115	3	He			65272.14		
In	115	3	He			65765.29		
Tb	159	3	He			288497.67		
Tb	159	3	He			285982.34		
Tb	159	3	He			287627.61		
Bi	209	3	He			221040.04		
Bi	209	3	He			222036.07		
Bi	209	3	He			223222.71		

Quantitation Report

Data File Name	219SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:11:09
Sample Name	410-136577-H-21-A SD @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

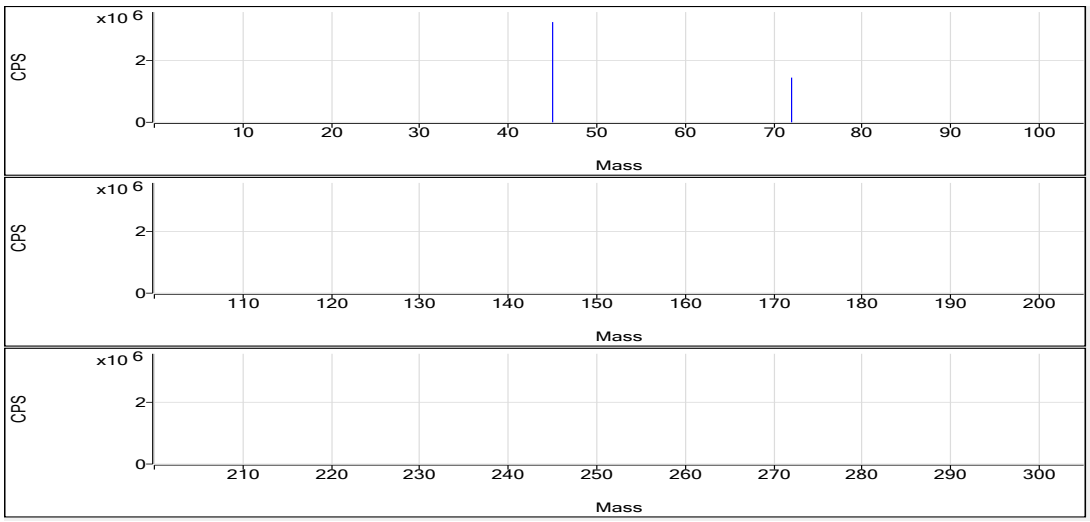
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.270	ppb	13.0	584.01	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.253	ppb	43.6	18.00	0.0001	Pulse	1.5000	3
Na	23	72	He	1225.345	ppb	0.5	165373.60	2.2114	Pulse	0.1000	3
Mg	24	72	He	2126.879	ppb	1.1	134465.82	1.7980	Pulse	0.1000	3
Al	27	72	He	4492.393	ppb	0.8	81178.84	1.0855	Pulse	0.1000	3
K	39	72	He	833.683	ppb	3.8	45173.47	0.6040	Pulse	0.1000	3
Ca	44	72	He	9092.942	ppb	3.3	21239.36	0.2840	Pulse	0.1000	3
Ti	47	72	He	222.564	ppb	3.7	4194.08	0.0561	Pulse	0.1000	3
V	51	72	He	11.881	ppb	1.8	10940.78	0.1463	Pulse	0.5000	3
Cr	52	72	He	5.920	ppb	8.3	8639.51	0.1155	Pulse	0.1000	3
Mn	55	72	He	329.338	ppb	0.7	146406.58	1.9577	Pulse	0.1000	3
Fe	57	72	He	5665.954	ppb	1.2	123047.57	1.6454	Pulse	0.1000	3
Co	59	72	He	1.994	ppb	2.5	4780.97	0.0639	Pulse	0.1000	3
Ni	60	72	He	5.938	ppb	2.8	4577.54	0.0612	Pulse	0.1000	3
Cu	63	72	He	29.450	ppb	1.3	55289.55	0.7393	Pulse	0.1000	3
Zn	66	72	He	42.279	ppb	1.8	8129.21	0.1087	Pulse	0.1000	3
As	75	72	He	1.252	ppb	8.1	195.33	0.0026	Pulse	0.5000	3
Sr	88	115	He	26.140	ppb	2.4	13239.93	0.2051	Pulse	0.1000	3
Mo	98	115	He	0.413	ppb	12.7	620.03	0.0096	Pulse	0.1000	3
Ag	107	115	He	0.078	ppb	10.4	260.01	0.0040	Pulse	0.1000	3
Cd	111	115	He	0.131	ppb	6.3	44.00	0.0007	Pulse	0.5000	3
Sn	120	115	He	6.154	ppb	4.0	6668.50	0.1033	Pulse	0.1000	3
Sb	121	115	He	1.579	ppb	11.2	1280.11	0.0198	Pulse	0.1000	3
Ba	137	115	He	76.693	ppb	4.0	21670.91	0.3358	Pulse	0.1000	3
Tl	205	209	He	0.326	ppb	13.8	2240.27	0.0100	Pulse	0.1000	3
Pb	208	209	He	26.765	ppb	1.3	218554.13	0.9764	Pulse	0.1000	3
U	238	209	He	0.488	ppb	2.6	4651.00	0.0208	Pulse	0.1000	3

ISTD Table:

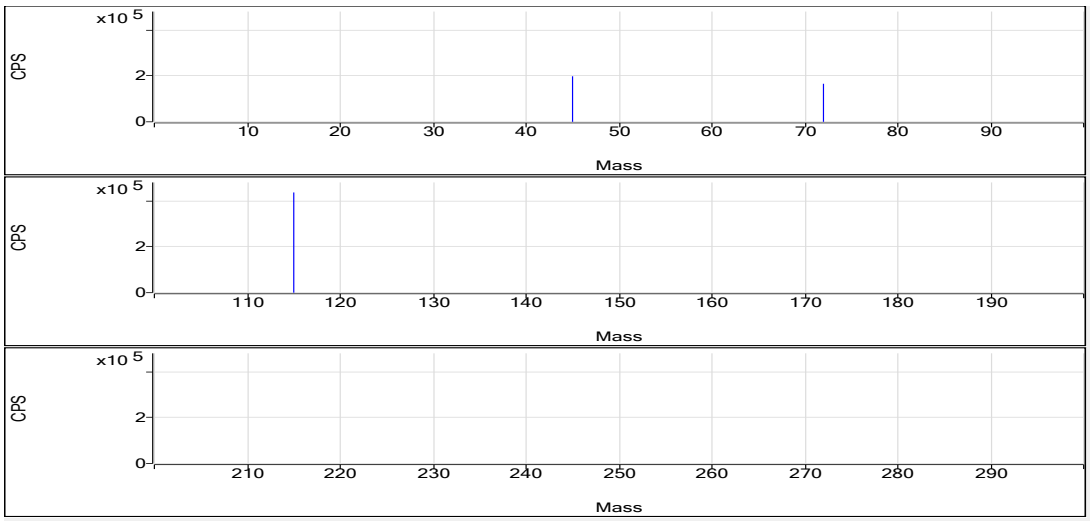
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3260852.97	1.6	100.6	Pulse	0.1000	3
No Gas	Ge	72	1453609.04	2.0	101.0	Pulse	0.1000	3
H2	Sc	45	198058.28	0.9	101.4	Pulse	0.1000	3
H2	Ge	72	165479.08	2.0	101.5	Pulse	0.1000	3
H2	In	115	435858.60	2.2	100.6	Pulse	0.1000	3
He	Sc	45	42141.47	0.4	105.4	Pulse	0.1000	3
He	Ge	72	74783.96	0.4	103.5	Pulse	0.1000	3
He	In	115	64551.06	1.3	99.9	Pulse	0.1000	3
He	Tb	159	289965.63	1.0	101.4	Pulse	0.1000	3
He	Bi	209	223858.72	1.2	100.8	Pulse	0.1000	3

No Gas

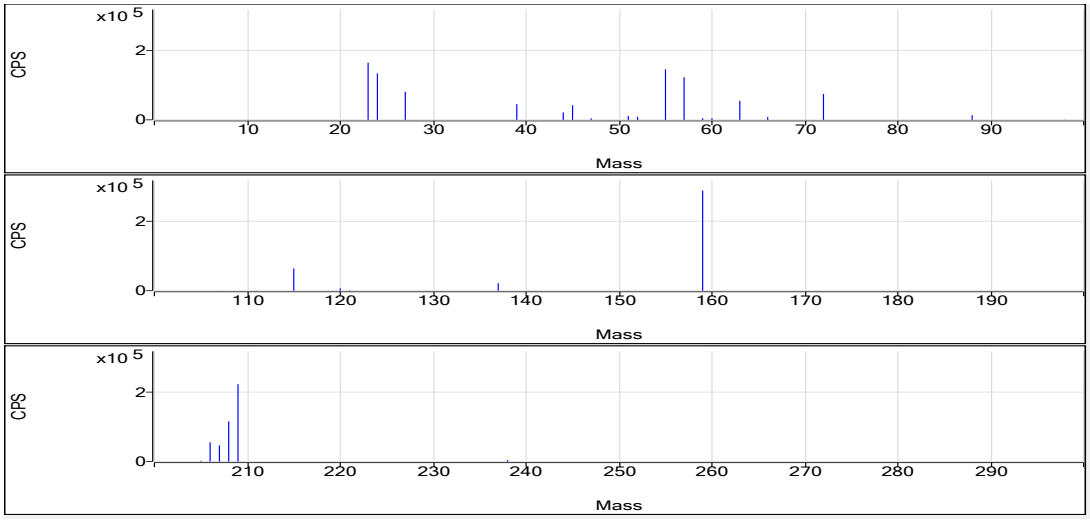


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.308	0.0005	650.02	0.0013	4.694E-05
Be	9	1	No Gas	0.266	0.0004	568.01	0.0013	4.694E-05
Be	9	1	No Gas	0.238	0.0004	534.01	0.0013	4.694E-05
Se	78	2	H2	0.154	0.0001	12.00	0.0004	1.089E-05
Se	78	2	H2	0.372	0.0002	25.33	0.0004	1.089E-05
Se	78	2	H2	0.232	0.0001	16.67	0.0004	1.089E-05
Na	23	3	He	1218.446	2.1995	165307.69	0.0017	0.1065
Na	23	3	He	1230.125	2.2196	165744.47	0.0017	0.1065
Na	23	3	He	1227.463	2.215	165068.65	0.0017	0.1065
Mg	24	3	He	2147.994	1.8158	136469.98	0.0008	0.004846
Mg	24	3	He	2101.173	1.7763	132645.99	0.0008	0.004846
Mg	24	3	He	2131.471	1.8019	134281.50	0.0008	0.004846
Al	27	3	He	4518.024	1.0917	82046.86	0.0002	0.001063
Al	27	3	He	4453.006	1.076	80348.06	0.0002	0.001063
Al	27	3	He	4506.149	1.0888	81141.61	0.0002	0.001063
K	39	3	He	867.669	0.6228	46805.49	0.0006	0.1436
K	39	3	He	804.894	0.5881	43916.41	0.0006	0.1436
K	39	3	He	828.487	0.6011	44798.51	0.0006	0.1436
Ca	44	3	He	8770.863	0.274	20595.20	0	0.001611
Ca	44	3	He	9155.996	0.286	21356.22	0	0.001611
Ca	44	3	He	9351.967	0.2921	21766.65	0	0.001611
Ti	47	3	He	215.421	0.0543	4080.74	0.0003	0.0002737
Ti	47	3	He	220.558	0.0556	4150.73	0.0003	0.0002737
Ti	47	3	He	231.711	0.0584	4350.78	0.0003	0.0002737
V	51	3	He	11.651	0.1436	10794.01	0.0117	0.007326
V	51	3	He	12.081	0.1487	11100.23	0.0117	0.007326
V	51	3	He	11.91	0.1466	10928.11	0.0117	0.007326
Cr	52	3	He	5.85	0.1145	8602.83	0.0152	0.02538
Cr	52	3	He	6.444	0.1235	9223.20	0.0152	0.02538
Cr	52	3	He	5.464	0.1086	8092.50	0.0152	0.02538
Mn	55	3	He	327.746	1.9483	146430.10	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	331.962	1.9732	147348.03	0.0059	0.01385
Mn	55	3	He	328.305	1.9516	145441.61	0.0059	0.01385
Fe	57	3	He	5601.103	1.6266	122251.69	0.0003	0.003918
Fe	57	3	He	5662.446	1.6444	122793.84	0.0003	0.003918
Fe	57	3	He	5734.312	1.6652	124097.19	0.0003	0.003918
Co	59	3	He	1.953	0.0627	4710.94	0.0305	0.003084
Co	59	3	He	2.05	0.0656	4901.00	0.0305	0.003084
Co	59	3	He	1.98	0.0635	4730.96	0.0305	0.003084
Ni	60	3	He	5.756	0.0596	4480.81	0.0088	0.009003
Ni	60	3	He	6.074	0.0624	4660.92	0.0088	0.009003
Ni	60	3	He	5.982	0.0616	4590.90	0.0088	0.009003
Cu	63	3	He	29.114	0.7309	54934.99	0.0249	0.004937
Cu	63	3	He	29.858	0.7495	55968.33	0.0249	0.004937
Cu	63	3	He	29.379	0.7376	54965.33	0.0249	0.004937
Zn	66	3	He	41.481	0.1067	8022.51	0.0025	0.004836
Zn	66	3	He	42.961	0.1104	8242.55	0.0025	0.004836
Zn	66	3	He	42.397	0.109	8122.58	0.0025	0.004836
As	75	3	He	1.357	0.0028	210.00	0.0017	0.0004347
As	75	3	He	1.244	0.0026	194.00	0.0017	0.0004347
As	75	3	He	1.154	0.0024	182.00	0.0017	0.0004347
Sr	88	3	He	26.069	0.2046	13016.42	0.0078	0.0007762
Sr	88	3	He	26.79	0.2102	13626.94	0.0078	0.0007762
Sr	88	3	He	25.56	0.2006	13076.43	0.0078	0.0007762
Mo	98	3	He	0.426	0.0099	630.03	0.022	0.0005162
Mo	98	3	He	0.355	0.0083	540.03	0.022	0.0005162
Mo	98	3	He	0.457	0.0106	690.04	0.022	0.0005162
Ag	107	3	He	0.073	0.0038	240.01	0.0455	0.0004641
Ag	107	3	He	0.075	0.0039	250.01	0.0455	0.0004641
Ag	107	3	He	0.088	0.0044	290.01	0.0455	0.0004641
Cd	111	3	He	0.14	0.0007	46.00	0.0048	5.152E-05
Cd	111	3	He	0.131	0.0007	44.00	0.0048	5.152E-05
Cd	111	3	He	0.123	0.0006	42.00	0.0048	5.152E-05
Sn	120	3	He	6.437	0.1074	6831.89	0.0143	0.01559
Sn	120	3	He	6.049	0.1018	6601.86	0.0143	0.01559
Sn	120	3	He	5.977	0.1008	6571.75	0.0143	0.01559
Sb	121	3	He	1.652	0.0207	1320.11	0.0124	0.000258
Sb	121	3	He	1.708	0.0214	1390.12	0.0124	0.000258
Sb	121	3	He	1.377	0.0173	1130.09	0.0124	0.000258
Ba	137	3	He	79.744	0.3492	22218.61	0.0044	0.000309
Ba	137	3	He	76.786	0.3362	21797.65	0.0044	0.000309
Ba	137	3	He	73.55	0.3221	20996.48	0.0044	0.000309
Tl	205	3	He	0.374	0.0114	2530.32	0.0276	0.001005
Tl	205	3	He	0.318	0.0098	2170.26	0.0276	0.001005
Tl	205	3	He	0.286	0.0089	2020.24	0.0276	0.001005
Pb	208	3	He	26.504	0.9669	114957.47	0.0364	0.002176
Pb	208	3	He	27.149	0.9903	117208.63	0.0364	0.002176
Pb	208	3	He	26.642	0.9719	116722.97	0.0364	0.002176
U	238	3	He	0.495	0.0211	4691.00	0.0421	0.00024
U	238	3	He	0.474	0.0202	4470.95	0.0421	0.00024
U	238	3	He	0.496	0.0211	4791.06	0.0421	0.00024
Sc	45	1	No Gas			3235922.45		
Sc	45	1	No Gas			3227555.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3319080.58		
Ge	72	1	No Gas			1440280.29		
Ge	72	1	No Gas			1434155.13		
Ge	72	1	No Gas			1486391.70		
Sc	45	2	H2			200169.41		
Sc	45	2	H2			196813.57		
Sc	45	2	H2			197191.85		
Ge	72	2	H2			169063.81		
Ge	72	2	H2			162760.71		
Ge	72	2	H2			164612.73		
In	115	2	H2			445704.76		
In	115	2	H2			426880.93		
In	115	2	H2			434990.11		
Sc	45	3	He			42001.38		
Sc	45	3	He			42332.03		
Sc	45	3	He			42091.00		
Ge	72	3	He			75155.99		
Ge	72	3	He			74673.43		
Ge	72	3	He			74522.46		
In	115	3	He			63685.41		
In	115	3	He			64881.04		
In	115	3	He			65242.76		
Tb	159	3	He			287397.40		
Tb	159	3	He			292961.91		
Tb	159	3	He			289537.59		
Bi	209	3	He			222825.06		
Bi	209	3	He			221737.03		
Bi	209	3	He			227014.08		

Quantitation Report

Data File Name	220SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:13:09
Sample Name	410-136577-H-21-A SD@50
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

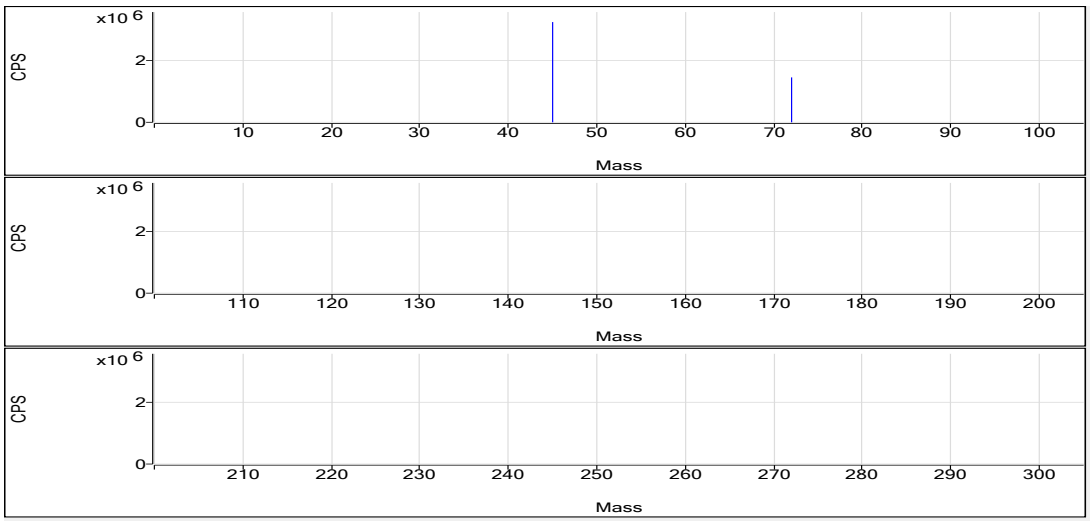
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.084	ppb	8.1	226.67	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.077	ppb	50.2	6.67	0.0000	Pulse	1.5000	3
Na	23	72	He	330.413	ppb	0.9	49920.90	0.6740	Pulse	0.1000	3
Mg	24	72	He	594.225	ppb	1.8	37461.35	0.5058	Pulse	0.1000	3
Al	27	72	He	1276.162	ppb	0.7	22894.93	0.3091	Pulse	0.1000	3
K	39	72	He	243.763	ppb	7.0	20611.73	0.2782	Pulse	0.1000	3
Ca	44	72	He	2610.513	ppb	1.9	6124.85	0.0827	Pulse	0.1000	3
Ti	47	72	He	61.902	ppb	19.8	1170.09	0.0158	Pulse	0.1000	3
V	51	72	He	3.253	ppb	3.0	3361.74	0.0454	Pulse	0.5000	3
Cr	52	72	He	1.703	ppb	8.4	3800.62	0.0513	Pulse	0.1000	3
Mn	55	72	He	90.632	ppb	2.0	40644.10	0.5488	Pulse	0.1000	3
Fe	57	72	He	1571.933	ppb	3.2	34014.13	0.4593	Pulse	0.1000	3
Co	59	72	He	0.630	ppb	11.4	1650.16	0.0223	Pulse	0.1000	3
Ni	60	72	He	2.427	ppb	3.7	2246.92	0.0303	Pulse	0.1000	3
Cu	63	72	He	8.379	ppb	1.9	15842.60	0.2139	Pulse	0.1000	3
Zn	66	72	He	12.227	ppb	5.5	2583.66	0.0349	Pulse	0.1000	3
As	75	72	He	0.355	ppb	14.6	78.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	7.407	ppb	3.0	3790.65	0.0587	Pulse	0.1000	3
Mo	98	115	He	0.138	ppb	10.5	230.01	0.0036	Pulse	0.1000	3
Ag	107	115	He	0.027	ppb	43.4	110.00	0.0017	Pulse	0.1000	3
Cd	111	115	He	0.047	ppb	35.8	18.00	0.0003	Pulse	0.5000	3
Sn	120	115	He	1.603	ppb	3.7	2483.64	0.0384	Pulse	0.1000	3
Sb	121	115	He	0.395	ppb	7.8	333.35	0.0052	Pulse	0.1000	3
Ba	137	115	He	20.768	ppb	8.0	5891.47	0.0912	Pulse	0.1000	3
Tl	205	209	He	0.102	ppb	25.0	860.06	0.0038	Pulse	0.1000	3
Pb	208	209	He	7.341	ppb	1.4	60496.44	0.2694	Pulse	0.1000	3
U	238	209	He	0.142	ppb	7.4	1393.47	0.0062	Pulse	0.1000	3

ISTD Table:

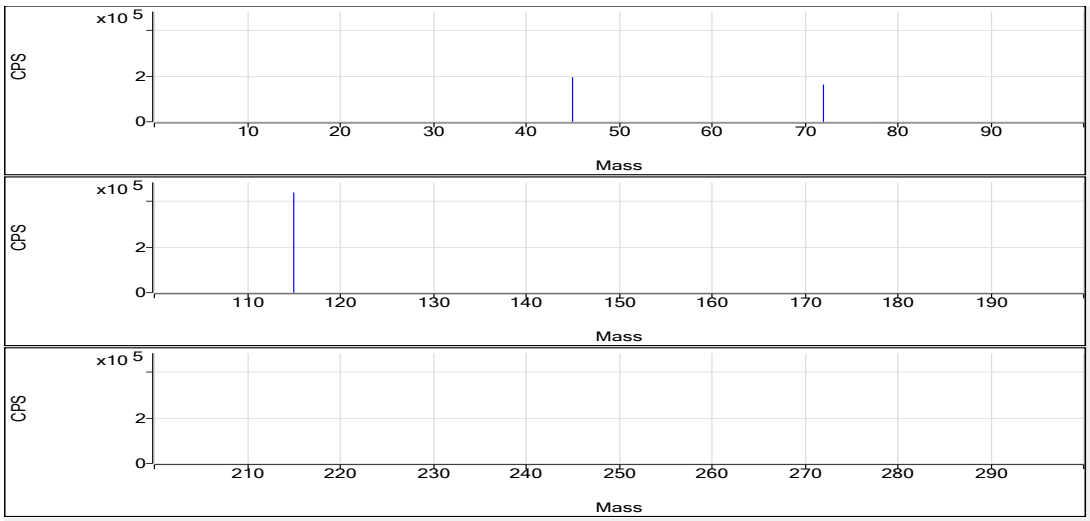
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3220259.12	2.7	99.4	Pulse	0.1000	3
No Gas	Ge	72	1442719.93	1.8	100.2	Pulse	0.1000	3
H2	Sc	45	195044.72	2.0	99.8	Pulse	0.1000	3
H2	Ge	72	163107.23	2.0	100.1	Pulse	0.1000	3
H2	In	115	438814.82	1.7	101.3	Pulse	0.1000	3
He	Sc	45	41422.55	0.9	103.6	Pulse	0.1000	3
He	Ge	72	74063.43	0.8	102.5	Pulse	0.1000	3
He	In	115	64606.73	0.6	100.0	Pulse	0.1000	3
He	Tb	159	285284.55	0.4	99.7	Pulse	0.1000	3
He	Bi	209	224594.70	0.6	101.1	Pulse	0.1000	3

No Gas

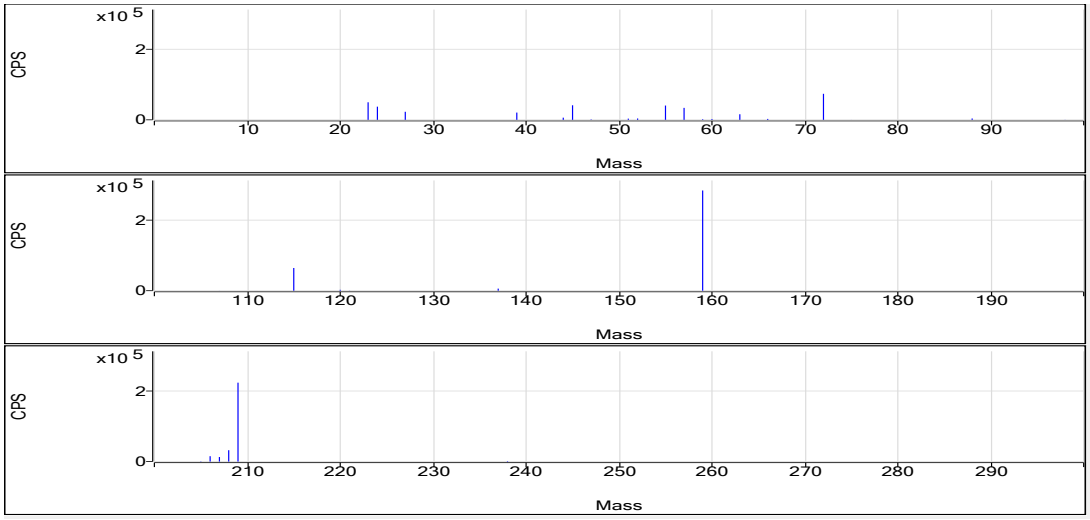


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.083	0.0002	222.00	0.0013	4.694E-05
Be	9	1	No Gas	0.077	0.0001	214.00	0.0013	4.694E-05
Be	9	1	No Gas	0.091	0.0002	244.00	0.0013	4.694E-05
Se	78	2	H2	0.108	0.0001	8.67	0.0004	1.089E-05
Se	78	2	H2	0.09	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.034	0	4.00	0.0004	1.089E-05
Na	23	3	He	326.948	0.6681	49673.63	0.0017	0.1065
Na	23	3	He	331.437	0.6758	50315.30	0.0017	0.1065
Na	23	3	He	332.854	0.6782	49773.78	0.0017	0.1065
Mg	24	3	He	582.686	0.4961	36886.38	0.0008	0.004846
Mg	24	3	He	595.468	0.5069	37738.82	0.0008	0.004846
Mg	24	3	He	604.522	0.5145	37758.84	0.0008	0.004846
Al	27	3	He	1287.035	0.3117	23178.67	0.0002	0.001063
Al	27	3	He	1270.795	0.3078	22918.32	0.0002	0.001063
Al	27	3	He	1270.655	0.3078	22587.80	0.0002	0.001063
K	39	3	He	248.075	0.2806	20865.24	0.0006	0.1436
K	39	3	He	258.351	0.2863	21316.11	0.0006	0.1436
K	39	3	He	224.862	0.2678	19653.85	0.0006	0.1436
Ca	44	3	He	2668.232	0.0845	6281.63	0	0.001611
Ca	44	3	He	2586.632	0.082	6101.47	0	0.001611
Ca	44	3	He	2576.674	0.0816	5991.44	0	0.001611
Ti	47	3	He	75.072	0.0191	1420.12	0.0003	0.0002737
Ti	47	3	He	50.864	0.013	970.07	0.0003	0.0002737
Ti	47	3	He	59.77	0.0153	1120.08	0.0003	0.0002737
V	51	3	He	3.309	0.046	3422.42	0.0117	0.007326
V	51	3	He	3.31	0.046	3428.42	0.0117	0.007326
V	51	3	He	3.141	0.0441	3234.38	0.0117	0.007326
Cr	52	3	He	1.867	0.0538	4000.69	0.0152	0.02538
Cr	52	3	He	1.641	0.0504	3750.58	0.0152	0.02538
Cr	52	3	He	1.6	0.0497	3650.58	0.0152	0.02538
Mn	55	3	He	91.783	0.5556	41309.29	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	88.552	0.5365	39945.47	0.0059	0.01385
Mn	55	3	He	91.562	0.5543	40677.55	0.0059	0.01385
Fe	57	3	He	1532.351	0.4479	33299.13	0.0003	0.003918
Fe	57	3	He	1555.336	0.4545	33840.19	0.0003	0.003918
Fe	57	3	He	1628.11	0.4756	34903.08	0.0003	0.003918
Co	59	3	He	0.626	0.0222	1650.18	0.0305	0.003084
Co	59	3	He	0.559	0.0201	1500.14	0.0305	0.003084
Co	59	3	He	0.703	0.0245	1800.17	0.0305	0.003084
Ni	60	3	He	2.403	0.0301	2240.27	0.0088	0.009003
Ni	60	3	He	2.352	0.0297	2210.24	0.0088	0.009003
Ni	60	3	He	2.525	0.0312	2290.26	0.0088	0.009003
Cu	63	3	He	8.28	0.2114	15718.98	0.0249	0.004937
Cu	63	3	He	8.56	0.2184	16259.85	0.0249	0.004937
Cu	63	3	He	8.298	0.2119	15548.97	0.0249	0.004937
Zn	66	3	He	12.322	0.0351	2610.35	0.0025	0.004836
Zn	66	3	He	12.849	0.0364	2710.33	0.0025	0.004836
Zn	66	3	He	11.511	0.0331	2430.29	0.0025	0.004836
As	75	3	He	0.4	0.0011	84.00	0.0017	0.0004347
As	75	3	He	0.368	0.0011	80.00	0.0017	0.0004347
As	75	3	He	0.299	0.001	70.00	0.0017	0.0004347
Sr	88	3	He	7.665	0.0607	3900.68	0.0078	0.0007762
Sr	88	3	He	7.281	0.0577	3750.64	0.0078	0.0007762
Sr	88	3	He	7.275	0.0576	3720.63	0.0078	0.0007762
Mo	98	3	He	0.153	0.0039	250.01	0.022	0.0005162
Mo	98	3	He	0.137	0.0035	230.01	0.022	0.0005162
Mo	98	3	He	0.124	0.0033	210.01	0.022	0.0005162
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.02	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.041	0.0023	150.01	0.0455	0.0004641
Cd	111	3	He	0.028	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	0.053	0.0003	20.00	0.0048	5.152E-05
Cd	111	3	He	0.06	0.0003	22.00	0.0048	5.152E-05
Sn	120	3	He	1.668	0.0394	2530.31	0.0143	0.01559
Sn	120	3	He	1.55	0.0377	2450.31	0.0143	0.01559
Sn	120	3	He	1.591	0.0383	2470.30	0.0143	0.01559
Sb	121	3	He	0.431	0.0056	360.02	0.0124	0.000258
Sb	121	3	He	0.376	0.0049	320.02	0.0124	0.000258
Sb	121	3	He	0.379	0.005	320.02	0.0124	0.000258
Ba	137	3	He	18.855	0.0828	5321.20	0.0044	0.000309
Ba	137	3	He	21.804	0.0957	6221.59	0.0044	0.000309
Ba	137	3	He	21.646	0.095	6131.61	0.0044	0.000309
Tl	205	3	He	0.127	0.0045	1020.08	0.0276	0.001005
Tl	205	3	He	0.103	0.0039	860.06	0.0276	0.001005
Tl	205	3	He	0.076	0.0031	700.04	0.0276	0.001005
Pb	208	3	He	7.353	0.2698	32360.60	0.0364	0.002176
Pb	208	3	He	7.436	0.2728	32771.18	0.0364	0.002176
Pb	208	3	He	7.234	0.2655	31779.24	0.0364	0.002176
U	238	3	He	0.144	0.0063	1420.14	0.0421	0.00024
U	238	3	He	0.151	0.0066	1470.15	0.0421	0.00024
U	238	3	He	0.13	0.0057	1290.12	0.0421	0.00024
Sc	45	1	No Gas			3144252.77		
Sc	45	1	No Gas			3199859.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3316665.58		
Ge	72	1	No Gas			1417286.85		
Ge	72	1	No Gas			1442680.76		
Ge	72	1	No Gas			1468192.17		
Sc	45	2	H2			195658.55		
Sc	45	2	H2			190827.87		
Sc	45	2	H2			198647.75		
Ge	72	2	H2			163305.52		
Ge	72	2	H2			159726.51		
Ge	72	2	H2			166289.65		
In	115	2	H2			447221.95		
In	115	2	H2			432736.20		
In	115	2	H2			436486.32		
Sc	45	3	He			41088.21		
Sc	45	3	He			41790.24		
Sc	45	3	He			41389.19		
Ge	72	3	He			74351.27		
Ge	72	3	He			74452.34		
Ge	72	3	He			73386.67		
In	115	3	He			64287.73		
In	115	3	He			65031.56		
In	115	3	He			64559.01		
Tb	159	3	He			286209.78		
Tb	159	3	He			285519.74		
Tb	159	3	He			284124.12		
Bi	209	3	He			225680.07		
Bi	209	3	He			222936.97		
Bi	209	3	He			225167.07		

Quantitation Report

Data File Name	221SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:15:10
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

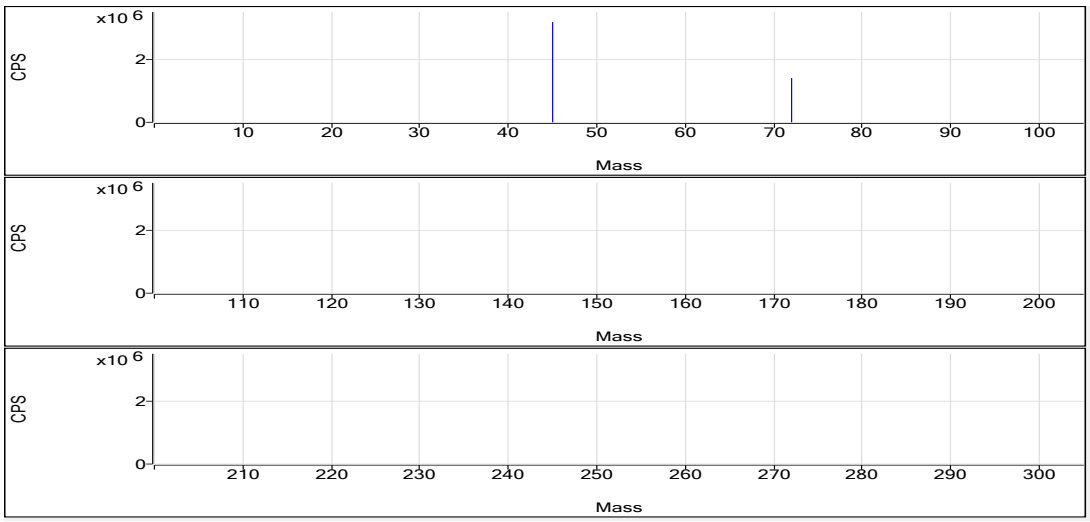
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.002	ppb	N/A	62.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.059	ppb	57.6	5.33	0.0000	Pulse	1.5000	3
Na	23	72	He	4.837	ppb	74.9	8302.57	0.1148	Pulse	0.1000	3
Mg	24	72	He	3.934	ppb	17.3	590.04	0.0082	Pulse	0.1000	3
Al	27	72	He	10.331	ppb	37.8	256.68	0.0036	Pulse	0.1000	3
K	39	72	He	11.408	ppb	195.5	10837.72	0.1499	Pulse	0.1000	3
Ca	44	72	He	13.500	ppb	74.3	146.67	0.0020	Pulse	0.1000	3
Ti	47	72	He	1.478	ppb	56.4	46.67	0.0006	Pulse	0.1000	3
V	51	72	He	0.131	ppb	69.1	640.68	0.0089	Pulse	0.5000	3
Cr	52	72	He	0.222	ppb	53.0	2080.22	0.0288	Pulse	0.1000	3
Mn	55	72	He	-0.871	ppb	N/A	630.04	0.0087	Pulse	0.1000	3
Fe	57	72	He	18.767	ppb	9.8	676.71	0.0094	Pulse	0.1000	3
Co	59	72	He	0.124	ppb	54.1	496.69	0.0069	Pulse	0.1000	3
Ni	60	72	He	0.959	ppb	25.0	1260.10	0.0174	Pulse	0.1000	3
Cu	63	72	He	0.135	ppb	5.3	600.03	0.0083	Pulse	0.1000	3
Zn	66	72	He	0.019	ppb	834.3	353.35	0.0049	Pulse	0.1000	3
As	75	72	He	0.063	ppb	94.2	39.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.061	ppb	149.5	80.00	0.0013	Pulse	0.1000	3
Mo	98	115	He	0.012	ppb	233.7	50.00	0.0008	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	87.5	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	76.5	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.170	ppb	95.7	1150.10	0.0180	Pulse	0.1000	3
Sb	121	115	He	0.025	ppb	103.0	36.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.132	ppb	153.6	56.67	0.0009	Pulse	0.1000	3
Tl	205	209	He	0.075	ppb	18.2	676.71	0.0031	Pulse	0.1000	3
Pb	208	209	He	0.052	ppb	18.5	896.71	0.0041	Pulse	0.1000	3
U	238	209	He	0.009	ppb	51.6	140.01	0.0006	Pulse	0.1000	3

ISTD Table:

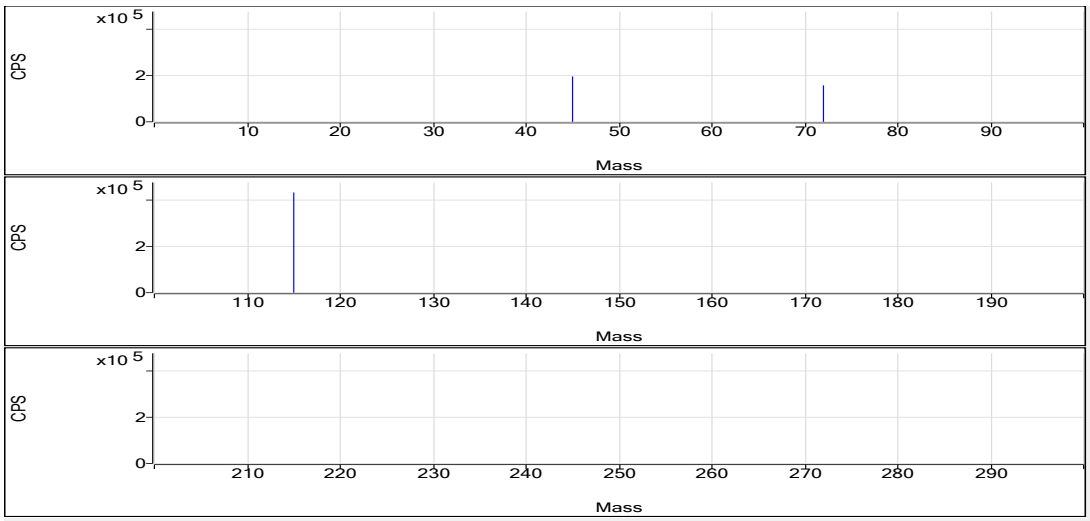
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3192263.18	2.2	98.5	Pulse	0.1000	3
No Gas	Ge	72	1407358.94	2.7	97.7	Pulse	0.1000	3
H2	Sc	45	196647.64	0.8	100.6	Pulse	0.1000	3
H2	Ge	72	158282.00	1.6	97.1	Pulse	0.1000	3
H2	In	115	434789.89	2.2	100.3	Pulse	0.1000	3
He	Sc	45	41369.15	1.0	103.5	Pulse	0.1000	3
He	Ge	72	72328.66	1.3	100.1	Pulse	0.1000	3
He	In	115	63874.06	0.8	98.9	Pulse	0.1000	3
He	Tb	159	285276.93	0.4	99.7	Pulse	0.1000	3
He	Bi	209	219686.73	1.0	98.9	Pulse	0.1000	3

No Gas

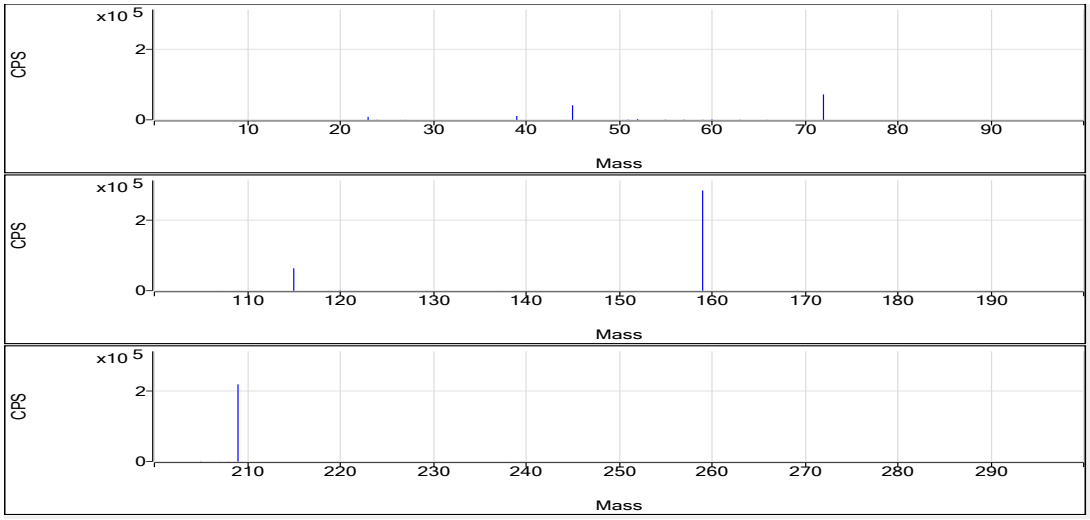


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.002	0	60.00	0.0013	4.694E-05
Be	9	1	No Gas	0.001	0	68.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.005	0	58.00	0.0013	4.694E-05
Se	78	2	H2	0.025	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.059	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.093	0	7.33	0.0004	1.089E-05
Na	23	3	He	0.948	0.1081	7732.23	0.0017	0.1065
Na	23	3	He	5.441	0.1158	8492.68	0.0017	0.1065
Na	23	3	He	8.123	0.1204	8682.80	0.0017	0.1065
Mg	24	3	He	4.367	0.0085	610.04	0.0008	0.004846
Mg	24	3	He	3.148	0.0075	550.03	0.0008	0.004846
Mg	24	3	He	4.286	0.0085	610.04	0.0008	0.004846
Al	27	3	He	14.128	0.0045	320.01	0.0002	0.001063
Al	27	3	He	6.33	0.0026	190.01	0.0002	0.001063
Al	27	3	He	10.534	0.0036	260.01	0.0002	0.001063
K	39	3	He	34.409	0.1626	11635.12	0.0006	0.1436
K	39	3	He	-10.137	0.138	10123.74	0.0006	0.1436
K	39	3	He	9.952	0.1491	10754.29	0.0006	0.1436
Ca	44	3	He	24.648	0.0024	170.01	0	0.001611
Ca	44	3	He	5.211	0.0018	130.01	0	0.001611
Ca	44	3	He	10.642	0.0019	140.00	0	0.001611
Ti	47	3	He	0.581	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	1.627	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	2.226	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.148	0.0091	648.02	0.0117	0.007326
V	51	3	He	0.211	0.0098	718.02	0.0117	0.007326
V	51	3	He	0.033	0.0077	556.01	0.0117	0.007326
Cr	52	3	He	0.132	0.0274	1960.19	0.0152	0.02538
Cr	52	3	He	0.178	0.0281	2060.21	0.0152	0.02538
Cr	52	3	He	0.355	0.0308	2220.25	0.0152	0.02538
Mn	55	3	He	-0.76	0.0094	670.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.845	0.0089	650.04	0.0059	0.01385
Mn	55	3	He	-1.008	0.0079	570.03	0.0059	0.01385
Fe	57	3	He	19.771	0.0096	690.04	0.0003	0.003918
Fe	57	3	He	19.896	0.0097	710.04	0.0003	0.003918
Fe	57	3	He	16.635	0.0087	630.04	0.0003	0.003918
Co	59	3	He	0.105	0.0063	450.02	0.0305	0.003084
Co	59	3	He	0.069	0.0052	380.02	0.0305	0.003084
Co	59	3	He	0.199	0.0092	660.04	0.0305	0.003084
Ni	60	3	He	1.091	0.0186	1330.12	0.0088	0.009003
Ni	60	3	He	0.682	0.015	1100.07	0.0088	0.009003
Ni	60	3	He	1.105	0.0187	1350.12	0.0088	0.009003
Cu	63	3	He	0.127	0.0081	580.03	0.0249	0.004937
Cu	63	3	He	0.136	0.0083	610.03	0.0249	0.004937
Cu	63	3	He	0.141	0.0085	610.03	0.0249	0.004937
Zn	66	3	He	-0.148	0.0045	320.02	0.0025	0.004836
Zn	66	3	He	0.03	0.0049	360.02	0.0025	0.004836
Zn	66	3	He	0.177	0.0053	380.02	0.0025	0.004836
As	75	3	He	0.12	0.0006	46.00	0.0017	0.0004347
As	75	3	He	0.001	0.0004	32.00	0.0017	0.0004347
As	75	3	He	0.069	0.0006	40.00	0.0017	0.0004347
Sr	88	3	He	-0.019	0.0006	40.00	0.0078	0.0007762
Sr	88	3	He	0.159	0.002	130.01	0.0078	0.0007762
Sr	88	3	He	0.042	0.0011	70.00	0.0078	0.0007762
Mo	98	3	He	0.04	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	-0.016	0.0002	10.00	0.022	0.0005162
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.0009	60.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	0.355	0.0206	1320.12	0.0143	0.01559
Sn	120	3	He	0.052	0.0163	1050.08	0.0143	0.01559
Sn	120	3	He	0.102	0.017	1080.09	0.0143	0.01559
Sb	121	3	He	0.055	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	0.358	0.0019	120.01	0.0044	0.000309
Ba	137	3	He	-0.035	0.0002	10.00	0.0044	0.000309
Ba	137	3	He	0.074	0.0006	40.00	0.0044	0.000309
Tl	205	3	He	0.087	0.0034	750.05	0.0276	0.001005
Tl	205	3	He	0.079	0.0032	690.04	0.0276	0.001005
Tl	205	3	He	0.06	0.0027	590.04	0.0276	0.001005
Pb	208	3	He	0.041	0.0037	440.02	0.0364	0.002176
Pb	208	3	He	0.058	0.0043	560.03	0.0364	0.002176
Pb	208	3	He	0.058	0.0043	440.02	0.0364	0.002176
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.01	0.0007	150.01	0.0421	0.00024
Sc	45	1	No Gas			3116948.39		
Sc	45	1	No Gas			3202306.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3257534.64		
Ge	72	1	No Gas			1364767.95		
Ge	72	1	No Gas			1417226.54		
Ge	72	1	No Gas			1440082.32		
Sc	45	2	H2			198224.55		
Sc	45	2	H2			196552.89		
Sc	45	2	H2			195165.47		
Ge	72	2	H2			160890.26		
Ge	72	2	H2			158281.97		
Ge	72	2	H2			155673.78		
In	115	2	H2			445623.67		
In	115	2	H2			429385.35		
In	115	2	H2			429360.66		
Sc	45	3	He			41028.03		
Sc	45	3	He			41228.72		
Sc	45	3	He			41850.71		
Ge	72	3	He			71538.19		
Ge	72	3	He			73337.51		
Ge	72	3	He			72110.27		
In	115	3	He			63946.32		
In	115	3	He			64328.39		
In	115	3	He			63374.38		
Tb	159	3	He			286718.84		
Tb	159	3	He			284290.43		
Tb	159	3	He			284821.52		
Bi	209	3	He			220426.05		
Bi	209	3	He			217201.74		
Bi	209	3	He			221432.40		

Quantitation Report

Data File Name	222_CCV.d
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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

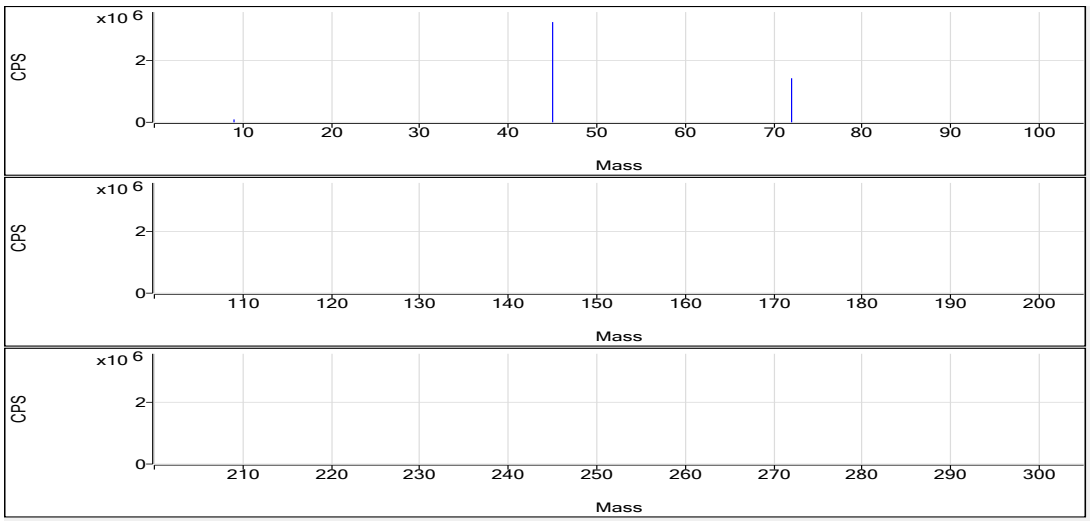
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.675	ppb	4.8	93397.40	0.0653	Pulse	0.5000	3
Se	78	72	H2	54.130	ppb	1.0	3403.08	0.0211	Pulse	1.5000	3
Na	23	72	He	5355.467	ppb	1.6	682417.75	9.3062	Pulse	0.1000	3
Mg	24	72	He	5351.347	ppb	3.0	331156.86	4.5166	Pulse	0.1000	3
Al	27	72	He	5318.528	ppb	2.6	94217.96	1.2849	Pulse	0.1000	3
K	39	72	He	5351.086	ppb	1.4	227220.57	3.0986	Pulse	0.1000	3
Ca	44	72	He	5292.151	ppb	4.9	12168.80	0.1660	Pulse	0.1000	3
Ti	47	72	He	5402.162	ppb	2.1	99359.38	1.3550	Pulse	0.1000	3
V	51	72	He	535.104	ppb	1.7	459534.22	6.2668	Pulse	0.5000	3
Cr	52	72	He	535.900	ppb	1.9	600235.95	8.1857	Pulse	0.1000	3
Mn	55	72	He	532.452	ppb	2.4	231456.38	3.1566	Pulse	0.1000	3
Fe	57	72	He	5331.838	ppb	1.8	113557.81	1.5486	Pulse	0.1000	3
Co	59	72	He	534.696	ppb	1.1	1196562.51	16.3169	Pulse	0.1000	3
Ni	60	72	He	537.476	ppb	1.1	347245.61	4.7352	Pulse	0.1000	3
Cu	63	72	He	531.978	ppb	1.3	973203.55	13.2709	Pulse	0.1000	3
Zn	66	72	He	526.879	ppb	2.0	95269.89	1.2993	Pulse	0.1000	3
As	75	72	He	522.652	ppb	1.7	66685.79	0.9094	Pulse	0.5000	3
Sr	88	115	He	53.699	ppb	2.4	26912.79	0.4205	Pulse	0.1000	3
Mo	98	115	He	53.324	ppb	2.2	75179.84	1.1748	Pulse	0.1000	3
Ag	107	115	He	52.217	ppb	1.6	152078.01	2.3764	Pulse	0.1000	3
Cd	111	115	He	52.975	ppb	0.6	16279.45	0.2543	Pulse	0.5000	3
Sn	120	115	He	52.765	ppb	2.3	49140.76	0.7679	Pulse	0.1000	3
Sb	121	115	He	52.101	ppb	1.9	41385.50	0.6466	Pulse	0.1000	3
Ba	137	115	He	522.451	ppb	2.1	146284.86	2.2859	Pulse	0.1000	3
Tl	205	209	He	52.636	ppb	0.3	321697.96	1.4561	Pulse	0.1000	3
Pb	208	209	He	52.441	ppb	0.5	422189.96	1.9109	Pulse	0.1000	3
U	238	209	He	52.346	ppb	0.6	486567.74	2.2023	Pulse	0.1000	3

ISTD Table:

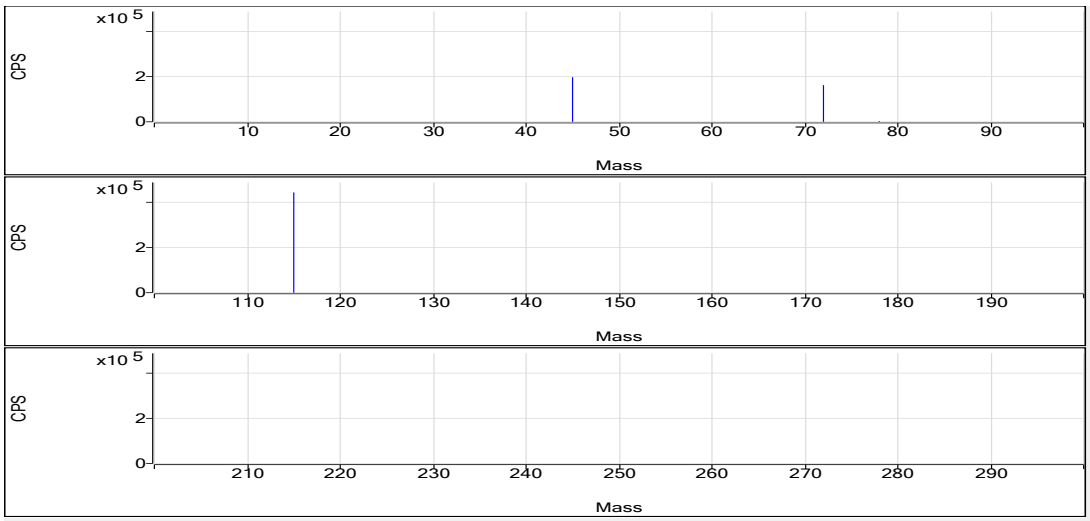
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3255442.76	2.5	100.4	Pulse	0.1000	3
No Gas	Ge	72	1430694.09	2.0	99.4	Pulse	0.1000	3
H2	Sc	45	196083.45	2.5	100.4	Pulse	0.1000	3
H2	Ge	72	161379.06	2.1	99.0	Pulse	0.1000	3
H2	In	115	440993.70	3.9	101.8	Pulse	0.1000	3
He	Sc	45	42201.70	0.8	105.5	Pulse	0.1000	3
He	Ge	72	73340.05	1.4	101.5	Pulse	0.1000	3
He	In	115	64005.25	1.3	99.1	Pulse	0.1000	3
He	Tb	159	288661.13	0.6	100.9	Pulse	0.1000	3
He	Bi	209	220937.31	0.7	99.4	Pulse	0.1000	3

No Gas

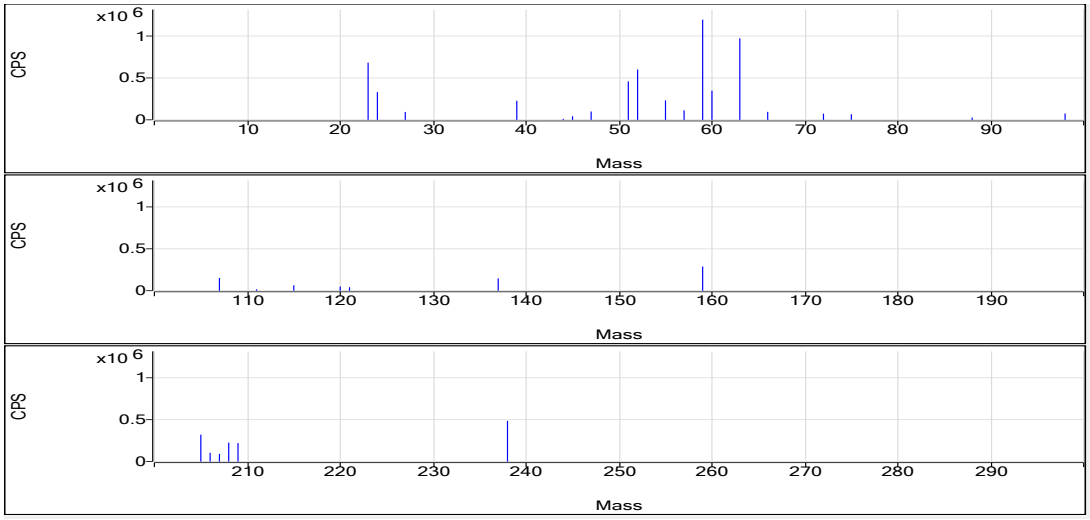


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	51.748	0.068	95854.06	0.0013	4.694E-05
Be	9	1	No Gas	50.202	0.066	93782.84	0.0013	4.694E-05
Be	9	1	No Gas	47.076	0.0619	90555.30	0.0013	4.694E-05
Se	78	2	H2	54.687	0.0213	3491.10	0.0004	1.089E-05
Se	78	2	H2	54.12	0.0211	3323.06	0.0004	1.089E-05
Se	78	2	H2	53.582	0.0209	3395.07	0.0004	1.089E-05
Na	23	3	He	5342.848	9.2845	684438.35	0.0017	0.1065
Na	23	3	He	5278.341	9.1737	680149.21	0.0017	0.1065
Na	23	3	He	5445.213	9.4604	682665.69	0.0017	0.1065
Mg	24	3	He	5344.582	4.5109	332533.67	0.0008	0.004846
Mg	24	3	He	5196.774	4.3863	325202.18	0.0008	0.004846
Mg	24	3	He	5512.686	4.6526	335734.72	0.0008	0.004846
Al	27	3	He	5190.685	1.2541	92447.44	0.0002	0.001063
Al	27	3	He	5303.263	1.2812	94992.65	0.0002	0.001063
Al	27	3	He	5461.635	1.3195	95213.80	0.0002	0.001063
K	39	3	He	5335.156	3.0898	227773.04	0.0006	0.1436
K	39	3	He	5284.208	3.0616	226993.86	0.0006	0.1436
K	39	3	He	5433.894	3.1443	226894.82	0.0006	0.1436
Ca	44	3	He	5383.734	0.1688	12445.78	0	0.001611
Ca	44	3	He	5000.646	0.1569	11635.00	0	0.001611
Ca	44	3	He	5492.073	0.1722	12425.63	0	0.001611
Ti	47	3	He	5322.063	1.3349	98409.25	0.0003	0.0002737
Ti	47	3	He	5355.616	1.3434	99597.67	0.0003	0.0002737
Ti	47	3	He	5528.806	1.3868	100071.23	0.0003	0.0002737
V	51	3	He	531.853	6.2288	459177.25	0.0117	0.007326
V	51	3	He	527.867	6.1822	458354.72	0.0117	0.007326
V	51	3	He	545.59	6.3895	461070.69	0.0117	0.007326
Cr	52	3	He	529.95	8.0951	596755.30	0.0152	0.02538
Cr	52	3	He	530.393	8.1018	600679.25	0.0152	0.02538
Cr	52	3	He	547.357	8.3601	603273.31	0.0152	0.02538
Mn	55	3	He	522.774	3.0995	228488.63	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	527.384	3.1267	231817.18	0.0059	0.01385
Mn	55	3	He	547.197	3.2436	234063.34	0.0059	0.01385
Fe	57	3	He	5272.03	1.5313	112884.97	0.0003	0.003918
Fe	57	3	He	5280.9	1.5339	113723.10	0.0003	0.003918
Fe	57	3	He	5442.584	1.5807	114065.37	0.0003	0.003918
Co	59	3	He	530.227	16.1806	1192804.67	0.0305	0.003084
Co	59	3	He	532.174	16.24	1204052.33	0.0305	0.003084
Co	59	3	He	541.686	16.5302	1192830.53	0.0305	0.003084
Ni	60	3	He	533.714	4.7021	346631.67	0.0088	0.009003
Ni	60	3	He	534.649	4.7103	349229.84	0.0088	0.009003
Ni	60	3	He	544.065	4.7931	345875.31	0.0088	0.009003
Cu	63	3	He	524.826	13.0926	965162.33	0.0249	0.004937
Cu	63	3	He	532.265	13.2781	984453.66	0.0249	0.004937
Cu	63	3	He	538.844	13.4422	969994.67	0.0249	0.004937
Zn	66	3	He	520.426	1.2834	94610.16	0.0025	0.004836
Zn	66	3	He	521.14	1.2852	95282.93	0.0025	0.004836
Zn	66	3	He	539.071	1.3292	95916.57	0.0025	0.004836
As	75	3	He	519.753	0.9044	66668.89	0.0017	0.0004347
As	75	3	He	515.495	0.897	66502.37	0.0017	0.0004347
As	75	3	He	532.708	0.9269	66886.11	0.0017	0.0004347
Sr	88	3	He	52.602	0.412	26425.03	0.0078	0.0007762
Sr	88	3	He	55.091	0.4314	27226.78	0.0078	0.0007762
Sr	88	3	He	53.404	0.4182	27086.55	0.0078	0.0007762
Mo	98	3	He	52.709	1.1612	74486.02	0.022	0.0005162
Mo	98	3	He	54.665	1.2043	76004.59	0.022	0.0005162
Mo	98	3	He	52.598	1.1588	75048.91	0.022	0.0005162
Ag	107	3	He	51.847	2.3595	151346.61	0.0455	0.0004641
Ag	107	3	He	53.193	2.4207	152771.10	0.0455	0.0004641
Ag	107	3	He	51.611	2.3488	152116.31	0.0455	0.0004641
Cd	111	3	He	53.303	0.2559	16415.60	0.0048	5.152E-05
Cd	111	3	He	52.921	0.2541	16035.16	0.0048	5.152E-05
Cd	111	3	He	52.702	0.253	16387.59	0.0048	5.152E-05
Sn	120	3	He	53.031	0.7717	49498.99	0.0143	0.01559
Sn	120	3	He	53.85	0.7834	49438.49	0.0143	0.01559
Sn	120	3	He	51.414	0.7486	48484.79	0.0143	0.01559
Sb	121	3	He	51.041	0.6334	40629.66	0.0124	0.000258
Sb	121	3	He	52.301	0.649	40960.89	0.0124	0.000258
Sb	121	3	He	52.962	0.6573	42565.96	0.0124	0.000258
Ba	137	3	He	518.836	2.2701	145611.86	0.0044	0.000309
Ba	137	3	He	534.767	2.3398	147662.98	0.0044	0.000309
Ba	137	3	He	513.751	2.2479	145579.74	0.0044	0.000309
Tl	205	3	He	52.791	1.4604	320040.00	0.0276	0.001005
Tl	205	3	He	52.453	1.451	322007.22	0.0276	0.001005
Tl	205	3	He	52.663	1.4568	323046.66	0.0276	0.001005
Pb	208	3	He	52.433	1.9106	224106.95	0.0364	0.002176
Pb	208	3	He	52.687	1.9198	227401.34	0.0364	0.002176
Pb	208	3	He	52.204	1.9023	227715.76	0.0364	0.002176
U	238	3	He	52.48	2.2079	483858.90	0.0421	0.00024
U	238	3	He	52.013	2.1883	485616.75	0.0421	0.00024
U	238	3	He	52.547	2.2108	490227.57	0.0421	0.00024
Sc	45	1	No Gas			3181828.39		
Sc	45	1	No Gas			3242982.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3341517.14		
Ge	72	1	No Gas			1408675.60		
Ge	72	1	No Gas			1420653.42		
Ge	72	1	No Gas			1462753.26		
Sc	45	2	H2			195712.59		
Sc	45	2	H2			191283.36		
Sc	45	2	H2			201254.39		
Ge	72	2	H2			163872.61		
Ge	72	2	H2			157616.12		
Ge	72	2	H2			162648.46		
In	115	2	H2			453275.62		
In	115	2	H2			421410.07		
In	115	2	H2			448295.42		
Sc	45	3	He			41931.04		
Sc	45	3	He			42592.91		
Sc	45	3	He			42081.15		
Ge	72	3	He			73718.28		
Ge	72	3	He			74141.20		
Ge	72	3	He			72160.66		
In	115	3	He			64529.18		
In	115	3	He			63494.71		
In	115	3	He			65141.76		
Tb	159	3	He			286557.26		
Tb	159	3	He			289465.11		
Tb	159	3	He			289961.01		
Bi	209	3	He			219147.28		
Bi	209	3	He			221917.79		
Bi	209	3	He			221746.87		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

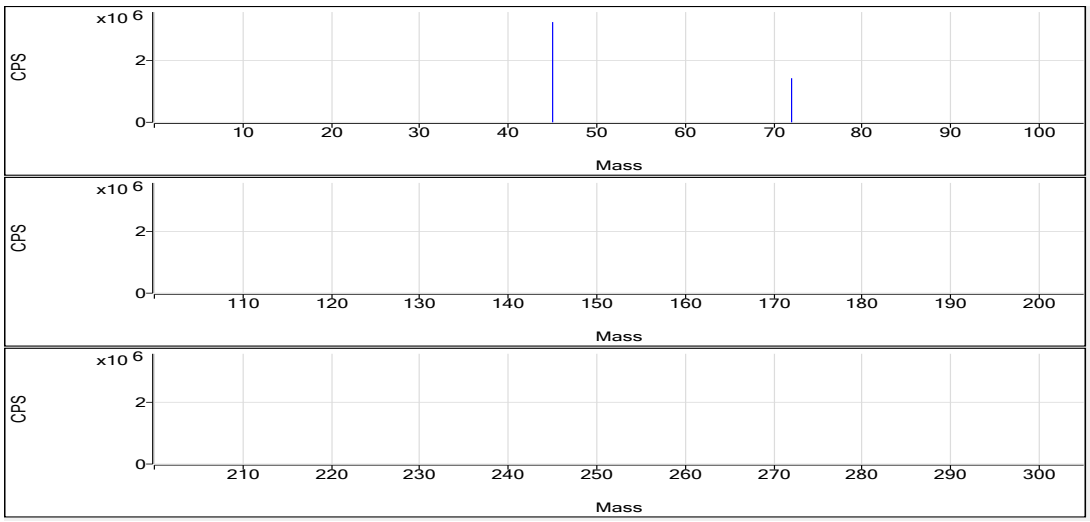
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.028	ppb	3.7	118.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.036	ppb	27.3	4.00	0.0000	Pulse	1.5000	3
Na	23	72	He	6.250	ppb	9.8	8432.64	0.1172	Pulse	0.1000	3
Mg	24	72	He	2.929	ppb	22.4	526.69	0.0073	Pulse	0.1000	3
Al	27	72	He	10.553	ppb	17.1	260.01	0.0036	Pulse	0.1000	3
K	39	72	He	18.746	ppb	36.1	11077.89	0.1540	Pulse	0.1000	3
Ca	44	72	He	7.873	ppb	258.2	133.34	0.0019	Pulse	0.1000	3
Ti	47	72	He	0.942	ppb	122.2	36.67	0.0005	Pulse	0.1000	3
V	51	72	He	0.179	ppb	27.7	677.35	0.0094	Pulse	0.5000	3
Cr	52	72	He	0.219	ppb	63.4	2066.89	0.0287	Pulse	0.1000	3
Mn	55	72	He	-0.832	ppb	N/A	643.37	0.0089	Pulse	0.1000	3
Fe	57	72	He	19.593	ppb	8.4	690.04	0.0096	Pulse	0.1000	3
Co	59	72	He	0.175	ppb	23.5	606.70	0.0084	Pulse	0.1000	3
Ni	60	72	He	0.928	ppb	29.3	1236.77	0.0172	Pulse	0.1000	3
Cu	63	72	He	0.146	ppb	24.8	616.70	0.0086	Pulse	0.1000	3
Zn	66	72	He	0.168	ppb	324.8	376.68	0.0052	Pulse	0.1000	3
As	75	72	He	0.279	ppb	66.9	66.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.171	ppb	44.8	136.67	0.0021	Pulse	0.1000	3
Mo	98	115	He	0.033	ppb	34.8	80.00	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.027	ppb	31.2	110.00	0.0017	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	44.0	10.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.181	ppb	38.2	1170.09	0.0182	Pulse	0.1000	3
Sb	121	115	He	0.067	ppb	36.1	70.00	0.0011	Pulse	0.1000	3
Ba	137	115	He	0.318	ppb	54.5	110.00	0.0017	Pulse	0.1000	3
Tl	205	209	He	0.185	ppb	5.9	1340.12	0.0061	Pulse	0.1000	3
Pb	208	209	He	0.030	ppb	32.8	720.04	0.0033	Pulse	0.1000	3
U	238	209	He	0.019	ppb	30.6	223.34	0.0010	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3243470.99	2.1	100.1	Pulse	0.1000	3
No Gas	Ge	72	1426408.05	2.2	99.1	Pulse	0.1000	3
H2	Sc	45	195722.62	1.5	100.2	Pulse	0.1000	3
H2	Ge	72	160634.86	1.9	98.5	Pulse	0.1000	3
H2	In	115	437417.01	1.6	100.9	Pulse	0.1000	3
He	Sc	45	40637.39	3.9	101.6	Pulse	0.1000	3
He	Ge	72	71953.38	1.5	99.5	Pulse	0.1000	3
He	In	115	64423.01	1.6	99.7	Pulse	0.1000	3
He	Tb	159	281495.70	0.3	98.4	Pulse	0.1000	3
He	Bi	209	219098.97	0.4	98.6	Pulse	0.1000	3

No Gas



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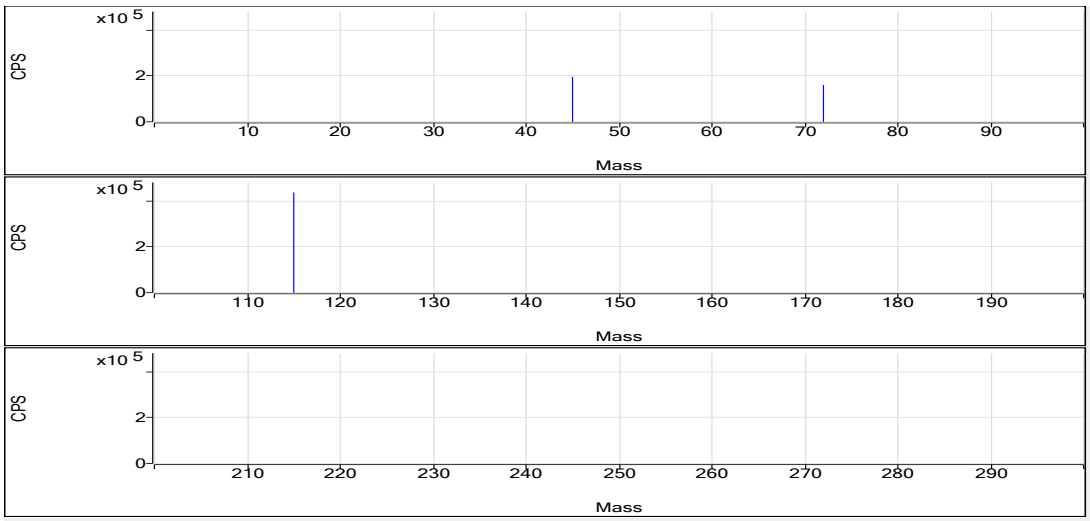
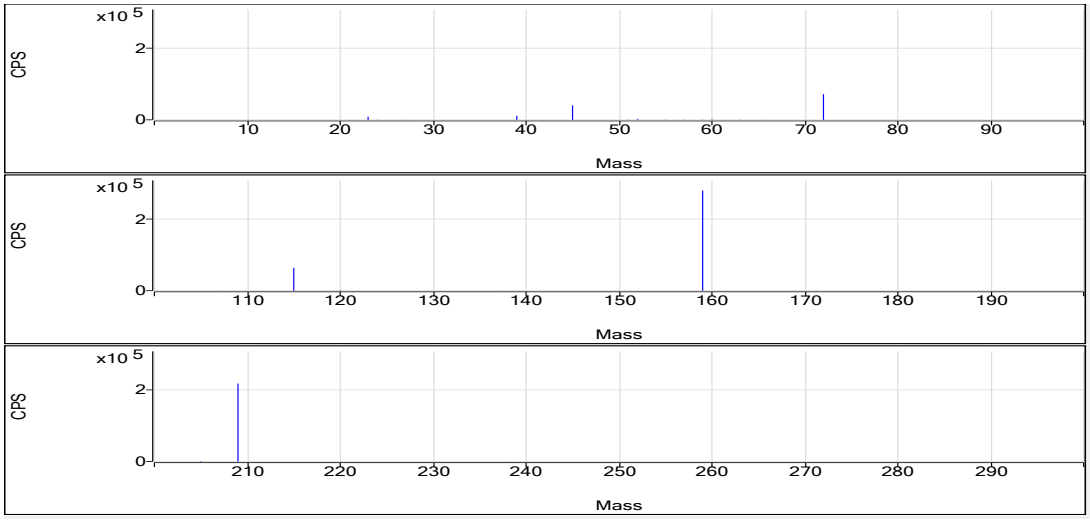


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.027	0.0001	114.00	0.0013	4.694E-05
Be	9	1	No Gas	0.029	0.0001	122.00	0.0013	4.694E-05
Be	9	1	No Gas	0.027	0.0001	120.00	0.0013	4.694E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.046	0	4.67	0.0004	1.089E-05
Na	23	3	He	5.608	0.1161	8372.54	0.0017	0.1065
Na	23	3	He	6.823	0.1182	8622.74	0.0017	0.1065
Na	23	3	He	6.32	0.1173	8302.65	0.0017	0.1065
Mg	24	3	He	2.475	0.0069	500.02	0.0008	0.004846
Mg	24	3	He	3.681	0.0079	580.03	0.0008	0.004846
Mg	24	3	He	2.632	0.0071	500.02	0.0008	0.004846
Al	27	3	He	9.383	0.0033	240.01	0.0002	0.001063
Al	27	3	He	12.63	0.0041	300.01	0.0002	0.001063
Al	27	3	He	9.646	0.0034	240.01	0.0002	0.001063
K	39	3	He	21.723	0.1556	11224.66	0.0006	0.1436
K	39	3	He	11.01	0.1497	10924.39	0.0006	0.1436
K	39	3	He	23.504	0.1566	11084.63	0.0006	0.1436
Ca	44	3	He	28.494	0.0025	180.01	0	0.001611
Ca	44	3	He	-12.152	0.0012	90.00	0	0.001611
Ca	44	3	He	7.278	0.0018	130.01	0	0.001611
Ti	47	3	He	2.226	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	0.002	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	0.599	0.0004	30.00	0.0003	0.0002737
V	51	3	He	0.194	0.0096	692.02	0.0117	0.007326
V	51	3	He	0.124	0.0088	640.02	0.0117	0.007326
V	51	3	He	0.219	0.0099	700.02	0.0117	0.007326
Cr	52	3	He	0.355	0.0308	2220.25	0.0152	0.02538
Cr	52	3	He	0.223	0.0288	2100.23	0.0152	0.02538
Cr	52	3	He	0.078	0.0266	1880.18	0.0152	0.02538
Mn	55	3	He	-1.29	0.0062	450.02	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.536	0.0107	780.05	0.0059	0.01385
Mn	55	3	He	-0.671	0.0099	700.04	0.0059	0.01385
Fe	57	3	He	20.459	0.0098	710.04	0.0003	0.003918
Fe	57	3	He	17.701	0.009	660.04	0.0003	0.003918
Fe	57	3	He	20.618	0.0099	700.04	0.0003	0.003918
Co	59	3	He	0.149	0.0076	550.03	0.0305	0.003084
Co	59	3	He	0.222	0.0099	720.04	0.0305	0.003084
Co	59	3	He	0.154	0.0078	550.03	0.0305	0.003084
Ni	60	3	He	0.947	0.0173	1250.10	0.0088	0.009003
Ni	60	3	He	1.19	0.0195	1420.13	0.0088	0.009003
Ni	60	3	He	0.647	0.0147	1040.07	0.0088	0.009003
Cu	63	3	He	0.169	0.0092	660.04	0.0249	0.004937
Cu	63	3	He	0.104	0.0075	550.03	0.0249	0.004937
Cu	63	3	He	0.165	0.009	640.04	0.0249	0.004937
Zn	66	3	He	0.233	0.0054	390.02	0.0025	0.004836
Zn	66	3	He	-0.407	0.0038	280.01	0.0025	0.004836
Zn	66	3	He	0.677	0.0065	460.02	0.0025	0.004836
As	75	3	He	0.244	0.0009	62.00	0.0017	0.0004347
As	75	3	He	0.113	0.0006	46.00	0.0017	0.0004347
As	75	3	He	0.481	0.0013	90.00	0.0017	0.0004347
Sr	88	3	He	0.215	0.0025	160.01	0.0078	0.0007762
Sr	88	3	He	0.083	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.216	0.0025	160.01	0.0078	0.0007762
Mo	98	3	He	0.039	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.02	0.0009	60.00	0.022	0.0005162
Mo	98	3	He	0.04	0.0014	90.00	0.022	0.0005162
Ag	107	3	He	0.034	0.002	130.00	0.0455	0.0004641
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0.03	0.0019	120.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.021	0.0002	10.00	0.0048	5.152E-05
Sn	120	3	He	0.102	0.017	1110.09	0.0143	0.01559
Sn	120	3	He	0.227	0.0188	1190.09	0.0143	0.01559
Sn	120	3	He	0.215	0.0187	1210.10	0.0143	0.01559
Sb	121	3	He	0.066	0.0011	70.00	0.0124	0.000258
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.091	0.0014	90.00	0.0124	0.000258
Ba	137	3	He	0.315	0.0017	110.00	0.0044	0.000309
Ba	137	3	He	0.146	0.0009	60.00	0.0044	0.000309
Ba	137	3	He	0.493	0.0025	160.01	0.0044	0.000309
Tl	205	3	He	0.179	0.006	1300.12	0.0276	0.001005
Tl	205	3	He	0.178	0.0059	1300.10	0.0276	0.001005
Tl	205	3	He	0.198	0.0065	1420.13	0.0276	0.001005
Pb	208	3	He	0.022	0.003	280.02	0.0364	0.002176
Pb	208	3	He	0.042	0.0037	460.03	0.0364	0.002176
Pb	208	3	He	0.028	0.0032	370.02	0.0364	0.002176
U	238	3	He	0.025	0.0013	280.01	0.0421	0.00024
U	238	3	He	0.017	0.001	210.01	0.0421	0.00024
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
Sc	45	1	No Gas			3164974.64		
Sc	45	1	No Gas			3284726.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3280711.51		
Ge	72	1	No Gas			1389759.82		
Ge	72	1	No Gas			1440931.54		
Ge	72	1	No Gas			1448532.79		
Sc	45	2	H2			195480.37		
Sc	45	2	H2			192977.40		
Sc	45	2	H2			198710.08		
Ge	72	2	H2			162499.27		
Ge	72	2	H2			157191.03		
Ge	72	2	H2			162214.27		
In	115	2	H2			439201.56		
In	115	2	H2			429878.08		
In	115	2	H2			443171.40		
Sc	45	3	He			41450.08		
Sc	45	3	He			38822.17		
Sc	45	3	He			41639.93		
Ge	72	3	He			72121.01		
Ge	72	3	He			72965.10		
Ge	72	3	He			70774.04		
In	115	3	He			65172.12		
In	115	3	He			63253.09		
In	115	3	He			64871.20		
Tb	159	3	He			280541.54		
Tb	159	3	He			281604.49		
Tb	159	3	He			282341.07		
Bi	209	3	He			218068.96		
Bi	209	3	He			219584.66		
Bi	209	3	He			219643.28		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:21:11
Sample Name	410-136577-K-21-A DU @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

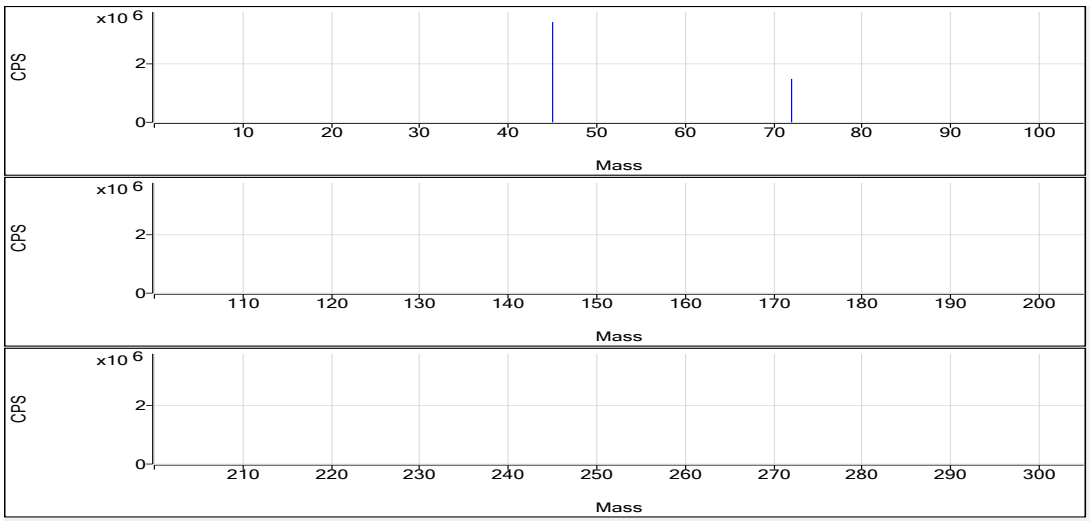
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.609	ppb	2.5	3189.02	0.0022	Pulse	0.5000	3
Se	78	72	H2	0.841	ppb	6.4	55.11	0.0003	Pulse	1.5000	3
Na	23	72	He	8460.355	ppb	1.0	1091915.87	14.6398	Pulse	0.1000	3
Mg	24	72	He	12056.774	ppb	1.0	758528.35	10.1699	Pulse	0.1000	3
Al	27	72	He	28520.356	ppb	1.1	513576.24	6.8857	Pulse	0.1000	3
K	39	72	He	5489.665	ppb	2.0	236822.56	3.1751	Pulse	0.1000	3
Ca	44	72	He	56368.560	ppb	0.8	130709.27	1.7524	Pulse	0.1000	3
Ti	47	72	He	1317.324	ppb	3.5	24661.41	0.3306	Pulse	0.1000	3
V	51	72	He	75.104	ppb	0.5	66073.90	0.8859	Pulse	0.5000	3
Cr	52	72	He	38.814	ppb	1.8	45976.63	0.6164	Pulse	0.1000	3
Mn	55	72	He	2062.635	ppb	0.2	909085.56	12.1884	Pulse	0.1000	3
Fe	57	72	He	38397.786	ppb	0.6	830013.87	11.1283	Pulse	0.1000	3
Co	59	72	He	11.267	ppb	2.3	25870.45	0.3469	Pulse	0.1000	3
Ni	60	72	He	30.542	ppb	2.8	20702.12	0.2776	Pulse	0.1000	3
Cu	63	72	He	208.281	ppb	0.5	387767.44	5.1989	Pulse	0.1000	3
Zn	66	72	He	267.516	ppb	1.0	49382.15	0.6621	Pulse	0.1000	3
As	75	72	He	8.581	ppb	4.3	1145.39	0.0154	Pulse	0.5000	3
Sr	88	115	He	168.975	ppb	1.3	85063.70	1.3217	Pulse	0.1000	3
Mo	98	115	He	2.835	ppb	6.0	4050.73	0.0629	Pulse	0.1000	3
Ag	107	115	He	0.348	ppb	14.9	1050.07	0.0163	Pulse	0.1000	3
Cd	111	115	He	0.881	ppb	11.7	275.34	0.0043	Pulse	0.5000	3
Sn	120	115	He	36.569	ppb	2.6	34568.79	0.5370	Pulse	0.1000	3
Sb	121	115	He	11.863	ppb	2.7	9486.88	0.1474	Pulse	0.1000	3
Ba	137	115	He	466.500	ppb	2.4	131361.24	2.0412	Pulse	0.1000	3
Tl	205	209	He	0.292	ppb	11.8	2020.22	0.0091	Pulse	0.1000	3
Pb	208	209	He	174.449	ppb	0.6	1412198.30	6.3516	Pulse	0.1000	3
U	238	209	He	3.049	ppb	3.3	28565.62	0.1285	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3408257.45	1.9	105.2	Pulse	0.1000	3
No Gas	Ge	72	1475771.33	1.6	102.5	Pulse	0.1000	3
H2	Sc	45	205426.68	2.1	105.1	Pulse	0.1000	3
H2	Ge	72	162864.07	1.2	99.9	Pulse	0.1000	3
H2	In	115	439302.83	0.6	101.4	Pulse	0.1000	3
He	Sc	45	43625.65	1.5	109.1	Pulse	0.1000	3
He	Ge	72	74586.50	0.4	103.2	Pulse	0.1000	3
He	In	115	64366.72	1.1	99.7	Pulse	0.1000	3
He	Tb	159	293702.28	0.4	102.7	Pulse	0.1000	3
He	Bi	209	222337.67	0.9	100.1	Pulse	0.1000	3

No Gas



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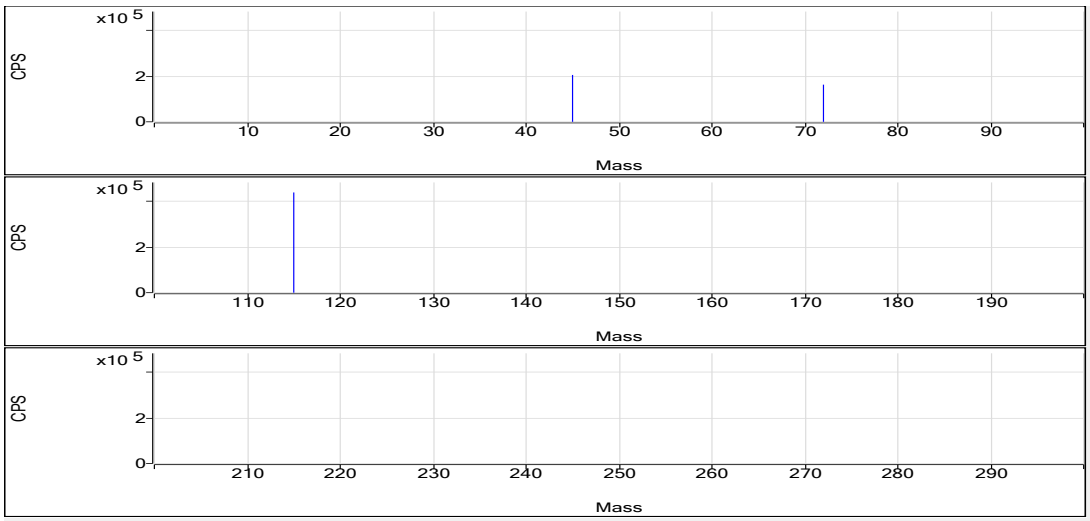
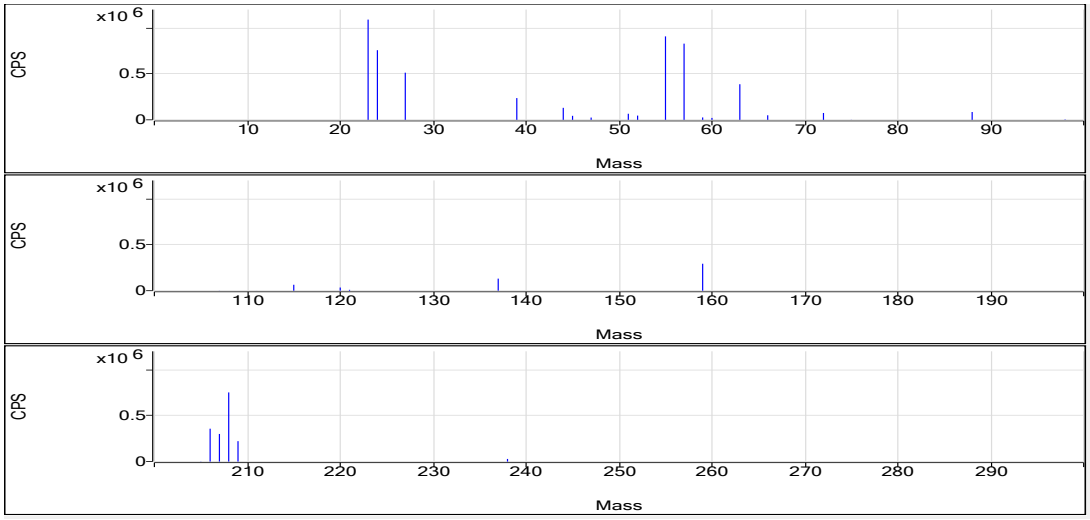


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.652	0.0022	3214.36	0.0013	4.694E-05
Be	9	1	No Gas	1.575	0.0021	3140.34	0.0013	4.694E-05
Be	9	1	No Gas	1.601	0.0022	3212.36	0.0013	4.694E-05
Se	78	2	H2	0.855	0.0003	56.00	0.0004	1.089E-05
Se	78	2	H2	0.781	0.0003	50.67	0.0004	1.089E-05
Se	78	2	H2	0.886	0.0004	58.67	0.0004	1.089E-05
Na	23	3	He	8495.753	14.7006	1099222.09	0.0017	0.1065
Na	23	3	He	8519.169	14.7409	1094081.47	0.0017	0.1065
Na	23	3	He	8366.145	14.478	1082444.05	0.0017	0.1065
Mg	24	3	He	12121.29	10.2243	764511.24	0.0008	0.004846
Mg	24	3	He	12131.376	10.2328	759490.54	0.0008	0.004846
Mg	24	3	He	11917.654	10.0526	751583.27	0.0008	0.004846
Al	27	3	He	28751.697	6.9416	519046.20	0.0002	0.001063
Al	27	3	He	28635.588	6.9135	513128.78	0.0002	0.001063
Al	27	3	He	28173.783	6.8021	508553.74	0.0002	0.001063
K	39	3	He	5609.825	3.2415	242375.56	0.0006	0.1436
K	39	3	He	5460.873	3.1592	234478.84	0.0006	0.1436
K	39	3	He	5398.297	3.1246	233613.28	0.0006	0.1436
Ca	44	3	He	56662.839	1.7616	131717.79	0	0.001611
Ca	44	3	He	55825.05	1.7355	128812.69	0	0.001611
Ca	44	3	He	56617.789	1.7602	131597.34	0	0.001611
Ti	47	3	He	1369.618	0.3437	25703.15	0.0003	0.0002737
Ti	47	3	He	1301.255	0.3266	24240.68	0.0003	0.0002737
Ti	47	3	He	1281.1	0.3215	24040.39	0.0003	0.0002737
V	51	3	He	75.284	0.888	66397.30	0.0117	0.007326
V	51	3	He	75.368	0.889	65979.54	0.0117	0.007326
V	51	3	He	74.661	0.8807	65844.85	0.0117	0.007326
Cr	52	3	He	38.305	0.6087	45512.14	0.0152	0.02538
Cr	52	3	He	38.513	0.6118	45411.28	0.0152	0.02538
Cr	52	3	He	39.622	0.6287	47006.48	0.0152	0.02538
Mn	55	3	He	2059.05	12.1672	909789.91	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2066.598	12.2118	906370.69	0.0059	0.01385
Mn	55	3	He	2062.258	12.1862	911096.08	0.0059	0.01385
Fe	57	3	He	38154.837	11.0579	826843.27	0.0003	0.003918
Fe	57	3	He	38556.808	11.1744	829374.21	0.0003	0.003918
Fe	57	3	He	38481.713	11.1526	833824.13	0.0003	0.003918
Co	59	3	He	11.477	0.3533	26414.66	0.0305	0.003084
Co	59	3	He	11.342	0.3491	25913.85	0.0305	0.003084
Co	59	3	He	10.982	0.3382	25282.85	0.0305	0.003084
Ni	60	3	He	31.198	0.2833	21186.35	0.0088	0.009003
Ni	60	3	He	30.87	0.2805	20815.53	0.0088	0.009003
Ni	60	3	He	29.557	0.2689	20104.48	0.0088	0.009003
Cu	63	3	He	207.644	5.183	387550.58	0.0249	0.004937
Cu	63	3	He	207.758	5.1858	384895.93	0.0249	0.004937
Cu	63	3	He	209.442	5.2278	390855.81	0.0249	0.004937
Zn	66	3	He	269.815	0.6677	49927.15	0.0025	0.004836
Zn	66	3	He	264.577	0.6548	48602.88	0.0025	0.004836
Zn	66	3	He	268.156	0.6636	49616.42	0.0025	0.004836
As	75	3	He	8.271	0.0148	1108.05	0.0017	0.0004347
As	75	3	He	8.985	0.0161	1192.06	0.0017	0.0004347
As	75	3	He	8.487	0.0152	1136.05	0.0017	0.0004347
Sr	88	3	He	169.597	1.3265	84802.50	0.0078	0.0007762
Sr	88	3	He	166.562	1.3028	84962.42	0.0078	0.0007762
Sr	88	3	He	170.766	1.3357	85426.17	0.0078	0.0007762
Mo	98	3	He	2.747	0.061	3900.68	0.022	0.0005162
Mo	98	3	He	2.727	0.0606	3950.69	0.022	0.0005162
Mo	98	3	He	3.03	0.0672	4300.82	0.022	0.0005162
Ag	107	3	He	0.292	0.0138	880.05	0.0455	0.0004641
Ag	107	3	He	0.357	0.0167	1090.08	0.0455	0.0004641
Ag	107	3	He	0.395	0.0185	1180.09	0.0455	0.0004641
Cd	111	3	He	0.837	0.0041	260.00	0.0048	5.152E-05
Cd	111	3	He	0.807	0.0039	256.00	0.0048	5.152E-05
Cd	111	3	He	0.999	0.0048	310.01	0.0048	5.152E-05
Sn	120	3	He	36.816	0.5405	34553.37	0.0143	0.01559
Sn	120	3	He	37.379	0.5485	35772.69	0.0143	0.01559
Sn	120	3	He	35.512	0.5219	33380.32	0.0143	0.01559
Sb	121	3	He	11.85	0.1473	9413.50	0.0124	0.000258
Sb	121	3	He	11.553	0.1436	9363.41	0.0124	0.000258
Sb	121	3	He	12.185	0.1514	9683.73	0.0124	0.000258
Ba	137	3	He	466.67	2.0419	130533.99	0.0044	0.000309
Ba	137	3	He	455.053	1.9911	129847.53	0.0044	0.000309
Ba	137	3	He	477.778	2.0905	133702.21	0.0044	0.000309
Tl	205	3	He	0.289	0.009	2000.22	0.0276	0.001005
Tl	205	3	He	0.259	0.0082	1800.18	0.0276	0.001005
Tl	205	3	He	0.328	0.0101	2260.25	0.0276	0.001005
Pb	208	3	He	175.619	6.3943	756618.35	0.0364	0.002176
Pb	208	3	He	173.991	6.335	749034.29	0.0364	0.002176
Pb	208	3	He	173.736	6.3257	754373.19	0.0364	0.002176
U	238	3	He	3.149	0.1327	29474.39	0.0421	0.00024
U	238	3	He	3.049	0.1285	28331.86	0.0421	0.00024
U	238	3	He	2.948	0.1243	27890.61	0.0421	0.00024
Sc	45	1	No Gas			3335529.95		
Sc	45	1	No Gas			3454587.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3434655.26		
Ge	72	1	No Gas			1449315.29		
Ge	72	1	No Gas			1484135.45		
Ge	72	1	No Gas			1493863.26		
Sc	45	2	H2			203035.50		
Sc	45	2	H2			202793.49		
Sc	45	2	H2			210451.05		
Ge	72	2	H2			162819.53		
Ge	72	2	H2			160928.45		
Ge	72	2	H2			164844.24		
In	115	2	H2			436523.27		
In	115	2	H2			440153.20		
In	115	2	H2			441232.02		
Sc	45	3	He			44287.44		
Sc	45	3	He			43565.26		
Sc	45	3	He			43024.24		
Ge	72	3	He			74773.76		
Ge	72	3	He			74220.98		
Ge	72	3	He			74764.77		
In	115	3	He			64197.47		
In	115	3	He			65493.86		
In	115	3	He			64217.75		
Tb	159	3	He			294417.87		
Tb	159	3	He			292312.44		
Tb	159	3	He			294376.54		
Bi	209	3	He			222074.06		
Bi	209	3	He			220506.62		
Bi	209	3	He			224432.32		

Quantitation Report

Data File Name	225SMPL.d
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Acq Time	2023-08-10 18:23:11
Sample Name	410-136577-K-21-A DU @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

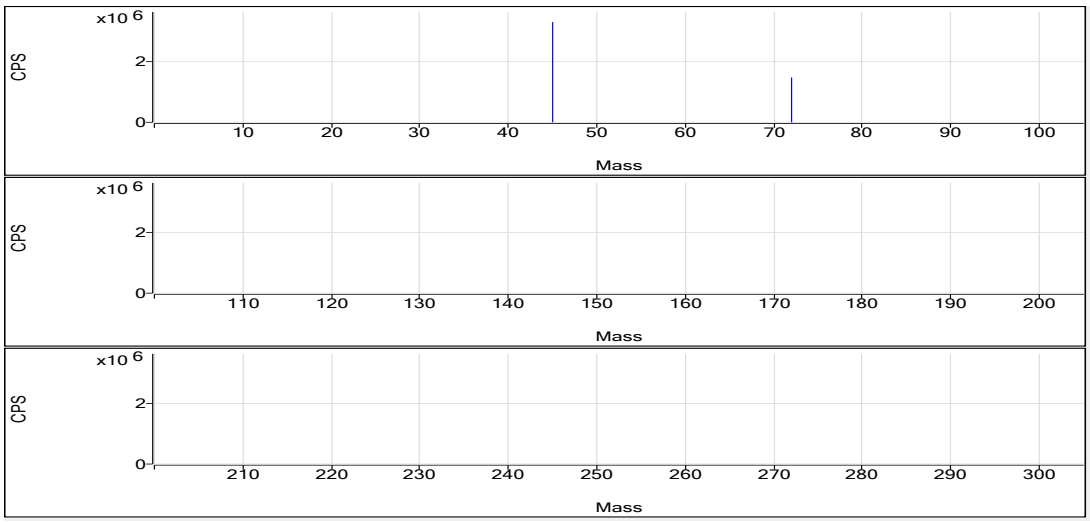
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.295	ppb	8.8	636.02	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.153	ppb	15.6	11.55	0.0001	Pulse	1.5000	3
Na	23	72	He	1578.763	ppb	2.7	212347.75	2.8185	Pulse	0.1000	3
Mg	24	72	He	2244.646	ppb	2.1	142954.86	1.8973	Pulse	0.1000	3
Al	27	72	He	5343.131	ppb	2.3	97257.90	1.2909	Pulse	0.1000	3
K	39	72	He	1037.589	ppb	3.0	53992.89	0.7166	Pulse	0.1000	3
Ca	44	72	He	10545.144	ppb	1.6	24801.46	0.3291	Pulse	0.1000	3
Ti	47	72	He	247.839	ppb	6.3	4700.92	0.0624	Pulse	0.1000	3
V	51	72	He	13.851	ppb	1.3	12761.61	0.1694	Pulse	0.5000	3
Cr	52	72	He	7.550	ppb	2.1	10577.53	0.1404	Pulse	0.1000	3
Mn	55	72	He	385.482	ppb	2.8	172460.50	2.2891	Pulse	0.1000	3
Fe	57	72	He	7274.913	ppb	2.4	159093.29	2.1116	Pulse	0.1000	3
Co	59	72	He	2.088	ppb	11.1	5027.72	0.0668	Pulse	0.1000	3
Ni	60	72	He	6.654	ppb	5.5	5087.74	0.0675	Pulse	0.1000	3
Cu	63	72	He	39.566	ppb	2.1	74720.01	0.9916	Pulse	0.1000	3
Zn	66	72	He	52.620	ppb	2.3	10110.57	0.1341	Pulse	0.1000	3
As	75	72	He	1.654	ppb	18.1	250.00	0.0033	Pulse	0.5000	3
Sr	88	115	He	31.831	ppb	2.1	15705.90	0.2496	Pulse	0.1000	3
Mo	98	115	He	0.550	ppb	21.0	793.39	0.0126	Pulse	0.1000	3
Ag	107	115	He	0.076	ppb	22.6	246.68	0.0039	Pulse	0.1000	3
Cd	111	115	He	0.199	ppb	13.1	63.33	0.0010	Pulse	0.5000	3
Sn	120	115	He	6.516	ppb	7.8	6825.24	0.1085	Pulse	0.1000	3
Sb	121	115	He	2.349	ppb	1.2	1850.18	0.0294	Pulse	0.1000	3
Ba	137	115	He	90.300	ppb	3.0	24883.11	0.3954	Pulse	0.1000	3
Tl	205	209	He	0.078	ppb	15.0	706.71	0.0032	Pulse	0.1000	3
Pb	208	209	He	33.025	ppb	1.0	268716.40	1.2042	Pulse	0.1000	3
U	238	209	He	0.597	ppb	3.2	5654.81	0.0253	Pulse	0.1000	3

ISTD Table:

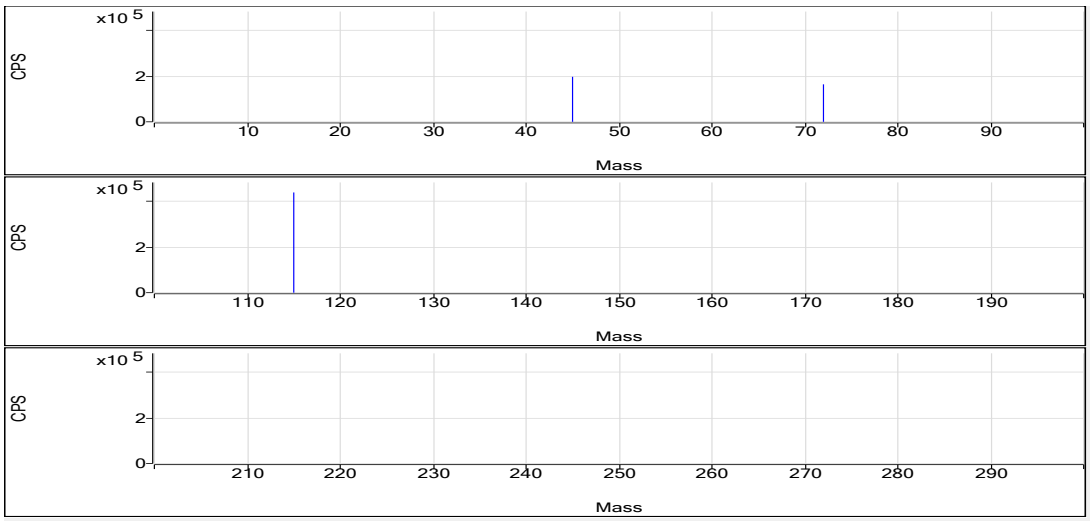
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3278340.26	1.7	101.1	Pulse	0.1000	3
No Gas	Ge	72	1465875.87	1.5	101.8	Pulse	0.1000	3
H2	Sc	45	197073.12	0.4	100.9	Pulse	0.1000	3
H2	Ge	72	164118.88	1.3	100.7	Pulse	0.1000	3
H2	In	115	438833.38	1.7	101.3	Pulse	0.1000	3
He	Sc	45	42696.32	1.4	106.8	Pulse	0.1000	3
He	Ge	72	75367.42	2.1	104.3	Pulse	0.1000	3
He	In	115	62929.16	0.8	97.4	Pulse	0.1000	3
He	Tb	159	286342.12	0.3	100.1	Pulse	0.1000	3
He	Bi	209	223161.67	0.8	100.4	Pulse	0.1000	3

No Gas

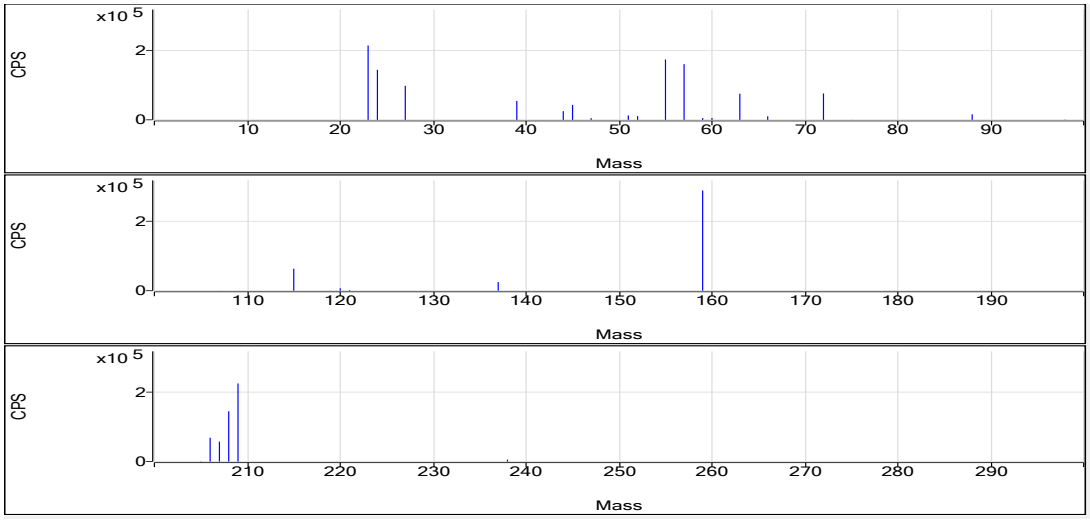


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.322	0.0005	678.02	0.0013	4.694E-05
Be	9	1	No Gas	0.271	0.0004	596.02	0.0013	4.694E-05
Be	9	1	No Gas	0.291	0.0004	634.02	0.0013	4.694E-05
Se	78	2	H2	0.15	0.0001	11.33	0.0004	1.089E-05
Se	78	2	H2	0.13	0.0001	10.00	0.0004	1.089E-05
Se	78	2	H2	0.178	0.0001	13.33	0.0004	1.089E-05
Na	23	3	He	1552.719	2.7737	212618.18	0.0017	0.1065
Na	23	3	He	1554.726	2.7772	210511.40	0.0017	0.1065
Na	23	3	He	1628.843	2.9045	213913.67	0.0017	0.1065
Mg	24	3	He	2202.908	1.8621	142738.55	0.0008	0.004846
Mg	24	3	He	2235.885	1.8899	143256.12	0.0008	0.004846
Mg	24	3	He	2295.145	1.9399	142869.90	0.0008	0.004846
Al	27	3	He	5242.42	1.2666	97085.96	0.0002	0.001063
Al	27	3	He	5303.794	1.2814	97127.61	0.0002	0.001063
Al	27	3	He	5483.18	1.3247	97560.13	0.0002	0.001063
K	39	3	He	1024.833	0.7096	54390.86	0.0006	0.1436
K	39	3	He	1014.608	0.7039	53357.03	0.0006	0.1436
K	39	3	He	1073.327	0.7363	54230.77	0.0006	0.1436
Ca	44	3	He	10453.474	0.3263	25011.68	0	0.001611
Ca	44	3	He	10444.31	0.326	24711.52	0	0.001611
Ca	44	3	He	10737.649	0.3351	24681.18	0	0.001611
Ti	47	3	He	233.044	0.0587	4500.83	0.0003	0.0002737
Ti	47	3	He	246.208	0.062	4700.93	0.0003	0.0002737
Ti	47	3	He	264.264	0.0665	4900.99	0.0003	0.0002737
V	51	3	He	13.684	0.1674	12831.67	0.0117	0.007326
V	51	3	He	13.832	0.1691	12819.64	0.0117	0.007326
V	51	3	He	14.038	0.1715	12633.51	0.0117	0.007326
Cr	52	3	He	7.392	0.1379	10574.23	0.0152	0.02538
Cr	52	3	He	7.711	0.1428	10824.43	0.0152	0.02538
Cr	52	3	He	7.548	0.1403	10333.94	0.0152	0.02538
Mn	55	3	He	376.013	2.2332	171186.09	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	383.235	2.2759	172510.84	0.0059	0.01385
Mn	55	3	He	397.199	2.3583	173684.57	0.0059	0.01385
Fe	57	3	He	7174.487	2.0825	159629.22	0.0003	0.003918
Fe	57	3	He	7174.342	2.0824	157848.06	0.0003	0.003918
Fe	57	3	He	7475.908	2.1698	159802.58	0.0003	0.003918
Co	59	3	He	2.093	0.0669	5131.09	0.0305	0.003084
Co	59	3	He	1.854	0.0596	4520.87	0.0305	0.003084
Co	59	3	He	2.316	0.0737	5431.19	0.0305	0.003084
Ni	60	3	He	6.307	0.0645	4941.01	0.0088	0.009003
Ni	60	3	He	7.035	0.0709	5371.18	0.0088	0.009003
Ni	60	3	He	6.621	0.0672	4951.03	0.0088	0.009003
Cu	63	3	He	38.588	0.9672	74139.54	0.0249	0.004937
Cu	63	3	He	40.121	1.0054	76211.73	0.0249	0.004937
Cu	63	3	He	39.99	1.0022	73808.76	0.0249	0.004937
Zn	66	3	He	53.863	0.1372	10514.29	0.0025	0.004836
Zn	66	3	He	52.503	0.1338	10143.81	0.0025	0.004836
Zn	66	3	He	51.495	0.1313	9673.62	0.0025	0.004836
As	75	3	He	2	0.0039	300.00	0.0017	0.0004347
As	75	3	He	1.48	0.003	228.00	0.0017	0.0004347
As	75	3	He	1.483	0.003	222.00	0.0017	0.0004347
Sr	88	3	He	31.526	0.2472	15559.02	0.0078	0.0007762
Sr	88	3	He	32.585	0.2555	15949.52	0.0078	0.0007762
Sr	88	3	He	31.384	0.2461	15609.16	0.0078	0.0007762
Mo	98	3	He	0.496	0.0114	720.04	0.022	0.0005162
Mo	98	3	He	0.682	0.0155	970.08	0.022	0.0005162
Mo	98	3	He	0.471	0.0109	690.04	0.022	0.0005162
Ag	107	3	He	0.07	0.0037	230.01	0.0455	0.0004641
Ag	107	3	He	0.095	0.0048	300.02	0.0455	0.0004641
Ag	107	3	He	0.063	0.0033	210.01	0.0455	0.0004641
Cd	111	3	He	0.208	0.001	66.00	0.0048	5.152E-05
Cd	111	3	He	0.169	0.0009	54.00	0.0048	5.152E-05
Cd	111	3	He	0.219	0.0011	70.00	0.0048	5.152E-05
Sn	120	3	He	6.843	0.1132	7122.00	0.0143	0.01559
Sn	120	3	He	6.774	0.1122	7002.00	0.0143	0.01559
Sn	120	3	He	5.931	0.1001	6351.71	0.0143	0.01559
Sb	121	3	He	2.336	0.0292	1840.19	0.0124	0.000258
Sb	121	3	He	2.381	0.0298	1860.18	0.0124	0.000258
Sb	121	3	He	2.331	0.0292	1850.18	0.0124	0.000258
Ba	137	3	He	89.539	0.392	24672.86	0.0044	0.000309
Ba	137	3	He	88.036	0.3854	24061.63	0.0044	0.000309
Ba	137	3	He	93.326	0.4086	25914.84	0.0044	0.000309
Tl	205	3	He	0.075	0.0031	690.04	0.0276	0.001005
Tl	205	3	He	0.091	0.0035	780.05	0.0276	0.001005
Tl	205	3	He	0.068	0.0029	650.04	0.0276	0.001005
Pb	208	3	He	32.733	1.1936	142553.76	0.0364	0.002176
Pb	208	3	He	33.403	1.218	143889.80	0.0364	0.002176
Pb	208	3	He	32.937	1.201	144627.75	0.0364	0.002176
U	238	3	He	0.586	0.0249	5561.50	0.0421	0.00024
U	238	3	He	0.585	0.0249	5501.35	0.0421	0.00024
U	238	3	He	0.618	0.0263	5901.57	0.0421	0.00024
Sc	45	1	No Gas			3217506.83		
Sc	45	1	No Gas			3322181.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3295332.45		
Ge	72	1	No Gas			1441137.95		
Ge	72	1	No Gas			1478335.45		
Ge	72	1	No Gas			1478154.20		
Sc	45	2	H2			196938.40		
Sc	45	2	H2			196289.53		
Sc	45	2	H2			197991.42		
Ge	72	2	H2			163862.40		
Ge	72	2	H2			162173.97		
Ge	72	2	H2			166320.27		
In	115	2	H2			435441.01		
In	115	2	H2			433503.94		
In	115	2	H2			447555.19		
Sc	45	3	He			42151.61		
Sc	45	3	He			43364.77		
Sc	45	3	He			42572.57		
Ge	72	3	He			76653.72		
Ge	72	3	He			75799.94		
Ge	72	3	He			73648.60		
In	115	3	He			62992.99		
In	115	3	He			62479.93		
In	115	3	He			63474.28		
Tb	159	3	He			285441.91		
Tb	159	3	He			287057.67		
Tb	159	3	He			286526.79		
Bi	209	3	He			223484.98		
Bi	209	3	He			221239.86		
Bi	209	3	He			224760.17		

Quantitation Report

Data File Name	226SMPL.d
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Sample Name	410-136577-I-21-A MS @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

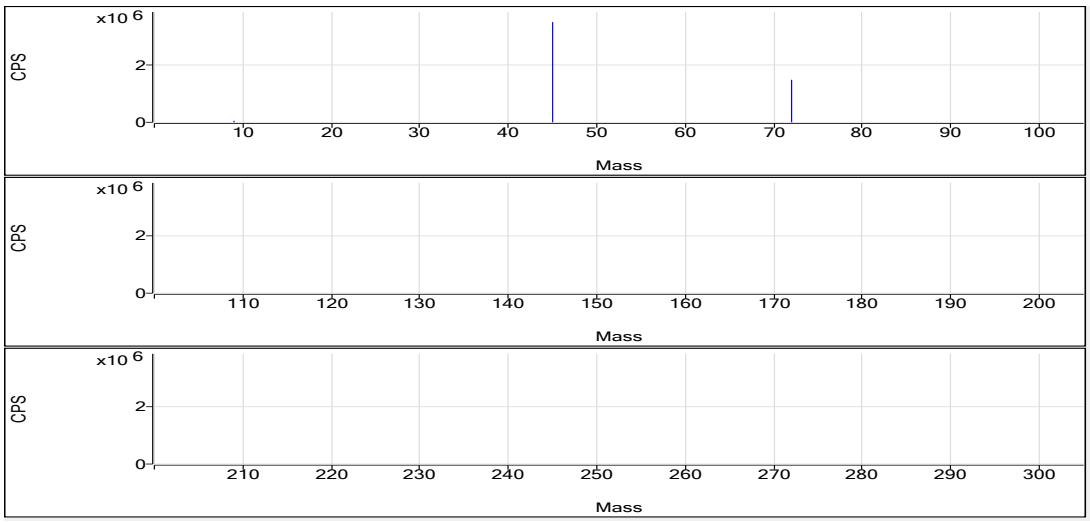
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	27.008	ppb	2.7	52767.05	0.0355	Pulse	0.5000	3
Se	78	72	H2	54.907	ppb	3.5	3449.53	0.0214	Pulse	1.5000	3
Na	23	72	He	11024.432	ppb	1.4	1440180.55	19.0445	Pulse	0.1000	3
Mg	24	72	He	17621.313	ppb	1.3	1123873.68	14.8614	Pulse	0.1000	3
Al	27	72	He	42568.484	ppb	1.8	777129.10	10.2768	Pulse	0.1000	3
K	39	72	He	11384.317	ppb	0.9	486286.83	6.4302	Pulse	0.1000	3
Ca	44	72	He	65294.264	ppb	2.2	153475.29	2.0296	Pulse	0.1000	3
Ti	47	72	He	1956.647	ppb	2.3	37124.56	0.4910	Pulse	0.1000	3
V	51	72	He	355.166	ppb	1.6	314734.15	4.1620	Pulse	0.5000	3
Cr	52	72	He	326.726	ppb	1.6	378143.98	5.0005	Pulse	0.1000	3
Mn	55	72	He	2557.679	ppb	1.8	1142636.78	15.1104	Pulse	0.1000	3
Fe	57	72	He	45219.879	ppb	1.4	991010.84	13.1048	Pulse	0.1000	3
Co	59	72	He	278.780	ppb	1.8	643436.52	8.5088	Pulse	0.1000	3
Ni	60	72	He	298.028	ppb	2.0	198855.76	2.6297	Pulse	0.1000	3
Cu	63	72	He	488.058	ppb	1.8	920722.09	12.1757	Pulse	0.1000	3
Zn	66	72	He	537.451	ppb	1.2	100219.07	1.3252	Pulse	0.1000	3
As	75	72	He	269.149	ppb	1.5	35431.37	0.4685	Pulse	0.5000	3
Sr	88	115	He	226.966	ppb	1.3	113690.98	1.7750	Pulse	0.1000	3
Mo	98	115	He	29.576	ppb	2.0	41749.00	0.6518	Pulse	0.1000	3
Ag	107	115	He	27.188	ppb	1.0	79267.23	1.2375	Pulse	0.1000	3
Cd	111	115	He	27.843	ppb	2.0	8563.31	0.1337	Pulse	0.5000	3
Sn	120	115	He	93.713	ppb	1.8	86574.92	1.3517	Pulse	0.1000	3
Sb	121	115	He	60.943	ppb	1.9	48437.96	0.7563	Pulse	0.1000	3
Ba	137	115	He	787.366	ppb	1.6	220639.67	3.4449	Pulse	0.1000	3
Tl	205	209	He	53.236	ppb	0.7	330069.85	1.4727	Pulse	0.1000	3
Pb	208	209	He	221.272	ppb	0.7	1805556.40	8.0559	Pulse	0.1000	3
U	238	209	He	30.025	ppb	1.1	283137.77	1.2633	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3499727.24	0.9	108.0	Pulse	0.1000	3
No Gas	Ge	72	1485179.20	1.3	103.2	Pulse	0.1000	3
H2	Sc	45	206679.06	2.5	105.8	Pulse	0.1000	3
H2	Ge	72	161296.58	0.8	98.9	Pulse	0.1000	3
H2	In	115	441853.34	1.5	102.0	Pulse	0.1000	3
He	Sc	45	44501.61	1.3	111.3	Pulse	0.1000	3
He	Ge	72	75631.88	1.4	104.6	Pulse	0.1000	3
He	In	115	64061.77	1.9	99.2	Pulse	0.1000	3
He	Tb	159	296627.13	0.7	103.7	Pulse	0.1000	3
He	Bi	209	224134.68	0.6	100.9	Pulse	0.1000	3

No Gas



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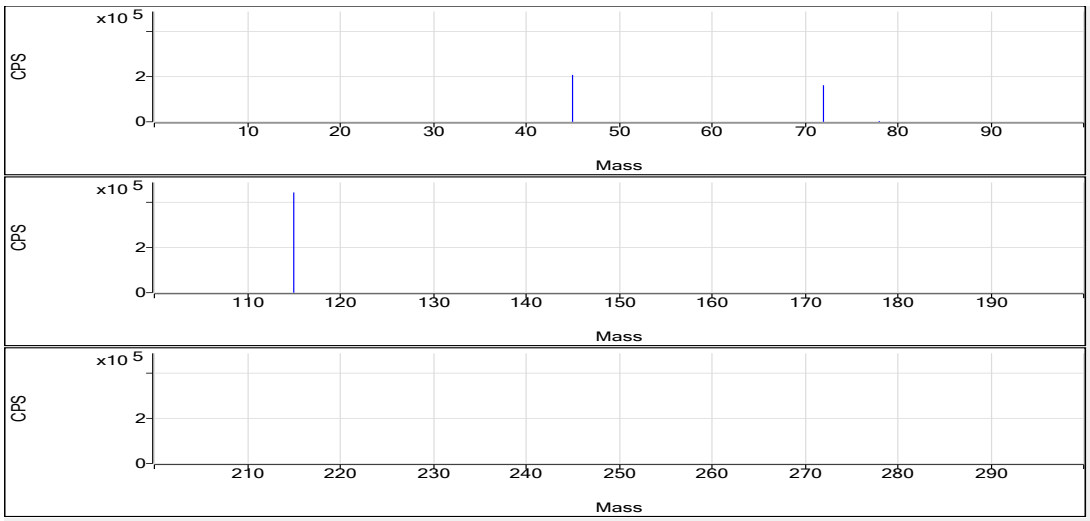
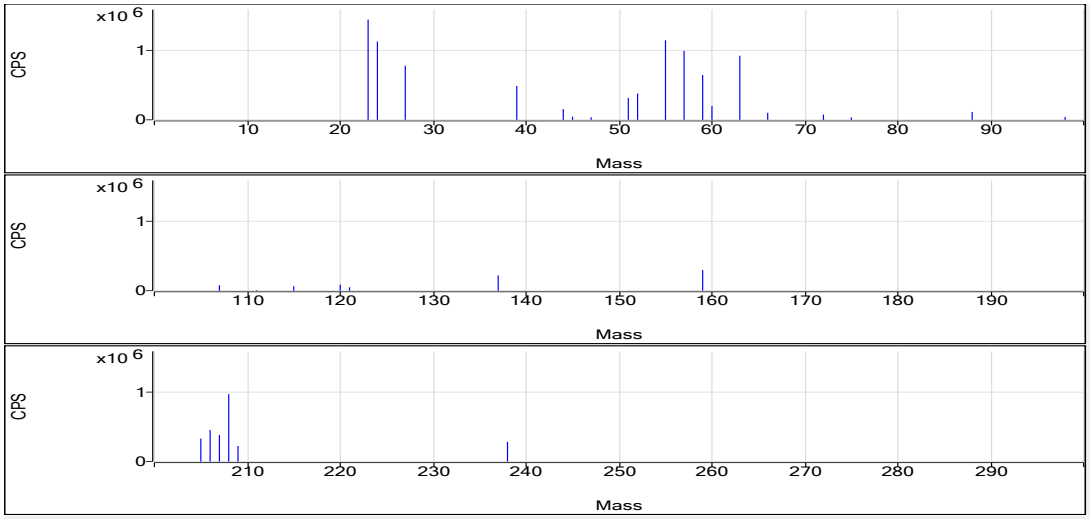


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	27.681	0.0364	53297.61	0.0013	4.694E-05
Be	9	1	No Gas	26.233	0.0345	51860.58	0.0013	4.694E-05
Be	9	1	No Gas	27.111	0.0357	53142.96	0.0013	4.694E-05
Se	78	2	H2	56.995	0.0222	3561.11	0.0004	1.089E-05
Se	78	2	H2	54.55	0.0213	3416.41	0.0004	1.089E-05
Se	78	2	H2	53.177	0.0207	3371.07	0.0004	1.089E-05
Na	23	3	He	11108.383	19.1887	1436944.67	0.0017	0.1065
Na	23	3	He	10841.559	18.7303	1439137.01	0.0017	0.1065
Na	23	3	He	11123.354	19.2144	1444459.98	0.0017	0.1065
Mg	24	3	He	17857.563	15.0606	1127812.72	0.0008	0.004846
Mg	24	3	He	17400.694	14.6754	1127578.97	0.0008	0.004846
Mg	24	3	He	17605.682	14.8482	1116229.36	0.0008	0.004846
Al	27	3	He	43145.081	10.416	780005.30	0.0002	0.001063
Al	27	3	He	41708.96	10.0694	773675.93	0.0002	0.001063
Al	27	3	He	42851.411	10.3451	777706.08	0.0002	0.001063
K	39	3	He	11478.133	6.482	485404.95	0.0006	0.1436
K	39	3	He	11266.845	6.3653	489077.45	0.0006	0.1436
K	39	3	He	11407.975	6.4433	484378.08	0.0006	0.1436
Ca	44	3	He	66519.362	2.0677	154839.31	0	0.001611
Ca	44	3	He	63742.606	1.9814	152243.81	0	0.001611
Ca	44	3	He	65620.825	2.0398	153342.76	0	0.001611
Ti	47	3	He	1974.862	0.4955	37107.65	0.0003	0.0002737
Ti	47	3	He	1904.455	0.4779	36717.09	0.0003	0.0002737
Ti	47	3	He	1990.624	0.4995	37548.95	0.0003	0.0002737
V	51	3	He	360.427	4.2235	316278.13	0.0117	0.007326
V	51	3	He	349.359	4.094	314563.81	0.0117	0.007326
V	51	3	He	355.712	4.1684	313360.53	0.0117	0.007326
Cr	52	3	He	330.03	5.0508	378232.61	0.0152	0.02538
Cr	52	3	He	320.69	4.9086	377151.32	0.0152	0.02538
Cr	52	3	He	329.459	5.0421	379048.00	0.0152	0.02538
Mn	55	3	He	2586.48	15.2803	1144269.67	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2505.253	14.8009	1137222.87	0.0059	0.01385
Mn	55	3	He	2581.304	15.2498	1146417.80	0.0059	0.01385
Fe	57	3	He	45655.771	13.2311	990808.89	0.0003	0.003918
Fe	57	3	He	44495.484	12.8949	990775.92	0.0003	0.003918
Fe	57	3	He	45508.381	13.1884	991447.72	0.0003	0.003918
Co	59	3	He	280.734	8.5684	641647.10	0.0305	0.003084
Co	59	3	He	273.2	8.3385	640689.33	0.0305	0.003084
Co	59	3	He	282.406	8.6194	647973.12	0.0305	0.003084
Ni	60	3	He	298.427	2.6332	197184.14	0.0088	0.009003
Ni	60	3	He	291.935	2.5761	197931.81	0.0088	0.009003
Ni	60	3	He	303.723	2.6797	201451.33	0.0088	0.009003
Cu	63	3	He	492.526	12.2871	920121.86	0.0249	0.004937
Cu	63	3	He	478.055	11.9263	916349.75	0.0249	0.004937
Cu	63	3	He	493.592	12.3137	925694.67	0.0249	0.004937
Zn	66	3	He	539.58	1.3305	99631.39	0.0025	0.004836
Zn	66	3	He	530.216	1.3075	100457.69	0.0025	0.004836
Zn	66	3	He	542.556	1.3378	100568.13	0.0025	0.004836
As	75	3	He	270.369	0.4707	35244.90	0.0017	0.0004347
As	75	3	He	264.643	0.4607	35397.34	0.0017	0.0004347
As	75	3	He	272.435	0.4742	35651.88	0.0017	0.0004347
Sr	88	3	He	226.308	1.7698	113106.50	0.0078	0.0007762
Sr	88	3	He	230.209	1.8003	113257.69	0.0078	0.0007762
Sr	88	3	He	224.383	1.7548	114708.74	0.0078	0.0007762
Mo	98	3	He	29.166	0.6428	41080.18	0.022	0.0005162
Mo	98	3	He	30.238	0.6664	41922.91	0.022	0.0005162
Mo	98	3	He	29.322	0.6462	42243.91	0.022	0.0005162
Ag	107	3	He	27.155	1.236	78991.80	0.0455	0.0004641
Ag	107	3	He	27.474	1.2506	78671.31	0.0455	0.0004641
Ag	107	3	He	26.933	1.2259	80138.57	0.0455	0.0004641
Cd	111	3	He	27.803	0.1335	8532.63	0.0048	5.152E-05
Cd	111	3	He	28.424	0.1365	8586.66	0.0048	5.152E-05
Cd	111	3	He	27.303	0.1311	8570.64	0.0048	5.152E-05
Sn	120	3	He	93.492	1.3486	86185.28	0.0143	0.01559
Sn	120	3	He	95.522	1.3775	86659.32	0.0143	0.01559
Sn	120	3	He	92.124	1.3291	86880.16	0.0143	0.01559
Sb	121	3	He	60.188	0.7469	47731.84	0.0124	0.000258
Sb	121	3	He	62.276	0.7728	48615.64	0.0124	0.000258
Sb	121	3	He	60.365	0.7491	48966.41	0.0124	0.000258
Ba	137	3	He	786.161	3.4396	219816.54	0.0044	0.000309
Ba	137	3	He	800.596	3.5027	220354.59	0.0044	0.000309
Ba	137	3	He	775.341	3.3923	221747.89	0.0044	0.000309
Tl	205	3	He	52.813	1.461	329753.39	0.0276	0.001005
Tl	205	3	He	53.343	1.4756	329521.48	0.0276	0.001005
Tl	205	3	He	53.552	1.4814	330934.68	0.0276	0.001005
Pb	208	3	He	219.562	7.9936	962387.25	0.0364	0.002176
Pb	208	3	He	222.068	8.0849	971080.06	0.0364	0.002176
Pb	208	3	He	222.187	8.0892	971259.36	0.0364	0.002176
U	238	3	He	29.652	1.2476	281594.84	0.0421	0.00024
U	238	3	He	30.153	1.2687	283311.27	0.0421	0.00024
U	238	3	He	30.269	1.2736	284507.20	0.0421	0.00024
Sc	45	1	No Gas			3476625.89		
Sc	45	1	No Gas			3537638.38		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3484917.45		
Ge	72	1	No Gas			1463376.85		
Ge	72	1	No Gas			1502418.42		
Ge	72	1	No Gas			1489742.32		
Sc	45	2	H2			207061.93		
Sc	45	2	H2			201327.07		
Sc	45	2	H2			211648.18		
Ge	72	2	H2			160393.06		
Ge	72	2	H2			160767.13		
Ge	72	2	H2			162729.55		
In	115	2	H2			438765.19		
In	115	2	H2			437564.95		
In	115	2	H2			449229.88		
Sc	45	3	He			45149.94		
Sc	45	3	He			44257.83		
Sc	45	3	He			44097.05		
Ge	72	3	He			74885.05		
Ge	72	3	He			76834.64		
Ge	72	3	He			75175.95		
In	115	3	He			64579.82		
In	115	3	He			63584.98		
In	115	3	He			66046.37		
Tb	159	3	He			298886.40		
Tb	159	3	He			296326.93		
Tb	159	3	He			294668.06		
Bi	209	3	He			225704.29		
Bi	209	3	He			223307.98		
Bi	209	3	He			223391.77		

Quantitation Report

Data File Name	227SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:27:12
Sample Name	410-136577-I-21-A MS @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

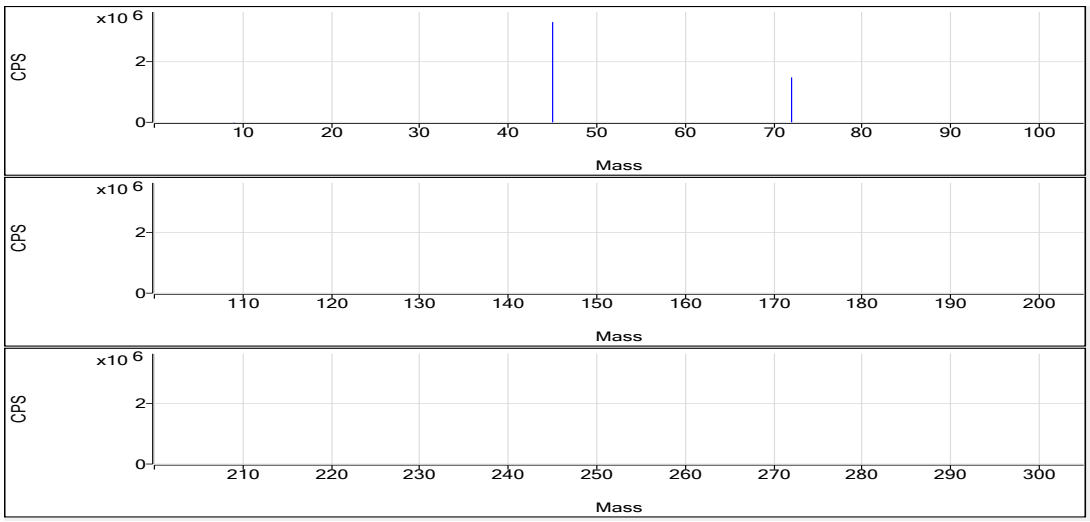
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	4.975	ppb	3.4	9793.90	0.0066	Pulse	0.5000	3
Se	78	72	H2	10.117	ppb	9.4	644.68	0.0040	Pulse	1.5000	3
Na	23	72	He	2016.010	ppb	0.5	267314.67	3.5696	Pulse	0.1000	3
Mg	24	72	He	3257.150	ppb	0.2	206011.74	2.7510	Pulse	0.1000	3
Al	27	72	He	7816.623	ppb	1.0	141377.29	1.8880	Pulse	0.1000	3
K	39	72	He	2082.654	ppb	2.1	96887.80	1.2937	Pulse	0.1000	3
Ca	44	72	He	12064.514	ppb	1.0	28181.19	0.3763	Pulse	0.1000	3
Ti	47	72	He	348.704	ppb	5.4	6568.33	0.0877	Pulse	0.1000	3
V	51	72	He	64.925	ppb	1.1	57420.51	0.7668	Pulse	0.5000	3
Cr	52	72	He	61.054	ppb	1.2	71522.71	0.9551	Pulse	0.1000	3
Mn	55	72	He	476.035	ppb	1.5	211440.02	2.8236	Pulse	0.1000	3
Fe	57	72	He	8355.656	ppb	1.4	181565.68	2.4247	Pulse	0.1000	3
Co	59	72	He	52.400	ppb	0.5	119956.21	1.6018	Pulse	0.1000	3
Ni	60	72	He	55.425	ppb	3.3	37171.76	0.4964	Pulse	0.1000	3
Cu	63	72	He	91.980	ppb	1.7	172128.04	2.2986	Pulse	0.1000	3
Zn	66	72	He	103.671	ppb	2.0	19433.63	0.2595	Pulse	0.1000	3
As	75	72	He	50.034	ppb	2.1	6548.85	0.0875	Pulse	0.5000	3
Sr	88	115	He	40.668	ppb	2.0	20799.06	0.3187	Pulse	0.1000	3
Mo	98	115	He	5.225	ppb	3.5	7542.29	0.1156	Pulse	0.1000	3
Ag	107	115	He	4.828	ppb	2.4	14364.48	0.2201	Pulse	0.1000	3
Cd	111	115	He	5.028	ppb	3.1	1578.76	0.0242	Pulse	0.5000	3
Sn	120	115	He	16.751	ppb	3.0	16603.76	0.2544	Pulse	0.1000	3
Sb	121	115	He	10.678	ppb	6.4	8662.99	0.1327	Pulse	0.1000	3
Ba	137	115	He	140.346	ppb	2.8	40089.12	0.6143	Pulse	0.1000	3
Tl	205	209	He	9.822	ppb	1.4	60974.64	0.2725	Pulse	0.1000	3
Pb	208	209	He	40.597	ppb	0.2	331055.31	1.4798	Pulse	0.1000	3
U	238	209	He	5.523	ppb	1.6	52021.82	0.2326	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3322083.08	0.7	102.5	Pulse	0.1000	3
No Gas	Ge	72	1487444.77	0.7	103.3	Pulse	0.1000	3
H2	Sc	45	199677.38	2.7	102.2	Pulse	0.1000	3
H2	Ge	72	163380.71	1.7	100.2	Pulse	0.1000	3
H2	In	115	438328.22	1.7	101.2	Pulse	0.1000	3
He	Sc	45	43000.91	0.6	107.5	Pulse	0.1000	3
He	Ge	72	74888.45	1.0	103.6	Pulse	0.1000	3
He	In	115	65264.27	1.0	101.0	Pulse	0.1000	3
He	Tb	159	286140.59	0.3	100.0	Pulse	0.1000	3
He	Bi	209	223713.68	1.1	100.7	Pulse	0.1000	3

No Gas



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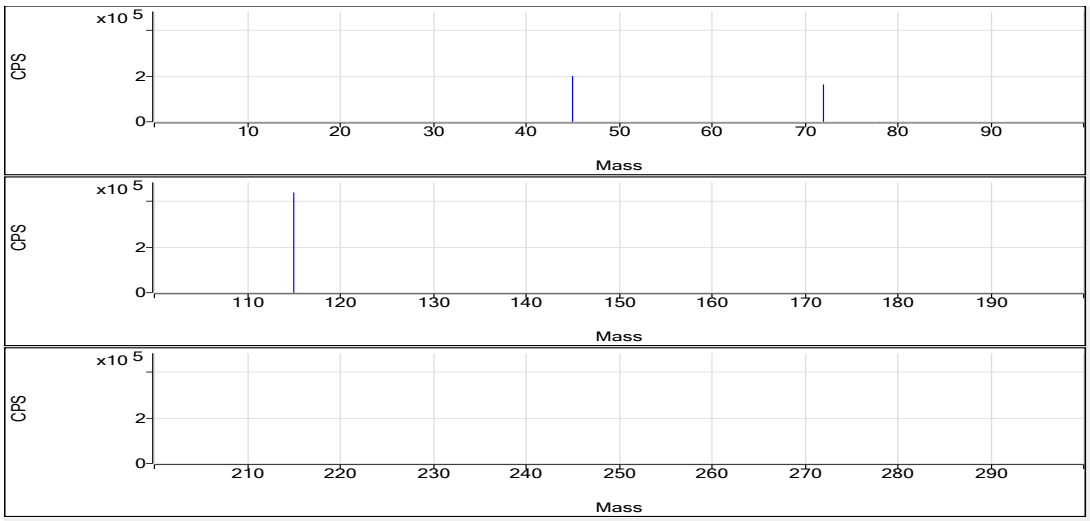
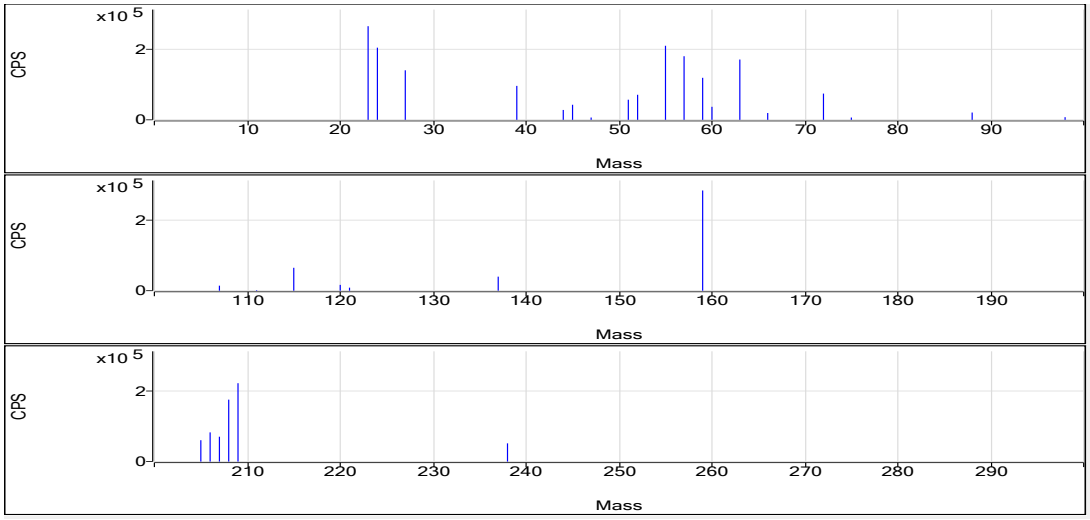


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	4.95	0.0066	9681.16	0.0013	4.694E-05
Be	9	1	No Gas	4.82	0.0064	9565.07	0.0013	4.694E-05
Be	9	1	No Gas	5.156	0.0068	10135.47	0.0013	4.694E-05
Se	78	2	H2	10.745	0.0042	676.68	0.0004	1.089E-05
Se	78	2	H2	10.58	0.0041	670.02	0.0004	1.089E-05
Se	78	2	H2	9.027	0.0035	587.35	0.0004	1.089E-05
Na	23	3	He	2019.948	3.5764	268208.63	0.0017	0.1065
Na	23	3	He	2004.938	3.5506	268278.26	0.0017	0.1065
Na	23	3	He	2023.143	3.5819	265457.12	0.0017	0.1065
Mg	24	3	He	3260.285	2.7536	206505.35	0.0008	0.004846
Mg	24	3	He	3247.964	2.7432	207274.10	0.0008	0.004846
Mg	24	3	He	3263.2	2.7561	204255.76	0.0008	0.004846
Al	27	3	He	7768.84	1.8764	140721.30	0.0002	0.001063
Al	27	3	He	7773.879	1.8776	141871.97	0.0002	0.001063
Al	27	3	He	7907.149	1.9098	141538.60	0.0002	0.001063
K	39	3	He	2132.212	1.3211	99073.56	0.0006	0.1436
K	39	3	He	2067.733	1.2855	97128.62	0.0006	0.1436
K	39	3	He	2048.018	1.2746	94461.23	0.0006	0.1436
Ca	44	3	He	12032.229	0.3753	28147.80	0	0.001611
Ca	44	3	He	11963.326	0.3732	28197.87	0	0.001611
Ca	44	3	He	12197.986	0.3805	28197.90	0	0.001611
Ti	47	3	He	328.117	0.0826	6191.47	0.0003	0.0002737
Ti	47	3	He	353.114	0.0888	6711.71	0.0003	0.0002737
Ti	47	3	He	364.88	0.0918	6801.82	0.0003	0.0002737
V	51	3	He	64.547	0.7624	57174.91	0.0117	0.007326
V	51	3	He	64.454	0.7613	57522.16	0.0117	0.007326
V	51	3	He	65.773	0.7767	57564.45	0.0117	0.007326
Cr	52	3	He	61.838	0.967	72520.48	0.0152	0.02538
Cr	52	3	He	60.447	0.9458	71466.25	0.0152	0.02538
Cr	52	3	He	60.876	0.9524	70581.40	0.0152	0.02538
Mn	55	3	He	469.838	2.787	209012.99	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	474.133	2.8124	212501.07	0.0059	0.01385
Mn	55	3	He	484.135	2.8714	212805.99	0.0059	0.01385
Fe	57	3	He	8272.19	2.4005	180024.31	0.0003	0.003918
Fe	57	3	He	8303.658	2.4096	182067.61	0.0003	0.003918
Fe	57	3	He	8491.12	2.4639	182605.13	0.0003	0.003918
Co	59	3	He	52.261	1.5976	119812.13	0.0305	0.003084
Co	59	3	He	52.251	1.5973	120688.83	0.0305	0.003084
Co	59	3	He	52.689	1.6106	119367.67	0.0305	0.003084
Ni	60	3	He	53.317	0.4778	35834.91	0.0088	0.009003
Ni	60	3	He	56.563	0.5064	38261.18	0.0088	0.009003
Ni	60	3	He	56.395	0.5049	37419.18	0.0088	0.009003
Cu	63	3	He	90.702	2.2668	169996.91	0.0249	0.004937
Cu	63	3	He	91.58	2.2887	172929.84	0.0249	0.004937
Cu	63	3	He	93.658	2.3405	173457.36	0.0249	0.004937
Zn	66	3	He	103.998	0.2603	19523.73	0.0025	0.004836
Zn	66	3	He	101.48	0.2541	19203.20	0.0025	0.004836
Zn	66	3	He	105.536	0.2641	19573.96	0.0025	0.004836
As	75	3	He	48.907	0.0855	6411.45	0.0017	0.0004347
As	75	3	He	50.276	0.0879	6639.57	0.0017	0.0004347
As	75	3	He	50.921	0.089	6595.53	0.0017	0.0004347
Sr	88	3	He	40.306	0.3159	20795.71	0.0078	0.0007762
Sr	88	3	He	41.608	0.326	21306.48	0.0078	0.0007762
Sr	88	3	He	40.088	0.3142	20295.00	0.0078	0.0007762
Mo	98	3	He	5.33	0.1179	7762.43	0.022	0.0005162
Mo	98	3	He	5.016	0.111	7252.15	0.022	0.0005162
Mo	98	3	He	5.327	0.1178	7612.30	0.022	0.0005162
Ag	107	3	He	4.696	0.2141	14097.58	0.0455	0.0004641
Ag	107	3	He	4.872	0.2222	14517.97	0.0455	0.0004641
Ag	107	3	He	4.915	0.2241	14477.88	0.0455	0.0004641
Cd	111	3	He	5.191	0.025	1644.11	0.0048	5.152E-05
Cd	111	3	He	5.013	0.0241	1576.09	0.0048	5.152E-05
Cd	111	3	He	4.878	0.0235	1516.09	0.0048	5.152E-05
Sn	120	3	He	16.239	0.2471	16269.95	0.0143	0.01559
Sn	120	3	He	17.239	0.2614	17081.09	0.0143	0.01559
Sn	120	3	He	16.777	0.2548	16460.23	0.0143	0.01559
Sb	121	3	He	11.346	0.141	9283.43	0.0124	0.000258
Sb	121	3	He	9.986	0.1241	8112.64	0.0124	0.000258
Sb	121	3	He	10.702	0.133	8592.91	0.0124	0.000258
Ba	137	3	He	136.605	0.5979	39367.11	0.0044	0.000309
Ba	137	3	He	144.433	0.6322	41313.00	0.0044	0.000309
Ba	137	3	He	140	0.6128	39587.25	0.0044	0.000309
Tl	205	3	He	9.876	0.274	61222.68	0.0276	0.001005
Tl	205	3	He	9.926	0.2754	62327.26	0.0276	0.001005
Tl	205	3	He	9.664	0.2682	59373.98	0.0276	0.001005
Pb	208	3	He	40.668	1.4824	179508.71	0.0364	0.002176
Pb	208	3	He	40.624	1.4808	177196.68	0.0364	0.002176
Pb	208	3	He	40.499	1.4762	173710.23	0.0364	0.002176
U	238	3	He	5.498	0.2315	51723.89	0.0421	0.00024
U	238	3	He	5.447	0.2294	51914.84	0.0421	0.00024
U	238	3	He	5.623	0.2368	52426.72	0.0421	0.00024
Sc	45	1	No Gas			3296857.14		
Sc	45	1	No Gas			3333131.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3336260.26		
Ge	72	1	No Gas			1477613.42		
Ge	72	1	No Gas			1499009.98		
Ge	72	1	No Gas			1485710.92		
Sc	45	2	H2			196258.24		
Sc	45	2	H2			196907.42		
Sc	45	2	H2			205866.48		
Ge	72	2	H2			161326.22		
Ge	72	2	H2			162224.28		
Ge	72	2	H2			166591.62		
In	115	2	H2			433889.02		
In	115	2	H2			434018.59		
In	115	2	H2			447077.06		
Sc	45	3	He			43294.43		
Sc	45	3	He			42864.13		
Sc	45	3	He			42844.16		
Ge	72	3	He			74994.74		
Ge	72	3	He			75558.98		
Ge	72	3	He			74111.64		
In	115	3	He			65966.21		
In	115	3	He			65483.99		
In	115	3	He			64731.13		
Tb	159	3	He			285113.49		
Tb	159	3	He			286760.54		
Tb	159	3	He			286547.75		
Bi	209	3	He			223415.86		
Bi	209	3	He			226315.29		
Bi	209	3	He			221409.90		

Quantitation Report

Data File Name	228SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:29:11
Sample Name	410-136577-J-21-A MSD @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

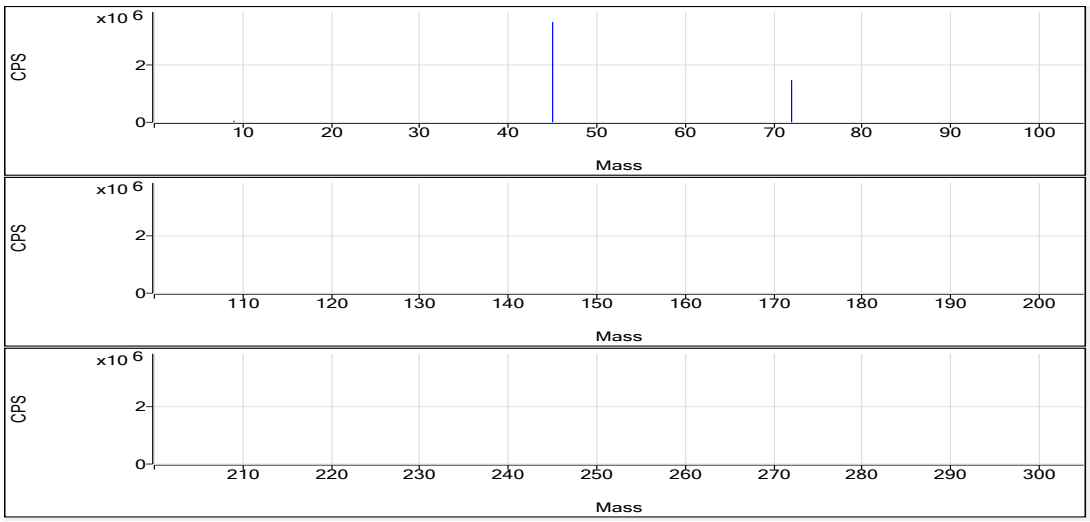
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	27.005	ppb	3.6	51902.07	0.0355	Pulse	0.5000	3
Se	78	72	H2	53.255	ppb	4.6	3363.06	0.0207	Pulse	1.5000	3
Na	23	72	He	12010.170	ppb	0.7	1556776.28	20.7378	Pulse	0.1000	3
Mg	24	72	He	20123.499	ppb	0.9	1273992.45	16.9710	Pulse	0.1000	3
Al	27	72	He	47872.147	ppb	0.8	867582.72	11.5571	Pulse	0.1000	3
K	39	72	He	14556.892	ppb	0.4	614242.02	8.1821	Pulse	0.1000	3
Ca	44	72	He	75956.035	ppb	2.3	177208.30	2.3608	Pulse	0.1000	3
Ti	47	72	He	2262.986	ppb	2.2	42629.70	0.5678	Pulse	0.1000	3
V	51	72	He	353.062	ppb	1.0	310584.06	4.1374	Pulse	0.5000	3
Cr	52	72	He	305.388	ppb	1.1	350988.81	4.6756	Pulse	0.1000	3
Mn	55	72	He	2922.182	ppb	0.6	1295846.39	17.2618	Pulse	0.1000	3
Fe	57	72	He	46746.340	ppb	0.7	1016967.61	13.5470	Pulse	0.1000	3
Co	59	72	He	270.020	ppb	1.0	618691.06	8.2415	Pulse	0.1000	3
Ni	60	72	He	291.270	ppb	0.8	192944.68	2.5702	Pulse	0.1000	3
Cu	63	72	He	643.935	ppb	0.9	1205818.06	16.0628	Pulse	0.1000	3
Zn	66	72	He	525.466	ppb	1.0	97272.64	1.2958	Pulse	0.1000	3
As	75	72	He	265.128	ppb	0.4	34648.18	0.4615	Pulse	0.5000	3
Sr	88	115	He	273.871	ppb	3.0	136603.64	2.1417	Pulse	0.1000	3
Mo	98	115	He	28.308	ppb	1.8	39810.60	0.6239	Pulse	0.1000	3
Ag	107	115	He	26.062	ppb	2.1	75673.65	1.1863	Pulse	0.1000	3
Cd	111	115	He	27.167	ppb	1.4	8324.50	0.1305	Pulse	0.5000	3
Sn	120	115	He	95.671	ppb	1.1	88020.60	1.3797	Pulse	0.1000	3
Sb	121	115	He	58.427	ppb	3.0	46247.37	0.7250	Pulse	0.1000	3
Ba	137	115	He	875.754	ppb	1.6	244434.98	3.8316	Pulse	0.1000	3
Tl	205	209	He	50.992	ppb	0.1	314206.59	1.4107	Pulse	0.1000	3
Pb	208	209	He	240.489	ppb	0.6	1950131.08	8.7553	Pulse	0.1000	3
U	238	209	He	29.582	ppb	0.2	277238.12	1.2447	Pulse	0.1000	3

ISTD Table:

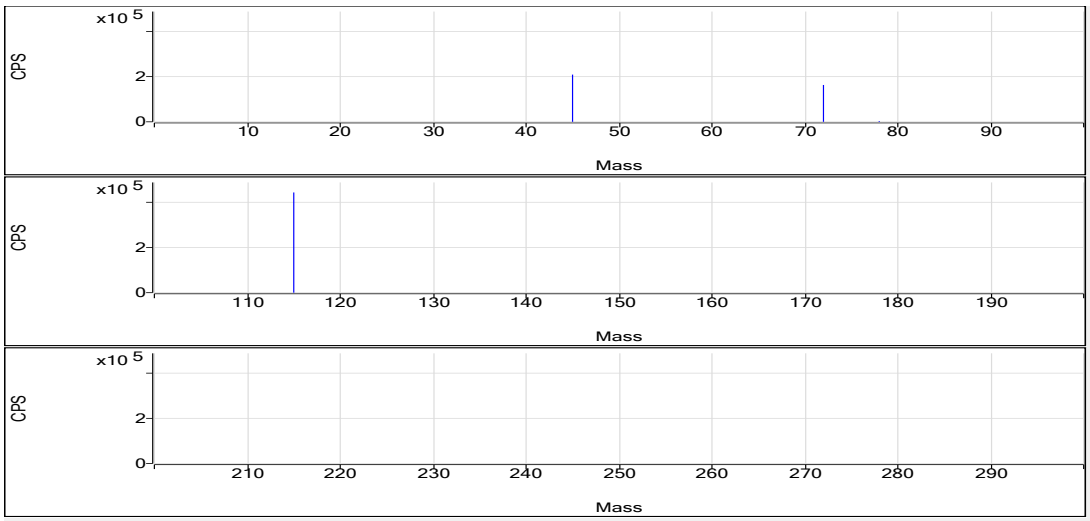
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3467127.45	1.3	107.0	Pulse	0.1000	3
No Gas	Ge	72	1460994.61	1.0	101.5	Pulse	0.1000	3
H2	Sc	45	207956.69	2.5	106.4	Pulse	0.1000	3
H2	Ge	72	162251.31	3.2	99.5	Pulse	0.1000	3
H2	In	115	441455.41	1.4	101.9	Pulse	0.1000	3
He	Sc	45	44404.80	2.3	111.1	Pulse	0.1000	3
He	Ge	72	75072.47	0.8	103.9	Pulse	0.1000	3
He	In	115	63806.37	1.8	98.8	Pulse	0.1000	3
He	Tb	159	298648.79	0.6	104.4	Pulse	0.1000	3
He	Bi	209	222738.98	0.4	100.2	Pulse	0.1000	3

No Gas

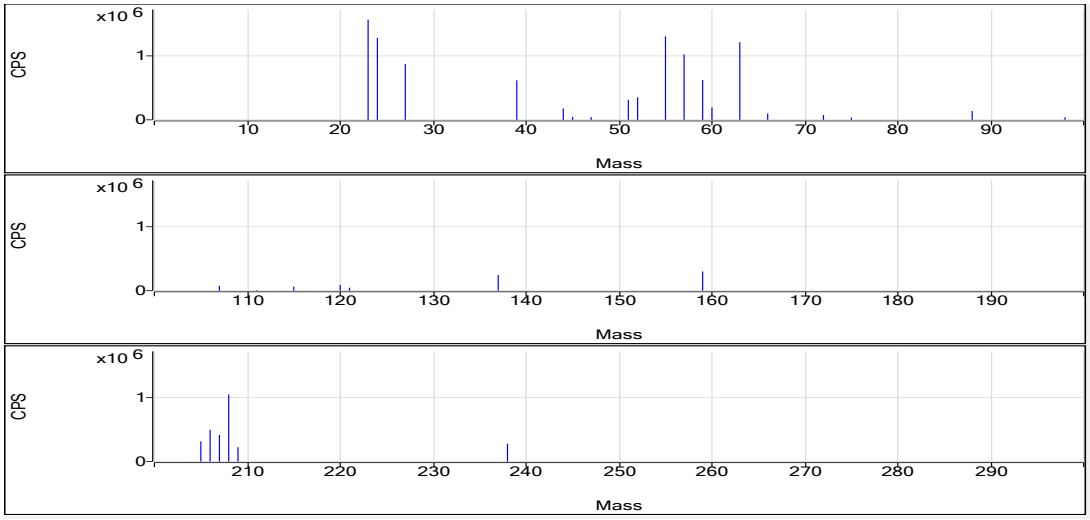


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	28.093	0.037	53427.92	0.0013	4.694E-05
Be	9	1	No Gas	26.217	0.0345	50530.06	0.0013	4.694E-05
Be	9	1	No Gas	26.704	0.0351	51748.24	0.0013	4.694E-05
Se	78	2	H2	53.21	0.0207	3411.74	0.0004	1.089E-05
Se	78	2	H2	55.749	0.0217	3395.07	0.0004	1.089E-05
Se	78	2	H2	50.807	0.0198	3282.38	0.0004	1.089E-05
Na	23	3	He	12014.865	20.7458	1553959.82	0.0017	0.1065
Na	23	3	He	12093.831	20.8815	1556783.88	0.0017	0.1065
Na	23	3	He	11921.814	20.586	1559585.13	0.0017	0.1065
Mg	24	3	He	20170.905	17.011	1274200.29	0.0008	0.004846
Mg	24	3	He	20274.149	17.098	1274712.95	0.0008	0.004846
Mg	24	3	He	19925.444	16.804	1273064.12	0.0008	0.004846
Al	27	3	He	47991.272	11.5859	867835.85	0.0002	0.001063
Al	27	3	He	48188.564	11.6335	867315.77	0.0002	0.001063
Al	27	3	He	47436.604	11.452	867596.55	0.0002	0.001063
K	39	3	He	14621.492	8.2178	615551.32	0.0006	0.1436
K	39	3	He	14558.534	8.183	610072.06	0.0006	0.1436
K	39	3	He	14490.651	8.1455	617102.69	0.0006	0.1436
Ca	44	3	He	76620.709	2.3814	178380.86	0	0.001611
Ca	44	3	He	77279.575	2.4019	179069.82	0	0.001611
Ca	44	3	He	73967.82	2.299	174174.22	0	0.001611
Ti	47	3	He	2273.293	0.5704	42723.25	0.0003	0.0002737
Ti	47	3	He	2208.376	0.5541	41309.12	0.0003	0.0002737
Ti	47	3	He	2307.289	0.5789	43856.72	0.0003	0.0002737
V	51	3	He	354.075	4.1492	310794.94	0.0117	0.007326
V	51	3	He	355.988	4.1716	311005.53	0.0117	0.007326
V	51	3	He	349.121	4.0913	309951.72	0.0117	0.007326
Cr	52	3	He	306.106	4.6865	351043.51	0.0152	0.02538
Cr	52	3	He	308.346	4.7206	351939.72	0.0152	0.02538
Cr	52	3	He	301.714	4.6197	349983.20	0.0152	0.02538
Mn	55	3	He	2933.724	17.3299	1298091.70	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2930.682	17.312	1290664.28	0.0059	0.01385
Mn	55	3	He	2902.139	17.1435	1298783.18	0.0059	0.01385
Fe	57	3	He	46797.425	13.5618	1015842.95	0.0003	0.003918
Fe	57	3	He	47057.596	13.6372	1016697.48	0.0003	0.003918
Fe	57	3	He	46383.999	13.442	1018362.41	0.0003	0.003918
Co	59	3	He	272.929	8.3303	623977.73	0.0305	0.003084
Co	59	3	He	269.63	8.2296	613545.58	0.0305	0.003084
Co	59	3	He	267.5	8.1647	618549.87	0.0305	0.003084
Ni	60	3	He	291.389	2.5713	192600.54	0.0088	0.009003
Ni	60	3	He	293.594	2.5907	193142.17	0.0088	0.009003
Ni	60	3	He	288.826	2.5487	193091.33	0.0088	0.009003
Cu	63	3	He	645.582	16.1039	1206255.84	0.0249	0.004937
Cu	63	3	He	648.562	16.1782	1206137.25	0.0249	0.004937
Cu	63	3	He	637.663	15.9064	1205061.08	0.0249	0.004937
Zn	66	3	He	524.942	1.2945	96963.71	0.0025	0.004836
Zn	66	3	He	530.89	1.3091	97598.34	0.0025	0.004836
Zn	66	3	He	520.566	1.2837	97255.87	0.0025	0.004836
As	75	3	He	266.113	0.4633	34699.63	0.0017	0.0004347
As	75	3	He	265.281	0.4618	34428.98	0.0017	0.0004347
As	75	3	He	263.99	0.4596	34815.93	0.0017	0.0004347
Sr	88	3	He	282.632	2.2101	138336.37	0.0078	0.0007762
Sr	88	3	He	266.523	2.0842	135035.78	0.0078	0.0007762
Sr	88	3	He	272.458	2.1306	136438.76	0.0078	0.0007762
Mo	98	3	He	27.977	0.6166	38594.28	0.022	0.0005162
Mo	98	3	He	28.066	0.6186	40077.54	0.022	0.0005162
Mo	98	3	He	28.88	0.6365	40759.99	0.022	0.0005162
Ag	107	3	He	26.699	1.2153	76065.45	0.0455	0.0004641
Ag	107	3	He	25.697	1.1697	75784.26	0.0455	0.0004641
Ag	107	3	He	25.789	1.1739	75171.24	0.0455	0.0004641
Cd	111	3	He	27.262	0.1309	8194.42	0.0048	5.152E-05
Cd	111	3	He	27.482	0.132	8550.63	0.0048	5.152E-05
Cd	111	3	He	26.757	0.1285	8228.44	0.0048	5.152E-05
Sn	120	3	He	96.879	1.3969	87433.46	0.0143	0.01559
Sn	120	3	He	95.234	1.3734	88983.86	0.0143	0.01559
Sn	120	3	He	94.898	1.3686	87644.47	0.0143	0.01559
Sb	121	3	He	60.46	0.7503	46959.83	0.0124	0.000258
Sb	121	3	He	57.621	0.715	46327.47	0.0124	0.000258
Sb	121	3	He	57.2	0.7098	45454.82	0.0124	0.000258
Ba	137	3	He	887.599	3.8834	243067.07	0.0044	0.000309
Ba	137	3	He	859.894	3.7622	243750.25	0.0044	0.000309
Ba	137	3	He	879.768	3.8491	246487.63	0.0044	0.000309
Tl	205	3	He	50.964	1.4099	313342.83	0.0276	0.001005
Tl	205	3	He	51.053	1.4123	313946.13	0.0276	0.001005
Tl	205	3	He	50.959	1.4097	315330.82	0.0276	0.001005
Pb	208	3	He	241.852	8.805	1044889.52	0.0364	0.002176
Pb	208	3	He	240.41	8.7525	1042325.30	0.0364	0.002176
Pb	208	3	He	239.204	8.7086	1041030.45	0.0364	0.002176
U	238	3	He	29.635	1.2469	277125.05	0.0421	0.00024
U	238	3	He	29.555	1.2436	276430.43	0.0421	0.00024
U	238	3	He	29.555	1.2436	278158.88	0.0421	0.00024
Sc	45	1	No Gas			3417358.70		
Sc	45	1	No Gas			3487101.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3496922.14		
Ge	72	1	No Gas			1445481.23		
Ge	72	1	No Gas			1464772.48		
Ge	72	1	No Gas			1472730.13		
Sc	45	2	H2			210603.34		
Sc	45	2	H2			202035.21		
Sc	45	2	H2			211231.52		
Ge	72	2	H2			164590.66		
Ge	72	2	H2			156329.22		
Ge	72	2	H2			165834.06		
In	115	2	H2			440780.38		
In	115	2	H2			435485.58		
In	115	2	H2			448100.27		
Sc	45	3	He			43706.02		
Sc	45	3	He			45581.93		
Sc	45	3	He			43926.46		
Ge	72	3	He			74904.63		
Ge	72	3	He			74553.28		
Ge	72	3	He			75759.50		
In	115	3	He			63273.71		
In	115	3	He			65483.94		
In	115	3	He			64721.13		
Tb	159	3	He			299904.41		
Tb	159	3	He			299384.27		
Tb	159	3	He			296657.69		
Bi	209	3	He			222247.85		
Bi	209	3	He			222289.66		
Bi	209	3	He			223679.43		

Quantitation Report

Data File Name	229SMPL.d
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Acq Time	2023-08-10 18:31:12
Sample Name	410-136577-J-21-A MSD @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

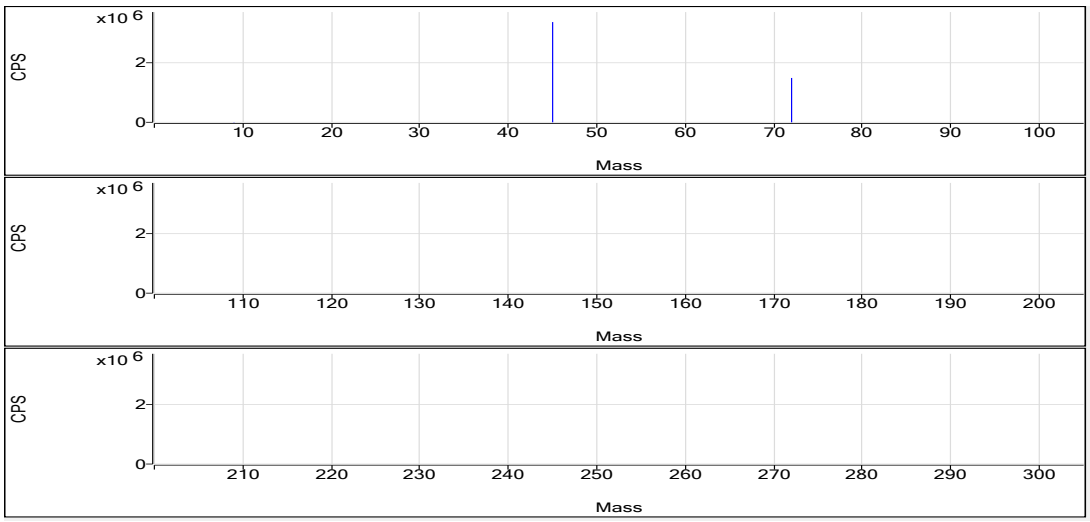
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	4.542	ppb	4.6	8887.99	0.0060	Pulse	0.5000	3
Se	78	72	H2	9.252	ppb	6.5	585.35	0.0036	Pulse	1.5000	3
Na	23	72	He	2112.493	ppb	2.3	278289.29	3.7353	Pulse	0.1000	3
Mg	24	72	He	3557.474	ppb	1.9	223816.58	3.0042	Pulse	0.1000	3
Al	27	72	He	8361.790	ppb	3.0	150442.42	2.0196	Pulse	0.1000	3
K	39	72	He	2542.398	ppb	1.6	115305.86	1.5476	Pulse	0.1000	3
Ca	44	72	He	13512.085	ppb	2.8	31384.39	0.4213	Pulse	0.1000	3
Ti	47	72	He	388.303	ppb	2.0	7275.34	0.0977	Pulse	0.1000	3
V	51	72	He	61.537	ppb	1.6	54178.32	0.7272	Pulse	0.5000	3
Cr	52	72	He	54.332	ppb	2.0	63528.87	0.8527	Pulse	0.1000	3
Mn	55	72	He	509.244	ppb	1.3	224986.52	3.0196	Pulse	0.1000	3
Fe	57	72	He	8170.791	ppb	1.4	176667.80	2.3711	Pulse	0.1000	3
Co	59	72	He	47.623	ppb	1.8	108483.78	1.4561	Pulse	0.1000	3
Ni	60	72	He	52.402	ppb	3.0	34996.34	0.4698	Pulse	0.1000	3
Cu	63	72	He	112.894	ppb	2.3	210102.35	2.8202	Pulse	0.1000	3
Zn	66	72	He	93.799	ppb	4.4	17524.50	0.2353	Pulse	0.1000	3
As	75	72	He	45.364	ppb	3.5	5909.24	0.0793	Pulse	0.5000	3
Sr	88	115	He	46.542	ppb	0.8	23466.74	0.3646	Pulse	0.1000	3
Mo	98	115	He	4.995	ppb	5.4	7112.09	0.1105	Pulse	0.1000	3
Ag	107	115	He	4.531	ppb	2.3	13300.05	0.2066	Pulse	0.1000	3
Cd	111	115	He	4.646	ppb	2.0	1438.75	0.0224	Pulse	0.5000	3
Sn	120	115	He	16.106	ppb	3.6	15779.38	0.2452	Pulse	0.1000	3
Sb	121	115	He	10.341	ppb	1.4	8272.79	0.1285	Pulse	0.1000	3
Ba	137	115	He	148.319	ppb	1.4	41780.97	0.6492	Pulse	0.1000	3
Tl	205	209	He	8.913	ppb	0.7	55721.49	0.2474	Pulse	0.1000	3
Pb	208	209	He	41.745	ppb	0.8	342716.96	1.5216	Pulse	0.1000	3
U	238	209	He	5.109	ppb	2.7	48458.67	0.2152	Pulse	0.1000	3

ISTD Table:

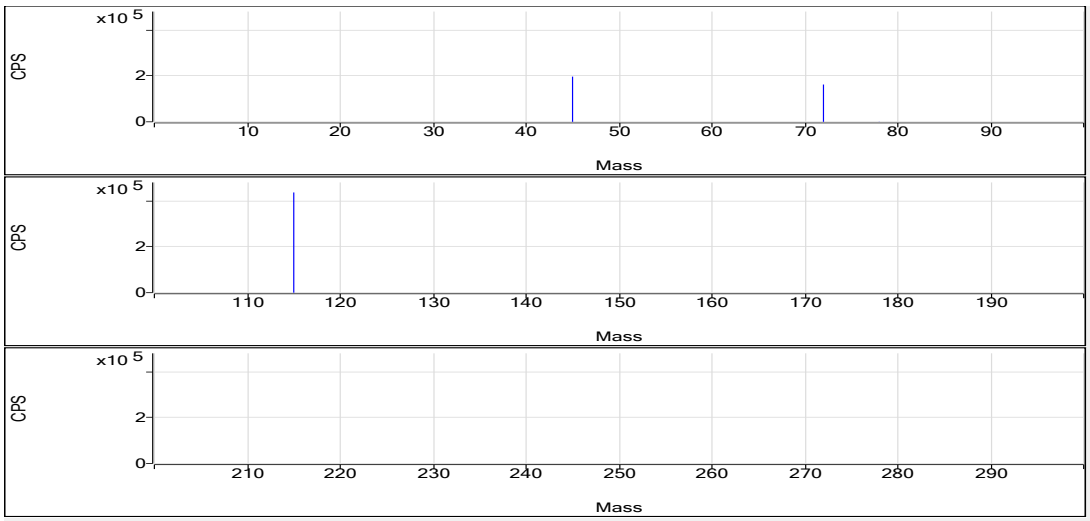
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3340621.31	1.2	103.1	Pulse	0.1000	3
No Gas	Ge	72	1477891.49	0.9	102.6	Pulse	0.1000	3
H2	Sc	45	196424.71	2.4	100.5	Pulse	0.1000	3
H2	Ge	72	162083.55	1.2	99.4	Pulse	0.1000	3
H2	In	115	435614.94	1.4	100.5	Pulse	0.1000	3
He	Sc	45	42686.07	1.5	106.8	Pulse	0.1000	3
He	Ge	72	74519.48	1.8	103.1	Pulse	0.1000	3
He	In	115	64366.38	1.5	99.7	Pulse	0.1000	3
He	Tb	159	286756.93	0.3	100.3	Pulse	0.1000	3
He	Bi	209	225243.01	0.6	101.4	Pulse	0.1000	3

No Gas

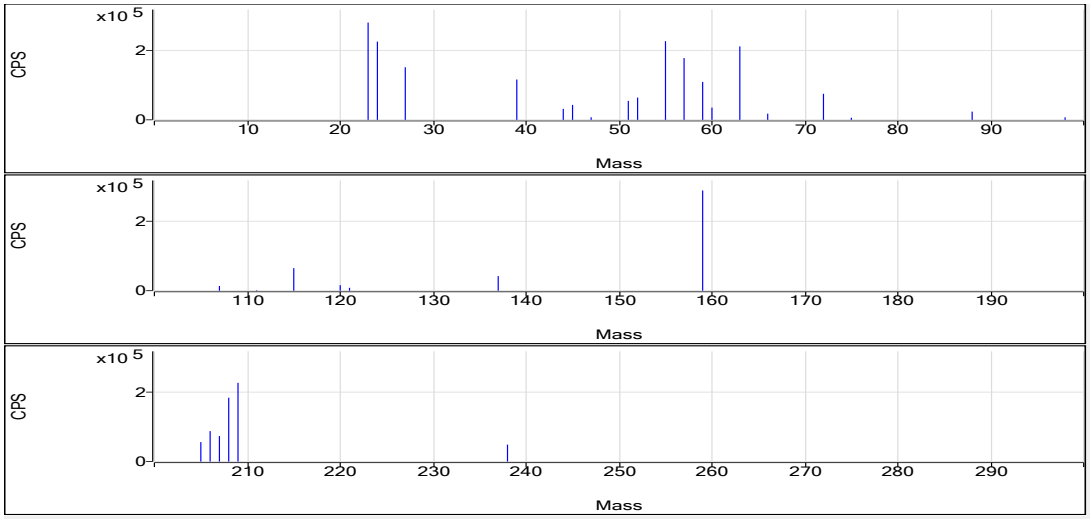


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	4.77	0.0063	9252.87	0.0013	4.694E-05
Be	9	1	No Gas	4.357	0.0058	8616.52	0.0013	4.694E-05
Be	9	1	No Gas	4.499	0.006	8794.59	0.0013	4.694E-05
Se	78	2	H2	9.177	0.0036	580.68	0.0004	1.089E-05
Se	78	2	H2	9.884	0.0039	618.02	0.0004	1.089E-05
Se	78	2	H2	8.695	0.0034	557.35	0.0004	1.089E-05
Na	23	3	He	2059.326	3.644	275885.78	0.0017	0.1065
Na	23	3	He	2126.88	3.7601	281191.87	0.0017	0.1065
Na	23	3	He	2151.272	3.802	277790.23	0.0017	0.1065
Mg	24	3	He	3489.767	2.9471	223121.19	0.0008	0.004846
Mg	24	3	He	3554.564	3.0017	224479.43	0.0008	0.004846
Mg	24	3	He	3628.091	3.0637	223849.12	0.0008	0.004846
Al	27	3	He	8098.221	1.9559	148081.99	0.0002	0.001063
Al	27	3	He	8380.937	2.0242	151375.66	0.0002	0.001063
Al	27	3	He	8606.213	2.0786	151869.60	0.0002	0.001063
K	39	3	He	2518.485	1.5344	116166.82	0.0006	0.1436
K	39	3	He	2518.418	1.5343	114744.13	0.0006	0.1436
K	39	3	He	2590.292	1.574	115006.64	0.0006	0.1436
Ca	44	3	He	13230.661	0.4126	31234.17	0	0.001611
Ca	44	3	He	13369.103	0.4169	31173.96	0	0.001611
Ca	44	3	He	13936.491	0.4345	31745.05	0	0.001611
Ti	47	3	He	384.028	0.0966	7312.01	0.0003	0.0002737
Ti	47	3	He	383.459	0.0964	7211.97	0.0003	0.0002737
Ti	47	3	He	397.421	0.0999	7302.03	0.0003	0.0002737
V	51	3	He	60.53	0.7154	54161.62	0.0117	0.007326
V	51	3	He	61.615	0.7281	54448.63	0.0117	0.007326
V	51	3	He	62.466	0.738	53924.72	0.0117	0.007326
Cr	52	3	He	53.256	0.8363	63317.59	0.0152	0.02538
Cr	52	3	He	54.324	0.8526	63760.20	0.0152	0.02538
Cr	52	3	He	55.415	0.8692	63508.82	0.0152	0.02538
Mn	55	3	He	502.762	2.9814	225717.57	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	508.991	3.0181	225708.16	0.0059	0.01385
Mn	55	3	He	515.979	3.0594	223533.84	0.0059	0.01385
Fe	57	3	He	8037.037	2.3324	176581.95	0.0003	0.003918
Fe	57	3	He	8216.882	2.3845	178320.08	0.0003	0.003918
Fe	57	3	He	8258.454	2.3965	175101.38	0.0003	0.003918
Co	59	3	He	46.78	1.4304	108292.22	0.0305	0.003084
Co	59	3	He	47.608	1.4556	108856.86	0.0305	0.003084
Co	59	3	He	48.481	1.4823	108302.25	0.0305	0.003084
Ni	60	3	He	51.207	0.4593	34772.24	0.0088	0.009003
Ni	60	3	He	51.808	0.4646	34742.26	0.0088	0.009003
Ni	60	3	He	54.191	0.4855	35474.53	0.0088	0.009003
Cu	63	3	He	111.018	2.7734	209973.59	0.0249	0.004937
Cu	63	3	He	111.792	2.7927	208849.18	0.0249	0.004937
Cu	63	3	He	115.873	2.8945	211484.29	0.0249	0.004937
Zn	66	3	He	89.324	0.2243	16980.42	0.0025	0.004836
Zn	66	3	He	94.76	0.2376	17771.62	0.0025	0.004836
Zn	66	3	He	97.313	0.2439	17821.46	0.0025	0.004836
As	75	3	He	44.31	0.0775	5867.22	0.0017	0.0004347
As	75	3	He	44.569	0.0779	5829.22	0.0017	0.0004347
As	75	3	He	47.213	0.0825	6031.29	0.0017	0.0004347
Sr	88	3	He	46.346	0.3631	23309.80	0.0078	0.0007762
Sr	88	3	He	46.33	0.3629	23730.55	0.0078	0.0007762
Sr	88	3	He	46.952	0.3678	23359.88	0.0078	0.0007762
Mo	98	3	He	4.703	0.1041	6681.90	0.022	0.0005162
Mo	98	3	He	5.048	0.1117	7302.19	0.022	0.0005162
Mo	98	3	He	5.233	0.1158	7352.19	0.022	0.0005162
Ag	107	3	He	4.411	0.2012	12916.39	0.0455	0.0004641
Ag	107	3	He	4.59	0.2093	13687.03	0.0455	0.0004641
Ag	107	3	He	4.591	0.2094	13296.72	0.0455	0.0004641
Cd	111	3	He	4.604	0.0221	1422.08	0.0048	5.152E-05
Cd	111	3	He	4.584	0.0221	1442.08	0.0048	5.152E-05
Cd	111	3	He	4.752	0.0229	1452.08	0.0048	5.152E-05
Sn	120	3	He	16.516	0.2511	16119.81	0.0143	0.01559
Sn	120	3	He	15.446	0.2358	15419.02	0.0143	0.01559
Sn	120	3	He	16.354	0.2488	15799.32	0.0143	0.01559
Sb	121	3	He	10.203	0.1268	8142.65	0.0124	0.000258
Sb	121	3	He	10.327	0.1284	8392.91	0.0124	0.000258
Sb	121	3	He	10.492	0.1304	8282.82	0.0124	0.000258
Ba	137	3	He	146.766	0.6424	41242.64	0.0044	0.000309
Ba	137	3	He	147.445	0.6454	42195.79	0.0044	0.000309
Ba	137	3	He	150.745	0.6598	41904.48	0.0044	0.000309
Tl	205	3	He	8.842	0.2454	55316.49	0.0276	0.001005
Tl	205	3	He	8.935	0.248	56200.19	0.0276	0.001005
Tl	205	3	He	8.961	0.2487	55647.79	0.0276	0.001005
Pb	208	3	He	41.573	1.5153	184495.97	0.0364	0.002176
Pb	208	3	He	41.522	1.5135	180288.65	0.0364	0.002176
Pb	208	3	He	42.141	1.536	183531.36	0.0364	0.002176
U	238	3	He	4.967	0.2092	47147.39	0.0421	0.00024
U	238	3	He	5.116	0.2155	48823.19	0.0421	0.00024
U	238	3	He	5.243	0.2208	49405.44	0.0421	0.00024
Sc	45	1	No Gas			3310390.58		
Sc	45	1	No Gas			3387466.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3324006.83		
Ge	72	1	No Gas			1465169.67		
Ge	72	1	No Gas			1492666.70		
Ge	72	1	No Gas			1475838.10		
Sc	45	2	H2			196490.08		
Sc	45	2	H2			191649.06		
Sc	45	2	H2			201134.98		
Ge	72	2	H2			162013.33		
Ge	72	2	H2			160130.93		
Ge	72	2	H2			164106.40		
In	115	2	H2			432186.05		
In	115	2	H2			431836.83		
In	115	2	H2			442821.95		
Sc	45	3	He			43224.25		
Sc	45	3	He			41950.48		
Sc	45	3	He			42883.49		
Ge	72	3	He			75709.39		
Ge	72	3	He			74783.98		
Ge	72	3	He			73065.07		
In	115	3	He			64328.71		
In	115	3	He			65504.49		
In	115	3	He			63635.16		
Tb	159	3	He			287162.67		
Tb	159	3	He			285822.79		
Tb	159	3	He			287285.33		
Bi	209	3	He			225378.20		
Bi	209	3	He			226608.63		
Bi	209	3	He			223742.20		

Quantitation Report

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Acq Time	2023-08-10 18:33:12
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

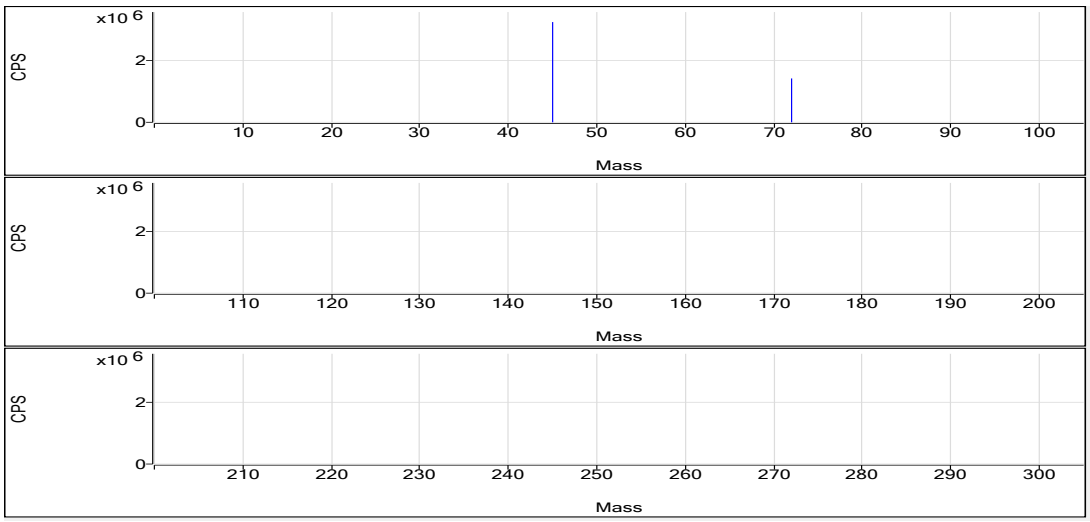
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.009	ppb	14.4	84.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.073	ppb	67.4	6.22	0.0000	Pulse	1.5000	3
Na	23	72	He	5.932	ppb	48.3	8329.35	0.1166	Pulse	0.1000	3
Mg	24	72	He	6.546	ppb	11.1	740.05	0.0104	Pulse	0.1000	3
Al	27	72	He	16.072	ppb	29.9	353.35	0.0049	Pulse	0.1000	3
K	39	72	He	32.724	ppb	69.8	11544.96	0.1617	Pulse	0.1000	3
Ca	44	72	He	5.141	ppb	299.3	126.67	0.0018	Pulse	0.1000	3
Ti	47	72	He	1.326	ppb	105.0	43.33	0.0006	Pulse	0.1000	3
V	51	72	He	0.165	ppb	19.0	661.35	0.0093	Pulse	0.5000	3
Cr	52	72	He	0.193	ppb	52.0	2023.55	0.0283	Pulse	0.1000	3
Mn	55	72	He	-0.385	ppb	N/A	826.72	0.0116	Pulse	0.1000	3
Fe	57	72	He	20.946	ppb	40.9	713.38	0.0100	Pulse	0.1000	3
Co	59	72	He	0.167	ppb	20.7	583.36	0.0082	Pulse	0.1000	3
Ni	60	72	He	1.078	ppb	7.0	1320.11	0.0185	Pulse	0.1000	3
Cu	63	72	He	0.197	ppb	5.8	703.37	0.0098	Pulse	0.1000	3
Zn	66	72	He	0.177	ppb	113.3	376.69	0.0053	Pulse	0.1000	3
As	75	72	He	0.142	ppb	34.9	48.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.072	ppb	116.5	83.34	0.0013	Pulse	0.1000	3
Mo	98	115	He	0.023	ppb	94.5	63.33	0.0010	Pulse	0.1000	3
Ag	107	115	He	0.010	ppb	149.6	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	70.6	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.087	ppb	36.8	1053.41	0.0168	Pulse	0.1000	3
Sb	121	115	He	0.052	ppb	62.6	56.67	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.285	ppb	60.3	96.67	0.0016	Pulse	0.1000	3
Tl	205	209	He	0.095	ppb	10.7	796.72	0.0036	Pulse	0.1000	3
Pb	208	209	He	0.078	ppb	3.2	1103.39	0.0050	Pulse	0.1000	3
U	238	209	He	0.012	ppb	42.1	163.34	0.0007	Pulse	0.1000	3

ISTD Table:

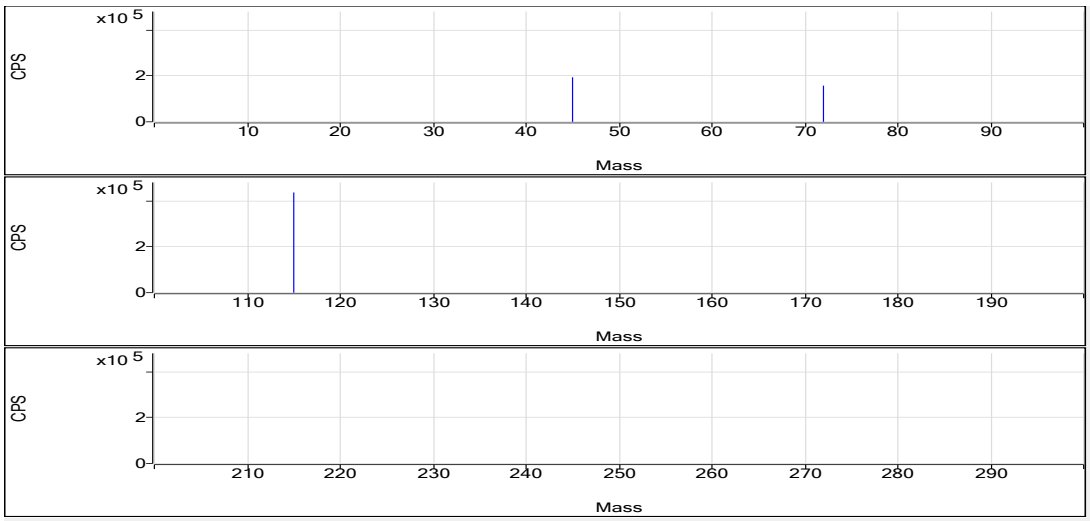
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3238685.99	0.9	99.9	Pulse	0.1000	3
No Gas	Ge	72	1417181.33	0.6	98.4	Pulse	0.1000	3
H2	Sc	45	194082.15	1.4	99.3	Pulse	0.1000	3
H2	Ge	72	157749.56	1.6	96.8	Pulse	0.1000	3
H2	In	115	436794.54	1.4	100.8	Pulse	0.1000	3
He	Sc	45	40710.68	2.7	101.8	Pulse	0.1000	3
He	Ge	72	71427.17	1.0	98.8	Pulse	0.1000	3
He	In	115	62555.67	2.0	96.8	Pulse	0.1000	3
He	Tb	159	282853.79	0.3	98.9	Pulse	0.1000	3
He	Bi	209	220056.93	0.6	99.0	Pulse	0.1000	3

No Gas

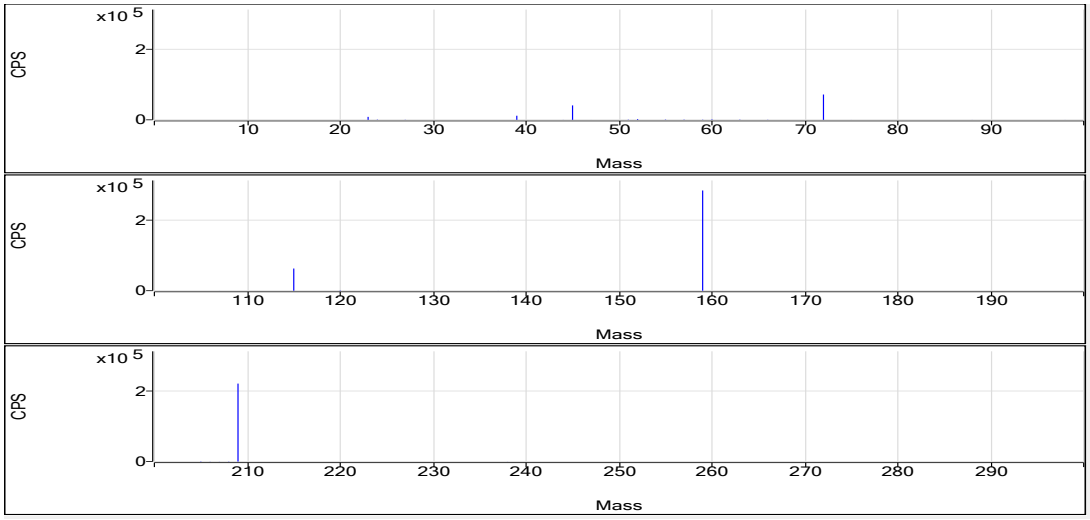


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0.0001	84.00	0.0013	4.694E-05
Be	9	1	No Gas	0.008	0.0001	82.00	0.0013	4.694E-05
Be	9	1	No Gas	0.011	0.0001	86.00	0.0013	4.694E-05
Se	78	2	H2	0.125	0.0001	9.33	0.0004	1.089E-05
Se	78	2	H2	0.027	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.068	0	6.00	0.0004	1.089E-05
Na	23	3	He	9.072	0.122	8612.82	0.0017	0.1065
Na	23	3	He	3.45	0.1124	8082.54	0.0017	0.1065
Na	23	3	He	5.274	0.1155	8292.70	0.0017	0.1065
Mg	24	3	He	7.362	0.0111	780.06	0.0008	0.004846
Mg	24	3	He	6.292	0.0102	730.05	0.0008	0.004846
Mg	24	3	He	5.984	0.0099	710.04	0.0008	0.004846
Al	27	3	He	12.621	0.0041	290.01	0.0002	0.001063
Al	27	3	He	14.03	0.0044	320.01	0.0002	0.001063
Al	27	3	He	21.566	0.0063	450.02	0.0002	0.001063
K	39	3	He	57.438	0.1754	12375.73	0.0006	0.1436
K	39	3	He	28.307	0.1593	11454.79	0.0006	0.1436
K	39	3	He	12.427	0.1505	10804.36	0.0006	0.1436
Ca	44	3	He	-10.807	0.0013	90.00	0	0.001611
Ca	44	3	He	6.332	0.0018	130.00	0	0.001611
Ca	44	3	He	19.897	0.0022	160.01	0	0.001611
Ti	47	3	He	1.169	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	2.79	0.001	70.00	0.0003	0.0002737
Ti	47	3	He	0.019	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.156	0.0092	646.02	0.0117	0.007326
V	51	3	He	0.139	0.009	644.02	0.0117	0.007326
V	51	3	He	0.2	0.0097	694.02	0.0117	0.007326
Cr	52	3	He	0.101	0.0269	1900.21	0.0152	0.02538
Cr	52	3	He	0.178	0.0281	2020.21	0.0152	0.02538
Cr	52	3	He	0.3	0.03	2150.24	0.0152	0.02538
Mn	55	3	He	-0.162	0.0129	910.06	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.674	0.0099	710.04	0.0059	0.01385
Mn	55	3	He	-0.317	0.012	860.05	0.0059	0.01385
Fe	57	3	He	19.248	0.0095	670.04	0.0003	0.003918
Fe	57	3	He	13.355	0.0078	560.03	0.0003	0.003918
Fe	57	3	He	30.234	0.0127	910.06	0.0003	0.003918
Co	59	3	He	0.201	0.0092	650.03	0.0305	0.003084
Co	59	3	He	0.168	0.0082	590.03	0.0305	0.003084
Co	59	3	He	0.132	0.0071	510.03	0.0305	0.003084
Ni	60	3	He	1.055	0.0183	1290.10	0.0088	0.009003
Ni	60	3	He	1.016	0.0179	1290.10	0.0088	0.009003
Ni	60	3	He	1.162	0.0192	1380.13	0.0088	0.009003
Cu	63	3	He	0.188	0.0096	680.04	0.0249	0.004937
Cu	63	3	He	0.192	0.0097	700.04	0.0249	0.004937
Cu	63	3	He	0.21	0.0102	730.04	0.0249	0.004937
Zn	66	3	He	0.05	0.005	350.02	0.0025	0.004836
Zn	66	3	He	0.409	0.0058	420.02	0.0025	0.004836
Zn	66	3	He	0.073	0.005	360.02	0.0025	0.004836
As	75	3	He	0.157	0.0007	50.00	0.0017	0.0004347
As	75	3	He	0.182	0.0008	54.00	0.0017	0.0004347
As	75	3	He	0.086	0.0006	42.00	0.0017	0.0004347
Sr	88	3	He	0.089	0.0015	90.00	0.0078	0.0007762
Sr	88	3	He	0.146	0.0019	120.01	0.0078	0.0007762
Sr	88	3	He	-0.019	0.0006	40.00	0.0078	0.0007762
Mo	98	3	He	0.036	0.0013	80.00	0.022	0.0005162
Mo	98	3	He	0.035	0.0013	80.00	0.022	0.0005162
Mo	98	3	He	-0.002	0.0005	30.00	0.022	0.0005162
Ag	107	3	He	0.015	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.021	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Cd	111	3	He	0.003	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.052	0.0163	1000.07	0.0143	0.01559
Sn	120	3	He	0.115	0.0172	1080.08	0.0143	0.01559
Sn	120	3	He	0.095	0.0169	1080.09	0.0143	0.01559
Sb	121	3	He	0.058	0.001	60.00	0.0124	0.000258
Sb	121	3	He	0.082	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.452	0.0023	140.01	0.0044	0.000309
Ba	137	3	He	0.294	0.0016	100.01	0.0044	0.000309
Ba	137	3	He	0.109	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	0.106	0.0039	860.06	0.0276	0.001005
Tl	205	3	He	0.091	0.0035	780.05	0.0276	0.001005
Tl	205	3	He	0.087	0.0034	750.05	0.0276	0.001005
Pb	208	3	He	0.077	0.005	580.04	0.0364	0.002176
Pb	208	3	He	0.081	0.0051	590.03	0.0364	0.002176
Pb	208	3	He	0.076	0.0049	570.03	0.0364	0.002176
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
U	238	3	He	0.016	0.0009	200.01	0.0421	0.00024
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
Sc	45	1	No Gas			3249210.26		
Sc	45	1	No Gas			3259551.20		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3207296.51		
Ge	72	1	No Gas			1419922.32		
Ge	72	1	No Gas			1424522.79		
Ge	72	1	No Gas			1407098.89		
Sc	45	2	H2			192681.09		
Sc	45	2	H2			192306.58		
Sc	45	2	H2			197258.79		
Ge	72	2	H2			156481.81		
Ge	72	2	H2			156180.11		
Ge	72	2	H2			160586.75		
In	115	2	H2			431994.21		
In	115	2	H2			434838.39		
In	115	2	H2			443551.01		
Sc	45	3	He			39433.80		
Sc	45	3	He			41329.08		
Sc	45	3	He			41369.17		
Ge	72	3	He			70573.79		
Ge	72	3	He			71919.50		
Ge	72	3	He			71788.22		
In	115	3	He			61244.43		
In	115	3	He			62691.52		
In	115	3	He			63755.70		
Tb	159	3	He			283659.98		
Tb	159	3	He			283014.14		
Tb	159	3	He			281887.24		
Bi	209	3	He			218493.30		
Bi	209	3	He			220936.62		
Bi	209	3	He			220740.88		

Quantitation Report

Data File Name	231_CCV.d
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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

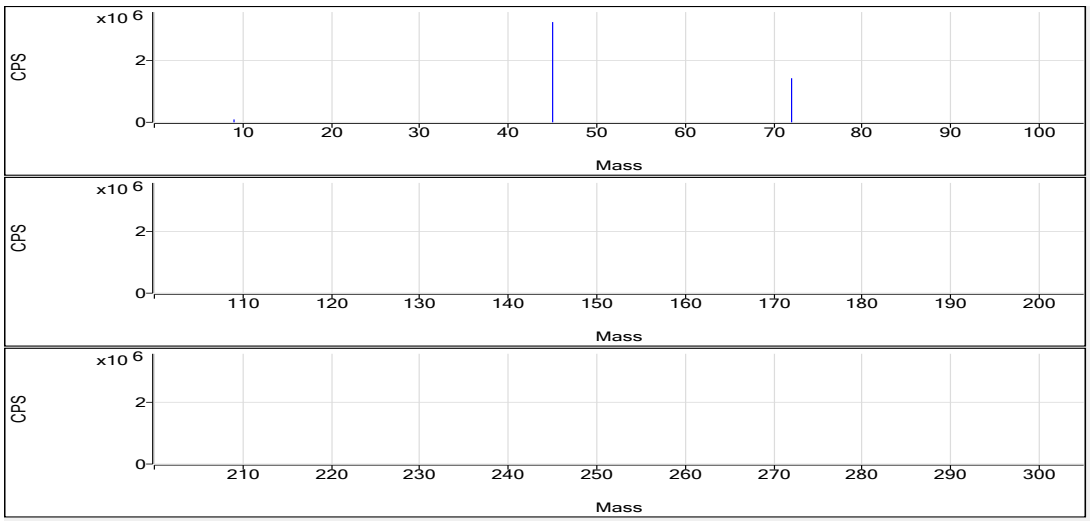
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.380	ppb	3.9	93343.71	0.0649	Pulse	0.5000	3
Se	78	72	H2	53.635	ppb	4.8	3351.06	0.0209	Pulse	1.5000	3
Na	23	72	He	5469.030	ppb	2.1	692103.19	9.5013	Pulse	0.1000	3
Mg	24	72	He	5479.827	ppb	2.1	336891.06	4.6249	Pulse	0.1000	3
Al	27	72	He	5409.761	ppb	2.2	95201.00	1.3069	Pulse	0.1000	3
K	39	72	He	5444.474	ppb	2.0	229473.79	3.1501	Pulse	0.1000	3
Ca	44	72	He	5273.683	ppb	5.5	12045.24	0.1654	Pulse	0.1000	3
Ti	47	72	He	5451.597	ppb	1.3	99614.80	1.3674	Pulse	0.1000	3
V	51	72	He	544.724	ppb	1.7	464709.39	6.3794	Pulse	0.5000	3
Cr	52	72	He	543.996	ppb	2.8	605216.18	8.3090	Pulse	0.1000	3
Mn	55	72	He	538.589	ppb	3.2	232555.80	3.1928	Pulse	0.1000	3
Fe	57	72	He	5397.907	ppb	3.1	114193.21	1.5678	Pulse	0.1000	3
Co	59	72	He	541.390	ppb	1.8	1203484.36	16.5212	Pulse	0.1000	3
Ni	60	72	He	542.336	ppb	1.1	348071.82	4.7779	Pulse	0.1000	3
Cu	63	72	He	539.432	ppb	1.8	980259.18	13.4568	Pulse	0.1000	3
Zn	66	72	He	532.685	ppb	2.9	95675.72	1.3135	Pulse	0.1000	3
As	75	72	He	535.911	ppb	2.4	67922.78	0.9325	Pulse	0.5000	3
Sr	88	115	He	53.307	ppb	1.3	26829.24	0.4175	Pulse	0.1000	3
Mo	98	115	He	51.393	ppb	2.0	72773.70	1.1323	Pulse	0.1000	3
Ag	107	115	He	52.593	ppb	1.5	153817.53	2.3935	Pulse	0.1000	3
Cd	111	115	He	52.981	ppb	1.1	16347.53	0.2544	Pulse	0.5000	3
Sn	120	115	He	52.809	ppb	3.0	49385.01	0.7685	Pulse	0.1000	3
Sb	121	115	He	52.398	ppb	2.6	41789.95	0.6502	Pulse	0.1000	3
Ba	137	115	He	531.798	ppb	0.6	149539.15	2.3268	Pulse	0.1000	3
Tl	205	209	He	53.677	ppb	0.7	325206.03	1.4849	Pulse	0.1000	3
Pb	208	209	He	53.257	ppb	0.8	425020.29	1.9406	Pulse	0.1000	3
U	238	209	He	53.149	ppb	0.5	489733.43	2.2361	Pulse	0.1000	3

ISTD Table:

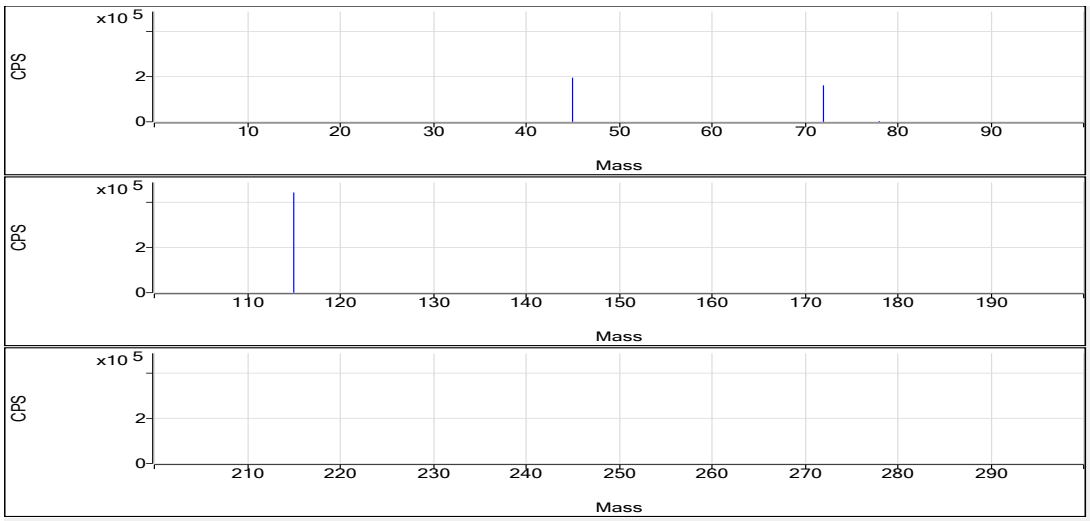
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3269097.03	0.3	100.9	Pulse	0.1000	3
No Gas	Ge	72	1437300.34	0.7	99.8	Pulse	0.1000	3
H2	Sc	45	194290.04	2.2	99.4	Pulse	0.1000	3
H2	Ge	72	160548.02	3.3	98.5	Pulse	0.1000	3
H2	In	115	441472.86	2.5	101.9	Pulse	0.1000	3
He	Sc	45	41325.68	1.8	103.4	Pulse	0.1000	3
He	Ge	72	72857.38	1.4	100.8	Pulse	0.1000	3
He	In	115	64271.17	1.3	99.5	Pulse	0.1000	3
He	Tb	159	284185.00	0.9	99.4	Pulse	0.1000	3
He	Bi	209	219020.19	0.8	98.6	Pulse	0.1000	3

No Gas

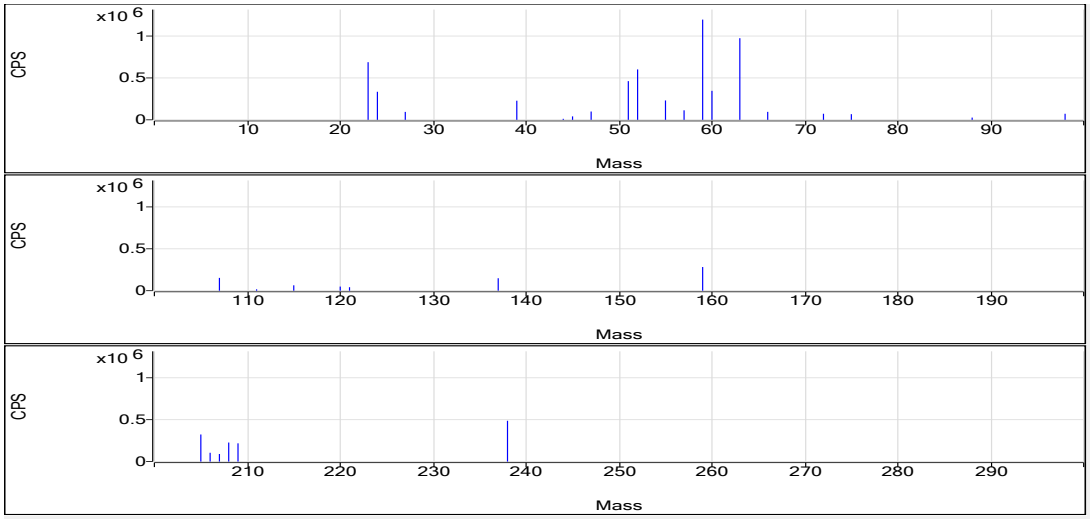


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.805	0.0629	90207.25	0.0013	4.694E-05
Be	9	1	No Gas	48.813	0.0642	91711.99	0.0013	4.694E-05
Be	9	1	No Gas	51.521	0.0677	98111.88	0.0013	4.694E-05
Se	78	2	H2	56.568	0.022	3403.74	0.0004	1.089E-05
Se	78	2	H2	52.716	0.0205	3363.73	0.0004	1.089E-05
Se	78	2	H2	51.62	0.0201	3285.71	0.0004	1.089E-05
Na	23	3	He	5591.296	9.7113	697159.99	0.0017	0.1065
Na	23	3	He	5449.571	9.4678	690436.01	0.0017	0.1065
Na	23	3	He	5366.222	9.3247	688713.58	0.0017	0.1065
Mg	24	3	He	5606.713	4.7319	339694.21	0.0008	0.004846
Mg	24	3	He	5453.176	4.6024	335628.82	0.0008	0.004846
Mg	24	3	He	5379.593	4.5404	335350.15	0.0008	0.004846
Al	27	3	He	5527.777	1.3354	95868.97	0.0002	0.001063
Al	27	3	He	5411.284	1.3073	95335.06	0.0002	0.001063
Al	27	3	He	5290.221	1.2781	94398.98	0.0002	0.001063
K	39	3	He	5571.973	3.2206	231198.49	0.0006	0.1436
K	39	3	He	5379.54	3.1143	227107.18	0.0006	0.1436
K	39	3	He	5381.909	3.1156	230115.70	0.0006	0.1436
Ca	44	3	He	5588.112	0.1752	12575.69	0	0.001611
Ca	44	3	He	5213.035	0.1635	11925.10	0	0.001611
Ca	44	3	He	5019.901	0.1575	11634.94	0	0.001611
Ti	47	3	He	5528.965	1.3868	99558.00	0.0003	0.0002737
Ti	47	3	He	5432.891	1.3627	99376.15	0.0003	0.0002737
Ti	47	3	He	5392.935	1.3527	99910.26	0.0003	0.0002737
V	51	3	He	554.551	6.4943	466218.19	0.0117	0.007326
V	51	3	He	543.469	6.3647	464140.72	0.0117	0.007326
V	51	3	He	536.151	6.2791	463769.25	0.0117	0.007326
Cr	52	3	He	556.819	8.5042	610505.54	0.0152	0.02538
Cr	52	3	He	547.886	8.3682	610244.83	0.0152	0.02538
Cr	52	3	He	527.284	8.0545	594898.16	0.0152	0.02538
Mn	55	3	He	552.234	3.2734	234990.41	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	544.141	3.2256	235224.84	0.0059	0.01385
Mn	55	3	He	519.393	3.0795	227452.15	0.0059	0.01385
Fe	57	3	He	5515.915	1.602	115002.27	0.0003	0.003918
Fe	57	3	He	5473.712	1.5897	115930.14	0.0003	0.003918
Fe	57	3	He	5204.092	1.5116	111647.21	0.0003	0.003918
Co	59	3	He	551.307	16.8237	1207751.62	0.0305	0.003084
Co	59	3	He	540.882	16.5057	1203663.34	0.0305	0.003084
Co	59	3	He	531.981	16.2341	1199038.11	0.0305	0.003084
Ni	60	3	He	548.876	4.8354	347128.63	0.0088	0.009003
Ni	60	3	He	540.834	4.7647	347463.74	0.0088	0.009003
Ni	60	3	He	537.299	4.7336	349623.08	0.0088	0.009003
Cu	63	3	He	550.257	13.7268	985424.28	0.0249	0.004937
Cu	63	3	He	537.247	13.4023	977354.75	0.0249	0.004937
Cu	63	3	He	530.792	13.2414	977998.50	0.0249	0.004937
Zn	66	3	He	550.552	1.3574	97446.77	0.0025	0.004836
Zn	66	3	He	524.254	1.2928	94277.00	0.0025	0.004836
Zn	66	3	He	523.249	1.2903	95303.39	0.0025	0.004836
As	75	3	He	547.411	0.9525	68376.83	0.0017	0.0004347
As	75	3	He	538.026	0.9362	68268.39	0.0017	0.0004347
As	75	3	He	522.296	0.9088	67123.13	0.0017	0.0004347
Sr	88	3	He	53.209	0.4167	26775.96	0.0078	0.0007762
Sr	88	3	He	52.669	0.4125	26855.92	0.0078	0.0007762
Sr	88	3	He	54.045	0.4232	26855.85	0.0078	0.0007762
Mo	98	3	He	52.589	1.1586	74446.03	0.022	0.0005162
Mo	98	3	He	50.89	1.1212	72997.23	0.022	0.0005162
Mo	98	3	He	50.701	1.117	70877.83	0.022	0.0005162
Ag	107	3	He	53.192	2.4207	155542.43	0.0455	0.0004641
Ag	107	3	He	51.725	2.354	153259.28	0.0455	0.0004641
Ag	107	3	He	52.863	2.4058	152650.87	0.0455	0.0004641
Cd	111	3	He	53.126	0.2551	16389.57	0.0048	5.152E-05
Cd	111	3	He	52.354	0.2514	16365.55	0.0048	5.152E-05
Cd	111	3	He	53.463	0.2567	16287.47	0.0048	5.152E-05
Sn	120	3	He	54.065	0.7864	50532.47	0.0143	0.01559
Sn	120	3	He	51.019	0.743	48374.65	0.0143	0.01559
Sn	120	3	He	53.343	0.7761	49247.90	0.0143	0.01559
Sb	121	3	He	53.91	0.669	42987.07	0.0124	0.000258
Sb	121	3	He	51.329	0.637	41472.25	0.0124	0.000258
Sb	121	3	He	51.954	0.6447	40910.54	0.0124	0.000258
Ba	137	3	He	532.562	2.3302	149724.43	0.0044	0.000309
Ba	137	3	He	528.078	2.3105	150431.23	0.0044	0.000309
Ba	137	3	He	534.755	2.3398	148461.78	0.0044	0.000309
Tl	205	3	He	53.885	1.4906	325674.19	0.0276	0.001005
Tl	205	3	He	53.908	1.4913	324547.03	0.0276	0.001005
Tl	205	3	He	53.239	1.4728	325396.87	0.0276	0.001005
Pb	208	3	He	53.683	1.9561	229935.07	0.0364	0.002176
Pb	208	3	He	53.232	1.9397	227782.48	0.0364	0.002176
Pb	208	3	He	52.857	1.926	227695.70	0.0364	0.002176
U	238	3	He	53.263	2.2409	489598.27	0.0421	0.00024
U	238	3	He	53.323	2.2434	488235.77	0.0421	0.00024
U	238	3	He	52.86	2.2239	491366.24	0.0421	0.00024
Sc	45	1	No Gas			3264310.26		
Sc	45	1	No Gas			3280770.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3262210.58		
Ge	72	1	No Gas			1434946.70		
Ge	72	1	No Gas			1428761.70		
Ge	72	1	No Gas			1448192.63		
Sc	45	2	H2			189693.96		
Sc	45	2	H2			194809.61		
Sc	45	2	H2			198366.56		
Ge	72	2	H2			154461.41		
Ge	72	2	H2			163792.81		
Ge	72	2	H2			163389.85		
In	115	2	H2			430970.31		
In	115	2	H2			440706.87		
In	115	2	H2			452741.40		
Sc	45	3	He			41068.16		
Sc	45	3	He			42181.29		
Sc	45	3	He			40727.59		
Ge	72	3	He			71788.51		
Ge	72	3	He			72924.31		
Ge	72	3	He			73859.33		
In	115	3	He			64649.24		
In	115	3	He			65483.78		
In	115	3	He			63836.08		
Tb	159	3	He			287103.98		
Tb	159	3	He			282484.16		
Tb	159	3	He			282966.85		
Bi	209	3	He			218484.37		
Bi	209	3	He			217632.03		
Bi	209	3	He			220944.18		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

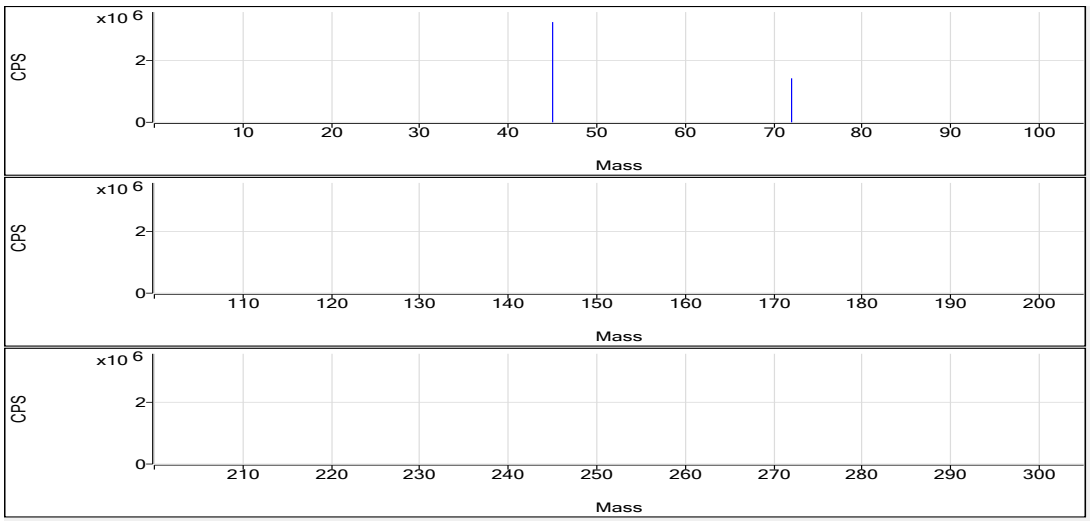
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.025	ppb	50.8	113.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.066	ppb	17.5	5.78	0.0000	Pulse	1.5000	3
Na	23	72	He	6.457	ppb	19.3	8446.03	0.1175	Pulse	0.1000	3
Mg	24	72	He	7.117	ppb	22.5	780.05	0.0108	Pulse	0.1000	3
Al	27	72	He	14.628	ppb	8.4	330.02	0.0046	Pulse	0.1000	3
K	39	72	He	17.016	ppb	52.7	10997.79	0.1530	Pulse	0.1000	3
Ca	44	72	He	16.955	ppb	178.8	153.34	0.0021	Pulse	0.1000	3
Ti	47	72	He	2.223	ppb	107.0	60.00	0.0008	Pulse	0.1000	3
V	51	72	He	0.200	ppb	7.3	694.69	0.0097	Pulse	0.5000	3
Cr	52	72	He	0.228	ppb	25.0	2073.56	0.0289	Pulse	0.1000	3
Mn	55	72	He	-0.516	ppb	N/A	776.71	0.0108	Pulse	0.1000	3
Fe	57	72	He	16.389	ppb	25.2	623.37	0.0087	Pulse	0.1000	3
Co	59	72	He	0.197	ppb	3.1	653.37	0.0091	Pulse	0.1000	3
Ni	60	72	He	1.232	ppb	32.0	1423.45	0.0198	Pulse	0.1000	3
Cu	63	72	He	0.274	ppb	11.3	846.72	0.0118	Pulse	0.1000	3
Zn	66	72	He	0.146	ppb	429.9	373.36	0.0052	Pulse	0.1000	3
As	75	72	He	0.235	ppb	55.0	60.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.188	ppb	36.8	143.34	0.0022	Pulse	0.1000	3
Mo	98	115	He	0.038	ppb	29.4	86.67	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.021	ppb	32.3	90.00	0.0014	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	56.3	8.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.069	ppb	174.5	1056.75	0.0166	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	126.1	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.324	ppb	30.8	110.01	0.0017	Pulse	0.1000	3
Tl	205	209	He	0.157	ppb	0.9	1170.10	0.0053	Pulse	0.1000	3
Pb	208	209	He	0.060	ppb	9.0	956.72	0.0044	Pulse	0.1000	3
U	238	209	He	0.022	ppb	27.5	256.68	0.0012	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3254879.12	1.1	100.4	Pulse	0.1000	3
No Gas	Ge	72	1428410.81	1.0	99.2	Pulse	0.1000	3
H2	Sc	45	195812.97	1.9	100.2	Pulse	0.1000	3
H2	Ge	72	157443.02	1.8	96.6	Pulse	0.1000	3
H2	In	115	438547.38	1.5	101.2	Pulse	0.1000	3
He	Sc	45	41522.77	1.9	103.8	Pulse	0.1000	3
He	Ge	72	71856.56	1.2	99.4	Pulse	0.1000	3
He	In	115	63814.67	1.2	98.8	Pulse	0.1000	3
He	Tb	159	282492.57	0.3	98.8	Pulse	0.1000	3
He	Bi	209	218970.31	0.4	98.6	Pulse	0.1000	3

No Gas



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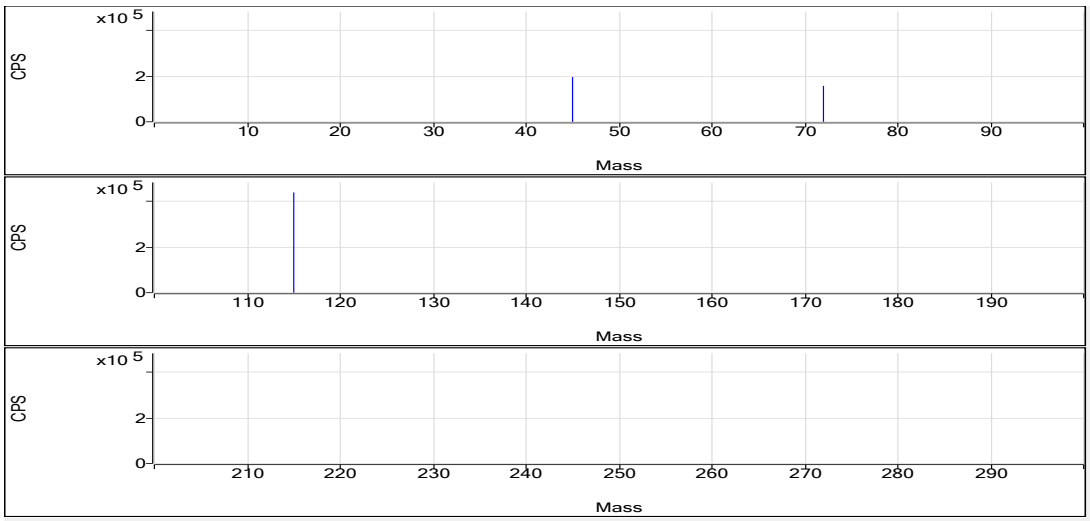
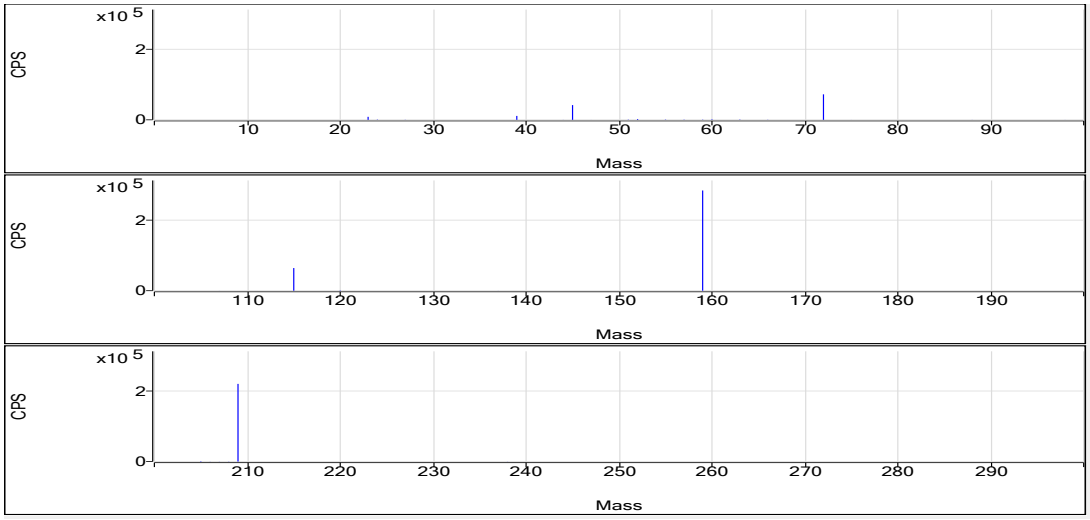


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.022	0.0001	108.00	0.0013	4.694E-05
Be	9	1	No Gas	0.014	0.0001	94.00	0.0013	4.694E-05
Be	9	1	No Gas	0.038	0.0001	138.00	0.0013	4.694E-05
Se	78	2	H2	0.061	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.058	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.079	0	6.67	0.0004	1.089E-05
Na	23	3	He	7.554	0.1194	8602.77	0.0017	0.1065
Na	23	3	He	5.098	0.1152	8362.60	0.0017	0.1065
Na	23	3	He	6.72	0.118	8372.71	0.0017	0.1065
Mg	24	3	He	8.25	0.0118	850.05	0.0008	0.004846
Mg	24	3	He	7.816	0.0114	830.05	0.0008	0.004846
Mg	24	3	He	5.285	0.0093	660.04	0.0008	0.004846
Al	27	3	He	15.728	0.0049	350.02	0.0002	0.001063
Al	27	3	He	13.291	0.0043	310.01	0.0002	0.001063
Al	27	3	He	14.865	0.0047	330.02	0.0002	0.001063
K	39	3	He	27.109	0.1586	11424.81	0.0006	0.1436
K	39	3	He	13.933	0.1513	10984.45	0.0006	0.1436
K	39	3	He	10.005	0.1492	10584.11	0.0006	0.1436
Ca	44	3	He	-16.107	0.0011	80.00	0	0.001611
Ca	44	3	He	23.546	0.0023	170.01	0	0.001611
Ca	44	3	He	43.427	0.003	210.01	0	0.001611
Ti	47	3	He	1.123	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	4.952	0.0015	110.01	0.0003	0.0002737
Ti	47	3	He	0.594	0.0004	30.00	0.0003	0.0002737
V	51	3	He	0.216	0.0099	710.02	0.0117	0.007326
V	51	3	He	0.196	0.0096	698.02	0.0117	0.007326
V	51	3	He	0.188	0.0095	676.02	0.0117	0.007326
Cr	52	3	He	0.293	0.0299	2150.23	0.0152	0.02538
Cr	52	3	He	0.188	0.0282	2050.22	0.0152	0.02538
Cr	52	3	He	0.203	0.0285	2020.23	0.0152	0.02538
Mn	55	3	He	-0.301	0.0121	870.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.666	0.0099	720.04	0.0059	0.01385
Mn	55	3	He	-0.58	0.0104	740.05	0.0059	0.01385
Fe	57	3	He	17.627	0.009	650.04	0.0003	0.003918
Fe	57	3	He	19.767	0.0096	700.04	0.0003	0.003918
Fe	57	3	He	11.774	0.0073	520.03	0.0003	0.003918
Co	59	3	He	0.195	0.009	650.04	0.0305	0.003084
Co	59	3	He	0.192	0.009	650.04	0.0305	0.003084
Co	59	3	He	0.204	0.0093	660.04	0.0305	0.003084
Ni	60	3	He	1.124	0.0189	1360.10	0.0088	0.009003
Ni	60	3	He	0.903	0.0169	1230.09	0.0088	0.009003
Ni	60	3	He	1.669	0.0237	1680.16	0.0088	0.009003
Cu	63	3	He	0.275	0.0118	850.06	0.0249	0.004937
Cu	63	3	He	0.305	0.0125	910.06	0.0249	0.004937
Cu	63	3	He	0.243	0.011	780.05	0.0249	0.004937
Zn	66	3	He	0.857	0.0069	500.03	0.0025	0.004836
Zn	66	3	He	-0.342	0.004	290.02	0.0025	0.004836
Zn	66	3	He	-0.075	0.0047	330.02	0.0025	0.004836
As	75	3	He	0.165	0.0007	52.00	0.0017	0.0004347
As	75	3	He	0.384	0.0011	80.00	0.0017	0.0004347
As	75	3	He	0.155	0.0007	50.00	0.0017	0.0004347
Sr	88	3	He	0.124	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.178	0.0022	140.01	0.0078	0.0007762
Sr	88	3	He	0.261	0.0028	180.01	0.0078	0.0007762
Mo	98	3	He	0.041	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.026	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.048	0.0016	100.00	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.02	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.028	0.0017	110.01	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.028	0.0002	12.00	0.0048	5.152E-05
Sn	120	3	He	0.198	0.0184	1160.09	0.0143	0.01559
Sn	120	3	He	0.048	0.0163	1050.09	0.0143	0.01559
Sn	120	3	He	-0.039	0.015	960.07	0.0143	0.01559
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.042	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	0.437	0.0022	140.01	0.0044	0.000309
Ba	137	3	He	0.248	0.0014	90.00	0.0044	0.000309
Ba	137	3	He	0.287	0.0016	100.01	0.0044	0.000309
Tl	205	3	He	0.156	0.0053	1170.10	0.0276	0.001005
Tl	205	3	He	0.159	0.0054	1180.10	0.0276	0.001005
Tl	205	3	He	0.156	0.0053	1160.11	0.0276	0.001005
Pb	208	3	He	0.059	0.0043	460.03	0.0364	0.002176
Pb	208	3	He	0.056	0.0042	470.02	0.0364	0.002176
Pb	208	3	He	0.066	0.0046	430.03	0.0364	0.002176
U	238	3	He	0.029	0.0015	320.02	0.0421	0.00024
U	238	3	He	0.017	0.001	210.01	0.0421	0.00024
U	238	3	He	0.02	0.0011	240.01	0.0421	0.00024
Sc	45	1	No Gas			3236047.45		
Sc	45	1	No Gas			3295979.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3232610.89		
Ge	72	1	No Gas			1425255.14		
Ge	72	1	No Gas			1444307.79		
Ge	72	1	No Gas			1415669.51		
Sc	45	2	H2			192094.16		
Sc	45	2	H2			199472.46		
Sc	45	2	H2			195872.30		
Ge	72	2	H2			154157.44		
Ge	72	2	H2			158756.24		
Ge	72	2	H2			159415.39		
In	115	2	H2			432873.74		
In	115	2	H2			445730.31		
In	115	2	H2			437038.08		
Sc	45	3	He			42441.84		
Sc	45	3	He			41048.14		
Sc	45	3	He			41078.33		
Ge	72	3	He			72030.54		
Ge	72	3	He			72583.80		
Ge	72	3	He			70955.33		
In	115	3	He			63012.99		
In	115	3	He			64559.06		
In	115	3	He			63896.70		
Tb	159	3	He			283140.27		
Tb	159	3	He			281698.86		
Tb	159	3	He			282638.57		
Bi	209	3	He			219818.55		
Bi	209	3	He			219043.84		
Bi	209	3	He			218048.55		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:39:13
Sample Name	410-136557-H-21-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

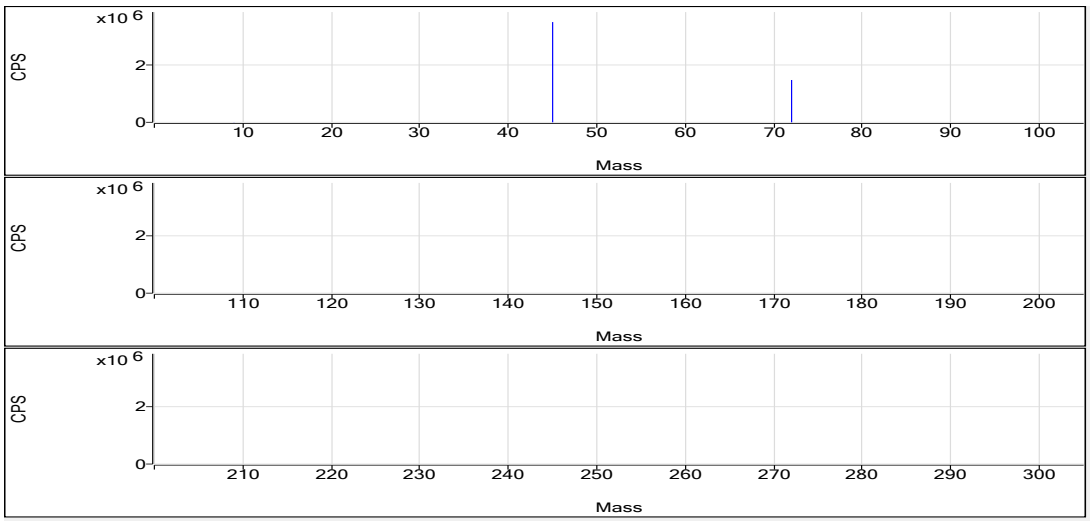
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	2.363	ppb	2.2	4624.07	0.0032	Pulse	0.5000	3
Se	78	72	H2	1.994	ppb	4.1	126.89	0.0008	Pulse	1.5000	3
Na	23	72	He	401.245	ppb	4.0	59706.91	0.7957	Pulse	0.1000	3
Mg	24	72	He	13932.204	ppb	1.5	881858.40	11.7511	Pulse	0.1000	3
Al	27	72	He	55065.462	ppb	1.4	997617.93	13.2935	Pulse	0.1000	3
K	39	72	He	5874.894	ppb	0.9	254258.57	3.3878	Pulse	0.1000	3
Ca	44	72	He	9969.059	ppb	0.9	23359.31	0.3112	Pulse	0.1000	3
Ti	47	72	He	316.003	ppb	2.2	5968.09	0.0795	Pulse	0.1000	3
V	51	72	He	82.546	ppb	1.9	73011.06	0.9729	Pulse	0.5000	3
Cr	52	72	He	77.790	ppb	1.9	90795.09	1.2099	Pulse	0.1000	3
Mn	55	72	He	2083.311	ppb	0.8	923888.32	12.3104	Pulse	0.1000	3
Fe	57	72	He	97348.847	ppb	1.6	2116791.01	28.2073	Pulse	0.1000	3
Co	59	72	He	40.935	ppb	1.6	93976.89	1.2520	Pulse	0.1000	3
Ni	60	72	He	94.274	ppb	3.0	62880.33	0.8380	Pulse	0.1000	3
Cu	63	72	He	78.487	ppb	1.5	147251.99	1.9622	Pulse	0.1000	3
Zn	66	72	He	342.517	ppb	0.6	63516.82	0.8463	Pulse	0.1000	3
As	75	72	He	27.308	ppb	2.8	3596.47	0.0479	Pulse	0.5000	3
Sr	88	115	He	100.112	ppb	1.0	49938.27	0.7834	Pulse	0.1000	3
Mo	98	115	He	2.872	ppb	7.7	4064.07	0.0638	Pulse	0.1000	3
Ag	107	115	He	0.334	ppb	6.3	996.74	0.0156	Pulse	0.1000	3
Cd	111	115	He	0.762	ppb	11.5	236.67	0.0037	Pulse	0.5000	3
Sn	120	115	He	21.074	ppb	4.1	20145.26	0.3161	Pulse	0.1000	3
Sb	121	115	He	1.062	ppb	13.3	856.73	0.0134	Pulse	0.1000	3
Ba	137	115	He	501.602	ppb	0.9	139913.54	2.1947	Pulse	0.1000	3
Tl	205	209	He	0.496	ppb	2.8	3337.21	0.0147	Pulse	0.1000	3
Pb	208	209	He	235.457	ppb	1.1	1943413.42	8.5722	Pulse	0.1000	3
U	238	209	He	3.454	ppb	2.0	32992.81	0.1455	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3476269.53	0.9	107.3	Pulse	0.1000	3
No Gas	Ge	72	1467260.50	1.0	101.9	Pulse	0.1000	3
H2	Sc	45	208244.12	0.9	106.6	Pulse	0.1000	3
H2	Ge	72	161244.31	2.4	98.9	Pulse	0.1000	3
H2	In	115	441453.85	1.9	101.9	Pulse	0.1000	3
He	Sc	45	44421.51	1.3	111.1	Pulse	0.1000	3
He	Ge	72	75052.24	1.0	103.8	Pulse	0.1000	3
He	In	115	63752.81	1.0	98.7	Pulse	0.1000	3
He	Tb	159	303573.69	1.0	106.1	Pulse	0.1000	3
He	Bi	209	226727.85	1.1	102.0	Pulse	0.1000	3

No Gas



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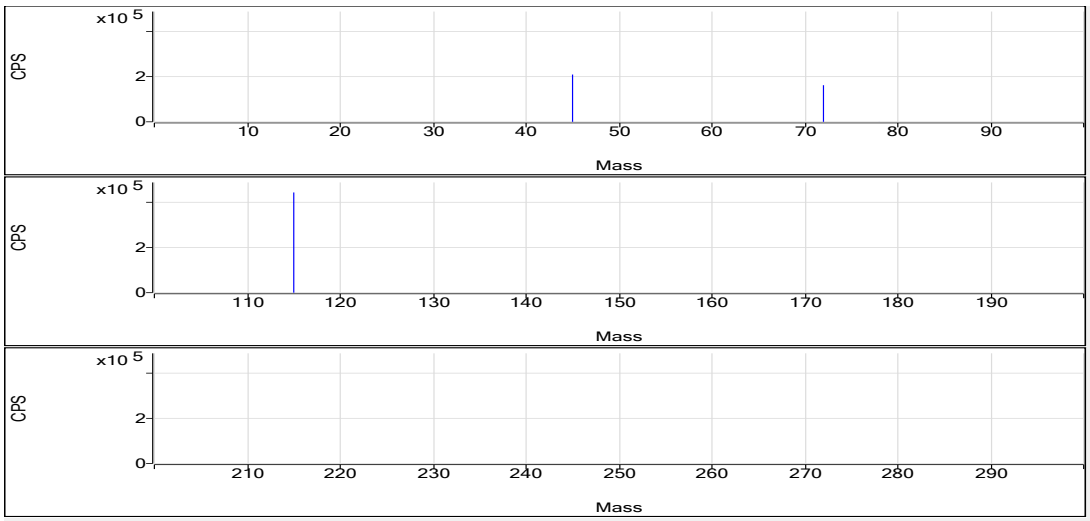
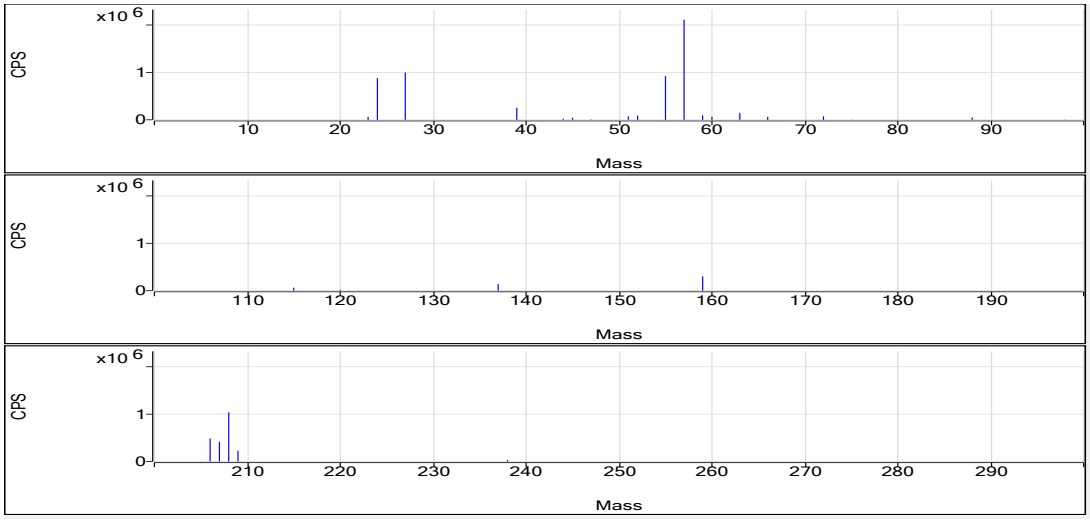


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	2.323	0.0031	4508.70	0.0013	4.694E-05
Be	9	1	No Gas	2.343	0.0031	4636.74	0.0013	4.694E-05
Be	9	1	No Gas	2.422	0.0032	4726.76	0.0013	4.694E-05
Se	78	2	H2	2.071	0.0008	128.67	0.0004	1.089E-05
Se	78	2	H2	1.908	0.0008	121.33	0.0004	1.089E-05
Se	78	2	H2	2.002	0.0008	130.67	0.0004	1.089E-05
Na	23	3	He	394.457	0.7841	59218.71	0.0017	0.1065
Na	23	3	He	389.784	0.776	58565.51	0.0017	0.1065
Na	23	3	He	419.493	0.8271	61336.51	0.0017	0.1065
Mg	24	3	He	13839.794	11.6732	881653.19	0.0008	0.004846
Mg	24	3	He	13787.244	11.6289	877604.44	0.0008	0.004846
Mg	24	3	He	14169.574	11.9512	886317.56	0.0008	0.004846
Al	27	3	He	54394.799	13.1317	991807.25	0.0002	0.001063
Al	27	3	He	54887.266	13.2505	999985.45	0.0002	0.001063
Al	27	3	He	55914.32	13.4985	1001061.08	0.0002	0.001063
K	39	3	He	5816.178	3.3554	253426.81	0.0006	0.1436
K	39	3	He	5913.854	3.4093	257294.68	0.0006	0.1436
K	39	3	He	5894.65	3.3987	252054.21	0.0006	0.1436
Ca	44	3	He	10020.969	0.3129	23629.75	0	0.001611
Ca	44	3	He	9870.875	0.3082	23259.03	0	0.001611
Ca	44	3	He	10015.332	0.3127	23189.14	0	0.001611
Ti	47	3	He	322.099	0.081	6121.50	0.0003	0.0002737
Ti	47	3	He	308.614	0.0777	5861.40	0.0003	0.0002737
Ti	47	3	He	317.295	0.0798	5921.38	0.0003	0.0002737
V	51	3	He	81.524	0.961	72580.28	0.0117	0.007326
V	51	3	He	81.806	0.9643	72771.27	0.0117	0.007326
V	51	3	He	84.307	0.9935	73681.62	0.0117	0.007326
Cr	52	3	He	77.381	1.2037	90912.26	0.0152	0.02538
Cr	52	3	He	76.543	1.1909	89875.69	0.0152	0.02538
Cr	52	3	He	79.445	1.2351	91597.32	0.0152	0.02538
Mn	55	3	He	2066.198	12.2094	922153.42	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2086.777	12.3309	930582.41	0.0059	0.01385
Mn	55	3	He	2096.957	12.391	918929.13	0.0059	0.01385
Fe	57	3	He	96285.527	27.8992	2107174.03	0.0003	0.003918
Fe	57	3	He	96633.648	28.0001	2113099.97	0.0003	0.003918
Fe	57	3	He	99127.366	28.7226	2130099.03	0.0003	0.003918
Co	59	3	He	41.033	1.255	94789.41	0.0305	0.003084
Co	59	3	He	41.538	1.2704	95875.41	0.0305	0.003084
Co	59	3	He	40.234	1.2306	91265.84	0.0305	0.003084
Ni	60	3	He	91.625	0.8147	61531.63	0.0088	0.009003
Ni	60	3	He	93.938	0.835	63017.31	0.0088	0.009003
Ni	60	3	He	97.259	0.8642	64092.04	0.0088	0.009003
Cu	63	3	He	77.544	1.9387	146423.65	0.0249	0.004937
Cu	63	3	He	78.159	1.954	147463.50	0.0249	0.004937
Cu	63	3	He	79.759	1.9939	147868.81	0.0249	0.004937
Zn	66	3	He	340.087	0.8404	63470.02	0.0025	0.004836
Zn	66	3	He	343.721	0.8493	64092.97	0.0025	0.004836
Zn	66	3	He	343.743	0.8493	62987.46	0.0025	0.004836
As	75	3	He	27.099	0.0476	3592.47	0.0017	0.0004347
As	75	3	He	26.679	0.0468	3534.46	0.0017	0.0004347
As	75	3	He	28.146	0.0494	3662.49	0.0017	0.0004347
Sr	88	3	He	99.527	0.7788	49697.38	0.0078	0.0007762
Sr	88	3	He	101.307	0.7927	49988.60	0.0078	0.0007762
Sr	88	3	He	99.502	0.7786	50128.84	0.0078	0.0007762
Mo	98	3	He	2.617	0.0581	3710.61	0.022	0.0005162
Mo	98	3	He	3.016	0.0669	4220.77	0.022	0.0005162
Mo	98	3	He	2.982	0.0662	4260.82	0.022	0.0005162
Ag	107	3	He	0.338	0.0158	1010.08	0.0455	0.0004641
Ag	107	3	He	0.352	0.0165	1040.07	0.0455	0.0004641
Ag	107	3	He	0.311	0.0146	940.06	0.0455	0.0004641
Cd	111	3	He	0.773	0.0038	240.00	0.0048	5.152E-05
Cd	111	3	He	0.67	0.0033	206.00	0.0048	5.152E-05
Cd	111	3	He	0.843	0.0041	264.00	0.0048	5.152E-05
Sn	120	3	He	20.509	0.308	19654.47	0.0143	0.01559
Sn	120	3	He	22.059	0.3301	20816.46	0.0143	0.01559
Sn	120	3	He	20.655	0.3101	19964.86	0.0143	0.01559
Sb	121	3	He	1.053	0.0133	850.06	0.0124	0.000258
Sb	121	3	He	0.925	0.0117	740.05	0.0124	0.000258
Sb	121	3	He	1.206	0.0152	980.07	0.0124	0.000258
Ba	137	3	He	497.349	2.1761	138864.86	0.0044	0.000309
Ba	137	3	He	506.423	2.2158	139730.93	0.0044	0.000309
Ba	137	3	He	501.035	2.1922	141144.84	0.0044	0.000309
Tl	205	3	He	0.511	0.0151	3470.57	0.0276	0.001005
Tl	205	3	He	0.483	0.0143	3240.51	0.0276	0.001005
Tl	205	3	He	0.495	0.0147	3300.56	0.0276	0.001005
Pb	208	3	He	232.911	8.4795	1042312.56	0.0364	0.002176
Pb	208	3	He	235.503	8.5739	1034886.39	0.0364	0.002176
Pb	208	3	He	237.957	8.6632	1039694.36	0.0364	0.002176
U	238	3	He	3.377	0.1423	32651.99	0.0421	0.00024
U	238	3	He	3.476	0.1464	33072.85	0.0421	0.00024
U	238	3	He	3.509	0.1479	33253.58	0.0421	0.00024
Sc	45	1	No Gas			3450192.45		
Sc	45	1	No Gas			3510452.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3468163.39		
Ge	72	1	No Gas			1454783.88		
Ge	72	1	No Gas			1483261.70		
Ge	72	1	No Gas			1463735.92		
Sc	45	2	H2			207044.14		
Sc	45	2	H2			207174.55		
Sc	45	2	H2			210513.67		
Ge	72	2	H2			157452.89		
Ge	72	2	H2			160969.99		
Ge	72	2	H2			165310.04		
In	115	2	H2			431906.20		
In	115	2	H2			446814.68		
In	115	2	H2			445640.66		
Sc	45	3	He			45040.46		
Sc	45	3	He			44257.62		
Sc	45	3	He			43966.44		
Ge	72	3	He			75527.99		
Ge	72	3	He			75467.58		
Ge	72	3	He			74161.16		
In	115	3	He			63966.74		
In	115	3	He			63223.33		
In	115	3	He			64539.75		
Tb	159	3	He			305723.80		
Tb	159	3	He			304917.34		
Tb	159	3	He			300079.94		
Bi	209	3	He			229467.42		
Bi	209	3	He			225837.05		
Bi	209	3	He			224879.08		

Quantitation Report

Data File Name	234SMPL.d
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Acq Time	2023-08-10 18:41:13
Sample Name	410-136557-H-21-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

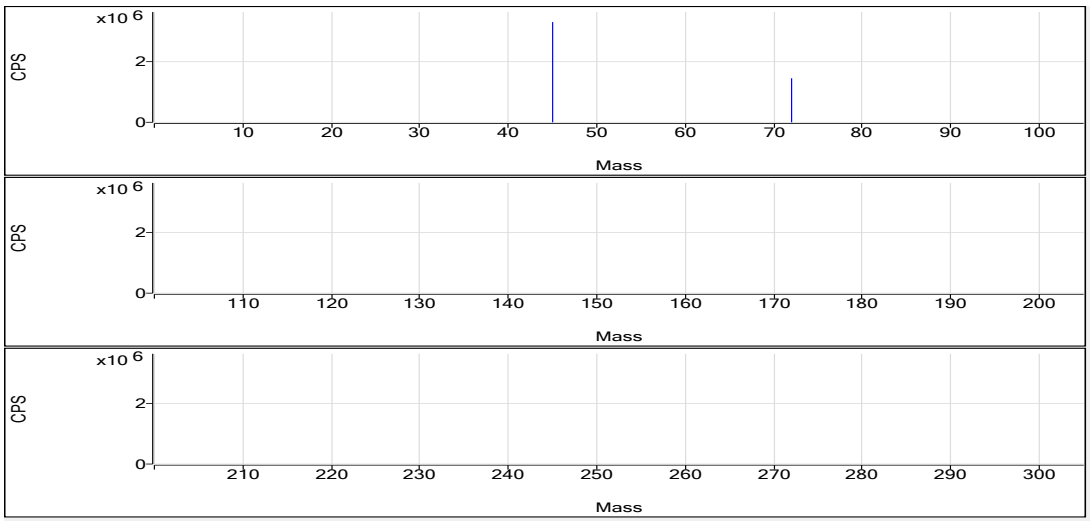
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.499	ppb	12.4	1019.37	0.0007	Pulse	0.5000	3
Se	78	72	H2	0.440	ppb	12.4	29.33	0.0002	Pulse	1.5000	3
Na	23	72	He	77.502	ppb	4.0	17474.16	0.2396	Pulse	0.1000	3
Mg	24	72	He	2952.410	ppb	0.8	181888.55	2.4940	Pulse	0.1000	3
Al	27	72	He	11660.910	ppb	0.7	205355.73	2.8159	Pulse	0.1000	3
K	39	72	He	1289.914	ppb	0.8	62422.77	0.8559	Pulse	0.1000	3
Ca	44	72	He	2241.441	ppb	4.6	5194.42	0.0712	Pulse	0.1000	3
Ti	47	72	He	74.370	ppb	7.0	1380.11	0.0189	Pulse	0.1000	3
V	51	72	He	17.538	ppb	0.8	15496.23	0.2125	Pulse	0.5000	3
Cr	52	72	He	16.582	ppb	3.9	20268.09	0.2779	Pulse	0.1000	3
Mn	55	72	He	444.117	ppb	1.4	192170.38	2.6352	Pulse	0.1000	3
Fe	57	72	He	20760.074	ppb	0.9	438896.70	6.0184	Pulse	0.1000	3
Co	59	72	He	8.639	ppb	1.0	19446.96	0.2667	Pulse	0.1000	3
Ni	60	72	He	20.824	ppb	2.7	14010.49	0.1921	Pulse	0.1000	3
Cu	63	72	He	16.554	ppb	1.1	30465.97	0.4177	Pulse	0.1000	3
Zn	66	72	He	76.570	ppb	1.7	14070.63	0.1930	Pulse	0.1000	3
As	75	72	He	5.633	ppb	9.2	746.02	0.0102	Pulse	0.5000	3
Sr	88	115	He	20.612	ppb	2.5	10374.10	0.1619	Pulse	0.1000	3
Mo	98	115	He	0.610	ppb	10.6	893.39	0.0139	Pulse	0.1000	3
Ag	107	115	He	0.099	ppb	23.3	316.68	0.0049	Pulse	0.1000	3
Cd	111	115	He	0.184	ppb	19.9	60.00	0.0009	Pulse	0.5000	3
Sn	120	115	He	4.461	ppb	3.4	5074.43	0.0792	Pulse	0.1000	3
Sb	121	115	He	0.290	ppb	9.0	246.68	0.0038	Pulse	0.1000	3
Ba	137	115	He	103.994	ppb	0.8	29171.55	0.4553	Pulse	0.1000	3
Tl	205	209	He	0.140	ppb	6.8	1090.09	0.0049	Pulse	0.1000	3
Pb	208	209	He	48.832	ppb	1.4	398502.91	1.7795	Pulse	0.1000	3
U	238	209	He	0.741	ppb	2.9	7032.21	0.0314	Pulse	0.1000	3

ISTD Table:

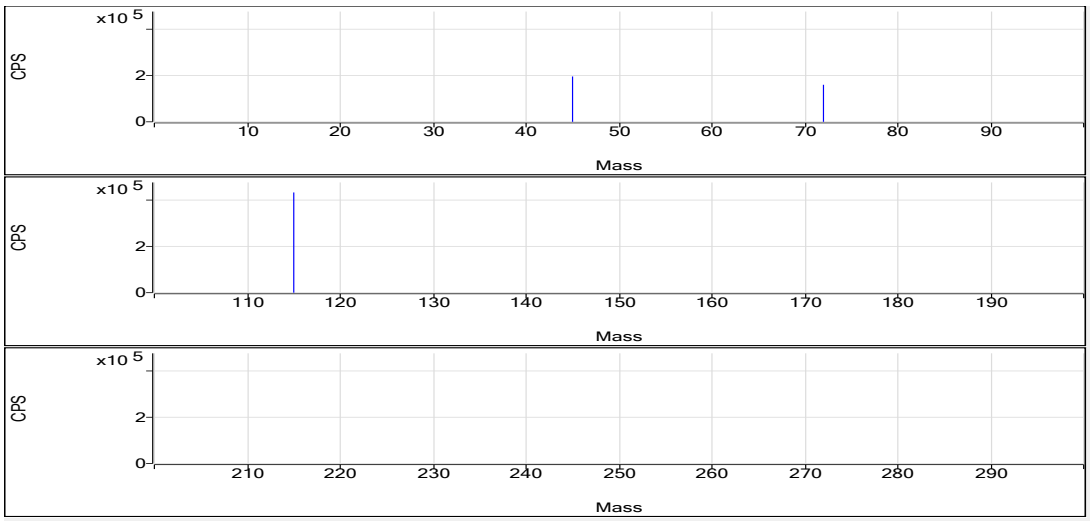
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3303301.93	0.3	101.9	Pulse	0.1000	3
No Gas	Ge	72	1450829.04	0.5	100.8	Pulse	0.1000	3
H2	Sc	45	196703.62	2.2	100.7	Pulse	0.1000	3
H2	Ge	72	160650.23	2.3	98.6	Pulse	0.1000	3
H2	In	115	434748.52	0.3	100.3	Pulse	0.1000	3
He	Sc	45	42001.04	0.5	105.0	Pulse	0.1000	3
He	Ge	72	72927.99	0.6	100.9	Pulse	0.1000	3
He	In	115	64078.27	0.6	99.2	Pulse	0.1000	3
He	Tb	159	290102.04	0.9	101.4	Pulse	0.1000	3
He	Bi	209	223951.55	0.6	100.8	Pulse	0.1000	3

No Gas

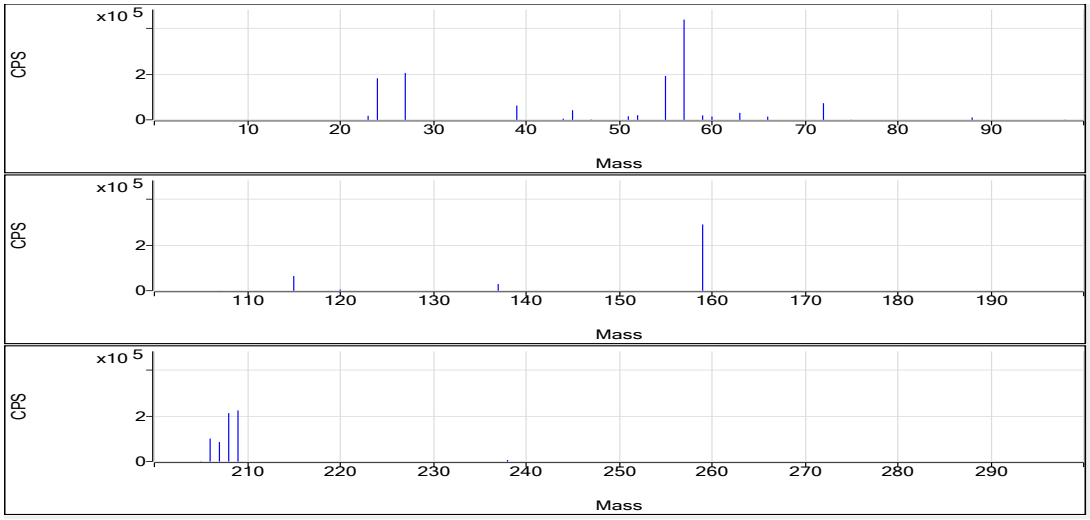


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.434	0.0006	898.03	0.0013	4.694E-05
Be	9	1	No Gas	0.507	0.0007	1028.04	0.0013	4.694E-05
Be	9	1	No Gas	0.557	0.0008	1132.05	0.0013	4.694E-05
Se	78	2	H2	0.377	0.0002	24.67	0.0004	1.089E-05
Se	78	2	H2	0.466	0.0002	31.33	0.0004	1.089E-05
Se	78	2	H2	0.477	0.0002	32.00	0.0004	1.089E-05
Na	23	3	He	80.029	0.2439	17911.19	0.0017	0.1065
Na	23	3	He	74.095	0.2337	16970.15	0.0017	0.1065
Na	23	3	He	78.382	0.2411	17541.14	0.0017	0.1065
Mg	24	3	He	2975.254	2.5133	184543.01	0.0008	0.004846
Mg	24	3	He	2956.3	2.4973	181312.48	0.0008	0.004846
Mg	24	3	He	2925.675	2.4715	179810.15	0.0008	0.004846
Al	27	3	He	11574.266	2.795	205230.04	0.0002	0.001063
Al	27	3	He	11686.646	2.8222	204897.18	0.0002	0.001063
Al	27	3	He	11721.817	2.8306	205939.98	0.0002	0.001063
K	39	3	He	1294.247	0.8583	63025.23	0.0006	0.1436
K	39	3	He	1297.849	0.8603	62462.59	0.0006	0.1436
K	39	3	He	1277.646	0.8492	61780.49	0.0006	0.1436
Ca	44	3	He	2233.073	0.071	5211.10	0	0.001611
Ca	44	3	He	2347.723	0.0745	5411.18	0	0.001611
Ca	44	3	He	2143.527	0.0682	4960.98	0	0.001611
Ti	47	3	He	73.315	0.0187	1370.11	0.0003	0.0002737
Ti	47	3	He	69.764	0.0178	1290.10	0.0003	0.0002737
Ti	47	3	He	80.032	0.0203	1480.11	0.0003	0.0002737
V	51	3	He	17.592	0.2131	15648.38	0.0117	0.007326
V	51	3	He	17.379	0.2106	15292.01	0.0117	0.007326
V	51	3	He	17.643	0.2137	15548.30	0.0117	0.007326
Cr	52	3	He	17.174	0.2869	21066.03	0.0152	0.02538
Cr	52	3	He	15.884	0.2673	19403.53	0.0152	0.02538
Cr	52	3	He	16.688	0.2795	20334.71	0.0152	0.02538
Mn	55	3	He	437.042	2.5935	190429.78	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	449.599	2.6676	193674.63	0.0059	0.01385
Mn	55	3	He	445.711	2.6446	192406.72	0.0059	0.01385
Fe	57	3	He	20586.628	5.9682	438224.21	0.0003	0.003918
Fe	57	3	He	20963.717	6.0774	441239.64	0.0003	0.003918
Fe	57	3	He	20729.877	6.0097	437226.24	0.0003	0.003918
Co	59	3	He	8.565	0.2644	19413.50	0.0305	0.003084
Co	59	3	He	8.74	0.2697	19583.78	0.0305	0.003084
Co	59	3	He	8.613	0.2659	19343.61	0.0305	0.003084
Ni	60	3	He	20.841	0.1923	14117.18	0.0088	0.009003
Ni	60	3	He	21.387	0.1971	14307.47	0.0088	0.009003
Ni	60	3	He	20.245	0.187	13606.81	0.0088	0.009003
Cu	63	3	He	16.745	0.4225	31023.64	0.0249	0.004937
Cu	63	3	He	16.389	0.4136	30031.69	0.0249	0.004937
Cu	63	3	He	16.526	0.4171	30342.58	0.0249	0.004937
Zn	66	3	He	75.125	0.1894	13907.11	0.0025	0.004836
Zn	66	3	He	77.066	0.1942	14097.35	0.0025	0.004836
Zn	66	3	He	77.518	0.1953	14207.43	0.0025	0.004836
As	75	3	He	5.388	0.0098	720.02	0.0017	0.0004347
As	75	3	He	6.229	0.0113	818.03	0.0017	0.0004347
As	75	3	He	5.282	0.0096	700.02	0.0017	0.0004347
Sr	88	3	He	20.592	0.1617	10434.12	0.0078	0.0007762
Sr	88	3	He	21.137	0.166	10574.23	0.0078	0.0007762
Sr	88	3	He	20.107	0.158	10113.96	0.0078	0.0007762
Mo	98	3	He	0.674	0.0153	990.07	0.022	0.0005162
Mo	98	3	He	0.611	0.014	890.06	0.022	0.0005162
Mo	98	3	He	0.544	0.0125	800.05	0.022	0.0005162
Ag	107	3	He	0.075	0.0039	250.01	0.0455	0.0004641
Ag	107	3	He	0.121	0.006	380.02	0.0455	0.0004641
Ag	107	3	He	0.1	0.005	320.01	0.0455	0.0004641
Cd	111	3	He	0.151	0.0008	50.00	0.0048	5.152E-05
Cd	111	3	He	0.179	0.0009	58.00	0.0048	5.152E-05
Cd	111	3	He	0.224	0.0011	72.00	0.0048	5.152E-05
Sn	120	3	He	4.562	0.0806	5201.14	0.0143	0.01559
Sn	120	3	He	4.535	0.0802	5111.10	0.0143	0.01559
Sn	120	3	He	4.286	0.0767	4911.05	0.0143	0.01559
Sb	121	3	He	0.279	0.0037	240.01	0.0124	0.000258
Sb	121	3	He	0.27	0.0036	230.01	0.0124	0.000258
Sb	121	3	He	0.319	0.0042	270.01	0.0124	0.000258
Ba	137	3	He	103.048	0.4511	29101.55	0.0044	0.000309
Ba	137	3	He	104.507	0.4575	29141.56	0.0044	0.000309
Ba	137	3	He	104.428	0.4572	29271.55	0.0044	0.000309
Tl	205	3	He	0.137	0.0048	1070.08	0.0276	0.001005
Tl	205	3	He	0.15	0.0052	1150.09	0.0276	0.001005
Tl	205	3	He	0.132	0.0047	1050.09	0.0276	0.001005
Pb	208	3	He	49.186	1.7924	213269.35	0.0364	0.002176
Pb	208	3	He	49.286	1.796	212702.95	0.0364	0.002176
Pb	208	3	He	48.023	1.7501	210528.61	0.0364	0.002176
U	238	3	He	0.72	0.0305	6832.08	0.0421	0.00024
U	238	3	He	0.763	0.0323	7202.33	0.0421	0.00024
U	238	3	He	0.739	0.0313	7062.21	0.0421	0.00024
Sc	45	1	No Gas			3312320.26		
Sc	45	1	No Gas			3292231.20		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3305354.33		
Ge	72	1	No Gas			1455955.45		
Ge	72	1	No Gas			1442301.38		
Ge	72	1	No Gas			1454230.29		
Sc	45	2	H2			192701.19		
Sc	45	2	H2			201203.28		
Sc	45	2	H2			196206.38		
Ge	72	2	H2			156329.65		
Ge	72	2	H2			162811.88		
Ge	72	2	H2			162809.16		
In	115	2	H2			433483.63		
In	115	2	H2			435919.84		
In	115	2	H2			434842.10		
Sc	45	3	He			41770.64		
Sc	45	3	He			42091.00		
Sc	45	3	He			42141.47		
Ge	72	3	He			73426.95		
Ge	72	3	He			72603.19		
Ge	72	3	He			72753.82		
In	115	3	He			64549.62		
In	115	3	He			63736.25		
In	115	3	He			64067.69		
Tb	159	3	He			289094.35		
Tb	159	3	He			293062.14		
Tb	159	3	He			288149.62		
Bi	209	3	He			223668.51		
Bi	209	3	He			222681.95		
Bi	209	3	He			225504.18		

Quantitation Report

Data File Name	235SMPL.d
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Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

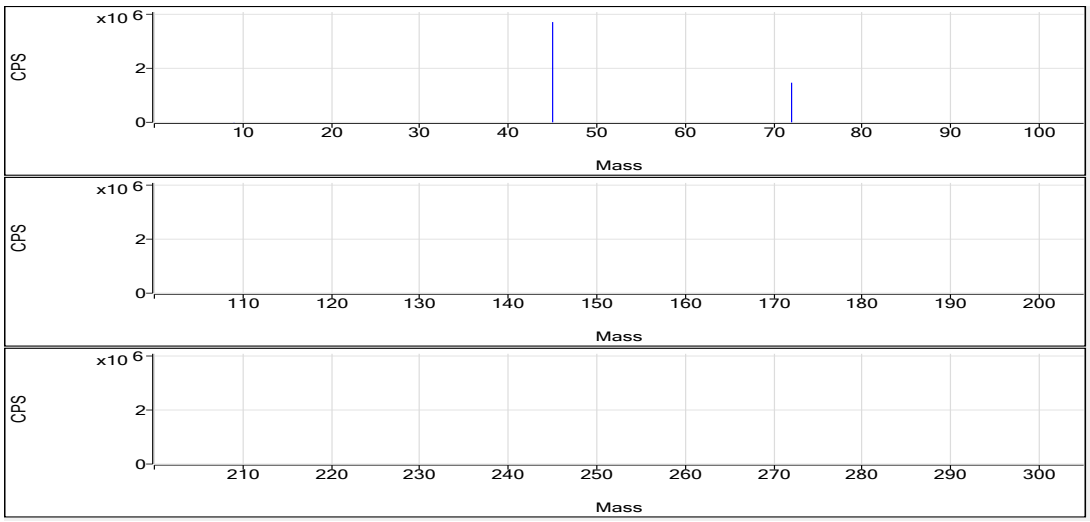
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	4.004	ppb	2.5	7750.68	0.0053	Pulse	0.5000	3
Se	78	72	H2	0.284	ppb	14.0	19.34	0.0001	Pulse	1.5000	3
Na	23	72	He	348.087	ppb	0.4	52978.26	0.7044	Pulse	0.1000	3
Mg	24	72	He	25967.893	ppb	0.4	1646950.76	21.8984	Pulse	0.1000	3
Al	27	72	He	99931.816	ppb	0.1	1814360.23	24.1240	Pulse	0.1000	3
K	39	72	He	9919.184	ppb	0.9	422751.26	5.6211	Pulse	0.1000	3
Ca	44	72	He	4037.508	ppb	2.5	9553.35	0.1270	Pulse	0.1000	3
Ti	47	72	He	395.591	ppb	1.8	7482.16	0.0995	Pulse	0.1000	3
V	51	72	He	134.385	ppb	0.9	118777.83	1.5793	Pulse	0.5000	3
Cr	52	72	He	109.367	ppb	1.5	127154.03	1.6907	Pulse	0.1000	3
Mn	55	72	He	5416.651	ppb	0.9	2405535.44	31.9852	Pulse	0.1000	3
Fe	57	72	He	173064.684	ppb	0.9	3771153.07	50.1433	Pulse	0.1000	3
Co	59	72	He	73.628	ppb	1.2	169184.99	2.2495	Pulse	0.1000	3
Ni	60	72	He	173.118	ppb	0.3	115167.53	1.5313	Pulse	0.1000	3
Cu	63	72	He	121.373	ppb	0.4	228010.29	3.0316	Pulse	0.1000	3
Zn	66	72	He	487.203	ppb	1.0	90382.54	1.2018	Pulse	0.1000	3
As	75	72	He	58.189	ppb	1.3	7644.07	0.1016	Pulse	0.5000	3
Sr	88	115	He	57.185	ppb	3.6	29087.29	0.4478	Pulse	0.1000	3
Mo	98	115	He	1.557	ppb	3.9	2260.26	0.0348	Pulse	0.1000	3
Ag	107	115	He	0.072	ppb	16.9	243.34	0.0037	Pulse	0.1000	3
Cd	111	115	He	0.581	ppb	10.8	184.67	0.0028	Pulse	0.5000	3
Sn	120	115	He	3.507	ppb	6.0	4260.81	0.0656	Pulse	0.1000	3
Sb	121	115	He	1.212	ppb	6.6	993.42	0.0153	Pulse	0.1000	3
Ba	137	115	He	604.328	ppb	1.0	171750.76	2.6441	Pulse	0.1000	3
Tl	205	209	He	0.697	ppb	1.1	4624.30	0.0203	Pulse	0.1000	3
Pb	208	209	He	93.174	ppb	0.2	774290.84	3.3935	Pulse	0.1000	3
U	238	209	He	5.349	ppb	2.0	51399.49	0.2253	Pulse	0.1000	3

ISTD Table:

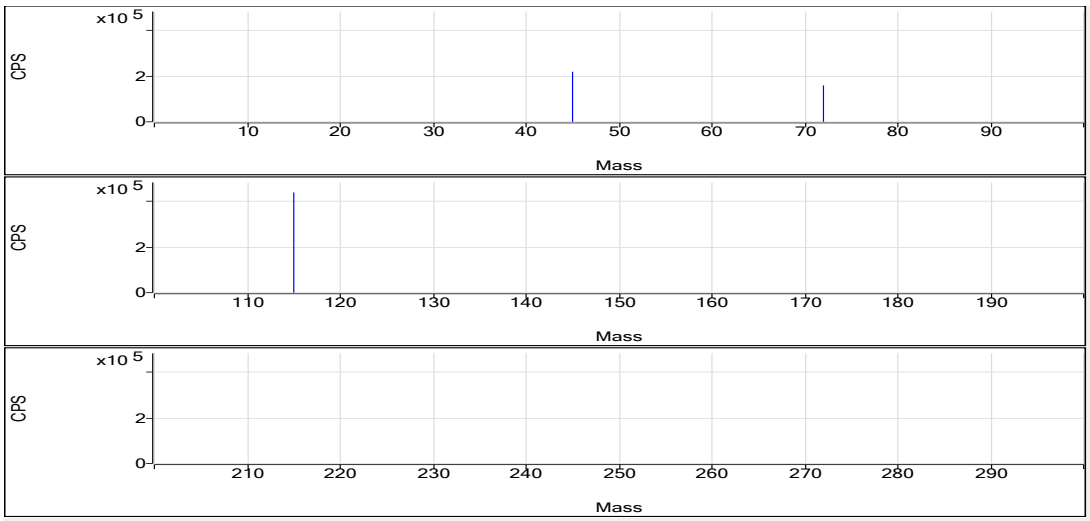
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3695503.80	1.0	114.0	Pulse	0.1000	3
No Gas	Ge	72	1460169.25	0.4	101.4	Pulse	0.1000	3
H2	Sc	45	219176.37	0.9	112.2	Pulse	0.1000	3
H2	Ge	72	159505.03	1.0	97.8	Pulse	0.1000	3
H2	In	115	438885.40	1.2	101.3	Pulse	0.1000	3
He	Sc	45	46795.27	1.8	117.0	Pulse	0.1000	3
He	Ge	72	75209.64	0.5	104.0	Pulse	0.1000	3
He	In	115	64958.24	0.8	100.6	Pulse	0.1000	3
He	Tb	159	309054.51	0.7	108.1	Pulse	0.1000	3
He	Bi	209	228171.43	0.3	102.7	Pulse	0.1000	3

No Gas

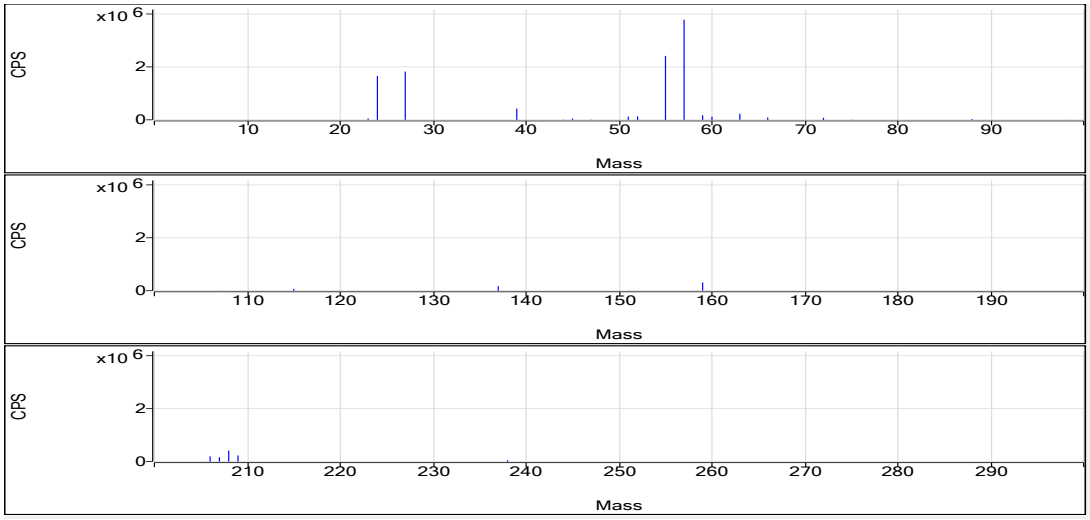


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	3.889	0.0052	7567.92	0.0013	4.694E-05
Be	9	1	No Gas	4.039	0.0054	7794.05	0.0013	4.694E-05
Be	9	1	No Gas	4.084	0.0054	7890.08	0.0013	4.694E-05
Se	78	2	H2	0.238	0.0001	16.67	0.0004	1.089E-05
Se	78	2	H2	0.309	0.0001	20.67	0.0004	1.089E-05
Se	78	2	H2	0.304	0.0001	20.67	0.0004	1.089E-05
Na	23	3	He	348.709	0.7055	52794.05	0.0017	0.1065
Na	23	3	He	349.045	0.7061	53376.15	0.0017	0.1065
Na	23	3	He	346.506	0.7017	52764.59	0.0017	0.1065
Mg	24	3	He	26038.361	21.9578	1643208.26	0.0008	0.004846
Mg	24	3	He	25842.618	21.7928	1647488.73	0.0008	0.004846
Mg	24	3	He	26022.7	21.9446	1650155.29	0.0008	0.004846
Al	27	3	He	99840.541	24.102	1803665.91	0.0002	0.001063
Al	27	3	He	99887.647	24.1134	1822918.25	0.0002	0.001063
Al	27	3	He	100067.258	24.1567	1816496.54	0.0002	0.001063
K	39	3	He	9988.351	5.6593	423514.13	0.0006	0.1436
K	39	3	He	9819.777	5.5662	420795.58	0.0006	0.1436
K	39	3	He	9949.423	5.6378	423944.06	0.0006	0.1436
Ca	44	3	He	3924.771	0.1235	9243.12	0	0.001611
Ca	44	3	He	4072.176	0.1281	9683.49	0	0.001611
Ca	44	3	He	4115.579	0.1294	9733.43	0	0.001611
Ti	47	3	He	393.865	0.099	7412.14	0.0003	0.0002737
Ti	47	3	He	403.597	0.1015	7672.24	0.0003	0.0002737
Ti	47	3	He	389.312	0.0979	7362.11	0.0003	0.0002737
V	51	3	He	135.704	1.5948	119343.38	0.0117	0.007326
V	51	3	He	133.484	1.5688	118596.95	0.0117	0.007326
V	51	3	He	133.968	1.5745	118393.16	0.0117	0.007326
Cr	52	3	He	111.058	1.7165	128453.20	0.0152	0.02538
Cr	52	3	He	107.754	1.6662	125960.05	0.0152	0.02538
Cr	52	3	He	109.289	1.6896	127048.85	0.0152	0.02538
Mn	55	3	He	5472.277	32.3135	2418174.81	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5390.24	31.8293	2406228.25	0.0059	0.01385
Mn	55	3	He	5387.435	31.8128	2392203.25	0.0059	0.01385
Fe	57	3	He	174928.079	50.6831	3792859.63	0.0003	0.003918
Fe	57	3	He	172012.503	49.8385	3767680.57	0.0003	0.003918
Fe	57	3	He	172253.47	49.9083	3752919.01	0.0003	0.003918
Co	59	3	He	74.219	2.2676	169691.87	0.0305	0.003084
Co	59	3	He	74.052	2.2624	171035.43	0.0305	0.003084
Co	59	3	He	72.614	2.2186	166827.67	0.0305	0.003084
Ni	60	3	He	172.654	1.5272	114287.66	0.0088	0.009003
Ni	60	3	He	173.175	1.5318	115799.21	0.0088	0.009003
Ni	60	3	He	173.525	1.5349	115415.73	0.0088	0.009003
Cu	63	3	He	121.265	3.0289	226669.63	0.0249	0.004937
Cu	63	3	He	121.866	3.0439	230114.53	0.0249	0.004937
Cu	63	3	He	120.989	3.022	227246.72	0.0249	0.004937
Zn	66	3	He	491.389	1.2121	90704.52	0.0025	0.004836
Zn	66	3	He	482.019	1.189	89889.13	0.0025	0.004836
Zn	66	3	He	488.202	1.2042	90553.96	0.0025	0.004836
As	75	3	He	57.622	0.1006	7532.02	0.0017	0.0004347
As	75	3	He	57.935	0.1012	7650.06	0.0017	0.0004347
As	75	3	He	59.011	0.1031	7750.13	0.0017	0.0004347
Sr	88	3	He	56.516	0.4426	28499.55	0.0078	0.0007762
Sr	88	3	He	59.482	0.4658	30283.13	0.0078	0.0007762
Sr	88	3	He	55.557	0.4351	28479.20	0.0078	0.0007762
Mo	98	3	He	1.556	0.0348	2240.26	0.022	0.0005162
Mo	98	3	He	1.618	0.0361	2350.28	0.022	0.0005162
Mo	98	3	He	1.496	0.0335	2190.25	0.022	0.0005162
Ag	107	3	He	0.058	0.0031	200.01	0.0455	0.0004641
Ag	107	3	He	0.078	0.004	260.01	0.0455	0.0004641
Ag	107	3	He	0.08	0.0041	270.01	0.0455	0.0004641
Cd	111	3	He	0.52	0.0025	164.00	0.0048	5.152E-05
Cd	111	3	He	0.579	0.0028	184.00	0.0048	5.152E-05
Cd	111	3	He	0.645	0.0031	206.00	0.0048	5.152E-05
Sn	120	3	He	3.504	0.0655	4220.77	0.0143	0.01559
Sn	120	3	He	3.298	0.0626	4070.77	0.0143	0.01559
Sn	120	3	He	3.719	0.0686	4490.89	0.0143	0.01559
Sb	121	3	He	1.231	0.0155	1000.08	0.0124	0.000258
Sb	121	3	He	1.281	0.0162	1050.09	0.0124	0.000258
Sb	121	3	He	1.125	0.0142	930.08	0.0124	0.000258
Ba	137	3	He	606.695	2.6545	170937.36	0.0044	0.000309
Ba	137	3	He	608.918	2.6642	173225.62	0.0044	0.000309
Ba	137	3	He	597.372	2.6137	171089.31	0.0044	0.000309
Tl	205	3	He	0.689	0.0201	4590.95	0.0276	0.001005
Tl	205	3	He	0.696	0.0202	4610.96	0.0276	0.001005
Tl	205	3	He	0.705	0.0205	4671.00	0.0276	0.001005
Pb	208	3	He	92.942	3.385	416693.70	0.0364	0.002176
Pb	208	3	He	93.193	3.3941	410801.05	0.0364	0.002176
Pb	208	3	He	93.389	3.4013	414161.24	0.0364	0.002176
U	238	3	He	5.227	0.2201	50378.79	0.0421	0.00024
U	238	3	He	5.426	0.2285	52035.42	0.0421	0.00024
U	238	3	He	5.396	0.2272	51784.26	0.0421	0.00024
Sc	45	1	No Gas			3738220.57		
Sc	45	1	No Gas			3678160.88		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3670129.95		
Ge	72	1	No Gas			1467253.42		
Ge	72	1	No Gas			1455698.26		
Ge	72	1	No Gas			1457556.07		
Sc	45	2	H2			217481.74		
Sc	45	2	H2			218690.06		
Sc	45	2	H2			221357.32		
Ge	72	2	H2			160981.03		
Ge	72	2	H2			157747.00		
Ge	72	2	H2			159787.05		
In	115	2	H2			434224.49		
In	115	2	H2			444407.81		
In	115	2	H2			438023.90		
Sc	45	3	He			46283.51		
Sc	45	3	He			47778.34		
Sc	45	3	He			46323.96		
Ge	72	3	He			74834.73		
Ge	72	3	He			75597.85		
Ge	72	3	He			75196.33		
In	115	3	He			64428.89		
In	115	3	He			65051.53		
In	115	3	He			65494.01		
Tb	159	3	He			310055.89		
Tb	159	3	He			306591.19		
Tb	159	3	He			310516.46		
Bi	209	3	He			228865.56		
Bi	209	3	He			227740.78		
Bi	209	3	He			227907.95		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:45:13
Sample Name	410-136557-H-19-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

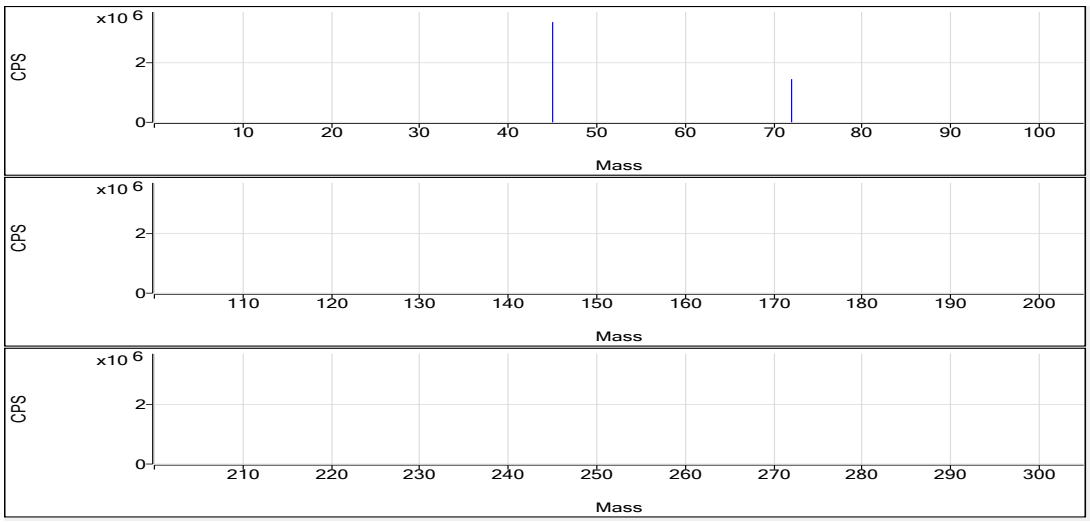
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.773	ppb	7.0	1529.42	0.0011	Pulse	0.5000	3
Se	78	72	H2	0.054	ppb	68.7	5.11	0.0000	Pulse	1.5000	3
Na	23	72	He	55.905	ppb	2.9	15034.68	0.2025	Pulse	0.1000	3
Mg	24	72	He	5083.250	ppb	2.5	318482.00	4.2905	Pulse	0.1000	3
Al	27	72	He	19572.058	ppb	2.8	350767.47	4.7256	Pulse	0.1000	3
K	39	72	He	1947.135	ppb	3.1	90473.62	1.2189	Pulse	0.1000	3
Ca	44	72	He	802.773	ppb	11.2	1973.53	0.0265	Pulse	0.1000	3
Ti	47	72	He	80.129	ppb	7.6	1513.47	0.0204	Pulse	0.1000	3
V	51	72	He	26.397	ppb	2.9	23464.13	0.3161	Pulse	0.5000	3
Cr	52	72	He	21.764	ppb	3.1	26491.28	0.3568	Pulse	0.1000	3
Mn	55	72	He	1070.939	ppb	2.6	470233.30	6.3350	Pulse	0.1000	3
Fe	57	72	He	34018.033	ppb	2.0	731912.36	9.8594	Pulse	0.1000	3
Co	59	72	He	14.591	ppb	4.0	33268.98	0.4483	Pulse	0.1000	3
Ni	60	72	He	35.426	ppb	1.9	23796.79	0.3205	Pulse	0.1000	3
Cu	63	72	He	24.234	ppb	2.7	45224.90	0.6093	Pulse	0.1000	3
Zn	66	72	He	99.806	ppb	3.3	18559.13	0.2500	Pulse	0.1000	3
As	75	72	He	11.585	ppb	2.1	1528.09	0.0206	Pulse	0.5000	3
Sr	88	115	He	11.815	ppb	4.4	5988.14	0.0931	Pulse	0.1000	3
Mo	98	115	He	0.323	ppb	11.6	490.03	0.0076	Pulse	0.1000	3
Ag	107	115	He	0.017	ppb	54.8	80.00	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.106	ppb	20.2	36.00	0.0006	Pulse	0.5000	3
Sn	120	115	He	0.812	ppb	12.4	1746.83	0.0272	Pulse	0.1000	3
Sb	121	115	He	0.235	ppb	25.8	203.34	0.0032	Pulse	0.1000	3
Ba	137	115	He	118.233	ppb	0.4	33294.34	0.5176	Pulse	0.1000	3
Tl	205	209	He	0.139	ppb	11.1	1076.76	0.0048	Pulse	0.1000	3
Pb	208	209	He	18.494	ppb	0.3	150083.84	0.6753	Pulse	0.1000	3
U	238	209	He	1.058	ppb	1.5	9947.56	0.0448	Pulse	0.1000	3

ISTD Table:

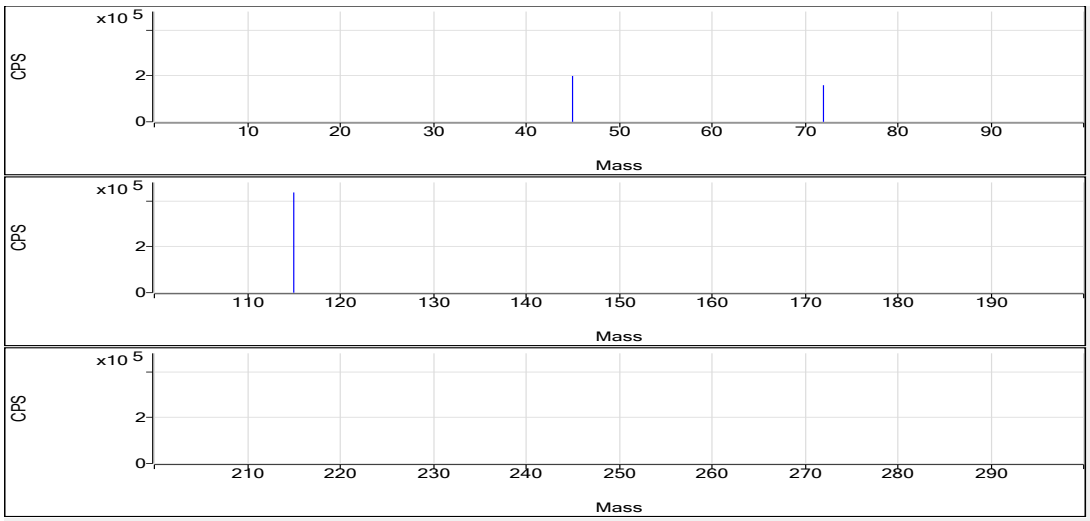
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3342310.37	1.4	103.1	Pulse	0.1000	3
No Gas	Ge	72	1438920.71	0.9	99.9	Pulse	0.1000	3
H2	Sc	45	200289.66	1.2	102.5	Pulse	0.1000	3
H2	Ge	72	159963.04	1.8	98.1	Pulse	0.1000	3
H2	In	115	437906.00	1.4	101.1	Pulse	0.1000	3
He	Sc	45	42686.19	0.9	106.8	Pulse	0.1000	3
He	Ge	72	74251.31	1.8	102.7	Pulse	0.1000	3
He	In	115	64327.93	1.9	99.6	Pulse	0.1000	3
He	Tb	159	289007.81	0.3	101.1	Pulse	0.1000	3
He	Bi	209	222242.64	0.3	100.0	Pulse	0.1000	3

No Gas

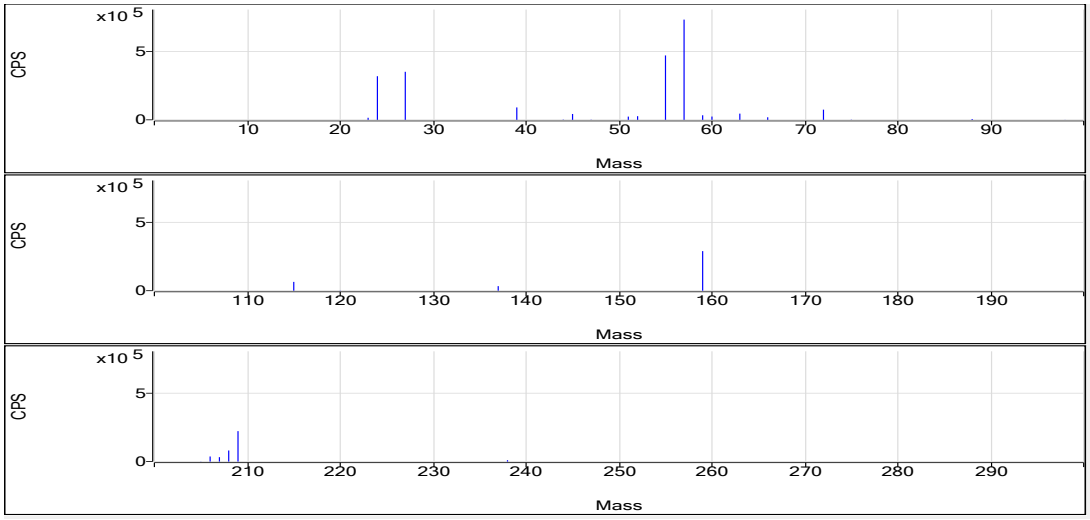


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.715	0.001	1430.08	0.0013	4.694E-05
Be	9	1	No Gas	0.782	0.0011	1550.09	0.0013	4.694E-05
Be	9	1	No Gas	0.823	0.0011	1608.10	0.0013	4.694E-05
Se	78	2	H2	0.059	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.088	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Na	23	3	He	57.348	0.205	14967.86	0.0017	0.1065
Na	23	3	He	56.181	0.203	15368.40	0.0017	0.1065
Na	23	3	He	54.186	0.1995	14767.77	0.0017	0.1065
Mg	24	3	He	5185.863	4.3771	319633.22	0.0008	0.004846
Mg	24	3	He	4941.746	4.1712	315843.45	0.0008	0.004846
Mg	24	3	He	5122.141	4.3233	319969.33	0.0008	0.004846
Al	27	3	He	20001.747	4.8294	352663.28	0.0002	0.001063
Al	27	3	He	18963.295	4.5787	346695.46	0.0002	0.001063
Al	27	3	He	19751.131	4.7689	352943.67	0.0002	0.001063
K	39	3	He	1989.791	1.2424	90727.88	0.0006	0.1436
K	39	3	He	1878.949	1.1812	89441.07	0.0006	0.1436
K	39	3	He	1972.664	1.233	91251.92	0.0006	0.1436
Ca	44	3	He	724.173	0.0241	1760.16	0	0.001611
Ca	44	3	He	900.686	0.0296	2240.24	0	0.001611
Ca	44	3	He	783.459	0.0259	1920.19	0	0.001611
Ti	47	3	He	78.641	0.02	1460.14	0.0003	0.0002737
Ti	47	3	He	86.863	0.0221	1670.15	0.0003	0.0002737
Ti	47	3	He	74.884	0.0191	1410.12	0.0003	0.0002737
V	51	3	He	26.969	0.3228	23572.96	0.0117	0.007326
V	51	3	He	25.537	0.3061	23174.33	0.0117	0.007326
V	51	3	He	26.685	0.3195	23645.09	0.0117	0.007326
Cr	52	3	He	21.376	0.3509	25623.04	0.0152	0.02538
Cr	52	3	He	21.381	0.351	26574.78	0.0152	0.02538
Cr	52	3	He	22.536	0.3685	27276.03	0.0152	0.02538
Mn	55	3	He	1091.89	6.4587	471641.13	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1039.123	6.1472	465461.63	0.0059	0.01385
Mn	55	3	He	1081.802	6.3991	473597.14	0.0059	0.01385
Fe	57	3	He	34376.831	9.9634	727573.74	0.0003	0.003918
Fe	57	3	He	33230.974	9.6314	729284.44	0.0003	0.003918
Fe	57	3	He	34446.295	9.9835	738878.90	0.0003	0.003918
Co	59	3	He	15.02	0.4614	33689.99	0.0305	0.003084
Co	59	3	He	13.931	0.4281	32417.02	0.0305	0.003084
Co	59	3	He	14.823	0.4553	33699.92	0.0305	0.003084
Ni	60	3	He	35.136	0.318	23219.23	0.0088	0.009003
Ni	60	3	He	34.947	0.3163	23950.35	0.0088	0.009003
Ni	60	3	He	36.194	0.3273	24220.78	0.0088	0.009003
Cu	63	3	He	24.955	0.6272	45803.52	0.0249	0.004937
Cu	63	3	He	23.688	0.5956	45101.33	0.0249	0.004937
Cu	63	3	He	24.06	0.6049	44769.86	0.0249	0.004937
Zn	66	3	He	103.563	0.2593	18932.88	0.0025	0.004836
Zn	66	3	He	97.386	0.2441	18482.34	0.0025	0.004836
Zn	66	3	He	98.47	0.2468	18262.18	0.0025	0.004836
As	75	3	He	11.845	0.021	1536.09	0.0017	0.0004347
As	75	3	He	11.551	0.0205	1554.09	0.0017	0.0004347
As	75	3	He	11.358	0.0202	1494.09	0.0017	0.0004347
Sr	88	3	He	12.39	0.0976	6151.54	0.0078	0.0007762
Sr	88	3	He	11.68	0.0921	5951.50	0.0078	0.0007762
Sr	88	3	He	11.376	0.0897	5861.39	0.0078	0.0007762
Mo	98	3	He	0.366	0.0086	540.03	0.022	0.0005162
Mo	98	3	He	0.307	0.0073	470.03	0.022	0.0005162
Mo	98	3	He	0.296	0.007	460.02	0.022	0.0005162
Ag	107	3	He	0.025	0.0016	100.00	0.0455	0.0004641
Ag	107	3	He	0.02	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	0.088	0.0005	30.00	0.0048	5.152E-05
Cd	111	3	He	0.099	0.0005	34.00	0.0048	5.152E-05
Cd	111	3	He	0.13	0.0007	44.00	0.0048	5.152E-05
Sn	120	3	He	0.844	0.0276	1740.16	0.0143	0.01559
Sn	120	3	He	0.893	0.0283	1830.18	0.0143	0.01559
Sn	120	3	He	0.699	0.0256	1670.15	0.0143	0.01559
Sb	121	3	He	0.299	0.004	250.01	0.0124	0.000258
Sb	121	3	He	0.179	0.0025	160.01	0.0124	0.000258
Sb	121	3	He	0.226	0.0031	200.01	0.0124	0.000258
Ba	137	3	He	117.757	0.5155	32479.06	0.0044	0.000309
Ba	137	3	He	118.797	0.52	33611.86	0.0044	0.000309
Ba	137	3	He	118.146	0.5172	33792.09	0.0044	0.000309
Tl	205	3	He	0.121	0.0044	970.08	0.0276	0.001005
Tl	205	3	He	0.146	0.005	1120.09	0.0276	0.001005
Tl	205	3	He	0.15	0.0051	1140.11	0.0276	0.001005
Pb	208	3	He	18.454	0.6739	80464.34	0.0364	0.002176
Pb	208	3	He	18.482	0.6749	81541.74	0.0364	0.002176
Pb	208	3	He	18.546	0.6772	80707.45	0.0364	0.002176
U	238	3	He	1.045	0.0442	9844.08	0.0421	0.00024
U	238	3	He	1.053	0.0446	9914.25	0.0421	0.00024
U	238	3	He	1.076	0.0455	10084.34	0.0421	0.00024
Sc	45	1	No Gas			3387791.51		
Sc	45	1	No Gas			3345826.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3293313.08		
Ge	72	1	No Gas			1449623.10		
Ge	72	1	No Gas			1441934.98		
Ge	72	1	No Gas			1425204.04		
Sc	45	2	H2			197465.54		
Sc	45	2	H2			201175.97		
Sc	45	2	H2			202227.46		
Ge	72	2	H2			156673.13		
Ge	72	2	H2			161911.75		
Ge	72	2	H2			161304.25		
In	115	2	H2			433850.70		
In	115	2	H2			444765.66		
In	115	2	H2			435101.63		
Sc	45	3	He			42642.65		
Sc	45	3	He			42341.76		
Sc	45	3	He			43074.17		
Ge	72	3	He			73024.72		
Ge	72	3	He			75719.32		
Ge	72	3	He			74009.90		
In	115	3	He			63021.96		
In	115	3	He			64649.79		
In	115	3	He			65352.92		
Tb	159	3	He			289848.34		
Tb	159	3	He			289160.46		
Tb	159	3	He			288014.62		
Bi	209	3	He			222683.38		
Bi	209	3	He			222520.76		
Bi	209	3	He			221523.77		

Quantitation Report

Data File Name	237SMPL.d
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Sample Name	410-136557-H-20-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

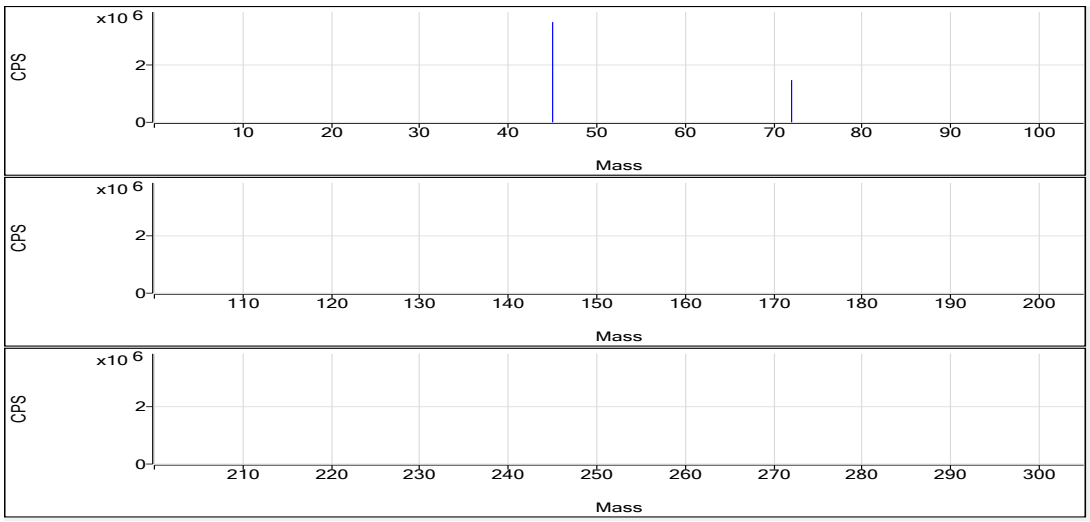
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	2.594	ppb	2.7	5095.56	0.0035	Pulse	0.5000	3
Se	78	72	H2	6.019	ppb	8.5	380.01	0.0024	Pulse	1.5000	3
Na	23	72	He	434.062	ppb	0.8	63000.34	0.8521	Pulse	0.1000	3
Mg	24	72	He	11001.597	ppb	0.4	686161.79	9.2803	Pulse	0.1000	3
Al	27	72	He	46575.876	ppb	0.1	831358.48	11.2442	Pulse	0.1000	3
K	39	72	He	6717.199	ppb	1.7	284883.31	3.8530	Pulse	0.1000	3
Ca	44	72	He	21270.648	ppb	0.4	48965.86	0.6623	Pulse	0.1000	3
Ti	47	72	He	540.173	ppb	3.0	10037.11	0.1357	Pulse	0.1000	3
V	51	72	He	81.812	ppb	0.7	71301.43	0.9643	Pulse	0.5000	3
Cr	52	72	He	137.933	ppb	0.7	157171.99	2.1257	Pulse	0.1000	3
Mn	55	72	He	2260.390	ppb	0.3	987476.86	13.3556	Pulse	0.1000	3
Fe	57	72	He	86234.144	ppb	0.5	1847493.93	24.9872	Pulse	0.1000	3
Co	59	72	He	40.051	ppb	1.0	90578.37	1.2251	Pulse	0.1000	3
Ni	60	72	He	86.853	ppb	0.3	57133.16	0.7727	Pulse	0.1000	3
Cu	63	72	He	158.695	ppb	1.0	292966.73	3.9623	Pulse	0.1000	3
Zn	66	72	He	547.011	ppb	0.4	99718.71	1.3487	Pulse	0.1000	3
As	75	72	He	44.913	ppb	3.0	5807.87	0.0785	Pulse	0.5000	3
Sr	88	115	He	149.583	ppb	0.6	75742.23	1.1701	Pulse	0.1000	3
Mo	98	115	He	3.836	ppb	2.8	5501.28	0.0850	Pulse	0.1000	3
Ag	107	115	He	2.449	ppb	3.6	7242.15	0.1119	Pulse	0.1000	3
Cd	111	115	He	2.559	ppb	3.1	798.70	0.0123	Pulse	0.5000	3
Sn	120	115	He	24.353	ppb	0.2	23487.09	0.3628	Pulse	0.1000	3
Sb	121	115	He	106.032	ppb	0.6	85159.62	1.3156	Pulse	0.1000	3
Ba	137	115	He	547.330	ppb	0.5	155031.04	2.3948	Pulse	0.1000	3
Tl	205	209	He	0.725	ppb	3.7	5091.16	0.0210	Pulse	0.1000	3
Pb	208	209	He	16907.409	ppb	0.7	148918719.45	615.3870	Analog	0.1000	3
U	238	209	He	3.035	ppb	1.6	30957.74	0.1279	Pulse	0.1000	3

ISTD Table:

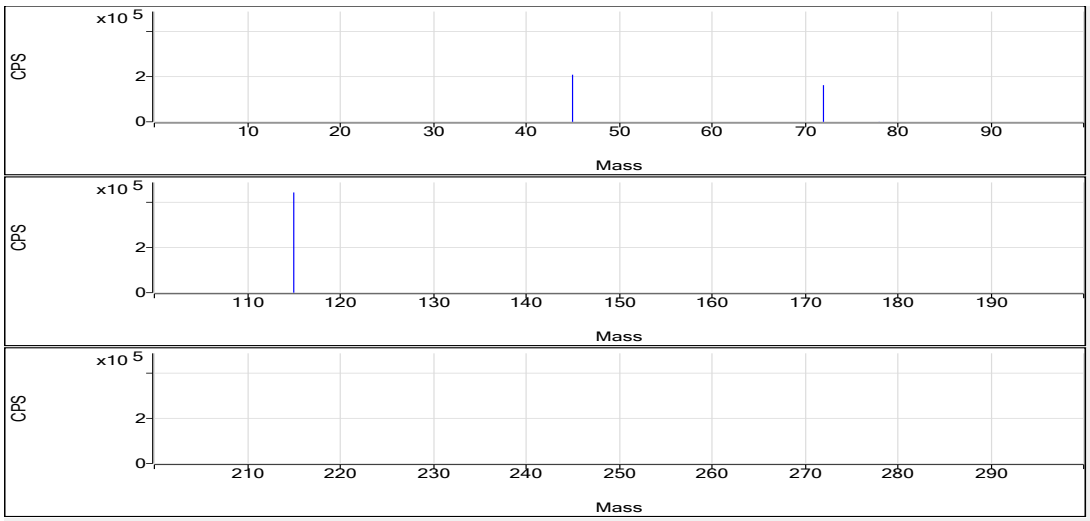
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3501696.20	1.5	108.0	Pulse	0.1000	3
No Gas	Ge	72	1474632.01	0.6	102.4	Pulse	0.1000	3
H2	Sc	45	207718.85	3.4	106.3	Pulse	0.1000	3
H2	Ge	72	161672.97	3.0	99.2	Pulse	0.1000	3
H2	In	115	442010.00	1.3	102.0	Pulse	0.1000	3
He	Sc	45	44351.12	1.5	110.9	Pulse	0.1000	3
He	Ge	72	73936.37	0.6	102.3	Pulse	0.1000	3
He	In	115	64734.85	1.2	100.2	Pulse	0.1000	3
He	Tb	159	303104.55	1.3	106.0	Pulse	0.1000	3
He	Bi	209	241990.89	0.4	108.9	Pulse	0.1000	3

No Gas

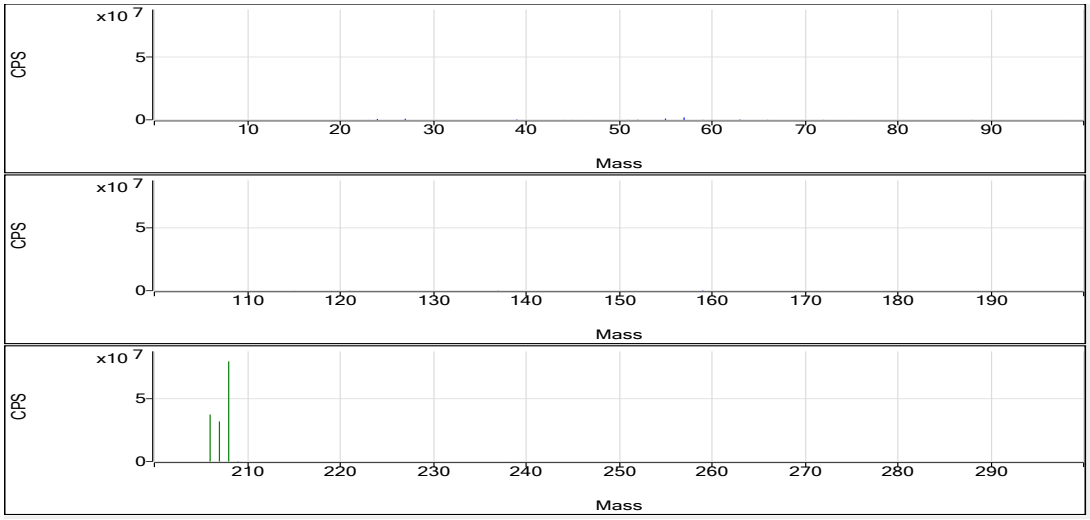


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	2.576	0.0034	5090.89	0.0013	4.694E-05
Be	9	1	No Gas	2.534	0.0034	4980.86	0.0013	4.694E-05
Be	9	1	No Gas	2.672	0.0036	5214.94	0.0013	4.694E-05
Se	78	2	H2	6.61	0.0026	403.34	0.0004	1.089E-05
Se	78	2	H2	5.698	0.0022	366.67	0.0004	1.089E-05
Se	78	2	H2	5.75	0.0022	370.01	0.0004	1.089E-05
Na	23	3	He	431.267	0.8473	62461.87	0.0017	0.1065
Na	23	3	He	438.191	0.8592	63294.87	0.0017	0.1065
Na	23	3	He	432.728	0.8498	63244.27	0.0017	0.1065
Mg	24	3	He	11008.301	9.286	684552.18	0.0008	0.004846
Mg	24	3	He	10951.106	9.2377	680526.47	0.0008	0.004846
Mg	24	3	He	11045.385	9.3172	693406.71	0.0008	0.004846
Al	27	3	He	46595.037	11.2488	829253.27	0.0002	0.001063
Al	27	3	He	46516.392	11.2298	827281.24	0.0002	0.001063
Al	27	3	He	46616.2	11.2539	837540.93	0.0002	0.001063
K	39	3	He	6786.966	3.8915	286876.42	0.0006	0.1436
K	39	3	He	6582.701	3.7787	278368.45	0.0006	0.1436
K	39	3	He	6781.931	3.8887	289405.05	0.0006	0.1436
Ca	44	3	He	21380.261	0.6657	49073.21	0	0.001611
Ca	44	3	He	21206.291	0.6603	48641.21	0	0.001611
Ca	44	3	He	21225.392	0.6609	49183.17	0	0.001611
Ti	47	3	He	529.743	0.1331	9813.64	0.0003	0.0002737
Ti	47	3	He	531.733	0.1336	9843.63	0.0003	0.0002737
Ti	47	3	He	559.043	0.1405	10454.06	0.0003	0.0002737
V	51	3	He	81.34	0.9588	70683.02	0.0117	0.007326
V	51	3	He	81.683	0.9628	70930.29	0.0117	0.007326
V	51	3	He	82.412	0.9714	72290.97	0.0117	0.007326
Cr	52	3	He	137.868	2.1247	156633.96	0.0152	0.02538
Cr	52	3	He	137.047	2.1122	155604.06	0.0152	0.02538
Cr	52	3	He	138.883	2.1402	159277.94	0.0152	0.02538
Mn	55	3	He	2261.672	13.3632	985122.09	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2252.192	13.3072	980318.34	0.0059	0.01385
Mn	55	3	He	2267.305	13.3964	996990.14	0.0059	0.01385
Fe	57	3	He	86256.07	24.9936	1842501.69	0.0003	0.003918
Fe	57	3	He	85799.677	24.8613	1831486.85	0.0003	0.003918
Fe	57	3	He	86646.684	25.1067	1868493.25	0.0003	0.003918
Co	59	3	He	40.382	1.2352	91054.93	0.0305	0.003084
Co	59	3	He	39.604	1.2114	89243.18	0.0305	0.003084
Co	59	3	He	40.168	1.2286	91437.01	0.0305	0.003084
Ni	60	3	He	86.835	0.7726	56953.05	0.0088	0.009003
Ni	60	3	He	86.6	0.7705	56761.51	0.0088	0.009003
Ni	60	3	He	87.123	0.7751	57684.92	0.0088	0.009003
Cu	63	3	He	159.676	3.9868	293901.93	0.0249	0.004937
Cu	63	3	He	156.837	3.916	288483.71	0.0249	0.004937
Cu	63	3	He	159.573	3.9842	296514.55	0.0249	0.004937
Zn	66	3	He	545.31	1.3445	99117.85	0.0025	0.004836
Zn	66	3	He	549.307	1.3544	99772.64	0.0025	0.004836
Zn	66	3	He	546.418	1.3473	100265.63	0.0025	0.004836
As	75	3	He	43.546	0.0762	5615.12	0.0017	0.0004347
As	75	3	He	44.998	0.0787	5797.19	0.0017	0.0004347
As	75	3	He	46.194	0.0808	6011.30	0.0017	0.0004347
Sr	88	3	He	150.577	1.1779	75591.63	0.0078	0.0007762
Sr	88	3	He	149.213	1.1672	75128.85	0.0078	0.0007762
Sr	88	3	He	148.958	1.1652	76506.20	0.0078	0.0007762
Mo	98	3	He	3.798	0.0842	5401.25	0.022	0.0005162
Mo	98	3	He	3.956	0.0876	5641.32	0.022	0.0005162
Mo	98	3	He	3.754	0.0832	5461.26	0.022	0.0005162
Ag	107	3	He	2.538	0.116	7442.24	0.0455	0.0004641
Ag	107	3	He	2.446	0.1117	7192.14	0.0455	0.0004641
Ag	107	3	He	2.364	0.108	7092.06	0.0455	0.0004641
Cd	111	3	He	2.528	0.0122	782.03	0.0048	5.152E-05
Cd	111	3	He	2.501	0.0121	776.03	0.0048	5.152E-05
Cd	111	3	He	2.648	0.0128	838.03	0.0048	5.152E-05
Sn	120	3	He	24.305	0.3621	23240.10	0.0143	0.01559
Sn	120	3	He	24.382	0.3632	23380.28	0.0143	0.01559
Sn	120	3	He	24.373	0.3631	23840.89	0.0143	0.01559
Sb	121	3	He	106.202	1.3177	84566.09	0.0124	0.000258
Sb	121	3	He	106.607	1.3227	85139.93	0.0124	0.000258
Sb	121	3	He	105.286	1.3063	85772.84	0.0124	0.000258
Ba	137	3	He	546.428	2.3908	153436.91	0.0044	0.000309
Ba	137	3	He	544.991	2.3845	153486.31	0.0044	0.000309
Ba	137	3	He	550.571	2.4089	158169.89	0.0044	0.000309
Tl	205	3	He	0.733	0.0213	5141.19	0.0276	0.001005
Tl	205	3	He	0.747	0.0216	5221.26	0.0276	0.001005
Tl	205	3	He	0.695	0.0202	4911.04	0.0276	0.001005
Pb	208	3	He	17027.888	619.7722	80173253.81	0.0364	0.002176
Pb	208	3	He	16788.394	611.0552	78952523.82	0.0364	0.002176
Pb	208	3	He	16905.945	615.3337	79783023.81	0.0364	0.002176
U	238	3	He	3.085	0.13	31429.33	0.0421	0.00024
U	238	3	He	3.035	0.1279	30857.25	0.0421	0.00024
U	238	3	He	2.986	0.1259	30586.65	0.0421	0.00024
Sc	45	1	No Gas			3555231.82		
Sc	45	1	No Gas			3499525.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3450331.51		
Ge	72	1	No Gas			1483202.17		
Ge	72	1	No Gas			1475247.32		
Ge	72	1	No Gas			1465446.54		
Sc	45	2	H2			199786.42		
Sc	45	2	H2			213324.61		
Sc	45	2	H2			210045.52		
Ge	72	2	H2			156068.24		
Ge	72	2	H2			164470.54		
Ge	72	2	H2			164480.13		
In	115	2	H2			435624.06		
In	115	2	H2			445698.51		
In	115	2	H2			444707.42		
Sc	45	3	He			44167.14		
Sc	45	3	He			45069.60		
Sc	45	3	He			43816.61		
Ge	72	3	He			73719.04		
Ge	72	3	He			73668.06		
Ge	72	3	He			74422.00		
In	115	3	He			64358.88		
In	115	3	He			64549.90		
In	115	3	He			65845.38		
Tb	159	3	He			300169.84		
Tb	159	3	He			301521.97		
Tb	159	3	He			307621.83		
Bi	209	3	He			241705.64		
Bi	209	3	He			241230.54		
Bi	209	3	He			243036.50		

Quantitation Report

Data File Name	238SMPL.d
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Sample Name	410-136557-H-20-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

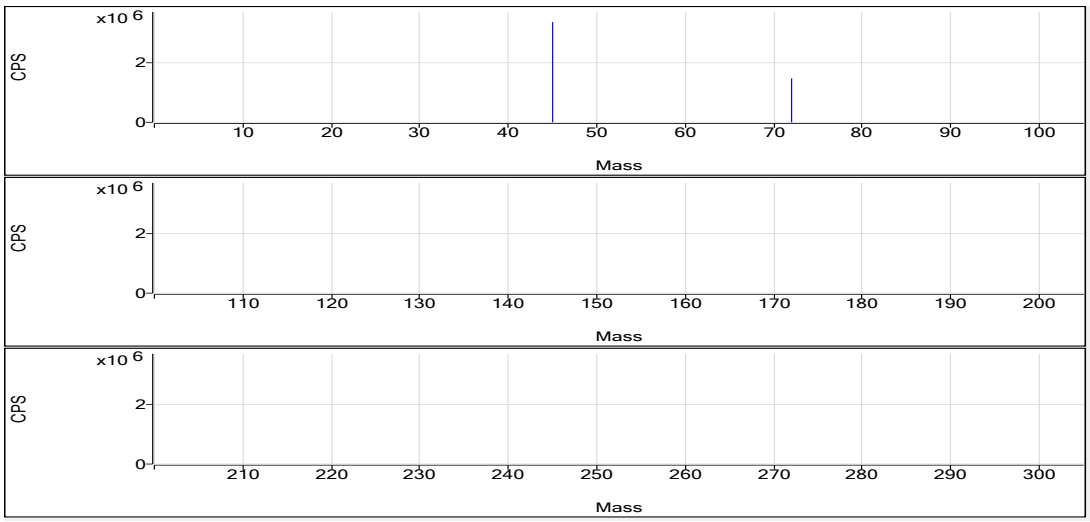
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.562	ppb	9.2	1148.72	0.0008	Pulse	0.5000	3
Se	78	72	H2	1.383	ppb	20.2	87.34	0.0005	Pulse	1.5000	3
Na	23	72	He	77.852	ppb	3.1	17564.25	0.2402	Pulse	0.1000	3
Mg	24	72	He	2289.320	ppb	2.8	141474.29	1.9350	Pulse	0.1000	3
Al	27	72	He	9675.455	ppb	1.4	170867.98	2.3367	Pulse	0.1000	3
K	39	72	He	1405.212	ppb	0.2	67257.49	0.9196	Pulse	0.1000	3
Ca	44	72	He	4463.439	ppb	3.6	10253.88	0.1402	Pulse	0.1000	3
Ti	47	72	He	116.917	ppb	6.2	2163.57	0.0296	Pulse	0.1000	3
V	51	72	He	17.053	ppb	2.9	15120.50	0.2068	Pulse	0.5000	3
Cr	52	72	He	28.917	ppb	4.5	34043.90	0.4657	Pulse	0.1000	3
Mn	55	72	He	469.469	ppb	1.9	203632.15	2.7849	Pulse	0.1000	3
Fe	57	72	He	18026.632	ppb	0.9	382209.60	5.2265	Pulse	0.1000	3
Co	59	72	He	8.391	ppb	1.6	18946.28	0.2591	Pulse	0.1000	3
Ni	60	72	He	19.554	ppb	2.0	13236.44	0.1809	Pulse	0.1000	3
Cu	63	72	He	33.416	ppb	3.7	61286.74	0.8382	Pulse	0.1000	3
Zn	66	72	He	114.760	ppb	6.5	20959.16	0.2868	Pulse	0.1000	3
As	75	72	He	9.475	ppb	4.4	1236.73	0.0169	Pulse	0.5000	3
Sr	88	115	He	30.927	ppb	3.1	15612.42	0.2425	Pulse	0.1000	3
Mo	98	115	He	0.893	ppb	20.4	1296.78	0.0202	Pulse	0.1000	3
Ag	107	115	He	0.502	ppb	5.2	1500.14	0.0233	Pulse	0.1000	3
Cd	111	115	He	0.485	ppb	1.0	153.33	0.0024	Pulse	0.5000	3
Sn	120	115	He	4.787	ppb	2.5	5397.90	0.0838	Pulse	0.1000	3
Sb	121	115	He	22.623	ppb	0.8	18085.60	0.2809	Pulse	0.1000	3
Ba	137	115	He	112.285	ppb	2.1	31647.21	0.4915	Pulse	0.1000	3
Tl	205	209	He	0.179	ppb	5.8	1350.13	0.0059	Pulse	0.1000	3
Pb	208	209	He	3695.152	ppb	0.4	30525923.09	134.4959	Analog	0.1000	3
U	238	209	He	0.698	ppb	8.7	6715.35	0.0296	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3337448.39	1.1	103.0	Pulse	0.1000	3
No Gas	Ge	72	1463544.20	0.7	101.7	Pulse	0.1000	3
H2	Sc	45	197898.24	2.9	101.3	Pulse	0.1000	3
H2	Ge	72	159222.39	1.5	97.7	Pulse	0.1000	3
H2	In	115	437594.11	2.1	101.0	Pulse	0.1000	3
He	Sc	45	41653.28	3.6	104.2	Pulse	0.1000	3
He	Ge	72	73136.63	1.7	101.2	Pulse	0.1000	3
He	In	115	64386.45	1.5	99.7	Pulse	0.1000	3
He	Tb	159	287821.04	0.9	100.6	Pulse	0.1000	3
He	Bi	209	226968.50	0.5	102.2	Pulse	0.1000	3

No Gas



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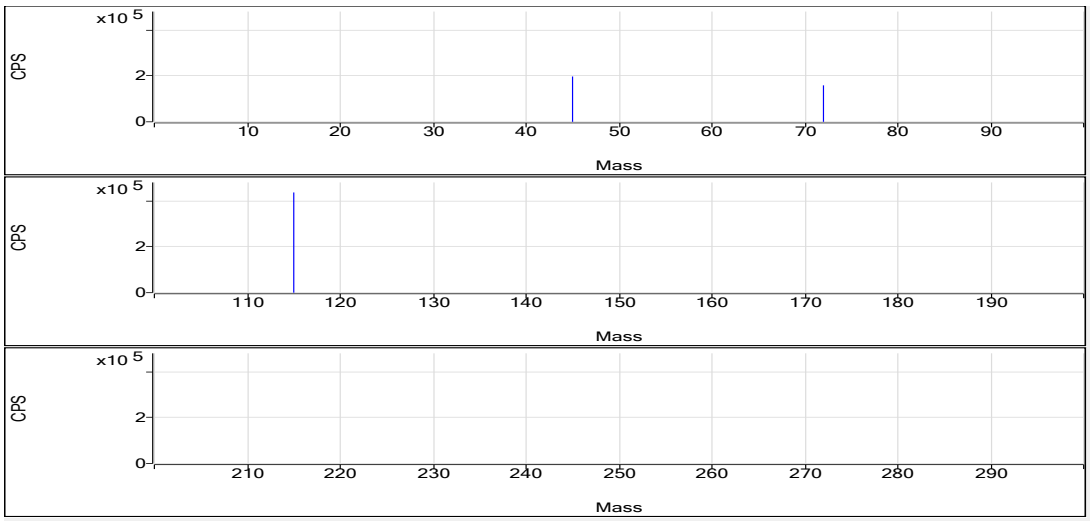
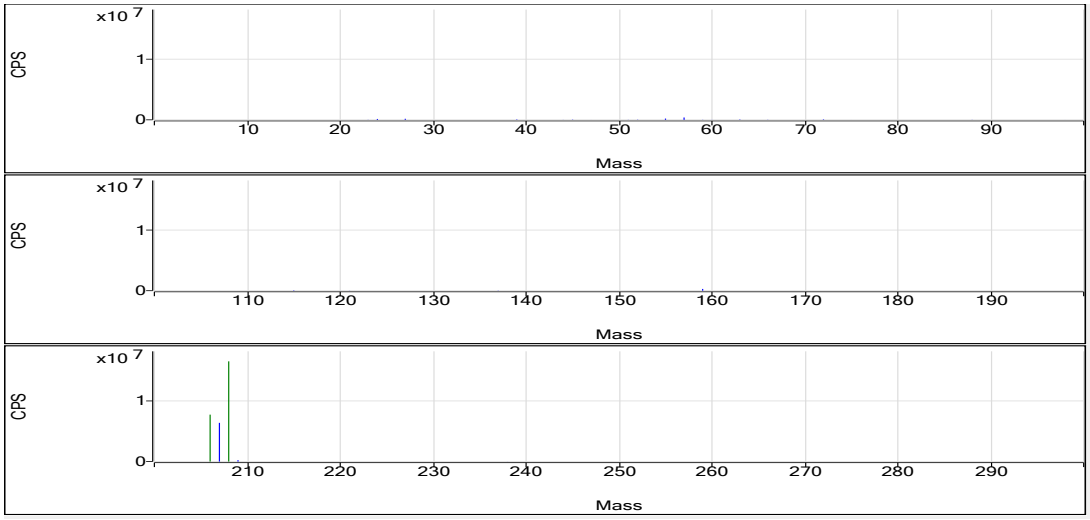


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.578	0.0008	1178.05	0.0013	4.694E-05
Be	9	1	No Gas	0.504	0.0007	1046.04	0.0013	4.694E-05
Be	9	1	No Gas	0.604	0.0008	1222.06	0.0013	4.694E-05
Se	78	2	H2	1.553	0.0006	96.67	0.0004	1.089E-05
Se	78	2	H2	1.536	0.0006	96.67	0.0004	1.089E-05
Se	78	2	H2	1.062	0.0004	68.67	0.0004	1.089E-05
Na	23	3	He	75.096	0.2355	17440.67	0.0017	0.1065
Na	23	3	He	78.828	0.2419	17801.25	0.0017	0.1065
Na	23	3	He	79.634	0.2433	17450.82	0.0017	0.1065
Mg	24	3	He	2252.928	1.9043	141054.00	0.0008	0.004846
Mg	24	3	He	2252.144	1.9036	140105.05	0.0008	0.004846
Mg	24	3	He	2362.888	1.997	143263.83	0.0008	0.004846
Al	27	3	He	9558.864	2.3085	170995.52	0.0002	0.001063
Al	27	3	He	9637.498	2.3275	171301.09	0.0002	0.001063
Al	27	3	He	9830.003	2.374	170307.34	0.0002	0.001063
K	39	3	He	1403.007	0.9184	68027.17	0.0006	0.1436
K	39	3	He	1407.767	0.921	67786.41	0.0006	0.1436
K	39	3	He	1404.862	0.9194	65958.90	0.0006	0.1436
Ca	44	3	He	4461.635	0.1402	10384.00	0	0.001611
Ca	44	3	He	4302.382	0.1352	9953.67	0	0.001611
Ca	44	3	He	4626.301	0.1453	10423.98	0	0.001611
Ti	47	3	He	118.972	0.0301	2230.25	0.0003	0.0002737
Ti	47	3	He	108.905	0.0276	2030.21	0.0003	0.0002737
Ti	47	3	He	122.874	0.0311	2230.24	0.0003	0.0002737
V	51	3	He	16.581	0.2013	14909.63	0.0117	0.007326
V	51	3	He	17.01	0.2063	15183.88	0.0117	0.007326
V	51	3	He	17.567	0.2128	15268.00	0.0117	0.007326
Cr	52	3	He	27.838	0.4493	33278.87	0.0152	0.02538
Cr	52	3	He	28.537	0.4599	33850.03	0.0152	0.02538
Cr	52	3	He	30.375	0.4879	35002.79	0.0152	0.02538
Mn	55	3	He	462.57	2.7441	203262.38	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	466.365	2.7665	203613.67	0.0059	0.01385
Mn	55	3	He	479.473	2.8439	204020.41	0.0059	0.01385
Fe	57	3	He	17871.458	5.1815	383804.99	0.0003	0.003918
Fe	57	3	He	18005.131	5.2203	384205.42	0.0003	0.003918
Fe	57	3	He	18203.308	5.2777	378618.39	0.0003	0.003918
Co	59	3	He	8.405	0.2595	19223.24	0.0305	0.003084
Co	59	3	He	8.25	0.2548	18752.81	0.0305	0.003084
Co	59	3	He	8.517	0.2629	18862.80	0.0305	0.003084
Ni	60	3	He	19.621	0.1815	13446.60	0.0088	0.009003
Ni	60	3	He	19.908	0.1841	13546.74	0.0088	0.009003
Ni	60	3	He	19.134	0.1773	12715.97	0.0088	0.009003
Cu	63	3	He	31.978	0.8024	59432.48	0.0249	0.004937
Cu	63	3	He	34.028	0.8535	62816.67	0.0249	0.004937
Cu	63	3	He	34.241	0.8588	61611.08	0.0249	0.004937
Zn	66	3	He	107.519	0.269	19924.26	0.0025	0.004836
Zn	66	3	He	114.261	0.2855	21016.00	0.0025	0.004836
Zn	66	3	He	122.5	0.3058	21937.22	0.0025	0.004836
As	75	3	He	9.671	0.0173	1278.06	0.0017	0.0004347
As	75	3	He	9	0.0161	1184.06	0.0017	0.0004347
As	75	3	He	9.753	0.0174	1248.06	0.0017	0.0004347
Sr	88	3	He	31.32	0.2456	15919.49	0.0078	0.0007762
Sr	88	3	He	29.85	0.2341	15238.68	0.0078	0.0007762
Sr	88	3	He	31.611	0.2479	15679.10	0.0078	0.0007762
Mo	98	3	He	0.789	0.0179	1160.09	0.022	0.0005162
Mo	98	3	He	0.786	0.0178	1160.09	0.022	0.0005162
Mo	98	3	He	1.104	0.0248	1570.15	0.022	0.0005162
Ag	107	3	He	0.478	0.0222	1440.14	0.0455	0.0004641
Ag	107	3	He	0.53	0.0246	1600.15	0.0455	0.0004641
Ag	107	3	He	0.497	0.0231	1460.14	0.0455	0.0004641
Cd	111	3	He	0.491	0.0024	156.00	0.0048	5.152E-05
Cd	111	3	He	0.482	0.0024	154.00	0.0048	5.152E-05
Cd	111	3	He	0.483	0.0024	150.00	0.0048	5.152E-05
Sn	120	3	He	4.859	0.0849	5501.28	0.0143	0.01559
Sn	120	3	He	4.651	0.0819	5331.19	0.0143	0.01559
Sn	120	3	He	4.851	0.0848	5361.23	0.0143	0.01559
Sb	121	3	He	22.804	0.2831	18352.64	0.0124	0.000258
Sb	121	3	He	22.424	0.2784	18122.42	0.0124	0.000258
Sb	121	3	He	22.642	0.2811	17781.75	0.0124	0.000258
Ba	137	3	He	114.717	0.5022	32549.39	0.0044	0.000309
Ba	137	3	He	109.942	0.4813	31326.62	0.0044	0.000309
Ba	137	3	He	112.195	0.4911	31065.61	0.0044	0.000309
Tl	205	3	He	0.182	0.006	1370.13	0.0276	0.001005
Tl	205	3	He	0.167	0.0056	1270.11	0.0276	0.001005
Tl	205	3	He	0.188	0.0062	1410.14	0.0276	0.001005
Pb	208	3	He	3687.275	134.2092	16382492.26	0.0364	0.002176
Pb	208	3	He	3712.159	135.1149	16532787.25	0.0364	0.002176
Pb	208	3	He	3686.022	134.1636	16463529.75	0.0364	0.002176
U	238	3	He	0.654	0.0278	6311.78	0.0421	0.00024
U	238	3	He	0.672	0.0285	6431.82	0.0421	0.00024
U	238	3	He	0.767	0.0325	7402.44	0.0421	0.00024
Sc	45	1	No Gas			3345344.33		
Sc	45	1	No Gas			3367951.82		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3299049.01		
Ge	72	1	No Gas			1460802.32		
Ge	72	1	No Gas			1474992.01		
Ge	72	1	No Gas			1454838.26		
Sc	45	2	H2			192766.31		
Sc	45	2	H2			196928.14		
Sc	45	2	H2			204000.27		
Ge	72	2	H2			157089.35		
Ge	72	2	H2			158725.71		
Ge	72	2	H2			161852.11		
In	115	2	H2			431717.88		
In	115	2	H2			432636.67		
In	115	2	H2			448427.77		
Sc	45	3	He			40115.64		
Sc	45	3	He			43083.99		
Sc	45	3	He			41760.22		
Ge	72	3	He			74071.59		
Ge	72	3	He			73598.79		
Ge	72	3	He			71739.51		
In	115	3	He			64860.17		
In	115	3	He			65131.68		
In	115	3	He			63293.82		
Tb	159	3	He			284735.62		
Tb	159	3	He			289259.84		
Tb	159	3	He			289467.67		
Bi	209	3	He			227433.79		
Bi	209	3	He			225652.05		
Bi	209	3	He			227819.66		

Quantitation Report

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Acq Time	2023-08-10 18:51:12
Sample Name	410-136557-H-18-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

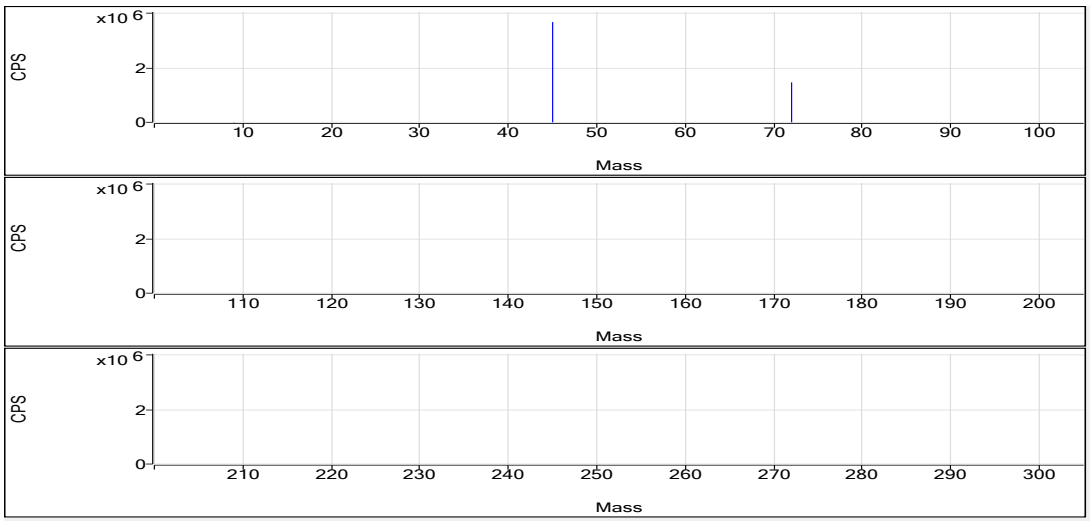
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	5.160	ppb	4.0	9991.35	0.0068	Pulse	0.5000	3
Se	78	72	H2	1.069	ppb	15.4	68.22	0.0004	Pulse	1.5000	3
Na	23	72	He	400.501	ppb	2.0	59469.19	0.7944	Pulse	0.1000	3
Mg	24	72	He	23807.357	ppb	1.4	1502905.39	20.0769	Pulse	0.1000	3
Al	27	72	He	108635.008	ppb	1.6	1963121.22	26.2249	Pulse	0.1000	3
K	39	72	He	12910.051	ppb	2.0	544404.15	7.2727	Pulse	0.1000	3
Ca	44	72	He	5156.512	ppb	3.5	12108.78	0.1618	Pulse	0.1000	3
Ti	47	72	He	518.066	ppb	1.2	9746.92	0.1302	Pulse	0.1000	3
V	51	72	He	155.868	ppb	1.6	137035.92	1.8306	Pulse	0.5000	3
Cr	52	72	He	126.994	ppb	2.1	146653.90	1.9592	Pulse	0.1000	3
Mn	55	72	He	10275.405	ppb	2.1	4541023.06	60.6636	Pulse	0.1000	3
Fe	57	72	He	205963.985	ppb	1.5	4467069.41	59.6747	Pulse	0.1000	3
Co	59	72	He	87.515	ppb	1.4	200111.89	2.6732	Pulse	0.1000	3
Ni	60	72	He	170.753	ppb	1.4	113071.47	1.5105	Pulse	0.1000	3
Cu	63	72	He	88.937	ppb	0.8	166395.85	2.2228	Pulse	0.1000	3
Zn	66	72	He	637.880	ppb	3.1	117665.80	1.5720	Pulse	0.1000	3
As	75	72	He	71.871	ppb	1.2	9389.77	0.1254	Pulse	0.5000	3
Sr	88	115	He	75.852	ppb	2.3	38265.54	0.5937	Pulse	0.1000	3
Mo	98	115	He	2.216	ppb	7.2	3177.13	0.0493	Pulse	0.1000	3
Ag	107	115	He	0.070	ppb	30.7	233.34	0.0036	Pulse	0.1000	3
Cd	111	115	He	0.923	ppb	5.6	288.67	0.0045	Pulse	0.5000	3
Sn	120	115	He	4.576	ppb	7.4	5207.82	0.0808	Pulse	0.1000	3
Sb	121	115	He	1.014	ppb	9.6	826.72	0.0128	Pulse	0.1000	3
Ba	137	115	He	818.445	ppb	2.5	230782.74	3.5808	Pulse	0.1000	3
Tl	205	209	He	0.940	ppb	5.9	6218.36	0.0270	Pulse	0.1000	3
Pb	208	209	He	89.892	ppb	0.7	754305.31	3.2740	Pulse	0.1000	3
U	238	209	He	6.799	ppb	0.6	65948.53	0.2862	Pulse	0.1000	3

ISTD Table:

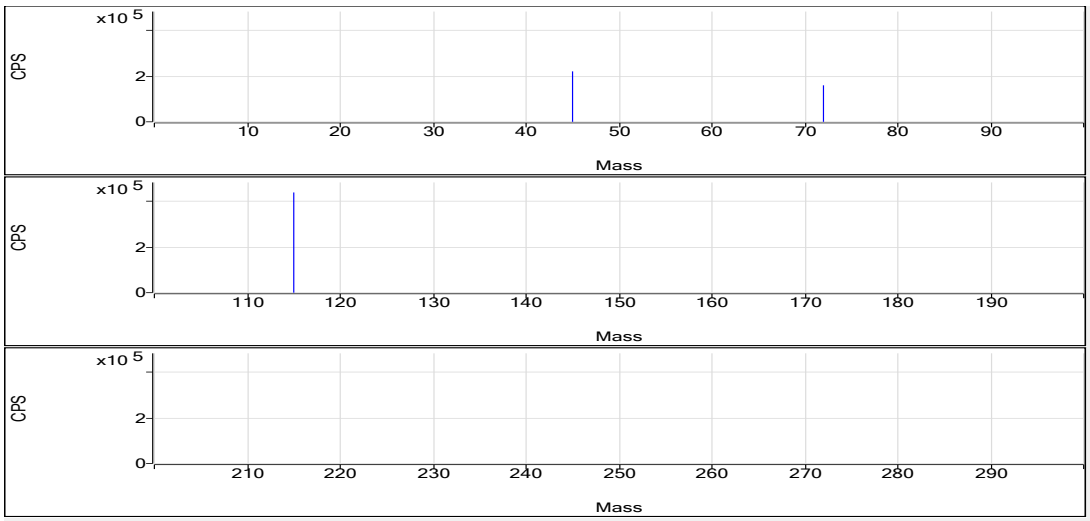
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3675705.26	0.5	113.4	Pulse	0.1000	3
No Gas	Ge	72	1463549.72	1.1	101.7	Pulse	0.1000	3
H2	Sc	45	221074.85	1.3	113.2	Pulse	0.1000	3
H2	Ge	72	159953.11	1.4	98.1	Pulse	0.1000	3
H2	In	115	439146.52	1.5	101.3	Pulse	0.1000	3
He	Sc	45	47052.67	1.1	117.7	Pulse	0.1000	3
He	Ge	72	74861.66	0.6	103.6	Pulse	0.1000	3
He	In	115	64468.02	1.8	99.8	Pulse	0.1000	3
He	Tb	159	315179.86	0.2	110.2	Pulse	0.1000	3
He	Bi	209	230389.23	0.4	103.7	Pulse	0.1000	3

No Gas

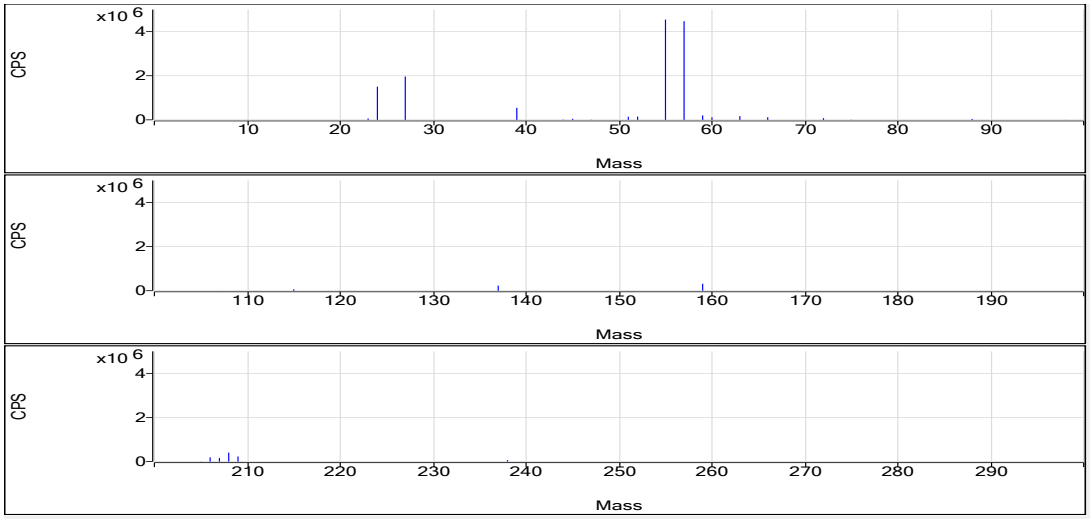


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	5.226	0.0069	9997.36	0.0013	4.694E-05
Be	9	1	No Gas	4.93	0.0065	9619.10	0.0013	4.694E-05
Be	9	1	No Gas	5.324	0.007	10357.58	0.0013	4.694E-05
Se	78	2	H2	1.201	0.0005	75.33	0.0004	1.089E-05
Se	78	2	H2	1.12	0.0004	72.00	0.0004	1.089E-05
Se	78	2	H2	0.885	0.0004	57.33	0.0004	1.089E-05
Na	23	3	He	391.269	0.7786	58696.20	0.0017	0.1065
Na	23	3	He	403.254	0.7992	59669.84	0.0017	0.1065
Na	23	3	He	406.98	0.8056	60041.52	0.0017	0.1065
Mg	24	3	He	23422.741	19.7526	1489111.07	0.0008	0.004846
Mg	24	3	He	24084.821	20.3108	1516492.63	0.0008	0.004846
Mg	24	3	He	23914.508	20.1672	1503112.48	0.0008	0.004846
Al	27	3	He	106701.236	25.7581	1941856.38	0.0002	0.001063
Al	27	3	He	109859.703	26.5206	1980140.44	0.0002	0.001063
Al	27	3	He	109344.085	26.3961	1967366.85	0.0002	0.001063
K	39	3	He	12620.114	7.1126	536206.75	0.0006	0.1436
K	39	3	He	12979.456	7.311	545874.80	0.0006	0.1436
K	39	3	He	13130.583	7.3945	551130.89	0.0006	0.1436
Ca	44	3	He	4955.543	0.1555	11725.07	0	0.001611
Ca	44	3	He	5211.282	0.1635	12205.58	0	0.001611
Ca	44	3	He	5302.711	0.1663	12395.68	0	0.001611
Ti	47	3	He	524.34	0.1318	9933.70	0.0003	0.0002737
Ti	47	3	He	511.797	0.1286	9603.46	0.0003	0.0002737
Ti	47	3	He	518.061	0.1302	9703.59	0.0003	0.0002737
V	51	3	He	153.258	1.8001	135705.75	0.0117	0.007326
V	51	3	He	156.233	1.8349	137001.30	0.0117	0.007326
V	51	3	He	158.115	1.8569	138400.70	0.0117	0.007326
Cr	52	3	He	123.989	1.9134	144247.17	0.0152	0.02538
Cr	52	3	He	128.723	1.9855	148245.32	0.0152	0.02538
Cr	52	3	He	128.27	1.9786	147469.20	0.0152	0.02538
Mn	55	3	He	10037.015	59.2565	4467239.31	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	10447.705	61.6806	4605343.37	0.0059	0.01385
Mn	55	3	He	10341.495	61.0537	4550486.49	0.0059	0.01385
Fe	57	3	He	202302.412	58.6139	4418791.18	0.0003	0.003918
Fe	57	3	He	207876.65	60.2288	4496947.12	0.0003	0.003918
Fe	57	3	He	207712.893	60.1814	4485469.93	0.0003	0.003918
Co	59	3	He	86.239	2.6343	198592.56	0.0305	0.003084
Co	59	3	He	88.69	2.7091	202270.47	0.0305	0.003084
Co	59	3	He	87.617	2.6763	199472.63	0.0305	0.003084
Ni	60	3	He	168.02	1.4865	112060.68	0.0088	0.009003
Ni	60	3	He	172.236	1.5235	113753.09	0.0088	0.009003
Ni	60	3	He	172.005	1.5215	113400.65	0.0088	0.009003
Cu	63	3	He	88.227	2.2051	166234.74	0.0249	0.004937
Cu	63	3	He	89.594	2.2391	167184.55	0.0249	0.004937
Cu	63	3	He	88.991	2.2241	165768.26	0.0249	0.004937
Zn	66	3	He	615.98	1.5182	114450.82	0.0025	0.004836
Zn	66	3	He	653.563	1.6105	120246.09	0.0025	0.004836
Zn	66	3	He	644.098	1.5872	118300.50	0.0025	0.004836
As	75	3	He	71.346	0.1245	9387.10	0.0017	0.0004347
As	75	3	He	72.887	0.1272	9497.16	0.0017	0.0004347
As	75	3	He	71.38	0.1246	9285.04	0.0017	0.0004347
Sr	88	3	He	75.631	0.592	38463.20	0.0078	0.0007762
Sr	88	3	He	77.677	0.608	38382.37	0.0078	0.0007762
Sr	88	3	He	74.247	0.5812	37951.06	0.0078	0.0007762
Mo	98	3	He	2.116	0.0471	3060.44	0.022	0.0005162
Mo	98	3	He	2.401	0.0534	3370.50	0.022	0.0005162
Mo	98	3	He	2.133	0.0475	3100.46	0.022	0.0005162
Ag	107	3	He	0.057	0.0031	200.01	0.0455	0.0004641
Ag	107	3	He	0.094	0.0048	300.01	0.0455	0.0004641
Ag	107	3	He	0.057	0.0031	200.01	0.0455	0.0004641
Cd	111	3	He	0.925	0.0045	292.00	0.0048	5.152E-05
Cd	111	3	He	0.973	0.0047	298.01	0.0048	5.152E-05
Cd	111	3	He	0.87	0.0042	276.00	0.0048	5.152E-05
Sn	120	3	He	4.23	0.0759	4931.06	0.0143	0.01559
Sn	120	3	He	4.907	0.0856	5401.22	0.0143	0.01559
Sn	120	3	He	4.59	0.081	5291.19	0.0143	0.01559
Sb	121	3	He	0.91	0.0115	750.04	0.0124	0.000258
Sb	121	3	He	1.103	0.0139	880.06	0.0124	0.000258
Sb	121	3	He	1.029	0.013	850.06	0.0124	0.000258
Ba	137	3	He	804.263	3.5188	228626.05	0.0044	0.000309
Ba	137	3	He	841.624	3.6822	232460.50	0.0044	0.000309
Ba	137	3	He	809.446	3.5415	231261.66	0.0044	0.000309
Tl	205	3	He	0.995	0.0285	6541.90	0.0276	0.001005
Tl	205	3	He	0.884	0.0254	5871.48	0.0276	0.001005
Tl	205	3	He	0.941	0.027	6241.69	0.0276	0.001005
Pb	208	3	He	89.476	3.2589	400076.28	0.0364	0.002176
Pb	208	3	He	90.652	3.3017	409286.28	0.0364	0.002176
Pb	208	3	He	89.549	3.2615	406225.03	0.0364	0.002176
U	238	3	He	6.754	0.2843	65244.64	0.0421	0.00024
U	238	3	He	6.813	0.2868	66189.80	0.0421	0.00024
U	238	3	He	6.829	0.2875	66411.14	0.0421	0.00024
Sc	45	1	No Gas			3660382.76		
Sc	45	1	No Gas			3697450.88		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3669282.13		
Ge	72	1	No Gas			1445830.29		
Ge	72	1	No Gas			1474103.88		
Ge	72	1	No Gas			1470714.98		
Sc	45	2	H2			218181.79		
Sc	45	2	H2			221280.56		
Sc	45	2	H2			223762.20		
Ge	72	2	H2			157403.34		
Ge	72	2	H2			161151.52		
Ge	72	2	H2			161304.48		
In	115	2	H2			435317.73		
In	115	2	H2			435327.73		
In	115	2	H2			446794.09		
Sc	45	3	He			47186.44		
Sc	45	3	He			46484.18		
Sc	45	3	He			47487.40		
Ge	72	3	He			75388.12		
Ge	72	3	He			74664.36		
Ge	72	3	He			74532.51		
In	115	3	He			65011.28		
In	115	3	He			63172.29		
In	115	3	He			65342.34		
Tb	159	3	He			315734.53		
Tb	159	3	He			315269.35		
Tb	159	3	He			314535.70		
Bi	209	3	He			229454.94		
Bi	209	3	He			230747.85		
Bi	209	3	He			230964.90		

Quantitation Report

Data File Name	240SMPL.d
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Sample Name	410-136557-H-18-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

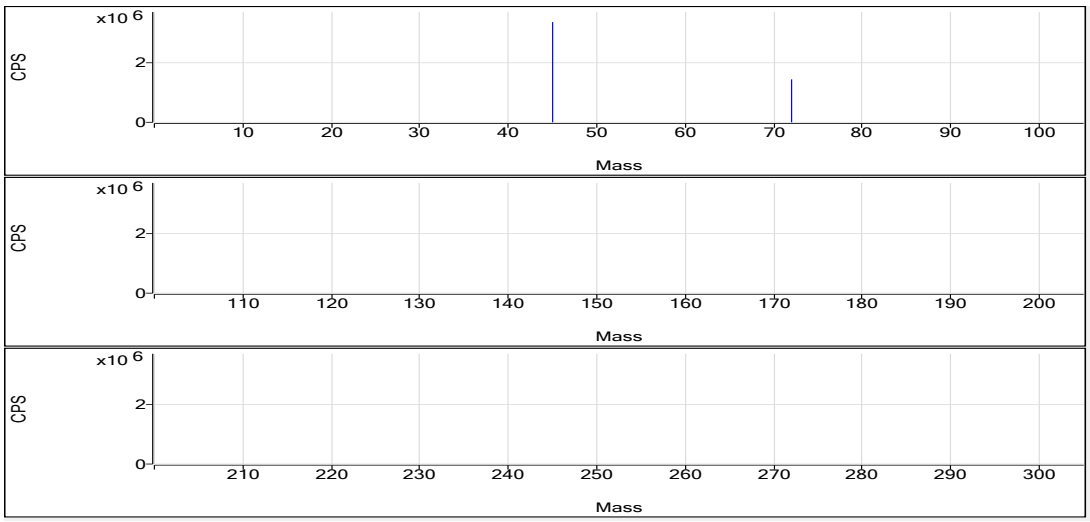
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.186	ppb	3.1	2330.86	0.0016	Pulse	0.5000	3
Se	78	72	H2	0.259	ppb	16.4	17.78	0.0001	Pulse	1.5000	3
Na	23	72	He	79.797	ppb	4.9	17694.34	0.2435	Pulse	0.1000	3
Mg	24	72	He	5520.414	ppb	1.5	338522.10	4.6591	Pulse	0.1000	3
Al	27	72	He	24785.672	ppb	1.0	434808.04	5.9842	Pulse	0.1000	3
K	39	72	He	2969.850	ppb	1.4	129595.60	1.7836	Pulse	0.1000	3
Ca	44	72	He	1211.129	ppb	1.4	2850.38	0.0392	Pulse	0.1000	3
Ti	47	72	He	117.811	ppb	1.8	2166.92	0.0298	Pulse	0.1000	3
V	51	72	He	36.270	ppb	1.8	31358.83	0.4316	Pulse	0.5000	3
Cr	52	72	He	28.947	ppb	2.8	33870.06	0.4662	Pulse	0.1000	3
Mn	55	72	He	2348.802	ppb	1.1	1008335.40	13.8775	Pulse	0.1000	3
Fe	57	72	He	47331.490	ppb	0.8	996659.60	13.7165	Pulse	0.1000	3
Co	59	72	He	20.189	ppb	3.2	44976.87	0.6190	Pulse	0.1000	3
Ni	60	72	He	40.304	ppb	3.6	26401.39	0.3634	Pulse	0.1000	3
Cu	63	72	He	20.542	ppb	3.9	37572.82	0.5172	Pulse	0.1000	3
Zn	66	72	He	149.068	ppb	0.0	26962.69	0.3711	Pulse	0.1000	3
As	75	72	He	16.128	ppb	6.3	2069.50	0.0285	Pulse	0.5000	3
Sr	88	115	He	16.531	ppb	5.3	8432.77	0.1300	Pulse	0.1000	3
Mo	98	115	He	0.521	ppb	8.8	776.71	0.0120	Pulse	0.1000	3
Ag	107	115	He	0.017	ppb	51.6	80.00	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.184	ppb	43.0	60.67	0.0009	Pulse	0.5000	3
Sn	120	115	He	1.057	ppb	14.8	1990.21	0.0307	Pulse	0.1000	3
Sb	121	115	He	0.351	ppb	13.0	300.01	0.0046	Pulse	0.1000	3
Ba	137	115	He	180.524	ppb	2.7	51259.31	0.7901	Pulse	0.1000	3
Tl	205	209	He	0.203	ppb	5.2	1493.47	0.0066	Pulse	0.1000	3
Pb	208	209	He	21.867	ppb	2.4	179824.50	0.7981	Pulse	0.1000	3
U	238	209	He	1.541	ppb	3.7	14655.45	0.0650	Pulse	0.1000	3

ISTD Table:

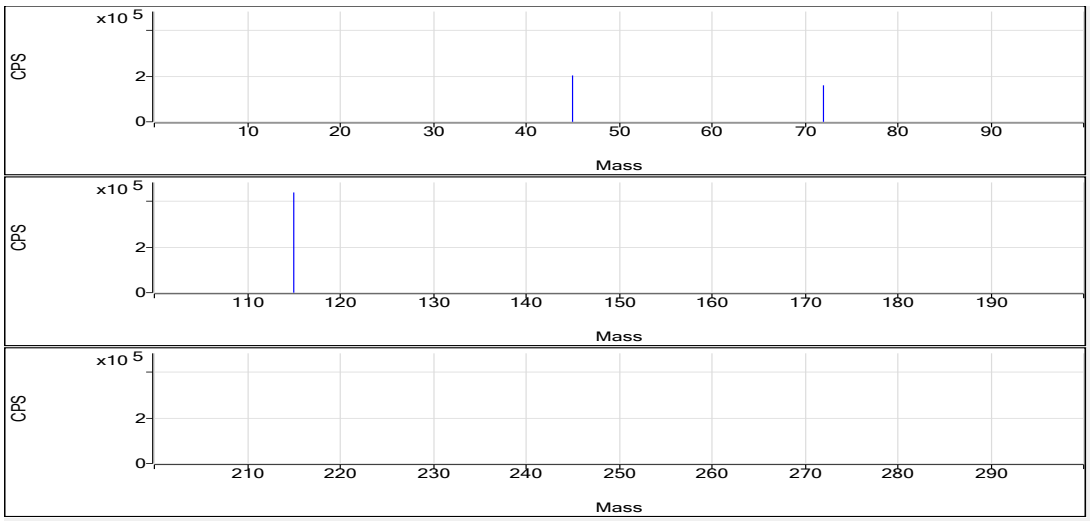
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3388499.22	1.7	104.5	Pulse	0.1000	3
No Gas	Ge	72	1451640.60	1.3	100.8	Pulse	0.1000	3
H2	Sc	45	202762.07	2.4	103.8	Pulse	0.1000	3
H2	Ge	72	159565.67	1.7	97.9	Pulse	0.1000	3
H2	In	115	438178.67	1.7	101.1	Pulse	0.1000	3
He	Sc	45	42940.19	1.4	107.4	Pulse	0.1000	3
He	Ge	72	72663.61	0.8	100.5	Pulse	0.1000	3
He	In	115	64905.56	2.3	100.5	Pulse	0.1000	3
He	Tb	159	294776.15	1.1	103.1	Pulse	0.1000	3
He	Bi	209	225350.26	1.1	101.4	Pulse	0.1000	3

No Gas

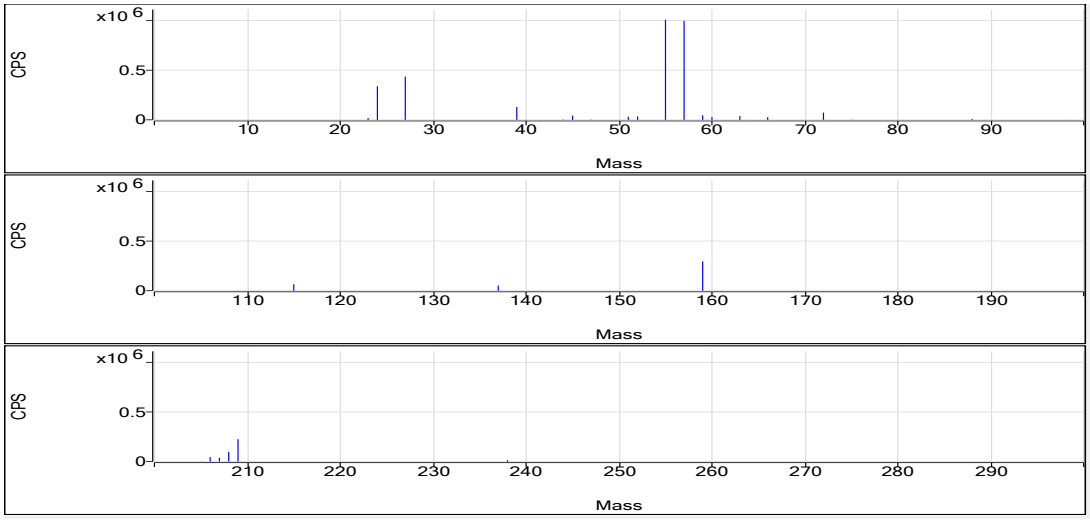


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.149	0.0016	2264.18	0.0013	4.694E-05
Be	9	1	No Gas	1.189	0.0016	2362.20	0.0013	4.694E-05
Be	9	1	No Gas	1.222	0.0017	2366.20	0.0013	4.694E-05
Se	78	2	H2	0.3	0.0001	20.00	0.0004	1.089E-05
Se	78	2	H2	0.26	0.0001	18.00	0.0004	1.089E-05
Se	78	2	H2	0.215	0.0001	15.33	0.0004	1.089E-05
Na	23	3	He	79.612	0.2432	17540.85	0.0017	0.1065
Na	23	3	He	83.827	0.2505	18171.48	0.0017	0.1065
Na	23	3	He	75.951	0.2369	17370.69	0.0017	0.1065
Mg	24	3	He	5607.827	4.7328	341334.29	0.0008	0.004846
Mg	24	3	He	5505.103	4.6462	337098.16	0.0008	0.004846
Mg	24	3	He	5448.312	4.5983	337133.86	0.0008	0.004846
Al	27	3	He	25000.085	6.0359	435316.63	0.0002	0.001063
Al	27	3	He	24842.36	5.9979	435165.50	0.0002	0.001063
Al	27	3	He	24514.572	5.9187	433941.99	0.0002	0.001063
K	39	3	He	3008.883	1.8052	130191.11	0.0006	0.1436
K	39	3	He	2974.015	1.7859	129575.07	0.0006	0.1436
K	39	3	He	2926.653	1.7598	129020.63	0.0006	0.1436
Ca	44	3	He	1229.519	0.0398	2870.38	0	0.001611
Ca	44	3	He	1195.249	0.0387	2810.37	0	0.001611
Ca	44	3	He	1208.619	0.0392	2870.38	0	0.001611
Ti	47	3	He	116.137	0.0294	2120.24	0.0003	0.0002737
Ti	47	3	He	117.087	0.0296	2150.25	0.0003	0.0002737
Ti	47	3	He	120.209	0.0304	2230.26	0.0003	0.0002737
V	51	3	He	37.008	0.4402	31750.34	0.0117	0.007326
V	51	3	He	36.101	0.4296	31171.11	0.0117	0.007326
V	51	3	He	35.7	0.4249	31155.04	0.0117	0.007326
Cr	52	3	He	29.129	0.4689	33820.03	0.0152	0.02538
Cr	52	3	He	29.653	0.4769	34601.87	0.0152	0.02538
Cr	52	3	He	28.061	0.4527	33188.27	0.0152	0.02538
Mn	55	3	He	2378.5	14.0528	1013496.23	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2336.743	13.8063	1001693.66	0.0059	0.01385
Mn	55	3	He	2331.163	13.7734	1009816.31	0.0059	0.01385
Fe	57	3	He	47743.012	13.8358	997846.55	0.0003	0.003918
Fe	57	3	He	47149.074	13.6637	991347.72	0.0003	0.003918
Fe	57	3	He	47102.384	13.6502	1000784.52	0.0003	0.003918
Co	59	3	He	20.928	0.6416	46274.13	0.0305	0.003084
Co	59	3	He	19.716	0.6046	43867.07	0.0305	0.003084
Co	59	3	He	19.922	0.6109	44789.41	0.0305	0.003084
Ni	60	3	He	41.212	0.3714	26785.29	0.0088	0.009003
Ni	60	3	He	41.071	0.3701	26855.62	0.0088	0.009003
Ni	60	3	He	38.628	0.3487	25563.27	0.0088	0.009003
Cu	63	3	He	21.344	0.5372	38742.74	0.0249	0.004937
Cu	63	3	He	20.534	0.517	37509.10	0.0249	0.004937
Cu	63	3	He	19.748	0.4974	36466.63	0.0249	0.004937
Zn	66	3	He	149.037	0.371	26755.68	0.0025	0.004836
Zn	66	3	He	149.092	0.3711	26925.98	0.0025	0.004836
Zn	66	3	He	149.076	0.3711	27206.41	0.0025	0.004836
As	75	3	He	17.1	0.0302	2176.18	0.0017	0.0004347
As	75	3	He	15.062	0.0266	1932.14	0.0017	0.0004347
As	75	3	He	16.221	0.0286	2100.17	0.0017	0.0004347
Sr	88	3	He	16.723	0.1315	8352.69	0.0078	0.0007762
Sr	88	3	He	17.299	0.136	8802.97	0.0078	0.0007762
Sr	88	3	He	15.571	0.1225	8142.66	0.0078	0.0007762
Mo	98	3	He	0.556	0.0128	810.05	0.022	0.0005162
Mo	98	3	He	0.538	0.0124	800.05	0.022	0.0005162
Mo	98	3	He	0.468	0.0108	720.04	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.024	0.0015	100.01	0.0455	0.0004641
Ag	107	3	He	0.02	0.0014	90.00	0.0455	0.0004641
Cd	111	3	He	0.12	0.0006	40.00	0.0048	5.152E-05
Cd	111	3	He	0.272	0.0014	88.00	0.0048	5.152E-05
Cd	111	3	He	0.159	0.0008	54.00	0.0048	5.152E-05
Sn	120	3	He	1.171	0.0323	2050.23	0.0143	0.01559
Sn	120	3	He	0.879	0.0281	1820.18	0.0143	0.01559
Sn	120	3	He	1.123	0.0316	2100.22	0.0143	0.01559
Sb	121	3	He	0.322	0.0043	270.01	0.0124	0.000258
Sb	121	3	He	0.328	0.0043	280.01	0.0124	0.000258
Sb	121	3	He	0.404	0.0053	350.02	0.0124	0.000258
Ba	137	3	He	183.91	0.8049	51125.39	0.0044	0.000309
Ba	137	3	He	182.715	0.7996	51757.95	0.0044	0.000309
Ba	137	3	He	174.946	0.7657	50894.58	0.0044	0.000309
Tl	205	3	He	0.205	0.0067	1490.14	0.0276	0.001005
Tl	205	3	He	0.213	0.0069	1570.15	0.0276	0.001005
Tl	205	3	He	0.192	0.0063	1420.13	0.0276	0.001005
Pb	208	3	He	22.453	0.8194	99150.50	0.0364	0.002176
Pb	208	3	He	21.656	0.7904	96239.60	0.0364	0.002176
Pb	208	3	He	21.491	0.7844	95786.66	0.0364	0.002176
U	238	3	He	1.563	0.066	14728.96	0.0421	0.00024
U	238	3	He	1.475	0.0623	14198.26	0.0421	0.00024
U	238	3	He	1.583	0.0668	15039.14	0.0421	0.00024
Sc	45	1	No Gas			3384201.82		
Sc	45	1	No Gas			3449172.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3332123.08		
Ge	72	1	No Gas			1454571.54		
Ge	72	1	No Gas			1468146.38		
Ge	72	1	No Gas			1432203.88		
Sc	45	2	H2			197189.53		
Sc	45	2	H2			204885.21		
Sc	45	2	H2			206211.46		
Ge	72	2	H2			156552.26		
Ge	72	2	H2			160345.67		
Ge	72	2	H2			161799.09		
In	115	2	H2			429531.79		
In	115	2	H2			441148.16		
In	115	2	H2			443856.05		
Sc	45	3	He			42231.67		
Sc	45	3	He			43214.41		
Sc	45	3	He			43374.49		
Ge	72	3	He			72120.79		
Ge	72	3	He			72553.41		
Ge	72	3	He			73316.64		
In	115	3	He			63535.47		
In	115	3	He			64740.12		
In	115	3	He			66487.67		
Tb	159	3	He			291386.91		
Tb	159	3	He			298033.55		
Tb	159	3	He			294908.00		
Bi	209	3	He			223128.45		
Bi	209	3	He			227951.91		
Bi	209	3	He			224970.43		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

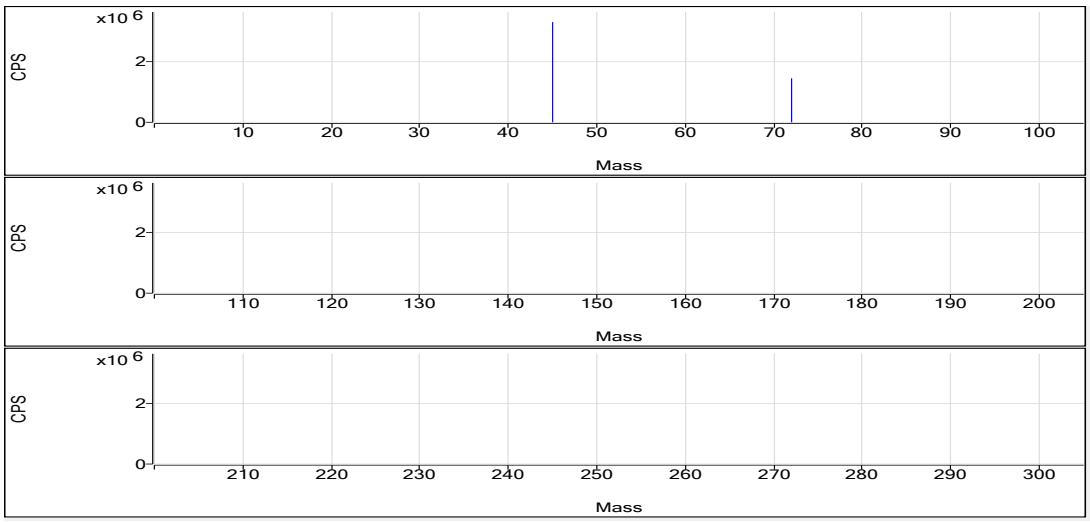
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.004	ppb	47.9	76.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.018	ppb	33.5	2.89	0.0000	Pulse	1.5000	3
Na	23	72	He	3.747	ppb	75.4	8192.55	0.1129	Pulse	0.1000	3
Mg	24	72	He	9.183	ppb	4.3	913.39	0.0126	Pulse	0.1000	3
Al	27	72	He	25.119	ppb	25.6	516.70	0.0071	Pulse	0.1000	3
K	39	72	He	9.130	ppb	56.6	10787.64	0.1487	Pulse	0.1000	3
Ca	44	72	He	33.918	ppb	6.3	193.34	0.0027	Pulse	0.1000	3
Ti	47	72	He	0.372	ppb	168.2	26.67	0.0004	Pulse	0.1000	3
V	51	72	He	0.083	ppb	48.0	602.02	0.0083	Pulse	0.5000	3
Cr	52	72	He	0.019	ppb	852.5	1863.52	0.0257	Pulse	0.1000	3
Mn	55	72	He	1.117	ppb	19.8	1483.46	0.0204	Pulse	0.1000	3
Fe	57	72	He	51.025	ppb	3.0	1356.79	0.0187	Pulse	0.1000	3
Co	59	72	He	0.077	ppb	5.9	393.35	0.0054	Pulse	0.1000	3
Ni	60	72	He	0.957	ppb	15.6	1263.43	0.0174	Pulse	0.1000	3
Cu	63	72	He	0.132	ppb	56.0	596.70	0.0082	Pulse	0.1000	3
Zn	66	72	He	0.032	ppb	588.5	356.69	0.0049	Pulse	0.1000	3
As	75	72	He	0.215	ppb	60.9	58.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.045	ppb	202.0	73.33	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.016	ppb	151.2	56.67	0.0009	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	60.0	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	N/A	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.027	ppb	509.5	1040.07	0.0160	Pulse	0.1000	3
Sb	121	115	He	0.016	ppb	262.2	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.339	ppb	49.4	116.67	0.0018	Pulse	0.1000	3
Tl	205	209	He	0.009	ppb	60.6	276.68	0.0013	Pulse	0.1000	3
Pb	208	209	He	1.780	ppb	3.8	14677.11	0.0670	Pulse	0.1000	3
U	238	209	He	0.010	ppb	33.7	146.68	0.0007	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3289399.85	1.2	101.5	Pulse	0.1000	3
No Gas	Ge	72	1441340.92	1.1	100.1	Pulse	0.1000	3
H2	Sc	45	196968.11	2.9	100.8	Pulse	0.1000	3
H2	Ge	72	160203.46	2.5	98.3	Pulse	0.1000	3
H2	In	115	440213.68	1.4	101.6	Pulse	0.1000	3
He	Sc	45	41643.26	2.6	104.1	Pulse	0.1000	3
He	Ge	72	72559.48	0.5	100.4	Pulse	0.1000	3
He	In	115	65154.07	1.3	100.9	Pulse	0.1000	3
He	Tb	159	284574.36	1.2	99.5	Pulse	0.1000	3
He	Bi	209	219136.17	1.4	98.6	Pulse	0.1000	3

No Gas



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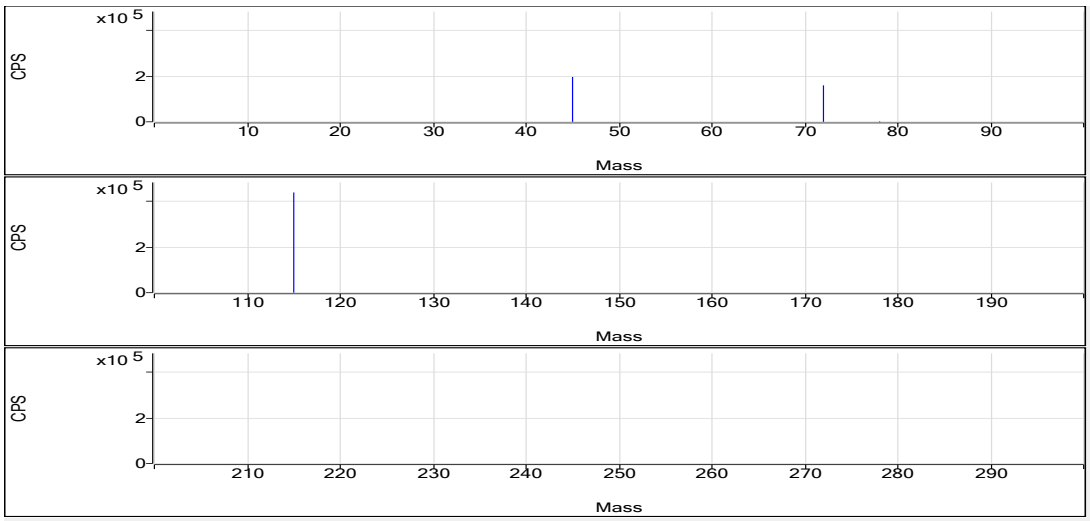
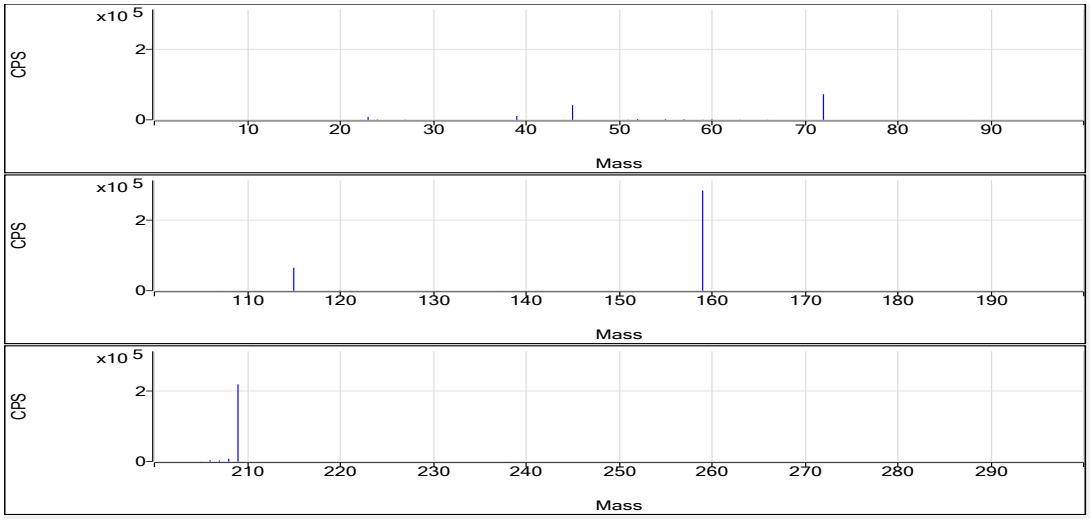


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.002	0	72.00	0.0013	4.694E-05
Be	9	1	No Gas	0.006	0.0001	80.00	0.0013	4.694E-05
Be	9	1	No Gas	0.005	0.0001	76.00	0.0013	4.694E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.025	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.014	0	2.67	0.0004	1.089E-05
Na	23	3	He	2.557	0.1108	8002.30	0.0017	0.1065
Na	23	3	He	1.711	0.1094	7932.47	0.0017	0.1065
Na	23	3	He	6.974	0.1184	8642.89	0.0017	0.1065
Mg	24	3	He	9.04	0.0125	900.06	0.0008	0.004846
Mg	24	3	He	9.629	0.013	940.06	0.0008	0.004846
Mg	24	3	He	8.881	0.0123	900.05	0.0008	0.004846
Al	27	3	He	29.456	0.0082	590.04	0.0002	0.001063
Al	27	3	He	28.163	0.0079	570.03	0.0002	0.001063
Al	27	3	He	17.738	0.0053	390.02	0.0002	0.001063
K	39	3	He	14.923	0.1519	10964.48	0.0006	0.1436
K	39	3	He	7.456	0.1478	10714.29	0.0006	0.1436
K	39	3	He	5.012	0.1464	10684.16	0.0006	0.1436
Ca	44	3	He	32.876	0.0026	190.01	0	0.001611
Ca	44	3	He	32.5	0.0026	190.01	0	0.001611
Ca	44	3	He	36.378	0.0027	200.01	0	0.001611
Ti	47	3	He	0.013	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	0.008	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	1.094	0.0005	40.00	0.0003	0.0002737
V	51	3	He	0.044	0.0078	566.02	0.0117	0.007326
V	51	3	He	0.081	0.0083	600.02	0.0117	0.007326
V	51	3	He	0.123	0.0088	640.02	0.0117	0.007326
Cr	52	3	He	-0.166	0.0229	1650.15	0.0152	0.02538
Cr	52	3	He	0.144	0.0276	2000.21	0.0152	0.02538
Cr	52	3	He	0.079	0.0266	1940.20	0.0152	0.02538
Mn	55	3	He	1.103	0.0204	1470.14	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.345	0.0218	1580.14	0.0059	0.01385
Mn	55	3	He	0.903	0.0192	1400.11	0.0059	0.01385
Fe	57	3	He	52.465	0.0191	1380.12	0.0003	0.003918
Fe	57	3	He	51.221	0.0188	1360.13	0.0003	0.003918
Fe	57	3	He	49.391	0.0182	1330.11	0.0003	0.003918
Co	59	3	He	0.071	0.0053	380.02	0.0305	0.003084
Co	59	3	He	0.08	0.0055	400.02	0.0305	0.003084
Co	59	3	He	0.079	0.0055	400.02	0.0305	0.003084
Ni	60	3	He	1.04	0.0181	1310.10	0.0088	0.009003
Ni	60	3	He	1.047	0.0182	1320.10	0.0088	0.009003
Ni	60	3	He	0.784	0.0159	1160.10	0.0088	0.009003
Cu	63	3	He	0.046	0.0061	440.03	0.0249	0.004937
Cu	63	3	He	0.173	0.0092	670.04	0.0249	0.004937
Cu	63	3	He	0.176	0.0093	680.04	0.0249	0.004937
Zn	66	3	He	-0.164	0.0044	320.02	0.0025	0.004836
Zn	66	3	He	0.052	0.005	360.02	0.0025	0.004836
Zn	66	3	He	0.207	0.0053	390.02	0.0025	0.004836
As	75	3	He	0.308	0.001	70.00	0.0017	0.0004347
As	75	3	He	0.273	0.0009	66.00	0.0017	0.0004347
As	75	3	He	0.065	0.0005	40.00	0.0017	0.0004347
Sr	88	3	He	-0.061	0.0003	20.00	0.0078	0.0007762
Sr	88	3	He	0.099	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.098	0.0015	100.00	0.0078	0.0007762
Mo	98	3	He	0.038	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	-0.009	0.0003	20.00	0.022	0.0005162
Mo	98	3	He	0.019	0.0009	60.00	0.022	0.0005162
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	-0.096	0.0142	940.07	0.0143	0.01559
Sn	120	3	He	0.179	0.0181	1170.08	0.0143	0.01559
Sn	120	3	He	-0.001	0.0156	1010.07	0.0143	0.01559
Sb	121	3	He	-0.009	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.066	0.0011	70.00	0.0124	0.000258
Ba	137	3	He	0.275	0.0015	100.00	0.0044	0.000309
Ba	137	3	He	0.213	0.0012	80.00	0.0044	0.000309
Ba	137	3	He	0.529	0.0026	170.01	0.0044	0.000309
Tl	205	3	He	0.008	0.0012	270.01	0.0276	0.001005
Tl	205	3	He	0.004	0.0011	250.01	0.0276	0.001005
Tl	205	3	He	0.015	0.0014	310.02	0.0276	0.001005
Pb	208	3	He	1.859	0.0698	8572.99	0.0364	0.002176
Pb	208	3	He	1.742	0.0656	8092.76	0.0364	0.002176
Pb	208	3	He	1.741	0.0655	7382.32	0.0364	0.002176
U	238	3	He	0.006	0.0005	110.01	0.0421	0.00024
U	238	3	He	0.012	0.0008	170.01	0.0421	0.00024
U	238	3	He	0.012	0.0007	160.01	0.0421	0.00024
Sc	45	1	No Gas			3318639.64		
Sc	45	1	No Gas			3305972.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3243587.76		
Ge	72	1	No Gas			1449222.48		
Ge	72	1	No Gas			1451353.88		
Ge	72	1	No Gas			1423446.39		
Sc	45	2	H2			191274.00		
Sc	45	2	H2			197037.61		
Sc	45	2	H2			202592.73		
Ge	72	2	H2			156058.85		
Ge	72	2	H2			160325.49		
Ge	72	2	H2			164226.03		
In	115	2	H2			433216.32		
In	115	2	H2			443104.88		
In	115	2	H2			444319.84		
Sc	45	3	He			42893.67		
Sc	45	3	He			40947.76		
Sc	45	3	He			41088.36		
Ge	72	3	He			72190.99		
Ge	72	3	He			72512.44		
Ge	72	3	He			72975.01		
In	115	3	He			66116.96		
In	115	3	He			64509.08		
In	115	3	He			64860.52		
Tb	159	3	He			286483.37		
Tb	159	3	He			286605.72		
Tb	159	3	He			280634.00		
Bi	209	3	He			218759.96		
Bi	209	3	He			222386.52		
Bi	209	3	He			216262.03		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 18:57:12
Sample Name	410-136557-H-20-A @100
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

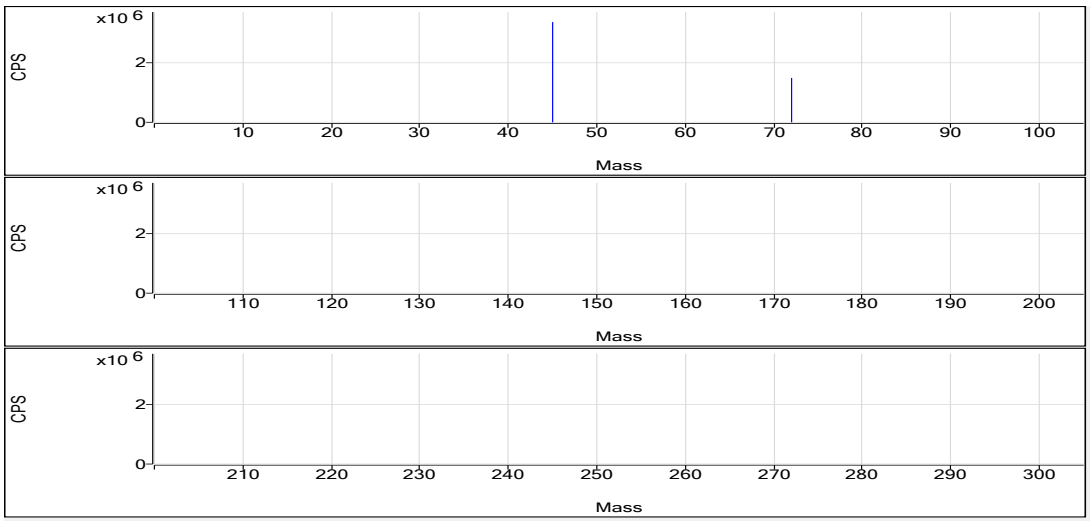
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.143	ppb	2.9	346.68	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.268	ppb	8.9	18.89	0.0001	Pulse	1.5000	3
Na	23	72	He	84.592	ppb	7.4	18722.20	0.2518	Pulse	0.1000	3
Mg	24	72	He	295.013	ppb	3.8	18855.92	0.2536	Pulse	0.1000	3
Al	27	72	He	1129.188	ppb	2.7	20347.85	0.2736	Pulse	0.1000	3
K	39	72	He	180.817	ppb	10.3	18104.92	0.2435	Pulse	0.1000	3
Ca	44	72	He	573.119	ppb	2.8	1443.45	0.0194	Pulse	0.1000	3
Ti	47	72	He	19.665	ppb	21.4	386.68	0.0052	Pulse	0.1000	3
V	51	72	He	2.950	ppb	4.6	3111.02	0.0418	Pulse	0.5000	3
Cr	52	72	He	4.255	ppb	5.1	6705.12	0.0902	Pulse	0.1000	3
Mn	55	72	He	59.621	ppb	1.9	27206.02	0.3658	Pulse	0.1000	3
Fe	57	72	He	2112.266	ppb	1.6	45799.43	0.6159	Pulse	0.1000	3
Co	59	72	He	1.916	ppb	3.3	4577.56	0.0615	Pulse	0.1000	3
Ni	60	72	He	4.117	ppb	11.3	3363.84	0.0452	Pulse	0.1000	3
Cu	63	72	He	4.811	ppb	2.3	9289.95	0.1249	Pulse	0.1000	3
Zn	66	72	He	35.277	ppb	8.1	6801.84	0.0915	Pulse	0.1000	3
As	75	72	He	1.940	ppb	9.3	283.34	0.0038	Pulse	0.5000	3
Sr	88	115	He	3.964	ppb	3.3	2043.55	0.0318	Pulse	0.1000	3
Mo	98	115	He	0.280	ppb	19.4	430.02	0.0067	Pulse	0.1000	3
Ag	107	115	He	0.147	ppb	21.0	460.02	0.0071	Pulse	0.1000	3
Cd	111	115	He	0.179	ppb	20.6	58.67	0.0009	Pulse	0.5000	3
Sn	120	115	He	0.706	ppb	13.5	1650.16	0.0256	Pulse	0.1000	3
Sb	121	115	He	2.277	ppb	8.6	1833.52	0.0285	Pulse	0.1000	3
Ba	137	115	He	13.668	ppb	4.5	3867.36	0.0601	Pulse	0.1000	3
Tl	205	209	He	0.149	ppb	11.9	1166.76	0.0051	Pulse	0.1000	3
Pb	208	209	He	359.129	ppb	1.3	2976522.03	13.0735	Pulse	0.1000	3
U	238	209	He	0.182	ppb	6.8	1796.86	0.0079	Pulse	0.1000	3

ISTD Table:

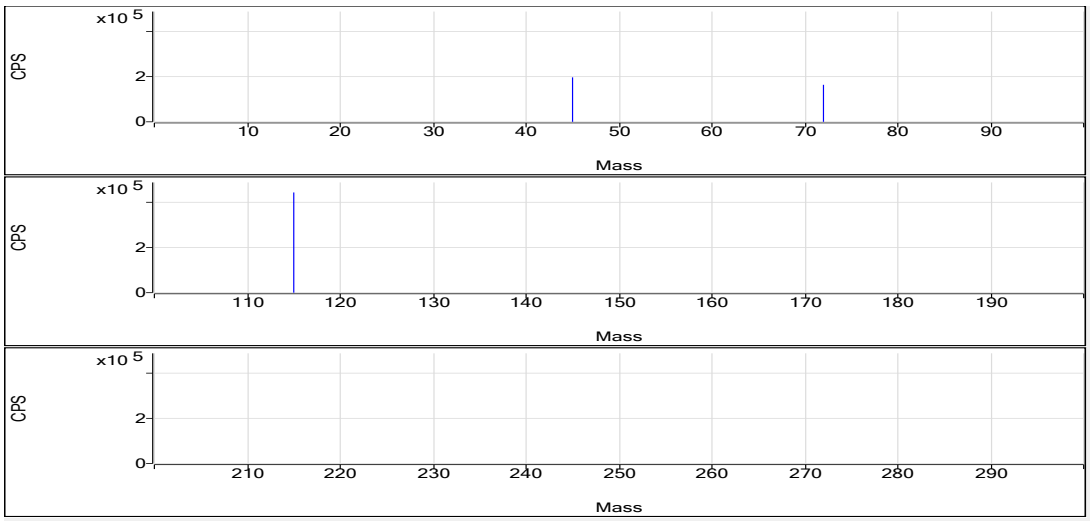
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3338958.49	1.4	103.0	Pulse	0.1000	3
No Gas	Ge	72	1479111.18	0.3	102.7	Pulse	0.1000	3
H2	Sc	45	196997.16	1.8	100.8	Pulse	0.1000	3
H2	Ge	72	163983.88	1.4	100.6	Pulse	0.1000	3
H2	In	115	444099.30	1.6	102.5	Pulse	0.1000	3
He	Sc	45	42713.10	1.7	106.8	Pulse	0.1000	3
He	Ge	72	74372.45	1.1	102.9	Pulse	0.1000	3
He	In	115	64338.92	0.4	99.6	Pulse	0.1000	3
He	Tb	159	291597.81	1.1	102.0	Pulse	0.1000	3
He	Bi	209	227691.99	0.9	102.5	Pulse	0.1000	3

No Gas

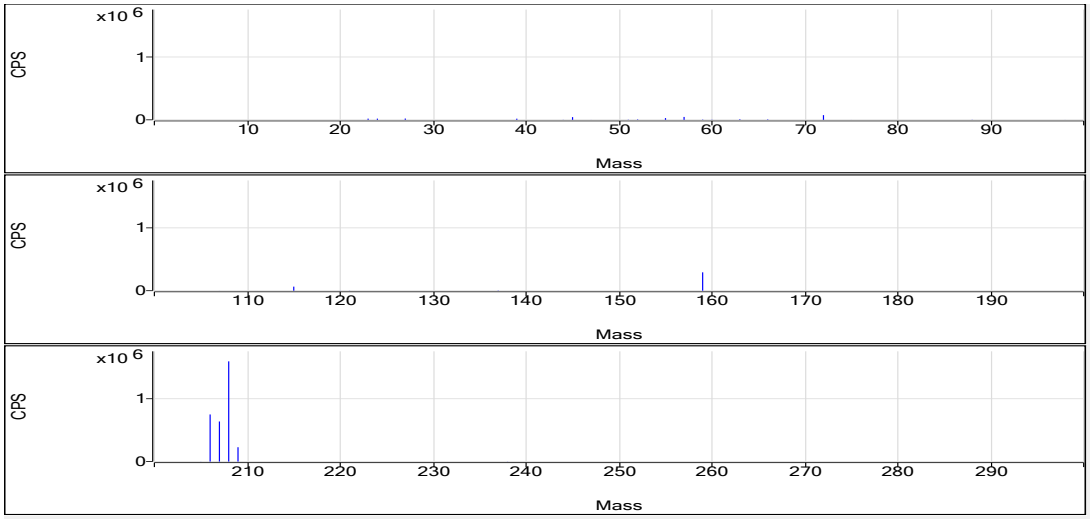


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.145	0.0002	352.01	0.0013	4.694E-05
Be	9	1	No Gas	0.145	0.0002	350.01	0.0013	4.694E-05
Be	9	1	No Gas	0.138	0.0002	338.01	0.0013	4.694E-05
Se	78	2	H2	0.29	0.0001	20.00	0.0004	1.089E-05
Se	78	2	H2	0.243	0.0001	17.33	0.0004	1.089E-05
Se	78	2	H2	0.271	0.0001	19.33	0.0004	1.089E-05
Na	23	3	He	90.938	0.2627	19543.39	0.0017	0.1065
Na	23	3	He	84.45	0.2515	18501.87	0.0017	0.1065
Na	23	3	He	78.389	0.2411	18121.34	0.0017	0.1065
Mg	24	3	He	284.1	0.2444	18181.83	0.0008	0.004846
Mg	24	3	He	306.475	0.2632	19363.13	0.0008	0.004846
Mg	24	3	He	294.463	0.2531	19022.80	0.0008	0.004846
Al	27	3	He	1114.968	0.2702	20104.25	0.0002	0.001063
Al	27	3	He	1163.898	0.282	20744.97	0.0002	0.001063
Al	27	3	He	1108.699	0.2687	20194.32	0.0002	0.001063
K	39	3	He	194.839	0.2512	18692.35	0.0006	0.1436
K	39	3	He	187.983	0.2474	18201.78	0.0006	0.1436
K	39	3	He	159.631	0.2318	17420.64	0.0006	0.1436
Ca	44	3	He	566.986	0.0192	1430.12	0	0.001611
Ca	44	3	He	591.595	0.02	1470.12	0	0.001611
Ca	44	3	He	560.775	0.019	1430.12	0	0.001611
Ti	47	3	He	22.491	0.0059	440.02	0.0003	0.0002737
Ti	47	3	He	21.678	0.0057	420.02	0.0003	0.0002737
Ti	47	3	He	14.826	0.004	300.01	0.0003	0.0002737
V	51	3	He	2.819	0.0403	2998.32	0.0117	0.007326
V	51	3	He	3.088	0.0435	3196.37	0.0117	0.007326
V	51	3	He	2.943	0.0418	3138.37	0.0117	0.007326
Cr	52	3	He	4.134	0.0883	6571.71	0.0152	0.02538
Cr	52	3	He	4.504	0.094	6911.88	0.0152	0.02538
Cr	52	3	He	4.128	0.0882	6631.78	0.0152	0.02538
Mn	55	3	He	59.923	0.3675	27346.32	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	58.353	0.3583	26354.36	0.0059	0.01385
Mn	55	3	He	60.586	0.3715	27917.37	0.0059	0.01385
Fe	57	3	He	2091.346	0.6098	45371.45	0.0003	0.003918
Fe	57	3	He	2151.286	0.6272	46134.05	0.0003	0.003918
Fe	57	3	He	2094.166	0.6106	45892.78	0.0003	0.003918
Co	59	3	He	1.93	0.062	4610.90	0.0305	0.003084
Co	59	3	He	1.846	0.0594	4370.82	0.0305	0.003084
Co	59	3	He	1.971	0.0632	4750.97	0.0305	0.003084
Ni	60	3	He	3.822	0.0426	3170.47	0.0088	0.009003
Ni	60	3	He	3.878	0.0431	3170.45	0.0088	0.009003
Ni	60	3	He	4.651	0.0499	3750.60	0.0088	0.009003
Cu	63	3	He	4.703	0.1222	9093.17	0.0249	0.004937
Cu	63	3	He	4.923	0.1277	9393.35	0.0249	0.004937
Cu	63	3	He	4.809	0.1249	9383.33	0.0249	0.004937
Zn	66	3	He	36.064	0.0934	6951.92	0.0025	0.004836
Zn	66	3	He	37.663	0.0974	7162.02	0.0025	0.004836
Zn	66	3	He	32.106	0.0837	6291.57	0.0025	0.004836
As	75	3	He	2.146	0.0042	310.01	0.0017	0.0004347
As	75	3	He	1.814	0.0036	264.00	0.0017	0.0004347
As	75	3	He	1.862	0.0037	276.00	0.0017	0.0004347
Sr	88	3	He	3.869	0.031	2000.24	0.0078	0.0007762
Sr	88	3	He	3.91	0.0313	2020.20	0.0078	0.0007762
Sr	88	3	He	4.114	0.0329	2110.21	0.0078	0.0007762
Mo	98	3	He	0.272	0.0065	420.02	0.022	0.0005162
Mo	98	3	He	0.23	0.0056	360.02	0.022	0.0005162
Mo	98	3	He	0.338	0.008	510.03	0.022	0.0005162
Ag	107	3	He	0.174	0.0084	540.03	0.0455	0.0004641
Ag	107	3	He	0.153	0.0074	480.02	0.0455	0.0004641
Ag	107	3	He	0.113	0.0056	360.02	0.0455	0.0004641
Cd	111	3	He	0.138	0.0007	46.00	0.0048	5.152E-05
Cd	111	3	He	0.209	0.0011	68.00	0.0048	5.152E-05
Cd	111	3	He	0.191	0.001	62.00	0.0048	5.152E-05
Sn	120	3	He	0.626	0.0245	1580.15	0.0143	0.01559
Sn	120	3	He	0.811	0.0271	1750.17	0.0143	0.01559
Sn	120	3	He	0.68	0.0253	1620.16	0.0143	0.01559
Sb	121	3	He	2.217	0.0278	1790.17	0.0124	0.000258
Sb	121	3	He	2.118	0.0265	1710.18	0.0124	0.000258
Sb	121	3	He	2.496	0.0312	2000.22	0.0124	0.000258
Ba	137	3	He	13.652	0.06	3870.67	0.0044	0.000309
Ba	137	3	He	14.293	0.0628	4050.76	0.0044	0.000309
Ba	137	3	He	13.06	0.0574	3680.66	0.0044	0.000309
Tl	205	3	He	0.151	0.0052	1170.10	0.0276	0.001005
Tl	205	3	He	0.166	0.0056	1270.11	0.0276	0.001005
Tl	205	3	He	0.13	0.0046	1060.08	0.0276	0.001005
Pb	208	3	He	364.449	13.2671	1599009.51	0.0364	0.002176
Pb	208	3	He	357.098	12.9996	1581965.45	0.0364	0.002176
Pb	208	3	He	355.841	12.9538	1594190.44	0.0364	0.002176
U	238	3	He	0.19	0.0082	1860.20	0.0421	0.00024
U	238	3	He	0.168	0.0073	1660.17	0.0421	0.00024
U	238	3	He	0.188	0.0081	1870.21	0.0421	0.00024
Sc	45	1	No Gas			3346130.89		
Sc	45	1	No Gas			3381881.82		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3288862.76		
Ge	72	1	No Gas			1481580.29		
Ge	72	1	No Gas			1474295.76		
Ge	72	1	No Gas			1481457.48		
Sc	45	2	H2			193986.19		
Sc	45	2	H2			196186.38		
Sc	45	2	H2			200818.92		
Ge	72	2	H2			161477.02		
Ge	72	2	H2			164498.59		
Ge	72	2	H2			165976.03		
In	115	2	H2			441907.77		
In	115	2	H2			438138.12		
In	115	2	H2			452252.02		
Sc	45	3	He			42021.01		
Sc	45	3	He			43445.14		
Sc	45	3	He			42673.14		
Ge	72	3	He			74402.42		
Ge	72	3	He			73558.28		
Ge	72	3	He			75156.66		
In	115	3	He			64488.78		
In	115	3	He			64478.94		
In	115	3	He			64087.67		
Tb	159	3	He			291068.30		
Tb	159	3	He			288763.00		
Tb	159	3	He			294962.12		
Bi	209	3	He			225654.27		
Bi	209	3	He			227505.91		
Bi	209	3	He			229915.78		

Quantitation Report

Data File Name	243_CCV.d
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Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

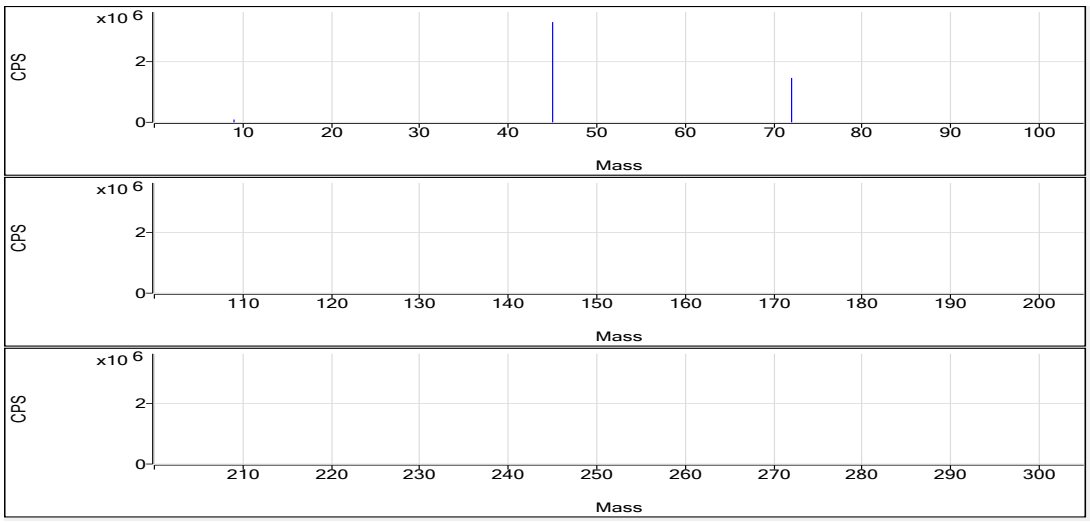
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	47.414	ppb	6.5	91186.10	0.0624	Pulse	0.5000	3
Se	78	72	H2	51.269	ppb	4.8	3268.15	0.0200	Pulse	1.5000	3
Na	23	72	He	5202.496	ppb	0.8	667358.17	9.0434	Pulse	0.1000	3
Mg	24	72	He	5221.047	ppb	0.9	325191.81	4.4067	Pulse	0.1000	3
Al	27	72	He	5223.792	ppb	1.5	93131.40	1.2621	Pulse	0.1000	3
K	39	72	He	5147.095	ppb	0.3	220350.80	2.9859	Pulse	0.1000	3
Ca	44	72	He	5361.681	ppb	2.1	12409.05	0.1681	Pulse	0.1000	3
Ti	47	72	He	5197.657	ppb	1.2	96208.41	1.3037	Pulse	0.1000	3
V	51	72	He	516.334	ppb	0.7	446258.47	6.0473	Pulse	0.5000	3
Cr	52	72	He	515.912	ppb	0.9	581599.89	7.8813	Pulse	0.1000	3
Mn	55	72	He	518.412	ppb	1.3	226825.10	3.0737	Pulse	0.1000	3
Fe	57	72	He	5256.787	ppb	0.8	112678.26	1.5269	Pulse	0.1000	3
Co	59	72	He	513.846	ppb	0.4	1157168.52	15.6808	Pulse	0.1000	3
Ni	60	72	He	515.916	ppb	1.0	335443.82	4.5456	Pulse	0.1000	3
Cu	63	72	He	514.739	ppb	0.9	947601.84	12.8410	Pulse	0.1000	3
Zn	66	72	He	520.467	ppb	0.6	94716.16	1.2835	Pulse	0.1000	3
As	75	72	He	508.919	ppb	0.8	65349.05	0.8855	Pulse	0.5000	3
Sr	88	115	He	51.676	ppb	3.5	25824.06	0.4047	Pulse	0.1000	3
Mo	98	115	He	50.858	ppb	1.4	71488.04	1.1205	Pulse	0.1000	3
Ag	107	115	He	51.582	ppb	1.0	149777.45	2.3475	Pulse	0.1000	3
Cd	111	115	He	51.838	ppb	2.6	15879.00	0.2489	Pulse	0.5000	3
Sn	120	115	He	52.064	ppb	1.7	48354.63	0.7579	Pulse	0.1000	3
Sb	121	115	He	50.908	ppb	1.8	40309.16	0.6318	Pulse	0.1000	3
Ba	137	115	He	516.271	ppb	1.4	144125.95	2.2589	Pulse	0.1000	3
Tl	205	209	He	50.843	ppb	1.0	314791.22	1.4065	Pulse	0.1000	3
Pb	208	209	He	54.051	ppb	0.9	440787.62	1.9695	Pulse	0.1000	3
U	238	209	He	50.895	ppb	0.9	479231.31	2.1412	Pulse	0.1000	3

ISTD Table:

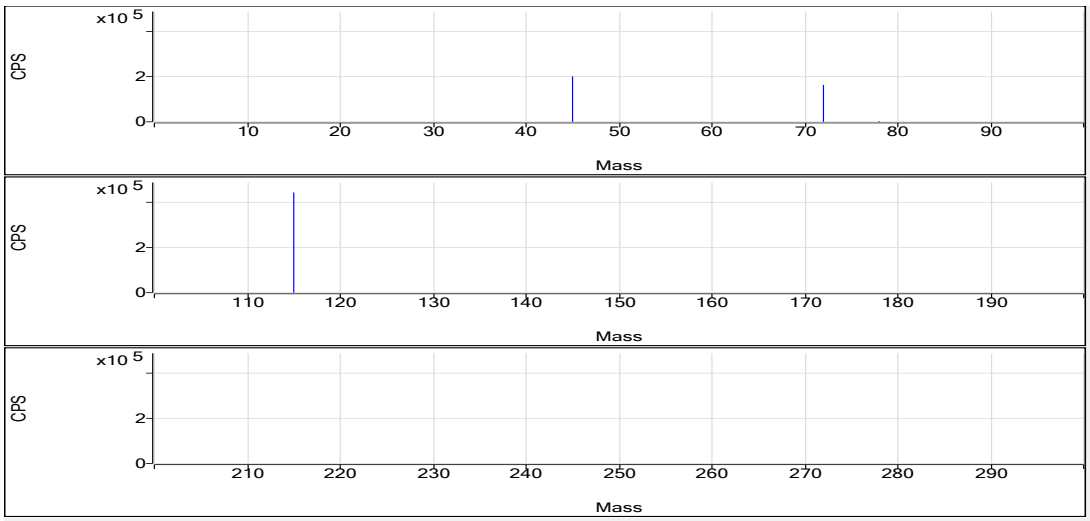
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3305493.28	2.1	102.0	Pulse	0.1000	3
No Gas	Ge	72	1463810.65	2.1	101.7	Pulse	0.1000	3
H2	Sc	45	201449.76	4.9	103.1	Pulse	0.1000	3
H2	Ge	72	163805.53	3.4	100.5	Pulse	0.1000	3
H2	In	115	444858.08	2.6	102.7	Pulse	0.1000	3
He	Sc	45	42602.59	0.8	106.5	Pulse	0.1000	3
He	Ge	72	73796.03	0.4	102.1	Pulse	0.1000	3
He	In	115	63810.49	1.7	98.8	Pulse	0.1000	3
He	Tb	159	288254.31	0.1	100.8	Pulse	0.1000	3
He	Bi	209	223822.71	1.3	100.7	Pulse	0.1000	3

No Gas

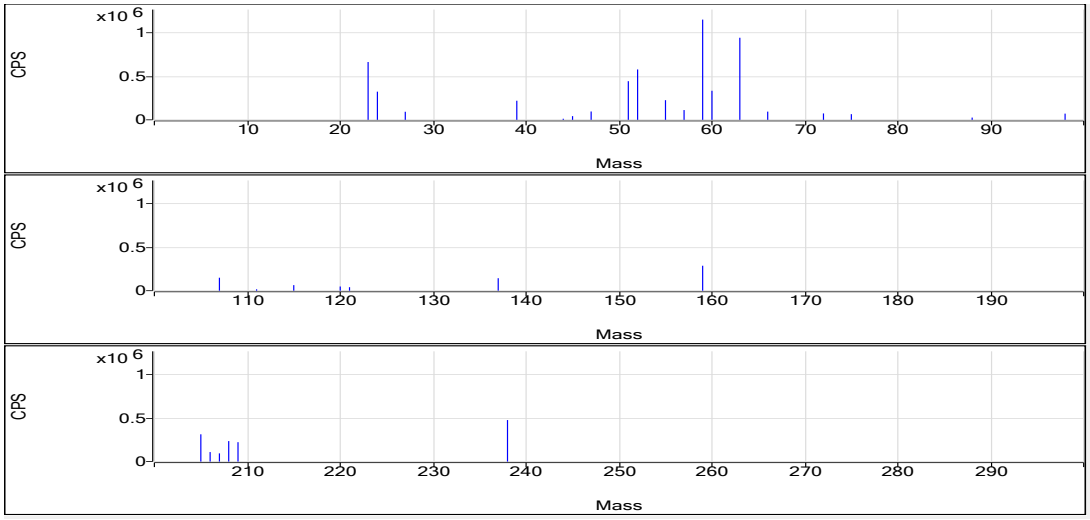


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	44.313	0.0583	87165.56	0.0013	4.694E-05
Be	9	1	No Gas	47.476	0.0624	91285.67	0.0013	4.694E-05
Be	9	1	No Gas	50.453	0.0663	95107.07	0.0013	4.694E-05
Se	78	2	H2	53.956	0.021	3310.38	0.0004	1.089E-05
Se	78	2	H2	49.08	0.0191	3213.03	0.0004	1.089E-05
Se	78	2	H2	50.77	0.0198	3281.04	0.0004	1.089E-05
Na	23	3	He	5233.588	9.0968	668228.74	0.0017	0.1065
Na	23	3	He	5217.658	9.0695	670604.68	0.0017	0.1065
Na	23	3	He	5156.242	8.964	663241.08	0.0017	0.1065
Mg	24	3	He	5264.138	4.443	326374.64	0.0008	0.004846
Mg	24	3	He	5227.313	4.412	326227.71	0.0008	0.004846
Mg	24	3	He	5171.689	4.3651	322973.08	0.0008	0.004846
Al	27	3	He	5301.079	1.2807	94077.75	0.0002	0.001063
Al	27	3	He	5222.394	1.2617	93292.68	0.0002	0.001063
Al	27	3	He	5147.902	1.2437	92023.76	0.0002	0.001063
K	39	3	He	5135.45	2.9795	218865.97	0.0006	0.1436
K	39	3	He	5139.879	2.9819	220487.73	0.0006	0.1436
K	39	3	He	5165.957	2.9963	221698.69	0.0006	0.1436
Ca	44	3	He	5231.918	0.1641	12055.35	0	0.001611
Ca	44	3	He	5419.675	0.1699	12565.92	0	0.001611
Ca	44	3	He	5433.451	0.1704	12605.87	0	0.001611
Ti	47	3	He	5247.548	1.3162	96688.25	0.0003	0.0002737
Ti	47	3	He	5220.26	1.3094	96818.81	0.0003	0.0002737
Ti	47	3	He	5125.163	1.2856	95118.16	0.0003	0.0002737
V	51	3	He	519.09	6.0795	446584.75	0.0117	0.007326
V	51	3	He	517.517	6.0611	448164.03	0.0117	0.007326
V	51	3	He	512.395	6.0012	444026.63	0.0117	0.007326
Cr	52	3	He	519.483	7.9357	582935.15	0.0152	0.02538
Cr	52	3	He	517.886	7.9114	584975.19	0.0152	0.02538
Cr	52	3	He	510.367	7.7969	576889.33	0.0152	0.02538
Mn	55	3	He	522.447	3.0976	227538.38	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	522.374	3.0971	229004.63	0.0059	0.01385
Mn	55	3	He	510.414	3.0265	223932.28	0.0059	0.01385
Fe	57	3	He	5249.719	1.5248	112010.60	0.0003	0.003918
Fe	57	3	He	5304.135	1.5406	113913.72	0.0003	0.003918
Fe	57	3	He	5216.506	1.5152	112110.46	0.0003	0.003918
Co	59	3	He	515.696	15.7372	1156014.98	0.0305	0.003084
Co	59	3	He	514.436	15.6988	1160783.89	0.0305	0.003084
Co	59	3	He	511.405	15.6063	1154706.70	0.0305	0.003084
Ni	60	3	He	518.308	4.5666	335453.35	0.0088	0.009003
Ni	60	3	He	519.344	4.5758	338335.46	0.0088	0.009003
Ni	60	3	He	510.097	4.4944	332542.65	0.0088	0.009003
Cu	63	3	He	517.99	12.9221	949223.58	0.0249	0.004937
Cu	63	3	He	516.915	12.8953	953491.63	0.0249	0.004937
Cu	63	3	He	509.311	12.7057	940090.30	0.0249	0.004937
Zn	66	3	He	522.939	1.2896	94728.86	0.0025	0.004836
Zn	66	3	He	521.838	1.2869	95152.40	0.0025	0.004836
Zn	66	3	He	516.623	1.2741	94267.22	0.0025	0.004836
As	75	3	He	507.558	0.8832	64875.02	0.0017	0.0004347
As	75	3	He	513.468	0.8934	66062.15	0.0017	0.0004347
As	75	3	He	505.73	0.88	65109.98	0.0017	0.0004347
Sr	88	3	He	51.898	0.4065	25443.34	0.0078	0.0007762
Sr	88	3	He	53.366	0.4179	26886.14	0.0078	0.0007762
Sr	88	3	He	49.763	0.3898	25142.70	0.0078	0.0007762
Mo	98	3	He	51.613	1.1371	71179.73	0.022	0.0005162
Mo	98	3	He	50.775	1.1187	71963.38	0.022	0.0005162
Mo	98	3	He	50.185	1.1057	71321.00	0.022	0.0005162
Ag	107	3	He	52.1	2.371	148418.19	0.0455	0.0004641
Ag	107	3	He	51.599	2.3483	151063.11	0.0455	0.0004641
Ag	107	3	He	51.046	2.3231	149851.05	0.0455	0.0004641
Cd	111	3	He	52.715	0.2531	15842.97	0.0048	5.152E-05
Cd	111	3	He	52.526	0.2522	16223.37	0.0048	5.152E-05
Cd	111	3	He	50.275	0.2414	15570.67	0.0048	5.152E-05
Sn	120	3	He	52.974	0.7709	48254.34	0.0143	0.01559
Sn	120	3	He	52.042	0.7576	48735.80	0.0143	0.01559
Sn	120	3	He	51.177	0.7453	48073.76	0.0143	0.01559
Sb	121	3	He	51.58	0.6401	40068.50	0.0124	0.000258
Sb	121	3	He	49.837	0.6185	39787.28	0.0124	0.000258
Sb	121	3	He	51.307	0.6367	41071.69	0.0124	0.000258
Ba	137	3	He	521.364	2.2812	142792.47	0.0044	0.000309
Ba	137	3	He	519.231	2.2718	146146.94	0.0044	0.000309
Ba	137	3	He	508.22	2.2237	143438.43	0.0044	0.000309
Tl	205	3	He	51.257	1.418	316288.20	0.0276	0.001005
Tl	205	3	He	50.3	1.3915	315954.74	0.0276	0.001005
Tl	205	3	He	50.973	1.4101	312130.72	0.0276	0.001005
Pb	208	3	He	53.853	1.9623	235340.33	0.0364	0.002176
Pb	208	3	He	53.687	1.9563	239327.36	0.0364	0.002176
Pb	208	3	He	54.613	1.99	234800.07	0.0364	0.002176
U	238	3	He	50.597	2.1287	474829.84	0.0421	0.00024
U	238	3	He	50.65	2.131	483851.48	0.0421	0.00024
U	238	3	He	51.436	2.164	479012.61	0.0421	0.00024
Sc	45	1	No Gas			3377673.07		
Sc	45	1	No Gas			3300141.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3238664.95		
Ge	72	1	No Gas			1495727.63		
Ge	72	1	No Gas			1462157.48		
Ge	72	1	No Gas			1433546.85		
Sc	45	2	H2			190921.54		
Sc	45	2	H2			210380.09		
Sc	45	2	H2			203047.65		
Ge	72	2	H2			157491.51		
Ge	72	2	H2			168039.10		
Ge	72	2	H2			165885.97		
In	115	2	H2			433315.03		
In	115	2	H2			456463.04		
In	115	2	H2			444796.17		
Sc	45	3	He			42532.18		
Sc	45	3	He			42953.77		
Sc	45	3	He			42321.81		
Ge	72	3	He			73457.36		
Ge	72	3	He			73940.97		
Ge	72	3	He			73989.76		
In	115	3	He			62972.59		
In	115	3	He			64709.98		
In	115	3	He			64880.39		
Tb	159	3	He			288355.09		
Tb	159	3	He			288420.09		
Tb	159	3	He			287987.75		
Bi	209	3	He			223057.36		
Bi	209	3	He			227057.93		
Bi	209	3	He			221352.83		

Quantitation Report

Data File Name	244_CCB.d
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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

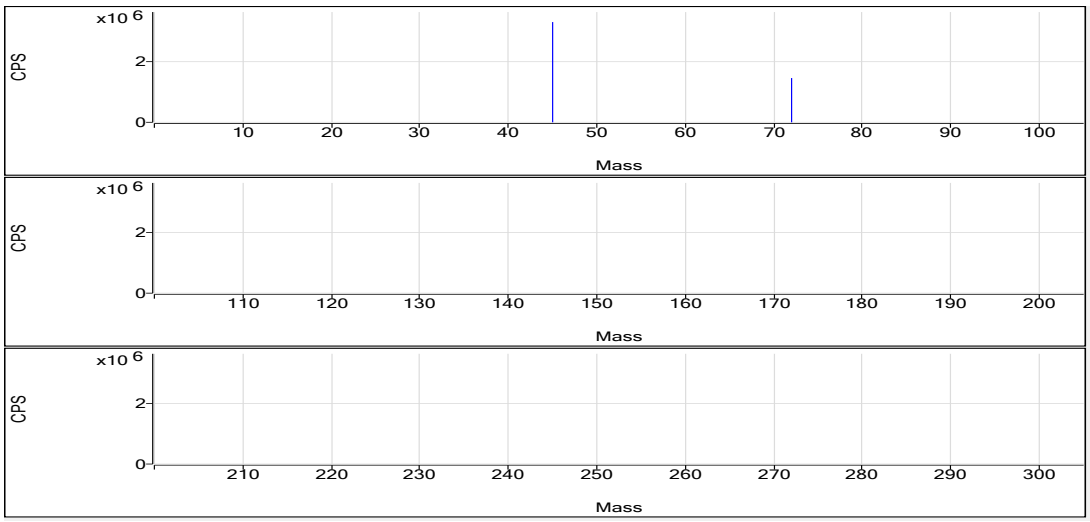
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.044	ppb	9.9	152.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.076	ppb	22.3	6.44	0.0000	Pulse	1.5000	3
Na	23	72	He	17.450	ppb	15.5	9946.97	0.1364	Pulse	0.1000	3
Mg	24	72	He	15.523	ppb	10.0	1306.77	0.0179	Pulse	0.1000	3
Al	27	72	He	45.791	ppb	12.8	883.39	0.0121	Pulse	0.1000	3
K	39	72	He	2.260	ppb	426.6	10560.77	0.1449	Pulse	0.1000	3
Ca	44	72	He	30.597	ppb	11.7	186.68	0.0026	Pulse	0.1000	3
Ti	47	72	He	2.363	ppb	56.4	63.33	0.0009	Pulse	0.1000	3
V	51	72	He	0.283	ppb	10.9	775.36	0.0106	Pulse	0.5000	3
Cr	52	72	He	0.174	ppb	61.1	2043.56	0.0280	Pulse	0.1000	3
Mn	55	72	He	1.968	ppb	14.2	1856.85	0.0255	Pulse	0.1000	3
Fe	57	72	He	75.682	ppb	6.0	1883.51	0.0258	Pulse	0.1000	3
Co	59	72	He	0.308	ppb	14.4	910.06	0.0125	Pulse	0.1000	3
Ni	60	72	He	1.226	ppb	13.5	1443.46	0.0198	Pulse	0.1000	3
Cu	63	72	He	0.389	ppb	14.4	1066.74	0.0146	Pulse	0.1000	3
Zn	66	72	He	3.605	ppb	29.1	996.74	0.0137	Pulse	0.1000	3
As	75	72	He	0.334	ppb	36.6	74.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.211	ppb	43.3	156.68	0.0024	Pulse	0.1000	3
Mo	98	115	He	0.047	ppb	63.9	100.00	0.0015	Pulse	0.1000	3
Ag	107	115	He	0.019	ppb	24.3	86.67	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.032	ppb	32.6	13.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.153	ppb	132.7	1150.10	0.0178	Pulse	0.1000	3
Sb	121	115	He	0.059	ppb	89.4	63.33	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.696	ppb	9.7	216.68	0.0034	Pulse	0.1000	3
Tl	205	209	He	0.150	ppb	16.7	1150.10	0.0052	Pulse	0.1000	3
Pb	208	209	He	2.065	ppb	3.5	17221.73	0.0773	Pulse	0.1000	3
U	238	209	He	0.030	ppb	23.6	333.35	0.0015	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3276317.25	1.6	101.1	Pulse	0.1000	3
No Gas	Ge	72	1446239.98	1.6	100.4	Pulse	0.1000	3
H2	Sc	45	195739.27	2.8	100.2	Pulse	0.1000	3
H2	Ge	72	159295.34	1.3	97.7	Pulse	0.1000	3
H2	In	115	439968.96	2.1	101.5	Pulse	0.1000	3
He	Sc	45	41549.74	2.5	103.9	Pulse	0.1000	3
He	Ge	72	72911.47	1.3	100.9	Pulse	0.1000	3
He	In	115	64637.59	2.0	100.1	Pulse	0.1000	3
He	Tb	159	287163.18	0.9	100.4	Pulse	0.1000	3
He	Bi	209	222743.11	0.9	100.2	Pulse	0.1000	3

No Gas



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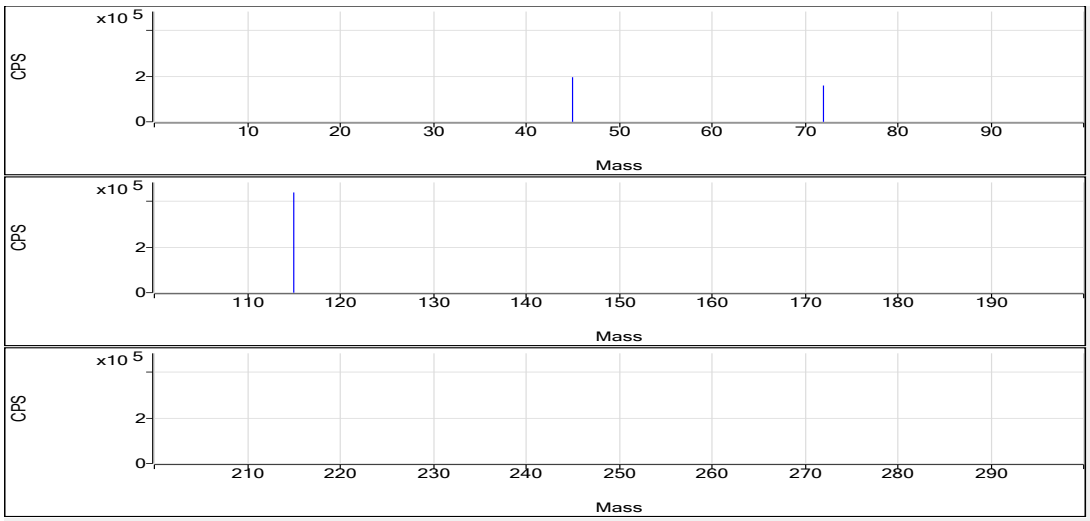
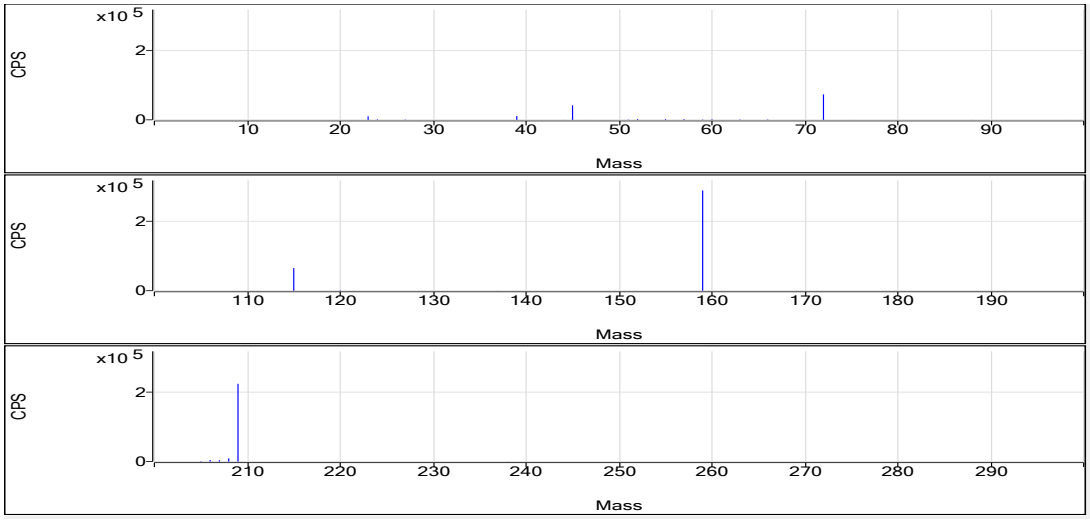


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.04	0.0001	146.00	0.0013	4.694E-05
Be	9	1	No Gas	0.044	0.0001	152.00	0.0013	4.694E-05
Be	9	1	No Gas	0.049	0.0001	158.00	0.0013	4.694E-05
Se	78	2	H2	0.081	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.057	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.09	0	7.33	0.0004	1.089E-05
Na	23	3	He	20.183	0.1411	10193.84	0.0017	0.1065
Na	23	3	He	17.386	0.1363	10083.73	0.0017	0.1065
Na	23	3	He	14.781	0.1318	9563.33	0.0017	0.1065
Mg	24	3	He	17.079	0.0192	1390.11	0.0008	0.004846
Mg	24	3	He	13.976	0.0166	1230.09	0.0008	0.004846
Mg	24	3	He	15.512	0.0179	1300.11	0.0008	0.004846
Al	27	3	He	51.232	0.0134	970.06	0.0002	0.001063
Al	27	3	He	46.564	0.0123	910.06	0.0002	0.001063
Al	27	3	He	39.577	0.0106	770.04	0.0002	0.001063
K	39	3	He	8.495	0.1483	10714.24	0.0006	0.1436
K	39	3	He	-8.844	0.1388	10263.85	0.0006	0.1436
K	39	3	He	7.128	0.1476	10704.21	0.0006	0.1436
Ca	44	3	He	32.829	0.0026	190.01	0	0.001611
Ca	44	3	He	26.486	0.0024	180.01	0	0.001611
Ca	44	3	He	32.476	0.0026	190.01	0	0.001611
Ti	47	3	He	2.221	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	3.76	0.0012	90.00	0.0003	0.0002737
Ti	47	3	He	1.108	0.0006	40.00	0.0003	0.0002737
V	51	3	He	0.28	0.0106	766.03	0.0117	0.007326
V	51	3	He	0.314	0.011	814.03	0.0117	0.007326
V	51	3	He	0.253	0.0103	746.02	0.0117	0.007326
Cr	52	3	He	0.297	0.0299	2160.27	0.0152	0.02538
Cr	52	3	He	0.109	0.027	2000.22	0.0152	0.02538
Cr	52	3	He	0.117	0.0272	1970.20	0.0152	0.02538
Mn	55	3	He	1.735	0.0241	1740.16	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.891	0.025	1850.18	0.0059	0.01385
Mn	55	3	He	2.278	0.0273	1980.20	0.0059	0.01385
Fe	57	3	He	78.235	0.0266	1920.18	0.0003	0.003918
Fe	57	3	He	70.478	0.0243	1800.16	0.0003	0.003918
Fe	57	3	He	78.331	0.0266	1930.20	0.0003	0.003918
Co	59	3	He	0.348	0.0137	990.07	0.0305	0.003084
Co	59	3	He	0.315	0.0127	940.07	0.0305	0.003084
Co	59	3	He	0.26	0.011	800.05	0.0305	0.003084
Ni	60	3	He	1.196	0.0195	1410.11	0.0088	0.009003
Ni	60	3	He	1.406	0.0214	1580.15	0.0088	0.009003
Ni	60	3	He	1.077	0.0185	1340.11	0.0088	0.009003
Cu	63	3	He	0.452	0.0162	1170.09	0.0249	0.004937
Cu	63	3	He	0.371	0.0142	1050.07	0.0249	0.004937
Cu	63	3	He	0.344	0.0135	980.06	0.0249	0.004937
Zn	66	3	He	4.456	0.0158	1140.09	0.0025	0.004836
Zn	66	3	He	2.434	0.0108	800.04	0.0025	0.004836
Zn	66	3	He	3.924	0.0145	1050.08	0.0025	0.004836
As	75	3	He	0.467	0.0012	90.00	0.0017	0.0004347
As	75	3	He	0.31	0.001	72.00	0.0017	0.0004347
As	75	3	He	0.226	0.0008	60.00	0.0017	0.0004347
Sr	88	3	He	0.184	0.0022	140.01	0.0078	0.0007762
Sr	88	3	He	0.312	0.0032	210.01	0.0078	0.0007762
Sr	88	3	He	0.135	0.0018	120.01	0.0078	0.0007762
Mo	98	3	He	0.027	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.081	0.0023	150.01	0.022	0.0005162
Mo	98	3	He	0.032	0.0012	80.00	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.02	0.0014	90.00	0.0455	0.0004641
Ag	107	3	He	0.023	0.0015	100.00	0.0455	0.0004641
Cd	111	3	He	0.042	0.0003	16.00	0.0048	5.152E-05
Cd	111	3	He	0.021	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.034	0.0002	14.00	0.0048	5.152E-05
Sn	120	3	He	0.04	0.0162	1020.08	0.0143	0.01559
Sn	120	3	He	0.389	0.0211	1380.13	0.0143	0.01559
Sn	120	3	He	0.032	0.016	1050.08	0.0143	0.01559
Sb	121	3	He	0.12	0.0017	110.00	0.0124	0.000258
Sb	121	3	He	0.029	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.028	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	0.762	0.0036	230.01	0.0044	0.000309
Ba	137	3	He	0.699	0.0034	220.01	0.0044	0.000309
Ba	137	3	He	0.628	0.0031	200.01	0.0044	0.000309
Tl	205	3	He	0.125	0.0045	990.07	0.0276	0.001005
Tl	205	3	He	0.176	0.0059	1300.11	0.0276	0.001005
Tl	205	3	He	0.15	0.0052	1160.12	0.0276	0.001005
Pb	208	3	He	2.039	0.0764	8803.29	0.0364	0.002176
Pb	208	3	He	2.146	0.0803	9353.61	0.0364	0.002176
Pb	208	3	He	2.009	0.0753	9213.51	0.0364	0.002176
U	238	3	He	0.022	0.0012	260.01	0.0421	0.00024
U	238	3	He	0.036	0.0018	390.02	0.0421	0.00024
U	238	3	He	0.031	0.0016	350.02	0.0421	0.00024
Sc	45	1	No Gas			3327775.58		
Sc	45	1	No Gas			3279889.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3221286.83		
Ge	72	1	No Gas			1470621.07		
Ge	72	1	No Gas			1442470.29		
Ge	72	1	No Gas			1425628.57		
Sc	45	2	H2			190867.69		
Sc	45	2	H2			201824.12		
Sc	45	2	H2			194525.99		
Ge	72	2	H2			156977.33		
Ge	72	2	H2			160970.93		
Ge	72	2	H2			159937.76		
In	115	2	H2			429466.28		
In	115	2	H2			446573.31		
In	115	2	H2			443867.30		
Sc	45	3	He			41529.79		
Sc	45	3	He			40506.47		
Sc	45	3	He			42612.96		
Ge	72	3	He			72231.47		
Ge	72	3	He			73969.86		
Ge	72	3	He			72533.08		
In	115	3	He			63133.56		
In	115	3	He			65332.49		
In	115	3	He			65473.62		
Tb	159	3	He			285063.82		
Tb	159	3	He			286403.34		
Tb	159	3	He			290022.38		
Bi	209	3	He			221302.61		
Bi	209	3	He			221871.50		
Bi	209	3	He			225055.23		

Quantitation Report

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Sample Name	410-136258-J-17-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

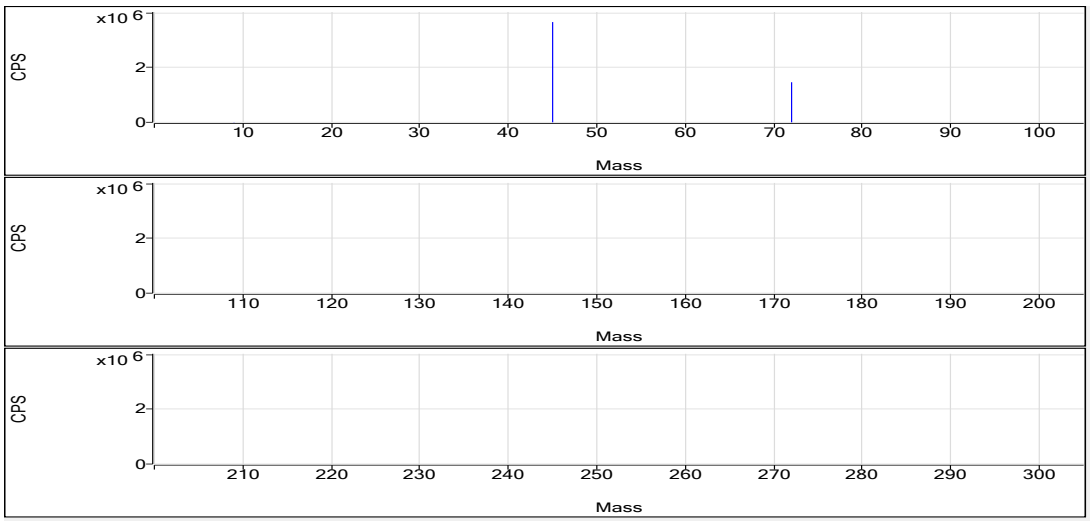
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	3.887	ppb	8.3	7556.60	0.0052	Pulse	0.5000	3
Se	78	72	H2	0.757	ppb	3.3	49.11	0.0003	Pulse	1.5000	3
Na	23	72	He	395.397	ppb	1.3	59212.16	0.7857	Pulse	0.1000	3
Mg	24	72	He	28363.475	ppb	0.8	1802632.89	23.9181	Pulse	0.1000	3
Al	27	72	He	99862.877	ppb	0.8	1816894.50	24.1074	Pulse	0.1000	3
K	39	72	He	11184.932	ppb	1.1	476311.69	6.3201	Pulse	0.1000	3
Ca	44	72	He	3697.659	ppb	2.1	8776.22	0.1165	Pulse	0.1000	3
Ti	47	72	He	628.115	ppb	5.1	11888.61	0.1578	Pulse	0.1000	3
V	51	72	He	140.801	ppb	0.9	124683.50	1.6544	Pulse	0.5000	3
Cr	52	72	He	108.262	ppb	1.6	126148.74	1.6739	Pulse	0.1000	3
Mn	55	72	He	4812.923	ppb	1.0	2142004.03	28.4218	Pulse	0.1000	3
Fe	57	72	He	144242.570	ppb	1.2	3149678.81	41.7931	Pulse	0.1000	3
Co	59	72	He	53.476	ppb	1.7	123189.44	1.6347	Pulse	0.1000	3
Ni	60	72	He	120.569	ppb	2.0	80577.20	1.0692	Pulse	0.1000	3
Cu	63	72	He	117.693	ppb	1.5	221553.53	2.9399	Pulse	0.1000	3
Zn	66	72	He	347.211	ppb	0.8	64655.24	0.8579	Pulse	0.1000	3
As	75	72	He	34.029	ppb	2.0	4492.73	0.0596	Pulse	0.5000	3
Sr	88	115	He	33.751	ppb	4.1	16873.82	0.2646	Pulse	0.1000	3
Mo	98	115	He	3.032	ppb	3.8	4294.14	0.0673	Pulse	0.1000	3
Ag	107	115	He	0.129	ppb	11.5	403.36	0.0063	Pulse	0.1000	3
Cd	111	115	He	0.420	ppb	2.5	132.00	0.0021	Pulse	0.5000	3
Sn	120	115	He	3.336	ppb	4.4	4030.73	0.0632	Pulse	0.1000	3
Sb	121	115	He	1.101	ppb	13.2	886.73	0.0139	Pulse	0.1000	3
Ba	137	115	He	400.173	ppb	1.9	111689.65	1.7510	Pulse	0.1000	3
Tl	205	209	He	0.709	ppb	1.3	4647.66	0.0206	Pulse	0.1000	3
Pb	208	209	He	66.789	ppb	0.5	549138.66	2.4331	Pulse	0.1000	3
U	238	209	He	3.943	ppb	1.9	37485.41	0.1661	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3671311.71	1.3	113.3	Pulse	0.1000	3
No Gas	Ge	72	1467168.05	1.6	101.9	Pulse	0.1000	3
H2	Sc	45	222331.73	2.1	113.8	Pulse	0.1000	3
H2	Ge	72	160714.66	1.9	98.6	Pulse	0.1000	3
H2	In	115	437775.49	2.7	101.0	Pulse	0.1000	3
He	Sc	45	46591.45	2.1	116.5	Pulse	0.1000	3
He	Ge	72	75371.10	1.2	104.3	Pulse	0.1000	3
He	In	115	63798.41	1.7	98.8	Pulse	0.1000	3
He	Tb	159	311548.87	0.5	108.9	Pulse	0.1000	3
He	Bi	209	225690.68	0.7	101.6	Pulse	0.1000	3

No Gas



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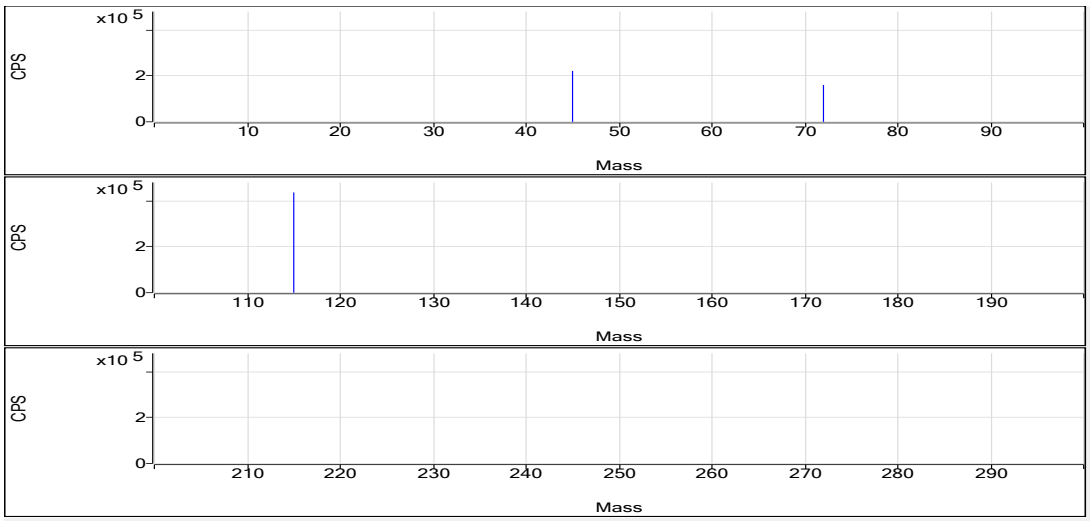
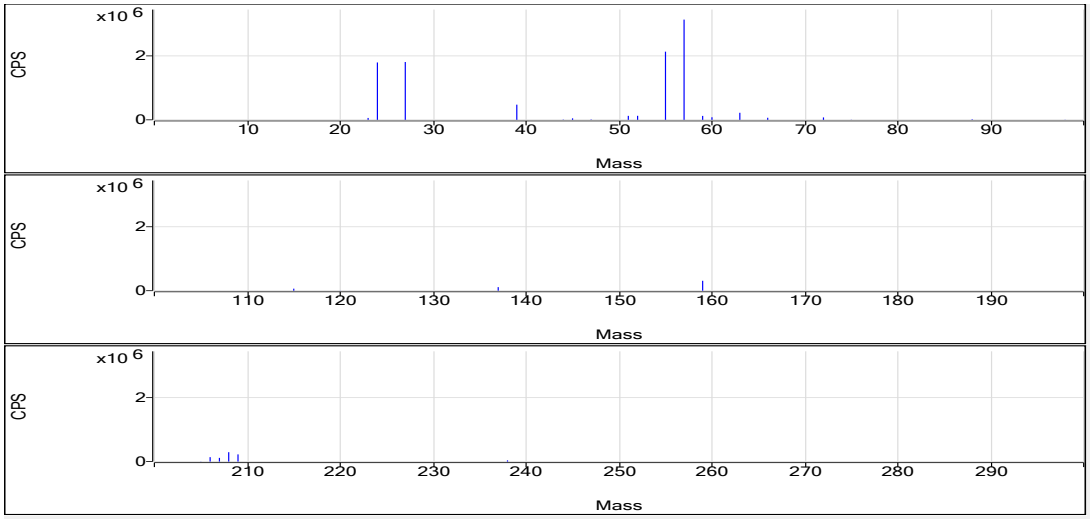


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	3.543	0.0047	7021.67	0.0013	4.694E-05
Be	9	1	No Gas	3.936	0.0052	7627.97	0.0013	4.694E-05
Be	9	1	No Gas	4.183	0.0055	8020.17	0.0013	4.694E-05
Se	78	2	H2	0.783	0.0003	50.00	0.0004	1.089E-05
Se	78	2	H2	0.733	0.0003	48.67	0.0004	1.089E-05
Se	78	2	H2	0.755	0.0003	48.67	0.0004	1.089E-05
Na	23	3	He	390.572	0.7774	59379.16	0.0017	0.1065
Na	23	3	He	400.595	0.7946	59248.75	0.0017	0.1065
Na	23	3	He	395.023	0.785	59008.57	0.0017	0.1065
Mg	24	3	He	28179.8	23.7633	1815107.32	0.0008	0.004846
Mg	24	3	He	28602.96	24.12	1798477.79	0.0008	0.004846
Mg	24	3	He	28307.664	23.8711	1794313.57	0.0008	0.004846
Al	27	3	He	98955.827	23.8884	1824666.22	0.0002	0.001063
Al	27	3	He	100205.193	24.19	1803694.82	0.0002	0.001063
Al	27	3	He	100427.611	24.2437	1822322.47	0.0002	0.001063
K	39	3	He	11062.759	6.2526	477593.47	0.0006	0.1436
K	39	3	He	11303.999	6.3858	476151.44	0.0006	0.1436
K	39	3	He	11188.037	6.3218	475190.15	0.0006	0.1436
Ca	44	3	He	3616.458	0.1139	8702.88	0	0.001611
Ca	44	3	He	3770.772	0.1187	8852.98	0	0.001611
Ca	44	3	He	3705.747	0.1167	8772.79	0	0.001611
Ti	47	3	He	603.184	0.1515	11575.05	0.0003	0.0002737
Ti	47	3	He	663.954	0.1668	12435.69	0.0003	0.0002737
Ti	47	3	He	617.206	0.1551	11655.08	0.0003	0.0002737
V	51	3	He	139.438	1.6384	125148.58	0.0117	0.007326
V	51	3	He	141.945	1.6678	124354.31	0.0117	0.007326
V	51	3	He	141.021	1.6569	124547.60	0.0117	0.007326
Cr	52	3	He	106.474	1.6467	125778.82	0.0152	0.02538
Cr	52	3	He	109.824	1.6977	126586.67	0.0152	0.02538
Cr	52	3	He	108.487	1.6773	126080.74	0.0152	0.02538
Mn	55	3	He	4758.321	28.0995	2146317.94	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4849.912	28.6401	2135507.62	0.0059	0.01385
Mn	55	3	He	4830.534	28.5257	2144186.53	0.0059	0.01385
Fe	57	3	He	142469.869	41.2795	3153048.39	0.0003	0.003918
Fe	57	3	He	146050.57	42.3169	3155301.52	0.0003	0.003918
Fe	57	3	He	144207.271	41.7829	3140686.52	0.0003	0.003918
Co	59	3	He	52.62	1.6086	122865.96	0.0305	0.003084
Co	59	3	He	54.439	1.664	124077.23	0.0305	0.003084
Co	59	3	He	53.368	1.6314	122625.13	0.0305	0.003084
Ni	60	3	He	119.224	1.0574	80765.40	0.0088	0.009003
Ni	60	3	He	123.399	1.0941	81578.95	0.0088	0.009003
Ni	60	3	He	119.084	1.0561	79387.26	0.0088	0.009003
Cu	63	3	He	115.755	2.8915	220863.06	0.0249	0.004937
Cu	63	3	He	119.168	2.9767	221949.98	0.0249	0.004937
Cu	63	3	He	118.156	2.9514	221847.54	0.0249	0.004937
Zn	66	3	He	346.59	0.8563	65408.73	0.0025	0.004836
Zn	66	3	He	350.268	0.8654	64524.64	0.0025	0.004836
Zn	66	3	He	344.776	0.8519	64032.36	0.0025	0.004836
As	75	3	He	33.434	0.0586	4474.72	0.0017	0.0004347
As	75	3	He	34.781	0.0609	4542.75	0.0017	0.0004347
As	75	3	He	33.872	0.0593	4460.73	0.0017	0.0004347
Sr	88	3	He	34.244	0.2685	17010.73	0.0078	0.0007762
Sr	88	3	He	32.188	0.2524	16409.99	0.0078	0.0007762
Sr	88	3	He	34.82	0.273	17200.75	0.0078	0.0007762
Mo	98	3	He	3.044	0.0676	4280.79	0.022	0.0005162
Mo	98	3	He	3.141	0.0697	4530.89	0.022	0.0005162
Mo	98	3	He	2.91	0.0646	4070.75	0.022	0.0005162
Ag	107	3	He	0.146	0.0071	450.03	0.0455	0.0004641
Ag	107	3	He	0.122	0.006	390.02	0.0455	0.0004641
Ag	107	3	He	0.119	0.0059	370.02	0.0455	0.0004641
Cd	111	3	He	0.417	0.0021	130.00	0.0048	5.152E-05
Cd	111	3	He	0.412	0.002	132.00	0.0048	5.152E-05
Cd	111	3	He	0.432	0.0021	134.00	0.0048	5.152E-05
Sn	120	3	He	3.313	0.0628	3980.71	0.0143	0.01559
Sn	120	3	He	3.492	0.0654	4250.81	0.0143	0.01559
Sn	120	3	He	3.204	0.0613	3860.66	0.0143	0.01559
Sb	121	3	He	1.073	0.0136	860.06	0.0124	0.000258
Sb	121	3	He	0.971	0.0123	800.06	0.0124	0.000258
Sb	121	3	He	1.259	0.0159	1000.07	0.0124	0.000258
Ba	137	3	He	406.921	1.7805	112818.84	0.0044	0.000309
Ba	137	3	He	392.061	1.7155	111539.07	0.0044	0.000309
Ba	137	3	He	401.536	1.7569	110711.03	0.0044	0.000309
Tl	205	3	He	0.718	0.0209	4731.00	0.0276	0.001005
Tl	205	3	He	0.699	0.0203	4550.94	0.0276	0.001005
Tl	205	3	He	0.708	0.0206	4661.03	0.0276	0.001005
Pb	208	3	He	67.174	2.4471	297445.82	0.0364	0.002176
Pb	208	3	He	66.674	2.4289	293506.46	0.0364	0.002176
Pb	208	3	He	66.519	2.4233	292232.91	0.0364	0.002176
U	238	3	He	3.887	0.1638	37154.93	0.0421	0.00024
U	238	3	He	4.028	0.1697	37966.63	0.0421	0.00024
U	238	3	He	3.914	0.1649	37334.66	0.0421	0.00024
Sc	45	1	No Gas			3715679.63		
Sc	45	1	No Gas			3676663.38		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3621592.13		
Ge	72	1	No Gas			1493301.23		
Ge	72	1	No Gas			1461538.42		
Ge	72	1	No Gas			1446664.51		
Sc	45	2	H2			218178.57		
Sc	45	2	H2			227415.19		
Sc	45	2	H2			221401.44		
Ge	72	2	H2			158383.39		
Ge	72	2	H2			164165.41		
Ge	72	2	H2			159595.17		
In	115	2	H2			428007.88		
In	115	2	H2			451020.62		
In	115	2	H2			434297.96		
Sc	45	3	He			46955.92		
Sc	45	3	He			45491.38		
Sc	45	3	He			47327.05		
Ge	72	3	He			76382.86		
Ge	72	3	He			74563.61		
Ge	72	3	He			75166.83		
In	115	3	He			63394.44		
In	115	3	He			65051.72		
In	115	3	He			63043.40		
Tb	159	3	He			309739.31		
Tb	159	3	He			312671.38		
Tb	159	3	He			312235.91		
Bi	209	3	He			226894.86		
Bi	209	3	He			223761.36		
Bi	209	3	He			226415.82		

Quantitation Report

Data File Name	246SMPL.d
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Acq Time	2023-08-10 19:05:15
Sample Name	410-136258-J-17-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

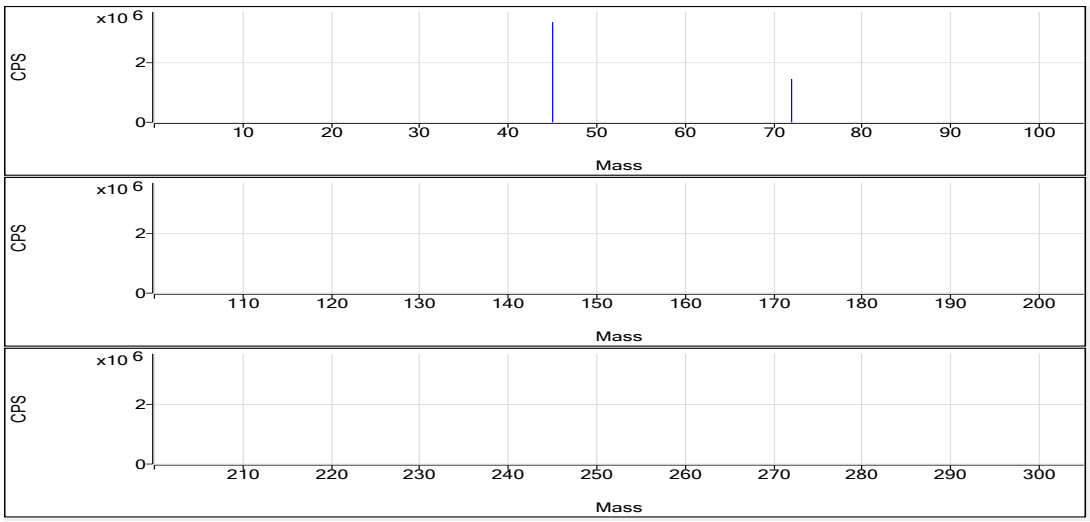
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.848	ppb	6.3	1674.77	0.0012	Pulse	0.5000	3
Se	78	72	H2	0.151	ppb	19.9	11.33	0.0001	Pulse	1.5000	3
Na	23	72	He	74.687	ppb	1.4	17650.94	0.2348	Pulse	0.1000	3
Mg	24	72	He	6103.069	ppb	0.1	387235.18	5.1504	Pulse	0.1000	3
Al	27	72	He	21399.964	ppb	0.5	388484.93	5.1669	Pulse	0.1000	3
K	39	72	He	2394.162	ppb	0.6	110200.47	1.4657	Pulse	0.1000	3
Ca	44	72	He	847.680	ppb	5.7	2100.23	0.0279	Pulse	0.1000	3
Ti	47	72	He	130.809	ppb	4.3	2486.96	0.0331	Pulse	0.1000	3
V	51	72	He	30.201	ppb	0.7	27112.39	0.3606	Pulse	0.5000	3
Cr	52	72	He	23.453	ppb	2.6	28762.52	0.3825	Pulse	0.1000	3
Mn	55	72	He	1029.999	ppb	0.4	458143.00	6.0933	Pulse	0.1000	3
Fe	57	72	He	30981.664	ppb	0.1	675157.65	8.9798	Pulse	0.1000	3
Co	59	72	He	11.682	ppb	2.9	27029.07	0.3595	Pulse	0.1000	3
Ni	60	72	He	26.332	ppb	1.9	18085.10	0.2405	Pulse	0.1000	3
Cu	63	72	He	25.884	ppb	1.0	48900.17	0.6504	Pulse	0.1000	3
Zn	66	72	He	81.687	ppb	1.7	15452.00	0.2055	Pulse	0.1000	3
As	75	72	He	7.319	ppb	8.3	989.37	0.0132	Pulse	0.5000	3
Sr	88	115	He	7.549	ppb	4.4	3833.97	0.0598	Pulse	0.1000	3
Mo	98	115	He	0.677	ppb	12.3	986.74	0.0154	Pulse	0.1000	3
Ag	107	115	He	0.039	ppb	28.5	143.34	0.0022	Pulse	0.1000	3
Cd	111	115	He	0.111	ppb	40.0	37.33	0.0006	Pulse	0.5000	3
Sn	120	115	He	0.824	ppb	21.0	1750.17	0.0273	Pulse	0.1000	3
Sb	121	115	He	0.240	ppb	28.3	206.68	0.0032	Pulse	0.1000	3
Ba	137	115	He	84.159	ppb	6.6	23594.29	0.3685	Pulse	0.1000	3
Tl	205	209	He	0.184	ppb	4.6	1366.80	0.0061	Pulse	0.1000	3
Pb	208	209	He	15.398	ppb	0.8	126255.64	0.5626	Pulse	0.1000	3
U	238	209	He	0.820	ppb	1.3	7795.98	0.0347	Pulse	0.1000	3

ISTD Table:

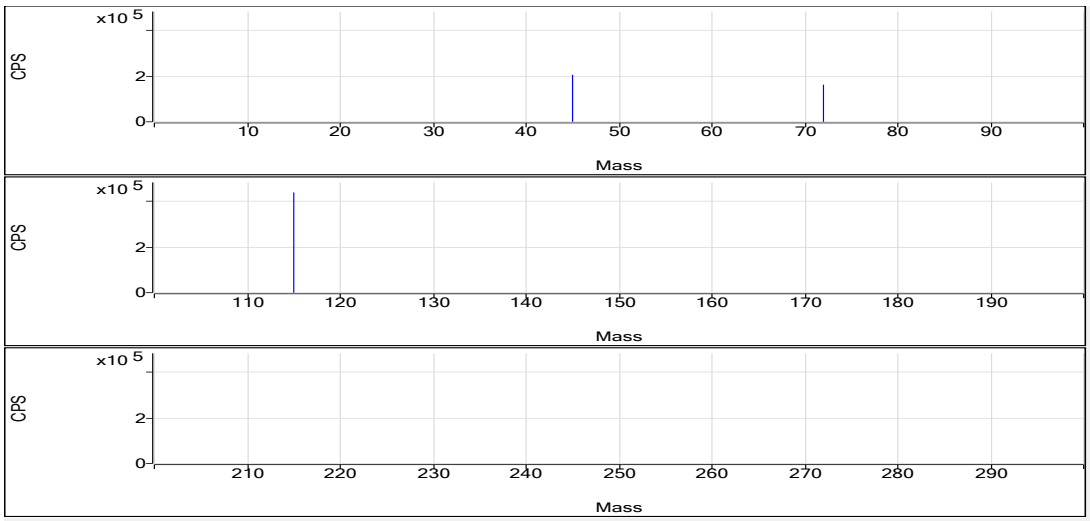
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3336549.64	2.1	102.9	Pulse	0.1000	3
No Gas	Ge	72	1442817.48	1.9	100.2	Pulse	0.1000	3
H2	Sc	45	206345.22	0.6	105.6	Pulse	0.1000	3
H2	Ge	72	163026.66	1.2	100.0	Pulse	0.1000	3
H2	In	115	439794.01	2.2	101.5	Pulse	0.1000	3
He	Sc	45	42893.46	0.8	107.3	Pulse	0.1000	3
He	Ge	72	75186.43	0.6	104.0	Pulse	0.1000	3
He	In	115	64090.33	2.1	99.2	Pulse	0.1000	3
He	Tb	159	294515.89	0.5	103.0	Pulse	0.1000	3
He	Bi	209	224403.50	0.6	101.0	Pulse	0.1000	3

No Gas

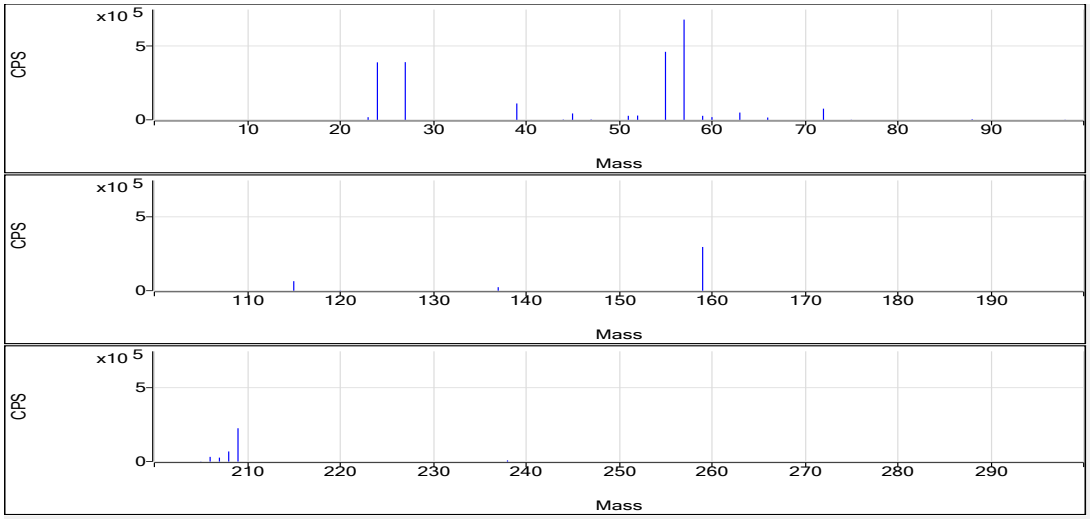


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.787	0.0011	1594.09	0.0013	4.694E-05
Be	9	1	No Gas	0.876	0.0012	1712.11	0.0013	4.694E-05
Be	9	1	No Gas	0.882	0.0012	1718.11	0.0013	4.694E-05
Se	78	2	H2	0.14	0.0001	10.67	0.0004	1.089E-05
Se	78	2	H2	0.128	0.0001	10.00	0.0004	1.089E-05
Se	78	2	H2	0.185	0.0001	13.33	0.0004	1.089E-05
Na	23	3	He	74.13	0.2338	17500.77	0.0017	0.1065
Na	23	3	He	74.029	0.2336	17520.75	0.0017	0.1065
Na	23	3	He	75.902	0.2368	17931.29	0.0017	0.1065
Mg	24	3	He	6103.792	5.151	385571.21	0.0008	0.004846
Mg	24	3	He	6109.611	5.1559	386666.40	0.0008	0.004846
Mg	24	3	He	6095.804	5.1442	389467.92	0.0008	0.004846
Al	27	3	He	21278.664	5.1376	384571.60	0.0002	0.001063
Al	27	3	He	21459.306	5.1812	388567.22	0.0002	0.001063
Al	27	3	He	21461.922	5.1818	392315.97	0.0002	0.001063
K	39	3	He	2409.091	1.474	110332.80	0.0006	0.1436
K	39	3	He	2392.839	1.465	109867.85	0.0006	0.1436
K	39	3	He	2380.556	1.4582	110400.77	0.0006	0.1436
Ca	44	3	He	890.189	0.0293	2190.24	0	0.001611
Ca	44	3	He	858.36	0.0283	2120.23	0	0.001611
Ca	44	3	He	794.489	0.0263	1990.23	0	0.001611
Ti	47	3	He	126.241	0.0319	2390.28	0.0003	0.0002737
Ti	47	3	He	137.17	0.0347	2600.32	0.0003	0.0002737
Ti	47	3	He	129.017	0.0326	2470.29	0.0003	0.0002737
V	51	3	He	30.434	0.3633	27197.19	0.0117	0.007326
V	51	3	He	30.147	0.36	26996.87	0.0117	0.007326
V	51	3	He	30.022	0.3585	27143.12	0.0117	0.007326
Cr	52	3	He	23.063	0.3766	28188.03	0.0152	0.02538
Cr	52	3	He	23.139	0.3777	28328.21	0.0152	0.02538
Cr	52	3	He	24.157	0.3932	29771.32	0.0152	0.02538
Mn	55	3	He	1028.4	6.0839	455405.62	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1027.219	6.0769	455741.75	0.0059	0.01385
Mn	55	3	He	1034.378	6.1192	463281.63	0.0059	0.01385
Fe	57	3	He	30933.191	8.9657	671121.55	0.0003	0.003918
Fe	57	3	He	31016.733	8.9899	674202.57	0.0003	0.003918
Fe	57	3	He	30995.066	8.9836	680148.82	0.0003	0.003918
Co	59	3	He	12.022	0.3699	27686.91	0.0305	0.003084
Co	59	3	He	11.338	0.349	26174.19	0.0305	0.003084
Co	59	3	He	11.685	0.3596	27226.12	0.0305	0.003084
Ni	60	3	He	26.903	0.2456	18382.12	0.0088	0.009003
Ni	60	3	He	26.122	0.2387	17901.59	0.0088	0.009003
Ni	60	3	He	25.971	0.2374	17971.59	0.0088	0.009003
Cu	63	3	He	26.038	0.6543	48973.61	0.0249	0.004937
Cu	63	3	He	26.021	0.6538	49034.30	0.0249	0.004937
Cu	63	3	He	25.593	0.6431	48692.59	0.0249	0.004937
Zn	66	3	He	83.29	0.2095	15678.92	0.0025	0.004836
Zn	66	3	He	80.576	0.2028	15208.43	0.0025	0.004836
Zn	66	3	He	81.196	0.2043	15468.65	0.0025	0.004836
As	75	3	He	7.708	0.0138	1036.05	0.0017	0.0004347
As	75	3	He	7.632	0.0137	1028.04	0.0017	0.0004347
As	75	3	He	6.616	0.0119	904.03	0.0017	0.0004347
Sr	88	3	He	7.603	0.0602	3850.66	0.0078	0.0007762
Sr	88	3	He	7.847	0.0621	4070.70	0.0078	0.0007762
Sr	88	3	He	7.196	0.057	3580.56	0.0078	0.0007762
Mo	98	3	He	0.694	0.0158	1010.08	0.022	0.0005162
Mo	98	3	He	0.586	0.0134	880.06	0.022	0.0005162
Mo	98	3	He	0.75	0.017	1070.08	0.022	0.0005162
Ag	107	3	He	0.048	0.0027	170.01	0.0455	0.0004641
Ag	107	3	He	0.027	0.0017	110.01	0.0455	0.0004641
Ag	107	3	He	0.042	0.0024	150.01	0.0455	0.0004641
Cd	111	3	He	0.094	0.0005	32.00	0.0048	5.152E-05
Cd	111	3	He	0.078	0.0004	28.00	0.0048	5.152E-05
Cd	111	3	He	0.162	0.0008	52.00	0.0048	5.152E-05
Sn	120	3	He	0.804	0.0271	1730.18	0.0143	0.01559
Sn	120	3	He	0.662	0.025	1640.14	0.0143	0.01559
Sn	120	3	He	1.007	0.0299	1880.19	0.0143	0.01559
Sb	121	3	He	0.294	0.0039	250.01	0.0124	0.000258
Sb	121	3	He	0.164	0.0023	150.01	0.0124	0.000258
Sb	121	3	He	0.262	0.0035	220.01	0.0124	0.000258
Ba	137	3	He	83.963	0.3676	23511.01	0.0044	0.000309
Ba	137	3	He	78.688	0.3446	22579.13	0.0044	0.000309
Ba	137	3	He	89.826	0.3933	24692.74	0.0044	0.000309
Tl	205	3	He	0.184	0.0061	1370.14	0.0276	0.001005
Tl	205	3	He	0.193	0.0063	1410.13	0.0276	0.001005
Tl	205	3	He	0.175	0.0059	1320.12	0.0276	0.001005
Pb	208	3	He	15.258	0.5575	68096.74	0.0364	0.002176
Pb	208	3	He	15.441	0.5642	67552.95	0.0364	0.002176
Pb	208	3	He	15.496	0.5662	68549.31	0.0364	0.002176
U	238	3	He	0.825	0.0349	7862.75	0.0421	0.00024
U	238	3	He	0.808	0.0342	7622.53	0.0421	0.00024
U	238	3	He	0.828	0.0351	7902.67	0.0421	0.00024
Sc	45	1	No Gas			3417302.76		
Sc	45	1	No Gas			3306439.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3285906.20		
Ge	72	1	No Gas			1474438.26		
Ge	72	1	No Gas			1428584.82		
Ge	72	1	No Gas			1425429.35		
Sc	45	2	H2			205392.26		
Sc	45	2	H2			207756.23		
Sc	45	2	H2			205887.16		
Ge	72	2	H2			163386.43		
Ge	72	2	H2			164782.58		
Ge	72	2	H2			160910.98		
In	115	2	H2			441672.06		
In	115	2	H2			448604.13		
In	115	2	H2			429105.85		
Sc	45	3	He			43174.00		
Sc	45	3	He			43013.74		
Sc	45	3	He			42492.64		
Ge	72	3	He			74854.20		
Ge	72	3	He			74995.39		
Ge	72	3	He			75709.69		
In	115	3	He			63966.35		
In	115	3	He			65544.36		
In	115	3	He			62801.24		
Tb	159	3	He			294880.50		
Tb	159	3	He			295878.26		
Tb	159	3	He			292788.92		
Bi	209	3	He			224995.95		
Bi	209	3	He			222814.43		
Bi	209	3	He			225400.11		

Quantitation Report

Data File Name	247SMPL.d
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Sample Name	410-136258-F-9-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

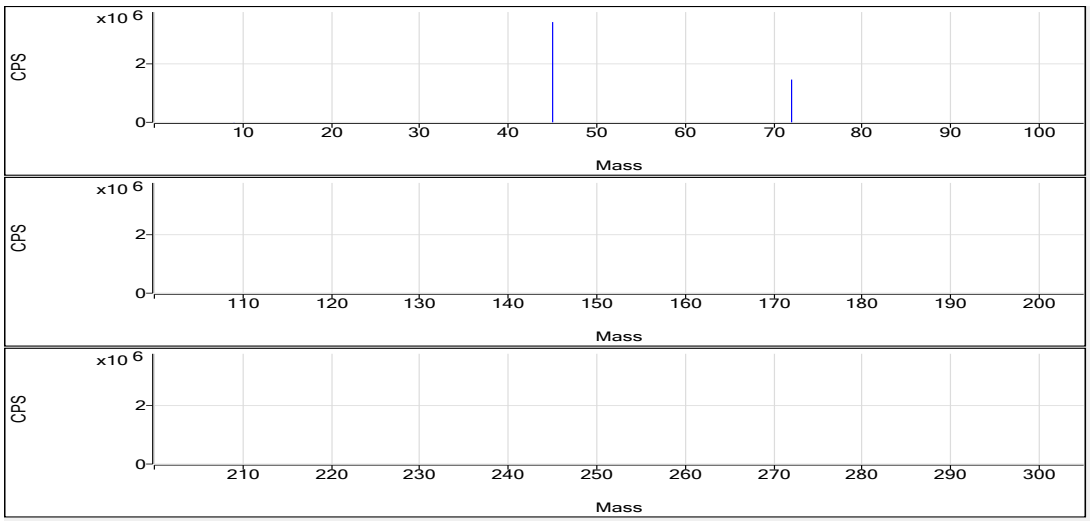
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	3.028	ppb	4.8	5874.51	0.0040	Pulse	0.5000	3
Se	78	72	H2	1.282	ppb	15.6	84.22	0.0005	Pulse	1.5000	3
Na	23	72	He	433.076	ppb	2.0	64389.31	0.8504	Pulse	0.1000	3
Mg	24	72	He	94168.270	ppb	1.2	6012157.41	79.3983	Analog	0.1000	3
Al	27	72	He	50537.881	ppb	1.6	923795.06	12.2006	Pulse	0.1000	3
K	39	72	He	9292.959	ppb	1.8	399419.46	5.2753	Pulse	0.1000	3
Ca	44	72	He	152746.506	ppb	1.4	359357.56	4.7459	Pulse	0.1000	3
Ti	47	72	He	291.300	ppb	6.1	5557.91	0.0733	Pulse	0.1000	3
V	51	72	He	166.425	ppb	1.8	147958.41	1.9541	Pulse	0.5000	3
Cr	52	72	He	69.477	ppb	2.7	82013.96	1.0833	Pulse	0.1000	3
Mn	55	72	He	4956.945	ppb	2.1	2216206.42	29.2718	Pulse	0.1000	3
Fe	57	72	He	79144.584	ppb	1.7	1736414.98	22.9333	Pulse	0.1000	3
Co	59	72	He	29.826	ppb	2.2	69131.18	0.9131	Pulse	0.1000	3
Ni	60	72	He	96.046	ppb	2.0	64638.29	0.8536	Pulse	0.1000	3
Cu	63	72	He	129.992	ppb	1.5	245823.45	3.2466	Pulse	0.1000	3
Zn	66	72	He	734.972	ppb	3.4	137058.33	1.8105	Pulse	0.1000	3
As	75	72	He	28.864	ppb	5.4	3831.87	0.0506	Pulse	0.5000	3
Sr	88	115	He	153.802	ppb	2.4	76086.75	1.2031	Pulse	0.1000	3
Mo	98	115	He	3.552	ppb	0.7	4981.06	0.0787	Pulse	0.1000	3
Ag	107	115	He	1.534	ppb	4.9	4440.83	0.0702	Pulse	0.1000	3
Cd	111	115	He	3.808	ppb	2.8	1160.06	0.0183	Pulse	0.5000	3
Sn	120	115	He	10.641	ppb	6.7	10574.33	0.1673	Pulse	0.1000	3
Sb	121	115	He	1.984	ppb	0.8	1573.48	0.0249	Pulse	0.1000	3
Ba	137	115	He	391.532	ppb	2.1	108353.98	1.7132	Pulse	0.1000	3
Tl	205	209	He	0.530	ppb	4.5	3493.94	0.0157	Pulse	0.1000	3
Pb	208	209	He	258.919	ppb	0.4	2103851.58	9.4261	Pulse	0.1000	3
U	238	209	He	2.169	ppb	1.5	20420.21	0.0915	Pulse	0.1000	3

ISTD Table:

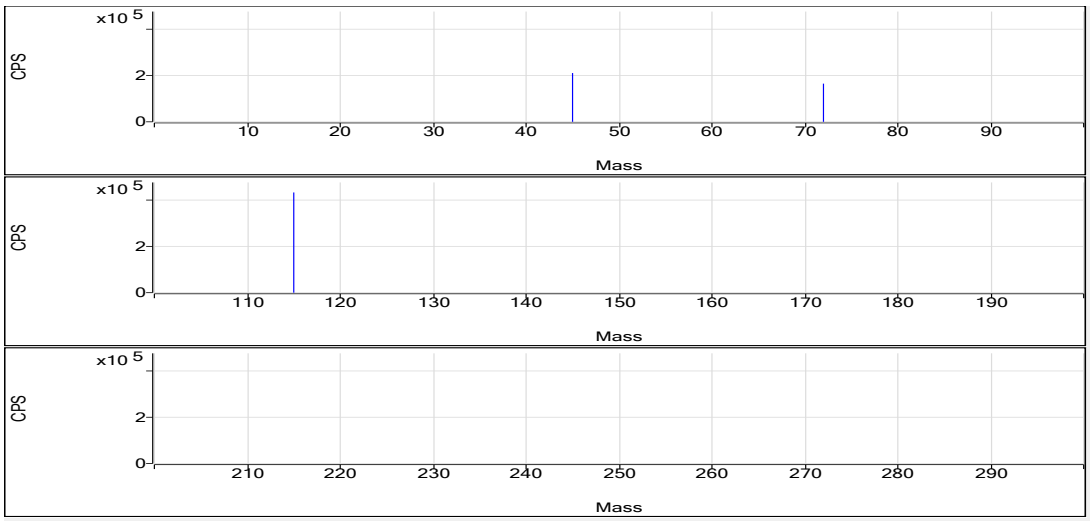
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3424888.91	1.6	105.7	Pulse	0.1000	3
No Gas	Ge	72	1460294.98	2.0	101.4	Pulse	0.1000	3
H2	Sc	45	211279.75	2.8	108.1	Pulse	0.1000	3
H2	Ge	72	165364.13	2.9	101.4	Pulse	0.1000	3
H2	In	115	434159.99	2.1	100.2	Pulse	0.1000	3
He	Sc	45	44110.66	0.7	110.3	Pulse	0.1000	3
He	Ge	72	75735.74	2.4	104.8	Pulse	0.1000	3
He	In	115	63268.49	2.5	98.0	Pulse	0.1000	3
He	Tb	159	305014.23	1.1	106.6	Pulse	0.1000	3
He	Bi	209	223196.20	0.5	100.5	Pulse	0.1000	3

No Gas

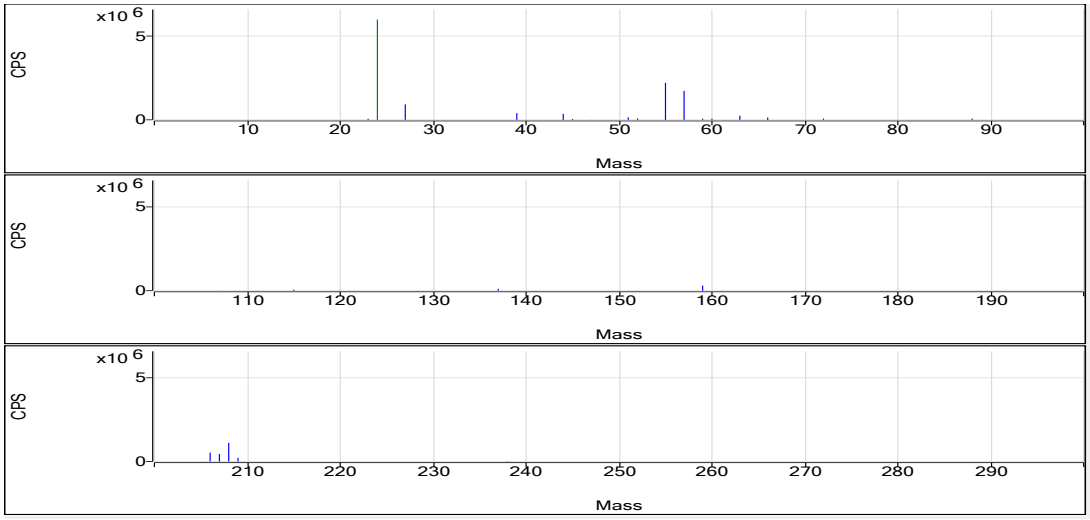


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	2.889	0.0038	5729.13	0.0013	4.694E-05
Be	9	1	No Gas	3.013	0.004	5833.16	0.0013	4.694E-05
Be	9	1	No Gas	3.181	0.0042	6061.25	0.0013	4.694E-05
Se	78	2	H2	1.5	0.0006	98.00	0.0004	1.089E-05
Se	78	2	H2	1.107	0.0004	75.33	0.0004	1.089E-05
Se	78	2	H2	1.238	0.0005	79.33	0.0004	1.089E-05
Na	23	3	He	430.641	0.8462	65112.47	0.0017	0.1065
Na	23	3	He	442.714	0.867	63867.12	0.0017	0.1065
Na	23	3	He	425.874	0.838	64188.34	0.0017	0.1065
Mg	24	3	He	93601.207	78.9202	6072517.41	0.0008	0.004846
Mg	24	3	He	95472.641	80.498	5930118.04	0.0008	0.004846
Mg	24	3	He	93430.962	78.7766	6033836.79	0.0008	0.004846
Al	27	3	He	50008.845	12.0729	928950.61	0.0002	0.001063
Al	27	3	He	51440.27	12.4184	914840.92	0.0002	0.001063
Al	27	3	He	50164.527	12.1105	927593.66	0.0002	0.001063
K	39	3	He	9196.326	5.222	401804.06	0.0006	0.1436
K	39	3	He	9487.375	5.3827	396530.85	0.0006	0.1436
K	39	3	He	9195.177	5.2213	399923.47	0.0006	0.1436
Ca	44	3	He	150840.414	4.6867	360617.92	0	0.001611
Ca	44	3	He	155040.114	4.8171	354868.32	0	0.001611
Ca	44	3	He	152358.991	4.7339	362586.44	0	0.001611
Ti	47	3	He	310.444	0.0781	6011.46	0.0003	0.0002737
Ti	47	3	He	275.025	0.0692	5101.08	0.0003	0.0002737
Ti	47	3	He	288.43	0.0726	5561.20	0.0003	0.0002737
V	51	3	He	165.577	1.9442	149596.77	0.0117	0.007326
V	51	3	He	169.707	1.9925	146784.41	0.0117	0.007326
V	51	3	He	163.991	1.9257	147494.06	0.0117	0.007326
Cr	52	3	He	67.891	1.0592	81498.52	0.0152	0.02538
Cr	52	3	He	71.504	1.1142	82080.53	0.0152	0.02538
Cr	52	3	He	69.036	1.0766	82462.84	0.0152	0.02538
Mn	55	3	He	4873.024	28.7765	2214208.87	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5071.446	29.9477	2206181.84	0.0059	0.01385
Mn	55	3	He	4926.365	29.0913	2228228.56	0.0059	0.01385
Fe	57	3	He	78060.26	22.6191	1740429.51	0.0003	0.003918
Fe	57	3	He	80616.399	23.3597	1720858.10	0.0003	0.003918
Fe	57	3	He	78757.093	22.821	1747957.32	0.0003	0.003918
Co	59	3	He	29.634	0.9072	69807.85	0.0305	0.003084
Co	59	3	He	30.564	0.9356	68923.41	0.0305	0.003084
Co	59	3	He	29.28	0.8964	68662.28	0.0305	0.003084
Ni	60	3	He	97.267	0.8643	66503.64	0.0088	0.009003
Ni	60	3	He	97.05	0.8624	63530.61	0.0088	0.009003
Ni	60	3	He	93.823	0.834	63880.61	0.0088	0.009003
Cu	63	3	He	129.031	3.2226	247963.26	0.0249	0.004937
Cu	63	3	He	132.266	3.3033	243345.19	0.0249	0.004937
Cu	63	3	He	128.68	3.2138	246161.89	0.0249	0.004937
Zn	66	3	He	734.851	1.8102	139285.38	0.0025	0.004836
Zn	66	3	He	760.211	1.8725	137943.00	0.0025	0.004836
Zn	66	3	He	709.854	1.7488	133946.60	0.0025	0.004836
As	75	3	He	28.584	0.0501	3858.55	0.0017	0.0004347
As	75	3	He	30.538	0.0535	3944.57	0.0017	0.0004347
As	75	3	He	27.469	0.0482	3692.50	0.0017	0.0004347
Sr	88	3	He	154.918	1.2118	76817.00	0.0078	0.0007762
Sr	88	3	He	156.882	1.2271	75631.54	0.0078	0.0007762
Sr	88	3	He	149.607	1.1703	75811.72	0.0078	0.0007762
Mo	98	3	He	3.53	0.0783	4961.03	0.022	0.0005162
Mo	98	3	He	3.58	0.0794	4891.05	0.022	0.0005162
Mo	98	3	He	3.545	0.0786	5091.11	0.022	0.0005162
Ag	107	3	He	1.484	0.068	4310.80	0.0455	0.0004641
Ag	107	3	He	1.62	0.0742	4570.83	0.0455	0.0004641
Ag	107	3	He	1.496	0.0686	4440.87	0.0455	0.0004641
Cd	111	3	He	3.907	0.0188	1192.06	0.0048	5.152E-05
Cd	111	3	He	3.694	0.0178	1096.05	0.0048	5.152E-05
Cd	111	3	He	3.823	0.0184	1192.06	0.0048	5.152E-05
Sn	120	3	He	10.65	0.1674	10614.34	0.0143	0.01559
Sn	120	3	He	11.35	0.1774	10934.63	0.0143	0.01559
Sn	120	3	He	9.922	0.1571	10174.02	0.0143	0.01559
Sb	121	3	He	2.001	0.0251	1590.14	0.0124	0.000258
Sb	121	3	He	1.981	0.0248	1530.13	0.0124	0.000258
Sb	121	3	He	1.97	0.0247	1600.16	0.0124	0.000258
Ba	137	3	He	393.402	1.7214	109119.65	0.0044	0.000309
Ba	137	3	He	398.649	1.7443	107506.60	0.0044	0.000309
Ba	137	3	He	382.546	1.6739	108435.70	0.0044	0.000309
Tl	205	3	He	0.556	0.0164	3670.66	0.0276	0.001005
Tl	205	3	He	0.524	0.0155	3460.58	0.0276	0.001005
Tl	205	3	He	0.51	0.0151	3350.57	0.0276	0.001005
Pb	208	3	He	258.509	9.4112	1126152.64	0.0364	0.002176
Pb	208	3	He	258.055	9.3947	1111126.78	0.0364	0.002176
Pb	208	3	He	260.193	9.4725	1130847.01	0.0364	0.002176
U	238	3	He	2.185	0.0922	20667.28	0.0421	0.00024
U	238	3	He	2.131	0.0899	20076.36	0.0421	0.00024
U	238	3	He	2.191	0.0924	20516.98	0.0421	0.00024
Sc	45	1	No Gas			3488050.89		
Sc	45	1	No Gas			3392919.32		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3393696.51		
Ge	72	1	No Gas			1490876.23		
Ge	72	1	No Gas			1455842.79		
Ge	72	1	No Gas			1434165.92		
Sc	45	2	H2			208230.27		
Sc	45	2	H2			217986.11		
Sc	45	2	H2			207622.87		
Ge	72	2	H2			164673.24		
Ge	72	2	H2			170425.95		
Ge	72	2	H2			160993.19		
In	115	2	H2			430712.06		
In	115	2	H2			444472.92		
In	115	2	H2			427294.99		
Sc	45	3	He			44398.28		
Sc	45	3	He			44147.56		
Sc	45	3	He			43786.14		
Ge	72	3	He			76945.06		
Ge	72	3	He			73667.91		
Ge	72	3	He			76594.24		
In	115	3	He			63474.29		
In	115	3	He			61717.83		
In	115	3	He			64860.78		
Tb	159	3	He			301956.05		
Tb	159	3	He			304629.62		
Tb	159	3	He			308457.01		
Bi	209	3	He			224218.30		
Bi	209	3	He			223395.93		
Bi	209	3	He			221974.37		

Quantitation Report

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Acq Time	2023-08-10 19:09:14
Sample Name	410-136258-F-9-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

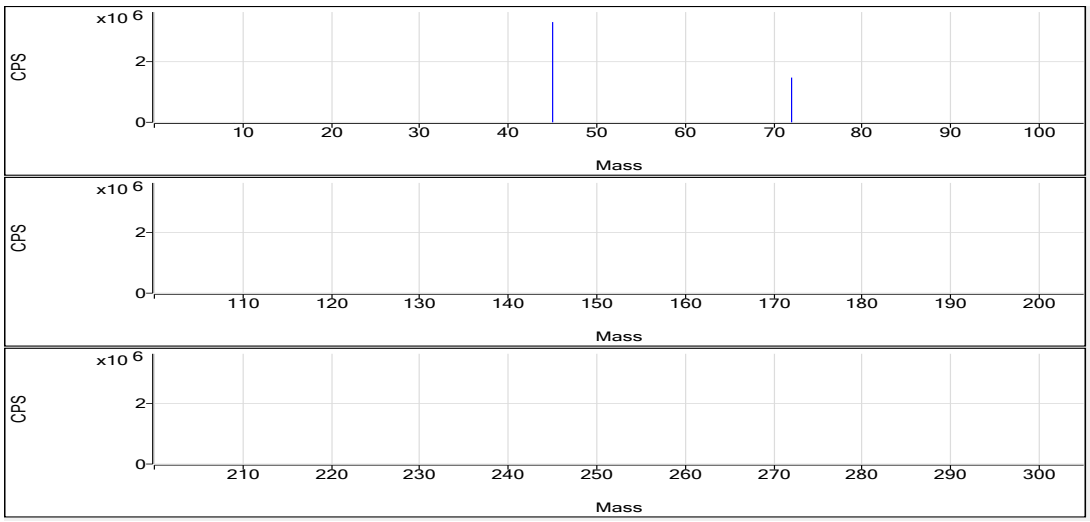
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.579	ppb	4.9	1192.06	0.0008	Pulse	0.5000	3
Se	78	72	H2	0.316	ppb	16.1	22.00	0.0001	Pulse	1.5000	3
Na	23	72	He	74.625	ppb	4.3	17751.11	0.2346	Pulse	0.1000	3
Mg	24	72	He	18012.510	ppb	1.4	1149204.59	15.1912	Pulse	0.1000	3
Al	27	72	He	10016.947	ppb	0.4	183007.12	2.4191	Pulse	0.1000	3
K	39	72	He	1865.442	ppb	1.1	88793.63	1.1738	Pulse	0.1000	3
Ca	44	72	He	30525.777	ppb	1.0	71846.48	0.9497	Pulse	0.1000	3
Ti	47	72	He	61.994	ppb	2.0	1196.76	0.0158	Pulse	0.1000	3
V	51	72	He	32.892	ppb	1.5	29660.67	0.3921	Pulse	0.5000	3
Cr	52	72	He	14.446	ppb	1.0	18562.35	0.2454	Pulse	0.1000	3
Mn	55	72	He	977.846	ppb	1.9	437652.77	5.7855	Pulse	0.1000	3
Fe	57	72	He	15905.242	ppb	2.2	348871.68	4.6119	Pulse	0.1000	3
Co	59	72	He	6.018	ppb	1.4	14123.96	0.1867	Pulse	0.1000	3
Ni	60	72	He	20.404	ppb	5.9	14250.82	0.1884	Pulse	0.1000	3
Cu	63	72	He	26.339	ppb	2.4	50057.47	0.6617	Pulse	0.1000	3
Zn	66	72	He	147.353	ppb	1.7	27754.12	0.3668	Pulse	0.1000	3
As	75	72	He	5.653	ppb	2.5	776.70	0.0103	Pulse	0.5000	3
Sr	88	115	He	30.582	ppb	2.5	15292.01	0.2398	Pulse	0.1000	3
Mo	98	115	He	0.726	ppb	3.0	1053.41	0.0165	Pulse	0.1000	3
Ag	107	115	He	0.305	ppb	4.6	916.74	0.0144	Pulse	0.1000	3
Cd	111	115	He	0.750	ppb	5.8	232.67	0.0037	Pulse	0.5000	3
Sn	120	115	He	2.134	ppb	6.2	2933.75	0.0460	Pulse	0.1000	3
Sb	121	115	He	0.429	ppb	18.8	356.68	0.0056	Pulse	0.1000	3
Ba	137	115	He	77.513	ppb	2.2	21640.95	0.3394	Pulse	0.1000	3
Tl	205	209	He	0.113	ppb	9.3	930.07	0.0041	Pulse	0.1000	3
Pb	208	209	He	51.771	ppb	1.0	423645.68	1.8865	Pulse	0.1000	3
U	238	209	He	0.415	ppb	2.7	3970.76	0.0177	Pulse	0.1000	3

ISTD Table:

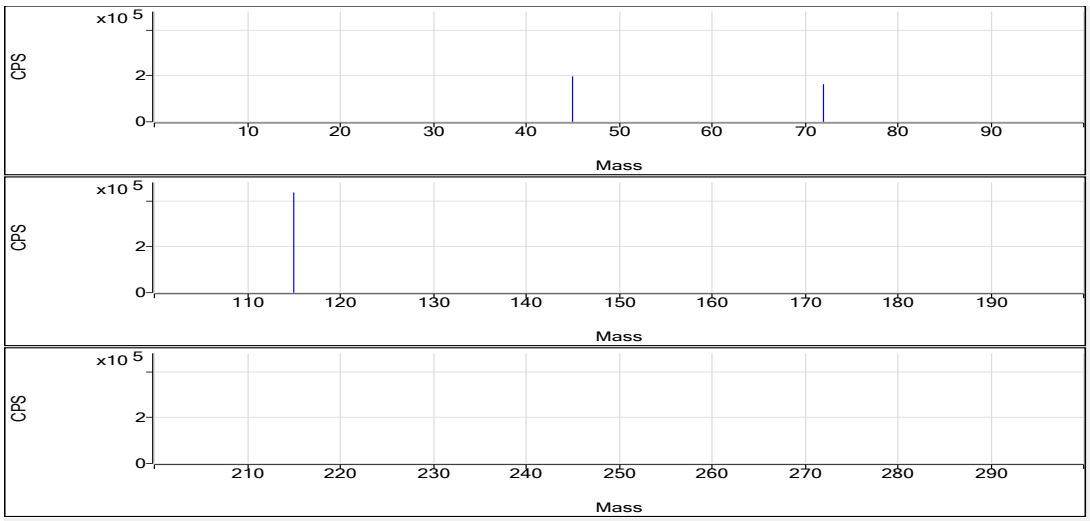
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3306863.49	2.1	102.0	Pulse	0.1000	3
No Gas	Ge	72	1475099.98	2.1	102.5	Pulse	0.1000	3
H2	Sc	45	198366.68	2.0	101.5	Pulse	0.1000	3
H2	Ge	72	164247.61	1.0	100.8	Pulse	0.1000	3
H2	In	115	437522.91	0.6	101.0	Pulse	0.1000	3
He	Sc	45	42522.29	0.8	106.3	Pulse	0.1000	3
He	Ge	72	75652.25	0.7	104.7	Pulse	0.1000	3
He	In	115	63786.51	2.8	98.8	Pulse	0.1000	3
He	Tb	159	288683.86	0.4	100.9	Pulse	0.1000	3
He	Bi	209	224572.03	0.7	101.1	Pulse	0.1000	3

No Gas

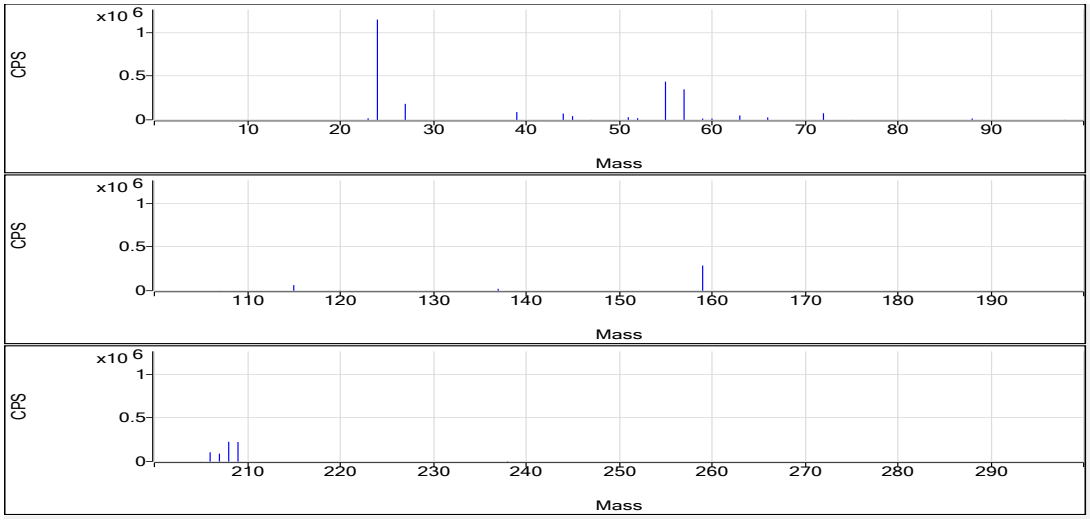


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.579	0.0008	1218.06	0.0013	4.694E-05
Be	9	1	No Gas	0.551	0.0008	1132.05	0.0013	4.694E-05
Be	9	1	No Gas	0.608	0.0008	1226.06	0.0013	4.694E-05
Se	78	2	H2	0.373	0.0002	25.33	0.0004	1.089E-05
Se	78	2	H2	0.303	0.0001	21.33	0.0004	1.089E-05
Se	78	2	H2	0.273	0.0001	19.33	0.0004	1.089E-05
Na	23	3	He	77.813	0.2401	18201.53	0.0017	0.1065
Na	23	3	He	74.68	0.2347	17621.08	0.0017	0.1065
Na	23	3	He	71.381	0.2291	17430.71	0.0017	0.1065
Mg	24	3	He	17733.772	14.9562	1133682.01	0.0008	0.004846
Mg	24	3	He	18249.603	15.3911	1155342.25	0.0008	0.004846
Mg	24	3	He	18054.156	15.2263	1158589.51	0.0008	0.004846
Al	27	3	He	9977.861	2.4097	182652.38	0.0002	0.001063
Al	27	3	He	10063.269	2.4303	182430.06	0.0002	0.001063
Al	27	3	He	10009.712	2.4173	183938.92	0.0002	0.001063
K	39	3	He	1861.758	1.1717	88816.87	0.0006	0.1436
K	39	3	He	1887.387	1.1859	89018.57	0.0006	0.1436
K	39	3	He	1847.18	1.1637	88545.44	0.0006	0.1436
Ca	44	3	He	30400.977	0.9459	71696.32	0	0.001611
Ca	44	3	He	30871.083	0.9605	72097.63	0	0.001611
Ca	44	3	He	30305.271	0.9429	71745.49	0	0.001611
Ti	47	3	He	62.041	0.0158	1200.09	0.0003	0.0002737
Ti	47	3	He	63.19	0.0161	1210.10	0.0003	0.0002737
Ti	47	3	He	60.751	0.0155	1180.08	0.0003	0.0002737
V	51	3	He	32.499	0.3875	29371.45	0.0117	0.007326
V	51	3	He	33.427	0.3984	29902.47	0.0117	0.007326
V	51	3	He	32.75	0.3904	29708.09	0.0117	0.007326
Cr	52	3	He	14.615	0.2479	18792.61	0.0152	0.02538
Cr	52	3	He	14.397	0.2446	18362.10	0.0152	0.02538
Cr	52	3	He	14.328	0.2436	18532.33	0.0152	0.02538
Mn	55	3	He	963.393	5.7002	432076.01	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	998.977	5.9102	443655.11	0.0059	0.01385
Mn	55	3	He	971.168	5.7461	437227.18	0.0059	0.01385
Fe	57	3	He	15598.765	4.5231	342851.87	0.0003	0.003918
Fe	57	3	He	16283.955	4.7216	354430.78	0.0003	0.003918
Fe	57	3	He	15833.005	4.591	349332.38	0.0003	0.003918
Co	59	3	He	6.003	0.1862	14117.34	0.0305	0.003084
Co	59	3	He	6.111	0.1895	14227.37	0.0305	0.003084
Co	59	3	He	5.941	0.1843	14027.16	0.0305	0.003084
Ni	60	3	He	19.721	0.1824	13827.01	0.0088	0.009003
Ni	60	3	He	21.804	0.2007	15068.20	0.0088	0.009003
Ni	60	3	He	19.687	0.1821	13857.24	0.0088	0.009003
Cu	63	3	He	25.971	0.6526	49465.64	0.0249	0.004937
Cu	63	3	He	27.069	0.68	51040.98	0.0249	0.004937
Cu	63	3	He	25.976	0.6527	49665.80	0.0249	0.004937
Zn	66	3	He	145.418	0.3621	27446.86	0.0025	0.004836
Zn	66	3	He	146.48	0.3647	27376.63	0.0025	0.004836
Zn	66	3	He	150.161	0.3737	28438.87	0.0025	0.004836
As	75	3	He	5.697	0.0103	784.03	0.0017	0.0004347
As	75	3	He	5.495	0.01	750.03	0.0017	0.0004347
As	75	3	He	5.765	0.0105	796.03	0.0017	0.0004347
Sr	88	3	He	31.401	0.2462	15198.62	0.0078	0.0007762
Sr	88	3	He	29.913	0.2346	15138.54	0.0078	0.0007762
Sr	88	3	He	30.431	0.2387	15538.87	0.0078	0.0007762
Mo	98	3	He	0.72	0.0164	1010.07	0.022	0.0005162
Mo	98	3	He	0.751	0.017	1100.09	0.022	0.0005162
Mo	98	3	He	0.709	0.0161	1050.08	0.022	0.0005162
Ag	107	3	He	0.292	0.0138	850.06	0.0455	0.0004641
Ag	107	3	He	0.32	0.015	970.08	0.0455	0.0004641
Ag	107	3	He	0.304	0.0143	930.07	0.0455	0.0004641
Cd	111	3	He	0.779	0.0038	234.00	0.0048	5.152E-05
Cd	111	3	He	0.771	0.0038	242.00	0.0048	5.152E-05
Cd	111	3	He	0.7	0.0034	222.00	0.0048	5.152E-05
Sn	120	3	He	2.237	0.0475	2930.40	0.0143	0.01559
Sn	120	3	He	1.983	0.0439	2830.41	0.0143	0.01559
Sn	120	3	He	2.182	0.0467	3040.44	0.0143	0.01559
Sb	121	3	He	0.358	0.0047	290.01	0.0124	0.000258
Sb	121	3	He	0.516	0.0067	430.02	0.0124	0.000258
Sb	121	3	He	0.413	0.0054	350.02	0.0124	0.000258
Ba	137	3	He	79.393	0.3476	21457.31	0.0044	0.000309
Ba	137	3	He	77.11	0.3377	21787.80	0.0044	0.000309
Ba	137	3	He	76.035	0.3329	21677.74	0.0044	0.000309
Tl	205	3	He	0.111	0.0041	910.06	0.0276	0.001005
Tl	205	3	He	0.104	0.0039	870.07	0.0276	0.001005
Tl	205	3	He	0.125	0.0045	1010.07	0.0276	0.001005
Pb	208	3	He	51.512	1.8771	227193.34	0.0364	0.002176
Pb	208	3	He	52.379	1.9086	227219.20	0.0364	0.002176
Pb	208	3	He	51.423	1.8738	225956.70	0.0364	0.002176
U	238	3	He	0.422	0.018	4020.73	0.0421	0.00024
U	238	3	He	0.421	0.0179	4010.79	0.0421	0.00024
U	238	3	He	0.402	0.0171	3880.76	0.0421	0.00024
Sc	45	1	No Gas			3383701.51		
Sc	45	1	No Gas			3290333.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3246555.26		
Ge	72	1	No Gas			1509154.20		
Ge	72	1	No Gas			1467475.60		
Ge	72	1	No Gas			1448670.13		
Sc	45	2	H2			195904.29		
Sc	45	2	H2			202846.81		
Sc	45	2	H2			196348.94		
Ge	72	2	H2			162357.50		
Ge	72	2	H2			165622.69		
Ge	72	2	H2			164762.63		
In	115	2	H2			434678.12		
In	115	2	H2			440305.62		
In	115	2	H2			437584.99		
Sc	45	3	He			42923.17		
Sc	45	3	He			42291.67		
Sc	45	3	He			42352.02		
Ge	72	3	He			75800.05		
Ge	72	3	He			75065.53		
Ge	72	3	He			76091.17		
In	115	3	He			61746.43		
In	115	3	He			64549.61		
In	115	3	He			65132.16		
Tb	159	3	He			289394.47		
Tb	159	3	He			289238.71		
Tb	159	3	He			287418.41		
Bi	209	3	He			223694.18		
Bi	209	3	He			223648.86		
Bi	209	3	He			226373.06		

Quantitation Report

Data File Name	249SMPL.d
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Acq Time	2023-08-10 19:11:13
Sample Name	410-136577-H-18-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

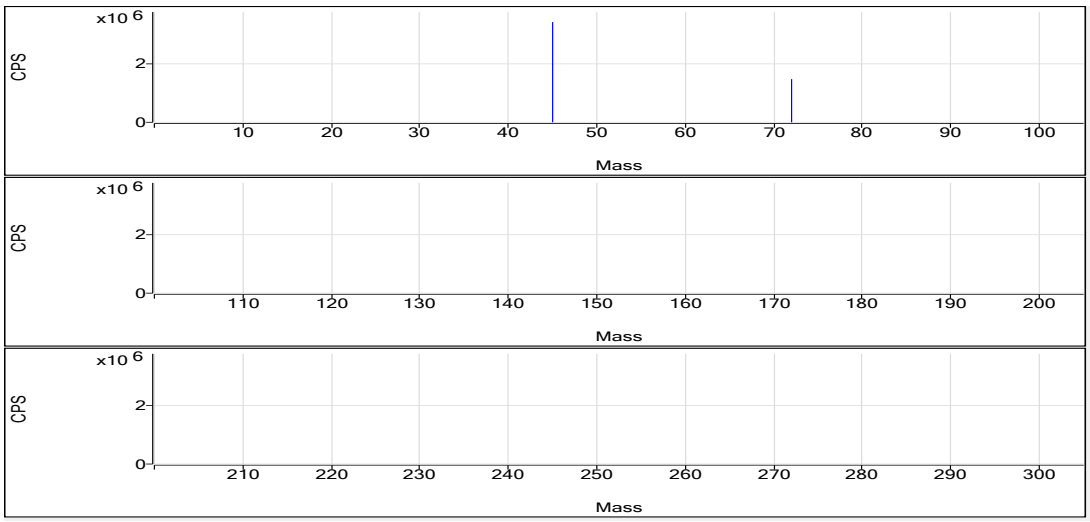
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.242	ppb	4.4	2488.22	0.0017	Pulse	0.5000	3
Se	78	72	H2	0.165	ppb	28.0	12.22	0.0001	Pulse	1.5000	3
Na	23	72	He	882.922	ppb	1.5	121775.91	1.6232	Pulse	0.1000	3
Mg	24	72	He	25558.616	ppb	1.3	1617029.66	21.5534	Pulse	0.1000	3
Al	27	72	He	21582.576	ppb	0.9	390958.24	5.2110	Pulse	0.1000	3
K	39	72	He	3553.364	ppb	1.4	157990.07	2.1059	Pulse	0.1000	3
Ca	44	72	He	34796.319	ppb	1.0	81211.63	1.0824	Pulse	0.1000	3
Ti	47	72	He	2042.405	ppb	1.0	38448.08	0.5125	Pulse	0.1000	3
V	51	72	He	112.407	ppb	0.9	99202.08	1.3222	Pulse	0.5000	3
Cr	52	72	He	51.380	ppb	2.4	60600.08	0.8078	Pulse	0.1000	3
Mn	55	72	He	503.372	ppb	1.9	223939.90	2.9850	Pulse	0.1000	3
Fe	57	72	He	47332.964	ppb	1.2	1029113.24	13.7170	Pulse	0.1000	3
Co	59	72	He	13.054	ppb	1.3	30112.08	0.4014	Pulse	0.1000	3
Ni	60	72	He	32.469	ppb	2.3	22097.37	0.2945	Pulse	0.1000	3
Cu	63	72	He	90.081	ppb	1.2	168904.04	2.2513	Pulse	0.1000	3
Zn	66	72	He	82.764	ppb	3.4	15618.93	0.2082	Pulse	0.1000	3
As	75	72	He	6.613	ppb	5.4	895.37	0.0119	Pulse	0.5000	3
Sr	88	115	He	33.152	ppb	1.3	16600.14	0.2599	Pulse	0.1000	3
Mo	98	115	He	0.788	ppb	16.5	1140.09	0.0179	Pulse	0.1000	3
Ag	107	115	He	0.130	ppb	15.4	406.69	0.0064	Pulse	0.1000	3
Cd	111	115	He	0.276	ppb	19.5	88.00	0.0014	Pulse	0.5000	3
Sn	120	115	He	4.573	ppb	6.9	5161.16	0.0808	Pulse	0.1000	3
Sb	121	115	He	0.749	ppb	4.0	610.04	0.0095	Pulse	0.1000	3
Ba	137	115	He	102.302	ppb	2.1	28603.68	0.4479	Pulse	0.1000	3
Tl	205	209	He	0.148	ppb	11.1	1136.76	0.0051	Pulse	0.1000	3
Pb	208	209	He	42.122	ppb	0.2	343158.84	1.5353	Pulse	0.1000	3
U	238	209	He	2.539	ppb	1.0	23922.75	0.1070	Pulse	0.1000	3

ISTD Table:

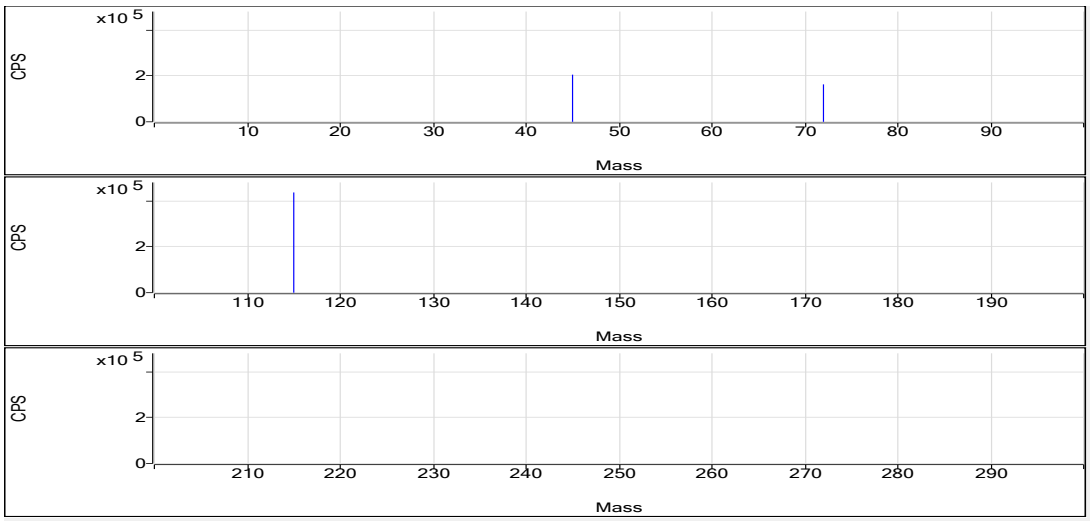
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3444957.34	2.4	106.3	Pulse	0.1000	3
No Gas	Ge	72	1483363.26	2.5	103.0	Pulse	0.1000	3
H2	Sc	45	205173.06	3.4	105.0	Pulse	0.1000	3
H2	Ge	72	162926.67	2.7	99.9	Pulse	0.1000	3
H2	In	115	436057.90	3.9	100.6	Pulse	0.1000	3
He	Sc	45	44207.31	1.0	110.6	Pulse	0.1000	3
He	Ge	72	75028.66	0.7	103.8	Pulse	0.1000	3
He	In	115	63862.90	1.1	98.9	Pulse	0.1000	3
He	Tb	159	295685.68	1.3	103.4	Pulse	0.1000	3
He	Bi	209	223514.34	0.1	100.6	Pulse	0.1000	3

No Gas

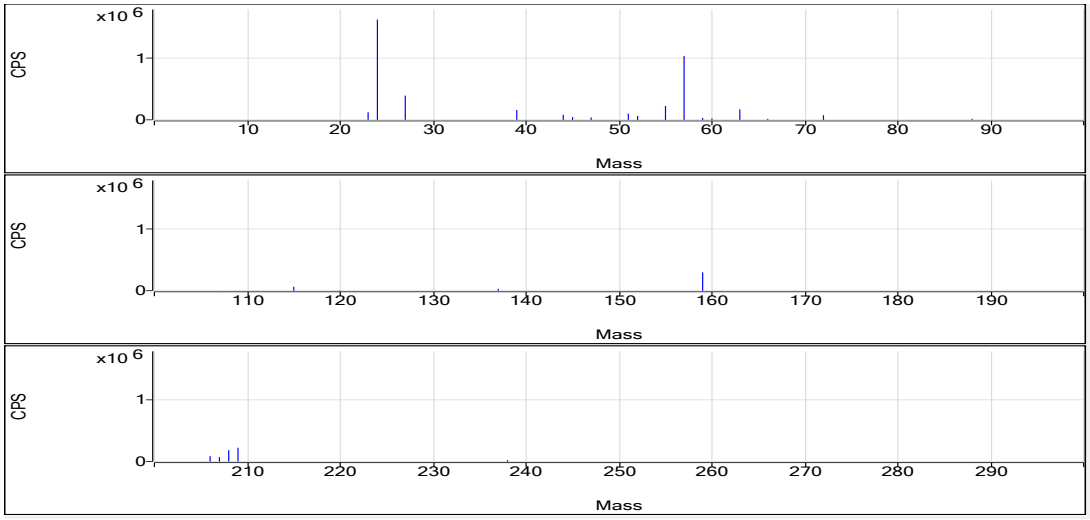


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.18	0.0016	2420.21	0.0013	4.694E-05
Be	9	1	No Gas	1.262	0.0017	2544.23	0.0013	4.694E-05
Be	9	1	No Gas	1.282	0.0017	2500.22	0.0013	4.694E-05
Se	78	2	H2	0.21	0.0001	14.67	0.0004	1.089E-05
Se	78	2	H2	0.168	0.0001	12.67	0.0004	1.089E-05
Se	78	2	H2	0.118	0.0001	9.33	0.0004	1.089E-05
Na	23	3	He	892.463	1.6395	122481.15	0.0017	0.1065
Na	23	3	He	867.748	1.5971	120736.92	0.0017	0.1065
Na	23	3	He	888.555	1.6328	122109.66	0.0017	0.1065
Mg	24	3	He	25782.397	21.742	1624221.07	0.0008	0.004846
Mg	24	3	He	25188.469	21.2413	1605797.32	0.0008	0.004846
Mg	24	3	He	25704.984	21.6768	1621070.60	0.0008	0.004846
Al	27	3	He	21792.844	5.2617	393073.35	0.0002	0.001063
Al	27	3	He	21390.294	5.1646	390429.76	0.0002	0.001063
Al	27	3	He	21564.59	5.2066	389371.60	0.0002	0.001063
K	39	3	He	3587.33	2.1246	158717.10	0.0006	0.1436
K	39	3	He	3496.358	2.0744	156818.18	0.0006	0.1436
K	39	3	He	3576.403	2.1186	158434.94	0.0006	0.1436
Ca	44	3	He	34945.631	1.087	81204.79	0	0.001611
Ca	44	3	He	35063.017	1.0907	82451.91	0	0.001611
Ca	44	3	He	34380.309	1.0695	79978.19	0	0.001611
Ti	47	3	He	2061.547	0.5173	38642.02	0.0003	0.0002737
Ti	47	3	He	2020.761	0.507	38331.08	0.0003	0.0002737
Ti	47	3	He	2044.908	0.5131	38371.14	0.0003	0.0002737
V	51	3	He	113.383	1.3336	99629.26	0.0117	0.007326
V	51	3	He	111.341	1.3098	99015.88	0.0117	0.007326
V	51	3	He	112.498	1.3233	98961.11	0.0117	0.007326
Cr	52	3	He	51.612	0.8113	60606.66	0.0152	0.02538
Cr	52	3	He	50.022	0.7871	59502.35	0.0152	0.02538
Cr	52	3	He	52.507	0.8249	61691.24	0.0152	0.02538
Mn	55	3	He	511.605	3.0336	226619.90	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	492.703	2.922	220896.81	0.0059	0.01385
Mn	55	3	He	505.809	2.9994	224303.00	0.0059	0.01385
Fe	57	3	He	47825.379	13.8596	1035372.95	0.0003	0.003918
Fe	57	3	He	46710.9	13.5368	1023350.45	0.0003	0.003918
Fe	57	3	He	47462.611	13.7545	1028616.31	0.0003	0.003918
Co	59	3	He	13.176	0.4051	30262.15	0.0305	0.003084
Co	59	3	He	12.854	0.3953	29881.94	0.0305	0.003084
Co	59	3	He	13.131	0.4037	30192.15	0.0305	0.003084
Ni	60	3	He	31.639	0.2872	21456.32	0.0088	0.009003
Ni	60	3	He	32.669	0.2963	22397.75	0.0088	0.009003
Ni	60	3	He	33.097	0.3	22438.04	0.0088	0.009003
Cu	63	3	He	90.833	2.2701	169582.54	0.0249	0.004937
Cu	63	3	He	88.892	2.2216	167952.15	0.0249	0.004937
Cu	63	3	He	90.519	2.2622	169177.42	0.0249	0.004937
Zn	66	3	He	85.153	0.214	15989.48	0.0025	0.004836
Zn	66	3	He	83.475	0.2099	15869.12	0.0025	0.004836
Zn	66	3	He	79.665	0.2006	14998.19	0.0025	0.004836
As	75	3	He	6.6	0.0119	890.03	0.0017	0.0004347
As	75	3	He	6.261	0.0113	856.03	0.0017	0.0004347
As	75	3	He	6.978	0.0126	940.04	0.0017	0.0004347
Sr	88	3	He	33.38	0.2617	16570.07	0.0078	0.0007762
Sr	88	3	He	32.673	0.2562	16289.78	0.0078	0.0007762
Sr	88	3	He	33.402	0.2619	16940.56	0.0078	0.0007762
Mo	98	3	He	0.895	0.0202	1280.11	0.022	0.0005162
Mo	98	3	He	0.826	0.0187	1190.10	0.022	0.0005162
Mo	98	3	He	0.644	0.0147	950.07	0.022	0.0005162
Ag	107	3	He	0.153	0.0074	470.02	0.0455	0.0004641
Ag	107	3	He	0.118	0.0058	370.02	0.0455	0.0004641
Ag	107	3	He	0.119	0.0059	380.02	0.0455	0.0004641
Cd	111	3	He	0.233	0.0012	74.00	0.0048	5.152E-05
Cd	111	3	He	0.337	0.0017	106.00	0.0048	5.152E-05
Cd	111	3	He	0.26	0.0013	84.00	0.0048	5.152E-05
Sn	120	3	He	4.369	0.0779	4931.08	0.0143	0.01559
Sn	120	3	He	4.412	0.0785	4991.11	0.0143	0.01559
Sn	120	3	He	4.937	0.086	5561.29	0.0143	0.01559
Sb	121	3	He	0.718	0.0092	580.04	0.0124	0.000258
Sb	121	3	He	0.753	0.0096	610.03	0.0124	0.000258
Sb	121	3	He	0.777	0.0099	640.04	0.0124	0.000258
Ba	137	3	He	103.255	0.452	28620.42	0.0044	0.000309
Ba	137	3	He	99.861	0.4372	27798.73	0.0044	0.000309
Ba	137	3	He	103.791	0.4544	29391.88	0.0044	0.000309
Tl	205	3	He	0.154	0.0053	1180.10	0.0276	0.001005
Tl	205	3	He	0.129	0.0046	1020.07	0.0276	0.001005
Tl	205	3	He	0.159	0.0054	1210.10	0.0276	0.001005
Pb	208	3	He	42.168	1.537	183380.37	0.0364	0.002176
Pb	208	3	He	42.154	1.5365	184174.02	0.0364	0.002176
Pb	208	3	He	42.042	1.5324	183087.75	0.0364	0.002176
U	238	3	He	2.565	0.1081	24203.41	0.0421	0.00024
U	238	3	He	2.534	0.1068	23842.47	0.0421	0.00024
U	238	3	He	2.517	0.1061	23722.36	0.0421	0.00024
Sc	45	1	No Gas			3534724.63		
Sc	45	1	No Gas			3432510.57		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3367636.82		
Ge	72	1	No Gas			1515000.13		
Ge	72	1	No Gas			1491513.10		
Ge	72	1	No Gas			1443576.54		
Sc	45	2	H2			197316.95		
Sc	45	2	H2			210702.57		
Sc	45	2	H2			207499.65		
Ge	72	2	H2			158028.55		
Ge	72	2	H2			166402.19		
Ge	72	2	H2			164349.26		
In	115	2	H2			417616.67		
In	115	2	H2			450908.94		
In	115	2	H2			439648.08		
Sc	45	3	He			43785.98		
Sc	45	3	He			44177.60		
Sc	45	3	He			44658.34		
Ge	72	3	He			74704.22		
Ge	72	3	He			75597.94		
Ge	72	3	He			74783.81		
In	115	3	He			63353.70		
In	115	3	He			63625.56		
In	115	3	He			64730.22		
Tb	159	3	He			294469.21		
Tb	159	3	He			292553.80		
Tb	159	3	He			300034.04		
Bi	209	3	He			223805.54		
Bi	209	3	He			223189.90		
Bi	209	3	He			223547.59		

Quantitation Report

Data File Name	250SMPL.d
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Sample Name	410-136577-H-18-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

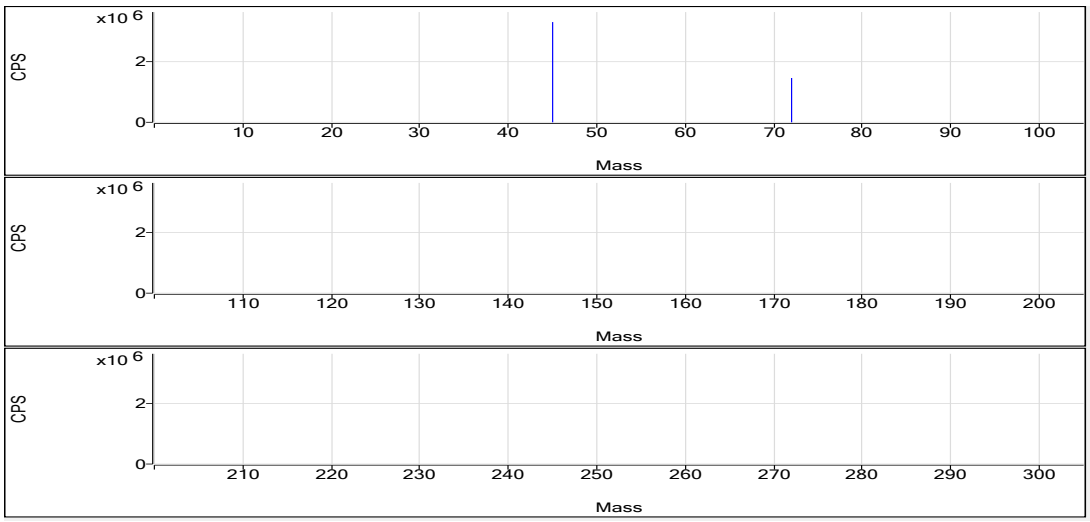
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.253	ppb	6.3	558.01	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.028	ppb	87.9	3.56	0.0000	Pulse	1.5000	3
Na	23	72	He	175.480	ppb	3.8	30421.84	0.4079	Pulse	0.1000	3
Mg	24	72	He	5251.851	ppb	1.1	330645.72	4.4327	Pulse	0.1000	3
Al	27	72	He	4402.141	ppb	0.5	79348.91	1.0637	Pulse	0.1000	3
K	39	72	He	736.413	ppb	6.0	41041.30	0.5503	Pulse	0.1000	3
Ca	44	72	He	7095.460	ppb	2.9	16556.52	0.2220	Pulse	0.1000	3
Ti	47	72	He	430.507	ppb	6.0	8075.82	0.1082	Pulse	0.1000	3
V	51	72	He	22.971	ppb	1.1	20589.83	0.2760	Pulse	0.5000	3
Cr	52	72	He	10.518	ppb	3.4	13840.34	0.1855	Pulse	0.1000	3
Mn	55	72	He	103.978	ppb	2.8	46805.94	0.6276	Pulse	0.1000	3
Fe	57	72	He	9762.013	ppb	1.9	211240.86	2.8321	Pulse	0.1000	3
Co	59	72	He	2.748	ppb	0.3	6484.99	0.0869	Pulse	0.1000	3
Ni	60	72	He	7.768	ppb	2.6	5768.02	0.0773	Pulse	0.1000	3
Cu	63	72	He	18.799	ppb	0.8	35340.46	0.4737	Pulse	0.1000	3
Zn	66	72	He	19.660	ppb	1.7	3964.01	0.0531	Pulse	0.1000	3
As	75	72	He	1.280	ppb	16.3	198.67	0.0027	Pulse	0.5000	3
Sr	88	115	He	6.793	ppb	1.9	3470.53	0.0539	Pulse	0.1000	3
Mo	98	115	He	0.151	ppb	24.9	246.68	0.0038	Pulse	0.1000	3
Ag	107	115	He	0.038	ppb	17.2	140.01	0.0022	Pulse	0.1000	3
Cd	111	115	He	0.093	ppb	24.9	32.00	0.0005	Pulse	0.5000	3
Sn	120	115	He	0.972	ppb	4.0	1896.87	0.0294	Pulse	0.1000	3
Sb	121	115	He	0.184	ppb	37.7	163.34	0.0025	Pulse	0.1000	3
Ba	137	115	He	21.168	ppb	1.0	5984.86	0.0929	Pulse	0.1000	3
Tl	205	209	He	0.046	ppb	9.2	510.02	0.0023	Pulse	0.1000	3
Pb	208	209	He	9.379	ppb	0.9	77023.95	0.3435	Pulse	0.1000	3
U	238	209	He	0.510	ppb	0.9	4864.44	0.0217	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3331770.68	1.1	102.8	Pulse	0.1000	3
No Gas	Ge	72	1472323.16	0.9	102.3	Pulse	0.1000	3
H2	Sc	45	199643.22	2.5	102.2	Pulse	0.1000	3
H2	Ge	72	164150.95	3.3	100.7	Pulse	0.1000	3
H2	In	115	435868.56	1.8	100.6	Pulse	0.1000	3
He	Sc	45	42355.15	0.8	105.9	Pulse	0.1000	3
He	Ge	72	74597.17	1.2	103.2	Pulse	0.1000	3
He	In	115	64410.38	0.8	99.7	Pulse	0.1000	3
He	Tb	159	288546.27	0.8	100.9	Pulse	0.1000	3
He	Bi	209	224200.35	0.1	100.9	Pulse	0.1000	3

No Gas



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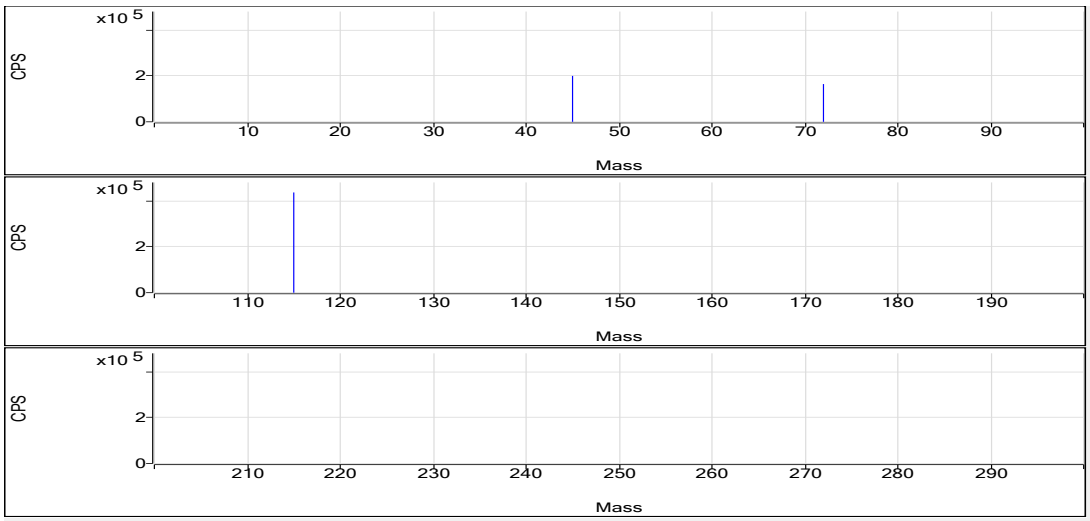
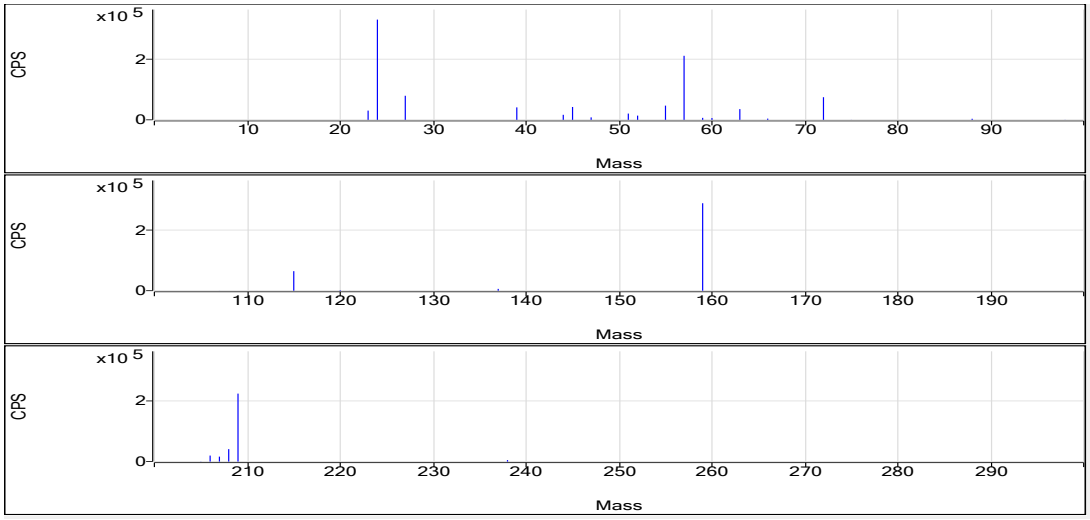


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.249	0.0004	554.01	0.0013	4.694E-05
Be	9	1	No Gas	0.239	0.0004	534.01	0.0013	4.694E-05
Be	9	1	No Gas	0.27	0.0004	586.02	0.0013	4.694E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.012	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.056	0	5.33	0.0004	1.089E-05
Na	23	3	He	182.713	0.4203	30922.70	0.0017	0.1065
Na	23	3	He	169.766	0.3981	29890.94	0.0017	0.1065
Na	23	3	He	173.962	0.4053	30451.87	0.0017	0.1065
Mg	24	3	He	5300.054	4.4733	329096.36	0.0008	0.004846
Mg	24	3	He	5188.066	4.3789	328799.96	0.0008	0.004846
Mg	24	3	He	5267.432	4.4458	334040.85	0.0008	0.004846
Al	27	3	He	4410.666	1.0658	78407.29	0.0002	0.001063
Al	27	3	He	4416.745	1.0672	80135.95	0.0002	0.001063
Al	27	3	He	4379.01	1.0581	79503.50	0.0002	0.001063
K	39	3	He	768.049	0.5678	41769.75	0.0006	0.1436
K	39	3	He	755.005	0.5606	42091.12	0.0006	0.1436
K	39	3	He	686.185	0.5226	39263.02	0.0006	0.1436
Ca	44	3	He	7326.703	0.2292	16860.24	0	0.001611
Ca	44	3	He	6937.033	0.2171	16299.48	0	0.001611
Ca	44	3	He	7022.643	0.2197	16509.84	0	0.001611
Ti	47	3	He	416.388	0.1047	7702.27	0.0003	0.0002737
Ti	47	3	He	460.552	0.1158	8692.88	0.0003	0.0002737
Ti	47	3	He	414.58	0.1042	7832.30	0.0003	0.0002737
V	51	3	He	23.26	0.2794	20556.47	0.0117	0.007326
V	51	3	He	22.789	0.2739	20566.47	0.0117	0.007326
V	51	3	He	22.865	0.2748	20646.56	0.0117	0.007326
Cr	52	3	He	10.578	0.1865	13716.93	0.0152	0.02538
Cr	52	3	He	10.846	0.1905	14307.40	0.0152	0.02538
Cr	52	3	He	10.13	0.1796	13496.69	0.0152	0.02538
Mn	55	3	He	107.084	0.6459	47518.33	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	101.247	0.6115	45912.64	0.0059	0.01385
Mn	55	3	He	103.602	0.6254	46986.84	0.0059	0.01385
Fe	57	3	He	9939.464	2.8835	212136.81	0.0003	0.003918
Fe	57	3	He	9783.937	2.8385	213132.40	0.0003	0.003918
Fe	57	3	He	9562.637	2.7744	208453.38	0.0003	0.003918
Co	59	3	He	2.755	0.0872	6411.64	0.0305	0.003084
Co	59	3	He	2.75	0.087	6531.70	0.0305	0.003084
Co	59	3	He	2.739	0.0867	6511.62	0.0305	0.003084
Ni	60	3	He	7.557	0.0755	5551.29	0.0088	0.009003
Ni	60	3	He	7.96	0.079	5931.39	0.0088	0.009003
Ni	60	3	He	7.787	0.0775	5821.37	0.0088	0.009003
Cu	63	3	He	18.625	0.4694	34531.89	0.0249	0.004937
Cu	63	3	He	18.892	0.476	35744.80	0.0249	0.004937
Cu	63	3	He	18.879	0.4757	35744.68	0.0249	0.004937
Zn	66	3	He	19.502	0.0527	3880.66	0.0025	0.004836
Zn	66	3	He	20.044	0.0541	4060.71	0.0025	0.004836
Zn	66	3	He	19.434	0.0526	3950.65	0.0025	0.004836
As	75	3	He	1.047	0.0023	166.00	0.0017	0.0004347
As	75	3	He	1.45	0.003	222.00	0.0017	0.0004347
As	75	3	He	1.342	0.0028	208.00	0.0017	0.0004347
Sr	88	3	He	6.727	0.0534	3440.51	0.0078	0.0007762
Sr	88	3	He	6.939	0.055	3570.55	0.0078	0.0007762
Sr	88	3	He	6.713	0.0532	3400.52	0.0078	0.0007762
Mo	98	3	He	0.16	0.004	260.01	0.022	0.0005162
Mo	98	3	He	0.11	0.0029	190.01	0.022	0.0005162
Mo	98	3	He	0.183	0.0045	290.01	0.022	0.0005162
Ag	107	3	He	0.038	0.0022	140.01	0.0455	0.0004641
Ag	107	3	He	0.044	0.0025	160.01	0.0455	0.0004641
Ag	107	3	He	0.031	0.0019	120.00	0.0455	0.0004641
Cd	111	3	He	0.119	0.0006	40.00	0.0048	5.152E-05
Cd	111	3	He	0.086	0.0005	30.00	0.0048	5.152E-05
Cd	111	3	He	0.074	0.0004	26.00	0.0048	5.152E-05
Sn	120	3	He	0.963	0.0293	1890.21	0.0143	0.01559
Sn	120	3	He	1.014	0.0301	1950.19	0.0143	0.01559
Sn	120	3	He	0.939	0.029	1850.21	0.0143	0.01559
Sb	121	3	He	0.104	0.0016	100.00	0.0124	0.000258
Sb	121	3	He	0.215	0.0029	190.01	0.0124	0.000258
Sb	121	3	He	0.232	0.0031	200.01	0.0124	0.000258
Ba	137	3	He	21.207	0.0931	6001.49	0.0044	0.000309
Ba	137	3	He	21.351	0.0937	6081.60	0.0044	0.000309
Ba	137	3	He	20.945	0.0919	5871.48	0.0044	0.000309
Tl	205	3	He	0.049	0.0024	530.03	0.0276	0.001005
Tl	205	3	He	0.041	0.0021	480.02	0.0276	0.001005
Tl	205	3	He	0.048	0.0023	520.02	0.0276	0.001005
Pb	208	3	He	9.449	0.3461	41817.11	0.0364	0.002176
Pb	208	3	He	9.406	0.3445	40653.58	0.0364	0.002176
Pb	208	3	He	9.281	0.34	40443.08	0.0364	0.002176
U	238	3	He	0.512	0.0218	4891.09	0.0421	0.00024
U	238	3	He	0.505	0.0215	4811.12	0.0421	0.00024
U	238	3	He	0.513	0.0218	4891.11	0.0421	0.00024
Sc	45	1	No Gas			3352247.76		
Sc	45	1	No Gas			3353625.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3289438.39		
Ge	72	1	No Gas			1482261.23		
Ge	72	1	No Gas			1478021.54		
Ge	72	1	No Gas			1456686.70		
Sc	45	2	H2			193840.17		
Sc	45	2	H2			202323.43		
Sc	45	2	H2			202766.05		
Ge	72	2	H2			159375.80		
Ge	72	2	H2			169983.55		
Ge	72	2	H2			163093.50		
In	115	2	H2			426850.11		
In	115	2	H2			439163.39		
In	115	2	H2			441592.18		
Sc	45	3	He			41991.04		
Sc	45	3	He			42612.62		
Sc	45	3	He			42461.79		
Ge	72	3	He			73568.54		
Ge	72	3	He			75087.13		
Ge	72	3	He			75135.83		
In	115	3	He			64488.84		
In	115	3	He			64910.85		
In	115	3	He			63875.82		
Tb	159	3	He			291015.41		
Tb	159	3	He			286687.93		
Tb	159	3	He			287935.46		
Bi	209	3	He			224446.50		
Bi	209	3	He			224066.38		
Bi	209	3	He			224088.16		

Quantitation Report

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Acq Time	2023-08-10 19:15:11
Sample Name	410-136577-H-13-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

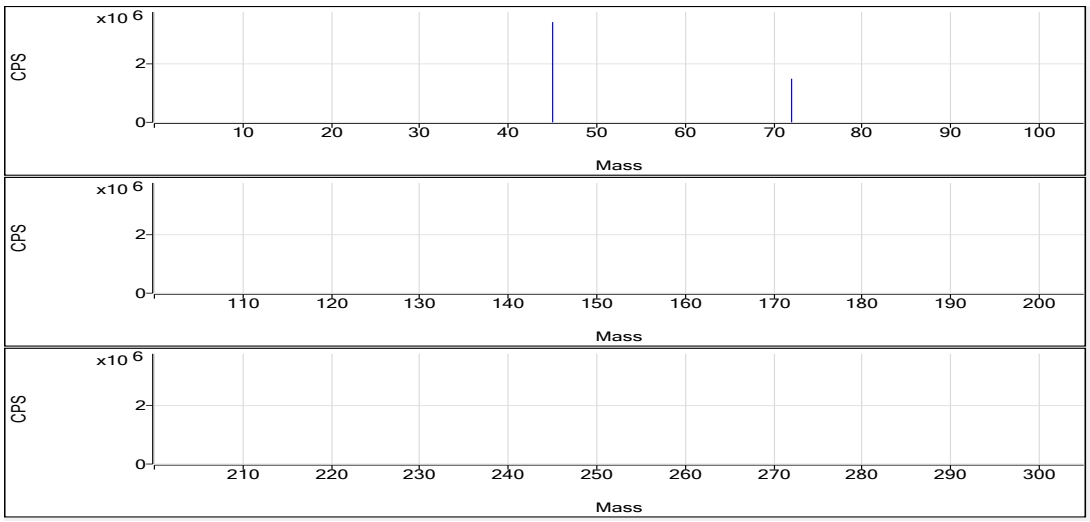
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.036	ppb	3.1	2090.82	0.0014	Pulse	0.5000	3
Se	78	72	H2	0.075	ppb	31.8	6.44	0.0000	Pulse	1.5000	3
Na	23	72	He	928.879	ppb	1.0	129374.65	1.7021	Pulse	0.1000	3
Mg	24	72	He	6476.501	ppb	0.0	415413.61	5.4652	Pulse	0.1000	3
Al	27	72	He	16468.071	ppb	1.0	302226.28	3.9764	Pulse	0.1000	3
K	39	72	He	2868.270	ppb	1.7	131308.20	1.7275	Pulse	0.1000	3
Ca	44	72	He	7128.069	ppb	2.1	16950.26	0.2230	Pulse	0.1000	3
Ti	47	72	He	1309.462	ppb	1.7	24982.10	0.3287	Pulse	0.1000	3
V	51	72	He	68.769	ppb	0.5	61702.39	0.8118	Pulse	0.5000	3
Cr	52	72	He	36.185	ppb	1.6	43813.06	0.5764	Pulse	0.1000	3
Mn	55	72	He	398.577	ppb	1.1	179883.81	2.3664	Pulse	0.1000	3
Fe	57	72	He	30454.431	ppb	0.7	670917.02	8.8270	Pulse	0.1000	3
Co	59	72	He	10.072	ppb	3.6	23586.46	0.3104	Pulse	0.1000	3
Ni	60	72	He	23.065	ppb	3.4	16099.38	0.2118	Pulse	0.1000	3
Cu	63	72	He	38.710	ppb	0.9	73744.35	0.9702	Pulse	0.1000	3
Zn	66	72	He	38.603	ppb	2.8	7575.59	0.0997	Pulse	0.1000	3
As	75	72	He	5.651	ppb	4.4	780.03	0.0103	Pulse	0.5000	3
Sr	88	115	He	28.721	ppb	3.4	14361.03	0.2253	Pulse	0.1000	3
Mo	98	115	He	1.868	ppb	10.6	2650.35	0.0417	Pulse	0.1000	3
Ag	107	115	He	0.050	ppb	30.6	173.34	0.0027	Pulse	0.1000	3
Cd	111	115	He	0.096	ppb	1.1	32.67	0.0005	Pulse	0.5000	3
Sn	120	115	He	2.906	ppb	10.1	3630.61	0.0570	Pulse	0.1000	3
Sb	121	115	He	0.540	ppb	19.0	443.36	0.0070	Pulse	0.1000	3
Ba	137	115	He	67.457	ppb	3.4	18823.42	0.2954	Pulse	0.1000	3
Tl	205	209	He	0.126	ppb	9.4	1003.41	0.0045	Pulse	0.1000	3
Pb	208	209	He	10.045	ppb	1.3	82444.66	0.3678	Pulse	0.1000	3
U	238	209	He	2.431	ppb	0.3	22977.70	0.1025	Pulse	0.1000	3

ISTD Table:

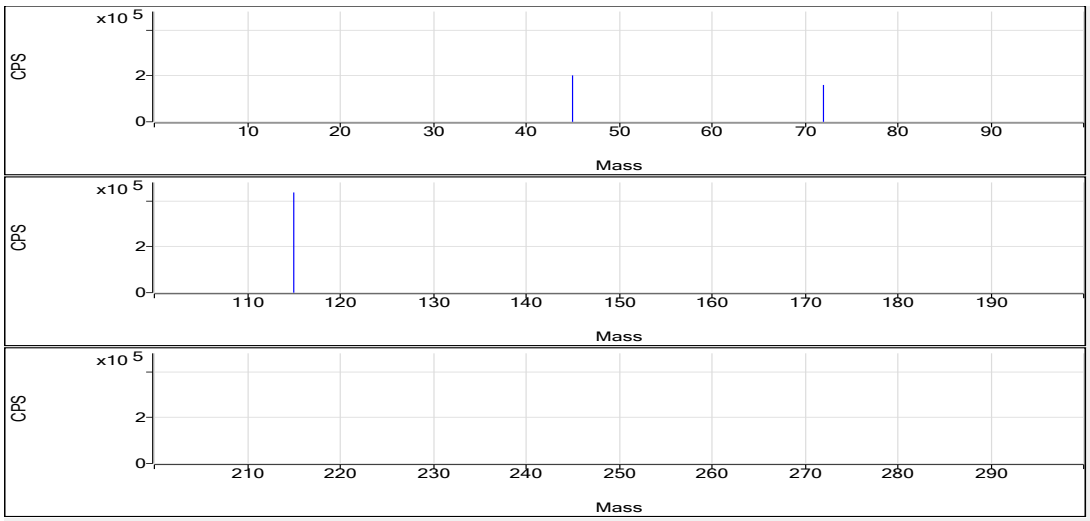
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3411629.63	0.6	105.3	Pulse	0.1000	3
No Gas	Ge	72	1484197.95	0.0	103.1	Pulse	0.1000	3
H2	Sc	45	201874.16	1.9	103.3	Pulse	0.1000	3
H2	Ge	72	160259.71	0.9	98.3	Pulse	0.1000	3
H2	In	115	435751.21	1.2	100.6	Pulse	0.1000	3
He	Sc	45	42850.03	2.1	107.2	Pulse	0.1000	3
He	Ge	72	76010.83	1.1	105.1	Pulse	0.1000	3
He	In	115	63761.07	3.2	98.7	Pulse	0.1000	3
He	Tb	159	296903.45	0.8	103.8	Pulse	0.1000	3
He	Bi	209	224173.74	0.6	100.9	Pulse	0.1000	3

No Gas

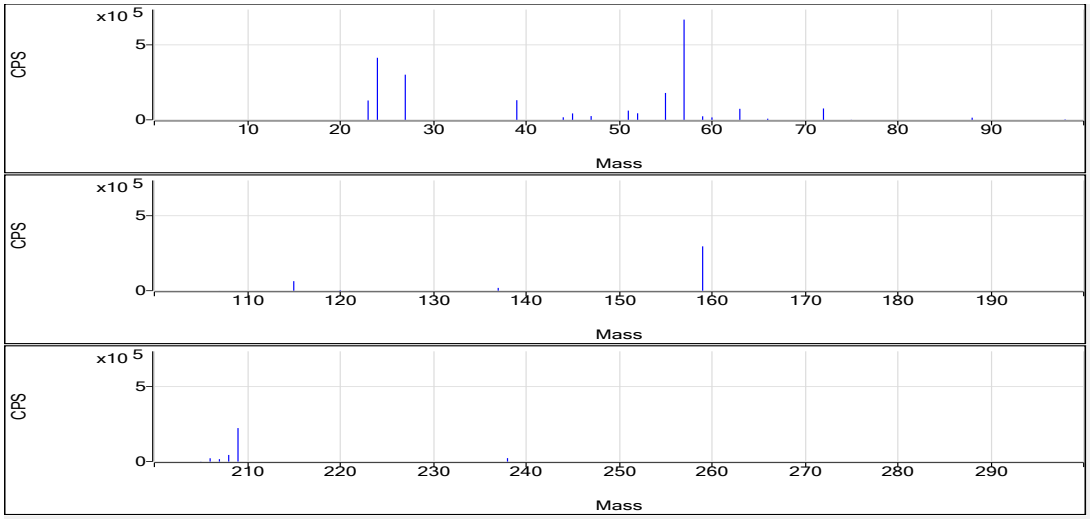


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.073	0.0015	2162.17	0.0013	4.694E-05
Be	9	1	No Gas	1.025	0.0014	2068.15	0.0013	4.694E-05
Be	9	1	No Gas	1.011	0.0014	2042.15	0.0013	4.694E-05
Se	78	2	H2	0.048	0	4.67	0.0004	1.089E-05
Se	78	2	H2	0.09	0	7.33	0.0004	1.089E-05
Se	78	2	H2	0.088	0	7.33	0.0004	1.089E-05
Na	23	3	He	935.143	1.7129	131022.97	0.0017	0.1065
Na	23	3	He	933.122	1.7094	128247.89	0.0017	0.1065
Na	23	3	He	918.372	1.6841	128853.09	0.0017	0.1065
Mg	24	3	He	6474.295	5.4633	417909.49	0.0008	0.004846
Mg	24	3	He	6477.39	5.4659	410084.64	0.0008	0.004846
Mg	24	3	He	6477.818	5.4663	418246.71	0.0008	0.004846
Al	27	3	He	16460.939	3.9746	304033.88	0.0002	0.001063
Al	27	3	He	16636.055	4.0169	301370.27	0.0002	0.001063
Al	27	3	He	16307.219	3.9375	301274.70	0.0002	0.001063
K	39	3	He	2814.85	1.698	129888.56	0.0006	0.1436
K	39	3	He	2880.133	1.7341	130100.36	0.0006	0.1436
K	39	3	He	2909.828	1.7505	133935.69	0.0006	0.1436
Ca	44	3	He	7250.95	0.2268	17350.59	0	0.001611
Ca	44	3	He	7174.811	0.2245	16840.17	0	0.001611
Ca	44	3	He	6958.446	0.2177	16660.02	0	0.001611
Ti	47	3	He	1288.689	0.3235	24741.84	0.0003	0.0002737
Ti	47	3	He	1306.46	0.3279	24601.34	0.0003	0.0002737
Ti	47	3	He	1333.236	0.3346	25603.12	0.0003	0.0002737
V	51	3	He	68.34	0.8068	61711.13	0.0117	0.007326
V	51	3	He	68.918	0.8135	61034.25	0.0117	0.007326
V	51	3	He	69.049	0.815	62361.79	0.0117	0.007326
Cr	52	3	He	36.837	0.5863	44849.53	0.0152	0.02538
Cr	52	3	He	35.905	0.5721	42923.82	0.0152	0.02538
Cr	52	3	He	35.811	0.5707	43665.82	0.0152	0.02538
Mn	55	3	He	397.25	2.3586	180416.76	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	395.195	2.3465	176044.33	0.0059	0.01385
Mn	55	3	He	403.286	2.3942	183190.35	0.0059	0.01385
Fe	57	3	He	30411.889	8.8147	674266.16	0.0003	0.003918
Fe	57	3	He	30674.59	8.8908	667035.54	0.0003	0.003918
Fe	57	3	He	30276.814	8.7756	671449.36	0.0003	0.003918
Co	59	3	He	9.951	0.3067	23459.52	0.0305	0.003084
Co	59	3	He	10.48	0.3228	24220.96	0.0305	0.003084
Co	59	3	He	9.785	0.3016	23078.91	0.0305	0.003084
Ni	60	3	He	23.715	0.2175	16640.01	0.0088	0.009003
Ni	60	3	He	23.273	0.2137	16029.28	0.0088	0.009003
Ni	60	3	He	22.205	0.2043	15628.85	0.0088	0.009003
Cu	63	3	He	38.658	0.969	74119.41	0.0249	0.004937
Cu	63	3	He	39.096	0.9799	73516.20	0.0249	0.004937
Cu	63	3	He	38.375	0.9619	73597.45	0.0249	0.004937
Zn	66	3	He	37.367	0.0966	7392.13	0.0025	0.004836
Zn	66	3	He	39.277	0.1013	7602.29	0.0025	0.004836
Zn	66	3	He	39.166	0.1011	7732.36	0.0025	0.004836
As	75	3	He	5.854	0.0106	812.03	0.0017	0.0004347
As	75	3	He	5.728	0.0104	780.03	0.0017	0.0004347
As	75	3	He	5.371	0.0098	748.03	0.0017	0.0004347
Sr	88	3	He	29.744	0.2333	14477.81	0.0078	0.0007762
Sr	88	3	He	27.819	0.2182	13787.11	0.0078	0.0007762
Sr	88	3	He	28.6	0.2243	14818.16	0.0078	0.0007762
Mo	98	3	He	2.004	0.0446	2770.35	0.022	0.0005162
Mo	98	3	He	1.961	0.0437	2760.37	0.022	0.0005162
Mo	98	3	He	1.641	0.0366	2420.32	0.022	0.0005162
Ag	107	3	He	0.054	0.0029	180.01	0.0455	0.0004641
Ag	107	3	He	0.063	0.0033	210.01	0.0455	0.0004641
Ag	107	3	He	0.033	0.002	130.00	0.0455	0.0004641
Cd	111	3	He	0.097	0.0005	32.00	0.0048	5.152E-05
Cd	111	3	He	0.095	0.0005	32.00	0.0048	5.152E-05
Cd	111	3	He	0.097	0.0005	34.00	0.0048	5.152E-05
Sn	120	3	He	3.032	0.0588	3650.61	0.0143	0.01559
Sn	120	3	He	3.115	0.06	3790.66	0.0143	0.01559
Sn	120	3	He	2.571	0.0522	3450.57	0.0143	0.01559
Sb	121	3	He	0.46	0.006	370.02	0.0124	0.000258
Sb	121	3	He	0.656	0.0084	530.03	0.0124	0.000258
Sb	121	3	He	0.504	0.0065	430.02	0.0124	0.000258
Ba	137	3	He	69.815	0.3057	18973.68	0.0044	0.000309
Ba	137	3	He	67.277	0.2946	18613.14	0.0044	0.000309
Ba	137	3	He	65.28	0.2859	18883.45	0.0044	0.000309
Tl	205	3	He	0.112	0.0041	920.07	0.0276	0.001005
Tl	205	3	He	0.134	0.0047	1060.08	0.0276	0.001005
Tl	205	3	He	0.131	0.0046	1030.08	0.0276	0.001005
Pb	208	3	He	10.007	0.3664	43723.56	0.0364	0.002176
Pb	208	3	He	9.936	0.3638	43873.54	0.0364	0.002176
Pb	208	3	He	10.192	0.3731	45298.59	0.0364	0.002176
U	238	3	He	2.425	0.1023	22931.01	0.0421	0.00024
U	238	3	He	2.428	0.1024	23091.06	0.0421	0.00024
U	238	3	He	2.439	0.1028	22911.03	0.0421	0.00024
Sc	45	1	No Gas			3429676.82		
Sc	45	1	No Gas			3413782.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3391429.32		
Ge	72	1	No Gas			1484719.51		
Ge	72	1	No Gas			1483492.63		
Ge	72	1	No Gas			1484381.70		
Sc	45	2	H2			197655.70		
Sc	45	2	H2			202848.22		
Sc	45	2	H2			205118.57		
Ge	72	2	H2			158766.74		
Ge	72	2	H2			160242.47		
Ge	72	2	H2			161769.92		
In	115	2	H2			430357.65		
In	115	2	H2			435806.52		
In	115	2	H2			441089.45		
Sc	45	3	He			41920.67		
Sc	45	3	He			42903.61		
Sc	45	3	He			43725.80		
Ge	72	3	He			76493.48		
Ge	72	3	He			75025.40		
Ge	72	3	He			76513.61		
In	115	3	He			62087.90		
In	115	3	He			63203.44		
In	115	3	He			66076.82		
Tb	159	3	He			299448.32		
Tb	159	3	He			294625.89		
Tb	159	3	He			296636.13		
Bi	209	3	He			224240.00		
Bi	209	3	He			225506.89		
Bi	209	3	He			222774.33		

Quantitation Report

Data File Name	252SMPL.d
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Sample Name	410-136577-H-13-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

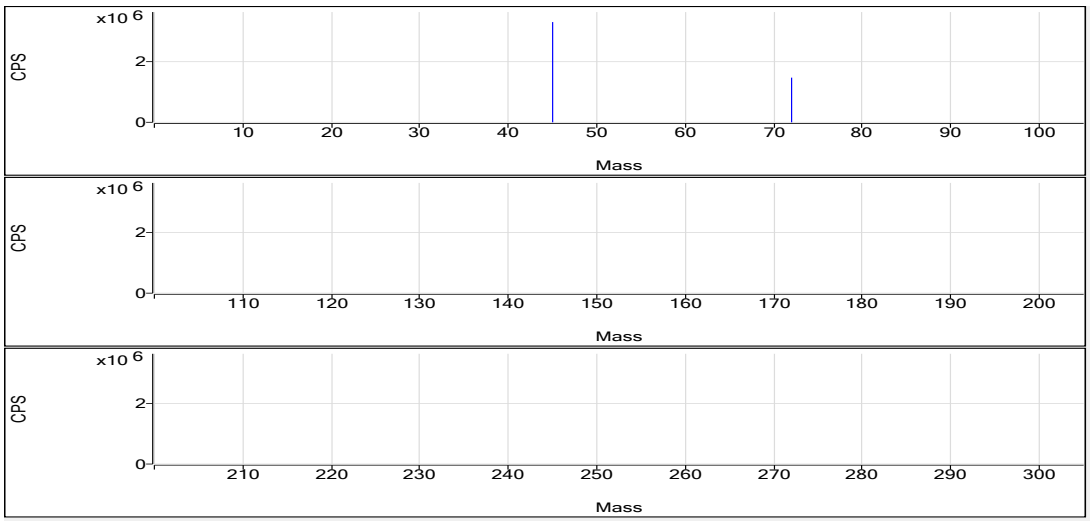
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.185	ppb	2.5	429.34	0.0003	Pulse	0.5000	3
Se	78	72	H2	0.028	ppb	121.8	3.56	0.0000	Pulse	1.5000	3
Na	23	72	He	173.127	ppb	3.5	29927.51	0.4039	Pulse	0.1000	3
Mg	24	72	He	1284.470	ppb	0.7	80611.90	1.0878	Pulse	0.1000	3
Al	27	72	He	3290.891	ppb	1.7	58948.23	0.7955	Pulse	0.1000	3
K	39	72	He	566.978	ppb	2.3	33846.35	0.4567	Pulse	0.1000	3
Ca	44	72	He	1448.625	ppb	3.5	3453.86	0.0466	Pulse	0.1000	3
Ti	47	72	He	267.431	ppb	7.8	4991.02	0.0673	Pulse	0.1000	3
V	51	72	He	13.677	ppb	1.2	12399.29	0.1673	Pulse	0.5000	3
Cr	52	72	He	7.148	ppb	1.6	9947.07	0.1342	Pulse	0.1000	3
Mn	55	72	He	77.709	ppb	2.5	35016.03	0.4725	Pulse	0.1000	3
Fe	57	72	He	5980.096	ppb	1.7	128679.09	1.7364	Pulse	0.1000	3
Co	59	72	He	1.959	ppb	8.2	4657.61	0.0629	Pulse	0.1000	3
Ni	60	72	He	5.100	ppb	6.0	3990.67	0.0539	Pulse	0.1000	3
Cu	63	72	He	7.934	ppb	2.2	15028.31	0.2028	Pulse	0.1000	3
Zn	66	72	He	10.172	ppb	7.3	2210.24	0.0298	Pulse	0.1000	3
As	75	72	He	1.245	ppb	13.4	192.67	0.0026	Pulse	0.5000	3
Sr	88	115	He	5.806	ppb	4.0	2973.75	0.0462	Pulse	0.1000	3
Mo	98	115	He	0.409	ppb	6.1	613.37	0.0095	Pulse	0.1000	3
Ag	107	115	He	0.018	ppb	16.5	83.33	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.015	ppb	186.9	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.577	ppb	39.6	1530.13	0.0238	Pulse	0.1000	3
Sb	121	115	He	0.154	ppb	29.1	140.01	0.0022	Pulse	0.1000	3
Ba	137	115	He	13.153	ppb	6.3	3723.97	0.0578	Pulse	0.1000	3
Tl	205	209	He	0.026	ppb	37.4	386.69	0.0017	Pulse	0.1000	3
Pb	208	209	He	2.577	ppb	3.1	21577.85	0.0960	Pulse	0.1000	3
U	238	209	He	0.474	ppb	4.8	4534.29	0.0202	Pulse	0.1000	3

ISTD Table:

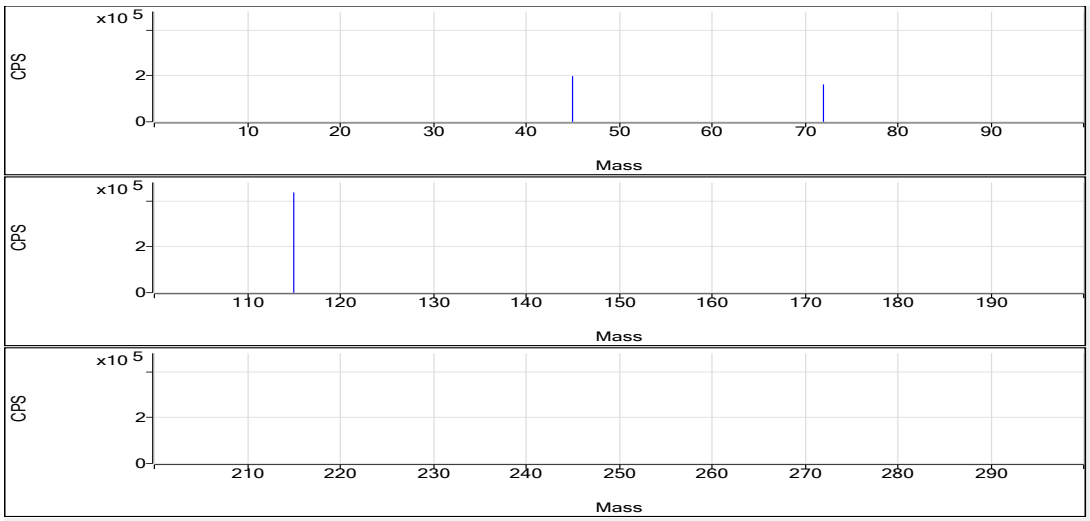
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3325795.16	0.9	102.6	Pulse	0.1000	3
No Gas	Ge	72	1481624.14	0.9	102.9	Pulse	0.1000	3
H2	Sc	45	198913.21	2.8	101.8	Pulse	0.1000	3
H2	Ge	72	162966.81	1.7	100.0	Pulse	0.1000	3
H2	In	115	436718.59	1.1	100.8	Pulse	0.1000	3
He	Sc	45	41720.32	0.5	104.3	Pulse	0.1000	3
He	Ge	72	74107.46	0.3	102.5	Pulse	0.1000	3
He	In	115	64463.89	3.6	99.8	Pulse	0.1000	3
He	Tb	159	287104.53	0.4	100.4	Pulse	0.1000	3
He	Bi	209	224872.01	0.7	101.2	Pulse	0.1000	3

No Gas

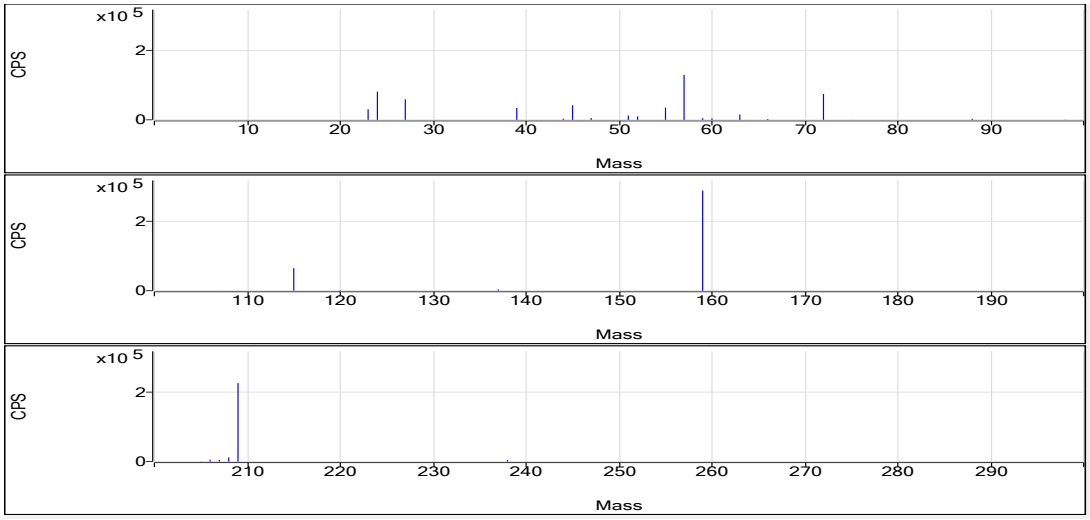


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.189	0.0003	436.01	0.0013	4.694E-05
Be	9	1	No Gas	0.185	0.0003	434.01	0.0013	4.694E-05
Be	9	1	No Gas	0.18	0.0003	418.01	0.0013	4.694E-05
Se	78	2	H2	0.068	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.013	0	2.67	0.0004	1.089E-05
Na	23	3	He	180.104	0.4158	30722.48	0.0017	0.1065
Na	23	3	He	170.438	0.3992	29660.10	0.0017	0.1065
Na	23	3	He	168.838	0.3965	29399.96	0.0017	0.1065
Mg	24	3	He	1294.667	1.0964	81000.64	0.0008	0.004846
Mg	24	3	He	1277.986	1.0823	80407.31	0.0008	0.004846
Mg	24	3	He	1280.755	1.0847	80427.76	0.0008	0.004846
Al	27	3	He	3353.886	0.8107	59892.35	0.0002	0.001063
Al	27	3	He	3266.954	0.7897	58667.18	0.0002	0.001063
Al	27	3	He	3251.834	0.786	58285.17	0.0002	0.001063
K	39	3	He	578.672	0.4632	34220.47	0.0006	0.1436
K	39	3	He	553.01	0.449	33358.45	0.0006	0.1436
K	39	3	He	569.251	0.458	33960.14	0.0006	0.1436
Ca	44	3	He	1447.463	0.0466	3440.51	0	0.001611
Ca	44	3	He	1499.842	0.0482	3580.55	0	0.001611
Ca	44	3	He	1398.569	0.0451	3340.51	0	0.001611
Ti	47	3	He	251.554	0.0634	4680.90	0.0003	0.0002737
Ti	47	3	He	290.963	0.0732	5441.22	0.0003	0.0002737
Ti	47	3	He	259.775	0.0654	4850.94	0.0003	0.0002737
V	51	3	He	13.776	0.1685	12447.32	0.0117	0.007326
V	51	3	He	13.489	0.1651	12267.17	0.0117	0.007326
V	51	3	He	13.765	0.1684	12483.38	0.0117	0.007326
Cr	52	3	He	7.021	0.1323	9773.64	0.0152	0.02538
Cr	52	3	He	7.194	0.1349	10023.79	0.0152	0.02538
Cr	52	3	He	7.228	0.1355	10043.77	0.0152	0.02538
Mn	55	3	He	79.921	0.4856	35874.65	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	76.448	0.4651	34551.54	0.0059	0.01385
Mn	55	3	He	76.758	0.4669	34621.90	0.0059	0.01385
Fe	57	3	He	6083.988	1.7665	130511.74	0.0003	0.003918
Fe	57	3	He	5886.156	1.7092	126981.16	0.0003	0.003918
Fe	57	3	He	5970.143	1.7336	128544.37	0.0003	0.003918
Co	59	3	He	2.14	0.0684	5051.11	0.0305	0.003084
Co	59	3	He	1.902	0.0611	4540.88	0.0305	0.003084
Co	59	3	He	1.835	0.0591	4380.84	0.0305	0.003084
Ni	60	3	He	5.134	0.0542	4000.68	0.0088	0.009003
Ni	60	3	He	4.779	0.051	3790.61	0.0088	0.009003
Ni	60	3	He	5.388	0.0564	4180.71	0.0088	0.009003
Cu	63	3	He	8.106	0.2071	15298.63	0.0249	0.004937
Cu	63	3	He	7.757	0.1984	14737.96	0.0249	0.004937
Cu	63	3	He	7.94	0.2029	15048.34	0.0249	0.004937
Zn	66	3	He	10.484	0.0306	2260.24	0.0025	0.004836
Zn	66	3	He	9.319	0.0277	2060.20	0.0025	0.004836
Zn	66	3	He	10.713	0.0312	2310.28	0.0025	0.004836
As	75	3	He	1.058	0.0023	168.00	0.0017	0.0004347
As	75	3	He	1.375	0.0028	210.00	0.0017	0.0004347
As	75	3	He	1.301	0.0027	200.00	0.0017	0.0004347
Sr	88	3	He	5.596	0.0445	2900.41	0.0078	0.0007762
Sr	88	3	He	6.06	0.0481	2980.40	0.0078	0.0007762
Sr	88	3	He	5.764	0.0458	3040.43	0.0078	0.0007762
Mo	98	3	He	0.381	0.0089	580.03	0.022	0.0005162
Mo	98	3	He	0.417	0.0097	600.03	0.022	0.0005162
Mo	98	3	He	0.428	0.0099	660.04	0.022	0.0005162
Ag	107	3	He	0.017	0.0012	80.00	0.0455	0.0004641
Ag	107	3	He	0.022	0.0015	90.00	0.0455	0.0004641
Ag	107	3	He	0.016	0.0012	80.00	0.0455	0.0004641
Cd	111	3	He	0.047	0.0003	18.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.608	0.0243	1580.14	0.0143	0.01559
Sn	120	3	He	0.788	0.0268	1660.15	0.0143	0.01559
Sn	120	3	He	0.334	0.0204	1350.10	0.0143	0.01559
Sb	121	3	He	0.103	0.0015	100.00	0.0124	0.000258
Sb	121	3	He	0.175	0.0024	150.01	0.0124	0.000258
Sb	121	3	He	0.186	0.0026	170.01	0.0124	0.000258
Ba	137	3	He	13.264	0.0583	3800.65	0.0044	0.000309
Ba	137	3	He	13.926	0.0612	3790.65	0.0044	0.000309
Ba	137	3	He	12.267	0.054	3580.60	0.0044	0.000309
Tl	205	3	He	0.015	0.0014	320.02	0.0276	0.001005
Tl	205	3	He	0.028	0.0018	400.02	0.0276	0.001005
Tl	205	3	He	0.034	0.0019	440.03	0.0276	0.001005
Pb	208	3	He	2.631	0.0979	11965.89	0.0364	0.002176
Pb	208	3	He	2.614	0.0973	11925.72	0.0364	0.002176
Pb	208	3	He	2.486	0.0926	11275.20	0.0364	0.002176
U	238	3	He	0.488	0.0208	4671.04	0.0421	0.00024
U	238	3	He	0.448	0.0191	4260.84	0.0421	0.00024
U	238	3	He	0.485	0.0206	4671.00	0.0421	0.00024
Sc	45	1	No Gas			3312822.76		
Sc	45	1	No Gas			3361570.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3302991.83		
Ge	72	1	No Gas			1474085.76		
Ge	72	1	No Gas			1496487.63		
Ge	72	1	No Gas			1474299.04		
Sc	45	2	H2			193663.53		
Sc	45	2	H2			198406.05		
Sc	45	2	H2			204670.06		
Ge	72	2	H2			161315.40		
Ge	72	2	H2			161476.24		
Ge	72	2	H2			166108.79		
In	115	2	H2			431796.63		
In	115	2	H2			437361.48		
In	115	2	H2			440997.65		
Sc	45	3	He			41699.90		
Sc	45	3	He			41539.90		
Sc	45	3	He			41921.17		
Ge	72	3	He			73879.94		
Ge	72	3	He			74291.73		
Ge	72	3	He			74150.70		
In	115	3	He			65162.12		
In	115	3	He			61917.42		
In	115	3	He			66347.93		
Tb	159	3	He			288086.87		
Tb	159	3	He			287341.58		
Tb	159	3	He			285885.15		
Bi	209	3	He			224735.35		
Bi	209	3	He			223455.58		
Bi	209	3	He			226425.09		

Quantitation Report

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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

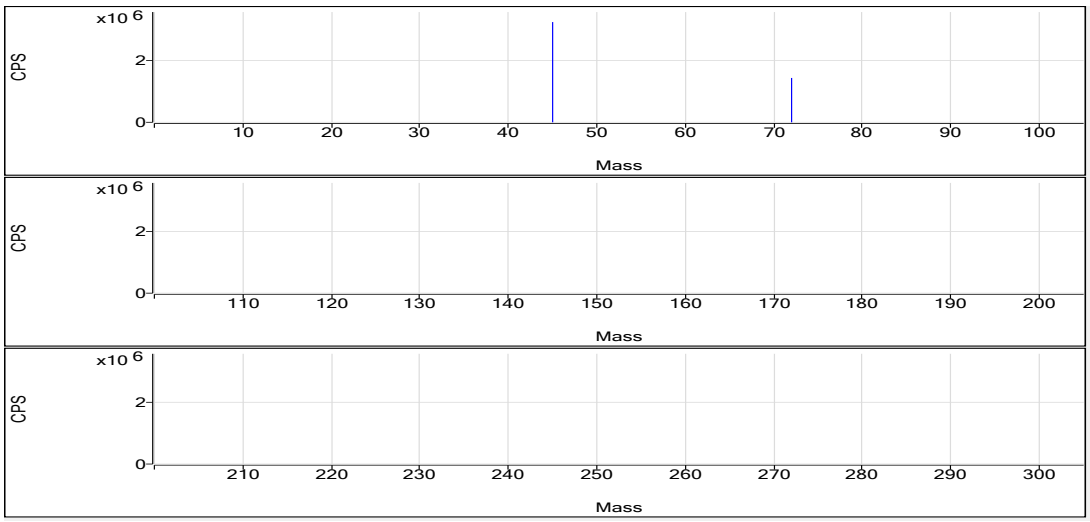
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.002	ppb	N/A	64.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.012	ppb	141.4	2.44	0.0000	Pulse	1.5000	3
Na	23	72	He	3.791	ppb	81.3	8179.17	0.1130	Pulse	0.1000	3
Mg	24	72	He	14.403	ppb	14.0	1230.09	0.0170	Pulse	0.1000	3
Al	27	72	He	20.186	ppb	22.6	430.02	0.0059	Pulse	0.1000	3
K	39	72	He	0.887	ppb	2584.7	10430.68	0.1441	Pulse	0.1000	3
Ca	44	72	He	29.795	ppb	93.3	183.34	0.0025	Pulse	0.1000	3
Ti	47	72	He	0.926	ppb	123.3	36.67	0.0005	Pulse	0.1000	3
V	51	72	He	0.120	ppb	29.4	632.02	0.0087	Pulse	0.5000	3
Cr	52	72	He	0.141	ppb	113.1	1993.55	0.0275	Pulse	0.1000	3
Mn	55	72	He	0.352	ppb	40.8	1153.43	0.0159	Pulse	0.1000	3
Fe	57	72	He	40.506	ppb	9.9	1133.42	0.0157	Pulse	0.1000	3
Co	59	72	He	0.086	ppb	37.4	413.36	0.0057	Pulse	0.1000	3
Ni	60	72	He	0.840	ppb	17.0	1186.76	0.0164	Pulse	0.1000	3
Cu	63	72	He	0.077	ppb	87.9	496.69	0.0069	Pulse	0.1000	3
Zn	66	72	He	0.806	ppb	42.8	493.36	0.0068	Pulse	0.1000	3
As	75	72	He	0.110	ppb	75.2	45.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.088	ppb	105.7	93.34	0.0015	Pulse	0.1000	3
Mo	98	115	He	-0.007	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	130.7	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	495.3	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.162	ppb	74.1	1146.80	0.0179	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	74.6	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.276	ppb	53.5	96.67	0.0015	Pulse	0.1000	3
Tl	205	209	He	0.003	ppb	192.7	236.68	0.0011	Pulse	0.1000	3
Pb	208	209	He	0.792	ppb	1.7	6807.64	0.0310	Pulse	0.1000	3
U	238	209	He	0.008	ppb	63.2	123.34	0.0006	Pulse	0.1000	3

ISTD Table:

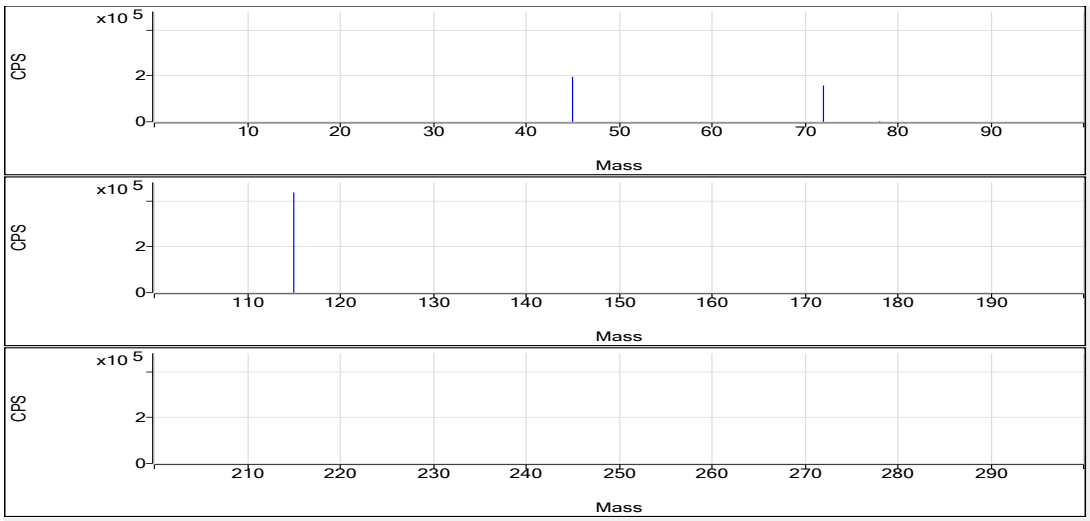
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3270612.66	1.2	100.9	Pulse	0.1000	3
No Gas	Ge	72	1447274.56	0.6	100.5	Pulse	0.1000	3
H2	Sc	45	196435.22	2.1	100.5	Pulse	0.1000	3
H2	Ge	72	158122.85	0.2	97.0	Pulse	0.1000	3
H2	In	115	436829.38	1.4	100.8	Pulse	0.1000	3
He	Sc	45	41432.44	1.4	103.6	Pulse	0.1000	3
He	Ge	72	72398.56	0.7	100.2	Pulse	0.1000	3
He	In	115	64028.23	1.5	99.1	Pulse	0.1000	3
He	Tb	159	284394.47	0.5	99.4	Pulse	0.1000	3
He	Bi	209	219665.48	1.1	98.9	Pulse	0.1000	3

No Gas

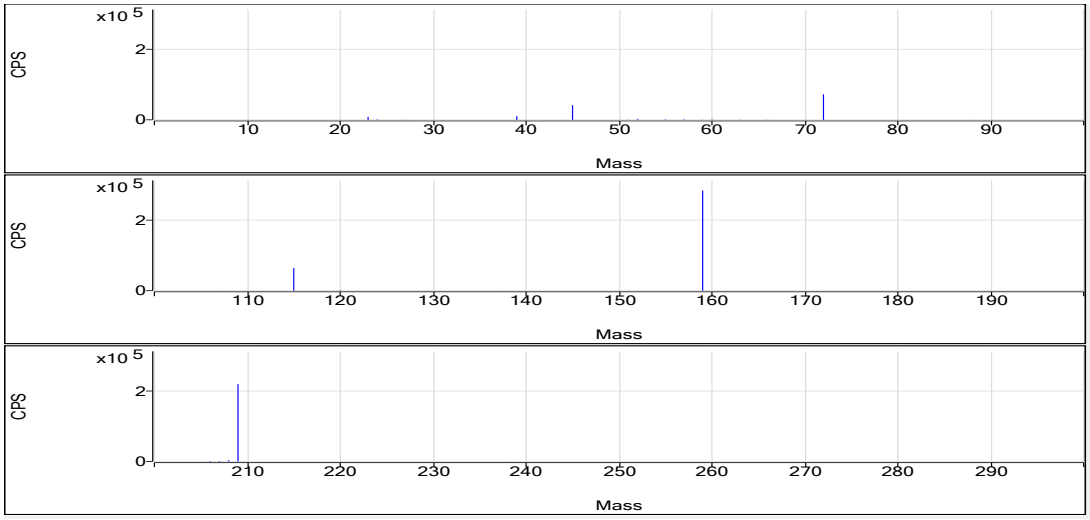


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0.0001	86.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.009	0	52.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.006	0	56.00	0.0013	4.694E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	-0.006	0	1.33	0.0004	1.089E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Na	23	3	He	3.919	0.1132	8132.47	0.0017	0.1065
Na	23	3	He	6.805	0.1181	8602.70	0.0017	0.1065
Na	23	3	He	0.648	0.1076	7802.34	0.0017	0.1065
Mg	24	3	He	14.724	0.0173	1240.11	0.0008	0.004846
Mg	24	3	He	16.244	0.0185	1350.10	0.0008	0.004846
Mg	24	3	He	12.241	0.0152	1100.07	0.0008	0.004846
Al	27	3	He	15.202	0.0047	340.02	0.0002	0.001063
Al	27	3	He	21.2	0.0062	450.02	0.0002	0.001063
Al	27	3	He	24.156	0.0069	500.03	0.0002	0.001063
K	39	3	He	26.57	0.1583	11374.65	0.0006	0.1436
K	39	3	He	-17.547	0.134	9753.52	0.0006	0.1436
K	39	3	He	-6.361	0.1401	10163.87	0.0006	0.1436
Ca	44	3	He	60.166	0.0035	250.01	0	0.001611
Ca	44	3	He	5.621	0.0018	130.01	0	0.001611
Ca	44	3	He	23.599	0.0023	170.01	0	0.001611
Ti	47	3	He	0.018	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	0.551	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	2.207	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.085	0.0083	598.02	0.0117	0.007326
V	51	3	He	0.156	0.0091	666.02	0.0117	0.007326
V	51	3	He	0.119	0.0087	632.02	0.0117	0.007326
Cr	52	3	He	0.061	0.0263	1890.19	0.0152	0.02538
Cr	52	3	He	0.038	0.026	1890.21	0.0152	0.02538
Cr	52	3	He	0.325	0.0303	2200.25	0.0152	0.02538
Mn	55	3	He	0.247	0.0153	1100.08	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.515	0.0169	1230.11	0.0059	0.01385
Mn	55	3	He	0.293	0.0156	1130.09	0.0059	0.01385
Fe	57	3	He	37.404	0.0148	1060.07	0.0003	0.003918
Fe	57	3	He	39.1	0.0152	1110.09	0.0003	0.003918
Fe	57	3	He	45.015	0.017	1230.09	0.0003	0.003918
Co	59	3	He	0.081	0.0056	400.02	0.0305	0.003084
Co	59	3	He	0.056	0.0048	350.02	0.0305	0.003084
Co	59	3	He	0.12	0.0068	490.03	0.0305	0.003084
Ni	60	3	He	0.686	0.015	1080.08	0.0088	0.009003
Ni	60	3	He	0.866	0.0166	1210.09	0.0088	0.009003
Ni	60	3	He	0.968	0.0175	1270.10	0.0088	0.009003
Cu	63	3	He	0.031	0.0057	410.02	0.0249	0.004937
Cu	63	3	He	0.155	0.0088	640.04	0.0249	0.004937
Cu	63	3	He	0.045	0.0061	440.02	0.0249	0.004937
Zn	66	3	He	0.864	0.007	500.02	0.0025	0.004836
Zn	66	3	He	0.435	0.0059	430.03	0.0025	0.004836
Zn	66	3	He	1.118	0.0076	550.03	0.0025	0.004836
As	75	3	He	0.182	0.0008	54.00	0.0017	0.0004347
As	75	3	He	0.129	0.0007	48.00	0.0017	0.0004347
As	75	3	He	0.02	0.0005	34.00	0.0017	0.0004347
Sr	88	3	He	0.08	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	-0.001	0.0008	50.00	0.0078	0.0007762
Sr	88	3	He	0.185	0.0022	140.01	0.0078	0.0007762
Mo	98	3	He	-0.002	0.0005	30.00	0.022	0.0005162
Mo	98	3	He	-0.009	0.0003	20.00	0.022	0.0005162
Mo	98	3	He	-0.009	0.0003	20.00	0.022	0.0005162
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.142	0.0176	1130.08	0.0143	0.01559
Sn	120	3	He	0.29	0.0197	1280.24	0.0143	0.01559
Sn	120	3	He	0.053	0.0163	1030.07	0.0143	0.01559
Sb	121	3	He	0.029	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.357	0.0019	120.01	0.0044	0.000309
Ba	137	3	He	0.105	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.365	0.0019	120.01	0.0044	0.000309
Tl	205	3	He	0.006	0.0012	260.01	0.0276	0.001005
Tl	205	3	He	-0.003	0.0009	200.01	0.0276	0.001005
Tl	205	3	He	0.004	0.0011	250.01	0.0276	0.001005
Pb	208	3	He	0.796	0.0312	3640.65	0.0364	0.002176
Pb	208	3	He	0.802	0.0314	3540.64	0.0364	0.002176
Pb	208	3	He	0.777	0.0304	3490.60	0.0364	0.002176
U	238	3	He	0.013	0.0008	170.01	0.0421	0.00024
U	238	3	He	0.003	0.0004	80.00	0.0421	0.00024
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
Sc	45	1	No Gas			3263422.45		
Sc	45	1	No Gas			3311866.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3236548.70		
Ge	72	1	No Gas			1440207.17		
Ge	72	1	No Gas			1456396.07		
Ge	72	1	No Gas			1445220.45		
Sc	45	2	H2			191679.74		
Sc	45	2	H2			198489.33		
Sc	45	2	H2			199136.58		
Ge	72	2	H2			158200.42		
Ge	72	2	H2			158352.55		
Ge	72	2	H2			157815.59		
In	115	2	H2			431162.26		
In	115	2	H2			435949.52		
In	115	2	H2			443376.36		
Sc	45	3	He			40827.46		
Sc	45	3	He			41499.28		
Sc	45	3	He			41970.57		
Ge	72	3	He			71849.02		
Ge	72	3	He			72814.04		
Ge	72	3	He			72532.62		
In	115	3	He			64197.62		
In	115	3	He			64901.30		
In	115	3	He			63012.61		
Tb	159	3	He			283669.29		
Tb	159	3	He			286145.72		
Tb	159	3	He			283368.41		
Bi	209	3	He			220143.65		
Bi	209	3	He			217103.49		
Bi	209	3	He			221749.29		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:21:13
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

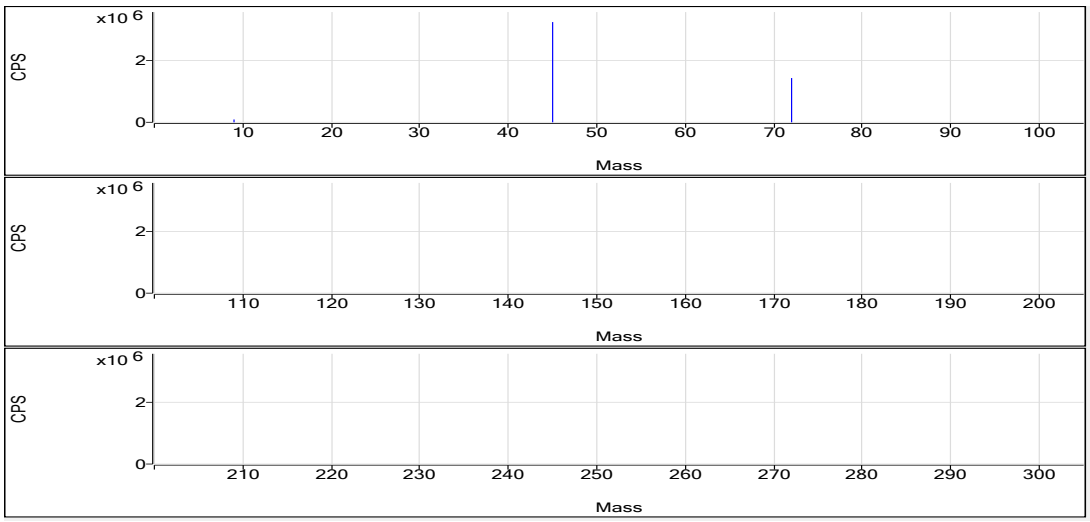
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	48.395	ppb	5.4	91611.15	0.0636	Pulse	0.5000	3
Se	78	72	H2	52.496	ppb	5.1	3235.93	0.0205	Pulse	1.5000	3
Na	23	72	He	5239.346	ppb	0.7	668302.62	9.1067	Pulse	0.1000	3
Mg	24	72	He	5205.623	ppb	0.9	322437.39	4.3937	Pulse	0.1000	3
Al	27	72	He	5215.609	ppb	1.4	92470.28	1.2601	Pulse	0.1000	3
K	39	72	He	5154.476	ppb	1.7	219417.50	2.9900	Pulse	0.1000	3
Ca	44	72	He	5146.225	ppb	0.9	11848.46	0.1615	Pulse	0.1000	3
Ti	47	72	He	5303.630	ppb	1.4	97628.34	1.3303	Pulse	0.1000	3
V	51	72	He	519.876	ppb	0.7	446823.60	6.0887	Pulse	0.5000	3
Cr	52	72	He	523.345	ppb	0.9	586677.36	7.9945	Pulse	0.1000	3
Mn	55	72	He	515.696	ppb	1.7	224386.25	3.0577	Pulse	0.1000	3
Fe	57	72	He	5150.864	ppb	1.0	109799.28	1.4962	Pulse	0.1000	3
Co	59	72	He	518.559	ppb	0.9	1161288.71	15.8246	Pulse	0.1000	3
Ni	60	72	He	518.810	ppb	1.3	335445.36	4.5711	Pulse	0.1000	3
Cu	63	72	He	518.255	ppb	0.8	948778.11	12.9287	Pulse	0.1000	3
Zn	66	72	He	520.930	ppb	1.1	94273.14	1.2846	Pulse	0.1000	3
As	75	72	He	511.802	ppb	0.8	65353.11	0.8905	Pulse	0.5000	3
Sr	88	115	He	52.999	ppb	2.8	26131.19	0.4151	Pulse	0.1000	3
Mo	98	115	He	51.819	ppb	1.2	71856.12	1.1417	Pulse	0.1000	3
Ag	107	115	He	52.377	ppb	1.4	150029.49	2.3836	Pulse	0.1000	3
Cd	111	115	He	52.162	ppb	1.9	15762.87	0.2504	Pulse	0.5000	3
Sn	120	115	He	51.925	ppb	1.2	47578.85	0.7559	Pulse	0.1000	3
Sb	121	115	He	52.711	ppb	4.1	41161.73	0.6541	Pulse	0.1000	3
Ba	137	115	He	519.212	ppb	0.5	142995.08	2.2718	Pulse	0.1000	3
Tl	205	209	He	51.576	ppb	0.9	316164.89	1.4268	Pulse	0.1000	3
Pb	208	209	He	52.166	ppb	0.9	421229.80	1.9009	Pulse	0.1000	3
U	238	209	He	50.951	ppb	0.6	475012.87	2.1436	Pulse	0.1000	3

ISTD Table:

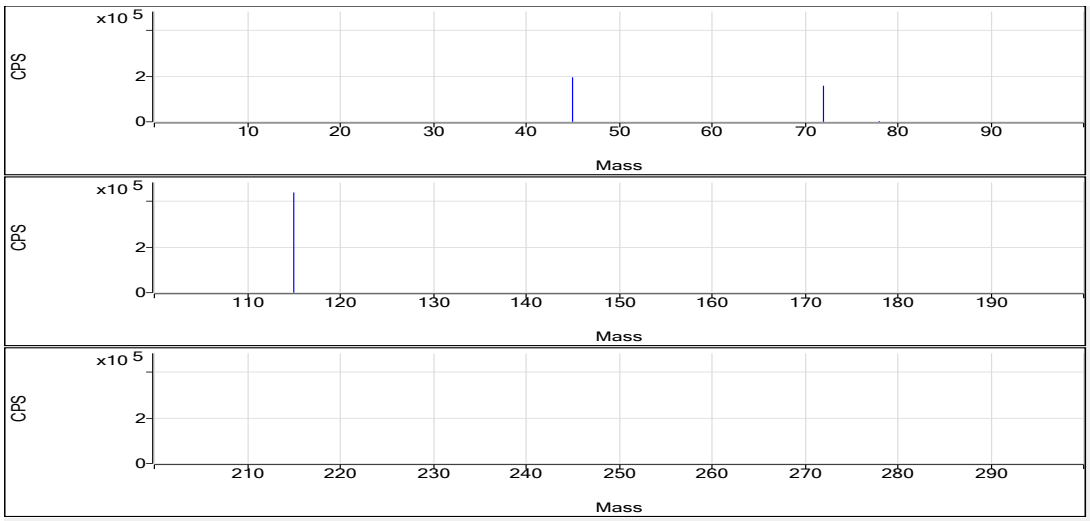
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3262883.60	2.4	100.7	Pulse	0.1000	3
No Gas	Ge	72	1440397.11	1.7	100.0	Pulse	0.1000	3
H2	Sc	45	194888.85	2.4	99.7	Pulse	0.1000	3
H2	Ge	72	158331.75	2.0	97.1	Pulse	0.1000	3
H2	In	115	439314.73	3.4	101.4	Pulse	0.1000	3
He	Sc	45	41937.41	2.9	104.9	Pulse	0.1000	3
He	Ge	72	73387.05	0.4	101.5	Pulse	0.1000	3
He	In	115	62946.18	1.3	97.5	Pulse	0.1000	3
He	Tb	159	283881.51	1.2	99.3	Pulse	0.1000	3
He	Bi	209	221595.58	0.5	99.7	Pulse	0.1000	3

No Gas

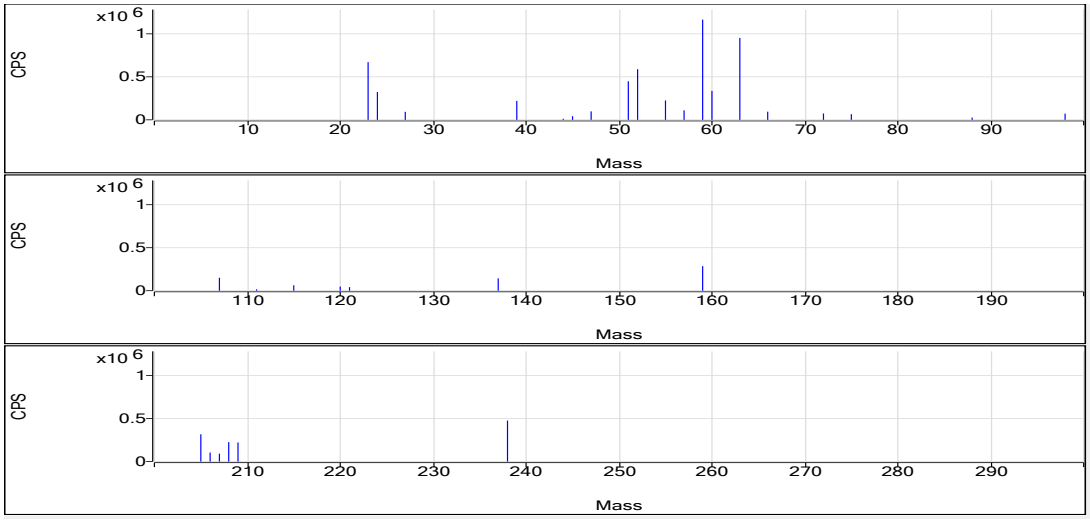


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.943	0.0604	88598.09	0.0013	4.694E-05
Be	9	1	No Gas	48.077	0.0632	90915.34	0.0013	4.694E-05
Be	9	1	No Gas	51.167	0.0673	95320.03	0.0013	4.694E-05
Se	78	2	H2	55.606	0.0217	3355.73	0.0004	1.089E-05
Se	78	2	H2	50.988	0.0199	3197.03	0.0004	1.089E-05
Se	78	2	H2	50.893	0.0198	3155.02	0.0004	1.089E-05
Na	23	3	He	5266.567	9.1535	668804.91	0.0017	0.1065
Na	23	3	He	5197.766	9.0353	665886.24	0.0017	0.1065
Na	23	3	He	5253.704	9.1314	670216.71	0.0017	0.1065
Mg	24	3	He	5252.124	4.4329	323894.25	0.0008	0.004846
Mg	24	3	He	5204.624	4.3929	323747.63	0.0008	0.004846
Mg	24	3	He	5160.123	4.3554	319670.29	0.0008	0.004846
Al	27	3	He	5261.596	1.2712	92879.73	0.0002	0.001063
Al	27	3	He	5129.827	1.2394	91339.81	0.0002	0.001063
Al	27	3	He	5255.403	1.2697	93191.30	0.0002	0.001063
K	39	3	He	5243.349	3.0391	222052.40	0.0006	0.1436
K	39	3	He	5071.963	2.9444	217000.37	0.0006	0.1436
K	39	3	He	5148.115	2.9865	219199.72	0.0006	0.1436
Ca	44	3	He	5123.529	0.1607	11745.09	0	0.001611
Ca	44	3	He	5114.05	0.1605	11825.10	0	0.001611
Ca	44	3	He	5201.094	0.1632	11975.19	0	0.001611
Ti	47	3	He	5336.119	1.3385	97795.61	0.0003	0.0002737
Ti	47	3	He	5358.934	1.3442	99064.14	0.0003	0.0002737
Ti	47	3	He	5215.838	1.3083	96025.26	0.0003	0.0002737
V	51	3	He	523.359	6.1295	447852.53	0.0117	0.007326
V	51	3	He	516.605	6.0504	445908.09	0.0117	0.007326
V	51	3	He	519.663	6.0862	446710.19	0.0117	0.007326
Cr	52	3	He	528.204	8.0685	589529.13	0.0152	0.02538
Cr	52	3	He	518.369	7.9187	583597.41	0.0152	0.02538
Cr	52	3	He	523.464	7.9963	586905.54	0.0152	0.02538
Mn	55	3	He	522.478	3.0977	226338.28	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	506.131	3.0013	221187.48	0.0059	0.01385
Mn	55	3	He	518.48	3.0741	225633.00	0.0059	0.01385
Fe	57	3	He	5207.884	1.5127	110527.77	0.0003	0.003918
Fe	57	3	He	5133.804	1.4913	109903.17	0.0003	0.003918
Fe	57	3	He	5110.904	1.4846	108966.90	0.0003	0.003918
Co	59	3	He	523.884	15.987	1168103.42	0.0305	0.003084
Co	59	3	He	514.683	15.7063	1157531.23	0.0305	0.003084
Co	59	3	He	517.109	15.7803	1158231.47	0.0305	0.003084
Ni	60	3	He	526.55	4.6391	338959.92	0.0088	0.009003
Ni	60	3	He	515.079	4.5382	334461.21	0.0088	0.009003
Ni	60	3	He	514.801	4.5358	332914.96	0.0088	0.009003
Cu	63	3	He	522.266	13.0287	951953.11	0.0249	0.004937
Cu	63	3	He	513.692	12.8149	944439.36	0.0249	0.004937
Cu	63	3	He	518.808	12.9425	949941.86	0.0249	0.004937
Zn	66	3	He	525.415	1.2957	94668.18	0.0025	0.004836
Zn	66	3	He	514.668	1.2693	93542.00	0.0025	0.004836
Zn	66	3	He	522.707	1.289	94609.24	0.0025	0.004836
As	75	3	He	516.366	0.8985	65648.34	0.0017	0.0004347
As	75	3	He	508.343	0.8845	65188.45	0.0017	0.0004347
As	75	3	He	510.698	0.8886	65222.55	0.0017	0.0004347
Sr	88	3	He	54.066	0.4234	27046.16	0.0078	0.0007762
Sr	88	3	He	53.623	0.42	26244.69	0.0078	0.0007762
Sr	88	3	He	51.307	0.4018	25102.73	0.0078	0.0007762
Mo	98	3	He	51.158	1.1271	71993.58	0.022	0.0005162
Mo	98	3	He	52.406	1.1546	72154.26	0.022	0.0005162
Mo	98	3	He	51.894	1.1433	71420.52	0.022	0.0005162
Ag	107	3	He	51.869	2.3605	150780.47	0.0455	0.0004641
Ag	107	3	He	52.029	2.3678	147972.44	0.0455	0.0004641
Ag	107	3	He	53.233	2.4226	151335.56	0.0455	0.0004641
Cd	111	3	He	51.436	0.247	15774.88	0.0048	5.152E-05
Cd	111	3	He	51.74	0.2484	15524.60	0.0048	5.152E-05
Cd	111	3	He	53.31	0.256	15989.14	0.0048	5.152E-05
Sn	120	3	He	51.373	0.7481	47782.55	0.0143	0.01559
Sn	120	3	He	51.768	0.7537	47100.94	0.0143	0.01559
Sn	120	3	He	52.634	0.766	47853.06	0.0143	0.01559
Sb	121	3	He	50.331	0.6246	39897.88	0.0124	0.000258
Sb	121	3	He	53.321	0.6617	41352.33	0.0124	0.000258
Sb	121	3	He	54.481	0.6761	42234.98	0.0124	0.000258
Ba	137	3	He	517.643	2.2649	144671.82	0.0044	0.000309
Ba	137	3	He	522.037	2.2841	142743.17	0.0044	0.000309
Ba	137	3	He	517.955	2.2663	141570.24	0.0044	0.000309
Tl	205	3	He	51.247	1.4177	315958.32	0.0276	0.001005
Tl	205	3	He	51.406	1.4221	314475.37	0.0276	0.001005
Tl	205	3	He	52.076	1.4406	318060.99	0.0276	0.001005
Pb	208	3	He	52.456	1.9114	226943.71	0.0364	0.002176
Pb	208	3	He	51.613	1.8807	222776.60	0.0364	0.002176
Pb	208	3	He	52.429	1.9104	226204.61	0.0364	0.002176
U	238	3	He	51.057	2.1481	478738.24	0.0421	0.00024
U	238	3	He	50.615	2.1295	470909.25	0.0421	0.00024
U	238	3	He	51.179	2.1532	475391.13	0.0421	0.00024
Sc	45	1	No Gas			3345322.45		
Sc	45	1	No Gas			3252088.70		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3191239.64		
Ge	72	1	No Gas			1466425.92		
Ge	72	1	No Gas			1438039.82		
Ge	72	1	No Gas			1416725.60		
Sc	45	2	H2			189441.72		
Sc	45	2	H2			197060.06		
Sc	45	2	H2			198164.76		
Ge	72	2	H2			154914.64		
Ge	72	2	H2			160950.29		
Ge	72	2	H2			159130.31		
In	115	2	H2			422013.16		
In	115	2	H2			447927.65		
In	115	2	H2			448003.39		
Sc	45	3	He			43154.34		
Sc	45	3	He			40737.44		
Sc	45	3	He			41920.46		
Ge	72	3	He			73065.67		
Ge	72	3	He			73698.39		
Ge	72	3	He			73397.09		
In	115	3	He			64248.54		
In	115	3	He			62861.33		
In	115	3	He			62842.00		
Tb	159	3	He			287772.83		
Tb	159	3	He			282216.77		
Tb	159	3	He			281654.92		
Bi	209	3	He			222866.91		
Bi	209	3	He			221138.38		
Bi	209	3	He			220781.46		

Quantitation Report

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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

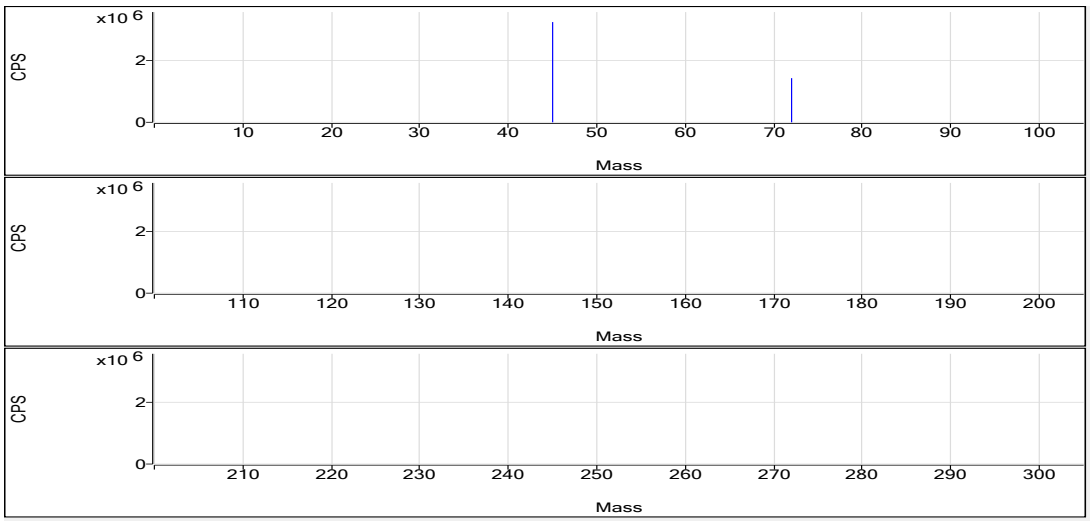
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.023	ppb	51.2	110.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.062	ppb	77.2	5.56	0.0000	Pulse	1.5000	3
Na	23	72	He	6.687	ppb	48.1	8486.07	0.1179	Pulse	0.1000	3
Mg	24	72	He	15.247	ppb	12.8	1273.44	0.0177	Pulse	0.1000	3
Al	27	72	He	21.701	ppb	16.2	453.35	0.0063	Pulse	0.1000	3
K	39	72	He	12.102	ppb	155.2	10814.33	0.1503	Pulse	0.1000	3
Ca	44	72	He	22.707	ppb	68.7	166.67	0.0023	Pulse	0.1000	3
Ti	47	72	He	0.942	ppb	90.3	36.67	0.0005	Pulse	0.1000	3
V	51	72	He	0.143	ppb	9.1	647.35	0.0090	Pulse	0.5000	3
Cr	52	72	He	0.031	ppb	464.2	1860.19	0.0259	Pulse	0.1000	3
Mn	55	72	He	0.204	ppb	51.6	1083.41	0.0151	Pulse	0.1000	3
Fe	57	72	He	37.177	ppb	3.5	1056.75	0.0147	Pulse	0.1000	3
Co	59	72	He	0.157	ppb	43.9	566.70	0.0079	Pulse	0.1000	3
Ni	60	72	He	0.947	ppb	22.5	1246.76	0.0173	Pulse	0.1000	3
Cu	63	72	He	0.138	ppb	38.6	603.36	0.0084	Pulse	0.1000	3
Zn	66	72	He	1.181	ppb	21.5	556.70	0.0077	Pulse	0.1000	3
As	75	72	He	0.171	ppb	23.8	52.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.153	ppb	58.6	126.67	0.0020	Pulse	0.1000	3
Mo	98	115	He	0.047	ppb	51.4	100.00	0.0016	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.026	ppb	58.9	11.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.116	ppb	30.7	1103.41	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.071	ppb	34.8	73.33	0.0011	Pulse	0.1000	3
Ba	137	115	He	0.228	ppb	26.3	83.33	0.0013	Pulse	0.1000	3
Tl	205	209	He	0.129	ppb	15.8	1003.41	0.0046	Pulse	0.1000	3
Pb	208	209	He	0.693	ppb	4.0	6024.09	0.0274	Pulse	0.1000	3
U	238	209	He	0.014	ppb	25.7	186.68	0.0008	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3260060.37	1.8	100.6	Pulse	0.1000	3
No Gas	Ge	72	1435895.66	1.3	99.7	Pulse	0.1000	3
H2	Sc	45	194411.42	3.2	99.5	Pulse	0.1000	3
H2	Ge	72	157561.51	1.4	96.7	Pulse	0.1000	3
H2	In	115	438181.91	2.6	101.1	Pulse	0.1000	3
He	Sc	45	40339.60	2.3	100.9	Pulse	0.1000	3
He	Ge	72	71946.45	0.2	99.5	Pulse	0.1000	3
He	In	115	63988.19	1.9	99.1	Pulse	0.1000	3
He	Tb	159	284339.67	0.8	99.4	Pulse	0.1000	3
He	Bi	209	219974.41	0.9	99.0	Pulse	0.1000	3

No Gas



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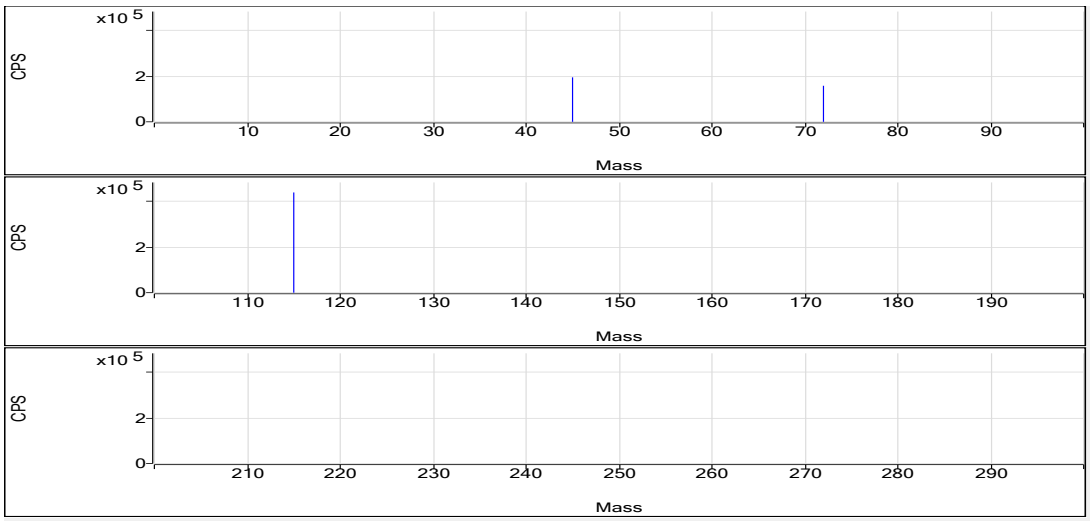
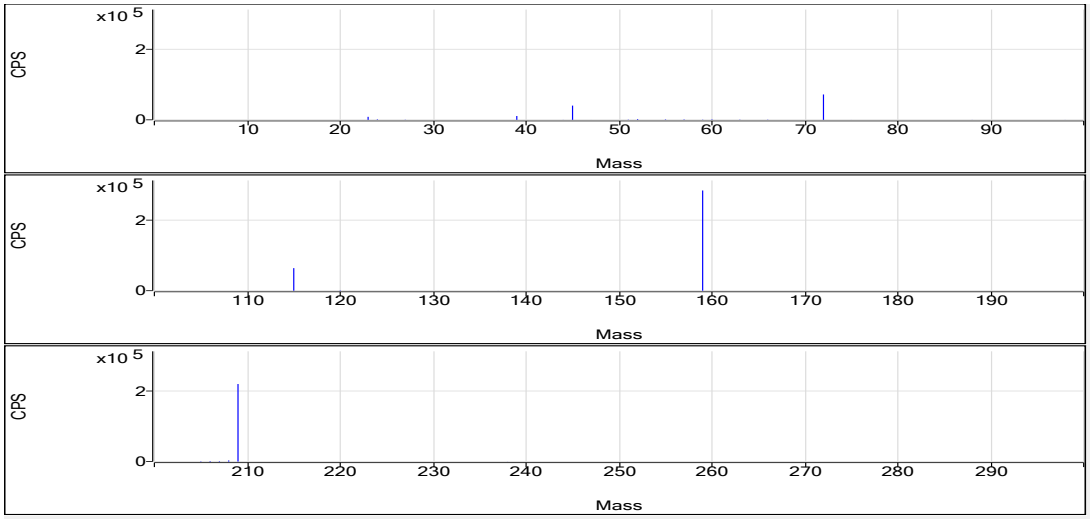


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0.0001	86.00	0.0013	4.694E-05
Be	9	1	No Gas	0.032	0.0001	128.00	0.0013	4.694E-05
Be	9	1	No Gas	0.027	0.0001	116.00	0.0013	4.694E-05
Se	78	2	H2	0.06	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.112	0.0001	8.67	0.0004	1.089E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Na	23	3	He	3.776	0.1129	8112.53	0.0017	0.1065
Na	23	3	He	6.141	0.117	8412.65	0.0017	0.1065
Na	23	3	He	10.143	0.1239	8933.02	0.0017	0.1065
Mg	24	3	He	17.372	0.0195	1400.12	0.0008	0.004846
Mg	24	3	He	13.555	0.0163	1170.10	0.0008	0.004846
Mg	24	3	He	14.814	0.0173	1250.09	0.0008	0.004846
Al	27	3	He	18.668	0.0056	400.02	0.0002	0.001063
Al	27	3	He	25.559	0.0072	520.02	0.0002	0.001063
Al	27	3	He	20.876	0.0061	440.02	0.0002	0.001063
K	39	3	He	31.951	0.1613	11584.96	0.0006	0.1436
K	39	3	He	9.735	0.149	10714.23	0.0006	0.1436
K	39	3	He	-5.379	0.1407	10143.81	0.0006	0.1436
Ca	44	3	He	24.338	0.0024	170.01	0	0.001611
Ca	44	3	He	6.348	0.0018	130.00	0	0.001611
Ca	44	3	He	37.436	0.0028	200.01	0	0.001611
Ti	47	3	He	1.684	0.0007	50.00	0.0003	0.0002737
Ti	47	3	He	1.127	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	0.014	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.143	0.009	646.02	0.0117	0.007326
V	51	3	He	0.156	0.0092	658.02	0.0117	0.007326
V	51	3	He	0.13	0.0088	638.02	0.0117	0.007326
Cr	52	3	He	0.043	0.026	1870.18	0.0152	0.02538
Cr	52	3	He	0.169	0.028	2010.22	0.0152	0.02538
Cr	52	3	He	-0.119	0.0236	1700.16	0.0152	0.02538
Mn	55	3	He	0.083	0.0143	1030.07	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.269	0.0154	1110.08	0.0059	0.01385
Mn	55	3	He	0.261	0.0154	1110.09	0.0059	0.01385
Fe	57	3	He	38.38	0.015	1080.09	0.0003	0.003918
Fe	57	3	He	37.368	0.0147	1060.08	0.0003	0.003918
Fe	57	3	He	35.783	0.0143	1030.08	0.0003	0.003918
Co	59	3	He	0.223	0.0099	710.05	0.0305	0.003084
Co	59	3	He	0.163	0.0081	580.04	0.0305	0.003084
Co	59	3	He	0.085	0.0057	410.02	0.0305	0.003084
Ni	60	3	He	0.702	0.0152	1090.07	0.0088	0.009003
Ni	60	3	He	1.048	0.0182	1310.10	0.0088	0.009003
Ni	60	3	He	1.09	0.0186	1340.11	0.0088	0.009003
Cu	63	3	He	0.137	0.0084	600.03	0.0249	0.004937
Cu	63	3	He	0.192	0.0097	700.04	0.0249	0.004937
Cu	63	3	He	0.086	0.0071	510.02	0.0249	0.004937
Zn	66	3	He	0.922	0.0071	510.03	0.0025	0.004836
Zn	66	3	He	1.428	0.0083	600.03	0.0025	0.004836
Zn	66	3	He	1.193	0.0078	560.03	0.0025	0.004836
As	75	3	He	0.166	0.0007	52.00	0.0017	0.0004347
As	75	3	He	0.214	0.0008	58.00	0.0017	0.0004347
As	75	3	He	0.133	0.0007	48.00	0.0017	0.0004347
Sr	88	3	He	0.081	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.124	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.254	0.0028	180.01	0.0078	0.0007762
Mo	98	3	He	0.026	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.042	0.0014	90.00	0.022	0.0005162
Mo	98	3	He	0.074	0.0021	140.01	0.022	0.0005162
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.035	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.036	0.0002	14.00	0.0048	5.152E-05
Cd	111	3	He	0.008	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.149	0.0177	1130.08	0.0143	0.01559
Sn	120	3	He	0.122	0.0173	1090.07	0.0143	0.01559
Sn	120	3	He	0.078	0.0167	1090.08	0.0143	0.01559
Sb	121	3	He	0.08	0.0013	80.00	0.0124	0.000258
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.09	0.0014	90.00	0.0124	0.000258
Ba	137	3	He	0.216	0.0013	80.00	0.0044	0.000309
Ba	137	3	He	0.293	0.0016	100.00	0.0044	0.000309
Ba	137	3	He	0.175	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.151	0.0052	1140.09	0.0276	0.001005
Tl	205	3	He	0.123	0.0044	980.08	0.0276	0.001005
Tl	205	3	He	0.111	0.0041	890.06	0.0276	0.001005
Pb	208	3	He	0.704	0.0278	3050.46	0.0364	0.002176
Pb	208	3	He	0.661	0.0262	2970.45	0.0364	0.002176
Pb	208	3	He	0.713	0.0281	3230.52	0.0364	0.002176
U	238	3	He	0.011	0.0007	150.01	0.0421	0.00024
U	238	3	He	0.018	0.001	220.01	0.0421	0.00024
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
Sc	45	1	No Gas			3308284.01		
Sc	45	1	No Gas			3278970.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3192926.51		
Ge	72	1	No Gas			1446022.17		
Ge	72	1	No Gas			1447685.60		
Ge	72	1	No Gas			1413979.20		
Sc	45	2	H2			187405.04		
Sc	45	2	H2			199035.13		
Sc	45	2	H2			196794.10		
Ge	72	2	H2			155200.23		
Ge	72	2	H2			159343.61		
Ge	72	2	H2			158140.70		
In	115	2	H2			429023.98		
In	115	2	H2			451035.50		
In	115	2	H2			434486.24		
Sc	45	3	He			41198.85		
Sc	45	3	He			39323.58		
Sc	45	3	He			40496.37		
Ge	72	3	He			71829.26		
Ge	72	3	He			71899.61		
Ge	72	3	He			72110.47		
In	115	3	He			63805.88		
In	115	3	He			62911.45		
In	115	3	He			65273.04		
Tb	159	3	He			283114.41		
Tb	159	3	He			282941.40		
Tb	159	3	He			286963.20		
Bi	209	3	He			220040.29		
Bi	209	3	He			221864.20		
Bi	209	3	He			218018.75		

Quantitation Report

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Comment	H2 ICP
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

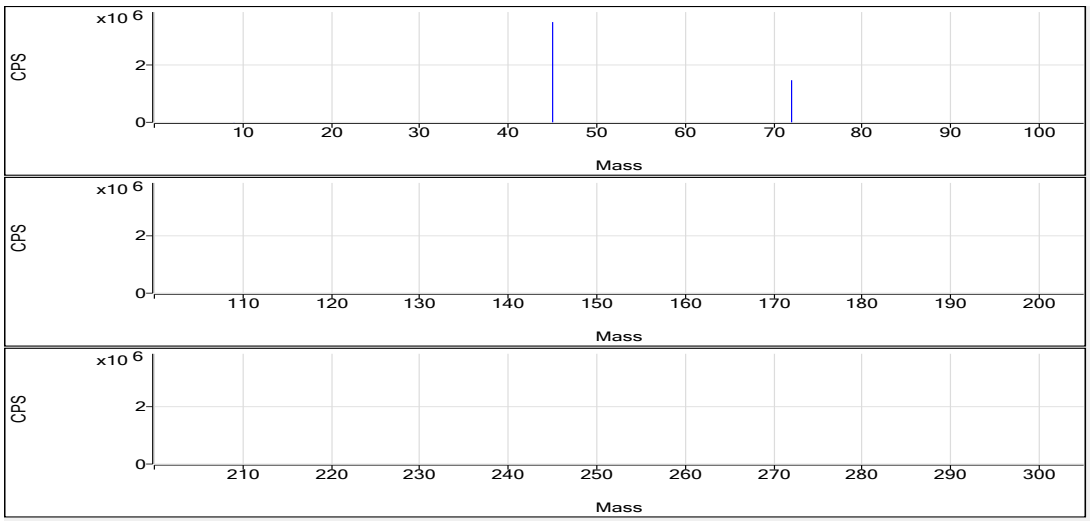
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	2.277	ppb	8.5	4478.03	0.0030	Pulse	0.5000	3
Se	78	72	H2	0.317	ppb	12.1	21.78	0.0001	Pulse	1.5000	3
Na	23	72	He	1650.490	ppb	1.0	218075.47	2.9417	Pulse	0.1000	3
Mg	24	72	He	16234.535	ppb	1.2	1015000.69	13.6922	Pulse	0.1000	3
Al	27	72	He	39789.517	ppb	1.3	712100.56	9.6060	Pulse	0.1000	3
K	39	72	He	6157.877	ppb	1.3	262726.18	3.5441	Pulse	0.1000	3
Ca	44	72	He	13231.341	ppb	0.8	30586.07	0.4126	Pulse	0.1000	3
Ti	47	72	He	2496.402	ppb	1.0	46434.65	0.6263	Pulse	0.1000	3
V	51	72	He	124.602	ppb	1.2	108592.50	1.4649	Pulse	0.5000	3
Cr	52	72	He	63.703	ppb	2.0	73793.74	0.9954	Pulse	0.1000	3
Mn	55	72	He	718.620	ppb	0.8	315470.35	4.2554	Pulse	0.1000	3
Fe	57	72	He	61629.171	ppb	0.9	1323928.31	17.8588	Pulse	0.1000	3
Co	59	72	He	19.217	ppb	1.6	43693.37	0.5894	Pulse	0.1000	3
Ni	60	72	He	42.404	ppb	0.7	28311.76	0.3819	Pulse	0.1000	3
Cu	63	72	He	62.084	ppb	0.4	115145.08	1.5531	Pulse	0.1000	3
Zn	66	72	He	112.055	ppb	1.0	20768.75	0.2801	Pulse	0.1000	3
As	75	72	He	10.687	ppb	2.9	1410.08	0.0190	Pulse	0.5000	3
Sr	88	115	He	46.012	ppb	1.3	23216.24	0.3605	Pulse	0.1000	3
Mo	98	115	He	0.792	ppb	13.2	1156.76	0.0180	Pulse	0.1000	3
Ag	107	115	He	0.113	ppb	13.7	360.02	0.0056	Pulse	0.1000	3
Cd	111	115	He	0.613	ppb	19.9	192.67	0.0030	Pulse	0.5000	3
Sn	120	115	He	3.877	ppb	7.5	4564.23	0.0709	Pulse	0.1000	3
Sb	121	115	He	1.081	ppb	5.5	880.06	0.0137	Pulse	0.1000	3
Ba	137	115	He	202.623	ppb	0.3	57112.25	0.8867	Pulse	0.1000	3
Tl	205	209	He	0.419	ppb	5.8	2823.75	0.0126	Pulse	0.1000	3
Pb	208	209	He	43.345	ppb	0.9	353920.93	1.5798	Pulse	0.1000	3
U	238	209	He	2.963	ppb	0.3	27981.18	0.1249	Pulse	0.1000	3

ISTD Table:

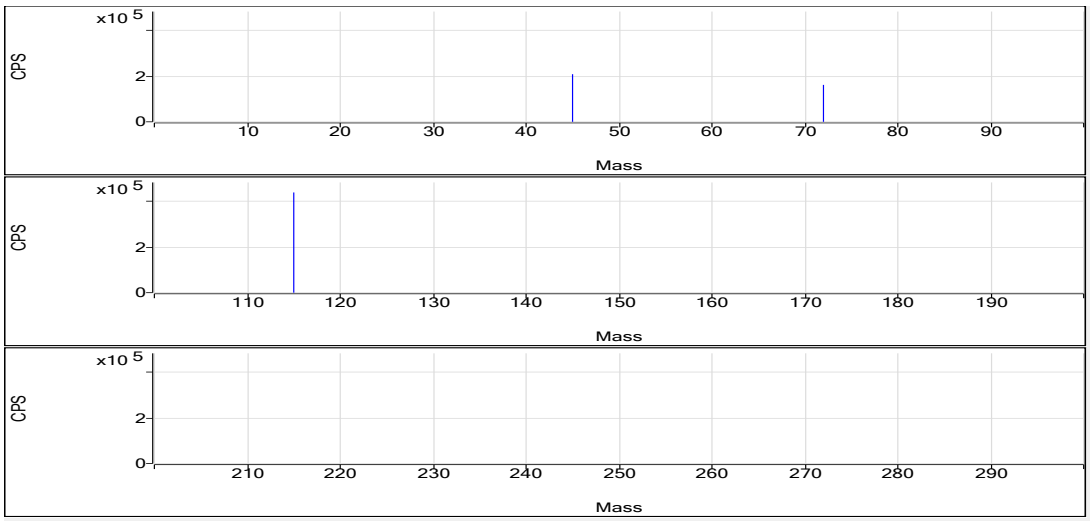
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3511198.70	1.4	108.3	Pulse	0.1000	3
No Gas	Ge	72	1474795.14	1.5	102.4	Pulse	0.1000	3
H2	Sc	45	208672.91	2.6	106.8	Pulse	0.1000	3
H2	Ge	72	161808.13	3.2	99.3	Pulse	0.1000	3
H2	In	115	439171.03	2.1	101.4	Pulse	0.1000	3
He	Sc	45	44197.46	1.2	110.5	Pulse	0.1000	3
He	Ge	72	74137.41	1.3	102.6	Pulse	0.1000	3
He	In	115	64407.01	0.2	99.7	Pulse	0.1000	3
He	Tb	159	300109.79	0.5	104.9	Pulse	0.1000	3
He	Bi	209	224049.88	1.8	100.8	Pulse	0.1000	3

No Gas

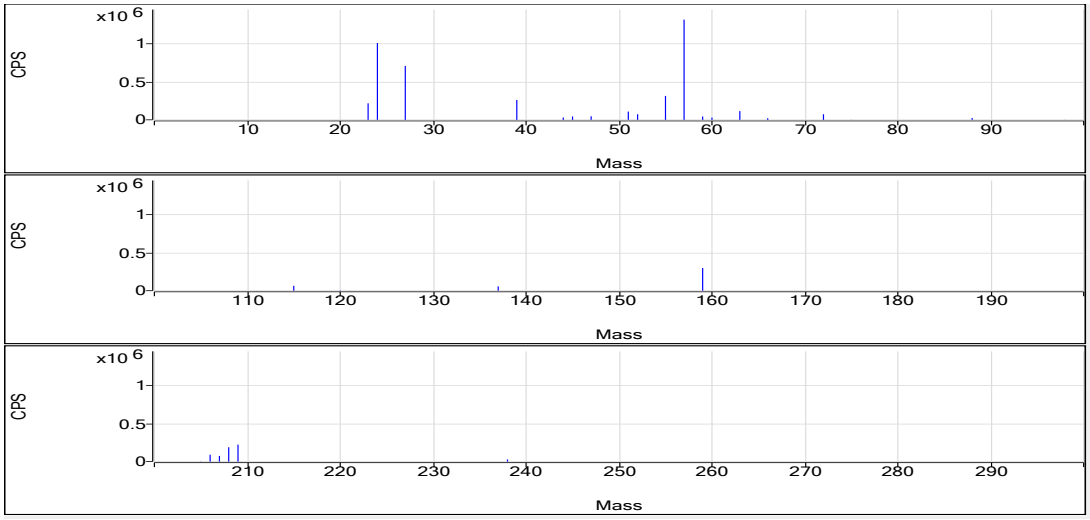


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	2.06	0.0028	4126.59	0.0013	4.694E-05
Be	9	1	No Gas	2.335	0.0031	4576.72	0.0013	4.694E-05
Be	9	1	No Gas	2.436	0.0032	4730.77	0.0013	4.694E-05
Se	78	2	H2	0.275	0.0001	18.67	0.0004	1.089E-05
Se	78	2	H2	0.349	0.0001	24.67	0.0004	1.089E-05
Se	78	2	H2	0.327	0.0001	22.00	0.0004	1.089E-05
Na	23	3	He	1638.563	2.9212	219637.26	0.0017	0.1065
Na	23	3	He	1643.745	2.9301	216502.24	0.0017	0.1065
Na	23	3	He	1669.162	2.9738	218086.91	0.0017	0.1065
Mg	24	3	He	16032.461	13.5218	1016666.16	0.0008	0.004846
Mg	24	3	He	16240.183	13.697	1012050.22	0.0008	0.004846
Mg	24	3	He	16430.96	13.8578	1016285.69	0.0008	0.004846
Al	27	3	He	39429.539	9.5191	715714.13	0.0002	0.001063
Al	27	3	He	39532.525	9.544	705191.86	0.0002	0.001063
Al	27	3	He	40406.489	9.755	715395.69	0.0002	0.001063
K	39	3	He	6095.505	3.5097	263879.98	0.0006	0.1436
K	39	3	He	6133.598	3.5307	260877.52	0.0006	0.1436
K	39	3	He	6244.528	3.5919	263421.03	0.0006	0.1436
Ca	44	3	He	13138.367	0.4097	30803.11	0	0.001611
Ca	44	3	He	13343.941	0.4161	30742.98	0	0.001611
Ca	44	3	He	13211.714	0.412	30212.13	0	0.001611
Ti	47	3	He	2511.06	0.63	47367.46	0.0003	0.0002737
Ti	47	3	He	2467.533	0.6191	45742.95	0.0003	0.0002737
Ti	47	3	He	2510.613	0.6299	46193.55	0.0003	0.0002737
V	51	3	He	122.997	1.4461	108729.30	0.0117	0.007326
V	51	3	He	125.014	1.4697	108594.60	0.0117	0.007326
V	51	3	He	125.795	1.4788	108453.59	0.0117	0.007326
Cr	52	3	He	63.757	0.9962	74903.39	0.0152	0.02538
Cr	52	3	He	62.413	0.9758	72097.47	0.0152	0.02538
Cr	52	3	He	64.939	1.0142	74380.37	0.0152	0.02538
Mn	55	3	He	714.564	4.2315	318154.45	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	715.939	4.2396	313260.37	0.0059	0.01385
Mn	55	3	He	725.356	4.2952	314996.23	0.0059	0.01385
Fe	57	3	He	61294.758	17.7619	1335464.04	0.0003	0.003918
Fe	57	3	He	61317.74	17.7686	1312894.82	0.0003	0.003918
Fe	57	3	He	62275.016	18.0459	1323426.07	0.0003	0.003918
Co	59	3	He	19.144	0.5872	44147.88	0.0305	0.003084
Co	59	3	He	18.962	0.5816	42974.57	0.0305	0.003084
Co	59	3	He	19.544	0.5994	43957.65	0.0305	0.003084
Ni	60	3	He	42.642	0.384	28869.30	0.0088	0.009003
Ni	60	3	He	42.083	0.3791	28007.79	0.0088	0.009003
Ni	60	3	He	42.486	0.3826	28058.18	0.0088	0.009003
Cu	63	3	He	61.999	1.551	116616.10	0.0249	0.004937
Cu	63	3	He	62.349	1.5597	115246.24	0.0249	0.004937
Cu	63	3	He	61.904	1.5487	113572.91	0.0249	0.004937
Zn	66	3	He	112.889	0.2822	21216.08	0.0025	0.004836
Zn	66	3	He	110.77	0.277	20465.02	0.0025	0.004836
Zn	66	3	He	112.507	0.2812	20625.16	0.0025	0.004836
As	75	3	He	10.656	0.019	1426.08	0.0017	0.0004347
As	75	3	He	10.396	0.0185	1368.08	0.0017	0.0004347
As	75	3	He	11.009	0.0196	1436.08	0.0017	0.0004347
Sr	88	3	He	46.611	0.3651	23530.05	0.0078	0.0007762
Sr	88	3	He	45.988	0.3603	23249.64	0.0078	0.0007762
Sr	88	3	He	45.438	0.356	22869.03	0.0078	0.0007762
Mo	98	3	He	0.893	0.0202	1300.11	0.022	0.0005162
Mo	98	3	He	0.8	0.0181	1170.09	0.022	0.0005162
Mo	98	3	He	0.683	0.0156	1000.07	0.022	0.0005162
Ag	107	3	He	0.099	0.005	320.02	0.0455	0.0004641
Ag	107	3	He	0.129	0.0064	410.02	0.0455	0.0004641
Ag	107	3	He	0.11	0.0054	350.02	0.0455	0.0004641
Cd	111	3	He	0.474	0.0023	150.00	0.0048	5.152E-05
Cd	111	3	He	0.661	0.0032	208.00	0.0048	5.152E-05
Cd	111	3	He	0.703	0.0034	220.00	0.0048	5.152E-05
Sn	120	3	He	4.197	0.0754	4860.99	0.0143	0.01559
Sn	120	3	He	3.809	0.0699	4510.91	0.0143	0.01559
Sn	120	3	He	3.624	0.0673	4320.78	0.0143	0.01559
Sb	121	3	He	1.093	0.0138	890.06	0.0124	0.000258
Sb	121	3	He	1.016	0.0129	830.06	0.0124	0.000258
Sb	121	3	He	1.134	0.0143	920.07	0.0124	0.000258
Ba	137	3	He	202.75	0.8873	57179.13	0.0044	0.000309
Ba	137	3	He	201.998	0.884	57048.91	0.0044	0.000309
Ba	137	3	He	203.121	0.8889	57108.71	0.0044	0.000309
Tl	205	3	He	0.443	0.0132	3020.47	0.0276	0.001005
Tl	205	3	He	0.394	0.0119	2620.38	0.0276	0.001005
Tl	205	3	He	0.421	0.0126	2830.41	0.0276	0.001005
Pb	208	3	He	42.932	1.5648	191422.93	0.0364	0.002176
Pb	208	3	He	43.739	1.5942	187433.59	0.0364	0.002176
Pb	208	3	He	43.364	1.5805	188085.23	0.0364	0.002176
U	238	3	He	2.971	0.1252	28552.41	0.0421	0.00024
U	238	3	He	2.962	0.1249	27480.21	0.0421	0.00024
U	238	3	He	2.956	0.1246	27910.92	0.0421	0.00024
Sc	45	1	No Gas			3566695.57		
Sc	45	1	No Gas			3484342.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3482557.76		
Ge	72	1	No Gas			1498552.48		
Ge	72	1	No Gas			1469075.45		
Ge	72	1	No Gas			1456757.48		
Sc	45	2	H2			205127.77		
Sc	45	2	H2			214832.87		
Sc	45	2	H2			206058.10		
Ge	72	2	H2			158505.61		
Ge	72	2	H2			167859.41		
Ge	72	2	H2			159059.36		
In	115	2	H2			429260.50		
In	115	2	H2			447985.07		
In	115	2	H2			440267.53		
Sc	45	3	He			44558.58		
Sc	45	3	He			43575.33		
Sc	45	3	He			44458.46		
Ge	72	3	He			75186.97		
Ge	72	3	He			73888.62		
Ge	72	3	He			73336.65		
In	115	3	He			64479.77		
In	115	3	He			64569.39		
In	115	3	He			64278.68		
Tb	159	3	He			301368.96		
Tb	159	3	He			298505.64		
Tb	159	3	He			300454.78		
Bi	209	3	He			228023.20		
Bi	209	3	He			220103.38		
Bi	209	3	He			224023.06		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:27:14
Sample Name	410-136577-H-25-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

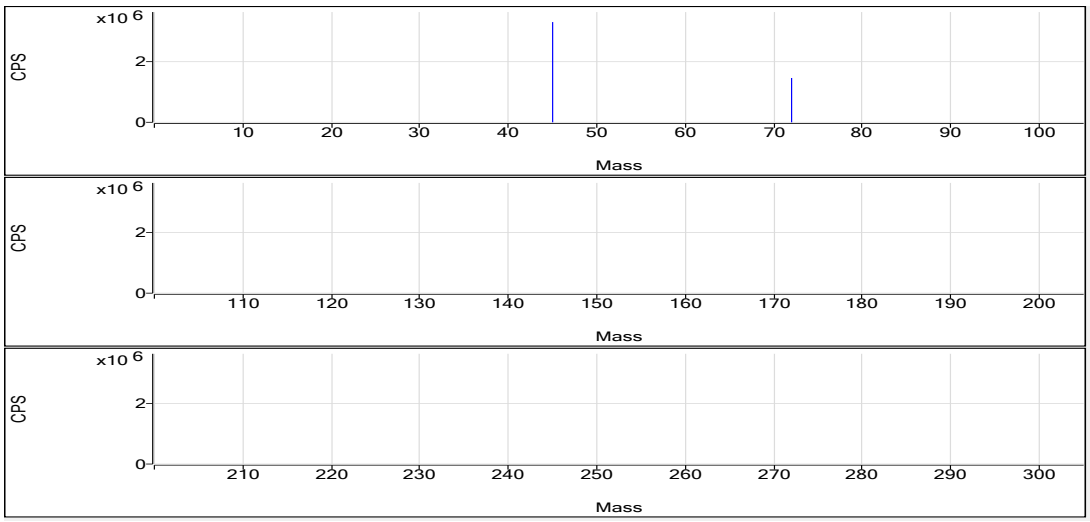
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.506	ppb	9.8	1036.04	0.0007	Pulse	0.5000	3
Se	78	72	H2	0.128	ppb	7.2	9.78	0.0001	Pulse	1.5000	3
Na	23	72	He	346.198	ppb	1.2	51847.47	0.7012	Pulse	0.1000	3
Mg	24	72	He	3517.641	ppb	0.8	219662.33	2.9706	Pulse	0.1000	3
Al	27	72	He	8540.243	ppb	1.7	152510.44	2.0626	Pulse	0.1000	3
K	39	72	He	1314.143	ppb	1.6	64284.41	0.8693	Pulse	0.1000	3
Ca	44	72	He	2920.322	ppb	4.3	6825.17	0.0923	Pulse	0.1000	3
Ti	47	72	He	526.543	ppb	5.6	9783.61	0.1323	Pulse	0.1000	3
V	51	72	He	26.690	ppb	0.4	23627.73	0.3195	Pulse	0.5000	3
Cr	52	72	He	13.761	ppb	4.7	17370.80	0.2349	Pulse	0.1000	3
Mn	55	72	He	153.894	ppb	2.2	68190.23	0.9222	Pulse	0.1000	3
Fe	57	72	He	13149.604	ppb	0.1	281988.32	3.8136	Pulse	0.1000	3
Co	59	72	He	4.134	ppb	2.5	9553.44	0.1292	Pulse	0.1000	3
Ni	60	72	He	9.987	ppb	3.0	7158.69	0.0968	Pulse	0.1000	3
Cu	63	72	He	13.290	ppb	2.0	24868.74	0.3363	Pulse	0.1000	3
Zn	66	72	He	30.716	ppb	5.0	5938.10	0.0803	Pulse	0.1000	3
As	75	72	He	2.606	ppb	9.6	367.34	0.0050	Pulse	0.5000	3
Sr	88	115	He	9.728	ppb	4.5	4994.37	0.0768	Pulse	0.1000	3
Mo	98	115	He	0.203	ppb	18.1	323.35	0.0050	Pulse	0.1000	3
Ag	107	115	He	0.021	ppb	73.4	93.34	0.0014	Pulse	0.1000	3
Cd	111	115	He	0.122	ppb	20.8	41.33	0.0006	Pulse	0.5000	3
Sn	120	115	He	0.947	ppb	16.5	1890.20	0.0291	Pulse	0.1000	3
Sb	121	115	He	0.293	ppb	18.7	253.35	0.0039	Pulse	0.1000	3
Ba	137	115	He	43.299	ppb	2.5	12332.57	0.1897	Pulse	0.1000	3
Tl	205	209	He	0.104	ppb	15.1	866.74	0.0039	Pulse	0.1000	3
Pb	208	209	He	9.791	ppb	1.1	79877.40	0.3586	Pulse	0.1000	3
U	238	209	He	0.638	ppb	4.6	6034.98	0.0271	Pulse	0.1000	3

ISTD Table:

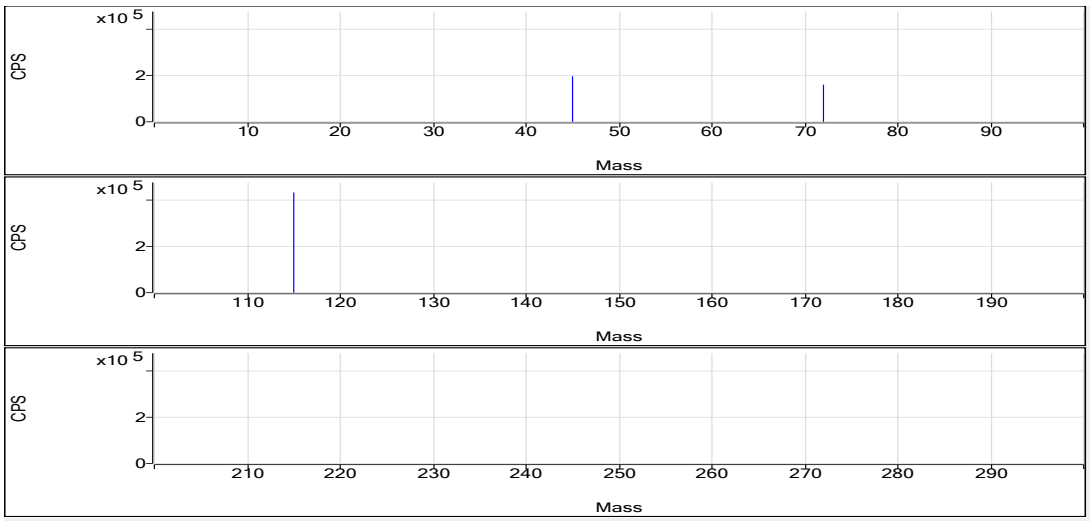
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3296249.64	2.4	101.7	Pulse	0.1000	3
No Gas	Ge	72	1457237.74	1.8	101.2	Pulse	0.1000	3
H2	Sc	45	197455.24	0.9	101.1	Pulse	0.1000	3
H2	Ge	72	161176.82	2.0	98.9	Pulse	0.1000	3
H2	In	115	435121.31	1.9	100.4	Pulse	0.1000	3
He	Sc	45	41285.58	1.2	103.3	Pulse	0.1000	3
He	Ge	72	73943.90	0.5	102.3	Pulse	0.1000	3
He	In	115	65003.18	0.4	100.6	Pulse	0.1000	3
He	Tb	159	287345.06	0.4	100.5	Pulse	0.1000	3
He	Bi	209	222768.17	0.4	100.3	Pulse	0.1000	3

No Gas

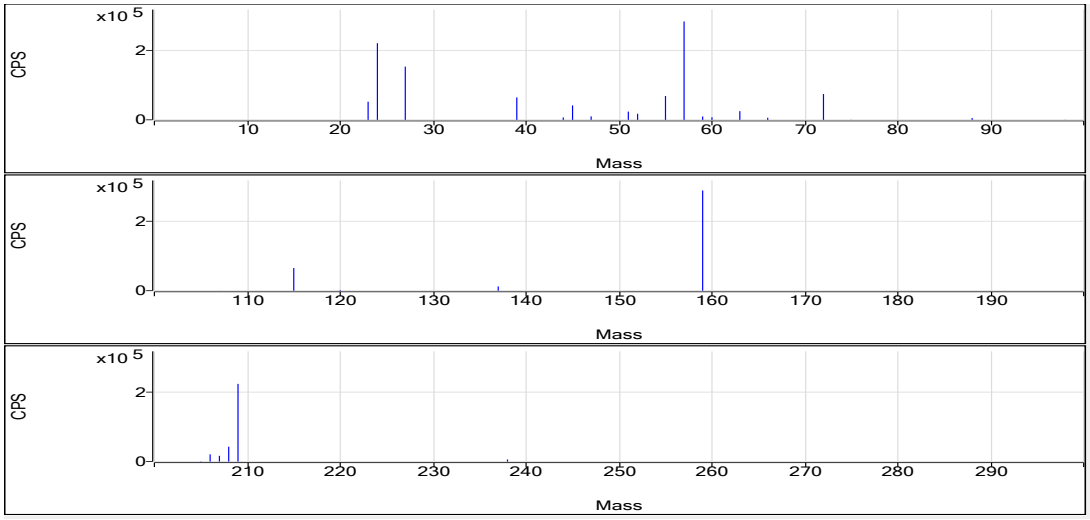


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.455	0.0006	956.04	0.0013	4.694E-05
Be	9	1	No Gas	0.509	0.0007	1044.04	0.0013	4.694E-05
Be	9	1	No Gas	0.554	0.0008	1108.05	0.0013	4.694E-05
Se	78	2	H2	0.134	0.0001	10.00	0.0004	1.089E-05
Se	78	2	H2	0.117	0.0001	9.33	0.0004	1.089E-05
Se	78	2	H2	0.133	0.0001	10.00	0.0004	1.089E-05
Na	23	3	He	349.618	0.707	52171.98	0.0017	0.1065
Na	23	3	He	347.455	0.7033	52322.26	0.0017	0.1065
Na	23	3	He	341.521	0.6931	51048.16	0.0017	0.1065
Mg	24	3	He	3503.285	2.9585	218304.18	0.0008	0.004846
Mg	24	3	He	3551.118	2.9988	223090.11	0.0008	0.004846
Mg	24	3	He	3498.522	2.9545	217592.71	0.0008	0.004846
Al	27	3	He	8517.161	2.0571	151789.19	0.0002	0.001063
Al	27	3	He	8405.925	2.0302	151033.29	0.0002	0.001063
Al	27	3	He	8697.644	2.1006	154708.85	0.0002	0.001063
K	39	3	He	1311.518	0.8679	64040.22	0.0006	0.1436
K	39	3	He	1336.891	0.8819	65606.42	0.0006	0.1436
K	39	3	He	1294.02	0.8582	63206.59	0.0006	0.1436
Ca	44	3	He	2990.105	0.0945	6971.87	0	0.001611
Ca	44	3	He	2774.931	0.0878	6531.71	0	0.001611
Ca	44	3	He	2995.931	0.0947	6971.92	0	0.001611
Ti	47	3	He	560.601	0.1409	10394.05	0.0003	0.0002737
Ti	47	3	He	509.91	0.1281	9533.38	0.0003	0.0002737
Ti	47	3	He	509.119	0.128	9423.41	0.0003	0.0002737
V	51	3	He	26.681	0.3194	23570.96	0.0117	0.007326
V	51	3	He	26.579	0.3182	23675.18	0.0117	0.007326
V	51	3	He	26.81	0.3209	23637.06	0.0117	0.007326
Cr	52	3	He	13.116	0.2251	16609.93	0.0152	0.02538
Cr	52	3	He	13.765	0.235	17480.91	0.0152	0.02538
Cr	52	3	He	14.403	0.2447	18021.57	0.0152	0.02538
Mn	55	3	He	150.436	0.9018	66542.52	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	153.955	0.9226	68632.13	0.0059	0.01385
Mn	55	3	He	157.291	0.9423	69396.04	0.0059	0.01385
Fe	57	3	He	13137.475	3.81	281140.84	0.0003	0.003918
Fe	57	3	He	13145.287	3.8123	283609.02	0.0003	0.003918
Fe	57	3	He	13166.048	3.8183	281215.11	0.0003	0.003918
Co	59	3	He	4.031	0.1261	9303.24	0.0305	0.003084
Co	59	3	He	4.134	0.1292	9613.51	0.0305	0.003084
Co	59	3	He	4.235	0.1323	9743.56	0.0305	0.003084
Ni	60	3	He	10.245	0.0991	7312.13	0.0088	0.009003
Ni	60	3	He	9.665	0.094	6991.92	0.0088	0.009003
Ni	60	3	He	10.051	0.0974	7172.03	0.0088	0.009003
Cu	63	3	He	13.455	0.3405	25122.57	0.0249	0.004937
Cu	63	3	He	12.982	0.3287	24451.29	0.0249	0.004937
Cu	63	3	He	13.432	0.3399	25032.35	0.0249	0.004937
Zn	66	3	He	31.744	0.0828	6111.51	0.0025	0.004836
Zn	66	3	He	31.47	0.0822	6111.47	0.0025	0.004836
Zn	66	3	He	28.933	0.0759	5591.31	0.0025	0.004836
As	75	3	He	2.322	0.0045	330.01	0.0017	0.0004347
As	75	3	He	2.703	0.0051	382.01	0.0017	0.0004347
As	75	3	He	2.795	0.0053	390.01	0.0017	0.0004347
Sr	88	3	He	10.229	0.0807	5271.10	0.0078	0.0007762
Sr	88	3	He	9.556	0.0755	4901.02	0.0078	0.0007762
Sr	88	3	He	9.401	0.0743	4810.98	0.0078	0.0007762
Mo	98	3	He	0.171	0.0043	280.01	0.022	0.0005162
Mo	98	3	He	0.193	0.0048	310.02	0.022	0.0005162
Mo	98	3	He	0.243	0.0059	380.02	0.022	0.0005162
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.03	0.0018	120.01	0.0455	0.0004641
Ag	107	3	He	0.031	0.0019	120.00	0.0455	0.0004641
Cd	111	3	He	0.149	0.0008	50.00	0.0048	5.152E-05
Cd	111	3	He	0.118	0.0006	40.00	0.0048	5.152E-05
Cd	111	3	He	0.099	0.0005	34.00	0.0048	5.152E-05
Sn	120	3	He	0.776	0.0267	1740.18	0.0143	0.01559
Sn	120	3	He	0.981	0.0296	1920.20	0.0143	0.01559
Sn	120	3	He	1.083	0.031	2010.22	0.0143	0.01559
Sb	121	3	He	0.35	0.0046	300.02	0.0124	0.000258
Sb	121	3	He	0.24	0.0032	210.01	0.0124	0.000258
Sb	121	3	He	0.29	0.0039	250.01	0.0124	0.000258
Ba	137	3	He	42.102	0.1845	12045.65	0.0044	0.000309
Ba	137	3	He	43.564	0.1909	12395.98	0.0044	0.000309
Ba	137	3	He	44.232	0.1938	12556.09	0.0044	0.000309
Tl	205	3	He	0.089	0.0035	770.06	0.0276	0.001005
Tl	205	3	He	0.12	0.0043	960.09	0.0276	0.001005
Tl	205	3	He	0.104	0.0039	870.06	0.0276	0.001005
Pb	208	3	He	9.802	0.359	42509.37	0.0364	0.002176
Pb	208	3	He	9.675	0.3543	41134.64	0.0364	0.002176
Pb	208	3	He	9.897	0.3624	44114.74	0.0364	0.002176
U	238	3	He	0.628	0.0267	5941.55	0.0421	0.00024
U	238	3	He	0.615	0.0261	5791.48	0.0421	0.00024
U	238	3	He	0.671	0.0285	6371.92	0.0421	0.00024
Sc	45	1	No Gas			3376019.01		
Sc	45	1	No Gas			3296573.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3216156.83		
Ge	72	1	No Gas			1482601.85		
Ge	72	1	No Gas			1458873.88		
Ge	72	1	No Gas			1430237.48		
Sc	45	2	H2			196570.68		
Sc	45	2	H2			199413.02		
Sc	45	2	H2			196382.01		
Ge	72	2	H2			158937.61		
Ge	72	2	H2			164906.09		
Ge	72	2	H2			159686.76		
In	115	2	H2			430687.10		
In	115	2	H2			444514.06		
In	115	2	H2			430162.77		
Sc	45	3	He			40817.31		
Sc	45	3	He			41770.35		
Sc	45	3	He			41269.07		
Ge	72	3	He			73789.53		
Ge	72	3	He			74393.15		
Ge	72	3	He			73649.01		
In	115	3	He			65302.53		
In	115	3	He			64951.64		
In	115	3	He			64799.60		
Tb	159	3	He			287094.00		
Tb	159	3	He			288544.19		
Tb	159	3	He			286396.99		
Bi	209	3	He			222807.22		
Bi	209	3	He			221787.50		
Bi	209	3	He			223709.78		

Quantitation Report

Data File Name	258SMPL.d
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Acq Time	2023-08-10 19:29:14
Sample Name	410-136577-H-23-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

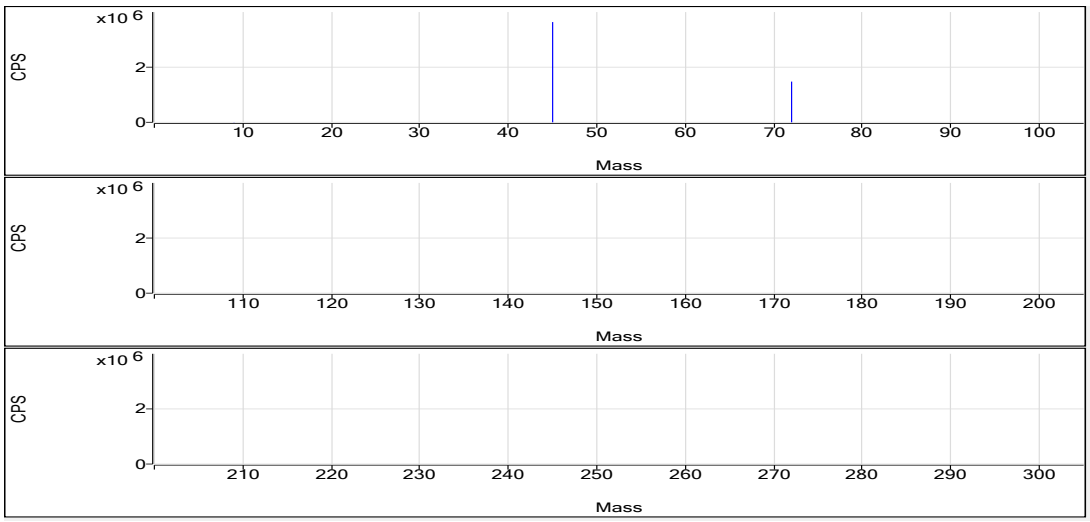
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	3.268	ppb	5.2	6349.37	0.0043	Pulse	0.5000	3
Se	78	72	H2	0.131	ppb	67.7	10.00	0.0001	Pulse	1.5000	3
Na	23	72	He	2055.453	ppb	1.6	271964.58	3.6374	Pulse	0.1000	3
Mg	24	72	He	23431.700	ppb	1.9	1477408.26	19.7601	Pulse	0.1000	3
Al	27	72	He	53512.262	ppb	2.1	965874.18	12.9186	Pulse	0.1000	3
K	39	72	He	10051.693	ppb	1.8	425753.48	5.6943	Pulse	0.1000	3
Ca	44	72	He	17026.985	ppb	3.0	39658.00	0.5305	Pulse	0.1000	3
Ti	47	72	He	4381.287	ppb	2.8	82166.80	1.0990	Pulse	0.1000	3
V	51	72	He	189.264	ppb	1.9	166080.02	2.2213	Pulse	0.5000	3
Cr	52	72	He	107.431	ppb	1.7	124212.14	1.6613	Pulse	0.1000	3
Mn	55	72	He	1359.619	ppb	2.4	601015.32	8.0389	Pulse	0.1000	3
Fe	57	72	He	90285.605	ppb	2.6	1955854.92	26.1610	Pulse	0.1000	3
Co	59	72	He	35.162	ppb	1.8	80442.57	1.0759	Pulse	0.1000	3
Ni	60	72	He	75.687	ppb	2.0	50438.55	0.6745	Pulse	0.1000	3
Cu	63	72	He	71.312	ppb	3.2	133312.69	1.7832	Pulse	0.1000	3
Zn	66	72	He	157.219	ppb	4.4	29233.55	0.3911	Pulse	0.1000	3
As	75	72	He	9.442	ppb	4.0	1260.06	0.0169	Pulse	0.5000	3
Sr	88	115	He	79.864	ppb	2.2	39886.77	0.6251	Pulse	0.1000	3
Mo	98	115	He	0.740	ppb	8.1	1073.41	0.0168	Pulse	0.1000	3
Ag	107	115	He	0.148	ppb	15.7	460.02	0.0072	Pulse	0.1000	3
Cd	111	115	He	0.320	ppb	15.0	101.33	0.0016	Pulse	0.5000	3
Sn	120	115	He	4.580	ppb	4.8	5161.16	0.0809	Pulse	0.1000	3
Sb	121	115	He	0.805	ppb	5.9	653.37	0.0102	Pulse	0.1000	3
Ba	137	115	He	239.378	ppb	0.6	66859.51	1.0475	Pulse	0.1000	3
Tl	205	209	He	0.569	ppb	3.2	3697.31	0.0167	Pulse	0.1000	3
Pb	208	209	He	26.937	ppb	1.5	216998.12	0.9826	Pulse	0.1000	3
U	238	209	He	5.804	ppb	2.2	53969.75	0.2444	Pulse	0.1000	3

ISTD Table:

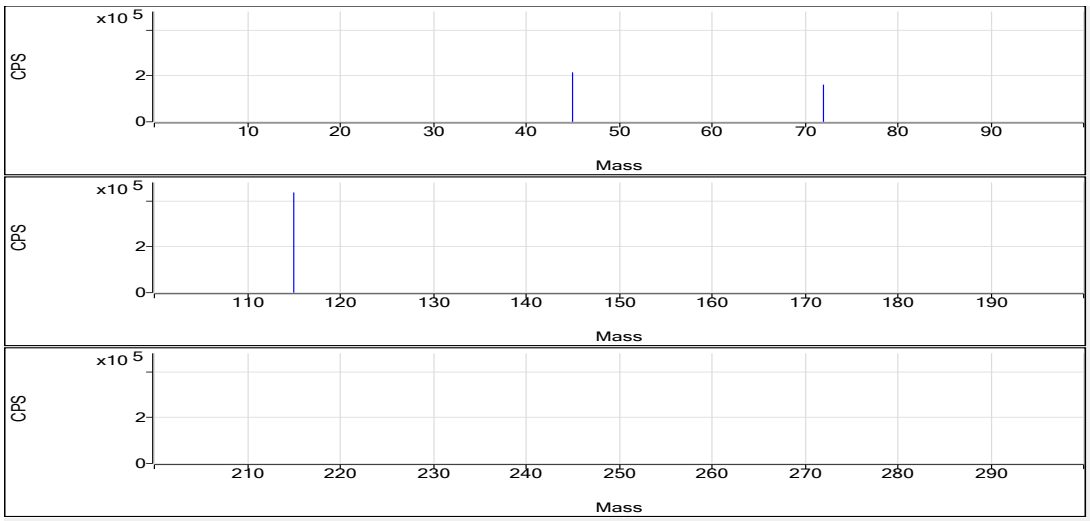
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3602812.34	0.6	111.2	Pulse	0.1000	3
No Gas	Ge	72	1463003.68	1.2	101.6	Pulse	0.1000	3
H2	Sc	45	215594.29	2.8	110.3	Pulse	0.1000	3
H2	Ge	72	162134.63	1.9	99.5	Pulse	0.1000	3
H2	In	115	436808.91	1.1	100.8	Pulse	0.1000	3
He	Sc	45	45946.17	1.7	114.9	Pulse	0.1000	3
He	Ge	72	74781.17	1.5	103.4	Pulse	0.1000	3
He	In	115	63825.50	1.6	98.8	Pulse	0.1000	3
He	Tb	159	306310.42	0.8	107.1	Pulse	0.1000	3
He	Bi	209	220850.49	1.2	99.4	Pulse	0.1000	3

No Gas

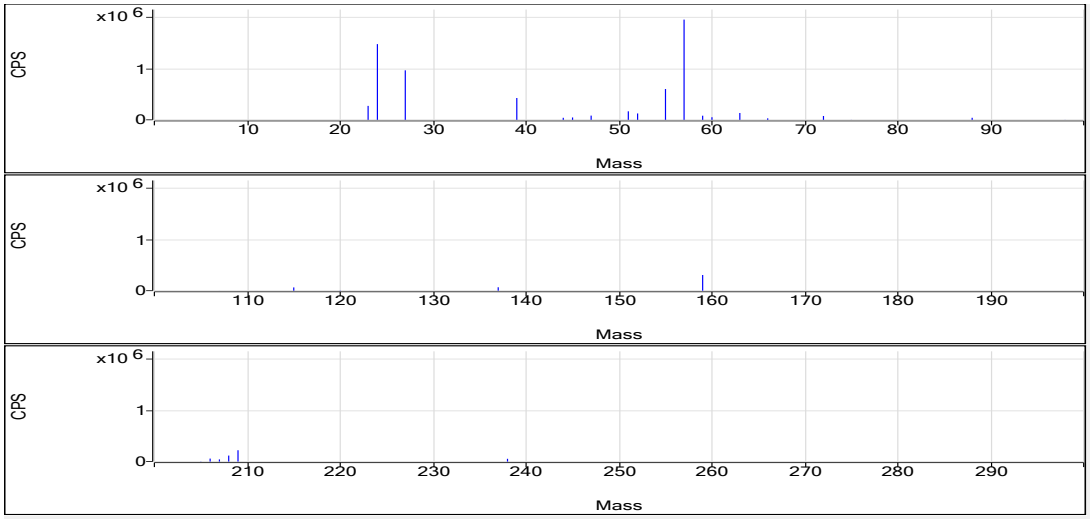


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	3.076	0.0041	6007.23	0.0013	4.694E-05
Be	9	1	No Gas	3.334	0.0044	6537.44	0.0013	4.694E-05
Be	9	1	No Gas	3.392	0.0045	6503.43	0.0013	4.694E-05
Se	78	2	H2	0.21	0.0001	14.67	0.0004	1.089E-05
Se	78	2	H2	0.15	0.0001	11.33	0.0004	1.089E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Na	23	3	He	2025.823	3.5865	271671.38	0.0017	0.1065
Na	23	3	He	2049.802	3.6277	272095.05	0.0017	0.1065
Na	23	3	He	2090.735	3.698	272127.32	0.0017	0.1065
Mg	24	3	He	23041.945	19.4315	1471924.67	0.0008	0.004846
Mg	24	3	He	23326.086	19.6711	1475448.42	0.0008	0.004846
Mg	24	3	He	23927.069	20.1778	1484851.70	0.0008	0.004846
Al	27	3	He	52480.907	12.6696	959716.16	0.0002	0.001063
Al	27	3	He	53377.355	12.886	966529.13	0.0002	0.001063
Al	27	3	He	54678.523	13.2001	971377.25	0.0002	0.001063
K	39	3	He	9868.081	5.5929	423658.70	0.0006	0.1436
K	39	3	He	10051.015	5.6939	427078.12	0.0006	0.1436
K	39	3	He	10235.984	5.7961	426523.63	0.0006	0.1436
Ca	44	3	He	16743.085	0.5216	39514.50	0	0.001611
Ca	44	3	He	16715.748	0.5208	39063.04	0	0.001611
Ca	44	3	He	17622.121	0.549	40396.47	0	0.001611
Ti	47	3	He	4241.382	1.0639	80591.46	0.0003	0.0002737
Ti	47	3	He	4439.004	1.1135	83517.84	0.0003	0.0002737
Ti	47	3	He	4463.476	1.1196	82391.11	0.0003	0.0002737
V	51	3	He	186.593	2.19	165893.77	0.0117	0.007326
V	51	3	He	187.809	2.2043	165332.73	0.0117	0.007326
V	51	3	He	193.391	2.2696	167013.56	0.0117	0.007326
Cr	52	3	He	106.434	1.6461	124689.93	0.0152	0.02538
Cr	52	3	He	106.322	1.6444	123337.75	0.0152	0.02538
Cr	52	3	He	109.536	1.6933	124608.75	0.0152	0.02538
Mn	55	3	He	1332.711	7.8801	596909.60	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1349.478	7.979	598474.87	0.0059	0.01385
Mn	55	3	He	1396.667	8.2576	607661.48	0.0059	0.01385
Fe	57	3	He	88421.32	25.6209	1940761.22	0.0003	0.003918
Fe	57	3	He	89520.4	25.9393	1945599.03	0.0003	0.003918
Fe	57	3	He	92915.094	26.9228	1981204.50	0.0003	0.003918
Co	59	3	He	34.814	1.0653	80694.22	0.0305	0.003084
Co	59	3	He	34.787	1.0644	79839.52	0.0305	0.003084
Co	59	3	He	35.884	1.0979	80793.98	0.0305	0.003084
Ni	60	3	He	74.067	0.6603	50017.19	0.0088	0.009003
Ni	60	3	He	77.154	0.6874	51562.43	0.0088	0.009003
Ni	60	3	He	75.838	0.6759	49736.04	0.0088	0.009003
Cu	63	3	He	69.718	1.7435	132068.65	0.0249	0.004937
Cu	63	3	He	70.335	1.7589	131926.99	0.0249	0.004937
Cu	63	3	He	73.882	1.8473	135942.44	0.0249	0.004937
Zn	66	3	He	151.977	0.3782	28649.01	0.0025	0.004836
Zn	66	3	He	154.59	0.3846	28849.43	0.0025	0.004836
Zn	66	3	He	165.089	0.4104	30202.22	0.0025	0.004836
As	75	3	He	9.087	0.0162	1230.06	0.0017	0.0004347
As	75	3	He	9.394	0.0168	1258.06	0.0017	0.0004347
As	75	3	He	9.846	0.0176	1292.07	0.0017	0.0004347
Sr	88	3	He	81.144	0.6351	40157.33	0.0078	0.0007762
Sr	88	3	He	80.574	0.6306	39877.05	0.0078	0.0007762
Sr	88	3	He	77.874	0.6095	39625.94	0.0078	0.0007762
Mo	98	3	He	0.738	0.0168	1060.08	0.022	0.0005162
Mo	98	3	He	0.68	0.0155	980.07	0.022	0.0005162
Mo	98	3	He	0.801	0.0182	1180.08	0.022	0.0005162
Ag	107	3	He	0.129	0.0063	400.02	0.0455	0.0004641
Ag	107	3	He	0.174	0.0084	530.03	0.0455	0.0004641
Ag	107	3	He	0.142	0.0069	450.02	0.0455	0.0004641
Cd	111	3	He	0.266	0.0013	84.00	0.0048	5.152E-05
Cd	111	3	He	0.358	0.0018	112.00	0.0048	5.152E-05
Cd	111	3	He	0.335	0.0017	108.00	0.0048	5.152E-05
Sn	120	3	He	4.809	0.0842	5321.25	0.0143	0.01559
Sn	120	3	He	4.565	0.0807	5101.11	0.0143	0.01559
Sn	120	3	He	4.367	0.0778	5061.12	0.0143	0.01559
Sb	121	3	He	0.782	0.01	630.04	0.0124	0.000258
Sb	121	3	He	0.859	0.0109	690.04	0.0124	0.000258
Sb	121	3	He	0.773	0.0098	640.04	0.0124	0.000258
Ba	137	3	He	237.969	1.0414	65847.79	0.0044	0.000309
Ba	137	3	He	240.797	1.0537	66632.05	0.0044	0.000309
Ba	137	3	He	239.366	1.0475	68098.68	0.0044	0.000309
Tl	205	3	He	0.551	0.0162	3550.59	0.0276	0.001005
Tl	205	3	He	0.588	0.0173	3860.69	0.0276	0.001005
Tl	205	3	He	0.568	0.0167	3680.66	0.0276	0.001005
Pb	208	3	He	26.896	0.9811	115209.41	0.0364	0.002176
Pb	208	3	He	26.545	0.9684	116592.27	0.0364	0.002176
Pb	208	3	He	27.37	0.9984	119054.09	0.0364	0.002176
U	238	3	He	5.883	0.2477	54133.87	0.0421	0.00024
U	238	3	He	5.656	0.2382	53260.14	0.0421	0.00024
U	238	3	He	5.873	0.2473	54515.24	0.0421	0.00024
Sc	45	1	No Gas			3605165.26		
Sc	45	1	No Gas			3622300.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3580971.51		
Ge	72	1	No Gas			1469062.95		
Ge	72	1	No Gas			1476227.79		
Ge	72	1	No Gas			1443720.29		
Sc	45	2	H2			208895.68		
Sc	45	2	H2			217300.91		
Sc	45	2	H2			220586.29		
Ge	72	2	H2			158628.55		
Ge	72	2	H2			163580.11		
Ge	72	2	H2			164195.23		
In	115	2	H2			436755.62		
In	115	2	H2			441532.02		
In	115	2	H2			432139.10		
Sc	45	3	He			46825.43		
Sc	45	3	He			45300.64		
Sc	45	3	He			45712.45		
Ge	72	3	He			75749.23		
Ge	72	3	He			75005.87		
Ge	72	3	He			73588.40		
In	115	3	He			63273.08		
In	115	3	He			63273.19		
In	115	3	He			65051.02		
Tb	159	3	He			307838.98		
Tb	159	3	He			303555.44		
Tb	159	3	He			307536.85		
Bi	209	3	He			218514.41		
Bi	209	3	He			223603.94		
Bi	209	3	He			220433.12		

Quantitation Report

Data File Name	259SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:31:14
Sample Name	410-136577-H-23-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

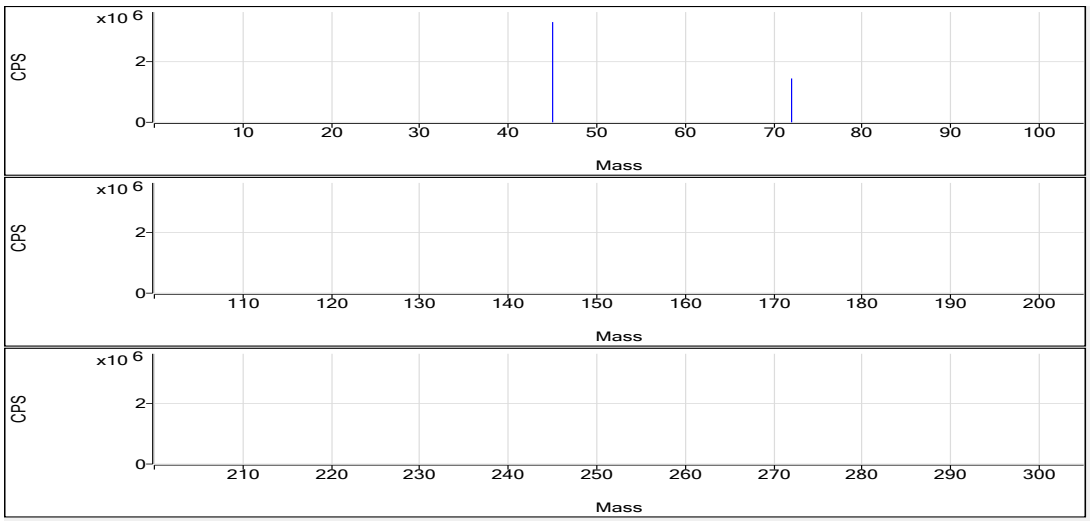
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.734	ppb	3.7	1461.42	0.0010	Pulse	0.5000	3
Se	78	72	H2	0.039	ppb	38.2	4.22	0.0000	Pulse	1.5000	3
Na	23	72	He	433.793	ppb	2.1	62558.53	0.8516	Pulse	0.1000	3
Mg	24	72	He	5170.504	ppb	1.8	320556.18	4.3641	Pulse	0.1000	3
Al	27	72	He	11844.135	ppb	0.8	210104.50	2.8602	Pulse	0.1000	3
K	39	72	He	2204.380	ppb	4.0	99954.95	1.3609	Pulse	0.1000	3
Ca	44	72	He	3771.356	ppb	1.2	8722.90	0.1187	Pulse	0.1000	3
Ti	47	72	He	953.961	ppb	0.8	17594.41	0.2395	Pulse	0.1000	3
V	51	72	He	41.799	ppb	1.5	36454.53	0.4963	Pulse	0.5000	3
Cr	52	72	He	24.194	ppb	3.1	28922.85	0.3938	Pulse	0.1000	3
Mn	55	72	He	300.860	ppb	2.7	131446.35	1.7897	Pulse	0.1000	3
Fe	57	72	He	19770.636	ppb	1.7	421018.16	5.7318	Pulse	0.1000	3
Co	59	72	He	7.742	ppb	3.0	17574.47	0.2393	Pulse	0.1000	3
Ni	60	72	He	18.048	ppb	2.5	12319.00	0.1677	Pulse	0.1000	3
Cu	63	72	He	16.036	ppb	3.7	29731.22	0.4048	Pulse	0.1000	3
Zn	66	72	He	35.797	ppb	2.7	6815.19	0.0928	Pulse	0.1000	3
As	75	72	He	2.262	ppb	9.1	320.67	0.0044	Pulse	0.5000	3
Sr	88	115	He	17.855	ppb	2.2	8873.02	0.1403	Pulse	0.1000	3
Mo	98	115	He	0.159	ppb	33.5	253.34	0.0040	Pulse	0.1000	3
Ag	107	115	He	0.025	ppb	84.7	100.00	0.0016	Pulse	0.1000	3
Cd	111	115	He	0.095	ppb	14.0	32.00	0.0005	Pulse	0.5000	3
Sn	120	115	He	1.159	ppb	2.7	2030.23	0.0321	Pulse	0.1000	3
Sb	121	115	He	0.213	ppb	28.4	183.34	0.0029	Pulse	0.1000	3
Ba	137	115	He	51.684	ppb	4.9	14314.48	0.2264	Pulse	0.1000	3
Tl	205	209	He	0.131	ppb	9.4	1030.08	0.0046	Pulse	0.1000	3
Pb	208	209	He	6.285	ppb	2.2	51468.18	0.2309	Pulse	0.1000	3
U	238	209	He	1.250	ppb	4.7	11765.78	0.0528	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3303386.51	1.0	101.9	Pulse	0.1000	3
No Gas	Ge	72	1444817.69	0.9	100.3	Pulse	0.1000	3
H2	Sc	45	199764.69	3.2	102.2	Pulse	0.1000	3
H2	Ge	72	160711.36	1.7	98.6	Pulse	0.1000	3
H2	In	115	433096.10	1.2	100.0	Pulse	0.1000	3
He	Sc	45	41653.13	1.7	104.2	Pulse	0.1000	3
He	Ge	72	73463.84	1.3	101.6	Pulse	0.1000	3
He	In	115	63221.17	0.2	97.9	Pulse	0.1000	3
He	Tb	159	288322.85	0.7	100.8	Pulse	0.1000	3
He	Bi	209	222855.44	1.2	100.3	Pulse	0.1000	3

No Gas



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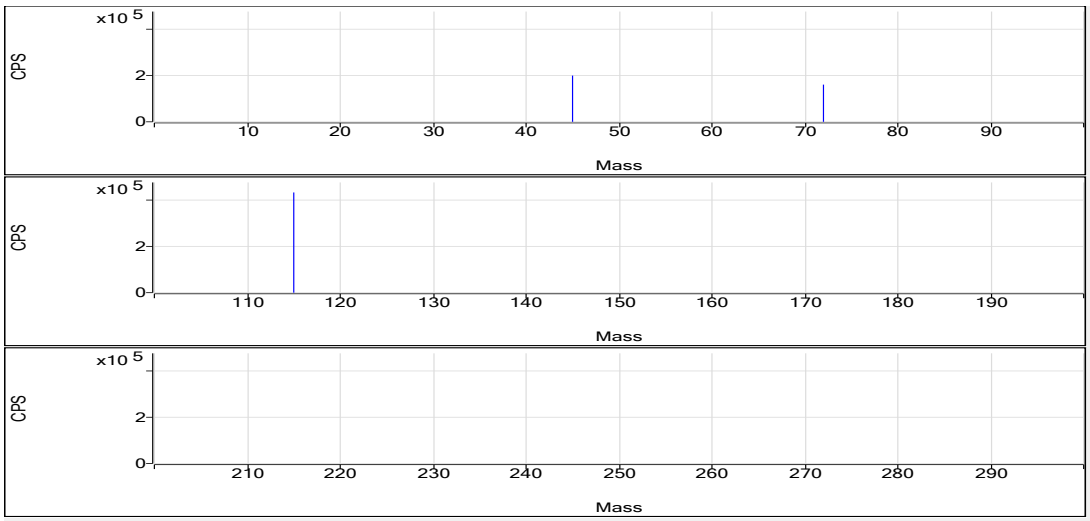
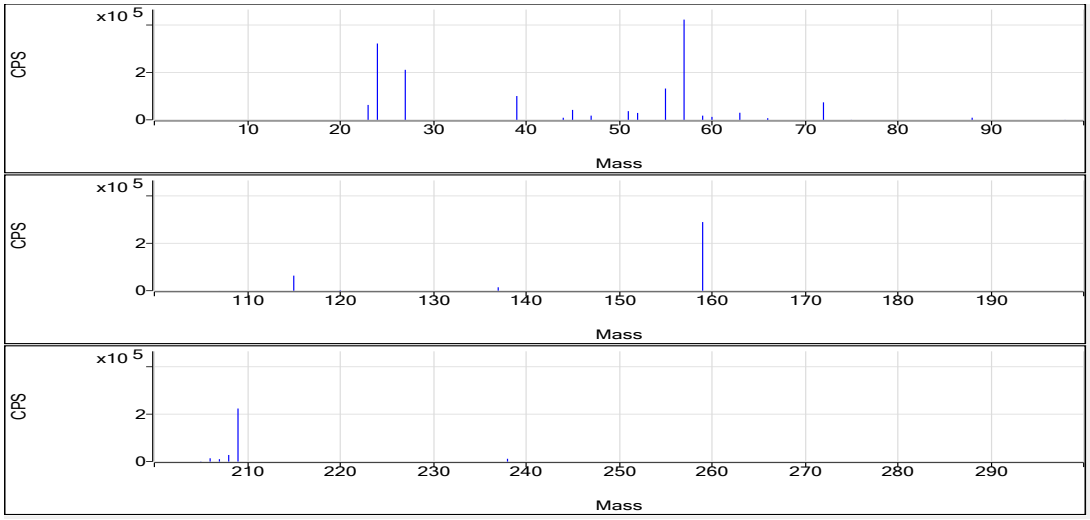


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.714	0.001	1438.08	0.0013	4.694E-05
Be	9	1	No Gas	0.724	0.001	1436.08	0.0013	4.694E-05
Be	9	1	No Gas	0.765	0.0011	1510.09	0.0013	4.694E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.056	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Na	23	3	He	444.42	0.8699	63305.18	0.0017	0.1065
Na	23	3	He	427.861	0.8414	61496.76	0.0017	0.1065
Na	23	3	He	429.097	0.8436	62873.66	0.0017	0.1065
Mg	24	3	He	5244.88	4.4268	322156.05	0.0008	0.004846
Mg	24	3	He	5197.675	4.387	320623.47	0.0008	0.004846
Mg	24	3	He	5068.957	4.2785	318889.02	0.0008	0.004846
Al	27	3	He	11907.881	2.8756	209265.17	0.0002	0.001063
Al	27	3	He	11890.705	2.8714	209856.05	0.0002	0.001063
Al	27	3	He	11733.819	2.8335	211192.28	0.0002	0.001063
K	39	3	He	2302.913	1.4153	102999.42	0.0006	0.1436
K	39	3	He	2174.233	1.3443	98246.09	0.0006	0.1436
K	39	3	He	2135.995	1.3232	98619.34	0.0006	0.1436
Ca	44	3	He	3816.059	0.1201	8742.84	0	0.001611
Ca	44	3	He	3773.197	0.1188	8682.89	0	0.001611
Ca	44	3	He	3724.814	0.1173	8742.96	0	0.001611
Ti	47	3	He	951.823	0.239	17390.84	0.0003	0.0002737
Ti	47	3	He	962.517	0.2417	17661.14	0.0003	0.0002737
Ti	47	3	He	947.542	0.2379	17731.24	0.0003	0.0002737
V	51	3	He	42.383	0.5031	36613.54	0.0117	0.007326
V	51	3	He	41.856	0.4969	36318.89	0.0117	0.007326
V	51	3	He	41.159	0.4888	36431.17	0.0117	0.007326
Cr	52	3	He	24.529	0.3989	29029.57	0.0152	0.02538
Cr	52	3	He	24.725	0.4019	29370.66	0.0152	0.02538
Cr	52	3	He	23.329	0.3806	28368.32	0.0152	0.02538
Mn	55	3	He	308.352	1.8339	133458.39	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	301.861	1.7956	131228.20	0.0059	0.01385
Mn	55	3	He	292.368	1.7395	129652.47	0.0059	0.01385
Fe	57	3	He	20071.535	5.8189	423466.13	0.0003	0.003918
Fe	57	3	He	19827.105	5.7481	420099.52	0.0003	0.003918
Fe	57	3	He	19413.266	5.6282	419488.82	0.0003	0.003918
Co	59	3	He	7.939	0.2453	17851.59	0.0305	0.003084
Co	59	3	He	7.801	0.2411	17621.04	0.0305	0.003084
Co	59	3	He	7.485	0.2315	17250.78	0.0305	0.003084
Ni	60	3	He	17.909	0.1665	12115.59	0.0088	0.009003
Ni	60	3	He	18.545	0.1721	12575.85	0.0088	0.009003
Ni	60	3	He	17.691	0.1646	12265.57	0.0088	0.009003
Cu	63	3	He	16.616	0.4193	30512.85	0.0249	0.004937
Cu	63	3	He	16.055	0.4053	29621.04	0.0249	0.004937
Cu	63	3	He	15.437	0.3899	29059.77	0.0249	0.004937
Zn	66	3	He	35.516	0.0921	6701.82	0.0025	0.004836
Zn	66	3	He	36.861	0.0954	6971.95	0.0025	0.004836
Zn	66	3	He	35.013	0.0909	6771.80	0.0025	0.004836
As	75	3	He	2.437	0.0047	340.01	0.0017	0.0004347
As	75	3	He	2.315	0.0045	326.01	0.0017	0.0004347
As	75	3	He	2.034	0.004	296.00	0.0017	0.0004347
Sr	88	3	He	17.468	0.1373	8682.91	0.0078	0.0007762
Sr	88	3	He	17.838	0.1402	8842.97	0.0078	0.0007762
Sr	88	3	He	18.258	0.1435	9093.19	0.0078	0.0007762
Mo	98	3	He	0.099	0.0027	170.01	0.022	0.0005162
Mo	98	3	He	0.2	0.0049	310.01	0.022	0.0005162
Mo	98	3	He	0.177	0.0044	280.01	0.022	0.0005162
Ag	107	3	He	0.025	0.0016	100.00	0.0455	0.0004641
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0.045	0.0025	160.01	0.0455	0.0004641
Cd	111	3	He	0.108	0.0006	36.00	0.0048	5.152E-05
Cd	111	3	He	0.095	0.0005	32.00	0.0048	5.152E-05
Cd	111	3	He	0.081	0.0004	28.00	0.0048	5.152E-05
Sn	120	3	He	1.126	0.0316	2000.22	0.0143	0.01559
Sn	120	3	He	1.187	0.0325	2050.23	0.0143	0.01559
Sn	120	3	He	1.165	0.0322	2040.24	0.0143	0.01559
Sb	121	3	He	0.145	0.0021	130.01	0.0124	0.000258
Sb	121	3	He	0.26	0.0035	220.01	0.0124	0.000258
Sb	121	3	He	0.234	0.0032	200.01	0.0124	0.000258
Ba	137	3	He	54.551	0.239	15108.70	0.0044	0.000309
Ba	137	3	He	49.718	0.2178	13737.11	0.0044	0.000309
Ba	137	3	He	50.782	0.2225	14097.62	0.0044	0.000309
Tl	205	3	He	0.127	0.0045	1020.08	0.0276	0.001005
Tl	205	3	He	0.121	0.0043	960.06	0.0276	0.001005
Tl	205	3	He	0.145	0.005	1110.09	0.0276	0.001005
Pb	208	3	He	6.347	0.2332	28902.38	0.0364	0.002176
Pb	208	3	He	6.38	0.2344	27429.21	0.0364	0.002176
Pb	208	3	He	6.129	0.2253	26707.66	0.0364	0.002176
U	238	3	He	1.191	0.0504	11375.36	0.0421	0.00024
U	238	3	He	1.25	0.0528	11655.77	0.0421	0.00024
U	238	3	He	1.308	0.0553	12266.21	0.0421	0.00024
Sc	45	1	No Gas			3340955.58		
Sc	45	1	No Gas			3279836.20		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3289367.76		
Ge	72	1	No Gas			1460148.73		
Ge	72	1	No Gas			1439004.67		
Ge	72	1	No Gas			1435299.67		
Sc	45	2	H2			197320.33		
Sc	45	2	H2			206939.51		
Sc	45	2	H2			195034.22		
Ge	72	2	H2			160030.39		
Ge	72	2	H2			163769.72		
Ge	72	2	H2			158333.98		
In	115	2	H2			431230.54		
In	115	2	H2			438755.70		
In	115	2	H2			429302.06		
Sc	45	3	He			42492.06		
Sc	45	3	He			41248.78		
Sc	45	3	He			41218.55		
Ge	72	3	He			72773.81		
Ge	72	3	He			73084.67		
Ge	72	3	He			74533.05		
In	115	3	He			63243.22		
In	115	3	He			63083.29		
In	115	3	He			63384.51		
Tb	159	3	He			288538.61		
Tb	159	3	He			290251.36		
Tb	159	3	He			286178.59		
Bi	209	3	He			225884.47		
Bi	209	3	He			220720.52		
Bi	209	3	He			221961.32		

Quantitation Report

Data File Name	260SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:33:14
Sample Name	410-136577-H-31-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

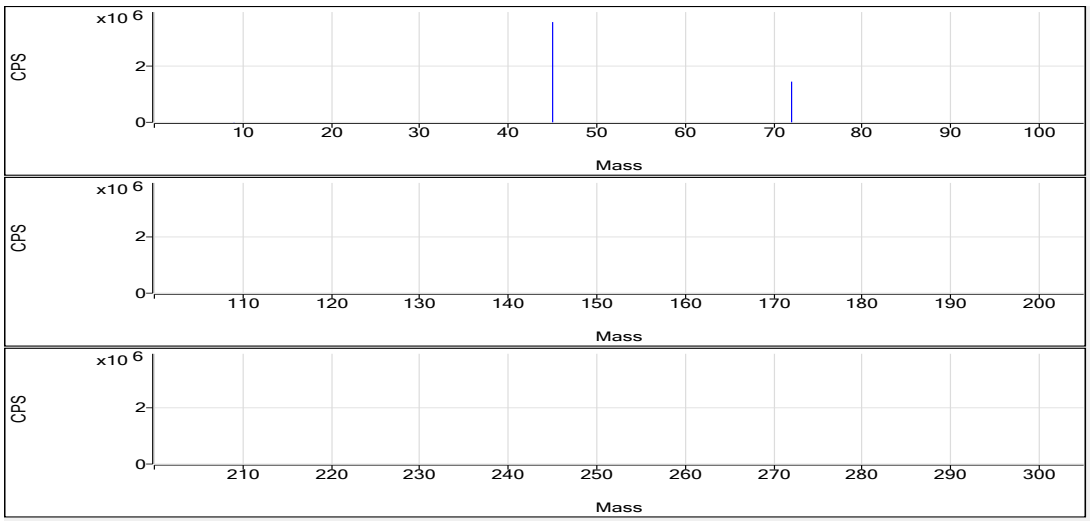
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	4.337	ppb	7.8	8243.64	0.0057	Pulse	0.5000	3
Se	78	72	H2	0.441	ppb	17.6	28.44	0.0002	Pulse	1.5000	3
Na	23	72	He	3421.421	ppb	0.9	440311.15	5.9838	Pulse	0.1000	3
Mg	24	72	He	37390.589	ppb	1.0	2319935.23	31.5289	Pulse	0.1000	3
Al	27	72	He	72217.938	ppb	1.4	1282801.88	17.4341	Pulse	0.1000	3
K	39	72	He	7975.296	ppb	1.3	334613.07	4.5477	Pulse	0.1000	3
Ca	44	72	He	24717.573	ppb	0.9	56606.74	0.7693	Pulse	0.1000	3
Ti	47	72	He	3682.883	ppb	0.8	67978.38	0.9239	Pulse	0.1000	3
V	51	72	He	299.670	ppb	0.9	258476.71	3.5128	Pulse	0.5000	3
Cr	52	72	He	162.088	ppb	0.9	183483.89	2.4935	Pulse	0.1000	3
Mn	55	72	He	6887.364	ppb	1.0	2992315.27	40.6660	Pulse	0.1000	3
Fe	57	72	He	155584.279	ppb	1.0	3317042.56	45.0790	Pulse	0.1000	3
Co	59	72	He	42.580	ppb	1.8	95821.25	1.3022	Pulse	0.1000	3
Ni	60	72	He	128.986	ppb	0.5	84117.22	1.1432	Pulse	0.1000	3
Cu	63	72	He	186.068	ppb	0.8	341776.83	4.6449	Pulse	0.1000	3
Zn	66	72	He	408.081	ppb	0.8	74126.81	1.0074	Pulse	0.1000	3
As	75	72	He	46.602	ppb	0.8	5995.95	0.0815	Pulse	0.5000	3
Sr	88	115	He	70.565	ppb	2.1	35943.01	0.5524	Pulse	0.1000	3
Mo	98	115	He	17.622	ppb	2.7	25283.21	0.3886	Pulse	0.1000	3
Ag	107	115	He	0.248	ppb	11.5	763.38	0.0117	Pulse	0.1000	3
Cd	111	115	He	0.888	ppb	7.8	280.67	0.0043	Pulse	0.5000	3
Sn	120	115	He	9.450	ppb	3.3	9780.43	0.1503	Pulse	0.1000	3
Sb	121	115	He	1.591	ppb	12.7	1300.11	0.0200	Pulse	0.1000	3
Ba	137	115	He	322.090	ppb	3.5	91704.49	1.4094	Pulse	0.1000	3
Tl	205	209	He	0.475	ppb	3.4	3167.17	0.0141	Pulse	0.1000	3
Pb	208	209	He	69.747	ppb	0.6	569152.10	2.5408	Pulse	0.1000	3
U	238	209	He	6.313	ppb	2.2	59544.15	0.2658	Pulse	0.1000	3

ISTD Table:

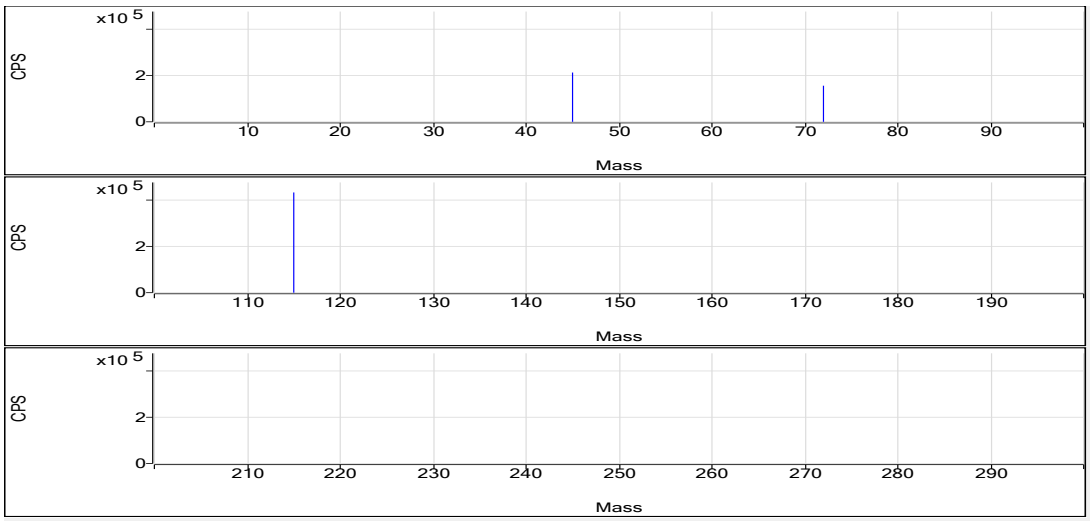
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3539163.39	1.3	109.2	Pulse	0.1000	3
No Gas	Ge	72	1435893.99	2.0	99.7	Pulse	0.1000	3
H2	Sc	45	213404.90	2.3	109.2	Pulse	0.1000	3
H2	Ge	72	156300.24	2.6	95.9	Pulse	0.1000	3
H2	In	115	434016.41	2.2	100.2	Pulse	0.1000	3
He	Sc	45	45705.26	1.1	114.3	Pulse	0.1000	3
He	Ge	72	73581.63	0.9	101.8	Pulse	0.1000	3
He	In	115	65075.72	1.0	100.7	Pulse	0.1000	3
He	Tb	159	307253.83	1.0	107.4	Pulse	0.1000	3
He	Bi	209	224009.22	0.6	100.8	Pulse	0.1000	3

No Gas

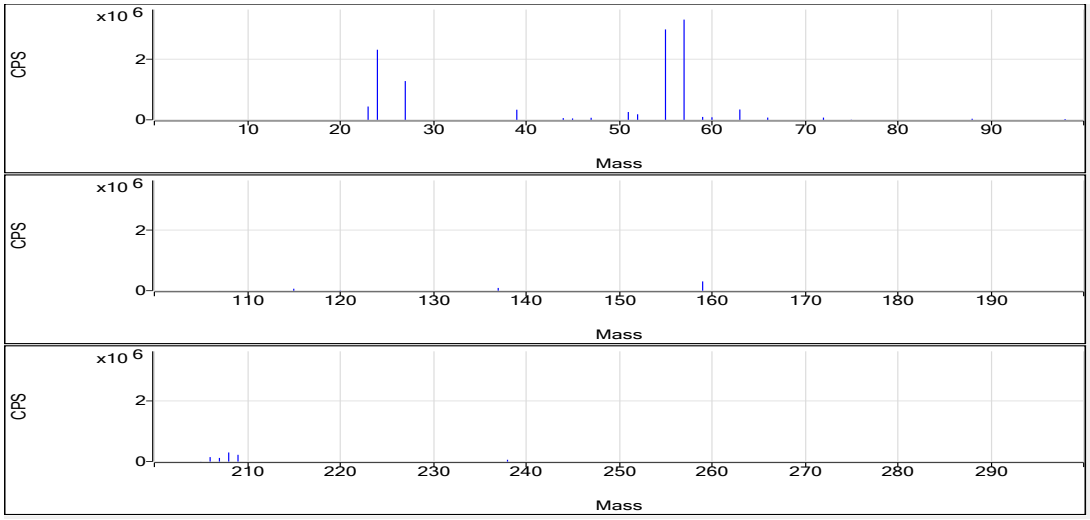


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	3.954	0.0052	7657.98	0.0013	4.694E-05
Be	9	1	No Gas	4.461	0.0059	8526.46	0.0013	4.694E-05
Be	9	1	No Gas	4.597	0.0061	8546.47	0.0013	4.694E-05
Se	78	2	H2	0.506	0.0002	32.00	0.0004	1.089E-05
Se	78	2	H2	0.355	0.0001	24.00	0.0004	1.089E-05
Se	78	2	H2	0.461	0.0002	29.33	0.0004	1.089E-05
Na	23	3	He	3386.469	5.9238	432885.66	0.0017	0.1065
Na	23	3	He	3448.722	6.0307	442520.11	0.0017	0.1065
Na	23	3	He	3429.072	5.997	445527.69	0.0017	0.1065
Mg	24	3	He	37108.933	31.2914	2286641.53	0.0008	0.004846
Mg	24	3	He	37816.974	31.8884	2339886.37	0.0008	0.004846
Mg	24	3	He	37245.859	31.4069	2333277.78	0.0008	0.004846
Al	27	3	He	71583.107	17.2808	1262805.68	0.0002	0.001063
Al	27	3	He	73390.416	17.7171	1300032.79	0.0002	0.001063
Al	27	3	He	71680.29	17.3043	1285567.17	0.0002	0.001063
K	39	3	He	7950.294	4.5339	331316.52	0.0006	0.1436
K	39	3	He	8089.264	4.6106	338315.66	0.0006	0.1436
K	39	3	He	7886.331	4.4986	334207.03	0.0006	0.1436
Ca	44	3	He	24721.445	0.7695	56228.44	0	0.001611
Ca	44	3	He	24945.586	0.7764	56971.46	0	0.001611
Ca	44	3	He	24485.688	0.7621	56620.32	0	0.001611
Ti	47	3	He	3667.783	0.9201	67235.24	0.0003	0.0002737
Ti	47	3	He	3717.073	0.9324	68419.88	0.0003	0.0002737
Ti	47	3	He	3663.795	0.9191	68280.02	0.0003	0.0002737
V	51	3	He	297.377	3.486	254739.38	0.0117	0.007326
V	51	3	He	302.824	3.5497	260466.91	0.0117	0.007326
V	51	3	He	298.809	3.5027	260223.84	0.0117	0.007326
Cr	52	3	He	160.442	2.4685	180385.43	0.0152	0.02538
Cr	52	3	He	163.279	2.5117	184300.33	0.0152	0.02538
Cr	52	3	He	162.544	2.5005	185765.92	0.0152	0.02538
Mn	55	3	He	6814.417	40.2354	2940227.46	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	6958.614	41.0865	3014820.89	0.0059	0.01385
Mn	55	3	He	6889.061	40.676	3021897.45	0.0059	0.01385
Fe	57	3	He	153952.229	44.6061	3259620.58	0.0003	0.003918
Fe	57	3	He	157086.671	45.5142	3339714.01	0.0003	0.003918
Fe	57	3	He	155713.938	45.1165	3351793.08	0.0003	0.003918
Co	59	3	He	41.866	1.2805	93569.76	0.0305	0.003084
Co	59	3	He	43.398	1.3272	97384.39	0.0305	0.003084
Co	59	3	He	42.476	1.2991	96509.61	0.0305	0.003084
Ni	60	3	He	129.626	1.1488	83952.29	0.0088	0.009003
Ni	60	3	He	128.949	1.1429	83862.56	0.0088	0.009003
Ni	60	3	He	128.382	1.1379	84536.81	0.0088	0.009003
Cu	63	3	He	185.367	4.6275	338153.78	0.0249	0.004937
Cu	63	3	He	187.738	4.6866	343889.64	0.0249	0.004937
Cu	63	3	He	185.1	4.6208	343287.07	0.0249	0.004937
Zn	66	3	He	404.842	0.9994	73034.50	0.0025	0.004836
Zn	66	3	He	410.975	1.0145	74441.70	0.0025	0.004836
Zn	66	3	He	408.425	1.0082	74904.23	0.0025	0.004836
As	75	3	He	46.372	0.0811	5925.26	0.0017	0.0004347
As	75	3	He	46.384	0.0811	5951.26	0.0017	0.0004347
As	75	3	He	47.049	0.0823	6111.33	0.0017	0.0004347
Sr	88	3	He	69.514	0.5442	35435.22	0.0078	0.0007762
Sr	88	3	He	69.938	0.5475	35986.18	0.0078	0.0007762
Sr	88	3	He	72.243	0.5655	36407.64	0.0078	0.0007762
Mo	98	3	He	17.741	0.3912	25473.57	0.022	0.0005162
Mo	98	3	He	17.091	0.3769	24772.19	0.022	0.0005162
Mo	98	3	He	18.036	0.3977	25603.87	0.022	0.0005162
Ag	107	3	He	0.226	0.0108	700.04	0.0455	0.0004641
Ag	107	3	He	0.237	0.0113	740.05	0.0455	0.0004641
Ag	107	3	He	0.28	0.0132	850.05	0.0455	0.0004641
Cd	111	3	He	0.808	0.0039	256.00	0.0048	5.152E-05
Cd	111	3	He	0.921	0.0045	294.01	0.0048	5.152E-05
Cd	111	3	He	0.934	0.0045	292.01	0.0048	5.152E-05
Sn	120	3	He	9.315	0.1484	9663.70	0.0143	0.01559
Sn	120	3	He	9.229	0.1472	9673.68	0.0143	0.01559
Sn	120	3	He	9.805	0.1554	10003.90	0.0143	0.01559
Sb	121	3	He	1.391	0.0175	1140.09	0.0124	0.000258
Sb	121	3	He	1.586	0.0199	1310.11	0.0124	0.000258
Sb	121	3	He	1.795	0.0225	1450.13	0.0124	0.000258
Ba	137	3	He	310.995	1.3608	88614.36	0.0044	0.000309
Ba	137	3	He	321.816	1.4082	92559.33	0.0044	0.000309
Ba	137	3	He	333.461	1.4591	93939.78	0.0044	0.000309
Tl	205	3	He	0.464	0.0138	3090.46	0.0276	0.001005
Tl	205	3	He	0.468	0.0139	3110.49	0.0276	0.001005
Tl	205	3	He	0.493	0.0146	3300.55	0.0276	0.001005
Pb	208	3	He	69.386	2.5277	296820.33	0.0364	0.002176
Pb	208	3	He	70.183	2.5566	301933.16	0.0364	0.002176
Pb	208	3	He	69.672	2.538	303386.66	0.0364	0.002176
U	238	3	He	6.154	0.2591	57940.22	0.0421	0.00024
U	238	3	He	6.379	0.2686	59898.83	0.0421	0.00024
U	238	3	He	6.406	0.2697	60793.39	0.0421	0.00024
Sc	45	1	No Gas			3581769.95		
Sc	45	1	No Gas			3546875.57		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3488844.64		
Ge	72	1	No Gas			1460613.73		
Ge	72	1	No Gas			1443063.26		
Ge	72	1	No Gas			1404004.98		
Sc	45	2	H2			209395.86		
Sc	45	2	H2			218751.87		
Sc	45	2	H2			212066.97		
Ge	72	2	H2			154034.45		
Ge	72	2	H2			160911.25		
Ge	72	2	H2			153955.03		
In	115	2	H2			429759.68		
In	115	2	H2			445121.75		
In	115	2	H2			427167.81		
Sc	45	3	He			46002.89		
Sc	45	3	He			45150.19		
Sc	45	3	He			45962.70		
Ge	72	3	He			73075.61		
Ge	72	3	He			73377.36		
Ge	72	3	He			74291.91		
In	115	3	He			65192.47		
In	115	3	He			65804.91		
In	115	3	He			64458.64		
Tb	159	3	He			305973.92		
Tb	159	3	He			305173.02		
Tb	159	3	He			310614.55		
Bi	209	3	He			223618.26		
Bi	209	3	He			223019.76		
Bi	209	3	He			225389.65		

Quantitation Report

Data File Name	261SMPL.d
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Acq Time	2023-08-10 19:35:14
Sample Name	410-136577-H-31-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

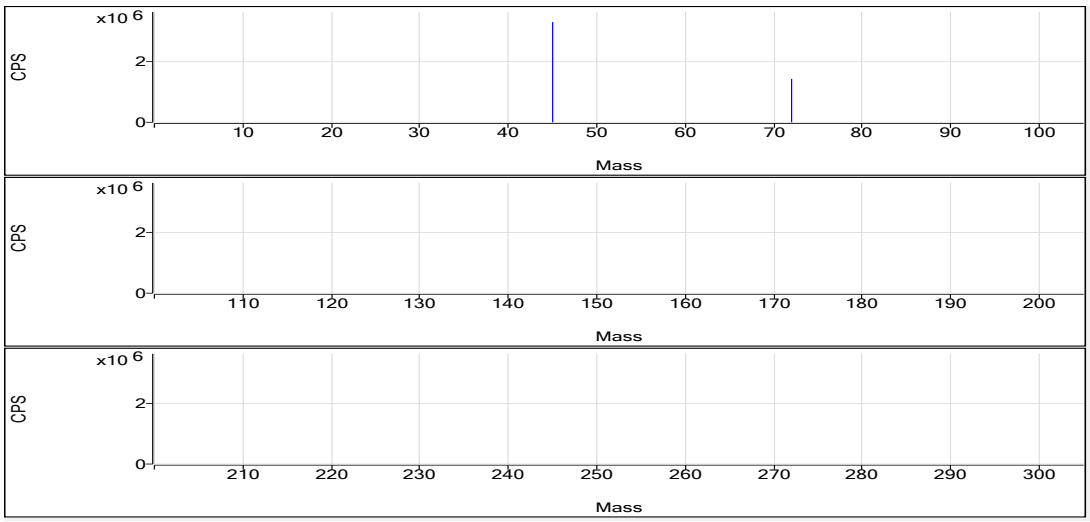
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.903	ppb	5.1	1748.78	0.0012	Pulse	0.5000	3
Se	78	72	H2	0.070	ppb	88.9	6.00	0.0000	Pulse	1.5000	3
Na	23	72	He	663.182	ppb	3.5	90460.96	1.2457	Pulse	0.1000	3
Mg	24	72	He	7393.834	ppb	1.3	453030.11	6.2386	Pulse	0.1000	3
Al	27	72	He	14230.808	ppb	1.5	249533.15	3.4363	Pulse	0.1000	3
K	39	72	He	1584.754	ppb	1.9	73980.08	1.0188	Pulse	0.1000	3
Ca	44	72	He	4888.058	ppb	3.9	11141.28	0.1534	Pulse	0.1000	3
Ti	47	72	He	709.814	ppb	0.9	12946.08	0.1783	Pulse	0.1000	3
V	51	72	He	59.334	ppb	2.4	50934.73	0.7014	Pulse	0.5000	3
Cr	52	72	He	32.536	ppb	3.3	37819.98	0.5208	Pulse	0.1000	3
Mn	55	72	He	1363.428	ppb	0.2	585391.42	8.0614	Pulse	0.1000	3
Fe	57	72	He	30715.245	ppb	1.1	646477.74	8.9026	Pulse	0.1000	3
Co	59	72	He	8.369	ppb	1.9	18765.96	0.2584	Pulse	0.1000	3
Ni	60	72	He	26.364	ppb	1.8	17487.75	0.2408	Pulse	0.1000	3
Cu	63	72	He	37.424	ppb	0.9	68127.35	0.9382	Pulse	0.1000	3
Zn	66	72	He	81.353	ppb	3.4	14864.83	0.2047	Pulse	0.1000	3
As	75	72	He	9.495	ppb	3.6	1230.73	0.0169	Pulse	0.5000	3
Sr	88	115	He	14.199	ppb	4.3	7225.40	0.1118	Pulse	0.1000	3
Mo	98	115	He	3.595	ppb	3.1	5151.13	0.0797	Pulse	0.1000	3
Ag	107	115	He	0.056	ppb	12.4	193.34	0.0030	Pulse	0.1000	3
Cd	111	115	He	0.150	ppb	8.3	50.00	0.0008	Pulse	0.5000	3
Sn	120	115	He	2.107	ppb	7.0	2950.46	0.0456	Pulse	0.1000	3
Sb	121	115	He	0.308	ppb	18.7	263.35	0.0041	Pulse	0.1000	3
Ba	137	115	He	62.873	ppb	0.8	17802.03	0.2754	Pulse	0.1000	3
Tl	205	209	He	0.109	ppb	11.9	893.39	0.0040	Pulse	0.1000	3
Pb	208	209	He	14.180	ppb	3.0	114892.93	0.5183	Pulse	0.1000	3
U	238	209	He	1.217	ppb	2.5	11398.80	0.0514	Pulse	0.1000	3

ISTD Table:

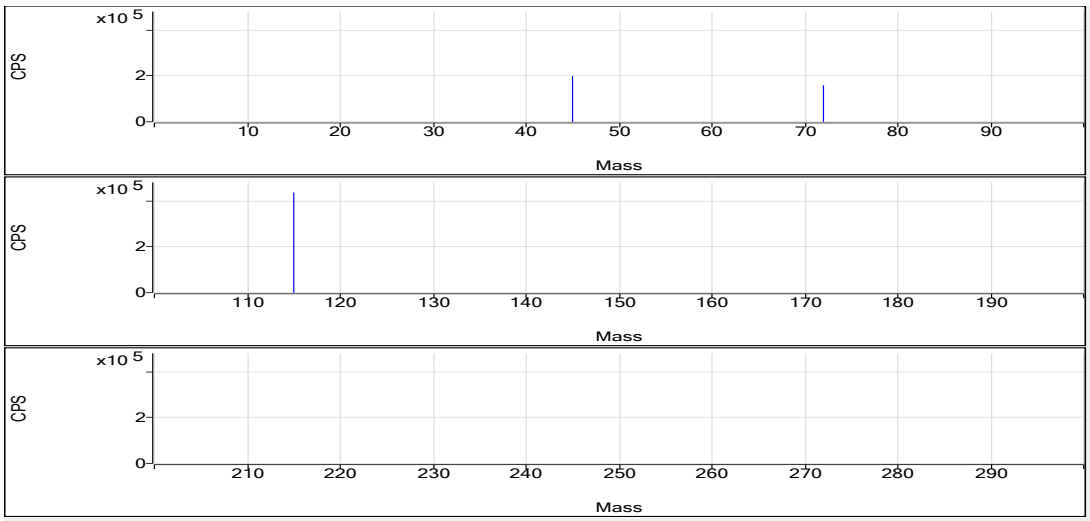
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3277422.76	1.3	101.1	Pulse	0.1000	3
No Gas	Ge	72	1418210.29	1.3	98.5	Pulse	0.1000	3
H2	Sc	45	199627.43	2.2	102.2	Pulse	0.1000	3
H2	Ge	72	159266.01	2.9	97.7	Pulse	0.1000	3
H2	In	115	437212.01	1.9	100.9	Pulse	0.1000	3
He	Sc	45	42034.34	1.3	105.1	Pulse	0.1000	3
He	Ge	72	72616.66	0.2	100.5	Pulse	0.1000	3
He	In	115	64647.11	0.4	100.1	Pulse	0.1000	3
He	Tb	159	288256.84	0.4	100.8	Pulse	0.1000	3
He	Bi	209	221756.02	1.7	99.8	Pulse	0.1000	3

No Gas

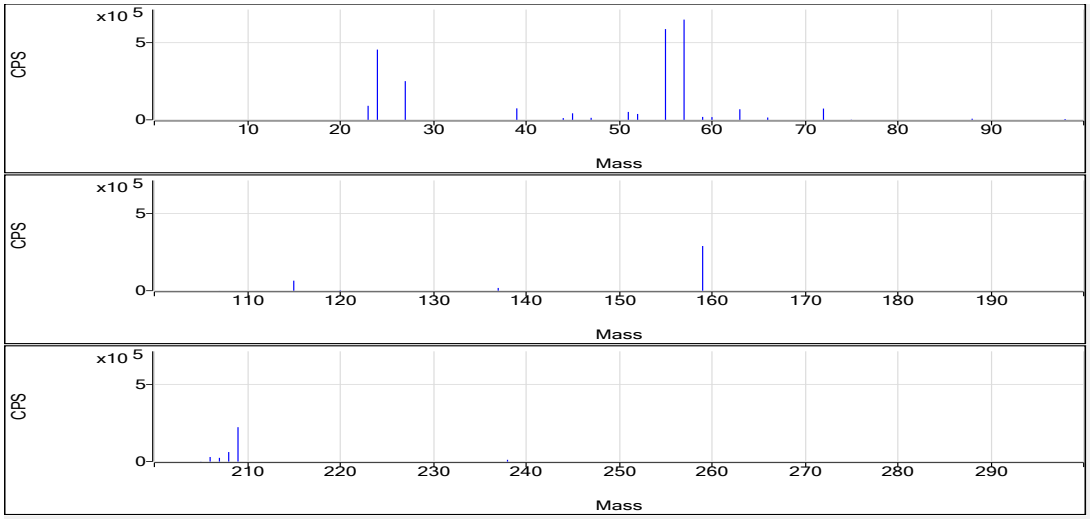


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.851	0.0012	1674.10	0.0013	4.694E-05
Be	9	1	No Gas	0.942	0.0013	1822.12	0.0013	4.694E-05
Be	9	1	No Gas	0.916	0.0013	1750.11	0.0013	4.694E-05
Se	78	2	H2	0.08	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.126	0.0001	9.33	0.0004	1.089E-05
Na	23	3	He	683.498	1.2806	93089.92	0.0017	0.1065
Na	23	3	He	667.917	1.2538	91158.19	0.0017	0.1065
Na	23	3	He	638.132	1.2027	87134.76	0.0017	0.1065
Mg	24	3	He	7508.572	6.3353	460536.71	0.0008	0.004846
Mg	24	3	He	7338.925	6.1923	450208.27	0.0008	0.004846
Mg	24	3	He	7334.005	6.1882	448345.34	0.0008	0.004846
Al	27	3	He	14464.488	3.4927	253896.52	0.0002	0.001063
Al	27	3	He	14043.106	3.391	246539.92	0.0002	0.001063
Al	27	3	He	14184.829	3.4252	248163.00	0.0002	0.001063
K	39	3	He	1618.545	1.0374	75413.57	0.0006	0.1436
K	39	3	He	1575.704	1.0138	73705.11	0.0006	0.1436
K	39	3	He	1560.013	1.0051	72821.55	0.0006	0.1436
Ca	44	3	He	4853.063	0.1523	11074.57	0	0.001611
Ca	44	3	He	4714.893	0.1481	10764.25	0	0.001611
Ca	44	3	He	5096.218	0.1599	11585.01	0	0.001611
Ti	47	3	He	702.473	0.1764	12825.97	0.0003	0.0002737
Ti	47	3	He	714.992	0.1796	13056.18	0.0003	0.0002737
Ti	47	3	He	711.977	0.1788	12956.09	0.0003	0.0002737
V	51	3	He	60.548	0.7156	52019.81	0.0117	0.007326
V	51	3	He	59.678	0.7054	51287.27	0.0117	0.007326
V	51	3	He	57.775	0.6832	49497.10	0.0117	0.007326
Cr	52	3	He	33.696	0.5385	39143.55	0.0152	0.02538
Cr	52	3	He	31.562	0.506	36787.09	0.0152	0.02538
Cr	52	3	He	32.35	0.518	37529.31	0.0152	0.02538
Mn	55	3	He	1361.723	8.0513	585277.06	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1367.147	8.0833	587694.37	0.0059	0.01385
Mn	55	3	He	1361.413	8.0495	583202.84	0.0059	0.01385
Fe	57	3	He	31089.962	9.0111	655049.64	0.0003	0.003918
Fe	57	3	He	30460.409	8.8287	641889.21	0.0003	0.003918
Fe	57	3	He	30595.363	8.8678	642494.37	0.0003	0.003918
Co	59	3	He	8.336	0.2574	18712.52	0.0305	0.003084
Co	59	3	He	8.226	0.2541	18472.26	0.0305	0.003084
Co	59	3	He	8.545	0.2638	19113.11	0.0305	0.003084
Ni	60	3	He	26.465	0.2417	17571.37	0.0088	0.009003
Ni	60	3	He	25.85	0.2363	17180.64	0.0088	0.009003
Ni	60	3	He	26.776	0.2445	17711.25	0.0088	0.009003
Cu	63	3	He	37.652	0.9439	68612.78	0.0249	0.004937
Cu	63	3	He	37.053	0.9289	67537.87	0.0249	0.004937
Cu	63	3	He	37.567	0.9417	68231.41	0.0249	0.004937
Zn	66	3	He	84.479	0.2124	15438.71	0.0025	0.004836
Zn	66	3	He	79.142	0.1993	14487.85	0.0025	0.004836
Zn	66	3	He	80.436	0.2024	14667.92	0.0025	0.004836
As	75	3	He	9.685	0.0173	1256.06	0.0017	0.0004347
As	75	3	He	9.098	0.0163	1182.06	0.0017	0.0004347
As	75	3	He	9.702	0.0173	1254.06	0.0017	0.0004347
Sr	88	3	He	13.559	0.1068	6901.93	0.0078	0.0007762
Sr	88	3	He	14.766	0.1162	7482.21	0.0078	0.0007762
Sr	88	3	He	14.272	0.1123	7292.07	0.0078	0.0007762
Mo	98	3	He	3.588	0.0795	5141.11	0.022	0.0005162
Mo	98	3	He	3.708	0.0822	5291.21	0.022	0.0005162
Mo	98	3	He	3.489	0.0774	5021.07	0.022	0.0005162
Ag	107	3	He	0.061	0.0032	210.01	0.0455	0.0004641
Ag	107	3	He	0.048	0.0026	170.01	0.0455	0.0004641
Ag	107	3	He	0.058	0.0031	200.01	0.0455	0.0004641
Cd	111	3	He	0.138	0.0007	46.00	0.0048	5.152E-05
Cd	111	3	He	0.151	0.0008	50.00	0.0048	5.152E-05
Cd	111	3	He	0.163	0.0008	54.00	0.0048	5.152E-05
Sn	120	3	He	2.238	0.0475	3070.46	0.0143	0.01559
Sn	120	3	He	1.946	0.0433	2790.39	0.0143	0.01559
Sn	120	3	He	2.138	0.0461	2990.53	0.0143	0.01559
Sb	121	3	He	0.303	0.004	260.01	0.0124	0.000258
Sb	121	3	He	0.367	0.0048	310.02	0.0124	0.000258
Sb	121	3	He	0.252	0.0034	220.01	0.0124	0.000258
Ba	137	3	He	62.947	0.2757	17822.03	0.0044	0.000309
Ba	137	3	He	62.311	0.2729	17571.81	0.0044	0.000309
Ba	137	3	He	63.361	0.2775	18012.25	0.0044	0.000309
Tl	205	3	He	0.123	0.0044	970.07	0.0276	0.001005
Tl	205	3	He	0.097	0.0037	810.05	0.0276	0.001005
Tl	205	3	He	0.108	0.004	900.06	0.0276	0.001005
Pb	208	3	He	14.239	0.5204	60298.57	0.0364	0.002176
Pb	208	3	He	14.573	0.5326	63090.85	0.0364	0.002176
Pb	208	3	He	13.727	0.5018	60810.35	0.0364	0.002176
U	238	3	He	1.225	0.0518	11385.40	0.0421	0.00024
U	238	3	He	1.242	0.0525	11505.56	0.0421	0.00024
U	238	3	He	1.183	0.05	11305.43	0.0421	0.00024
Sc	45	1	No Gas			3313517.45		
Sc	45	1	No Gas			3287299.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3231451.20		
Ge	72	1	No Gas			1436049.51		
Ge	72	1	No Gas			1418573.57		
Ge	72	1	No Gas			1400007.79		
Sc	45	2	H2			196725.47		
Sc	45	2	H2			204732.61		
Sc	45	2	H2			197424.20		
Ge	72	2	H2			158353.02		
Ge	72	2	H2			164227.11		
Ge	72	2	H2			155217.89		
In	115	2	H2			433890.31		
In	115	2	H2			446846.87		
In	115	2	H2			430898.86		
Sc	45	3	He			42442.23		
Sc	45	3	He			42251.46		
Sc	45	3	He			41409.33		
Ge	72	3	He			72693.35		
Ge	72	3	He			72704.47		
Ge	72	3	He			72452.16		
In	115	3	He			64669.44		
In	115	3	He			64409.10		
In	115	3	He			64931.85		
Tb	159	3	He			289427.14		
Tb	159	3	He			287257.30		
Tb	159	3	He			288086.07		
Bi	209	3	He			219886.77		
Bi	209	3	He			219248.73		
Bi	209	3	He			226132.57		

Quantitation Report

Data File Name	262SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:37:14
Sample Name	410-136577-H-20-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

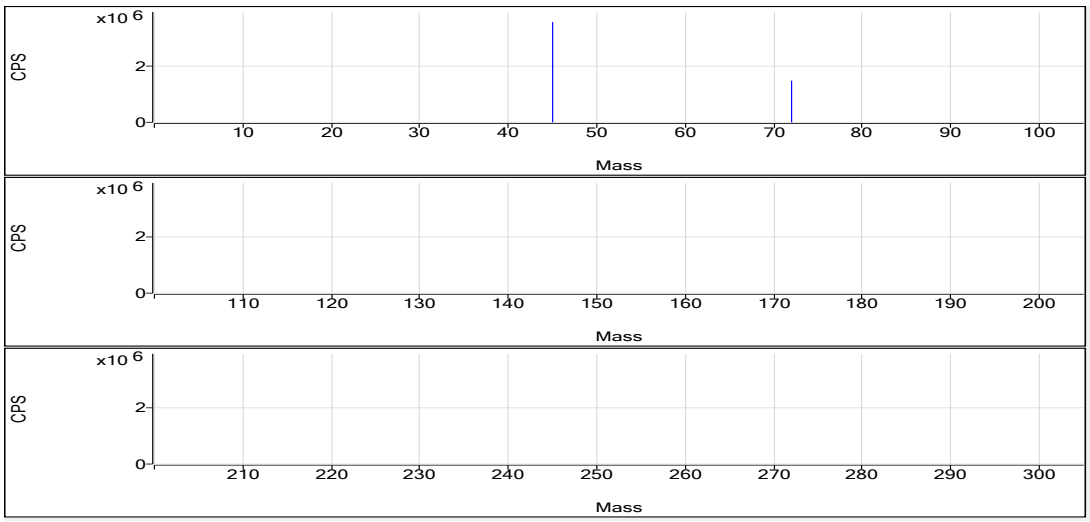
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.371	ppb	7.6	2739.60	0.0018	Pulse	0.5000	3
Se	78	72	H2	0.761	ppb	8.9	49.78	0.0003	Pulse	1.5000	3
Na	23	72	He	4934.243	ppb	0.2	637070.43	8.5826	Pulse	0.1000	3
Mg	24	72	He	30777.855	ppb	1.3	1926360.80	25.9537	Pulse	0.1000	3
Al	27	72	He	46131.136	ppb	1.1	826621.55	11.1369	Pulse	0.1000	3
K	39	72	He	3057.931	ppb	0.9	136006.51	1.8323	Pulse	0.1000	3
Ca	44	72	He	56140.610	ppb	1.8	129541.51	1.7453	Pulse	0.1000	3
Ti	47	72	He	5680.958	ppb	1.4	105767.27	1.4249	Pulse	0.1000	3
V	51	72	He	184.655	ppb	0.9	160871.79	2.1674	Pulse	0.5000	3
Cr	52	72	He	110.879	ppb	2.3	127194.42	1.7138	Pulse	0.1000	3
Mn	55	72	He	2240.141	ppb	0.9	982470.98	13.2361	Pulse	0.1000	3
Fe	57	72	He	74502.080	ppb	1.1	1602404.56	21.5883	Pulse	0.1000	3
Co	59	72	He	35.541	ppb	0.5	80717.49	1.0875	Pulse	0.1000	3
Ni	60	72	He	91.422	ppb	1.4	60339.46	0.8129	Pulse	0.1000	3
Cu	63	72	He	1798.048	ppb	0.5	3328531.51	44.8431	Pulse	0.1000	3
Zn	66	72	He	186.955	ppb	3.0	34448.32	0.4641	Pulse	0.1000	3
As	75	72	He	10.724	ppb	2.4	1416.75	0.0191	Pulse	0.5000	3
Sr	88	115	He	157.482	ppb	1.2	78171.48	1.2318	Pulse	0.1000	3
Mo	98	115	He	1.608	ppb	5.2	2280.26	0.0359	Pulse	0.1000	3
Ag	107	115	He	2.352	ppb	6.2	6818.57	0.1075	Pulse	0.1000	3
Cd	111	115	He	0.904	ppb	2.4	278.67	0.0044	Pulse	0.5000	3
Sn	120	115	He	16.073	ppb	3.8	15529.10	0.2448	Pulse	0.1000	3
Sb	121	115	He	3.641	ppb	4.5	2883.74	0.0454	Pulse	0.1000	3
Ba	137	115	He	313.992	ppb	2.0	87188.78	1.3740	Pulse	0.1000	3
Tl	205	209	He	0.213	ppb	7.8	1550.16	0.0069	Pulse	0.1000	3
Pb	208	209	He	133.859	ppb	0.6	1094134.49	4.8743	Pulse	0.1000	3
U	238	209	He	1.989	ppb	0.9	18830.95	0.0839	Pulse	0.1000	3

ISTD Table:

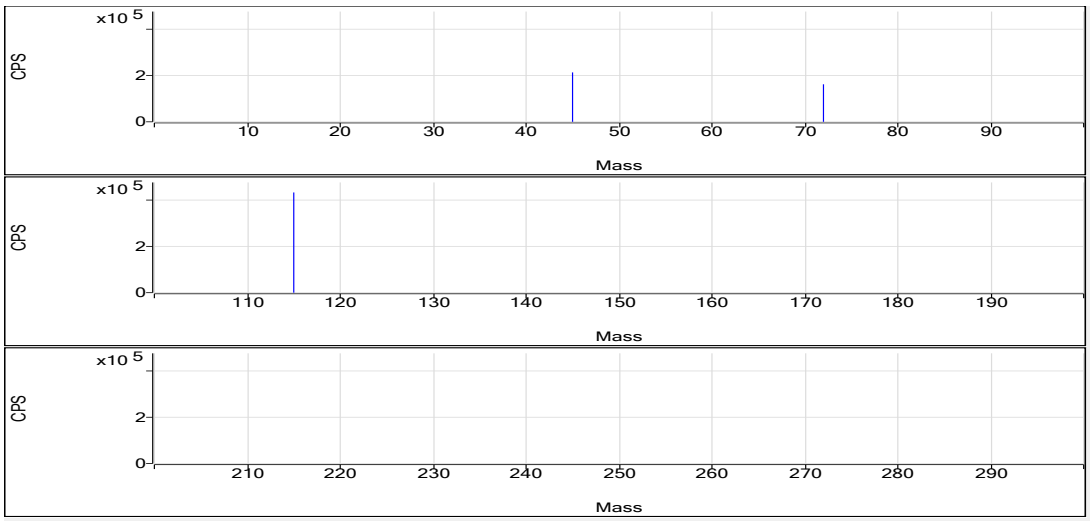
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3569115.26	0.8	110.1	Pulse	0.1000	3
No Gas	Ge	72	1482764.41	1.6	103.0	Pulse	0.1000	3
H2	Sc	45	213228.30	2.4	109.1	Pulse	0.1000	3
H2	Ge	72	161949.06	2.5	99.3	Pulse	0.1000	3
H2	In	115	432560.92	2.5	99.8	Pulse	0.1000	3
He	Sc	45	45498.07	0.2	113.8	Pulse	0.1000	3
He	Ge	72	74228.12	0.9	102.7	Pulse	0.1000	3
He	In	115	63467.22	1.5	98.3	Pulse	0.1000	3
He	Tb	159	297275.36	0.6	103.9	Pulse	0.1000	3
He	Bi	209	224468.45	0.2	101.0	Pulse	0.1000	3

No Gas

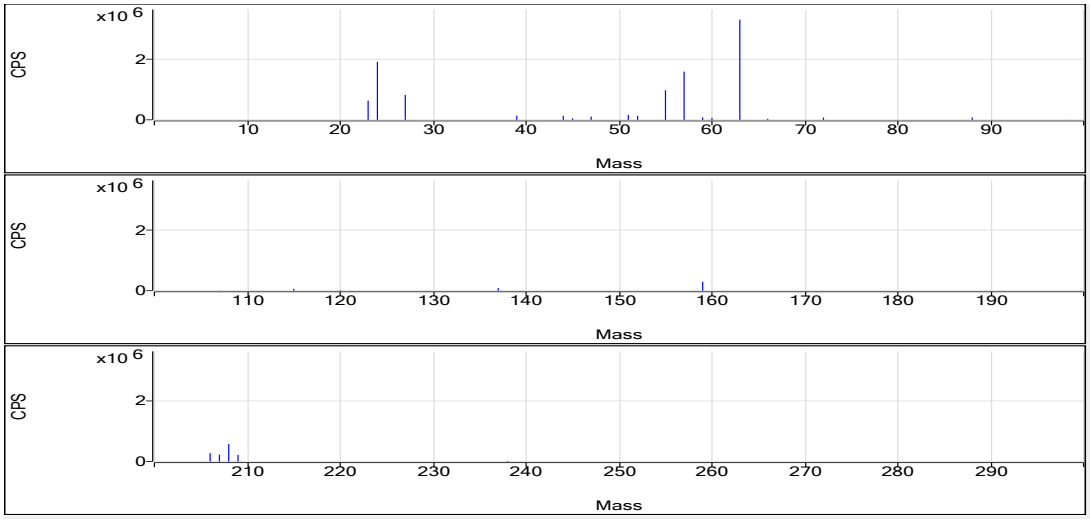


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.275	0.0017	2580.24	0.0013	4.694E-05
Be	9	1	No Gas	1.357	0.0018	2734.27	0.0013	4.694E-05
Be	9	1	No Gas	1.483	0.002	2904.30	0.0013	4.694E-05
Se	78	2	H2	0.689	0.0003	44.00	0.0004	1.089E-05
Se	78	2	H2	0.769	0.0003	51.33	0.0004	1.089E-05
Se	78	2	H2	0.823	0.0003	54.00	0.0004	1.089E-05
Na	23	3	He	4927.03	8.5702	640571.94	0.0017	0.1065
Na	23	3	He	4943.984	8.5993	639985.38	0.0017	0.1065
Na	23	3	He	4931.714	8.5783	630653.97	0.0017	0.1065
Mg	24	3	He	30332.959	25.5786	1911847.78	0.0008	0.004846
Mg	24	3	He	30854.296	26.0182	1936339.81	0.0008	0.004846
Mg	24	3	He	31146.31	26.2643	1930894.81	0.0008	0.004846
Al	27	3	He	45591.212	11.0065	822671.08	0.0002	0.001063
Al	27	3	He	46231.286	11.161	830633.19	0.0002	0.001063
Al	27	3	He	46570.911	11.243	826560.38	0.0002	0.001063
K	39	3	He	3039.111	1.8219	136174.14	0.0006	0.1436
K	39	3	He	3088.528	1.8492	137619.58	0.0006	0.1436
K	39	3	He	3046.152	1.8258	134225.82	0.0006	0.1436
Ca	44	3	He	54973.564	1.7091	127743.65	0	0.001611
Ca	44	3	He	56537.352	1.7577	130809.22	0	0.001611
Ca	44	3	He	56910.914	1.7693	130071.66	0	0.001611
Ti	47	3	He	5596.031	1.4036	104913.85	0.0003	0.0002737
Ti	47	3	He	5751.393	1.4426	107362.40	0.0003	0.0002737
Ti	47	3	He	5695.451	1.4286	105025.55	0.0003	0.0002737
V	51	3	He	183.236	2.1508	160757.39	0.0117	0.007326
V	51	3	He	184.18	2.1618	160888.56	0.0117	0.007326
V	51	3	He	186.549	2.1895	160969.42	0.0117	0.007326
Cr	52	3	He	108.083	1.6712	124911.39	0.0152	0.02538
Cr	52	3	He	111.343	1.7208	128069.31	0.0152	0.02538
Cr	52	3	He	113.211	1.7493	128602.56	0.0152	0.02538
Mn	55	3	He	2218.398	13.1078	979727.49	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2258.074	13.342	992944.05	0.0059	0.01385
Mn	55	3	He	2243.95	13.2586	974741.39	0.0059	0.01385
Fe	57	3	He	73605.179	21.3284	1594171.23	0.0003	0.003918
Fe	57	3	He	75127.196	21.7694	1620134.04	0.0003	0.003918
Fe	57	3	He	74773.864	21.667	1592908.41	0.0003	0.003918
Co	59	3	He	35.336	1.0812	80814.28	0.0305	0.003084
Co	59	3	He	35.592	1.089	81046.34	0.0305	0.003084
Co	59	3	He	35.695	1.0921	80291.86	0.0305	0.003084
Ni	60	3	He	90.182	0.802	59944.53	0.0088	0.009003
Ni	60	3	He	92.785	0.8249	61390.34	0.0088	0.009003
Ni	60	3	He	91.299	0.8118	59683.51	0.0088	0.009003
Cu	63	3	He	1787.683	44.5846	3332430.89	0.0249	0.004937
Cu	63	3	He	1800.89	44.9139	3342614.95	0.0249	0.004937
Cu	63	3	He	1805.569	45.0306	3310548.70	0.0249	0.004937
Zn	66	3	He	180.517	0.4483	33509.52	0.0025	0.004836
Zn	66	3	He	190.405	0.4726	35173.33	0.0025	0.004836
Zn	66	3	He	189.942	0.4715	34662.12	0.0025	0.004836
As	75	3	He	10.536	0.0188	1402.08	0.0017	0.0004347
As	75	3	He	11.015	0.0196	1458.08	0.0017	0.0004347
As	75	3	He	10.622	0.0189	1390.08	0.0017	0.0004347
Sr	88	3	He	155.469	1.2161	78415.28	0.0078	0.0007762
Sr	88	3	He	157.847	1.2347	78255.27	0.0078	0.0007762
Sr	88	3	He	159.132	1.2447	77843.90	0.0078	0.0007762
Mo	98	3	He	1.596	0.0357	2300.28	0.022	0.0005162
Mo	98	3	He	1.696	0.0379	2400.28	0.022	0.0005162
Mo	98	3	He	1.531	0.0342	2140.23	0.022	0.0005162
Ag	107	3	He	2.189	0.1001	6451.66	0.0455	0.0004641
Ag	107	3	He	2.397	0.1095	6941.98	0.0455	0.0004641
Ag	107	3	He	2.472	0.1129	7062.07	0.0455	0.0004641
Cd	111	3	He	0.926	0.0045	290.01	0.0048	5.152E-05
Cd	111	3	He	0.883	0.0043	272.00	0.0048	5.152E-05
Cd	111	3	He	0.902	0.0044	274.00	0.0048	5.152E-05
Sn	120	3	He	15.362	0.2346	15128.58	0.0143	0.01559
Sn	120	3	He	16.457	0.2502	15859.48	0.0143	0.01559
Sn	120	3	He	16.401	0.2494	15599.23	0.0143	0.01559
Sb	121	3	He	3.818	0.0476	3070.46	0.0124	0.000258
Sb	121	3	He	3.49	0.0436	2760.39	0.0124	0.000258
Sb	121	3	He	3.615	0.0451	2820.37	0.0124	0.000258
Ba	137	3	He	307.139	1.344	86661.91	0.0044	0.000309
Ba	137	3	He	319.553	1.3983	88624.74	0.0044	0.000309
Ba	137	3	He	315.284	1.3796	86279.69	0.0044	0.000309
Tl	205	3	He	0.225	0.0072	1620.18	0.0276	0.001005
Tl	205	3	He	0.221	0.0071	1600.16	0.0276	0.001005
Tl	205	3	He	0.194	0.0064	1430.13	0.0276	0.001005
Pb	208	3	He	133.59	4.8645	581568.23	0.0364	0.002176
Pb	208	3	He	134.815	4.9091	585073.19	0.0364	0.002176
Pb	208	3	He	133.172	4.8493	580057.34	0.0364	0.002176
U	238	3	He	1.971	0.0832	18634.00	0.0421	0.00024
U	238	3	He	1.989	0.0839	18884.33	0.0421	0.00024
U	238	3	He	2.005	0.0846	18974.51	0.0421	0.00024
Sc	45	1	No Gas			3582108.07		
Sc	45	1	No Gas			3588949.32		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3536288.38		
Ge	72	1	No Gas			1498154.82		
Ge	72	1	No Gas			1494546.70		
Ge	72	1	No Gas			1455591.70		
Sc	45	2	H2			209266.99		
Sc	45	2	H2			219134.68		
Sc	45	2	H2			211283.24		
Ge	72	2	H2			157563.51		
Ge	72	2	H2			165400.00		
Ge	72	2	H2			162883.66		
In	115	2	H2			421956.24		
In	115	2	H2			443240.15		
In	115	2	H2			432486.36		
Sc	45	3	He			45561.56		
Sc	45	3	He			45521.64		
Sc	45	3	He			45411.01		
Ge	72	3	He			74744.00		
Ge	72	3	He			74422.65		
Ge	72	3	He			73517.71		
In	115	3	He			64599.53		
In	115	3	He			63504.71		
In	115	3	He			62660.78		
Tb	159	3	He			296403.04		
Tb	159	3	He			299328.90		
Tb	159	3	He			296094.14		
Bi	209	3	He			224053.71		
Bi	209	3	He			225039.22		
Bi	209	3	He			224312.42		

Quantitation Report

Data File Name	263SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:39:13
Sample Name	410-136577-H-20-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

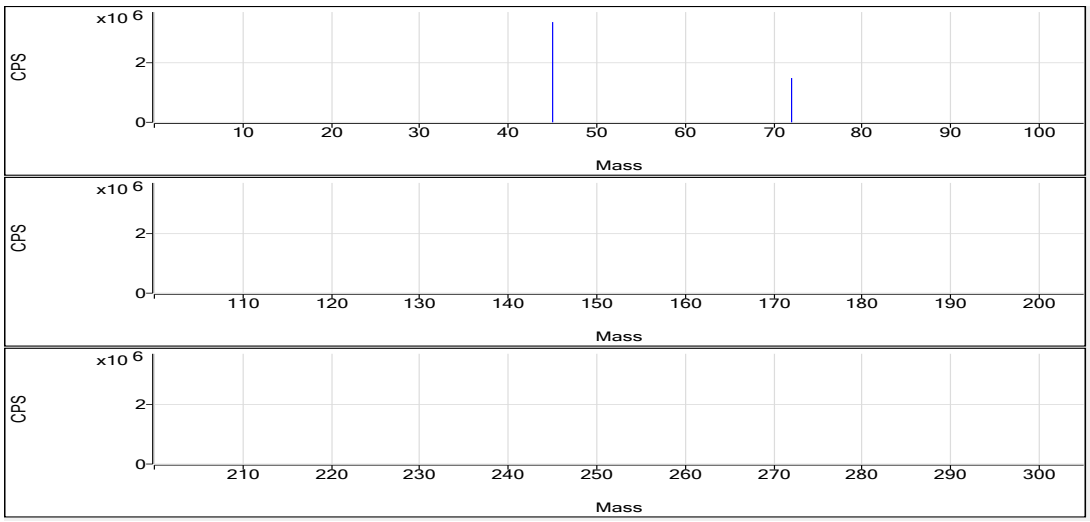
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.274	ppb	4.4	601.35	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.191	ppb	26.7	14.00	0.0001	Pulse	1.5000	3
Na	23	72	He	1038.045	ppb	1.2	141032.57	1.8896	Pulse	0.1000	3
Mg	24	72	He	6692.874	ppb	0.7	421514.16	5.6476	Pulse	0.1000	3
Al	27	72	He	9963.836	ppb	1.1	179592.80	2.4063	Pulse	0.1000	3
K	39	72	He	666.569	ppb	6.0	38190.29	0.5117	Pulse	0.1000	3
Ca	44	72	He	12336.408	ppb	1.0	28718.90	0.3848	Pulse	0.1000	3
Ti	47	72	He	1218.568	ppb	1.3	22828.45	0.3059	Pulse	0.1000	3
V	51	72	He	39.967	ppb	2.2	35439.41	0.4748	Pulse	0.5000	3
Cr	52	72	He	24.223	ppb	1.6	29423.68	0.3942	Pulse	0.1000	3
Mn	55	72	He	491.231	ppb	0.5	217437.64	2.9133	Pulse	0.1000	3
Fe	57	72	He	16269.168	ppb	0.6	352091.93	4.7173	Pulse	0.1000	3
Co	59	72	He	7.590	ppb	1.7	17514.48	0.2347	Pulse	0.1000	3
Ni	60	72	He	20.395	ppb	2.6	14057.22	0.1883	Pulse	0.1000	3
Cu	63	72	He	392.854	ppb	0.6	731549.73	9.8016	Pulse	0.1000	3
Zn	66	72	He	43.024	ppb	5.2	8249.29	0.1105	Pulse	0.1000	3
As	75	72	He	2.437	ppb	13.2	348.67	0.0047	Pulse	0.5000	3
Sr	88	115	He	34.316	ppb	0.9	17387.84	0.2690	Pulse	0.1000	3
Mo	98	115	He	0.372	ppb	2.9	563.36	0.0087	Pulse	0.1000	3
Ag	107	115	He	0.539	ppb	6.4	1616.81	0.0250	Pulse	0.1000	3
Cd	111	115	He	0.219	ppb	14.8	71.33	0.0011	Pulse	0.5000	3
Sn	120	115	He	3.477	ppb	3.4	4210.77	0.0652	Pulse	0.1000	3
Sb	121	115	He	0.807	ppb	8.8	663.38	0.0103	Pulse	0.1000	3
Ba	137	115	He	67.058	ppb	0.6	18980.28	0.2937	Pulse	0.1000	3
Tl	205	209	He	0.047	ppb	26.8	516.70	0.0023	Pulse	0.1000	3
Pb	208	209	He	29.592	ppb	1.9	241624.78	1.0793	Pulse	0.1000	3
U	238	209	He	0.439	ppb	4.0	4187.50	0.0187	Pulse	0.1000	3

ISTD Table:

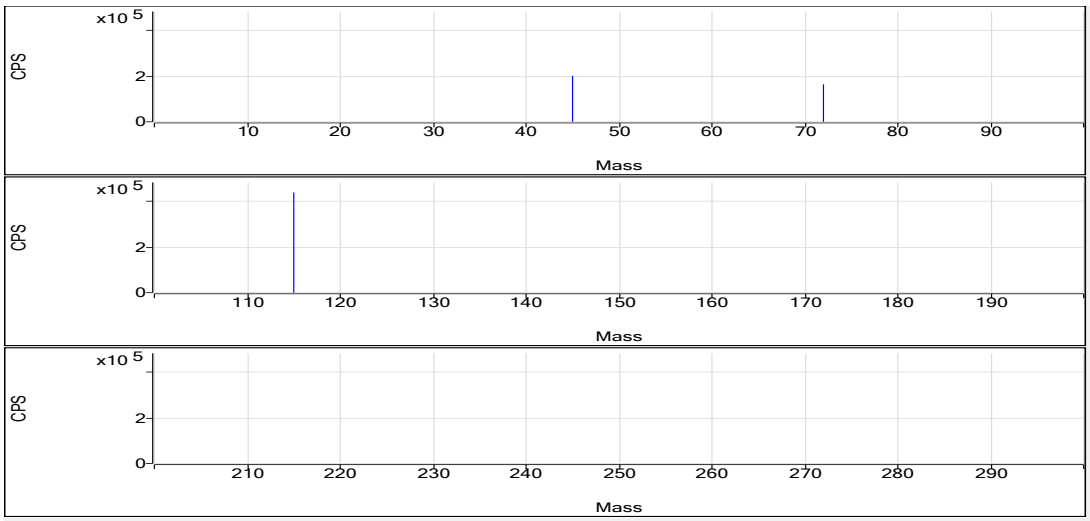
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3349939.11	1.3	103.4	Pulse	0.1000	3
No Gas	Ge	72	1479099.67	1.0	102.7	Pulse	0.1000	3
H2	Sc	45	201335.14	2.2	103.0	Pulse	0.1000	3
H2	Ge	72	164307.86	3.1	100.8	Pulse	0.1000	3
H2	In	115	439452.22	2.0	101.4	Pulse	0.1000	3
He	Sc	45	42642.85	1.8	106.6	Pulse	0.1000	3
He	Ge	72	74636.89	0.3	103.2	Pulse	0.1000	3
He	In	115	64627.25	1.2	100.1	Pulse	0.1000	3
He	Tb	159	287880.22	1.0	100.7	Pulse	0.1000	3
He	Bi	209	223929.03	1.8	100.8	Pulse	0.1000	3

No Gas

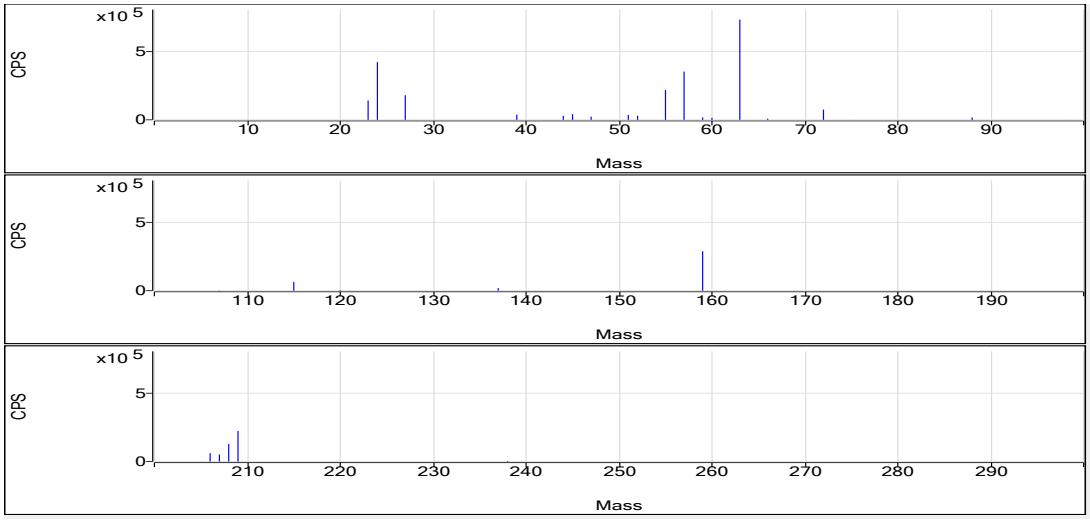


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.288	0.0004	634.02	0.0013	4.694E-05
Be	9	1	No Gas	0.266	0.0004	588.02	0.0013	4.694E-05
Be	9	1	No Gas	0.267	0.0004	582.01	0.0013	4.694E-05
Se	78	2	H2	0.186	0.0001	13.33	0.0004	1.089E-05
Se	78	2	H2	0.143	0.0001	11.33	0.0004	1.089E-05
Se	78	2	H2	0.245	0.0001	17.33	0.0004	1.089E-05
Na	23	3	He	1052.328	1.9142	142303.41	0.0017	0.1065
Na	23	3	He	1030.302	1.8763	140358.53	0.0017	0.1065
Na	23	3	He	1031.505	1.8784	140435.76	0.0017	0.1065
Mg	24	3	He	6743.848	5.6906	423051.40	0.0008	0.004846
Mg	24	3	He	6653.233	5.6142	419969.02	0.0008	0.004846
Mg	24	3	He	6681.54	5.6381	421522.06	0.0008	0.004846
Al	27	3	He	10072.666	2.4325	180840.84	0.0002	0.001063
Al	27	3	He	9851.216	2.3791	177967.34	0.0002	0.001063
Al	27	3	He	9967.625	2.4072	179970.23	0.0002	0.001063
K	39	3	He	710.695	0.5361	39854.48	0.0006	0.1436
K	39	3	He	656.635	0.5062	37869.37	0.0006	0.1436
K	39	3	He	632.377	0.4928	36847.02	0.0006	0.1436
Ca	44	3	He	12290.185	0.3833	28498.52	0	0.001611
Ca	44	3	He	12481.188	0.3893	29119.64	0	0.001611
Ca	44	3	He	12237.85	0.3817	28538.54	0	0.001611
Ti	47	3	He	1227.681	0.3082	22908.60	0.0003	0.0002737
Ti	47	3	He	1200.861	0.3014	22548.02	0.0003	0.0002737
Ti	47	3	He	1227.162	0.308	23028.74	0.0003	0.0002737
V	51	3	He	40.8	0.4846	36026.18	0.0117	0.007326
V	51	3	He	39.053	0.4642	34720.97	0.0117	0.007326
V	51	3	He	40.047	0.4758	35571.07	0.0117	0.007326
Cr	52	3	He	24.614	0.4002	29750.93	0.0152	0.02538
Cr	52	3	He	24.223	0.3942	29490.45	0.0152	0.02538
Cr	52	3	He	23.832	0.3883	29029.65	0.0152	0.02538
Mn	55	3	He	494.152	2.9305	217863.41	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	490.587	2.9095	217645.06	0.0059	0.01385
Mn	55	3	He	488.954	2.8999	216804.45	0.0059	0.01385
Fe	57	3	He	16160.208	4.6858	348350.27	0.0003	0.003918
Fe	57	3	He	16359.507	4.7435	354837.18	0.0003	0.003918
Fe	57	3	He	16287.788	4.7227	353088.35	0.0003	0.003918
Co	59	3	He	7.729	0.2389	17761.49	0.0305	0.003084
Co	59	3	He	7.558	0.2337	17481.08	0.0305	0.003084
Co	59	3	He	7.483	0.2314	17300.88	0.0305	0.003084
Ni	60	3	He	20.342	0.1879	13967.12	0.0088	0.009003
Ni	60	3	He	20.956	0.1933	14457.61	0.0088	0.009003
Ni	60	3	He	19.887	0.1839	13746.93	0.0088	0.009003
Cu	63	3	He	395.566	9.8692	733698.43	0.0249	0.004937
Cu	63	3	He	391.252	9.7616	730218.04	0.0249	0.004937
Cu	63	3	He	391.744	9.7739	730732.72	0.0249	0.004937
Zn	66	3	He	44.86	0.115	8552.79	0.0025	0.004836
Zn	66	3	He	40.541	0.1044	7812.36	0.0025	0.004836
Zn	66	3	He	43.67	0.1121	8382.71	0.0025	0.004836
As	75	3	He	2.72	0.0052	384.01	0.0017	0.0004347
As	75	3	He	2.502	0.0048	358.01	0.0017	0.0004347
As	75	3	He	2.088	0.0041	304.00	0.0017	0.0004347
Sr	88	3	He	33.985	0.2664	16980.74	0.0078	0.0007762
Sr	88	3	He	34.562	0.2709	17581.29	0.0078	0.0007762
Sr	88	3	He	34.403	0.2697	17601.48	0.0078	0.0007762
Mo	98	3	He	0.383	0.0089	570.03	0.022	0.0005162
Mo	98	3	He	0.361	0.0085	550.03	0.022	0.0005162
Mo	98	3	He	0.373	0.0087	570.03	0.022	0.0005162
Ag	107	3	He	0.5	0.0232	1480.12	0.0455	0.0004641
Ag	107	3	He	0.566	0.0262	1700.17	0.0455	0.0004641
Ag	107	3	He	0.552	0.0256	1670.15	0.0455	0.0004641
Cd	111	3	He	0.238	0.0012	76.00	0.0048	5.152E-05
Cd	111	3	He	0.182	0.0009	60.00	0.0048	5.152E-05
Cd	111	3	He	0.238	0.0012	78.00	0.0048	5.152E-05
Sn	120	3	He	3.574	0.0665	4240.78	0.0143	0.01559
Sn	120	3	He	3.512	0.0657	4260.78	0.0143	0.01559
Sn	120	3	He	3.346	0.0633	4130.75	0.0143	0.01559
Sb	121	3	He	0.814	0.0104	660.04	0.0124	0.000258
Sb	121	3	He	0.874	0.0111	720.05	0.0124	0.000258
Sb	121	3	He	0.733	0.0093	610.04	0.0124	0.000258
Ba	137	3	He	66.723	0.2922	18623.17	0.0044	0.000309
Ba	137	3	He	66.91	0.293	19013.69	0.0044	0.000309
Ba	137	3	He	67.543	0.2958	19303.97	0.0044	0.000309
Tl	205	3	He	0.042	0.0022	490.03	0.0276	0.001005
Tl	205	3	He	0.061	0.0027	610.04	0.0276	0.001005
Tl	205	3	He	0.038	0.0021	450.02	0.0276	0.001005
Pb	208	3	He	29.325	1.0695	129187.74	0.0364	0.002176
Pb	208	3	He	29.217	1.0656	127765.13	0.0364	0.002176
Pb	208	3	He	30.235	1.1026	128906.55	0.0364	0.002176
U	238	3	He	0.44	0.0188	4250.84	0.0421	0.00024
U	238	3	He	0.421	0.0179	4050.78	0.0421	0.00024
U	238	3	He	0.456	0.0194	4260.89	0.0421	0.00024
Sc	45	1	No Gas			3384145.26		
Sc	45	1	No Gas			3364721.82		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3300950.26		
Ge	72	1	No Gas			1492324.20		
Ge	72	1	No Gas			1482154.67		
Ge	72	1	No Gas			1462820.13		
Sc	45	2	H2			198212.69		
Sc	45	2	H2			206394.92		
Sc	45	2	H2			199397.81		
Ge	72	2	H2			159879.73		
Ge	72	2	H2			169992.34		
Ge	72	2	H2			163051.51		
In	115	2	H2			432771.87		
In	115	2	H2			449202.22		
In	115	2	H2			436382.57		
Sc	45	3	He			41910.39		
Sc	45	3	He			42552.67		
Sc	45	3	He			43465.49		
Ge	72	3	He			74342.21		
Ge	72	3	He			74804.82		
Ge	72	3	He			74763.63		
In	115	3	He			63765.55		
In	115	3	He			64920.93		
In	115	3	He			65293.80		
Tb	159	3	He			291123.65		
Tb	159	3	He			285450.05		
Tb	159	3	He			287066.97		
Bi	209	3	He			226618.02		
Bi	209	3	He			225758.24		
Bi	209	3	He			219410.84		

Quantitation Report

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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

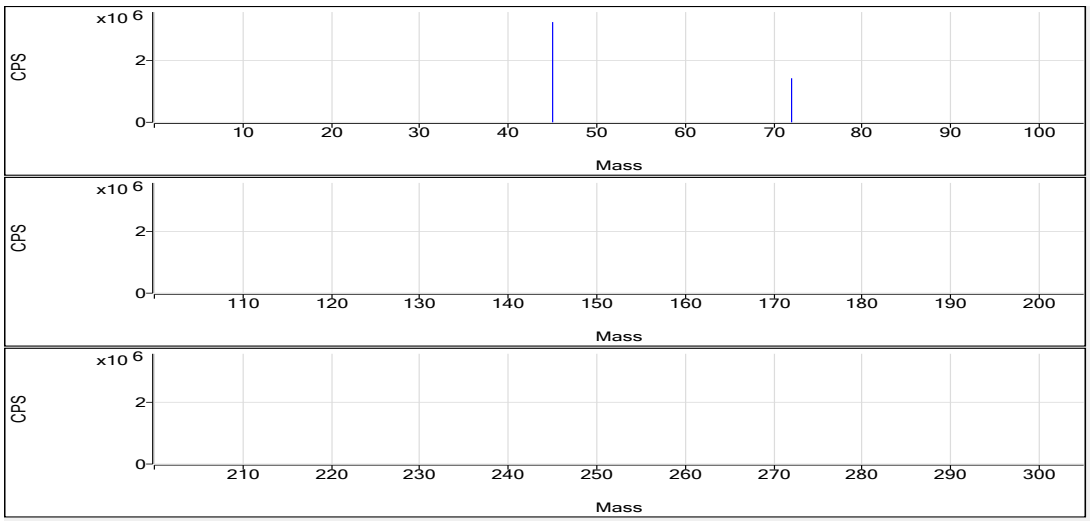
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.005	ppb	N/A	57.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.012	ppb	113.7	2.44	0.0000	Pulse	1.5000	3
Na	23	72	He	3.673	ppb	87.5	8142.50	0.1128	Pulse	0.1000	3
Mg	24	72	He	16.160	ppb	15.4	1333.44	0.0185	Pulse	0.1000	3
Al	27	72	He	25.620	ppb	2.6	523.36	0.0072	Pulse	0.1000	3
K	39	72	He	9.332	ppb	107.3	10744.27	0.1488	Pulse	0.1000	3
Ca	44	72	He	26.868	ppb	49.5	176.68	0.0024	Pulse	0.1000	3
Ti	47	72	He	1.858	ppb	149.6	53.33	0.0007	Pulse	0.1000	3
V	51	72	He	0.118	ppb	9.5	628.69	0.0087	Pulse	0.5000	3
Cr	52	72	He	0.140	ppb	55.0	1986.87	0.0275	Pulse	0.1000	3
Mn	55	72	He	0.328	ppb	15.5	1140.09	0.0158	Pulse	0.1000	3
Fe	57	72	He	48.781	ppb	11.0	1303.44	0.0181	Pulse	0.1000	3
Co	59	72	He	0.032	ppb	37.4	293.35	0.0041	Pulse	0.1000	3
Ni	60	72	He	1.039	ppb	17.7	1310.10	0.0181	Pulse	0.1000	3
Cu	63	72	He	0.257	ppb	11.2	820.06	0.0114	Pulse	0.1000	3
Zn	66	72	He	0.286	ppb	37.9	400.02	0.0055	Pulse	0.1000	3
As	75	72	He	0.000	ppb	N/A	31.33	0.0004	Pulse	0.5000	3
Sr	88	115	He	0.140	ppb	65.4	120.00	0.0019	Pulse	0.1000	3
Mo	98	115	He	0.017	ppb	65.2	56.67	0.0009	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	7966.3	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	576.1	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.070	ppb	212.8	1063.41	0.0166	Pulse	0.1000	3
Sb	121	115	He	0.013	ppb	205.5	26.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.334	ppb	22.5	113.34	0.0018	Pulse	0.1000	3
Tl	205	209	He	-0.002	ppb	N/A	206.68	0.0009	Pulse	0.1000	3
Pb	208	209	He	0.474	ppb	5.6	4273.78	0.0194	Pulse	0.1000	3
U	238	209	He	0.009	ppb	15.1	133.34	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3259392.35	1.7	100.6	Pulse	0.1000	3
No Gas	Ge	72	1432252.84	1.5	99.5	Pulse	0.1000	3
H2	Sc	45	191382.44	2.2	98.0	Pulse	0.1000	3
H2	Ge	72	157104.50	2.8	96.4	Pulse	0.1000	3
H2	In	115	433048.57	1.7	99.9	Pulse	0.1000	3
He	Sc	45	41429.32	1.7	103.6	Pulse	0.1000	3
He	Ge	72	72214.65	0.4	99.9	Pulse	0.1000	3
He	In	115	64102.85	0.2	99.2	Pulse	0.1000	3
He	Tb	159	280661.69	0.4	98.1	Pulse	0.1000	3
He	Bi	209	219728.46	0.9	98.9	Pulse	0.1000	3

No Gas



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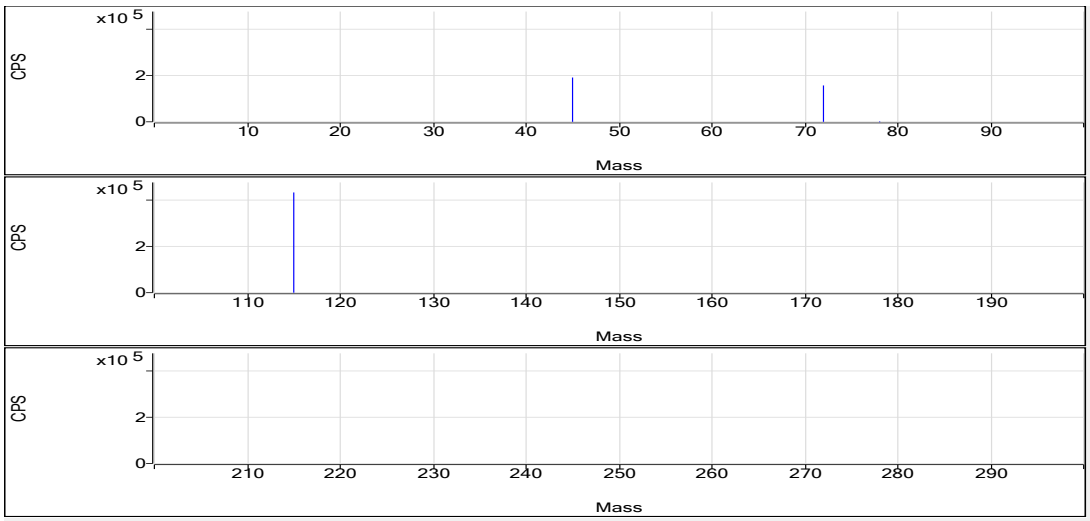
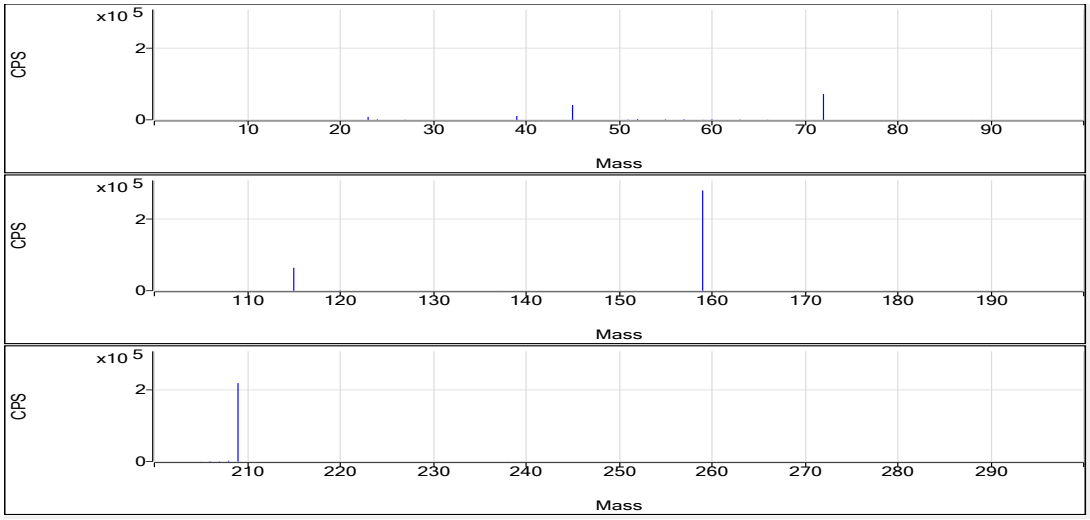


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.006	0	56.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.015	0	40.00	0.0013	4.694E-05
Be	9	1	No Gas	0.005	0.0001	76.00	0.0013	4.694E-05
Se	78	2	H2	0.028	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Na	23	3	He	1.079	0.1083	7822.32	0.0017	0.1065
Na	23	3	He	7.266	0.1189	8552.70	0.0017	0.1065
Na	23	3	He	2.674	0.111	8052.49	0.0017	0.1065
Mg	24	3	He	15.111	0.0176	1270.10	0.0008	0.004846
Mg	24	3	He	18.996	0.0209	1500.12	0.0008	0.004846
Mg	24	3	He	14.373	0.017	1230.09	0.0008	0.004846
Al	27	3	He	24.852	0.0071	510.02	0.0002	0.001063
Al	27	3	He	26.132	0.0074	530.03	0.0002	0.001063
Al	27	3	He	25.878	0.0073	530.03	0.0002	0.001063
K	39	3	He	16.81	0.1529	11044.40	0.0006	0.1436
K	39	3	He	13.226	0.1509	10854.33	0.0006	0.1436
K	39	3	He	-2.041	0.1425	10334.08	0.0006	0.1436
Ca	44	3	He	23.924	0.0024	170.01	0	0.001611
Ca	44	3	He	15.299	0.0021	150.01	0	0.001611
Ca	44	3	He	41.38	0.0029	210.01	0	0.001611
Ti	47	3	He	4.43	0.0014	100.00	0.0003	0.0002737
Ti	47	3	He	2.236	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	-1.091	0	0.00	0.0003	0.0002737
V	51	3	He	0.108	0.0086	620.02	0.0117	0.007326
V	51	3	He	0.13	0.0088	636.02	0.0117	0.007326
V	51	3	He	0.116	0.0087	630.02	0.0117	0.007326
Cr	52	3	He	0.061	0.0263	1900.18	0.0152	0.02538
Cr	52	3	He	0.214	0.0287	2060.24	0.0152	0.02538
Cr	52	3	He	0.144	0.0276	2000.20	0.0152	0.02538
Mn	55	3	He	0.304	0.0156	1130.10	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.386	0.0161	1160.09	0.0059	0.01385
Mn	55	3	He	0.293	0.0156	1130.08	0.0059	0.01385
Fe	57	3	He	54.827	0.0198	1430.13	0.0003	0.003918
Fe	57	3	He	46.963	0.0175	1260.11	0.0003	0.003918
Fe	57	3	He	44.554	0.0168	1220.08	0.0003	0.003918
Co	59	3	He	0.031	0.004	290.02	0.0305	0.003084
Co	59	3	He	0.045	0.0045	320.01	0.0305	0.003084
Co	59	3	He	0.021	0.0037	270.01	0.0305	0.003084
Ni	60	3	He	1.134	0.019	1370.12	0.0088	0.009003
Ni	60	3	He	0.827	0.0163	1170.08	0.0088	0.009003
Ni	60	3	He	1.156	0.0192	1390.11	0.0088	0.009003
Cu	63	3	He	0.23	0.0107	770.05	0.0249	0.004937
Cu	63	3	He	0.287	0.0121	870.06	0.0249	0.004937
Cu	63	3	He	0.256	0.0113	820.06	0.0249	0.004937
Zn	66	3	He	0.399	0.0058	420.02	0.0025	0.004836
Zn	66	3	He	0.182	0.0053	380.02	0.0025	0.004836
Zn	66	3	He	0.277	0.0055	400.02	0.0025	0.004836
As	75	3	He	0.005	0.0004	32.00	0.0017	0.0004347
As	75	3	He	0.054	0.0005	38.00	0.0017	0.0004347
As	75	3	He	-0.06	0.0003	24.00	0.0017	0.0004347
Sr	88	3	He	0.24	0.0027	170.01	0.0078	0.0007762
Sr	88	3	He	0.061	0.0012	80.00	0.0078	0.0007762
Sr	88	3	He	0.12	0.0017	110.00	0.0078	0.0007762
Mo	98	3	He	0.019	0.0009	60.00	0.022	0.0005162
Mo	98	3	He	0.026	0.0011	70.00	0.022	0.0005162
Mo	98	3	He	0.005	0.0006	40.00	0.022	0.0005162
Ag	107	3	He	-0.007	0.0002	10.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.068	0.0166	1060.08	0.0143	0.01559
Sn	120	3	He	0.222	0.0187	1200.09	0.0143	0.01559
Sn	120	3	He	-0.078	0.0145	930.07	0.0143	0.01559
Sb	121	3	He	0.042	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Ba	137	3	He	0.393	0.002	130.01	0.0044	0.000309
Ba	137	3	He	0.358	0.0019	120.00	0.0044	0.000309
Ba	137	3	He	0.249	0.0014	90.00	0.0044	0.000309
Tl	205	3	He	-0.01	0.0007	160.01	0.0276	0.001005
Tl	205	3	He	0.004	0.0011	240.01	0.0276	0.001005
Tl	205	3	He	0	0.001	220.01	0.0276	0.001005
Pb	208	3	He	0.504	0.0205	2390.31	0.0364	0.002176
Pb	208	3	He	0.452	0.0186	2130.26	0.0364	0.002176
Pb	208	3	He	0.468	0.0192	2270.30	0.0364	0.002176
U	238	3	He	0.009	0.0006	140.01	0.0421	0.00024
U	238	3	He	0.01	0.0006	140.01	0.0421	0.00024
U	238	3	He	0.007	0.0005	120.00	0.0421	0.00024
Sc	45	1	No Gas			3293847.76		
Sc	45	1	No Gas			3287380.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3196948.39		
Ge	72	1	No Gas			1450911.23		
Ge	72	1	No Gas			1437683.73		
Ge	72	1	No Gas			1408163.57		
Sc	45	2	H2			186705.19		
Sc	45	2	H2			194851.15		
Sc	45	2	H2			192590.99		
Ge	72	2	H2			152033.38		
Ge	72	2	H2			160222.76		
Ge	72	2	H2			159057.35		
In	115	2	H2			424849.80		
In	115	2	H2			438150.42		
In	115	2	H2			436145.50		
Sc	45	3	He			41228.71		
Sc	45	3	He			42231.58		
Sc	45	3	He			40827.66		
Ge	72	3	He			72221.83		
Ge	72	3	He			71909.34		
Ge	72	3	He			72512.77		
In	115	3	He			64037.86		
In	115	3	He			64027.03		
In	115	3	He			64268.55		
Tb	159	3	He			280799.14		
Tb	159	3	He			279462.67		
Tb	159	3	He			281723.26		
Bi	209	3	He			220835.17		
Bi	209	3	He			217414.63		
Bi	209	3	He			220935.58		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

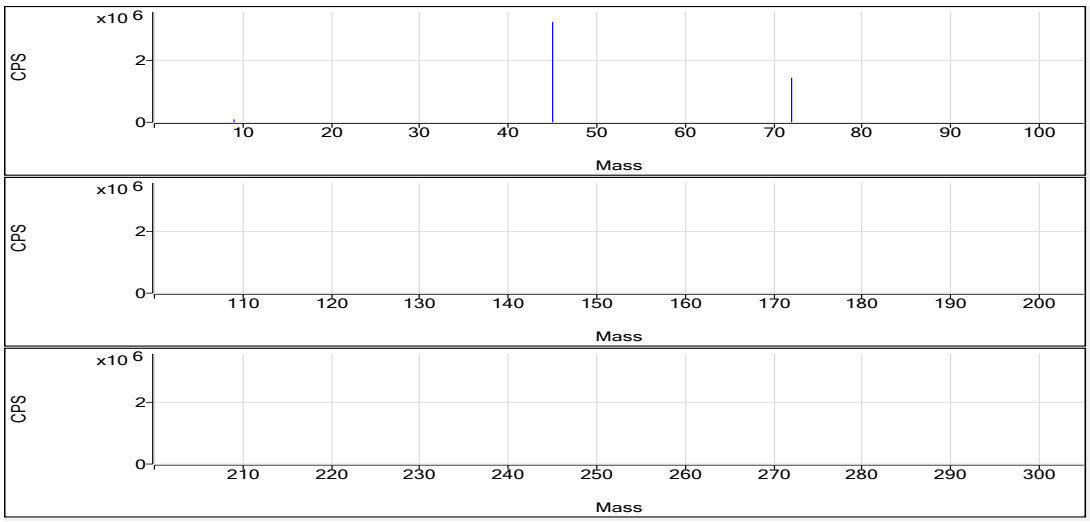
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.785	ppb	5.8	93878.50	0.0655	Pulse	0.5000	3
Se	78	72	H2	52.632	ppb	3.6	3243.04	0.0205	Pulse	1.5000	3
Na	23	72	He	5367.859	ppb	1.9	672682.65	9.3275	Pulse	0.1000	3
Mg	24	72	He	5373.458	ppb	1.5	327077.26	4.5352	Pulse	0.1000	3
Al	27	72	He	5306.865	ppb	1.6	92464.45	1.2821	Pulse	0.1000	3
K	39	72	He	5326.591	ppb	1.9	222488.52	3.0850	Pulse	0.1000	3
Ca	44	72	He	5363.293	ppb	5.5	12128.71	0.1682	Pulse	0.1000	3
Ti	47	72	He	5430.207	ppb	1.5	98231.56	1.3621	Pulse	0.1000	3
V	51	72	He	535.524	ppb	1.3	452316.90	6.2717	Pulse	0.5000	3
Cr	52	72	He	539.004	ppb	1.6	593752.52	8.2330	Pulse	0.1000	3
Mn	55	72	He	534.883	ppb	1.5	228687.73	3.1710	Pulse	0.1000	3
Fe	57	72	He	5306.357	ppb	2.2	111149.81	1.5412	Pulse	0.1000	3
Co	59	72	He	531.500	ppb	1.6	1169725.45	16.2194	Pulse	0.1000	3
Ni	60	72	He	531.834	ppb	0.9	337931.74	4.6856	Pulse	0.1000	3
Cu	63	72	He	531.632	ppb	1.2	956481.97	13.2623	Pulse	0.1000	3
Zn	66	72	He	527.947	ppb	1.0	93894.77	1.3019	Pulse	0.1000	3
As	75	72	He	528.875	ppb	2.0	66365.73	0.9202	Pulse	0.5000	3
Sr	88	115	He	51.868	ppb	5.4	26064.56	0.4062	Pulse	0.1000	3
Mo	98	115	He	51.819	ppb	1.0	73279.88	1.1416	Pulse	0.1000	3
Ag	107	115	He	51.710	ppb	1.2	151054.56	2.3533	Pulse	0.1000	3
Cd	111	115	He	51.765	ppb	2.7	15950.42	0.2485	Pulse	0.5000	3
Sn	120	115	He	52.424	ppb	2.6	48970.05	0.7630	Pulse	0.1000	3
Sb	121	115	He	51.999	ppb	2.7	41415.77	0.6453	Pulse	0.1000	3
Ba	137	115	He	515.217	ppb	1.7	144686.75	2.2543	Pulse	0.1000	3
Tl	205	209	He	52.203	ppb	0.8	318024.25	1.4441	Pulse	0.1000	3
Pb	208	209	He	52.456	ppb	1.4	420948.66	1.9114	Pulse	0.1000	3
U	238	209	He	51.885	ppb	0.9	480717.68	2.1829	Pulse	0.1000	3

ISTD Table:

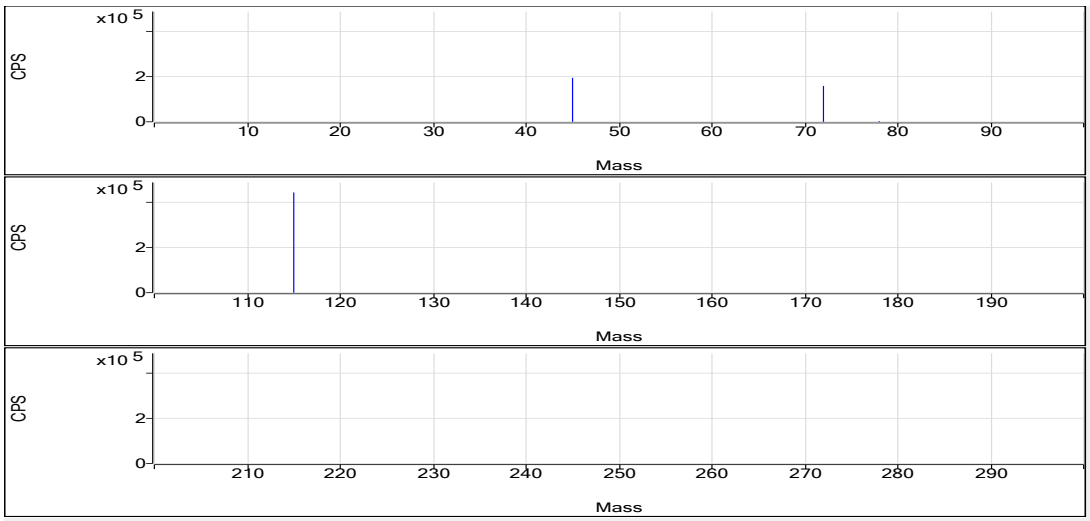
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3231154.74	2.5	99.7	Pulse	0.1000	3
No Gas	Ge	72	1434832.89	1.6	99.7	Pulse	0.1000	3
H2	Sc	45	193863.35	3.0	99.2	Pulse	0.1000	3
H2	Ge	72	158210.79	1.6	97.1	Pulse	0.1000	3
H2	In	115	441920.51	2.3	102.0	Pulse	0.1000	3
He	Sc	45	41807.11	0.5	104.6	Pulse	0.1000	3
He	Ge	72	72124.39	0.7	99.8	Pulse	0.1000	3
He	In	115	64194.23	1.5	99.4	Pulse	0.1000	3
He	Tb	159	286220.72	0.4	100.1	Pulse	0.1000	3
He	Bi	209	220223.14	0.6	99.1	Pulse	0.1000	3

No Gas

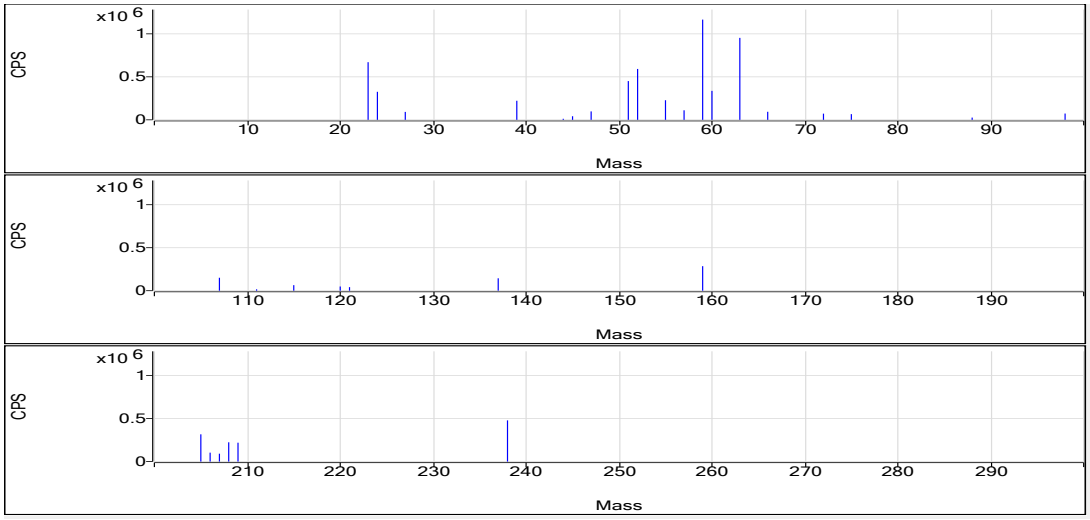


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.558	0.0612	89243.93	0.0013	4.694E-05
Be	9	1	No Gas	50.649	0.0666	95553.70	0.0013	4.694E-05
Be	9	1	No Gas	52.15	0.0686	96837.88	0.0013	4.694E-05
Se	78	2	H2	54.815	0.0214	3341.06	0.0004	1.089E-05
Se	78	2	H2	51.249	0.02	3215.03	0.0004	1.089E-05
Se	78	2	H2	51.833	0.0202	3173.02	0.0004	1.089E-05
Na	23	3	He	5441.29	9.4536	680095.93	0.0017	0.1065
Na	23	3	He	5253.225	9.1306	663921.71	0.0017	0.1065
Na	23	3	He	5409.062	9.3983	674030.30	0.0017	0.1065
Mg	24	3	He	5432.412	4.5849	329840.46	0.0008	0.004846
Mg	24	3	He	5279.772	4.4562	324031.50	0.0008	0.004846
Mg	24	3	He	5408.191	4.5645	327359.82	0.0008	0.004846
Al	27	3	He	5323.139	1.286	92517.90	0.0002	0.001063
Al	27	3	He	5217.176	1.2605	91653.33	0.0002	0.001063
Al	27	3	He	5380.28	1.2998	93222.13	0.0002	0.001063
K	39	3	He	5387.704	3.1188	224366.89	0.0006	0.1436
K	39	3	He	5211.294	3.0214	219697.32	0.0006	0.1436
K	39	3	He	5380.776	3.115	223401.36	0.0006	0.1436
Ca	44	3	He	5674.789	0.1779	12795.95	0	0.001611
Ca	44	3	He	5082.041	0.1595	11594.90	0	0.001611
Ca	44	3	He	5333.049	0.1673	11995.28	0	0.001611
Ti	47	3	He	5404.524	1.3556	97523.40	0.0003	0.0002737
Ti	47	3	He	5364.127	1.3455	97835.99	0.0003	0.0002737
Ti	47	3	He	5521.969	1.3851	99335.29	0.0003	0.0002737
V	51	3	He	539.322	6.3162	454387.50	0.0117	0.007326
V	51	3	He	527.22	6.1746	448982.31	0.0117	0.007326
V	51	3	He	540.029	6.3244	453580.88	0.0117	0.007326
Cr	52	3	He	540.376	8.2538	593783.12	0.0152	0.02538
Cr	52	3	He	529.987	8.0956	588668.27	0.0152	0.02538
Cr	52	3	He	546.65	8.3494	598806.16	0.0152	0.02538
Mn	55	3	He	538.684	3.1934	229733.75	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	525.933	3.1181	226732.73	0.0059	0.01385
Mn	55	3	He	540.032	3.2014	229596.70	0.0059	0.01385
Fe	57	3	He	5362.578	1.5575	112049.50	0.0003	0.003918
Fe	57	3	He	5171.934	1.5023	109238.84	0.0003	0.003918
Fe	57	3	He	5384.561	1.5639	112161.08	0.0003	0.003918
Co	59	3	He	534.824	16.3208	1174125.53	0.0305	0.003084
Co	59	3	He	521.794	15.9233	1157850.53	0.0305	0.003084
Co	59	3	He	537.882	16.4141	1177200.29	0.0305	0.003084
Ni	60	3	He	536.133	4.7234	339801.64	0.0088	0.009003
Ni	60	3	He	526.409	4.6379	337239.88	0.0088	0.009003
Ni	60	3	He	532.96	4.6955	336753.71	0.0088	0.009003
Cu	63	3	He	532.971	13.2957	956496.55	0.0249	0.004937
Cu	63	3	He	524.878	13.0939	952111.47	0.0249	0.004937
Cu	63	3	He	537.046	13.3973	960837.88	0.0249	0.004937
Zn	66	3	He	533.849	1.3164	94700.59	0.0025	0.004836
Zn	66	3	He	523.634	1.2913	93894.74	0.0025	0.004836
Zn	66	3	He	526.358	1.298	93088.98	0.0025	0.004836
As	75	3	He	536.074	0.9328	67102.98	0.0017	0.0004347
As	75	3	He	516.926	0.8995	65403.45	0.0017	0.0004347
As	75	3	He	533.625	0.9285	66590.77	0.0017	0.0004347
Sr	88	3	He	50.263	0.3937	25623.71	0.0078	0.0007762
Sr	88	3	He	50.268	0.3937	25343.20	0.0078	0.0007762
Sr	88	3	He	55.073	0.4313	27226.76	0.0078	0.0007762
Mo	98	3	He	51.468	1.1339	73802.38	0.022	0.0005162
Mo	98	3	He	51.568	1.1361	73129.09	0.022	0.0005162
Mo	98	3	He	52.421	1.1549	72908.17	0.022	0.0005162
Ag	107	3	He	51.696	2.3527	153125.40	0.0455	0.0004641
Ag	107	3	He	51.094	2.3253	149670.90	0.0455	0.0004641
Ag	107	3	He	52.339	2.3819	150367.39	0.0455	0.0004641
Cd	111	3	He	50.73	0.2436	15852.98	0.0048	5.152E-05
Cd	111	3	He	51.238	0.246	15834.98	0.0048	5.152E-05
Cd	111	3	He	53.327	0.256	16163.29	0.0048	5.152E-05
Sn	120	3	He	51.057	0.7436	48394.91	0.0143	0.01559
Sn	120	3	He	52.393	0.7626	49087.05	0.0143	0.01559
Sn	120	3	He	53.821	0.783	49428.19	0.0143	0.01559
Sb	121	3	He	51.668	0.6412	41733.26	0.0124	0.000258
Sb	121	3	He	50.776	0.6301	40559.95	0.0124	0.000258
Sb	121	3	He	53.553	0.6646	41954.10	0.0124	0.000258
Ba	137	3	He	508.303	2.224	144753.12	0.0044	0.000309
Ba	137	3	He	512.405	2.242	144310.22	0.0044	0.000309
Ba	137	3	He	524.944	2.2968	144996.91	0.0044	0.000309
Tl	205	3	He	51.826	1.4337	317424.51	0.0276	0.001005
Tl	205	3	He	52.173	1.4433	316011.40	0.0276	0.001005
Tl	205	3	He	52.61	1.4554	320636.83	0.0276	0.001005
Pb	208	3	He	52.308	1.9061	225145.11	0.0364	0.002176
Pb	208	3	He	51.807	1.8878	220231.70	0.0364	0.002176
Pb	208	3	He	53.252	1.9404	229374.84	0.0364	0.002176
U	238	3	He	51.402	2.1626	478807.30	0.0421	0.00024
U	238	3	He	51.938	2.1851	478439.33	0.0421	0.00024
U	238	3	He	52.315	2.201	484906.40	0.0421	0.00024
Sc	45	1	No Gas			3290564.95		
Sc	45	1	No Gas			3263939.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3138959.95		
Ge	72	1	No Gas			1457626.23		
Ge	72	1	No Gas			1434706.85		
Ge	72	1	No Gas			1412165.60		
Sc	45	2	H2			188385.51		
Sc	45	2	H2			199987.83		
Sc	45	2	H2			193216.72		
Ge	72	2	H2			156463.47		
Ge	72	2	H2			161030.51		
Ge	72	2	H2			157138.39		
In	115	2	H2			430494.68		
In	115	2	H2			449442.45		
In	115	2	H2			445824.41		
Sc	45	3	He			41700.30		
Sc	45	3	He			42060.92		
Sc	45	3	He			41660.10		
Ge	72	3	He			71940.27		
Ge	72	3	He			72714.26		
Ge	72	3	He			71718.65		
In	115	3	He			65463.49		
In	115	3	He			64750.38		
In	115	3	He			63514.72		
Tb	159	3	He			285563.73		
Tb	159	3	He			285404.88		
Tb	159	3	He			287693.55		
Bi	209	3	He			221403.63		
Bi	209	3	He			218951.17		
Bi	209	3	He			220314.63		

Quantitation Report

Data File Name	266_CCB.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:45:13
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

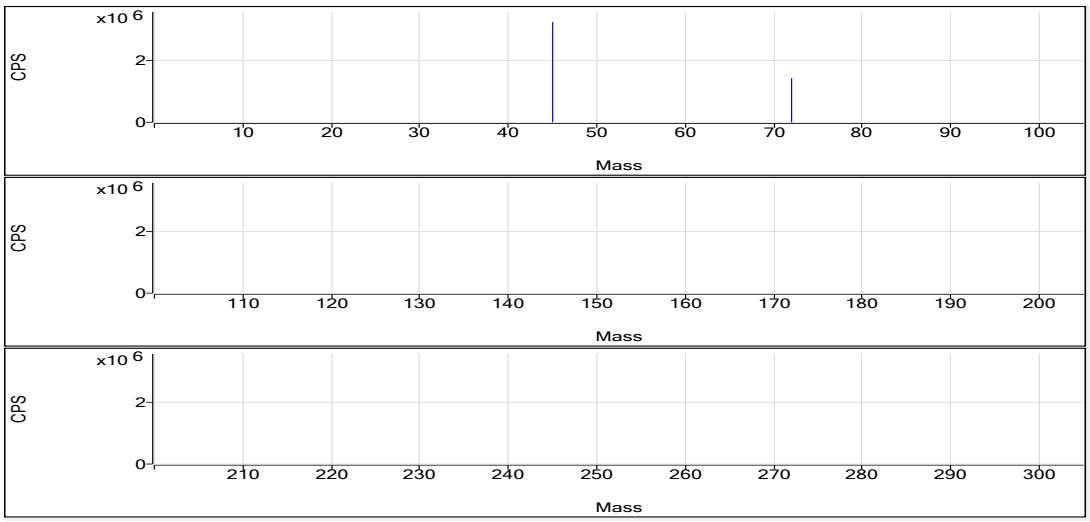
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.016	ppb	32.2	98.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.055	ppb	71.9	5.11	0.0000	Pulse	1.5000	3
Na	23	72	He	5.477	ppb	39.3	8345.94	0.1159	Pulse	0.1000	3
Mg	24	72	He	15.332	ppb	5.0	1280.10	0.0178	Pulse	0.1000	3
Al	27	72	He	24.412	ppb	34.0	500.03	0.0070	Pulse	0.1000	3
K	39	72	He	10.086	ppb	267.7	10734.27	0.1492	Pulse	0.1000	3
Ca	44	72	He	-10.043	ppb	N/A	93.34	0.0013	Pulse	0.1000	3
Ti	47	72	He	1.681	ppb	87.1	50.00	0.0007	Pulse	0.1000	3
V	51	72	He	0.155	ppb	24.0	658.02	0.0091	Pulse	0.5000	3
Cr	52	72	He	0.129	ppb	78.2	1970.21	0.0274	Pulse	0.1000	3
Mn	55	72	He	0.190	ppb	192.4	1080.08	0.0150	Pulse	0.1000	3
Fe	57	72	He	44.513	ppb	13.8	1213.43	0.0168	Pulse	0.1000	3
Co	59	72	He	0.149	ppb	23.3	550.03	0.0076	Pulse	0.1000	3
Ni	60	72	He	0.903	ppb	6.9	1220.09	0.0169	Pulse	0.1000	3
Cu	63	72	He	0.343	ppb	9.7	973.40	0.0135	Pulse	0.1000	3
Zn	66	72	He	0.199	ppb	142.0	383.36	0.0053	Pulse	0.1000	3
As	75	72	He	0.148	ppb	54.4	50.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.128	ppb	45.1	113.33	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.005	ppb	143.4	40.00	0.0006	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	114.6	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	222.2	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.160	ppb	164.3	1136.76	0.0179	Pulse	0.1000	3
Sb	121	115	He	0.030	ppb	73.7	40.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.191	ppb	57.9	73.33	0.0011	Pulse	0.1000	3
Tl	205	209	He	0.095	ppb	9.1	790.05	0.0036	Pulse	0.1000	3
Pb	208	209	He	0.413	ppb	2.8	3743.69	0.0172	Pulse	0.1000	3
U	238	209	He	0.012	ppb	9.3	160.01	0.0007	Pulse	0.1000	3

ISTD Table:

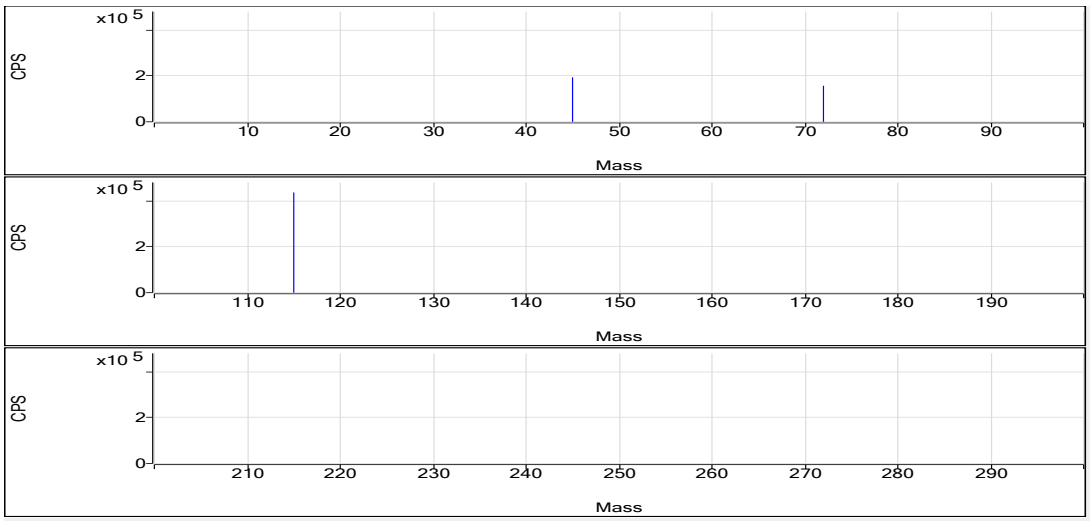
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3252175.57	1.7	100.3	Pulse	0.1000	3
No Gas	Ge	72	1430358.15	1.5	99.3	Pulse	0.1000	3
H2	Sc	45	194508.38	2.8	99.6	Pulse	0.1000	3
H2	Ge	72	157641.80	2.0	96.7	Pulse	0.1000	3
H2	In	115	438066.31	1.7	101.1	Pulse	0.1000	3
He	Sc	45	41081.68	0.1	102.7	Pulse	0.1000	3
He	Ge	72	72050.49	2.4	99.7	Pulse	0.1000	3
He	In	115	63723.15	1.5	98.7	Pulse	0.1000	3
He	Tb	159	280631.03	0.3	98.1	Pulse	0.1000	3
He	Bi	209	217708.97	0.1	98.0	Pulse	0.1000	3

No Gas

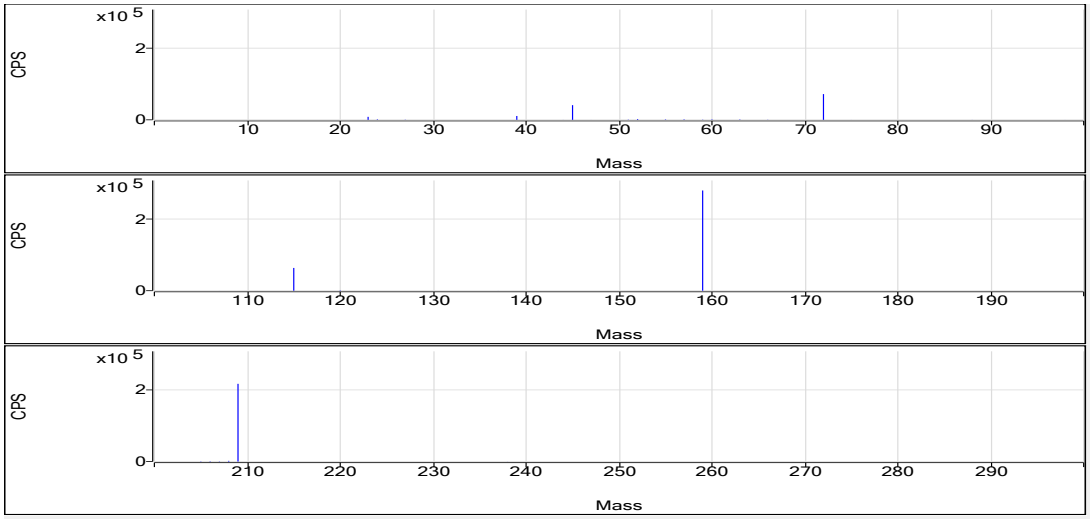


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0.0001	98.00	0.0013	4.694E-05
Be	9	1	No Gas	0.012	0.0001	88.00	0.0013	4.694E-05
Be	9	1	No Gas	0.022	0.0001	108.00	0.0013	4.694E-05
Se	78	2	H2	0.039	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.1	0	8.00	0.0004	1.089E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Na	23	3	He	7.097	0.1186	8312.57	0.0017	0.1065
Na	23	3	He	3.038	0.1117	8122.45	0.0017	0.1065
Na	23	3	He	6.297	0.1173	8602.81	0.0017	0.1065
Mg	24	3	He	15.924	0.0183	1280.10	0.0008	0.004846
Mg	24	3	He	14.475	0.0171	1240.11	0.0008	0.004846
Mg	24	3	He	15.596	0.018	1320.09	0.0008	0.004846
Al	27	3	He	30.486	0.0084	590.04	0.0002	0.001063
Al	27	3	He	14.964	0.0047	340.02	0.0002	0.001063
Al	27	3	He	27.788	0.0078	570.03	0.0002	0.001063
K	39	3	He	40.878	0.1662	11645.08	0.0006	0.1436
K	39	3	He	-9.554	0.1384	10063.73	0.0006	0.1436
K	39	3	He	-1.065	0.1431	10493.99	0.0006	0.1436
Ca	44	3	He	-1.311	0.0016	110.01	0	0.001611
Ca	44	3	He	-16.452	0.0011	80.00	0	0.001611
Ca	44	3	He	-12.365	0.0012	90.00	0	0.001611
Ti	47	3	He	2.323	0.0009	60.00	0.0003	0.0002737
Ti	47	3	He	0.005	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	2.714	0.001	70.00	0.0003	0.0002737
V	51	3	He	0.194	0.0096	672.02	0.0117	0.007326
V	51	3	He	0.152	0.0091	662.02	0.0117	0.007326
V	51	3	He	0.12	0.0087	640.02	0.0117	0.007326
Cr	52	3	He	0.161	0.0278	1950.20	0.0152	0.02538
Cr	52	3	He	0.211	0.0286	2080.23	0.0152	0.02538
Cr	52	3	He	0.016	0.0256	1880.21	0.0152	0.02538
Mn	55	3	He	-0.05	0.0136	950.07	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.611	0.0175	1270.10	0.0059	0.01385
Mn	55	3	He	0.009	0.0139	1020.07	0.0059	0.01385
Fe	57	3	He	38.211	0.015	1050.08	0.0003	0.003918
Fe	57	3	He	44.854	0.0169	1230.10	0.0003	0.003918
Fe	57	3	He	50.475	0.0185	1360.12	0.0003	0.003918
Co	59	3	He	0.152	0.0077	540.03	0.0305	0.003084
Co	59	3	He	0.183	0.0087	630.04	0.0305	0.003084
Co	59	3	He	0.113	0.0065	480.03	0.0305	0.003084
Ni	60	3	He	0.973	0.0176	1230.09	0.0088	0.009003
Ni	60	3	He	0.884	0.0168	1220.09	0.0088	0.009003
Ni	60	3	He	0.852	0.0165	1210.10	0.0088	0.009003
Cu	63	3	He	0.306	0.0126	880.05	0.0249	0.004937
Cu	63	3	He	0.37	0.0142	1030.07	0.0249	0.004937
Cu	63	3	He	0.354	0.0138	1010.08	0.0249	0.004937
Zn	66	3	He	0.414	0.0059	410.02	0.0025	0.004836
Zn	66	3	He	-0.122	0.0045	330.02	0.0025	0.004836
Zn	66	3	He	0.307	0.0056	410.03	0.0025	0.004836
As	75	3	He	0.078	0.0006	40.00	0.0017	0.0004347
As	75	3	He	0.13	0.0007	48.00	0.0017	0.0004347
As	75	3	He	0.236	0.0008	62.00	0.0017	0.0004347
Sr	88	3	He	0.062	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.158	0.002	130.00	0.0078	0.0007762
Sr	88	3	He	0.166	0.0021	130.00	0.0078	0.0007762
Mo	98	3	He	0.012	0.0008	50.00	0.022	0.0005162
Mo	98	3	He	-0.002	0.0005	30.00	0.022	0.0005162
Mo	98	3	He	0.005	0.0006	40.00	0.022	0.0005162
Ag	107	3	He	0.004	0.0006	40.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.028	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Sn	120	3	He	0.384	0.0211	1340.13	0.0143	0.01559
Sn	120	3	He	-0.129	0.0137	890.06	0.0143	0.01559
Sn	120	3	He	0.225	0.0188	1180.10	0.0143	0.01559
Sb	121	3	He	0.055	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.018	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.145	0.0009	60.00	0.0044	0.000309
Ba	137	3	He	0.318	0.0017	110.00	0.0044	0.000309
Ba	137	3	He	0.111	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	0.09	0.0035	760.05	0.0276	0.001005
Tl	205	3	He	0.105	0.0039	850.06	0.0276	0.001005
Tl	205	3	He	0.09	0.0035	760.05	0.0276	0.001005
Pb	208	3	He	0.404	0.0169	1960.21	0.0364	0.002176
Pb	208	3	He	0.426	0.0177	2070.24	0.0364	0.002176
Pb	208	3	He	0.407	0.017	1840.21	0.0364	0.002176
U	238	3	He	0.012	0.0007	160.01	0.0421	0.00024
U	238	3	He	0.011	0.0007	150.01	0.0421	0.00024
U	238	3	He	0.013	0.0008	170.01	0.0421	0.00024
Sc	45	1	No Gas			3314510.26		
Sc	45	1	No Gas			3210979.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3231037.45		
Ge	72	1	No Gas			1454880.76		
Ge	72	1	No Gas			1414415.60		
Ge	72	1	No Gas			1421778.10		
Sc	45	2	H2			190280.49		
Sc	45	2	H2			200758.10		
Sc	45	2	H2			192486.54		
Ge	72	2	H2			154359.85		
Ge	72	2	H2			160720.00		
Ge	72	2	H2			157845.55		
In	115	2	H2			433081.52		
In	115	2	H2			446478.24		
In	115	2	H2			434639.17		
Sc	45	3	He			41078.28		
Sc	45	3	He			41128.57		
Sc	45	3	He			41038.18		
Ge	72	3	He			70060.80		
Ge	72	3	He			72733.29		
Ge	72	3	He			73357.39		
In	115	3	He			63634.75		
In	115	3	He			64749.87		
In	115	3	He			62811.41		
Tb	159	3	He			279654.18		
Tb	159	3	He			281492.42		
Tb	159	3	He			280746.48		
Bi	209	3	He			217835.90		
Bi	209	3	He			217712.20		
Bi	209	3	He			217578.82		

Quantitation Report

Data File Name	267SMPL.d
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Acq Time	2023-08-10 19:47:13
Sample Name	410-136577-H-9-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

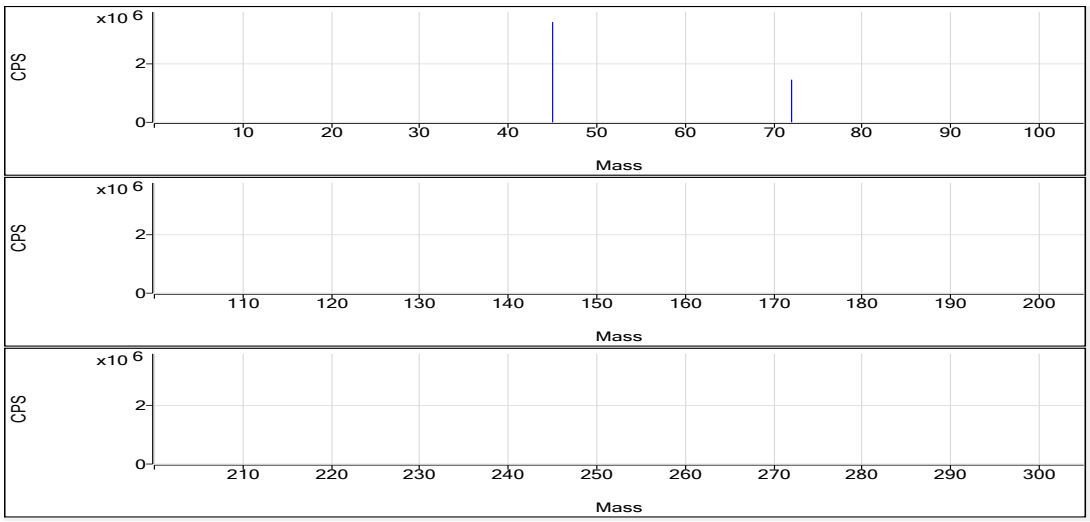
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.986	ppb	5.7	1976.81	0.0013	Pulse	0.5000	3
Se	78	72	H2	0.376	ppb	31.1	25.33	0.0002	Pulse	1.5000	3
Na	23	72	He	1478.981	ppb	1.3	195460.03	2.6471	Pulse	0.1000	3
Mg	24	72	He	22413.985	ppb	0.9	1395756.70	18.9021	Pulse	0.1000	3
Al	27	72	He	37771.938	ppb	1.4	673334.94	9.1190	Pulse	0.1000	3
K	39	72	He	2414.563	ppb	0.5	109068.71	1.4770	Pulse	0.1000	3
Ca	44	72	He	31651.080	ppb	1.6	72707.38	0.9847	Pulse	0.1000	3
Ti	47	72	He	3328.398	ppb	1.6	61653.96	0.8350	Pulse	0.1000	3
V	51	72	He	127.687	ppb	0.8	110834.75	1.5010	Pulse	0.5000	3
Cr	52	72	He	90.145	ppb	1.7	103226.90	1.3980	Pulse	0.1000	3
Mn	55	72	He	2577.784	ppb	1.3	1124495.61	15.2290	Pulse	0.1000	3
Fe	57	72	He	254497.102	ppb	2.3	5444095.12	73.7355	Mix	0.1000	3
Co	59	72	He	42.444	ppb	1.2	95848.63	1.2981	Pulse	0.1000	3
Ni	60	72	He	113.215	ppb	2.0	74170.11	1.0045	Pulse	0.1000	3
Cu	63	72	He	667.676	ppb	1.9	1229727.01	16.6549	Pulse	0.1000	3
Zn	66	72	He	135.239	ppb	3.6	24885.56	0.3371	Pulse	0.1000	3
As	75	72	He	60.256	ppb	2.3	7770.14	0.1052	Pulse	0.5000	3
Sr	88	115	He	65.569	ppb	4.5	33426.67	0.5133	Pulse	0.1000	3
Mo	98	115	He	5.127	ppb	6.6	7382.21	0.1134	Pulse	0.1000	3
Ag	107	115	He	0.565	ppb	1.3	1706.84	0.0262	Pulse	0.1000	3
Cd	111	115	He	0.412	ppb	9.3	132.00	0.0020	Pulse	0.5000	3
Sn	120	115	He	2584.032	ppb	3.3	2400479.81	36.8585	Pulse	0.1000	3
Sb	121	115	He	40.828	ppb	4.1	32996.43	0.5067	Pulse	0.1000	3
Ba	137	115	He	118.753	ppb	3.9	33852.11	0.5198	Pulse	0.1000	3
Tl	205	209	He	0.162	ppb	6.0	1216.77	0.0055	Pulse	0.1000	3
Pb	208	209	He	100.708	ppb	0.3	815170.35	3.6677	Pulse	0.1000	3
U	238	209	He	2.102	ppb	1.1	19705.66	0.0887	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3460362.24	1.0	106.8	Pulse	0.1000	3
No Gas	Ge	72	1472008.78	1.1	102.2	Pulse	0.1000	3
H2	Sc	45	208583.85	0.7	106.8	Pulse	0.1000	3
H2	Ge	72	161378.66	1.4	99.0	Pulse	0.1000	3
H2	In	115	577355.75	0.9	133.2	Pulse	0.1000	3
He	Sc	45	43231.13	0.6	108.1	Pulse	0.1000	3
He	Ge	72	73846.61	1.2	102.2	Pulse	0.1000	3
He	In	115	65163.99	2.6	100.9	Pulse	0.1000	3
He	Tb	159	292891.14	0.7	102.4	Pulse	0.1000	3
He	Bi	209	222256.47	0.8	100.0	Pulse	0.1000	3

No Gas



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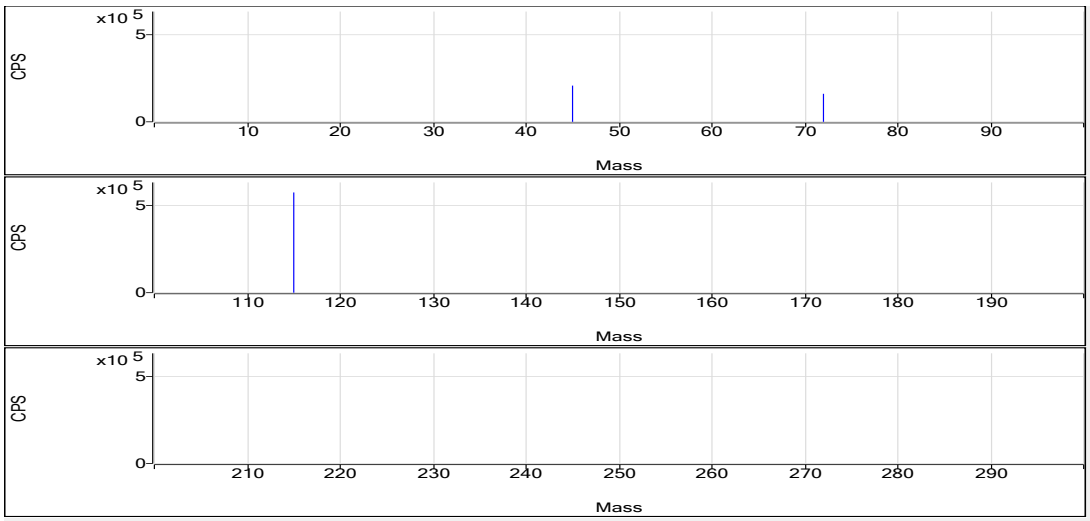
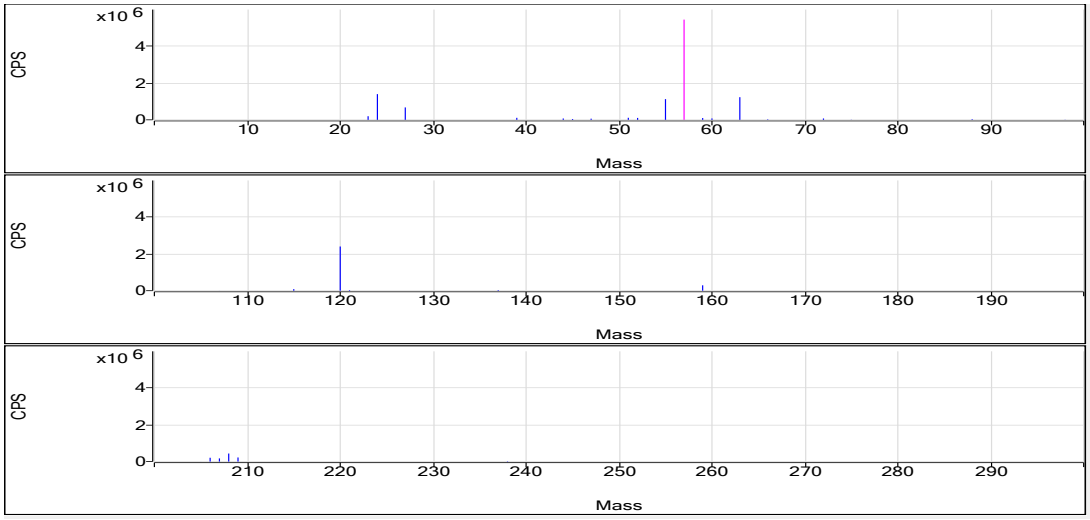


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.933	0.0013	1866.13	0.0013	4.694E-05
Be	9	1	No Gas	0.981	0.0013	1992.14	0.0013	4.694E-05
Be	9	1	No Gas	1.045	0.0014	2072.16	0.0013	4.694E-05
Se	78	2	H2	0.465	0.0002	30.67	0.0004	1.089E-05
Se	78	2	H2	0.244	0.0001	17.33	0.0004	1.089E-05
Se	78	2	H2	0.42	0.0002	28.00	0.0004	1.089E-05
Na	23	3	He	1457.049	2.6094	195354.88	0.0017	0.1065
Na	23	3	He	1495.48	2.6754	196743.86	0.0017	0.1065
Na	23	3	He	1484.413	2.6564	194281.36	0.0017	0.1065
Mg	24	3	He	22208.565	18.7289	1402152.79	0.0008	0.004846
Mg	24	3	He	22410.67	18.8993	1389807.64	0.0008	0.004846
Mg	24	3	He	22622.72	19.0781	1395309.67	0.0008	0.004846
Al	27	3	He	37275.468	8.9991	673726.71	0.0002	0.001063
Al	27	3	He	37696.959	9.1009	669256.24	0.0002	0.001063
Al	27	3	He	38343.386	9.2569	677021.86	0.0002	0.001063
K	39	3	He	2410.102	1.4745	110391.44	0.0006	0.1436
K	39	3	He	2405.966	1.4722	108265.02	0.0006	0.1436
K	39	3	He	2427.621	1.4842	108549.67	0.0006	0.1436
Ca	44	3	He	31196.065	0.9706	72661.33	0	0.001611
Ca	44	3	He	31548.745	0.9815	72177.79	0	0.001611
Ca	44	3	He	32208.43	1.002	73283.03	0	0.001611
Ti	47	3	He	3297.598	0.8272	61932.07	0.0003	0.0002737
Ti	47	3	He	3296.715	0.827	60817.06	0.0003	0.0002737
Ti	47	3	He	3390.88	0.8506	62212.75	0.0003	0.0002737
V	51	3	He	126.484	1.4869	111318.23	0.0117	0.007326
V	51	3	He	128.169	1.5066	110792.45	0.0117	0.007326
V	51	3	He	128.408	1.5094	110393.57	0.0117	0.007326
Cr	52	3	He	88.5	1.373	102790.58	0.0152	0.02538
Cr	52	3	He	90.399	1.4019	103093.00	0.0152	0.02538
Cr	52	3	He	91.535	1.4192	103797.11	0.0152	0.02538
Mn	55	3	He	2543.256	15.0252	1124872.72	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2579.72	15.2404	1120743.73	0.0059	0.01385
Mn	55	3	He	2610.376	15.4214	1127870.37	0.0059	0.01385
Fe	57	3	He	248145.204	71.8952	5382481.79	0.0003	0.003918
Fe	57	3	He	255586.893	74.0512	5445535.54	0.0003	0.003918
Fe	57	3	He	259759.209	75.26	5504268.04	0.0003	0.003918
Co	59	3	He	41.894	1.2813	95925.54	0.0305	0.003084
Co	59	3	He	42.586	1.3024	95774.79	0.0305	0.003084
Co	59	3	He	42.851	1.3105	95845.56	0.0305	0.003084
Ni	60	3	He	110.635	0.9818	73506.70	0.0088	0.009003
Ni	60	3	He	114.392	1.0149	74631.88	0.0088	0.009003
Ni	60	3	He	114.62	1.0169	74371.76	0.0088	0.009003
Cu	63	3	He	653.441	16.2999	1220299.98	0.0249	0.004937
Cu	63	3	He	675.693	16.8548	1239456.93	0.0249	0.004937
Cu	63	3	He	673.895	16.8099	1229424.12	0.0249	0.004937
Zn	66	3	He	129.611	0.3233	24201.05	0.0025	0.004836
Zn	66	3	He	137.863	0.3435	25262.64	0.0025	0.004836
Zn	66	3	He	138.242	0.3445	25193.00	0.0025	0.004836
As	75	3	He	59.15	0.1033	7734.11	0.0017	0.0004347
As	75	3	He	61.834	0.108	7940.24	0.0017	0.0004347
As	75	3	He	59.783	0.1044	7636.07	0.0017	0.0004347
Sr	88	3	He	62.245	0.4873	32708.07	0.0078	0.0007762
Sr	88	3	He	67.849	0.5312	34272.28	0.0078	0.0007762
Sr	88	3	He	66.613	0.5215	33299.65	0.0078	0.0007762
Mo	98	3	He	4.741	0.1049	7042.00	0.022	0.0005162
Mo	98	3	He	5.256	0.1163	7502.25	0.022	0.0005162
Mo	98	3	He	5.383	0.1191	7602.39	0.022	0.0005162
Ag	107	3	He	0.573	0.0265	1780.19	0.0455	0.0004641
Ag	107	3	He	0.565	0.0262	1690.17	0.0455	0.0004641
Ag	107	3	He	0.558	0.0258	1650.15	0.0455	0.0004641
Cd	111	3	He	0.368	0.0018	122.00	0.0048	5.152E-05
Cd	111	3	He	0.428	0.0021	136.00	0.0048	5.152E-05
Cd	111	3	He	0.439	0.0022	138.00	0.0048	5.152E-05
Sn	120	3	He	2491.943	35.5455	2385616.53	0.0143	0.01559
Sn	120	3	He	2602.542	37.1224	2395275.90	0.0143	0.01559
Sn	120	3	He	2657.612	37.9076	2420547.00	0.0143	0.01559
Sb	121	3	He	39.002	0.4841	32488.71	0.0124	0.000258
Sb	121	3	He	41.145	0.5107	32949.48	0.0124	0.000258
Sb	121	3	He	42.336	0.5254	33551.11	0.0124	0.000258
Ba	137	3	He	114.166	0.4998	33541.35	0.0044	0.000309
Ba	137	3	He	118.576	0.5191	33491.21	0.0044	0.000309
Ba	137	3	He	123.517	0.5407	34523.77	0.0044	0.000309
Tl	205	3	He	0.172	0.0058	1270.11	0.0276	0.001005
Tl	205	3	He	0.16	0.0054	1210.10	0.0276	0.001005
Tl	205	3	He	0.153	0.0052	1170.09	0.0276	0.001005
Pb	208	3	He	100.621	3.6645	434173.51	0.0364	0.002176
Pb	208	3	He	101.014	3.6788	438616.48	0.0364	0.002176
Pb	208	3	He	100.49	3.6597	437078.67	0.0364	0.002176
U	238	3	He	2.099	0.0885	19505.35	0.0421	0.00024
U	238	3	He	2.081	0.0878	19575.35	0.0421	0.00024
U	238	3	He	2.125	0.0897	20036.27	0.0421	0.00024
Sc	45	1	No Gas			3483989.32		
Sc	45	1	No Gas			3477885.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3419211.51		
Ge	72	1	No Gas			1466578.42		
Ge	72	1	No Gas			1490884.98		
Ge	72	1	No Gas			1458562.95		
Sc	45	2	H2			206942.09		
Sc	45	2	H2			209903.51		
Sc	45	2	H2			208905.95		
Ge	72	2	H2			159656.23		
Ge	72	2	H2			163943.90		
Ge	72	2	H2			160535.85		
In	115	2	H2			576720.34		
In	115	2	H2			582620.07		
In	115	2	H2			572726.83		
Sc	45	3	He			43214.37		
Sc	45	3	He			43495.20		
Sc	45	3	He			42983.83		
Ge	72	3	He			74865.64		
Ge	72	3	He			73537.45		
Ge	72	3	He			73136.73		
In	115	3	He			85722.22		
In	115	3	He			83206.85		
In	115	3	He			82734.13		
Tb	159	3	He			290947.03		
Tb	159	3	He			295162.26		
Tb	159	3	He			292564.12		
Bi	209	3	He			220314.78		
Bi	209	3	He			222966.85		
Bi	209	3	He			223487.77		

Quantitation Report

Data File Name	268SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:49:13
Sample Name	410-136577-H-9-A @10
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

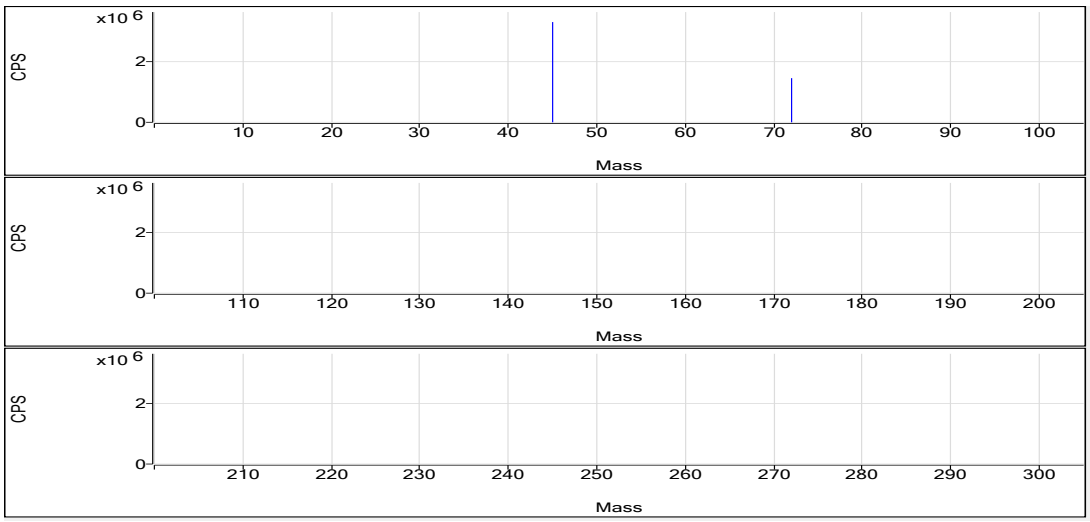
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.247	ppb	9.2	538.01	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.093	ppb	20.4	7.56	0.0000	Pulse	1.5000	3
Na	23	72	He	326.431	ppb	2.1	49339.02	0.6672	Pulse	0.1000	3
Mg	24	72	He	5227.400	ppb	1.2	326270.41	4.4121	Pulse	0.1000	3
Al	27	72	He	8670.533	ppb	0.9	154854.32	2.0941	Pulse	0.1000	3
K	39	72	He	568.581	ppb	2.8	33839.72	0.4576	Pulse	0.1000	3
Ca	44	72	He	7517.987	ppb	2.0	17387.46	0.2351	Pulse	0.1000	3
Ti	47	72	He	798.288	ppb	1.1	14824.69	0.2005	Pulse	0.1000	3
V	51	72	He	29.872	ppb	1.2	26381.73	0.3568	Pulse	0.5000	3
Cr	52	72	He	21.192	ppb	1.0	25740.05	0.3481	Pulse	0.1000	3
Mn	55	72	He	605.549	ppb	0.2	265334.89	3.5881	Pulse	0.1000	3
Fe	57	72	He	59091.806	ppb	0.8	1266288.08	17.1237	Pulse	0.1000	3
Co	59	72	He	9.821	ppb	1.1	22387.91	0.3027	Pulse	0.1000	3
Ni	60	72	He	26.625	ppb	3.8	17978.34	0.2431	Pulse	0.1000	3
Cu	63	72	He	156.027	ppb	1.2	288098.79	3.8958	Pulse	0.1000	3
Zn	66	72	He	33.583	ppb	5.5	6458.33	0.0873	Pulse	0.1000	3
As	75	72	He	13.919	ppb	5.6	1822.13	0.0246	Pulse	0.5000	3
Sr	88	115	He	15.344	ppb	5.9	7729.01	0.1207	Pulse	0.1000	3
Mo	98	115	He	1.127	ppb	4.4	1623.48	0.0253	Pulse	0.1000	3
Ag	107	115	He	0.139	ppb	6.1	433.36	0.0068	Pulse	0.1000	3
Cd	111	115	He	0.076	ppb	20.1	26.67	0.0004	Pulse	0.5000	3
Sn	120	115	He	617.678	ppb	1.5	565047.13	8.8224	Pulse	0.1000	3
Sb	121	115	He	10.098	ppb	1.7	8039.26	0.1255	Pulse	0.1000	3
Ba	137	115	He	28.634	ppb	2.7	8042.56	0.1256	Pulse	0.1000	3
Tl	205	209	He	0.054	ppb	34.5	556.70	0.0025	Pulse	0.1000	3
Pb	208	209	He	23.860	ppb	0.3	194319.13	0.8706	Pulse	0.1000	3
U	238	209	He	0.479	ppb	2.9	4550.99	0.0204	Pulse	0.1000	3

ISTD Table:

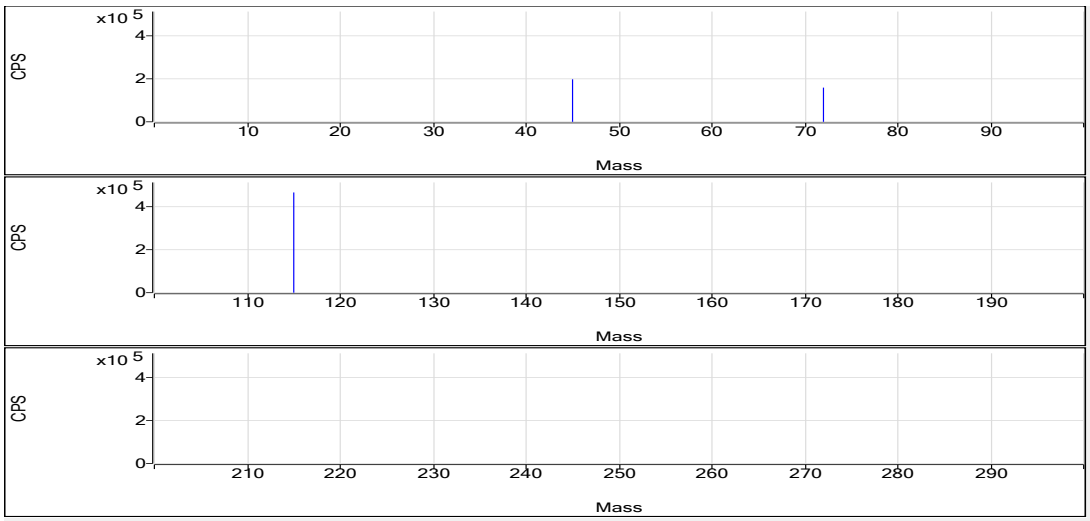
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3294193.39	1.1	101.6	Pulse	0.1000	3
No Gas	Ge	72	1450716.18	0.5	100.8	Pulse	0.1000	3
H2	Sc	45	198602.26	2.1	101.7	Pulse	0.1000	3
H2	Ge	72	159702.34	3.0	98.0	Pulse	0.1000	3
H2	In	115	468144.76	2.9	108.0	Pulse	0.1000	3
He	Sc	45	41903.83	1.4	104.8	Pulse	0.1000	3
He	Ge	72	73949.70	0.3	102.3	Pulse	0.1000	3
He	In	115	64054.02	1.2	99.2	Pulse	0.1000	3
He	Tb	159	286978.27	1.2	100.3	Pulse	0.1000	3
He	Bi	209	223194.96	0.5	100.5	Pulse	0.1000	3

No Gas

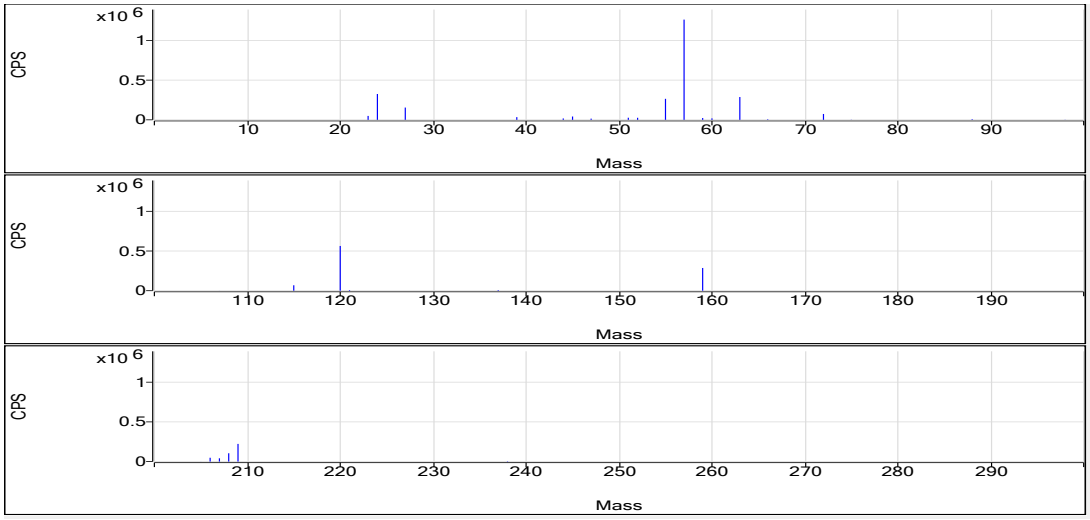


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.227	0.0003	502.01	0.0013	4.694E-05
Be	9	1	No Gas	0.242	0.0004	530.01	0.0013	4.694E-05
Be	9	1	No Gas	0.271	0.0004	582.02	0.0013	4.694E-05
Se	78	2	H2	0.072	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.099	0	8.00	0.0004	1.089E-05
Se	78	2	H2	0.109	0.0001	8.67	0.0004	1.089E-05
Na	23	3	He	323.735	0.6626	48870.82	0.0017	0.1065
Na	23	3	He	334.383	0.6809	50315.54	0.0017	0.1065
Na	23	3	He	321.175	0.6582	48830.71	0.0017	0.1065
Mg	24	3	He	5187.919	4.3788	322974.84	0.0008	0.004846
Mg	24	3	He	5301.357	4.4744	330657.14	0.0008	0.004846
Mg	24	3	He	5192.925	4.383	325179.25	0.0008	0.004846
Al	27	3	He	8683.098	2.0971	154680.77	0.0002	0.001063
Al	27	3	He	8745.777	2.1122	156093.24	0.0002	0.001063
Al	27	3	He	8582.724	2.0729	153788.96	0.0002	0.001063
K	39	3	He	571.68	0.4593	33879.63	0.0006	0.1436
K	39	3	He	582.881	0.4655	34401.22	0.0006	0.1436
K	39	3	He	551.183	0.448	33238.31	0.0006	0.1436
Ca	44	3	He	7495.496	0.2344	17290.57	0	0.001611
Ca	44	3	He	7380.925	0.2309	17060.50	0	0.001611
Ca	44	3	He	7677.541	0.2401	17811.32	0	0.001611
Ti	47	3	He	788.639	0.198	14607.82	0.0003	0.0002737
Ti	47	3	He	806.046	0.2024	14958.20	0.0003	0.0002737
Ti	47	3	He	800.178	0.2009	14908.05	0.0003	0.0002737
V	51	3	He	29.969	0.3579	26397.75	0.0117	0.007326
V	51	3	He	30.159	0.3601	26612.15	0.0117	0.007326
V	51	3	He	29.488	0.3523	26135.28	0.0117	0.007326
Cr	52	3	He	21.263	0.3492	25753.41	0.0152	0.02538
Cr	52	3	He	21.362	0.3507	25913.70	0.0152	0.02538
Cr	52	3	He	20.952	0.3444	25553.04	0.0152	0.02538
Mn	55	3	He	606.44	3.5933	265039.31	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	605.597	3.5883	265176.17	0.0059	0.01385
Mn	55	3	He	604.608	3.5825	265789.20	0.0059	0.01385
Fe	57	3	He	58782.396	17.034	1256412.72	0.0003	0.003918
Fe	57	3	He	59656.727	17.2873	1277522.79	0.0003	0.003918
Fe	57	3	He	58836.294	17.0497	1264928.73	0.0003	0.003918
Co	59	3	He	9.709	0.2993	22077.49	0.0305	0.003084
Co	59	3	He	9.824	0.3028	22377.85	0.0305	0.003084
Co	59	3	He	9.931	0.3061	22708.38	0.0305	0.003084
Ni	60	3	He	26.345	0.2407	17751.31	0.0088	0.009003
Ni	60	3	He	27.757	0.2531	18702.64	0.0088	0.009003
Ni	60	3	He	25.772	0.2356	17481.08	0.0088	0.009003
Cu	63	3	He	153.882	3.8423	283404.37	0.0249	0.004937
Cu	63	3	He	157.192	3.9248	290043.45	0.0249	0.004937
Cu	63	3	He	157.008	3.9203	290848.55	0.0249	0.004937
Zn	66	3	He	34.408	0.0894	6591.71	0.0025	0.004836
Zn	66	3	He	34.89	0.0906	6691.80	0.0025	0.004836
Zn	66	3	He	31.452	0.0821	6091.49	0.0025	0.004836
As	75	3	He	14.064	0.0249	1836.13	0.0017	0.0004347
As	75	3	He	14.612	0.0258	1910.14	0.0017	0.0004347
As	75	3	He	13.081	0.0232	1720.11	0.0017	0.0004347
Sr	88	3	He	14.293	0.1125	7302.05	0.0078	0.0007762
Sr	88	3	He	15.869	0.1248	7972.44	0.0078	0.0007762
Sr	88	3	He	15.868	0.1248	7912.54	0.0078	0.0007762
Mo	98	3	He	1.138	0.0256	1660.16	0.022	0.0005162
Mo	98	3	He	1.171	0.0263	1680.15	0.022	0.0005162
Mo	98	3	He	1.073	0.0241	1530.14	0.022	0.0005162
Ag	107	3	He	0.132	0.0065	420.02	0.0455	0.0004641
Ag	107	3	He	0.148	0.0072	460.03	0.0455	0.0004641
Ag	107	3	He	0.135	0.0066	420.02	0.0455	0.0004641
Cd	111	3	He	0.092	0.0005	32.00	0.0048	5.152E-05
Cd	111	3	He	0.074	0.0004	26.00	0.0048	5.152E-05
Cd	111	3	He	0.062	0.0003	22.00	0.0048	5.152E-05
Sn	120	3	He	607.01	8.6703	562724.25	0.0143	0.01559
Sn	120	3	He	624.053	8.9133	569266.75	0.0143	0.01559
Sn	120	3	He	621.97	8.8836	563150.38	0.0143	0.01559
Sb	121	3	He	9.993	0.1242	8062.54	0.0124	0.000258
Sb	121	3	He	10.004	0.1244	7942.59	0.0124	0.000258
Sb	121	3	He	10.296	0.128	8112.66	0.0124	0.000258
Ba	137	3	He	27.902	0.1224	7942.54	0.0044	0.000309
Ba	137	3	He	29.43	0.1291	8242.64	0.0044	0.000309
Ba	137	3	He	28.569	0.1253	7942.50	0.0044	0.000309
Tl	205	3	He	0.07	0.0029	660.04	0.0276	0.001005
Tl	205	3	He	0.058	0.0026	580.04	0.0276	0.001005
Tl	205	3	He	0.034	0.0019	430.03	0.0276	0.001005
Pb	208	3	He	23.871	0.871	104582.55	0.0364	0.002176
Pb	208	3	He	23.918	0.8727	106094.14	0.0364	0.002176
Pb	208	3	He	23.792	0.8681	104118.76	0.0364	0.002176
U	238	3	He	0.478	0.0204	4561.00	0.0421	0.00024
U	238	3	He	0.493	0.021	4691.05	0.0421	0.00024
U	238	3	He	0.465	0.0198	4400.92	0.0421	0.00024
Sc	45	1	No Gas			3322199.64		
Sc	45	1	No Gas			3305253.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3255127.45		
Ge	72	1	No Gas			1456682.17		
Ge	72	1	No Gas			1452419.67		
Ge	72	1	No Gas			1443046.70		
Sc	45	2	H2			193815.95		
Sc	45	2	H2			201191.25		
Sc	45	2	H2			200799.59		
Ge	72	2	H2			154099.51		
Ge	72	2	H2			162429.62		
Ge	72	2	H2			162577.88		
In	115	2	H2			453772.30		
In	115	2	H2			480712.53		
In	115	2	H2			469949.45		
Sc	45	3	He			41248.67		
Sc	45	3	He			42050.87		
Sc	45	3	He			42411.95		
Ge	72	3	He			73758.94		
Ge	72	3	He			73899.30		
Ge	72	3	He			74190.87		
In	115	3	He			69291.90		
In	115	3	He			68307.48		
In	115	3	He			67784.78		
Tb	159	3	He			282900.09		
Tb	159	3	He			289279.08		
Tb	159	3	He			288755.64		
Bi	209	3	He			224014.51		
Bi	209	3	He			223505.25		
Bi	209	3	He			222065.13		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:51:13
Sample Name	410-136659-D-1-A @2
Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

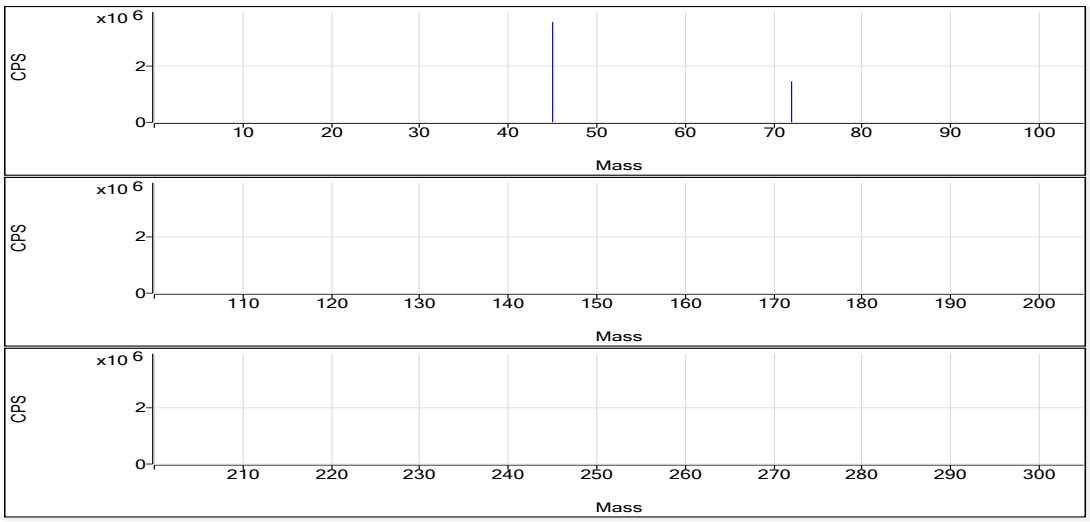
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	2.955	ppb	7.5	5697.78	0.0039	Pulse	0.5000	3
Se	78	72	H2	36.659	ppb	4.4	2244.84	0.0143	Pulse	1.5000	3
Na	23	72	He	13200.093	ppb	0.6	1678247.11	22.7819	Pulse	0.1000	3
Mg	24	72	He	58212.289	ppb	0.6	3615724.32	49.0837	Pulse	0.1000	3
Al	27	72	He	288500.259	ppb	1.7	5130188.88	69.6434	Analog	0.1000	3
K	39	72	He	6213.052	ppb	1.6	263309.68	3.5746	Pulse	0.1000	3
Ca	44	72	He	65652.391	ppb	1.5	150327.45	2.0408	Pulse	0.1000	3
Ti	47	72	He	3419.939	ppb	0.6	63200.23	0.8579	Pulse	0.1000	3
V	51	72	He	11180.277	ppb	0.6	9635010.00	130.7914	Analog	0.5000	3
Cr	52	72	He	1330.955	ppb	2.0	1494750.34	20.2922	Pulse	0.1000	3
Mn	55	72	He	3151.505	ppb	1.7	1371249.25	18.6154	Pulse	0.1000	3
Fe	57	72	He	297030.915	ppb	1.9	6339060.11	86.0581	Analog	0.1000	3
Co	59	72	He	275.371	ppb	0.3	619135.24	8.4048	Pulse	0.1000	3
Ni	60	72	He	5931.740	ppb	0.4	3843058.17	52.1686	Pulse	0.1000	3
Cu	63	72	He	1105.267	ppb	0.6	2030786.27	27.5671	Pulse	0.1000	3
Zn	66	72	He	3017.882	ppb	0.2	546530.57	7.4191	Pulse	0.1000	3
As	75	72	He	135.997	ppb	1.2	17455.94	0.2370	Pulse	0.5000	3
Sr	88	115	He	889.356	ppb	1.5	436361.00	6.9530	Pulse	0.1000	3
Mo	98	115	He	6059.467	ppb	1.9	8373243.00	133.4396	Analog	0.1000	3
Ag	107	115	He	33.010	ppb	3.2	94264.58	1.5024	Pulse	0.1000	3
Cd	111	115	He	3.063	ppb	9.5	924.70	0.0148	Pulse	0.5000	3
Sn	120	115	He	26.581	ppb	1.8	24772.78	0.3946	Pulse	0.1000	3
Sb	121	115	He	6.049	ppb	3.8	4724.29	0.0753	Pulse	0.1000	3
Ba	137	115	He	3359.352	ppb	2.1	922228.35	14.6968	Pulse	0.1000	3
Tl	205	209	He	1.731	ppb	1.1	14231.47	0.0489	Pulse	0.1000	3
Pb	208	209	He	815.238	ppb	1.1	8642024.98	29.6747	Pulse	0.1000	3
U	238	209	He	5.064	ppb	1.8	62109.25	0.2133	Pulse	0.1000	3

ISTD Table:

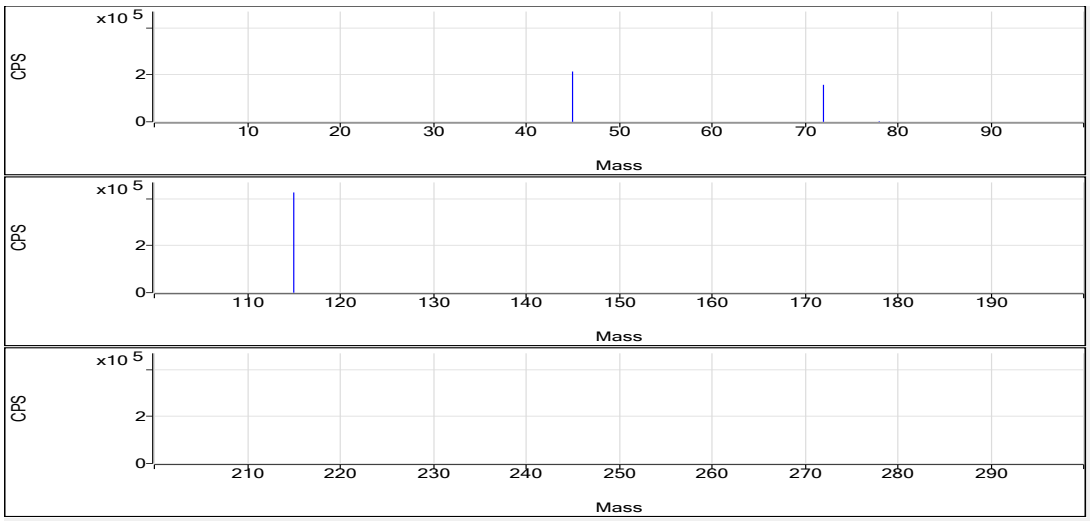
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3549253.69	1.2	109.5	Pulse	0.1000	3
No Gas	Ge	72	1451142.69	2.0	100.8	Pulse	0.1000	3
H2	Sc	45	213769.96	0.6	109.4	Pulse	0.1000	3
H2	Ge	72	157216.18	1.4	96.4	Pulse	0.1000	3
H2	In	115	425880.22	2.5	98.3	Pulse	0.1000	3
He	Sc	45	44632.01	1.2	111.6	Pulse	0.1000	3
He	Ge	72	73665.28	0.6	101.9	Pulse	0.1000	3
He	In	115	62768.96	2.4	97.2	Pulse	0.1000	3
He	Tb	159	298628.09	1.3	104.4	Pulse	0.1000	3
He	Bi	209	291237.33	0.6	131.1	Pulse	0.1000	3

No Gas

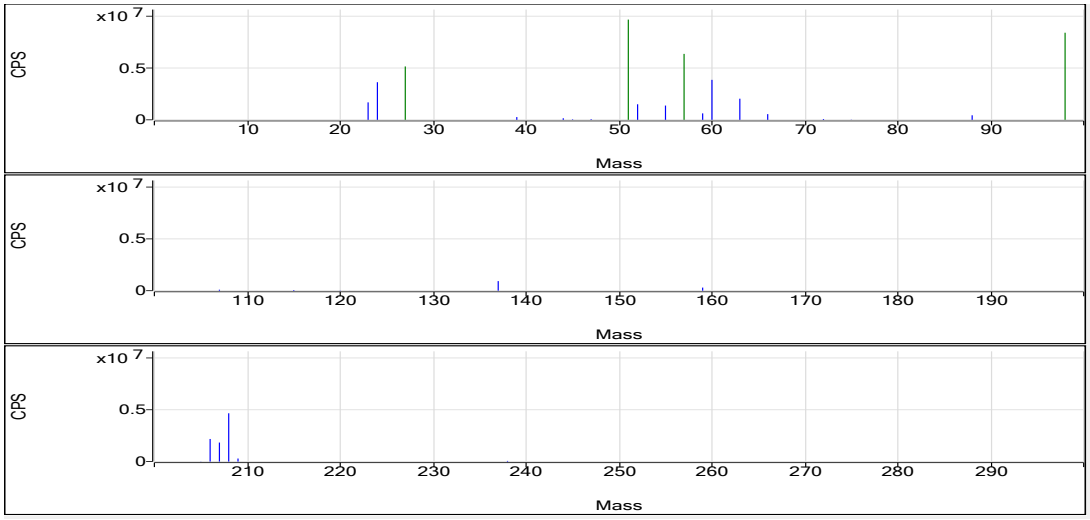


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	2.702	0.0036	5320.97	0.0013	4.694E-05
Be	9	1	No Gas	3.057	0.0041	5903.18	0.0013	4.694E-05
Be	9	1	No Gas	3.106	0.0041	5869.19	0.0013	4.694E-05
Se	78	2	H2	38.44	0.015	2321.52	0.0004	1.089E-05
Se	78	2	H2	35.325	0.0138	2193.50	0.0004	1.089E-05
Se	78	2	H2	36.211	0.0141	2219.51	0.0004	1.089E-05
Na	23	3	He	13285.032	22.9278	1688119.04	0.0017	0.1065
Na	23	3	He	13119.587	22.6436	1659037.32	0.0017	0.1065
Na	23	3	He	13195.661	22.7742	1687584.97	0.0017	0.1065
Mg	24	3	He	57869.387	48.7946	3592636.51	0.0008	0.004846
Mg	24	3	He	58583.927	49.397	3619198.70	0.0008	0.004846
Mg	24	3	He	58183.552	49.0595	3635337.76	0.0008	0.004846
Al	27	3	He	283333.823	68.3962	5035856.49	0.0002	0.001063
Al	27	3	He	293041.05	70.7395	5182904.92	0.0002	0.001063
Al	27	3	He	289125.902	69.7944	5171805.24	0.0002	0.001063
K	39	3	He	6145.956	3.5375	260458.79	0.0006	0.1436
K	39	3	He	6325.3	3.6365	266440.66	0.0006	0.1436
K	39	3	He	6167.901	3.5496	263029.59	0.0006	0.1436
Ca	44	3	He	64974.778	2.0197	148707.28	0	0.001611
Ca	44	3	He	66742.247	2.0746	152001.95	0	0.001611
Ca	44	3	He	65240.149	2.028	150273.13	0	0.001611
Ti	47	3	He	3404.148	0.854	62875.38	0.0003	0.0002737
Ti	47	3	He	3413.766	0.8564	62744.50	0.0003	0.0002737
Ti	47	3	He	3441.903	0.8634	63980.80	0.0003	0.0002737
V	51	3	He	11169.57	130.6661	9620650.00	0.0117	0.007326
V	51	3	He	11116.72	130.0479	9528287.00	0.0117	0.007326
V	51	3	He	11254.541	131.6601	9756093.00	0.0117	0.007326
Cr	52	3	He	1310.522	19.9811	1471159.51	0.0152	0.02538
Cr	52	3	He	1361.51	20.7575	1520847.32	0.0152	0.02538
Cr	52	3	He	1320.834	20.1381	1492244.20	0.0152	0.02538
Mn	55	3	He	3106.765	18.3513	1351163.42	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3211.6	18.9701	1389889.82	0.0059	0.01385
Mn	55	3	He	3136.152	18.5247	1372694.51	0.0059	0.01385
Fe	57	3	He	296249.241	85.8317	6319589.91	0.0003	0.003918
Fe	57	3	He	302890.999	87.7559	6429654.90	0.0003	0.003918
Fe	57	3	He	291952.505	84.5868	6267935.53	0.0003	0.003918
Co	59	3	He	275.181	8.399	618399.48	0.0305	0.003084
Co	59	3	He	276.215	8.4305	617685.11	0.0305	0.003084
Co	59	3	He	274.717	8.3848	621321.12	0.0305	0.003084
Ni	60	3	He	5915.531	52.026	3830558.69	0.0088	0.009003
Ni	60	3	He	5922.253	52.0852	3816149.63	0.0088	0.009003
Ni	60	3	He	5957.436	52.3945	3882466.19	0.0088	0.009003
Cu	63	3	He	1103.685	27.5277	2026798.88	0.0249	0.004937
Cu	63	3	He	1099.146	27.4145	2008589.03	0.0249	0.004937
Cu	63	3	He	1112.969	27.7592	2056970.91	0.0249	0.004937
Zn	66	3	He	3014.514	7.4108	545639.84	0.0025	0.004836
Zn	66	3	He	3015.391	7.4129	543128.20	0.0025	0.004836
Zn	66	3	He	3023.739	7.4335	550823.66	0.0025	0.004836
As	75	3	He	134.339	0.2341	17234.32	0.0017	0.0004347
As	75	3	He	136.007	0.237	17362.50	0.0017	0.0004347
As	75	3	He	137.645	0.2398	17770.99	0.0017	0.0004347
Sr	88	3	He	889.767	6.9562	427093.86	0.0078	0.0007762
Sr	88	3	He	875.807	6.847	441003.16	0.0078	0.0007762
Sr	88	3	He	902.493	7.0556	440985.97	0.0078	0.0007762
Mo	98	3	He	6164.62	135.7553	8335083.63	0.022	0.0005162
Mo	98	3	He	5932.81	130.6504	8414916.12	0.022	0.0005162
Mo	98	3	He	6080.973	133.9132	8369729.25	0.022	0.0005162
Ag	107	3	He	33.426	1.5214	93409.46	0.0455	0.0004641
Ag	107	3	He	31.812	1.4479	93257.42	0.0455	0.0004641
Ag	107	3	He	33.792	1.538	96126.86	0.0455	0.0004641
Cd	111	3	He	3.362	0.0162	994.04	0.0048	5.152E-05
Cd	111	3	He	2.784	0.0134	864.03	0.0048	5.152E-05
Cd	111	3	He	3.042	0.0147	916.04	0.0048	5.152E-05
Sn	120	3	He	26.45	0.3927	24111.58	0.0143	0.01559
Sn	120	3	He	27.116	0.4022	25904.83	0.0143	0.01559
Sn	120	3	He	26.177	0.3888	24301.93	0.0143	0.01559
Sb	121	3	He	6.099	0.0759	4660.93	0.0124	0.000258
Sb	121	3	He	5.8	0.0722	4650.94	0.0124	0.000258
Sb	121	3	He	6.249	0.0778	4861.01	0.0124	0.000258
Ba	137	3	He	3389.959	14.8307	910572.17	0.0044	0.000309
Ba	137	3	He	3278.784	14.3443	923886.63	0.0044	0.000309
Ba	137	3	He	3409.313	14.9153	932226.24	0.0044	0.000309
Tl	205	3	He	1.712	0.0483	14148.04	0.0276	0.001005
Tl	205	3	He	1.731	0.0489	14148.02	0.0276	0.001005
Tl	205	3	He	1.75	0.0494	14398.34	0.0276	0.001005
Pb	208	3	He	805.186	29.3088	4605163.99	0.0364	0.002176
Pb	208	3	He	823.707	29.9829	4682801.18	0.0364	0.002176
Pb	208	3	He	816.821	29.7323	4638897.12	0.0364	0.002176
U	238	3	He	5.045	0.2125	62189.77	0.0421	0.00024
U	238	3	He	4.984	0.2099	60762.39	0.0421	0.00024
U	238	3	He	5.162	0.2174	63375.58	0.0421	0.00024
Sc	45	1	No Gas			3586955.88		
Sc	45	1	No Gas			3557408.38		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3503396.82		
Ge	72	1	No Gas			1479209.20		
Ge	72	1	No Gas			1452500.76		
Ge	72	1	No Gas			1421718.10		
Sc	45	2	H2			212634.43		
Sc	45	2	H2			213626.34		
Sc	45	2	H2			215049.12		
Ge	72	2	H2			154996.00		
Ge	72	2	H2			159352.43		
Ge	72	2	H2			157300.11		
In	115	2	H2			414836.91		
In	115	2	H2			436106.99		
In	115	2	H2			426696.75		
Sc	45	3	He			44628.78		
Sc	45	3	He			45150.01		
Sc	45	3	He			44117.23		
Ge	72	3	He			73627.72		
Ge	72	3	He			73267.51		
Ge	72	3	He			74100.60		
In	115	3	He			61585.94		
In	115	3	He			64609.93		
In	115	3	He			62690.70		
Tb	159	3	He			295928.39		
Tb	159	3	He			303024.43		
Tb	159	3	He			296931.46		
Bi	209	3	He			292691.69		
Bi	209	3	He			289495.78		
Bi	209	3	He			291524.51		

Quantitation Report

Data File Name	270SMPL.d
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Sample Type	Sample
Comment	H2 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

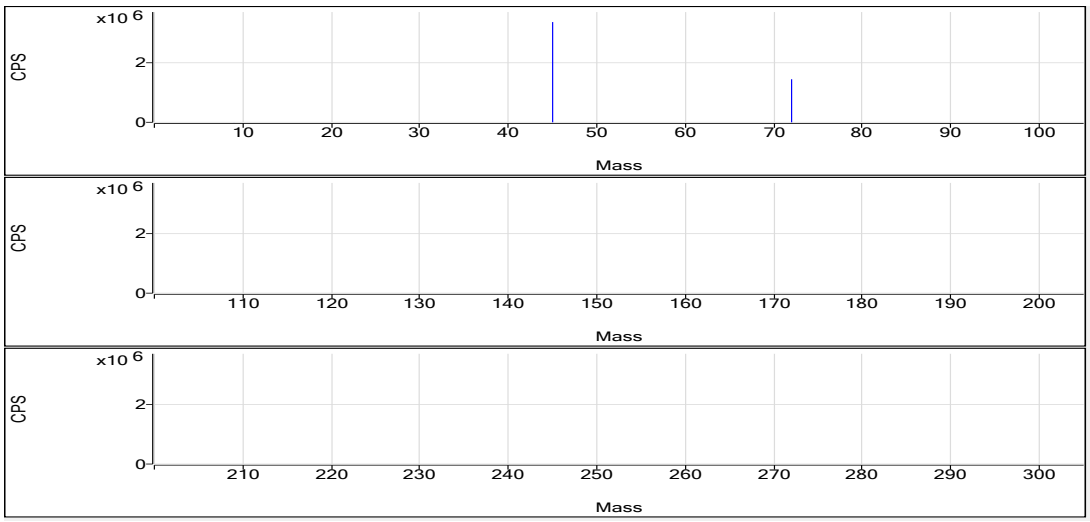
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.675	ppb	0.9	1338.74	0.0009	Pulse	0.5000	3
Se	78	72	H2	8.414	ppb	8.6	522.90	0.0033	Pulse	1.5000	3
Na	23	72	He	3058.704	ppb	0.6	387264.69	5.3608	Pulse	0.1000	3
Mg	24	72	He	13714.791	ppb	0.2	835670.69	11.5678	Pulse	0.1000	3
Al	27	72	He	65285.699	ppb	0.3	1138579.15	15.7607	Pulse	0.1000	3
K	39	72	He	1436.753	ppb	2.2	67692.55	0.9370	Pulse	0.1000	3
Ca	44	72	He	15574.691	ppb	0.9	35062.63	0.4854	Pulse	0.1000	3
Ti	47	72	He	828.841	ppb	1.2	15034.86	0.2081	Pulse	0.1000	3
V	51	72	He	2528.982	ppb	0.1	2137670.75	29.5907	Pulse	0.5000	3
Cr	52	72	He	313.699	ppb	1.3	346902.96	4.8022	Pulse	0.1000	3
Mn	55	72	He	748.724	ppb	0.9	320267.50	4.4331	Pulse	0.1000	3
Fe	57	72	He	68124.385	ppb	0.2	1426082.38	19.7406	Pulse	0.1000	3
Co	59	72	He	65.615	ppb	1.6	144856.13	2.0050	Pulse	0.1000	3
Ni	60	72	He	1404.080	ppb	0.5	892588.84	12.3555	Pulse	0.1000	3
Cu	63	72	He	264.157	ppb	0.2	476231.88	6.5922	Pulse	0.1000	3
Zn	66	72	He	711.954	ppb	0.5	126708.85	1.7539	Pulse	0.1000	3
As	75	72	He	32.253	ppb	1.6	4083.94	0.0565	Pulse	0.5000	3
Sr	88	115	He	201.938	ppb	1.2	100882.81	1.5793	Pulse	0.1000	3
Mo	98	115	He	1349.142	ppb	1.0	1897807.79	29.7108	Pulse	0.1000	3
Ag	107	115	He	7.638	ppb	0.6	22228.13	0.3480	Pulse	0.1000	3
Cd	111	115	He	0.678	ppb	7.2	211.33	0.0033	Pulse	0.5000	3
Sn	120	115	He	6.053	ppb	2.3	6508.44	0.1019	Pulse	0.1000	3
Sb	121	115	He	1.401	ppb	5.8	1126.76	0.0176	Pulse	0.1000	3
Ba	137	115	He	760.922	ppb	0.3	212653.31	3.3292	Pulse	0.1000	3
Tl	205	209	He	0.469	ppb	12.9	3333.87	0.0140	Pulse	0.1000	3
Pb	208	209	He	229.824	ppb	0.5	1995566.10	8.3672	Pulse	0.1000	3
U	238	209	He	1.376	ppb	3.8	13857.98	0.0581	Pulse	0.1000	3

ISTD Table:

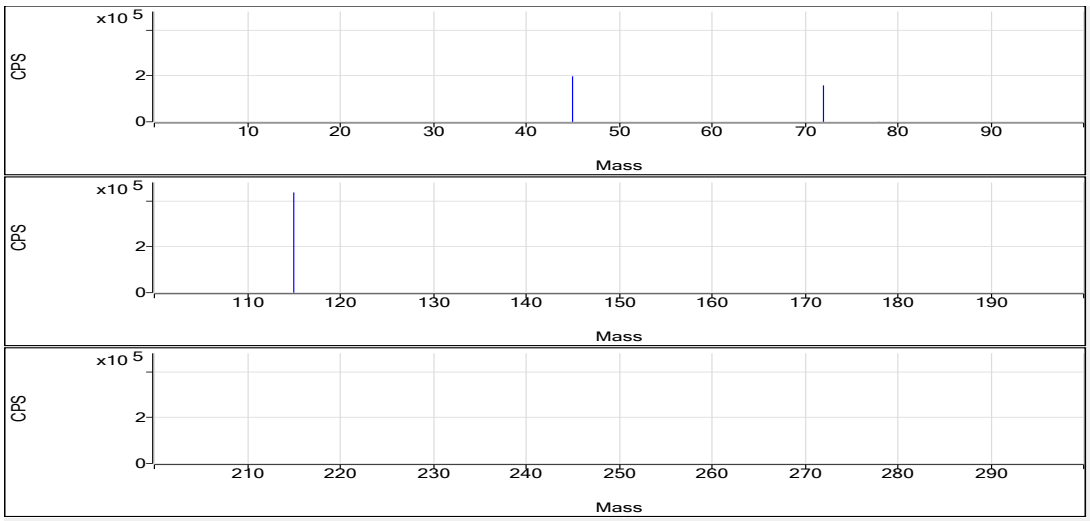
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3336395.89	2.3	102.9	Pulse	0.1000	3
No Gas	Ge	72	1433197.37	2.0	99.5	Pulse	0.1000	3
H2	Sc	45	198930.93	3.4	101.8	Pulse	0.1000	3
H2	Ge	72	159245.40	2.0	97.7	Pulse	0.1000	3
H2	In	115	437947.44	1.8	101.1	Pulse	0.1000	3
He	Sc	45	41920.65	2.5	104.8	Pulse	0.1000	3
He	Ge	72	72241.41	0.6	99.9	Pulse	0.1000	3
He	In	115	63876.04	0.5	98.9	Pulse	0.1000	3
He	Tb	159	291875.80	0.7	102.1	Pulse	0.1000	3
He	Bi	209	238497.12	0.3	107.3	Pulse	0.1000	3

No Gas

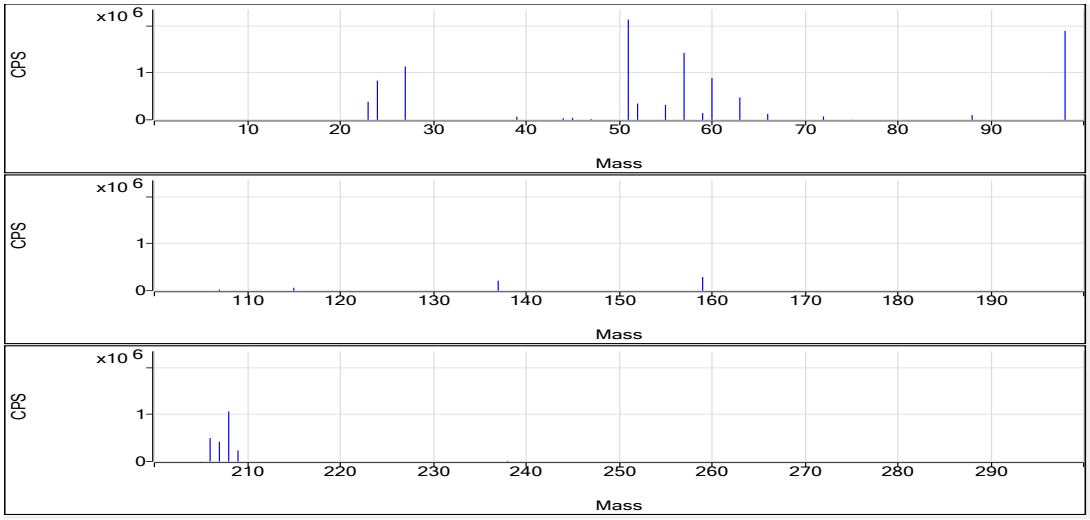


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.68	0.0009	1316.07	0.0013	4.694E-05
Be	9	1	No Gas	0.668	0.0009	1342.07	0.0013	4.694E-05
Be	9	1	No Gas	0.677	0.0009	1358.07	0.0013	4.694E-05
Se	78	2	H2	8.555	0.0033	533.34	0.0004	1.089E-05
Se	78	2	H2	9.053	0.0035	551.34	0.0004	1.089E-05
Se	78	2	H2	7.635	0.003	484.01	0.0004	1.089E-05
Na	23	3	He	3078.924	5.3955	388912.06	0.0017	0.1065
Na	23	3	He	3051.712	5.3488	384572.06	0.0017	0.1065
Na	23	3	He	3045.475	5.338	388309.96	0.0017	0.1065
Mg	24	3	He	13700.965	11.5562	832977.33	0.0008	0.004846
Mg	24	3	He	13742.786	11.5914	833415.46	0.0008	0.004846
Mg	24	3	He	13700.624	11.5559	840619.28	0.0008	0.004846
Al	27	3	He	65438.196	15.7975	1138694.75	0.0002	0.001063
Al	27	3	He	65055.498	15.7051	1129186.00	0.0002	0.001063
Al	27	3	He	65363.404	15.7794	1147856.70	0.0002	0.001063
K	39	3	He	1471.651	0.9563	68931.22	0.0006	0.1436
K	39	3	He	1409.486	0.922	66289.48	0.0006	0.1436
K	39	3	He	1429.122	0.9328	67856.95	0.0006	0.1436
Ca	44	3	He	15739.165	0.4905	35353.30	0	0.001611
Ca	44	3	He	15487.332	0.4826	34701.91	0	0.001611
Ca	44	3	He	15497.577	0.483	35132.68	0	0.001611
Ti	47	3	He	831.947	0.2089	15058.33	0.0003	0.0002737
Ti	47	3	He	836.818	0.2101	15108.25	0.0003	0.0002737
Ti	47	3	He	817.758	0.2054	14938.00	0.0003	0.0002737
V	51	3	He	2532.948	29.6371	2136268.50	0.0117	0.007326
V	51	3	He	2527.182	29.5697	2126040.75	0.0117	0.007326
V	51	3	He	2526.816	29.5654	2150703.00	0.0117	0.007326
Cr	52	3	He	318.219	4.871	351105.39	0.0152	0.02538
Cr	52	3	He	312.85	4.7892	344343.35	0.0152	0.02538
Cr	52	3	He	310.026	4.7462	345260.15	0.0152	0.02538
Mn	55	3	He	745.28	4.4128	318079.29	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	744.486	4.4081	316941.44	0.0059	0.01385
Mn	55	3	He	756.405	4.4785	325781.77	0.0059	0.01385
Fe	57	3	He	67994.488	19.7029	1420203.26	0.0003	0.003918
Fe	57	3	He	68260.588	19.78	1422170.92	0.0003	0.003918
Fe	57	3	He	68118.079	19.7387	1435872.95	0.0003	0.003918
Co	59	3	He	65.499	2.0015	144269.82	0.0305	0.003084
Co	59	3	He	64.602	1.9741	141938.47	0.0305	0.003084
Co	59	3	He	66.744	2.0395	148360.11	0.0305	0.003084
Ni	60	3	He	1409.846	12.4062	894249.60	0.0088	0.009003
Ni	60	3	He	1395.526	12.2803	882945.14	0.0088	0.009003
Ni	60	3	He	1406.869	12.38	900571.78	0.0088	0.009003
Cu	63	3	He	263.661	6.5799	474283.78	0.0249	0.004937
Cu	63	3	He	264.672	6.6051	474901.87	0.0249	0.004937
Cu	63	3	He	264.137	6.5917	479509.99	0.0249	0.004937
Zn	66	3	He	714.253	1.7596	126832.64	0.0025	0.004836
Zn	66	3	He	707.786	1.7437	125371.03	0.0025	0.004836
Zn	66	3	He	713.824	1.7585	127922.88	0.0025	0.004836
As	75	3	He	32.477	0.0569	4102.62	0.0017	0.0004347
As	75	3	He	31.647	0.0555	3988.58	0.0017	0.0004347
As	75	3	He	32.637	0.0572	4160.62	0.0017	0.0004347
Sr	88	3	He	199.213	1.558	99476.77	0.0078	0.0007762
Sr	88	3	He	203.28	1.5898	101056.81	0.0078	0.0007762
Sr	88	3	He	203.322	1.5902	102114.86	0.0078	0.0007762
Mo	98	3	He	1333.998	29.3773	1875658.57	0.022	0.0005162
Mo	98	3	He	1357.281	29.89	1899936.69	0.022	0.0005162
Mo	98	3	He	1356.145	29.865	1917828.10	0.022	0.0005162
Ag	107	3	He	7.683	0.35	22348.34	0.0455	0.0004641
Ag	107	3	He	7.641	0.3481	22127.88	0.0455	0.0004641
Ag	107	3	He	7.59	0.3458	22208.18	0.0455	0.0004641
Cd	111	3	He	0.72	0.0035	224.00	0.0048	5.152E-05
Cd	111	3	He	0.625	0.0031	194.00	0.0048	5.152E-05
Cd	111	3	He	0.69	0.0034	216.00	0.0048	5.152E-05
Sn	120	3	He	5.917	0.1	6381.74	0.0143	0.01559
Sn	120	3	He	6.191	0.1039	6601.77	0.0143	0.01559
Sn	120	3	He	6.052	0.1019	6541.81	0.0143	0.01559
Sb	121	3	He	1.469	0.0185	1180.11	0.0124	0.000258
Sb	121	3	He	1.311	0.0165	1050.08	0.0124	0.000258
Sb	121	3	He	1.423	0.0179	1150.09	0.0124	0.000258
Ba	137	3	He	762.065	3.3342	212878.59	0.0044	0.000309
Ba	137	3	He	762.284	3.3351	211996.11	0.0044	0.000309
Ba	137	3	He	758.417	3.3182	213085.23	0.0044	0.000309
Tl	205	3	He	0.444	0.0133	3160.47	0.0276	0.001005
Tl	205	3	He	0.426	0.0128	3040.47	0.0276	0.001005
Tl	205	3	He	0.538	0.0159	3800.68	0.0276	0.001005
Pb	208	3	He	229.483	8.3547	1057065.22	0.0364	0.002176
Pb	208	3	He	228.963	8.3358	1069027.48	0.0364	0.002176
Pb	208	3	He	231.027	8.411	1081499.67	0.0364	0.002176
U	238	3	He	1.319	0.0557	13267.44	0.0421	0.00024
U	238	3	He	1.421	0.06	14288.30	0.0421	0.00024
U	238	3	He	1.387	0.0586	14018.19	0.0421	0.00024
Sc	45	1	No Gas			3248983.39		
Sc	45	1	No Gas			3365185.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3395019.01		
Ge	72	1	No Gas			1399504.04		
Ge	72	1	No Gas			1450386.70		
Ge	72	1	No Gas			1449701.38		
Sc	45	2	H2			198691.05		
Sc	45	2	H2			192359.08		
Sc	45	2	H2			205742.65		
Ge	72	2	H2			159585.83		
Ge	72	2	H2			155926.33		
Ge	72	2	H2			162224.04		
In	115	2	H2			441593.04		
In	115	2	H2			428710.77		
In	115	2	H2			443538.51		
Sc	45	3	He			41489.56		
Sc	45	3	He			43094.03		
Sc	45	3	He			41178.37		
Ge	72	3	He			72080.86		
Ge	72	3	He			71899.40		
Ge	72	3	He			72743.96		
In	115	3	He			63897.04		
In	115	3	He			63615.76		
In	115	3	He			64267.61		
Tb	159	3	He			291989.98		
Tb	159	3	He			289918.39		
Tb	159	3	He			293719.02		
Bi	209	3	He			238064.41		
Bi	209	3	He			238078.65		
Bi	209	3	He			239348.30		

Quantitation Report

Data File Name	271SMPL.d
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Sample Name	RINSE
Sample Type	Sample
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Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

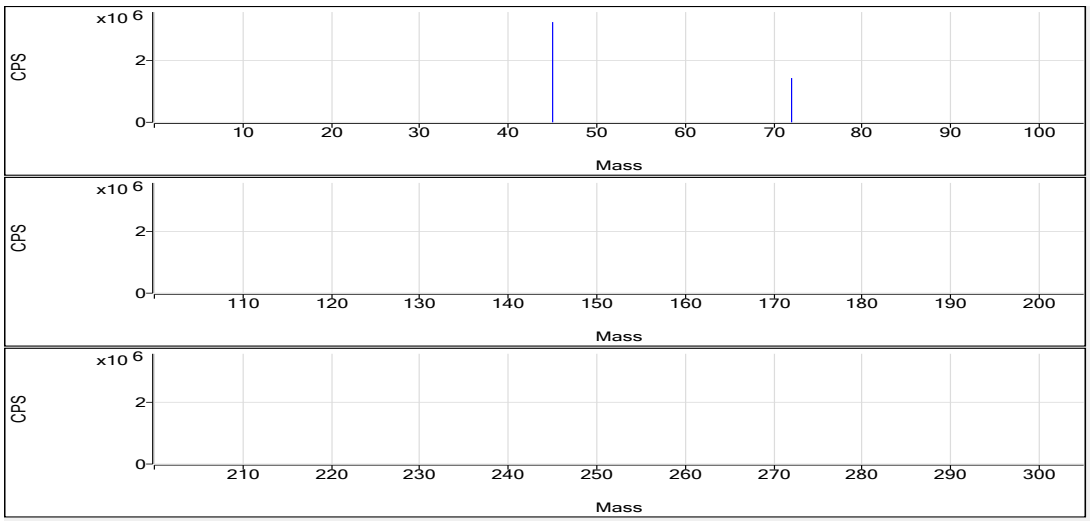
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.003	ppb	191.9	72.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.011	ppb	221.8	2.44	0.0000	Pulse	1.5000	3
Na	23	72	He	7.257	ppb	38.7	8612.75	0.1189	Pulse	0.1000	3
Mg	24	72	He	17.119	ppb	8.6	1396.78	0.0193	Pulse	0.1000	3
Al	27	72	He	45.290	ppb	9.4	870.06	0.0120	Pulse	0.1000	3
K	39	72	He	0.850	ppb	410.8	10440.68	0.1441	Pulse	0.1000	3
Ca	44	72	He	3.059	ppb	467.8	123.34	0.0017	Pulse	0.1000	3
Ti	47	72	He	1.469	ppb	76.3	46.67	0.0006	Pulse	0.1000	3
V	51	72	He	1.083	ppb	5.7	1448.08	0.0200	Pulse	0.5000	3
Cr	52	72	He	0.064	ppb	112.0	1910.19	0.0264	Pulse	0.1000	3
Mn	55	72	He	0.234	ppb	26.2	1103.42	0.0152	Pulse	0.1000	3
Fe	57	72	He	67.201	ppb	6.2	1693.49	0.0234	Pulse	0.1000	3
Co	59	72	He	0.068	ppb	31.2	373.35	0.0052	Pulse	0.1000	3
Ni	60	72	He	1.398	ppb	36.4	1540.14	0.0213	Pulse	0.1000	3
Cu	63	72	He	0.354	ppb	20.4	996.73	0.0138	Pulse	0.1000	3
Zn	66	72	He	0.320	ppb	187.7	406.69	0.0056	Pulse	0.1000	3
As	75	72	He	0.142	ppb	41.5	49.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.073	ppb	12.4	86.67	0.0013	Pulse	0.1000	3
Mo	98	115	He	0.791	ppb	7.4	1153.42	0.0179	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	175.4	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	227.2	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.419	ppb	13.0	1386.78	0.0216	Pulse	0.1000	3
Sb	121	115	He	0.025	ppb	56.3	36.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.652	ppb	13.4	203.34	0.0032	Pulse	0.1000	3
Tl	205	209	He	-0.002	ppb	N/A	210.01	0.0010	Pulse	0.1000	3
Pb	208	209	He	0.457	ppb	3.4	4160.42	0.0188	Pulse	0.1000	3
U	238	209	He	0.007	ppb	63.5	116.67	0.0005	Pulse	0.1000	3

ISTD Table:

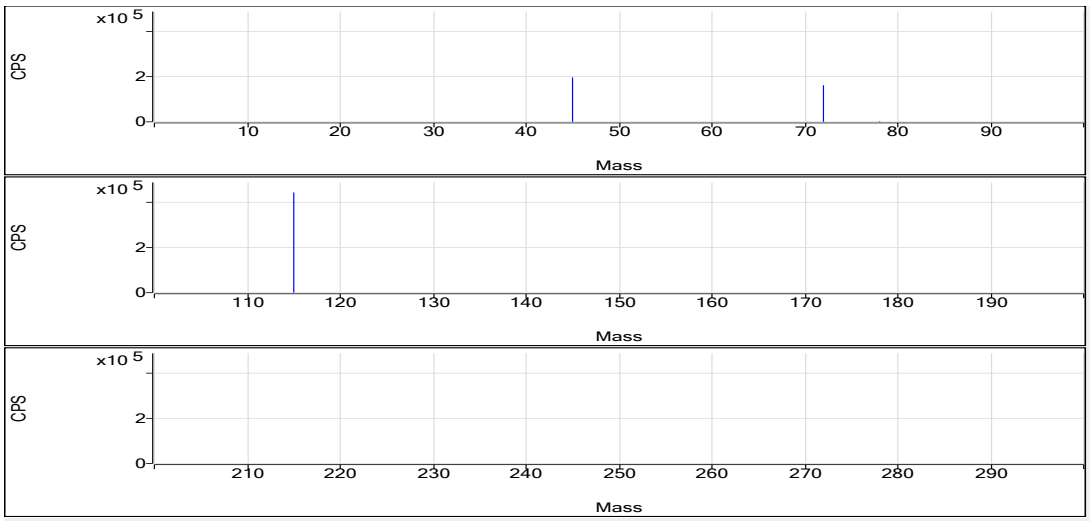
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3242970.26	1.6	100.1	Pulse	0.1000	3
No Gas	Ge	72	1431523.62	0.7	99.4	Pulse	0.1000	3
H2	Sc	45	194988.16	2.4	99.8	Pulse	0.1000	3
H2	Ge	72	160745.34	2.0	98.6	Pulse	0.1000	3
H2	In	115	440939.79	1.9	101.8	Pulse	0.1000	3
He	Sc	45	40590.40	2.2	101.5	Pulse	0.1000	3
He	Ge	72	72458.84	1.9	100.2	Pulse	0.1000	3
He	In	115	64304.12	1.4	99.6	Pulse	0.1000	3
He	Tb	159	284913.03	0.2	99.6	Pulse	0.1000	3
He	Bi	209	221267.38	0.5	99.6	Pulse	0.1000	3

No Gas

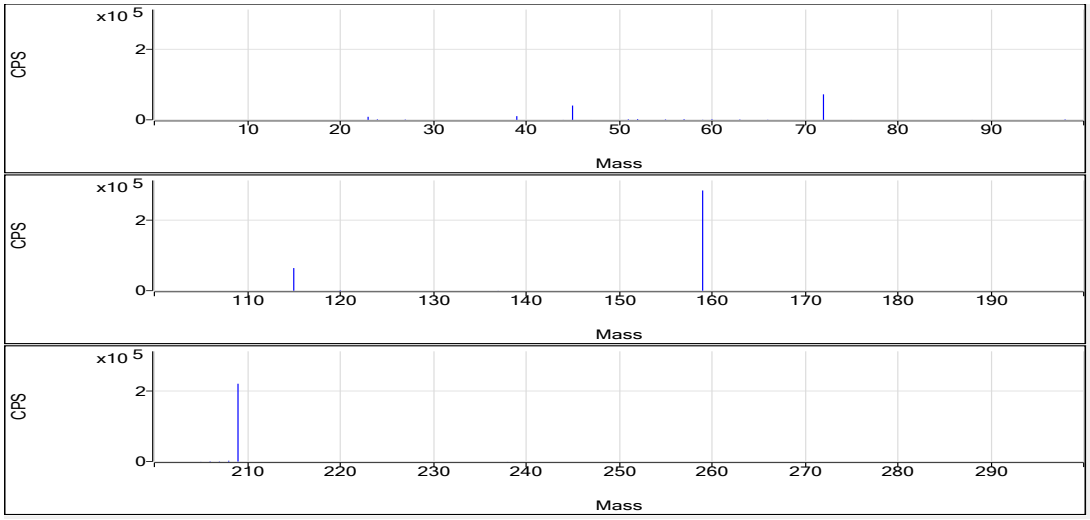


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.002	0	70.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.002	0	64.00	0.0013	4.694E-05
Be	9	1	No Gas	0.008	0.0001	82.00	0.0013	4.694E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.089E-05
Se	78	2	H2	0.024	0	3.33	0.0004	1.089E-05
Na	23	3	He	10.475	0.1244	8822.84	0.0017	0.1065
Na	23	3	He	5.315	0.1156	8432.60	0.0017	0.1065
Na	23	3	He	5.981	0.1167	8582.80	0.0017	0.1065
Mg	24	3	He	17.008	0.0192	1360.12	0.0008	0.004846
Mg	24	3	He	18.641	0.0206	1500.13	0.0008	0.004846
Mg	24	3	He	15.709	0.0181	1330.10	0.0008	0.004846
Al	27	3	He	41.178	0.011	780.05	0.0002	0.001063
Al	27	3	He	45.002	0.0119	870.06	0.0002	0.001063
Al	27	3	He	49.689	0.0131	960.07	0.0002	0.001063
K	39	3	He	3.334	0.1455	10313.92	0.0006	0.1436
K	39	3	He	2.355	0.1449	10574.13	0.0006	0.1436
K	39	3	He	-3.14	0.1419	10434.00	0.0006	0.1436
Ca	44	3	He	16.26	0.0021	150.01	0	0.001611
Ca	44	3	He	-12.147	0.0012	90.00	0	0.001611
Ca	44	3	He	5.064	0.0018	130.01	0	0.001611
Ti	47	3	He	0.596	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	2.735	0.001	70.00	0.0003	0.0002737
Ti	47	3	He	1.078	0.0005	40.00	0.0003	0.0002737
V	51	3	He	1.154	0.0208	1476.08	0.0117	0.007326
V	51	3	He	1.059	0.0197	1438.08	0.0117	0.007326
V	51	3	He	1.036	0.0194	1430.08	0.0117	0.007326
Cr	52	3	He	-0.009	0.0253	1790.17	0.0152	0.02538
Cr	52	3	He	0.133	0.0274	2000.19	0.0152	0.02538
Cr	52	3	He	0.066	0.0264	1940.21	0.0152	0.02538
Mn	55	3	He	0.282	0.0155	1100.09	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.254	0.0154	1120.09	0.0059	0.01385
Mn	55	3	He	0.165	0.0148	1090.08	0.0059	0.01385
Fe	57	3	He	71.689	0.0247	1750.19	0.0003	0.003918
Fe	57	3	He	66.443	0.0232	1690.15	0.0003	0.003918
Fe	57	3	He	63.472	0.0223	1640.14	0.0003	0.003918
Co	59	3	He	0.056	0.0048	340.02	0.0305	0.003084
Co	59	3	He	0.092	0.0059	430.02	0.0305	0.003084
Co	59	3	He	0.055	0.0048	350.01	0.0305	0.003084
Ni	60	3	He	1.768	0.0245	1740.17	0.0088	0.009003
Ni	60	3	He	1.611	0.0232	1690.15	0.0088	0.009003
Ni	60	3	He	0.817	0.0162	1190.09	0.0088	0.009003
Cu	63	3	He	0.436	0.0158	1120.08	0.0249	0.004937
Cu	63	3	He	0.297	0.0123	900.05	0.0249	0.004937
Cu	63	3	He	0.331	0.0132	970.06	0.0249	0.004937
Zn	66	3	He	0.558	0.0062	440.02	0.0025	0.004836
Zn	66	3	He	0.765	0.0067	490.03	0.0025	0.004836
Zn	66	3	He	-0.363	0.0039	290.01	0.0025	0.004836
As	75	3	He	0.123	0.0006	46.00	0.0017	0.0004347
As	75	3	He	0.207	0.0008	58.00	0.0017	0.0004347
As	75	3	He	0.094	0.0006	44.00	0.0017	0.0004347
Sr	88	3	He	0.063	0.0013	80.01	0.0078	0.0007762
Sr	88	3	He	0.078	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.078	0.0014	90.00	0.0078	0.0007762
Mo	98	3	He	0.738	0.0168	1060.08	0.022	0.0005162
Mo	98	3	He	0.853	0.0193	1250.09	0.022	0.0005162
Mo	98	3	He	0.781	0.0177	1150.09	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.016	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.36	0.0207	1310.11	0.0143	0.01559
Sn	120	3	He	0.466	0.0222	1440.12	0.0143	0.01559
Sn	120	3	He	0.43	0.0217	1410.12	0.0143	0.01559
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.041	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.652	0.0032	200.01	0.0044	0.000309
Ba	137	3	He	0.565	0.0028	180.01	0.0044	0.000309
Ba	137	3	He	0.739	0.0035	230.01	0.0044	0.000309
Tl	205	3	He	0.008	0.0012	270.01	0.0276	0.001005
Tl	205	3	He	-0.015	0.0006	130.00	0.0276	0.001005
Tl	205	3	He	0.001	0.001	230.01	0.0276	0.001005
Pb	208	3	He	0.472	0.0193	2290.30	0.0364	0.002176
Pb	208	3	He	0.441	0.0182	2250.28	0.0364	0.002176
Pb	208	3	He	0.458	0.0189	2290.26	0.0364	0.002176
U	238	3	He	0.003	0.0004	80.00	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
U	238	3	He	0.011	0.0007	160.01	0.0421	0.00024
Sc	45	1	No Gas			3187817.76		
Sc	45	1	No Gas			3288395.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3252697.45		
Ge	72	1	No Gas			1421574.20		
Ge	72	1	No Gas			1440251.85		
Ge	72	1	No Gas			1432744.82		
Sc	45	2	H2			193278.81		
Sc	45	2	H2			191424.78		
Sc	45	2	H2			200260.90		
Ge	72	2	H2			157451.85		
Ge	72	2	H2			160829.36		
Ge	72	2	H2			163954.80		
In	115	2	H2			432305.58		
In	115	2	H2			441226.05		
In	115	2	H2			449287.73		
Sc	45	3	He			40005.35		
Sc	45	3	He			41609.95		
Sc	45	3	He			40155.91		
Ge	72	3	He			70894.73		
Ge	72	3	He			72954.65		
Ge	72	3	He			73527.15		
In	115	3	He			63253.57		
In	115	3	He			64770.09		
In	115	3	He			64921.16		
Tb	159	3	He			284403.82		
Tb	159	3	He			285649.18		
Tb	159	3	He			284686.09		
Bi	209	3	He			220182.07		
Bi	209	3	He			222409.70		
Bi	209	3	He			221210.37		

Quantitation Report

Data File Name	272_CCV.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 19:57:11
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

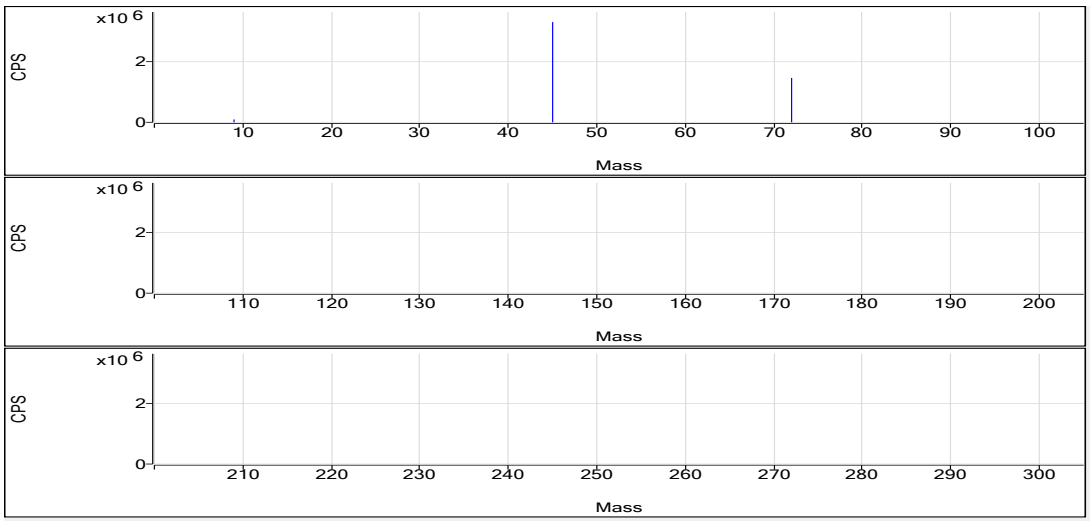
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	48.798	ppb	3.2	93425.05	0.0642	Pulse	0.5000	3
Se	78	72	H2	52.210	ppb	2.3	3296.16	0.0203	Pulse	1.5000	3
Na	23	72	He	5296.614	ppb	2.2	677404.49	9.2051	Pulse	0.1000	3
Mg	24	72	He	5286.380	ppb	1.9	328358.50	4.4618	Pulse	0.1000	3
Al	27	72	He	5315.734	ppb	2.1	94509.88	1.2843	Pulse	0.1000	3
K	39	72	He	5307.665	ppb	1.5	226284.85	3.0746	Pulse	0.1000	3
Ca	44	72	He	5292.439	ppb	1.6	12218.78	0.1660	Pulse	0.1000	3
Ti	47	72	He	5389.523	ppb	1.7	99486.49	1.3519	Pulse	0.1000	3
V	51	72	He	533.735	ppb	1.8	460016.46	6.2508	Pulse	0.5000	3
Cr	52	72	He	535.920	ppb	2.0	602409.13	8.1860	Pulse	0.1000	3
Mn	55	72	He	536.915	ppb	1.5	234247.50	3.1829	Pulse	0.1000	3
Fe	57	72	He	5381.853	ppb	1.5	115036.66	1.5631	Pulse	0.1000	3
Co	59	72	He	531.816	ppb	1.8	1194321.49	16.2291	Pulse	0.1000	3
Ni	60	72	He	534.128	ppb	1.9	346300.75	4.7058	Pulse	0.1000	3
Cu	63	72	He	531.210	ppb	1.1	975308.29	13.2518	Pulse	0.1000	3
Zn	66	72	He	525.541	ppb	2.0	95373.60	1.2960	Pulse	0.1000	3
As	75	72	He	527.709	ppb	2.3	67569.10	0.9182	Pulse	0.5000	3
Sr	88	115	He	52.813	ppb	2.8	26502.08	0.4136	Pulse	0.1000	3
Mo	98	115	He	53.211	ppb	1.7	75119.04	1.1723	Pulse	0.1000	3
Ag	107	115	He	52.273	ppb	1.0	152448.43	2.3789	Pulse	0.1000	3
Cd	111	115	He	53.517	ppb	2.7	16464.32	0.2569	Pulse	0.5000	3
Sn	120	115	He	53.871	ppb	0.5	50221.61	0.7837	Pulse	0.1000	3
Sb	121	115	He	52.868	ppb	2.2	42044.46	0.6561	Pulse	0.1000	3
Ba	137	115	He	530.479	ppb	1.2	148734.33	2.3210	Pulse	0.1000	3
Tl	205	209	He	52.837	ppb	0.6	326124.90	1.4616	Pulse	0.1000	3
Pb	208	209	He	53.544	ppb	0.8	435314.04	1.9510	Pulse	0.1000	3
U	238	209	He	52.207	ppb	1.1	490079.67	2.1964	Pulse	0.1000	3

ISTD Table:

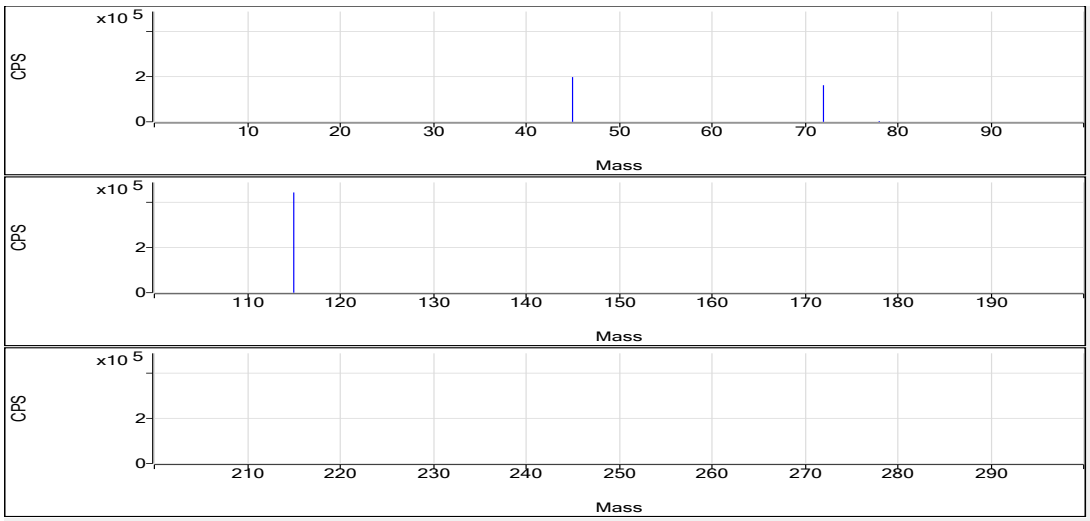
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3286600.68	0.6	101.4	Pulse	0.1000	3
No Gas	Ge	72	1456027.90	0.4	101.1	Pulse	0.1000	3
H2	Sc	45	197970.50	1.6	101.3	Pulse	0.1000	3
H2	Ge	72	162049.68	1.0	99.4	Pulse	0.1000	3
H2	In	115	443764.51	2.2	102.4	Pulse	0.1000	3
He	Sc	45	41516.07	0.4	103.8	Pulse	0.1000	3
He	Ge	72	73607.97	1.8	101.8	Pulse	0.1000	3
He	In	115	64087.23	1.3	99.2	Pulse	0.1000	3
He	Tb	159	287274.54	0.5	100.4	Pulse	0.1000	3
He	Bi	209	223127.63	0.6	100.4	Pulse	0.1000	3

No Gas

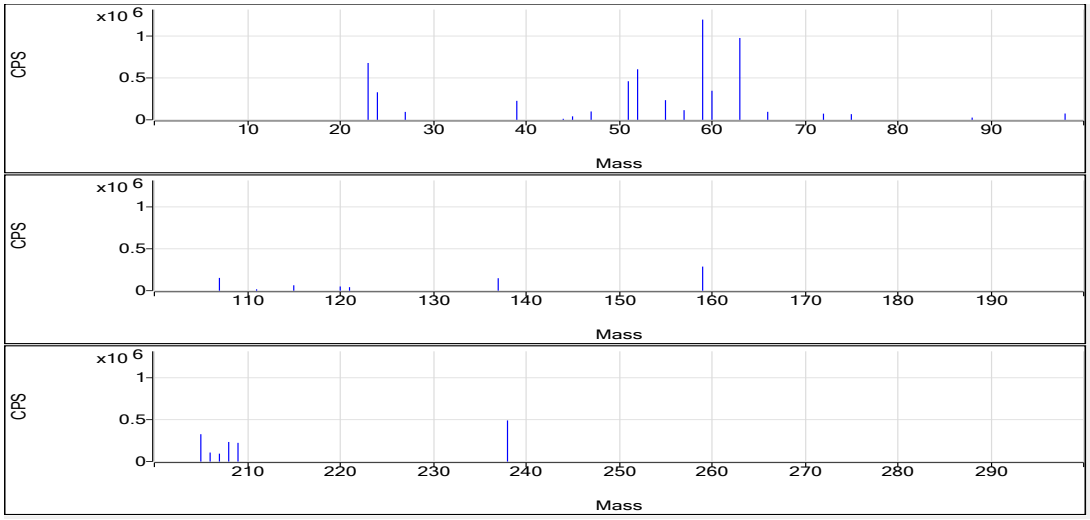


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.111	0.0646	94042.66	0.0013	4.694E-05
Be	9	1	No Gas	47.095	0.0619	90537.55	0.0013	4.694E-05
Be	9	1	No Gas	50.189	0.066	95694.93	0.0013	4.694E-05
Se	78	2	H2	53.048	0.0207	3329.06	0.0004	1.089E-05
Se	78	2	H2	52.734	0.0205	3365.73	0.0004	1.089E-05
Se	78	2	H2	50.848	0.0198	3193.69	0.0004	1.089E-05
Na	23	3	He	5399.779	9.3823	683738.19	0.0017	0.1065
Na	23	3	He	5317.991	9.2418	672742.80	0.0017	0.1065
Na	23	3	He	5172.072	8.9912	675732.49	0.0017	0.1065
Mg	24	3	He	5389.128	4.5484	331467.85	0.0008	0.004846
Mg	24	3	He	5286.064	4.4615	324770.19	0.0008	0.004846
Mg	24	3	He	5183.948	4.3754	328837.46	0.0008	0.004846
Al	27	3	He	5425.224	1.3107	95516.16	0.0002	0.001063
Al	27	3	He	5321.382	1.2856	93584.16	0.0002	0.001063
Al	27	3	He	5200.595	1.2565	94429.32	0.0002	0.001063
K	39	3	He	5395.249	3.123	227586.54	0.0006	0.1436
K	39	3	He	5291.903	3.0659	223176.62	0.0006	0.1436
K	39	3	He	5235.843	3.0349	228091.40	0.0006	0.1436
Ca	44	3	He	5198.934	0.1631	11885.16	0	0.001611
Ca	44	3	He	5368.643	0.1684	12255.51	0	0.001611
Ca	44	3	He	5309.739	0.1665	12515.66	0	0.001611
Ti	47	3	He	5449.172	1.3668	99606.85	0.0003	0.0002737
Ti	47	3	He	5437.151	1.3638	99275.51	0.0003	0.0002737
Ti	47	3	He	5282.247	1.325	99577.12	0.0003	0.0002737
V	51	3	He	541.615	6.343	462247.50	0.0117	0.007326
V	51	3	He	536.342	6.2813	457238.81	0.0117	0.007326
V	51	3	He	523.248	6.1282	460563.06	0.0117	0.007326
Cr	52	3	He	541.59	8.2723	602847.61	0.0152	0.02538
Cr	52	3	He	542.505	8.2863	603184.72	0.0152	0.02538
Cr	52	3	He	523.665	7.9994	601195.07	0.0152	0.02538
Mn	55	3	He	542.572	3.2163	234391.54	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	540.692	3.2052	233320.68	0.0059	0.01385
Mn	55	3	He	527.48	3.1273	235030.29	0.0059	0.01385
Fe	57	3	He	5421.105	1.5745	114741.45	0.0003	0.003918
Fe	57	3	He	5437.705	1.5793	114962.64	0.0003	0.003918
Fe	57	3	He	5286.748	1.5356	115405.90	0.0003	0.003918
Co	59	3	He	536.604	16.3751	1193341.62	0.0305	0.003084
Co	59	3	He	538.284	16.4264	1195733.19	0.0305	0.003084
Co	59	3	He	520.56	15.8856	1193889.67	0.0305	0.003084
Ni	60	3	He	540.41	4.761	346958.04	0.0088	0.009003
Ni	60	3	He	539.657	4.7544	346086.79	0.0088	0.009003
Ni	60	3	He	522.318	4.6019	345857.42	0.0088	0.009003
Cu	63	3	He	534.754	13.3402	972166.78	0.0249	0.004937
Cu	63	3	He	534.377	13.3307	970389.99	0.0249	0.004937
Cu	63	3	He	524.501	13.0845	983368.11	0.0249	0.004937
Zn	66	3	He	535.567	1.3206	96239.06	0.0025	0.004836
Zn	66	3	He	526.156	1.2975	94447.93	0.0025	0.004836
Zn	66	3	He	514.898	1.2698	95433.80	0.0025	0.004836
As	75	3	He	535.583	0.9319	67912.79	0.0017	0.0004347
As	75	3	He	533.708	0.9286	67599.20	0.0017	0.0004347
As	75	3	He	513.838	0.8941	67195.31	0.0017	0.0004347
Sr	88	3	He	51.093	0.4002	25974.40	0.0078	0.0007762
Sr	88	3	He	53.465	0.4187	26826.20	0.0078	0.0007762
Sr	88	3	He	53.882	0.422	26705.64	0.0078	0.0007762
Mo	98	3	He	52.383	1.1541	74908.16	0.022	0.0005162
Mo	98	3	He	53.084	1.1695	74928.11	0.022	0.0005162
Mo	98	3	He	54.165	1.1933	75520.84	0.022	0.0005162
Ag	107	3	He	52.003	2.3666	153612.34	0.0455	0.0004641
Ag	107	3	He	51.967	2.365	151518.53	0.0455	0.0004641
Ag	107	3	He	52.85	2.4052	152214.43	0.0455	0.0004641
Cd	111	3	He	52.951	0.2542	16501.68	0.0048	5.152E-05
Cd	111	3	He	52.467	0.2519	16139.30	0.0048	5.152E-05
Cd	111	3	He	55.132	0.2647	16751.97	0.0048	5.152E-05
Sn	120	3	He	53.619	0.7801	50633.02	0.0143	0.01559
Sn	120	3	He	53.864	0.7836	50201.75	0.0143	0.01559
Sn	120	3	He	54.13	0.7874	49830.05	0.0143	0.01559
Sb	121	3	He	53.231	0.6606	42877.02	0.0124	0.000258
Sb	121	3	He	51.544	0.6397	40981.11	0.0124	0.000258
Sb	121	3	He	53.828	0.668	42275.24	0.0124	0.000258
Ba	137	3	He	523.97	2.2926	148804.50	0.0044	0.000309
Ba	137	3	He	530.695	2.322	148764.62	0.0044	0.000309
Ba	137	3	He	536.773	2.3486	148633.86	0.0044	0.000309
Tl	205	3	He	53.101	1.4689	326859.82	0.0276	0.001005
Tl	205	3	He	52.956	1.4649	325589.66	0.0276	0.001005
Tl	205	3	He	52.454	1.4511	325925.21	0.0276	0.001005
Pb	208	3	He	53.846	1.962	233356.07	0.0364	0.002176
Pb	208	3	He	53.764	1.9591	232420.91	0.0364	0.002176
Pb	208	3	He	53.021	1.932	234637.79	0.0364	0.002176
U	238	3	He	52.868	2.2242	494926.67	0.0421	0.00024
U	238	3	He	51.763	2.1778	484019.72	0.0421	0.00024
U	238	3	He	51.989	2.1873	491292.61	0.0421	0.00024
Sc	45	1	No Gas			3277960.58		
Sc	45	1	No Gas			3309650.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3272190.89		
Ge	72	1	No Gas			1456197.48		
Ge	72	1	No Gas			1461900.45		
Ge	72	1	No Gas			1449985.76		
Sc	45	2	H2			195639.31		
Sc	45	2	H2			196734.41		
Sc	45	2	H2			201537.77		
Ge	72	2	H2			161091.50		
Ge	72	2	H2			163833.05		
Ge	72	2	H2			161224.50		
In	115	2	H2			435627.69		
In	115	2	H2			440887.34		
In	115	2	H2			454778.51		
Sc	45	3	He			41429.17		
Sc	45	3	He			41700.00		
Sc	45	3	He			41419.05		
Ge	72	3	He			72875.25		
Ge	72	3	He			72793.38		
Ge	72	3	He			75155.28		
In	115	3	He			65302.25		
In	115	3	He			64459.24		
In	115	3	He			63675.38		
Tb	159	3	He			285656.46		
Tb	159	3	He			287987.16		
Tb	159	3	He			288180.00		
Bi	209	3	He			222514.68		
Bi	209	3	He			222255.86		
Bi	209	3	He			224612.36		

Quantitation Report

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Sample Type	CCB
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

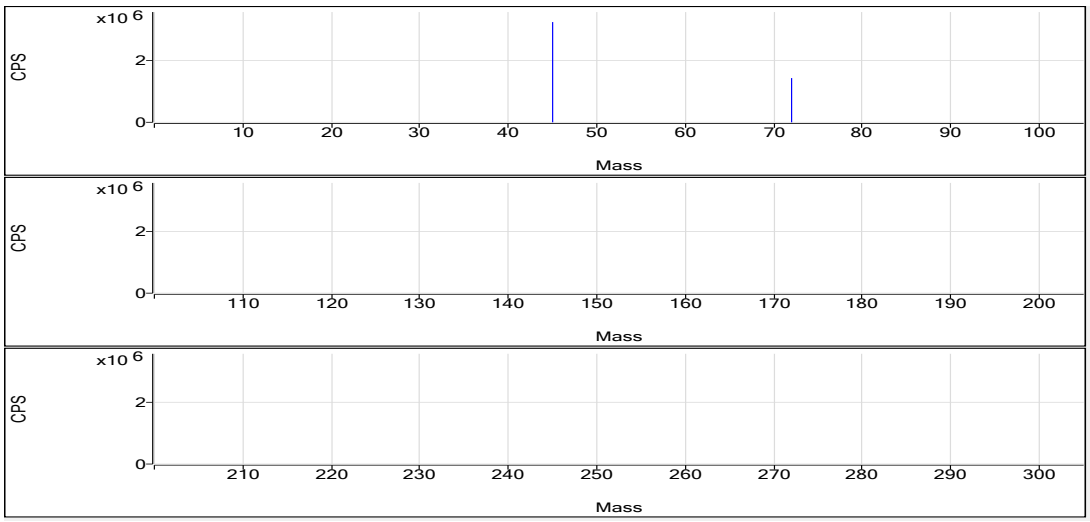
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.022	ppb	17.9	109.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.050	ppb	43.3	4.89	0.0000	Pulse	1.5000	3
Na	23	72	He	5.497	ppb	21.4	8429.35	0.1159	Pulse	0.1000	3
Mg	24	72	He	16.323	ppb	2.5	1353.45	0.0186	Pulse	0.1000	3
Al	27	72	He	35.338	ppb	22.2	696.71	0.0096	Pulse	0.1000	3
K	39	72	He	13.271	ppb	144.0	10974.42	0.1510	Pulse	0.1000	3
Ca	44	72	He	32.410	ppb	79.1	190.01	0.0026	Pulse	0.1000	3
Ti	47	72	He	2.031	ppb	96.7	56.67	0.0008	Pulse	0.1000	3
V	51	72	He	0.781	ppb	5.1	1196.73	0.0165	Pulse	0.5000	3
Cr	52	72	He	0.203	ppb	48.6	2070.21	0.0285	Pulse	0.1000	3
Mn	55	72	He	-0.264	ppb	N/A	893.40	0.0123	Pulse	0.1000	3
Fe	57	72	He	58.772	ppb	9.3	1523.47	0.0209	Pulse	0.1000	3
Co	59	72	He	0.186	ppb	18.1	636.70	0.0087	Pulse	0.1000	3
Ni	60	72	He	1.190	ppb	18.8	1416.79	0.0195	Pulse	0.1000	3
Cu	63	72	He	0.358	ppb	20.4	1010.07	0.0139	Pulse	0.1000	3
Zn	66	72	He	0.327	ppb	25.8	410.02	0.0056	Pulse	0.1000	3
As	75	72	He	0.082	ppb	51.0	42.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.167	ppb	19.3	133.34	0.0021	Pulse	0.1000	3
Mo	98	115	He	0.399	ppb	4.0	596.70	0.0093	Pulse	0.1000	3
Ag	107	115	He	0.017	ppb	35.0	80.00	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	125.5	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.437	ppb	6.4	1400.12	0.0218	Pulse	0.1000	3
Sb	121	115	He	0.046	ppb	14.1	53.33	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.428	ppb	21.5	140.01	0.0022	Pulse	0.1000	3
Tl	205	209	He	0.117	ppb	28.0	943.40	0.0042	Pulse	0.1000	3
Pb	208	209	He	0.354	ppb	3.2	3346.96	0.0151	Pulse	0.1000	3
U	238	209	He	0.015	ppb	10.8	193.34	0.0009	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3240959.95	0.7	100.0	Pulse	0.1000	3
No Gas	Ge	72	1429609.72	0.7	99.3	Pulse	0.1000	3
H2	Sc	45	196616.05	2.2	100.6	Pulse	0.1000	3
H2	Ge	72	161509.27	0.9	99.1	Pulse	0.1000	3
H2	In	115	443593.22	0.7	102.4	Pulse	0.1000	3
He	Sc	45	41546.22	1.3	103.9	Pulse	0.1000	3
He	Ge	72	72733.41	1.2	100.6	Pulse	0.1000	3
He	In	115	64196.83	1.1	99.4	Pulse	0.1000	3
He	Tb	159	286115.78	0.4	100.0	Pulse	0.1000	3
He	Bi	209	222359.53	0.2	100.1	Pulse	0.1000	3

No Gas



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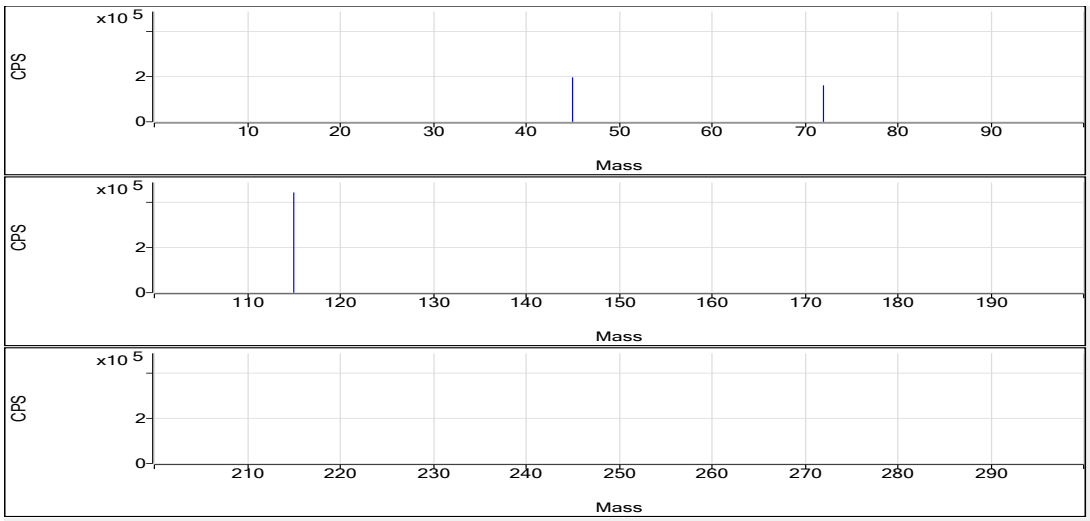
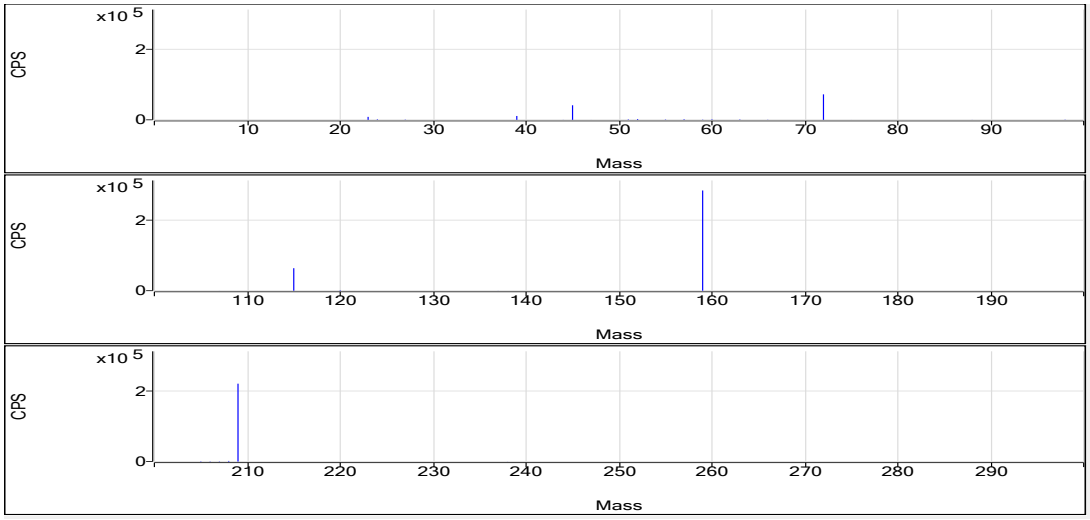


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.022	0.0001	108.00	0.0013	4.694E-05
Be	9	1	No Gas	0.027	0.0001	118.00	0.0013	4.694E-05
Be	9	1	No Gas	0.019	0.0001	102.00	0.0013	4.694E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.056	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.067	0	6.00	0.0004	1.089E-05
Na	23	3	He	6.285	0.1173	8412.69	0.0017	0.1065
Na	23	3	He	6.06	0.1169	8592.86	0.0017	0.1065
Na	23	3	He	4.146	0.1136	8282.51	0.0017	0.1065
Mg	24	3	He	16.406	0.0187	1340.11	0.0008	0.004846
Mg	24	3	He	16.677	0.0189	1390.12	0.0008	0.004846
Mg	24	3	He	15.886	0.0182	1330.11	0.0008	0.004846
Al	27	3	He	41.791	0.0112	800.05	0.0002	0.001063
Al	27	3	He	26.586	0.0075	550.03	0.0002	0.001063
Al	27	3	He	37.637	0.0101	740.04	0.0002	0.001063
K	39	3	He	35.308	0.1631	11704.95	0.0006	0.1436
K	39	3	He	1.295	0.1444	10614.19	0.0006	0.1436
K	39	3	He	3.21	0.1454	10604.11	0.0006	0.1436
Ca	44	3	He	60.323	0.0035	250.01	0	0.001611
Ca	44	3	He	26.957	0.0024	180.01	0	0.001611
Ca	44	3	He	9.949	0.0019	140.01	0	0.001611
Ti	47	3	He	3.91	0.0013	90.00	0.0003	0.0002737
Ti	47	3	He	-0.007	0.0003	20.00	0.0003	0.0002737
Ti	47	3	He	2.189	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.825	0.017	1218.06	0.0117	0.007326
V	51	3	He	0.748	0.0161	1182.06	0.0117	0.007326
V	51	3	He	0.769	0.0163	1190.06	0.0117	0.007326
Cr	52	3	He	0.31	0.0301	2160.22	0.0152	0.02538
Cr	52	3	He	0.182	0.0282	2070.21	0.0152	0.02538
Cr	52	3	He	0.116	0.0272	1980.21	0.0152	0.02538
Mn	55	3	He	0.038	0.0141	1010.08	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.342	0.0118	870.06	0.0059	0.01385
Mn	55	3	He	-0.488	0.011	800.05	0.0059	0.01385
Fe	57	3	He	56.239	0.0202	1450.12	0.0003	0.003918
Fe	57	3	He	55.021	0.0199	1460.12	0.0003	0.003918
Fe	57	3	He	65.057	0.0228	1660.16	0.0003	0.003918
Co	59	3	He	0.164	0.0081	580.03	0.0305	0.003084
Co	59	3	He	0.224	0.0099	730.04	0.0305	0.003084
Co	59	3	He	0.169	0.0082	600.03	0.0305	0.003084
Ni	60	3	He	0.973	0.0176	1260.11	0.0088	0.009003
Ni	60	3	He	1.42	0.0215	1580.13	0.0088	0.009003
Ni	60	3	He	1.175	0.0193	1410.12	0.0088	0.009003
Cu	63	3	He	0.299	0.0124	890.05	0.0249	0.004937
Cu	63	3	He	0.44	0.0159	1170.09	0.0249	0.004937
Cu	63	3	He	0.335	0.0133	970.06	0.0249	0.004937
Zn	66	3	He	0.414	0.0059	420.02	0.0025	0.004836
Zn	66	3	He	0.246	0.0054	400.02	0.0025	0.004836
Zn	66	3	He	0.32	0.0056	410.02	0.0025	0.004836
As	75	3	He	0.071	0.0006	40.00	0.0017	0.0004347
As	75	3	He	0.047	0.0005	38.00	0.0017	0.0004347
As	75	3	He	0.129	0.0007	48.00	0.0017	0.0004347
Sr	88	3	He	0.157	0.002	130.01	0.0078	0.0007762
Sr	88	3	He	0.141	0.0019	120.01	0.0078	0.0007762
Sr	88	3	He	0.202	0.0024	150.01	0.0078	0.0007762
Mo	98	3	He	0.417	0.0097	630.03	0.022	0.0005162
Mo	98	3	He	0.388	0.0091	580.03	0.022	0.0005162
Mo	98	3	He	0.391	0.0091	580.03	0.022	0.0005162
Ag	107	3	He	0.013	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.024	0.0016	100.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.028	0.0002	12.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.407	0.0214	1390.13	0.0143	0.01559
Sn	120	3	He	0.441	0.0219	1400.12	0.0143	0.01559
Sn	120	3	He	0.462	0.0222	1410.11	0.0143	0.01559
Sb	121	3	He	0.054	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.042	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Ba	137	3	He	0.492	0.0025	160.01	0.0044	0.000309
Ba	137	3	He	0.322	0.0017	110.01	0.0044	0.000309
Ba	137	3	He	0.469	0.0024	150.01	0.0044	0.000309
Tl	205	3	He	0.15	0.0051	1140.09	0.0276	0.001005
Tl	205	3	He	0.118	0.0043	950.07	0.0276	0.001005
Tl	205	3	He	0.084	0.0033	740.05	0.0276	0.001005
Pb	208	3	He	0.363	0.0154	1940.20	0.0364	0.002176
Pb	208	3	He	0.341	0.0146	1550.14	0.0364	0.002176
Pb	208	3	He	0.358	0.0152	1860.21	0.0364	0.002176
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
U	238	3	He	0.017	0.0009	210.01	0.0421	0.00024
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
Sc	45	1	No Gas			3252683.08		
Sc	45	1	No Gas			3256619.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3213576.83		
Ge	72	1	No Gas			1420383.89		
Ge	72	1	No Gas			1439882.63		
Ge	72	1	No Gas			1428562.63		
Sc	45	2	H2			191680.43		
Sc	45	2	H2			198961.95		
Sc	45	2	H2			199205.76		
Ge	72	2	H2			159755.92		
Ge	72	2	H2			162446.70		
Ge	72	2	H2			162325.20		
In	115	2	H2			440085.15		
In	115	2	H2			444989.45		
In	115	2	H2			445705.07		
Sc	45	3	He			41379.07		
Sc	45	3	He			41098.35		
Sc	45	3	He			42161.23		
Ge	72	3	He			71748.49		
Ge	72	3	He			73527.81		
Ge	72	3	He			72923.92		
In	115	3	He			65001.23		
In	115	3	He			64016.72		
In	115	3	He			63605.29		
Tb	159	3	He			287085.58		
Tb	159	3	He			286189.92		
Tb	159	3	He			285071.83		
Bi	209	3	He			221868.59		
Bi	209	3	He			222740.13		
Bi	209	3	He			222469.86		

Quantitation Report

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Comment	H2 ICP
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

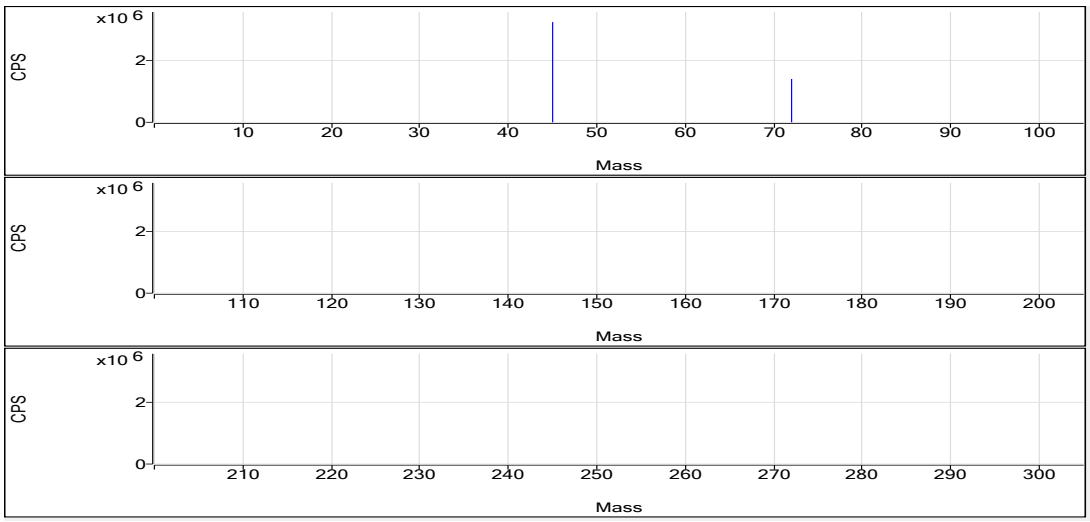
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.123	ppb	6.9	296.00	0.0002	Pulse	0.5000	3
Se	78	72	H2	1.515	ppb	4.7	95.11	0.0006	Pulse	1.5000	3
Na	23	72	He	567.022	ppb	2.6	77914.07	1.0805	Pulse	0.1000	3
Mg	24	72	He	2533.286	ppb	2.4	154360.24	2.1407	Pulse	0.1000	3
Al	27	72	He	12132.878	ppb	3.0	211250.38	2.9299	Pulse	0.1000	3
K	39	72	He	277.753	ppb	6.7	21416.09	0.2970	Pulse	0.1000	3
Ca	44	72	He	2880.765	ppb	5.7	6565.07	0.0911	Pulse	0.1000	3
Ti	47	72	He	156.766	ppb	5.3	2853.71	0.0396	Pulse	0.1000	3
V	51	72	He	466.680	ppb	2.4	394176.77	5.4664	Pulse	0.5000	3
Cr	52	72	He	58.197	ppb	3.6	65721.75	0.9116	Pulse	0.1000	3
Mn	55	72	He	137.708	ppb	4.4	59592.53	0.8267	Pulse	0.1000	3
Fe	57	72	He	12732.673	ppb	2.7	266266.33	3.6928	Pulse	0.1000	3
Co	59	72	He	12.079	ppb	2.2	26798.76	0.3716	Pulse	0.1000	3
Ni	60	72	He	262.211	ppb	1.7	166926.94	2.3147	Pulse	0.1000	3
Cu	63	72	He	49.780	ppb	3.2	89864.83	1.2463	Pulse	0.1000	3
Zn	66	72	He	134.105	ppb	2.2	24107.36	0.3343	Pulse	0.1000	3
As	75	72	He	6.097	ppb	8.2	795.36	0.0110	Pulse	0.5000	3
Sr	88	115	He	35.993	ppb	3.7	18185.49	0.2821	Pulse	0.1000	3
Mo	98	115	He	244.994	ppb	1.6	347691.84	5.3957	Pulse	0.1000	3
Ag	107	115	He	1.385	ppb	8.5	4090.75	0.0635	Pulse	0.1000	3
Cd	111	115	He	0.132	ppb	27.4	44.00	0.0007	Pulse	0.5000	3
Sn	120	115	He	1.226	ppb	13.0	2130.24	0.0331	Pulse	0.1000	3
Sb	121	115	He	0.209	ppb	26.1	183.34	0.0029	Pulse	0.1000	3
Ba	137	115	He	141.024	ppb	2.3	39778.40	0.6173	Pulse	0.1000	3
Tl	205	209	He	0.139	ppb	12.4	1100.08	0.0048	Pulse	0.1000	3
Pb	208	209	He	44.260	ppb	1.2	366589.26	1.6131	Pulse	0.1000	3
U	238	209	He	0.278	ppb	11.4	2713.73	0.0119	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3272221.51	1.3	101.0	Pulse	0.1000	3
No Gas	Ge	72	1415044.67	0.5	98.3	Pulse	0.1000	3
H2	Sc	45	200757.67	2.7	102.8	Pulse	0.1000	3
H2	Ge	72	158385.63	2.1	97.2	Pulse	0.1000	3
H2	In	115	440074.74	2.2	101.6	Pulse	0.1000	3
He	Sc	45	42358.92	3.0	105.9	Pulse	0.1000	3
He	Ge	72	72134.15	2.2	99.8	Pulse	0.1000	3
He	In	115	64452.22	1.9	99.8	Pulse	0.1000	3
He	Tb	159	288849.29	0.8	101.0	Pulse	0.1000	3
He	Bi	209	227267.61	1.0	102.3	Pulse	0.1000	3

No Gas



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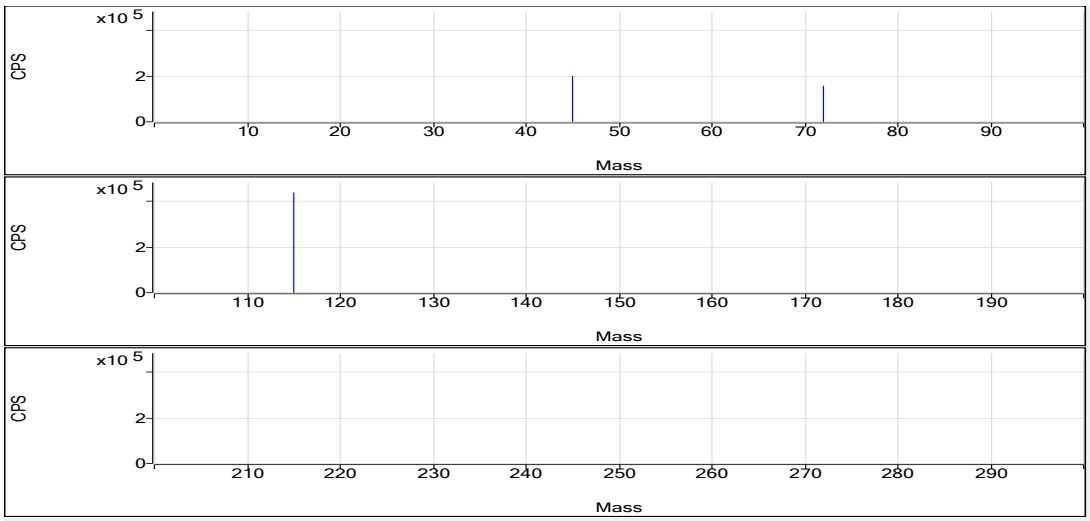
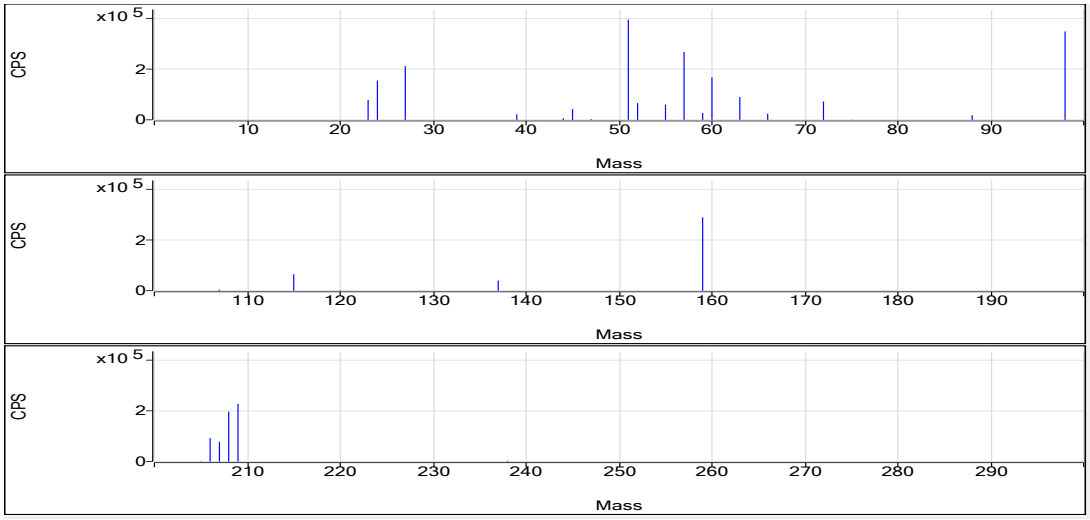


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.129	0.0002	308.00	0.0013	4.694E-05
Be	9	1	No Gas	0.114	0.0002	278.00	0.0013	4.694E-05
Be	9	1	No Gas	0.128	0.0002	302.00	0.0013	4.694E-05
Se	78	2	H2	1.506	0.0006	93.33	0.0004	1.089E-05
Se	78	2	H2	1.59	0.0006	98.67	0.0004	1.089E-05
Se	78	2	H2	1.449	0.0006	93.33	0.0004	1.089E-05
Na	23	3	He	569.072	1.084	77864.24	0.0017	0.1065
Na	23	3	He	551.634	1.0541	77874.08	0.0017	0.1065
Na	23	3	He	580.359	1.1034	78003.88	0.0017	0.1065
Mg	24	3	He	2553.058	2.1573	154959.35	0.0008	0.004846
Mg	24	3	He	2465.17	2.0832	153909.03	0.0008	0.004846
Mg	24	3	He	2581.629	2.1814	154212.33	0.0008	0.004846
Al	27	3	He	12253.56	2.959	212542.44	0.0002	0.001063
Al	27	3	He	11726.196	2.8317	209205.43	0.0002	0.001063
Al	27	3	He	12418.878	2.9989	212003.26	0.0002	0.001063
K	39	3	He	292.436	0.3051	21917.03	0.0006	0.1436
K	39	3	He	256.962	0.2855	21095.51	0.0006	0.1436
K	39	3	He	283.86	0.3004	21235.74	0.0006	0.1436
Ca	44	3	He	2893.779	0.0915	6571.74	0	0.001611
Ca	44	3	He	2711.715	0.0858	6341.58	0	0.001611
Ca	44	3	He	3036.802	0.0959	6781.88	0	0.001611
Ti	47	3	He	163.254	0.0412	2960.40	0.0003	0.0002737
Ti	47	3	He	147.356	0.0372	2750.36	0.0003	0.0002737
Ti	47	3	He	159.687	0.0403	2850.36	0.0003	0.0002737
V	51	3	He	470.208	5.5077	395612.97	0.0117	0.007326
V	51	3	He	454.183	5.3202	393058.78	0.0117	0.007326
V	51	3	He	475.65	5.5714	393858.56	0.0117	0.007326
Cr	52	3	He	58.886	0.9221	66230.82	0.0152	0.02538
Cr	52	3	He	55.866	0.8761	64724.25	0.0152	0.02538
Cr	52	3	He	59.84	0.9366	66210.18	0.0152	0.02538
Mn	55	3	He	138.426	0.8309	59682.92	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	131.365	0.7892	58307.70	0.0059	0.01385
Mn	55	3	He	143.333	0.8599	60786.98	0.0059	0.01385
Fe	57	3	He	12792.938	3.7102	266501.79	0.0003	0.003918
Fe	57	3	He	12361.003	3.5851	264865.25	0.0003	0.003918
Fe	57	3	He	13044.078	3.783	267431.95	0.0003	0.003918
Co	59	3	He	12.126	0.373	26795.31	0.0305	0.003084
Co	59	3	He	11.795	0.363	26815.48	0.0305	0.003084
Co	59	3	He	12.317	0.3789	26785.49	0.0305	0.003084
Ni	60	3	He	262.324	2.3157	166334.37	0.0088	0.009003
Ni	60	3	He	257.628	2.2744	168032.52	0.0088	0.009003
Ni	60	3	He	266.682	2.354	166413.92	0.0088	0.009003
Cu	63	3	He	50.985	1.2764	91679.50	0.0249	0.004937
Cu	63	3	He	47.942	1.2005	88690.72	0.0249	0.004937
Cu	63	3	He	50.414	1.2621	89224.26	0.0249	0.004937
Zn	66	3	He	135.853	0.3386	24321.01	0.0025	0.004836
Zn	66	3	He	130.759	0.3261	24090.77	0.0025	0.004836
Zn	66	3	He	135.702	0.3382	23910.29	0.0025	0.004836
As	75	3	He	6.202	0.0112	806.03	0.0017	0.0004347
As	75	3	He	5.556	0.0101	746.03	0.0017	0.0004347
As	75	3	He	6.534	0.0118	834.03	0.0017	0.0004347
Sr	88	3	He	37.465	0.2936	18873.04	0.0078	0.0007762
Sr	88	3	He	35.578	0.2789	18342.41	0.0078	0.0007762
Sr	88	3	He	34.937	0.2739	17341.01	0.0078	0.0007762
Mo	98	3	He	246.619	5.4315	349093.04	0.022	0.0005162
Mo	98	3	He	240.418	5.2949	348238.74	0.022	0.0005162
Mo	98	3	He	247.944	5.4606	345743.74	0.022	0.0005162
Ag	107	3	He	1.519	0.0696	4470.86	0.0455	0.0004641
Ag	107	3	He	1.297	0.0595	3910.66	0.0455	0.0004641
Ag	107	3	He	1.34	0.0614	3890.72	0.0455	0.0004641
Cd	111	3	He	0.112	0.0006	38.00	0.0048	5.152E-05
Cd	111	3	He	0.11	0.0006	38.00	0.0048	5.152E-05
Cd	111	3	He	0.174	0.0009	56.00	0.0048	5.152E-05
Sn	120	3	He	1.122	0.0316	2030.21	0.0143	0.01559
Sn	120	3	He	1.146	0.0319	2100.24	0.0143	0.01559
Sn	120	3	He	1.41	0.0357	2260.27	0.0143	0.01559
Sb	121	3	He	0.18	0.0025	160.01	0.0124	0.000258
Sb	121	3	He	0.175	0.0024	160.01	0.0124	0.000258
Sb	121	3	He	0.272	0.0036	230.01	0.0124	0.000258
Ba	137	3	He	137.833	0.6033	38775.49	0.0044	0.000309
Ba	137	3	He	140.796	0.6163	40530.72	0.0044	0.000309
Ba	137	3	He	144.442	0.6322	40029.00	0.0044	0.000309
Tl	205	3	He	0.158	0.0054	1220.10	0.0276	0.001005
Tl	205	3	He	0.132	0.0047	1070.08	0.0276	0.001005
Tl	205	3	He	0.126	0.0045	1010.07	0.0276	0.001005
Pb	208	3	He	44.668	1.628	198858.32	0.0364	0.002176
Pb	208	3	He	43.659	1.5913	195766.05	0.0364	0.002176
Pb	208	3	He	44.454	1.6202	194831.40	0.0364	0.002176
U	238	3	He	0.295	0.0127	2870.45	0.0421	0.00024
U	238	3	He	0.242	0.0104	2390.30	0.0421	0.00024
U	238	3	He	0.298	0.0128	2880.43	0.0421	0.00024
Sc	45	1	No Gas			3288393.08		
Sc	45	1	No Gas			3304507.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3223764.01		
Ge	72	1	No Gas			1422088.89		
Ge	72	1	No Gas			1416287.95		
Ge	72	1	No Gas			1406757.17		
Sc	45	2	H2			195251.87		
Sc	45	2	H2			201125.39		
Sc	45	2	H2			205895.74		
Ge	72	2	H2			156289.03		
Ge	72	2	H2			156612.75		
Ge	72	2	H2			162255.11		
In	115	2	H2			434640.27		
In	115	2	H2			434409.88		
In	115	2	H2			451174.06		
Sc	45	3	He			41860.87		
Sc	45	3	He			41399.39		
Sc	45	3	He			43816.49		
Ge	72	3	He			71829.12		
Ge	72	3	He			73879.84		
Ge	72	3	He			70693.49		
In	115	3	He			64288.27		
In	115	3	He			65784.97		
In	115	3	He			63333.28		
Tb	159	3	He			287769.35		
Tb	159	3	He			291344.88		
Tb	159	3	He			287433.65		
Bi	209	3	He			226811.91		
Bi	209	3	He			229733.43		
Bi	209	3	He			225257.50		

Quantitation Report

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Acq Time	2023-08-10 20:03:12
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

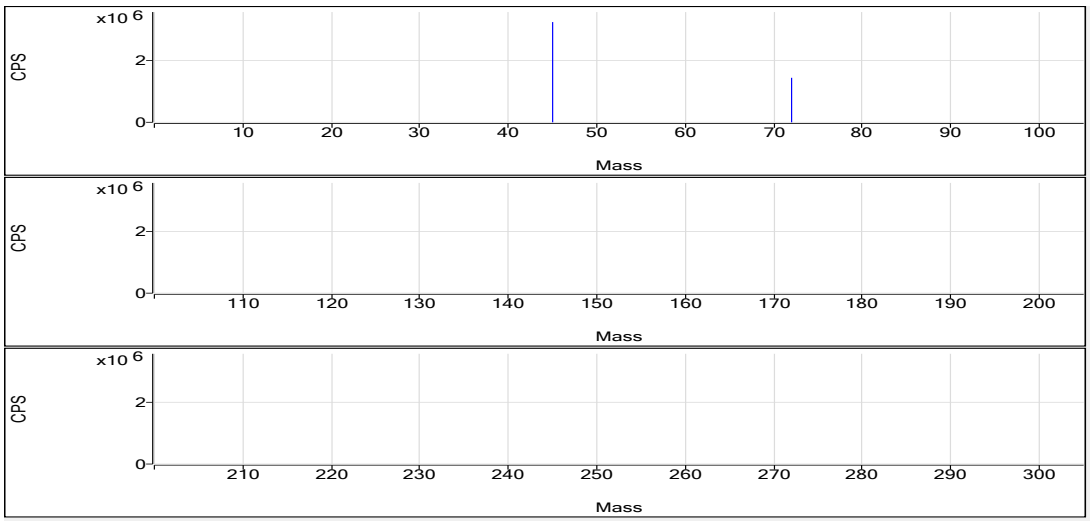
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.007	ppb	N/A	54.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.007	ppb	N/A	1.33	0.0000	Pulse	1.5000	3
Na	23	72	He	4.528	ppb	16.3	8222.51	0.1142	Pulse	0.1000	3
Mg	24	72	He	13.095	ppb	8.3	1143.42	0.0159	Pulse	0.1000	3
Al	27	72	He	31.087	ppb	8.6	616.70	0.0086	Pulse	0.1000	3
K	39	72	He	2.894	ppb	464.5	10454.02	0.1452	Pulse	0.1000	3
Ca	44	72	He	7.794	ppb	218.3	133.34	0.0019	Pulse	0.1000	3
Ti	47	72	He	1.123	ppb	147.7	40.00	0.0006	Pulse	0.1000	3
V	51	72	He	0.695	ppb	12.5	1112.72	0.0155	Pulse	0.5000	3
Cr	52	72	He	0.088	ppb	149.2	1923.53	0.0267	Pulse	0.1000	3
Mn	55	72	He	-0.276	ppb	N/A	880.06	0.0122	Pulse	0.1000	3
Fe	57	72	He	50.586	ppb	23.4	1336.77	0.0186	Pulse	0.1000	3
Co	59	72	He	0.075	ppb	66.5	386.69	0.0054	Pulse	0.1000	3
Ni	60	72	He	1.209	ppb	10.2	1413.45	0.0196	Pulse	0.1000	3
Cu	63	72	He	0.277	ppb	30.9	853.39	0.0119	Pulse	0.1000	3
Zn	66	72	He	0.011	ppb	3372.9	350.02	0.0049	Pulse	0.1000	3
As	75	72	He	0.123	ppb	33.1	46.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.140	ppb	25.7	120.01	0.0019	Pulse	0.1000	3
Mo	98	115	He	0.389	ppb	12.6	583.37	0.0091	Pulse	0.1000	3
Ag	107	115	He	0.010	ppb	89.0	60.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	4821.4	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.449	ppb	34.4	1413.52	0.0220	Pulse	0.1000	3
Sb	121	115	He	0.004	ppb	294.6	20.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.380	ppb	6.3	126.68	0.0020	Pulse	0.1000	3
Tl	205	209	He	0.021	ppb	20.8	346.69	0.0016	Pulse	0.1000	3
Pb	208	209	He	0.307	ppb	3.1	2943.58	0.0134	Pulse	0.1000	3
U	238	209	He	0.005	ppb	69.7	96.67	0.0004	Pulse	0.1000	3

ISTD Table:

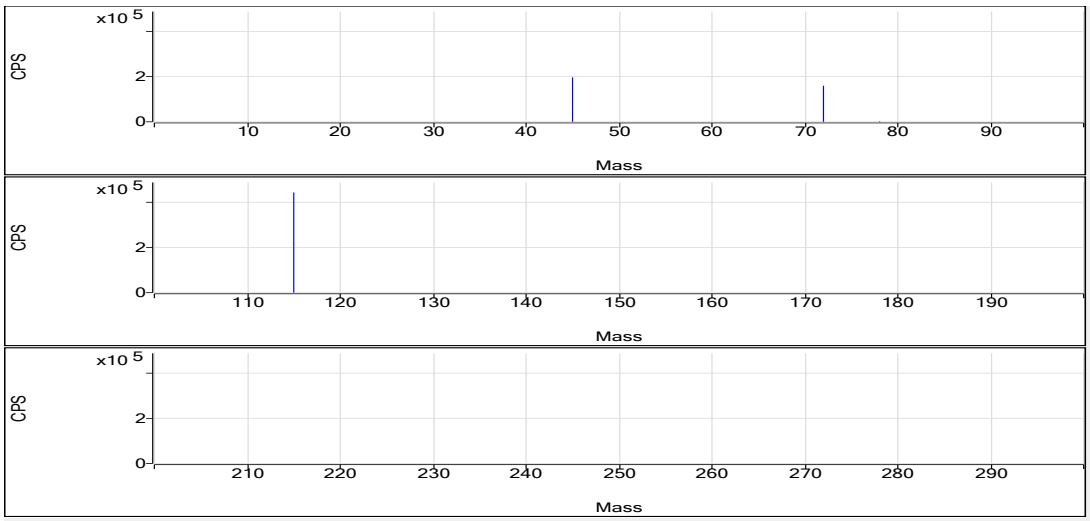
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3252938.18	0.9	100.4	Pulse	0.1000	3
No Gas	Ge	72	1444569.15	1.1	100.3	Pulse	0.1000	3
H2	Sc	45	196017.99	1.0	100.3	Pulse	0.1000	3
H2	Ge	72	159436.32	2.2	97.8	Pulse	0.1000	3
H2	In	115	442407.52	1.9	102.1	Pulse	0.1000	3
He	Sc	45	41034.87	0.6	102.6	Pulse	0.1000	3
He	Ge	72	71980.20	0.2	99.6	Pulse	0.1000	3
He	In	115	64327.29	1.4	99.6	Pulse	0.1000	3
He	Tb	159	284587.28	0.9	99.5	Pulse	0.1000	3
He	Bi	209	220361.69	1.6	99.2	Pulse	0.1000	3

No Gas

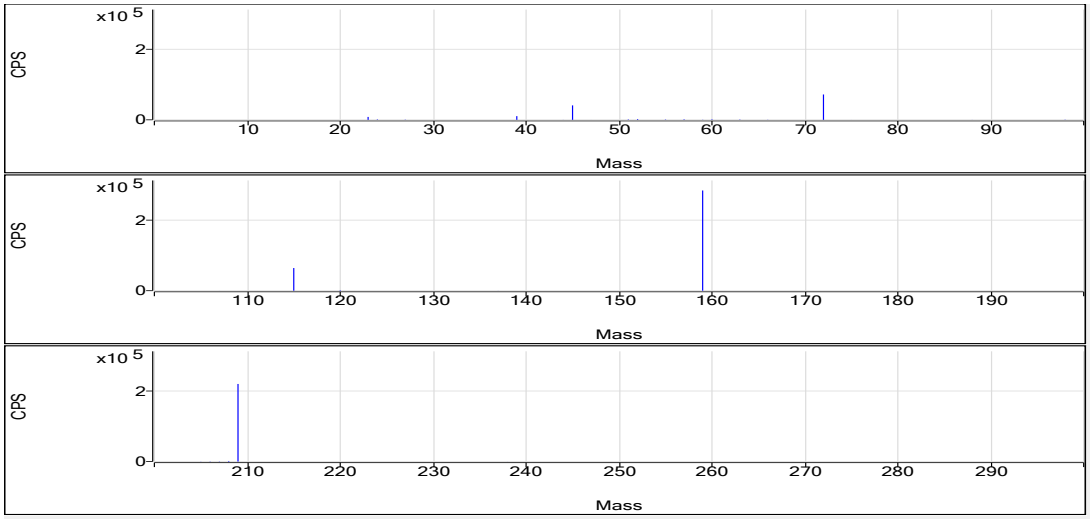


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.015	0	40.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.003	0	62.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.004	0	60.00	0.0013	4.694E-05
Se	78	2	H2	-0.006	0	1.33	0.0004	1.089E-05
Se	78	2	H2	-0.006	0	1.33	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Na	23	3	He	5.312	0.1156	8312.58	0.0017	0.1065
Na	23	3	He	4.429	0.1141	8202.46	0.0017	0.1065
Na	23	3	He	3.842	0.1131	8152.48	0.0017	0.1065
Mg	24	3	He	13.879	0.0165	1190.09	0.0008	0.004846
Mg	24	3	He	13.552	0.0163	1170.09	0.0008	0.004846
Mg	24	3	He	11.853	0.0148	1070.07	0.0008	0.004846
Al	27	3	He	29.007	0.0081	580.03	0.0002	0.001063
Al	27	3	He	30.164	0.0083	600.04	0.0002	0.001063
Al	27	3	He	34.09	0.0093	670.04	0.0002	0.001063
K	39	3	He	18.225	0.1537	11054.44	0.0006	0.1436
K	39	3	He	-2.655	0.1422	10223.86	0.0006	0.1436
K	39	3	He	-6.887	0.1398	10083.75	0.0006	0.1436
Ca	44	3	He	19.766	0.0022	160.01	0	0.001611
Ca	44	3	He	15.298	0.0021	150.01	0	0.001611
Ca	44	3	He	-11.682	0.0012	90.00	0	0.001611
Ti	47	3	He	-0.537	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	1.127	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	2.779	0.001	70.00	0.0003	0.0002737
V	51	3	He	0.631	0.0147	1058.05	0.0117	0.007326
V	51	3	He	0.66	0.015	1082.05	0.0117	0.007326
V	51	3	He	0.794	0.0166	1198.06	0.0117	0.007326
Cr	52	3	He	-0.032	0.0249	1790.18	0.0152	0.02538
Cr	52	3	He	0.068	0.0264	1900.19	0.0152	0.02538
Cr	52	3	He	0.227	0.0288	2080.22	0.0152	0.02538
Mn	55	3	He	-0.462	0.0111	800.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.274	0.0122	880.06	0.0059	0.01385
Mn	55	3	He	-0.091	0.0133	960.06	0.0059	0.01385
Fe	57	3	He	64.233	0.0225	1620.14	0.0003	0.003918
Fe	57	3	He	44.561	0.0168	1210.09	0.0003	0.003918
Fe	57	3	He	42.964	0.0164	1180.08	0.0003	0.003918
Co	59	3	He	0.017	0.0036	260.01	0.0305	0.003084
Co	59	3	He	0.104	0.0063	450.03	0.0305	0.003084
Co	59	3	He	0.103	0.0062	450.03	0.0305	0.003084
Ni	60	3	He	1.348	0.0209	1500.13	0.0088	0.009003
Ni	60	3	He	1.111	0.0188	1350.11	0.0088	0.009003
Ni	60	3	He	1.168	0.0193	1390.11	0.0088	0.009003
Cu	63	3	He	0.376	0.0143	1030.08	0.0249	0.004937
Cu	63	3	He	0.226	0.0106	760.05	0.0249	0.004937
Cu	63	3	He	0.23	0.0107	770.05	0.0249	0.004937
Zn	66	3	He	0.352	0.0057	410.02	0.0025	0.004836
Zn	66	3	He	0.069	0.005	360.02	0.0025	0.004836
Zn	66	3	He	-0.388	0.0039	280.01	0.0025	0.004836
As	75	3	He	0.166	0.0007	52.00	0.0017	0.0004347
As	75	3	He	0.118	0.0006	46.00	0.0017	0.0004347
As	75	3	He	0.085	0.0006	42.00	0.0017	0.0004347
Sr	88	3	He	0.163	0.0021	130.01	0.0078	0.0007762
Sr	88	3	He	0.098	0.0015	100.00	0.0078	0.0007762
Sr	88	3	He	0.157	0.002	130.01	0.0078	0.0007762
Mo	98	3	He	0.407	0.0095	600.05	0.022	0.0005162
Mo	98	3	He	0.425	0.0099	640.03	0.022	0.0005162
Mo	98	3	He	0.333	0.0079	510.02	0.022	0.0005162
Ag	107	3	He	0.018	0.0013	80.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.013	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.58	0.0239	1510.14	0.0143	0.01559
Sn	120	3	He	0.489	0.0226	1460.32	0.0143	0.01559
Sn	120	3	He	0.278	0.0196	1270.10	0.0143	0.01559
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Ba	137	3	He	0.399	0.0021	130.01	0.0044	0.000309
Ba	137	3	He	0.353	0.0019	120.01	0.0044	0.000309
Ba	137	3	He	0.387	0.002	130.01	0.0044	0.000309
Tl	205	3	He	0.017	0.0015	330.02	0.0276	0.001005
Tl	205	3	He	0.025	0.0017	370.02	0.0276	0.001005
Tl	205	3	He	0.02	0.0015	340.02	0.0276	0.001005
Pb	208	3	He	0.314	0.0136	1680.18	0.0364	0.002176
Pb	208	3	He	0.311	0.0135	1690.17	0.0364	0.002176
Pb	208	3	He	0.297	0.013	1580.14	0.0364	0.002176
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.002	0.0003	70.00	0.0421	0.00024
U	238	3	He	0.008	0.0006	130.01	0.0421	0.00024
Sc	45	1	No Gas			3284512.14		
Sc	45	1	No Gas			3247078.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3227224.01		
Ge	72	1	No Gas			1459383.10		
Ge	72	1	No Gas			1446148.42		
Ge	72	1	No Gas			1428175.92		
Sc	45	2	H2			195395.95		
Sc	45	2	H2			194385.39		
Sc	45	2	H2			198272.63		
Ge	72	2	H2			156551.52		
Ge	72	2	H2			158512.61		
Ge	72	2	H2			163244.82		
In	115	2	H2			432933.63		
In	115	2	H2			444628.27		
In	115	2	H2			449660.66		
Sc	45	3	He			41248.87		
Sc	45	3	He			41068.42		
Sc	45	3	He			40787.31		
Ge	72	3	He			71919.96		
Ge	72	3	He			71910.43		
Ge	72	3	He			72110.21		
In	115	3	He			63303.53		
In	115	3	He			64760.26		
In	115	3	He			64951.15		
Tb	159	3	He			283411.32		
Tb	159	3	He			282802.93		
Tb	159	3	He			287547.59		
Bi	209	3	He			224126.91		
Bi	209	3	He			217163.67		
Bi	209	3	He			219794.49		

Quantitation Report

Data File Name	276SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 20:05:12
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

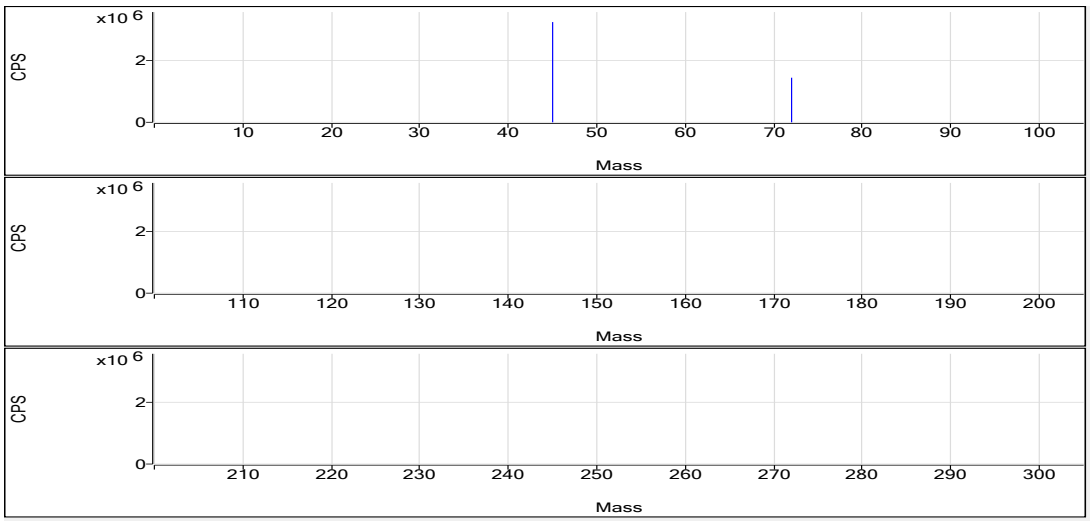
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.003	ppb	N/A	62.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.004	ppb	277.1	2.00	0.0000	Pulse	1.5000	3
Na	23	72	He	2.233	ppb	99.9	8002.39	0.1103	Pulse	0.1000	3
Mg	24	72	He	13.221	ppb	11.0	1160.09	0.0160	Pulse	0.1000	3
Al	27	72	He	30.584	ppb	17.9	613.37	0.0084	Pulse	0.1000	3
K	39	72	He	11.517	ppb	174.1	10881.00	0.1500	Pulse	0.1000	3
Ca	44	72	He	10.142	ppb	186.3	140.01	0.0019	Pulse	0.1000	3
Ti	47	72	He	0.566	ppb	260.8	30.00	0.0004	Pulse	0.1000	3
V	51	72	He	0.599	ppb	5.6	1040.05	0.0143	Pulse	0.5000	3
Cr	52	72	He	0.233	ppb	25.6	2100.22	0.0289	Pulse	0.1000	3
Mn	55	72	He	-0.323	ppb	N/A	866.73	0.0119	Pulse	0.1000	3
Fe	57	72	He	50.833	ppb	20.3	1353.44	0.0186	Pulse	0.1000	3
Co	59	72	He	0.086	ppb	18.6	413.35	0.0057	Pulse	0.1000	3
Ni	60	72	He	0.956	ppb	20.7	1263.44	0.0174	Pulse	0.1000	3
Cu	63	72	He	0.237	ppb	17.9	786.71	0.0108	Pulse	0.1000	3
Zn	66	72	He	0.052	ppb	464.0	360.02	0.0050	Pulse	0.1000	3
As	75	72	He	0.119	ppb	70.7	46.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.098	ppb	73.8	100.00	0.0015	Pulse	0.1000	3
Mo	98	115	He	0.357	ppb	14.4	543.37	0.0084	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	26.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	227.1	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.275	ppb	27.7	1263.44	0.0195	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	4.6	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.271	ppb	22.0	96.67	0.0015	Pulse	0.1000	3
Tl	205	209	He	0.008	ppb	149.7	273.35	0.0012	Pulse	0.1000	3
Pb	208	209	He	0.328	ppb	5.3	3136.94	0.0141	Pulse	0.1000	3
U	238	209	He	0.008	ppb	69.0	126.67	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3236731.51	1.5	99.9	Pulse	0.1000	3
No Gas	Ge	72	1439880.71	1.8	100.0	Pulse	0.1000	3
H2	Sc	45	197565.86	1.0	101.1	Pulse	0.1000	3
H2	Ge	72	160924.02	1.9	98.7	Pulse	0.1000	3
H2	In	115	441995.89	1.7	102.0	Pulse	0.1000	3
He	Sc	45	41425.97	1.1	103.6	Pulse	0.1000	3
He	Ge	72	72569.90	0.9	100.4	Pulse	0.1000	3
He	In	115	64753.83	2.1	100.3	Pulse	0.1000	3
He	Tb	159	283715.93	1.5	99.2	Pulse	0.1000	3
He	Bi	209	221981.29	0.8	99.9	Pulse	0.1000	3

No Gas



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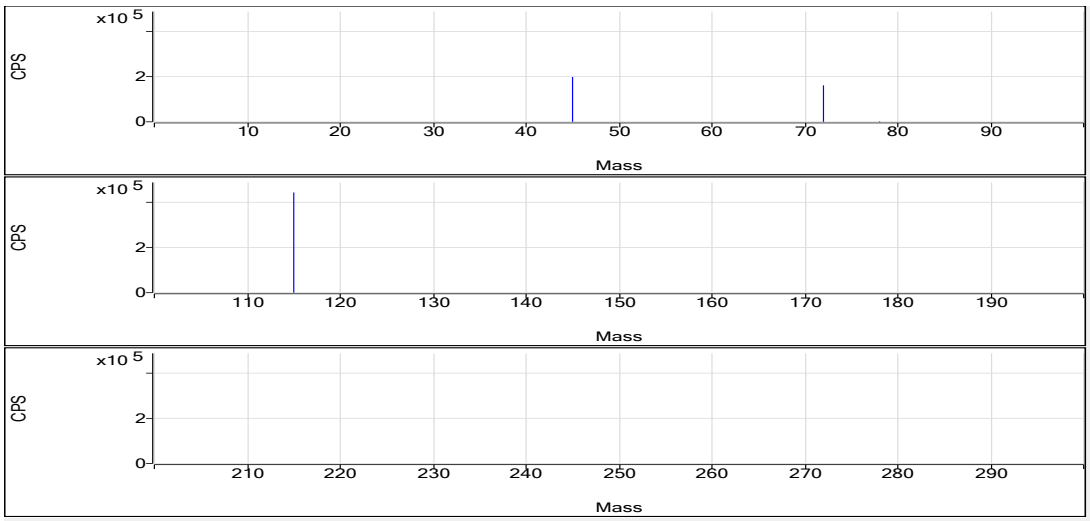
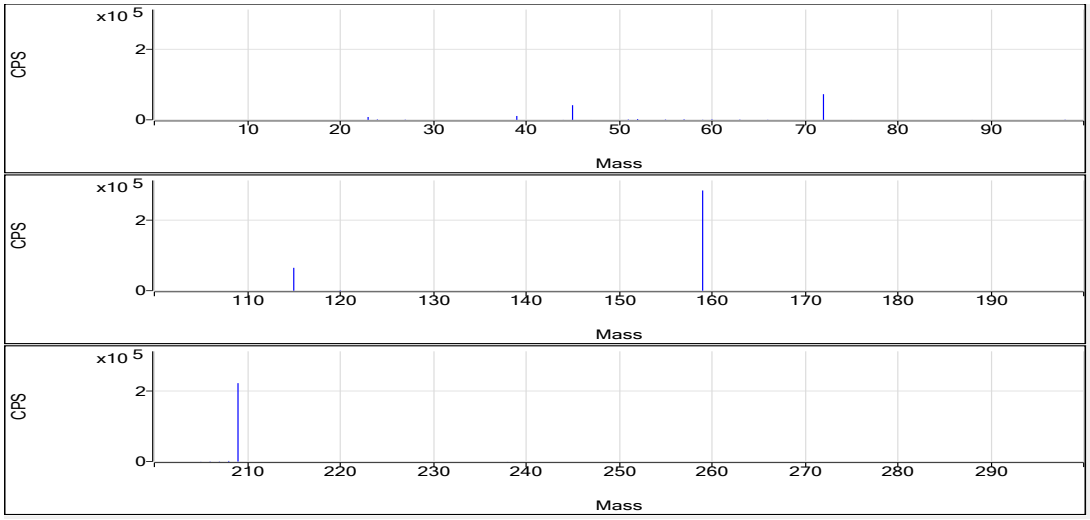


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.011	0	48.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.001	0	66.00	0.0013	4.694E-05
Be	9	1	No Gas	0.003	0.0001	72.00	0.0013	4.694E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.089E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Na	23	3	He	4.666	0.1145	8222.55	0.0017	0.1065
Na	23	3	He	1.75	0.1095	7992.38	0.0017	0.1065
Na	23	3	He	0.282	0.1069	7792.24	0.0017	0.1065
Mg	24	3	He	14.894	0.0174	1250.10	0.0008	0.004846
Mg	24	3	He	12.285	0.0152	1110.08	0.0008	0.004846
Mg	24	3	He	12.485	0.0154	1120.09	0.0008	0.004846
Al	27	3	He	25.011	0.0071	510.02	0.0002	0.001063
Al	27	3	He	30.776	0.0085	620.04	0.0002	0.001063
Al	27	3	He	35.966	0.0097	710.04	0.0002	0.001063
K	39	3	He	34.218	0.1625	11675.00	0.0006	0.1436
K	39	3	He	4.123	0.1459	10654.16	0.0006	0.1436
K	39	3	He	-3.79	0.1415	10313.85	0.0006	0.1436
Ca	44	3	He	-11.52	0.0013	90.01	0	0.001611
Ca	44	3	He	18.691	0.0022	160.01	0	0.001611
Ca	44	3	He	23.256	0.0023	170.01	0	0.001611
Ti	47	3	He	2.239	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	-0.545	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	0.003	0.0003	20.00	0.0003	0.0002737
V	51	3	He	0.623	0.0146	1050.05	0.0117	0.007326
V	51	3	He	0.561	0.0139	1014.04	0.0117	0.007326
V	51	3	He	0.613	0.0145	1056.05	0.0117	0.007326
Cr	52	3	He	0.18	0.0281	2020.21	0.0152	0.02538
Cr	52	3	He	0.222	0.0288	2100.22	0.0152	0.02538
Cr	52	3	He	0.298	0.0299	2180.24	0.0152	0.02538
Mn	55	3	He	-0.248	0.0124	890.07	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.56	0.0105	770.05	0.0059	0.01385
Mn	55	3	He	-0.161	0.0129	940.06	0.0059	0.01385
Fe	57	3	He	48.471	0.018	1290.10	0.0003	0.003918
Fe	57	3	He	62.121	0.0219	1600.14	0.0003	0.003918
Fe	57	3	He	41.906	0.0161	1170.09	0.0003	0.003918
Co	59	3	He	0.086	0.0057	410.02	0.0305	0.003084
Co	59	3	He	0.069	0.0052	380.02	0.0305	0.003084
Co	59	3	He	0.101	0.0062	450.02	0.0305	0.003084
Ni	60	3	He	0.94	0.0173	1240.10	0.0088	0.009003
Ni	60	3	He	0.767	0.0158	1150.09	0.0088	0.009003
Ni	60	3	He	1.161	0.0192	1400.12	0.0088	0.009003
Cu	63	3	He	0.282	0.012	860.05	0.0249	0.004937
Cu	63	3	He	0.23	0.0107	780.05	0.0249	0.004937
Cu	63	3	He	0.198	0.0099	720.04	0.0249	0.004937
Zn	66	3	He	0.298	0.0056	400.02	0.0025	0.004836
Zn	66	3	He	-0.185	0.0044	320.01	0.0025	0.004836
Zn	66	3	He	0.043	0.0049	360.02	0.0025	0.004836
As	75	3	He	0.038	0.0005	36.00	0.0017	0.0004347
As	75	3	He	0.207	0.0008	58.00	0.0017	0.0004347
As	75	3	He	0.113	0.0006	46.00	0.0017	0.0004347
Sr	88	3	He	0.041	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	0.074	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.18	0.0022	140.01	0.0078	0.0007762
Mo	98	3	He	0.339	0.008	510.03	0.022	0.0005162
Mo	98	3	He	0.415	0.0097	640.04	0.022	0.0005162
Mo	98	3	He	0.317	0.0075	480.03	0.022	0.0005162
Ag	107	3	He	-0.01	0	0.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.014	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.191	0.0183	1170.10	0.0143	0.01559
Sn	120	3	He	0.293	0.0198	1310.11	0.0143	0.01559
Sn	120	3	He	0.34	0.0204	1310.11	0.0143	0.01559
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.287	0.0016	100.00	0.0044	0.000309
Ba	137	3	He	0.205	0.0012	80.00	0.0044	0.000309
Ba	137	3	He	0.322	0.0017	110.00	0.0044	0.000309
Tl	205	3	He	-0.005	0.0009	190.01	0.0276	0.001005
Tl	205	3	He	0.019	0.0015	340.02	0.0276	0.001005
Tl	205	3	He	0.011	0.0013	290.01	0.0276	0.001005
Pb	208	3	He	0.314	0.0136	1650.17	0.0364	0.002176
Pb	208	3	He	0.347	0.0148	1970.21	0.0364	0.002176
Pb	208	3	He	0.324	0.014	1650.17	0.0364	0.002176
U	238	3	He	0.003	0.0004	80.00	0.0421	0.00024
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
Sc	45	1	No Gas			3270504.01		
Sc	45	1	No Gas			3258926.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3180764.02		
Ge	72	1	No Gas			1451874.04		
Ge	72	1	No Gas			1458007.95		
Ge	72	1	No Gas			1409760.14		
Sc	45	2	H2			195701.05		
Sc	45	2	H2			199541.75		
Sc	45	2	H2			197454.78		
Ge	72	2	H2			157532.97		
Ge	72	2	H2			163651.49		
Ge	72	2	H2			161587.60		
In	115	2	H2			433477.53		
In	115	2	H2			447079.95		
In	115	2	H2			445430.19		
Sc	45	3	He			41599.69		
Sc	45	3	He			41750.13		
Sc	45	3	He			40928.08		
Ge	72	3	He			71830.11		
Ge	72	3	He			73014.99		
Ge	72	3	He			72864.60		
In	115	3	He			63886.92		
In	115	3	He			66297.31		
In	115	3	He			64106.83		
Tb	159	3	He			280105.80		
Tb	159	3	He			282719.35		
Tb	159	3	He			288322.63		
Bi	209	3	He			220822.93		
Bi	209	3	He			224056.23		
Bi	209	3	He			221064.70		

Quantitation Report

Data File Name	277_CCV.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 20:07:12
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

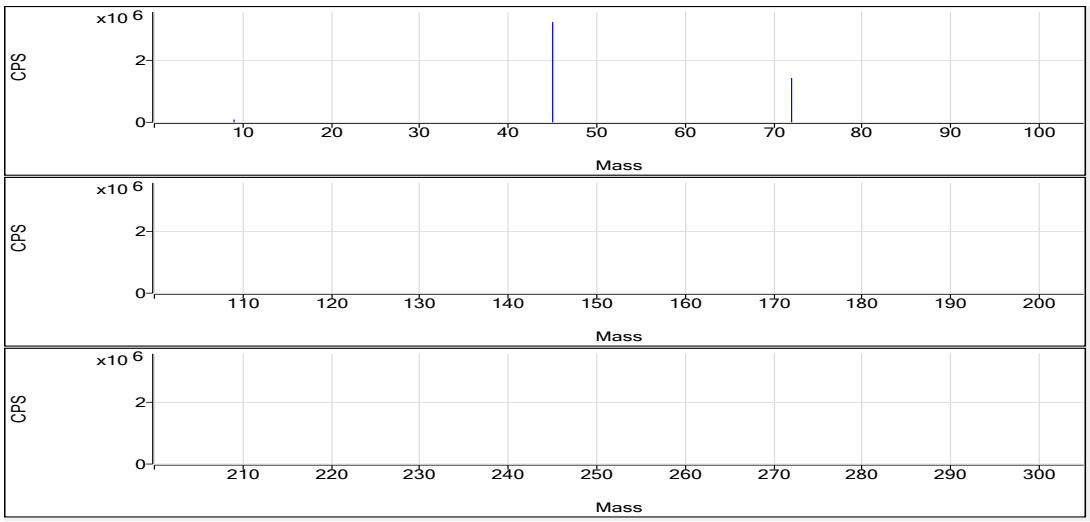
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	48.536	ppb	7.0	92120.98	0.0638	Pulse	0.5000	3
Se	78	72	H2	51.404	ppb	3.8	3271.27	0.0200	Pulse	1.5000	3
Na	23	72	He	5152.331	ppb	2.2	668774.39	8.9572	Pulse	0.1000	3
Mg	24	72	He	5139.198	ppb	2.7	323844.77	4.3377	Pulse	0.1000	3
Al	27	72	He	5043.003	ppb	2.5	90967.77	1.2184	Pulse	0.1000	3
K	39	72	He	5152.562	ppb	2.3	223171.74	2.9889	Pulse	0.1000	3
Ca	44	72	He	5158.597	ppb	5.0	12078.71	0.1618	Pulse	0.1000	3
Ti	47	72	He	5218.846	ppb	1.4	97758.79	1.3091	Pulse	0.1000	3
V	51	72	He	514.354	ppb	2.6	449749.27	6.0241	Pulse	0.5000	3
Cr	52	72	He	515.362	ppb	2.3	587812.92	7.8729	Pulse	0.1000	3
Mn	55	72	He	512.684	ppb	2.6	226964.04	3.0399	Pulse	0.1000	3
Fe	57	72	He	5139.780	ppb	2.8	111461.69	1.4930	Pulse	0.1000	3
Co	59	72	He	514.364	ppb	2.6	1171888.97	15.6966	Pulse	0.1000	3
Ni	60	72	He	518.290	ppb	1.6	340979.50	4.5665	Pulse	0.1000	3
Cu	63	72	He	512.632	ppb	2.7	954767.15	12.7885	Pulse	0.1000	3
Zn	66	72	He	516.221	ppb	3.0	95051.90	1.2731	Pulse	0.1000	3
As	75	72	He	509.178	ppb	2.7	66146.57	0.8860	Pulse	0.5000	3
Sr	88	115	He	51.555	ppb	1.9	26191.51	0.4038	Pulse	0.1000	3
Mo	98	115	He	51.940	ppb	2.2	74191.24	1.1443	Pulse	0.1000	3
Ag	107	115	He	51.034	ppb	2.3	150578.43	2.3225	Pulse	0.1000	3
Cd	111	115	He	51.428	ppb	3.0	16007.82	0.2469	Pulse	0.5000	3
Sn	120	115	He	51.403	ppb	2.2	48528.62	0.7485	Pulse	0.1000	3
Sb	121	115	He	51.762	ppb	0.5	41656.43	0.6424	Pulse	0.1000	3
Ba	137	115	He	515.767	ppb	1.4	146326.23	2.2567	Pulse	0.1000	3
Tl	205	209	He	52.308	ppb	1.5	319582.07	1.4470	Pulse	0.1000	3
Pb	208	209	He	52.353	ppb	1.7	421312.68	1.9077	Pulse	0.1000	3
U	238	209	He	51.931	ppb	1.1	482552.78	2.1849	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3267784.85	2.6	100.8	Pulse	0.1000	3
No Gas	Ge	72	1444973.94	2.4	100.4	Pulse	0.1000	3
H2	Sc	45	198402.71	2.2	101.5	Pulse	0.1000	3
H2	Ge	72	163443.54	3.1	100.3	Pulse	0.1000	3
H2	In	115	440126.52	3.5	101.6	Pulse	0.1000	3
He	Sc	45	41108.41	1.3	102.8	Pulse	0.1000	3
He	Ge	72	74687.08	2.2	103.3	Pulse	0.1000	3
He	In	115	64850.66	1.7	100.4	Pulse	0.1000	3
He	Tb	159	286315.58	0.7	100.1	Pulse	0.1000	3
He	Bi	209	220881.52	1.3	99.4	Pulse	0.1000	3

No Gas



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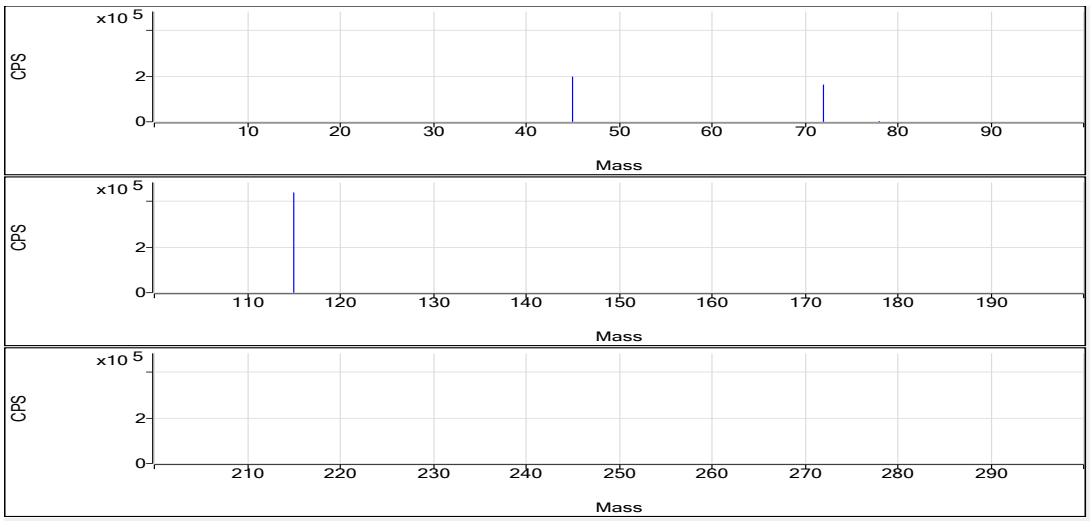
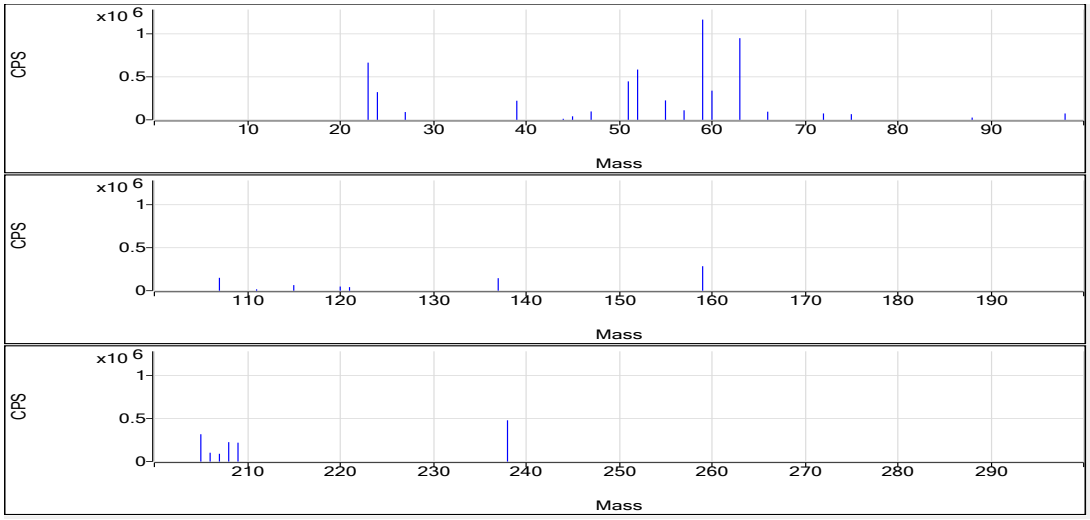


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.167	0.0594	87740.73	0.0013	4.694E-05
Be	9	1	No Gas	48.455	0.0637	92400.26	0.0013	4.694E-05
Be	9	1	No Gas	51.985	0.0684	96221.95	0.0013	4.694E-05
Se	78	2	H2	53.417	0.0208	3358.40	0.0004	1.089E-05
Se	78	2	H2	49.572	0.0193	3266.38	0.0004	1.089E-05
Se	78	2	H2	51.224	0.02	3189.03	0.0004	1.089E-05
Na	23	3	He	5204.726	9.0472	670226.79	0.0017	0.1065
Na	23	3	He	5232.062	9.0942	667853.51	0.0017	0.1065
Na	23	3	He	5020.205	8.7303	668242.88	0.0017	0.1065
Mg	24	3	He	5183.526	4.3751	324109.64	0.0008	0.004846
Mg	24	3	He	5248.759	4.4301	325333.28	0.0008	0.004846
Mg	24	3	He	4985.31	4.208	322091.38	0.0008	0.004846
Al	27	3	He	5054.968	1.2213	90475.03	0.0002	0.001063
Al	27	3	He	5161.719	1.2471	91581.56	0.0002	0.001063
Al	27	3	He	4912.321	1.1869	90846.71	0.0002	0.001063
K	39	3	He	5134.654	2.9791	220690.80	0.0006	0.1436
K	39	3	He	5278.552	3.0585	224609.35	0.0006	0.1436
K	39	3	He	5044.479	2.9293	224215.06	0.0006	0.1436
Ca	44	3	He	5165.689	0.1621	12005.27	0	0.001611
Ca	44	3	He	5413.266	0.1697	12465.70	0	0.001611
Ca	44	3	He	4896.837	0.1537	11765.15	0	0.001611
Ti	47	3	He	5299.331	1.3292	98470.83	0.0003	0.0002737
Ti	47	3	He	5195.429	1.3032	95701.97	0.0003	0.0002737
Ti	47	3	He	5161.777	1.2947	99103.58	0.0003	0.0002737
V	51	3	He	519.544	6.0848	450768.38	0.0117	0.007326
V	51	3	He	524.599	6.144	451195.44	0.0117	0.007326
V	51	3	He	498.919	5.8435	447284.00	0.0117	0.007326
Cr	52	3	He	520.446	7.9504	588968.82	0.0152	0.02538
Cr	52	3	He	523.617	7.9986	587398.47	0.0152	0.02538
Cr	52	3	He	502.022	7.6698	587071.48	0.0152	0.02538
Mn	55	3	He	511.819	3.0348	224822.32	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	526.35	3.1206	229168.08	0.0059	0.01385
Mn	55	3	He	499.881	2.9644	226901.72	0.0059	0.01385
Fe	57	3	He	5207.242	1.5125	112049.52	0.0003	0.003918
Fe	57	3	He	5236.898	1.5211	111707.21	0.0003	0.003918
Fe	57	3	He	4975.2	1.4453	110628.35	0.0003	0.003918
Co	59	3	He	521.639	15.9186	1179258.89	0.0305	0.003084
Co	59	3	He	522.662	15.9498	1171306.39	0.0305	0.003084
Co	59	3	He	498.792	15.2215	1165101.62	0.0305	0.003084
Ni	60	3	He	520.66	4.5873	339832.18	0.0088	0.009003
Ni	60	3	He	524.978	4.6253	339669.06	0.0088	0.009003
Ni	60	3	He	509.233	4.4868	343437.26	0.0088	0.009003
Cu	63	3	He	519.094	12.9496	959319.83	0.0249	0.004937
Cu	63	3	He	521.793	13.017	955929.60	0.0249	0.004937
Cu	63	3	He	497.009	12.3989	949052.02	0.0249	0.004937
Zn	66	3	He	532.351	1.3127	97245.67	0.0025	0.004836
Zn	66	3	He	515.223	1.2706	93310.79	0.0025	0.004836
Zn	66	3	He	501.088	1.2359	94599.24	0.0025	0.004836
As	75	3	He	517.894	0.9011	66757.23	0.0017	0.0004347
As	75	3	He	516.08	0.898	65945.72	0.0017	0.0004347
As	75	3	He	493.559	0.8588	65736.75	0.0017	0.0004347
Sr	88	3	He	51.986	0.4072	26505.27	0.0078	0.0007762
Sr	88	3	He	50.421	0.3949	25142.98	0.0078	0.0007762
Sr	88	3	He	52.259	0.4093	26926.29	0.0078	0.0007762
Mo	98	3	He	51.823	1.1417	74325.10	0.022	0.0005162
Mo	98	3	He	53.14	1.1707	74536.48	0.022	0.0005162
Mo	98	3	He	50.856	1.1205	73712.14	0.022	0.0005162
Ag	107	3	He	51.012	2.3215	151125.79	0.0455	0.0004641
Ag	107	3	He	52.232	2.377	151336.17	0.0455	0.0004641
Ag	107	3	He	49.858	2.269	149273.33	0.0455	0.0004641
Cd	111	3	He	50.618	0.243	15820.93	0.0048	5.152E-05
Cd	111	3	He	53.218	0.2555	16267.46	0.0048	5.152E-05
Cd	111	3	He	50.448	0.2422	15935.07	0.0048	5.152E-05
Sn	120	3	He	50.798	0.7399	48163.50	0.0143	0.01559
Sn	120	3	He	52.729	0.7674	48856.68	0.0143	0.01559
Sn	120	3	He	50.683	0.7382	48565.67	0.0143	0.01559
Sb	121	3	He	51.982	0.6451	41994.05	0.0124	0.000258
Sb	121	3	He	51.805	0.6429	40930.96	0.0124	0.000258
Sb	121	3	He	51.498	0.6391	42044.28	0.0124	0.000258
Ba	137	3	He	511.433	2.2377	145671.39	0.0044	0.000309
Ba	137	3	He	524.034	2.2928	145976.88	0.0044	0.000309
Ba	137	3	He	511.835	2.2395	147330.43	0.0044	0.000309
Tl	205	3	He	53.187	1.4713	320381.83	0.0276	0.001005
Tl	205	3	He	51.686	1.4298	317248.69	0.0276	0.001005
Tl	205	3	He	52.05	1.4399	321115.70	0.0276	0.001005
Pb	208	3	He	53.31	1.9425	227821.64	0.0364	0.002176
Pb	208	3	He	52.195	1.9019	227244.59	0.0364	0.002176
Pb	208	3	He	51.554	1.8786	225654.49	0.0364	0.002176
U	238	3	He	52.512	2.2093	481078.08	0.0421	0.00024
U	238	3	He	51.897	2.1834	484447.53	0.0421	0.00024
U	238	3	He	51.385	2.1619	482132.73	0.0421	0.00024
Sc	45	1	No Gas			3347453.39		
Sc	45	1	No Gas			3279264.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3176636.83		
Ge	72	1	No Gas			1477149.67		
Ge	72	1	No Gas			1450130.45		
Ge	72	1	No Gas			1407641.70		
Sc	45	2	H2			194341.42		
Sc	45	2	H2			203098.75		
Sc	45	2	H2			197767.97		
Ge	72	2	H2			161388.15		
Ge	72	2	H2			169134.67		
Ge	72	2	H2			159807.81		
In	115	2	H2			425170.38		
In	115	2	H2			456112.61		
In	115	2	H2			439096.56		
Sc	45	3	He			41649.82		
Sc	45	3	He			40626.97		
Sc	45	3	He			41048.45		
Ge	72	3	He			74080.76		
Ge	72	3	He			73437.28		
Ge	72	3	He			76543.20		
In	115	3	He			65473.76		
In	115	3	He			64047.25		
In	115	3	He			66166.55		
Tb	159	3	He			286823.37		
Tb	159	3	He			284074.04		
Tb	159	3	He			288049.33		
Bi	209	3	He			217752.50		
Bi	209	3	He			221877.69		
Bi	209	3	He			223014.37		

Quantitation Report

Data File Name	278_CCB.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 20:09:13
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

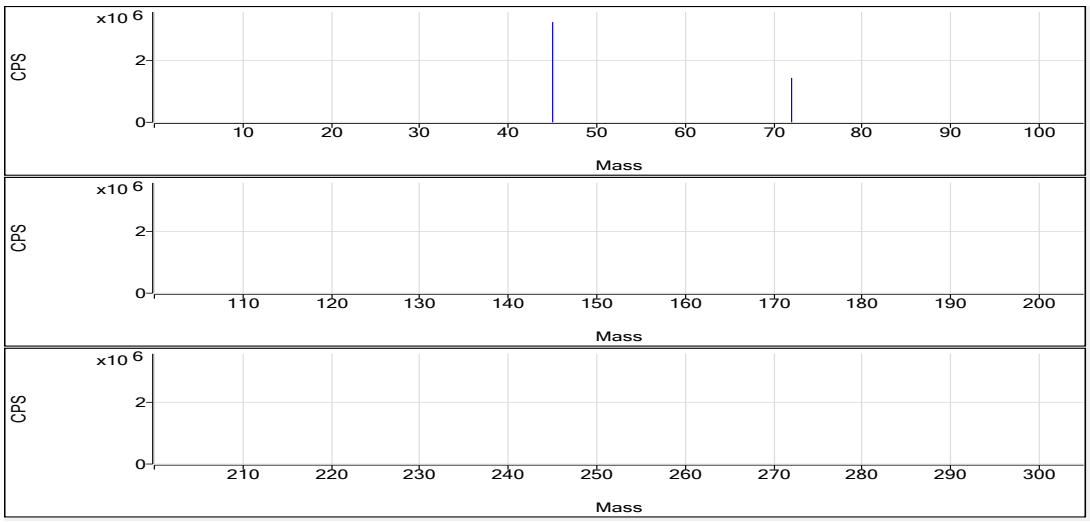
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.025	ppb	20.7	113.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.061	ppb	68.8	5.56	0.0000	Pulse	1.5000	3
Na	23	72	He	3.212	ppb	25.4	8145.86	0.1120	Pulse	0.1000	3
Mg	24	72	He	12.461	ppb	5.3	1116.75	0.0154	Pulse	0.1000	3
Al	27	72	He	27.297	ppb	4.9	556.70	0.0077	Pulse	0.1000	3
K	39	72	He	1.645	ppb	933.2	10514.12	0.1445	Pulse	0.1000	3
Ca	44	72	He	8.743	ppb	300.5	136.67	0.0019	Pulse	0.1000	3
Ti	47	72	He	1.464	ppb	56.7	46.67	0.0006	Pulse	0.1000	3
V	51	72	He	0.679	ppb	14.4	1110.72	0.0153	Pulse	0.5000	3
Cr	52	72	He	0.140	ppb	199.4	2000.21	0.0275	Pulse	0.1000	3
Mn	55	72	He	-0.445	ppb	N/A	816.72	0.0112	Pulse	0.1000	3
Fe	57	72	He	43.241	ppb	12.3	1196.76	0.0164	Pulse	0.1000	3
Co	59	72	He	0.153	ppb	15.5	563.37	0.0077	Pulse	0.1000	3
Ni	60	72	He	1.193	ppb	33.4	1416.79	0.0195	Pulse	0.1000	3
Cu	63	72	He	0.217	ppb	3.1	753.38	0.0104	Pulse	0.1000	3
Zn	66	72	He	-0.047	ppb	N/A	343.35	0.0047	Pulse	0.1000	3
As	75	72	He	0.093	ppb	86.7	43.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.146	ppb	24.4	123.34	0.0019	Pulse	0.1000	3
Mo	98	115	He	0.275	ppb	8.5	423.35	0.0066	Pulse	0.1000	3
Ag	107	115	He	0.012	ppb	38.1	66.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	77.9	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.253	ppb	25.4	1236.77	0.0192	Pulse	0.1000	3
Sb	121	115	He	0.042	ppb	53.7	50.00	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.379	ppb	18.9	126.67	0.0020	Pulse	0.1000	3
Tl	205	209	He	0.111	ppb	47.5	913.40	0.0041	Pulse	0.1000	3
Pb	208	209	He	0.270	ppb	10.0	2676.89	0.0120	Pulse	0.1000	3
U	238	209	He	0.015	ppb	36.8	190.01	0.0009	Pulse	0.1000	3

ISTD Table:

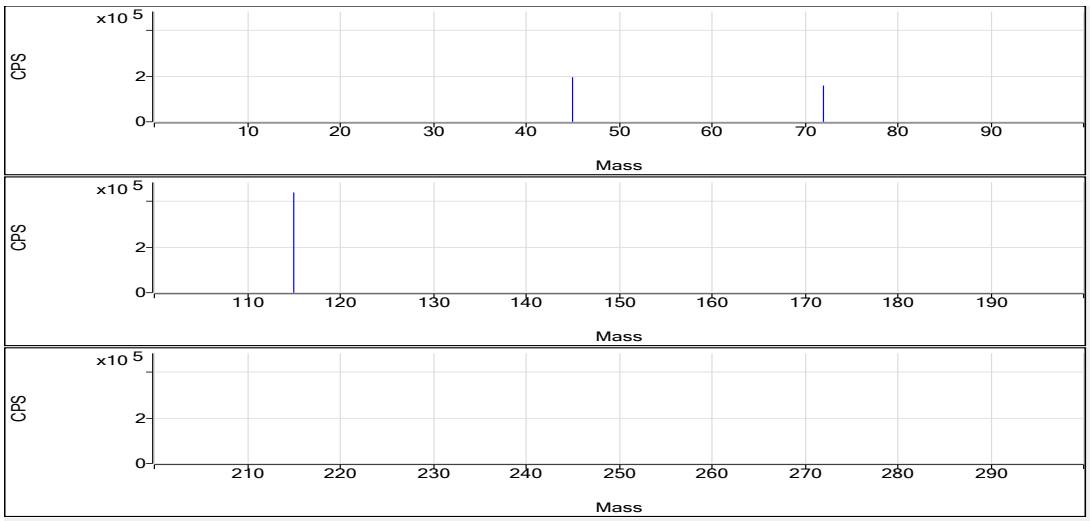
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3221276.93	2.2	99.4	Pulse	0.1000	3
No Gas	Ge	72	1427681.44	1.7	99.2	Pulse	0.1000	3
H2	Sc	45	195425.86	2.0	100.0	Pulse	0.1000	3
H2	Ge	72	158858.54	2.1	97.5	Pulse	0.1000	3
H2	In	115	439474.84	2.1	101.4	Pulse	0.1000	3
He	Sc	45	41466.13	1.1	103.7	Pulse	0.1000	3
He	Ge	72	72743.70	0.7	100.6	Pulse	0.1000	3
He	In	115	64372.09	2.1	99.7	Pulse	0.1000	3
He	Tb	159	281792.03	0.3	98.5	Pulse	0.1000	3
He	Bi	209	222890.15	1.4	100.3	Pulse	0.1000	3

No Gas

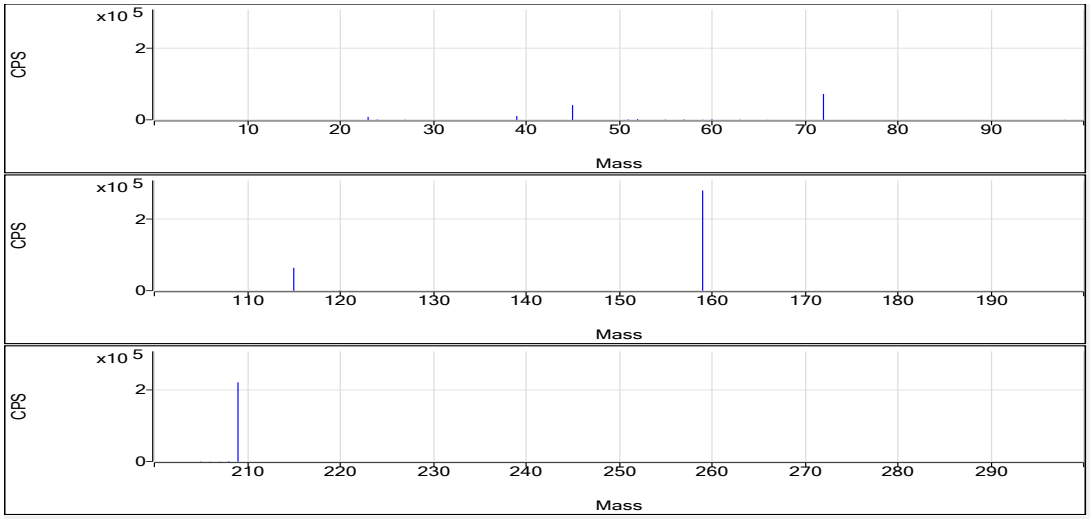


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.021	0.0001	108.00	0.0013	4.694E-05
Be	9	1	No Gas	0.022	0.0001	110.00	0.0013	4.694E-05
Be	9	1	No Gas	0.031	0.0001	122.00	0.0013	4.694E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.1	0	8.00	0.0004	1.089E-05
Se	78	2	H2	0.068	0	6.00	0.0004	1.089E-05
Na	23	3	He	2.736	0.1112	8082.51	0.0017	0.1065
Na	23	3	He	2.746	0.1112	8032.47	0.0017	0.1065
Na	23	3	He	4.155	0.1136	8322.60	0.0017	0.1065
Mg	24	3	He	11.707	0.0147	1070.08	0.0008	0.004846
Mg	24	3	He	12.968	0.0158	1140.09	0.0008	0.004846
Mg	24	3	He	12.709	0.0156	1140.08	0.0008	0.004846
Al	27	3	He	28.643	0.008	580.03	0.0002	0.001063
Al	27	3	He	25.987	0.0073	530.03	0.0002	0.001063
Al	27	3	He	27.263	0.0076	560.03	0.0002	0.001063
K	39	3	He	18.679	0.154	11194.66	0.0006	0.1436
K	39	3	He	-2.618	0.1422	10273.81	0.0006	0.1436
K	39	3	He	-11.126	0.1375	10073.88	0.0006	0.1436
Ca	44	3	He	18.984	0.0022	160.01	0	0.001611
Ca	44	3	He	28.349	0.0025	180.01	0	0.001611
Ca	44	3	He	-21.104	0.001	70.00	0	0.001611
Ti	47	3	He	2.199	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	0.564	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	1.63	0.0007	50.00	0.0003	0.0002737
V	51	3	He	0.77	0.0163	1188.06	0.0117	0.007326
V	51	3	He	0.692	0.0154	1114.05	0.0117	0.007326
V	51	3	He	0.576	0.0141	1030.04	0.0117	0.007326
Cr	52	3	He	0.338	0.0305	2220.25	0.0152	0.02538
Cr	52	3	He	0.26	0.0293	2120.23	0.0152	0.02538
Cr	52	3	He	-0.179	0.0227	1660.15	0.0152	0.02538
Mn	55	3	He	-0.576	0.0105	760.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.494	0.0109	790.06	0.0059	0.01385
Mn	55	3	He	-0.266	0.0123	900.06	0.0059	0.01385
Fe	57	3	He	45.818	0.0172	1250.09	0.0003	0.003918
Fe	57	3	He	37.12	0.0147	1060.08	0.0003	0.003918
Fe	57	3	He	46.785	0.0175	1280.10	0.0003	0.003918
Co	59	3	He	0.178	0.0085	620.04	0.0305	0.003084
Co	59	3	He	0.148	0.0076	550.03	0.0305	0.003084
Co	59	3	He	0.132	0.0071	520.03	0.0305	0.003084
Ni	60	3	He	1.197	0.0195	1420.12	0.0088	0.009003
Ni	60	3	He	1.589	0.023	1660.16	0.0088	0.009003
Ni	60	3	He	0.792	0.016	1170.08	0.0088	0.009003
Cu	63	3	He	0.21	0.0102	740.05	0.0249	0.004937
Cu	63	3	He	0.218	0.0104	750.05	0.0249	0.004937
Cu	63	3	He	0.223	0.0105	770.05	0.0249	0.004937
Zn	66	3	He	-0.289	0.0041	300.01	0.0025	0.004836
Zn	66	3	He	0.229	0.0054	390.02	0.0025	0.004836
Zn	66	3	He	-0.08	0.0046	340.02	0.0025	0.004836
As	75	3	He	0.177	0.0007	54.00	0.0017	0.0004347
As	75	3	He	0.084	0.0006	42.00	0.0017	0.0004347
As	75	3	He	0.017	0.0005	34.00	0.0017	0.0004347
Sr	88	3	He	0.139	0.0019	120.00	0.0078	0.0007762
Sr	88	3	He	0.185	0.0022	140.01	0.0078	0.0007762
Sr	88	3	He	0.115	0.0017	110.00	0.0078	0.0007762
Mo	98	3	He	0.265	0.0064	410.02	0.022	0.0005162
Mo	98	3	He	0.258	0.0062	390.02	0.022	0.0005162
Mo	98	3	He	0.302	0.0072	470.02	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.017	0.0012	80.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Sn	120	3	He	0.223	0.0188	1210.10	0.0143	0.01559
Sn	120	3	He	0.21	0.0186	1170.09	0.0143	0.01559
Sn	120	3	He	0.327	0.0203	1330.11	0.0143	0.01559
Sb	121	3	He	0.054	0.0009	60.00	0.0124	0.000258
Sb	121	3	He	0.056	0.001	60.00	0.0124	0.000258
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.461	0.0023	150.01	0.0044	0.000309
Ba	137	3	He	0.329	0.0017	110.00	0.0044	0.000309
Ba	137	3	He	0.347	0.0018	120.01	0.0044	0.000309
Tl	205	3	He	0.172	0.0058	1300.11	0.0276	0.001005
Tl	205	3	He	0.086	0.0034	760.05	0.0276	0.001005
Tl	205	3	He	0.076	0.0031	680.04	0.0276	0.001005
Pb	208	3	He	0.291	0.0128	1630.18	0.0364	0.002176
Pb	208	3	He	0.24	0.0109	1240.10	0.0364	0.002176
Pb	208	3	He	0.279	0.0123	1480.16	0.0364	0.002176
U	238	3	He	0.009	0.0006	140.01	0.0421	0.00024
U	238	3	He	0.02	0.0011	240.01	0.0421	0.00024
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
Sc	45	1	No Gas			3285890.89		
Sc	45	1	No Gas			3232769.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3145169.95		
Ge	72	1	No Gas			1442724.20		
Ge	72	1	No Gas			1440872.95		
Ge	72	1	No Gas			1399447.17		
Sc	45	2	H2			192304.78		
Sc	45	2	H2			199803.40		
Sc	45	2	H2			194169.41		
Ge	72	2	H2			154926.07		
Ge	72	2	H2			160720.08		
Ge	72	2	H2			160929.48		
In	115	2	H2			429536.83		
In	115	2	H2			447126.17		
In	115	2	H2			441761.52		
Sc	45	3	He			40988.25		
Sc	45	3	He			41850.51		
Sc	45	3	He			41559.64		
Ge	72	3	He			72713.62		
Ge	72	3	He			72251.41		
Ge	72	3	He			73266.08		
In	115	3	He			64508.41		
In	115	3	He			62961.93		
In	115	3	He			65674.86		
Tb	159	3	He			282394.08		
Tb	159	3	He			282090.78		
Tb	159	3	He			280891.23		
Bi	209	3	He			225366.36		
Bi	209	3	He			223812.81		
Bi	209	3	He			219491.29		

Quantitation Report

Data File Name	279SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 20:11:13
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

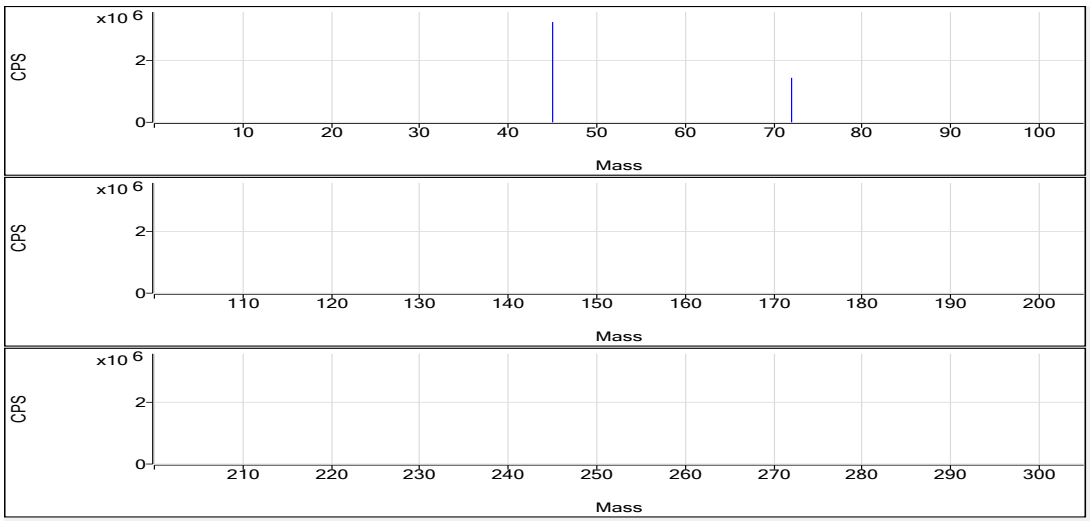
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.001	ppb	781.5	68.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.011	ppb	216.5	2.44	0.0000	Pulse	1.5000	3
Na	23	72	He	4.079	ppb	47.0	8165.88	0.1135	Pulse	0.1000	3
Mg	24	72	He	10.906	ppb	17.8	1010.07	0.0140	Pulse	0.1000	3
Al	27	72	He	30.310	ppb	21.5	603.36	0.0084	Pulse	0.1000	3
K	39	72	He	11.537	ppb	78.0	10790.96	0.1500	Pulse	0.1000	3
Ca	44	72	He	10.743	ppb	78.6	140.01	0.0019	Pulse	0.1000	3
Ti	47	72	He	1.303	ppb	62.4	43.33	0.0006	Pulse	0.1000	3
V	51	72	He	0.586	ppb	6.3	1020.71	0.0142	Pulse	0.5000	3
Cr	52	72	He	0.214	ppb	47.7	2060.22	0.0286	Pulse	0.1000	3
Mn	55	72	He	-0.394	ppb	N/A	830.05	0.0115	Pulse	0.1000	3
Fe	57	72	He	41.671	ppb	19.8	1150.09	0.0160	Pulse	0.1000	3
Co	59	72	He	0.111	ppb	32.7	466.69	0.0065	Pulse	0.1000	3
Ni	60	72	He	1.210	ppb	15.3	1413.46	0.0196	Pulse	0.1000	3
Cu	63	72	He	0.200	ppb	24.2	713.38	0.0099	Pulse	0.1000	3
Zn	66	72	He	0.071	ppb	448.3	360.02	0.0050	Pulse	0.1000	3
As	75	72	He	-0.015	ppb	N/A	29.33	0.0004	Pulse	0.5000	3
Sr	88	115	He	0.120	ppb	50.8	110.00	0.0017	Pulse	0.1000	3
Mo	98	115	He	0.286	ppb	16.8	436.69	0.0068	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	99.9	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	86.3	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.281	ppb	62.2	1256.80	0.0196	Pulse	0.1000	3
Sb	121	115	He	0.004	ppb	288.6	20.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.334	ppb	41.0	113.34	0.0018	Pulse	0.1000	3
Tl	205	209	He	0.040	ppb	5.7	466.70	0.0021	Pulse	0.1000	3
Pb	208	209	He	0.268	ppb	6.5	2626.86	0.0119	Pulse	0.1000	3
U	238	209	He	0.005	ppb	41.1	103.34	0.0005	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3231833.91	1.5	99.7	Pulse	0.1000	3
No Gas	Ge	72	1434600.71	1.8	99.6	Pulse	0.1000	3
H2	Sc	45	195792.56	2.9	100.2	Pulse	0.1000	3
H2	Ge	72	159141.86	2.4	97.6	Pulse	0.1000	3
H2	In	115	441249.03	2.4	101.8	Pulse	0.1000	3
He	Sc	45	41800.35	1.0	104.5	Pulse	0.1000	3
He	Ge	72	71953.48	1.3	99.5	Pulse	0.1000	3
He	In	115	64127.55	0.7	99.3	Pulse	0.1000	3
He	Tb	159	284831.26	0.8	99.6	Pulse	0.1000	3
He	Bi	209	220012.86	0.3	99.0	Pulse	0.1000	3

No Gas



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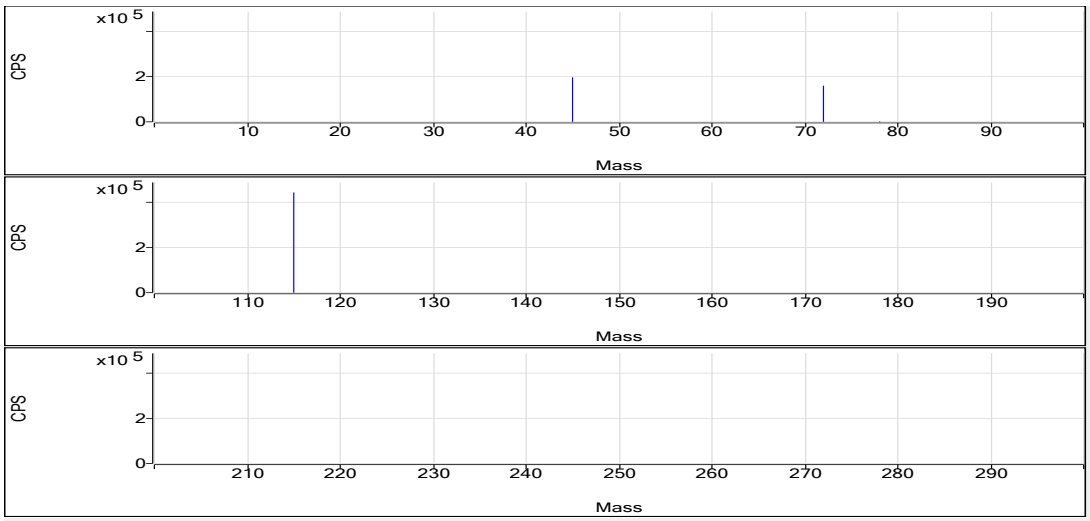
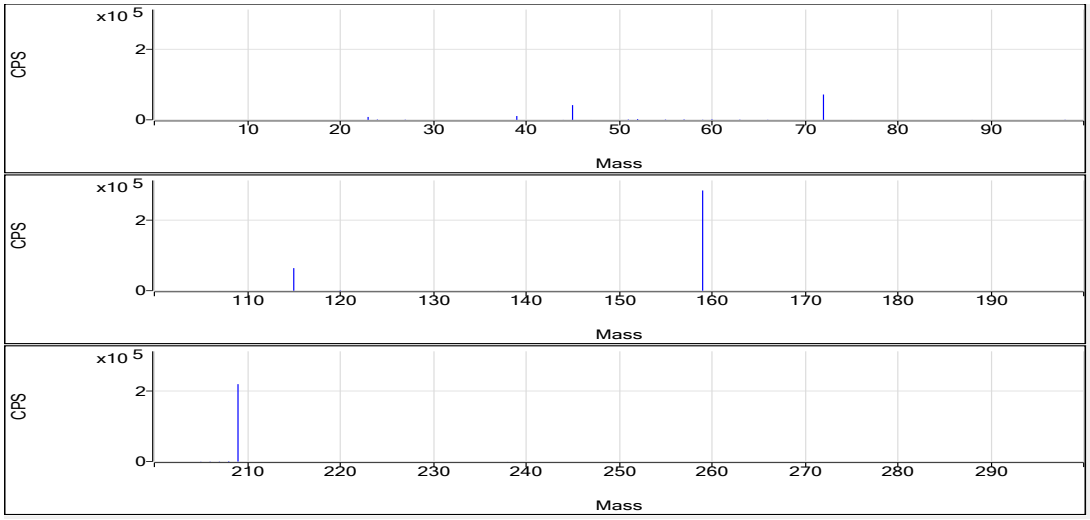


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.005	0	60.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.001	0	66.00	0.0013	4.694E-05
Be	9	1	No Gas	0.007	0.0001	80.00	0.0013	4.694E-05
Se	78	2	H2	0.027	0	3.33	0.0004	1.089E-05
Se	78	2	H2	0.024	0	3.33	0.0004	1.089E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.089E-05
Na	23	3	He	3.143	0.1119	7952.51	0.0017	0.1065
Na	23	3	He	2.81	0.1113	7992.39	0.0017	0.1065
Na	23	3	He	6.284	0.1173	8552.74	0.0017	0.1065
Mg	24	3	He	12.605	0.0155	1100.08	0.0008	0.004846
Mg	24	3	He	8.786	0.0123	880.06	0.0008	0.004846
Mg	24	3	He	11.327	0.0144	1050.08	0.0008	0.004846
Al	27	3	He	23.567	0.0068	480.02	0.0002	0.001063
Al	27	3	He	36.553	0.0099	710.04	0.0002	0.001063
Al	27	3	He	30.81	0.0085	620.03	0.0002	0.001063
K	39	3	He	21.45	0.1555	11054.45	0.0006	0.1436
K	39	3	He	9.277	0.1488	10684.19	0.0006	0.1436
K	39	3	He	3.884	0.1458	10634.23	0.0006	0.1436
Ca	44	3	He	11.538	0.002	140.01	0	0.001611
Ca	44	3	He	1.93	0.0017	120.00	0	0.001611
Ca	44	3	He	18.76	0.0022	160.01	0	0.001611
Ti	47	3	He	0.591	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	1.129	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	2.188	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.557	0.0138	984.04	0.0117	0.007326
V	51	3	He	0.574	0.014	1008.04	0.0117	0.007326
V	51	3	He	0.628	0.0147	1070.05	0.0117	0.007326
Cr	52	3	He	0.31	0.0301	2140.24	0.0152	0.02538
Cr	52	3	He	0.226	0.0288	2070.21	0.0152	0.02538
Cr	52	3	He	0.107	0.027	1970.21	0.0152	0.02538
Mn	55	3	He	-0.584	0.0104	740.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.342	0.0118	850.05	0.0059	0.01385
Mn	55	3	He	-0.257	0.0123	900.06	0.0059	0.01385
Fe	57	3	He	49.597	0.0183	1300.12	0.0003	0.003918
Fe	57	3	He	33.098	0.0135	970.06	0.0003	0.003918
Fe	57	3	He	42.318	0.0162	1180.08	0.0003	0.003918
Co	59	3	He	0.069	0.0052	370.01	0.0305	0.003084
Co	59	3	He	0.136	0.0072	520.03	0.0305	0.003084
Co	59	3	He	0.128	0.007	510.03	0.0305	0.003084
Ni	60	3	He	1.264	0.0201	1430.12	0.0088	0.009003
Ni	60	3	He	1.003	0.0178	1280.10	0.0088	0.009003
Ni	60	3	He	1.362	0.021	1530.15	0.0088	0.009003
Cu	63	3	He	0.163	0.009	640.04	0.0249	0.004937
Cu	63	3	He	0.254	0.0113	810.05	0.0249	0.004937
Cu	63	3	He	0.181	0.0095	690.04	0.0249	0.004937
Zn	66	3	He	0.264	0.0055	390.02	0.0025	0.004836
Zn	66	3	He	0.242	0.0054	390.02	0.0025	0.004836
Zn	66	3	He	-0.294	0.0041	300.01	0.0025	0.004836
As	75	3	He	-0.023	0.0004	28.00	0.0017	0.0004347
As	75	3	He	0.038	0.0005	36.00	0.0017	0.0004347
As	75	3	He	-0.061	0.0003	24.00	0.0017	0.0004347
Sr	88	3	He	0.121	0.0017	110.01	0.0078	0.0007762
Sr	88	3	He	0.181	0.0022	140.00	0.0078	0.0007762
Sr	88	3	He	0.059	0.0012	80.00	0.0078	0.0007762
Mo	98	3	He	0.239	0.0058	370.02	0.022	0.0005162
Mo	98	3	He	0.283	0.0067	430.02	0.022	0.0005162
Mo	98	3	He	0.335	0.0079	510.03	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Sn	120	3	He	0.244	0.0191	1220.11	0.0143	0.01559
Sn	120	3	He	0.127	0.0174	1110.15	0.0143	0.01559
Sn	120	3	He	0.47	0.0223	1440.14	0.0143	0.01559
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.004	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Ba	137	3	He	0.429	0.0022	140.01	0.0044	0.000309
Ba	137	3	He	0.395	0.002	130.01	0.0044	0.000309
Ba	137	3	He	0.177	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	0.041	0.0021	470.03	0.0276	0.001005
Tl	205	3	He	0.042	0.0022	480.03	0.0276	0.001005
Tl	205	3	He	0.038	0.0021	450.03	0.0276	0.001005
Pb	208	3	He	0.277	0.0123	1540.15	0.0364	0.002176
Pb	208	3	He	0.279	0.0123	1260.10	0.0364	0.002176
Pb	208	3	He	0.248	0.0112	1230.10	0.0364	0.002176
U	238	3	He	0.003	0.0004	80.00	0.0421	0.00024
U	238	3	He	0.007	0.0005	120.01	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.01	0.0421	0.00024
Sc	45	1	No Gas			3285720.89		
Sc	45	1	No Gas			3215251.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3194529.01		
Ge	72	1	No Gas			1463219.51		
Ge	72	1	No Gas			1426355.29		
Ge	72	1	No Gas			1414227.32		
Sc	45	2	H2			190928.83		
Sc	45	2	H2			201974.88		
Sc	45	2	H2			194473.96		
Ge	72	2	H2			155461.49		
Ge	72	2	H2			163135.71		
Ge	72	2	H2			158828.38		
In	115	2	H2			435460.46		
In	115	2	H2			453695.23		
In	115	2	H2			434591.40		
Sc	45	3	He			41639.68		
Sc	45	3	He			41479.36		
Sc	45	3	He			42282.01		
Ge	72	3	He			71096.32		
Ge	72	3	He			71819.74		
Ge	72	3	He			72944.38		
In	115	3	He			64006.76		
In	115	3	He			63795.51		
In	115	3	He			64609.79		
Tb	159	3	He			285358.08		
Tb	159	3	He			282376.85		
Tb	159	3	He			286758.84		
Bi	209	3	He			220089.98		
Bi	209	3	He			220528.20		
Bi	209	3	He			219420.41		

Quantitation Report

Data File Name	280SMPL.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 20:13:14
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

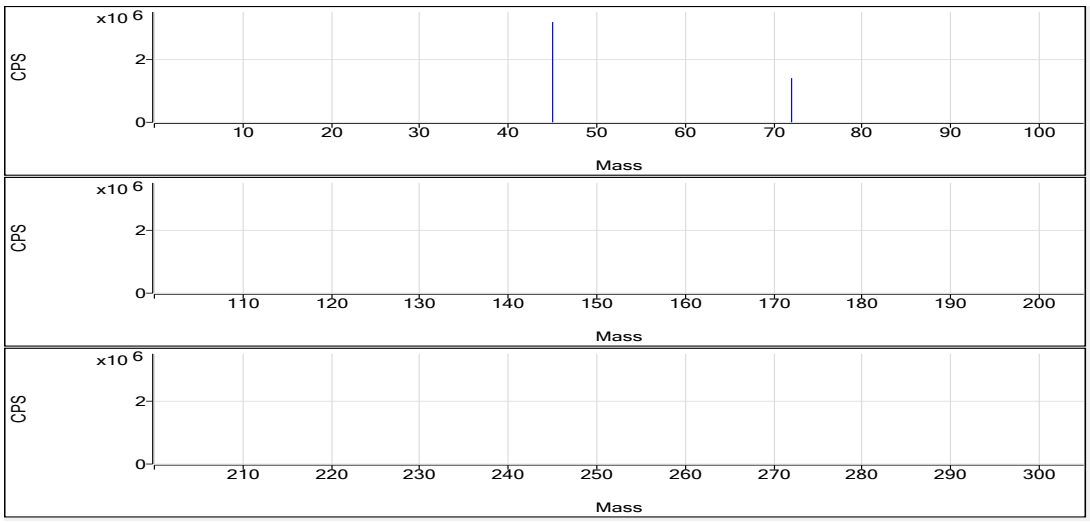
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.007	ppb	N/A	54.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.037	ppb	60.2	4.00	0.0000	Pulse	1.5000	3
Na	23	72	He	2.032	ppb	133.4	8059.11	0.1099	Pulse	0.1000	3
Mg	24	72	He	11.192	ppb	14.3	1046.74	0.0143	Pulse	0.1000	3
Al	27	72	He	26.662	ppb	15.8	550.03	0.0075	Pulse	0.1000	3
K	39	72	He	12.538	ppb	81.9	11037.79	0.1506	Pulse	0.1000	3
Ca	44	72	He	16.925	ppb	52.3	156.68	0.0021	Pulse	0.1000	3
Ti	47	72	He	1.263	ppb	98.5	43.33	0.0006	Pulse	0.1000	3
V	51	72	He	0.475	ppb	2.9	944.04	0.0129	Pulse	0.5000	3
Cr	52	72	He	0.142	ppb	93.3	2020.22	0.0276	Pulse	0.1000	3
Mn	55	72	He	-0.389	ppb	N/A	846.73	0.0116	Pulse	0.1000	3
Fe	57	72	He	45.969	ppb	4.2	1263.43	0.0172	Pulse	0.1000	3
Co	59	72	He	0.078	ppb	41.6	400.02	0.0055	Pulse	0.1000	3
Ni	60	72	He	0.901	ppb	35.7	1240.10	0.0169	Pulse	0.1000	3
Cu	63	72	He	0.223	ppb	19.8	770.05	0.0105	Pulse	0.1000	3
Zn	66	72	He	0.143	ppb	287.3	380.02	0.0052	Pulse	0.1000	3
As	75	72	He	0.095	ppb	123.0	44.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.079	ppb	114.8	90.00	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.275	ppb	10.2	423.35	0.0066	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	127.2	46.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	171.6	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.073	ppb	43.6	1070.07	0.0166	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	151.3	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.189	ppb	70.3	73.33	0.0011	Pulse	0.1000	3
Tl	205	209	He	0.026	ppb	42.3	376.68	0.0017	Pulse	0.1000	3
Pb	208	209	He	0.277	ppb	12.5	2693.56	0.0123	Pulse	0.1000	3
U	238	209	He	0.009	ppb	48.0	136.67	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3206386.10	1.3	98.9	Pulse	0.1000	3
No Gas	Ge	72	1412461.64	0.9	98.1	Pulse	0.1000	3
H2	Sc	45	195575.36	2.9	100.1	Pulse	0.1000	3
H2	Ge	72	159357.71	1.7	97.8	Pulse	0.1000	3
H2	In	115	442022.72	2.8	102.0	Pulse	0.1000	3
He	Sc	45	41435.89	1.1	103.6	Pulse	0.1000	3
He	Ge	72	73303.48	0.7	101.4	Pulse	0.1000	3
He	In	115	64343.64	1.9	99.6	Pulse	0.1000	3
He	Tb	159	283399.97	0.7	99.1	Pulse	0.1000	3
He	Bi	209	219531.94	0.3	98.8	Pulse	0.1000	3

No Gas



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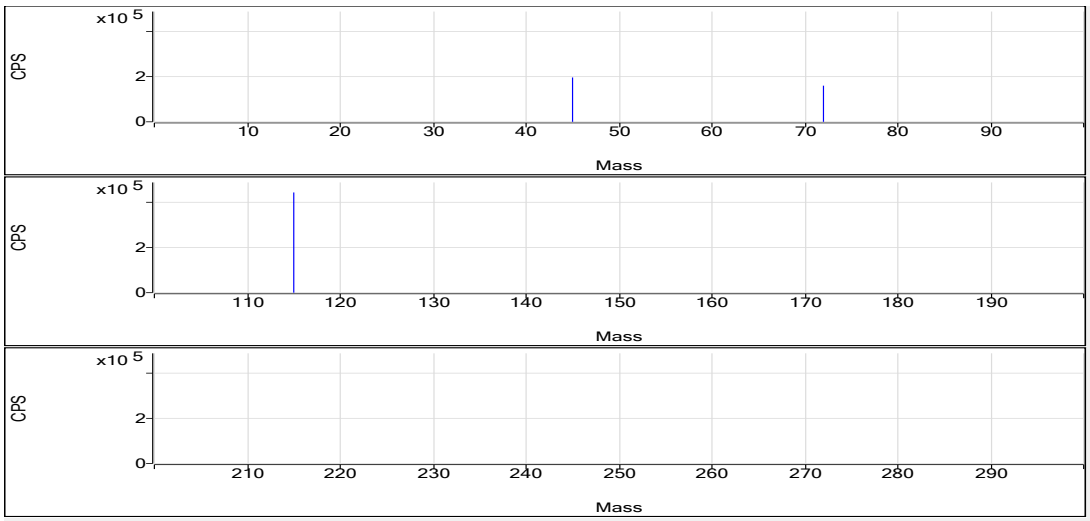
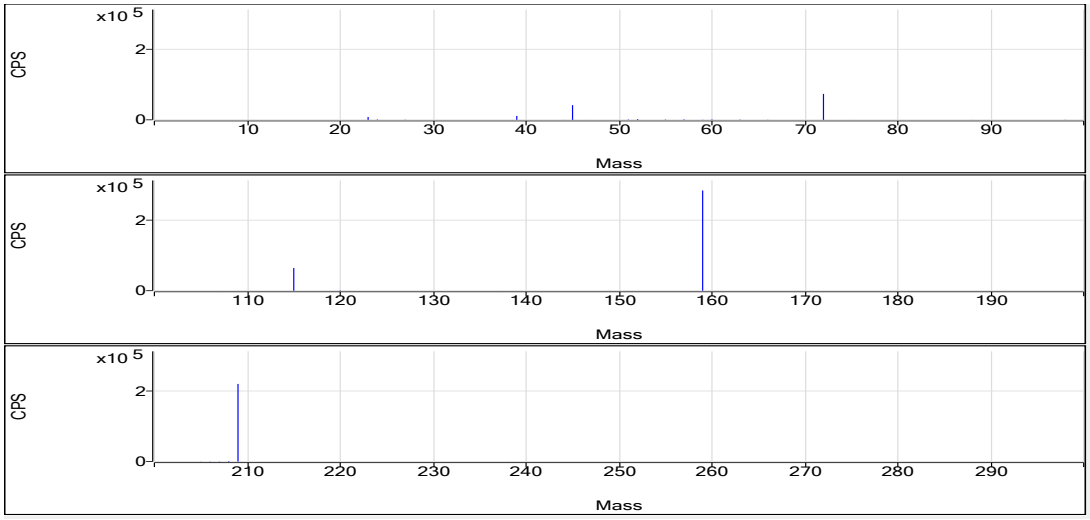


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.002	0	64.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.011	0	46.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	52.00	0.0013	4.694E-05
Se	78	2	H2	0.015	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.059	0	5.33	0.0004	1.089E-05
Na	23	3	He	4.535	0.1142	8402.65	0.0017	0.1065
Na	23	3	He	2.406	0.1106	8042.47	0.0017	0.1065
Na	23	3	He	-0.847	0.105	7732.21	0.0017	0.1065
Mg	24	3	He	12.477	0.0154	1130.08	0.0008	0.004846
Mg	24	3	He	11.705	0.0147	1070.07	0.0008	0.004846
Mg	24	3	He	9.394	0.0128	940.08	0.0008	0.004846
Al	27	3	He	28.831	0.008	590.04	0.0002	0.001063
Al	27	3	He	21.802	0.0063	460.02	0.0002	0.001063
Al	27	3	He	29.353	0.0081	600.04	0.0002	0.001063
K	39	3	He	24.381	0.1571	11554.76	0.0006	0.1436
K	39	3	He	6.18	0.1471	10694.21	0.0006	0.1436
K	39	3	He	7.054	0.1475	10864.39	0.0006	0.1436
Ca	44	3	He	26.935	0.0024	180.01	0	0.001611
Ca	44	3	He	10.12	0.0019	140.01	0	0.001611
Ca	44	3	He	13.722	0.002	150.01	0	0.001611
Ti	47	3	He	0.535	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	0.553	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	2.699	0.001	70.00	0.0003	0.0002737
V	51	3	He	0.487	0.013	958.04	0.0117	0.007326
V	51	3	He	0.46	0.0127	924.04	0.0117	0.007326
V	51	3	He	0.477	0.0129	950.04	0.0117	0.007326
Cr	52	3	He	0.155	0.0277	2040.22	0.0152	0.02538
Cr	52	3	He	0.004	0.0254	1850.18	0.0152	0.02538
Cr	52	3	He	0.268	0.0295	2170.25	0.0152	0.02538
Mn	55	3	He	-0.159	0.0129	950.07	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.227	0.0125	910.07	0.0059	0.01385
Mn	55	3	He	-0.783	0.0092	680.04	0.0059	0.01385
Fe	57	3	He	47.961	0.0178	1310.10	0.0003	0.003918
Fe	57	3	He	45.81	0.0172	1250.09	0.0003	0.003918
Fe	57	3	He	44.135	0.0167	1230.09	0.0003	0.003918
Co	59	3	He	0.046	0.0045	330.01	0.0305	0.003084
Co	59	3	He	0.111	0.0065	470.02	0.0305	0.003084
Co	59	3	He	0.077	0.0054	400.02	0.0305	0.003084
Ni	60	3	He	0.584	0.0141	1040.07	0.0088	0.009003
Ni	60	3	He	1.228	0.0198	1440.12	0.0088	0.009003
Ni	60	3	He	0.891	0.0168	1240.10	0.0088	0.009003
Cu	63	3	He	0.227	0.0106	780.05	0.0249	0.004937
Cu	63	3	He	0.177	0.0094	680.04	0.0249	0.004937
Cu	63	3	He	0.265	0.0115	850.05	0.0249	0.004937
Zn	66	3	He	-0.308	0.0041	300.01	0.0025	0.004836
Zn	66	3	He	0.494	0.0061	440.02	0.0025	0.004836
Zn	66	3	He	0.243	0.0054	400.02	0.0025	0.004836
As	75	3	He	0.11	0.0006	46.00	0.0017	0.0004347
As	75	3	He	-0.029	0.0004	28.00	0.0017	0.0004347
As	75	3	He	0.203	0.0008	58.00	0.0017	0.0004347
Sr	88	3	He	0.002	0.0008	50.00	0.0078	0.0007762
Sr	88	3	He	0.18	0.0022	140.01	0.0078	0.0007762
Sr	88	3	He	0.057	0.0012	80.00	0.0078	0.0007762
Mo	98	3	He	0.278	0.0066	420.02	0.022	0.0005162
Mo	98	3	He	0.246	0.0059	380.02	0.022	0.0005162
Mo	98	3	He	0.302	0.0072	470.02	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.003	0.0006	40.00	0.0455	0.0004641
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.06	0.0164	1040.07	0.0143	0.01559
Sn	120	3	He	0.11	0.0172	1100.07	0.0143	0.01559
Sn	120	3	He	0.05	0.0163	1070.08	0.0143	0.01559
Sb	121	3	He	0.043	0.0008	50.00	0.0124	0.000258
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.016	0.0005	30.00	0.0124	0.000258
Ba	137	3	He	0.255	0.0014	90.00	0.0044	0.000309
Ba	137	3	He	0.036	0.0005	30.00	0.0044	0.000309
Ba	137	3	He	0.278	0.0015	100.00	0.0044	0.000309
Tl	205	3	He	0.026	0.0017	380.02	0.0276	0.001005
Tl	205	3	He	0.036	0.002	440.02	0.0276	0.001005
Tl	205	3	He	0.015	0.0014	310.01	0.0276	0.001005
Pb	208	3	He	0.306	0.0133	1580.15	0.0364	0.002176
Pb	208	3	He	0.287	0.0126	1620.16	0.0364	0.002176
Pb	208	3	He	0.239	0.0109	1310.12	0.0364	0.002176
U	238	3	He	0.005	0.0005	100.00	0.0421	0.00024
U	238	3	He	0.008	0.0006	130.01	0.0421	0.00024
U	238	3	He	0.014	0.0008	180.01	0.0421	0.00024
Sc	45	1	No Gas			3250603.39		
Sc	45	1	No Gas			3166526.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3202028.08		
Ge	72	1	No Gas			1427427.63		
Ge	72	1	No Gas			1404411.23		
Ge	72	1	No Gas			1405546.07		
Sc	45	2	H2			191355.39		
Sc	45	2	H2			202053.30		
Sc	45	2	H2			193317.38		
Ge	72	2	H2			158828.13		
Ge	72	2	H2			162275.11		
Ge	72	2	H2			156969.88		
In	115	2	H2			429603.16		
In	115	2	H2			454524.80		
In	115	2	H2			441940.19		
Sc	45	3	He			41208.48		
Sc	45	3	He			41950.78		
Sc	45	3	He			41148.42		
Ge	72	3	He			73548.37		
Ge	72	3	He			72723.32		
Ge	72	3	He			73638.76		
In	115	3	He			63253.38		
In	115	3	He			64148.10		
In	115	3	He			65654.48		
Tb	159	3	He			285742.91		
Tb	159	3	He			282187.46		
Tb	159	3	He			282269.53		
Bi	209	3	He			219971.19		
Bi	209	3	He			218769.08		
Bi	209	3	He			219855.54		

Quantitation Report

Data File Name	281SMPL.d
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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

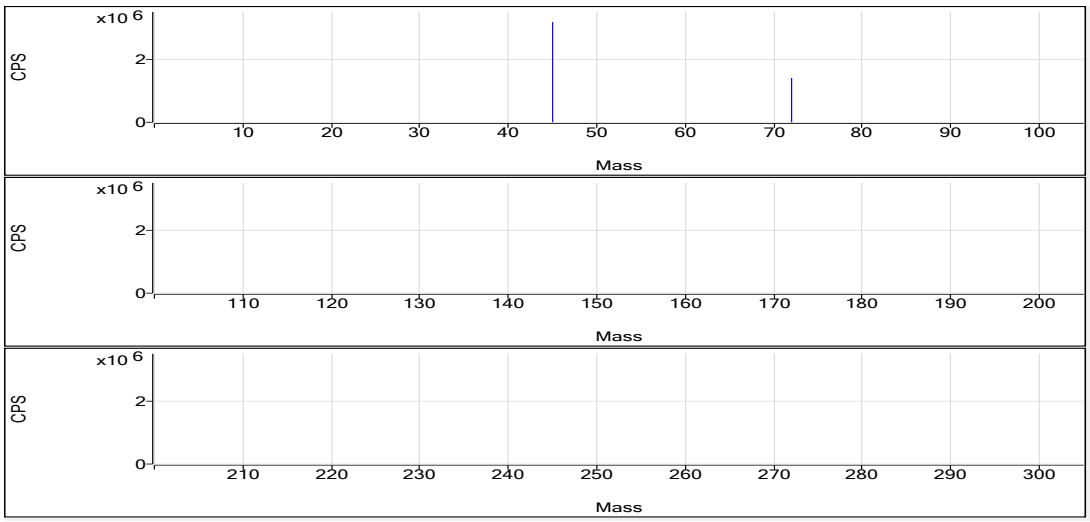
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.005	ppb	N/A	56.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.022	ppb	155.7	3.11	0.0000	Pulse	1.5000	3
Na	23	72	He	4.211	ppb	33.7	8179.21	0.1137	Pulse	0.1000	3
Mg	24	72	He	9.259	ppb	18.3	910.06	0.0127	Pulse	0.1000	3
Al	27	72	He	22.851	ppb	12.7	473.36	0.0066	Pulse	0.1000	3
K	39	72	He	12.887	ppb	166.8	10844.37	0.1508	Pulse	0.1000	3
Ca	44	72	He	15.277	ppb	163.2	150.00	0.0021	Pulse	0.1000	3
Ti	47	72	He	1.677	ppb	119.0	50.00	0.0007	Pulse	0.1000	3
V	51	72	He	0.557	ppb	7.1	996.04	0.0138	Pulse	0.5000	3
Cr	52	72	He	0.256	ppb	16.9	2106.89	0.0293	Pulse	0.1000	3
Mn	55	72	He	-0.322	ppb	N/A	860.05	0.0120	Pulse	0.1000	3
Fe	57	72	He	36.220	ppb	8.3	1036.73	0.0144	Pulse	0.1000	3
Co	59	72	He	0.083	ppb	28.9	403.36	0.0056	Pulse	0.1000	3
Ni	60	72	He	1.068	ppb	5.1	1323.45	0.0184	Pulse	0.1000	3
Cu	63	72	He	0.196	ppb	33.1	706.71	0.0098	Pulse	0.1000	3
Zn	66	72	He	0.181	ppb	133.4	380.02	0.0053	Pulse	0.1000	3
As	75	72	He	0.086	ppb	201.5	42.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.088	ppb	9.8	93.33	0.0015	Pulse	0.1000	3
Mo	98	115	He	0.226	ppb	10.0	350.02	0.0055	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	15.1	66.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	277.8	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.143	ppb	224.4	1126.78	0.0176	Pulse	0.1000	3
Sb	121	115	He	0.008	ppb	220.5	23.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.346	ppb	27.7	116.67	0.0018	Pulse	0.1000	3
Tl	205	209	He	0.015	ppb	46.5	310.02	0.0014	Pulse	0.1000	3
Pb	208	209	He	0.254	ppb	5.9	2503.52	0.0114	Pulse	0.1000	3
U	238	209	He	0.008	ppb	22.5	123.34	0.0006	Pulse	0.1000	3

ISTD Table:

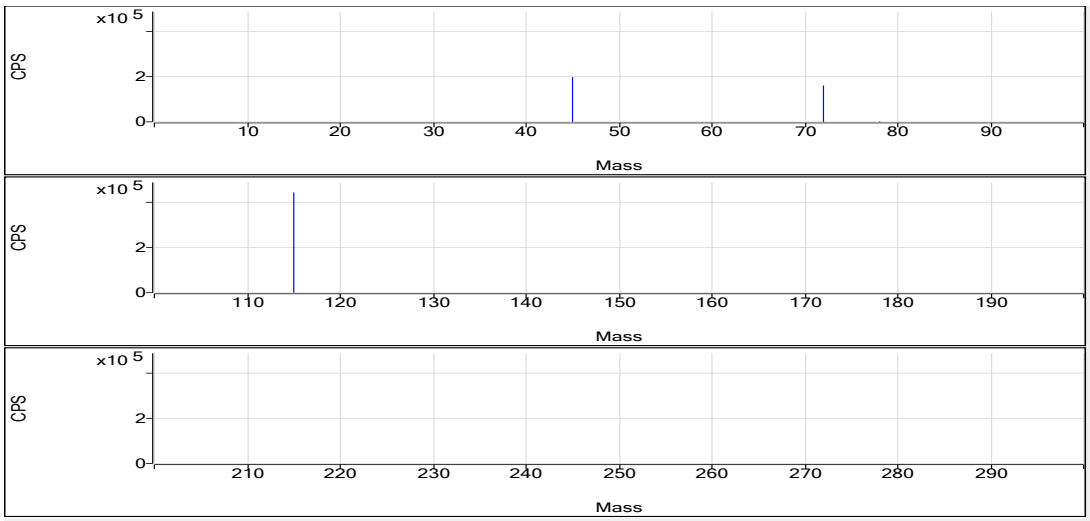
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3204860.68	1.8	98.9	Pulse	0.1000	3
No Gas	Ge	72	1418050.55	1.8	98.5	Pulse	0.1000	3
H2	Sc	45	197325.63	1.7	101.0	Pulse	0.1000	3
H2	Ge	72	159963.83	2.3	98.1	Pulse	0.1000	3
H2	In	115	442043.47	2.8	102.0	Pulse	0.1000	3
He	Sc	45	41696.58	0.9	104.3	Pulse	0.1000	3
He	Ge	72	71943.68	0.3	99.5	Pulse	0.1000	3
He	In	115	63787.17	1.6	98.8	Pulse	0.1000	3
He	Tb	159	283478.35	0.6	99.1	Pulse	0.1000	3
He	Bi	209	219190.91	1.1	98.6	Pulse	0.1000	3

No Gas

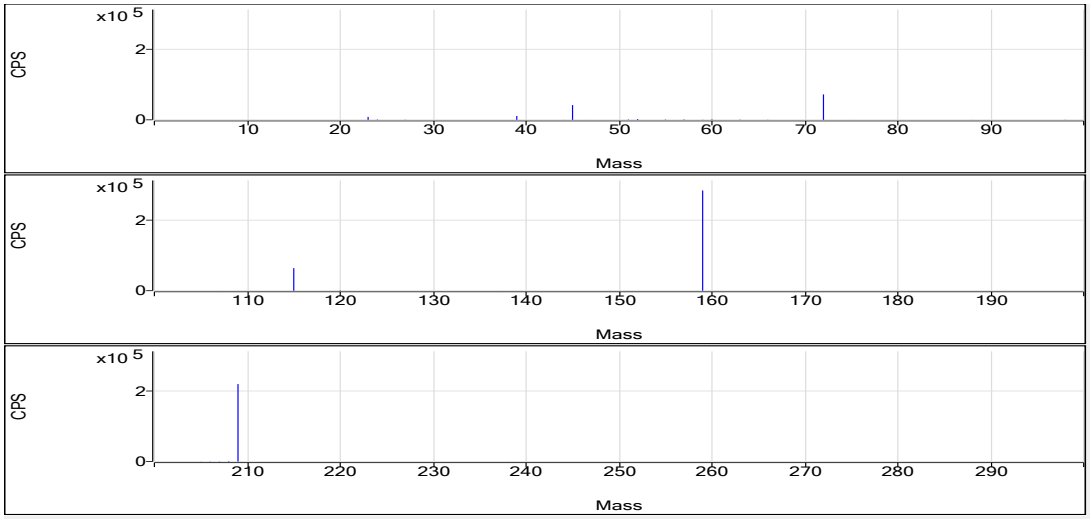


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.008	0	52.00	0.0013	4.694E-05
Be	9	1	No Gas	0.002	0	70.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.01	0	48.00	0.0013	4.694E-05
Se	78	2	H2	0.037	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.045	0	4.67	0.0004	1.089E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.089E-05
Na	23	3	He	5.258	0.1155	8282.65	0.0017	0.1065
Na	23	3	He	2.594	0.1109	7982.40	0.0017	0.1065
Na	23	3	He	4.782	0.1147	8272.58	0.0017	0.1065
Mg	24	3	He	10.957	0.0141	1010.07	0.0008	0.004846
Mg	24	3	He	9.25	0.0126	910.05	0.0008	0.004846
Mg	24	3	He	7.57	0.0112	810.05	0.0008	0.004846
Al	27	3	He	22.169	0.0064	460.02	0.0002	0.001063
Al	27	3	He	20.349	0.006	430.02	0.0002	0.001063
Al	27	3	He	26.033	0.0073	530.03	0.0002	0.001063
K	39	3	He	33.667	0.1622	11635.09	0.0006	0.1436
K	39	3	He	14.251	0.1515	10904.33	0.0006	0.1436
K	39	3	He	-9.257	0.1385	9993.68	0.0006	0.1436
Ca	44	3	He	10.984	0.002	140.00	0	0.001611
Ca	44	3	He	42.082	0.0029	210.01	0	0.001611
Ca	44	3	He	-7.236	0.0014	100.00	0	0.001611
Ti	47	3	He	-0.535	0.0001	10.00	0.0003	0.0002737
Ti	47	3	He	3.341	0.0011	80.00	0.0003	0.0002737
Ti	47	3	He	2.225	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.544	0.0137	982.04	0.0117	0.007326
V	51	3	He	0.526	0.0135	970.04	0.0117	0.007326
V	51	3	He	0.601	0.0144	1036.05	0.0117	0.007326
Cr	52	3	He	0.293	0.0298	2140.21	0.0152	0.02538
Cr	52	3	He	0.268	0.0295	2120.22	0.0152	0.02538
Cr	52	3	He	0.208	0.0286	2060.23	0.0152	0.02538
Mn	55	3	He	-0.528	0.0107	770.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.087	0.0133	960.06	0.0059	0.01385
Mn	55	3	He	-0.351	0.0118	850.06	0.0059	0.01385
Fe	57	3	He	38.94	0.0152	1090.07	0.0003	0.003918
Fe	57	3	He	33.001	0.0135	970.06	0.0003	0.003918
Fe	57	3	He	36.719	0.0146	1050.07	0.0003	0.003918
Co	59	3	He	0.109	0.0064	460.03	0.0305	0.003084
Co	59	3	He	0.077	0.0054	390.02	0.0305	0.003084
Co	59	3	He	0.062	0.005	360.02	0.0305	0.003084
Ni	60	3	He	1.006	0.0178	1280.10	0.0088	0.009003
Ni	60	3	He	1.11	0.0188	1350.12	0.0088	0.009003
Ni	60	3	He	1.089	0.0186	1340.12	0.0088	0.009003
Cu	63	3	He	0.188	0.0096	690.04	0.0249	0.004937
Cu	63	3	He	0.265	0.0115	830.05	0.0249	0.004937
Cu	63	3	He	0.136	0.0083	600.03	0.0249	0.004937
Zn	66	3	He	-0.096	0.0046	330.01	0.0025	0.004836
Zn	66	3	He	0.35	0.0057	410.02	0.0025	0.004836
Zn	66	3	He	0.288	0.0055	400.02	0.0025	0.004836
As	75	3	He	0.039	0.0005	36.00	0.0017	0.0004347
As	75	3	He	0.277	0.0009	66.00	0.0017	0.0004347
As	75	3	He	-0.059	0.0003	24.00	0.0017	0.0004347
Sr	88	3	He	0.083	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.082	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.098	0.0015	100.00	0.0078	0.0007762
Mo	98	3	He	0.2	0.0049	310.01	0.022	0.0005162
Mo	98	3	He	0.234	0.0057	360.02	0.022	0.0005162
Mo	98	3	He	0.242	0.0059	380.02	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.013	0.0011	70.00	0.0455	0.0004641
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.02	0.0159	1000.08	0.0143	0.01559
Sn	120	3	He	-0.098	0.0142	900.06	0.0143	0.01559
Sn	120	3	He	0.506	0.0228	1480.20	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.029	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	0.292	0.0016	100.00	0.0044	0.000309
Ba	137	3	He	0.29	0.0016	100.01	0.0044	0.000309
Ba	137	3	He	0.457	0.0023	150.01	0.0044	0.000309
Tl	205	3	He	0.007	0.0012	260.01	0.0276	0.001005
Tl	205	3	He	0.02	0.0016	340.02	0.0276	0.001005
Tl	205	3	He	0.017	0.0015	330.02	0.0276	0.001005
Pb	208	3	He	0.267	0.0119	1220.11	0.0364	0.002176
Pb	208	3	He	0.258	0.0116	1270.11	0.0364	0.002176
Pb	208	3	He	0.237	0.0108	1200.09	0.0364	0.002176
U	238	3	He	0.007	0.0006	120.01	0.0421	0.00024
U	238	3	He	0.01	0.0006	140.01	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
Sc	45	1	No Gas			3266202.14		
Sc	45	1	No Gas			3192864.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3155515.58		
Ge	72	1	No Gas			1447527.79		
Ge	72	1	No Gas			1408884.82		
Ge	72	1	No Gas			1397739.04		
Sc	45	2	H2			195428.32		
Sc	45	2	H2			201253.65		
Sc	45	2	H2			195294.92		
Ge	72	2	H2			157382.29		
Ge	72	2	H2			164228.24		
Ge	72	2	H2			158280.96		
In	115	2	H2			438618.47		
In	115	2	H2			455722.42		
In	115	2	H2			431789.52		
Sc	45	3	He			41288.31		
Sc	45	3	He			41850.78		
Sc	45	3	He			41950.66		
Ge	72	3	He			71718.74		
Ge	72	3	He			71970.78		
Ge	72	3	He			72141.52		
In	115	3	He			63002.25		
In	115	3	He			63444.29		
In	115	3	He			64941.33		
Tb	159	3	He			281844.51		
Tb	159	3	He			283156.34		
Tb	159	3	He			285434.19		
Bi	209	3	He			217073.41		
Bi	209	3	He			218648.75		
Bi	209	3	He			221850.58		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

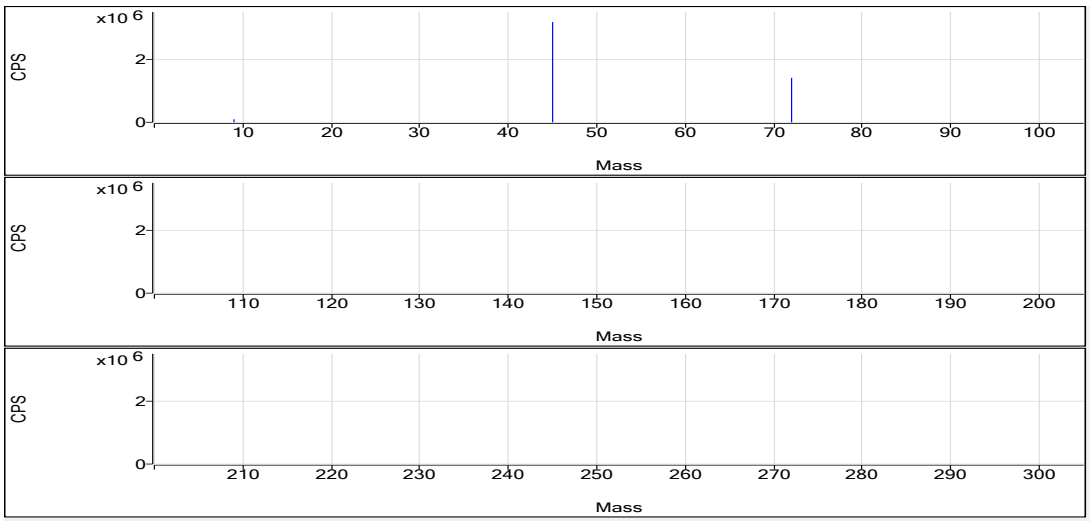
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	51.557	ppb	2.5	95696.76	0.0678	Pulse	0.5000	3
Se	78	72	H2	52.835	ppb	4.0	3291.94	0.0206	Pulse	1.5000	3
Na	23	72	He	5259.477	ppb	1.2	673825.80	9.1413	Pulse	0.1000	3
Mg	24	72	He	5276.767	ppb	0.9	328303.42	4.4537	Pulse	0.1000	3
Al	27	72	He	5145.227	ppb	2.9	91619.16	1.2431	Pulse	0.1000	3
K	39	72	He	5248.921	ppb	1.3	224243.93	3.0422	Pulse	0.1000	3
Ca	44	72	He	5234.441	ppb	2.0	12105.37	0.1642	Pulse	0.1000	3
Ti	47	72	He	5287.178	ppb	0.8	97761.81	1.3262	Pulse	0.1000	3
V	51	72	He	527.901	ppb	0.5	455754.72	6.1826	Pulse	0.5000	3
Cr	52	72	He	525.651	ppb	1.2	591884.52	8.0296	Pulse	0.1000	3
Mn	55	72	He	524.806	ppb	1.8	229347.21	3.1115	Pulse	0.1000	3
Fe	57	72	He	5246.588	ppb	1.9	112331.35	1.5239	Pulse	0.1000	3
Co	59	72	He	524.177	ppb	1.4	1179090.71	15.9960	Pulse	0.1000	3
Ni	60	72	He	523.727	ppb	0.7	340143.41	4.6143	Pulse	0.1000	3
Cu	63	72	He	522.859	ppb	0.9	961504.15	13.0435	Pulse	0.1000	3
Zn	66	72	He	518.607	ppb	1.6	94270.06	1.2789	Pulse	0.1000	3
As	75	72	He	521.009	ppb	1.8	66821.70	0.9066	Pulse	0.5000	3
Sr	88	115	He	52.136	ppb	2.1	26251.49	0.4083	Pulse	0.1000	3
Mo	98	115	He	51.849	ppb	1.3	73440.61	1.1423	Pulse	0.1000	3
Ag	107	115	He	51.282	ppb	0.4	150043.05	2.3338	Pulse	0.1000	3
Cd	111	115	He	52.476	ppb	1.2	16198.03	0.2520	Pulse	0.5000	3
Sn	120	115	He	51.950	ppb	0.7	48622.45	0.7563	Pulse	0.1000	3
Sb	121	115	He	52.095	ppb	2.4	41562.79	0.6465	Pulse	0.1000	3
Ba	137	115	He	519.379	ppb	0.9	146098.27	2.2725	Pulse	0.1000	3
Tl	205	209	He	53.022	ppb	0.9	321738.70	1.4668	Pulse	0.1000	3
Pb	208	209	He	53.260	ppb	0.4	425700.08	1.9407	Pulse	0.1000	3
U	238	209	He	52.424	ppb	0.6	483806.40	2.2056	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3184893.50	1.5	98.3	Pulse	0.1000	3
No Gas	Ge	72	1411848.05	1.4	98.1	Pulse	0.1000	3
H2	Sc	45	194647.43	2.4	99.6	Pulse	0.1000	3
H2	Ge	72	160044.22	2.6	98.2	Pulse	0.1000	3
H2	In	115	438214.67	1.6	101.1	Pulse	0.1000	3
He	Sc	45	41332.30	2.1	103.4	Pulse	0.1000	3
He	Ge	72	73718.83	1.1	102.0	Pulse	0.1000	3
He	In	115	64290.56	0.2	99.5	Pulse	0.1000	3
He	Tb	159	285955.38	0.6	100.0	Pulse	0.1000	3
He	Bi	209	219355.66	0.2	98.7	Pulse	0.1000	3

No Gas



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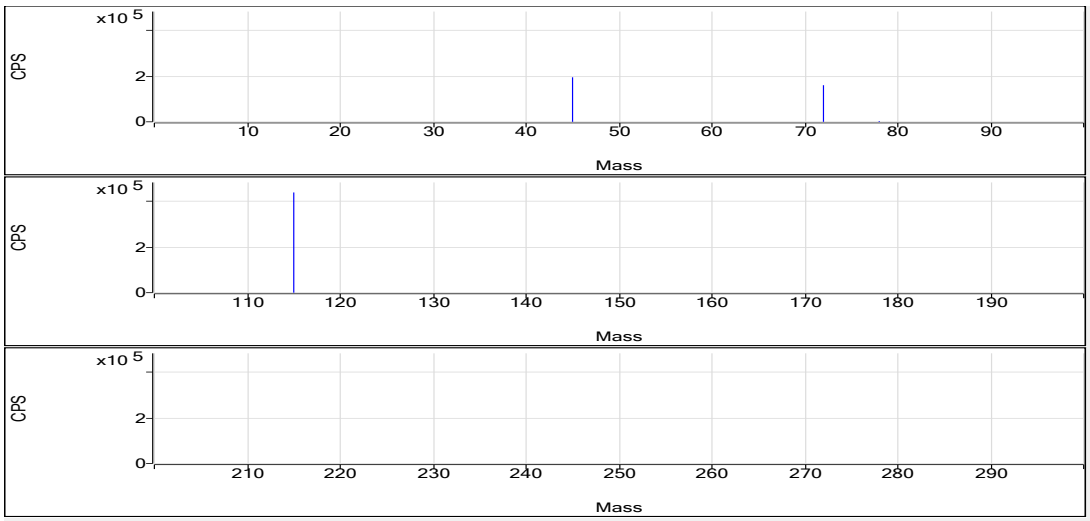
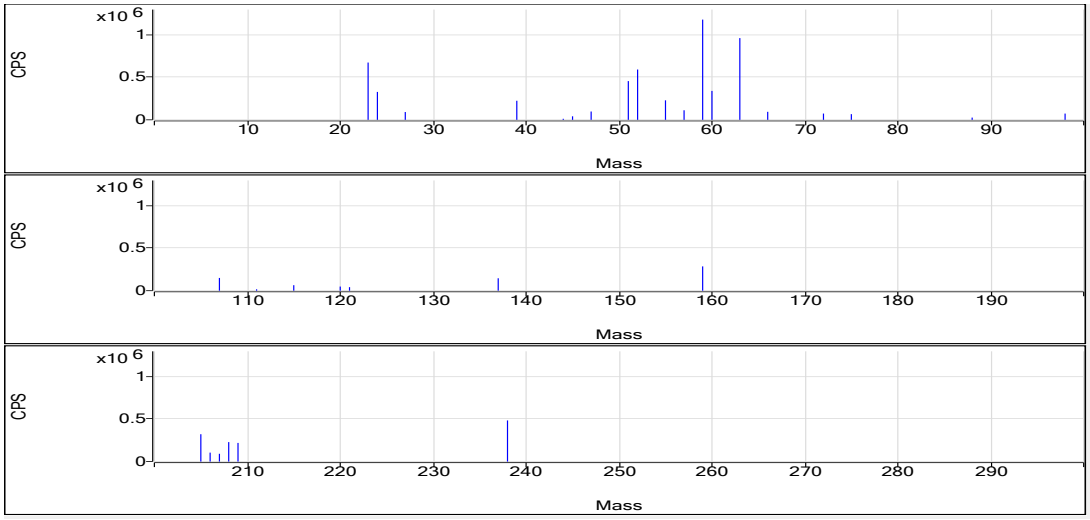


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.083	0.0659	94384.65	0.0013	4.694E-05
Be	9	1	No Gas	52.426	0.0689	96958.55	0.0013	4.694E-05
Be	9	1	No Gas	52.163	0.0686	95747.09	0.0013	4.694E-05
Se	78	2	H2	52.068	0.0203	3290.38	0.0004	1.089E-05
Se	78	2	H2	51.213	0.02	3245.04	0.0004	1.089E-05
Se	78	2	H2	55.225	0.0215	3340.39	0.0004	1.089E-05
Na	23	3	He	5294.277	9.2011	675424.91	0.0017	0.1065
Na	23	3	He	5185.389	9.014	672929.52	0.0017	0.1065
Na	23	3	He	5298.764	9.2088	673122.96	0.0017	0.1065
Mg	24	3	He	5324.337	4.4938	329877.34	0.0008	0.004846
Mg	24	3	He	5226.437	4.4113	329316.67	0.0008	0.004846
Mg	24	3	He	5279.525	4.456	325716.25	0.0008	0.004846
Al	27	3	He	5192.794	1.2546	92094.65	0.0002	0.001063
Al	27	3	He	4975.961	1.2022	89750.85	0.0002	0.001063
Al	27	3	He	5266.925	1.2725	93011.99	0.0002	0.001063
K	39	3	He	5273.342	3.0556	224306.01	0.0006	0.1436
K	39	3	He	5173.272	3.0004	223989.33	0.0006	0.1436
K	39	3	He	5300.148	3.0704	224436.46	0.0006	0.1436
Ca	44	3	He	5283.834	0.1657	12165.48	0	0.001611
Ca	44	3	He	5306.926	0.1664	12425.59	0	0.001611
Ca	44	3	He	5112.565	0.1604	11725.03	0	0.001611
Ti	47	3	He	5332.098	1.3375	98178.65	0.0003	0.0002737
Ti	47	3	He	5253.236	1.3177	98369.28	0.0003	0.0002737
Ti	47	3	He	5276.201	1.3234	96737.51	0.0003	0.0002737
V	51	3	He	528.033	6.1841	453959.28	0.0117	0.007326
V	51	3	He	524.999	6.1486	459017.31	0.0117	0.007326
V	51	3	He	530.67	6.215	454287.56	0.0117	0.007326
Cr	52	3	He	530.744	8.1072	595123.94	0.0152	0.02538
Cr	52	3	He	518.344	7.9183	591132.80	0.0152	0.02538
Cr	52	3	He	527.867	8.0634	589396.83	0.0152	0.02538
Mn	55	3	He	532.194	3.1551	231605.93	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	514.388	3.05	227692.50	0.0059	0.01385
Mn	55	3	He	527.836	3.1294	228743.20	0.0059	0.01385
Fe	57	3	He	5348.031	1.5533	114024.87	0.0003	0.003918
Fe	57	3	He	5152.736	1.4967	111737.09	0.0003	0.003918
Fe	57	3	He	5238.995	1.5217	111232.09	0.0003	0.003918
Co	59	3	He	523.759	15.9832	1173282.87	0.0305	0.003084
Co	59	3	He	517.014	15.7774	1177842.25	0.0305	0.003084
Co	59	3	He	531.759	16.2273	1186147.01	0.0305	0.003084
Ni	60	3	He	524.627	4.6222	339303.24	0.0088	0.009003
Ni	60	3	He	519.898	4.5806	341960.07	0.0088	0.009003
Ni	60	3	He	526.655	4.64	339166.91	0.0088	0.009003
Cu	63	3	He	520.974	12.9965	954037.56	0.0249	0.004937
Cu	63	3	He	519.437	12.9582	967375.84	0.0249	0.004937
Cu	63	3	He	528.165	13.1759	963099.05	0.0249	0.004937
Zn	66	3	He	520.9	1.2846	94296.42	0.0025	0.004836
Zn	66	3	He	509.21	1.2558	93753.48	0.0025	0.004836
Zn	66	3	He	525.711	1.2964	94760.27	0.0025	0.004836
As	75	3	He	523.217	0.9104	66829.82	0.0017	0.0004347
As	75	3	He	510.87	0.8889	66361.46	0.0017	0.0004347
As	75	3	He	528.94	0.9204	67273.83	0.0017	0.0004347
Sr	88	3	He	52.778	0.4133	26635.64	0.0078	0.0007762
Sr	88	3	He	50.849	0.3983	25613.70	0.0078	0.0007762
Sr	88	3	He	52.78	0.4134	26505.12	0.0078	0.0007762
Mo	98	3	He	51.844	1.1422	73602.30	0.022	0.0005162
Mo	98	3	He	52.534	1.1574	74435.43	0.022	0.0005162
Mo	98	3	He	51.168	1.1273	72284.11	0.022	0.0005162
Ag	107	3	He	51.374	2.338	150658.48	0.0455	0.0004641
Ag	107	3	He	51.075	2.3244	149487.69	0.0455	0.0004641
Ag	107	3	He	51.398	2.3391	149982.99	0.0455	0.0004641
Cd	111	3	He	52.288	0.2511	16177.33	0.0048	5.152E-05
Cd	111	3	He	51.956	0.2495	16043.20	0.0048	5.152E-05
Cd	111	3	He	53.185	0.2554	16373.57	0.0048	5.152E-05
Sn	120	3	He	52.269	0.7608	49026.68	0.0143	0.01559
Sn	120	3	He	51.52	0.7502	48244.40	0.0143	0.01559
Sn	120	3	He	52.062	0.7579	48596.28	0.0143	0.01559
Sb	121	3	He	52.376	0.65	41883.59	0.0124	0.000258
Sb	121	3	He	50.731	0.6296	40489.44	0.0124	0.000258
Sb	121	3	He	53.178	0.6599	42315.34	0.0124	0.000258
Ba	137	3	He	520.336	2.2767	146705.32	0.0044	0.000309
Ba	137	3	He	514.058	2.2492	144652.42	0.0044	0.000309
Ba	137	3	He	523.743	2.2916	146937.07	0.0044	0.000309
Tl	205	3	He	53.516	1.4804	324214.64	0.0276	0.001005
Tl	205	3	He	52.596	1.455	319758.63	0.0276	0.001005
Tl	205	3	He	52.953	1.4649	321242.83	0.0276	0.001005
Pb	208	3	He	53.16	1.9371	227698.96	0.0364	0.002176
Pb	208	3	He	53.134	1.9361	229072.05	0.0364	0.002176
Pb	208	3	He	53.485	1.9489	230048.98	0.0364	0.002176
U	238	3	He	52.126	2.1931	480286.40	0.0421	0.00024
U	238	3	He	52.379	2.2037	484298.63	0.0421	0.00024
U	238	3	He	52.766	2.22	486834.17	0.0421	0.00024
Sc	45	1	No Gas			3238463.08		
Sc	45	1	No Gas			3163664.02		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3152553.39		
Ge	72	1	No Gas			1433157.01		
Ge	72	1	No Gas			1406485.76		
Ge	72	1	No Gas			1395901.39		
Sc	45	2	H2			193553.14		
Sc	45	2	H2			199835.31		
Sc	45	2	H2			190553.84		
Ge	72	2	H2			162214.41		
Ge	72	2	H2			162649.09		
Ge	72	2	H2			155269.17		
In	115	2	H2			439929.92		
In	115	2	H2			444186.05		
In	115	2	H2			430528.04		
Sc	45	3	He			41689.77		
Sc	45	3	He			40346.30		
Sc	45	3	He			41960.82		
Ge	72	3	He			73407.16		
Ge	72	3	He			74653.59		
Ge	72	3	He			73095.74		
In	115	3	He			64820.89		
In	115	3	He			64688.95		
In	115	3	He			64499.60		
Tb	159	3	He			287993.98		
Tb	159	3	He			284954.53		
Tb	159	3	He			284917.63		
Bi	209	3	He			219002.93		
Bi	209	3	He			219765.66		
Bi	209	3	He			219298.40		

Quantitation Report

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Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	2023-08-10 20:19:15
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

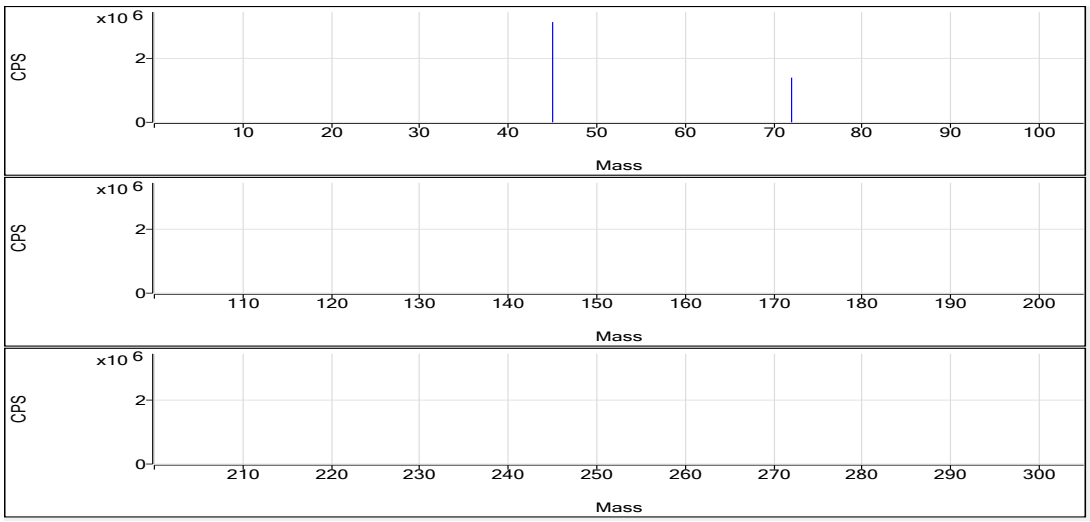
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.007	ppb	41.5	78.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.044	ppb	80.6	4.44	0.0000	Pulse	1.5000	3
Na	23	72	He	4.124	ppb	54.6	8172.47	0.1135	Pulse	0.1000	3
Mg	24	72	He	11.055	ppb	9.3	1020.08	0.0142	Pulse	0.1000	3
Al	27	72	He	25.863	ppb	15.8	526.69	0.0073	Pulse	0.1000	3
K	39	72	He	11.856	ppb	136.3	10807.69	0.1502	Pulse	0.1000	3
Ca	44	72	He	25.500	ppb	62.6	173.34	0.0024	Pulse	0.1000	3
Ti	47	72	He	1.684	ppb	58.2	50.00	0.0007	Pulse	0.1000	3
V	51	72	He	0.529	ppb	11.2	972.71	0.0135	Pulse	0.5000	3
Cr	52	72	He	0.161	ppb	63.5	2003.55	0.0278	Pulse	0.1000	3
Mn	55	72	He	-0.431	ppb	N/A	813.38	0.0113	Pulse	0.1000	3
Fe	57	72	He	33.166	ppb	11.0	973.40	0.0135	Pulse	0.1000	3
Co	59	72	He	0.151	ppb	25.2	553.36	0.0077	Pulse	0.1000	3
Ni	60	72	He	0.866	ppb	16.7	1196.76	0.0166	Pulse	0.1000	3
Cu	63	72	He	0.223	ppb	16.6	756.71	0.0105	Pulse	0.1000	3
Zn	66	72	He	0.407	ppb	51.4	420.02	0.0058	Pulse	0.1000	3
As	75	72	He	0.107	ppb	42.2	44.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.141	ppb	17.9	120.00	0.0019	Pulse	0.1000	3
Mo	98	115	He	0.204	ppb	13.2	320.02	0.0050	Pulse	0.1000	3
Ag	107	115	He	0.015	ppb	32.7	73.33	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	149.2	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.288	ppb	40.7	1260.11	0.0197	Pulse	0.1000	3
Sb	121	115	He	0.042	ppb	102.9	50.00	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.311	ppb	11.0	106.67	0.0017	Pulse	0.1000	3
Tl	205	209	He	0.123	ppb	9.5	966.74	0.0044	Pulse	0.1000	3
Pb	208	209	He	0.229	ppb	4.2	2310.16	0.0105	Pulse	0.1000	3
U	238	209	He	0.017	ppb	47.0	213.34	0.0010	Pulse	0.1000	3

ISTD Table:

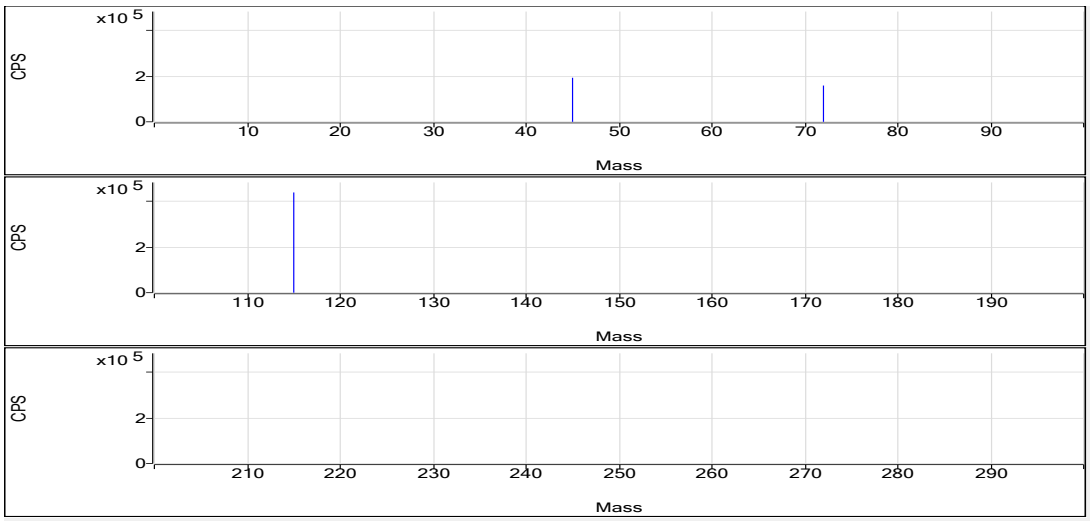
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3137396.83	1.6	96.8	Pulse	0.1000	3
No Gas	Ge	72	1397365.45	1.9	97.1	Pulse	0.1000	3
H2	Sc	45	192891.22	2.8	98.7	Pulse	0.1000	3
H2	Ge	72	158806.80	2.2	97.4	Pulse	0.1000	3
H2	In	115	438841.66	2.3	101.3	Pulse	0.1000	3
He	Sc	45	40918.07	1.5	102.3	Pulse	0.1000	3
He	Ge	72	72000.60	1.4	99.6	Pulse	0.1000	3
He	In	115	63900.35	2.7	98.9	Pulse	0.1000	3
He	Tb	159	282019.02	0.1	98.6	Pulse	0.1000	3
He	Bi	209	219724.64	0.9	98.9	Pulse	0.1000	3

No Gas

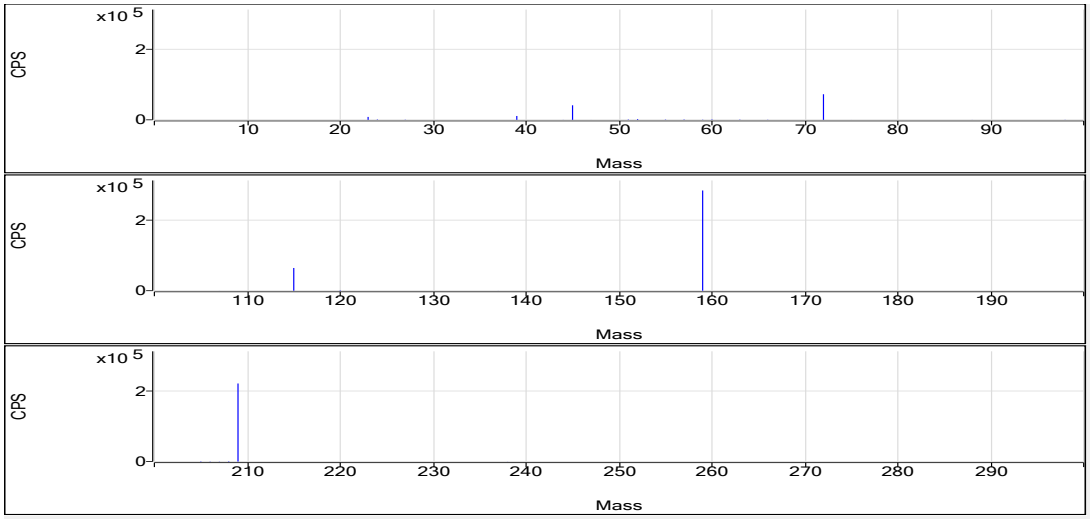


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0.0001	80.00	0.0013	4.694E-05
Be	9	1	No Gas	0.004	0.0001	74.00	0.0013	4.694E-05
Be	9	1	No Gas	0.01	0.0001	82.00	0.0013	4.694E-05
Se	78	2	H2	0.057	0	5.33	0.0004	1.089E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.072	0	6.00	0.0004	1.089E-05
Na	23	3	He	6.724	0.118	8362.54	0.0017	0.1065
Na	23	3	He	2.868	0.1114	8102.42	0.0017	0.1065
Na	23	3	He	2.78	0.1112	8052.45	0.0017	0.1065
Mg	24	3	He	11.158	0.0143	1010.08	0.0008	0.004846
Mg	24	3	He	12.026	0.015	1090.08	0.0008	0.004846
Mg	24	3	He	9.982	0.0133	960.07	0.0008	0.004846
Al	27	3	He	21.32	0.0062	440.02	0.0002	0.001063
Al	27	3	He	29.198	0.0081	590.03	0.0002	0.001063
Al	27	3	He	27.072	0.0076	550.03	0.0002	0.001063
K	39	3	He	30.046	0.1602	11354.83	0.0006	0.1436
K	39	3	He	-0.871	0.1432	10413.99	0.0006	0.1436
K	39	3	He	6.394	0.1472	10654.25	0.0006	0.1436
Ca	44	3	He	7.202	0.0018	130.01	0	0.001611
Ca	44	3	He	36.658	0.0027	200.01	0	0.001611
Ca	44	3	He	32.639	0.0026	190.01	0	0.001611
Ti	47	3	He	2.285	0.0008	60.00	0.0003	0.0002737
Ti	47	3	He	0.553	0.0004	30.00	0.0003	0.0002737
Ti	47	3	He	2.213	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.563	0.0139	986.04	0.0117	0.007326
V	51	3	He	0.563	0.0139	1012.04	0.0117	0.007326
V	51	3	He	0.46	0.0127	920.04	0.0117	0.007326
Cr	52	3	He	0.27	0.0295	2090.23	0.0152	0.02538
Cr	52	3	He	0.066	0.0264	1920.18	0.0152	0.02538
Cr	52	3	He	0.147	0.0276	2000.23	0.0152	0.02538
Mn	55	3	He	-0.076	0.0134	950.06	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.391	0.0115	840.06	0.0059	0.01385
Mn	55	3	He	-0.826	0.009	650.03	0.0059	0.01385
Fe	57	3	He	36.65	0.0145	1030.07	0.0003	0.003918
Fe	57	3	He	33.456	0.0136	990.07	0.0003	0.003918
Fe	57	3	He	29.392	0.0124	900.06	0.0003	0.003918
Co	59	3	He	0.176	0.0085	600.04	0.0305	0.003084
Co	59	3	He	0.169	0.0082	600.03	0.0305	0.003084
Co	59	3	He	0.107	0.0064	460.02	0.0305	0.003084
Ni	60	3	He	0.87	0.0167	1180.08	0.0088	0.009003
Ni	60	3	He	1.009	0.0179	1300.11	0.0088	0.009003
Ni	60	3	He	0.72	0.0153	1110.08	0.0088	0.009003
Cu	63	3	He	0.181	0.0095	670.04	0.0249	0.004937
Cu	63	3	He	0.238	0.0109	790.05	0.0249	0.004937
Cu	63	3	He	0.251	0.0112	810.05	0.0249	0.004937
Zn	66	3	He	0.559	0.0062	440.03	0.0025	0.004836
Zn	66	3	He	0.494	0.006	440.02	0.0025	0.004836
Zn	66	3	He	0.168	0.0052	380.02	0.0025	0.004836
As	75	3	He	0.156	0.0007	50.00	0.0017	0.0004347
As	75	3	He	0.066	0.0005	40.00	0.0017	0.0004347
As	75	3	He	0.1	0.0006	44.00	0.0017	0.0004347
Sr	88	3	He	0.169	0.0021	130.00	0.0078	0.0007762
Sr	88	3	He	0.119	0.0017	110.00	0.0078	0.0007762
Sr	88	3	He	0.136	0.0018	120.00	0.0078	0.0007762
Mo	98	3	He	0.226	0.0055	340.02	0.022	0.0005162
Mo	98	3	He	0.174	0.0043	280.02	0.022	0.0005162
Mo	98	3	He	0.213	0.0052	340.02	0.022	0.0005162
Ag	107	3	He	0.015	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.01	0.0009	60.00	0.0455	0.0004641
Ag	107	3	He	0.02	0.0014	90.00	0.0455	0.0004641
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.008	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.197	0.0184	1140.10	0.0143	0.01559
Sn	120	3	He	0.247	0.0191	1230.12	0.0143	0.01559
Sn	120	3	He	0.42	0.0216	1410.12	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.067	0.0011	70.00	0.0124	0.000258
Sb	121	3	He	0.066	0.0011	70.00	0.0124	0.000258
Ba	137	3	He	0.298	0.0016	100.00	0.0044	0.000309
Ba	137	3	He	0.284	0.0016	100.00	0.0044	0.000309
Ba	137	3	He	0.349	0.0018	120.01	0.0044	0.000309
Tl	205	3	He	0.133	0.0047	1040.08	0.0276	0.001005
Tl	205	3	He	0.11	0.0041	890.06	0.0276	0.001005
Tl	205	3	He	0.125	0.0045	970.08	0.0276	0.001005
Pb	208	3	He	0.228	0.0105	1170.09	0.0364	0.002176
Pb	208	3	He	0.22	0.0102	1060.08	0.0364	0.002176
Pb	208	3	He	0.239	0.0109	1250.10	0.0364	0.002176
U	238	3	He	0.009	0.0006	140.01	0.0421	0.00024
U	238	3	He	0.026	0.0013	290.01	0.0421	0.00024
U	238	3	He	0.017	0.001	210.01	0.0421	0.00024
Sc	45	1	No Gas			3173345.27		
Sc	45	1	No Gas			3160405.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3078439.33		
Ge	72	1	No Gas			1409399.98		
Ge	72	1	No Gas			1416314.35		
Ge	72	1	No Gas			1366382.01		
Sc	45	2	H2			196073.90		
Sc	45	2	H2			195904.63		
Sc	45	2	H2			186695.13		
Ge	72	2	H2			160321.38		
Ge	72	2	H2			161223.07		
Ge	72	2	H2			154875.95		
In	115	2	H2			444625.81		
In	115	2	H2			444486.56		
In	115	2	H2			427412.61		
Sc	45	3	He			41579.76		
Sc	45	3	He			40366.71		
Sc	45	3	He			40807.74		
Ge	72	3	He			70864.78		
Ge	72	3	He			72743.81		
Ge	72	3	He			72393.22		
In	115	3	He			61988.66		
In	115	3	He			64388.91		
In	115	3	He			65352.95		
Tb	159	3	He			281948.86		
Tb	159	3	He			282394.57		
Tb	159	3	He			281713.63		
Bi	209	3	He			221760.29		
Bi	209	3	He			219700.62		
Bi	209	3	He			217713.00		

Quantitation Report

Data File Name	284SMPL.d
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Sample Type	Sample
Comment	G20 ICP rr
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

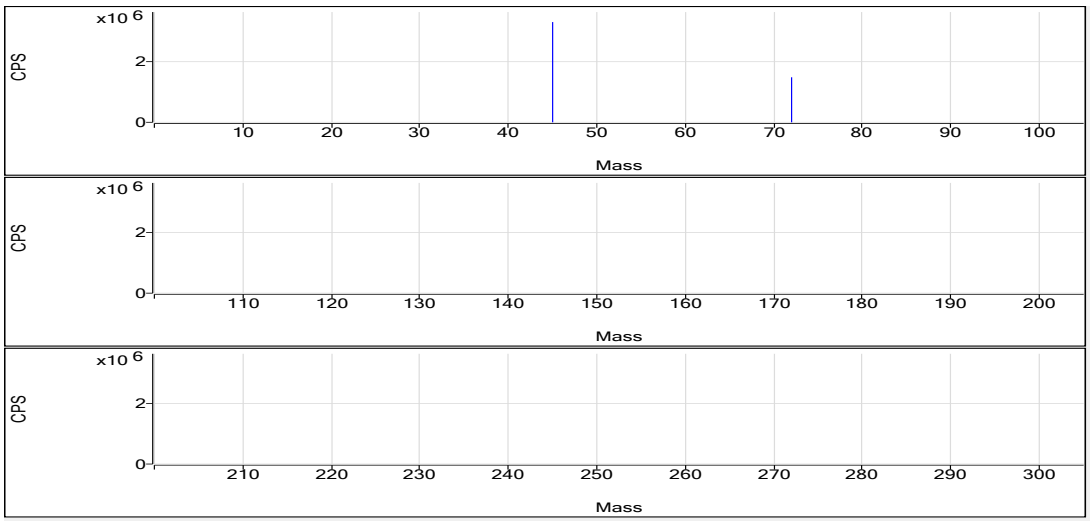
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.010	ppb	N/A	51.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.023	ppb	51.2	3.11	0.0000	Pulse	1.5000	3
Na	23	72	He	94.249	ppb	3.4	19443.16	0.2684	Pulse	0.1000	3
Mg	24	72	He	11.054	ppb	15.7	1026.74	0.0142	Pulse	0.1000	3
Al	27	72	He	21.822	ppb	30.4	460.02	0.0063	Pulse	0.1000	3
K	39	72	He	10.415	ppb	115.2	10830.97	0.1494	Pulse	0.1000	3
Ca	44	72	He	19.124	ppb	56.5	160.01	0.0022	Pulse	0.1000	3
Ti	47	72	He	0.552	ppb	170.4	30.00	0.0004	Pulse	0.1000	3
V	51	72	He	0.329	ppb	26.5	809.36	0.0112	Pulse	0.5000	3
Cr	52	72	He	0.302	ppb	46.3	2173.59	0.0300	Pulse	0.1000	3
Mn	55	72	He	-0.647	ppb	N/A	726.71	0.0100	Pulse	0.1000	3
Fe	57	72	He	38.328	ppb	19.1	1086.75	0.0150	Pulse	0.1000	3
Co	59	72	He	0.083	ppb	32.8	406.69	0.0056	Pulse	0.1000	3
Ni	60	72	He	1.048	ppb	9.1	1320.11	0.0182	Pulse	0.1000	3
Cu	63	72	He	0.409	ppb	14.1	1096.75	0.0151	Pulse	0.1000	3
Zn	66	72	He	1.232	ppb	33.6	570.03	0.0079	Pulse	0.1000	3
As	75	72	He	-0.017	ppb	N/A	29.33	0.0004	Pulse	0.5000	3
Sr	88	115	He	0.121	ppb	67.9	106.67	0.0017	Pulse	0.1000	3
Mo	98	115	He	0.216	ppb	11.4	326.69	0.0053	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	1318.9	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	53.7	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.326	ppb	4.9	1253.43	0.0202	Pulse	0.1000	3
Sb	121	115	He	0.027	ppb	146.8	36.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.176	ppb	32.5	66.67	0.0011	Pulse	0.1000	3
Tl	205	209	He	0.001	ppb	969.5	223.34	0.0010	Pulse	0.1000	3
Pb	208	209	He	0.217	ppb	5.1	2196.83	0.0101	Pulse	0.1000	3
U	238	209	He	0.002	ppb	74.9	73.33	0.0003	Pulse	0.1000	3

ISTD Table:

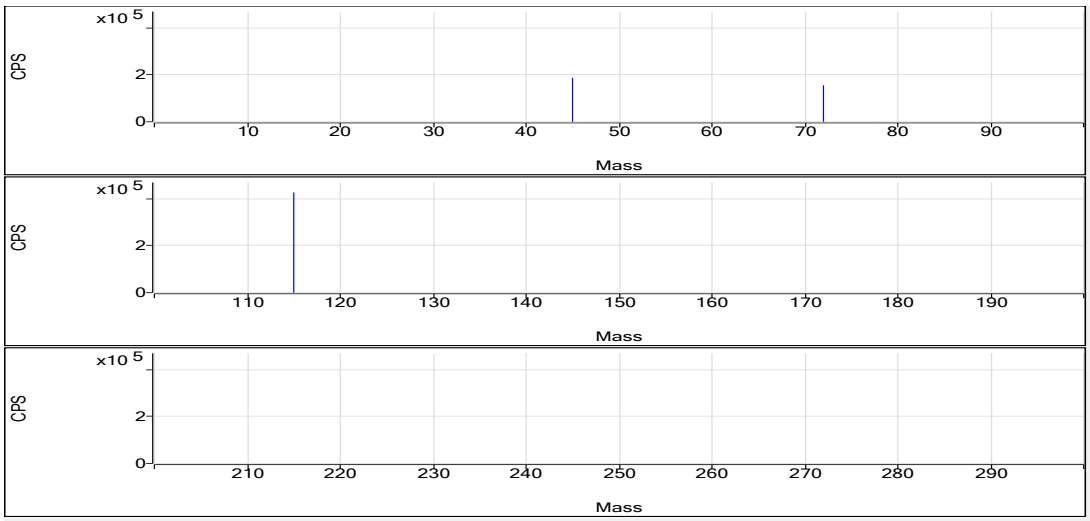
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3321532.55	2.2	102.5	Pulse	0.1000	3
No Gas	Ge	72	1492071.33	1.6	103.6	Pulse	0.1000	3
H2	Sc	45	187283.92	2.3	95.9	Pulse	0.1000	3
H2	Ge	72	155747.40	2.1	95.5	Pulse	0.1000	3
H2	In	115	426988.32	2.0	98.5	Pulse	0.1000	3
He	Sc	45	40921.50	0.8	102.3	Pulse	0.1000	3
He	Ge	72	72469.28	1.8	100.3	Pulse	0.1000	3
He	In	115	61927.93	0.8	95.9	Pulse	0.1000	3
He	Tb	159	278691.24	1.1	97.4	Pulse	0.1000	3
He	Bi	209	217895.96	1.4	98.1	Pulse	0.1000	3

No Gas

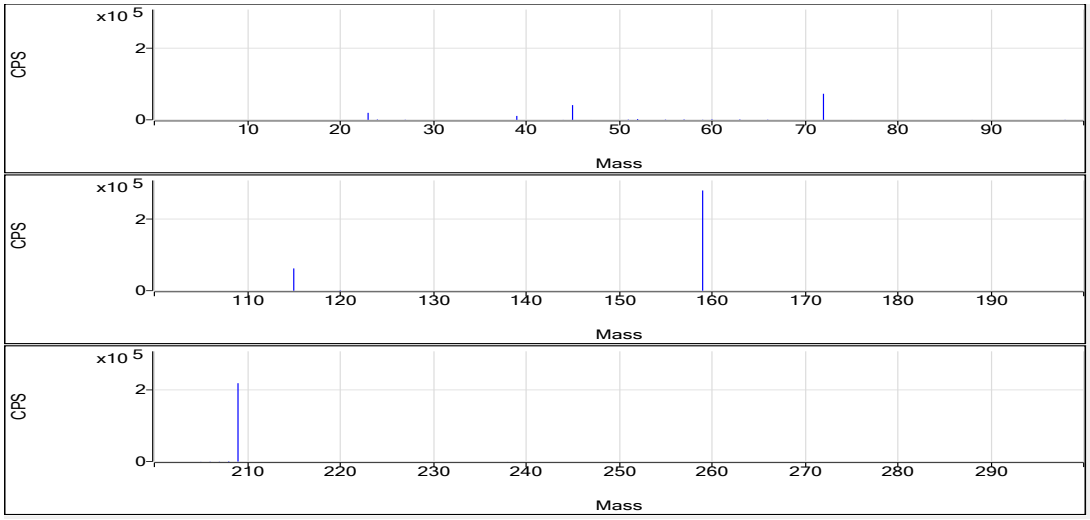


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.017	0	36.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.004	0	62.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	56.00	0.0013	4.694E-05
Se	78	2	H2	0.016	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.017	0	2.67	0.0004	1.089E-05
Se	78	2	H2	0.037	0	4.00	0.0004	1.089E-05
Na	23	3	He	90.627	0.2621	19393.08	0.0017	0.1065
Na	23	3	He	96.466	0.2722	19593.33	0.0017	0.1065
Na	23	3	He	95.652	0.2708	19343.06	0.0017	0.1065
Mg	24	3	He	11.729	0.0147	1090.07	0.0008	0.004846
Mg	24	3	He	9.081	0.0125	900.06	0.0008	0.004846
Mg	24	3	He	12.351	0.0153	1090.09	0.0008	0.004846
Al	27	3	He	29.197	0.0081	600.03	0.0002	0.001063
Al	27	3	He	16.314	0.005	360.02	0.0002	0.001063
Al	27	3	He	19.954	0.0059	420.02	0.0002	0.001063
K	39	3	He	19.293	0.1543	11414.78	0.0006	0.1436
K	39	3	He	15.185	0.152	10944.37	0.0006	0.1436
K	39	3	He	-3.233	0.1419	10133.77	0.0006	0.1436
Ca	44	3	He	26.474	0.0024	180.01	0	0.001611
Ca	44	3	He	24.168	0.0024	170.01	0	0.001611
Ca	44	3	He	6.729	0.0018	130.01	0	0.001611
Ti	47	3	He	1.065	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	1.124	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	-0.533	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.233	0.0101	744.02	0.0117	0.007326
V	51	3	He	0.404	0.0121	868.03	0.0117	0.007326
V	51	3	He	0.35	0.0114	816.03	0.0117	0.007326
Cr	52	3	He	0.322	0.0303	2240.26	0.0152	0.02538
Cr	52	3	He	0.431	0.032	2300.28	0.0152	0.02538
Cr	52	3	He	0.153	0.0277	1980.22	0.0152	0.02538
Mn	55	3	He	-0.79	0.0092	680.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.605	0.0103	740.04	0.0059	0.01385
Mn	55	3	He	-0.545	0.0106	760.05	0.0059	0.01385
Fe	57	3	He	29.871	0.0126	930.06	0.0003	0.003918
Fe	57	3	He	42.099	0.0161	1160.09	0.0003	0.003918
Fe	57	3	He	43.013	0.0164	1170.09	0.0003	0.003918
Co	59	3	He	0.067	0.0051	380.02	0.0305	0.003084
Co	59	3	He	0.067	0.0051	370.02	0.0305	0.003084
Co	59	3	He	0.115	0.0066	470.02	0.0305	0.003084
Ni	60	3	He	1.005	0.0178	1320.11	0.0088	0.009003
Ni	60	3	He	0.983	0.0176	1270.11	0.0088	0.009003
Ni	60	3	He	1.157	0.0192	1370.11	0.0088	0.009003
Cu	63	3	He	0.371	0.0142	1050.08	0.0249	0.004937
Cu	63	3	He	0.381	0.0144	1040.07	0.0249	0.004937
Cu	63	3	He	0.476	0.0168	1200.10	0.0249	0.004937
Zn	66	3	He	1.223	0.0078	580.03	0.0025	0.004836
Zn	66	3	He	1.65	0.0089	640.04	0.0025	0.004836
Zn	66	3	He	0.823	0.0069	490.02	0.0025	0.004836
As	75	3	He	-0.001	0.0004	32.00	0.0017	0.0004347
As	75	3	He	-0.042	0.0004	26.00	0.0017	0.0004347
As	75	3	He	-0.008	0.0004	30.00	0.0017	0.0004347
Sr	88	3	He	0.045	0.0011	70.00	0.0078	0.0007762
Sr	88	3	He	0.109	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.208	0.0024	150.01	0.0078	0.0007762
Mo	98	3	He	0.189	0.0047	290.02	0.022	0.0005162
Mo	98	3	He	0.22	0.0054	330.02	0.022	0.0005162
Mo	98	3	He	0.238	0.0058	360.02	0.022	0.0005162
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Ag	107	3	He	0.008	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	-0.003	0.0003	20.00	0.0455	0.0004641
Cd	111	3	He	0.003	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	0.01	0.0001	6.00	0.0048	5.152E-05
Cd	111	3	He	0.009	0.0001	6.00	0.0048	5.152E-05
Sn	120	3	He	0.313	0.02	1240.10	0.0143	0.01559
Sn	120	3	He	0.344	0.0205	1260.10	0.0143	0.01559
Sn	120	3	He	0.322	0.0202	1260.10	0.0143	0.01559
Sb	121	3	He	-0.008	0.0002	10.00	0.0124	0.000258
Sb	121	3	He	0.019	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.07	0.0011	70.00	0.0124	0.000258
Ba	137	3	He	0.114	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.227	0.0013	80.00	0.0044	0.000309
Ba	137	3	He	0.186	0.0011	70.00	0.0044	0.000309
Tl	205	3	He	-0.005	0.0009	190.01	0.0276	0.001005
Tl	205	3	He	0.009	0.0013	270.01	0.0276	0.001005
Tl	205	3	He	-0.002	0.0009	210.01	0.0276	0.001005
Pb	208	3	He	0.212	0.0099	1250.10	0.0364	0.002176
Pb	208	3	He	0.23	0.0105	1180.09	0.0364	0.002176
Pb	208	3	He	0.21	0.0098	1200.10	0.0364	0.002176
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.002	0.0003	70.00	0.0421	0.00024
U	238	3	He	0.001	0.0003	60.00	0.0421	0.00024
Sc	45	1	No Gas			3239956.20		
Sc	45	1	No Gas			3347027.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3377614.01		
Ge	72	1	No Gas			1471350.13		
Ge	72	1	No Gas			1487337.48		
Ge	72	1	No Gas			1517526.38		
Sc	45	2	H2			187088.71		
Sc	45	2	H2			183012.20		
Sc	45	2	H2			191750.84		
Ge	72	2	H2			157118.67		
Ge	72	2	H2			152003.83		
Ge	72	2	H2			158119.71		
In	115	2	H2			433514.49		
In	115	2	H2			417265.97		
In	115	2	H2			430184.49		
Sc	45	3	He			41269.16		
Sc	45	3	He			40597.12		
Sc	45	3	He			40898.21		
Ge	72	3	He			73980.47		
Ge	72	3	He			71990.07		
Ge	72	3	He			71437.29		
In	115	3	He			61867.55		
In	115	3	He			61495.69		
In	115	3	He			62449.87		
Tb	159	3	He			278401.85		
Tb	159	3	He			275806.97		
Tb	159	3	He			281864.90		
Bi	209	3	He			217022.18		
Bi	209	3	He			215294.18		
Bi	209	3	He			221371.52		

Quantitation Report

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Sample Name	LCS 410-404498/2-A @2
Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

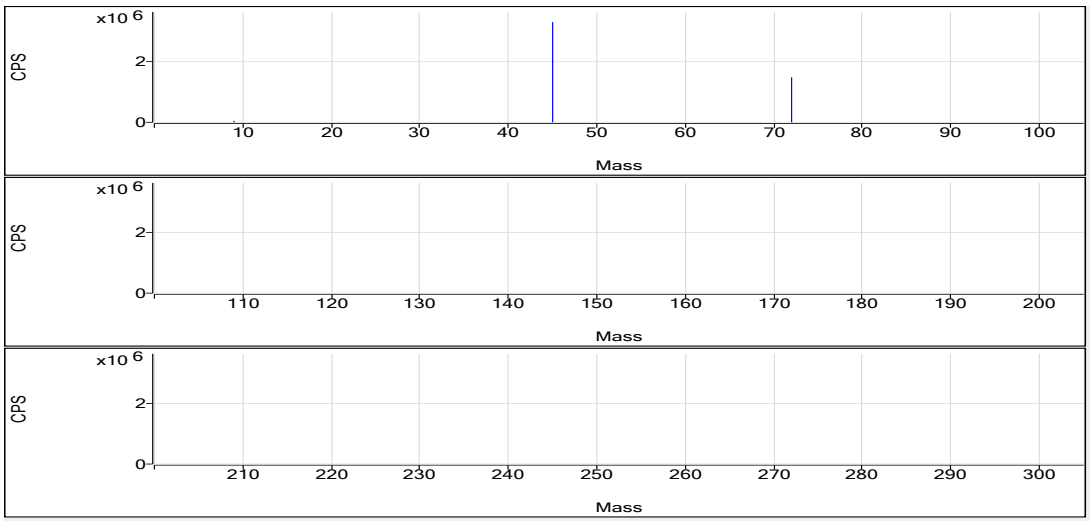
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.539	ppb	4.3	47613.41	0.0323	Pulse	0.5000	3
Se	78	72	H2	53.647	ppb	5.2	3351.06	0.0209	Pulse	1.5000	3
Na	23	72	He	2775.240	ppb	1.0	355734.82	4.8738	Pulse	0.1000	3
Mg	24	72	He	2728.160	ppb	1.9	168224.72	2.3050	Pulse	0.1000	3
Al	27	72	He	2707.477	ppb	2.2	47777.42	0.6546	Pulse	0.1000	3
K	39	72	He	2677.286	ppb	2.4	118386.40	1.6221	Pulse	0.1000	3
Ca	44	72	He	2721.883	ppb	1.0	6288.24	0.0862	Pulse	0.1000	3
Ti	47	72	He	273.477	ppb	5.8	5024.37	0.0689	Pulse	0.1000	3
V	51	72	He	269.082	ppb	1.4	230271.61	3.1550	Pulse	0.5000	3
Cr	52	72	He	272.218	ppb	1.4	304394.13	4.1705	Pulse	0.1000	3
Mn	55	72	He	267.562	ppb	2.9	116262.12	1.5931	Pulse	0.1000	3
Fe	57	72	He	2704.130	ppb	1.8	57464.02	0.7873	Pulse	0.1000	3
Co	59	72	He	270.075	ppb	1.7	601639.89	8.2432	Pulse	0.1000	3
Ni	60	72	He	269.654	ppb	1.6	173716.25	2.3802	Pulse	0.1000	3
Cu	63	72	He	268.312	ppb	1.4	488709.86	6.6959	Pulse	0.1000	3
Zn	66	72	He	267.174	ppb	1.6	48264.98	0.6612	Pulse	0.1000	3
As	75	72	He	264.619	ppb	1.8	33620.38	0.4607	Pulse	0.5000	3
Sr	88	115	He	26.977	ppb	0.5	13283.26	0.2117	Pulse	0.1000	3
Mo	98	115	He	26.351	ppb	1.1	36451.03	0.5808	Pulse	0.1000	3
Ag	107	115	He	26.383	ppb	1.3	75365.33	1.2009	Pulse	0.1000	3
Cd	111	115	He	26.883	ppb	2.1	8101.71	0.1291	Pulse	0.5000	3
Sn	120	115	He	53.757	ppb	1.1	49080.24	0.7821	Pulse	0.1000	3
Sb	121	115	He	52.777	ppb	3.7	41101.21	0.6550	Pulse	0.1000	3
Ba	137	115	He	267.265	ppb	1.4	73398.64	1.1695	Pulse	0.1000	3
Tl	205	209	He	53.292	ppb	0.5	321931.60	1.4742	Pulse	0.1000	3
Pb	208	209	He	27.176	ppb	1.2	216469.12	0.9913	Pulse	0.1000	3
U	238	209	He	26.584	ppb	2.1	244248.60	1.1186	Pulse	0.1000	3

ISTD Table:

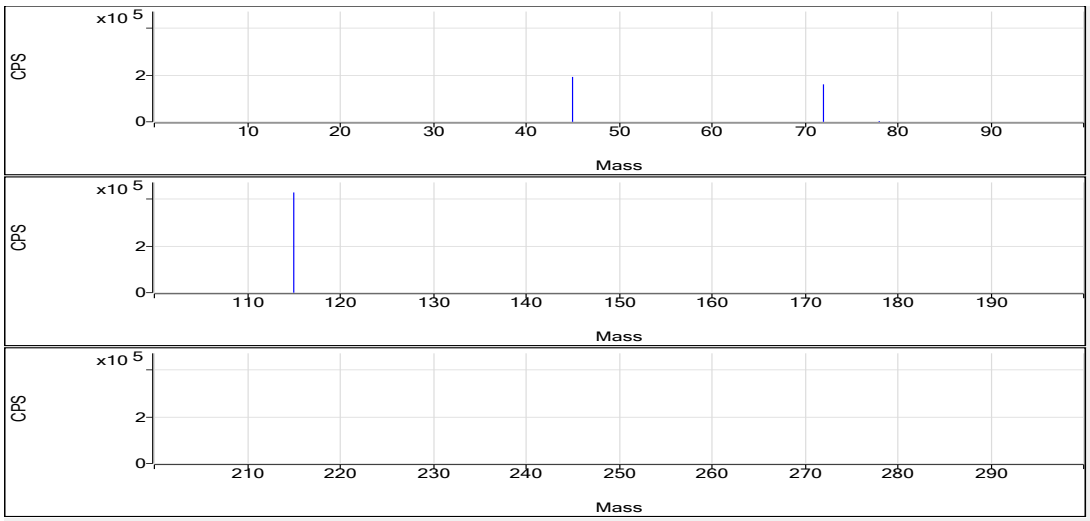
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3281680.89	2.8	101.2	Pulse	0.1000	3
No Gas	Ge	72	1475469.35	2.6	102.5	Pulse	0.1000	3
H2	Sc	45	192236.19	1.9	98.4	Pulse	0.1000	3
H2	Ge	72	160476.20	2.5	98.4	Pulse	0.1000	3
H2	In	115	429216.36	1.8	99.1	Pulse	0.1000	3
He	Sc	45	41095.02	2.6	102.8	Pulse	0.1000	3
He	Ge	72	72995.00	1.2	101.0	Pulse	0.1000	3
He	In	115	62759.76	0.4	97.2	Pulse	0.1000	3
He	Tb	159	279653.16	0.6	97.8	Pulse	0.1000	3
He	Bi	209	218376.59	0.6	98.3	Pulse	0.1000	3

No Gas

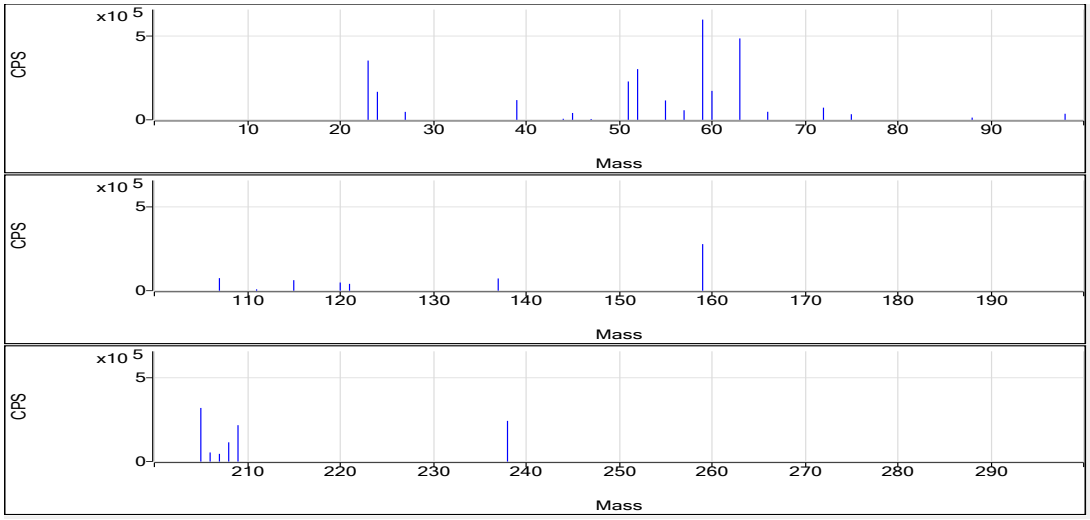


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	25.741	0.0339	48507.49	0.0013	4.694E-05
Be	9	1	No Gas	23.749	0.0313	46533.49	0.0013	4.694E-05
Be	9	1	No Gas	24.127	0.0318	47799.25	0.0013	4.694E-05
Se	78	2	H2	54.823	0.0214	3359.06	0.0004	1.089E-05
Se	78	2	H2	55.65	0.0217	3449.75	0.0004	1.089E-05
Se	78	2	H2	50.468	0.0197	3244.37	0.0004	1.089E-05
Na	23	3	He	2768.253	4.8618	355911.24	0.0017	0.1065
Na	23	3	He	2806.738	4.9279	354812.57	0.0017	0.1065
Na	23	3	He	2750.729	4.8317	356480.66	0.0017	0.1065
Mg	24	3	He	2713.609	2.2927	167837.50	0.0008	0.004846
Mg	24	3	He	2784.776	2.3527	169394.82	0.0008	0.004846
Mg	24	3	He	2686.094	2.2695	167441.85	0.0008	0.004846
Al	27	3	He	2660.659	0.6433	47095.24	0.0002	0.001063
Al	27	3	He	2774.517	0.6708	48298.90	0.0002	0.001063
Al	27	3	He	2687.254	0.6498	47938.12	0.0002	0.001063
K	39	3	He	2711.465	1.6409	120125.86	0.0006	0.1436
K	39	3	He	2716.873	1.6439	118363.50	0.0006	0.1436
K	39	3	He	2603.52	1.5813	116669.83	0.0006	0.1436
Ca	44	3	He	2701.984	0.0855	6261.56	0	0.001611
Ca	44	3	He	2752.55	0.0871	6271.57	0	0.001611
Ca	44	3	He	2711.116	0.0858	6331.58	0	0.001611
Ti	47	3	He	282.762	0.0712	5211.09	0.0003	0.0002737
Ti	47	3	He	282.528	0.0711	5121.08	0.0003	0.0002737
Ti	47	3	He	255.143	0.0643	4740.93	0.0003	0.0002737
V	51	3	He	267.601	3.1377	229692.89	0.0117	0.007326
V	51	3	He	273.315	3.2045	230725.20	0.0117	0.007326
V	51	3	He	266.33	3.1228	230396.73	0.0117	0.007326
Cr	52	3	He	269.51	4.1293	302286.23	0.0152	0.02538
Cr	52	3	He	276.746	4.2395	305242.81	0.0152	0.02538
Cr	52	3	He	270.398	4.1428	305653.35	0.0152	0.02538
Mn	55	3	He	267	1.5898	116381.98	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	275.638	1.6408	118137.01	0.0059	0.01385
Mn	55	3	He	260.049	1.5488	114267.36	0.0059	0.01385
Fe	57	3	He	2679.362	0.7802	57112.49	0.0003	0.003918
Fe	57	3	He	2759.588	0.8034	57845.85	0.0003	0.003918
Fe	57	3	He	2673.441	0.7785	57433.71	0.0003	0.003918
Co	59	3	He	266.541	8.1354	595553.35	0.0305	0.003084
Co	59	3	He	275.27	8.4017	604926.83	0.0305	0.003084
Co	59	3	He	268.414	8.1925	604439.48	0.0305	0.003084
Ni	60	3	He	269.334	2.3773	174033.59	0.0088	0.009003
Ni	60	3	He	274.208	2.4202	174254.96	0.0088	0.009003
Ni	60	3	He	265.422	2.3429	172860.21	0.0088	0.009003
Cu	63	3	He	267.122	6.6662	488000.11	0.0249	0.004937
Cu	63	3	He	272.411	6.7981	489464.21	0.0249	0.004937
Cu	63	3	He	265.404	6.6233	488665.27	0.0249	0.004937
Zn	66	3	He	271.787	0.6726	49234.48	0.0025	0.004836
Zn	66	3	He	266.275	0.659	47449.06	0.0025	0.004836
Zn	66	3	He	263.461	0.6521	48111.41	0.0025	0.004836
As	75	3	He	263.178	0.4581	33538.81	0.0017	0.0004347
As	75	3	He	269.925	0.4699	33831.53	0.0017	0.0004347
As	75	3	He	260.755	0.4539	33490.79	0.0017	0.0004347
Sr	88	3	He	26.841	0.2106	13276.57	0.0078	0.0007762
Sr	88	3	He	26.998	0.2118	13266.56	0.0078	0.0007762
Sr	88	3	He	27.091	0.2125	13306.65	0.0078	0.0007762
Mo	98	3	He	26.099	0.5753	36267.11	0.022	0.0005162
Mo	98	3	He	26.279	0.5792	36277.29	0.022	0.0005162
Mo	98	3	He	26.675	0.5879	36808.69	0.022	0.0005162
Ag	107	3	He	25.975	1.1823	74538.27	0.0455	0.0004641
Ag	107	3	He	26.559	1.2089	75713.68	0.0455	0.0004641
Ag	107	3	He	26.615	1.2115	75844.03	0.0455	0.0004641
Cd	111	3	He	26.273	0.1262	7954.29	0.0048	5.152E-05
Cd	111	3	He	26.979	0.1296	8114.39	0.0048	5.152E-05
Cd	111	3	He	27.396	0.1316	8236.45	0.0048	5.152E-05
Sn	120	3	He	53.203	0.7742	48805.79	0.0143	0.01559
Sn	120	3	He	53.686	0.781	48916.33	0.0143	0.01559
Sn	120	3	He	54.382	0.791	49518.59	0.0143	0.01559
Sb	121	3	He	50.637	0.6284	39616.96	0.0124	0.000258
Sb	121	3	He	54.495	0.6763	42354.72	0.0124	0.000258
Sb	121	3	He	53.2	0.6602	41331.94	0.0124	0.000258
Ba	137	3	He	265.277	1.1608	73183.92	0.0044	0.000309
Ba	137	3	He	265.013	1.1597	72631.29	0.0044	0.000309
Ba	137	3	He	271.505	1.1881	74380.72	0.0044	0.000309
Tl	205	3	He	52.985	1.4657	322148.63	0.0276	0.001005
Tl	205	3	He	53.552	1.4814	322641.99	0.0276	0.001005
Tl	205	3	He	53.339	1.4755	321004.17	0.0276	0.001005
Pb	208	3	He	26.816	0.9782	114897.28	0.0364	0.002176
Pb	208	3	He	27.434	1.0007	117319.04	0.0364	0.002176
Pb	208	3	He	27.277	0.995	114332.73	0.0364	0.002176
U	238	3	He	25.979	1.0931	240248.30	0.0421	0.00024
U	238	3	He	26.734	1.1249	244989.72	0.0421	0.00024
U	238	3	He	27.039	1.1377	247507.79	0.0421	0.00024
Sc	45	1	No Gas			3179438.39		
Sc	45	1	No Gas			3307712.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3357892.14		
Ge	72	1	No Gas			1432119.35		
Ge	72	1	No Gas			1488850.76		
Ge	72	1	No Gas			1505437.95		
Sc	45	2	H2			189653.53		
Sc	45	2	H2			190553.86		
Sc	45	2	H2			196501.17		
Ge	72	2	H2			157282.11		
Ge	72	2	H2			159130.97		
Ge	72	2	H2			165015.51		
In	115	2	H2			430008.59		
In	115	2	H2			421022.22		
In	115	2	H2			436618.27		
Sc	45	3	He			41118.78		
Sc	45	3	He			42151.08		
Sc	45	3	He			40015.19		
Ge	72	3	He			73205.36		
Ge	72	3	He			72000.33		
Ge	72	3	He			73779.31		
In	115	3	He			63424.53		
In	115	3	He			63011.58		
In	115	3	He			62991.65		
Tb	159	3	He			277781.44		
Tb	159	3	He			280594.92		
Tb	159	3	He			280583.12		
Bi	209	3	He			219785.49		
Bi	209	3	He			217792.16		
Bi	209	3	He			217552.11		

Quantitation Report

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Acq Time	2023-08-10 20:31:39
Sample Name	410-137227-B-1-A @2
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

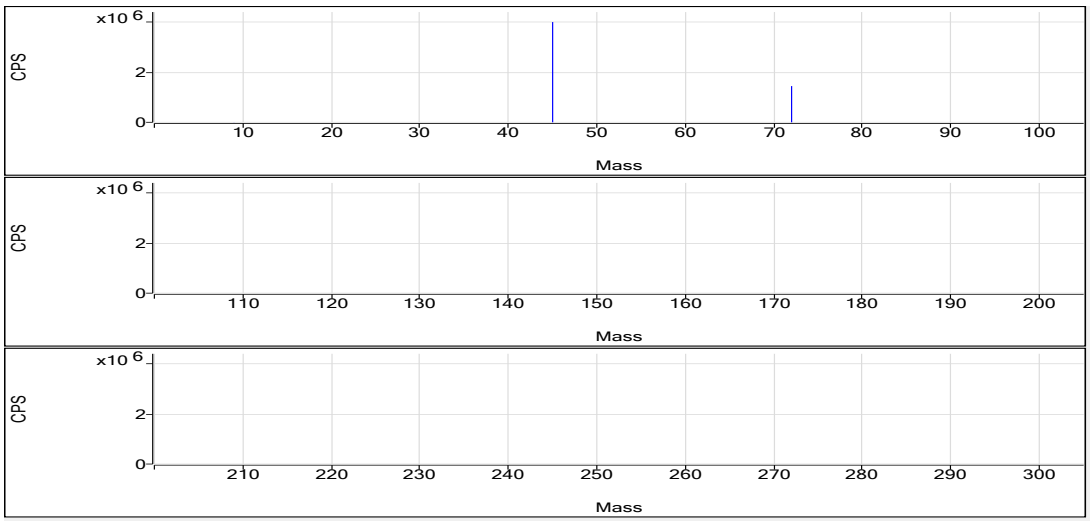
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1.823	ppb	6.8	3523.76	0.0024	Pulse	0.5000	3
Se	78	72	H2	0.528	ppb	8.1	33.78	0.0002	Pulse	1.5000	3
Na	23	72	He	5475.313	ppb	0.9	700597.83	9.5121	Pulse	0.1000	3
Mg	24	72	He	137146.854	ppb	0.9	8516885.71	115.6336	Analog	0.1000	3
Al	27	72	He	115933.598	ppb	0.6	2061345.49	27.9868	Pulse	0.1000	3
K	39	72	He	2449.755	ppb	0.1	110219.76	1.4964	Pulse	0.1000	3
Ca	44	72	He	176568.551	ppb	0.8	404050.58	5.4858	Pulse	0.1000	3
Ti	47	72	He	16854.902	ppb	0.9	311343.26	4.2271	Pulse	0.1000	3
V	51	72	He	512.493	ppb	0.5	442098.86	6.0023	Pulse	0.5000	3
Cr	52	72	He	246.402	ppb	0.6	278222.96	3.7774	Pulse	0.1000	3
Mn	55	72	He	4243.693	ppb	0.6	1845923.67	25.0619	Pulse	0.1000	3
Fe	57	72	He	217806.644	ppb	0.3	4648043.89	63.1057	Pulse	0.1000	3
Co	59	72	He	138.909	ppb	0.6	312388.08	4.2413	Pulse	0.1000	3
Ni	60	72	He	242.952	ppb	0.8	158013.16	2.1454	Pulse	0.1000	3
Cu	63	72	He	405.087	ppb	0.7	744393.97	10.1066	Pulse	0.1000	3
Zn	66	72	He	313.149	ppb	1.2	57019.73	0.7742	Pulse	0.1000	3
As	75	72	He	6.557	ppb	6.6	872.03	0.0118	Pulse	0.5000	3
Sr	88	115	He	312.074	ppb	1.1	148990.32	2.4403	Pulse	0.1000	3
Mo	98	115	He	1.879	ppb	11.9	2556.99	0.0419	Pulse	0.1000	3
Ag	107	115	He	0.254	ppb	3.6	733.38	0.0120	Pulse	0.1000	3
Cd	111	115	He	0.524	ppb	10.5	156.67	0.0026	Pulse	0.5000	3
Sn	120	115	He	2.539	ppb	15.2	3160.48	0.0518	Pulse	0.1000	3
Sb	121	115	He	0.102	ppb	31.1	93.34	0.0015	Pulse	0.1000	3
Ba	137	115	He	308.916	ppb	0.5	82537.78	1.3518	Pulse	0.1000	3
Tl	205	209	He	0.231	ppb	11.5	1560.16	0.0074	Pulse	0.1000	3
Pb	208	209	He	32.637	ppb	1.0	251205.06	1.1901	Pulse	0.1000	3
U	238	209	He	2.065	ppb	3.4	18383.63	0.0871	Pulse	0.1000	3

ISTD Table:

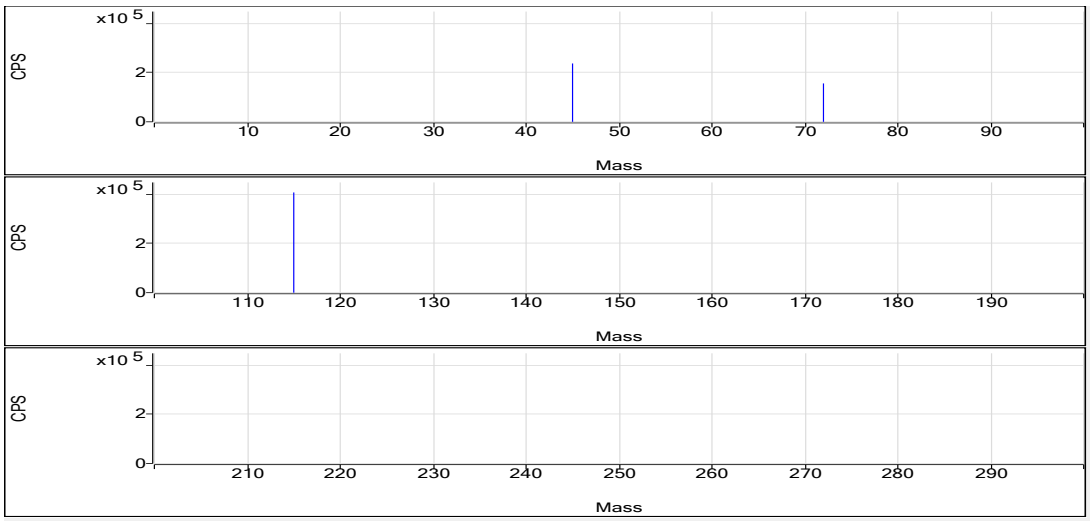
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3999116.71	1.3	123.4	Pulse	0.1000	3
No Gas	Ge	72	1444619.10	2.5	100.3	Pulse	0.1000	3
H2	Sc	45	237278.26	2.2	121.4	Pulse	0.1000	3
H2	Ge	72	156128.74	1.9	95.8	Pulse	0.1000	3
H2	In	115	407609.59	2.4	94.1	Pulse	0.1000	3
He	Sc	45	50327.32	0.5	125.9	Pulse	0.1000	3
He	Ge	72	73655.54	0.5	101.9	Pulse	0.1000	3
He	In	115	61059.46	1.2	94.5	Pulse	0.1000	3
He	Tb	159	294498.02	0.9	103.0	Pulse	0.1000	3
He	Bi	209	211085.56	0.1	95.0	Pulse	0.1000	3

No Gas

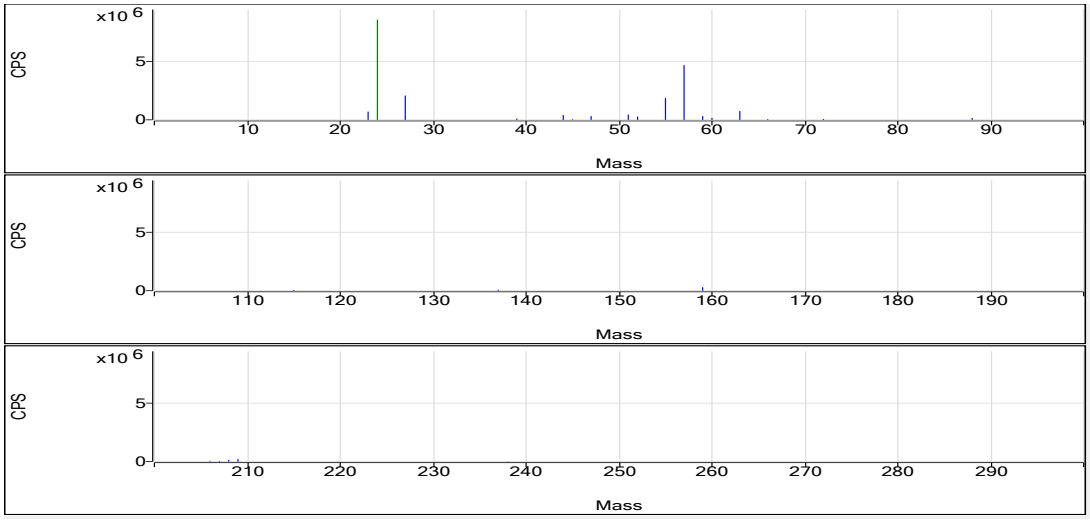


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.965	0.0026	3692.47	0.0013	4.694E-05
Be	9	1	No Gas	1.741	0.0023	3404.40	0.0013	4.694E-05
Be	9	1	No Gas	1.761	0.0024	3474.42	0.0013	4.694E-05
Se	78	2	H2	0.478	0.0002	30.67	0.0004	1.089E-05
Se	78	2	H2	0.552	0.0002	34.67	0.0004	1.089E-05
Se	78	2	H2	0.552	0.0002	36.00	0.0004	1.089E-05
Na	23	3	He	5496.782	9.5489	703075.07	0.0017	0.1065
Na	23	3	He	5508.898	9.5698	701625.38	0.0017	0.1065
Na	23	3	He	5420.258	9.4175	697093.04	0.0017	0.1065
Mg	24	3	He	138168.96	116.4953	8577382.37	0.0008	0.004846
Mg	24	3	He	137422.995	115.8664	8494969.25	0.0008	0.004846
Mg	24	3	He	135848.606	114.539	8478305.50	0.0008	0.004846
Al	27	3	He	116328.169	28.082	2067637.78	0.0002	0.001063
Al	27	3	He	116320.187	28.0801	2058745.59	0.0002	0.001063
Al	27	3	He	115152.438	27.7982	2057653.09	0.0002	0.001063
K	39	3	He	2452.483	1.4979	110290.50	0.0006	0.1436
K	39	3	He	2449.566	1.4963	109705.62	0.0006	0.1436
K	39	3	He	2447.215	1.495	110663.16	0.0006	0.1436
Ca	44	3	He	177230.725	5.5064	405426.32	0	0.001611
Ca	44	3	He	177489.97	5.5144	404300.78	0	0.001611
Ca	44	3	He	174984.96	5.4366	402424.64	0	0.001611
Ti	47	3	He	16880.928	4.2337	311718.34	0.0003	0.0002737
Ti	47	3	He	16985.605	4.2599	312323.67	0.0003	0.0002737
Ti	47	3	He	16698.172	4.1878	309987.77	0.0003	0.0002737
V	51	3	He	512.647	6.0041	442076.47	0.0117	0.007326
V	51	3	He	514.959	6.0312	442188.19	0.0117	0.007326
V	51	3	He	509.874	5.9717	442031.91	0.0117	0.007326
Cr	52	3	He	245.295	3.7606	276884.98	0.0152	0.02538
Cr	52	3	He	248.236	3.8053	278995.70	0.0152	0.02538
Cr	52	3	He	245.674	3.7663	278788.20	0.0152	0.02538
Mn	55	3	He	4227.497	24.9663	1838234.19	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4270.872	25.2223	1849224.82	0.0059	0.01385
Mn	55	3	He	4232.709	24.9971	1850312.00	0.0059	0.01385
Fe	57	3	He	218070.413	63.1821	4652008.06	0.0003	0.003918
Fe	57	3	He	218247.932	63.2335	4636089.93	0.0003	0.003918
Fe	57	3	He	217101.585	62.9014	4656033.68	0.0003	0.003918
Co	59	3	He	138.478	4.2281	311310.03	0.0305	0.003084
Co	59	3	He	139.847	4.2699	313054.80	0.0305	0.003084
Co	59	3	He	138.402	4.2258	312799.41	0.0305	0.003084
Ni	60	3	He	242.174	2.1385	157455.34	0.0088	0.009003
Ni	60	3	He	245.201	2.1651	158740.66	0.0088	0.009003
Ni	60	3	He	241.48	2.1324	157843.48	0.0088	0.009003
Cu	63	3	He	403.701	10.0721	741591.63	0.0249	0.004937
Cu	63	3	He	408.549	10.193	747316.71	0.0249	0.004937
Cu	63	3	He	403.012	10.0549	744273.58	0.0249	0.004937
Zn	66	3	He	312.493	0.7726	56882.39	0.0025	0.004836
Zn	66	3	He	317.175	0.7841	57485.05	0.0025	0.004836
Zn	66	3	He	309.777	0.7659	56691.74	0.0025	0.004836
As	75	3	He	6.06	0.011	808.03	0.0017	0.0004347
As	75	3	He	6.761	0.0122	894.03	0.0017	0.0004347
As	75	3	He	6.85	0.0123	914.03	0.0017	0.0004347
Sr	88	3	He	316.099	2.4718	148882.54	0.0078	0.0007762
Sr	88	3	He	310.616	2.4289	149842.95	0.0078	0.0007762
Sr	88	3	He	309.507	2.4202	148245.47	0.0078	0.0007762
Mo	98	3	He	2.035	0.0453	2730.36	0.022	0.0005162
Mo	98	3	He	1.979	0.0441	2720.36	0.022	0.0005162
Mo	98	3	He	1.623	0.0362	2220.24	0.022	0.0005162
Ag	107	3	He	0.249	0.0118	710.05	0.0455	0.0004641
Ag	107	3	He	0.264	0.0125	770.05	0.0455	0.0004641
Ag	107	3	He	0.248	0.0118	720.04	0.0455	0.0004641
Cd	111	3	He	0.543	0.0027	160.00	0.0048	5.152E-05
Cd	111	3	He	0.462	0.0023	140.00	0.0048	5.152E-05
Cd	111	3	He	0.567	0.0028	170.00	0.0048	5.152E-05
Sn	120	3	He	2.948	0.0576	3470.55	0.0143	0.01559
Sn	120	3	He	2.488	0.0511	3150.51	0.0143	0.01559
Sn	120	3	He	2.182	0.0467	2860.39	0.0143	0.01559
Sb	121	3	He	0.073	0.0012	70.00	0.0124	0.000258
Sb	121	3	He	0.136	0.0019	120.01	0.0124	0.000258
Sb	121	3	He	0.098	0.0015	90.00	0.0124	0.000258
Ba	137	3	He	308.149	1.3484	81218.88	0.0044	0.000309
Ba	137	3	He	307.838	1.347	83101.34	0.0044	0.000309
Ba	137	3	He	310.761	1.3598	83293.13	0.0044	0.000309
Tl	205	3	He	0.238	0.0076	1600.18	0.0276	0.001005
Tl	205	3	He	0.202	0.0066	1390.12	0.0276	0.001005
Tl	205	3	He	0.254	0.008	1690.17	0.0276	0.001005
Pb	208	3	He	32.327	1.1788	134035.69	0.0364	0.002176
Pb	208	3	He	32.629	1.1898	135065.73	0.0364	0.002176
Pb	208	3	He	32.955	1.2016	136209.62	0.0364	0.002176
U	238	3	He	2.028	0.0856	18063.23	0.0421	0.00024
U	238	3	He	2.02	0.0852	18002.92	0.0421	0.00024
U	238	3	He	2.146	0.0905	19084.74	0.0421	0.00024
Sc	45	1	No Gas			3940352.13		
Sc	45	1	No Gas			4023053.69		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			4033944.31		
Ge	72	1	No Gas			1404425.92		
Ge	72	1	No Gas			1458155.45		
Ge	72	1	No Gas			1471275.92		
Sc	45	2	H2			236439.94		
Sc	45	2	H2			232468.16		
Sc	45	2	H2			242926.68		
Ge	72	2	H2			155641.78		
Ge	72	2	H2			153400.63		
Ge	72	2	H2			159343.81		
In	115	2	H2			408103.55		
In	115	2	H2			397438.28		
In	115	2	H2			417286.95		
Sc	45	3	He			50588.59		
Sc	45	3	He			50076.33		
Sc	45	3	He			50317.03		
Ge	72	3	He			73628.56		
Ge	72	3	He			73316.94		
Ge	72	3	He			74021.11		
In	115	3	He			60260.64		
In	115	3	He			61716.50		
In	115	3	He			61275.18		
Tb	159	3	He			293213.55		
Tb	159	3	He			297666.77		
Tb	159	3	He			292613.75		
Bi	209	3	He			211114.76		
Bi	209	3	He			211271.36		
Bi	209	3	He			210870.56		

Quantitation Report

Data File Name	287SMPL.d
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Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

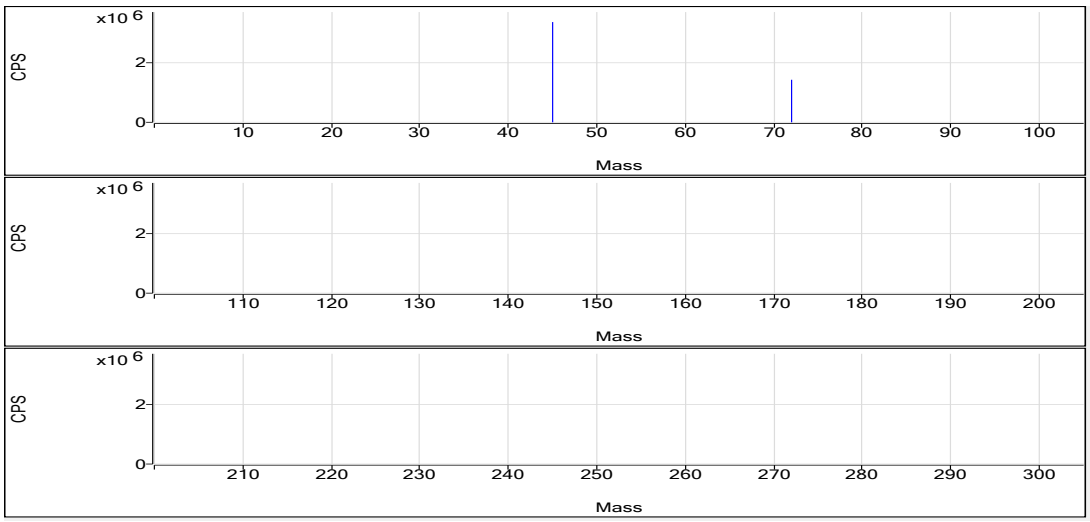
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.431	ppb	6.9	879.37	0.0006	Pulse	0.5000	3
Se	78	72	H2	0.114	ppb	26.9	8.67	0.0001	Pulse	1.5000	3
Na	23	72	He	1290.428	ppb	2.7	171548.30	2.3232	Pulse	0.1000	3
Mg	24	72	He	28945.746	ppb	2.1	1802519.29	24.4091	Pulse	0.1000	3
Al	27	72	He	25134.465	ppb	1.7	448158.86	6.0684	Pulse	0.1000	3
K	39	72	He	532.382	ppb	6.7	32306.25	0.4376	Pulse	0.1000	3
Ca	44	72	He	38365.409	ppb	1.5	88124.69	1.1932	Pulse	0.1000	3
Ti	47	72	He	3688.362	ppb	2.9	68320.23	0.9252	Pulse	0.1000	3
V	51	72	He	111.493	ppb	2.2	96853.17	1.3115	Pulse	0.5000	3
Cr	52	72	He	53.607	ppb	2.8	62156.08	0.8417	Pulse	0.1000	3
Mn	55	72	He	930.161	ppb	2.1	406468.18	5.5041	Pulse	0.1000	3
Fe	57	72	He	47712.316	ppb	2.5	1021051.29	13.8269	Pulse	0.1000	3
Co	59	72	He	30.796	ppb	2.9	69607.10	0.9427	Pulse	0.1000	3
Ni	60	72	He	53.717	ppb	2.1	35547.53	0.4814	Pulse	0.1000	3
Cu	63	72	He	91.013	ppb	1.5	167985.58	2.2745	Pulse	0.1000	3
Zn	66	72	He	70.283	ppb	3.3	13106.35	0.1775	Pulse	0.1000	3
As	75	72	He	1.364	ppb	3.1	207.33	0.0028	Pulse	0.5000	3
Sr	88	115	He	67.238	ppb	2.3	32852.02	0.5264	Pulse	0.1000	3
Mo	98	115	He	0.537	ppb	12.1	770.05	0.0123	Pulse	0.1000	3
Ag	107	115	He	0.046	ppb	33.3	160.01	0.0026	Pulse	0.1000	3
Cd	111	115	He	0.112	ppb	27.9	36.67	0.0006	Pulse	0.5000	3
Sn	120	115	He	0.832	ppb	7.2	1713.50	0.0275	Pulse	0.1000	3
Sb	121	115	He	0.052	ppb	71.6	56.67	0.0009	Pulse	0.1000	3
Ba	137	115	He	65.496	ppb	2.4	17902.12	0.2868	Pulse	0.1000	3
Tl	205	209	He	0.060	ppb	8.6	580.04	0.0027	Pulse	0.1000	3
Pb	208	209	He	7.095	ppb	2.5	56806.92	0.2604	Pulse	0.1000	3
U	238	209	He	0.419	ppb	6.6	3894.08	0.0179	Pulse	0.1000	3

ISTD Table:

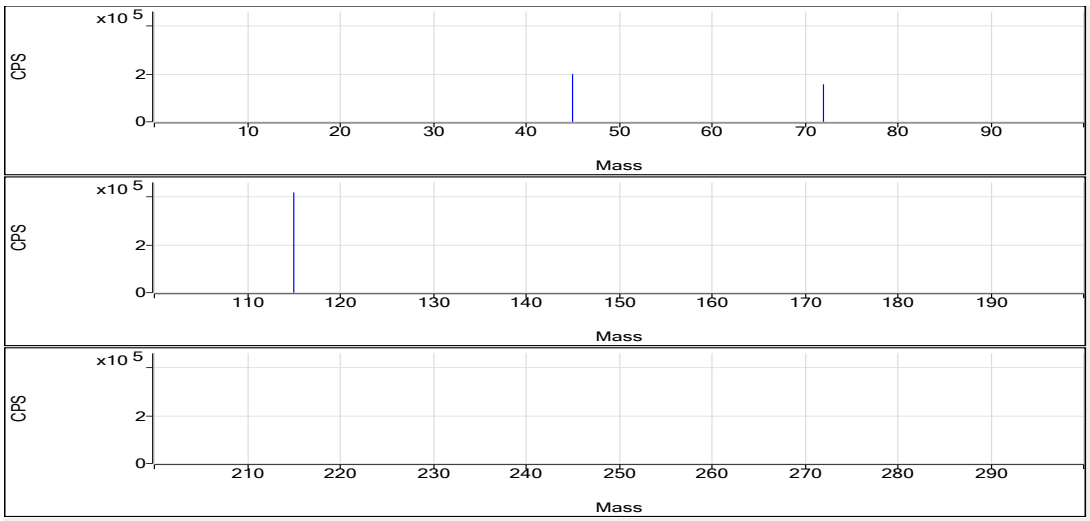
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3382383.91	1.7	104.4	Pulse	0.1000	3
No Gas	Ge	72	1435311.59	1.7	99.7	Pulse	0.1000	3
H2	Sc	45	199863.28	1.4	102.3	Pulse	0.1000	3
H2	Ge	72	157258.61	2.3	96.5	Pulse	0.1000	3
H2	In	115	419600.72	2.6	96.8	Pulse	0.1000	3
He	Sc	45	42275.20	1.3	105.7	Pulse	0.1000	3
He	Ge	72	73869.62	2.2	102.2	Pulse	0.1000	3
He	In	115	62412.90	0.3	96.6	Pulse	0.1000	3
He	Tb	159	287015.10	0.3	100.4	Pulse	0.1000	3
He	Bi	209	218172.91	1.4	98.2	Pulse	0.1000	3

No Gas

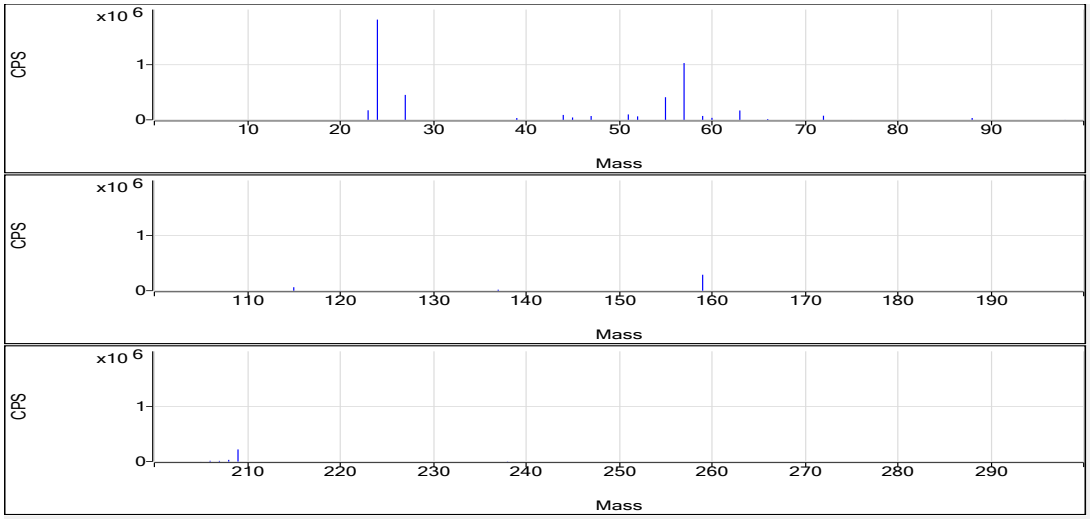


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.417	0.0006	842.03	0.0013	4.694E-05
Be	9	1	No Gas	0.464	0.0007	940.04	0.0013	4.694E-05
Be	9	1	No Gas	0.41	0.0006	856.03	0.0013	4.694E-05
Se	78	2	H2	0.079	0	6.67	0.0004	1.089E-05
Se	78	2	H2	0.128	0.0001	9.33	0.0004	1.089E-05
Se	78	2	H2	0.135	0.0001	10.00	0.0004	1.089E-05
Na	23	3	He	1325.474	2.3834	172034.20	0.0017	0.1065
Na	23	3	He	1288.701	2.3202	171649.35	0.0017	0.1065
Na	23	3	He	1257.108	2.2659	170961.35	0.0017	0.1065
Mg	24	3	He	29590.142	24.9523	1801076.22	0.0008	0.004846
Mg	24	3	He	28887.959	24.3603	1802176.22	0.0008	0.004846
Mg	24	3	He	28359.138	23.9145	1804305.44	0.0008	0.004846
Al	27	3	He	25501.295	6.1569	444411.01	0.0002	0.001063
Al	27	3	He	25247.528	6.0957	450957.38	0.0002	0.001063
Al	27	3	He	24654.574	5.9525	449108.20	0.0002	0.001063
K	39	3	He	571.01	0.459	33127.98	0.0006	0.1436
K	39	3	He	524.793	0.4334	32065.70	0.0006	0.1436
K	39	3	He	501.342	0.4205	31725.07	0.0006	0.1436
Ca	44	3	He	38986.234	1.2125	87520.34	0	0.001611
Ca	44	3	He	38243.032	1.1894	87994.30	0	0.001611
Ca	44	3	He	37866.959	1.1778	88859.43	0	0.001611
Ti	47	3	He	3767.635	0.9451	68219.27	0.0003	0.0002737
Ti	47	3	He	3730.114	0.9357	69223.71	0.0003	0.0002737
Ti	47	3	He	3567.336	0.8949	67517.70	0.0003	0.0002737
V	51	3	He	114.331	1.3447	97064.36	0.0117	0.007326
V	51	3	He	110.426	1.2991	96104.46	0.0117	0.007326
V	51	3	He	109.722	1.2908	97390.70	0.0117	0.007326
Cr	52	3	He	54.214	0.8509	61419.67	0.0152	0.02538
Cr	52	3	He	54.7	0.8583	63498.07	0.0152	0.02538
Cr	52	3	He	51.908	0.8158	61550.51	0.0152	0.02538
Mn	55	3	He	943.928	5.5853	403151.44	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	939.086	5.5567	411087.14	0.0059	0.01385
Mn	55	3	He	907.469	5.3701	405165.97	0.0059	0.01385
Fe	57	3	He	48518.95	14.0606	1014901.00	0.0003	0.003918
Fe	57	3	He	48277.514	13.9906	1035025.61	0.0003	0.003918
Fe	57	3	He	46340.483	13.4294	1013227.25	0.0003	0.003918
Co	59	3	He	31.611	0.9675	69837.81	0.0305	0.003084
Co	59	3	He	30.915	0.9463	70008.92	0.0305	0.003084
Co	59	3	He	29.862	0.9142	68974.58	0.0305	0.003084
Ni	60	3	He	54.519	0.4884	35253.47	0.0088	0.009003
Ni	60	3	He	54.185	0.4855	35914.76	0.0088	0.009003
Ni	60	3	He	52.447	0.4702	35474.35	0.0088	0.009003
Cu	63	3	He	92.027	2.2998	166002.87	0.0249	0.004937
Cu	63	3	He	91.582	2.2887	169319.55	0.0249	0.004937
Cu	63	3	He	89.431	2.2351	168634.33	0.0249	0.004937
Zn	66	3	He	72.9	0.1839	13276.46	0.0025	0.004836
Zn	66	3	He	69.427	0.1754	12976.21	0.0025	0.004836
Zn	66	3	He	68.524	0.1732	13066.37	0.0025	0.004836
As	75	3	He	1.343	0.0028	200.00	0.0017	0.0004347
As	75	3	He	1.413	0.0029	214.00	0.0017	0.0004347
As	75	3	He	1.335	0.0028	208.00	0.0017	0.0004347
Sr	88	3	He	65.87	0.5157	32177.22	0.0078	0.0007762
Sr	88	3	He	68.897	0.5393	33550.31	0.0078	0.0007762
Sr	88	3	He	66.947	0.5241	32828.52	0.0078	0.0007762
Mo	98	3	He	0.522	0.012	750.05	0.022	0.0005162
Mo	98	3	He	0.48	0.0111	690.04	0.022	0.0005162
Mo	98	3	He	0.607	0.0139	870.06	0.022	0.0005162
Ag	107	3	He	0.029	0.0018	110.00	0.0455	0.0004641
Ag	107	3	He	0.057	0.0031	190.01	0.0455	0.0004641
Ag	107	3	He	0.053	0.0029	180.01	0.0455	0.0004641
Cd	111	3	He	0.129	0.0007	42.00	0.0048	5.152E-05
Cd	111	3	He	0.13	0.0007	42.00	0.0048	5.152E-05
Cd	111	3	He	0.076	0.0004	26.00	0.0048	5.152E-05
Sn	120	3	He	0.896	0.0284	1770.18	0.0143	0.01559
Sn	120	3	He	0.779	0.0267	1660.16	0.0143	0.01559
Sn	120	3	He	0.822	0.0273	1710.17	0.0143	0.01559
Sb	121	3	He	0.031	0.0006	40.00	0.0124	0.000258
Sb	121	3	He	0.096	0.0014	90.00	0.0124	0.000258
Sb	121	3	He	0.031	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	63.897	0.2798	17461.51	0.0044	0.000309
Ba	137	3	He	67.075	0.2937	18272.67	0.0044	0.000309
Ba	137	3	He	65.516	0.2869	17972.17	0.0044	0.000309
Tl	205	3	He	0.059	0.0026	570.03	0.0276	0.001005
Tl	205	3	He	0.065	0.0028	620.04	0.0276	0.001005
Tl	205	3	He	0.055	0.0025	550.04	0.0276	0.001005
Pb	208	3	He	7.292	0.2676	30315.66	0.0364	0.002176
Pb	208	3	He	6.947	0.255	30416.03	0.0364	0.002176
Pb	208	3	He	7.048	0.2587	30846.80	0.0364	0.002176
U	238	3	He	0.446	0.019	4090.85	0.0421	0.00024
U	238	3	He	0.391	0.0167	3690.64	0.0421	0.00024
U	238	3	He	0.419	0.0179	3900.75	0.0421	0.00024
Sc	45	1	No Gas			3339943.39		
Sc	45	1	No Gas			3358203.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3449004.95		
Ge	72	1	No Gas			1414089.04		
Ge	72	1	No Gas			1430329.04		
Ge	72	1	No Gas			1461516.70		
Sc	45	2	H2			202926.83		
Sc	45	2	H2			197666.99		
Sc	45	2	H2			198996.01		
Ge	72	2	H2			160537.23		
Ge	72	2	H2			153439.27		
Ge	72	2	H2			157799.33		
In	115	2	H2			432147.57		
In	115	2	H2			412024.29		
In	115	2	H2			414630.31		
Sc	45	3	He			41720.45		
Sc	45	3	He			42793.25		
Sc	45	3	He			42311.89		
Ge	72	3	He			72180.65		
Ge	72	3	He			73979.96		
Ge	72	3	He			75448.24		
In	115	3	He			62410.42		
In	115	3	He			62218.19		
In	115	3	He			62650.19		
Tb	159	3	He			288004.41		
Tb	159	3	He			286811.44		
Tb	159	3	He			286229.45		
Bi	209	3	He			215161.75		
Bi	209	3	He			221139.53		
Bi	209	3	He			218217.46		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

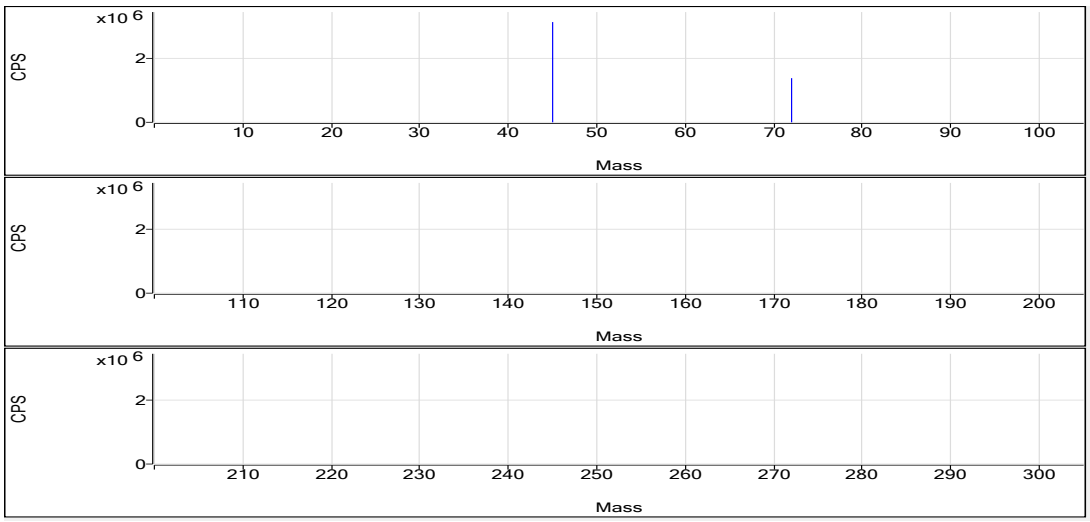
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.004	ppb	181.2	72.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.045	ppb	47.2	4.44	0.0000	Pulse	1.5000	3
Na	23	72	He	1.973	ppb	48.3	7875.67	0.1098	Pulse	0.1000	3
Mg	24	72	He	19.549	ppb	9.8	1530.13	0.0213	Pulse	0.1000	3
Al	27	72	He	26.557	ppb	19.7	536.70	0.0075	Pulse	0.1000	3
K	39	72	He	4.865	ppb	543.0	10484.10	0.1463	Pulse	0.1000	3
Ca	44	72	He	15.596	ppb	177.8	150.01	0.0021	Pulse	0.1000	3
Ti	47	72	He	2.068	ppb	43.0	56.67	0.0008	Pulse	0.1000	3
V	51	72	He	0.426	ppb	17.8	882.70	0.0123	Pulse	0.5000	3
Cr	52	72	He	0.110	ppb	121.2	1940.20	0.0271	Pulse	0.1000	3
Mn	55	72	He	-0.379	ppb	N/A	833.39	0.0116	Pulse	0.1000	3
Fe	57	72	He	41.371	ppb	12.7	1140.09	0.0159	Pulse	0.1000	3
Co	59	72	He	0.079	ppb	35.5	393.35	0.0055	Pulse	0.1000	3
Ni	60	72	He	0.920	ppb	41.9	1223.43	0.0171	Pulse	0.1000	3
Cu	63	72	He	0.195	ppb	7.3	703.37	0.0098	Pulse	0.1000	3
Zn	66	72	He	-0.135	ppb	N/A	323.35	0.0045	Pulse	0.1000	3
As	75	72	He	0.086	ppb	128.7	42.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.215	ppb	46.6	153.34	0.0025	Pulse	0.1000	3
Mo	98	115	He	0.158	ppb	21.5	250.01	0.0040	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	426.1	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	195.7	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.177	ppb	49.2	1133.41	0.0181	Pulse	0.1000	3
Sb	121	115	He	0.009	ppb	75.3	23.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.259	ppb	29.7	90.00	0.0014	Pulse	0.1000	3
Tl	205	209	He	0.032	ppb	33.4	413.36	0.0019	Pulse	0.1000	3
Pb	208	209	He	0.165	ppb	8.1	1783.45	0.0082	Pulse	0.1000	3
U	238	209	He	0.006	ppb	18.3	110.00	0.0005	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3156800.16	2.6	97.4	Pulse	0.1000	3
No Gas	Ge	72	1390155.19	1.6	96.6	Pulse	0.1000	3
H2	Sc	45	190073.17	1.5	97.3	Pulse	0.1000	3
H2	Ge	72	155292.59	2.3	95.3	Pulse	0.1000	3
H2	In	115	433814.15	2.1	100.1	Pulse	0.1000	3
He	Sc	45	41098.41	1.9	102.8	Pulse	0.1000	3
He	Ge	72	71705.51	1.4	99.2	Pulse	0.1000	3
He	In	115	62528.36	1.5	96.8	Pulse	0.1000	3
He	Tb	159	279544.08	1.2	97.7	Pulse	0.1000	3
He	Bi	209	217766.03	0.8	98.0	Pulse	0.1000	3

No Gas



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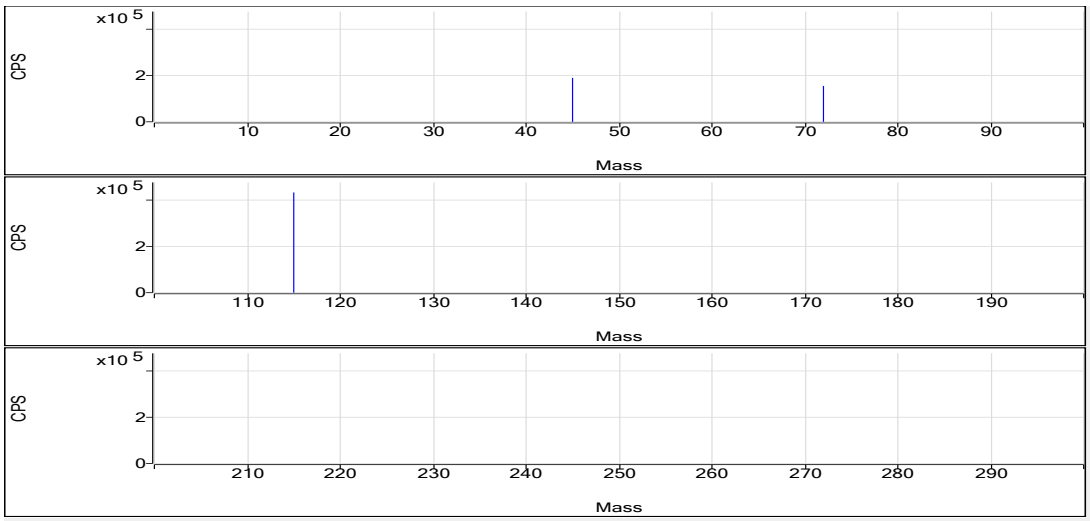
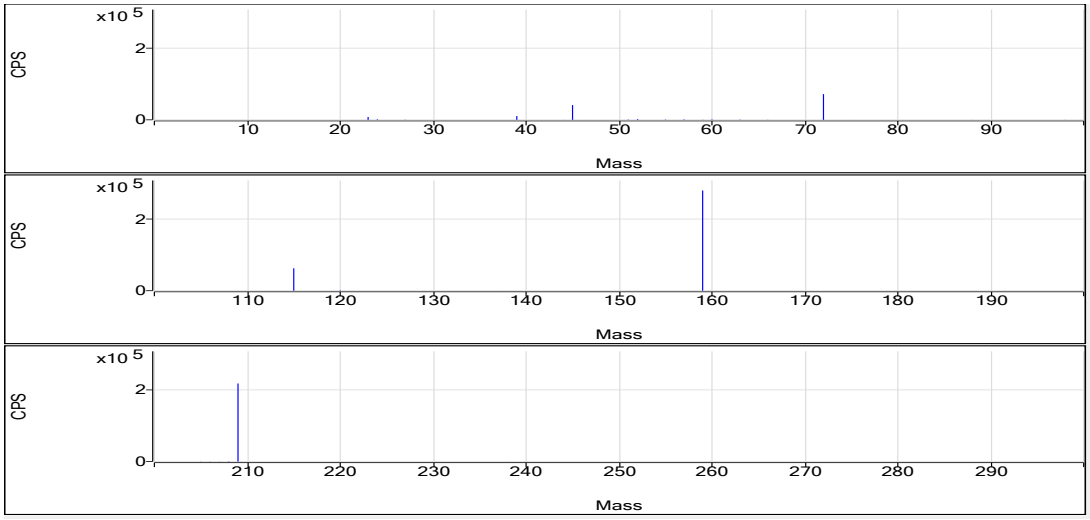


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0.0001	74.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.003	0	58.00	0.0013	4.694E-05
Be	9	1	No Gas	0.009	0.0001	84.00	0.0013	4.694E-05
Se	78	2	H2	0.069	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.04	0	4.00	0.0004	1.089E-05
Se	78	2	H2	0.027	0	3.33	0.0004	1.089E-05
Na	23	3	He	3.053	0.1117	7922.44	0.0017	0.1065
Na	23	3	He	1.251	0.1086	7912.30	0.0017	0.1065
Na	23	3	He	1.615	0.1092	7792.27	0.0017	0.1065
Mg	24	3	He	17.332	0.0195	1380.11	0.0008	0.004846
Mg	24	3	He	20.792	0.0224	1630.14	0.0008	0.004846
Mg	24	3	He	20.525	0.0222	1580.15	0.0008	0.004846
Al	27	3	He	24.219	0.0069	490.02	0.0002	0.001063
Al	27	3	He	32.56	0.0089	650.04	0.0002	0.001063
Al	27	3	He	22.892	0.0066	470.03	0.0002	0.001063
K	39	3	He	34.142	0.1625	11524.93	0.0006	0.1436
K	39	3	He	-17.182	0.1342	9773.55	0.0006	0.1436
K	39	3	He	-2.365	0.1423	10153.82	0.0006	0.1436
Ca	44	3	He	2.613	0.0017	120.01	0	0.001611
Ca	44	3	He	-3.253	0.0015	110.00	0	0.001611
Ca	44	3	He	47.429	0.0031	220.01	0	0.001611
Ti	47	3	He	2.844	0.001	70.00	0.0003	0.0002737
Ti	47	3	He	1.098	0.0005	40.00	0.0003	0.0002737
Ti	47	3	He	2.262	0.0008	60.00	0.0003	0.0002737
V	51	3	He	0.456	0.0127	898.03	0.0117	0.007326
V	51	3	He	0.481	0.013	944.04	0.0117	0.007326
V	51	3	He	0.34	0.0113	806.03	0.0117	0.007326
Cr	52	3	He	0.259	0.0293	2080.23	0.0152	0.02538
Cr	52	3	He	0.073	0.0265	1930.18	0.0152	0.02538
Cr	52	3	He	-0.001	0.0254	1810.18	0.0152	0.02538
Mn	55	3	He	-0.484	0.011	780.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.301	0.0121	880.06	0.0059	0.01385
Mn	55	3	He	-0.352	0.0118	840.05	0.0059	0.01385
Fe	57	3	He	38.068	0.0149	1060.08	0.0003	0.003918
Fe	57	3	He	38.597	0.0151	1100.08	0.0003	0.003918
Fe	57	3	He	47.447	0.0177	1260.10	0.0003	0.003918
Co	59	3	He	0.088	0.0058	410.02	0.0305	0.003084
Co	59	3	He	0.047	0.0045	330.02	0.0305	0.003084
Co	59	3	He	0.101	0.0062	440.02	0.0305	0.003084
Ni	60	3	He	1.269	0.0202	1430.12	0.0088	0.009003
Ni	60	3	He	0.506	0.0135	980.08	0.0088	0.009003
Ni	60	3	He	0.985	0.0177	1260.10	0.0088	0.009003
Cu	63	3	He	0.181	0.0094	670.04	0.0249	0.004937
Cu	63	3	He	0.209	0.0102	740.04	0.0249	0.004937
Cu	63	3	He	0.196	0.0098	700.04	0.0249	0.004937
Zn	66	3	He	-0.304	0.0041	290.01	0.0025	0.004836
Zn	66	3	He	0.099	0.0051	370.02	0.0025	0.004836
Zn	66	3	He	-0.2	0.0043	310.01	0.0025	0.004836
As	75	3	He	0.058	0.0005	38.00	0.0017	0.0004347
As	75	3	He	0.208	0.0008	58.00	0.0017	0.0004347
As	75	3	He	-0.008	0.0004	30.00	0.0017	0.0004347
Sr	88	3	He	0.102	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.252	0.0027	170.01	0.0078	0.0007762
Sr	88	3	He	0.293	0.0031	190.01	0.0078	0.0007762
Mo	98	3	He	0.119	0.0031	200.01	0.022	0.0005162
Mo	98	3	He	0.174	0.0044	270.01	0.022	0.0005162
Mo	98	3	He	0.182	0.0045	280.01	0.022	0.0005162
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Ag	107	3	He	-0.01	0	0.00	0.0455	0.0004641
Cd	111	3	He	0.022	0.0002	10.00	0.0048	5.152E-05
Cd	111	3	He	0.003	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.275	0.0195	1240.09	0.0143	0.01559
Sn	120	3	He	0.107	0.0171	1060.07	0.0143	0.01559
Sn	120	3	He	0.151	0.0177	1100.08	0.0143	0.01559
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Ba	137	3	He	0.181	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.261	0.0015	90.00	0.0044	0.000309
Ba	137	3	He	0.335	0.0018	110.00	0.0044	0.000309
Tl	205	3	He	0.02	0.0016	340.02	0.0276	0.001005
Tl	205	3	He	0.041	0.0021	470.03	0.0276	0.001005
Tl	205	3	He	0.036	0.002	430.02	0.0276	0.001005
Pb	208	3	He	0.16	0.008	940.07	0.0364	0.002176
Pb	208	3	He	0.18	0.0087	940.07	0.0364	0.002176
Pb	208	3	He	0.155	0.0078	970.08	0.0364	0.002176
U	238	3	He	0.007	0.0006	120.00	0.0421	0.00024
U	238	3	He	0.005	0.0005	100.00	0.0421	0.00024
U	238	3	He	0.006	0.0005	110.00	0.0421	0.00024
Sc	45	1	No Gas			3146365.89		
Sc	45	1	No Gas			3079514.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3244519.95		
Ge	72	1	No Gas			1387179.20		
Ge	72	1	No Gas			1369211.07		
Ge	72	1	No Gas			1414075.29		
Sc	45	2	H2			193382.28		
Sc	45	2	H2			188003.22		
Sc	45	2	H2			188834.02		
Ge	72	2	H2			159120.34		
Ge	72	2	H2			152064.62		
Ge	72	2	H2			154692.82		
In	115	2	H2			444474.37		
In	115	2	H2			427587.81		
In	115	2	H2			429380.27		
Sc	45	3	He			41850.24		
Sc	45	3	He			41168.81		
Sc	45	3	He			40276.18		
Ge	72	3	He			70925.11		
Ge	72	3	He			72853.79		
Ge	72	3	He			71337.62		
In	115	3	He			63595.00		
In	115	3	He			61977.91		
In	115	3	He			62038.70		
Tb	159	3	He			276865.68		
Tb	159	3	He			283388.16		
Tb	159	3	He			278378.41		
Bi	209	3	He			217255.37		
Bi	209	3	He			219663.69		
Bi	209	3	He			216379.02		

Quantitation Report

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Acq Time	2023-08-10 20:37:37
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Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

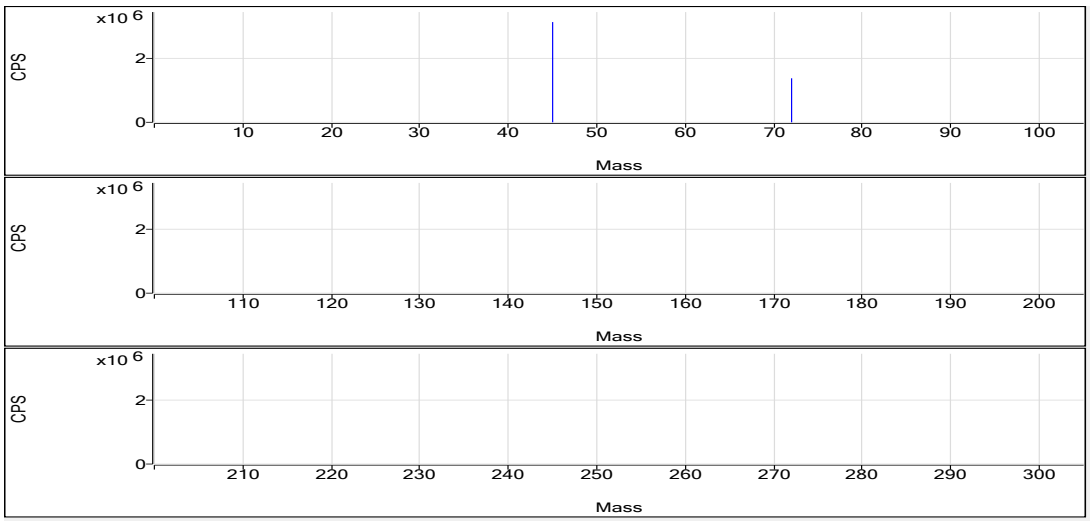
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.007	ppb	N/A	52.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.001	ppb	2243.7	1.78	0.0000	Pulse	1.5000	3
Na	23	72	He	2.753	ppb	76.7	8015.75	0.1112	Pulse	0.1000	3
Mg	24	72	He	17.343	ppb	20.4	1403.45	0.0195	Pulse	0.1000	3
Al	27	72	He	21.643	ppb	1.7	453.36	0.0063	Pulse	0.1000	3
K	39	72	He	3.713	ppb	692.4	10507.46	0.1457	Pulse	0.1000	3
Ca	44	72	He	6.009	ppb	454.3	130.00	0.0018	Pulse	0.1000	3
Ti	47	72	He	1.483	ppb	149.0	46.67	0.0006	Pulse	0.1000	3
V	51	72	He	0.322	ppb	42.4	798.69	0.0111	Pulse	0.5000	3
Cr	52	72	He	0.063	ppb	92.3	1900.20	0.0263	Pulse	0.1000	3
Mn	55	72	He	-0.570	ppb	N/A	756.71	0.0105	Pulse	0.1000	3
Fe	57	72	He	35.429	ppb	14.5	1023.41	0.0142	Pulse	0.1000	3
Co	59	72	He	0.081	ppb	12.4	400.02	0.0055	Pulse	0.1000	3
Ni	60	72	He	0.915	ppb	20.3	1230.10	0.0170	Pulse	0.1000	3
Cu	63	72	He	0.153	ppb	18.6	630.04	0.0087	Pulse	0.1000	3
Zn	66	72	He	-0.178	ppb	N/A	316.68	0.0044	Pulse	0.1000	3
As	75	72	He	0.048	ppb	167.9	37.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.128	ppb	44.7	113.34	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.153	ppb	27.9	246.68	0.0039	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	98.2	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	-0.006	ppb	N/A	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.229	ppb	57.9	1200.16	0.0189	Pulse	0.1000	3
Sb	121	115	He	0.034	ppb	118.9	43.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.169	ppb	12.9	66.67	0.0010	Pulse	0.1000	3
Tl	205	209	He	0.014	ppb	87.0	303.35	0.0014	Pulse	0.1000	3
Pb	208	209	He	0.144	ppb	16.6	1626.77	0.0074	Pulse	0.1000	3
U	238	209	He	0.003	ppb	66.9	83.33	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3148584.54	1.6	97.1	Pulse	0.1000	3
No Gas	Ge	72	1382566.18	1.5	96.0	Pulse	0.1000	3
H2	Sc	45	190954.91	3.1	97.7	Pulse	0.1000	3
H2	Ge	72	156142.59	1.8	95.8	Pulse	0.1000	3
H2	In	115	432238.48	2.4	99.8	Pulse	0.1000	3
He	Sc	45	40129.09	2.6	100.4	Pulse	0.1000	3
He	Ge	72	72110.60	1.1	99.8	Pulse	0.1000	3
He	In	115	63646.08	0.5	98.5	Pulse	0.1000	3
He	Tb	159	281303.46	0.9	98.4	Pulse	0.1000	3
He	Bi	209	219563.43	0.7	98.8	Pulse	0.1000	3

No Gas



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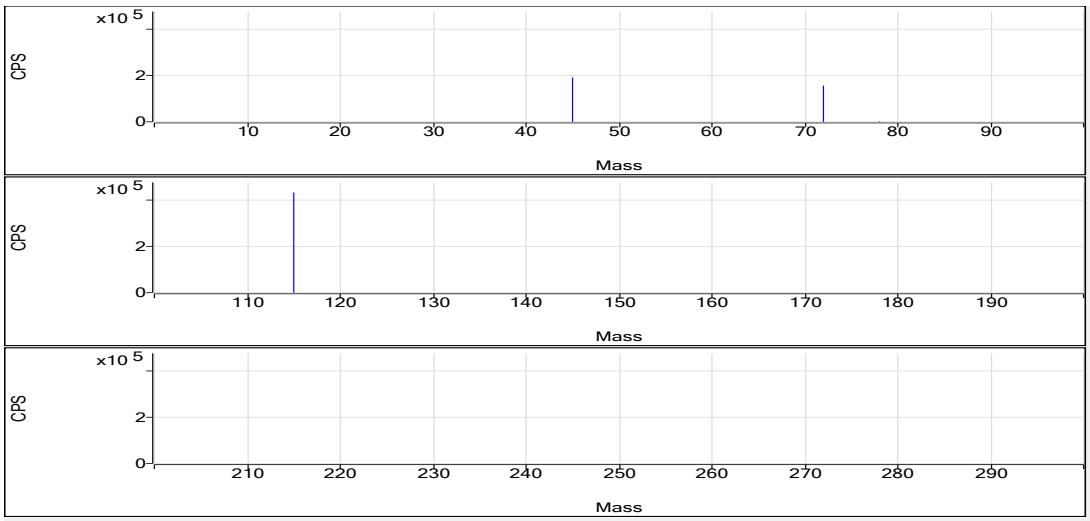
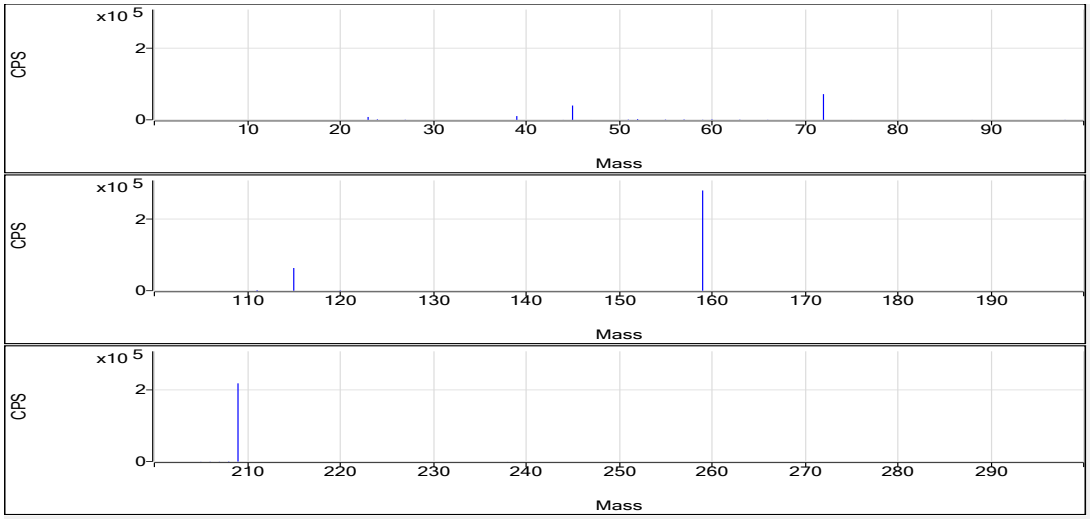


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	58.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.009	0	48.00	0.0013	4.694E-05
Be	9	1	No Gas	-0.008	0	52.00	0.0013	4.694E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.089E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.089E-05
Se	78	2	H2	-0.006	0	1.33	0.0004	1.089E-05
Na	23	3	He	0.627	0.1075	7822.35	0.0017	0.1065
Na	23	3	He	4.85	0.1148	8172.46	0.0017	0.1065
Na	23	3	He	2.781	0.1112	8052.45	0.0017	0.1065
Mg	24	3	He	19.527	0.0213	1550.14	0.0008	0.004846
Mg	24	3	He	19.244	0.0211	1500.13	0.0008	0.004846
Mg	24	3	He	13.259	0.016	1160.08	0.0008	0.004846
Al	27	3	He	21.225	0.0062	450.02	0.0002	0.001063
Al	27	3	He	21.783	0.0063	450.03	0.0002	0.001063
Al	27	3	He	21.922	0.0064	460.02	0.0002	0.001063
K	39	3	He	29.275	0.1598	11624.90	0.0006	0.1436
K	39	3	He	4.003	0.1459	10384.08	0.0006	0.1436
K	39	3	He	-22.139	0.1314	9513.41	0.0006	0.1436
Ca	44	3	He	36.658	0.0027	200.01	0	0.001611
Ca	44	3	He	-15.688	0.0011	80.00	0	0.001611
Ca	44	3	He	-2.943	0.0015	110.00	0	0.001611
Ti	47	3	He	3.842	0.0012	90.00	0.0003	0.0002737
Ti	47	3	He	1.149	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	-0.541	0.0001	10.00	0.0003	0.0002737
V	51	3	He	0.232	0.01	730.02	0.0117	0.007326
V	51	3	He	0.478	0.0129	920.04	0.0117	0.007326
V	51	3	He	0.255	0.0103	746.02	0.0117	0.007326
Cr	52	3	He	0.13	0.0274	1990.21	0.0152	0.02538
Cr	52	3	He	0.021	0.0257	1830.19	0.0152	0.02538
Cr	52	3	He	0.039	0.026	1880.19	0.0152	0.02538
Mn	55	3	He	-0.6	0.0103	750.05	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.634	0.0101	720.04	0.0059	0.01385
Mn	55	3	He	-0.475	0.0111	800.05	0.0059	0.01385
Fe	57	3	He	37.252	0.0147	1070.08	0.0003	0.003918
Fe	57	3	He	29.628	0.0125	890.05	0.0003	0.003918
Fe	57	3	He	39.407	0.0153	1110.09	0.0003	0.003918
Co	59	3	He	0.088	0.0058	420.02	0.0305	0.003084
Co	59	3	He	0.069	0.0052	370.02	0.0305	0.003084
Co	59	3	He	0.085	0.0057	410.02	0.0305	0.003084
Ni	60	3	He	1.009	0.0179	1300.11	0.0088	0.009003
Ni	60	3	He	0.701	0.0152	1080.07	0.0088	0.009003
Ni	60	3	He	1.034	0.0181	1310.11	0.0088	0.009003
Cu	63	3	He	0.133	0.0082	600.04	0.0249	0.004937
Cu	63	3	He	0.185	0.0096	680.04	0.0249	0.004937
Cu	63	3	He	0.14	0.0084	610.04	0.0249	0.004937
Zn	66	3	He	-0.849	0.0027	200.01	0.0025	0.004836
Zn	66	3	He	0.147	0.0052	370.02	0.0025	0.004836
Zn	66	3	He	0.168	0.0052	380.02	0.0025	0.004836
As	75	3	He	-0.044	0.0004	26.00	0.0017	0.0004347
As	75	3	He	0.105	0.0006	44.00	0.0017	0.0004347
As	75	3	He	0.084	0.0006	42.00	0.0017	0.0004347
Sr	88	3	He	0.062	0.0013	80.00	0.0078	0.0007762
Sr	88	3	He	0.162	0.002	130.01	0.0078	0.0007762
Sr	88	3	He	0.161	0.002	130.01	0.0078	0.0007762
Mo	98	3	He	0.184	0.0046	290.01	0.022	0.0005162
Mo	98	3	He	0.169	0.0042	270.01	0.022	0.0005162
Mo	98	3	He	0.104	0.0028	180.01	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0	0.0005	30.00	0.0455	0.0004641
Ag	107	3	He	0.007	0.0008	50.00	0.0455	0.0004641
Cd	111	3	He	-0.011	0	0.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.08	0.0167	1060.08	0.0143	0.01559
Sn	120	3	He	0.275	0.0195	1240.28	0.0143	0.01559
Sn	120	3	He	0.332	0.0203	1300.12	0.0143	0.01559
Sb	121	3	He	0.005	0.0003	20.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.08	0.0013	80.00	0.0124	0.000258
Ba	137	3	He	0.182	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.181	0.0011	70.00	0.0044	0.000309
Ba	137	3	He	0.144	0.0009	60.00	0.0044	0.000309
Tl	205	3	He	0.019	0.0015	340.02	0.0276	0.001005
Tl	205	3	He	0.022	0.0016	350.02	0.0276	0.001005
Tl	205	3	He	0	0.001	220.01	0.0276	0.001005
Pb	208	3	He	0.13	0.0069	810.05	0.0364	0.002176
Pb	208	3	He	0.171	0.0084	860.06	0.0364	0.002176
Pb	208	3	He	0.13	0.0069	800.06	0.0364	0.002176
U	238	3	He	0.005	0.0005	100.00	0.0421	0.00024
U	238	3	He	0.004	0.0004	90.00	0.0421	0.00024
U	238	3	He	0.001	0.0003	60.00	0.0421	0.00024
Sc	45	1	No Gas			3133988.39		
Sc	45	1	No Gas			3107809.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3203955.58		
Ge	72	1	No Gas			1373323.26		
Ge	72	1	No Gas			1367945.92		
Ge	72	1	No Gas			1406429.35		
Sc	45	2	H2			197888.10		
Sc	45	2	H2			187522.56		
Sc	45	2	H2			187454.08		
Ge	72	2	H2			159314.62		
Ge	72	2	H2			153985.12		
Ge	72	2	H2			155128.04		
In	115	2	H2			443441.32		
In	115	2	H2			422754.29		
In	115	2	H2			430519.84		
Sc	45	3	He			41278.89		
Sc	45	3	He			39273.33		
Sc	45	3	He			39835.04		
Ge	72	3	He			72743.50		
Ge	72	3	He			71196.37		
Ge	72	3	He			72391.94		
In	115	3	He			63404.54		
In	115	3	He			63574.56		
In	115	3	He			63987.22		
Tb	159	3	He			278593.02		
Tb	159	3	He			281667.32		
Tb	159	3	He			283650.03		
Bi	209	3	He			221273.49		
Bi	209	3	He			218606.25		
Bi	209	3	He			218810.56		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

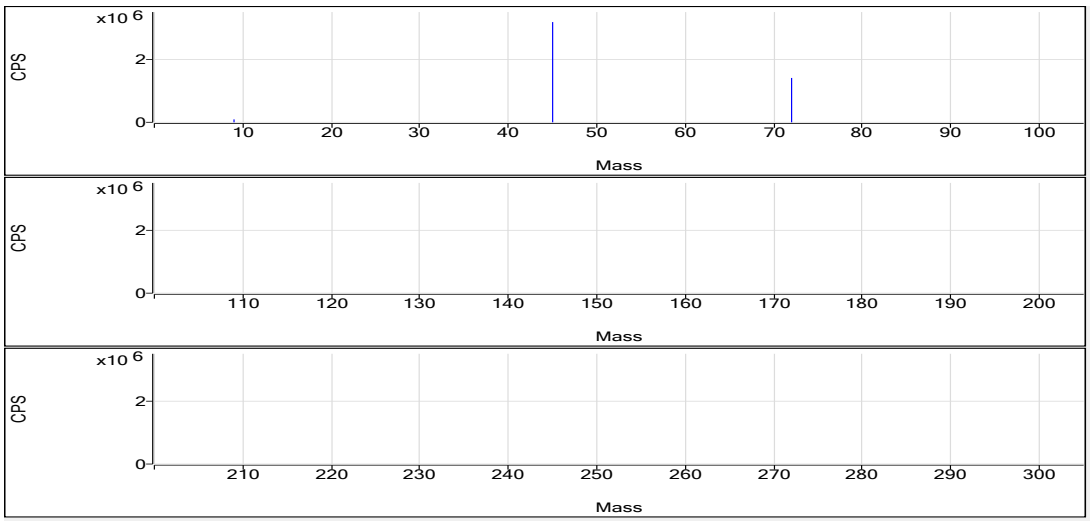
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.844	ppb	6.8	92785.85	0.0655	Pulse	0.5000	3
Se	78	72	H2	52.745	ppb	2.6	3212.36	0.0205	Pulse	1.5000	3
Na	23	72	He	5346.640	ppb	1.6	668120.41	9.2910	Pulse	0.1000	3
Mg	24	72	He	5357.391	ppb	1.3	325162.25	4.5217	Pulse	0.1000	3
Al	27	72	He	5299.145	ppb	0.7	92068.52	1.2802	Pulse	0.1000	3
K	39	72	He	5389.225	ppb	1.0	224341.58	3.1196	Pulse	0.1000	3
Ca	44	72	He	5459.514	ppb	2.7	12308.95	0.1712	Pulse	0.1000	3
Ti	47	72	He	5403.829	ppb	1.6	97470.39	1.3554	Pulse	0.1000	3
V	51	72	He	534.580	ppb	1.3	450216.04	6.2607	Pulse	0.5000	3
Cr	52	72	He	534.500	ppb	1.1	587119.35	8.1644	Pulse	0.1000	3
Mn	55	72	He	534.022	ppb	1.6	227659.40	3.1659	Pulse	0.1000	3
Fe	57	72	He	5300.333	ppb	1.0	110709.37	1.5395	Pulse	0.1000	3
Co	59	72	He	532.332	ppb	0.7	1168227.53	16.2448	Pulse	0.1000	3
Ni	60	72	He	532.913	ppb	1.6	337621.21	4.6951	Pulse	0.1000	3
Cu	63	72	He	531.252	ppb	1.2	953034.49	13.2528	Pulse	0.1000	3
Zn	66	72	He	531.914	ppb	2.8	94313.56	1.3116	Pulse	0.1000	3
As	75	72	He	525.382	ppb	1.3	65738.80	0.9142	Pulse	0.5000	3
Sr	88	115	He	51.812	ppb	1.1	25857.49	0.4058	Pulse	0.1000	3
Mo	98	115	He	51.473	ppb	0.8	72258.25	1.1340	Pulse	0.1000	3
Ag	107	115	He	51.602	ppb	0.7	149633.20	2.3484	Pulse	0.1000	3
Cd	111	115	He	52.272	ppb	1.7	15990.48	0.2510	Pulse	0.5000	3
Sn	120	115	He	52.637	ppb	2.0	48819.74	0.7661	Pulse	0.1000	3
Sb	121	115	He	51.620	ppb	1.4	40817.22	0.6406	Pulse	0.1000	3
Ba	137	115	He	518.654	ppb	1.6	144601.84	2.2693	Pulse	0.1000	3
Tl	205	209	He	52.740	ppb	0.2	319005.63	1.4590	Pulse	0.1000	3
Pb	208	209	He	52.819	ppb	1.3	420822.94	1.9246	Pulse	0.1000	3
U	238	209	He	51.829	ppb	0.0	476783.69	2.1805	Pulse	0.1000	3

ISTD Table:

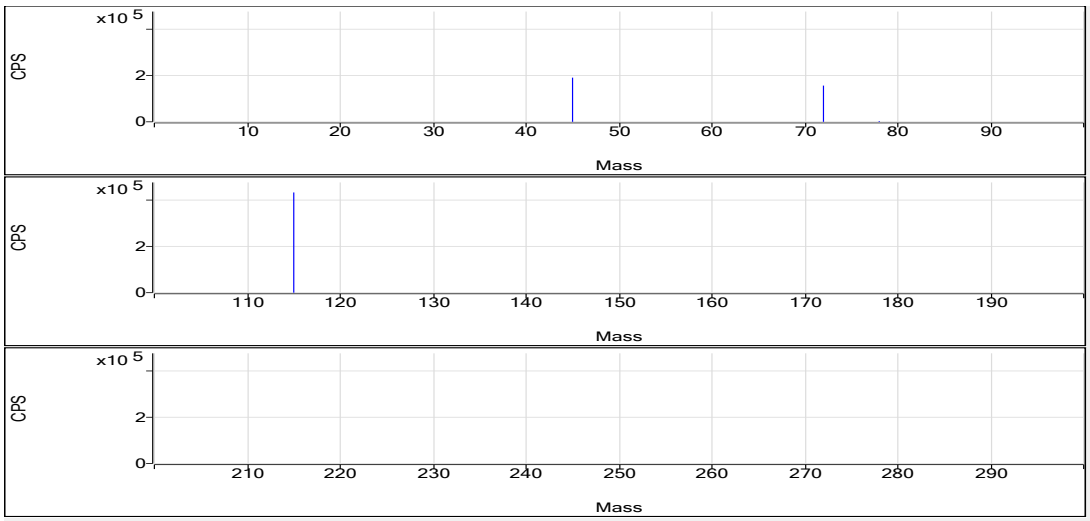
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3202825.99	2.8	98.8	Pulse	0.1000	3
No Gas	Ge	72	1417438.47	2.8	98.4	Pulse	0.1000	3
H2	Sc	45	190728.63	2.1	97.6	Pulse	0.1000	3
H2	Ge	72	156374.27	1.4	95.9	Pulse	0.1000	3
H2	In	115	432832.83	1.0	99.9	Pulse	0.1000	3
He	Sc	45	41298.99	1.8	103.3	Pulse	0.1000	3
He	Ge	72	71916.51	0.9	99.5	Pulse	0.1000	3
He	In	115	63720.25	0.8	98.7	Pulse	0.1000	3
He	Tb	159	283643.69	1.0	99.2	Pulse	0.1000	3
He	Bi	209	218654.64	0.5	98.4	Pulse	0.1000	3

No Gas

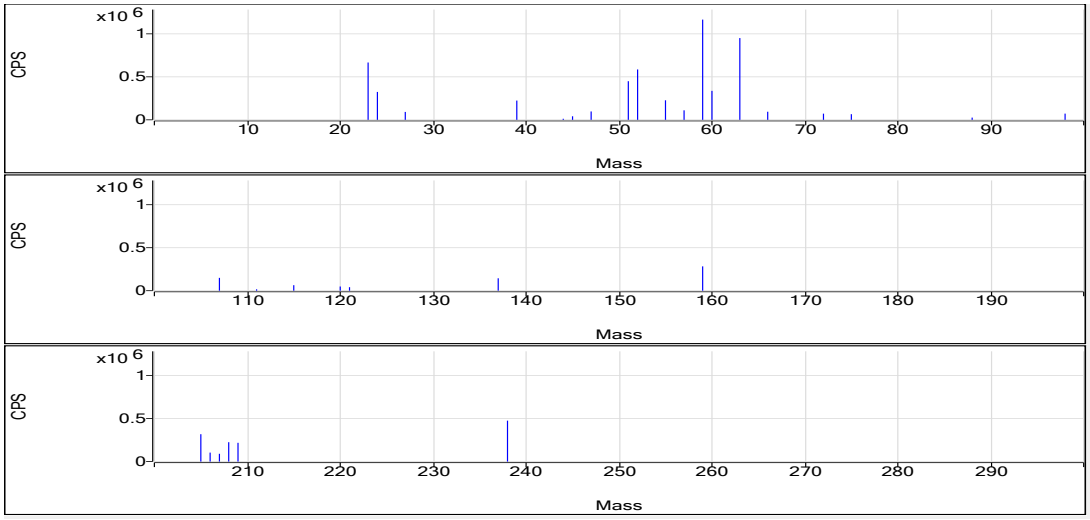


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.674	0.0693	95733.24	0.0013	4.694E-05
Be	9	1	No Gas	50.765	0.0668	94074.76	0.0013	4.694E-05
Be	9	1	No Gas	46.092	0.0606	88549.55	0.0013	4.694E-05
Se	78	2	H2	52.568	0.0205	3222.37	0.0004	1.089E-05
Se	78	2	H2	54.189	0.0211	3246.37	0.0004	1.089E-05
Se	78	2	H2	51.478	0.0201	3168.35	0.0004	1.089E-05
Na	23	3	He	5419.492	9.4162	674659.52	0.0017	0.1065
Na	23	3	He	5371.748	9.3342	667085.30	0.0017	0.1065
Na	23	3	He	5248.68	9.1227	662616.40	0.0017	0.1065
Mg	24	3	He	5422.412	4.5765	327901.01	0.0008	0.004846
Mg	24	3	He	5365.226	4.5283	323622.87	0.0008	0.004846
Mg	24	3	He	5284.535	4.4602	323962.87	0.0008	0.004846
Al	27	3	He	5337.159	1.2894	92385.80	0.0002	0.001063
Al	27	3	He	5291.361	1.2784	91361.16	0.0002	0.001063
Al	27	3	He	5268.917	1.2729	92458.61	0.0002	0.001063
K	39	3	He	5427.809	3.1409	225045.29	0.0006	0.1436
K	39	3	He	5410.911	3.1316	223807.09	0.0006	0.1436
K	39	3	He	5328.956	3.0864	224172.36	0.0006	0.1436
Ca	44	3	He	5518.227	0.173	12395.73	0	0.001611
Ca	44	3	He	5568.467	0.1746	12475.78	0	0.001611
Ca	44	3	He	5291.848	0.166	12055.33	0	0.001611
Ti	47	3	He	5402.418	1.3551	97090.73	0.0003	0.0002737
Ti	47	3	He	5489.763	1.377	98409.68	0.0003	0.0002737
Ti	47	3	He	5319.305	1.3342	96910.77	0.0003	0.0002737
V	51	3	He	539.5	6.3183	452697.56	0.0117	0.007326
V	51	3	He	537.55	6.2954	449917.53	0.0117	0.007326
V	51	3	He	526.69	6.1684	448033.03	0.0117	0.007326
Cr	52	3	He	533.738	8.1528	584136.75	0.0152	0.02538
Cr	52	3	He	540.616	8.2575	590139.05	0.0152	0.02538
Cr	52	3	He	529.145	8.0828	587082.26	0.0152	0.02538
Mn	55	3	He	540.781	3.2058	229690.11	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	536.781	3.1822	227419.74	0.0059	0.01385
Mn	55	3	He	524.505	3.1097	225868.34	0.0059	0.01385
Fe	57	3	He	5326.668	1.5471	110850.45	0.0003	0.003918
Fe	57	3	He	5333.455	1.5491	110709.54	0.0003	0.003918
Fe	57	3	He	5240.876	1.5223	110568.13	0.0003	0.003918
Co	59	3	He	535.06	16.328	1169888.26	0.0305	0.003084
Co	59	3	He	533.627	16.2843	1163791.86	0.0305	0.003084
Co	59	3	He	528.31	16.1221	1171002.48	0.0305	0.003084
Ni	60	3	He	535.423	4.7171	337978.43	0.0088	0.009003
Ni	60	3	He	540.055	4.7579	340031.05	0.0088	0.009003
Ni	60	3	He	523.261	4.6102	334854.14	0.0088	0.009003
Cu	63	3	He	534.636	13.3372	955597.72	0.0249	0.004937
Cu	63	3	He	534.943	13.3449	953719.83	0.0249	0.004937
Cu	63	3	He	524.178	13.0764	949785.92	0.0249	0.004937
Zn	66	3	He	544.425	1.3424	96178.88	0.0025	0.004836
Zn	66	3	He	535.957	1.3216	94447.82	0.0025	0.004836
Zn	66	3	He	515.361	1.271	92313.97	0.0025	0.004836
As	75	3	He	531.047	0.924	66204.89	0.0017	0.0004347
As	75	3	He	527.485	0.9178	65594.11	0.0017	0.0004347
As	75	3	He	517.612	0.9007	65417.39	0.0017	0.0004347
Sr	88	3	He	51.269	0.4016	25723.87	0.0078	0.0007762
Sr	88	3	He	52.369	0.4102	26235.07	0.0078	0.0007762
Sr	88	3	He	51.799	0.4057	25613.54	0.0078	0.0007762
Mo	98	3	He	51.074	1.1252	72084.16	0.022	0.0005162
Mo	98	3	He	51.479	1.1342	72545.97	0.022	0.0005162
Mo	98	3	He	51.866	1.1427	72144.62	0.022	0.0005162
Ag	107	3	He	51.522	2.3447	150204.97	0.0455	0.0004641
Ag	107	3	He	51.271	2.3333	149247.19	0.0455	0.0004641
Ag	107	3	He	52.013	2.3671	149447.43	0.0455	0.0004641
Cd	111	3	He	51.561	0.2476	15858.99	0.0048	5.152E-05
Cd	111	3	He	51.991	0.2496	15967.14	0.0048	5.152E-05
Cd	111	3	He	53.262	0.2557	16145.31	0.0048	5.152E-05
Sn	120	3	He	53.441	0.7775	49809.93	0.0143	0.01559
Sn	120	3	He	53.017	0.7715	49348.10	0.0143	0.01559
Sn	120	3	He	51.453	0.7492	47301.20	0.0143	0.01559
Sb	121	3	He	50.829	0.6308	40409.19	0.0124	0.000258
Sb	121	3	He	51.804	0.6429	41121.62	0.0124	0.000258
Sb	121	3	He	52.228	0.6481	40920.85	0.0124	0.000258
Ba	137	3	He	511.287	2.2371	143309.21	0.0044	0.000309
Ba	137	3	He	527.442	2.3078	147614.06	0.0044	0.000309
Ba	137	3	He	517.233	2.2631	142882.24	0.0044	0.000309
Tl	205	3	He	52.744	1.4591	318130.78	0.0276	0.001005
Tl	205	3	He	52.823	1.4613	318730.19	0.0276	0.001005
Tl	205	3	He	52.652	1.4565	320155.93	0.0276	0.001005
Pb	208	3	He	53.608	1.9534	227522.26	0.0364	0.002176
Pb	208	3	He	52.428	1.9104	225623.22	0.0364	0.002176
Pb	208	3	He	52.42	1.9101	223913.77	0.0364	0.002176
U	238	3	He	51.82	2.1802	475355.85	0.0421	0.00024
U	238	3	He	51.852	2.1815	475831.16	0.0421	0.00024
U	238	3	He	51.814	2.1799	479164.06	0.0421	0.00024
Sc	45	1	No Gas			3109372.77		
Sc	45	1	No Gas			3207649.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3291455.26		
Ge	72	1	No Gas			1382171.54		
Ge	72	1	No Gas			1409262.32		
Ge	72	1	No Gas			1460881.54		
Sc	45	2	H2			192997.46		
Sc	45	2	H2			186098.75		
Sc	45	2	H2			193089.68		
Ge	72	2	H2			157351.68		
Ge	72	2	H2			153784.28		
Ge	72	2	H2			157986.84		
In	115	2	H2			435462.42		
In	115	2	H2			427992.49		
In	115	2	H2			435043.59		
Sc	45	3	He			41379.12		
Sc	45	3	He			41981.03		
Sc	45	3	He			40536.81		
Ge	72	3	He			71649.01		
Ge	72	3	He			71467.11		
Ge	72	3	He			72633.41		
In	115	3	He			64449.29		
In	115	3	He			64349.14		
In	115	3	He			63504.71		
Tb	159	3	He			281021.75		
Tb	159	3	He			283399.90		
Tb	159	3	He			286509.41		
Bi	209	3	He			218036.91		
Bi	209	3	He			218119.08		
Bi	209	3	He			219807.93		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins21905
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	2023-08-10 16:44:41
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

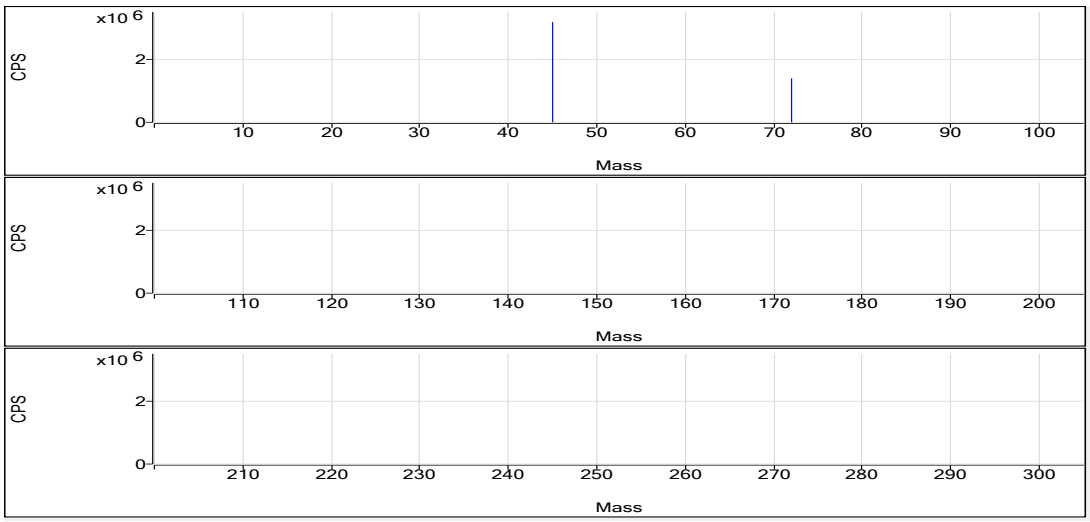
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.028	ppb	20.9	118.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.039	ppb	90.0	4.00	0.0000	Pulse	1.5000	3
Na	23	72	He	3.034	ppb	27.9	8045.74	0.1117	Pulse	0.1000	3
Mg	24	72	He	14.316	ppb	26.8	1220.10	0.0169	Pulse	0.1000	3
Al	27	72	He	17.829	ppb	8.2	386.69	0.0054	Pulse	0.1000	3
K	39	72	He	5.037	ppb	237.0	10554.16	0.1464	Pulse	0.1000	3
Ca	44	72	He	1.649	ppb	898.9	120.00	0.0017	Pulse	0.1000	3
Ti	47	72	He	2.408	ppb	46.9	63.33	0.0009	Pulse	0.1000	3
V	51	72	He	0.378	ppb	11.9	846.70	0.0117	Pulse	0.5000	3
Cr	52	72	He	0.176	ppb	72.1	2023.54	0.0281	Pulse	0.1000	3
Mn	55	72	He	-0.802	ppb	N/A	656.71	0.0091	Pulse	0.1000	3
Fe	57	72	He	30.207	ppb	18.9	913.39	0.0127	Pulse	0.1000	3
Co	59	72	He	0.129	ppb	16.3	506.70	0.0070	Pulse	0.1000	3
Ni	60	72	He	1.028	ppb	6.0	1300.10	0.0180	Pulse	0.1000	3
Cu	63	72	He	0.277	ppb	6.9	853.39	0.0118	Pulse	0.1000	3
Zn	66	72	He	-0.331	ppb	N/A	290.01	0.0040	Pulse	0.1000	3
As	75	72	He	0.176	ppb	34.0	53.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.109	ppb	29.6	103.33	0.0016	Pulse	0.1000	3
Mo	98	115	He	0.132	ppb	39.3	216.68	0.0034	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	14.5	66.67	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.005	ppb	217.7	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.194	ppb	15.0	1163.43	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.022	ppb	35.3	33.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.157	ppb	51.9	63.33	0.0010	Pulse	0.1000	3
Tl	205	209	He	0.146	ppb	14.8	1096.76	0.0050	Pulse	0.1000	3
Pb	208	209	He	0.128	ppb	6.4	1490.10	0.0068	Pulse	0.1000	3
U	238	209	He	0.014	ppb	16.5	183.34	0.0008	Pulse	0.1000	3

ISTD Table:

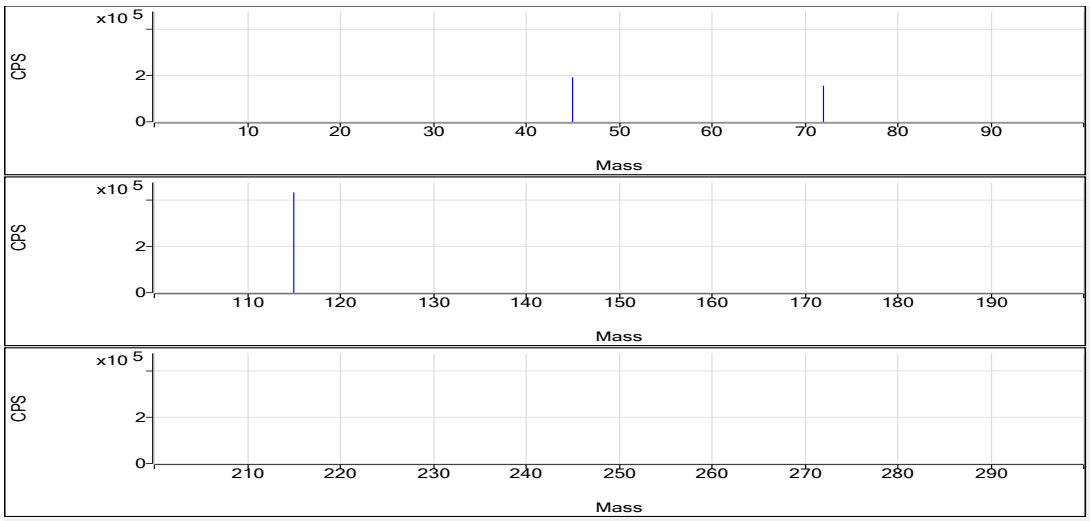
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	3204074.64	2.1	98.9	Pulse	0.1000	3
No Gas	Ge	72	1405122.79	2.0	97.6	Pulse	0.1000	3
H2	Sc	45	191882.28	2.4	98.2	Pulse	0.1000	3
H2	Ge	72	155821.56	2.5	95.6	Pulse	0.1000	3
H2	In	115	432533.34	2.3	99.8	Pulse	0.1000	3
He	Sc	45	39801.57	2.2	99.5	Pulse	0.1000	3
He	Ge	72	72057.50	1.1	99.7	Pulse	0.1000	3
He	In	115	63405.15	0.7	98.2	Pulse	0.1000	3
He	Tb	159	280253.99	0.1	98.0	Pulse	0.1000	3
He	Bi	209	217942.42	0.9	98.1	Pulse	0.1000	3

No Gas

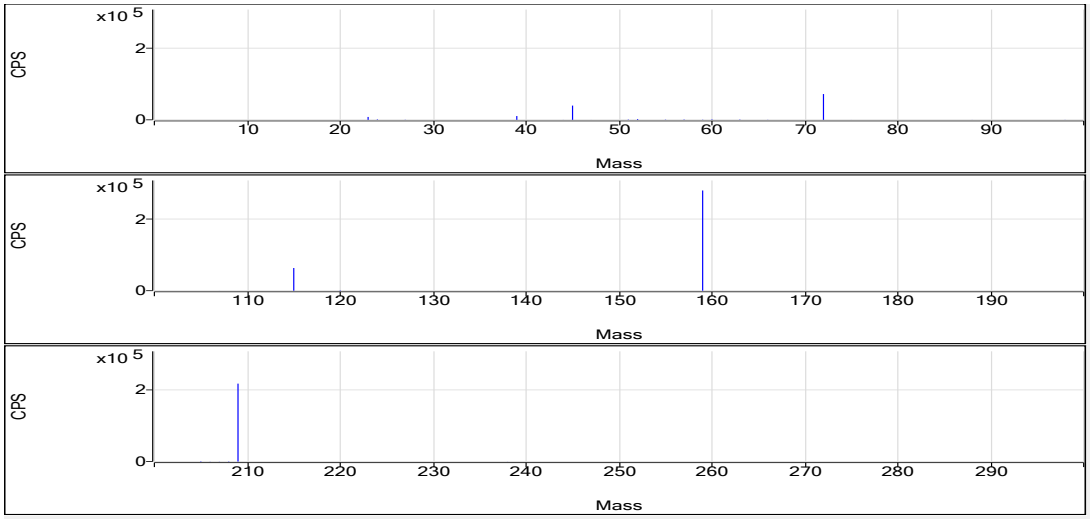


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.033	0.0001	124.00	0.0013	4.694E-05
Be	9	1	No Gas	0.022	0.0001	106.00	0.0013	4.694E-05
Be	9	1	No Gas	0.03	0.0001	124.00	0.0013	4.694E-05
Se	78	2	H2	0.004	0	2.00	0.0004	1.089E-05
Se	78	2	H2	0.074	0	6.00	0.0004	1.089E-05
Se	78	2	H2	0.038	0	4.00	0.0004	1.089E-05
Na	23	3	He	2.06	0.11	8022.40	0.0017	0.1065
Na	23	3	He	3.443	0.1124	8052.40	0.0017	0.1065
Na	23	3	He	3.598	0.1126	8062.41	0.0017	0.1065
Mg	24	3	He	17.672	0.0197	1440.12	0.0008	0.004846
Mg	24	3	He	10.143	0.0134	960.07	0.0008	0.004846
Mg	24	3	He	15.133	0.0176	1260.10	0.0008	0.004846
Al	27	3	He	17.75	0.0053	390.02	0.0002	0.001063
Al	27	3	He	16.41	0.005	360.02	0.0002	0.001063
Al	27	3	He	19.327	0.0057	410.02	0.0002	0.001063
K	39	3	He	18.577	0.1539	11224.60	0.0006	0.1436
K	39	3	He	0.527	0.1439	10314.03	0.0006	0.1436
K	39	3	He	-3.991	0.1414	10123.85	0.0006	0.1436
Ca	44	3	He	18.769	0.0022	160.01	0	0.001611
Ca	44	3	He	-6.936	0.0014	100.00	0	0.001611
Ca	44	3	He	-6.885	0.0014	100.00	0	0.001611
Ti	47	3	He	3.282	0.0011	80.00	0.0003	0.0002737
Ti	47	3	He	1.134	0.0006	40.00	0.0003	0.0002737
Ti	47	3	He	2.808	0.001	70.00	0.0003	0.0002737
V	51	3	He	0.424	0.0123	896.04	0.0117	0.007326
V	51	3	He	0.376	0.0117	840.03	0.0117	0.007326
V	51	3	He	0.334	0.0112	804.03	0.0117	0.007326
Cr	52	3	He	0.323	0.0303	2210.24	0.0152	0.02538
Cr	52	3	He	0.102	0.0269	1930.19	0.0152	0.02538
Cr	52	3	He	0.104	0.027	1930.20	0.0152	0.02538
Mn	55	3	He	-0.907	0.0085	620.04	0.0059	0.01385

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.834	0.0089	640.04	0.0059	0.01385
Mn	55	3	He	-0.666	0.0099	710.05	0.0059	0.01385
Fe	57	3	He	33.806	0.0137	1000.08	0.0003	0.003918
Fe	57	3	He	33.203	0.0135	970.06	0.0003	0.003918
Fe	57	3	He	23.61	0.0108	770.04	0.0003	0.003918
Co	59	3	He	0.142	0.0074	540.03	0.0305	0.003084
Co	59	3	He	0.141	0.0074	530.03	0.0305	0.003084
Co	59	3	He	0.105	0.0063	450.03	0.0305	0.003084
Ni	60	3	He	1.097	0.0186	1360.10	0.0088	0.009003
Ni	60	3	He	1.008	0.0179	1280.10	0.0088	0.009003
Ni	60	3	He	0.978	0.0176	1260.09	0.0088	0.009003
Cu	63	3	He	0.291	0.0122	890.05	0.0249	0.004937
Cu	63	3	He	0.255	0.0113	810.06	0.0249	0.004937
Cu	63	3	He	0.284	0.012	860.06	0.0249	0.004937
Zn	66	3	He	-0.238	0.0043	310.01	0.0025	0.004836
Zn	66	3	He	-0.492	0.0036	260.01	0.0025	0.004836
Zn	66	3	He	-0.263	0.0042	300.01	0.0025	0.004836
As	75	3	He	0.113	0.0006	46.00	0.0017	0.0004347
As	75	3	He	0.232	0.0008	60.00	0.0017	0.0004347
As	75	3	He	0.184	0.0008	54.00	0.0017	0.0004347
Sr	88	3	He	0.081	0.0014	90.00	0.0078	0.0007762
Sr	88	3	He	0.102	0.0016	100.00	0.0078	0.0007762
Sr	88	3	He	0.145	0.0019	120.00	0.0078	0.0007762
Mo	98	3	He	0.076	0.0022	140.01	0.022	0.0005162
Mo	98	3	He	0.141	0.0036	230.01	0.022	0.0005162
Mo	98	3	He	0.179	0.0044	280.01	0.022	0.0005162
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.014	0.0011	70.00	0.0455	0.0004641
Ag	107	3	He	0.011	0.001	60.00	0.0455	0.0004641
Cd	111	3	He	0.015	0.0001	8.00	0.0048	5.152E-05
Cd	111	3	He	0.002	0.0001	4.00	0.0048	5.152E-05
Cd	111	3	He	-0.004	0	2.00	0.0048	5.152E-05
Sn	120	3	He	0.225	0.0188	1200.09	0.0143	0.01559
Sn	120	3	He	0.168	0.018	1140.10	0.0143	0.01559
Sn	120	3	He	0.188	0.0183	1150.09	0.0143	0.01559
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.017	0.0005	30.00	0.0124	0.000258
Sb	121	3	He	0.03	0.0006	40.00	0.0124	0.000258
Ba	137	3	He	0.252	0.0014	90.00	0.0044	0.000309
Ba	137	3	He	0.11	0.0008	50.00	0.0044	0.000309
Ba	137	3	He	0.111	0.0008	50.00	0.0044	0.000309
Tl	205	3	He	0.164	0.0055	1210.11	0.0276	0.001005
Tl	205	3	He	0.151	0.0052	1120.09	0.0276	0.001005
Tl	205	3	He	0.122	0.0044	960.07	0.0276	0.001005
Pb	208	3	He	0.138	0.0072	890.07	0.0364	0.002176
Pb	208	3	He	0.124	0.0067	850.07	0.0364	0.002176
Pb	208	3	He	0.123	0.0067	760.05	0.0364	0.002176
U	238	3	He	0.016	0.0009	200.01	0.0421	0.00024
U	238	3	He	0.015	0.0009	190.01	0.0421	0.00024
U	238	3	He	0.012	0.0007	160.01	0.0421	0.00024
Sc	45	1	No Gas			3137003.08		
Sc	45	1	No Gas			3200919.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			3274300.89		
Ge	72	1	No Gas			1376079.20		
Ge	72	1	No Gas			1408299.98		
Ge	72	1	No Gas			1430989.20		
Sc	45	2	H2			194576.13		
Sc	45	2	H2			186596.89		
Sc	45	2	H2			194473.83		
Ge	72	2	H2			159686.10		
Ge	72	2	H2			151822.49		
Ge	72	2	H2			155956.08		
In	115	2	H2			436519.95		
In	115	2	H2			421225.81		
In	115	2	H2			439854.25		
Sc	45	3	He			40366.30		
Sc	45	3	He			40266.23		
Sc	45	3	He			38772.19		
Ge	72	3	He			72934.76		
Ge	72	3	He			71659.16		
Ge	72	3	He			71578.57		
In	115	3	He			63856.23		
In	115	3	He			63423.94		
In	115	3	He			62962.49		
Tb	159	3	He			280447.09		
Tb	159	3	He			280423.55		
Tb	159	3	He			279891.32		
Bi	209	3	He			218586.03		
Bi	209	3	He			215679.51		
Bi	209	3	He			219561.72		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 8:01:28 AM
Sample Name	ICIS 4654618
Sample Type	CalBlk
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

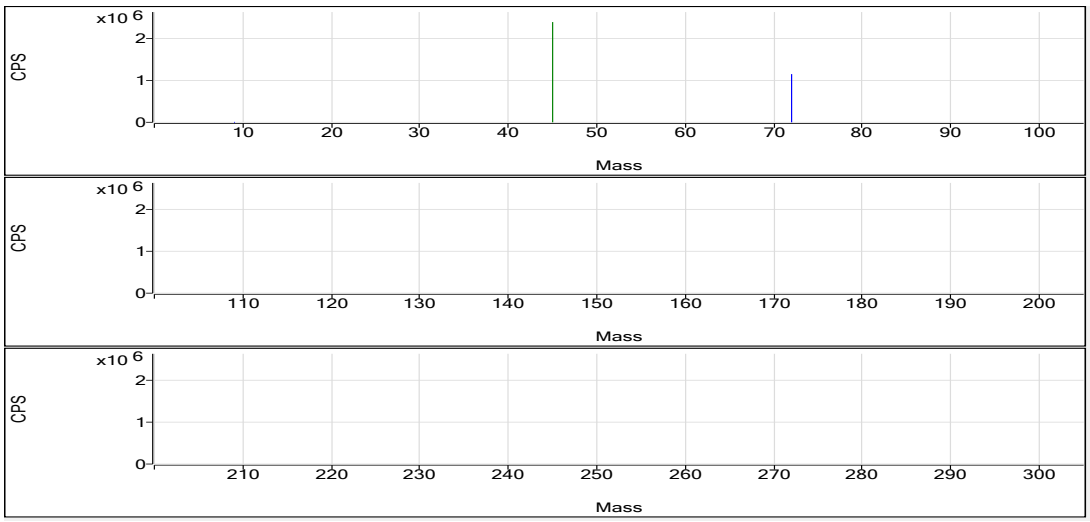
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	N/A	11.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.000	ppb	N/A	2.00	0.0000	Pulse	1.5000	3
Na	23	45	He	0.000	ppb	N/A	16089.21	0.3452	Pulse	0.1000	3
Mg	24	45	He	0.000	ppb	N/A	163.34	0.0035	Pulse	0.1000	3
Al	27	45	He	0.000	ppb	N/A	30.00	0.0006	Pulse	0.1000	3
K	39	45	He	0.000	ppb	N/A	18425.44	0.3951	Pulse	0.1000	3
Ca	44	45	He	0.000	ppb	N/A	126.67	0.0027	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.000	ppb	N/A	1160.06	0.0249	Pulse	0.5000	3
Cr	52	45	He	0.000	ppb	N/A	1866.85	0.0400	Pulse	0.1000	3
Mn	55	45	He	0.000	ppb	N/A	123.34	0.0026	Pulse	0.1000	3
Fe	57	45	He	0.000	ppb	N/A	66.67	0.0014	Pulse	0.1000	3
Co	59	45	He	0.000	ppb	N/A	100.00	0.0021	Pulse	0.1000	3
Ni	60	72	He	0.000	ppb	N/A	230.01	0.0028	Pulse	0.1000	3
Cu	63	72	He	0.000	ppb	N/A	386.69	0.0048	Pulse	0.1000	3
Zn	66	72	He	0.000	ppb	N/A	310.02	0.0038	Pulse	0.1000	3
As	75	72	He	0.000	ppb	N/A	65.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	N/A	83.34	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.000	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.000	ppb	N/A	1420.12	0.0165	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.000	ppb	N/A	20.00	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.000	ppb	N/A	53.33	0.0001	Pulse	0.1000	3
Pb	208	159	He	0.000	ppb	N/A	426.68	0.0011	Pulse	0.1000	3
U	238	209	He	0.000	ppb	N/A	23.33	0.0001	Pulse	0.1000	3

ISTD Table:

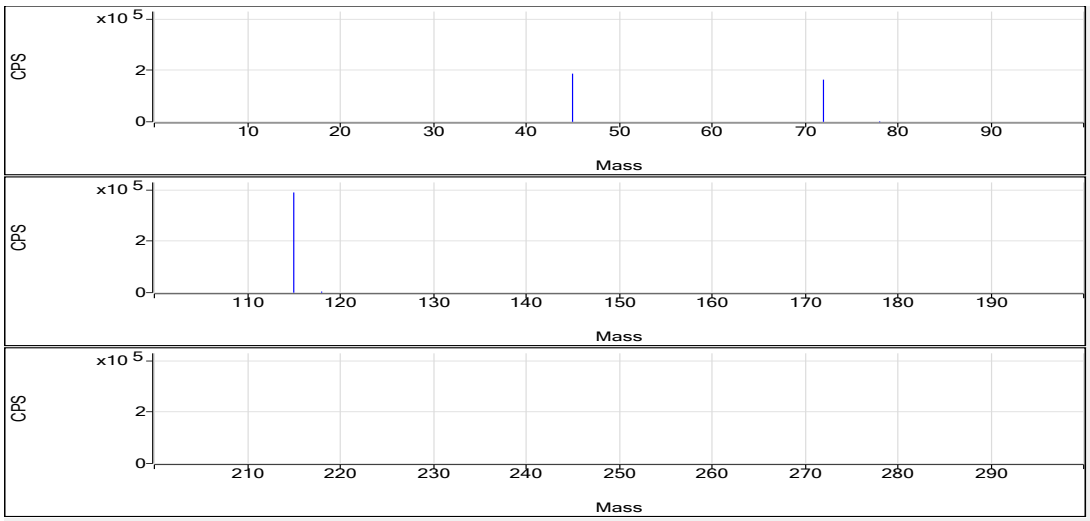
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2398817.93	2.1	100.0	Analog	0.1000	3
No Gas	Ge	72	1153302.77	0.8	100.0	Pulse	0.1000	3
H2	Sc	45	187008.05	0.2	100.0	Pulse	0.1000	3
H2	Ge	72	163714.51	0.9	100.0	Pulse	0.1000	3
H2	In	115	389092.85	0.6	100.0	Pulse	0.1000	3
He	Sc	45	46642.13	3.1	100.0	Pulse	0.1000	3
He	Ge	72	81194.04	1.0	100.0	Pulse	0.1000	3
He	In	115	86196.29	1.5	100.0	Pulse	0.1000	3
He	Tb	159	398606.67	0.9	100.0	Pulse	0.1000	3
He	Bi	209	309284.32	0.7	100.0	Pulse	0.1000	3

No Gas

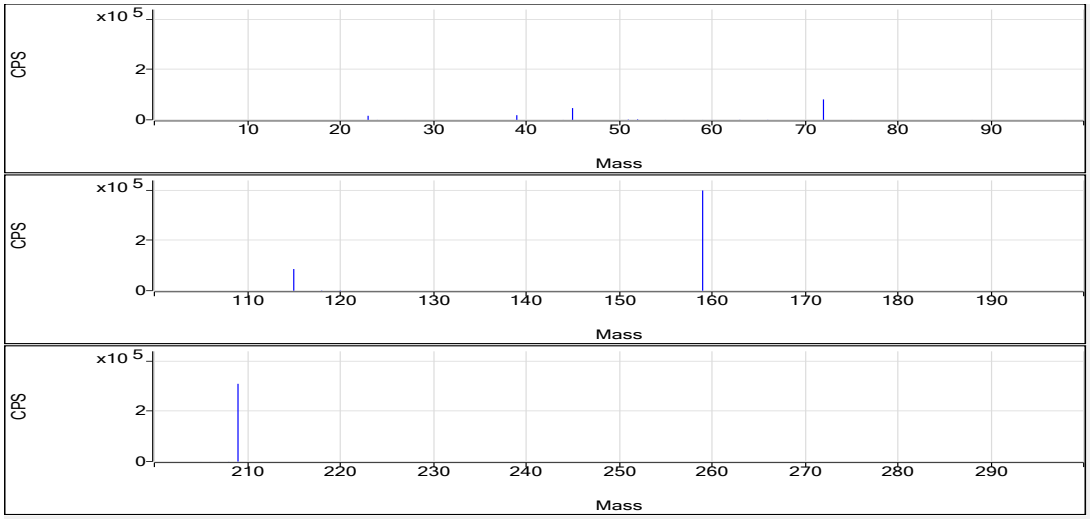


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	-0.004	0	4.00	0.0008	4.685E-06
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	-0.029	0	0.00	0.0004	1.219E-05
Se	78	2	H2	0.029	0	4.00	0.0004	1.219E-05
Na	23	3	He	-2.407	0.3365	16019.22	0.0036	0.3452
Na	23	3	He	3.193	0.3566	16039.02	0.0036	0.3452
Na	23	3	He	-0.786	0.3423	16209.39	0.0036	0.3452
Mg	24	3	He	-0.427	0.0027	130.01	0.0018	0.003497
Mg	24	3	He	-0.214	0.0031	140.00	0.0018	0.003497
Mg	24	3	He	0.641	0.0046	220.01	0.0018	0.003497
Al	27	3	He	0.337	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	0.041	0.0007	30.00	0.0006	0.0006432
Al	27	3	He	-0.377	0.0004	20.00	0.0006	0.0006432
K	39	3	He	-4.192	0.3902	18572.24	0.0012	0.3951
K	39	3	He	0.976	0.3962	17821.31	0.0012	0.3951
K	39	3	He	3.216	0.3988	18882.77	0.0012	0.3951
Ca	44	3	He	0.24	0.0027	130.00	0.0001	0.002715
Ca	44	3	He	-0.698	0.0027	120.00	0.0001	0.002715
Ca	44	3	He	0.457	0.0027	130.01	0.0001	0.002715
Ti	47	3	He	0.261	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.014	0.0252	1198.06	0.0219	0.02486
V	51	3	He	-0.017	0.0245	1102.05	0.0219	0.02486
V	51	3	He	0.003	0.0249	1180.06	0.0219	0.02486
Cr	52	3	He	0.075	0.0422	2010.21	0.0299	0.03997
Cr	52	3	He	-0.095	0.0371	1670.15	0.0299	0.03997
Cr	52	3	He	0.019	0.0406	1920.20	0.0299	0.03997
Mn	55	3	He	0.105	0.004	190.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.015	0.0024	110.00	0.0128	0.002639
Mn	55	3	He	-0.09	0.0015	70.00	0.0128	0.002639
Fe	57	3	He	-1.013	0.0008	40.00	0.0006	0.001429
Fe	57	3	He	-0.163	0.0013	60.00	0.0006	0.001429
Fe	57	3	He	1.176	0.0021	100.00	0.0006	0.001429
Co	59	3	He	-0.001	0.0021	100.00	0.0563	0.002149
Co	59	3	He	0.005	0.0024	110.01	0.0563	0.002149
Co	59	3	He	-0.004	0.0019	90.00	0.0563	0.002149
Ni	60	3	He	-0.004	0.0028	230.01	0.0086	0.002834
Ni	60	3	He	0.046	0.0032	260.01	0.0086	0.002834
Ni	60	3	He	-0.042	0.0025	200.01	0.0086	0.002834
Cu	63	3	He	0.038	0.0057	470.02	0.0257	0.004757
Cu	63	3	He	-0.03	0.004	320.02	0.0257	0.004757
Cu	63	3	He	-0.007	0.0046	370.02	0.0257	0.004757
Zn	66	3	He	-0.014	0.0038	310.02	0.0029	0.003818
Zn	66	3	He	-0.117	0.0035	280.01	0.0029	0.003818
Zn	66	3	He	0.131	0.0042	340.02	0.0029	0.003818
As	75	3	He	-0.12	0.0006	46.00	0.002	0.0008061
As	75	3	He	0.079	0.001	78.00	0.002	0.0008061
As	75	3	He	0.041	0.0009	72.00	0.002	0.0008061
Sr	88	3	He	-0.016	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	0.046	0.0014	120.01	0.009	0.0009645
Sr	88	3	He	-0.03	0.0007	60.00	0.009	0.0009645
Mo	98	3	He	-0.002	0.0002	20.00	0.0219	0.0002706
Mo	98	3	He	-0.002	0.0002	20.00	0.0219	0.0002706
Mo	98	3	He	0.003	0.0003	30.00	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.005	0.0164	1390.11	0.0158	0.01648
Sn	120	3	He	-0.014	0.0163	1420.12	0.0158	0.01648
Sn	120	3	He	0.019	0.0168	1450.12	0.0158	0.01648
Sb	121	3	He	-0.002	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	0.001	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0	0.0001	50.00	0.0247	0.0001339
Tl	205	3	He	0.001	0.0002	60.00	0.0247	0.0001339
Tl	205	3	He	0	0.0001	50.00	0.0247	0.0001339
Pb	208	3	He	0.001	0.0011	320.02	0.0327	0.00107
Pb	208	3	He	0.001	0.0011	250.01	0.0327	0.00107
Pb	208	3	He	-0.003	0.001	220.01	0.0327	0.00107
U	238	3	He	0	0.0001	20.00	0.0493	7.55E-05
U	238	3	He	-0.001	0	10.00	0.0493	7.55E-05
U	238	3	He	0.001	0.0001	40.00	0.0493	7.55E-05
Sc	45	1	No Gas			2400611.84		
Sc	45	1	No Gas			2448308.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2347533.25		
Ge	72	1	No Gas			1149635.14		
Ge	72	1	No Gas			1164291.70		
Ge	72	1	No Gas			1145981.47		
Sc	45	2	H2			186786.97		
Sc	45	2	H2			186905.90		
Sc	45	2	H2			187331.29		
Ge	72	2	H2			162042.25		
Ge	72	2	H2			164086.29		
Ge	72	2	H2			165014.98		
In	115	2	H2			388188.67		
In	115	2	H2			391562.14		
In	115	2	H2			387527.73		
Sc	45	3	He			47598.45		
Sc	45	3	He			44980.23		
Sc	45	3	He			47347.72		
Ge	72	3	He			82095.69		
Ge	72	3	He			80506.82		
Ge	72	3	He			80979.60		
In	115	3	He			84818.94		
In	115	3	He			87353.49		
In	115	3	He			86438.82		
Tb	159	3	He			402724.41		
Tb	159	3	He			396459.60		
Tb	159	3	He			396636.01		
Bi	209	3	He			311672.50		
Bi	209	3	He			308186.95		
Bi	209	3	He			307993.51		

Quantitation Report

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Sample Type	CalStd
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

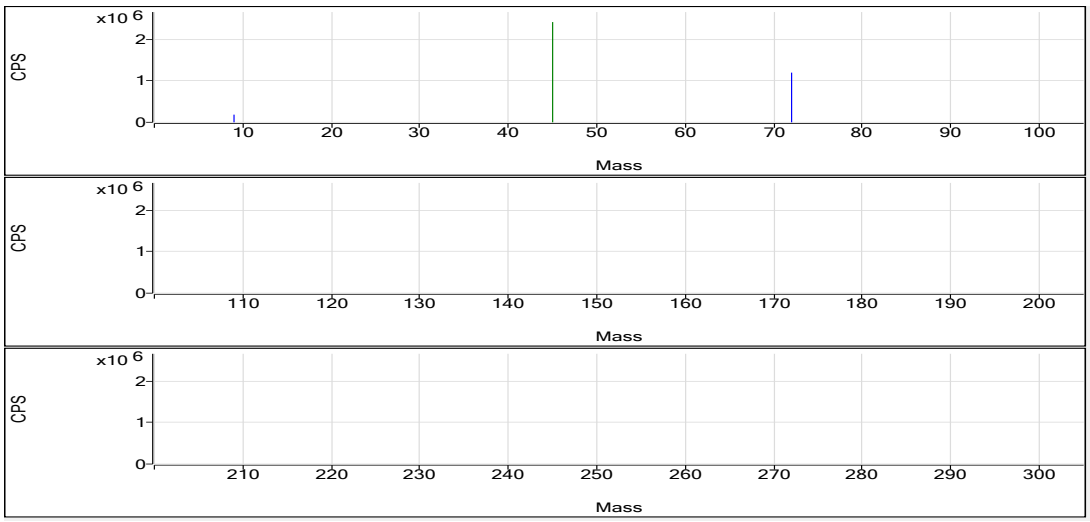
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	100.000	ppb	0.7	184120.12	0.0763	Pulse	0.5000	3
Se	78	72	H2	100.000	ppb	1.2	6768.50	0.0417	Pulse	1.5000	3
Na	23	45	He	10000.000	ppb	1.3	1676784.66	36.1156	Analog	0.1000	3
Mg	24	45	He	10000.000	ppb	0.3	833281.24	17.9467	Pulse	0.1000	3
Al	27	45	He	10000.000	ppb	0.3	271671.49	5.8510	Pulse	0.1000	3
K	39	45	He	10000.000	ppb	0.6	558939.00	12.0383	Pulse	0.1000	3
Ca	44	45	He	10000.000	ppb	2.2	31491.38	0.6782	Pulse	0.1000	3
Ti	47	45	He	10000.000	ppb	0.7	249310.77	5.3696	Pulse	0.1000	3
V	51	45	He	1000.000	ppb	0.6	1016077.31	21.8840	Pulse	0.5000	3
Cr	52	45	He	1000.000	ppb	0.9	1392012.79	29.9807	Analog	0.1000	3
Mn	55	45	He	1000.000	ppb	0.7	596000.11	12.8365	Pulse	0.1000	3
Fe	57	45	He	10000.000	ppb	0.8	269817.25	5.8113	Pulse	0.1000	3
Co	59	45	He	1000.000	ppb	0.6	2613351.11	56.2844	Analog	0.1000	3
Ni	60	72	He	1000.000	ppb	0.1	703401.37	8.5860	Pulse	0.1000	3
Cu	63	72	He	1000.000	ppb	0.6	2103440.49	25.6758	Analog	0.1000	3
Zn	66	72	He	1000.000	ppb	0.6	238844.32	2.9154	Pulse	0.1000	3
As	75	72	He	1000.000	ppb	0.5	167914.56	2.0497	Pulse	0.5000	3
Sr	88	115	He	100.000	ppb	1.4	75890.23	0.8979	Pulse	0.1000	3
Mo	98	115	He	100.000	ppb	0.9	185318.88	2.1929	Pulse	0.1000	3
Ag	107	115	He	100.000	ppb	1.3	392899.22	4.6493	Pulse	0.1000	3
Cd	111	115	He	100.000	ppb	0.7	45186.03	0.5347	Pulse	0.5000	3
Sn	120	115	He	100.000	ppb	0.5	134908.31	1.5963	Pulse	0.1000	3
Sb	121	115	He	100.000	ppb	0.3	125552.05	1.4856	Pulse	0.1000	3
Ba	137	115	He	1000.000	ppb	0.3	405612.73	4.7996	Pulse	0.1000	3
Tl	205	159	He	100.000	ppb	1.2	979417.64	2.4728	Pulse	0.1000	3
Pb	208	159	He	100.000	ppb	0.7	1296803.26	3.2740	Pulse	0.1000	3
U	238	209	He	100.000	ppb	0.9	1502888.15	4.9261	Pulse	0.1000	3

ISTD Table:

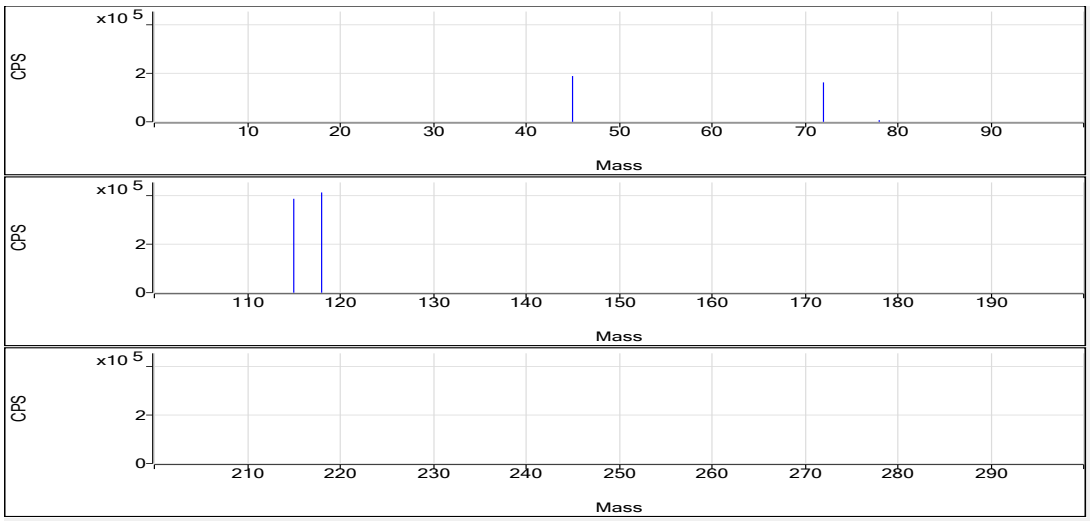
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2413614.60	0.3	100.6	Analog	0.1000	3
No Gas	Ge	72	1196151.31	0.3	103.7	Pulse	0.1000	3
H2	Sc	45	188433.96	1.5	100.8	Pulse	0.1000	3
H2	Ge	72	162259.14	1.9	99.1	Pulse	0.1000	3
H2	In	115	386577.38	0.5	99.4	Pulse	0.1000	3
He	Sc	45	46431.67	0.9	99.5	Pulse	0.1000	3
He	Ge	72	81924.69	0.8	100.9	Pulse	0.1000	3
He	In	115	84511.42	0.6	98.0	Pulse	0.1000	3
He	Tb	159	396093.30	0.4	99.4	Pulse	0.1000	3
He	Bi	209	305102.46	0.8	98.6	Pulse	0.1000	3

No Gas

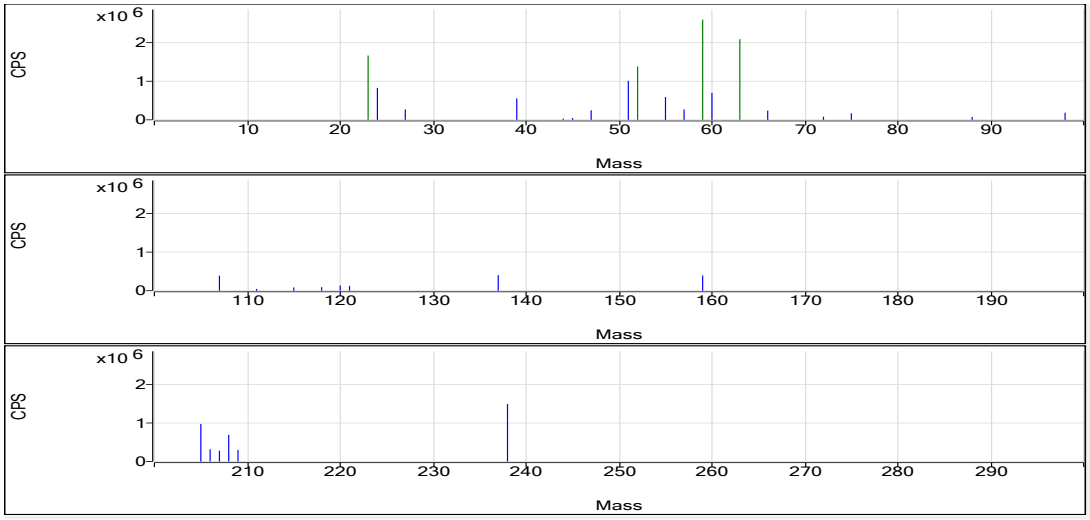


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	99.631	0.076	182774.08	0.0008	4.685E-06
Be	9	1	No Gas	99.513	0.0759	183385.19	0.0008	4.685E-06
Be	9	1	No Gas	100.856	0.0769	186201.08	0.0008	4.685E-06
Se	78	2	H2	101.014	0.0421	6690.23	0.0004	1.219E-05
Se	78	2	H2	98.707	0.0412	6762.28	0.0004	1.219E-05
Se	78	2	H2	100.279	0.0418	6852.98	0.0004	1.219E-05
Na	23	3	He	9859.817	35.6142	1671249.35	0.0036	0.3452
Na	23	3	He	10113.622	36.5221	1686379.35	0.0036	0.3452
Na	23	3	He	10026.561	36.2107	1672725.29	0.0036	0.3452
Mg	24	3	He	9967.036	17.8876	839400.61	0.0018	0.003497
Mg	24	3	He	10022.829	17.9877	830567.41	0.0018	0.003497
Mg	24	3	He	10010.135	17.9649	829875.69	0.0018	0.003497
Al	27	3	He	10000.75	5.8514	274587.03	0.0006	0.0006432
Al	27	3	He	9973.639	5.8356	269452.98	0.0006	0.0006432
Al	27	3	He	10025.611	5.866	270974.47	0.0006	0.0006432
K	39	3	He	9927.687	11.9541	560965.54	0.0012	0.3951
K	39	3	He	10038.482	12.0831	557929.72	0.0012	0.3951
K	39	3	He	10033.832	12.0777	557921.75	0.0012	0.3951
Ca	44	3	He	9996.402	0.678	31815.73	0.0001	0.002715
Ca	44	3	He	10220.822	0.6932	32005.72	0.0001	0.002715
Ca	44	3	He	9782.775	0.6636	30652.68	0.0001	0.002715
Ti	47	3	He	9949.482	5.3424	250701.68	0.0005	7.003E-05
Ti	47	3	He	10076.311	5.4105	249827.38	0.0005	7.003E-05
Ti	47	3	He	9974.207	5.3557	247403.24	0.0005	7.003E-05
V	51	3	He	993.547	21.743	1020321.13	0.0219	0.02486
V	51	3	He	1003.867	21.9686	1014381.56	0.0219	0.02486
V	51	3	He	1002.587	21.9406	1013529.25	0.0219	0.02486
Cr	52	3	He	994.657	29.8207	1399381.54	0.0299	0.03997
Cr	52	3	He	1010.333	30.2901	1398620.76	0.0299	0.03997
Cr	52	3	He	995.011	29.8313	1378036.07	0.0299	0.03997
Mn	55	3	He	993.371	12.7514	598380.23	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	998.939	12.8229	592087.49	0.0128	0.002639
Mn	55	3	He	1007.69	12.9352	597532.61	0.0128	0.002639
Fe	57	3	He	9911.693	5.76	270298.02	0.0006	0.001429
Fe	57	3	He	10076.27	5.8556	270380.17	0.0006	0.001429
Fe	57	3	He	10012.036	5.8183	268773.57	0.0006	0.001429
Co	59	3	He	997.717	56.156	2635201.21	0.0563	0.002149
Co	59	3	He	995.562	56.0347	2587357.93	0.0563	0.002149
Co	59	3	He	1006.721	56.6627	2617494.18	0.0563	0.002149
Ni	60	3	He	999.532	8.582	709637.18	0.0086	0.002834
Ni	60	3	He	999.463	8.5814	701295.77	0.0086	0.002834
Ni	60	3	He	1001.005	8.5946	699271.16	0.0086	0.002834
Cu	63	3	He	997.227	25.6046	2117230.28	0.0257	0.004757
Cu	63	3	He	995.985	25.5728	2089884.34	0.0257	0.004757
Cu	63	3	He	1006.789	25.8501	2103206.84	0.0257	0.004757
Zn	66	3	He	1000.374	2.9165	241165.29	0.0029	0.003818
Zn	66	3	He	993.76	2.8973	236773.34	0.0029	0.003818
Zn	66	3	He	1005.867	2.9325	238594.33	0.0029	0.003818
As	75	3	He	995.131	2.0397	168661.33	0.002	0.0008061
As	75	3	He	1000.147	2.05	167530.33	0.002	0.0008061
As	75	3	He	1004.722	2.0593	167552.03	0.002	0.0008061
Sr	88	3	He	99.516	0.8936	75712.47	0.009	0.0009645
Sr	88	3	He	98.921	0.8883	74525.85	0.009	0.0009645
Sr	88	3	He	101.562	0.912	77432.37	0.009	0.0009645
Mo	98	3	He	99.682	2.1859	185206.83	0.0219	0.0002706
Mo	98	3	He	101.05	2.2159	185917.22	0.0219	0.0002706
Mo	98	3	He	99.268	2.1769	184832.58	0.0219	0.0002706
Ag	107	3	He	99.608	4.6311	392376.32	0.0465	0.0006206
Ag	107	3	He	101.498	4.719	395922.22	0.0465	0.0006206
Ag	107	3	He	98.894	4.5979	390399.13	0.0465	0.0006206
Cd	111	3	He	99.784	0.5335	45204.77	0.0053	0
Cd	111	3	He	100.816	0.5391	45226.82	0.0053	0
Cd	111	3	He	99.399	0.5315	45126.50	0.0053	0
Sn	120	3	He	99.368	1.5864	134407.18	0.0158	0.01648
Sn	120	3	He	100.28	1.6008	134304.54	0.0158	0.01648
Sn	120	3	He	100.352	1.6019	136013.21	0.0158	0.01648
Sb	121	3	He	99.756	1.482	125564.36	0.0149	0.0002698
Sb	121	3	He	99.898	1.4841	124516.57	0.0149	0.0002698
Sb	121	3	He	100.345	1.4907	126575.21	0.0149	0.0002698
Ba	137	3	He	999.813	4.7987	406574.95	0.0048	0.0002317
Ba	137	3	He	1003.417	4.816	404060.03	0.0048	0.0002317
Ba	137	3	He	996.77	4.7841	406203.20	0.0048	0.0002317
Tl	205	3	He	99.28	2.455	975483.89	0.0247	0.0001339
Tl	205	3	He	101.328	2.5056	987946.08	0.0247	0.0001339
Tl	205	3	He	99.392	2.4577	974822.95	0.0247	0.0001339
Pb	208	3	He	99.557	3.2595	693976.16	0.0327	0.00107
Pb	208	3	He	100.754	3.2987	698896.63	0.0327	0.00107
Pb	208	3	He	99.689	3.2639	691421.16	0.0327	0.00107
U	238	3	He	99.382	4.8956	1496903.57	0.0493	7.55E-05
U	238	3	He	99.611	4.9069	1507364.51	0.0493	7.55E-05
U	238	3	He	101.007	4.9757	1504396.38	0.0493	7.55E-05
Sc	45	1	No Gas			2404878.40		
Sc	45	1	No Gas			2415758.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2420206.68		
Ge	72	1	No Gas			1196304.04		
Ge	72	1	No Gas			1199978.26		
Ge	72	1	No Gas			1192171.62		
Sc	45	2	H2			187434.31		
Sc	45	2	H2			186339.33		
Sc	45	2	H2			191528.24		
Ge	72	2	H2			158754.37		
Ge	72	2	H2			164214.33		
Ge	72	2	H2			163808.72		
In	115	2	H2			388200.97		
In	115	2	H2			384558.31		
In	115	2	H2			386972.85		
Sc	45	3	He			46926.48		
Sc	45	3	He			46174.24		
Sc	45	3	He			46194.28		
Ge	72	3	He			82689.35		
Ge	72	3	He			81723.07		
Ge	72	3	He			81361.66		
In	115	3	He			85433.02		
In	115	3	He			84617.23		
In	115	3	He			85623.97		
Tb	159	3	He			397351.48		
Tb	159	3	He			394292.53		
Tb	159	3	He			396635.89		
Bi	209	3	He			305764.25		
Bi	209	3	He			307191.97		
Bi	209	3	He			302351.17		

Quantitation Report

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Sample Type	ICV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

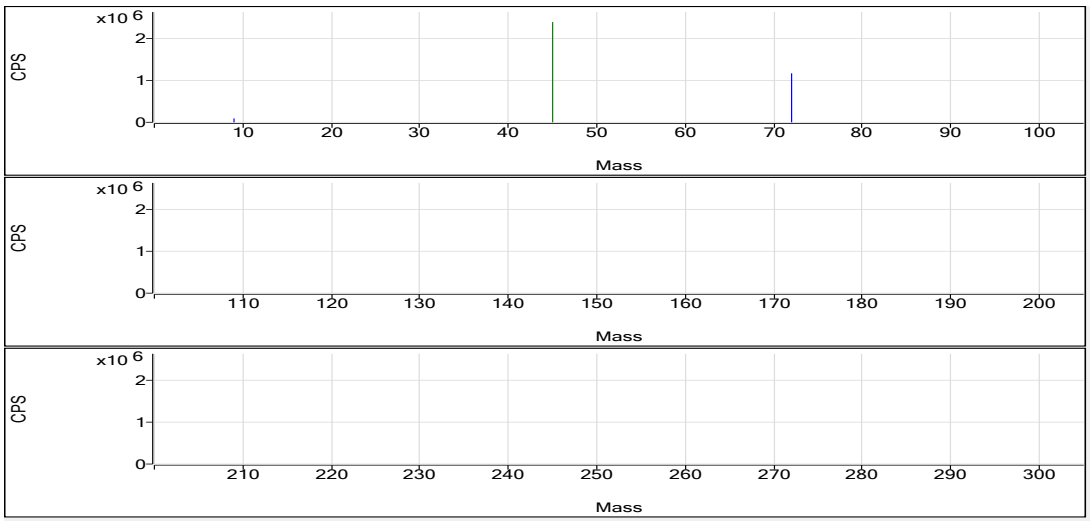
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.838	ppb	1.3	92283.95	0.0388	Pulse	0.5000	3
Se	78	72	H2	50.001	ppb	1.7	3378.63	0.0209	Pulse	1.5000	3
Na	23	45	He	4702.655	ppb	1.2	804705.25	17.1668	Pulse	0.1000	3
Mg	24	45	He	4963.057	ppb	0.2	417615.07	8.9088	Pulse	0.1000	3
Al	27	45	He	4965.717	ppb	1.3	136212.65	2.9058	Pulse	0.1000	3
K	39	45	He	4938.533	ppb	1.0	288056.74	6.1451	Pulse	0.1000	3
Ca	44	45	He	5165.481	ppb	3.3	16483.15	0.3517	Pulse	0.1000	3
Ti	47	45	He	4889.115	ppb	1.3	123060.62	2.6253	Pulse	0.1000	3
V	51	45	He	491.290	ppb	0.6	504577.98	10.7641	Pulse	0.5000	3
Cr	52	45	He	472.146	ppb	0.5	664532.13	14.1764	Pulse	0.1000	3
Mn	55	45	He	494.285	ppb	0.5	297486.32	6.3462	Pulse	0.1000	3
Fe	57	45	He	4985.836	ppb	0.5	135855.05	2.8982	Pulse	0.1000	3
Co	59	45	He	474.418	ppb	0.7	1251755.27	26.7035	Pulse	0.1000	3
Ni	60	72	He	504.371	ppb	0.1	353043.26	4.3319	Pulse	0.1000	3
Cu	63	72	He	483.575	ppb	0.6	1012067.02	12.4186	Pulse	0.1000	3
Zn	66	72	He	507.628	ppb	0.6	120768.98	1.4818	Pulse	0.1000	3
As	75	72	He	494.292	ppb	0.8	82599.01	1.0135	Pulse	0.5000	3
Sr	88	115	He	50.342	ppb	2.3	38396.12	0.4525	Pulse	0.1000	3
Mo	98	115	He	49.593	ppb	1.3	92292.31	1.0877	Pulse	0.1000	3
Ag	107	115	He	49.442	ppb	1.6	195077.02	2.2990	Pulse	0.1000	3
Cd	111	115	He	54.062	ppb	0.7	24530.17	0.2891	Pulse	0.5000	3
Sn	120	115	He	50.835	ppb	1.8	69558.18	0.8196	Pulse	0.1000	3
Sb	121	115	He	53.293	ppb	1.8	67193.48	0.7919	Pulse	0.1000	3
Ba	137	115	He	502.104	ppb	1.5	204493.62	2.4100	Pulse	0.1000	3
Tl	205	159	He	49.907	ppb	0.1	491326.37	1.2341	Pulse	0.1000	3
Pb	208	159	He	50.061	ppb	0.1	652724.39	1.6396	Pulse	0.1000	3
U	238	209	He	50.644	ppb	0.5	768658.14	2.4948	Pulse	0.1000	3

ISTD Table:

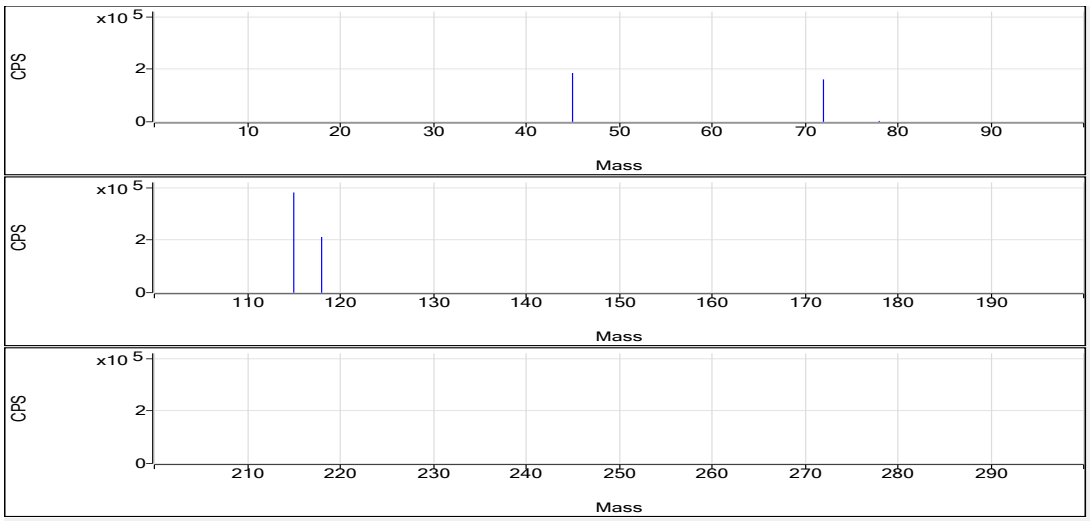
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2379759.08	1.4	99.2	Analog	0.1000	3
No Gas	Ge	72	1163753.81	1.2	100.9	Pulse	0.1000	3
H2	Sc	45	186408.50	1.9	99.7	Pulse	0.1000	3
H2	Ge	72	161929.88	0.7	98.9	Pulse	0.1000	3
H2	In	115	382674.66	0.4	98.4	Pulse	0.1000	3
He	Sc	45	46876.56	0.3	100.5	Pulse	0.1000	3
He	Ge	72	81498.47	0.8	100.4	Pulse	0.1000	3
He	In	115	84859.08	0.9	98.4	Pulse	0.1000	3
He	Tb	159	398111.67	0.5	99.9	Pulse	0.1000	3
He	Bi	209	308102.21	0.6	99.6	Pulse	0.1000	3

No Gas

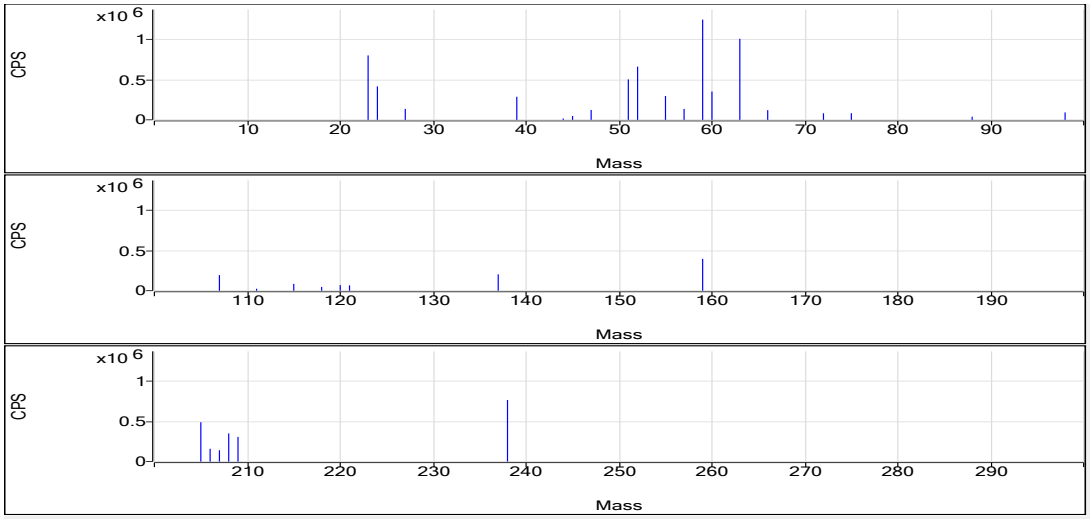


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.132	0.0382	92324.27	0.0008	4.685E-06
Be	9	1	No Gas	50.989	0.0389	92396.59	0.0008	4.685E-06
Be	9	1	No Gas	51.393	0.0392	92130.98	0.0008	4.685E-06
Se	78	2	H2	49.455	0.0206	3369.07	0.0004	1.219E-05
Se	78	2	H2	50.979	0.0213	3425.08	0.0004	1.219E-05
Se	78	2	H2	49.57	0.0207	3341.73	0.0004	1.219E-05
Na	23	3	He	4728.347	17.2587	806250.69	0.0036	0.3452
Na	23	3	He	4739.623	17.299	811266.32	0.0036	0.3452
Na	23	3	He	4639.995	16.9426	796598.74	0.0036	0.3452
Mg	24	3	He	4957.108	8.8981	415682.53	0.0018	0.003497
Mg	24	3	He	4973.946	8.9284	418710.11	0.0018	0.003497
Mg	24	3	He	4958.118	8.9	418452.57	0.0018	0.003497
Al	27	3	He	4924.648	2.8817	134622.05	0.0006	0.0006432
Al	27	3	He	5042.463	2.9507	138376.07	0.0006	0.0006432
Al	27	3	He	4930.039	2.8849	135639.83	0.0006	0.0006432
K	39	3	He	4988.568	6.2034	289795.31	0.0012	0.3951
K	39	3	He	4939.658	6.1464	288247.61	0.0012	0.3951
K	39	3	He	4887.374	6.0856	286127.30	0.0012	0.3951
Ca	44	3	He	5324.773	0.3624	16930.38	0.0001	0.002715
Ca	44	3	He	5183.949	0.3529	16549.86	0.0001	0.002715
Ca	44	3	He	4987.719	0.3396	15969.21	0.0001	0.002715
Ti	47	3	He	4947.553	2.6567	124107.30	0.0005	7.003E-05
Ti	47	3	He	4894.767	2.6283	123258.99	0.0005	7.003E-05
Ti	47	3	He	4825.026	2.5909	121815.58	0.0005	7.003E-05
V	51	3	He	492.099	10.7817	503676.25	0.0219	0.02486
V	51	3	He	493.841	10.8198	507413.56	0.0219	0.02486
V	51	3	He	487.93	10.6906	502644.13	0.0219	0.02486
Cr	52	3	He	474.499	14.2468	665549.44	0.0299	0.03997
Cr	52	3	He	471.846	14.1674	664403.43	0.0299	0.03997
Cr	52	3	He	470.092	14.1149	663643.51	0.0299	0.03997
Mn	55	3	He	496.563	6.3755	297834.29	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	494.683	6.3513	297856.52	0.0128	0.002639
Mn	55	3	He	491.609	6.3119	296768.14	0.0128	0.002639
Fe	57	3	He	5005.256	2.9094	135916.20	0.0006	0.001429
Fe	57	3	He	4955.138	2.8803	135077.32	0.0006	0.001429
Fe	57	3	He	4997.113	2.9047	136571.62	0.0006	0.001429
Co	59	3	He	475.829	26.7829	1251181.62	0.0563	0.002149
Co	59	3	He	476.738	26.8341	1258428.97	0.0563	0.002149
Co	59	3	He	470.687	26.4935	1245655.22	0.0563	0.002149
Ni	60	3	He	503.856	4.3275	352482.18	0.0086	0.002834
Ni	60	3	He	504.166	4.3302	355963.78	0.0086	0.002834
Ni	60	3	He	505.091	4.3381	350683.82	0.0086	0.002834
Cu	63	3	He	484.587	12.4446	1013634.91	0.0257	0.004757
Cu	63	3	He	480.263	12.3336	1013894.05	0.0257	0.004757
Cu	63	3	He	485.875	12.4777	1008672.09	0.0257	0.004757
Zn	66	3	He	510.893	1.4913	121472.30	0.0029	0.003818
Zn	66	3	He	507.373	1.4811	121754.31	0.0029	0.003818
Zn	66	3	He	504.618	1.4731	119080.34	0.0029	0.003818
As	75	3	He	492.395	1.0097	82238.30	0.002	0.0008061
As	75	3	He	491.481	1.0078	82845.73	0.002	0.0008061
As	75	3	He	499.001	1.0232	82713.01	0.002	0.0008061
Sr	88	3	He	51.409	0.4621	38843.79	0.009	0.0009645
Sr	88	3	He	49.092	0.4413	37731.27	0.009	0.0009645
Sr	88	3	He	50.526	0.4542	38613.31	0.009	0.0009645
Mo	98	3	He	50.209	1.1012	92564.88	0.0219	0.0002706
Mo	98	3	He	48.923	1.073	91738.22	0.0219	0.0002706
Mo	98	3	He	49.648	1.0889	92573.84	0.0219	0.0002706
Ag	107	3	He	50.34	2.3408	196768.06	0.0465	0.0006206
Ag	107	3	He	49.043	2.2805	194978.75	0.0465	0.0006206
Ag	107	3	He	48.942	2.2758	193484.24	0.0465	0.0006206
Cd	111	3	He	54.094	0.2892	24313.10	0.0053	0
Cd	111	3	He	54.446	0.2911	24890.16	0.0053	0
Cd	111	3	He	53.647	0.2868	24387.25	0.0053	0
Sn	120	3	He	49.901	0.8048	67655.49	0.0158	0.01648
Sn	120	3	He	51.745	0.834	71303.69	0.0158	0.01648
Sn	120	3	He	50.861	0.82	69715.37	0.0158	0.01648
Sb	121	3	He	54.047	0.8031	67505.07	0.0149	0.0002698
Sb	121	3	He	53.612	0.7966	68107.74	0.0149	0.0002698
Sb	121	3	He	52.22	0.7759	65967.62	0.0149	0.0002698
Ba	137	3	He	508.878	2.4425	205318.12	0.0048	0.0002317
Ba	137	3	He	494.209	2.3721	202811.83	0.0048	0.0002317
Ba	137	3	He	503.225	2.4154	205350.90	0.0048	0.0002317
Tl	205	3	He	49.897	1.2339	491531.28	0.0247	0.0001339
Tl	205	3	He	49.856	1.2329	492916.05	0.0247	0.0001339
Tl	205	3	He	49.968	1.2357	489531.79	0.0247	0.0001339
Pb	208	3	He	50.035	1.6387	350698.67	0.0327	0.00107
Pb	208	3	He	50.039	1.6388	353251.21	0.0327	0.00107
Pb	208	3	He	50.109	1.6411	350919.21	0.0327	0.00107
U	238	3	He	50.451	2.4853	766015.30	0.0493	7.55E-05
U	238	3	He	50.901	2.5075	777065.38	0.0493	7.55E-05
U	238	3	He	50.579	2.4916	762893.74	0.0493	7.55E-05
Sc	45	1	No Gas			2414059.81		
Sc	45	1	No Gas			2375324.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2349893.40		
Ge	72	1	No Gas			1175438.03		
Ge	72	1	No Gas			1167420.45		
Ge	72	1	No Gas			1148402.95		
Sc	45	2	H2			185177.07		
Sc	45	2	H2			190454.18		
Sc	45	2	H2			183594.26		
Ge	72	2	H2			163244.79		
Ge	72	2	H2			160999.79		
Ge	72	2	H2			161545.06		
In	115	2	H2			384360.58		
In	115	2	H2			381245.15		
In	115	2	H2			382418.24		
Sc	45	3	He			46715.64		
Sc	45	3	He			46896.66		
Sc	45	3	He			47017.37		
Ge	72	3	He			81451.67		
Ge	72	3	He			82205.68		
Ge	72	3	He			80838.07		
In	115	3	He			84426.43		
In	115	3	He			85884.21		
In	115	3	He			85381.82		
Tb	159	3	He			398356.83		
Tb	159	3	He			399804.99		
Tb	159	3	He			396173.20		
Bi	209	3	He			308219.74		
Bi	209	3	He			309901.75		
Bi	209	3	He			306185.13		

Quantitation Report

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Sample Type	ICB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

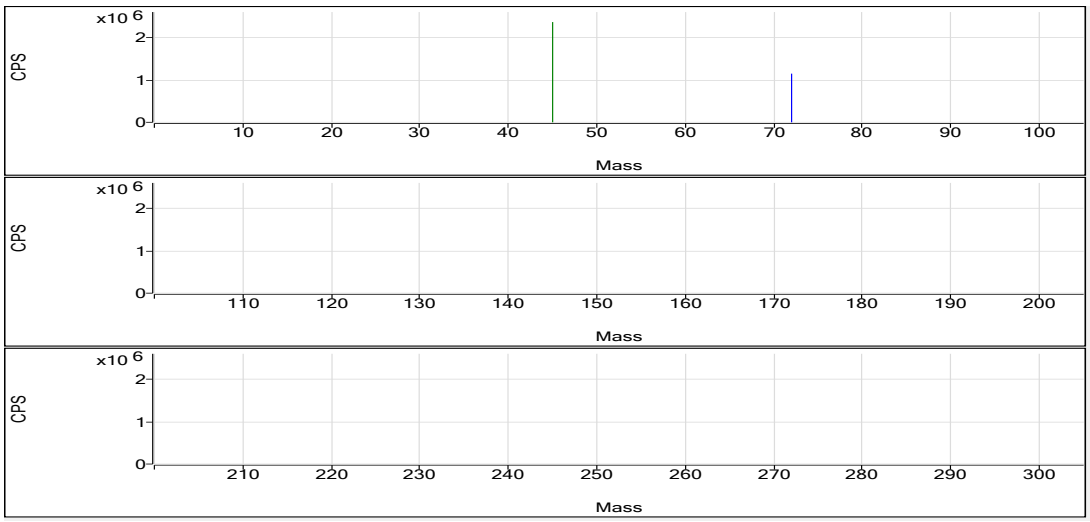
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.030	ppb	24.8	65.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.038	ppb	82.3	4.45	0.0000	Pulse	1.5000	3
Na	23	45	He	-4.985	ppb	N/A	15481.90	0.3273	Pulse	0.1000	3
Mg	24	45	He	0.369	ppb	202.9	196.68	0.0042	Pulse	0.1000	3
Al	27	45	He	1.544	ppb	51.5	73.33	0.0015	Pulse	0.1000	3
K	39	45	He	0.068	ppb	13866.1	18685.76	0.3951	Pulse	0.1000	3
Ca	44	45	He	1.668	ppb	793.2	133.34	0.0028	Pulse	0.1000	3
Ti	47	45	He	1.970	ppb	11.6	53.33	0.0011	Pulse	0.1000	3
V	51	45	He	-0.009	ppb	N/A	1167.39	0.0247	Pulse	0.5000	3
Cr	52	45	He	-0.061	ppb	N/A	1803.50	0.0382	Pulse	0.1000	3
Mn	55	45	He	0.063	ppb	73.9	163.34	0.0034	Pulse	0.1000	3
Fe	57	45	He	3.245	ppb	18.3	156.68	0.0033	Pulse	0.1000	3
Co	59	45	He	0.087	ppb	17.5	333.35	0.0070	Pulse	0.1000	3
Ni	60	72	He	0.096	ppb	150.5	290.01	0.0037	Pulse	0.1000	3
Cu	63	72	He	0.168	ppb	30.3	720.05	0.0091	Pulse	0.1000	3
Zn	66	72	He	0.001	ppb	7233.1	303.35	0.0038	Pulse	0.1000	3
As	75	72	He	0.185	ppb	47.2	94.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	-0.041	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.054	ppb	68.7	123.34	0.0015	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	225.3	60.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	34.2	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.126	ppb	85.2	1553.49	0.0185	Pulse	0.1000	3
Sb	121	115	He	0.051	ppb	55.2	86.67	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.109	ppb	53.7	63.33	0.0008	Pulse	0.1000	3
Tl	205	159	He	0.108	ppb	6.7	1110.09	0.0028	Pulse	0.1000	3
Pb	208	159	He	0.019	ppb	2.2	670.04	0.0017	Pulse	0.1000	3
U	238	209	He	0.066	ppb	17.4	1020.08	0.0033	Pulse	0.1000	3

ISTD Table:

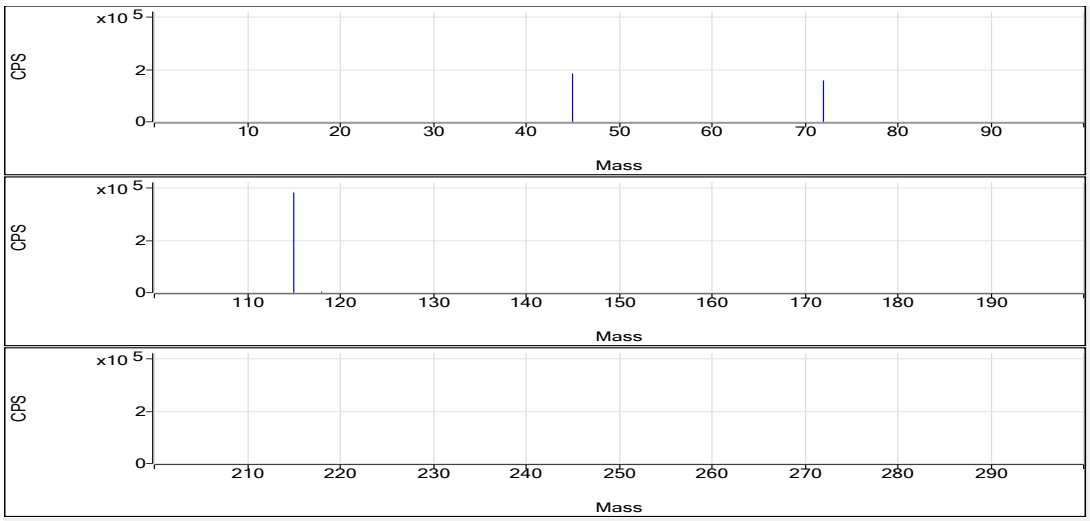
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2369272.15	0.9	98.8	Analog	0.1000	3
No Gas	Ge	72	1149774.59	0.3	99.7	Pulse	0.1000	3
H2	Sc	45	184750.64	1.1	98.8	Pulse	0.1000	3
H2	Ge	72	158471.40	1.0	96.8	Pulse	0.1000	3
H2	In	115	383662.05	0.9	98.6	Pulse	0.1000	3
He	Sc	45	47301.14	1.5	101.4	Pulse	0.1000	3
He	Ge	72	79423.92	1.1	97.8	Pulse	0.1000	3
He	In	115	84086.61	1.3	97.6	Pulse	0.1000	3
He	Tb	159	395801.22	1.3	99.3	Pulse	0.1000	3
He	Bi	209	305202.02	1.2	98.7	Pulse	0.1000	3

No Gas

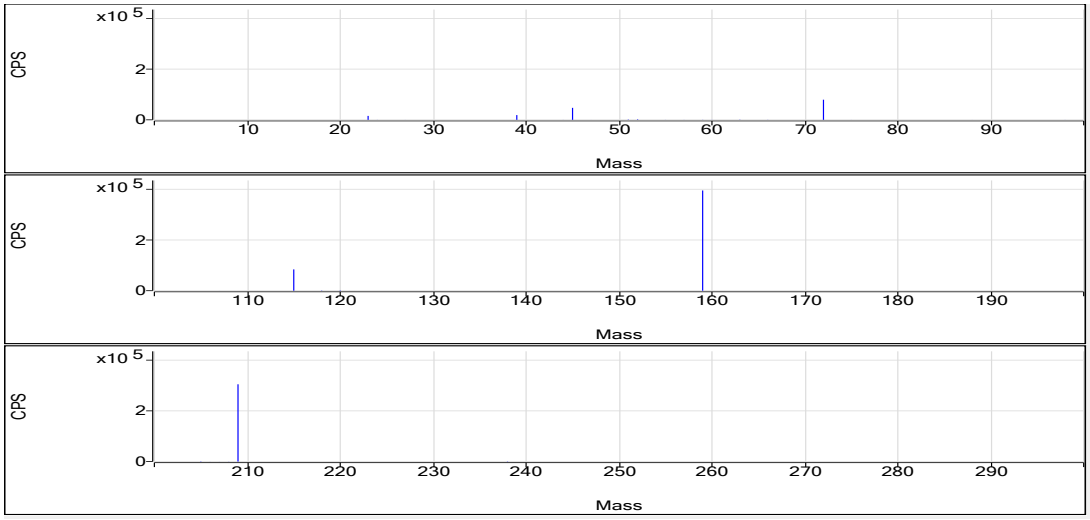


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.027	0	60.00	0.0008	4.685E-06
Be	9	1	No Gas	0.039	0	80.00	0.0008	4.685E-06
Be	9	1	No Gas	0.025	0	56.00	0.0008	4.685E-06
Se	78	2	H2	0.073	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.011	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.031	0	4.00	0.0004	1.219E-05
Na	23	3	He	-5.576	0.3252	15388.48	0.0036	0.3452
Na	23	3	He	-5.332	0.3261	15648.81	0.0036	0.3452
Na	23	3	He	-4.047	0.3307	15408.40	0.0036	0.3452
Mg	24	3	He	1.231	0.0057	270.01	0.0018	0.003497
Mg	24	3	He	-0.091	0.0033	160.01	0.0018	0.003497
Mg	24	3	He	-0.035	0.0034	160.01	0.0018	0.003497
Al	27	3	He	1.068	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	2.462	0.0021	100.00	0.0006	0.0006432
Al	27	3	He	1.102	0.0013	60.00	0.0006	0.0006432
K	39	3	He	-1.114	0.3938	18632.36	0.0012	0.3951
K	39	3	He	-8.717	0.3849	18472.14	0.0012	0.3951
K	39	3	He	10.035	0.4068	18952.77	0.0012	0.3951
Ca	44	3	He	3.612	0.003	140.01	0.0001	0.002715
Ca	44	3	He	-12.428	0.0019	90.00	0.0001	0.002715
Ca	44	3	He	13.822	0.0036	170.01	0.0001	0.002715
Ti	47	3	He	2.231	0.0013	60.00	0.0005	7.003E-05
Ti	47	3	He	1.81	0.001	50.00	0.0005	7.003E-05
Ti	47	3	He	1.868	0.0011	50.00	0.0005	7.003E-05
V	51	3	He	0.021	0.0253	1198.06	0.0219	0.02486
V	51	3	He	-0.018	0.0245	1174.05	0.0219	0.02486
V	51	3	He	-0.028	0.0243	1130.05	0.0219	0.02486
Cr	52	3	He	-0.036	0.0389	1840.17	0.0299	0.03997
Cr	52	3	He	-0.166	0.035	1680.15	0.0299	0.03997
Cr	52	3	He	0.02	0.0406	1890.19	0.0299	0.03997
Mn	55	3	He	0.074	0.0036	170.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.103	0.004	190.01	0.0128	0.002639
Mn	55	3	He	0.012	0.0028	130.01	0.0128	0.002639
Fe	57	3	He	2.634	0.003	140.01	0.0006	0.001429
Fe	57	3	He	3.28	0.0033	160.01	0.0006	0.001429
Fe	57	3	He	3.821	0.0036	170.01	0.0006	0.001429
Co	59	3	He	0.105	0.008	380.02	0.0563	0.002149
Co	59	3	He	0.077	0.0065	310.01	0.0563	0.002149
Co	59	3	He	0.08	0.0067	310.01	0.0563	0.002149
Ni	60	3	He	0.249	0.005	390.02	0.0086	0.002834
Ni	60	3	He	0.077	0.0035	280.01	0.0086	0.002834
Ni	60	3	He	-0.038	0.0025	200.01	0.0086	0.002834
Cu	63	3	He	0.212	0.0102	800.05	0.0257	0.004757
Cu	63	3	He	0.18	0.0094	750.05	0.0257	0.004757
Cu	63	3	He	0.112	0.0076	610.04	0.0257	0.004757
Zn	66	3	He	0.091	0.0041	320.02	0.0029	0.003818
Zn	66	3	He	-0.024	0.0037	300.01	0.0029	0.003818
Zn	66	3	He	-0.064	0.0036	290.01	0.0029	0.003818
As	75	3	He	0.279	0.0014	108.00	0.002	0.0008061
As	75	3	He	0.107	0.001	82.00	0.002	0.0008061
As	75	3	He	0.169	0.0012	92.00	0.002	0.0008061
Sr	88	3	He	-0.027	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.027	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.068	0.0004	30.00	0.009	0.0009645
Mo	98	3	He	0.015	0.0006	50.00	0.0219	0.0002706
Mo	98	3	He	0.059	0.0016	130.01	0.0219	0.0002706
Mo	98	3	He	0.089	0.0022	190.01	0.0219	0.0002706
Ag	107	3	He	0.005	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.005	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	0.224	0.02	1670.17	0.0158	0.01648
Sn	120	3	He	0.011	0.0166	1390.13	0.0158	0.01648
Sn	120	3	He	0.144	0.0188	1600.17	0.0158	0.01648
Sb	121	3	He	0.022	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.079	0.0014	120.01	0.0149	0.0002698
Sb	121	3	He	0.053	0.0011	90.00	0.0149	0.0002698
Ba	137	3	He	0.176	0.0011	90.00	0.0048	0.0002317
Ba	137	3	He	0.076	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.074	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.106	0.0028	1110.09	0.0247	0.0001339
Tl	205	3	He	0.116	0.003	1180.10	0.0247	0.0001339
Tl	205	3	He	0.102	0.0026	1040.08	0.0247	0.0001339
Pb	208	3	He	0.019	0.0017	370.02	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	420.02	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	390.02	0.0327	0.00107
U	238	3	He	0.053	0.0027	830.06	0.0493	7.55E-05
U	238	3	He	0.073	0.0037	1110.10	0.0493	7.55E-05
U	238	3	He	0.073	0.0037	1120.09	0.0493	7.55E-05
Sc	45	1	No Gas			2370097.78		
Sc	45	1	No Gas			2346547.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2391171.06		
Ge	72	1	No Gas			1153020.61		
Ge	72	1	No Gas			1145627.09		
Ge	72	1	No Gas			1150676.08		
Sc	45	2	H2			186504.59		
Sc	45	2	H2			185164.20		
Sc	45	2	H2			182583.14		
Ge	72	2	H2			156923.65		
Ge	72	2	H2			158491.25		
Ge	72	2	H2			159999.29		
In	115	2	H2			385387.65		
In	115	2	H2			385729.56		
In	115	2	H2			379868.94		
Sc	45	3	He			47317.89		
Sc	45	3	He			47989.99		
Sc	45	3	He			46595.54		
Ge	72	3	He			78394.77		
Ge	72	3	He			80044.12		
Ge	72	3	He			79832.87		
In	115	3	He			83450.56		
In	115	3	He			83511.12		
In	115	3	He			85321.63		
Tb	159	3	He			401555.66		
Tb	159	3	He			393115.42		
Tb	159	3	He			392732.57		
Bi	209	3	He			308498.78		
Bi	209	3	He			301336.91		
Bi	209	3	He			305770.37		

Quantitation Report

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Sample Type	CRI
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

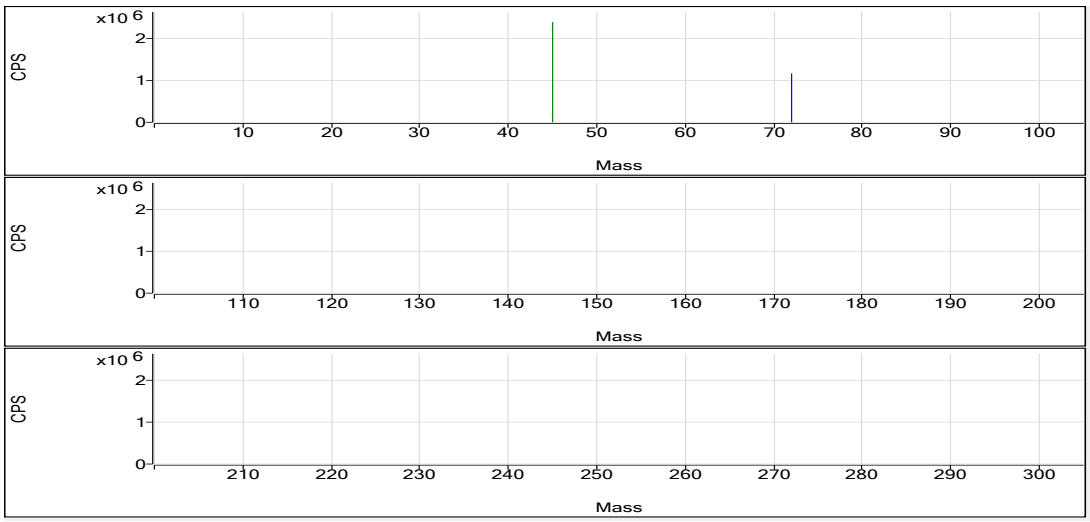
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.488	ppb	7.1	903.37	0.0004	Pulse	0.5000	3
Se	78	72	H2	0.938	ppb	6.6	65.33	0.0004	Pulse	1.5000	3
Na	23	45	He	183.562	ppb	2.9	47427.00	1.0018	Pulse	0.1000	3
Mg	24	45	He	50.677	ppb	1.8	4470.80	0.0944	Pulse	0.1000	3
Al	27	45	He	27.444	ppb	16.2	790.05	0.0167	Pulse	0.1000	3
K	39	45	He	202.462	ppb	8.3	29861.27	0.6308	Pulse	0.1000	3
Ca	44	45	He	104.606	ppb	26.3	463.36	0.0098	Pulse	0.1000	3
Ti	47	45	He	9.043	ppb	10.0	233.34	0.0049	Pulse	0.1000	3
V	51	45	He	1.888	ppb	4.6	3131.69	0.0661	Pulse	0.5000	3
Cr	52	45	He	2.025	ppb	6.8	4764.28	0.1006	Pulse	0.1000	3
Mn	55	45	He	2.049	ppb	3.5	1370.11	0.0289	Pulse	0.1000	3
Fe	57	45	He	50.489	ppb	6.2	1456.80	0.0308	Pulse	0.1000	3
Co	59	45	He	0.497	ppb	8.0	1426.79	0.0301	Pulse	0.1000	3
Ni	60	72	He	1.138	ppb	11.0	1030.08	0.0126	Pulse	0.1000	3
Cu	63	72	He	1.018	ppb	3.3	2523.64	0.0309	Pulse	0.1000	3
Zn	66	72	He	12.132	ppb	1.8	3197.14	0.0391	Pulse	0.1000	3
As	75	72	He	2.069	ppb	7.5	412.01	0.0050	Pulse	0.5000	3
Sr	88	115	He	0.958	ppb	8.2	823.38	0.0096	Pulse	0.1000	3
Mo	98	115	He	0.526	ppb	10.5	1016.74	0.0118	Pulse	0.1000	3
Ag	107	115	He	0.534	ppb	8.4	2190.25	0.0254	Pulse	0.1000	3
Cd	111	115	He	0.453	ppb	3.0	208.67	0.0024	Pulse	0.5000	3
Sn	120	115	He	2.017	ppb	2.4	4164.12	0.0483	Pulse	0.1000	3
Sb	121	115	He	0.912	ppb	5.2	1190.10	0.0138	Pulse	0.1000	3
Ba	137	115	He	1.982	ppb	11.9	840.06	0.0097	Pulse	0.1000	3
Tl	205	159	He	0.502	ppb	2.3	4951.12	0.0125	Pulse	0.1000	3
Pb	208	159	He	0.504	ppb	4.9	6931.00	0.0176	Pulse	0.1000	3
U	238	209	He	0.970	ppb	3.4	14755.55	0.0478	Pulse	0.1000	3

ISTD Table:

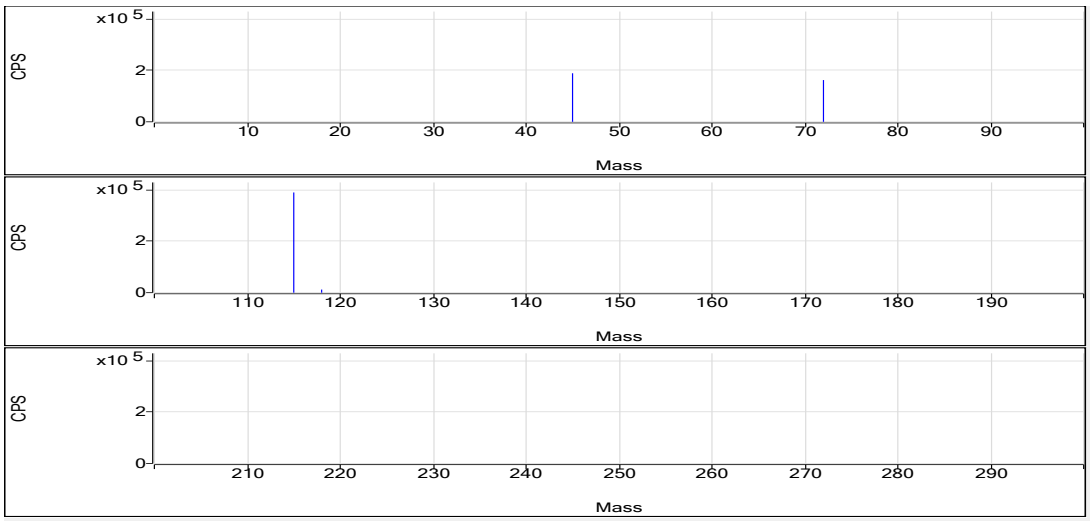
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2400438.98	1.2	100.1	Analog	0.1000	3
No Gas	Ge	72	1169400.35	0.3	101.4	Pulse	0.1000	3
H2	Sc	45	188425.95	0.6	100.8	Pulse	0.1000	3
H2	Ge	72	162036.93	1.0	99.0	Pulse	0.1000	3
H2	In	115	389017.54	1.3	100.0	Pulse	0.1000	3
He	Sc	45	47347.73	1.0	101.5	Pulse	0.1000	3
He	Ge	72	81679.66	0.8	100.6	Pulse	0.1000	3
He	In	115	86136.72	1.0	99.9	Pulse	0.1000	3
He	Tb	159	394778.02	1.5	99.0	Pulse	0.1000	3
He	Bi	209	308521.80	0.7	99.8	Pulse	0.1000	3

No Gas

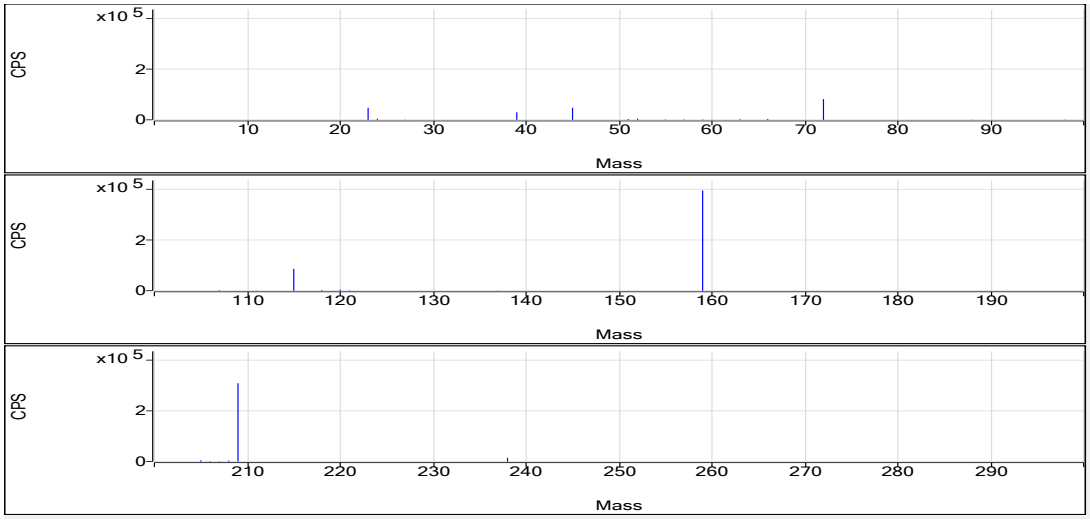


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.474	0.0004	884.03	0.0008	4.685E-06
Be	9	1	No Gas	0.462	0.0004	864.03	0.0008	4.685E-06
Be	9	1	No Gas	0.527	0.0004	962.04	0.0008	4.685E-06
Se	78	2	H2	0.934	0.0004	64.67	0.0004	1.219E-05
Se	78	2	H2	1.001	0.0004	69.33	0.0004	1.219E-05
Se	78	2	H2	0.878	0.0004	62.00	0.0004	1.219E-05
Na	23	3	He	189.314	1.0223	48139.24	0.0036	0.3452
Na	23	3	He	178.786	0.9847	47146.01	0.0036	0.3452
Na	23	3	He	182.586	0.9983	46995.74	0.0036	0.3452
Mg	24	3	He	50.019	0.0932	4390.76	0.0018	0.003497
Mg	24	3	He	50.324	0.0938	4490.80	0.0018	0.003497
Mg	24	3	He	51.689	0.0962	4530.83	0.0018	0.003497
Al	27	3	He	32.299	0.0195	920.06	0.0006	0.0006432
Al	27	3	He	23.535	0.0144	690.04	0.0006	0.0006432
Al	27	3	He	26.497	0.0161	760.05	0.0006	0.0006432
K	39	3	He	217.606	0.6484	30532.75	0.0012	0.3951
K	39	3	He	184.303	0.6097	29189.86	0.0012	0.3951
K	39	3	He	205.476	0.6343	29861.20	0.0012	0.3951
Ca	44	3	He	123.298	0.011	520.03	0.0001	0.002715
Ca	44	3	He	117.502	0.0107	510.03	0.0001	0.002715
Ca	44	3	He	73.019	0.0076	360.02	0.0001	0.002715
Ti	47	3	He	8.176	0.0045	210.01	0.0005	7.003E-05
Ti	47	3	He	9.983	0.0054	260.01	0.0005	7.003E-05
Ti	47	3	He	8.969	0.0049	230.01	0.0005	7.003E-05
V	51	3	He	1.962	0.0678	3190.37	0.0219	0.02486
V	51	3	He	1.911	0.0666	3190.37	0.0219	0.02486
V	51	3	He	1.792	0.064	3014.33	0.0219	0.02486
Cr	52	3	He	2.141	0.1041	4901.02	0.0299	0.03997
Cr	52	3	He	2.063	0.1017	4870.98	0.0299	0.03997
Cr	52	3	He	1.872	0.096	4520.84	0.0299	0.03997
Mn	55	3	He	2.029	0.0287	1350.10	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.992	0.0282	1350.11	0.0128	0.002639
Mn	55	3	He	2.128	0.03	1410.12	0.0128	0.002639
Fe	57	3	He	52.376	0.0319	1500.14	0.0006	0.001429
Fe	57	3	He	52.188	0.0317	1520.14	0.0006	0.001429
Fe	57	3	He	46.903	0.0287	1350.12	0.0006	0.001429
Co	59	3	He	0.528	0.0319	1500.13	0.0563	0.002149
Co	59	3	He	0.511	0.0309	1480.12	0.0563	0.002149
Co	59	3	He	0.452	0.0276	1300.11	0.0563	0.002149
Ni	60	3	He	1.203	0.0132	1080.08	0.0086	0.002834
Ni	60	3	He	0.995	0.0114	920.06	0.0086	0.002834
Ni	60	3	He	1.218	0.0133	1090.09	0.0086	0.002834
Cu	63	3	He	0.982	0.03	2460.29	0.0257	0.004757
Cu	63	3	He	1.023	0.031	2510.29	0.0257	0.004757
Cu	63	3	He	1.049	0.0317	2600.33	0.0257	0.004757
Zn	66	3	He	12.373	0.0398	3270.52	0.0029	0.003818
Zn	66	3	He	12.062	0.0389	3150.46	0.0029	0.003818
Zn	66	3	He	11.961	0.0386	3170.44	0.0029	0.003818
As	75	3	He	2.092	0.0051	418.01	0.002	0.0008061
As	75	3	He	2.213	0.0053	432.01	0.002	0.0008061
As	75	3	He	1.903	0.0047	386.01	0.002	0.0008061
Sr	88	3	He	0.93	0.0093	810.05	0.009	0.0009645
Sr	88	3	He	1.047	0.0104	890.06	0.009	0.0009645
Sr	88	3	He	0.898	0.009	770.04	0.009	0.0009645
Mo	98	3	He	0.585	0.0131	1140.09	0.0219	0.0002706
Mo	98	3	He	0.476	0.0107	920.06	0.0219	0.0002706
Mo	98	3	He	0.516	0.0116	990.08	0.0219	0.0002706
Ag	107	3	He	0.528	0.0252	2190.25	0.0465	0.0006206
Ag	107	3	He	0.492	0.0235	2020.20	0.0465	0.0006206
Ag	107	3	He	0.581	0.0276	2360.29	0.0465	0.0006206
Cd	111	3	He	0.438	0.0023	204.00	0.0053	0
Cd	111	3	He	0.457	0.0024	210.00	0.0053	0
Cd	111	3	He	0.464	0.0025	212.00	0.0053	0
Sn	120	3	He	1.961	0.0475	4130.76	0.0158	0.01648
Sn	120	3	He	2.043	0.0487	4190.79	0.0158	0.01648
Sn	120	3	He	2.049	0.0488	4170.81	0.0158	0.01648
Sb	121	3	He	0.964	0.0146	1270.11	0.0149	0.0002698
Sb	121	3	He	0.898	0.0136	1170.09	0.0149	0.0002698
Sb	121	3	He	0.873	0.0132	1130.10	0.0149	0.0002698
Ba	137	3	He	2.202	0.0108	940.07	0.0048	0.0002317
Ba	137	3	He	2.012	0.0099	850.05	0.0048	0.0002317
Ba	137	3	He	1.733	0.0085	730.05	0.0048	0.0002317
Tl	205	3	He	0.507	0.0127	5071.15	0.0247	0.0001339
Tl	205	3	He	0.488	0.0122	4751.03	0.0247	0.0001339
Tl	205	3	He	0.51	0.0128	5031.19	0.0247	0.0001339
Pb	208	3	He	0.476	0.0167	3690.71	0.0327	0.00107
Pb	208	3	He	0.513	0.0179	3870.68	0.0327	0.00107
Pb	208	3	He	0.523	0.0182	3880.71	0.0327	0.00107
U	238	3	He	1.006	0.0497	15199.39	0.0493	7.55E-05
U	238	3	He	0.959	0.0473	14618.83	0.0493	7.55E-05
U	238	3	He	0.943	0.0465	14448.44	0.0493	7.55E-05
Sc	45	1	No Gas			2412490.75		
Sc	45	1	No Gas			2422035.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2366790.90		
Ge	72	1	No Gas			1173426.31		
Ge	72	1	No Gas			1168977.33		
Ge	72	1	No Gas			1165797.40		
Sc	45	2	H2			189509.86		
Sc	45	2	H2			188657.63		
Sc	45	2	H2			187110.37		
Ge	72	2	H2			160948.19		
Ge	72	2	H2			161330.92		
Ge	72	2	H2			163831.69		
In	115	2	H2			391947.06		
In	115	2	H2			391821.01		
In	115	2	H2			383284.56		
Sc	45	3	He			47087.10		
Sc	45	3	He			47879.29		
Sc	45	3	He			47076.80		
Ge	72	3	He			82085.92		
Ge	72	3	He			80908.27		
Ge	72	3	He			82044.79		
In	115	3	He			87072.70		
In	115	3	He			85985.57		
In	115	3	He			85412.42		
Tb	159	3	He			400621.91		
Tb	159	3	He			389163.04		
Tb	159	3	He			394549.10		
Bi	209	3	He			306122.83		
Bi	209	3	He			308803.14		
Bi	209	3	He			310639.43		

Quantitation Report

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Sample Type	ICSA
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

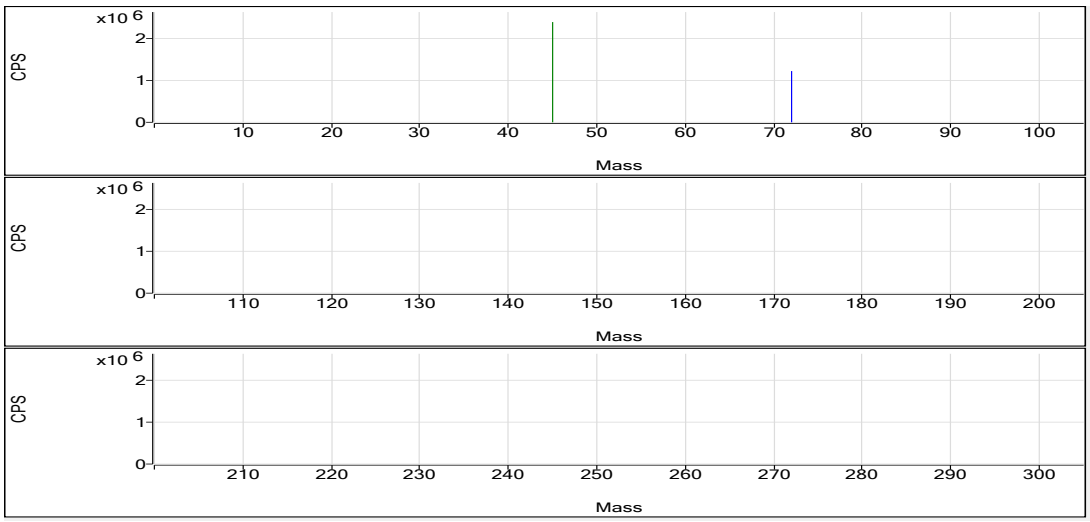
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	58.2	20.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.032	ppb	68.4	4.22	0.0000	Pulse	1.5000	3
Na	23	45	He	234346.856	ppb	1.3	39464061.91	838.6153	Analog	0.1000	3
Mg	24	45	He	97432.473	ppb	1.5	8227054.05	174.8287	Analog	0.1000	3
Al	27	45	He	101206.014	ppb	1.3	2786333.29	59.2097	Analog	0.1000	3
K	39	45	He	98145.012	ppb	1.3	5396327.63	114.6679	Analog	0.1000	3
Ca	44	45	He	288367.072	ppb	0.9	916857.96	19.4825	Pulse	0.1000	3
Ti	47	45	He	1991.143	ppb	2.4	50314.44	1.0692	Pulse	0.1000	3
V	51	45	He	-0.179	ppb	N/A	986.04	0.0209	Pulse	0.5000	3
Cr	52	45	He	3.125	ppb	1.1	6284.91	0.1335	Pulse	0.1000	3
Mn	55	45	He	0.854	ppb	8.1	640.04	0.0136	Pulse	0.1000	3
Fe	57	45	He	242317.822	ppb	1.6	6625050.32	140.7859	Analog	0.1000	3
Co	59	45	He	0.209	ppb	24.2	653.37	0.0139	Pulse	0.1000	3
Ni	60	72	He	0.638	ppb	9.5	696.71	0.0083	Pulse	0.1000	3
Cu	63	72	He	0.040	ppb	119.4	486.69	0.0058	Pulse	0.1000	3
Zn	66	72	He	3.070	ppb	2.9	1070.08	0.0128	Pulse	0.1000	3
As	75	72	He	0.184	ppb	13.0	99.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	1.977	ppb	5.7	1520.13	0.0187	Pulse	0.1000	3
Mo	98	115	He	2139.131	ppb	1.7	3813862.03	46.9038	Analog	0.1000	3
Ag	107	115	He	0.008	ppb	149.9	80.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.314	ppb	10.8	136.67	0.0017	Pulse	0.5000	3
Sn	120	115	He	0.135	ppb	75.4	1513.47	0.0186	Pulse	0.1000	3
Sb	121	115	He	0.139	ppb	21.3	190.01	0.0023	Pulse	0.1000	3
Ba	137	115	He	0.533	ppb	18.1	226.68	0.0028	Pulse	0.1000	3
Tl	205	159	He	0.015	ppb	11.4	193.34	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.079	ppb	4.3	1426.75	0.0037	Pulse	0.1000	3
U	238	209	He	0.055	ppb	8.2	800.06	0.0028	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2381332.57	1.0	99.3	Analog	0.1000	3
No Gas	Ge	72	1217028.50	0.2	105.5	Pulse	0.1000	3
H2	Sc	45	183160.71	0.9	97.9	Pulse	0.1000	3
H2	Ge	72	164651.69	0.8	100.6	Pulse	0.1000	3
H2	In	115	367288.78	0.9	94.4	Pulse	0.1000	3
He	Sc	45	47063.35	1.2	100.9	Pulse	0.1000	3
He	Ge	72	83879.05	1.3	103.3	Pulse	0.1000	3
He	In	115	81323.21	1.2	94.3	Pulse	0.1000	3
He	Tb	159	389400.61	1.0	97.7	Pulse	0.1000	3
He	Bi	209	287728.23	0.6	93.0	Pulse	0.1000	3

No Gas



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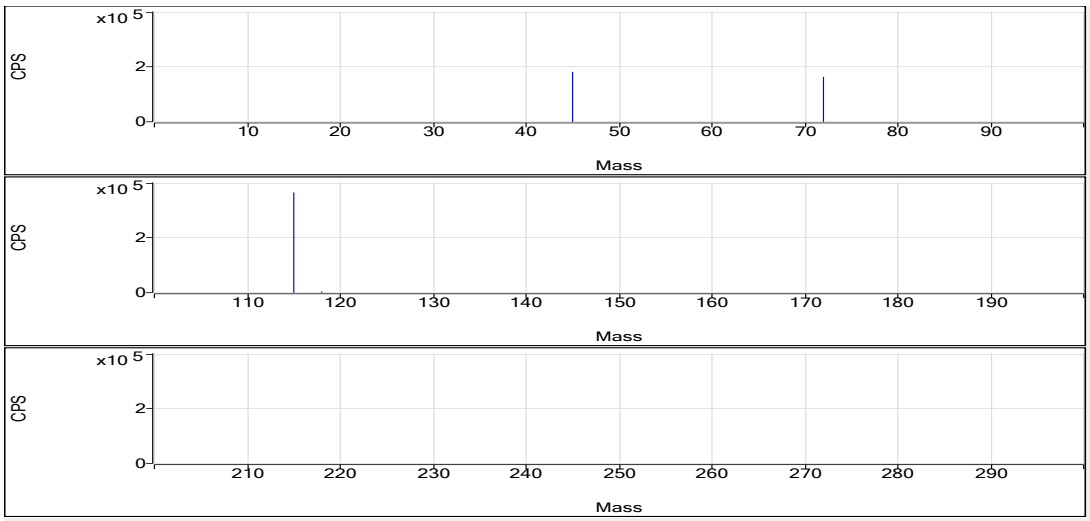
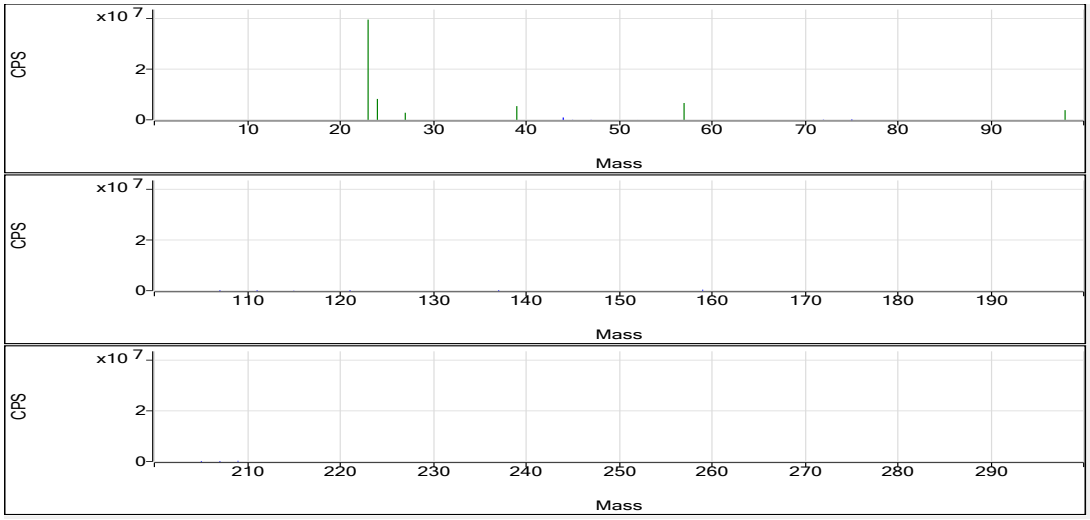


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	22.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.002	0	14.00	0.0008	4.685E-06
Se	78	2	H2	0.02	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.019	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.057	0	6.00	0.0004	1.219E-05
Na	23	3	He	231437.481	828.2084	39462811.91	0.0036	0.3452
Na	23	3	He	237407.869	849.5647	39526084.41	0.0036	0.3452
Na	23	3	He	234195.218	838.0729	39403289.41	0.0036	0.3452
Mg	24	3	He	95927.77	172.1288	8201663.63	0.0018	0.003497
Mg	24	3	He	98802.095	177.2863	8248261.13	0.0018	0.003497
Mg	24	3	He	97567.554	175.0711	8231237.38	0.0018	0.003497
Al	27	3	He	100095.037	58.5597	2790277.77	0.0006	0.0006432
Al	27	3	He	102624.656	60.0396	2793350.27	0.0006	0.0006432
Al	27	3	He	100898.35	59.0297	2775371.83	0.0006	0.0006432
K	39	3	He	96823.185	113.1289	5390411.17	0.0012	0.3951
K	39	3	He	98168.697	114.6955	5336219.30	0.0012	0.3951
K	39	3	He	99443.155	116.1794	5462352.42	0.0012	0.3951
Ca	44	3	He	285497.167	19.2886	919070.77	0.0001	0.002715
Ca	44	3	He	289365.82	19.5499	909562.33	0.0001	0.002715
Ca	44	3	He	290238.23	19.6089	921940.77	0.0001	0.002715
Ti	47	3	He	1939.9	1.0417	49635.22	0.0005	7.003E-05
Ti	47	3	He	1996.805	1.0723	49886.66	0.0005	7.003E-05
Ti	47	3	He	2036.726	1.0937	51421.43	0.0005	7.003E-05
V	51	3	He	-0.147	0.0217	1032.04	0.0219	0.02486
V	51	3	He	-0.158	0.0214	996.04	0.0219	0.02486
V	51	3	He	-0.233	0.0198	930.04	0.0219	0.02486
Cr	52	3	He	3.089	0.1325	6311.59	0.0299	0.03997
Cr	52	3	He	3.131	0.1337	6221.55	0.0299	0.03997
Cr	52	3	He	3.156	0.1345	6321.60	0.0299	0.03997
Mn	55	3	He	0.857	0.0136	650.04	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.783	0.0127	590.03	0.0128	0.002639
Mn	55	3	He	0.921	0.0145	680.04	0.0128	0.002639
Fe	57	3	He	239252.225	139.0048	6623356.78	0.0006	0.001429
Fe	57	3	He	246824.848	143.4044	6671904.28	0.0006	0.001429
Fe	57	3	He	240876.394	139.9484	6579889.90	0.0006	0.001429
Co	59	3	He	0.152	0.0107	510.03	0.0563	0.002149
Co	59	3	He	0.248	0.0161	750.05	0.0563	0.002149
Co	59	3	He	0.226	0.0149	700.04	0.0563	0.002149
Ni	60	3	He	0.57	0.0077	650.04	0.0086	0.002834
Ni	60	3	He	0.657	0.0085	700.04	0.0086	0.002834
Ni	60	3	He	0.686	0.0087	740.05	0.0086	0.002834
Cu	63	3	He	0.023	0.0053	450.02	0.0257	0.004757
Cu	63	3	He	0.003	0.0048	400.02	0.0257	0.004757
Cu	63	3	He	0.095	0.0072	610.03	0.0257	0.004757
Zn	66	3	He	3.136	0.0129	1090.09	0.0029	0.003818
Zn	66	3	He	2.97	0.0125	1030.08	0.0029	0.003818
Zn	66	3	He	3.103	0.0129	1090.07	0.0029	0.003818
As	75	3	He	0.21	0.0012	104.00	0.002	0.0008061
As	75	3	He	0.162	0.0011	94.00	0.002	0.0008061
As	75	3	He	0.182	0.0012	100.00	0.002	0.0008061
Sr	88	3	He	2.087	0.0197	1580.14	0.009	0.0009645
Sr	88	3	He	1.86	0.0177	1450.12	0.009	0.0009645
Sr	88	3	He	1.984	0.0188	1530.14	0.009	0.0009645
Mo	98	3	He	2175.652	47.7045	3829426.51	0.0219	0.0002706
Mo	98	3	He	2102.3	46.0962	3786926.19	0.0219	0.0002706
Mo	98	3	He	2139.442	46.9106	3825233.38	0.0219	0.0002706
Ag	107	3	He	0.021	0.0016	130.01	0.0465	0.0006206
Ag	107	3	He	0	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.335	0.0018	144.00	0.0053	0
Cd	111	3	He	0.332	0.0018	146.00	0.0053	0
Cd	111	3	He	0.275	0.0015	120.00	0.0053	0
Sn	120	3	He	0.077	0.0177	1420.12	0.0158	0.01648
Sn	120	3	He	0.252	0.0205	1680.17	0.0158	0.01648
Sn	120	3	He	0.075	0.0177	1440.13	0.0158	0.01648
Sb	121	3	He	0.15	0.0025	200.01	0.0149	0.0002698
Sb	121	3	He	0.162	0.0027	220.01	0.0149	0.0002698
Sb	121	3	He	0.106	0.0018	150.01	0.0149	0.0002698
Ba	137	3	He	0.627	0.0032	260.01	0.0048	0.0002317
Ba	137	3	He	0.434	0.0023	190.01	0.0048	0.0002317
Ba	137	3	He	0.539	0.0028	230.01	0.0048	0.0002317
Tl	205	3	He	0.013	0.0005	180.01	0.0247	0.0001339
Tl	205	3	He	0.017	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.014	0.0005	190.01	0.0247	0.0001339
Pb	208	3	He	0.078	0.0036	820.06	0.0327	0.00107
Pb	208	3	He	0.076	0.0036	710.04	0.0327	0.00107
Pb	208	3	He	0.083	0.0038	850.05	0.0327	0.00107
U	238	3	He	0.055	0.0028	800.06	0.0493	7.55E-05
U	238	3	He	0.06	0.003	860.06	0.0493	7.55E-05
U	238	3	He	0.051	0.0026	740.05	0.0493	7.55E-05
Sc	45	1	No Gas			2393531.21		
Sc	45	1	No Gas			2395411.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2355054.81		
Ge	72	1	No Gas			1220167.17		
Ge	72	1	No Gas			1216263.42		
Ge	72	1	No Gas			1214654.90		
Sc	45	2	H2			181642.15		
Sc	45	2	H2			182998.20		
Sc	45	2	H2			184841.77		
Ge	72	2	H2			163403.78		
Ge	72	2	H2			164638.24		
Ge	72	2	H2			165913.04		
In	115	2	H2			367142.22		
In	115	2	H2			364238.55		
In	115	2	H2			370485.58		
Sc	45	3	He			47648.41		
Sc	45	3	He			46525.10		
Sc	45	3	He			47016.54		
Ge	72	3	He			84176.96		
Ge	72	3	He			82638.73		
Ge	72	3	He			84821.45		
In	115	3	He			80282.67		
In	115	3	He			82162.59		
In	115	3	He			81549.18		
Tb	159	3	He			387776.67		
Tb	159	3	He			386706.99		
Tb	159	3	He			393718.16		
Bi	209	3	He			288656.30		
Bi	209	3	He			285855.43		
Bi	209	3	He			288672.96		

Quantitation Report

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Sample Type	ICSAB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

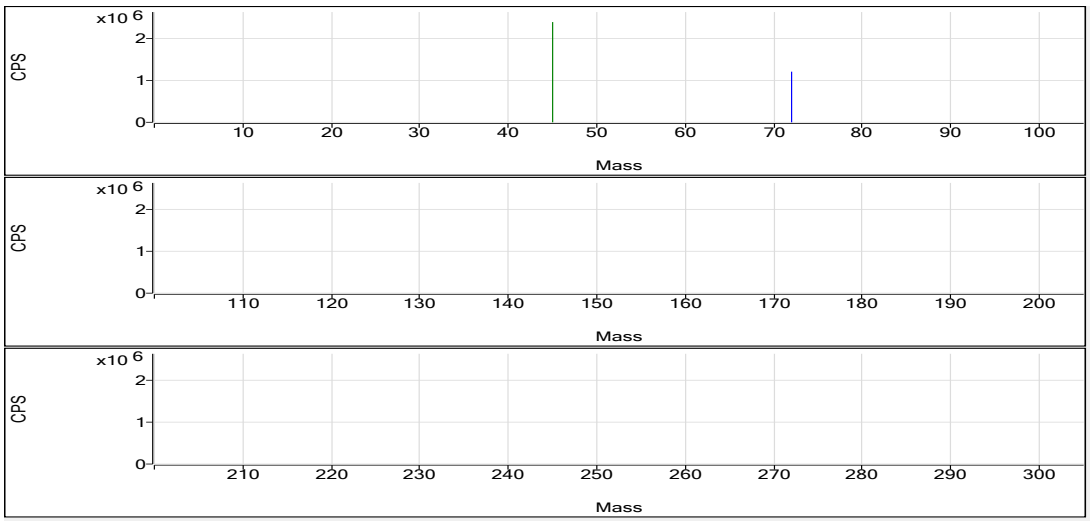
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	78.7	24.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	97.826	ppb	0.5	6874.55	0.0408	Pulse	1.5000	3
Na	23	45	He	231440.972	ppb	2.0	39442110.24	828.2209	Analog	0.1000	3
Mg	24	45	He	96711.550	ppb	2.3	8263953.21	173.5352	Analog	0.1000	3
Al	27	45	He	99640.291	ppb	1.8	2776153.50	58.2937	Analog	0.1000	3
K	39	45	He	97543.265	ppb	2.2	5427252.83	113.9673	Analog	0.1000	3
Ca	44	45	He	287492.774	ppb	1.5	925060.09	19.4234	Pulse	0.1000	3
Ti	47	45	He	1970.032	ppb	2.3	50381.42	1.0579	Pulse	0.1000	3
V	51	45	He	198.300	ppb	2.0	207612.90	4.3595	Pulse	0.5000	3
Cr	52	45	He	190.159	ppb	2.5	273030.59	5.7335	Pulse	0.1000	3
Mn	55	45	He	196.457	ppb	2.3	120193.70	2.5239	Pulse	0.1000	3
Fe	57	45	He	242062.616	ppb	1.7	6697962.82	140.6376	Analog	0.1000	3
Co	59	45	He	185.584	ppb	2.7	497479.03	10.4472	Pulse	0.1000	3
Ni	60	72	He	190.055	ppb	0.9	139431.89	1.6341	Pulse	0.1000	3
Cu	63	72	He	180.031	ppb	0.7	394754.55	4.6263	Pulse	0.1000	3
Zn	66	72	He	98.587	ppb	2.7	24815.34	0.2909	Pulse	0.1000	3
As	75	72	He	97.390	ppb	1.8	17093.57	0.2003	Pulse	0.5000	3
Sr	88	115	He	1.934	ppb	11.0	1523.47	0.0183	Pulse	0.1000	3
Mo	98	115	He	2102.198	ppb	1.5	3831902.44	46.0940	Analog	0.1000	3
Ag	107	115	He	49.270	ppb	0.3	190476.33	2.2911	Pulse	0.1000	3
Cd	111	115	He	101.085	ppb	1.1	44933.91	0.5405	Pulse	0.5000	3
Sn	120	115	He	0.145	ppb	20.0	1560.16	0.0188	Pulse	0.1000	3
Sb	121	115	He	0.114	ppb	23.9	163.34	0.0020	Pulse	0.1000	3
Ba	137	115	He	0.461	ppb	24.7	203.34	0.0024	Pulse	0.1000	3
Tl	205	159	He	0.018	ppb	40.0	230.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.068	ppb	12.9	1303.41	0.0033	Pulse	0.1000	3
U	238	209	He	0.053	ppb	21.1	780.05	0.0027	Pulse	0.1000	3

ISTD Table:

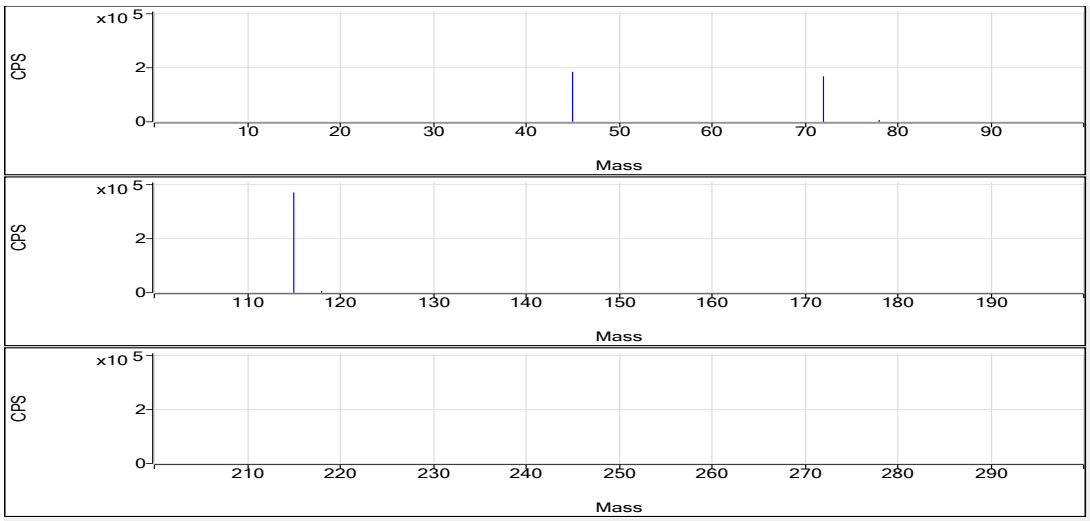
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2403477.83	0.2	100.2	Analog	0.1000	3
No Gas	Ge	72	1213993.86	0.8	105.3	Pulse	0.1000	3
H2	Sc	45	184752.61	0.8	98.8	Pulse	0.1000	3
H2	Ge	72	168445.93	1.0	102.9	Pulse	0.1000	3
H2	In	115	370907.83	0.4	95.3	Pulse	0.1000	3
He	Sc	45	47635.30	2.0	102.1	Pulse	0.1000	3
He	Ge	72	85331.41	1.1	105.1	Pulse	0.1000	3
He	In	115	83140.36	1.0	96.5	Pulse	0.1000	3
He	Tb	159	396336.62	0.5	99.4	Pulse	0.1000	3
He	Bi	209	292945.15	0.8	94.7	Pulse	0.1000	3

No Gas

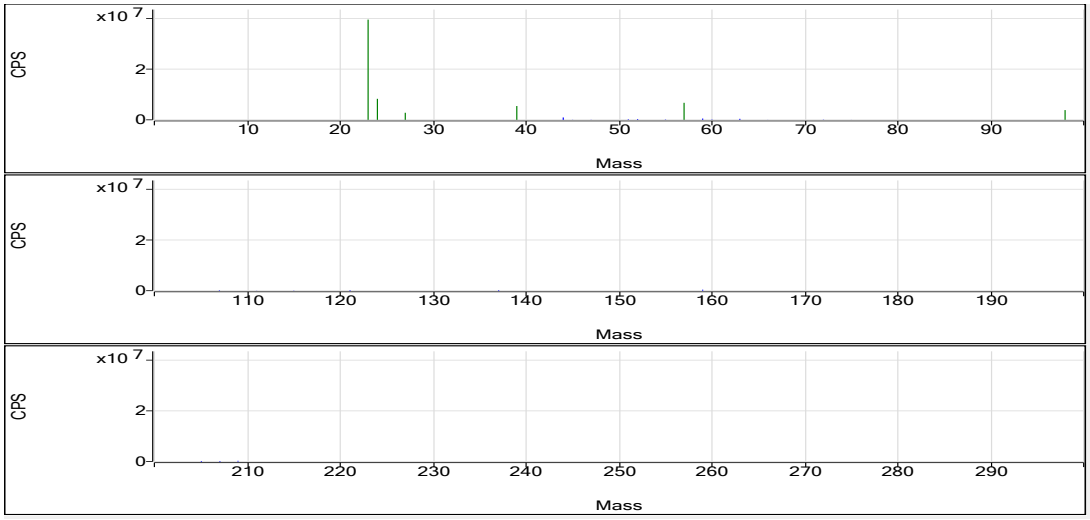


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.012	0	34.00	0.0008	4.685E-06
Be	9	1	No Gas	0.001	0	14.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	24.00	0.0008	4.685E-06
Se	78	2	H2	98.347	0.041	6881.67	0.0004	1.219E-05
Se	78	2	H2	97.492	0.0407	6931.69	0.0004	1.219E-05
Se	78	2	H2	97.639	0.0407	6810.29	0.0004	1.219E-05
Na	23	3	He	236702.143	847.0403	39493729.41	0.0036	0.3452
Na	23	3	He	229816.722	822.4108	39268891.91	0.0036	0.3452
Na	23	3	He	227804.049	815.2114	39563709.41	0.0036	0.3452
Mg	24	3	He	98697.019	177.0977	8257280.50	0.0018	0.003497
Mg	24	3	He	97101.535	174.2349	8319457.38	0.0018	0.003497
Mg	24	3	He	94336.098	169.2728	8215121.75	0.0018	0.003497
Al	27	3	He	101546.32	59.4088	2769967.46	0.0006	0.0006432
Al	27	3	He	99477.926	58.1987	2778900.90	0.0006	0.0006432
Al	27	3	He	97896.627	57.2736	2779592.15	0.0006	0.0006432
K	39	3	He	99722.975	116.5052	5432119.29	0.0012	0.3951
K	39	3	He	97545.95	113.9704	5441917.42	0.0012	0.3951
K	39	3	He	95360.871	111.4263	5407721.79	0.0012	0.3951
Ca	44	3	He	292106.628	19.7351	920158.89	0.0001	0.002715
Ca	44	3	He	286438.224	19.3522	924036.94	0.0001	0.002715
Ca	44	3	He	283933.471	19.183	930984.44	0.0001	0.002715
Ti	47	3	He	2018.141	1.0837	50528.55	0.0005	7.003E-05
Ti	47	3	He	1930.37	1.0366	49495.18	0.0005	7.003E-05
Ti	47	3	He	1961.583	1.0533	51120.54	0.0005	7.003E-05
V	51	3	He	202.293	4.4468	207335.41	0.0219	0.02486
V	51	3	He	198.185	4.357	208041.70	0.0219	0.02486
V	51	3	He	194.421	4.2748	207461.58	0.0219	0.02486
Cr	52	3	He	194.187	5.8541	272948.77	0.0299	0.03997
Cr	52	3	He	191.306	5.7678	275404.64	0.0299	0.03997
Cr	52	3	He	184.985	5.5786	270738.37	0.0299	0.03997
Mn	55	3	He	201.606	2.59	120761.56	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	194.442	2.4981	119279.47	0.0128	0.002639
Mn	55	3	He	193.324	2.4837	120540.06	0.0128	0.002639
Fe	57	3	He	244997.626	142.3428	6636813.03	0.0006	0.001429
Fe	57	3	He	243829.244	141.664	6764244.27	0.0006	0.001429
Fe	57	3	He	237360.979	137.906	6692831.15	0.0006	0.001429
Co	59	3	He	190.364	10.7163	499653.23	0.0563	0.002149
Co	59	3	He	186.123	10.4776	500288.47	0.0563	0.002149
Co	59	3	He	180.265	10.1479	492495.38	0.0563	0.002149
Ni	60	3	He	190.289	1.6361	139024.33	0.0086	0.002834
Ni	60	3	He	188.285	1.6189	139842.49	0.0086	0.002834
Ni	60	3	He	191.592	1.6473	139428.85	0.0086	0.002834
Cu	63	3	He	179.988	4.6252	393018.35	0.0257	0.004757
Cu	63	3	He	178.858	4.5962	397026.24	0.0257	0.004757
Cu	63	3	He	181.246	4.6575	394219.06	0.0257	0.004757
Zn	66	3	He	100.597	0.2967	25212.75	0.0029	0.003818
Zn	66	3	He	95.55	0.282	24361.19	0.0029	0.003818
Zn	66	3	He	99.613	0.2939	24872.09	0.0029	0.003818
As	75	3	He	98.565	0.2028	17228.40	0.002	0.0008061
As	75	3	He	95.322	0.1961	16940.02	0.002	0.0008061
As	75	3	He	98.283	0.2022	17112.30	0.002	0.0008061
Sr	88	3	He	1.903	0.018	1490.14	0.009	0.0009645
Sr	88	3	He	2.161	0.0203	1710.17	0.009	0.0009645
Sr	88	3	He	1.738	0.0166	1370.10	0.009	0.0009645
Mo	98	3	He	2126.327	46.623	3851919.63	0.0219	0.0002706
Mo	98	3	He	2066.369	45.3084	3808460.88	0.0219	0.0002706
Mo	98	3	He	2113.898	46.3505	3835326.82	0.0219	0.0002706
Ag	107	3	He	49.326	2.2937	189498.24	0.0465	0.0006206
Ag	107	3	He	49.105	2.2834	191932.87	0.0465	0.0006206
Ag	107	3	He	49.38	2.2962	189997.89	0.0465	0.0006206
Cd	111	3	He	102.203	0.5465	45148.53	0.0053	0
Cd	111	3	He	100.058	0.535	44970.04	0.0053	0
Cd	111	3	He	100.994	0.54	44683.17	0.0053	0
Sn	120	3	He	0.122	0.0184	1520.14	0.0158	0.01648
Sn	120	3	He	0.177	0.0193	1620.21	0.0158	0.01648
Sn	120	3	He	0.135	0.0186	1540.13	0.0158	0.01648
Sb	121	3	He	0.088	0.0016	130.01	0.0149	0.0002698
Sb	121	3	He	0.142	0.0024	200.01	0.0149	0.0002698
Sb	121	3	He	0.112	0.0019	160.01	0.0149	0.0002698
Ba	137	3	He	0.532	0.0028	230.01	0.0048	0.0002317
Ba	137	3	He	0.522	0.0027	230.01	0.0048	0.0002317
Ba	137	3	He	0.329	0.0018	150.01	0.0048	0.0002317
Tl	205	3	He	0.025	0.0008	300.01	0.0247	0.0001339
Tl	205	3	He	0.018	0.0006	230.01	0.0247	0.0001339
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Pb	208	3	He	0.078	0.0036	730.05	0.0327	0.00107
Pb	208	3	He	0.062	0.0031	690.05	0.0327	0.00107
Pb	208	3	He	0.064	0.0032	700.04	0.0327	0.00107
U	238	3	He	0.063	0.0032	930.07	0.0493	7.55E-05
U	238	3	He	0.054	0.0027	790.05	0.0493	7.55E-05
U	238	3	He	0.041	0.0021	620.04	0.0493	7.55E-05
Sc	45	1	No Gas			2398964.96		
Sc	45	1	No Gas			2403438.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2408029.65		
Ge	72	1	No Gas			1211425.22		
Ge	72	1	No Gas			1205236.31		
Ge	72	1	No Gas			1225320.06		
Sc	45	2	H2			186138.92		
Sc	45	2	H2			184792.85		
Sc	45	2	H2			183326.05		
Ge	72	2	H2			167725.58		
Ge	72	2	H2			170424.53		
Ge	72	2	H2			167187.69		
In	115	2	H2			369851.71		
In	115	2	H2			372520.42		
In	115	2	H2			370351.36		
Sc	45	3	He			46625.56		
Sc	45	3	He			47748.51		
Sc	45	3	He			48531.84		
Ge	72	3	He			84972.41		
Ge	72	3	He			86380.55		
Ge	72	3	He			84641.26		
In	115	3	He			82625.82		
In	115	3	He			84064.12		
In	115	3	He			82755.64		
Tb	159	3	He			395297.57		
Tb	159	3	He			395215.66		
Tb	159	3	He			398496.63		
Bi	209	3	He			291955.62		
Bi	209	3	He			291291.48		
Bi	209	3	He			295588.35		

Quantitation Report

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Sample Type	LRC
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Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

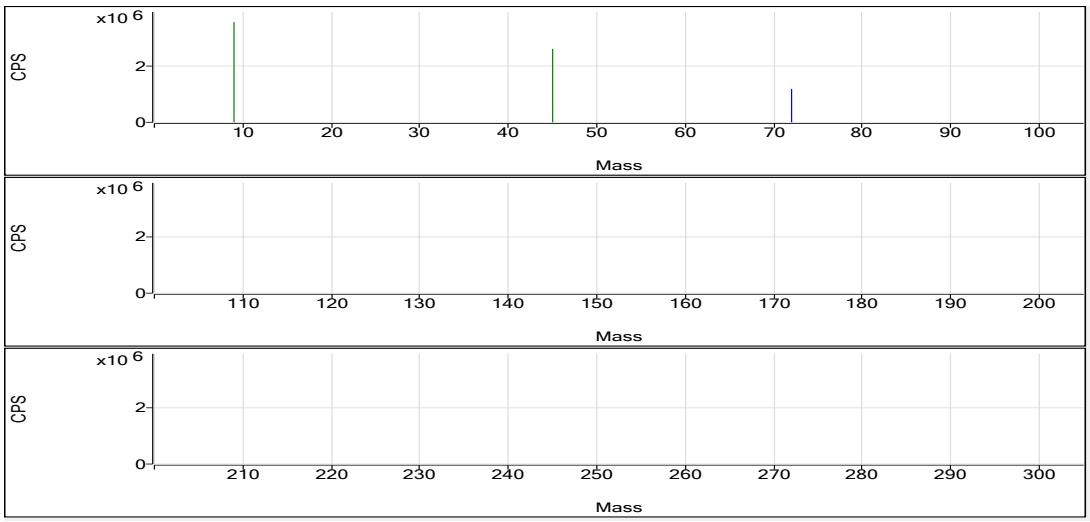
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	1790.005	ppb	1.9	3553874.67	1.3654	Analog	0.5000	3
Se	78	72	H2	1999.788	ppb	1.6	137532.22	0.8341	Pulse	1.5000	3
Na	23	45	He	174873.715	ppb	1.5	31898660.36	625.8770	Analog	0.1000	3
Mg	24	45	He	184538.600	ppb	1.6	16875776.83	331.1252	Analog	0.1000	3
Al	27	45	He	188307.029	ppb	1.4	5614822.00	110.1668	Analog	0.1000	3
K	39	45	He	186613.375	ppb	1.4	11093948.17	217.6740	Analog	0.1000	3
Ca	44	45	He	189112.912	ppb	1.2	651238.32	12.7777	Pulse	0.1000	3
Ti	47	45	He	1915.011	ppb	2.2	52405.31	1.0283	Pulse	0.1000	3
V	51	45	He	1876.875	ppb	2.4	2092028.08	41.0518	Analog	0.5000	3
Cr	52	45	He	1808.823	ppb	2.4	2761947.46	54.1974	Analog	0.1000	3
Mn	55	45	He	5605.142	ppb	1.3	3666410.36	71.9383	Analog	0.1000	3
Fe	57	45	He	147336.526	ppb	1.8	4362784.21	85.6026	Analog	0.1000	3
Co	59	45	He	1769.916	ppb	2.5	5076477.01	99.6171	Analog	0.1000	3
Ni	60	72	He	1933.971	ppb	1.6	1373836.49	16.6024	Pulse	0.1000	3
Cu	63	72	He	1910.528	ppb	1.3	4059080.46	49.0501	Analog	0.1000	3
Zn	66	72	He	1976.327	ppb	1.5	476493.09	5.7581	Pulse	0.1000	3
As	75	72	He	2004.621	ppb	1.7	339932.99	4.1080	Pulse	0.5000	3
Sr	88	115	He	2050.894	ppb	1.5	1662776.17	18.3971	Analog	0.1000	3
Mo	98	115	He	2003.153	ppb	0.7	3970111.19	43.9222	Analog	0.1000	3
Ag	107	115	He	1900.054	ppb	1.7	7983358.63	88.3286	Analog	0.1000	3
Cd	111	115	He	1869.114	ppb	1.2	903309.98	9.9940	Pulse	0.5000	3
Sn	120	115	He	2014.431	ppb	0.9	2878128.60	31.8418	Analog	0.1000	3
Sb	121	115	He	2029.997	ppb	1.2	2725382.15	30.1527	Analog	0.1000	3
Ba	137	115	He	1922.876	ppb	1.6	834111.11	9.2288	Pulse	0.1000	3
Tl	205	159	He	2028.951	ppb	1.0	19864453.87	50.1687	Analog	0.1000	3
Pb	208	159	He	2037.917	ppb	0.7	26410757.32	66.7015	Analog	0.1000	3
U	238	209	He	219.997	ppb	0.4	3138170.68	10.8371	Analog	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2603096.53	0.9	108.5	Analog	0.1000	3
No Gas	Ge	72	1184581.88	0.5	102.7	Pulse	0.1000	3
H2	Sc	45	187068.83	1.2	100.0	Pulse	0.1000	3
H2	Ge	72	164935.16	2.3	100.7	Pulse	0.1000	3
H2	In	115	481503.78	0.9	123.8	Pulse	0.1000	3
He	Sc	45	50973.40	1.6	109.3	Pulse	0.1000	3
He	Ge	72	82766.11	1.9	101.9	Pulse	0.1000	3
He	In	115	90395.23	1.4	104.9	Pulse	0.1000	3
He	Tb	159	395957.05	0.1	99.3	Pulse	0.1000	3
He	Bi	209	289572.46	1.0	93.6	Pulse	0.1000	3

No Gas



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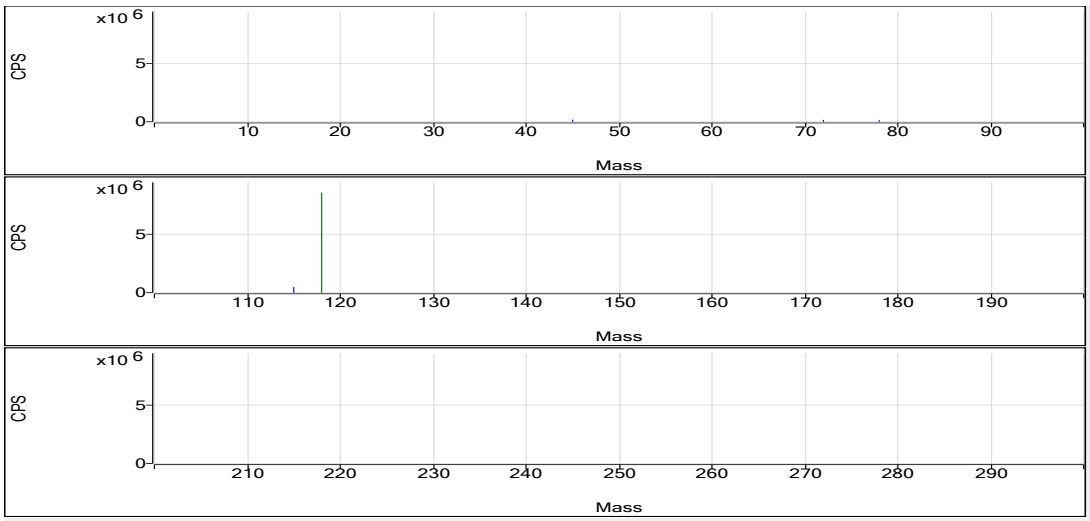
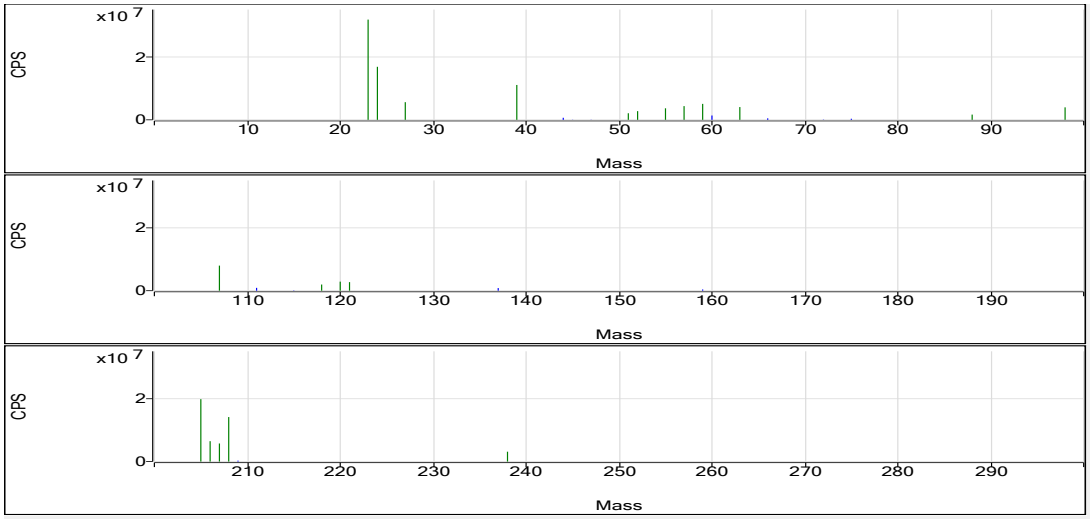


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1796.515	1.3704	3551875.25	0.0008	4.685E-06
Be	9	1	No Gas	1753.304	1.3374	3516167.75	0.0008	4.685E-06
Be	9	1	No Gas	1820.196	1.3884	3593581.00	0.0008	4.685E-06
Se	78	2	H2	2029.344	0.8464	136300.04	0.0004	1.219E-05
Se	78	2	H2	1966.058	0.82	138310.81	0.0004	1.219E-05
Se	78	2	H2	2003.962	0.8358	137985.80	0.0004	1.219E-05
Na	23	3	He	172338.24	616.8075	31636827.03	0.0036	0.3452
Na	23	3	He	174557.858	624.7472	32238384.52	0.0036	0.3452
Na	23	3	He	177725.048	636.0764	31820769.53	0.0036	0.3452
Mg	24	3	He	182671.489	327.775	16811987.25	0.0018	0.003497
Mg	24	3	He	183069.125	328.4884	16950756.00	0.0018	0.003497
Mg	24	3	He	187875.186	337.1121	16864587.25	0.0018	0.003497
Al	27	3	He	186033.037	108.8364	5582357.42	0.0006	0.0006432
Al	27	3	He	187676.364	109.7979	5665820.54	0.0006	0.0006432
Al	27	3	He	191211.684	111.8661	5596288.04	0.0006	0.0006432
K	39	3	He	185287.456	216.1302	11085587.33	0.0012	0.3951
K	39	3	He	185005.007	215.8013	11135842.33	0.0012	0.3951
K	39	3	He	189547.662	221.0905	11060414.84	0.0012	0.3951
Ca	44	3	He	187358.825	12.6592	649304.17	0.0001	0.002715
Ca	44	3	He	188208.792	12.7166	656204.52	0.0001	0.002715
Ca	44	3	He	191771.118	12.9572	648206.28	0.0001	0.002715
Ti	47	3	He	1906.344	1.0237	52505.81	0.0005	7.003E-05
Ti	47	3	He	1878.183	1.0086	52043.93	0.0005	7.003E-05
Ti	47	3	He	1960.507	1.0528	52666.18	0.0005	7.003E-05
V	51	3	He	1873.826	40.9851	2102179.50	0.0219	0.02486
V	51	3	He	1833.869	40.1117	2069856.75	0.0219	0.02486
V	51	3	He	1922.931	42.0585	2104048.00	0.0219	0.02486
Cr	52	3	He	1775.776	53.208	2729104.02	0.0299	0.03997
Cr	52	3	He	1792.108	53.697	2770888.08	0.0299	0.03997
Cr	52	3	He	1858.584	55.6873	2785850.27	0.0299	0.03997
Mn	55	3	He	5583.997	71.667	3675888.38	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5543.33	71.1451	3671247.76	0.0128	0.002639
Mn	55	3	He	5688.098	73.003	3652094.95	0.0128	0.002639
Fe	57	3	He	144637.454	84.0345	4310232.75	0.0006	0.001429
Fe	57	3	He	147303.421	85.5834	4416297.75	0.0006	0.001429
Fe	57	3	He	150068.702	87.19	4361822.12	0.0006	0.001429
Co	59	3	He	1742.849	98.0937	5031349.61	0.0563	0.002149
Co	59	3	He	1746.15	98.2795	5071446.80	0.0563	0.002149
Co	59	3	He	1820.749	102.4781	5126634.61	0.0563	0.002149
Ni	60	3	He	1964.866	16.8676	1374575.92	0.0086	0.002834
Ni	60	3	He	1901.413	16.3229	1379609.82	0.0086	0.002834
Ni	60	3	He	1935.632	16.6166	1367323.73	0.0086	0.002834
Cu	63	3	He	1936.11	49.7068	4050716.50	0.0257	0.004757
Cu	63	3	He	1888.083	48.4739	4096995.88	0.0257	0.004757
Cu	63	3	He	1907.392	48.9696	4029529.00	0.0257	0.004757
Zn	66	3	He	2008.889	5.8529	476968.43	0.0029	0.003818
Zn	66	3	He	1948.985	5.6785	479946.24	0.0029	0.003818
Zn	66	3	He	1971.107	5.7429	472564.60	0.0029	0.003818
As	75	3	He	2031.299	4.1627	339225.28	0.002	0.0008061
As	75	3	He	1967.556	4.0321	340789.19	0.002	0.0008061
As	75	3	He	2015.007	4.1293	339784.50	0.002	0.0008061
Sr	88	3	He	2063.487	18.5101	1657851.54	0.009	0.0009645
Sr	88	3	He	2015.965	18.0838	1662005.60	0.009	0.0009645
Sr	88	3	He	2073.23	18.5975	1668471.38	0.009	0.0009645
Mo	98	3	He	2016.233	44.2091	3959578.38	0.0219	0.0002706
Mo	98	3	He	1988.429	43.5994	4007035.88	0.0219	0.0002706
Mo	98	3	He	2004.797	43.9583	3943719.32	0.0219	0.0002706
Ag	107	3	He	1932.539	89.8388	8046398.01	0.0465	0.0006206
Ag	107	3	He	1869.153	86.8921	7985885.51	0.0465	0.0006206
Ag	107	3	He	1898.469	88.2549	7917792.38	0.0465	0.0006206
Cd	111	3	He	1891.55	10.1139	905853.06	0.0053	0
Cd	111	3	He	1845.837	9.8695	907064.81	0.0053	0
Cd	111	3	He	1869.954	9.9985	897012.06	0.0053	0
Sn	120	3	He	2033.964	32.1504	2879547.46	0.0158	0.01648
Sn	120	3	He	1996.755	31.5626	2900781.21	0.0158	0.01648
Sn	120	3	He	2012.574	31.8125	2854057.14	0.0158	0.01648
Sb	121	3	He	2055.898	30.5374	2735080.58	0.0149	0.0002698
Sb	121	3	He	2006.07	29.7973	2738544.65	0.0149	0.0002698
Sb	121	3	He	2028.024	30.1234	2702521.21	0.0149	0.0002698
Ba	137	3	He	1944.917	9.3345	836046.71	0.0048	0.0002317
Ba	137	3	He	1888.808	9.0653	833148.89	0.0048	0.0002317
Ba	137	3	He	1934.905	9.2865	833137.72	0.0048	0.0002317
Tl	205	3	He	2020.267	49.954	19788320.96	0.0247	0.0001339
Tl	205	3	He	2052.876	50.7603	20066255.95	0.0247	0.0001339
Tl	205	3	He	2013.71	49.7918	19738784.71	0.0247	0.0001339
Pb	208	3	He	2034.742	66.5976	14112654.79	0.0327	0.00107
Pb	208	3	He	2053.879	67.224	14303471.04	0.0327	0.00107
Pb	208	3	He	2025.131	66.283	14083296.04	0.0327	0.00107
U	238	3	He	219.617	10.8184	3095244.64	0.0493	7.55E-05
U	238	3	He	221.063	10.8896	3176541.83	0.0493	7.55E-05
U	238	3	He	219.311	10.8033	3142725.58	0.0493	7.55E-05
Sc	45	1	No Gas			2591930.90		
Sc	45	1	No Gas			2629110.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2588248.09		
Ge	72	1	No Gas			1178464.12		
Ge	72	1	No Gas			1188858.42		
Ge	72	1	No Gas			1186423.11		
Sc	45	2	H2			184448.69		
Sc	45	2	H2			187847.01		
Sc	45	2	H2			188910.80		
Ge	72	2	H2			161037.72		
Ge	72	2	H2			168673.49		
Ge	72	2	H2			165094.26		
In	115	2	H2			477231.59		
In	115	2	H2			485727.92		
In	115	2	H2			481551.83		
Sc	45	3	He			51291.25		
Sc	45	3	He			51602.29		
Sc	45	3	He			50026.65		
Ge	72	3	He			81492.24		
Ge	72	3	He			84519.68		
Ge	72	3	He			82286.41		
In	115	3	He			104783.02		
In	115	3	He			107413.48		
In	115	3	He			104924.84		
Tb	159	3	He			396131.09		
Tb	159	3	He			395314.02		
Tb	159	3	He			396426.05		
Bi	209	3	He			286110.03		
Bi	209	3	He			291703.59		
Bi	209	3	He			290903.75		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

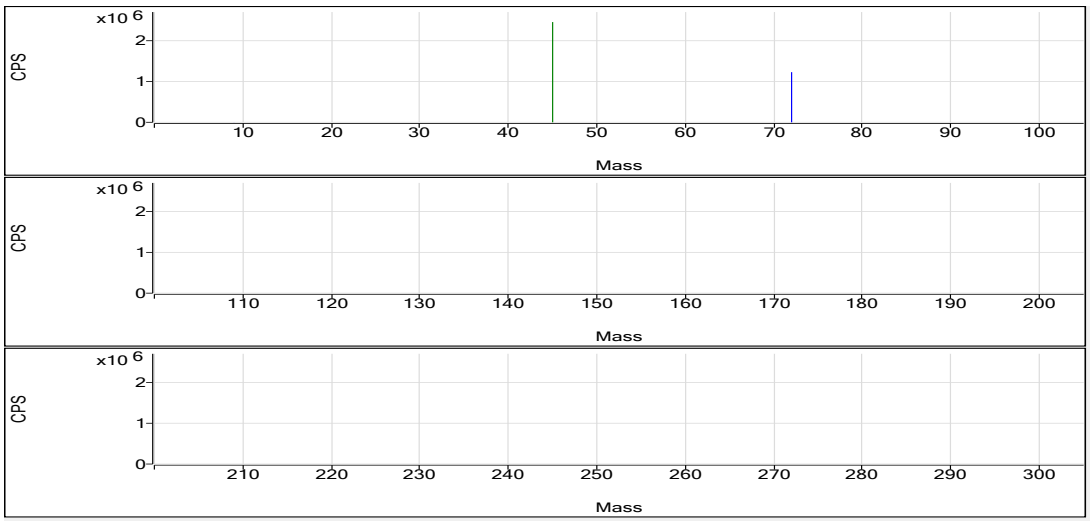
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.737	ppb	14.9	1385.41	0.0006	Pulse	0.5000	3
Se	78	72	H2	0.964	ppb	10.5	69.56	0.0004	Pulse	1.5000	3
Na	23	45	He	53.656	ppb	3.6	25495.97	0.5371	Pulse	0.1000	3
Mg	24	45	He	21.253	ppb	9.2	1976.86	0.0416	Pulse	0.1000	3
Al	27	45	He	21.576	ppb	12.5	630.04	0.0133	Pulse	0.1000	3
K	39	45	He	18.461	ppb	50.6	19774.03	0.4166	Pulse	0.1000	3
Ca	44	45	He	67.908	ppb	22.4	346.68	0.0073	Pulse	0.1000	3
Ti	47	45	He	0.261	ppb	149.4	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.448	ppb	9.1	1645.44	0.0347	Pulse	0.5000	3
Cr	52	45	He	-0.111	ppb	N/A	1740.17	0.0367	Pulse	0.1000	3
Mn	55	45	He	0.758	ppb	12.9	586.70	0.0124	Pulse	0.1000	3
Fe	57	45	He	32.325	ppb	19.2	960.07	0.0202	Pulse	0.1000	3
Co	59	45	He	0.273	ppb	12.8	830.05	0.0175	Pulse	0.1000	3
Ni	60	72	He	0.377	ppb	15.4	516.70	0.0061	Pulse	0.1000	3
Cu	63	72	He	0.311	ppb	29.5	1083.41	0.0127	Pulse	0.1000	3
Zn	66	72	He	-0.086	ppb	N/A	303.35	0.0036	Pulse	0.1000	3
As	75	72	He	0.272	ppb	13.0	116.00	0.0014	Pulse	0.5000	3
Sr	88	115	He	0.206	ppb	49.8	240.01	0.0028	Pulse	0.1000	3
Mo	98	115	He	2.113	ppb	12.5	3980.72	0.0466	Pulse	0.1000	3
Ag	107	115	He	0.225	ppb	10.3	943.40	0.0111	Pulse	0.1000	3
Cd	111	115	He	0.241	ppb	13.7	110.00	0.0013	Pulse	0.5000	3
Sn	120	115	He	0.938	ppb	18.3	2670.35	0.0313	Pulse	0.1000	3
Sb	121	115	He	0.256	ppb	20.9	346.68	0.0041	Pulse	0.1000	3
Ba	137	115	He	0.220	ppb	12.0	110.01	0.0013	Pulse	0.1000	3
Tl	205	159	He	1.107	ppb	4.4	10958.27	0.0275	Pulse	0.1000	3
Pb	208	159	He	0.303	ppb	11.1	4377.12	0.0110	Pulse	0.1000	3
U	238	209	He	0.155	ppb	6.1	2376.98	0.0077	Pulse	0.1000	3

ISTD Table:

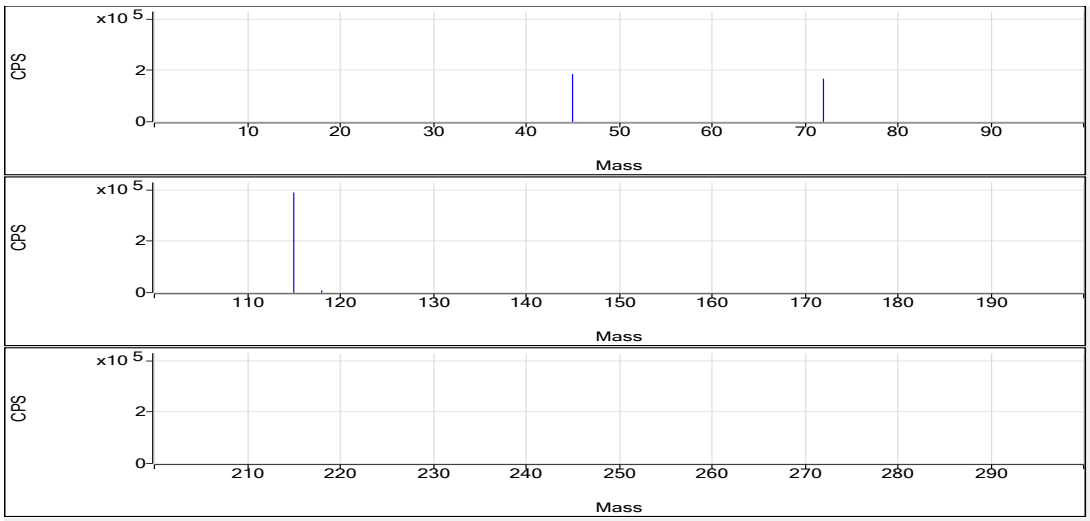
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2446955.69	0.7	102.0	Analog	0.1000	3
No Gas	Ge	72	1223821.49	0.3	106.1	Pulse	0.1000	3
H2	Sc	45	185806.77	1.8	99.4	Pulse	0.1000	3
H2	Ge	72	167907.37	0.1	102.6	Pulse	0.1000	3
H2	In	115	390210.41	0.8	100.3	Pulse	0.1000	3
He	Sc	45	47468.10	0.7	101.8	Pulse	0.1000	3
He	Ge	72	85126.03	0.7	104.8	Pulse	0.1000	3
He	In	115	85341.01	1.3	99.0	Pulse	0.1000	3
He	Tb	159	398642.45	0.9	100.0	Pulse	0.1000	3
He	Bi	209	307894.69	1.0	99.6	Pulse	0.1000	3

No Gas

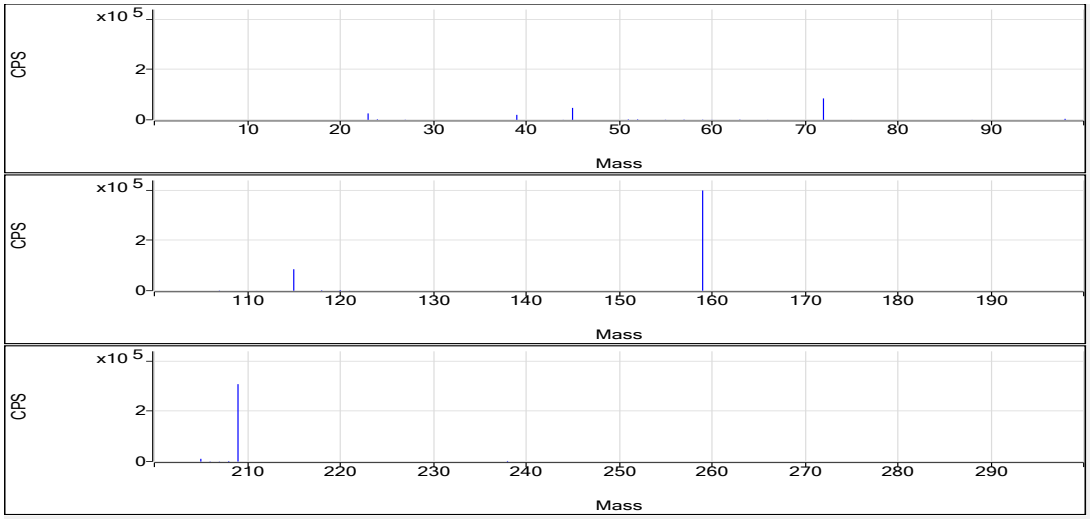


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.842	0.0006	1570.09	0.0008	4.685E-06
Be	9	1	No Gas	0.745	0.0006	1404.07	0.0008	4.685E-06
Be	9	1	No Gas	0.623	0.0005	1182.06	0.0008	4.685E-06
Se	78	2	H2	1.066	0.0005	76.67	0.0004	1.219E-05
Se	78	2	H2	0.864	0.0004	62.67	0.0004	1.219E-05
Se	78	2	H2	0.962	0.0004	69.33	0.0004	1.219E-05
Na	23	3	He	55.583	0.544	26023.62	0.0036	0.3452
Na	23	3	He	51.679	0.53	25041.86	0.0036	0.3452
Na	23	3	He	53.707	0.5373	25422.42	0.0036	0.3452
Mg	24	3	He	23.45	0.0456	2180.23	0.0018	0.003497
Mg	24	3	He	20.583	0.0404	1910.19	0.0018	0.003497
Mg	24	3	He	19.725	0.0389	1840.16	0.0018	0.003497
Al	27	3	He	24.628	0.0151	720.04	0.0006	0.0006432
Al	27	3	He	20.609	0.0127	600.04	0.0006	0.0006432
Al	27	3	He	19.493	0.012	570.04	0.0006	0.0006432
K	39	3	He	20.368	0.4188	20034.22	0.0012	0.3951
K	39	3	He	8.316	0.4047	19123.27	0.0012	0.3951
K	39	3	He	26.699	0.4262	20164.60	0.0012	0.3951
Ca	44	3	He	74.309	0.0077	370.02	0.0001	0.002715
Ca	44	3	He	78.877	0.008	380.02	0.0001	0.002715
Ca	44	3	He	50.539	0.0061	290.01	0.0001	0.002715
Ti	47	3	He	0.648	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.264	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.479	0.0353	1690.11	0.0219	0.02486
V	51	3	He	0.402	0.0337	1590.10	0.0219	0.02486
V	51	3	He	0.464	0.035	1656.11	0.0219	0.02486
Cr	52	3	He	-0.057	0.0383	1830.18	0.0299	0.03997
Cr	52	3	He	-0.197	0.0341	1610.15	0.0299	0.03997
Cr	52	3	He	-0.079	0.0376	1780.17	0.0299	0.03997
Mn	55	3	He	0.674	0.0113	540.03	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.734	0.0121	570.03	0.0128	0.002639
Mn	55	3	He	0.865	0.0137	650.05	0.0128	0.002639
Fe	57	3	He	39.28	0.0242	1160.10	0.0006	0.001429
Fe	57	3	He	27.415	0.0174	820.05	0.0006	0.001429
Fe	57	3	He	30.281	0.019	900.06	0.0006	0.001429
Co	59	3	He	0.244	0.0159	760.05	0.0563	0.002149
Co	59	3	He	0.312	0.0197	930.06	0.0563	0.002149
Co	59	3	He	0.262	0.0169	800.05	0.0563	0.002149
Ni	60	3	He	0.343	0.0058	490.03	0.0086	0.002834
Ni	60	3	He	0.344	0.0058	490.03	0.0086	0.002834
Ni	60	3	He	0.444	0.0066	570.03	0.0086	0.002834
Cu	63	3	He	0.361	0.014	1190.09	0.0257	0.004757
Cu	63	3	He	0.367	0.0142	1200.09	0.0257	0.004757
Cu	63	3	He	0.205	0.01	860.05	0.0257	0.004757
Zn	66	3	He	-0.137	0.0034	290.01	0.0029	0.003818
Zn	66	3	He	0.189	0.0044	370.02	0.0029	0.003818
Zn	66	3	He	-0.31	0.0029	250.01	0.0029	0.003818
As	75	3	He	0.239	0.0013	110.00	0.002	0.0008061
As	75	3	He	0.309	0.0014	122.00	0.002	0.0008061
As	75	3	He	0.266	0.0014	116.00	0.002	0.0008061
Sr	88	3	He	0.144	0.0023	190.01	0.009	0.0009645
Sr	88	3	He	0.325	0.0039	330.02	0.009	0.0009645
Sr	88	3	He	0.15	0.0023	200.01	0.009	0.0009645
Mo	98	3	He	1.81	0.0399	3370.56	0.0219	0.0002706
Mo	98	3	He	2.281	0.0503	4280.78	0.0219	0.0002706
Mo	98	3	He	2.25	0.0496	4290.82	0.0219	0.0002706
Ag	107	3	He	0.247	0.0121	1020.08	0.0465	0.0006206
Ag	107	3	He	0.227	0.0112	950.07	0.0465	0.0006206
Ag	107	3	He	0.2	0.0099	860.06	0.0465	0.0006206
Cd	111	3	He	0.279	0.0015	126.00	0.0053	0
Cd	111	3	He	0.224	0.0012	102.00	0.0053	0
Cd	111	3	He	0.22	0.0012	102.00	0.0053	0
Sn	120	3	He	0.833	0.0296	2500.31	0.0158	0.01648
Sn	120	3	He	1.136	0.0344	2930.40	0.0158	0.01648
Sn	120	3	He	0.845	0.0298	2580.35	0.0158	0.01648
Sb	121	3	He	0.317	0.005	420.02	0.0149	0.0002698
Sb	121	3	He	0.219	0.0035	300.01	0.0149	0.0002698
Sb	121	3	He	0.231	0.0037	320.02	0.0149	0.0002698
Ba	137	3	He	0.223	0.0013	110.01	0.0048	0.0002317
Ba	137	3	He	0.245	0.0014	120.01	0.0048	0.0002317
Ba	137	3	He	0.193	0.0012	100.00	0.0048	0.0002317
Tl	205	3	He	1.163	0.0289	11405.29	0.0247	0.0001339
Tl	205	3	He	1.078	0.0268	10714.78	0.0247	0.0001339
Tl	205	3	He	1.078	0.0268	10754.75	0.0247	0.0001339
Pb	208	3	He	0.325	0.0117	2230.26	0.0327	0.00107
Pb	208	3	He	0.32	0.0115	2310.30	0.0327	0.00107
Pb	208	3	He	0.264	0.0097	2310.30	0.0327	0.00107
U	238	3	He	0.15	0.0075	2290.28	0.0493	7.55E-05
U	238	3	He	0.149	0.0074	2270.28	0.0493	7.55E-05
U	238	3	He	0.166	0.0083	2570.38	0.0493	7.55E-05
Sc	45	1	No Gas			2428182.15		
Sc	45	1	No Gas			2450253.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2462431.06		
Ge	72	1	No Gas			1223339.67		
Ge	72	1	No Gas			1227228.65		
Ge	72	1	No Gas			1220896.15		
Sc	45	2	H2			182298.83		
Sc	45	2	H2			186208.77		
Sc	45	2	H2			188912.71		
Ge	72	2	H2			167797.11		
Ge	72	2	H2			168168.59		
Ge	72	2	H2			167756.40		
In	115	2	H2			390003.55		
In	115	2	H2			393257.73		
In	115	2	H2			387369.96		
Sc	45	3	He			47839.27		
Sc	45	3	He			47247.26		
Sc	45	3	He			47317.78		
Ge	72	3	He			84861.73		
Ge	72	3	He			84720.32		
Ge	72	3	He			85796.03		
In	115	3	He			84385.17		
In	115	3	He			85151.15		
In	115	3	He			86528.54		
Tb	159	3	He			394679.25		
Tb	159	3	He			399868.39		
Tb	159	3	He			401379.72		
Bi	209	3	He			305990.82		
Bi	209	3	He			306421.66		
Bi	209	3	He			311271.58		

Quantitation Report

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Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

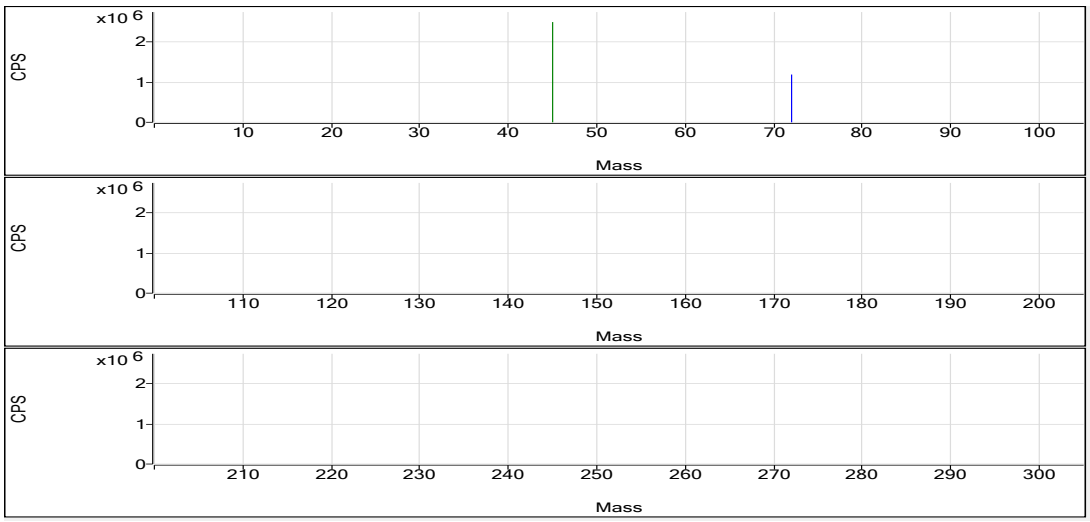
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.192	ppb	4.2	378.01	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.273	ppb	17.8	21.11	0.0001	Pulse	1.5000	3
Na	23	45	He	11.984	ppb	18.3	19600.22	0.3880	Pulse	0.1000	3
Mg	24	45	He	5.850	ppb	7.0	706.71	0.0140	Pulse	0.1000	3
Al	27	45	He	6.112	ppb	44.7	213.34	0.0042	Pulse	0.1000	3
K	39	45	He	-5.371	ppb	N/A	19640.44	0.3888	Pulse	0.1000	3
Ca	44	45	He	18.379	ppb	130.8	200.01	0.0040	Pulse	0.1000	3
Ti	47	45	He	0.486	ppb	117.8	16.67	0.0003	Pulse	0.1000	3
V	51	45	He	-0.169	ppb	N/A	1070.05	0.0212	Pulse	0.5000	3
Cr	52	45	He	0.168	ppb	96.3	2270.25	0.0450	Pulse	0.1000	3
Mn	55	45	He	0.160	ppb	25.3	236.68	0.0047	Pulse	0.1000	3
Fe	57	45	He	9.918	ppb	5.9	363.35	0.0072	Pulse	0.1000	3
Co	59	45	He	0.065	ppb	27.1	293.35	0.0058	Pulse	0.1000	3
Ni	60	72	He	0.070	ppb	29.9	286.68	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.062	ppb	31.9	530.03	0.0063	Pulse	0.1000	3
Zn	66	72	He	-0.598	ppb	N/A	173.34	0.0021	Pulse	0.1000	3
As	75	72	He	0.046	ppb	378.0	75.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.053	ppb	182.2	130.00	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.760	ppb	24.9	1516.81	0.0169	Pulse	0.1000	3
Ag	107	115	He	0.051	ppb	26.7	270.01	0.0030	Pulse	0.1000	3
Cd	111	115	He	0.054	ppb	49.7	26.00	0.0003	Pulse	0.5000	3
Sn	120	115	He	-0.073	ppb	N/A	1376.78	0.0153	Pulse	0.1000	3
Sb	121	115	He	0.042	ppb	30.2	80.00	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.045	ppb	91.2	40.00	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.574	ppb	6.5	5884.87	0.0143	Pulse	0.1000	3
Pb	208	159	He	0.096	ppb	13.8	1733.45	0.0042	Pulse	0.1000	3
U	238	209	He	0.045	ppb	3.5	730.05	0.0023	Pulse	0.1000	3

ISTD Table:

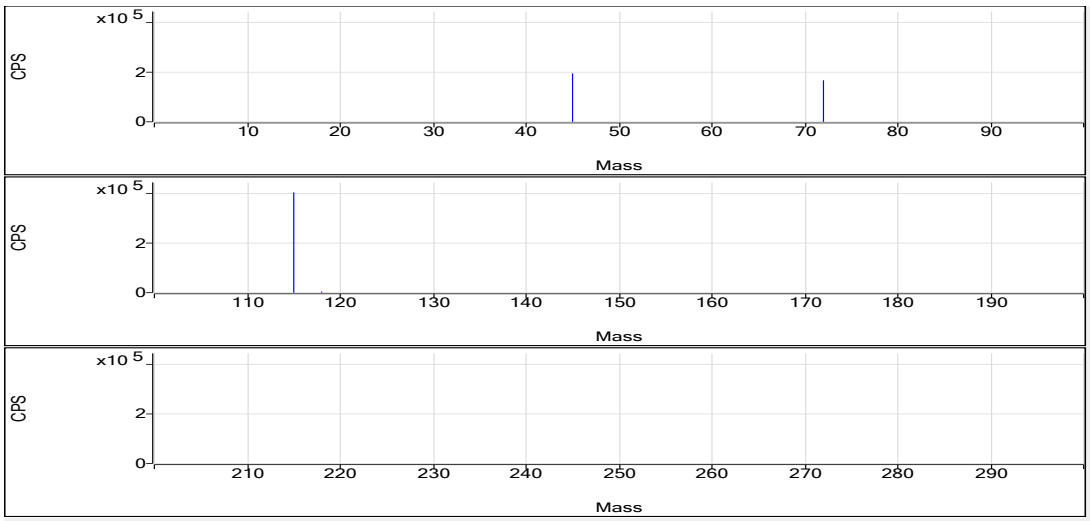
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2502031.47	0.9	104.3	Analog	0.1000	3
No Gas	Ge	72	1192254.13	0.5	103.4	Pulse	0.1000	3
H2	Sc	45	195382.47	0.9	104.5	Pulse	0.1000	3
H2	Ge	72	167664.42	0.3	102.4	Pulse	0.1000	3
H2	In	115	404257.60	0.3	103.9	Pulse	0.1000	3
He	Sc	45	50522.06	2.5	108.3	Pulse	0.1000	3
He	Ge	72	83544.63	0.6	102.9	Pulse	0.1000	3
He	In	115	89802.25	1.5	104.2	Pulse	0.1000	3
He	Tb	159	410813.68	0.7	103.1	Pulse	0.1000	3
He	Bi	209	319184.76	0.5	103.2	Pulse	0.1000	3

No Gas

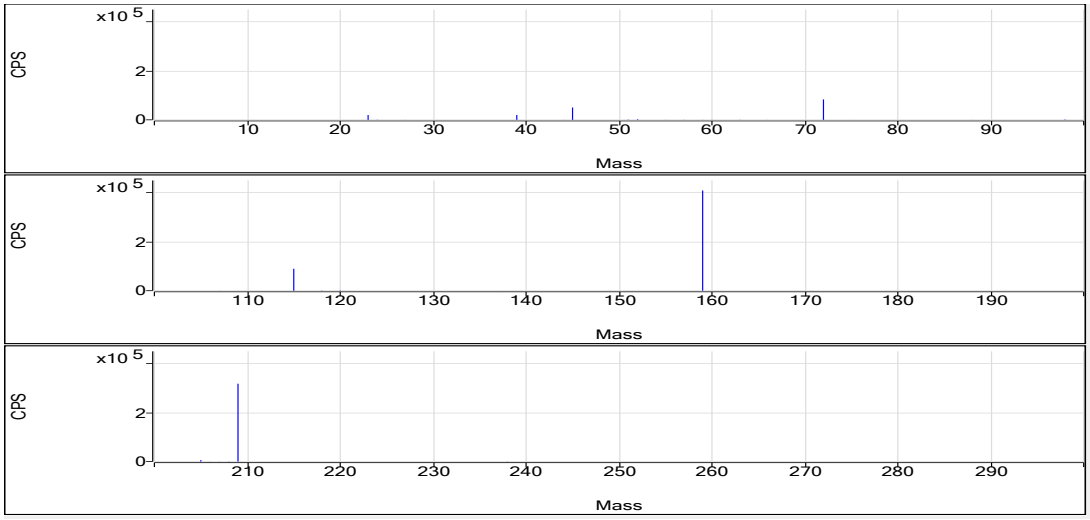


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.195	0.0002	384.01	0.0008	4.685E-06
Be	9	1	No Gas	0.198	0.0002	386.01	0.0008	4.685E-06
Be	9	1	No Gas	0.183	0.0001	364.01	0.0008	4.685E-06
Se	78	2	H2	0.313	0.0001	24.00	0.0004	1.219E-05
Se	78	2	H2	0.286	0.0001	22.00	0.0004	1.219E-05
Se	78	2	H2	0.219	0.0001	17.33	0.0004	1.219E-05
Na	23	3	He	9.911	0.3806	19743.74	0.0036	0.3452
Na	23	3	He	11.751	0.3872	19132.96	0.0036	0.3452
Na	23	3	He	14.29	0.3963	19923.97	0.0036	0.3452
Mg	24	3	He	5.787	0.0139	720.04	0.0018	0.003497
Mg	24	3	He	6.285	0.0148	730.05	0.0018	0.003497
Mg	24	3	He	5.478	0.0133	670.04	0.0018	0.003497
Al	27	3	He	5.491	0.0039	200.01	0.0006	0.0006432
Al	27	3	He	3.744	0.0028	140.01	0.0006	0.0006432
Al	27	3	He	9.1	0.006	300.01	0.0006	0.0006432
K	39	3	He	-8.433	0.3852	19984.16	0.0012	0.3951
K	39	3	He	-1.534	0.3933	19433.73	0.0012	0.3951
K	39	3	He	-6.145	0.3879	19503.44	0.0012	0.3951
Ca	44	3	He	11.18	0.0035	180.01	0.0001	0.002715
Ca	44	3	He	-1.243	0.0026	130.01	0.0001	0.002715
Ca	44	3	He	45.2	0.0058	290.02	0.0001	0.002715
Ti	47	3	He	0.588	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	-0.143	0.0217	1128.05	0.0219	0.02486
V	51	3	He	-0.195	0.0206	1018.04	0.0219	0.02486
V	51	3	He	-0.169	0.0212	1064.05	0.0219	0.02486
Cr	52	3	He	-0.002	0.0399	2070.21	0.0299	0.03997
Cr	52	3	He	0.186	0.0455	2250.24	0.0299	0.03997
Cr	52	3	He	0.319	0.0495	2490.30	0.0299	0.03997
Mn	55	3	He	0.125	0.0042	220.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.204	0.0053	260.01	0.0128	0.002639
Mn	55	3	He	0.151	0.0046	230.01	0.0128	0.002639
Fe	57	3	He	9.818	0.0071	370.02	0.0006	0.001429
Fe	57	3	He	9.384	0.0069	340.02	0.0006	0.001429
Fe	57	3	He	10.55	0.0076	380.02	0.0006	0.001429
Co	59	3	He	0.075	0.0064	330.02	0.0563	0.002149
Co	59	3	He	0.045	0.0047	230.01	0.0563	0.002149
Co	59	3	He	0.075	0.0064	320.01	0.0563	0.002149
Ni	60	3	He	0.089	0.0036	300.02	0.0086	0.002834
Ni	60	3	He	0.048	0.0032	270.01	0.0086	0.002834
Ni	60	3	He	0.072	0.0034	290.01	0.0086	0.002834
Cu	63	3	He	0.081	0.0068	570.03	0.0257	0.004757
Cu	63	3	He	0.063	0.0064	530.03	0.0257	0.004757
Cu	63	3	He	0.042	0.0058	490.03	0.0257	0.004757
Zn	66	3	He	-0.652	0.0019	160.01	0.0029	0.003818
Zn	66	3	He	-0.486	0.0024	200.01	0.0029	0.003818
Zn	66	3	He	-0.658	0.0019	160.01	0.0029	0.003818
As	75	3	He	-0.03	0.0007	62.00	0.002	0.0008061
As	75	3	He	-0.077	0.0006	54.00	0.002	0.0008061
As	75	3	He	0.245	0.0013	110.00	0.002	0.0008061
Sr	88	3	He	0.015	0.0011	100.00	0.009	0.0009645
Sr	88	3	He	0.164	0.0024	220.01	0.009	0.0009645
Sr	88	3	He	-0.019	0.0008	70.00	0.009	0.0009645
Mo	98	3	He	0.576	0.0129	1170.09	0.0219	0.0002706
Mo	98	3	He	0.75	0.0167	1510.14	0.0219	0.0002706
Mo	98	3	He	0.954	0.0212	1870.19	0.0219	0.0002706
Ag	107	3	He	0.051	0.003	270.01	0.0465	0.0006206
Ag	107	3	He	0.065	0.0037	330.02	0.0465	0.0006206
Ag	107	3	He	0.038	0.0024	210.01	0.0465	0.0006206
Cd	111	3	He	0.082	0.0004	40.00	0.0053	0
Cd	111	3	He	0.029	0.0002	14.00	0.0053	0
Cd	111	3	He	0.051	0.0003	24.00	0.0053	0
Sn	120	3	He	-0.052	0.0157	1420.12	0.0158	0.01648
Sn	120	3	He	-0.062	0.0155	1400.11	0.0158	0.01648
Sn	120	3	He	-0.104	0.0148	1310.10	0.0158	0.01648
Sb	121	3	He	0.034	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.056	0.0011	100.00	0.0149	0.0002698
Sb	121	3	He	0.035	0.0008	70.00	0.0149	0.0002698
Ba	137	3	He	-0.002	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.067	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.07	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.6	0.015	6191.66	0.0247	0.0001339
Tl	205	3	He	0.531	0.0133	5441.31	0.0247	0.0001339
Tl	205	3	He	0.591	0.0147	6021.63	0.0247	0.0001339
Pb	208	3	He	0.109	0.0046	1000.08	0.0327	0.00107
Pb	208	3	He	0.097	0.0042	870.06	0.0327	0.00107
Pb	208	3	He	0.082	0.0038	820.06	0.0327	0.00107
U	238	3	He	0.046	0.0023	750.06	0.0493	7.55E-05
U	238	3	He	0.043	0.0022	700.05	0.0493	7.55E-05
U	238	3	He	0.046	0.0023	740.05	0.0493	7.55E-05
Sc	45	1	No Gas			2500570.43		
Sc	45	1	No Gas			2480404.96		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2525119.02		
Ge	72	1	No Gas			1193263.97		
Ge	72	1	No Gas			1185580.22		
Ge	72	1	No Gas			1197918.19		
Sc	45	2	H2			196369.24		
Sc	45	2	H2			196519.98		
Sc	45	2	H2			193258.20		
Ge	72	2	H2			168222.60		
Ge	72	2	H2			167207.13		
Ge	72	2	H2			167563.53		
In	115	2	H2			405696.56		
In	115	2	H2			403211.95		
In	115	2	H2			403864.29		
Sc	45	3	He			51873.60		
Sc	45	3	He			49414.50		
Sc	45	3	He			50278.07		
Ge	72	3	He			83322.94		
Ge	72	3	He			83223.17		
Ge	72	3	He			84087.77		
In	115	3	He			90726.57		
In	115	3	He			90392.89		
In	115	3	He			88309.44		
Tb	159	3	He			413931.60		
Tb	159	3	He			409929.37		
Tb	159	3	He			408580.07		
Bi	209	3	He			321032.05		
Bi	209	3	He			318485.00		
Bi	209	3	He			318037.24		

Quantitation Report

Data File Name	034SMPL.d
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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

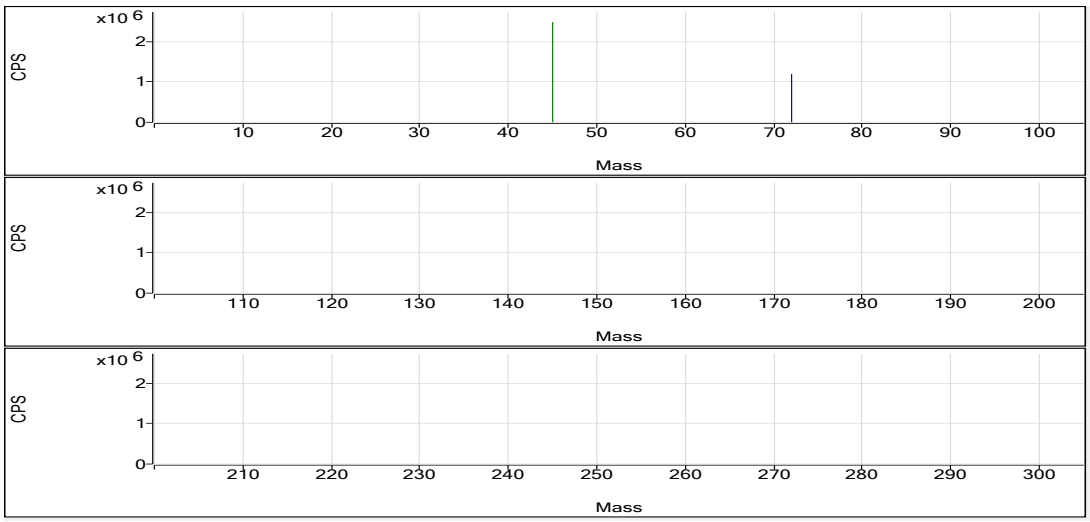
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.101	ppb	11.5	204.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.097	ppb	72.1	8.67	0.0001	Pulse	1.5000	3
Na	23	45	He	7.661	ppb	47.5	17861.33	0.3726	Pulse	0.1000	3
Mg	24	45	He	3.331	ppb	41.6	453.36	0.0095	Pulse	0.1000	3
Al	27	45	He	3.400	ppb	45.1	126.67	0.0026	Pulse	0.1000	3
K	39	45	He	10.766	ppb	110.7	19543.52	0.4076	Pulse	0.1000	3
Ca	44	45	He	-6.240	ppb	N/A	110.00	0.0023	Pulse	0.1000	3
Ti	47	45	He	0.263	ppb	149.9	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.041	ppb	63.9	1236.06	0.0258	Pulse	0.5000	3
Cr	52	45	He	-0.021	ppb	N/A	1886.85	0.0394	Pulse	0.1000	3
Mn	55	45	He	0.059	ppb	88.3	163.34	0.0034	Pulse	0.1000	3
Fe	57	45	He	5.426	ppb	14.5	220.01	0.0046	Pulse	0.1000	3
Co	59	45	He	0.036	ppb	60.8	200.01	0.0042	Pulse	0.1000	3
Ni	60	72	He	0.126	ppb	21.3	326.68	0.0039	Pulse	0.1000	3
Cu	63	72	He	0.081	ppb	49.5	570.03	0.0068	Pulse	0.1000	3
Zn	66	72	He	-0.104	ppb	N/A	293.35	0.0035	Pulse	0.1000	3
As	75	72	He	0.009	ppb	1052.9	68.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	-0.020	ppb	N/A	70.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.334	ppb	20.5	670.04	0.0076	Pulse	0.1000	3
Ag	107	115	He	0.016	ppb	24.1	120.00	0.0014	Pulse	0.1000	3
Cd	111	115	He	0.038	ppb	2.6	18.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.112	ppb	62.4	1613.49	0.0182	Pulse	0.1000	3
Sb	121	115	He	0.035	ppb	35.7	70.00	0.0008	Pulse	0.1000	3
Ba	137	115	He	-0.017	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.195	ppb	1.8	2003.56	0.0050	Pulse	0.1000	3
Pb	208	159	He	0.054	ppb	6.9	1143.39	0.0028	Pulse	0.1000	3
U	238	209	He	0.011	ppb	45.6	196.67	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2484546.06	0.5	103.6	Analog	0.1000	3
No Gas	Ge	72	1198824.18	0.9	103.9	Pulse	0.1000	3
H2	Sc	45	193765.95	0.6	103.6	Pulse	0.1000	3
H2	Ge	72	164722.80	0.1	100.6	Pulse	0.1000	3
H2	In	115	400006.75	0.7	102.8	Pulse	0.1000	3
He	Sc	45	47963.15	2.0	102.8	Pulse	0.1000	3
He	Ge	72	83339.38	1.4	102.6	Pulse	0.1000	3
He	In	115	88536.00	2.6	102.7	Pulse	0.1000	3
He	Tb	159	403908.65	0.7	101.3	Pulse	0.1000	3
He	Bi	209	313952.13	0.9	101.5	Pulse	0.1000	3

No Gas



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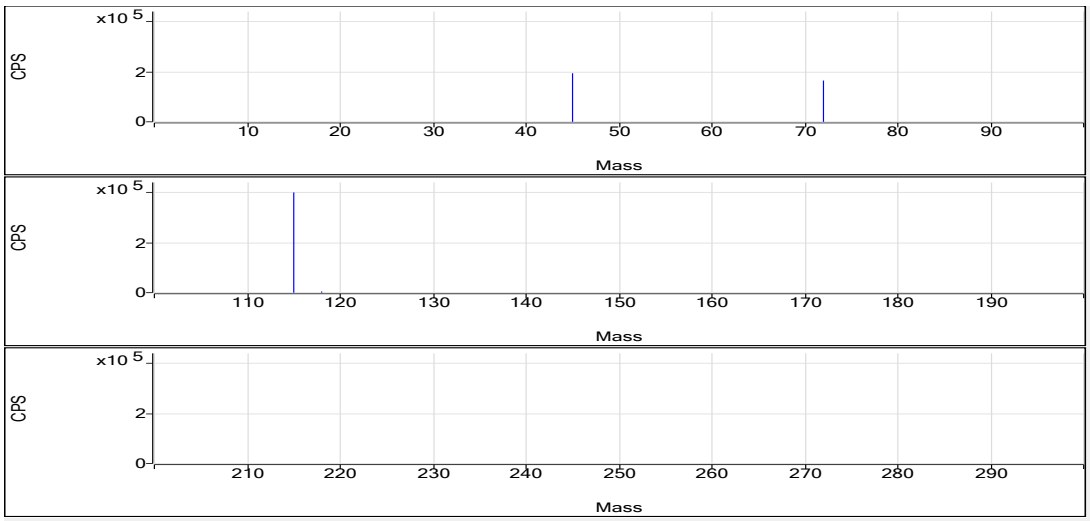
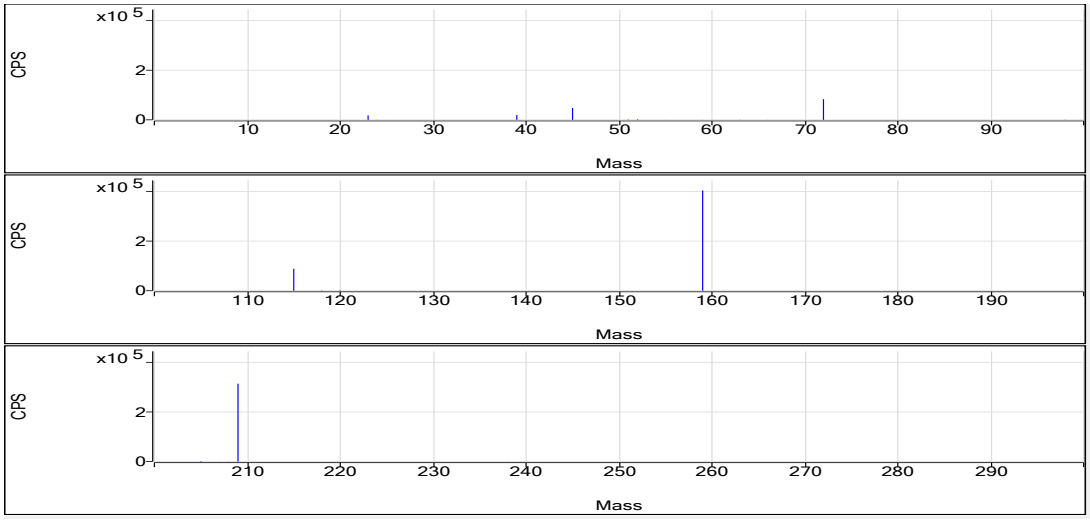


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.107	0.0001	216.00	0.0008	4.685E-06
Be	9	1	No Gas	0.109	0.0001	218.00	0.0008	4.685E-06
Be	9	1	No Gas	0.088	0.0001	178.00	0.0008	4.685E-06
Se	78	2	H2	0.077	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.174	0.0001	14.00	0.0004	1.219E-05
Se	78	2	H2	0.039	0	4.67	0.0004	1.219E-05
Na	23	3	He	10.414	0.3824	18171.76	0.0036	0.3452
Na	23	3	He	3.533	0.3578	17550.99	0.0036	0.3452
Na	23	3	He	9.035	0.3775	17861.24	0.0036	0.3452
Mg	24	3	He	4.854	0.0122	580.04	0.0018	0.003497
Mg	24	3	He	2.142	0.0073	360.02	0.0018	0.003497
Mg	24	3	He	2.998	0.0089	420.02	0.0018	0.003497
Al	27	3	He	1.778	0.0017	80.00	0.0006	0.0006432
Al	27	3	He	4.825	0.0035	170.01	0.0006	0.0006432
Al	27	3	He	3.597	0.0027	130.00	0.0006	0.0006432
K	39	3	He	23.515	0.4224	20074.18	0.0012	0.3951
K	39	3	He	-0.104	0.3949	19373.31	0.0012	0.3951
K	39	3	He	8.886	0.4054	19183.07	0.0012	0.3951
Ca	44	3	He	0.308	0.0027	130.00	0.0001	0.002715
Ca	44	3	He	-6.994	0.0022	110.00	0.0001	0.002715
Ca	44	3	He	-12.034	0.0019	90.00	0.0001	0.002715
Ti	47	3	He	0.261	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.657	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.012	0.0251	1194.06	0.0219	0.02486
V	51	3	He	0.049	0.0259	1272.07	0.0219	0.02486
V	51	3	He	0.063	0.0262	1242.06	0.0219	0.02486
Cr	52	3	He	-0.014	0.0396	1880.20	0.0299	0.03997
Cr	52	3	He	-0.069	0.0379	1860.18	0.0299	0.03997
Cr	52	3	He	0.02	0.0406	1920.18	0.0299	0.03997
Mn	55	3	He	0.008	0.0027	130.00	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.112	0.0041	200.01	0.0128	0.002639
Mn	55	3	He	0.058	0.0034	160.01	0.0128	0.002639
Fe	57	3	He	5.148	0.0044	210.01	0.0006	0.001429
Fe	57	3	He	6.313	0.0051	250.01	0.0006	0.001429
Fe	57	3	He	4.816	0.0042	200.01	0.0006	0.001429
Co	59	3	He	0.048	0.0048	230.01	0.0563	0.002149
Co	59	3	He	0.049	0.0049	240.01	0.0563	0.002149
Co	59	3	He	0.011	0.0027	130.01	0.0563	0.002149
Ni	60	3	He	0.11	0.0038	310.02	0.0086	0.002834
Ni	60	3	He	0.158	0.0042	350.01	0.0086	0.002834
Ni	60	3	He	0.112	0.0038	320.02	0.0086	0.002834
Cu	63	3	He	0.052	0.0061	500.03	0.0257	0.004757
Cu	63	3	He	0.127	0.008	670.04	0.0257	0.004757
Cu	63	3	He	0.064	0.0064	540.03	0.0257	0.004757
Zn	66	3	He	-0.348	0.0028	230.01	0.0029	0.003818
Zn	66	3	He	0.085	0.0041	340.02	0.0029	0.003818
Zn	66	3	He	-0.049	0.0037	310.01	0.0029	0.003818
As	75	3	He	0.059	0.0009	76.00	0.002	0.0008061
As	75	3	He	0.074	0.001	80.00	0.002	0.0008061
As	75	3	He	-0.104	0.0006	50.00	0.002	0.0008061
Sr	88	3	He	-0.033	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	0.004	0.001	90.00	0.009	0.0009645
Sr	88	3	He	-0.03	0.0007	60.00	0.009	0.0009645
Mo	98	3	He	0.272	0.0062	560.04	0.0219	0.0002706
Mo	98	3	He	0.323	0.0074	660.04	0.0219	0.0002706
Mo	98	3	He	0.407	0.0092	790.05	0.0219	0.0002706
Ag	107	3	He	0.02	0.0016	140.00	0.0465	0.0006206
Ag	107	3	He	0.013	0.0012	110.01	0.0465	0.0006206
Ag	107	3	He	0.014	0.0013	110.00	0.0465	0.0006206
Cd	111	3	He	0.037	0.0002	18.00	0.0053	0
Cd	111	3	He	0.038	0.0002	18.00	0.0053	0
Cd	111	3	He	0.039	0.0002	18.00	0.0053	0
Sn	120	3	He	0.125	0.0185	1660.16	0.0158	0.01648
Sn	120	3	He	0.036	0.017	1530.14	0.0158	0.01648
Sn	120	3	He	0.173	0.0192	1650.16	0.0158	0.01648
Sb	121	3	He	0.027	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.049	0.001	90.00	0.0149	0.0002698
Sb	121	3	He	0.029	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.197	0.005	2040.24	0.0247	0.0001339
Tl	205	3	He	0.197	0.005	2020.22	0.0247	0.0001339
Tl	205	3	He	0.191	0.0049	1950.23	0.0247	0.0001339
Pb	208	3	He	0.057	0.0029	550.04	0.0327	0.00107
Pb	208	3	He	0.055	0.0029	570.03	0.0327	0.00107
Pb	208	3	He	0.05	0.0027	680.04	0.0327	0.00107
U	238	3	He	0.006	0.0003	110.00	0.0493	7.55E-05
U	238	3	He	0.015	0.0008	260.01	0.0493	7.55E-05
U	238	3	He	0.013	0.0007	220.01	0.0493	7.55E-05
Sc	45	1	No Gas			2499079.03		
Sc	45	1	No Gas			2477901.99		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2476657.15		
Ge	72	1	No Gas			1211836.47		
Ge	72	1	No Gas			1193874.59		
Ge	72	1	No Gas			1190761.47		
Sc	45	2	H2			194923.36		
Sc	45	2	H2			193682.58		
Sc	45	2	H2			192691.91		
Ge	72	2	H2			164790.15		
Ge	72	2	H2			164891.74		
Ge	72	2	H2			164486.52		
In	115	2	H2			401281.67		
In	115	2	H2			401793.78		
In	115	2	H2			396944.80		
Sc	45	3	He			47519.03		
Sc	45	3	He			49053.08		
Sc	45	3	He			47317.34		
Ge	72	3	He			82024.74		
Ge	72	3	He			83614.56		
Ge	72	3	He			84378.83		
In	115	3	He			89970.66		
In	115	3	He			89769.54		
In	115	3	He			85895.34		
Tb	159	3	He			406895.38		
Tb	159	3	He			403653.35		
Tb	159	3	He			401177.22		
Bi	209	3	He			315567.14		
Bi	209	3	He			310671.34		
Bi	209	3	He			315617.91		

Quantitation Report

Data File Name	035SMPL.d
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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

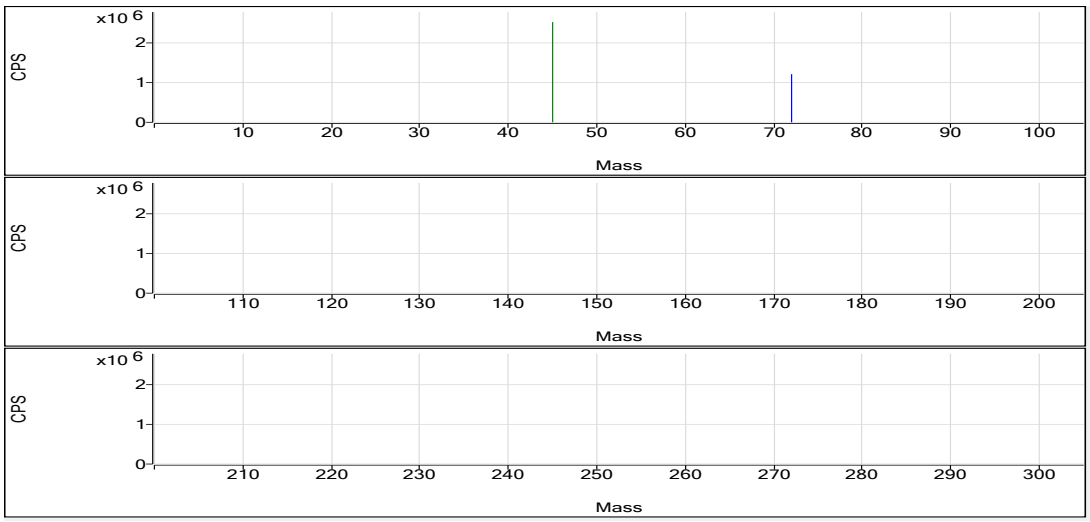
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.085	ppb	14.0	175.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.076	ppb	72.4	7.11	0.0000	Pulse	1.5000	3
Na	23	45	He	4.310	ppb	50.7	17651.08	0.3606	Pulse	0.1000	3
Mg	24	45	He	1.694	ppb	40.3	320.02	0.0065	Pulse	0.1000	3
Al	27	45	He	3.199	ppb	55.0	123.34	0.0025	Pulse	0.1000	3
K	39	45	He	5.452	ppb	298.7	19650.39	0.4014	Pulse	0.1000	3
Ca	44	45	He	2.198	ppb	738.6	140.00	0.0029	Pulse	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.149	ppb	59.0	1376.74	0.0281	Pulse	0.5000	3
Cr	52	45	He	-0.075	ppb	N/A	1846.85	0.0377	Pulse	0.1000	3
Mn	55	45	He	0.055	ppb	120.2	163.34	0.0033	Pulse	0.1000	3
Fe	57	45	He	3.750	ppb	29.7	176.68	0.0036	Pulse	0.1000	3
Co	59	45	He	0.024	ppb	31.3	170.01	0.0035	Pulse	0.1000	3
Ni	60	72	He	0.126	ppb	32.9	326.68	0.0039	Pulse	0.1000	3
Cu	63	72	He	0.052	ppb	125.7	506.70	0.0061	Pulse	0.1000	3
Zn	66	72	He	-0.257	ppb	N/A	256.68	0.0031	Pulse	0.1000	3
As	75	72	He	-0.043	ppb	N/A	60.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.040	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.184	ppb	14.8	380.02	0.0043	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	277.5	76.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	82.2	8.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.116	ppb	96.3	1613.48	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.007	ppb	265.5	33.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	-0.009	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.131	ppb	9.9	1373.45	0.0034	Pulse	0.1000	3
Pb	208	159	He	0.041	ppb	8.7	990.05	0.0024	Pulse	0.1000	3
U	238	209	He	0.006	ppb	34.5	110.00	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2514908.82	1.4	104.8	Analog	0.1000	3
No Gas	Ge	72	1207085.14	1.0	104.7	Pulse	0.1000	3
H2	Sc	45	191550.97	1.2	102.4	Pulse	0.1000	3
H2	Ge	72	162188.51	0.8	99.1	Pulse	0.1000	3
H2	In	115	400152.14	0.6	102.8	Pulse	0.1000	3
He	Sc	45	48956.41	0.6	105.0	Pulse	0.1000	3
He	Ge	72	83506.82	1.2	102.8	Pulse	0.1000	3
He	In	115	88171.62	1.8	102.3	Pulse	0.1000	3
He	Tb	159	407784.56	0.5	102.3	Pulse	0.1000	3
He	Bi	209	313080.26	0.5	101.2	Pulse	0.1000	3

No Gas



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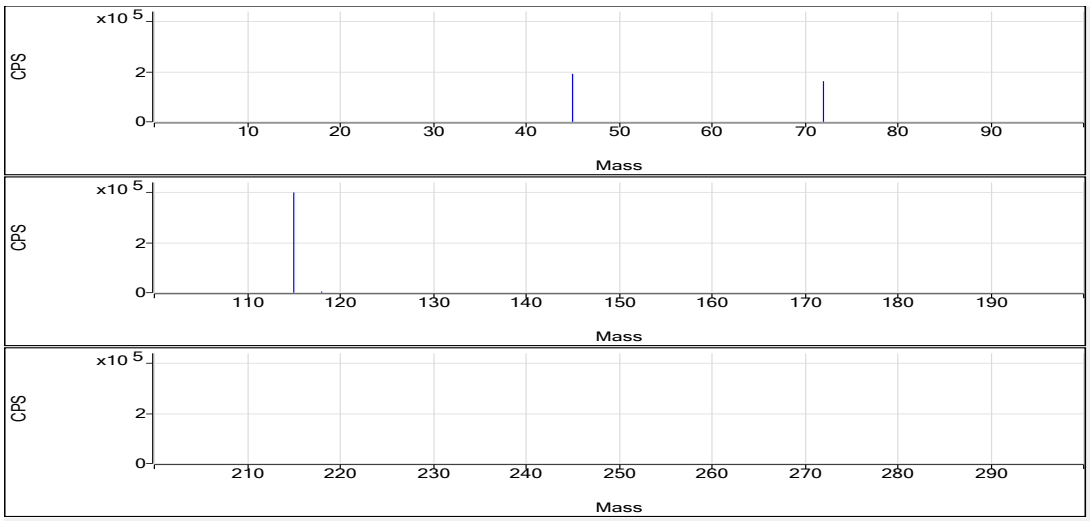
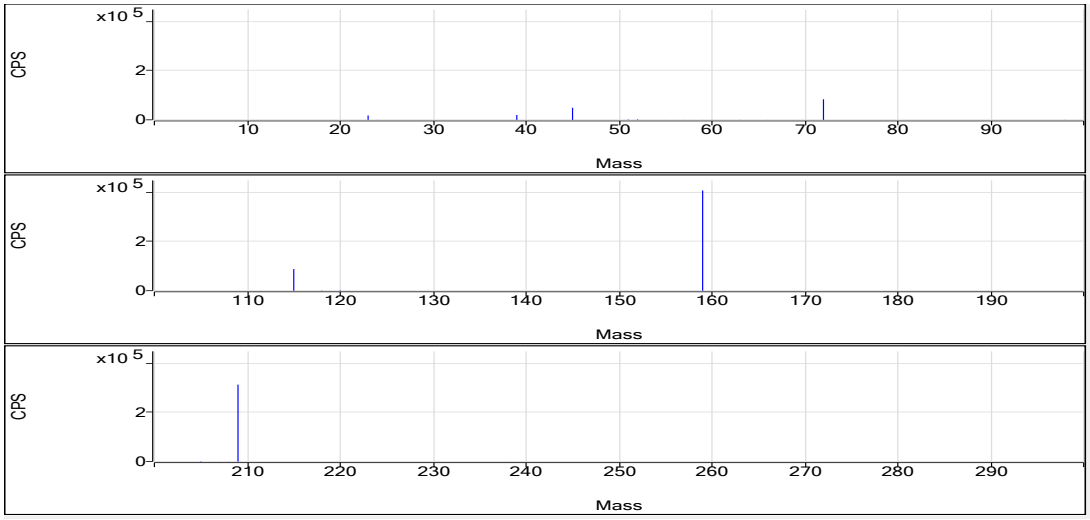


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.097	0.0001	196.00	0.0008	4.685E-06
Be	9	1	No Gas	0.086	0.0001	176.00	0.0008	4.685E-06
Be	9	1	No Gas	0.073	0.0001	154.00	0.0008	4.685E-06
Se	78	2	H2	0.13	0.0001	10.67	0.0004	1.219E-05
Se	78	2	H2	0.02	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.078	0	7.33	0.0004	1.219E-05
Na	23	3	He	6.681	0.3691	17981.47	0.0036	0.3452
Na	23	3	He	3.869	0.359	17530.82	0.0036	0.3452
Na	23	3	He	2.379	0.3537	17440.94	0.0036	0.3452
Mg	24	3	He	1.025	0.0053	260.01	0.0018	0.003497
Mg	24	3	He	2.388	0.0078	380.02	0.0018	0.003497
Mg	24	3	He	1.668	0.0065	320.02	0.0018	0.003497
Al	27	3	He	1.707	0.0016	80.00	0.0006	0.0006432
Al	27	3	He	2.751	0.0023	110.00	0.0006	0.0006432
Al	27	3	He	5.14	0.0037	180.01	0.0006	0.0006432
K	39	3	He	23.205	0.4221	20565.10	0.0012	0.3951
K	39	3	He	-8.788	0.3848	18792.42	0.0012	0.3951
K	39	3	He	1.938	0.3973	19593.65	0.0012	0.3951
Ca	44	3	He	20.578	0.0041	200.01	0.0001	0.002715
Ca	44	3	He	-3.813	0.0025	120.00	0.0001	0.002715
Ca	44	3	He	-10.172	0.002	100.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.25	0.0303	1478.09	0.0219	0.02486
V	51	3	He	0.09	0.0268	1310.07	0.0219	0.02486
V	51	3	He	0.108	0.0272	1342.07	0.0219	0.02486
Cr	52	3	He	-0.067	0.038	1850.19	0.0299	0.03997
Cr	52	3	He	-0.042	0.0387	1890.20	0.0299	0.03997
Cr	52	3	He	-0.116	0.0365	1800.17	0.0299	0.03997
Mn	55	3	He	0.13	0.0043	210.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.018	0.0029	140.01	0.0128	0.002639
Mn	55	3	He	0.016	0.0028	140.01	0.0128	0.002639
Fe	57	3	He	2.487	0.0029	140.01	0.0006	0.001429
Fe	57	3	He	4.591	0.0041	200.01	0.0006	0.001429
Fe	57	3	He	4.173	0.0039	190.01	0.0006	0.001429
Co	59	3	He	0.031	0.0039	190.01	0.0563	0.002149
Co	59	3	He	0.016	0.0031	150.01	0.0563	0.002149
Co	59	3	He	0.023	0.0034	170.01	0.0563	0.002149
Ni	60	3	He	0.107	0.0038	310.01	0.0086	0.002834
Ni	60	3	He	0.097	0.0037	310.01	0.0086	0.002834
Ni	60	3	He	0.173	0.0043	360.02	0.0086	0.002834
Cu	63	3	He	0.126	0.008	660.04	0.0257	0.004757
Cu	63	3	He	0.008	0.005	420.02	0.0257	0.004757
Cu	63	3	He	0.02	0.0053	440.03	0.0257	0.004757
Zn	66	3	He	-0.355	0.0028	230.01	0.0029	0.003818
Zn	66	3	He	-0.093	0.0035	300.01	0.0029	0.003818
Zn	66	3	He	-0.322	0.0029	240.01	0.0029	0.003818
As	75	3	He	-0.015	0.0008	64.00	0.002	0.0008061
As	75	3	He	-0.047	0.0007	60.00	0.002	0.0008061
As	75	3	He	-0.066	0.0007	56.00	0.002	0.0008061
Sr	88	3	He	-0.033	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.044	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.043	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	0.18	0.0042	380.02	0.0219	0.0002706
Mo	98	3	He	0.159	0.0038	330.02	0.0219	0.0002706
Mo	98	3	He	0.213	0.005	430.02	0.0219	0.0002706
Ag	107	3	He	0.003	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.021	0.0016	140.01	0.0465	0.0006206
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.034	0.0002	16.00	0.0053	0
Sn	120	3	He	0.105	0.0181	1630.15	0.0158	0.01648
Sn	120	3	He	0.01	0.0166	1460.13	0.0158	0.01648
Sn	120	3	He	0.233	0.0202	1750.16	0.0158	0.01648
Sb	121	3	He	0.004	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	0.028	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	0.021	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.117	0.003	1230.10	0.0247	0.0001339
Tl	205	3	He	0.142	0.0036	1490.12	0.0247	0.0001339
Tl	205	3	He	0.134	0.0034	1400.12	0.0247	0.0001339
Pb	208	3	He	0.039	0.0024	490.03	0.0327	0.00107
Pb	208	3	He	0.046	0.0026	510.03	0.0327	0.00107
Pb	208	3	He	0.04	0.0024	520.03	0.0327	0.00107
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
U	238	3	He	0.008	0.0004	140.01	0.0493	7.55E-05
U	238	3	He	0.006	0.0003	110.00	0.0493	7.55E-05
Sc	45	1	No Gas			2498845.59		
Sc	45	1	No Gas			2491842.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2554038.09		
Ge	72	1	No Gas			1201126.15		
Ge	72	1	No Gas			1199523.73		
Ge	72	1	No Gas			1220605.53		
Sc	45	2	H2			189217.63		
Sc	45	2	H2			191507.52		
Sc	45	2	H2			193927.77		
Ge	72	2	H2			160685.58		
Ge	72	2	H2			162522.99		
Ge	72	2	H2			163356.97		
In	115	2	H2			401250.11		
In	115	2	H2			397595.66		
In	115	2	H2			401610.66		
Sc	45	3	He			48722.63		
Sc	45	3	He			48832.47		
Sc	45	3	He			49314.12		
Ge	72	3	He			82618.61		
Ge	72	3	He			84548.59		
Ge	72	3	He			83353.27		
In	115	3	He			89889.89		
In	115	3	He			87786.77		
In	115	3	He			86861.22		
Tb	159	3	He			407833.98		
Tb	159	3	He			409637.53		
Tb	159	3	He			405882.18		
Bi	209	3	He			311414.04		
Bi	209	3	He			313092.91		
Bi	209	3	He			314733.82		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

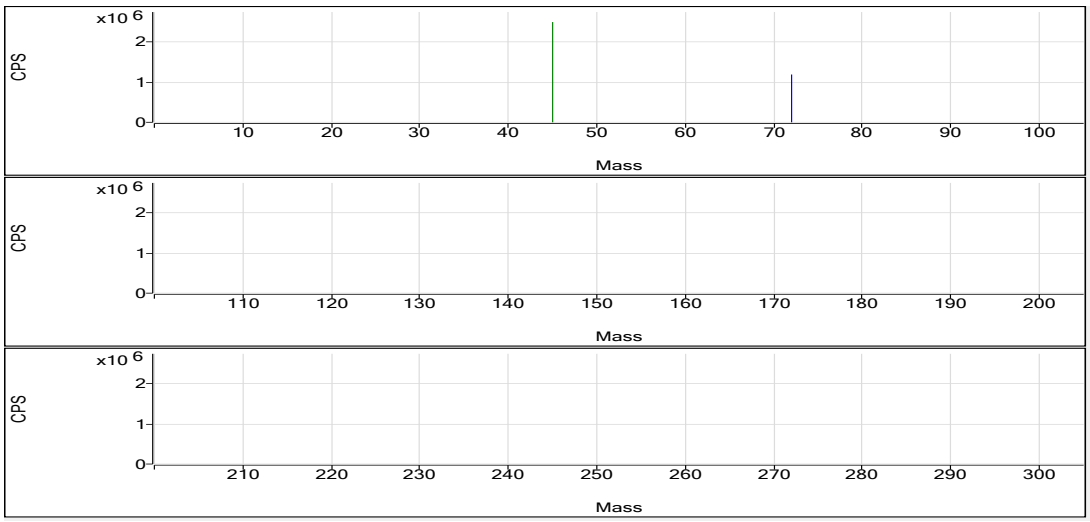
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.049	ppb	35.8	106.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.017	ppb	125.3	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	-0.578	ppb	N/A	16926.87	0.3431	Pulse	0.1000	3
Mg	24	45	He	0.503	ppb	91.9	216.68	0.0044	Pulse	0.1000	3
Al	27	45	He	0.992	ppb	156.0	60.00	0.0012	Pulse	0.1000	3
K	39	45	He	-0.695	ppb	N/A	19446.82	0.3943	Pulse	0.1000	3
Ca	44	45	He	0.783	ppb	1416.3	136.68	0.0028	Pulse	0.1000	3
Ti	47	45	He	0.122	ppb	179.0	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.098	ppb	24.0	1332.74	0.0270	Pulse	0.5000	3
Cr	52	45	He	-0.067	ppb	N/A	1873.52	0.0380	Pulse	0.1000	3
Mn	55	45	He	0.015	ppb	261.2	140.01	0.0028	Pulse	0.1000	3
Fe	57	45	He	3.249	ppb	37.0	163.34	0.0033	Pulse	0.1000	3
Co	59	45	He	0.010	ppb	133.6	133.34	0.0027	Pulse	0.1000	3
Ni	60	72	He	0.069	ppb	102.4	286.68	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.052	ppb	99.8	510.02	0.0061	Pulse	0.1000	3
Zn	66	72	He	-0.244	ppb	N/A	260.02	0.0031	Pulse	0.1000	3
As	75	72	He	-0.016	ppb	N/A	64.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	-0.023	ppb	N/A	66.67	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.109	ppb	12.7	236.68	0.0027	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	64.1	93.33	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	56.8	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.050	ppb	132.3	1530.15	0.0173	Pulse	0.1000	3
Sb	121	115	He	-0.003	ppb	N/A	20.00	0.0002	Pulse	0.1000	3
Ba	137	115	He	-0.001	ppb	N/A	20.00	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.104	ppb	13.0	1093.42	0.0027	Pulse	0.1000	3
Pb	208	159	He	0.027	ppb	25.9	786.71	0.0019	Pulse	0.1000	3
U	238	209	He	0.006	ppb	42.4	113.34	0.0004	Pulse	0.1000	3

ISTD Table:

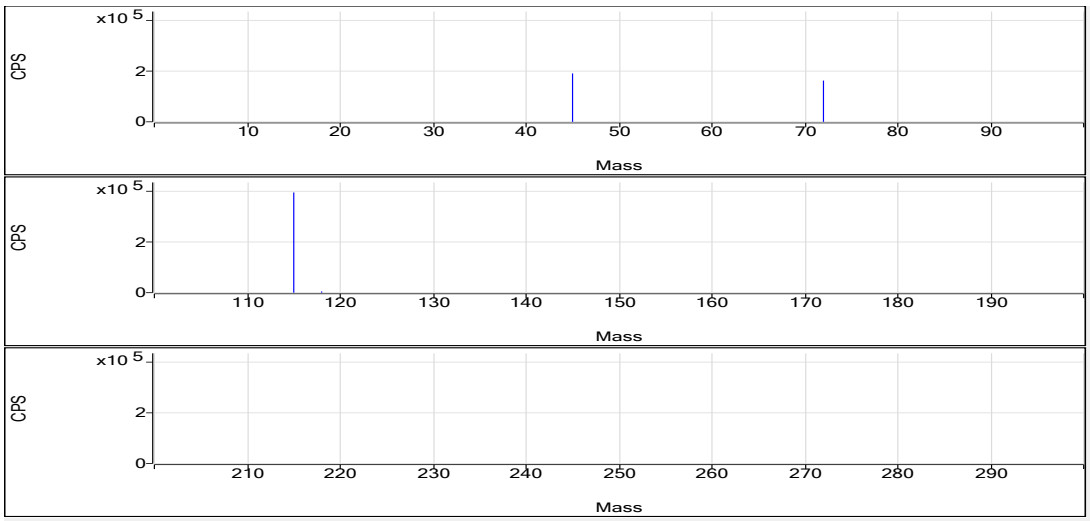
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2500414.75	0.8	104.2	Analog	0.1000	3
No Gas	Ge	72	1192225.58	0.4	103.4	Pulse	0.1000	3
H2	Sc	45	191269.32	1.0	102.3	Pulse	0.1000	3
H2	Ge	72	163094.63	0.8	99.6	Pulse	0.1000	3
H2	In	115	396300.99	0.7	101.9	Pulse	0.1000	3
He	Sc	45	49337.75	1.3	105.8	Pulse	0.1000	3
He	Ge	72	83772.11	0.6	103.2	Pulse	0.1000	3
He	In	115	88581.49	1.6	102.8	Pulse	0.1000	3
He	Tb	159	405345.92	0.4	101.7	Pulse	0.1000	3
He	Bi	209	310633.88	0.3	100.4	Pulse	0.1000	3

No Gas

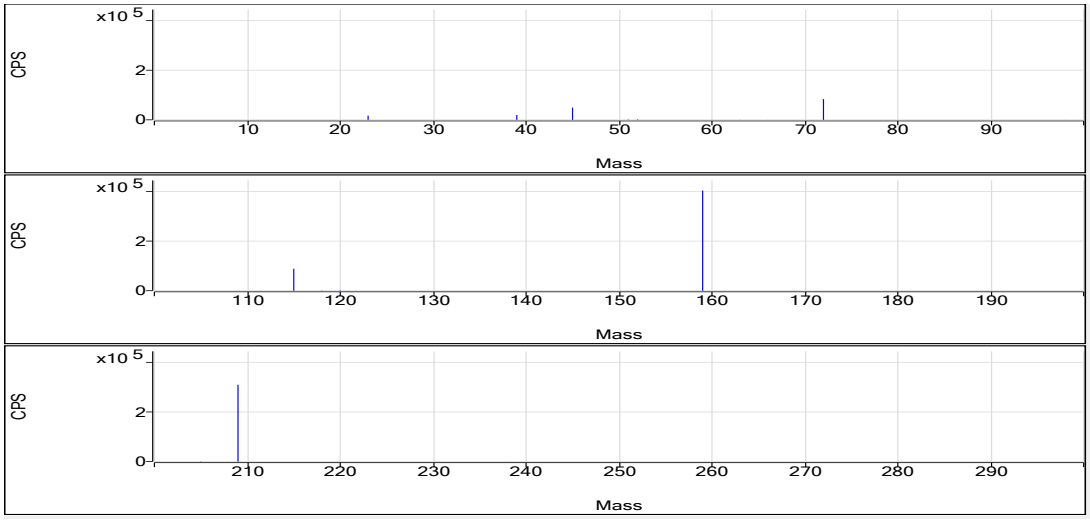


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.052	0	112.00	0.0008	4.685E-06
Be	9	1	No Gas	0.066	0.0001	136.00	0.0008	4.685E-06
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Se	78	2	H2	0.04	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Na	23	3	He	-0.224	0.3444	16739.95	0.0036	0.3452
Na	23	3	He	0.683	0.3476	17270.69	0.0036	0.3452
Na	23	3	He	-2.192	0.3373	16769.96	0.0036	0.3452
Mg	24	3	He	1.032	0.0053	260.01	0.0018	0.003497
Mg	24	3	He	0.182	0.0038	190.01	0.0018	0.003497
Mg	24	3	He	0.293	0.004	200.01	0.0018	0.003497
Al	27	3	He	2.769	0.0023	110.01	0.0006	0.0006432
Al	27	3	He	-0.067	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	0.276	0.0008	40.00	0.0006	0.0006432
K	39	3	He	11.113	0.408	19833.97	0.0012	0.3951
K	39	3	He	-10.65	0.3827	19012.96	0.0012	0.3951
K	39	3	He	-2.548	0.3921	19493.54	0.0012	0.3951
Ca	44	3	He	-3.645	0.0025	120.01	0.0001	0.002715
Ca	44	3	He	-7.414	0.0022	110.01	0.0001	0.002715
Ca	44	3	He	13.409	0.0036	180.01	0.0001	0.002715
Ti	47	3	He	0.253	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.244	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.107	0.0272	1322.07	0.0219	0.02486
V	51	3	He	0.117	0.0274	1362.07	0.0219	0.02486
V	51	3	He	0.072	0.0264	1314.07	0.0219	0.02486
Cr	52	3	He	-0.112	0.0366	1780.16	0.0299	0.03997
Cr	52	3	He	-0.132	0.036	1790.18	0.0299	0.03997
Cr	52	3	He	0.042	0.0412	2050.23	0.0299	0.03997
Mn	55	3	He	-0.013	0.0025	120.00	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.061	0.0034	170.01	0.0128	0.002639
Mn	55	3	He	-0.002	0.0026	130.01	0.0128	0.002639
Fe	57	3	He	4.623	0.0041	200.01	0.0006	0.001429
Fe	57	3	He	2.737	0.003	150.01	0.0006	0.001429
Fe	57	3	He	2.388	0.0028	140.01	0.0006	0.001429
Co	59	3	He	0.024	0.0035	170.01	0.0563	0.002149
Co	59	3	He	0.008	0.0026	130.01	0.0563	0.002149
Co	59	3	He	-0.002	0.002	100.00	0.0563	0.002149
Ni	60	3	He	0.118	0.0038	320.01	0.0086	0.002834
Ni	60	3	He	0.1	0.0037	310.01	0.0086	0.002834
Ni	60	3	He	-0.012	0.0027	230.01	0.0086	0.002834
Cu	63	3	He	-0.007	0.0046	380.02	0.0257	0.004757
Cu	63	3	He	0.075	0.0067	560.02	0.0257	0.004757
Cu	63	3	He	0.088	0.007	590.03	0.0257	0.004757
Zn	66	3	He	0.051	0.004	330.02	0.0029	0.003818
Zn	66	3	He	-0.246	0.0031	260.02	0.0029	0.003818
Zn	66	3	He	-0.536	0.0023	190.01	0.0029	0.003818
As	75	3	He	0.064	0.0009	78.00	0.002	0.0008061
As	75	3	He	-0.044	0.0007	60.00	0.002	0.0008061
As	75	3	He	-0.069	0.0007	56.00	0.002	0.0008061
Sr	88	3	He	-0.057	0.0005	40.00	0.009	0.0009645
Sr	88	3	He	-0.021	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	0.008	0.001	90.00	0.009	0.0009645
Mo	98	3	He	0.106	0.0026	230.01	0.0219	0.0002706
Mo	98	3	He	0.125	0.003	270.01	0.0219	0.0002706
Mo	98	3	He	0.098	0.0024	210.01	0.0219	0.0002706
Ag	107	3	He	0.016	0.0014	120.00	0.0465	0.0006206
Ag	107	3	He	0.008	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.012	0.0001	6.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.04	0.0171	1520.14	0.0158	0.01648
Sn	120	3	He	0.12	0.0184	1650.18	0.0158	0.01648
Sn	120	3	He	-0.01	0.0163	1420.12	0.0158	0.01648
Sb	121	3	He	0.02	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	-0.011	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.002	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Tl	205	3	He	0.118	0.0031	1240.11	0.0247	0.0001339
Tl	205	3	He	0.092	0.0024	980.07	0.0247	0.0001339
Tl	205	3	He	0.101	0.0026	1060.08	0.0247	0.0001339
Pb	208	3	He	0.02	0.0017	370.02	0.0327	0.00107
Pb	208	3	He	0.026	0.0019	350.02	0.0327	0.00107
Pb	208	3	He	0.034	0.0022	530.03	0.0327	0.00107
U	238	3	He	0.007	0.0004	130.01	0.0493	7.55E-05
U	238	3	He	0.003	0.0002	70.00	0.0493	7.55E-05
U	238	3	He	0.008	0.0005	140.01	0.0493	7.55E-05
Sc	45	1	No Gas			2520113.40		
Sc	45	1	No Gas			2482531.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2498599.18		
Ge	72	1	No Gas			1191321.15		
Ge	72	1	No Gas			1187502.40		
Ge	72	1	No Gas			1197853.19		
Sc	45	2	H2			190026.74		
Sc	45	2	H2			193390.88		
Sc	45	2	H2			190390.33		
Ge	72	2	H2			161626.06		
Ge	72	2	H2			163616.06		
Ge	72	2	H2			164041.76		
In	115	2	H2			396123.16		
In	115	2	H2			399136.52		
In	115	2	H2			393643.28		
Sc	45	3	He			48611.98		
Sc	45	3	He			49685.46		
Sc	45	3	He			49715.80		
Ge	72	3	He			83232.20		
Ge	72	3	He			83876.01		
Ge	72	3	He			84208.11		
In	115	3	He			88894.51		
In	115	3	He			89799.87		
In	115	3	He			87073.09		
Tb	159	3	He			404835.46		
Tb	159	3	He			407049.80		
Tb	159	3	He			404152.49		
Bi	209	3	He			310570.27		
Bi	209	3	He			311496.11		
Bi	209	3	He			309835.27		

Quantitation Report

Data File Name	037SMPL.d
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Acq Time	8/10/2023 8:46:06 AM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

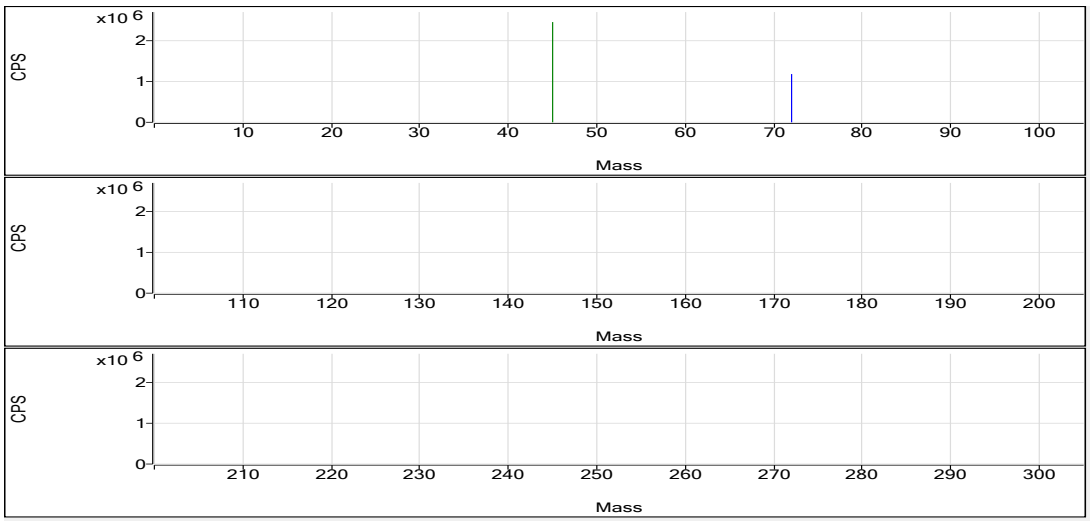
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.036	ppb	29.6	79.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.040	ppb	91.0	4.67	0.0000	Pulse	1.5000	3
Na	23	45	He	0.255	ppb	1084.8	16950.17	0.3461	Pulse	0.1000	3
Mg	24	45	He	0.279	ppb	192.7	196.68	0.0040	Pulse	0.1000	3
Al	27	45	He	0.984	ppb	126.2	60.00	0.0012	Pulse	0.1000	3
K	39	45	He	-1.908	ppb	N/A	19216.63	0.3928	Pulse	0.1000	3
Ca	44	45	He	-2.672	ppb	N/A	123.34	0.0025	Pulse	0.1000	3
Ti	47	45	He	-0.008	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.128	ppb	39.8	1354.74	0.0277	Pulse	0.5000	3
Cr	52	45	He	-0.035	ppb	N/A	1906.86	0.0389	Pulse	0.1000	3
Mn	55	45	He	0.038	ppb	79.2	153.34	0.0031	Pulse	0.1000	3
Fe	57	45	He	2.011	ppb	123.2	126.67	0.0026	Pulse	0.1000	3
Co	59	45	He	0.022	ppb	93.3	166.67	0.0034	Pulse	0.1000	3
Ni	60	72	He	0.062	ppb	7.6	283.34	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.036	ppb	79.4	476.69	0.0057	Pulse	0.1000	3
Zn	66	72	He	-0.276	ppb	N/A	253.34	0.0030	Pulse	0.1000	3
As	75	72	He	0.083	ppb	64.0	82.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	-0.041	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.083	ppb	15.6	186.68	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	38.5	80.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	138.2	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.017	ppb	N/A	1450.13	0.0162	Pulse	0.1000	3
Sb	121	115	He	0.009	ppb	184.8	36.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.014	ppb	257.5	26.67	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.067	ppb	11.8	730.05	0.0018	Pulse	0.1000	3
Pb	208	159	He	0.024	ppb	28.8	753.37	0.0019	Pulse	0.1000	3
U	238	209	He	0.002	ppb	76.4	56.67	0.0002	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2464505.95	0.2	102.7	Analog	0.1000	3
No Gas	Ge	72	1186124.80	0.5	102.8	Pulse	0.1000	3
H2	Sc	45	192091.00	0.9	102.7	Pulse	0.1000	3
H2	Ge	72	163409.76	1.6	99.8	Pulse	0.1000	3
H2	In	115	397307.11	0.2	102.1	Pulse	0.1000	3
He	Sc	45	49003.45	3.4	105.1	Pulse	0.1000	3
He	Ge	72	84077.53	0.8	103.6	Pulse	0.1000	3
He	In	115	89493.49	0.9	103.8	Pulse	0.1000	3
He	Tb	159	405503.14	0.6	101.7	Pulse	0.1000	3
He	Bi	209	311206.56	0.5	100.6	Pulse	0.1000	3

No Gas



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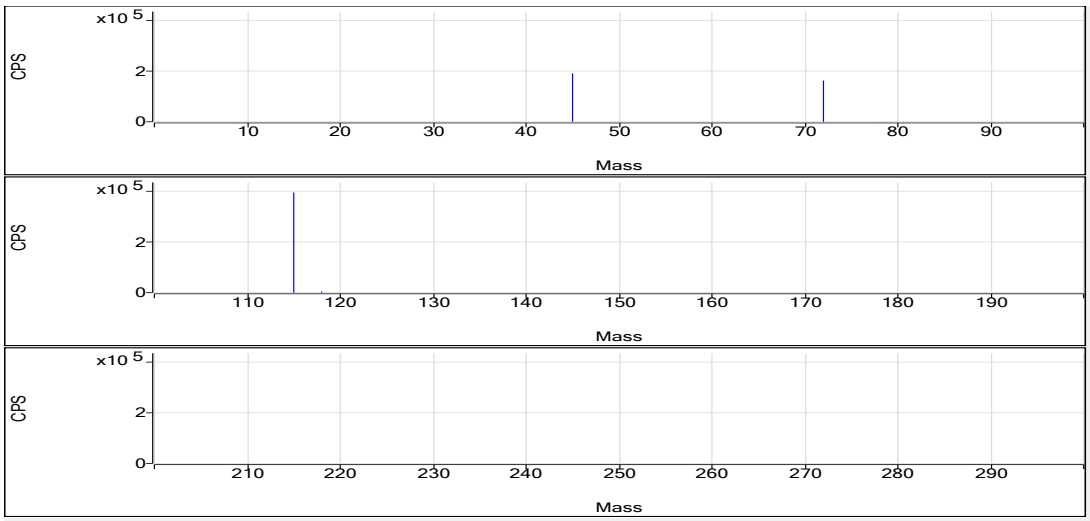
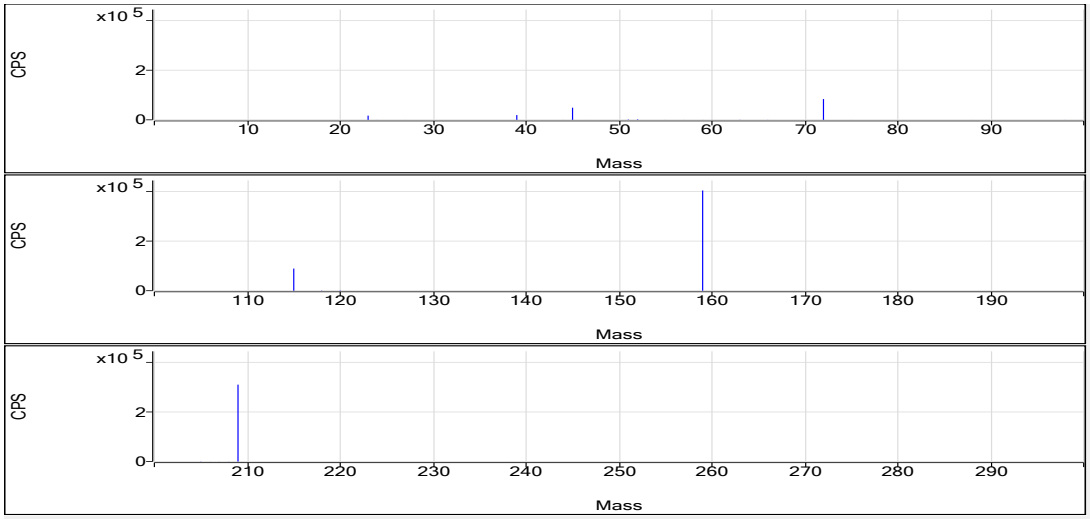


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.046	0	98.00	0.0008	4.685E-06
Be	9	1	No Gas	0.025	0	58.00	0.0008	4.685E-06
Be	9	1	No Gas	0.037	0	82.00	0.0008	4.685E-06
Se	78	2	H2	0.05	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.069	0	6.67	0.0004	1.219E-05
Na	23	3	He	3.328	0.3571	16870.23	0.0036	0.3452
Na	23	3	He	-0.536	0.3432	17350.57	0.0036	0.3452
Na	23	3	He	-2.028	0.3379	16629.70	0.0036	0.3452
Mg	24	3	He	-0.297	0.003	140.01	0.0018	0.003497
Mg	24	3	He	0.367	0.0042	210.01	0.0018	0.003497
Mg	24	3	He	0.769	0.0049	240.01	0.0018	0.003497
Al	27	3	He	-0.014	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	0.591	0.001	50.00	0.0006	0.0006432
Al	27	3	He	2.374	0.002	100.00	0.0006	0.0006432
K	39	3	He	22.332	0.4211	19894.28	0.0012	0.3951
K	39	3	He	-32.086	0.3577	18081.77	0.0012	0.3951
K	39	3	He	4.031	0.3998	19673.85	0.0012	0.3951
Ca	44	3	He	13.077	0.0036	170.01	0.0001	0.002715
Ca	44	3	He	-7.974	0.0022	110.01	0.0001	0.002715
Ca	44	3	He	-13.119	0.0018	90.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.238	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.187	0.029	1368.07	0.0219	0.02486
V	51	3	He	0.101	0.0271	1368.07	0.0219	0.02486
V	51	3	He	0.097	0.027	1328.07	0.0219	0.02486
Cr	52	3	He	-0.041	0.0387	1830.19	0.0299	0.03997
Cr	52	3	He	-0.126	0.0362	1830.17	0.0299	0.03997
Cr	52	3	He	0.063	0.0419	2060.22	0.0299	0.03997
Mn	55	3	He	0.025	0.003	140.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.072	0.0036	180.01	0.0128	0.002639
Mn	55	3	He	0.016	0.0028	140.01	0.0128	0.002639
Fe	57	3	He	1.912	0.0025	120.00	0.0006	0.001429
Fe	57	3	He	-0.416	0.0012	60.00	0.0006	0.001429
Fe	57	3	He	4.536	0.0041	200.01	0.0006	0.001429
Co	59	3	He	-0.001	0.0021	100.00	0.0563	0.002149
Co	59	3	He	0.039	0.0044	220.01	0.0563	0.002149
Co	59	3	He	0.027	0.0037	180.01	0.0563	0.002149
Ni	60	3	He	0.068	0.0034	290.01	0.0086	0.002834
Ni	60	3	He	0.06	0.0033	280.01	0.0086	0.002834
Ni	60	3	He	0.06	0.0033	280.01	0.0086	0.002834
Cu	63	3	He	0.03	0.0055	470.02	0.0257	0.004757
Cu	63	3	He	0.066	0.0065	540.03	0.0257	0.004757
Cu	63	3	He	0.01	0.005	420.02	0.0257	0.004757
Zn	66	3	He	-0.34	0.0028	240.01	0.0029	0.003818
Zn	66	3	He	-0.367	0.0027	230.01	0.0029	0.003818
Zn	66	3	He	-0.121	0.0035	290.01	0.0029	0.003818
As	75	3	He	0.09	0.001	84.00	0.002	0.0008061
As	75	3	He	0.131	0.0011	90.00	0.002	0.0008061
As	75	3	He	0.027	0.0009	72.00	0.002	0.0008061
Sr	88	3	He	-0.045	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.033	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.045	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	0.094	0.0023	210.01	0.0219	0.0002706
Mo	98	3	He	0.069	0.0018	160.01	0.0219	0.0002706
Mo	98	3	He	0.085	0.0021	190.01	0.0219	0.0002706
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.008	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.025	0.0001	12.00	0.0053	0
Sn	120	3	He	-0.071	0.0154	1380.12	0.0158	0.01648
Sn	120	3	He	-0.002	0.0164	1480.12	0.0158	0.01648
Sn	120	3	He	0.022	0.0168	1490.15	0.0158	0.01648
Sb	121	3	He	0.019	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.019	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	-0.011	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	0.021	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	0.046	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.072	0.0019	780.04	0.0247	0.0001339
Tl	205	3	He	0.058	0.0016	640.04	0.0247	0.0001339
Tl	205	3	He	0.072	0.0019	770.06	0.0247	0.0001339
Pb	208	3	He	0.022	0.0018	460.02	0.0327	0.00107
Pb	208	3	He	0.018	0.0017	280.01	0.0327	0.00107
Pb	208	3	He	0.032	0.0021	460.03	0.0327	0.00107
U	238	3	He	0	0.0001	30.00	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
Sc	45	1	No Gas			2464843.09		
Sc	45	1	No Gas			2458683.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2469991.53		
Ge	72	1	No Gas			1193246.47		
Ge	72	1	No Gas			1183802.72		
Ge	72	1	No Gas			1181325.22		
Sc	45	2	H2			191121.77		
Sc	45	2	H2			194039.10		
Sc	45	2	H2			191112.13		
Ge	72	2	H2			161839.33		
Ge	72	2	H2			166348.32		
Ge	72	2	H2			162041.63		
In	115	2	H2			396709.49		
In	115	2	H2			397289.02		
In	115	2	H2			397922.81		
Sc	45	3	He			47247.19		
Sc	45	3	He			50549.03		
Sc	45	3	He			49214.12		
Ge	72	3	He			84873.07		
Ge	72	3	He			83685.20		
Ge	72	3	He			83674.31		
In	115	3	He			89869.46		
In	115	3	He			90011.21		
In	115	3	He			88621.87		
Tb	159	3	He			406931.71		
Tb	159	3	He			406879.02		
Tb	159	3	He			402698.70		
Bi	209	3	He			311515.78		
Bi	209	3	He			312578.90		
Bi	209	3	He			309525.00		

Quantitation Report

Data File Name	038_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 8:48:11 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

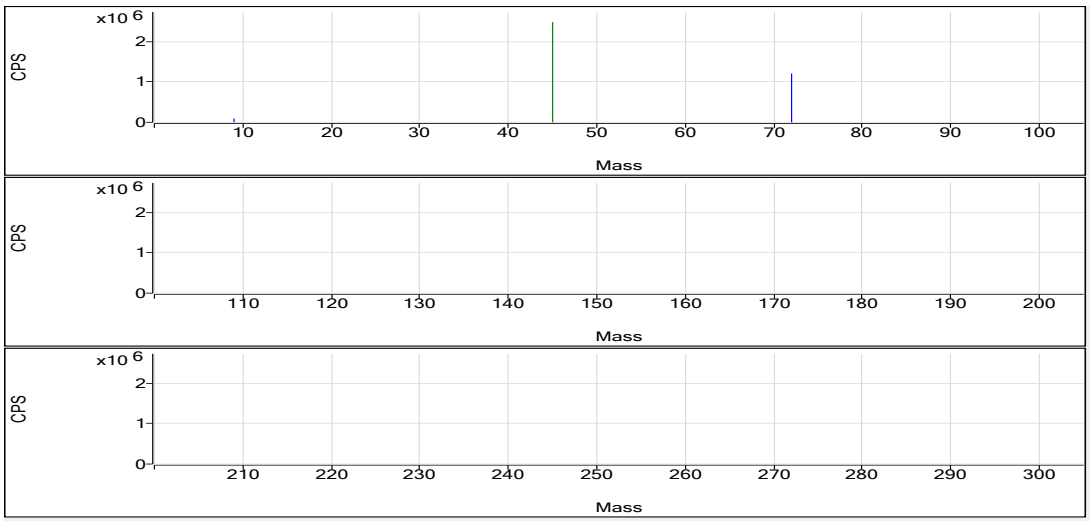
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.851	ppb	0.9	94113.28	0.0380	Pulse	0.5000	3
Se	78	72	H2	53.221	ppb	1.7	3674.70	0.0222	Pulse	1.5000	3
Na	23	45	He	4723.693	ppb	2.3	858046.34	17.2420	Pulse	0.1000	3
Mg	24	45	He	4962.815	ppb	1.5	443384.08	8.9084	Pulse	0.1000	3
Al	27	45	He	5010.566	ppb	1.5	145924.26	2.9320	Pulse	0.1000	3
K	39	45	He	5026.360	ppb	2.0	310915.46	6.2474	Pulse	0.1000	3
Ca	44	45	He	5207.659	ppb	1.3	17644.55	0.3545	Pulse	0.1000	3
Ti	47	45	He	4990.408	ppb	2.0	133357.29	2.6797	Pulse	0.1000	3
V	51	45	He	499.381	ppb	1.7	544509.52	10.9409	Pulse	0.5000	3
Cr	52	45	He	480.614	ppb	1.2	718194.26	14.4299	Pulse	0.1000	3
Mn	55	45	He	501.729	ppb	2.1	320579.79	6.4418	Pulse	0.1000	3
Fe	57	45	He	5021.817	ppb	2.6	145257.80	2.9191	Pulse	0.1000	3
Co	59	45	He	480.758	ppb	1.8	1346719.51	27.0603	Pulse	0.1000	3
Ni	60	72	He	536.915	ppb	0.8	383071.14	4.6113	Pulse	0.1000	3
Cu	63	72	He	506.941	ppb	0.4	1081494.75	13.0185	Pulse	0.1000	3
Zn	66	72	He	524.847	ppb	0.1	127267.31	1.5320	Pulse	0.1000	3
As	75	72	He	533.416	ppb	0.3	90859.18	1.0937	Pulse	0.5000	3
Sr	88	115	He	51.879	ppb	1.0	41592.01	0.4663	Pulse	0.1000	3
Mo	98	115	He	50.865	ppb	1.0	99500.63	1.1156	Pulse	0.1000	3
Ag	107	115	He	50.360	ppb	1.2	208866.12	2.3417	Pulse	0.1000	3
Cd	111	115	He	51.319	ppb	0.8	24474.73	0.2744	Pulse	0.5000	3
Sn	120	115	He	50.357	ppb	1.3	72432.49	0.8121	Pulse	0.1000	3
Sb	121	115	He	50.900	ppb	1.0	67458.32	0.7563	Pulse	0.1000	3
Ba	137	115	He	514.201	ppb	0.8	220141.13	2.4681	Pulse	0.1000	3
Tl	205	159	He	50.683	ppb	0.2	514987.68	1.2533	Pulse	0.1000	3
Pb	208	159	He	50.783	ppb	0.5	683380.99	1.6632	Pulse	0.1000	3
U	238	209	He	50.576	ppb	0.7	780965.69	2.4914	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2474616.79	0.6	103.2	Analog	0.1000	3
No Gas	Ge	72	1204349.83	1.4	104.4	Pulse	0.1000	3
H2	Sc	45	194910.51	0.3	104.2	Pulse	0.1000	3
H2	Ge	72	165475.52	1.2	101.1	Pulse	0.1000	3
H2	In	115	399056.99	0.6	102.6	Pulse	0.1000	3
He	Sc	45	49779.13	2.0	106.7	Pulse	0.1000	3
He	Ge	72	83074.51	0.4	102.3	Pulse	0.1000	3
He	In	115	89195.73	0.3	103.5	Pulse	0.1000	3
He	Tb	159	410890.84	0.5	103.1	Pulse	0.1000	3
He	Bi	209	313469.79	0.7	101.4	Pulse	0.1000	3

No Gas



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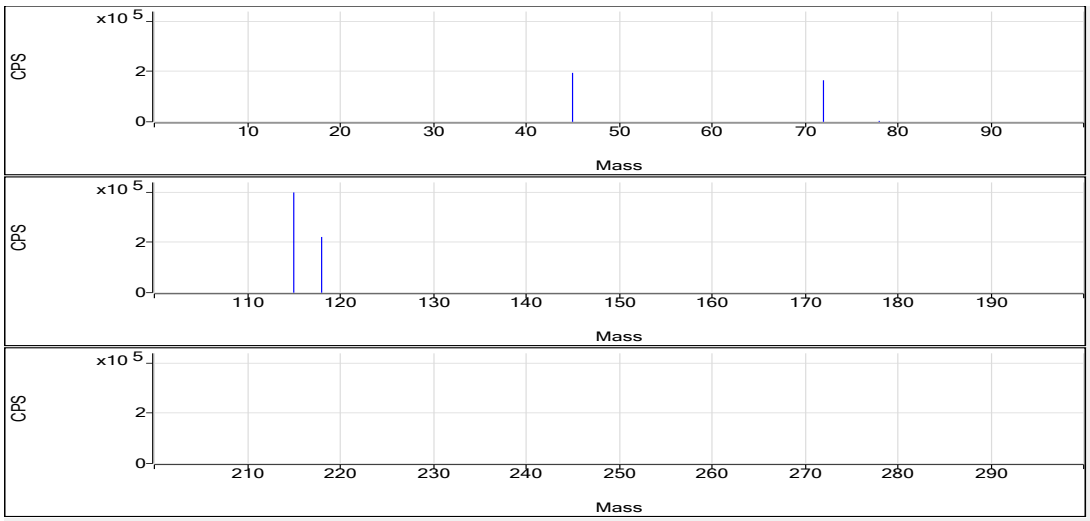
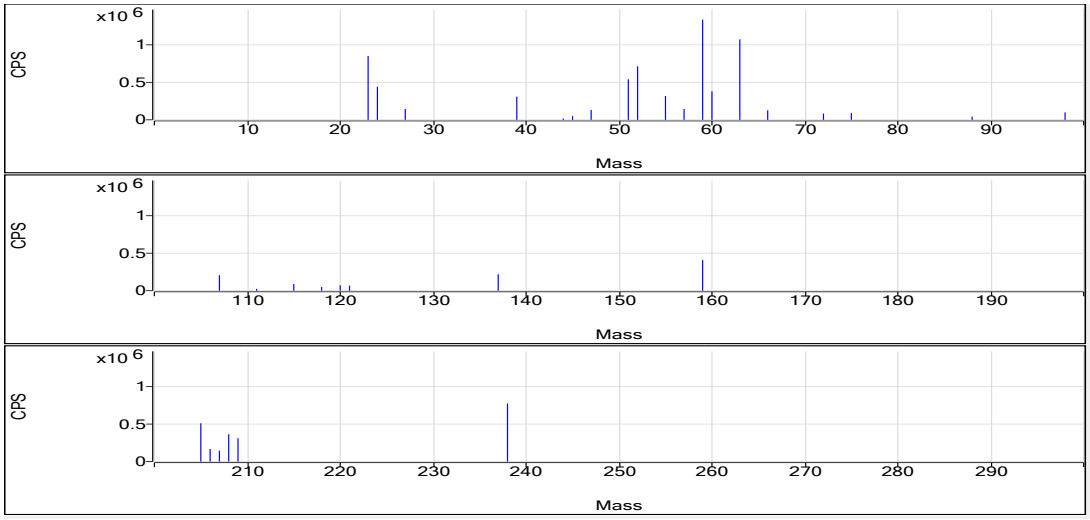


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.608	0.0378	93440.95	0.0008	4.685E-06
Be	9	1	No Gas	50.34	0.0384	95723.37	0.0008	4.685E-06
Be	9	1	No Gas	49.604	0.0378	93175.51	0.0008	4.685E-06
Se	78	2	H2	52.769	0.022	3691.82	0.0004	1.219E-05
Se	78	2	H2	52.609	0.022	3622.47	0.0004	1.219E-05
Se	78	2	H2	54.285	0.0227	3709.82	0.0004	1.219E-05
Na	23	3	He	4601.145	16.8037	855634.75	0.0036	0.3452
Na	23	3	He	4808.827	17.5466	864246.71	0.0036	0.3452
Na	23	3	He	4761.108	17.3759	854257.57	0.0036	0.3452
Mg	24	3	He	4894.427	8.7857	447362.10	0.0018	0.003497
Mg	24	3	He	5041.107	9.0489	445696.99	0.0018	0.003497
Mg	24	3	He	4952.912	8.8906	437093.16	0.0018	0.003497
Al	27	3	He	4926.302	2.8827	146785.69	0.0006	0.0006432
Al	27	3	He	5054.333	2.9576	145675.19	0.0006	0.0006432
Al	27	3	He	5051.063	2.9557	145311.91	0.0006	0.0006432
K	39	3	He	4913.69	6.1162	311434.12	0.0012	0.3951
K	39	3	He	5099.435	6.3325	311902.61	0.0012	0.3951
K	39	3	He	5065.954	6.2935	309409.66	0.0012	0.3951
Ca	44	3	He	5146.702	0.3504	17841.40	0.0001	0.002715
Ca	44	3	He	5279.948	0.3594	17701.34	0.0001	0.002715
Ca	44	3	He	5196.326	0.3537	17390.91	0.0001	0.002715
Ti	47	3	He	4880.696	2.6208	133447.51	0.0005	7.003E-05
Ti	47	3	He	5014.469	2.6926	132621.80	0.0005	7.003E-05
Ti	47	3	He	5076.059	2.7257	134002.55	0.0005	7.003E-05
V	51	3	He	489.841	10.7324	546487.31	0.0219	0.02486
V	51	3	He	503.414	11.0291	543231.75	0.0219	0.02486
V	51	3	He	504.886	11.0613	543809.50	0.0219	0.02486
Cr	52	3	He	473.973	14.2311	724639.21	0.0299	0.03997
Cr	52	3	He	482.654	14.491	713745.93	0.0299	0.03997
Cr	52	3	He	485.216	14.5677	716197.65	0.0299	0.03997
Mn	55	3	He	490.16	6.2933	320450.89	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	505.017	6.484	319364.02	0.0128	0.002639
Mn	55	3	He	510.01	6.548	321924.45	0.0128	0.002639
Fe	57	3	He	4869.278	2.8304	144124.28	0.0006	0.001429
Fe	57	3	He	5106.966	2.9685	146213.30	0.0006	0.001429
Fe	57	3	He	5089.207	2.9582	145435.81	0.0006	0.001429
Co	59	3	He	470.972	26.5095	1349851.85	0.0563	0.002149
Co	59	3	He	483.345	27.2059	1340012.17	0.0563	0.002149
Co	59	3	He	487.956	27.4654	1350294.51	0.0563	0.002149
Ni	60	3	He	534.505	4.5906	382496.09	0.0086	0.002834
Ni	60	3	He	541.592	4.6514	384854.68	0.0086	0.002834
Ni	60	3	He	534.649	4.5918	381862.65	0.0086	0.002834
Cu	63	3	He	505.433	12.9798	1081501.55	0.0257	0.004757
Cu	63	3	He	509.036	13.0723	1081592.56	0.0257	0.004757
Cu	63	3	He	506.355	13.0034	1081390.14	0.0257	0.004757
Zn	66	3	He	524.294	1.5304	127512.89	0.0029	0.003818
Zn	66	3	He	525.692	1.5344	126958.07	0.0029	0.003818
Zn	66	3	He	524.556	1.5311	127330.98	0.0029	0.003818
As	75	3	He	535.005	1.097	91401.17	0.002	0.0008061
As	75	3	He	533.54	1.094	90513.70	0.002	0.0008061
As	75	3	He	531.703	1.0902	90662.66	0.002	0.0008061
Sr	88	3	He	51.342	0.4615	41240.71	0.009	0.0009645
Sr	88	3	He	51.915	0.4666	41682.18	0.009	0.0009645
Sr	88	3	He	52.38	0.4708	41853.13	0.009	0.0009645
Mo	98	3	He	50.418	1.1058	98815.48	0.0219	0.0002706
Mo	98	3	He	50.774	1.1136	99470.37	0.0219	0.0002706
Mo	98	3	He	51.401	1.1273	100216.03	0.0219	0.0002706
Ag	107	3	He	49.675	2.3098	206416.42	0.0465	0.0006206
Ag	107	3	He	50.544	2.3503	209940.72	0.0465	0.0006206
Ag	107	3	He	50.861	2.365	210241.21	0.0465	0.0006206
Cd	111	3	He	50.85	0.2719	24297.05	0.0053	0
Cd	111	3	He	51.501	0.2754	24597.63	0.0053	0
Cd	111	3	He	51.606	0.2759	24529.52	0.0053	0
Sn	120	3	He	51.092	0.8237	73605.13	0.0158	0.01648
Sn	120	3	He	50.031	0.8069	72077.42	0.0158	0.01648
Sn	120	3	He	49.948	0.8056	71614.91	0.0158	0.01648
Sb	121	3	He	50.346	0.7481	66851.59	0.0149	0.0002698
Sb	121	3	He	51.012	0.758	67706.55	0.0149	0.0002698
Sb	121	3	He	51.341	0.7629	67816.83	0.0149	0.0002698
Ba	137	3	He	518.838	2.4903	222543.24	0.0048	0.0002317
Ba	137	3	He	510.949	2.4524	219067.34	0.0048	0.0002317
Ba	137	3	He	512.816	2.4614	218812.81	0.0048	0.0002317
Tl	205	3	He	50.582	1.2508	511402.14	0.0247	0.0001339
Tl	205	3	He	50.731	1.2545	518279.88	0.0247	0.0001339
Tl	205	3	He	50.736	1.2547	515281.01	0.0247	0.0001339
Pb	208	3	He	51.06	1.6722	366758.47	0.0327	0.00107
Pb	208	3	He	50.662	1.6592	370109.80	0.0327	0.00107
Pb	208	3	He	50.628	1.6581	363992.38	0.0327	0.00107
U	238	3	He	50.974	2.511	781405.07	0.0493	7.55E-05
U	238	3	He	50.326	2.4791	782562.88	0.0493	7.55E-05
U	238	3	He	50.428	2.4842	778929.13	0.0493	7.55E-05
Sc	45	1	No Gas			2469031.84		
Sc	45	1	No Gas			2492569.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2462249.49		
Ge	72	1	No Gas			1204928.11		
Ge	72	1	No Gas			1220458.97		
Ge	72	1	No Gas			1187662.40		
Sc	45	2	H2			194687.95		
Sc	45	2	H2			194474.49		
Sc	45	2	H2			195569.08		
Ge	72	2	H2			167652.99		
Ge	72	2	H2			165004.92		
Ge	72	2	H2			163768.66		
In	115	2	H2			399167.10		
In	115	2	H2			396762.77		
In	115	2	H2			401241.09		
Sc	45	3	He			50919.49		
Sc	45	3	He			49254.46		
Sc	45	3	He			49163.43		
Ge	72	3	He			83322.16		
Ge	72	3	He			82739.53		
Ge	72	3	He			83161.84		
In	115	3	He			89749.74		
In	115	3	He			89708.92		
In	115	3	He			89285.86		
Tb	159	3	He			408846.52		
Tb	159	3	He			413130.62		
Tb	159	3	He			410695.38		
Bi	209	3	He			311188.47		
Bi	209	3	He			315662.24		
Bi	209	3	He			313558.65		

Quantitation Report

Data File Name	039_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 8:50:15 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

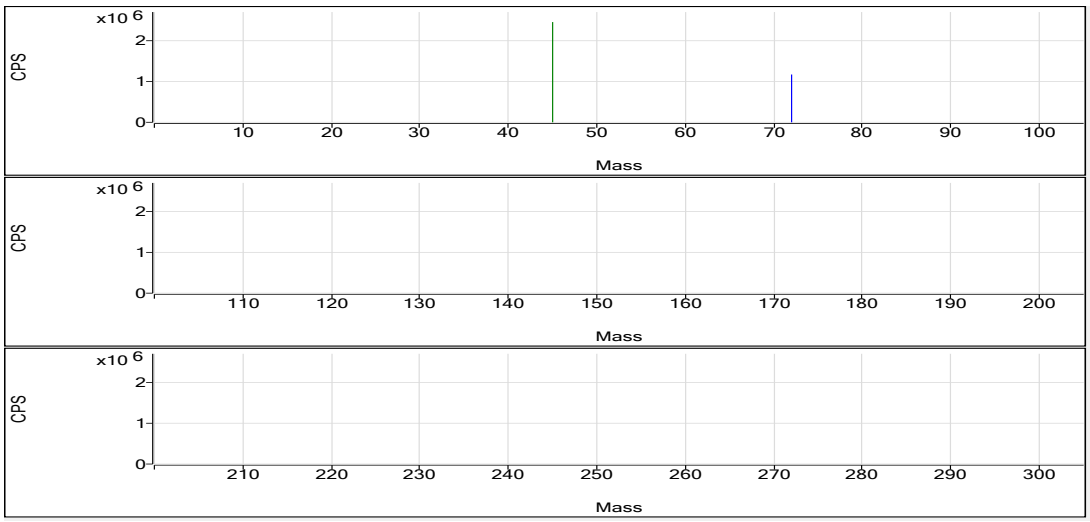
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.047	ppb	17.1	99.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.042	ppb	51.9	4.89	0.0000	Pulse	1.5000	3
Na	23	45	He	0.437	ppb	591.6	16789.95	0.3467	Pulse	0.1000	3
Mg	24	45	He	0.585	ppb	55.1	220.01	0.0045	Pulse	0.1000	3
Al	27	45	He	1.491	ppb	49.8	73.34	0.0015	Pulse	0.1000	3
K	39	45	He	-1.004	ppb	N/A	19069.69	0.3939	Pulse	0.1000	3
Ca	44	45	He	10.644	ppb	200.8	166.67	0.0034	Pulse	0.1000	3
Ti	47	45	He	1.412	ppb	48.4	40.00	0.0008	Pulse	0.1000	3
V	51	45	He	0.066	ppb	73.7	1273.40	0.0263	Pulse	0.5000	3
Cr	52	45	He	-0.133	ppb	N/A	1743.50	0.0360	Pulse	0.1000	3
Mn	55	45	He	0.410	ppb	148.8	380.54	0.0079	Pulse	0.1000	3
Fe	57	45	He	9.702	ppb	113.0	340.28	0.0071	Pulse	0.1000	3
Co	59	45	He	0.064	ppb	15.7	280.01	0.0058	Pulse	0.1000	3
Ni	60	72	He	0.070	ppb	101.0	283.35	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.164	ppb	35.9	740.07	0.0090	Pulse	0.1000	3
Zn	66	72	He	-0.076	ppb	N/A	296.68	0.0036	Pulse	0.1000	3
As	75	72	He	0.218	ppb	26.1	103.33	0.0013	Pulse	0.5000	3
Sr	88	115	He	-0.031	ppb	N/A	60.00	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.147	ppb	30.9	306.68	0.0035	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	88.0	93.33	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	78.4	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.031	ppb	492.8	1493.47	0.0170	Pulse	0.1000	3
Sb	121	115	He	0.020	ppb	37.5	50.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.046	ppb	48.2	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.117	ppb	4.4	1230.11	0.0030	Pulse	0.1000	3
Pb	208	159	He	0.026	ppb	12.5	776.71	0.0019	Pulse	0.1000	3
U	238	209	He	0.046	ppb	0.5	733.38	0.0024	Pulse	0.1000	3

ISTD Table:

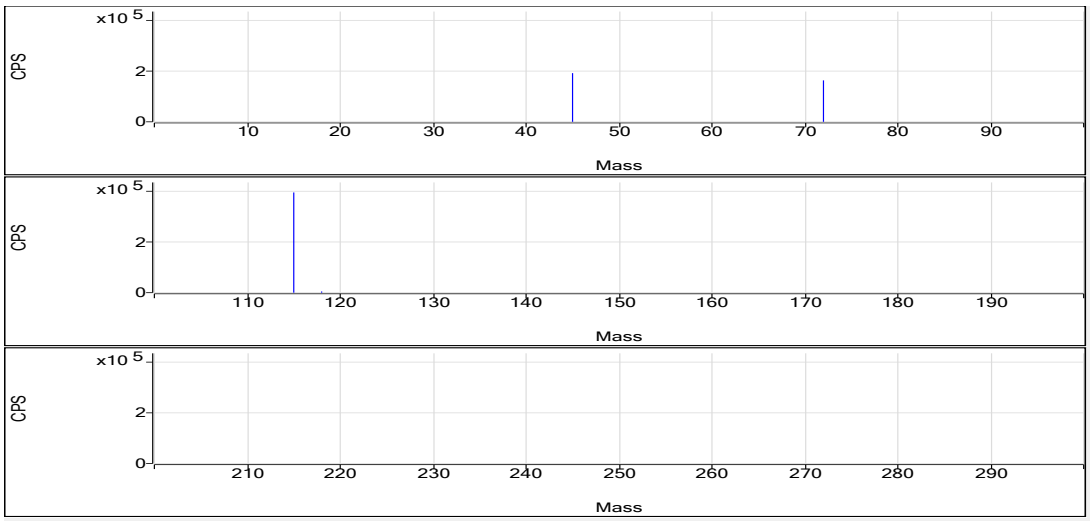
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2465487.20	0.9	102.8	Analog	0.1000	3
No Gas	Ge	72	1175667.98	0.9	101.9	Pulse	0.1000	3
H2	Sc	45	192026.02	0.7	102.7	Pulse	0.1000	3
H2	Ge	72	163449.02	1.0	99.8	Pulse	0.1000	3
H2	In	115	395296.99	1.1	101.6	Pulse	0.1000	3
He	Sc	45	48427.91	0.9	103.8	Pulse	0.1000	3
He	Ge	72	82550.95	0.7	101.7	Pulse	0.1000	3
He	In	115	87892.67	1.5	102.0	Pulse	0.1000	3
He	Tb	159	407031.57	0.5	102.1	Pulse	0.1000	3
He	Bi	209	310721.19	0.3	100.5	Pulse	0.1000	3

No Gas

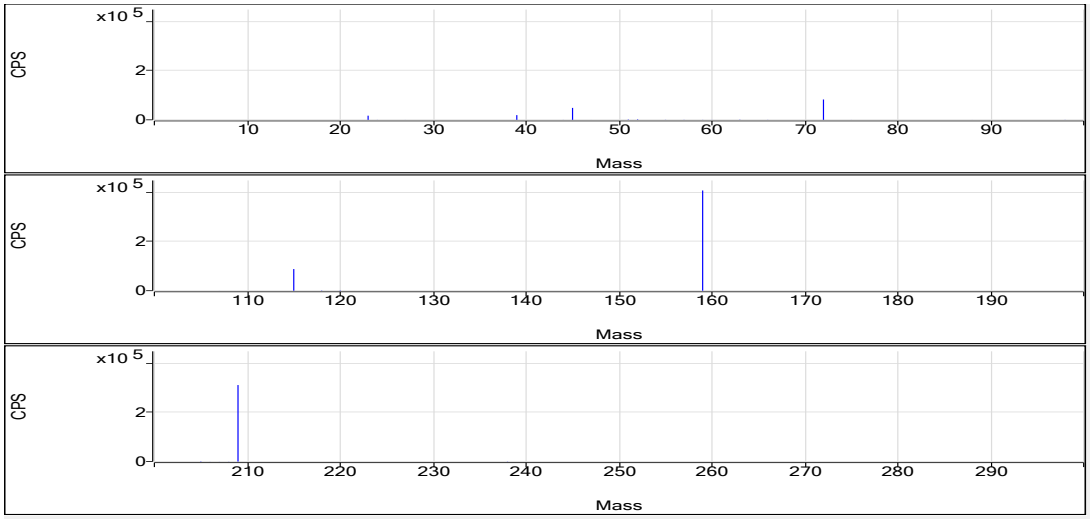


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.054	0	112.00	0.0008	4.685E-06
Be	9	1	No Gas	0.048	0	102.00	0.0008	4.685E-06
Be	9	1	No Gas	0.038	0	84.00	0.0008	4.685E-06
Se	78	2	H2	0.068	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.029	0	4.00	0.0004	1.219E-05
Se	78	2	H2	0.03	0	4.00	0.0004	1.219E-05
Na	23	3	He	-2.453	0.3364	16399.59	0.0036	0.3452
Na	23	3	He	1.226	0.3495	16749.86	0.0036	0.3452
Na	23	3	He	2.539	0.3542	17220.40	0.0036	0.3452
Mg	24	3	He	0.223	0.0039	190.01	0.0018	0.003497
Mg	24	3	He	0.843	0.005	240.01	0.0018	0.003497
Mg	24	3	He	0.688	0.0047	230.01	0.0018	0.003497
Al	27	3	He	0.654	0.001	50.00	0.0006	0.0006432
Al	27	3	He	1.754	0.0017	80.00	0.0006	0.0006432
Al	27	3	He	2.065	0.0019	90.01	0.0006	0.0006432
K	39	3	He	-4.537	0.3898	19002.92	0.0012	0.3951
K	39	3	He	20.307	0.4187	20064.33	0.0012	0.3951
K	39	3	He	-18.784	0.3732	18141.83	0.0012	0.3951
Ca	44	3	He	14.469	0.0037	180.01	0.0001	0.002715
Ca	44	3	He	-12.388	0.0019	90.00	0.0001	0.002715
Ca	44	3	He	29.852	0.0047	230.01	0.0001	0.002715
Ti	47	3	He	1.016	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	2.201	0.0013	60.00	0.0005	7.003E-05
Ti	47	3	He	1.019	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	0.015	0.0252	1228.06	0.0219	0.02486
V	51	3	He	0.111	0.0273	1308.07	0.0219	0.02486
V	51	3	He	0.071	0.0264	1284.06	0.0219	0.02486
Cr	52	3	He	-0.143	0.0357	1740.16	0.0299	0.03997
Cr	52	3	He	-0.164	0.0351	1680.16	0.0299	0.03997
Cr	52	3	He	-0.091	0.0372	1810.19	0.0299	0.03997
Mn	55	3	He	0.098	0.0039	190.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.114	0.0169	811.59	0.0128	0.002639
Mn	55	3	He	0.019	0.0029	140.01	0.0128	0.002639
Fe	57	3	He	3.19	0.0033	160.01	0.0006	0.001429
Fe	57	3	He	22.354	0.0144	690.83	0.0006	0.001429
Fe	57	3	He	3.56	0.0035	170.01	0.0006	0.001429
Co	59	3	He	0.075	0.0064	310.01	0.0563	0.002149
Co	59	3	He	0.055	0.0052	250.01	0.0563	0.002149
Co	59	3	He	0.064	0.0058	280.01	0.0563	0.002149
Ni	60	3	He	0.009	0.0029	240.01	0.0086	0.002834
Ni	60	3	He	0.054	0.0033	270.01	0.0086	0.002834
Ni	60	3	He	0.146	0.0041	340.02	0.0086	0.002834
Cu	63	3	He	0.112	0.0076	630.04	0.0257	0.004757
Cu	63	3	He	0.228	0.0106	870.12	0.0257	0.004757
Cu	63	3	He	0.152	0.0087	720.04	0.0257	0.004757
Zn	66	3	He	-0.229	0.0032	260.01	0.0029	0.003818
Zn	66	3	He	0.239	0.0045	370.02	0.0029	0.003818
Zn	66	3	He	-0.237	0.0031	260.01	0.0029	0.003818
As	75	3	He	0.281	0.0014	114.00	0.002	0.0008061
As	75	3	He	0.202	0.0012	100.00	0.002	0.0008061
As	75	3	He	0.17	0.0012	96.00	0.002	0.0008061
Sr	88	3	He	-0.005	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	-0.07	0.0003	30.00	0.009	0.0009645
Sr	88	3	He	-0.018	0.0008	70.00	0.009	0.0009645
Mo	98	3	He	0.151	0.0036	310.01	0.0219	0.0002706
Mo	98	3	He	0.1	0.0025	220.01	0.0219	0.0002706
Mo	98	3	He	0.191	0.0044	390.02	0.0219	0.0002706
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.018	0.0015	130.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.021	0.0001	10.00	0.0053	0
Sn	120	3	He	-0.087	0.0151	1310.11	0.0158	0.01648
Sn	120	3	He	0.205	0.0197	1760.18	0.0158	0.01648
Sn	120	3	He	-0.025	0.0161	1410.11	0.0158	0.01648
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.02	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.028	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.068	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.047	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.119	0.0031	1250.11	0.0247	0.0001339
Tl	205	3	He	0.111	0.0029	1170.11	0.0247	0.0001339
Tl	205	3	He	0.12	0.0031	1270.11	0.0247	0.0001339
Pb	208	3	He	0.024	0.0019	360.02	0.0327	0.00107
Pb	208	3	He	0.024	0.0018	410.02	0.0327	0.00107
Pb	208	3	He	0.029	0.002	430.02	0.0327	0.00107
U	238	3	He	0.047	0.0024	740.05	0.0493	7.55E-05
U	238	3	He	0.046	0.0024	730.05	0.0493	7.55E-05
U	238	3	He	0.046	0.0024	730.05	0.0493	7.55E-05
Sc	45	1	No Gas			2446843.24		
Sc	45	1	No Gas			2459941.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2489677.15		
Ge	72	1	No Gas			1173275.45		
Ge	72	1	No Gas			1166431.86		
Ge	72	1	No Gas			1187296.62		
Sc	45	2	H2			190836.83		
Sc	45	2	H2			191769.74		
Sc	45	2	H2			193471.50		
Ge	72	2	H2			164872.52		
Ge	72	2	H2			163899.78		
Ge	72	2	H2			161574.77		
In	115	2	H2			393610.38		
In	115	2	H2			391951.17		
In	115	2	H2			400329.41		
Sc	45	3	He			48752.37		
Sc	45	3	He			47919.30		
Sc	45	3	He			48612.05		
Ge	72	3	He			82537.18		
Ge	72	3	He			81984.87		
Ge	72	3	He			83130.79		
In	115	3	He			86760.10		
In	115	3	He			89286.43		
In	115	3	He			87655.83		
Tb	159	3	He			405334.84		
Tb	159	3	He			406720.62		
Tb	159	3	He			409039.25		
Bi	209	3	He			311700.87		
Bi	209	3	He			310289.53		
Bi	209	3	He			310173.18		

Quantitation Report

Data File Name	102_LLC.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 11:08:06 AM
Sample Name	CRI 4604525
Sample Type	CRI
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

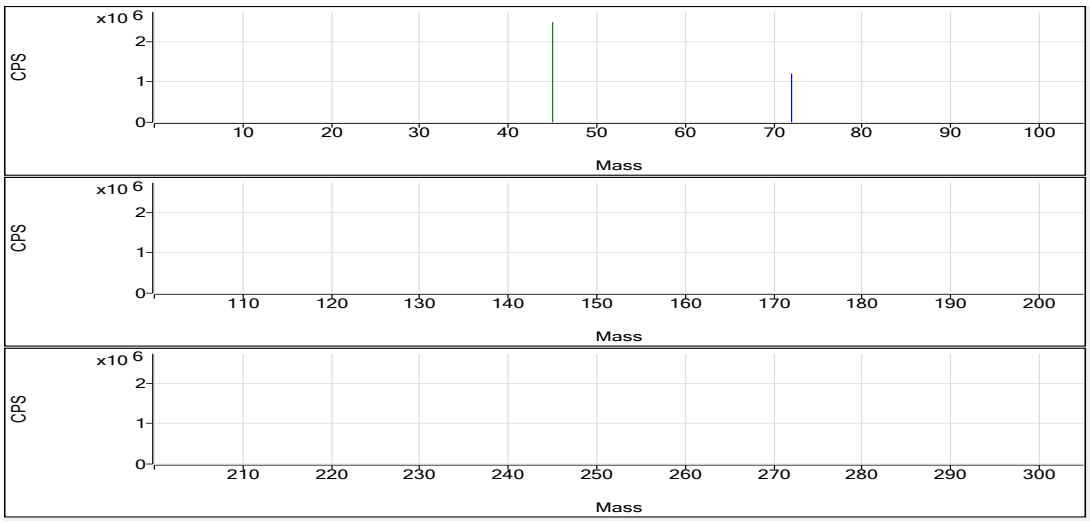
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.460	ppb	9.0	885.37	0.0004	Pulse	0.5000	3
Se	78	72	H2	1.030	ppb	12.3	71.33	0.0004	Pulse	1.5000	3
Na	23	45	He	182.926	ppb	4.9	49376.53	0.9995	Pulse	0.1000	3
Mg	24	45	He	50.155	ppb	5.5	4617.55	0.0935	Pulse	0.1000	3
Al	27	45	He	21.861	ppb	8.2	663.37	0.0134	Pulse	0.1000	3
K	39	45	He	177.245	ppb	10.9	29707.56	0.6014	Pulse	0.1000	3
Ca	44	45	He	99.606	ppb	7.1	466.69	0.0094	Pulse	0.1000	3
Ti	47	45	He	9.933	ppb	10.6	266.68	0.0054	Pulse	0.1000	3
V	51	45	He	2.108	ppb	6.5	3504.44	0.0709	Pulse	0.5000	3
Cr	52	45	He	1.925	ppb	8.9	4820.97	0.0976	Pulse	0.1000	3
Mn	55	45	He	2.003	ppb	10.9	1400.12	0.0283	Pulse	0.1000	3
Fe	57	45	He	54.389	ppb	5.1	1633.49	0.0330	Pulse	0.1000	3
Co	59	45	He	0.489	ppb	6.4	1466.79	0.0297	Pulse	0.1000	3
Ni	60	72	He	1.059	ppb	25.6	1023.41	0.0119	Pulse	0.1000	3
Cu	63	72	He	1.034	ppb	7.1	2687.02	0.0313	Pulse	0.1000	3
Zn	66	72	He	21.845	ppb	0.9	5788.05	0.0674	Pulse	0.1000	3
As	75	72	He	2.050	ppb	8.3	430.01	0.0050	Pulse	0.5000	3
Sr	88	115	He	1.043	ppb	17.4	943.40	0.0103	Pulse	0.1000	3
Mo	98	115	He	0.446	ppb	12.0	920.06	0.0101	Pulse	0.1000	3
Ag	107	115	He	0.472	ppb	5.3	2063.55	0.0226	Pulse	0.1000	3
Cd	111	115	He	0.493	ppb	9.7	241.33	0.0026	Pulse	0.5000	3
Sn	120	115	He	1.794	ppb	13.3	4094.09	0.0448	Pulse	0.1000	3
Sb	121	115	He	1.038	ppb	11.6	1433.46	0.0157	Pulse	0.1000	3
Ba	137	115	He	1.676	ppb	9.0	756.71	0.0083	Pulse	0.1000	3
Tl	205	159	He	0.489	ppb	1.4	4947.78	0.0122	Pulse	0.1000	3
Pb	208	159	He	0.545	ppb	3.0	7641.14	0.0189	Pulse	0.1000	3
U	238	209	He	0.991	ppb	3.2	15209.36	0.0489	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2487126.68	1.2	103.7	Analog	0.1000	3
No Gas	Ge	72	1210760.89	0.5	105.0	Pulse	0.1000	3
H2	Sc	45	187422.52	0.8	100.2	Pulse	0.1000	3
H2	Ge	72	161640.01	1.6	98.7	Pulse	0.1000	3
H2	In	115	401396.65	0.7	103.2	Pulse	0.1000	3
He	Sc	45	49421.46	2.2	106.0	Pulse	0.1000	3
He	Ge	72	85850.67	0.7	105.7	Pulse	0.1000	3
He	In	115	91410.10	1.4	106.0	Pulse	0.1000	3
He	Tb	159	404548.16	1.2	101.5	Pulse	0.1000	3
He	Bi	209	310926.80	0.3	100.5	Pulse	0.1000	3

No Gas



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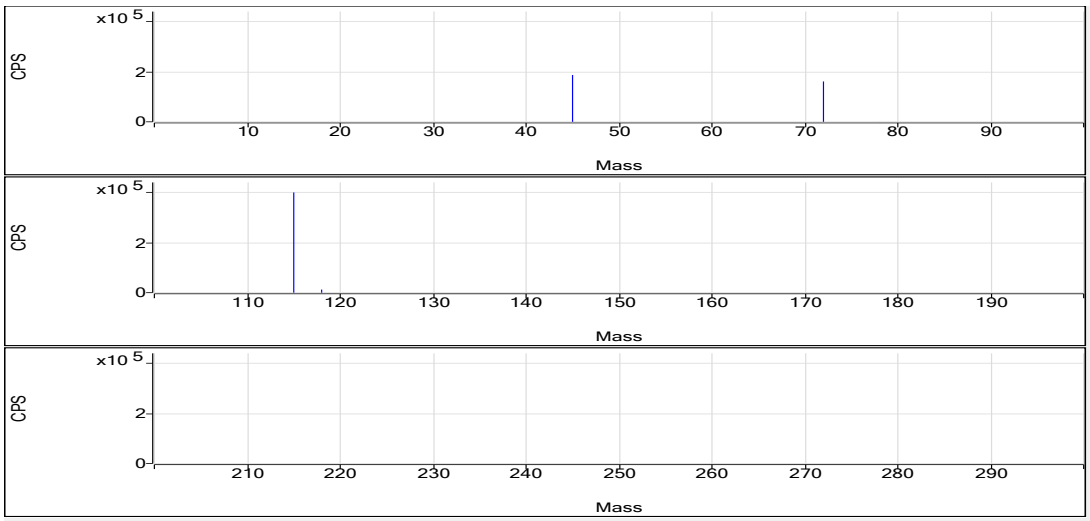
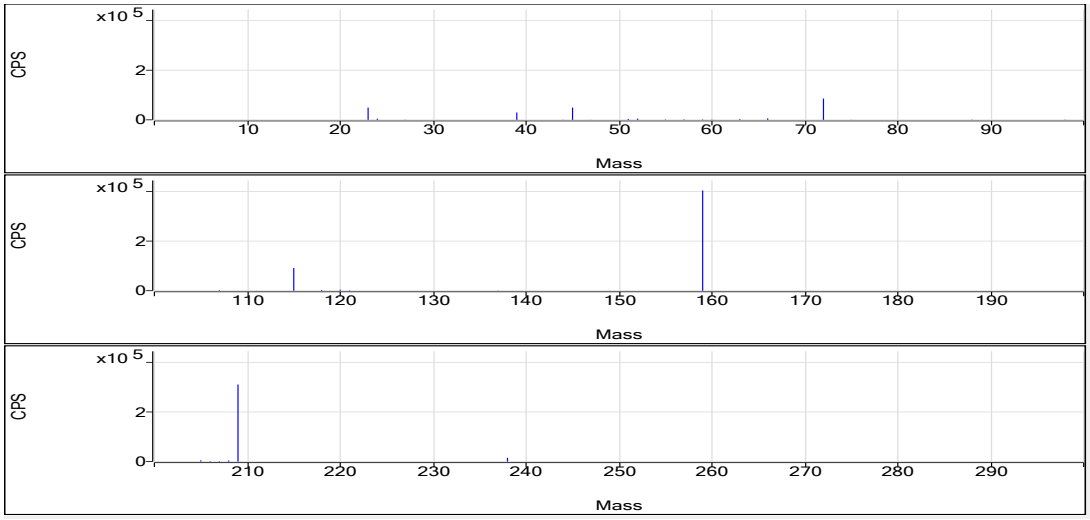


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.455	0.0004	884.03	0.0008	4.685E-06
Be	9	1	No Gas	0.422	0.0003	800.03	0.0008	4.685E-06
Be	9	1	No Gas	0.504	0.0004	972.04	0.0008	4.685E-06
Se	78	2	H2	0.896	0.0004	62.67	0.0004	1.219E-05
Se	78	2	H2	1.044	0.0004	73.33	0.0004	1.219E-05
Se	78	2	H2	1.149	0.0005	78.00	0.0004	1.219E-05
Na	23	3	He	178.447	0.9835	49654.28	0.0036	0.3452
Na	23	3	He	193.338	1.0367	50075.53	0.0036	0.3452
Na	23	3	He	176.994	0.9783	48399.79	0.0036	0.3452
Mg	24	3	He	46.96	0.0878	4430.82	0.0018	0.003497
Mg	24	3	He	51.6	0.0961	4640.93	0.0018	0.003497
Mg	24	3	He	51.906	0.0966	4780.91	0.0018	0.003497
Al	27	3	He	19.892	0.0123	620.04	0.0006	0.0006432
Al	27	3	He	22.258	0.0137	660.04	0.0006	0.0006432
Al	27	3	He	23.432	0.0144	710.04	0.0006	0.0006432
K	39	3	He	159.118	0.5803	29300.17	0.0012	0.3951
K	39	3	He	197.545	0.6251	30191.72	0.0012	0.3951
K	39	3	He	175.073	0.5989	29630.78	0.0012	0.3951
Ca	44	3	He	103.485	0.0097	490.02	0.0001	0.002715
Ca	44	3	He	103.865	0.0097	470.03	0.0001	0.002715
Ca	44	3	He	91.469	0.0089	440.02	0.0001	0.002715
Ti	47	3	He	8.723	0.0048	240.01	0.0005	7.003E-05
Ti	47	3	He	10.666	0.0058	280.01	0.0005	7.003E-05
Ti	47	3	He	10.41	0.0057	280.01	0.0005	7.003E-05
V	51	3	He	1.953	0.0675	3410.42	0.0219	0.02486
V	51	3	He	2.204	0.0731	3528.45	0.0219	0.02486
V	51	3	He	2.168	0.0722	3574.46	0.0219	0.02486
Cr	52	3	He	1.788	0.0935	4720.93	0.0299	0.03997
Cr	52	3	He	2.116	0.1033	4991.05	0.0299	0.03997
Cr	52	3	He	1.872	0.096	4750.93	0.0299	0.03997
Mn	55	3	He	1.801	0.0258	1300.10	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.972	0.028	1350.12	0.0128	0.002639
Mn	55	3	He	2.236	0.0313	1550.14	0.0128	0.002639
Fe	57	3	He	56.865	0.0345	1740.17	0.0006	0.001429
Fe	57	3	He	51.354	0.0313	1510.14	0.0006	0.001429
Fe	57	3	He	54.949	0.0334	1650.15	0.0006	0.001429
Co	59	3	He	0.525	0.0317	1600.14	0.0563	0.002149
Co	59	3	He	0.473	0.0288	1390.12	0.0563	0.002149
Co	59	3	He	0.468	0.0285	1410.12	0.0563	0.002149
Ni	60	3	He	1.309	0.0141	1200.09	0.0086	0.002834
Ni	60	3	He	0.771	0.0094	810.06	0.0086	0.002834
Ni	60	3	He	1.097	0.0123	1060.08	0.0086	0.002834
Cu	63	3	He	0.993	0.0303	2580.33	0.0257	0.004757
Cu	63	3	He	1.119	0.0335	2870.39	0.0257	0.004757
Cu	63	3	He	0.99	0.0302	2610.34	0.0257	0.004757
Zn	66	3	He	21.891	0.0676	5761.36	0.0029	0.003818
Zn	66	3	He	22.006	0.0679	5821.41	0.0029	0.003818
Zn	66	3	He	21.638	0.0668	5781.37	0.0029	0.003818
As	75	3	He	1.953	0.0048	410.01	0.002	0.0008061
As	75	3	He	1.952	0.0048	412.01	0.002	0.0008061
As	75	3	He	2.247	0.0054	468.01	0.002	0.0008061
Sr	88	3	He	1.224	0.0119	1100.09	0.009	0.0009645
Sr	88	3	He	0.86	0.0087	800.05	0.009	0.0009645
Sr	88	3	He	1.045	0.0103	930.07	0.009	0.0009645
Mo	98	3	He	0.508	0.0114	1050.07	0.0219	0.0002706
Mo	98	3	He	0.423	0.0095	880.06	0.0219	0.0002706
Mo	98	3	He	0.409	0.0092	830.05	0.0219	0.0002706
Ag	107	3	He	0.475	0.0227	2090.21	0.0465	0.0006206
Ag	107	3	He	0.495	0.0237	2180.23	0.0465	0.0006206
Ag	107	3	He	0.446	0.0214	1920.21	0.0465	0.0006206
Cd	111	3	He	0.544	0.0029	268.00	0.0053	0
Cd	111	3	He	0.487	0.0026	240.00	0.0053	0
Cd	111	3	He	0.449	0.0024	216.00	0.0053	0
Sn	120	3	He	1.555	0.041	3780.63	0.0158	0.01648
Sn	120	3	He	1.794	0.0448	4130.76	0.0158	0.01648
Sn	120	3	He	2.033	0.0486	4370.87	0.0158	0.01648
Sb	121	3	He	0.903	0.0137	1260.10	0.0149	0.0002698
Sb	121	3	He	1.077	0.0163	1500.14	0.0149	0.0002698
Sb	121	3	He	1.135	0.0171	1540.15	0.0149	0.0002698
Ba	137	3	He	1.58	0.0078	720.04	0.0048	0.0002317
Ba	137	3	He	1.851	0.0091	840.06	0.0048	0.0002317
Ba	137	3	He	1.597	0.0079	710.04	0.0048	0.0002317
Tl	205	3	He	0.491	0.0123	4971.14	0.0247	0.0001339
Tl	205	3	He	0.495	0.0124	5061.13	0.0247	0.0001339
Tl	205	3	He	0.481	0.012	4811.06	0.0247	0.0001339
Pb	208	3	He	0.546	0.0189	4180.81	0.0327	0.00107
Pb	208	3	He	0.528	0.0183	4070.74	0.0327	0.00107
Pb	208	3	He	0.56	0.0194	4220.84	0.0327	0.00107
U	238	3	He	0.973	0.048	14979.08	0.0493	7.55E-05
U	238	3	He	1.028	0.0507	15760.09	0.0493	7.55E-05
U	238	3	He	0.973	0.048	14888.92	0.0493	7.55E-05
Sc	45	1	No Gas			2510879.96		
Sc	45	1	No Gas			2452471.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2498028.56		
Ge	72	1	No Gas			1208497.01		
Ge	72	1	No Gas			1217154.90		
Ge	72	1	No Gas			1206630.76		
Sc	45	2	H2			185986.36		
Sc	45	2	H2			189056.29		
Sc	45	2	H2			187224.92		
Ge	72	2	H2			162343.43		
Ge	72	2	H2			163882.73		
Ge	72	2	H2			158693.86		
In	115	2	H2			399518.78		
In	115	2	H2			404854.29		
In	115	2	H2			399816.87		
Sc	45	3	He			50488.68		
Sc	45	3	He			48301.09		
Sc	45	3	He			49474.61		
Ge	72	3	He			85283.96		
Ge	72	3	He			85746.44		
Ge	72	3	He			86521.61		
In	115	3	He			92135.57		
In	115	3	He			92204.59		
In	115	3	He			89961.60		
Tb	159	3	He			404986.52		
Tb	159	3	He			408992.53		
Tb	159	3	He			399665.42		
Bi	209	3	He			311886.32		
Bi	209	3	He			310881.15		
Bi	209	3	He			310012.93		

Quantitation Report

Data File Name	103SMPL.d
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Acq Time	8/10/2023 2:04:41 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

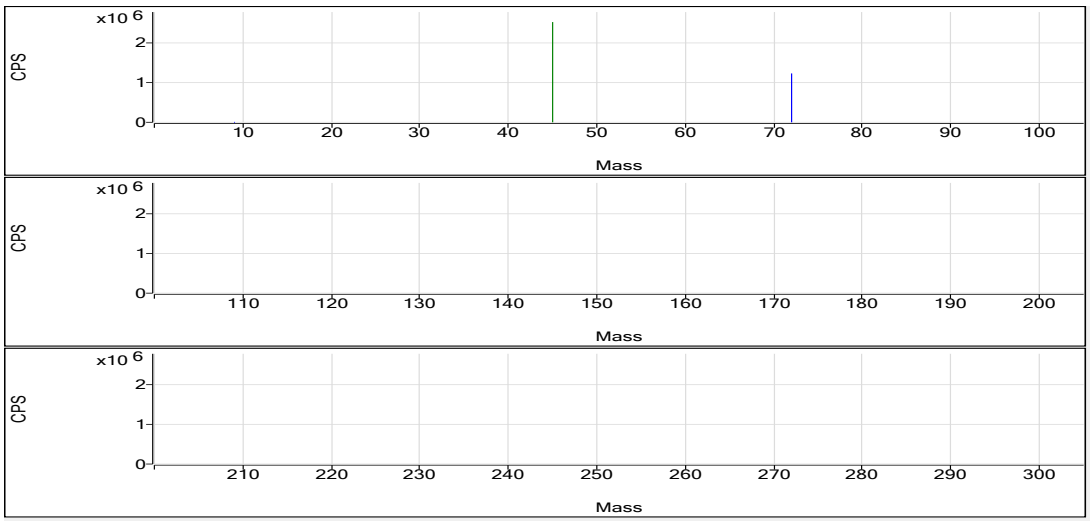
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.003	ppb	82.5	18.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.004	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	45	He	-4.313	ppb	N/A	15878.99	0.3297	Pulse	0.1000	3
Mg	24	45	He	-0.136	ppb	N/A	156.68	0.0033	Pulse	0.1000	3
Al	27	45	He	0.911	ppb	44.4	56.67	0.0012	Pulse	0.1000	3
K	39	45	He	-8.074	ppb	N/A	18572.30	0.3857	Pulse	0.1000	3
Ca	44	45	He	19.254	ppb	40.9	193.34	0.0040	Pulse	0.1000	3
Ti	47	45	He	-0.002	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.130	ppb	23.9	1334.74	0.0277	Pulse	0.5000	3
Cr	52	45	He	-0.006	ppb	N/A	1916.87	0.0398	Pulse	0.1000	3
Mn	55	45	He	0.021	ppb	268.0	140.01	0.0029	Pulse	0.1000	3
Fe	57	45	He	1.473	ppb	151.5	110.00	0.0023	Pulse	0.1000	3
Co	59	45	He	-0.019	ppb	N/A	53.33	0.0011	Pulse	0.1000	3
Ni	60	72	He	0.025	ppb	212.6	253.34	0.0030	Pulse	0.1000	3
Cu	63	72	He	-0.037	ppb	N/A	316.68	0.0038	Pulse	0.1000	3
Zn	66	72	He	4.897	ppb	9.3	1500.14	0.0181	Pulse	0.1000	3
As	75	72	He	-0.052	ppb	N/A	58.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.004	ppb	N/A	80.00	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.161	ppb	23.0	326.68	0.0038	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.081	ppb	N/A	1306.78	0.0152	Pulse	0.1000	3
Sb	121	115	He	0.003	ppb	1097.7	26.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	-0.024	ppb	N/A	10.00	0.0001	Pulse	0.1000	3
Tl	205	159	He	0.007	ppb	60.0	120.01	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.002	ppb	42.9	450.02	0.0011	Pulse	0.1000	3
U	238	209	He	0.002	ppb	19.7	53.33	0.0002	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2525253.04	1.8	105.3	Analog	0.1000	3
No Gas	Ge	72	1231188.89	1.3	106.8	Pulse	0.1000	3
H2	Sc	45	187551.94	0.6	100.3	Pulse	0.1000	3
H2	Ge	72	165681.64	1.4	101.2	Pulse	0.1000	3
H2	In	115	395221.34	0.2	101.6	Pulse	0.1000	3
He	Sc	45	48157.16	0.3	103.2	Pulse	0.1000	3
He	Ge	72	82954.04	1.6	102.2	Pulse	0.1000	3
He	In	115	85965.06	0.4	99.7	Pulse	0.1000	3
He	Tb	159	398262.78	0.1	99.9	Pulse	0.1000	3
He	Bi	209	305490.84	1.1	98.8	Pulse	0.1000	3

No Gas



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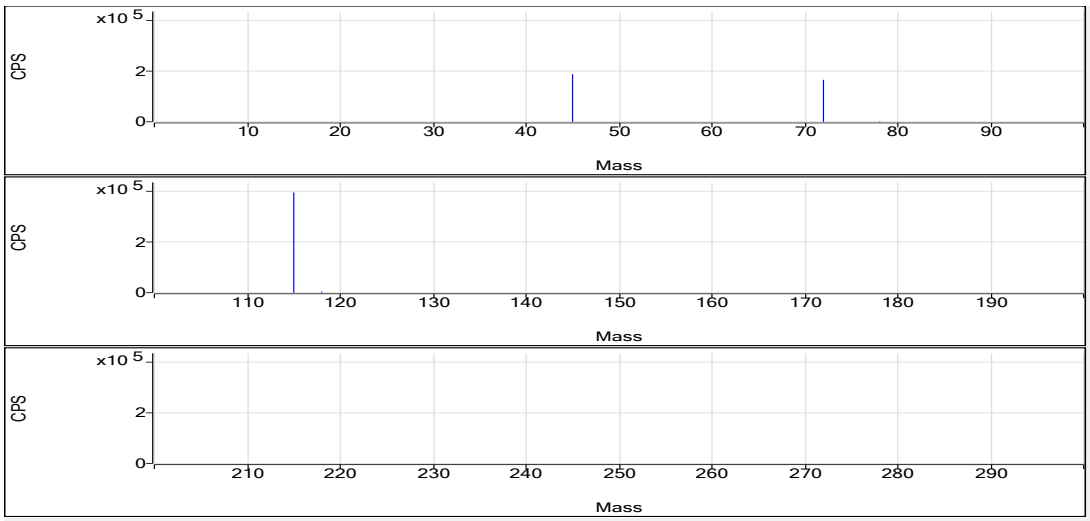
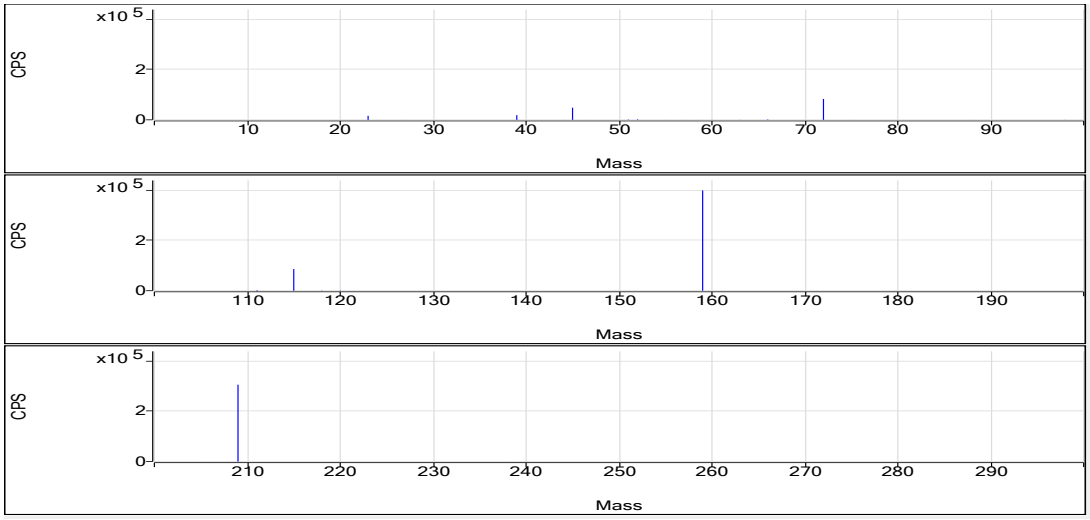


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Be	9	1	No Gas	0.004	0	20.00	0.0008	4.685E-06
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Se	78	2	H2	-0.019	0	0.67	0.0004	1.219E-05
Se	78	2	H2	-0.001	0	2.00	0.0004	1.219E-05
Na	23	3	He	-4.105	0.3305	15959.14	0.0036	0.3452
Na	23	3	He	-3.892	0.3312	15959.06	0.0036	0.3452
Na	23	3	He	-4.944	0.3275	15718.77	0.0036	0.3452
Mg	24	3	He	0.129	0.0037	180.01	0.0018	0.003497
Mg	24	3	He	-0.329	0.0029	140.01	0.0018	0.003497
Mg	24	3	He	-0.207	0.0031	150.01	0.0018	0.003497
Al	27	3	He	1.378	0.0014	70.00	0.0006	0.0006432
Al	27	3	He	0.674	0.001	50.00	0.0006	0.0006432
Al	27	3	He	0.681	0.001	50.00	0.0006	0.0006432
K	39	3	He	-10.068	0.3833	18512.22	0.0012	0.3951
K	39	3	He	-8.416	0.3853	18562.26	0.0012	0.3951
K	39	3	He	-5.738	0.3884	18642.43	0.0012	0.3951
Ca	44	3	He	18.056	0.0039	190.01	0.0001	0.002715
Ca	44	3	He	12.045	0.0035	170.01	0.0001	0.002715
Ca	44	3	He	27.662	0.0046	220.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.256	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.136	0.0278	1344.07	0.0219	0.02486
V	51	3	He	0.097	0.027	1300.07	0.0219	0.02486
V	51	3	He	0.159	0.0283	1360.07	0.0219	0.02486
Cr	52	3	He	0.097	0.0429	2070.22	0.0299	0.03997
Cr	52	3	He	-0.025	0.0392	1890.20	0.0299	0.03997
Cr	52	3	He	-0.089	0.0373	1790.18	0.0299	0.03997
Mn	55	3	He	0.053	0.0033	160.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.044	0.0021	100.00	0.0128	0.002639
Mn	55	3	He	0.054	0.0033	160.01	0.0128	0.002639
Fe	57	3	He	-0.321	0.0012	60.00	0.0006	0.001429
Fe	57	3	He	3.972	0.0037	180.01	0.0006	0.001429
Fe	57	3	He	0.768	0.0019	90.00	0.0006	0.001429
Co	59	3	He	-0.016	0.0012	60.00	0.0563	0.002149
Co	59	3	He	-0.012	0.0015	70.00	0.0563	0.002149
Co	59	3	He	-0.027	0.0006	30.00	0.0563	0.002149
Ni	60	3	He	0.086	0.0036	300.01	0.0086	0.002834
Ni	60	3	He	-0.016	0.0027	220.01	0.0086	0.002834
Ni	60	3	He	0.005	0.0029	240.01	0.0086	0.002834
Cu	63	3	He	0	0.0048	400.02	0.0257	0.004757
Cu	63	3	He	-0.066	0.0031	250.01	0.0257	0.004757
Cu	63	3	He	-0.045	0.0036	300.02	0.0257	0.004757
Zn	66	3	He	4.861	0.018	1510.13	0.0029	0.003818
Zn	66	3	He	4.462	0.0168	1370.12	0.0029	0.003818
Zn	66	3	He	5.367	0.0194	1620.17	0.0029	0.003818
As	75	3	He	-0.068	0.0007	56.00	0.002	0.0008061
As	75	3	He	-0.01	0.0008	64.00	0.002	0.0008061
As	75	3	He	-0.077	0.0006	54.00	0.002	0.0008061
Sr	88	3	He	-0.029	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.017	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	0.035	0.0013	110.00	0.009	0.0009645
Mo	98	3	He	0.121	0.0029	250.01	0.0219	0.0002706
Mo	98	3	He	0.168	0.0039	340.02	0.0219	0.0002706
Mo	98	3	He	0.194	0.0045	390.02	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0004	30.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	-0.022	0.0161	1380.12	0.0158	0.01648
Sn	120	3	He	-0.058	0.0156	1340.12	0.0158	0.01648
Sn	120	3	He	-0.162	0.0139	1200.09	0.0158	0.01648
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	0.037	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Tl	205	3	He	0.007	0.0003	120.01	0.0247	0.0001339
Tl	205	3	He	0.003	0.0002	80.00	0.0247	0.0001339
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Pb	208	3	He	0.002	0.0011	230.01	0.0327	0.00107
Pb	208	3	He	0.003	0.0012	260.01	0.0327	0.00107
Pb	208	3	He	0.001	0.0011	200.01	0.0327	0.00107
U	238	3	He	0.002	0.0002	50.00	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	50.00	0.0493	7.55E-05
Sc	45	1	No Gas			2545051.06		
Sc	45	1	No Gas			2474193.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2556514.96		
Ge	72	1	No Gas			1229712.01		
Ge	72	1	No Gas			1216248.19		
Ge	72	1	No Gas			1247606.47		
Sc	45	2	H2			186674.59		
Sc	45	2	H2			188699.00		
Sc	45	2	H2			187282.22		
Ge	72	2	H2			164781.89		
Ge	72	2	H2			164012.63		
Ge	72	2	H2			168250.41		
In	115	2	H2			394764.25		
In	115	2	H2			394991.99		
In	115	2	H2			395907.77		
Sc	45	3	He			48291.41		
Sc	45	3	He			48180.24		
Sc	45	3	He			47999.84		
Ge	72	3	He			84027.77		
Ge	72	3	He			81512.59		
Ge	72	3	He			83321.76		
In	115	3	He			85553.15		
In	115	3	He			86147.13		
In	115	3	He			86216.59		
Tb	159	3	He			398868.04		
Tb	159	3	He			397800.70		
Tb	159	3	He			398119.60		
Bi	209	3	He			302726.13		
Bi	209	3	He			304489.29		
Bi	209	3	He			309257.09		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

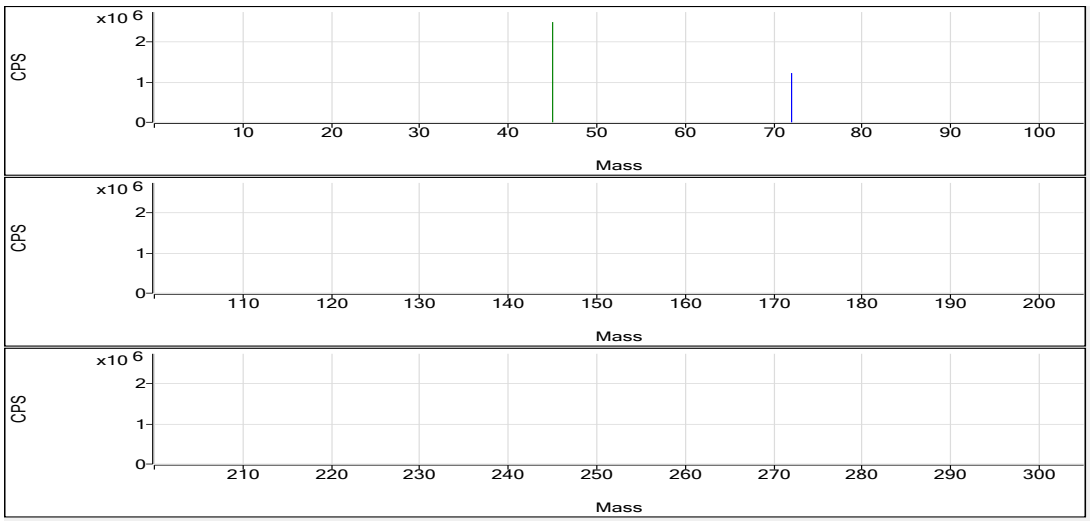
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.003	ppb	112.9	18.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.003	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	45	He	-1.770	ppb	N/A	16072.59	0.3388	Pulse	0.1000	3
Mg	24	45	He	0.360	ppb	112.1	196.68	0.0041	Pulse	0.1000	3
Al	27	45	He	0.461	ppb	161.8	43.33	0.0009	Pulse	0.1000	3
K	39	45	He	-5.871	ppb	N/A	18422.16	0.3882	Pulse	0.1000	3
Ca	44	45	He	9.711	ppb	145.7	160.01	0.0034	Pulse	0.1000	3
Ti	47	45	He	0.134	ppb	341.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.133	ppb	34.0	1318.07	0.0278	Pulse	0.5000	3
Cr	52	45	He	0.040	ppb	223.1	1953.53	0.0412	Pulse	0.1000	3
Mn	55	45	He	-0.013	ppb	N/A	116.67	0.0025	Pulse	0.1000	3
Fe	57	45	He	0.683	ppb	26.5	86.67	0.0018	Pulse	0.1000	3
Co	59	45	He	-0.011	ppb	N/A	73.33	0.0016	Pulse	0.1000	3
Ni	60	72	He	0.004	ppb	2017.2	240.01	0.0029	Pulse	0.1000	3
Cu	63	72	He	0.005	ppb	704.6	410.02	0.0049	Pulse	0.1000	3
Zn	66	72	He	4.321	ppb	16.6	1370.11	0.0164	Pulse	0.1000	3
As	75	72	He	-0.035	ppb	N/A	61.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.009	ppb	422.1	90.00	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.032	ppb	25.8	83.33	0.0010	Pulse	0.1000	3
Ag	107	115	He	-0.008	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.017	ppb	N/A	1393.46	0.0162	Pulse	0.1000	3
Sb	121	115	He	-0.002	ppb	N/A	20.00	0.0002	Pulse	0.1000	3
Ba	137	115	He	-0.024	ppb	N/A	10.00	0.0001	Pulse	0.1000	3
Tl	205	159	He	-0.001	ppb	N/A	46.67	0.0001	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	54.9	526.69	0.0013	Pulse	0.1000	3
U	238	209	He	0.000	ppb	7.1	30.00	0.0001	Pulse	0.1000	3

ISTD Table:

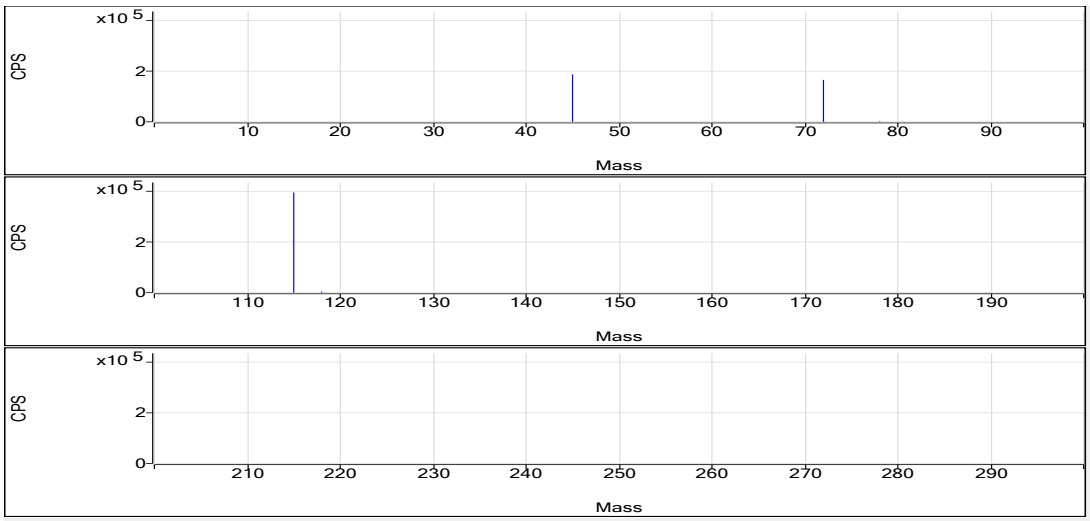
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2490679.96	1.1	103.8	Analog	0.1000	3
No Gas	Ge	72	1223794.72	1.0	106.1	Pulse	0.1000	3
H2	Sc	45	186505.00	0.7	99.7	Pulse	0.1000	3
H2	Ge	72	165005.74	0.6	100.8	Pulse	0.1000	3
H2	In	115	394362.43	0.2	101.4	Pulse	0.1000	3
He	Sc	45	47451.57	1.0	101.7	Pulse	0.1000	3
He	Ge	72	83648.21	1.6	103.0	Pulse	0.1000	3
He	In	115	85957.65	1.0	99.7	Pulse	0.1000	3
He	Tb	159	399356.75	0.4	100.2	Pulse	0.1000	3
He	Bi	209	308379.50	1.6	99.7	Pulse	0.1000	3

No Gas

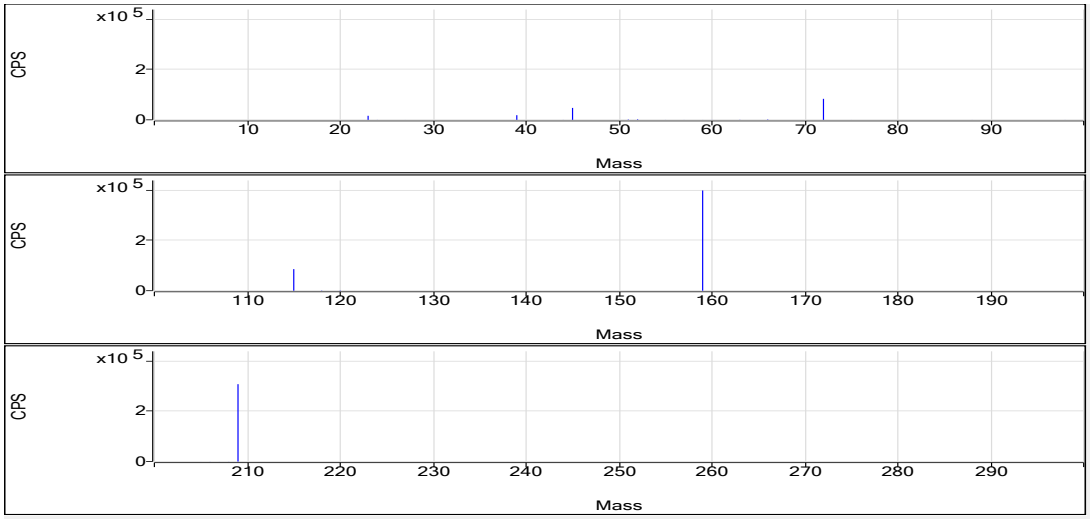


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.002	0	16.00	0.0008	4.685E-06
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	26.00	0.0008	4.685E-06
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	-0.019	0	0.67	0.0004	1.219E-05
Se	78	2	H2	0.009	0	2.67	0.0004	1.219E-05
Na	23	3	He	-6.27	0.3227	15458.52	0.0036	0.3452
Na	23	3	He	2.757	0.355	16659.90	0.0036	0.3452
Na	23	3	He	-1.797	0.3387	16099.35	0.0036	0.3452
Mg	24	3	He	0.727	0.0048	230.01	0.0018	0.003497
Mg	24	3	He	0.427	0.0043	200.01	0.0018	0.003497
Mg	24	3	He	-0.073	0.0034	160.01	0.0018	0.003497
Al	27	3	He	1.042	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	0.722	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	-0.38	0.0004	20.00	0.0006	0.0006432
K	39	3	He	-8.09	0.3856	18472.23	0.0012	0.3951
K	39	3	He	-7.27	0.3866	18141.95	0.0012	0.3951
K	39	3	He	-2.253	0.3924	18652.29	0.0012	0.3951
Ca	44	3	He	21.623	0.0042	200.01	0.0001	0.002715
Ca	44	3	He	13.44	0.0036	170.01	0.0001	0.002715
Ca	44	3	He	-5.93	0.0023	110.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.663	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.146	0.0281	1344.07	0.0219	0.02486
V	51	3	He	0.171	0.0286	1342.07	0.0219	0.02486
V	51	3	He	0.083	0.0267	1268.07	0.0219	0.02486
Cr	52	3	He	0.004	0.0401	1920.19	0.0299	0.03997
Cr	52	3	He	-0.025	0.0392	1840.17	0.0299	0.03997
Cr	52	3	He	0.141	0.0442	2100.23	0.0299	0.03997
Mn	55	3	He	-0.092	0.0015	70.00	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.143	0.0045	210.01	0.0128	0.002639
Mn	55	3	He	-0.091	0.0015	70.00	0.0128	0.002639
Fe	57	3	He	0.775	0.0019	90.00	0.0006	0.001429
Fe	57	3	He	0.475	0.0017	80.00	0.0006	0.001429
Fe	57	3	He	0.8	0.0019	90.00	0.0006	0.001429
Co	59	3	He	-0.016	0.0013	60.00	0.0563	0.002149
Co	59	3	He	0.011	0.0028	130.00	0.0563	0.002149
Co	59	3	He	-0.027	0.0006	30.00	0.0563	0.002149
Ni	60	3	He	0.101	0.0037	310.02	0.0086	0.002834
Ni	60	3	He	-0.07	0.0022	190.01	0.0086	0.002834
Ni	60	3	He	-0.018	0.0027	220.01	0.0086	0.002834
Cu	63	3	He	0.047	0.006	500.03	0.0257	0.004757
Cu	63	3	He	-0.002	0.0047	400.02	0.0257	0.004757
Cu	63	3	He	-0.029	0.004	330.02	0.0257	0.004757
Zn	66	3	He	4.632	0.0173	1450.12	0.0029	0.003818
Zn	66	3	He	3.501	0.014	1190.09	0.0029	0.003818
Zn	66	3	He	4.83	0.0179	1470.13	0.0029	0.003818
As	75	3	He	-0.091	0.0006	52.00	0.002	0.0008061
As	75	3	He	-0.026	0.0008	64.00	0.002	0.0008061
As	75	3	He	0.01	0.0008	68.00	0.002	0.0008061
Sr	88	3	He	-0.031	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	0.049	0.0014	120.01	0.009	0.0009645
Sr	88	3	He	0.01	0.0011	90.00	0.009	0.0009645
Mo	98	3	He	0.03	0.0009	80.00	0.0219	0.0002706
Mo	98	3	He	0.025	0.0008	70.00	0.0219	0.0002706
Mo	98	3	He	0.041	0.0012	100.00	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.001	0.0165	1430.12	0.0158	0.01648
Sn	120	3	He	-0.035	0.0159	1360.12	0.0158	0.01648
Sn	120	3	He	-0.014	0.0163	1390.13	0.0158	0.01648
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	0.001	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	-0.001	0.0001	40.00	0.0247	0.0001339
Tl	205	3	He	-0.001	0.0001	40.00	0.0247	0.0001339
Tl	205	3	He	0.001	0.0002	60.00	0.0247	0.0001339
Pb	208	3	He	0.005	0.0012	200.01	0.0327	0.00107
Pb	208	3	He	0.005	0.0012	200.01	0.0327	0.00107
Pb	208	3	He	0.012	0.0015	280.01	0.0327	0.00107
U	238	3	He	0	0.0001	30.00	0.0493	7.55E-05
U	238	3	He	0	0.0001	30.00	0.0493	7.55E-05
U	238	3	He	0	0.0001	30.00	0.0493	7.55E-05
Sc	45	1	No Gas			2458346.06		
Sc	45	1	No Gas			2508545.74		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2505148.09		
Ge	72	1	No Gas			1209961.00		
Ge	72	1	No Gas			1231676.23		
Ge	72	1	No Gas			1229746.93		
Sc	45	2	H2			186603.79		
Sc	45	2	H2			185102.85		
Sc	45	2	H2			187808.36		
Ge	72	2	H2			164446.77		
Ge	72	2	H2			164445.15		
Ge	72	2	H2			166125.29		
In	115	2	H2			394156.21		
In	115	2	H2			393806.95		
In	115	2	H2			395124.13		
Sc	45	3	He			47899.33		
Sc	45	3	He			46926.73		
Sc	45	3	He			47528.66		
Ge	72	3	He			83795.20		
Ge	72	3	He			84932.75		
Ge	72	3	He			82216.68		
In	115	3	He			86930.95		
In	115	3	He			85452.20		
In	115	3	He			85512.36		
Tb	159	3	He			400662.03		
Tb	159	3	He			397651.44		
Tb	159	3	He			399756.79		
Bi	209	3	He			308586.60		
Bi	209	3	He			313194.51		
Bi	209	3	He			303357.40		

Quantitation Report

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Sample Type	ICSA
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Acq Mode	Spectrum
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Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

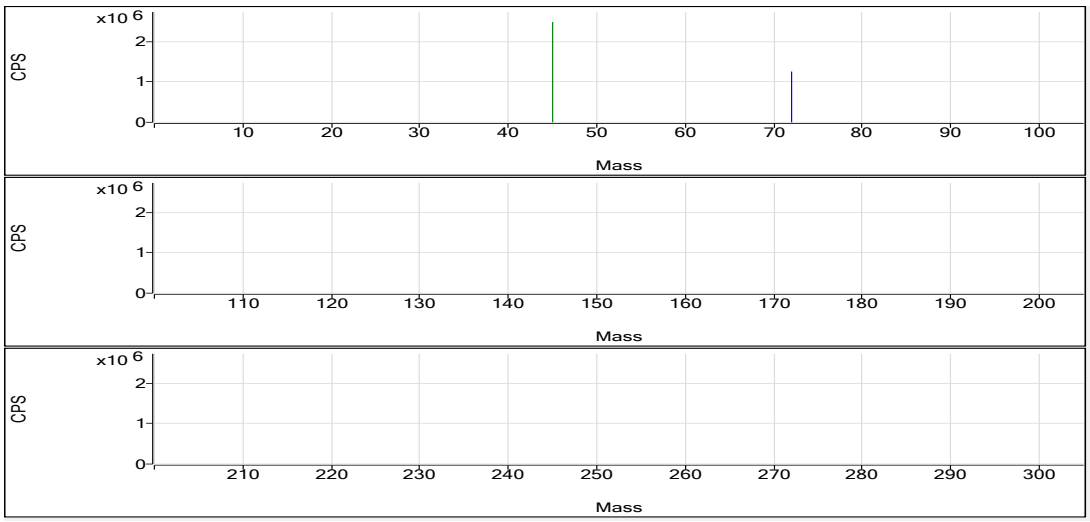
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.006	ppb	121.5	22.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.050	ppb	93.3	5.55	0.0000	Pulse	1.5000	3
Na	23	45	He	238111.041	ppb	1.7	39775131.91	852.0800	Analog	0.1000	3
Mg	24	45	He	98258.588	ppb	0.8	8230949.67	176.3110	Analog	0.1000	3
Al	27	45	He	100417.026	ppb	1.4	2742409.44	58.7481	Analog	0.1000	3
K	39	45	He	100031.169	ppb	1.8	5455162.00	116.8640	Analog	0.1000	3
Ca	44	45	He	293623.344	ppb	1.3	926039.39	19.8375	Pulse	0.1000	3
Ti	47	45	He	1993.607	ppb	0.4	49980.06	1.0705	Pulse	0.1000	3
V	51	45	He	-0.203	ppb	N/A	953.37	0.0204	Pulse	0.5000	3
Cr	52	45	He	3.098	ppb	6.2	6194.90	0.1327	Pulse	0.1000	3
Mn	55	45	He	0.768	ppb	4.9	583.36	0.0125	Pulse	0.1000	3
Fe	57	45	He	249987.594	ppb	1.9	6779765.94	145.2419	Analog	0.1000	3
Co	59	45	He	0.228	ppb	6.9	700.04	0.0150	Pulse	0.1000	3
Ni	60	72	He	0.650	ppb	5.2	736.71	0.0084	Pulse	0.1000	3
Cu	63	72	He	0.067	ppb	71.6	566.69	0.0065	Pulse	0.1000	3
Zn	66	72	He	6.457	ppb	13.4	1980.20	0.0226	Pulse	0.1000	3
As	75	72	He	0.168	ppb	12.0	100.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	1.812	ppb	5.6	1413.45	0.0172	Pulse	0.1000	3
Mo	98	115	He	2194.268	ppb	0.9	3947378.48	48.1127	Analog	0.1000	3
Ag	107	115	He	0.006	ppb	130.3	73.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.316	ppb	13.2	138.67	0.0017	Pulse	0.5000	3
Sn	120	115	He	0.131	ppb	82.9	1520.13	0.0185	Pulse	0.1000	3
Sb	121	115	He	0.108	ppb	5.9	153.34	0.0019	Pulse	0.1000	3
Ba	137	115	He	0.503	ppb	35.0	216.68	0.0026	Pulse	0.1000	3
Tl	205	159	He	0.011	ppb	39.9	160.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.085	ppb	0.7	1506.76	0.0039	Pulse	0.1000	3
U	238	209	He	0.061	ppb	5.7	890.06	0.0031	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2484291.06	1.2	103.6	Analog	0.1000	3
No Gas	Ge	72	1258293.81	1.1	109.1	Pulse	0.1000	3
H2	Sc	45	186117.40	1.7	99.5	Pulse	0.1000	3
H2	Ge	72	168244.44	0.4	102.8	Pulse	0.1000	3
H2	In	115	372636.87	0.9	95.8	Pulse	0.1000	3
He	Sc	45	46685.67	1.1	100.1	Pulse	0.1000	3
He	Ge	72	87533.94	0.6	107.8	Pulse	0.1000	3
He	In	115	82050.63	1.3	95.2	Pulse	0.1000	3
He	Tb	159	390831.19	0.5	98.0	Pulse	0.1000	3
He	Bi	209	289732.30	0.8	93.7	Pulse	0.1000	3

No Gas



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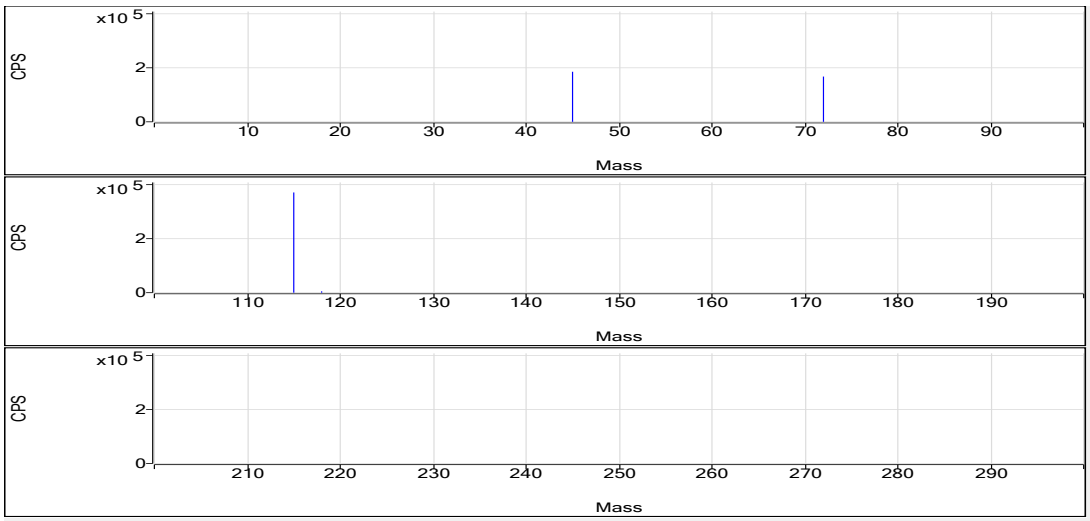
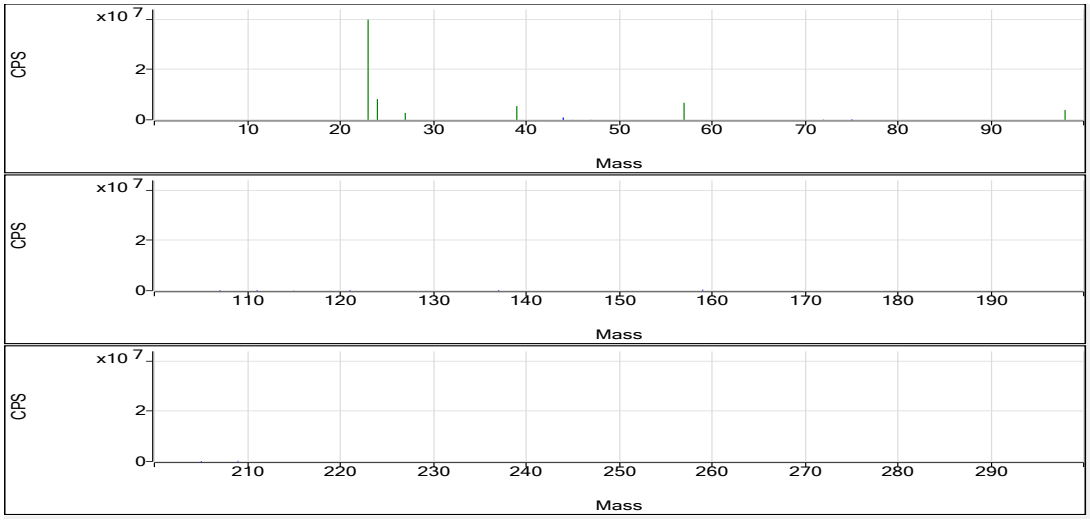


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.014	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Se	78	2	H2	0.103	0.0001	9.33	0.0004	1.219E-05
Se	78	2	H2	0.028	0	4.00	0.0004	1.219E-05
Se	78	2	H2	0.018	0	3.33	0.0004	1.219E-05
Na	23	3	He	242758.479	868.7041	40041891.90	0.0036	0.3452
Na	23	3	He	236335.755	845.7297	39814469.41	0.0036	0.3452
Na	23	3	He	235238.889	841.8062	39469034.41	0.0036	0.3452
Mg	24	3	He	98865.036	177.3992	8177006.75	0.0018	0.003497
Mg	24	3	He	98592.58	176.9103	8328418.00	0.0018	0.003497
Mg	24	3	He	97318.15	174.6236	8187424.25	0.0018	0.003497
Al	27	3	He	101987.471	59.6669	2750273.71	0.0006	0.0006432
Al	27	3	He	99280.306	58.0831	2734380.58	0.0006	0.0006432
Al	27	3	He	99983.303	58.4944	2742574.02	0.0006	0.0006432
K	39	3	He	102059.269	119.2254	5495553.67	0.0012	0.3951
K	39	3	He	98825.021	115.4597	5435501.79	0.0012	0.3951
K	39	3	He	99209.216	115.907	5434430.54	0.0012	0.3951
Ca	44	3	He	298106.784	20.1404	928347.80	0.0001	0.002715
Ca	44	3	He	291514.185	19.6951	927185.22	0.0001	0.002715
Ca	44	3	He	291249.064	19.6771	922585.14	0.0001	0.002715
Ti	47	3	He	1985.073	1.066	49133.86	0.0005	7.003E-05
Ti	47	3	He	1998.783	1.0733	50528.51	0.0005	7.003E-05
Ti	47	3	He	1996.965	1.0723	50277.81	0.0005	7.003E-05
V	51	3	He	-0.167	0.0212	978.04	0.0219	0.02486
V	51	3	He	-0.183	0.0209	982.04	0.0219	0.02486
V	51	3	He	-0.259	0.0192	900.03	0.0219	0.02486
Cr	52	3	He	3.303	0.1389	6401.60	0.0299	0.03997
Cr	52	3	He	2.923	0.1275	6001.51	0.0299	0.03997
Cr	52	3	He	3.068	0.1318	6181.58	0.0299	0.03997
Mn	55	3	He	0.792	0.0128	590.03	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.788	0.0127	600.03	0.0128	0.002639
Mn	55	3	He	0.725	0.0119	560.03	0.0128	0.002639
Fe	57	3	He	255336.721	148.3497	6838005.52	0.0006	0.001429
Fe	57	3	He	246467.333	143.1967	6741279.27	0.0006	0.001429
Fe	57	3	He	248158.728	144.1794	6760013.02	0.0006	0.001429
Co	59	3	He	0.243	0.0158	730.05	0.0563	0.002149
Co	59	3	He	0.23	0.0151	710.04	0.0563	0.002149
Co	59	3	He	0.212	0.0141	660.03	0.0563	0.002149
Ni	60	3	He	0.677	0.0086	760.05	0.0086	0.002834
Ni	60	3	He	0.612	0.0081	710.04	0.0086	0.002834
Ni	60	3	He	0.662	0.0085	740.04	0.0086	0.002834
Cu	63	3	He	0.014	0.0051	450.02	0.0257	0.004757
Cu	63	3	He	0.108	0.0075	660.03	0.0257	0.004757
Cu	63	3	He	0.079	0.0068	590.03	0.0257	0.004757
Zn	66	3	He	7.402	0.0254	2230.24	0.0029	0.003818
Zn	66	3	He	5.694	0.0204	1790.17	0.0029	0.003818
Zn	66	3	He	6.276	0.0221	1920.20	0.0029	0.003818
As	75	3	He	0.162	0.0011	100.00	0.002	0.0008061
As	75	3	He	0.152	0.0011	98.00	0.002	0.0008061
As	75	3	He	0.191	0.0012	104.00	0.002	0.0008061
Sr	88	3	He	1.698	0.0162	1310.10	0.009	0.0009645
Sr	88	3	He	1.893	0.0179	1490.13	0.009	0.0009645
Sr	88	3	He	1.846	0.0175	1440.12	0.009	0.0009645
Mo	98	3	He	2211.939	48.5002	3923981.82	0.0219	0.0002706
Mo	98	3	He	2172.431	47.6339	3955520.25	0.0219	0.0002706
Mo	98	3	He	2198.435	48.2041	3962633.38	0.0219	0.0002706
Ag	107	3	He	0.011	0.0011	90.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.01	0.0011	90.00	0.0465	0.0006206
Cd	111	3	He	0.361	0.0019	156.00	0.0053	0
Cd	111	3	He	0.311	0.0017	138.00	0.0053	0
Cd	111	3	He	0.278	0.0015	122.00	0.0053	0
Sn	120	3	He	0.248	0.0204	1650.15	0.0158	0.01648
Sn	120	3	He	0.108	0.0182	1510.13	0.0158	0.01648
Sn	120	3	He	0.035	0.017	1400.11	0.0158	0.01648
Sb	121	3	He	0.115	0.002	160.01	0.0149	0.0002698
Sb	121	3	He	0.103	0.0018	150.01	0.0149	0.0002698
Sb	121	3	He	0.105	0.0018	150.01	0.0149	0.0002698
Ba	137	3	He	0.699	0.0036	290.01	0.0048	0.0002317
Ba	137	3	He	0.454	0.0024	200.01	0.0048	0.0002317
Ba	137	3	He	0.357	0.0019	160.01	0.0048	0.0002317
Tl	205	3	He	0.009	0.0004	140.01	0.0247	0.0001339
Tl	205	3	He	0.016	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.008	0.0003	130.01	0.0247	0.0001339
Pb	208	3	He	0.084	0.0038	810.05	0.0327	0.00107
Pb	208	3	He	0.086	0.0039	810.06	0.0327	0.00107
Pb	208	3	He	0.085	0.0039	810.05	0.0327	0.00107
U	238	3	He	0.06	0.003	880.07	0.0493	7.55E-05
U	238	3	He	0.065	0.0033	940.06	0.0493	7.55E-05
U	238	3	He	0.058	0.0029	850.06	0.0493	7.55E-05
Sc	45	1	No Gas			2517571.68		
Sc	45	1	No Gas			2461601.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2473700.43		
Ge	72	1	No Gas			1268345.76		
Ge	72	1	No Gas			1263528.57		
Ge	72	1	No Gas			1243007.09		
Sc	45	2	H2			183585.09		
Sc	45	2	H2			189540.84		
Sc	45	2	H2			185226.27		
Ge	72	2	H2			169019.49		
Ge	72	2	H2			168178.47		
Ge	72	2	H2			167535.35		
In	115	2	H2			368590.85		
In	115	2	H2			375063.39		
In	115	2	H2			374256.36		
Sc	45	3	He			46093.82		
Sc	45	3	He			47077.06		
Sc	45	3	He			46886.13		
Ge	72	3	He			87909.41		
Ge	72	3	He			87768.65		
Ge	72	3	He			86923.75		
In	115	3	He			80915.13		
In	115	3	He			83048.11		
In	115	3	He			82213.13		
Tb	159	3	He			391320.35		
Tb	159	3	He			392396.52		
Tb	159	3	He			388776.71		
Bi	209	3	He			292470.27		
Bi	209	3	He			287724.72		
Bi	209	3	He			289001.91		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 2:10:51 PM
Sample Name	ICSAB 4677744
Sample Type	ICSAB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

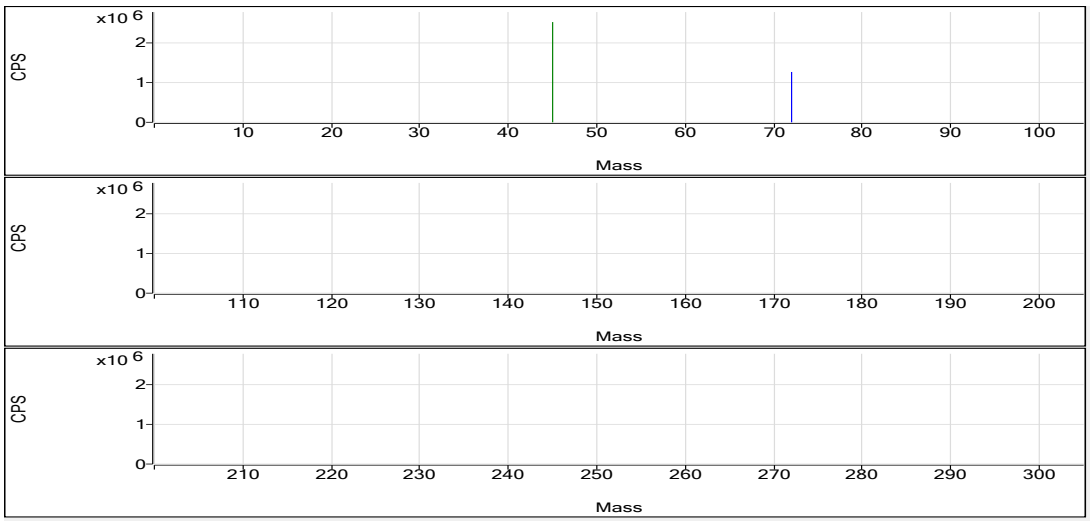
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	39.5	20.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	100.000	ppb	2.5	6790.95	0.0417	Pulse	1.5000	3
Na	23	45	He	235833.483	ppb	0.5	39533396.08	843.9331	Analog	0.1000	3
Mg	24	45	He	96878.661	ppb	2.3	8141995.51	173.8350	Analog	0.1000	3
Al	27	45	He	98828.377	ppb	1.5	2708237.87	57.8187	Analog	0.1000	3
K	39	45	He	98595.781	ppb	1.2	5395940.34	115.1928	Analog	0.1000	3
Ca	44	45	He	289221.567	ppb	1.0	915310.58	19.5402	Pulse	0.1000	3
Ti	47	45	He	1954.174	ppb	0.8	49157.11	1.0494	Pulse	0.1000	3
V	51	45	He	204.873	ppb	1.1	210939.83	4.5032	Pulse	0.5000	3
Cr	52	45	He	196.289	ppb	2.2	277155.94	5.9170	Pulse	0.1000	3
Mn	55	45	He	197.987	ppb	2.5	119135.08	2.5436	Pulse	0.1000	3
Fe	57	45	He	245923.008	ppb	1.6	6692637.81	142.8804	Analog	0.1000	3
Co	59	45	He	191.110	ppb	0.7	503959.72	10.7583	Pulse	0.1000	3
Ni	60	72	He	184.718	ppb	0.9	139957.94	1.5883	Pulse	0.1000	3
Cu	63	72	He	177.198	ppb	0.8	401253.25	4.5536	Pulse	0.1000	3
Zn	66	72	He	99.349	ppb	1.8	25824.13	0.2931	Pulse	0.1000	3
As	75	72	He	93.320	ppb	0.5	16919.39	0.1920	Pulse	0.5000	3
Sr	88	115	He	2.080	ppb	6.0	1616.81	0.0196	Pulse	0.1000	3
Mo	98	115	He	2147.409	ppb	2.1	3878061.92	47.0853	Analog	0.1000	3
Ag	107	115	He	50.025	ppb	1.8	191588.58	2.3261	Pulse	0.1000	3
Cd	111	115	He	102.188	ppb	1.1	45004.78	0.5464	Pulse	0.5000	3
Sn	120	115	He	0.069	ppb	128.8	1446.79	0.0176	Pulse	0.1000	3
Sb	121	115	He	0.118	ppb	23.4	166.68	0.0020	Pulse	0.1000	3
Ba	137	115	He	0.559	ppb	14.4	240.01	0.0029	Pulse	0.1000	3
Tl	205	159	He	0.020	ppb	17.0	243.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.071	ppb	7.8	1323.41	0.0034	Pulse	0.1000	3
U	238	209	He	0.050	ppb	8.1	740.05	0.0026	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2517238.82	1.1	104.9	Analog	0.1000	3
No Gas	Ge	72	1263918.37	0.4	109.6	Pulse	0.1000	3
H2	Sc	45	181393.27	1.0	97.0	Pulse	0.1000	3
H2	Ge	72	162815.74	1.4	99.5	Pulse	0.1000	3
H2	In	115	368978.77	0.2	94.8	Pulse	0.1000	3
He	Sc	45	46846.23	1.3	100.4	Pulse	0.1000	3
He	Ge	72	88121.51	1.0	108.5	Pulse	0.1000	3
He	In	115	82372.98	1.1	95.6	Pulse	0.1000	3
He	Tb	159	390691.40	0.2	98.0	Pulse	0.1000	3
He	Bi	209	289724.72	0.6	93.7	Pulse	0.1000	3

No Gas



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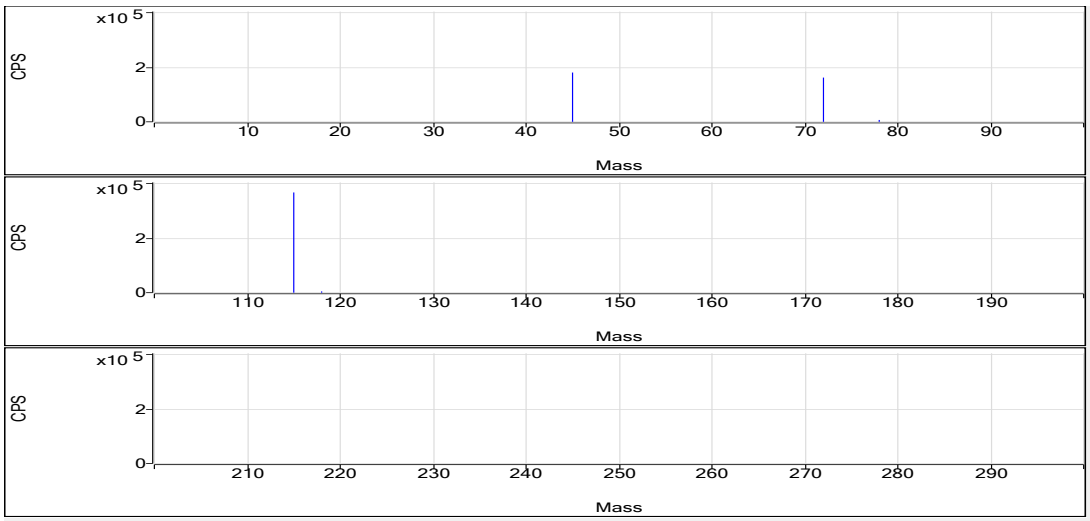
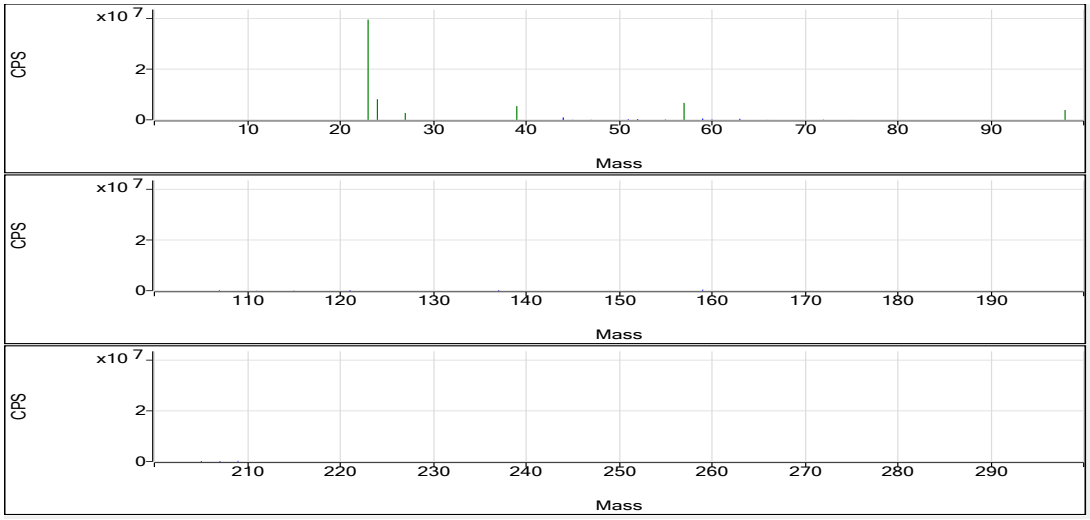


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Se	78	2	H2	102.791	0.0429	6878.99	0.0004	1.219E-05
Se	78	2	H2	99.375	0.0415	6766.94	0.0004	1.219E-05
Se	78	2	H2	97.835	0.0408	6726.92	0.0004	1.219E-05
Na	23	3	He	234499.102	839.1599	39825036.91	0.0036	0.3452
Na	23	3	He	236840.212	847.5342	39210254.42	0.0036	0.3452
Na	23	3	He	236161.134	845.1051	39564896.91	0.0036	0.3452
Mg	24	3	He	94337.107	169.2746	8033473.01	0.0018	0.003497
Mg	24	3	He	98521.744	176.7832	8178684.88	0.0018	0.003497
Mg	24	3	He	97777.133	175.4472	8213828.63	0.0018	0.003497
Al	27	3	He	97435.871	57.004	2705309.33	0.0006	0.0006432
Al	27	3	He	100453.144	58.7692	2718894.96	0.0006	0.0006432
Al	27	3	He	98596.117	57.6828	2700509.33	0.0006	0.0006432
K	39	3	He	97271.201	113.6505	5393651.17	0.0012	0.3951
K	39	3	He	98949.61	115.6047	5348328.05	0.0012	0.3951
K	39	3	He	99566.532	116.323	5445841.79	0.0012	0.3951
Ca	44	3	He	286917.226	19.3845	919954.83	0.0001	0.002715
Ca	44	3	He	292432.843	19.7571	914041.39	0.0001	0.002715
Ca	44	3	He	288314.632	19.4789	911935.53	0.0001	0.002715
Ti	47	3	He	1939.791	1.0416	49434.34	0.0005	7.003E-05
Ti	47	3	He	1953.132	1.0488	48521.71	0.0005	7.003E-05
Ti	47	3	He	1969.6	1.0576	49515.28	0.0005	7.003E-05
V	51	3	He	202.522	4.4518	211275.41	0.0219	0.02486
V	51	3	He	206.977	4.5492	210464.20	0.0219	0.02486
V	51	3	He	205.122	4.5087	211079.88	0.0219	0.02486
Cr	52	3	He	195.146	5.8828	279186.32	0.0299	0.03997
Cr	52	3	He	201.124	6.0618	280441.05	0.0299	0.03997
Cr	52	3	He	192.598	5.8065	271840.45	0.0299	0.03997
Mn	55	3	He	195.004	2.5053	118896.96	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	203.726	2.6172	121083.71	0.0128	0.002639
Mn	55	3	He	195.229	2.5082	117424.56	0.0128	0.002639
Fe	57	3	He	243720.12	141.6006	6720111.77	0.0006	0.001429
Fe	57	3	He	250577.161	145.5845	6735308.02	0.0006	0.001429
Fe	57	3	He	243471.742	141.4563	6622493.65	0.0006	0.001429
Co	59	3	He	190.348	10.7154	508531.63	0.0563	0.002149
Co	59	3	He	192.55	10.8393	501469.13	0.0563	0.002149
Co	59	3	He	190.432	10.7201	501878.39	0.0563	0.002149
Ni	60	3	He	184.236	1.5842	141145.18	0.0086	0.002834
Ni	60	3	He	183.308	1.5762	138642.20	0.0086	0.002834
Ni	60	3	He	186.611	1.6045	140086.45	0.0086	0.002834
Cu	63	3	He	175.648	4.5138	402171.99	0.0257	0.004757
Cu	63	3	He	178.019	4.5747	402391.99	0.0257	0.004757
Cu	63	3	He	177.928	4.5724	399195.78	0.0257	0.004757
Zn	66	3	He	97.308	0.2871	25583.64	0.0029	0.003818
Zn	66	3	He	100.227	0.2956	26004.54	0.0029	0.003818
Zn	66	3	He	100.514	0.2965	25884.20	0.0029	0.003818
As	75	3	He	92.875	0.1911	17026.21	0.002	0.0008061
As	75	3	He	93.237	0.1918	16873.96	0.002	0.0008061
As	75	3	He	93.849	0.1931	16857.99	0.002	0.0008061
Sr	88	3	He	1.953	0.0185	1510.13	0.009	0.0009645
Sr	88	3	He	2.203	0.0207	1700.16	0.009	0.0009645
Sr	88	3	He	2.086	0.0197	1640.14	0.009	0.0009645
Mo	98	3	He	2197.086	48.1745	3936456.19	0.0219	0.0002706
Mo	98	3	He	2136.134	46.8381	3842305.57	0.0219	0.0002706
Mo	98	3	He	2109.008	46.2433	3855424.01	0.0219	0.0002706
Ag	107	3	He	50.226	2.3355	190837.83	0.0465	0.0006206
Ag	107	3	He	50.792	2.3618	193747.50	0.0465	0.0006206
Ag	107	3	He	49.056	2.2811	190180.41	0.0465	0.0006206
Cd	111	3	He	102.29	0.5469	44691.18	0.0053	0
Cd	111	3	He	103.261	0.5521	45293.05	0.0053	0
Cd	111	3	He	101.013	0.5401	45030.11	0.0053	0
Sn	120	3	He	-0.028	0.016	1310.11	0.0158	0.01648
Sn	120	3	He	0.146	0.0188	1540.13	0.0158	0.01648
Sn	120	3	He	0.088	0.0179	1490.13	0.0158	0.01648
Sb	121	3	He	0.122	0.0021	170.01	0.0149	0.0002698
Sb	121	3	He	0.089	0.0016	130.01	0.0149	0.0002698
Sb	121	3	He	0.143	0.0024	200.01	0.0149	0.0002698
Ba	137	3	He	0.564	0.0029	240.01	0.0048	0.0002317
Ba	137	3	He	0.638	0.0033	270.02	0.0048	0.0002317
Ba	137	3	He	0.477	0.0025	210.01	0.0048	0.0002317
Tl	205	3	He	0.018	0.0006	230.01	0.0247	0.0001339
Tl	205	3	He	0.024	0.0007	280.01	0.0247	0.0001339
Tl	205	3	He	0.017	0.0006	220.01	0.0247	0.0001339
Pb	208	3	He	0.074	0.0035	710.05	0.0327	0.00107
Pb	208	3	He	0.064	0.0032	790.05	0.0327	0.00107
Pb	208	3	He	0.074	0.0035	590.03	0.0327	0.00107
U	238	3	He	0.046	0.0023	680.05	0.0493	7.55E-05
U	238	3	He	0.051	0.0026	750.05	0.0493	7.55E-05
U	238	3	He	0.054	0.0027	790.06	0.0493	7.55E-05
Sc	45	1	No Gas			2547969.02		
Sc	45	1	No Gas			2507197.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2496550.28		
Ge	72	1	No Gas			1258888.42		
Ge	72	1	No Gas			1268610.68		
Ge	72	1	No Gas			1264256.00		
Sc	45	2	H2			181087.15		
Sc	45	2	H2			183269.61		
Sc	45	2	H2			179823.06		
Ge	72	2	H2			160412.79		
Ge	72	2	H2			163223.13		
Ge	72	2	H2			164811.29		
In	115	2	H2			368558.74		
In	115	2	H2			369840.50		
In	115	2	H2			368537.06		
Sc	45	3	He			47458.22		
Sc	45	3	He			46263.92		
Sc	45	3	He			46816.54		
Ge	72	3	He			89097.95		
Ge	72	3	He			87960.24		
Ge	72	3	He			87306.35		
In	115	3	He			81720.71		
In	115	3	He			82042.73		
In	115	3	He			83380.37		
Tb	159	3	He			391500.81		
Tb	159	3	He			390080.70		
Tb	159	3	He			390492.69		
Bi	209	3	He			291545.66		
Bi	209	3	He			287880.13		
Bi	209	3	He			289748.37		

Quantitation Report

Data File Name	107SMPL.d
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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

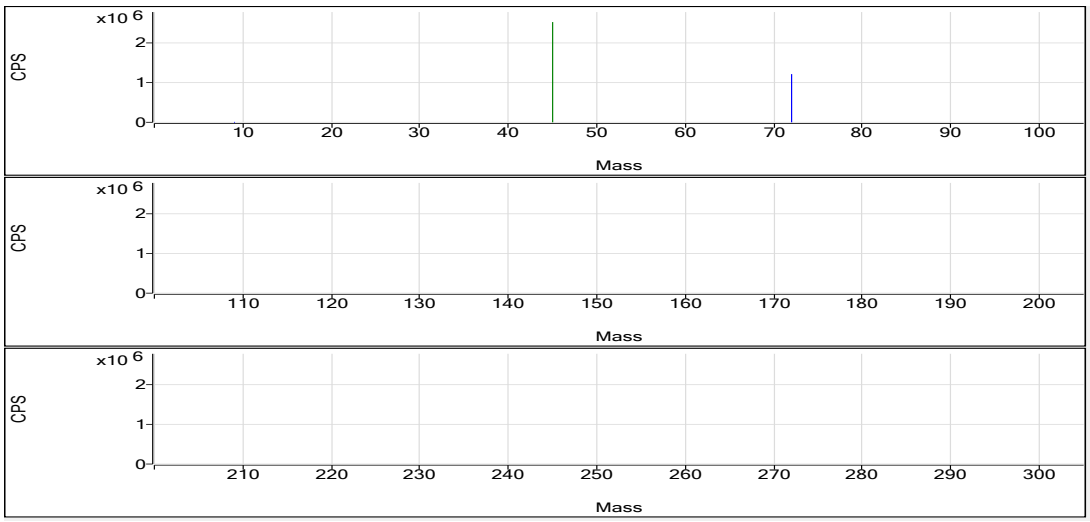
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	142.2	14.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.065	ppb	44.3	6.22	0.0000	Pulse	1.5000	3
Na	23	45	He	67.676	ppb	13.8	27553.13	0.5872	Pulse	0.1000	3
Mg	24	45	He	12.181	ppb	8.6	1190.09	0.0254	Pulse	0.1000	3
Al	27	45	He	11.285	ppb	17.8	340.02	0.0072	Pulse	0.1000	3
K	39	45	He	-3.560	ppb	N/A	18338.67	0.3909	Pulse	0.1000	3
Ca	44	45	He	31.293	ppb	18.9	226.68	0.0048	Pulse	0.1000	3
Ti	47	45	He	0.268	ppb	148.5	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.179	ppb	N/A	982.71	0.0209	Pulse	0.5000	3
Cr	52	45	He	0.019	ppb	499.6	1903.52	0.0406	Pulse	0.1000	3
Mn	55	45	He	-0.012	ppb	N/A	116.67	0.0025	Pulse	0.1000	3
Fe	57	45	He	36.560	ppb	14.0	1063.42	0.0227	Pulse	0.1000	3
Co	59	45	He	0.010	ppb	40.3	126.67	0.0027	Pulse	0.1000	3
Ni	60	72	He	-0.027	ppb	N/A	213.34	0.0026	Pulse	0.1000	3
Cu	63	72	He	0.063	ppb	26.6	523.36	0.0064	Pulse	0.1000	3
Zn	66	72	He	3.916	ppb	6.4	1250.10	0.0152	Pulse	0.1000	3
As	75	72	He	-0.053	ppb	N/A	57.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.031	ppb	N/A	60.00	0.0007	Pulse	0.1000	3
Mo	98	115	He	2.427	ppb	10.4	4644.28	0.0535	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	112.2	70.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	64.0	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.150	ppb	N/A	1226.77	0.0141	Pulse	0.1000	3
Sb	121	115	He	-0.013	ppb	N/A	6.67	0.0001	Pulse	0.1000	3
Ba	137	115	He	-0.024	ppb	N/A	10.00	0.0001	Pulse	0.1000	3
Tl	205	159	He	0.000	ppb	2540.9	53.33	0.0001	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	23.2	543.36	0.0014	Pulse	0.1000	3
U	238	209	He	0.001	ppb	40.7	36.67	0.0001	Pulse	0.1000	3

ISTD Table:

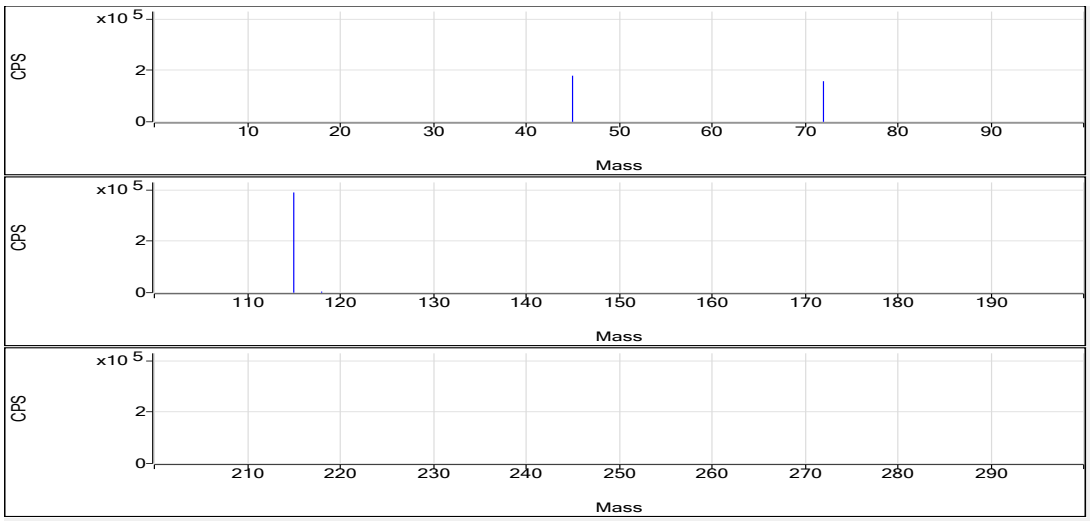
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2512254.65	0.5	104.7	Analog	0.1000	3
No Gas	Ge	72	1207818.60	0.8	104.7	Pulse	0.1000	3
H2	Sc	45	178965.86	1.0	95.7	Pulse	0.1000	3
H2	Ge	72	157600.46	0.8	96.3	Pulse	0.1000	3
H2	In	115	388931.30	0.5	100.0	Pulse	0.1000	3
He	Sc	45	46919.54	0.9	100.6	Pulse	0.1000	3
He	Ge	72	82152.71	0.4	101.2	Pulse	0.1000	3
He	In	115	86897.39	1.6	100.8	Pulse	0.1000	3
He	Tb	159	395396.32	0.8	99.2	Pulse	0.1000	3
He	Bi	209	303094.42	0.5	98.0	Pulse	0.1000	3

No Gas

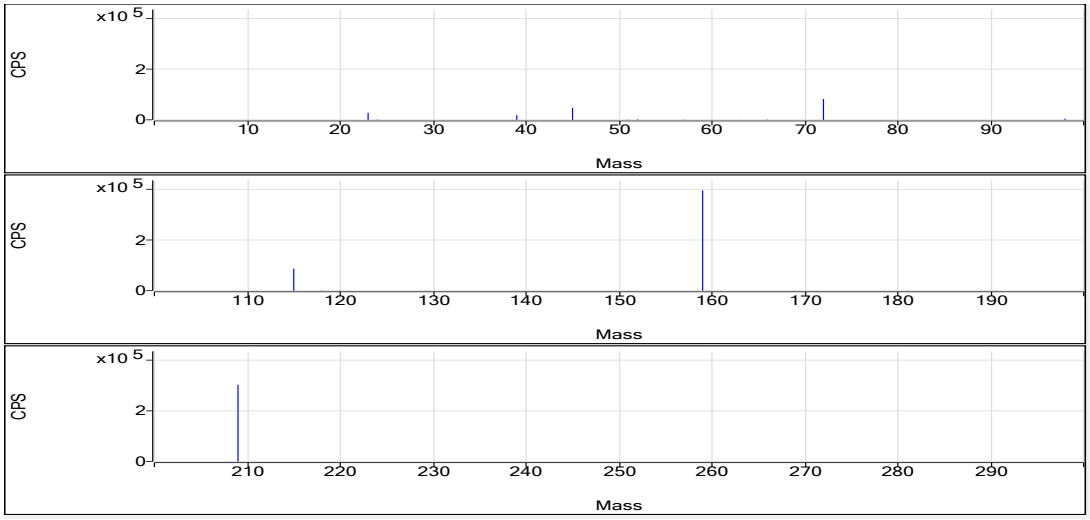


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	10.00	0.0008	4.685E-06
Be	9	1	No Gas	0.002	0	16.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Se	78	2	H2	0.081	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.083	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.032	0	4.00	0.0004	1.219E-05
Na	23	3	He	76.348	0.6183	28838.93	0.0036	0.3452
Na	23	3	He	68.85	0.5914	28027.10	0.0036	0.3452
Na	23	3	He	57.83	0.552	25793.35	0.0036	0.3452
Mg	24	3	He	11.314	0.0238	1110.09	0.0018	0.003497
Mg	24	3	He	13.341	0.0274	1300.10	0.0018	0.003497
Mg	24	3	He	11.888	0.0248	1160.09	0.0018	0.003497
Al	27	3	He	9.161	0.006	280.01	0.0006	0.0006432
Al	27	3	He	11.526	0.0074	350.02	0.0006	0.0006432
Al	27	3	He	13.168	0.0083	390.02	0.0006	0.0006432
K	39	3	He	3.394	0.399	18612.34	0.0012	0.3951
K	39	3	He	-15.044	0.3776	17891.31	0.0012	0.3951
K	39	3	He	0.969	0.3962	18512.35	0.0012	0.3951
Ca	44	3	He	26.458	0.0045	210.01	0.0001	0.002715
Ca	44	3	He	37.91	0.0053	250.01	0.0001	0.002715
Ca	44	3	He	29.512	0.0047	220.01	0.0001	0.002715
Ti	47	3	He	0.269	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.667	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	-0.17	0.0211	986.04	0.0219	0.02486
V	51	3	He	-0.176	0.021	996.04	0.0219	0.02486
V	51	3	He	-0.192	0.0207	966.04	0.0219	0.02486
Cr	52	3	He	-0.032	0.039	1820.17	0.0299	0.03997
Cr	52	3	He	0.131	0.0439	2080.22	0.0299	0.03997
Cr	52	3	He	-0.041	0.0387	1810.18	0.0299	0.03997
Mn	55	3	He	-0.005	0.0026	120.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.041	0.0021	100.00	0.0128	0.002639
Mn	55	3	He	0.011	0.0028	130.01	0.0128	0.002639
Fe	57	3	He	42.193	0.0259	1210.10	0.0006	0.001429
Fe	57	3	He	35.318	0.0219	1040.08	0.0006	0.001429
Fe	57	3	He	32.17	0.0201	940.07	0.0006	0.001429
Co	59	3	He	0.008	0.0026	120.00	0.0563	0.002149
Co	59	3	He	0.014	0.003	140.00	0.0563	0.002149
Co	59	3	He	0.007	0.0026	120.01	0.0563	0.002149
Ni	60	3	He	-0.132	0.0017	140.00	0.0086	0.002834
Ni	60	3	He	-0.033	0.0025	210.01	0.0086	0.002834
Ni	60	3	He	0.083	0.0035	290.01	0.0086	0.002834
Cu	63	3	He	0.08	0.0068	560.03	0.0257	0.004757
Cu	63	3	He	0.046	0.0059	490.03	0.0257	0.004757
Cu	63	3	He	0.062	0.0064	520.02	0.0257	0.004757
Zn	66	3	He	3.698	0.0146	1200.10	0.0029	0.003818
Zn	66	3	He	3.859	0.0151	1240.09	0.0029	0.003818
Zn	66	3	He	4.19	0.016	1310.10	0.0029	0.003818
As	75	3	He	-0.014	0.0008	64.00	0.002	0.0008061
As	75	3	He	-0.085	0.0006	52.00	0.002	0.0008061
As	75	3	He	-0.059	0.0007	56.00	0.002	0.0008061
Sr	88	3	He	-0.032	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.017	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	-0.043	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	2.159	0.0476	4210.79	0.0219	0.0002706
Mo	98	3	He	2.464	0.0543	4660.93	0.0219	0.0002706
Mo	98	3	He	2.659	0.0586	5061.11	0.0219	0.0002706
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	-0.098	0.0149	1320.12	0.0158	0.01648
Sn	120	3	He	-0.188	0.0135	1160.09	0.0158	0.01648
Sn	120	3	He	-0.164	0.0139	1200.09	0.0158	0.01648
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.001	0.0002	60.00	0.0247	0.0001339
Tl	205	3	He	-0.001	0.0001	40.00	0.0247	0.0001339
Tl	205	3	He	0.001	0.0002	60.00	0.0247	0.0001339
Pb	208	3	He	0.008	0.0013	230.01	0.0327	0.00107
Pb	208	3	He	0.012	0.0015	360.02	0.0327	0.00107
Pb	208	3	He	0.008	0.0013	260.01	0.0327	0.00107
U	238	3	He	0.001	0.0001	40.00	0.0493	7.55E-05
U	238	3	He	0.001	0.0001	40.00	0.0493	7.55E-05
U	238	3	He	0	0.0001	30.00	0.0493	7.55E-05
Sc	45	1	No Gas			2500090.59		
Sc	45	1	No Gas			2512176.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2524496.52		
Ge	72	1	No Gas			1218833.18		
Ge	72	1	No Gas			1203297.64		
Ge	72	1	No Gas			1201324.98		
Sc	45	2	H2			180739.12		
Sc	45	2	H2			178890.21		
Sc	45	2	H2			177268.26		
Ge	72	2	H2			158976.06		
Ge	72	2	H2			156982.76		
Ge	72	2	H2			156842.55		
In	115	2	H2			391247.18		
In	115	2	H2			387153.43		
In	115	2	H2			388393.28		
Sc	45	3	He			46645.35		
Sc	45	3	He			47387.89		
Sc	45	3	He			46725.39		
Ge	72	3	He			82286.98		
Ge	72	3	He			82377.14		
Ge	72	3	He			81794.01		
In	115	3	He			88440.87		
In	115	3	He			85864.93		
In	115	3	He			86409.15		
Tb	159	3	He			392694.10		
Tb	159	3	He			398783.43		
Tb	159	3	He			394711.44		
Bi	209	3	He			303646.42		
Bi	209	3	He			304317.30		
Bi	209	3	He			301319.53		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

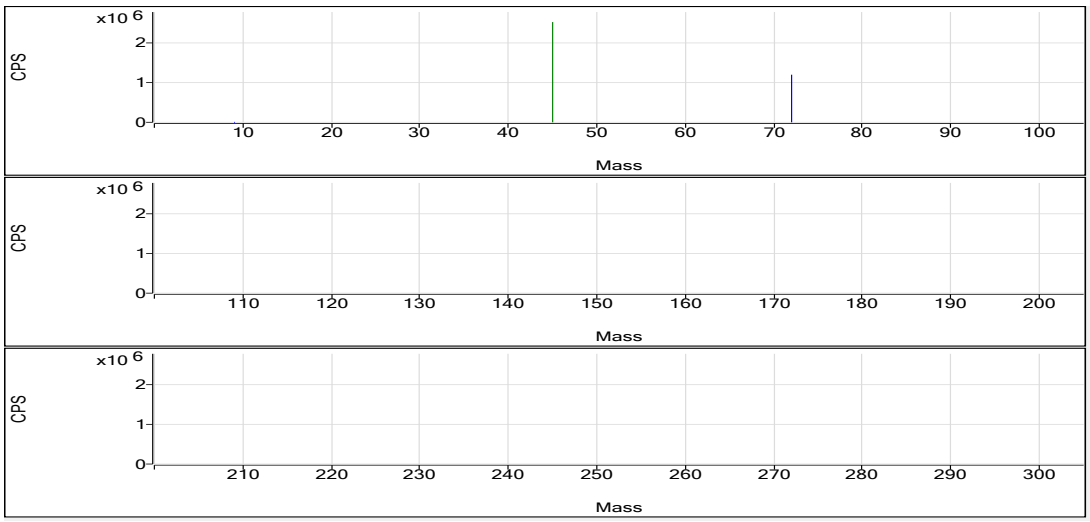
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	417.7	14.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.015	ppb	172.3	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	30.292	ppb	8.0	21476.17	0.4535	Pulse	0.1000	3
Mg	24	45	He	3.308	ppb	19.8	446.69	0.0094	Pulse	0.1000	3
Al	27	45	He	3.125	ppb	39.1	116.67	0.0025	Pulse	0.1000	3
K	39	45	He	-2.952	ppb	N/A	18548.95	0.3916	Pulse	0.1000	3
Ca	44	45	He	0.573	ppb	2971.5	130.01	0.0028	Pulse	0.1000	3
Ti	47	45	He	-0.002	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.185	ppb	N/A	986.71	0.0208	Pulse	0.5000	3
Cr	52	45	He	0.086	ppb	155.3	2016.89	0.0425	Pulse	0.1000	3
Mn	55	45	He	-0.041	ppb	N/A	100.00	0.0021	Pulse	0.1000	3
Fe	57	45	He	10.993	ppb	9.7	370.02	0.0078	Pulse	0.1000	3
Co	59	45	He	-0.004	ppb	N/A	90.00	0.0019	Pulse	0.1000	3
Ni	60	72	He	0.228	ppb	14.1	396.69	0.0048	Pulse	0.1000	3
Cu	63	72	He	0.007	ppb	345.9	410.02	0.0049	Pulse	0.1000	3
Zn	66	72	He	4.340	ppb	5.5	1363.44	0.0165	Pulse	0.1000	3
As	75	72	He	-0.028	ppb	N/A	62.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.030	ppb	N/A	60.00	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.585	ppb	8.9	1123.42	0.0131	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	33.2	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.020	ppb	477.3	1440.12	0.0168	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	6138.0	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	-0.040	ppb	N/A	3.33	0.0000	Pulse	0.1000	3
Tl	205	159	He	0.001	ppb	132.0	60.00	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	81.8	520.03	0.0013	Pulse	0.1000	3
U	238	209	He	-0.001	ppb	N/A	10.00	0.0000	Pulse	0.1000	3

ISTD Table:

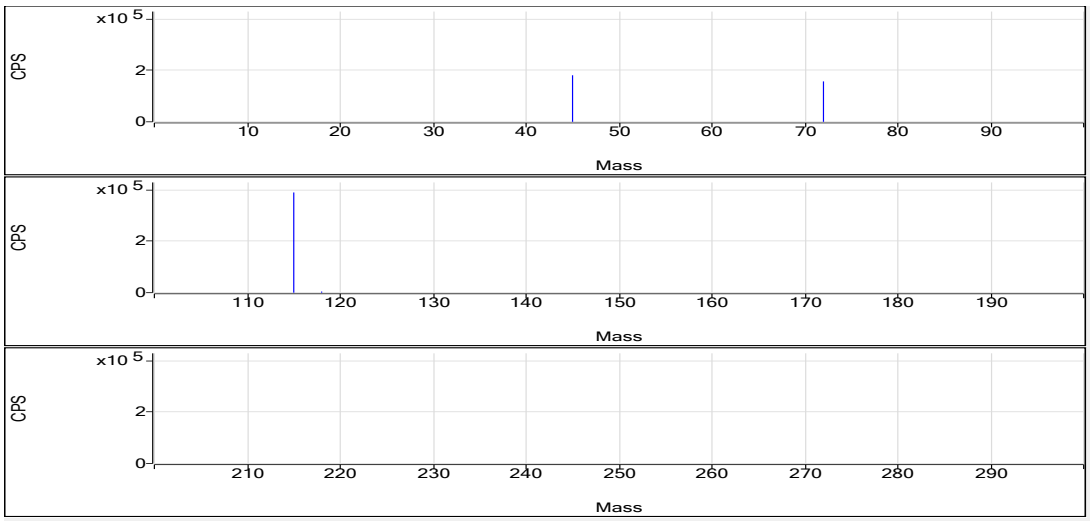
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2524868.35	2.1	105.3	Analog	0.1000	3
No Gas	Ge	72	1198698.71	1.6	103.9	Pulse	0.1000	3
H2	Sc	45	180838.81	0.7	96.7	Pulse	0.1000	3
H2	Ge	72	157015.43	0.4	95.9	Pulse	0.1000	3
H2	In	115	389364.15	0.5	100.1	Pulse	0.1000	3
He	Sc	45	47364.48	1.7	101.5	Pulse	0.1000	3
He	Ge	72	82849.56	0.5	102.0	Pulse	0.1000	3
He	In	115	85739.78	0.2	99.5	Pulse	0.1000	3
He	Tb	159	393337.35	0.6	98.7	Pulse	0.1000	3
He	Bi	209	307513.04	1.1	99.4	Pulse	0.1000	3

No Gas

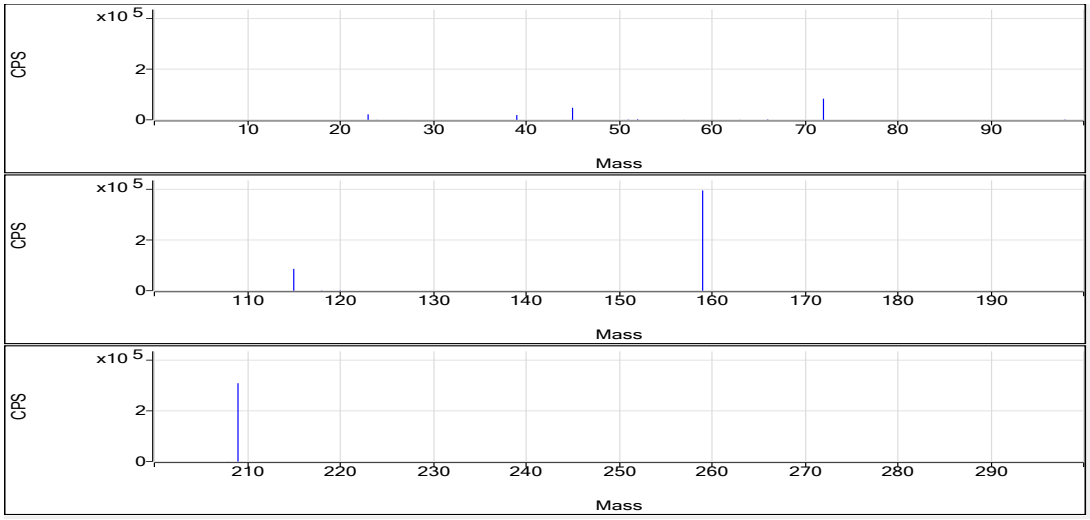


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	-0.004	0	4.00	0.0008	4.685E-06
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	0.012	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.042	0	4.67	0.0004	1.219E-05
Na	23	3	He	32.607	0.4618	21656.44	0.0036	0.3452
Na	23	3	He	27.783	0.4445	21476.18	0.0036	0.3452
Na	23	3	He	30.485	0.4542	21295.90	0.0036	0.3452
Mg	24	3	He	3.993	0.0107	500.02	0.0018	0.003497
Mg	24	3	He	3.243	0.0093	450.02	0.0018	0.003497
Mg	24	3	He	2.687	0.0083	390.02	0.0018	0.003497
Al	27	3	He	4.004	0.003	140.01	0.0006	0.0006432
Al	27	3	He	1.731	0.0017	80.00	0.0006	0.0006432
Al	27	3	He	3.64	0.0028	130.01	0.0006	0.0006432
K	39	3	He	-5.956	0.3881	18201.92	0.0012	0.3951
K	39	3	He	-3.615	0.3909	18882.76	0.0012	0.3951
K	39	3	He	0.715	0.3959	18562.18	0.0012	0.3951
Ca	44	3	He	19.789	0.0041	190.01	0.0001	0.002715
Ca	44	3	He	-12.613	0.0019	90.00	0.0001	0.002715
Ca	44	3	He	-5.457	0.0023	110.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.255	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	-0.156	0.0215	1006.04	0.0219	0.02486
V	51	3	He	-0.177	0.021	1014.04	0.0219	0.02486
V	51	3	He	-0.22	0.02	940.04	0.0219	0.02486
Cr	52	3	He	-0.046	0.0386	1810.18	0.0299	0.03997
Cr	52	3	He	0.221	0.0466	2250.26	0.0299	0.03997
Cr	52	3	He	0.083	0.0424	1990.22	0.0299	0.03997
Mn	55	3	He	-0.073	0.0017	80.00	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.06	0.0019	90.00	0.0128	0.002639
Mn	55	3	He	0.01	0.0028	130.01	0.0128	0.002639
Fe	57	3	He	12.222	0.0085	400.02	0.0006	0.001429
Fe	57	3	He	10.367	0.0075	360.02	0.0006	0.001429
Fe	57	3	He	10.39	0.0075	350.01	0.0006	0.001429
Co	59	3	He	-0.012	0.0015	70.00	0.0563	0.002149
Co	59	3	He	-0.009	0.0017	80.00	0.0563	0.002149
Co	59	3	He	0.007	0.0026	120.00	0.0563	0.002149
Ni	60	3	He	0.264	0.0051	420.03	0.0086	0.002834
Ni	60	3	He	0.218	0.0047	390.02	0.0086	0.002834
Ni	60	3	He	0.202	0.0046	380.02	0.0086	0.002834
Cu	63	3	He	-0.015	0.0044	360.02	0.0257	0.004757
Cu	63	3	He	0.036	0.0057	470.02	0.0257	0.004757
Cu	63	3	He	0.002	0.0048	400.02	0.0257	0.004757
Zn	66	3	He	4.066	0.0157	1290.09	0.0029	0.003818
Zn	66	3	He	4.449	0.0168	1390.12	0.0029	0.003818
Zn	66	3	He	4.505	0.0169	1410.11	0.0029	0.003818
As	75	3	He	0.033	0.0009	72.00	0.002	0.0008061
As	75	3	He	-0.075	0.0007	54.00	0.002	0.0008061
As	75	3	He	-0.042	0.0007	60.00	0.002	0.0008061
Sr	88	3	He	0.022	0.0012	100.00	0.009	0.0009645
Sr	88	3	He	-0.003	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	-0.108	0	0.00	0.009	0.0009645
Mo	98	3	He	0.529	0.0119	1020.07	0.0219	0.0002706
Mo	98	3	He	0.632	0.0141	1210.09	0.0219	0.0002706
Mo	98	3	He	0.594	0.0133	1140.09	0.0219	0.0002706
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	-0.078	0.0152	1310.10	0.0158	0.01648
Sn	120	3	He	0.022	0.0168	1440.12	0.0158	0.01648
Sn	120	3	He	0.117	0.0183	1570.14	0.0158	0.01648
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0004	30.00	0.0149	0.0002698
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Tl	205	3	He	0	0.0001	50.00	0.0247	0.0001339
Tl	205	3	He	0.002	0.0002	70.00	0.0247	0.0001339
Tl	205	3	He	0.001	0.0002	60.00	0.0247	0.0001339
Pb	208	3	He	0.013	0.0015	380.02	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	280.01	0.0327	0.00107
Pb	208	3	He	0.001	0.0011	200.01	0.0327	0.00107
U	238	3	He	-0.002	0	0.00	0.0493	7.55E-05
U	238	3	He	-0.001	0	10.00	0.0493	7.55E-05
U	238	3	He	0	0.0001	20.00	0.0493	7.55E-05
Sc	45	1	No Gas			2481986.99		
Sc	45	1	No Gas			2585381.99		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2507236.06		
Ge	72	1	No Gas			1188789.44		
Ge	72	1	No Gas			1220165.92		
Ge	72	1	No Gas			1187140.76		
Sc	45	2	H2			182208.75		
Sc	45	2	H2			180346.76		
Sc	45	2	H2			179960.92		
Ge	72	2	H2			157702.36		
Ge	72	2	H2			156449.12		
Ge	72	2	H2			156894.82		
In	115	2	H2			389499.72		
In	115	2	H2			387501.83		
In	115	2	H2			391090.89		
Sc	45	3	He			46896.24		
Sc	45	3	He			48311.11		
Sc	45	3	He			46886.09		
Ge	72	3	He			82396.49		
Ge	72	3	He			82889.56		
Ge	72	3	He			83262.62		
In	115	3	He			85934.93		
In	115	3	He			85604.04		
In	115	3	He			85704.39		
Tb	159	3	He			390460.23		
Tb	159	3	He			395213.12		
Tb	159	3	He			394338.71		
Bi	209	3	He			303794.27		
Bi	209	3	He			310719.78		
Bi	209	3	He			308025.07		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 2:16:59 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

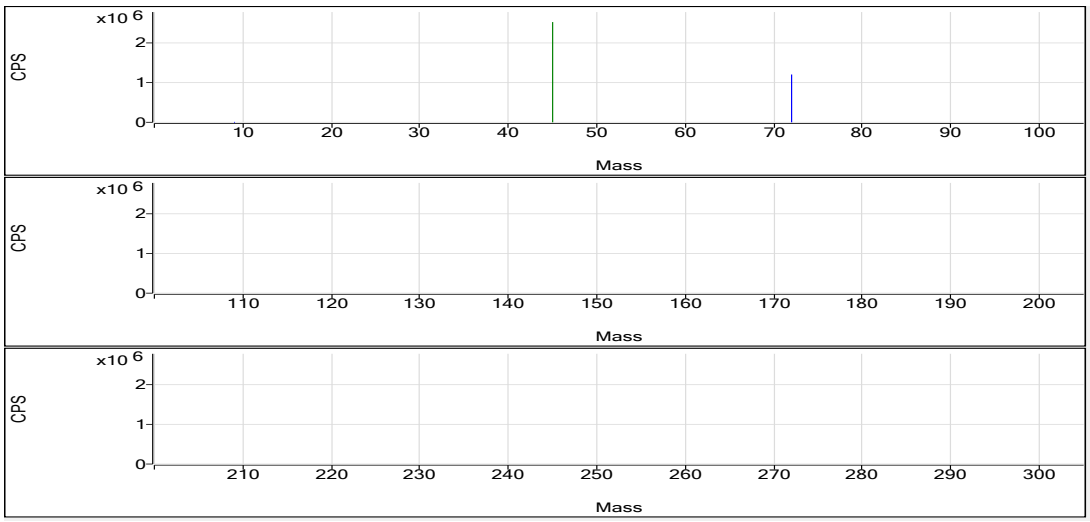
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	175.7	15.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.011	ppb	89.9	2.67	0.0000	Pulse	1.5000	3
Na	23	45	He	17.655	ppb	12.9	19396.57	0.4083	Pulse	0.1000	3
Mg	24	45	He	1.611	ppb	30.4	303.35	0.0064	Pulse	0.1000	3
Al	27	45	He	3.937	ppb	47.3	140.00	0.0029	Pulse	0.1000	3
K	39	45	He	-13.101	ppb	N/A	18045.00	0.3798	Pulse	0.1000	3
Ca	44	45	He	6.444	ppb	371.4	150.01	0.0032	Pulse	0.1000	3
Ti	47	45	He	0.261	ppb	259.7	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.130	ppb	N/A	1046.05	0.0220	Pulse	0.5000	3
Cr	52	45	He	-0.088	ppb	N/A	1773.52	0.0373	Pulse	0.1000	3
Mn	55	45	He	-0.003	ppb	N/A	123.34	0.0026	Pulse	0.1000	3
Fe	57	45	He	6.111	ppb	29.4	236.68	0.0050	Pulse	0.1000	3
Co	59	45	He	-0.008	ppb	N/A	80.00	0.0017	Pulse	0.1000	3
Ni	60	72	He	0.080	ppb	99.9	293.35	0.0035	Pulse	0.1000	3
Cu	63	72	He	0.011	ppb	89.9	420.02	0.0050	Pulse	0.1000	3
Zn	66	72	He	3.905	ppb	4.0	1266.77	0.0152	Pulse	0.1000	3
As	75	72	He	-0.054	ppb	N/A	58.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.016	ppb	N/A	70.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.236	ppb	11.1	466.69	0.0054	Pulse	0.1000	3
Ag	107	115	He	-0.008	ppb	N/A	20.00	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	99.5	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.012	ppb	1576.2	1430.21	0.0167	Pulse	0.1000	3
Sb	121	115	He	-0.005	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Ba	137	115	He	-0.040	ppb	N/A	3.33	0.0000	Pulse	0.1000	3
Tl	205	159	He	-0.001	ppb	N/A	46.67	0.0001	Pulse	0.1000	3
Pb	208	159	He	0.005	ppb	119.8	493.36	0.0012	Pulse	0.1000	3
U	238	209	He	0.001	ppb	56.8	33.33	0.0001	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2526964.86	1.6	105.3	Analog	0.1000	3
No Gas	Ge	72	1205181.55	0.6	104.5	Pulse	0.1000	3
H2	Sc	45	183251.28	1.5	98.0	Pulse	0.1000	3
H2	Ge	72	158807.63	0.4	97.0	Pulse	0.1000	3
H2	In	115	390382.81	1.0	100.3	Pulse	0.1000	3
He	Sc	45	47505.01	0.8	101.9	Pulse	0.1000	3
He	Ge	72	83412.98	1.3	102.7	Pulse	0.1000	3
He	In	115	85777.16	0.8	99.5	Pulse	0.1000	3
He	Tb	159	398281.84	0.6	99.9	Pulse	0.1000	3
He	Bi	209	306979.14	0.8	99.3	Pulse	0.1000	3

No Gas



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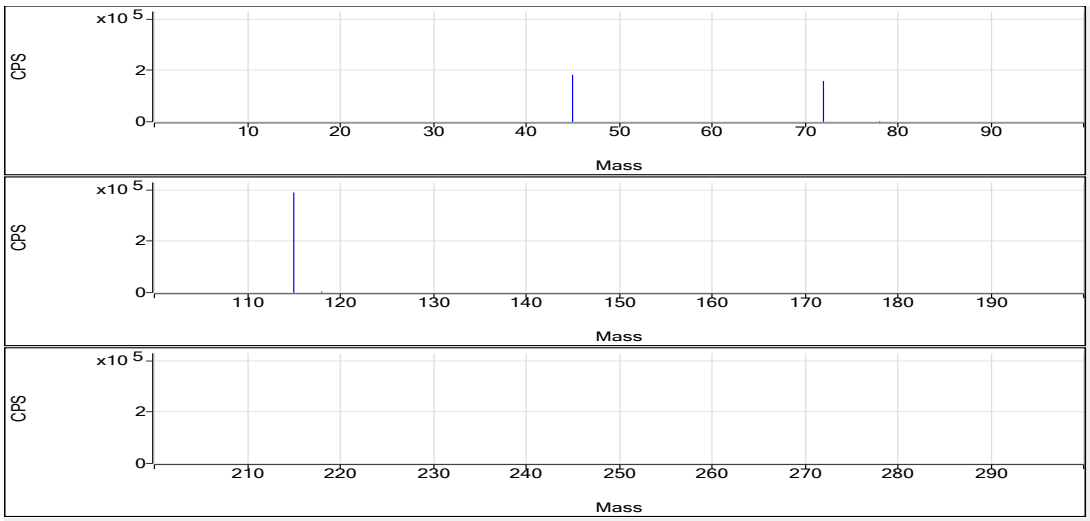
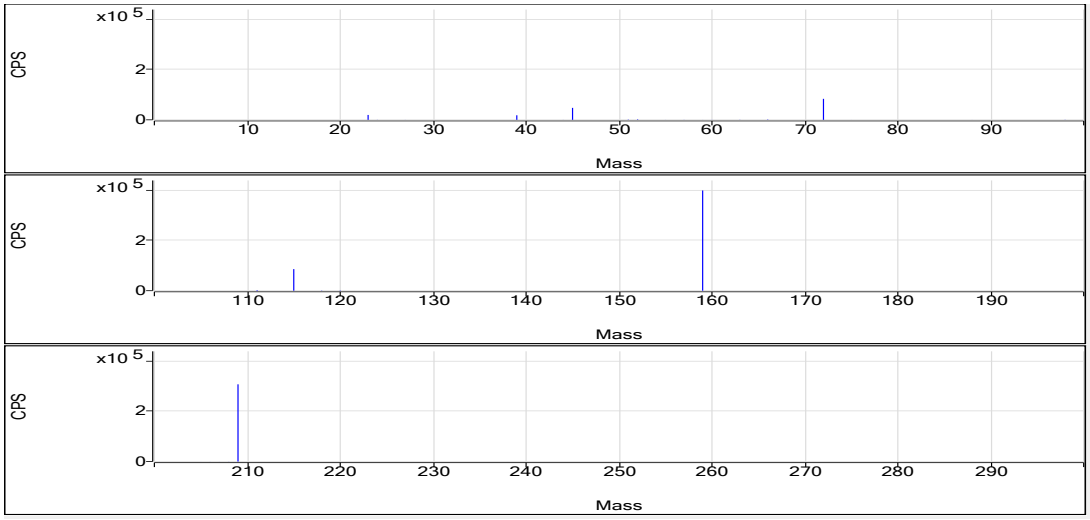


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	10.00	0.0008	4.685E-06
Be	9	1	No Gas	0.001	0	14.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Se	78	2	H2	0.011	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.001	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.021	0	3.33	0.0004	1.219E-05
Na	23	3	He	18.987	0.4131	19773.77	0.0036	0.3452
Na	23	3	He	15.033	0.3989	18972.59	0.0036	0.3452
Na	23	3	He	18.945	0.4129	19443.34	0.0036	0.3452
Mg	24	3	He	1.661	0.0065	310.02	0.0018	0.003497
Mg	24	3	He	1.098	0.0055	260.01	0.0018	0.003497
Mg	24	3	He	2.075	0.0072	340.01	0.0018	0.003497
Al	27	3	He	2.828	0.0023	110.00	0.0006	0.0006432
Al	27	3	He	6.089	0.0042	200.01	0.0006	0.0006432
Al	27	3	He	2.894	0.0023	110.00	0.0006	0.0006432
K	39	3	He	-10.939	0.3823	18301.95	0.0012	0.3951
K	39	3	He	-5.898	0.3882	18462.20	0.0012	0.3951
K	39	3	He	-22.464	0.3689	17370.86	0.0012	0.3951
Ca	44	3	He	34.031	0.005	240.01	0.0001	0.002715
Ca	44	3	He	-5.948	0.0023	110.01	0.0001	0.002715
Ca	44	3	He	-8.752	0.0021	100.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	1.044	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	-0.134	0.0219	1050.05	0.0219	0.02486
V	51	3	He	-0.077	0.0232	1102.05	0.0219	0.02486
V	51	3	He	-0.18	0.0209	986.04	0.0219	0.02486
Cr	52	3	He	-0.219	0.0334	1600.16	0.0299	0.03997
Cr	52	3	He	0.042	0.0412	1960.22	0.0299	0.03997
Cr	52	3	He	-0.087	0.0374	1760.18	0.0299	0.03997
Mn	55	3	He	-0.043	0.0021	100.00	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.025	0.0023	110.00	0.0128	0.002639
Mn	55	3	He	0.059	0.0034	160.01	0.0128	0.002639
Fe	57	3	He	5.811	0.0048	230.01	0.0006	0.001429
Fe	57	3	He	8.037	0.0061	290.01	0.0006	0.001429
Fe	57	3	He	4.486	0.004	190.01	0.0006	0.001429
Co	59	3	He	-0.001	0.0021	100.00	0.0563	0.002149
Co	59	3	He	-0.008	0.0017	80.00	0.0563	0.002149
Co	59	3	He	-0.016	0.0013	60.00	0.0563	0.002149
Ni	60	3	He	0.16	0.0042	350.02	0.0086	0.002834
Ni	60	3	He	0	0.0028	240.01	0.0086	0.002834
Ni	60	3	He	0.08	0.0035	290.01	0.0086	0.002834
Cu	63	3	He	0.007	0.0049	410.02	0.0257	0.004757
Cu	63	3	He	0.022	0.0053	450.02	0.0257	0.004757
Cu	63	3	He	0.004	0.0049	400.02	0.0257	0.004757
Zn	66	3	He	3.728	0.0147	1220.10	0.0029	0.003818
Zn	66	3	He	3.964	0.0154	1300.11	0.0029	0.003818
Zn	66	3	He	4.022	0.0155	1280.09	0.0029	0.003818
As	75	3	He	-0.065	0.0007	56.00	0.002	0.0008061
As	75	3	He	-0.001	0.0008	68.00	0.002	0.0008061
As	75	3	He	-0.097	0.0006	50.00	0.002	0.0008061
Sr	88	3	He	0.05	0.0014	120.00	0.009	0.0009645
Sr	88	3	He	-0.03	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.069	0.0003	30.00	0.009	0.0009645
Mo	98	3	He	0.213	0.0049	420.03	0.0219	0.0002706
Mo	98	3	He	0.23	0.0053	460.02	0.0219	0.0002706
Mo	98	3	He	0.264	0.0061	520.03	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0004	30.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.013	0	0.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.076	0.0153	1300.11	0.0158	0.01648
Sn	120	3	He	0.224	0.02	1730.40	0.0158	0.01648
Sn	120	3	He	-0.112	0.0147	1260.11	0.0158	0.01648
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Tl	205	3	He	0	0.0001	50.00	0.0247	0.0001339
Tl	205	3	He	0.002	0.0002	70.00	0.0247	0.0001339
Tl	205	3	He	-0.003	0	20.00	0.0247	0.0001339
Pb	208	3	He	0.009	0.0014	320.02	0.0327	0.00107
Pb	208	3	He	-0.002	0.001	190.01	0.0327	0.00107
Pb	208	3	He	0.008	0.0013	340.02	0.0327	0.00107
U	238	3	He	0	0.0001	30.00	0.0493	7.55E-05
U	238	3	He	0	0.0001	30.00	0.0493	7.55E-05
U	238	3	He	0.001	0.0001	40.00	0.0493	7.55E-05
Sc	45	1	No Gas			2569638.71		
Sc	45	1	No Gas			2491375.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2519879.96		
Ge	72	1	No Gas			1207926.00		
Ge	72	1	No Gas			1210588.58		
Ge	72	1	No Gas			1197030.06		
Sc	45	2	H2			186278.84		
Sc	45	2	H2			181004.57		
Sc	45	2	H2			182470.43		
Ge	72	2	H2			159015.73		
Ge	72	2	H2			158068.09		
Ge	72	2	H2			159339.06		
In	115	2	H2			394630.03		
In	115	2	H2			387589.45		
In	115	2	H2			388928.94		
Sc	45	3	He			47869.55		
Sc	45	3	He			47558.59		
Sc	45	3	He			47086.90		
Ge	72	3	He			83161.95		
Ge	72	3	He			84639.86		
Ge	72	3	He			82437.12		
In	115	3	He			85150.64		
In	115	3	He			86478.40		
In	115	3	He			85723.74		
Tb	159	3	He			396042.03		
Tb	159	3	He			397719.60		
Tb	159	3	He			401083.90		
Bi	209	3	He			304546.56		
Bi	209	3	He			309375.46		
Bi	209	3	He			307015.41		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

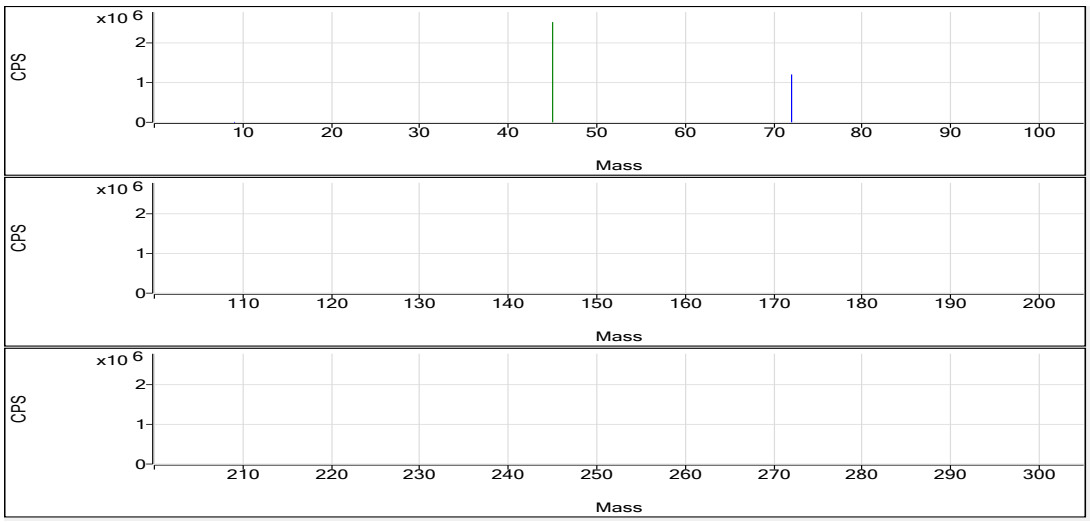
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	221.3	16.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.015	ppb	278.1	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	13.429	ppb	11.3	18829.22	0.3932	Pulse	0.1000	3
Mg	24	45	He	0.764	ppb	25.6	233.34	0.0049	Pulse	0.1000	3
Al	27	45	He	0.811	ppb	71.8	53.33	0.0011	Pulse	0.1000	3
K	39	45	He	-14.571	ppb	N/A	18108.41	0.3781	Pulse	0.1000	3
Ca	44	45	He	16.705	ppb	108.4	183.34	0.0038	Pulse	0.1000	3
Ti	47	45	He	0.002	ppb	14422.9	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.069	ppb	N/A	1118.06	0.0234	Pulse	0.5000	3
Cr	52	45	He	-0.094	ppb	N/A	1780.17	0.0371	Pulse	0.1000	3
Mn	55	45	He	-0.027	ppb	N/A	110.00	0.0023	Pulse	0.1000	3
Fe	57	45	He	4.393	ppb	43.8	190.01	0.0040	Pulse	0.1000	3
Co	59	45	He	-0.010	ppb	N/A	76.67	0.0016	Pulse	0.1000	3
Ni	60	72	He	0.044	ppb	167.6	263.34	0.0032	Pulse	0.1000	3
Cu	63	72	He	0.000	ppb	N/A	390.02	0.0048	Pulse	0.1000	3
Zn	66	72	He	4.116	ppb	7.1	1296.77	0.0158	Pulse	0.1000	3
As	75	72	He	-0.064	ppb	N/A	55.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.005	ppb	N/A	80.00	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.135	ppb	11.3	280.01	0.0032	Pulse	0.1000	3
Ag	107	115	He	-0.008	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.044	ppb	N/A	1370.12	0.0158	Pulse	0.1000	3
Sb	121	115	He	-0.008	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Ba	137	115	He	-0.032	ppb	N/A	6.67	0.0001	Pulse	0.1000	3
Tl	205	159	He	0.001	ppb	514.0	60.00	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.004	ppb	101.0	480.02	0.0012	Pulse	0.1000	3
U	238	209	He	-0.001	ppb	N/A	10.00	0.0000	Pulse	0.1000	3

ISTD Table:

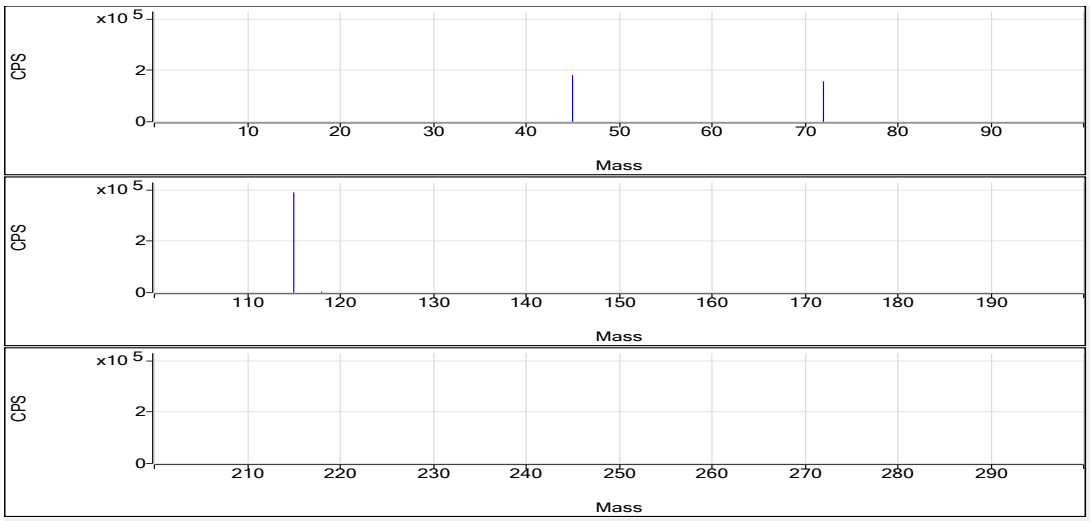
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2529623.35	1.2	105.5	Analog	0.1000	3
No Gas	Ge	72	1207494.70	1.2	104.7	Pulse	0.1000	3
H2	Sc	45	181409.27	0.9	97.0	Pulse	0.1000	3
H2	Ge	72	157341.33	0.7	96.1	Pulse	0.1000	3
H2	In	115	389320.27	0.6	100.1	Pulse	0.1000	3
He	Sc	45	47896.08	1.9	102.7	Pulse	0.1000	3
He	Ge	72	82035.22	1.2	101.0	Pulse	0.1000	3
He	In	115	86795.74	1.0	100.7	Pulse	0.1000	3
He	Tb	159	395517.91	1.1	99.2	Pulse	0.1000	3
He	Bi	209	305896.44	0.3	98.9	Pulse	0.1000	3

No Gas

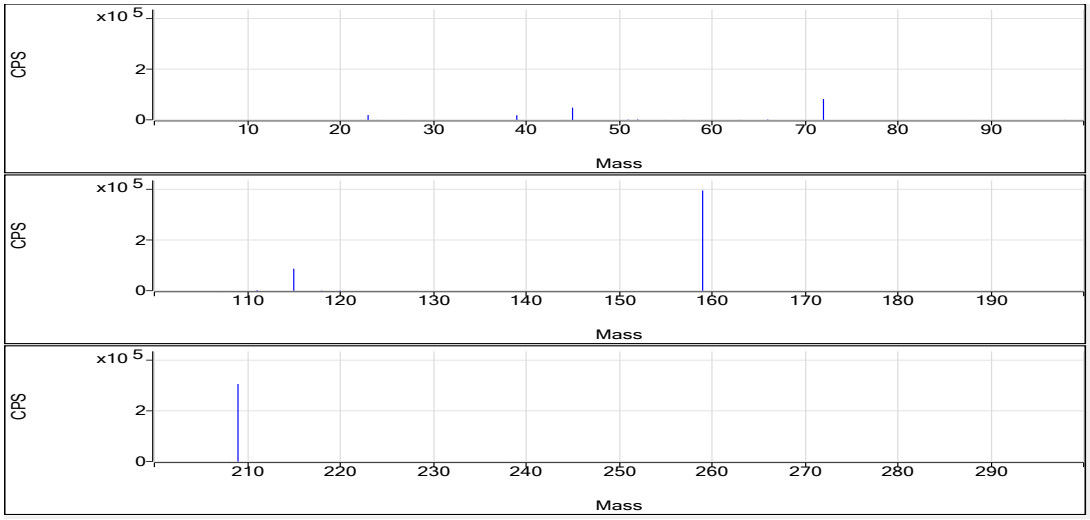


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	26.00	0.0008	4.685E-06
Be	9	1	No Gas	0.001	0	14.00	0.0008	4.685E-06
Be	9	1	No Gas	-0.002	0	8.00	0.0008	4.685E-06
Se	78	2	H2	0.063	0	6.00	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Na	23	3	He	12.023	0.3882	18962.75	0.0036	0.3452
Na	23	3	He	13.219	0.3924	18762.41	0.0036	0.3452
Na	23	3	He	15.045	0.399	18762.49	0.0036	0.3452
Mg	24	3	He	0.903	0.0051	250.01	0.0018	0.003497
Mg	24	3	He	0.849	0.005	240.01	0.0018	0.003497
Mg	24	3	He	0.54	0.0045	210.01	0.0018	0.003497
Al	27	3	He	0.3	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	0.688	0.001	50.00	0.0006	0.0006432
Al	27	3	He	1.445	0.0015	70.00	0.0006	0.0006432
K	39	3	He	-20.713	0.371	18121.77	0.0012	0.3951
K	39	3	He	-4.048	0.3904	18662.43	0.0012	0.3951
K	39	3	He	-18.952	0.373	17541.03	0.0012	0.3951
Ca	44	3	He	-0.795	0.0027	130.01	0.0001	0.002715
Ca	44	3	He	15.547	0.0038	180.01	0.0001	0.002715
Ca	44	3	He	35.361	0.0051	240.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.266	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	-0.13	0.022	1076.05	0.0219	0.02486
V	51	3	He	-0.045	0.0239	1142.06	0.0219	0.02486
V	51	3	He	-0.032	0.0242	1136.06	0.0219	0.02486
Cr	52	3	He	-0.07	0.0379	1850.19	0.0299	0.03997
Cr	52	3	He	-0.043	0.0387	1850.17	0.0299	0.03997
Cr	52	3	He	-0.17	0.0349	1640.15	0.0299	0.03997
Mn	55	3	He	0.018	0.0029	140.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.059	0.0019	90.00	0.0128	0.002639
Mn	55	3	He	-0.04	0.0021	100.00	0.0128	0.002639
Fe	57	3	He	2.474	0.0029	140.01	0.0006	0.001429
Fe	57	3	He	4.381	0.004	190.01	0.0006	0.001429
Fe	57	3	He	6.325	0.0051	240.01	0.0006	0.001429
Co	59	3	He	-0.005	0.0018	90.00	0.0563	0.002149
Co	59	3	He	-0.027	0.0006	30.00	0.0563	0.002149
Co	59	3	He	0.003	0.0023	110.00	0.0563	0.002149
Ni	60	3	He	-0.036	0.0025	210.01	0.0086	0.002834
Ni	60	3	He	0.058	0.0033	270.01	0.0086	0.002834
Ni	60	3	He	0.111	0.0038	310.01	0.0086	0.002834
Cu	63	3	He	0.002	0.0048	400.02	0.0257	0.004757
Cu	63	3	He	-0.003	0.0047	380.02	0.0257	0.004757
Cu	63	3	He	0	0.0048	390.02	0.0257	0.004757
Zn	66	3	He	4.434	0.0167	1390.11	0.0029	0.003818
Zn	66	3	He	3.855	0.015	1220.10	0.0029	0.003818
Zn	66	3	He	4.058	0.0156	1280.10	0.0029	0.003818
As	75	3	He	-0.1	0.0006	50.00	0.002	0.0008061
As	75	3	He	0.016	0.0008	68.00	0.002	0.0008061
As	75	3	He	-0.107	0.0006	48.00	0.002	0.0008061
Sr	88	3	He	0.007	0.001	90.00	0.009	0.0009645
Sr	88	3	He	-0.043	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	0.022	0.0012	100.00	0.009	0.0009645
Mo	98	3	He	0.123	0.003	260.01	0.0219	0.0002706
Mo	98	3	He	0.13	0.0031	270.01	0.0219	0.0002706
Mo	98	3	He	0.152	0.0036	310.02	0.0219	0.0002706
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.018	0.0162	1420.13	0.0158	0.01648
Sn	120	3	He	-0.006	0.0164	1420.12	0.0158	0.01648
Sn	120	3	He	-0.108	0.0148	1270.11	0.0158	0.01648
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.002	0.0002	70.00	0.0247	0.0001339
Tl	205	3	He	0.004	0.0002	90.00	0.0247	0.0001339
Tl	205	3	He	-0.003	0.0001	20.00	0.0247	0.0001339
Pb	208	3	He	-0.001	0.001	210.01	0.0327	0.00107
Pb	208	3	He	0.006	0.0013	280.02	0.0327	0.00107
Pb	208	3	He	0.008	0.0013	270.01	0.0327	0.00107
U	238	3	He	0	0.0001	20.00	0.0493	7.55E-05
U	238	3	He	-0.002	0	0.00	0.0493	7.55E-05
U	238	3	He	-0.001	0	10.00	0.0493	7.55E-05
Sc	45	1	No Gas			2534637.62		
Sc	45	1	No Gas			2557539.49		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2496692.93		
Ge	72	1	No Gas			1205998.81		
Ge	72	1	No Gas			1222474.36		
Ge	72	1	No Gas			1194010.92		
Sc	45	2	H2			182257.65		
Sc	45	2	H2			182372.09		
Sc	45	2	H2			179598.06		
Ge	72	2	H2			156023.93		
Ge	72	2	H2			157822.36		
Ge	72	2	H2			158177.69		
In	115	2	H2			391809.13		
In	115	2	H2			387626.17		
In	115	2	H2			388525.50		
Sc	45	3	He			48852.32		
Sc	45	3	He			47809.07		
Sc	45	3	He			47026.84		
Ge	72	3	He			83101.11		
Ge	72	3	He			81119.95		
Ge	72	3	He			81884.60		
In	115	3	He			87706.29		
In	115	3	He			86710.38		
In	115	3	He			85995.44		
Tb	159	3	He			400671.52		
Tb	159	3	He			392201.44		
Tb	159	3	He			393680.78		
Bi	209	3	He			306904.04		
Bi	209	3	He			304929.60		
Bi	209	3	He			305855.68		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

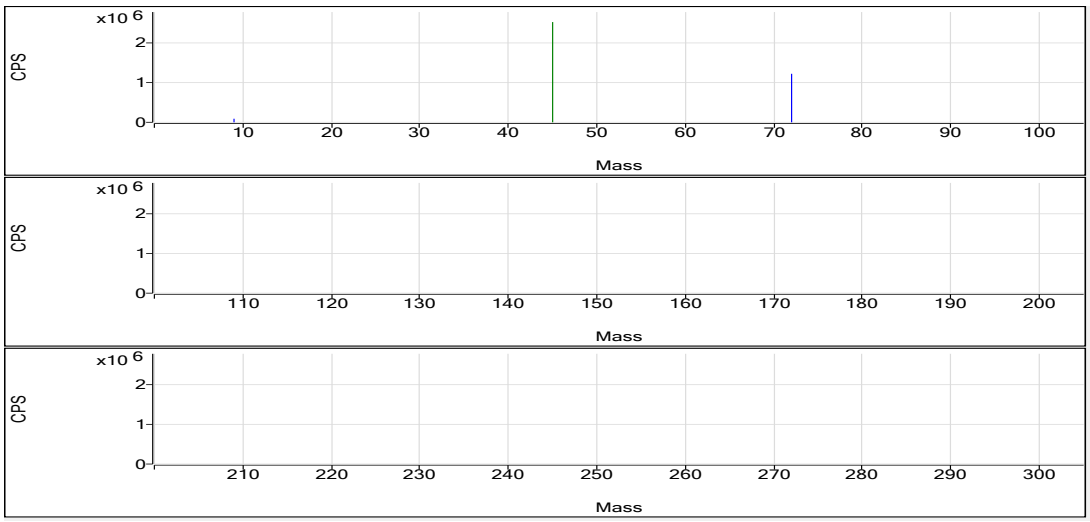
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.543	ppb	0.3	89563.14	0.0355	Pulse	0.5000	3
Se	78	72	H2	50.789	ppb	1.9	3429.75	0.0212	Pulse	1.5000	3
Na	23	45	He	4833.708	ppb	1.3	846901.13	17.6356	Pulse	0.1000	3
Mg	24	45	He	5007.187	ppb	1.8	431590.33	8.9880	Pulse	0.1000	3
Al	27	45	He	4924.868	ppb	0.8	138398.27	2.8819	Pulse	0.1000	3
K	39	45	He	5016.159	ppb	0.9	299450.64	6.2355	Pulse	0.1000	3
Ca	44	45	He	5161.628	ppb	1.8	16877.06	0.3514	Pulse	0.1000	3
Ti	47	45	He	5058.676	ppb	2.0	130431.54	2.7163	Pulse	0.1000	3
V	51	45	He	510.854	ppb	1.2	537438.00	11.1917	Pulse	0.5000	3
Cr	52	45	He	488.313	ppb	0.8	704040.20	14.6604	Pulse	0.1000	3
Mn	55	45	He	506.156	ppb	1.3	312072.78	6.4986	Pulse	0.1000	3
Fe	57	45	He	5135.625	ppb	1.1	143353.39	2.9852	Pulse	0.1000	3
Co	59	45	He	493.683	ppb	1.5	1334365.29	27.7877	Pulse	0.1000	3
Ni	60	72	He	520.527	ppb	0.4	376993.39	4.4706	Pulse	0.1000	3
Cu	63	72	He	496.024	ppb	0.6	1074176.52	12.7382	Pulse	0.1000	3
Zn	66	72	He	512.741	ppb	0.9	126221.69	1.4967	Pulse	0.1000	3
As	75	72	He	516.676	ppb	1.0	89335.21	1.0594	Pulse	0.5000	3
Sr	88	115	He	50.716	ppb	2.5	38884.22	0.4559	Pulse	0.1000	3
Mo	98	115	He	53.159	ppb	2.1	99430.47	1.1659	Pulse	0.1000	3
Ag	107	115	He	52.138	ppb	2.0	206762.07	2.4243	Pulse	0.1000	3
Cd	111	115	He	52.025	ppb	2.3	23723.50	0.2782	Pulse	0.5000	3
Sn	120	115	He	51.881	ppb	2.9	71300.26	0.8361	Pulse	0.1000	3
Sb	121	115	He	52.395	ppb	1.8	66399.83	0.7785	Pulse	0.1000	3
Ba	137	115	He	523.230	ppb	2.7	214163.05	2.5114	Pulse	0.1000	3
Tl	205	159	He	51.115	ppb	0.3	504034.54	1.2640	Pulse	0.1000	3
Pb	208	159	He	51.464	ppb	0.2	672093.75	1.6855	Pulse	0.1000	3
U	238	209	He	50.915	ppb	0.6	769823.64	2.5081	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2522460.59	0.6	105.2	Analog	0.1000	3
No Gas	Ge	72	1220697.64	0.7	105.8	Pulse	0.1000	3
H2	Sc	45	185424.91	0.8	99.2	Pulse	0.1000	3
H2	Ge	72	161840.34	1.0	98.9	Pulse	0.1000	3
H2	In	115	392402.90	0.3	100.9	Pulse	0.1000	3
He	Sc	45	48026.81	1.5	103.0	Pulse	0.1000	3
He	Ge	72	84328.98	0.7	103.9	Pulse	0.1000	3
He	In	115	85310.70	2.3	99.0	Pulse	0.1000	3
He	Tb	159	398755.78	0.5	100.0	Pulse	0.1000	3
He	Bi	209	306931.21	0.2	99.2	Pulse	0.1000	3

No Gas



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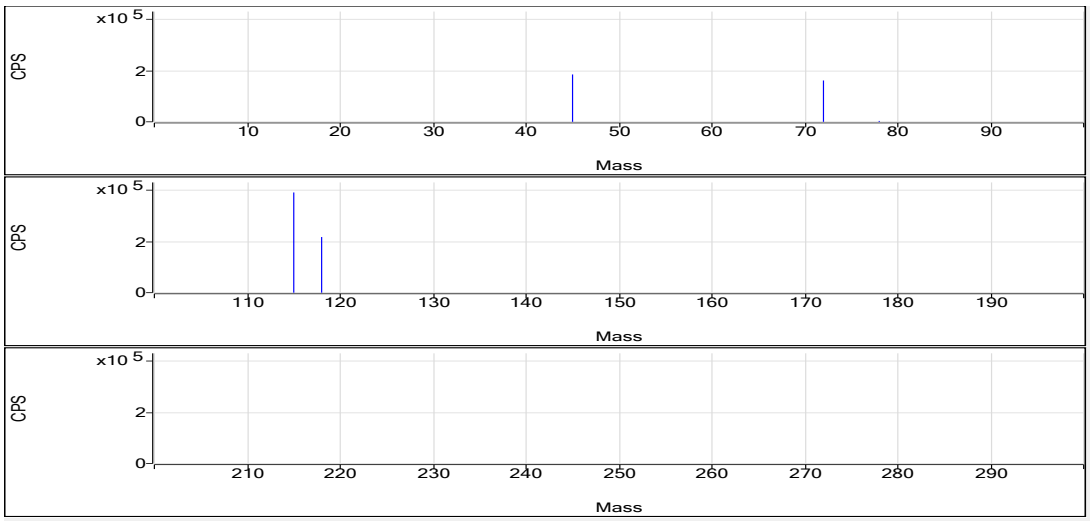
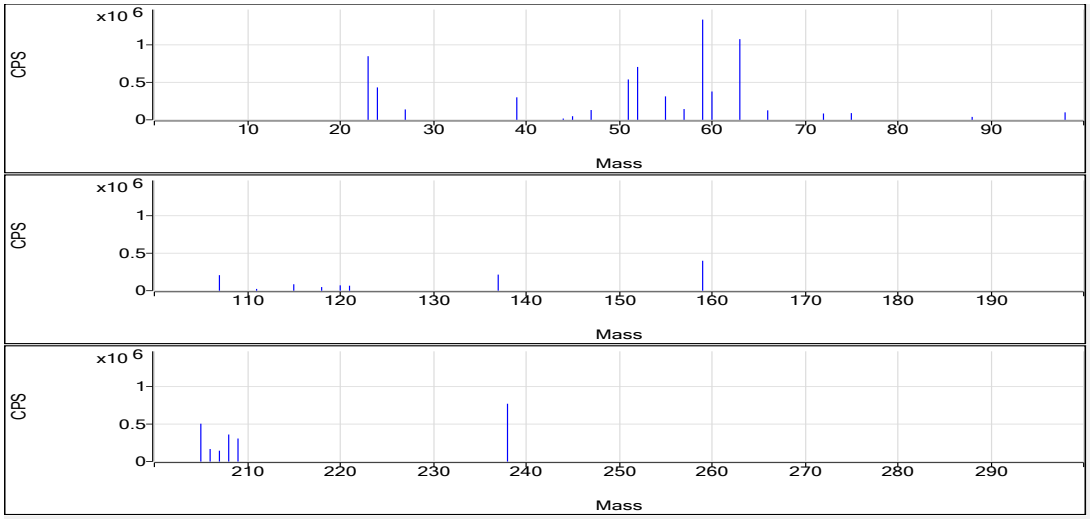


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.375	0.0354	89843.17	0.0008	4.685E-06
Be	9	1	No Gas	46.591	0.0355	89570.12	0.0008	4.685E-06
Be	9	1	No Gas	46.662	0.0356	89276.14	0.0008	4.685E-06
Se	78	2	H2	51.63	0.0215	3453.09	0.0004	1.219E-05
Se	78	2	H2	50.969	0.0213	3443.09	0.0004	1.219E-05
Se	78	2	H2	49.768	0.0208	3393.08	0.0004	1.219E-05
Na	23	3	He	4901.314	17.8774	850398.74	0.0036	0.3452
Na	23	3	He	4817.006	17.5758	837997.33	0.0036	0.3452
Na	23	3	He	4782.802	17.4535	852307.33	0.0036	0.3452
Mg	24	3	He	5086.232	9.1298	434291.36	0.0018	0.003497
Mg	24	3	He	5028.841	9.0269	430391.20	0.0018	0.003497
Mg	24	3	He	4906.487	8.8073	430088.43	0.0018	0.003497
Al	27	3	He	4970.094	2.9083	138344.10	0.0006	0.0006432
Al	27	3	He	4912.639	2.8747	137063.11	0.0006	0.0006432
Al	27	3	He	4891.872	2.8626	139787.61	0.0006	0.0006432
K	39	3	He	5061.874	6.2887	299145.17	0.0012	0.3951
K	39	3	He	5013.429	6.2323	297151.34	0.0012	0.3951
K	39	3	He	4973.173	6.1855	302055.41	0.0012	0.3951
Ca	44	3	He	5231.704	0.3561	16940.36	0.0001	0.002715
Ca	44	3	He	5054.79	0.3442	16409.94	0.0001	0.002715
Ca	44	3	He	5198.391	0.3539	17280.87	0.0001	0.002715
Ti	47	3	He	5144.837	2.7626	131411.69	0.0005	7.003E-05
Ti	47	3	He	5083.99	2.7299	130159.49	0.0005	7.003E-05
Ti	47	3	He	4947.202	2.6565	129723.45	0.0005	7.003E-05
V	51	3	He	514.306	11.2672	535961.13	0.0219	0.02486
V	51	3	He	514.712	11.276	537630.44	0.0219	0.02486
V	51	3	He	503.544	11.0319	538722.44	0.0219	0.02486
Cr	52	3	He	489.557	14.6977	699143.58	0.0299	0.03997
Cr	52	3	He	491.539	14.757	703598.27	0.0299	0.03997
Cr	52	3	He	483.843	14.5266	709378.74	0.0299	0.03997
Mn	55	3	He	513.044	6.587	313331.91	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	505.334	6.488	309342.85	0.0128	0.002639
Mn	55	3	He	500.089	6.4207	313543.57	0.0128	0.002639
Fe	57	3	He	5175.521	3.0084	143102.74	0.0006	0.001429
Fe	57	3	He	5160.336	2.9995	143014.82	0.0006	0.001429
Fe	57	3	He	5071.019	2.9476	143942.62	0.0006	0.001429
Co	59	3	He	499.428	28.1111	1337199.20	0.0563	0.002149
Co	59	3	He	496.239	27.9316	1331751.54	0.0563	0.002149
Co	59	3	He	485.381	27.3205	1334145.14	0.0563	0.002149
Ni	60	3	He	519.189	4.4591	378139.29	0.0086	0.002834
Ni	60	3	He	519.396	4.4609	377036.17	0.0086	0.002834
Ni	60	3	He	522.996	4.4918	375804.72	0.0086	0.002834
Cu	63	3	He	495.09	12.7143	1078187.95	0.0257	0.004757
Cu	63	3	He	493.79	12.6809	1071794.20	0.0257	0.004757
Cu	63	3	He	499.192	12.8196	1072547.41	0.0257	0.004757
Zn	66	3	He	517.496	1.5106	128098.29	0.0029	0.003818
Zn	66	3	He	511.841	1.4941	126282.33	0.0029	0.003818
Zn	66	3	He	508.887	1.4855	124284.46	0.0029	0.003818
As	75	3	He	515.45	1.0569	89626.32	0.002	0.0008061
As	75	3	He	512.25	1.0503	88775.16	0.002	0.0008061
As	75	3	He	522.328	1.071	89604.15	0.002	0.0008061
Sr	88	3	He	49.256	0.4428	38242.66	0.009	0.0009645
Sr	88	3	He	51.486	0.4628	38452.74	0.009	0.0009645
Sr	88	3	He	51.407	0.4621	39957.25	0.009	0.0009645
Mo	98	3	He	52.912	1.1604	100225.21	0.0219	0.0002706
Mo	98	3	He	54.37	1.1924	99077.88	0.0219	0.0002706
Mo	98	3	He	52.196	1.1447	98988.32	0.0219	0.0002706
Ag	107	3	He	51.433	2.3916	206558.16	0.0465	0.0006206
Ag	107	3	He	53.315	2.4791	205990.00	0.0465	0.0006206
Ag	107	3	He	51.664	2.4023	207738.06	0.0465	0.0006206
Cd	111	3	He	51.854	0.2773	23946.54	0.0053	0
Cd	111	3	He	53.296	0.285	23678.11	0.0053	0
Cd	111	3	He	50.925	0.2723	23545.86	0.0053	0
Sn	120	3	He	51.419	0.8288	71584.40	0.0158	0.01648
Sn	120	3	He	53.558	0.8626	71676.20	0.0158	0.01648
Sn	120	3	He	50.664	0.8169	70640.17	0.0158	0.01648
Sb	121	3	He	51.584	0.7665	66198.37	0.0149	0.0002698
Sb	121	3	He	53.4	0.7934	65927.46	0.0149	0.0002698
Sb	121	3	He	52.203	0.7757	67073.66	0.0149	0.0002698
Ba	137	3	He	513.793	2.4661	212993.16	0.0048	0.0002317
Ba	137	3	He	539.294	2.5885	215078.92	0.0048	0.0002317
Ba	137	3	He	516.604	2.4796	214417.07	0.0048	0.0002317
Tl	205	3	He	51.309	1.2688	504658.94	0.0247	0.0001339
Tl	205	3	He	50.965	1.2603	501185.58	0.0247	0.0001339
Tl	205	3	He	51.071	1.2629	506259.09	0.0247	0.0001339
Pb	208	3	He	51.451	1.685	360598.28	0.0327	0.00107
Pb	208	3	He	51.56	1.6886	357814.21	0.0327	0.00107
Pb	208	3	He	51.382	1.6828	362028.16	0.0327	0.00107
U	238	3	He	50.974	2.511	769764.60	0.0493	7.55E-05
U	238	3	He	50.565	2.4909	765857.18	0.0493	7.55E-05
U	238	3	He	51.207	2.5225	773849.13	0.0493	7.55E-05
Sc	45	1	No Gas			2539461.84		
Sc	45	1	No Gas			2519996.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2507923.24		
Ge	72	1	No Gas			1230789.90		
Ge	72	1	No Gas			1213028.11		
Ge	72	1	No Gas			1218274.90		
Sc	45	2	H2			186228.49		
Sc	45	2	H2			183757.40		
Sc	45	2	H2			186288.84		
Ge	72	2	H2			160270.11		
Ge	72	2	H2			161876.17		
Ge	72	2	H2			163374.73		
In	115	2	H2			392273.78		
In	115	2	H2			391143.39		
In	115	2	H2			393791.52		
Sc	45	3	He			47568.37		
Sc	45	3	He			47678.97		
Sc	45	3	He			48833.10		
Ge	72	3	He			84801.47		
Ge	72	3	He			84520.53		
Ge	72	3	He			83664.95		
In	115	3	He			86741.40		
In	115	3	He			83470.80		
In	115	3	He			86850.92		
Tb	159	3	He			397740.35		
Tb	159	3	He			397668.31		
Tb	159	3	He			400858.67		
Bi	209	3	He			306553.22		
Bi	209	3	He			307462.91		
Bi	209	3	He			306777.50		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

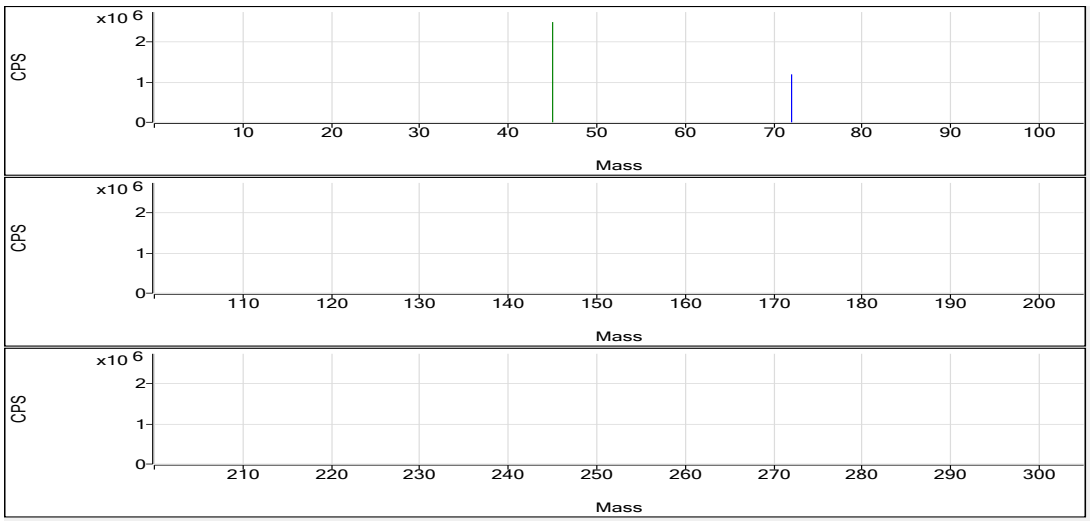
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.023	ppb	9.3	55.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.031	ppb	31.0	4.00	0.0000	Pulse	1.5000	3
Na	23	45	He	8.088	ppb	34.0	18088.20	0.3741	Pulse	0.1000	3
Mg	24	45	He	0.358	ppb	42.7	200.01	0.0041	Pulse	0.1000	3
Al	27	45	He	2.067	ppb	87.6	90.00	0.0019	Pulse	0.1000	3
K	39	45	He	-14.716	ppb	N/A	18275.36	0.3779	Pulse	0.1000	3
Ca	44	45	He	-0.433	ppb	N/A	130.01	0.0027	Pulse	0.1000	3
Ti	47	45	He	1.284	ppb	76.5	36.67	0.0008	Pulse	0.1000	3
V	51	45	He	-0.060	ppb	N/A	1139.39	0.0236	Pulse	0.5000	3
Cr	52	45	He	0.017	ppb	580.5	1956.86	0.0405	Pulse	0.1000	3
Mn	55	45	He	0.031	ppb	160.3	146.67	0.0030	Pulse	0.1000	3
Fe	57	45	He	2.177	ppb	61.6	130.01	0.0027	Pulse	0.1000	3
Co	59	45	He	0.040	ppb	28.9	213.34	0.0044	Pulse	0.1000	3
Ni	60	72	He	0.002	ppb	3164.5	233.34	0.0028	Pulse	0.1000	3
Cu	63	72	He	0.102	ppb	58.8	603.37	0.0074	Pulse	0.1000	3
Zn	66	72	He	3.828	ppb	12.4	1223.44	0.0150	Pulse	0.1000	3
As	75	72	He	0.182	ppb	58.8	96.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	-0.043	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.134	ppb	23.0	276.68	0.0032	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	115.0	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.018	ppb	301.9	1450.13	0.0168	Pulse	0.1000	3
Sb	121	115	He	0.031	ppb	79.3	63.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.032	ppb	241.5	33.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.072	ppb	13.0	756.72	0.0019	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	119.6	533.36	0.0014	Pulse	0.1000	3
U	238	209	He	0.045	ppb	10.2	706.71	0.0023	Pulse	0.1000	3

ISTD Table:

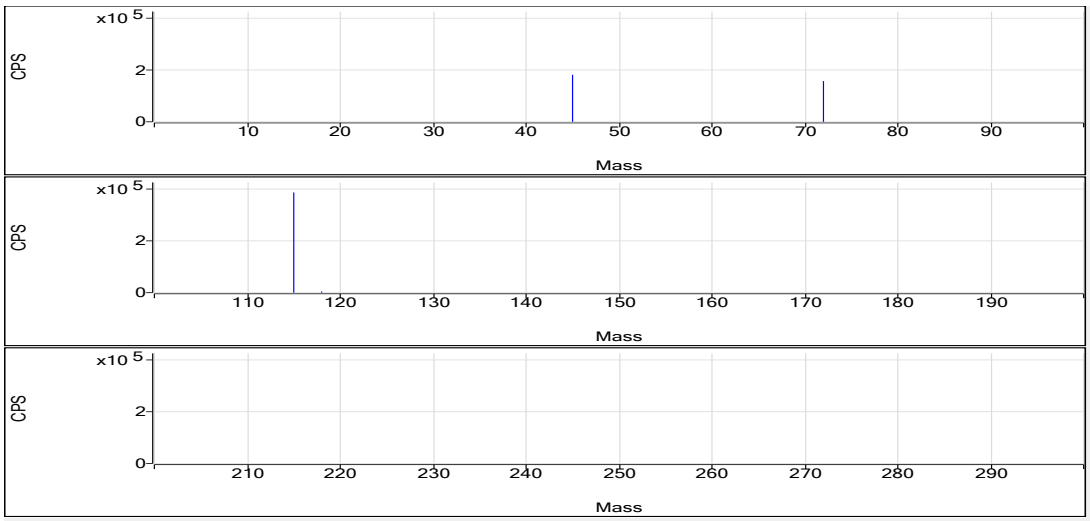
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2500323.97	1.1	104.2	Analog	0.1000	3
No Gas	Ge	72	1196401.23	1.0	103.7	Pulse	0.1000	3
H2	Sc	45	182031.53	1.2	97.3	Pulse	0.1000	3
H2	Ge	72	157797.22	1.3	96.4	Pulse	0.1000	3
H2	In	115	388175.77	1.2	99.8	Pulse	0.1000	3
He	Sc	45	48361.10	1.7	103.7	Pulse	0.1000	3
He	Ge	72	81823.94	1.6	100.8	Pulse	0.1000	3
He	In	115	86514.12	0.7	100.4	Pulse	0.1000	3
He	Tb	159	394589.34	0.8	99.0	Pulse	0.1000	3
He	Bi	209	308153.69	0.3	99.6	Pulse	0.1000	3

No Gas

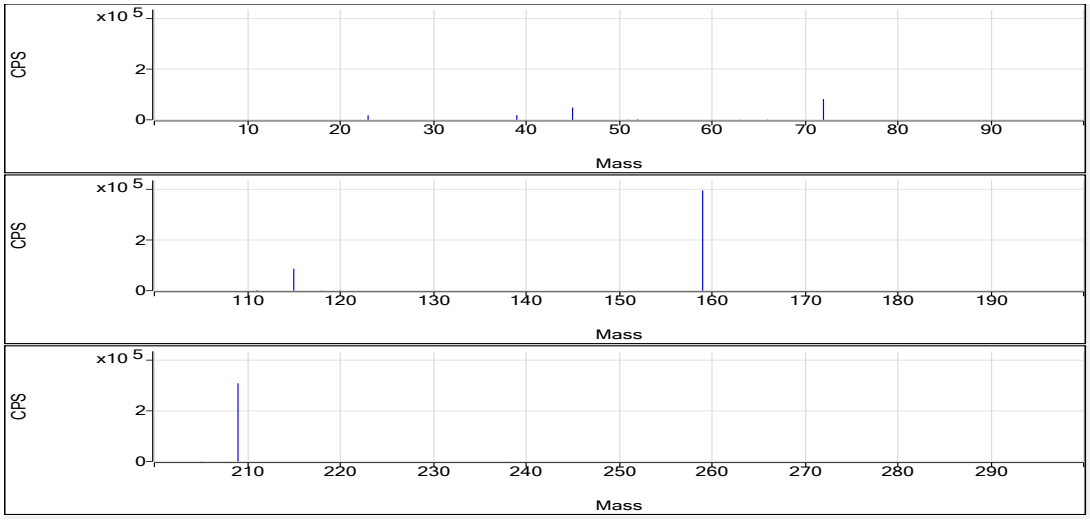


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.023	0	54.00	0.0008	4.685E-06
Be	9	1	No Gas	0.021	0	52.00	0.0008	4.685E-06
Be	9	1	No Gas	0.025	0	60.00	0.0008	4.685E-06
Se	78	2	H2	0.031	0	4.00	0.0004	1.219E-05
Se	78	2	H2	0.022	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.042	0	4.67	0.0004	1.219E-05
Na	23	3	He	5.382	0.3644	17941.40	0.0036	0.3452
Na	23	3	He	10.876	0.3841	18512.11	0.0036	0.3452
Na	23	3	He	8.007	0.3738	17811.08	0.0036	0.3452
Mg	24	3	He	0.202	0.0039	190.01	0.0018	0.003497
Mg	24	3	He	0.364	0.0041	200.01	0.0018	0.003497
Mg	24	3	He	0.508	0.0044	210.01	0.0018	0.003497
Al	27	3	He	3.067	0.0024	120.01	0.0006	0.0006432
Al	27	3	He	3.156	0.0025	120.00	0.0006	0.0006432
Al	27	3	He	-0.023	0.0006	30.00	0.0006	0.0006432
K	39	3	He	-20.562	0.3711	18272.08	0.0012	0.3951
K	39	3	He	-6.591	0.3874	18672.54	0.0012	0.3951
K	39	3	He	-16.995	0.3753	17881.47	0.0012	0.3951
Ca	44	3	He	1.907	0.0028	140.01	0.0001	0.002715
Ca	44	3	He	2.809	0.0029	140.01	0.0001	0.002715
Ca	44	3	He	-6.016	0.0023	110.00	0.0001	0.002715
Ti	47	3	He	1.383	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	0.256	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	2.215	0.0013	60.00	0.0005	7.003E-05
V	51	3	He	-0.03	0.0242	1192.06	0.0219	0.02486
V	51	3	He	-0.073	0.0233	1122.05	0.0219	0.02486
V	51	3	He	-0.077	0.0232	1104.05	0.0219	0.02486
Cr	52	3	He	0.035	0.041	2020.22	0.0299	0.03997
Cr	52	3	He	-0.088	0.0373	1800.17	0.0299	0.03997
Cr	52	3	He	0.102	0.043	2050.20	0.0299	0.03997
Mn	55	3	He	0	0.0026	130.00	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.005	0.0027	130.01	0.0128	0.002639
Mn	55	3	He	0.089	0.0038	180.01	0.0128	0.002639
Fe	57	3	He	1.736	0.0024	120.01	0.0006	0.001429
Fe	57	3	He	1.112	0.0021	100.00	0.0006	0.001429
Fe	57	3	He	3.682	0.0036	170.01	0.0006	0.001429
Co	59	3	He	0.052	0.0051	250.01	0.0563	0.002149
Co	59	3	He	0.039	0.0044	210.01	0.0563	0.002149
Co	59	3	He	0.029	0.0038	180.01	0.0563	0.002149
Ni	60	3	He	0.007	0.0029	240.01	0.0086	0.002834
Ni	60	3	He	-0.055	0.0024	190.01	0.0086	0.002834
Ni	60	3	He	0.053	0.0033	270.01	0.0086	0.002834
Cu	63	3	He	0.143	0.0084	700.05	0.0257	0.004757
Cu	63	3	He	0.129	0.0081	650.04	0.0257	0.004757
Cu	63	3	He	0.033	0.0056	460.03	0.0257	0.004757
Zn	66	3	He	3.655	0.0145	1200.11	0.0029	0.003818
Zn	66	3	He	4.367	0.0165	1330.11	0.0029	0.003818
Zn	66	3	He	3.463	0.0139	1140.09	0.0029	0.003818
As	75	3	He	0.3	0.0014	118.00	0.002	0.0008061
As	75	3	He	0.092	0.001	80.00	0.002	0.0008061
As	75	3	He	0.154	0.0011	92.00	0.002	0.0008061
Sr	88	3	He	-0.056	0.0005	40.00	0.009	0.0009645
Sr	88	3	He	-0.082	0.0002	20.00	0.009	0.0009645
Sr	88	3	He	0.009	0.001	90.00	0.009	0.0009645
Mo	98	3	He	0.108	0.0026	230.01	0.0219	0.0002706
Mo	98	3	He	0.168	0.0039	340.02	0.0219	0.0002706
Mo	98	3	He	0.125	0.003	260.01	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.019	0.0162	1410.13	0.0158	0.01648
Sn	120	3	He	0.082	0.0178	1530.14	0.0158	0.01648
Sn	120	3	He	-0.008	0.0164	1410.13	0.0158	0.01648
Sb	121	3	He	0.059	0.0011	100.00	0.0149	0.0002698
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	0.121	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.075	0.002	780.06	0.0247	0.0001339
Tl	205	3	He	0.062	0.0017	650.04	0.0247	0.0001339
Tl	205	3	He	0.08	0.0021	840.06	0.0247	0.0001339
Pb	208	3	He	-0.001	0.001	160.01	0.0327	0.00107
Pb	208	3	He	0.02	0.0017	340.02	0.0327	0.00107
Pb	208	3	He	0.007	0.0013	250.01	0.0327	0.00107
U	238	3	He	0.04	0.002	630.03	0.0493	7.55E-05
U	238	3	He	0.046	0.0024	730.05	0.0493	7.55E-05
U	238	3	He	0.049	0.0025	760.05	0.0493	7.55E-05
Sc	45	1	No Gas			2469122.62		
Sc	45	1	No Gas			2517753.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2514096.21		
Ge	72	1	No Gas			1183820.06		
Ge	72	1	No Gas			1206390.69		
Ge	72	1	No Gas			1198992.95		
Sc	45	2	H2			181716.38		
Sc	45	2	H2			180082.46		
Sc	45	2	H2			184295.74		
Ge	72	2	H2			159693.71		
Ge	72	2	H2			155590.12		
Ge	72	2	H2			158107.84		
In	115	2	H2			393172.69		
In	115	2	H2			384532.49		
In	115	2	H2			386822.14		
Sc	45	3	He			49234.21		
Sc	45	3	He			48200.62		
Sc	45	3	He			47648.47		
Ge	72	3	He			83001.42		
Ge	72	3	He			80456.09		
Ge	72	3	He			82014.32		
In	115	3	He			87193.40		
In	115	3	He			86136.91		
In	115	3	He			86237.08		
Tb	159	3	He			394405.97		
Tb	159	3	He			391656.17		
Tb	159	3	He			397705.89		
Bi	209	3	He			308716.03		
Bi	209	3	He			308794.02		
Bi	209	3	He			306951.03		

Quantitation Report

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Sample Type	Sample
Comment	D2
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

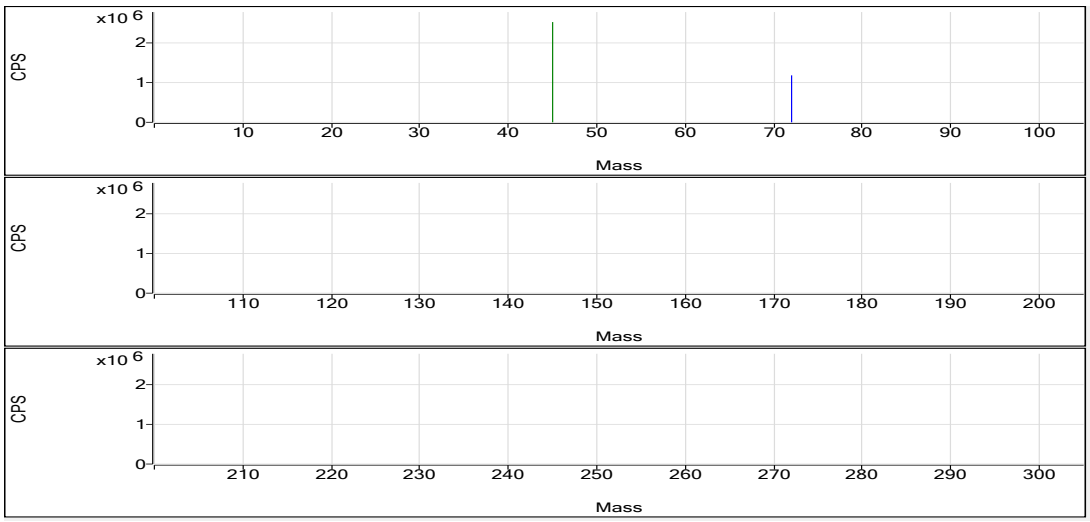
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.006	ppb	62.3	23.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.013	ppb	N/A	1.11	0.0000	Pulse	1.5000	3
Na	23	45	He	0.063	ppb	4949.4	16543.07	0.3454	Pulse	0.1000	3
Mg	24	45	He	0.421	ppb	98.7	203.34	0.0043	Pulse	0.1000	3
Al	27	45	He	15.441	ppb	18.0	463.36	0.0097	Pulse	0.1000	3
K	39	45	He	-6.611	ppb	N/A	18559.04	0.3874	Pulse	0.1000	3
Ca	44	45	He	2.983	ppb	395.9	140.00	0.0029	Pulse	0.1000	3
Ti	47	45	He	0.128	ppb	174.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.223	ppb	N/A	958.04	0.0200	Pulse	0.5000	3
Cr	52	45	He	-0.238	ppb	N/A	1573.47	0.0328	Pulse	0.1000	3
Mn	55	45	He	-0.054	ppb	N/A	93.33	0.0019	Pulse	0.1000	3
Fe	57	45	He	1.479	ppb	78.9	110.00	0.0023	Pulse	0.1000	3
Co	59	45	He	-0.016	ppb	N/A	60.00	0.0013	Pulse	0.1000	3
Ni	60	72	He	-0.038	ppb	N/A	210.01	0.0025	Pulse	0.1000	3
Cu	63	72	He	0.137	ppb	29.4	693.38	0.0083	Pulse	0.1000	3
Zn	66	72	He	3.350	ppb	18.5	1136.75	0.0136	Pulse	0.1000	3
As	75	72	He	-0.114	ppb	N/A	48.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.031	ppb	N/A	60.00	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.074	ppb	34.5	166.68	0.0019	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.255	ppb	N/A	1090.08	0.0124	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	-0.025	ppb	N/A	10.00	0.0001	Pulse	0.1000	3
Tl	205	159	He	0.008	ppb	94.9	130.01	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	22.8	556.70	0.0014	Pulse	0.1000	3
U	238	209	He	0.004	ppb	18.0	80.00	0.0003	Pulse	0.1000	3

ISTD Table:

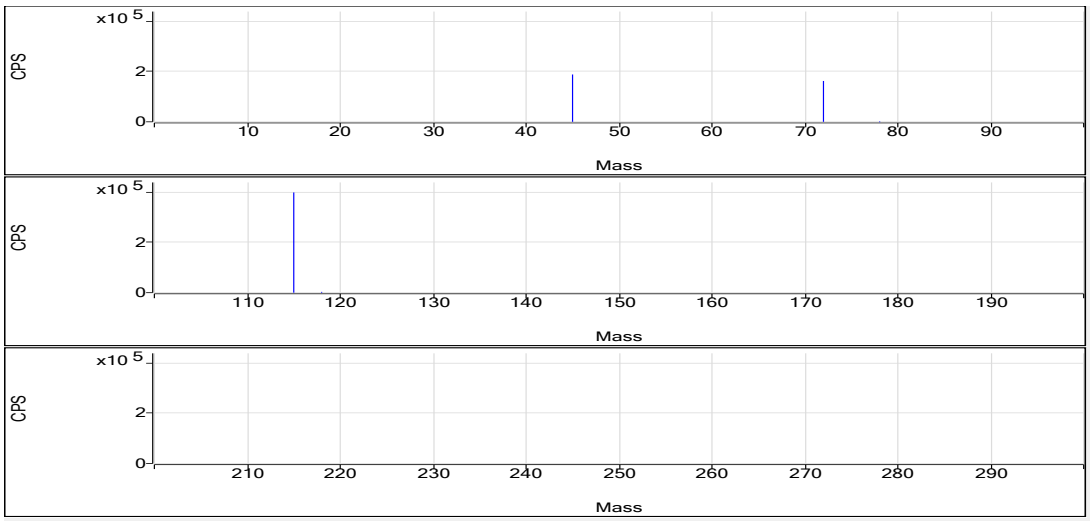
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2518712.77	1.2	105.0	Analog	0.1000	3
No Gas	Ge	72	1179788.68	0.8	102.3	Pulse	0.1000	3
H2	Sc	45	188446.34	2.0	100.8	Pulse	0.1000	3
H2	Ge	72	162599.88	0.7	99.3	Pulse	0.1000	3
H2	In	115	399020.75	1.2	102.6	Pulse	0.1000	3
He	Sc	45	47916.28	1.8	102.7	Pulse	0.1000	3
He	Ge	72	83762.09	0.1	103.2	Pulse	0.1000	3
He	In	115	87720.73	1.6	101.8	Pulse	0.1000	3
He	Tb	159	405999.67	0.7	101.9	Pulse	0.1000	3
He	Bi	209	315045.30	0.6	101.9	Pulse	0.1000	3

No Gas

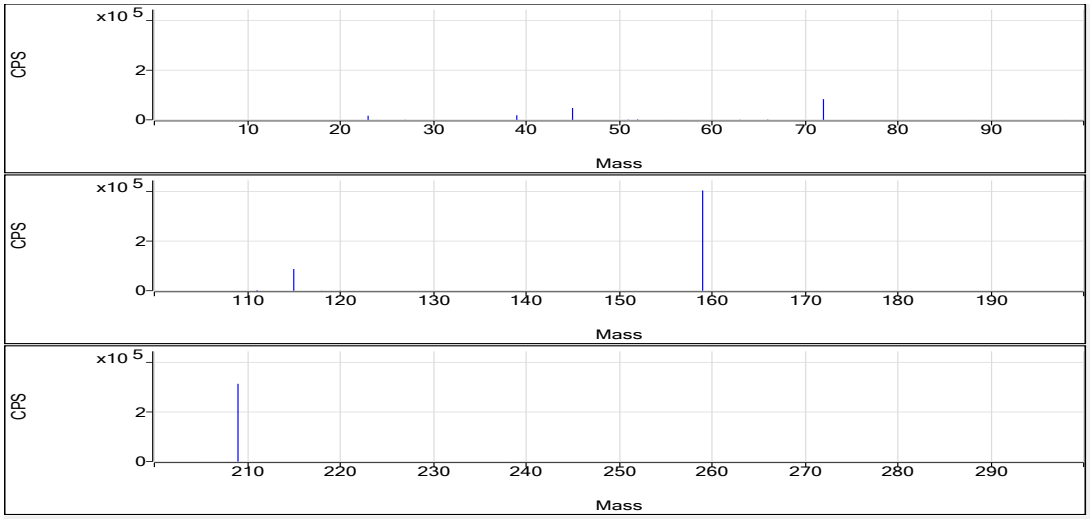


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.002	0	16.00	0.0008	4.685E-06
Se	78	2	H2	-0.029	0	0.00	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	-0.01	0	1.33	0.0004	1.219E-05
Na	23	3	He	-3.448	0.3328	16259.44	0.0036	0.3452
Na	23	3	He	1.179	0.3494	16699.90	0.0036	0.3452
Na	23	3	He	2.457	0.3539	16669.87	0.0036	0.3452
Mg	24	3	He	0.105	0.0037	180.01	0.0018	0.003497
Mg	24	3	He	0.267	0.004	190.01	0.0018	0.003497
Mg	24	3	He	0.891	0.0051	240.01	0.0018	0.003497
Al	27	3	He	13.247	0.0084	410.02	0.0006	0.0006432
Al	27	3	He	18.57	0.0115	550.03	0.0006	0.0006432
Al	27	3	He	14.507	0.0091	430.02	0.0006	0.0006432
K	39	3	He	-9.627	0.3839	18752.54	0.0012	0.3951
K	39	3	He	-7.214	0.3867	18482.27	0.0012	0.3951
K	39	3	He	-2.993	0.3916	18442.32	0.0012	0.3951
Ca	44	3	He	14.356	0.0037	180.01	0.0001	0.002715
Ca	44	3	He	-9.221	0.0021	100.00	0.0001	0.002715
Ca	44	3	He	3.814	0.003	140.00	0.0001	0.002715
Ti	47	3	He	0.251	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.265	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	-0.24	0.0196	958.04	0.0219	0.02486
V	51	3	He	-0.211	0.0203	968.04	0.0219	0.02486
V	51	3	He	-0.217	0.0201	948.04	0.0219	0.02486
Cr	52	3	He	-0.282	0.0315	1540.14	0.0299	0.03997
Cr	52	3	He	-0.175	0.0347	1660.15	0.0299	0.03997
Cr	52	3	He	-0.257	0.0323	1520.12	0.0299	0.03997
Mn	55	3	He	-0.094	0.0014	70.00	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.023	0.0029	140.00	0.0128	0.002639
Mn	55	3	He	-0.09	0.0015	70.00	0.0128	0.002639
Fe	57	3	He	2.826	0.0031	150.01	0.0006	0.001429
Fe	57	3	He	0.782	0.0019	90.00	0.0006	0.001429
Fe	57	3	He	0.83	0.0019	90.00	0.0006	0.001429
Co	59	3	He	-0.027	0.0006	30.00	0.0563	0.002149
Co	59	3	He	-0.001	0.0021	100.00	0.0563	0.002149
Co	59	3	He	-0.019	0.0011	50.00	0.0563	0.002149
Ni	60	3	He	-0.038	0.0025	210.01	0.0086	0.002834
Ni	60	3	He	-0.024	0.0026	220.01	0.0086	0.002834
Ni	60	3	He	-0.052	0.0024	200.01	0.0086	0.002834
Cu	63	3	He	0.103	0.0074	620.05	0.0257	0.004757
Cu	63	3	He	0.126	0.008	670.04	0.0257	0.004757
Cu	63	3	He	0.182	0.0094	790.05	0.0257	0.004757
Zn	66	3	He	3.247	0.0133	1110.08	0.0029	0.003818
Zn	66	3	He	2.788	0.0119	1000.07	0.0029	0.003818
Zn	66	3	He	4.014	0.0155	1300.11	0.0029	0.003818
As	75	3	He	-0.055	0.0007	58.00	0.002	0.0008061
As	75	3	He	-0.079	0.0006	54.00	0.002	0.0008061
As	75	3	He	-0.207	0.0004	32.00	0.002	0.0008061
Sr	88	3	He	-0.069	0.0003	30.00	0.009	0.0009645
Sr	88	3	He	-0.033	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	0.008	0.001	90.00	0.009	0.0009645
Mo	98	3	He	0.082	0.0021	180.01	0.0219	0.0002706
Mo	98	3	He	0.095	0.0024	210.01	0.0219	0.0002706
Mo	98	3	He	0.046	0.0013	110.01	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.268	0.0122	1070.07	0.0158	0.01648
Sn	120	3	He	-0.362	0.0108	960.06	0.0158	0.01648
Sn	120	3	He	-0.136	0.0143	1240.10	0.0158	0.01648
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.004	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	-0.001	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Tl	205	3	He	0.009	0.0004	150.01	0.0247	0.0001339
Tl	205	3	He	0.013	0.0005	190.01	0.0247	0.0001339
Tl	205	3	He	0	0.0001	50.00	0.0247	0.0001339
Pb	208	3	He	0.012	0.0014	300.02	0.0327	0.00107
Pb	208	3	He	0.009	0.0013	260.02	0.0327	0.00107
Pb	208	3	He	0.008	0.0013	270.01	0.0327	0.00107
U	238	3	He	0.003	0.0002	70.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	90.00	0.0493	7.55E-05
Sc	45	1	No Gas			2507663.87		
Sc	45	1	No Gas			2494903.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2553571.21		
Ge	72	1	No Gas			1181641.31		
Ge	72	1	No Gas			1169154.12		
Ge	72	1	No Gas			1188570.61		
Sc	45	2	H2			185225.13		
Sc	45	2	H2			187474.08		
Sc	45	2	H2			192639.80		
Ge	72	2	H2			161373.03		
Ge	72	2	H2			162860.75		
Ge	72	2	H2			163565.87		
In	115	2	H2			394980.81		
In	115	2	H2			397797.65		
In	115	2	H2			404283.78		
Sc	45	3	He			48852.81		
Sc	45	3	He			47798.98		
Sc	45	3	He			47097.06		
Ge	72	3	He			83644.70		
Ge	72	3	He			83795.37		
Ge	72	3	He			83846.19		
In	115	3	He			87434.70		
In	115	3	He			89215.37		
In	115	3	He			86528.80		
Tb	159	3	He			407567.06		
Tb	159	3	He			407710.50		
Tb	159	3	He			402721.44		
Bi	209	3	He			316767.92		
Bi	209	3	He			312878.14		
Bi	209	3	He			315489.84		

Quantitation Report

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Sample Type	Sample
Comment	D2
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

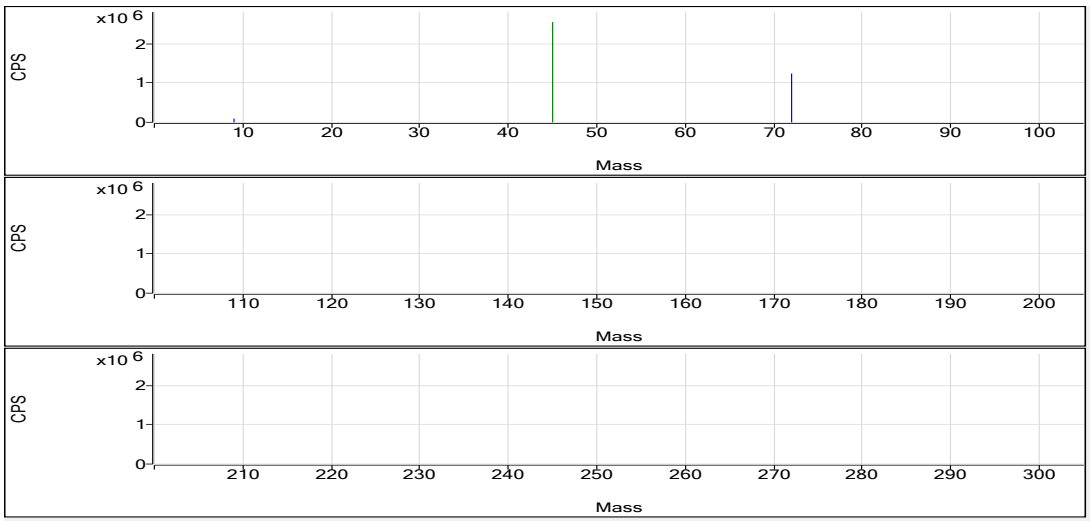
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.527	ppb	2.0	92280.07	0.0363	Pulse	0.5000	3
Se	78	72	H2	100.732	ppb	0.3	7130.89	0.0420	Pulse	1.5000	3
Na	23	45	He	4680.196	ppb	1.0	849513.66	17.0864	Pulse	0.1000	3
Mg	24	45	He	4907.422	ppb	1.1	437965.06	8.8090	Pulse	0.1000	3
Al	27	45	He	4849.909	ppb	2.2	141088.23	2.8380	Pulse	0.1000	3
K	39	45	He	4900.723	ppb	1.6	303326.33	6.1011	Pulse	0.1000	3
Ca	44	45	He	4941.137	ppb	1.4	16730.13	0.3365	Pulse	0.1000	3
Ti	47	45	He	508.842	ppb	2.1	13586.80	0.2733	Pulse	0.1000	3
V	51	45	He	501.875	ppb	1.3	546661.58	10.9954	Pulse	0.5000	3
Cr	52	45	He	473.379	ppb	1.4	706640.43	14.2133	Pulse	0.1000	3
Mn	55	45	He	498.124	ppb	1.1	317972.36	6.3955	Pulse	0.1000	3
Fe	57	45	He	4995.319	ppb	0.9	144372.47	2.9037	Pulse	0.1000	3
Co	59	45	He	483.312	ppb	1.4	1352497.27	27.2041	Pulse	0.1000	3
Ni	60	72	He	500.503	ppb	0.1	377597.13	4.2987	Pulse	0.1000	3
Cu	63	72	He	479.527	ppb	0.3	1081719.57	12.3147	Pulse	0.1000	3
Zn	66	72	He	508.657	ppb	0.6	130426.49	1.4848	Pulse	0.1000	3
As	75	72	He	505.299	ppb	0.4	91009.59	1.0361	Pulse	0.5000	3
Sr	88	115	He	51.719	ppb	0.7	40676.07	0.4649	Pulse	0.1000	3
Mo	98	115	He	51.008	ppb	1.1	97880.04	1.1187	Pulse	0.1000	3
Ag	107	115	He	50.974	ppb	0.9	207391.46	2.3703	Pulse	0.1000	3
Cd	111	115	He	52.088	ppb	1.6	24367.24	0.2785	Pulse	0.5000	3
Sn	120	115	He	103.190	ppb	1.0	144086.92	1.6467	Pulse	0.1000	3
Sb	121	115	He	99.595	ppb	1.4	129457.53	1.4796	Pulse	0.1000	3
Ba	137	115	He	521.707	ppb	1.3	219092.37	2.5041	Pulse	0.1000	3
Tl	205	159	He	102.444	ppb	0.4	1020790.61	2.5332	Pulse	0.1000	3
Pb	208	159	He	51.286	ppb	0.5	676831.82	1.6796	Pulse	0.1000	3
U	238	209	He	49.669	ppb	0.8	769005.27	2.4468	Pulse	0.1000	3

ISTD Table:

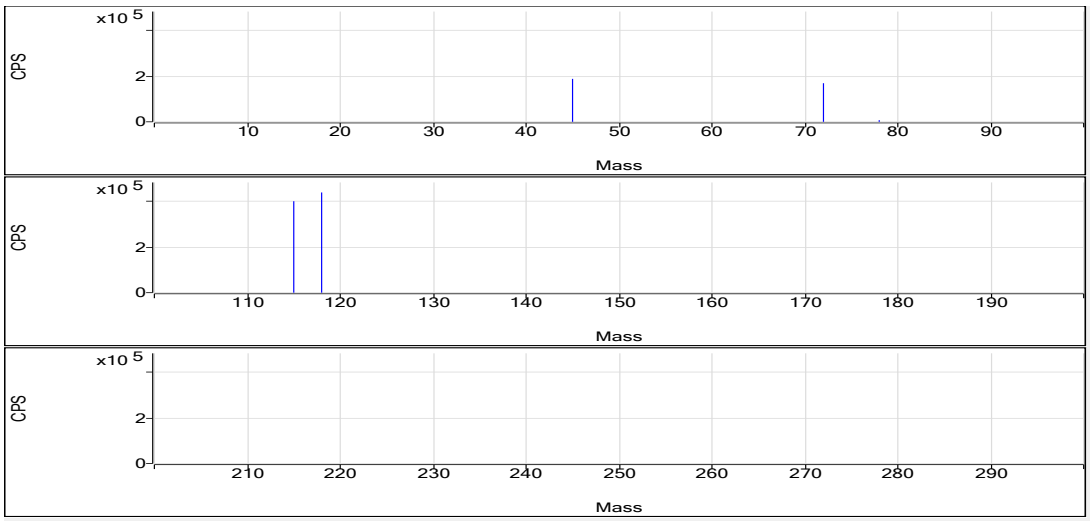
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2545915.64	2.3	106.1	Analog	0.1000	3
No Gas	Ge	72	1239523.13	0.9	107.5	Pulse	0.1000	3
H2	Sc	45	188784.74	0.6	101.0	Pulse	0.1000	3
H2	Ge	72	169687.19	0.9	103.6	Pulse	0.1000	3
H2	In	115	402016.83	0.4	103.3	Pulse	0.1000	3
He	Sc	45	49722.17	1.2	106.6	Pulse	0.1000	3
He	Ge	72	87839.31	0.2	108.2	Pulse	0.1000	3
He	In	115	87502.10	1.1	101.5	Pulse	0.1000	3
He	Tb	159	402964.30	0.2	101.1	Pulse	0.1000	3
He	Bi	209	314309.13	0.8	101.6	Pulse	0.1000	3

No Gas

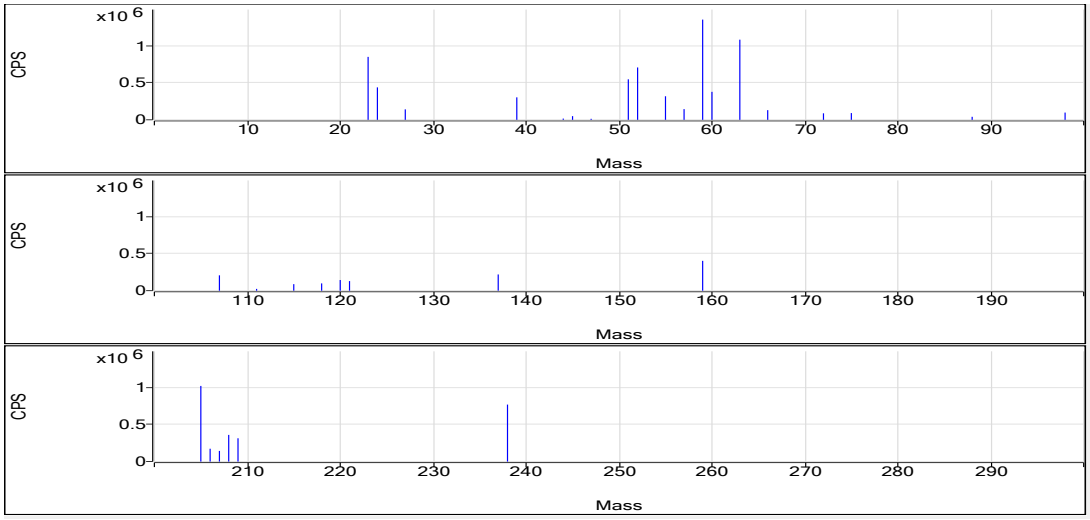


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.88	0.0365	92221.83	0.0008	4.685E-06
Be	9	1	No Gas	46.464	0.0354	92577.87	0.0008	4.685E-06
Be	9	1	No Gas	48.236	0.0368	92040.50	0.0008	4.685E-06
Se	78	2	H2	100.679	0.042	7196.48	0.0004	1.219E-05
Se	78	2	H2	101.015	0.0421	7093.10	0.0004	1.219E-05
Se	78	2	H2	100.5	0.0419	7103.10	0.0004	1.219E-05
Na	23	3	He	4630.955	16.9103	851728.11	0.0036	0.3452
Na	23	3	He	4690.928	17.1248	848448.66	0.0036	0.3452
Na	23	3	He	4718.706	17.2242	848364.21	0.0036	0.3452
Mg	24	3	He	4849.835	8.7057	438481.36	0.0018	0.003497
Mg	24	3	He	4914.4	8.8215	437061.17	0.0018	0.003497
Mg	24	3	He	4958.032	8.8998	438352.65	0.0018	0.003497
Al	27	3	He	4729.17	2.7674	139385.29	0.0006	0.0006432
Al	27	3	He	4893.729	2.8636	141879.08	0.0006	0.0006432
Al	27	3	He	4926.829	2.883	142000.33	0.0006	0.0006432
K	39	3	He	4822.231	6.0097	302693.80	0.0012	0.3951
K	39	3	He	4899.963	6.1002	302235.13	0.0012	0.3951
K	39	3	He	4979.973	6.1934	305050.05	0.0012	0.3951
Ca	44	3	He	4871.072	0.3318	16710.14	0.0001	0.002715
Ca	44	3	He	5012.414	0.3413	16910.33	0.0001	0.002715
Ca	44	3	He	4939.926	0.3364	16569.92	0.0001	0.002715
Ti	47	3	He	497.067	0.267	13446.57	0.0005	7.003E-05
Ti	47	3	He	517.746	0.2781	13777.11	0.0005	7.003E-05
Ti	47	3	He	511.713	0.2748	13536.71	0.0005	7.003E-05
V	51	3	He	494.353	10.831	545529.44	0.0219	0.02486
V	51	3	He	504.634	11.0557	547756.06	0.0219	0.02486
V	51	3	He	506.638	11.0995	546699.25	0.0219	0.02486
Cr	52	3	He	466.451	14.0058	705437.96	0.0299	0.03997
Cr	52	3	He	474.318	14.2414	705588.74	0.0299	0.03997
Cr	52	3	He	479.367	14.3926	708894.60	0.0299	0.03997
Mn	55	3	He	491.766	6.3139	318014.90	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	501.858	6.4434	319238.86	0.0128	0.002639
Mn	55	3	He	500.747	6.4292	316663.32	0.0128	0.002639
Fe	57	3	He	4963.369	2.8851	145314.95	0.0006	0.001429
Fe	57	3	He	5047.211	2.9338	145355.50	0.0006	0.001429
Fe	57	3	He	4975.377	2.8921	142446.96	0.0006	0.001429
Co	59	3	He	475.535	26.7664	1348152.17	0.0563	0.002149
Co	59	3	He	485.94	27.352	1355152.17	0.0563	0.002149
Co	59	3	He	488.461	27.4938	1354187.48	0.0563	0.002149
Ni	60	3	He	499.846	4.2931	376797.73	0.0086	0.002834
Ni	60	3	He	501.243	4.3051	378978.55	0.0086	0.002834
Ni	60	3	He	500.419	4.298	377015.11	0.0086	0.002834
Cu	63	3	He	477.955	12.2744	1077305.14	0.0257	0.004757
Cu	63	3	He	480.886	12.3496	1087143.03	0.0257	0.004757
Cu	63	3	He	479.739	12.3202	1080710.53	0.0257	0.004757
Zn	66	3	He	512.199	1.4951	131226.66	0.0029	0.003818
Zn	66	3	He	507.521	1.4815	130419.53	0.0029	0.003818
Zn	66	3	He	506.252	1.4778	129633.28	0.0029	0.003818
As	75	3	He	504.435	1.0343	90781.40	0.002	0.0008061
As	75	3	He	503.624	1.0327	90906.20	0.002	0.0008061
As	75	3	He	507.836	1.0413	91341.16	0.002	0.0008061
Sr	88	3	He	51.305	0.4612	40589.02	0.009	0.0009645
Sr	88	3	He	51.783	0.4654	40990.41	0.009	0.0009645
Sr	88	3	He	52.069	0.468	40448.77	0.009	0.0009645
Mo	98	3	He	50.446	1.1064	97376.11	0.0219	0.0002706
Mo	98	3	He	50.964	1.1177	98433.67	0.0219	0.0002706
Mo	98	3	He	51.613	1.132	97830.33	0.0219	0.0002706
Ag	107	3	He	50.587	2.3523	207034.90	0.0465	0.0006206
Ag	107	3	He	50.877	2.3658	208343.38	0.0465	0.0006206
Ag	107	3	He	51.458	2.3928	206796.11	0.0465	0.0006206
Cd	111	3	He	51.493	0.2753	24232.98	0.0053	0
Cd	111	3	He	51.735	0.2766	24361.26	0.0053	0
Cd	111	3	He	53.034	0.2836	24507.48	0.0053	0
Sn	120	3	He	102.01	1.6281	143295.45	0.0158	0.01648
Sn	120	3	He	103.554	1.6525	145528.01	0.0158	0.01648
Sn	120	3	He	104.008	1.6597	143437.29	0.0158	0.01648
Sb	121	3	He	98.246	1.4596	128462.17	0.0149	0.0002698
Sb	121	3	He	99.593	1.4796	130299.44	0.0149	0.0002698
Sb	121	3	He	100.947	1.4997	129610.97	0.0149	0.0002698
Ba	137	3	He	520.342	2.4975	219818.34	0.0048	0.0002317
Ba	137	3	He	515.504	2.4743	217903.08	0.0048	0.0002317
Ba	137	3	He	529.275	2.5404	219555.70	0.0048	0.0002317
Tl	205	3	He	102.004	2.5223	1015734.13	0.0247	0.0001339
Tl	205	3	He	102.872	2.5438	1023092.88	0.0247	0.0001339
Tl	205	3	He	102.457	2.5335	1023544.83	0.0247	0.0001339
Pb	208	3	He	51.379	1.6827	360659.14	0.0327	0.00107
Pb	208	3	He	51.461	1.6854	358740.66	0.0327	0.00107
Pb	208	3	He	51.017	1.6709	360349.96	0.0327	0.00107
U	238	3	He	49.47	2.437	767027.41	0.0493	7.55E-05
U	238	3	He	50.136	2.4698	769908.50	0.0493	7.55E-05
U	238	3	He	49.399	2.4335	770079.91	0.0493	7.55E-05
Sc	45	1	No Gas			2524781.84		
Sc	45	1	No Gas			2611746.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2501218.71		
Ge	72	1	No Gas			1246229.83		
Ge	72	1	No Gas			1245507.17		
Ge	72	1	No Gas			1226832.40		
Sc	45	2	H2			190018.10		
Sc	45	2	H2			188689.86		
Sc	45	2	H2			187646.25		
Ge	72	2	H2			171335.45		
Ge	72	2	H2			168312.91		
Ge	72	2	H2			169413.22		
In	115	2	H2			400458.78		
In	115	2	H2			401777.81		
In	115	2	H2			403813.90		
Sc	45	3	He			50367.38		
Sc	45	3	He			49544.92		
Sc	45	3	He			49254.20		
Ge	72	3	He			87768.61		
Ge	72	3	He			88030.57		
Ge	72	3	He			87718.74		
In	115	3	He			88783.35		
In	115	3	He			88843.88		
In	115	3	He			87182.78		
Tb	159	3	He			402698.47		
Tb	159	3	He			402193.04		
Tb	159	3	He			404001.40		
Bi	209	3	He			314745.13		
Bi	209	3	He			311730.82		
Bi	209	3	He			316451.44		

Quantitation Report

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Acq Time	8/10/2023 2:32:40 PM
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Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

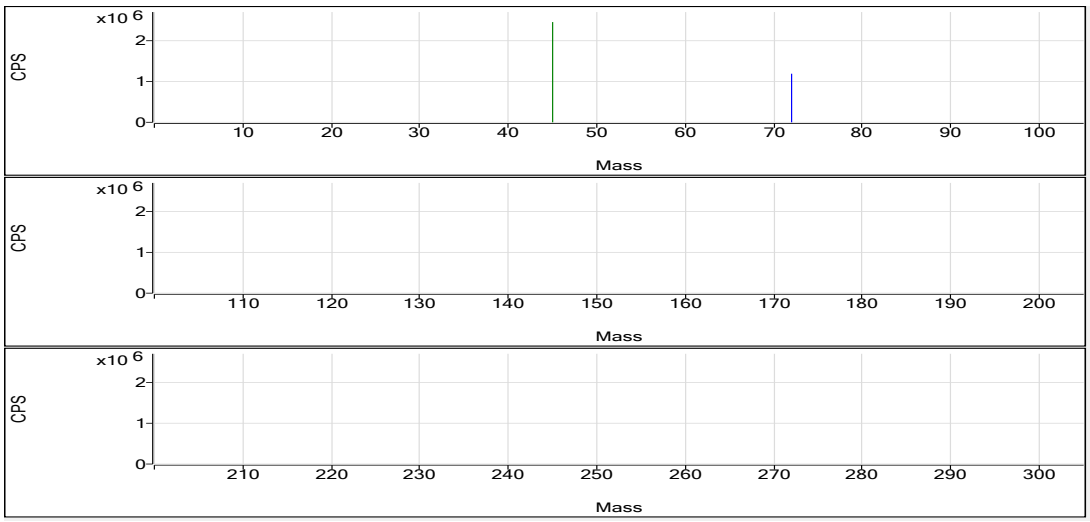
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.020	ppb	49.0	48.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.095	ppb	33.3	8.22	0.0001	Pulse	1.5000	3
Na	23	45	He	1.972	ppb	62.7	16943.50	0.3522	Pulse	0.1000	3
Mg	24	45	He	0.330	ppb	17.2	196.68	0.0041	Pulse	0.1000	3
Al	27	45	He	1.737	ppb	52.2	80.00	0.0017	Pulse	0.1000	3
K	39	45	He	-9.044	ppb	N/A	18498.91	0.3845	Pulse	0.1000	3
Ca	44	45	He	1.939	ppb	576.7	136.67	0.0028	Pulse	0.1000	3
Ti	47	45	He	0.646	ppb	104.6	20.00	0.0004	Pulse	0.1000	3
V	51	45	He	0.063	ppb	136.7	1262.73	0.0262	Pulse	0.5000	3
Cr	52	45	He	-0.002	ppb	N/A	1920.19	0.0399	Pulse	0.1000	3
Mn	55	45	He	0.096	ppb	89.7	186.68	0.0039	Pulse	0.1000	3
Fe	57	45	He	3.144	ppb	16.2	156.68	0.0033	Pulse	0.1000	3
Co	59	45	He	0.024	ppb	103.1	170.01	0.0035	Pulse	0.1000	3
Ni	60	72	He	0.043	ppb	50.3	270.01	0.0032	Pulse	0.1000	3
Cu	63	72	He	0.034	ppb	153.0	473.36	0.0056	Pulse	0.1000	3
Zn	66	72	He	3.539	ppb	13.0	1190.09	0.0141	Pulse	0.1000	3
As	75	72	He	0.286	ppb	19.0	117.33	0.0014	Pulse	0.5000	3
Sr	88	115	He	-0.026	ppb	N/A	63.33	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.147	ppb	36.6	303.35	0.0035	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	153.0	80.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	99.8	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.230	ppb	90.2	1733.51	0.0201	Pulse	0.1000	3
Sb	121	115	He	0.448	ppb	16.8	596.70	0.0069	Pulse	0.1000	3
Ba	137	115	He	0.105	ppb	59.6	63.33	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.239	ppb	6.5	2403.63	0.0060	Pulse	0.1000	3
Pb	208	159	He	0.016	ppb	84.5	630.03	0.0016	Pulse	0.1000	3
U	238	209	He	0.162	ppb	12.6	2477.00	0.0080	Pulse	0.1000	3

ISTD Table:

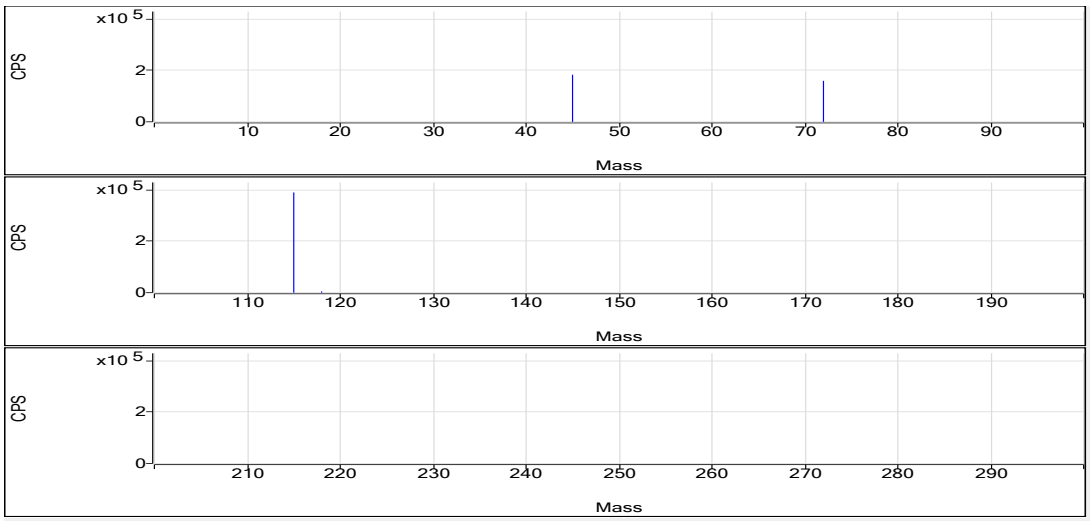
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2456206.37	0.4	102.4	Analog	0.1000	3
No Gas	Ge	72	1190137.82	0.8	103.2	Pulse	0.1000	3
H2	Sc	45	182695.18	0.6	97.7	Pulse	0.1000	3
H2	Ge	72	159014.82	1.5	97.1	Pulse	0.1000	3
H2	In	115	389049.88	0.6	100.0	Pulse	0.1000	3
He	Sc	45	48107.07	1.0	103.1	Pulse	0.1000	3
He	Ge	72	84248.55	0.9	103.8	Pulse	0.1000	3
He	In	115	86330.35	1.4	100.2	Pulse	0.1000	3
He	Tb	159	398150.23	1.0	99.9	Pulse	0.1000	3
He	Bi	209	308059.46	0.4	99.6	Pulse	0.1000	3

No Gas

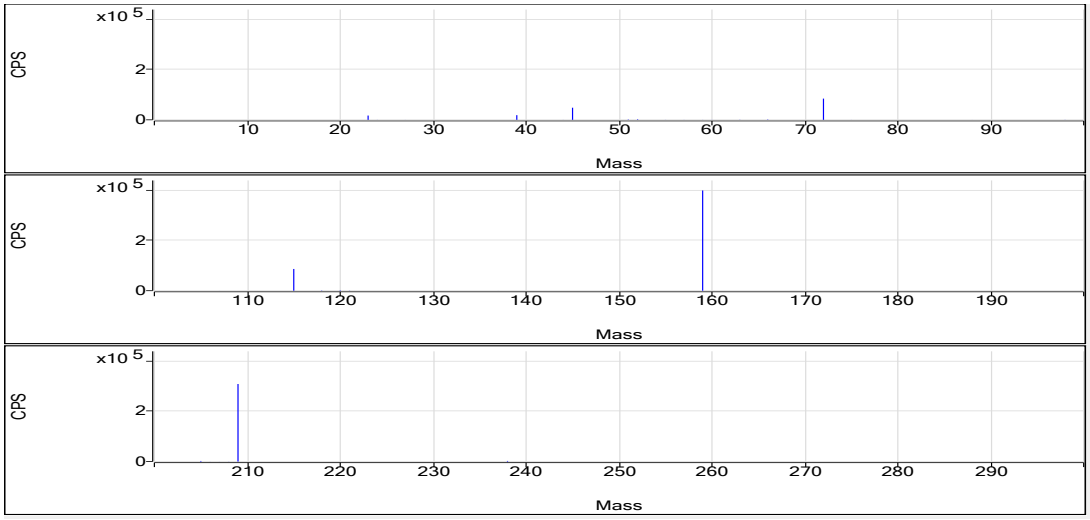


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.03	0	68.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Be	9	1	No Gas	0.018	0	46.00	0.0008	4.685E-06
Se	78	2	H2	0.104	0.0001	8.67	0.0004	1.219E-05
Se	78	2	H2	0.121	0.0001	10.00	0.0004	1.219E-05
Se	78	2	H2	0.06	0	6.00	0.0004	1.219E-05
Na	23	3	He	0.84	0.3482	16669.86	0.0036	0.3452
Na	23	3	He	1.785	0.3515	17110.33	0.0036	0.3452
Na	23	3	He	3.29	0.3569	17050.31	0.0036	0.3452
Mg	24	3	He	0.379	0.0042	200.01	0.0018	0.003497
Mg	24	3	He	0.341	0.0041	200.01	0.0018	0.003497
Mg	24	3	He	0.268	0.004	190.01	0.0018	0.003497
Al	27	3	He	1.4	0.0015	70.00	0.0006	0.0006432
Al	27	3	He	2.764	0.0023	110.00	0.0006	0.0006432
Al	27	3	He	1.047	0.0013	60.00	0.0006	0.0006432
K	39	3	He	-16.932	0.3754	17971.56	0.0012	0.3951
K	39	3	He	-8.047	0.3857	18772.70	0.0012	0.3951
K	39	3	He	-2.154	0.3926	18752.46	0.0012	0.3951
Ca	44	3	He	3.098	0.0029	140.01	0.0001	0.002715
Ca	44	3	He	-9.776	0.0021	100.00	0.0001	0.002715
Ca	44	3	He	12.494	0.0036	170.01	0.0001	0.002715
Ti	47	3	He	1.425	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	0.252	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.259	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	-0.033	0.0241	1156.05	0.0219	0.02486
V	51	3	He	0.133	0.0278	1352.07	0.0219	0.02486
V	51	3	He	0.088	0.0268	1280.07	0.0219	0.02486
Cr	52	3	He	0.046	0.0414	1980.19	0.0299	0.03997
Cr	52	3	He	0.072	0.0421	2050.22	0.0299	0.03997
Cr	52	3	He	-0.125	0.0362	1730.15	0.0299	0.03997
Mn	55	3	He	0.104	0.004	190.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.179	0.0049	240.01	0.0128	0.002639
Mn	55	3	He	0.006	0.0027	130.01	0.0128	0.002639
Fe	57	3	He	2.574	0.0029	140.01	0.0006	0.001429
Fe	57	3	He	3.553	0.0035	170.01	0.0006	0.001429
Fe	57	3	He	3.306	0.0033	160.01	0.0006	0.001429
Co	59	3	He	0.025	0.0036	170.01	0.0563	0.002149
Co	59	3	He	0.049	0.0049	240.01	0.0563	0.002149
Co	59	3	He	-0.001	0.0021	100.00	0.0563	0.002149
Ni	60	3	He	0.053	0.0033	280.01	0.0086	0.002834
Ni	60	3	He	0.018	0.003	250.01	0.0086	0.002834
Ni	60	3	He	0.058	0.0033	280.01	0.0086	0.002834
Cu	63	3	He	-0.002	0.0047	400.02	0.0257	0.004757
Cu	63	3	He	0.01	0.005	420.02	0.0257	0.004757
Cu	63	3	He	0.093	0.0071	600.04	0.0257	0.004757
Zn	66	3	He	3.897	0.0152	1290.11	0.0029	0.003818
Zn	66	3	He	3.701	0.0146	1220.10	0.0029	0.003818
Zn	66	3	He	3.02	0.0126	1060.07	0.0029	0.003818
As	75	3	He	0.284	0.0014	118.00	0.002	0.0008061
As	75	3	He	0.342	0.0015	126.00	0.002	0.0008061
As	75	3	He	0.234	0.0013	108.00	0.002	0.0008061
Sr	88	3	He	-0.003	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	-0.043	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.031	0.0007	60.00	0.009	0.0009645
Mo	98	3	He	0.1	0.0025	210.01	0.0219	0.0002706
Mo	98	3	He	0.136	0.0033	280.01	0.0219	0.0002706
Mo	98	3	He	0.206	0.0048	420.02	0.0219	0.0002706
Ag	107	3	He	0.017	0.0014	120.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.022	0.0001	10.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.44	0.0234	2000.21	0.0158	0.01648
Sn	120	3	He	0.225	0.02	1720.16	0.0158	0.01648
Sn	120	3	He	0.025	0.0169	1480.15	0.0158	0.01648
Sb	121	3	He	0.534	0.0082	700.05	0.0149	0.0002698
Sb	121	3	He	0.413	0.0064	550.03	0.0149	0.0002698
Sb	121	3	He	0.396	0.0062	540.03	0.0149	0.0002698
Ba	137	3	He	0.171	0.0011	90.00	0.0048	0.0002317
Ba	137	3	He	0.097	0.0007	60.00	0.0048	0.0002317
Ba	137	3	He	0.047	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.24	0.0061	2430.29	0.0247	0.0001339
Tl	205	3	He	0.223	0.0056	2220.27	0.0247	0.0001339
Tl	205	3	He	0.254	0.0064	2560.32	0.0247	0.0001339
Pb	208	3	He	0.028	0.002	420.02	0.0327	0.00107
Pb	208	3	He	0.001	0.0011	200.01	0.0327	0.00107
Pb	208	3	He	0.018	0.0017	420.02	0.0327	0.00107
U	238	3	He	0.139	0.0069	2120.25	0.0493	7.55E-05
U	238	3	He	0.168	0.0084	2580.37	0.0493	7.55E-05
U	238	3	He	0.178	0.0088	2730.39	0.0493	7.55E-05
Sc	45	1	No Gas			2453509.03		
Sc	45	1	No Gas			2466321.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2448788.56		
Ge	72	1	No Gas			1198423.03		
Ge	72	1	No Gas			1179483.81		
Ge	72	1	No Gas			1192506.62		
Sc	45	2	H2			182918.55		
Sc	45	2	H2			183597.03		
Sc	45	2	H2			181569.96		
Ge	72	2	H2			156451.49		
Ge	72	2	H2			159268.69		
Ge	72	2	H2			161324.28		
In	115	2	H2			386947.03		
In	115	2	H2			391542.69		
In	115	2	H2			388659.92		
Sc	45	3	He			47879.24		
Sc	45	3	He			48672.11		
Sc	45	3	He			47769.86		
Ge	72	3	He			85072.76		
Ge	72	3	He			83604.26		
Ge	72	3	He			84068.64		
In	115	3	He			85382.55		
In	115	3	He			85905.59		
In	115	3	He			87726.85		
Tb	159	3	He			400933.31		
Tb	159	3	He			393606.56		
Tb	159	3	He			399910.81		
Bi	209	3	He			306762.89		
Bi	209	3	He			308221.79		
Bi	209	3	He			309193.71		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

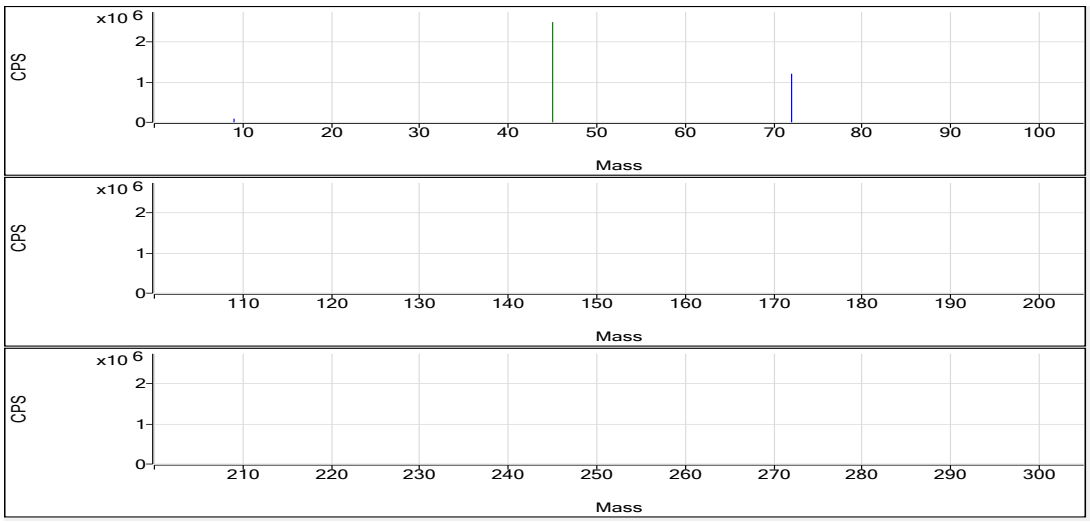
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.807	ppb	0.9	91165.91	0.0365	Pulse	0.5000	3
Se	78	72	H2	53.123	ppb	4.2	3566.23	0.0222	Pulse	1.5000	3
Na	23	45	He	4765.721	ppb	3.1	847800.38	17.3924	Pulse	0.1000	3
Mg	24	45	He	4950.773	ppb	2.6	433225.35	8.8868	Pulse	0.1000	3
Al	27	45	He	4888.778	ppb	2.8	139455.85	2.8607	Pulse	0.1000	3
K	39	45	He	5075.791	ppb	3.1	307345.13	6.3049	Pulse	0.1000	3
Ca	44	45	He	5041.200	ppb	3.0	16733.42	0.3433	Pulse	0.1000	3
Ti	47	45	He	5015.880	ppb	1.4	131330.29	2.6933	Pulse	0.1000	3
V	51	45	He	507.301	ppb	2.6	541799.23	11.1140	Pulse	0.5000	3
Cr	52	45	He	483.354	ppb	2.3	707483.74	14.5119	Pulse	0.1000	3
Mn	55	45	He	501.963	ppb	4.2	314089.86	6.4448	Pulse	0.1000	3
Fe	57	45	He	5058.546	ppb	2.5	143346.57	2.9404	Pulse	0.1000	3
Co	59	45	He	489.058	ppb	2.2	1342051.07	27.5275	Pulse	0.1000	3
Ni	60	72	He	514.817	ppb	0.8	377205.80	4.4216	Pulse	0.1000	3
Cu	63	72	He	490.166	ppb	0.9	1073865.56	12.5878	Pulse	0.1000	3
Zn	66	72	He	510.666	ppb	1.3	127169.45	1.4907	Pulse	0.1000	3
As	75	72	He	518.379	ppb	0.6	90676.01	1.0629	Pulse	0.5000	3
Sr	88	115	He	52.597	ppb	1.7	40632.39	0.4727	Pulse	0.1000	3
Mo	98	115	He	52.405	ppb	0.7	98789.11	1.1493	Pulse	0.1000	3
Ag	107	115	He	51.852	ppb	0.9	207245.80	2.4111	Pulse	0.1000	3
Cd	111	115	He	52.089	ppb	1.7	23939.16	0.2785	Pulse	0.5000	3
Sn	120	115	He	51.616	ppb	0.2	71508.28	0.8319	Pulse	0.1000	3
Sb	121	115	He	52.728	ppb	0.8	67340.94	0.7835	Pulse	0.1000	3
Ba	137	115	He	523.875	ppb	0.4	216134.83	2.5145	Pulse	0.1000	3
Tl	205	159	He	51.111	ppb	0.5	510059.51	1.2639	Pulse	0.1000	3
Pb	208	159	He	51.261	ppb	0.7	677503.38	1.6788	Pulse	0.1000	3
U	238	209	He	50.731	ppb	0.6	770744.36	2.4991	Pulse	0.1000	3

ISTD Table:

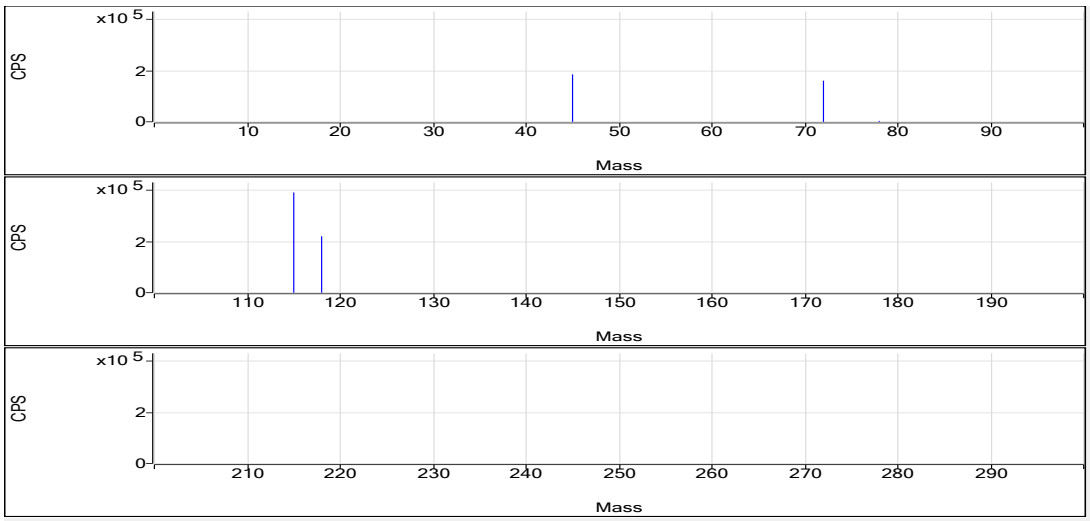
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2499688.51	0.1	104.2	Analog	0.1000	3
No Gas	Ge	72	1211285.03	0.2	105.0	Pulse	0.1000	3
H2	Sc	45	185588.29	1.1	99.2	Pulse	0.1000	3
H2	Ge	72	160961.73	2.0	98.3	Pulse	0.1000	3
H2	In	115	392291.67	0.3	100.8	Pulse	0.1000	3
He	Sc	45	48772.52	2.8	104.6	Pulse	0.1000	3
He	Ge	72	85310.93	0.3	105.1	Pulse	0.1000	3
He	In	115	85955.16	0.6	99.7	Pulse	0.1000	3
He	Tb	159	403563.80	0.6	101.2	Pulse	0.1000	3
He	Bi	209	308416.75	0.6	99.7	Pulse	0.1000	3

No Gas

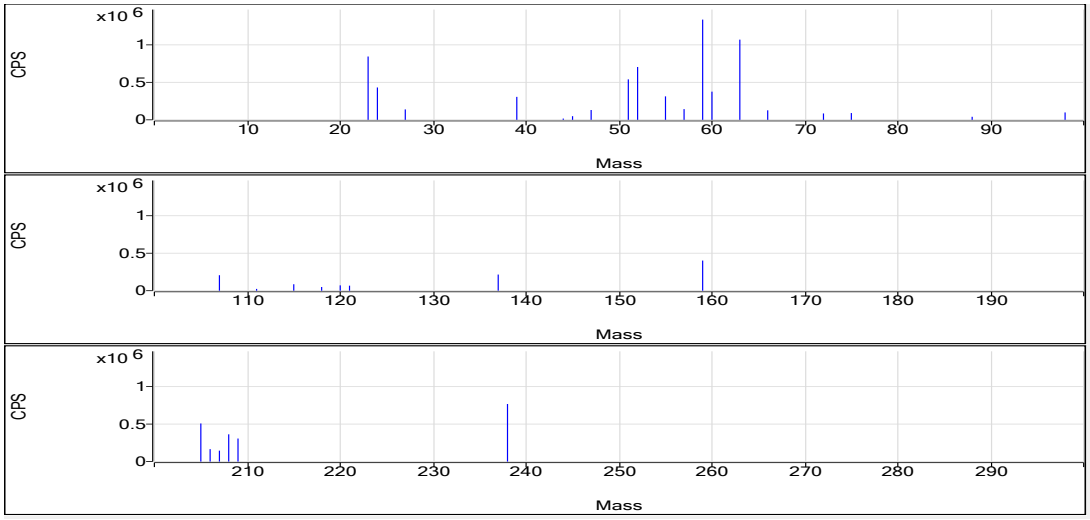


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.33	0.0361	90301.87	0.0008	4.685E-06
Be	9	1	No Gas	48.138	0.0367	91648.42	0.0008	4.685E-06
Be	9	1	No Gas	47.952	0.0366	91547.45	0.0008	4.685E-06
Se	78	2	H2	55.247	0.0231	3649.14	0.0004	1.219E-05
Se	78	2	H2	50.77	0.0212	3487.76	0.0004	1.219E-05
Se	78	2	H2	53.354	0.0223	3561.78	0.0004	1.219E-05
Na	23	3	He	4599.241	16.7969	844338.11	0.0036	0.3452
Na	23	3	He	4820.006	17.5866	850854.83	0.0036	0.3452
Na	23	3	He	4877.917	17.7937	848208.19	0.0036	0.3452
Mg	24	3	He	4810.46	8.635	434061.17	0.0018	0.003497
Mg	24	3	He	4980.964	8.941	432571.95	0.0018	0.003497
Mg	24	3	He	5060.895	9.0844	433042.92	0.0018	0.003497
Al	27	3	He	4744.734	2.7765	139566.84	0.0006	0.0006432
Al	27	3	He	4909.821	2.8731	139001.42	0.0006	0.0006432
Al	27	3	He	5011.779	2.9327	139799.29	0.0006	0.0006432
K	39	3	He	4905.178	6.1063	306948.75	0.0012	0.3951
K	39	3	He	5108.876	6.3435	306903.12	0.0012	0.3951
K	39	3	He	5213.318	6.4651	308183.51	0.0012	0.3951
Ca	44	3	He	4871.981	0.3318	16680.12	0.0001	0.002715
Ca	44	3	He	5152.334	0.3508	16970.35	0.0001	0.002715
Ca	44	3	He	5099.285	0.3472	16549.79	0.0001	0.002715
Ti	47	3	He	4954.161	2.6602	133721.95	0.0005	7.003E-05
Ti	47	3	He	4999.34	2.6845	129876.86	0.0005	7.003E-05
Ti	47	3	He	5094.14	2.7354	130392.07	0.0005	7.003E-05
V	51	3	He	492.2	10.784	542083.56	0.0219	0.02486
V	51	3	He	512.23	11.2218	542921.19	0.0219	0.02486
V	51	3	He	517.471	11.3364	540392.94	0.0219	0.02486
Cr	52	3	He	471.294	14.1509	711330.22	0.0299	0.03997
Cr	52	3	He	485.168	14.5662	704729.13	0.0299	0.03997
Cr	52	3	He	493.599	14.8187	706391.86	0.0299	0.03997
Mn	55	3	He	477.705	6.1335	308313.80	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	512.446	6.5793	318313.28	0.0128	0.002639
Mn	55	3	He	515.737	6.6215	315642.51	0.0128	0.002639
Fe	57	3	He	4910.327	2.8543	143477.97	0.0006	0.001429
Fe	57	3	He	5135.007	2.9848	144408.56	0.0006	0.001429
Fe	57	3	He	5130.305	2.9821	142153.19	0.0006	0.001429
Co	59	3	He	477.081	26.8534	1349853.73	0.0563	0.002149
Co	59	3	He	492.829	27.7397	1342074.98	0.0563	0.002149
Co	59	3	He	497.265	27.9894	1334224.51	0.0563	0.002149
Ni	60	3	He	519.329	4.4603	379852.69	0.0086	0.002834
Ni	60	3	He	511.931	4.3968	376175.66	0.0086	0.002834
Ni	60	3	He	513.191	4.4076	375589.06	0.0086	0.002834
Cu	63	3	He	491.431	12.6203	1074783.58	0.0257	0.004757
Cu	63	3	He	485.338	12.4639	1066368.58	0.0257	0.004757
Cu	63	3	He	493.728	12.6793	1080444.52	0.0257	0.004757
Zn	66	3	He	518.341	1.513	128853.90	0.0029	0.003818
Zn	66	3	He	506.151	1.4775	126412.81	0.0029	0.003818
Zn	66	3	He	507.504	1.4815	126241.64	0.0029	0.003818
As	75	3	He	522.003	1.0703	91151.72	0.002	0.0008061
As	75	3	He	516.42	1.0589	90594.18	0.002	0.0008061
As	75	3	He	516.713	1.0595	90282.13	0.002	0.0008061
Sr	88	3	He	51.601	0.4638	40147.80	0.009	0.0009645
Sr	88	3	He	52.908	0.4755	40689.46	0.009	0.0009645
Sr	88	3	He	53.28	0.4789	41059.91	0.009	0.0009645
Mo	98	3	He	52.17	1.1442	99038.23	0.0219	0.0002706
Mo	98	3	He	52.819	1.1584	99117.58	0.0219	0.0002706
Mo	98	3	He	52.228	1.1454	98211.51	0.0219	0.0002706
Ag	107	3	He	51.89	2.4128	208852.99	0.0465	0.0006206
Ag	107	3	He	51.37	2.3887	204387.09	0.0465	0.0006206
Ag	107	3	He	52.296	2.4317	208497.32	0.0465	0.0006206
Cd	111	3	He	51.861	0.2773	24002.65	0.0053	0
Cd	111	3	He	53.042	0.2836	24267.04	0.0053	0
Cd	111	3	He	51.364	0.2746	23547.80	0.0053	0
Sn	120	3	He	51.481	0.8298	71827.14	0.0158	0.01648
Sn	120	3	He	51.704	0.8333	71303.98	0.0158	0.01648
Sn	120	3	He	51.662	0.8327	71393.71	0.0158	0.01648
Sb	121	3	He	52.221	0.7759	67163.55	0.0149	0.0002698
Sb	121	3	He	52.962	0.7869	67334.53	0.0149	0.0002698
Sb	121	3	He	53.002	0.7875	67524.75	0.0149	0.0002698
Ba	137	3	He	525.498	2.5223	218325.70	0.0048	0.0002317
Ba	137	3	He	524.356	2.5168	215348.57	0.0048	0.0002317
Ba	137	3	He	521.771	2.5044	214730.21	0.0048	0.0002317
Tl	205	3	He	51.384	1.2707	510702.73	0.0247	0.0001339
Tl	205	3	He	51.103	1.2637	508821.87	0.0247	0.0001339
Tl	205	3	He	50.845	1.2573	510653.94	0.0247	0.0001339
Pb	208	3	He	51.578	1.6892	363968.04	0.0327	0.00107
Pb	208	3	He	51.337	1.6813	364672.10	0.0327	0.00107
Pb	208	3	He	50.87	1.666	365758.90	0.0327	0.00107
U	238	3	He	50.623	2.4937	774602.02	0.0493	7.55E-05
U	238	3	He	51.083	2.5164	772684.75	0.0493	7.55E-05
U	238	3	He	50.486	2.487	764946.32	0.0493	7.55E-05
Sc	45	1	No Gas			2500920.43		
Sc	45	1	No Gas			2495616.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2502528.56		
Ge	72	1	No Gas			1211399.04		
Ge	72	1	No Gas			1208982.87		
Ge	72	1	No Gas			1213473.19		
Sc	45	2	H2			184002.83		
Sc	45	2	H2			187820.51		
Sc	45	2	H2			184941.54		
Ge	72	2	H2			158288.15		
Ge	72	2	H2			164619.37		
Ge	72	2	H2			159977.68		
In	115	2	H2			391460.07		
In	115	2	H2			393772.92		
In	115	2	H2			391642.03		
Sc	45	3	He			50267.59		
Sc	45	3	He			48380.98		
Sc	45	3	He			47669.00		
Ge	72	3	He			85162.89		
Ge	72	3	He			85556.47		
Ge	72	3	He			85213.43		
In	115	3	He			86942.56		
In	115	3	He			85955.37		
In	115	3	He			86125.75		
Tb	159	3	He			401914.80		
Tb	159	3	He			402638.20		
Tb	159	3	He			406138.39		
Bi	209	3	He			310617.48		
Bi	209	3	He			307055.91		
Bi	209	3	He			307576.85		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

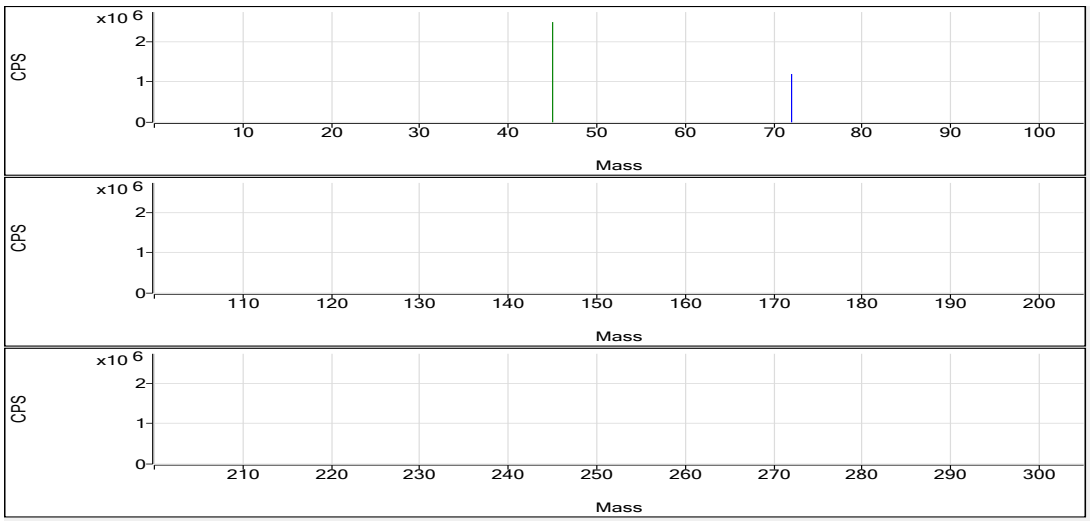
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.024	ppb	26.8	56.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.044	ppb	69.1	4.89	0.0000	Pulse	1.5000	3
Na	23	45	He	0.824	ppb	303.7	16643.17	0.3481	Pulse	0.1000	3
Mg	24	45	He	0.380	ppb	155.8	200.01	0.0042	Pulse	0.1000	3
Al	27	45	He	0.687	ppb	50.2	50.00	0.0010	Pulse	0.1000	3
K	39	45	He	5.388	ppb	62.0	19193.13	0.4013	Pulse	0.1000	3
Ca	44	45	He	0.167	ppb	5434.5	130.00	0.0027	Pulse	0.1000	3
Ti	47	45	He	0.772	ppb	56.5	23.33	0.0005	Pulse	0.1000	3
V	51	45	He	0.091	ppb	74.8	1283.40	0.0269	Pulse	0.5000	3
Cr	52	45	He	0.022	ppb	250.4	1943.53	0.0406	Pulse	0.1000	3
Mn	55	45	He	0.072	ppb	45.4	170.01	0.0036	Pulse	0.1000	3
Fe	57	45	He	2.085	ppb	61.2	126.67	0.0026	Pulse	0.1000	3
Co	59	45	He	0.039	ppb	33.8	206.68	0.0043	Pulse	0.1000	3
Ni	60	72	He	0.090	ppb	71.7	300.01	0.0036	Pulse	0.1000	3
Cu	63	72	He	0.061	ppb	44.2	526.70	0.0063	Pulse	0.1000	3
Zn	66	72	He	3.835	ppb	2.2	1246.77	0.0150	Pulse	0.1000	3
As	75	72	He	0.122	ppb	72.0	88.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	-0.040	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.075	ppb	34.7	170.01	0.0019	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	48.9	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.023	ppb	N/A	1420.12	0.0161	Pulse	0.1000	3
Sb	121	115	He	0.074	ppb	31.9	120.01	0.0014	Pulse	0.1000	3
Ba	137	115	He	0.030	ppb	41.6	33.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.092	ppb	2.1	966.74	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	24.4	600.03	0.0015	Pulse	0.1000	3
U	238	209	He	0.056	ppb	23.7	873.40	0.0028	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2475831.47	1.2	103.2	Analog	0.1000	3
No Gas	Ge	72	1192659.96	0.6	103.4	Pulse	0.1000	3
H2	Sc	45	184199.94	1.3	98.5	Pulse	0.1000	3
H2	Ge	72	159437.53	0.4	97.4	Pulse	0.1000	3
H2	In	115	389921.83	0.8	100.2	Pulse	0.1000	3
He	Sc	45	47826.14	2.1	102.5	Pulse	0.1000	3
He	Ge	72	83215.08	1.1	102.5	Pulse	0.1000	3
He	In	115	88122.08	1.3	102.2	Pulse	0.1000	3
He	Tb	159	400901.55	0.5	100.6	Pulse	0.1000	3
He	Bi	209	309235.22	0.9	100.0	Pulse	0.1000	3

No Gas



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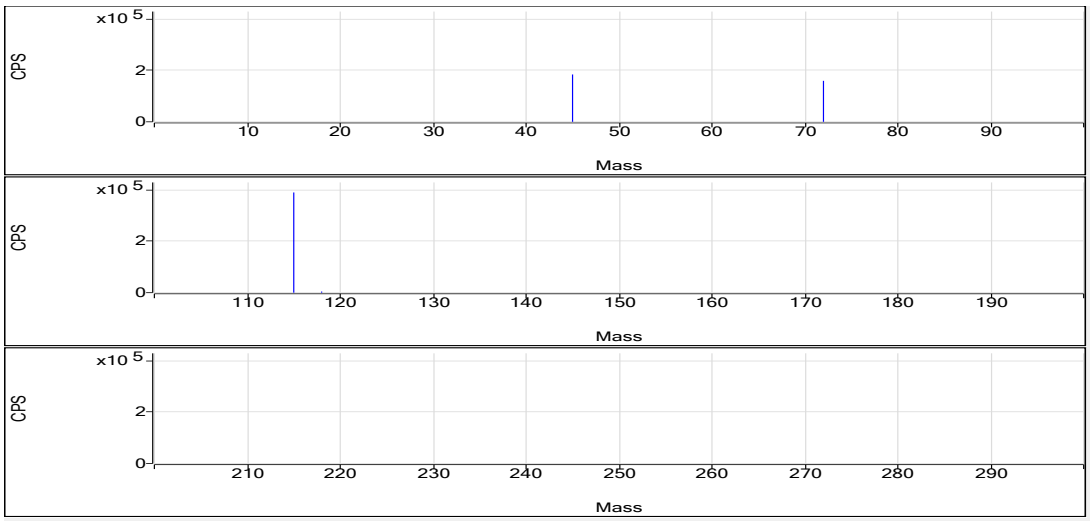
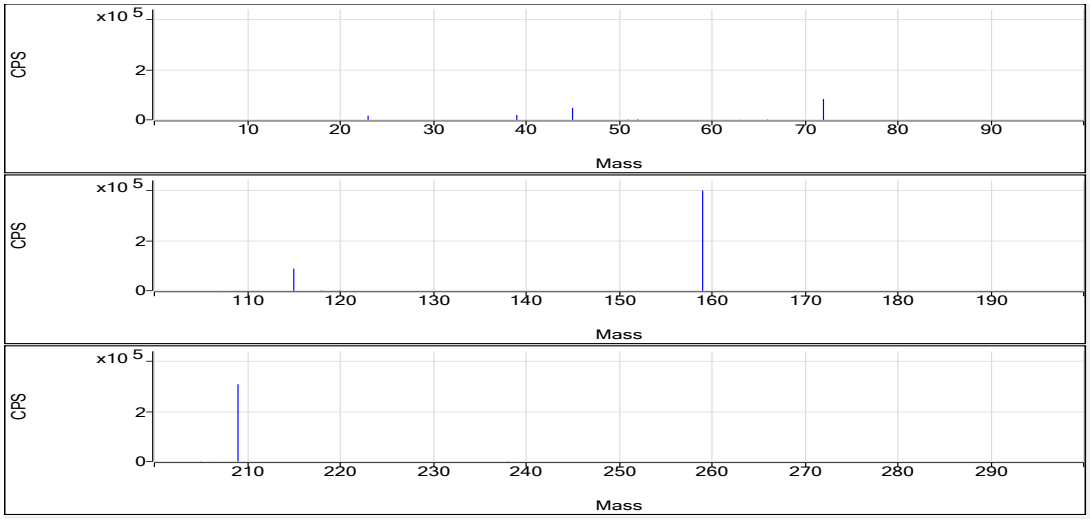


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.023	0	54.00	0.0008	4.685E-06
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Be	9	1	No Gas	0.018	0	46.00	0.0008	4.685E-06
Se	78	2	H2	0.071	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.011	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.051	0	5.33	0.0004	1.219E-05
Na	23	3	He	1.594	0.3509	16880.12	0.0036	0.3452
Na	23	3	He	-1.973	0.3381	16459.56	0.0036	0.3452
Na	23	3	He	2.849	0.3554	16589.84	0.0036	0.3452
Mg	24	3	He	1.063	0.0054	260.01	0.0018	0.003497
Mg	24	3	He	-0.003	0.0035	170.01	0.0018	0.003497
Mg	24	3	He	0.081	0.0036	170.01	0.0018	0.003497
Al	27	3	He	0.322	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	1.007	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	0.731	0.0011	50.00	0.0006	0.0006432
K	39	3	He	1.718	0.3971	19103.05	0.0012	0.3951
K	39	3	He	6.192	0.4023	19583.68	0.0012	0.3951
K	39	3	He	8.254	0.4047	18892.66	0.0012	0.3951
Ca	44	3	He	-6.344	0.0023	110.00	0.0001	0.002715
Ca	44	3	He	-3.701	0.0025	120.00	0.0001	0.002715
Ca	44	3	He	10.546	0.0034	160.01	0.0001	0.002715
Ti	47	3	He	1.031	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	1.017	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.268	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.097	0.027	1298.07	0.0219	0.02486
V	51	3	He	0.02	0.0253	1232.06	0.0219	0.02486
V	51	3	He	0.156	0.0283	1320.07	0.0219	0.02486
Cr	52	3	He	0.081	0.0424	2040.21	0.0299	0.03997
Cr	52	3	He	0.01	0.0403	1960.21	0.0299	0.03997
Cr	52	3	He	-0.026	0.0392	1830.18	0.0299	0.03997
Mn	55	3	He	0.086	0.0037	180.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.035	0.0031	150.01	0.0128	0.002639
Mn	55	3	He	0.095	0.0039	180.01	0.0128	0.002639
Fe	57	3	He	1.476	0.0023	110.00	0.0006	0.001429
Fe	57	3	He	3.552	0.0035	170.01	0.0006	0.001429
Fe	57	3	He	1.228	0.0021	100.00	0.0006	0.001429
Co	59	3	He	0.036	0.0042	200.01	0.0563	0.002149
Co	59	3	He	0.028	0.0037	180.01	0.0563	0.002149
Co	59	3	He	0.053	0.0051	240.01	0.0563	0.002149
Ni	60	3	He	0.164	0.0042	350.01	0.0086	0.002834
Ni	60	3	He	0.043	0.0032	270.01	0.0086	0.002834
Ni	60	3	He	0.063	0.0034	280.01	0.0086	0.002834
Cu	63	3	He	0.07	0.0065	540.03	0.0257	0.004757
Cu	63	3	He	0.083	0.0069	580.04	0.0257	0.004757
Cu	63	3	He	0.031	0.0055	460.02	0.0257	0.004757
Zn	66	3	He	3.851	0.015	1240.10	0.0029	0.003818
Zn	66	3	He	3.745	0.0147	1240.11	0.0029	0.003818
Zn	66	3	He	3.909	0.0152	1260.10	0.0029	0.003818
As	75	3	He	0.021	0.0008	70.00	0.002	0.0008061
As	75	3	He	0.174	0.0012	98.00	0.002	0.0008061
As	75	3	He	0.172	0.0012	96.00	0.002	0.0008061
Sr	88	3	He	-0.045	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.031	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.044	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	0.105	0.0026	230.01	0.0219	0.0002706
Mo	98	3	He	0.056	0.0015	130.01	0.0219	0.0002706
Mo	98	3	He	0.065	0.0017	150.01	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	-0.036	0.0159	1420.13	0.0158	0.01648
Sn	120	3	He	-0.069	0.0154	1340.10	0.0158	0.01648
Sn	120	3	He	0.036	0.017	1500.12	0.0158	0.01648
Sb	121	3	He	0.05	0.001	90.00	0.0149	0.0002698
Sb	121	3	He	0.075	0.0014	120.01	0.0149	0.0002698
Sb	121	3	He	0.097	0.0017	150.01	0.0149	0.0002698
Ba	137	3	He	0.045	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Tl	205	3	He	0.09	0.0024	950.08	0.0247	0.0001339
Tl	205	3	He	0.094	0.0025	980.07	0.0247	0.0001339
Tl	205	3	He	0.093	0.0024	970.07	0.0247	0.0001339
Pb	208	3	He	0.015	0.0016	430.02	0.0327	0.00107
Pb	208	3	He	0.015	0.0016	310.02	0.0327	0.00107
Pb	208	3	He	0.009	0.0014	330.02	0.0327	0.00107
U	238	3	He	0.041	0.0021	640.04	0.0493	7.55E-05
U	238	3	He	0.06	0.003	940.08	0.0493	7.55E-05
U	238	3	He	0.066	0.0033	1040.08	0.0493	7.55E-05
Sc	45	1	No Gas			2441150.28		
Sc	45	1	No Gas			2490468.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2495875.90		
Ge	72	1	No Gas			1188268.34		
Ge	72	1	No Gas			1200829.28		
Ge	72	1	No Gas			1188882.25		
Sc	45	2	H2			185528.83		
Sc	45	2	H2			181398.55		
Sc	45	2	H2			185672.44		
Ge	72	2	H2			159755.86		
Ge	72	2	H2			159813.57		
Ge	72	2	H2			158743.17		
In	115	2	H2			389560.97		
In	115	2	H2			393331.83		
In	115	2	H2			386872.69		
Sc	45	3	He			48110.38		
Sc	45	3	He			48682.26		
Sc	45	3	He			46685.77		
Ge	72	3	He			82507.58		
Ge	72	3	He			84237.44		
Ge	72	3	He			82900.21		
In	115	3	He			89306.51		
In	115	3	He			87093.01		
In	115	3	He			87998.42		
Tb	159	3	He			403148.43		
Tb	159	3	He			399987.49		
Tb	159	3	He			399568.74		
Bi	209	3	He			306061.69		
Bi	209	3	He			310362.38		
Bi	209	3	He			311281.58		

Quantitation Report

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Acq Time	8/10/2023 2:38:51 PM
Sample Name	410-137743-L-4-A
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

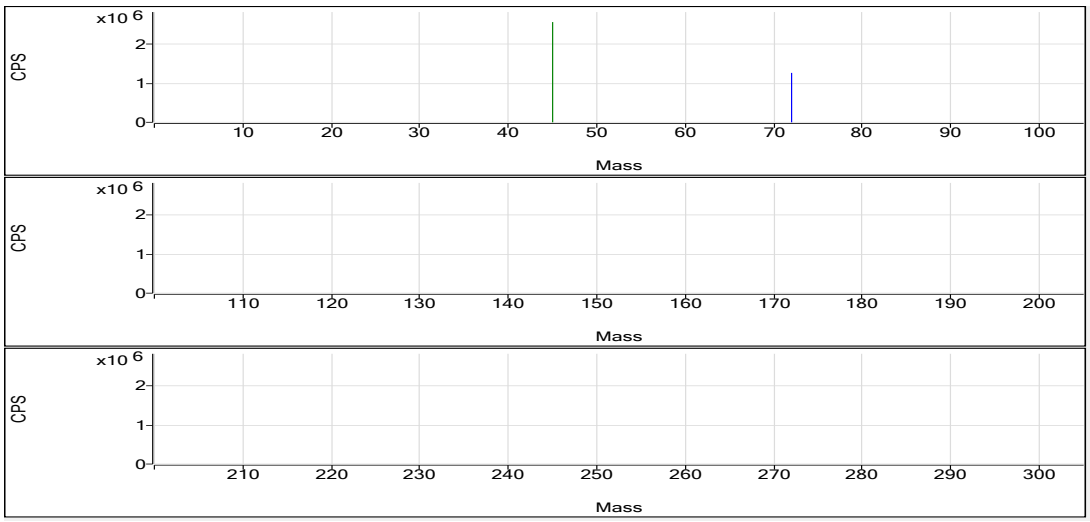
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.068	ppb	4.2	144.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.102	ppb	34.9	9.56	0.0001	Pulse	1.5000	3
Na	23	45	He	7475.373	ppb	2.8	1345382.69	27.0849	Analog	0.1000	3
Mg	24	45	He	9612.652	ppb	2.4	856890.56	17.2517	Pulse	0.1000	3
Al	27	45	He	28.889	ppb	31.4	873.39	0.0175	Pulse	0.1000	3
K	39	45	He	3643.052	ppb	2.1	230316.97	4.6368	Pulse	0.1000	3
Ca	44	45	He	66937.997	ppb	2.2	224735.53	4.5245	Pulse	0.1000	3
Ti	47	45	He	0.738	ppb	75.5	23.33	0.0005	Pulse	0.1000	3
V	51	45	He	-0.230	ppb	N/A	984.71	0.0198	Pulse	0.5000	3
Cr	52	45	He	-0.169	ppb	N/A	1733.49	0.0349	Pulse	0.1000	3
Mn	55	45	He	208.877	ppb	1.1	133300.02	2.6833	Pulse	0.1000	3
Fe	57	45	He	5.389	ppb	18.2	226.68	0.0046	Pulse	0.1000	3
Co	59	45	He	1.003	ppb	9.0	2913.72	0.0586	Pulse	0.1000	3
Ni	60	72	He	14.320	ppb	1.9	11381.57	0.1257	Pulse	0.1000	3
Cu	63	72	He	0.592	ppb	20.8	1803.50	0.0199	Pulse	0.1000	3
Zn	66	72	He	22.199	ppb	10.2	6191.53	0.0685	Pulse	0.1000	3
As	75	72	He	0.002	ppb	4669.0	73.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	365.848	ppb	0.9	299370.41	3.2826	Pulse	0.1000	3
Mo	98	115	He	0.259	ppb	19.6	543.36	0.0060	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	40.00	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.081	ppb	6.7	39.33	0.0004	Pulse	0.5000	3
Sn	120	115	He	-0.263	ppb	N/A	1123.42	0.0123	Pulse	0.1000	3
Sb	121	115	He	0.029	ppb	30.7	63.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	9.206	ppb	5.8	4050.72	0.0444	Pulse	0.1000	3
Tl	205	159	He	0.076	ppb	14.9	820.06	0.0020	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	54.3	546.69	0.0013	Pulse	0.1000	3
U	238	209	He	0.062	ppb	17.9	1006.75	0.0031	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2561455.80	1.1	106.8	Analog	0.1000	3
No Gas	Ge	72	1262871.28	0.5	109.5	Pulse	0.1000	3
H2	Sc	45	193154.14	1.4	103.3	Pulse	0.1000	3
H2	Ge	72	174565.54	1.0	106.6	Pulse	0.1000	3
H2	In	115	407347.18	0.7	104.7	Pulse	0.1000	3
He	Sc	45	49682.52	1.7	106.5	Pulse	0.1000	3
He	Ge	72	90526.14	1.6	111.5	Pulse	0.1000	3
He	In	115	91202.32	0.8	105.8	Pulse	0.1000	3
He	Tb	159	407404.79	1.0	102.2	Pulse	0.1000	3
He	Bi	209	322806.21	0.6	104.4	Pulse	0.1000	3

No Gas



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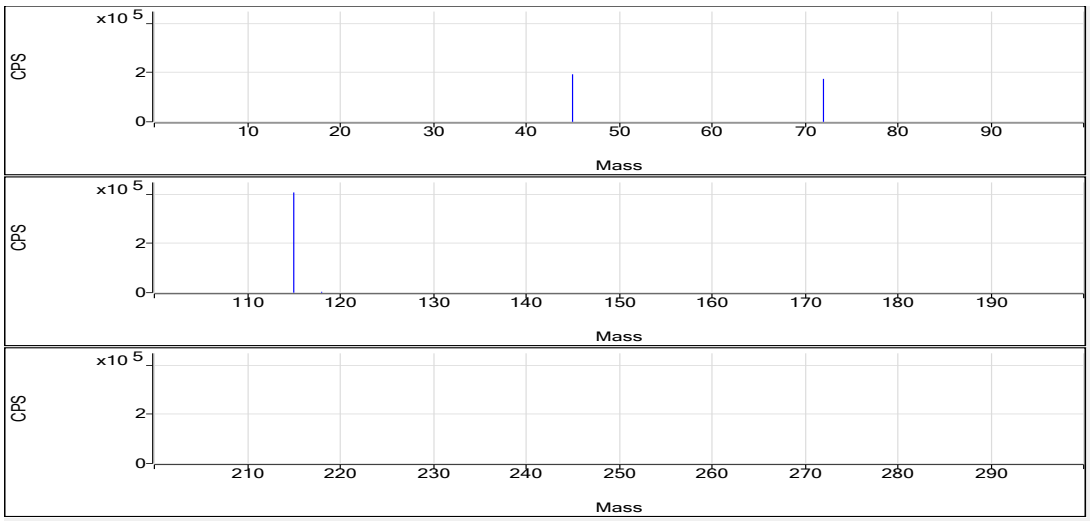
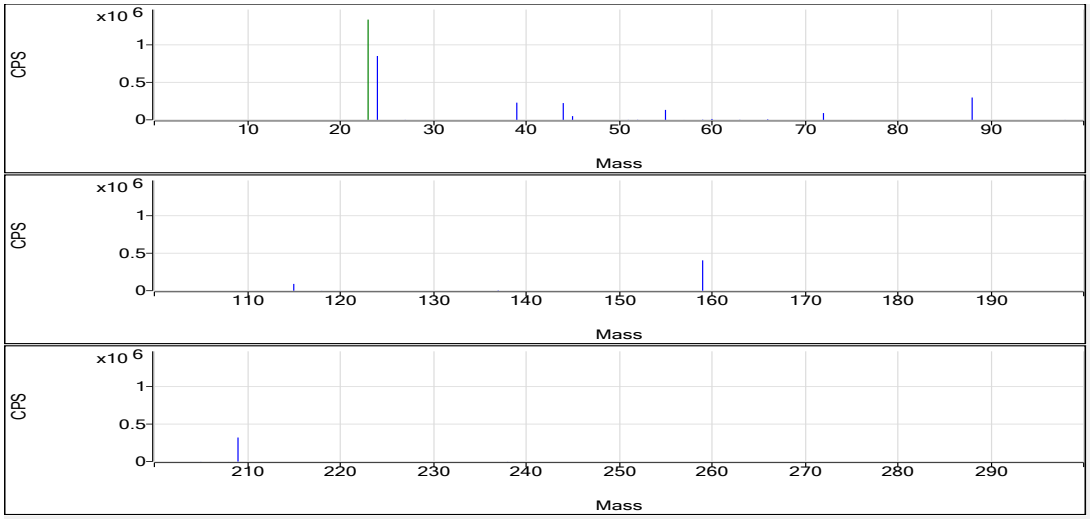


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.067	0.0001	144.00	0.0008	4.685E-06
Be	9	1	No Gas	0.065	0.0001	140.00	0.0008	4.685E-06
Be	9	1	No Gas	0.071	0.0001	148.00	0.0008	4.685E-06
Se	78	2	H2	0.061	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.128	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.117	0.0001	10.67	0.0004	1.219E-05
Na	23	3	He	7457.088	27.0195	1363100.60	0.0036	0.3452
Na	23	3	He	7691.329	27.8574	1359798.89	0.0036	0.3452
Na	23	3	He	7277.701	26.3779	1313248.57	0.0036	0.3452
Mg	24	3	He	9446.894	16.9543	855321.00	0.0018	0.003497
Mg	24	3	He	9872.3	17.7176	864844.91	0.0018	0.003497
Mg	24	3	He	9518.763	17.0832	850505.77	0.0018	0.003497
Al	27	3	He	38.884	0.0234	1180.09	0.0006	0.0006432
Al	27	3	He	26.566	0.0162	790.05	0.0006	0.0006432
Al	27	3	He	21.218	0.0131	650.03	0.0006	0.0006432
K	39	3	He	3575.874	4.5586	229973.10	0.0012	0.3951
K	39	3	He	3728.019	4.7357	231162.73	0.0012	0.3951
K	39	3	He	3625.262	4.6161	229815.07	0.0012	0.3951
Ca	44	3	He	65495.55	4.4271	223339.72	0.0001	0.002715
Ca	44	3	He	68385.504	4.6223	225626.77	0.0001	0.002715
Ca	44	3	He	66932.939	4.5242	225240.09	0.0001	0.002715
Ti	47	3	He	1.346	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	0.251	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.618	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	-0.254	0.0193	974.04	0.0219	0.02486
V	51	3	He	-0.198	0.0205	1002.04	0.0219	0.02486
V	51	3	He	-0.239	0.0196	978.04	0.0219	0.02486
Cr	52	3	He	-0.19	0.0343	1730.16	0.0299	0.03997
Cr	52	3	He	-0.11	0.0367	1790.15	0.0299	0.03997
Cr	52	3	He	-0.208	0.0337	1680.17	0.0299	0.03997
Mn	55	3	He	206.239	2.6495	133662.94	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	210.645	2.706	132089.08	0.0128	0.002639
Mn	55	3	He	209.746	2.6945	134148.05	0.0128	0.002639
Fe	57	3	He	6.412	0.0052	260.01	0.0006	0.001429
Fe	57	3	He	5.299	0.0045	220.01	0.0006	0.001429
Fe	57	3	He	4.456	0.004	200.01	0.0006	0.001429
Co	59	3	He	1.071	0.0624	3150.44	0.0563	0.002149
Co	59	3	He	0.901	0.0529	2580.31	0.0563	0.002149
Co	59	3	He	1.036	0.0605	3010.41	0.0563	0.002149
Ni	60	3	He	14.628	0.1284	11494.97	0.0086	0.002834
Ni	60	3	He	14.155	0.1243	11174.75	0.0086	0.002834
Ni	60	3	He	14.175	0.1245	11474.99	0.0086	0.002834
Cu	63	3	He	0.568	0.0193	1730.17	0.0257	0.004757
Cu	63	3	He	0.725	0.0234	2100.21	0.0257	0.004757
Cu	63	3	He	0.483	0.0171	1580.13	0.0257	0.004757
Zn	66	3	He	22.441	0.0692	6191.55	0.0029	0.003818
Zn	66	3	He	24.335	0.0747	6711.76	0.0029	0.003818
Zn	66	3	He	19.823	0.0615	5671.28	0.0029	0.003818
As	75	3	He	-0.066	0.0007	60.00	0.002	0.0008061
As	75	3	He	0.128	0.0011	96.00	0.002	0.0008061
As	75	3	He	-0.055	0.0007	64.00	0.002	0.0008061
Sr	88	3	He	362.17	3.2496	298362.94	0.009	0.0009645
Sr	88	3	He	366.574	3.2891	297188.18	0.009	0.0009645
Sr	88	3	He	368.802	3.309	302560.11	0.009	0.0009645
Mo	98	3	He	0.306	0.007	640.04	0.0219	0.0002706
Mo	98	3	He	0.205	0.0048	430.02	0.0219	0.0002706
Mo	98	3	He	0.267	0.0061	560.03	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.013	0	0.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.077	0.0004	38.00	0.0053	0
Cd	111	3	He	0.087	0.0005	42.00	0.0053	0
Cd	111	3	He	0.078	0.0004	38.00	0.0053	0
Sn	120	3	He	-0.374	0.0106	970.07	0.0158	0.01648
Sn	120	3	He	-0.272	0.0122	1100.08	0.0158	0.01648
Sn	120	3	He	-0.143	0.0142	1300.10	0.0158	0.01648
Sb	121	3	He	0.018	0.0005	50.00	0.0149	0.0002698
Sb	121	3	He	0.034	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.033	0.0008	70.00	0.0149	0.0002698
Ba	137	3	He	8.849	0.0427	3920.67	0.0048	0.0002317
Ba	137	3	He	8.947	0.0432	3900.69	0.0048	0.0002317
Ba	137	3	He	9.821	0.0474	4330.81	0.0048	0.0002317
Tl	205	3	He	0.086	0.0023	930.07	0.0247	0.0001339
Tl	205	3	He	0.078	0.0021	840.06	0.0247	0.0001339
Tl	205	3	He	0.064	0.0017	690.04	0.0247	0.0001339
Pb	208	3	He	0.004	0.0012	240.01	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	340.02	0.0327	0.00107
Pb	208	3	He	0.007	0.0013	240.01	0.0327	0.00107
U	238	3	He	0.058	0.0029	940.08	0.0493	7.55E-05
U	238	3	He	0.053	0.0027	870.06	0.0493	7.55E-05
U	238	3	He	0.074	0.0037	1210.11	0.0493	7.55E-05
Sc	45	1	No Gas			2573892.31		
Sc	45	1	No Gas			2582645.74		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2527829.34		
Ge	72	1	No Gas			1269812.25		
Ge	72	1	No Gas			1262694.82		
Ge	72	1	No Gas			1256106.78		
Sc	45	2	H2			194839.55		
Sc	45	2	H2			190106.75		
Sc	45	2	H2			194516.13		
Ge	72	2	H2			176324.43		
Ge	72	2	H2			172723.75		
Ge	72	2	H2			174648.43		
In	115	2	H2			410041.44		
In	115	2	H2			404308.04		
In	115	2	H2			407692.06		
Sc	45	3	He			50448.72		
Sc	45	3	He			48812.81		
Sc	45	3	He			49786.03		
Ge	72	3	He			89530.35		
Ge	72	3	He			89882.08		
Ge	72	3	He			92165.98		
In	115	3	He			91822.44		
In	115	3	He			90362.93		
In	115	3	He			91439.83		
Tb	159	3	He			412130.58		
Tb	159	3	He			405669.02		
Tb	159	3	He			404414.76		
Bi	209	3	He			320467.38		
Bi	209	3	He			323578.26		
Bi	209	3	He			324373.00		

Quantitation Report

Data File Name	119SMPL.d
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Acq Time	8/10/2023 2:40:55 PM
Sample Name	410-137743-L-4-A PDS
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

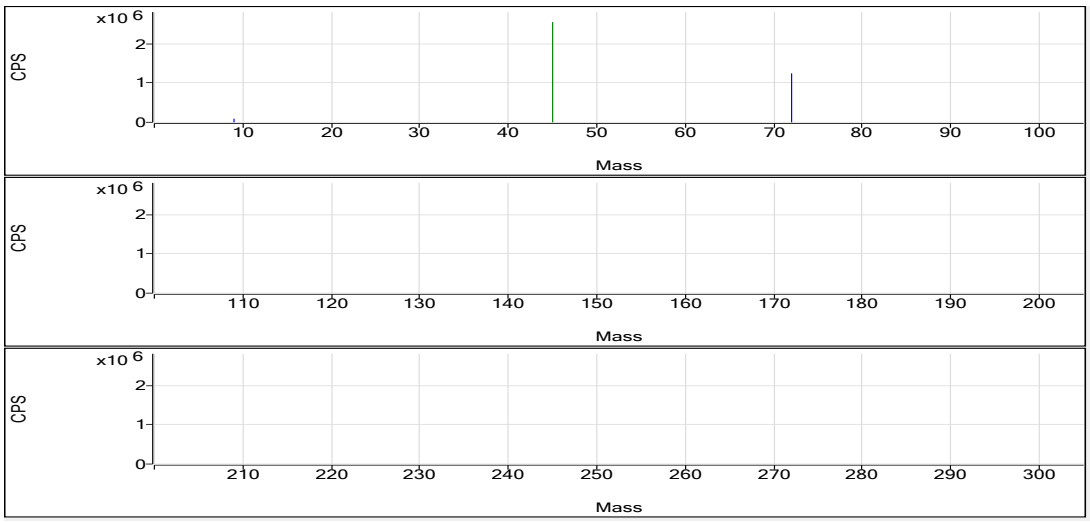
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.854	ppb	1.2	91450.48	0.0357	Pulse	0.5000	3
Se	78	72	H2	101.301	ppb	0.6	7270.52	0.0423	Pulse	1.5000	3
Na	23	45	He	12125.337	ppb	1.8	2172025.59	43.7181	Analog	0.1000	3
Mg	24	45	He	14738.896	ppb	0.7	1314321.34	26.4498	Analog	0.1000	3
Al	27	45	He	4869.339	ppb	0.8	141582.64	2.8494	Pulse	0.1000	3
K	39	45	He	8462.279	ppb	1.4	509166.89	10.2479	Pulse	0.1000	3
Ca	44	45	He	70207.416	ppb	1.0	235782.74	4.7454	Pulse	0.1000	3
Ti	47	45	He	520.028	ppb	2.4	13880.43	0.2793	Pulse	0.1000	3
V	51	45	He	509.122	ppb	1.4	554175.39	11.1539	Pulse	0.5000	3
Cr	52	45	He	479.570	ppb	1.2	715410.04	14.3987	Pulse	0.1000	3
Mn	55	45	He	698.952	ppb	1.5	445812.20	8.9729	Pulse	0.1000	3
Fe	57	45	He	4997.201	ppb	1.8	144321.76	2.9048	Pulse	0.1000	3
Co	59	45	He	481.068	ppb	1.4	1345348.99	27.0777	Pulse	0.1000	3
Ni	60	72	He	518.442	ppb	2.0	387355.38	4.4527	Pulse	0.1000	3
Cu	63	72	He	481.382	ppb	1.4	1075509.15	12.3623	Pulse	0.1000	3
Zn	66	72	He	528.237	ppb	1.7	134132.61	1.5418	Pulse	0.1000	3
As	75	72	He	521.415	ppb	1.5	93011.56	1.0691	Pulse	0.5000	3
Sr	88	115	He	410.542	ppb	2.1	329398.73	3.6834	Pulse	0.1000	3
Mo	98	115	He	50.681	ppb	0.7	99411.22	1.1115	Pulse	0.1000	3
Ag	107	115	He	50.180	ppb	0.8	208682.43	2.3333	Pulse	0.1000	3
Cd	111	115	He	51.485	ppb	1.2	24620.34	0.2753	Pulse	0.5000	3
Sn	120	115	He	103.342	ppb	2.1	147478.52	1.6491	Pulse	0.1000	3
Sb	121	115	He	99.367	ppb	1.4	132032.94	1.4762	Pulse	0.1000	3
Ba	137	115	He	515.184	ppb	0.7	221154.29	2.4728	Pulse	0.1000	3
Tl	205	159	He	102.903	ppb	0.3	1026544.25	2.5446	Pulse	0.1000	3
Pb	208	159	He	51.633	ppb	1.2	682156.64	1.6910	Pulse	0.1000	3
U	238	209	He	50.141	ppb	1.0	775995.17	2.4700	Pulse	0.1000	3

ISTD Table:

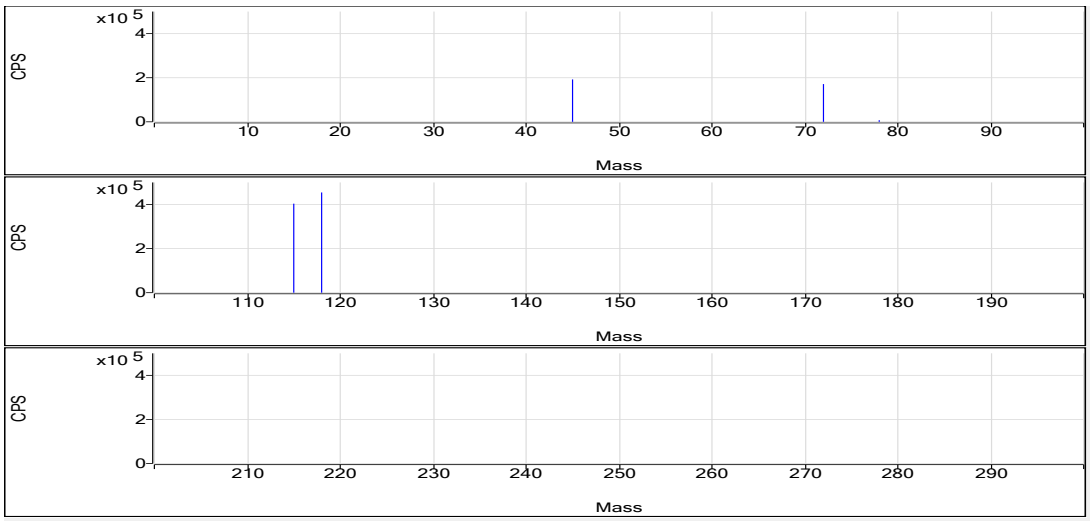
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2558784.39	1.6	106.7	Analog	0.1000	3
No Gas	Ge	72	1249395.97	0.4	108.3	Pulse	0.1000	3
H2	Sc	45	193222.85	1.2	103.3	Pulse	0.1000	3
H2	Ge	72	172038.51	0.2	105.1	Pulse	0.1000	3
H2	In	115	405785.74	0.8	104.3	Pulse	0.1000	3
He	Sc	45	49692.55	1.7	106.5	Pulse	0.1000	3
He	Ge	72	87011.10	1.6	107.2	Pulse	0.1000	3
He	In	115	89440.36	1.1	103.8	Pulse	0.1000	3
He	Tb	159	403433.99	0.9	101.2	Pulse	0.1000	3
He	Bi	209	314183.37	0.8	101.6	Pulse	0.1000	3

No Gas

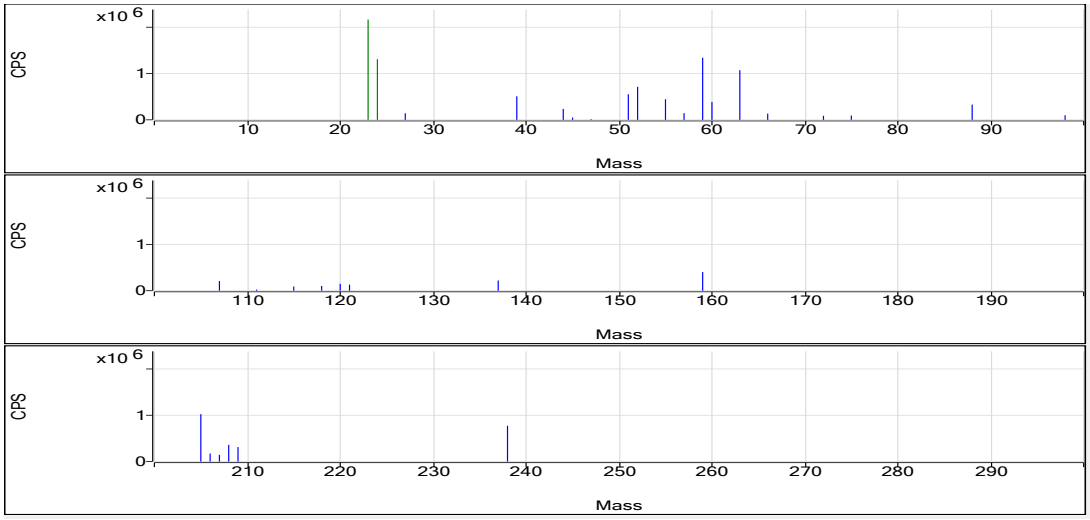


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.289	0.0353	91911.80	0.0008	4.685E-06
Be	9	1	No Gas	46.908	0.0358	91270.17	0.0008	4.685E-06
Be	9	1	No Gas	47.364	0.0361	91169.48	0.0008	4.685E-06
Se	78	2	H2	100.59	0.042	7235.17	0.0004	1.219E-05
Se	78	2	H2	101.799	0.0425	7286.52	0.0004	1.219E-05
Se	78	2	H2	101.512	0.0423	7289.86	0.0004	1.219E-05
Na	23	3	He	12077	43.5452	2179326.06	0.0036	0.3452
Na	23	3	He	11931.662	43.0253	2164081.22	0.0036	0.3452
Na	23	3	He	12367.35	44.5838	2172669.50	0.0036	0.3452
Mg	24	3	He	14628.199	26.2512	1313805.92	0.0018	0.003497
Mg	24	3	He	14791.727	26.5446	1335137.95	0.0018	0.003497
Mg	24	3	He	14796.761	26.5536	1294020.14	0.0018	0.003497
Al	27	3	He	4883.219	2.8575	143010.47	0.0006	0.0006432
Al	27	3	He	4824.556	2.8232	141999.78	0.0006	0.0006432
Al	27	3	He	4900.242	2.8675	139737.68	0.0006	0.0006432
K	39	3	He	8432.833	10.2136	511166.75	0.0012	0.3951
K	39	3	He	8357.797	10.1263	509329.99	0.0012	0.3951
K	39	3	He	8596.208	10.4039	507003.94	0.0012	0.3951
Ca	44	3	He	69834.139	4.7201	236231.27	0.0001	0.002715
Ca	44	3	He	69775.97	4.7162	237215.60	0.0001	0.002715
Ca	44	3	He	71012.139	4.7997	233901.36	0.0001	0.002715
Ti	47	3	He	509.561	0.2737	13696.90	0.0005	7.003E-05
Ti	47	3	He	533.71	0.2866	14417.63	0.0005	7.003E-05
Ti	47	3	He	516.814	0.2776	13526.76	0.0005	7.003E-05
V	51	3	He	506.725	11.1014	555599.25	0.0219	0.02486
V	51	3	He	503.405	11.0289	554729.31	0.0219	0.02486
V	51	3	He	517.237	11.3312	552197.63	0.0219	0.02486
Cr	52	3	He	476.622	14.3104	716199.13	0.0299	0.03997
Cr	52	3	He	475.909	14.289	718707.96	0.0299	0.03997
Cr	52	3	He	486.18	14.5965	711323.04	0.0299	0.03997
Mn	55	3	He	693.127	8.8981	445329.84	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	692.817	8.8942	447357.73	0.0128	0.002639
Mn	55	3	He	710.91	9.1264	444749.02	0.0128	0.002639
Fe	57	3	He	4904.469	2.8509	142679.36	0.0006	0.001429
Fe	57	3	He	4999.271	2.906	146163.61	0.0006	0.001429
Fe	57	3	He	5087.861	2.9574	144122.31	0.0006	0.001429
Co	59	3	He	477.301	26.8657	1344561.85	0.0563	0.002149
Co	59	3	He	476.987	26.8481	1350402.64	0.0563	0.002149
Co	59	3	He	488.914	27.5194	1341082.48	0.0563	0.002149
Ni	60	3	He	508.33	4.3659	386750.31	0.0086	0.002834
Ni	60	3	He	528.781	4.5414	390050.85	0.0086	0.002834
Ni	60	3	He	518.214	4.4507	385264.99	0.0086	0.002834
Cu	63	3	He	474.945	12.1971	1080472.72	0.0257	0.004757
Cu	63	3	He	488.359	12.5414	1077148.58	0.0257	0.004757
Cu	63	3	He	480.841	12.3485	1068906.16	0.0257	0.004757
Zn	66	3	He	518.384	1.5132	134041.63	0.0029	0.003818
Zn	66	3	He	536.404	1.5656	134466.48	0.0029	0.003818
Zn	66	3	He	529.923	1.5468	133889.71	0.0029	0.003818
As	75	3	He	514.536	1.055	93458.40	0.002	0.0008061
As	75	3	He	530.124	1.087	93355.88	0.002	0.0008061
As	75	3	He	519.586	1.0654	92220.39	0.002	0.0008061
Sr	88	3	He	408.374	3.664	327845.11	0.009	0.0009645
Sr	88	3	He	420.068	3.7689	333308.63	0.009	0.0009645
Sr	88	3	He	403.182	3.6174	327042.46	0.009	0.0009645
Mo	98	3	He	50.494	1.1074	99089.34	0.0219	0.0002706
Mo	98	3	He	51.083	1.1203	99079.17	0.0219	0.0002706
Mo	98	3	He	50.467	1.1068	100065.14	0.0219	0.0002706
Ag	107	3	He	50.305	2.3391	209299.00	0.0465	0.0006206
Ag	107	3	He	50.526	2.3494	207777.16	0.0465	0.0006206
Ag	107	3	He	49.709	2.3114	208971.13	0.0465	0.0006206
Cd	111	3	He	51.962	0.2778	24860.11	0.0053	0
Cd	111	3	He	51.684	0.2763	24439.36	0.0053	0
Cd	111	3	He	50.81	0.2717	24561.56	0.0053	0
Sn	120	3	He	104.228	1.6631	148812.89	0.0158	0.01648
Sn	120	3	He	104.924	1.6741	148055.11	0.0158	0.01648
Sn	120	3	He	100.873	1.6101	145567.55	0.0158	0.01648
Sb	121	3	He	100.94	1.4996	134177.99	0.0149	0.0002698
Sb	121	3	He	98.553	1.4641	129482.36	0.0149	0.0002698
Sb	121	3	He	98.606	1.4649	132438.48	0.0149	0.0002698
Ba	137	3	He	514.171	2.4679	220821.97	0.0048	0.0002317
Ba	137	3	He	519.256	2.4923	220412.07	0.0048	0.0002317
Ba	137	3	He	512.124	2.4581	222228.82	0.0048	0.0002317
Tl	205	3	He	102.709	2.5398	1033397.56	0.0247	0.0001339
Tl	205	3	He	102.728	2.5402	1024979.98	0.0247	0.0001339
Tl	205	3	He	103.272	2.5537	1021255.22	0.0247	0.0001339
Pb	208	3	He	51.031	1.6713	360906.56	0.0327	0.00107
Pb	208	3	He	51.563	1.6887	361489.25	0.0327	0.00107
Pb	208	3	He	52.304	1.713	363863.47	0.0327	0.00107
U	238	3	He	50.566	2.4909	778684.52	0.0493	7.55E-05
U	238	3	He	50.297	2.4777	774916.63	0.0493	7.55E-05
U	238	3	He	49.561	2.4414	774384.36	0.0493	7.55E-05
Sc	45	1	No Gas			2602733.40		
Sc	45	1	No Gas			2550484.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2523134.96		
Ge	72	1	No Gas			1253694.90		
Ge	72	1	No Gas			1250794.12		
Ge	72	1	No Gas			1243698.89		
Sc	45	2	H2			195305.70		
Sc	45	2	H2			190879.51		
Sc	45	2	H2			193483.34		
Ge	72	2	H2			172408.77		
Ge	72	2	H2			171571.42		
Ge	72	2	H2			172135.33		
In	115	2	H2			408252.14		
In	115	2	H2			402287.81		
In	115	2	H2			406817.26		
Sc	45	3	He			50047.47		
Sc	45	3	He			50297.88		
Sc	45	3	He			48732.29		
Ge	72	3	He			88584.29		
Ge	72	3	He			85887.09		
Ge	72	3	He			86561.93		
In	115	3	He			90272.46		
In	115	3	He			89245.92		
In	115	3	He			91199.89		
Tb	159	3	He			406887.45		
Tb	159	3	He			403498.04		
Tb	159	3	He			399916.48		
Bi	209	3	He			312605.70		
Bi	209	3	He			312759.14		
Bi	209	3	He			317185.27		

Quantitation Report

Data File Name	120SMPL.d
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Sample Name	410-137743-L-4-A SD@5
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

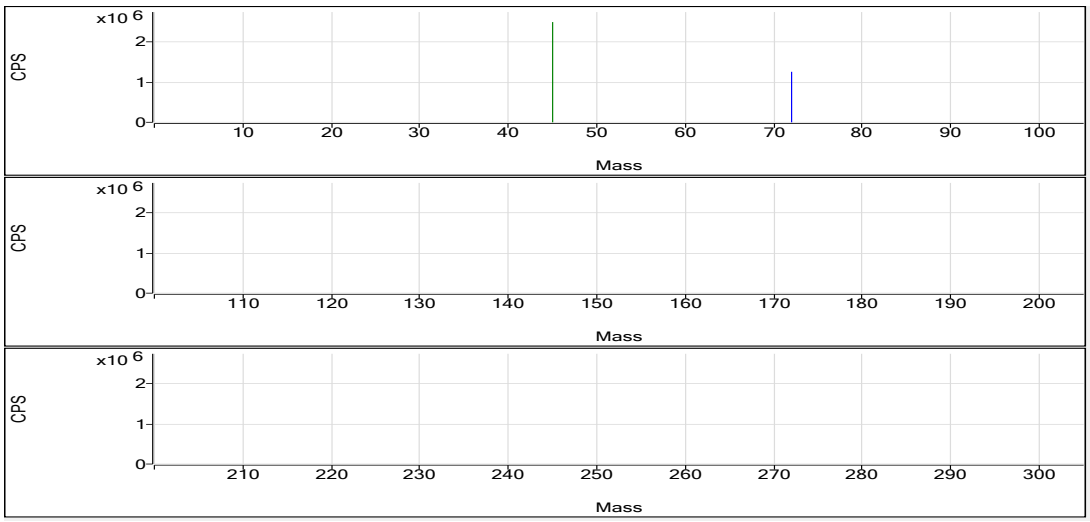
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.032	ppb	7.9	72.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.144	ppb	9.8	12.22	0.0001	Pulse	1.5000	3
Na	23	45	He	1298.638	ppb	1.5	243108.78	4.9905	Pulse	0.1000	3
Mg	24	45	He	1733.542	ppb	0.8	151703.16	3.1140	Pulse	0.1000	3
Al	27	45	He	5.792	ppb	24.2	196.68	0.0040	Pulse	0.1000	3
K	39	45	He	637.942	ppb	3.2	55432.79	1.1378	Pulse	0.1000	3
Ca	44	45	He	12098.289	ppb	2.5	39942.22	0.8200	Pulse	0.1000	3
Ti	47	45	He	0.507	ppb	44.0	16.67	0.0003	Pulse	0.1000	3
V	51	45	He	0.037	ppb	221.8	1251.39	0.0257	Pulse	0.5000	3
Cr	52	45	He	0.003	ppb	5200.1	1950.20	0.0401	Pulse	0.1000	3
Mn	55	45	He	38.431	ppb	0.5	24157.40	0.4959	Pulse	0.1000	3
Fe	57	45	He	4.016	ppb	12.2	183.34	0.0038	Pulse	0.1000	3
Co	59	45	He	0.205	ppb	20.5	666.71	0.0137	Pulse	0.1000	3
Ni	60	72	He	2.577	ppb	12.2	2226.92	0.0250	Pulse	0.1000	3
Cu	63	72	He	0.250	ppb	25.9	1000.07	0.0112	Pulse	0.1000	3
Zn	66	72	He	8.405	ppb	4.9	2526.97	0.0283	Pulse	0.1000	3
As	75	72	He	0.196	ppb	56.8	108.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	66.150	ppb	0.7	53525.20	0.5943	Pulse	0.1000	3
Mo	98	115	He	0.172	ppb	16.9	363.35	0.0040	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	339.5	63.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.025	ppb	33.3	12.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.044	ppb	14.9	1546.82	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.418	ppb	20.2	583.36	0.0065	Pulse	0.1000	3
Ba	137	115	He	1.587	ppb	17.0	706.71	0.0078	Pulse	0.1000	3
Tl	205	159	He	0.221	ppb	2.2	2256.93	0.0056	Pulse	0.1000	3
Pb	208	159	He	0.028	ppb	37.2	806.71	0.0020	Pulse	0.1000	3
U	238	209	He	0.140	ppb	12.4	2226.95	0.0070	Pulse	0.1000	3

ISTD Table:

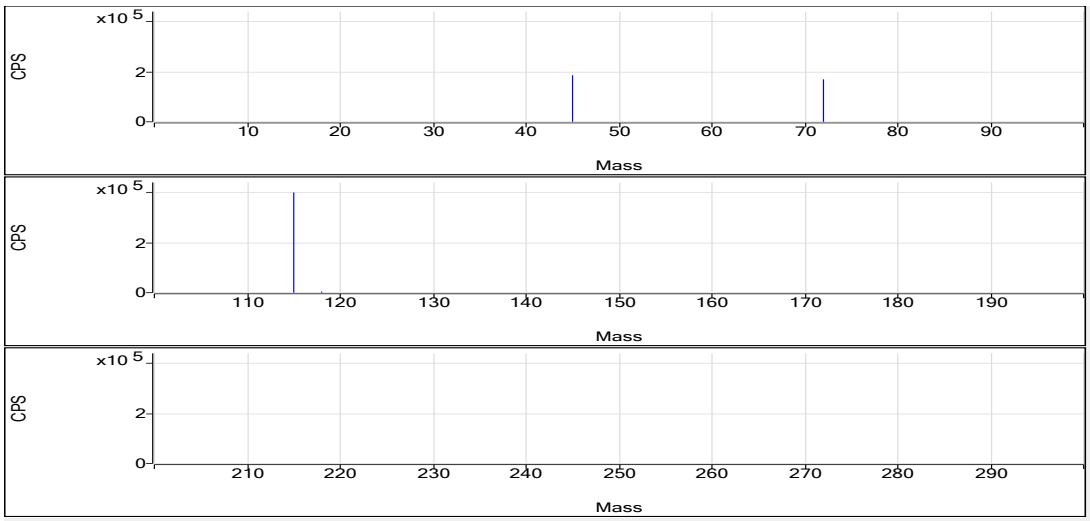
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2500985.33	2.4	104.3	Analog	0.1000	3
No Gas	Ge	72	1260361.86	1.0	109.3	Pulse	0.1000	3
H2	Sc	45	185648.72	0.6	99.3	Pulse	0.1000	3
H2	Ge	72	169461.57	1.8	103.5	Pulse	0.1000	3
H2	In	115	399642.50	0.4	102.7	Pulse	0.1000	3
He	Sc	45	48718.68	1.0	104.5	Pulse	0.1000	3
He	Ge	72	89342.02	2.0	110.0	Pulse	0.1000	3
He	In	115	90063.39	0.5	104.5	Pulse	0.1000	3
He	Tb	159	403810.34	1.2	101.3	Pulse	0.1000	3
He	Bi	209	319747.11	1.8	103.4	Pulse	0.1000	3

No Gas

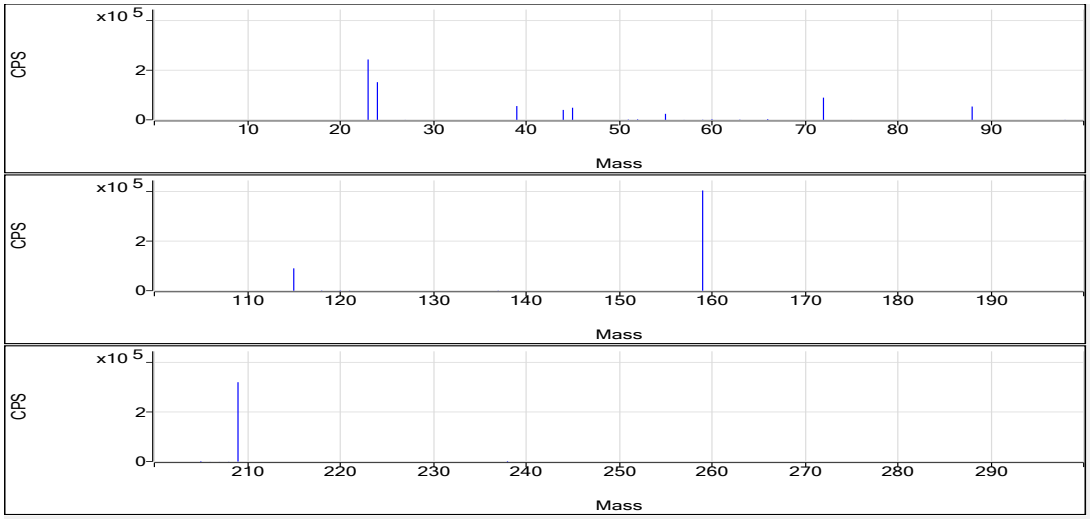


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.035	0	76.00	0.0008	4.685E-06
Be	9	1	No Gas	0.03	0	68.00	0.0008	4.685E-06
Be	9	1	No Gas	0.032	0	74.00	0.0008	4.685E-06
Se	78	2	H2	0.129	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.158	0.0001	13.33	0.0004	1.219E-05
Se	78	2	H2	0.144	0.0001	12.00	0.0004	1.219E-05
Na	23	3	He	1318.981	5.0632	243896.01	0.0036	0.3452
Na	23	3	He	1281.488	4.9291	241343.18	0.0036	0.3452
Na	23	3	He	1295.447	4.979	244087.16	0.0036	0.3452
Mg	24	3	He	1750.171	3.1439	151440.58	0.0018	0.003497
Mg	24	3	He	1727.887	3.1039	151975.01	0.0018	0.003497
Mg	24	3	He	1722.57	3.0943	151693.89	0.0018	0.003497
Al	27	3	He	4.224	0.0031	150.01	0.0006	0.0006432
Al	27	3	He	6.93	0.0047	230.01	0.0006	0.0006432
Al	27	3	He	6.223	0.0043	210.01	0.0006	0.0006432
K	39	3	He	643.375	1.1442	55114.64	0.0012	0.3951
K	39	3	He	615.15	1.1113	54412.53	0.0012	0.3951
K	39	3	He	655.303	1.1581	56771.21	0.0012	0.3951
Ca	44	3	He	12411.424	0.8411	40517.39	0.0001	0.002715
Ca	44	3	He	12088.482	0.8193	40116.02	0.0001	0.002715
Ca	44	3	He	11794.959	0.7995	39193.24	0.0001	0.002715
Ti	47	3	He	0.643	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.25	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.629	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	-0.028	0.0242	1168.05	0.0219	0.02486
V	51	3	He	0.01	0.0251	1228.06	0.0219	0.02486
V	51	3	He	0.13	0.0277	1358.07	0.0219	0.02486
Cr	52	3	He	0.142	0.0442	2130.22	0.0299	0.03997
Cr	52	3	He	-0.134	0.0359	1760.17	0.0299	0.03997
Cr	52	3	He	0	0.04	1960.21	0.0299	0.03997
Mn	55	3	He	38.471	0.4964	23910.34	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	38.211	0.493	24140.61	0.0128	0.002639
Mn	55	3	He	38.61	0.4982	24421.24	0.0128	0.002639
Fe	57	3	He	3.616	0.0035	170.01	0.0006	0.001429
Fe	57	3	He	3.869	0.0037	180.01	0.0006	0.001429
Fe	57	3	He	4.563	0.0041	200.01	0.0006	0.001429
Co	59	3	He	0.22	0.0145	700.05	0.0563	0.002149
Co	59	3	He	0.238	0.0155	760.05	0.0563	0.002149
Co	59	3	He	0.158	0.011	540.03	0.0563	0.002149
Ni	60	3	He	2.313	0.0227	2040.21	0.0086	0.002834
Ni	60	3	He	2.494	0.0242	2200.25	0.0086	0.002834
Ni	60	3	He	2.925	0.0279	2440.30	0.0086	0.002834
Cu	63	3	He	0.296	0.0123	1110.09	0.0257	0.004757
Cu	63	3	He	0.278	0.0119	1080.08	0.0257	0.004757
Cu	63	3	He	0.176	0.0093	810.05	0.0257	0.004757
Zn	66	3	He	7.933	0.0269	2420.28	0.0029	0.003818
Zn	66	3	He	8.643	0.029	2630.33	0.0029	0.003818
Zn	66	3	He	8.638	0.029	2530.29	0.0029	0.003818
As	75	3	He	0.323	0.0015	132.00	0.002	0.0008061
As	75	3	He	0.112	0.001	94.00	0.002	0.0008061
As	75	3	He	0.154	0.0011	98.00	0.002	0.0008061
Sr	88	3	He	66.56	0.598	53532.35	0.009	0.0009645
Sr	88	3	He	65.666	0.59	53361.02	0.009	0.0009645
Sr	88	3	He	66.225	0.595	53682.22	0.009	0.0009645
Mo	98	3	He	0.156	0.0037	330.02	0.0219	0.0002706
Mo	98	3	He	0.154	0.0036	330.02	0.0219	0.0002706
Mo	98	3	He	0.205	0.0048	430.02	0.0219	0.0002706
Ag	107	3	He	0.008	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Cd	111	3	He	0.025	0.0001	12.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.033	0.0002	16.00	0.0053	0
Sn	120	3	He	0.039	0.0171	1530.16	0.0158	0.01648
Sn	120	3	He	0.042	0.0171	1550.17	0.0158	0.01648
Sn	120	3	He	0.052	0.0173	1560.14	0.0158	0.01648
Sb	121	3	He	0.335	0.0053	470.02	0.0149	0.0002698
Sb	121	3	He	0.414	0.0064	580.03	0.0149	0.0002698
Sb	121	3	He	0.504	0.0078	700.04	0.0149	0.0002698
Ba	137	3	He	1.488	0.0074	660.04	0.0048	0.0002317
Ba	137	3	He	1.38	0.0069	620.04	0.0048	0.0002317
Ba	137	3	He	1.892	0.0093	840.06	0.0048	0.0002317
Tl	205	3	He	0.215	0.0055	2180.24	0.0247	0.0001339
Tl	205	3	He	0.221	0.0056	2290.29	0.0247	0.0001339
Tl	205	3	He	0.225	0.0057	2300.27	0.0247	0.0001339
Pb	208	3	He	0.039	0.0024	520.03	0.0327	0.00107
Pb	208	3	He	0.018	0.0017	330.02	0.0327	0.00107
Pb	208	3	He	0.028	0.002	480.03	0.0327	0.00107
U	238	3	He	0.122	0.0061	1990.24	0.0493	7.55E-05
U	238	3	He	0.141	0.007	2220.28	0.0493	7.55E-05
U	238	3	He	0.157	0.0078	2470.32	0.0493	7.55E-05
Sc	45	1	No Gas			2445014.81		
Sc	45	1	No Gas			2494099.18		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2563841.99		
Ge	72	1	No Gas			1246972.95		
Ge	72	1	No Gas			1261272.72		
Ge	72	1	No Gas			1272839.90		
Sc	45	2	H2			186805.27		
Sc	45	2	H2			185357.89		
Sc	45	2	H2			184783.01		
Ge	72	2	H2			171277.20		
Ge	72	2	H2			171122.91		
Ge	72	2	H2			165984.59		
In	115	2	H2			401073.63		
In	115	2	H2			399783.94		
In	115	2	H2			398069.92		
Sc	45	3	He			48170.17		
Sc	45	3	He			48962.88		
Sc	45	3	He			49022.99		
Ge	72	3	He			89922.95		
Ge	72	3	He			90757.60		
Ge	72	3	He			87345.51		
In	115	3	He			89527.97		
In	115	3	He			90454.05		
In	115	3	He			90232.81		
Tb	159	3	He			399210.50		
Tb	159	3	He			408727.92		
Tb	159	3	He			403492.61		
Bi	209	3	He			326229.16		
Bi	209	3	He			316948.80		
Bi	209	3	He			316063.37		

Quantitation Report

Data File Name	121SMPL.d
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Acq Time	8/10/2023 2:44:59 PM
Sample Name	410-137743-I-4-A DU
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

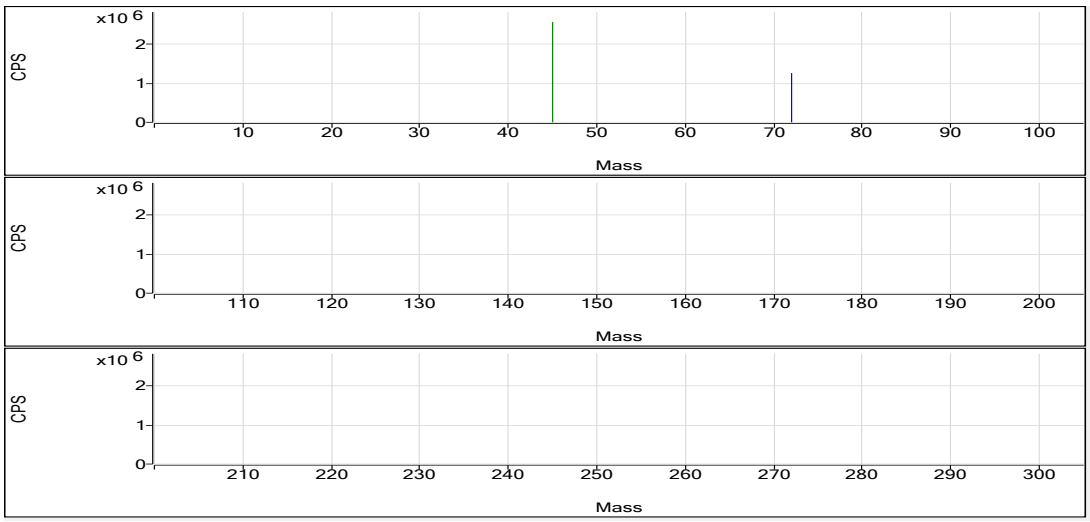
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.071	ppb	4.6	150.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.110	ppb	37.6	10.00	0.0001	Pulse	1.5000	3
Na	23	45	He	7511.977	ppb	1.2	1350416.18	27.2159	Analog	0.1000	3
Mg	24	45	He	9575.826	ppb	1.1	852728.48	17.1856	Pulse	0.1000	3
Al	27	45	He	29.112	ppb	8.5	876.72	0.0177	Pulse	0.1000	3
K	39	45	He	3633.457	ppb	2.6	229496.87	4.6256	Pulse	0.1000	3
Ca	44	45	He	67003.859	ppb	2.0	224710.88	4.5290	Pulse	0.1000	3
Ti	47	45	He	0.118	ppb	364.8	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.186	ppb	N/A	1032.04	0.0208	Pulse	0.5000	3
Cr	52	45	He	-0.110	ppb	N/A	1820.17	0.0367	Pulse	0.1000	3
Mn	55	45	He	207.361	ppb	1.9	132172.96	2.6639	Pulse	0.1000	3
Fe	57	45	He	4.481	ppb	9.2	200.01	0.0040	Pulse	0.1000	3
Co	59	45	He	0.987	ppb	8.2	2863.71	0.0577	Pulse	0.1000	3
Ni	60	72	He	14.799	ppb	1.4	11635.07	0.1299	Pulse	0.1000	3
Cu	63	72	He	0.574	ppb	3.8	1746.83	0.0195	Pulse	0.1000	3
Zn	66	72	He	23.430	ppb	1.3	6455.00	0.0720	Pulse	0.1000	3
As	75	72	He	0.112	ppb	59.0	92.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	376.618	ppb	0.5	303574.56	3.3792	Pulse	0.1000	3
Mo	98	115	He	0.255	ppb	17.8	526.69	0.0059	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	33.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.100	ppb	15.5	48.00	0.0005	Pulse	0.5000	3
Sn	120	115	He	-0.198	ppb	N/A	1200.09	0.0134	Pulse	0.1000	3
Sb	121	115	He	0.084	ppb	32.0	136.67	0.0015	Pulse	0.1000	3
Ba	137	115	He	8.425	ppb	3.0	3653.95	0.0407	Pulse	0.1000	3
Tl	205	159	He	0.095	ppb	4.0	1013.41	0.0025	Pulse	0.1000	3
Pb	208	159	He	0.002	ppb	135.2	463.35	0.0011	Pulse	0.1000	3
U	238	209	He	0.069	ppb	9.5	1120.09	0.0035	Pulse	0.1000	3

ISTD Table:

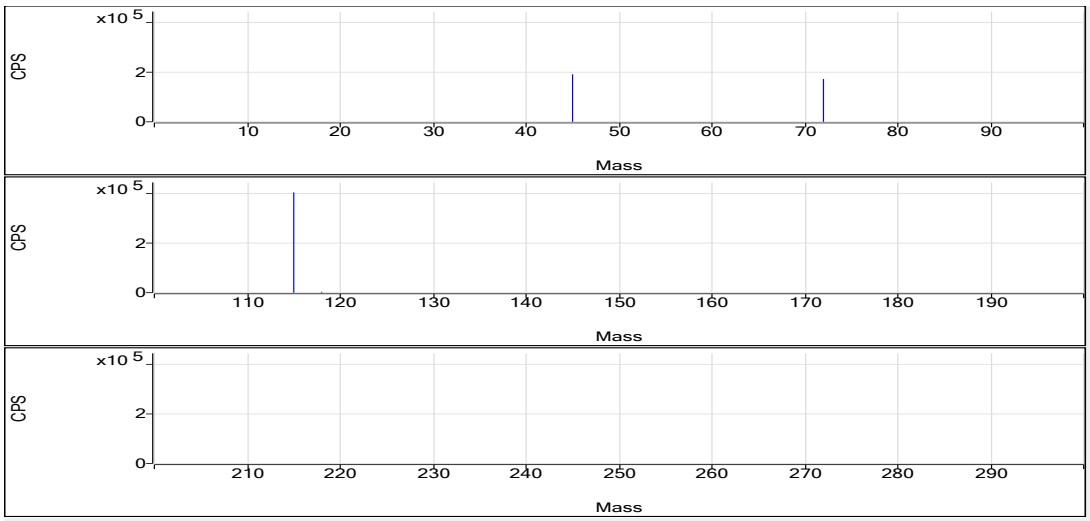
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2565277.10	0.7	106.9	Analog	0.1000	3
No Gas	Ge	72	1259327.64	0.5	109.2	Pulse	0.1000	3
H2	Sc	45	191930.10	1.0	102.6	Pulse	0.1000	3
H2	Ge	72	172723.03	1.1	105.5	Pulse	0.1000	3
H2	In	115	404639.72	0.8	104.0	Pulse	0.1000	3
He	Sc	45	49622.00	1.0	106.4	Pulse	0.1000	3
He	Ge	72	89596.72	1.5	110.3	Pulse	0.1000	3
He	In	115	89841.10	1.3	104.2	Pulse	0.1000	3
He	Tb	159	409295.24	0.6	102.7	Pulse	0.1000	3
He	Bi	209	320766.28	0.3	103.7	Pulse	0.1000	3

No Gas

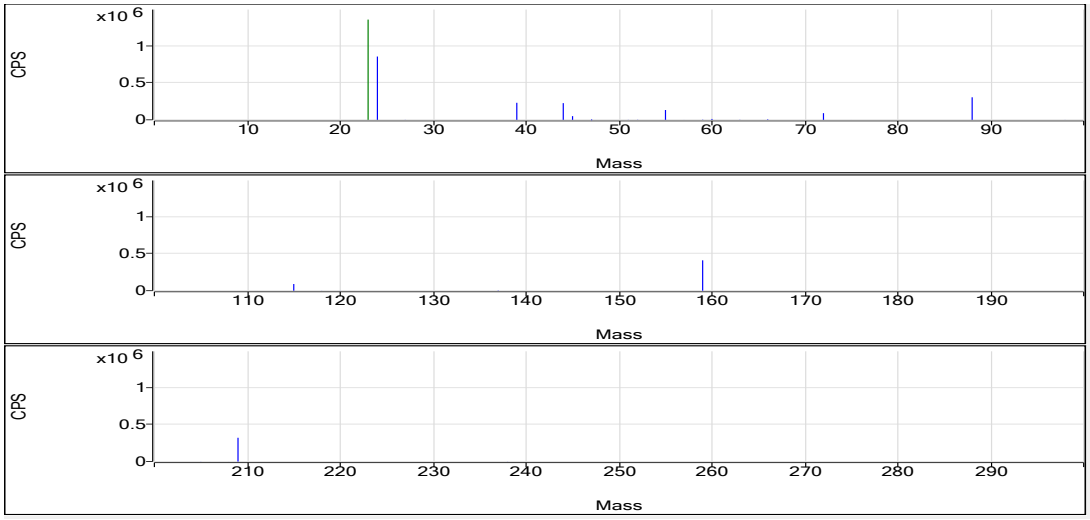


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.067	0.0001	142.00	0.0008	4.685E-06
Be	9	1	No Gas	0.072	0.0001	152.00	0.0008	4.685E-06
Be	9	1	No Gas	0.073	0.0001	156.00	0.0008	4.685E-06
Se	78	2	H2	0.157	0.0001	13.33	0.0004	1.219E-05
Se	78	2	H2	0.082	0	8.00	0.0004	1.219E-05
Se	78	2	H2	0.09	0	8.67	0.0004	1.219E-05
Na	23	3	He	7490.42	27.1388	1356833.89	0.0036	0.3452
Na	23	3	He	7435.519	26.9424	1341623.26	0.0036	0.3452
Na	23	3	He	7609.992	27.5665	1352791.39	0.0036	0.3452
Mg	24	3	He	9534.097	17.1107	855471.32	0.0018	0.003497
Mg	24	3	He	9499.789	17.0492	848981.32	0.0018	0.003497
Mg	24	3	He	9693.591	17.3969	853732.80	0.0018	0.003497
Al	27	3	He	26.253	0.016	800.05	0.0006	0.0006432
Al	27	3	He	30.483	0.0185	920.06	0.0006	0.0006432
Al	27	3	He	30.599	0.0185	910.06	0.0006	0.0006432
K	39	3	He	3584.307	4.5684	228401.05	0.0012	0.3951
K	39	3	He	3573.073	4.5553	226835.37	0.0012	0.3951
K	39	3	He	3742.992	4.7531	233254.20	0.0012	0.3951
Ca	44	3	He	65496.491	4.4271	221339.43	0.0001	0.002715
Ca	44	3	He	67402.351	4.5559	226864.35	0.0001	0.002715
Ca	44	3	He	68112.735	4.6039	225928.86	0.0001	0.002715
Ti	47	3	He	0.615	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	-0.204	0.0204	1020.04	0.0219	0.02486
V	51	3	He	-0.169	0.0212	1054.05	0.0219	0.02486
V	51	3	He	-0.185	0.0208	1022.04	0.0219	0.02486
Cr	52	3	He	-0.213	0.0336	1680.14	0.0299	0.03997
Cr	52	3	He	-0.02	0.0394	1960.19	0.0299	0.03997
Cr	52	3	He	-0.096	0.0371	1820.17	0.0299	0.03997
Mn	55	3	He	206.487	2.6527	132623.32	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	203.861	2.619	130414.28	0.0128	0.002639
Mn	55	3	He	211.734	2.72	133481.29	0.0128	0.002639
Fe	57	3	He	4.082	0.0038	190.01	0.0006	0.001429
Fe	57	3	He	4.454	0.004	200.01	0.0006	0.001429
Fe	57	3	He	4.907	0.0043	210.01	0.0006	0.001429
Co	59	3	He	1.06	0.0618	3090.43	0.0563	0.002149
Co	59	3	He	0.9	0.0528	2630.33	0.0563	0.002149
Co	59	3	He	1.001	0.0585	2870.38	0.0563	0.002149
Ni	60	3	He	14.572	0.1279	11394.92	0.0086	0.002834
Ni	60	3	He	14.872	0.1305	11885.27	0.0086	0.002834
Ni	60	3	He	14.954	0.1312	11625.01	0.0086	0.002834
Cu	63	3	He	0.58	0.0196	1750.17	0.0257	0.004757
Cu	63	3	He	0.55	0.0189	1720.15	0.0257	0.004757
Cu	63	3	He	0.593	0.02	1770.17	0.0257	0.004757
Zn	66	3	He	23.369	0.0719	6401.68	0.0029	0.003818
Zn	66	3	He	23.769	0.073	6651.76	0.0029	0.003818
Zn	66	3	He	23.151	0.0712	6311.57	0.0029	0.003818
As	75	3	He	0.187	0.0012	106.00	0.002	0.0008061
As	75	3	He	0.067	0.0009	86.00	0.002	0.0008061
As	75	3	He	0.08	0.001	86.00	0.002	0.0008061
Sr	88	3	He	376.819	3.381	303318.77	0.009	0.0009645
Sr	88	3	He	378.362	3.3948	301214.49	0.009	0.0009645
Sr	88	3	He	374.674	3.3617	306190.43	0.009	0.0009645
Mo	98	3	He	0.206	0.0048	430.02	0.0219	0.0002706
Mo	98	3	He	0.296	0.0068	600.03	0.0219	0.0002706
Mo	98	3	He	0.263	0.006	550.03	0.0219	0.0002706
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.009	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0.108	0.0006	52.00	0.0053	0
Cd	111	3	He	0.11	0.0006	52.00	0.0053	0
Cd	111	3	He	0.082	0.0004	40.00	0.0053	0
Sn	120	3	He	-0.274	0.0122	1090.09	0.0158	0.01648
Sn	120	3	He	-0.187	0.0135	1200.09	0.0158	0.01648
Sn	120	3	He	-0.132	0.0144	1310.10	0.0158	0.01648
Sb	121	3	He	0.072	0.0013	120.01	0.0149	0.0002698
Sb	121	3	He	0.065	0.0012	110.00	0.0149	0.0002698
Sb	121	3	He	0.115	0.002	180.01	0.0149	0.0002698
Ba	137	3	He	8.198	0.0396	3550.62	0.0048	0.0002317
Ba	137	3	He	8.384	0.0405	3590.59	0.0048	0.0002317
Ba	137	3	He	8.692	0.0419	3820.64	0.0048	0.0002317
Tl	205	3	He	0.092	0.0024	990.07	0.0247	0.0001339
Tl	205	3	He	0.099	0.0026	1050.08	0.0247	0.0001339
Tl	205	3	He	0.093	0.0024	1000.08	0.0247	0.0001339
Pb	208	3	He	0.001	0.0011	290.01	0.0327	0.00107
Pb	208	3	He	0	0.0011	210.01	0.0327	0.00107
Pb	208	3	He	0.005	0.0012	240.01	0.0327	0.00107
U	238	3	He	0.068	0.0034	1100.09	0.0493	7.55E-05
U	238	3	He	0.076	0.0038	1230.10	0.0493	7.55E-05
U	238	3	He	0.063	0.0032	1030.08	0.0493	7.55E-05
Sc	45	1	No Gas			2550990.59		
Sc	45	1	No Gas			2559510.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2585330.12		
Ge	72	1	No Gas			1258468.26		
Ge	72	1	No Gas			1265678.57		
Ge	72	1	No Gas			1253836.08		
Sc	45	2	H2			192083.81		
Sc	45	2	H2			193717.36		
Sc	45	2	H2			189989.14		
Ge	72	2	H2			171469.41		
Ge	72	2	H2			171831.97		
Ge	72	2	H2			174867.71		
In	115	2	H2			403819.33		
In	115	2	H2			408160.19		
In	115	2	H2			401939.64		
Sc	45	3	He			49996.17		
Sc	45	3	He			49796.03		
Sc	45	3	He			49073.79		
Ge	72	3	He			89086.76		
Ge	72	3	He			91089.22		
Ge	72	3	He			88614.19		
In	115	3	He			89720.35		
In	115	3	He			88732.87		
In	115	3	He			91088.02		
Tb	159	3	He			411785.11		
Tb	159	3	He			406881.99		
Tb	159	3	He			409218.63		
Bi	209	3	He			320204.62		
Bi	209	3	He			320223.43		
Bi	209	3	He			321870.80		

Quantitation Report

Data File Name	122SMPL.d
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Acq Time	8/10/2023 2:47:05 PM
Sample Name	410-137743-N-4-A MS
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

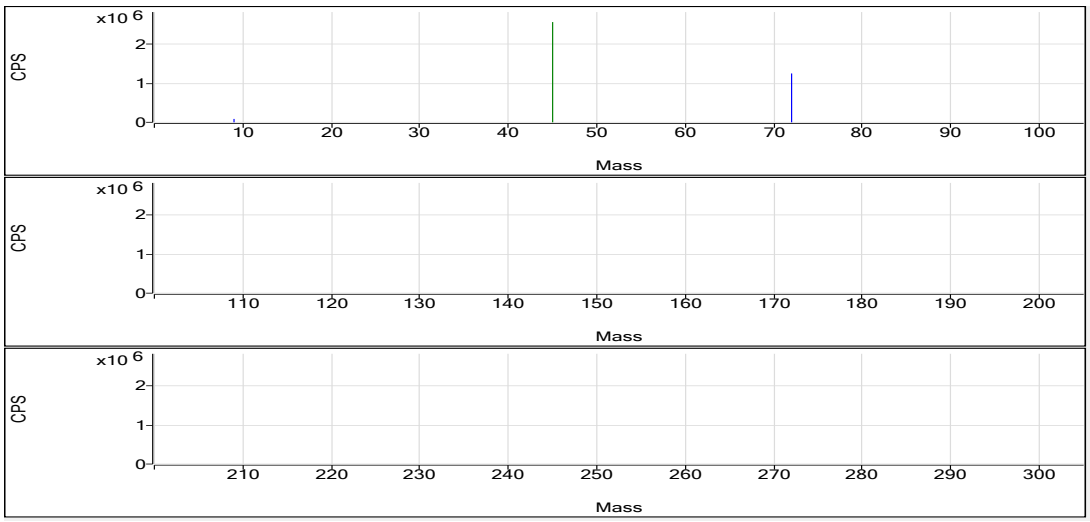
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	44.050	ppb	1.5	86417.50	0.0336	Pulse	0.5000	3
Se	78	72	H2	96.079	ppb	2.2	6854.09	0.0401	Pulse	1.5000	3
Na	23	45	He	11907.939	ppb	1.9	2142860.59	42.9404	Analog	0.1000	3
Mg	24	45	He	14583.567	ppb	0.6	1306001.88	26.1711	Analog	0.1000	3
Al	27	45	He	4642.466	ppb	0.8	135567.36	2.7166	Pulse	0.1000	3
K	39	45	He	8289.301	ppb	0.2	501348.35	10.0465	Pulse	0.1000	3
Ca	44	45	He	70126.733	ppb	0.6	236536.24	4.7399	Pulse	0.1000	3
Ti	47	45	He	503.067	ppb	0.6	13483.37	0.2702	Pulse	0.1000	3
V	51	45	He	485.470	ppb	0.6	530801.56	10.6368	Pulse	0.5000	3
Cr	52	45	He	457.170	ppb	0.4	685061.71	13.7280	Pulse	0.1000	3
Mn	55	45	He	676.274	ppb	1.0	433245.06	8.6819	Pulse	0.1000	3
Fe	57	45	He	4768.067	ppb	0.5	138310.77	2.7716	Pulse	0.1000	3
Co	59	45	He	456.694	ppb	0.5	1282792.66	25.7059	Pulse	0.1000	3
Ni	60	72	He	484.664	ppb	0.4	369294.72	4.1628	Pulse	0.1000	3
Cu	63	72	He	451.534	ppb	1.0	1028702.33	11.5961	Pulse	0.1000	3
Zn	66	72	He	499.948	ppb	1.2	129472.90	1.4595	Pulse	0.1000	3
As	75	72	He	491.322	ppb	1.0	89372.68	1.0075	Pulse	0.5000	3
Sr	88	115	He	428.405	ppb	1.8	336512.95	3.8437	Pulse	0.1000	3
Mo	98	115	He	50.436	ppb	2.7	96832.46	1.1062	Pulse	0.1000	3
Ag	107	115	He	48.845	ppb	1.8	198852.18	2.2713	Pulse	0.1000	3
Cd	111	115	He	49.601	ppb	1.7	23219.30	0.2652	Pulse	0.5000	3
Sn	120	115	He	101.229	ppb	1.9	141460.00	1.6158	Pulse	0.1000	3
Sb	121	115	He	98.511	ppb	2.7	128115.27	1.4635	Pulse	0.1000	3
Ba	137	115	He	509.848	ppb	2.0	214242.33	2.4472	Pulse	0.1000	3
Tl	205	159	He	97.204	ppb	1.1	984396.31	2.4036	Pulse	0.1000	3
Pb	208	159	He	48.430	ppb	0.8	649614.38	1.5862	Pulse	0.1000	3
U	238	209	He	47.605	ppb	0.8	746958.01	2.3451	Pulse	0.1000	3

ISTD Table:

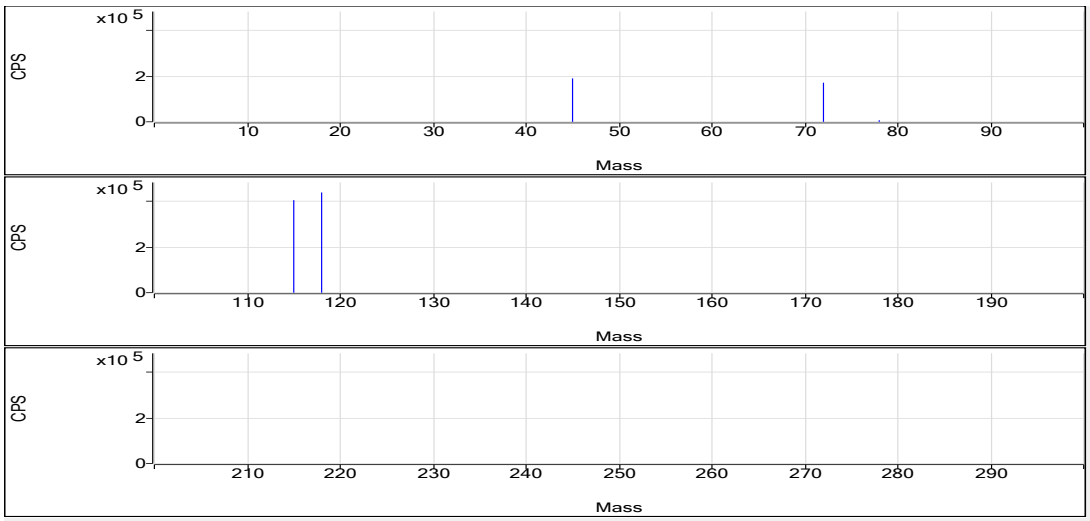
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2571644.44	0.5	107.2	Analog	0.1000	3
No Gas	Ge	72	1253206.34	0.3	108.7	Pulse	0.1000	3
H2	Sc	45	189974.10	0.9	101.6	Pulse	0.1000	3
H2	Ge	72	171020.00	1.5	104.5	Pulse	0.1000	3
H2	In	115	404564.02	0.4	104.0	Pulse	0.1000	3
He	Sc	45	49902.68	0.2	107.0	Pulse	0.1000	3
He	Ge	72	88714.71	0.6	109.3	Pulse	0.1000	3
He	In	115	87569.41	1.9	101.6	Pulse	0.1000	3
He	Tb	159	409573.01	1.3	102.8	Pulse	0.1000	3
He	Bi	209	318523.46	0.8	103.0	Pulse	0.1000	3

No Gas

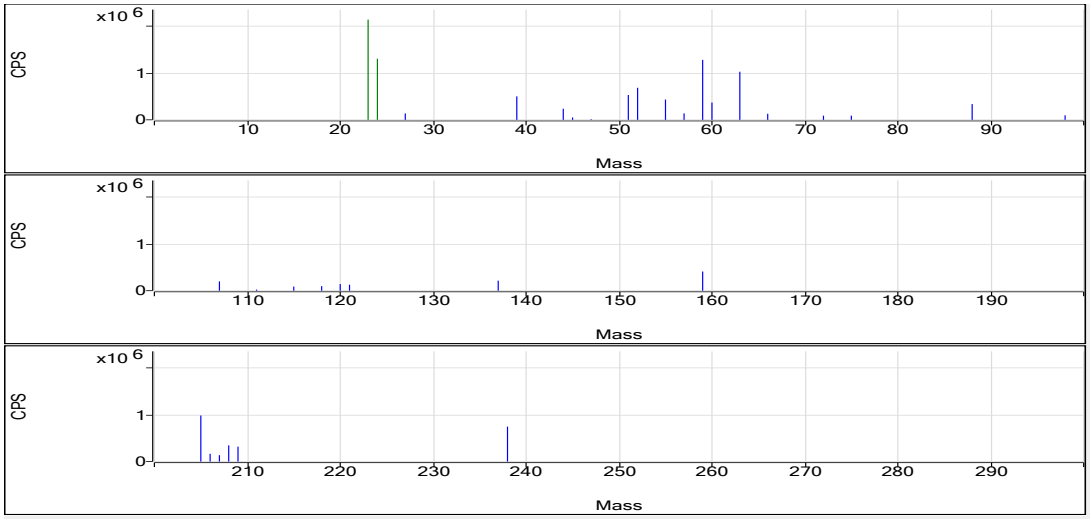


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	43.386	0.0331	85435.90	0.0008	4.685E-06
Be	9	1	No Gas	44.071	0.0336	86574.34	0.0008	4.685E-06
Be	9	1	No Gas	44.693	0.0341	87242.25	0.0008	4.685E-06
Se	78	2	H2	94.785	0.0395	6880.99	0.0004	1.219E-05
Se	78	2	H2	98.513	0.0411	6949.03	0.0004	1.219E-05
Se	78	2	H2	94.939	0.0396	6732.26	0.0004	1.219E-05
Na	23	3	He	12158.671	43.8373	2188190.28	0.0036	0.3452
Na	23	3	He	11822.96	42.6365	2132520.75	0.0036	0.3452
Na	23	3	He	11742.185	42.3475	2107870.75	0.0036	0.3452
Mg	24	3	He	14656.409	26.3018	1312885.29	0.0018	0.003497
Mg	24	3	He	14494.633	26.0115	1301002.25	0.0018	0.003497
Mg	24	3	He	14599.659	26.2	1304118.11	0.0018	0.003497
Al	27	3	He	4681.411	2.7394	136741.89	0.0006	0.0006432
Al	27	3	He	4606.505	2.6956	134824.55	0.0006	0.0006432
Al	27	3	He	4639.481	2.7149	135135.64	0.0006	0.0006432
K	39	3	He	8306.55	10.0666	502486.09	0.0012	0.3951
K	39	3	He	8279.837	10.0355	501939.25	0.0012	0.3951
K	39	3	He	8281.516	10.0375	499619.72	0.0012	0.3951
Ca	44	3	He	70322.25	4.7531	237257.30	0.0001	0.002715
Ca	44	3	He	70391.919	4.7578	237969.00	0.0001	0.002715
Ca	44	3	He	69666.03	4.7088	234382.42	0.0001	0.002715
Ti	47	3	He	501.189	0.2692	13436.59	0.0005	7.003E-05
Ti	47	3	He	506.527	0.272	13606.91	0.0005	7.003E-05
Ti	47	3	He	501.484	0.2693	13406.61	0.0005	7.003E-05
V	51	3	He	485.64	10.6405	531135.06	0.0219	0.02486
V	51	3	He	482.713	10.5766	529001.44	0.0219	0.02486
V	51	3	He	488.056	10.6934	532268.19	0.0219	0.02486
Cr	52	3	He	459.028	13.7836	688024.83	0.0299	0.03997
Cr	52	3	He	455.821	13.6876	684603.35	0.0299	0.03997
Cr	52	3	He	456.66	13.7127	682556.94	0.0299	0.03997
Mn	55	3	He	682.853	8.7663	437579.45	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	669.805	8.5988	430082.57	0.0128	0.002639
Mn	55	3	He	676.163	8.6804	432073.16	0.0128	0.002639
Fe	57	3	He	4770.789	2.7732	138428.14	0.0006	0.001429
Fe	57	3	He	4742.852	2.757	137894.22	0.0006	0.001429
Fe	57	3	He	4790.561	2.7847	138609.96	0.0006	0.001429
Co	59	3	He	459.332	25.8544	1290551.39	0.0563	0.002149
Co	59	3	He	454.713	25.5945	1280141.93	0.0563	0.002149
Co	59	3	He	456.036	25.6689	1277684.67	0.0563	0.002149
Ni	60	3	He	486.919	4.1821	369502.53	0.0086	0.002834
Ni	60	3	He	483.951	4.1567	367500.85	0.0086	0.002834
Ni	60	3	He	483.122	4.1495	370880.78	0.0086	0.002834
Cu	63	3	He	454.782	11.6795	1031915.53	0.0257	0.004757
Cu	63	3	He	453.339	11.6425	1029340.84	0.0257	0.004757
Cu	63	3	He	446.48	11.4664	1024850.61	0.0257	0.004757
Zn	66	3	He	507.111	1.4803	130791.23	0.0029	0.003818
Zn	66	3	He	496.457	1.4493	128137.36	0.0029	0.003818
Zn	66	3	He	496.275	1.4488	129490.10	0.0029	0.003818
As	75	3	He	493.138	1.0112	89340.46	0.002	0.0008061
As	75	3	He	495.236	1.0155	89781.24	0.002	0.0008061
As	75	3	He	485.593	0.9957	88996.34	0.002	0.0008061
Sr	88	3	He	422.608	3.7917	335464.06	0.009	0.0009645
Sr	88	3	He	437.345	3.9239	336184.45	0.009	0.0009645
Sr	88	3	He	425.262	3.8155	337890.35	0.009	0.0009645
Mo	98	3	He	49.566	1.0871	96177.57	0.0219	0.0002706
Mo	98	3	He	52.016	1.1408	97739.24	0.0219	0.0002706
Mo	98	3	He	49.727	1.0906	96580.56	0.0219	0.0002706
Ag	107	3	He	48.467	2.2537	199395.39	0.0465	0.0006206
Ag	107	3	He	49.855	2.3182	198617.09	0.0465	0.0006206
Ag	107	3	He	48.215	2.242	198544.06	0.0465	0.0006206
Cd	111	3	He	49.032	0.2622	23195.29	0.0053	0
Cd	111	3	He	50.585	0.2705	23173.22	0.0053	0
Cd	111	3	He	49.185	0.263	23289.40	0.0053	0
Sn	120	3	He	99.617	1.5903	140698.55	0.0158	0.01648
Sn	120	3	He	103.321	1.6488	141265.32	0.0158	0.01648
Sn	120	3	He	100.749	1.6082	142416.13	0.0158	0.01648
Sb	121	3	He	97.705	1.4515	128421.35	0.0149	0.0002698
Sb	121	3	He	101.498	1.5079	129188.70	0.0149	0.0002698
Sb	121	3	He	96.331	1.4311	126735.76	0.0149	0.0002698
Ba	137	3	He	505.107	2.4244	214496.44	0.0048	0.0002317
Ba	137	3	He	521.767	2.5044	214566.25	0.0048	0.0002317
Ba	137	3	He	502.67	2.4127	213664.29	0.0048	0.0002317
Tl	205	3	He	97.731	2.4167	994988.97	0.0247	0.0001339
Tl	205	3	He	95.933	2.3722	980682.88	0.0247	0.0001339
Tl	205	3	He	97.948	2.422	977517.09	0.0247	0.0001339
Pb	208	3	He	48.605	1.5919	349652.69	0.0327	0.00107
Pb	208	3	He	47.976	1.5713	345024.96	0.0327	0.00107
Pb	208	3	He	48.708	1.5953	343920.03	0.0327	0.00107
U	238	3	He	48.054	2.3672	753319.60	0.0493	7.55E-05
U	238	3	He	47.468	2.3383	739384.21	0.0493	7.55E-05
U	238	3	He	47.294	2.3298	748170.22	0.0493	7.55E-05
Sc	45	1	No Gas			2581232.31		
Sc	45	1	No Gas			2574968.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2558732.46		
Ge	72	1	No Gas			1248799.59		
Ge	72	1	No Gas			1255012.64		
Ge	72	1	No Gas			1255806.78		
Sc	45	2	H2			192012.46		
Sc	45	2	H2			189129.06		
Sc	45	2	H2			188780.78		
Ge	72	2	H2			174008.73		
Ge	72	2	H2			169080.39		
Ge	72	2	H2			169970.88		
In	115	2	H2			404931.75		
In	115	2	H2			402945.74		
In	115	2	H2			405814.56		
Sc	45	3	He			49916.15		
Sc	45	3	He			50016.36		
Sc	45	3	He			49775.53		
Ge	72	3	He			88352.67		
Ge	72	3	He			88412.70		
Ge	72	3	He			89378.77		
In	115	3	He			89225.96		
In	115	3	He			86439.90		
In	115	3	He			89317.48		
Tb	159	3	He			411720.15		
Tb	159	3	He			413406.32		
Tb	159	3	He			403592.57		
Bi	209	3	He			318231.83		
Bi	209	3	He			316203.41		
Bi	209	3	He			321135.15		

Quantitation Report

Data File Name	123SMPL.d
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Acq Time	8/10/2023 2:49:08 PM
Sample Name	410-137743-M-4-A MSD
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

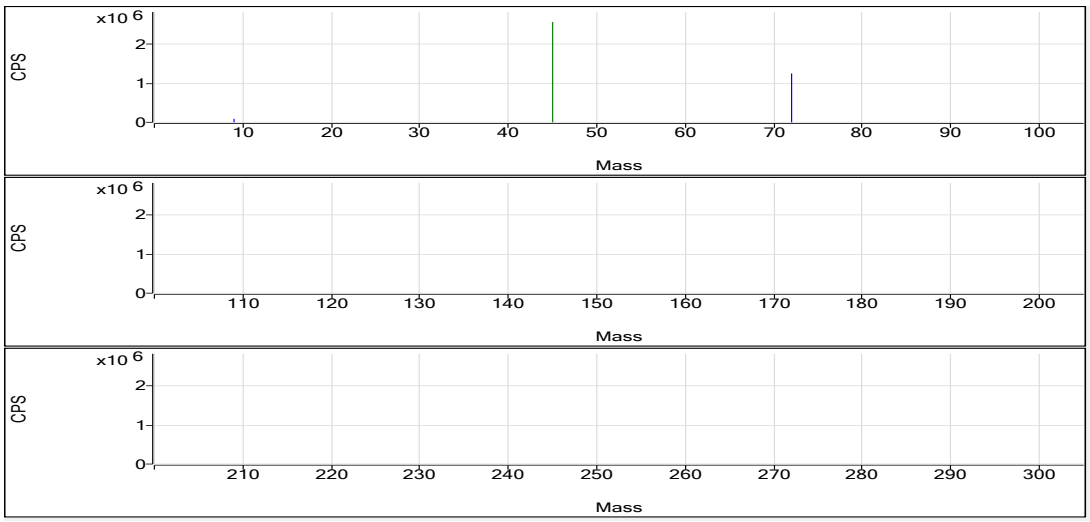
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	44.482	ppb	0.6	87394.43	0.0339	Pulse	0.5000	3
Se	78	72	H2	98.973	ppb	2.3	7038.18	0.0413	Pulse	1.5000	3
Na	23	45	He	11879.848	ppb	2.2	2159286.58	42.8400	Analog	0.1000	3
Mg	24	45	He	14652.914	ppb	0.4	1325554.20	26.2955	Analog	0.1000	3
Al	27	45	He	4684.625	ppb	1.8	138173.60	2.7413	Pulse	0.1000	3
K	39	45	He	8298.055	ppb	1.2	506927.05	10.0567	Pulse	0.1000	3
Ca	44	45	He	70000.649	ppb	0.9	238500.02	4.7314	Pulse	0.1000	3
Ti	47	45	He	486.355	ppb	2.2	13169.73	0.2612	Pulse	0.1000	3
V	51	45	He	491.100	ppb	0.9	542383.71	10.7599	Pulse	0.5000	3
Cr	52	45	He	464.559	ppb	1.0	703144.52	13.9492	Pulse	0.1000	3
Mn	55	45	He	683.377	ppb	1.8	442197.60	8.7730	Pulse	0.1000	3
Fe	57	45	He	4840.075	ppb	1.8	141814.80	2.8135	Pulse	0.1000	3
Co	59	45	He	465.803	ppb	1.5	1321554.41	26.2186	Pulse	0.1000	3
Ni	60	72	He	498.083	ppb	0.3	381252.83	4.2780	Pulse	0.1000	3
Cu	63	72	He	463.445	ppb	0.3	1060699.80	11.9019	Pulse	0.1000	3
Zn	66	72	He	507.480	ppb	0.9	132023.99	1.4814	Pulse	0.1000	3
As	75	72	He	501.597	ppb	0.8	91661.64	1.0285	Pulse	0.5000	3
Sr	88	115	He	418.885	ppb	0.8	335384.34	3.7583	Pulse	0.1000	3
Mo	98	115	He	49.468	ppb	1.5	96815.94	1.0849	Pulse	0.1000	3
Ag	107	115	He	49.324	ppb	1.0	204671.76	2.2936	Pulse	0.1000	3
Cd	111	115	He	50.038	ppb	0.5	23875.74	0.2676	Pulse	0.5000	3
Sn	120	115	He	101.038	ppb	0.7	143918.79	1.6127	Pulse	0.1000	3
Sb	121	115	He	99.157	ppb	0.9	131456.50	1.4731	Pulse	0.1000	3
Ba	137	115	He	510.244	ppb	0.6	218549.89	2.4491	Pulse	0.1000	3
Tl	205	159	He	100.747	ppb	0.9	1018093.09	2.4912	Pulse	0.1000	3
Pb	208	159	He	49.958	ppb	1.8	668592.41	1.6362	Pulse	0.1000	3
U	238	209	He	49.205	ppb	0.7	766985.35	2.4239	Pulse	0.1000	3

ISTD Table:

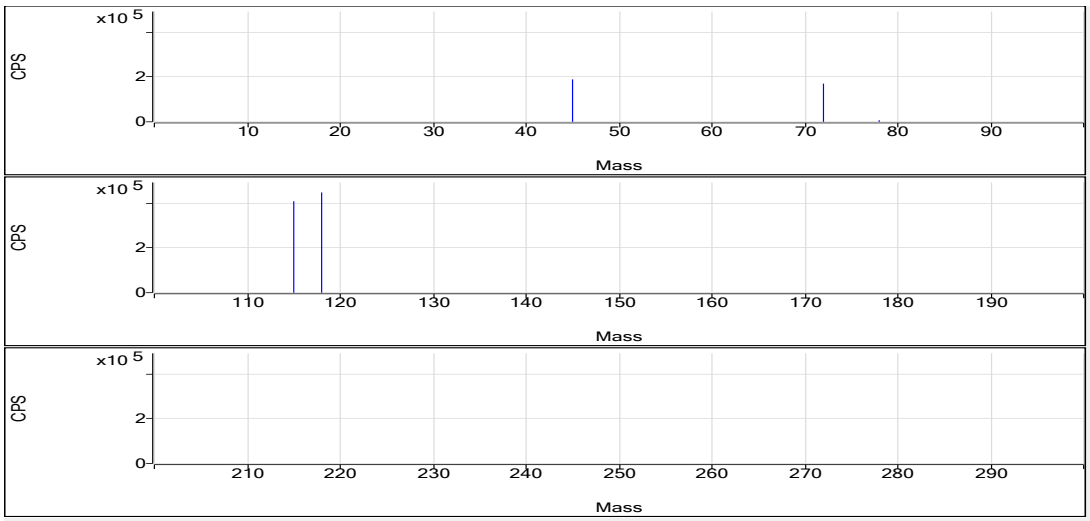
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2575405.22	0.8	107.4	Analog	0.1000	3
No Gas	Ge	72	1255220.32	0.5	108.8	Pulse	0.1000	3
H2	Sc	45	189610.37	0.9	101.4	Pulse	0.1000	3
H2	Ge	72	170505.40	2.0	104.1	Pulse	0.1000	3
H2	In	115	408683.30	0.9	105.0	Pulse	0.1000	3
He	Sc	45	50411.37	1.2	108.1	Pulse	0.1000	3
He	Ge	72	89120.71	0.2	109.8	Pulse	0.1000	3
He	In	115	89238.58	0.1	103.5	Pulse	0.1000	3
He	Tb	159	408700.49	1.4	102.5	Pulse	0.1000	3
He	Bi	209	316437.20	0.9	102.3	Pulse	0.1000	3

No Gas

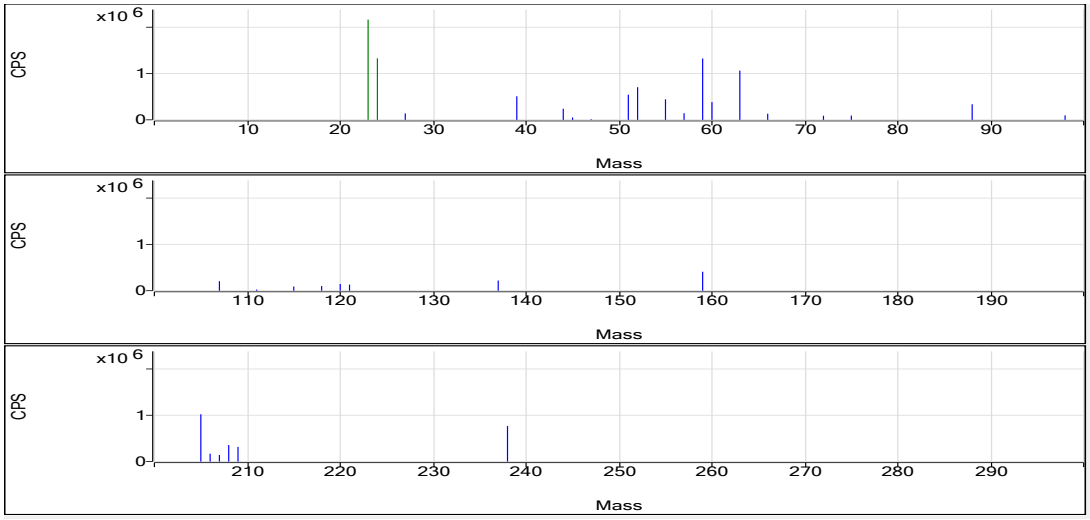


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	44.525	0.034	86892.21	0.0008	4.685E-06
Be	9	1	No Gas	44.205	0.0337	87670.70	0.0008	4.685E-06
Be	9	1	No Gas	44.716	0.0341	87620.38	0.0008	4.685E-06
Se	78	2	H2	97.376	0.0406	7019.73	0.0004	1.219E-05
Se	78	2	H2	101.537	0.0424	7056.41	0.0004	1.219E-05
Se	78	2	H2	98.008	0.0409	7038.40	0.0004	1.219E-05
Na	23	3	He	12140.593	43.7727	2176179.81	0.0036	0.3452
Na	23	3	He	11610.371	41.876	2126857.78	0.0036	0.3452
Na	23	3	He	11888.58	42.8712	2174822.16	0.0036	0.3452
Mg	24	3	He	14715.895	26.4085	1312914.51	0.0018	0.003497
Mg	24	3	He	14597.046	26.1953	1330443.11	0.0018	0.003497
Mg	24	3	He	14645.802	26.2828	1333304.98	0.0018	0.003497
Al	27	3	He	4781.777	2.7981	139111.41	0.0006	0.0006432
Al	27	3	He	4643.346	2.7172	138003.02	0.0006	0.0006432
Al	27	3	He	4628.751	2.7086	137406.38	0.0006	0.0006432
K	39	3	He	8412.342	10.1898	506590.15	0.0012	0.3951
K	39	3	He	8269.479	10.0234	509084.45	0.0012	0.3951
K	39	3	He	8212.342	9.9569	505106.55	0.0012	0.3951
Ca	44	3	He	70694.354	4.7783	237553.30	0.0001	0.002715
Ca	44	3	He	69911.439	4.7254	239998.45	0.0001	0.002715
Ca	44	3	He	69396.155	4.6906	237948.32	0.0001	0.002715
Ti	47	3	He	478.466	0.257	12775.99	0.0005	7.003E-05
Ti	47	3	He	481.932	0.2588	13146.48	0.0005	7.003E-05
Ti	47	3	He	498.666	0.2678	13586.71	0.0005	7.003E-05
V	51	3	He	496.135	10.87	540405.81	0.0219	0.02486
V	51	3	He	489.206	10.7185	544386.50	0.0219	0.02486
V	51	3	He	487.959	10.6913	542358.81	0.0219	0.02486
Cr	52	3	He	469.789	14.1058	701277.57	0.0299	0.03997
Cr	52	3	He	463.087	13.9051	706232.88	0.0299	0.03997
Cr	52	3	He	460.8	13.8367	701923.11	0.0299	0.03997
Mn	55	3	He	697.294	8.9516	445034.33	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	676.145	8.6802	440862.22	0.0128	0.002639
Mn	55	3	He	676.693	8.6872	440696.24	0.0128	0.002639
Fe	57	3	He	4915.948	2.8575	142064.54	0.0006	0.001429
Fe	57	3	He	4747.287	2.7596	140156.33	0.0006	0.001429
Fe	57	3	He	4856.988	2.8233	143223.53	0.0006	0.001429
Co	59	3	He	473.984	26.679	1326362.17	0.0563	0.002149
Co	59	3	He	461.326	25.9666	1318829.82	0.0563	0.002149
Co	59	3	He	462.098	26.0101	1319471.23	0.0563	0.002149
Ni	60	3	He	499.276	4.2882	381678.59	0.0086	0.002834
Ni	60	3	He	498.222	4.2791	380960.11	0.0086	0.002834
Ni	60	3	He	496.751	4.2665	381119.80	0.0086	0.002834
Cu	63	3	He	465.068	11.9435	1063058.34	0.0257	0.004757
Cu	63	3	He	463.439	11.9017	1059578.50	0.0257	0.004757
Cu	63	3	He	461.827	11.8604	1059462.56	0.0257	0.004757
Zn	66	3	He	511.833	1.4941	132983.46	0.0029	0.003818
Zn	66	3	He	502.716	1.4675	130650.32	0.0029	0.003818
Zn	66	3	He	507.892	1.4826	132438.20	0.0029	0.003818
As	75	3	He	505.921	1.0374	92333.27	0.002	0.0008061
As	75	3	He	497.961	1.0211	90902.22	0.002	0.0008061
As	75	3	He	500.911	1.0271	91749.42	0.002	0.0008061
Sr	88	3	He	422.519	3.7909	338393.39	0.009	0.0009645
Sr	88	3	He	417.072	3.742	333450.74	0.009	0.0009645
Sr	88	3	He	417.064	3.7419	334308.90	0.009	0.0009645
Mo	98	3	He	49.868	1.0937	97629.36	0.0219	0.0002706
Mo	98	3	He	49.928	1.095	97576.43	0.0219	0.0002706
Mo	98	3	He	48.607	1.0661	95242.04	0.0219	0.0002706
Ag	107	3	He	49.368	2.2956	204915.39	0.0465	0.0006206
Ag	107	3	He	49.772	2.3144	206232.26	0.0465	0.0006206
Ag	107	3	He	48.833	2.2707	202867.63	0.0465	0.0006206
Cd	111	3	He	50.117	0.268	23920.50	0.0053	0
Cd	111	3	He	50.234	0.2686	23934.50	0.0053	0
Cd	111	3	He	49.764	0.2661	23772.23	0.0053	0
Sn	120	3	He	100.394	1.6026	143053.16	0.0158	0.01648
Sn	120	3	He	100.85	1.6098	143446.19	0.0158	0.01648
Sn	120	3	He	101.869	1.6259	145257.02	0.0158	0.01648
Sb	121	3	He	100.158	1.488	132822.41	0.0149	0.0002698
Sb	121	3	He	98.99	1.4706	131045.63	0.0149	0.0002698
Sb	121	3	He	98.324	1.4607	130501.45	0.0149	0.0002698
Ba	137	3	He	511.399	2.4546	219110.62	0.0048	0.0002317
Ba	137	3	He	512.76	2.4611	219311.70	0.0048	0.0002317
Ba	137	3	He	506.573	2.4314	217227.36	0.0048	0.0002317
Tl	205	3	He	100.007	2.4729	1023197.33	0.0247	0.0001339
Tl	205	3	He	101.706	2.515	1012784.05	0.0247	0.0001339
Tl	205	3	He	100.528	2.4858	1018297.88	0.0247	0.0001339
Pb	208	3	He	49.172	1.6104	353076.60	0.0327	0.00107
Pb	208	3	He	50.972	1.6694	357493.39	0.0327	0.00107
Pb	208	3	He	49.729	1.6287	356741.24	0.0327	0.00107
U	238	3	He	48.832	2.4056	768564.83	0.0493	7.55E-05
U	238	3	He	49.474	2.4372	764880.22	0.0493	7.55E-05
U	238	3	He	49.309	2.429	767511.00	0.0493	7.55E-05
Sc	45	1	No Gas			2558058.24		
Sc	45	1	No Gas			2599659.96		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2568497.46		
Ge	72	1	No Gas			1247924.12		
Ge	72	1	No Gas			1258823.50		
Ge	72	1	No Gas			1258913.34		
Sc	45	2	H2			191357.13		
Sc	45	2	H2			188144.33		
Sc	45	2	H2			189329.65		
Ge	72	2	H2			172795.62		
Ge	72	2	H2			166582.67		
Ge	72	2	H2			172137.91		
In	115	2	H2			413066.67		
In	115	2	H2			407287.22		
In	115	2	H2			405696.01		
Sc	45	3	He			49715.51		
Sc	45	3	He			50789.39		
Sc	45	3	He			50729.22		
Ge	72	3	He			89006.96		
Ge	72	3	He			89027.16		
Ge	72	3	He			89328.02		
In	115	3	He			90029.91		
In	115	3	He			89889.89		
In	115	3	He			90131.91		
Tb	159	3	He			413756.83		
Tb	159	3	He			402703.70		
Tb	159	3	He			409640.93		
Bi	209	3	He			319496.26		
Bi	209	3	He			313841.19		
Bi	209	3	He			315974.16		

Quantitation Report

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Acq Time	8/10/2023 2:51:12 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

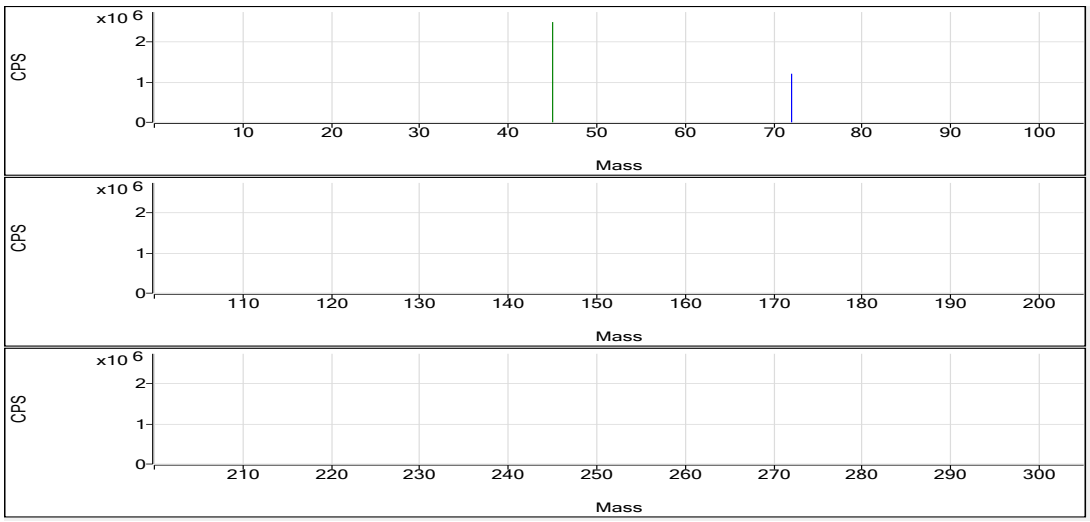
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.023	ppb	28.3	56.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.111	ppb	15.8	9.34	0.0001	Pulse	1.5000	3
Na	23	45	He	0.682	ppb	418.9	16663.21	0.3476	Pulse	0.1000	3
Mg	24	45	He	1.770	ppb	42.6	320.02	0.0067	Pulse	0.1000	3
Al	27	45	He	2.462	ppb	80.3	100.01	0.0021	Pulse	0.1000	3
K	39	45	He	-8.070	ppb	N/A	18488.91	0.3857	Pulse	0.1000	3
Ca	44	45	He	15.395	ppb	20.0	180.01	0.0038	Pulse	0.1000	3
Ti	47	45	He	0.517	ppb	86.6	16.67	0.0003	Pulse	0.1000	3
V	51	45	He	0.136	ppb	23.1	1334.74	0.0278	Pulse	0.5000	3
Cr	52	45	He	-0.030	ppb	N/A	1873.52	0.0391	Pulse	0.1000	3
Mn	55	45	He	0.119	ppb	62.1	200.01	0.0042	Pulse	0.1000	3
Fe	57	45	He	2.086	ppb	97.4	126.67	0.0026	Pulse	0.1000	3
Co	59	45	He	0.092	ppb	14.3	350.02	0.0073	Pulse	0.1000	3
Ni	60	72	He	0.069	ppb	65.9	286.68	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.088	ppb	17.7	586.70	0.0070	Pulse	0.1000	3
Zn	66	72	He	3.533	ppb	9.7	1180.09	0.0141	Pulse	0.1000	3
As	75	72	He	0.104	ppb	46.1	85.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.019	ppb	64.6	100.00	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.171	ppb	2.5	353.35	0.0040	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	24.0	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.071	ppb	92.5	1550.14	0.0176	Pulse	0.1000	3
Sb	121	115	He	0.496	ppb	16.8	673.38	0.0076	Pulse	0.1000	3
Ba	137	115	He	0.015	ppb	182.2	26.67	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.246	ppb	2.4	2500.33	0.0062	Pulse	0.1000	3
Pb	208	159	He	0.021	ppb	41.3	703.37	0.0017	Pulse	0.1000	3
U	238	209	He	0.164	ppb	12.0	2533.68	0.0082	Pulse	0.1000	3

ISTD Table:

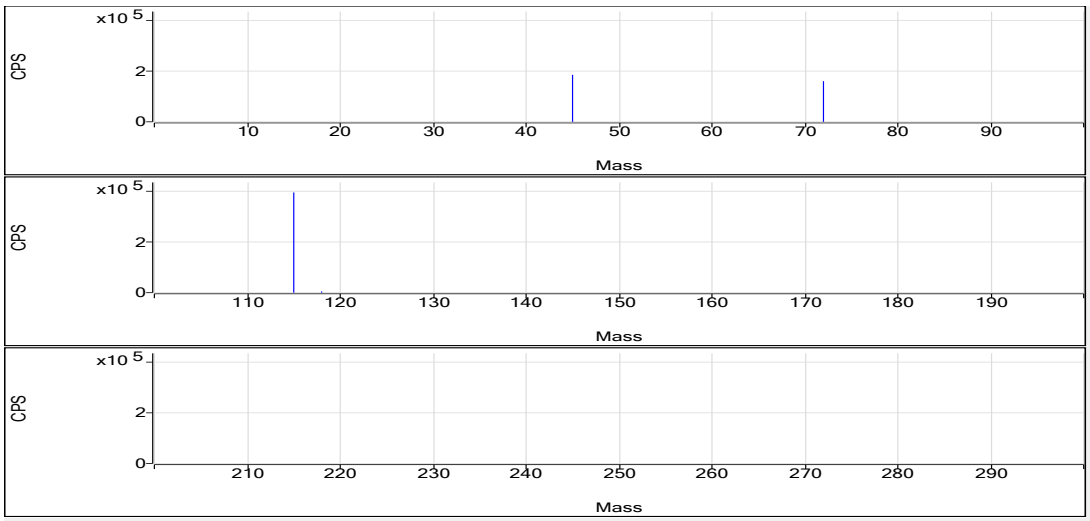
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2503907.51	0.9	104.4	Analog	0.1000	3
No Gas	Ge	72	1213061.88	1.4	105.2	Pulse	0.1000	3
H2	Sc	45	184821.42	1.2	98.8	Pulse	0.1000	3
H2	Ge	72	159974.34	1.7	97.7	Pulse	0.1000	3
H2	In	115	394436.43	0.7	101.4	Pulse	0.1000	3
He	Sc	45	47939.74	0.3	102.8	Pulse	0.1000	3
He	Ge	72	83684.65	0.7	103.1	Pulse	0.1000	3
He	In	115	88084.29	1.0	102.2	Pulse	0.1000	3
He	Tb	159	402080.99	0.5	100.9	Pulse	0.1000	3
He	Bi	209	310657.78	1.4	100.4	Pulse	0.1000	3

No Gas

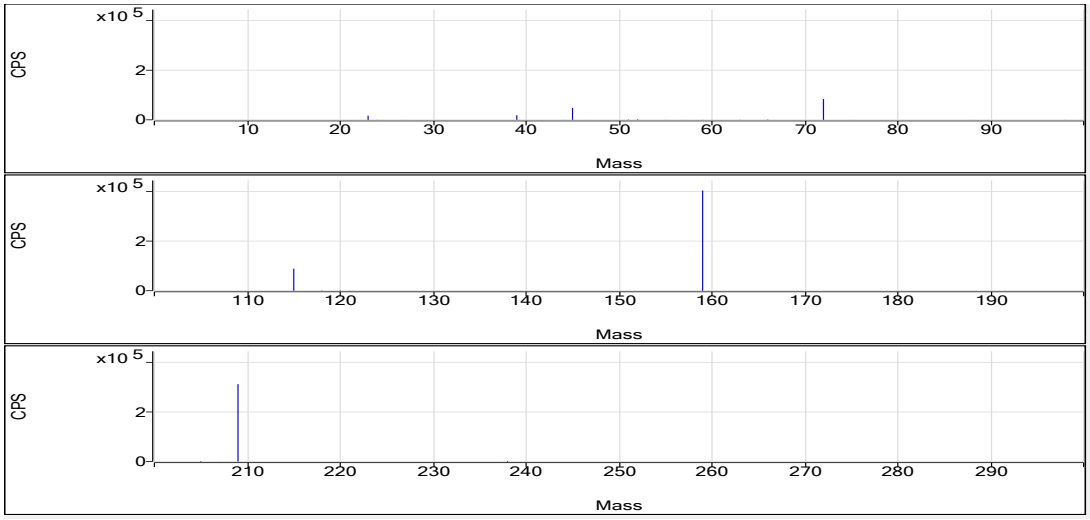


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.018	0	46.00	0.0008	4.685E-06
Be	9	1	No Gas	0.021	0	52.00	0.0008	4.685E-06
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Se	78	2	H2	0.131	0.0001	10.67	0.0004	1.219E-05
Se	78	2	H2	0.103	0.0001	8.67	0.0004	1.219E-05
Se	78	2	H2	0.099	0.0001	8.67	0.0004	1.219E-05
Na	23	3	He	1.972	0.3522	16920.15	0.0036	0.3452
Na	23	3	He	-2.593	0.3359	16129.18	0.0036	0.3452
Na	23	3	He	2.667	0.3547	16940.31	0.0036	0.3452
Mg	24	3	He	1.648	0.0065	310.02	0.0018	0.003497
Mg	24	3	He	2.578	0.0081	390.02	0.0018	0.003497
Mg	24	3	He	1.085	0.0054	260.01	0.0018	0.003497
Al	27	3	He	2.815	0.0023	110.01	0.0006	0.0006432
Al	27	3	He	4.24	0.0031	150.01	0.0006	0.0006432
Al	27	3	He	0.332	0.0008	40.00	0.0006	0.0006432
K	39	3	He	-9.775	0.3837	18432.11	0.0012	0.3951
K	39	3	He	-6.595	0.3874	18602.39	0.0012	0.3951
K	39	3	He	-7.84	0.3859	18432.22	0.0012	0.3951
Ca	44	3	He	18.361	0.004	190.01	0.0001	0.002715
Ca	44	3	He	12.219	0.0035	170.01	0.0001	0.002715
Ca	44	3	He	15.605	0.0038	180.01	0.0001	0.002715
Ti	47	3	He	0.257	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.033	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.26	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.101	0.0271	1300.07	0.0219	0.02486
V	51	3	He	0.16	0.0284	1362.07	0.0219	0.02486
V	51	3	He	0.148	0.0281	1342.07	0.0219	0.02486
Cr	52	3	He	0.028	0.0408	1960.20	0.0299	0.03997
Cr	52	3	He	-0.069	0.0379	1820.17	0.0299	0.03997
Cr	52	3	He	-0.048	0.0385	1840.18	0.0299	0.03997
Mn	55	3	He	0.054	0.0033	160.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.2	0.0052	250.01	0.0128	0.002639
Mn	55	3	He	0.104	0.004	190.01	0.0128	0.002639
Fe	57	3	He	1.482	0.0023	110.00	0.0006	0.001429
Fe	57	3	He	4.351	0.004	190.01	0.0006	0.001429
Fe	57	3	He	0.424	0.0017	80.00	0.0006	0.001429
Co	59	3	He	0.076	0.0065	310.01	0.0563	0.002149
Co	59	3	He	0.099	0.0077	370.02	0.0563	0.002149
Co	59	3	He	0.099	0.0077	370.02	0.0563	0.002149
Ni	60	3	He	0.104	0.0037	310.01	0.0086	0.002834
Ni	60	3	He	0.085	0.0036	300.02	0.0086	0.002834
Ni	60	3	He	0.018	0.003	250.01	0.0086	0.002834
Cu	63	3	He	0.101	0.0073	610.04	0.0257	0.004757
Cu	63	3	He	0.092	0.0071	600.03	0.0257	0.004757
Cu	63	3	He	0.071	0.0066	550.03	0.0257	0.004757
Zn	66	3	He	3.483	0.014	1160.10	0.0029	0.003818
Zn	66	3	He	3.216	0.0132	1110.08	0.0029	0.003818
Zn	66	3	He	3.898	0.0152	1270.10	0.0029	0.003818
As	75	3	He	0.1	0.001	84.00	0.002	0.0008061
As	75	3	He	0.059	0.0009	78.00	0.002	0.0008061
As	75	3	He	0.154	0.0011	94.00	0.002	0.0008061
Sr	88	3	He	0.031	0.0012	110.00	0.009	0.0009645
Sr	88	3	He	0.02	0.0011	100.00	0.009	0.0009645
Sr	88	3	He	0.006	0.001	90.00	0.009	0.0009645
Mo	98	3	He	0.173	0.0041	360.02	0.0219	0.0002706
Mo	98	3	He	0.166	0.0039	340.01	0.0219	0.0002706
Mo	98	3	He	0.174	0.0041	360.02	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Sn	120	3	He	0.14	0.0187	1660.17	0.0158	0.01648
Sn	120	3	He	0.011	0.0166	1450.13	0.0158	0.01648
Sn	120	3	He	0.061	0.0174	1540.13	0.0158	0.01648
Sb	121	3	He	0.437	0.0068	600.04	0.0149	0.0002698
Sb	121	3	He	0.461	0.0071	620.04	0.0149	0.0002698
Sb	121	3	He	0.592	0.0091	800.06	0.0149	0.0002698
Ba	137	3	He	0.046	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	-0.001	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.245	0.0062	2490.33	0.0247	0.0001339
Tl	205	3	He	0.241	0.0061	2460.32	0.0247	0.0001339
Tl	205	3	He	0.252	0.0064	2550.33	0.0247	0.0001339
Pb	208	3	He	0.022	0.0018	290.01	0.0327	0.00107
Pb	208	3	He	0.029	0.002	370.02	0.0327	0.00107
Pb	208	3	He	0.012	0.0014	280.02	0.0327	0.00107
U	238	3	He	0.143	0.0071	2230.28	0.0493	7.55E-05
U	238	3	He	0.181	0.009	2810.41	0.0493	7.55E-05
U	238	3	He	0.168	0.0084	2560.36	0.0493	7.55E-05
Sc	45	1	No Gas			2485008.56		
Sc	45	1	No Gas			2527518.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2499195.74		
Ge	72	1	No Gas			1201452.79		
Ge	72	1	No Gas			1232660.76		
Ge	72	1	No Gas			1205072.09		
Sc	45	2	H2			184070.41		
Sc	45	2	H2			183050.23		
Sc	45	2	H2			187343.63		
Ge	72	2	H2			159916.67		
Ge	72	2	H2			157348.61		
Ge	72	2	H2			162657.73		
In	115	2	H2			391983.98		
In	115	2	H2			394164.56		
In	115	2	H2			397160.74		
Sc	45	3	He			48039.69		
Sc	45	3	He			48020.04		
Sc	45	3	He			47759.49		
Ge	72	3	He			83101.39		
Ge	72	3	He			84217.99		
Ge	72	3	He			83734.56		
In	115	3	He			88824.20		
In	115	3	He			87133.03		
In	115	3	He			88319.58		
Tb	159	3	He			402311.87		
Tb	159	3	He			403841.60		
Tb	159	3	He			400089.49		
Bi	209	3	He			314017.01		
Bi	209	3	He			312117.24		
Bi	209	3	He			305839.08		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

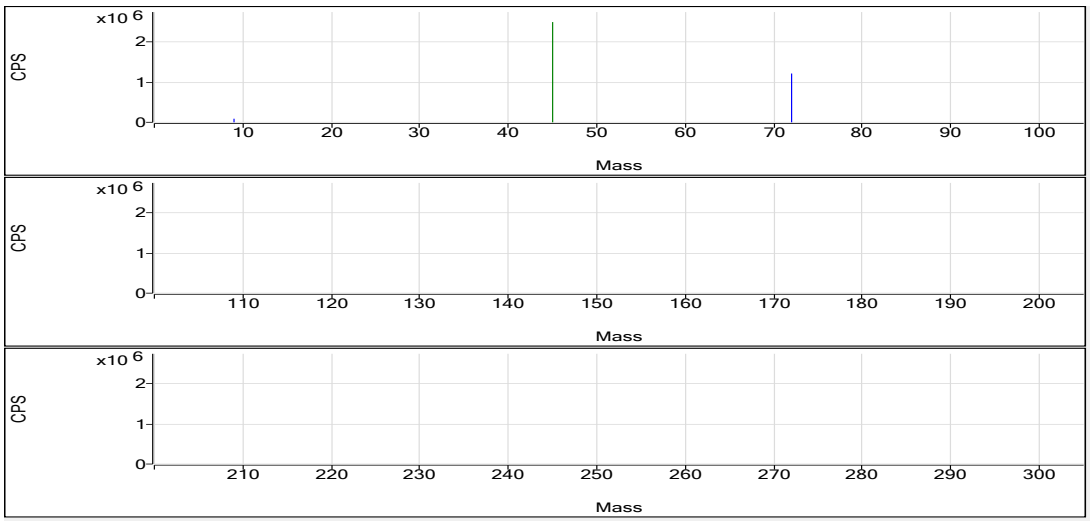
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.692	ppb	0.5	88951.53	0.0356	Pulse	0.5000	3
Se	78	72	H2	53.080	ppb	3.0	3601.35	0.0222	Pulse	1.5000	3
Na	23	45	He	4738.898	ppb	2.3	846219.88	17.2964	Pulse	0.1000	3
Mg	24	45	He	4928.672	ppb	1.7	432870.32	8.8471	Pulse	0.1000	3
Al	27	45	He	4915.865	ppb	0.9	140757.43	2.8766	Pulse	0.1000	3
K	39	45	He	5069.101	ppb	1.4	308143.03	6.2972	Pulse	0.1000	3
Ca	44	45	He	5146.567	ppb	2.9	17150.64	0.3504	Pulse	0.1000	3
Ti	47	45	He	5044.900	ppb	1.1	132549.51	2.7089	Pulse	0.1000	3
V	51	45	He	507.297	ppb	1.7	543777.02	11.1139	Pulse	0.5000	3
Cr	52	45	He	483.642	ppb	1.3	710498.09	14.5206	Pulse	0.1000	3
Mn	55	45	He	501.488	ppb	1.3	315041.42	6.4387	Pulse	0.1000	3
Fe	57	45	He	5032.145	ppb	2.1	143110.38	2.9251	Pulse	0.1000	3
Co	59	45	He	484.880	ppb	1.2	1335433.15	27.2923	Pulse	0.1000	3
Ni	60	72	He	518.888	ppb	1.5	377508.34	4.4565	Pulse	0.1000	3
Cu	63	72	He	495.180	ppb	1.0	1077220.29	12.7166	Pulse	0.1000	3
Zn	66	72	He	522.477	ppb	2.3	129187.79	1.5251	Pulse	0.1000	3
As	75	72	He	523.467	ppb	0.6	90924.34	1.0733	Pulse	0.5000	3
Sr	88	115	He	51.337	ppb	2.0	40893.21	0.4615	Pulse	0.1000	3
Mo	98	115	He	50.629	ppb	2.1	98400.35	1.1104	Pulse	0.1000	3
Ag	107	115	He	50.700	ppb	2.5	208909.94	2.3575	Pulse	0.1000	3
Cd	111	115	He	51.123	ppb	1.8	24224.34	0.2733	Pulse	0.5000	3
Sn	120	115	He	51.208	ppb	2.6	73150.46	0.8255	Pulse	0.1000	3
Sb	121	115	He	51.528	ppb	2.1	67853.41	0.7656	Pulse	0.1000	3
Ba	137	115	He	515.440	ppb	1.7	219251.23	2.4740	Pulse	0.1000	3
Tl	205	159	He	51.257	ppb	1.2	511555.06	1.2675	Pulse	0.1000	3
Pb	208	159	He	51.473	ppb	1.6	680334.46	1.6858	Pulse	0.1000	3
U	238	209	He	50.534	ppb	1.4	776077.62	2.4894	Pulse	0.1000	3

ISTD Table:

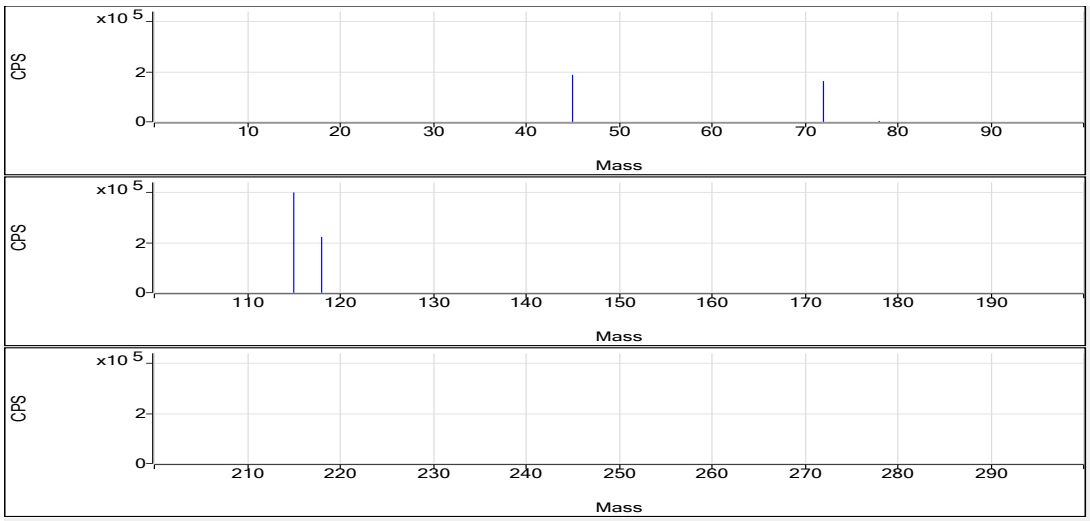
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2497241.84	1.0	104.1	Analog	0.1000	3
No Gas	Ge	72	1215202.17	1.6	105.4	Pulse	0.1000	3
H2	Sc	45	187509.09	1.5	100.3	Pulse	0.1000	3
H2	Ge	72	162629.83	1.4	99.3	Pulse	0.1000	3
H2	In	115	400174.67	0.3	102.8	Pulse	0.1000	3
He	Sc	45	48936.43	1.6	104.9	Pulse	0.1000	3
He	Ge	72	84714.04	0.7	104.3	Pulse	0.1000	3
He	In	115	88637.27	1.6	102.8	Pulse	0.1000	3
He	Tb	159	403617.10	1.0	101.3	Pulse	0.1000	3
He	Bi	209	311780.49	0.8	100.8	Pulse	0.1000	3

No Gas

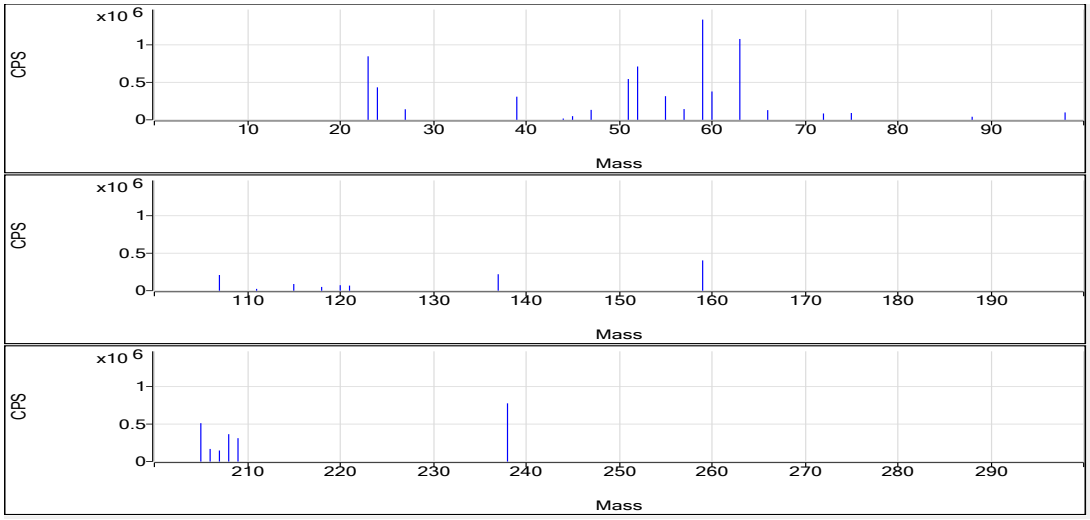


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.482	0.0355	89519.67	0.0008	4.685E-06
Be	9	1	No Gas	46.972	0.0358	88781.09	0.0008	4.685E-06
Be	9	1	No Gas	46.623	0.0356	88553.84	0.0008	4.685E-06
Se	78	2	H2	54.917	0.0229	3675.81	0.0004	1.219E-05
Se	78	2	H2	52.009	0.0217	3582.45	0.0004	1.219E-05
Se	78	2	H2	52.313	0.0218	3545.78	0.0004	1.219E-05
Na	23	3	He	4631.722	16.9131	840336.63	0.0036	0.3452
Na	23	3	He	4851.438	17.699	851680.85	0.0036	0.3452
Na	23	3	He	4733.536	17.2772	846642.17	0.0036	0.3452
Mg	24	3	He	4845.942	8.6987	432199.72	0.0018	0.003497
Mg	24	3	He	5009	8.9913	432662.02	0.0018	0.003497
Mg	24	3	He	4931.073	8.8514	433749.21	0.0018	0.003497
Al	27	3	He	4865.211	2.847	141453.20	0.0006	0.0006432
Al	27	3	He	4951.497	2.8974	139425.77	0.0006	0.0006432
Al	27	3	He	4930.886	2.8854	141393.31	0.0006	0.0006432
K	39	3	He	5000.117	6.2168	308887.71	0.0012	0.3951
K	39	3	He	5066.201	6.2938	302858.61	0.0012	0.3951
K	39	3	He	5140.984	6.3809	312682.77	0.0012	0.3951
Ca	44	3	He	5317.3	0.3619	17981.68	0.0001	0.002715
Ca	44	3	He	5051.126	0.3439	16549.93	0.0001	0.002715
Ca	44	3	He	5071.274	0.3453	16920.31	0.0001	0.002715
Ti	47	3	He	4990.921	2.6799	133154.67	0.0005	7.003E-05
Ti	47	3	He	5101.741	2.7394	131822.96	0.0005	7.003E-05
Ti	47	3	He	5042.037	2.7074	132670.90	0.0005	7.003E-05
V	51	3	He	498.89	10.9302	543073.63	0.0219	0.02486
V	51	3	He	516.343	11.3117	544322.56	0.0219	0.02486
V	51	3	He	506.657	11.1	543934.88	0.0219	0.02486
Cr	52	3	He	480.106	14.4147	716204.60	0.0299	0.03997
Cr	52	3	He	490.741	14.7331	708962.10	0.0299	0.03997
Cr	52	3	He	480.079	14.4139	706327.57	0.0299	0.03997
Mn	55	3	He	494.913	6.3543	315717.03	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	508.205	6.5249	313979.23	0.0128	0.002639
Mn	55	3	He	501.348	6.4369	315428.00	0.0128	0.002639
Fe	57	3	He	4928.638	2.8649	142345.61	0.0006	0.001429
Fe	57	3	He	5136.778	2.9858	143680.02	0.0006	0.001429
Fe	57	3	He	5031.02	2.9244	143305.50	0.0006	0.001429
Co	59	3	He	478.586	26.9381	1338436.07	0.0563	0.002149
Co	59	3	He	489.39	27.5461	1325529.04	0.0563	0.002149
Co	59	3	He	486.664	27.3927	1342334.35	0.0563	0.002149
Ni	60	3	He	525.308	4.5116	378959.49	0.0086	0.002834
Ni	60	3	He	520.955	4.4743	380326.32	0.0086	0.002834
Ni	60	3	He	510.401	4.3837	373239.21	0.0086	0.002834
Cu	63	3	He	500.623	12.8563	1079877.48	0.0257	0.004757
Cu	63	3	He	492.39	12.6449	1074856.62	0.0257	0.004757
Cu	63	3	He	492.527	12.6485	1076926.78	0.0257	0.004757
Zn	66	3	He	530.512	1.5485	130065.11	0.0029	0.003818
Zn	66	3	He	508.397	1.4841	126150.77	0.0029	0.003818
Zn	66	3	He	528.522	1.5427	131347.48	0.0029	0.003818
As	75	3	He	525.168	1.0768	90447.52	0.002	0.0008061
As	75	3	He	519.6	1.0654	90561.96	0.002	0.0008061
As	75	3	He	525.633	1.0778	91763.55	0.002	0.0008061
Sr	88	3	He	52.475	0.4717	41100.32	0.009	0.0009645
Sr	88	3	He	50.481	0.4538	40799.84	0.009	0.0009645
Sr	88	3	He	51.056	0.4589	40779.48	0.009	0.0009645
Mo	98	3	He	51.838	1.1369	99068.62	0.0219	0.0002706
Mo	98	3	He	49.81	1.0924	98222.59	0.0219	0.0002706
Mo	98	3	He	50.24	1.1019	97909.83	0.0219	0.0002706
Ag	107	3	He	52.068	2.4211	210975.97	0.0465	0.0006206
Ag	107	3	He	49.553	2.3042	207176.58	0.0465	0.0006206
Ag	107	3	He	50.48	2.3473	208577.28	0.0465	0.0006206
Cd	111	3	He	52.161	0.2789	24303.13	0.0053	0
Cd	111	3	He	50.41	0.2695	24235.01	0.0053	0
Cd	111	3	He	50.798	0.2716	24134.87	0.0053	0
Sn	120	3	He	52.723	0.8494	74018.76	0.0158	0.01648
Sn	120	3	He	50.356	0.812	73013.00	0.0158	0.01648
Sn	120	3	He	50.544	0.815	72419.63	0.0158	0.01648
Sb	121	3	He	52.098	0.7741	67455.37	0.0149	0.0002698
Sb	121	3	He	50.295	0.7473	67193.81	0.0149	0.0002698
Sb	121	3	He	52.193	0.7755	68911.05	0.0149	0.0002698
Ba	137	3	He	523.427	2.5123	218924.49	0.0048	0.0002317
Ba	137	3	He	506.225	2.4298	218469.06	0.0048	0.0002317
Ba	137	3	He	516.668	2.4799	220360.13	0.0048	0.0002317
Tl	205	3	He	50.606	1.2514	510374.02	0.0247	0.0001339
Tl	205	3	He	51.313	1.2689	511969.60	0.0247	0.0001339
Tl	205	3	He	51.852	1.2822	512321.55	0.0247	0.0001339
Pb	208	3	He	50.588	1.6568	362358.74	0.0327	0.00107
Pb	208	3	He	51.561	1.6886	364997.30	0.0327	0.00107
Pb	208	3	He	52.271	1.7119	367076.60	0.0327	0.00107
U	238	3	He	50.523	2.4888	776926.47	0.0493	7.55E-05
U	238	3	He	49.848	2.4556	771518.11	0.0493	7.55E-05
U	238	3	He	51.23	2.5237	779788.27	0.0493	7.55E-05
Sc	45	1	No Gas			2524483.56		
Sc	45	1	No Gas			2477551.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2489690.12		
Ge	72	1	No Gas			1236041.62		
Ge	72	1	No Gas			1197948.03		
Ge	72	1	No Gas			1211616.86		
Sc	45	2	H2			190665.88		
Sc	45	2	H2			185469.16		
Sc	45	2	H2			186392.24		
Ge	72	2	H2			160402.60		
Ge	72	2	H2			165063.18		
Ge	72	2	H2			162423.71		
In	115	2	H2			400285.50		
In	115	2	H2			401189.37		
In	115	2	H2			399049.13		
Sc	45	3	He			49685.68		
Sc	45	3	He			48120.31		
Sc	45	3	He			49003.30		
Ge	72	3	He			83996.15		
Ge	72	3	He			85002.99		
Ge	72	3	He			85142.97		
In	115	3	He			87536.45		
In	115	3	He			90302.95		
In	115	3	He			89246.66		
Tb	159	3	He			407827.73		
Tb	159	3	He			403469.68		
Tb	159	3	He			399553.90		
Bi	209	3	He			312163.88		
Bi	209	3	He			314188.43		
Bi	209	3	He			308989.16		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

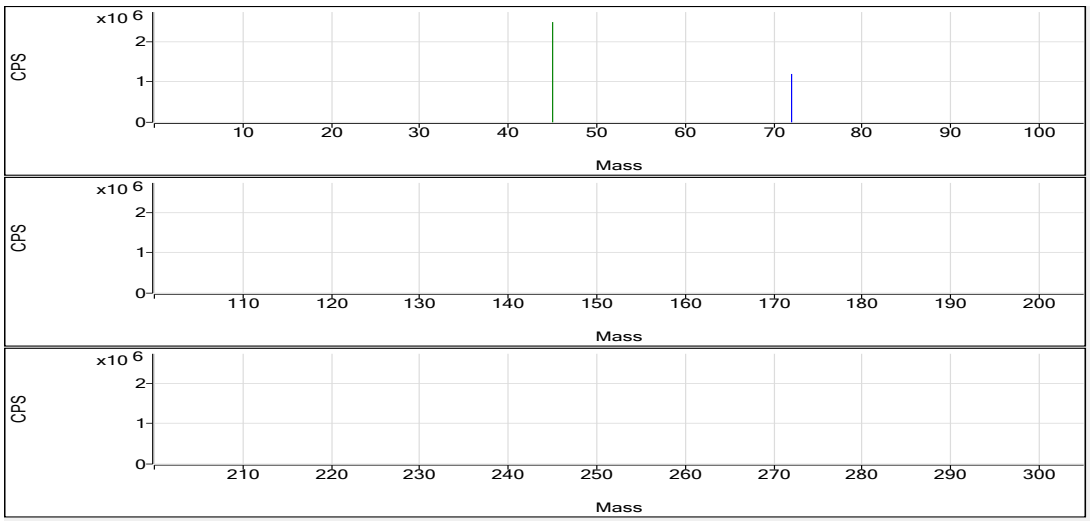
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.023	ppb	15.3	55.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.051	ppb	90.4	5.34	0.0000	Pulse	1.5000	3
Na	23	45	He	-2.484	ppb	N/A	16309.48	0.3363	Pulse	0.1000	3
Mg	24	45	He	0.391	ppb	140.4	203.34	0.0042	Pulse	0.1000	3
Al	27	45	He	1.130	ppb	64.4	63.33	0.0013	Pulse	0.1000	3
K	39	45	He	-7.699	ppb	N/A	18729.20	0.3861	Pulse	0.1000	3
Ca	44	45	He	-2.586	ppb	N/A	123.34	0.0025	Pulse	0.1000	3
Ti	47	45	He	1.021	ppb	75.4	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	0.154	ppb	8.4	1369.41	0.0282	Pulse	0.5000	3
Cr	52	45	He	0.012	ppb	898.3	1956.88	0.0403	Pulse	0.1000	3
Mn	55	45	He	0.095	ppb	41.9	186.68	0.0039	Pulse	0.1000	3
Fe	57	45	He	1.088	ppb	29.7	100.00	0.0021	Pulse	0.1000	3
Co	59	45	He	0.083	ppb	19.2	330.02	0.0068	Pulse	0.1000	3
Ni	60	72	He	0.019	ppb	113.9	253.34	0.0030	Pulse	0.1000	3
Cu	63	72	He	0.113	ppb	39.1	646.70	0.0077	Pulse	0.1000	3
Zn	66	72	He	3.046	ppb	11.3	1073.41	0.0127	Pulse	0.1000	3
As	75	72	He	0.181	ppb	68.4	99.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	-0.018	ppb	N/A	70.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.073	ppb	19.6	163.34	0.0019	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	91.4	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.010	ppb	810.7	1460.14	0.0166	Pulse	0.1000	3
Sb	121	115	He	0.084	ppb	44.0	133.34	0.0015	Pulse	0.1000	3
Ba	137	115	He	0.047	ppb	53.2	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.098	ppb	3.3	1033.41	0.0026	Pulse	0.1000	3
Pb	208	159	He	0.023	ppb	25.2	730.04	0.0018	Pulse	0.1000	3
U	238	209	He	0.056	ppb	12.2	890.07	0.0028	Pulse	0.1000	3

ISTD Table:

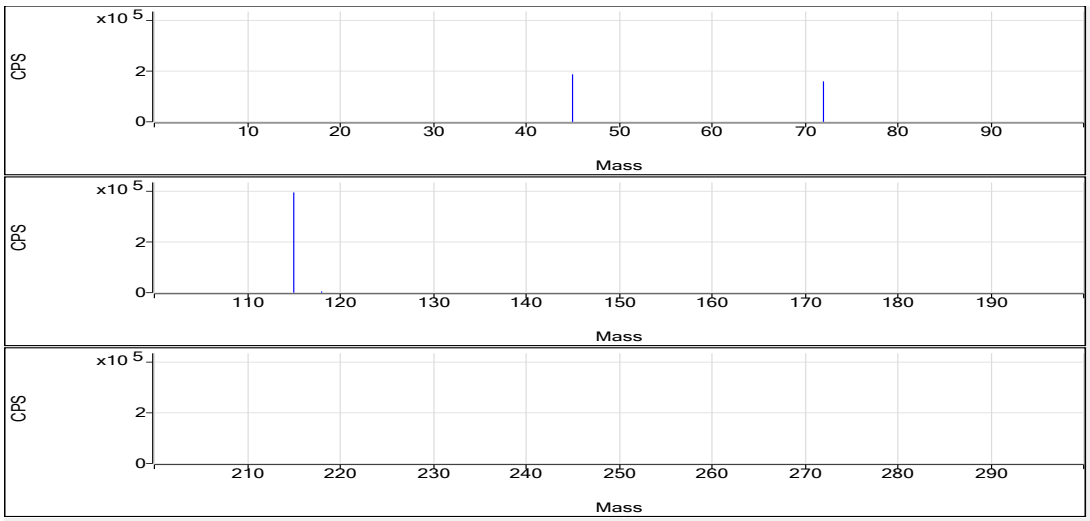
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2477089.39	1.6	103.3	Analog	0.1000	3
No Gas	Ge	72	1194471.91	1.3	103.6	Pulse	0.1000	3
H2	Sc	45	187554.78	0.4	100.3	Pulse	0.1000	3
H2	Ge	72	159782.49	1.6	97.6	Pulse	0.1000	3
H2	In	115	395916.44	0.6	101.8	Pulse	0.1000	3
He	Sc	45	48501.42	0.9	104.0	Pulse	0.1000	3
He	Ge	72	84570.14	1.2	104.2	Pulse	0.1000	3
He	In	115	87816.66	1.6	101.9	Pulse	0.1000	3
He	Tb	159	402966.76	0.3	101.1	Pulse	0.1000	3
He	Bi	209	312643.06	1.1	101.1	Pulse	0.1000	3

No Gas

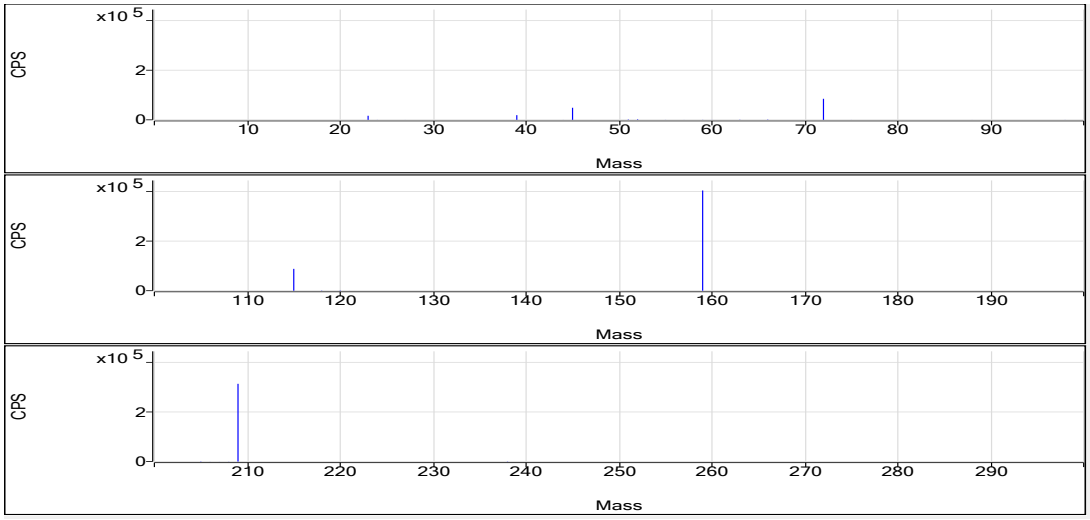


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.021	0	52.00	0.0008	4.685E-06
Be	9	1	No Gas	0.021	0	52.00	0.0008	4.685E-06
Be	9	1	No Gas	0.027	0	62.00	0.0008	4.685E-06
Se	78	2	H2	0.101	0.0001	8.67	0.0004	1.219E-05
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.042	0	4.67	0.0004	1.219E-05
Na	23	3	He	-2.763	0.3353	16429.53	0.0036	0.3452
Na	23	3	He	-2.193	0.3373	16309.56	0.0036	0.3452
Na	23	3	He	-2.497	0.3362	16189.35	0.0036	0.3452
Mg	24	3	He	-0.243	0.0031	150.01	0.0018	0.003497
Mg	24	3	He	0.702	0.0048	230.01	0.0018	0.003497
Mg	24	3	He	0.713	0.0048	230.01	0.0018	0.003497
Al	27	3	He	1.342	0.0014	70.00	0.0006	0.0006432
Al	27	3	He	1.729	0.0017	80.00	0.0006	0.0006432
Al	27	3	He	0.32	0.0008	40.00	0.0006	0.0006432
K	39	3	He	0.948	0.3962	19413.51	0.0012	0.3951
K	39	3	He	-9.942	0.3835	18542.24	0.0012	0.3951
K	39	3	He	-14.103	0.3786	18231.85	0.0012	0.3951
Ca	44	3	He	5.126	0.0031	150.01	0.0001	0.002715
Ca	44	3	He	-6.513	0.0023	110.00	0.0001	0.002715
Ca	44	3	He	-6.372	0.0023	110.00	0.0001	0.002715
Ti	47	3	He	1.01	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	1.795	0.001	50.00	0.0005	7.003E-05
Ti	47	3	He	0.256	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.158	0.0283	1388.08	0.0219	0.02486
V	51	3	He	0.164	0.0285	1376.08	0.0219	0.02486
V	51	3	He	0.14	0.0279	1344.07	0.0219	0.02486
Cr	52	3	He	0.035	0.041	2010.22	0.0299	0.03997
Cr	52	3	He	0.109	0.0432	2090.25	0.0299	0.03997
Cr	52	3	He	-0.107	0.0368	1770.17	0.0299	0.03997
Mn	55	3	He	0.049	0.0033	160.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.117	0.0041	200.01	0.0128	0.002639
Mn	55	3	He	0.118	0.0042	200.01	0.0128	0.002639
Fe	57	3	He	1.404	0.0022	110.00	0.0006	0.001429
Fe	57	3	He	1.101	0.0021	100.00	0.0006	0.001429
Fe	57	3	He	0.758	0.0019	90.00	0.0006	0.001429
Co	59	3	He	0.089	0.0071	350.02	0.0563	0.002149
Co	59	3	He	0.065	0.0058	280.01	0.0563	0.002149
Co	59	3	He	0.095	0.0075	360.02	0.0563	0.002149
Ni	60	3	He	0.004	0.0029	240.01	0.0086	0.002834
Ni	60	3	He	0.01	0.0029	250.01	0.0086	0.002834
Ni	60	3	He	0.044	0.0032	270.01	0.0086	0.002834
Cu	63	3	He	0.164	0.009	750.05	0.0257	0.004757
Cu	63	3	He	0.092	0.0071	610.03	0.0257	0.004757
Cu	63	3	He	0.083	0.0069	580.03	0.0257	0.004757
Zn	66	3	He	3.076	0.0128	1070.09	0.0029	0.003818
Zn	66	3	He	3.375	0.0136	1170.08	0.0029	0.003818
Zn	66	3	He	2.687	0.0116	980.07	0.0029	0.003818
As	75	3	He	0.236	0.0013	108.00	0.002	0.0008061
As	75	3	He	0.039	0.0009	76.00	0.002	0.0008061
As	75	3	He	0.267	0.0014	114.00	0.002	0.0008061
Sr	88	3	He	-0.07	0.0003	30.00	0.009	0.0009645
Sr	88	3	He	0.006	0.001	90.00	0.009	0.0009645
Sr	88	3	He	0.009	0.001	90.00	0.009	0.0009645
Mo	98	3	He	0.07	0.0018	160.01	0.0219	0.0002706
Mo	98	3	He	0.06	0.0016	140.01	0.0219	0.0002706
Mo	98	3	He	0.088	0.0022	190.01	0.0219	0.0002706
Ag	107	3	He	-0.009	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.075	0.0153	1360.12	0.0158	0.01648
Sn	120	3	He	0.013	0.0167	1470.15	0.0158	0.01648
Sn	120	3	He	0.094	0.018	1550.14	0.0158	0.01648
Sb	121	3	He	0.095	0.0017	150.01	0.0149	0.0002698
Sb	121	3	He	0.043	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.114	0.002	170.01	0.0149	0.0002698
Ba	137	3	He	0.045	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.072	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.095	0.0025	1000.08	0.0247	0.0001339
Tl	205	3	He	0.098	0.0026	1030.08	0.0247	0.0001339
Tl	205	3	He	0.102	0.0026	1070.08	0.0247	0.0001339
Pb	208	3	He	0.017	0.0016	340.02	0.0327	0.00107
Pb	208	3	He	0.028	0.002	470.03	0.0327	0.00107
Pb	208	3	He	0.023	0.0018	450.02	0.0327	0.00107
U	238	3	He	0.052	0.0026	830.06	0.0493	7.55E-05
U	238	3	He	0.064	0.0032	1020.08	0.0493	7.55E-05
U	238	3	He	0.052	0.0027	820.06	0.0493	7.55E-05
Sc	45	1	No Gas			2495590.59		
Sc	45	1	No Gas			2503643.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2432033.71		
Ge	72	1	No Gas			1195842.09		
Ge	72	1	No Gas			1209861.08		
Ge	72	1	No Gas			1177712.56		
Sc	45	2	H2			187868.22		
Sc	45	2	H2			188031.81		
Sc	45	2	H2			186764.31		
Ge	72	2	H2			159431.18		
Ge	72	2	H2			162444.60		
Ge	72	2	H2			157471.68		
In	115	2	H2			397994.88		
In	115	2	H2			396712.65		
In	115	2	H2			393041.79		
Sc	45	3	He			49002.88		
Sc	45	3	He			48351.23		
Sc	45	3	He			48150.14		
Ge	72	3	He			83766.13		
Ge	72	3	He			85757.26		
Ge	72	3	He			84187.03		
In	115	3	He			88985.20		
In	115	3	He			88168.97		
In	115	3	He			86317.41		
Tb	159	3	He			402229.53		
Tb	159	3	He			402504.95		
Tb	159	3	He			404165.81		
Bi	209	3	He			313676.09		
Bi	209	3	He			315416.75		
Bi	209	3	He			308836.34		

Quantitation Report

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Acq Time	8/10/2023 2:57:24 PM
Sample Name	410-137743-L-5-A
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

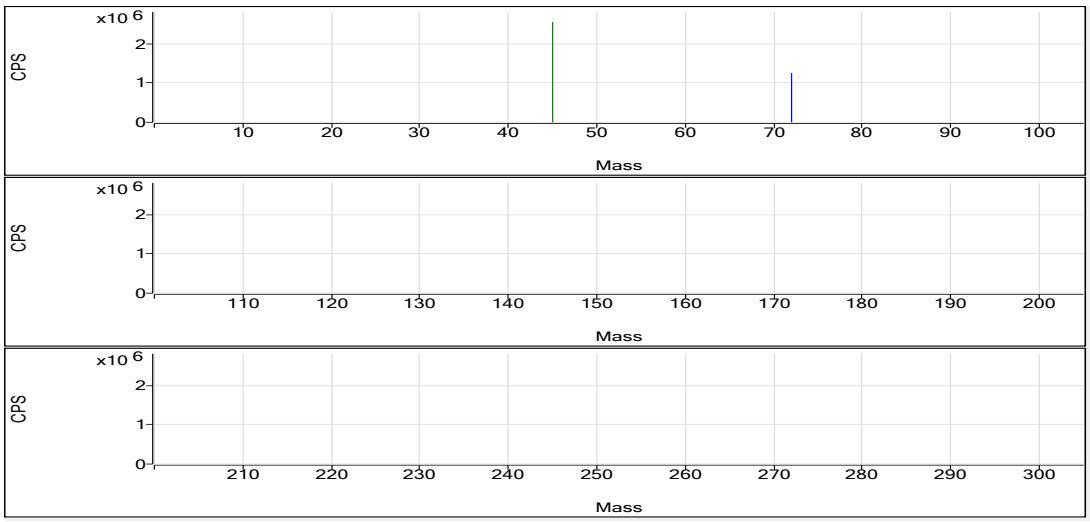
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.086	ppb	18.7	179.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.087	ppb	15.9	8.44	0.0000	Pulse	1.5000	3
Na	23	45	He	12899.837	ppb	0.4	2318137.41	46.4885	Analog	0.1000	3
Mg	24	45	He	16895.066	ppb	0.5	1511858.47	30.3187	Analog	0.1000	3
Al	27	45	He	33.166	ppb	8.4	1000.07	0.0200	Pulse	0.1000	3
K	39	45	He	5051.944	ppb	1.8	312983.36	6.2772	Pulse	0.1000	3
Ca	44	45	He	108890.264	ppb	1.1	366915.60	7.3585	Pulse	0.1000	3
Ti	47	45	He	0.122	ppb	359.0	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.222	ppb	N/A	997.38	0.0200	Pulse	0.5000	3
Cr	52	45	He	-0.140	ppb	N/A	1783.50	0.0358	Pulse	0.1000	3
Mn	55	45	He	7836.070	ppb	1.9	5014390.76	100.5698	Analog	0.1000	3
Fe	57	45	He	79.334	ppb	4.7	2370.28	0.0475	Pulse	0.1000	3
Co	59	45	He	4.828	ppb	4.6	13656.88	0.2739	Pulse	0.1000	3
Ni	60	72	He	50.191	ppb	5.9	38605.98	0.4336	Pulse	0.1000	3
Cu	63	72	He	0.557	ppb	13.9	1696.83	0.0191	Pulse	0.1000	3
Zn	66	72	He	70.649	ppb	2.7	18659.33	0.2095	Pulse	0.1000	3
As	75	72	He	-0.021	ppb	N/A	68.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	662.576	ppb	0.4	536301.87	5.9442	Pulse	0.1000	3
Mo	98	115	He	1.034	ppb	3.7	2070.24	0.0229	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.775	ppb	5.9	374.01	0.0041	Pulse	0.5000	3
Sn	120	115	He	-0.250	ppb	N/A	1130.09	0.0125	Pulse	0.1000	3
Sb	121	115	He	0.066	ppb	18.3	113.34	0.0013	Pulse	0.1000	3
Ba	137	115	He	6.948	ppb	8.8	3030.45	0.0336	Pulse	0.1000	3
Tl	205	159	He	0.080	ppb	6.4	856.72	0.0021	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	11.3	666.70	0.0016	Pulse	0.1000	3
U	238	209	He	0.316	ppb	5.3	5034.49	0.0157	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2544796.11	1.5	106.1	Analog	0.1000	3
No Gas	Ge	72	1248700.40	1.2	108.3	Pulse	0.1000	3
H2	Sc	45	195147.05	0.7	104.4	Pulse	0.1000	3
H2	Ge	72	174477.21	0.9	106.6	Pulse	0.1000	3
H2	In	115	406517.16	0.8	104.5	Pulse	0.1000	3
He	Sc	45	49866.21	1.1	106.9	Pulse	0.1000	3
He	Ge	72	89080.14	1.5	109.7	Pulse	0.1000	3
He	In	115	90225.58	1.1	104.7	Pulse	0.1000	3
He	Tb	159	407205.23	0.8	102.2	Pulse	0.1000	3
He	Bi	209	321487.69	0.3	103.9	Pulse	0.1000	3

No Gas



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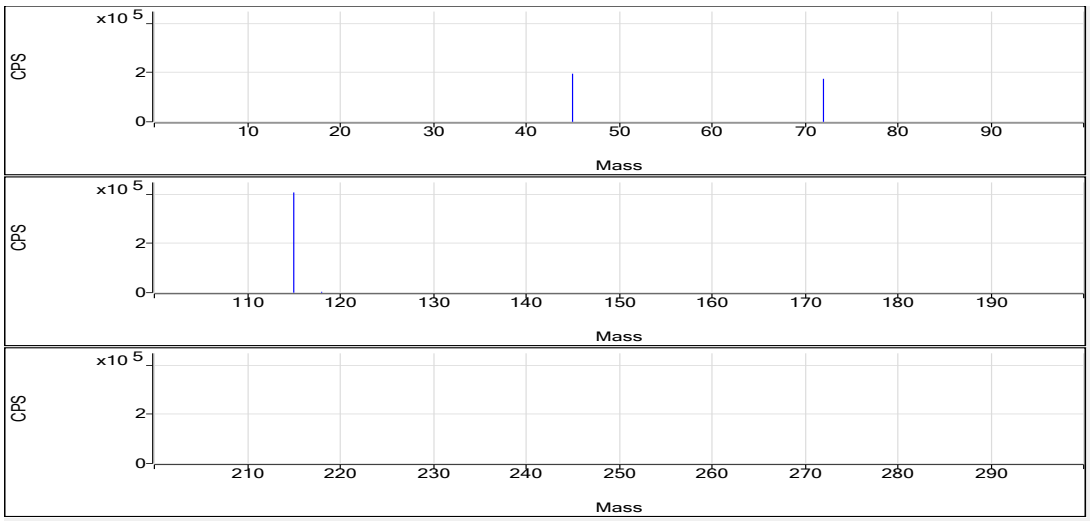
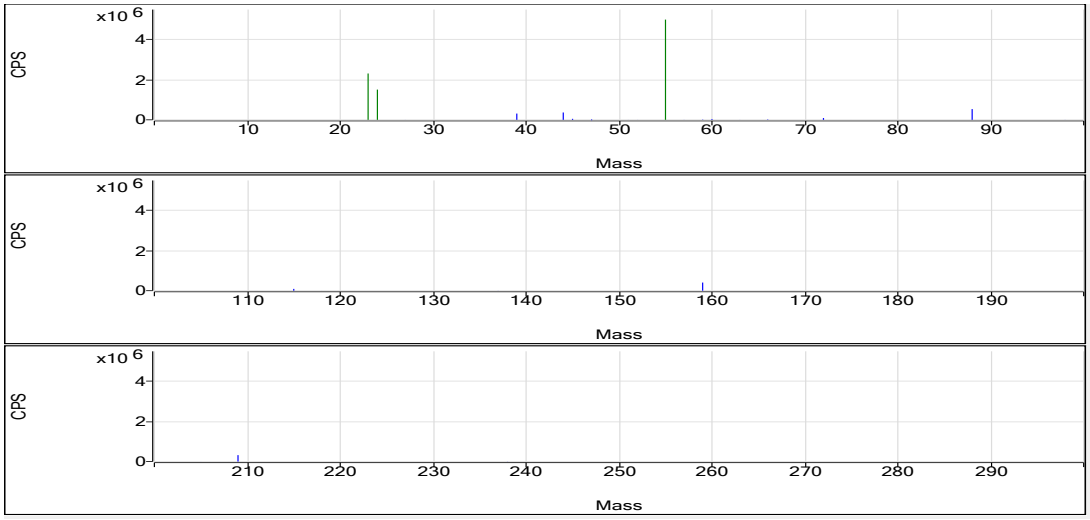


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.091	0.0001	192.00	0.0008	4.685E-06
Be	9	1	No Gas	0.099	0.0001	202.00	0.0008	4.685E-06
Be	9	1	No Gas	0.068	0.0001	144.00	0.0008	4.685E-06
Se	78	2	H2	0.098	0.0001	9.33	0.0004	1.219E-05
Se	78	2	H2	0.071	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.091	0.0001	8.67	0.0004	1.219E-05
Na	23	3	He	12876.612	46.4054	2324764.50	0.0036	0.3452
Na	23	3	He	12961.974	46.7108	2301174.18	0.0036	0.3452
Na	23	3	He	12860.923	46.3493	2328473.56	0.0036	0.3452
Mg	24	3	He	16960.227	30.4356	1524727.01	0.0018	0.003497
Mg	24	3	He	16919.031	30.3617	1495747.48	0.0018	0.003497
Mg	24	3	He	16805.94	30.1588	1515100.91	0.0018	0.003497
Al	27	3	He	31.999	0.0194	970.07	0.0006	0.0006432
Al	27	3	He	31.17	0.0189	930.06	0.0006	0.0006432
Al	27	3	He	36.33	0.0219	1100.07	0.0006	0.0006432
K	39	3	He	4998.803	6.2153	311367.07	0.0012	0.3951
K	39	3	He	5154.443	6.3965	315120.21	0.0012	0.3951
K	39	3	He	5002.587	6.2197	312462.79	0.0012	0.3951
Ca	44	3	He	109205.078	7.3797	369700.81	0.0001	0.002715
Ca	44	3	He	109889.723	7.426	365835.54	0.0001	0.002715
Ca	44	3	He	107575.992	7.2697	365210.46	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.626	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	-0.215	0.0202	1010.04	0.0219	0.02486
V	51	3	He	-0.164	0.0213	1048.05	0.0219	0.02486
V	51	3	He	-0.287	0.0186	934.04	0.0219	0.02486
Cr	52	3	He	-0.182	0.0345	1730.16	0.0299	0.03997
Cr	52	3	He	-0.115	0.0365	1800.18	0.0299	0.03997
Cr	52	3	He	-0.125	0.0362	1820.17	0.0299	0.03997
Mn	55	3	He	7828.072	100.4671	5033084.30	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	7991.855	102.5691	5052996.49	0.0128	0.002639
Mn	55	3	He	7688.285	98.6731	4957091.49	0.0128	0.002639
Fe	57	3	He	77.946	0.0467	2340.27	0.0006	0.001429
Fe	57	3	He	76.51	0.0459	2260.26	0.0006	0.001429
Fe	57	3	He	83.547	0.05	2510.30	0.0006	0.001429
Co	59	3	He	5.018	0.2846	14257.44	0.0563	0.002149
Co	59	3	He	4.884	0.277	13646.88	0.0563	0.002149
Co	59	3	He	4.583	0.2601	13066.33	0.0563	0.002149
Ni	60	3	He	48.449	0.4187	37559.76	0.0086	0.002834
Ni	60	3	He	53.639	0.4632	40568.15	0.0086	0.002834
Ni	60	3	He	48.487	0.419	37690.04	0.0086	0.002834
Cu	63	3	He	0.518	0.0181	1620.15	0.0257	0.004757
Cu	63	3	He	0.647	0.0214	1870.20	0.0257	0.004757
Cu	63	3	He	0.508	0.0178	1600.15	0.0257	0.004757
Zn	66	3	He	69.601	0.2065	18522.53	0.0029	0.003818
Zn	66	3	He	72.82	0.2158	18902.91	0.0029	0.003818
Zn	66	3	He	69.526	0.2062	18552.54	0.0029	0.003818
As	75	3	He	-0.023	0.0008	68.00	0.002	0.0008061
As	75	3	He	-0.037	0.0007	64.00	0.002	0.0008061
As	75	3	He	-0.003	0.0008	72.00	0.002	0.0008061
Sr	88	3	He	660.17	5.9226	540923.08	0.009	0.0009645
Sr	88	3	He	665.626	5.9715	534940.23	0.009	0.0009645
Sr	88	3	He	661.933	5.9384	533042.30	0.009	0.0009645
Mo	98	3	He	1.021	0.0227	2070.24	0.0219	0.0002706
Mo	98	3	He	1.077	0.0239	2140.24	0.0219	0.0002706
Mo	98	3	He	1.004	0.0223	2000.23	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Cd	111	3	He	0.799	0.0043	390.01	0.0053	0
Cd	111	3	He	0.722	0.0039	346.01	0.0053	0
Cd	111	3	He	0.804	0.0043	386.01	0.0053	0
Sn	120	3	He	-0.232	0.0128	1170.09	0.0158	0.01648
Sn	120	3	He	-0.216	0.0131	1170.10	0.0158	0.01648
Sn	120	3	He	-0.302	0.0117	1050.08	0.0158	0.01648
Sb	121	3	He	0.056	0.0011	100.00	0.0149	0.0002698
Sb	121	3	He	0.08	0.0015	130.01	0.0149	0.0002698
Sb	121	3	He	0.064	0.0012	110.00	0.0149	0.0002698
Ba	137	3	He	7.299	0.0353	3220.50	0.0048	0.0002317
Ba	137	3	He	7.303	0.0353	3160.49	0.0048	0.0002317
Ba	137	3	He	6.243	0.0302	2710.36	0.0048	0.0002317
Tl	205	3	He	0.082	0.0022	890.06	0.0247	0.0001339
Tl	205	3	He	0.083	0.0022	890.06	0.0247	0.0001339
Tl	205	3	He	0.074	0.002	790.05	0.0247	0.0001339
Pb	208	3	He	0.02	0.0017	400.02	0.0327	0.00107
Pb	208	3	He	0.017	0.0016	400.02	0.0327	0.00107
Pb	208	3	He	0.016	0.0016	390.02	0.0327	0.00107
U	238	3	He	0.311	0.0154	4951.12	0.0493	7.55E-05
U	238	3	He	0.335	0.0166	5341.27	0.0493	7.55E-05
U	238	3	He	0.303	0.015	4811.09	0.0493	7.55E-05
Sc	45	1	No Gas			2586782.62		
Sc	45	1	No Gas			2510763.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2536842.31		
Ge	72	1	No Gas			1266271.23		
Ge	72	1	No Gas			1238841.62		
Ge	72	1	No Gas			1240988.34		
Sc	45	2	H2			196731.77		
Sc	45	2	H2			194628.77		
Sc	45	2	H2			194080.60		
Ge	72	2	H2			175971.33		
Ge	72	2	H2			174727.36		
Ge	72	2	H2			172732.93		
In	115	2	H2			407027.22		
In	115	2	H2			409477.42		
In	115	2	H2			403046.83		
Sc	45	3	He			50096.82		
Sc	45	3	He			49264.31		
Sc	45	3	He			50237.50		
Ge	72	3	He			89710.50		
Ge	72	3	He			87577.91		
Ge	72	3	He			89952.00		
In	115	3	He			91338.92		
In	115	3	He			89588.01		
In	115	3	He			89769.47		
Tb	159	3	He			409625.50		
Tb	159	3	He			408551.36		
Tb	159	3	He			403438.82		
Bi	209	3	He			322086.93		
Bi	209	3	He			322090.76		
Bi	209	3	He			320285.39		

Quantitation Report

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Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

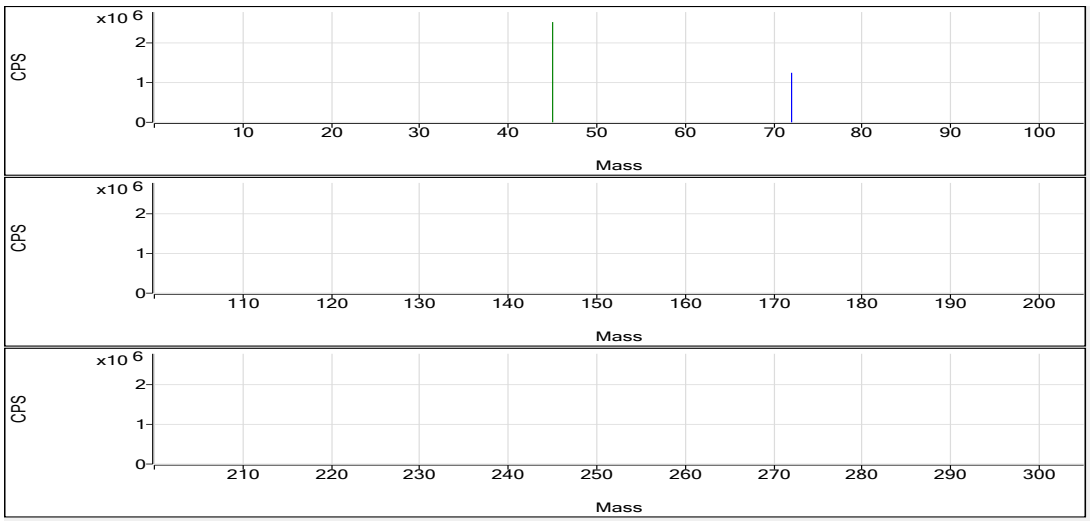
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.183	ppb	9.3	366.01	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.112	ppb	22.8	10.22	0.0001	Pulse	1.5000	3
Na	23	45	He	4754.470	ppb	2.7	866679.44	17.3521	Pulse	0.1000	3
Mg	24	45	He	7247.420	ppb	2.2	649732.90	13.0077	Pulse	0.1000	3
Al	27	45	He	82.203	ppb	9.5	2433.63	0.0487	Pulse	0.1000	3
K	39	45	He	3126.746	ppb	3.0	201563.71	4.0356	Pulse	0.1000	3
Ca	44	45	He	45486.627	ppb	2.4	153620.84	3.0754	Pulse	0.1000	3
Ti	47	45	He	0.237	ppb	154.3	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.051	ppb	41.9	1298.07	0.0260	Pulse	0.5000	3
Cr	52	45	He	-0.216	ppb	N/A	1673.49	0.0335	Pulse	0.1000	3
Mn	55	45	He	1216.528	ppb	2.2	779988.22	15.6154	Pulse	0.1000	3
Fe	57	45	He	3.971	ppb	1.9	186.68	0.0037	Pulse	0.1000	3
Co	59	45	He	5.855	ppb	0.9	16573.40	0.3317	Pulse	0.1000	3
Ni	60	72	He	24.799	ppb	0.9	19507.10	0.2157	Pulse	0.1000	3
Cu	63	72	He	1.253	ppb	1.9	3340.51	0.0369	Pulse	0.1000	3
Zn	66	72	He	56.704	ppb	4.0	15278.66	0.1689	Pulse	0.1000	3
As	75	72	He	0.135	ppb	52.2	98.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	273.902	ppb	1.2	227850.43	2.4578	Pulse	0.1000	3
Mo	98	115	He	0.203	ppb	6.1	436.69	0.0047	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.328	ppb	6.3	162.67	0.0018	Pulse	0.5000	3
Sn	120	115	He	-0.285	ppb	N/A	1110.09	0.0120	Pulse	0.1000	3
Sb	121	115	He	0.047	ppb	53.6	90.00	0.0010	Pulse	0.1000	3
Ba	137	115	He	15.660	ppb	3.5	6988.71	0.0754	Pulse	0.1000	3
Tl	205	159	He	0.078	ppb	4.0	846.73	0.0021	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	49.8	550.03	0.0013	Pulse	0.1000	3
U	238	209	He	0.097	ppb	10.6	1573.49	0.0048	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2541225.54	0.7	105.9	Analog	0.1000	3
No Gas	Ge	72	1255385.84	1.0	108.9	Pulse	0.1000	3
H2	Sc	45	193015.68	0.5	103.2	Pulse	0.1000	3
H2	Ge	72	173843.84	1.0	106.2	Pulse	0.1000	3
H2	In	115	412005.33	0.3	105.9	Pulse	0.1000	3
He	Sc	45	49966.89	2.4	107.1	Pulse	0.1000	3
He	Ge	72	90442.20	0.4	111.4	Pulse	0.1000	3
He	In	115	92709.82	0.7	107.6	Pulse	0.1000	3
He	Tb	159	409736.65	0.0	102.8	Pulse	0.1000	3
He	Bi	209	325548.54	0.5	105.3	Pulse	0.1000	3

No Gas



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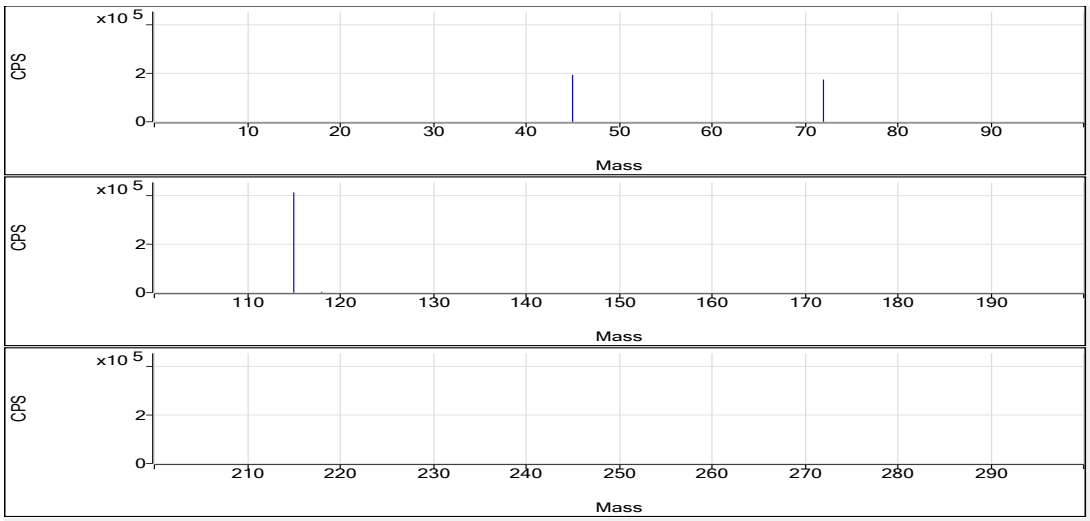
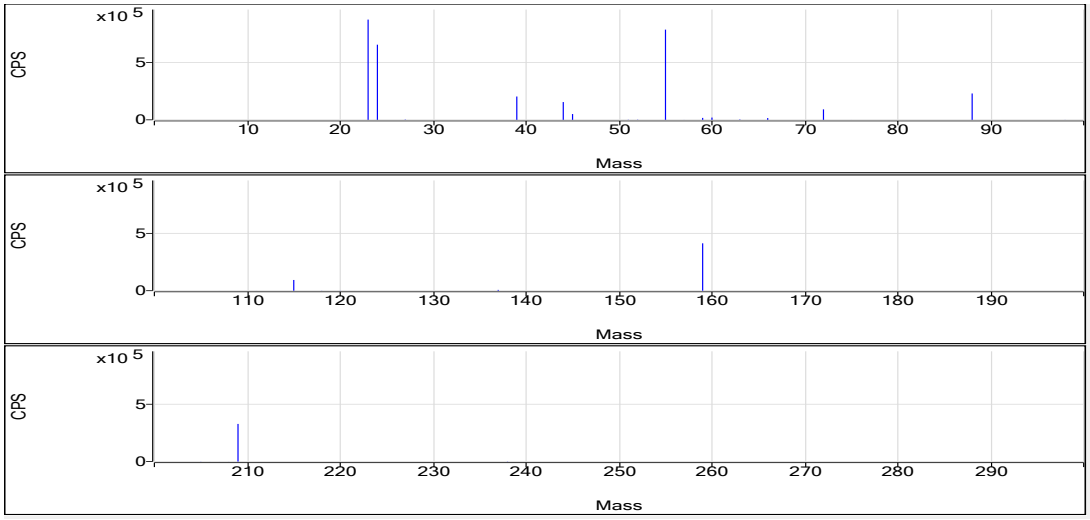


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.167	0.0001	338.01	0.0008	4.685E-06
Be	9	1	No Gas	0.201	0.0002	400.01	0.0008	4.685E-06
Be	9	1	No Gas	0.18	0.0001	360.01	0.0008	4.685E-06
Se	78	2	H2	0.125	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.127	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.082	0	8.00	0.0004	1.219E-05
Na	23	3	He	4904.341	17.8882	870668.19	0.0036	0.3452
Na	23	3	He	4673.49	17.0625	870362.80	0.0036	0.3452
Na	23	3	He	4685.579	17.1057	859007.33	0.0036	0.3452
Mg	24	3	He	7422.67	13.3222	648425.15	0.0018	0.003497
Mg	24	3	He	7121.854	12.7824	652034.99	0.0018	0.003497
Mg	24	3	He	7197.736	12.9186	648738.55	0.0018	0.003497
Al	27	3	He	88.463	0.0524	2550.30	0.0006	0.0006432
Al	27	3	He	84.695	0.0502	2560.34	0.0006	0.0006432
Al	27	3	He	73.452	0.0436	2190.24	0.0006	0.0006432
K	39	3	He	3236.02	4.1629	202617.13	0.0012	0.3951
K	39	3	He	3067.758	3.9669	202355.11	0.0012	0.3951
K	39	3	He	3076.459	3.9771	199718.88	0.0012	0.3951
Ca	44	3	He	46692.517	3.1569	153654.01	0.0001	0.002715
Ca	44	3	He	45119.858	3.0506	155614.71	0.0001	0.002715
Ca	44	3	He	44647.506	3.0187	151593.80	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.6	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.24	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.071	0.0264	1286.07	0.0219	0.02486
V	51	3	He	0.054	0.026	1328.07	0.0219	0.02486
V	51	3	He	0.029	0.0255	1280.06	0.0219	0.02486
Cr	52	3	He	-0.175	0.0347	1690.15	0.0299	0.03997
Cr	52	3	He	-0.242	0.0327	1670.16	0.0299	0.03997
Cr	52	3	He	-0.231	0.0331	1660.15	0.0299	0.03997
Mn	55	3	He	1247.481	16.0126	779378.74	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1198.698	15.3866	784875.61	0.0128	0.002639
Mn	55	3	He	1203.405	15.447	775710.30	0.0128	0.002639
Fe	57	3	He	3.906	0.0037	180.01	0.0006	0.001429
Fe	57	3	He	3.952	0.0037	190.01	0.0006	0.001429
Fe	57	3	He	4.053	0.0038	190.01	0.0006	0.001429
Co	59	3	He	5.832	0.3304	16079.58	0.0563	0.002149
Co	59	3	He	5.817	0.3295	16810.27	0.0563	0.002149
Co	59	3	He	5.917	0.3351	16830.36	0.0563	0.002149
Ni	60	3	He	24.65	0.2144	19443.60	0.0086	0.002834
Ni	60	3	He	25.068	0.218	19754.22	0.0086	0.002834
Ni	60	3	He	24.678	0.2147	19323.49	0.0086	0.002834
Cu	63	3	He	1.271	0.0374	3390.51	0.0257	0.004757
Cu	63	3	He	1.264	0.0372	3370.53	0.0257	0.004757
Cu	63	3	He	1.226	0.0362	3260.49	0.0257	0.004757
Zn	66	3	He	57.084	0.17	15418.88	0.0029	0.003818
Zn	66	3	He	58.759	0.1749	15849.28	0.0029	0.003818
Zn	66	3	He	54.268	0.1618	14567.82	0.0029	0.003818
As	75	3	He	0.199	0.0012	110.00	0.002	0.0008061
As	75	3	He	0.059	0.0009	84.00	0.002	0.0008061
As	75	3	He	0.149	0.0011	100.00	0.002	0.0008061
Sr	88	3	He	272.068	2.4414	227403.16	0.009	0.0009645
Sr	88	3	He	277.801	2.4928	229180.47	0.009	0.0009645
Sr	88	3	He	271.838	2.4393	226967.65	0.009	0.0009645
Mo	98	3	He	0.188	0.0044	410.02	0.0219	0.0002706
Mo	98	3	He	0.211	0.0049	450.03	0.0219	0.0002706
Mo	98	3	He	0.208	0.0048	450.03	0.0219	0.0002706
Ag	107	3	He	0.001	0.0006	60.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.009	0.0002	20.00	0.0465	0.0006206
Cd	111	3	He	0.345	0.0018	172.00	0.0053	0
Cd	111	3	He	0.305	0.0016	150.00	0.0053	0
Cd	111	3	He	0.334	0.0018	166.00	0.0053	0
Sn	120	3	He	-0.336	0.0112	1040.08	0.0158	0.01648
Sn	120	3	He	-0.368	0.0107	980.07	0.0158	0.01648
Sn	120	3	He	-0.152	0.0141	1310.11	0.0158	0.01648
Sb	121	3	He	0.061	0.0012	110.00	0.0149	0.0002698
Sb	121	3	He	0.062	0.0012	110.00	0.0149	0.0002698
Sb	121	3	He	0.018	0.0005	50.00	0.0149	0.0002698
Ba	137	3	He	15.772	0.0759	7072.05	0.0048	0.0002317
Ba	137	3	He	16.138	0.0777	7142.15	0.0048	0.0002317
Ba	137	3	He	15.072	0.0726	6751.92	0.0048	0.0002317
Tl	205	3	He	0.075	0.002	810.06	0.0247	0.0001339
Tl	205	3	He	0.08	0.0021	870.06	0.0247	0.0001339
Tl	205	3	He	0.079	0.0021	860.07	0.0247	0.0001339
Pb	208	3	He	0.009	0.0014	310.01	0.0327	0.00107
Pb	208	3	He	0.012	0.0015	310.02	0.0327	0.00107
Pb	208	3	He	0.004	0.0012	290.02	0.0327	0.00107
U	238	3	He	0.085	0.0042	1380.12	0.0493	7.55E-05
U	238	3	He	0.102	0.0051	1660.18	0.0493	7.55E-05
U	238	3	He	0.103	0.0051	1680.18	0.0493	7.55E-05
Sc	45	1	No Gas			2560561.06		
Sc	45	1	No Gas			2534313.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2528801.99		
Ge	72	1	No Gas			1241940.92		
Ge	72	1	No Gas			1267509.82		
Ge	72	1	No Gas			1256706.78		
Sc	45	2	H2			192418.63		
Sc	45	2	H2			194181.29		
Sc	45	2	H2			192447.11		
Ge	72	2	H2			175578.14		
Ge	72	2	H2			173806.54		
Ge	72	2	H2			172146.83		
In	115	2	H2			413320.50		
In	115	2	H2			411209.33		
In	115	2	H2			411486.17		
Sc	45	3	He			48672.69		
Sc	45	3	He			51010.39		
Sc	45	3	He			50217.59		
Ge	72	3	He			90685.95		
Ge	72	3	He			90618.02		
Ge	72	3	He			90022.62		
In	115	3	He			93151.85		
In	115	3	He			91942.71		
In	115	3	He			93051.44		
Tb	159	3	He			409648.74		
Tb	159	3	He			409875.89		
Tb	159	3	He			409685.31		
Bi	209	3	He			324900.70		
Bi	209	3	He			324309.82		
Bi	209	3	He			327435.09		

Quantitation Report

Data File Name	129SMPL.d
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Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

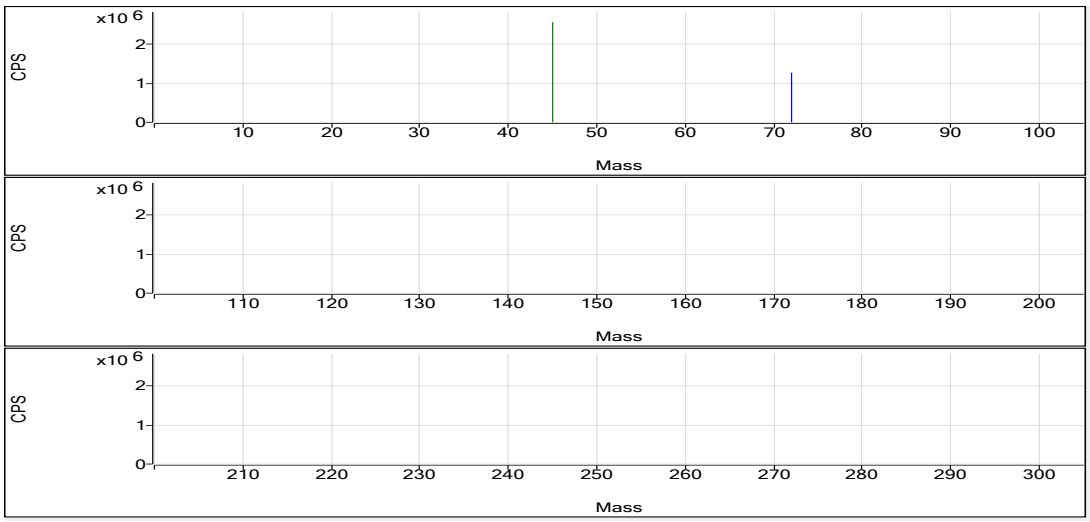
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.339	ppb	6.4	676.69	0.0003	Pulse	0.5000	3
Se	78	72	H2	0.096	ppb	38.5	8.89	0.0001	Pulse	1.5000	3
Na	23	45	He	5075.095	ppb	0.8	911043.03	18.4990	Pulse	0.1000	3
Mg	24	45	He	7967.396	ppb	1.3	704207.49	14.2996	Pulse	0.1000	3
Al	27	45	He	381.209	ppb	1.7	11014.43	0.2237	Pulse	0.1000	3
K	39	45	He	3245.974	ppb	1.8	205572.54	4.1744	Pulse	0.1000	3
Ca	44	45	He	49054.915	ppb	0.5	163341.13	3.3165	Pulse	0.1000	3
Ti	47	45	He	0.250	ppb	152.0	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.106	ppb	N/A	1110.72	0.0226	Pulse	0.5000	3
Cr	52	45	He	-0.184	ppb	N/A	1696.82	0.0345	Pulse	0.1000	3
Mn	55	45	He	1331.212	ppb	1.9	841456.91	17.0872	Pulse	0.1000	3
Fe	57	45	He	5.702	ppb	22.5	233.34	0.0047	Pulse	0.1000	3
Co	59	45	He	9.476	ppb	4.1	26368.15	0.5355	Pulse	0.1000	3
Ni	60	72	He	30.928	ppb	1.2	23934.02	0.2683	Pulse	0.1000	3
Cu	63	72	He	2.505	ppb	5.7	6161.58	0.0691	Pulse	0.1000	3
Zn	66	72	He	71.628	ppb	1.0	18946.35	0.2124	Pulse	0.1000	3
As	75	72	He	-0.018	ppb	N/A	68.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	285.823	ppb	1.2	232663.29	2.5647	Pulse	0.1000	3
Mo	98	115	He	0.072	ppb	58.4	166.67	0.0018	Pulse	0.1000	3
Ag	107	115	He	-0.008	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.369	ppb	10.3	178.67	0.0020	Pulse	0.5000	3
Sn	120	115	He	-0.259	ppb	N/A	1123.42	0.0124	Pulse	0.1000	3
Sb	121	115	He	0.024	ppb	65.3	56.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	13.405	ppb	6.5	5854.76	0.0646	Pulse	0.1000	3
Tl	205	159	He	0.081	ppb	6.9	876.73	0.0021	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	39.4	583.37	0.0014	Pulse	0.1000	3
U	238	209	He	0.124	ppb	10.1	2023.57	0.0062	Pulse	0.1000	3

ISTD Table:

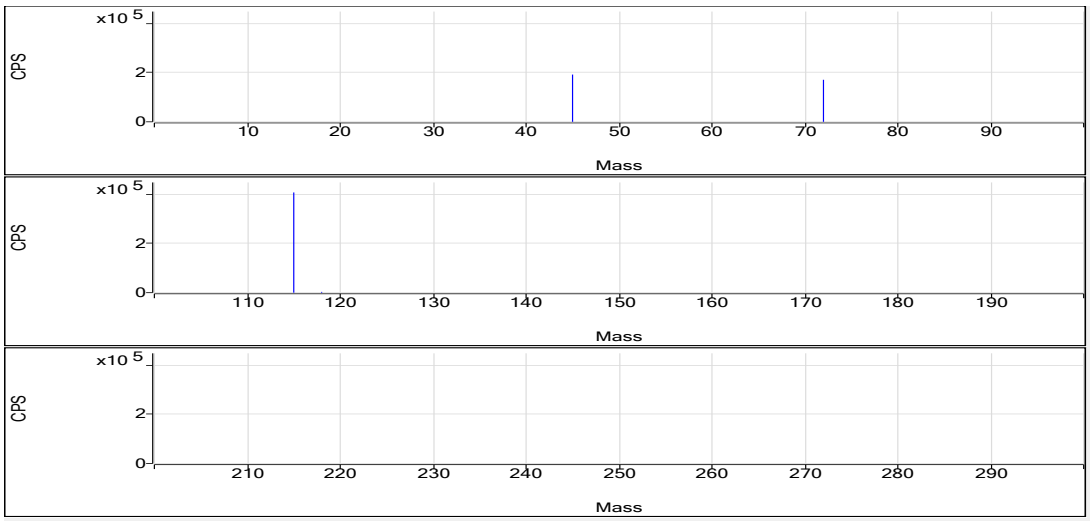
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2572115.64	0.7	107.2	Analog	0.1000	3
No Gas	Ge	72	1272298.73	1.0	110.3	Pulse	0.1000	3
H2	Sc	45	191692.33	1.0	102.5	Pulse	0.1000	3
H2	Ge	72	170514.53	1.5	104.2	Pulse	0.1000	3
H2	In	115	406617.93	0.9	104.5	Pulse	0.1000	3
He	Sc	45	49250.81	1.1	105.6	Pulse	0.1000	3
He	Ge	72	89214.58	1.1	109.9	Pulse	0.1000	3
He	In	115	90726.33	1.4	105.3	Pulse	0.1000	3
He	Tb	159	410177.99	0.9	102.9	Pulse	0.1000	3
He	Bi	209	326046.61	0.9	105.4	Pulse	0.1000	3

No Gas

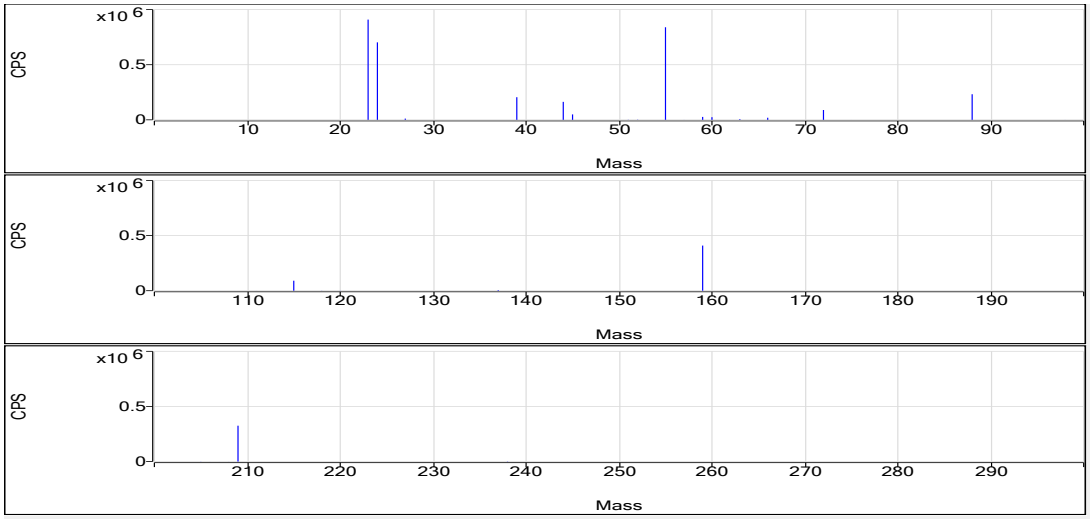


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.363	0.0003	730.02	0.0008	4.685E-06
Be	9	1	No Gas	0.322	0.0003	644.02	0.0008	4.685E-06
Be	9	1	No Gas	0.33	0.0003	656.02	0.0008	4.685E-06
Se	78	2	H2	0.073	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.076	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.138	0.0001	12.00	0.0004	1.219E-05
Na	23	3	He	5027.285	18.328	913580.46	0.0036	0.3452
Na	23	3	He	5092.03	18.5596	906315.22	0.0036	0.3452
Na	23	3	He	5105.97	18.6095	913233.42	0.0036	0.3452
Mg	24	3	He	7878.569	14.1402	704833.82	0.0018	0.003497
Mg	24	3	He	8085.161	14.5109	708605.22	0.0018	0.003497
Mg	24	3	He	7938.46	14.2476	699183.43	0.0018	0.003497
Al	27	3	He	375.571	0.2204	10984.37	0.0006	0.0006432
Al	27	3	He	388.295	0.2278	11124.53	0.0006	0.0006432
Al	27	3	He	379.76	0.2228	10934.40	0.0006	0.0006432
K	39	3	He	3178.963	4.0964	204190.66	0.0012	0.3951
K	39	3	He	3267.139	4.1991	205052.54	0.0012	0.3951
K	39	3	He	3291.821	4.2278	207474.41	0.0012	0.3951
Ca	44	3	He	49110.751	3.3202	165501.17	0.0001	0.002715
Ca	44	3	He	48794.47	3.2989	161092.91	0.0001	0.002715
Ca	44	3	He	49259.523	3.3303	163429.30	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.251	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.629	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	-0.146	0.0217	1080.05	0.0219	0.02486
V	51	3	He	-0.154	0.0215	1050.05	0.0219	0.02486
V	51	3	He	-0.017	0.0245	1202.06	0.0219	0.02486
Cr	52	3	He	-0.249	0.0325	1620.16	0.0299	0.03997
Cr	52	3	He	-0.076	0.0377	1840.17	0.0299	0.03997
Cr	52	3	He	-0.226	0.0332	1630.14	0.0299	0.03997
Mn	55	3	He	1302.513	16.7189	833374.28	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1339.825	17.1978	839813.97	0.0128	0.002639
Mn	55	3	He	1351.297	17.345	851182.49	0.0128	0.002639
Fe	57	3	He	4.447	0.004	200.01	0.0006	0.001429
Fe	57	3	He	5.648	0.0047	230.01	0.0006	0.001429
Fe	57	3	He	7.011	0.0055	270.01	0.0006	0.001429
Co	59	3	He	9.12	0.5155	25693.75	0.0563	0.002149
Co	59	3	He	9.416	0.5321	25984.19	0.0563	0.002149
Co	59	3	He	9.892	0.5589	27426.52	0.0563	0.002149
Ni	60	3	He	31.36	0.272	24050.84	0.0086	0.002834
Ni	60	3	He	30.655	0.2659	24010.86	0.0086	0.002834
Ni	60	3	He	30.77	0.2669	23740.35	0.0086	0.002834
Cu	63	3	He	2.401	0.0664	5871.44	0.0257	0.004757
Cu	63	3	He	2.447	0.0676	6101.55	0.0257	0.004757
Cu	63	3	He	2.667	0.0732	6511.74	0.0257	0.004757
Zn	66	3	He	71.256	0.2113	18682.62	0.0029	0.003818
Zn	66	3	He	71.207	0.2111	19063.11	0.0029	0.003818
Zn	66	3	He	72.422	0.2147	19093.32	0.0029	0.003818
As	75	3	He	-0.051	0.0007	62.00	0.002	0.0008061
As	75	3	He	-0.026	0.0008	68.00	0.002	0.0008061
As	75	3	He	0.024	0.0009	76.00	0.002	0.0008061
Sr	88	3	He	288.592	2.5896	232554.72	0.009	0.0009645
Sr	88	3	He	281.825	2.5289	233032.18	0.009	0.0009645
Sr	88	3	He	287.051	2.5758	232402.97	0.009	0.0009645
Mo	98	3	He	0.12	0.0029	260.01	0.0219	0.0002706
Mo	98	3	He	0.052	0.0014	130.00	0.0219	0.0002706
Mo	98	3	He	0.043	0.0012	110.00	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0.412	0.0022	198.00	0.0053	0
Cd	111	3	He	0.349	0.0019	172.00	0.0053	0
Cd	111	3	He	0.344	0.0018	166.00	0.0053	0
Sn	120	3	He	-0.26	0.0124	1110.09	0.0158	0.01648
Sn	120	3	He	-0.315	0.0115	1060.08	0.0158	0.01648
Sn	120	3	He	-0.201	0.0133	1200.09	0.0158	0.01648
Sb	121	3	He	0.012	0.0004	40.00	0.0149	0.0002698
Sb	121	3	He	0.018	0.0005	50.00	0.0149	0.0002698
Sb	121	3	He	0.042	0.0009	80.00	0.0149	0.0002698
Ba	137	3	He	13.76	0.0663	5951.43	0.0048	0.0002317
Ba	137	3	He	12.414	0.0598	5511.29	0.0048	0.0002317
Ba	137	3	He	14.042	0.0676	6101.55	0.0048	0.0002317
Tl	205	3	He	0.08	0.0021	860.06	0.0247	0.0001339
Tl	205	3	He	0.076	0.002	830.06	0.0247	0.0001339
Tl	205	3	He	0.087	0.0023	940.08	0.0247	0.0001339
Pb	208	3	He	0.015	0.0016	350.02	0.0327	0.00107
Pb	208	3	He	0.007	0.0013	290.02	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	330.02	0.0327	0.00107
U	238	3	He	0.11	0.0055	1790.20	0.0493	7.55E-05
U	238	3	He	0.134	0.0067	2200.27	0.0493	7.55E-05
U	238	3	He	0.129	0.0064	2080.24	0.0493	7.55E-05
Sc	45	1	No Gas			2590361.84		
Sc	45	1	No Gas			2569599.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2556385.27		
Ge	72	1	No Gas			1285192.09		
Ge	72	1	No Gas			1258586.00		
Ge	72	1	No Gas			1273118.11		
Sc	45	2	H2			190129.68		
Sc	45	2	H2			193877.15		
Sc	45	2	H2			191070.15		
Ge	72	2	H2			171954.10		
Ge	72	2	H2			167503.96		
Ge	72	2	H2			172085.52		
In	115	2	H2			409953.51		
In	115	2	H2			402771.17		
In	115	2	H2			407129.10		
Sc	45	3	He			49846.15		
Sc	45	3	He			48832.69		
Sc	45	3	He			49073.60		
Ge	72	3	He			88422.71		
Ge	72	3	He			90284.15		
Ge	72	3	He			88936.89		
In	115	3	He			89809.26		
In	115	3	He			92154.83		
In	115	3	He			90232.61		
Tb	159	3	He			405787.22		
Tb	159	3	He			413148.98		
Tb	159	3	He			411597.77		
Bi	209	3	He			325181.26		
Bi	209	3	He			329180.89		
Bi	209	3	He			323777.69		

Quantitation Report

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Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

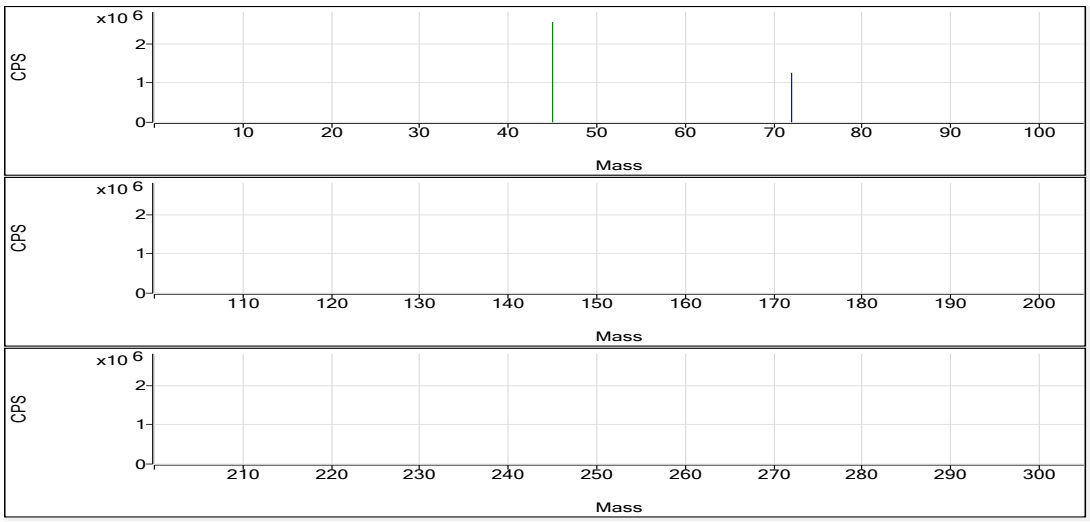
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.202	ppb	14.5	404.01	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.088	ppb	15.5	8.44	0.0000	Pulse	1.5000	3
Na	23	45	He	4797.435	ppb	3.4	870108.50	17.5058	Pulse	0.1000	3
Mg	24	45	He	7252.384	ppb	2.9	647026.44	13.0166	Pulse	0.1000	3
Al	27	45	He	91.060	ppb	6.8	2680.34	0.0539	Pulse	0.1000	3
K	39	45	He	3111.238	ppb	2.8	199716.44	4.0176	Pulse	0.1000	3
Ca	44	45	He	45276.502	ppb	3.5	152151.45	3.0612	Pulse	0.1000	3
Ti	47	45	He	0.369	ppb	153.1	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.039	ppb	160.4	1280.07	0.0257	Pulse	0.5000	3
Cr	52	45	He	-0.168	ppb	N/A	1736.84	0.0349	Pulse	0.1000	3
Mn	55	45	He	1216.816	ppb	2.2	776482.38	15.6191	Pulse	0.1000	3
Fe	57	45	He	3.659	ppb	8.2	176.68	0.0036	Pulse	0.1000	3
Co	59	45	He	5.944	ppb	4.2	16733.58	0.3367	Pulse	0.1000	3
Ni	60	72	He	25.202	ppb	4.0	19734.09	0.2191	Pulse	0.1000	3
Cu	63	72	He	1.306	ppb	7.8	3447.22	0.0383	Pulse	0.1000	3
Zn	66	72	He	56.556	ppb	0.0	15171.76	0.1685	Pulse	0.1000	3
As	75	72	He	0.033	ppb	76.4	78.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	280.345	ppb	0.9	227686.67	2.5156	Pulse	0.1000	3
Mo	98	115	He	0.177	ppb	1.2	376.69	0.0042	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	33.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.299	ppb	3.1	144.67	0.0016	Pulse	0.5000	3
Sn	120	115	He	-0.329	ppb	N/A	1020.07	0.0113	Pulse	0.1000	3
Sb	121	115	He	0.039	ppb	28.8	76.67	0.0008	Pulse	0.1000	3
Ba	137	115	He	16.720	ppb	7.9	7282.20	0.0805	Pulse	0.1000	3
Tl	205	159	He	0.064	ppb	5.3	703.38	0.0017	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	1.3	570.02	0.0014	Pulse	0.1000	3
U	238	209	He	0.096	ppb	3.2	1556.82	0.0048	Pulse	0.1000	3

ISTD Table:

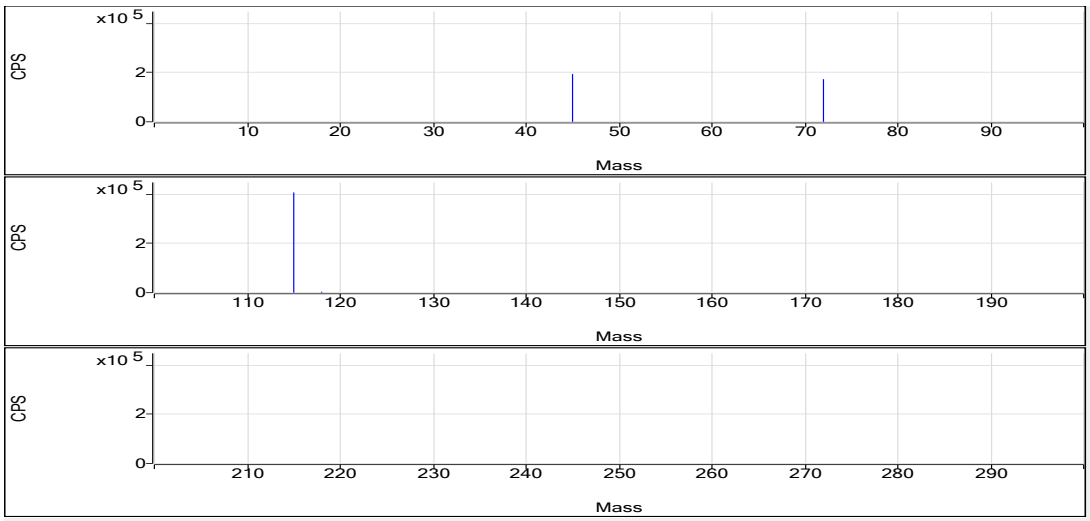
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2545003.61	1.0	106.1	Analog	0.1000	3
No Gas	Ge	72	1257031.41	0.3	109.0	Pulse	0.1000	3
H2	Sc	45	193837.50	1.4	103.7	Pulse	0.1000	3
H2	Ge	72	173269.78	0.5	105.8	Pulse	0.1000	3
H2	In	115	407130.86	0.2	104.6	Pulse	0.1000	3
He	Sc	45	49732.41	2.6	106.6	Pulse	0.1000	3
He	Ge	72	90046.23	0.1	110.9	Pulse	0.1000	3
He	In	115	90511.83	0.5	105.0	Pulse	0.1000	3
He	Tb	159	407573.69	0.3	102.2	Pulse	0.1000	3
He	Bi	209	322649.47	1.0	104.3	Pulse	0.1000	3

No Gas

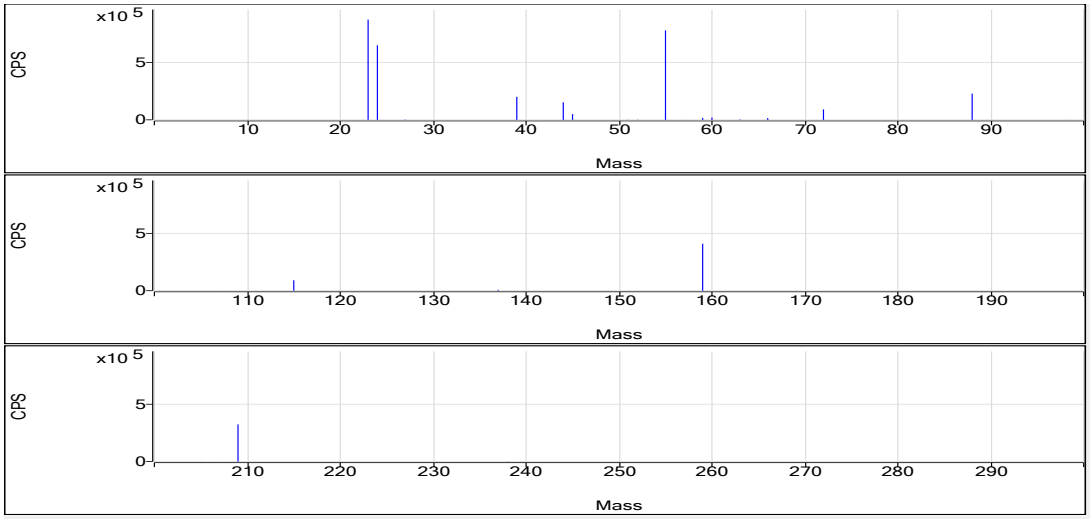


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.236	0.0002	466.01	0.0008	4.685E-06
Be	9	1	No Gas	0.186	0.0001	378.01	0.0008	4.685E-06
Be	9	1	No Gas	0.184	0.0001	368.01	0.0008	4.685E-06
Se	78	2	H2	0.099	0.0001	9.33	0.0004	1.219E-05
Se	78	2	H2	0.073	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.09	0	8.67	0.0004	1.219E-05
Na	23	3	He	4674.823	17.0672	864778.74	0.0036	0.3452
Na	23	3	He	4736.394	17.2875	868994.05	0.0036	0.3452
Na	23	3	He	4981.089	18.1628	876552.72	0.0036	0.3452
Mg	24	3	He	7085.761	12.7176	644389.25	0.0018	0.003497
Mg	24	3	He	7184.985	12.8957	648230.26	0.0018	0.003497
Mg	24	3	He	7486.407	13.4365	648459.80	0.0018	0.003497
Al	27	3	He	84.259	0.0499	2530.30	0.0006	0.0006432
Al	27	3	He	96.506	0.0571	2870.40	0.0006	0.0006432
Al	27	3	He	92.415	0.0547	2640.32	0.0006	0.0006432
K	39	3	He	3055.155	3.9523	200257.15	0.0012	0.3951
K	39	3	He	3067.212	3.9663	199375.21	0.0012	0.3951
K	39	3	He	3211.349	4.1341	199516.97	0.0012	0.3951
Ca	44	3	He	44296.123	2.995	151753.66	0.0001	0.002715
Ca	44	3	He	44442.517	3.0049	151047.70	0.0001	0.002715
Ca	44	3	He	47090.867	3.1838	153652.99	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.981	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.255	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.045	0.0259	1310.07	0.0219	0.02486
V	51	3	He	0.098	0.027	1358.07	0.0219	0.02486
V	51	3	He	-0.026	0.0243	1172.06	0.0219	0.02486
Cr	52	3	He	-0.241	0.0328	1660.16	0.0299	0.03997
Cr	52	3	He	-0.112	0.0366	1840.19	0.0299	0.03997
Cr	52	3	He	-0.152	0.0354	1710.16	0.0299	0.03997
Mn	55	3	He	1202.633	15.4371	782181.16	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1199.639	15.3987	774048.58	0.0128	0.002639
Mn	55	3	He	1248.177	16.0216	773217.41	0.0128	0.002639
Fe	57	3	He	3.656	0.0036	180.01	0.0006	0.001429
Fe	57	3	He	3.362	0.0034	170.01	0.0006	0.001429
Fe	57	3	He	3.961	0.0037	180.01	0.0006	0.001429
Co	59	3	He	5.713	0.3237	16400.01	0.0563	0.002149
Co	59	3	He	5.914	0.335	16840.35	0.0563	0.002149
Co	59	3	He	6.206	0.3514	16960.38	0.0563	0.002149
Ni	60	3	He	25.628	0.2228	20054.62	0.0086	0.002834
Ni	60	3	He	24.062	0.2094	18832.78	0.0086	0.002834
Ni	60	3	He	25.917	0.2253	20314.87	0.0086	0.002834
Cu	63	3	He	1.282	0.0377	3390.53	0.0257	0.004757
Cu	63	3	He	1.218	0.036	3240.47	0.0257	0.004757
Cu	63	3	He	1.418	0.0412	3710.65	0.0257	0.004757
Zn	66	3	He	56.528	0.1684	15158.46	0.0029	0.003818
Zn	66	3	He	56.566	0.1685	15158.42	0.0029	0.003818
Zn	66	3	He	56.576	0.1685	15198.39	0.0029	0.003818
As	75	3	He	0.062	0.0009	84.00	0.002	0.0008061
As	75	3	He	0.019	0.0008	76.00	0.002	0.0008061
As	75	3	He	0.018	0.0008	76.00	0.002	0.0008061
Sr	88	3	He	282.498	2.5349	228237.24	0.009	0.0009645
Sr	88	3	He	280.833	2.52	228305.35	0.009	0.0009645
Sr	88	3	He	277.705	2.4919	226517.42	0.009	0.0009645
Mo	98	3	He	0.175	0.0041	370.02	0.0219	0.0002706
Mo	98	3	He	0.179	0.0042	380.02	0.0219	0.0002706
Mo	98	3	He	0.178	0.0042	380.02	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Cd	111	3	He	0.295	0.0016	142.00	0.0053	0
Cd	111	3	He	0.31	0.0017	150.00	0.0053	0
Cd	111	3	He	0.292	0.0016	142.00	0.0053	0
Sn	120	3	He	-0.241	0.0127	1140.09	0.0158	0.01648
Sn	120	3	He	-0.421	0.0098	890.06	0.0158	0.01648
Sn	120	3	He	-0.326	0.0113	1030.07	0.0158	0.01648
Sb	121	3	He	0.027	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.049	0.001	90.00	0.0149	0.0002698
Sb	121	3	He	0.041	0.0009	80.00	0.0149	0.0002698
Ba	137	3	He	18.24	0.0878	7902.58	0.0048	0.0002317
Ba	137	3	He	15.871	0.0764	6921.97	0.0048	0.0002317
Ba	137	3	He	16.048	0.0772	7022.05	0.0048	0.0002317
Tl	205	3	He	0.068	0.0018	740.05	0.0247	0.0001339
Tl	205	3	He	0.063	0.0017	690.05	0.0247	0.0001339
Tl	205	3	He	0.062	0.0017	680.04	0.0247	0.0001339
Pb	208	3	He	0.01	0.0014	270.01	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	330.02	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	230.01	0.0327	0.00107
U	238	3	He	0.097	0.0049	1580.16	0.0493	7.55E-05
U	238	3	He	0.093	0.0047	1510.14	0.0493	7.55E-05
U	238	3	He	0.099	0.005	1580.15	0.0493	7.55E-05
Sc	45	1	No Gas			2524315.12		
Sc	45	1	No Gas			2574488.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2536206.84		
Ge	72	1	No Gas			1259411.07		
Ge	72	1	No Gas			1252878.73		
Ge	72	1	No Gas			1258804.43		
Sc	45	2	H2			196259.06		
Sc	45	2	H2			190799.14		
Sc	45	2	H2			194454.31		
Ge	72	2	H2			173854.74		
Ge	72	2	H2			172340.06		
Ge	72	2	H2			173614.55		
In	115	2	H2			406103.82		
In	115	2	H2			407888.74		
In	115	2	H2			407400.03		
Sc	45	3	He			50668.96		
Sc	45	3	He			50267.27		
Sc	45	3	He			48260.99		
Ge	72	3	He			90012.36		
Ge	72	3	He			89952.60		
Ge	72	3	He			90173.74		
In	115	3	He			90041.27		
In	115	3	He			90604.73		
In	115	3	He			90906.73		
Tb	159	3	He			406198.67		
Tb	159	3	He			408004.33		
Tb	159	3	He			408518.08		
Bi	209	3	He			325006.28		
Bi	209	3	He			323990.84		
Bi	209	3	He			318951.28		

Quantitation Report

Data File Name	131SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 3:05:38 PM
Sample Name	Z410-137726-O-1-A
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

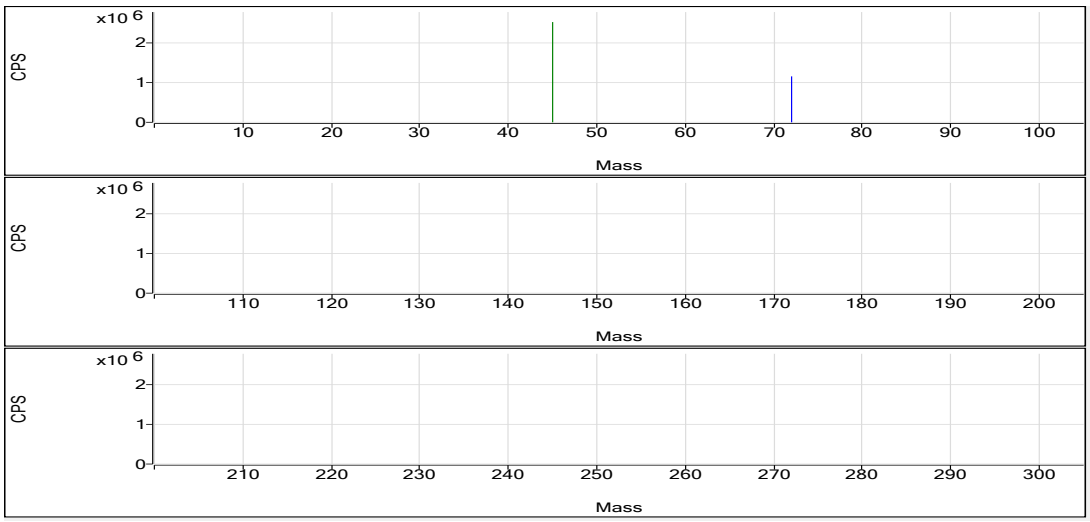
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas		ppb	0.00232113337113573			Pulse	0.5000	3
Se	78	72	H2		ppb	0.0786946902901992			Pulse	1.5000	3
Na	23	45	He		ppb	51.0132249168271			Analog	0.1000	3
Mg	24	45	He		ppb	990.140936164727			Analog	0.1000	3
Al	27	45	He		ppb	2.8650138138469			Pulse	0.1000	3
K	39	45	He		ppb	206.109432537403			Pulse	0.1000	3
Ca	44	45	He		ppb	6739.57890278957			Analog	0.1000	3
Ti	47	45	He		ppb	1.86264514923096E-09			Pulse	0.1000	3
V	51	45	He		ppb	0.0361669317911737			Pulse	0.5000	3
Cr	52	45	He		ppb	0.145697259718969			Pulse	0.1000	3
Mn	55	45	He		ppb	151.218440856271			Analog	0.1000	3
Fe	57	45	He		ppb	9.83362387810317			Pulse	0.1000	3
Co	59	45	He		ppb	0.276167456879964			Pulse	0.1000	3
Ni	60	72	He		ppb	0.483675534613026			Pulse	0.1000	3
Cu	63	72	He		ppb	0.047751580474067			Pulse	0.1000	3
Zn	66	72	He		ppb	0.910387528698394			Pulse	0.1000	3
As	75	72	He		ppb	0.140925052032443			Pulse	0.5000	3
Sr	88	115	He		ppb	30.9390029101465			Analog	0.1000	3
Mo	98	115	He		ppb	0.0493480593607248			Pulse	0.1000	3
Ag	107	115	He		ppb	0.00368849652845494			Pulse	0.1000	3
Cd	111	115	He		ppb	0.00424516798094181			Pulse	0.5000	3
Sn	120	115	He		ppb	0.0455054716046804			Pulse	0.1000	3
Sb	121	115	He		ppb	0.034997128582582			Pulse	0.1000	3
Ba	137	115	He		ppb	1.7733927071838			Pulse	0.1000	3
Tl	205	159	He		ppb	0.00340395467092721			Pulse	0.1000	3
Pb	208	159	He		ppb	0.00706253950957902			Pulse	0.1000	3
U	238	209	He		ppb	0.0928924710172574			Pulse	0.1000	3

ISTD Table:

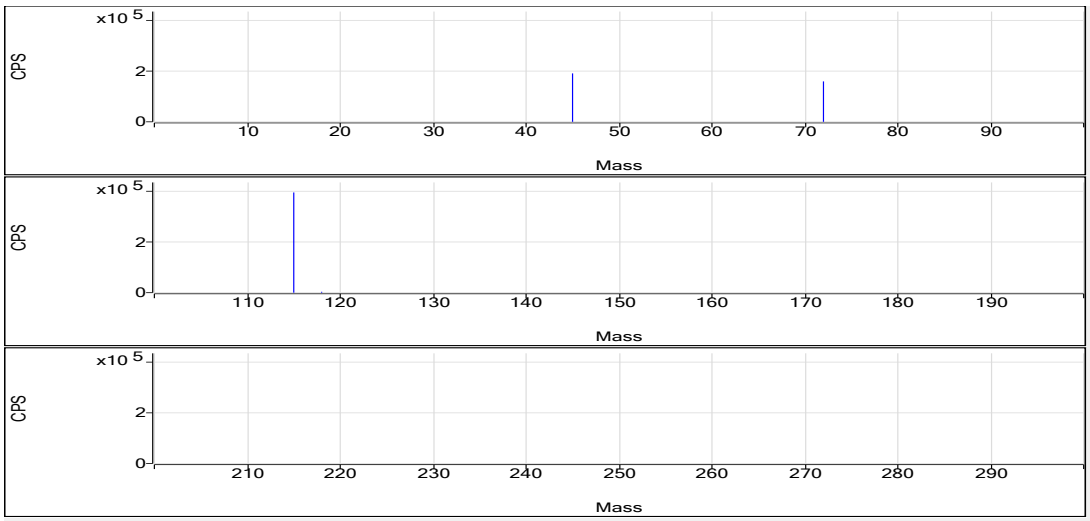
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45				Analog	0.1000	3
No Gas	Ge	72				Pulse	0.1000	3
H2	Sc	45				Pulse	0.1000	3
H2	Ge	72				Pulse	0.1000	3
H2	In	115				Pulse	0.1000	3
He	Sc	45				Pulse	0.1000	3
He	Ge	72				Pulse	0.1000	3
He	In	115				Pulse	0.1000	3
He	Tb	159				Pulse	0.1000	3
He	Bi	209				Pulse	0.1000	3

No Gas

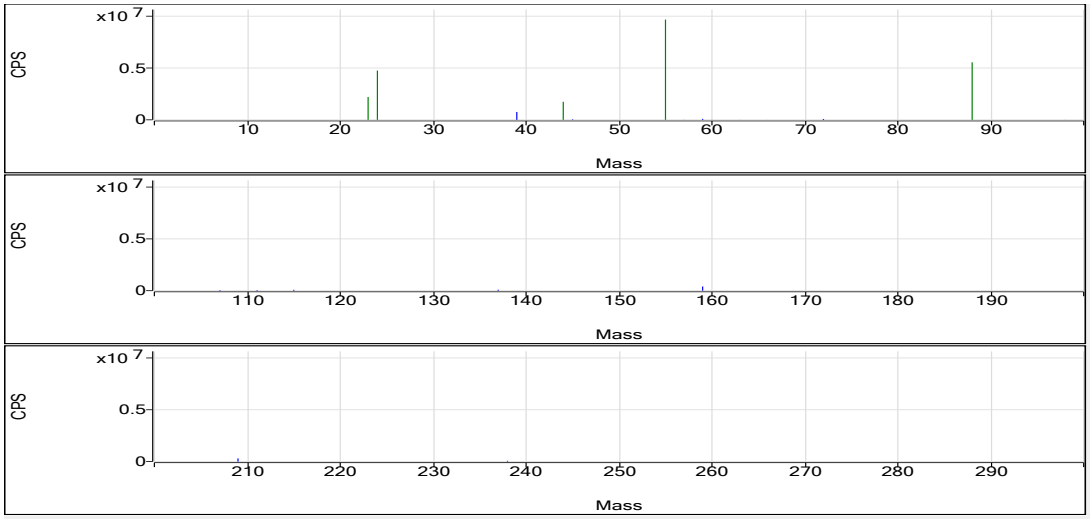


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009		30.00		
Be	9	1	No Gas	0.005		22.00		
Be	9	1	No Gas	0.005		22.00		
Se	78	2	H2	0.48		34.00		
Se	78	2	H2	0.342		24.67		
Se	78	2	H2	0.347		24.67		
Na	23	3	He	12434.292		2170395.44		
Na	23	3	He	12529.597		2184183.09		
Na	23	3	He	12450.406		2220479.34		
Mg	24	3	He	55153.182		4792057.43		
Mg	24	3	He	53911.263		4678329.93		
Mg	24	3	He	53196.421		4722632.43		
Al	27	3	He	6.667		220.01		
Al	27	3	He	10.918		340.01		
Al	27	3	He	5.465		190.01		
K	39	3	He	13139.526		759911.32		
K	39	3	He	12999.733		751094.75		
K	39	3	He	12733.792		753076.16		
Ca	44	3	He	528418.259		1728558.88		
Ca	44	3	He	531680.091		1737065.13		
Ca	44	3	He	518722.829		1733772.32		
Ti	47	3	He	-0.13		0.00		
Ti	47	3	He	-0.13		0.00		
Ti	47	3	He	-0.13		0.00		
V	51	3	He	-0.187		1006.04		
V	51	3	He	-0.254		934.04		
V	51	3	He	-0.244		966.04		
Cr	52	3	He	-0.197		1650.16		
Cr	52	3	He	0.06		2020.20		
Cr	52	3	He	-0.187		1700.16		
Mn	55	3	He	15523.934		9647196.11		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	15399.686		9558082.98		
Mn	55	3	He	15223.015		9666067.98		
Fe	57	3	He	298.716		8472.74		
Fe	57	3	He	280.929		7962.43		
Fe	57	3	He	282.555		8192.59		
Co	59	3	He	33.961		92657.52		
Co	59	3	He	34.015		92687.00		
Co	59	3	He	33.512		93422.18		
Ni	60	3	He	17.161		12555.88		
Ni	60	3	He	17.899		13016.39		
Ni	60	3	He	18.071		13036.38		
Cu	63	3	He	1.916		4510.85		
Cu	63	3	He	2.011		4690.89		
Cu	63	3	He	1.963		4550.89		
Zn	66	3	He	10.025		2760.38		
Zn	66	3	He	11.035		2990.43		
Zn	66	3	He	9.218		2530.30		
As	75	3	He	7.847		1412.08		
As	75	3	He	7.727		1384.08		
As	75	3	He	7.566		1346.07		
Sr	88	3	He	7033.046		5571404.92		
Sr	88	3	He	6971.337		5509926.17		
Sr	88	3	He	6998.241		5479370.54		
Mo	98	3	He	2.482		4830.98		
Mo	98	3	He	2.55		4951.06		
Mo	98	3	He	2.454		4720.95		
Ag	107	3	He	-0.001		50.00		
Ag	107	3	He	0.001		60.00		
Ag	107	3	He	-0.006		30.00		
Cd	111	3	He	0		0.00		
Cd	111	3	He	0.008		4.00		
Cd	111	3	He	0.004		2.00		
Sn	120	3	He	-0.269		1080.08		
Sn	120	3	He	-0.267		1080.08		
Sn	120	3	He	-0.347		960.07		
Sb	121	3	He	0.538		730.05		
Sb	121	3	He	0.486		660.04		
Sb	121	3	He	0.553		740.04		
Ba	137	3	He	227.315		96368.07		
Ba	137	3	He	224.979		95160.40		
Ba	137	3	He	223.836		93789.98		
Tl	205	3	He	0.012		170.01		
Tl	205	3	He	0.017		230.01		
Tl	205	3	He	0.012		170.01		
Pb	208	3	He	0.096		850.05		
Pb	208	3	He	0.096		970.08		
Pb	208	3	He	0.108		1010.09		
U	238	3	He	4.841		72324.22		
U	238	3	He	4.967		73519.75		
U	238	3	He	4.786		71187.87		
Sc	45	1	No Gas			2538748.56		
Sc	45	1	No Gas			2508688.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2519685.43		
Ge	72	1	No Gas			1146773.34		
Ge	72	1	No Gas			1154898.42		
Ge	72	1	No Gas			1165223.34		
Sc	45	2	H2			188304.20		
Sc	45	2	H2			191800.68		
Sc	45	2	H2			191233.57		
Ge	72	2	H2			159977.44		
Ge	72	2	H2			159523.63		
Ge	72	2	H2			157357.79		
In	115	2	H2			391672.73		
In	115	2	H2			397842.69		
In	115	2	H2			393033.67		
Sc	45	3	He			48421.22		
Sc	45	3	He			48361.00		
Sc	45	3	He			49474.96		
Ge	72	3	He			83634.30		
Ge	72	3	He			83191.11		
Ge	72	3	He			82538.12		
In	115	3	He			88319.67		
In	115	3	He			88119.51		
In	115	3	He			87294.49		
Tb	159	3	He			404571.67		
Tb	159	3	He			406070.66		
Tb	159	3	He			403753.16		
Bi	209	3	He			303197.93		
Bi	209	3	He			300393.98		
Bi	209	3	He			301878.10		

Quantitation Report

Data File Name	132SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 3:07:40 PM
Sample Name	410-137721-AE-1-A
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

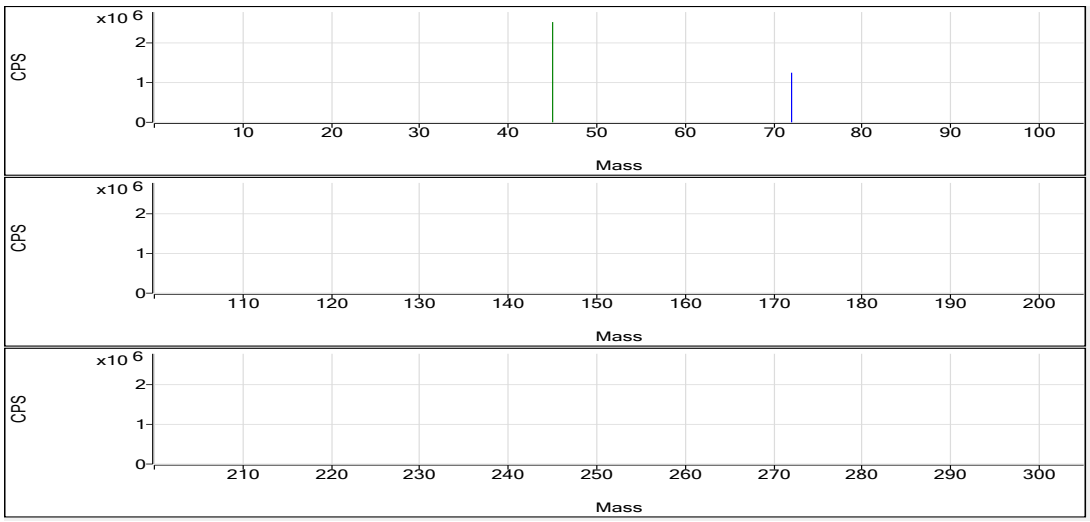
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	52.2	24.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.050	ppb	10.7	5.78	0.0000	Pulse	1.5000	3
Na	23	45	He	1324.280	ppb	0.5	250263.52	5.0822	Pulse	0.1000	3
Mg	24	45	He	1795.942	ppb	2.0	158844.75	3.2260	Pulse	0.1000	3
Al	27	45	He	1.674	ppb	54.3	80.00	0.0016	Pulse	0.1000	3
K	39	45	He	908.500	ppb	1.7	71538.94	1.4529	Pulse	0.1000	3
Ca	44	45	He	12133.308	ppb	2.0	40490.50	0.8223	Pulse	0.1000	3
Ti	47	45	He	0.123	ppb	357.3	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.098	ppb	N/A	1119.38	0.0227	Pulse	0.5000	3
Cr	52	45	He	-0.075	ppb	N/A	1856.85	0.0377	Pulse	0.1000	3
Mn	55	45	He	22.054	ppb	1.4	14067.27	0.2857	Pulse	0.1000	3
Fe	57	45	He	8.277	ppb	29.3	306.68	0.0062	Pulse	0.1000	3
Co	59	45	He	0.066	ppb	12.6	290.01	0.0059	Pulse	0.1000	3
Ni	60	72	He	0.020	ppb	82.9	270.01	0.0030	Pulse	0.1000	3
Cu	63	72	He	1.178	ppb	4.8	3143.79	0.0350	Pulse	0.1000	3
Zn	66	72	He	3.733	ppb	3.1	1320.11	0.0147	Pulse	0.1000	3
As	75	72	He	0.252	ppb	41.3	118.67	0.0013	Pulse	0.5000	3
Sr	88	115	He	28.582	ppb	1.8	22822.34	0.2573	Pulse	0.1000	3
Mo	98	115	He	0.043	ppb	40.1	106.67	0.0012	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	99.2	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.338	ppb	N/A	986.74	0.0111	Pulse	0.1000	3
Sb	121	115	He	0.020	ppb	67.9	50.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	17.379	ppb	3.5	7418.95	0.0836	Pulse	0.1000	3
Tl	205	159	He	0.007	ppb	77.3	126.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.035	ppb	13.6	896.71	0.0022	Pulse	0.1000	3
U	238	209	He	0.039	ppb	15.0	630.04	0.0020	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2517541.37	1.3	104.9	Analog	0.1000	3
No Gas	Ge	72	1245494.20	1.8	108.0	Pulse	0.1000	3
H2	Sc	45	192603.58	0.4	103.0	Pulse	0.1000	3
H2	Ge	72	174490.52	0.2	106.6	Pulse	0.1000	3
H2	In	115	408681.21	1.1	105.0	Pulse	0.1000	3
He	Sc	45	49244.05	1.1	105.6	Pulse	0.1000	3
He	Ge	72	89912.75	2.3	110.7	Pulse	0.1000	3
He	In	115	88693.67	1.3	102.9	Pulse	0.1000	3
He	Tb	159	407515.91	1.0	102.2	Pulse	0.1000	3
He	Bi	209	316742.60	0.7	102.4	Pulse	0.1000	3

No Gas



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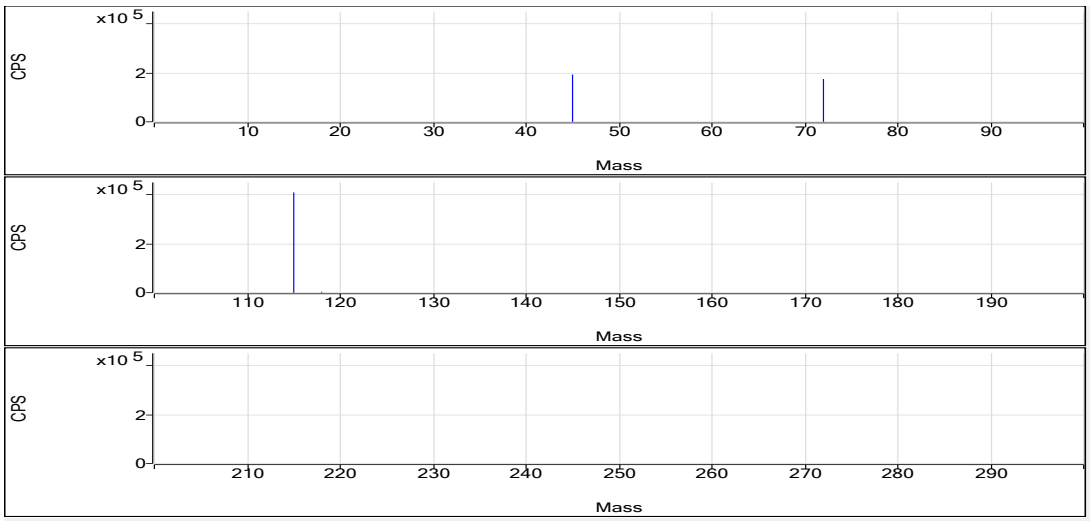
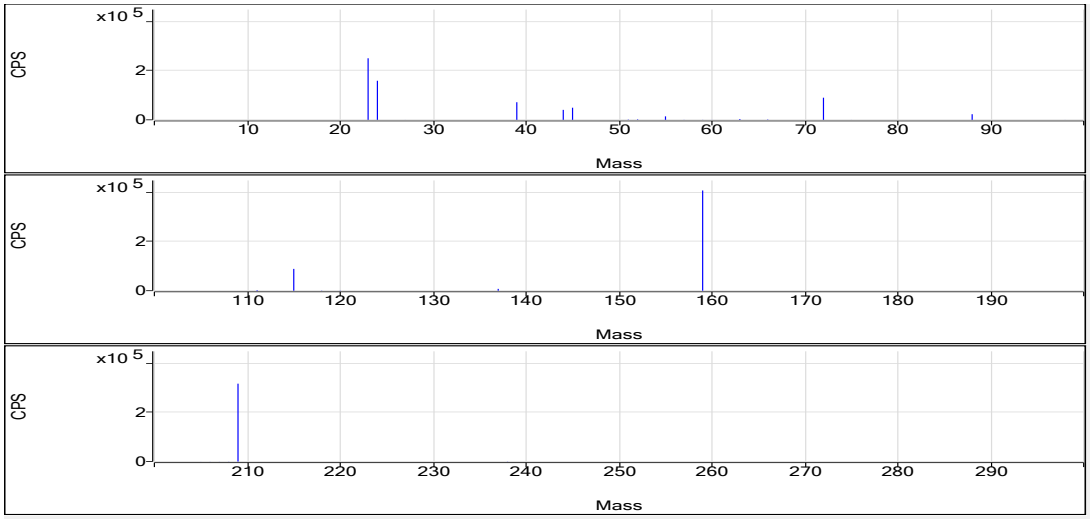


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	32.00	0.0008	4.685E-06
Se	78	2	H2	0.053	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.044	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.053	0	6.00	0.0004	1.219E-05
Na	23	3	He	1331.486	5.1079	249436.23	0.0036	0.3452
Na	23	3	He	1318.45	5.0613	248273.80	0.0036	0.3452
Na	23	3	He	1322.903	5.0772	253080.54	0.0036	0.3452
Mg	24	3	He	1837.683	3.3009	161192.33	0.0018	0.003497
Mg	24	3	He	1776.941	3.1919	156572.83	0.0018	0.003497
Mg	24	3	He	1773.201	3.1852	158769.08	0.0018	0.003497
Al	27	3	He	0.651	0.001	50.00	0.0006	0.0006432
Al	27	3	He	2.385	0.002	100.00	0.0006	0.0006432
Al	27	3	He	1.987	0.0018	90.01	0.0006	0.0006432
K	39	3	He	925.022	1.4721	71886.72	0.0012	0.3951
K	39	3	He	905.638	1.4495	71103.77	0.0012	0.3951
K	39	3	He	894.839	1.437	71626.33	0.0012	0.3951
Ca	44	3	He	12196.788	0.8266	40366.85	0.0001	0.002715
Ca	44	3	He	12332.43	0.8358	40998.35	0.0001	0.002715
Ca	44	3	He	11870.707	0.8046	40106.30	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.629	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	-0.083	0.0231	1126.05	0.0219	0.02486
V	51	3	He	-0.108	0.0225	1104.05	0.0219	0.02486
V	51	3	He	-0.102	0.0226	1128.05	0.0219	0.02486
Cr	52	3	He	-0.083	0.0375	1830.18	0.0299	0.03997
Cr	52	3	He	-0.028	0.0391	1920.19	0.0299	0.03997
Cr	52	3	He	-0.115	0.0365	1820.18	0.0299	0.03997
Mn	55	3	He	22.416	0.2903	14177.32	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	21.853	0.2831	13887.06	0.0128	0.002639
Mn	55	3	He	21.894	0.2836	14137.43	0.0128	0.002639
Fe	57	3	He	9.525	0.007	340.01	0.0006	0.001429
Fe	57	3	He	9.822	0.0071	350.02	0.0006	0.001429
Fe	57	3	He	5.483	0.0046	230.01	0.0006	0.001429
Co	59	3	He	0.06	0.0055	270.01	0.0563	0.002149
Co	59	3	He	0.063	0.0057	280.01	0.0563	0.002149
Co	59	3	He	0.076	0.0064	320.02	0.0563	0.002149
Ni	60	3	He	0.03	0.0031	280.01	0.0086	0.002834
Ni	60	3	He	0.029	0.0031	270.01	0.0086	0.002834
Ni	60	3	He	0.001	0.0028	260.01	0.0086	0.002834
Cu	63	3	He	1.187	0.0352	3190.45	0.0257	0.004757
Cu	63	3	He	1.229	0.0363	3180.47	0.0257	0.004757
Cu	63	3	He	1.117	0.0334	3060.44	0.0257	0.004757
Zn	66	3	He	3.693	0.0146	1320.13	0.0029	0.003818
Zn	66	3	He	3.863	0.0151	1320.10	0.0029	0.003818
Zn	66	3	He	3.643	0.0144	1320.10	0.0029	0.003818
As	75	3	He	0.145	0.0011	100.00	0.002	0.0008061
As	75	3	He	0.353	0.0015	134.00	0.002	0.0008061
As	75	3	He	0.257	0.0013	122.00	0.002	0.0008061
Sr	88	3	He	29.127	0.2622	22979.19	0.009	0.0009645
Sr	88	3	He	28.497	0.2566	23059.50	0.009	0.0009645
Sr	88	3	He	28.122	0.2532	22428.33	0.009	0.0009645
Mo	98	3	He	0.055	0.0015	130.00	0.0219	0.0002706
Mo	98	3	He	0.023	0.0008	70.00	0.0219	0.0002706
Mo	98	3	He	0.049	0.0014	120.01	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.263	0.0123	1080.08	0.0158	0.01648
Sn	120	3	He	-0.472	0.009	810.05	0.0158	0.01648
Sn	120	3	He	-0.278	0.0121	1070.09	0.0158	0.01648
Sb	121	3	He	0.028	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.004	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	0.027	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	17.624	0.0848	7432.27	0.0048	0.0002317
Ba	137	3	He	17.832	0.0858	7712.48	0.0048	0.0002317
Ba	137	3	He	16.682	0.0803	7112.09	0.0048	0.0002317
Tl	205	3	He	0.001	0.0002	70.00	0.0247	0.0001339
Tl	205	3	He	0.008	0.0003	130.01	0.0247	0.0001339
Tl	205	3	He	0.013	0.0004	180.01	0.0247	0.0001339
Pb	208	3	He	0.039	0.0024	490.03	0.0327	0.00107
Pb	208	3	He	0.03	0.002	420.02	0.0327	0.00107
Pb	208	3	He	0.034	0.0022	440.02	0.0327	0.00107
U	238	3	He	0.037	0.0019	600.04	0.0493	7.55E-05
U	238	3	He	0.045	0.0023	730.05	0.0493	7.55E-05
U	238	3	He	0.034	0.0018	560.03	0.0493	7.55E-05
Sc	45	1	No Gas			2503410.43		
Sc	45	1	No Gas			2493139.65		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2556074.02		
Ge	72	1	No Gas			1238315.92		
Ge	72	1	No Gas			1227245.06		
Ge	72	1	No Gas			1270921.62		
Sc	45	2	H2			191639.88		
Sc	45	2	H2			193237.40		
Sc	45	2	H2			192933.45		
Ge	72	2	H2			174766.62		
Ge	72	2	H2			174635.54		
Ge	72	2	H2			174069.39		
In	115	2	H2			405565.31		
In	115	2	H2			413875.23		
In	115	2	H2			406603.08		
Sc	45	3	He			48832.96		
Sc	45	3	He			49053.17		
Sc	45	3	He			49846.02		
Ge	72	3	He			90596.78		
Ge	72	3	He			87628.26		
Ge	72	3	He			91513.20		
In	115	3	He			87637.65		
In	115	3	He			89880.05		
In	115	3	He			88581.33		
Tb	159	3	He			412108.12		
Tb	159	3	He			405350.27		
Tb	159	3	He			405089.33		
Bi	209	3	He			319217.51		
Bi	209	3	He			315193.71		
Bi	209	3	He			315816.58		

Quantitation Report

Data File Name	133SMPL.d
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Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

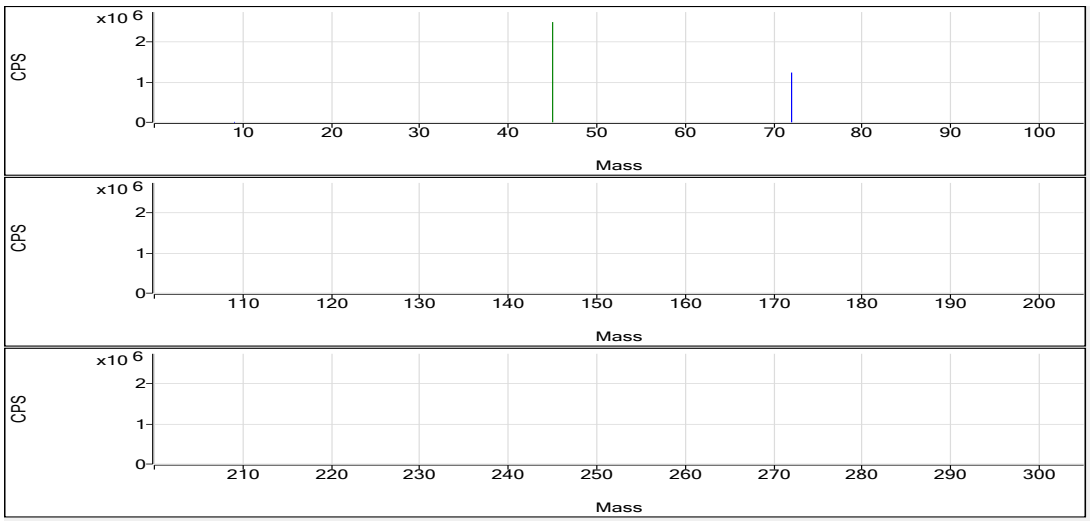
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.003	ppb	151.8	16.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.068	ppb	41.6	7.11	0.0000	Pulse	1.5000	3
Na	23	45	He	1383.310	ppb	1.6	260632.08	5.2933	Pulse	0.1000	3
Mg	24	45	He	1784.763	ppb	2.0	157850.22	3.2059	Pulse	0.1000	3
Al	27	45	He	9.315	ppb	13.4	300.01	0.0061	Pulse	0.1000	3
K	39	45	He	734.065	ppb	3.0	61533.80	1.2498	Pulse	0.1000	3
Ca	44	45	He	11940.386	ppb	3.6	39845.64	0.8093	Pulse	0.1000	3
Ti	47	45	He	-0.005	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.112	ppb	N/A	1104.05	0.0224	Pulse	0.5000	3
Cr	52	45	He	0.014	ppb	622.2	1990.21	0.0404	Pulse	0.1000	3
Mn	55	45	He	23.059	ppb	1.4	14701.27	0.2986	Pulse	0.1000	3
Fe	57	45	He	11.994	ppb	22.3	413.36	0.0084	Pulse	0.1000	3
Co	59	45	He	0.045	ppb	44.5	230.01	0.0047	Pulse	0.1000	3
Ni	60	72	He	0.084	ppb	36.7	316.68	0.0036	Pulse	0.1000	3
Cu	63	72	He	1.254	ppb	0.4	3290.49	0.0370	Pulse	0.1000	3
Zn	66	72	He	3.498	ppb	7.9	1246.76	0.0140	Pulse	0.1000	3
As	75	72	He	0.093	ppb	90.0	88.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	28.280	ppb	1.0	23106.19	0.2546	Pulse	0.1000	3
Mo	98	115	He	0.088	ppb	19.8	200.01	0.0022	Pulse	0.1000	3
Ag	107	115	He	-0.009	ppb	N/A	20.00	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	21.8	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.262	ppb	N/A	1120.09	0.0123	Pulse	0.1000	3
Sb	121	115	He	0.024	ppb	47.1	56.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	14.812	ppb	5.4	6471.74	0.0713	Pulse	0.1000	3
Tl	205	159	He	0.008	ppb	5.5	133.34	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.035	ppb	9.6	893.38	0.0022	Pulse	0.1000	3
U	238	209	He	0.021	ppb	21.4	353.35	0.0011	Pulse	0.1000	3

ISTD Table:

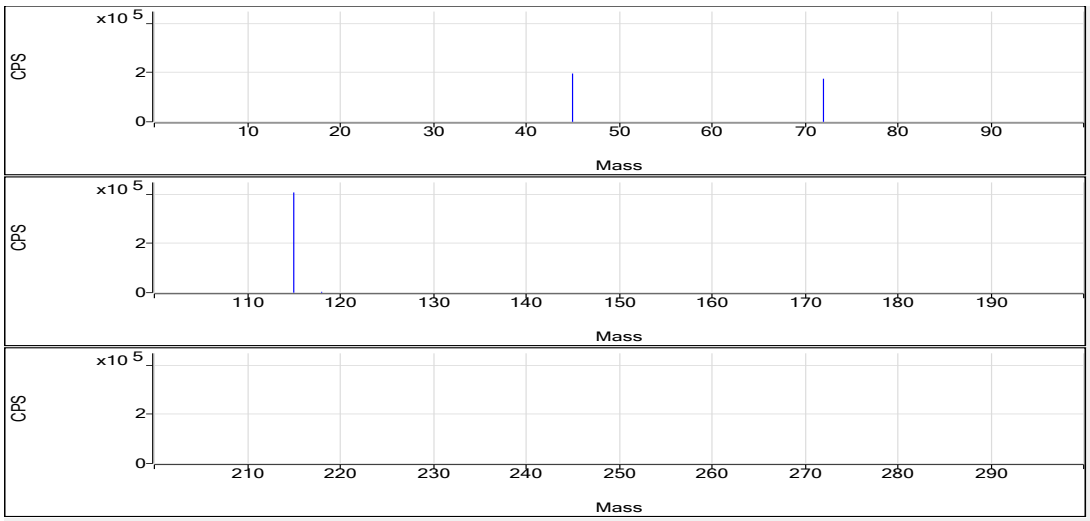
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2505792.15	1.8	104.5	Analog	0.1000	3
No Gas	Ge	72	1243551.28	0.6	107.8	Pulse	0.1000	3
H2	Sc	45	195909.15	0.9	104.8	Pulse	0.1000	3
H2	Ge	72	174858.99	1.9	106.8	Pulse	0.1000	3
H2	In	115	406621.85	1.5	104.5	Pulse	0.1000	3
He	Sc	45	49240.80	0.6	105.6	Pulse	0.1000	3
He	Ge	72	89039.79	0.9	109.7	Pulse	0.1000	3
He	In	115	90744.10	0.2	105.3	Pulse	0.1000	3
He	Tb	159	405081.02	1.1	101.6	Pulse	0.1000	3
He	Bi	209	314781.25	1.7	101.8	Pulse	0.1000	3

No Gas

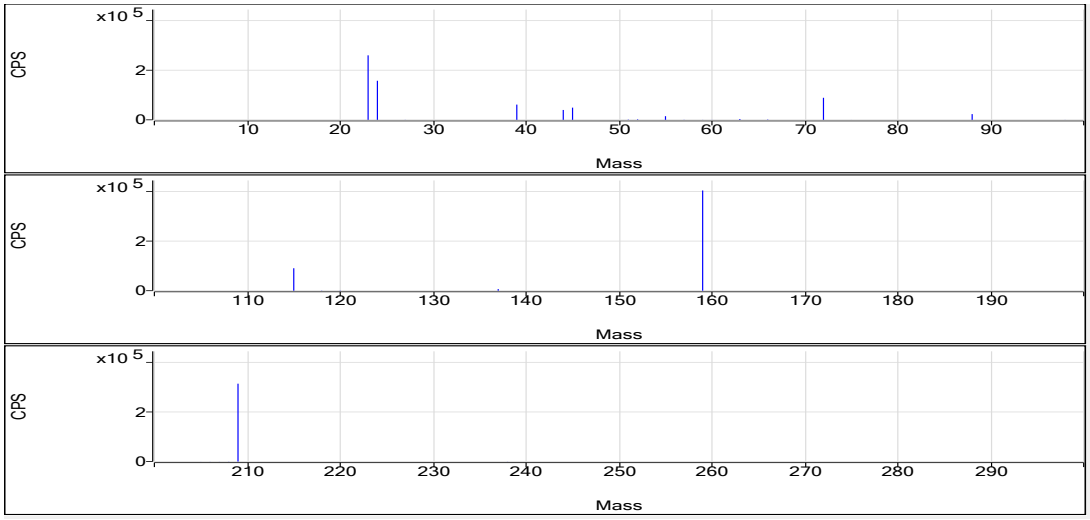


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Be	9	1	No Gas	0.004	0	20.00	0.0008	4.685E-06
Be	9	1	No Gas	-0.002	0	8.00	0.0008	4.685E-06
Se	78	2	H2	0.099	0.0001	9.33	0.0004	1.219E-05
Se	78	2	H2	0.064	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.042	0	5.33	0.0004	1.219E-05
Na	23	3	He	1358.053	5.203	257990.97	0.0036	0.3452
Na	23	3	He	1395.642	5.3374	261336.71	0.0036	0.3452
Na	23	3	He	1396.233	5.3396	262568.57	0.0036	0.3452
Mg	24	3	He	1753.338	3.1495	156171.08	0.0018	0.003497
Mg	24	3	He	1823.464	3.2754	160372.18	0.0018	0.003497
Mg	24	3	He	1777.486	3.1929	157007.41	0.0018	0.003497
Al	27	3	He	8.898	0.0058	290.01	0.0006	0.0006432
Al	27	3	He	8.327	0.0055	270.01	0.0006	0.0006432
Al	27	3	He	10.72	0.0069	340.02	0.0006	0.0006432
K	39	3	He	711.328	1.2233	60656.86	0.0012	0.3951
K	39	3	He	754.623	1.2737	62363.83	0.0012	0.3951
K	39	3	He	736.245	1.2523	61580.70	0.0012	0.3951
Ca	44	3	He	11448.338	0.7761	38481.70	0.0001	0.002715
Ca	44	3	He	12134.169	0.8224	40267.18	0.0001	0.002715
Ca	44	3	He	12238.65	0.8295	40788.03	0.0001	0.002715
Ti	47	3	He	0.245	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	-0.084	0.023	1142.05	0.0219	0.02486
V	51	3	He	-0.035	0.0241	1180.05	0.0219	0.02486
V	51	3	He	-0.216	0.0201	990.04	0.0219	0.02486
Cr	52	3	He	0.1	0.043	2130.24	0.0299	0.03997
Cr	52	3	He	-0.08	0.0376	1840.18	0.0299	0.03997
Cr	52	3	He	0.023	0.0407	2000.20	0.0299	0.03997
Mn	55	3	He	22.781	0.295	14627.80	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	23.408	0.3031	14838.25	0.0128	0.002639
Mn	55	3	He	22.989	0.2977	14637.76	0.0128	0.002639
Fe	57	3	He	11.773	0.0083	410.02	0.0006	0.001429
Fe	57	3	He	14.767	0.01	490.03	0.0006	0.001429
Fe	57	3	He	9.442	0.0069	340.02	0.0006	0.001429
Co	59	3	He	0.048	0.0048	240.01	0.0563	0.002149
Co	59	3	He	0.024	0.0035	170.01	0.0563	0.002149
Co	59	3	He	0.063	0.0057	280.01	0.0563	0.002149
Ni	60	3	He	0.053	0.0033	290.01	0.0086	0.002834
Ni	60	3	He	0.115	0.0038	340.01	0.0086	0.002834
Ni	60	3	He	0.085	0.0036	320.02	0.0086	0.002834
Cu	63	3	He	1.25	0.0368	3250.50	0.0257	0.004757
Cu	63	3	He	1.254	0.0369	3290.50	0.0257	0.004757
Cu	63	3	He	1.259	0.0371	3330.48	0.0257	0.004757
Zn	66	3	He	3.361	0.0136	1200.10	0.0029	0.003818
Zn	66	3	He	3.817	0.0149	1330.09	0.0029	0.003818
Zn	66	3	He	3.316	0.0135	1210.09	0.0029	0.003818
As	75	3	He	0.06	0.0009	82.00	0.002	0.0008061
As	75	3	He	0.187	0.0012	106.00	0.002	0.0008061
As	75	3	He	0.03	0.0009	78.00	0.002	0.0008061
Sr	88	3	He	28.264	0.2545	23049.17	0.009	0.0009645
Sr	88	3	He	28.572	0.2573	23400.11	0.009	0.0009645
Sr	88	3	He	28.002	0.2521	22869.28	0.009	0.0009645
Mo	98	3	He	0.078	0.002	180.01	0.0219	0.0002706
Mo	98	3	He	0.078	0.002	180.01	0.0219	0.0002706
Mo	98	3	He	0.108	0.0026	240.01	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.009	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Cd	111	3	He	0.012	0.0001	6.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.012	0.0001	6.00	0.0053	0
Sn	120	3	He	-0.155	0.014	1270.11	0.0158	0.01648
Sn	120	3	He	-0.236	0.0128	1160.08	0.0158	0.01648
Sn	120	3	He	-0.394	0.0103	930.07	0.0158	0.01648
Sb	121	3	He	0.012	0.0004	40.00	0.0149	0.0002698
Sb	121	3	He	0.034	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.026	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	15.347	0.0739	6691.86	0.0048	0.0002317
Ba	137	3	He	15.189	0.0731	6651.87	0.0048	0.0002317
Ba	137	3	He	13.9	0.0669	6071.48	0.0048	0.0002317
Tl	205	3	He	0.008	0.0003	140.01	0.0247	0.0001339
Tl	205	3	He	0.008	0.0003	130.01	0.0247	0.0001339
Tl	205	3	He	0.008	0.0003	130.01	0.0247	0.0001339
Pb	208	3	He	0.036	0.0022	520.03	0.0327	0.00107
Pb	208	3	He	0.031	0.0021	420.02	0.0327	0.00107
Pb	208	3	He	0.037	0.0023	460.03	0.0327	0.00107
U	238	3	He	0.017	0.0009	290.01	0.0493	7.55E-05
U	238	3	He	0.021	0.0011	350.02	0.0493	7.55E-05
U	238	3	He	0.026	0.0014	420.03	0.0493	7.55E-05
Sc	45	1	No Gas			2548319.02		
Sc	45	1	No Gas			2508545.74		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2460511.68		
Ge	72	1	No Gas			1244434.20		
Ge	72	1	No Gas			1250782.87		
Ge	72	1	No Gas			1235436.78		
Sc	45	2	H2			197184.61		
Sc	45	2	H2			193795.19		
Sc	45	2	H2			196747.65		
Ge	72	2	H2			174625.31		
Ge	72	2	H2			171579.67		
Ge	72	2	H2			178371.99		
In	115	2	H2			407652.18		
In	115	2	H2			400027.53		
In	115	2	H2			412185.85		
Sc	45	3	He			49585.22		
Sc	45	3	He			48962.94		
Sc	45	3	He			49174.25		
Ge	72	3	He			88221.67		
Ge	72	3	He			89076.82		
Ge	72	3	He			89820.89		
In	115	3	He			90576.09		
In	115	3	He			90967.23		
In	115	3	He			90706.06		
Tb	159	3	He			409978.74		
Tb	159	3	He			403337.53		
Tb	159	3	He			401926.79		
Bi	209	3	He			317607.07		
Bi	209	3	He			318094.51		
Bi	209	3	He			308642.16		

Quantitation Report

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Sample Type	Sample
Comment	D2
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

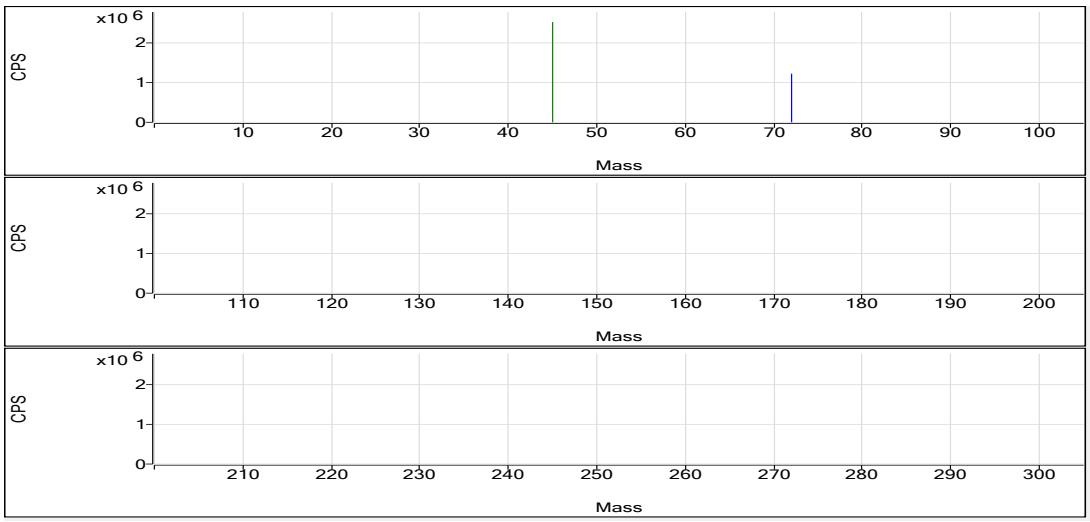
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.006	ppb	45.4	22.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.237	ppb	28.4	18.67	0.0001	Pulse	1.5000	3
Na	23	45	He	54923.127	ppb	2.1	9574539.24	196.8079	Analog	0.1000	3
Mg	24	45	He	16767.464	ppb	2.1	1463761.28	30.0897	Analog	0.1000	3
Al	27	45	He	5.934	ppb	27.7	200.01	0.0041	Pulse	0.1000	3
K	39	45	He	5403.552	ppb	1.6	325284.99	6.6866	Pulse	0.1000	3
Ca	44	45	He	111553.078	ppb	1.4	366739.60	7.5383	Pulse	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.050	ppb	N/A	1156.06	0.0238	Pulse	0.5000	3
Cr	52	45	He	0.334	ppb	17.7	2430.30	0.0500	Pulse	0.1000	3
Mn	55	45	He	302.145	ppb	2.4	188790.41	3.8803	Pulse	0.1000	3
Fe	57	45	He	49.906	ppb	6.2	1480.13	0.0304	Pulse	0.1000	3
Co	59	45	He	0.629	ppb	5.9	1826.86	0.0375	Pulse	0.1000	3
Ni	60	72	He	1.459	ppb	8.2	1346.78	0.0154	Pulse	0.1000	3
Cu	63	72	He	1.040	ppb	1.4	2757.03	0.0315	Pulse	0.1000	3
Zn	66	72	He	5.301	ppb	8.9	1686.82	0.0193	Pulse	0.1000	3
As	75	72	He	0.041	ppb	53.8	78.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	489.617	ppb	1.4	389077.66	4.3927	Pulse	0.1000	3
Mo	98	115	He	0.557	ppb	6.3	1106.75	0.0125	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	33.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.017	ppb	24.3	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.262	ppb	N/A	1093.41	0.0123	Pulse	0.1000	3
Sb	121	115	He	0.007	ppb	120.9	33.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	121.085	ppb	2.5	51487.29	0.5814	Pulse	0.1000	3
Tl	205	159	He	0.025	ppb	34.4	306.68	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.053	ppb	12.8	1136.73	0.0028	Pulse	0.1000	3
U	238	209	He	0.422	ppb	2.5	6498.54	0.0209	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2515003.92	0.8	104.8	Analog	0.1000	3
No Gas	Ge	72	1219948.11	0.2	105.8	Pulse	0.1000	3
H2	Sc	45	190053.82	0.9	101.6	Pulse	0.1000	3
H2	Ge	72	168065.45	1.2	102.7	Pulse	0.1000	3
H2	In	115	400286.54	0.2	102.9	Pulse	0.1000	3
He	Sc	45	48655.45	1.6	104.3	Pulse	0.1000	3
He	Ge	72	87658.15	0.9	108.0	Pulse	0.1000	3
He	In	115	88579.21	1.1	102.8	Pulse	0.1000	3
He	Tb	159	403519.03	0.8	101.2	Pulse	0.1000	3
He	Bi	209	311567.17	0.8	100.7	Pulse	0.1000	3

No Gas



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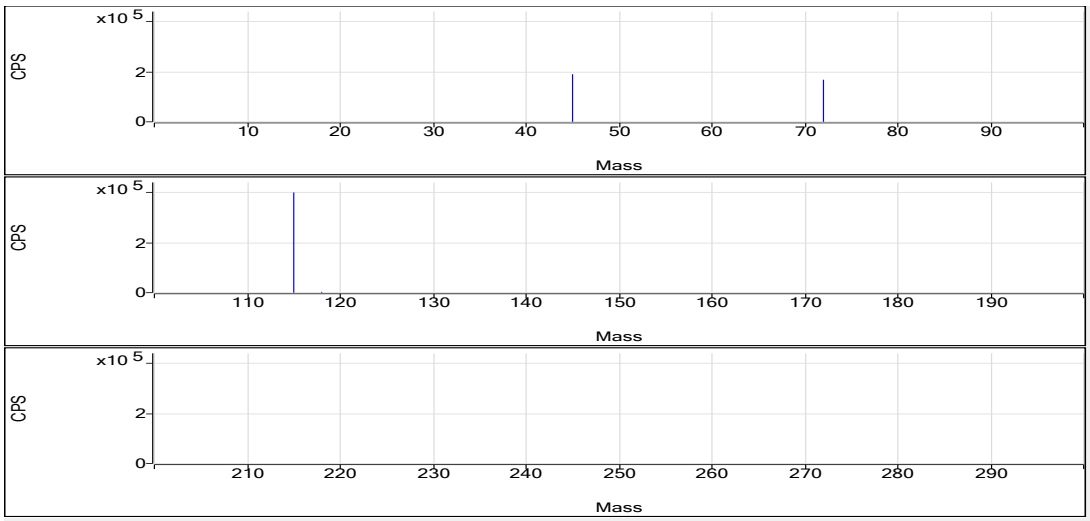
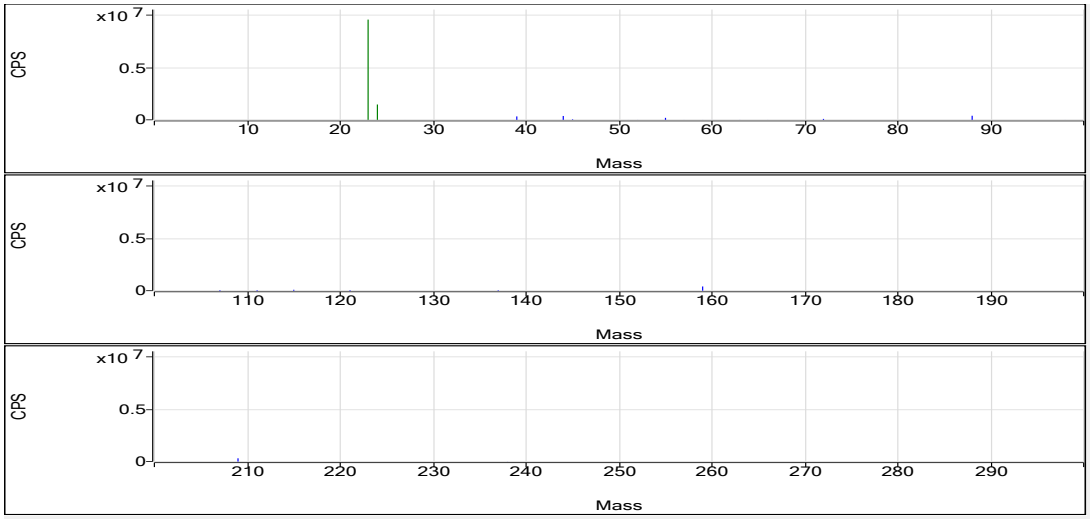


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.008	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Se	78	2	H2	0.312	0.0001	24.00	0.0004	1.219E-05
Se	78	2	H2	0.183	0.0001	14.67	0.0004	1.219E-05
Se	78	2	H2	0.216	0.0001	17.33	0.0004	1.219E-05
Na	23	3	He	56117.574	201.0805	9623681.11	0.0036	0.3452
Na	23	3	He	54798.901	196.3635	9712997.36	0.0036	0.3452
Na	23	3	He	53852.908	192.9796	9386939.24	0.0036	0.3452
Mg	24	3	He	17165.521	30.804	1474273.26	0.0018	0.003497
Mg	24	3	He	16601.699	29.7923	1473656.85	0.0018	0.003497
Mg	24	3	He	16535.173	29.6729	1443353.73	0.0018	0.003497
Al	27	3	He	5.687	0.004	190.01	0.0006	0.0006432
Al	27	3	He	4.43	0.0032	160.01	0.0006	0.0006432
Al	27	3	He	7.686	0.0051	250.01	0.0006	0.0006432
K	39	3	He	5491.169	6.7886	324900.46	0.0012	0.3951
K	39	3	He	5321.351	6.5909	326012.57	0.0012	0.3951
K	39	3	He	5398.135	6.6803	324941.95	0.0012	0.3951
Ca	44	3	He	113340.62	7.6591	366562.89	0.0001	0.002715
Ca	44	3	He	111007.04	7.5015	371054.60	0.0001	0.002715
Ca	44	3	He	110311.574	7.4545	362601.32	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	-0.025	0.0243	1164.06	0.0219	0.02486
V	51	3	He	-0.126	0.0221	1094.05	0.0219	0.02486
V	51	3	He	0.001	0.0249	1210.06	0.0219	0.02486
Cr	52	3	He	0.368	0.051	2440.30	0.0299	0.03997
Cr	52	3	He	0.265	0.0479	2370.28	0.0299	0.03997
Cr	52	3	He	0.368	0.051	2480.31	0.0299	0.03997
Mn	55	3	He	307.621	3.9506	189075.39	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	304.892	3.9156	193682.11	0.0128	0.002639
Mn	55	3	He	293.921	3.7748	183613.73	0.0128	0.002639
Fe	57	3	He	48.613	0.0297	1420.12	0.0006	0.001429
Fe	57	3	He	47.652	0.0291	1440.12	0.0006	0.001429
Fe	57	3	He	53.454	0.0325	1580.14	0.0006	0.001429
Co	59	3	He	0.619	0.037	1770.19	0.0563	0.002149
Co	59	3	He	0.67	0.0398	1970.22	0.0563	0.002149
Co	59	3	He	0.597	0.0358	1740.17	0.0563	0.002149
Ni	60	3	He	1.576	0.0164	1440.12	0.0086	0.002834
Ni	60	3	He	1.466	0.0154	1360.11	0.0086	0.002834
Ni	60	3	He	1.336	0.0143	1240.10	0.0086	0.002834
Cu	63	3	He	1.023	0.031	2730.35	0.0257	0.004757
Cu	63	3	He	1.051	0.0317	2800.38	0.0257	0.004757
Cu	63	3	He	1.046	0.0316	2740.36	0.0257	0.004757
Zn	66	3	He	5.284	0.0192	1690.15	0.0029	0.003818
Zn	66	3	He	4.839	0.0179	1580.13	0.0029	0.003818
Zn	66	3	He	5.779	0.0206	1790.18	0.0029	0.003818
As	75	3	He	0.017	0.0008	74.00	0.002	0.0008061
As	75	3	He	0.06	0.0009	82.00	0.002	0.0008061
As	75	3	He	0.046	0.0009	78.00	0.002	0.0008061
Sr	88	3	He	482.303	4.3271	387675.15	0.009	0.0009645
Sr	88	3	He	495.906	4.4492	393324.72	0.009	0.0009645
Sr	88	3	He	490.643	4.4019	386233.12	0.009	0.0009645
Mo	98	3	He	0.548	0.0123	1100.09	0.0219	0.0002706
Mo	98	3	He	0.596	0.0133	1180.08	0.0219	0.0002706
Mo	98	3	He	0.528	0.0119	1040.08	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Cd	111	3	He	0.021	0.0001	10.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Sn	120	3	He	-0.244	0.0126	1130.08	0.0158	0.01648
Sn	120	3	He	-0.227	0.0129	1140.09	0.0158	0.01648
Sn	120	3	He	-0.314	0.0115	1010.07	0.0158	0.01648
Sb	121	3	He	0.012	0.0004	40.00	0.0149	0.0002698
Sb	121	3	He	0.012	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	117.64	0.5648	50603.75	0.0048	0.0002317
Ba	137	3	He	122.226	0.5868	51878.85	0.0048	0.0002317
Ba	137	3	He	123.388	0.5924	51979.26	0.0048	0.0002317
Tl	205	3	He	0.02	0.0006	250.01	0.0247	0.0001339
Tl	205	3	He	0.035	0.001	410.02	0.0247	0.0001339
Tl	205	3	He	0.021	0.0006	260.01	0.0247	0.0001339
Pb	208	3	He	0.051	0.0027	580.03	0.0327	0.00107
Pb	208	3	He	0.061	0.0031	640.04	0.0327	0.00107
Pb	208	3	He	0.048	0.0026	600.04	0.0327	0.00107
U	238	3	He	0.41	0.0203	6341.79	0.0493	7.55E-05
U	238	3	He	0.425	0.021	6571.93	0.0493	7.55E-05
U	238	3	He	0.431	0.0213	6581.89	0.0493	7.55E-05
Sc	45	1	No Gas			2518634.96		
Sc	45	1	No Gas			2532770.27		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2493606.53		
Ge	72	1	No Gas			1218441.08		
Ge	72	1	No Gas			1218389.83		
Ge	72	1	No Gas			1223013.42		
Sc	45	2	H2			189035.09		
Sc	45	2	H2			189073.98		
Sc	45	2	H2			192052.38		
Ge	72	2	H2			168583.85		
Ge	72	2	H2			165834.24		
Ge	72	2	H2			169778.26		
In	115	2	H2			399268.78		
In	115	2	H2			401131.71		
In	115	2	H2			400459.13		
Sc	45	3	He			47859.85		
Sc	45	3	He			49464.37		
Sc	45	3	He			48642.12		
Ge	72	3	He			88020.92		
Ge	72	3	He			88241.56		
Ge	72	3	He			86711.96		
In	115	3	He			89598.22		
In	115	3	He			88410.61		
In	115	3	He			87747.52		
Tb	159	3	He			402438.98		
Tb	159	3	He			407311.05		
Tb	159	3	He			400807.06		
Bi	209	3	He			312706.60		
Bi	209	3	He			313116.58		
Bi	209	3	He			308878.32		

Quantitation Report

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Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

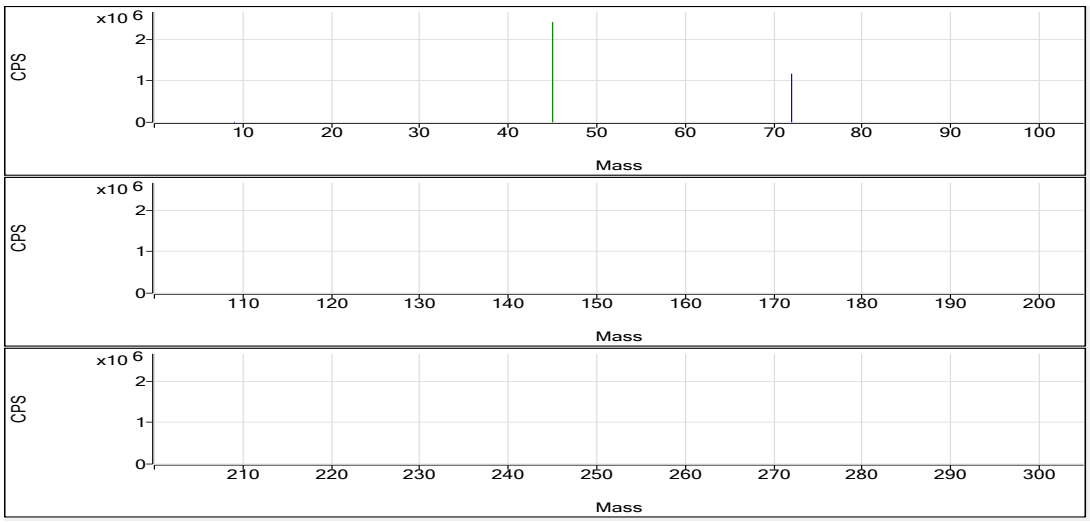
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	160.9	15.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.004	ppb	377.1	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	5.656	ppb	9.6	17847.92	0.3654	Pulse	0.1000	3
Mg	24	45	He	2.653	ppb	20.3	403.35	0.0083	Pulse	0.1000	3
Al	27	45	He	0.416	ppb	127.5	43.33	0.0009	Pulse	0.1000	3
K	39	45	He	-4.528	ppb	N/A	19039.71	0.3898	Pulse	0.1000	3
Ca	44	45	He	16.389	ppb	22.0	186.68	0.0038	Pulse	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.111	ppb	12.5	1333.40	0.0273	Pulse	0.5000	3
Cr	52	45	He	-0.141	ppb	N/A	1746.83	0.0358	Pulse	0.1000	3
Mn	55	45	He	0.347	ppb	52.1	346.68	0.0071	Pulse	0.1000	3
Fe	57	45	He	1.535	ppb	27.1	113.34	0.0023	Pulse	0.1000	3
Co	59	45	He	0.014	ppb	66.5	143.34	0.0029	Pulse	0.1000	3
Ni	60	72	He	0.046	ppb	164.0	266.68	0.0032	Pulse	0.1000	3
Cu	63	72	He	0.021	ppb	58.0	436.69	0.0053	Pulse	0.1000	3
Zn	66	72	He	3.625	ppb	7.8	1186.76	0.0144	Pulse	0.1000	3
As	75	72	He	0.021	ppb	209.5	70.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.122	ppb	9.6	180.01	0.0021	Pulse	0.1000	3
Mo	98	115	He	0.022	ppb	13.1	66.67	0.0008	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	99.7	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.019	ppb	N/A	1413.47	0.0162	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.047	ppb	86.6	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.011	ppb	27.5	160.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	84.2	530.03	0.0013	Pulse	0.1000	3
U	238	209	He	0.004	ppb	0.3	80.00	0.0003	Pulse	0.1000	3

ISTD Table:

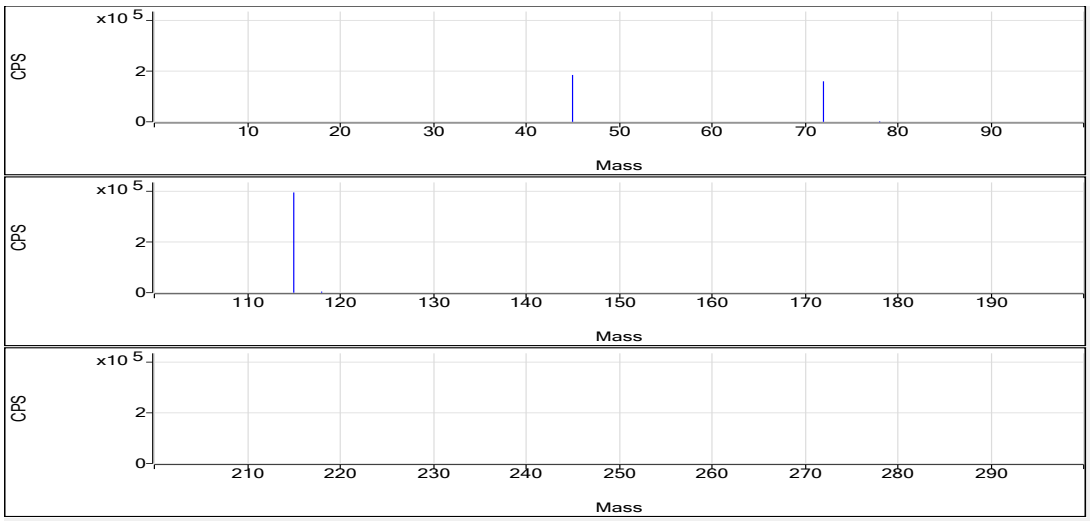
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2419225.49	1.7	100.9	Analog	0.1000	3
No Gas	Ge	72	1173097.69	1.8	101.7	Pulse	0.1000	3
H2	Sc	45	184952.91	1.3	98.9	Pulse	0.1000	3
H2	Ge	72	159919.94	0.1	97.7	Pulse	0.1000	3
H2	In	115	395657.45	0.2	101.7	Pulse	0.1000	3
He	Sc	45	48846.07	0.3	104.7	Pulse	0.1000	3
He	Ge	72	82541.65	1.3	101.7	Pulse	0.1000	3
He	In	115	87461.12	0.6	101.5	Pulse	0.1000	3
He	Tb	159	399538.93	0.5	100.2	Pulse	0.1000	3
He	Bi	209	307328.45	0.2	99.4	Pulse	0.1000	3

No Gas

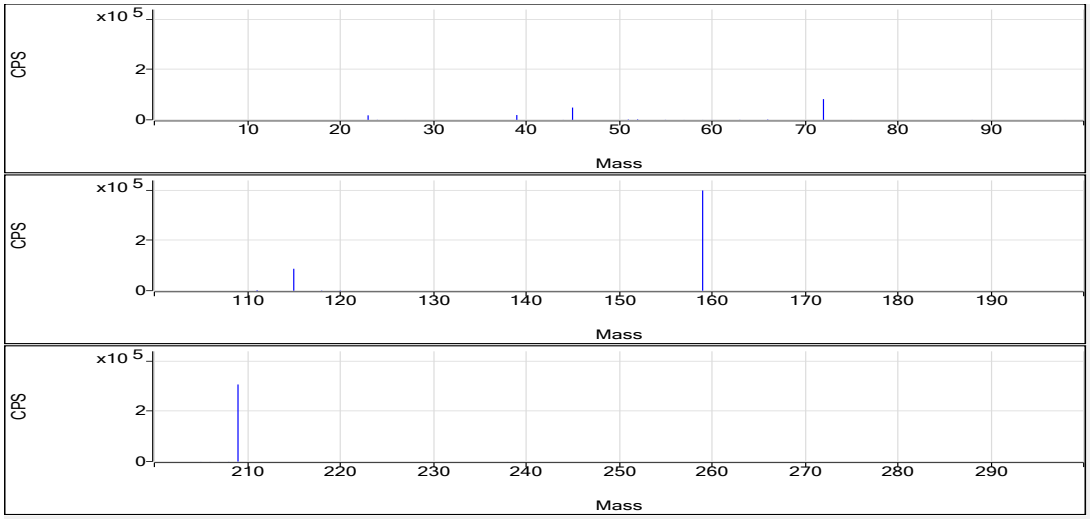


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	-0.002	0	8.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	20.00	0.0008	4.685E-06
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	0.001	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.021	0	3.33	0.0004	1.219E-05
Na	23	3	He	5.996	0.3666	17891.29	0.0036	0.3452
Na	23	3	He	5.94	0.3664	17951.38	0.0036	0.3452
Na	23	3	He	5.031	0.3632	17701.09	0.0036	0.3452
Mg	24	3	He	2.048	0.0072	350.02	0.0018	0.003497
Mg	24	3	He	2.829	0.0086	420.02	0.0018	0.003497
Mg	24	3	He	3.082	0.009	440.02	0.0018	0.003497
Al	27	3	He	-0.049	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	0.994	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	0.303	0.0008	40.00	0.0006	0.0006432
K	39	3	He	0.232	0.3953	19293.43	0.0012	0.3951
K	39	3	He	-8.111	0.3856	18892.86	0.0012	0.3951
K	39	3	He	-5.704	0.3884	18932.85	0.0012	0.3951
Ca	44	3	He	14.412	0.0037	180.01	0.0001	0.002715
Ca	44	3	He	14.2	0.0037	180.01	0.0001	0.002715
Ca	44	3	He	20.554	0.0041	200.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.1	0.027	1320.07	0.0219	0.02486
V	51	3	He	0.127	0.0276	1354.07	0.0219	0.02486
V	51	3	He	0.107	0.0272	1326.07	0.0219	0.02486
Cr	52	3	He	0.006	0.0402	1960.20	0.0299	0.03997
Cr	52	3	He	-0.128	0.0361	1770.16	0.0299	0.03997
Cr	52	3	He	-0.3	0.031	1510.13	0.0299	0.03997
Mn	55	3	He	0.497	0.009	440.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.399	0.0078	380.02	0.0128	0.002639
Mn	55	3	He	0.146	0.0045	220.01	0.0128	0.002639
Fe	57	3	He	1.773	0.0025	120.01	0.0006	0.001429
Fe	57	3	He	1.054	0.002	100.00	0.0006	0.001429
Fe	57	3	He	1.778	0.0025	120.00	0.0006	0.001429
Co	59	3	He	0.013	0.0029	140.01	0.0563	0.002149
Co	59	3	He	0.005	0.0024	120.00	0.0563	0.002149
Co	59	3	He	0.024	0.0035	170.01	0.0563	0.002149
Ni	60	3	He	0.006	0.0029	240.01	0.0086	0.002834
Ni	60	3	He	0.133	0.004	330.02	0.0086	0.002834
Ni	60	3	He	-0.001	0.0028	230.01	0.0086	0.002834
Cu	63	3	He	0.03	0.0055	460.02	0.0257	0.004757
Cu	63	3	He	0.007	0.0049	410.02	0.0257	0.004757
Cu	63	3	He	0.026	0.0054	440.02	0.0257	0.004757
Zn	66	3	He	3.637	0.0144	1200.10	0.0029	0.003818
Zn	66	3	He	3.902	0.0152	1260.10	0.0029	0.003818
Zn	66	3	He	3.336	0.0135	1100.09	0.0029	0.003818
As	75	3	He	0.04	0.0009	74.00	0.002	0.0008061
As	75	3	He	-0.029	0.0007	62.00	0.002	0.0008061
As	75	3	He	0.051	0.0009	74.00	0.002	0.0008061
Sr	88	3	He	0.11	0.0019	170.01	0.009	0.0009645
Sr	88	3	He	0.123	0.0021	180.01	0.009	0.0009645
Sr	88	3	He	0.133	0.0022	190.01	0.009	0.0009645
Mo	98	3	He	0.019	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.024	0.0008	70.00	0.0219	0.0002706
Mo	98	3	He	0.024	0.0008	70.00	0.0219	0.0002706
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Sn	120	3	He	0.097	0.018	1570.14	0.0158	0.01648
Sn	120	3	He	0.09	0.0179	1560.19	0.0158	0.01648
Sn	120	3	He	-0.245	0.0126	1110.09	0.0158	0.01648
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.094	0.0007	60.00	0.0048	0.0002317
Tl	205	3	He	0.014	0.0005	190.01	0.0247	0.0001339
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Tl	205	3	He	0.008	0.0003	130.00	0.0247	0.0001339
Pb	208	3	He	0.002	0.0011	240.01	0.0327	0.00107
Pb	208	3	He	0.015	0.0016	360.02	0.0327	0.00107
Pb	208	3	He	0.007	0.0013	250.01	0.0327	0.00107
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
Sc	45	1	No Gas			2466282.62		
Sc	45	1	No Gas			2398524.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2392869.81		
Ge	72	1	No Gas			1197068.81		
Ge	72	1	No Gas			1156919.44		
Ge	72	1	No Gas			1165304.83		
Sc	45	2	H2			184699.37		
Sc	45	2	H2			182775.80		
Sc	45	2	H2			187383.55		
Ge	72	2	H2			160006.67		
Ge	72	2	H2			159826.07		
Ge	72	2	H2			159927.09		
In	115	2	H2			395033.39		
In	115	2	H2			395230.85		
In	115	2	H2			396708.12		
Sc	45	3	He			48802.55		
Sc	45	3	He			48993.09		
Sc	45	3	He			48742.56		
Ge	72	3	He			83302.92		
Ge	72	3	He			83021.07		
Ge	72	3	He			81300.96		
In	115	3	He			87194.38		
In	115	3	He			87173.49		
In	115	3	He			88039.51		
Tb	159	3	He			401487.77		
Tb	159	3	He			399521.36		
Tb	159	3	He			397607.65		
Bi	209	3	He			307986.07		
Bi	209	3	He			307077.85		
Bi	209	3	He			306921.44		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

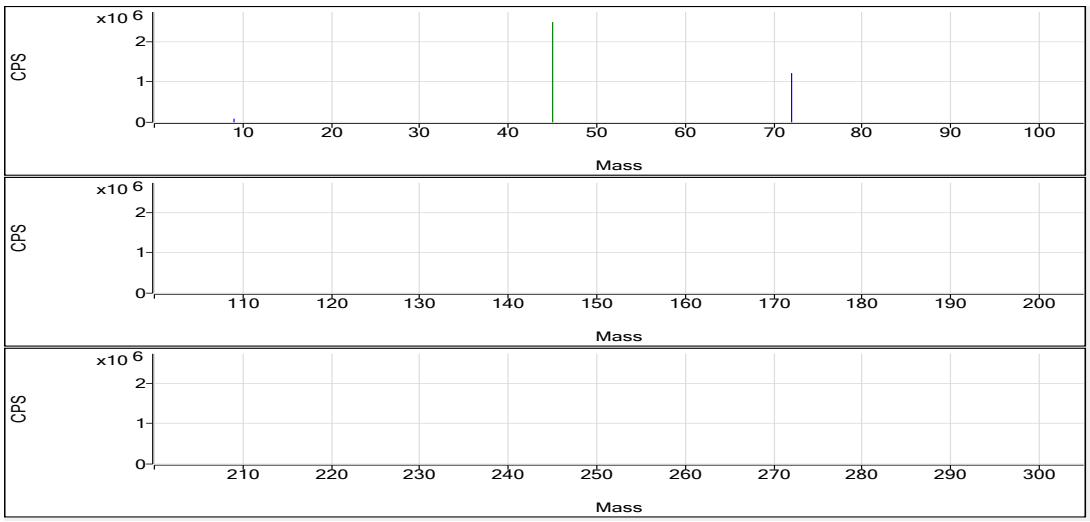
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.652	ppb	0.5	89958.09	0.0364	Pulse	0.5000	3
Se	78	72	H2	52.687	ppb	2.0	3548.00	0.0220	Pulse	1.5000	3
Na	23	45	He	4822.490	ppb	1.8	850039.13	17.5954	Pulse	0.1000	3
Mg	24	45	He	4998.429	ppb	2.0	433433.64	8.9723	Pulse	0.1000	3
Al	27	45	He	4948.062	ppb	2.1	139870.53	2.8954	Pulse	0.1000	3
K	39	45	He	5031.640	ppb	2.6	302080.59	6.2535	Pulse	0.1000	3
Ca	44	45	He	5340.983	ppb	1.1	17567.81	0.3635	Pulse	0.1000	3
Ti	47	45	He	5066.090	ppb	1.6	131426.61	2.7203	Pulse	0.1000	3
V	51	45	He	510.957	ppb	1.8	540773.50	11.1940	Pulse	0.5000	3
Cr	52	45	He	485.034	ppb	2.3	703441.53	14.5622	Pulse	0.1000	3
Mn	55	45	He	506.884	ppb	2.5	314365.05	6.5079	Pulse	0.1000	3
Fe	57	45	He	5064.224	ppb	2.4	142204.74	2.9437	Pulse	0.1000	3
Co	59	45	He	493.489	ppb	2.1	1341841.54	27.7768	Pulse	0.1000	3
Ni	60	72	He	513.464	ppb	0.5	372249.02	4.4100	Pulse	0.1000	3
Cu	63	72	He	492.895	ppb	0.8	1068430.09	12.6579	Pulse	0.1000	3
Zn	66	72	He	517.119	ppb	2.3	127398.45	1.5095	Pulse	0.1000	3
As	75	72	He	517.613	ppb	1.1	89585.28	1.0613	Pulse	0.5000	3
Sr	88	115	He	50.873	ppb	2.3	40067.48	0.4573	Pulse	0.1000	3
Mo	98	115	He	51.822	ppb	2.7	99581.23	1.1365	Pulse	0.1000	3
Ag	107	115	He	50.776	ppb	2.3	206875.95	2.3610	Pulse	0.1000	3
Cd	111	115	He	50.821	ppb	1.4	23811.61	0.2717	Pulse	0.5000	3
Sn	120	115	He	51.857	ppb	1.7	73234.27	0.8357	Pulse	0.1000	3
Sb	121	115	He	51.450	ppb	0.6	66995.87	0.7645	Pulse	0.1000	3
Ba	137	115	He	516.392	ppb	2.1	217178.62	2.4786	Pulse	0.1000	3
Tl	205	159	He	51.079	ppb	0.8	508039.56	1.2631	Pulse	0.1000	3
Pb	208	159	He	51.446	ppb	1.7	677641.75	1.6849	Pulse	0.1000	3
U	238	209	He	50.814	ppb	0.2	770922.93	2.5031	Pulse	0.1000	3

ISTD Table:

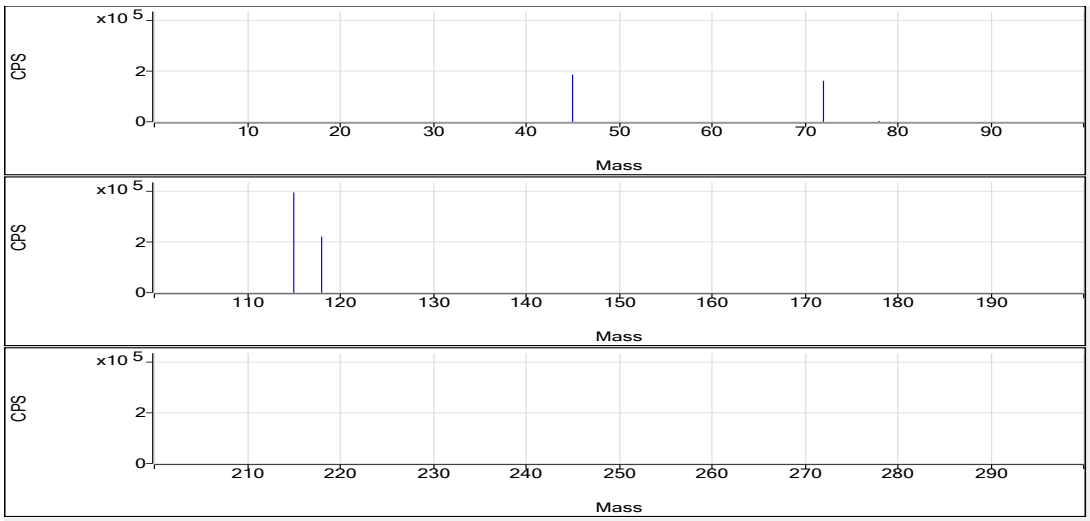
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2474603.82	0.2	103.2	Analog	0.1000	3
No Gas	Ge	72	1215033.44	0.6	105.4	Pulse	0.1000	3
H2	Sc	45	185395.93	0.8	99.1	Pulse	0.1000	3
H2	Ge	72	161402.89	1.3	98.6	Pulse	0.1000	3
H2	In	115	393994.25	0.6	101.3	Pulse	0.1000	3
He	Sc	45	48321.26	2.1	103.6	Pulse	0.1000	3
He	Ge	72	84412.27	1.0	104.0	Pulse	0.1000	3
He	In	115	87640.34	1.5	101.7	Pulse	0.1000	3
He	Tb	159	402226.41	0.8	100.9	Pulse	0.1000	3
He	Bi	209	307981.23	0.5	99.6	Pulse	0.1000	3

No Gas

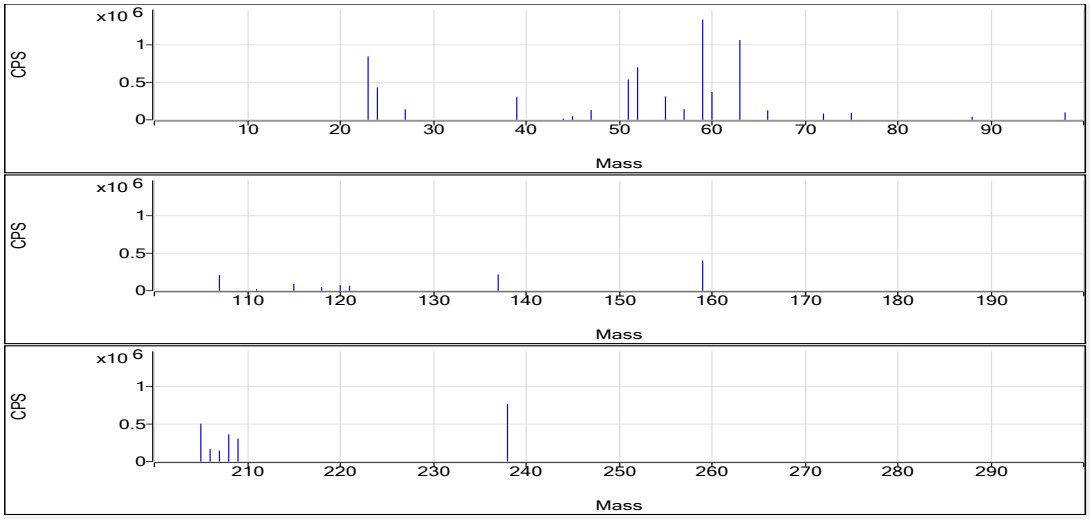


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.771	0.0364	90141.14	0.0008	4.685E-06
Be	9	1	No Gas	47.394	0.0362	89644.18	0.0008	4.685E-06
Be	9	1	No Gas	47.79	0.0365	90088.96	0.0008	4.685E-06
Se	78	2	H2	52.678	0.022	3554.45	0.0004	1.219E-05
Se	78	2	H2	51.613	0.0215	3517.10	0.0004	1.219E-05
Se	78	2	H2	53.769	0.0224	3572.45	0.0004	1.219E-05
Na	23	3	He	4810.644	17.5531	855403.66	0.0036	0.3452
Na	23	3	He	4912.475	17.9173	845471.08	0.0036	0.3452
Na	23	3	He	4744.352	17.3159	849242.64	0.0036	0.3452
Mg	24	3	He	4981.171	8.9413	435732.34	0.0018	0.003497
Mg	24	3	He	5108.117	9.1691	432665.77	0.0018	0.003497
Mg	24	3	He	4905.998	8.8064	431902.81	0.0018	0.003497
Al	27	3	He	4924.004	2.8814	140415.53	0.0006	0.0006432
Al	27	3	He	5063.63	2.963	139818.18	0.0006	0.0006432
Al	27	3	He	4856.552	2.8419	139377.89	0.0006	0.0006432
K	39	3	He	5003.989	6.2213	303181.19	0.0012	0.3951
K	39	3	He	5172.676	6.4178	302836.73	0.0012	0.3951
K	39	3	He	4918.255	6.1215	300223.86	0.0012	0.3951
Ca	44	3	He	5346.036	0.3638	17731.29	0.0001	0.002715
Ca	44	3	He	5277.412	0.3592	16950.37	0.0001	0.002715
Ca	44	3	He	5399.501	0.3675	18021.78	0.0001	0.002715
Ti	47	3	He	4980.966	2.6746	130339.53	0.0005	7.003E-05
Ti	47	3	He	5146.1	2.7633	130391.13	0.0005	7.003E-05
Ti	47	3	He	5071.204	2.723	133549.17	0.0005	7.003E-05
V	51	3	He	507.681	11.1224	542019.63	0.0219	0.02486
V	51	3	He	521.295	11.4199	538876.56	0.0219	0.02486
V	51	3	He	503.894	11.0396	541424.31	0.0219	0.02486
Cr	52	3	He	479.078	14.3839	700963.58	0.0299	0.03997
Cr	52	3	He	498.145	14.9548	705677.18	0.0299	0.03997
Cr	52	3	He	477.879	14.348	703683.82	0.0299	0.03997
Mn	55	3	He	504.712	6.4801	315788.86	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	520.568	6.6835	315378.86	0.0128	0.002639
Mn	55	3	He	495.37	6.3602	311927.42	0.0128	0.002639
Fe	57	3	He	5093.229	2.9605	144274.71	0.0006	0.001429
Fe	57	3	He	5166.127	3.0029	141698.98	0.0006	0.001429
Fe	57	3	He	4933.317	2.8676	140640.54	0.0006	0.001429
Co	59	3	He	493.49	27.7769	1353637.17	0.0563	0.002149
Co	59	3	He	504.094	28.3737	1338882.17	0.0563	0.002149
Co	59	3	He	482.881	27.1798	1333005.29	0.0563	0.002149
Ni	60	3	He	513.451	4.4099	375733.12	0.0086	0.002834
Ni	60	3	He	511.126	4.3899	370855.39	0.0086	0.002834
Ni	60	3	He	515.813	4.4301	370158.55	0.0086	0.002834
Cu	63	3	He	490.333	12.5921	1072886.47	0.0257	0.004757
Cu	63	3	He	490.933	12.6075	1065074.28	0.0257	0.004757
Cu	63	3	He	497.418	12.774	1067329.52	0.0257	0.004757
Zn	66	3	He	505.695	1.4762	125777.18	0.0029	0.003818
Zn	66	3	He	515.905	1.5059	127220.07	0.0029	0.003818
Zn	66	3	He	529.758	1.5463	129198.09	0.0029	0.003818
As	75	3	He	517.608	1.0613	90427.20	0.002	0.0008061
As	75	3	He	511.825	1.0495	88658.08	0.002	0.0008061
As	75	3	He	523.405	1.0732	89670.55	0.002	0.0008061
Sr	88	3	He	52.216	0.4693	40448.59	0.009	0.0009645
Sr	88	3	He	50.073	0.4501	39886.70	0.009	0.0009645
Sr	88	3	He	50.329	0.4524	39867.14	0.009	0.0009645
Mo	98	3	He	53.452	1.1723	101031.55	0.0219	0.0002706
Mo	98	3	He	51.052	1.1197	99218.75	0.0219	0.0002706
Mo	98	3	He	50.962	1.1177	98493.40	0.0219	0.0002706
Ag	107	3	He	52.095	2.4224	208770.31	0.0465	0.0006206
Ag	107	3	He	49.939	2.3221	205775.04	0.0465	0.0006206
Ag	107	3	He	50.293	2.3386	206082.50	0.0465	0.0006206
Cd	111	3	He	51.635	0.2761	23794.26	0.0053	0
Cd	111	3	He	50.311	0.269	23838.32	0.0053	0
Cd	111	3	He	50.516	0.2701	23802.25	0.0053	0
Sn	120	3	He	52.736	0.8496	73224.53	0.0158	0.01648
Sn	120	3	He	51.016	0.8225	72882.30	0.0158	0.01648
Sn	120	3	He	51.82	0.8352	73595.97	0.0158	0.01648
Sb	121	3	He	51.702	0.7682	66208.64	0.0149	0.0002698
Sb	121	3	He	51.139	0.7599	67334.33	0.0149	0.0002698
Sb	121	3	He	51.509	0.7654	67444.63	0.0149	0.0002698
Ba	137	3	He	528.816	2.5382	218751.72	0.0048	0.0002317
Ba	137	3	He	509.491	2.4455	216703.20	0.0048	0.0002317
Ba	137	3	He	510.868	2.4521	216080.93	0.0048	0.0002317
Tl	205	3	He	50.68	1.2533	508458.43	0.0247	0.0001339
Tl	205	3	He	51.095	1.2635	507722.06	0.0247	0.0001339
Tl	205	3	He	51.46	1.2726	507938.20	0.0247	0.0001339
Pb	208	3	He	50.452	1.6524	358726.32	0.0327	0.00107
Pb	208	3	He	51.77	1.6955	367264.21	0.0327	0.00107
Pb	208	3	He	52.116	1.7068	365223.20	0.0327	0.00107
U	238	3	He	50.725	2.4988	770283.35	0.0493	7.55E-05
U	238	3	He	50.826	2.5038	766864.91	0.0493	7.55E-05
U	238	3	He	50.89	2.5069	775620.54	0.0493	7.55E-05
Sc	45	1	No Gas			2473441.06		
Sc	45	1	No Gas			2479354.49		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2471015.90		
Ge	72	1	No Gas			1217663.34		
Ge	72	1	No Gas			1207366.70		
Ge	72	1	No Gas			1220070.29		
Sc	45	2	H2			187070.25		
Sc	45	2	H2			184213.43		
Sc	45	2	H2			184904.12		
Ge	72	2	H2			161696.05		
Ge	72	2	H2			163294.21		
Ge	72	2	H2			159218.41		
In	115	2	H2			396936.99		
In	115	2	H2			392362.81		
In	115	2	H2			392682.96		
Sc	45	3	He			48732.43		
Sc	45	3	He			47187.36		
Sc	45	3	He			49043.99		
Ge	72	3	He			85202.92		
Ge	72	3	He			84479.13		
Ge	72	3	He			83554.76		
In	115	3	He			86569.73		
In	115	3	He			89004.13		
In	115	3	He			88491.52		
Tb	159	3	He			405703.86		
Tb	159	3	He			401827.18		
Tb	159	3	He			399148.20		
Bi	209	3	He			308262.16		
Bi	209	3	He			306285.91		
Bi	209	3	He			309395.62		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

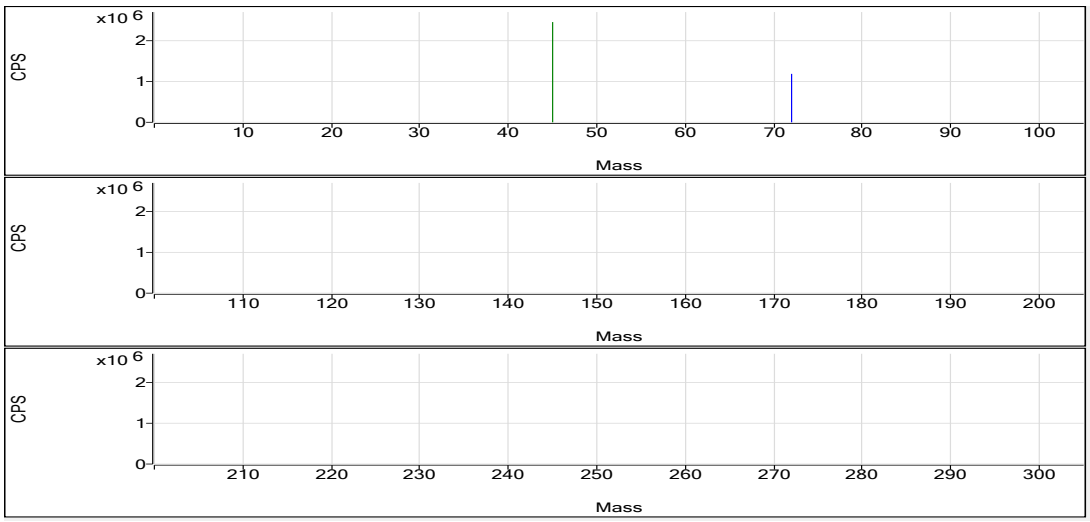
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.017	ppb	9.0	42.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.035	ppb	33.7	4.22	0.0000	Pulse	1.5000	3
Na	23	45	He	-1.198	ppb	N/A	16513.06	0.3409	Pulse	0.1000	3
Mg	24	45	He	0.890	ppb	30.3	246.68	0.0051	Pulse	0.1000	3
Al	27	45	He	1.719	ppb	89.0	80.00	0.0016	Pulse	0.1000	3
K	39	45	He	-6.550	ppb	N/A	18765.98	0.3874	Pulse	0.1000	3
Ca	44	45	He	1.515	ppb	1364.8	136.67	0.0028	Pulse	0.1000	3
Ti	47	45	He	0.895	ppb	49.5	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	0.158	ppb	35.6	1371.41	0.0283	Pulse	0.5000	3
Cr	52	45	He	-0.050	ppb	N/A	1863.52	0.0385	Pulse	0.1000	3
Mn	55	45	He	0.234	ppb	46.4	273.35	0.0056	Pulse	0.1000	3
Fe	57	45	He	1.452	ppb	107.2	110.01	0.0023	Pulse	0.1000	3
Co	59	45	He	0.074	ppb	22.2	306.68	0.0063	Pulse	0.1000	3
Ni	60	72	He	0.081	ppb	30.3	290.01	0.0035	Pulse	0.1000	3
Cu	63	72	He	0.069	ppb	91.5	536.70	0.0065	Pulse	0.1000	3
Zn	66	72	He	2.994	ppb	3.5	1030.07	0.0125	Pulse	0.1000	3
As	75	72	He	0.169	ppb	39.4	94.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.047	ppb	109.0	120.01	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.058	ppb	42.1	133.34	0.0015	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.014	ppb	68.7	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.077	ppb	154.7	1533.48	0.0177	Pulse	0.1000	3
Sb	121	115	He	0.041	ppb	56.8	76.67	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.056	ppb	23.8	43.33	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.075	ppb	16.1	793.38	0.0020	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	47.2	643.37	0.0016	Pulse	0.1000	3
U	238	209	He	0.044	ppb	14.9	700.05	0.0023	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2467376.27	0.9	102.9	Analog	0.1000	3
No Gas	Ge	72	1192190.27	0.5	103.4	Pulse	0.1000	3
H2	Sc	45	183944.21	0.9	98.4	Pulse	0.1000	3
H2	Ge	72	158022.04	0.7	96.5	Pulse	0.1000	3
H2	In	115	391166.58	0.4	100.5	Pulse	0.1000	3
He	Sc	45	48438.05	0.5	103.9	Pulse	0.1000	3
He	Ge	72	82179.48	1.1	101.2	Pulse	0.1000	3
He	In	115	86625.11	1.1	100.5	Pulse	0.1000	3
He	Tb	159	397773.25	0.2	99.8	Pulse	0.1000	3
He	Bi	209	309316.78	1.2	100.0	Pulse	0.1000	3

No Gas



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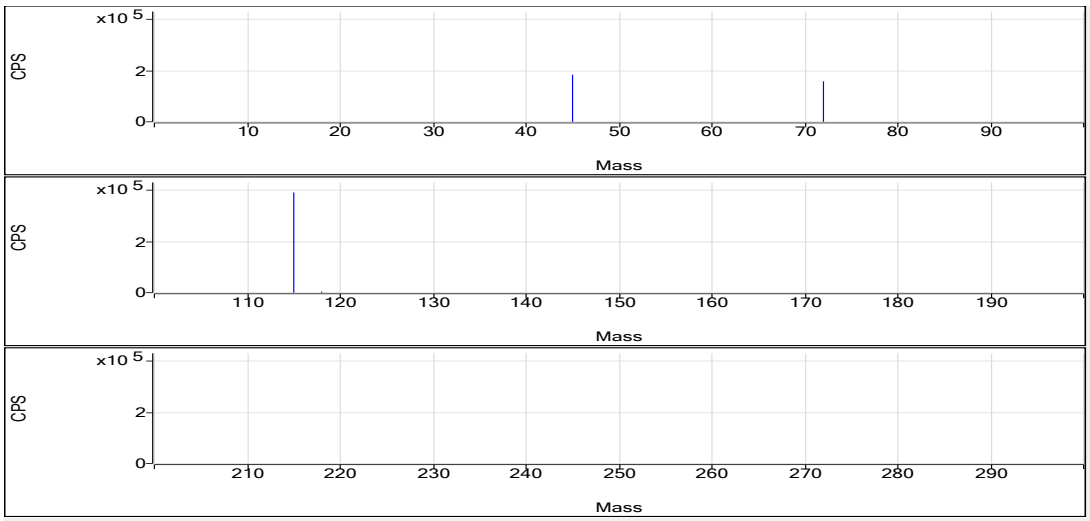
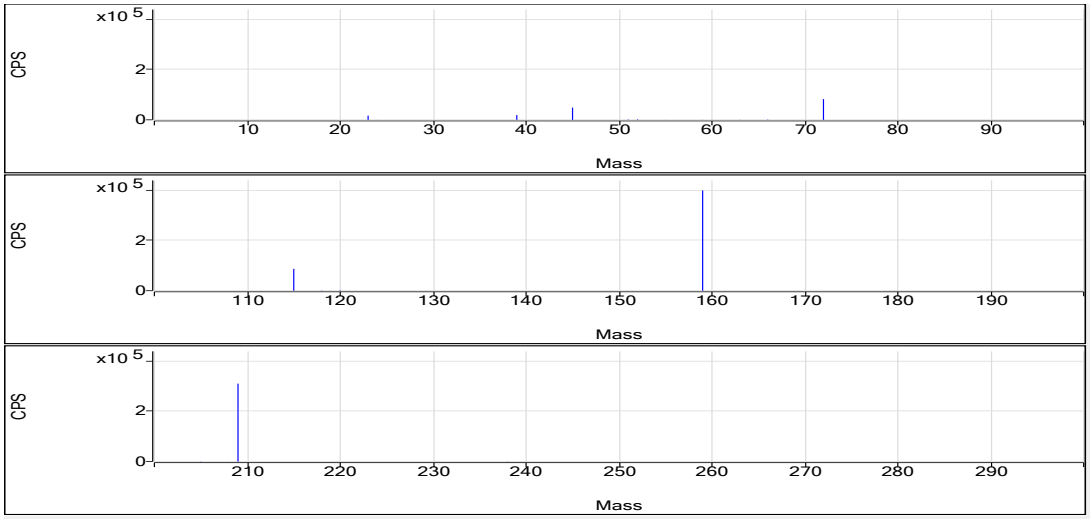


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.018	0	46.00	0.0008	4.685E-06
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Se	78	2	H2	0.042	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.041	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.021	0	3.33	0.0004	1.219E-05
Na	23	3	He	2.552	0.3543	17240.53	0.0036	0.3452
Na	23	3	He	-2.428	0.3365	16319.48	0.0036	0.3452
Na	23	3	He	-3.718	0.3319	15979.16	0.0036	0.3452
Mg	24	3	He	1.029	0.0053	260.01	0.0018	0.003497
Mg	24	3	He	0.579	0.0045	220.01	0.0018	0.003497
Mg	24	3	He	1.061	0.0054	260.01	0.0018	0.003497
Al	27	3	He	2.413	0.0021	100.01	0.0006	0.0006432
Al	27	3	He	2.777	0.0023	110.00	0.0006	0.0006432
Al	27	3	He	-0.035	0.0006	30.00	0.0006	0.0006432
K	39	3	He	-15.226	0.3773	18362.14	0.0012	0.3951
K	39	3	He	-0.324	0.3947	19143.05	0.0012	0.3951
K	39	3	He	-4.099	0.3903	18792.75	0.0012	0.3951
Ca	44	3	He	8.486	0.0033	160.01	0.0001	0.002715
Ca	44	3	He	17.803	0.0039	190.01	0.0001	0.002715
Ca	44	3	He	-21.744	0.0012	60.00	0.0001	0.002715
Ti	47	3	He	0.635	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1.406	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	0.643	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.179	0.0288	1400.08	0.0219	0.02486
V	51	3	He	0.2	0.0292	1418.08	0.0219	0.02486
V	51	3	He	0.094	0.0269	1296.07	0.0219	0.02486
Cr	52	3	He	-0.079	0.0376	1830.17	0.0299	0.03997
Cr	52	3	He	-0.047	0.0386	1870.19	0.0299	0.03997
Cr	52	3	He	-0.024	0.0393	1890.20	0.0299	0.03997
Mn	55	3	He	0.195	0.0051	250.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.357	0.0072	350.02	0.0128	0.002639
Mn	55	3	He	0.15	0.0046	220.01	0.0128	0.002639
Fe	57	3	He	2.139	0.0027	130.01	0.0006	0.001429
Fe	57	3	He	-0.33	0.0012	60.00	0.0006	0.001429
Fe	57	3	He	2.546	0.0029	140.01	0.0006	0.001429
Co	59	3	He	0.093	0.0074	360.02	0.0563	0.002149
Co	59	3	He	0.064	0.0058	280.02	0.0563	0.002149
Co	59	3	He	0.065	0.0058	280.01	0.0563	0.002149
Ni	60	3	He	0.055	0.0033	270.01	0.0086	0.002834
Ni	60	3	He	0.083	0.0035	290.02	0.0086	0.002834
Ni	60	3	He	0.104	0.0037	310.01	0.0086	0.002834
Cu	63	3	He	0.053	0.0061	500.03	0.0257	0.004757
Cu	63	3	He	0.015	0.0051	420.03	0.0257	0.004757
Cu	63	3	He	0.138	0.0083	690.04	0.0257	0.004757
Zn	66	3	He	3.107	0.0129	1050.07	0.0029	0.003818
Zn	66	3	He	2.977	0.0125	1020.07	0.0029	0.003818
Zn	66	3	He	2.9	0.0123	1020.07	0.0029	0.003818
As	75	3	He	0.097	0.001	82.00	0.002	0.0008061
As	75	3	He	0.228	0.0013	104.00	0.002	0.0008061
As	75	3	He	0.181	0.0012	98.00	0.002	0.0008061
Sr	88	3	He	0.097	0.0018	160.01	0.009	0.0009645
Sr	88	3	He	0.049	0.0014	120.01	0.009	0.0009645
Sr	88	3	He	-0.005	0.0009	80.00	0.009	0.0009645
Mo	98	3	He	0.066	0.0017	150.01	0.0219	0.0002706
Mo	98	3	He	0.03	0.0009	80.00	0.0219	0.0002706
Mo	98	3	He	0.077	0.002	170.01	0.0219	0.0002706
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.026	0.0001	12.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	0.213	0.0198	1730.20	0.0158	0.01648
Sn	120	3	He	0.03	0.0169	1450.13	0.0158	0.01648
Sn	120	3	He	-0.011	0.0163	1420.12	0.0158	0.01648
Sb	121	3	He	0.02	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.037	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.067	0.0013	110.00	0.0149	0.0002698
Ba	137	3	He	0.047	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.049	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.071	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.079	0.0021	830.06	0.0247	0.0001339
Tl	205	3	He	0.062	0.0017	660.04	0.0247	0.0001339
Tl	205	3	He	0.085	0.0022	890.05	0.0247	0.0001339
Pb	208	3	He	0.011	0.0014	320.02	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	330.02	0.0327	0.00107
Pb	208	3	He	0.026	0.0019	370.02	0.0327	0.00107
U	238	3	He	0.037	0.0019	590.04	0.0493	7.55E-05
U	238	3	He	0.049	0.0025	760.05	0.0493	7.55E-05
U	238	3	He	0.047	0.0024	750.05	0.0493	7.55E-05
Sc	45	1	No Gas			2489832.78		
Sc	45	1	No Gas			2466892.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2445403.87		
Ge	72	1	No Gas			1185064.75		
Ge	72	1	No Gas			1197746.78		
Ge	72	1	No Gas			1193759.28		
Sc	45	2	H2			185844.70		
Sc	45	2	H2			183171.05		
Sc	45	2	H2			182816.89		
Ge	72	2	H2			156973.90		
Ge	72	2	H2			159067.25		
Ge	72	2	H2			158024.98		
In	115	2	H2			392930.11		
In	115	2	H2			389454.88		
In	115	2	H2			391114.76		
Sc	45	3	He			48662.31		
Sc	45	3	He			48501.60		
Sc	45	3	He			48150.24		
Ge	72	3	He			81633.26		
Ge	72	3	He			81703.99		
Ge	72	3	He			83201.19		
In	115	3	He			87182.53		
In	115	3	He			85562.72		
In	115	3	He			87152.95		
Tb	159	3	He			398612.34		
Tb	159	3	He			397265.81		
Tb	159	3	He			397441.60		
Bi	209	3	He			311897.30		
Bi	209	3	He			305189.94		
Bi	209	3	He			310863.10		

Quantitation Report

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Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

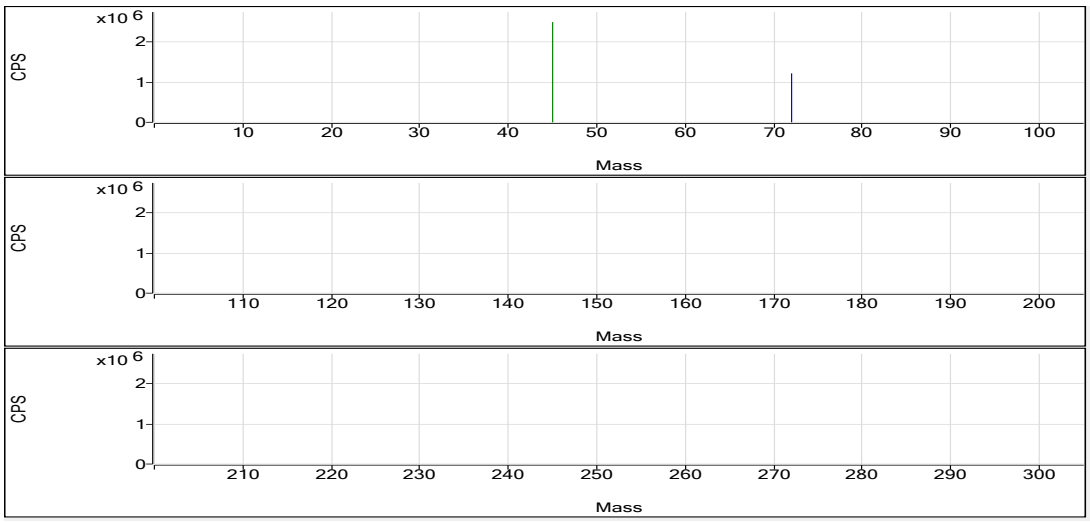
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	38.4	22.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.477	ppb	4.3	35.11	0.0002	Pulse	1.5000	3
Na	23	45	He	47838.433	ppb	0.6	8355358.00	171.4656	Analog	0.1000	3
Mg	24	45	He	15798.694	ppb	2.2	1381547.79	28.3514	Analog	0.1000	3
Al	27	45	He	2.525	ppb	71.2	103.34	0.0021	Pulse	0.1000	3
K	39	45	He	7589.788	ppb	0.3	449868.34	9.2321	Pulse	0.1000	3
Ca	44	45	He	105273.583	ppb	0.7	346665.87	7.1141	Pulse	0.1000	3
Ti	47	45	He	0.507	ppb	115.2	16.67	0.0003	Pulse	0.1000	3
V	51	45	He	0.045	ppb	43.8	1260.06	0.0259	Pulse	0.5000	3
Cr	52	45	He	0.420	ppb	25.7	2560.32	0.0525	Pulse	0.1000	3
Mn	55	45	He	17.040	ppb	6.4	10784.35	0.2213	Pulse	0.1000	3
Fe	57	45	He	17.205	ppb	10.5	556.70	0.0114	Pulse	0.1000	3
Co	59	45	He	0.532	ppb	8.0	1563.48	0.0321	Pulse	0.1000	3
Ni	60	72	He	1.617	ppb	6.4	1450.12	0.0167	Pulse	0.1000	3
Cu	63	72	He	1.203	ppb	2.8	3090.44	0.0356	Pulse	0.1000	3
Zn	66	72	He	4.997	ppb	0.2	1593.49	0.0184	Pulse	0.1000	3
As	75	72	He	0.027	ppb	396.9	74.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	452.206	ppb	1.4	358717.24	4.0572	Pulse	0.1000	3
Mo	98	115	He	0.399	ppb	13.8	796.72	0.0090	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	1527.6	56.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	108.2	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.266	ppb	N/A	1083.42	0.0123	Pulse	0.1000	3
Sb	121	115	He	0.012	ppb	165.3	40.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	107.845	ppb	1.0	45784.02	0.5178	Pulse	0.1000	3
Tl	205	159	He	0.026	ppb	41.0	313.35	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.040	ppb	0.8	963.39	0.0024	Pulse	0.1000	3
U	238	209	He	0.484	ppb	4.3	7392.39	0.0239	Pulse	0.1000	3

ISTD Table:

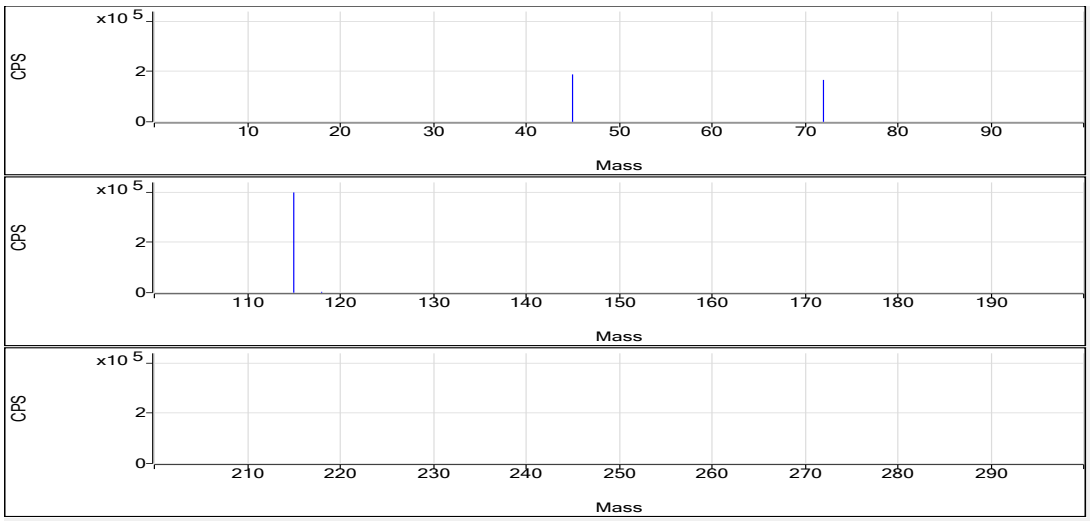
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2503933.45	0.3	104.4	Analog	0.1000	3
No Gas	Ge	72	1222960.87	0.8	106.0	Pulse	0.1000	3
H2	Sc	45	188053.33	1.1	100.6	Pulse	0.1000	3
H2	Ge	72	166234.36	0.9	101.5	Pulse	0.1000	3
H2	In	115	397520.33	0.8	102.2	Pulse	0.1000	3
He	Sc	45	48729.00	0.2	104.5	Pulse	0.1000	3
He	Ge	72	86756.05	0.8	106.9	Pulse	0.1000	3
He	In	115	88422.23	1.1	102.6	Pulse	0.1000	3
He	Tb	159	403013.70	1.0	101.1	Pulse	0.1000	3
He	Bi	209	308925.70	0.4	99.9	Pulse	0.1000	3

No Gas

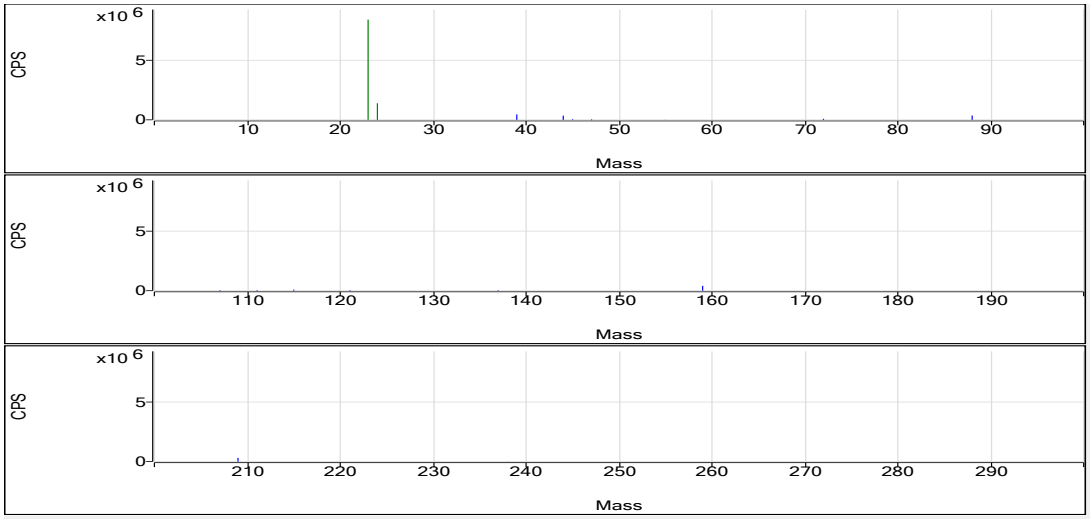


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	26.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Se	78	2	H2	0.466	0.0002	34.67	0.0004	1.219E-05
Se	78	2	H2	0.501	0.0002	36.67	0.0004	1.219E-05
Se	78	2	H2	0.465	0.0002	34.00	0.0004	1.219E-05
Na	23	3	He	48150.738	172.5827	8415564.25	0.0036	0.3452
Na	23	3	He	47638.182	170.7493	8329571.13	0.0036	0.3452
Na	23	3	He	47726.379	171.0648	8320938.63	0.0036	0.3452
Mg	24	3	He	15492.244	27.8016	1355674.04	0.0018	0.003497
Mg	24	3	He	16184.873	29.0444	1416856.07	0.0018	0.003497
Mg	24	3	He	15718.966	28.2084	1372113.26	0.0018	0.003497
Al	27	3	He	1.004	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	4.507	0.0033	160.01	0.0006	0.0006432
Al	27	3	He	2.063	0.0019	90.00	0.0006	0.0006432
K	39	3	He	7610.074	9.2557	451330.03	0.0012	0.3951
K	39	3	He	7559.808	9.1972	448659.80	0.0012	0.3951
K	39	3	He	7599.482	9.2433	449615.19	0.0012	0.3951
Ca	44	3	He	104590.226	7.068	344652.57	0.0001	0.002715
Ca	44	3	He	106054.894	7.1669	349620.31	0.0001	0.002715
Ca	44	3	He	105175.63	7.1075	345724.72	0.0001	0.002715
Ti	47	3	He	1.015	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.635	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.047	0.0259	1262.06	0.0219	0.02486
V	51	3	He	0.065	0.0263	1282.06	0.0219	0.02486
V	51	3	He	0.025	0.0254	1236.06	0.0219	0.02486
Cr	52	3	He	0.453	0.0535	2610.33	0.0299	0.03997
Cr	52	3	He	0.507	0.0551	2690.34	0.0299	0.03997
Cr	52	3	He	0.299	0.0489	2380.28	0.0299	0.03997
Mn	55	3	He	16.739	0.2175	10604.17	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	16.125	0.2096	10223.94	0.0128	0.002639
Mn	55	3	He	18.256	0.2369	11524.93	0.0128	0.002639
Fe	57	3	He	15.191	0.0103	500.03	0.0006	0.001429
Fe	57	3	He	18.712	0.0123	600.03	0.0006	0.001429
Fe	57	3	He	17.712	0.0117	570.04	0.0006	0.001429
Co	59	3	He	0.483	0.0293	1430.13	0.0563	0.002149
Co	59	3	He	0.559	0.0336	1640.16	0.0563	0.002149
Co	59	3	He	0.554	0.0333	1620.16	0.0563	0.002149
Ni	60	3	He	1.694	0.0174	1520.12	0.0086	0.002834
Ni	60	3	He	1.657	0.0171	1470.13	0.0086	0.002834
Ni	60	3	He	1.5	0.0157	1360.11	0.0086	0.002834
Cu	63	3	He	1.164	0.0346	3030.44	0.0257	0.004757
Cu	63	3	He	1.216	0.036	3100.45	0.0257	0.004757
Cu	63	3	He	1.228	0.0363	3140.42	0.0257	0.004757
Zn	66	3	He	5.008	0.0184	1610.16	0.0029	0.003818
Zn	66	3	He	4.986	0.0183	1580.17	0.0029	0.003818
Zn	66	3	He	4.997	0.0184	1590.14	0.0029	0.003818
As	75	3	He	-0.048	0.0007	62.00	0.002	0.0008061
As	75	3	He	0.15	0.0011	96.00	0.002	0.0008061
As	75	3	He	-0.021	0.0008	66.00	0.002	0.0008061
Sr	88	3	He	459.151	4.1195	360116.75	0.009	0.0009645
Sr	88	3	He	450.371	4.0407	361251.24	0.009	0.0009645
Sr	88	3	He	447.095	4.0113	354783.74	0.009	0.0009645
Mo	98	3	He	0.462	0.0104	910.06	0.0219	0.0002706
Mo	98	3	He	0.37	0.0084	750.05	0.0219	0.0002706
Mo	98	3	He	0.364	0.0083	730.04	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.025	0.0001	12.00	0.0053	0
Sn	120	3	He	-0.109	0.0148	1290.12	0.0158	0.01648
Sn	120	3	He	-0.413	0.01	890.06	0.0158	0.01648
Sn	120	3	He	-0.277	0.0121	1070.09	0.0158	0.01648
Sb	121	3	He	0.036	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Ba	137	3	He	108.081	0.5189	45365.70	0.0048	0.0002317
Ba	137	3	He	106.617	0.5119	45767.50	0.0048	0.0002317
Ba	137	3	He	108.835	0.5226	46218.85	0.0048	0.0002317
Tl	205	3	He	0.025	0.0008	310.02	0.0247	0.0001339
Tl	205	3	He	0.037	0.0011	420.02	0.0247	0.0001339
Tl	205	3	He	0.016	0.0005	210.01	0.0247	0.0001339
Pb	208	3	He	0.04	0.0024	570.03	0.0327	0.00107
Pb	208	3	He	0.041	0.0024	540.03	0.0327	0.00107
Pb	208	3	He	0.04	0.0024	600.04	0.0327	0.00107
U	238	3	He	0.494	0.0244	7532.48	0.0493	7.55E-05
U	238	3	He	0.499	0.0246	7642.48	0.0493	7.55E-05
U	238	3	He	0.46	0.0227	7002.20	0.0493	7.55E-05
Sc	45	1	No Gas			2512384.34		
Sc	45	1	No Gas			2499130.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2500285.12		
Ge	72	1	No Gas			1232042.25		
Ge	72	1	No Gas			1223596.54		
Ge	72	1	No Gas			1213243.81		
Sc	45	2	H2			190231.48		
Sc	45	2	H2			187809.80		
Sc	45	2	H2			186118.71		
Ge	72	2	H2			167876.85		
Ge	72	2	H2			165791.50		
Ge	72	2	H2			165034.72		
In	115	2	H2			400928.67		
In	115	2	H2			395019.37		
In	115	2	H2			396612.96		
Sc	45	3	He			48762.50		
Sc	45	3	He			48782.47		
Sc	45	3	He			48642.04		
Ge	72	3	He			87507.39		
Ge	72	3	He			86179.55		
Ge	72	3	He			86581.22		
In	115	3	He			87424.67		
In	115	3	He			89407.89		
In	115	3	He			88450.91		
Tb	159	3	He			407619.25		
Tb	159	3	He			399825.54		
Tb	159	3	He			401596.32		
Bi	209	3	He			308723.51		
Bi	209	3	He			310238.12		
Bi	209	3	He			307815.46		

Quantitation Report

Data File Name	139SMPL.d
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Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

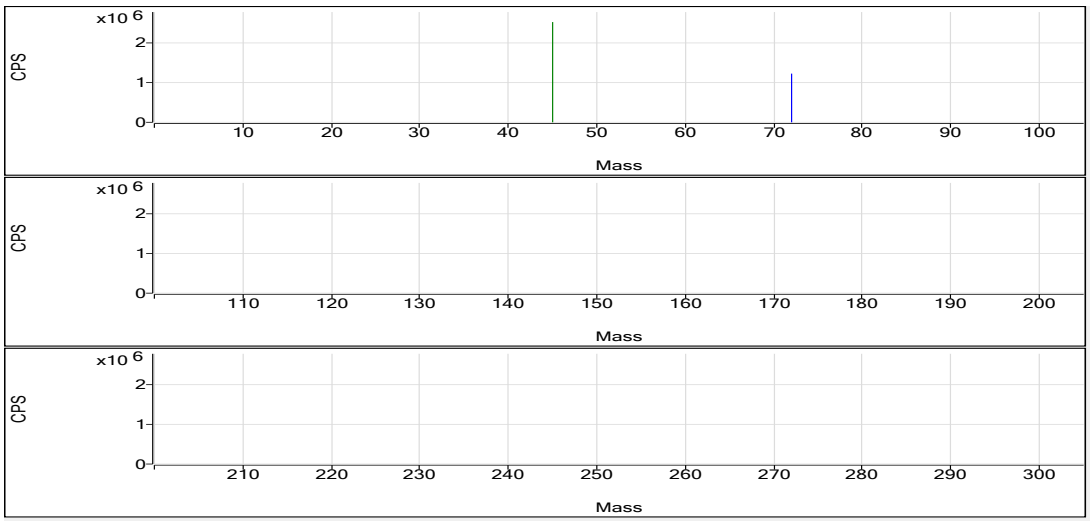
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	96.2	20.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.655	ppb	13.7	47.33	0.0003	Pulse	1.5000	3
Na	23	45	He	58399.974	ppb	1.8	10148257.14	209.2447	Analog	0.1000	3
Mg	24	45	He	15966.428	ppb	0.8	1389798.11	28.6524	Analog	0.1000	3
Al	27	45	He	4.644	ppb	27.0	163.34	0.0034	Pulse	0.1000	3
K	39	45	He	6347.231	ppb	2.4	377537.00	7.7853	Pulse	0.1000	3
Ca	44	45	He	109505.155	ppb	2.6	358833.08	7.4000	Pulse	0.1000	3
Ti	47	45	He	0.254	ppb	153.6	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.020	ppb	91.8	1226.73	0.0253	Pulse	0.5000	3
Cr	52	45	He	0.820	ppb	10.4	3130.45	0.0645	Pulse	0.1000	3
Mn	55	45	He	4.776	ppb	4.5	3100.42	0.0639	Pulse	0.1000	3
Fe	57	45	He	20.114	ppb	5.6	636.71	0.0131	Pulse	0.1000	3
Co	59	45	He	0.752	ppb	5.4	2156.90	0.0445	Pulse	0.1000	3
Ni	60	72	He	2.907	ppb	2.9	2390.28	0.0278	Pulse	0.1000	3
Cu	63	72	He	1.200	ppb	5.9	3060.44	0.0356	Pulse	0.1000	3
Zn	66	72	He	5.597	ppb	9.3	1730.17	0.0201	Pulse	0.1000	3
As	75	72	He	-0.027	ppb	N/A	64.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	450.558	ppb	1.0	358965.33	4.0424	Pulse	0.1000	3
Mo	98	115	He	0.486	ppb	9.5	970.07	0.0109	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	306.6	63.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	99.9	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.285	ppb	N/A	1063.42	0.0120	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	98.184	ppb	1.2	41864.69	0.4715	Pulse	0.1000	3
Tl	205	159	He	0.018	ppb	44.8	230.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.043	ppb	29.6	1003.39	0.0025	Pulse	0.1000	3
U	238	209	He	0.318	ppb	1.3	4894.45	0.0158	Pulse	0.1000	3

ISTD Table:

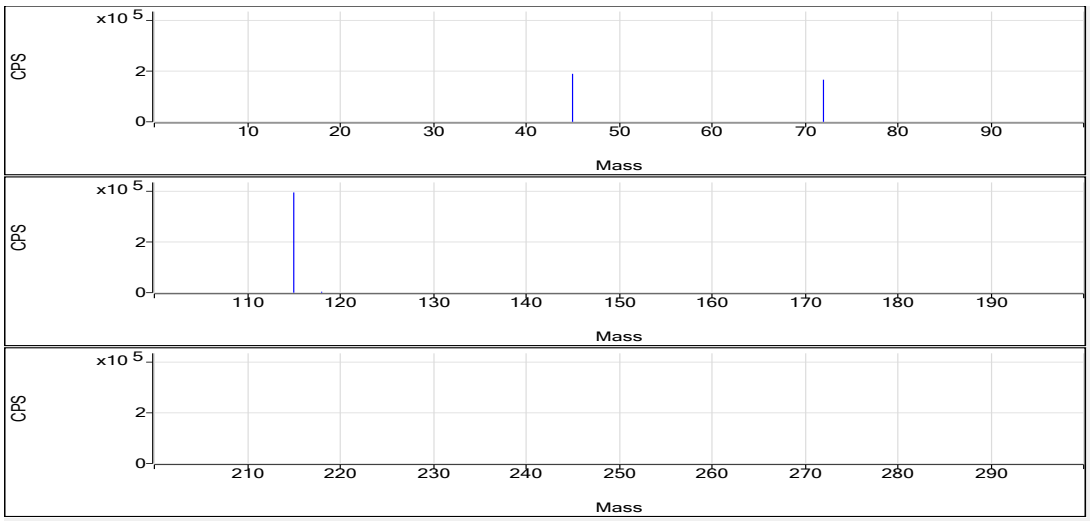
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2516287.72	1.2	104.9	Analog	0.1000	3
No Gas	Ge	72	1221778.63	1.1	105.9	Pulse	0.1000	3
H2	Sc	45	189102.04	1.2	101.1	Pulse	0.1000	3
H2	Ge	72	165927.73	0.4	101.4	Pulse	0.1000	3
H2	In	115	394829.91	0.2	101.5	Pulse	0.1000	3
He	Sc	45	48511.80	2.5	104.0	Pulse	0.1000	3
He	Ge	72	86038.15	0.6	106.0	Pulse	0.1000	3
He	In	115	88801.08	0.2	103.0	Pulse	0.1000	3
He	Tb	159	403853.00	0.3	101.3	Pulse	0.1000	3
He	Bi	209	310574.80	1.0	100.4	Pulse	0.1000	3

No Gas

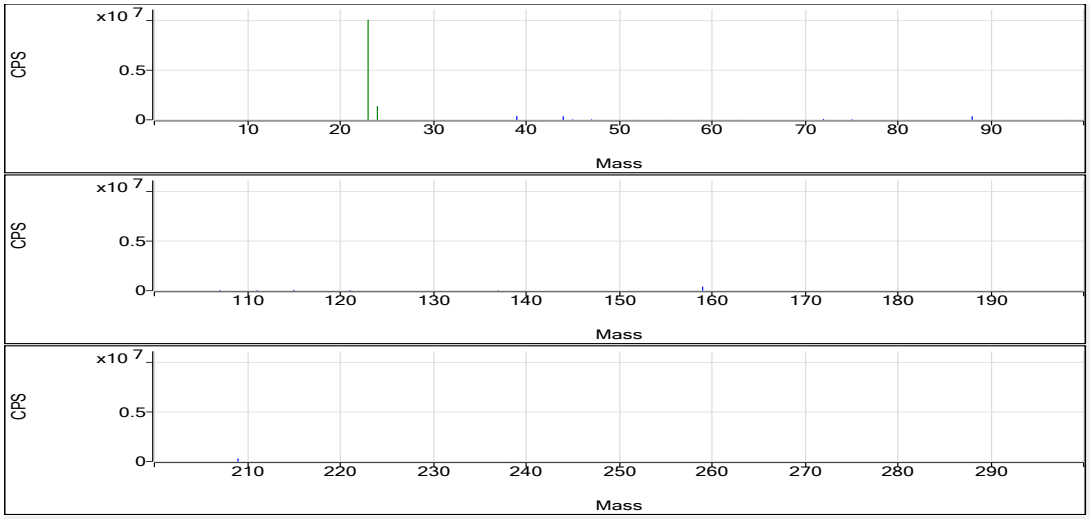


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Be	9	1	No Gas	0.001	0	14.00	0.0008	4.685E-06
Se	78	2	H2	0.711	0.0003	51.33	0.0004	1.219E-05
Se	78	2	H2	0.551	0.0002	40.00	0.0004	1.219E-05
Se	78	2	H2	0.701	0.0003	50.67	0.0004	1.219E-05
Na	23	3	He	59493.382	213.1559	10201560.47	0.0036	0.3452
Na	23	3	He	58356.652	209.0898	9983927.35	0.0036	0.3452
Na	23	3	He	57349.889	205.4885	10259283.60	0.0036	0.3452
Mg	24	3	He	16062.219	28.8243	1379519.51	0.0018	0.003497
Mg	24	3	He	16015.225	28.74	1372318.42	0.0018	0.003497
Mg	24	3	He	15821.841	28.393	1417556.39	0.0018	0.003497
Al	27	3	He	5.33	0.0038	180.01	0.0006	0.0006432
Al	27	3	He	3.197	0.0025	120.01	0.0006	0.0006432
Al	27	3	He	5.406	0.0038	190.01	0.0006	0.0006432
K	39	3	He	6434.328	7.8867	377455.70	0.0012	0.3951
K	39	3	He	6433.491	7.8858	376540.50	0.0012	0.3951
K	39	3	He	6173.874	7.5835	378614.80	0.0012	0.3951
Ca	44	3	He	110631.577	7.4761	357802.77	0.0001	0.002715
Ca	44	3	He	111579.828	7.5401	360038.00	0.0001	0.002715
Ca	44	3	He	106304.061	7.1838	358658.47	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.65	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.243	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.036	0.0257	1228.06	0.0219	0.02486
V	51	3	He	0.022	0.0253	1210.06	0.0219	0.02486
V	51	3	He	0.001	0.0249	1242.06	0.0219	0.02486
Cr	52	3	He	0.877	0.0662	3170.47	0.0299	0.03997
Cr	52	3	He	0.722	0.0616	2940.41	0.0299	0.03997
Cr	52	3	He	0.859	0.0657	3280.48	0.0299	0.03997
Mn	55	3	He	5.021	0.0671	3210.45	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4.691	0.0628	3000.39	0.0128	0.002639
Mn	55	3	He	4.618	0.0619	3090.43	0.0128	0.002639
Fe	57	3	He	19.12	0.0125	600.04	0.0006	0.001429
Fe	57	3	He	19.891	0.013	620.03	0.0006	0.001429
Fe	57	3	He	21.33	0.0138	690.05	0.0006	0.001429
Co	59	3	He	0.775	0.0458	2190.22	0.0563	0.002149
Co	59	3	He	0.777	0.0459	2190.23	0.0563	0.002149
Co	59	3	He	0.706	0.0419	2090.24	0.0563	0.002149
Ni	60	3	He	3.002	0.0286	2460.31	0.0086	0.002834
Ni	60	3	He	2.872	0.0275	2350.25	0.0086	0.002834
Ni	60	3	He	2.846	0.0273	2360.27	0.0086	0.002834
Cu	63	3	He	1.119	0.0335	2880.39	0.0257	0.004757
Cu	63	3	He	1.232	0.0364	3110.47	0.0257	0.004757
Cu	63	3	He	1.25	0.0369	3190.45	0.0257	0.004757
Zn	66	3	He	5.836	0.0208	1790.18	0.0029	0.003818
Zn	66	3	He	5.959	0.0212	1810.18	0.0029	0.003818
Zn	66	3	He	4.997	0.0184	1590.15	0.0029	0.003818
As	75	3	He	-0.03	0.0007	64.00	0.002	0.0008061
As	75	3	He	-0.051	0.0007	60.00	0.002	0.0008061
As	75	3	He	0.001	0.0008	70.00	0.002	0.0008061
Sr	88	3	He	450.241	4.0395	359561.01	0.009	0.0009645
Sr	88	3	He	446.4	4.0051	355640.78	0.009	0.0009645
Sr	88	3	He	455.032	4.0825	361694.21	0.009	0.0009645
Mo	98	3	He	0.5	0.0112	1000.07	0.0219	0.0002706
Mo	98	3	He	0.435	0.0098	870.06	0.0219	0.0002706
Mo	98	3	He	0.523	0.0117	1040.08	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	-0.332	0.0112	1000.07	0.0158	0.01648
Sn	120	3	He	-0.28	0.0121	1070.09	0.0158	0.01648
Sn	120	3	He	-0.243	0.0126	1120.09	0.0158	0.01648
Sb	121	3	He	-0.011	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.012	0.0005	40.00	0.0149	0.0002698
Ba	137	3	He	96.824	0.4649	41383.01	0.0048	0.0002317
Ba	137	3	He	98.799	0.4744	42125.33	0.0048	0.0002317
Ba	137	3	He	98.93	0.475	42085.73	0.0048	0.0002317
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Tl	205	3	He	0.015	0.0005	200.01	0.0247	0.0001339
Tl	205	3	He	0.027	0.0008	320.01	0.0247	0.0001339
Pb	208	3	He	0.04	0.0024	600.04	0.0327	0.00107
Pb	208	3	He	0.057	0.0029	600.03	0.0327	0.00107
Pb	208	3	He	0.032	0.0021	460.03	0.0327	0.00107
U	238	3	He	0.317	0.0157	4921.10	0.0493	7.55E-05
U	238	3	He	0.315	0.0156	4851.12	0.0493	7.55E-05
U	238	3	He	0.323	0.016	4911.13	0.0493	7.55E-05
Sc	45	1	No Gas			2519568.71		
Sc	45	1	No Gas			2484541.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2544752.77		
Ge	72	1	No Gas			1234613.50		
Ge	72	1	No Gas			1206946.00		
Ge	72	1	No Gas			1223776.39		
Sc	45	2	H2			191058.94		
Sc	45	2	H2			186654.39		
Sc	45	2	H2			189592.79		
Ge	72	2	H2			166197.28		
Ge	72	2	H2			165246.68		
Ge	72	2	H2			166339.24		
In	115	2	H2			394479.25		
In	115	2	H2			395917.49		
In	115	2	H2			394093.00		
Sc	45	3	He			47859.62		
Sc	45	3	He			47749.48		
Sc	45	3	He			49926.31		
Ge	72	3	He			86027.21		
Ge	72	3	He			85515.70		
Ge	72	3	He			86571.54		
In	115	3	He			89015.30		
In	115	3	He			88802.81		
In	115	3	He			88601.98		
Tb	159	3	He			402336.09		
Tb	159	3	He			404285.19		
Tb	159	3	He			404937.73		
Bi	209	3	He			313183.96		
Bi	209	3	He			311180.01		
Bi	209	3	He			307360.44		

Quantitation Report

Data File Name	140SMPL.d
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Sample Name	410-137632-G-4-A
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

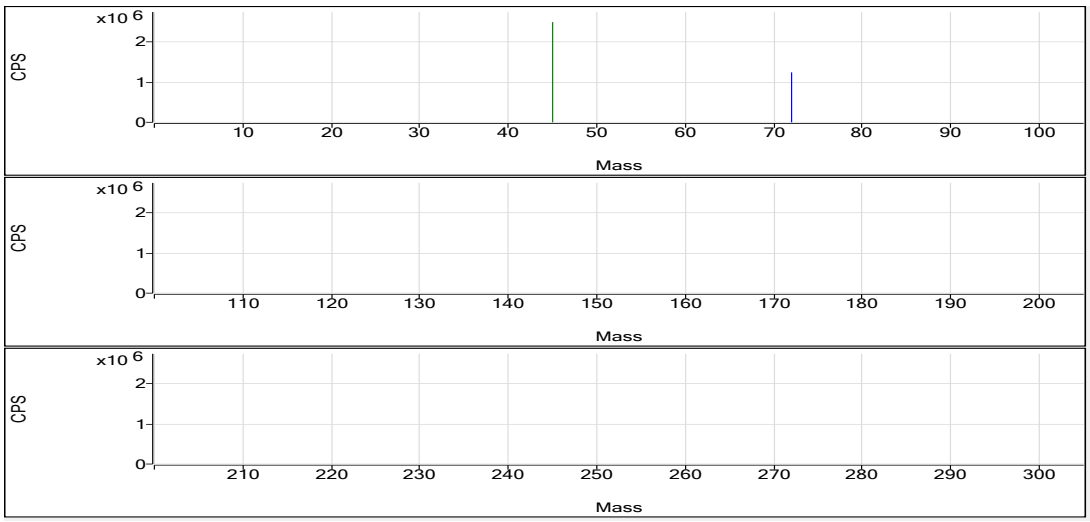
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	92.4	28.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.145	ppb	46.9	12.22	0.0001	Pulse	1.5000	3
Na	23	45	He	27454.367	ppb	1.9	4682112.33	98.5508	Analog	0.1000	3
Mg	24	45	He	3615.532	ppb	2.5	308354.96	6.4909	Pulse	0.1000	3
Al	27	45	He	43.681	ppb	34.9	1250.67	0.0262	Pulse	0.1000	3
K	39	45	He	7721.902	ppb	2.5	445891.02	9.3859	Pulse	0.1000	3
Ca	44	45	He	18290.548	ppb	0.9	58843.01	1.2383	Pulse	0.1000	3
Ti	47	45	He	3.305	ppb	88.8	86.68	0.0018	Pulse	0.1000	3
V	51	45	He	2.227	ppb	4.9	3493.77	0.0735	Pulse	0.5000	3
Cr	52	45	He	-0.046	ppb	N/A	1833.51	0.0386	Pulse	0.1000	3
Mn	55	45	He	33.616	ppb	2.1	20621.95	0.4341	Pulse	0.1000	3
Fe	57	45	He	34.045	ppb	10.0	1006.78	0.0212	Pulse	0.1000	3
Co	59	45	He	0.325	ppb	14.7	970.07	0.0204	Pulse	0.1000	3
Ni	60	72	He	0.779	ppb	12.4	836.72	0.0095	Pulse	0.1000	3
Cu	63	72	He	1.258	ppb	4.5	3257.14	0.0370	Pulse	0.1000	3
Zn	66	72	He	6.192	ppb	5.6	1920.19	0.0218	Pulse	0.1000	3
As	75	72	He	1.275	ppb	8.8	300.67	0.0034	Pulse	0.5000	3
Sr	88	115	He	154.549	ppb	1.9	123971.10	1.3872	Pulse	0.1000	3
Mo	98	115	He	4.980	ppb	1.5	9783.72	0.1095	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	40.00	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.015	ppb	77.5	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.251	ppb	3.5	1826.86	0.0204	Pulse	0.1000	3
Sb	121	115	He	0.783	ppb	10.1	1063.41	0.0119	Pulse	0.1000	3
Ba	137	115	He	50.621	ppb	0.5	21734.56	0.2432	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	21.6	280.02	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.044	ppb	26.9	1003.39	0.0025	Pulse	0.1000	3
U	238	209	He	0.012	ppb	44.3	213.34	0.0007	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2495434.96	0.4	104.0	Analog	0.1000	3
No Gas	Ge	72	1243321.36	0.4	107.8	Pulse	0.1000	3
H2	Sc	45	189615.59	0.6	101.4	Pulse	0.1000	3
H2	Ge	72	168264.65	0.8	102.8	Pulse	0.1000	3
H2	In	115	399158.96	0.4	102.6	Pulse	0.1000	3
He	Sc	45	47521.74	2.0	101.9	Pulse	0.1000	3
He	Ge	72	87916.98	1.1	108.3	Pulse	0.1000	3
He	In	115	89377.82	1.2	103.7	Pulse	0.1000	3
He	Tb	159	402570.91	1.5	101.0	Pulse	0.1000	3
He	Bi	209	319174.66	0.4	103.2	Pulse	0.1000	3

No Gas



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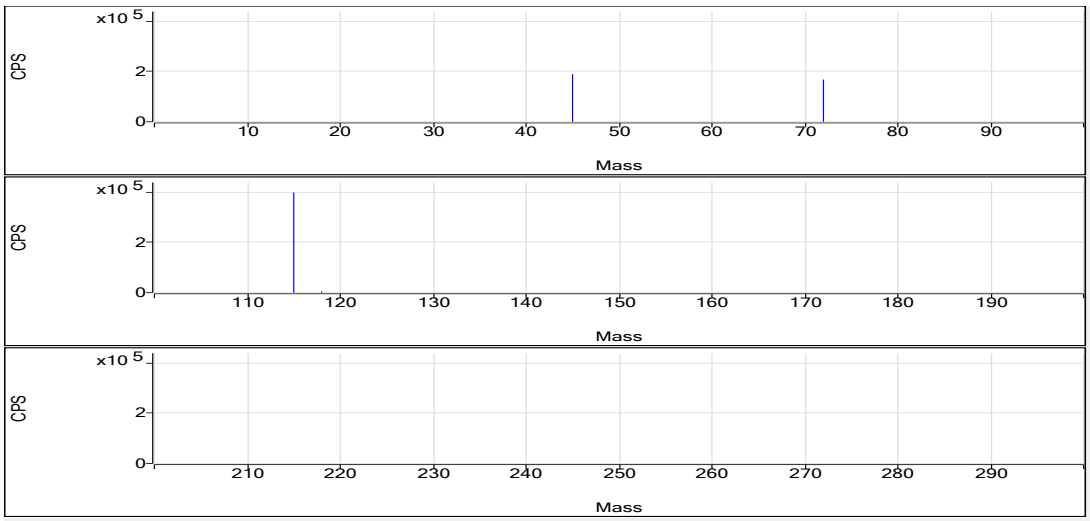
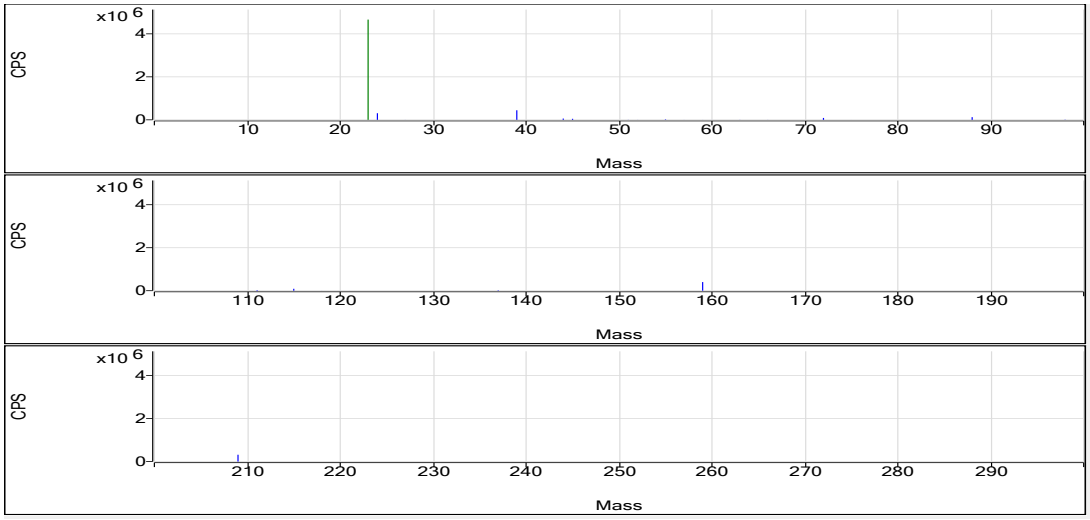


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Se	78	2	H2	0.066	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.187	0.0001	15.33	0.0004	1.219E-05
Se	78	2	H2	0.18	0.0001	14.67	0.0004	1.219E-05
Na	23	3	He	27409.989	98.392	4696146.49	0.0036	0.3452
Na	23	3	He	26954.232	96.7618	4679554.93	0.0036	0.3452
Na	23	3	He	27998.879	100.4985	4670635.56	0.0036	0.3452
Mg	24	3	He	3583.718	6.4338	307080.29	0.0018	0.003497
Mg	24	3	He	3543.567	6.3618	307666.77	0.0018	0.003497
Mg	24	3	He	3719.311	6.6771	310317.83	0.0018	0.003497
Al	27	3	He	47.624	0.0285	1360.51	0.0006	0.0006432
Al	27	3	He	56.561	0.0337	1631.41	0.0006	0.0006432
Al	27	3	He	26.856	0.0164	760.10	0.0006	0.0006432
K	39	3	He	7695.862	9.3556	446531.01	0.0012	0.3951
K	39	3	He	7544.723	9.1796	443939.68	0.0012	0.3951
K	39	3	He	7925.122	9.6225	447202.38	0.0012	0.3951
Ca	44	3	He	18103.6	1.2256	58498.85	0.0001	0.002715
Ca	44	3	He	18366.997	1.2434	60134.79	0.0001	0.002715
Ca	44	3	He	18401.047	1.2457	57895.39	0.0001	0.002715
Ti	47	3	He	1.821	0.001	50.00	0.0005	7.003E-05
Ti	47	3	He	1.41	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	6.684	0.0037	170.05	0.0005	7.003E-05
V	51	3	He	2.289	0.0749	3574.46	0.0219	0.02486
V	51	3	He	2.102	0.0708	3424.42	0.0219	0.02486
V	51	3	He	2.29	0.0749	3482.44	0.0219	0.02486
Cr	52	3	He	0.009	0.0402	1920.18	0.0299	0.03997
Cr	52	3	He	-0.14	0.0358	1730.17	0.0299	0.03997
Cr	52	3	He	-0.005	0.0398	1850.18	0.0299	0.03997
Mn	55	3	He	33.122	0.4277	20414.95	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	33.299	0.43	20795.41	0.0128	0.002639
Mn	55	3	He	34.425	0.4444	20655.48	0.0128	0.002639
Fe	57	3	He	31.443	0.0197	940.12	0.0006	0.001429
Fe	57	3	He	32.779	0.0205	990.10	0.0006	0.001429
Fe	57	3	He	37.913	0.0235	1090.11	0.0006	0.001429
Co	59	3	He	0.345	0.0216	1030.07	0.0563	0.002149
Co	59	3	He	0.27	0.0174	840.06	0.0563	0.002149
Co	59	3	He	0.359	0.0224	1040.07	0.0563	0.002149
Ni	60	3	He	0.678	0.0087	770.05	0.0086	0.002834
Ni	60	3	He	0.871	0.0103	900.06	0.0086	0.002834
Ni	60	3	He	0.789	0.0096	840.06	0.0086	0.002834
Cu	63	3	He	1.268	0.0373	3320.48	0.0257	0.004757
Cu	63	3	He	1.309	0.0384	3350.50	0.0257	0.004757
Cu	63	3	He	1.196	0.0355	3100.45	0.0257	0.004757
Zn	66	3	He	5.867	0.0209	1860.17	0.0029	0.003818
Zn	66	3	He	6.555	0.0229	2000.21	0.0029	0.003818
Zn	66	3	He	6.154	0.0217	1900.18	0.0029	0.003818
As	75	3	He	1.384	0.0036	324.01	0.002	0.0008061
As	75	3	He	1.283	0.0034	300.01	0.002	0.0008061
As	75	3	He	1.159	0.0032	278.00	0.002	0.0008061
Sr	88	3	He	151.282	1.3579	122981.88	0.009	0.0009645
Sr	88	3	He	157.138	1.4105	125181.74	0.009	0.0009645
Sr	88	3	He	155.228	1.3933	123749.68	0.009	0.0009645
Mo	98	3	He	4.98	0.1095	9913.81	0.0219	0.0002706
Mo	98	3	He	5.056	0.1111	9863.74	0.0219	0.0002706
Mo	98	3	He	4.904	0.1078	9573.60	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.009	0.0002	20.00	0.0465	0.0006206
Cd	111	3	He	0.029	0.0002	14.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Sn	120	3	He	0.257	0.0205	1860.20	0.0158	0.01648
Sn	120	3	He	0.241	0.0203	1800.18	0.0158	0.01648
Sn	120	3	He	0.254	0.0205	1820.20	0.0158	0.01648
Sb	121	3	He	0.703	0.0107	970.07	0.0149	0.0002698
Sb	121	3	He	0.862	0.0131	1160.08	0.0149	0.0002698
Sb	121	3	He	0.785	0.0119	1060.08	0.0149	0.0002698
Ba	137	3	He	50.517	0.2427	21978.27	0.0048	0.0002317
Ba	137	3	He	50.421	0.2422	21497.58	0.0048	0.0002317
Ba	137	3	He	50.925	0.2446	21727.83	0.0048	0.0002317
Tl	205	3	He	0.025	0.0008	310.02	0.0247	0.0001339
Tl	205	3	He	0.017	0.0006	220.01	0.0247	0.0001339
Tl	205	3	He	0.026	0.0008	310.02	0.0247	0.0001339
Pb	208	3	He	0.04	0.0024	430.03	0.0327	0.00107
Pb	208	3	He	0.057	0.0029	710.05	0.0327	0.00107
Pb	208	3	He	0.034	0.0022	510.03	0.0327	0.00107
U	238	3	He	0.006	0.0004	120.01	0.0493	7.55E-05
U	238	3	He	0.014	0.0008	240.01	0.0493	7.55E-05
U	238	3	He	0.016	0.0009	280.01	0.0493	7.55E-05
Sc	45	1	No Gas			2485293.87		
Sc	45	1	No Gas			2498326.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2502684.18		
Ge	72	1	No Gas			1245330.61		
Ge	72	1	No Gas			1238084.51		
Ge	72	1	No Gas			1246548.97		
Sc	45	2	H2			189844.43		
Sc	45	2	H2			188397.93		
Sc	45	2	H2			190604.41		
Ge	72	2	H2			167075.37		
Ge	72	2	H2			169768.71		
Ge	72	2	H2			167949.86		
In	115	2	H2			397903.90		
In	115	2	H2			400682.53		
In	115	2	H2			398890.46		
Sc	45	3	He			47728.93		
Sc	45	3	He			48361.61		
Sc	45	3	He			46474.67		
Ge	72	3	He			88996.41		
Ge	72	3	He			87336.93		
Ge	72	3	He			87417.59		
In	115	3	He			90573.99		
In	115	3	He			88762.31		
In	115	3	He			88824.06		
Tb	159	3	He			408566.40		
Tb	159	3	He			396714.02		
Tb	159	3	He			402432.30		
Bi	209	3	He			320095.74		
Bi	209	3	He			319779.60		
Bi	209	3	He			317648.65		

Quantitation Report

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Acq Time	8/10/2023 3:27:19 PM
Sample Name	410-137327-J-1-A
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

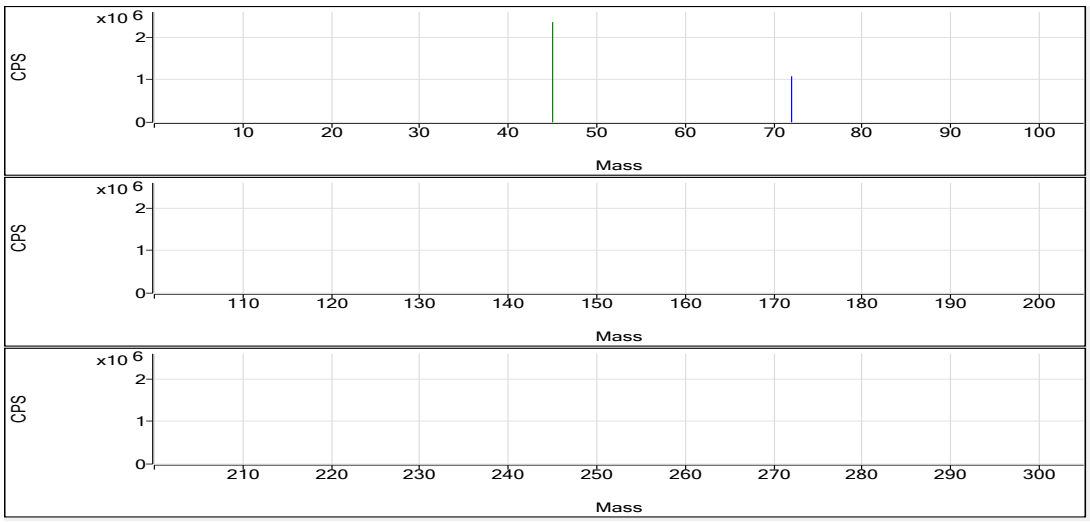
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.008	ppb	14.2	25.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.022	ppb	N/A	0.44	0.0000	Pulse	1.5000	3
Na	23	45	He	2193147.716	ppb	0.4	376209461.06	7 845.3420	Analog	0.1000	3
Mg	24	45	He	567221.442	ppb	0.5	48806185.94	1 017.7814	Analog	0.1000	3
Al	27	45	He	6.865	ppb	44.4	223.34	0.0047	Pulse	0.1000	3
K	39	45	He	10520.048	ppb	0.4	606314.23	12.6438	Pulse	0.1000	3
Ca	44	45	He	1003828.158	ppb	0.4	3251880.99	67.8132	Analog	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.493	ppb	15.0	1709.44	0.0356	Pulse	0.5000	3
Cr	52	45	He	-0.327	ppb	N/A	1446.79	0.0302	Pulse	0.1000	3
Mn	55	45	He	13503.341	ppb	0.4	8310381.13	173.3028	Analog	0.1000	3
Fe	57	45	He	395.638	ppb	3.5	11091.25	0.2313	Pulse	0.1000	3
Co	59	45	He	12.148	ppb	2.1	32888.19	0.6858	Pulse	0.1000	3
Ni	60	72	He	16.878	ppb	2.2	11841.91	0.1477	Pulse	0.1000	3
Cu	63	72	He	0.784	ppb	18.6	1996.87	0.0249	Pulse	0.1000	3
Zn	66	72	He	11.886	ppb	3.8	3080.43	0.0384	Pulse	0.1000	3
As	75	72	He	10.812	ppb	0.9	1840.80	0.0230	Pulse	0.5000	3
Sr	88	115	He	8980.464	ppb	2.1	6661175.94	80.5541	Analog	0.1000	3
Mo	98	115	He	3.443	ppb	2.8	6264.99	0.0758	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.005	ppb	100.7	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.271	ppb	N/A	1010.08	0.0122	Pulse	0.1000	3
Sb	121	115	He	0.009	ppb	53.8	33.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	349.024	ppb	1.9	138541.60	1.6753	Pulse	0.1000	3
Tl	205	159	He	0.003	ppb	89.4	80.00	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.065	ppb	9.7	1196.73	0.0032	Pulse	0.1000	3
U	238	209	He	9.426	ppb	0.8	124512.32	0.4644	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2358832.83	1.1	98.3	Analog	0.1000	3
No Gas	Ge	72	1083353.84	0.5	93.9	Pulse	0.1000	3
H2	Sc	45	189011.08	1.5	101.1	Pulse	0.1000	3
H2	Ge	72	155472.11	1.4	95.0	Pulse	0.1000	3
H2	In	115	359835.80	1.1	92.5	Pulse	0.1000	3
He	Sc	45	47953.25	0.2	102.8	Pulse	0.1000	3
He	Ge	72	80178.35	0.6	98.7	Pulse	0.1000	3
He	In	115	82710.30	1.6	96.0	Pulse	0.1000	3
He	Tb	159	375084.84	1.3	94.1	Pulse	0.1000	3
He	Bi	209	268128.95	0.5	86.7	Pulse	0.1000	3

No Gas



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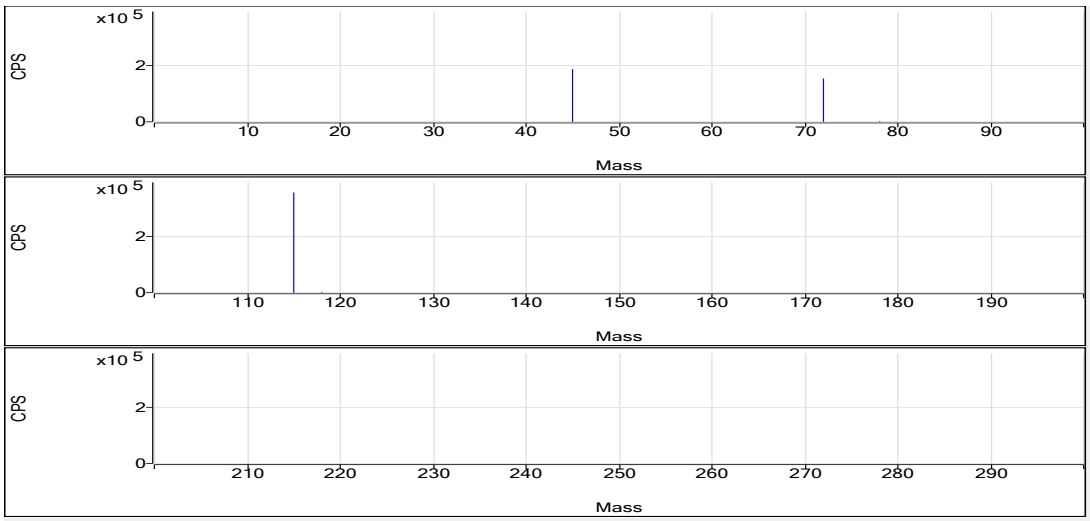
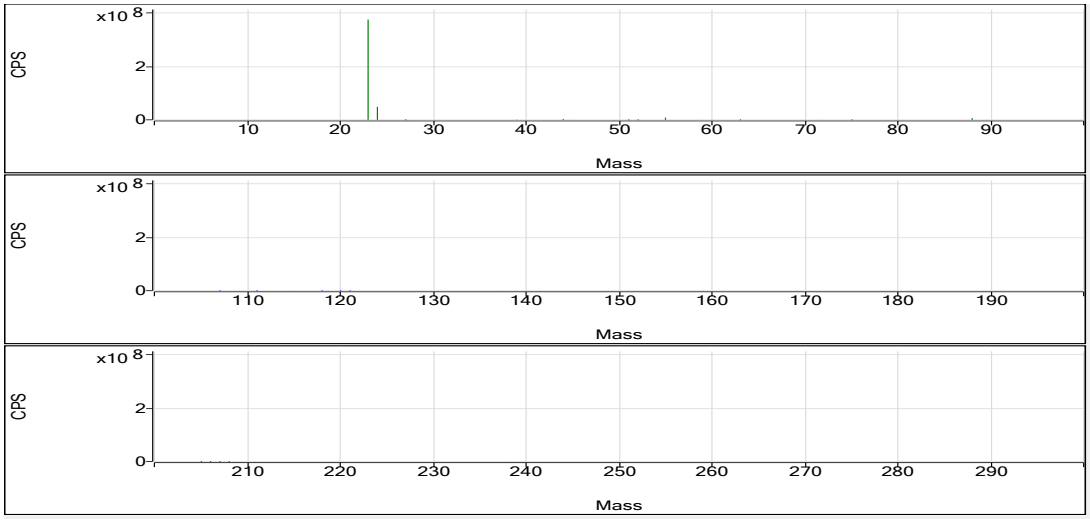


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	24.00	0.0008	4.685E-06
Se	78	2	H2	-0.029	0	0.00	0.0004	1.219E-05
Se	78	2	H2	-0.029	0	0.00	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Na	23	3	He	2204321.719	7885.3119	378177274.36	0.0036	0.3452
Na	23	3	He	2186270.223	7820.7409	375868794.40	0.0036	0.3452
Na	23	3	He	2188851.206	7829.9732	374582314.42	0.0036	0.3452
Mg	24	3	He	565194.483	1014.1444	48638069.28	0.0018	0.003497
Mg	24	3	He	570274.717	1023.2599	49178394.27	0.0018	0.003497
Mg	24	3	He	566195.126	1015.9398	48602094.28	0.0018	0.003497
Al	27	3	He	4.603	0.0033	160.01	0.0006	0.0006432
Al	27	3	He	5.658	0.004	190.01	0.0006	0.0006432
Al	27	3	He	10.334	0.0067	320.01	0.0006	0.0006432
K	39	3	He	10480.408	12.5977	604181.28	0.0012	0.3951
K	39	3	He	10553.84	12.6832	609560.26	0.0012	0.3951
K	39	3	He	10525.896	12.6506	605201.16	0.0012	0.3951
Ca	44	3	He	1001240.62	67.6384	3243919.33	0.0001	0.002715
Ca	44	3	He	1008548.459	68.1321	3274462.76	0.0001	0.002715
Ca	44	3	He	1001695.394	67.6691	3237260.89	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.417	0.034	1630.10	0.0219	0.02486
V	51	3	He	0.498	0.0357	1718.11	0.0219	0.02486
V	51	3	He	0.565	0.0372	1780.12	0.0219	0.02486
Cr	52	3	He	-0.29	0.0313	1500.15	0.0299	0.03997
Cr	52	3	He	-0.348	0.0295	1420.11	0.0299	0.03997
Cr	52	3	He	-0.344	0.0297	1420.12	0.0299	0.03997
Mn	55	3	He	13494.505	173.1894	8306115.50	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	13450.95	172.6305	8296708.00	0.0128	0.002639
Mn	55	3	He	13564.568	174.0886	8328319.88	0.0128	0.002639
Fe	57	3	He	380.261	0.2224	10664.18	0.0006	0.001429
Fe	57	3	He	406.344	0.2375	11414.90	0.0006	0.001429
Fe	57	3	He	400.308	0.234	11194.66	0.0006	0.001429
Co	59	3	He	11.879	0.6707	32166.57	0.0563	0.002149
Co	59	3	He	12.176	0.6874	33038.64	0.0563	0.002149
Co	59	3	He	12.389	0.6994	33459.35	0.0563	0.002149
Ni	60	3	He	17.253	0.1509	12025.43	0.0086	0.002834
Ni	60	3	He	16.854	0.1475	11905.31	0.0086	0.002834
Ni	60	3	He	16.528	0.1447	11594.98	0.0086	0.002834
Cu	63	3	He	0.617	0.0206	1640.14	0.0257	0.004757
Cu	63	3	He	0.852	0.0266	2150.22	0.0257	0.004757
Cu	63	3	He	0.884	0.0275	2200.25	0.0257	0.004757
Zn	66	3	He	12.397	0.0399	3180.44	0.0029	0.003818
Zn	66	3	He	11.54	0.0374	3020.42	0.0029	0.003818
Zn	66	3	He	11.72	0.0379	3040.43	0.0029	0.003818
As	75	3	He	10.706	0.0227	1812.13	0.002	0.0008061
As	75	3	He	10.83	0.023	1856.13	0.002	0.0008061
As	75	3	He	10.9	0.0231	1854.14	0.002	0.0008061
Sr	88	3	He	9028.11	80.9815	6667068.03	0.009	0.0009645
Sr	88	3	He	8772.399	78.6878	6622976.15	0.009	0.0009645
Sr	88	3	He	9140.884	81.993	6693483.65	0.009	0.0009645
Mo	98	3	He	3.451	0.0759	6251.65	0.0219	0.0002706
Mo	98	3	He	3.343	0.0736	6191.64	0.0219	0.0002706
Mo	98	3	He	3.536	0.0778	6351.69	0.0219	0.0002706
Ag	107	3	He	0.005	0.0009	70.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.32	0.0114	940.07	0.0158	0.01648
Sn	120	3	He	-0.17	0.0138	1160.09	0.0158	0.01648
Sn	120	3	He	-0.322	0.0114	930.07	0.0158	0.01648
Sb	121	3	He	0.015	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	0.007	0.0004	30.00	0.0149	0.0002698
Ba	137	3	He	354.604	1.7021	140130.78	0.0048	0.0002317
Ba	137	3	He	341.527	1.6393	137979.03	0.0048	0.0002317
Ba	137	3	He	350.941	1.6845	137515.00	0.0048	0.0002317
Tl	205	3	He	0.002	0.0002	70.00	0.0247	0.0001339
Tl	205	3	He	0.006	0.0003	110.00	0.0247	0.0001339
Tl	205	3	He	0.001	0.0002	60.00	0.0247	0.0001339
Pb	208	3	He	0.058	0.003	590.03	0.0327	0.00107
Pb	208	3	He	0.07	0.0034	690.05	0.0327	0.00107
Pb	208	3	He	0.066	0.0032	660.05	0.0327	0.00107
U	238	3	He	9.341	0.4602	123923.30	0.0493	7.55E-05
U	238	3	He	9.455	0.4658	125094.83	0.0493	7.55E-05
U	238	3	He	9.481	0.4671	124518.82	0.0493	7.55E-05
Sc	45	1	No Gas			2387954.96		
Sc	45	1	No Gas			2353135.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2335408.09		
Ge	72	1	No Gas			1087912.64		
Ge	72	1	No Gas			1077791.16		
Ge	72	1	No Gas			1084357.72		
Sc	45	2	H2			190785.95		
Sc	45	2	H2			185845.51		
Sc	45	2	H2			190401.79		
Ge	72	2	H2			158016.19		
Ge	72	2	H2			153791.37		
Ge	72	2	H2			154608.77		
In	115	2	H2			362928.67		
In	115	2	H2			361034.76		
In	115	2	H2			355543.98		
Sc	45	3	He			47959.71		
Sc	45	3	He			48060.51		
Sc	45	3	He			47839.54		
Ge	72	3	He			79682.22		
Ge	72	3	He			80718.59		
Ge	72	3	He			80134.24		
In	115	3	He			82334.33		
In	115	3	He			84173.86		
In	115	3	He			81639.55		
Tb	159	3	He			380595.03		
Tb	159	3	He			373661.05		
Tb	159	3	He			370998.43		
Bi	209	3	He			269271.27		
Bi	209	3	He			268537.22		
Bi	209	3	He			266578.36		

Quantitation Report

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Sample Type	Sample
Comment	D2
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

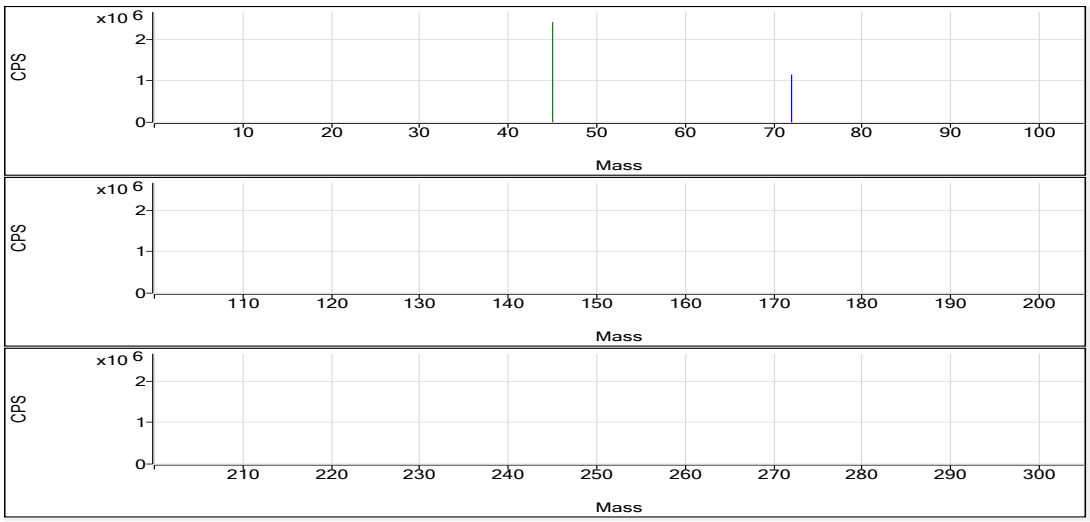
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	26.7	32.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.019	ppb	102.4	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	2476057.301	ppb	1.2	430723566.92	8 857.3234	Analog	0.1000	3
Mg	24	45	He	610326.666	ppb	1.6	53253387.54	1 095.1260	Analog	0.1000	3
Al	27	45	He	4.060	ppb	30.9	146.67	0.0030	Pulse	0.1000	3
K	39	45	He	19233.742	ppb	1.4	1108222.07	22.7894	Pulse	0.1000	3
Ca	44	45	He	1096604.597	ppb	1.3	3602420.57	74.0804	Analog	0.1000	3
Ti	47	45	He	0.252	ppb	151.0	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	1.323	ppb	1.8	2615.58	0.0538	Pulse	0.5000	3
Cr	52	45	He	-0.170	ppb	N/A	1696.83	0.0349	Pulse	0.1000	3
Mn	55	45	He	8856.859	ppb	1.1	5527697.83	113.6705	Analog	0.1000	3
Fe	57	45	He	1858.631	ppb	0.5	52583.20	1.0813	Pulse	0.1000	3
Co	59	45	He	6.940	ppb	1.5	19099.89	0.3927	Pulse	0.1000	3
Ni	60	72	He	11.005	ppb	0.9	8119.23	0.0973	Pulse	0.1000	3
Cu	63	72	He	0.082	ppb	44.6	573.37	0.0069	Pulse	0.1000	3
Zn	66	72	He	5.221	ppb	6.8	1586.81	0.0190	Pulse	0.1000	3
As	75	72	He	5.043	ppb	4.5	929.37	0.0111	Pulse	0.5000	3
Sr	88	115	He	13403.070	ppb	1.5	10027596.10	120.2241	Analog	0.1000	3
Mo	98	115	He	1.007	ppb	11.3	1863.53	0.0224	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	423.7	56.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	92.2	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.242	ppb	N/A	1056.75	0.0126	Pulse	0.1000	3
Sb	121	115	He	0.014	ppb	96.3	40.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	1551.085	ppb	1.3	620936.71	7.4444	Pulse	0.1000	3
Tl	205	159	He	0.011	ppb	52.3	153.34	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.007	ppb	69.0	483.35	0.0013	Pulse	0.1000	3
U	238	209	He	3.180	ppb	0.5	41755.31	0.1567	Pulse	0.1000	3

ISTD Table:

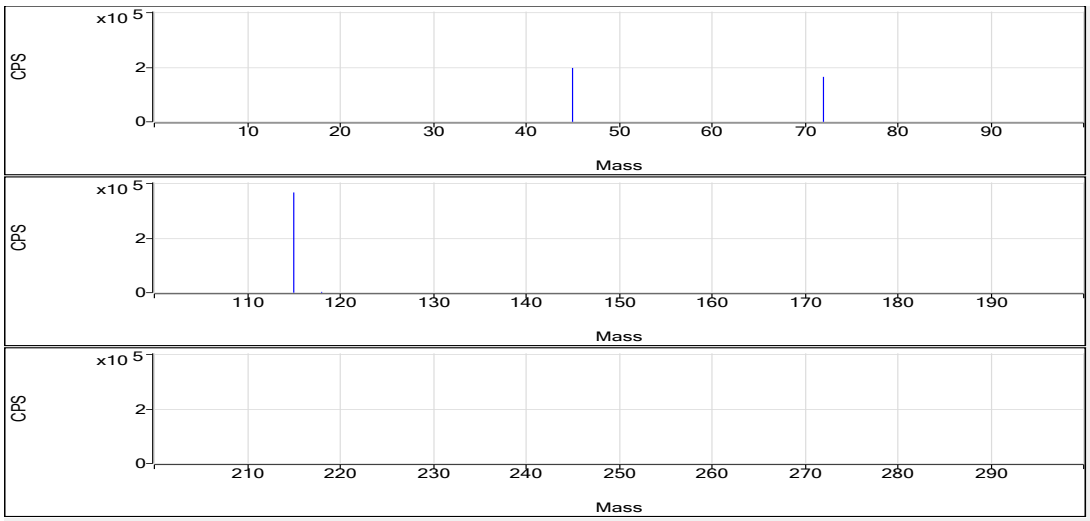
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2423427.15	0.8	101.0	Analog	0.1000	3
No Gas	Ge	72	1155477.69	0.7	100.2	Pulse	0.1000	3
H2	Sc	45	197591.96	0.3	105.7	Pulse	0.1000	3
H2	Ge	72	164915.96	0.7	100.7	Pulse	0.1000	3
H2	In	115	367637.31	0.4	94.5	Pulse	0.1000	3
He	Sc	45	48631.98	0.8	104.3	Pulse	0.1000	3
He	Ge	72	83452.99	0.6	102.8	Pulse	0.1000	3
He	In	115	83421.36	1.7	96.8	Pulse	0.1000	3
He	Tb	159	376764.64	1.2	94.5	Pulse	0.1000	3
He	Bi	209	266428.96	1.1	86.1	Pulse	0.1000	3

No Gas

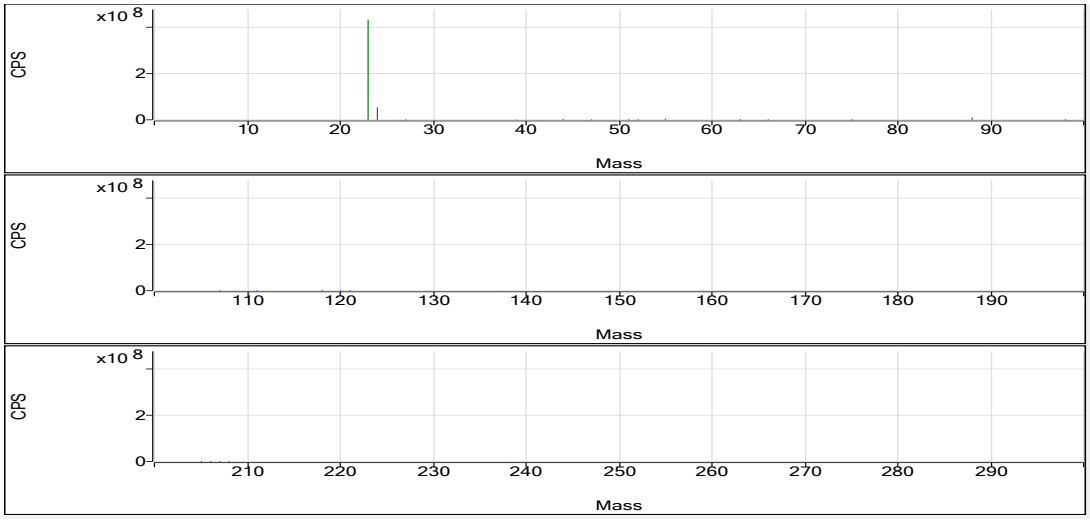


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.013	0	36.00	0.0008	4.685E-06
Be	9	1	No Gas	0.008	0	26.00	0.0008	4.685E-06
Be	9	1	No Gas	0.013	0	36.00	0.0008	4.685E-06
Se	78	2	H2	0.039	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.019	0	3.33	0.0004	1.219E-05
Na	23	3	He	2441278.238	8732.917	428207233.62	0.0036	0.3452
Na	23	3	He	2494682.847	8923.9479	430406113.59	0.0036	0.3452
Na	23	3	He	2492210.819	8915.1054	433557353.54	0.0036	0.3452
Mg	24	3	He	600431.866	1077.3716	52827514.21	0.0018	0.003497
Mg	24	3	He	620229.921	1112.8957	53675469.20	0.0018	0.003497
Mg	24	3	He	610318.212	1095.1109	53257179.21	0.0018	0.003497
Al	27	3	He	2.735	0.0022	110.00	0.0006	0.0006432
Al	27	3	He	4.217	0.0031	150.01	0.0006	0.0006432
Al	27	3	He	5.227	0.0037	180.01	0.0006	0.0006432
K	39	3	He	18925.36	22.4304	1099843.89	0.0012	0.3951
K	39	3	He	19391.411	22.973	1107998.50	0.0012	0.3951
K	39	3	He	19384.453	22.9649	1116823.81	0.0012	0.3951
Ca	44	3	He	1081394.732	73.053	3582058.38	0.0001	0.002715
Ca	44	3	He	1109911.714	74.9794	3616289.32	0.0001	0.002715
Ca	44	3	He	1098507.344	74.209	3608914.01	0.0001	0.002715
Ti	47	3	He	0.629	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.256	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	1.328	0.0539	2642.26	0.0219	0.02486
V	51	3	He	1.344	0.0542	2616.25	0.0219	0.02486
V	51	3	He	1.297	0.0532	2588.24	0.0219	0.02486
Cr	52	3	He	-0.15	0.0355	1740.18	0.0299	0.03997
Cr	52	3	He	-0.13	0.0361	1740.17	0.0299	0.03997
Cr	52	3	He	-0.229	0.0331	1610.15	0.0299	0.03997
Mn	55	3	He	8780.655	112.6925	5525729.29	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	8968.195	115.0993	5551294.29	0.0128	0.002639
Mn	55	3	He	8821.728	113.2196	5506069.92	0.0128	0.002639
Fe	57	3	He	1848.026	1.0751	52716.85	0.0006	0.001429
Fe	57	3	He	1865.974	1.0855	52356.22	0.0006	0.001429
Fe	57	3	He	1861.892	1.0832	52676.53	0.0006	0.001429
Co	59	3	He	7.004	0.3963	19433.74	0.0563	0.002149
Co	59	3	He	6.996	0.3959	19093.10	0.0563	0.002149
Co	59	3	He	6.82	0.386	18772.84	0.0563	0.002149
Ni	60	3	He	10.9	0.0964	8092.47	0.0086	0.002834
Ni	60	3	He	11.107	0.0982	8142.59	0.0086	0.002834
Ni	60	3	He	11.01	0.0973	8122.63	0.0086	0.002834
Cu	63	3	He	0.084	0.0069	580.03	0.0257	0.004757
Cu	63	3	He	0.045	0.0059	490.03	0.0257	0.004757
Cu	63	3	He	0.118	0.0078	650.04	0.0257	0.004757
Zn	66	3	He	4.826	0.0179	1500.13	0.0029	0.003818
Zn	66	3	He	5.521	0.0199	1650.15	0.0029	0.003818
Zn	66	3	He	5.315	0.0193	1610.14	0.0029	0.003818
As	75	3	He	4.781	0.0106	890.03	0.002	0.0008061
As	75	3	He	5.173	0.0114	946.04	0.002	0.0008061
As	75	3	He	5.175	0.0114	952.04	0.002	0.0008061
Sr	88	3	He	13214.965	118.5368	10028354.85	0.009	0.0009645
Sr	88	3	He	13614.401	122.1197	9999891.73	0.009	0.0009645
Sr	88	3	He	13379.845	120.0157	10054541.73	0.009	0.0009645
Mo	98	3	He	0.877	0.0195	1650.16	0.0219	0.0002706
Mo	98	3	He	1.057	0.0234	1920.21	0.0219	0.0002706
Mo	98	3	He	1.087	0.0241	2020.21	0.0219	0.0002706
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.014	0.0001	6.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	-0.085	0.0151	1280.11	0.0158	0.01648
Sn	120	3	He	-0.332	0.0112	920.06	0.0158	0.01648
Sn	120	3	He	-0.31	0.0116	970.07	0.0158	0.01648
Sb	121	3	He	0.03	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Ba	137	3	He	1528.905	7.338	620799.91	0.0048	0.0002317
Ba	137	3	He	1569.84	7.5344	616963.55	0.0048	0.0002317
Ba	137	3	He	1554.511	7.4609	625046.67	0.0048	0.0002317
Tl	205	3	He	0.004	0.0002	90.00	0.0247	0.0001339
Tl	205	3	He	0.014	0.0005	180.01	0.0247	0.0001339
Tl	205	3	He	0.015	0.0005	190.01	0.0247	0.0001339
Pb	208	3	He	0.012	0.0015	240.01	0.0327	0.00107
Pb	208	3	He	0.004	0.0012	220.01	0.0327	0.00107
Pb	208	3	He	0.004	0.0012	240.01	0.0327	0.00107
U	238	3	He	3.19	0.1572	41929.19	0.0493	7.55E-05
U	238	3	He	3.163	0.1559	41948.90	0.0493	7.55E-05
U	238	3	He	3.187	0.1571	41387.84	0.0493	7.55E-05
Sc	45	1	No Gas			2410960.43		
Sc	45	1	No Gas			2414085.75		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2445235.28		
Ge	72	1	No Gas			1151719.20		
Ge	72	1	No Gas			1150300.61		
Ge	72	1	No Gas			1164413.26		
Sc	45	2	H2			197899.18		
Sc	45	2	H2			196886.79		
Sc	45	2	H2			197989.90		
Ge	72	2	H2			163515.89		
Ge	72	2	H2			165672.19		
Ge	72	2	H2			165559.80		
In	115	2	H2			366444.99		
In	115	2	H2			369141.67		
In	115	2	H2			367325.27		
Sc	45	3	He			49033.70		
Sc	45	3	He			48230.46		
Sc	45	3	He			48631.77		
Ge	72	3	He			83956.40		
Ge	72	3	He			82949.49		
Ge	72	3	He			83453.09		
In	115	3	He			84606.82		
In	115	3	He			81890.92		
In	115	3	He			83781.70		
Tb	159	3	He			371432.10		
Tb	159	3	He			379167.57		
Tb	159	3	He			379694.25		
Bi	209	3	He			266709.94		
Bi	209	3	He			269089.61		
Bi	209	3	He			263487.32		

Quantitation Report

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Sample Type	Sample
Comment	D2
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

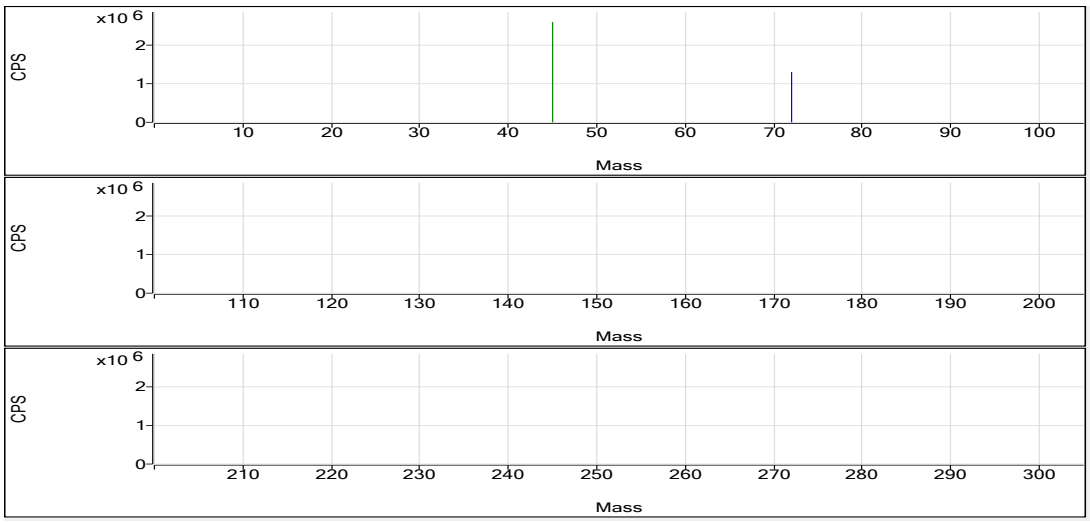
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.027	ppb	11.7	66.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.847	ppb	14.5	66.00	0.0004	Pulse	1.5000	3
Na	23	45	He	94152.284	ppb	1.1	17315504.32	337.1325	Analog	0.1000	3
Mg	24	45	He	12561.949	ppb	0.5	1157914.78	22.5437	Analog	0.1000	3
Al	27	45	He	3.451	ppb	20.7	136.68	0.0027	Pulse	0.1000	3
K	39	45	He	908.771	ppb	1.1	74637.57	1.4532	Pulse	0.1000	3
Ca	44	45	He	51782.748	ppb	1.2	179808.07	3.5007	Pulse	0.1000	3
Ti	47	45	He	0.113	ppb	186.7	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.944	ppb	3.8	2337.54	0.0455	Pulse	0.5000	3
Cr	52	45	He	0.696	ppb	10.0	3123.77	0.0608	Pulse	0.1000	3
Mn	55	45	He	2.332	ppb	9.1	1673.49	0.0326	Pulse	0.1000	3
Fe	57	45	He	9.587	ppb	27.4	360.02	0.0070	Pulse	0.1000	3
Co	59	45	He	0.018	ppb	52.3	163.34	0.0032	Pulse	0.1000	3
Ni	60	72	He	0.167	ppb	44.4	383.35	0.0043	Pulse	0.1000	3
Cu	63	72	He	2.680	ppb	6.2	6608.45	0.0736	Pulse	0.1000	3
Zn	66	72	He	4.793	ppb	4.9	1596.81	0.0178	Pulse	0.1000	3
As	75	72	He	0.353	ppb	17.9	137.33	0.0015	Pulse	0.5000	3
Sr	88	115	He	153.068	ppb	1.5	126361.51	1.3740	Pulse	0.1000	3
Mo	98	115	He	1.704	ppb	7.8	3463.91	0.0376	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.015	ppb	32.9	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.280	ppb	N/A	1106.75	0.0120	Pulse	0.1000	3
Sb	121	115	He	0.109	ppb	36.9	173.34	0.0019	Pulse	0.1000	3
Ba	137	115	He	14.485	ppb	1.0	6415.07	0.0697	Pulse	0.1000	3
Tl	205	159	He	0.002	ppb	173.5	70.00	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.031	ppb	35.8	856.71	0.0021	Pulse	0.1000	3
U	238	209	He	0.324	ppb	1.5	4977.81	0.0160	Pulse	0.1000	3

ISTD Table:

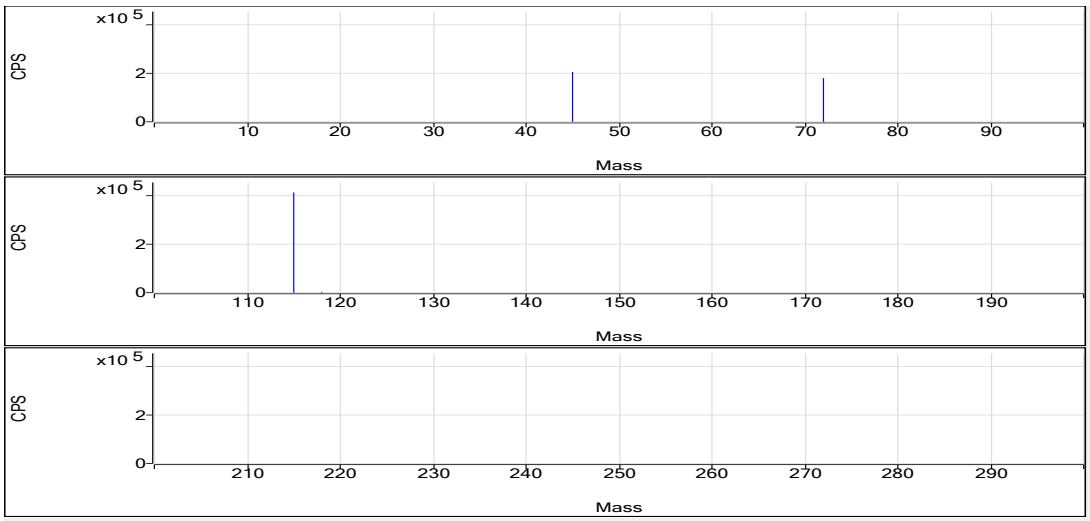
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2605932.25	0.5	108.6	Analog	0.1000	3
No Gas	Ge	72	1305339.36	0.2	113.2	Pulse	0.1000	3
H2	Sc	45	205523.15	1.0	109.9	Pulse	0.1000	3
H2	Ge	72	180501.08	0.9	110.3	Pulse	0.1000	3
H2	In	115	413356.80	0.4	106.2	Pulse	0.1000	3
He	Sc	45	51364.94	1.1	110.1	Pulse	0.1000	3
He	Ge	72	89872.28	1.1	110.7	Pulse	0.1000	3
He	In	115	91977.36	1.2	106.7	Pulse	0.1000	3
He	Tb	159	409120.37	0.8	102.6	Pulse	0.1000	3
He	Bi	209	310845.52	0.6	100.5	Pulse	0.1000	3

No Gas

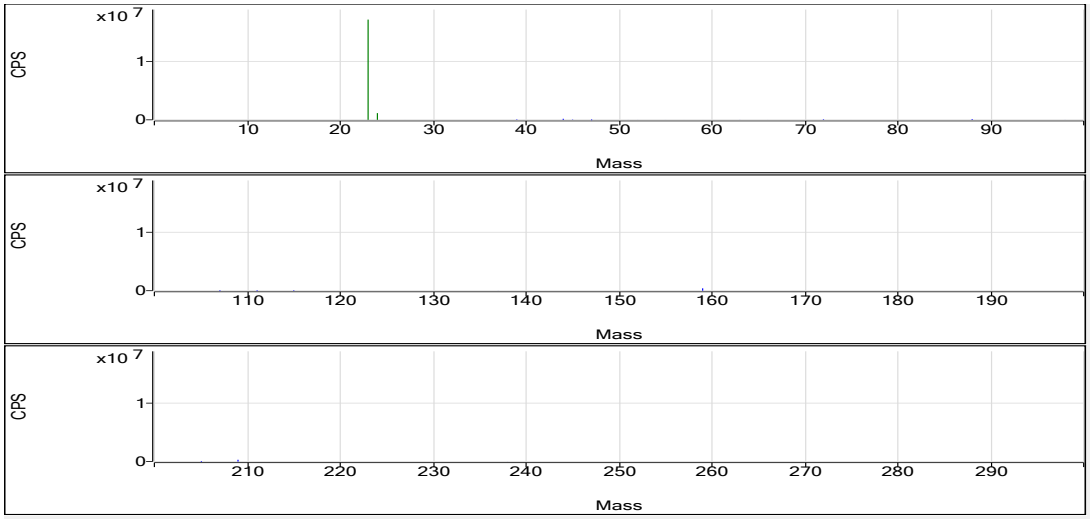


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.031	0	74.00	0.0008	4.685E-06
Be	9	1	No Gas	0.026	0	64.00	0.0008	4.685E-06
Be	9	1	No Gas	0.025	0	62.00	0.0008	4.685E-06
Se	78	2	H2	0.712	0.0003	55.33	0.0004	1.219E-05
Se	78	2	H2	0.953	0.0004	74.67	0.0004	1.219E-05
Se	78	2	H2	0.875	0.0004	68.00	0.0004	1.219E-05
Na	23	3	He	92989.344	332.9726	17312527.24	0.0036	0.3452
Na	23	3	He	94777.811	339.37	17393100.99	0.0036	0.3452
Na	23	3	He	94689.698	339.0548	17240884.74	0.0036	0.3452
Mg	24	3	He	12495.228	22.424	1165907.95	0.0018	0.003497
Mg	24	3	He	12585.658	22.5862	1157569.44	0.0018	0.003497
Mg	24	3	He	12604.962	22.6209	1150266.94	0.0018	0.003497
Al	27	3	He	2.846	0.0023	120.01	0.0006	0.0006432
Al	27	3	He	4.237	0.0031	160.01	0.0006	0.0006432
Al	27	3	He	3.271	0.0026	130.01	0.0006	0.0006432
K	39	3	He	898.301	1.441	74922.20	0.0012	0.3951
K	39	3	He	909.327	1.4538	74509.91	0.0012	0.3951
K	39	3	He	918.685	1.4647	74480.59	0.0012	0.3951
Ca	44	3	He	51709.733	3.4958	181760.41	0.0001	0.002715
Ca	44	3	He	51199.862	3.4614	177398.81	0.0001	0.002715
Ca	44	3	He	52438.648	3.545	180265.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.233	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.236	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.925	0.0451	2344.21	0.0219	0.02486
V	51	3	He	0.985	0.0464	2378.21	0.0219	0.02486
V	51	3	He	0.923	0.045	2290.20	0.0219	0.02486
Cr	52	3	He	0.65	0.0594	3090.43	0.0299	0.03997
Cr	52	3	He	0.777	0.0632	3240.47	0.0299	0.03997
Cr	52	3	He	0.662	0.0598	3040.41	0.0299	0.03997
Mn	55	3	He	2.567	0.0356	1850.18	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2.151	0.0302	1550.13	0.0128	0.002639
Mn	55	3	He	2.277	0.0319	1620.15	0.0128	0.002639
Fe	57	3	He	11.776	0.0083	430.02	0.0006	0.001429
Fe	57	3	He	10.303	0.0074	380.02	0.0006	0.001429
Fe	57	3	He	6.68	0.0053	270.01	0.0006	0.001429
Co	59	3	He	0.023	0.0035	180.01	0.0563	0.002149
Co	59	3	He	0.024	0.0035	180.01	0.0563	0.002149
Co	59	3	He	0.007	0.0026	130.01	0.0563	0.002149
Ni	60	3	He	0.241	0.0049	440.02	0.0086	0.002834
Ni	60	3	He	0.093	0.0036	330.01	0.0086	0.002834
Ni	60	3	He	0.167	0.0043	380.02	0.0086	0.002834
Cu	63	3	He	2.699	0.074	6641.78	0.0257	0.004757
Cu	63	3	He	2.507	0.0691	6281.61	0.0257	0.004757
Cu	63	3	He	2.835	0.0775	6901.95	0.0257	0.004757
Zn	66	3	He	4.815	0.0178	1600.14	0.0029	0.003818
Zn	66	3	He	4.546	0.0171	1550.13	0.0029	0.003818
Zn	66	3	He	5.017	0.0184	1640.15	0.0029	0.003818
As	75	3	He	0.292	0.0014	126.00	0.002	0.0008061
As	75	3	He	0.348	0.0015	138.00	0.002	0.0008061
As	75	3	He	0.418	0.0017	148.00	0.002	0.0008061
Sr	88	3	He	154.072	1.383	127937.31	0.009	0.0009645
Sr	88	3	He	150.377	1.3498	125200.00	0.009	0.0009645
Sr	88	3	He	154.754	1.3891	125947.22	0.009	0.0009645
Mo	98	3	He	1.827	0.0403	3730.70	0.0219	0.0002706
Mo	98	3	He	1.724	0.0381	3530.58	0.0219	0.0002706
Mo	98	3	He	1.562	0.0345	3130.44	0.0219	0.0002706
Ag	107	3	He	0.005	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.012	0.0001	6.00	0.0053	0
Cd	111	3	He	0.012	0.0001	6.00	0.0053	0
Cd	111	3	He	0.021	0.0001	10.00	0.0053	0
Sn	120	3	He	-0.283	0.012	1110.08	0.0158	0.01648
Sn	120	3	He	-0.408	0.01	930.06	0.0158	0.01648
Sn	120	3	He	-0.149	0.0141	1280.11	0.0158	0.01648
Sb	121	3	He	0.149	0.0025	230.01	0.0149	0.0002698
Sb	121	3	He	0.069	0.0013	120.01	0.0149	0.0002698
Sb	121	3	He	0.108	0.0019	170.01	0.0149	0.0002698
Ba	137	3	He	14.573	0.0702	6491.78	0.0048	0.0002317
Ba	137	3	He	14.31	0.0689	6391.72	0.0048	0.0002317
Ba	137	3	He	14.571	0.0702	6361.72	0.0048	0.0002317
Tl	205	3	He	-0.001	0.0001	50.00	0.0247	0.0001339
Tl	205	3	He	0.004	0.0002	100.00	0.0247	0.0001339
Tl	205	3	He	0.001	0.0001	60.00	0.0247	0.0001339
Pb	208	3	He	0.033	0.0021	460.03	0.0327	0.00107
Pb	208	3	He	0.02	0.0017	370.02	0.0327	0.00107
Pb	208	3	He	0.042	0.0024	500.03	0.0327	0.00107
U	238	3	He	0.319	0.0158	4941.08	0.0493	7.55E-05
U	238	3	He	0.322	0.016	4961.17	0.0493	7.55E-05
U	238	3	He	0.329	0.0163	5031.18	0.0493	7.55E-05
Sc	45	1	No Gas			2609930.74		
Sc	45	1	No Gas			2590660.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2617205.90		
Ge	72	1	No Gas			1305447.25		
Ge	72	1	No Gas			1308222.32		
Ge	72	1	No Gas			1302348.50		
Sc	45	2	H2			203371.70		
Sc	45	2	H2			205907.38		
Sc	45	2	H2			207290.37		
Ge	72	2	H2			178979.41		
Ge	72	2	H2			182208.06		
Ge	72	2	H2			180315.76		
In	115	2	H2			412939.17		
In	115	2	H2			415301.63		
In	115	2	H2			411829.60		
Sc	45	3	He			51993.85		
Sc	45	3	He			51251.14		
Sc	45	3	He			50849.84		
Ge	72	3	He			89701.46		
Ge	72	3	He			90899.33		
Ge	72	3	He			89016.05		
In	115	3	He			92516.90		
In	115	3	He			92758.83		
In	115	3	He			90675.46		
Tb	159	3	He			412284.80		
Tb	159	3	He			409367.88		
Tb	159	3	He			405708.43		
Bi	209	3	He			312641.17		
Bi	209	3	He			310864.39		
Bi	209	3	He			309030.99		

Quantitation Report

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Acq Time	8/10/2023 3:33:32 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

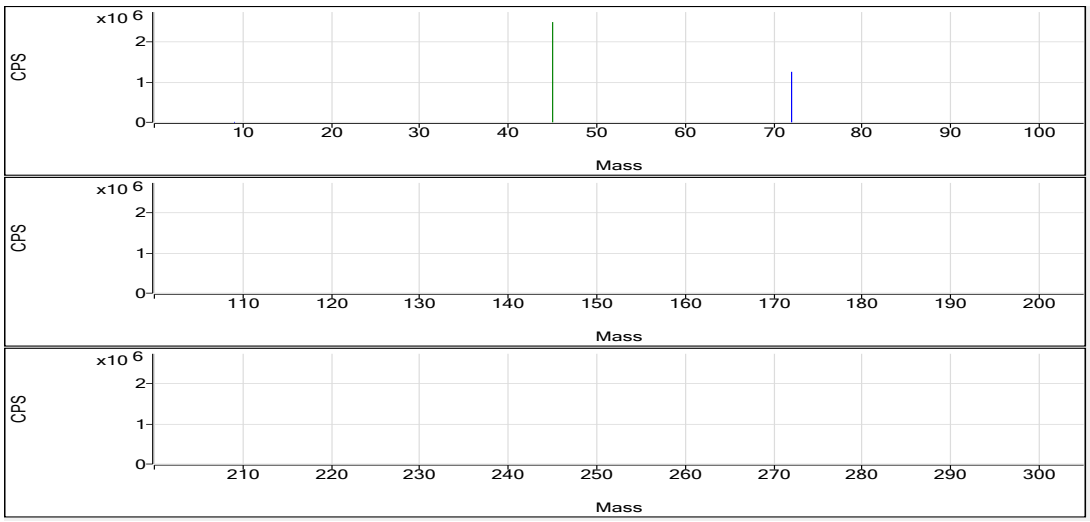
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	664.3	12.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.007	ppb	N/A	1.56	0.0000	Pulse	1.5000	3
Na	23	45	He	440.592	ppb	4.3	93850.74	1.9212	Pulse	0.1000	3
Mg	24	45	He	26.884	ppb	7.1	2526.96	0.0517	Pulse	0.1000	3
Al	27	45	He	-0.049	ppb	N/A	30.00	0.0006	Pulse	0.1000	3
K	39	45	He	9.011	ppb	4.6	19814.04	0.4056	Pulse	0.1000	3
Ca	44	45	He	54.731	ppb	15.3	313.35	0.0064	Pulse	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	1.171	ppb	2.3	2465.56	0.0505	Pulse	0.5000	3
Cr	52	45	He	-0.038	ppb	N/A	1896.86	0.0388	Pulse	0.1000	3
Mn	55	45	He	0.607	ppb	22.8	510.03	0.0104	Pulse	0.1000	3
Fe	57	45	He	1.183	ppb	147.6	103.34	0.0021	Pulse	0.1000	3
Co	59	45	He	-0.005	ppb	N/A	90.00	0.0018	Pulse	0.1000	3
Ni	60	72	He	-0.092	ppb	N/A	173.34	0.0020	Pulse	0.1000	3
Cu	63	72	He	0.086	ppb	21.7	590.03	0.0070	Pulse	0.1000	3
Zn	66	72	He	4.251	ppb	8.2	1373.44	0.0162	Pulse	0.1000	3
As	75	72	He	0.240	ppb	32.8	110.00	0.0013	Pulse	0.5000	3
Sr	88	115	He	0.606	ppb	36.0	563.36	0.0064	Pulse	0.1000	3
Mo	98	115	He	0.053	ppb	22.9	126.67	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	50.9	76.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.076	ppb	121.2	1553.47	0.0177	Pulse	0.1000	3
Sb	121	115	He	0.007	ppb	298.4	33.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.054	ppb	109.0	43.33	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.009	ppb	67.1	136.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.012	ppb	22.5	576.70	0.0014	Pulse	0.1000	3
U	238	209	He	0.013	ppb	18.7	220.01	0.0007	Pulse	0.1000	3

ISTD Table:

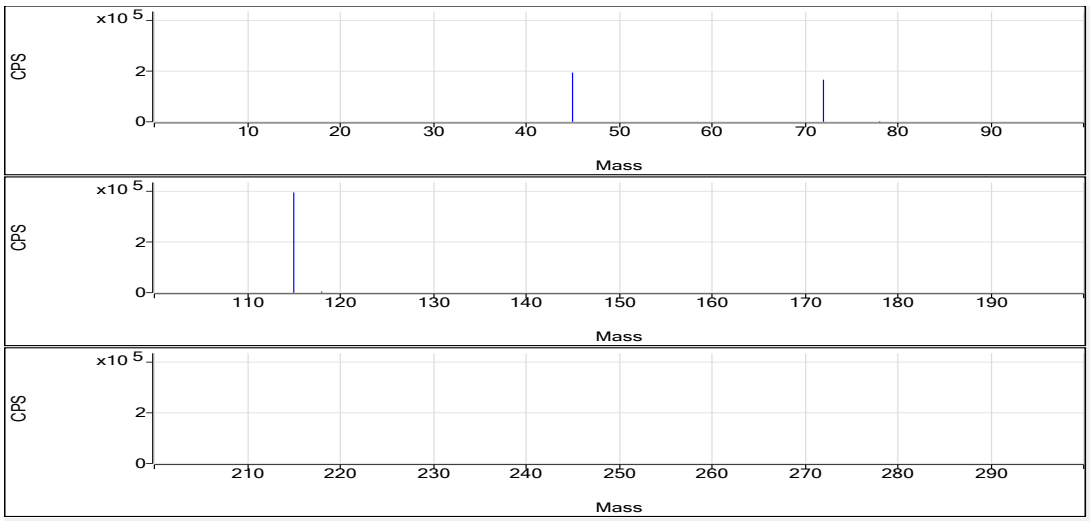
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2493347.10	1.0	103.9	Analog	0.1000	3
No Gas	Ge	72	1255945.55	0.9	108.9	Pulse	0.1000	3
H2	Sc	45	194993.87	0.9	104.3	Pulse	0.1000	3
H2	Ge	72	166831.05	1.0	101.9	Pulse	0.1000	3
H2	In	115	396997.48	0.5	102.0	Pulse	0.1000	3
He	Sc	45	48856.01	0.7	104.7	Pulse	0.1000	3
He	Ge	72	84747.56	1.6	104.4	Pulse	0.1000	3
He	In	115	87873.45	0.8	101.9	Pulse	0.1000	3
He	Tb	159	397836.92	0.6	99.8	Pulse	0.1000	3
He	Bi	209	308522.90	0.3	99.8	Pulse	0.1000	3

No Gas

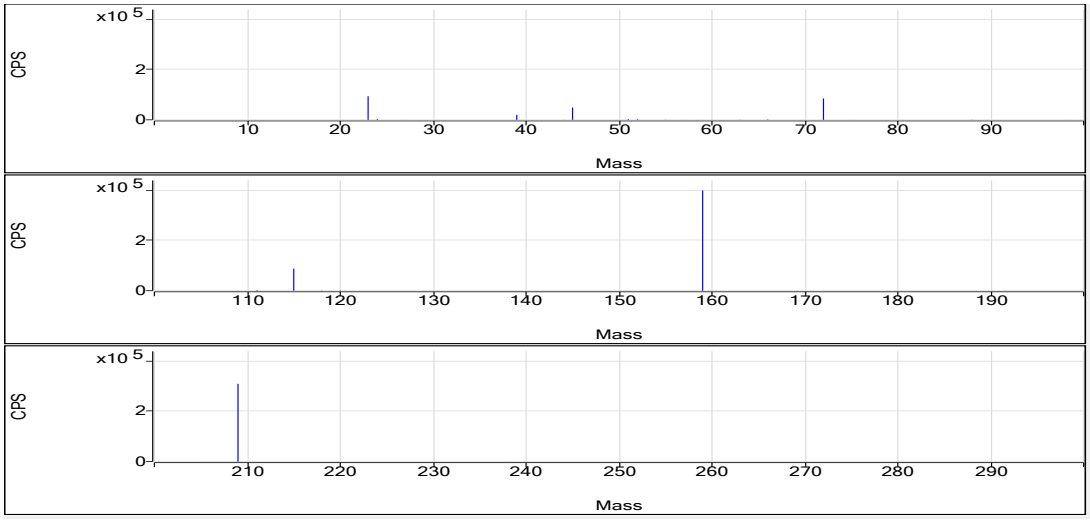


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	10.00	0.0008	4.685E-06
Be	9	1	No Gas	-0.002	0	8.00	0.0008	4.685E-06
Be	9	1	No Gas	0.004	0	20.00	0.0008	4.685E-06
Se	78	2	H2	-0.02	0	0.67	0.0004	1.219E-05
Se	78	2	H2	-0.001	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Na	23	3	He	459.771	1.9898	96986.68	0.0036	0.3452
Na	23	3	He	439.673	1.9179	93212.94	0.0036	0.3452
Na	23	3	He	422.331	1.8559	91352.59	0.0036	0.3452
Mg	24	3	He	28.698	0.055	2680.33	0.0018	0.003497
Mg	24	3	He	27.066	0.0521	2530.29	0.0018	0.003497
Mg	24	3	He	24.887	0.0482	2370.27	0.0018	0.003497
Al	27	3	He	0.303	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	-0.044	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	-0.405	0.0004	20.00	0.0006	0.0006432
K	39	3	He	9.295	0.4059	19783.97	0.0012	0.3951
K	39	3	He	8.536	0.405	19683.98	0.0012	0.3951
K	39	3	He	9.203	0.4058	19974.17	0.0012	0.3951
Ca	44	3	He	60.039	0.0068	330.02	0.0001	0.002715
Ca	44	3	He	45.096	0.0058	280.01	0.0001	0.002715
Ca	44	3	He	59.058	0.0067	330.02	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	1.143	0.0499	2430.22	0.0219	0.02486
V	51	3	He	1.197	0.051	2480.23	0.0219	0.02486
V	51	3	He	1.173	0.0505	2486.23	0.0219	0.02486
Cr	52	3	He	-0.184	0.0345	1680.15	0.0299	0.03997
Cr	52	3	He	0.053	0.0416	2020.21	0.0299	0.03997
Cr	52	3	He	0.015	0.0404	1990.21	0.0299	0.03997
Mn	55	3	He	0.61	0.0105	510.03	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.468	0.0086	420.02	0.0128	0.002639
Mn	55	3	He	0.744	0.0122	600.03	0.0128	0.002639
Fe	57	3	He	3.191	0.0033	160.01	0.0006	0.001429
Fe	57	3	He	0.02	0.0014	70.00	0.0006	0.001429
Fe	57	3	He	0.338	0.0016	80.00	0.0006	0.001429
Co	59	3	He	-0.016	0.0012	60.00	0.0563	0.002149
Co	59	3	He	-0.005	0.0019	90.00	0.0563	0.002149
Co	59	3	He	0.005	0.0024	120.00	0.0563	0.002149
Ni	60	3	He	-0.148	0.0016	130.00	0.0086	0.002834
Ni	60	3	He	-0.113	0.0019	160.01	0.0086	0.002834
Ni	60	3	He	-0.016	0.0027	230.01	0.0086	0.002834
Cu	63	3	He	0.072	0.0066	550.03	0.0257	0.004757
Cu	63	3	He	0.078	0.0068	580.03	0.0257	0.004757
Cu	63	3	He	0.107	0.0075	640.04	0.0257	0.004757
Zn	66	3	He	3.851	0.015	1250.09	0.0029	0.003818
Zn	66	3	He	4.493	0.0169	1450.12	0.0029	0.003818
Zn	66	3	He	4.409	0.0167	1420.11	0.0029	0.003818
As	75	3	He	0.264	0.0013	112.00	0.002	0.0008061
As	75	3	He	0.153	0.0011	96.00	0.002	0.0008061
As	75	3	He	0.305	0.0014	122.00	0.002	0.0008061
Sr	88	3	He	0.815	0.0083	730.04	0.009	0.0009645
Sr	88	3	He	0.625	0.0066	580.03	0.009	0.0009645
Sr	88	3	He	0.379	0.0044	380.02	0.009	0.0009645
Mo	98	3	He	0.039	0.0011	100.00	0.0219	0.0002706
Mo	98	3	He	0.06	0.0016	140.01	0.0219	0.0002706
Mo	98	3	He	0.061	0.0016	140.01	0.0219	0.0002706
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.155	0.0189	1670.15	0.0158	0.01648
Sn	120	3	He	0.097	0.018	1590.14	0.0158	0.01648
Sn	120	3	He	-0.025	0.0161	1400.13	0.0158	0.01648
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Sb	121	3	He	0.02	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Ba	137	3	He	0.117	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	-0.001	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.047	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.006	0.0003	110.00	0.0247	0.0001339
Tl	205	3	He	0.005	0.0003	100.00	0.0247	0.0001339
Tl	205	3	He	0.015	0.0005	200.01	0.0247	0.0001339
Pb	208	3	He	0.013	0.0015	370.02	0.0327	0.00107
Pb	208	3	He	0.009	0.0014	320.02	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	330.02	0.0327	0.00107
U	238	3	He	0.016	0.0008	260.01	0.0493	7.55E-05
U	238	3	He	0.012	0.0007	210.01	0.0493	7.55E-05
U	238	3	He	0.011	0.0006	190.01	0.0493	7.55E-05
Sc	45	1	No Gas			2480301.21		
Sc	45	1	No Gas			2477214.65		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2522525.43		
Ge	72	1	No Gas			1242449.20		
Ge	72	1	No Gas			1264221.07		
Ge	72	1	No Gas			1261166.39		
Sc	45	2	H2			195679.76		
Sc	45	2	H2			196247.59		
Sc	45	2	H2			193054.25		
Ge	72	2	H2			166642.69		
Ge	72	2	H2			168634.57		
Ge	72	2	H2			165215.88		
In	115	2	H2			396748.43		
In	115	2	H2			398972.81		
In	115	2	H2			395271.21		
Sc	45	3	He			48742.33		
Sc	45	3	He			48601.80		
Sc	45	3	He			49223.89		
Ge	72	3	He			83171.43		
Ge	72	3	He			85807.36		
Ge	72	3	He			85263.89		
In	115	3	He			88249.74		
In	115	3	He			88341.15		
In	115	3	He			87051.70		
Tb	159	3	He			399011.91		
Tb	159	3	He			399600.97		
Tb	159	3	He			394897.88		
Bi	209	3	He			307472.07		
Bi	209	3	He			308949.55		
Bi	209	3	He			309147.07		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

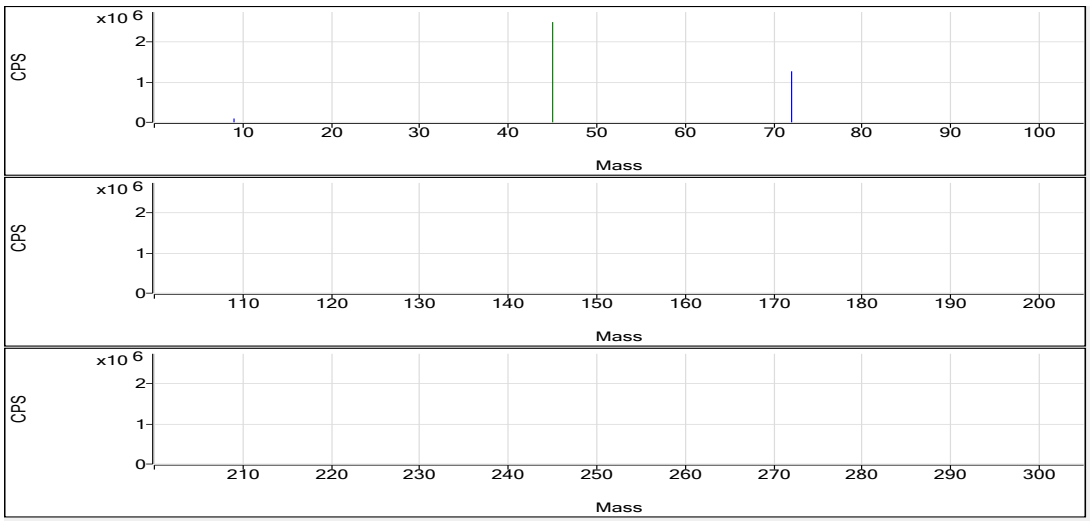
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.569	ppb	0.6	94197.86	0.0378	Pulse	0.5000	3
Se	78	72	H2	51.486	ppb	0.7	3577.12	0.0215	Pulse	1.5000	3
Na	23	45	He	5099.643	ppb	1.1	903906.21	18.5868	Pulse	0.1000	3
Mg	24	45	He	5059.108	ppb	0.6	441634.56	9.0812	Pulse	0.1000	3
Al	27	45	He	5041.350	ppb	0.6	143466.21	2.9500	Pulse	0.1000	3
K	39	45	He	5104.626	ppb	0.9	308259.03	6.3385	Pulse	0.1000	3
Ca	44	45	He	5250.486	ppb	1.5	17380.89	0.3574	Pulse	0.1000	3
Ti	47	45	He	5128.178	ppb	0.8	133915.77	2.7536	Pulse	0.1000	3
V	51	45	He	508.607	ppb	0.6	541886.90	11.1426	Pulse	0.5000	3
Cr	52	45	He	483.787	ppb	0.3	706376.89	14.5249	Pulse	0.1000	3
Mn	55	45	He	504.396	ppb	0.1	314943.36	6.4760	Pulse	0.1000	3
Fe	57	45	He	4967.435	ppb	0.8	140422.12	2.8875	Pulse	0.1000	3
Co	59	45	He	483.941	ppb	0.5	1324717.43	27.2395	Pulse	0.1000	3
Ni	60	72	He	523.096	ppb	0.6	373514.76	4.4926	Pulse	0.1000	3
Cu	63	72	He	496.058	ppb	1.0	1059094.36	12.7391	Pulse	0.1000	3
Zn	66	72	He	519.088	ppb	1.5	125966.42	1.5152	Pulse	0.1000	3
As	75	72	He	526.254	ppb	0.4	89710.67	1.0790	Pulse	0.5000	3
Sr	88	115	He	51.718	ppb	0.8	40401.73	0.4649	Pulse	0.1000	3
Mo	98	115	He	50.927	ppb	2.6	97048.56	1.1169	Pulse	0.1000	3
Ag	107	115	He	50.787	ppb	1.3	205203.07	2.3616	Pulse	0.1000	3
Cd	111	115	He	50.934	ppb	0.7	23665.39	0.2723	Pulse	0.5000	3
Sn	120	115	He	51.498	ppb	2.9	72117.81	0.8301	Pulse	0.1000	3
Sb	121	115	He	50.959	ppb	1.9	65790.13	0.7572	Pulse	0.1000	3
Ba	137	115	He	523.744	ppb	1.4	218431.54	2.5139	Pulse	0.1000	3
Tl	205	159	He	51.112	ppb	0.5	506099.48	1.2640	Pulse	0.1000	3
Pb	208	159	He	51.257	ppb	0.4	672153.49	1.6787	Pulse	0.1000	3
U	238	209	He	50.432	ppb	0.3	762268.43	2.4843	Pulse	0.1000	3

ISTD Table:

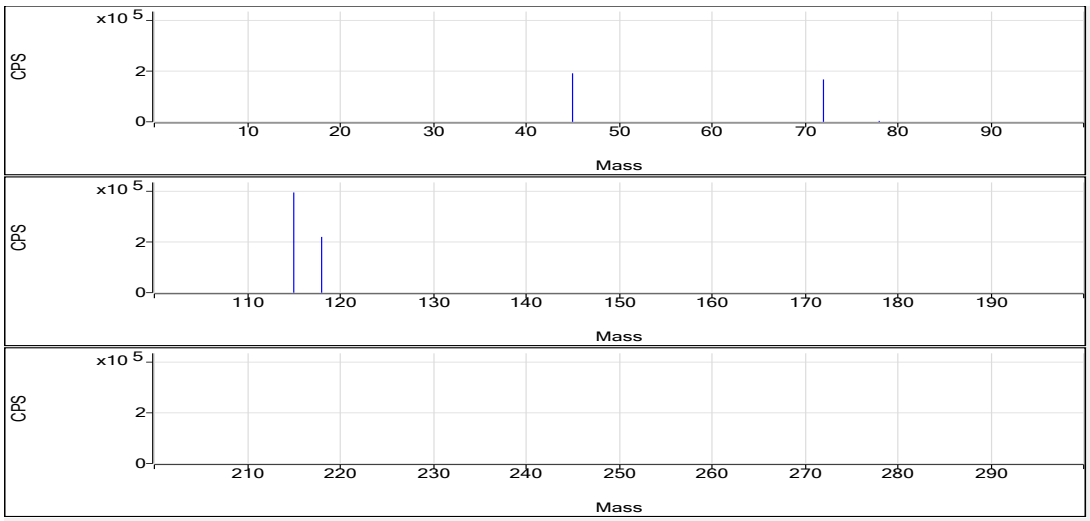
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2491086.37	0.8	103.8	Analog	0.1000	3
No Gas	Ge	72	1267666.99	0.9	109.9	Pulse	0.1000	3
H2	Sc	45	190689.94	0.8	102.0	Pulse	0.1000	3
H2	Ge	72	166493.23	0.5	101.7	Pulse	0.1000	3
H2	In	115	393929.17	0.1	101.2	Pulse	0.1000	3
He	Sc	45	48632.34	0.3	104.3	Pulse	0.1000	3
He	Ge	72	83141.55	0.8	102.4	Pulse	0.1000	3
He	In	115	86903.00	1.5	100.8	Pulse	0.1000	3
He	Tb	159	400404.39	0.5	100.5	Pulse	0.1000	3
He	Bi	209	306837.29	0.9	99.2	Pulse	0.1000	3

No Gas

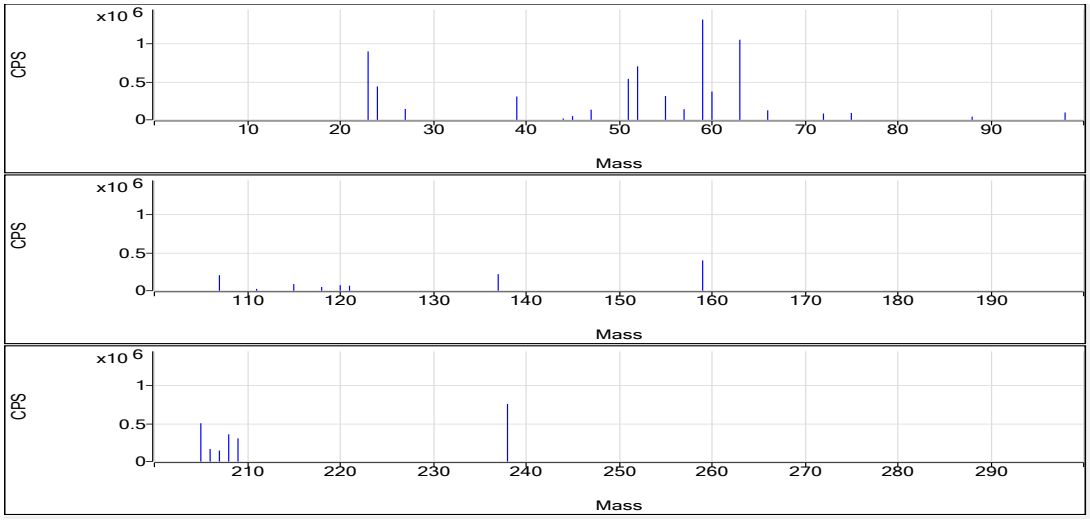


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.747	0.038	94389.10	0.0008	4.685E-06
Be	9	1	No Gas	49.715	0.0379	93815.51	0.0008	4.685E-06
Be	9	1	No Gas	49.244	0.0376	94388.98	0.0008	4.685E-06
Se	78	2	H2	51.088	0.0213	3553.78	0.0004	1.219E-05
Se	78	2	H2	51.651	0.0216	3569.12	0.0004	1.219E-05
Se	78	2	H2	51.717	0.0216	3608.46	0.0004	1.219E-05
Na	23	3	He	5162.186	18.8106	911788.58	0.0036	0.3452
Na	23	3	He	5089.739	18.5514	904802.02	0.0036	0.3452
Na	23	3	He	5047.004	18.3985	895128.03	0.0036	0.3452
Mg	24	3	He	5070.054	9.1008	441135.97	0.0018	0.003497
Mg	24	3	He	5023.688	9.0176	439813.20	0.0018	0.003497
Mg	24	3	He	5083.583	9.1251	443954.52	0.0018	0.003497
Al	27	3	He	5048.282	2.9541	143189.94	0.0006	0.0006432
Al	27	3	He	5069.252	2.9663	144676.04	0.0006	0.0006432
Al	27	3	He	5006.515	2.9296	142532.64	0.0006	0.0006432
K	39	3	He	5104.171	6.338	307216.21	0.0012	0.3951
K	39	3	He	5148.589	6.3897	311643.18	0.0012	0.3951
K	39	3	He	5061.117	6.2879	305917.71	0.0012	0.3951
Ca	44	3	He	5228.167	0.3559	17250.65	0.0001	0.002715
Ca	44	3	He	5186.622	0.3531	17220.72	0.0001	0.002715
Ca	44	3	He	5336.671	0.3632	17671.29	0.0001	0.002715
Ti	47	3	He	5150.01	2.7654	134043.20	0.0005	7.003E-05
Ti	47	3	He	5151.825	2.7663	134921.77	0.0005	7.003E-05
Ti	47	3	He	5082.698	2.7292	132782.35	0.0005	7.003E-05
V	51	3	He	511.734	11.2109	543418.88	0.0219	0.02486
V	51	3	He	508.841	11.1477	543703.75	0.0219	0.02486
V	51	3	He	505.248	11.0692	538538.06	0.0219	0.02486
Cr	52	3	He	485.307	14.5704	706260.38	0.0299	0.03997
Cr	52	3	He	483.188	14.507	707544.36	0.0299	0.03997
Cr	52	3	He	482.866	14.4973	705325.93	0.0299	0.03997
Mn	55	3	He	504.223	6.4738	313797.85	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	504.933	6.4829	316187.83	0.0128	0.002639
Mn	55	3	He	504.033	6.4713	314844.41	0.0128	0.002639
Fe	57	3	He	5014.508	2.9148	141287.33	0.0006	0.001429
Fe	57	3	He	4954.379	2.8799	140459.41	0.0006	0.001429
Fe	57	3	He	4933.417	2.8677	139519.63	0.0006	0.001429
Co	59	3	He	483.221	27.1989	1318392.32	0.0563	0.002149
Co	59	3	He	481.992	27.1297	1323190.76	0.0563	0.002149
Co	59	3	He	486.611	27.3897	1332569.20	0.0563	0.002149
Ni	60	3	He	520.352	4.4691	373680.07	0.0086	0.002834
Ni	60	3	He	522.595	4.4883	374295.70	0.0086	0.002834
Ni	60	3	He	526.341	4.5205	372568.51	0.0086	0.002834
Cu	63	3	He	491.48	12.6216	1055343.50	0.0257	0.004757
Cu	63	3	He	495.334	12.7205	1060799.52	0.0257	0.004757
Cu	63	3	He	501.358	12.8752	1061140.06	0.0257	0.004757
Zn	66	3	He	513.755	1.4997	125394.20	0.0029	0.003818
Zn	66	3	He	515.29	1.5041	125434.73	0.0029	0.003818
Zn	66	3	He	528.218	1.5418	127070.34	0.0029	0.003818
As	75	3	He	524.488	1.0754	89919.93	0.002	0.0008061
As	75	3	He	525.811	1.0781	89907.77	0.002	0.0008061
As	75	3	He	528.464	1.0836	89304.30	0.002	0.0008061
Sr	88	3	He	51.448	0.4624	39746.61	0.009	0.0009645
Sr	88	3	He	52.222	0.4694	41471.32	0.009	0.0009645
Sr	88	3	He	51.485	0.4628	39987.27	0.009	0.0009645
Mo	98	3	He	50.558	1.1088	95303.11	0.0219	0.0002706
Mo	98	3	He	49.837	1.093	96571.95	0.0219	0.0002706
Mo	98	3	He	52.385	1.1489	99270.61	0.0219	0.0002706
Ag	107	3	He	51.062	2.3744	204075.31	0.0465	0.0006206
Ag	107	3	He	50.035	2.3266	205563.43	0.0465	0.0006206
Ag	107	3	He	51.264	2.3837	205970.47	0.0465	0.0006206
Cd	111	3	He	51.131	0.2734	23497.79	0.0053	0
Cd	111	3	He	50.533	0.2702	23872.41	0.0053	0
Cd	111	3	He	51.138	0.2734	23625.97	0.0053	0
Sn	120	3	He	53.082	0.8551	73494.84	0.0158	0.01648
Sn	120	3	He	50.054	0.8073	71323.71	0.0158	0.01648
Sn	120	3	He	51.359	0.8279	71534.87	0.0158	0.01648
Sb	121	3	He	51.442	0.7644	65696.59	0.0149	0.0002698
Sb	121	3	He	49.866	0.741	65465.63	0.0149	0.0002698
Sb	121	3	He	51.568	0.7662	66208.18	0.0149	0.0002698
Ba	137	3	He	530.114	2.5444	218691.91	0.0048	0.0002317
Ba	137	3	He	515.671	2.4751	218683.40	0.0048	0.0002317
Ba	137	3	He	525.445	2.522	217919.31	0.0048	0.0002317
Tl	205	3	He	50.814	1.2566	500931.98	0.0247	0.0001339
Tl	205	3	He	51.21	1.2664	509933.31	0.0247	0.0001339
Tl	205	3	He	51.313	1.2689	507433.16	0.0247	0.0001339
Pb	208	3	He	51.486	1.6862	358808.24	0.0327	0.00107
Pb	208	3	He	51.063	1.6723	362487.92	0.0327	0.00107
Pb	208	3	He	51.223	1.6776	359184.53	0.0327	0.00107
U	238	3	He	50.612	2.4932	757557.57	0.0493	7.55E-05
U	238	3	He	50.271	2.4764	766041.08	0.0493	7.55E-05
U	238	3	He	50.411	2.4833	763206.63	0.0493	7.55E-05
Sc	45	1	No Gas			2487135.43		
Sc	45	1	No Gas			2473609.65		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2512514.03		
Ge	72	1	No Gas			1278093.50		
Ge	72	1	No Gas			1256072.25		
Ge	72	1	No Gas			1268835.22		
Sc	45	2	H2			192368.22		
Sc	45	2	H2			190222.03		
Sc	45	2	H2			189479.57		
Ge	72	2	H2			166691.62		
Ge	72	2	H2			165589.41		
Ge	72	2	H2			167198.65		
In	115	2	H2			393421.05		
In	115	2	H2			394373.39		
In	115	2	H2			393993.08		
Sc	45	3	He			48472.19		
Sc	45	3	He			48772.70		
Sc	45	3	He			48652.12		
Ge	72	3	He			83614.28		
Ge	72	3	He			83392.79		
Ge	72	3	He			82417.58		
In	115	3	He			86337.39		
In	115	3	He			88742.32		
In	115	3	He			86790.69		
Tb	159	3	He			398643.86		
Tb	159	3	He			402675.89		
Tb	159	3	He			399893.43		
Bi	209	3	He			303848.37		
Bi	209	3	He			309332.03		
Bi	209	3	He			307331.46		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

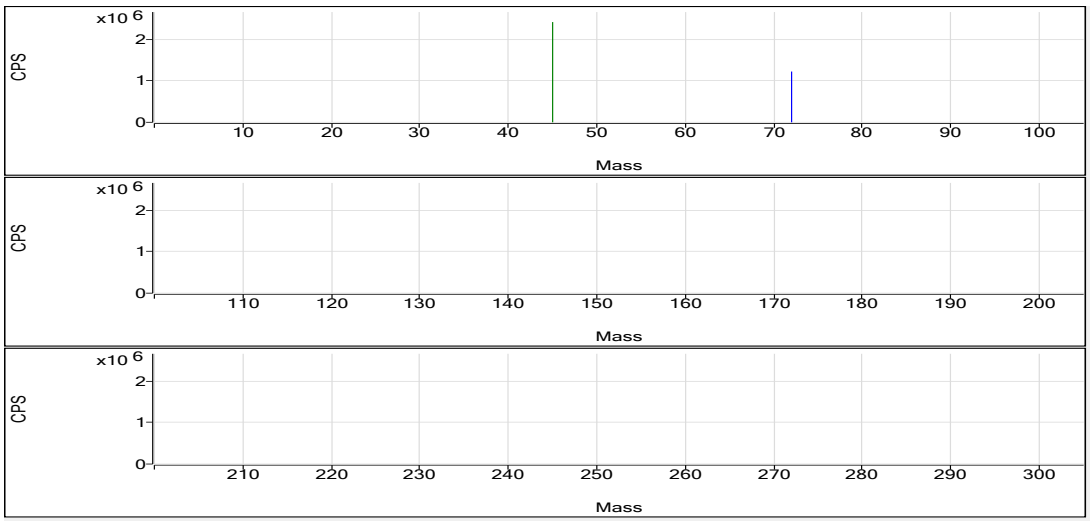
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.022	ppb	42.0	51.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.047	ppb	23.7	5.11	0.0000	Pulse	1.5000	3
Na	23	45	He	210.108	ppb	2.6	52982.14	1.0967	Pulse	0.1000	3
Mg	24	45	He	5.557	ppb	11.6	650.04	0.0135	Pulse	0.1000	3
Al	27	45	He	1.481	ppb	66.2	73.33	0.0015	Pulse	0.1000	3
K	39	45	He	1.738	ppb	898.7	19173.23	0.3971	Pulse	0.1000	3
Ca	44	45	He	16.790	ppb	92.5	186.68	0.0038	Pulse	0.1000	3
Ti	47	45	He	0.521	ppb	115.4	16.67	0.0003	Pulse	0.1000	3
V	51	45	He	1.189	ppb	3.1	2456.22	0.0508	Pulse	0.5000	3
Cr	52	45	He	-0.038	ppb	N/A	1880.18	0.0388	Pulse	0.1000	3
Mn	55	45	He	0.542	ppb	11.2	463.36	0.0096	Pulse	0.1000	3
Fe	57	45	He	2.160	ppb	38.7	130.01	0.0027	Pulse	0.1000	3
Co	59	45	He	0.052	ppb	41.2	246.68	0.0051	Pulse	0.1000	3
Ni	60	72	He	-0.081	ppb	N/A	176.68	0.0021	Pulse	0.1000	3
Cu	63	72	He	0.082	ppb	52.7	566.70	0.0069	Pulse	0.1000	3
Zn	66	72	He	3.832	ppb	12.0	1236.76	0.0150	Pulse	0.1000	3
As	75	72	He	0.338	ppb	33.3	124.00	0.0015	Pulse	0.5000	3
Sr	88	115	He	0.174	ppb	32.8	216.68	0.0025	Pulse	0.1000	3
Mo	98	115	He	0.048	ppb	6.0	113.34	0.0013	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	353.3	66.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	56.4	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.048	ppb	101.1	1483.47	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.042	ppb	26.6	76.67	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.016	ppb	87.7	26.67	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.078	ppb	7.6	816.72	0.0021	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	28.7	596.69	0.0015	Pulse	0.1000	3
U	238	209	He	0.047	ppb	7.1	733.39	0.0024	Pulse	0.1000	3

ISTD Table:

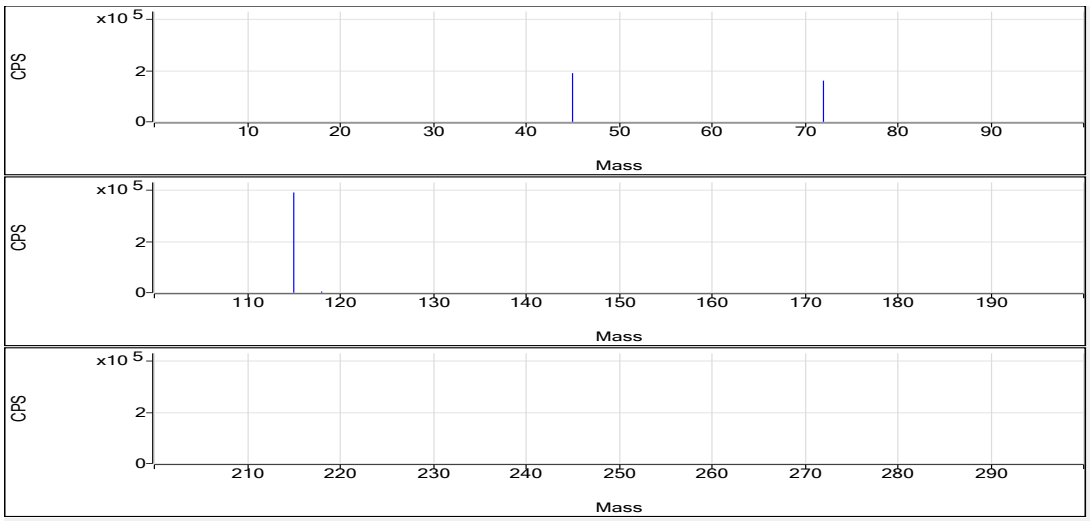
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2418961.84	1.0	100.8	Analog	0.1000	3
No Gas	Ge	72	1225147.85	0.1	106.2	Pulse	0.1000	3
H2	Sc	45	190269.84	1.3	101.7	Pulse	0.1000	3
H2	Ge	72	160985.84	1.3	98.3	Pulse	0.1000	3
H2	In	115	391774.20	0.3	100.7	Pulse	0.1000	3
He	Sc	45	48317.41	2.3	103.6	Pulse	0.1000	3
He	Ge	72	82665.80	1.8	101.8	Pulse	0.1000	3
He	In	115	86039.99	1.6	99.8	Pulse	0.1000	3
He	Tb	159	395713.17	0.3	99.3	Pulse	0.1000	3
He	Bi	209	306183.35	0.5	99.0	Pulse	0.1000	3

No Gas

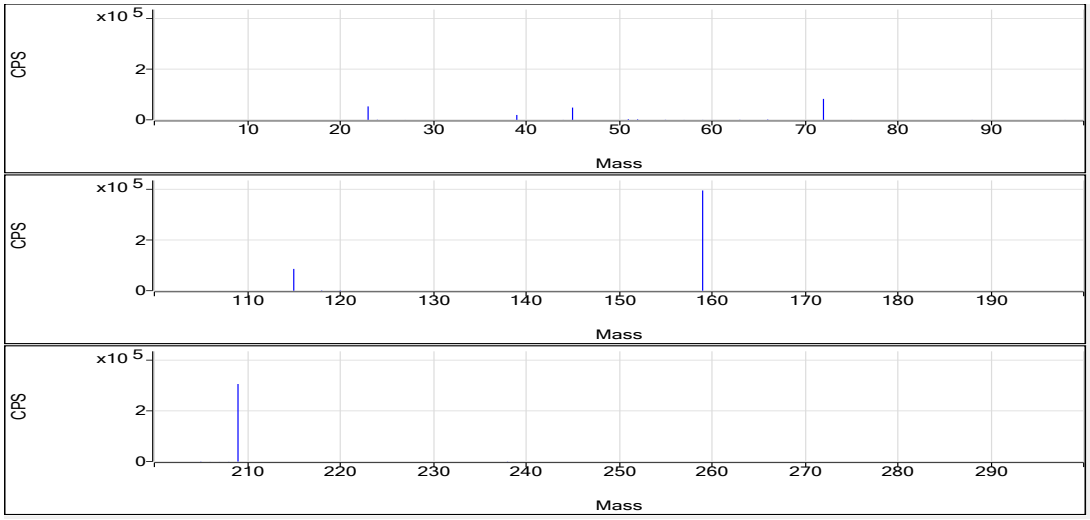


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.026	0	60.00	0.0008	4.685E-06
Be	9	1	No Gas	0.028	0	62.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Se	78	2	H2	0.04	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.06	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.041	0	4.67	0.0004	1.219E-05
Na	23	3	He	209.568	1.0948	54109.34	0.0036	0.3452
Na	23	3	He	215.717	1.1168	52664.30	0.0036	0.3452
Na	23	3	He	205.039	1.0786	52172.79	0.0036	0.3452
Mg	24	3	He	4.817	0.0121	600.03	0.0018	0.003497
Mg	24	3	He	5.852	0.014	660.04	0.0018	0.003497
Mg	24	3	He	6.002	0.0143	690.04	0.0018	0.003497
Al	27	3	He	2.013	0.0018	90.00	0.0006	0.0006432
Al	27	3	He	0.35	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	2.081	0.0019	90.00	0.0006	0.0006432
K	39	3	He	-15.696	0.3768	18622.61	0.0012	0.3951
K	39	3	He	14.449	0.4119	19423.47	0.0012	0.3951
K	39	3	He	6.46	0.4026	19473.62	0.0012	0.3951
Ca	44	3	He	34.692	0.0051	250.01	0.0001	0.002715
Ca	44	3	He	6.9	0.0032	150.01	0.0001	0.002715
Ca	44	3	He	8.779	0.0033	160.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	1.054	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.64	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	1.149	0.05	2470.23	0.0219	0.02486
V	51	3	He	1.22	0.0515	2430.22	0.0219	0.02486
V	51	3	He	1.197	0.051	2468.22	0.0219	0.02486
Cr	52	3	He	0.084	0.0425	2100.20	0.0299	0.03997
Cr	52	3	He	-0.216	0.0335	1580.14	0.0299	0.03997
Cr	52	3	He	0.018	0.0405	1960.20	0.0299	0.03997
Mn	55	3	He	0.472	0.0087	430.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.571	0.01	470.03	0.0128	0.002639
Mn	55	3	He	0.584	0.0101	490.03	0.0128	0.002639
Fe	57	3	He	3.113	0.0032	160.01	0.0006	0.001429
Fe	57	3	He	1.556	0.0023	110.00	0.0006	0.001429
Fe	57	3	He	1.811	0.0025	120.01	0.0006	0.001429
Co	59	3	He	0.077	0.0065	320.02	0.0563	0.002149
Co	59	3	He	0.037	0.0042	200.01	0.0563	0.002149
Co	59	3	He	0.043	0.0045	220.01	0.0563	0.002149
Ni	60	3	He	-0.067	0.0023	190.01	0.0086	0.002834
Ni	60	3	He	-0.043	0.0025	200.01	0.0086	0.002834
Ni	60	3	He	-0.133	0.0017	140.01	0.0086	0.002834
Cu	63	3	He	0.088	0.007	590.03	0.0257	0.004757
Cu	63	3	He	0.122	0.0079	640.04	0.0257	0.004757
Cu	63	3	He	0.036	0.0057	470.02	0.0257	0.004757
Zn	66	3	He	3.631	0.0144	1210.10	0.0029	0.003818
Zn	66	3	He	4.359	0.0165	1340.11	0.0029	0.003818
Zn	66	3	He	3.505	0.014	1160.08	0.0029	0.003818
As	75	3	He	0.349	0.0015	128.00	0.002	0.0008061
As	75	3	He	0.22	0.0013	102.00	0.002	0.0008061
As	75	3	He	0.444	0.0017	142.00	0.002	0.0008061
Sr	88	3	He	0.123	0.0021	180.01	0.009	0.0009645
Sr	88	3	He	0.236	0.0031	260.01	0.009	0.0009645
Sr	88	3	He	0.163	0.0024	210.01	0.009	0.0009645
Mo	98	3	He	0.045	0.0013	110.00	0.0219	0.0002706
Mo	98	3	He	0.047	0.0013	110.00	0.0219	0.0002706
Mo	98	3	He	0.051	0.0014	120.01	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.017	0.0014	120.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Sn	120	3	He	0.019	0.0168	1460.13	0.0158	0.01648
Sn	120	3	He	0.021	0.0168	1420.13	0.0158	0.01648
Sn	120	3	He	0.105	0.0181	1570.15	0.0158	0.01648
Sb	121	3	He	0.051	0.001	90.00	0.0149	0.0002698
Sb	121	3	He	0.03	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.044	0.0009	80.00	0.0149	0.0002698
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.026	0.0004	30.00	0.0048	0.0002317
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.073	0.0019	760.06	0.0247	0.0001339
Tl	205	3	He	0.084	0.0022	880.05	0.0247	0.0001339
Tl	205	3	He	0.077	0.002	810.05	0.0247	0.0001339
Pb	208	3	He	0.016	0.0016	290.01	0.0327	0.00107
Pb	208	3	He	0.015	0.0016	370.02	0.0327	0.00107
Pb	208	3	He	0.009	0.0014	340.02	0.0327	0.00107
U	238	3	He	0.046	0.0023	720.05	0.0493	7.55E-05
U	238	3	He	0.044	0.0023	690.05	0.0493	7.55E-05
U	238	3	He	0.051	0.0026	790.06	0.0493	7.55E-05
Sc	45	1	No Gas			2445390.90		
Sc	45	1	No Gas			2396008.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2415486.37		
Ge	72	1	No Gas			1223602.33		
Ge	72	1	No Gas			1225463.26		
Ge	72	1	No Gas			1226377.95		
Sc	45	2	H2			187363.81		
Sc	45	2	H2			191829.12		
Sc	45	2	H2			191616.60		
Ge	72	2	H2			162618.31		
Ge	72	2	H2			161748.12		
Ge	72	2	H2			158591.08		
In	115	2	H2			391550.03		
In	115	2	H2			390564.99		
In	115	2	H2			393207.57		
Sc	45	3	He			49424.25		
Sc	45	3	He			47156.90		
Sc	45	3	He			48371.07		
Ge	72	3	He			84097.36		
Ge	72	3	He			81171.00		
Ge	72	3	He			82729.05		
In	115	3	He			87041.69		
In	115	3	He			84487.41		
In	115	3	He			86620.15		
Tb	159	3	He			394470.97		
Tb	159	3	He			396854.33		
Tb	159	3	He			395814.21		
Bi	209	3	He			307881.83		
Bi	209	3	He			304660.15		
Bi	209	3	He			306008.08		

Quantitation Report

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Acq Time	8/10/2023 3:39:38 PM
Sample Name	410-137396-B-1-A
Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

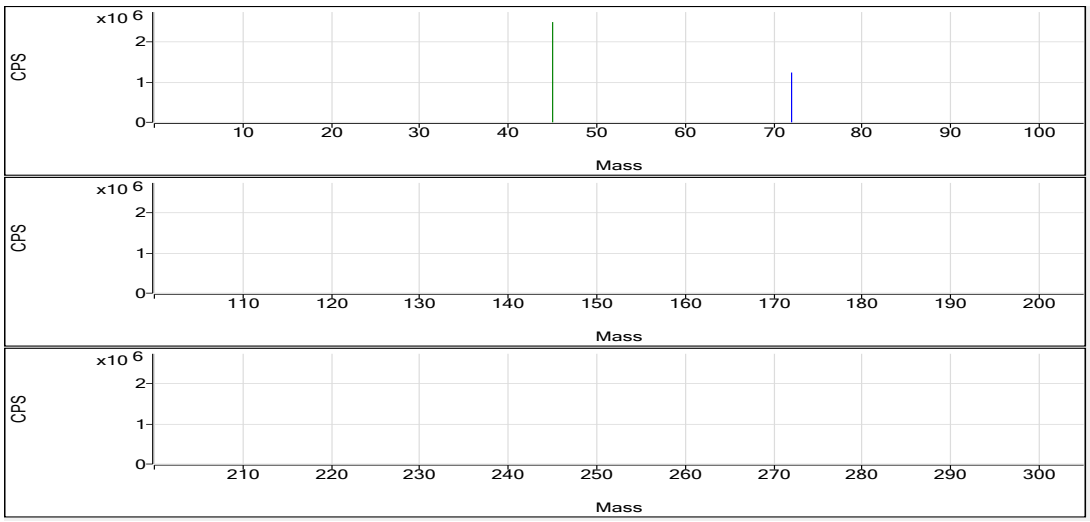
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	16.4	34.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	1.062	ppb	3.3	77.56	0.0005	Pulse	1.5000	3
Na	23	45	He	237862.414	ppb	1.5	41008996.06	851.1907	Analog	0.1000	3
Mg	24	45	He	27571.726	ppb	2.2	2383539.23	49.4760	Analog	0.1000	3
Al	27	45	He	9.805	ppb	41.4	306.68	0.0064	Pulse	0.1000	3
K	39	45	He	40744.376	ppb	1.9	2304500.28	47.8348	Analog	0.1000	3
Ca	44	45	He	39978.748	ppb	2.1	130235.39	2.7034	Pulse	0.1000	3
Ti	47	45	He	0.637	ppb	121.1	20.00	0.0004	Pulse	0.1000	3
V	51	45	He	6.898	ppb	4.1	8460.51	0.1756	Pulse	0.5000	3
Cr	52	45	He	-0.023	ppb	N/A	1893.52	0.0393	Pulse	0.1000	3
Mn	55	45	He	7577.321	ppb	2.2	4684976.39	97.2490	Analog	0.1000	3
Fe	57	45	He	11.968	ppb	15.5	403.35	0.0084	Pulse	0.1000	3
Co	59	45	He	29.350	ppb	1.7	79687.13	1.6540	Pulse	0.1000	3
Ni	60	72	He	5.273	ppb	3.9	4157.44	0.0481	Pulse	0.1000	3
Cu	63	72	He	0.265	ppb	4.4	1000.07	0.0116	Pulse	0.1000	3
Zn	66	72	He	5.893	ppb	5.2	1813.52	0.0210	Pulse	0.1000	3
As	75	72	He	0.713	ppb	16.4	196.00	0.0023	Pulse	0.5000	3
Sr	88	115	He	311.001	ppb	1.3	240814.25	2.7906	Pulse	0.1000	3
Mo	98	115	He	0.885	ppb	7.1	1696.82	0.0197	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.036	ppb	25.2	16.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.287	ppb	N/A	1030.08	0.0119	Pulse	0.1000	3
Sb	121	115	He	0.258	ppb	15.9	353.35	0.0041	Pulse	0.1000	3
Ba	137	115	He	23.598	ppb	1.9	9793.90	0.1135	Pulse	0.1000	3
Tl	205	159	He	0.052	ppb	12.1	566.70	0.0014	Pulse	0.1000	3
Pb	208	159	He	0.034	ppb	18.1	873.38	0.0022	Pulse	0.1000	3
U	238	209	He	0.011	ppb	14.4	193.34	0.0006	Pulse	0.1000	3

ISTD Table:

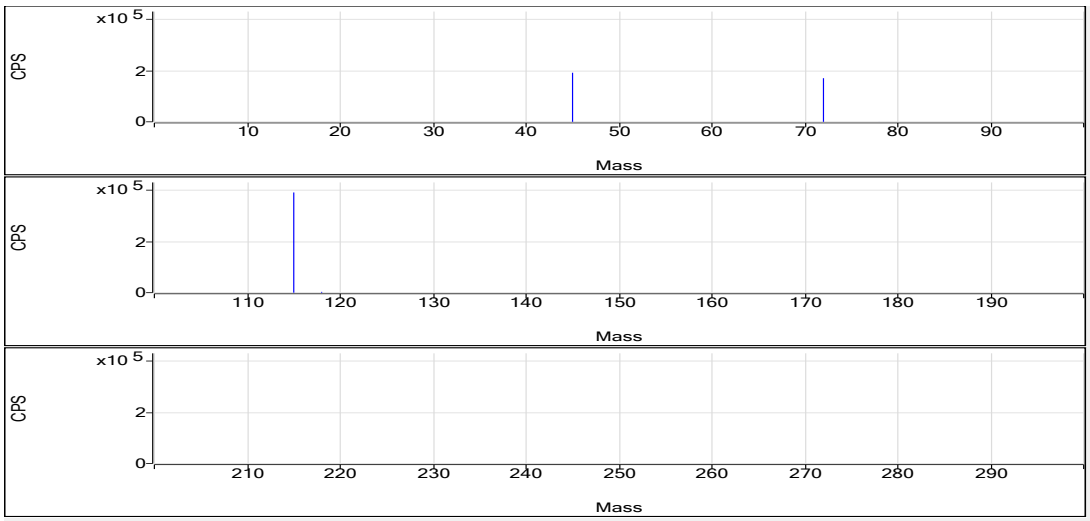
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2495279.39	0.7	104.0	Analog	0.1000	3
No Gas	Ge	72	1238995.61	0.3	107.4	Pulse	0.1000	3
H2	Sc	45	191732.19	0.6	102.5	Pulse	0.1000	3
H2	Ge	72	170402.61	0.8	104.1	Pulse	0.1000	3
H2	In	115	391582.60	0.2	100.6	Pulse	0.1000	3
He	Sc	45	48187.38	1.8	103.3	Pulse	0.1000	3
He	Ge	72	86447.83	0.4	106.5	Pulse	0.1000	3
He	In	115	86298.03	0.8	100.1	Pulse	0.1000	3
He	Tb	159	397607.86	0.6	99.7	Pulse	0.1000	3
He	Bi	209	304999.24	0.3	98.6	Pulse	0.1000	3

No Gas

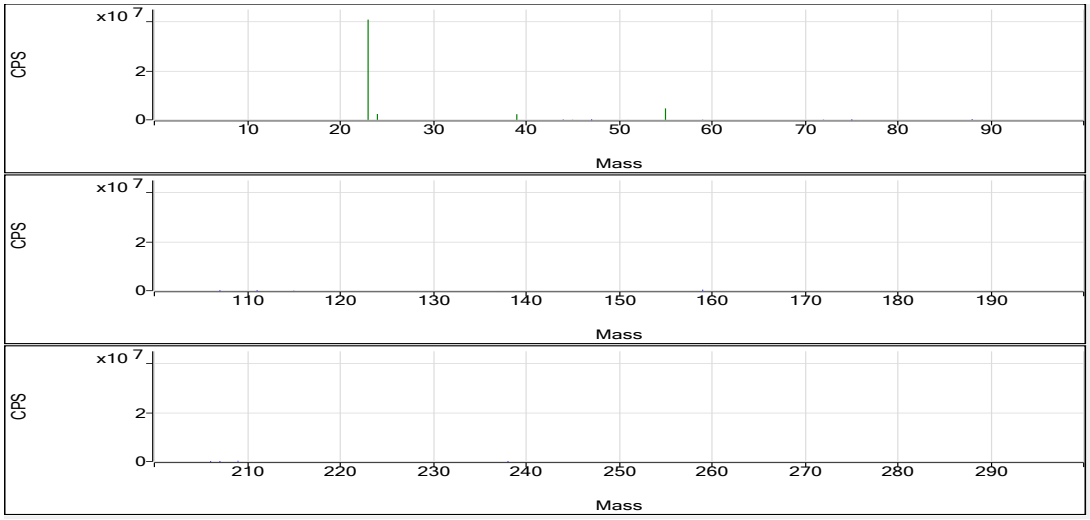


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Be	9	1	No Gas	0.014	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Se	78	2	H2	1.022	0.0004	74.67	0.0004	1.219E-05
Se	78	2	H2	1.077	0.0005	78.00	0.0004	1.219E-05
Se	78	2	H2	1.087	0.0005	80.00	0.0004	1.219E-05
Na	23	3	He	234420.839	838.88	41116234.39	0.0036	0.3452
Na	23	3	He	237457.572	849.7425	41026571.89	0.0036	0.3452
Na	23	3	He	241708.832	864.9495	40884181.89	0.0036	0.3452
Mg	24	3	He	26908.684	48.2863	2366670.43	0.0018	0.003497
Mg	24	3	He	27753.592	49.8024	2404517.46	0.0018	0.003497
Mg	24	3	He	28052.902	50.3394	2379429.81	0.0018	0.003497
Al	27	3	He	10.061	0.0065	320.02	0.0006	0.0006432
Al	27	3	He	5.627	0.0039	190.01	0.0006	0.0006432
Al	27	3	He	13.728	0.0087	410.02	0.0006	0.0006432
K	39	3	He	40075.412	47.0559	2306364.34	0.0012	0.3951
K	39	3	He	40536.945	47.5933	2297861.22	0.0012	0.3951
K	39	3	He	41620.772	48.8552	2309275.28	0.0012	0.3951
Ca	44	3	He	39259.232	2.6548	130117.97	0.0001	0.002715
Ca	44	3	He	39805.552	2.6917	129956.32	0.0001	0.002715
Ca	44	3	He	40871.461	2.7637	130631.88	0.0001	0.002715
Ti	47	3	He	0.63	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1.413	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	6.767	0.1728	8468.51	0.0219	0.02486
V	51	3	He	6.706	0.1715	8278.41	0.0219	0.02486
V	51	3	He	7.219	0.1827	8634.61	0.0219	0.02486
Cr	52	3	He	-0.054	0.0384	1880.18	0.0299	0.03997
Cr	52	3	He	0.111	0.0433	2090.23	0.0299	0.03997
Cr	52	3	He	-0.127	0.0362	1710.15	0.0299	0.03997
Mn	55	3	He	7390.361	94.8496	4648887.74	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	7622.611	97.8303	4723361.80	0.0128	0.002639
Mn	55	3	He	7718.99	99.0672	4682679.62	0.0128	0.002639
Fe	57	3	He	9.832	0.0071	350.02	0.0006	0.001429
Fe	57	3	He	12.871	0.0089	430.02	0.0006	0.001429
Fe	57	3	He	13.199	0.0091	430.02	0.0006	0.001429
Co	59	3	He	28.773	1.6216	79479.03	0.0563	0.002149
Co	59	3	He	29.54	1.6647	80374.73	0.0563	0.002149
Co	59	3	He	29.735	1.6757	79207.63	0.0563	0.002149
Ni	60	3	He	5.283	0.0482	4150.78	0.0086	0.002834
Ni	60	3	He	5.474	0.0498	4300.79	0.0086	0.002834
Ni	60	3	He	5.063	0.0463	4020.75	0.0086	0.002834
Cu	63	3	He	0.253	0.0113	970.07	0.0257	0.004757
Cu	63	3	He	0.266	0.0116	1000.07	0.0257	0.004757
Cu	63	3	He	0.277	0.0119	1030.08	0.0257	0.004757
Zn	66	3	He	5.666	0.0203	1750.17	0.0029	0.003818
Zn	66	3	He	5.771	0.0206	1780.17	0.0029	0.003818
Zn	66	3	He	6.242	0.022	1910.23	0.0029	0.003818
As	75	3	He	0.694	0.0022	192.00	0.002	0.0008061
As	75	3	He	0.839	0.0025	218.00	0.002	0.0008061
As	75	3	He	0.607	0.002	178.00	0.002	0.0008061
Sr	88	3	He	307.44	2.7586	240097.79	0.009	0.0009645
Sr	88	3	He	315.166	2.8279	243771.54	0.009	0.0009645
Sr	88	3	He	310.397	2.7852	238573.41	0.009	0.0009645
Mo	98	3	He	0.847	0.0188	1640.15	0.0219	0.0002706
Mo	98	3	He	0.85	0.0189	1630.15	0.0219	0.0002706
Mo	98	3	He	0.957	0.0212	1820.17	0.0219	0.0002706
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.039	0.0002	18.00	0.0053	0
Cd	111	3	He	0.026	0.0001	12.00	0.0053	0
Cd	111	3	He	0.044	0.0002	20.00	0.0053	0
Sn	120	3	He	-0.286	0.012	1040.08	0.0158	0.01648
Sn	120	3	He	-0.301	0.0117	1010.07	0.0158	0.01648
Sn	120	3	He	-0.274	0.0121	1040.08	0.0158	0.01648
Sb	121	3	He	0.222	0.0036	310.02	0.0149	0.0002698
Sb	121	3	He	0.302	0.0048	410.02	0.0149	0.0002698
Sb	121	3	He	0.249	0.004	340.02	0.0149	0.0002698
Ba	137	3	He	23.901	0.1149	10003.96	0.0048	0.0002317
Ba	137	3	He	23.069	0.1109	9563.81	0.0048	0.0002317
Ba	137	3	He	23.824	0.1146	9813.93	0.0048	0.0002317
Tl	205	3	He	0.048	0.0013	530.03	0.0247	0.0001339
Tl	205	3	He	0.059	0.0016	640.04	0.0247	0.0001339
Tl	205	3	He	0.049	0.0013	530.03	0.0247	0.0001339
Pb	208	3	He	0.034	0.0022	420.02	0.0327	0.00107
Pb	208	3	He	0.041	0.0024	450.02	0.0327	0.00107
Pb	208	3	He	0.028	0.002	440.02	0.0327	0.00107
U	238	3	He	0.01	0.0006	170.01	0.0493	7.55E-05
U	238	3	He	0.011	0.0006	190.01	0.0493	7.55E-05
U	238	3	He	0.013	0.0007	220.01	0.0493	7.55E-05
Sc	45	1	No Gas			2513564.49		
Sc	45	1	No Gas			2479938.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2492335.59		
Ge	72	1	No Gas			1243549.83		
Ge	72	1	No Gas			1237611.15		
Ge	72	1	No Gas			1235825.84		
Sc	45	2	H2			192984.22		
Sc	45	2	H2			190756.56		
Sc	45	2	H2			191455.80		
Ge	72	2	H2			170385.11		
Ge	72	2	H2			169010.60		
Ge	72	2	H2			171812.13		
In	115	2	H2			391763.74		
In	115	2	H2			390869.25		
In	115	2	H2			392114.80		
Sc	45	3	He			49013.25		
Sc	45	3	He			48281.18		
Sc	45	3	He			47267.71		
Ge	72	3	He			86149.47		
Ge	72	3	He			86329.98		
Ge	72	3	He			86864.03		
In	115	3	He			87041.33		
In	115	3	He			86206.92		
In	115	3	He			85663.69		
Tb	159	3	He			399151.44		
Tb	159	3	He			398809.56		
Tb	159	3	He			394862.57		
Bi	209	3	He			304037.36		
Bi	209	3	He			304830.03		
Bi	209	3	He			306130.33		

Quantitation Report

Data File Name	148SMPL.d
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Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

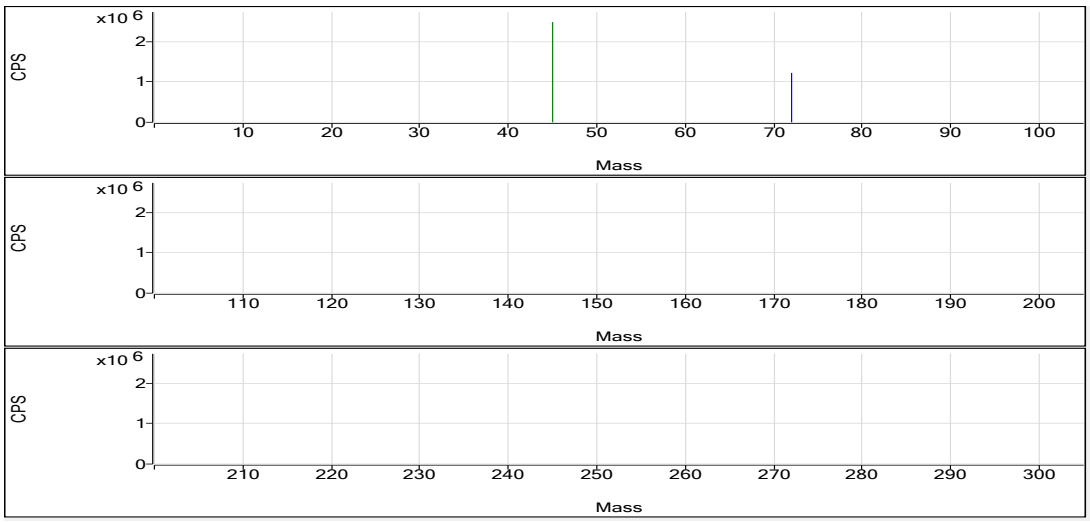
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.006	ppb	77.2	23.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	1.071	ppb	14.9	78.00	0.0005	Pulse	1.5000	3
Na	23	45	He	238228.667	ppb	2.1	41078196.06	852.5008	Analog	0.1000	3
Mg	24	45	He	27228.629	ppb	2.5	2354249.03	48.8604	Analog	0.1000	3
Al	27	45	He	8.487	ppb	14.1	270.01	0.0056	Pulse	0.1000	3
K	39	45	He	40984.449	ppb	2.0	2318472.88	48.1144	Analog	0.1000	3
Ca	44	45	He	39985.208	ppb	2.8	130275.20	2.7038	Pulse	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	6.977	ppb	1.4	8548.56	0.1774	Pulse	0.5000	3
Cr	52	45	He	-0.088	ppb	N/A	1800.18	0.0373	Pulse	0.1000	3
Mn	55	45	He	7510.186	ppb	2.8	4644130.14	96.3874	Analog	0.1000	3
Fe	57	45	He	10.628	ppb	6.4	366.68	0.0076	Pulse	0.1000	3
Co	59	45	He	29.688	ppb	2.4	80632.15	1.6731	Pulse	0.1000	3
Ni	60	72	He	5.054	ppb	3.9	3997.36	0.0462	Pulse	0.1000	3
Cu	63	72	He	0.225	ppb	28.3	910.06	0.0105	Pulse	0.1000	3
Zn	66	72	He	5.136	ppb	13.9	1623.48	0.0188	Pulse	0.1000	3
As	75	72	He	0.570	ppb	6.0	170.67	0.0020	Pulse	0.5000	3
Sr	88	115	He	309.217	ppb	0.9	241026.40	2.7746	Pulse	0.1000	3
Mo	98	115	He	0.929	ppb	4.4	1793.51	0.0206	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.037	ppb	35.5	17.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.193	ppb	N/A	1166.75	0.0134	Pulse	0.1000	3
Sb	121	115	He	0.240	ppb	12.6	333.35	0.0038	Pulse	0.1000	3
Ba	137	115	He	24.899	ppb	1.3	10400.97	0.1197	Pulse	0.1000	3
Tl	205	159	He	0.043	ppb	15.0	470.03	0.0012	Pulse	0.1000	3
Pb	208	159	He	0.045	ppb	3.1	1000.06	0.0025	Pulse	0.1000	3
U	238	209	He	0.005	ppb	48.2	100.00	0.0003	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2484321.32	0.8	103.6	Analog	0.1000	3
No Gas	Ge	72	1224873.05	0.7	106.2	Pulse	0.1000	3
H2	Sc	45	192020.69	0.3	102.7	Pulse	0.1000	3
H2	Ge	72	169954.26	1.0	103.8	Pulse	0.1000	3
H2	In	115	392790.18	0.9	101.0	Pulse	0.1000	3
He	Sc	45	48197.00	1.7	103.3	Pulse	0.1000	3
He	Ge	72	86488.14	0.3	106.5	Pulse	0.1000	3
He	In	115	86867.73	0.4	100.8	Pulse	0.1000	3
He	Tb	159	395312.94	0.9	99.2	Pulse	0.1000	3
He	Bi	209	306235.21	1.3	99.0	Pulse	0.1000	3

No Gas



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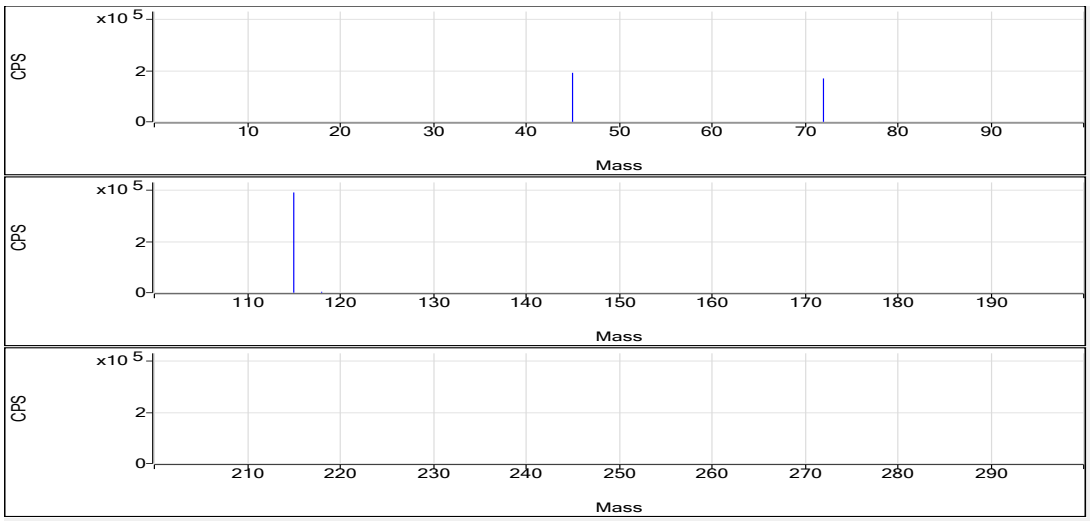
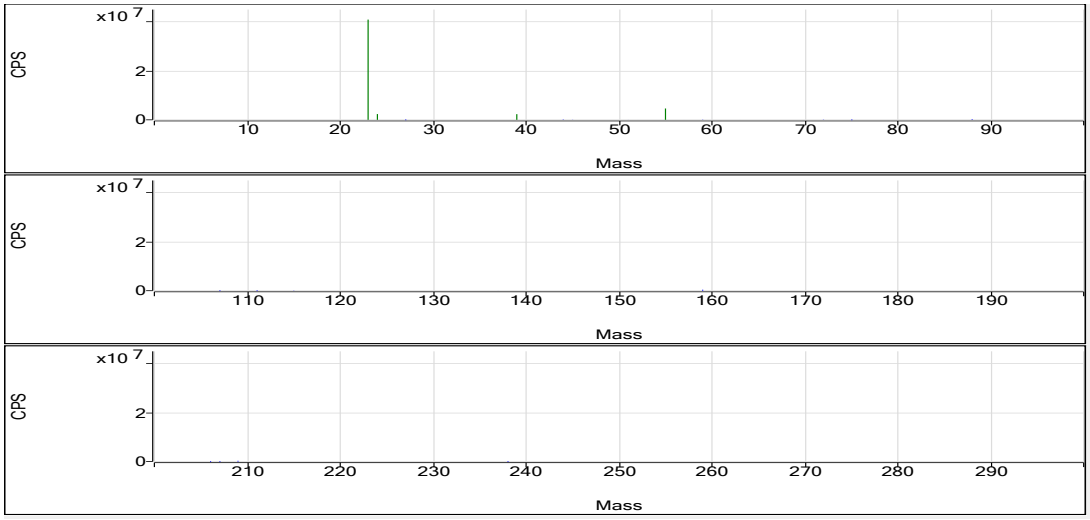


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Be	9	1	No Gas	0.001	0	14.00	0.0008	4.685E-06
Se	78	2	H2	1.197	0.0005	86.00	0.0004	1.219E-05
Se	78	2	H2	1.126	0.0005	82.67	0.0004	1.219E-05
Se	78	2	H2	0.892	0.0004	65.33	0.0004	1.219E-05
Na	23	3	He	243776.958	872.3473	41233491.89	0.0036	0.3452
Na	23	3	He	234436.905	838.9375	41018101.89	0.0036	0.3452
Na	23	3	He	236472.137	846.2176	40982994.39	0.0036	0.3452
Mg	24	3	He	27945.851	50.1474	2370329.34	0.0018	0.003497
Mg	24	3	He	26585.349	47.7062	2332494.03	0.0018	0.003497
Mg	24	3	He	27154.686	48.7277	2359923.71	0.0018	0.003497
Al	27	3	He	9.75	0.0063	300.01	0.0006	0.0006432
Al	27	3	He	8.34	0.0055	270.01	0.0006	0.0006432
Al	27	3	He	7.371	0.005	240.01	0.0006	0.0006432
K	39	3	He	41723.296	48.9746	2314897.15	0.0012	0.3951
K	39	3	He	40086.666	47.069	2301342.78	0.0012	0.3951
K	39	3	He	41143.383	48.2994	2339178.72	0.0012	0.3951
Ca	44	3	He	41035.586	2.7747	131154.77	0.0001	0.002715
Ca	44	3	He	38837.048	2.6262	128404.13	0.0001	0.002715
Ca	44	3	He	40082.99	2.7104	131266.71	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	7.045	0.1789	8454.51	0.0219	0.02486
V	51	3	He	7.024	0.1784	8722.65	0.0219	0.02486
V	51	3	He	6.862	0.1749	8468.51	0.0219	0.02486
Cr	52	3	He	-0.091	0.0372	1760.17	0.0299	0.03997
Cr	52	3	He	-0.092	0.0372	1820.19	0.0299	0.03997
Cr	52	3	He	-0.08	0.0376	1820.18	0.0299	0.03997
Mn	55	3	He	7719.707	99.0764	4683073.37	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	7301.539	93.7097	4581740.24	0.0128	0.002639
Mn	55	3	He	7509.311	96.3762	4667576.81	0.0128	0.002639
Fe	57	3	He	9.922	0.0072	340.01	0.0006	0.001429
Fe	57	3	He	11.271	0.008	390.02	0.0006	0.001429
Fe	57	3	He	10.691	0.0076	370.02	0.0006	0.001429
Co	59	3	He	29.611	1.6687	78875.59	0.0563	0.002149
Co	59	3	He	29.016	1.6352	79951.74	0.0563	0.002149
Co	59	3	He	30.437	1.7152	83069.12	0.0563	0.002149
Ni	60	3	He	5.056	0.0462	4000.71	0.0086	0.002834
Ni	60	3	He	5.249	0.0479	4150.73	0.0086	0.002834
Ni	60	3	He	4.858	0.0445	3840.65	0.0086	0.002834
Cu	63	3	He	0.292	0.0122	1060.08	0.0257	0.004757
Cu	63	3	He	0.165	0.009	780.05	0.0257	0.004757
Cu	63	3	He	0.217	0.0103	890.06	0.0257	0.004757
Zn	66	3	He	4.325	0.0164	1420.13	0.0029	0.003818
Zn	66	3	He	5.425	0.0196	1700.15	0.0029	0.003818
Zn	66	3	He	5.659	0.0203	1750.17	0.0029	0.003818
As	75	3	He	0.588	0.002	174.00	0.002	0.0008061
As	75	3	He	0.53	0.0019	164.00	0.002	0.0008061
As	75	3	He	0.591	0.002	174.00	0.002	0.0008061
Sr	88	3	He	311.809	2.7978	244073.61	0.009	0.0009645
Sr	88	3	He	306.136	2.747	238089.55	0.009	0.0009645
Sr	88	3	He	309.706	2.779	240916.05	0.009	0.0009645
Mo	98	3	He	0.976	0.0217	1890.19	0.0219	0.0002706
Mo	98	3	He	0.898	0.02	1730.17	0.0219	0.0002706
Mo	98	3	He	0.914	0.0203	1760.16	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.026	0.0001	12.00	0.0053	0
Cd	111	3	He	0.052	0.0003	24.00	0.0053	0
Cd	111	3	He	0.035	0.0002	16.00	0.0053	0
Sn	120	3	He	-0.15	0.0141	1230.09	0.0158	0.01648
Sn	120	3	He	-0.115	0.0147	1270.10	0.0158	0.01648
Sn	120	3	He	-0.313	0.0115	1000.07	0.0158	0.01648
Sb	121	3	He	0.206	0.0033	290.02	0.0149	0.0002698
Sb	121	3	He	0.261	0.0042	360.02	0.0149	0.0002698
Sb	121	3	He	0.254	0.004	350.02	0.0149	0.0002698
Ba	137	3	He	25.113	0.1208	10534.45	0.0048	0.0002317
Ba	137	3	He	25.06	0.1205	10444.34	0.0048	0.0002317
Ba	137	3	He	24.525	0.1179	10224.11	0.0048	0.0002317
Tl	205	3	He	0.047	0.0013	510.03	0.0247	0.0001339
Tl	205	3	He	0.035	0.001	400.02	0.0247	0.0001339
Tl	205	3	He	0.046	0.0013	500.03	0.0247	0.0001339
Pb	208	3	He	0.045	0.0025	500.03	0.0327	0.00107
Pb	208	3	He	0.046	0.0026	500.03	0.0327	0.00107
Pb	208	3	He	0.043	0.0025	670.04	0.0327	0.00107
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
U	238	3	He	0.006	0.0004	110.00	0.0493	7.55E-05
U	238	3	He	0.007	0.0004	130.01	0.0493	7.55E-05
Sc	45	1	No Gas			2462975.74		
Sc	45	1	No Gas			2489456.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2500531.53		
Ge	72	1	No Gas			1214423.50		
Ge	72	1	No Gas			1230160.76		
Ge	72	1	No Gas			1230034.90		
Sc	45	2	H2			191325.88		
Sc	45	2	H2			192572.48		
Sc	45	2	H2			192163.71		
Ge	72	2	H2			168220.43		
Ge	72	2	H2			171549.31		
Ge	72	2	H2			170093.04		
In	115	2	H2			390043.90		
In	115	2	H2			391737.53		
In	115	2	H2			396589.10		
Sc	45	3	He			47267.29		
Sc	45	3	He			48892.92		
Sc	45	3	He			48430.80		
Ge	72	3	He			86541.64		
Ge	72	3	He			86682.34		
Ge	72	3	He			86240.44		
In	115	3	He			87243.21		
In	115	3	He			86679.73		
In	115	3	He			86699.53		
Tb	159	3	He			397218.43		
Tb	159	3	He			397523.78		
Tb	159	3	He			391196.60		
Bi	209	3	He			310440.11		
Bi	209	3	He			305571.66		
Bi	209	3	He			302693.86		

Quantitation Report

Data File Name	149SMPL.d
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Sample Type	Sample
Comment	D2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

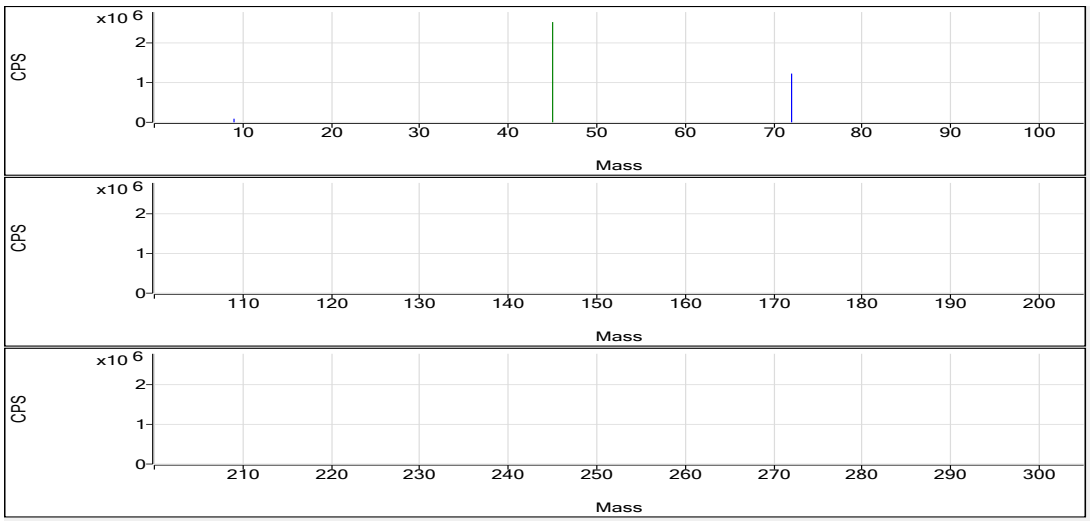
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.965	ppb	1.2	90808.61	0.0358	Pulse	0.5000	3
Se	78	72	H2	97.371	ppb	0.9	6900.33	0.0406	Pulse	1.5000	3
Na	23	45	He	235707.174	ppb	2.8	41123442.72	843.4813	Analog	0.1000	3
Mg	24	45	He	31369.273	ppb	1.3	2744833.29	56.2901	Analog	0.1000	3
Al	27	45	He	4828.111	ppb	2.1	137752.73	2.8253	Pulse	0.1000	3
K	39	45	He	44834.832	ppb	2.3	2564498.82	52.5975	Analog	0.1000	3
Ca	44	45	He	44211.082	ppb	1.1	145766.72	2.9893	Pulse	0.1000	3
Ti	47	45	He	498.896	ppb	1.1	13066.27	0.2680	Pulse	0.1000	3
V	51	45	He	498.408	ppb	1.6	532446.04	10.9197	Pulse	0.5000	3
Cr	52	45	He	457.609	ppb	1.9	669999.81	13.7411	Pulse	0.1000	3
Mn	55	45	He	7868.638	ppb	1.5	4924256.07	100.9878	Analog	0.1000	3
Fe	57	45	He	4829.719	ppb	1.3	136901.61	2.8075	Pulse	0.1000	3
Co	59	45	He	487.749	ppb	1.6	1338666.86	27.4538	Pulse	0.1000	3
Ni	60	72	He	475.833	ppb	0.8	354652.14	4.0870	Pulse	0.1000	3
Cu	63	72	He	449.040	ppb	1.2	1000692.49	11.5321	Pulse	0.1000	3
Zn	66	72	He	481.492	ppb	0.8	121995.24	1.4057	Pulse	0.1000	3
As	75	72	He	493.224	ppb	0.9	87761.34	1.0114	Pulse	0.5000	3
Sr	88	115	He	359.917	ppb	0.9	278413.15	3.2294	Pulse	0.1000	3
Mo	98	115	He	49.876	ppb	1.3	94305.43	1.0939	Pulse	0.1000	3
Ag	107	115	He	46.791	ppb	1.2	187581.78	2.1758	Pulse	0.1000	3
Cd	111	115	He	49.560	ppb	0.9	22846.02	0.2650	Pulse	0.5000	3
Sn	120	115	He	101.742	ppb	1.5	139994.45	1.6239	Pulse	0.1000	3
Sb	121	115	He	101.990	ppb	1.6	130624.66	1.5152	Pulse	0.1000	3
Ba	137	115	He	527.943	ppb	1.1	218462.24	2.5340	Pulse	0.1000	3
Tl	205	159	He	96.785	ppb	1.2	947634.78	2.3933	Pulse	0.1000	3
Pb	208	159	He	48.979	ppb	0.8	635174.35	1.6041	Pulse	0.1000	3
U	238	209	He	48.687	ppb	0.2	735817.41	2.3984	Pulse	0.1000	3

ISTD Table:

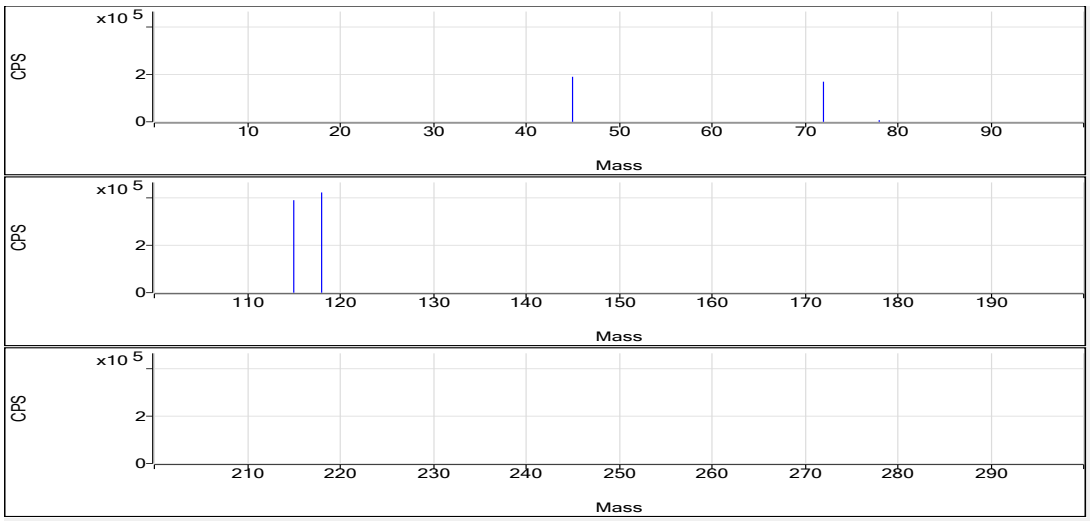
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2535000.80	2.6	105.7	Analog	0.1000	3
No Gas	Ge	72	1231834.17	1.3	106.8	Pulse	0.1000	3
H2	Sc	45	190625.57	0.4	101.9	Pulse	0.1000	3
H2	Ge	72	169868.99	0.7	103.8	Pulse	0.1000	3
H2	In	115	391533.65	0.6	100.6	Pulse	0.1000	3
He	Sc	45	48768.96	1.6	104.6	Pulse	0.1000	3
He	Ge	72	86779.84	0.8	106.9	Pulse	0.1000	3
He	In	115	86215.26	0.5	100.0	Pulse	0.1000	3
He	Tb	159	395974.62	0.7	99.3	Pulse	0.1000	3
He	Bi	209	306797.64	1.1	99.2	Pulse	0.1000	3

No Gas

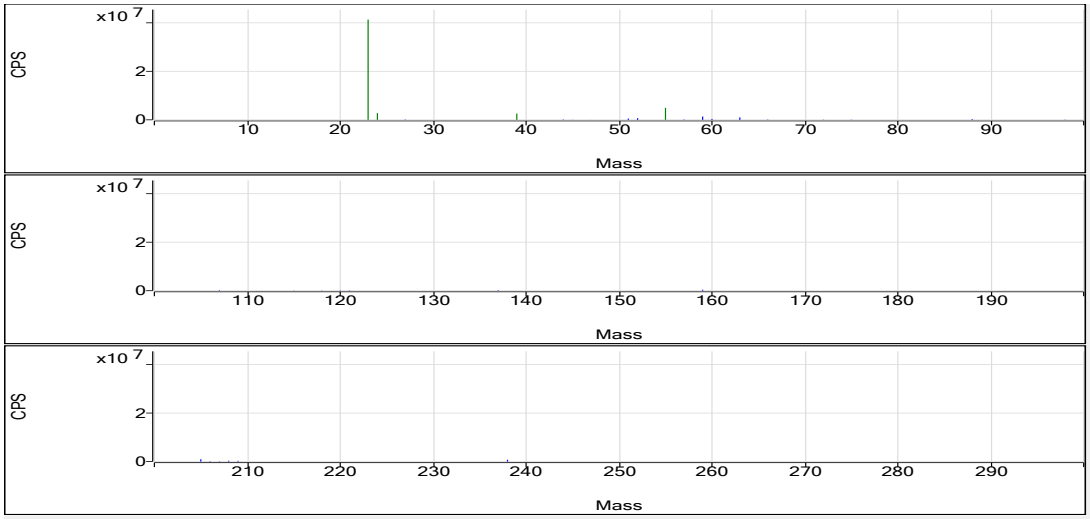


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.697	0.0356	90489.30	0.0008	4.685E-06
Be	9	1	No Gas	46.572	0.0355	92270.30	0.0008	4.685E-06
Be	9	1	No Gas	47.626	0.0363	89666.23	0.0008	4.685E-06
Se	78	2	H2	97.362	0.0406	6951.69	0.0004	1.219E-05
Se	78	2	H2	96.518	0.0403	6839.63	0.0004	1.219E-05
Se	78	2	H2	98.232	0.041	6909.67	0.0004	1.219E-05
Na	23	3	He	243380.774	870.9301	41690631.88	0.0036	0.3452
Na	23	3	He	231676.106	829.0619	40651816.89	0.0036	0.3452
Na	23	3	He	232064.643	830.4518	41027879.39	0.0036	0.3452
Mg	24	3	He	31816.854	57.0932	2732998.40	0.0018	0.003497
Mg	24	3	He	31207.587	56	2745874.33	0.0018	0.003497
Mg	24	3	He	31083.377	55.7771	2755627.15	0.0018	0.003497
Al	27	3	He	4943.931	2.893	138486.01	0.0006	0.0006432
Al	27	3	He	4792.369	2.8043	137506.93	0.0006	0.0006432
Al	27	3	He	4748.032	2.7784	137265.24	0.0006	0.0006432
K	39	3	He	45917.032	53.8575	2578109.02	0.0012	0.3951
K	39	3	He	44693.979	52.4335	2570996.37	0.0012	0.3951
K	39	3	He	43893.485	51.5014	2544391.06	0.0012	0.3951
Ca	44	3	He	44683.83	3.0212	144621.75	0.0001	0.002715
Ca	44	3	He	44204.261	2.9888	146551.21	0.0001	0.002715
Ca	44	3	He	43745.156	2.9578	146127.20	0.0001	0.002715
Ti	47	3	He	503.936	0.2707	12956.14	0.0005	7.003E-05
Ti	47	3	He	499.953	0.2685	13166.45	0.0005	7.003E-05
Ti	47	3	He	492.799	0.2647	13076.23	0.0005	7.003E-05
V	51	3	He	507.259	11.1131	531975.63	0.0219	0.02486
V	51	3	He	496.646	10.8811	533540.13	0.0219	0.02486
V	51	3	He	491.319	10.7647	531822.38	0.0219	0.02486
Cr	52	3	He	467.458	14.036	671890.15	0.0299	0.03997
Cr	52	3	He	454.944	13.6613	669863.12	0.0299	0.03997
Cr	52	3	He	450.427	13.5261	668246.16	0.0299	0.03997
Mn	55	3	He	7999.033	102.6612	4914299.93	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	7840.848	100.6311	4934296.49	0.0128	0.002639
Mn	55	3	He	7766.032	99.6709	4924171.80	0.0128	0.002639
Fe	57	3	He	4893.669	2.8446	136168.68	0.0006	0.001429
Fe	57	3	He	4772.052	2.7739	136016.36	0.0006	0.001429
Fe	57	3	He	4823.436	2.8038	138519.80	0.0006	0.001429
Co	59	3	He	496.528	27.9479	1337839.36	0.0563	0.002149
Co	59	3	He	483.679	27.2247	1334924.36	0.0563	0.002149
Co	59	3	He	483.039	27.1887	1343236.85	0.0563	0.002149
Ni	60	3	He	476.033	4.0887	355817.34	0.0086	0.002834
Ni	60	3	He	471.921	4.0534	354090.62	0.0086	0.002834
Ni	60	3	He	479.544	4.1188	354048.47	0.0086	0.002834
Cu	63	3	He	445.041	11.4294	994642.09	0.0257	0.004757
Cu	63	3	He	447.006	11.4799	1002840.38	0.0257	0.004757
Cu	63	3	He	455.073	11.687	1004594.99	0.0257	0.004757
Zn	66	3	He	483.3	1.411	122791.89	0.0029	0.003818
Zn	66	3	He	484.116	1.4134	123467.54	0.0029	0.003818
Zn	66	3	He	477.061	1.3928	119726.28	0.0029	0.003818
As	75	3	He	490.941	1.0067	87605.82	0.002	0.0008061
As	75	3	He	490.647	1.0061	87887.30	0.002	0.0008061
As	75	3	He	498.085	1.0213	87790.91	0.002	0.0008061
Sr	88	3	He	361.44	3.243	278019.59	0.009	0.0009645
Sr	88	3	He	362.255	3.2503	280436.52	0.009	0.0009645
Sr	88	3	He	356.056	3.1947	276783.34	0.009	0.0009645
Mo	98	3	He	50.399	1.1053	94758.92	0.0219	0.0002706
Mo	98	3	He	50.087	1.0985	94777.68	0.0219	0.0002706
Mo	98	3	He	49.144	1.0778	93379.69	0.0219	0.0002706
Ag	107	3	He	47.414	2.2048	189012.69	0.0465	0.0006206
Ag	107	3	He	46.465	2.1606	186419.37	0.0465	0.0006206
Ag	107	3	He	46.495	2.162	187313.28	0.0465	0.0006206
Cd	111	3	He	49.942	0.267	22892.72	0.0053	0
Cd	111	3	He	49.05	0.2623	22628.34	0.0053	0
Cd	111	3	He	49.687	0.2657	23017.01	0.0053	0
Sn	120	3	He	103.332	1.649	141364.99	0.0158	0.01648
Sn	120	3	He	101.553	1.6209	139849.32	0.0158	0.01648
Sn	120	3	He	100.34	1.6017	138769.05	0.0158	0.01648
Sb	121	3	He	103.061	1.5311	131257.85	0.0149	0.0002698
Sb	121	3	He	102.772	1.5268	131730.95	0.0149	0.0002698
Sb	121	3	He	100.136	1.4876	128885.17	0.0149	0.0002698
Ba	137	3	He	534.684	2.5664	220010.60	0.0048	0.0002317
Ba	137	3	He	524.242	2.5162	217100.39	0.0048	0.0002317
Ba	137	3	He	524.902	2.5194	218275.72	0.0048	0.0002317
Tl	205	3	He	95.747	2.3676	945491.08	0.0247	0.0001339
Tl	205	3	He	96.555	2.3876	941564.52	0.0247	0.0001339
Tl	205	3	He	98.054	2.4247	955848.74	0.0247	0.0001339
Pb	208	3	He	48.538	1.5897	337479.84	0.0327	0.00107
Pb	208	3	He	49.203	1.6115	334311.83	0.0327	0.00107
Pb	208	3	He	49.196	1.6112	338794.88	0.0327	0.00107
U	238	3	He	48.765	2.4022	745453.50	0.0493	7.55E-05
U	238	3	He	48.732	2.4006	728387.49	0.0493	7.55E-05
U	238	3	He	48.563	2.3923	733611.24	0.0493	7.55E-05
Sc	45	1	No Gas			2540084.34		
Sc	45	1	No Gas			2597014.49		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2467903.56		
Ge	72	1	No Gas			1233375.37		
Ge	72	1	No Gas			1246972.25		
Ge	72	1	No Gas			1215154.90		
Sc	45	2	H2			190504.18		
Sc	45	2	H2			191427.28		
Sc	45	2	H2			189945.25		
Ge	72	2	H2			171144.70		
Ge	72	2	H2			169858.08		
Ge	72	2	H2			168604.18		
In	115	2	H2			389663.86		
In	115	2	H2			390886.95		
In	115	2	H2			394050.15		
Sc	45	3	He			47869.09		
Sc	45	3	He			49033.51		
Sc	45	3	He			49404.29		
Ge	72	3	He			87024.62		
Ge	72	3	He			87356.35		
Ge	72	3	He			85958.56		
In	115	3	He			86468.94		
In	115	3	He			87032.63		
In	115	3	He			87384.50		
Tb	159	3	He			399345.19		
Tb	159	3	He			394359.21		
Tb	159	3	He			394219.45		
Bi	209	3	He			310318.39		
Bi	209	3	He			303419.98		
Bi	209	3	He			306654.55		

Quantitation Report

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Acq Time	8/10/2023 3:45:45 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

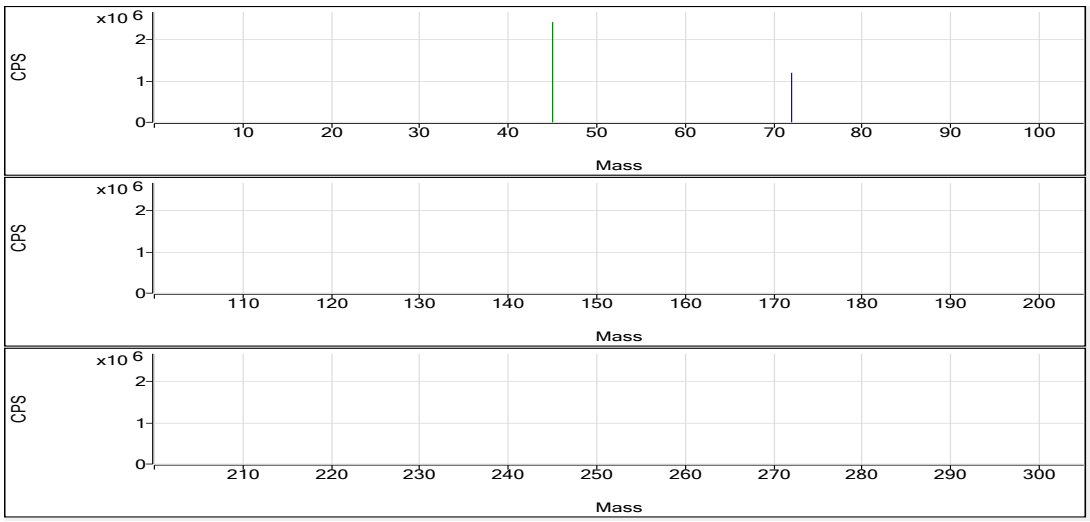
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.020	ppb	17.9	48.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.106	ppb	61.7	9.11	0.0001	Pulse	1.5000	3
Na	23	45	He	147.967	ppb	4.1	42117.55	0.8744	Pulse	0.1000	3
Mg	24	45	He	5.000	ppb	21.1	600.04	0.0125	Pulse	0.1000	3
Al	27	45	He	0.789	ppb	91.9	53.33	0.0011	Pulse	0.1000	3
K	39	45	He	9.354	ppb	96.6	19553.52	0.4060	Pulse	0.1000	3
Ca	44	45	He	14.063	ppb	51.8	176.68	0.0037	Pulse	0.1000	3
Ti	47	45	He	0.254	ppb	151.3	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.700	ppb	8.9	1934.14	0.0402	Pulse	0.5000	3
Cr	52	45	He	-0.023	ppb	N/A	1893.52	0.0393	Pulse	0.1000	3
Mn	55	45	He	1.756	ppb	9.3	1213.43	0.0252	Pulse	0.1000	3
Fe	57	45	He	1.602	ppb	117.3	113.34	0.0024	Pulse	0.1000	3
Co	59	45	He	0.094	ppb	44.8	356.69	0.0074	Pulse	0.1000	3
Ni	60	72	He	-0.003	ppb	N/A	233.34	0.0028	Pulse	0.1000	3
Cu	63	72	He	0.068	ppb	47.4	540.03	0.0065	Pulse	0.1000	3
Zn	66	72	He	3.743	ppb	7.7	1220.10	0.0147	Pulse	0.1000	3
As	75	72	He	0.250	ppb	15.6	109.33	0.0013	Pulse	0.5000	3
Sr	88	115	He	0.158	ppb	17.8	206.68	0.0024	Pulse	0.1000	3
Mo	98	115	He	0.145	ppb	13.0	300.02	0.0035	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	40.9	83.33	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	88.9	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.054	ppb	176.7	1503.46	0.0173	Pulse	0.1000	3
Sb	121	115	He	0.018	ppb	88.1	46.67	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.080	ppb	46.7	53.33	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.193	ppb	6.1	1933.56	0.0049	Pulse	0.1000	3
Pb	208	159	He	0.026	ppb	17.0	760.04	0.0019	Pulse	0.1000	3
U	238	209	He	0.130	ppb	11.2	1976.89	0.0065	Pulse	0.1000	3

ISTD Table:

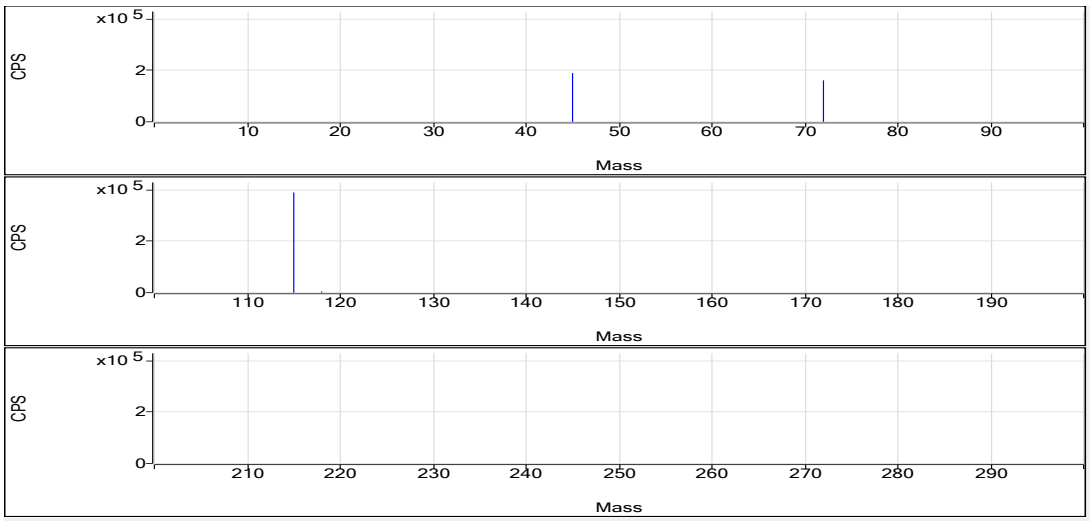
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2427563.97	1.0	101.2	Analog	0.1000	3
No Gas	Ge	72	1199285.53	0.3	104.0	Pulse	0.1000	3
H2	Sc	45	189365.17	0.5	101.3	Pulse	0.1000	3
H2	Ge	72	161146.05	0.9	98.4	Pulse	0.1000	3
H2	In	115	389471.11	0.4	100.1	Pulse	0.1000	3
He	Sc	45	48170.42	1.0	103.3	Pulse	0.1000	3
He	Ge	72	82856.81	1.9	102.0	Pulse	0.1000	3
He	In	115	86695.72	0.8	100.6	Pulse	0.1000	3
He	Tb	159	394409.09	0.9	98.9	Pulse	0.1000	3
He	Bi	209	305992.98	1.3	98.9	Pulse	0.1000	3

No Gas

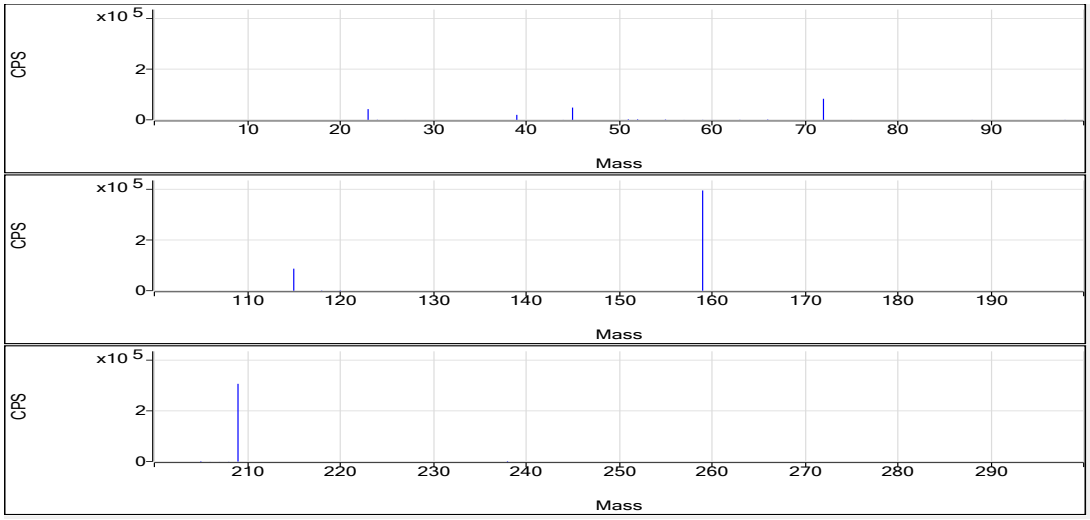


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.018	0	44.00	0.0008	4.685E-06
Be	9	1	No Gas	0.024	0	56.00	0.0008	4.685E-06
Be	9	1	No Gas	0.018	0	44.00	0.0008	4.685E-06
Se	78	2	H2	0.14	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.147	0.0001	12.00	0.0004	1.219E-05
Se	78	2	H2	0.031	0	4.00	0.0004	1.219E-05
Na	23	3	He	152.864	0.892	42491.94	0.0036	0.3452
Na	23	3	He	141.266	0.8505	41198.10	0.0036	0.3452
Na	23	3	He	149.77	0.8809	42662.60	0.0036	0.3452
Mg	24	3	He	6.124	0.0145	690.04	0.0018	0.003497
Mg	24	3	He	4.034	0.0107	520.03	0.0018	0.003497
Mg	24	3	He	4.841	0.0122	590.04	0.0018	0.003497
Al	27	3	He	-0.023	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	1.018	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	1.371	0.0014	70.00	0.0006	0.0006432
K	39	3	He	14.659	0.4121	19633.61	0.0012	0.3951
K	39	3	He	14.477	0.4119	19954.08	0.0012	0.3951
K	39	3	He	-1.075	0.3938	19072.88	0.0012	0.3951
Ca	44	3	He	6.424	0.0031	150.01	0.0001	0.002715
Ca	44	3	He	14.82	0.0037	180.01	0.0001	0.002715
Ca	44	3	He	20.944	0.0041	200.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.638	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.254	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.772	0.0417	1988.15	0.0219	0.02486
V	51	3	He	0.666	0.0394	1910.13	0.0219	0.02486
V	51	3	He	0.661	0.0393	1904.14	0.0219	0.02486
Cr	52	3	He	-0.199	0.034	1620.14	0.0299	0.03997
Cr	52	3	He	0.065	0.0419	2030.21	0.0299	0.03997
Cr	52	3	He	0.065	0.0419	2030.21	0.0299	0.03997
Mn	55	3	He	1.61	0.0233	1110.07	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.934	0.0275	1330.11	0.0128	0.002639
Mn	55	3	He	1.725	0.0248	1200.10	0.0128	0.002639
Fe	57	3	He	3.683	0.0036	170.01	0.0006	0.001429
Fe	57	3	He	1.094	0.0021	100.00	0.0006	0.001429
Fe	57	3	He	0.029	0.0014	70.00	0.0006	0.001429
Co	59	3	He	0.126	0.0092	440.03	0.0563	0.002149
Co	59	3	He	0.109	0.0083	400.03	0.0563	0.002149
Co	59	3	He	0.046	0.0047	230.01	0.0563	0.002149
Ni	60	3	He	0.044	0.0032	270.01	0.0086	0.002834
Ni	60	3	He	-0.043	0.0025	200.01	0.0086	0.002834
Ni	60	3	He	-0.009	0.0028	230.01	0.0086	0.002834
Cu	63	3	He	0.088	0.007	590.03	0.0257	0.004757
Cu	63	3	He	0.031	0.0056	450.02	0.0257	0.004757
Cu	63	3	He	0.085	0.0069	580.03	0.0257	0.004757
Zn	66	3	He	4.005	0.0155	1300.11	0.0029	0.003818
Zn	66	3	He	3.433	0.0138	1120.08	0.0029	0.003818
Zn	66	3	He	3.79	0.0149	1240.10	0.0029	0.003818
As	75	3	He	0.292	0.0014	118.00	0.002	0.0008061
As	75	3	He	0.245	0.0013	106.00	0.002	0.0008061
As	75	3	He	0.215	0.0012	104.00	0.002	0.0008061
Sr	88	3	He	0.19	0.0027	230.01	0.009	0.0009645
Sr	88	3	He	0.147	0.0023	200.01	0.009	0.0009645
Sr	88	3	He	0.137	0.0022	190.01	0.009	0.0009645
Mo	98	3	He	0.131	0.0031	270.01	0.0219	0.0002706
Mo	98	3	He	0.139	0.0033	290.02	0.0219	0.0002706
Mo	98	3	He	0.167	0.0039	340.02	0.0219	0.0002706
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.053	0.0173	1490.12	0.0158	0.01648
Sn	120	3	He	0.152	0.0189	1650.15	0.0158	0.01648
Sn	120	3	He	-0.041	0.0158	1370.11	0.0158	0.01648
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.036	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Ba	137	3	He	0.121	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	0.071	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.048	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.179	0.0046	1820.22	0.0247	0.0001339
Tl	205	3	He	0.2	0.0051	2000.23	0.0247	0.0001339
Tl	205	3	He	0.199	0.0051	1980.22	0.0247	0.0001339
Pb	208	3	He	0.023	0.0018	380.02	0.0327	0.00107
Pb	208	3	He	0.024	0.0019	400.02	0.0327	0.00107
Pb	208	3	He	0.031	0.0021	460.02	0.0327	0.00107
U	238	3	He	0.118	0.0059	1820.17	0.0493	7.55E-05
U	238	3	He	0.126	0.0063	1890.22	0.0493	7.55E-05
U	238	3	He	0.146	0.0073	2220.29	0.0493	7.55E-05
Sc	45	1	No Gas			2400663.71		
Sc	45	1	No Gas			2448204.96		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2433823.24		
Ge	72	1	No Gas			1197668.89		
Ge	72	1	No Gas			1196861.86		
Ge	72	1	No Gas			1203325.84		
Sc	45	2	H2			189510.50		
Sc	45	2	H2			190199.12		
Sc	45	2	H2			188385.88		
Ge	72	2	H2			160310.99		
Ge	72	2	H2			162827.18		
Ge	72	2	H2			160299.99		
In	115	2	H2			388339.92		
In	115	2	H2			391011.67		
In	115	2	H2			389061.75		
Sc	45	3	He			47638.86		
Sc	45	3	He			48441.29		
Sc	45	3	He			48431.12		
Ge	72	3	He			83996.32		
Ge	72	3	He			81080.21		
Ge	72	3	He			83493.91		
In	115	3	He			86106.05		
In	115	3	He			87445.46		
In	115	3	He			86559.83		
Tb	159	3	He			398491.20		
Tb	159	3	He			393419.80		
Tb	159	3	He			391316.28		
Bi	209	3	He			309937.44		
Bi	209	3	He			302053.04		
Bi	209	3	He			305988.47		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

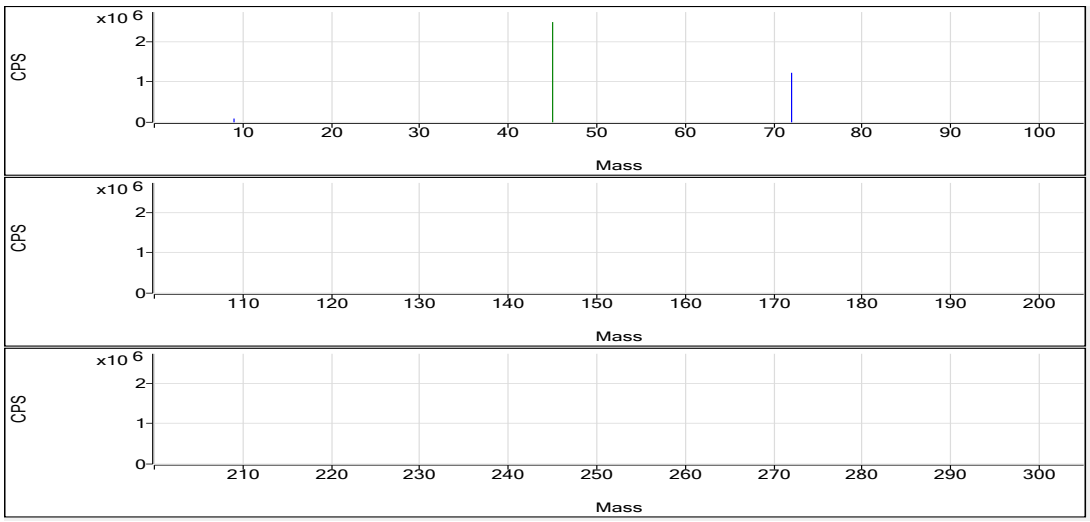
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.099	ppb	1.1	92807.32	0.0375	Pulse	0.5000	3
Se	78	72	H2	52.321	ppb	0.5	3552.67	0.0218	Pulse	1.5000	3
Na	23	45	He	4997.956	ppb	3.7	878572.62	18.2231	Pulse	0.1000	3
Mg	24	45	He	5077.960	ppb	3.1	439492.56	9.1150	Pulse	0.1000	3
Al	27	45	He	5033.596	ppb	3.5	142009.56	2.9455	Pulse	0.1000	3
K	39	45	He	5116.015	ppb	3.1	306272.19	6.3518	Pulse	0.1000	3
Ca	44	45	He	5125.706	ppb	2.7	16833.57	0.3490	Pulse	0.1000	3
Ti	47	45	He	5053.715	ppb	2.3	130862.53	2.7137	Pulse	0.1000	3
V	51	45	He	514.003	ppb	3.2	542935.62	11.2605	Pulse	0.5000	3
Cr	52	45	He	488.123	ppb	3.4	706568.51	14.6547	Pulse	0.1000	3
Mn	55	45	He	506.932	ppb	3.9	313771.49	6.5085	Pulse	0.1000	3
Fe	57	45	He	5053.782	ppb	3.4	141636.27	2.9376	Pulse	0.1000	3
Co	59	45	He	489.879	ppb	3.2	1329489.10	27.5737	Pulse	0.1000	3
Ni	60	72	He	512.044	ppb	1.2	374096.27	4.3978	Pulse	0.1000	3
Cu	63	72	He	487.933	ppb	0.8	1065927.09	12.5305	Pulse	0.1000	3
Zn	66	72	He	508.901	ppb	1.0	126369.70	1.4855	Pulse	0.1000	3
As	75	72	He	520.196	ppb	1.2	90731.83	1.0666	Pulse	0.5000	3
Sr	88	115	He	51.178	ppb	1.6	39800.01	0.4600	Pulse	0.1000	3
Mo	98	115	He	51.955	ppb	1.3	98564.67	1.1395	Pulse	0.1000	3
Ag	107	115	He	51.426	ppb	0.8	206853.13	2.3913	Pulse	0.1000	3
Cd	111	115	He	51.191	ppb	2.0	23674.72	0.2737	Pulse	0.5000	3
Sn	120	115	He	51.132	ppb	1.8	71303.50	0.8243	Pulse	0.1000	3
Sb	121	115	He	52.990	ppb	2.2	68104.65	0.7874	Pulse	0.1000	3
Ba	137	115	He	527.474	ppb	0.7	219008.48	2.5318	Pulse	0.1000	3
Tl	205	159	He	51.122	ppb	0.1	506450.14	1.2642	Pulse	0.1000	3
Pb	208	159	He	51.365	ppb	0.3	673915.41	1.6822	Pulse	0.1000	3
U	238	209	He	50.834	ppb	0.9	770336.58	2.5042	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2477919.34	1.2	103.3	Analog	0.1000	3
No Gas	Ge	72	1224177.25	0.0	106.1	Pulse	0.1000	3
H2	Sc	45	188408.72	0.7	100.7	Pulse	0.1000	3
H2	Ge	72	162714.89	0.8	99.4	Pulse	0.1000	3
H2	In	115	393086.46	0.9	101.0	Pulse	0.1000	3
He	Sc	45	48244.24	2.8	103.4	Pulse	0.1000	3
He	Ge	72	85069.11	0.8	104.8	Pulse	0.1000	3
He	In	115	86510.24	1.5	100.4	Pulse	0.1000	3
He	Tb	159	400609.76	0.2	100.5	Pulse	0.1000	3
He	Bi	209	307627.13	0.4	99.5	Pulse	0.1000	3

No Gas



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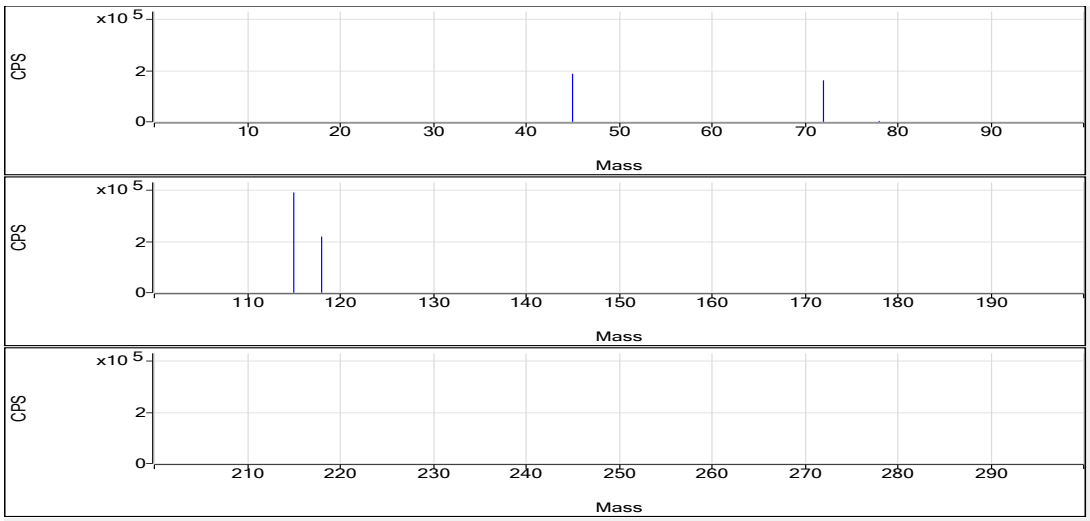
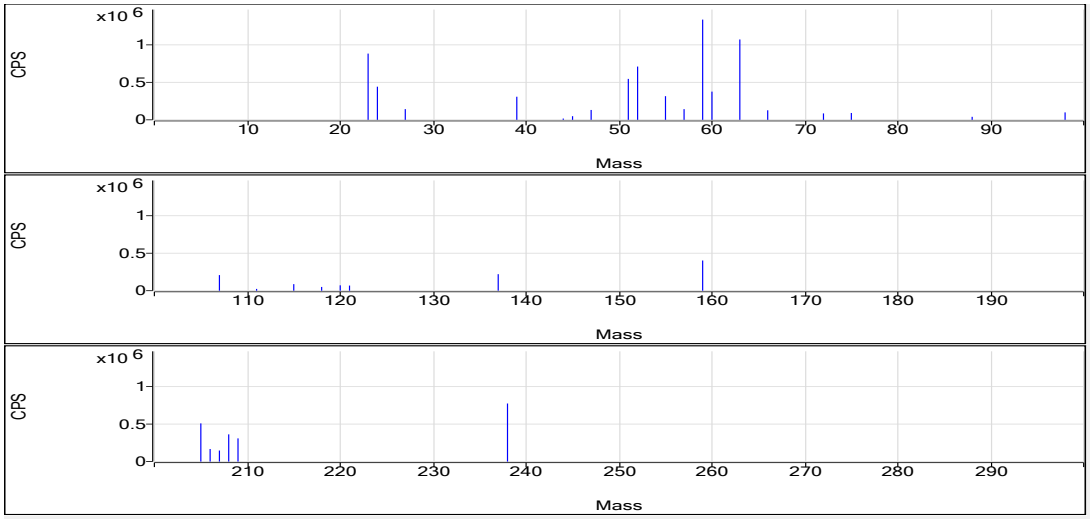


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.968	0.0374	93201.78	0.0008	4.685E-06
Be	9	1	No Gas	49.677	0.0379	92654.34	0.0008	4.685E-06
Be	9	1	No Gas	48.652	0.0371	92565.84	0.0008	4.685E-06
Se	78	2	H2	52.225	0.0218	3572.45	0.0004	1.219E-05
Se	78	2	H2	52.625	0.022	3577.12	0.0004	1.219E-05
Se	78	2	H2	52.113	0.0217	3508.44	0.0004	1.219E-05
Na	23	3	He	4987.375	18.1852	877816.86	0.0036	0.3452
Na	23	3	He	5186.015	18.8958	885951.08	0.0036	0.3452
Na	23	3	He	4820.479	17.5882	871949.91	0.0036	0.3452
Mg	24	3	He	5068.322	9.0977	439153.47	0.0018	0.003497
Mg	24	3	He	5240.084	9.4059	441006.36	0.0018	0.003497
Mg	24	3	He	4925.474	8.8414	438317.85	0.0018	0.003497
Al	27	3	He	5033.617	2.9455	142180.98	0.0006	0.0006432
Al	27	3	He	5209.93	3.0486	142938.77	0.0006	0.0006432
Al	27	3	He	4857.24	2.8423	140908.93	0.0006	0.0006432
K	39	3	He	5090.496	6.3221	305171.40	0.0012	0.3951
K	39	3	He	5286.028	6.5497	307091.73	0.0012	0.3951
K	39	3	He	4971.521	6.1835	306553.43	0.0012	0.3951
Ca	44	3	He	5280.86	0.3594	17350.81	0.0001	0.002715
Ca	44	3	He	5083.983	0.3461	16229.54	0.0001	0.002715
Ca	44	3	He	5012.274	0.3413	16920.37	0.0001	0.002715
Ti	47	3	He	5076.097	2.7257	131570.62	0.0005	7.003E-05
Ti	47	3	He	5158.775	2.7701	129877.95	0.0005	7.003E-05
Ti	47	3	He	4926.272	2.6452	131139.03	0.0005	7.003E-05
V	51	3	He	515.863	11.3012	545518.31	0.0219	0.02486
V	51	3	He	529.462	11.5985	543807.31	0.0219	0.02486
V	51	3	He	496.684	10.882	539481.25	0.0219	0.02486
Cr	52	3	He	489.987	14.7105	710089.60	0.0299	0.03997
Cr	52	3	He	503.52	15.1157	708718.27	0.0299	0.03997
Cr	52	3	He	470.862	14.1379	700897.65	0.0299	0.03997
Mn	55	3	He	508.629	6.5303	315223.78	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	525.935	6.7524	316595.11	0.0128	0.002639
Mn	55	3	He	486.233	6.2429	309495.58	0.0128	0.002639
Fe	57	3	He	5083.647	2.955	142639.39	0.0006	0.001429
Fe	57	3	He	5207.16	3.0267	141912.30	0.0006	0.001429
Fe	57	3	He	4870.538	2.8312	140357.11	0.0006	0.001429
Co	59	3	He	487.514	27.4406	1324579.36	0.0563	0.002149
Co	59	3	He	506.537	28.5112	1336782.48	0.0563	0.002149
Co	59	3	He	475.587	26.7693	1327105.45	0.0563	0.002149
Ni	60	3	He	510.471	4.3843	375229.25	0.0086	0.002834
Ni	60	3	He	518.635	4.4544	375717.42	0.0086	0.002834
Ni	60	3	He	507.025	4.3547	371342.14	0.0086	0.002834
Cu	63	3	He	487.804	12.5272	1072142.64	0.0257	0.004757
Cu	63	3	He	492.131	12.6383	1066018.89	0.0257	0.004757
Cu	63	3	He	483.865	12.4261	1059619.75	0.0257	0.004757
Zn	66	3	He	509.582	1.4875	127310.11	0.0029	0.003818
Zn	66	3	He	513.546	1.4991	126443.97	0.0029	0.003818
Zn	66	3	He	503.573	1.47	125355.01	0.0029	0.003818
As	75	3	He	518.531	1.0632	90994.71	0.002	0.0008061
As	75	3	He	526.885	1.0803	91123.66	0.002	0.0008061
As	75	3	He	515.173	1.0563	90077.12	0.002	0.0008061
Sr	88	3	He	50.924	0.4577	39997.21	0.009	0.0009645
Sr	88	3	He	52.079	0.4681	40769.50	0.009	0.0009645
Sr	88	3	He	50.53	0.4542	38633.32	0.009	0.0009645
Mo	98	3	He	51.17	1.1222	98061.12	0.0219	0.0002706
Mo	98	3	He	52.191	1.1446	99692.81	0.0219	0.0002706
Mo	98	3	He	52.503	1.1515	97940.07	0.0219	0.0002706
Ag	107	3	He	51.068	2.3746	207494.51	0.0465	0.0006206
Ag	107	3	He	51.319	2.3863	207835.21	0.0465	0.0006206
Ag	107	3	He	51.891	2.4129	205229.68	0.0465	0.0006206
Cd	111	3	He	50.83	0.2718	23748.16	0.0053	0
Cd	111	3	He	50.385	0.2694	23463.72	0.0053	0
Cd	111	3	He	52.36	0.28	23812.29	0.0053	0
Sn	120	3	He	50.091	0.8079	70589.95	0.0158	0.01648
Sn	120	3	He	51.77	0.8344	72670.53	0.0158	0.01648
Sn	120	3	He	51.533	0.8306	70650.02	0.0158	0.01648
Sb	121	3	He	53.294	0.7919	69193.25	0.0149	0.0002698
Sb	121	3	He	51.713	0.7684	66922.31	0.0149	0.0002698
Sb	121	3	He	53.963	0.8018	68198.40	0.0149	0.0002698
Ba	137	3	He	526.448	2.5268	220793.82	0.0048	0.0002317
Ba	137	3	He	524.239	2.5162	219151.87	0.0048	0.0002317
Ba	137	3	He	531.736	2.5522	217079.76	0.0048	0.0002317
Tl	205	3	He	51.126	1.2643	507357.53	0.0247	0.0001339
Tl	205	3	He	51.08	1.2632	505982.30	0.0247	0.0001339
Tl	205	3	He	51.161	1.2652	506010.58	0.0247	0.0001339
Pb	208	3	He	51.41	1.6837	362190.66	0.0327	0.00107
Pb	208	3	He	51.514	1.6871	361112.06	0.0327	0.00107
Pb	208	3	He	51.171	1.6759	359379.49	0.0327	0.00107
U	238	3	He	50.366	2.4811	767059.68	0.0493	7.55E-05
U	238	3	He	51.259	2.5251	775676.24	0.0493	7.55E-05
U	238	3	He	50.878	2.5063	768273.82	0.0493	7.55E-05
Sc	45	1	No Gas			2494890.28		
Sc	45	1	No Gas			2444885.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2493982.62		
Ge	72	1	No Gas			1223551.70		
Ge	72	1	No Gas			1224499.83		
Ge	72	1	No Gas			1224480.22		
Sc	45	2	H2			189872.89		
Sc	45	2	H2			187940.70		
Sc	45	2	H2			187412.58		
Ge	72	2	H2			163921.83		
Ge	72	2	H2			162890.94		
Ge	72	2	H2			161331.90		
In	115	2	H2			397015.58		
In	115	2	H2			390732.18		
In	115	2	H2			391511.63		
Sc	45	3	He			48270.83		
Sc	45	3	He			46886.17		
Sc	45	3	He			49575.71		
Ge	72	3	He			85585.13		
Ge	72	3	He			84348.39		
Ge	72	3	He			85273.81		
In	115	3	He			87766.56		
In	115	3	He			87485.38		
In	115	3	He			85442.61		
Tb	159	3	He			401300.35		
Tb	159	3	He			400569.45		
Tb	159	3	He			399959.49		
Bi	209	3	He			309161.36		
Bi	209	3	He			307187.46		
Bi	209	3	He			306532.57		

Quantitation Report

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Sample Type	CCB
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Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

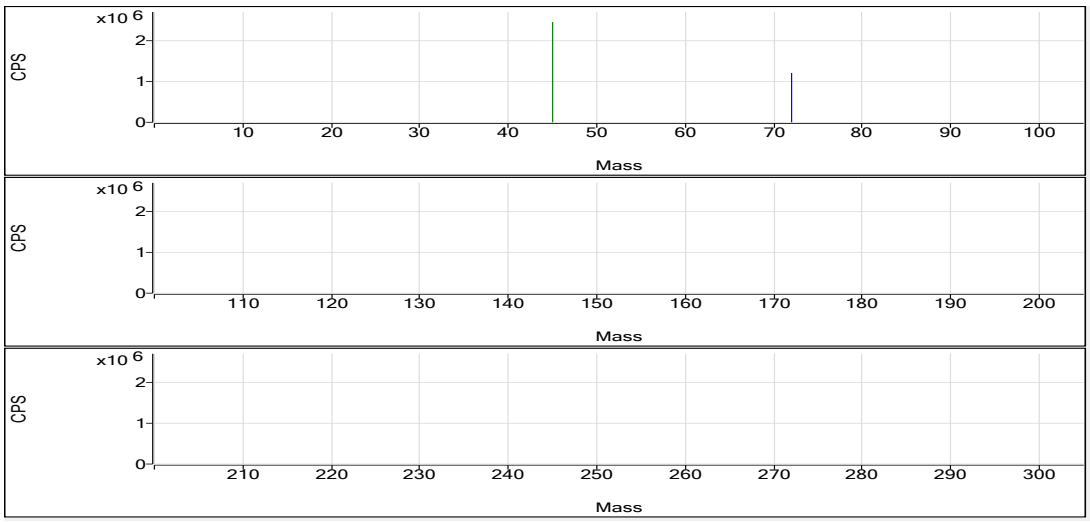
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.028	ppb	16.6	64.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.022	ppb	141.3	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	88.624	ppb	2.5	32189.11	0.6622	Pulse	0.1000	3
Mg	24	45	He	2.993	ppb	27.5	430.02	0.0089	Pulse	0.1000	3
Al	27	45	He	1.489	ppb	40.9	73.33	0.0015	Pulse	0.1000	3
K	39	45	He	-3.029	ppb	N/A	19026.32	0.3915	Pulse	0.1000	3
Ca	44	45	He	8.243	ppb	213.1	160.01	0.0033	Pulse	0.1000	3
Ti	47	45	He	1.261	ppb	68.5	36.67	0.0007	Pulse	0.1000	3
V	51	45	He	0.644	ppb	7.8	1893.47	0.0389	Pulse	0.5000	3
Cr	52	45	He	-0.029	ppb	N/A	1900.19	0.0391	Pulse	0.1000	3
Mn	55	45	He	0.661	ppb	14.5	540.03	0.0111	Pulse	0.1000	3
Fe	57	45	He	1.182	ppb	84.0	103.34	0.0021	Pulse	0.1000	3
Co	59	45	He	0.092	ppb	12.9	356.68	0.0073	Pulse	0.1000	3
Ni	60	72	He	-0.015	ppb	N/A	226.68	0.0027	Pulse	0.1000	3
Cu	63	72	He	0.105	ppb	25.4	623.37	0.0074	Pulse	0.1000	3
Zn	66	72	He	3.255	ppb	12.8	1113.42	0.0133	Pulse	0.1000	3
As	75	72	He	0.271	ppb	29.2	114.00	0.0014	Pulse	0.5000	3
Sr	88	115	He	0.051	ppb	73.7	123.34	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.079	ppb	46.2	173.34	0.0020	Pulse	0.1000	3
Ag	107	115	He	0.011	ppb	157.0	96.67	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	99.4	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.061	ppb	95.0	1513.47	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.031	ppb	37.3	63.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.136	ppb	28.0	76.67	0.0009	Pulse	0.1000	3
Tl	205	159	He	0.105	ppb	6.3	1076.75	0.0027	Pulse	0.1000	3
Pb	208	159	He	0.024	ppb	32.5	736.70	0.0019	Pulse	0.1000	3
U	238	209	He	0.056	ppb	19.3	883.40	0.0028	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2472638.71	1.5	103.1	Analog	0.1000	3
No Gas	Ge	72	1217659.80	0.5	105.6	Pulse	0.1000	3
H2	Sc	45	184425.76	0.1	98.6	Pulse	0.1000	3
H2	Ge	72	157267.73	1.4	96.1	Pulse	0.1000	3
H2	In	115	390563.68	0.8	100.4	Pulse	0.1000	3
He	Sc	45	48621.76	2.7	104.2	Pulse	0.1000	3
He	Ge	72	83728.49	0.7	103.1	Pulse	0.1000	3
He	In	115	86773.64	1.2	100.7	Pulse	0.1000	3
He	Tb	159	394636.33	0.9	99.0	Pulse	0.1000	3
He	Bi	209	310216.63	0.3	100.3	Pulse	0.1000	3

No Gas



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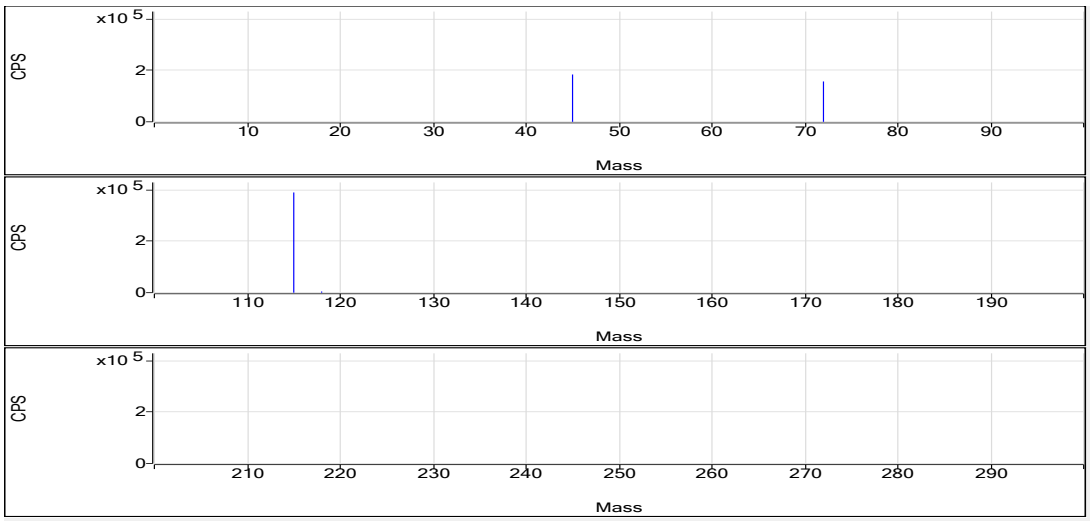
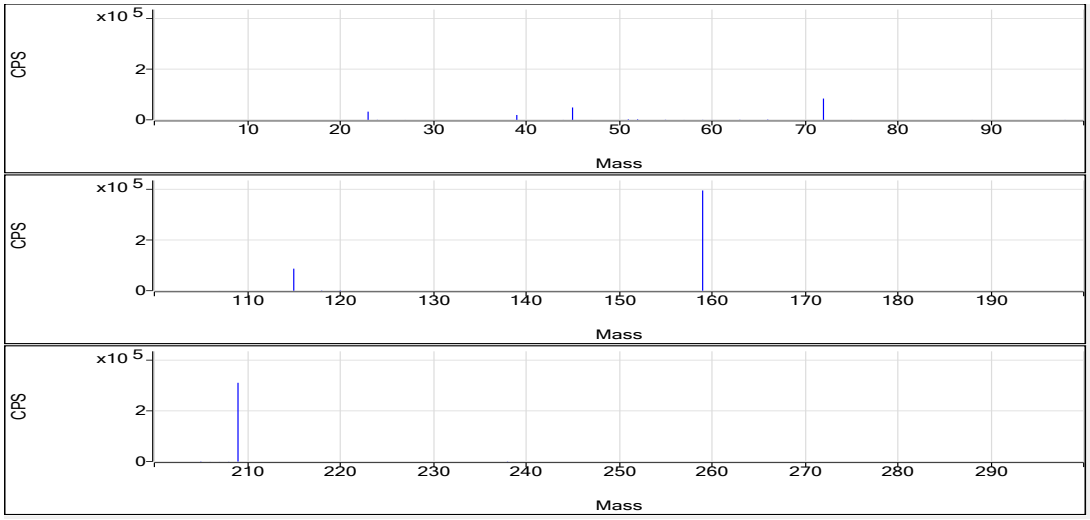


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.023	0	54.00	0.0008	4.685E-06
Be	9	1	No Gas	0.03	0	70.00	0.0008	4.685E-06
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Se	78	2	H2	0.022	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.052	0	5.33	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Na	23	3	He	86.179	0.6534	32596.60	0.0036	0.3452
Na	23	3	He	90.606	0.6693	31654.52	0.0036	0.3452
Na	23	3	He	89.086	0.6638	32316.22	0.0036	0.3452
Mg	24	3	He	2.52	0.008	400.02	0.0018	0.003497
Mg	24	3	He	3.943	0.0106	500.03	0.0018	0.003497
Mg	24	3	He	2.516	0.008	390.02	0.0018	0.003497
Al	27	3	He	0.956	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	2.153	0.0019	90.00	0.0006	0.0006432
Al	27	3	He	1.358	0.0014	70.00	0.0006	0.0006432
K	39	3	He	-11.281	0.3819	19052.93	0.0012	0.3951
K	39	3	He	10.307	0.4071	19253.29	0.0012	0.3951
K	39	3	He	-8.113	0.3856	18772.75	0.0012	0.3951
Ca	44	3	He	19.162	0.004	200.01	0.0001	0.002715
Ca	44	3	He	-12.022	0.0019	90.00	0.0001	0.002715
Ca	44	3	He	17.588	0.0039	190.01	0.0001	0.002715
Ti	47	3	He	1.736	0.001	50.00	0.0005	7.003E-05
Ti	47	3	He	0.263	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.782	0.001	50.00	0.0005	7.003E-05
V	51	3	He	0.675	0.0396	1976.15	0.0219	0.02486
V	51	3	He	0.671	0.0395	1870.13	0.0219	0.02486
V	51	3	He	0.586	0.0377	1834.13	0.0219	0.02486
Cr	52	3	He	-0.096	0.0371	1850.18	0.0299	0.03997
Cr	52	3	He	0.035	0.041	1940.20	0.0299	0.03997
Cr	52	3	He	-0.025	0.0392	1910.19	0.0299	0.03997
Mn	55	3	He	0.638	0.0108	540.04	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.766	0.0125	590.03	0.0128	0.002639
Mn	55	3	He	0.579	0.0101	490.03	0.0128	0.002639
Fe	57	3	He	2.027	0.0026	130.01	0.0006	0.001429
Fe	57	3	He	0.088	0.0015	70.00	0.0006	0.001429
Fe	57	3	He	1.43	0.0023	110.00	0.0006	0.001429
Co	59	3	He	0.101	0.0078	390.02	0.0563	0.002149
Co	59	3	He	0.097	0.0076	360.02	0.0563	0.002149
Co	59	3	He	0.079	0.0066	320.01	0.0563	0.002149
Ni	60	3	He	0.044	0.0032	270.01	0.0086	0.002834
Ni	60	3	He	-0.053	0.0024	200.01	0.0086	0.002834
Ni	60	3	He	-0.036	0.0025	210.01	0.0086	0.002834
Cu	63	3	He	0.116	0.0077	650.03	0.0257	0.004757
Cu	63	3	He	0.074	0.0067	560.03	0.0257	0.004757
Cu	63	3	He	0.124	0.0079	660.04	0.0257	0.004757
Zn	66	3	He	3.714	0.0146	1230.10	0.0029	0.003818
Zn	66	3	He	2.9	0.0123	1030.07	0.0029	0.003818
Zn	66	3	He	3.153	0.013	1080.08	0.0029	0.003818
As	75	3	He	0.234	0.0013	108.00	0.002	0.0008061
As	75	3	He	0.362	0.0015	130.00	0.002	0.0008061
As	75	3	He	0.217	0.0013	104.00	0.002	0.0008061
Sr	88	3	He	0.075	0.0016	140.01	0.009	0.0009645
Sr	88	3	He	0.008	0.001	90.00	0.009	0.0009645
Sr	88	3	He	0.071	0.0016	140.01	0.009	0.0009645
Mo	98	3	He	0.041	0.0012	100.00	0.0219	0.0002706
Mo	98	3	He	0.113	0.0028	240.01	0.0219	0.0002706
Mo	98	3	He	0.081	0.0021	180.01	0.0219	0.0002706
Ag	107	3	He	0.029	0.002	170.01	0.0465	0.0006206
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.037	0.0171	1460.13	0.0158	0.01648
Sn	120	3	He	0.127	0.0185	1610.15	0.0158	0.01648
Sn	120	3	He	0.019	0.0168	1470.14	0.0158	0.01648
Sb	121	3	He	0.029	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.02	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.043	0.0009	80.00	0.0149	0.0002698
Ba	137	3	He	0.171	0.0011	90.00	0.0048	0.0002317
Ba	137	3	He	0.095	0.0007	60.00	0.0048	0.0002317
Ba	137	3	He	0.142	0.0009	80.00	0.0048	0.0002317
Tl	205	3	He	0.097	0.0025	1010.07	0.0247	0.0001339
Tl	205	3	He	0.108	0.0028	1100.09	0.0247	0.0001339
Tl	205	3	He	0.109	0.0028	1120.10	0.0247	0.0001339
Pb	208	3	He	0.026	0.0019	430.02	0.0327	0.00107
Pb	208	3	He	0.016	0.0016	330.02	0.0327	0.00107
Pb	208	3	He	0.031	0.0021	530.03	0.0327	0.00107
U	238	3	He	0.059	0.003	930.07	0.0493	7.55E-05
U	238	3	He	0.044	0.0023	700.04	0.0493	7.55E-05
U	238	3	He	0.065	0.0033	1020.08	0.0493	7.55E-05
Sc	45	1	No Gas			2449307.31		
Sc	45	1	No Gas			2516132.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2452476.68		
Ge	72	1	No Gas			1213015.06		
Ge	72	1	No Gas			1223731.00		
Ge	72	1	No Gas			1216233.34		
Sc	45	2	H2			184567.61		
Sc	45	2	H2			184446.03		
Sc	45	2	H2			184263.63		
Ge	72	2	H2			155022.71		
Ge	72	2	H2			157296.66		
Ge	72	2	H2			159483.83		
In	115	2	H2			391414.13		
In	115	2	H2			392976.09		
In	115	2	H2			387300.81		
Sc	45	3	He			49885.65		
Sc	45	3	He			47297.62		
Sc	45	3	He			48682.01		
Ge	72	3	He			84077.10		
Ge	72	3	He			84007.49		
Ge	72	3	He			83100.88		
In	115	3	He			85613.55		
In	115	3	He			87104.07		
In	115	3	He			87626.01		
Tb	159	3	He			397630.89		
Tb	159	3	He			390718.82		
Tb	159	3	He			395559.29		
Bi	209	3	He			310832.34		
Bi	209	3	He			310481.34		
Bi	209	3	He			309336.21		

Quantitation Report

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Acq Time	8/10/2023 3:53:17 PM
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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

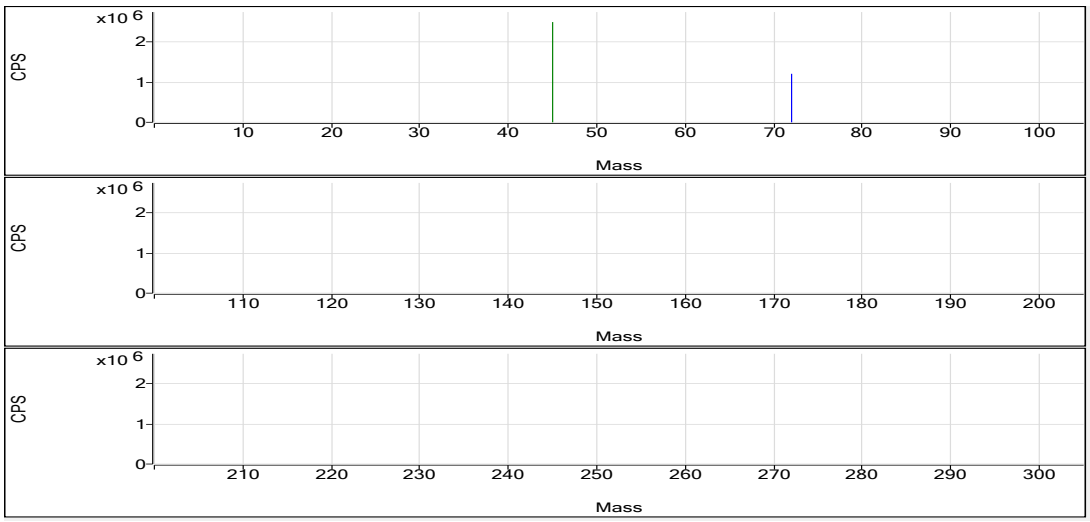
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	25.0	20.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.001	ppb	1251.7	2.00	0.0000	Pulse	1.5000	3
Na	23	45	He	69.770	ppb	6.0	28688.54	0.5947	Pulse	0.1000	3
Mg	24	45	He	1.063	ppb	80.6	260.01	0.0054	Pulse	0.1000	3
Al	27	45	He	0.322	ppb	194.1	40.00	0.0008	Pulse	0.1000	3
K	39	45	He	2.234	ppb	449.7	19186.46	0.3977	Pulse	0.1000	3
Ca	44	45	He	-2.407	ppb	N/A	123.34	0.0026	Pulse	0.1000	3
Ti	47	45	He	0.390	ppb	154.4	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.562	ppb	11.7	1792.12	0.0372	Pulse	0.5000	3
Cr	52	45	He	-0.002	ppb	N/A	1926.87	0.0399	Pulse	0.1000	3
Mn	55	45	He	0.500	ppb	13.1	436.69	0.0091	Pulse	0.1000	3
Fe	57	45	He	0.277	ppb	81.3	76.67	0.0016	Pulse	0.1000	3
Co	59	45	He	0.020	ppb	81.8	156.67	0.0033	Pulse	0.1000	3
Ni	60	72	He	-0.109	ppb	N/A	156.68	0.0019	Pulse	0.1000	3
Cu	63	72	He	0.060	ppb	35.0	520.03	0.0063	Pulse	0.1000	3
Zn	66	72	He	3.548	ppb	5.9	1166.75	0.0141	Pulse	0.1000	3
As	75	72	He	0.104	ppb	82.2	84.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.039	ppb	164.4	113.34	0.0013	Pulse	0.1000	3
Mo	98	115	He	0.007	ppb	46.3	36.67	0.0004	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	49.6	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.119	ppb	N/A	1256.76	0.0146	Pulse	0.1000	3
Sb	121	115	He	0.008	ppb	116.7	33.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.024	ppb	4.5	30.00	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.018	ppb	46.2	233.35	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.007	ppb	37.9	510.03	0.0013	Pulse	0.1000	3
U	238	209	He	0.008	ppb	41.6	150.01	0.0005	Pulse	0.1000	3

ISTD Table:

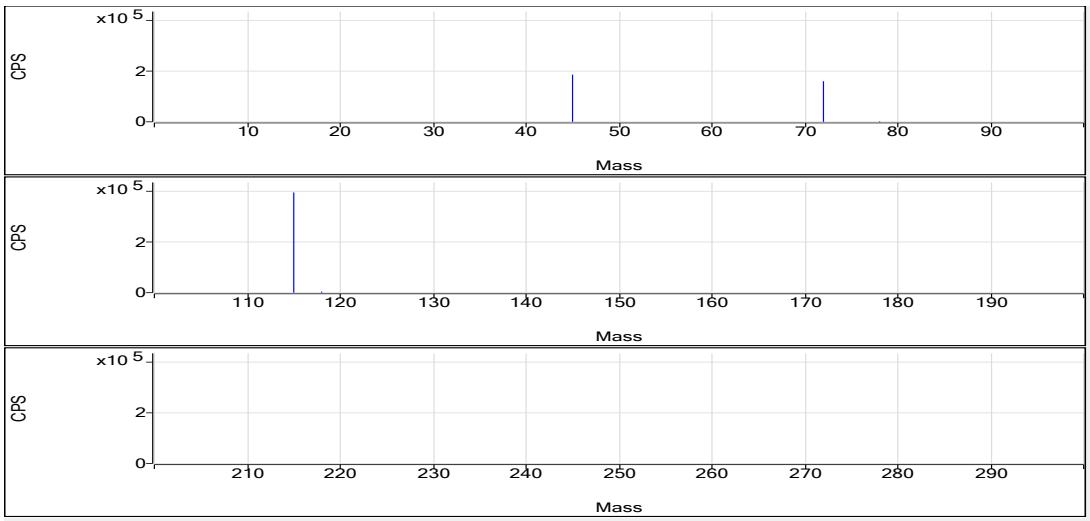
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2490978.25	0.7	103.8	Analog	0.1000	3
No Gas	Ge	72	1205204.93	0.7	104.5	Pulse	0.1000	3
H2	Sc	45	185989.24	0.8	99.5	Pulse	0.1000	3
H2	Ge	72	159858.80	1.0	97.6	Pulse	0.1000	3
H2	In	115	394882.50	0.9	101.5	Pulse	0.1000	3
He	Sc	45	48250.60	1.6	103.4	Pulse	0.1000	3
He	Ge	72	82467.57	1.2	101.6	Pulse	0.1000	3
He	In	115	86165.99	1.5	100.0	Pulse	0.1000	3
He	Tb	159	394850.75	0.8	99.1	Pulse	0.1000	3
He	Bi	209	306809.34	1.1	99.2	Pulse	0.1000	3

No Gas

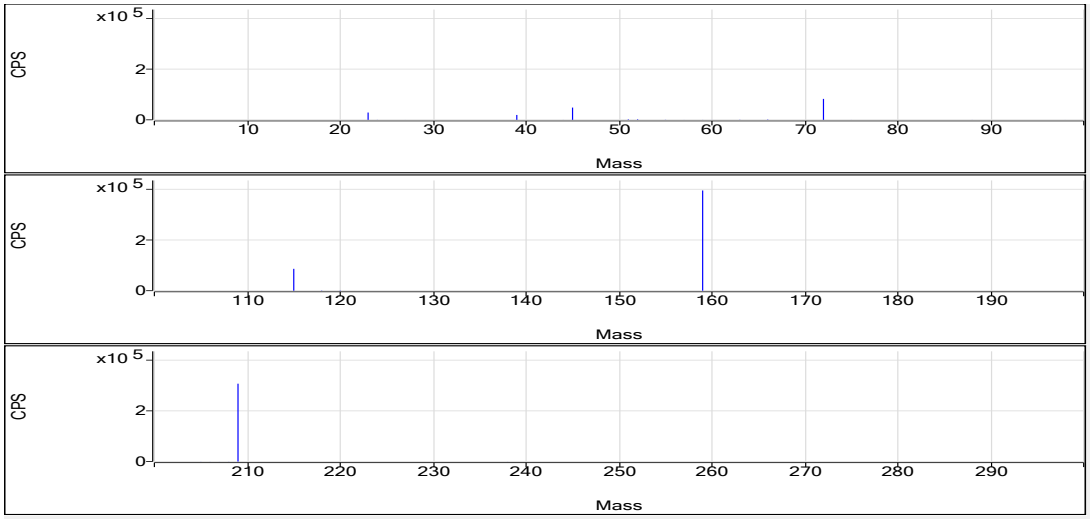


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	0.011	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.001	0	2.00	0.0004	1.219E-05
Na	23	3	He	65.887	0.5808	28358.10	0.0036	0.3452
Na	23	3	He	74.185	0.6105	28918.96	0.0036	0.3452
Na	23	3	He	69.238	0.5928	28788.55	0.0036	0.3452
Mg	24	3	He	0.22	0.0039	190.01	0.0018	0.003497
Mg	24	3	He	1.934	0.007	330.01	0.0018	0.003497
Mg	24	3	He	1.035	0.0054	260.01	0.0018	0.003497
Al	27	3	He	-0.399	0.0004	20.00	0.0006	0.0006432
Al	27	3	He	0.705	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	0.66	0.001	50.00	0.0006	0.0006432
K	39	3	He	9.426	0.406	19824.03	0.0012	0.3951
K	39	3	He	6.521	0.4027	19073.01	0.0012	0.3951
K	39	3	He	-9.245	0.3843	18662.34	0.0012	0.3951
Ca	44	3	He	-0.774	0.0027	130.00	0.0001	0.002715
Ca	44	3	He	-8.938	0.0021	100.00	0.0001	0.002715
Ca	44	3	He	2.49	0.0029	140.01	0.0001	0.002715
Ti	47	3	He	0.251	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.049	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.534	0.0365	1784.12	0.0219	0.02486
V	51	3	He	0.638	0.0388	1838.12	0.0219	0.02486
V	51	3	He	0.515	0.0361	1754.12	0.0219	0.02486
Cr	52	3	He	0.122	0.0436	2130.23	0.0299	0.03997
Cr	52	3	He	-0.101	0.0369	1750.16	0.0299	0.03997
Cr	52	3	He	-0.028	0.0391	1900.21	0.0299	0.03997
Mn	55	3	He	0.497	0.009	440.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.568	0.0099	470.03	0.0128	0.002639
Mn	55	3	He	0.436	0.0082	400.02	0.0128	0.002639
Fe	57	3	He	0.361	0.0016	80.00	0.0006	0.001429
Fe	57	3	He	0.448	0.0017	80.00	0.0006	0.001429
Fe	57	3	He	0.022	0.0014	70.00	0.0006	0.001429
Co	59	3	He	0.002	0.0023	110.00	0.0563	0.002149
Co	59	3	He	0.033	0.004	190.01	0.0563	0.002149
Co	59	3	He	0.024	0.0035	170.01	0.0563	0.002149
Ni	60	3	He	-0.13	0.0017	140.01	0.0086	0.002834
Ni	60	3	He	-0.107	0.0019	160.01	0.0086	0.002834
Ni	60	3	He	-0.09	0.0021	170.01	0.0086	0.002834
Cu	63	3	He	0.078	0.0067	550.03	0.0257	0.004757
Cu	63	3	He	0.067	0.0065	540.03	0.0257	0.004757
Cu	63	3	He	0.037	0.0057	470.03	0.0257	0.004757
Zn	66	3	He	3.618	0.0144	1170.08	0.0029	0.003818
Zn	66	3	He	3.711	0.0146	1220.10	0.0029	0.003818
Zn	66	3	He	3.314	0.0135	1110.08	0.0029	0.003818
As	75	3	He	0.109	0.001	84.00	0.002	0.0008061
As	75	3	He	0.016	0.0008	70.00	0.002	0.0008061
As	75	3	He	0.187	0.0012	98.00	0.002	0.0008061
Sr	88	3	He	0.097	0.0018	160.01	0.009	0.0009645
Sr	88	3	He	-0.03	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	0.05	0.0014	120.01	0.009	0.0009645
Mo	98	3	He	0.003	0.0003	30.00	0.0219	0.0002706
Mo	98	3	He	0.009	0.0005	40.00	0.0219	0.0002706
Mo	98	3	He	0.009	0.0005	40.00	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0004	30.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Sn	120	3	He	-0.239	0.0127	1110.08	0.0158	0.01648
Sn	120	3	He	-0.103	0.0148	1280.10	0.0158	0.01648
Sn	120	3	He	-0.013	0.0163	1380.10	0.0158	0.01648
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.014	0.0005	40.00	0.0149	0.0002698
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.025	0.0004	30.00	0.0048	0.0002317
Tl	205	3	He	0.01	0.0004	150.01	0.0247	0.0001339
Tl	205	3	He	0.027	0.0008	320.02	0.0247	0.0001339
Tl	205	3	He	0.018	0.0006	230.01	0.0247	0.0001339
Pb	208	3	He	0.009	0.0014	300.02	0.0327	0.00107
Pb	208	3	He	0.004	0.0012	210.01	0.0327	0.00107
Pb	208	3	He	0.007	0.0013	260.02	0.0327	0.00107
U	238	3	He	0.012	0.0007	210.01	0.0493	7.55E-05
U	238	3	He	0.006	0.0004	120.01	0.0493	7.55E-05
U	238	3	He	0.006	0.0004	120.01	0.0493	7.55E-05
Sc	45	1	No Gas			2481001.37		
Sc	45	1	No Gas			2509674.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2482259.34		
Ge	72	1	No Gas			1211896.31		
Ge	72	1	No Gas			1207163.42		
Ge	72	1	No Gas			1196555.06		
Sc	45	2	H2			187799.24		
Sc	45	2	H2			185193.77		
Sc	45	2	H2			184974.72		
Ge	72	2	H2			161513.26		
Ge	72	2	H2			158479.29		
Ge	72	2	H2			159583.86		
In	115	2	H2			398706.95		
In	115	2	H2			393966.52		
In	115	2	H2			391974.02		
Sc	45	3	He			48822.62		
Sc	45	3	He			47367.58		
Sc	45	3	He			48561.59		
Ge	72	3	He			81522.23		
Ge	72	3	He			83443.07		
Ge	72	3	He			82437.41		
In	115	3	He			87434.41		
In	115	3	He			86216.82		
In	115	3	He			84868.89		
Tb	159	3	He			393486.24		
Tb	159	3	He			398445.11		
Tb	159	3	He			392620.89		
Bi	209	3	He			305072.10		
Bi	209	3	He			310527.03		
Bi	209	3	He			304828.88		

Quantitation Report

Data File Name	154SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 3:55:22 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

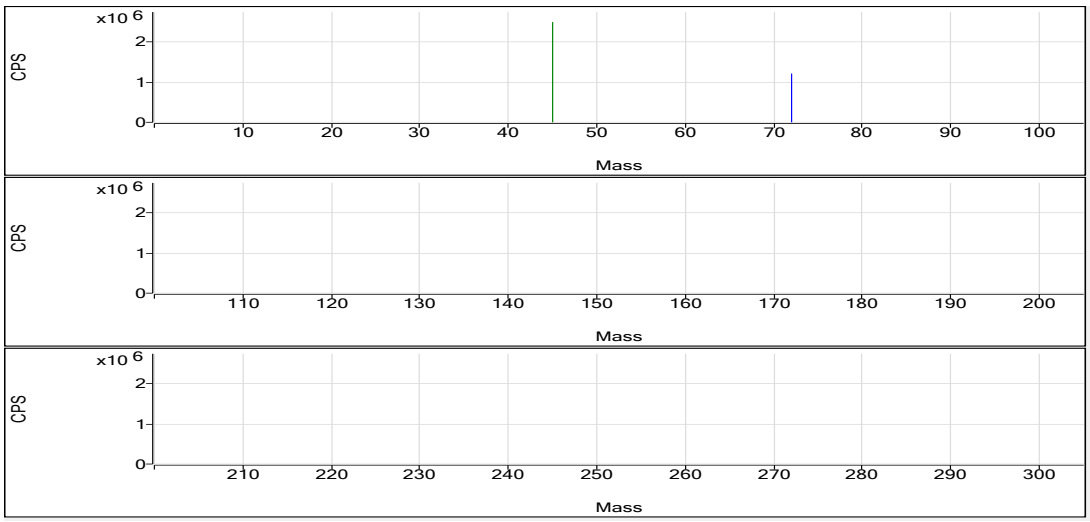
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	110.2	20.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.003	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	45	He	64.710	ppb	8.8	28468.18	0.5766	Pulse	0.1000	3
Mg	24	45	He	0.848	ppb	85.9	246.68	0.0050	Pulse	0.1000	3
Al	27	45	He	0.065	ppb	1668.3	33.33	0.0007	Pulse	0.1000	3
K	39	45	He	6.585	ppb	206.7	19874.02	0.4027	Pulse	0.1000	3
Ca	44	45	He	13.239	ppb	165.5	176.68	0.0036	Pulse	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.535	ppb	7.9	1804.79	0.0366	Pulse	0.5000	3
Cr	52	45	He	-0.056	ppb	N/A	1890.18	0.0383	Pulse	0.1000	3
Mn	55	45	He	0.322	ppb	17.8	333.35	0.0068	Pulse	0.1000	3
Fe	57	45	He	2.669	ppb	79.1	146.67	0.0030	Pulse	0.1000	3
Co	59	45	He	0.036	ppb	18.0	206.68	0.0042	Pulse	0.1000	3
Ni	60	72	He	-0.106	ppb	N/A	163.34	0.0019	Pulse	0.1000	3
Cu	63	72	He	0.082	ppb	61.7	580.03	0.0069	Pulse	0.1000	3
Zn	66	72	He	3.396	ppb	11.6	1160.09	0.0137	Pulse	0.1000	3
As	75	72	He	0.044	ppb	350.8	76.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.070	ppb	117.4	140.01	0.0016	Pulse	0.1000	3
Mo	98	115	He	0.017	ppb	70.2	56.67	0.0006	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.014	ppb	154.6	1463.47	0.0167	Pulse	0.1000	3
Sb	121	115	He	-0.005	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Ba	137	115	He	-0.001	ppb	N/A	20.00	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.012	ppb	14.3	170.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.006	ppb	100.5	503.36	0.0013	Pulse	0.1000	3
U	238	209	He	0.008	ppb	74.7	140.00	0.0005	Pulse	0.1000	3

ISTD Table:

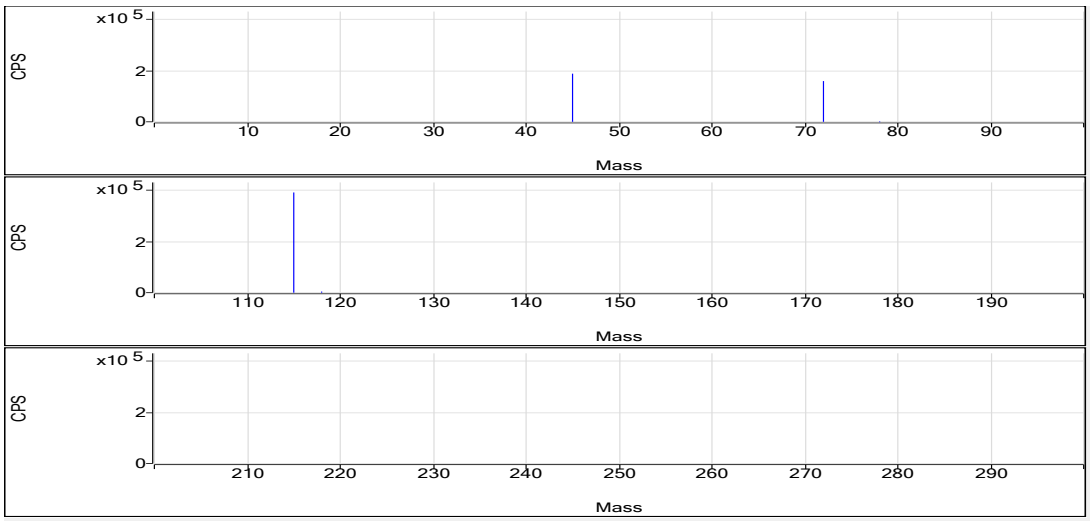
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2491596.37	1.1	103.9	Analog	0.1000	3
No Gas	Ge	72	1211760.50	0.4	105.1	Pulse	0.1000	3
H2	Sc	45	188279.05	1.2	100.7	Pulse	0.1000	3
H2	Ge	72	159296.81	1.3	97.3	Pulse	0.1000	3
H2	In	115	391968.47	0.1	100.7	Pulse	0.1000	3
He	Sc	45	49387.94	3.3	105.9	Pulse	0.1000	3
He	Ge	72	84680.55	1.0	104.3	Pulse	0.1000	3
He	In	115	87665.23	0.8	101.7	Pulse	0.1000	3
He	Tb	159	396142.91	0.4	99.4	Pulse	0.1000	3
He	Bi	209	306189.72	0.4	99.0	Pulse	0.1000	3

No Gas

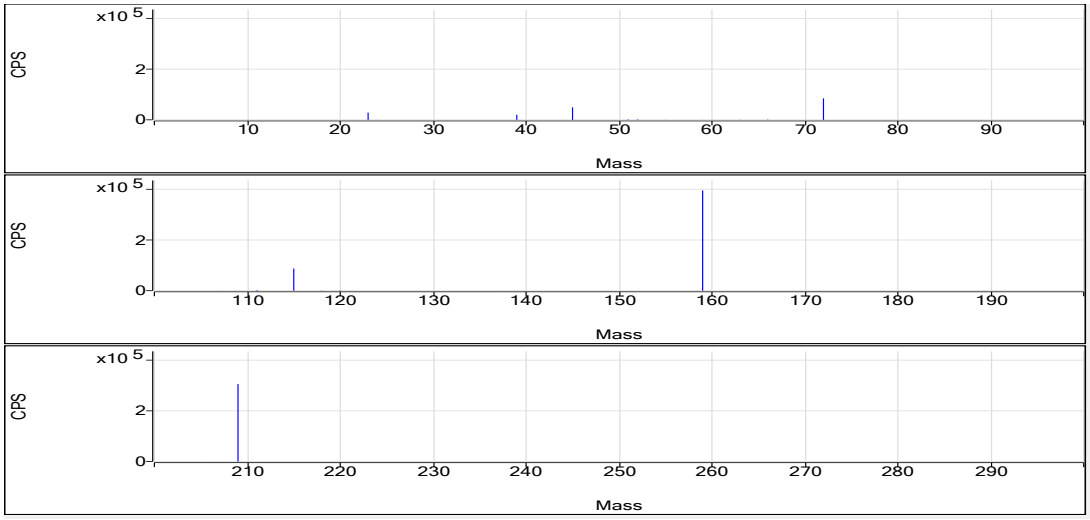


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Be	9	1	No Gas	0.002	0	16.00	0.0008	4.685E-06
Be	9	1	No Gas	0.001	0	14.00	0.0008	4.685E-06
Se	78	2	H2	0.02	0	3.33	0.0004	1.219E-05
Se	78	2	H2	-0.019	0	0.67	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Na	23	3	He	65.591	0.5798	29510.43	0.0036	0.3452
Na	23	3	He	58.617	0.5548	27506.27	0.0036	0.3452
Na	23	3	He	69.921	0.5953	28387.84	0.0036	0.3452
Mg	24	3	He	0.57	0.0045	230.01	0.0018	0.003497
Mg	24	3	He	0.3	0.004	200.01	0.0018	0.003497
Mg	24	3	He	1.674	0.0065	310.01	0.0018	0.003497
Al	27	3	He	0.244	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	-1.099	0	0.00	0.0006	0.0006432
Al	27	3	He	1.051	0.0013	60.00	0.0006	0.0006432
K	39	3	He	-2.607	0.392	19954.12	0.0012	0.3951
K	39	3	He	0.138	0.3952	19593.59	0.0012	0.3951
K	39	3	He	22.224	0.4209	20074.34	0.0012	0.3951
Ca	44	3	He	-5.287	0.0024	120.01	0.0001	0.002715
Ca	44	3	He	7.589	0.0032	160.01	0.0001	0.002715
Ca	44	3	He	37.416	0.0052	250.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.507	0.036	1830.13	0.0219	0.02486
V	51	3	He	0.514	0.0361	1790.12	0.0219	0.02486
V	51	3	He	0.584	0.0376	1794.13	0.0219	0.02486
Cr	52	3	He	-0.114	0.0365	1860.16	0.0299	0.03997
Cr	52	3	He	-0.035	0.0389	1930.20	0.0299	0.03997
Cr	52	3	He	-0.018	0.0394	1880.19	0.0299	0.03997
Mn	55	3	He	0.269	0.0061	310.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.313	0.0067	330.02	0.0128	0.002639
Mn	55	3	He	0.383	0.0075	360.02	0.0128	0.002639
Fe	57	3	He	3.29	0.0033	170.01	0.0006	0.001429
Fe	57	3	He	0.318	0.0016	80.00	0.0006	0.001429
Fe	57	3	He	4.399	0.004	190.01	0.0006	0.001429
Co	59	3	He	0.032	0.0039	200.01	0.0563	0.002149
Co	59	3	He	0.033	0.004	200.01	0.0563	0.002149
Co	59	3	He	0.044	0.0046	220.01	0.0563	0.002149
Ni	60	3	He	-0.044	0.0025	210.01	0.0086	0.002834
Ni	60	3	He	-0.136	0.0017	140.01	0.0086	0.002834
Ni	60	3	He	-0.137	0.0017	140.00	0.0086	0.002834
Cu	63	3	He	0.092	0.0071	610.04	0.0257	0.004757
Cu	63	3	He	0.126	0.008	670.04	0.0257	0.004757
Cu	63	3	He	0.027	0.0054	460.02	0.0257	0.004757
Zn	66	3	He	2.943	0.0124	1060.08	0.0029	0.003818
Zn	66	3	He	3.64	0.0144	1210.10	0.0029	0.003818
Zn	66	3	He	3.606	0.0143	1210.09	0.0029	0.003818
As	75	3	He	0.029	0.0009	74.00	0.002	0.0008061
As	75	3	He	-0.103	0.0006	50.00	0.002	0.0008061
As	75	3	He	0.207	0.0012	104.00	0.002	0.0008061
Sr	88	3	He	-0.019	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	0.085	0.0017	150.01	0.009	0.0009645
Sr	88	3	He	0.145	0.0023	200.01	0.009	0.0009645
Mo	98	3	He	0.003	0.0003	30.00	0.0219	0.0002706
Mo	98	3	He	0.024	0.0008	70.00	0.0219	0.0002706
Mo	98	3	He	0.024	0.0008	70.00	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.011	0.0163	1430.12	0.0158	0.01648
Sn	120	3	He	0.028	0.0169	1470.15	0.0158	0.01648
Sn	120	3	He	0.025	0.0169	1490.13	0.0158	0.01648
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	0.07	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Tl	205	3	He	0.014	0.0005	190.01	0.0247	0.0001339
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Pb	208	3	He	0.012	0.0015	310.01	0.0327	0.00107
Pb	208	3	He	0.006	0.0013	170.01	0.0327	0.00107
Pb	208	3	He	0	0.0011	240.01	0.0327	0.00107
U	238	3	He	0.005	0.0003	100.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
U	238	3	He	0.014	0.0008	240.01	0.0493	7.55E-05
Sc	45	1	No Gas			2485151.21		
Sc	45	1	No Gas			2468577.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2521059.96		
Ge	72	1	No Gas			1208213.89		
Ge	72	1	No Gas			1210047.17		
Ge	72	1	No Gas			1217020.45		
Sc	45	2	H2			190878.92		
Sc	45	2	H2			186897.36		
Sc	45	2	H2			187060.86		
Ge	72	2	H2			161647.32		
Ge	72	2	H2			158208.01		
Ge	72	2	H2			158035.11		
In	115	2	H2			392568.86		
In	115	2	H2			391845.97		
In	115	2	H2			391490.58		
Sc	45	3	He			50899.28		
Sc	45	3	He			49575.56		
Sc	45	3	He			47688.97		
Ge	72	3	He			85575.38		
Ge	72	3	He			83946.37		
Ge	72	3	He			84519.91		
In	115	3	He			87717.13		
In	115	3	He			86940.77		
In	115	3	He			88360.41		
Tb	159	3	He			395769.76		
Tb	159	3	He			397791.09		
Tb	159	3	He			394867.88		
Bi	209	3	He			305240.97		
Bi	209	3	He			307507.83		
Bi	209	3	He			305820.37		

Quantitation Report

Data File Name	155SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 3:57:24 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

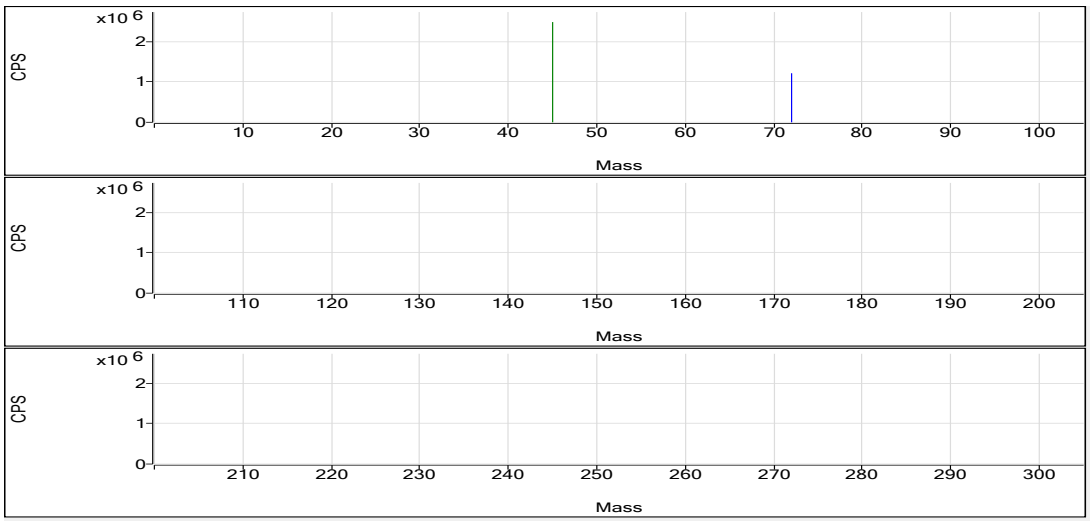
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	12.5	21.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.017	ppb	187.2	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	61.259	ppb	0.5	27843.73	0.5643	Pulse	0.1000	3
Mg	24	45	He	0.874	ppb	58.7	250.01	0.0051	Pulse	0.1000	3
Al	27	45	He	1.096	ppb	20.7	63.33	0.0013	Pulse	0.1000	3
K	39	45	He	0.533	ppb	1859.7	19530.23	0.3957	Pulse	0.1000	3
Ca	44	45	He	28.857	ppb	33.0	230.01	0.0047	Pulse	0.1000	3
Ti	47	45	He	0.121	ppb	180.0	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.558	ppb	7.0	1828.80	0.0371	Pulse	0.5000	3
Cr	52	45	He	-0.121	ppb	N/A	1793.51	0.0363	Pulse	0.1000	3
Mn	55	45	He	0.200	ppb	9.4	256.68	0.0052	Pulse	0.1000	3
Fe	57	45	He	0.463	ppb	348.8	83.34	0.0017	Pulse	0.1000	3
Co	59	45	He	0.024	ppb	33.8	173.34	0.0035	Pulse	0.1000	3
Ni	60	72	He	-0.039	ppb	N/A	213.34	0.0025	Pulse	0.1000	3
Cu	63	72	He	0.024	ppb	163.2	456.69	0.0054	Pulse	0.1000	3
Zn	66	72	He	3.740	ppb	11.5	1253.44	0.0147	Pulse	0.1000	3
As	75	72	He	0.099	ppb	53.4	86.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.010	ppb	503.1	93.34	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.018	ppb	27.4	60.00	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	2094.4	56.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	43.3	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.048	ppb	N/A	1400.12	0.0157	Pulse	0.1000	3
Sb	121	115	He	-0.008	ppb	N/A	13.33	0.0001	Pulse	0.1000	3
Ba	137	115	He	0.030	ppb	164.2	33.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.009	ppb	43.2	143.34	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	28.9	596.69	0.0015	Pulse	0.1000	3
U	238	209	He	0.005	ppb	7.4	103.33	0.0003	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2482652.72	0.3	103.5	Analog	0.1000	3
No Gas	Ge	72	1215040.01	0.9	105.4	Pulse	0.1000	3
H2	Sc	45	188709.76	0.9	100.9	Pulse	0.1000	3
H2	Ge	72	161142.85	0.9	98.4	Pulse	0.1000	3
H2	In	115	390517.94	0.6	100.4	Pulse	0.1000	3
He	Sc	45	49344.34	1.4	105.8	Pulse	0.1000	3
He	Ge	72	85200.34	1.1	104.9	Pulse	0.1000	3
He	In	115	89057.37	0.8	103.3	Pulse	0.1000	3
He	Tb	159	400593.29	1.0	100.5	Pulse	0.1000	3
He	Bi	209	308401.49	0.9	99.7	Pulse	0.1000	3

No Gas



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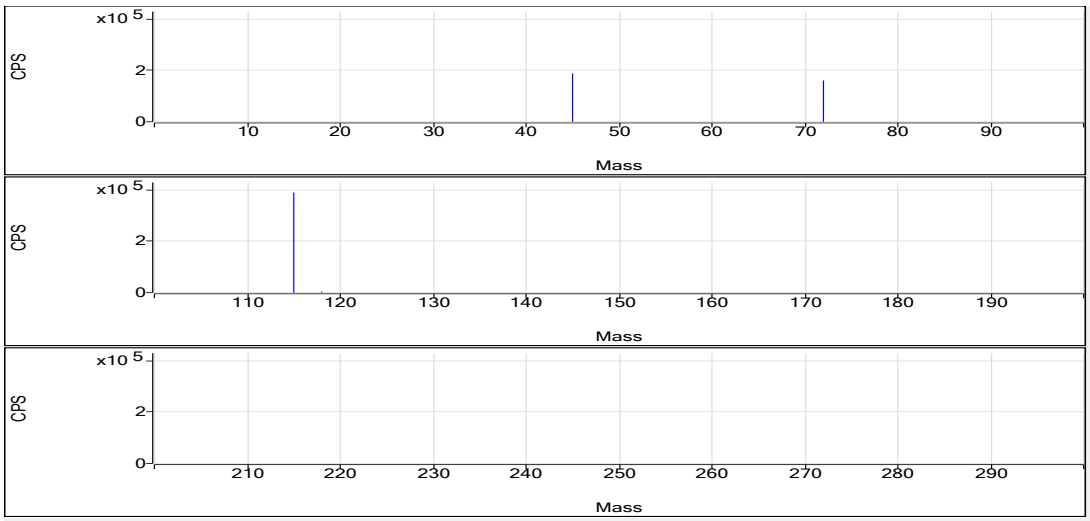
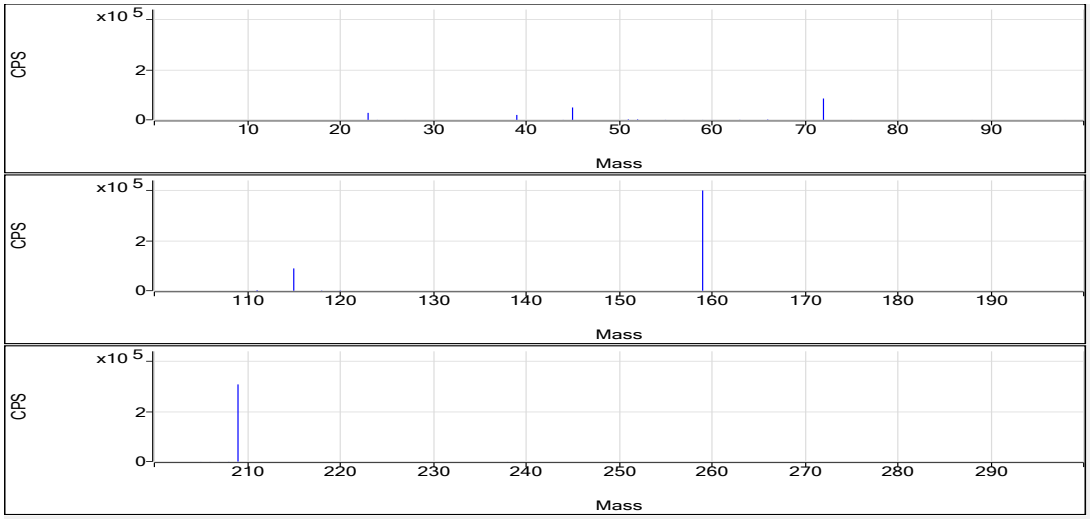


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	22.00	0.0008	4.685E-06
Be	9	1	No Gas	0.004	0	20.00	0.0008	4.685E-06
Se	78	2	H2	-0.019	0	0.67	0.0004	1.219E-05
Se	78	2	H2	0.04	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.03	0	4.00	0.0004	1.219E-05
Na	23	3	He	61.223	0.5642	27786.85	0.0036	0.3452
Na	23	3	He	60.95	0.5632	28207.82	0.0036	0.3452
Na	23	3	He	61.604	0.5655	27536.52	0.0036	0.3452
Mg	24	3	He	1.446	0.0061	300.02	0.0018	0.003497
Mg	24	3	He	0.722	0.0048	240.01	0.0018	0.003497
Mg	24	3	He	0.455	0.0043	210.01	0.0018	0.003497
Al	27	3	He	0.983	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	0.948	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	1.358	0.0014	70.00	0.0006	0.0006432
K	39	3	He	-2.533	0.3921	19313.32	0.0012	0.3951
K	39	3	He	11.612	0.4086	20464.75	0.0012	0.3951
K	39	3	He	-7.48	0.3864	18812.63	0.0012	0.3951
Ca	44	3	He	19.923	0.0041	200.01	0.0001	0.002715
Ca	44	3	He	27.79	0.0046	230.01	0.0001	0.002715
Ca	44	3	He	38.857	0.0053	260.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.241	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.252	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.562	0.0372	1830.13	0.0219	0.02486
V	51	3	He	0.518	0.0362	1812.13	0.0219	0.02486
V	51	3	He	0.595	0.0379	1844.13	0.0219	0.02486
Cr	52	3	He	-0.203	0.0339	1670.15	0.0299	0.03997
Cr	52	3	He	-0.088	0.0373	1870.18	0.0299	0.03997
Cr	52	3	He	-0.073	0.0378	1840.21	0.0299	0.03997
Mn	55	3	He	0.206	0.0053	260.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.214	0.0054	270.01	0.0128	0.002639
Mn	55	3	He	0.178	0.0049	240.01	0.0128	0.002639
Fe	57	3	He	0.336	0.0016	80.00	0.0006	0.001429
Fe	57	3	He	-1.085	0.0008	40.00	0.0006	0.001429
Fe	57	3	He	2.136	0.0027	130.01	0.0006	0.001429
Co	59	3	He	0.023	0.0035	170.01	0.0563	0.002149
Co	59	3	He	0.033	0.004	200.01	0.0563	0.002149
Co	59	3	He	0.017	0.0031	150.01	0.0563	0.002149
Ni	60	3	He	0.007	0.0029	250.01	0.0086	0.002834
Ni	60	3	He	-0.013	0.0027	230.01	0.0086	0.002834
Ni	60	3	He	-0.11	0.0019	160.01	0.0086	0.002834
Cu	63	3	He	-0.014	0.0044	380.02	0.0257	0.004757
Cu	63	3	He	0.064	0.0064	540.03	0.0257	0.004757
Cu	63	3	He	0.021	0.0053	450.03	0.0257	0.004757
Zn	66	3	He	4.101	0.0158	1360.12	0.0029	0.003818
Zn	66	3	He	3.854	0.015	1270.10	0.0029	0.003818
Zn	66	3	He	3.264	0.0133	1130.09	0.0029	0.003818
As	75	3	He	0.082	0.001	84.00	0.002	0.0008061
As	75	3	He	0.057	0.0009	78.00	0.002	0.0008061
As	75	3	He	0.159	0.0011	96.00	0.002	0.0008061
Sr	88	3	He	-0.045	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	0.043	0.0013	120.01	0.009	0.0009645
Sr	88	3	He	0.031	0.0012	110.00	0.009	0.0009645
Mo	98	3	He	0.018	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.024	0.0008	70.00	0.0219	0.0002706
Mo	98	3	He	0.013	0.0006	50.00	0.0219	0.0002706
Ag	107	3	He	-0.009	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	-0.099	0.0149	1340.12	0.0158	0.01648
Sn	120	3	He	0.059	0.0174	1550.15	0.0158	0.01648
Sn	120	3	He	-0.104	0.0148	1310.10	0.0158	0.01648
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	-0.011	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	-0.011	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	0.045	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	0.069	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Tl	205	3	He	0.005	0.0002	100.00	0.0247	0.0001339
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Pb	208	3	He	0.016	0.0016	350.02	0.0327	0.00107
Pb	208	3	He	0.009	0.0014	270.01	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	340.01	0.0327	0.00107
U	238	3	He	0.005	0.0003	100.00	0.0493	7.55E-05
U	238	3	He	0.006	0.0004	110.00	0.0493	7.55E-05
U	238	3	He	0.005	0.0003	100.00	0.0493	7.55E-05
Sc	45	1	No Gas			2480197.46		
Sc	45	1	No Gas			2477331.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2490429.34		
Ge	72	1	No Gas			1212766.39		
Ge	72	1	No Gas			1205692.87		
Ge	72	1	No Gas			1226660.76		
Sc	45	2	H2			190725.56		
Sc	45	2	H2			188101.99		
Sc	45	2	H2			187301.74		
Ge	72	2	H2			159582.33		
Ge	72	2	H2			161301.22		
Ge	72	2	H2			162545.00		
In	115	2	H2			388499.02		
In	115	2	H2			393290.19		
In	115	2	H2			389764.60		
Sc	45	3	He			49253.93		
Sc	45	3	He			50086.73		
Sc	45	3	He			48692.36		
Ge	72	3	He			86309.85		
Ge	72	3	He			84459.55		
Ge	72	3	He			84831.61		
In	115	3	He			89839.44		
In	115	3	He			89024.68		
In	115	3	He			88331.41		
Tb	159	3	He			400343.20		
Tb	159	3	He			404605.89		
Tb	159	3	He			396830.78		
Bi	209	3	He			311346.07		
Bi	209	3	He			308252.16		
Bi	209	3	He			305606.25		

Quantitation Report

Data File Name	156_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 3:59:30 PM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

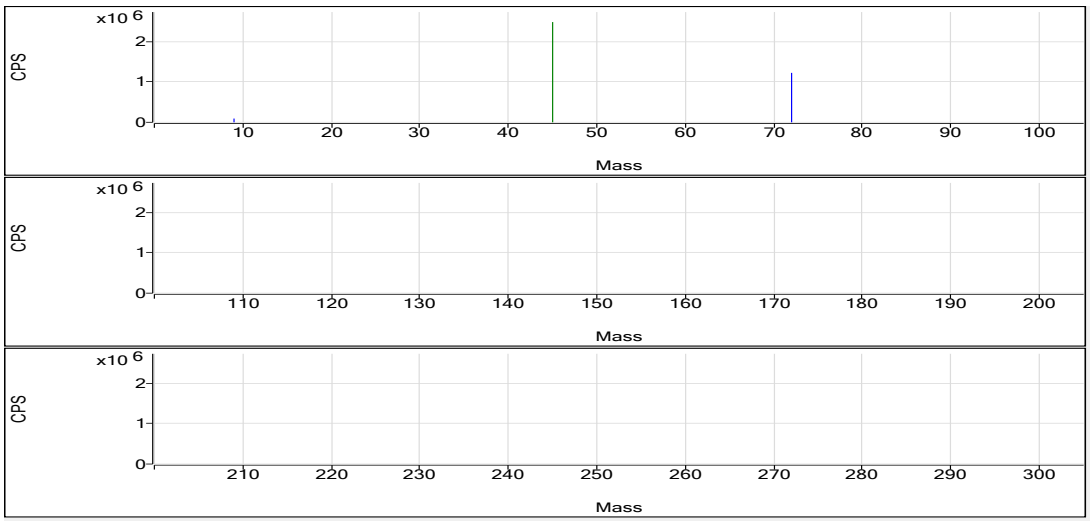
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.883	ppb	1.4	92524.31	0.0373	Pulse	0.5000	3
Se	78	72	H2	52.941	ppb	1.0	3672.92	0.0221	Pulse	1.5000	3
Na	23	45	He	4884.295	ppb	0.7	867382.35	17.8165	Pulse	0.1000	3
Mg	24	45	He	5045.861	ppb	1.2	440942.38	9.0574	Pulse	0.1000	3
Al	27	45	He	4909.238	ppb	0.8	139859.86	2.8727	Pulse	0.1000	3
K	39	45	He	5124.823	ppb	1.2	309729.80	6.3620	Pulse	0.1000	3
Ca	44	45	He	5093.949	ppb	3.8	16887.05	0.3468	Pulse	0.1000	3
Ti	47	45	He	5077.157	ppb	0.6	132725.55	2.7262	Pulse	0.1000	3
V	51	45	He	510.003	ppb	0.6	543964.67	11.1731	Pulse	0.5000	3
Cr	52	45	He	485.798	ppb	0.9	710082.31	14.5851	Pulse	0.1000	3
Mn	55	45	He	503.816	ppb	0.2	314922.78	6.4686	Pulse	0.1000	3
Fe	57	45	He	4981.341	ppb	0.2	140970.03	2.8955	Pulse	0.1000	3
Co	59	45	He	486.264	ppb	0.6	1332524.04	27.3702	Pulse	0.1000	3
Ni	60	72	He	513.031	ppb	1.6	375895.96	4.4063	Pulse	0.1000	3
Cu	63	72	He	488.382	ppb	1.0	1069981.10	12.5420	Pulse	0.1000	3
Zn	66	72	He	511.305	ppb	1.3	127332.02	1.4925	Pulse	0.1000	3
As	75	72	He	518.102	ppb	1.3	90627.68	1.0623	Pulse	0.5000	3
Sr	88	115	He	51.390	ppb	2.0	40475.59	0.4619	Pulse	0.1000	3
Mo	98	115	He	51.571	ppb	1.0	99095.61	1.1310	Pulse	0.1000	3
Ag	107	115	He	51.065	ppb	1.1	208002.00	2.3745	Pulse	0.1000	3
Cd	111	115	He	50.672	ppb	0.5	23735.47	0.2709	Pulse	0.5000	3
Sn	120	115	He	51.249	ppb	1.5	72379.71	0.8261	Pulse	0.1000	3
Sb	121	115	He	51.592	ppb	1.7	67166.85	0.7666	Pulse	0.1000	3
Ba	137	115	He	517.659	ppb	0.9	217663.09	2.4846	Pulse	0.1000	3
Tl	205	159	He	51.145	ppb	0.9	506352.21	1.2648	Pulse	0.1000	3
Pb	208	159	He	51.645	ppb	1.0	677141.72	1.6914	Pulse	0.1000	3
U	238	209	He	50.435	ppb	0.8	772741.63	2.4845	Pulse	0.1000	3

ISTD Table:

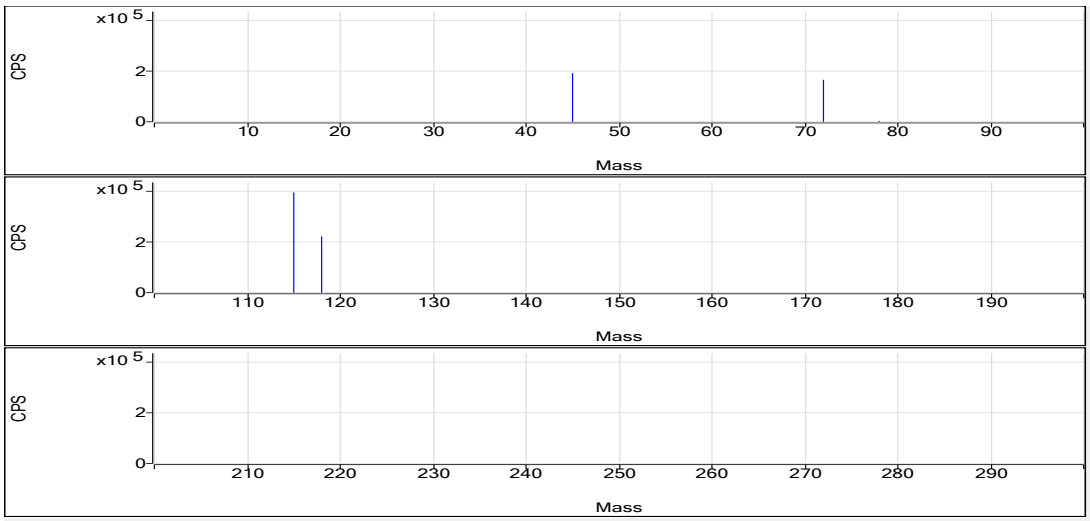
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2481347.25	1.2	103.4	Analog	0.1000	3
No Gas	Ge	72	1223905.19	0.6	106.1	Pulse	0.1000	3
H2	Sc	45	192401.23	0.4	102.9	Pulse	0.1000	3
H2	Ge	72	166247.37	0.8	101.5	Pulse	0.1000	3
H2	In	115	395925.44	0.2	101.8	Pulse	0.1000	3
He	Sc	45	48685.49	0.6	104.4	Pulse	0.1000	3
He	Ge	72	85314.32	0.5	105.1	Pulse	0.1000	3
He	In	115	87608.38	1.3	101.6	Pulse	0.1000	3
He	Tb	159	400373.39	1.1	100.4	Pulse	0.1000	3
He	Bi	209	311025.61	0.2	100.6	Pulse	0.1000	3

No Gas

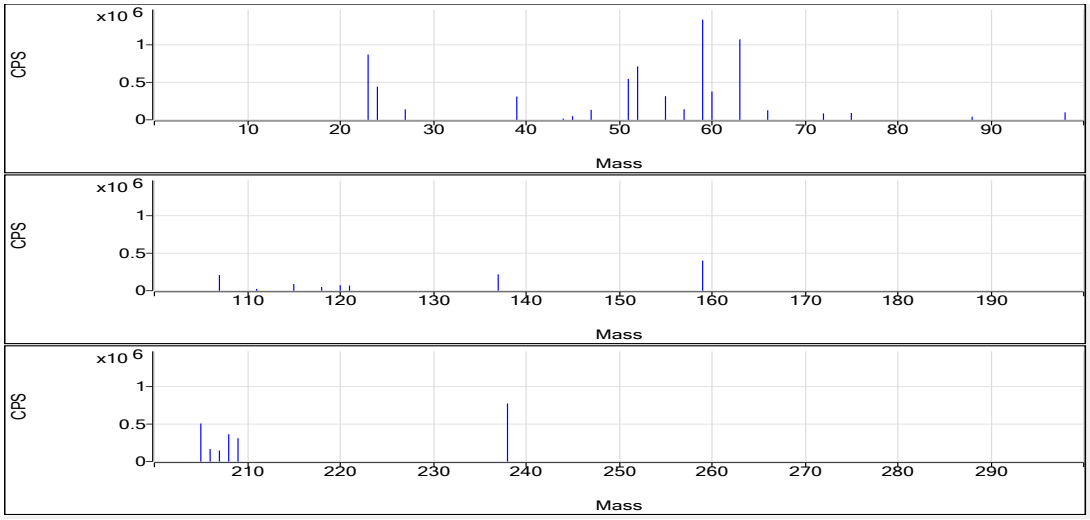


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.556	0.037	92175.59	0.0008	4.685E-06
Be	9	1	No Gas	48.397	0.0369	92517.61	0.0008	4.685E-06
Be	9	1	No Gas	49.696	0.0379	92879.73	0.0008	4.685E-06
Se	78	2	H2	52.397	0.0219	3623.80	0.0004	1.219E-05
Se	78	2	H2	53.442	0.0223	3741.83	0.0004	1.219E-05
Se	78	2	H2	52.984	0.0221	3653.14	0.0004	1.219E-05
Na	23	3	He	4880.16	17.8017	870020.61	0.0036	0.3452
Na	23	3	He	4850.507	17.6957	864483.42	0.0036	0.3452
Na	23	3	He	4922.219	17.9522	867643.03	0.0036	0.3452
Mg	24	3	He	5002.032	8.9788	438816.83	0.0018	0.003497
Mg	24	3	He	5023.032	9.0164	440478.43	0.0018	0.003497
Mg	24	3	He	5112.519	9.177	443531.87	0.0018	0.003497
Al	27	3	He	4950.814	2.897	141586.56	0.0006	0.0006432
Al	27	3	He	4867.678	2.8484	139152.68	0.0006	0.0006432
Al	27	3	He	4909.222	2.8727	138840.34	0.0006	0.0006432
K	39	3	He	5148.234	6.3893	312262.69	0.0012	0.3951
K	39	3	He	5056.498	6.2825	306917.12	0.0012	0.3951
K	39	3	He	5169.736	6.4143	310009.59	0.0012	0.3951
Ca	44	3	He	5309.362	0.3614	17661.29	0.0001	0.002715
Ca	44	3	He	5032.445	0.3427	16740.22	0.0001	0.002715
Ca	44	3	He	4940.039	0.3364	16259.64	0.0001	0.002715
Ti	47	3	He	5050.552	2.712	132541.06	0.0005	7.003E-05
Ti	47	3	He	5072.63	2.7238	133066.07	0.0005	7.003E-05
Ti	47	3	He	5108.289	2.743	132569.51	0.0005	7.003E-05
V	51	3	He	512.332	11.224	548549.25	0.0219	0.02486
V	51	3	He	506.598	11.0987	542202.50	0.0219	0.02486
V	51	3	He	511.079	11.1966	541142.25	0.0219	0.02486
Cr	52	3	He	489.864	14.7068	718764.91	0.0299	0.03997
Cr	52	3	He	481.348	14.4519	706015.93	0.0299	0.03997
Cr	52	3	He	486.182	14.5966	705466.08	0.0299	0.03997
Mn	55	3	He	502.995	6.458	315621.32	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	503.896	6.4696	316057.03	0.0128	0.002639
Mn	55	3	He	504.557	6.4781	313090.00	0.0128	0.002639
Fe	57	3	He	4973.383	2.8909	141287.31	0.0006	0.001429
Fe	57	3	He	4981.038	2.8954	141446.89	0.0006	0.001429
Fe	57	3	He	4989.604	2.9003	140175.89	0.0006	0.001429
Co	59	3	He	488.524	27.4974	1343876.39	0.0563	0.002149
Co	59	3	He	483.186	27.197	1328649.82	0.0563	0.002149
Co	59	3	He	487.081	27.4162	1325045.92	0.0563	0.002149
Ni	60	3	He	520.748	4.4725	379995.31	0.0086	0.002834
Ni	60	3	He	513.71	4.4121	375707.49	0.0086	0.002834
Ni	60	3	He	504.634	4.3342	371985.07	0.0086	0.002834
Cu	63	3	He	493.674	12.6779	1077148.66	0.0257	0.004757
Cu	63	3	He	487.536	12.5203	1066160.06	0.0257	0.004757
Cu	63	3	He	483.935	12.4279	1066634.59	0.0257	0.004757
Zn	66	3	He	509.052	1.486	126253.20	0.0029	0.003818
Zn	66	3	He	518.969	1.5149	128996.58	0.0029	0.003818
Zn	66	3	He	505.893	1.4768	126746.27	0.0029	0.003818
As	75	3	He	522.458	1.0713	91016.70	0.002	0.0008061
As	75	3	He	521.606	1.0695	91073.10	0.002	0.0008061
As	75	3	He	510.242	1.0462	89793.23	0.002	0.0008061
Sr	88	3	He	52.375	0.4708	41852.89	0.009	0.0009645
Sr	88	3	He	51.454	0.4625	40378.42	0.009	0.0009645
Sr	88	3	He	50.342	0.4525	39195.46	0.009	0.0009645
Mo	98	3	He	51.919	1.1387	101234.41	0.0219	0.0002706
Mo	98	3	He	51.845	1.137	99269.23	0.0219	0.0002706
Mo	98	3	He	50.949	1.1174	96783.20	0.0219	0.0002706
Ag	107	3	He	50.456	2.3462	208587.77	0.0465	0.0006206
Ag	107	3	He	51.119	2.377	207521.72	0.0465	0.0006206
Ag	107	3	He	51.619	2.4002	207896.52	0.0465	0.0006206
Cd	111	3	He	50.412	0.2696	23964.52	0.0053	0
Cd	111	3	He	50.65	0.2708	23643.99	0.0053	0
Cd	111	3	He	50.954	0.2724	23597.89	0.0053	0
Sn	120	3	He	51.225	0.8258	73415.25	0.0158	0.01648
Sn	120	3	He	52.038	0.8386	73214.04	0.0158	0.01648
Sn	120	3	He	50.484	0.8141	70509.83	0.0158	0.01648
Sb	121	3	He	52.516	0.7803	69374.11	0.0149	0.0002698
Sb	121	3	He	50.837	0.7554	65947.83	0.0149	0.0002698
Sb	121	3	He	51.422	0.7641	66178.62	0.0149	0.0002698
Ba	137	3	He	512.842	2.4615	218844.12	0.0048	0.0002317
Ba	137	3	He	521.935	2.5052	218713.71	0.0048	0.0002317
Ba	137	3	He	518.198	2.4872	215431.44	0.0048	0.0002317
Tl	205	3	He	51.073	1.263	511142.45	0.0247	0.0001339
Tl	205	3	He	50.712	1.2541	502646.05	0.0247	0.0001339
Tl	205	3	He	51.65	1.2773	505268.12	0.0247	0.0001339
Pb	208	3	He	51.293	1.6799	363034.49	0.0327	0.00107
Pb	208	3	He	51.428	1.6843	363116.36	0.0327	0.00107
Pb	208	3	He	52.213	1.71	362958.12	0.0327	0.00107
U	238	3	He	50.847	2.5048	779210.93	0.0493	7.55E-05
U	238	3	He	50.007	2.4634	767275.61	0.0493	7.55E-05
U	238	3	He	50.452	2.4853	771738.35	0.0493	7.55E-05
Sc	45	1	No Gas			2488393.24		
Sc	45	1	No Gas			2505796.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2449851.99		
Ge	72	1	No Gas			1226558.50		
Ge	72	1	No Gas			1229136.15		
Ge	72	1	No Gas			1216020.92		
Sc	45	2	H2			193210.04		
Sc	45	2	H2			191961.93		
Sc	45	2	H2			192031.72		
Ge	72	2	H2			165732.01		
Ge	72	2	H2			167785.95		
Ge	72	2	H2			165224.14		
In	115	2	H2			395743.67		
In	115	2	H2			396690.89		
In	115	2	H2			395341.75		
Sc	45	3	He			48872.81		
Sc	45	3	He			48852.85		
Sc	45	3	He			48330.80		
Ge	72	3	He			84962.78		
Ge	72	3	He			85154.27		
Ge	72	3	He			85825.90		
In	115	3	He			89296.22		
In	115	3	He			87695.59		
In	115	3	He			87002.16		
Tb	159	3	He			404712.57		
Tb	159	3	He			400817.14		
Tb	159	3	He			395590.46		
Bi	209	3	He			311088.10		
Bi	209	3	He			311469.57		
Bi	209	3	He			310519.16		

Quantitation Report

Data File Name	157_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 4:01:32 PM
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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

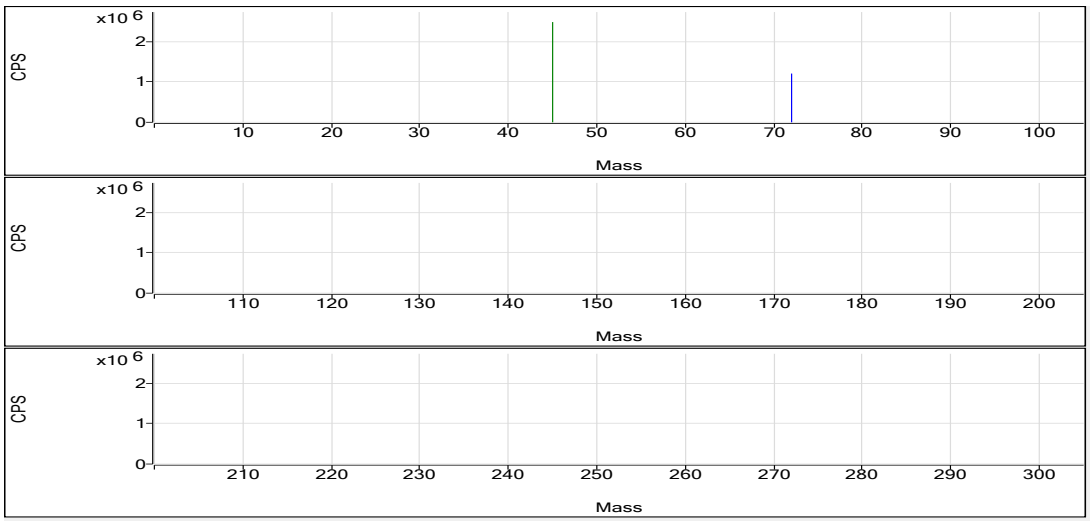
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.023	ppb	31.2	54.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.052	ppb	34.7	5.33	0.0000	Pulse	1.5000	3
Na	23	45	He	54.904	ppb	3.8	25743.14	0.5416	Pulse	0.1000	3
Mg	24	45	He	1.924	ppb	28.5	330.03	0.0069	Pulse	0.1000	3
Al	27	45	He	1.062	ppb	61.0	60.00	0.0013	Pulse	0.1000	3
K	39	45	He	4.129	ppb	242.7	19006.23	0.3999	Pulse	0.1000	3
Ca	44	45	He	11.467	ppb	181.6	166.67	0.0035	Pulse	0.1000	3
Ti	47	45	He	0.917	ppb	26.6	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	0.617	ppb	7.5	1823.46	0.0383	Pulse	0.5000	3
Cr	52	45	He	-0.014	ppb	N/A	1880.19	0.0396	Pulse	0.1000	3
Mn	55	45	He	0.400	ppb	18.6	370.02	0.0078	Pulse	0.1000	3
Fe	57	45	He	1.146	ppb	140.1	100.00	0.0021	Pulse	0.1000	3
Co	59	45	He	0.064	ppb	11.4	273.34	0.0058	Pulse	0.1000	3
Ni	60	72	He	0.010	ppb	796.3	243.34	0.0029	Pulse	0.1000	3
Cu	63	72	He	0.122	ppb	34.8	656.71	0.0079	Pulse	0.1000	3
Zn	66	72	He	3.569	ppb	32.7	1176.76	0.0142	Pulse	0.1000	3
As	75	72	He	0.237	ppb	20.7	107.33	0.0013	Pulse	0.5000	3
Sr	88	115	He	0.076	ppb	36.7	143.34	0.0016	Pulse	0.1000	3
Mo	98	115	He	0.069	ppb	37.6	156.67	0.0018	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	43.3	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.072	ppb	22.4	1536.81	0.0176	Pulse	0.1000	3
Sb	121	115	He	0.041	ppb	48.3	76.67	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.127	ppb	71.6	73.33	0.0008	Pulse	0.1000	3
Tl	205	159	He	0.060	ppb	6.8	633.37	0.0016	Pulse	0.1000	3
Pb	208	159	He	0.020	ppb	48.2	676.70	0.0017	Pulse	0.1000	3
U	238	209	He	0.044	ppb	8.0	693.38	0.0023	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2485697.67	1.6	103.6	Analog	0.1000	3
No Gas	Ge	72	1208646.10	0.4	104.8	Pulse	0.1000	3
H2	Sc	45	185908.80	0.9	99.4	Pulse	0.1000	3
H2	Ge	72	157812.92	0.8	96.4	Pulse	0.1000	3
H2	In	115	390172.03	0.4	100.3	Pulse	0.1000	3
He	Sc	45	47541.70	1.9	101.9	Pulse	0.1000	3
He	Ge	72	83135.20	2.3	102.4	Pulse	0.1000	3
He	In	115	87268.32	0.7	101.2	Pulse	0.1000	3
He	Tb	159	392050.11	0.7	98.4	Pulse	0.1000	3
He	Bi	209	306522.68	0.5	99.1	Pulse	0.1000	3

No Gas



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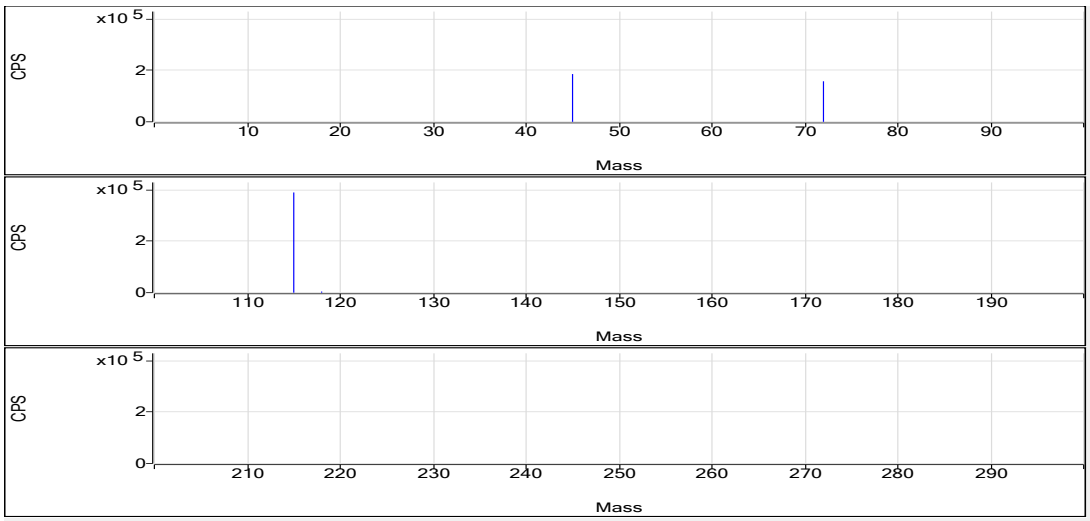
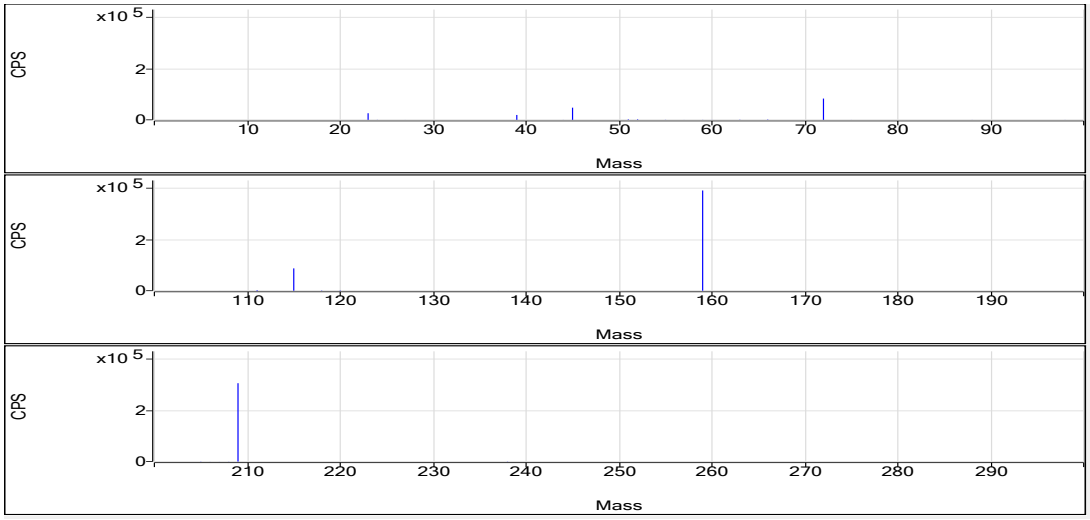


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.028	0	64.00	0.0008	4.685E-06
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.026	0	60.00	0.0008	4.685E-06
Se	78	2	H2	0.063	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.062	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.031	0	4.00	0.0004	1.219E-05
Na	23	3	He	53.225	0.5355	26033.85	0.0036	0.3452
Na	23	3	He	54.223	0.5391	25342.25	0.0036	0.3452
Na	23	3	He	57.264	0.55	25853.31	0.0036	0.3452
Mg	24	3	He	1.605	0.0064	310.01	0.0018	0.003497
Mg	24	3	He	1.608	0.0064	300.01	0.0018	0.003497
Mg	24	3	He	2.557	0.0081	380.08	0.0018	0.003497
Al	27	3	He	0.659	0.001	50.00	0.0006	0.0006432
Al	27	3	He	1.81	0.0017	80.01	0.0006	0.0006432
Al	27	3	He	0.719	0.0011	50.00	0.0006	0.0006432
K	39	3	He	-3.038	0.3915	19032.96	0.0012	0.3951
K	39	3	He	-0.156	0.3949	18562.31	0.0012	0.3951
K	39	3	He	15.581	0.4132	19423.43	0.0012	0.3951
Ca	44	3	He	32.898	0.0049	240.01	0.0001	0.002715
Ca	44	3	He	-8.699	0.0021	100.00	0.0001	0.002715
Ca	44	3	He	10.2	0.0034	160.01	0.0001	0.002715
Ti	47	3	He	0.636	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1.058	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	1.058	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	0.637	0.0388	1886.13	0.0219	0.02486
V	51	3	He	0.649	0.0391	1836.13	0.0219	0.02486
V	51	3	He	0.564	0.0372	1748.12	0.0219	0.02486
Cr	52	3	He	-0.064	0.0381	1850.18	0.0299	0.03997
Cr	52	3	He	0.022	0.0406	1910.20	0.0299	0.03997
Cr	52	3	He	0.001	0.04	1880.20	0.0299	0.03997
Mn	55	3	He	0.484	0.0088	430.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.341	0.007	330.01	0.0128	0.002639
Mn	55	3	He	0.375	0.0074	350.02	0.0128	0.002639
Fe	57	3	He	2.498	0.0029	140.01	0.0006	0.001429
Fe	57	3	He	-0.628	0.0011	50.00	0.0006	0.001429
Fe	57	3	He	1.569	0.0023	110.00	0.0006	0.001429
Co	59	3	He	0.057	0.0053	260.01	0.0563	0.002149
Co	59	3	He	0.064	0.0057	270.01	0.0563	0.002149
Co	59	3	He	0.071	0.0062	290.01	0.0563	0.002149
Ni	60	3	He	0.093	0.0036	310.01	0.0086	0.002834
Ni	60	3	He	-0.005	0.0028	230.01	0.0086	0.002834
Ni	60	3	He	-0.059	0.0023	190.01	0.0086	0.002834
Cu	63	3	He	0.162	0.0089	760.05	0.0257	0.004757
Cu	63	3	He	0.127	0.008	660.04	0.0257	0.004757
Cu	63	3	He	0.077	0.0067	550.03	0.0257	0.004757
Zn	66	3	He	2.271	0.0104	890.06	0.0029	0.003818
Zn	66	3	He	3.898	0.0152	1250.10	0.0029	0.003818
Zn	66	3	He	4.537	0.017	1390.12	0.0029	0.003818
As	75	3	He	0.19	0.0012	102.00	0.002	0.0008061
As	75	3	He	0.234	0.0013	106.00	0.002	0.0008061
As	75	3	He	0.288	0.0014	114.00	0.002	0.0008061
Sr	88	3	He	0.098	0.0018	160.01	0.009	0.0009645
Sr	88	3	He	0.045	0.0014	120.00	0.009	0.0009645
Sr	88	3	He	0.084	0.0017	150.01	0.009	0.0009645
Mo	98	3	He	0.046	0.0013	110.00	0.0219	0.0002706
Mo	98	3	He	0.066	0.0017	150.01	0.0219	0.0002706
Mo	98	3	He	0.097	0.0024	210.01	0.0219	0.0002706
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	0.09	0.0179	1550.13	0.0158	0.01648
Sn	120	3	He	0.059	0.0174	1530.15	0.0158	0.01648
Sn	120	3	He	0.066	0.0175	1530.14	0.0158	0.01648
Sb	121	3	He	0.06	0.0012	100.00	0.0149	0.0002698
Sb	121	3	He	0.02	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.044	0.0009	80.00	0.0149	0.0002698
Ba	137	3	He	0.168	0.001	90.00	0.0048	0.0002317
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.19	0.0011	100.00	0.0048	0.0002317
Tl	205	3	He	0.061	0.0016	650.04	0.0247	0.0001339
Tl	205	3	He	0.063	0.0017	660.04	0.0247	0.0001339
Tl	205	3	He	0.055	0.0015	590.03	0.0247	0.0001339
Pb	208	3	He	0.018	0.0017	430.02	0.0327	0.00107
Pb	208	3	He	0.011	0.0014	290.01	0.0327	0.00107
Pb	208	3	He	0.03	0.0021	490.03	0.0327	0.00107
U	238	3	He	0.041	0.0021	640.04	0.0493	7.55E-05
U	238	3	He	0.045	0.0023	700.04	0.0493	7.55E-05
U	238	3	He	0.048	0.0024	740.05	0.0493	7.55E-05
Sc	45	1	No Gas			2483296.84		
Sc	45	1	No Gas			2527510.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2446285.74		
Ge	72	1	No Gas			1204335.45		
Ge	72	1	No Gas			1214201.62		
Ge	72	1	No Gas			1207401.23		
Sc	45	2	H2			183899.31		
Sc	45	2	H2			186970.33		
Sc	45	2	H2			186856.76		
Ge	72	2	H2			156567.72		
Ge	72	2	H2			157883.45		
Ge	72	2	H2			158987.58		
In	115	2	H2			389503.28		
In	115	2	H2			388866.67		
In	115	2	H2			392146.13		
Sc	45	3	He			48611.81		
Sc	45	3	He			47006.87		
Sc	45	3	He			47006.41		
Ge	72	3	He			85344.95		
Ge	72	3	He			82418.01		
Ge	72	3	He			81642.65		
In	115	3	He			86620.10		
In	115	3	He			87887.13		
In	115	3	He			87323.32		
Tb	159	3	He			394797.26		
Tb	159	3	He			388967.53		
Tb	159	3	He			392385.54		
Bi	209	3	He			307799.45		
Bi	209	3	He			307060.64		
Bi	209	3	He			304707.96		

Quantitation Report

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Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

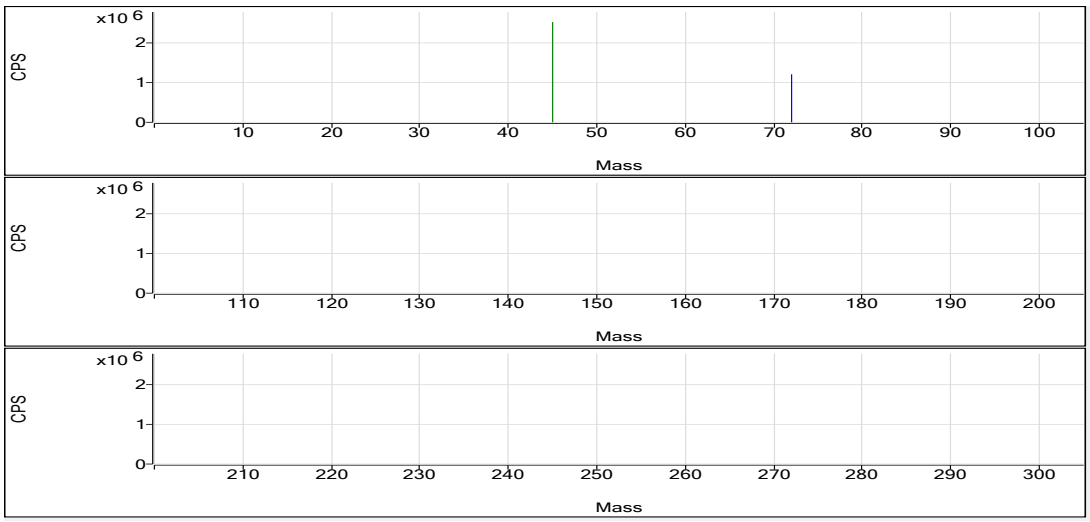
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	8.2	34.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.026	ppb	108.0	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	37.883	ppb	6.0	23742.97	0.4807	Pulse	0.1000	3
Mg	24	45	He	0.457	ppb	100.9	213.34	0.0043	Pulse	0.1000	3
Al	27	45	He	1.557	ppb	78.3	76.67	0.0016	Pulse	0.1000	3
K	39	45	He	-0.323	ppb	N/A	19496.96	0.3947	Pulse	0.1000	3
Ca	44	45	He	2.698	ppb	375.0	143.34	0.0029	Pulse	0.1000	3
Ti	47	45	He	0.744	ppb	104.7	23.33	0.0005	Pulse	0.1000	3
V	51	45	He	0.296	ppb	30.7	1548.09	0.0313	Pulse	0.5000	3
Cr	52	45	He	-0.319	ppb	N/A	1503.46	0.0304	Pulse	0.1000	3
Mn	55	45	He	0.356	ppb	24.2	356.68	0.0072	Pulse	0.1000	3
Fe	57	45	He	1.028	ppb	70.3	100.00	0.0020	Pulse	0.1000	3
Co	59	45	He	0.010	ppb	117.1	133.34	0.0027	Pulse	0.1000	3
Ni	60	72	He	-0.033	ppb	N/A	220.01	0.0025	Pulse	0.1000	3
Cu	63	72	He	0.052	ppb	64.5	526.70	0.0061	Pulse	0.1000	3
Zn	66	72	He	2.560	ppb	9.2	973.40	0.0113	Pulse	0.1000	3
As	75	72	He	0.013	ppb	661.2	72.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	-0.019	ppb	N/A	70.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.015	ppb	37.6	53.33	0.0006	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.277	ppb	N/A	1073.42	0.0121	Pulse	0.1000	3
Sb	121	115	He	0.012	ppb	58.8	40.00	0.0004	Pulse	0.1000	3
Ba	137	115	He	-0.010	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.016	ppb	47.8	216.68	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	54.6	576.70	0.0014	Pulse	0.1000	3
U	238	209	He	0.008	ppb	10.0	143.34	0.0005	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2515276.27	0.6	104.9	Analog	0.1000	3
No Gas	Ge	72	1204429.38	0.7	104.4	Pulse	0.1000	3
H2	Sc	45	190669.05	0.9	102.0	Pulse	0.1000	3
H2	Ge	72	164463.57	0.8	100.5	Pulse	0.1000	3
H2	In	115	401178.04	1.3	103.1	Pulse	0.1000	3
He	Sc	45	49401.15	1.0	105.9	Pulse	0.1000	3
He	Ge	72	86333.84	0.6	106.3	Pulse	0.1000	3
He	In	115	88746.20	1.5	103.0	Pulse	0.1000	3
He	Tb	159	404658.43	1.4	101.5	Pulse	0.1000	3
He	Bi	209	315062.09	0.3	101.9	Pulse	0.1000	3

No Gas



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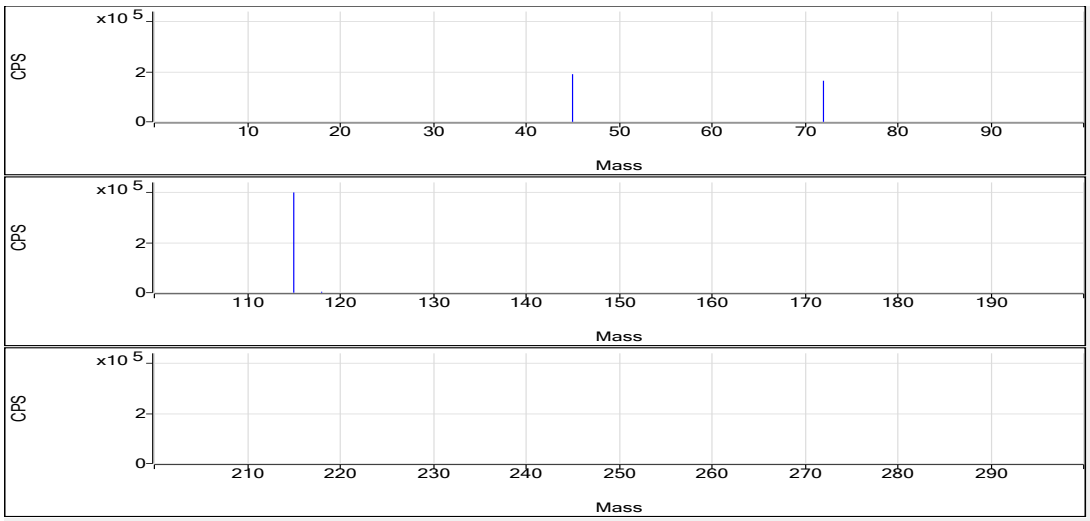
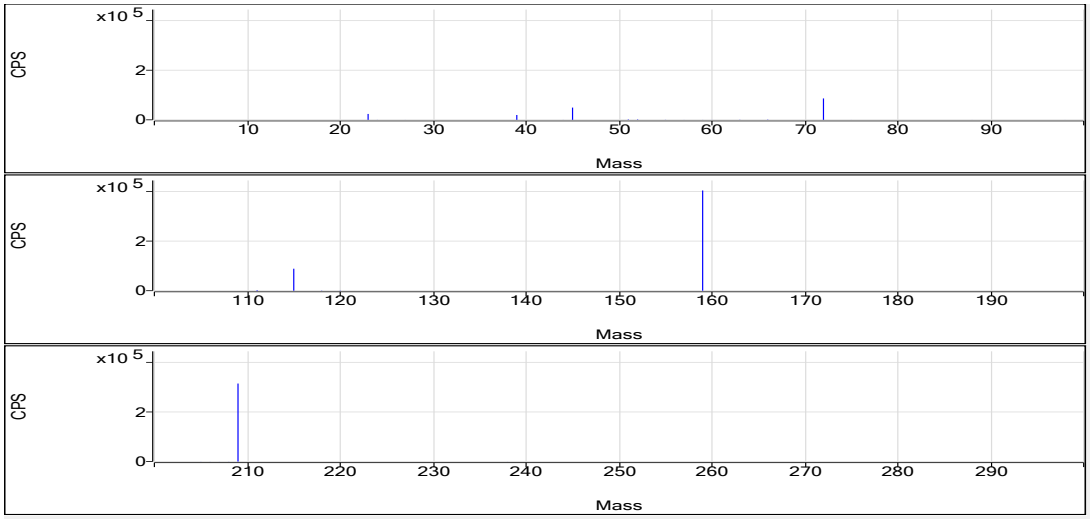


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.013	0	36.00	0.0008	4.685E-06
Be	9	1	No Gas	0.012	0	34.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Se	78	2	H2	0.009	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.058	0	6.00	0.0004	1.219E-05
Na	23	3	He	36.422	0.4754	23689.55	0.0036	0.3452
Na	23	3	He	36.72	0.4765	23589.48	0.0036	0.3452
Na	23	3	He	40.505	0.49	23949.89	0.0036	0.3452
Mg	24	3	He	0.288	0.004	200.01	0.0018	0.003497
Mg	24	3	He	0.978	0.0053	260.01	0.0018	0.003497
Mg	24	3	He	0.104	0.0037	180.01	0.0018	0.003497
Al	27	3	He	0.273	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	2.699	0.0022	110.00	0.0006	0.0006432
Al	27	3	He	1.698	0.0016	80.00	0.0006	0.0006432
K	39	3	He	-2.776	0.3918	19523.62	0.0012	0.3951
K	39	3	He	-1.631	0.3932	19463.64	0.0012	0.3951
K	39	3	He	3.44	0.3991	19503.61	0.0012	0.3951
Ca	44	3	He	13.29	0.0036	180.01	0.0001	0.002715
Ca	44	3	He	1.677	0.0028	140.01	0.0001	0.002715
Ca	44	3	He	-6.872	0.0023	110.00	0.0001	0.002715
Ti	47	3	He	1.365	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	0.998	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.311	0.0317	1578.09	0.0219	0.02486
V	51	3	He	0.199	0.0292	1446.08	0.0219	0.02486
V	51	3	He	0.379	0.0331	1620.10	0.0219	0.02486
Cr	52	3	He	-0.202	0.0339	1690.15	0.0299	0.03997
Cr	52	3	He	-0.37	0.0289	1430.11	0.0299	0.03997
Cr	52	3	He	-0.385	0.0284	1390.11	0.0299	0.03997
Mn	55	3	He	0.404	0.0078	390.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.408	0.0079	390.02	0.0128	0.002639
Mn	55	3	He	0.257	0.0059	290.01	0.0128	0.002639
Fe	57	3	He	0.995	0.002	100.00	0.0006	0.001429
Fe	57	3	He	0.322	0.0016	80.00	0.0006	0.001429
Fe	57	3	He	1.767	0.0025	120.00	0.0006	0.001429
Co	59	3	He	0.005	0.0024	120.00	0.0563	0.002149
Co	59	3	He	0.023	0.0034	170.01	0.0563	0.002149
Co	59	3	He	0.002	0.0023	110.00	0.0563	0.002149
Ni	60	3	He	0.02	0.003	260.01	0.0086	0.002834
Ni	60	3	He	-0.035	0.0025	220.01	0.0086	0.002834
Ni	60	3	He	-0.085	0.0021	180.01	0.0086	0.002834
Cu	63	3	He	0.089	0.0071	610.04	0.0257	0.004757
Cu	63	3	He	0.044	0.0059	510.03	0.0257	0.004757
Cu	63	3	He	0.024	0.0054	460.02	0.0257	0.004757
Zn	66	3	He	2.74	0.0118	1020.06	0.0029	0.003818
Zn	66	3	He	2.646	0.0115	1000.07	0.0029	0.003818
Zn	66	3	He	2.295	0.0105	900.06	0.0029	0.003818
As	75	3	He	0.081	0.001	84.00	0.002	0.0008061
As	75	3	He	0.045	0.0009	78.00	0.002	0.0008061
As	75	3	He	-0.086	0.0006	54.00	0.002	0.0008061
Sr	88	3	He	-0.046	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.007	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	-0.006	0.0009	80.00	0.009	0.0009645
Mo	98	3	He	0.018	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.019	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.009	0.0005	40.00	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.243	0.0126	1140.09	0.0158	0.01648
Sn	120	3	He	-0.35	0.011	970.08	0.0158	0.01648
Sn	120	3	He	-0.24	0.0127	1110.09	0.0158	0.01648
Sb	121	3	He	0.019	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.012	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Ba	137	3	He	0.044	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.025	0.0008	310.02	0.0247	0.0001339
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Pb	208	3	He	0.004	0.0012	190.01	0.0327	0.00107
Pb	208	3	He	0.012	0.0015	280.02	0.0327	0.00107
Pb	208	3	He	0.016	0.0016	370.02	0.0327	0.00107
U	238	3	He	0.007	0.0004	130.01	0.0493	7.55E-05
U	238	3	He	0.008	0.0005	150.01	0.0493	7.55E-05
U	238	3	He	0.008	0.0005	150.01	0.0493	7.55E-05
Sc	45	1	No Gas			2524029.81		
Sc	45	1	No Gas			2525002.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2496796.68		
Ge	72	1	No Gas			1195517.64		
Ge	72	1	No Gas			1205122.72		
Ge	72	1	No Gas			1212647.79		
Sc	45	2	H2			191069.72		
Sc	45	2	H2			192218.18		
Sc	45	2	H2			188719.26		
Ge	72	2	H2			165561.11		
Ge	72	2	H2			163039.14		
Ge	72	2	H2			164790.45		
In	115	2	H2			407053.74		
In	115	2	H2			397951.56		
In	115	2	H2			398528.82		
Sc	45	3	He			49826.23		
Sc	45	3	He			49504.75		
Sc	45	3	He			48872.46		
Ge	72	3	He			86480.76		
Ge	72	3	He			86803.32		
Ge	72	3	He			85717.43		
In	115	3	He			90181.50		
In	115	3	He			88571.04		
In	115	3	He			87505.24		
Tb	159	3	He			410940.54		
Tb	159	3	He			403318.63		
Tb	159	3	He			399716.13		
Bi	209	3	He			316037.38		
Bi	209	3	He			313884.45		
Bi	209	3	He			315264.45		

Quantitation Report

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Sample Type	Sample
Comment	A12
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

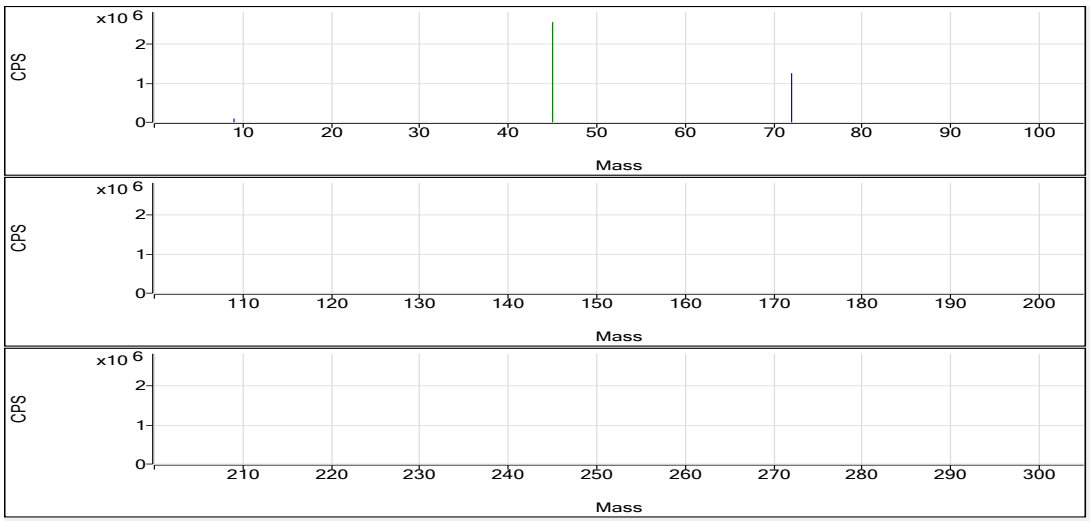
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.738	ppb	0.8	93318.40	0.0364	Pulse	0.5000	3
Se	78	72	H2	100.901	ppb	0.4	7191.15	0.0421	Pulse	1.5000	3
Na	23	45	He	4674.787	ppb	1.9	860295.61	17.0671	Pulse	0.1000	3
Mg	24	45	He	4900.251	ppb	1.6	443389.93	8.7961	Pulse	0.1000	3
Al	27	45	He	4848.266	ppb	1.5	143008.81	2.8370	Pulse	0.1000	3
K	39	45	He	4896.337	ppb	2.1	307273.25	6.0960	Pulse	0.1000	3
Ca	44	45	He	5120.129	ppb	1.8	17571.16	0.3486	Pulse	0.1000	3
Ti	47	45	He	514.918	ppb	1.5	13940.49	0.2766	Pulse	0.1000	3
V	51	45	He	495.606	ppb	1.6	547344.27	10.8584	Pulse	0.5000	3
Cr	52	45	He	466.486	ppb	2.1	706015.87	14.0069	Pulse	0.1000	3
Mn	55	45	He	487.994	ppb	1.8	315821.56	6.2655	Pulse	0.1000	3
Fe	57	45	He	4876.381	ppb	1.1	142888.73	2.8346	Pulse	0.1000	3
Co	59	45	He	472.433	ppb	1.7	1340412.95	26.5918	Pulse	0.1000	3
Ni	60	72	He	491.538	ppb	1.0	373364.56	4.2218	Pulse	0.1000	3
Cu	63	72	He	471.586	ppb	1.0	1071063.74	12.1109	Pulse	0.1000	3
Zn	66	72	He	499.100	ppb	1.4	128851.35	1.4570	Pulse	0.1000	3
As	75	72	He	503.346	ppb	0.3	91279.75	1.0321	Pulse	0.5000	3
Sr	88	115	He	51.670	ppb	3.0	40722.93	0.4644	Pulse	0.1000	3
Mo	98	115	He	51.162	ppb	1.1	98403.92	1.1221	Pulse	0.1000	3
Ag	107	115	He	50.440	ppb	1.2	205675.75	2.3454	Pulse	0.1000	3
Cd	111	115	He	51.842	ppb	0.6	24309.11	0.2772	Pulse	0.5000	3
Sn	120	115	He	103.491	ppb	1.7	144827.68	1.6515	Pulse	0.1000	3
Sb	121	115	He	104.200	ppb	1.1	135746.90	1.5480	Pulse	0.1000	3
Ba	137	115	He	518.192	ppb	0.3	218120.58	2.4872	Pulse	0.1000	3
Tl	205	159	He	103.016	ppb	1.1	1024944.80	2.5473	Pulse	0.1000	3
Pb	208	159	He	51.952	ppb	1.2	684580.83	1.7015	Pulse	0.1000	3
U	238	209	He	49.751	ppb	0.4	770798.42	2.4508	Pulse	0.1000	3

ISTD Table:

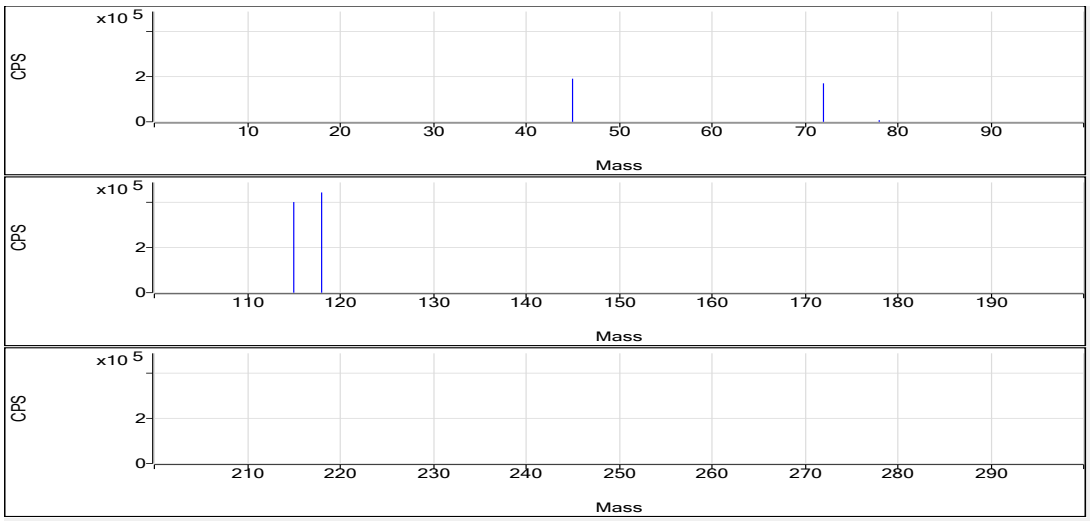
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2562540.85	1.1	106.8	Analog	0.1000	3
No Gas	Ge	72	1254097.40	0.8	108.7	Pulse	0.1000	3
H2	Sc	45	191415.98	0.5	102.4	Pulse	0.1000	3
H2	Ge	72	170831.76	0.5	104.3	Pulse	0.1000	3
H2	In	115	402245.05	0.4	103.4	Pulse	0.1000	3
He	Sc	45	50414.82	1.4	108.1	Pulse	0.1000	3
He	Ge	72	88442.64	0.8	108.9	Pulse	0.1000	3
He	In	115	87698.18	1.1	101.7	Pulse	0.1000	3
He	Tb	159	402377.52	0.8	100.9	Pulse	0.1000	3
He	Bi	209	314509.86	0.2	101.7	Pulse	0.1000	3

No Gas

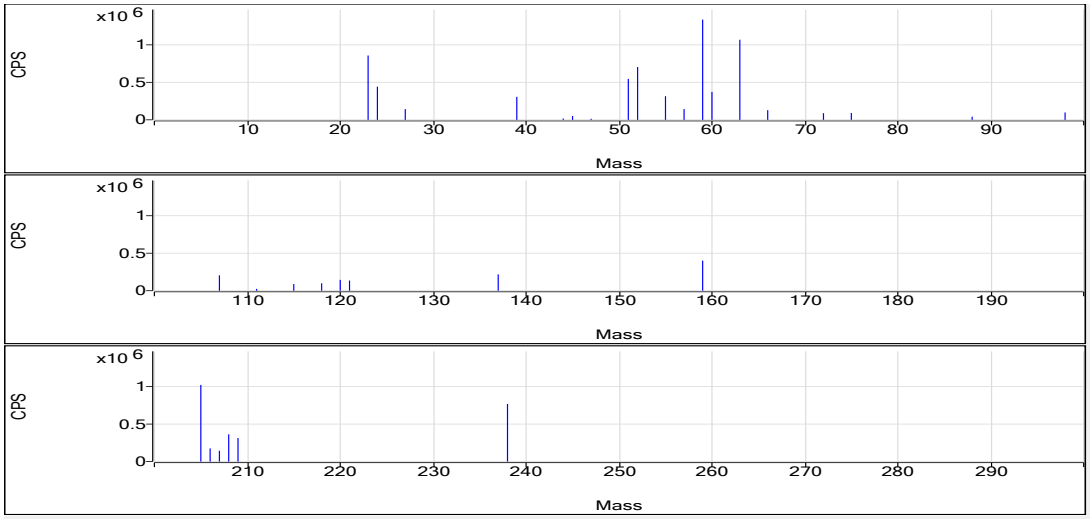


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.084	0.0367	92845.48	0.0008	4.685E-06
Be	9	1	No Gas	47.324	0.0361	93398.88	0.0008	4.685E-06
Be	9	1	No Gas	47.805	0.0365	93710.84	0.0008	4.685E-06
Se	78	2	H2	100.466	0.0419	7135.12	0.0004	1.219E-05
Se	78	2	H2	101.025	0.0421	7243.84	0.0004	1.219E-05
Se	78	2	H2	101.212	0.0422	7194.49	0.0004	1.219E-05
Na	23	3	He	4604.675	16.8163	852580.22	0.0036	0.3452
Na	23	3	He	4773.908	17.4217	864029.83	0.0036	0.3452
Na	23	3	He	4645.778	16.9633	864276.78	0.0036	0.3452
Mg	24	3	He	4880.505	8.7607	444163.74	0.0018	0.003497
Mg	24	3	He	4984.277	8.9469	443722.45	0.0018	0.003497
Mg	24	3	He	4835.973	8.6808	442283.59	0.0018	0.003497
Al	27	3	He	4838.353	2.8312	143543.17	0.0006	0.0006432
Al	27	3	He	4927.423	2.8834	143000.51	0.0006	0.0006432
Al	27	3	He	4779.022	2.7965	142482.75	0.0006	0.0006432
K	39	3	He	4838.883	6.0291	305673.37	0.0012	0.3951
K	39	3	He	5012.702	6.2315	309051.58	0.0012	0.3951
K	39	3	He	4837.427	6.0274	307094.80	0.0012	0.3951
Ca	44	3	He	5066.875	0.345	17490.96	0.0001	0.002715
Ca	44	3	He	5225.455	0.3557	17641.21	0.0001	0.002715
Ca	44	3	He	5068.058	0.3451	17581.31	0.0001	0.002715
Ti	47	3	He	514.035	0.2761	13997.18	0.0005	7.003E-05
Ti	47	3	He	523.233	0.281	13937.19	0.0005	7.003E-05
Ti	47	3	He	507.488	0.2726	13887.11	0.0005	7.003E-05
V	51	3	He	491.79	10.775	546287.38	0.0219	0.02486
V	51	3	He	504.476	11.0523	548140.38	0.0219	0.02486
V	51	3	He	490.553	10.748	547605.06	0.0219	0.02486
Cr	52	3	He	463.612	13.9208	705781.55	0.0299	0.03997
Cr	52	3	He	477.397	14.3336	710876.86	0.0299	0.03997
Cr	52	3	He	458.45	13.7663	701389.21	0.0299	0.03997
Mn	55	3	He	482.954	6.2008	314378.67	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	497.976	6.3936	317091.60	0.0128	0.002639
Mn	55	3	He	483.053	6.2021	315994.41	0.0128	0.002639
Fe	57	3	He	4846.177	2.817	142821.47	0.0006	0.001429
Fe	57	3	He	4939.739	2.8714	142406.10	0.0006	0.001429
Fe	57	3	He	4843.226	2.8153	143438.63	0.0006	0.001429
Co	59	3	He	472.081	26.572	1347188.89	0.0563	0.002149
Co	59	3	He	480.638	27.0535	1341724.51	0.0563	0.002149
Co	59	3	He	464.581	26.1498	1332325.45	0.0563	0.002149
Ni	60	3	He	490.153	4.2099	373603.51	0.0086	0.002834
Ni	60	3	He	496.891	4.2677	373797.18	0.0086	0.002834
Ni	60	3	He	487.57	4.1877	372693.00	0.0086	0.002834
Cu	63	3	He	471.909	12.1192	1075505.14	0.0257	0.004757
Cu	63	3	He	475.923	12.2222	1070507.02	0.0257	0.004757
Cu	63	3	He	466.925	11.9912	1067179.05	0.0257	0.004757
Zn	66	3	He	497.411	1.4521	128864.25	0.0029	0.003818
Zn	66	3	He	506.694	1.4791	129551.40	0.0029	0.003818
Zn	66	3	He	493.195	1.4398	128138.41	0.0029	0.003818
As	75	3	He	502.282	1.0299	91399.13	0.002	0.0008061
As	75	3	He	505.178	1.0358	90726.98	0.002	0.0008061
As	75	3	He	502.579	1.0305	91713.16	0.002	0.0008061
Sr	88	3	He	53.267	0.4788	41762.52	0.009	0.0009645
Sr	88	3	He	50.132	0.4506	40027.50	0.009	0.0009645
Sr	88	3	He	51.611	0.4639	40378.76	0.009	0.0009645
Mo	98	3	He	51.737	1.1347	98977.88	0.0219	0.0002706
Mo	98	3	He	51.123	1.1212	99591.90	0.0219	0.0002706
Mo	98	3	He	50.626	1.1103	96641.99	0.0219	0.0002706
Ag	107	3	He	51.055	2.374	207087.09	0.0465	0.0006206
Ag	107	3	He	49.809	2.3161	205724.74	0.0465	0.0006206
Ag	107	3	He	50.457	2.3462	204215.43	0.0465	0.0006206
Cd	111	3	He	51.6	0.2759	24066.72	0.0053	0
Cd	111	3	He	51.72	0.2765	24563.50	0.0053	0
Cd	111	3	He	52.207	0.2791	24297.11	0.0053	0
Sn	120	3	He	105.567	1.6843	146921.27	0.0158	0.01648
Sn	120	3	He	102.611	1.6376	145457.68	0.0158	0.01648
Sn	120	3	He	102.297	1.6326	142104.08	0.0158	0.01648
Sb	121	3	He	105.105	1.5614	136204.89	0.0149	0.0002698
Sb	121	3	He	102.982	1.5299	135892.21	0.0149	0.0002698
Sb	121	3	He	104.514	1.5527	135143.60	0.0149	0.0002698
Ba	137	3	He	519.835	2.4951	217647.28	0.0048	0.0002317
Ba	137	3	He	516.885	2.4809	220367.30	0.0048	0.0002317
Ba	137	3	He	517.857	2.4856	216347.15	0.0048	0.0002317
Tl	205	3	He	104.162	2.5757	1033828.89	0.0247	0.0001339
Tl	205	3	He	101.869	2.519	1023152.25	0.0247	0.0001339
Tl	205	3	He	103.016	2.5473	1017853.27	0.0247	0.0001339
Pb	208	3	He	51.9	1.6997	363299.33	0.0327	0.00107
Pb	208	3	He	51.343	1.6815	362237.10	0.0327	0.00107
Pb	208	3	He	52.615	1.7231	366832.96	0.0327	0.00107
U	238	3	He	49.748	2.4506	772146.55	0.0493	7.55E-05
U	238	3	He	49.93	2.4596	774224.75	0.0493	7.55E-05
U	238	3	He	49.574	2.4421	766023.97	0.0493	7.55E-05
Sc	45	1	No Gas			2531071.52		
Sc	45	1	No Gas			2587016.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2569534.96		
Ge	72	1	No Gas			1243092.95		
Ge	72	1	No Gas			1257335.53		
Ge	72	1	No Gas			1261863.73		
Sc	45	2	H2			191130.08		
Sc	45	2	H2			190615.50		
Sc	45	2	H2			192502.36		
Ge	72	2	H2			170235.45		
Ge	72	2	H2			171873.08		
Ge	72	2	H2			170386.76		
In	115	2	H2			403628.28		
In	115	2	H2			402330.54		
In	115	2	H2			400776.32		
Sc	45	3	He			50699.61		
Sc	45	3	He			49595.14		
Sc	45	3	He			50949.70		
Ge	72	3	He			88744.20		
Ge	72	3	He			87587.10		
Ge	72	3	He			88996.61		
In	115	3	He			88009.06		
In	115	3	He			89608.35		
In	115	3	He			87797.26		
Tb	159	3	He			401380.42		
Tb	159	3	He			406178.04		
Tb	159	3	He			399574.10		
Bi	209	3	He			315078.80		
Bi	209	3	He			314776.48		
Bi	209	3	He			313674.29		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

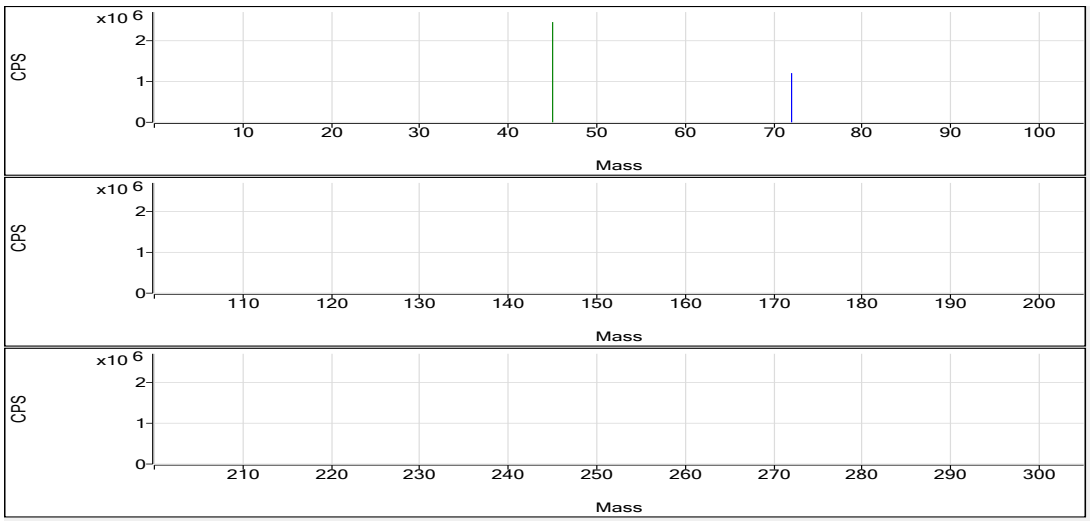
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.027	ppb	11.3	62.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.107	ppb	28.0	8.89	0.0001	Pulse	1.5000	3
Na	23	45	He	39.905	ppb	3.5	23395.72	0.4879	Pulse	0.1000	3
Mg	24	45	He	1.574	ppb	32.6	303.34	0.0063	Pulse	0.1000	3
Al	27	45	He	1.871	ppb	22.1	83.33	0.0017	Pulse	0.1000	3
K	39	45	He	11.328	ppb	100.3	19573.74	0.4083	Pulse	0.1000	3
Ca	44	45	He	12.330	ppb	53.7	170.01	0.0035	Pulse	0.1000	3
Ti	47	45	He	0.644	ppb	59.3	20.00	0.0004	Pulse	0.1000	3
V	51	45	He	0.533	ppb	9.2	1750.78	0.0365	Pulse	0.5000	3
Cr	52	45	He	0.016	ppb	678.8	1940.20	0.0405	Pulse	0.1000	3
Mn	55	45	He	0.314	ppb	51.9	320.02	0.0067	Pulse	0.1000	3
Fe	57	45	He	1.363	ppb	104.8	106.67	0.0022	Pulse	0.1000	3
Co	59	45	He	0.073	ppb	31.4	300.02	0.0063	Pulse	0.1000	3
Ni	60	72	He	-0.051	ppb	N/A	196.67	0.0024	Pulse	0.1000	3
Cu	63	72	He	0.099	ppb	17.0	600.04	0.0073	Pulse	0.1000	3
Zn	66	72	He	3.974	ppb	18.6	1263.44	0.0154	Pulse	0.1000	3
As	75	72	He	0.304	ppb	17.8	117.33	0.0014	Pulse	0.5000	3
Sr	88	115	He	-0.026	ppb	N/A	63.33	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.170	ppb	21.9	346.68	0.0040	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	200.0	56.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	94.8	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.171	ppb	116.8	1656.83	0.0192	Pulse	0.1000	3
Sb	121	115	He	0.096	ppb	49.4	146.67	0.0017	Pulse	0.1000	3
Ba	137	115	He	0.080	ppb	96.0	53.33	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.228	ppb	8.2	2303.62	0.0058	Pulse	0.1000	3
Pb	208	159	He	0.022	ppb	21.3	720.04	0.0018	Pulse	0.1000	3
U	238	209	He	0.147	ppb	9.2	2243.62	0.0073	Pulse	0.1000	3

ISTD Table:

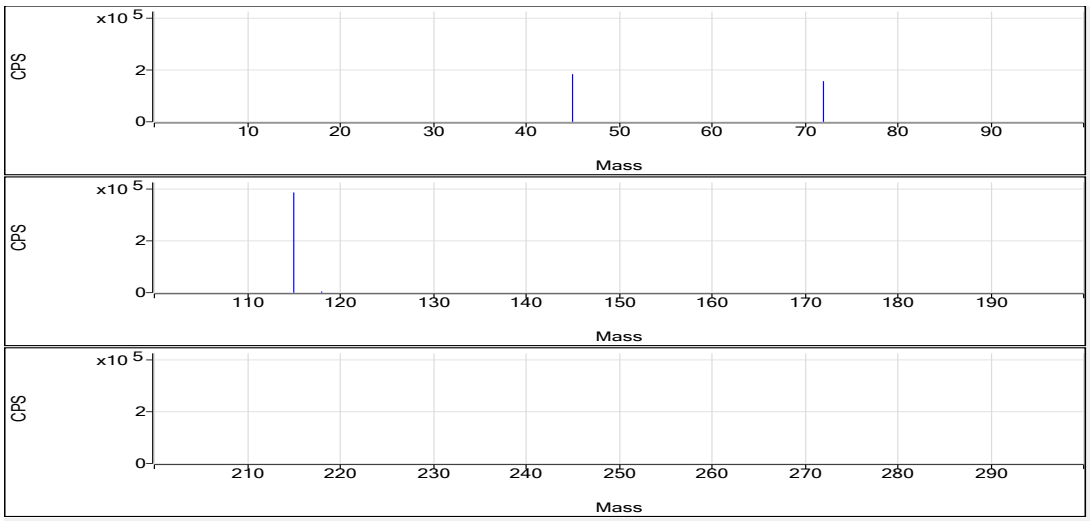
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2443881.01	1.9	101.9	Analog	0.1000	3
No Gas	Ge	72	1199383.91	1.0	104.0	Pulse	0.1000	3
H2	Sc	45	183455.00	2.4	98.1	Pulse	0.1000	3
H2	Ge	72	156438.61	0.6	95.6	Pulse	0.1000	3
H2	In	115	385637.97	0.8	99.1	Pulse	0.1000	3
He	Sc	45	47953.07	0.8	102.8	Pulse	0.1000	3
He	Ge	72	82156.07	1.3	101.2	Pulse	0.1000	3
He	In	115	86501.56	0.9	100.4	Pulse	0.1000	3
He	Tb	159	398822.23	0.1	100.1	Pulse	0.1000	3
He	Bi	209	307339.77	0.7	99.4	Pulse	0.1000	3

No Gas

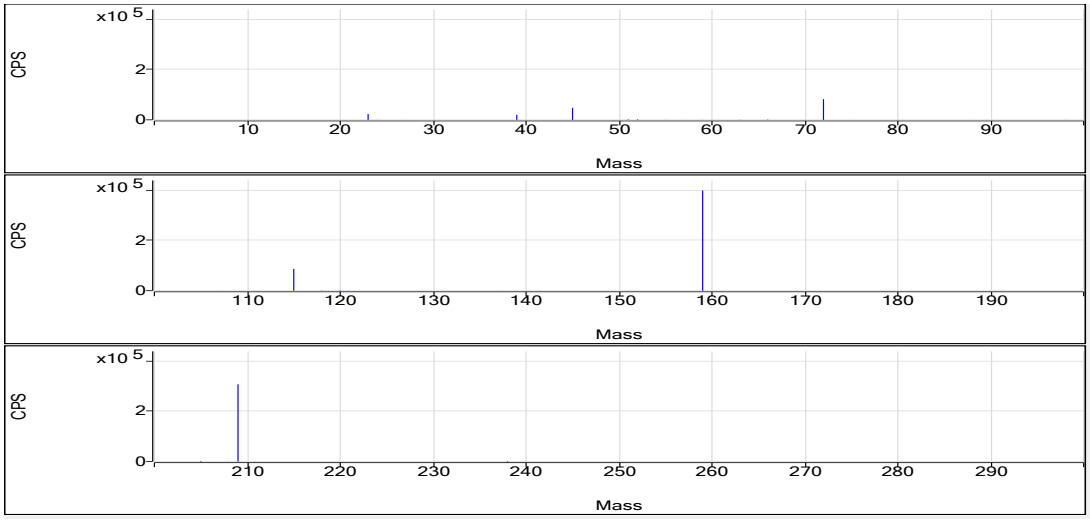


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.024	0	56.00	0.0008	4.685E-06
Be	9	1	No Gas	0.029	0	64.00	0.0008	4.685E-06
Be	9	1	No Gas	0.03	0	68.00	0.0008	4.685E-06
Se	78	2	H2	0.072	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.124	0.0001	10.00	0.0004	1.219E-05
Se	78	2	H2	0.125	0.0001	10.00	0.0004	1.219E-05
Na	23	3	He	39.933	0.488	23198.74	0.0036	0.3452
Na	23	3	He	38.51	0.4829	23348.98	0.0036	0.3452
Na	23	3	He	41.273	0.4928	23639.44	0.0036	0.3452
Mg	24	3	He	0.982	0.0053	250.01	0.0018	0.003497
Mg	24	3	He	1.855	0.0068	330.01	0.0018	0.003497
Mg	24	3	He	1.885	0.0069	330.01	0.0018	0.003497
Al	27	3	He	2.137	0.0019	90.00	0.0006	0.0006432
Al	27	3	He	2.082	0.0019	90.00	0.0006	0.0006432
Al	27	3	He	1.395	0.0015	70.00	0.0006	0.0006432
K	39	3	He	24.277	0.4233	20124.51	0.0012	0.3951
K	39	3	He	3.047	0.3986	19273.23	0.0012	0.3951
K	39	3	He	6.66	0.4028	19323.47	0.0012	0.3951
Ca	44	3	He	18.979	0.004	190.01	0.0001	0.002715
Ca	44	3	He	5.738	0.0031	150.01	0.0001	0.002715
Ca	44	3	He	12.274	0.0035	170.01	0.0001	0.002715
Ti	47	3	He	0.261	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.025	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.646	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.566	0.0372	1770.12	0.0219	0.02486
V	51	3	He	0.477	0.0353	1706.11	0.0219	0.02486
V	51	3	He	0.556	0.037	1776.12	0.0219	0.02486
Cr	52	3	He	0.063	0.0419	1990.20	0.0299	0.03997
Cr	52	3	He	0.095	0.0428	2070.23	0.0299	0.03997
Cr	52	3	He	-0.11	0.0367	1760.17	0.0299	0.03997
Mn	55	3	He	0.352	0.0072	340.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.455	0.0085	410.02	0.0128	0.002639
Mn	55	3	He	0.136	0.0044	210.01	0.0128	0.002639
Fe	57	3	He	-0.287	0.0013	60.00	0.0006	0.001429
Fe	57	3	He	2.169	0.0027	130.01	0.0006	0.001429
Fe	57	3	He	2.206	0.0027	130.01	0.0006	0.001429
Co	59	3	He	0.081	0.0067	320.02	0.0563	0.002149
Co	59	3	He	0.09	0.0072	350.02	0.0563	0.002149
Co	59	3	He	0.047	0.0048	230.01	0.0563	0.002149
Ni	60	3	He	-0.028	0.0026	210.01	0.0086	0.002834
Ni	60	3	He	-0.19	0.0012	100.00	0.0086	0.002834
Ni	60	3	He	0.065	0.0034	280.01	0.0086	0.002834
Cu	63	3	He	0.099	0.0073	590.04	0.0257	0.004757
Cu	63	3	He	0.083	0.0069	570.03	0.0257	0.004757
Cu	63	3	He	0.116	0.0077	640.04	0.0257	0.004757
Zn	66	3	He	4.332	0.0164	1330.12	0.0029	0.003818
Zn	66	3	He	3.124	0.0129	1070.08	0.0029	0.003818
Zn	66	3	He	4.466	0.0168	1390.12	0.0029	0.003818
As	75	3	He	0.366	0.0016	126.00	0.002	0.0008061
As	75	3	He	0.278	0.0014	114.00	0.002	0.0008061
As	75	3	He	0.268	0.0014	112.00	0.002	0.0008061
Sr	88	3	He	-0.018	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	-0.068	0.0004	30.00	0.009	0.0009645
Sr	88	3	He	0.008	0.001	90.00	0.009	0.0009645
Mo	98	3	He	0.15	0.0036	310.01	0.0219	0.0002706
Mo	98	3	He	0.148	0.0035	300.01	0.0219	0.0002706
Mo	98	3	He	0.213	0.0049	430.02	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.022	0.0001	10.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Sn	120	3	He	0.005	0.0166	1440.13	0.0158	0.01648
Sn	120	3	He	0.392	0.0227	1940.20	0.0158	0.01648
Sn	120	3	He	0.115	0.0183	1590.15	0.0158	0.01648
Sb	121	3	He	0.137	0.0023	200.01	0.0149	0.0002698
Sb	121	3	He	0.108	0.0019	160.01	0.0149	0.0002698
Sb	121	3	He	0.044	0.0009	80.00	0.0149	0.0002698
Ba	137	3	He	0.048	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.025	0.0004	30.00	0.0048	0.0002317
Ba	137	3	He	0.168	0.001	90.00	0.0048	0.0002317
Tl	205	3	He	0.249	0.0063	2510.33	0.0247	0.0001339
Tl	205	3	He	0.213	0.0054	2150.26	0.0247	0.0001339
Tl	205	3	He	0.223	0.0056	2250.27	0.0247	0.0001339
Pb	208	3	He	0.019	0.0017	360.02	0.0327	0.00107
Pb	208	3	He	0.028	0.002	380.02	0.0327	0.00107
Pb	208	3	He	0.021	0.0018	360.02	0.0327	0.00107
U	238	3	He	0.132	0.0066	2010.24	0.0493	7.55E-05
U	238	3	He	0.15	0.0075	2320.28	0.0493	7.55E-05
U	238	3	He	0.158	0.0079	2400.34	0.0493	7.55E-05
Sc	45	1	No Gas			2442862.15		
Sc	45	1	No Gas			2398636.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2490144.03		
Ge	72	1	No Gas			1202611.62		
Ge	72	1	No Gas			1185906.78		
Ge	72	1	No Gas			1209633.34		
Sc	45	2	H2			188275.31		
Sc	45	2	H2			182169.06		
Sc	45	2	H2			179920.62		
Ge	72	2	H2			157287.29		
Ge	72	2	H2			156499.56		
Ge	72	2	H2			155528.99		
In	115	2	H2			383044.96		
In	115	2	H2			385086.21		
In	115	2	H2			388782.73		
Sc	45	3	He			47538.23		
Sc	45	3	He			48350.65		
Sc	45	3	He			47970.32		
Ge	72	3	He			80959.21		
Ge	72	3	He			82869.71		
Ge	72	3	He			82639.28		
In	115	3	He			87022.07		
In	115	3	He			85605.05		
In	115	3	He			86901.43		
Tb	159	3	He			399083.98		
Tb	159	3	He			398928.12		
Tb	159	3	He			398454.60		
Bi	209	3	He			306442.69		
Bi	209	3	He			309846.32		
Bi	209	3	He			305730.31		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 4:09:42 PM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

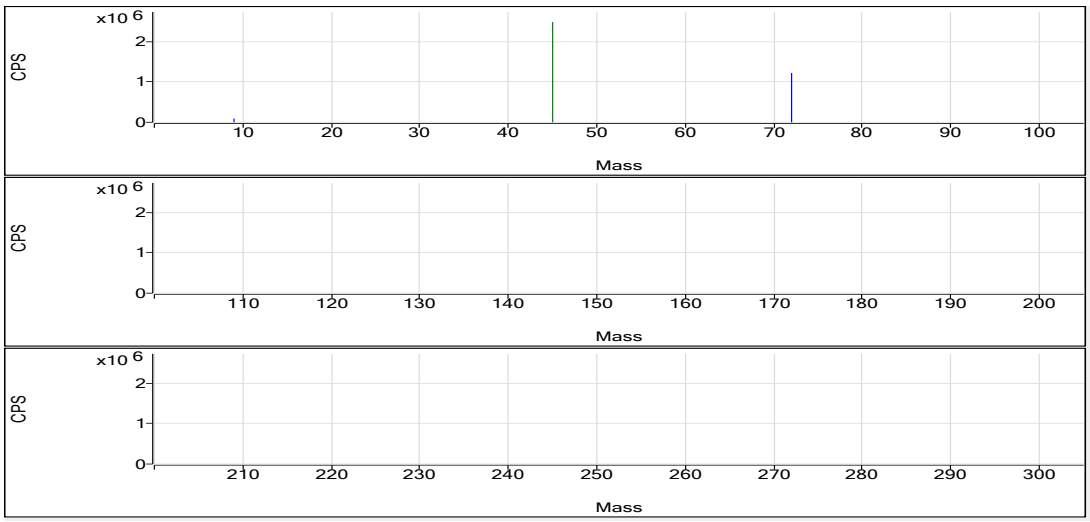
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.738	ppb	0.9	92081.57	0.0372	Pulse	0.5000	3
Se	78	72	H2	51.599	ppb	1.2	3496.88	0.0215	Pulse	1.5000	3
Na	23	45	He	4898.230	ppb	0.2	858712.64	17.8664	Pulse	0.1000	3
Mg	24	45	He	5009.706	ppb	1.1	432195.71	8.9925	Pulse	0.1000	3
Al	27	45	He	4960.346	ppb	0.4	139507.90	2.9026	Pulse	0.1000	3
K	39	45	He	5102.763	ppb	0.3	304549.36	6.3363	Pulse	0.1000	3
Ca	44	45	He	5128.512	ppb	2.4	16780.20	0.3492	Pulse	0.1000	3
Ti	47	45	He	5018.964	ppb	0.3	129530.47	2.6950	Pulse	0.1000	3
V	51	45	He	512.415	ppb	0.6	539542.44	11.2258	Pulse	0.5000	3
Cr	52	45	He	489.268	ppb	1.2	705974.94	14.6890	Pulse	0.1000	3
Mn	55	45	He	506.561	ppb	1.3	312578.37	6.5038	Pulse	0.1000	3
Fe	57	45	He	5111.900	ppb	1.1	142811.27	2.9714	Pulse	0.1000	3
Co	59	45	He	490.911	ppb	1.2	1328021.02	27.6318	Pulse	0.1000	3
Ni	60	72	He	516.166	ppb	1.7	374109.40	4.4332	Pulse	0.1000	3
Cu	63	72	He	488.438	ppb	1.9	1058514.52	12.5435	Pulse	0.1000	3
Zn	66	72	He	517.813	ppb	1.7	127555.98	1.5115	Pulse	0.1000	3
As	75	72	He	520.405	ppb	1.9	90043.32	1.0670	Pulse	0.5000	3
Sr	88	115	He	52.108	ppb	1.7	40481.99	0.4684	Pulse	0.1000	3
Mo	98	115	He	51.209	ppb	1.2	97077.49	1.1231	Pulse	0.1000	3
Ag	107	115	He	51.428	ppb	1.7	206693.05	2.3914	Pulse	0.1000	3
Cd	111	115	He	51.764	ppb	1.0	23923.13	0.2768	Pulse	0.5000	3
Sn	120	115	He	50.953	ppb	3.4	70997.02	0.8215	Pulse	0.1000	3
Sb	121	115	He	52.003	ppb	0.0	66788.34	0.7727	Pulse	0.1000	3
Ba	137	115	He	526.406	ppb	0.2	218395.01	2.5266	Pulse	0.1000	3
Tl	205	159	He	51.482	ppb	0.1	508564.09	1.2731	Pulse	0.1000	3
Pb	208	159	He	51.597	ppb	0.4	675027.68	1.6898	Pulse	0.1000	3
U	238	209	He	50.571	ppb	0.9	768479.55	2.4912	Pulse	0.1000	3

ISTD Table:

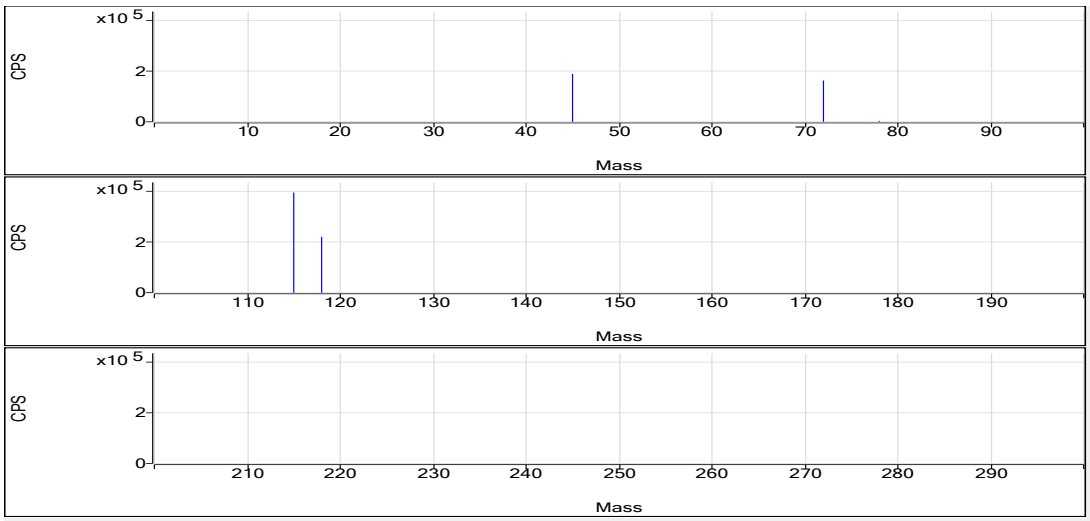
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2476708.97	0.9	103.2	Analog	0.1000	3
No Gas	Ge	72	1218843.00	0.8	105.7	Pulse	0.1000	3
H2	Sc	45	188045.42	0.2	100.6	Pulse	0.1000	3
H2	Ge	72	162392.96	0.7	99.2	Pulse	0.1000	3
H2	In	115	393669.80	0.9	101.2	Pulse	0.1000	3
He	Sc	45	48063.41	0.6	103.0	Pulse	0.1000	3
He	Ge	72	84405.90	1.9	104.0	Pulse	0.1000	3
He	In	115	86436.51	0.6	100.3	Pulse	0.1000	3
He	Tb	159	399471.59	0.4	100.2	Pulse	0.1000	3
He	Bi	209	308489.92	0.7	99.7	Pulse	0.1000	3

No Gas

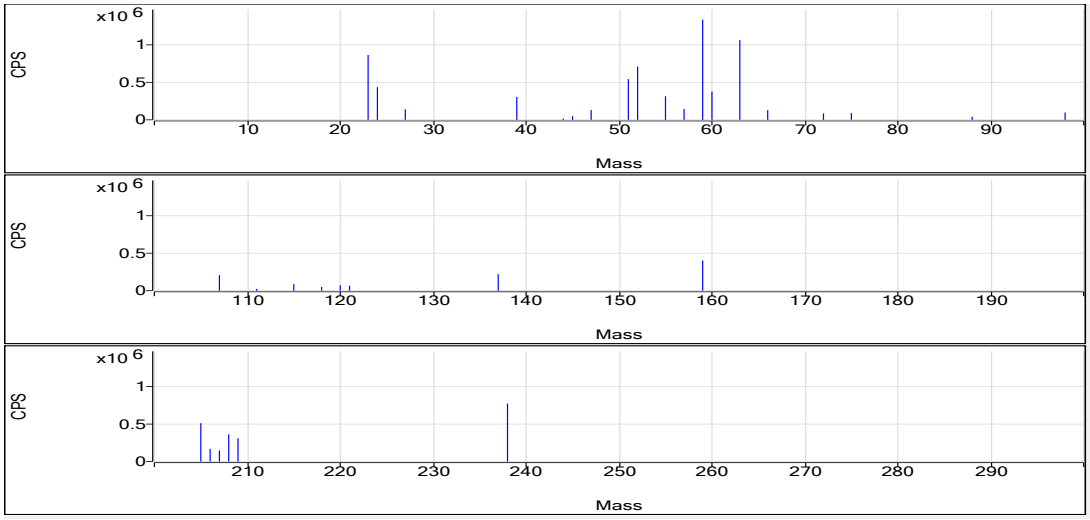


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.306	0.0369	92141.22	0.0008	4.685E-06
Be	9	1	No Gas	48.696	0.0371	91921.91	0.0008	4.685E-06
Be	9	1	No Gas	49.211	0.0375	92181.58	0.0008	4.685E-06
Se	78	2	H2	50.933	0.0213	3427.08	0.0004	1.219E-05
Se	78	2	H2	52.081	0.0217	3554.45	0.0004	1.219E-05
Se	78	2	H2	51.782	0.0216	3509.10	0.0004	1.219E-05
Na	23	3	He	4907.939	17.9011	855125.53	0.0036	0.3452
Na	23	3	He	4896.899	17.8616	859503.89	0.0036	0.3452
Na	23	3	He	4889.852	17.8364	861508.50	0.0036	0.3452
Mg	24	3	He	5070.919	9.1024	434814.68	0.0018	0.003497
Mg	24	3	He	4973.356	8.9273	429583.31	0.0018	0.003497
Mg	24	3	He	4984.842	8.9479	432189.13	0.0018	0.003497
Al	27	3	He	4981.992	2.9153	139261.42	0.0006	0.0006432
Al	27	3	He	4948.604	2.8957	139343.99	0.0006	0.0006432
Al	27	3	He	4950.442	2.8968	139918.30	0.0006	0.0006432
K	39	3	He	5092.219	6.3241	302097.50	0.0012	0.3951
K	39	3	He	5093.306	6.3253	304376.46	0.0012	0.3951
K	39	3	He	5122.763	6.3596	307174.12	0.0012	0.3951
Ca	44	3	He	5268.492	0.3586	17130.68	0.0001	0.002715
Ca	44	3	He	5063.469	0.3448	16590.01	0.0001	0.002715
Ca	44	3	He	5053.575	0.3441	16619.92	0.0001	0.002715
Ti	47	3	He	5017.375	2.6941	128697.82	0.0005	7.003E-05
Ti	47	3	He	5033.426	2.7028	130057.50	0.0005	7.003E-05
Ti	47	3	He	5006.09	2.6881	129836.10	0.0005	7.003E-05
V	51	3	He	514.398	11.2692	538322.63	0.0219	0.02486
V	51	3	He	513.794	11.256	541639.44	0.0219	0.02486
V	51	3	He	509.054	11.1524	538665.25	0.0219	0.02486
Cr	52	3	He	494.318	14.8402	708908.74	0.0299	0.03997
Cr	52	3	He	490.546	14.7273	708679.68	0.0299	0.03997
Cr	52	3	He	482.94	14.4995	700336.40	0.0299	0.03997
Mn	55	3	He	513.876	6.5977	315166.34	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	504.752	6.4806	311846.07	0.0128	0.002639
Mn	55	3	He	501.054	6.4331	310722.69	0.0128	0.002639
Fe	57	3	He	5169.874	3.0051	143550.93	0.0006	0.001429
Fe	57	3	He	5059.751	2.9411	141526.18	0.0006	0.001429
Fe	57	3	He	5106.075	2.968	143356.69	0.0006	0.001429
Co	59	3	He	495.924	27.9139	1333431.39	0.0563	0.002149
Co	59	3	He	492.714	27.7332	1334527.64	0.0563	0.002149
Co	59	3	He	484.096	27.2482	1316104.04	0.0563	0.002149
Ni	60	3	He	512.368	4.4006	376807.03	0.0086	0.002834
Ni	60	3	He	526.443	4.5214	373594.17	0.0086	0.002834
Ni	60	3	He	509.688	4.3776	371926.99	0.0086	0.002834
Cu	63	3	He	484.488	12.4421	1065378.19	0.0257	0.004757
Cu	63	3	He	498.796	12.8094	1058419.36	0.0257	0.004757
Cu	63	3	He	482.03	12.379	1051746.00	0.0257	0.004757
Zn	66	3	He	516.056	1.5064	128986.34	0.0029	0.003818
Zn	66	3	He	527.404	1.5394	127199.59	0.0029	0.003818
Zn	66	3	He	509.98	1.4887	126482.00	0.0029	0.003818
As	75	3	He	512.024	1.0499	89897.80	0.002	0.0008061
As	75	3	He	531.666	1.0901	90074.85	0.002	0.0008061
As	75	3	He	517.525	1.0611	90157.32	0.002	0.0008061
Sr	88	3	He	53.113	0.4774	41130.57	0.009	0.0009645
Sr	88	3	He	51.429	0.4623	40237.83	0.009	0.0009645
Sr	88	3	He	51.783	0.4654	40077.58	0.009	0.0009645
Mo	98	3	He	51.804	1.1361	97889.63	0.0219	0.0002706
Mo	98	3	He	51.214	1.1232	97768.74	0.0219	0.0002706
Mo	98	3	He	50.61	1.11	95574.09	0.0219	0.0002706
Ag	107	3	He	52.444	2.4386	210109.02	0.0465	0.0006206
Ag	107	3	He	50.731	2.3589	205331.19	0.0465	0.0006206
Ag	107	3	He	51.111	2.3766	204638.94	0.0465	0.0006206
Cd	111	3	He	52.306	0.2797	24096.77	0.0053	0
Cd	111	3	He	51.318	0.2744	23884.39	0.0053	0
Cd	111	3	He	51.669	0.2763	23788.22	0.0053	0
Sn	120	3	He	52.642	0.8482	73076.94	0.0158	0.01648
Sn	120	3	He	49.207	0.7939	69102.59	0.0158	0.01648
Sn	120	3	He	51.011	0.8224	70811.53	0.0158	0.01648
Sb	121	3	He	52.023	0.773	66600.17	0.0149	0.0002698
Sb	121	3	He	51.976	0.7723	67223.78	0.0149	0.0002698
Sb	121	3	He	52.009	0.7728	66541.08	0.0149	0.0002698
Ba	137	3	He	526.022	2.5248	217535.35	0.0048	0.0002317
Ba	137	3	He	527.828	2.5335	220522.11	0.0048	0.0002317
Ba	137	3	He	525.366	2.5216	217127.57	0.0048	0.0002317
Tl	205	3	He	51.489	1.2733	509284.05	0.0247	0.0001339
Tl	205	3	He	51.538	1.2745	510567.84	0.0247	0.0001339
Tl	205	3	He	51.419	1.2715	505840.38	0.0247	0.0001339
Pb	208	3	He	51.615	1.6904	360709.64	0.0327	0.00107
Pb	208	3	He	51.399	1.6833	360030.81	0.0327	0.00107
Pb	208	3	He	51.776	1.6957	360114.84	0.0327	0.00107
U	238	3	He	50.708	2.4979	765008.04	0.0493	7.55E-05
U	238	3	He	50.065	2.4663	766471.00	0.0493	7.55E-05
U	238	3	He	50.939	2.5093	773959.60	0.0493	7.55E-05
Sc	45	1	No Gas			2500298.09		
Sc	45	1	No Gas			2474387.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2455441.21		
Ge	72	1	No Gas			1227990.61		
Ge	72	1	No Gas			1208318.42		
Ge	72	1	No Gas			1220219.98		
Sc	45	2	H2			187678.79		
Sc	45	2	H2			188324.96		
Sc	45	2	H2			188132.50		
Ge	72	2	H2			161239.57		
Ge	72	2	H2			163545.64		
Ge	72	2	H2			162393.68		
In	115	2	H2			394756.40		
In	115	2	H2			389832.10		
In	115	2	H2			396420.89		
Sc	45	3	He			47769.45		
Sc	45	3	He			48120.19		
Sc	45	3	He			48300.58		
Ge	72	3	He			85627.00		
Ge	72	3	He			82628.47		
Ge	72	3	He			84962.23		
In	115	3	He			86538.75		
In	115	3	He			87434.35		
In	115	3	He			86488.70		
Tb	159	3	He			399983.74		
Tb	159	3	He			400610.46		
Tb	159	3	He			397820.58		
Bi	209	3	He			306257.61		
Bi	209	3	He			310778.43		
Bi	209	3	He			308433.73		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

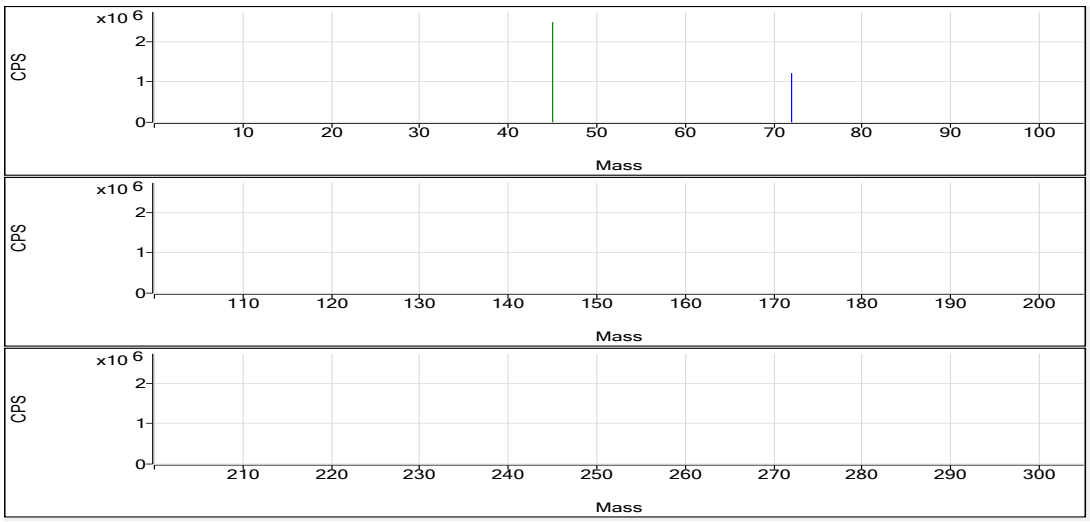
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.019	ppb	43.0	47.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.046	ppb	70.1	4.89	0.0000	Pulse	1.5000	3
Na	23	45	He	37.845	ppb	7.0	23275.64	0.4805	Pulse	0.1000	3
Mg	24	45	He	1.042	ppb	50.1	260.01	0.0054	Pulse	0.1000	3
Al	27	45	He	0.194	ppb	420.4	36.67	0.0008	Pulse	0.1000	3
K	39	45	He	-7.562	ppb	N/A	18709.24	0.3863	Pulse	0.1000	3
Ca	44	45	He	-0.461	ppb	N/A	130.01	0.0027	Pulse	0.1000	3
Ti	47	45	He	1.536	ppb	76.6	43.33	0.0009	Pulse	0.1000	3
V	51	45	He	0.465	ppb	2.0	1696.78	0.0350	Pulse	0.5000	3
Cr	52	45	He	-0.080	ppb	N/A	1820.18	0.0376	Pulse	0.1000	3
Mn	55	45	He	0.197	ppb	57.5	250.01	0.0052	Pulse	0.1000	3
Fe	57	45	He	1.686	ppb	43.6	116.67	0.0024	Pulse	0.1000	3
Co	59	45	He	0.075	ppb	42.1	310.02	0.0064	Pulse	0.1000	3
Ni	60	72	He	-0.059	ppb	N/A	193.34	0.0023	Pulse	0.1000	3
Cu	63	72	He	0.131	ppb	21.3	673.38	0.0081	Pulse	0.1000	3
Zn	66	72	He	3.935	ppb	1.1	1266.77	0.0153	Pulse	0.1000	3
As	75	72	He	0.120	ppb	37.1	87.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	-0.013	ppb	N/A	73.33	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.082	ppb	28.8	180.01	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	52.4	90.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	108.9	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.004	ppb	N/A	1423.46	0.0164	Pulse	0.1000	3
Sb	121	115	He	0.059	ppb	12.8	100.00	0.0012	Pulse	0.1000	3
Ba	137	115	He	0.104	ppb	24.5	63.33	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.086	ppb	1.7	896.74	0.0023	Pulse	0.1000	3
Pb	208	159	He	0.018	ppb	22.1	663.37	0.0017	Pulse	0.1000	3
U	238	209	He	0.050	ppb	15.2	786.72	0.0025	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2478269.44	2.0	103.3	Analog	0.1000	3
No Gas	Ge	72	1216604.15	0.7	105.5	Pulse	0.1000	3
H2	Sc	45	185664.88	0.1	99.3	Pulse	0.1000	3
H2	Ge	72	157040.93	1.4	95.9	Pulse	0.1000	3
H2	In	115	388463.29	0.8	99.8	Pulse	0.1000	3
He	Sc	45	48438.18	0.2	103.9	Pulse	0.1000	3
He	Ge	72	82927.30	1.5	102.1	Pulse	0.1000	3
He	In	115	86780.09	1.7	100.7	Pulse	0.1000	3
He	Tb	159	398278.07	0.4	99.9	Pulse	0.1000	3
He	Bi	209	311208.35	0.3	100.6	Pulse	0.1000	3

No Gas



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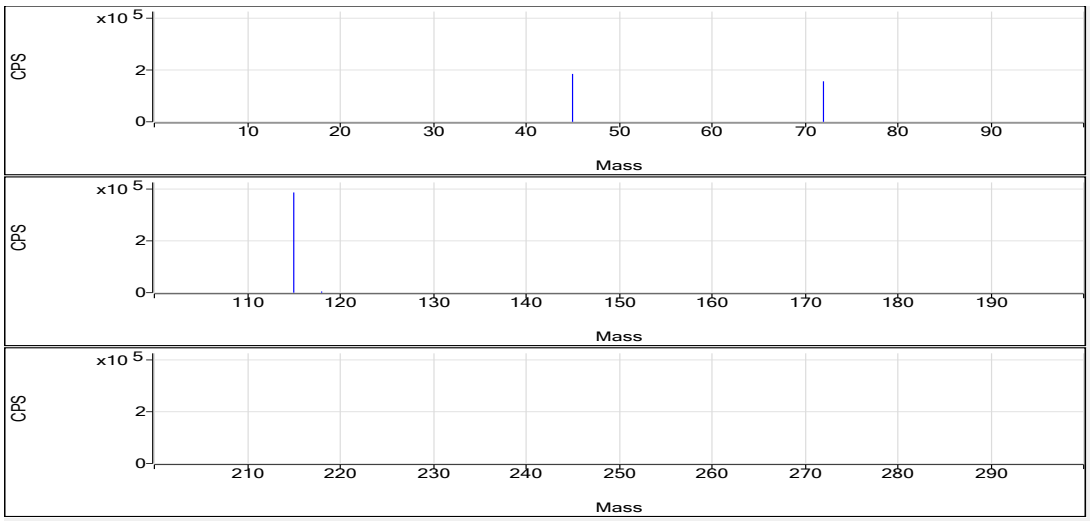
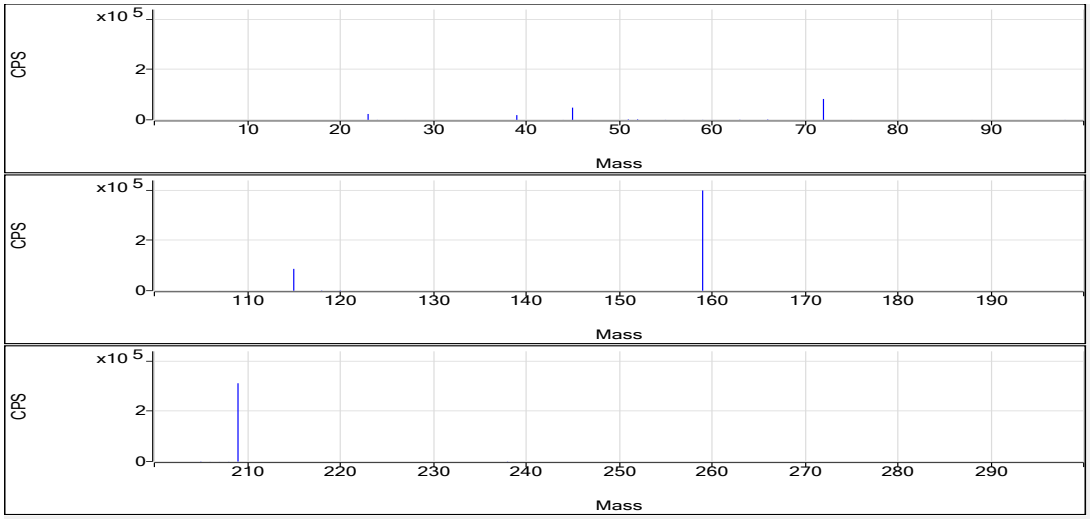


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.028	0	66.00	0.0008	4.685E-06
Be	9	1	No Gas	0.013	0	36.00	0.0008	4.685E-06
Se	78	2	H2	0.052	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.011	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.074	0	6.67	0.0004	1.219E-05
Na	23	3	He	35.348	0.4716	22878.33	0.0036	0.3452
Na	23	3	He	40.651	0.4906	23719.73	0.0036	0.3452
Na	23	3	He	37.536	0.4794	23228.87	0.0036	0.3452
Mg	24	3	He	1.498	0.0062	300.01	0.0018	0.003497
Mg	24	3	He	0.472	0.0043	210.01	0.0018	0.003497
Mg	24	3	He	1.157	0.0056	270.01	0.0018	0.003497
Al	27	3	He	0.662	0.001	50.00	0.0006	0.0006432
Al	27	3	He	-0.746	0.0002	10.00	0.0006	0.0006432
Al	27	3	He	0.664	0.001	50.00	0.0006	0.0006432
K	39	3	He	-12.982	0.38	18432.19	0.0012	0.3951
K	39	3	He	4.469	0.4003	19353.58	0.0012	0.3951
K	39	3	He	-14.173	0.3786	18341.94	0.0012	0.3951
Ca	44	3	He	-0.518	0.0027	130.01	0.0001	0.002715
Ca	44	3	He	-3.451	0.0025	120.00	0.0001	0.002715
Ca	44	3	He	2.587	0.0029	140.01	0.0001	0.002715
Ti	47	3	He	1.789	0.001	50.00	0.0005	7.003E-05
Ti	47	3	He	2.566	0.0014	70.00	0.0005	7.003E-05
Ti	47	3	He	0.254	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.471	0.0352	1706.11	0.0219	0.02486
V	51	3	He	0.469	0.0351	1698.11	0.0219	0.02486
V	51	3	He	0.455	0.0348	1686.11	0.0219	0.02486
Cr	52	3	He	-0.034	0.039	1890.18	0.0299	0.03997
Cr	52	3	He	-0.195	0.0341	1650.16	0.0299	0.03997
Cr	52	3	He	-0.011	0.0396	1920.20	0.0299	0.03997
Mn	55	3	He	0.196	0.0052	250.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.31	0.0066	320.02	0.0128	0.002639
Mn	55	3	He	0.084	0.0037	180.01	0.0128	0.002639
Fe	57	3	He	2.508	0.0029	140.00	0.0006	0.001429
Fe	57	3	He	1.457	0.0023	110.00	0.0006	0.001429
Fe	57	3	He	1.093	0.0021	100.00	0.0006	0.001429
Co	59	3	He	0.097	0.0076	370.02	0.0563	0.002149
Co	59	3	He	0.039	0.0043	210.01	0.0563	0.002149
Co	59	3	He	0.09	0.0072	350.02	0.0563	0.002149
Ni	60	3	He	-0.09	0.0021	170.01	0.0086	0.002834
Ni	60	3	He	-0.046	0.0024	200.01	0.0086	0.002834
Ni	60	3	He	-0.04	0.0025	210.01	0.0086	0.002834
Cu	63	3	He	0.136	0.0083	680.04	0.0257	0.004757
Cu	63	3	He	0.156	0.0088	720.05	0.0257	0.004757
Cu	63	3	He	0.101	0.0074	620.04	0.0257	0.004757
Zn	66	3	He	3.904	0.0152	1250.09	0.0029	0.003818
Zn	66	3	He	3.917	0.0152	1250.10	0.0029	0.003818
Zn	66	3	He	3.983	0.0154	1300.11	0.0029	0.003818
As	75	3	He	0.069	0.0009	78.00	0.002	0.0008061
As	75	3	He	0.141	0.0011	90.00	0.002	0.0008061
As	75	3	He	0.151	0.0011	94.00	0.002	0.0008061
Sr	88	3	He	0.007	0.001	90.00	0.009	0.0009645
Sr	88	3	He	-0.018	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	-0.029	0.0007	60.00	0.009	0.0009645
Mo	98	3	He	0.091	0.0023	200.01	0.0219	0.0002706
Mo	98	3	He	0.055	0.0015	130.00	0.0219	0.0002706
Mo	98	3	He	0.1	0.0025	210.01	0.0219	0.0002706
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.014	0.0013	110.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.022	0.0001	10.00	0.0053	0
Sn	120	3	He	-0.07	0.0154	1350.12	0.0158	0.01648
Sn	120	3	He	0	0.0165	1440.13	0.0158	0.01648
Sn	120	3	He	0.059	0.0174	1480.13	0.0158	0.01648
Sb	121	3	He	0.066	0.0013	110.00	0.0149	0.0002698
Sb	121	3	He	0.051	0.001	90.00	0.0149	0.0002698
Sb	121	3	He	0.061	0.0012	100.01	0.0149	0.0002698
Ba	137	3	He	0.118	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	0.119	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	0.074	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.085	0.0022	890.08	0.0247	0.0001339
Tl	205	3	He	0.087	0.0023	910.07	0.0247	0.0001339
Tl	205	3	He	0.085	0.0022	890.06	0.0247	0.0001339
Pb	208	3	He	0.022	0.0018	360.02	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	280.01	0.0327	0.00107
Pb	208	3	He	0.014	0.0015	370.02	0.0327	0.00107
U	238	3	He	0.052	0.0026	820.05	0.0493	7.55E-05
U	238	3	He	0.041	0.0021	660.05	0.0493	7.55E-05
U	238	3	He	0.056	0.0028	880.07	0.0493	7.55E-05
Sc	45	1	No Gas			2475036.06		
Sc	45	1	No Gas			2529722.77		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2430049.50		
Ge	72	1	No Gas			1220923.42		
Ge	72	1	No Gas			1221618.65		
Ge	72	1	No Gas			1207270.37		
Sc	45	2	H2			185782.32		
Sc	45	2	H2			185631.74		
Sc	45	2	H2			185580.58		
Ge	72	2	H2			157691.23		
Ge	72	2	H2			158884.75		
Ge	72	2	H2			154546.82		
In	115	2	H2			388760.27		
In	115	2	H2			391389.02		
In	115	2	H2			385240.58		
Sc	45	3	He			48511.95		
Sc	45	3	He			48351.27		
Sc	45	3	He			48451.31		
Ge	72	3	He			82327.07		
Ge	72	3	He			82116.14		
Ge	72	3	He			84338.70		
In	115	3	He			87888.30		
In	115	3	He			87413.98		
In	115	3	He			85062.09		
Tb	159	3	He			397746.05		
Tb	159	3	He			397071.28		
Tb	159	3	He			400016.87		
Bi	209	3	He			311108.26		
Bi	209	3	He			312246.71		
Bi	209	3	He			310270.07		

Quantitation Report

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Auto Dilution	1.0000
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Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

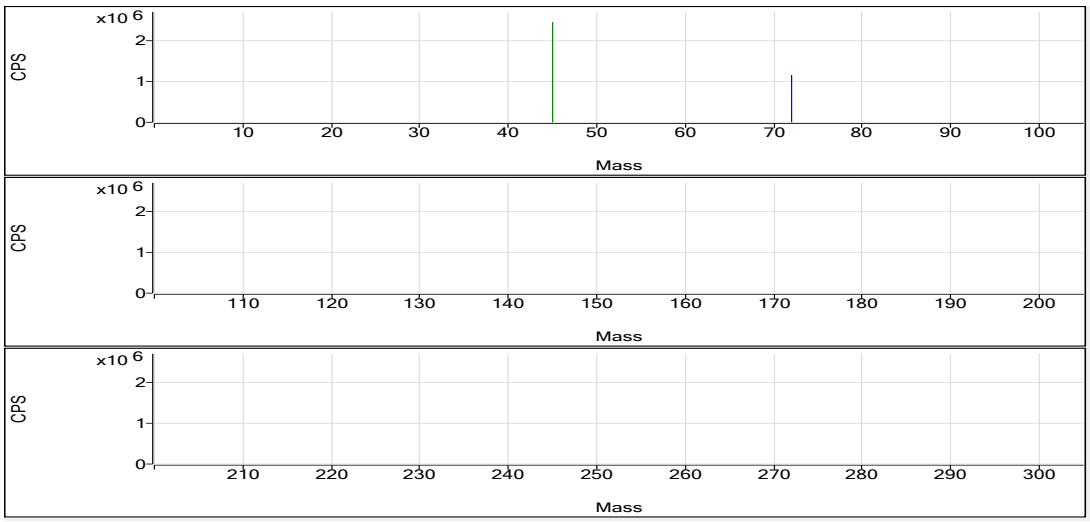
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.016	ppb	46.6	40.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.232	ppb	32.6	17.33	0.0001	Pulse	1.5000	3
Na	23	45	He	918868.411	ppb	1.1	159660810.95	3 287.1825	Analog	0.1000	3
Mg	24	45	He	114158.186	ppb	2.7	9947016.73	204.8400	Analog	0.1000	3
Al	27	45	He	80.317	ppb	5.5	2313.81	0.0476	Pulse	0.1000	3
K	39	45	He	37473.210	ppb	1.6	2138247.78	44.0261	Analog	0.1000	3
Ca	44	45	He	49678.158	ppb	0.5	163142.64	3.3586	Pulse	0.1000	3
Ti	47	45	He	1.536	ppb	64.5	43.34	0.0009	Pulse	0.1000	3
V	51	45	He	2.854	ppb	6.4	4235.98	0.0872	Pulse	0.5000	3
Cr	52	45	He	113.719	ppb	2.0	167297.61	3.4448	Pulse	0.1000	3
Mn	55	45	He	13.550	ppb	1.7	8576.20	0.1765	Pulse	0.1000	3
Fe	57	45	He	93.501	ppb	5.8	2710.35	0.0558	Pulse	0.1000	3
Co	59	45	He	0.146	ppb	3.4	503.36	0.0104	Pulse	0.1000	3
Ni	60	72	He	1.056	ppb	2.9	990.08	0.0119	Pulse	0.1000	3
Cu	63	72	He	1.950	ppb	6.2	4560.88	0.0548	Pulse	0.1000	3
Zn	66	72	He	19.411	ppb	4.5	5021.05	0.0603	Pulse	0.1000	3
As	75	72	He	0.998	ppb	11.1	237.33	0.0029	Pulse	0.5000	3
Sr	88	115	He	770.272	ppb	0.3	601107.22	6.9102	Pulse	0.1000	3
Mo	98	115	He	2.298	ppb	1.8	4407.49	0.0507	Pulse	0.1000	3
Ag	107	115	He	0.147	ppb	8.5	646.70	0.0074	Pulse	0.1000	3
Cd	111	115	He	0.032	ppb	41.8	14.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.145	ppb	N/A	1233.68	0.0142	Pulse	0.1000	3
Sb	121	115	He	1.780	ppb	6.5	2323.60	0.0267	Pulse	0.1000	3
Ba	137	115	He	27.743	ppb	3.7	11602.01	0.1334	Pulse	0.1000	3
Tl	205	159	He	0.030	ppb	28.0	346.69	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.579	ppb	2.3	7834.53	0.0200	Pulse	0.1000	3
U	238	209	He	0.410	ppb	7.2	5901.60	0.0203	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2457412.41	0.3	102.4	Analog	0.1000	3
No Gas	Ge	72	1159549.51	0.5	100.5	Pulse	0.1000	3
H2	Sc	45	189713.98	0.5	101.4	Pulse	0.1000	3
H2	Ge	72	158661.76	1.9	96.9	Pulse	0.1000	3
H2	In	115	386097.09	0.9	99.2	Pulse	0.1000	3
He	Sc	45	48578.59	2.2	104.2	Pulse	0.1000	3
He	Ge	72	83214.90	0.5	102.5	Pulse	0.1000	3
He	In	115	86988.48	0.2	100.9	Pulse	0.1000	3
He	Tb	159	391366.69	0.7	98.2	Pulse	0.1000	3
He	Bi	209	290858.54	0.6	94.0	Pulse	0.1000	3

No Gas



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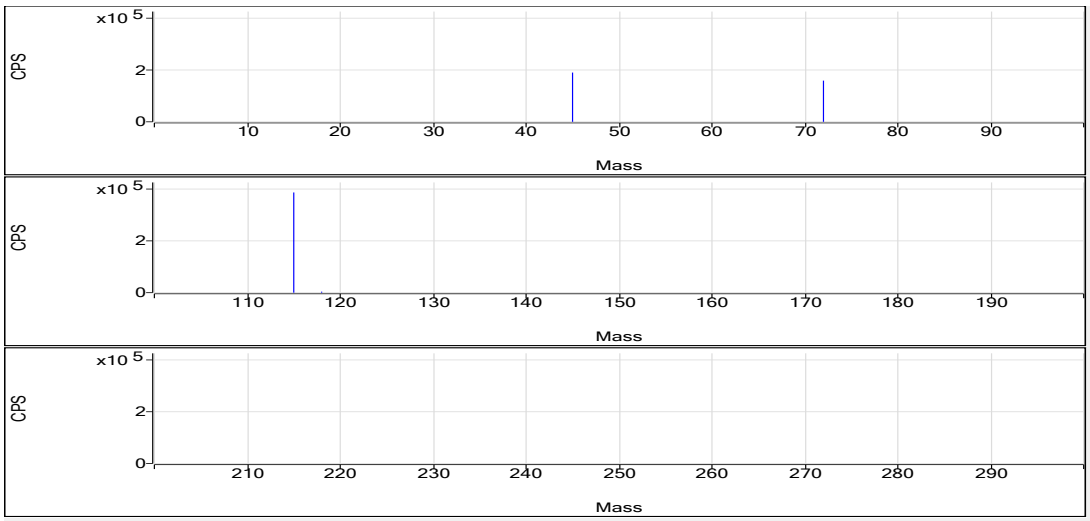
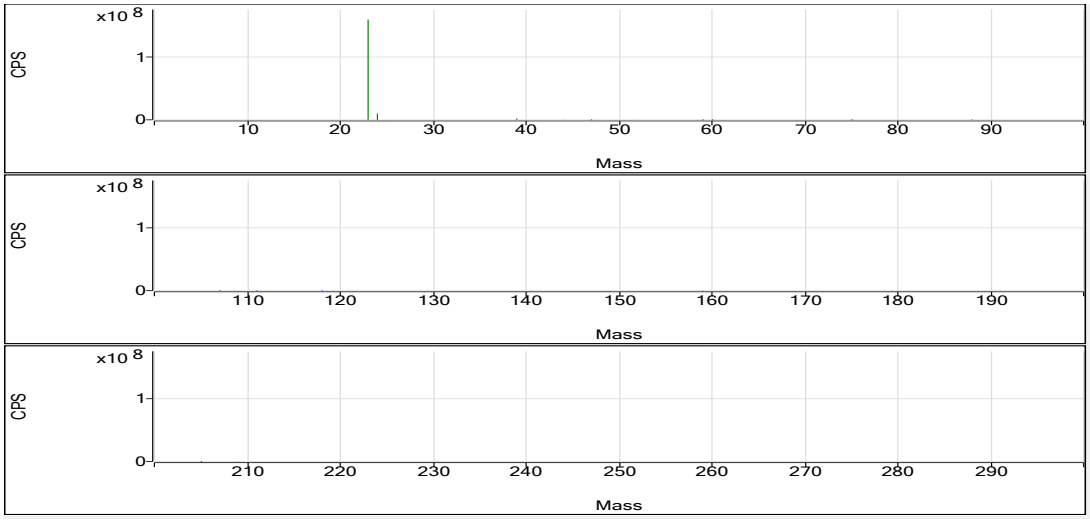


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.013	0	36.00	0.0008	4.685E-06
Be	9	1	No Gas	0.024	0	56.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Se	78	2	H2	0.18	0.0001	14.00	0.0004	1.219E-05
Se	78	2	H2	0.198	0.0001	14.67	0.0004	1.219E-05
Se	78	2	H2	0.319	0.0001	23.33	0.0004	1.219E-05
Na	23	3	He	906885.237	3244.3181	161454527.59	0.0036	0.3452
Na	23	3	He	925600.501	3311.2635	158077997.64	0.0036	0.3452
Na	23	3	He	924119.495	3305.9659	159449907.62	0.0036	0.3452
Mg	24	3	He	110822.662	198.855	9896084.23	0.0018	0.003497
Mg	24	3	He	116748.996	209.4888	10000885.48	0.0018	0.003497
Mg	24	3	He	114902.9	206.1763	9944080.48	0.0018	0.003497
Al	27	3	He	81.363	0.0482	2400.84	0.0006	0.0006432
Al	27	3	He	84.128	0.0499	2380.33	0.0006	0.0006432
Al	27	3	He	75.46	0.0448	2160.25	0.0006	0.0006432
K	39	3	He	36828.209	43.2751	2153600.75	0.0012	0.3951
K	39	3	He	37970.905	44.6056	2129448.25	0.0012	0.3951
K	39	3	He	37620.516	44.1976	2131694.34	0.0012	0.3951
Ca	44	3	He	49374.559	3.3381	166119.65	0.0001	0.002715
Ca	44	3	He	49806.157	3.3672	160749.13	0.0001	0.002715
Ca	44	3	He	49853.759	3.3704	162559.14	0.0001	0.002715
Ti	47	3	He	1.367	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	2.601	0.0015	70.01	0.0005	7.003E-05
Ti	47	3	He	0.642	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	2.658	0.083	4128.61	0.0219	0.02486
V	51	3	He	2.882	0.0879	4194.63	0.0219	0.02486
V	51	3	He	3.021	0.0909	4384.69	0.0219	0.02486
Cr	52	3	He	111.135	3.3674	167581.36	0.0299	0.03997
Cr	52	3	He	114.981	3.4826	166256.68	0.0299	0.03997
Cr	52	3	He	115.041	3.4844	168054.78	0.0299	0.03997
Mn	55	3	He	13.671	0.1781	8862.99	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	13.689	0.1783	8512.85	0.0128	0.002639
Mn	55	3	He	13.289	0.1732	8352.75	0.0128	0.002639
Fe	57	3	He	99.585	0.0593	2950.41	0.0006	0.001429
Fe	57	3	He	91.653	0.0547	2610.32	0.0006	0.001429
Fe	57	3	He	89.267	0.0533	2570.32	0.0006	0.001429
Co	59	3	He	0.14	0.01	500.03	0.0563	0.002149
Co	59	3	He	0.148	0.0105	500.03	0.0563	0.002149
Co	59	3	He	0.15	0.0106	510.02	0.0563	0.002149
Ni	60	3	He	1.072	0.012	1000.09	0.0086	0.002834
Ni	60	3	He	1.02	0.0116	970.07	0.0086	0.002834
Ni	60	3	He	1.076	0.0121	1000.08	0.0086	0.002834
Cu	63	3	He	2.014	0.0565	4690.90	0.0257	0.004757
Cu	63	3	He	1.812	0.0513	4290.77	0.0257	0.004757
Cu	63	3	He	2.025	0.0567	4700.97	0.0257	0.004757
Zn	66	3	He	18.409	0.0574	4770.92	0.0029	0.003818
Zn	66	3	He	19.95	0.0619	5181.11	0.0029	0.003818
Zn	66	3	He	19.874	0.0617	5111.13	0.0029	0.003818
As	75	3	He	1.099	0.0031	254.00	0.002	0.0008061
As	75	3	He	1.018	0.0029	242.00	0.002	0.0008061
As	75	3	He	0.879	0.0026	216.00	0.002	0.0008061
Sr	88	3	He	773.002	6.9347	604676.48	0.009	0.0009645
Sr	88	3	He	768.129	6.8909	598511.71	0.009	0.0009645
Sr	88	3	He	769.684	6.9049	600133.47	0.009	0.0009645
Mo	98	3	He	2.279	0.0502	4380.81	0.0219	0.0002706
Mo	98	3	He	2.346	0.0517	4490.86	0.0219	0.0002706
Mo	98	3	He	2.271	0.0501	4350.81	0.0219	0.0002706
Ag	107	3	He	0.157	0.0079	690.04	0.0465	0.0006206
Ag	107	3	He	0.133	0.0068	590.03	0.0465	0.0006206
Ag	107	3	He	0.15	0.0076	660.04	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.043	0.0002	20.00	0.0053	0
Cd	111	3	He	0.034	0.0002	16.00	0.0053	0
Sn	120	3	He	0.054	0.0173	1510.87	0.0158	0.01648
Sn	120	3	He	-0.256	0.0124	1080.09	0.0158	0.01648
Sn	120	3	He	-0.234	0.0128	1110.09	0.0158	0.01648
Sb	121	3	He	1.65	0.0248	2160.22	0.0149	0.0002698
Sb	121	3	He	1.873	0.0281	2440.31	0.0149	0.0002698
Sb	121	3	He	1.818	0.0273	2370.28	0.0149	0.0002698
Ba	137	3	He	26.631	0.128	11165.02	0.0048	0.0002317
Ba	137	3	He	27.937	0.1343	11665.34	0.0048	0.0002317
Ba	137	3	He	28.661	0.1378	11975.68	0.0048	0.0002317
Tl	205	3	He	0.026	0.0008	300.02	0.0247	0.0001339
Tl	205	3	He	0.025	0.0008	300.01	0.0247	0.0001339
Tl	205	3	He	0.04	0.0011	440.03	0.0247	0.0001339
Pb	208	3	He	0.564	0.0195	4010.76	0.0327	0.00107
Pb	208	3	He	0.59	0.0204	4150.81	0.0327	0.00107
Pb	208	3	He	0.582	0.0201	4290.83	0.0327	0.00107
U	238	3	He	0.439	0.0217	6271.83	0.0493	7.55E-05
U	238	3	He	0.413	0.0204	5931.61	0.0493	7.55E-05
U	238	3	He	0.38	0.0188	5501.35	0.0493	7.55E-05
Sc	45	1	No Gas			2449203.56		
Sc	45	1	No Gas			2459474.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2463559.34		
Ge	72	1	No Gas			1160339.98		
Ge	72	1	No Gas			1165358.58		
Ge	72	1	No Gas			1152949.98		
Sc	45	2	H2			190079.51		
Sc	45	2	H2			188659.94		
Sc	45	2	H2			190402.48		
Ge	72	2	H2			160360.71		
Ge	72	2	H2			155114.01		
Ge	72	2	H2			160510.56		
In	115	2	H2			390192.73		
In	115	2	H2			384212.92		
In	115	2	H2			383885.62		
Sc	45	3	He			49765.32		
Sc	45	3	He			47739.48		
Sc	45	3	He			48230.96		
Ge	72	3	He			83090.70		
Ge	72	3	He			83694.46		
Ge	72	3	He			82859.54		
In	115	3	He			87204.14		
In	115	3	He			86861.43		
In	115	3	He			86921.63		
Tb	159	3	He			389947.42		
Tb	159	3	He			394557.14		
Tb	159	3	He			389595.50		
Bi	209	3	He			289127.81		
Bi	209	3	He			290764.41		
Bi	209	3	He			292683.41		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 4:15:57 PM
Sample Name	410-138038-C-2-A PDS
Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

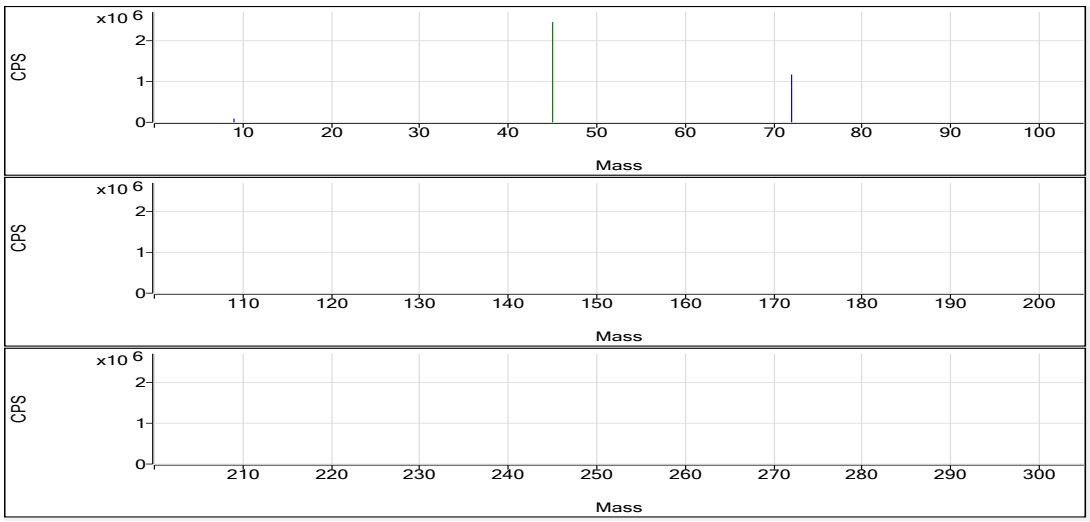
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.583	ppb	0.8	91400.15	0.0371	Pulse	0.5000	3
Se	78	72	H2	104.314	ppb	1.6	7237.61	0.0435	Pulse	1.5000	3
Na	23	45	He	866044.761	ppb	0.5	157188197.65	3 098.2297	Analog	0.1000	3
Mg	24	45	He	110604.042	ppb	1.6	10068590.06	198.4628	Analog	0.1000	3
Al	27	45	He	4899.732	ppb	1.8	145464.05	2.8672	Pulse	0.1000	3
K	39	45	He	39855.238	ppb	1.8	2374316.63	46.7996	Analog	0.1000	3
Ca	44	45	He	51511.320	ppb	0.7	176682.71	3.4824	Pulse	0.1000	3
Ti	47	45	He	495.379	ppb	1.5	13499.99	0.2661	Pulse	0.1000	3
V	51	45	He	500.225	ppb	0.8	556014.46	10.9594	Pulse	0.5000	3
Cr	52	45	He	561.127	ppb	1.1	854374.91	16.8405	Pulse	0.1000	3
Mn	55	45	He	494.097	ppb	0.8	321869.10	6.3438	Pulse	0.1000	3
Fe	57	45	He	4837.258	ppb	0.7	142665.75	2.8118	Pulse	0.1000	3
Co	59	45	He	454.231	ppb	0.7	1297143.81	25.5673	Pulse	0.1000	3
Ni	60	72	He	488.889	ppb	1.4	359198.38	4.1990	Pulse	0.1000	3
Cu	63	72	He	469.155	ppb	1.8	1030607.43	12.0485	Pulse	0.1000	3
Zn	66	72	He	515.055	ppb	3.0	128595.81	1.5035	Pulse	0.1000	3
As	75	72	He	528.162	ppb	1.8	92633.13	1.0829	Pulse	0.5000	3
Sr	88	115	He	818.371	ppb	0.8	637974.74	7.3416	Pulse	0.1000	3
Mo	98	115	He	53.257	ppb	1.7	101502.70	1.1680	Pulse	0.1000	3
Ag	107	115	He	39.903	ppb	2.4	161225.45	1.8556	Pulse	0.1000	3
Cd	111	115	He	50.237	ppb	1.8	23340.84	0.2686	Pulse	0.5000	3
Sn	120	115	He	102.112	ppb	0.7	141622.89	1.6297	Pulse	0.1000	3
Sb	121	115	He	103.516	ppb	2.8	133616.17	1.5378	Pulse	0.1000	3
Ba	137	115	He	545.074	ppb	0.6	227351.33	2.6162	Pulse	0.1000	3
Tl	205	159	He	98.649	ppb	1.1	963777.48	2.4394	Pulse	0.1000	3
Pb	208	159	He	49.813	ppb	1.4	644560.03	1.6314	Pulse	0.1000	3
U	238	209	He	52.979	ppb	0.8	760181.37	2.6098	Pulse	0.1000	3

ISTD Table:

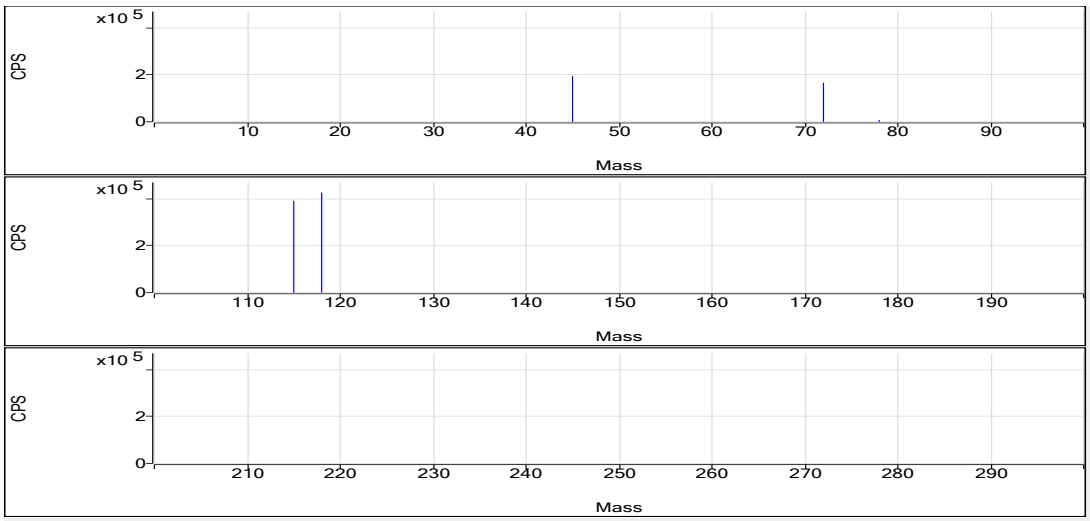
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2466144.23	0.5	102.8	Analog	0.1000	3
No Gas	Ge	72	1175580.97	0.6	101.9	Pulse	0.1000	3
H2	Sc	45	194369.45	0.3	103.9	Pulse	0.1000	3
H2	Ge	72	166324.91	0.7	101.6	Pulse	0.1000	3
H2	In	115	391810.31	0.3	100.7	Pulse	0.1000	3
He	Sc	45	50736.12	0.7	108.8	Pulse	0.1000	3
He	Ge	72	85555.38	1.6	105.4	Pulse	0.1000	3
He	In	115	86904.81	1.3	100.8	Pulse	0.1000	3
He	Tb	159	395135.66	1.4	99.1	Pulse	0.1000	3
He	Bi	209	291275.82	0.5	94.2	Pulse	0.1000	3

No Gas

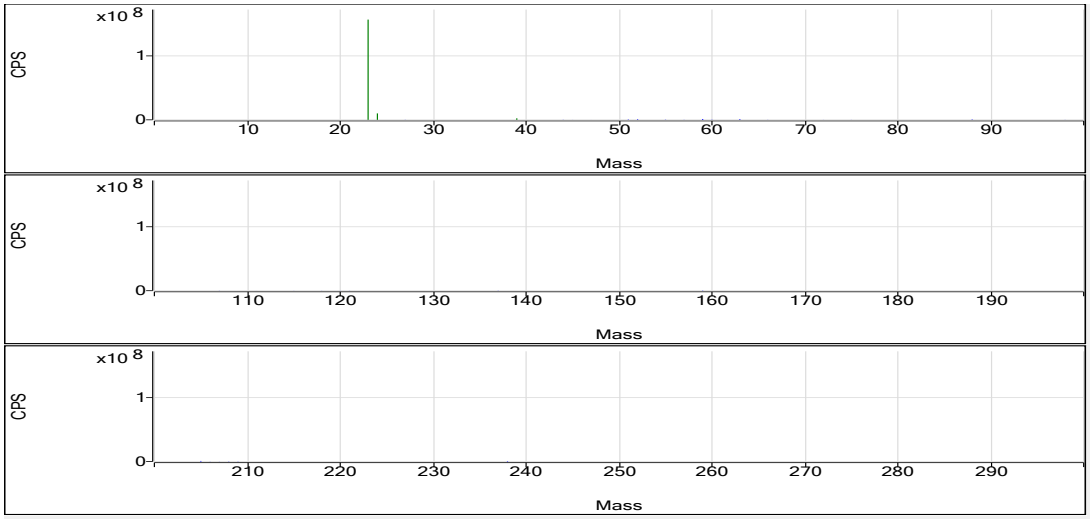


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.268	0.0368	91098.95	0.0008	4.685E-06
Be	9	1	No Gas	49.043	0.0374	91769.31	0.0008	4.685E-06
Be	9	1	No Gas	48.438	0.037	91332.20	0.0008	4.685E-06
Se	78	2	H2	105.984	0.0442	7308.54	0.0004	1.219E-05
Se	78	2	H2	104.29	0.0435	7223.83	0.0004	1.219E-05
Se	78	2	H2	102.668	0.0428	7180.47	0.0004	1.219E-05
Na	23	3	He	861490.879	3081.9402	157397677.65	0.0036	0.3452
Na	23	3	He	866198.477	3098.7795	157447067.65	0.0036	0.3452
Na	23	3	He	870444.928	3113.9693	156719847.66	0.0036	0.3452
Mg	24	3	He	108631.527	194.9234	9954928.60	0.0018	0.003497
Mg	24	3	He	111427.528	199.9404	10158845.47	0.0018	0.003497
Mg	24	3	He	111753.07	200.5245	10091996.10	0.0018	0.003497
Al	27	3	He	4812.447	2.8161	143820.57	0.0006	0.0006432
Al	27	3	He	4987.93	2.9188	148300.18	0.0006	0.0006432
Al	27	3	He	4898.819	2.8666	144271.39	0.0006	0.0006432
K	39	3	He	39058.372	45.8718	2342715.75	0.0012	0.3951
K	39	3	He	40483.607	47.5312	2415031.21	0.0012	0.3951
K	39	3	He	40023.735	46.9958	2365202.93	0.0012	0.3951
Ca	44	3	He	51214.269	3.4623	176824.88	0.0001	0.002715
Ca	44	3	He	51888.2	3.5079	178232.28	0.0001	0.002715
Ca	44	3	He	51431.492	3.477	174990.97	0.0001	0.002715
Ti	47	3	He	502.262	0.2698	13776.85	0.0005	7.003E-05
Ti	47	3	He	496.046	0.2664	13536.70	0.0005	7.003E-05
Ti	47	3	He	487.829	0.262	13186.41	0.0005	7.003E-05
V	51	3	He	496.926	10.8873	556023.00	0.0219	0.02486
V	51	3	He	499.22	10.9374	555722.75	0.0219	0.02486
V	51	3	He	504.529	11.0534	556297.63	0.0219	0.02486
Cr	52	3	He	555.338	16.6672	851209.44	0.0299	0.03997
Cr	52	3	He	560.04	16.808	854003.35	0.0299	0.03997
Cr	52	3	He	568.004	17.0464	857911.94	0.0299	0.03997
Mn	55	3	He	494.153	6.3445	324021.91	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	498.025	6.3942	324886.91	0.0128	0.002639
Mn	55	3	He	490.113	6.2927	316698.47	0.0128	0.002639
Fe	57	3	He	4873.827	2.8331	144688.03	0.0006	0.001429
Fe	57	3	He	4827.477	2.8061	142578.69	0.0006	0.001429
Fe	57	3	He	4810.469	2.7963	140730.54	0.0006	0.001429
Co	59	3	He	451.339	25.4045	1297433.89	0.0563	0.002149
Co	59	3	He	454.098	25.5598	1298679.67	0.0563	0.002149
Co	59	3	He	457.255	25.7375	1295317.87	0.0563	0.002149
Ni	60	3	He	489.945	4.2081	358164.99	0.0086	0.002834
Ni	60	3	He	481.787	4.1381	360445.03	0.0086	0.002834
Ni	60	3	He	494.935	4.2509	358985.11	0.0086	0.002834
Cu	63	3	He	472.763	12.1411	1033367.17	0.0257	0.004757
Cu	63	3	He	459.267	11.7946	1027363.81	0.0257	0.004757
Cu	63	3	He	475.436	12.2097	1031091.31	0.0257	0.004757
Zn	66	3	He	509	1.4858	126463.88	0.0029	0.003818
Zn	66	3	He	503.696	1.4704	128077.15	0.0029	0.003818
Zn	66	3	He	532.468	1.5542	131246.39	0.0029	0.003818
As	75	3	He	531.023	1.0888	92671.45	0.002	0.0008061
As	75	3	He	517.408	1.0609	92409.70	0.002	0.0008061
As	75	3	He	536.054	1.0991	92818.25	0.002	0.0008061
Sr	88	3	He	816.996	7.3293	640712.02	0.009	0.0009645
Sr	88	3	He	812.314	7.2873	639092.26	0.009	0.0009645
Sr	88	3	He	825.801	7.4083	634119.95	0.009	0.0009645
Mo	98	3	He	52.23	1.1455	100136.02	0.0219	0.0002706
Mo	98	3	He	54	1.1843	103863.35	0.0219	0.0002706
Mo	98	3	He	53.54	1.1742	100508.74	0.0219	0.0002706
Ag	107	3	He	39.283	1.8268	159694.66	0.0465	0.0006206
Ag	107	3	He	39.425	1.8334	160787.11	0.0465	0.0006206
Ag	107	3	He	40.999	1.9066	163194.57	0.0465	0.0006206
Cd	111	3	He	50.593	0.2705	23648.00	0.0053	0
Cd	111	3	He	49.209	0.2631	23075.11	0.0053	0
Cd	111	3	He	50.908	0.2722	23299.42	0.0053	0
Sn	120	3	He	101.351	1.6177	141415.91	0.0158	0.01648
Sn	120	3	He	102.148	1.6303	142975.62	0.0158	0.01648
Sn	120	3	He	102.837	1.6412	140477.14	0.0158	0.01648
Sb	121	3	He	103.704	1.5406	134678.58	0.0149	0.0002698
Sb	121	3	He	100.558	1.4939	131015.16	0.0149	0.0002698
Sb	121	3	He	106.286	1.579	135154.77	0.0149	0.0002698
Ba	137	3	He	541.796	2.6005	227330.31	0.0048	0.0002317
Ba	137	3	He	544.627	2.6141	229254.02	0.0048	0.0002317
Ba	137	3	He	548.799	2.6341	225469.66	0.0048	0.0002317
Tl	205	3	He	98.656	2.4395	962336.78	0.0247	0.0001339
Tl	205	3	He	97.563	2.4125	967321.31	0.0247	0.0001339
Tl	205	3	He	99.726	2.466	961674.36	0.0247	0.0001339
Pb	208	3	He	49.84	1.6323	345367.61	0.0327	0.00107
Pb	208	3	He	49.115	1.6086	342043.35	0.0327	0.00107
Pb	208	3	He	50.485	1.6534	342349.88	0.0327	0.00107
U	238	3	He	53.365	2.6288	768524.60	0.0493	7.55E-05
U	238	3	He	53.053	2.6135	757392.64	0.0493	7.55E-05
U	238	3	He	52.519	2.5872	754626.86	0.0493	7.55E-05
Sc	45	1	No Gas			2473998.56		
Sc	45	1	No Gas			2452834.65		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2471599.49		
Ge	72	1	No Gas			1182972.95		
Ge	72	1	No Gas			1172838.58		
Ge	72	1	No Gas			1170931.39		
Sc	45	2	H2			194402.81		
Sc	45	2	H2			193684.72		
Sc	45	2	H2			195020.82		
Ge	72	2	H2			165296.29		
Ge	72	2	H2			166034.63		
Ge	72	2	H2			167643.81		
In	115	2	H2			392959.21		
In	115	2	H2			391387.81		
In	115	2	H2			391083.90		
Sc	45	3	He			51070.97		
Sc	45	3	He			50809.38		
Sc	45	3	He			50328.00		
Ge	72	3	He			85113.25		
Ge	72	3	He			87104.43		
Ge	72	3	He			84448.47		
In	115	3	He			88179.59		
In	115	3	He			88460.53		
In	115	3	He			86347.77		
Tb	159	3	He			394474.99		
Tb	159	3	He			400958.82		
Tb	159	3	He			389973.16		
Bi	209	3	He			292343.67		
Bi	209	3	He			289801.95		
Bi	209	3	He			291681.85		

Quantitation Report

Data File Name	165SMPL.d
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Sample Name	410-138038-C-2-A SD@5
Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

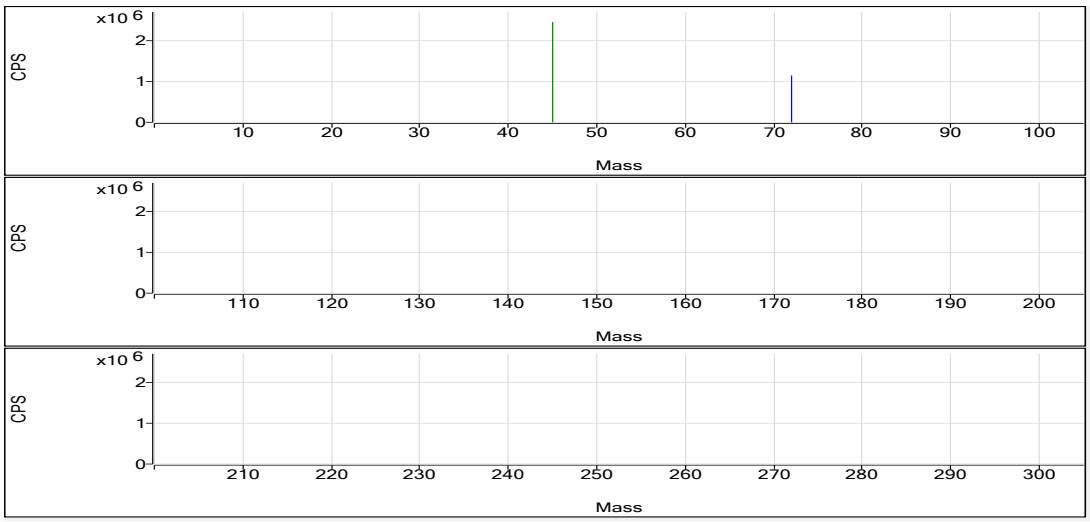
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.026	ppb	52.3	61.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.117	ppb	52.8	9.78	0.0001	Pulse	1.5000	3
Na	23	45	He	182010.710	ppb	1.8	32309762.85	651.4064	Analog	0.1000	3
Mg	24	45	He	23161.096	ppb	0.3	2061723.51	41.5620	Analog	0.1000	3
Al	27	45	He	13.712	ppb	25.1	430.02	0.0087	Pulse	0.1000	3
K	39	45	He	7082.807	ppb	0.7	428660.11	8.6418	Pulse	0.1000	3
Ca	44	45	He	9565.999	ppb	1.7	32186.42	0.6489	Pulse	0.1000	3
Ti	47	45	He	0.619	ppb	60.1	20.00	0.0004	Pulse	0.1000	3
V	51	45	He	1.316	ppb	5.4	2660.93	0.0536	Pulse	0.5000	3
Cr	52	45	He	22.236	ppb	0.8	35009.67	0.7057	Pulse	0.1000	3
Mn	55	45	He	2.810	ppb	2.3	1920.20	0.0387	Pulse	0.1000	3
Fe	57	45	He	18.803	ppb	19.0	613.37	0.0124	Pulse	0.1000	3
Co	59	45	He	0.085	ppb	17.9	343.35	0.0069	Pulse	0.1000	3
Ni	60	72	He	0.239	ppb	46.9	400.02	0.0049	Pulse	0.1000	3
Cu	63	72	He	0.612	ppb	6.0	1680.15	0.0205	Pulse	0.1000	3
Zn	66	72	He	7.044	ppb	6.7	1996.87	0.0243	Pulse	0.1000	3
As	75	72	He	0.669	ppb	15.6	178.67	0.0022	Pulse	0.5000	3
Sr	88	115	He	152.438	ppb	0.7	122935.04	1.3683	Pulse	0.1000	3
Mo	98	115	He	0.584	ppb	11.3	1173.42	0.0131	Pulse	0.1000	3
Ag	107	115	He	0.031	ppb	30.4	186.67	0.0021	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	86.6	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.124	ppb	88.6	1656.83	0.0184	Pulse	0.1000	3
Sb	121	115	He	0.766	ppb	10.3	1046.74	0.0117	Pulse	0.1000	3
Ba	137	115	He	5.332	ppb	1.5	2320.28	0.0258	Pulse	0.1000	3
Tl	205	159	He	0.146	ppb	5.6	1503.49	0.0037	Pulse	0.1000	3
Pb	208	159	He	0.147	ppb	12.8	2360.18	0.0059	Pulse	0.1000	3
U	238	209	He	0.213	ppb	4.3	3200.52	0.0106	Pulse	0.1000	3

ISTD Table:

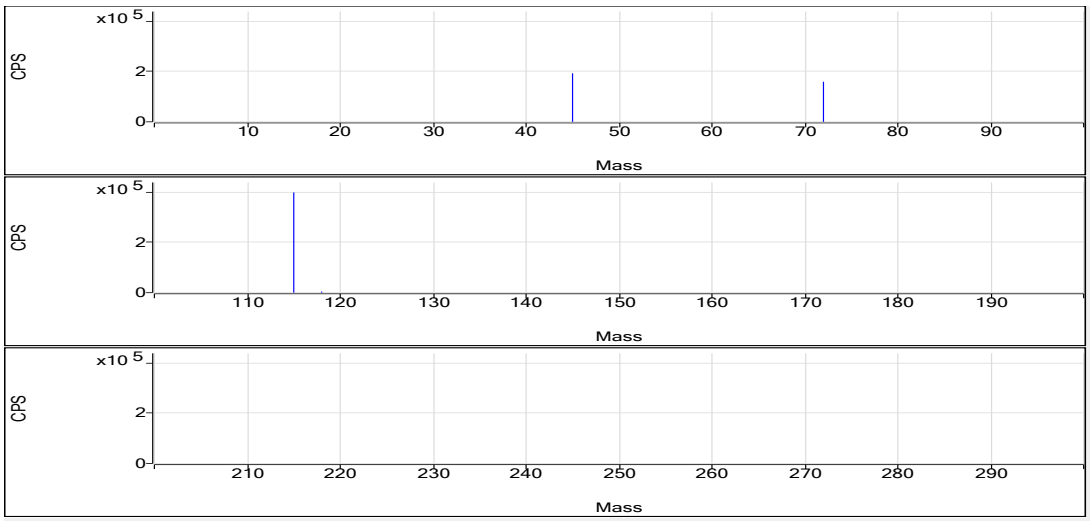
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2468953.97	0.3	102.9	Analog	0.1000	3
No Gas	Ge	72	1153029.52	0.9	100.0	Pulse	0.1000	3
H2	Sc	45	193039.45	0.8	103.2	Pulse	0.1000	3
H2	Ge	72	159385.36	1.6	97.4	Pulse	0.1000	3
H2	In	115	398759.50	0.3	102.5	Pulse	0.1000	3
He	Sc	45	49605.19	0.9	106.4	Pulse	0.1000	3
He	Ge	72	82055.42	1.1	101.1	Pulse	0.1000	3
He	In	115	89849.47	1.2	104.2	Pulse	0.1000	3
He	Tb	159	401210.48	0.9	100.7	Pulse	0.1000	3
He	Bi	209	302898.62	1.0	97.9	Pulse	0.1000	3

No Gas

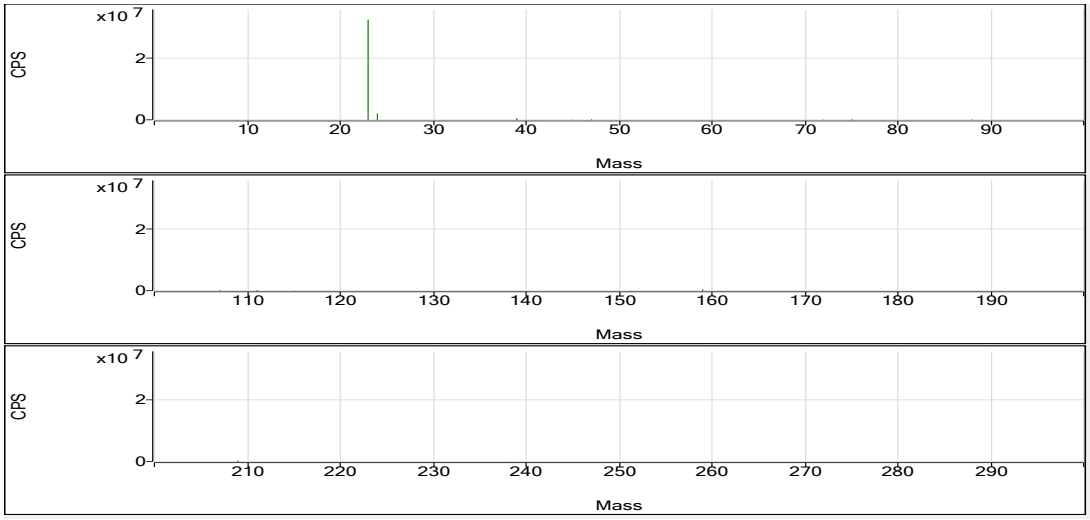


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.037	0	82.00	0.0008	4.685E-06
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Se	78	2	H2	0.188	0.0001	14.67	0.0004	1.219E-05
Se	78	2	H2	0.071	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.093	0.0001	8.00	0.0004	1.219E-05
Na	23	3	He	179765.478	643.3751	32127719.52	0.0036	0.3452
Na	23	3	He	185768.346	664.8476	32653207.01	0.0036	0.3452
Na	23	3	He	180498.307	645.9964	32148362.02	0.0036	0.3452
Mg	24	3	He	23226.715	41.6797	2081326.69	0.0018	0.003497
Mg	24	3	He	23089.951	41.4343	2034996.84	0.0018	0.003497
Mg	24	3	He	23166.624	41.5719	2068847.00	0.0018	0.003497
Al	27	3	He	17.386	0.0108	540.03	0.0006	0.0006432
Al	27	3	He	13.17	0.0083	410.02	0.0006	0.0006432
Al	27	3	He	10.579	0.0068	340.01	0.0006	0.0006432
K	39	3	He	7060.749	8.6161	430254.68	0.0012	0.3951
K	39	3	He	7141.978	8.7107	427813.86	0.0012	0.3951
K	39	3	He	7045.694	8.5986	427911.79	0.0012	0.3951
Ca	44	3	He	9453.832	0.6413	32026.06	0.0001	0.002715
Ca	44	3	He	9754.804	0.6617	32497.17	0.0001	0.002715
Ca	44	3	He	9489.362	0.6437	32036.04	0.0001	0.002715
Ti	47	3	He	0.615	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.249	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.992	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	1.32	0.0537	2682.27	0.0219	0.02486
V	51	3	He	1.244	0.052	2556.24	0.0219	0.02486
V	51	3	He	1.385	0.0551	2744.28	0.0219	0.02486
Cr	52	3	He	22.445	0.712	35554.25	0.0299	0.03997
Cr	52	3	He	22.114	0.7021	34481.90	0.0299	0.03997
Cr	52	3	He	22.15	0.7032	34992.87	0.0299	0.03997
Mn	55	3	He	2.884	0.0397	1980.20	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2.777	0.0383	1880.19	0.0128	0.002639
Mn	55	3	He	2.77	0.0382	1900.20	0.0128	0.002639
Fe	57	3	He	21.325	0.0138	690.04	0.0006	0.001429
Fe	57	3	He	14.714	0.01	490.03	0.0006	0.001429
Fe	57	3	He	20.369	0.0133	660.03	0.0006	0.001429
Co	59	3	He	0.101	0.0078	390.02	0.0563	0.002149
Co	59	3	He	0.07	0.0061	300.01	0.0563	0.002149
Co	59	3	He	0.083	0.0068	340.02	0.0563	0.002149
Ni	60	3	He	0.257	0.005	410.02	0.0086	0.002834
Ni	60	3	He	0.34	0.0058	470.02	0.0086	0.002834
Ni	60	3	He	0.118	0.0039	320.02	0.0086	0.002834
Cu	63	3	He	0.6	0.0202	1640.14	0.0257	0.004757
Cu	63	3	He	0.654	0.0215	1760.17	0.0257	0.004757
Cu	63	3	He	0.583	0.0197	1640.15	0.0257	0.004757
Zn	66	3	He	6.502	0.0227	1850.19	0.0029	0.003818
Zn	66	3	He	7.306	0.0251	2050.22	0.0029	0.003818
Zn	66	3	He	7.325	0.0251	2090.21	0.0029	0.003818
As	75	3	He	0.711	0.0023	184.00	0.002	0.0008061
As	75	3	He	0.55	0.0019	158.00	0.002	0.0008061
As	75	3	He	0.746	0.0023	194.00	0.002	0.0008061
Sr	88	3	He	153.244	1.3755	122517.13	0.009	0.0009645
Sr	88	3	He	151.319	1.3583	123738.85	0.009	0.0009645
Sr	88	3	He	152.751	1.3711	122549.13	0.009	0.0009645
Mo	98	3	He	0.658	0.0147	1310.10	0.0219	0.0002706
Mo	98	3	He	0.558	0.0125	1140.09	0.0219	0.0002706
Mo	98	3	He	0.534	0.012	1070.07	0.0219	0.0002706
Ag	107	3	He	0.037	0.0024	210.01	0.0465	0.0006206
Ag	107	3	He	0.036	0.0023	210.01	0.0465	0.0006206
Ag	107	3	He	0.02	0.0016	140.00	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.016	0.0001	8.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.172	0.0192	1710.16	0.0158	0.01648
Sn	120	3	He	0.201	0.0197	1790.19	0.0158	0.01648
Sn	120	3	He	-0.002	0.0164	1470.13	0.0158	0.01648
Sb	121	3	He	0.708	0.0108	960.07	0.0149	0.0002698
Sb	121	3	He	0.736	0.0112	1020.07	0.0149	0.0002698
Sb	121	3	He	0.856	0.013	1160.09	0.0149	0.0002698
Ba	137	3	He	5.403	0.0262	2330.28	0.0048	0.0002317
Ba	137	3	He	5.35	0.0259	2360.30	0.0048	0.0002317
Ba	137	3	He	5.244	0.0254	2270.26	0.0048	0.0002317
Tl	205	3	He	0.141	0.0036	1440.14	0.0247	0.0001339
Tl	205	3	He	0.155	0.004	1600.18	0.0247	0.0001339
Tl	205	3	He	0.142	0.0036	1470.14	0.0247	0.0001339
Pb	208	3	He	0.167	0.0065	1510.15	0.0327	0.00107
Pb	208	3	He	0.146	0.0058	1230.11	0.0327	0.00107
Pb	208	3	He	0.129	0.0053	1080.09	0.0327	0.00107
U	238	3	He	0.204	0.0101	3040.47	0.0493	7.55E-05
U	238	3	He	0.223	0.011	3370.57	0.0493	7.55E-05
U	238	3	He	0.212	0.0105	3190.52	0.0493	7.55E-05
Sc	45	1	No Gas			2467734.96		
Sc	45	1	No Gas			2477396.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2461730.74		
Ge	72	1	No Gas			1162877.25		
Ge	72	1	No Gas			1141708.97		
Ge	72	1	No Gas			1154502.33		
Sc	45	2	H2			194819.80		
Sc	45	2	H2			191636.81		
Sc	45	2	H2			192661.74		
Ge	72	2	H2			162060.97		
Ge	72	2	H2			159258.53		
Ge	72	2	H2			156836.57		
In	115	2	H2			399846.56		
In	115	2	H2			397714.92		
In	115	2	H2			398717.03		
Sc	45	3	He			49936.22		
Sc	45	3	He			49113.82		
Sc	45	3	He			49765.54		
Ge	72	3	He			81331.40		
Ge	72	3	He			81713.33		
Ge	72	3	He			83121.54		
In	115	3	He			89075.02		
In	115	3	He			91107.82		
In	115	3	He			89386.93		
Tb	159	3	He			397098.47		
Tb	159	3	He			402183.51		
Tb	159	3	He			404349.45		
Bi	209	3	He			299634.29		
Bi	209	3	He			305230.80		
Bi	209	3	He			303830.76		

Quantitation Report

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Sample Name	410-138038-E-2-A DU
Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

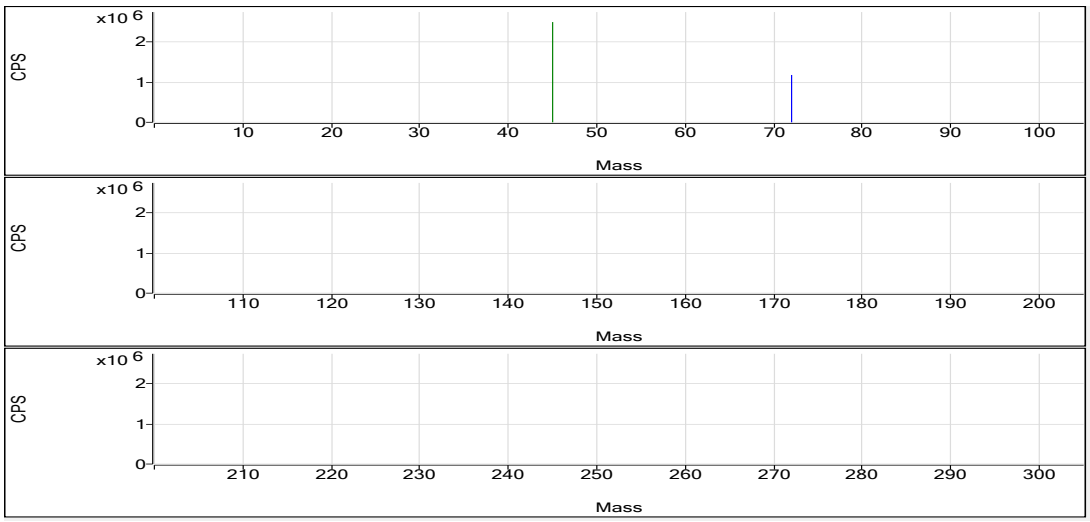
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.017	ppb	57.9	43.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.212	ppb	40.2	16.67	0.0001	Pulse	1.5000	3
Na	23	45	He	892020.876	ppb	1.2	161890867.59	3 191.1475	Analog	0.1000	3
Mg	24	45	He	110513.296	ppb	1.9	10059512.98	198.2999	Analog	0.1000	3
Al	27	45	He	101.680	ppb	38.5	3042.03	0.0601	Pulse	0.1000	3
K	39	45	He	36834.277	ppb	1.1	2195782.57	43.2822	Analog	0.1000	3
Ca	44	45	He	49027.384	ppb	1.3	168172.72	3.3146	Pulse	0.1000	3
Ti	47	45	He	1.831	ppb	31.9	53.33	0.0011	Pulse	0.1000	3
V	51	45	He	3.029	ppb	3.7	4620.10	0.0911	Pulse	0.5000	3
Cr	52	45	He	110.234	ppb	2.6	169455.44	3.3405	Pulse	0.1000	3
Mn	55	45	He	13.094	ppb	1.3	8659.50	0.1707	Pulse	0.1000	3
Fe	57	45	He	81.104	ppb	2.7	2463.64	0.0485	Pulse	0.1000	3
Co	59	45	He	0.124	ppb	22.0	463.36	0.0091	Pulse	0.1000	3
Ni	60	72	He	1.146	ppb	13.8	1070.08	0.0127	Pulse	0.1000	3
Cu	63	72	He	1.975	ppb	3.2	4687.57	0.0555	Pulse	0.1000	3
Zn	66	72	He	19.414	ppb	4.6	5101.08	0.0603	Pulse	0.1000	3
As	75	72	He	1.294	ppb	22.9	292.00	0.0035	Pulse	0.5000	3
Sr	88	115	He	786.533	ppb	0.7	621302.88	7.0560	Pulse	0.1000	3
Mo	98	115	He	2.281	ppb	6.4	4427.53	0.0503	Pulse	0.1000	3
Ag	107	115	He	0.150	ppb	15.7	670.04	0.0076	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	53.7	11.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.171	ppb	N/A	1213.43	0.0138	Pulse	0.1000	3
Sb	121	115	He	2.074	ppb	5.3	2737.02	0.0311	Pulse	0.1000	3
Ba	137	115	He	27.494	ppb	3.1	11638.69	0.1322	Pulse	0.1000	3
Tl	205	159	He	0.037	ppb	18.4	420.02	0.0011	Pulse	0.1000	3
Pb	208	159	He	0.580	ppb	3.8	7971.46	0.0201	Pulse	0.1000	3
U	238	209	He	0.406	ppb	3.0	5834.90	0.0201	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2498681.32	1.1	104.2	Analog	0.1000	3
No Gas	Ge	72	1179551.13	0.5	102.3	Pulse	0.1000	3
H2	Sc	45	196022.77	1.4	104.8	Pulse	0.1000	3
H2	Ge	72	166119.34	2.0	101.5	Pulse	0.1000	3
H2	In	115	392633.89	0.5	100.9	Pulse	0.1000	3
He	Sc	45	50736.05	1.2	108.8	Pulse	0.1000	3
He	Ge	72	84549.88	1.6	104.1	Pulse	0.1000	3
He	In	115	88052.17	0.2	102.2	Pulse	0.1000	3
He	Tb	159	397382.27	0.6	99.7	Pulse	0.1000	3
He	Bi	209	291018.09	0.5	94.1	Pulse	0.1000	3

No Gas



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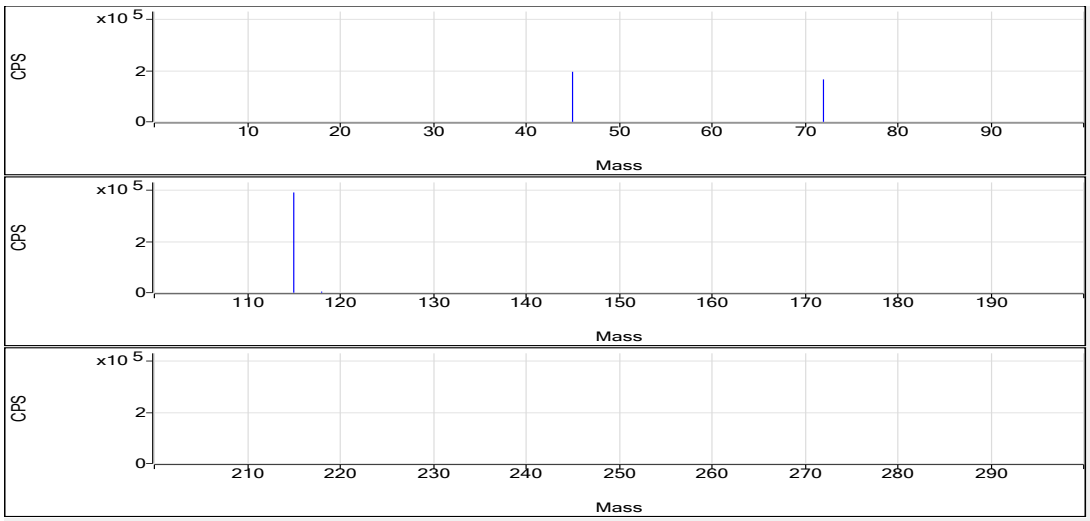
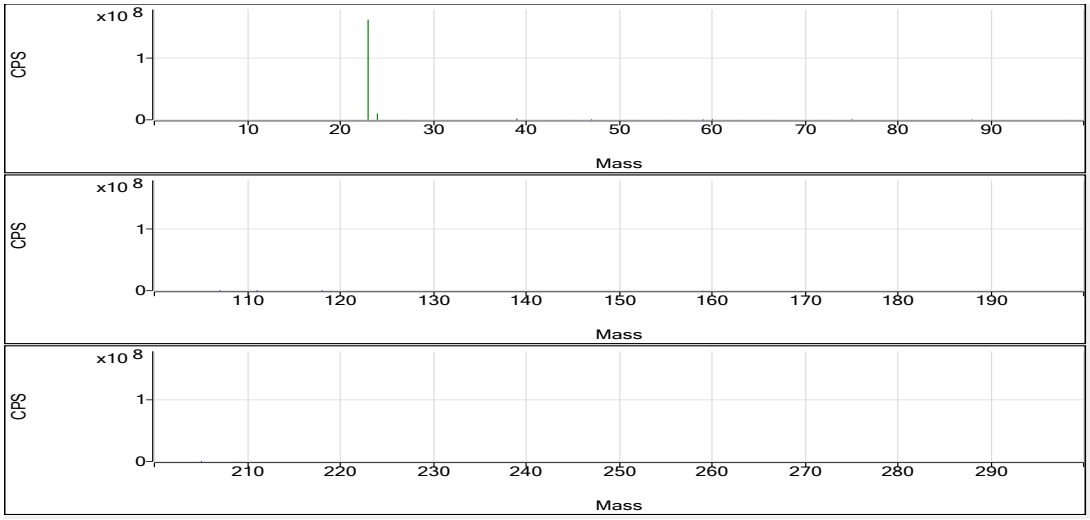


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.027	0	64.00	0.0008	4.685E-06
Be	9	1	No Gas	0.014	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Se	78	2	H2	0.135	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.197	0.0001	16.00	0.0004	1.219E-05
Se	78	2	H2	0.304	0.0001	22.67	0.0004	1.219E-05
Na	23	3	He	903518.039	3232.2735	161863947.59	0.0036	0.3452
Na	23	3	He	881662.558	3154.0953	161587457.59	0.0036	0.3452
Na	23	3	He	890882.031	3187.0738	162221197.58	0.0036	0.3452
Mg	24	3	He	112600.397	202.0449	10117887.35	0.0018	0.003497
Mg	24	3	He	108412.362	194.5302	9965975.48	0.0018	0.003497
Mg	24	3	He	110527.128	198.3247	10094676.10	0.0018	0.003497
Al	27	3	He	146.881	0.0866	4335.39	0.0006	0.0006432
Al	27	3	He	78.989	0.0469	2400.41	0.0006	0.0006432
Al	27	3	He	79.171	0.047	2390.30	0.0006	0.0006432
K	39	3	He	37266.065	43.7849	2192637.15	0.0012	0.3951
K	39	3	He	36465.398	42.8527	2195386.69	0.0012	0.3951
K	39	3	He	36771.368	43.2089	2199323.87	0.0012	0.3951
Ca	44	3	He	48713.732	3.2934	164926.03	0.0001	0.002715
Ca	44	3	He	48594.897	3.2854	168313.96	0.0001	0.002715
Ca	44	3	He	49773.521	3.365	171278.16	0.0001	0.002715
Ti	47	3	He	2.473	0.0014	70.00	0.0005	7.003E-05
Ti	47	3	He	1.687	0.001	50.00	0.0005	7.003E-05
Ti	47	3	He	1.333	0.0008	40.00	0.0005	7.003E-05
V	51	3	He	3.102	0.0927	4640.78	0.0219	0.02486
V	51	3	He	2.899	0.0882	4520.74	0.0219	0.02486
V	51	3	He	3.086	0.0923	4698.79	0.0219	0.02486
Cr	52	3	He	113.234	3.4303	171779.31	0.0299	0.03997
Cr	52	3	He	109.81	3.3278	170484.37	0.0299	0.03997
Cr	52	3	He	107.658	3.2633	166102.63	0.0299	0.03997
Mn	55	3	He	13.164	0.1716	8592.79	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	12.894	0.1681	8612.76	0.0128	0.002639
Mn	55	3	He	13.224	0.1724	8772.94	0.0128	0.002639
Fe	57	3	He	79.353	0.0475	2380.30	0.0006	0.001429
Fe	57	3	He	83.559	0.05	2560.32	0.0006	0.001429
Fe	57	3	He	80.399	0.0481	2450.31	0.0006	0.001429
Co	59	3	He	0.1	0.0078	390.02	0.0563	0.002149
Co	59	3	He	0.118	0.0088	450.02	0.0563	0.002149
Co	59	3	He	0.154	0.0108	550.03	0.0563	0.002149
Ni	60	3	He	1.2	0.0131	1100.07	0.0086	0.002834
Ni	60	3	He	1.27	0.0137	1150.10	0.0086	0.002834
Ni	60	3	He	0.968	0.0111	960.07	0.0086	0.002834
Cu	63	3	He	1.982	0.0556	4660.88	0.0257	0.004757
Cu	63	3	He	2.034	0.057	4770.95	0.0257	0.004757
Cu	63	3	He	1.909	0.0538	4630.88	0.0257	0.004757
Zn	66	3	He	18.825	0.0586	4910.99	0.0029	0.003818
Zn	66	3	He	20.432	0.0633	5301.13	0.0029	0.003818
Zn	66	3	He	18.985	0.0591	5091.11	0.0029	0.003818
As	75	3	He	1.145	0.0032	264.00	0.002	0.0008061
As	75	3	He	1.635	0.0042	348.01	0.002	0.0008061
As	75	3	He	1.102	0.0031	264.00	0.002	0.0008061
Sr	88	3	He	780.469	7.0016	615171.63	0.009	0.0009645
Sr	88	3	He	790.014	7.0872	623902.10	0.009	0.0009645
Sr	88	3	He	789.116	7.0792	624834.91	0.009	0.0009645
Mo	98	3	He	2.314	0.051	4480.88	0.0219	0.0002706
Mo	98	3	He	2.408	0.0531	4670.95	0.0219	0.0002706
Mo	98	3	He	2.122	0.0468	4130.76	0.0219	0.0002706
Ag	107	3	He	0.163	0.0082	720.05	0.0465	0.0006206
Ag	107	3	He	0.165	0.0083	730.05	0.0465	0.0006206
Ag	107	3	He	0.123	0.0063	560.03	0.0465	0.0006206
Cd	111	3	He	0.021	0.0001	10.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.038	0.0002	18.00	0.0053	0
Sn	120	3	He	-0.193	0.0134	1180.09	0.0158	0.01648
Sn	120	3	He	-0.166	0.0139	1220.10	0.0158	0.01648
Sn	120	3	He	-0.154	0.014	1240.10	0.0158	0.01648
Sb	121	3	He	1.959	0.0294	2580.32	0.0149	0.0002698
Sb	121	3	He	2.085	0.0312	2750.37	0.0149	0.0002698
Sb	121	3	He	2.179	0.0326	2880.38	0.0149	0.0002698
Ba	137	3	He	28.471	0.1369	12025.71	0.0048	0.0002317
Ba	137	3	He	27.089	0.1302	11465.29	0.0048	0.0002317
Ba	137	3	He	26.923	0.1294	11425.08	0.0048	0.0002317
Tl	205	3	He	0.044	0.0012	490.03	0.0247	0.0001339
Tl	205	3	He	0.037	0.0011	420.02	0.0247	0.0001339
Tl	205	3	He	0.03	0.0009	350.02	0.0247	0.0001339
Pb	208	3	He	0.595	0.0206	4260.85	0.0327	0.00107
Pb	208	3	He	0.591	0.0204	4630.95	0.0327	0.00107
Pb	208	3	He	0.555	0.0192	3830.73	0.0327	0.00107
U	238	3	He	0.392	0.0194	5671.44	0.0493	7.55E-05
U	238	3	He	0.408	0.0202	5841.61	0.0493	7.55E-05
U	238	3	He	0.416	0.0206	5991.64	0.0493	7.55E-05
Sc	45	1	No Gas			2514225.90		
Sc	45	1	No Gas			2514770.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2467047.62		
Ge	72	1	No Gas			1175857.79		
Ge	72	1	No Gas			1187004.51		
Ge	72	1	No Gas			1175791.08		
Sc	45	2	H2			195530.54		
Sc	45	2	H2			198882.34		
Sc	45	2	H2			193655.43		
Ge	72	2	H2			165204.88		
Ge	72	2	H2			169798.81		
Ge	72	2	H2			163354.32		
In	115	2	H2			392689.64		
In	115	2	H2			394673.43		
In	115	2	H2			390538.59		
Sc	45	3	He			50077.43		
Sc	45	3	He			51231.00		
Sc	45	3	He			50899.73		
Ge	72	3	He			83765.17		
Ge	72	3	He			83734.60		
Ge	72	3	He			86149.88		
In	115	3	He			87866.99		
In	115	3	He			88038.49		
In	115	3	He			88270.53		
Tb	159	3	He			399594.33		
Tb	159	3	He			397647.06		
Tb	159	3	He			394905.42		
Bi	209	3	He			292382.87		
Bi	209	3	He			289362.12		
Bi	209	3	He			291309.27		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 4:22:13 PM
Sample Name	410-138038-D-2-A MS
Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

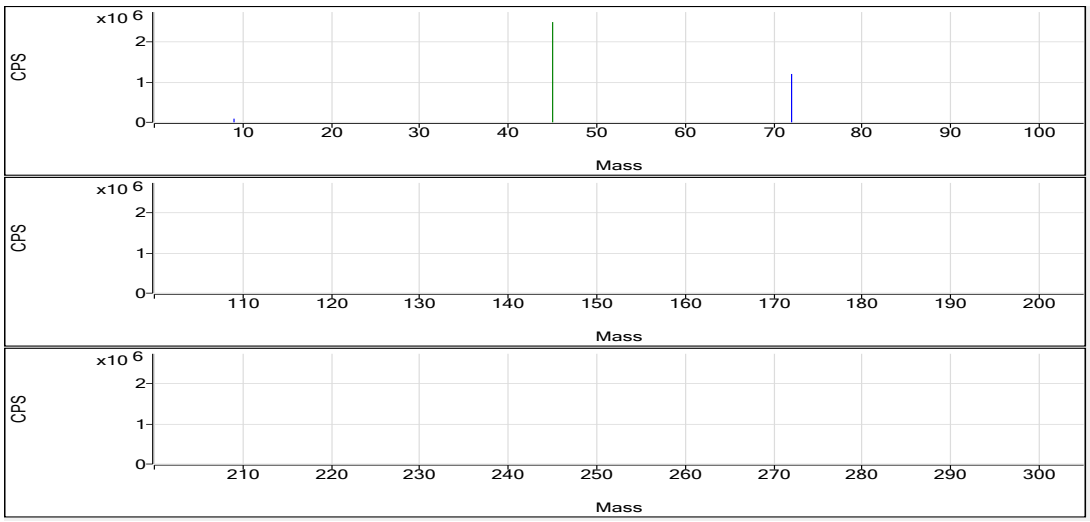
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.635	ppb	1.5	90512.09	0.0363	Pulse	0.5000	3
Se	78	72	H2	104.321	ppb	1.1	7416.15	0.0435	Pulse	1.5000	3
Na	23	45	He	890682.855	ppb	0.4	162019207.59	3 186.3614	Analog	0.1000	3
Mg	24	45	He	113705.868	ppb	1.7	10372480.47	204.0284	Analog	0.1000	3
Al	27	45	He	4964.029	ppb	2.3	147668.38	2.9048	Pulse	0.1000	3
K	39	45	He	41431.492	ppb	1.7	2472544.60	48.6349	Analog	0.1000	3
Ca	44	45	He	53850.209	ppb	1.2	185083.01	3.6404	Pulse	0.1000	3
Ti	47	45	He	509.547	ppb	1.2	13913.67	0.2737	Pulse	0.1000	3
V	51	45	He	508.392	ppb	1.1	566262.75	11.1379	Pulse	0.5000	3
Cr	52	45	He	574.543	ppb	1.8	876563.37	17.2422	Pulse	0.1000	3
Mn	55	45	He	497.805	ppb	1.5	324938.50	6.3914	Pulse	0.1000	3
Fe	57	45	He	4870.331	ppb	0.8	143940.91	2.8310	Pulse	0.1000	3
Co	59	45	He	461.968	ppb	1.2	1322000.50	26.0028	Pulse	0.1000	3
Ni	60	72	He	487.772	ppb	0.9	364974.91	4.1895	Pulse	0.1000	3
Cu	63	72	He	469.408	ppb	0.4	1050235.14	12.0550	Pulse	0.1000	3
Zn	66	72	He	516.081	ppb	0.9	131245.63	1.5064	Pulse	0.1000	3
As	75	72	He	530.740	ppb	0.5	94805.09	1.0882	Pulse	0.5000	3
Sr	88	115	He	834.379	ppb	0.6	664963.53	7.4852	Pulse	0.1000	3
Mo	98	115	He	53.789	ppb	1.6	104796.10	1.1797	Pulse	0.1000	3
Ag	107	115	He	47.068	ppb	0.1	194436.96	2.1887	Pulse	0.1000	3
Cd	111	115	He	49.795	ppb	1.3	23652.68	0.2662	Pulse	0.5000	3
Sn	120	115	He	102.399	ppb	1.3	145177.72	1.6342	Pulse	0.1000	3
Sb	121	115	He	107.084	ppb	0.5	141325.43	1.5908	Pulse	0.1000	3
Ba	137	115	He	546.100	ppb	0.7	232852.03	2.6211	Pulse	0.1000	3
Tl	205	159	He	97.864	ppb	0.1	970848.09	2.4200	Pulse	0.1000	3
Pb	208	159	He	49.406	ppb	0.2	649158.85	1.6181	Pulse	0.1000	3
U	238	209	He	52.241	ppb	0.5	755946.81	2.5735	Pulse	0.1000	3

ISTD Table:

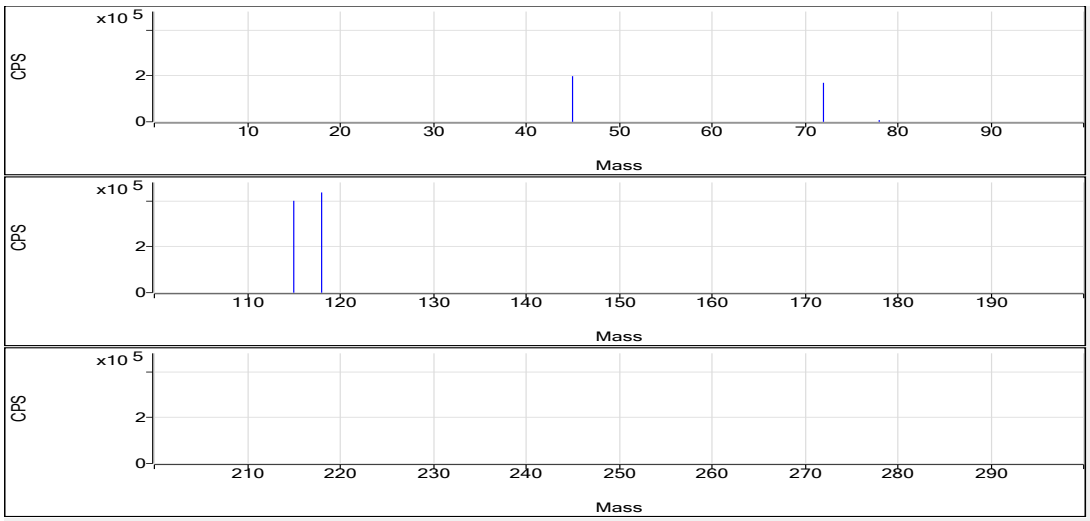
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2491120.90	1.9	103.8	Analog	0.1000	3
No Gas	Ge	72	1200978.60	0.6	104.1	Pulse	0.1000	3
H2	Sc	45	199371.07	0.1	106.6	Pulse	0.1000	3
H2	Ge	72	170405.93	0.5	104.1	Pulse	0.1000	3
H2	In	115	401447.13	0.5	103.2	Pulse	0.1000	3
He	Sc	45	50846.32	1.4	109.0	Pulse	0.1000	3
He	Ge	72	87121.38	0.8	107.3	Pulse	0.1000	3
He	In	115	88838.31	0.6	103.1	Pulse	0.1000	3
He	Tb	159	401179.91	0.7	100.6	Pulse	0.1000	3
He	Bi	209	293756.19	0.9	95.0	Pulse	0.1000	3

No Gas

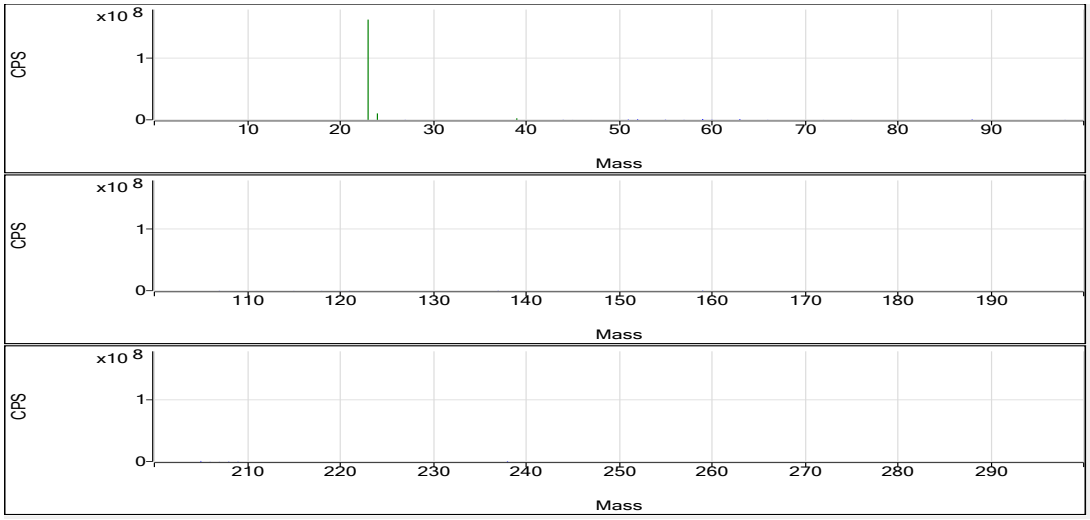


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.918	0.0366	91251.71	0.0008	4.685E-06
Be	9	1	No Gas	46.818	0.0357	90602.13	0.0008	4.685E-06
Be	9	1	No Gas	48.17	0.0367	89682.43	0.0008	4.685E-06
Se	78	2	H2	103.078	0.043	7329.22	0.0004	1.219E-05
Se	78	2	H2	104.489	0.0436	7461.28	0.0004	1.219E-05
Se	78	2	H2	105.397	0.044	7457.95	0.0004	1.219E-05
Na	23	3	He	892988.452	3194.6086	162059427.59	0.0036	0.3452
Na	23	3	He	892536.639	3192.9924	164735037.55	0.0036	0.3452
Na	23	3	He	886523.474	3171.4831	159263157.63	0.0036	0.3452
Mg	24	3	He	114175.293	204.8707	10392895.47	0.0018	0.003497
Mg	24	3	He	111567.948	200.1923	10328457.97	0.0018	0.003497
Mg	24	3	He	115374.363	207.0222	10396087.97	0.0018	0.003497
Al	27	3	He	4936.01	2.8884	146524.80	0.0006	0.0006432
Al	27	3	He	4867.684	2.8484	146957.01	0.0006	0.0006432
Al	27	3	He	5088.391	2.9775	149523.33	0.0006	0.0006432
K	39	3	He	41281.723	48.4605	2458353.40	0.0012	0.3951
K	39	3	He	40814.728	47.9167	2472153.09	0.0012	0.3951
K	39	3	He	42198.025	49.5273	2487127.31	0.0012	0.3951
Ca	44	3	He	54326.584	3.6726	186306.42	0.0001	0.002715
Ca	44	3	He	53094.857	3.5894	185185.41	0.0001	0.002715
Ca	44	3	He	54129.186	3.6592	183757.20	0.0001	0.002715
Ti	47	3	He	508.221	0.273	13846.93	0.0005	7.003E-05
Ti	47	3	He	504.047	0.2707	13967.05	0.0005	7.003E-05
Ti	47	3	He	516.372	0.2773	13927.03	0.0005	7.003E-05
V	51	3	He	510.621	11.1866	567486.06	0.0219	0.02486
V	51	3	He	501.808	10.994	567208.56	0.0219	0.02486
V	51	3	He	512.746	11.2331	564093.63	0.0219	0.02486
Cr	52	3	He	573.929	17.2238	873747.64	0.0299	0.03997
Cr	52	3	He	564.658	16.9463	874302.57	0.0299	0.03997
Cr	52	3	He	585.041	17.5565	881639.91	0.0299	0.03997
Mn	55	3	He	495.493	6.3617	322724.66	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	491.736	6.3135	325731.38	0.0128	0.002639
Mn	55	3	He	506.185	6.499	326359.47	0.0128	0.002639
Fe	57	3	He	4842.597	2.8149	142798.85	0.0006	0.001429
Fe	57	3	He	4852.88	2.8209	145538.17	0.0006	0.001429
Fe	57	3	He	4915.517	2.8573	143485.70	0.0006	0.001429
Co	59	3	He	462.027	26.0061	1319264.67	0.0563	0.002149
Co	59	3	He	456.291	25.6833	1325067.95	0.0563	0.002149
Co	59	3	He	467.587	26.319	1321668.89	0.0563	0.002149
Ni	60	3	He	492.607	4.231	365343.55	0.0086	0.002834
Ni	60	3	He	485.766	4.1722	365394.96	0.0086	0.002834
Ni	60	3	He	484.943	4.1652	364186.21	0.0086	0.002834
Cu	63	3	He	470.685	12.0878	1043780.22	0.0257	0.004757
Cu	63	3	He	470.277	12.0773	1057701.62	0.0257	0.004757
Cu	63	3	He	467.262	11.9999	1049223.58	0.0257	0.004757
Zn	66	3	He	515.052	1.5035	129823.27	0.0029	0.003818
Zn	66	3	He	521.028	1.5209	133192.73	0.0029	0.003818
Zn	66	3	He	512.164	1.495	130720.88	0.0029	0.003818
As	75	3	He	533.707	1.0943	94493.09	0.002	0.0008061
As	75	3	He	528.99	1.0846	94990.13	0.002	0.0008061
As	75	3	He	529.524	1.0857	94932.07	0.002	0.0008061
Sr	88	3	He	829.45	7.441	661722.49	0.009	0.0009645
Sr	88	3	He	834.903	7.4899	669007.41	0.009	0.0009645
Sr	88	3	He	838.783	7.5247	664160.69	0.009	0.0009645
Mo	98	3	He	52.85	1.1591	103076.63	0.0219	0.0002706
Mo	98	3	He	53.945	1.1831	105675.95	0.0219	0.0002706
Mo	98	3	He	54.571	1.1968	105635.71	0.0219	0.0002706
Ag	107	3	He	47.017	2.1863	194428.04	0.0465	0.0006206
Ag	107	3	He	47.06	2.1883	195460.35	0.0465	0.0006206
Ag	107	3	He	47.127	2.1914	193422.50	0.0465	0.0006206
Cd	111	3	He	49.059	0.2623	23327.49	0.0053	0
Cd	111	3	He	50.01	0.2674	23884.38	0.0053	0
Cd	111	3	He	50.316	0.269	23746.18	0.0053	0
Sn	120	3	He	101.316	1.6171	143810.43	0.0158	0.01648
Sn	120	3	He	101.955	1.6272	145345.67	0.0158	0.01648
Sn	120	3	He	103.928	1.6584	146377.05	0.0158	0.01648
Sb	121	3	He	106.461	1.5816	140649.11	0.0149	0.0002698
Sb	121	3	He	107.256	1.5934	142324.07	0.0149	0.0002698
Sb	121	3	He	107.534	1.5975	141003.12	0.0149	0.0002698
Ba	137	3	He	544.309	2.6126	232332.91	0.0048	0.0002317
Ba	137	3	He	543.394	2.6082	232964.70	0.0048	0.0002317
Ba	137	3	He	550.597	2.6427	233258.49	0.0048	0.0002317
Tl	205	3	He	97.77	2.4176	966084.13	0.0247	0.0001339
Tl	205	3	He	98.021	2.4238	980654.36	0.0247	0.0001339
Tl	205	3	He	97.802	2.4184	965805.77	0.0247	0.0001339
Pb	208	3	He	49.322	1.6154	343816.95	0.0327	0.00107
Pb	208	3	He	49.366	1.6168	348786.52	0.0327	0.00107
Pb	208	3	He	49.531	1.6222	344875.78	0.0327	0.00107
U	238	3	He	52.335	2.5781	753213.82	0.0493	7.55E-05
U	238	3	He	51.936	2.5584	759759.60	0.0493	7.55E-05
U	238	3	He	52.453	2.5839	754867.02	0.0493	7.55E-05
Sc	45	1	No Gas			2496226.06		
Sc	45	1	No Gas			2536686.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2440449.96		
Ge	72	1	No Gas			1204578.81		
Ge	72	1	No Gas			1205542.72		
Ge	72	1	No Gas			1192814.28		
Sc	45	2	H2			199128.32		
Sc	45	2	H2			199583.67		
Sc	45	2	H2			199401.21		
Ge	72	2	H2			170436.83		
Ge	72	2	H2			171165.27		
Ge	72	2	H2			169615.68		
In	115	2	H2			401773.67		
In	115	2	H2			403156.20		
In	115	2	H2			399411.52		
Sc	45	3	He			50729.04		
Sc	45	3	He			51592.68		
Sc	45	3	He			50217.25		
Ge	72	3	He			86350.20		
Ge	72	3	He			87577.79		
Ge	72	3	He			87436.14		
In	115	3	He			89698.42		
In	115	3	He			90112.47		
In	115	3	He			89024.79		
Tb	159	3	He			399599.99		
Tb	159	3	He			404587.30		
Tb	159	3	He			399352.45		
Bi	209	3	He			292160.43		
Bi	209	3	He			296965.11		
Bi	209	3	He			292143.02		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

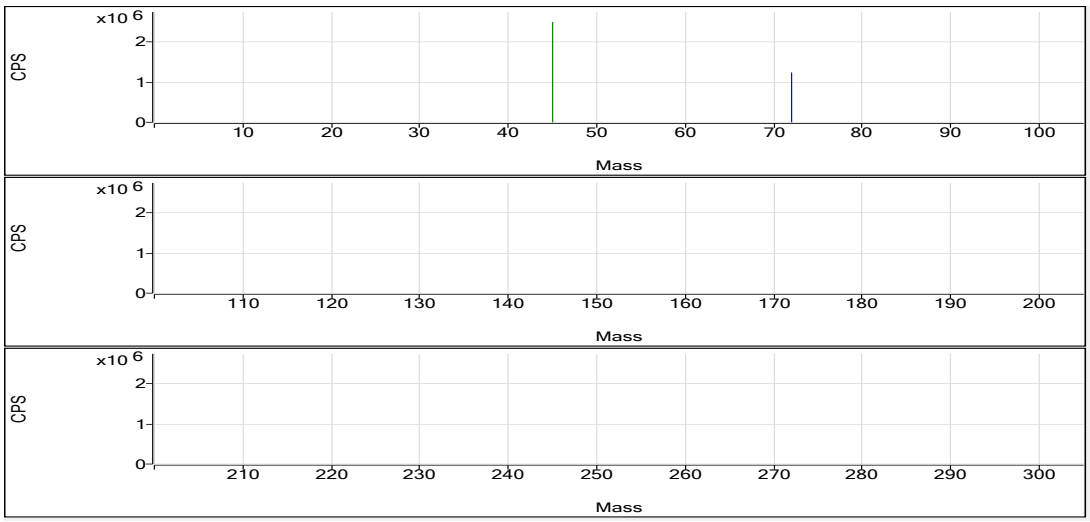
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.021	ppb	14.0	52.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.080	ppb	6.8	7.78	0.0000	Pulse	1.5000	3
Na	23	45	He	297.006	ppb	5.1	70036.86	1.4076	Pulse	0.1000	3
Mg	24	45	He	16.270	ppb	10.7	1626.82	0.0327	Pulse	0.1000	3
Al	27	45	He	2.337	ppb	15.1	100.00	0.0020	Pulse	0.1000	3
K	39	45	He	12.932	ppb	81.8	20404.81	0.4101	Pulse	0.1000	3
Ca	44	45	He	6.444	ppb	150.1	156.67	0.0032	Pulse	0.1000	3
Ti	47	45	He	0.367	ppb	234.8	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	1.157	ppb	5.8	2495.57	0.0502	Pulse	0.5000	3
Cr	52	45	He	0.032	ppb	487.8	2036.89	0.0409	Pulse	0.1000	3
Mn	55	45	He	0.150	ppb	68.4	226.68	0.0046	Pulse	0.1000	3
Fe	57	45	He	3.537	ppb	29.7	173.34	0.0035	Pulse	0.1000	3
Co	59	45	He	0.061	ppb	14.2	276.68	0.0056	Pulse	0.1000	3
Ni	60	72	He	-0.040	ppb	N/A	213.34	0.0025	Pulse	0.1000	3
Cu	63	72	He	0.103	ppb	55.2	633.37	0.0074	Pulse	0.1000	3
Zn	66	72	He	3.861	ppb	9.7	1290.11	0.0151	Pulse	0.1000	3
As	75	72	He	0.354	ppb	35.3	131.33	0.0015	Pulse	0.5000	3
Sr	88	115	He	0.172	ppb	16.1	230.01	0.0025	Pulse	0.1000	3
Mo	98	115	He	0.155	ppb	18.9	336.69	0.0037	Pulse	0.1000	3
Ag	107	115	He	0.011	ppb	55.0	103.34	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	44.5	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.048	ppb	251.1	1583.48	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.077	ppb	10.2	130.00	0.0014	Pulse	0.1000	3
Ba	137	115	He	0.065	ppb	60.4	50.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.148	ppb	9.4	1553.48	0.0038	Pulse	0.1000	3
Pb	208	159	He	0.022	ppb	9.8	730.04	0.0018	Pulse	0.1000	3
U	238	209	He	0.127	ppb	13.1	1990.23	0.0064	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2500380.22	2.0	104.2	Analog	0.1000	3
No Gas	Ge	72	1240619.67	0.9	107.6	Pulse	0.1000	3
H2	Sc	45	196475.36	0.8	105.1	Pulse	0.1000	3
H2	Ge	72	170219.64	0.9	104.0	Pulse	0.1000	3
H2	In	115	407738.75	0.3	104.8	Pulse	0.1000	3
He	Sc	45	49752.45	0.4	106.7	Pulse	0.1000	3
He	Ge	72	85632.53	1.1	105.5	Pulse	0.1000	3
He	In	115	91893.22	1.2	106.6	Pulse	0.1000	3
He	Tb	159	409037.13	1.1	102.6	Pulse	0.1000	3
He	Bi	209	313012.96	0.6	101.2	Pulse	0.1000	3

No Gas



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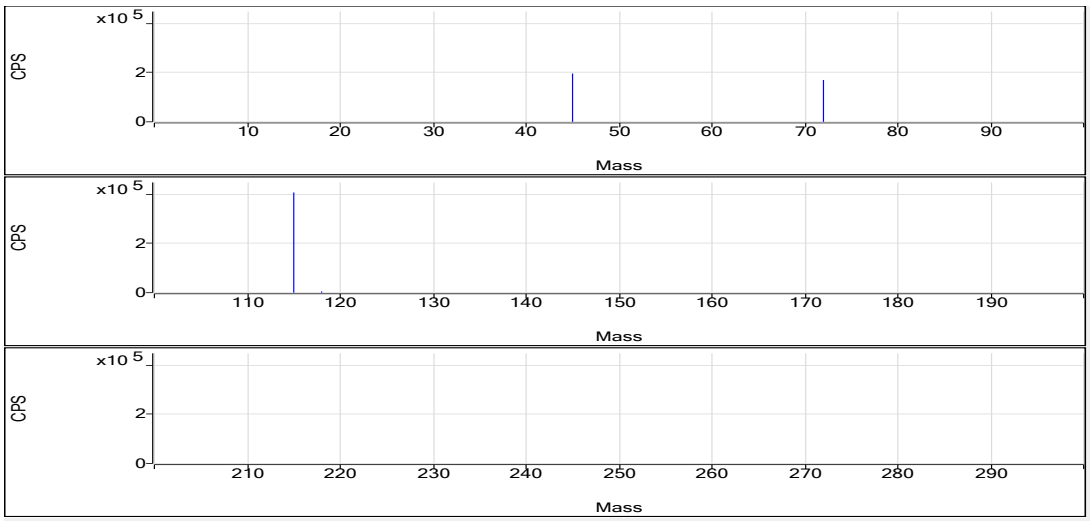
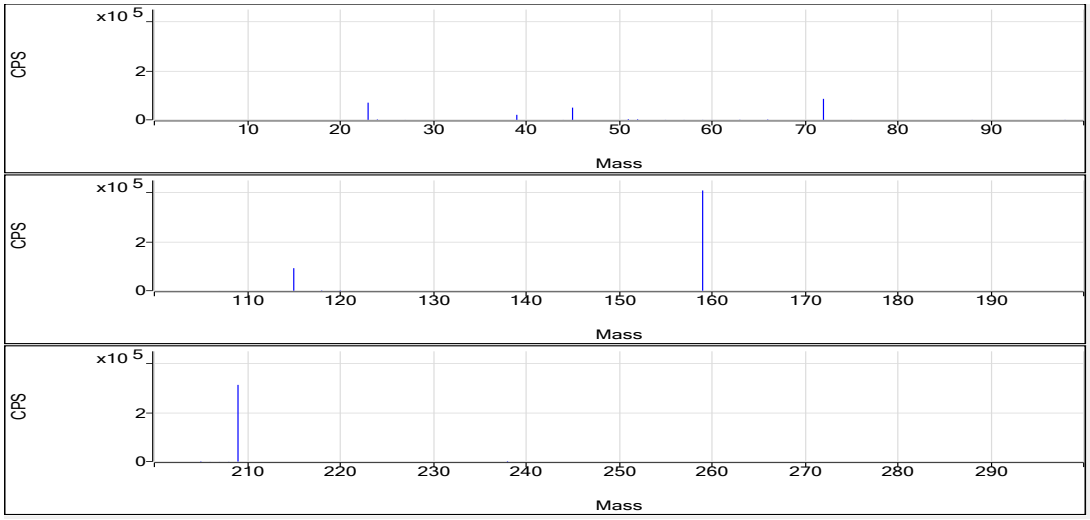


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.021	0	50.00	0.0008	4.685E-06
Be	9	1	No Gas	0.019	0	48.00	0.0008	4.685E-06
Be	9	1	No Gas	0.025	0	60.00	0.0008	4.685E-06
Se	78	2	H2	0.074	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.084	0	8.00	0.0004	1.219E-05
Se	78	2	H2	0.082	0	8.00	0.0004	1.219E-05
Na	23	3	He	312.083	1.4615	72980.98	0.0036	0.3452
Na	23	3	He	296.886	1.4071	70056.17	0.0036	0.3452
Na	23	3	He	282.048	1.3541	67073.42	0.0036	0.3452
Mg	24	3	He	18.142	0.036	1800.17	0.0018	0.003497
Mg	24	3	He	15.963	0.0321	1600.14	0.0018	0.003497
Mg	24	3	He	14.704	0.0299	1480.14	0.0018	0.003497
Al	27	3	He	2.323	0.002	100.00	0.0006	0.0006432
Al	27	3	He	1.99	0.0018	90.00	0.0006	0.0006432
Al	27	3	He	2.696	0.0022	110.00	0.0006	0.0006432
K	39	3	He	6.302	0.4024	20094.39	0.0012	0.3951
K	39	3	He	25.131	0.4243	21125.71	0.0012	0.3951
K	39	3	He	7.363	0.4036	19994.32	0.0012	0.3951
Ca	44	3	He	-4.617	0.0024	120.00	0.0001	0.002715
Ca	44	3	He	13.333	0.0036	180.01	0.0001	0.002715
Ca	44	3	He	10.616	0.0034	170.01	0.0001	0.002715
Ti	47	3	He	1.361	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	1.201	0.0511	2552.25	0.0219	0.02486
V	51	3	He	1.191	0.0509	2534.24	0.0219	0.02486
V	51	3	He	1.079	0.0485	2400.21	0.0219	0.02486
Cr	52	3	He	-0.098	0.0371	1850.20	0.0299	0.03997
Cr	52	3	He	0.208	0.0462	2300.26	0.0299	0.03997
Cr	52	3	He	-0.013	0.0396	1960.20	0.0299	0.03997
Mn	55	3	He	0.044	0.0032	160.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.248	0.0058	290.01	0.0128	0.002639
Mn	55	3	He	0.156	0.0046	230.01	0.0128	0.002639
Fe	57	3	He	4.435	0.004	200.01	0.0006	0.001429
Fe	57	3	He	2.381	0.0028	140.01	0.0006	0.001429
Fe	57	3	He	3.796	0.0036	180.01	0.0006	0.001429
Co	59	3	He	0.069	0.006	300.01	0.0563	0.002149
Co	59	3	He	0.062	0.0056	280.01	0.0563	0.002149
Co	59	3	He	0.051	0.005	250.01	0.0563	0.002149
Ni	60	3	He	-0.11	0.0019	160.01	0.0086	0.002834
Ni	60	3	He	0.078	0.0035	300.01	0.0086	0.002834
Ni	60	3	He	-0.088	0.0021	180.01	0.0086	0.002834
Cu	63	3	He	0.169	0.0091	770.05	0.0257	0.004757
Cu	63	3	He	0.074	0.0067	570.03	0.0257	0.004757
Cu	63	3	He	0.067	0.0065	560.03	0.0257	0.004757
Zn	66	3	He	3.433	0.0138	1170.09	0.0029	0.003818
Zn	66	3	He	4.028	0.0155	1330.12	0.0029	0.003818
Zn	66	3	He	4.121	0.0158	1370.11	0.0029	0.003818
As	75	3	He	0.263	0.0013	114.00	0.002	0.0008061
As	75	3	He	0.302	0.0014	122.00	0.002	0.0008061
As	75	3	He	0.497	0.0018	158.00	0.002	0.0008061
Sr	88	3	He	0.144	0.0023	210.01	0.009	0.0009645
Sr	88	3	He	0.171	0.0025	230.01	0.009	0.0009645
Sr	88	3	He	0.2	0.0028	250.01	0.009	0.0009645
Mo	98	3	He	0.125	0.003	280.02	0.0219	0.0002706
Mo	98	3	He	0.156	0.0037	340.02	0.0219	0.0002706
Mo	98	3	He	0.184	0.0043	390.02	0.0219	0.0002706
Ag	107	3	He	0.005	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.017	0.0014	130.01	0.0465	0.0006206
Ag	107	3	He	0.01	0.0011	100.00	0.0465	0.0006206
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.016	0.0001	8.00	0.0053	0
Sn	120	3	He	0.047	0.0172	1600.14	0.0158	0.01648
Sn	120	3	He	-0.072	0.0153	1410.13	0.0158	0.01648
Sn	120	3	He	0.171	0.0192	1740.18	0.0158	0.01648
Sb	121	3	He	0.069	0.0013	120.00	0.0149	0.0002698
Sb	121	3	He	0.084	0.0015	140.01	0.0149	0.0002698
Sb	121	3	He	0.078	0.0014	130.00	0.0149	0.0002698
Ba	137	3	He	0.086	0.0006	60.00	0.0048	0.0002317
Ba	137	3	He	0.02	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.089	0.0007	60.00	0.0048	0.0002317
Tl	205	3	He	0.156	0.004	1620.16	0.0247	0.0001339
Tl	205	3	He	0.132	0.0034	1410.13	0.0247	0.0001339
Tl	205	3	He	0.157	0.004	1630.16	0.0247	0.0001339
Pb	208	3	He	0.022	0.0018	430.02	0.0327	0.00107
Pb	208	3	He	0.024	0.0019	360.02	0.0327	0.00107
Pb	208	3	He	0.02	0.0017	310.02	0.0327	0.00107
U	238	3	He	0.11	0.0055	1700.18	0.0493	7.55E-05
U	238	3	He	0.13	0.0065	2040.25	0.0493	7.55E-05
U	238	3	He	0.142	0.0071	2230.27	0.0493	7.55E-05
Sc	45	1	No Gas			2446739.65		
Sc	45	1	No Gas			2510192.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2544208.24		
Ge	72	1	No Gas			1227385.37		
Ge	72	1	No Gas			1249041.86		
Ge	72	1	No Gas			1245431.78		
Sc	45	2	H2			197280.47		
Sc	45	2	H2			194668.18		
Sc	45	2	H2			197477.44		
Ge	72	2	H2			170070.84		
Ge	72	2	H2			168704.39		
Ge	72	2	H2			171883.69		
In	115	2	H2			407946.95		
In	115	2	H2			406300.27		
In	115	2	H2			408969.02		
Sc	45	3	He			49935.81		
Sc	45	3	He			49786.41		
Sc	45	3	He			49535.14		
Ge	72	3	He			84700.12		
Ge	72	3	He			85565.69		
Ge	72	3	He			86631.78		
In	115	3	He			92980.12		
In	115	3	He			91963.43		
In	115	3	He			90765.84		
Tb	159	3	He			405653.12		
Tb	159	3	He			414321.09		
Tb	159	3	He			407137.18		
Bi	209	3	He			310759.08		
Bi	209	3	He			313904.25		
Bi	209	3	He			314375.56		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

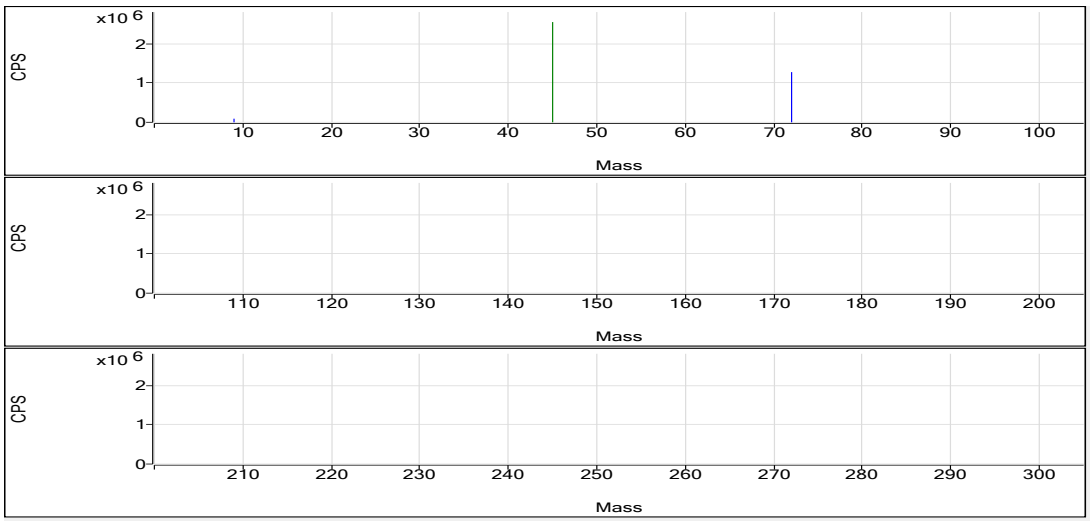
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.070	ppb	0.4	91664.32	0.0359	Pulse	0.5000	3
Se	78	72	H2	51.988	ppb	1.2	3759.16	0.0217	Pulse	1.5000	3
Na	23	45	He	5025.944	ppb	1.1	914228.14	18.3232	Pulse	0.1000	3
Mg	24	45	He	5064.140	ppb	1.2	453547.17	9.0902	Pulse	0.1000	3
Al	27	45	He	5039.906	ppb	1.4	147145.20	2.9492	Pulse	0.1000	3
K	39	45	He	5186.417	ppb	0.6	321012.98	6.4338	Pulse	0.1000	3
Ca	44	45	He	5182.653	ppb	1.2	17604.40	0.3528	Pulse	0.1000	3
Ti	47	45	He	5124.333	ppb	0.7	137289.93	2.7516	Pulse	0.1000	3
V	51	45	He	515.935	ppb	0.9	563950.94	11.3028	Pulse	0.5000	3
Cr	52	45	He	485.493	ppb	1.7	727245.33	14.5760	Pulse	0.1000	3
Mn	55	45	He	513.723	ppb	1.6	329088.14	6.5957	Pulse	0.1000	3
Fe	57	45	He	5106.899	ppb	2.0	148106.57	2.9685	Pulse	0.1000	3
Co	59	45	He	498.778	ppb	2.8	1400682.74	28.0745	Mix	0.1000	3
Ni	60	72	He	513.146	ppb	2.2	387261.39	4.4072	Pulse	0.1000	3
Cu	63	72	He	488.586	ppb	1.7	1102536.39	12.5473	Pulse	0.1000	3
Zn	66	72	He	516.872	ppb	1.9	132571.88	1.5088	Pulse	0.1000	3
As	75	72	He	525.049	ppb	1.8	94597.77	1.0766	Pulse	0.5000	3
Sr	88	115	He	50.563	ppb	2.0	41682.30	0.4545	Pulse	0.1000	3
Mo	98	115	He	49.846	ppb	1.6	100256.43	1.0932	Pulse	0.1000	3
Ag	107	115	He	50.046	ppb	0.9	213400.16	2.3271	Pulse	0.1000	3
Cd	111	115	He	50.284	ppb	2.4	24653.73	0.2689	Pulse	0.5000	3
Sn	120	115	He	50.436	ppb	1.8	74577.85	0.8133	Pulse	0.1000	3
Sb	121	115	He	51.458	ppb	1.1	70114.61	0.7646	Pulse	0.1000	3
Ba	137	115	He	517.559	ppb	1.0	227800.73	2.4842	Pulse	0.1000	3
Tl	205	159	He	51.357	ppb	0.9	519485.37	1.2700	Pulse	0.1000	3
Pb	208	159	He	51.534	ppb	0.9	690358.55	1.6878	Pulse	0.1000	3
U	238	209	He	50.372	ppb	0.6	783931.21	2.4814	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2552680.74	0.4	106.4	Analog	0.1000	3
No Gas	Ge	72	1277806.73	1.1	110.8	Pulse	0.1000	3
H2	Sc	45	196475.32	1.1	105.1	Pulse	0.1000	3
H2	Ge	72	173290.25	1.0	105.8	Pulse	0.1000	3
H2	In	115	406067.71	1.0	104.4	Pulse	0.1000	3
He	Sc	45	49896.12	0.5	107.0	Pulse	0.1000	3
He	Ge	72	87886.83	1.7	108.2	Pulse	0.1000	3
He	In	115	91703.99	0.5	106.4	Pulse	0.1000	3
He	Tb	159	409064.86	1.1	102.6	Pulse	0.1000	3
He	Bi	209	315933.09	0.6	102.1	Pulse	0.1000	3

No Gas



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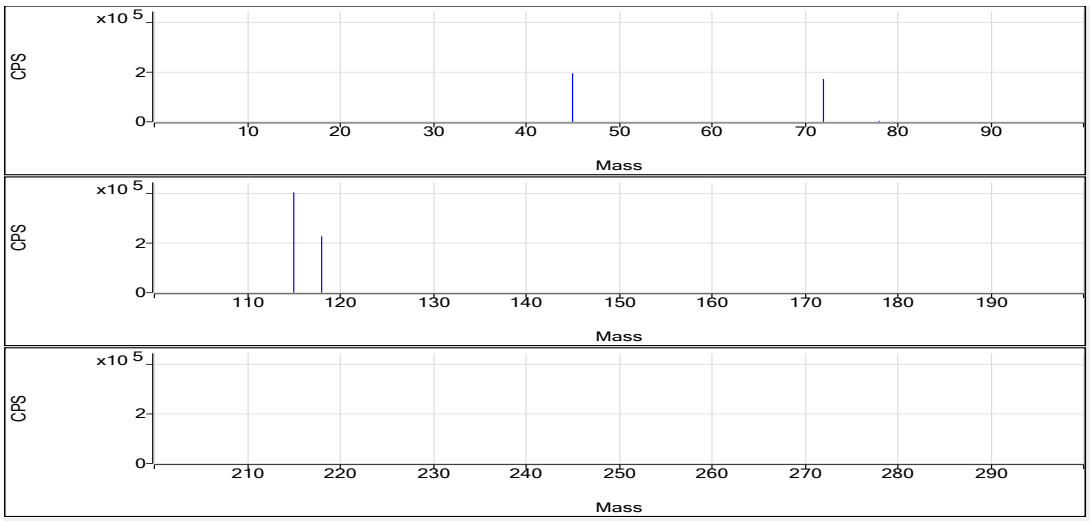
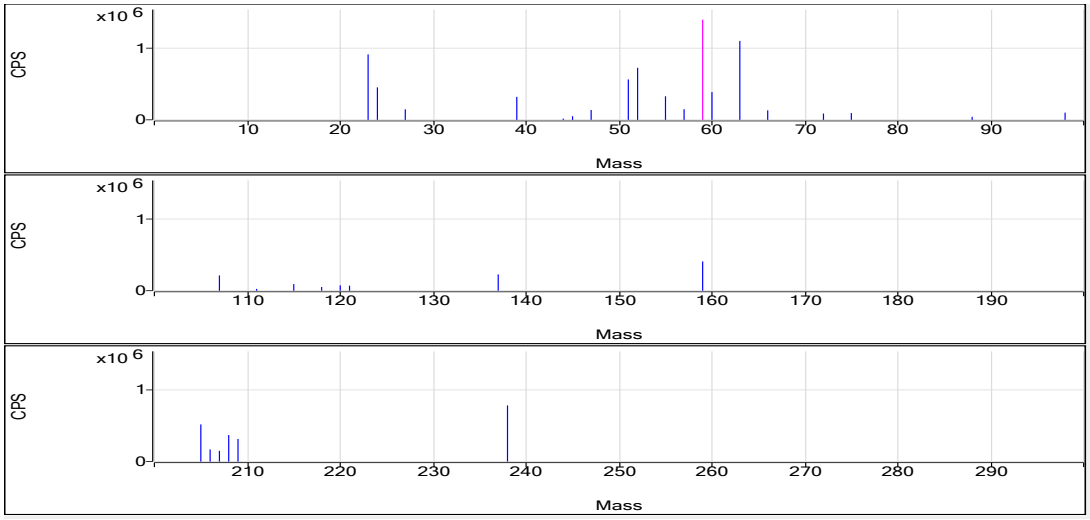


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.099	0.0359	91487.38	0.0008	4.685E-06
Be	9	1	No Gas	47.237	0.036	92412.87	0.0008	4.685E-06
Be	9	1	No Gas	46.873	0.0358	91092.70	0.0008	4.685E-06
Se	78	2	H2	51.615	0.0215	3736.49	0.0004	1.219E-05
Se	78	2	H2	51.634	0.0215	3770.50	0.0004	1.219E-05
Se	78	2	H2	52.714	0.022	3770.50	0.0004	1.219E-05
Na	23	3	He	5040.526	18.3754	918146.94	0.0036	0.3452
Na	23	3	He	5073.093	18.4919	917659.67	0.0036	0.3452
Na	23	3	He	4964.213	18.1024	906877.80	0.0036	0.3452
Mg	24	3	He	5055.187	9.0741	453399.56	0.0018	0.003497
Mg	24	3	He	5131.276	9.2107	457079.49	0.0018	0.003497
Mg	24	3	He	5005.956	8.9858	450162.45	0.0018	0.003497
Al	27	3	He	5031.29	2.9441	147106.57	0.0006	0.0006432
Al	27	3	He	5114.313	2.9927	148512.65	0.0006	0.0006432
Al	27	3	He	4974.114	2.9107	145816.38	0.0006	0.0006432
K	39	3	He	5181.745	6.4283	321198.08	0.0012	0.3951
K	39	3	He	5221.646	6.4748	321310.76	0.0012	0.3951
K	39	3	He	5155.861	6.3982	320530.11	0.0012	0.3951
Ca	44	3	He	5132.93	0.3495	17460.89	0.0001	0.002715
Ca	44	3	He	5159.511	0.3512	17430.79	0.0001	0.002715
Ca	44	3	He	5255.519	0.3577	17921.51	0.0001	0.002715
Ti	47	3	He	5109.62	2.7437	137091.00	0.0005	7.003E-05
Ti	47	3	He	5164.524	2.7732	137618.05	0.0005	7.003E-05
Ti	47	3	He	5098.856	2.7379	137160.74	0.0005	7.003E-05
V	51	3	He	517.334	11.3334	566284.69	0.0219	0.02486
V	51	3	He	519.675	11.3845	564958.25	0.0219	0.02486
V	51	3	He	510.797	11.1905	560609.88	0.0219	0.02486
Cr	52	3	He	484.999	14.5612	727567.88	0.0299	0.03997
Cr	52	3	He	494.196	14.8366	736265.93	0.0299	0.03997
Cr	52	3	He	477.284	14.3302	717902.18	0.0299	0.03997
Mn	55	3	He	518.681	6.6593	332741.09	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	518.099	6.6519	330098.75	0.0128	0.002639
Mn	55	3	He	504.39	6.4759	324424.59	0.0128	0.002639
Fe	57	3	He	5091.647	2.9596	147881.36	0.0006	0.001429
Fe	57	3	He	5215.969	3.0319	150456.19	0.0006	0.001429
Fe	57	3	He	5013.08	2.914	145982.16	0.0006	0.001429
Co	59	3	He	494.664	27.843	1391206.39	0.0563	0.002149
Co	59	3	He	514.276	28.9468	1436486.23	0.0563	0.002149
Co	59	3	He	487.394	27.4338	1374355.60	0.0563	0.002149
Ni	60	3	He	501.272	4.3053	385541.21	0.0086	0.002834
Ni	60	3	He	523.914	4.4997	392990.15	0.0086	0.002834
Ni	60	3	He	514.251	4.4167	383252.81	0.0086	0.002834
Cu	63	3	He	479.297	12.3088	1102252.95	0.0257	0.004757
Cu	63	3	He	491.717	12.6277	1102870.69	0.0257	0.004757
Cu	63	3	He	494.745	12.7054	1102485.53	0.0257	0.004757
Zn	66	3	He	505.976	1.477	132267.60	0.0029	0.003818
Zn	66	3	He	520.325	1.5188	132648.84	0.0029	0.003818
Zn	66	3	He	524.315	1.5304	132799.19	0.0029	0.003818
As	75	3	He	514.238	1.0544	94422.55	0.002	0.0008061
As	75	3	He	531.708	1.0902	95215.91	0.002	0.0008061
As	75	3	He	529.202	1.0851	94154.86	0.002	0.0008061
Sr	88	3	He	51.725	0.4649	42845.33	0.009	0.0009645
Sr	88	3	He	49.961	0.4491	40960.13	0.009	0.0009645
Sr	88	3	He	50.003	0.4495	41241.43	0.009	0.0009645
Mo	98	3	He	50.74	1.1128	102551.59	0.0219	0.0002706
Mo	98	3	He	49.306	1.0814	98624.94	0.0219	0.0002706
Mo	98	3	He	49.491	1.0854	99592.76	0.0219	0.0002706
Ag	107	3	He	49.793	2.3153	213369.33	0.0465	0.0006206
Ag	107	3	He	50.592	2.3525	214557.34	0.0465	0.0006206
Ag	107	3	He	49.754	2.3135	212273.81	0.0465	0.0006206
Cd	111	3	He	49.29	0.2635	24287.19	0.0053	0
Cd	111	3	He	51.591	0.2759	25158.58	0.0053	0
Cd	111	3	He	49.971	0.2672	24515.43	0.0053	0
Sn	120	3	He	49.631	0.8006	73777.39	0.0158	0.01648
Sn	120	3	He	51.408	0.8287	75575.93	0.0158	0.01648
Sn	120	3	He	50.269	0.8107	74380.23	0.0158	0.01648
Sb	121	3	He	51.082	0.759	69947.09	0.0149	0.0002698
Sb	121	3	He	52.134	0.7746	70650.04	0.0149	0.0002698
Sb	121	3	He	51.159	0.7602	69746.70	0.0149	0.0002698
Ba	137	3	He	512.959	2.4621	226893.59	0.0048	0.0002317
Ba	137	3	He	522.856	2.5096	228884.23	0.0048	0.0002317
Ba	137	3	He	516.861	2.4808	227624.37	0.0048	0.0002317
Tl	205	3	He	50.89	1.2585	521236.44	0.0247	0.0001339
Tl	205	3	He	51.824	1.2815	521580.93	0.0247	0.0001339
Tl	205	3	He	51.356	1.27	515638.74	0.0247	0.0001339
Pb	208	3	He	50.975	1.6695	370227.03	0.0327	0.00107
Pb	208	3	He	51.881	1.6991	370435.31	0.0327	0.00107
Pb	208	3	He	51.746	1.6947	370827.81	0.0327	0.00107
U	238	3	He	50.013	2.4637	784014.21	0.0493	7.55E-05
U	238	3	He	50.582	2.4917	785267.80	0.0493	7.55E-05
U	238	3	He	50.521	2.4887	782511.63	0.0493	7.55E-05
Sc	45	1	No Gas			2546205.27		
Sc	45	1	No Gas			2564425.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2547411.37		
Ge	72	1	No Gas			1273369.75		
Ge	72	1	No Gas			1293756.39		
Ge	72	1	No Gas			1266294.04		
Sc	45	2	H2			199066.05		
Sc	45	2	H2			195305.41		
Sc	45	2	H2			195054.49		
Ge	72	2	H2			173474.22		
Ge	72	2	H2			174990.08		
Ge	72	2	H2			171406.44		
In	115	2	H2			410840.85		
In	115	2	H2			404200.97		
In	115	2	H2			403161.32		
Sc	45	3	He			49966.18		
Sc	45	3	He			49625.06		
Sc	45	3	He			50097.13		
Ge	72	3	He			89549.89		
Ge	72	3	He			87337.61		
Ge	72	3	He			86773.00		
In	115	3	He			92567.08		
In	115	3	He			91612.23		
In	115	3	He			92143.95		
Tb	159	3	He			414182.88		
Tb	159	3	He			406993.35		
Tb	159	3	He			406018.35		
Bi	209	3	He			318225.44		
Bi	209	3	He			315150.52		
Bi	209	3	He			314423.30		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 4:28:25 PM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

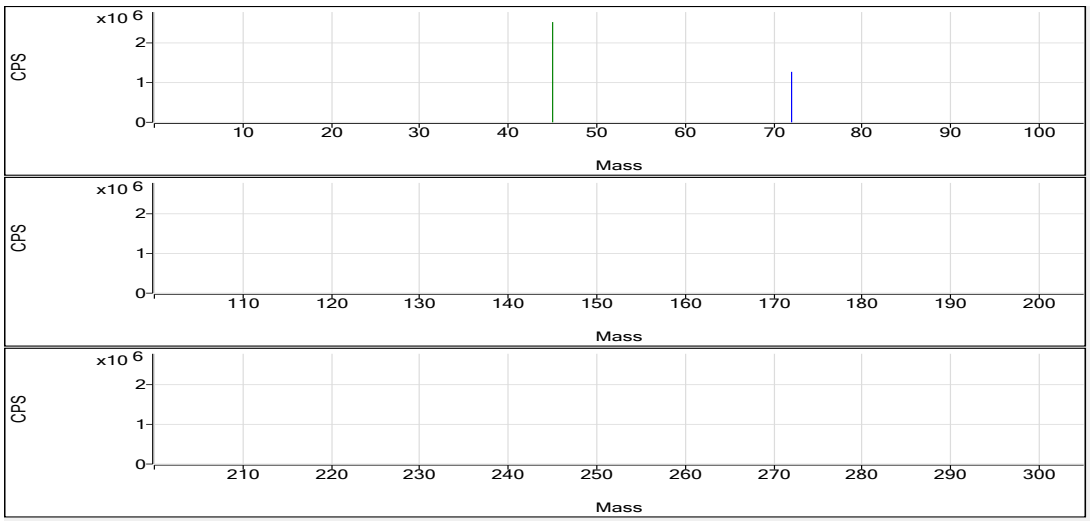
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.026	ppb	12.3	60.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.081	ppb	61.0	7.55	0.0000	Pulse	1.5000	3
Na	23	45	He	181.191	ppb	4.1	49296.23	0.9933	Pulse	0.1000	3
Mg	24	45	He	4.411	ppb	18.4	566.70	0.0114	Pulse	0.1000	3
Al	27	45	He	1.659	ppb	42.6	80.00	0.0016	Pulse	0.1000	3
K	39	45	He	-3.335	ppb	N/A	19416.81	0.3912	Pulse	0.1000	3
Ca	44	45	He	12.534	ppb	144.0	176.67	0.0036	Pulse	0.1000	3
Ti	47	45	He	0.995	ppb	0.7	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	0.929	ppb	6.9	2241.52	0.0452	Pulse	0.5000	3
Cr	52	45	He	-0.014	ppb	N/A	1963.53	0.0396	Pulse	0.1000	3
Mn	55	45	He	0.229	ppb	46.5	276.68	0.0056	Pulse	0.1000	3
Fe	57	45	He	2.053	ppb	46.0	130.01	0.0026	Pulse	0.1000	3
Co	59	45	He	0.091	ppb	33.8	360.02	0.0072	Pulse	0.1000	3
Ni	60	72	He	-0.040	ppb	N/A	216.68	0.0025	Pulse	0.1000	3
Cu	63	72	He	0.130	ppb	22.8	703.37	0.0081	Pulse	0.1000	3
Zn	66	72	He	3.590	ppb	19.0	1243.43	0.0143	Pulse	0.1000	3
As	75	72	He	0.328	ppb	21.5	128.67	0.0015	Pulse	0.5000	3
Sr	88	115	He	0.045	ppb	18.7	123.34	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.062	ppb	29.6	146.67	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	121.3	70.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	42.9	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.172	ppb	32.1	1730.17	0.0192	Pulse	0.1000	3
Sb	121	115	He	0.039	ppb	106.3	76.67	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.044	ppb	1.7	40.00	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.098	ppb	13.1	1036.75	0.0026	Pulse	0.1000	3
Pb	208	159	He	0.018	ppb	36.5	676.70	0.0017	Pulse	0.1000	3
U	238	209	He	0.056	ppb	13.8	893.40	0.0028	Pulse	0.1000	3

ISTD Table:

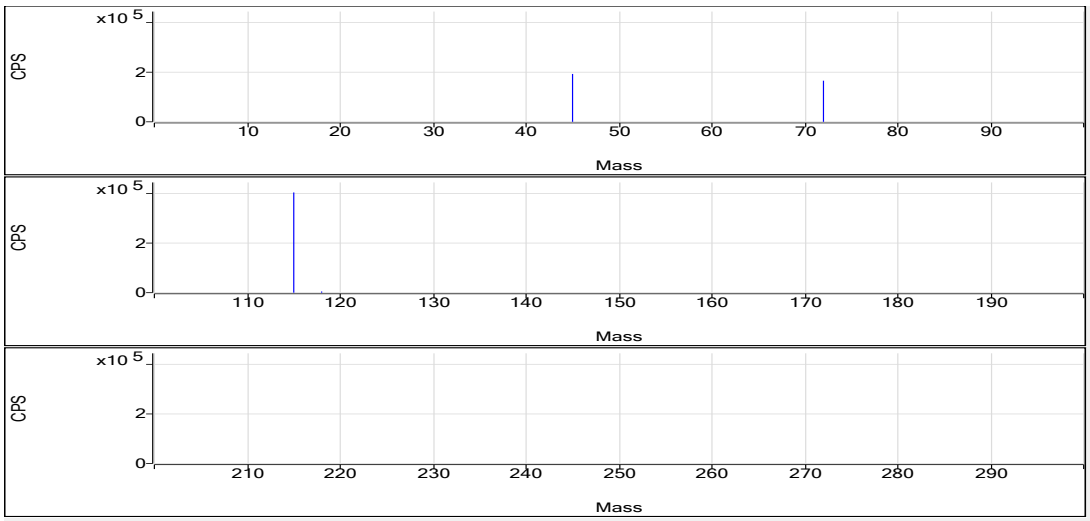
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2510140.85	1.2	104.6	Analog	0.1000	3
No Gas	Ge	72	1263642.25	0.8	109.6	Pulse	0.1000	3
H2	Sc	45	192272.13	1.2	102.8	Pulse	0.1000	3
H2	Ge	72	165168.66	1.9	100.9	Pulse	0.1000	3
H2	In	115	402591.13	0.8	103.5	Pulse	0.1000	3
He	Sc	45	49631.97	0.7	106.4	Pulse	0.1000	3
He	Ge	72	86954.59	2.3	107.1	Pulse	0.1000	3
He	In	115	90127.55	0.8	104.6	Pulse	0.1000	3
He	Tb	159	405462.31	0.8	101.7	Pulse	0.1000	3
He	Bi	209	314326.19	0.6	101.6	Pulse	0.1000	3

No Gas

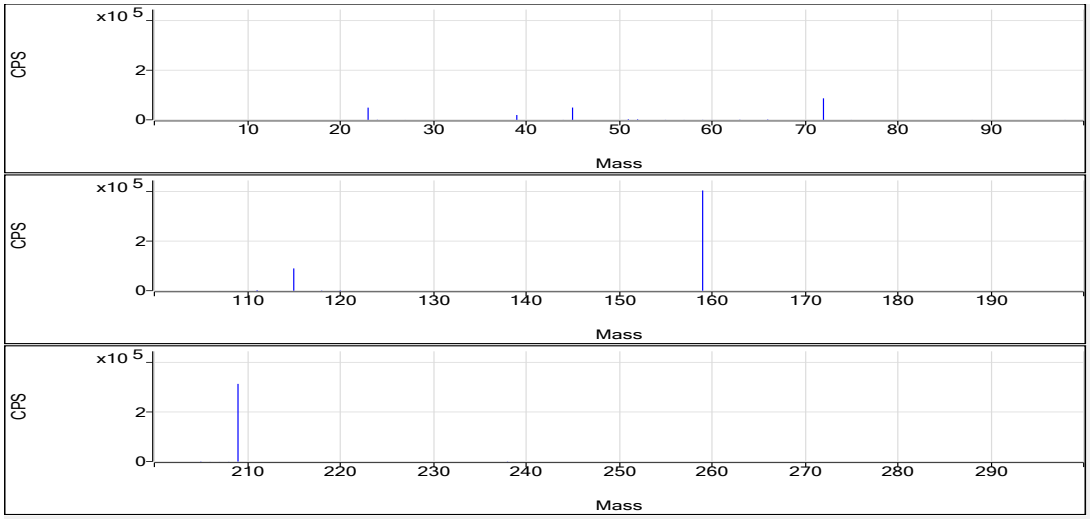


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.024	0	56.00	0.0008	4.685E-06
Be	9	1	No Gas	0.029	0	68.00	0.0008	4.685E-06
Be	9	1	No Gas	0.024	0	58.00	0.0008	4.685E-06
Se	78	2	H2	0.049	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.138	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.056	0	6.00	0.0004	1.219E-05
Na	23	3	He	173.681	0.9664	48269.42	0.0036	0.3452
Na	23	3	He	188.711	1.0202	50657.43	0.0036	0.3452
Na	23	3	He	181.181	0.9933	48961.84	0.0036	0.3452
Mg	24	3	He	4.97	0.0124	620.04	0.0018	0.003497
Mg	24	3	He	4.786	0.0121	600.03	0.0018	0.003497
Mg	24	3	He	3.478	0.0097	480.02	0.0018	0.003497
Al	27	3	He	0.954	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	1.654	0.0016	80.00	0.0006	0.0006432
Al	27	3	He	2.368	0.002	100.00	0.0006	0.0006432
K	39	3	He	6.574	0.4027	20114.42	0.0012	0.3951
K	39	3	He	-9.757	0.3837	19052.96	0.0012	0.3951
K	39	3	He	-6.822	0.3871	19083.06	0.0012	0.3951
Ca	44	3	He	-4.624	0.0024	120.00	0.0001	0.002715
Ca	44	3	He	31.362	0.0048	240.01	0.0001	0.002715
Ca	44	3	He	10.864	0.0034	170.01	0.0001	0.002715
Ti	47	3	He	0.988	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.995	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	1.003	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	0.856	0.0436	2176.18	0.0219	0.02486
V	51	3	He	0.972	0.0461	2290.20	0.0219	0.02486
V	51	3	He	0.958	0.0458	2258.19	0.0219	0.02486
Cr	52	3	He	-0.018	0.0394	1970.20	0.0299	0.03997
Cr	52	3	He	-0.01	0.0397	1970.19	0.0299	0.03997
Cr	52	3	He	-0.014	0.0396	1950.20	0.0299	0.03997
Mn	55	3	He	0.106	0.004	200.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.297	0.0064	320.02	0.0128	0.002639
Mn	55	3	He	0.284	0.0063	310.01	0.0128	0.002639
Fe	57	3	He	1.676	0.0024	120.01	0.0006	0.001429
Fe	57	3	He	1.354	0.0022	110.00	0.0006	0.001429
Fe	57	3	He	3.128	0.0032	160.01	0.0006	0.001429
Co	59	3	He	0.104	0.008	400.02	0.0563	0.002149
Co	59	3	He	0.112	0.0085	420.02	0.0563	0.002149
Co	59	3	He	0.056	0.0053	260.01	0.0563	0.002149
Ni	60	3	He	-0.017	0.0027	240.01	0.0086	0.002834
Ni	60	3	He	-0.017	0.0027	230.01	0.0086	0.002834
Ni	60	3	He	-0.086	0.0021	180.01	0.0086	0.002834
Cu	63	3	He	0.116	0.0077	690.04	0.0257	0.004757
Cu	63	3	He	0.11	0.0076	650.03	0.0257	0.004757
Cu	63	3	He	0.164	0.009	770.04	0.0257	0.004757
Zn	66	3	He	4.343	0.0165	1470.13	0.0029	0.003818
Zn	66	3	He	3.018	0.0126	1080.08	0.0029	0.003818
Zn	66	3	He	3.409	0.0137	1180.09	0.0029	0.003818
As	75	3	He	0.405	0.0016	146.00	0.002	0.0008061
As	75	3	He	0.313	0.0014	124.00	0.002	0.0008061
As	75	3	He	0.266	0.0014	116.00	0.002	0.0008061
Sr	88	3	He	0.04	0.0013	120.00	0.009	0.0009645
Sr	88	3	He	0.04	0.0013	120.01	0.009	0.0009645
Sr	88	3	He	0.055	0.0015	130.00	0.009	0.0009645
Mo	98	3	He	0.043	0.0012	110.00	0.0219	0.0002706
Mo	98	3	He	0.063	0.0017	150.01	0.0219	0.0002706
Mo	98	3	He	0.08	0.002	180.01	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.008	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.222	0.02	1810.17	0.0158	0.01648
Sn	120	3	He	0.181	0.0193	1750.18	0.0158	0.01648
Sn	120	3	He	0.113	0.0183	1630.15	0.0158	0.01648
Sb	121	3	He	0.012	0.0004	40.00	0.0149	0.0002698
Sb	121	3	He	0.019	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.087	0.0016	140.01	0.0149	0.0002698
Ba	137	3	He	0.044	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	0.044	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	0.045	0.0004	40.00	0.0048	0.0002317
Tl	205	3	He	0.11	0.0029	1170.10	0.0247	0.0001339
Tl	205	3	He	0.099	0.0026	1040.08	0.0247	0.0001339
Tl	205	3	He	0.085	0.0022	900.07	0.0247	0.0001339
Pb	208	3	He	0.011	0.0014	330.02	0.0327	0.00107
Pb	208	3	He	0.022	0.0018	340.01	0.0327	0.00107
Pb	208	3	He	0.022	0.0018	390.02	0.0327	0.00107
U	238	3	He	0.052	0.0027	840.06	0.0493	7.55E-05
U	238	3	He	0.051	0.0026	810.05	0.0493	7.55E-05
U	238	3	He	0.065	0.0033	1030.08	0.0493	7.55E-05
Sc	45	1	No Gas			2475853.09		
Sc	45	1	No Gas			2526662.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2527907.15		
Ge	72	1	No Gas			1251704.20		
Ge	72	1	No Gas			1267283.11		
Ge	72	1	No Gas			1271939.43		
Sc	45	2	H2			189521.25		
Sc	45	2	H2			193844.20		
Sc	45	2	H2			193450.93		
Ge	72	2	H2			163910.70		
Ge	72	2	H2			162900.83		
Ge	72	2	H2			168694.45		
In	115	2	H2			399009.37		
In	115	2	H2			403049.21		
In	115	2	H2			405714.80		
Sc	45	3	He			49946.34		
Sc	45	3	He			49655.11		
Sc	45	3	He			49294.45		
Ge	72	3	He			89299.14		
Ge	72	3	He			85696.38		
Ge	72	3	He			85868.26		
In	115	3	He			90574.73		
In	115	3	He			90544.60		
In	115	3	He			89286.56		
Tb	159	3	He			409157.10		
Tb	159	3	He			402999.29		
Tb	159	3	He			404230.54		
Bi	209	3	He			316319.14		
Bi	209	3	He			312725.91		
Bi	209	3	He			313933.51		

Quantitation Report

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Sample Type	Sample
Comment	A12
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

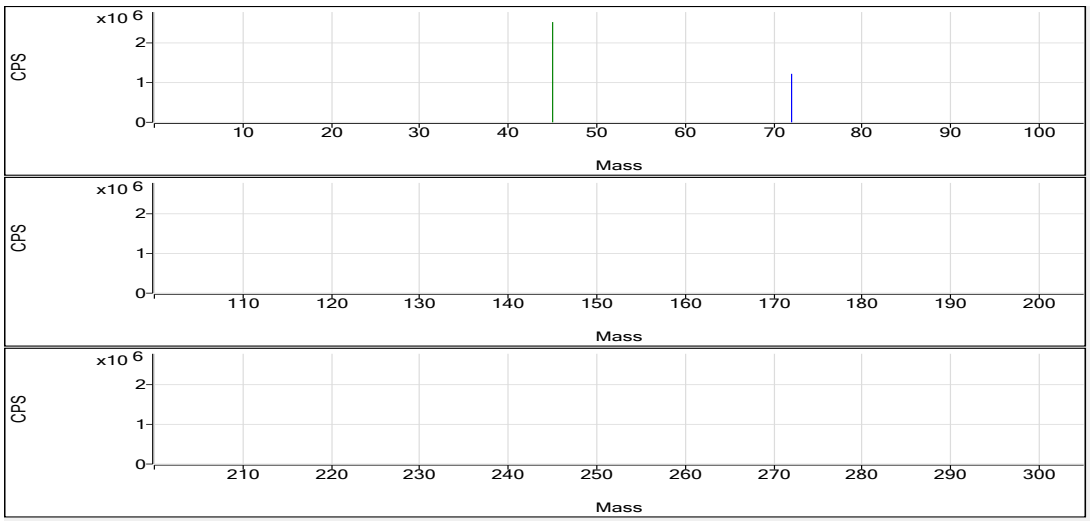
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	37.3	36.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.020	ppb	110.8	3.55	0.0000	Pulse	1.5000	3
Na	23	45	He	164.248	ppb	2.8	46908.25	0.9327	Pulse	0.1000	3
Mg	24	45	He	5.961	ppb	4.4	713.37	0.0142	Pulse	0.1000	3
Al	27	45	He	0.947	ppb	98.6	60.00	0.0012	Pulse	0.1000	3
K	39	45	He	41.278	ppb	57.1	22264.27	0.4431	Pulse	0.1000	3
Ca	44	45	He	4.037	ppb	208.4	150.01	0.0030	Pulse	0.1000	3
Ti	47	45	He	0.617	ppb	106.7	20.00	0.0004	Pulse	0.1000	3
V	51	45	He	0.601	ppb	24.1	1908.80	0.0380	Pulse	0.5000	3
Cr	52	45	He	-0.036	ppb	N/A	1953.53	0.0389	Pulse	0.1000	3
Mn	55	45	He	0.172	ppb	57.2	243.34	0.0048	Pulse	0.1000	3
Fe	57	45	He	2.124	ppb	96.8	133.34	0.0027	Pulse	0.1000	3
Co	59	45	He	0.035	ppb	68.1	206.68	0.0041	Pulse	0.1000	3
Ni	60	72	He	0.037	ppb	172.8	280.02	0.0031	Pulse	0.1000	3
Cu	63	72	He	0.326	ppb	27.0	1170.09	0.0131	Pulse	0.1000	3
Zn	66	72	He	2.661	ppb	6.3	1030.07	0.0116	Pulse	0.1000	3
As	75	72	He	0.147	ppb	66.4	98.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.026	ppb	350.1	110.00	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.042	ppb	2.1	110.00	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.120	ppb	4.8	570.03	0.0062	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.200	ppb	N/A	1226.77	0.0133	Pulse	0.1000	3
Sb	121	115	He	0.050	ppb	38.9	93.33	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.110	ppb	22.2	70.00	0.0008	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	32.3	283.35	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	28.8	550.03	0.0014	Pulse	0.1000	3
U	238	209	He	0.015	ppb	16.4	253.34	0.0008	Pulse	0.1000	3

ISTD Table:

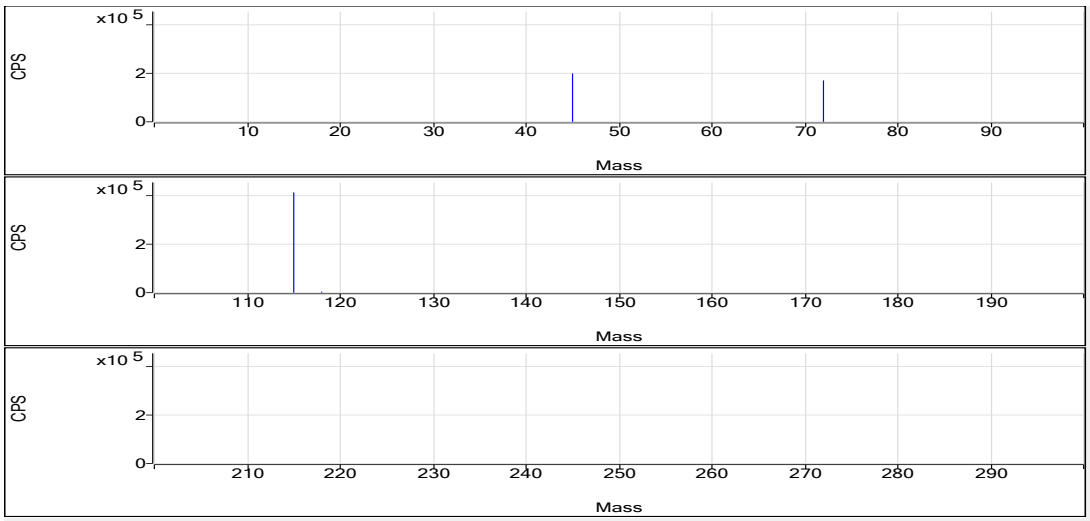
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2537507.93	0.8	105.8	Analog	0.1000	3
No Gas	Ge	72	1227108.37	0.7	106.4	Pulse	0.1000	3
H2	Sc	45	199508.15	0.5	106.7	Pulse	0.1000	3
H2	Ge	72	170805.37	2.4	104.3	Pulse	0.1000	3
H2	In	115	413373.33	0.4	106.2	Pulse	0.1000	3
He	Sc	45	50297.67	2.9	107.8	Pulse	0.1000	3
He	Ge	72	89039.89	1.0	109.7	Pulse	0.1000	3
He	In	115	92047.25	1.6	106.8	Pulse	0.1000	3
He	Tb	159	406230.70	0.6	101.9	Pulse	0.1000	3
He	Bi	209	318788.11	0.7	103.1	Pulse	0.1000	3

No Gas

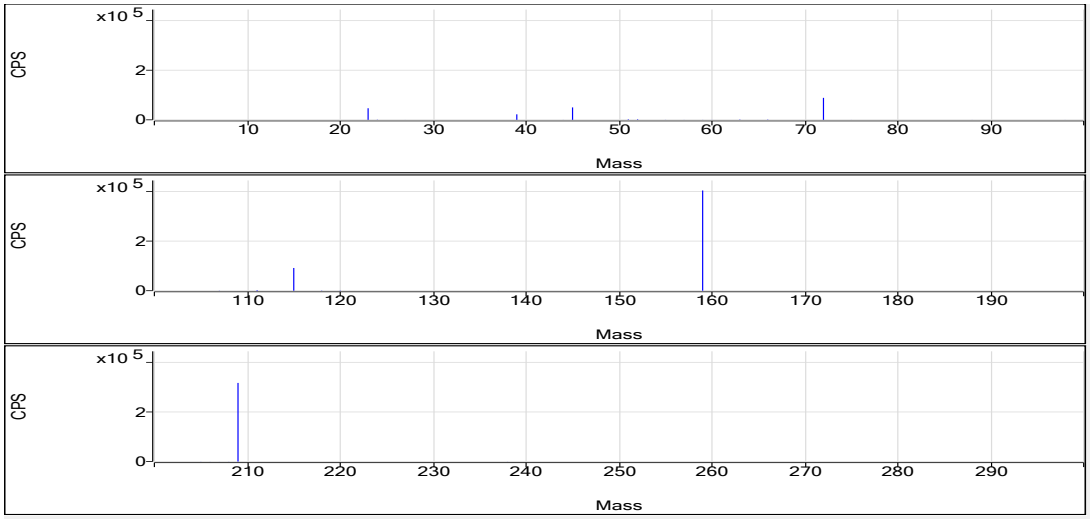


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.014	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	26.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	44.00	0.0008	4.685E-06
Se	78	2	H2	0.019	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.044	0	5.33	0.0004	1.219E-05
Se	78	2	H2	-0.001	0	2.00	0.0004	1.219E-05
Na	23	3	He	163.257	0.9291	48299.33	0.0036	0.3452
Na	23	3	He	169.321	0.9508	46984.93	0.0036	0.3452
Na	23	3	He	160.166	0.9181	45440.50	0.0036	0.3452
Mg	24	3	He	5.664	0.0137	710.04	0.0018	0.003497
Mg	24	3	He	6.172	0.0146	720.04	0.0018	0.003497
Mg	24	3	He	6.046	0.0143	710.04	0.0018	0.003497
Al	27	3	He	0.545	0.001	50.00	0.0006	0.0006432
Al	27	3	He	2.014	0.0018	90.00	0.0006	0.0006432
Al	27	3	He	0.282	0.0008	40.00	0.0006	0.0006432
K	39	3	He	17.179	0.4151	21576.57	0.0012	0.3951
K	39	3	He	64.259	0.4699	23219.26	0.0012	0.3951
K	39	3	He	42.394	0.4444	21996.99	0.0012	0.3951
Ca	44	3	He	-0.319	0.0027	140.01	0.0001	0.002715
Ca	44	3	He	13.736	0.0036	180.01	0.0001	0.002715
Ca	44	3	He	-1.306	0.0026	130.01	0.0001	0.002715
Ti	47	3	He	0.228	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.377	0.0008	40.01	0.0005	7.003E-05
Ti	47	3	He	0.246	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.441	0.0345	1794.12	0.0219	0.02486
V	51	3	He	0.638	0.0388	1918.14	0.0219	0.02486
V	51	3	He	0.724	0.0407	2014.15	0.0219	0.02486
Cr	52	3	He	-0.127	0.0362	1880.19	0.0299	0.03997
Cr	52	3	He	0.118	0.0435	2150.24	0.0299	0.03997
Cr	52	3	He	-0.1	0.037	1830.17	0.0299	0.03997
Mn	55	3	He	0.139	0.0044	230.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.094	0.0038	190.01	0.0128	0.002639
Mn	55	3	He	0.282	0.0063	310.01	0.0128	0.002639
Fe	57	3	He	0.852	0.0019	100.00	0.0006	0.001429
Fe	57	3	He	1.024	0.002	100.00	0.0006	0.001429
Fe	57	3	He	4.496	0.004	200.01	0.0006	0.001429
Co	59	3	He	0.023	0.0035	180.01	0.0563	0.002149
Co	59	3	He	0.062	0.0057	280.01	0.0563	0.002149
Co	59	3	He	0.019	0.0032	160.01	0.0563	0.002149
Ni	60	3	He	0.05	0.0033	290.02	0.0086	0.002834
Ni	60	3	He	0.092	0.0036	320.02	0.0086	0.002834
Ni	60	3	He	-0.032	0.0026	230.01	0.0086	0.002834
Cu	63	3	He	0.236	0.0108	960.07	0.0257	0.004757
Cu	63	3	He	0.331	0.0132	1170.10	0.0257	0.004757
Cu	63	3	He	0.412	0.0153	1380.11	0.0257	0.004757
Zn	66	3	He	2.48	0.011	980.07	0.0029	0.003818
Zn	66	3	He	2.694	0.0117	1030.07	0.0029	0.003818
Zn	66	3	He	2.81	0.012	1080.08	0.0029	0.003818
As	75	3	He	0.178	0.0012	104.00	0.002	0.0008061
As	75	3	He	0.038	0.0009	78.00	0.002	0.0008061
As	75	3	He	0.225	0.0013	114.00	0.002	0.0008061
Sr	88	3	He	-0.072	0.0003	30.00	0.009	0.0009645
Sr	88	3	He	0.11	0.0019	180.01	0.009	0.0009645
Sr	88	3	He	0.04	0.0013	120.00	0.009	0.0009645
Mo	98	3	He	0.041	0.0012	110.00	0.0219	0.0002706
Mo	98	3	He	0.042	0.0012	110.00	0.0219	0.0002706
Mo	98	3	He	0.043	0.0012	110.00	0.0219	0.0002706
Ag	107	3	He	0.113	0.0059	550.03	0.0465	0.0006206
Ag	107	3	He	0.124	0.0064	590.04	0.0465	0.0006206
Ag	107	3	He	0.122	0.0063	570.03	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.08	0.0152	1420.15	0.0158	0.01648
Sn	120	3	He	-0.323	0.0114	1050.07	0.0158	0.01648
Sn	120	3	He	-0.196	0.0134	1210.10	0.0158	0.01648
Sb	121	3	He	0.032	0.0007	70.00	0.0149	0.0002698
Sb	121	3	He	0.047	0.001	90.00	0.0149	0.0002698
Sb	121	3	He	0.071	0.0013	120.00	0.0149	0.0002698
Ba	137	3	He	0.108	0.0007	70.00	0.0048	0.0002317
Ba	137	3	He	0.087	0.0006	60.00	0.0048	0.0002317
Ba	137	3	He	0.136	0.0009	80.00	0.0048	0.0002317
Tl	205	3	He	0.031	0.0009	370.02	0.0247	0.0001339
Tl	205	3	He	0.018	0.0006	240.01	0.0247	0.0001339
Tl	205	3	He	0.019	0.0006	240.01	0.0247	0.0001339
Pb	208	3	He	0.006	0.0013	260.02	0.0327	0.00107
Pb	208	3	He	0.009	0.0014	290.01	0.0327	0.00107
Pb	208	3	He	0.011	0.0014	290.01	0.0327	0.00107
U	238	3	He	0.016	0.0009	280.01	0.0493	7.55E-05
U	238	3	He	0.012	0.0007	210.01	0.0493	7.55E-05
U	238	3	He	0.016	0.0008	270.01	0.0493	7.55E-05
Sc	45	1	No Gas			2521449.02		
Sc	45	1	No Gas			2529606.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2561468.71		
Ge	72	1	No Gas			1220242.01		
Ge	72	1	No Gas			1224928.89		
Ge	72	1	No Gas			1236154.20		
Sc	45	2	H2			200656.56		
Sc	45	2	H2			198628.26		
Sc	45	2	H2			199239.63		
Ge	72	2	H2			166461.36		
Ge	72	2	H2			174393.57		
Ge	72	2	H2			171561.17		
In	115	2	H2			414869.80		
In	115	2	H2			411531.24		
In	115	2	H2			413718.94		
Sc	45	3	He			51983.09		
Sc	45	3	He			49414.79		
Sc	45	3	He			49495.12		
Ge	72	3	He			88795.16		
Ge	72	3	He			88322.36		
Ge	72	3	He			90002.16		
In	115	3	He			93343.06		
In	115	3	He			92366.74		
In	115	3	He			90453.09		
Tb	159	3	He			407992.77		
Tb	159	3	He			407387.38		
Tb	159	3	He			403311.95		
Bi	209	3	He			317105.44		
Bi	209	3	He			317986.17		
Bi	209	3	He			321272.71		

Quantitation Report

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Sample Type	Sample
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Total Dilution	1.0000
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Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

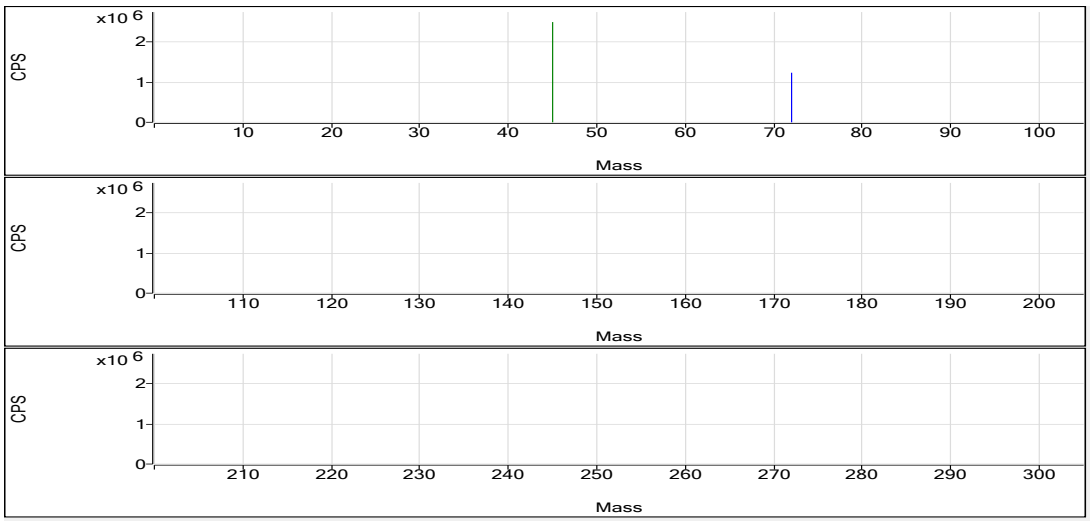
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	79.2	20.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.026	ppb	114.8	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	125.282	ppb	5.1	39206.08	0.7933	Pulse	0.1000	3
Mg	24	45	He	2.110	ppb	10.1	360.02	0.0073	Pulse	0.1000	3
Al	27	45	He	1.863	ppb	132.5	86.67	0.0017	Pulse	0.1000	3
K	39	45	He	9.028	ppb	109.6	20044.41	0.4056	Pulse	0.1000	3
Ca	44	45	He	21.858	ppb	54.0	206.68	0.0042	Pulse	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.820	ppb	6.3	2115.50	0.0428	Pulse	0.5000	3
Cr	52	45	He	-0.054	ppb	N/A	1893.52	0.0384	Pulse	0.1000	3
Mn	55	45	He	0.119	ppb	89.8	206.68	0.0042	Pulse	0.1000	3
Fe	57	45	He	2.777	ppb	47.6	150.01	0.0030	Pulse	0.1000	3
Co	59	45	He	0.030	ppb	40.4	190.01	0.0039	Pulse	0.1000	3
Ni	60	72	He	-0.088	ppb	N/A	180.01	0.0021	Pulse	0.1000	3
Cu	63	72	He	0.034	ppb	120.8	486.69	0.0056	Pulse	0.1000	3
Zn	66	72	He	3.289	ppb	11.8	1160.09	0.0134	Pulse	0.1000	3
As	75	72	He	0.147	ppb	22.4	96.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.031	ppb	146.4	113.34	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.011	ppb	95.6	46.67	0.0005	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	44.5	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.037	ppb	N/A	1443.46	0.0159	Pulse	0.1000	3
Sb	121	115	He	0.011	ppb	65.9	40.00	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.013	ppb	200.3	26.67	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.019	ppb	61.5	240.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	31.4	580.03	0.0014	Pulse	0.1000	3
U	238	209	He	0.012	ppb	40.3	213.35	0.0007	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2506548.66	0.4	104.5	Analog	0.1000	3
No Gas	Ge	72	1239675.47	0.9	107.5	Pulse	0.1000	3
H2	Sc	45	191591.04	0.6	102.5	Pulse	0.1000	3
H2	Ge	72	164985.82	0.5	100.8	Pulse	0.1000	3
H2	In	115	400225.37	0.4	102.9	Pulse	0.1000	3
He	Sc	45	49441.53	2.1	106.0	Pulse	0.1000	3
He	Ge	72	86662.39	1.3	106.7	Pulse	0.1000	3
He	In	115	90919.65	1.8	105.5	Pulse	0.1000	3
He	Tb	159	403794.49	1.0	101.3	Pulse	0.1000	3
He	Bi	209	313895.22	0.8	101.5	Pulse	0.1000	3

No Gas



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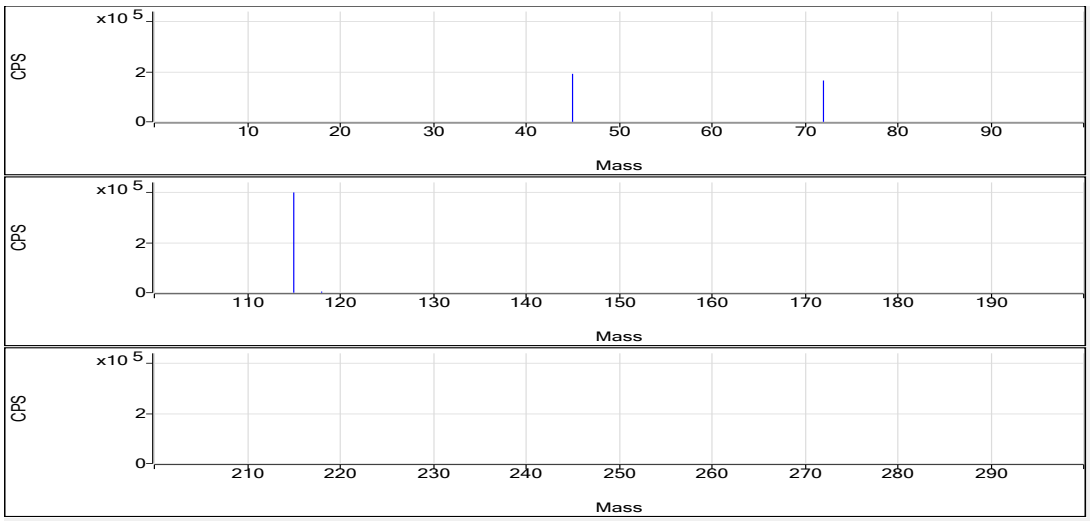
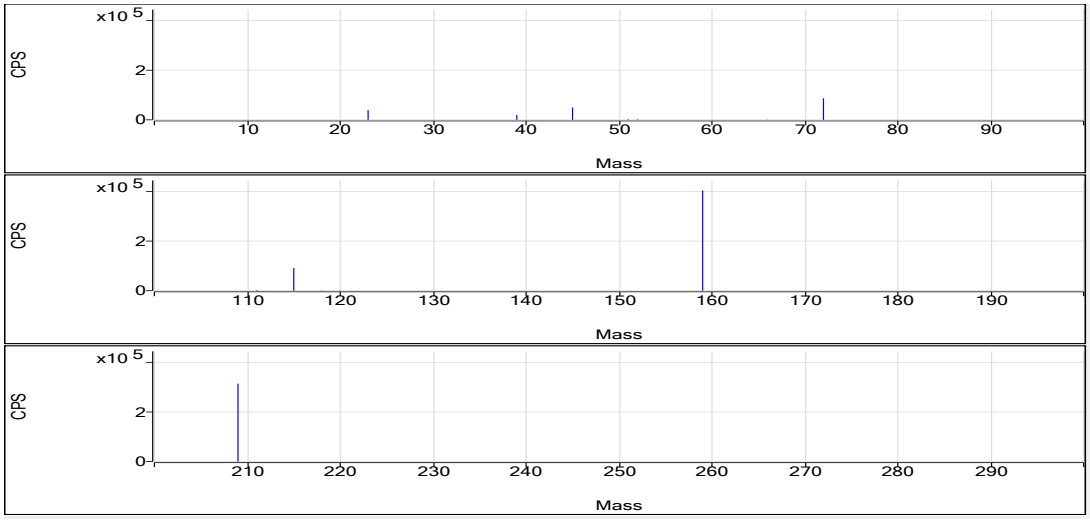


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.004	0	20.00	0.0008	4.685E-06
Be	9	1	No Gas	0.001	0	14.00	0.0008	4.685E-06
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.019	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.058	0	6.00	0.0004	1.219E-05
Na	23	3	He	131.801	0.8166	39533.76	0.0036	0.3452
Na	23	3	He	124.941	0.7921	39132.26	0.0036	0.3452
Na	23	3	He	119.104	0.7712	38952.21	0.0036	0.3452
Mg	24	3	He	2.311	0.0076	370.02	0.0018	0.003497
Mg	24	3	He	1.887	0.0069	340.01	0.0018	0.003497
Mg	24	3	He	2.134	0.0073	370.02	0.0018	0.003497
Al	27	3	He	-0.04	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	0.976	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	4.654	0.0034	170.01	0.0006	0.0006432
K	39	3	He	18.078	0.4161	20144.79	0.0012	0.3951
K	39	3	He	10.543	0.4073	20124.48	0.0012	0.3951
K	39	3	He	-1.535	0.3933	19863.96	0.0012	0.3951
Ca	44	3	He	33.2	0.005	240.01	0.0001	0.002715
Ca	44	3	He	22.736	0.0043	210.01	0.0001	0.002715
Ca	44	3	He	9.637	0.0034	170.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.836	0.0431	2088.16	0.0219	0.02486
V	51	3	He	0.863	0.0437	2160.18	0.0219	0.02486
V	51	3	He	0.763	0.0415	2098.17	0.0219	0.02486
Cr	52	3	He	0.059	0.0417	2020.20	0.0299	0.03997
Cr	52	3	He	-0.017	0.0395	1950.20	0.0299	0.03997
Cr	52	3	He	-0.204	0.0339	1710.15	0.0299	0.03997
Mn	55	3	He	0.052	0.0033	160.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.063	0.0034	170.01	0.0128	0.002639
Mn	55	3	He	0.242	0.0057	290.02	0.0128	0.002639
Fe	57	3	He	3.23	0.0033	160.01	0.0006	0.001429
Fe	57	3	He	3.812	0.0036	180.01	0.0006	0.001429
Fe	57	3	He	1.289	0.0022	110.00	0.0006	0.001429
Co	59	3	He	0.043	0.0045	220.01	0.0563	0.002149
Co	59	3	He	0.03	0.0038	190.01	0.0563	0.002149
Co	59	3	He	0.018	0.0032	160.01	0.0563	0.002149
Ni	60	3	He	-0.09	0.0021	180.01	0.0086	0.002834
Ni	60	3	He	-0.112	0.0019	160.01	0.0086	0.002834
Ni	60	3	He	-0.063	0.0023	200.01	0.0086	0.002834
Cu	63	3	He	0.033	0.0056	490.03	0.0257	0.004757
Cu	63	3	He	0.075	0.0067	570.03	0.0257	0.004757
Cu	63	3	He	-0.007	0.0046	400.02	0.0257	0.004757
Zn	66	3	He	2.856	0.0121	1060.08	0.0029	0.003818
Zn	66	3	He	3.599	0.0143	1220.10	0.0029	0.003818
Zn	66	3	He	3.412	0.0138	1200.08	0.0029	0.003818
As	75	3	He	0.109	0.001	90.00	0.002	0.0008061
As	75	3	He	0.167	0.0011	98.00	0.002	0.0008061
As	75	3	He	0.166	0.0011	100.00	0.002	0.0008061
Sr	88	3	He	0.049	0.0014	130.01	0.009	0.0009645
Sr	88	3	He	0.066	0.0016	140.01	0.009	0.0009645
Sr	88	3	He	-0.021	0.0008	70.00	0.009	0.0009645
Mo	98	3	He	0.007	0.0004	40.00	0.0219	0.0002706
Mo	98	3	He	0.023	0.0008	70.00	0.0219	0.0002706
Mo	98	3	He	0.003	0.0003	30.00	0.0219	0.0002706
Ag	107	3	He	0.001	0.0006	60.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.009	0.0002	20.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Sn	120	3	He	-0.094	0.015	1390.11	0.0158	0.01648
Sn	120	3	He	-0.018	0.0162	1460.13	0.0158	0.01648
Sn	120	3	He	0	0.0165	1480.13	0.0158	0.01648
Sb	121	3	He	0.011	0.0004	40.00	0.0149	0.0002698
Sb	121	3	He	0.004	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	0.019	0.0006	50.00	0.0149	0.0002698
Ba	137	3	He	0.042	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	-0.002	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	-0.002	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.032	0.0009	370.02	0.0247	0.0001339
Tl	205	3	He	0.01	0.0004	150.01	0.0247	0.0001339
Tl	205	3	He	0.014	0.0005	200.01	0.0247	0.0001339
Pb	208	3	He	0.007	0.0013	310.01	0.0327	0.00107
Pb	208	3	He	0.014	0.0015	310.02	0.0327	0.00107
Pb	208	3	He	0.012	0.0015	300.02	0.0327	0.00107
U	238	3	He	0.009	0.0005	170.01	0.0493	7.55E-05
U	238	3	He	0.009	0.0005	170.01	0.0493	7.55E-05
U	238	3	He	0.018	0.001	300.02	0.0493	7.55E-05
Sc	45	1	No Gas			2498054.49		
Sc	45	1	No Gas			2517416.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2504175.43		
Ge	72	1	No Gas			1233453.26		
Ge	72	1	No Gas			1253257.01		
Ge	72	1	No Gas			1232316.15		
Sc	45	2	H2			192844.49		
Sc	45	2	H2			190521.85		
Sc	45	2	H2			191406.79		
Ge	72	2	H2			164184.74		
Ge	72	2	H2			165042.30		
Ge	72	2	H2			165730.41		
In	115	2	H2			398732.49		
In	115	2	H2			400286.63		
In	115	2	H2			401656.99		
Sc	45	3	He			48411.58		
Sc	45	3	He			49404.44		
Sc	45	3	He			50508.58		
Ge	72	3	He			87376.65		
Ge	72	3	He			85345.01		
Ge	72	3	He			87265.51		
In	115	3	He			92789.34		
In	115	3	He			90182.03		
In	115	3	He			89809.64		
Tb	159	3	He			405318.67		
Tb	159	3	He			399271.60		
Tb	159	3	He			406793.20		
Bi	209	3	He			316759.10		
Bi	209	3	He			313050.58		
Bi	209	3	He			311875.97		

Quantitation Report

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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

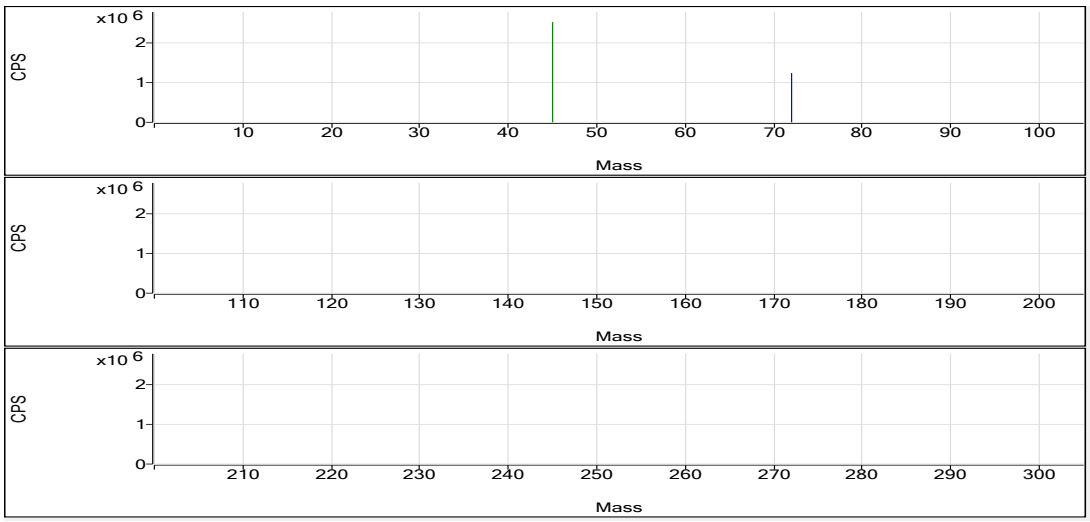
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	18.6	22.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.021	ppb	69.9	3.56	0.0000	Pulse	1.5000	3
Na	23	45	He	111.738	ppb	6.5	37327.89	0.7448	Pulse	0.1000	3
Mg	24	45	He	1.806	ppb	37.6	336.68	0.0067	Pulse	0.1000	3
Al	27	45	He	0.702	ppb	147.4	53.33	0.0011	Pulse	0.1000	3
K	39	45	He	7.984	ppb	156.6	20264.70	0.4044	Pulse	0.1000	3
Ca	44	45	He	13.962	ppb	62.4	183.34	0.0037	Pulse	0.1000	3
Ti	47	45	He	0.357	ppb	118.2	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.865	ppb	7.0	2194.85	0.0438	Pulse	0.5000	3
Cr	52	45	He	-0.163	ppb	N/A	1760.17	0.0351	Pulse	0.1000	3
Mn	55	45	He	0.063	ppb	68.1	173.34	0.0034	Pulse	0.1000	3
Fe	57	45	He	1.572	ppb	84.3	116.67	0.0023	Pulse	0.1000	3
Co	59	45	He	0.016	ppb	44.2	153.34	0.0031	Pulse	0.1000	3
Ni	60	72	He	-0.025	ppb	N/A	230.01	0.0026	Pulse	0.1000	3
Cu	63	72	He	0.051	ppb	50.3	533.36	0.0061	Pulse	0.1000	3
Zn	66	72	He	3.488	ppb	8.1	1226.76	0.0140	Pulse	0.1000	3
As	75	72	He	0.077	ppb	102.8	84.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.024	ppb	164.5	106.67	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.028	ppb	18.1	80.00	0.0009	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	302.7	66.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	25.1	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.022	ppb	N/A	1456.79	0.0161	Pulse	0.1000	3
Sb	121	115	He	0.014	ppb	62.0	43.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.029	ppb	47.6	33.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.020	ppb	26.1	253.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.007	ppb	137.1	523.35	0.0013	Pulse	0.1000	3
U	238	209	He	0.007	ppb	38.6	133.34	0.0004	Pulse	0.1000	3

ISTD Table:

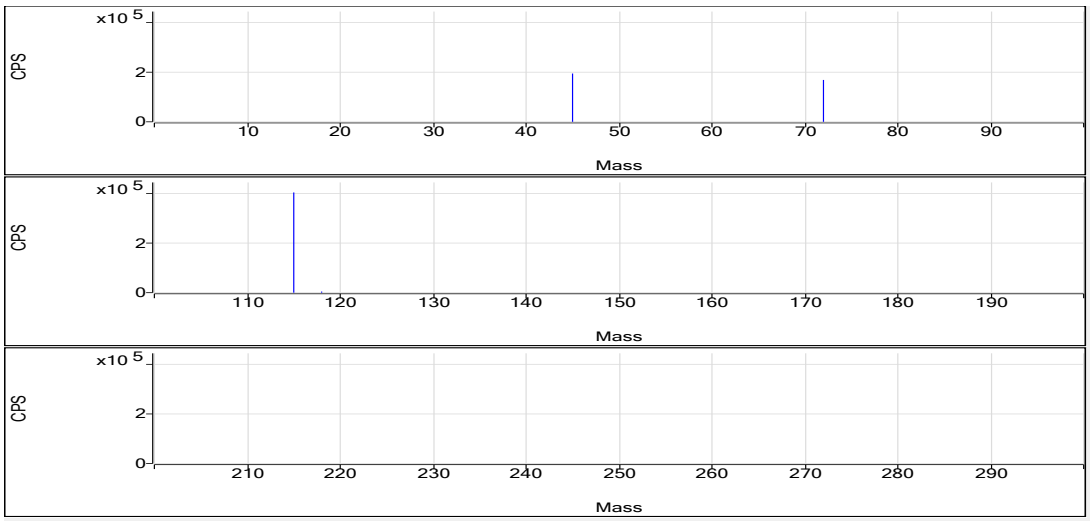
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2515453.45	0.7	104.9	Analog	0.1000	3
No Gas	Ge	72	1235516.60	0.8	107.1	Pulse	0.1000	3
H2	Sc	45	195155.04	0.7	104.4	Pulse	0.1000	3
H2	Ge	72	169192.47	1.2	103.3	Pulse	0.1000	3
H2	In	115	405002.91	1.1	104.1	Pulse	0.1000	3
He	Sc	45	50150.35	3.1	107.5	Pulse	0.1000	3
He	Ge	72	87835.93	1.4	108.2	Pulse	0.1000	3
He	In	115	90368.51	0.7	104.8	Pulse	0.1000	3
He	Tb	159	406795.42	0.7	102.1	Pulse	0.1000	3
He	Bi	209	312236.77	0.6	101.0	Pulse	0.1000	3

No Gas

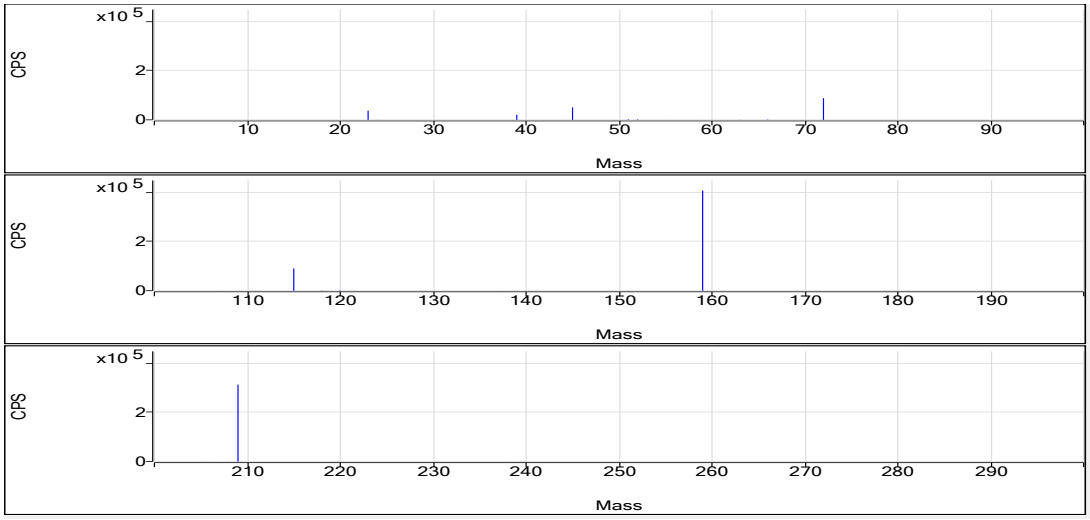


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.004	0	20.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Se	78	2	H2	0.008	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.018	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.037	0	4.67	0.0004	1.219E-05
Na	23	3	He	111.618	0.7444	37308.08	0.0036	0.3452
Na	23	3	He	104.529	0.7191	37177.28	0.0036	0.3452
Na	23	3	He	119.066	0.7711	37498.31	0.0036	0.3452
Mg	24	3	He	1.943	0.007	350.02	0.0018	0.003497
Mg	24	3	He	1.069	0.0054	280.01	0.0018	0.003497
Mg	24	3	He	2.406	0.0078	380.02	0.0018	0.003497
Al	27	3	He	-0.076	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	1.876	0.0017	90.00	0.0006	0.0006432
Al	27	3	He	0.306	0.0008	40.00	0.0006	0.0006432
K	39	3	He	12.607	0.4097	20535.15	0.0012	0.3951
K	39	3	He	-6.171	0.3879	20054.36	0.0012	0.3951
K	39	3	He	17.514	0.4155	20204.59	0.0012	0.3951
Ca	44	3	He	4.119	0.003	150.01	0.0001	0.002715
Ca	44	3	He	17.076	0.0039	200.01	0.0001	0.002715
Ca	44	3	He	20.692	0.0041	200.01	0.0001	0.002715
Ti	47	3	He	0.613	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.59	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.927	0.0451	2262.19	0.0219	0.02486
V	51	3	He	0.806	0.0425	2196.18	0.0219	0.02486
V	51	3	He	0.863	0.0437	2126.17	0.0219	0.02486
Cr	52	3	He	-0.015	0.0395	1980.21	0.0299	0.03997
Cr	52	3	He	-0.217	0.0335	1730.16	0.0299	0.03997
Cr	52	3	He	-0.257	0.0323	1570.13	0.0299	0.03997
Mn	55	3	He	0.028	0.003	150.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.111	0.0041	210.01	0.0128	0.002639
Mn	55	3	He	0.051	0.0033	160.01	0.0128	0.002639
Fe	57	3	He	1.662	0.0024	120.00	0.0006	0.001429
Fe	57	3	He	0.204	0.0015	80.00	0.0006	0.001429
Fe	57	3	He	2.85	0.0031	150.01	0.0006	0.001429
Co	59	3	He	0.008	0.0026	130.00	0.0563	0.002149
Co	59	3	He	0.02	0.0033	170.01	0.0563	0.002149
Co	59	3	He	0.02	0.0033	160.01	0.0563	0.002149
Ni	60	3	He	-0.042	0.0025	220.01	0.0086	0.002834
Ni	60	3	He	0.04	0.0032	280.02	0.0086	0.002834
Ni	60	3	He	-0.074	0.0022	190.01	0.0086	0.002834
Cu	63	3	He	0.078	0.0068	600.03	0.0257	0.004757
Cu	63	3	He	0.049	0.006	530.03	0.0257	0.004757
Cu	63	3	He	0.027	0.0054	470.02	0.0257	0.004757
Zn	66	3	He	3.326	0.0135	1200.09	0.0029	0.003818
Zn	66	3	He	3.324	0.0135	1190.09	0.0029	0.003818
Zn	66	3	He	3.815	0.0149	1290.10	0.0029	0.003818
As	75	3	He	0.002	0.0008	72.00	0.002	0.0008061
As	75	3	He	0.16	0.0011	100.00	0.002	0.0008061
As	75	3	He	0.07	0.0009	82.00	0.002	0.0008061
Sr	88	3	He	0.054	0.0014	130.01	0.009	0.0009645
Sr	88	3	He	0.039	0.0013	120.00	0.009	0.0009645
Sr	88	3	He	-0.021	0.0008	70.00	0.009	0.0009645
Mo	98	3	He	0.033	0.001	90.00	0.0219	0.0002706
Mo	98	3	He	0.028	0.0009	80.00	0.0219	0.0002706
Mo	98	3	He	0.023	0.0008	70.00	0.0219	0.0002706
Ag	107	3	He	0.008	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.012	0.0001	6.00	0.0053	0
Sn	120	3	He	0.026	0.0169	1520.13	0.0158	0.01648
Sn	120	3	He	-0.063	0.0155	1410.12	0.0158	0.01648
Sn	120	3	He	-0.031	0.016	1440.13	0.0158	0.01648
Sb	121	3	He	0.019	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.004	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	0.019	0.0006	50.00	0.0149	0.0002698
Ba	137	3	He	0.044	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	0.02	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.021	0.0003	30.00	0.0048	0.0002317
Tl	205	3	He	0.014	0.0005	200.01	0.0247	0.0001339
Tl	205	3	He	0.02	0.0006	260.01	0.0247	0.0001339
Tl	205	3	He	0.025	0.0007	300.01	0.0247	0.0001339
Pb	208	3	He	0.005	0.0012	300.02	0.0327	0.00107
Pb	208	3	He	0.016	0.0016	370.02	0.0327	0.00107
Pb	208	3	He	-0.002	0.001	230.01	0.0327	0.00107
U	238	3	He	0.005	0.0003	100.00	0.0493	7.55E-05
U	238	3	He	0.006	0.0004	120.00	0.0493	7.55E-05
U	238	3	He	0.01	0.0006	180.01	0.0493	7.55E-05
Sc	45	1	No Gas			2511606.21		
Sc	45	1	No Gas			2534676.52		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2500077.62		
Ge	72	1	No Gas			1232358.11		
Ge	72	1	No Gas			1246558.11		
Ge	72	1	No Gas			1227633.58		
Sc	45	2	H2			196369.65		
Sc	45	2	H2			195551.07		
Sc	45	2	H2			193544.39		
Ge	72	2	H2			171448.42		
Ge	72	2	H2			167957.20		
Ge	72	2	H2			168171.79		
In	115	2	H2			409870.66		
In	115	2	H2			401270.15		
In	115	2	H2			403867.92		
Sc	45	3	He			50116.82		
Sc	45	3	He			51702.24		
Sc	45	3	He			48632.00		
Ge	72	3	He			88885.82		
Ge	72	3	He			88181.46		
Ge	72	3	He			86440.50		
In	115	3	He			90001.18		
In	115	3	He			91068.02		
In	115	3	He			90061.22		
Tb	159	3	He			409912.53		
Tb	159	3	He			405830.42		
Tb	159	3	He			404643.31		
Bi	209	3	He			314209.08		
Bi	209	3	He			311977.63		
Bi	209	3	He			310523.61		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

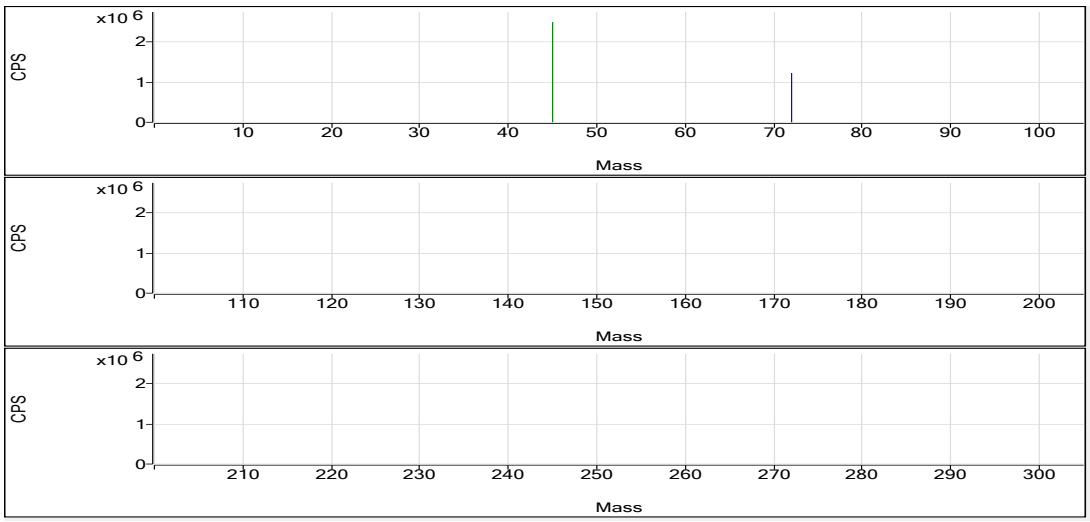
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.008	ppb	87.0	26.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.001	ppb	N/A	2.00	0.0000	Pulse	1.5000	3
Na	23	45	He	102.052	ppb	4.7	35329.60	0.7102	Pulse	0.1000	3
Mg	24	45	He	1.001	ppb	86.3	263.35	0.0053	Pulse	0.1000	3
Al	27	45	He	0.622	ppb	59.0	50.00	0.0010	Pulse	0.1000	3
K	39	45	He	6.929	ppb	185.6	20057.77	0.4031	Pulse	0.1000	3
Ca	44	45	He	12.434	ppb	43.4	176.68	0.0036	Pulse	0.1000	3
Ti	47	45	He	0.240	ppb	152.5	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.874	ppb	8.1	2187.51	0.0440	Pulse	0.5000	3
Cr	52	45	He	-0.069	ppb	N/A	1886.86	0.0379	Pulse	0.1000	3
Mn	55	45	He	0.093	ppb	65.9	190.01	0.0038	Pulse	0.1000	3
Fe	57	45	He	0.193	ppb	730.8	76.67	0.0015	Pulse	0.1000	3
Co	59	45	He	0.015	ppb	84.6	150.01	0.0030	Pulse	0.1000	3
Ni	60	72	He	-0.060	ppb	N/A	200.01	0.0023	Pulse	0.1000	3
Cu	63	72	He	0.029	ppb	97.6	476.70	0.0055	Pulse	0.1000	3
Zn	66	72	He	2.968	ppb	4.9	1076.74	0.0125	Pulse	0.1000	3
As	75	72	He	0.186	ppb	59.3	102.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	-0.004	ppb	N/A	83.33	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.019	ppb	77.7	63.33	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	3514.4	56.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.074	ppb	148.1	1600.26	0.0176	Pulse	0.1000	3
Sb	121	115	He	-0.006	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Ba	137	115	He	-0.017	ppb	N/A	13.33	0.0001	Pulse	0.1000	3
Tl	205	159	He	0.015	ppb	56.4	203.34	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	20.8	553.36	0.0014	Pulse	0.1000	3
U	238	209	He	0.006	ppb	49.1	123.34	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2504785.02	1.5	104.4	Analog	0.1000	3
No Gas	Ge	72	1231868.00	0.4	106.8	Pulse	0.1000	3
H2	Sc	45	193493.41	0.8	103.5	Pulse	0.1000	3
H2	Ge	72	167896.87	1.1	102.6	Pulse	0.1000	3
H2	In	115	400393.35	0.9	102.9	Pulse	0.1000	3
He	Sc	45	49759.22	1.9	106.7	Pulse	0.1000	3
He	Ge	72	86407.08	1.2	106.4	Pulse	0.1000	3
He	In	115	90654.61	1.4	105.2	Pulse	0.1000	3
He	Tb	159	406418.54	0.6	102.0	Pulse	0.1000	3
He	Bi	209	314224.81	0.5	101.6	Pulse	0.1000	3

No Gas



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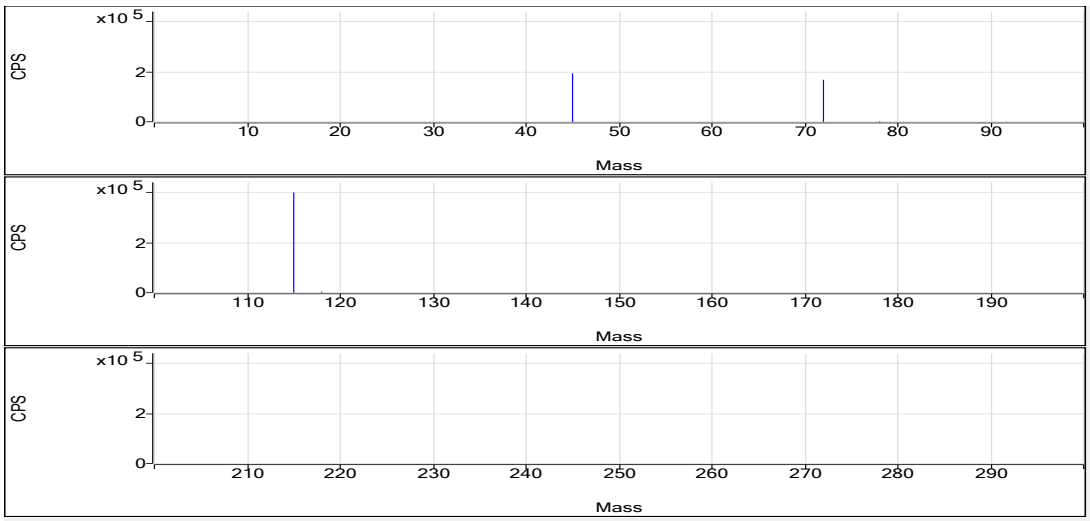
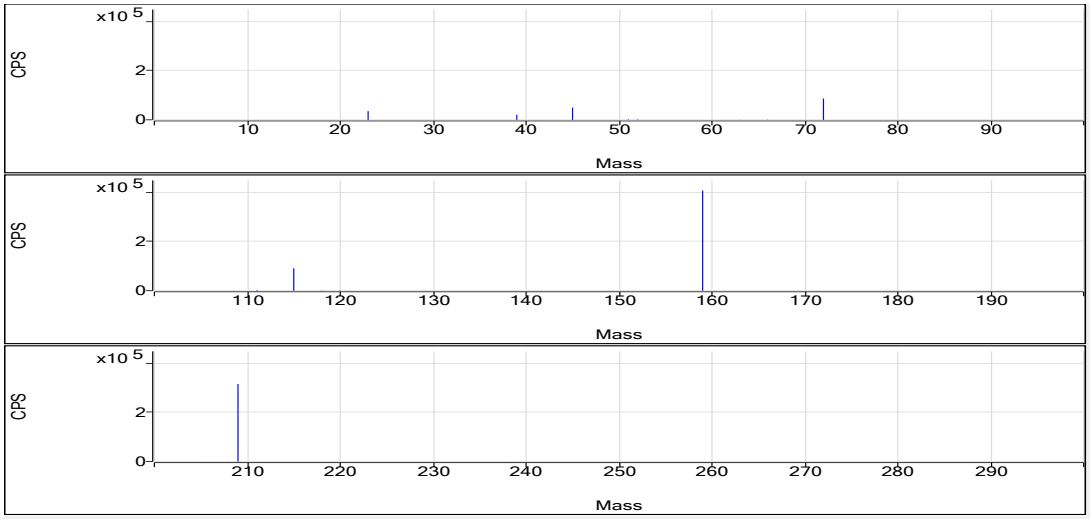


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.004	0	20.00	0.0008	4.685E-06
Se	78	2	H2	0.018	0	3.33	0.0004	1.219E-05
Se	78	2	H2	-0.02	0	0.67	0.0004	1.219E-05
Se	78	2	H2	-0.001	0	2.00	0.0004	1.219E-05
Na	23	3	He	96.806	0.6914	35152.40	0.0036	0.3452
Na	23	3	He	103.037	0.7137	35032.23	0.0036	0.3452
Na	23	3	He	106.314	0.7254	35804.16	0.0036	0.3452
Mg	24	3	He	1.121	0.0055	280.01	0.0018	0.003497
Mg	24	3	He	1.798	0.0067	330.02	0.0018	0.003497
Mg	24	3	He	0.084	0.0036	180.01	0.0018	0.003497
Al	27	3	He	0.245	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	0.642	0.001	50.00	0.0006	0.0006432
Al	27	3	He	0.978	0.0012	60.00	0.0006	0.0006432
K	39	3	He	6.08	0.4021	20444.90	0.0012	0.3951
K	39	3	He	20.192	0.4186	20545.23	0.0012	0.3951
K	39	3	He	-5.484	0.3887	19183.17	0.0012	0.3951
Ca	44	3	He	6.401	0.0031	160.01	0.0001	0.002715
Ca	44	3	He	14.1	0.0037	180.01	0.0001	0.002715
Ca	44	3	He	16.801	0.0038	190.01	0.0001	0.002715
Ti	47	3	He	0.602	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.249	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.803	0.0424	2156.17	0.0219	0.02486
V	51	3	He	0.945	0.0455	2234.19	0.0219	0.02486
V	51	3	He	0.876	0.044	2172.18	0.0219	0.02486
Cr	52	3	He	-0.028	0.0391	1990.21	0.0299	0.03997
Cr	52	3	He	-0.056	0.0383	1880.19	0.0299	0.03997
Cr	52	3	He	-0.124	0.0363	1790.18	0.0299	0.03997
Mn	55	3	He	0.024	0.003	150.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.112	0.0041	200.01	0.0128	0.002639
Mn	55	3	He	0.142	0.0045	220.01	0.0128	0.002639
Fe	57	3	He	-0.089	0.0014	70.00	0.0006	0.001429
Fe	57	3	He	-1.057	0.0008	40.00	0.0006	0.001429
Fe	57	3	He	1.726	0.0024	120.00	0.0006	0.001429
Co	59	3	He	0.007	0.0026	130.00	0.0563	0.002149
Co	59	3	He	0.031	0.0039	190.01	0.0563	0.002149
Co	59	3	He	0.009	0.0026	130.01	0.0563	0.002149
Ni	60	3	He	0.051	0.0033	280.01	0.0086	0.002834
Ni	60	3	He	-0.181	0.0013	110.00	0.0086	0.002834
Ni	60	3	He	-0.051	0.0024	210.01	0.0086	0.002834
Cu	63	3	He	-0.003	0.0047	400.02	0.0257	0.004757
Cu	63	3	He	0.041	0.0058	500.03	0.0257	0.004757
Cu	63	3	He	0.05	0.0061	530.04	0.0257	0.004757
Zn	66	3	He	3.061	0.0127	1090.08	0.0029	0.003818
Zn	66	3	He	2.802	0.012	1030.07	0.0029	0.003818
Zn	66	3	He	3.042	0.0127	1110.08	0.0029	0.003818
As	75	3	He	0.097	0.001	86.00	0.002	0.0008061
As	75	3	He	0.151	0.0011	96.00	0.002	0.0008061
As	75	3	He	0.309	0.0014	126.00	0.002	0.0008061
Sr	88	3	He	0.067	0.0016	140.00	0.009	0.0009645
Sr	88	3	He	0.002	0.001	90.00	0.009	0.0009645
Sr	88	3	He	-0.083	0.0002	20.00	0.009	0.0009645
Mo	98	3	He	0.003	0.0003	30.00	0.0219	0.0002706
Mo	98	3	He	0.033	0.001	90.00	0.0219	0.0002706
Mo	98	3	He	0.023	0.0008	70.00	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Ag	107	3	He	0.003	0.0008	70.01	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Sn	120	3	He	-0.014	0.0163	1450.13	0.0158	0.01648
Sn	120	3	He	0.039	0.0171	1560.15	0.0158	0.01648
Sn	120	3	He	0.196	0.0196	1790.50	0.0158	0.01648
Sb	121	3	He	0.004	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	-0.002	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.005	0.0003	110.00	0.0247	0.0001339
Tl	205	3	He	0.022	0.0007	270.01	0.0247	0.0001339
Tl	205	3	He	0.017	0.0006	230.01	0.0247	0.0001339
Pb	208	3	He	0.011	0.0014	280.01	0.0327	0.00107
Pb	208	3	He	0.009	0.0014	280.01	0.0327	0.00107
Pb	208	3	He	0.007	0.0013	260.01	0.0327	0.00107
U	238	3	He	0.004	0.0003	90.00	0.0493	7.55E-05
U	238	3	He	0.005	0.0003	100.00	0.0493	7.55E-05
U	238	3	He	0.01	0.0006	180.01	0.0493	7.55E-05
Sc	45	1	No Gas			2477551.84		
Sc	45	1	No Gas			2490416.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2546386.84		
Ge	72	1	No Gas			1230549.43		
Ge	72	1	No Gas			1227518.50		
Ge	72	1	No Gas			1237536.08		
Sc	45	2	H2			194949.82		
Sc	45	2	H2			192027.79		
Sc	45	2	H2			193502.63		
Ge	72	2	H2			169617.07		
Ge	72	2	H2			166015.76		
Ge	72	2	H2			168057.79		
In	115	2	H2			396369.64		
In	115	2	H2			401375.31		
In	115	2	H2			403435.11		
Sc	45	3	He			50839.59		
Sc	45	3	He			49083.60		
Sc	45	3	He			49354.48		
Ge	72	3	He			85625.89		
Ge	72	3	He			86018.21		
Ge	72	3	He			87577.13		
In	115	3	He			89194.70		
In	115	3	He			91309.70		
In	115	3	He			91480.96		
Tb	159	3	He			408088.43		
Tb	159	3	He			403583.63		
Tb	159	3	He			407583.55		
Bi	209	3	He			314724.60		
Bi	209	3	He			312621.40		
Bi	209	3	He			315328.43		

Quantitation Report

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Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

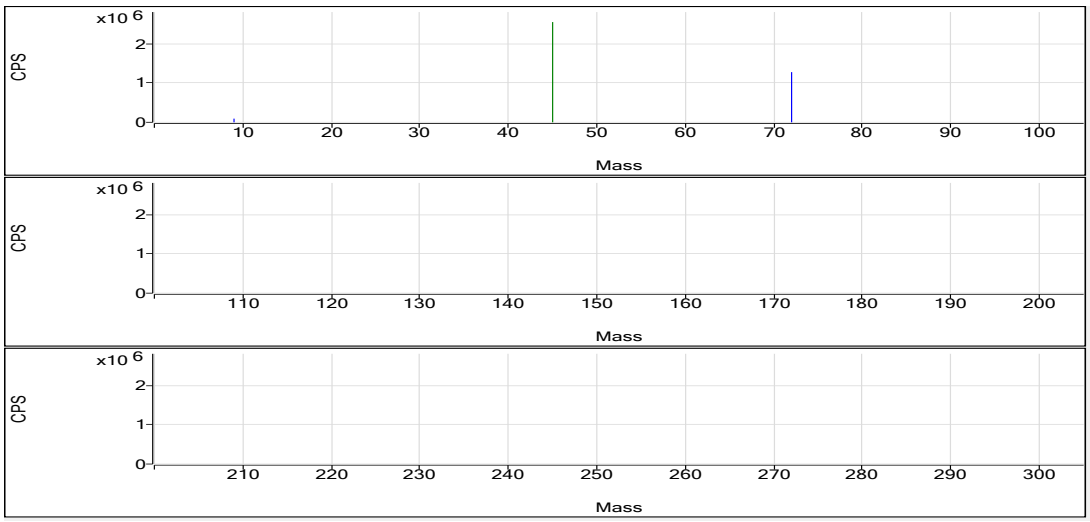
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.775	ppb	1.0	92920.09	0.0364	Pulse	0.5000	3
Se	78	72	H2	51.302	ppb	1.6	3606.02	0.0214	Pulse	1.5000	3
Na	23	45	He	4905.364	ppb	1.1	877191.21	17.8919	Pulse	0.1000	3
Mg	24	45	He	5027.978	ppb	0.6	442492.21	9.0253	Pulse	0.1000	3
Al	27	45	He	4963.913	ppb	1.5	142406.60	2.9047	Pulse	0.1000	3
K	39	45	He	5122.799	ppb	1.6	311788.10	6.3597	Pulse	0.1000	3
Ca	44	45	He	5216.847	ppb	3.2	17410.92	0.3551	Pulse	0.1000	3
Ti	47	45	He	5116.796	ppb	0.9	134707.23	2.7475	Pulse	0.1000	3
V	51	45	He	518.174	ppb	1.1	556537.25	11.3517	Pulse	0.5000	3
Cr	52	45	He	490.291	ppb	1.2	721667.10	14.7196	Pulse	0.1000	3
Mn	55	45	He	513.978	ppb	1.5	323526.08	6.5990	Pulse	0.1000	3
Fe	57	45	He	5114.735	ppb	0.9	145763.21	2.9730	Pulse	0.1000	3
Co	59	45	He	500.696	ppb	1.9	1381912.53	28.1825	Mix	0.1000	3
Ni	60	72	He	506.105	ppb	2.8	384186.91	4.3468	Pulse	0.1000	3
Cu	63	72	He	480.690	ppb	1.9	1091136.34	12.3446	Pulse	0.1000	3
Zn	66	72	He	507.405	ppb	2.3	130922.65	1.4812	Pulse	0.1000	3
As	75	72	He	511.285	ppb	1.8	92665.39	1.0484	Pulse	0.5000	3
Sr	88	115	He	51.153	ppb	1.2	40943.52	0.4598	Pulse	0.1000	3
Mo	98	115	He	51.325	ppb	0.7	100232.99	1.1257	Pulse	0.1000	3
Ag	107	115	He	51.117	ppb	0.9	211649.03	2.3769	Pulse	0.1000	3
Cd	111	115	He	51.256	ppb	1.2	24403.29	0.2741	Pulse	0.5000	3
Sn	120	115	He	51.249	ppb	0.9	73562.53	0.8261	Pulse	0.1000	3
Sb	121	115	He	52.464	ppb	1.7	69411.31	0.7795	Pulse	0.1000	3
Ba	137	115	He	521.968	ppb	1.0	223096.61	2.5053	Pulse	0.1000	3
Tl	205	159	He	50.991	ppb	0.3	513708.24	1.2610	Pulse	0.1000	3
Pb	208	159	He	51.567	ppb	0.5	688014.19	1.6888	Pulse	0.1000	3
U	238	209	He	50.379	ppb	0.6	775493.71	2.4817	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2549637.57	1.1	106.3	Analog	0.1000	3
No Gas	Ge	72	1276019.77	0.6	110.6	Pulse	0.1000	3
H2	Sc	45	192941.45	0.6	103.2	Pulse	0.1000	3
H2	Ge	72	168429.19	0.5	102.9	Pulse	0.1000	3
H2	In	115	402297.60	1.4	103.4	Pulse	0.1000	3
He	Sc	45	49029.80	0.9	105.1	Pulse	0.1000	3
He	Ge	72	88403.08	1.2	108.9	Pulse	0.1000	3
He	In	115	89048.50	1.0	103.3	Pulse	0.1000	3
He	Tb	159	407397.73	0.5	102.2	Pulse	0.1000	3
He	Bi	209	312488.21	1.2	101.0	Pulse	0.1000	3

No Gas



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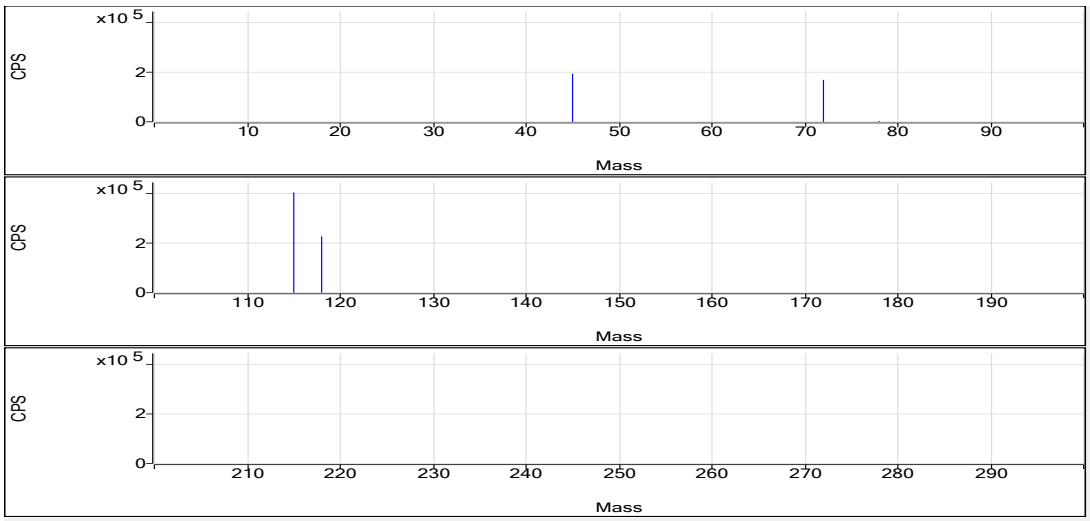
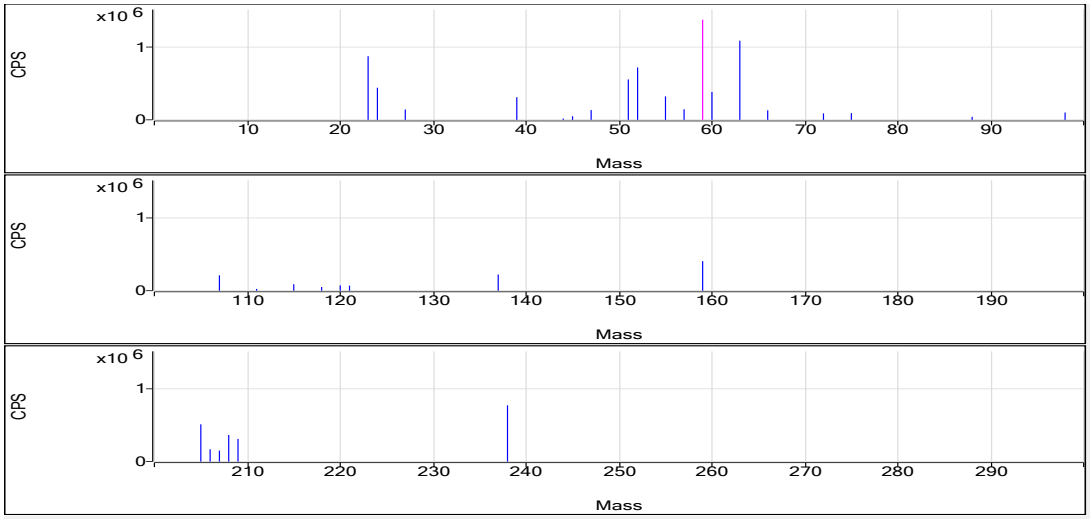


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.318	0.0369	92893.98	0.0008	4.685E-06
Be	9	1	No Gas	47.379	0.0361	92326.33	0.0008	4.685E-06
Be	9	1	No Gas	47.627	0.0363	93539.97	0.0008	4.685E-06
Se	78	2	H2	50.356	0.021	3518.44	0.0004	1.219E-05
Se	78	2	H2	51.797	0.0216	3657.14	0.0004	1.219E-05
Se	78	2	H2	51.752	0.0216	3642.47	0.0004	1.219E-05
Na	23	3	He	4892.65	17.8464	882230.38	0.0036	0.3452
Na	23	3	He	4963.333	18.0992	878563.74	0.0036	0.3452
Na	23	3	He	4860.108	17.73	870779.52	0.0036	0.3452
Mg	24	3	He	5005.43	8.9848	444162.61	0.0018	0.003497
Mg	24	3	He	5064.641	9.0911	441294.92	0.0018	0.003497
Mg	24	3	He	5013.863	9	442019.09	0.0018	0.003497
Al	27	3	He	4944.758	2.8935	143039.02	0.0006	0.0006432
Al	27	3	He	5047.509	2.9536	143372.62	0.0006	0.0006432
Al	27	3	He	4899.472	2.867	140808.16	0.0006	0.0006432
K	39	3	He	5087.241	6.3183	312341.62	0.0012	0.3951
K	39	3	He	5218.462	6.4711	314114.74	0.0012	0.3951
K	39	3	He	5062.694	6.2897	308907.93	0.0012	0.3951
Ca	44	3	He	5068.639	0.3451	17060.44	0.0001	0.002715
Ca	44	3	He	5187.108	0.3531	17140.67	0.0001	0.002715
Ca	44	3	He	5394.793	0.3671	18031.64	0.0001	0.002715
Ti	47	3	He	5127.383	2.7532	136104.07	0.0005	7.003E-05
Ti	47	3	He	5157.763	2.7695	134436.83	0.0005	7.003E-05
Ti	47	3	He	5065.244	2.7198	133580.80	0.0005	7.003E-05
V	51	3	He	514.114	11.263	556780.38	0.0219	0.02486
V	51	3	He	524.372	11.4872	557605.88	0.0219	0.02486
V	51	3	He	516.036	11.305	555225.50	0.0219	0.02486
Cr	52	3	He	490.219	14.7175	727553.50	0.0299	0.03997
Cr	52	3	He	496.137	14.8947	723009.05	0.0299	0.03997
Cr	52	3	He	484.516	14.5467	714438.74	0.0299	0.03997
Mn	55	3	He	513.346	6.5909	325816.60	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	521.874	6.7003	325242.38	0.0128	0.002639
Mn	55	3	He	506.715	6.5058	319519.27	0.0128	0.002639
Fe	57	3	He	5065.122	2.9442	145546.30	0.0006	0.001429
Fe	57	3	He	5127.635	2.9805	144679.65	0.0006	0.001429
Fe	57	3	He	5151.45	2.9944	147063.68	0.0006	0.001429
Co	59	3	He	511.728	28.8034	1423884.67	0.0563	0.002149
Co	59	3	He	494.63	27.8411	1351445.76	0.0563	0.002149
Co	59	3	He	495.73	27.903	1370407.17	0.0563	0.002149
Ni	60	3	He	520.988	4.4746	390613.24	0.0086	0.002834
Ni	60	3	He	492.936	4.2338	378409.25	0.0086	0.002834
Ni	60	3	He	504.392	4.3321	383538.24	0.0086	0.002834
Cu	63	3	He	490.263	12.5903	1099092.64	0.0257	0.004757
Cu	63	3	He	472.309	12.1294	1084112.48	0.0257	0.004757
Cu	63	3	He	479.497	12.314	1090203.89	0.0257	0.004757
Zn	66	3	He	513.819	1.4999	130932.92	0.0029	0.003818
Zn	66	3	He	493.908	1.4419	128873.93	0.0029	0.003818
Zn	66	3	He	514.488	1.5018	132961.10	0.0029	0.003818
As	75	3	He	520.467	1.0672	93160.74	0.002	0.0008061
As	75	3	He	502.255	1.0299	92047.54	0.002	0.0008061
As	75	3	He	511.132	1.048	92787.89	0.002	0.0008061
Sr	88	3	He	50.704	0.4558	40980.08	0.009	0.0009645
Sr	88	3	He	50.934	0.4578	40378.52	0.009	0.0009645
Sr	88	3	He	51.821	0.4658	41471.96	0.009	0.0009645
Mo	98	3	He	50.892	1.1161	100357.46	0.0219	0.0002706
Mo	98	3	He	51.603	1.1317	99813.48	0.0219	0.0002706
Mo	98	3	He	51.481	1.1291	100528.03	0.0219	0.0002706
Ag	107	3	He	50.698	2.3574	211966.97	0.0465	0.0006206
Ag	107	3	He	51.63	2.4007	211732.81	0.0465	0.0006206
Ag	107	3	He	51.024	2.3726	211247.30	0.0465	0.0006206
Cd	111	3	He	51.047	0.2729	24541.56	0.0053	0
Cd	111	3	He	51.936	0.2777	24491.41	0.0053	0
Cd	111	3	He	50.785	0.2715	24176.89	0.0053	0
Sn	120	3	He	50.773	0.8186	73605.63	0.0158	0.01648
Sn	120	3	He	51.74	0.8339	73545.60	0.0158	0.01648
Sn	120	3	He	51.235	0.8259	73536.37	0.0158	0.01648
Sb	121	3	He	52.062	0.7736	69554.84	0.0149	0.0002698
Sb	121	3	He	53.5	0.7949	70108.13	0.0149	0.0002698
Sb	121	3	He	51.832	0.7701	68570.95	0.0149	0.0002698
Ba	137	3	He	519.239	2.4922	224088.24	0.0048	0.0002317
Ba	137	3	He	518.582	2.4891	219523.22	0.0048	0.0002317
Ba	137	3	He	528.083	2.5347	225678.36	0.0048	0.0002317
Tl	205	3	He	51.114	1.264	516136.75	0.0247	0.0001339
Tl	205	3	He	51.003	1.2612	511101.13	0.0247	0.0001339
Tl	205	3	He	50.856	1.2576	513886.83	0.0247	0.0001339
Pb	208	3	He	51.425	1.6842	366903.00	0.0327	0.00107
Pb	208	3	He	51.862	1.6985	365898.86	0.0327	0.00107
Pb	208	3	He	51.412	1.6838	366929.06	0.0327	0.00107
U	238	3	He	50.323	2.479	784784.91	0.0493	7.55E-05
U	238	3	He	50.693	2.4972	772330.61	0.0493	7.55E-05
U	238	3	He	50.12	2.469	769365.61	0.0493	7.55E-05
Sc	45	1	No Gas			2520100.43		
Sc	45	1	No Gas			2554336.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2574475.90		
Ge	72	1	No Gas			1272703.73		
Ge	72	1	No Gas			1270618.89		
Ge	72	1	No Gas			1284736.70		
Sc	45	2	H2			194180.31		
Sc	45	2	H2			192195.37		
Sc	45	2	H2			192448.67		
Ge	72	2	H2			167431.79		
Ge	72	2	H2			169192.97		
Ge	72	2	H2			168662.81		
In	115	2	H2			401807.14		
In	115	2	H2			408230.35		
In	115	2	H2			396855.31		
Sc	45	3	He			49434.62		
Sc	45	3	He			48541.46		
Sc	45	3	He			49113.33		
Ge	72	3	He			87296.62		
Ge	72	3	He			89378.65		
Ge	72	3	He			88533.98		
In	115	3	He			90312.94		
In	115	3	He			88591.80		
In	115	3	He			89437.23		
Tb	159	3	He			408337.34		
Tb	159	3	He			405235.07		
Tb	159	3	He			408620.78		
Bi	209	3	He			316576.87		
Bi	209	3	He			309277.91		
Bi	209	3	He			311609.86		

Quantitation Report

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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

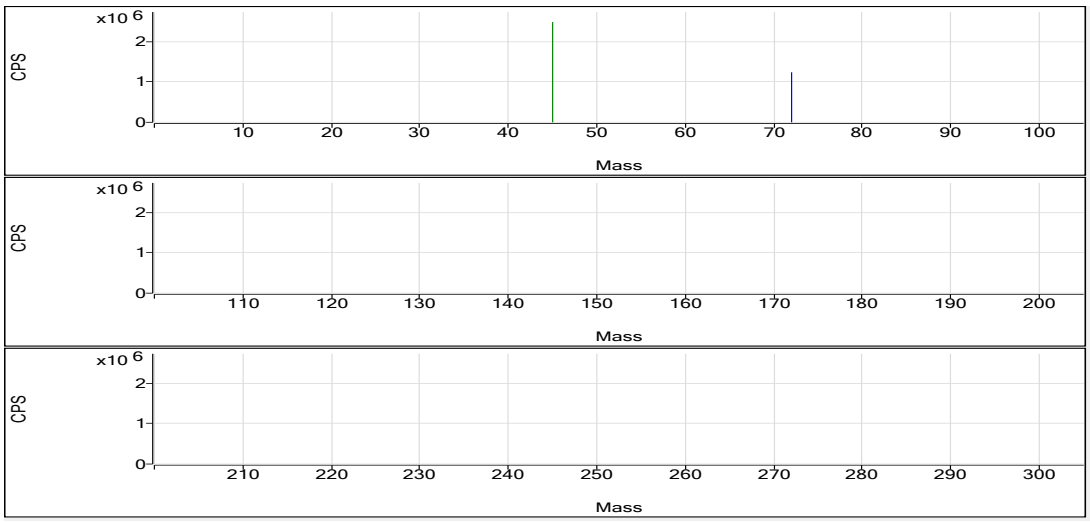
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.019	ppb	28.4	48.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.057	ppb	25.5	5.78	0.0000	Pulse	1.5000	3
Na	23	45	He	95.996	ppb	5.5	33121.24	0.6885	Pulse	0.1000	3
Mg	24	45	He	1.527	ppb	35.0	300.01	0.0062	Pulse	0.1000	3
Al	27	45	He	0.677	ppb	187.8	50.00	0.0010	Pulse	0.1000	3
K	39	45	He	-1.171	ppb	N/A	18946.16	0.3937	Pulse	0.1000	3
Ca	44	45	He	-1.204	ppb	N/A	126.67	0.0026	Pulse	0.1000	3
Ti	47	45	He	1.172	ppb	85.6	33.33	0.0007	Pulse	0.1000	3
V	51	45	He	0.759	ppb	12.4	1994.15	0.0415	Pulse	0.5000	3
Cr	52	45	He	-0.088	ppb	N/A	1796.83	0.0373	Pulse	0.1000	3
Mn	55	45	He	0.264	ppb	26.3	290.01	0.0060	Pulse	0.1000	3
Fe	57	45	He	2.087	ppb	73.3	126.67	0.0026	Pulse	0.1000	3
Co	59	45	He	0.069	ppb	8.0	290.01	0.0060	Pulse	0.1000	3
Ni	60	72	He	-0.003	ppb	N/A	243.34	0.0028	Pulse	0.1000	3
Cu	63	72	He	0.096	ppb	40.1	626.70	0.0072	Pulse	0.1000	3
Zn	66	72	He	3.347	ppb	18.0	1176.75	0.0136	Pulse	0.1000	3
As	75	72	He	0.255	ppb	14.9	115.33	0.0013	Pulse	0.5000	3
Sr	88	115	He	-0.056	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Mo	98	115	He	0.056	ppb	17.4	130.00	0.0015	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	166.7	70.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	86.6	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.015	ppb	N/A	1410.13	0.0162	Pulse	0.1000	3
Sb	121	115	He	0.033	ppb	34.4	66.67	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.064	ppb	59.1	46.67	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.070	ppb	13.5	743.38	0.0019	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	102.3	553.36	0.0014	Pulse	0.1000	3
U	238	209	He	0.042	ppb	19.4	670.04	0.0022	Pulse	0.1000	3

ISTD Table:

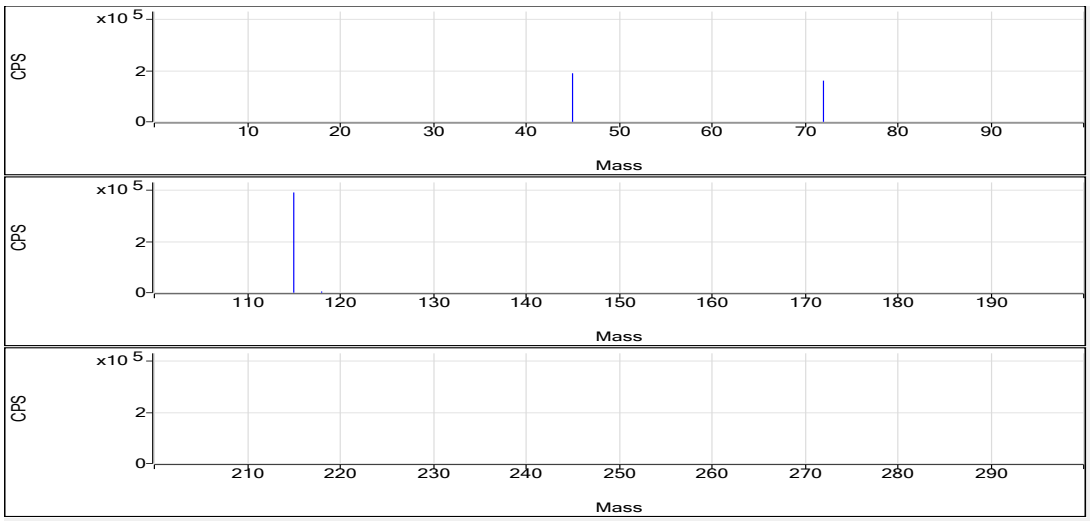
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2477824.23	0.4	103.3	Analog	0.1000	3
No Gas	Ge	72	1236075.53	0.0	107.2	Pulse	0.1000	3
H2	Sc	45	190262.94	0.6	101.7	Pulse	0.1000	3
H2	Ge	72	161362.73	1.1	98.6	Pulse	0.1000	3
H2	In	115	392727.03	1.1	100.9	Pulse	0.1000	3
He	Sc	45	48117.25	1.9	103.2	Pulse	0.1000	3
He	Ge	72	86873.91	1.5	107.0	Pulse	0.1000	3
He	In	115	86900.01	1.2	100.8	Pulse	0.1000	3
He	Tb	159	399997.58	0.4	100.3	Pulse	0.1000	3
He	Bi	209	310140.76	1.0	100.3	Pulse	0.1000	3

No Gas

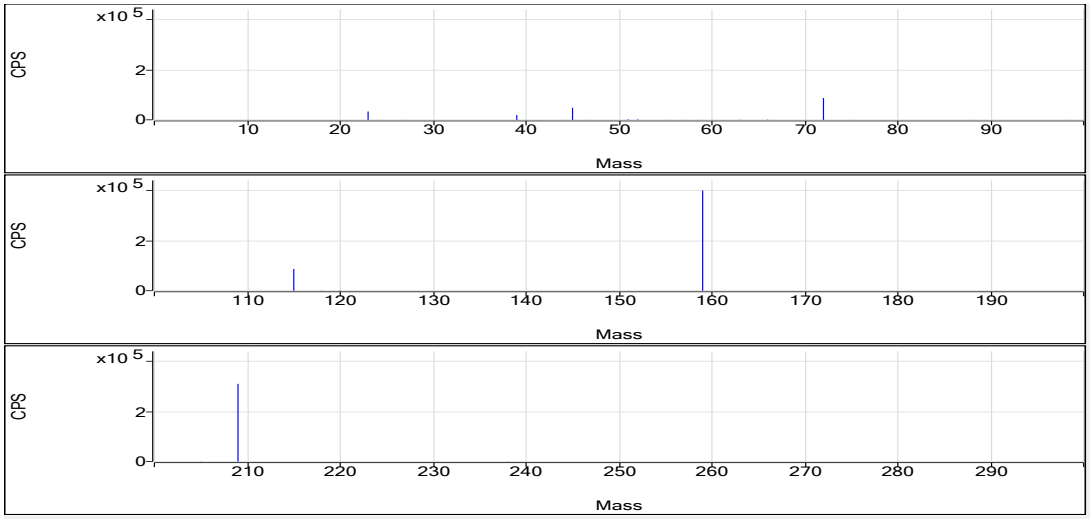


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Be	9	1	No Gas	0.026	0	60.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Se	78	2	H2	0.059	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.041	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.069	0	6.67	0.0004	1.219E-05
Na	23	3	He	98.039	0.6958	33659.21	0.0036	0.3452
Na	23	3	He	99.945	0.7027	33107.88	0.0036	0.3452
Na	23	3	He	90.003	0.6671	32596.63	0.0036	0.3452
Mg	24	3	He	2.084	0.0072	350.02	0.0018	0.003497
Mg	24	3	He	1.481	0.0062	290.01	0.0018	0.003497
Mg	24	3	He	1.017	0.0053	260.01	0.0018	0.003497
Al	27	3	He	-0.746	0.0002	10.00	0.0006	0.0006432
Al	27	3	He	1.077	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	1.699	0.0016	80.00	0.0006	0.0006432
K	39	3	He	1.121	0.3964	19173.07	0.0012	0.3951
K	39	3	He	-5.149	0.3891	18332.03	0.0012	0.3951
K	39	3	He	0.515	0.3957	19333.39	0.0012	0.3951
Ca	44	3	He	-3.466	0.0025	120.00	0.0001	0.002715
Ca	44	3	He	0.656	0.0028	130.01	0.0001	0.002715
Ca	44	3	He	-0.803	0.0027	130.01	0.0001	0.002715
Ti	47	3	He	1.025	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	2.241	0.0013	60.00	0.0005	7.003E-05
Ti	47	3	He	0.251	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.665	0.0394	1906.14	0.0219	0.02486
V	51	3	He	0.853	0.0435	2050.16	0.0219	0.02486
V	51	3	He	0.759	0.0415	2026.16	0.0219	0.02486
Cr	52	3	He	-0.03	0.0391	1890.18	0.0299	0.03997
Cr	52	3	He	-0.102	0.0369	1740.16	0.0299	0.03997
Cr	52	3	He	-0.132	0.036	1760.16	0.0299	0.03997
Mn	55	3	He	0.342	0.007	340.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.241	0.0057	270.01	0.0128	0.002639
Mn	55	3	He	0.209	0.0053	260.01	0.0128	0.002639
Fe	57	3	He	0.743	0.0019	90.00	0.0006	0.001429
Fe	57	3	He	3.751	0.0036	170.01	0.0006	0.001429
Fe	57	3	He	1.768	0.0025	120.00	0.0006	0.001429
Co	59	3	He	0.068	0.006	290.01	0.0563	0.002149
Co	59	3	He	0.064	0.0057	270.01	0.0563	0.002149
Co	59	3	He	0.075	0.0063	310.02	0.0563	0.002149
Ni	60	3	He	-0.026	0.0026	230.01	0.0086	0.002834
Ni	60	3	He	0.038	0.0032	270.01	0.0086	0.002834
Ni	60	3	He	-0.022	0.0026	230.01	0.0086	0.002834
Cu	63	3	He	0.133	0.0082	720.04	0.0257	0.004757
Cu	63	3	He	0.097	0.0073	620.03	0.0257	0.004757
Cu	63	3	He	0.056	0.0062	540.03	0.0257	0.004757
Zn	66	3	He	2.899	0.0123	1080.07	0.0029	0.003818
Zn	66	3	He	4.031	0.0156	1330.10	0.0029	0.003818
Zn	66	3	He	3.11	0.0129	1120.09	0.0029	0.003818
As	75	3	He	0.216	0.0012	110.00	0.002	0.0008061
As	75	3	He	0.292	0.0014	120.00	0.002	0.0008061
As	75	3	He	0.257	0.0013	116.00	0.002	0.0008061
Sr	88	3	He	-0.069	0.0003	30.00	0.009	0.0009645
Sr	88	3	He	-0.044	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.056	0.0005	40.00	0.009	0.0009645
Mo	98	3	He	0.051	0.0014	120.00	0.0219	0.0002706
Mo	98	3	He	0.05	0.0014	120.00	0.0219	0.0002706
Mo	98	3	He	0.067	0.0017	150.01	0.0219	0.0002706
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Sn	120	3	He	-0.057	0.0156	1350.11	0.0158	0.01648
Sn	120	3	He	-0.065	0.0155	1360.13	0.0158	0.01648
Sn	120	3	He	0.076	0.0177	1520.14	0.0158	0.01648
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.043	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.037	0.0008	70.00	0.0149	0.0002698
Ba	137	3	He	0.072	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.097	0.0007	60.00	0.0048	0.0002317
Tl	205	3	He	0.074	0.002	780.05	0.0247	0.0001339
Tl	205	3	He	0.059	0.0016	640.04	0.0247	0.0001339
Tl	205	3	He	0.077	0.002	810.05	0.0247	0.0001339
Pb	208	3	He	0	0.0011	210.01	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	390.02	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	310.02	0.0327	0.00107
U	238	3	He	0.034	0.0018	550.03	0.0493	7.55E-05
U	238	3	He	0.043	0.0022	670.04	0.0493	7.55E-05
U	238	3	He	0.051	0.0026	790.06	0.0493	7.55E-05
Sc	45	1	No Gas			2486020.12		
Sc	45	1	No Gas			2481831.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2465621.21		
Ge	72	1	No Gas			1236170.45		
Ge	72	1	No Gas			1236158.89		
Ge	72	1	No Gas			1235897.25		
Sc	45	2	H2			189114.70		
Sc	45	2	H2			190291.03		
Sc	45	2	H2			191383.08		
Ge	72	2	H2			162605.48		
Ge	72	2	H2			159432.69		
Ge	72	2	H2			162050.02		
In	115	2	H2			396295.31		
In	115	2	H2			394046.28		
In	115	2	H2			387839.49		
Sc	45	3	He			48371.44		
Sc	45	3	He			47117.40		
Sc	45	3	He			48862.91		
Ge	72	3	He			88111.17		
Ge	72	3	He			85505.83		
Ge	72	3	He			87004.74		
In	115	3	He			86690.33		
In	115	3	He			88007.80		
In	115	3	He			86025.93		
Tb	159	3	He			398418.31		
Tb	159	3	He			401864.25		
Tb	159	3	He			399710.19		
Bi	209	3	He			313604.31		
Bi	209	3	He			308618.24		
Bi	209	3	He			308199.72		

Quantitation Report

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Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

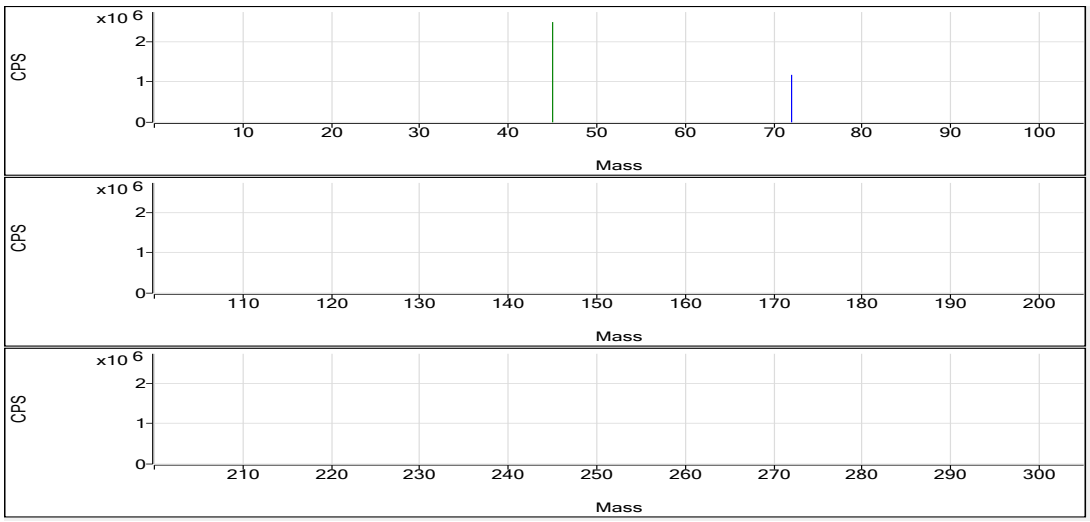
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.008	ppb	20.9	27.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.234	ppb	36.9	17.55	0.0001	Pulse	1.5000	3
Na	23	45	He	919038.879	ppb	1.2	162618394.24	3 287.7923	Analog	0.1000	3
Mg	24	45	He	113882.295	ppb	1.3	10107042.77	204.3450	Analog	0.1000	3
Al	27	45	He	71.277	ppb	4.9	2093.62	0.0423	Pulse	0.1000	3
K	39	45	He	37294.174	ppb	1.8	2167120.59	43.8177	Analog	0.1000	3
Ca	44	45	He	49470.691	ppb	1.4	165418.31	3.3446	Pulse	0.1000	3
Ti	47	45	He	0.994	ppb	63.8	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	2.986	ppb	3.5	4457.38	0.0901	Pulse	0.5000	3
Cr	52	45	He	112.187	ppb	1.1	168112.42	3.3989	Pulse	0.1000	3
Mn	55	45	He	12.870	ppb	4.7	8302.65	0.1678	Pulse	0.1000	3
Fe	57	45	He	78.386	ppb	1.9	2323.59	0.0470	Pulse	0.1000	3
Co	59	45	He	0.116	ppb	5.3	430.02	0.0087	Pulse	0.1000	3
Ni	60	72	He	1.152	ppb	21.5	1073.41	0.0127	Pulse	0.1000	3
Cu	63	72	He	1.745	ppb	4.9	4184.10	0.0495	Pulse	0.1000	3
Zn	66	72	He	17.921	ppb	1.2	4727.62	0.0560	Pulse	0.1000	3
As	75	72	He	1.121	ppb	20.1	262.00	0.0031	Pulse	0.5000	3
Sr	88	115	He	790.388	ppb	2.6	612493.32	7.0906	Pulse	0.1000	3
Mo	98	115	He	2.335	ppb	5.4	4444.21	0.0515	Pulse	0.1000	3
Ag	107	115	He	0.136	ppb	10.3	600.03	0.0069	Pulse	0.1000	3
Cd	111	115	He	0.020	ppb	55.0	9.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.054	ppb	N/A	1353.45	0.0156	Pulse	0.1000	3
Sb	121	115	He	1.969	ppb	4.0	2550.33	0.0295	Pulse	0.1000	3
Ba	137	115	He	27.050	ppb	0.9	11238.33	0.1301	Pulse	0.1000	3
Tl	205	159	He	0.019	ppb	43.4	240.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.541	ppb	4.7	7367.76	0.0188	Pulse	0.1000	3
U	238	209	He	0.410	ppb	7.9	5854.90	0.0203	Pulse	0.1000	3

ISTD Table:

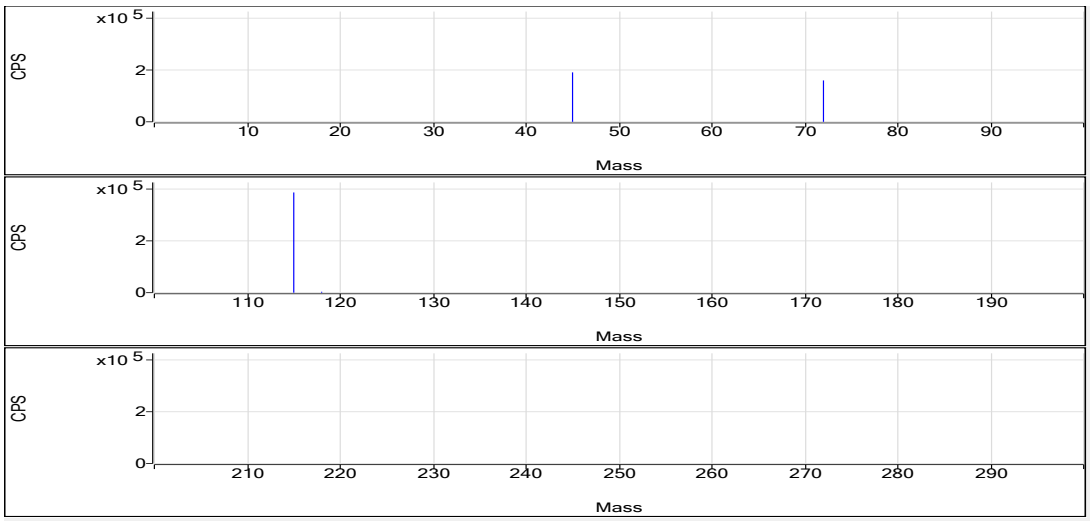
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2486525.85	0.9	103.7	Analog	0.1000	3
No Gas	Ge	72	1177373.06	0.5	102.1	Pulse	0.1000	3
H2	Sc	45	191537.18	0.8	102.4	Pulse	0.1000	3
H2	Ge	72	160363.55	0.6	98.0	Pulse	0.1000	3
H2	In	115	388274.29	1.1	99.8	Pulse	0.1000	3
He	Sc	45	49465.00	1.3	106.1	Pulse	0.1000	3
He	Ge	72	84429.14	1.0	104.0	Pulse	0.1000	3
He	In	115	86418.78	2.6	100.3	Pulse	0.1000	3
He	Tb	159	392351.53	0.2	98.4	Pulse	0.1000	3
He	Bi	209	289066.42	0.6	93.5	Pulse	0.1000	3

No Gas

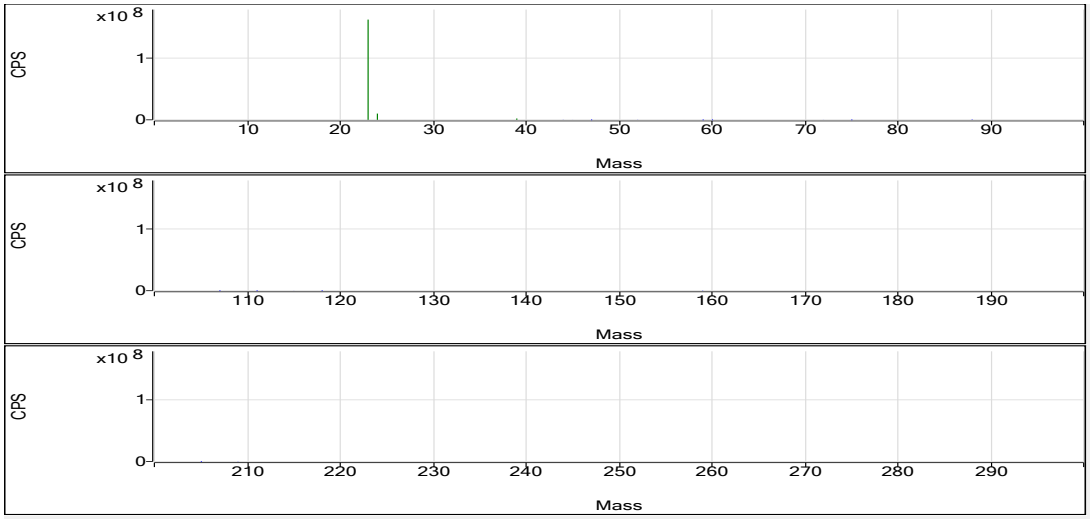


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	24.00	0.0008	4.685E-06
Se	78	2	H2	0.23	0.0001	17.33	0.0004	1.219E-05
Se	78	2	H2	0.322	0.0001	23.33	0.0004	1.219E-05
Se	78	2	H2	0.149	0.0001	12.00	0.0004	1.219E-05
Na	23	3	He	912790.097	3265.4401	163818637.56	0.0036	0.3452
Na	23	3	He	912937.714	3265.9681	161058897.60	0.0036	0.3452
Na	23	3	He	931388.827	3331.9686	162977647.57	0.0036	0.3452
Mg	24	3	He	112284.929	201.4788	10107667.97	0.0018	0.003497
Mg	24	3	He	115195.461	206.7012	10193324.85	0.0018	0.003497
Mg	24	3	He	114166.496	204.8549	10020135.48	0.0018	0.003497
Al	27	3	He	67.736	0.0403	2020.31	0.0006	0.0006432
Al	27	3	He	71.352	0.0424	2090.27	0.0006	0.0006432
Al	27	3	He	74.742	0.0444	2170.28	0.0006	0.0006432
K	39	3	He	36528.772	42.9265	2153510.28	0.0012	0.3951
K	39	3	He	37629.031	44.2075	2180063.87	0.0012	0.3951
K	39	3	He	37724.721	44.319	2167787.62	0.0012	0.3951
Ca	44	3	He	48755.357	3.2962	165363.40	0.0001	0.002715
Ca	44	3	He	49482.964	3.3454	164975.21	0.0001	0.002715
Ca	44	3	He	50173.753	3.392	165916.31	0.0001	0.002715
Ti	47	3	He	1.726	0.001	50.00	0.0005	7.003E-05
Ti	47	3	He	0.625	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.631	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	2.883	0.0879	4408.69	0.0219	0.02486
V	51	3	He	2.98	0.09	4438.71	0.0219	0.02486
V	51	3	He	3.094	0.0925	4524.73	0.0219	0.02486
Cr	52	3	He	111.014	3.3638	168753.43	0.0299	0.03997
Cr	52	3	He	112.066	3.3953	167437.28	0.0299	0.03997
Cr	52	3	He	113.48	3.4376	168146.56	0.0299	0.03997
Mn	55	3	He	13.063	0.1703	8542.80	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	13.356	0.174	8582.83	0.0128	0.002639
Mn	55	3	He	12.192	0.1591	7782.31	0.0128	0.002639
Fe	57	3	He	78.862	0.0472	2370.26	0.0006	0.001429
Fe	57	3	He	79.571	0.0477	2350.26	0.0006	0.001429
Fe	57	3	He	76.724	0.046	2250.24	0.0006	0.001429
Co	59	3	He	0.118	0.0088	440.02	0.0563	0.002149
Co	59	3	He	0.11	0.0083	410.02	0.0563	0.002149
Co	59	3	He	0.122	0.009	440.02	0.0563	0.002149
Ni	60	3	He	1.176	0.0129	1100.08	0.0086	0.002834
Ni	60	3	He	0.894	0.0105	890.06	0.0086	0.002834
Ni	60	3	He	1.388	0.0147	1230.09	0.0086	0.002834
Cu	63	3	He	1.801	0.051	4340.82	0.0257	0.004757
Cu	63	3	He	1.787	0.0506	4290.80	0.0257	0.004757
Cu	63	3	He	1.645	0.047	3920.67	0.0257	0.004757
Zn	66	3	He	17.699	0.0553	4710.95	0.0029	0.003818
Zn	66	3	He	18.106	0.0565	4790.96	0.0029	0.003818
Zn	66	3	He	17.958	0.0561	4680.95	0.0029	0.003818
As	75	3	He	0.971	0.0028	238.00	0.002	0.0008061
As	75	3	He	1.381	0.0036	308.01	0.002	0.0008061
As	75	3	He	1.011	0.0029	240.00	0.002	0.0008061
Sr	88	3	He	798.589	7.1642	614595.03	0.009	0.0009645
Sr	88	3	He	767.358	6.884	611969.95	0.009	0.0009645
Sr	88	3	He	805.218	7.2236	610914.99	0.009	0.0009645
Mo	98	3	He	2.412	0.0532	4560.91	0.0219	0.0002706
Mo	98	3	He	2.189	0.0483	4290.83	0.0219	0.0002706
Mo	98	3	He	2.404	0.053	4480.88	0.0219	0.0002706
Ag	107	3	He	0.152	0.0077	660.04	0.0465	0.0006206
Ag	107	3	He	0.129	0.0066	590.03	0.0465	0.0006206
Ag	107	3	He	0.127	0.0065	550.03	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.021	0.0001	10.00	0.0053	0
Cd	111	3	He	0.031	0.0002	14.00	0.0053	0
Sn	120	3	He	-0.135	0.0143	1230.11	0.0158	0.01648
Sn	120	3	He	0.111	0.0182	1620.15	0.0158	0.01648
Sn	120	3	He	-0.137	0.0143	1210.10	0.0158	0.01648
Sb	121	3	He	2.054	0.0308	2640.37	0.0149	0.0002698
Sb	121	3	He	1.898	0.0285	2530.31	0.0149	0.0002698
Sb	121	3	He	1.956	0.0293	2480.32	0.0149	0.0002698
Ba	137	3	He	27.337	0.1314	11275.04	0.0048	0.0002317
Ba	137	3	He	26.848	0.1291	11475.21	0.0048	0.0002317
Ba	137	3	He	26.966	0.1297	10964.75	0.0048	0.0002317
Tl	205	3	He	0.021	0.0007	260.02	0.0247	0.0001339
Tl	205	3	He	0.01	0.0004	150.01	0.0247	0.0001339
Tl	205	3	He	0.026	0.0008	310.01	0.0247	0.0001339
Pb	208	3	He	0.569	0.0197	4170.79	0.0327	0.00107
Pb	208	3	He	0.519	0.0181	3700.67	0.0327	0.00107
Pb	208	3	He	0.535	0.0186	4060.77	0.0327	0.00107
U	238	3	He	0.377	0.0186	5381.30	0.0493	7.55E-05
U	238	3	He	0.442	0.0218	6351.84	0.0493	7.55E-05
U	238	3	He	0.41	0.0203	5831.56	0.0493	7.55E-05
Sc	45	1	No Gas			2482479.81		
Sc	45	1	No Gas			2467281.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2509816.68		
Ge	72	1	No Gas			1179186.39		
Ge	72	1	No Gas			1170268.97		
Ge	72	1	No Gas			1182663.81		
Sc	45	2	H2			189979.25		
Sc	45	2	H2			193187.48		
Sc	45	2	H2			191444.80		
Ge	72	2	H2			160593.56		
Ge	72	2	H2			159387.92		
Ge	72	2	H2			161109.18		
In	115	2	H2			388604.88		
In	115	2	H2			383857.65		
In	115	2	H2			392360.35		
Sc	45	3	He			50167.40		
Sc	45	3	He			49314.29		
Sc	45	3	He			48913.32		
Ge	72	3	He			85113.46		
Ge	72	3	He			84740.88		
Ge	72	3	He			83433.08		
In	115	3	He			85794.10		
In	115	3	He			88904.45		
In	115	3	He			84577.59		
Tb	159	3	He			391964.02		
Tb	159	3	He			391657.38		
Tb	159	3	He			393433.20		
Bi	209	3	He			288734.76		
Bi	209	3	He			290822.46		
Bi	209	3	He			287642.03		

Quantitation Report

Data File Name	178SMPL.d
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Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

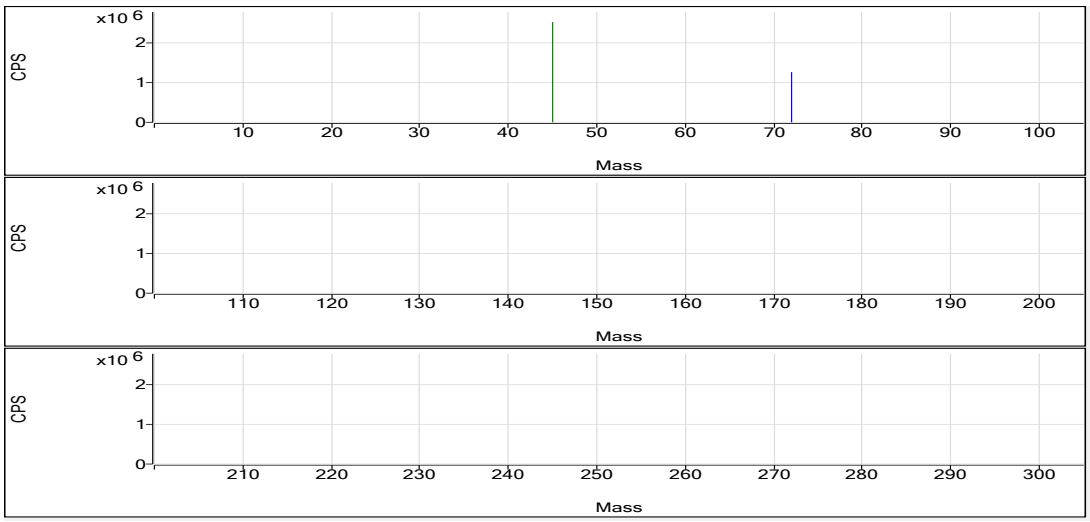
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	42.4	20.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.340	ppb	12.0	26.67	0.0002	Pulse	1.5000	3
Na	23	45	He	96282.333	ppb	0.7	16819766.42	344.7518	Analog	0.1000	3
Mg	24	45	He	22674.074	ppb	0.6	1985112.94	40.6881	Analog	0.1000	3
Al	27	45	He	6.024	ppb	29.3	203.34	0.0042	Pulse	0.1000	3
K	39	45	He	6277.229	ppb	1.4	375851.02	7.7038	Pulse	0.1000	3
Ca	44	45	He	51486.627	ppb	0.8	169818.02	3.4807	Pulse	0.1000	3
Ti	47	45	He	0.507	ppb	87.5	16.67	0.0003	Pulse	0.1000	3
V	51	45	He	0.836	ppb	7.5	2104.83	0.0431	Pulse	0.5000	3
Cr	52	45	He	0.139	ppb	48.8	2153.57	0.0441	Pulse	0.1000	3
Mn	55	45	He	2422.544	ppb	0.8	1516986.49	31.0933	Analog	0.1000	3
Fe	57	45	He	34.241	ppb	9.8	1040.07	0.0213	Pulse	0.1000	3
Co	59	45	He	1.334	ppb	3.9	3767.29	0.0772	Pulse	0.1000	3
Ni	60	72	He	1.089	ppb	3.2	1093.42	0.0122	Pulse	0.1000	3
Cu	63	72	He	0.066	ppb	79.6	580.03	0.0065	Pulse	0.1000	3
Zn	66	72	He	9.023	ppb	8.8	2700.35	0.0301	Pulse	0.1000	3
As	75	72	He	0.263	ppb	17.4	120.67	0.0013	Pulse	0.5000	3
Sr	88	115	He	290.818	ppb	0.8	232778.58	2.6095	Pulse	0.1000	3
Mo	98	115	He	0.357	ppb	23.1	723.38	0.0081	Pulse	0.1000	3
Ag	107	115	He	-0.007	ppb	N/A	26.67	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.031	ppb	8.4	14.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.221	ppb	N/A	1160.09	0.0130	Pulse	0.1000	3
Sb	121	115	He	0.100	ppb	42.5	156.67	0.0018	Pulse	0.1000	3
Ba	137	115	He	64.727	ppb	0.6	27732.04	0.3109	Pulse	0.1000	3
Tl	205	159	He	0.034	ppb	40.5	393.35	0.0010	Pulse	0.1000	3
Pb	208	159	He	0.019	ppb	29.2	683.37	0.0017	Pulse	0.1000	3
U	238	209	He	0.014	ppb	11.8	240.01	0.0008	Pulse	0.1000	3

ISTD Table:

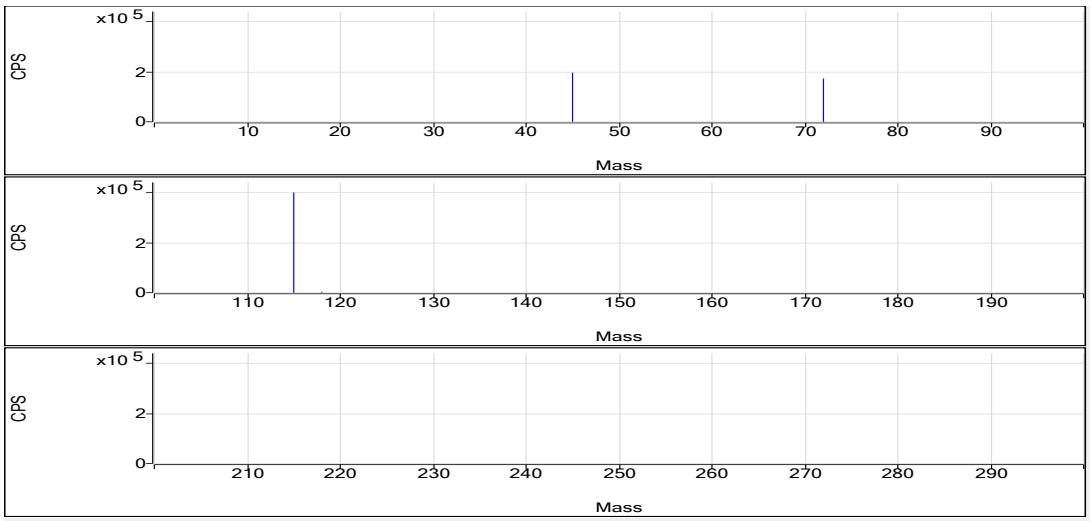
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2525741.53	0.5	105.3	Analog	0.1000	3
No Gas	Ge	72	1264244.09	0.3	109.6	Pulse	0.1000	3
H2	Sc	45	196811.46	0.5	105.2	Pulse	0.1000	3
H2	Ge	72	173222.63	1.0	105.8	Pulse	0.1000	3
H2	In	115	401432.26	0.7	103.2	Pulse	0.1000	3
He	Sc	45	48789.16	0.5	104.6	Pulse	0.1000	3
He	Ge	72	89791.03	1.1	110.6	Pulse	0.1000	3
He	In	115	89209.61	1.7	103.5	Pulse	0.1000	3
He	Tb	159	404550.09	0.9	101.5	Pulse	0.1000	3
He	Bi	209	308471.61	0.7	99.7	Pulse	0.1000	3

No Gas

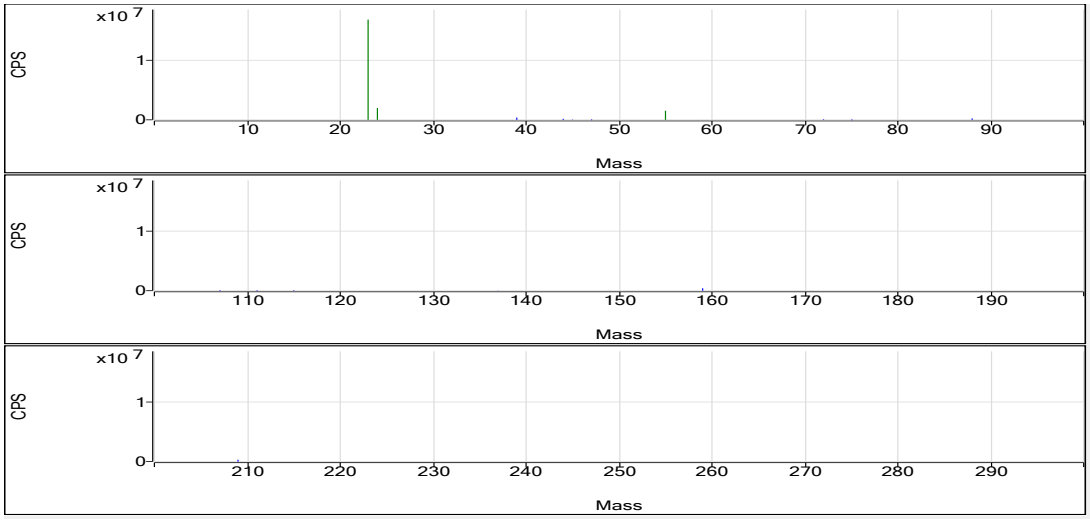


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	24.00	0.0008	4.685E-06
Se	78	2	H2	0.309	0.0001	24.67	0.0004	1.219E-05
Se	78	2	H2	0.386	0.0002	30.00	0.0004	1.219E-05
Se	78	2	H2	0.325	0.0001	25.33	0.0004	1.219E-05
Na	23	3	He	96537.213	345.6635	16824241.00	0.0036	0.3452
Na	23	3	He	96826.131	346.697	16864058.50	0.0036	0.3452
Na	23	3	He	95483.654	341.8949	16770999.75	0.0036	0.3452
Mg	24	3	He	22834.171	40.9754	1994364.97	0.0018	0.003497
Mg	24	3	He	22625.01	40.6	1974870.44	0.0018	0.003497
Mg	24	3	He	22563.04	40.4889	1986103.41	0.0018	0.003497
Al	27	3	He	4.169	0.0031	150.01	0.0006	0.0006432
Al	27	3	He	7.686	0.0051	250.01	0.0006	0.0006432
Al	27	3	He	6.218	0.0043	210.01	0.0006	0.0006432
K	39	3	He	6371.427	7.8135	380300.54	0.0012	0.3951
K	39	3	He	6261.663	7.6857	373847.77	0.0012	0.3951
K	39	3	He	6198.597	7.6123	373404.76	0.0012	0.3951
Ca	44	3	He	51656.148	3.4922	169972.77	0.0001	0.002715
Ca	44	3	He	51771.647	3.5	170246.68	0.0001	0.002715
Ca	44	3	He	51032.085	3.45	169234.61	0.0001	0.002715
Ti	47	3	He	0.252	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.018	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.249	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.908	0.0447	2176.18	0.0219	0.02486
V	51	3	He	0.794	0.0422	2054.16	0.0219	0.02486
V	51	3	He	0.806	0.0425	2084.16	0.0219	0.02486
Cr	52	3	He	0.216	0.0464	2260.27	0.0299	0.03997
Cr	52	3	He	0.086	0.0426	2070.21	0.0299	0.03997
Cr	52	3	He	0.115	0.0434	2130.23	0.0299	0.03997
Mn	55	3	He	2414.659	30.9921	1508455.76	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2445.557	31.3886	1526807.16	0.0128	0.002639
Mn	55	3	He	2407.415	30.8991	1515696.54	0.0128	0.002639
Fe	57	3	He	33.614	0.021	1020.07	0.0006	0.001429
Fe	57	3	He	37.882	0.0234	1140.08	0.0006	0.001429
Fe	57	3	He	31.228	0.0196	960.06	0.0006	0.001429
Co	59	3	He	1.378	0.0797	3880.65	0.0563	0.002149
Co	59	3	He	1.277	0.074	3600.60	0.0563	0.002149
Co	59	3	He	1.346	0.0779	3820.61	0.0563	0.002149
Ni	60	3	He	1.106	0.0123	1120.09	0.0086	0.002834
Ni	60	3	He	1.049	0.0118	1060.08	0.0086	0.002834
Ni	60	3	He	1.11	0.0124	1100.08	0.0086	0.002834
Cu	63	3	He	0.123	0.0079	720.04	0.0257	0.004757
Cu	63	3	He	0.054	0.0061	550.03	0.0257	0.004757
Cu	63	3	He	0.02	0.0053	470.02	0.0257	0.004757
Zn	66	3	He	8.407	0.0283	2570.29	0.0029	0.003818
Zn	66	3	He	8.738	0.0293	2620.36	0.0029	0.003818
Zn	66	3	He	9.923	0.0327	2910.39	0.0029	0.003818
As	75	3	He	0.241	0.0013	118.00	0.002	0.0008061
As	75	3	He	0.315	0.0015	130.00	0.002	0.0008061
As	75	3	He	0.232	0.0013	114.00	0.002	0.0008061
Sr	88	3	He	289.042	2.5936	235682.50	0.009	0.0009645
Sr	88	3	He	289.776	2.6002	230889.98	0.009	0.0009645
Sr	88	3	He	293.635	2.6348	231763.26	0.009	0.0009645
Mo	98	3	He	0.384	0.0087	790.05	0.0219	0.0002706
Mo	98	3	He	0.265	0.0061	540.03	0.0219	0.0002706
Mo	98	3	He	0.423	0.0096	840.05	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.009	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.013	0	0.00	0.0465	0.0006206
Cd	111	3	He	0.029	0.0002	14.00	0.0053	0
Cd	111	3	He	0.034	0.0002	16.00	0.0053	0
Cd	111	3	He	0.03	0.0002	14.00	0.0053	0
Sn	120	3	He	-0.095	0.015	1360.11	0.0158	0.01648
Sn	120	3	He	-0.287	0.0119	1060.08	0.0158	0.01648
Sn	120	3	He	-0.28	0.0121	1060.08	0.0158	0.01648
Sb	121	3	He	0.056	0.0011	100.00	0.0149	0.0002698
Sb	121	3	He	0.141	0.0024	210.01	0.0149	0.0002698
Sb	121	3	He	0.104	0.0018	160.01	0.0149	0.0002698
Ba	137	3	He	64.544	0.31	28169.66	0.0048	0.0002317
Ba	137	3	He	64.453	0.3096	27488.20	0.0048	0.0002317
Ba	137	3	He	65.184	0.3131	27538.26	0.0048	0.0002317
Tl	205	3	He	0.031	0.0009	370.02	0.0247	0.0001339
Tl	205	3	He	0.049	0.0013	540.03	0.0247	0.0001339
Tl	205	3	He	0.022	0.0007	270.01	0.0247	0.0001339
Pb	208	3	He	0.014	0.0015	250.01	0.0327	0.00107
Pb	208	3	He	0.017	0.0016	380.02	0.0327	0.00107
Pb	208	3	He	0.025	0.0019	390.02	0.0327	0.00107
U	238	3	He	0.016	0.0008	260.01	0.0493	7.55E-05
U	238	3	He	0.012	0.0007	210.01	0.0493	7.55E-05
U	238	3	He	0.015	0.0008	250.01	0.0493	7.55E-05
Sc	45	1	No Gas			2511878.56		
Sc	45	1	No Gas			2539409.96		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2525936.06		
Ge	72	1	No Gas			1266131.70		
Ge	72	1	No Gas			1266583.18		
Ge	72	1	No Gas			1260017.40		
Sc	45	2	H2			197827.48		
Sc	45	2	H2			196420.29		
Sc	45	2	H2			196186.62		
Ge	72	2	H2			174929.29		
Ge	72	2	H2			173137.83		
Ge	72	2	H2			171600.78		
In	115	2	H2			402956.91		
In	115	2	H2			403021.60		
In	115	2	H2			398318.28		
Sc	45	3	He			48672.31		
Sc	45	3	He			48642.07		
Sc	45	3	He			49053.09		
Ge	72	3	He			90837.93		
Ge	72	3	He			89559.43		
Ge	72	3	He			88975.73		
In	115	3	He			90876.06		
In	115	3	He			88802.95		
In	115	3	He			87967.29		
Tb	159	3	He			408961.01		
Tb	159	3	He			402753.08		
Tb	159	3	He			401936.17		
Bi	209	3	He			307874.14		
Bi	209	3	He			306587.01		
Bi	209	3	He			310953.67		

Quantitation Report

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Acq Time	8/10/2023 4:47:00 PM
Sample Name	410-137900-M-2-A
Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

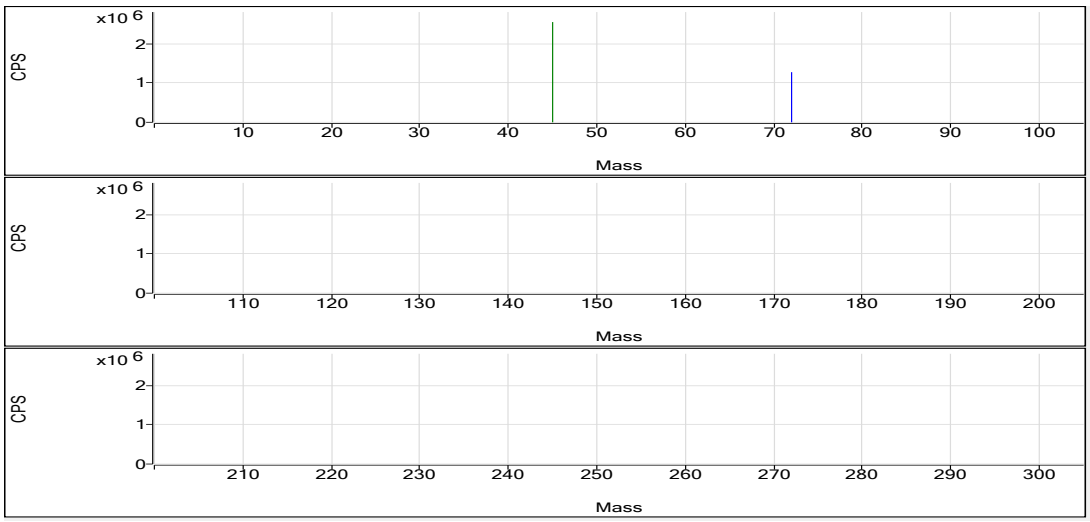
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.266	ppb	2.5	528.68	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.078	ppb	41.1	8.00	0.0000	Pulse	1.5000	3
Na	23	45	He	5279.242	ppb	1.5	960701.49	19.2293	Pulse	0.1000	3
Mg	24	45	He	7916.869	ppb	2.5	709786.08	14.2089	Pulse	0.1000	3
Al	27	45	He	239.614	ppb	2.5	7035.22	0.1408	Pulse	0.1000	3
K	39	45	He	3313.762	ppb	3.2	212460.80	4.2534	Pulse	0.1000	3
Ca	44	45	He	49089.132	ppb	1.5	165808.07	3.3188	Pulse	0.1000	3
Ti	47	45	He	0.113	ppb	373.8	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.788	ppb	7.5	2102.84	0.0421	Pulse	0.5000	3
Cr	52	45	He	-0.035	ppb	N/A	1946.87	0.0389	Pulse	0.1000	3
Mn	55	45	He	1201.717	ppb	2.0	770613.95	15.4253	Pulse	0.1000	3
Fe	57	45	He	78.448	ppb	6.7	2346.94	0.0470	Pulse	0.1000	3
Co	59	45	He	6.533	ppb	0.7	18482.45	0.3699	Pulse	0.1000	3
Ni	60	72	He	28.119	ppb	2.9	21927.30	0.2442	Pulse	0.1000	3
Cu	63	72	He	1.832	ppb	2.5	4650.93	0.0518	Pulse	0.1000	3
Zn	66	72	He	62.852	ppb	2.4	16776.93	0.1868	Pulse	0.1000	3
As	75	72	He	0.179	ppb	22.9	105.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	296.790	ppb	1.7	237638.79	2.6631	Pulse	0.1000	3
Mo	98	115	He	0.141	ppb	1.2	300.01	0.0034	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.394	ppb	4.7	188.00	0.0021	Pulse	0.5000	3
Sn	120	115	He	-0.231	ppb	N/A	1143.42	0.0128	Pulse	0.1000	3
Sb	121	115	He	0.067	ppb	23.6	113.34	0.0013	Pulse	0.1000	3
Ba	137	115	He	15.521	ppb	6.9	6665.18	0.0747	Pulse	0.1000	3
Tl	205	159	He	0.082	ppb	16.4	880.07	0.0022	Pulse	0.1000	3
Pb	208	159	He	0.014	ppb	26.6	626.70	0.0015	Pulse	0.1000	3
U	238	209	He	0.131	ppb	8.9	2113.59	0.0065	Pulse	0.1000	3

ISTD Table:

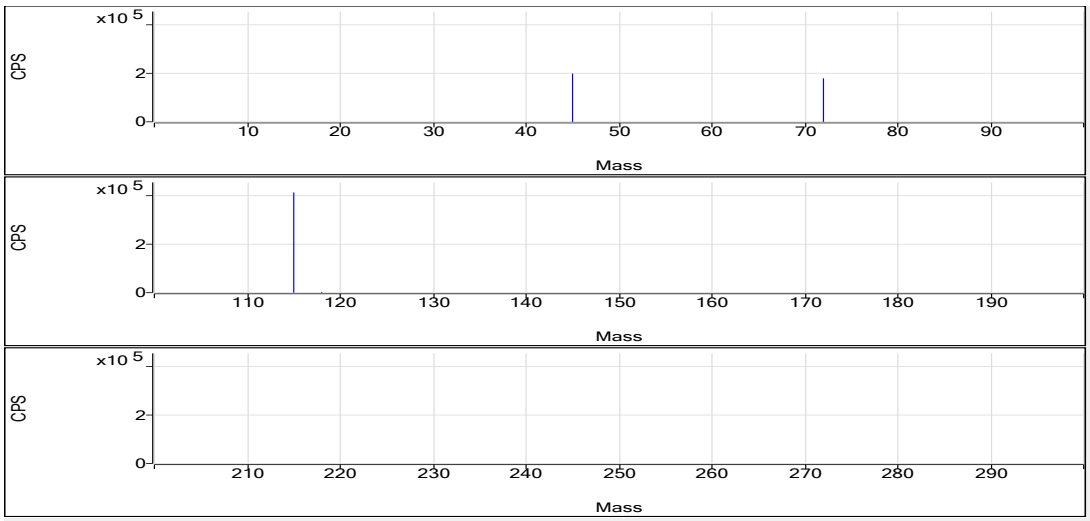
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2543386.89	0.5	106.0	Analog	0.1000	3
No Gas	Ge	72	1271801.41	0.5	110.3	Pulse	0.1000	3
H2	Sc	45	197714.08	1.2	105.7	Pulse	0.1000	3
H2	Ge	72	178363.24	0.3	108.9	Pulse	0.1000	3
H2	In	115	411034.75	0.4	105.6	Pulse	0.1000	3
He	Sc	45	49969.98	2.0	107.1	Pulse	0.1000	3
He	Ge	72	89808.59	0.7	110.6	Pulse	0.1000	3
He	In	115	89243.21	1.1	103.5	Pulse	0.1000	3
He	Tb	159	407044.45	0.6	102.1	Pulse	0.1000	3
He	Bi	209	323403.78	1.3	104.6	Pulse	0.1000	3

No Gas

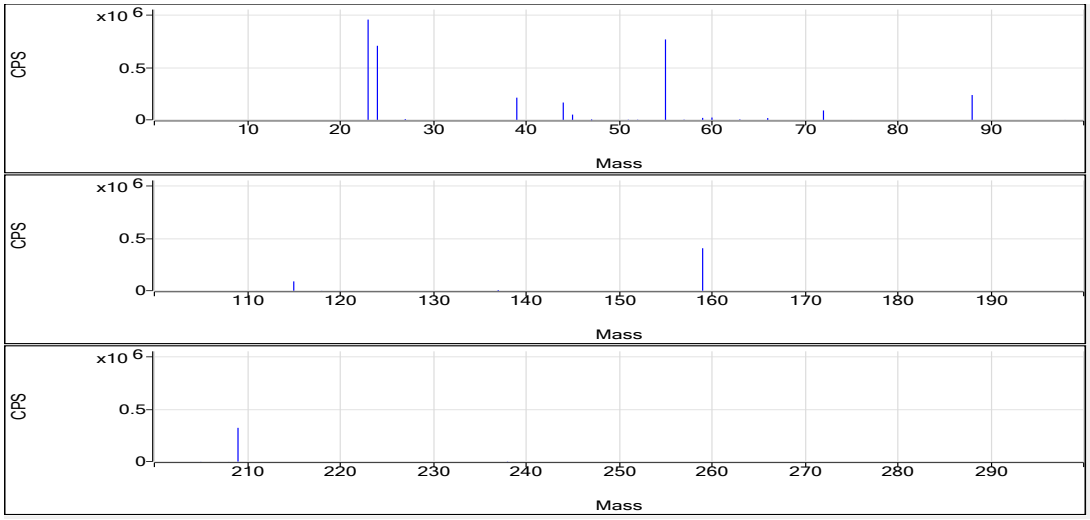


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.265	0.0002	524.01	0.0008	4.685E-06
Be	9	1	No Gas	0.26	0.0002	516.01	0.0008	4.685E-06
Be	9	1	No Gas	0.274	0.0002	546.01	0.0008	4.685E-06
Se	78	2	H2	0.105	0.0001	10.00	0.0004	1.219E-05
Se	78	2	H2	0.087	0	8.67	0.0004	1.219E-05
Se	78	2	H2	0.043	0	5.33	0.0004	1.219E-05
Na	23	3	He	5306.79	19.3278	960697.17	0.0036	0.3452
Na	23	3	He	5191.948	18.917	966293.50	0.0036	0.3452
Na	23	3	He	5338.989	19.443	955113.81	0.0036	0.3452
Mg	24	3	He	8013.914	14.383	714915.22	0.0018	0.003497
Mg	24	3	He	7689.16	13.8003	704929.76	0.0018	0.003497
Mg	24	3	He	8047.533	14.4434	709513.27	0.0018	0.003497
Al	27	3	He	244.848	0.1439	7152.00	0.0006	0.0006432
Al	27	3	He	233.203	0.1371	7001.89	0.0006	0.0006432
Al	27	3	He	240.792	0.1415	6951.77	0.0006	0.0006432
K	39	3	He	3369.755	4.3186	214656.05	0.0012	0.3951
K	39	3	He	3191.95	4.1115	210020.09	0.0012	0.3951
K	39	3	He	3379.58	4.33	212706.27	0.0012	0.3951
Ca	44	3	He	48930.396	3.3081	164428.40	0.0001	0.002715
Ca	44	3	He	48426.829	3.274	167240.10	0.0001	0.002715
Ca	44	3	He	49910.172	3.3742	165755.70	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.599	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.783	0.042	2086.17	0.0219	0.02486
V	51	3	He	0.733	0.0409	2088.16	0.0219	0.02486
V	51	3	He	0.85	0.0434	2134.18	0.0219	0.02486
Cr	52	3	He	-0.172	0.0348	1730.16	0.0299	0.03997
Cr	52	3	He	0.071	0.0421	2150.23	0.0299	0.03997
Cr	52	3	He	-0.002	0.0399	1960.21	0.0299	0.03997
Mn	55	3	He	1218.533	15.6411	777449.83	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1174.138	15.0714	769855.85	0.0128	0.002639
Mn	55	3	He	1212.479	15.5634	764536.16	0.0128	0.002639
Fe	57	3	He	81.35	0.0487	2420.29	0.0006	0.001429
Fe	57	3	He	72.354	0.0435	2220.25	0.0006	0.001429
Fe	57	3	He	81.641	0.0489	2400.27	0.0006	0.001429
Co	59	3	He	6.586	0.3728	18532.51	0.0563	0.002149
Co	59	3	He	6.523	0.3693	18862.90	0.0563	0.002149
Co	59	3	He	6.491	0.3675	18051.95	0.0563	0.002149
Ni	60	3	He	27.93	0.2426	21897.09	0.0086	0.002834
Ni	60	3	He	29.024	0.2519	22458.18	0.0086	0.002834
Ni	60	3	He	27.403	0.238	21426.62	0.0086	0.002834
Cu	63	3	He	1.783	0.0505	4560.89	0.0257	0.004757
Cu	63	3	He	1.873	0.0529	4710.96	0.0257	0.004757
Cu	63	3	He	1.84	0.052	4680.93	0.0257	0.004757
Zn	66	3	He	63.101	0.1875	16930.46	0.0029	0.003818
Zn	66	3	He	64.231	0.1908	17010.50	0.0029	0.003818
Zn	66	3	He	61.226	0.1821	16389.82	0.0029	0.003818
As	75	3	He	0.18	0.0012	106.00	0.002	0.0008061
As	75	3	He	0.22	0.0013	112.00	0.002	0.0008061
As	75	3	He	0.138	0.0011	98.00	0.002	0.0008061
Sr	88	3	He	290.954	2.6108	235800.37	0.009	0.0009645
Sr	88	3	He	299.044	2.6833	237028.12	0.009	0.0009645
Sr	88	3	He	300.373	2.6953	240087.87	0.009	0.0009645
Mo	98	3	He	0.139	0.0033	300.01	0.0219	0.0002706
Mo	98	3	He	0.143	0.0034	300.01	0.0219	0.0002706
Mo	98	3	He	0.141	0.0034	300.01	0.0219	0.0002706
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Cd	111	3	He	0.402	0.0021	194.00	0.0053	0
Cd	111	3	He	0.373	0.002	176.00	0.0053	0
Cd	111	3	He	0.407	0.0022	194.00	0.0053	0
Sn	120	3	He	-0.37	0.0106	960.07	0.0158	0.01648
Sn	120	3	He	-0.118	0.0146	1290.11	0.0158	0.01648
Sn	120	3	He	-0.204	0.0132	1180.09	0.0158	0.01648
Sb	121	3	He	0.071	0.0013	120.01	0.0149	0.0002698
Sb	121	3	He	0.081	0.0015	130.01	0.0149	0.0002698
Sb	121	3	He	0.05	0.001	90.00	0.0149	0.0002698
Ba	137	3	He	14.697	0.0708	6391.67	0.0048	0.0002317
Ba	137	3	He	16.728	0.0805	7112.12	0.0048	0.0002317
Ba	137	3	He	15.137	0.0729	6491.75	0.0048	0.0002317
Tl	205	3	He	0.07	0.0019	760.07	0.0247	0.0001339
Tl	205	3	He	0.08	0.0021	860.06	0.0247	0.0001339
Tl	205	3	He	0.096	0.0025	1020.07	0.0247	0.0001339
Pb	208	3	He	0.014	0.0015	380.02	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	370.02	0.0327	0.00107
Pb	208	3	He	0.011	0.0014	330.02	0.0327	0.00107
U	238	3	He	0.119	0.0059	1900.22	0.0493	7.55E-05
U	238	3	He	0.142	0.0071	2270.28	0.0493	7.55E-05
U	238	3	He	0.133	0.0066	2170.27	0.0493	7.55E-05
Sc	45	1	No Gas			2535000.74		
Sc	45	1	No Gas			2537153.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2558006.37		
Ge	72	1	No Gas			1266714.75		
Ge	72	1	No Gas			1279249.90		
Ge	72	1	No Gas			1269439.59		
Sc	45	2	H2			194991.38		
Sc	45	2	H2			199268.96		
Sc	45	2	H2			198881.91		
Ge	72	2	H2			178300.47		
Ge	72	2	H2			178965.45		
Ge	72	2	H2			177823.79		
In	115	2	H2			412752.65		
In	115	2	H2			410391.60		
In	115	2	H2			409959.99		
Sc	45	3	He			49705.44		
Sc	45	3	He			51080.66		
Sc	45	3	He			49123.83		
Ge	72	3	He			90275.04		
Ge	72	3	He			89137.99		
Ge	72	3	He			90012.73		
In	115	3	He			90323.77		
In	115	3	He			88340.31		
In	115	3	He			89084.49		
Tb	159	3	He			409732.34		
Tb	159	3	He			405819.68		
Tb	159	3	He			405581.32		
Bi	209	3	He			320847.69		
Bi	209	3	He			321266.05		
Bi	209	3	He			328097.61		

Quantitation Report

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Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

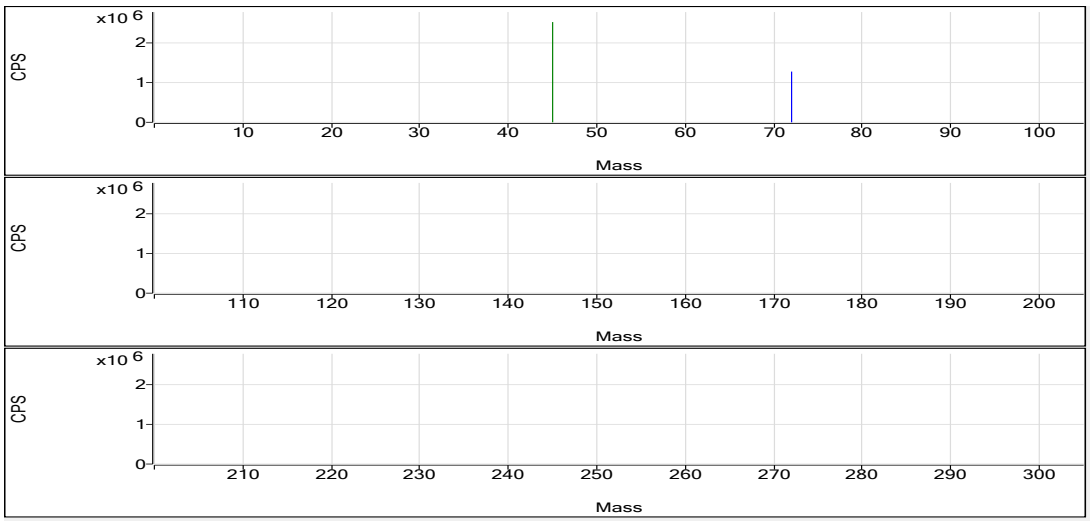
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.246	ppb	6.8	485.34	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.090	ppb	39.7	8.67	0.0000	Pulse	1.5000	3
Na	23	45	He	5273.172	ppb	0.5	953105.51	19.2076	Pulse	0.1000	3
Mg	24	45	He	7944.901	ppb	0.9	707528.37	14.2592	Pulse	0.1000	3
Al	27	45	He	148.047	ppb	3.1	4330.79	0.0873	Pulse	0.1000	3
K	39	45	He	3310.401	ppb	0.5	210861.10	4.2495	Pulse	0.1000	3
Ca	44	45	He	49994.502	ppb	1.3	167736.19	3.3799	Pulse	0.1000	3
Ti	47	45	He	0.993	ppb	36.6	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	1.311	ppb	5.7	2656.26	0.0535	Pulse	0.5000	3
Cr	52	45	He	-0.202	ppb	N/A	1683.49	0.0339	Pulse	0.1000	3
Mn	55	45	He	827.112	ppb	1.8	526820.07	10.6177	Pulse	0.1000	3
Fe	57	45	He	97.050	ppb	9.0	2867.06	0.0578	Pulse	0.1000	3
Co	59	45	He	3.822	ppb	2.5	10777.72	0.2172	Pulse	0.1000	3
Ni	60	72	He	21.686	ppb	5.0	16963.82	0.1890	Pulse	0.1000	3
Cu	63	72	He	1.231	ppb	7.7	3260.49	0.0364	Pulse	0.1000	3
Zn	66	72	He	46.294	ppb	3.8	12435.78	0.1386	Pulse	0.1000	3
As	75	72	He	0.147	ppb	87.6	99.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	291.725	ppb	1.5	237314.20	2.6177	Pulse	0.1000	3
Mo	98	115	He	0.120	ppb	50.6	263.35	0.0029	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.260	ppb	13.6	126.00	0.0014	Pulse	0.5000	3
Sn	120	115	He	-0.194	ppb	N/A	1216.76	0.0134	Pulse	0.1000	3
Sb	121	115	He	0.081	ppb	18.7	133.34	0.0015	Pulse	0.1000	3
Ba	137	115	He	15.368	ppb	5.2	6705.17	0.0740	Pulse	0.1000	3
Tl	205	159	He	0.064	ppb	13.4	696.72	0.0017	Pulse	0.1000	3
Pb	208	159	He	0.033	ppb	9.6	870.05	0.0022	Pulse	0.1000	3
U	238	209	He	0.105	ppb	4.3	1690.18	0.0052	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2527211.27	1.2	105.4	Analog	0.1000	3
No Gas	Ge	72	1278816.88	0.3	110.9	Pulse	0.1000	3
H2	Sc	45	192994.62	0.4	103.2	Pulse	0.1000	3
H2	Ge	72	173931.03	0.9	106.2	Pulse	0.1000	3
H2	In	115	405052.26	0.3	104.1	Pulse	0.1000	3
He	Sc	45	49622.29	1.1	106.4	Pulse	0.1000	3
He	Ge	72	89735.22	1.2	110.5	Pulse	0.1000	3
He	In	115	90668.99	1.3	105.2	Pulse	0.1000	3
He	Tb	159	403354.53	0.9	101.2	Pulse	0.1000	3
He	Bi	209	322991.08	1.5	104.4	Pulse	0.1000	3

No Gas



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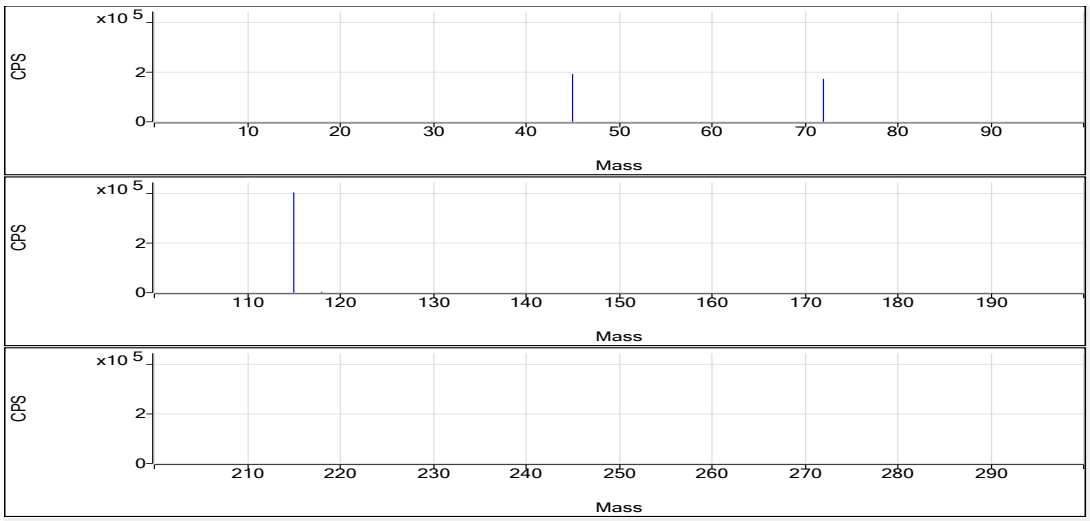
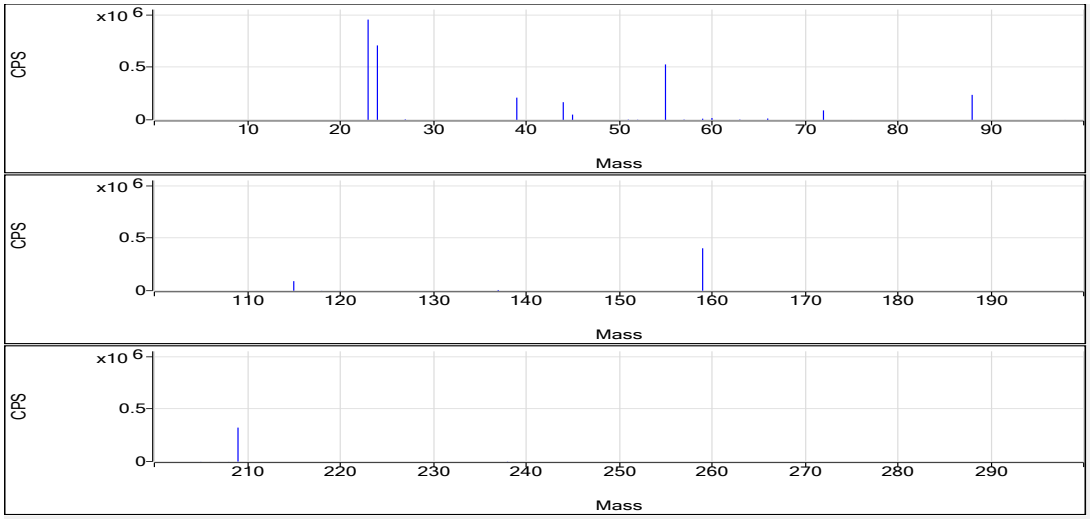


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.229	0.0002	450.01	0.0008	4.685E-06
Be	9	1	No Gas	0.262	0.0002	524.01	0.0008	4.685E-06
Be	9	1	No Gas	0.246	0.0002	482.01	0.0008	4.685E-06
Se	78	2	H2	0.125	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.054	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.091	0.0001	8.67	0.0004	1.219E-05
Na	23	3	He	5255.263	19.1435	961726.63	0.0036	0.3452
Na	23	3	He	5302.383	19.312	953338.81	0.0036	0.3452
Na	23	3	He	5261.868	19.1671	944251.08	0.0036	0.3452
Mg	24	3	He	7863.158	14.1125	708982.41	0.0018	0.003497
Mg	24	3	He	7968.428	14.3014	705989.52	0.0018	0.003497
Mg	24	3	He	8003.117	14.3637	707613.19	0.0018	0.003497
Al	27	3	He	153.399	0.0904	4540.85	0.0006	0.0006432
Al	27	3	He	145.393	0.0857	4230.75	0.0006	0.0006432
Al	27	3	He	145.347	0.0857	4220.77	0.0006	0.0006432
K	39	3	He	3293.142	4.2294	212473.61	0.0012	0.3951
K	39	3	He	3309.006	4.2478	209694.12	0.0012	0.3951
K	39	3	He	3329.055	4.2712	210415.56	0.0012	0.3951
Ca	44	3	He	50745.534	3.4307	172349.37	0.0001	0.002715
Ca	44	3	He	49734.959	3.3624	165985.15	0.0001	0.002715
Ca	44	3	He	49503.013	3.3467	164874.06	0.0001	0.002715
Ti	47	3	He	1.352	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	1.001	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.626	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	1.361	0.0546	2744.28	0.0219	0.02486
V	51	3	He	1.226	0.0517	2550.24	0.0219	0.02486
V	51	3	He	1.346	0.0543	2674.26	0.0219	0.02486
Cr	52	3	He	-0.191	0.0342	1720.16	0.0299	0.03997
Cr	52	3	He	-0.28	0.0316	1560.13	0.0299	0.03997
Cr	52	3	He	-0.135	0.0359	1770.17	0.0299	0.03997
Mn	55	3	He	812.492	10.4301	523983.12	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	843.007	10.8217	534212.34	0.0128	0.002639
Mn	55	3	He	825.837	10.6013	522264.76	0.0128	0.002639
Fe	57	3	He	86.974	0.052	2610.35	0.0006	0.001429
Fe	57	3	He	102.504	0.061	3010.41	0.0006	0.001429
Fe	57	3	He	101.672	0.0605	2980.43	0.0006	0.001429
Co	59	3	He	3.712	0.2111	10604.21	0.0563	0.002149
Co	59	3	He	3.865	0.2197	10844.45	0.0563	0.002149
Co	59	3	He	3.887	0.2209	10884.50	0.0563	0.002149
Ni	60	3	He	22.931	0.1997	18161.98	0.0086	0.002834
Ni	60	3	He	21.126	0.1842	16419.88	0.0086	0.002834
Ni	60	3	He	21.002	0.1831	16309.61	0.0086	0.002834
Cu	63	3	He	1.125	0.0336	3060.44	0.0257	0.004757
Cu	63	3	He	1.257	0.037	3300.48	0.0257	0.004757
Cu	63	3	He	1.311	0.0384	3420.54	0.0257	0.004757
Zn	66	3	He	45.073	0.1351	12285.58	0.0029	0.003818
Zn	66	3	He	45.514	0.1363	12155.49	0.0029	0.003818
Zn	66	3	He	48.296	0.1444	12866.28	0.0029	0.003818
As	75	3	He	0.197	0.0012	110.00	0.002	0.0008061
As	75	3	He	0.001	0.0008	72.00	0.002	0.0008061
As	75	3	He	0.242	0.0013	116.00	0.002	0.0008061
Sr	88	3	He	296.855	2.6637	238329.63	0.009	0.0009645
Sr	88	3	He	288.781	2.5913	238178.61	0.009	0.0009645
Sr	88	3	He	289.54	2.5981	235434.37	0.009	0.0009645
Mo	98	3	He	0.074	0.0019	170.01	0.0219	0.0002706
Mo	98	3	He	0.097	0.0024	220.01	0.0219	0.0002706
Mo	98	3	He	0.189	0.0044	400.02	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.002	0.0005	50.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.301	0.0016	144.00	0.0053	0
Cd	111	3	He	0.24	0.0013	118.00	0.0053	0
Cd	111	3	He	0.239	0.0013	116.00	0.0053	0
Sn	120	3	He	-0.229	0.0129	1150.10	0.0158	0.01648
Sn	120	3	He	-0.196	0.0134	1230.10	0.0158	0.01648
Sn	120	3	He	-0.156	0.014	1270.09	0.0158	0.01648
Sb	121	3	He	0.087	0.0016	140.01	0.0149	0.0002698
Sb	121	3	He	0.092	0.0016	150.01	0.0149	0.0002698
Sb	121	3	He	0.064	0.0012	110.00	0.0149	0.0002698
Ba	137	3	He	16.211	0.078	6981.98	0.0048	0.0002317
Ba	137	3	He	14.622	0.0704	6471.72	0.0048	0.0002317
Ba	137	3	He	15.27	0.0735	6661.82	0.0048	0.0002317
Tl	205	3	He	0.073	0.0019	780.06	0.0247	0.0001339
Tl	205	3	He	0.055	0.0015	610.04	0.0247	0.0001339
Tl	205	3	He	0.066	0.0018	700.05	0.0247	0.0001339
Pb	208	3	He	0.036	0.0022	470.03	0.0327	0.00107
Pb	208	3	He	0.03	0.002	430.03	0.0327	0.00107
Pb	208	3	He	0.034	0.0022	420.03	0.0327	0.00107
U	238	3	He	0.103	0.0052	1640.15	0.0493	7.55E-05
U	238	3	He	0.11	0.0055	1770.20	0.0493	7.55E-05
U	238	3	He	0.101	0.0051	1660.18	0.0493	7.55E-05
Sc	45	1	No Gas			2511878.56		
Sc	45	1	No Gas			2561053.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2508701.37		
Ge	72	1	No Gas			1279929.51		
Ge	72	1	No Gas			1282067.95		
Ge	72	1	No Gas			1274453.18		
Sc	45	2	H2			192761.21		
Sc	45	2	H2			192347.32		
Sc	45	2	H2			193875.33		
Ge	72	2	H2			175687.67		
Ge	72	2	H2			173097.75		
Ge	72	2	H2			173007.67		
In	115	2	H2			406023.28		
In	115	2	H2			405537.85		
In	115	2	H2			403595.66		
Sc	45	3	He			50237.78		
Sc	45	3	He			49364.99		
Sc	45	3	He			49264.11		
Ge	72	3	He			90968.79		
Ge	72	3	He			89158.53		
Ge	72	3	He			89078.35		
In	115	3	He			89478.00		
In	115	3	He			91922.41		
In	115	3	He			90624.03		
Tb	159	3	He			404795.70		
Tb	159	3	He			406247.96		
Tb	159	3	He			399019.92		
Bi	209	3	He			318154.33		
Bi	209	3	He			322677.05		
Bi	209	3	He			328141.87		

Quantitation Report

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Sample Type	Sample
Comment	A12
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

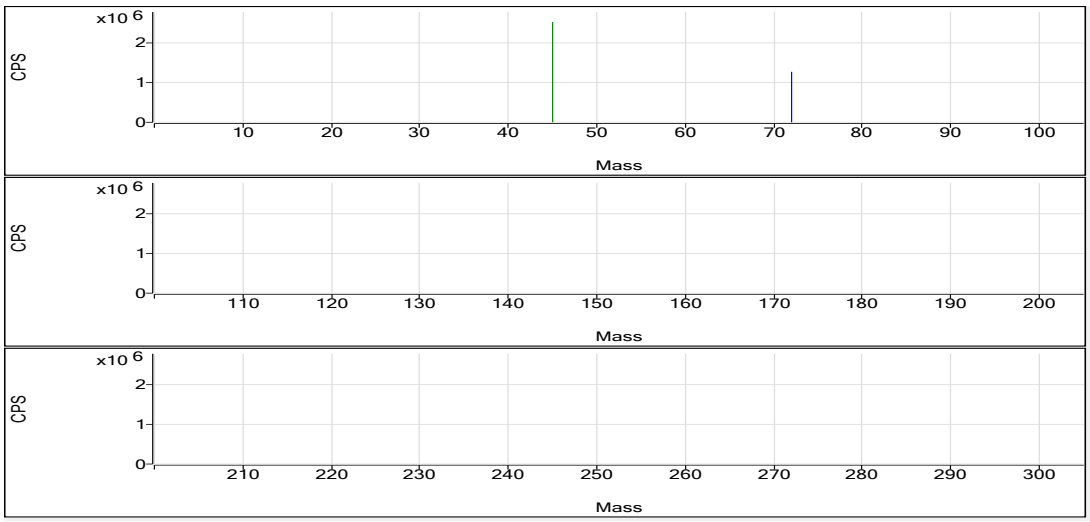
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	41.2	30.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.038	ppb	36.4	4.89	0.0000	Pulse	1.5000	3
Na	23	45	He	2341.937	ppb	1.8	432596.84	8.7224	Pulse	0.1000	3
Mg	24	45	He	3063.966	ppb	1.1	272847.59	5.5012	Pulse	0.1000	3
Al	27	45	He	12.466	ppb	19.5	393.36	0.0079	Pulse	0.1000	3
K	39	45	He	2342.752	ppb	1.5	154883.52	3.1228	Pulse	0.1000	3
Ca	44	45	He	9655.031	ppb	2.9	32480.29	0.6549	Pulse	0.1000	3
Ti	47	45	He	-0.006	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.509	ppb	3.9	1784.79	0.0360	Pulse	0.5000	3
Cr	52	45	He	-0.186	ppb	N/A	1706.82	0.0344	Pulse	0.1000	3
Mn	55	45	He	20.742	ppb	3.1	13333.18	0.2688	Pulse	0.1000	3
Fe	57	45	He	171.353	ppb	6.8	5007.71	0.1010	Pulse	0.1000	3
Co	59	45	He	0.090	ppb	13.2	356.68	0.0072	Pulse	0.1000	3
Ni	60	72	He	0.164	ppb	92.8	376.69	0.0042	Pulse	0.1000	3
Cu	63	72	He	1.391	ppb	5.4	3600.58	0.0405	Pulse	0.1000	3
Zn	66	72	He	2.739	ppb	37.5	1050.07	0.0118	Pulse	0.1000	3
As	75	72	He	0.904	ppb	19.3	236.67	0.0027	Pulse	0.5000	3
Sr	88	115	He	32.033	ppb	5.0	25924.55	0.2883	Pulse	0.1000	3
Mo	98	115	He	0.016	ppb	146.0	56.67	0.0006	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	1338.2	56.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	21.6	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.259	ppb	N/A	1113.42	0.0124	Pulse	0.1000	3
Sb	121	115	He	0.044	ppb	42.7	83.33	0.0009	Pulse	0.1000	3
Ba	137	115	He	53.193	ppb	1.5	22976.56	0.2555	Pulse	0.1000	3
Tl	205	159	He	0.006	ppb	101.2	116.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.081	ppb	9.1	1506.76	0.0037	Pulse	0.1000	3
U	238	209	He	0.009	ppb	16.6	156.68	0.0005	Pulse	0.1000	3

ISTD Table:

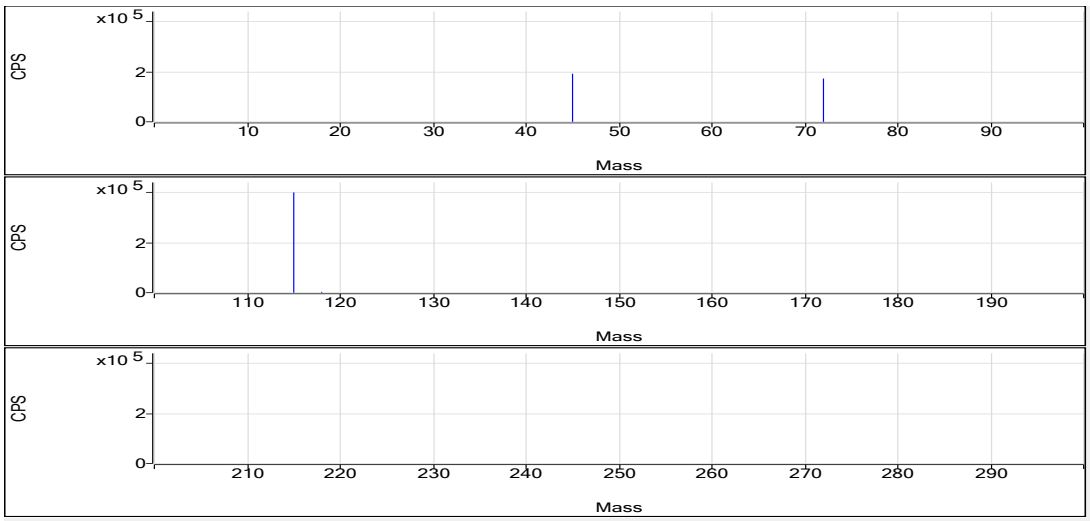
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2517208.45	2.0	104.9	Analog	0.1000	3
No Gas	Ge	72	1267602.14	1.0	109.9	Pulse	0.1000	3
H2	Sc	45	192366.46	1.0	102.9	Pulse	0.1000	3
H2	Ge	72	173207.61	0.3	105.8	Pulse	0.1000	3
H2	In	115	401098.65	1.1	103.1	Pulse	0.1000	3
He	Sc	45	49598.86	0.6	106.3	Pulse	0.1000	3
He	Ge	72	89006.24	0.8	109.6	Pulse	0.1000	3
He	In	115	89920.86	0.1	104.3	Pulse	0.1000	3
He	Tb	159	405488.94	1.1	101.7	Pulse	0.1000	3
He	Bi	209	316974.01	1.1	102.5	Pulse	0.1000	3

No Gas

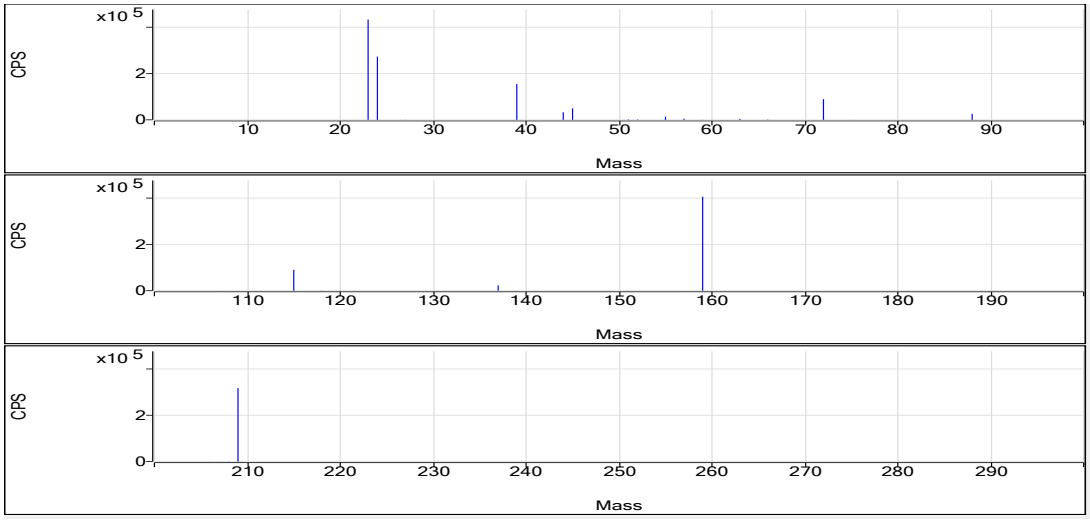


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Be	9	1	No Gas	0.013	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Se	78	2	H2	0.036	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.026	0	4.00	0.0004	1.219E-05
Se	78	2	H2	0.054	0	6.00	0.0004	1.219E-05
Na	23	3	He	2370.587	8.8249	437678.74	0.0036	0.3452
Na	23	3	He	2294.802	8.5538	426800.15	0.0036	0.3452
Na	23	3	He	2360.421	8.7885	433311.63	0.0036	0.3452
Mg	24	3	He	3095.449	5.5577	275641.64	0.0018	0.003497
Mg	24	3	He	3027.238	5.4353	271202.07	0.0018	0.003497
Mg	24	3	He	3069.21	5.5106	271699.06	0.0018	0.003497
Al	27	3	He	11.653	0.0075	370.02	0.0006	0.0006432
Al	27	3	He	10.549	0.0068	340.02	0.0006	0.0006432
Al	27	3	He	15.196	0.0095	470.03	0.0006	0.0006432
K	39	3	He	2378	3.1638	156913.86	0.0012	0.3951
K	39	3	He	2310.014	3.0847	153913.38	0.0012	0.3951
K	39	3	He	2340.241	3.1199	153823.33	0.0012	0.3951
Ca	44	3	He	9752.198	0.6615	32807.54	0.0001	0.002715
Ca	44	3	He	9342.527	0.6338	31625.17	0.0001	0.002715
Ca	44	3	He	9870.37	0.6695	33008.16	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.243	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.525	0.0363	1802.12	0.0219	0.02486
V	51	3	He	0.515	0.0361	1802.12	0.0219	0.02486
V	51	3	He	0.486	0.0355	1750.12	0.0219	0.02486
Cr	52	3	He	-0.217	0.0335	1660.16	0.0299	0.03997
Cr	52	3	He	-0.117	0.0365	1820.17	0.0299	0.03997
Cr	52	3	He	-0.224	0.0333	1640.14	0.0299	0.03997
Mn	55	3	He	20.055	0.26	12896.03	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	20.84	0.2701	13476.67	0.0128	0.002639
Mn	55	3	He	21.33	0.2764	13626.84	0.0128	0.002639
Fe	57	3	He	162.071	0.0956	4740.93	0.0006	0.001429
Fe	57	3	He	167.64	0.0988	4931.05	0.0006	0.001429
Fe	57	3	He	184.348	0.1085	5351.16	0.0006	0.001429
Co	59	3	He	0.091	0.0073	360.02	0.0563	0.002149
Co	59	3	He	0.101	0.0078	390.02	0.0563	0.002149
Co	59	3	He	0.077	0.0065	320.01	0.0563	0.002149
Ni	60	3	He	0.204	0.0046	410.02	0.0086	0.002834
Ni	60	3	He	0.291	0.0053	470.03	0.0086	0.002834
Ni	60	3	He	-0.004	0.0028	250.01	0.0086	0.002834
Cu	63	3	He	1.31	0.0384	3430.51	0.0257	0.004757
Cu	63	3	He	1.458	0.0422	3720.63	0.0257	0.004757
Cu	63	3	He	1.405	0.0408	3650.61	0.0257	0.004757
Zn	66	3	He	3.915	0.0152	1360.10	0.0029	0.003818
Zn	66	3	He	2.271	0.0104	920.06	0.0029	0.003818
Zn	66	3	He	2.03	0.0097	870.06	0.0029	0.003818
As	75	3	He	1.092	0.003	272.01	0.002	0.0008061
As	75	3	He	0.746	0.0023	206.00	0.002	0.0008061
As	75	3	He	0.873	0.0026	232.00	0.002	0.0008061
Sr	88	3	He	32.156	0.2894	25994.67	0.009	0.0009645
Sr	88	3	He	30.37	0.2734	24571.79	0.009	0.0009645
Sr	88	3	He	33.574	0.3021	27207.18	0.009	0.0009645
Mo	98	3	He	-0.002	0.0002	20.00	0.0219	0.0002706
Mo	98	3	He	0.008	0.0004	40.00	0.0219	0.0002706
Mo	98	3	He	0.043	0.0012	110.00	0.0219	0.0002706
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.003	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.012	0.0001	6.00	0.0053	0
Cd	111	3	He	0.012	0.0001	6.00	0.0053	0
Sn	120	3	He	-0.352	0.0109	980.06	0.0158	0.01648
Sn	120	3	He	-0.282	0.012	1080.08	0.0158	0.01648
Sn	120	3	He	-0.143	0.0142	1280.11	0.0158	0.01648
Sb	121	3	He	0.064	0.0012	110.00	0.0149	0.0002698
Sb	121	3	He	0.027	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.042	0.0009	80.00	0.0149	0.0002698
Ba	137	3	He	53.699	0.258	23170.31	0.0048	0.0002317
Ba	137	3	He	53.594	0.2574	23140.19	0.0048	0.0002317
Ba	137	3	He	52.286	0.2512	22619.19	0.0048	0.0002317
Tl	205	3	He	0.013	0.0005	190.01	0.0247	0.0001339
Tl	205	3	He	0.002	0.0002	70.00	0.0247	0.0001339
Tl	205	3	He	0.004	0.0002	90.00	0.0247	0.0001339
Pb	208	3	He	0.073	0.0035	780.06	0.0327	0.00107
Pb	208	3	He	0.082	0.0038	840.06	0.0327	0.00107
Pb	208	3	He	0.088	0.0039	750.04	0.0327	0.00107
U	238	3	He	0.008	0.0005	150.01	0.0493	7.55E-05
U	238	3	He	0.01	0.0006	180.01	0.0493	7.55E-05
U	238	3	He	0.007	0.0004	140.01	0.0493	7.55E-05
Sc	45	1	No Gas			2484995.59		
Sc	45	1	No Gas			2574981.52		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2491648.24		
Ge	72	1	No Gas			1259274.67		
Ge	72	1	No Gas			1281677.79		
Ge	72	1	No Gas			1261853.97		
Sc	45	2	H2			193064.27		
Sc	45	2	H2			193744.47		
Sc	45	2	H2			190290.64		
Ge	72	2	H2			172530.08		
Ge	72	2	H2			173439.20		
Ge	72	2	H2			173653.55		
In	115	2	H2			397778.51		
In	115	2	H2			405856.28		
In	115	2	H2			399661.17		
Sc	45	3	He			49596.09		
Sc	45	3	He			49896.10		
Sc	45	3	He			49304.38		
Ge	72	3	He			89379.00		
Ge	72	3	He			88211.52		
Ge	72	3	He			89428.19		
In	115	3	He			89829.53		
In	115	3	He			89890.07		
In	115	3	He			90061.47		
Tb	159	3	He			410598.47		
Tb	159	3	He			401771.60		
Tb	159	3	He			404096.75		
Bi	209	3	He			320444.29		
Bi	209	3	He			313742.44		
Bi	209	3	He			316735.29		

Quantitation Report

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Sample Name	410-137888-V-1-A
Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

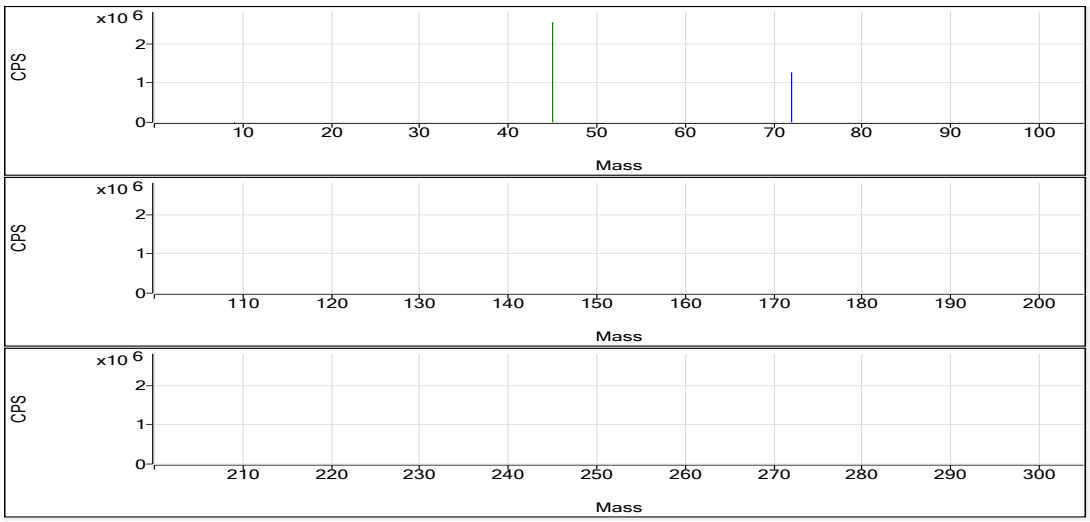
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	86.1	16.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.023	ppb	93.8	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	9266.986	ppb	1.6	1679854.56	33.4936	Analog	0.1000	3
Mg	24	45	He	9359.951	ppb	0.6	842536.66	16.7983	Pulse	0.1000	3
Al	27	45	He	2.765	ppb	40.0	113.34	0.0023	Pulse	0.1000	3
K	39	45	He	992.293	ppb	1.1	77763.90	1.5504	Pulse	0.1000	3
Ca	44	45	He	25429.185	ppb	0.9	86295.56	1.7205	Pulse	0.1000	3
Ti	47	45	He	0.241	ppb	154.6	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.510	ppb	6.3	1806.12	0.0360	Pulse	0.5000	3
Cr	52	45	He	-0.254	ppb	N/A	1623.48	0.0324	Pulse	0.1000	3
Mn	55	45	He	30.832	ppb	3.3	19981.14	0.3983	Pulse	0.1000	3
Fe	57	45	He	7.733	ppb	53.5	296.69	0.0059	Pulse	0.1000	3
Co	59	45	He	0.000	ppb	N/A	106.67	0.0021	Pulse	0.1000	3
Ni	60	72	He	-0.101	ppb	N/A	180.01	0.0020	Pulse	0.1000	3
Cu	63	72	He	19.247	ppb	2.5	45743.49	0.4988	Pulse	0.1000	3
Zn	66	72	He	13.112	ppb	2.9	3850.65	0.0420	Pulse	0.1000	3
As	75	72	He	0.455	ppb	26.3	159.33	0.0017	Pulse	0.5000	3
Sr	88	115	He	169.013	ppb	0.5	137610.54	1.5170	Pulse	0.1000	3
Mo	98	115	He	0.278	ppb	14.1	576.70	0.0064	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	50.3	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.175	ppb	N/A	1243.43	0.0137	Pulse	0.1000	3
Sb	121	115	He	0.029	ppb	74.2	63.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	95.958	ppb	1.1	41797.94	0.4608	Pulse	0.1000	3
Tl	205	159	He	0.005	ppb	29.4	106.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	1.213	ppb	2.1	16701.46	0.0408	Pulse	0.1000	3
U	238	209	He	0.564	ppb	4.4	8756.67	0.0278	Pulse	0.1000	3

ISTD Table:

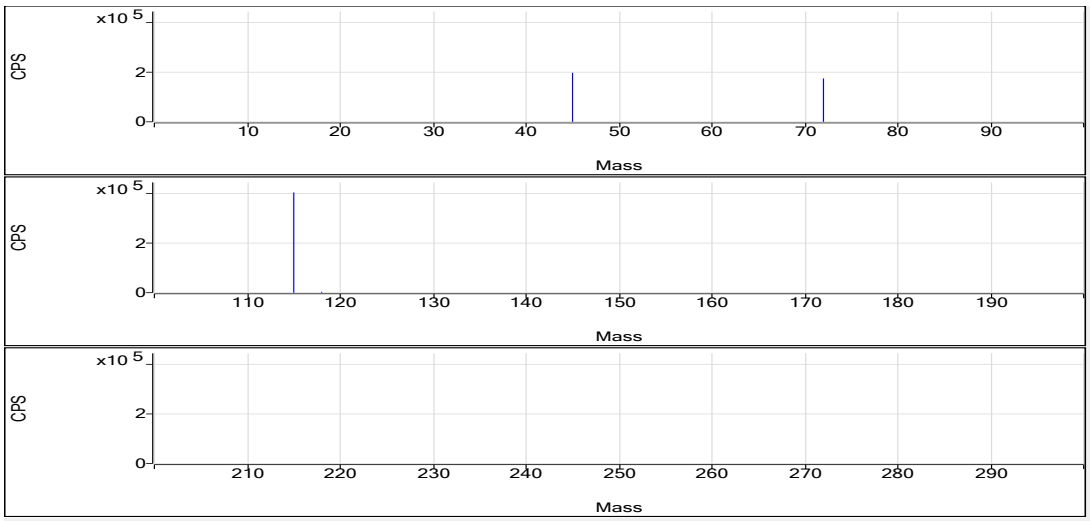
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2555097.09	1.0	106.5	Analog	0.1000	3
No Gas	Ge	72	1274292.87	0.6	110.5	Pulse	0.1000	3
H2	Sc	45	197286.98	0.4	105.5	Pulse	0.1000	3
H2	Ge	72	174727.80	0.5	106.7	Pulse	0.1000	3
H2	In	115	403615.87	0.6	103.7	Pulse	0.1000	3
He	Sc	45	50157.08	0.5	107.5	Pulse	0.1000	3
He	Ge	72	91713.50	1.3	113.0	Pulse	0.1000	3
He	In	115	90712.74	0.5	105.2	Pulse	0.1000	3
He	Tb	159	409834.24	0.7	102.8	Pulse	0.1000	3
He	Bi	209	314518.73	0.9	101.7	Pulse	0.1000	3

No Gas

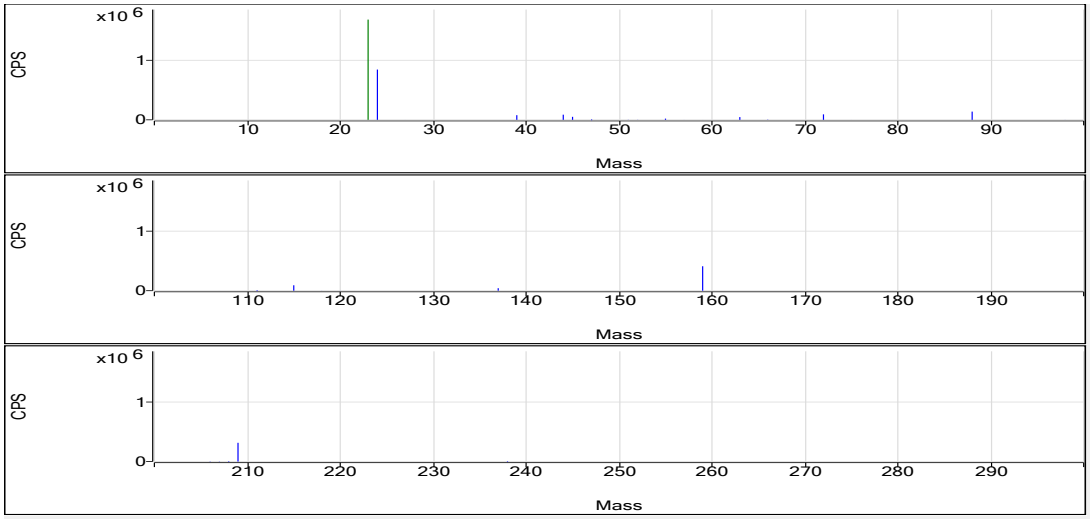


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.004	0	20.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Se	78	2	H2	0.035	0	4.67	0.0004	1.219E-05
Se	78	2	H2	-0.002	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.035	0	4.67	0.0004	1.219E-05
Na	23	3	He	9096.742	32.8847	1658981.69	0.0036	0.3452
Na	23	3	He	9340.387	33.7562	1687009.66	0.0036	0.3452
Na	23	3	He	9363.828	33.84	1693572.32	0.0036	0.3452
Mg	24	3	He	9299.837	16.6904	842005.77	0.0018	0.003497
Mg	24	3	He	9376.777	16.8285	841024.21	0.0018	0.003497
Mg	24	3	He	9403.237	16.8759	844579.99	0.0018	0.003497
Al	27	3	He	1.95	0.0018	90.00	0.0006	0.0006432
Al	27	3	He	2.321	0.002	100.00	0.0006	0.0006432
Al	27	3	He	4.024	0.003	150.01	0.0006	0.0006432
K	39	3	He	990.289	1.5481	78098.67	0.0012	0.3951
K	39	3	He	1004.066	1.5641	78169.30	0.0012	0.3951
K	39	3	He	982.524	1.539	77023.73	0.0012	0.3951
Ca	44	3	He	25397.287	1.7184	86688.20	0.0001	0.002715
Ca	44	3	He	25211.376	1.7058	85249.18	0.0001	0.002715
Ca	44	3	He	25678.892	1.7374	86949.30	0.0001	0.002715
Ti	47	3	He	0.239	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.615	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.497	0.0357	1802.12	0.0219	0.02486
V	51	3	He	0.486	0.0355	1774.12	0.0219	0.02486
V	51	3	He	0.546	0.0368	1842.13	0.0219	0.02486
Cr	52	3	He	-0.329	0.0301	1520.13	0.0299	0.03997
Cr	52	3	He	-0.252	0.0324	1620.16	0.0299	0.03997
Cr	52	3	He	-0.18	0.0346	1730.16	0.0299	0.03997
Mn	55	3	He	31.651	0.4088	20625.43	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	29.672	0.3834	19163.22	0.0128	0.002639
Mn	55	3	He	31.174	0.4027	20154.76	0.0128	0.002639
Fe	57	3	He	4.365	0.004	200.01	0.0006	0.001429
Fe	57	3	He	12.351	0.0086	430.04	0.0006	0.001429
Fe	57	3	He	6.483	0.0052	260.01	0.0006	0.001429
Co	59	3	He	0.018	0.0032	160.01	0.0563	0.002149
Co	59	3	He	-0.01	0.0016	80.00	0.0563	0.002149
Co	59	3	He	-0.01	0.0016	80.00	0.0563	0.002149
Ni	60	3	He	-0.13	0.0017	160.01	0.0086	0.002834
Ni	60	3	He	-0.1	0.002	180.01	0.0086	0.002834
Ni	60	3	He	-0.074	0.0022	200.01	0.0086	0.002834
Cu	63	3	He	18.826	0.488	45422.75	0.0257	0.004757
Cu	63	3	He	19.145	0.4962	45201.40	0.0257	0.004757
Cu	63	3	He	19.77	0.5123	46606.33	0.0257	0.004757
Zn	66	3	He	12.677	0.0407	3790.64	0.0029	0.003818
Zn	66	3	He	13.283	0.0425	3870.66	0.0029	0.003818
Zn	66	3	He	13.376	0.0428	3890.66	0.0029	0.003818
As	75	3	He	0.372	0.0016	146.00	0.002	0.0008061
As	75	3	He	0.592	0.002	184.00	0.002	0.0008061
As	75	3	He	0.401	0.0016	148.00	0.002	0.0008061
Sr	88	3	He	169.777	1.5238	138088.66	0.009	0.0009645
Sr	88	3	He	168.101	1.5088	136239.99	0.009	0.0009645
Sr	88	3	He	169.16	1.5183	138502.98	0.009	0.0009645
Mo	98	3	He	0.3	0.0068	620.03	0.0219	0.0002706
Mo	98	3	He	0.301	0.0069	620.04	0.0219	0.0002706
Mo	98	3	He	0.233	0.0054	490.02	0.0219	0.0002706
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.012	0.0001	6.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Sn	120	3	He	-0.198	0.0134	1210.11	0.0158	0.01648
Sn	120	3	He	-0.16	0.014	1260.09	0.0158	0.01648
Sn	120	3	He	-0.169	0.0138	1260.10	0.0158	0.01648
Sb	121	3	He	0.004	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	0.041	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.041	0.0009	80.00	0.0149	0.0002698
Ba	137	3	He	96.974	0.4656	42196.22	0.0048	0.0002317
Ba	137	3	He	94.866	0.4555	41132.44	0.0048	0.0002317
Ba	137	3	He	96.033	0.4611	42065.16	0.0048	0.0002317
Tl	205	3	He	0.005	0.0003	110.00	0.0247	0.0001339
Tl	205	3	He	0.006	0.0003	120.01	0.0247	0.0001339
Tl	205	3	He	0.004	0.0002	90.00	0.0247	0.0001339
Pb	208	3	He	1.186	0.0399	8593.15	0.0327	0.00107
Pb	208	3	He	1.214	0.0408	8553.12	0.0327	0.00107
Pb	208	3	He	1.237	0.0416	9273.61	0.0327	0.00107
U	238	3	He	0.59	0.0291	9173.62	0.0493	7.55E-05
U	238	3	He	0.561	0.0277	8623.30	0.0493	7.55E-05
U	238	3	He	0.541	0.0267	8473.10	0.0493	7.55E-05
Sc	45	1	No Gas			2569094.02		
Sc	45	1	No Gas			2571843.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2524354.02		
Ge	72	1	No Gas			1280604.04		
Ge	72	1	No Gas			1265891.39		
Ge	72	1	No Gas			1276383.18		
Sc	45	2	H2			196694.51		
Sc	45	2	H2			196958.63		
Sc	45	2	H2			198207.79		
Ge	72	2	H2			175254.00		
Ge	72	2	H2			175274.47		
Ge	72	2	H2			173654.92		
In	115	2	H2			406506.63		
In	115	2	H2			402628.55		
In	115	2	H2			401712.42		
Sc	45	3	He			50448.51		
Sc	45	3	He			49976.32		
Sc	45	3	He			50046.42		
Ge	72	3	He			93071.82		
Ge	72	3	He			91089.73		
Ge	72	3	He			90978.96		
In	115	3	He			90624.98		
In	115	3	He			90303.32		
In	115	3	He			91228.10		
Tb	159	3	He			413025.85		
Tb	159	3	He			408283.82		
Tb	159	3	He			408193.04		
Bi	209	3	He			315036.93		
Bi	209	3	He			311312.61		
Bi	209	3	He			317206.64		

Quantitation Report

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Sample Type	Sample
Comment	A12
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

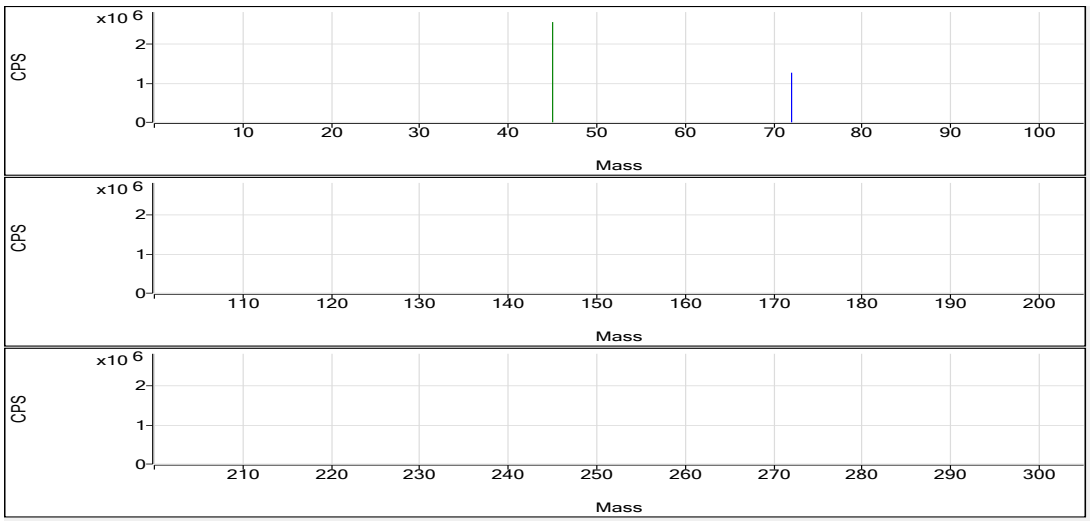
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.016	ppb	46.2	42.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.558	ppb	10.5	42.44	0.0002	Pulse	1.5000	3
Na	23	45	He	324022.251	ppb	0.4	58278230.80	1 159.3886	Analog	0.1000	3
Mg	24	45	He	53022.889	ppb	1.1	4782378.16	95.1436	Analog	0.1000	3
Al	27	45	He	238.936	ppb	2.4	7058.61	0.1404	Pulse	0.1000	3
K	39	45	He	10993.009	ppb	0.9	663238.43	13.1945	Pulse	0.1000	3
Ca	44	45	He	26328.235	ppb	1.6	89531.33	1.7812	Pulse	0.1000	3
Ti	47	45	He	10.118	ppb	7.1	276.68	0.0055	Pulse	0.1000	3
V	51	45	He	5.617	ppb	1.9	7421.26	0.1476	Pulse	0.5000	3
Cr	52	45	He	5.710	ppb	2.6	10604.23	0.2109	Pulse	0.1000	3
Mn	55	45	He	185.323	ppb	1.4	119683.08	2.3811	Pulse	0.1000	3
Fe	57	45	He	1563.592	ppb	0.4	45736.51	0.9099	Pulse	0.1000	3
Co	59	45	He	0.442	ppb	3.5	1360.11	0.0271	Pulse	0.1000	3
Ni	60	72	He	11.911	ppb	4.4	9593.53	0.1051	Pulse	0.1000	3
Cu	63	72	He	41.051	ppb	0.8	96667.00	1.0586	Pulse	0.1000	3
Zn	66	72	He	473.774	ppb	0.2	126315.66	1.3833	Pulse	0.1000	3
As	75	72	He	1.253	ppb	11.3	308.01	0.0034	Pulse	0.5000	3
Sr	88	115	He	163.570	ppb	0.9	129936.69	1.4682	Pulse	0.1000	3
Mo	98	115	He	4.913	ppb	1.9	9556.93	0.1080	Pulse	0.1000	3
Ag	107	115	He	0.019	ppb	36.3	133.34	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.121	ppb	15.1	57.33	0.0006	Pulse	0.5000	3
Sn	120	115	He	0.166	ppb	14.2	1690.17	0.0191	Pulse	0.1000	3
Sb	121	115	He	0.638	ppb	14.9	863.40	0.0098	Pulse	0.1000	3
Ba	137	115	He	1008.123	ppb	1.2	428205.20	4.8386	Pulse	0.1000	3
Tl	205	159	He	0.017	ppb	12.8	226.68	0.0006	Pulse	0.1000	3
Pb	208	159	He	2.183	ppb	5.1	29247.14	0.0725	Pulse	0.1000	3
U	238	209	He	0.314	ppb	6.1	4737.73	0.0156	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2568527.77	1.5	107.1	Analog	0.1000	3
No Gas	Ge	72	1271007.20	0.5	110.2	Pulse	0.1000	3
H2	Sc	45	194955.28	0.8	104.2	Pulse	0.1000	3
H2	Ge	72	173336.85	0.7	105.9	Pulse	0.1000	3
H2	In	115	398803.00	1.6	102.5	Pulse	0.1000	3
He	Sc	45	50267.40	0.7	107.8	Pulse	0.1000	3
He	Ge	72	91317.60	0.6	112.5	Pulse	0.1000	3
He	In	115	88502.71	0.6	102.7	Pulse	0.1000	3
He	Tb	159	403357.26	0.6	101.2	Pulse	0.1000	3
He	Bi	209	304707.57	0.5	98.5	Pulse	0.1000	3

No Gas



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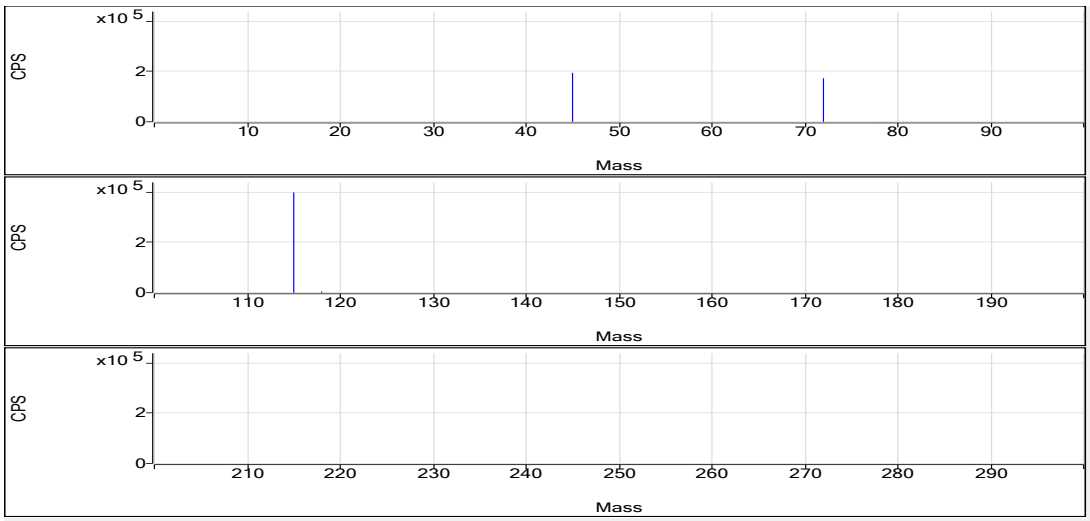
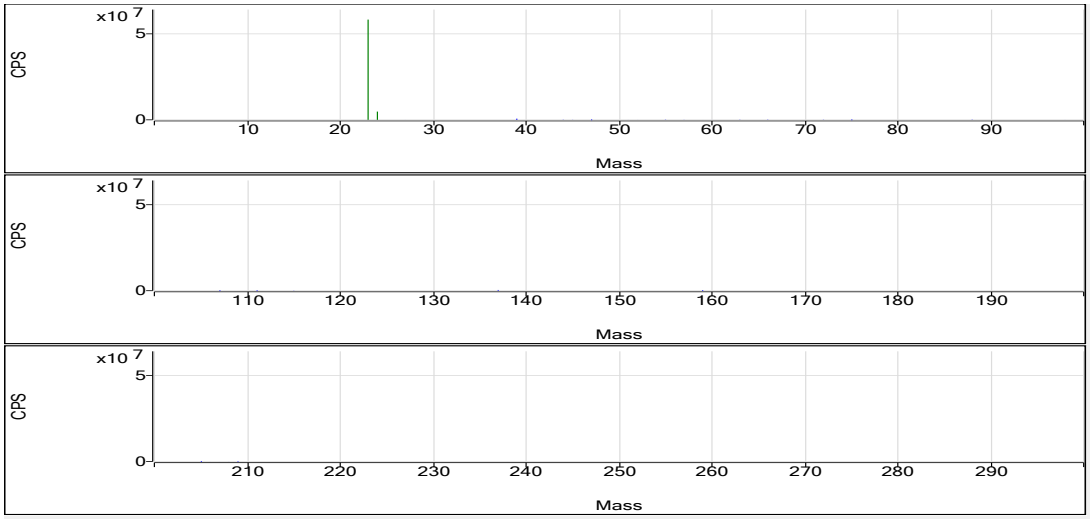


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.019	0	50.00	0.0008	4.685E-06
Be	9	1	No Gas	0.02	0	52.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	26.00	0.0008	4.685E-06
Se	78	2	H2	0.598	0.0003	45.33	0.0004	1.219E-05
Se	78	2	H2	0.491	0.0002	37.33	0.0004	1.219E-05
Se	78	2	H2	0.584	0.0003	44.67	0.0004	1.219E-05
Na	23	3	He	322861.245	1155.2357	58279224.13	0.0036	0.3452
Na	23	3	He	325638.158	1165.1688	58067364.13	0.0036	0.3452
Na	23	3	He	323567.35	1157.7614	58488104.13	0.0036	0.3452
Mg	24	3	He	52951.287	95.0152	4793315.87	0.0018	0.003497
Mg	24	3	He	53629.216	96.2316	4795797.74	0.0018	0.003497
Mg	24	3	He	52488.164	94.1842	4758020.87	0.0018	0.003497
Al	27	3	He	242.923	0.1428	7202.02	0.0006	0.0006432
Al	27	3	He	241.458	0.1419	7071.97	0.0006	0.0006432
Al	27	3	He	232.426	0.1366	6901.83	0.0006	0.0006432
K	39	3	He	11057.134	13.2692	669402.49	0.0012	0.3951
K	39	3	He	11045.806	13.256	660625.77	0.0012	0.3951
K	39	3	He	10876.088	13.0584	659687.02	0.0012	0.3951
Ca	44	3	He	26238.699	1.7752	89554.58	0.0001	0.002715
Ca	44	3	He	26782.644	1.8119	90299.54	0.0001	0.002715
Ca	44	3	He	25963.361	1.7566	88739.86	0.0001	0.002715
Ti	47	3	He	9.837	0.0054	270.01	0.0005	7.003E-05
Ti	47	3	He	9.586	0.0052	260.01	0.0005	7.003E-05
Ti	47	3	He	10.93	0.0059	300.01	0.0005	7.003E-05
V	51	3	He	5.705	0.1496	7545.99	0.0219	0.02486
V	51	3	He	5.65	0.1484	7393.92	0.0219	0.02486
V	51	3	He	5.495	0.145	7323.87	0.0219	0.02486
Cr	52	3	He	5.785	0.2132	10754.31	0.0299	0.03997
Cr	52	3	He	5.537	0.2058	10254.01	0.0299	0.03997
Cr	52	3	He	5.808	0.2139	10804.36	0.0299	0.03997
Mn	55	3	He	182.609	2.3462	118362.11	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	187.74	2.4121	120208.29	0.0128	0.002639
Mn	55	3	He	185.62	2.3849	120478.84	0.0128	0.002639
Fe	57	3	He	1570.209	0.9137	46094.55	0.0006	0.001429
Fe	57	3	He	1561.79	0.9088	45291.69	0.0006	0.001429
Fe	57	3	He	1558.777	0.9071	45823.29	0.0006	0.001429
Co	59	3	He	0.455	0.0278	1400.11	0.0563	0.002149
Co	59	3	He	0.425	0.0261	1300.10	0.0563	0.002149
Co	59	3	He	0.447	0.0273	1380.11	0.0563	0.002149
Ni	60	3	He	12.389	0.1092	9903.75	0.0086	0.002834
Ni	60	3	He	11.355	0.1003	9173.24	0.0086	0.002834
Ni	60	3	He	11.989	0.1057	9703.60	0.0086	0.002834
Cu	63	3	He	41.115	1.0602	96180.20	0.0257	0.004757
Cu	63	3	He	40.714	1.0499	96029.30	0.0257	0.004757
Cu	63	3	He	41.323	1.0656	97791.51	0.0257	0.004757
Zn	66	3	He	474.61	1.3857	125707.19	0.0029	0.003818
Zn	66	3	He	473.843	1.3835	126534.14	0.0029	0.003818
Zn	66	3	He	472.869	1.3806	126705.64	0.0029	0.003818
As	75	3	He	1.404	0.0037	334.01	0.002	0.0008061
As	75	3	He	1.122	0.0031	284.00	0.002	0.0008061
As	75	3	He	1.234	0.0033	306.01	0.002	0.0008061
Sr	88	3	He	164.293	1.4746	131387.11	0.009	0.0009645
Sr	88	3	He	161.859	1.4528	128299.21	0.009	0.0009645
Sr	88	3	He	164.557	1.477	130123.74	0.009	0.0009645
Mo	98	3	He	4.888	0.1075	9573.61	0.0219	0.0002706
Mo	98	3	He	5.014	0.1102	9733.71	0.0219	0.0002706
Mo	98	3	He	4.835	0.1063	9363.46	0.0219	0.0002706
Ag	107	3	He	0.023	0.0017	150.01	0.0465	0.0006206
Ag	107	3	He	0.023	0.0017	150.01	0.0465	0.0006206
Ag	107	3	He	0.011	0.0011	100.00	0.0465	0.0006206
Cd	111	3	He	0.101	0.0005	48.00	0.0053	0
Cd	111	3	He	0.127	0.0007	60.00	0.0053	0
Cd	111	3	He	0.136	0.0007	64.00	0.0053	0
Sn	120	3	He	0.172	0.0192	1710.17	0.0158	0.01648
Sn	120	3	He	0.14	0.0187	1650.15	0.0158	0.01648
Sn	120	3	He	0.186	0.0194	1710.18	0.0158	0.01648
Sb	121	3	He	0.73	0.0111	990.08	0.0149	0.0002698
Sb	121	3	He	0.645	0.0099	870.06	0.0149	0.0002698
Sb	121	3	He	0.54	0.0083	730.05	0.0149	0.0002698
Ba	137	3	He	995.166	4.7764	425561.91	0.0048	0.0002317
Ba	137	3	He	1010.966	4.8522	428503.51	0.0048	0.0002317
Ba	137	3	He	1018.237	4.8871	430550.19	0.0048	0.0002317
Tl	205	3	He	0.02	0.0006	250.01	0.0247	0.0001339
Tl	205	3	He	0.016	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.017	0.0005	220.01	0.0247	0.0001339
Pb	208	3	He	2.289	0.076	16110.57	0.0327	0.00107
Pb	208	3	He	2.194	0.0729	15369.59	0.0327	0.00107
Pb	208	3	He	2.066	0.0687	14608.58	0.0327	0.00107
U	238	3	He	0.31	0.0154	4691.05	0.0493	7.55E-05
U	238	3	He	0.297	0.0147	4500.92	0.0493	7.55E-05
U	238	3	He	0.335	0.0166	5021.21	0.0493	7.55E-05
Sc	45	1	No Gas			2610708.87		
Sc	45	1	No Gas			2562596.99		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2532277.46		
Ge	72	1	No Gas			1278458.97		
Ge	72	1	No Gas			1266647.64		
Ge	72	1	No Gas			1267914.98		
Sc	45	2	H2			194579.84		
Sc	45	2	H2			196673.40		
Sc	45	2	H2			193612.61		
Ge	72	2	H2			173257.75		
Ge	72	2	H2			172126.38		
Ge	72	2	H2			174626.42		
In	115	2	H2			396237.69		
In	115	2	H2			394148.43		
In	115	2	H2			406022.88		
Sc	45	3	He			50447.91		
Sc	45	3	He			49836.01		
Sc	45	3	He			50518.27		
Ge	72	3	He			90717.46		
Ge	72	3	He			91461.60		
Ge	72	3	He			91773.74		
In	115	3	He			89105.10		
In	115	3	He			88319.64		
In	115	3	He			88108.66		
Tb	159	3	He			400854.80		
Tb	159	3	He			405553.28		
Tb	159	3	He			403663.70		
Bi	209	3	He			305299.39		
Bi	209	3	He			305752.38		
Bi	209	3	He			303070.95		

Quantitation Report

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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

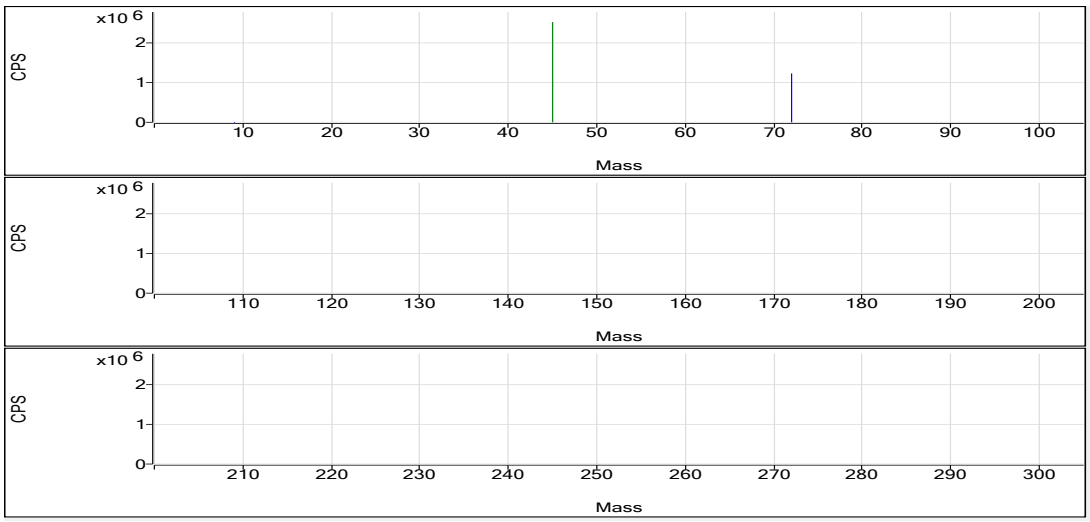
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.003	ppb	92.6	17.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.016	ppb	184.2	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	113.945	ppb	4.8	36970.38	0.7527	Pulse	0.1000	3
Mg	24	45	He	6.742	ppb	20.7	766.72	0.0156	Pulse	0.1000	3
Al	27	45	He	0.631	ppb	143.7	50.00	0.0010	Pulse	0.1000	3
K	39	45	He	20.972	ppb	59.6	20595.02	0.4195	Pulse	0.1000	3
Ca	44	45	He	3.106	ppb	265.9	143.34	0.0029	Pulse	0.1000	3
Ti	47	45	He	3.618	ppb	144.4	96.74	0.0020	Pulse	0.1000	3
V	51	45	He	0.714	ppb	9.3	1986.82	0.0405	Pulse	0.5000	3
Cr	52	45	He	-0.022	ppb	N/A	1930.21	0.0393	Pulse	0.1000	3
Mn	55	45	He	0.181	ppb	17.3	243.34	0.0050	Pulse	0.1000	3
Fe	57	45	He	0.595	ppb	161.4	86.67	0.0018	Pulse	0.1000	3
Co	59	45	He	0.007	ppb	218.9	123.34	0.0025	Pulse	0.1000	3
Ni	60	72	He	-0.068	ppb	N/A	193.34	0.0023	Pulse	0.1000	3
Cu	63	72	He	0.019	ppb	233.3	450.03	0.0052	Pulse	0.1000	3
Zn	66	72	He	3.578	ppb	3.3	1223.43	0.0142	Pulse	0.1000	3
As	75	72	He	0.213	ppb	44.6	106.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.018	ppb	257.8	100.00	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.029	ppb	36.6	80.00	0.0009	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.006	ppb	2944.7	1476.80	0.0166	Pulse	0.1000	3
Sb	121	115	He	-0.003	ppb	N/A	20.00	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.099	ppb	57.3	63.33	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.011	ppb	41.1	160.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	82.7	543.35	0.0013	Pulse	0.1000	3
U	238	209	He	0.005	ppb	63.0	93.34	0.0003	Pulse	0.1000	3

ISTD Table:

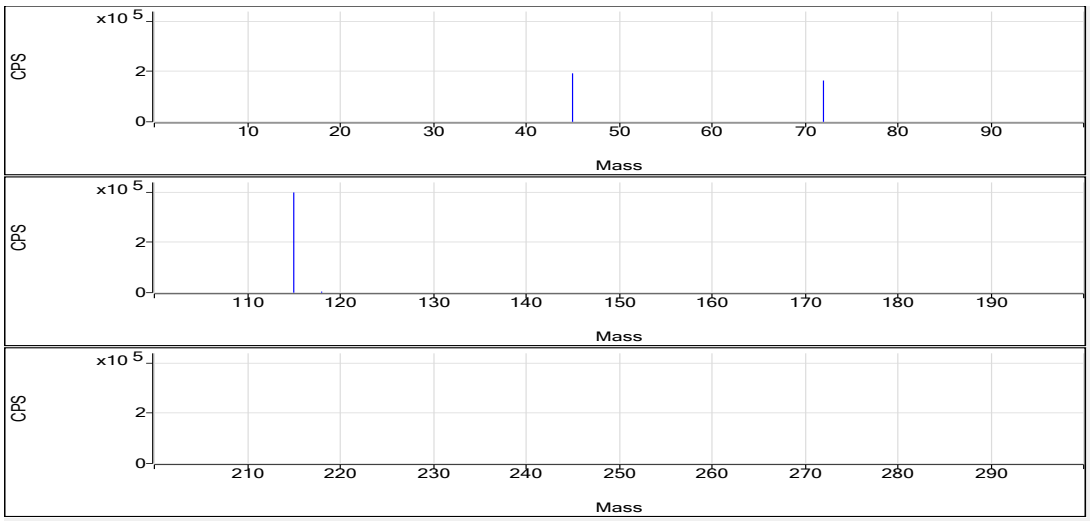
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2509358.45	1.0	104.6	Analog	0.1000	3
No Gas	Ge	72	1224017.40	0.6	106.1	Pulse	0.1000	3
H2	Sc	45	192551.51	1.7	103.0	Pulse	0.1000	3
H2	Ge	72	164003.95	1.8	100.2	Pulse	0.1000	3
H2	In	115	397986.95	0.6	102.3	Pulse	0.1000	3
He	Sc	45	49126.97	2.8	105.3	Pulse	0.1000	3
He	Ge	72	85941.71	0.5	105.8	Pulse	0.1000	3
He	In	115	89204.89	1.6	103.5	Pulse	0.1000	3
He	Tb	159	403175.66	0.5	101.1	Pulse	0.1000	3
He	Bi	209	310271.76	1.3	100.3	Pulse	0.1000	3

No Gas

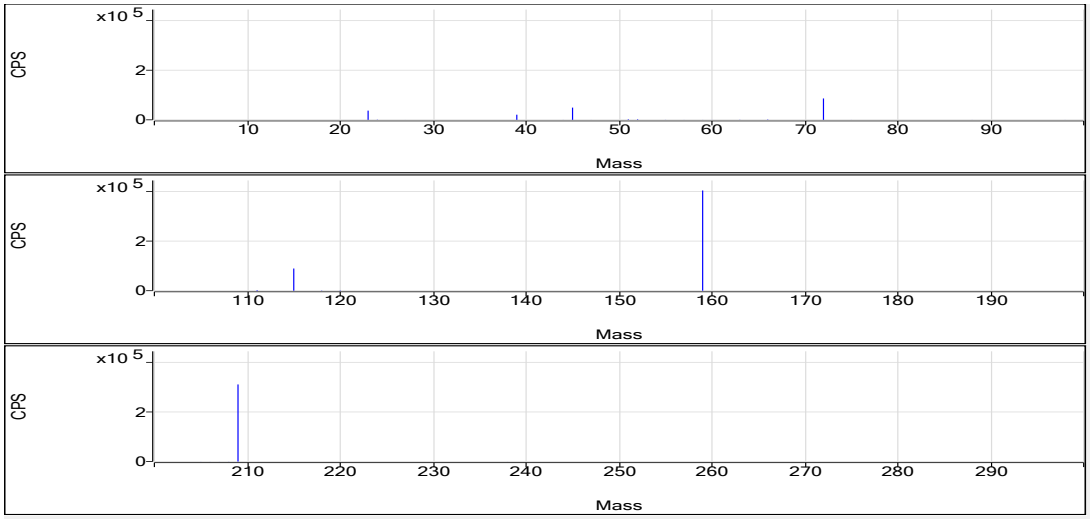


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Se	78	2	H2	0.049	0	5.33	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	0.009	0	2.67	0.0004	1.219E-05
Na	23	3	He	120.028	0.7745	37137.41	0.0036	0.3452
Na	23	3	He	112.31	0.7469	37829.32	0.0036	0.3452
Na	23	3	He	109.496	0.7368	35944.40	0.0036	0.3452
Mg	24	3	He	7.466	0.0169	810.06	0.0018	0.003497
Mg	24	3	He	7.625	0.0172	870.06	0.0018	0.003497
Mg	24	3	He	5.135	0.0127	620.04	0.0018	0.003497
Al	27	3	He	-0.387	0.0004	20.00	0.0006	0.0006432
Al	27	3	He	0.925	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	1.353	0.0014	70.00	0.0006	0.0006432
K	39	3	He	33.712	0.4343	20825.44	0.0012	0.3951
K	39	3	He	8.735	0.4052	20524.70	0.0012	0.3951
K	39	3	He	20.469	0.4189	20434.93	0.0012	0.3951
Ca	44	3	He	3.034	0.0029	140.01	0.0001	0.002715
Ca	44	3	He	-5.117	0.0024	120.00	0.0001	0.002715
Ca	44	3	He	11.4	0.0035	170.01	0.0001	0.002715
Ti	47	3	He	9.588	0.0052	250.21	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	1.397	0.0008	40.00	0.0005	7.003E-05
V	51	3	He	0.79	0.0421	2020.15	0.0219	0.02486
V	51	3	He	0.671	0.0395	2002.15	0.0219	0.02486
V	51	3	He	0.68	0.0397	1938.15	0.0219	0.02486
Cr	52	3	He	0.016	0.0405	1940.21	0.0299	0.03997
Cr	52	3	He	-0.062	0.0381	1930.21	0.0299	0.03997
Cr	52	3	He	-0.02	0.0394	1920.21	0.0299	0.03997
Mn	55	3	He	0.217	0.0054	260.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.164	0.0047	240.01	0.0128	0.002639
Mn	55	3	He	0.162	0.0047	230.01	0.0128	0.002639
Fe	57	3	He	1.49	0.0023	110.01	0.0006	0.001429
Fe	57	3	He	-0.42	0.0012	60.00	0.0006	0.001429
Fe	57	3	He	0.716	0.0018	90.00	0.0006	0.001429
Co	59	3	He	0.014	0.0029	140.01	0.0563	0.002149
Co	59	3	He	-0.01	0.0016	80.00	0.0563	0.002149
Co	59	3	He	0.016	0.0031	150.01	0.0563	0.002149
Ni	60	3	He	-0.06	0.0023	200.01	0.0086	0.002834
Ni	60	3	He	-0.087	0.0021	180.01	0.0086	0.002834
Ni	60	3	He	-0.058	0.0023	200.01	0.0086	0.002834
Cu	63	3	He	0.041	0.0058	500.03	0.0257	0.004757
Cu	63	3	He	-0.032	0.0039	340.02	0.0257	0.004757
Cu	63	3	He	0.047	0.006	510.03	0.0257	0.004757
Zn	66	3	He	3.555	0.0142	1220.08	0.0029	0.003818
Zn	66	3	He	3.707	0.0146	1260.10	0.0029	0.003818
Zn	66	3	He	3.471	0.0139	1190.10	0.0029	0.003818
As	75	3	He	0.196	0.0012	104.00	0.002	0.0008061
As	75	3	He	0.127	0.0011	92.00	0.002	0.0008061
As	75	3	He	0.315	0.0015	124.00	0.002	0.0008061
Sr	88	3	He	0.007	0.001	90.00	0.009	0.0009645
Sr	88	3	He	-0.021	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	0.067	0.0016	140.01	0.009	0.0009645
Mo	98	3	He	0.029	0.0009	80.00	0.0219	0.0002706
Mo	98	3	He	0.018	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.039	0.0011	100.00	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.026	0.0161	1410.11	0.0158	0.01648
Sn	120	3	He	-0.142	0.0142	1290.11	0.0158	0.01648
Sn	120	3	He	0.184	0.0194	1730.17	0.0158	0.01648
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	0.004	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	0.094	0.0007	60.00	0.0048	0.0002317
Ba	137	3	He	0.159	0.001	90.00	0.0048	0.0002317
Ba	137	3	He	0.045	0.0004	40.00	0.0048	0.0002317
Tl	205	3	He	0.014	0.0005	190.01	0.0247	0.0001339
Tl	205	3	He	0.006	0.0003	110.00	0.0247	0.0001339
Tl	205	3	He	0.013	0.0004	180.01	0.0247	0.0001339
Pb	208	3	He	0.001	0.0011	240.01	0.0327	0.00107
Pb	208	3	He	0.009	0.0014	310.01	0.0327	0.00107
Pb	208	3	He	0.015	0.0016	340.01	0.0327	0.00107
U	238	3	He	0.002	0.0002	50.00	0.0493	7.55E-05
U	238	3	He	0.007	0.0004	140.01	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	90.00	0.0493	7.55E-05
Sc	45	1	No Gas			2530059.96		
Sc	45	1	No Gas			2516469.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2481546.06		
Ge	72	1	No Gas			1232075.29		
Ge	72	1	No Gas			1220265.22		
Ge	72	1	No Gas			1219711.70		
Sc	45	2	H2			191092.40		
Sc	45	2	H2			190190.17		
Sc	45	2	H2			196371.97		
Ge	72	2	H2			164044.41		
Ge	72	2	H2			161009.82		
Ge	72	2	H2			166957.61		
In	115	2	H2			399775.42		
In	115	2	H2			395282.03		
In	115	2	H2			398903.39		
Sc	45	3	He			47949.78		
Sc	45	3	He			50648.67		
Sc	45	3	He			48782.47		
Ge	72	3	He			86109.61		
Ge	72	3	He			86239.71		
Ge	72	3	He			85475.80		
In	115	3	He			87756.41		
In	115	3	He			90624.21		
In	115	3	He			89256.27		
Tb	159	3	He			404990.81		
Tb	159	3	He			403425.15		
Tb	159	3	He			401111.01		
Bi	209	3	He			307082.26		
Bi	209	3	He			314748.47		
Bi	209	3	He			308984.55		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

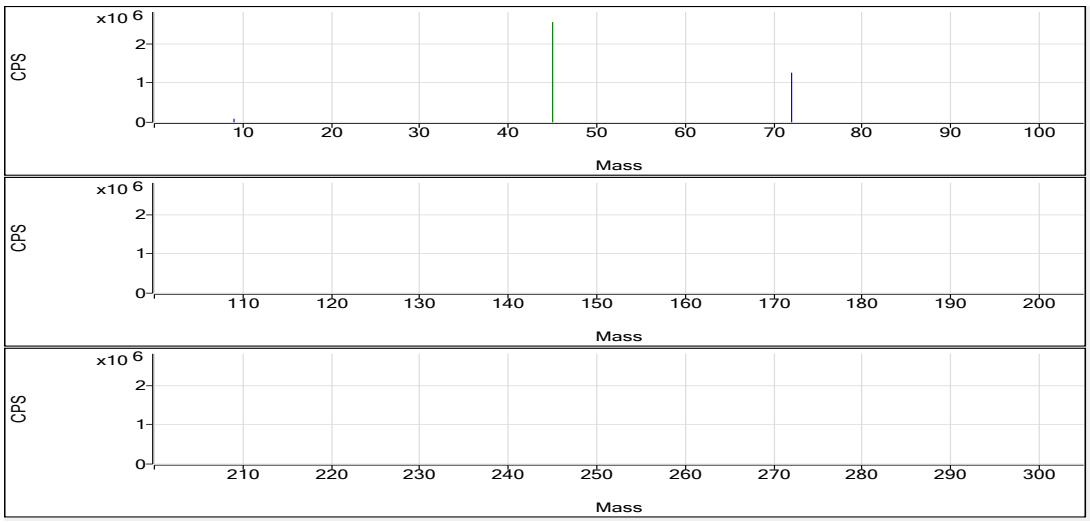
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.280	ppb	0.1	89867.80	0.0353	Pulse	0.5000	3
Se	78	72	H2	52.748	ppb	1.1	3646.03	0.0220	Pulse	1.5000	3
Na	23	45	He	4891.529	ppb	1.3	874457.20	17.8424	Pulse	0.1000	3
Mg	24	45	He	5029.610	ppb	0.2	442525.68	9.0282	Pulse	0.1000	3
Al	27	45	He	4974.584	ppb	1.9	142655.57	2.9109	Pulse	0.1000	3
K	39	45	He	5154.161	ppb	1.5	313475.94	6.3962	Pulse	0.1000	3
Ca	44	45	He	5359.348	ppb	0.3	17878.17	0.3647	Pulse	0.1000	3
Ti	47	45	He	5065.038	ppb	1.0	133300.62	2.7197	Pulse	0.1000	3
V	51	45	He	515.825	ppb	1.4	553820.69	11.3004	Pulse	0.5000	3
Cr	52	45	He	486.440	ppb	2.2	715708.14	14.6043	Pulse	0.1000	3
Mn	55	45	He	509.736	ppb	2.4	320703.96	6.5445	Pulse	0.1000	3
Fe	57	45	He	5086.327	ppb	0.9	144905.88	2.9565	Pulse	0.1000	3
Co	59	45	He	500.866	ppb	3.9	1381345.50	28.1920	Mix	0.1000	3
Ni	60	72	He	506.450	ppb	2.4	382211.85	4.3498	Pulse	0.1000	3
Cu	63	72	He	482.018	ppb	1.8	1087796.34	12.3787	Pulse	0.1000	3
Zn	66	72	He	509.160	ppb	2.2	130606.93	1.4863	Pulse	0.1000	3
As	75	72	He	514.307	ppb	1.2	92679.50	1.0546	Pulse	0.5000	3
Sr	88	115	He	51.716	ppb	1.7	41575.19	0.4649	Pulse	0.1000	3
Mo	98	115	He	50.809	ppb	1.3	99668.74	1.1143	Pulse	0.1000	3
Ag	107	115	He	50.739	ppb	1.4	211021.13	2.3593	Pulse	0.1000	3
Cd	111	115	He	50.964	ppb	1.0	24373.26	0.2725	Pulse	0.5000	3
Sn	120	115	He	51.044	ppb	2.0	73599.11	0.8229	Pulse	0.1000	3
Sb	121	115	He	51.539	ppb	1.2	68496.21	0.7658	Pulse	0.1000	3
Ba	137	115	He	518.299	ppb	1.5	222509.66	2.4877	Pulse	0.1000	3
Tl	205	159	He	50.968	ppb	1.7	512228.61	1.2604	Pulse	0.1000	3
Pb	208	159	He	51.362	ppb	1.6	683641.44	1.6821	Pulse	0.1000	3
U	238	209	He	50.412	ppb	0.6	774069.80	2.4834	Pulse	0.1000	3

ISTD Table:

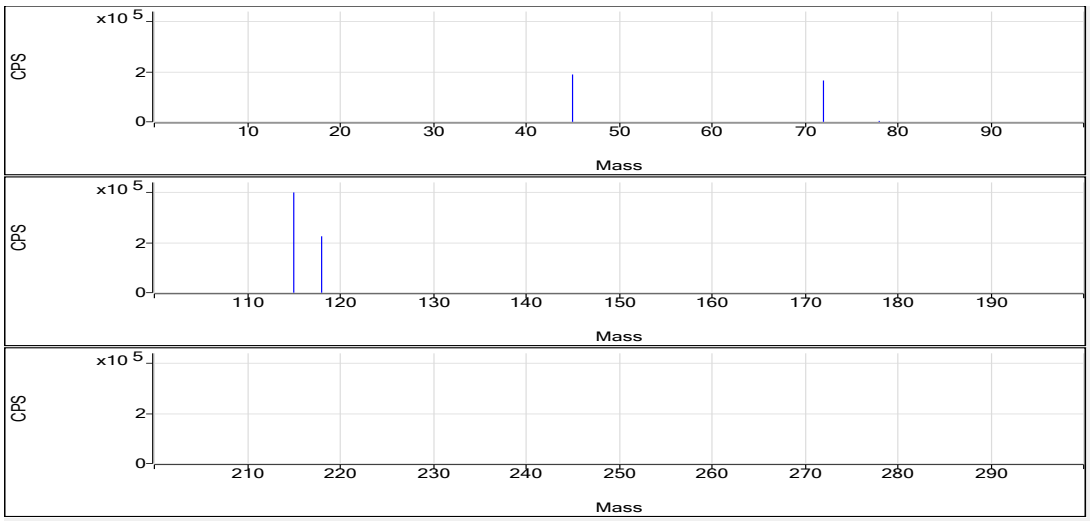
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2545371.01	0.4	106.1	Analog	0.1000	3
No Gas	Ge	72	1260072.98	0.9	109.3	Pulse	0.1000	3
H2	Sc	45	189645.37	1.0	101.4	Pulse	0.1000	3
H2	Ge	72	165637.74	1.3	101.2	Pulse	0.1000	3
H2	In	115	401617.00	0.2	103.2	Pulse	0.1000	3
He	Sc	45	49016.68	1.7	105.1	Pulse	0.1000	3
He	Ge	72	87896.37	1.9	108.3	Pulse	0.1000	3
He	In	115	89444.50	0.7	103.8	Pulse	0.1000	3
He	Tb	159	406469.73	1.4	102.0	Pulse	0.1000	3
He	Bi	209	311717.48	1.8	100.8	Pulse	0.1000	3

No Gas

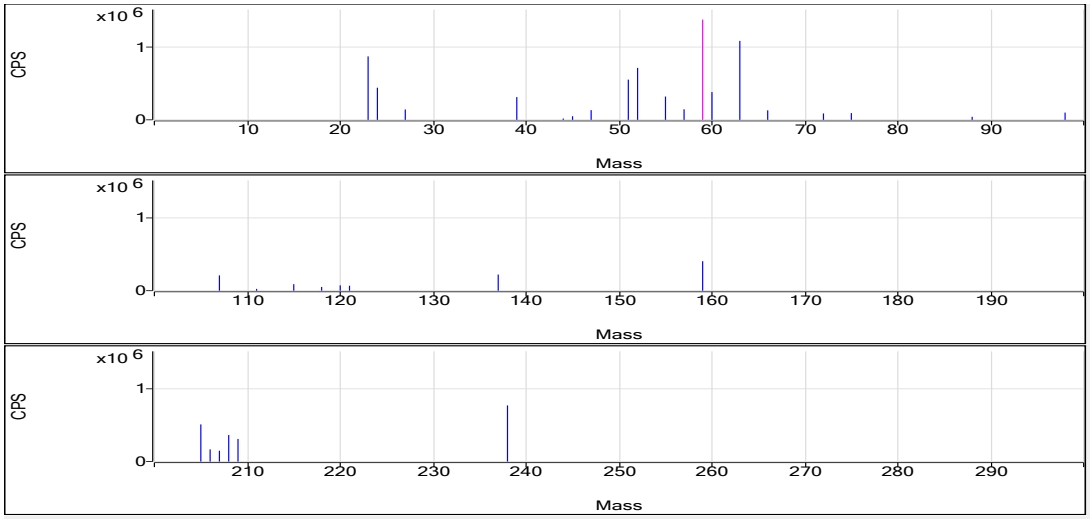


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.28	0.0353	89698.93	0.0008	4.685E-06
Be	9	1	No Gas	46.342	0.0354	89734.98	0.0008	4.685E-06
Be	9	1	No Gas	46.219	0.0353	90169.50	0.0008	4.685E-06
Se	78	2	H2	52.286	0.0218	3569.78	0.0004	1.219E-05
Se	78	2	H2	53.379	0.0223	3685.15	0.0004	1.219E-05
Se	78	2	H2	52.579	0.0219	3683.15	0.0004	1.219E-05
Na	23	3	He	4829.674	17.6211	880289.28	0.0036	0.3452
Na	23	3	He	4887.243	17.8271	868400.85	0.0036	0.3452
Na	23	3	He	4957.67	18.079	874681.47	0.0036	0.3452
Mg	24	3	He	5018.234	9.0078	449998.78	0.0018	0.003497
Mg	24	3	He	5040.779	9.0483	440764.13	0.0018	0.003497
Mg	24	3	He	5029.818	9.0286	436814.13	0.0018	0.003497
Al	27	3	He	4876.141	2.8534	142543.46	0.0006	0.0006432
Al	27	3	He	4987.275	2.9184	142161.19	0.0006	0.0006432
Al	27	3	He	5060.336	2.9611	143262.07	0.0006	0.0006432
K	39	3	He	5083.636	6.3141	315428.84	0.0012	0.3951
K	39	3	He	5145.548	6.3862	311086.01	0.0012	0.3951
K	39	3	He	5233.3	6.4883	313912.96	0.0012	0.3951
Ca	44	3	He	5341.644	0.3636	18161.82	0.0001	0.002715
Ca	44	3	He	5360.44	0.3648	17771.43	0.0001	0.002715
Ca	44	3	He	5375.96	0.3659	17701.26	0.0001	0.002715
Ti	47	3	He	5027.11	2.6994	134850.99	0.0005	7.003E-05
Ti	47	3	He	5045.181	2.7091	131965.81	0.0005	7.003E-05
Ti	47	3	He	5122.823	2.7508	133085.06	0.0005	7.003E-05
V	51	3	He	507.295	11.1139	555211.94	0.0219	0.02486
V	51	3	He	520.61	11.405	555564.13	0.0219	0.02486
V	51	3	He	519.571	11.3823	550686.00	0.0219	0.02486
Cr	52	3	He	475.004	14.262	712476.24	0.0299	0.03997
Cr	52	3	He	496.222	14.8972	725680.22	0.0299	0.03997
Cr	52	3	He	488.092	14.6538	708967.96	0.0299	0.03997
Mn	55	3	He	495.705	6.3645	317945.64	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	514.886	6.6106	322019.98	0.0128	0.002639
Mn	55	3	He	518.618	6.6585	322146.26	0.0128	0.002639
Fe	57	3	He	5033.544	2.9259	146166.10	0.0006	0.001429
Fe	57	3	He	5122.151	2.9774	145034.22	0.0006	0.001429
Fe	57	3	He	5103.287	2.9664	143517.32	0.0006	0.001429
Co	59	3	He	483.61	27.2208	1359856.23	0.0563	0.002149
Co	59	3	He	496.851	27.9661	1362296.85	0.0563	0.002149
Co	59	3	He	522.137	29.3892	1421883.42	0.0563	0.002149
Ni	60	3	He	492.595	4.2308	380147.81	0.0086	0.002834
Ni	60	3	He	514.427	4.4182	383735.35	0.0086	0.002834
Ni	60	3	He	512.327	4.4002	382752.38	0.0086	0.002834
Cu	63	3	He	472.371	12.131	1089990.45	0.0257	0.004757
Cu	63	3	He	489.183	12.5626	1091096.86	0.0257	0.004757
Cu	63	3	He	484.5	12.4424	1082301.70	0.0257	0.004757
Zn	66	3	He	497.283	1.4517	130438.63	0.0029	0.003818
Zn	66	3	He	510.071	1.4889	129319.20	0.0029	0.003818
Zn	66	3	He	520.127	1.5182	132062.95	0.0029	0.003818
As	75	3	He	508.487	1.0426	93681.78	0.002	0.0008061
As	75	3	He	520.323	1.0669	92661.45	0.002	0.0008061
As	75	3	He	514.111	1.0542	91695.27	0.002	0.0008061
Sr	88	3	He	52.414	0.4711	41902.83	0.009	0.0009645
Sr	88	3	He	50.732	0.456	41100.77	0.009	0.0009645
Sr	88	3	He	52.004	0.4674	41721.98	0.009	0.0009645
Mo	98	3	He	51.493	1.1293	100448.22	0.0219	0.0002706
Mo	98	3	He	50.754	1.1131	100325.76	0.0219	0.0002706
Mo	98	3	He	50.18	1.1005	98232.23	0.0219	0.0002706
Ag	107	3	He	51.587	2.3988	213358.63	0.0465	0.0006206
Ag	107	3	He	50.345	2.341	210994.08	0.0465	0.0006206
Ag	107	3	He	50.286	2.3383	208710.68	0.0465	0.0006206
Cd	111	3	He	51.477	0.2752	24481.47	0.0053	0
Cd	111	3	He	50.975	0.2726	24565.57	0.0053	0
Cd	111	3	He	50.44	0.2697	24072.75	0.0053	0
Sn	120	3	He	52.246	0.8419	74882.16	0.0158	0.01648
Sn	120	3	He	50.402	0.8128	73253.85	0.0158	0.01648
Sn	120	3	He	50.484	0.8141	72661.32	0.0158	0.01648
Sb	121	3	He	52.142	0.7748	68911.34	0.0149	0.0002698
Sb	121	3	He	51.585	0.7665	69082.56	0.0149	0.0002698
Sb	121	3	He	50.891	0.7562	67494.72	0.0149	0.0002698
Ba	137	3	He	525.92	2.5243	224525.13	0.0048	0.0002317
Ba	137	3	He	518.706	2.4897	224392.50	0.0048	0.0002317
Ba	137	3	He	510.27	2.4492	218611.36	0.0048	0.0002317
Tl	205	3	He	50.736	1.2546	514730.23	0.0247	0.0001339
Tl	205	3	He	50.216	1.2418	508434.29	0.0247	0.0001339
Tl	205	3	He	51.953	1.2847	513521.32	0.0247	0.0001339
Pb	208	3	He	51.072	1.6726	371924.72	0.0327	0.00107
Pb	208	3	He	50.737	1.6617	360825.03	0.0327	0.00107
Pb	208	3	He	52.279	1.7121	366416.28	0.0327	0.00107
U	238	3	He	50.224	2.4741	786988.19	0.0493	7.55E-05
U	238	3	He	50.773	2.5012	768678.58	0.0493	7.55E-05
U	238	3	He	50.239	2.4748	766542.64	0.0493	7.55E-05
Sc	45	1	No Gas			2540577.15		
Sc	45	1	No Gas			2538229.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2557306.06		
Ge	72	1	No Gas			1248676.23		
Ge	72	1	No Gas			1261279.75		
Ge	72	1	No Gas			1270262.95		
Sc	45	2	H2			187504.26		
Sc	45	2	H2			191151.23		
Sc	45	2	H2			190280.62		
Ge	72	2	H2			163608.92		
Ge	72	2	H2			165438.65		
Ge	72	2	H2			167865.64		
In	115	2	H2			402393.43		
In	115	2	H2			400743.20		
In	115	2	H2			401714.37		
Sc	45	3	He			49956.43		
Sc	45	3	He			48712.49		
Sc	45	3	He			48381.11		
Ge	72	3	He			89851.45		
Ge	72	3	He			86852.71		
Ge	72	3	He			86984.94		
In	115	3	He			89346.60		
In	115	3	He			90534.76		
In	115	3	He			89649.19		
Tb	159	3	He			410261.40		
Tb	159	3	He			409436.91		
Tb	159	3	He			399710.89		
Bi	209	3	He			318089.53		
Bi	209	3	He			307328.39		
Bi	209	3	He			309734.53		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

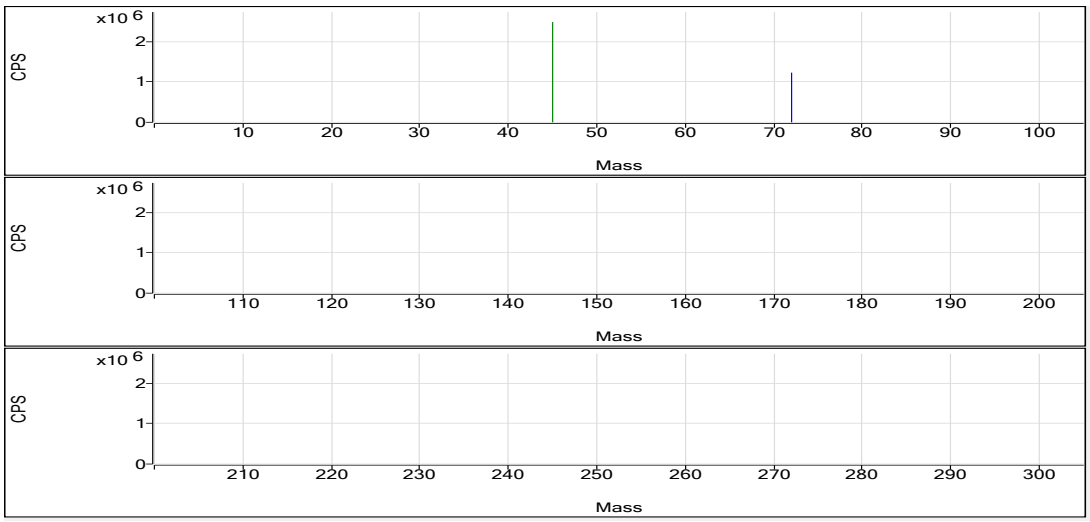
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.017	ppb	70.3	44.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.033	ppb	63.7	4.22	0.0000	Pulse	1.5000	3
Na	23	45	He	77.875	ppb	2.6	30388.60	0.6237	Pulse	0.1000	3
Mg	24	45	He	1.791	ppb	26.3	326.68	0.0067	Pulse	0.1000	3
Al	27	45	He	0.416	ppb	173.2	43.33	0.0009	Pulse	0.1000	3
K	39	45	He	9.496	ppb	155.6	19787.27	0.4061	Pulse	0.1000	3
Ca	44	45	He	8.390	ppb	128.2	160.01	0.0033	Pulse	0.1000	3
Ti	47	45	He	0.127	ppb	350.5	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.624	ppb	4.4	1876.13	0.0385	Pulse	0.5000	3
Cr	52	45	He	-0.112	ppb	N/A	1783.50	0.0366	Pulse	0.1000	3
Mn	55	45	He	0.167	ppb	56.8	233.34	0.0048	Pulse	0.1000	3
Fe	57	45	He	1.658	ppb	41.9	116.67	0.0024	Pulse	0.1000	3
Co	59	45	He	0.053	ppb	46.7	250.01	0.0051	Pulse	0.1000	3
Ni	60	72	He	0.061	ppb	117.7	283.35	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.115	ppb	7.2	650.04	0.0077	Pulse	0.1000	3
Zn	66	72	He	2.539	ppb	2.5	946.73	0.0112	Pulse	0.1000	3
As	75	72	He	0.234	ppb	39.0	108.67	0.0013	Pulse	0.5000	3
Sr	88	115	He	0.077	ppb	75.0	146.69	0.0017	Pulse	0.1000	3
Mo	98	115	He	0.045	ppb	31.9	110.01	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	139.1	73.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	42.3	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.020	ppb	N/A	1426.79	0.0162	Pulse	0.1000	3
Sb	121	115	He	0.035	ppb	79.8	70.00	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.038	ppb	142.4	36.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.070	ppb	10.6	743.38	0.0019	Pulse	0.1000	3
Pb	208	159	He	0.014	ppb	12.7	610.03	0.0015	Pulse	0.1000	3
U	238	209	He	0.036	ppb	20.2	576.70	0.0019	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2484269.39	0.9	103.6	Analog	0.1000	3
No Gas	Ge	72	1230818.65	0.6	106.7	Pulse	0.1000	3
H2	Sc	45	189595.18	0.8	101.4	Pulse	0.1000	3
H2	Ge	72	162056.44	1.5	99.0	Pulse	0.1000	3
H2	In	115	394636.50	1.4	101.4	Pulse	0.1000	3
He	Sc	45	48725.46	1.1	104.5	Pulse	0.1000	3
He	Ge	72	84456.28	1.4	104.0	Pulse	0.1000	3
He	In	115	88315.61	1.2	102.5	Pulse	0.1000	3
He	Tb	159	399011.63	1.2	100.1	Pulse	0.1000	3
He	Bi	209	309222.73	0.7	100.0	Pulse	0.1000	3

No Gas



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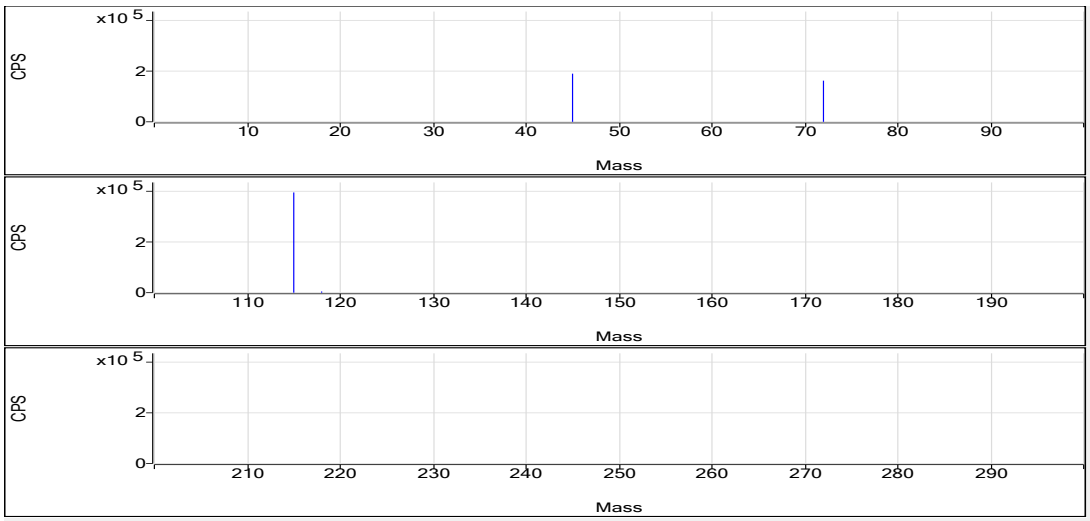
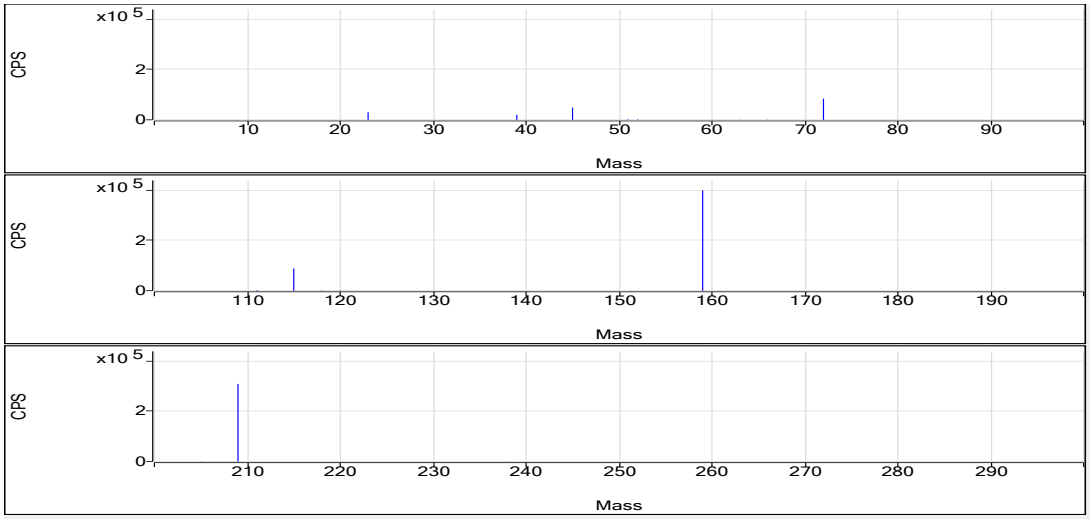


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Se	78	2	H2	0.04	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.051	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Na	23	3	He	75.8	0.6163	30311.62	0.0036	0.3452
Na	23	3	He	79.925	0.6311	30392.00	0.0036	0.3452
Na	23	3	He	77.9	0.6238	30462.17	0.0036	0.3452
Mg	24	3	He	1.564	0.0063	310.01	0.0018	0.003497
Mg	24	3	He	2.333	0.0077	370.02	0.0018	0.003497
Mg	24	3	He	1.475	0.0061	300.02	0.0018	0.003497
Al	27	3	He	0.638	0.001	50.00	0.0006	0.0006432
Al	27	3	He	-0.39	0.0004	20.00	0.0006	0.0006432
Al	27	3	He	1.001	0.0012	60.00	0.0006	0.0006432
K	39	3	He	17.535	0.4155	20434.85	0.0012	0.3951
K	39	3	He	18.505	0.4166	20064.28	0.0012	0.3951
K	39	3	He	-7.552	0.3863	18862.69	0.0012	0.3951
Ca	44	3	He	4.96	0.0031	150.01	0.0001	0.002715
Ca	44	3	He	-0.232	0.0027	130.00	0.0001	0.002715
Ca	44	3	He	20.442	0.0041	200.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.643	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.593	0.0378	1860.13	0.0219	0.02486
V	51	3	He	0.641	0.0389	1872.13	0.0219	0.02486
V	51	3	He	0.639	0.0388	1896.14	0.0219	0.02486
Cr	52	3	He	-0.201	0.034	1670.15	0.0299	0.03997
Cr	52	3	He	-0.107	0.0368	1770.18	0.0299	0.03997
Cr	52	3	He	-0.029	0.0391	1910.18	0.0299	0.03997
Mn	55	3	He	0.254	0.0059	290.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.183	0.005	240.01	0.0128	0.002639
Mn	55	3	He	0.066	0.0035	170.01	0.0128	0.002639
Fe	57	3	He	2.44	0.0028	140.00	0.0006	0.001429
Fe	57	3	He	1.115	0.0021	100.00	0.0006	0.001429
Fe	57	3	He	1.418	0.0023	110.01	0.0006	0.001429
Co	59	3	He	0.049	0.0049	240.01	0.0563	0.002149
Co	59	3	He	0.08	0.0066	320.02	0.0563	0.002149
Co	59	3	He	0.031	0.0039	190.01	0.0563	0.002149
Ni	60	3	He	0.016	0.003	250.01	0.0086	0.002834
Ni	60	3	He	0.023	0.003	260.01	0.0086	0.002834
Ni	60	3	He	0.144	0.0041	340.02	0.0086	0.002834
Cu	63	3	He	0.121	0.0079	660.03	0.0257	0.004757
Cu	63	3	He	0.105	0.0075	640.04	0.0257	0.004757
Cu	63	3	He	0.118	0.0078	650.04	0.0257	0.004757
Zn	66	3	He	2.612	0.0114	960.07	0.0029	0.003818
Zn	66	3	He	2.491	0.0111	950.06	0.0029	0.003818
Zn	66	3	He	2.514	0.0111	930.06	0.0029	0.003818
As	75	3	He	0.141	0.0011	92.00	0.002	0.0008061
As	75	3	He	0.323	0.0015	126.00	0.002	0.0008061
As	75	3	He	0.238	0.0013	108.00	0.002	0.0008061
Sr	88	3	He	0.142	0.0022	200.06	0.009	0.0009645
Sr	88	3	He	0.031	0.0012	110.00	0.009	0.0009645
Sr	88	3	He	0.059	0.0015	130.01	0.009	0.0009645
Mo	98	3	He	0.029	0.0009	80.00	0.0219	0.0002706
Mo	98	3	He	0.049	0.0014	120.01	0.0219	0.0002706
Mo	98	3	He	0.056	0.0015	130.01	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.011	0.0011	100.00	0.0465	0.0006206
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	-0.05	0.0157	1400.12	0.0158	0.01648
Sn	120	3	He	-0.021	0.0162	1430.13	0.0158	0.01648
Sn	120	3	He	0.01	0.0166	1450.13	0.0158	0.01648
Sb	121	3	He	0.012	0.0004	40.00	0.0149	0.0002698
Sb	121	3	He	0.027	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.067	0.0013	110.01	0.0149	0.0002698
Ba	137	3	He	0.068	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.069	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.062	0.0017	660.04	0.0247	0.0001339
Tl	205	3	He	0.077	0.002	810.05	0.0247	0.0001339
Tl	205	3	He	0.071	0.0019	760.04	0.0247	0.0001339
Pb	208	3	He	0.016	0.0016	400.02	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	400.02	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	320.02	0.0327	0.00107
U	238	3	He	0.035	0.0018	560.04	0.0493	7.55E-05
U	238	3	He	0.03	0.0015	470.02	0.0493	7.55E-05
U	238	3	He	0.044	0.0022	700.04	0.0493	7.55E-05
Sc	45	1	No Gas			2509842.62		
Sc	45	1	No Gas			2471417.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2471547.62		
Ge	72	1	No Gas			1231887.79		
Ge	72	1	No Gas			1237966.00		
Ge	72	1	No Gas			1222602.17		
Sc	45	2	H2			189104.57		
Sc	45	2	H2			188437.15		
Sc	45	2	H2			191243.81		
Ge	72	2	H2			162008.09		
Ge	72	2	H2			159624.03		
Ge	72	2	H2			164537.19		
In	115	2	H2			388809.80		
In	115	2	H2			394999.60		
In	115	2	H2			400100.11		
Sc	45	3	He			49183.35		
Sc	45	3	He			48160.56		
Sc	45	3	He			48832.46		
Ge	72	3	He			84046.47		
Ge	72	3	He			85818.57		
Ge	72	3	He			83503.80		
In	115	3	He			89246.10		
In	115	3	He			88552.63		
In	115	3	He			87182.33		
Tb	159	3	He			395024.29		
Tb	159	3	He			397600.19		
Tb	159	3	He			404410.42		
Bi	209	3	He			308598.75		
Bi	209	3	He			307297.22		
Bi	209	3	He			311772.22		

Quantitation Report

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Sample Type	Sample
Comment	T20
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

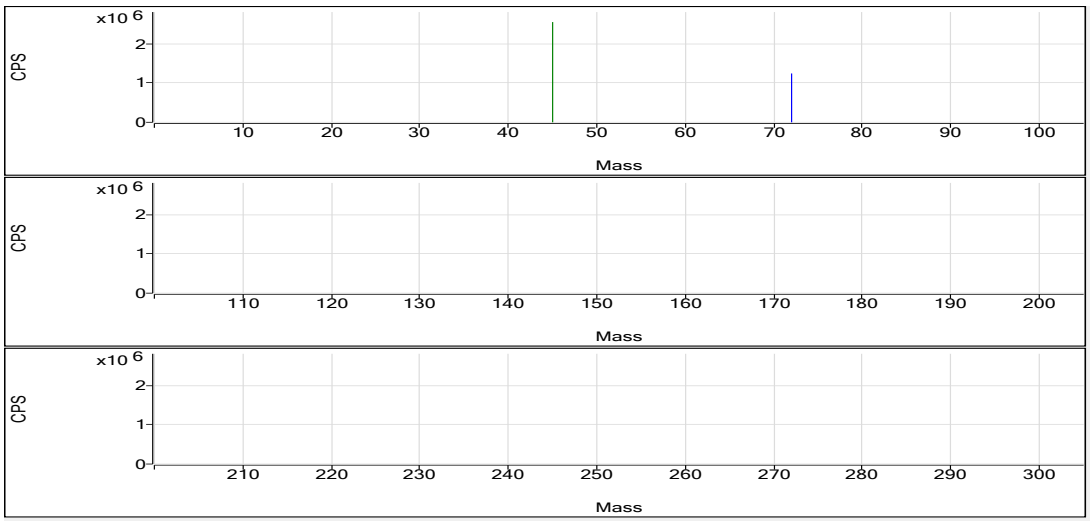
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	32.0	28.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.003	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	45	He	64.718	ppb	3.3	28635.15	0.5767	Pulse	0.1000	3
Mg	24	45	He	1.307	ppb	39.9	290.01	0.0058	Pulse	0.1000	3
Al	27	45	He	2.358	ppb	79.5	100.01	0.0020	Pulse	0.1000	3
K	39	45	He	0.237	ppb	3107.6	19630.48	0.3953	Pulse	0.1000	3
Ca	44	45	He	1.403	ppb	1264.9	140.01	0.0028	Pulse	0.1000	3
Ti	47	45	He	0.248	ppb	153.4	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.428	ppb	8.8	1700.11	0.0342	Pulse	0.5000	3
Cr	52	45	He	-0.092	ppb	N/A	1846.85	0.0372	Pulse	0.1000	3
Mn	55	45	He	0.155	ppb	59.2	230.01	0.0046	Pulse	0.1000	3
Fe	57	45	He	2.630	ppb	78.1	146.67	0.0030	Pulse	0.1000	3
Co	59	45	He	0.024	ppb	125.9	173.34	0.0035	Pulse	0.1000	3
Ni	60	72	He	-0.013	ppb	N/A	236.68	0.0027	Pulse	0.1000	3
Cu	63	72	He	0.103	ppb	3.1	643.37	0.0074	Pulse	0.1000	3
Zn	66	72	He	2.733	ppb	3.5	1023.41	0.0118	Pulse	0.1000	3
As	75	72	He	0.028	ppb	557.3	74.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.045	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.012	ppb	70.2	46.67	0.0005	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	2.0	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.290	ppb	N/A	1060.08	0.0119	Pulse	0.1000	3
Sb	121	115	He	0.022	ppb	42.3	53.33	0.0006	Pulse	0.1000	3
Ba	137	115	He	-0.009	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.014	ppb	67.6	196.68	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.059	ppb	11.0	1213.40	0.0030	Pulse	0.1000	3
U	238	209	He	0.008	ppb	14.6	140.01	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2552490.48	1.3	106.4	Analog	0.1000	3
No Gas	Ge	72	1243702.01	0.7	107.8	Pulse	0.1000	3
H2	Sc	45	190076.13	1.2	101.6	Pulse	0.1000	3
H2	Ge	72	164338.95	0.4	100.4	Pulse	0.1000	3
H2	In	115	403049.25	0.9	103.6	Pulse	0.1000	3
He	Sc	45	49662.05	1.2	106.5	Pulse	0.1000	3
He	Ge	72	86933.60	2.0	107.1	Pulse	0.1000	3
He	In	115	89299.02	2.0	103.6	Pulse	0.1000	3
He	Tb	159	405690.25	0.6	101.8	Pulse	0.1000	3
He	Bi	209	313958.69	0.3	101.5	Pulse	0.1000	3

No Gas



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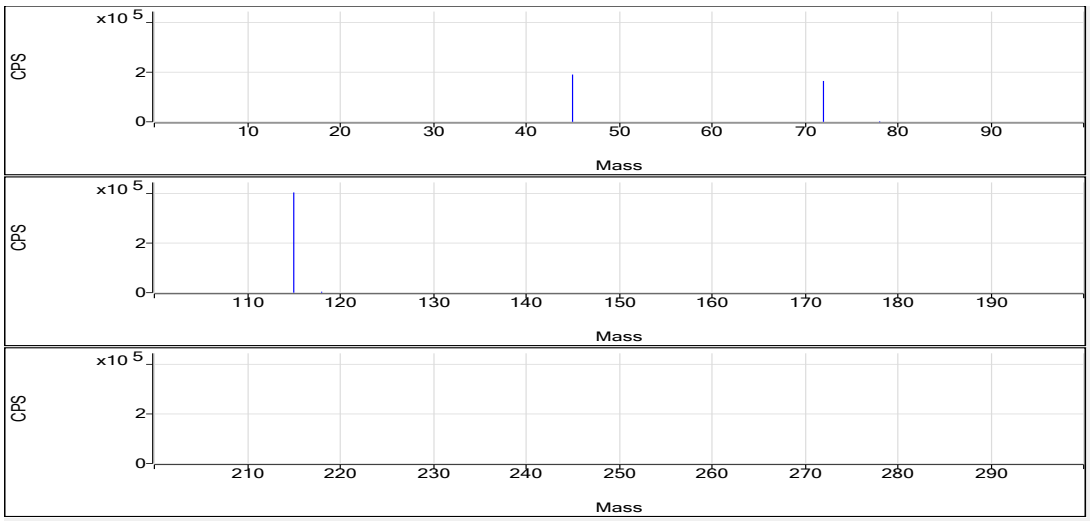
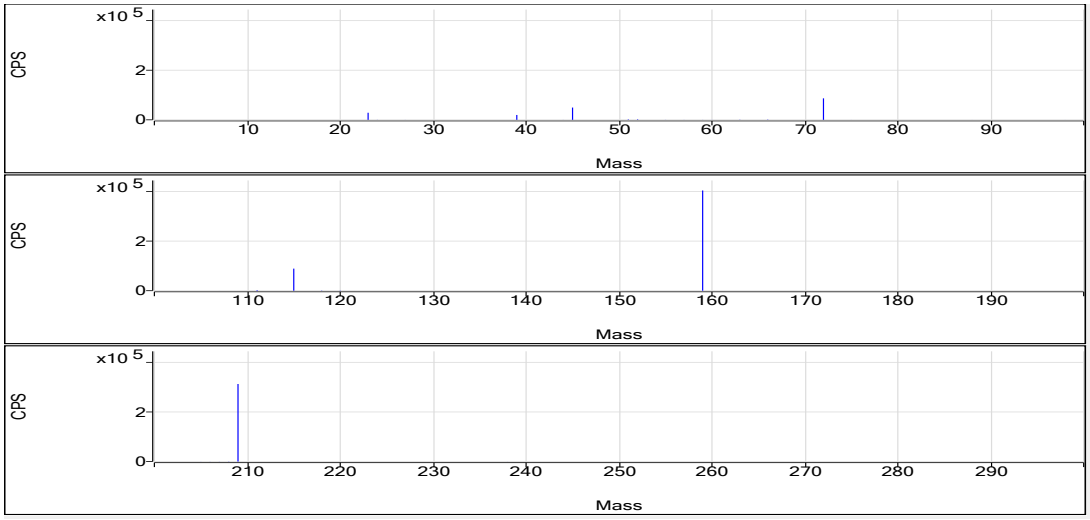


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0	34.00	0.0008	4.685E-06
Be	9	1	No Gas	0.008	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	24.00	0.0008	4.685E-06
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	-0.01	0	1.33	0.0004	1.219E-05
Na	23	3	He	65.205	0.5784	28778.72	0.0036	0.3452
Na	23	3	He	62.405	0.5684	28548.25	0.0036	0.3452
Na	23	3	He	66.546	0.5832	28578.47	0.0036	0.3452
Mg	24	3	He	1.86	0.0068	340.01	0.0018	0.003497
Mg	24	3	He	0.825	0.005	250.01	0.0018	0.003497
Mg	24	3	He	1.236	0.0057	280.02	0.0018	0.003497
Al	27	3	He	1.649	0.0016	80.00	0.0006	0.0006432
Al	27	3	He	0.942	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	4.483	0.0033	160.03	0.0006	0.0006432
K	39	3	He	3.578	0.3992	19864.14	0.0012	0.3951
K	39	3	He	-8.202	0.3855	19363.38	0.0012	0.3951
K	39	3	He	5.335	0.4013	19663.91	0.0012	0.3951
Ca	44	3	He	10.391	0.0034	170.01	0.0001	0.002715
Ca	44	3	He	12.864	0.0036	180.01	0.0001	0.002715
Ca	44	3	He	-19.044	0.0014	70.00	0.0001	0.002715
Ti	47	3	He	0.244	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.63	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.44	0.0345	1716.11	0.0219	0.02486
V	51	3	He	0.458	0.0349	1752.11	0.0219	0.02486
V	51	3	He	0.386	0.0333	1632.10	0.0219	0.02486
Cr	52	3	He	-0.147	0.0356	1770.17	0.0299	0.03997
Cr	52	3	He	-0.165	0.035	1760.16	0.0299	0.03997
Cr	52	3	He	0.035	0.041	2010.21	0.0299	0.03997
Mn	55	3	He	0.092	0.0038	190.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.26	0.006	300.01	0.0128	0.002639
Mn	55	3	He	0.112	0.0041	200.01	0.0128	0.002639
Fe	57	3	He	0.308	0.0016	80.00	0.0006	0.001429
Fe	57	3	He	3.367	0.0034	170.01	0.0006	0.001429
Fe	57	3	He	4.215	0.0039	190.01	0.0006	0.001429
Co	59	3	He	0.023	0.0034	170.01	0.0563	0.002149
Co	59	3	He	0.054	0.0052	260.01	0.0563	0.002149
Co	59	3	He	-0.006	0.0018	90.00	0.0563	0.002149
Ni	60	3	He	-0.02	0.0027	230.01	0.0086	0.002834
Ni	60	3	He	-0.002	0.0028	250.01	0.0086	0.002834
Ni	60	3	He	-0.017	0.0027	230.01	0.0086	0.002834
Cu	63	3	He	0.103	0.0074	640.04	0.0257	0.004757
Cu	63	3	He	0.1	0.0073	650.04	0.0257	0.004757
Cu	63	3	He	0.106	0.0075	640.03	0.0257	0.004757
Zn	66	3	He	2.822	0.012	1040.08	0.0029	0.003818
Zn	66	3	He	2.633	0.0115	1020.08	0.0029	0.003818
Zn	66	3	He	2.744	0.0118	1010.07	0.0029	0.003818
As	75	3	He	0.013	0.0008	72.00	0.002	0.0008061
As	75	3	He	-0.119	0.0006	50.00	0.002	0.0008061
As	75	3	He	0.189	0.0012	102.00	0.002	0.0008061
Sr	88	3	He	-0.045	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.034	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.057	0.0005	40.00	0.009	0.0009645
Mo	98	3	He	0.019	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.003	0.0003	30.00	0.0219	0.0002706
Mo	98	3	He	0.014	0.0006	50.00	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	-0.264	0.0123	1090.08	0.0158	0.01648
Sn	120	3	He	-0.405	0.0101	920.06	0.0158	0.01648
Sn	120	3	He	-0.201	0.0133	1170.09	0.0158	0.01648
Sb	121	3	He	0.027	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.011	0.0004	40.00	0.0149	0.0002698
Sb	121	3	He	0.028	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	-0.001	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	-0.003	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.025	0.0007	300.02	0.0247	0.0001339
Tl	205	3	He	0.006	0.0003	110.00	0.0247	0.0001339
Tl	205	3	He	0.012	0.0004	180.01	0.0247	0.0001339
Pb	208	3	He	0.062	0.0031	680.05	0.0327	0.00107
Pb	208	3	He	0.051	0.0027	640.04	0.0327	0.00107
Pb	208	3	He	0.063	0.0031	740.05	0.0327	0.00107
U	238	3	He	0.008	0.0005	150.01	0.0493	7.55E-05
U	238	3	He	0.008	0.0005	150.01	0.0493	7.55E-05
U	238	3	He	0.006	0.0004	120.01	0.0493	7.55E-05
Sc	45	1	No Gas			2529839.49		
Sc	45	1	No Gas			2535714.02		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2591917.93		
Ge	72	1	No Gas			1247582.79		
Ge	72	1	No Gas			1234235.22		
Ge	72	1	No Gas			1249288.03		
Sc	45	2	H2			190130.21		
Sc	45	2	H2			187699.80		
Sc	45	2	H2			192398.38		
Ge	72	2	H2			164901.21		
Ge	72	2	H2			163738.84		
Ge	72	2	H2			164376.81		
In	115	2	H2			404117.57		
In	115	2	H2			399160.11		
In	115	2	H2			405870.07		
Sc	45	3	He			49755.86		
Sc	45	3	He			50227.09		
Sc	45	3	He			49003.20		
Ge	72	3	He			86430.22		
Ge	72	3	He			88824.62		
Ge	72	3	He			85545.97		
In	115	3	He			88642.04		
In	115	3	He			91309.24		
In	115	3	He			87967.71		
Tb	159	3	He			404915.42		
Tb	159	3	He			403840.46		
Tb	159	3	He			408314.88		
Bi	209	3	He			314585.27		
Bi	209	3	He			314372.53		
Bi	209	3	He			312918.28		

Quantitation Report

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Acq Time	8/10/2023 5:05:35 PM
Sample Name	LCS 410-403519/2-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

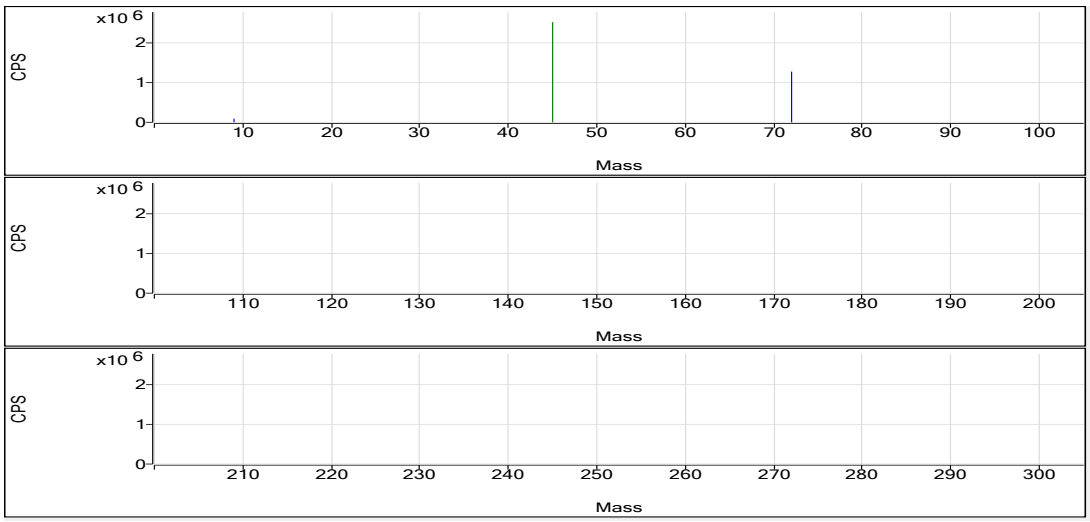
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.763	ppb	0.9	90491.95	0.0357	Pulse	0.5000	3
Se	78	72	H2	98.716	ppb	1.3	6973.93	0.0412	Pulse	1.5000	3
Na	23	45	He	4803.597	ppb	2.0	868191.18	17.5279	Pulse	0.1000	3
Mg	24	45	He	4973.549	ppb	1.6	442223.64	8.9276	Pulse	0.1000	3
Al	27	45	He	4913.762	ppb	1.1	142435.68	2.8754	Pulse	0.1000	3
K	39	45	He	5030.197	ppb	1.2	309692.56	6.2519	Pulse	0.1000	3
Ca	44	45	He	5221.780	ppb	1.2	17607.80	0.3555	Pulse	0.1000	3
Ti	47	45	He	501.668	ppb	1.8	13349.89	0.2694	Pulse	0.1000	3
V	51	45	He	503.386	ppb	1.1	546313.90	11.0285	Pulse	0.5000	3
Cr	52	45	He	479.449	ppb	1.3	713068.01	14.3950	Pulse	0.1000	3
Mn	55	45	He	498.344	ppb	1.0	316952.24	6.3983	Pulse	0.1000	3
Fe	57	45	He	5055.837	ppb	1.1	145578.71	2.9388	Pulse	0.1000	3
Co	59	45	He	483.216	ppb	1.4	1347296.96	27.1987	Pulse	0.1000	3
Ni	60	72	He	487.171	ppb	0.7	374517.64	4.1843	Pulse	0.1000	3
Cu	63	72	He	469.824	ppb	0.8	1079934.02	12.0657	Pulse	0.1000	3
Zn	66	72	He	496.515	ppb	1.0	129735.29	1.4495	Pulse	0.1000	3
As	75	72	He	501.802	ppb	0.8	92095.74	1.0289	Pulse	0.5000	3
Sr	88	115	He	51.657	ppb	1.4	40966.76	0.4643	Pulse	0.1000	3
Mo	98	115	He	50.726	ppb	1.8	98151.53	1.1125	Pulse	0.1000	3
Ag	107	115	He	50.090	ppb	0.7	205502.78	2.3292	Pulse	0.1000	3
Cd	111	115	He	51.475	ppb	1.4	24283.10	0.2752	Pulse	0.5000	3
Sn	120	115	He	103.903	ppb	1.0	146285.42	1.6580	Pulse	0.1000	3
Sb	121	115	He	103.748	ppb	0.7	135988.23	1.5413	Pulse	0.1000	3
Ba	137	115	He	520.065	ppb	1.5	220229.86	2.4962	Pulse	0.1000	3
Tl	205	159	He	103.145	ppb	0.9	1028010.95	2.5505	Pulse	0.1000	3
Pb	208	159	He	51.750	ppb	0.8	683106.18	1.6948	Pulse	0.1000	3
U	238	209	He	50.231	ppb	0.7	771472.44	2.4744	Pulse	0.1000	3

ISTD Table:

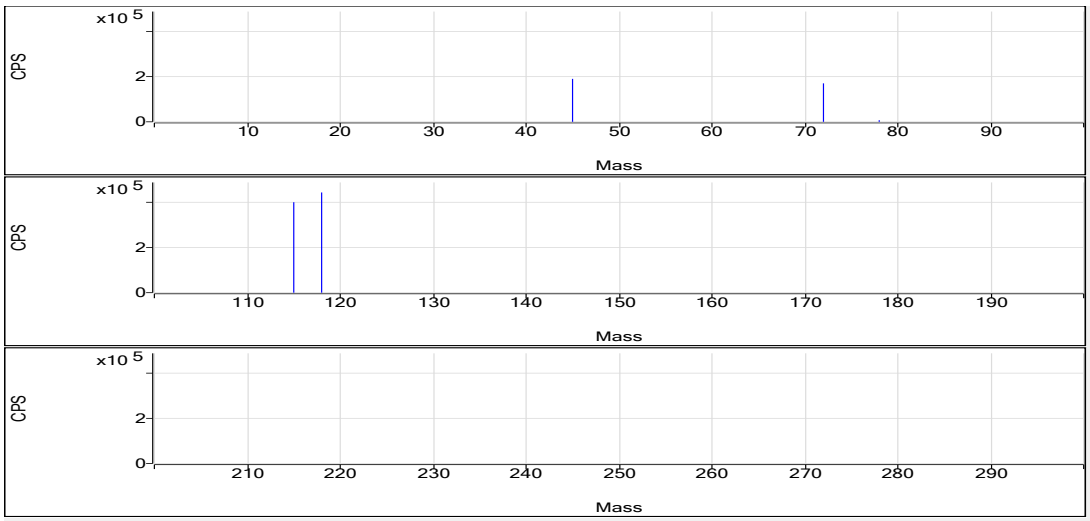
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2536556.99	0.2	105.7	Analog	0.1000	3
No Gas	Ge	72	1282699.23	0.3	111.2	Pulse	0.1000	3
H2	Sc	45	189095.95	1.5	101.1	Pulse	0.1000	3
H2	Ge	72	169349.29	0.7	103.4	Pulse	0.1000	3
H2	In	115	398320.33	0.1	102.4	Pulse	0.1000	3
He	Sc	45	49541.82	1.5	106.2	Pulse	0.1000	3
He	Ge	72	89509.18	1.0	110.2	Pulse	0.1000	3
He	In	115	88232.78	0.7	102.4	Pulse	0.1000	3
He	Tb	159	403066.26	0.5	101.1	Pulse	0.1000	3
He	Bi	209	311787.68	0.7	100.8	Pulse	0.1000	3

No Gas

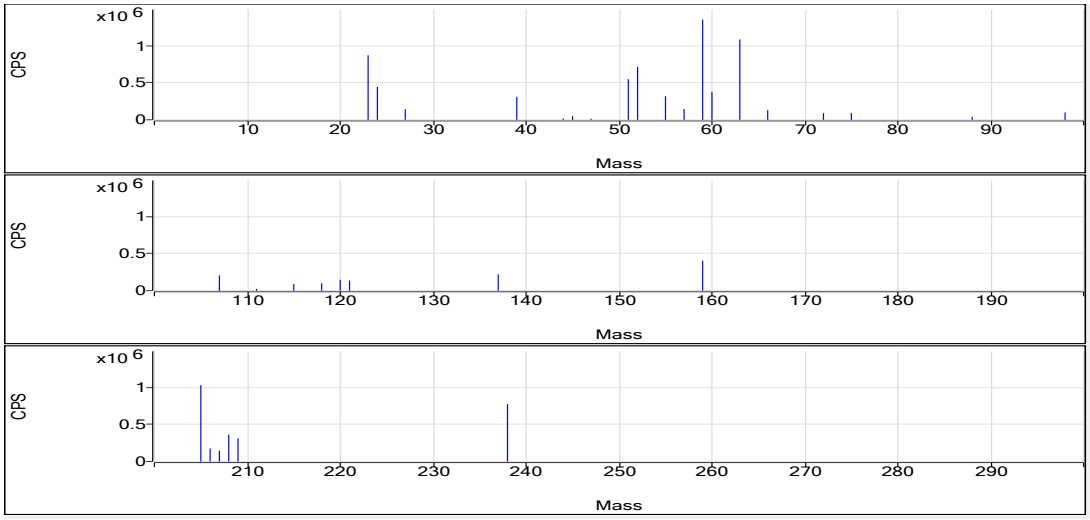


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.421	0.0354	89682.32	0.0008	4.685E-06
Be	9	1	No Gas	46.658	0.0356	90449.26	0.0008	4.685E-06
Be	9	1	No Gas	47.211	0.036	91344.27	0.0008	4.685E-06
Se	78	2	H2	97.587	0.0407	6924.35	0.0004	1.219E-05
Se	78	2	H2	98.375	0.041	6977.04	0.0004	1.219E-05
Se	78	2	H2	100.185	0.0418	7020.39	0.0004	1.219E-05
Na	23	3	He	4713.427	17.2053	865046.94	0.0036	0.3452
Na	23	3	He	4791.359	17.4841	866428.97	0.0036	0.3452
Na	23	3	He	4906.003	17.8942	873097.64	0.0036	0.3452
Mg	24	3	He	4891.416	8.7803	441453.43	0.0018	0.003497
Mg	24	3	He	4984.071	8.9465	443347.61	0.0018	0.003497
Mg	24	3	He	5045.162	9.0561	441869.88	0.0018	0.003497
Al	27	3	He	4853.556	2.8401	142796.34	0.0006	0.0006432
Al	27	3	He	4929.181	2.8844	142936.58	0.0006	0.0006432
Al	27	3	He	4958.549	2.9016	141574.11	0.0006	0.0006432
K	39	3	He	4969.758	6.1815	310792.12	0.0012	0.3951
K	39	3	He	5026.562	6.2476	309602.93	0.0012	0.3951
K	39	3	He	5094.272	6.3265	308682.63	0.0012	0.3951
Ca	44	3	He	5159.799	0.3513	17661.07	0.0001	0.002715
Ca	44	3	He	5217.749	0.3552	17601.24	0.0001	0.002715
Ca	44	3	He	5287.793	0.3599	17561.10	0.0001	0.002715
Ti	47	3	He	502.401	0.2698	13566.66	0.0005	7.003E-05
Ti	47	3	He	510.109	0.274	13576.80	0.0005	7.003E-05
Ti	47	3	He	492.493	0.2645	12906.22	0.0005	7.003E-05
V	51	3	He	497.323	10.8959	547824.94	0.0219	0.02486
V	51	3	He	504.988	11.0635	548254.44	0.0219	0.02486
V	51	3	He	507.847	11.126	542862.31	0.0219	0.02486
Cr	52	3	He	474.306	14.2411	716009.99	0.0299	0.03997
Cr	52	3	He	477.881	14.3481	711023.66	0.0299	0.03997
Cr	52	3	He	486.16	14.596	712170.38	0.0299	0.03997
Mn	55	3	He	493.617	6.3377	318643.75	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	497.55	6.3881	316565.60	0.0128	0.002639
Mn	55	3	He	503.867	6.4692	315647.36	0.0128	0.002639
Fe	57	3	He	4990.905	2.9011	145861.11	0.0006	0.001429
Fe	57	3	He	5074.219	2.9495	146163.49	0.0006	0.001429
Fe	57	3	He	5102.387	2.9659	144711.54	0.0006	0.001429
Co	59	3	He	478.803	26.9503	1355002.48	0.0563	0.002149
Co	59	3	He	479.612	26.9958	1337784.20	0.0563	0.002149
Co	59	3	He	491.234	27.6499	1349104.20	0.0563	0.002149
Ni	60	3	He	483.66	4.1542	376015.97	0.0086	0.002834
Ni	60	3	He	490.765	4.2151	375130.46	0.0086	0.002834
Ni	60	3	He	487.089	4.1836	372406.48	0.0086	0.002834
Cu	63	3	He	465.73	11.9605	1082614.52	0.0257	0.004757
Cu	63	3	He	471.205	12.1011	1076947.87	0.0257	0.004757
Cu	63	3	He	472.539	12.1353	1080239.67	0.0257	0.004757
Zn	66	3	He	492.052	1.4365	130024.24	0.0029	0.003818
Zn	66	3	He	495.804	1.4474	128813.64	0.0029	0.003818
Zn	66	3	He	501.69	1.4645	130367.98	0.0029	0.003818
As	75	3	He	498.708	1.0226	92560.59	0.002	0.0008061
As	75	3	He	506.458	1.0385	92419.86	0.002	0.0008061
As	75	3	He	500.241	1.0257	91306.76	0.002	0.0008061
Sr	88	3	He	51.726	0.4649	40719.73	0.009	0.0009645
Sr	88	3	He	52.322	0.4703	41491.42	0.009	0.0009645
Sr	88	3	He	50.924	0.4577	40689.14	0.009	0.0009645
Mo	98	3	He	51.796	1.136	99490.26	0.0219	0.0002706
Mo	98	3	He	50.263	1.1024	97255.73	0.0219	0.0002706
Mo	98	3	He	50.119	1.0992	97708.60	0.0219	0.0002706
Ag	107	3	He	50.513	2.3488	205714.06	0.0465	0.0006206
Ag	107	3	He	49.928	2.3216	204825.43	0.0465	0.0006206
Ag	107	3	He	49.831	2.3171	205968.84	0.0465	0.0006206
Cd	111	3	He	52.3	0.2796	24491.51	0.0053	0
Cd	111	3	He	51.107	0.2733	24108.73	0.0053	0
Cd	111	3	He	51.02	0.2728	24249.07	0.0053	0
Sn	120	3	He	105.03	1.6758	146769.97	0.0158	0.01648
Sn	120	3	He	103.182	1.6466	145274.18	0.0158	0.01648
Sn	120	3	He	103.498	1.6516	146812.10	0.0158	0.01648
Sb	121	3	He	104.038	1.5456	135365.13	0.0149	0.0002698
Sb	121	3	He	104.25	1.5487	136638.55	0.0149	0.0002698
Sb	121	3	He	102.957	1.5295	135961.02	0.0149	0.0002698
Ba	137	3	He	528.546	2.5369	222186.29	0.0048	0.0002317
Ba	137	3	He	518.935	2.4908	219750.41	0.0048	0.0002317
Ba	137	3	He	512.714	2.4609	218752.87	0.0048	0.0002317
Tl	205	3	He	103.34	2.5553	1032311.08	0.0247	0.0001339
Tl	205	3	He	102.18	2.5267	1022001.08	0.0247	0.0001339
Tl	205	3	He	103.916	2.5696	1029720.69	0.0247	0.0001339
Pb	208	3	He	51.535	1.6878	362672.81	0.0327	0.00107
Pb	208	3	He	51.509	1.6869	363567.18	0.0327	0.00107
Pb	208	3	He	52.204	1.7097	362128.04	0.0327	0.00107
U	238	3	He	50.226	2.4742	770558.19	0.0493	7.55E-05
U	238	3	He	49.902	2.4582	772198.74	0.0493	7.55E-05
U	238	3	He	50.564	2.4908	771660.38	0.0493	7.55E-05
Sc	45	1	No Gas			2532407.15		
Sc	45	1	No Gas			2541082.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2536180.90		
Ge	72	1	No Gas			1281253.34		
Ge	72	1	No Gas			1287221.62		
Ge	72	1	No Gas			1279622.72		
Sc	45	2	H2			189793.51		
Sc	45	2	H2			191535.97		
Sc	45	2	H2			185958.36		
Ge	72	2	H2			170079.61		
Ge	72	2	H2			170000.11		
Ge	72	2	H2			167968.16		
In	115	2	H2			398240.66		
In	115	2	H2			398072.30		
In	115	2	H2			398648.04		
Sc	45	3	He			50277.88		
Sc	45	3	He			49555.29		
Sc	45	3	He			48792.29		
Ge	72	3	He			90515.57		
Ge	72	3	He			88995.99		
Ge	72	3	He			89015.97		
In	115	3	He			88350.25		
In	115	3	He			89014.02		
In	115	3	He			89657.72		
Tb	159	3	He			403980.66		
Tb	159	3	He			404485.85		
Tb	159	3	He			400732.26		
Bi	209	3	He			311435.95		
Bi	209	3	He			314128.06		
Bi	209	3	He			309799.02		

Quantitation Report

Data File Name	189SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 5:07:39 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

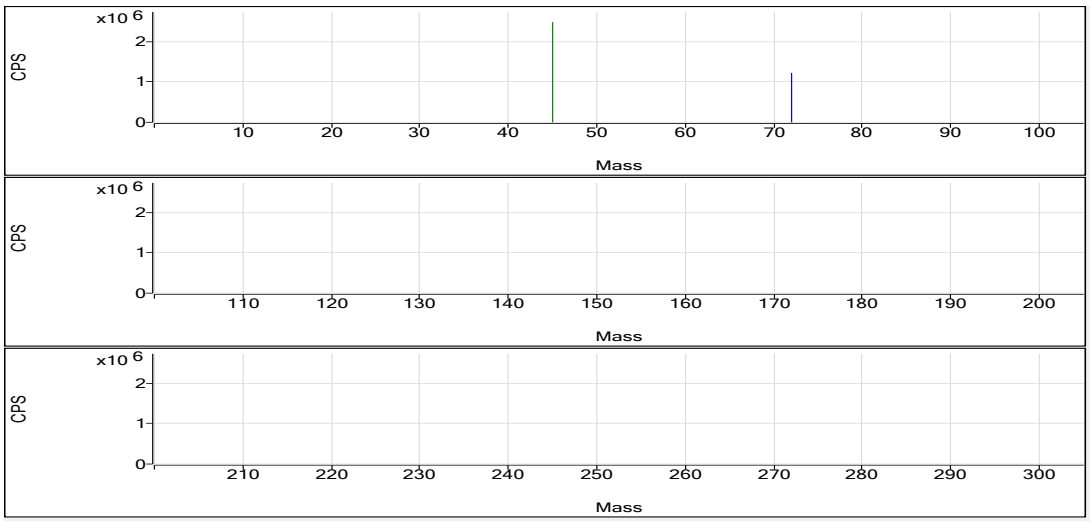
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.015	ppb	29.6	40.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.090	ppb	41.4	7.78	0.0000	Pulse	1.5000	3
Na	23	45	He	52.962	ppb	2.2	25883.41	0.5346	Pulse	0.1000	3
Mg	24	45	He	1.396	ppb	62.5	290.02	0.0060	Pulse	0.1000	3
Al	27	45	He	1.017	ppb	91.0	60.00	0.0012	Pulse	0.1000	3
K	39	45	He	7.822	ppb	189.6	19563.69	0.4042	Pulse	0.1000	3
Ca	44	45	He	-0.603	ppb	N/A	130.00	0.0027	Pulse	0.1000	3
Ti	47	45	He	0.258	ppb	151.2	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.633	ppb	9.5	1872.80	0.0387	Pulse	0.5000	3
Cr	52	45	He	1.388	ppb	180.1	3945.69	0.0815	Mix	0.1000	3
Mn	55	45	He	0.175	ppb	36.3	236.68	0.0049	Pulse	0.1000	3
Fe	57	45	He	0.504	ppb	163.3	83.33	0.0017	Pulse	0.1000	3
Co	59	45	He	0.060	ppb	7.1	266.68	0.0055	Pulse	0.1000	3
Ni	60	72	He	0.043	ppb	362.5	266.68	0.0032	Pulse	0.1000	3
Cu	63	72	He	0.090	ppb	23.2	590.04	0.0071	Pulse	0.1000	3
Zn	66	72	He	3.151	ppb	15.3	1083.42	0.0130	Pulse	0.1000	3
As	75	72	He	0.188	ppb	48.9	99.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.029	ppb	218.9	106.67	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.073	ppb	11.4	163.34	0.0019	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	124.6	66.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	125.4	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.128	ppb	59.4	1613.49	0.0185	Pulse	0.1000	3
Sb	121	115	He	0.015	ppb	75.7	43.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.047	ppb	183.0	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.139	ppb	11.8	1413.46	0.0036	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	27.9	640.04	0.0016	Pulse	0.1000	3
U	238	209	He	0.061	ppb	6.2	953.40	0.0031	Pulse	0.1000	3

ISTD Table:

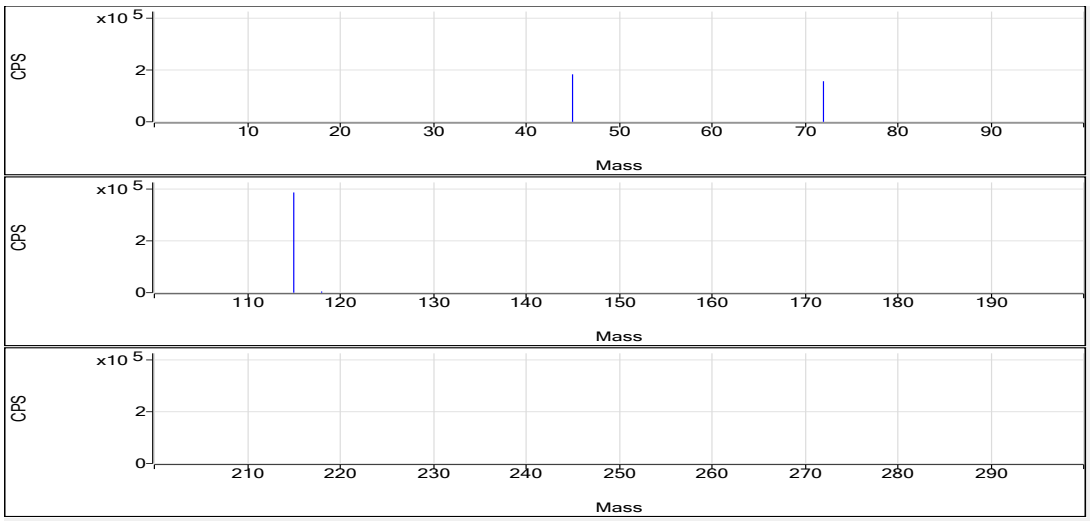
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2488868.76	1.7	103.8	Analog	0.1000	3
No Gas	Ge	72	1226065.11	1.2	106.3	Pulse	0.1000	3
H2	Sc	45	183879.59	0.5	98.3	Pulse	0.1000	3
H2	Ge	72	157159.30	1.2	96.0	Pulse	0.1000	3
H2	In	115	388073.96	0.2	99.7	Pulse	0.1000	3
He	Sc	45	48414.62	1.5	103.8	Pulse	0.1000	3
He	Ge	72	83396.34	0.2	102.7	Pulse	0.1000	3
He	In	115	87228.42	0.7	101.2	Pulse	0.1000	3
He	Tb	159	397113.77	0.4	99.6	Pulse	0.1000	3
He	Bi	209	307629.65	0.5	99.5	Pulse	0.1000	3

No Gas

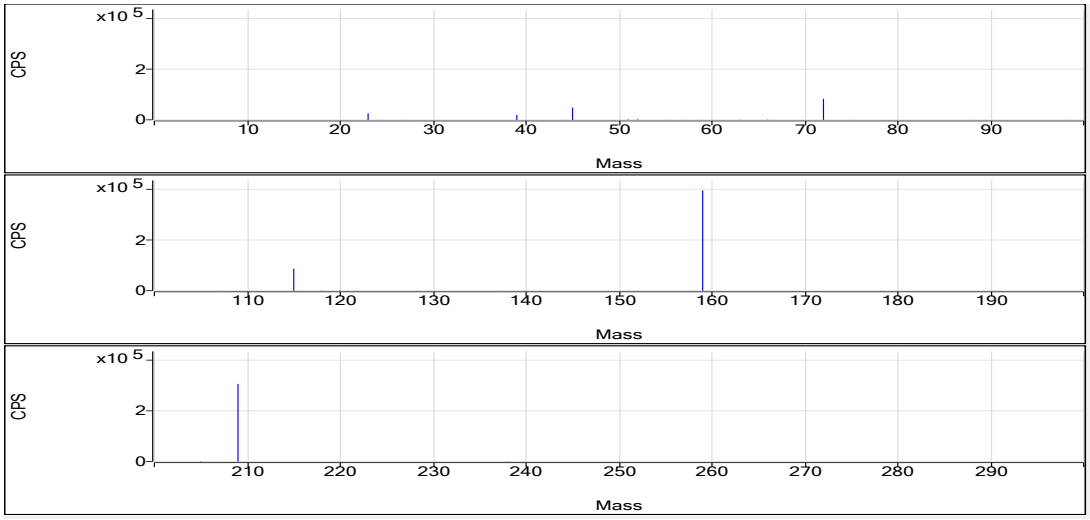


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.014	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	34.00	0.0008	4.685E-06
Be	9	1	No Gas	0.02	0	50.00	0.0008	4.685E-06
Se	78	2	H2	0.051	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.093	0.0001	8.00	0.0004	1.219E-05
Se	78	2	H2	0.125	0.0001	10.00	0.0004	1.219E-05
Na	23	3	He	52.743	0.5338	26234.05	0.0036	0.3452
Na	23	3	He	54.196	0.539	26083.73	0.0036	0.3452
Na	23	3	He	51.948	0.531	25332.44	0.0036	0.3452
Mg	24	3	He	1.113	0.0055	270.02	0.0018	0.003497
Mg	24	3	He	0.7	0.0048	230.01	0.0018	0.003497
Mg	24	3	He	2.374	0.0078	370.02	0.0018	0.003497
Al	27	3	He	1.683	0.0016	80.00	0.0006	0.0006432
Al	27	3	He	-0.04	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	1.408	0.0015	70.00	0.0006	0.0006432
K	39	3	He	7.146	0.4034	19823.96	0.0012	0.3951
K	39	3	He	-6.659	0.3873	18742.50	0.0012	0.3951
K	39	3	He	22.978	0.4218	20124.61	0.0012	0.3951
Ca	44	3	He	23.07	0.0043	210.01	0.0001	0.002715
Ca	44	3	He	-15.718	0.0017	80.00	0.0001	0.002715
Ca	44	3	He	-9.162	0.0021	100.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.254	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.65	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.57	0.0373	1834.13	0.0219	0.02486
V	51	3	He	0.638	0.0388	1878.13	0.0219	0.02486
V	51	3	He	0.69	0.04	1906.14	0.0219	0.02486
Cr	52	3	He	-0.084	0.0374	1840.20	0.0299	0.03997
Cr	52	3	He	4.274	0.1679	8126.68	0.0299	0.03997
Cr	52	3	He	-0.026	0.0392	1870.19	0.0299	0.03997
Mn	55	3	He	0.159	0.0047	230.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.245	0.0058	280.02	0.0128	0.002639
Mn	55	3	He	0.121	0.0042	200.01	0.0128	0.002639
Fe	57	3	He	-0.008	0.0014	70.00	0.0006	0.001429
Fe	57	3	He	1.453	0.0023	110.00	0.0006	0.001429
Fe	57	3	He	0.066	0.0015	70.00	0.0006	0.001429
Co	59	3	He	0.063	0.0057	280.01	0.0563	0.002149
Co	59	3	He	0.061	0.0056	270.01	0.0563	0.002149
Co	59	3	He	0.055	0.0052	250.01	0.0563	0.002149
Ni	60	3	He	0.118	0.0038	320.02	0.0086	0.002834
Ni	60	3	He	0.145	0.0041	340.02	0.0086	0.002834
Ni	60	3	He	-0.135	0.0017	140.01	0.0086	0.002834
Cu	63	3	He	0.068	0.0065	540.03	0.0257	0.004757
Cu	63	3	He	0.109	0.0076	630.04	0.0257	0.004757
Cu	63	3	He	0.094	0.0072	600.04	0.0257	0.004757
Zn	66	3	He	3.065	0.0127	1060.08	0.0029	0.003818
Zn	66	3	He	3.67	0.0145	1210.10	0.0029	0.003818
Zn	66	3	He	2.717	0.0117	980.07	0.0029	0.003818
As	75	3	He	0.264	0.0013	112.00	0.002	0.0008061
As	75	3	He	0.215	0.0012	104.00	0.002	0.0008061
As	75	3	He	0.086	0.001	82.00	0.002	0.0008061
Sr	88	3	He	0.072	0.0016	140.01	0.009	0.0009645
Sr	88	3	He	0.06	0.0015	130.01	0.009	0.0009645
Sr	88	3	He	-0.044	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	0.066	0.0017	150.01	0.0219	0.0002706
Mo	98	3	He	0.082	0.0021	180.01	0.0219	0.0002706
Mo	98	3	He	0.071	0.0018	160.01	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.04	0.0171	1490.14	0.0158	0.01648
Sn	120	3	He	0.169	0.0191	1660.16	0.0158	0.01648
Sn	120	3	He	0.174	0.0192	1690.16	0.0158	0.01648
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	0.028	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	0.119	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	0.07	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.12	0.0031	1230.11	0.0247	0.0001339
Tl	205	3	He	0.148	0.0038	1500.13	0.0247	0.0001339
Tl	205	3	He	0.148	0.0038	1510.15	0.0247	0.0001339
Pb	208	3	He	0.022	0.0018	390.02	0.0327	0.00107
Pb	208	3	He	0.014	0.0015	330.02	0.0327	0.00107
Pb	208	3	He	0.014	0.0015	330.02	0.0327	0.00107
U	238	3	He	0.065	0.0033	1020.08	0.0493	7.55E-05
U	238	3	He	0.061	0.0031	940.07	0.0493	7.55E-05
U	238	3	He	0.058	0.0029	900.06	0.0493	7.55E-05
Sc	45	1	No Gas			2450941.21		
Sc	45	1	No Gas			2535415.74		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2480249.34		
Ge	72	1	No Gas			1218127.09		
Ge	72	1	No Gas			1243055.14		
Ge	72	1	No Gas			1217013.11		
Sc	45	2	H2			183730.21		
Sc	45	2	H2			183118.57		
Sc	45	2	H2			184790.00		
Ge	72	2	H2			159228.32		
Ge	72	2	H2			156793.11		
Ge	72	2	H2			155456.47		
In	115	2	H2			388975.54		
In	115	2	H2			387635.38		
In	115	2	H2			387610.97		
Sc	45	3	He			49143.80		
Sc	45	3	He			48391.11		
Sc	45	3	He			47708.96		
Ge	72	3	He			83191.61		
Ge	72	3	He			83442.74		
Ge	72	3	He			83554.67		
In	115	3	He			87092.92		
In	115	3	He			86710.86		
In	115	3	He			87906.42		
Tb	159	3	He			397637.49		
Tb	159	3	He			395535.54		
Tb	159	3	He			398168.28		
Bi	209	3	He			309307.77		
Bi	209	3	He			306046.21		
Bi	209	3	He			307534.96		

Quantitation Report

Data File Name	190_CCV.d
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Acq Time	8/10/2023 5:09:42 PM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

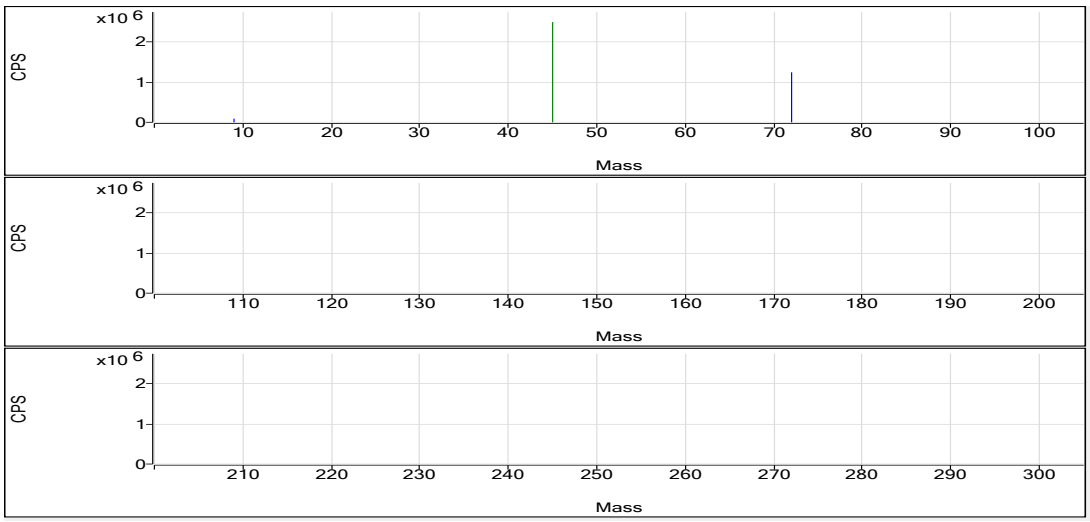
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.337	ppb	2.5	90338.21	0.0361	Pulse	0.5000	3
Se	78	72	H2	52.019	ppb	1.9	3494.66	0.0217	Pulse	1.5000	3
Na	23	45	He	4872.754	ppb	2.6	857550.07	17.7752	Pulse	0.1000	3
Mg	24	45	He	4991.271	ppb	2.2	432268.72	8.9594	Pulse	0.1000	3
Al	27	45	He	4926.728	ppb	2.7	139081.50	2.8830	Pulse	0.1000	3
K	39	45	He	5097.173	ppb	2.0	305412.45	6.3298	Pulse	0.1000	3
Ca	44	45	He	5165.241	ppb	3.8	16963.73	0.3516	Pulse	0.1000	3
Ti	47	45	He	5055.833	ppb	2.7	130975.78	2.7148	Pulse	0.1000	3
V	51	45	He	511.628	ppb	2.6	540746.52	11.2086	Pulse	0.5000	3
Cr	52	45	He	486.541	ppb	2.4	704737.23	14.6074	Pulse	0.1000	3
Mn	55	45	He	506.064	ppb	2.7	313452.52	6.4974	Pulse	0.1000	3
Fe	57	45	He	5048.859	ppb	3.9	141552.17	2.9348	Pulse	0.1000	3
Co	59	45	He	485.097	ppb	2.0	1317387.74	27.3045	Pulse	0.1000	3
Ni	60	72	He	508.616	ppb	1.5	369753.69	4.3684	Pulse	0.1000	3
Cu	63	72	He	484.681	ppb	1.7	1053544.57	12.4470	Pulse	0.1000	3
Zn	66	72	He	504.834	ppb	1.0	124745.57	1.4737	Pulse	0.1000	3
As	75	72	He	521.203	ppb	1.8	90455.23	1.0687	Pulse	0.5000	3
Sr	88	115	He	51.219	ppb	1.0	40401.80	0.4604	Pulse	0.1000	3
Mo	98	115	He	50.490	ppb	1.0	97174.57	1.1073	Pulse	0.1000	3
Ag	107	115	He	50.514	ppb	0.2	206127.85	2.3489	Pulse	0.1000	3
Cd	111	115	He	51.154	ppb	0.4	24002.60	0.2735	Pulse	0.5000	3
Sn	120	115	He	50.706	ppb	0.1	71745.85	0.8176	Pulse	0.1000	3
Sb	121	115	He	52.104	ppb	0.8	67940.27	0.7742	Pulse	0.1000	3
Ba	137	115	He	513.189	ppb	1.3	216159.65	2.4632	Pulse	0.1000	3
Tl	205	159	He	51.086	ppb	0.4	505447.32	1.2633	Pulse	0.1000	3
Pb	208	159	He	51.310	ppb	0.2	672351.83	1.6804	Pulse	0.1000	3
U	238	209	He	50.043	ppb	0.3	768457.62	2.4652	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2502286.47	1.7	104.3	Analog	0.1000	3
No Gas	Ge	72	1247395.71	1.0	108.2	Pulse	0.1000	3
H2	Sc	45	184868.66	1.6	98.9	Pulse	0.1000	3
H2	Ge	72	161021.92	1.7	98.4	Pulse	0.1000	3
H2	In	115	390110.75	0.5	100.3	Pulse	0.1000	3
He	Sc	45	48264.16	2.5	103.5	Pulse	0.1000	3
He	Ge	72	84653.97	1.2	104.3	Pulse	0.1000	3
He	In	115	87755.73	0.3	101.8	Pulse	0.1000	3
He	Tb	159	400105.98	0.6	100.4	Pulse	0.1000	3
He	Bi	209	311722.53	0.2	100.8	Pulse	0.1000	3

No Gas



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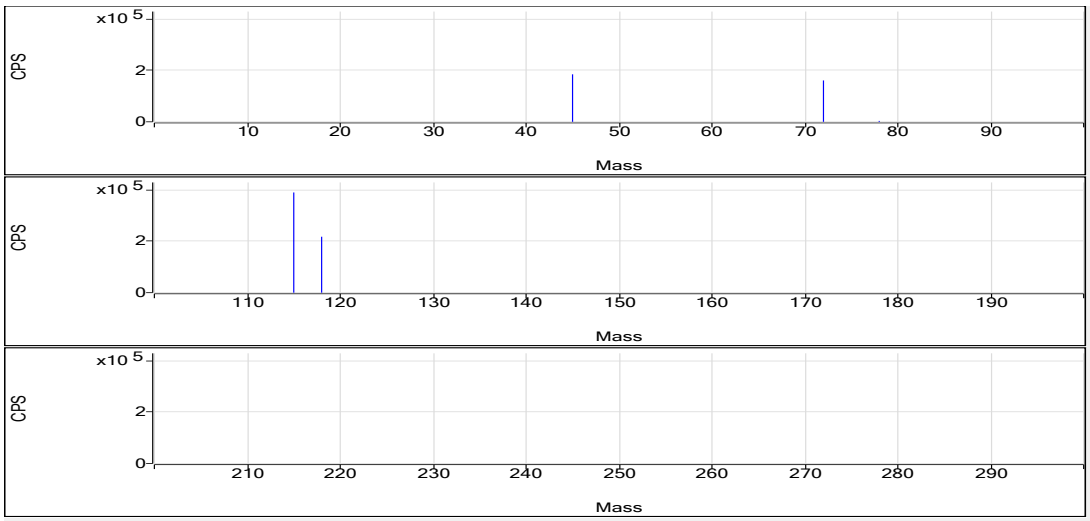
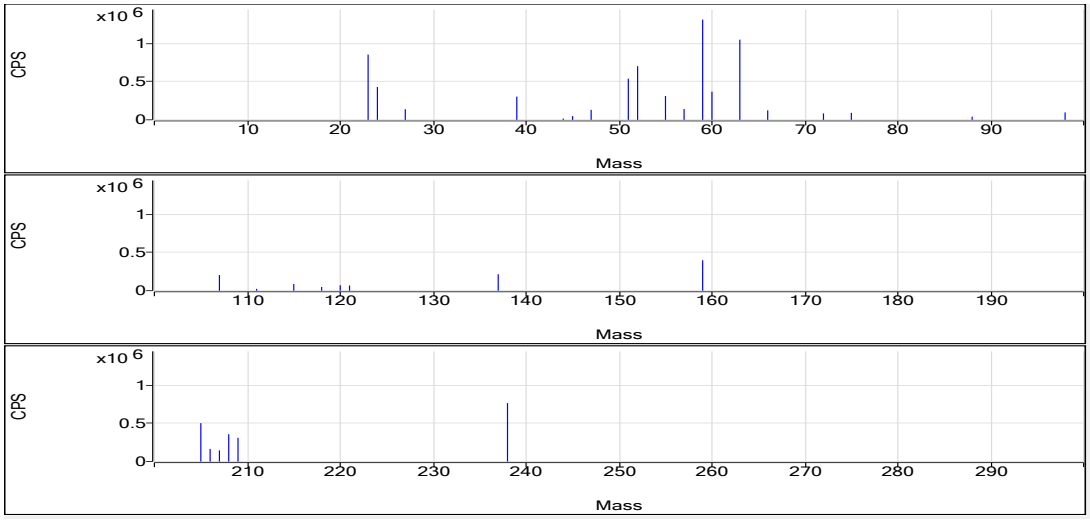


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.771	0.0364	90225.64	0.0008	4.685E-06
Be	9	1	No Gas	45.979	0.0351	89523.23	0.0008	4.685E-06
Be	9	1	No Gas	48.261	0.0368	91265.77	0.0008	4.685E-06
Se	78	2	H2	51.55	0.0215	3497.10	0.0004	1.219E-05
Se	78	2	H2	53.157	0.0222	3500.44	0.0004	1.219E-05
Se	78	2	H2	51.351	0.0214	3486.43	0.0004	1.219E-05
Na	23	3	He	5005.376	18.2496	857854.05	0.0036	0.3452
Na	23	3	He	4756.476	17.3593	857278.74	0.0036	0.3452
Na	23	3	He	4856.41	17.7168	857517.41	0.0036	0.3452
Mg	24	3	He	5112.66	9.1773	431391.95	0.0018	0.003497
Mg	24	3	He	4906.261	8.8069	434923.82	0.0018	0.003497
Mg	24	3	He	4954.89	8.8942	430490.38	0.0018	0.003497
Al	27	3	He	5058.176	2.9599	139132.72	0.0006	0.0006432
Al	27	3	He	4791.481	2.8038	138465.25	0.0006	0.0006432
Al	27	3	He	4930.526	2.8852	139646.52	0.0006	0.0006432
K	39	3	He	5193.149	6.4416	302797.44	0.0012	0.3951
K	39	3	He	4992.254	6.2077	306562.51	0.0012	0.3951
K	39	3	He	5106.116	6.3403	306877.40	0.0012	0.3951
Ca	44	3	He	5253.713	0.3576	16810.20	0.0001	0.002715
Ca	44	3	He	4941.8	0.3365	16619.97	0.0001	0.002715
Ca	44	3	He	5300.209	0.3608	17461.02	0.0001	0.002715
Ti	47	3	He	5211.852	2.7986	131551.34	0.0005	7.003E-05
Ti	47	3	He	4984.46	2.6765	132175.91	0.0005	7.003E-05
Ti	47	3	He	4971.186	2.6693	129200.09	0.0005	7.003E-05
V	51	3	He	526.642	11.5368	542306.81	0.0219	0.02486
V	51	3	He	501.036	10.9771	542097.06	0.0219	0.02486
V	51	3	He	507.206	11.112	537835.69	0.0219	0.02486
Cr	52	3	He	498.941	14.9786	704094.44	0.0299	0.03997
Cr	52	3	He	476.136	14.2958	705991.24	0.0299	0.03997
Cr	52	3	He	484.546	14.5476	704126.01	0.0299	0.03997
Mn	55	3	He	520.719	6.6855	314262.03	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	493.725	6.339	313049.88	0.0128	0.002639
Mn	55	3	He	503.749	6.4677	313045.66	0.0128	0.002639
Fe	57	3	He	5254.031	3.054	143556.99	0.0006	0.001429
Fe	57	3	He	4856.732	2.8231	139419.33	0.0006	0.001429
Fe	57	3	He	5035.813	2.9272	141680.20	0.0006	0.001429
Co	59	3	He	496.054	27.9212	1312482.79	0.0563	0.002149
Co	59	3	He	476.739	26.8341	1325185.14	0.0563	0.002149
Co	59	3	He	482.497	27.1582	1314495.29	0.0563	0.002149
Ni	60	3	He	508.828	4.3702	370599.56	0.0086	0.002834
Ni	60	3	He	516.355	4.4348	370588.67	0.0086	0.002834
Ni	60	3	He	500.666	4.3001	368072.85	0.0086	0.002834
Cu	63	3	He	483.558	12.4182	1053088.73	0.0257	0.004757
Cu	63	3	He	493.552	12.6748	1059156.00	0.0257	0.004757
Cu	63	3	He	476.933	12.2481	1048388.97	0.0257	0.004757
Zn	66	3	He	501.883	1.4651	124244.02	0.0029	0.003818
Zn	66	3	He	510.622	1.4906	124556.69	0.0029	0.003818
Zn	66	3	He	501.999	1.4654	125435.99	0.0029	0.003818
As	75	3	He	519.256	1.0647	90288.13	0.002	0.0008061
As	75	3	He	531.303	1.0894	91032.75	0.002	0.0008061
As	75	3	He	513.05	1.052	90044.82	0.002	0.0008061
Sr	88	3	He	51.496	0.4629	40759.32	0.009	0.0009645
Sr	88	3	He	51.537	0.4632	40549.16	0.009	0.0009645
Sr	88	3	He	50.624	0.4551	39896.92	0.009	0.0009645
Mo	98	3	He	50.333	1.1039	97205.45	0.0219	0.0002706
Mo	98	3	He	50.072	1.0982	96127.17	0.0219	0.0002706
Mo	98	3	He	51.065	1.1199	98191.08	0.0219	0.0002706
Ag	107	3	He	50.458	2.3463	206606.81	0.0465	0.0006206
Ag	107	3	He	50.633	2.3544	206091.64	0.0465	0.0006206
Ag	107	3	He	50.452	2.346	205685.11	0.0465	0.0006206
Cd	111	3	He	51.021	0.2728	24022.63	0.0053	0
Cd	111	3	He	51.048	0.273	23892.40	0.0053	0
Cd	111	3	He	51.393	0.2748	24092.77	0.0053	0
Sn	120	3	He	50.731	0.818	72026.98	0.0158	0.01648
Sn	120	3	He	50.757	0.8184	71635.44	0.0158	0.01648
Sn	120	3	He	50.63	0.8164	71575.14	0.0158	0.01648
Sb	121	3	He	52.453	0.7794	68630.67	0.0149	0.0002698
Sb	121	3	He	51.67	0.7677	67203.59	0.0149	0.0002698
Sb	121	3	He	52.187	0.7754	67986.54	0.0149	0.0002698
Ba	137	3	He	511.121	2.4533	216029.37	0.0048	0.0002317
Ba	137	3	He	507.807	2.4374	213352.01	0.0048	0.0002317
Ba	137	3	He	520.639	2.499	219097.57	0.0048	0.0002317
Tl	205	3	He	51.084	1.2632	505696.05	0.0247	0.0001339
Tl	205	3	He	51.305	1.2687	504598.00	0.0247	0.0001339
Tl	205	3	He	50.869	1.2579	506047.92	0.0247	0.0001339
Pb	208	3	He	51.196	1.6767	358443.98	0.0327	0.00107
Pb	208	3	He	51.376	1.6826	358473.04	0.0327	0.00107
Pb	208	3	He	51.358	1.682	360004.02	0.0327	0.00107
U	238	3	He	50.168	2.4714	771134.21	0.0493	7.55E-05
U	238	3	He	49.898	2.458	764605.93	0.0493	7.55E-05
U	238	3	He	50.063	2.4662	769632.72	0.0493	7.55E-05
Sc	45	1	No Gas			2475775.28		
Sc	45	1	No Gas			2552209.49		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2478874.65		
Ge	72	1	No Gas			1235537.87		
Ge	72	1	No Gas			1246680.76		
Ge	72	1	No Gas			1259968.50		
Sc	45	2	H2			188133.10		
Sc	45	2	H2			182239.14		
Sc	45	2	H2			184233.73		
Ge	72	2	H2			162565.34		
Ge	72	2	H2			157802.33		
Ge	72	2	H2			162698.08		
In	115	2	H2			389667.06		
In	115	2	H2			388282.18		
In	115	2	H2			392383.00		
Sc	45	3	He			47006.64		
Sc	45	3	He			49384.39		
Sc	45	3	He			48401.44		
Ge	72	3	He			84801.94		
Ge	72	3	He			83564.15		
Ge	72	3	He			85595.81		
In	115	3	He			88431.78		
In	115	3	He			87917.39		
In	115	3	He			88068.54		
Tb	159	3	He			400313.63		
Tb	159	3	He			397720.54		
Tb	159	3	He			402283.78		
Bi	209	3	He			312028.51		
Bi	209	3	He			311064.06		
Bi	209	3	He			312075.01		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

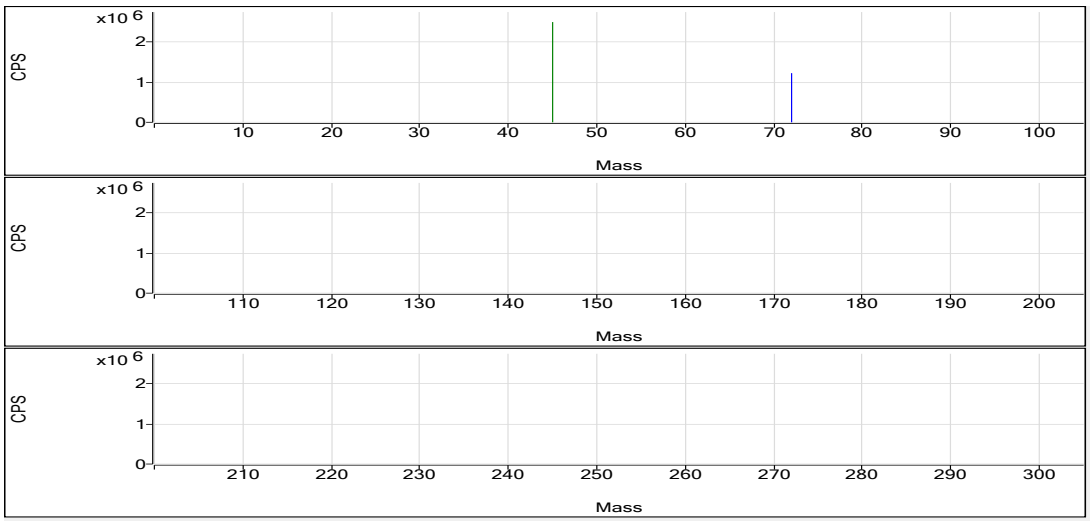
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.020	ppb	16.8	49.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.038	ppb	84.7	4.44	0.0000	Pulse	1.5000	3
Na	23	45	He	53.830	ppb	7.5	25636.21	0.5377	Pulse	0.1000	3
Mg	24	45	He	1.052	ppb	109.7	256.68	0.0054	Pulse	0.1000	3
Al	27	45	He	1.530	ppb	54.2	73.33	0.0015	Pulse	0.1000	3
K	39	45	He	11.510	ppb	46.2	19473.50	0.4085	Pulse	0.1000	3
Ca	44	45	He	0.144	ppb	9751.9	130.00	0.0027	Pulse	0.1000	3
Ti	47	45	He	0.913	ppb	65.6	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	0.604	ppb	19.4	1814.79	0.0381	Pulse	0.5000	3
Cr	52	45	He	0.004	ppb	3285.0	1910.18	0.0401	Pulse	0.1000	3
Mn	55	45	He	0.132	ppb	58.3	206.68	0.0043	Pulse	0.1000	3
Fe	57	45	He	1.638	ppb	84.6	113.34	0.0024	Pulse	0.1000	3
Co	59	45	He	0.100	ppb	27.5	370.02	0.0078	Pulse	0.1000	3
Ni	60	72	He	-0.009	ppb	N/A	230.01	0.0028	Pulse	0.1000	3
Cu	63	72	He	0.089	ppb	30.5	586.70	0.0070	Pulse	0.1000	3
Zn	66	72	He	2.740	ppb	22.3	983.40	0.0118	Pulse	0.1000	3
As	75	72	He	0.188	ppb	37.1	99.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.004	ppb	1071.7	86.67	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.044	ppb	18.9	106.67	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	200.8	66.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	98.5	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.069	ppb	N/A	1340.12	0.0154	Pulse	0.1000	3
Sb	121	115	He	0.015	ppb	153.8	43.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.047	ppb	181.6	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.081	ppb	12.7	846.73	0.0021	Pulse	0.1000	3
Pb	208	159	He	0.018	ppb	38.6	653.36	0.0016	Pulse	0.1000	3
U	238	209	He	0.046	ppb	10.4	716.71	0.0023	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2491873.04	0.5	103.9	Analog	0.1000	3
No Gas	Ge	72	1221919.15	0.7	105.9	Pulse	0.1000	3
H2	Sc	45	184844.69	1.0	98.8	Pulse	0.1000	3
H2	Ge	72	157695.20	0.3	96.3	Pulse	0.1000	3
H2	In	115	389279.81	0.2	100.0	Pulse	0.1000	3
He	Sc	45	47672.14	0.5	102.2	Pulse	0.1000	3
He	Ge	72	83379.77	0.2	102.7	Pulse	0.1000	3
He	In	115	87108.40	0.6	101.1	Pulse	0.1000	3
He	Tb	159	396499.97	0.4	99.5	Pulse	0.1000	3
He	Bi	209	306859.57	0.8	99.2	Pulse	0.1000	3

No Gas



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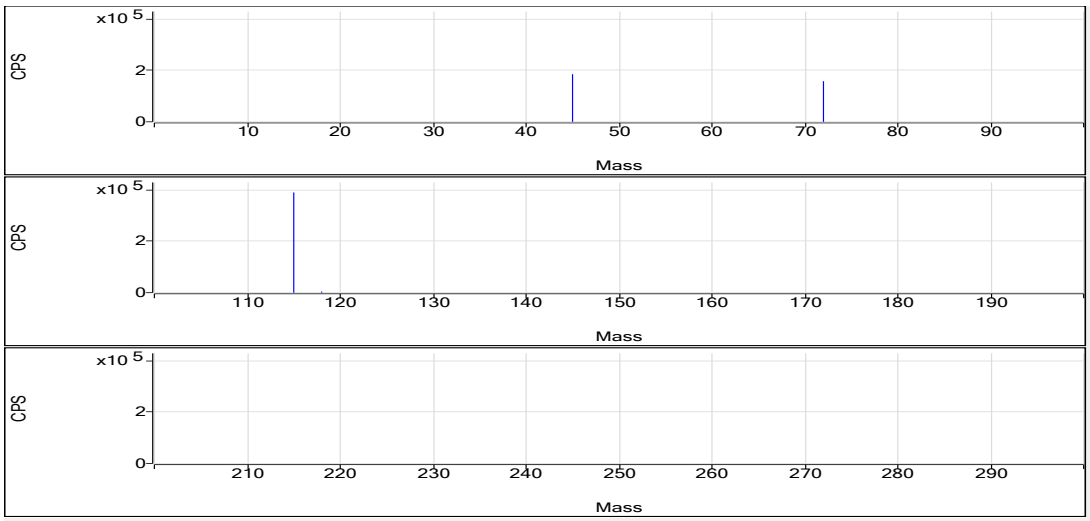
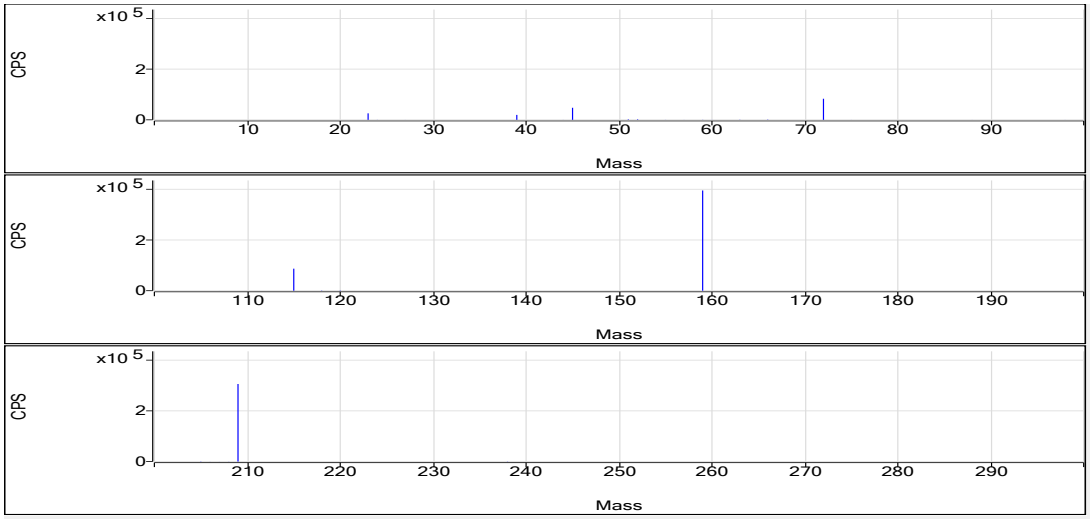


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.017	0	44.00	0.0008	4.685E-06
Be	9	1	No Gas	0.023	0	56.00	0.0008	4.685E-06
Be	9	1	No Gas	0.019	0	48.00	0.0008	4.685E-06
Se	78	2	H2	0.052	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.062	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.001	0	2.00	0.0004	1.219E-05
Na	23	3	He	55.393	0.5433	25893.29	0.0036	0.3452
Na	23	3	He	56.841	0.5485	26293.96	0.0036	0.3452
Na	23	3	He	49.257	0.5214	24721.37	0.0036	0.3452
Mg	24	3	He	2.378	0.0078	370.02	0.0018	0.003497
Mg	24	3	He	0.493	0.0044	210.01	0.0018	0.003497
Mg	24	3	He	0.284	0.004	190.01	0.0018	0.003497
Al	27	3	He	2.487	0.0021	100.00	0.0006	0.0006432
Al	27	3	He	1.04	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	1.063	0.0013	60.00	0.0006	0.0006432
K	39	3	He	13.789	0.4111	19593.70	0.0012	0.3951
K	39	3	He	15.311	0.4129	19793.88	0.0012	0.3951
K	39	3	He	5.429	0.4014	19032.93	0.0012	0.3951
Ca	44	3	He	-12.236	0.0019	90.00	0.0001	0.002715
Ca	44	3	He	15.395	0.0038	180.01	0.0001	0.002715
Ca	44	3	He	-2.728	0.0025	120.00	0.0001	0.002715
Ti	47	3	He	1.433	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	0.258	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.048	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	0.736	0.041	1952.14	0.0219	0.02486
V	51	3	He	0.563	0.0372	1782.12	0.0219	0.02486
V	51	3	He	0.512	0.0361	1710.11	0.0219	0.02486
Cr	52	3	He	0.018	0.0405	1930.19	0.0299	0.03997
Cr	52	3	He	-0.123	0.0363	1740.16	0.0299	0.03997
Cr	52	3	He	0.116	0.0434	2060.20	0.0299	0.03997
Mn	55	3	He	0.089	0.0038	180.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.087	0.0038	180.01	0.0128	0.002639
Mn	55	3	He	0.222	0.0055	260.01	0.0128	0.002639
Fe	57	3	He	2.236	0.0027	130.01	0.0006	0.001429
Fe	57	3	He	0.054	0.0015	70.00	0.0006	0.001429
Fe	57	3	He	2.623	0.003	140.01	0.0006	0.001429
Co	59	3	He	0.103	0.008	380.02	0.0563	0.002149
Co	59	3	He	0.125	0.0092	440.02	0.0563	0.002149
Co	59	3	He	0.07	0.0061	290.01	0.0563	0.002149
Ni	60	3	He	-0.078	0.0022	180.01	0.0086	0.002834
Ni	60	3	He	0.005	0.0029	240.01	0.0086	0.002834
Ni	60	3	He	0.046	0.0032	270.01	0.0086	0.002834
Cu	63	3	He	0.1	0.0073	610.04	0.0257	0.004757
Cu	63	3	He	0.058	0.0062	520.03	0.0257	0.004757
Cu	63	3	He	0.109	0.0075	630.03	0.0257	0.004757
Zn	66	3	He	2.524	0.0112	930.07	0.0029	0.003818
Zn	66	3	He	3.43	0.0138	1150.09	0.0029	0.003818
Zn	66	3	He	2.266	0.0104	870.05	0.0029	0.003818
As	75	3	He	0.181	0.0012	98.00	0.002	0.0008061
As	75	3	He	0.122	0.0011	88.00	0.002	0.0008061
As	75	3	He	0.261	0.0013	112.00	0.002	0.0008061
Sr	88	3	He	-0.018	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	0.047	0.0014	120.00	0.009	0.0009645
Sr	88	3	He	-0.018	0.0008	70.00	0.009	0.0009645
Mo	98	3	He	0.034	0.001	90.00	0.0219	0.0002706
Mo	98	3	He	0.046	0.0013	110.00	0.0219	0.0002706
Mo	98	3	He	0.051	0.0014	120.00	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Cd	111	3	He	0.021	0.0001	10.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.041	0.0171	1500.15	0.0158	0.01648
Sn	120	3	He	-0.13	0.0144	1250.10	0.0158	0.01648
Sn	120	3	He	-0.119	0.0146	1270.11	0.0158	0.01648
Sb	121	3	He	0.036	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Ba	137	3	He	0.142	0.0009	80.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Tl	205	3	He	0.092	0.0024	950.07	0.0247	0.0001339
Tl	205	3	He	0.08	0.0021	840.06	0.0247	0.0001339
Tl	205	3	He	0.071	0.0019	750.05	0.0247	0.0001339
Pb	208	3	He	0.018	0.0017	370.02	0.0327	0.00107
Pb	208	3	He	0.024	0.0019	380.02	0.0327	0.00107
Pb	208	3	He	0.011	0.0014	290.01	0.0327	0.00107
U	238	3	He	0.042	0.0021	660.04	0.0493	7.55E-05
U	238	3	He	0.045	0.0023	700.05	0.0493	7.55E-05
U	238	3	He	0.051	0.0026	790.05	0.0493	7.55E-05
Sc	45	1	No Gas			2494981.06		
Sc	45	1	No Gas			2478381.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2502256.21		
Ge	72	1	No Gas			1227990.45		
Ge	72	1	No Gas			1211700.45		
Ge	72	1	No Gas			1226066.54		
Sc	45	2	H2			184648.84		
Sc	45	2	H2			186806.33		
Sc	45	2	H2			183078.90		
Ge	72	2	H2			157935.27		
Ge	72	2	H2			158044.00		
Ge	72	2	H2			157106.34		
In	115	2	H2			389342.14		
In	115	2	H2			390199.41		
In	115	2	H2			388297.88		
Sc	45	3	He			47659.13		
Sc	45	3	He			47939.48		
Sc	45	3	He			47417.82		
Ge	72	3	He			83292.56		
Ge	72	3	He			83312.64		
Ge	72	3	He			83534.11		
In	115	3	He			87656.12		
In	115	3	He			86679.32		
In	115	3	He			87011.83		
Tb	159	3	He			395402.14		
Tb	159	3	He			398205.81		
Tb	159	3	He			395891.95		
Bi	209	3	He			309517.01		
Bi	209	3	He			306679.14		
Bi	209	3	He			304382.57		

Quantitation Report

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Sample Name	410-136722-Q-2-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

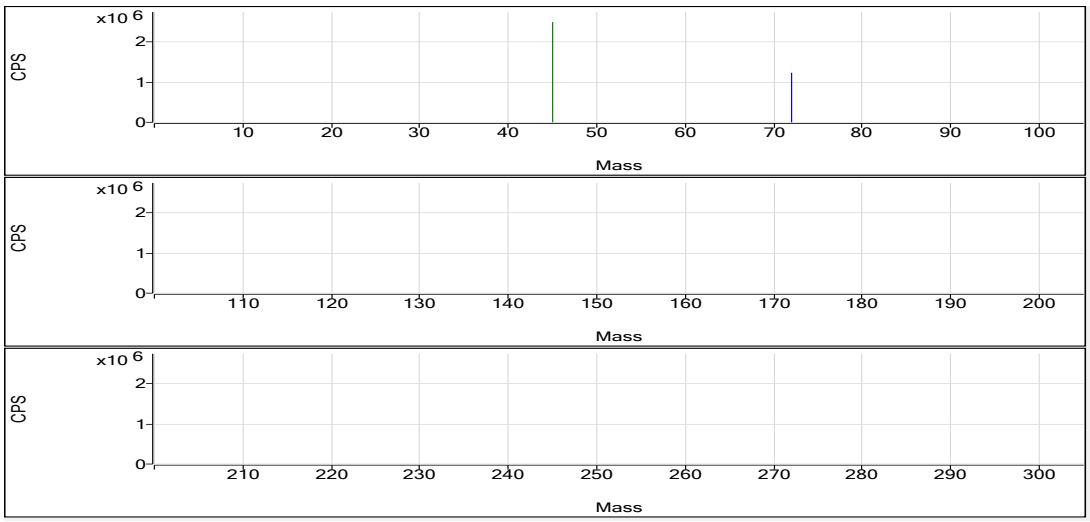
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.045	ppb	16.7	97.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.163	ppb	19.0	13.11	0.0001	Pulse	1.5000	3
Na	23	45	He	301597.176	ppb	1.7	52934055.88	1 079.1730	Analog	0.1000	3
Mg	24	45	He	6244.643	ppb	1.4	549779.34	11.2084	Pulse	0.1000	3
Al	27	45	He	378.327	ppb	10.6	10892.60	0.2220	Pulse	0.1000	3
K	39	45	He	5849.300	ppb	1.3	353440.34	7.2056	Pulse	0.1000	3
Ca	44	45	He	72737.035	ppb	1.6	241147.03	4.9162	Pulse	0.1000	3
Ti	47	45	He	4.800	ppb	28.0	130.01	0.0026	Pulse	0.1000	3
V	51	45	He	2.065	ppb	6.0	3433.76	0.0700	Pulse	0.5000	3
Cr	52	45	He	0.494	ppb	27.3	2687.02	0.0548	Pulse	0.1000	3
Mn	55	45	He	39.812	ppb	0.7	25192.48	0.5136	Pulse	0.1000	3
Fe	57	45	He	550.123	ppb	4.1	15745.72	0.3210	Pulse	0.1000	3
Co	59	45	He	0.518	ppb	8.1	1536.80	0.0313	Pulse	0.1000	3
Ni	60	72	He	1.557	ppb	3.2	1376.78	0.0162	Pulse	0.1000	3
Cu	63	72	He	3.025	ppb	5.1	7005.28	0.0824	Pulse	0.1000	3
Zn	66	72	He	5.304	ppb	8.0	1636.82	0.0193	Pulse	0.1000	3
As	75	72	He	1.249	ppb	13.4	286.00	0.0034	Pulse	0.5000	3
Sr	88	115	He	747.700	ppb	1.0	584544.52	6.7077	Pulse	0.1000	3
Mo	98	115	He	0.392	ppb	4.6	773.38	0.0089	Pulse	0.1000	3
Ag	107	115	He	0.014	ppb	70.7	110.00	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.109	ppb	34.0	50.67	0.0006	Pulse	0.5000	3
Sn	120	115	He	-0.091	ppb	N/A	1310.11	0.0150	Pulse	0.1000	3
Sb	121	115	He	0.304	ppb	9.1	416.69	0.0048	Pulse	0.1000	3
Ba	137	115	He	65.010	ppb	3.0	27207.78	0.3122	Pulse	0.1000	3
Tl	205	159	He	0.034	ppb	16.7	390.02	0.0010	Pulse	0.1000	3
Pb	208	159	He	0.577	ppb	0.9	7927.90	0.0200	Pulse	0.1000	3
U	238	209	He	0.282	ppb	3.3	4264.20	0.0140	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2496174.18	0.7	104.1	Analog	0.1000	3
No Gas	Ge	72	1234077.66	0.6	107.0	Pulse	0.1000	3
H2	Sc	45	186562.54	1.1	99.8	Pulse	0.1000	3
H2	Ge	72	162943.64	2.2	99.5	Pulse	0.1000	3
H2	In	115	386675.70	1.3	99.4	Pulse	0.1000	3
He	Sc	45	49053.43	0.6	105.2	Pulse	0.1000	3
He	Ge	72	85029.66	1.3	104.7	Pulse	0.1000	3
He	In	115	87145.92	0.6	101.1	Pulse	0.1000	3
He	Tb	159	397341.64	0.3	99.7	Pulse	0.1000	3
He	Bi	209	305523.82	0.6	98.8	Pulse	0.1000	3

No Gas



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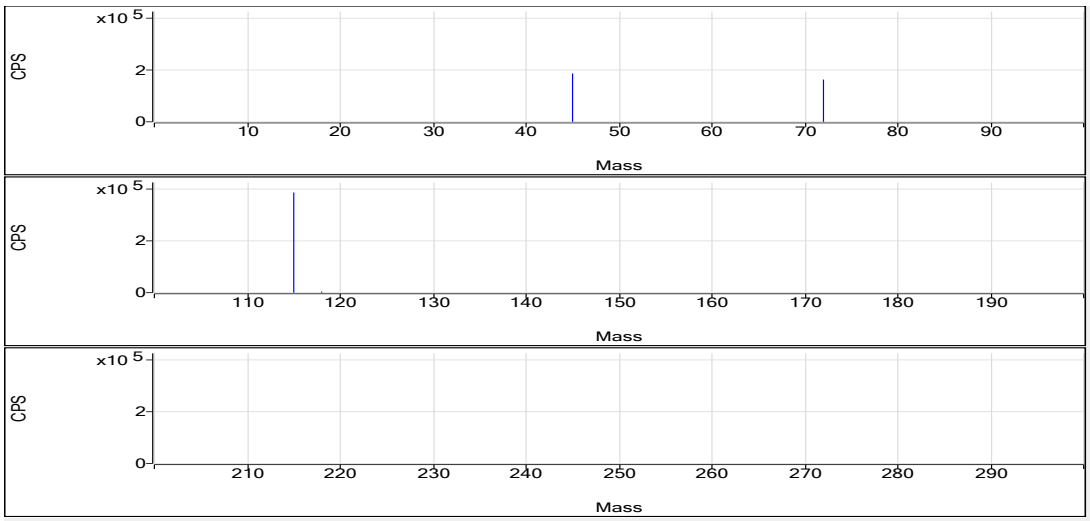
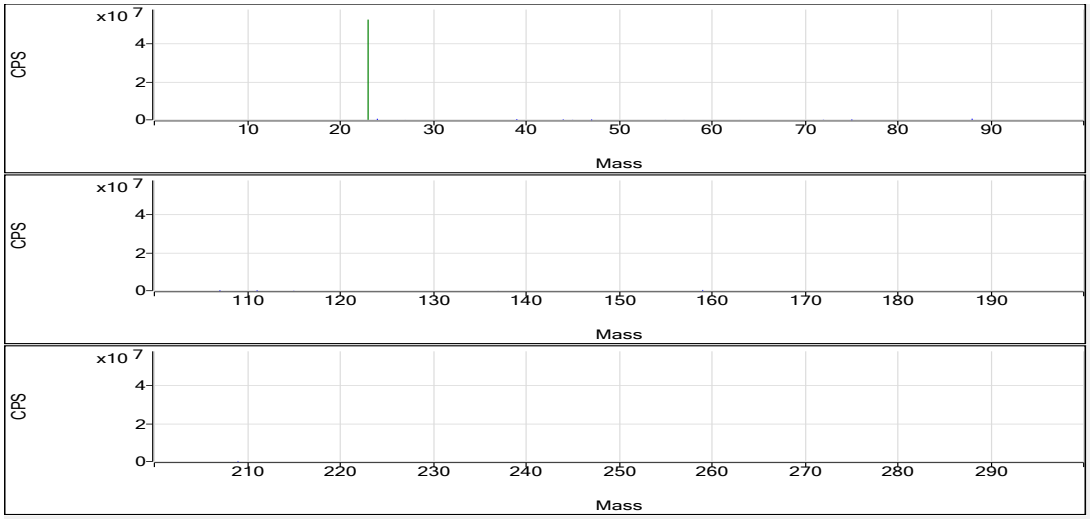


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.042	0	92.00	0.0008	4.685E-06
Be	9	1	No Gas	0.053	0	114.00	0.0008	4.685E-06
Be	9	1	No Gas	0.039	0	86.00	0.0008	4.685E-06
Se	78	2	H2	0.13	0.0001	10.67	0.0004	1.219E-05
Se	78	2	H2	0.169	0.0001	13.33	0.0004	1.219E-05
Se	78	2	H2	0.191	0.0001	15.33	0.0004	1.219E-05
Na	23	3	He	297407.076	1064.1848	52297959.22	0.0036	0.3452
Na	23	3	He	307099.867	1098.8564	53527659.20	0.0036	0.3452
Na	23	3	He	300284.585	1074.4778	52976549.21	0.0036	0.3452
Mg	24	3	He	6209.103	11.1446	547687.92	0.0018	0.003497
Mg	24	3	He	6341.729	11.3826	554470.97	0.0018	0.003497
Mg	24	3	He	6183.097	11.098	547179.13	0.0018	0.003497
Al	27	3	He	360.776	0.2117	10404.21	0.0006	0.0006432
Al	27	3	He	349.942	0.2054	10004.09	0.0006	0.0006432
Al	27	3	He	424.262	0.2489	12269.49	0.0006	0.0006432
K	39	3	He	5851.07	7.2076	354209.14	0.0012	0.3951
K	39	3	He	5923.649	7.2921	355215.27	0.0012	0.3951
K	39	3	He	5773.18	7.1169	350896.60	0.0012	0.3951
Ca	44	3	He	71635.015	4.8418	237943.71	0.0001	0.002715
Ca	44	3	He	73892.246	4.9943	243281.97	0.0001	0.002715
Ca	44	3	He	72683.843	4.9126	242215.41	0.0001	0.002715
Ti	47	3	He	5.175	0.0028	140.01	0.0005	7.003E-05
Ti	47	3	He	3.31	0.0018	90.00	0.0005	7.003E-05
Ti	47	3	He	5.914	0.0032	160.01	0.0005	7.003E-05
V	51	3	He	1.922	0.0669	3286.39	0.0219	0.02486
V	51	3	He	2.142	0.0717	3492.44	0.0219	0.02486
V	51	3	He	2.131	0.0714	3522.45	0.0219	0.02486
Cr	52	3	He	0.643	0.0592	2910.40	0.0299	0.03997
Cr	52	3	He	0.462	0.0538	2620.34	0.0299	0.03997
Cr	52	3	He	0.379	0.0513	2530.32	0.0299	0.03997
Mn	55	3	He	39.992	0.5159	25352.71	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	39.947	0.5153	25102.31	0.0128	0.002639
Mn	55	3	He	39.497	0.5095	25122.41	0.0128	0.002639
Fe	57	3	He	545.274	0.3182	15638.90	0.0006	0.001429
Fe	57	3	He	574.536	0.3352	16329.73	0.0006	0.001429
Fe	57	3	He	530.559	0.3097	15268.53	0.0006	0.001429
Co	59	3	He	0.472	0.0287	1410.11	0.0563	0.002149
Co	59	3	He	0.531	0.032	1560.13	0.0563	0.002149
Co	59	3	He	0.553	0.0333	1640.16	0.0563	0.002149
Ni	60	3	He	1.608	0.0166	1400.14	0.0086	0.002834
Ni	60	3	He	1.506	0.0158	1360.10	0.0086	0.002834
Ni	60	3	He	1.556	0.0162	1370.10	0.0086	0.002834
Cu	63	3	He	3.087	0.084	7072.01	0.0257	0.004757
Cu	63	3	He	2.849	0.0779	6721.81	0.0257	0.004757
Cu	63	3	He	3.139	0.0853	7222.03	0.0257	0.004757
Zn	66	3	He	5.747	0.0206	1730.17	0.0029	0.003818
Zn	66	3	He	4.899	0.0181	1560.13	0.0029	0.003818
Zn	66	3	He	5.265	0.0191	1620.15	0.0029	0.003818
As	75	3	He	1.439	0.0038	316.01	0.002	0.0008061
As	75	3	He	1.123	0.0031	268.00	0.002	0.0008061
As	75	3	He	1.187	0.0032	274.00	0.002	0.0008061
Sr	88	3	He	754.77	6.7711	587490.23	0.009	0.0009645
Sr	88	3	He	748.17	6.7119	588558.74	0.009	0.0009645
Sr	88	3	He	740.158	6.6401	577584.60	0.009	0.0009645
Mo	98	3	He	0.413	0.0093	810.05	0.0219	0.0002706
Mo	98	3	He	0.383	0.0087	760.05	0.0219	0.0002706
Mo	98	3	He	0.381	0.0086	750.05	0.0219	0.0002706
Ag	107	3	He	0.014	0.0013	110.00	0.0465	0.0006206
Ag	107	3	He	0.023	0.0017	150.01	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Cd	111	3	He	0.147	0.0008	68.00	0.0053	0
Cd	111	3	He	0.073	0.0004	34.00	0.0053	0
Cd	111	3	He	0.108	0.0006	50.00	0.0053	0
Sn	120	3	He	-0.124	0.0145	1260.10	0.0158	0.01648
Sn	120	3	He	-0.047	0.0157	1380.11	0.0158	0.01648
Sn	120	3	He	-0.104	0.0148	1290.11	0.0158	0.01648
Sb	121	3	He	0.292	0.0046	400.02	0.0149	0.0002698
Sb	121	3	He	0.335	0.0052	460.02	0.0149	0.0002698
Sb	121	3	He	0.284	0.0045	390.02	0.0149	0.0002698
Ba	137	3	He	65.026	0.3123	27097.62	0.0048	0.0002317
Ba	137	3	He	63.054	0.3028	26556.46	0.0048	0.0002317
Ba	137	3	He	66.949	0.3215	27969.26	0.0048	0.0002317
Tl	205	3	He	0.029	0.0009	340.02	0.0247	0.0001339
Tl	205	3	He	0.033	0.001	380.02	0.0247	0.0001339
Tl	205	3	He	0.041	0.0011	450.03	0.0247	0.0001339
Pb	208	3	He	0.578	0.02	4320.84	0.0327	0.00107
Pb	208	3	He	0.581	0.0201	4350.88	0.0327	0.00107
Pb	208	3	He	0.571	0.0198	4290.83	0.0327	0.00107
U	238	3	He	0.285	0.0141	4330.91	0.0493	7.55E-05
U	238	3	He	0.271	0.0134	4110.81	0.0493	7.55E-05
U	238	3	He	0.29	0.0143	4350.87	0.0493	7.55E-05
Sc	45	1	No Gas			2506250.43		
Sc	45	1	No Gas			2506509.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2475762.31		
Ge	72	1	No Gas			1229535.22		
Ge	72	1	No Gas			1241915.68		
Ge	72	1	No Gas			1230782.09		
Sc	45	2	H2			186683.30		
Sc	45	2	H2			184497.40		
Sc	45	2	H2			188506.91		
Ge	72	2	H2			160877.08		
Ge	72	2	H2			160937.19		
Ge	72	2	H2			167016.66		
In	115	2	H2			386295.46		
In	115	2	H2			381975.70		
In	115	2	H2			391755.93		
Sc	45	3	He			49143.68		
Sc	45	3	He			48712.15		
Sc	45	3	He			49304.46		
Ge	72	3	He			84187.59		
Ge	72	3	He			86281.01		
Ge	72	3	He			84620.38		
In	115	3	He			86770.64		
In	115	3	He			87695.82		
In	115	3	He			86991.36		
Tb	159	3	He			397040.27		
Tb	159	3	He			398795.54		
Tb	159	3	He			396189.10		
Bi	209	3	He			307244.02		
Bi	209	3	He			305844.90		
Bi	209	3	He			303482.55		

Quantitation Report

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Acq Time	8/10/2023 5:15:51 PM
Sample Name	410-136722-Q-2-A PDS
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

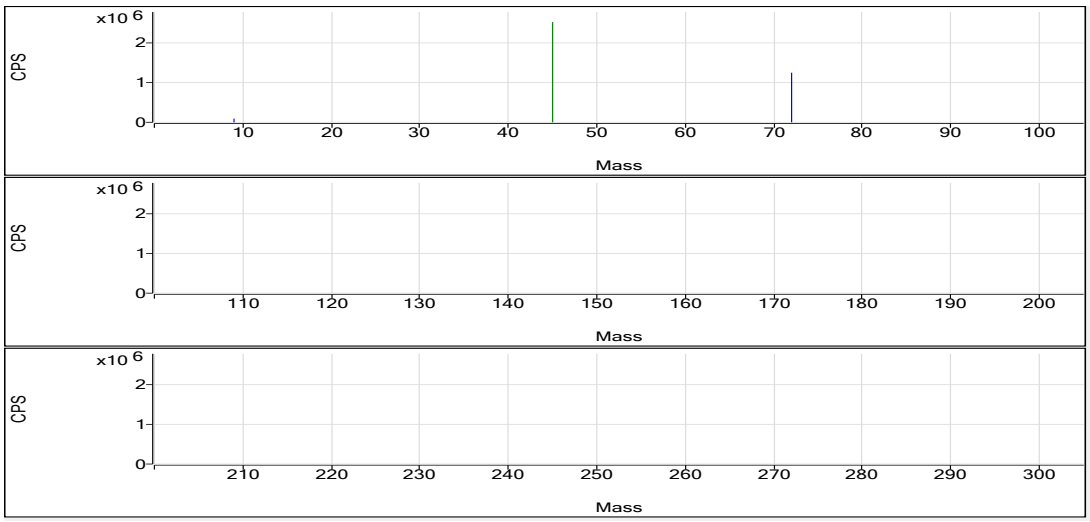
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.467	ppb	1.5	91051.98	0.0362	Pulse	0.5000	3
Se	78	72	H2	103.091	ppb	1.3	6975.71	0.0430	Pulse	1.5000	3
Na	23	45	He	302471.286	ppb	1.4	52369019.22	1 082.2998	Analog	0.1000	3
Mg	24	45	He	11179.577	ppb	1.4	970799.13	20.0633	Pulse	0.1000	3
Al	27	45	He	5309.550	ppb	1.2	150337.09	3.1069	Pulse	0.1000	3
K	39	45	He	10816.965	ppb	0.8	628547.76	12.9895	Pulse	0.1000	3
Ca	44	45	He	75945.178	ppb	0.6	248390.77	5.1330	Pulse	0.1000	3
Ti	47	45	He	521.969	ppb	4.1	13566.78	0.2803	Pulse	0.1000	3
V	51	45	He	516.448	ppb	0.8	547470.16	11.3140	Pulse	0.5000	3
Cr	52	45	He	479.966	ppb	1.7	697260.69	14.4105	Pulse	0.1000	3
Mn	55	45	He	534.742	ppb	0.3	332222.06	6.8654	Pulse	0.1000	3
Fe	57	45	He	5449.856	ppb	2.0	153269.84	3.1677	Pulse	0.1000	3
Co	59	45	He	480.002	ppb	1.0	1307338.81	27.0178	Pulse	0.1000	3
Ni	60	72	He	493.696	ppb	2.4	363394.00	4.2403	Pulse	0.1000	3
Cu	63	72	He	478.379	ppb	2.2	1052860.64	12.2853	Pulse	0.1000	3
Zn	66	72	He	514.302	ppb	2.4	128659.16	1.5013	Pulse	0.1000	3
As	75	72	He	517.336	ppb	2.4	90907.53	1.0608	Pulse	0.5000	3
Sr	88	115	He	802.023	ppb	1.2	612112.71	7.1950	Pulse	0.1000	3
Mo	98	115	He	52.733	ppb	2.3	98376.48	1.1565	Pulse	0.1000	3
Ag	107	115	He	53.175	ppb	3.2	210298.61	2.4726	Pulse	0.1000	3
Cd	111	115	He	51.806	ppb	1.9	23563.85	0.2770	Pulse	0.5000	3
Sn	120	115	He	104.266	ppb	2.3	141524.03	1.6637	Pulse	0.1000	3
Sb	121	115	He	103.813	ppb	2.0	131194.38	1.5422	Pulse	0.1000	3
Ba	137	115	He	594.027	ppb	2.3	242530.96	2.8512	Pulse	0.1000	3
Tl	205	159	He	101.459	ppb	0.5	994362.64	2.5089	Pulse	0.1000	3
Pb	208	159	He	51.316	ppb	0.6	666105.44	1.6806	Pulse	0.1000	3
U	238	209	He	52.708	ppb	0.9	773409.34	2.5965	Pulse	0.1000	3

ISTD Table:

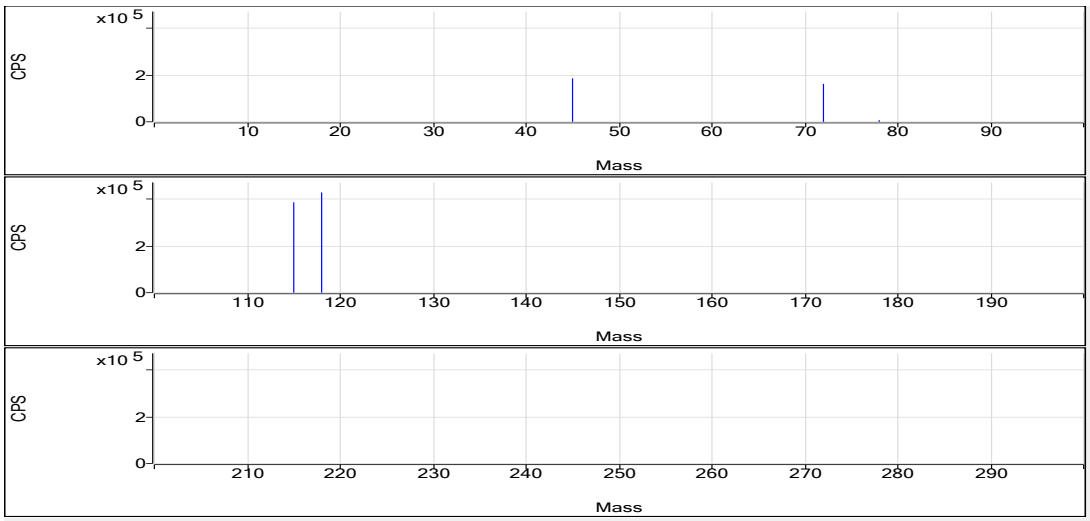
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2514969.34	2.2	104.8	Analog	0.1000	3
No Gas	Ge	72	1244055.42	0.9	107.9	Pulse	0.1000	3
H2	Sc	45	185888.36	0.5	99.4	Pulse	0.1000	3
H2	Ge	72	162198.84	0.3	99.1	Pulse	0.1000	3
H2	In	115	386630.87	0.3	99.4	Pulse	0.1000	3
He	Sc	45	48391.53	1.1	103.8	Pulse	0.1000	3
He	Ge	72	85730.48	2.3	105.6	Pulse	0.1000	3
He	In	115	85088.06	1.9	98.7	Pulse	0.1000	3
He	Tb	159	396346.85	0.4	99.4	Pulse	0.1000	3
He	Bi	209	297877.46	0.6	96.3	Pulse	0.1000	3

No Gas

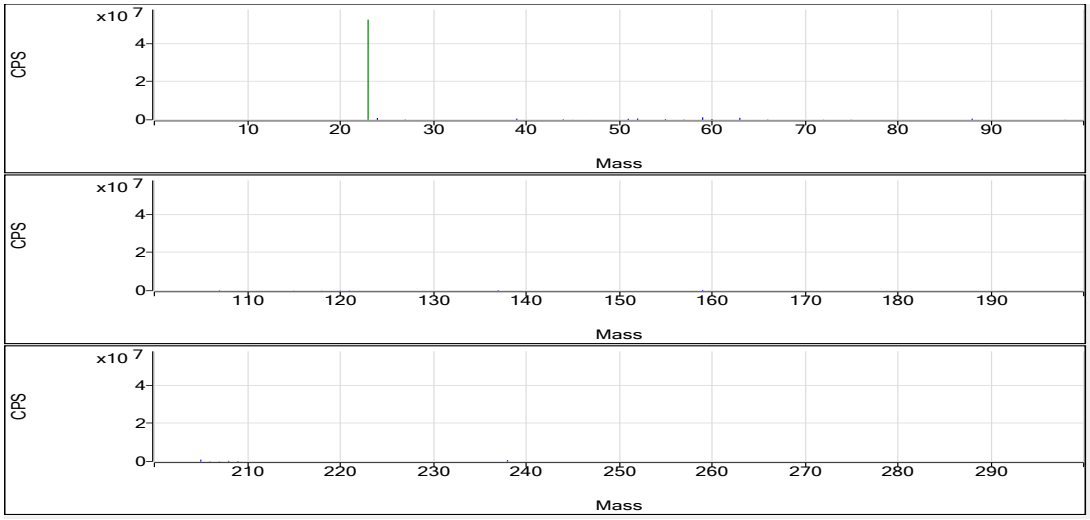


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.26	0.0368	90249.83	0.0008	4.685E-06
Be	9	1	No Gas	47.159	0.036	91491.33	0.0008	4.685E-06
Be	9	1	No Gas	46.981	0.0358	91414.79	0.0008	4.685E-06
Se	78	2	H2	102.113	0.0426	6915.01	0.0004	1.219E-05
Se	78	2	H2	104.637	0.0437	7057.08	0.0004	1.219E-05
Se	78	2	H2	102.524	0.0428	6955.03	0.0004	1.219E-05
Na	23	3	He	298192.278	1066.9935	52168654.22	0.0036	0.3452
Na	23	3	He	302873.777	1083.7395	52508804.22	0.0036	0.3452
Na	23	3	He	306347.802	1096.1663	52429599.22	0.0036	0.3452
Mg	24	3	He	11012.834	19.7641	966327.09	0.0018	0.003497
Mg	24	3	He	11215.614	20.1279	975227.88	0.0018	0.003497
Mg	24	3	He	11310.282	20.2978	970842.41	0.0018	0.003497
Al	27	3	He	5278.089	3.0885	151006.87	0.0006	0.0006432
Al	27	3	He	5270.301	3.084	149422.13	0.0006	0.0006432
Al	27	3	He	5380.26	3.1483	150582.27	0.0006	0.0006432
K	39	3	He	10726.043	12.8837	629923.66	0.0012	0.3951
K	39	3	He	10821.83	12.9952	629637.49	0.0012	0.3951
K	39	3	He	10903.022	13.0897	626082.14	0.0012	0.3951
Ca	44	3	He	75623.233	5.1112	249902.98	0.0001	0.002715
Ca	44	3	He	76434.312	5.166	250300.37	0.0001	0.002715
Ca	44	3	He	75777.988	5.1217	244968.96	0.0001	0.002715
Ti	47	3	He	510.917	0.2744	13416.60	0.0005	7.003E-05
Ti	47	3	He	546.743	0.2936	14227.44	0.0005	7.003E-05
Ti	47	3	He	508.248	0.273	13056.31	0.0005	7.003E-05
V	51	3	He	512.459	11.2268	548913.56	0.0219	0.02486
V	51	3	He	516.307	11.3109	548030.13	0.0219	0.02486
V	51	3	He	520.579	11.4043	545466.81	0.0219	0.02486
Cr	52	3	He	471.923	14.1697	692799.91	0.0299	0.03997
Cr	52	3	He	479.953	14.4101	698192.10	0.0299	0.03997
Cr	52	3	He	488.022	14.6517	700790.07	0.0299	0.03997
Mn	55	3	He	532.727	6.8396	334409.21	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	535.378	6.8736	333036.87	0.0128	0.002639
Mn	55	3	He	536.12	6.8831	329220.11	0.0128	0.002639
Fe	57	3	He	5347.095	3.108	151961.89	0.0006	0.001429
Fe	57	3	He	5441.119	3.1627	153236.05	0.0006	0.001429
Fe	57	3	He	5561.355	3.2325	154611.57	0.0006	0.001429
Co	59	3	He	475.091	26.7414	1307470.06	0.0563	0.002149
Co	59	3	He	480.406	27.0405	1310152.40	0.0563	0.002149
Co	59	3	He	484.51	27.2715	1304393.96	0.0563	0.002149
Ni	60	3	He	484.852	4.1644	360770.97	0.0086	0.002834
Ni	60	3	He	507.259	4.3567	363670.62	0.0086	0.002834
Ni	60	3	He	488.976	4.1998	365740.42	0.0086	0.002834
Cu	63	3	He	474.22	12.1785	1055052.25	0.0257	0.004757
Cu	63	3	He	490.555	12.5978	1051587.25	0.0257	0.004757
Cu	63	3	He	470.361	12.0794	1051942.41	0.0257	0.004757
Zn	66	3	He	505.604	1.4759	127864.45	0.0029	0.003818
Zn	66	3	He	528.277	1.542	128712.89	0.0029	0.003818
Zn	66	3	He	509.024	1.4859	129400.14	0.0029	0.003818
As	75	3	He	508.844	1.0434	90388.83	0.002	0.0008061
As	75	3	He	531.303	1.0894	90934.16	0.002	0.0008061
As	75	3	He	511.86	1.0495	91399.59	0.002	0.0008061
Sr	88	3	He	812.736	7.2911	606957.73	0.009	0.0009645
Sr	88	3	He	794.058	7.1235	614627.10	0.009	0.0009645
Sr	88	3	He	799.274	7.1703	614753.31	0.009	0.0009645
Mo	98	3	He	54.08	1.1861	98735.42	0.0219	0.0002706
Mo	98	3	He	51.725	1.1344	97879.27	0.0219	0.0002706
Mo	98	3	He	52.392	1.149	98514.76	0.0219	0.0002706
Ag	107	3	He	55.139	2.5639	213432.89	0.0465	0.0006206
Ag	107	3	He	51.926	2.4145	208325.60	0.0465	0.0006206
Ag	107	3	He	52.46	2.4393	209137.34	0.0465	0.0006206
Cd	111	3	He	52.948	0.2831	23567.83	0.0053	0
Cd	111	3	He	51.412	0.2749	23718.09	0.0053	0
Cd	111	3	He	51.057	0.273	23405.64	0.0053	0
Sn	120	3	He	106.967	1.7064	142053.07	0.0158	0.01648
Sn	120	3	He	102.538	1.6364	141193.58	0.0158	0.01648
Sn	120	3	He	103.294	1.6484	141325.45	0.0158	0.01648
Sb	121	3	He	106.061	1.5756	131167.43	0.0149	0.0002698
Sb	121	3	He	102.086	1.5166	130854.50	0.0149	0.0002698
Sb	121	3	He	103.291	1.5345	131561.20	0.0149	0.0002698
Ba	137	3	He	609.191	2.9239	243409.22	0.0048	0.0002317
Ba	137	3	He	583.733	2.8018	241739.82	0.0048	0.0002317
Ba	137	3	He	589.158	2.8278	242443.84	0.0048	0.0002317
Tl	205	3	He	101.571	2.5116	994444.05	0.0247	0.0001339
Tl	205	3	He	100.923	2.4956	993662.17	0.0247	0.0001339
Tl	205	3	He	101.884	2.5194	994981.70	0.0247	0.0001339
Pb	208	3	He	51.193	1.6766	354466.71	0.0327	0.00107
Pb	208	3	He	51.113	1.674	355710.50	0.0327	0.00107
Pb	208	3	He	51.643	1.6913	354260.78	0.0327	0.00107
U	238	3	He	52.212	2.572	770694.60	0.0493	7.55E-05
U	238	3	He	53.147	2.6181	776011.86	0.0493	7.55E-05
U	238	3	He	52.767	2.5994	773521.55	0.0493	7.55E-05
Sc	45	1	No Gas			2451317.31		
Sc	45	1	No Gas			2543041.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2550549.65		
Ge	72	1	No Gas			1231709.04		
Ge	72	1	No Gas			1247139.04		
Ge	72	1	No Gas			1253318.18		
Sc	45	2	H2			186006.74		
Sc	45	2	H2			186694.20		
Sc	45	2	H2			184964.14		
Ge	72	2	H2			162324.10		
Ge	72	2	H2			161664.22		
Ge	72	2	H2			162608.20		
In	115	2	H2			385379.92		
In	115	2	H2			387937.53		
In	115	2	H2			386575.15		
Sc	45	3	He			48893.13		
Sc	45	3	He			48451.50		
Sc	45	3	He			47829.97		
Ge	72	3	He			86632.33		
Ge	72	3	He			83473.69		
Ge	72	3	He			87085.43		
In	115	3	He			84003.76		
In	115	3	He			87042.98		
In	115	3	He			86499.30		
Tb	159	3	He			395939.02		
Tb	159	3	He			398165.78		
Tb	159	3	He			394935.74		
Bi	209	3	He			299646.13		
Bi	209	3	He			296405.56		
Bi	209	3	He			297580.68		

Quantitation Report

Data File Name	194SMPL.d
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Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

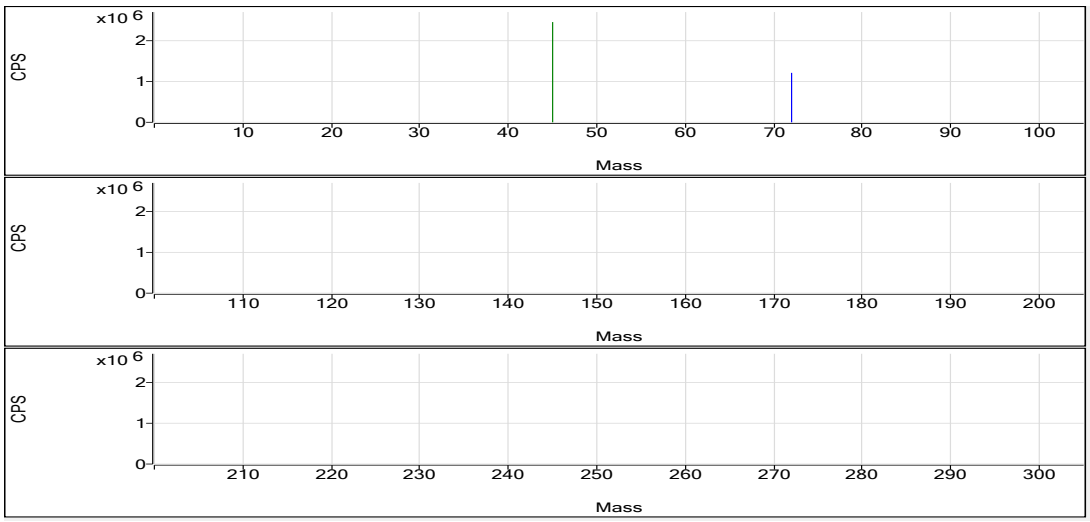
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.029	ppb	6.6	66.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.159	ppb	36.0	12.45	0.0001	Pulse	1.5000	3
Na	23	45	He	60050.086	ppb	1.3	10400070.88	215.1473	Analog	0.1000	3
Mg	24	45	He	1258.316	ppb	0.3	109323.23	2.2613	Pulse	0.1000	3
Al	27	45	He	71.586	ppb	24.6	2053.63	0.0425	Pulse	0.1000	3
K	39	45	He	1183.368	ppb	2.2	85697.51	1.7729	Pulse	0.1000	3
Ca	44	45	He	14324.961	ppb	2.5	46903.35	0.9704	Pulse	0.1000	3
Ti	47	45	He	1.156	ppb	20.7	33.33	0.0007	Pulse	0.1000	3
V	51	45	He	0.758	ppb	9.5	2002.82	0.0414	Pulse	0.5000	3
Cr	52	45	He	0.058	ppb	54.4	2016.88	0.0417	Pulse	0.1000	3
Mn	55	45	He	8.660	ppb	3.0	5501.24	0.1138	Pulse	0.1000	3
Fe	57	45	He	113.041	ppb	5.8	3243.83	0.0671	Pulse	0.1000	3
Co	59	45	He	0.204	ppb	7.4	660.04	0.0137	Pulse	0.1000	3
Ni	60	72	He	0.306	ppb	44.3	453.36	0.0055	Pulse	0.1000	3
Cu	63	72	He	0.716	ppb	9.0	1920.19	0.0231	Pulse	0.1000	3
Zn	66	72	He	3.553	ppb	6.4	1176.75	0.0142	Pulse	0.1000	3
As	75	72	He	0.414	ppb	39.2	137.33	0.0017	Pulse	0.5000	3
Sr	88	115	He	145.102	ppb	1.6	114719.09	1.3025	Pulse	0.1000	3
Mo	98	115	He	0.134	ppb	9.7	283.35	0.0032	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	83.4	90.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.031	ppb	40.3	14.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.002	ppb	N/A	1446.79	0.0164	Pulse	0.1000	3
Sb	121	115	He	0.247	ppb	14.1	346.68	0.0039	Pulse	0.1000	3
Ba	137	115	He	12.846	ppb	0.5	5451.27	0.0619	Pulse	0.1000	3
Tl	205	159	He	0.171	ppb	8.8	1746.84	0.0044	Pulse	0.1000	3
Pb	208	159	He	0.128	ppb	2.1	2100.15	0.0053	Pulse	0.1000	3
U	238	209	He	0.105	ppb	8.4	1633.49	0.0052	Pulse	0.1000	3

ISTD Table:

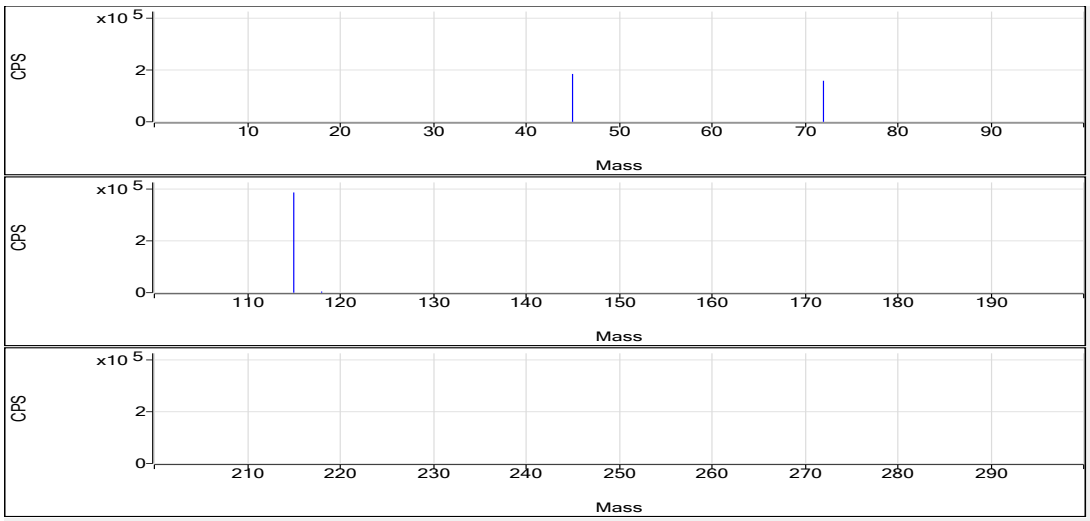
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2455026.21	1.4	102.3	Analog	0.1000	3
No Gas	Ge	72	1211202.67	0.4	105.0	Pulse	0.1000	3
H2	Sc	45	185466.65	0.5	99.2	Pulse	0.1000	3
H2	Ge	72	159100.34	1.0	97.2	Pulse	0.1000	3
H2	In	115	388274.47	1.2	99.8	Pulse	0.1000	3
He	Sc	45	48344.32	1.2	103.6	Pulse	0.1000	3
He	Ge	72	83061.30	1.1	102.3	Pulse	0.1000	3
He	In	115	88091.64	1.7	102.2	Pulse	0.1000	3
He	Tb	159	399833.13	0.1	100.3	Pulse	0.1000	3
He	Bi	209	311681.51	0.3	100.8	Pulse	0.1000	3

No Gas

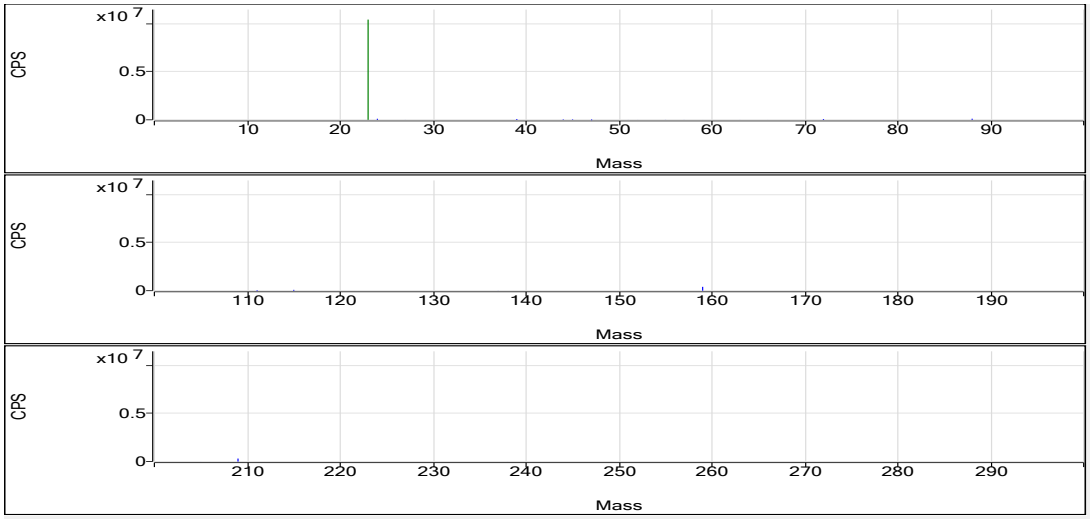


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Be	9	1	No Gas	0.027	0	62.00	0.0008	4.685E-06
Be	9	1	No Gas	0.03	0	66.00	0.0008	4.685E-06
Se	78	2	H2	0.1	0.0001	8.67	0.0004	1.219E-05
Se	78	2	H2	0.161	0.0001	12.67	0.0004	1.219E-05
Se	78	2	H2	0.215	0.0001	16.00	0.0004	1.219E-05
Na	23	3	He	60905.162	218.2059	10408221.09	0.0036	0.3452
Na	23	3	He	59791.356	214.2218	10377146.72	0.0036	0.3452
Na	23	3	He	59453.738	213.0141	10414844.84	0.0036	0.3452
Mg	24	3	He	1254.778	2.255	107560.12	0.0018	0.003497
Mg	24	3	He	1263.105	2.2699	109957.22	0.0018	0.003497
Mg	24	3	He	1257.064	2.2591	110452.36	0.0018	0.003497
Al	27	3	He	87.785	0.052	2480.37	0.0006	0.0006432
Al	27	3	He	52.893	0.0316	1530.12	0.0006	0.0006432
Al	27	3	He	74.079	0.044	2150.41	0.0006	0.0006432
K	39	3	He	1207.804	1.8013	85922.51	0.0012	0.3951
K	39	3	He	1186.049	1.776	86032.20	0.0012	0.3951
K	39	3	He	1156.249	1.7413	85137.83	0.0012	0.3951
Ca	44	3	He	14735.291	0.9981	47609.02	0.0001	0.002715
Ca	44	3	He	14190.092	0.9613	46565.63	0.0001	0.002715
Ca	44	3	He	14049.501	0.9518	46535.41	0.0001	0.002715
Ti	47	3	He	1.431	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	1.023	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	1.012	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	0.817	0.0427	2038.15	0.0219	0.02486
V	51	3	He	0.78	0.0419	2030.16	0.0219	0.02486
V	51	3	He	0.678	0.0397	1940.14	0.0219	0.02486
Cr	52	3	He	0.023	0.0407	1940.20	0.0299	0.03997
Cr	52	3	He	0.085	0.0425	2060.22	0.0299	0.03997
Cr	52	3	He	0.065	0.0419	2050.22	0.0299	0.03997
Mn	55	3	He	8.65	0.1137	5421.15	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	8.402	0.1105	5351.23	0.0128	0.002639
Mn	55	3	He	8.928	0.1172	5731.33	0.0128	0.002639
Fe	57	3	He	111.584	0.0663	3160.46	0.0006	0.001429
Fe	57	3	He	120.145	0.0712	3450.56	0.0006	0.001429
Fe	57	3	He	107.392	0.0638	3120.46	0.0006	0.001429
Co	59	3	He	0.211	0.014	670.04	0.0563	0.002149
Co	59	3	He	0.215	0.0142	690.05	0.0563	0.002149
Co	59	3	He	0.187	0.0127	620.04	0.0563	0.002149
Ni	60	3	He	0.462	0.0068	560.03	0.0086	0.002834
Ni	60	3	He	0.248	0.005	410.02	0.0086	0.002834
Ni	60	3	He	0.21	0.0046	390.02	0.0086	0.002834
Cu	63	3	He	0.77	0.0245	2020.20	0.0257	0.004757
Cu	63	3	He	0.733	0.0236	1950.20	0.0257	0.004757
Cu	63	3	He	0.644	0.0213	1790.17	0.0257	0.004757
Zn	66	3	He	3.524	0.0141	1160.08	0.0029	0.003818
Zn	66	3	He	3.341	0.0135	1120.08	0.0029	0.003818
Zn	66	3	He	3.795	0.0149	1250.10	0.0029	0.003818
As	75	3	He	0.602	0.002	168.00	0.002	0.0008061
As	75	3	He	0.315	0.0015	120.00	0.002	0.0008061
As	75	3	He	0.326	0.0015	124.00	0.002	0.0008061
Sr	88	3	He	144.767	1.2995	114763.33	0.009	0.0009645
Sr	88	3	He	142.989	1.2835	114812.65	0.009	0.0009645
Sr	88	3	He	147.55	1.3245	114581.28	0.009	0.0009645
Mo	98	3	He	0.137	0.0033	290.02	0.0219	0.0002706
Mo	98	3	He	0.12	0.0029	260.01	0.0219	0.0002706
Mo	98	3	He	0.146	0.0035	300.01	0.0219	0.0002706
Ag	107	3	He	0.016	0.0014	120.00	0.0465	0.0006206
Ag	107	3	He	0.008	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.038	0.0002	18.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.039	0.0002	18.00	0.0053	0
Sn	120	3	He	-0.068	0.0154	1360.11	0.0158	0.01648
Sn	120	3	He	-0.102	0.0149	1330.11	0.0158	0.01648
Sn	120	3	He	0.164	0.0191	1650.16	0.0158	0.01648
Sb	121	3	He	0.287	0.0045	400.02	0.0149	0.0002698
Sb	121	3	He	0.223	0.0036	320.01	0.0149	0.0002698
Sb	121	3	He	0.231	0.0037	320.01	0.0149	0.0002698
Ba	137	3	He	12.908	0.0622	5491.28	0.0048	0.0002317
Ba	137	3	He	12.79	0.0616	5511.29	0.0048	0.0002317
Ba	137	3	He	12.84	0.0619	5351.23	0.0048	0.0002317
Tl	205	3	He	0.168	0.0043	1710.17	0.0247	0.0001339
Tl	205	3	He	0.158	0.0041	1620.16	0.0247	0.0001339
Tl	205	3	He	0.188	0.0048	1910.20	0.0247	0.0001339
Pb	208	3	He	0.125	0.0052	1080.10	0.0327	0.00107
Pb	208	3	He	0.13	0.0053	1120.09	0.0327	0.00107
Pb	208	3	He	0.129	0.0053	1050.08	0.0327	0.00107
U	238	3	He	0.098	0.0049	1520.14	0.0493	7.55E-05
U	238	3	He	0.115	0.0057	1790.18	0.0493	7.55E-05
U	238	3	He	0.102	0.0051	1590.16	0.0493	7.55E-05
Sc	45	1	No Gas			2489871.68		
Sc	45	1	No Gas			2453664.49		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2421542.46		
Ge	72	1	No Gas			1212407.33		
Ge	72	1	No Gas			1215200.69		
Ge	72	1	No Gas			1205999.98		
Sc	45	2	H2			185814.16		
Sc	45	2	H2			184458.38		
Sc	45	2	H2			186127.42		
Ge	72	2	H2			160422.33		
Ge	72	2	H2			159510.90		
Ge	72	2	H2			157367.79		
In	115	2	H2			384487.06		
In	115	2	H2			386966.99		
In	115	2	H2			393369.37		
Sc	45	3	He			47699.08		
Sc	45	3	He			48441.14		
Sc	45	3	He			48892.75		
Ge	72	3	He			82407.43		
Ge	72	3	He			82689.01		
Ge	72	3	He			84087.46		
In	115	3	He			88321.05		
In	115	3	He			89457.32		
In	115	3	He			86519.56		
Tb	159	3	He			399520.54		
Tb	159	3	He			400031.63		
Tb	159	3	He			399947.22		
Bi	209	3	He			311335.29		
Bi	209	3	He			312787.71		
Bi	209	3	He			310921.52		

Quantitation Report

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Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

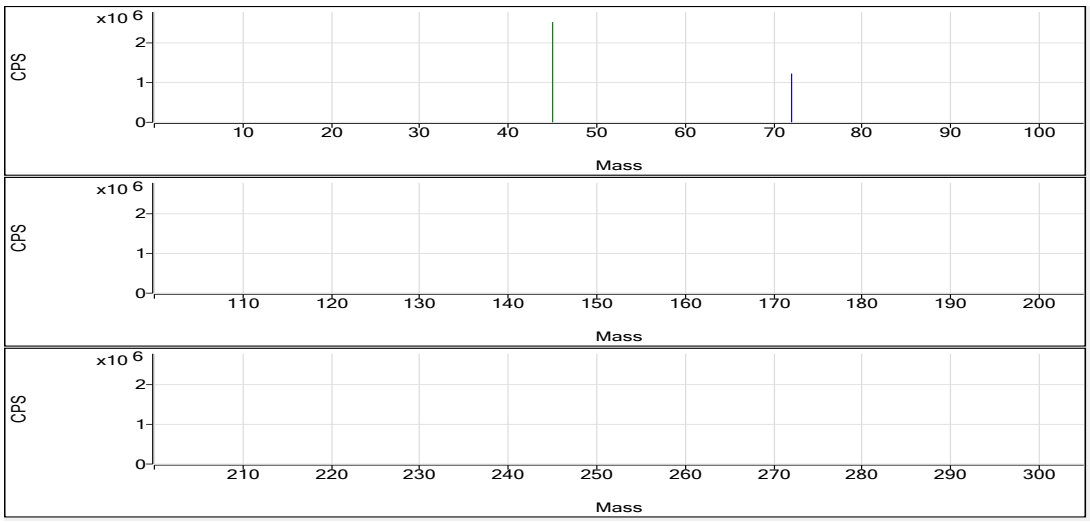
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.045	ppb	19.6	99.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.204	ppb	5.4	15.33	0.0001	Pulse	1.5000	3
Na	23	45	He	310095.368	ppb	2.0	53654552.53	1 109.5715	Analog	0.1000	3
Mg	24	45	He	6417.353	ppb	2.0	556960.85	11.5183	Pulse	0.1000	3
Al	27	45	He	386.312	ppb	3.2	10958.12	0.2266	Pulse	0.1000	3
K	39	45	He	6000.032	ppb	1.8	356923.12	7.3811	Pulse	0.1000	3
Ca	44	45	He	74997.028	ppb	1.5	245124.67	5.0689	Pulse	0.1000	3
Ti	47	45	He	9.560	ppb	72.3	250.08	0.0052	Pulse	0.1000	3
V	51	45	He	2.119	ppb	5.2	3441.76	0.0712	Pulse	0.5000	3
Cr	52	45	He	0.558	ppb	35.0	2737.02	0.0567	Pulse	0.1000	3
Mn	55	45	He	41.234	ppb	3.2	25713.64	0.5318	Pulse	0.1000	3
Fe	57	45	He	570.177	ppb	1.5	16089.42	0.3327	Pulse	0.1000	3
Co	59	45	He	0.565	ppb	2.8	1643.49	0.0340	Pulse	0.1000	3
Ni	60	72	He	1.400	ppb	7.9	1273.44	0.0149	Pulse	0.1000	3
Cu	63	72	He	3.105	ppb	5.3	7238.73	0.0845	Pulse	0.1000	3
Zn	66	72	He	5.743	ppb	9.1	1760.17	0.0205	Pulse	0.1000	3
As	75	72	He	1.327	ppb	9.2	302.01	0.0035	Pulse	0.5000	3
Sr	88	115	He	767.225	ppb	0.4	593106.93	6.8828	Pulse	0.1000	3
Mo	98	115	He	0.353	ppb	6.2	690.05	0.0080	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	26.6	90.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.107	ppb	18.7	49.33	0.0006	Pulse	0.5000	3
Sn	120	115	He	-0.012	ppb	N/A	1403.45	0.0163	Pulse	0.1000	3
Sb	121	115	He	0.253	ppb	13.1	346.68	0.0040	Pulse	0.1000	3
Ba	137	115	He	66.760	ppb	1.0	27628.44	0.3206	Pulse	0.1000	3
Tl	205	159	He	0.057	ppb	10.5	620.04	0.0016	Pulse	0.1000	3
Pb	208	159	He	0.572	ppb	2.7	7884.57	0.0198	Pulse	0.1000	3
U	238	209	He	0.281	ppb	5.0	4254.23	0.0139	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2541571.32	0.2	106.0	Analog	0.1000	3
No Gas	Ge	72	1235383.60	0.5	107.1	Pulse	0.1000	3
H2	Sc	45	185014.48	1.1	98.9	Pulse	0.1000	3
H2	Ge	72	157540.29	1.2	96.2	Pulse	0.1000	3
H2	In	115	389469.75	0.6	100.1	Pulse	0.1000	3
He	Sc	45	48367.84	2.0	103.7	Pulse	0.1000	3
He	Ge	72	85763.76	1.9	105.6	Pulse	0.1000	3
He	In	115	86172.23	0.7	100.0	Pulse	0.1000	3
He	Tb	159	398474.42	0.6	100.0	Pulse	0.1000	3
He	Bi	209	305996.76	0.7	98.9	Pulse	0.1000	3

No Gas



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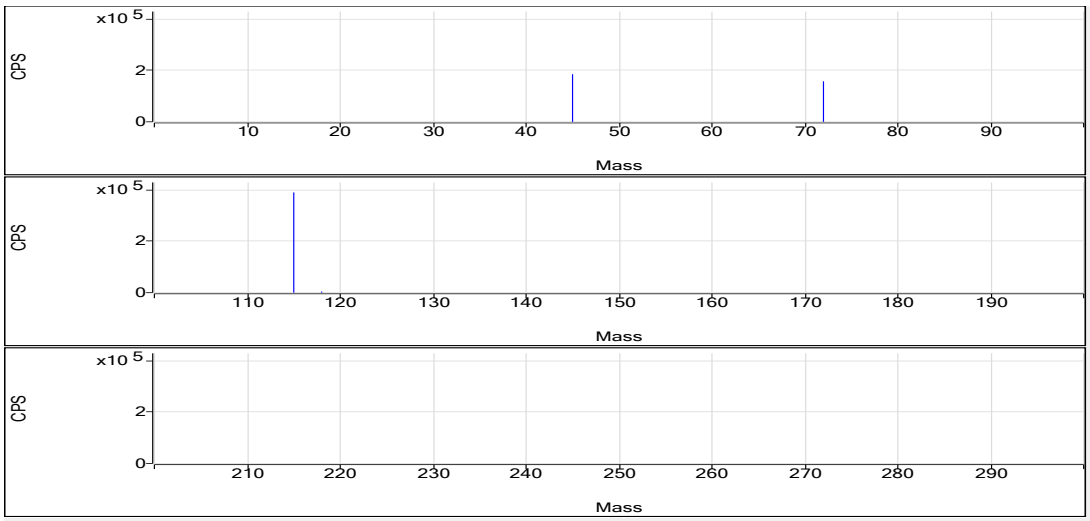
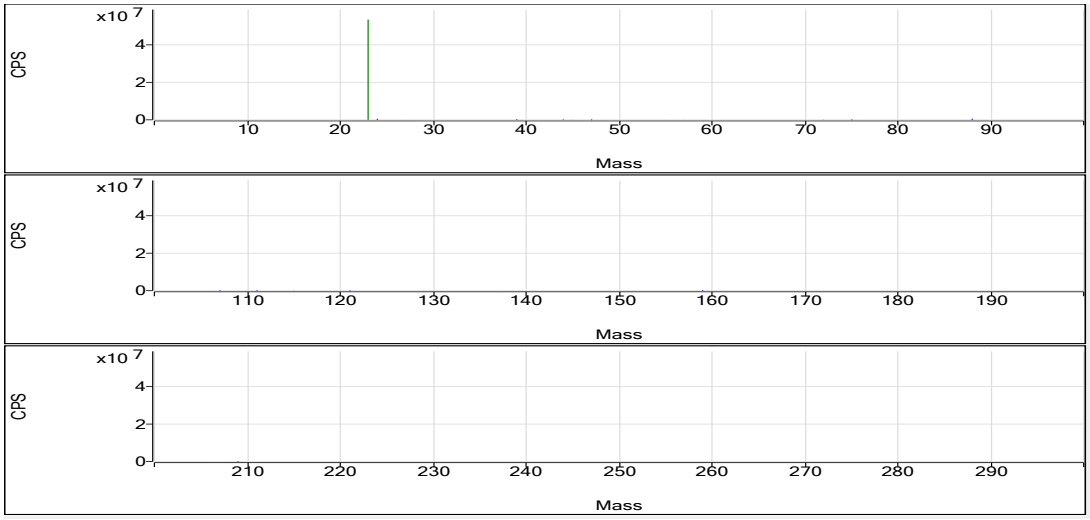


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.055	0	118.00	0.0008	4.685E-06
Be	9	1	No Gas	0.037	0	84.00	0.0008	4.685E-06
Be	9	1	No Gas	0.043	0	96.00	0.0008	4.685E-06
Se	78	2	H2	0.195	0.0001	14.67	0.0004	1.219E-05
Se	78	2	H2	0.201	0.0001	15.33	0.0004	1.219E-05
Se	78	2	H2	0.216	0.0001	16.00	0.0004	1.219E-05
Na	23	3	He	315015.348	1127.1705	54217374.19	0.0036	0.3452
Na	23	3	He	302989.038	1084.1518	53627449.20	0.0036	0.3452
Na	23	3	He	312281.716	1117.3922	53118834.21	0.0036	0.3452
Mg	24	3	He	6473.91	11.6198	558916.09	0.0018	0.003497
Mg	24	3	He	6267.056	11.2486	556411.44	0.0018	0.003497
Mg	24	3	He	6511.092	11.6865	555555.03	0.0018	0.003497
Al	27	3	He	383.56	0.225	10824.49	0.0006	0.0006432
Al	27	3	He	375.37	0.2202	10894.54	0.0006	0.0006432
Al	27	3	He	400.006	0.2347	11155.34	0.0006	0.0006432
K	39	3	He	6054.583	7.4446	358087.38	0.0012	0.3951
K	39	3	He	5873.101	7.2333	357793.12	0.0012	0.3951
K	39	3	He	6072.412	7.4653	354888.86	0.0012	0.3951
Ca	44	3	He	74757.504	5.0527	243038.28	0.0001	0.002715
Ca	44	3	He	73973.612	4.9998	247313.24	0.0001	0.002715
Ca	44	3	He	76259.969	5.1542	245022.50	0.0001	0.002715
Ti	47	3	He	4.903	0.0027	130.01	0.0005	7.003E-05
Ti	47	3	He	6.271	0.0034	170.01	0.0005	7.003E-05
Ti	47	3	He	17.508	0.0095	450.22	0.0005	7.003E-05
V	51	3	He	2.108	0.0709	3412.42	0.0219	0.02486
V	51	3	He	2.015	0.0689	3408.42	0.0219	0.02486
V	51	3	He	2.235	0.0737	3504.45	0.0219	0.02486
Cr	52	3	He	0.596	0.0578	2780.37	0.0299	0.03997
Cr	52	3	He	0.346	0.0503	2490.31	0.0299	0.03997
Cr	52	3	He	0.731	0.0619	2940.38	0.0299	0.03997
Mn	55	3	He	42.195	0.5442	26174.38	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	39.748	0.5128	25363.28	0.0128	0.002639
Mn	55	3	He	41.76	0.5386	25603.26	0.0128	0.002639
Fe	57	3	He	565.751	0.3301	15879.15	0.0006	0.001429
Fe	57	3	He	565.061	0.3297	16309.75	0.0006	0.001429
Fe	57	3	He	579.72	0.3382	16079.36	0.0006	0.001429
Co	59	3	He	0.553	0.0333	1600.16	0.0563	0.002149
Co	59	3	He	0.583	0.035	1730.17	0.0563	0.002149
Co	59	3	He	0.56	0.0337	1600.15	0.0563	0.002149
Ni	60	3	He	1.524	0.0159	1360.11	0.0086	0.002834
Ni	60	3	He	1.308	0.0141	1230.10	0.0086	0.002834
Ni	60	3	He	1.37	0.0146	1230.10	0.0086	0.002834
Cu	63	3	He	3.133	0.0852	7282.07	0.0257	0.004757
Cu	63	3	He	2.928	0.0799	6991.95	0.0257	0.004757
Cu	63	3	He	3.253	0.0883	7442.18	0.0257	0.004757
Zn	66	3	He	5.439	0.0197	1680.15	0.0029	0.003818
Zn	66	3	He	5.441	0.0197	1720.16	0.0029	0.003818
Zn	66	3	He	6.348	0.0223	1880.19	0.0029	0.003818
As	75	3	He	1.365	0.0036	308.01	0.002	0.0008061
As	75	3	He	1.191	0.0032	284.00	0.002	0.0008061
As	75	3	He	1.424	0.0037	314.01	0.002	0.0008061
Sr	88	3	He	769.722	6.9052	590979.37	0.009	0.0009645
Sr	88	3	He	763.38	6.8483	590259.72	0.009	0.0009645
Sr	88	3	He	768.574	6.8949	598081.71	0.009	0.0009645
Mo	98	3	He	0.334	0.0076	650.04	0.0219	0.0002706
Mo	98	3	He	0.348	0.0079	680.05	0.0219	0.0002706
Mo	98	3	He	0.377	0.0085	740.05	0.0219	0.0002706
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.012	0.0012	100.00	0.0465	0.0006206
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Cd	111	3	He	0.096	0.0005	44.00	0.0053	0
Cd	111	3	He	0.13	0.0007	60.00	0.0053	0
Cd	111	3	He	0.095	0.0005	44.00	0.0053	0
Sn	120	3	He	0.074	0.0176	1510.13	0.0158	0.01648
Sn	120	3	He	-0.088	0.0151	1300.11	0.0158	0.01648
Sn	120	3	He	-0.021	0.0161	1400.11	0.0158	0.01648
Sb	121	3	He	0.281	0.0044	380.02	0.0149	0.0002698
Sb	121	3	He	0.216	0.0035	300.01	0.0149	0.0002698
Sb	121	3	He	0.261	0.0042	360.02	0.0149	0.0002698
Ba	137	3	He	67.484	0.3241	27738.76	0.0048	0.0002317
Ba	137	3	He	66.694	0.3203	27608.46	0.0048	0.0002317
Ba	137	3	He	66.101	0.3175	27538.09	0.0048	0.0002317
Tl	205	3	He	0.053	0.0014	570.03	0.0247	0.0001339
Tl	205	3	He	0.055	0.0015	600.04	0.0247	0.0001339
Tl	205	3	He	0.064	0.0017	690.05	0.0247	0.0001339
Pb	208	3	He	0.59	0.0204	4290.87	0.0327	0.00107
Pb	208	3	He	0.565	0.0196	4230.85	0.0327	0.00107
Pb	208	3	He	0.561	0.0194	4060.75	0.0327	0.00107
U	238	3	He	0.267	0.0132	4020.77	0.0493	7.55E-05
U	238	3	He	0.295	0.0146	4491.04	0.0493	7.55E-05
U	238	3	He	0.279	0.0138	4250.88	0.0493	7.55E-05
Sc	45	1	No Gas			2544221.21		
Sc	45	1	No Gas			2534520.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2545971.84		
Ge	72	1	No Gas			1242248.97		
Ge	72	1	No Gas			1231512.48		
Ge	72	1	No Gas			1232389.36		
Sc	45	2	H2			184770.92		
Sc	45	2	H2			187099.84		
Sc	45	2	H2			183172.69		
Ge	72	2	H2			156922.53		
Ge	72	2	H2			159583.34		
Ge	72	2	H2			156114.99		
In	115	2	H2			387135.46		
In	115	2	H2			391956.56		
In	115	2	H2			389317.22		
Sc	45	3	He			48100.42		
Sc	45	3	He			49464.89		
Sc	45	3	He			47538.22		
Ge	72	3	He			85484.84		
Ge	72	3	He			87497.87		
Ge	72	3	He			84308.58		
In	115	3	He			85593.20		
In	115	3	He			86197.66		
In	115	3	He			86750.17		
Tb	159	3	He			395593.12		
Tb	159	3	He			399869.10		
Tb	159	3	He			399961.05		
Bi	209	3	He			303583.75		
Bi	209	3	He			307199.98		
Bi	209	3	He			307206.54		

Quantitation Report

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Acq Time	8/10/2023 5:22:03 PM
Sample Name	410-136722-R-2-A MS
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

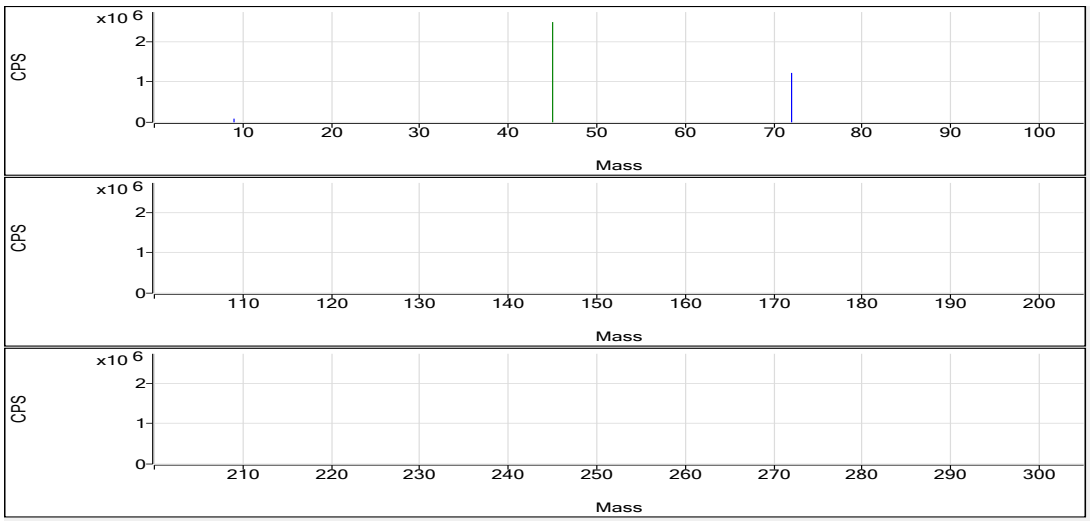
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.738	ppb	0.7	90474.36	0.0364	Pulse	0.5000	3
Se	78	72	H2	102.371	ppb	2.9	6945.25	0.0427	Pulse	1.5000	3
Na	23	45	He	313716.311	ppb	0.9	54460219.19	1 122.5238	Analog	0.1000	3
Mg	24	45	He	11382.410	ppb	0.5	991018.53	20.4272	Pulse	0.1000	3
Al	27	45	He	5659.620	ppb	0.9	160662.20	3.3117	Pulse	0.1000	3
K	39	45	He	10959.062	ppb	0.7	638199.25	13.1550	Pulse	0.1000	3
Ca	44	45	He	79193.141	ppb	0.7	259666.46	5.3524	Pulse	0.1000	3
Ti	47	45	He	529.644	ppb	0.8	13800.34	0.2845	Pulse	0.1000	3
V	51	45	He	514.532	ppb	0.1	546870.02	11.2721	Pulse	0.5000	3
Cr	52	45	He	477.750	ppb	0.3	695904.67	14.3442	Pulse	0.1000	3
Mn	55	45	He	534.169	ppb	0.9	332707.96	6.8581	Pulse	0.1000	3
Fe	57	45	He	5524.114	ppb	0.8	155772.54	3.2109	Pulse	0.1000	3
Co	59	45	He	479.060	ppb	0.9	1308148.39	26.9648	Pulse	0.1000	3
Ni	60	72	He	493.772	ppb	2.0	362000.83	4.2410	Pulse	0.1000	3
Cu	63	72	He	477.724	ppb	2.2	1047173.79	12.2684	Pulse	0.1000	3
Zn	66	72	He	511.364	ppb	2.1	127411.93	1.4927	Pulse	0.1000	3
As	75	72	He	519.259	ppb	2.0	90880.61	1.0647	Pulse	0.5000	3
Sr	88	115	He	812.151	ppb	1.4	631900.65	7.2858	Pulse	0.1000	3
Mo	98	115	He	51.447	ppb	2.8	97849.51	1.1283	Pulse	0.1000	3
Ag	107	115	He	49.351	ppb	2.2	199014.17	2.2948	Pulse	0.1000	3
Cd	111	115	He	50.902	ppb	1.1	23605.97	0.2722	Pulse	0.5000	3
Sn	120	115	He	102.723	ppb	2.4	142170.19	1.6394	Pulse	0.1000	3
Sb	121	115	He	104.925	ppb	0.9	135199.03	1.5588	Pulse	0.1000	3
Ba	137	115	He	586.649	ppb	0.4	244232.57	2.8158	Pulse	0.1000	3
Tl	205	159	He	102.017	ppb	1.2	999039.65	2.5226	Pulse	0.1000	3
Pb	208	159	He	51.279	ppb	1.4	665095.79	1.6794	Pulse	0.1000	3
U	238	209	He	52.235	ppb	0.6	772230.72	2.5732	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2484373.14	0.6	103.6	Analog	0.1000	3
No Gas	Ge	72	1224352.12	0.7	106.2	Pulse	0.1000	3
H2	Sc	45	183250.76	0.7	98.0	Pulse	0.1000	3
H2	Ge	72	162647.57	1.0	99.3	Pulse	0.1000	3
H2	In	115	388277.56	0.3	99.8	Pulse	0.1000	3
He	Sc	45	48515.05	0.6	104.0	Pulse	0.1000	3
He	Ge	72	85381.50	2.1	105.2	Pulse	0.1000	3
He	In	115	86741.13	1.4	100.6	Pulse	0.1000	3
He	Tb	159	396054.27	0.8	99.4	Pulse	0.1000	3
He	Bi	209	300116.62	0.7	97.0	Pulse	0.1000	3

No Gas



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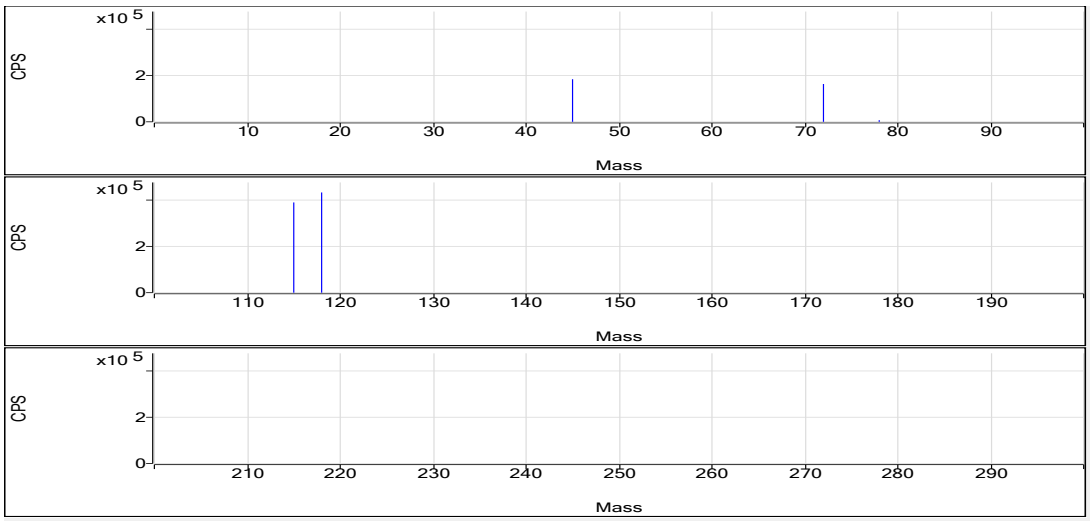
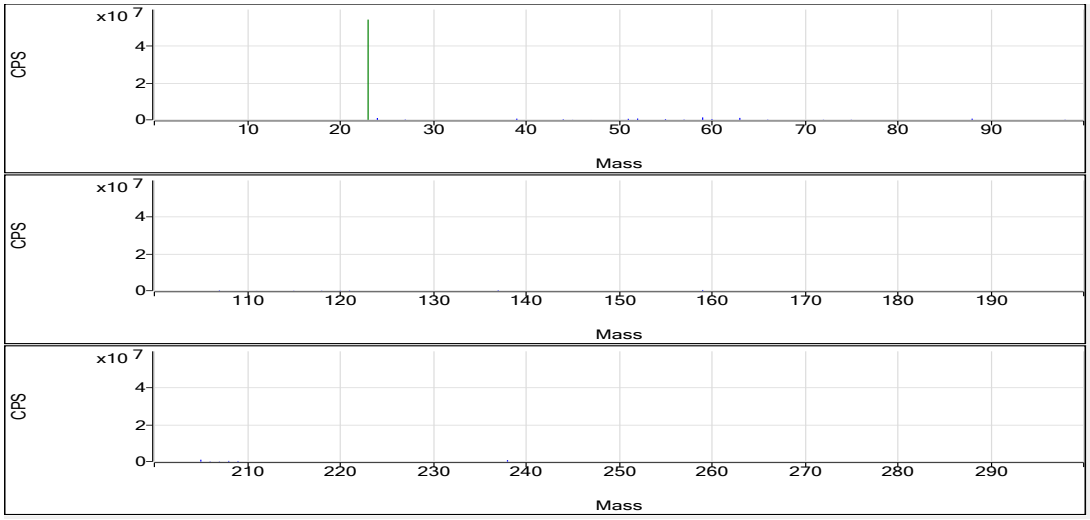


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.954	0.0366	90555.55	0.0008	4.685E-06
Be	9	1	No Gas	47.899	0.0365	90469.07	0.0008	4.685E-06
Be	9	1	No Gas	47.36	0.0361	90398.47	0.0008	4.685E-06
Se	78	2	H2	100.764	0.042	6913.01	0.0004	1.219E-05
Se	78	2	H2	105.846	0.0442	7115.11	0.0004	1.219E-05
Se	78	2	H2	100.502	0.0419	6807.63	0.0004	1.219E-05
Na	23	3	He	313834.16	1122.9453	54847659.18	0.0036	0.3452
Na	23	3	He	316406.978	1132.1484	54888729.18	0.0036	0.3452
Na	23	3	He	310907.794	1112.4776	53644269.20	0.0036	0.3452
Mg	24	3	He	11383.129	20.4285	997782.41	0.0018	0.003497
Mg	24	3	He	11327.996	20.3296	985616.55	0.0018	0.003497
Mg	24	3	He	11436.104	20.5235	989656.63	0.0018	0.003497
Al	27	3	He	5612.473	3.2841	160405.97	0.0006	0.0006432
Al	27	3	He	5654.967	3.309	160426.48	0.0006	0.0006432
Al	27	3	He	5711.421	3.342	161154.16	0.0006	0.0006432
K	39	3	He	10871.339	13.0529	637536.47	0.0012	0.3951
K	39	3	He	11010.96	13.2154	640708.94	0.0012	0.3951
K	39	3	He	10994.888	13.1967	636352.33	0.0012	0.3951
Ca	44	3	He	78702.687	5.3192	259805.52	0.0001	0.002715
Ca	44	3	He	79739.053	5.3892	261280.70	0.0001	0.002715
Ca	44	3	He	79137.682	5.3486	257913.16	0.0001	0.002715
Ti	47	3	He	527.858	0.2835	13847.04	0.0005	7.003E-05
Ti	47	3	He	526.789	0.2829	13716.93	0.0005	7.003E-05
Ti	47	3	He	534.284	0.287	13837.04	0.0005	7.003E-05
V	51	3	He	514.984	11.282	551042.88	0.0219	0.02486
V	51	3	He	514.941	11.281	546926.69	0.0219	0.02486
V	51	3	He	513.672	11.2533	542640.50	0.0219	0.02486
Cr	52	3	He	476.555	14.3084	698859.83	0.0299	0.03997
Cr	52	3	He	479.497	14.3965	697967.72	0.0299	0.03997
Cr	52	3	He	477.198	14.3276	690886.47	0.0299	0.03997
Mn	55	3	He	528.484	6.7851	331404.37	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	535.987	6.8814	333625.07	0.0128	0.002639
Mn	55	3	He	538.036	6.9077	333094.45	0.0128	0.002639
Fe	57	3	He	5506.867	3.2009	156338.97	0.0006	0.001429
Fe	57	3	He	5488.602	3.1903	154669.76	0.0006	0.001429
Fe	57	3	He	5576.874	3.2415	156308.88	0.0006	0.001429
Co	59	3	He	475.277	26.7518	1306630.45	0.0563	0.002149
Co	59	3	He	478.293	26.9216	1305209.75	0.0563	0.002149
Co	59	3	He	483.611	27.2209	1312604.98	0.0563	0.002149
Ni	60	3	He	483.021	4.1487	362829.53	0.0086	0.002834
Ni	60	3	He	501.732	4.3093	362788.04	0.0086	0.002834
Ni	60	3	He	496.564	4.2649	360384.92	0.0086	0.002834
Cu	63	3	He	465.44	11.9531	1045380.77	0.0257	0.004757
Cu	63	3	He	482.526	12.3917	1043230.38	0.0257	0.004757
Cu	63	3	He	485.205	12.4605	1052910.22	0.0257	0.004757
Zn	66	3	He	498.851	1.4563	127361.67	0.0029	0.003818
Zn	66	3	He	518.516	1.5135	127421.43	0.0029	0.003818
Zn	66	3	He	516.723	1.5083	127452.69	0.0029	0.003818
As	75	3	He	507.662	1.0409	91037.20	0.002	0.0008061
As	75	3	He	527.201	1.081	91004.59	0.002	0.0008061
As	75	3	He	522.915	1.0722	90600.03	0.002	0.0008061
Sr	88	3	He	801.677	7.1919	629858.70	0.009	0.0009645
Sr	88	3	He	824.489	7.3965	631673.58	0.009	0.0009645
Sr	88	3	He	810.285	7.2691	634169.68	0.009	0.0009645
Mo	98	3	He	50.953	1.1175	97868.90	0.0219	0.0002706
Mo	98	3	He	53.076	1.164	99410.72	0.0219	0.0002706
Mo	98	3	He	50.314	1.1035	96268.90	0.0219	0.0002706
Ag	107	3	He	48.838	2.271	198889.02	0.0465	0.0006206
Ag	107	3	He	50.615	2.3536	200998.34	0.0465	0.0006206
Ag	107	3	He	48.599	2.2599	197155.15	0.0465	0.0006206
Cd	111	3	He	50.603	0.2706	23696.16	0.0053	0
Cd	111	3	He	51.533	0.2755	23531.83	0.0053	0
Cd	111	3	He	50.571	0.2704	23589.93	0.0053	0
Sn	120	3	He	101.251	1.6161	141537.64	0.0158	0.01648
Sn	120	3	He	105.551	1.684	143820.43	0.0158	0.01648
Sn	120	3	He	101.367	1.6179	141152.51	0.0158	0.01648
Sb	121	3	He	103.925	1.5439	135215.29	0.0149	0.0002698
Sb	121	3	He	105.877	1.5729	134328.92	0.0149	0.0002698
Sb	121	3	He	104.973	1.5595	136052.89	0.0149	0.0002698
Ba	137	3	He	584.511	2.8055	245703.34	0.0048	0.0002317
Ba	137	3	He	589.4	2.829	241598.53	0.0048	0.0002317
Ba	137	3	He	586.036	2.8128	245395.84	0.0048	0.0002317
Tl	205	3	He	103.367	2.556	1002668.42	0.0247	0.0001339
Tl	205	3	He	101.672	2.5141	1000261.55	0.0247	0.0001339
Tl	205	3	He	101.012	2.4978	994188.97	0.0247	0.0001339
Pb	208	3	He	52.037	1.7042	357291.67	0.0327	0.00107
Pb	208	3	He	51.167	1.6757	355002.14	0.0327	0.00107
Pb	208	3	He	50.634	1.6583	347681.21	0.0327	0.00107
U	238	3	He	52.218	2.5723	774830.07	0.0493	7.55E-05
U	238	3	He	52.572	2.5897	771053.58	0.0493	7.55E-05
U	238	3	He	51.916	2.5575	770808.50	0.0493	7.55E-05
Sc	45	1	No Gas			2475308.40		
Sc	45	1	No Gas			2475788.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2502022.78		
Ge	72	1	No Gas			1215504.04		
Ge	72	1	No Gas			1233326.78		
Ge	72	1	No Gas			1224225.53		
Sc	45	2	H2			184597.67		
Sc	45	2	H2			183220.52		
Sc	45	2	H2			181934.08		
Ge	72	2	H2			164448.71		
Ge	72	2	H2			161131.22		
Ge	72	2	H2			162362.79		
In	115	2	H2			388100.74		
In	115	2	H2			389535.81		
In	115	2	H2			387196.13		
Sc	45	3	He			48842.68		
Sc	45	3	He			48481.92		
Sc	45	3	He			48220.54		
Ge	72	3	He			87456.82		
Ge	72	3	He			84187.79		
Ge	72	3	He			84499.90		
In	115	3	He			88340.49		
In	115	3	He			86156.20		
In	115	3	He			88007.98		
Tb	159	3	He			392278.28		
Tb	159	3	He			397859.29		
Tb	159	3	He			398025.23		
Bi	209	3	He			301219.80		
Bi	209	3	He			297733.35		
Bi	209	3	He			301396.71		

Quantitation Report

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Sample Type	Sample
Comment	T20
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

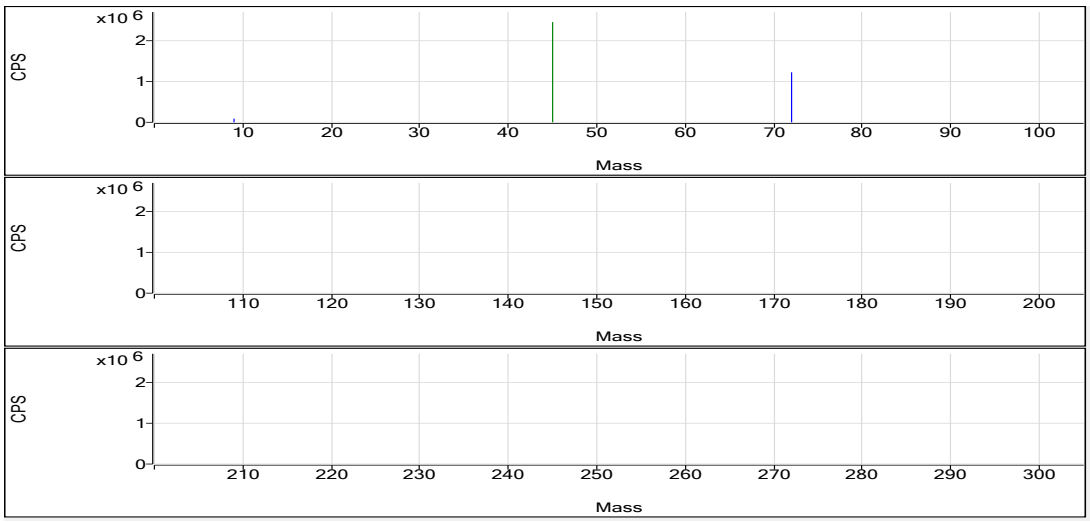
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.359	ppb	0.9	91164.01	0.0369	Pulse	0.5000	3
Se	78	72	H2	103.008	ppb	1.4	6914.35	0.0430	Pulse	1.5000	3
Na	23	45	He	319036.077	ppb	0.8	54909897.52	1 141.5528	Analog	0.1000	3
Mg	24	45	He	11484.746	ppb	0.7	991403.32	20.6108	Pulse	0.1000	3
Al	27	45	He	5664.775	ppb	0.5	159446.19	3.3147	Pulse	0.1000	3
K	39	45	He	11137.749	ppb	1.2	642757.95	13.3630	Pulse	0.1000	3
Ca	44	45	He	80130.144	ppb	1.3	260489.79	5.4157	Pulse	0.1000	3
Ti	47	45	He	545.691	ppb	4.2	14101.01	0.2931	Pulse	0.1000	3
V	51	45	He	517.835	ppb	1.5	545644.73	11.3443	Pulse	0.5000	3
Cr	52	45	He	485.029	ppb	1.3	700421.92	14.5621	Pulse	0.1000	3
Mn	55	45	He	538.005	ppb	1.9	332224.58	6.9073	Pulse	0.1000	3
Fe	57	45	He	5593.463	ppb	1.8	156376.31	3.2512	Pulse	0.1000	3
Co	59	45	He	479.371	ppb	1.1	1297839.91	26.9822	Pulse	0.1000	3
Ni	60	72	He	488.569	ppb	2.2	361560.19	4.1963	Pulse	0.1000	3
Cu	63	72	He	471.969	ppb	1.8	1044377.56	12.1207	Pulse	0.1000	3
Zn	66	72	He	503.850	ppb	2.2	126725.81	1.4708	Pulse	0.1000	3
As	75	72	He	517.678	ppb	1.1	91467.88	1.0615	Pulse	0.5000	3
Sr	88	115	He	826.645	ppb	1.6	636619.46	7.4158	Pulse	0.1000	3
Mo	98	115	He	52.312	ppb	2.4	98480.91	1.1473	Pulse	0.1000	3
Ag	107	115	He	49.383	ppb	1.4	197138.37	2.2963	Pulse	0.1000	3
Cd	111	115	He	51.561	ppb	1.8	23666.05	0.2757	Pulse	0.5000	3
Sn	120	115	He	103.957	ppb	1.9	142402.37	1.6589	Pulse	0.1000	3
Sb	121	115	He	105.005	ppb	1.7	133913.08	1.5600	Pulse	0.1000	3
Ba	137	115	He	591.923	ppb	1.2	243900.77	2.8411	Pulse	0.1000	3
Tl	205	159	He	101.805	ppb	0.3	997766.57	2.5174	Pulse	0.1000	3
Pb	208	159	He	51.168	ppb	0.8	664199.73	1.6758	Pulse	0.1000	3
U	238	209	He	52.142	ppb	0.5	776667.33	2.5686	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2471033.30	0.5	103.0	Analog	0.1000	3
No Gas	Ge	72	1231345.24	1.0	106.8	Pulse	0.1000	3
H2	Sc	45	182357.24	1.5	97.5	Pulse	0.1000	3
H2	Ge	72	160913.73	1.2	98.3	Pulse	0.1000	3
H2	In	115	389762.46	0.8	100.2	Pulse	0.1000	3
He	Sc	45	48103.73	1.1	103.1	Pulse	0.1000	3
He	Ge	72	86182.99	1.9	106.1	Pulse	0.1000	3
He	In	115	85856.74	1.3	99.6	Pulse	0.1000	3
He	Tb	159	396349.82	0.2	99.4	Pulse	0.1000	3
He	Bi	209	302379.33	0.8	97.8	Pulse	0.1000	3

No Gas



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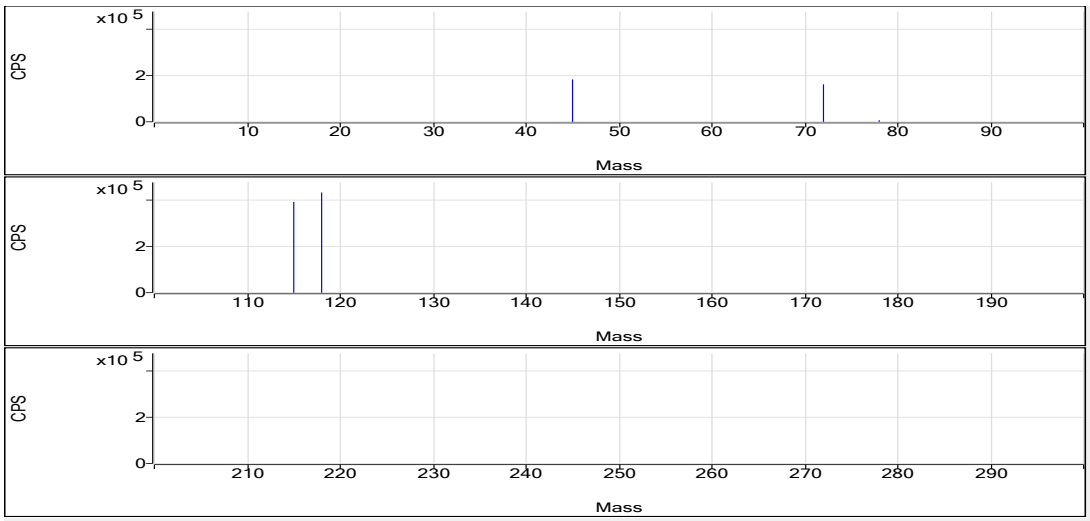
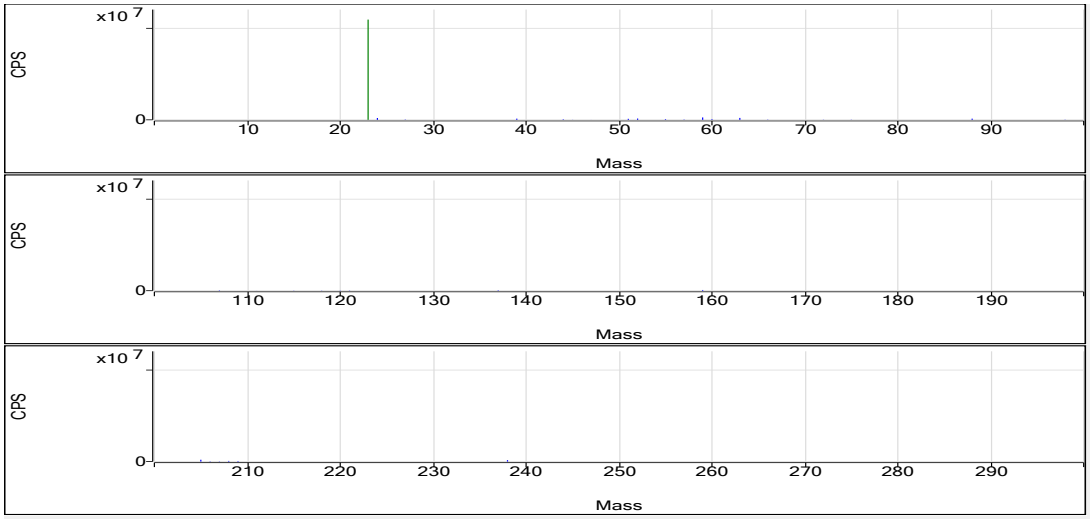


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.895	0.0365	89879.69	0.0008	4.685E-06
Be	9	1	No Gas	48.507	0.037	91915.75	0.0008	4.685E-06
Be	9	1	No Gas	48.677	0.0371	91696.59	0.0008	4.685E-06
Se	78	2	H2	103.598	0.0432	6949.03	0.0004	1.219E-05
Se	78	2	H2	101.388	0.0423	6887.67	0.0004	1.219E-05
Se	78	2	H2	104.039	0.0434	6906.34	0.0004	1.219E-05
Na	23	3	He	321558.425	1150.5754	55031584.18	0.0036	0.3452
Na	23	3	He	316229.45	1131.5134	55141284.18	0.0036	0.3452
Na	23	3	He	319320.356	1142.5697	54556824.19	0.0036	0.3452
Mg	24	3	He	11511.342	20.6586	988090.61	0.0018	0.003497
Mg	24	3	He	11390.081	20.441	996136.08	0.0018	0.003497
Mg	24	3	He	11552.816	20.733	989983.27	0.0018	0.003497
Al	27	3	He	5662.065	3.3131	158466.62	0.0006	0.0006432
Al	27	3	He	5639.698	3.3001	160819.76	0.0006	0.0006432
Al	27	3	He	5692.561	3.331	159052.19	0.0006	0.0006432
K	39	3	He	11213.148	13.4508	643348.23	0.0012	0.3951
K	39	3	He	10989.321	13.1902	642790.42	0.0012	0.3951
K	39	3	He	11210.778	13.4481	642135.19	0.0012	0.3951
Ca	44	3	He	80981.283	5.4732	261778.92	0.0001	0.002715
Ca	44	3	He	78995.305	5.339	260181.83	0.0001	0.002715
Ca	44	3	He	80413.844	5.4348	259508.63	0.0001	0.002715
Ti	47	3	He	519.941	0.2793	13356.51	0.0005	7.003E-05
Ti	47	3	He	563.911	0.3029	14759.16	0.0005	7.003E-05
Ti	47	3	He	553.222	0.2971	14187.35	0.0005	7.003E-05
V	51	3	He	524.078	11.4808	549121.63	0.0219	0.02486
V	51	3	He	509.108	11.1535	543538.38	0.0219	0.02486
V	51	3	He	520.318	11.3986	544274.19	0.0219	0.02486
Cr	52	3	He	486.655	14.6108	698827.26	0.0299	0.03997
Cr	52	3	He	477.912	14.349	699260.54	0.0299	0.03997
Cr	52	3	He	490.519	14.7265	703177.96	0.0299	0.03997
Mn	55	3	He	546.513	7.0165	335597.61	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	526.908	6.7649	329669.96	0.0128	0.002639
Mn	55	3	He	540.594	6.9406	331406.17	0.0128	0.002639
Fe	57	3	He	5695.506	3.3105	158338.30	0.0006	0.001429
Fe	57	3	He	5493.002	3.1928	155593.19	0.0006	0.001429
Fe	57	3	He	5591.882	3.2503	155197.45	0.0006	0.001429
Co	59	3	He	483.8	27.2315	1302474.36	0.0563	0.002149
Co	59	3	He	473.276	26.6392	1298190.61	0.0563	0.002149
Co	59	3	He	481.035	27.0759	1292854.75	0.0563	0.002149
Ni	60	3	He	498.381	4.2805	365705.07	0.0086	0.002834
Ni	60	3	He	490.427	4.2122	358351.21	0.0086	0.002834
Ni	60	3	He	476.9	4.0961	360624.29	0.0086	0.002834
Cu	63	3	He	478.726	12.2942	1050352.02	0.0257	0.004757
Cu	63	3	He	474.773	12.1927	1037278.11	0.0257	0.004757
Cu	63	3	He	462.409	11.8753	1045502.56	0.0257	0.004757
Zn	66	3	He	508.491	1.4843	126815.19	0.0029	0.003818
Zn	66	3	He	512.01	1.4946	127150.98	0.0029	0.003818
Zn	66	3	He	491.049	1.4336	126211.27	0.0029	0.003818
As	75	3	He	521.823	1.07	91411.38	0.002	0.0008061
As	75	3	He	519.93	1.0661	90695.07	0.002	0.0008061
As	75	3	He	511.281	1.0484	92297.20	0.002	0.0008061
Sr	88	3	He	828.143	7.4293	641180.19	0.009	0.0009645
Sr	88	3	He	813.108	7.2944	632442.22	0.009	0.0009645
Sr	88	3	He	838.684	7.5238	636235.97	0.009	0.0009645
Mo	98	3	He	51.967	1.1397	98362.71	0.0219	0.0002706
Mo	98	3	He	51.279	1.1246	97508.13	0.0219	0.0002706
Mo	98	3	He	53.689	1.1775	99571.90	0.0219	0.0002706
Ag	107	3	He	49.873	2.3191	200147.54	0.0465	0.0006206
Ag	107	3	He	48.61	2.2603	195977.69	0.0465	0.0006206
Ag	107	3	He	49.665	2.3094	195289.88	0.0465	0.0006206
Cd	111	3	He	51.259	0.2741	23654.02	0.0053	0
Cd	111	3	He	50.833	0.2718	23565.88	0.0053	0
Cd	111	3	He	52.589	0.2812	23778.26	0.0053	0
Sn	120	3	He	104.221	1.663	143527.14	0.0158	0.01648
Sn	120	3	He	101.843	1.6255	140930.74	0.0158	0.01648
Sn	120	3	He	105.807	1.6881	142749.24	0.0158	0.01648
Sb	121	3	He	104.334	1.55	133771.82	0.0149	0.0002698
Sb	121	3	He	103.706	1.5407	133579.55	0.0149	0.0002698
Sb	121	3	He	106.974	1.5892	134387.87	0.0149	0.0002698
Ba	137	3	He	587.414	2.8194	243329.92	0.0048	0.0002317
Ba	137	3	He	588.535	2.8248	244917.91	0.0048	0.0002317
Ba	137	3	He	599.821	2.879	243454.47	0.0048	0.0002317
Tl	205	3	He	102.018	2.5227	1001166.70	0.0247	0.0001339
Tl	205	3	He	101.952	2.521	997175.53	0.0247	0.0001339
Tl	205	3	He	101.444	2.5085	994957.49	0.0247	0.0001339
Pb	208	3	He	51.64	1.6912	355339.10	0.0327	0.00107
Pb	208	3	He	50.938	1.6683	350116.32	0.0327	0.00107
Pb	208	3	He	50.926	1.6679	351403.86	0.0327	0.00107
U	238	3	He	51.862	2.5548	779375.30	0.0493	7.55E-05
U	238	3	He	52.198	2.5714	774053.11	0.0493	7.55E-05
U	238	3	He	52.366	2.5796	776573.58	0.0493	7.55E-05
Sc	45	1	No Gas			2459902.31		
Sc	45	1	No Gas			2483880.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2469317.15		
Ge	72	1	No Gas			1219421.70		
Ge	72	1	No Gas			1243774.51		
Ge	72	1	No Gas			1230839.51		
Sc	45	2	H2			185418.01		
Sc	45	2	H2			181126.09		
Sc	45	2	H2			180527.63		
Ge	72	2	H2			160784.51		
Ge	72	2	H2			162836.58		
Ge	72	2	H2			159120.09		
In	115	2	H2			392400.31		
In	115	2	H2			386458.67		
In	115	2	H2			390428.39		
Sc	45	3	He			47829.62		
Sc	45	3	He			48732.33		
Sc	45	3	He			47749.23		
Ge	72	3	He			85434.98		
Ge	72	3	He			85073.85		
Ge	72	3	He			88040.14		
In	115	3	He			87052.61		
In	115	3	He			87454.04		
In	115	3	He			85311.65		
Tb	159	3	He			396867.49		
Tb	159	3	He			395542.18		
Tb	159	3	He			396639.80		
Bi	209	3	He			305065.66		
Bi	209	3	He			301028.57		
Bi	209	3	He			301043.77		

Quantitation Report

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Sample Name	RINSE
Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

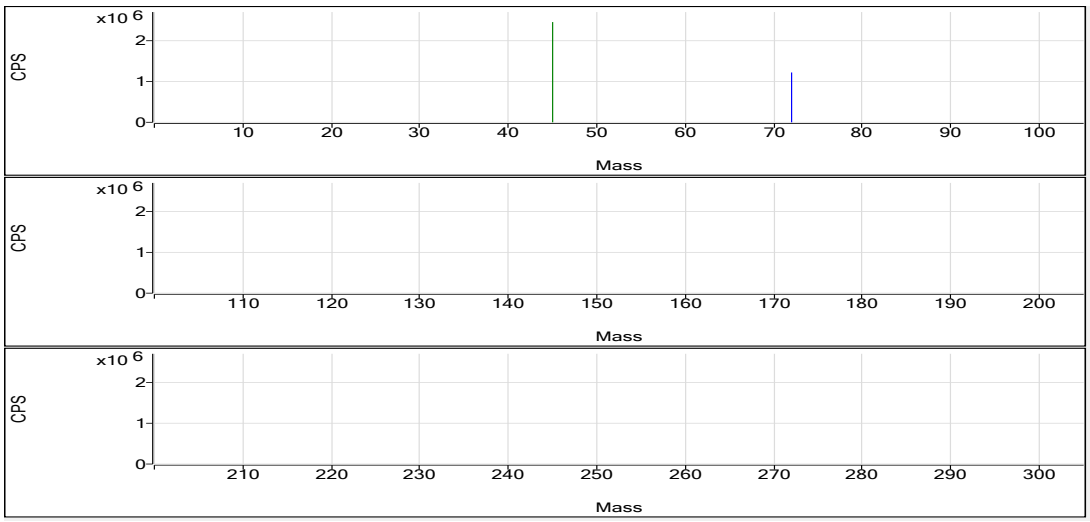
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.026	ppb	13.7	61.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.146	ppb	17.9	11.33	0.0001	Pulse	1.5000	3
Na	23	45	He	129.474	ppb	7.1	38280.25	0.8083	Pulse	0.1000	3
Mg	24	45	He	2.443	ppb	33.6	373.35	0.0079	Pulse	0.1000	3
Al	27	45	He	1.064	ppb	101.0	60.00	0.0013	Pulse	0.1000	3
K	39	45	He	6.778	ppb	121.5	19083.03	0.4030	Pulse	0.1000	3
Ca	44	45	He	17.151	ppb	124.9	183.34	0.0039	Pulse	0.1000	3
Ti	47	45	He	0.393	ppb	57.1	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.442	ppb	12.1	1634.77	0.0345	Pulse	0.5000	3
Cr	52	45	He	-0.063	ppb	N/A	1803.51	0.0381	Pulse	0.1000	3
Mn	55	45	He	0.200	ppb	20.2	246.68	0.0052	Pulse	0.1000	3
Fe	57	45	He	1.902	ppb	18.3	120.00	0.0025	Pulse	0.1000	3
Co	59	45	He	0.118	ppb	26.6	416.69	0.0088	Pulse	0.1000	3
Ni	60	72	He	0.088	ppb	106.0	300.01	0.0036	Pulse	0.1000	3
Cu	63	72	He	0.141	ppb	23.2	700.04	0.0084	Pulse	0.1000	3
Zn	66	72	He	2.733	ppb	8.6	983.40	0.0118	Pulse	0.1000	3
As	75	72	He	0.194	ppb	75.5	100.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.083	ppb	26.0	150.01	0.0017	Pulse	0.1000	3
Mo	98	115	He	0.100	ppb	10.5	216.68	0.0025	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	128.5	76.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	33.7	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.153	ppb	146.6	1653.49	0.0189	Pulse	0.1000	3
Sb	121	115	He	0.056	ppb	51.5	96.67	0.0011	Pulse	0.1000	3
Ba	137	115	He	0.047	ppb	183.0	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.174	ppb	13.6	1750.19	0.0044	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	72.9	636.69	0.0016	Pulse	0.1000	3
U	238	209	He	0.069	ppb	9.7	1066.75	0.0035	Pulse	0.1000	3

ISTD Table:

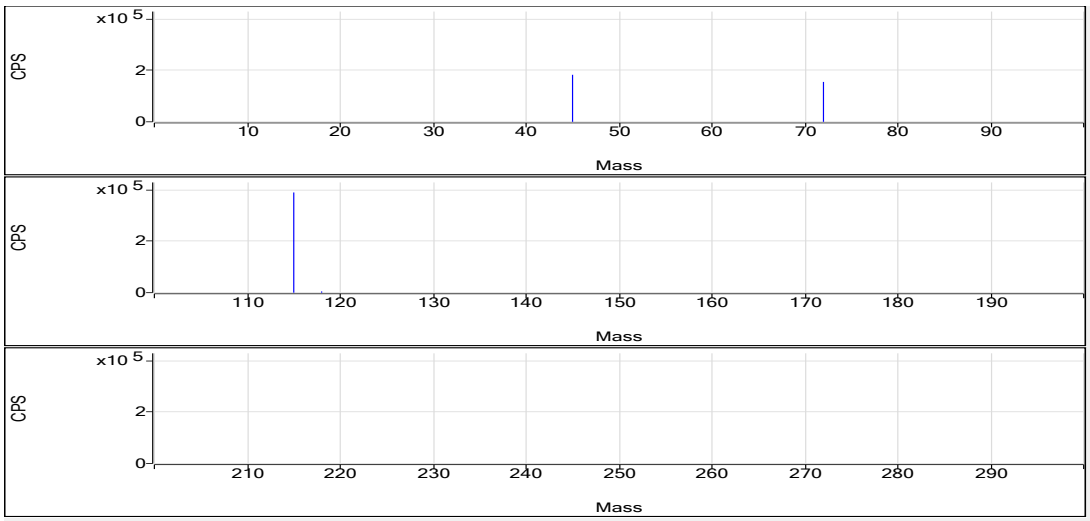
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2462219.24	1.2	102.6	Analog	0.1000	3
No Gas	Ge	72	1224015.30	1.8	106.1	Pulse	0.1000	3
H2	Sc	45	182690.49	0.6	97.7	Pulse	0.1000	3
H2	Ge	72	154989.32	0.7	94.7	Pulse	0.1000	3
H2	In	115	389390.67	0.5	100.1	Pulse	0.1000	3
He	Sc	45	47354.68	0.4	101.5	Pulse	0.1000	3
He	Ge	72	83537.27	0.8	102.9	Pulse	0.1000	3
He	In	115	87560.37	0.4	101.6	Pulse	0.1000	3
He	Tb	159	394921.48	0.7	99.1	Pulse	0.1000	3
He	Bi	209	307904.39	0.1	99.6	Pulse	0.1000	3

No Gas

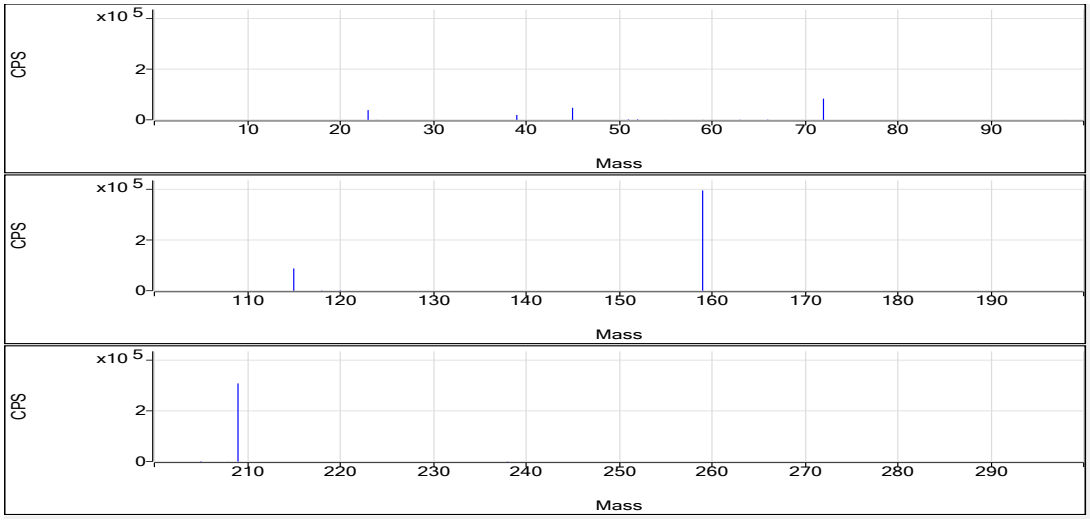


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	58.00	0.0008	4.685E-06
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Be	9	1	No Gas	0.024	0	56.00	0.0008	4.685E-06
Se	78	2	H2	0.127	0.0001	10.00	0.0004	1.219E-05
Se	78	2	H2	0.176	0.0001	13.33	0.0004	1.219E-05
Se	78	2	H2	0.136	0.0001	10.67	0.0004	1.219E-05
Na	23	3	He	139.304	0.8435	40105.09	0.0036	0.3452
Na	23	3	He	127.991	0.803	37979.54	0.0036	0.3452
Na	23	3	He	121.127	0.7784	36756.12	0.0036	0.3452
Mg	24	3	He	3.326	0.0095	450.02	0.0018	0.003497
Mg	24	3	He	1.704	0.0066	310.01	0.0018	0.003497
Mg	24	3	He	2.3	0.0076	360.02	0.0018	0.003497
Al	27	3	He	2.136	0.0019	90.00	0.0006	0.0006432
Al	27	3	He	1.069	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	-0.013	0.0006	30.00	0.0006	0.0006432
K	39	3	He	16.238	0.414	19683.78	0.0012	0.3951
K	39	3	He	1.214	0.3965	18752.62	0.0012	0.3951
K	39	3	He	2.883	0.3984	18812.68	0.0012	0.3951
Ca	44	3	He	9.626	0.0034	160.01	0.0001	0.002715
Ca	44	3	He	0.5	0.0027	130.01	0.0001	0.002715
Ca	44	3	He	41.326	0.0055	260.01	0.0001	0.002715
Ti	47	3	He	0.653	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.263	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.264	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.492	0.0356	1694.11	0.0219	0.02486
V	51	3	He	0.447	0.0346	1638.10	0.0219	0.02486
V	51	3	He	0.386	0.0333	1572.09	0.0219	0.02486
Cr	52	3	He	0.028	0.0408	1940.20	0.0299	0.03997
Cr	52	3	He	-0.24	0.0328	1550.12	0.0299	0.03997
Cr	52	3	He	0.023	0.0407	1920.20	0.0299	0.03997
Mn	55	3	He	0.237	0.0057	270.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.157	0.0047	220.01	0.0128	0.002639
Mn	55	3	He	0.207	0.0053	250.01	0.0128	0.002639
Fe	57	3	He	2.247	0.0027	130.01	0.0006	0.001429
Fe	57	3	He	1.908	0.0025	120.00	0.0006	0.001429
Fe	57	3	He	1.551	0.0023	110.00	0.0006	0.001429
Co	59	3	He	0.149	0.0105	500.03	0.0563	0.002149
Co	59	3	He	0.12	0.0089	420.02	0.0563	0.002149
Co	59	3	He	0.086	0.007	330.01	0.0563	0.002149
Ni	60	3	He	0.195	0.0045	380.02	0.0086	0.002834
Ni	60	3	He	0.034	0.0031	260.01	0.0086	0.002834
Ni	60	3	He	0.034	0.0031	260.01	0.0086	0.002834
Cu	63	3	He	0.138	0.0083	700.04	0.0257	0.004757
Cu	63	3	He	0.175	0.0093	770.05	0.0257	0.004757
Cu	63	3	He	0.11	0.0076	630.04	0.0257	0.004757
Zn	66	3	He	2.479	0.011	930.06	0.0029	0.003818
Zn	66	3	He	2.775	0.0119	990.07	0.0029	0.003818
Zn	66	3	He	2.945	0.0124	1030.08	0.0029	0.003818
As	75	3	He	0.244	0.0013	110.00	0.002	0.0008061
As	75	3	He	0.31	0.0014	120.00	0.002	0.0008061
As	75	3	He	0.029	0.0009	72.00	0.002	0.0008061
Sr	88	3	He	0.108	0.0019	170.01	0.009	0.0009645
Sr	88	3	He	0.07	0.0016	140.00	0.009	0.0009645
Sr	88	3	He	0.072	0.0016	140.01	0.009	0.0009645
Mo	98	3	He	0.112	0.0027	240.01	0.0219	0.0002706
Mo	98	3	He	0.097	0.0024	210.01	0.0219	0.0002706
Mo	98	3	He	0.092	0.0023	200.01	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.014	0.0013	110.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Sn	120	3	He	0.285	0.021	1840.20	0.0158	0.01648
Sn	120	3	He	-0.106	0.0148	1300.10	0.0158	0.01648
Sn	120	3	He	0.28	0.0209	1820.18	0.0158	0.01648
Sb	121	3	He	0.036	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.089	0.0016	140.01	0.0149	0.0002698
Sb	121	3	He	0.044	0.0009	80.00	0.0149	0.0002698
Ba	137	3	He	0.142	0.0009	80.00	0.0048	0.0002317
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.157	0.004	1590.16	0.0247	0.0001339
Tl	205	3	He	0.164	0.0042	1660.19	0.0247	0.0001339
Tl	205	3	He	0.201	0.0051	2000.23	0.0247	0.0001339
Pb	208	3	He	0.03	0.0021	510.03	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	220.01	0.0327	0.00107
Pb	208	3	He	0.009	0.0014	310.01	0.0327	0.00107
U	238	3	He	0.074	0.0037	1140.09	0.0493	7.55E-05
U	238	3	He	0.072	0.0036	1110.10	0.0493	7.55E-05
U	238	3	He	0.061	0.0031	950.07	0.0493	7.55E-05
Sc	45	1	No Gas			2442693.56		
Sc	45	1	No Gas			2496615.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2447349.03		
Ge	72	1	No Gas			1211084.98		
Ge	72	1	No Gas			1249967.72		
Ge	72	1	No Gas			1210993.19		
Sc	45	2	H2			181478.59		
Sc	45	2	H2			183442.97		
Sc	45	2	H2			183149.90		
Ge	72	2	H2			153800.28		
Ge	72	2	H2			155892.49		
Ge	72	2	H2			155275.20		
In	115	2	H2			391513.71		
In	115	2	H2			388755.03		
In	115	2	H2			387903.28		
Sc	45	3	He			47548.45		
Sc	45	3	He			47297.72		
Sc	45	3	He			47217.87		
Ge	72	3	He			84267.87		
Ge	72	3	He			83222.27		
Ge	72	3	He			83121.66		
In	115	3	He			87746.96		
In	115	3	He			87837.27		
In	115	3	He			87122.84		
Tb	159	3	He			396902.85		
Tb	159	3	He			395886.40		
Tb	159	3	He			391975.19		
Bi	209	3	He			308226.62		
Bi	209	3	He			308071.99		
Bi	209	3	He			307414.55		

Quantitation Report

Data File Name	199_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 5:28:15 PM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

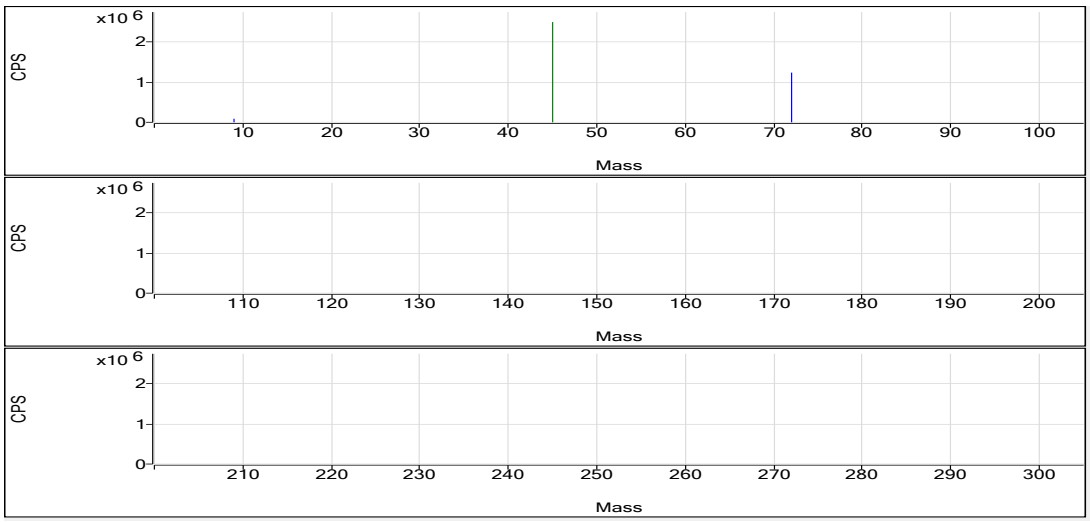
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.622	ppb	1.3	89116.54	0.0356	Pulse	0.5000	3
Se	78	72	H2	54.273	ppb	1.5	3546.00	0.0226	Pulse	1.5000	3
Na	23	45	He	4977.988	ppb	0.9	865755.69	18.1517	Pulse	0.1000	3
Mg	24	45	He	5039.021	ppb	2.1	431371.19	9.0451	Pulse	0.1000	3
Al	27	45	He	4993.503	ppb	2.1	139354.71	2.9220	Pulse	0.1000	3
K	39	45	He	5190.525	ppb	1.8	307070.97	6.4385	Pulse	0.1000	3
Ca	44	45	He	5314.298	ppb	2.2	17250.70	0.3617	Pulse	0.1000	3
Ti	47	45	He	5096.856	ppb	3.0	130512.01	2.7368	Pulse	0.1000	3
V	51	45	He	519.164	ppb	1.0	542457.38	11.3734	Pulse	0.5000	3
Cr	52	45	He	493.223	ppb	1.7	706203.82	14.8074	Pulse	0.1000	3
Mn	55	45	He	514.512	ppb	1.3	315058.82	6.6058	Pulse	0.1000	3
Fe	57	45	He	5133.821	ppb	1.5	142322.76	2.9841	Pulse	0.1000	3
Co	59	45	He	493.195	ppb	2.0	1323930.81	27.7603	Pulse	0.1000	3
Ni	60	72	He	512.739	ppb	1.4	373739.72	4.4037	Pulse	0.1000	3
Cu	63	72	He	487.581	ppb	1.2	1062659.33	12.5215	Pulse	0.1000	3
Zn	66	72	He	515.504	ppb	1.0	127707.55	1.5048	Pulse	0.1000	3
As	75	72	He	517.284	ppb	1.7	90011.23	1.0607	Pulse	0.5000	3
Sr	88	115	He	51.613	ppb	2.7	40365.32	0.4639	Pulse	0.1000	3
Mo	98	115	He	51.262	ppb	2.4	97815.90	1.1243	Pulse	0.1000	3
Ag	107	115	He	51.010	ppb	1.2	206382.90	2.3719	Pulse	0.1000	3
Cd	111	115	He	51.640	ppb	1.0	24025.31	0.2761	Pulse	0.5000	3
Sn	120	115	He	51.808	ppb	1.5	72650.99	0.8350	Pulse	0.1000	3
Sb	121	115	He	51.204	ppb	2.8	66195.71	0.7608	Pulse	0.1000	3
Ba	137	115	He	521.927	ppb	1.2	217974.67	2.5051	Pulse	0.1000	3
Tl	205	159	He	51.712	ppb	0.9	511731.31	1.2788	Pulse	0.1000	3
Pb	208	159	He	51.756	ppb	0.4	678304.43	1.6950	Pulse	0.1000	3
U	238	209	He	50.746	ppb	0.5	774799.05	2.4998	Pulse	0.1000	3

ISTD Table:

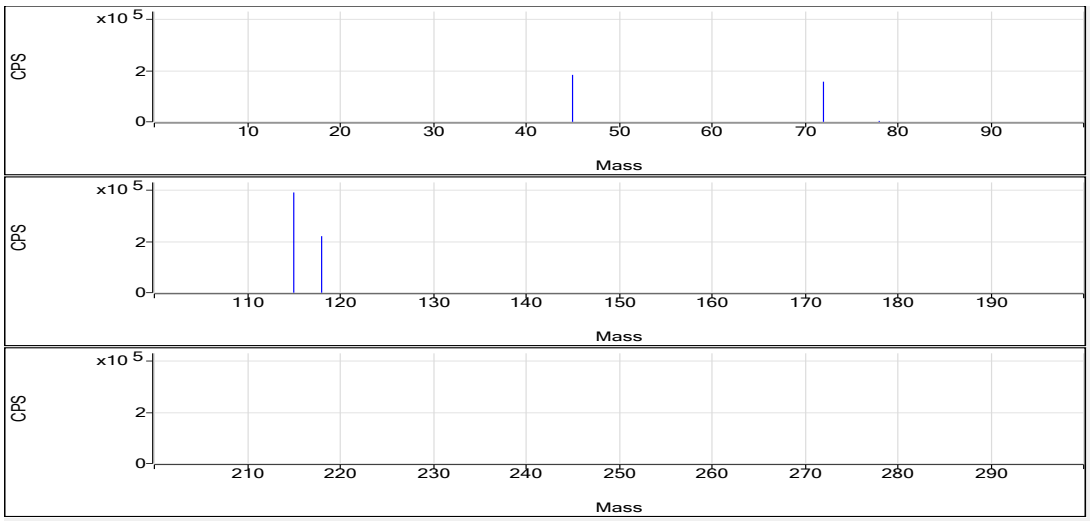
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2505783.56	1.0	104.5	Analog	0.1000	3
No Gas	Ge	72	1242116.88	0.2	107.7	Pulse	0.1000	3
H2	Sc	45	183136.47	0.1	97.9	Pulse	0.1000	3
H2	Ge	72	156570.24	0.4	95.6	Pulse	0.1000	3
H2	In	115	391023.50	0.7	100.5	Pulse	0.1000	3
He	Sc	45	47699.09	1.2	102.3	Pulse	0.1000	3
He	Ge	72	84874.86	1.2	104.5	Pulse	0.1000	3
He	In	115	87019.03	1.1	101.0	Pulse	0.1000	3
He	Tb	159	400178.72	0.5	100.4	Pulse	0.1000	3
He	Bi	209	309949.73	0.6	100.2	Pulse	0.1000	3

No Gas

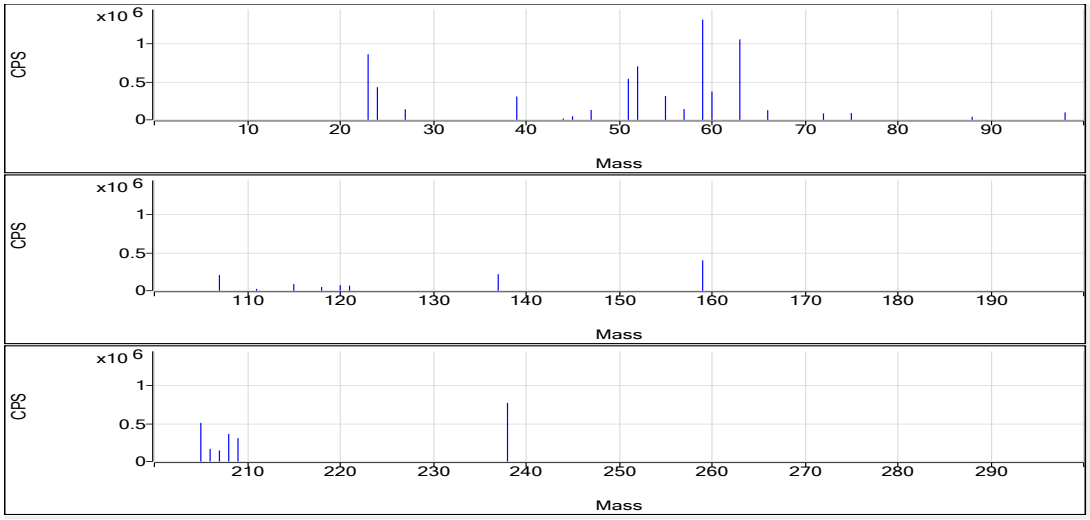


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.931	0.035	88851.59	0.0008	4.685E-06
Be	9	1	No Gas	47.064	0.0359	89328.56	0.0008	4.685E-06
Be	9	1	No Gas	46.872	0.0358	89169.47	0.0008	4.685E-06
Se	78	2	H2	55.111	0.023	3595.12	0.0004	1.219E-05
Se	78	2	H2	54.195	0.0226	3557.11	0.0004	1.219E-05
Se	78	2	H2	53.514	0.0223	3485.76	0.0004	1.219E-05
Na	23	3	He	5025.012	18.3199	862260.85	0.0036	0.3452
Na	23	3	He	4972.113	18.1307	866634.05	0.0036	0.3452
Na	23	3	He	4936.839	18.0045	868372.17	0.0036	0.3452
Mg	24	3	He	5137.545	9.2219	434047.18	0.0018	0.003497
Mg	24	3	He	5055.935	9.0755	433801.99	0.0018	0.003497
Mg	24	3	He	4923.584	8.838	426264.41	0.0018	0.003497
Al	27	3	He	5112.584	2.9917	140809.45	0.0006	0.0006432
Al	27	3	He	4943.574	2.8928	138274.36	0.0006	0.0006432
Al	27	3	He	4924.353	2.8816	138980.31	0.0006	0.0006432
K	39	3	He	5300.924	6.5671	309092.24	0.0012	0.3951
K	39	3	He	5138.744	6.3782	304876.13	0.0012	0.3951
K	39	3	He	5131.907	6.3703	307244.53	0.0012	0.3951
Ca	44	3	He	5376.028	0.3659	17220.67	0.0001	0.002715
Ca	44	3	He	5389.161	0.3668	17531.05	0.0001	0.002715
Ca	44	3	He	5177.704	0.3525	17000.37	0.0001	0.002715
Ti	47	3	He	5261.867	2.8254	132984.19	0.0005	7.003E-05
Ti	47	3	He	5064.864	2.7196	129997.32	0.0005	7.003E-05
Ti	47	3	He	4963.836	2.6654	128554.53	0.0005	7.003E-05
V	51	3	He	523.84	11.4756	540120.50	0.0219	0.02486
V	51	3	He	519.704	11.3852	544203.44	0.0219	0.02486
V	51	3	He	513.948	11.2593	543048.19	0.0219	0.02486
Cr	52	3	He	501.547	15.0567	708671.47	0.0299	0.03997
Cr	52	3	He	493.407	14.8129	708048.97	0.0299	0.03997
Cr	52	3	He	484.716	14.5527	701891.01	0.0299	0.03997
Mn	55	3	He	522.511	6.7085	315747.65	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	510.815	6.5584	313486.15	0.0128	0.002639
Mn	55	3	He	510.211	6.5506	315942.65	0.0128	0.002639
Fe	57	3	He	5218.219	3.0332	142761.94	0.0006	0.001429
Fe	57	3	He	5117.049	2.9744	142173.91	0.0006	0.001429
Fe	57	3	He	5066.196	2.9448	142032.43	0.0006	0.001429
Co	59	3	He	503.999	28.3684	1335212.95	0.0563	0.002149
Co	59	3	He	490.134	27.588	1318689.98	0.0563	0.002149
Co	59	3	He	485.453	27.3246	1317889.51	0.0563	0.002149
Ni	60	3	He	507.025	4.3547	374542.57	0.0086	0.002834
Ni	60	3	He	510.421	4.3839	369591.56	0.0086	0.002834
Ni	60	3	He	520.771	4.4727	377085.03	0.0086	0.002834
Cu	63	3	He	480.726	12.3455	1061822.02	0.0257	0.004757
Cu	63	3	He	490.456	12.5953	1061877.25	0.0257	0.004757
Cu	63	3	He	491.56	12.6236	1064278.73	0.0257	0.004757
Zn	66	3	He	509.848	1.4883	128006.64	0.0029	0.003818
Zn	66	3	He	518.6	1.5138	127623.07	0.0029	0.003818
Zn	66	3	He	518.064	1.5122	127492.95	0.0029	0.003818
As	75	3	He	507.352	1.0403	89475.20	0.002	0.0008061
As	75	3	He	523.633	1.0737	90517.57	0.002	0.0008061
As	75	3	He	520.867	1.068	90040.91	0.002	0.0008061
Sr	88	3	He	50.568	0.4545	40067.25	0.009	0.0009645
Sr	88	3	He	51.063	0.459	39636.81	0.009	0.0009645
Sr	88	3	He	53.208	0.4782	41391.90	0.009	0.0009645
Mo	98	3	He	49.989	1.0964	96641.14	0.0219	0.0002706
Mo	98	3	He	52.387	1.1489	99218.69	0.0219	0.0002706
Mo	98	3	He	51.41	1.1275	97587.86	0.0219	0.0002706
Ag	107	3	He	50.315	2.3396	206234.16	0.0465	0.0006206
Ag	107	3	He	51.286	2.3848	205941.70	0.0465	0.0006206
Ag	107	3	He	51.427	2.3913	206972.83	0.0465	0.0006206
Cd	111	3	He	51.041	0.2729	24056.65	0.0053	0
Cd	111	3	He	51.909	0.2776	23968.59	0.0053	0
Cd	111	3	He	51.969	0.2779	24050.69	0.0053	0
Sn	120	3	He	50.938	0.8212	72389.86	0.0158	0.01648
Sn	120	3	He	52.495	0.8458	73042.68	0.0158	0.01648
Sn	120	3	He	51.992	0.8379	72520.43	0.0158	0.01648
Sb	121	3	He	49.813	0.7402	65244.38	0.0149	0.0002698
Sb	121	3	He	51.152	0.7601	65636.22	0.0149	0.0002698
Sb	121	3	He	52.647	0.7823	67706.54	0.0149	0.0002698
Ba	137	3	He	514.585	2.4699	217715.93	0.0048	0.0002317
Ba	137	3	He	524.43	2.5171	217372.36	0.0048	0.0002317
Ba	137	3	He	526.766	2.5284	218835.72	0.0048	0.0002317
Tl	205	3	He	51.878	1.2829	513434.45	0.0247	0.0001339
Tl	205	3	He	52.047	1.2871	512229.25	0.0247	0.0001339
Tl	205	3	He	51.212	1.2664	509530.23	0.0247	0.0001339
Pb	208	3	He	51.735	1.6943	364861.64	0.0327	0.00107
Pb	208	3	He	51.968	1.702	364581.21	0.0327	0.00107
Pb	208	3	He	51.564	1.6888	363168.35	0.0327	0.00107
U	238	3	He	50.883	2.5066	776266.08	0.0493	7.55E-05
U	238	3	He	50.461	2.4858	775548.82	0.0493	7.55E-05
U	238	3	He	50.893	2.5071	772582.25	0.0493	7.55E-05
Sc	45	1	No Gas			2535701.06		
Sc	45	1	No Gas			2487952.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2493697.31		
Ge	72	1	No Gas			1242351.70		
Ge	72	1	No Gas			1244008.03		
Ge	72	1	No Gas			1239990.92		
Sc	45	2	H2			182856.93		
Sc	45	2	H2			183230.90		
Sc	45	2	H2			183321.58		
Ge	72	2	H2			156327.39		
Ge	72	2	H2			157288.04		
Ge	72	2	H2			156095.29		
In	115	2	H2			392598.04		
In	115	2	H2			392450.78		
In	115	2	H2			388021.67		
Sc	45	3	He			47066.97		
Sc	45	3	He			47799.39		
Sc	45	3	He			48230.91		
Ge	72	3	He			86008.72		
Ge	72	3	He			84307.42		
Ge	72	3	He			84308.43		
In	115	3	He			88531.41		
In	115	3	He			86740.05		
In	115	3	He			86931.61		
Tb	159	3	He			400215.35		
Tb	159	3	He			397984.17		
Tb	159	3	He			402336.63		
Bi	209	3	He			309692.42		
Bi	209	3	He			311995.43		
Bi	209	3	He			308161.34		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

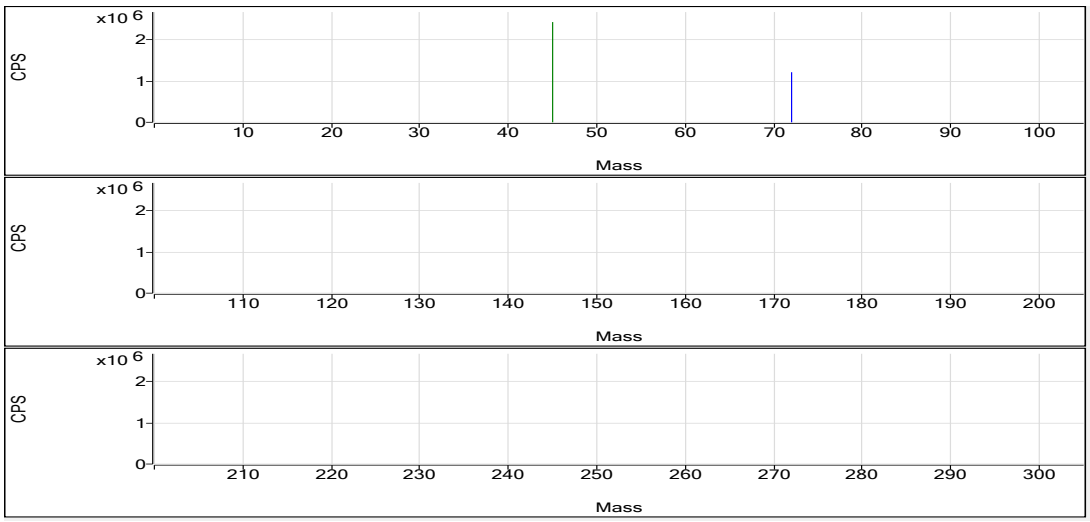
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.029	ppb	4.6	65.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.122	ppb	28.4	10.00	0.0001	Pulse	1.5000	3
Na	23	45	He	68.699	ppb	6.7	28578.28	0.5909	Pulse	0.1000	3
Mg	24	45	He	1.816	ppb	28.9	326.68	0.0068	Pulse	0.1000	3
Al	27	45	He	1.965	ppb	37.9	86.67	0.0018	Pulse	0.1000	3
K	39	45	He	0.438	ppb	988.0	19133.11	0.3956	Pulse	0.1000	3
Ca	44	45	He	-5.452	ppb	N/A	113.34	0.0023	Pulse	0.1000	3
Ti	47	45	He	1.029	ppb	112.8	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	0.324	ppb	10.9	1545.43	0.0320	Pulse	0.5000	3
Cr	52	45	He	-0.090	ppb	N/A	1803.52	0.0373	Pulse	0.1000	3
Mn	55	45	He	0.143	ppb	39.2	216.68	0.0045	Pulse	0.1000	3
Fe	57	45	He	2.759	ppb	13.8	146.68	0.0030	Pulse	0.1000	3
Co	59	45	He	0.085	ppb	45.4	336.68	0.0070	Pulse	0.1000	3
Ni	60	72	He	0.087	ppb	117.6	296.68	0.0036	Pulse	0.1000	3
Cu	63	72	He	0.120	ppb	17.1	650.04	0.0078	Pulse	0.1000	3
Zn	66	72	He	2.683	ppb	15.4	963.40	0.0116	Pulse	0.1000	3
As	75	72	He	0.192	ppb	37.3	99.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.092	ppb	18.0	156.68	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.083	ppb	12.6	183.34	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	115.8	76.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	114.6	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.109	ppb	155.2	1593.48	0.0182	Pulse	0.1000	3
Sb	121	115	He	0.049	ppb	49.8	86.67	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.079	ppb	47.2	53.33	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.102	ppb	8.1	1060.08	0.0027	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	13.5	650.03	0.0016	Pulse	0.1000	3
U	238	209	He	0.049	ppb	11.5	773.39	0.0025	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2434151.84	0.7	101.5	Analog	0.1000	3
No Gas	Ge	72	1215968.42	0.2	105.4	Pulse	0.1000	3
H2	Sc	45	185909.66	0.5	99.4	Pulse	0.1000	3
H2	Ge	72	158783.20	1.2	97.0	Pulse	0.1000	3
H2	In	115	393431.02	1.3	101.1	Pulse	0.1000	3
He	Sc	45	48367.58	0.6	103.7	Pulse	0.1000	3
He	Ge	72	82833.42	0.3	102.0	Pulse	0.1000	3
He	In	115	87665.20	1.5	101.7	Pulse	0.1000	3
He	Tb	159	399933.27	1.0	100.3	Pulse	0.1000	3
He	Bi	209	309203.30	0.7	100.0	Pulse	0.1000	3

No Gas



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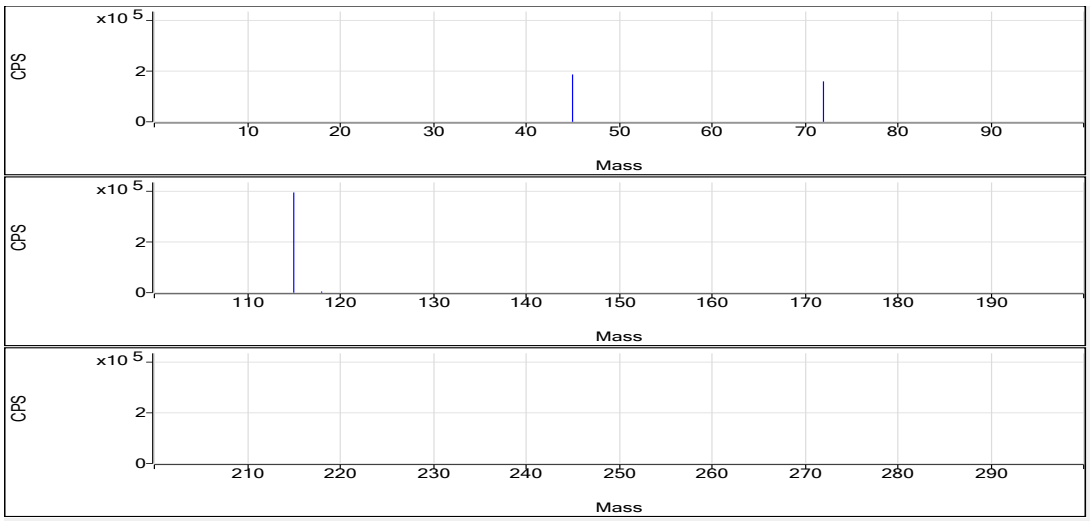
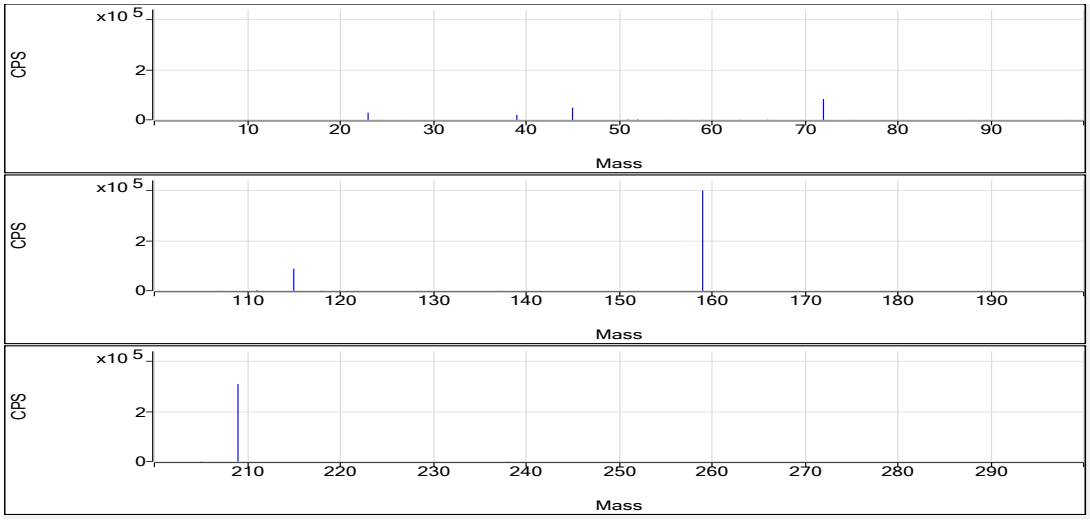


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.031	0	68.00	0.0008	4.685E-06
Be	9	1	No Gas	0.028	0	64.00	0.0008	4.685E-06
Be	9	1	No Gas	0.029	0	64.00	0.0008	4.685E-06
Se	78	2	H2	0.113	0.0001	9.33	0.0004	1.219E-05
Se	78	2	H2	0.16	0.0001	12.67	0.0004	1.219E-05
Se	78	2	H2	0.092	0.0001	8.00	0.0004	1.219E-05
Na	23	3	He	65.918	0.581	28287.67	0.0036	0.3452
Na	23	3	He	74.029	0.61	29369.90	0.0036	0.3452
Na	23	3	He	66.151	0.5818	28077.27	0.0036	0.3452
Mg	24	3	He	1.828	0.0068	330.01	0.0018	0.003497
Mg	24	3	He	2.334	0.0077	370.02	0.0018	0.003497
Mg	24	3	He	1.285	0.0058	280.01	0.0018	0.003497
Al	27	3	He	1.358	0.0014	70.00	0.0006	0.0006432
Al	27	3	He	1.74	0.0017	80.00	0.0006	0.0006432
Al	27	3	He	2.797	0.0023	110.01	0.0006	0.0006432
K	39	3	He	1.532	0.3969	19323.40	0.0012	0.3951
K	39	3	He	4.115	0.3999	19253.23	0.0012	0.3951
K	39	3	He	-4.332	0.39	18822.70	0.0012	0.3951
Ca	44	3	He	-18.909	0.0014	70.00	0.0001	0.002715
Ca	44	3	He	9.003	0.0033	160.01	0.0001	0.002715
Ca	44	3	He	-6.449	0.0023	110.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	2.19	0.0012	60.00	0.0005	7.003E-05
Ti	47	3	He	1.027	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	0.338	0.0322	1570.10	0.0219	0.02486
V	51	3	He	0.284	0.0311	1496.09	0.0219	0.02486
V	51	3	He	0.351	0.0325	1570.09	0.0219	0.02486
Cr	52	3	He	-0.059	0.0382	1860.20	0.0299	0.03997
Cr	52	3	He	-0.024	0.0393	1890.19	0.0299	0.03997
Cr	52	3	He	-0.186	0.0344	1660.16	0.0299	0.03997
Mn	55	3	He	0.146	0.0045	220.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.086	0.0037	180.01	0.0128	0.002639
Mn	55	3	He	0.198	0.0052	250.01	0.0128	0.002639
Fe	57	3	He	3.197	0.0033	160.01	0.0006	0.001429
Fe	57	3	He	2.546	0.0029	140.01	0.0006	0.001429
Fe	57	3	He	2.534	0.0029	140.01	0.0006	0.001429
Co	59	3	He	0.13	0.0094	460.02	0.0563	0.002149
Co	59	3	He	0.058	0.0054	260.01	0.0563	0.002149
Co	59	3	He	0.069	0.006	290.01	0.0563	0.002149
Ni	60	3	He	0.034	0.0031	260.01	0.0086	0.002834
Ni	60	3	He	0.205	0.0046	380.03	0.0086	0.002834
Ni	60	3	He	0.022	0.003	250.01	0.0086	0.002834
Cu	63	3	He	0.143	0.0084	700.05	0.0257	0.004757
Cu	63	3	He	0.102	0.0074	610.04	0.0257	0.004757
Cu	63	3	He	0.116	0.0077	640.04	0.0257	0.004757
Zn	66	3	He	2.821	0.012	1000.08	0.0029	0.003818
Zn	66	3	He	3.01	0.0126	1040.07	0.0029	0.003818
Zn	66	3	He	2.218	0.0103	850.06	0.0029	0.003818
As	75	3	He	0.205	0.0012	102.00	0.002	0.0008061
As	75	3	He	0.114	0.001	86.00	0.002	0.0008061
As	75	3	He	0.256	0.0013	110.00	0.002	0.0008061
Sr	88	3	He	0.111	0.002	170.01	0.009	0.0009645
Sr	88	3	He	0.08	0.0017	150.01	0.009	0.0009645
Sr	88	3	He	0.085	0.0017	150.01	0.009	0.0009645
Mo	98	3	He	0.077	0.002	170.01	0.0219	0.0002706
Mo	98	3	He	0.095	0.0024	210.01	0.0219	0.0002706
Mo	98	3	He	0.077	0.002	170.01	0.0219	0.0002706
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.011	0.0012	100.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.152	0.0189	1640.15	0.0158	0.01648
Sn	120	3	He	-0.078	0.0152	1360.12	0.0158	0.01648
Sn	120	3	He	0.253	0.0205	1780.17	0.0158	0.01648
Sb	121	3	He	0.044	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.027	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.075	0.0014	120.01	0.0149	0.0002698
Ba	137	3	He	0.12	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	0.069	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.048	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.099	0.0026	1040.08	0.0247	0.0001339
Tl	205	3	He	0.095	0.0025	1000.07	0.0247	0.0001339
Tl	205	3	He	0.111	0.0029	1140.09	0.0247	0.0001339
Pb	208	3	He	0.014	0.0015	360.02	0.0327	0.00107
Pb	208	3	He	0.018	0.0017	270.01	0.0327	0.00107
Pb	208	3	He	0.018	0.0017	220.01	0.0327	0.00107
U	238	3	He	0.046	0.0023	720.05	0.0493	7.55E-05
U	238	3	He	0.046	0.0023	730.05	0.0493	7.55E-05
U	238	3	He	0.056	0.0028	870.06	0.0493	7.55E-05
Sc	45	1	No Gas			2429375.28		
Sc	45	1	No Gas			2452951.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2420128.87		
Ge	72	1	No Gas			1217073.26		
Ge	72	1	No Gas			1213665.45		
Ge	72	1	No Gas			1217166.54		
Sc	45	2	H2			186159.43		
Sc	45	2	H2			186677.11		
Sc	45	2	H2			184892.44		
Ge	72	2	H2			157752.40		
Ge	72	2	H2			160897.10		
Ge	72	2	H2			157700.11		
In	115	2	H2			396168.47		
In	115	2	H2			396620.78		
In	115	2	H2			387503.82		
Sc	45	3	He			48691.90		
Sc	45	3	He			48150.24		
Sc	45	3	He			48260.60		
Ge	72	3	He			83121.06		
Ge	72	3	He			82659.57		
Ge	72	3	He			82719.62		
In	115	3	He			86861.68		
In	115	3	He			89206.81		
In	115	3	He			86951.93		
Tb	159	3	He			402899.17		
Tb	159	3	He			401452.45		
Tb	159	3	He			395448.20		
Bi	209	3	He			307861.23		
Bi	209	3	He			311653.30		
Bi	209	3	He			308095.37		

Quantitation Report

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Auto Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

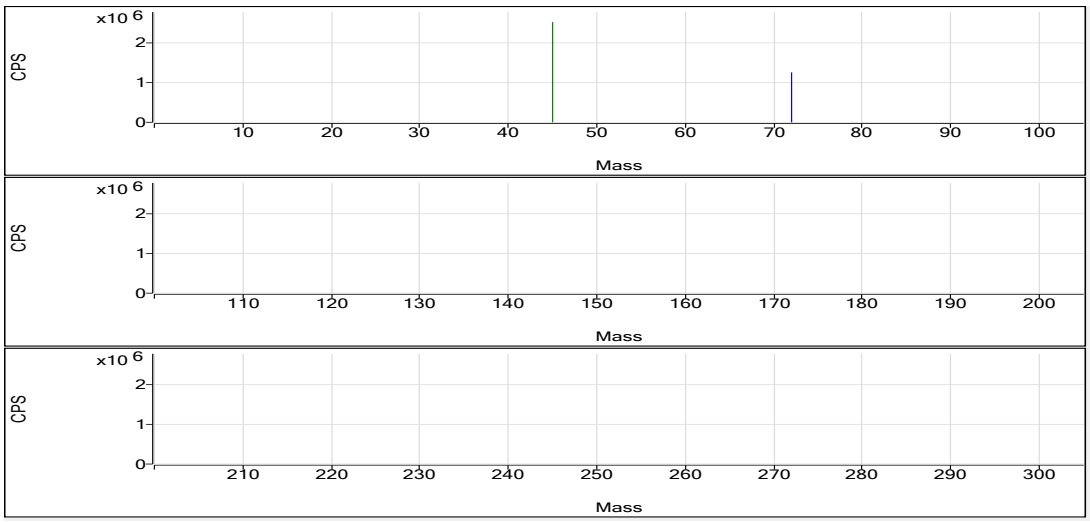
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.049	ppb	19.9	107.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.143	ppb	29.1	11.78	0.0001	Pulse	1.5000	3
Na	23	45	He	47757.286	ppb	0.2	8391576.75	171.1753	Analog	0.1000	3
Mg	24	45	He	47819.517	ppb	1.7	4206241.19	85.8071	Analog	0.1000	3
Al	27	45	He	403.857	ppb	2.9	11615.09	0.2369	Pulse	0.1000	3
K	39	45	He	12489.091	ppb	0.9	732207.28	14.9364	Pulse	0.1000	3
Ca	44	45	He	259797.126	ppb	1.4	860430.77	17.5525	Pulse	0.1000	3
Ti	47	45	He	12.160	ppb	19.5	323.35	0.0066	Pulse	0.1000	3
V	51	45	He	2.138	ppb	2.1	3510.44	0.0716	Pulse	0.5000	3
Cr	52	45	He	0.548	ppb	16.4	2763.69	0.0564	Pulse	0.1000	3
Mn	55	45	He	561.238	ppb	1.3	353217.91	7.2055	Pulse	0.1000	3
Fe	57	45	He	5479.814	ppb	1.9	156132.96	3.1852	Pulse	0.1000	3
Co	59	45	He	0.434	ppb	3.5	1303.44	0.0266	Pulse	0.1000	3
Ni	60	72	He	1.146	ppb	1.9	1106.75	0.0127	Pulse	0.1000	3
Cu	63	72	He	0.655	ppb	12.1	1883.52	0.0216	Pulse	0.1000	3
Zn	66	72	He	20.871	ppb	4.3	5641.33	0.0646	Pulse	0.1000	3
As	75	72	He	9.137	ppb	2.3	1705.45	0.0195	Pulse	0.5000	3
Sr	88	115	He	3164.353	ppb	1.9	2431339.03	28.3846	Analog	0.1000	3
Mo	98	115	He	8.710	ppb	4.1	16380.07	0.1913	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.023	ppb	45.9	10.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.218	ppb	14.6	1706.84	0.0199	Pulse	0.1000	3
Sb	121	115	He	0.108	ppb	17.2	160.01	0.0019	Pulse	0.1000	3
Ba	137	115	He	305.546	ppb	2.6	125615.94	1.4667	Pulse	0.1000	3
Tl	205	159	He	0.040	ppb	10.6	450.03	0.0011	Pulse	0.1000	3
Pb	208	159	He	0.624	ppb	4.5	8568.07	0.0215	Pulse	0.1000	3
U	238	209	He	12.772	ppb	0.9	192021.42	0.6292	Pulse	0.1000	3

ISTD Table:

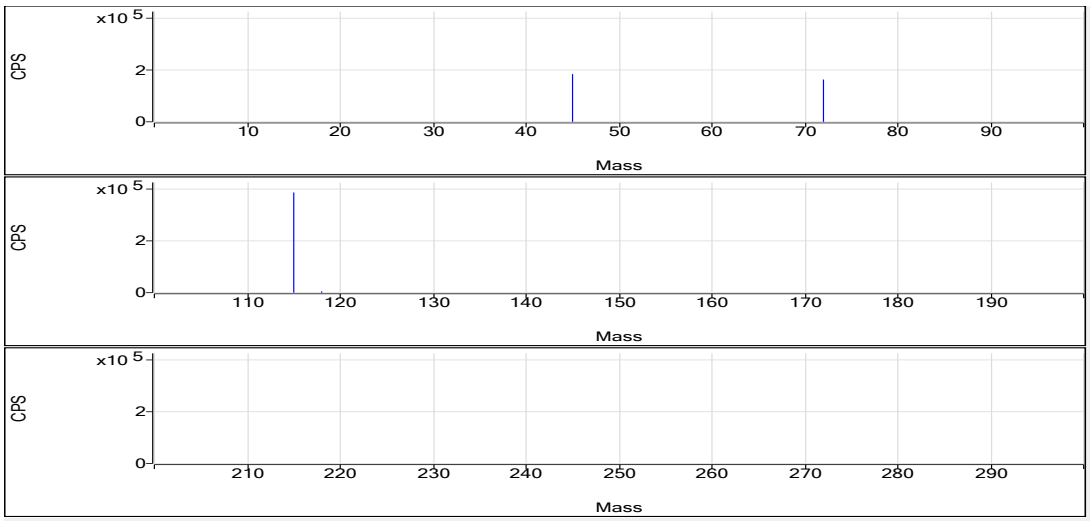
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2534603.09	1.2	105.7	Analog	0.1000	3
No Gas	Ge	72	1262862.51	0.5	109.5	Pulse	0.1000	3
H2	Sc	45	184669.31	0.8	98.7	Pulse	0.1000	3
H2	Ge	72	163884.89	1.0	100.1	Pulse	0.1000	3
H2	In	115	388270.31	0.8	99.8	Pulse	0.1000	3
He	Sc	45	49023.48	0.7	105.1	Pulse	0.1000	3
He	Ge	72	87349.43	0.7	107.6	Pulse	0.1000	3
He	In	115	85681.25	2.3	99.4	Pulse	0.1000	3
He	Tb	159	398686.82	0.6	100.0	Pulse	0.1000	3
He	Bi	209	305187.10	1.4	98.7	Pulse	0.1000	3

No Gas

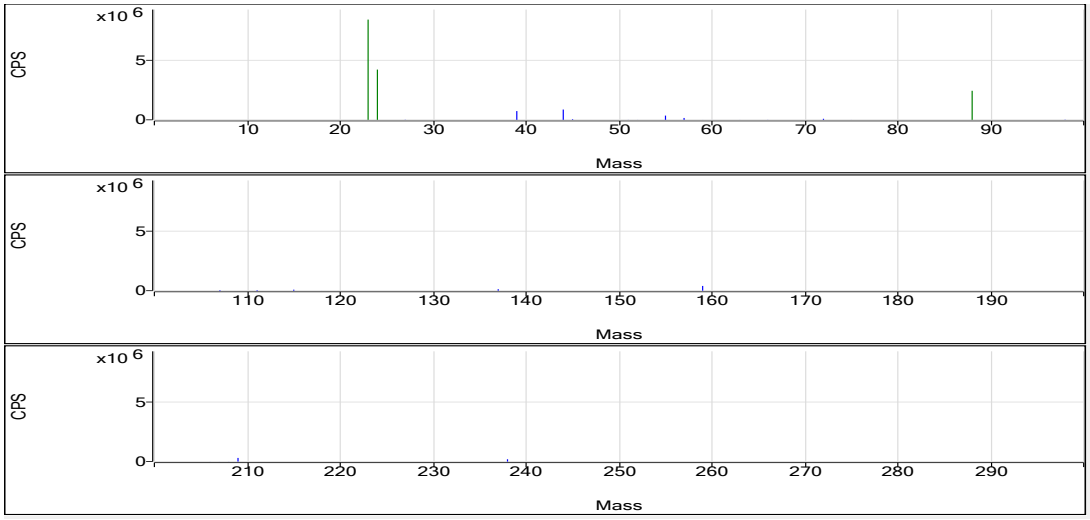


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.059	0	126.00	0.0008	4.685E-06
Be	9	1	No Gas	0.05	0	110.00	0.0008	4.685E-06
Be	9	1	No Gas	0.039	0	86.00	0.0008	4.685E-06
Se	78	2	H2	0.097	0.0001	8.67	0.0004	1.219E-05
Se	78	2	H2	0.155	0.0001	12.67	0.0004	1.219E-05
Se	78	2	H2	0.178	0.0001	14.00	0.0004	1.219E-05
Na	23	3	He	47850.228	171.5078	8388949.25	0.0036	0.3452
Na	23	3	He	47694.137	170.9494	8449134.25	0.0036	0.3452
Na	23	3	He	47727.493	171.0687	8336646.75	0.0036	0.3452
Mg	24	3	He	48336.344	86.7345	4242437.44	0.0018	0.003497
Mg	24	3	He	46908.275	84.172	4160183.06	0.0018	0.003497
Mg	24	3	He	48213.933	86.5148	4216103.06	0.0018	0.003497
Al	27	3	He	390.458	0.2291	11204.72	0.0006	0.0006432
Al	27	3	He	413.061	0.2423	11975.54	0.0006	0.0006432
Al	27	3	He	408.051	0.2394	11665.02	0.0006	0.0006432
K	39	3	He	12538.4	14.9939	733393.74	0.0012	0.3951
K	39	3	He	12367.15	14.7945	731213.04	0.0012	0.3951
K	39	3	He	12561.723	15.021	732015.07	0.0012	0.3951
Ca	44	3	He	259651.644	17.5427	858063.97	0.0001	0.002715
Ca	44	3	He	256363.6	17.3206	856064.75	0.0001	0.002715
Ca	44	3	He	263376.133	17.7943	867163.58	0.0001	0.002715
Ti	47	3	He	14.72	0.008	390.02	0.0005	7.003E-05
Ti	47	3	He	10.044	0.0055	270.01	0.0005	7.003E-05
Ti	47	3	He	11.717	0.0064	310.01	0.0005	7.003E-05
V	51	3	He	2.088	0.0705	3448.43	0.0219	0.02486
V	51	3	He	2.154	0.072	3556.45	0.0219	0.02486
V	51	3	He	2.173	0.0724	3526.45	0.0219	0.02486
Cr	52	3	He	0.625	0.0587	2870.35	0.0299	0.03997
Cr	52	3	He	0.449	0.0534	2640.35	0.0299	0.03997
Cr	52	3	He	0.57	0.0571	2780.36	0.0299	0.03997
Mn	55	3	He	567.042	7.28	356085.70	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	552.815	7.0974	350787.26	0.0128	0.002639
Mn	55	3	He	563.856	7.2391	352780.78	0.0128	0.002639
Fe	57	3	He	5530.939	3.2149	157247.95	0.0006	0.001429
Fe	57	3	He	5360.686	3.1159	154004.49	0.0006	0.001429
Fe	57	3	He	5547.816	3.2247	157146.44	0.0006	0.001429
Co	59	3	He	0.438	0.0268	1310.11	0.0563	0.002149
Co	59	3	He	0.447	0.0273	1350.11	0.0563	0.002149
Co	59	3	He	0.418	0.0257	1250.09	0.0563	0.002149
Ni	60	3	He	1.154	0.0127	1120.08	0.0086	0.002834
Ni	60	3	He	1.121	0.0125	1080.09	0.0086	0.002834
Ni	60	3	He	1.163	0.0128	1120.09	0.0086	0.002834
Cu	63	3	He	0.595	0.02	1760.16	0.0257	0.004757
Cu	63	3	He	0.745	0.0239	2070.21	0.0257	0.004757
Cu	63	3	He	0.626	0.0208	1820.19	0.0257	0.004757
Zn	66	3	He	21.315	0.0659	5791.39	0.0029	0.003818
Zn	66	3	He	21.469	0.0663	5751.42	0.0029	0.003818
Zn	66	3	He	19.829	0.0616	5381.19	0.0029	0.003818
As	75	3	He	8.946	0.0191	1682.11	0.002	0.0008061
As	75	3	He	9.356	0.02	1732.12	0.002	0.0008061
As	75	3	He	9.109	0.0195	1702.11	0.002	0.0008061
Sr	88	3	He	3232.94	28.9999	2418923.09	0.009	0.0009645
Sr	88	3	He	3135.544	28.1262	2447049.96	0.009	0.0009645
Sr	88	3	He	3124.574	28.0278	2428044.03	0.009	0.0009645
Mo	98	3	He	8.977	0.1971	16440.12	0.0219	0.0002706
Mo	98	3	He	8.306	0.1824	15869.44	0.0219	0.0002706
Mo	98	3	He	8.848	0.1943	16830.66	0.0219	0.0002706
Ag	107	3	He	0.005	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.036	0.0002	16.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Sn	120	3	He	0.217	0.0199	1660.16	0.0158	0.01648
Sn	120	3	He	0.187	0.0194	1690.18	0.0158	0.01648
Sn	120	3	He	0.251	0.0204	1770.19	0.0158	0.01648
Sb	121	3	He	0.127	0.0022	180.01	0.0149	0.0002698
Sb	121	3	He	0.09	0.0016	140.01	0.0149	0.0002698
Sb	121	3	He	0.106	0.0018	160.01	0.0149	0.0002698
Ba	137	3	He	314.186	1.5081	125794.44	0.0048	0.0002317
Ba	137	3	He	298.778	1.4342	124776.14	0.0048	0.0002317
Ba	137	3	He	303.674	1.4577	126277.24	0.0048	0.0002317
Tl	205	3	He	0.045	0.0012	500.03	0.0247	0.0001339
Tl	205	3	He	0.037	0.0011	420.03	0.0247	0.0001339
Tl	205	3	He	0.039	0.0011	430.02	0.0247	0.0001339
Pb	208	3	He	0.627	0.0216	4620.95	0.0327	0.00107
Pb	208	3	He	0.594	0.0205	4350.87	0.0327	0.00107
Pb	208	3	He	0.651	0.0224	4661.01	0.0327	0.00107
U	238	3	He	12.766	0.6289	194318.81	0.0493	7.55E-05
U	238	3	He	12.895	0.6353	191018.14	0.0493	7.55E-05
U	238	3	He	12.655	0.6235	190727.30	0.0493	7.55E-05
Sc	45	1	No Gas			2552676.37		
Sc	45	1	No Gas			2552987.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2498145.28		
Ge	72	1	No Gas			1267106.39		
Ge	72	1	No Gas			1265888.03		
Ge	72	1	No Gas			1255593.11		
Sc	45	2	H2			185954.67		
Sc	45	2	H2			185126.42		
Sc	45	2	H2			182926.83		
Ge	72	2	H2			164568.75		
Ge	72	2	H2			165105.90		
Ge	72	2	H2			161980.03		
In	115	2	H2			391541.17		
In	115	2	H2			388187.26		
In	115	2	H2			385082.49		
Sc	45	3	He			48912.94		
Sc	45	3	He			49424.76		
Sc	45	3	He			48732.73		
Ge	72	3	He			87909.87		
Ge	72	3	He			86711.85		
Ge	72	3	He			87426.58		
In	115	3	He			83421.01		
In	115	3	He			87011.32		
In	115	3	He			86639.43		
Tb	159	3	He			400553.67		
Tb	159	3	He			399719.76		
Tb	159	3	He			395787.03		
Bi	209	3	He			308960.56		
Bi	209	3	He			300683.08		
Bi	209	3	He			305917.67		

US EPA Tune Check Report

Operator Name	us19_usr_ins22323
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA_ICPMS.b
Acq. Date-Time	8/10/2023 6:41:08 AM
Report Comment	E09 Tune Report
Instrument Name	G8403A SG20064740

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9	10.00	4596	45955.53			0.247	5.000
24	10.00	18924	189241.02			0.365	5.000
25	10.00	2611	26107.30			0.389	5.000
26	10.00	3030	30301.01			0.447	5.000
59	10.00	32772	327724.78			0.165	5.000
115	10.00	52992	529918.24			0.547	5.000
206	10.00	13550	135501.62			1.008	5.000
207	10.00	11878	118779.86			0.742	5.000
208	10.00	28284	282837.36			0.549	5.000

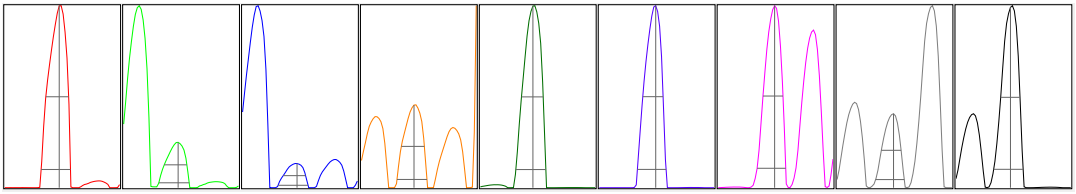
Mass	RSD% (Flag)
9	
24	
25	
26	
59	
115	
206	
207	
208	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	4615	4589	4596	4588	4589
24	18920	18983	18970	18938	18809
25	2605	2614	2623	2615	2596
26	3041	3044	3023	3031	3011
59	32692	32757	32769	32821	32823
115	52508	52940	53155	53217	53140
206	13323	13544	13587	13615	13682
207	11743	11876	11861	11973	11938
208	28020	28274	28340	28388	28397

Integration Time [sec] 0.1

Resolution/Axis

US EPA Tune Check Report



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	8555.76	8.95	8.90 - 9.10	
24	35154.04	23.95	23.90 - 24.10	
25	4668.56	24.95	24.90 - 25.10	
26	5436.15	25.90	25.90 - 26.10	
59	62162.42	58.90	58.90 - 59.10	
115	105743.77	115.00	114.90 - 115.10	
206	26867.82	206.00	205.90 - 206.10	
207	23272.60	207.00	206.90 - 207.10	
208	56734.19	207.95	207.90 - 208.10	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
9	0.59	0.755	0.900	
24	0.58	0.781	0.900	
25	0.57	0.771	0.900	
26	0.59	0.771	0.900	
59	0.56	0.772	0.900	
115	0.52	0.738	0.900	
206	0.51	0.735	0.900	
207	0.51	0.737	0.900	
208	0.50	0.758	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	235
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.05 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	0.90 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.4 V	Deflect	12.8 V
Extract 2	-170.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.5 V

US EPA Tune Check Report

He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	160 V		

QP Parameters

Mass Gain	131	Axis Gain	1.0006	QP Bias	-2.5 V
Mass Offset	124	Axis Offset	-0.05		

Hardware Settings

Torch

Torch H	-0.8 mm	Torch V	-0.7 mm		

EM

Discriminator	3.8 mV	Analog HV	2187 V	Pulse HV	1732 V

Quantitation Report

Data File Name	202SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 5:34:24 PM
Sample Name	410-136736-H-3-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

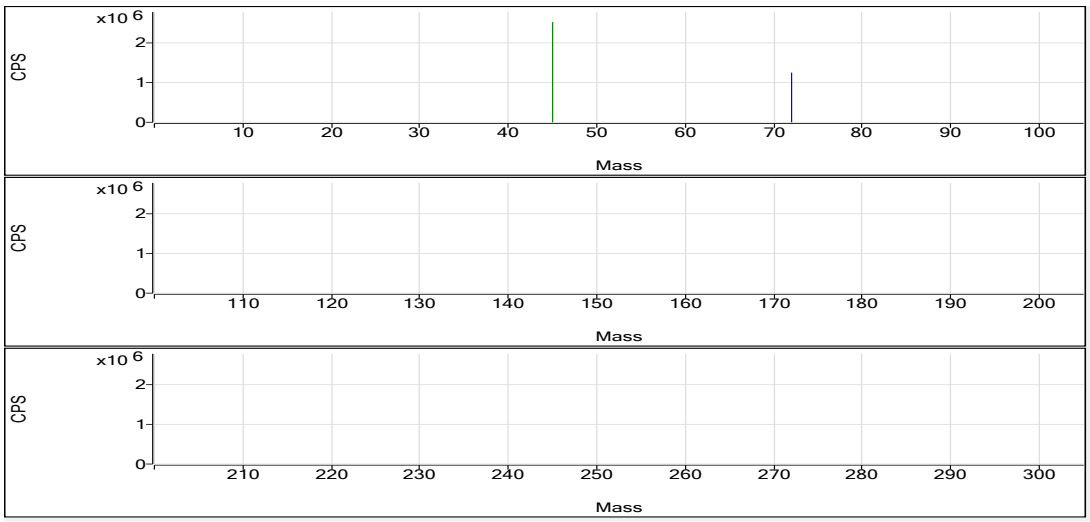
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.020	ppb	27.4	50.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	1.312	ppb	10.5	92.00	0.0006	Pulse	1.5000	3
Na	23	45	He	67292.390	ppb	1.5	11432134.41	241.0533	Analog	0.1000	3
Mg	24	45	He	49664.880	ppb	1.2	4226698.79	89.1183	Analog	0.1000	3
Al	27	45	He	39.502	ppb	17.6	1126.82	0.0238	Pulse	0.1000	3
K	39	45	He	16165.125	ppb	0.7	911386.73	19.2166	Pulse	0.1000	3
Ca	44	45	He	274198.951	ppb	1.0	878623.14	18.5254	Pulse	0.1000	3
Ti	47	45	He	1.967	ppb	64.7	53.34	0.0011	Pulse	0.1000	3
V	51	45	He	11.115	ppb	1.0	12702.24	0.2678	Pulse	0.5000	3
Cr	52	45	He	0.297	ppb	5.4	2316.93	0.0489	Pulse	0.1000	3
Mn	55	45	He	829.474	ppb	0.2	505012.18	10.6480	Pulse	0.1000	3
Fe	57	45	He	663.780	ppb	4.4	18358.92	0.3871	Pulse	0.1000	3
Co	59	45	He	1.205	ppb	5.3	3317.16	0.0699	Pulse	0.1000	3
Ni	60	72	He	7.740	ppb	0.8	5974.75	0.0693	Pulse	0.1000	3
Cu	63	72	He	0.396	ppb	5.1	1286.77	0.0149	Pulse	0.1000	3
Zn	66	72	He	3.614	ppb	13.9	1236.76	0.0143	Pulse	0.1000	3
As	75	72	He	20.022	ppb	1.6	3607.81	0.0418	Pulse	0.5000	3
Sr	88	115	He	2246.296	ppb	1.3	1723351.54	20.1498	Analog	0.1000	3
Mo	98	115	He	12.398	ppb	3.2	23276.69	0.2721	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.114	ppb	7.2	52.00	0.0006	Pulse	0.5000	3
Sn	120	115	He	-0.090	ppb	N/A	1286.78	0.0151	Pulse	0.1000	3
Sb	121	115	He	0.447	ppb	27.7	590.03	0.0069	Pulse	0.1000	3
Ba	137	115	He	178.489	ppb	1.5	73282.79	0.8569	Pulse	0.1000	3
Tl	205	159	He	0.053	ppb	6.8	576.70	0.0015	Pulse	0.1000	3
Pb	208	159	He	0.071	ppb	14.4	1346.75	0.0034	Pulse	0.1000	3
U	238	209	He	12.081	ppb	1.8	179396.04	0.5952	Pulse	0.1000	3

ISTD Table:

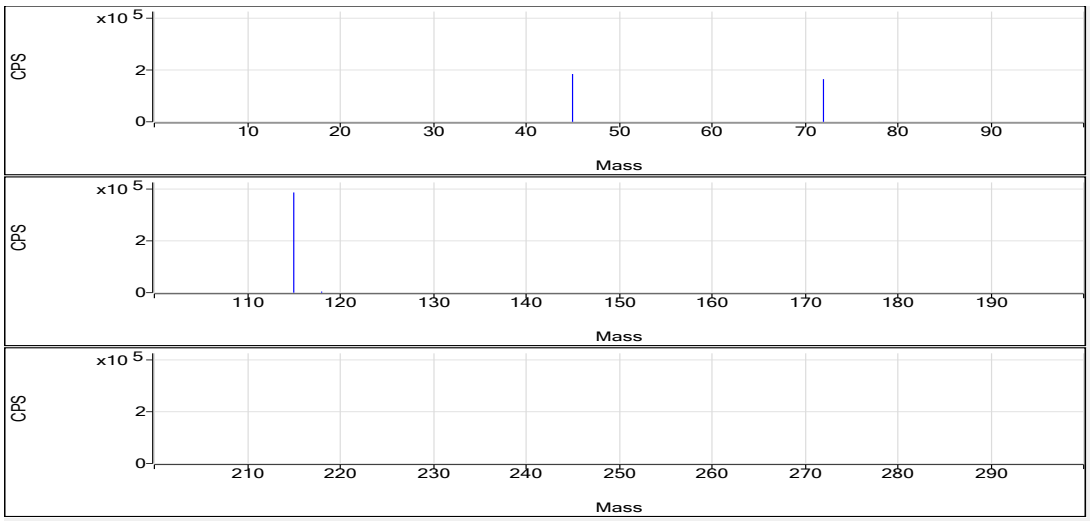
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2520182.51	1.6	105.1	Analog	0.1000	3
No Gas	Ge	72	1249744.82	0.2	108.4	Pulse	0.1000	3
H2	Sc	45	184277.78	0.9	98.5	Pulse	0.1000	3
H2	Ge	72	164538.48	0.4	100.5	Pulse	0.1000	3
H2	In	115	386400.16	0.4	99.3	Pulse	0.1000	3
He	Sc	45	47428.08	0.5	101.7	Pulse	0.1000	3
He	Ge	72	86256.21	0.8	106.2	Pulse	0.1000	3
He	In	115	85535.59	1.3	99.2	Pulse	0.1000	3
He	Tb	159	396173.67	0.8	99.4	Pulse	0.1000	3
He	Bi	209	301411.62	0.7	97.5	Pulse	0.1000	3

No Gas

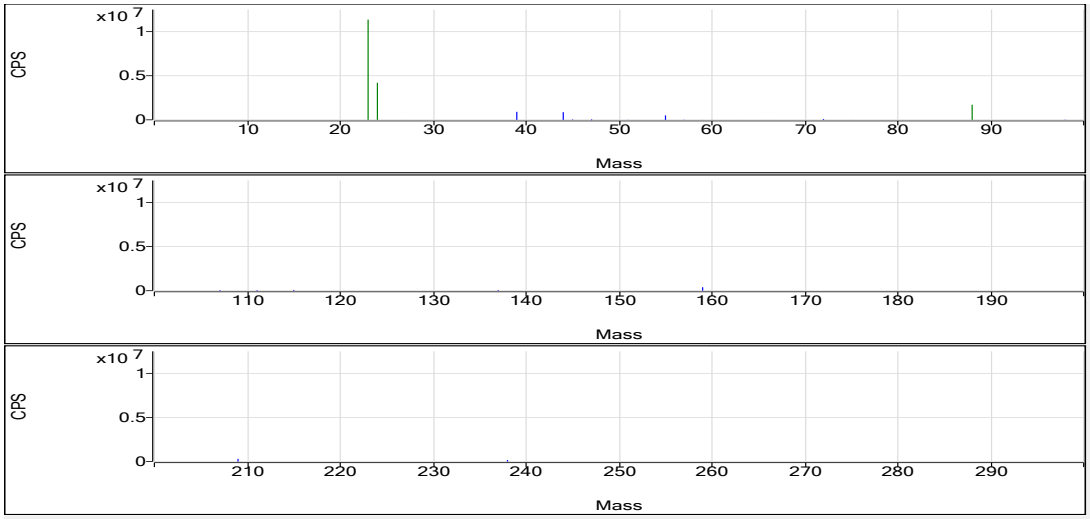


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.014	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.025	0	60.00	0.0008	4.685E-06
Be	9	1	No Gas	0.021	0	52.00	0.0008	4.685E-06
Se	78	2	H2	1.406	0.0006	98.00	0.0004	1.219E-05
Se	78	2	H2	1.375	0.0006	96.67	0.0004	1.219E-05
Se	78	2	H2	1.154	0.0005	81.33	0.0004	1.219E-05
Na	23	3	He	66354.416	237.6982	11335661.08	0.0036	0.3452
Na	23	3	He	67189.636	240.6858	11405593.58	0.0036	0.3452
Na	23	3	He	68333.117	244.7761	11555148.58	0.0036	0.3452
Mg	24	3	He	49883.152	89.5099	4268666.81	0.0018	0.003497
Mg	24	3	He	48991.753	87.9105	4165892.75	0.0018	0.003497
Mg	24	3	He	50119.736	89.9344	4245536.81	0.0018	0.003497
Al	27	3	He	45.145	0.0271	1290.22	0.0006	0.0006432
Al	27	3	He	31.727	0.0192	910.06	0.0006	0.0006432
Al	27	3	He	41.633	0.025	1180.17	0.0006	0.0006432
K	39	3	He	16095.646	19.1357	912566.24	0.0012	0.3951
K	39	3	He	16103.157	19.1444	907212.96	0.0012	0.3951
K	39	3	He	16296.571	19.3696	914381.00	0.0012	0.3951
Ca	44	3	He	275350.653	18.6032	887172.64	0.0001	0.002715
Ca	44	3	He	271166.283	18.3205	868170.69	0.0001	0.002715
Ca	44	3	He	276079.917	18.6524	880526.08	0.0001	0.002715
Ti	47	3	He	1.432	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	1.049	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	3.421	0.0019	90.01	0.0005	7.003E-05
V	51	3	He	11.106	0.2676	12763.63	0.0219	0.02486
V	51	3	He	11.005	0.2654	12577.46	0.0219	0.02486
V	51	3	He	11.233	0.2704	12765.64	0.0219	0.02486
Cr	52	3	He	0.283	0.0484	2310.26	0.0299	0.03997
Cr	52	3	He	0.314	0.0494	2340.27	0.0299	0.03997
Cr	52	3	He	0.292	0.0487	2300.27	0.0299	0.03997
Mn	55	3	He	827.655	10.6247	506682.65	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	831.515	10.6742	505828.12	0.0128	0.002639
Mn	55	3	He	829.251	10.6451	502525.77	0.0128	0.002639
Fe	57	3	He	657.374	0.3834	18282.04	0.0006	0.001429
Fe	57	3	He	695.76	0.4057	19223.32	0.0006	0.001429
Fe	57	3	He	638.205	0.3722	17571.39	0.0006	0.001429
Co	59	3	He	1.136	0.0661	3150.44	0.0563	0.002149
Co	59	3	He	1.263	0.0732	3470.55	0.0563	0.002149
Co	59	3	He	1.215	0.0706	3330.49	0.0563	0.002149
Ni	60	3	He	7.679	0.0687	5981.38	0.0086	0.002834
Ni	60	3	He	7.747	0.0693	5951.38	0.0086	0.002834
Ni	60	3	He	7.796	0.0697	5991.49	0.0086	0.002834
Cu	63	3	He	0.379	0.0145	1260.11	0.0257	0.004757
Cu	63	3	He	0.418	0.0155	1330.10	0.0257	0.004757
Cu	63	3	He	0.391	0.0148	1270.10	0.0257	0.004757
Zn	66	3	He	3.584	0.0143	1240.09	0.0029	0.003818
Zn	66	3	He	4.13	0.0158	1360.11	0.0029	0.003818
Zn	66	3	He	3.127	0.0129	1110.09	0.0029	0.003818
As	75	3	He	19.858	0.0415	3610.48	0.002	0.0008061
As	75	3	He	19.815	0.0414	3554.47	0.002	0.0008061
As	75	3	He	20.392	0.0426	3658.49	0.002	0.0008061
Sr	88	3	He	2225.044	19.9592	1716829.35	0.009	0.0009645
Sr	88	3	He	2278.344	20.4373	1722421.07	0.009	0.0009645
Sr	88	3	He	2235.5	20.053	1730804.19	0.009	0.0009645
Mo	98	3	He	12.023	0.2639	22699.12	0.0219	0.0002706
Mo	98	3	He	12.358	0.2712	22859.32	0.0219	0.0002706
Mo	98	3	He	12.813	0.2812	24271.62	0.0219	0.0002706
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0004	30.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.104	0.0006	48.00	0.0053	0
Cd	111	3	He	0.12	0.0006	54.00	0.0053	0
Cd	111	3	He	0.117	0.0006	54.00	0.0053	0
Sn	120	3	He	-0.093	0.015	1290.12	0.0158	0.01648
Sn	120	3	He	0.009	0.0166	1400.12	0.0158	0.01648
Sn	120	3	He	-0.185	0.0136	1170.10	0.0158	0.01648
Sb	121	3	He	0.318	0.005	430.02	0.0149	0.0002698
Sb	121	3	He	0.565	0.0087	730.04	0.0149	0.0002698
Sb	121	3	He	0.458	0.0071	610.04	0.0149	0.0002698
Ba	137	3	He	177.501	0.8521	73296.61	0.0048	0.0002317
Ba	137	3	He	181.436	0.871	73406.67	0.0048	0.0002317
Ba	137	3	He	176.529	0.8475	73145.10	0.0048	0.0002317
Tl	205	3	He	0.05	0.0014	540.03	0.0247	0.0001339
Tl	205	3	He	0.053	0.0014	570.03	0.0247	0.0001339
Tl	205	3	He	0.057	0.0016	620.04	0.0247	0.0001339
Pb	208	3	He	0.067	0.0033	620.04	0.0327	0.00107
Pb	208	3	He	0.064	0.0032	660.05	0.0327	0.00107
Pb	208	3	He	0.083	0.0038	810.06	0.0327	0.00107
U	238	3	He	12.199	0.601	179739.88	0.0493	7.55E-05
U	238	3	He	11.832	0.5829	176100.64	0.0493	7.55E-05
U	238	3	He	12.213	0.6017	182347.61	0.0493	7.55E-05
Sc	45	1	No Gas			2567200.74		
Sc	45	1	No Gas			2504175.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2489171.37		
Ge	72	1	No Gas			1251510.68		
Ge	72	1	No Gas			1246636.23		
Ge	72	1	No Gas			1251087.56		
Sc	45	2	H2			182553.84		
Sc	45	2	H2			184244.06		
Sc	45	2	H2			186035.43		
Ge	72	2	H2			163749.42		
Ge	72	2	H2			165094.14		
Ge	72	2	H2			164771.87		
In	115	2	H2			387666.36		
In	115	2	H2			386593.51		
In	115	2	H2			384940.62		
Sc	45	3	He			47689.31		
Sc	45	3	He			47387.90		
Sc	45	3	He			47207.02		
Ge	72	3	He			87014.49		
Ge	72	3	He			85846.88		
Ge	72	3	He			85907.26		
In	115	3	He			86025.99		
In	115	3	He			84284.95		
In	115	3	He			86317.53		
Tb	159	3	He			393169.56		
Tb	159	3	He			395839.02		
Tb	159	3	He			399512.42		
Bi	209	3	He			299072.67		
Bi	209	3	He			302100.44		
Bi	209	3	He			303061.75		

Quantitation Report

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Sample Name	410-136736-H-4-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

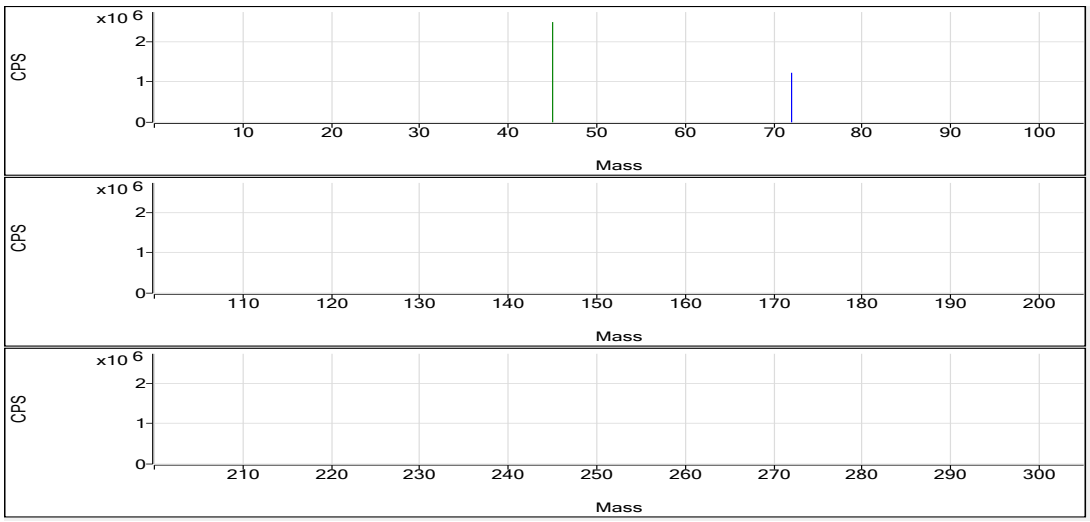
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.010	ppb	46.7	31.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.017	ppb	120.7	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	54.344	ppb	5.2	26033.50	0.5395	Pulse	0.1000	3
Mg	24	45	He	8.522	ppb	3.6	906.72	0.0188	Pulse	0.1000	3
Al	27	45	He	3.029	ppb	40.6	116.67	0.0024	Pulse	0.1000	3
K	39	45	He	7.416	ppb	93.0	19473.58	0.4037	Pulse	0.1000	3
Ca	44	45	He	58.819	ppb	41.9	323.35	0.0067	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.399	ppb	14.9	1619.44	0.0336	Pulse	0.5000	3
Cr	52	45	He	-0.061	ppb	N/A	1840.19	0.0381	Pulse	0.1000	3
Mn	55	45	He	0.247	ppb	36.7	280.01	0.0058	Pulse	0.1000	3
Fe	57	45	He	2.890	ppb	36.4	150.01	0.0031	Pulse	0.1000	3
Co	59	45	He	0.045	ppb	56.3	226.68	0.0047	Pulse	0.1000	3
Ni	60	72	He	0.206	ppb	37.7	390.02	0.0046	Pulse	0.1000	3
Cu	63	72	He	0.024	ppb	133.5	456.69	0.0054	Pulse	0.1000	3
Zn	66	72	He	2.609	ppb	17.9	966.74	0.0114	Pulse	0.1000	3
As	75	72	He	0.026	ppb	307.4	72.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.310	ppb	23.5	330.01	0.0037	Pulse	0.1000	3
Mo	98	115	He	0.015	ppb	140.2	53.33	0.0006	Pulse	0.1000	3
Ag	107	115	He	-0.006	ppb	N/A	30.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.113	ppb	N/A	1293.44	0.0147	Pulse	0.1000	3
Sb	121	115	He	0.010	ppb	224.2	36.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	-0.001	ppb	N/A	20.00	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.017	ppb	17.3	220.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	26.3	573.36	0.0014	Pulse	0.1000	3
U	238	209	He	0.022	ppb	19.1	370.02	0.0012	Pulse	0.1000	3

ISTD Table:

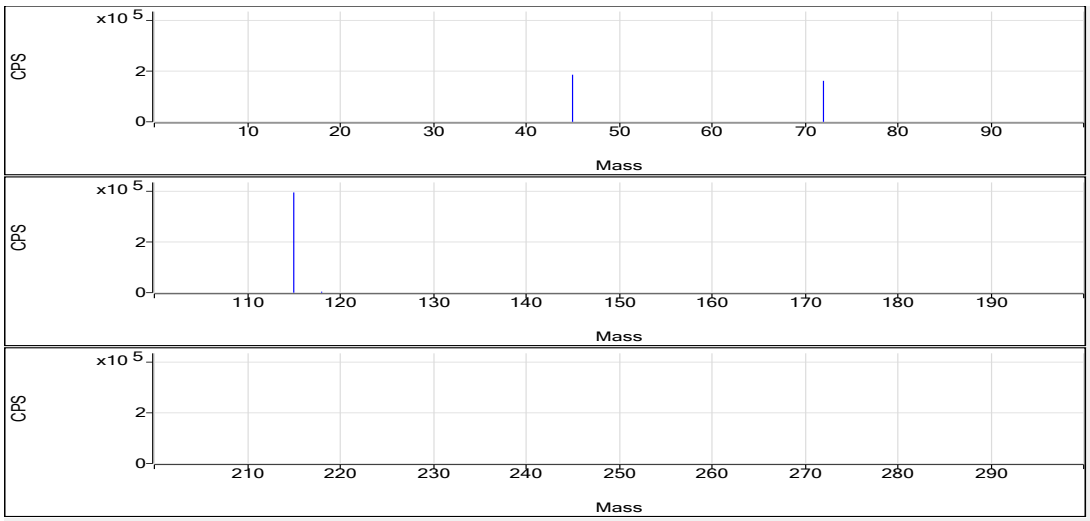
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2473968.35	0.8	103.1	Analog	0.1000	3
No Gas	Ge	72	1222519.88	0.2	106.0	Pulse	0.1000	3
H2	Sc	45	184955.70	0.5	98.9	Pulse	0.1000	3
H2	Ge	72	161026.08	0.5	98.4	Pulse	0.1000	3
H2	In	115	393623.86	0.7	101.2	Pulse	0.1000	3
He	Sc	45	48244.28	1.5	103.4	Pulse	0.1000	3
He	Ge	72	84728.05	1.0	104.4	Pulse	0.1000	3
He	In	115	88107.56	0.8	102.2	Pulse	0.1000	3
He	Tb	159	398840.67	1.5	100.1	Pulse	0.1000	3
He	Bi	209	312481.85	1.0	101.0	Pulse	0.1000	3

No Gas

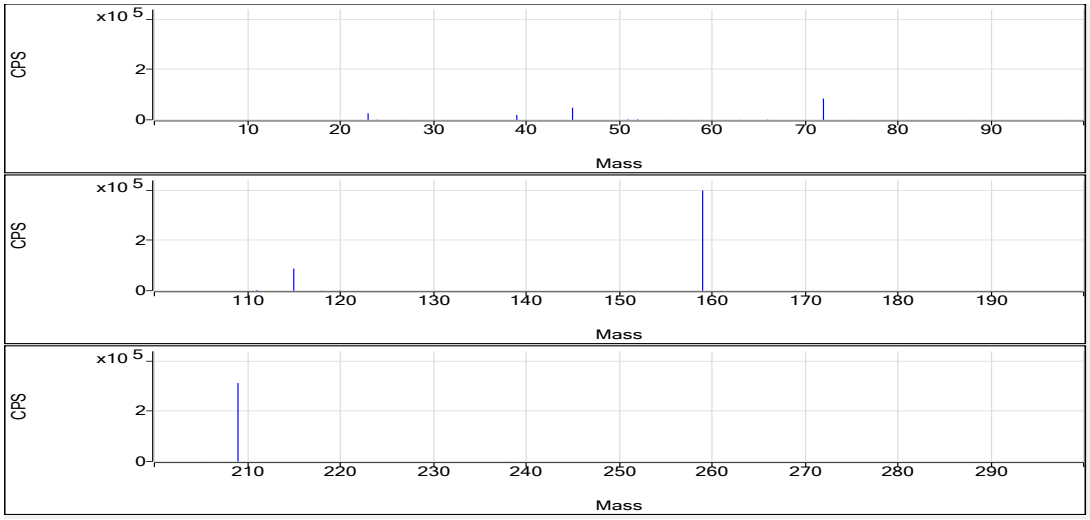


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	24.00	0.0008	4.685E-06
Se	78	2	H2	0.04	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.001	0	2.00	0.0004	1.219E-05
Na	23	3	He	57.277	0.55	26965.15	0.0036	0.3452
Na	23	3	He	54.115	0.5387	25642.84	0.0036	0.3452
Na	23	3	He	51.639	0.5299	25492.50	0.0036	0.3452
Mg	24	3	He	8.852	0.0194	950.06	0.0018	0.003497
Mg	24	3	He	8.238	0.0183	870.05	0.0018	0.003497
Mg	24	3	He	8.477	0.0187	900.06	0.0018	0.003497
Al	27	3	He	3.085	0.0024	120.01	0.0006	0.0006432
Al	27	3	He	1.773	0.0017	80.00	0.0006	0.0006432
Al	27	3	He	4.23	0.0031	150.01	0.0006	0.0006432
K	39	3	He	4.311	0.4001	19613.74	0.0012	0.3951
K	39	3	He	15.322	0.4129	19653.80	0.0012	0.3951
K	39	3	He	2.613	0.3981	19153.21	0.0012	0.3951
Ca	44	3	He	86.64	0.0086	420.02	0.0001	0.002715
Ca	44	3	He	50.004	0.0061	290.01	0.0001	0.002715
Ca	44	3	He	39.814	0.0054	260.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.261	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.344	0.0324	1588.10	0.0219	0.02486
V	51	3	He	0.462	0.035	1664.11	0.0219	0.02486
V	51	3	He	0.39	0.0334	1606.10	0.0219	0.02486
Cr	52	3	He	-0.006	0.0398	1950.20	0.0299	0.03997
Cr	52	3	He	-0.072	0.0378	1800.18	0.0299	0.03997
Cr	52	3	He	-0.106	0.0368	1770.18	0.0299	0.03997
Mn	55	3	He	0.208	0.0053	260.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.351	0.0071	340.02	0.0128	0.002639
Mn	55	3	He	0.183	0.005	240.01	0.0128	0.002639
Fe	57	3	He	2.808	0.0031	150.01	0.0006	0.001429
Fe	57	3	He	1.88	0.0025	120.01	0.0006	0.001429
Fe	57	3	He	3.981	0.0037	180.01	0.0006	0.001429
Co	59	3	He	0.067	0.0059	290.01	0.0563	0.002149
Co	59	3	He	0.051	0.005	240.01	0.0563	0.002149
Co	59	3	He	0.017	0.0031	150.01	0.0563	0.002149
Ni	60	3	He	0.226	0.0048	400.03	0.0086	0.002834
Ni	60	3	He	0.121	0.0039	330.02	0.0086	0.002834
Ni	60	3	He	0.272	0.0052	440.02	0.0086	0.002834
Cu	63	3	He	-0.013	0.0044	370.02	0.0257	0.004757
Cu	63	3	He	0.043	0.0059	500.03	0.0257	0.004757
Cu	63	3	He	0.044	0.0059	500.03	0.0257	0.004757
Zn	66	3	He	2.829	0.0121	1010.08	0.0029	0.003818
Zn	66	3	He	2.071	0.0098	840.06	0.0029	0.003818
Zn	66	3	He	2.927	0.0123	1050.07	0.0029	0.003818
As	75	3	He	0.108	0.001	86.00	0.002	0.0008061
As	75	3	He	0.019	0.0008	72.00	0.002	0.0008061
As	75	3	He	-0.049	0.0007	60.00	0.002	0.0008061
Sr	88	3	He	0.3	0.0037	320.01	0.009	0.0009645
Sr	88	3	He	0.388	0.0044	390.02	0.009	0.0009645
Sr	88	3	He	0.244	0.0031	280.01	0.009	0.0009645
Mo	98	3	He	-0.002	0.0002	20.00	0.0219	0.0002706
Mo	98	3	He	0.008	0.0005	40.00	0.0219	0.0002706
Mo	98	3	He	0.039	0.0011	100.00	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.019	0.0168	1470.13	0.0158	0.01648
Sn	120	3	He	-0.011	0.0163	1430.13	0.0158	0.01648
Sn	120	3	He	-0.345	0.011	980.07	0.0158	0.01648
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.036	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	0.047	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.014	0.0005	190.01	0.0247	0.0001339
Tl	205	3	He	0.02	0.0006	250.01	0.0247	0.0001339
Tl	205	3	He	0.017	0.0006	220.01	0.0247	0.0001339
Pb	208	3	He	0.012	0.0015	340.02	0.0327	0.00107
Pb	208	3	He	0.008	0.0013	250.01	0.0327	0.00107
Pb	208	3	He	0.014	0.0015	360.02	0.0327	0.00107
U	238	3	He	0.019	0.001	320.02	0.0493	7.55E-05
U	238	3	He	0.021	0.0011	340.02	0.0493	7.55E-05
U	238	3	He	0.027	0.0014	450.02	0.0493	7.55E-05
Sc	45	1	No Gas			2455700.59		
Sc	45	1	No Gas			2494708.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2471495.74		
Ge	72	1	No Gas			1225666.15		
Ge	72	1	No Gas			1221312.01		
Ge	72	1	No Gas			1220581.47		
Sc	45	2	H2			184962.73		
Sc	45	2	H2			185944.78		
Sc	45	2	H2			183959.59		
Ge	72	2	H2			161109.83		
Ge	72	2	H2			161738.30		
Ge	72	2	H2			160230.10		
In	115	2	H2			390600.70		
In	115	2	H2			396394.76		
In	115	2	H2			393876.13		
Sc	45	3	He			49023.75		
Sc	45	3	He			47598.64		
Sc	45	3	He			48110.44		
Ge	72	3	He			83785.71		
Ge	72	3	He			85294.86		
Ge	72	3	He			85103.58		
In	115	3	He			87655.01		
In	115	3	He			87756.48		
In	115	3	He			88934.03		
Tb	159	3	He			399806.20		
Tb	159	3	He			404133.74		
Tb	159	3	He			392582.06		
Bi	209	3	He			309688.35		
Bi	209	3	He			311867.01		
Bi	209	3	He			315890.19		

Quantitation Report

Data File Name	204SMPL.d
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Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

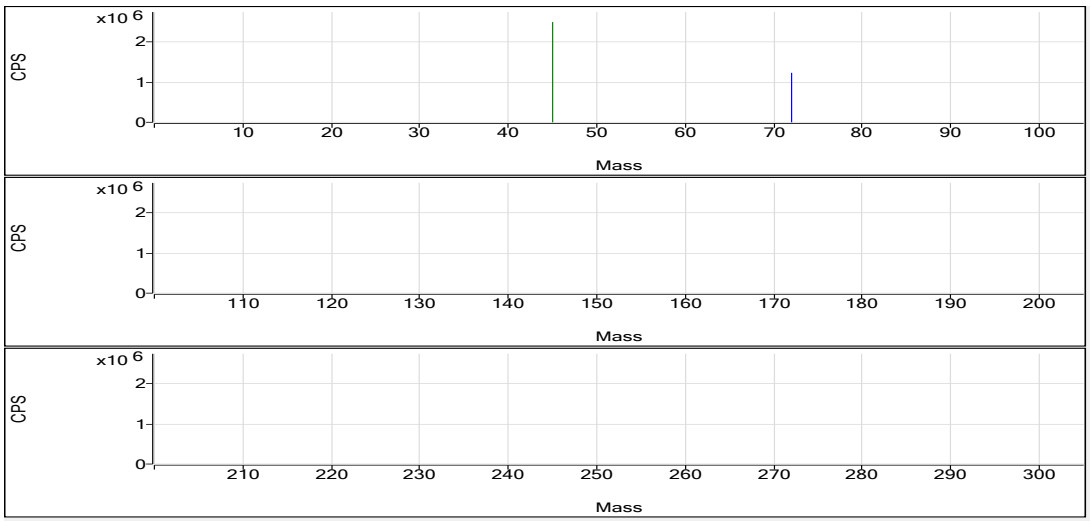
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.043	ppb	30.7	94.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	1.794	ppb	4.6	125.11	0.0008	Pulse	1.5000	3
Na	23	45	He	53504.838	ppb	2.7	9160231.95	191.7346	Analog	0.1000	3
Mg	24	45	He	55908.800	ppb	0.9	4794084.93	100.3219	Analog	0.1000	3
Al	27	45	He	445.258	ppb	7.4	12462.82	0.2611	Pulse	0.1000	3
K	39	45	He	13794.913	ppb	2.4	786205.69	16.4569	Pulse	0.1000	3
Ca	44	45	He	303030.943	ppb	2.9	977970.14	20.4730	Pulse	0.1000	3
Ti	47	45	He	11.903	ppb	34.6	306.68	0.0065	Pulse	0.1000	3
V	51	45	He	5.383	ppb	5.2	6806.97	0.1425	Pulse	0.5000	3
Cr	52	45	He	0.415	ppb	11.5	2503.65	0.0524	Pulse	0.1000	3
Mn	55	45	He	316.132	ppb	1.9	193970.56	4.0598	Pulse	0.1000	3
Fe	57	45	He	559.163	ppb	5.6	15578.92	0.3263	Pulse	0.1000	3
Co	59	45	He	1.506	ppb	6.2	4154.05	0.0869	Pulse	0.1000	3
Ni	60	72	He	8.233	ppb	4.3	6338.26	0.0735	Pulse	0.1000	3
Cu	63	72	He	0.860	ppb	9.2	2313.60	0.0268	Pulse	0.1000	3
Zn	66	72	He	9.748	ppb	7.1	2777.01	0.0322	Pulse	0.1000	3
As	75	72	He	3.139	ppb	5.7	624.02	0.0072	Pulse	0.5000	3
Sr	88	115	He	3347.466	ppb	0.4	2569325.01	30.0271	Analog	0.1000	3
Mo	98	115	He	12.483	ppb	1.6	23443.49	0.2740	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	527.1	60.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.198	ppb	2.7	90.67	0.0011	Pulse	0.5000	3
Sn	120	115	He	0.164	ppb	113.0	1630.68	0.0191	Pulse	0.1000	3
Sb	121	115	He	0.470	ppb	6.6	620.04	0.0072	Pulse	0.1000	3
Ba	137	115	He	194.942	ppb	1.5	80070.12	0.9358	Pulse	0.1000	3
Tl	205	159	He	0.102	ppb	19.1	1056.75	0.0027	Pulse	0.1000	3
Pb	208	159	He	0.588	ppb	4.1	8061.30	0.0203	Pulse	0.1000	3
U	238	209	He	20.477	ppb	1.1	307578.51	1.0088	Pulse	0.1000	3

ISTD Table:

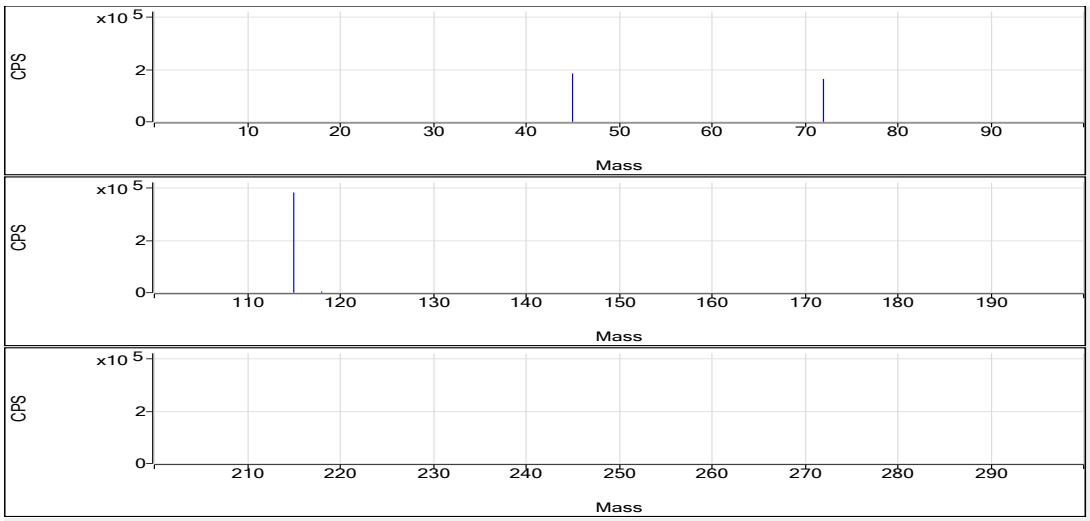
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2505852.72	1.9	104.5	Analog	0.1000	3
No Gas	Ge	72	1237454.64	0.9	107.3	Pulse	0.1000	3
H2	Sc	45	185633.27	0.4	99.3	Pulse	0.1000	3
H2	Ge	72	164608.86	0.7	100.5	Pulse	0.1000	3
H2	In	115	384524.36	0.1	98.8	Pulse	0.1000	3
He	Sc	45	47795.97	3.0	102.5	Pulse	0.1000	3
He	Ge	72	86280.24	1.8	106.3	Pulse	0.1000	3
He	In	115	85565.10	0.7	99.3	Pulse	0.1000	3
He	Tb	159	397054.26	0.7	99.6	Pulse	0.1000	3
He	Bi	209	304911.70	1.0	98.6	Pulse	0.1000	3

No Gas

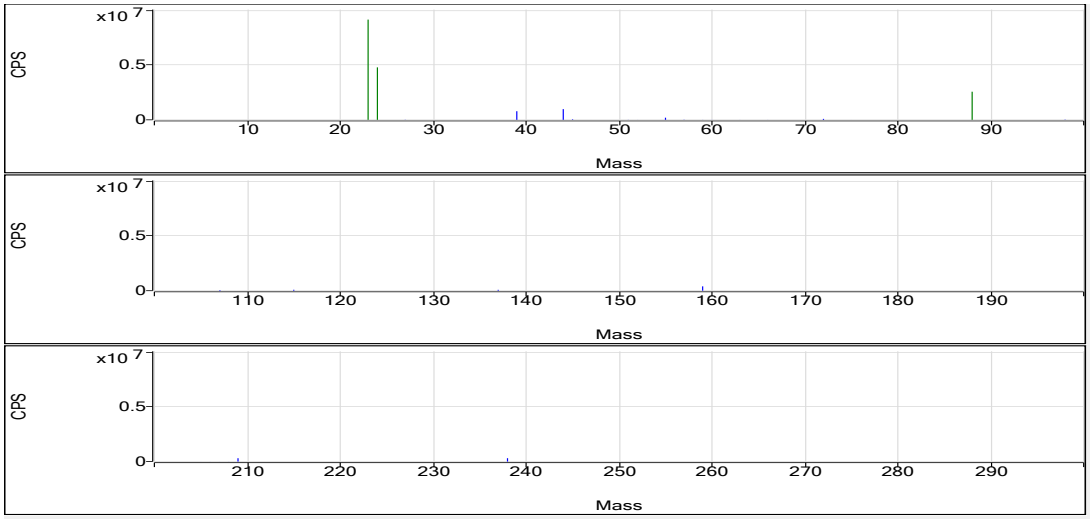


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.038	0	86.00	0.0008	4.685E-06
Be	9	1	No Gas	0.058	0	124.00	0.0008	4.685E-06
Be	9	1	No Gas	0.033	0	74.00	0.0008	4.685E-06
Se	78	2	H2	1.736	0.0007	122.00	0.0004	1.219E-05
Se	78	2	H2	1.889	0.0008	130.67	0.0004	1.219E-05
Se	78	2	H2	1.755	0.0007	122.67	0.0004	1.219E-05
Na	23	3	He	52714.195	188.9064	9319601.74	0.0036	0.3452
Na	23	3	He	52630.511	188.6071	8977481.74	0.0036	0.3452
Na	23	3	He	55169.808	197.6903	9183612.36	0.0036	0.3452
Mg	24	3	He	55376.486	99.3667	4902207.43	0.0018	0.003497
Mg	24	3	He	55938.688	100.3755	4777759.93	0.0018	0.003497
Mg	24	3	He	56411.227	101.2234	4702287.43	0.0018	0.003497
Al	27	3	He	413.462	0.2425	11965.25	0.0006	0.0006432
Al	27	3	He	442.959	0.2598	12365.69	0.0006	0.0006432
Al	27	3	He	479.354	0.2811	13057.53	0.0006	0.0006432
K	39	3	He	13453.021	16.0588	792251.55	0.0012	0.3951
K	39	3	He	13832.565	16.5007	785414.05	0.0012	0.3951
K	39	3	He	14099.154	16.8111	780951.47	0.0012	0.3951
Ca	44	3	He	294713.096	19.9111	982306.24	0.0001	0.002715
Ca	44	3	He	302299.751	20.4236	972141.94	0.0001	0.002715
Ca	44	3	He	312079.984	21.0843	979462.25	0.0001	0.002715
Ti	47	3	He	7.42	0.0041	200.01	0.0005	7.003E-05
Ti	47	3	He	12.782	0.0069	330.02	0.0005	7.003E-05
Ti	47	3	He	15.506	0.0084	390.02	0.0005	7.003E-05
V	51	3	He	5.086	0.136	6711.59	0.0219	0.02486
V	51	3	He	5.428	0.1435	6831.64	0.0219	0.02486
V	51	3	He	5.635	0.1481	6877.67	0.0219	0.02486
Cr	52	3	He	0.378	0.0513	2530.31	0.0299	0.03997
Cr	52	3	He	0.469	0.054	2570.35	0.0299	0.03997
Cr	52	3	He	0.398	0.0519	2410.29	0.0299	0.03997
Mn	55	3	He	310.545	3.9881	196752.91	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	315.178	4.0476	192660.70	0.0128	0.002639
Mn	55	3	He	322.674	4.1438	192498.08	0.0128	0.002639
Fe	57	3	He	531.984	0.3105	15318.68	0.0006	0.001429
Fe	57	3	He	551.83	0.322	15328.60	0.0006	0.001429
Fe	57	3	He	593.675	0.3463	16089.47	0.0006	0.001429
Co	59	3	He	1.547	0.0892	4400.79	0.0563	0.002149
Co	59	3	He	1.399	0.0809	3850.60	0.0563	0.002149
Co	59	3	He	1.572	0.0906	4210.76	0.0563	0.002149
Ni	60	3	He	7.876	0.0704	6191.54	0.0086	0.002834
Ni	60	3	He	8.59	0.0766	6501.64	0.0086	0.002834
Ni	60	3	He	8.233	0.0735	6321.59	0.0086	0.002834
Cu	63	3	He	0.794	0.0251	2210.24	0.0257	0.004757
Cu	63	3	He	0.838	0.0263	2230.23	0.0257	0.004757
Cu	63	3	He	0.947	0.0291	2500.34	0.0257	0.004757
Zn	66	3	He	9.082	0.0303	2660.31	0.0029	0.003818
Zn	66	3	He	9.691	0.032	2720.36	0.0029	0.003818
Zn	66	3	He	10.47	0.0343	2950.37	0.0029	0.003818
As	75	3	He	2.949	0.0068	602.02	0.002	0.0008061
As	75	3	He	3.308	0.0076	644.02	0.002	0.0008061
As	75	3	He	3.159	0.0073	626.02	0.002	0.0008061
Sr	88	3	He	3355.362	30.098	2582275.74	0.009	0.0009645
Sr	88	3	He	3355.62	30.1003	2590052.15	0.009	0.0009645
Sr	88	3	He	3331.415	29.8832	2535647.15	0.009	0.0009645
Mo	98	3	He	12.703	0.2788	23920.92	0.0219	0.0002706
Mo	98	3	He	12.422	0.2726	23460.20	0.0219	0.0002706
Mo	98	3	He	12.323	0.2705	22949.34	0.0219	0.0002706
Ag	107	3	He	0.012	0.0012	100.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0004	30.00	0.0465	0.0006206
Cd	111	3	He	0.196	0.001	90.00	0.0053	0
Cd	111	3	He	0.204	0.0011	94.00	0.0053	0
Cd	111	3	He	0.194	0.001	88.00	0.0053	0
Sn	120	3	He	-0.025	0.0161	1380.12	0.0158	0.01648
Sn	120	3	He	0.171	0.0192	1650.17	0.0158	0.01648
Sn	120	3	He	0.346	0.0219	1861.75	0.0158	0.01648
Sb	121	3	He	0.453	0.007	600.03	0.0149	0.0002698
Sb	121	3	He	0.451	0.007	600.04	0.0149	0.0002698
Sb	121	3	He	0.506	0.0078	660.04	0.0149	0.0002698
Ba	137	3	He	196.909	0.9453	81099.53	0.0048	0.0002317
Ba	137	3	He	191.533	0.9195	79117.28	0.0048	0.0002317
Ba	137	3	He	196.383	0.9427	79993.55	0.0048	0.0002317
Tl	205	3	He	0.106	0.0028	1100.09	0.0247	0.0001339
Tl	205	3	He	0.119	0.0031	1230.10	0.0247	0.0001339
Tl	205	3	He	0.081	0.0021	840.05	0.0247	0.0001339
Pb	208	3	He	0.59	0.0204	4150.90	0.0327	0.00107
Pb	208	3	He	0.562	0.0195	4150.76	0.0327	0.00107
Pb	208	3	He	0.61	0.021	4280.90	0.0327	0.00107
U	238	3	He	20.448	1.0073	304424.41	0.0493	7.55E-05
U	238	3	He	20.27	0.9986	307712.12	0.0493	7.55E-05
U	238	3	He	20.714	1.0204	310599.00	0.0493	7.55E-05
Sc	45	1	No Gas			2545543.87		
Sc	45	1	No Gas			2518609.02		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2453405.28		
Ge	72	1	No Gas			1237856.70		
Ge	72	1	No Gas			1248078.50		
Ge	72	1	No Gas			1226428.73		
Sc	45	2	H2			186329.20		
Sc	45	2	H2			185650.49		
Sc	45	2	H2			184920.11		
Ge	72	2	H2			165680.84		
Ge	72	2	H2			163323.45		
Ge	72	2	H2			164822.30		
In	115	2	H2			384129.84		
In	115	2	H2			384467.77		
In	115	2	H2			384975.46		
Sc	45	3	He			49334.49		
Sc	45	3	He			47598.86		
Sc	45	3	He			46454.55		
Ge	72	3	He			87910.06		
Ge	72	3	He			84921.74		
Ge	72	3	He			86008.93		
In	115	3	He			85803.53		
In	115	3	He			86055.45		
In	115	3	He			84859.17		
Tb	159	3	He			397687.65		
Tb	159	3	He			399458.70		
Tb	159	3	He			394016.44		
Bi	209	3	He			302205.82		
Bi	209	3	He			308150.11		
Bi	209	3	He			304379.16		

Quantitation Report

Data File Name	205SMPL.d
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Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

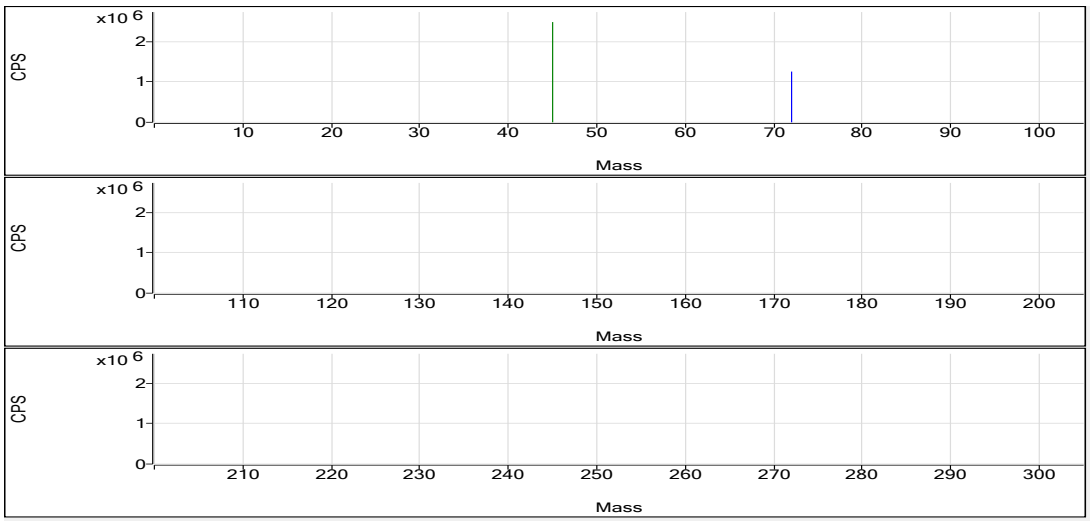
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.014	ppb	53.4	38.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.070	ppb	20.7	6.89	0.0000	Pulse	1.5000	3
Na	23	45	He	13908.524	ppb	2.1	2408601.89	50.0966	Analog	0.1000	3
Mg	24	45	He	7955.964	ppb	1.3	686586.92	14.2791	Pulse	0.1000	3
Al	27	45	He	12.610	ppb	24.2	386.70	0.0080	Pulse	0.1000	3
K	39	45	He	1003.989	ppb	1.1	75210.19	1.5640	Pulse	0.1000	3
Ca	44	45	He	21181.590	ppb	2.6	68926.60	1.4336	Pulse	0.1000	3
Ti	47	45	He	0.381	ppb	152.2	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.365	ppb	7.0	1579.43	0.0328	Pulse	0.5000	3
Cr	52	45	He	-0.005	ppb	N/A	1916.86	0.0398	Pulse	0.1000	3
Mn	55	45	He	12.829	ppb	1.6	8045.84	0.1673	Pulse	0.1000	3
Fe	57	45	He	61.629	ppb	4.5	1790.17	0.0372	Pulse	0.1000	3
Co	59	45	He	0.095	ppb	19.2	360.02	0.0075	Pulse	0.1000	3
Ni	60	72	He	1.165	ppb	11.6	1123.42	0.0128	Pulse	0.1000	3
Cu	63	72	He	0.160	ppb	24.8	776.71	0.0089	Pulse	0.1000	3
Zn	66	72	He	5.804	ppb	13.1	1813.51	0.0207	Pulse	0.1000	3
As	75	72	He	0.242	ppb	27.5	114.00	0.0013	Pulse	0.5000	3
Sr	88	115	He	86.155	ppb	1.2	67407.92	0.7738	Pulse	0.1000	3
Mo	98	115	He	0.071	ppb	13.1	160.01	0.0018	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.014	ppb	34.4	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.009	ppb	N/A	1423.46	0.0163	Pulse	0.1000	3
Sb	121	115	He	0.121	ppb	12.1	180.01	0.0021	Pulse	0.1000	3
Ba	137	115	He	5.088	ppb	5.8	2146.90	0.0247	Pulse	0.1000	3
Tl	205	159	He	0.015	ppb	33.7	206.68	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.033	ppb	13.6	866.72	0.0022	Pulse	0.1000	3
U	238	209	He	0.027	ppb	15.7	436.69	0.0014	Pulse	0.1000	3

ISTD Table:

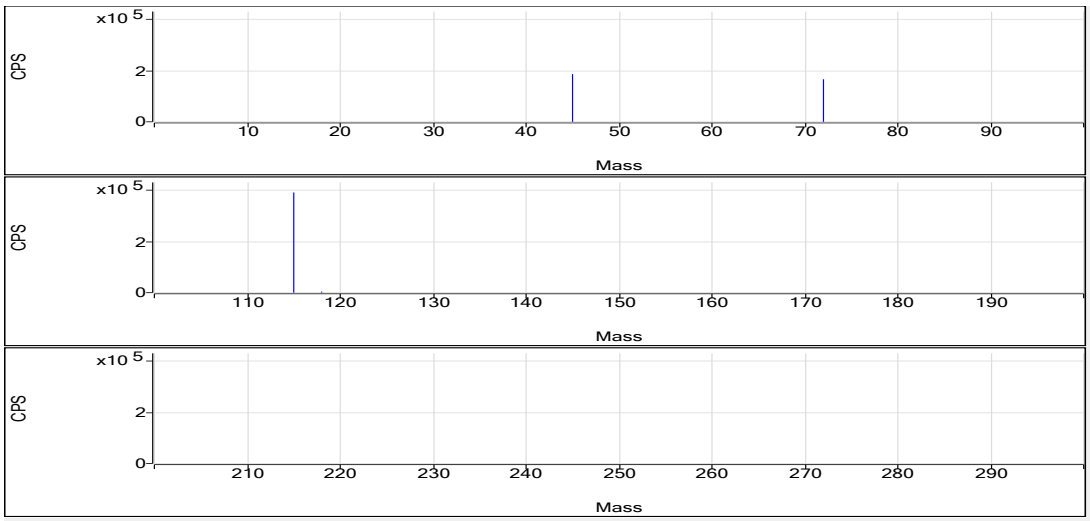
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2488311.16	1.4	103.7	Analog	0.1000	3
No Gas	Ge	72	1259314.23	1.3	109.2	Pulse	0.1000	3
H2	Sc	45	186428.84	2.1	99.7	Pulse	0.1000	3
H2	Ge	72	166323.03	1.5	101.6	Pulse	0.1000	3
H2	In	115	391644.20	0.3	100.7	Pulse	0.1000	3
He	Sc	45	48090.35	1.7	103.1	Pulse	0.1000	3
He	Ge	72	87557.92	0.6	107.8	Pulse	0.1000	3
He	In	115	87115.41	0.7	101.1	Pulse	0.1000	3
He	Tb	159	401214.88	0.7	100.7	Pulse	0.1000	3
He	Bi	209	308833.59	0.2	99.9	Pulse	0.1000	3

No Gas

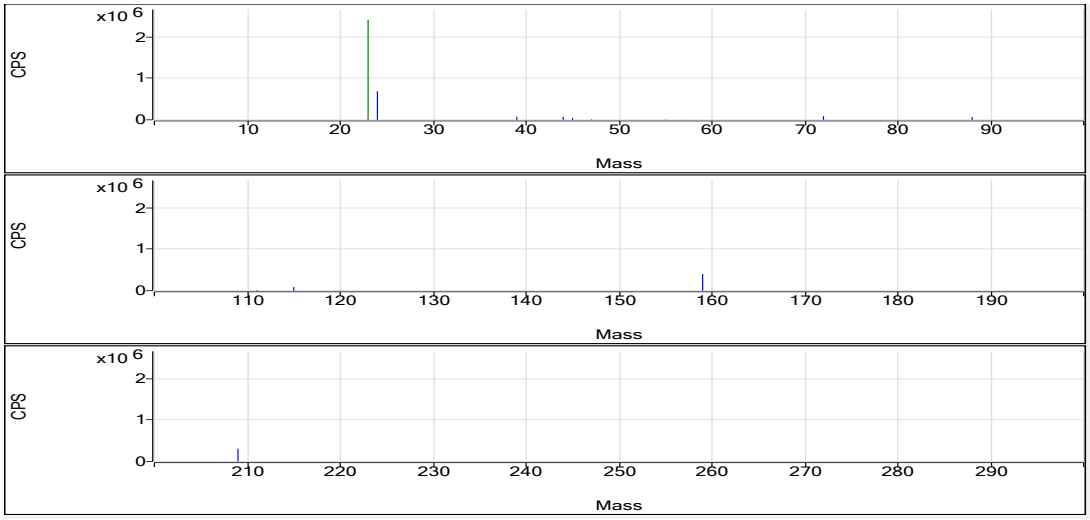


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.02	0	50.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	22.00	0.0008	4.685E-06
Se	78	2	H2	0.086	0	8.00	0.0004	1.219E-05
Se	78	2	H2	0.058	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.065	0	6.67	0.0004	1.219E-05
Na	23	3	He	13965.249	50.2995	2406806.21	0.0036	0.3452
Na	23	3	He	14164.733	51.0131	2418927.00	0.0036	0.3452
Na	23	3	He	13595.591	48.9773	2400072.46	0.0036	0.3452
Mg	24	3	He	7989.607	14.3394	686133.82	0.0018	0.003497
Mg	24	3	He	8034.784	14.4205	683787.18	0.0018	0.003497
Mg	24	3	He	7843.502	14.0773	689839.76	0.0018	0.003497
Al	27	3	He	11.761	0.0075	360.02	0.0006	0.0006432
Al	27	3	He	10.076	0.0065	310.02	0.0006	0.0006432
Al	27	3	He	15.994	0.01	490.05	0.0006	0.0006432
K	39	3	He	1014.863	1.5767	75444.20	0.0012	0.3951
K	39	3	He	1004.068	1.5641	74167.55	0.0012	0.3951
K	39	3	He	993.035	1.5513	76018.82	0.0012	0.3951
Ca	44	3	He	20875.749	1.4129	67607.07	0.0001	0.002715
Ca	44	3	He	21806.46	1.4758	69978.32	0.0001	0.002715
Ca	44	3	He	20862.561	1.412	69194.41	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.262	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.01	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	0.388	0.0334	1596.10	0.0219	0.02486
V	51	3	He	0.37	0.0329	1562.09	0.0219	0.02486
V	51	3	He	0.338	0.0322	1580.10	0.0219	0.02486
Cr	52	3	He	-0.016	0.0395	1890.20	0.0299	0.03997
Cr	52	3	He	-0.102	0.0369	1750.18	0.0299	0.03997
Cr	52	3	He	0.103	0.0431	2110.21	0.0299	0.03997
Mn	55	3	He	12.907	0.1683	8052.49	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	12.599	0.1643	7792.41	0.0128	0.002639
Mn	55	3	He	12.98	0.1692	8292.61	0.0128	0.002639
Fe	57	3	He	59.417	0.0359	1720.16	0.0006	0.001429
Fe	57	3	He	64.7	0.039	1850.19	0.0006	0.001429
Fe	57	3	He	60.77	0.0367	1800.17	0.0006	0.001429
Co	59	3	He	0.114	0.0086	410.02	0.0563	0.002149
Co	59	3	He	0.078	0.0065	310.02	0.0563	0.002149
Co	59	3	He	0.092	0.0073	360.02	0.0563	0.002149
Ni	60	3	He	1.018	0.0116	1020.07	0.0086	0.002834
Ni	60	3	He	1.192	0.0131	1140.10	0.0086	0.002834
Ni	60	3	He	1.285	0.0139	1210.10	0.0086	0.002834
Cu	63	3	He	0.115	0.0077	680.04	0.0257	0.004757
Cu	63	3	He	0.176	0.0093	810.05	0.0257	0.004757
Cu	63	3	He	0.19	0.0096	840.05	0.0257	0.004757
Zn	66	3	He	5.352	0.0194	1710.16	0.0029	0.003818
Zn	66	3	He	6.68	0.0233	2030.23	0.0029	0.003818
Zn	66	3	He	5.38	0.0195	1700.15	0.0029	0.003818
As	75	3	He	0.271	0.0014	120.00	0.002	0.0008061
As	75	3	He	0.289	0.0014	122.00	0.002	0.0008061
As	75	3	He	0.166	0.0011	100.00	0.002	0.0008061
Sr	88	3	He	86.665	0.7783	67522.59	0.009	0.0009645
Sr	88	3	He	85.007	0.7635	66255.84	0.009	0.0009645
Sr	88	3	He	86.792	0.7795	68445.32	0.009	0.0009645
Mo	98	3	He	0.067	0.0017	150.01	0.0219	0.0002706
Mo	98	3	He	0.082	0.0021	180.01	0.0219	0.0002706
Mo	98	3	He	0.066	0.0017	150.01	0.0219	0.0002706
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Sn	120	3	He	-0.05	0.0157	1360.11	0.0158	0.01648
Sn	120	3	He	-0.007	0.0164	1420.13	0.0158	0.01648
Sn	120	3	He	0.031	0.017	1490.14	0.0158	0.01648
Sb	121	3	He	0.106	0.0018	160.01	0.0149	0.0002698
Sb	121	3	He	0.121	0.0021	180.01	0.0149	0.0002698
Sb	121	3	He	0.135	0.0023	200.01	0.0149	0.0002698
Ba	137	3	He	5.26	0.0255	2210.25	0.0048	0.0002317
Ba	137	3	He	5.258	0.0255	2210.24	0.0048	0.0002317
Ba	137	3	He	4.745	0.023	2020.21	0.0048	0.0002317
Tl	205	3	He	0.015	0.0005	200.01	0.0247	0.0001339
Tl	205	3	He	0.021	0.0007	260.01	0.0247	0.0001339
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Pb	208	3	He	0.03	0.002	520.03	0.0327	0.00107
Pb	208	3	He	0.032	0.0021	410.02	0.0327	0.00107
Pb	208	3	He	0.038	0.0023	500.04	0.0327	0.00107
U	238	3	He	0.024	0.0013	390.02	0.0493	7.55E-05
U	238	3	He	0.025	0.0013	410.02	0.0493	7.55E-05
U	238	3	He	0.032	0.0017	510.03	0.0493	7.55E-05
Sc	45	1	No Gas			2529878.40		
Sc	45	1	No Gas			2468513.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2466541.99		
Ge	72	1	No Gas			1277517.32		
Ge	72	1	No Gas			1247823.50		
Ge	72	1	No Gas			1252601.86		
Sc	45	2	H2			185388.86		
Sc	45	2	H2			183191.23		
Sc	45	2	H2			190706.44		
Ge	72	2	H2			165915.04		
Ge	72	2	H2			163993.69		
Ge	72	2	H2			169060.37		
In	115	2	H2			390367.38		
In	115	2	H2			392797.92		
In	115	2	H2			391767.30		
Sc	45	3	He			47849.47		
Sc	45	3	He			47417.76		
Sc	45	3	He			49003.82		
Ge	72	3	He			88151.45		
Ge	72	3	He			87256.21		
Ge	72	3	He			87266.09		
In	115	3	He			86760.12		
In	115	3	He			86791.56		
In	115	3	He			87817.24		
Tb	159	3	He			400918.74		
Tb	159	3	He			398745.23		
Tb	159	3	He			403980.66		
Bi	209	3	He			309567.71		
Bi	209	3	He			308595.66		
Bi	209	3	He			308337.40		

Quantitation Report

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Acq Time	8/10/2023 5:42:36 PM
Sample Name	410-136722-Q-11-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

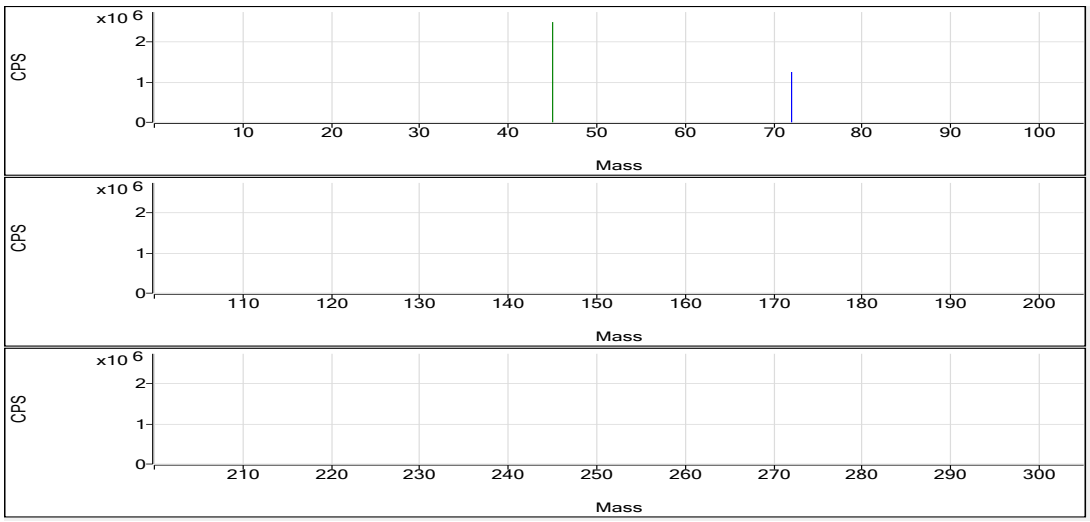
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.010	ppb	48.4	30.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.067	ppb	51.3	6.67	0.0000	Pulse	1.5000	3
Na	23	45	He	14624.720	ppb	1.1	2565285.43	52.6585	Analog	0.1000	3
Mg	24	45	He	7331.577	ppb	0.4	641031.80	13.1587	Pulse	0.1000	3
Al	27	45	He	22.069	ppb	10.2	660.04	0.0136	Pulse	0.1000	3
K	39	45	He	776.739	ppb	3.5	63301.16	1.2994	Pulse	0.1000	3
Ca	44	45	He	19144.550	ppb	1.9	63127.77	1.2960	Pulse	0.1000	3
Ti	47	45	He	0.253	ppb	152.3	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.320	ppb	7.4	1552.09	0.0319	Pulse	0.5000	3
Cr	52	45	He	0.137	ppb	29.7	2146.90	0.0441	Pulse	0.1000	3
Mn	55	45	He	3.670	ppb	12.2	2423.62	0.0497	Pulse	0.1000	3
Fe	57	45	He	372.934	ppb	5.1	10624.25	0.2181	Pulse	0.1000	3
Co	59	45	He	0.094	ppb	11.8	363.35	0.0075	Pulse	0.1000	3
Ni	60	72	He	1.256	ppb	21.3	1206.76	0.0136	Pulse	0.1000	3
Cu	63	72	He	0.149	ppb	27.2	760.04	0.0086	Pulse	0.1000	3
Zn	66	72	He	3.455	ppb	17.5	1230.10	0.0139	Pulse	0.1000	3
As	75	72	He	0.205	ppb	65.4	108.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	76.368	ppb	1.6	60151.51	0.6860	Pulse	0.1000	3
Mo	98	115	He	0.067	ppb	19.6	153.34	0.0017	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	1.305	ppb	6.0	612.02	0.0070	Pulse	0.5000	3
Sn	120	115	He	-0.049	ppb	N/A	1376.78	0.0157	Pulse	0.1000	3
Sb	121	115	He	0.023	ppb	69.9	53.33	0.0006	Pulse	0.1000	3
Ba	137	115	He	5.831	ppb	12.7	2473.65	0.0282	Pulse	0.1000	3
Tl	205	159	He	0.012	ppb	15.3	170.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.056	ppb	5.5	1160.07	0.0029	Pulse	0.1000	3
U	238	209	He	0.016	ppb	25.0	270.01	0.0009	Pulse	0.1000	3

ISTD Table:

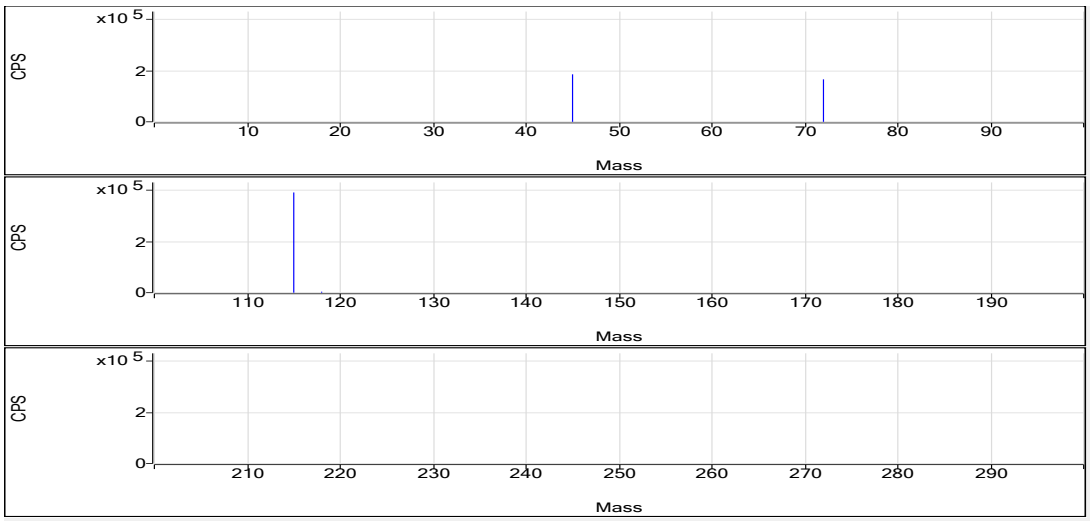
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2503345.54	1.5	104.4	Analog	0.1000	3
No Gas	Ge	72	1256022.53	1.1	108.9	Pulse	0.1000	3
H2	Sc	45	186055.47	0.8	99.5	Pulse	0.1000	3
H2	Ge	72	166365.19	1.2	101.6	Pulse	0.1000	3
H2	In	115	392646.39	0.3	100.9	Pulse	0.1000	3
He	Sc	45	48715.75	0.8	104.4	Pulse	0.1000	3
He	Ge	72	88690.94	0.9	109.2	Pulse	0.1000	3
He	In	115	87686.51	0.2	101.7	Pulse	0.1000	3
He	Tb	159	400147.82	0.7	100.4	Pulse	0.1000	3
He	Bi	209	312128.49	0.5	100.9	Pulse	0.1000	3

No Gas

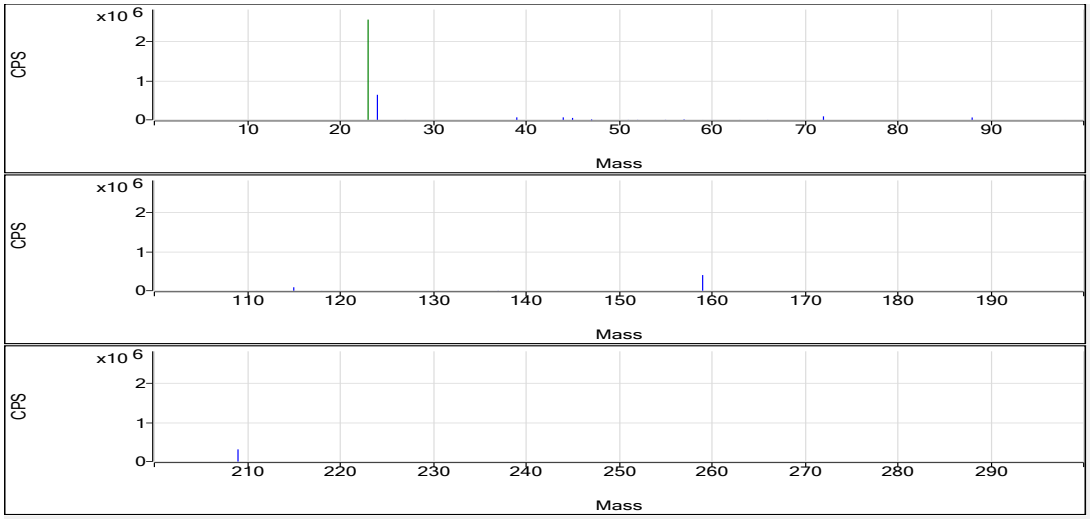


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.014	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	34.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	20.00	0.0008	4.685E-06
Se	78	2	H2	0.029	0	4.00	0.0004	1.219E-05
Se	78	2	H2	0.096	0.0001	8.67	0.0004	1.219E-05
Se	78	2	H2	0.075	0	7.33	0.0004	1.219E-05
Na	23	3	He	14793.7	53.2629	2600992.77	0.0036	0.3452
Na	23	3	He	14486.347	52.1635	2557753.24	0.0036	0.3452
Na	23	3	He	14594.114	52.549	2537110.27	0.0036	0.3452
Mg	24	3	He	7299.485	13.1011	639767.92	0.0018	0.003497
Mg	24	3	He	7345.179	13.1831	646412.30	0.0018	0.003497
Mg	24	3	He	7350.068	13.1919	636915.19	0.0018	0.003497
Al	27	3	He	19.903	0.0123	600.03	0.0006	0.0006432
Al	27	3	He	21.91	0.0135	660.05	0.0006	0.0006432
Al	27	3	He	24.393	0.0149	720.05	0.0006	0.0006432
K	39	3	He	803.276	1.3303	64964.67	0.0012	0.3951
K	39	3	He	749.541	1.2678	62163.37	0.0012	0.3951
K	39	3	He	777.4	1.3002	62775.44	0.0012	0.3951
Ca	44	3	He	19154.425	1.2966	63318.55	0.0001	0.002715
Ca	44	3	He	18772.773	1.2709	62314.12	0.0001	0.002715
Ca	44	3	He	19506.454	1.3204	63750.64	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.249	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.641	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.322	0.0319	1558.09	0.0219	0.02486
V	51	3	He	0.296	0.0313	1536.09	0.0219	0.02486
V	51	3	He	0.343	0.0324	1562.09	0.0219	0.02486
Cr	52	3	He	0.183	0.0455	2220.26	0.0299	0.03997
Cr	52	3	He	0.109	0.0432	2120.22	0.0299	0.03997
Cr	52	3	He	0.118	0.0435	2100.22	0.0299	0.03997
Mn	55	3	He	4.183	0.0563	2750.36	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3.482	0.0473	2320.26	0.0128	0.002639
Mn	55	3	He	3.345	0.0456	2200.23	0.0128	0.002639
Fe	57	3	He	392.118	0.2292	11194.77	0.0006	0.001429
Fe	57	3	He	354.317	0.2073	10163.83	0.0006	0.001429
Fe	57	3	He	372.367	0.2178	10514.14	0.0006	0.001429
Co	59	3	He	0.086	0.007	340.01	0.0563	0.002149
Co	59	3	He	0.107	0.0082	400.02	0.0563	0.002149
Co	59	3	He	0.091	0.0072	350.02	0.0563	0.002149
Ni	60	3	He	1.219	0.0133	1170.09	0.0086	0.002834
Ni	60	3	He	1.009	0.0115	1030.07	0.0086	0.002834
Ni	60	3	He	1.54	0.0161	1420.11	0.0086	0.002834
Cu	63	3	He	0.195	0.0098	860.05	0.0257	0.004757
Cu	63	3	He	0.128	0.008	720.04	0.0257	0.004757
Cu	63	3	He	0.123	0.0079	700.04	0.0257	0.004757
Zn	66	3	He	4.153	0.0159	1400.13	0.0029	0.003818
Zn	66	3	He	3.059	0.0127	1140.08	0.0029	0.003818
Zn	66	3	He	3.153	0.013	1150.09	0.0029	0.003818
As	75	3	He	0.106	0.001	90.00	0.002	0.0008061
As	75	3	He	0.151	0.0011	100.00	0.002	0.0008061
As	75	3	He	0.357	0.0015	136.00	0.002	0.0008061
Sr	88	3	He	76.698	0.6889	60349.59	0.009	0.0009645
Sr	88	3	He	77.374	0.695	61111.76	0.009	0.0009645
Sr	88	3	He	75.032	0.674	58993.19	0.009	0.0009645
Mo	98	3	He	0.081	0.0021	180.01	0.0219	0.0002706
Mo	98	3	He	0.055	0.0015	130.00	0.0219	0.0002706
Mo	98	3	He	0.066	0.0017	150.01	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	1.396	0.0075	654.02	0.0053	0
Cd	111	3	He	1.255	0.0067	590.02	0.0053	0
Cd	111	3	He	1.265	0.0068	592.02	0.0053	0
Sn	120	3	He	-0.009	0.0163	1430.12	0.0158	0.01648
Sn	120	3	He	-0.049	0.0157	1380.11	0.0158	0.01648
Sn	120	3	He	-0.088	0.0151	1320.12	0.0158	0.01648
Sb	121	3	He	0.028	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.035	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Ba	137	3	He	6.613	0.032	2800.39	0.0048	0.0002317
Ba	137	3	He	5.142	0.0249	2190.25	0.0048	0.0002317
Ba	137	3	He	5.737	0.0278	2430.31	0.0048	0.0002317
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Tl	205	3	He	0.014	0.0005	190.01	0.0247	0.0001339
Pb	208	3	He	0.054	0.0028	610.05	0.0327	0.00107
Pb	208	3	He	0.059	0.003	690.04	0.0327	0.00107
Pb	208	3	He	0.055	0.0029	610.04	0.0327	0.00107
U	238	3	He	0.014	0.0008	240.01	0.0493	7.55E-05
U	238	3	He	0.013	0.0007	230.01	0.0493	7.55E-05
U	238	3	He	0.021	0.0011	340.02	0.0493	7.55E-05
Sc	45	1	No Gas			2513694.18		
Sc	45	1	No Gas			2535558.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2460784.03		
Ge	72	1	No Gas			1253534.28		
Ge	72	1	No Gas			1270502.17		
Ge	72	1	No Gas			1244031.15		
Sc	45	2	H2			184264.20		
Sc	45	2	H2			186738.90		
Sc	45	2	H2			187163.30		
Ge	72	2	H2			164494.92		
Ge	72	2	H2			166177.95		
Ge	72	2	H2			168422.71		
In	115	2	H2			393395.85		
In	115	2	H2			391246.44		
In	115	2	H2			393296.87		
Sc	45	3	He			48833.06		
Sc	45	3	He			49033.36		
Sc	45	3	He			48280.83		
Ge	72	3	He			88009.87		
Ge	72	3	He			89590.63		
Ge	72	3	He			88472.33		
In	115	3	He			87606.52		
In	115	3	He			87937.58		
In	115	3	He			87535.86		
Tb	159	3	He			403452.88		
Tb	159	3	He			398041.32		
Tb	159	3	He			398949.25		
Bi	209	3	He			313925.56		
Bi	209	3	He			311239.21		
Bi	209	3	He			311220.70		

Quantitation Report

Data File Name	207SMPL.d
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Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

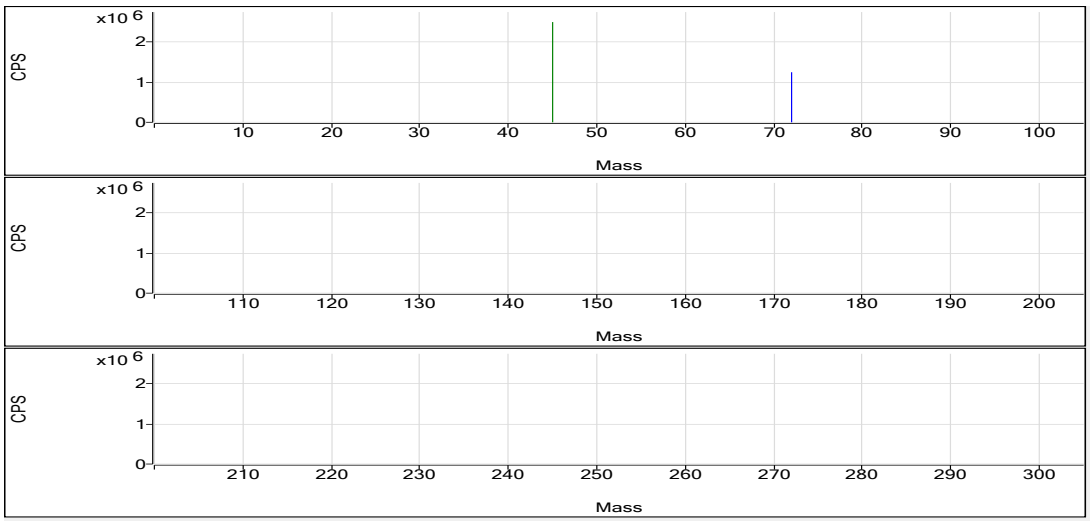
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.213	ppb	16.1	419.34	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.100	ppb	47.1	8.89	0.0001	Pulse	1.5000	3
Na	23	45	He	24612.974	ppb	2.3	4183687.85	88.3870	Analog	0.1000	3
Mg	24	45	He	8273.446	ppb	1.3	702950.95	14.8487	Pulse	0.1000	3
Al	27	45	He	1153.105	ppb	3.2	31959.02	0.6752	Pulse	0.1000	3
K	39	45	He	1296.109	ppb	2.0	90140.82	1.9042	Pulse	0.1000	3
Ca	44	45	He	51220.800	ppb	1.9	163913.82	3.4628	Pulse	0.1000	3
Ti	47	45	He	26.481	ppb	16.4	676.71	0.0143	Pulse	0.1000	3
V	51	45	He	1.720	ppb	4.0	2956.98	0.0625	Pulse	0.5000	3
Cr	52	45	He	2.095	ppb	12.0	4857.65	0.1027	Pulse	0.1000	3
Mn	55	45	He	1840.387	ppb	2.3	1118184.90	23.6219	Pulse	0.1000	3
Fe	57	45	He	22249.846	ppb	2.1	611974.52	12.9284	Pulse	0.1000	3
Co	59	45	He	5.858	ppb	4.7	15702.33	0.3318	Pulse	0.1000	3
Ni	60	72	He	4.632	ppb	7.8	3657.26	0.0426	Pulse	0.1000	3
Cu	63	72	He	7.832	ppb	3.5	17664.86	0.2058	Pulse	0.1000	3
Zn	66	72	He	52.986	ppb	4.2	13573.56	0.1581	Pulse	0.1000	3
As	75	72	He	5.996	ppb	6.3	1123.39	0.0131	Pulse	0.5000	3
Sr	88	115	He	255.740	ppb	2.6	198074.03	2.2949	Pulse	0.1000	3
Mo	98	115	He	0.420	ppb	8.0	816.72	0.0095	Pulse	0.1000	3
Ag	107	115	He	0.015	ppb	23.3	113.34	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.830	ppb	6.4	383.34	0.0044	Pulse	0.5000	3
Sn	120	115	He	0.141	ppb	94.7	1613.49	0.0187	Pulse	0.1000	3
Sb	121	115	He	0.567	ppb	17.0	750.05	0.0087	Pulse	0.1000	3
Ba	137	115	He	27.491	ppb	2.7	11411.88	0.1322	Pulse	0.1000	3
Tl	205	159	He	0.040	ppb	16.3	446.69	0.0011	Pulse	0.1000	3
Pb	208	159	He	16.467	ppb	0.7	214393.23	0.5400	Pulse	0.1000	3
U	238	209	He	0.203	ppb	10.7	3134.48	0.0101	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2505264.81	0.6	104.4	Analog	0.1000	3
No Gas	Ge	72	1251200.29	0.2	108.5	Pulse	0.1000	3
H2	Sc	45	182097.34	1.4	97.4	Pulse	0.1000	3
H2	Ge	72	164358.95	0.7	100.4	Pulse	0.1000	3
H2	In	115	386584.42	0.7	99.4	Pulse	0.1000	3
He	Sc	45	47347.89	2.0	101.5	Pulse	0.1000	3
He	Ge	72	85841.05	0.8	105.7	Pulse	0.1000	3
He	In	115	86337.44	2.0	100.2	Pulse	0.1000	3
He	Tb	159	396997.90	0.3	99.6	Pulse	0.1000	3
He	Bi	209	310331.91	0.6	100.3	Pulse	0.1000	3

No Gas



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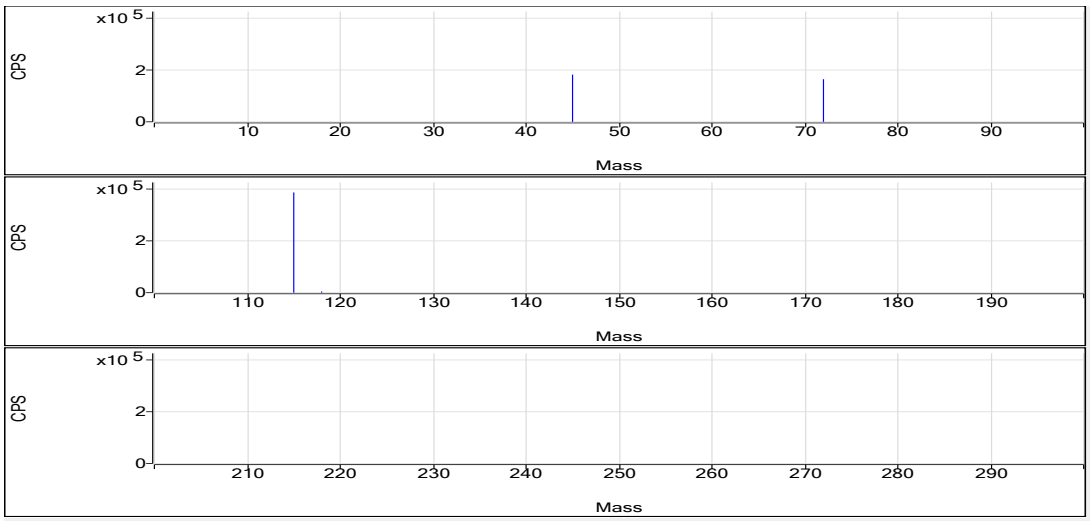
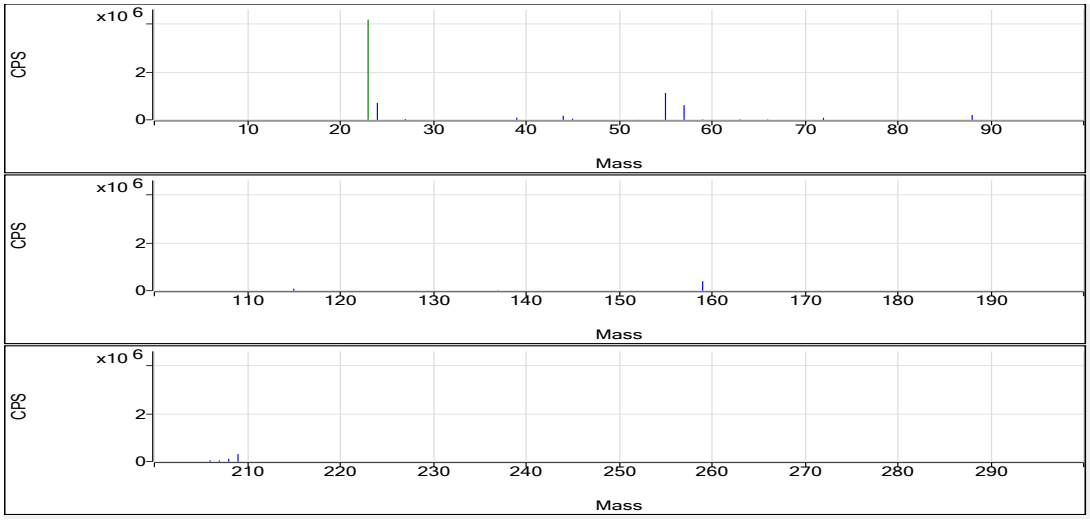


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.201	0.0002	394.01	0.0008	4.685E-06
Be	9	1	No Gas	0.186	0.0001	368.01	0.0008	4.685E-06
Be	9	1	No Gas	0.252	0.0002	496.01	0.0008	4.685E-06
Se	78	2	H2	0.068	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.155	0.0001	12.67	0.0004	1.219E-05
Se	78	2	H2	0.079	0	7.33	0.0004	1.219E-05
Na	23	3	He	24812.231	89.0997	4181123.06	0.0036	0.3452
Na	23	3	He	23973.009	86.0978	4168097.13	0.0036	0.3452
Na	23	3	He	25053.681	89.9634	4201843.37	0.0036	0.3452
Mg	24	3	He	8363.337	15.01	704364.99	0.0018	0.003497
Mg	24	3	He	8159.18	14.6437	708918.74	0.0018	0.003497
Mg	24	3	He	8297.819	14.8925	695569.13	0.0018	0.003497
Al	27	3	He	1180.048	0.691	32426.68	0.0006	0.0006432
Al	27	3	He	1111.642	0.651	31515.33	0.0006	0.0006432
Al	27	3	He	1167.624	0.6837	31935.05	0.0006	0.0006432
K	39	3	He	1295.684	1.9037	89332.06	0.0012	0.3951
K	39	3	He	1270.184	1.874	90721.42	0.0012	0.3951
K	39	3	He	1322.46	1.9348	90368.99	0.0012	0.3951
Ca	44	3	He	51779.862	3.5005	164267.65	0.0001	0.002715
Ca	44	3	He	50070.451	3.3851	163875.27	0.0001	0.002715
Ca	44	3	He	51812.088	3.5027	163598.54	0.0001	0.002715
Ti	47	3	He	21.699	0.0117	550.03	0.0005	7.003E-05
Ti	47	3	He	27.569	0.0149	720.04	0.0005	7.003E-05
Ti	47	3	He	30.176	0.0163	760.05	0.0005	7.003E-05
V	51	3	He	1.746	0.063	2958.31	0.0219	0.02486
V	51	3	He	1.643	0.0608	2942.32	0.0219	0.02486
V	51	3	He	1.772	0.0636	2970.32	0.0219	0.02486
Cr	52	3	He	2.288	0.1085	5091.09	0.0299	0.03997
Cr	52	3	He	1.812	0.0942	4560.87	0.0299	0.03997
Cr	52	3	He	2.184	0.1054	4920.99	0.0299	0.03997
Mn	55	3	He	1881.839	24.1539	1133455.37	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1798.834	23.0887	1117749.59	0.0128	0.002639
Mn	55	3	He	1840.487	23.6232	1103349.75	0.0128	0.002639
Fe	57	3	He	22615.822	13.141	616659.56	0.0006	0.001429
Fe	57	3	He	21726.332	12.6242	611154.05	0.0006	0.001429
Fe	57	3	He	22407.385	13.0199	608109.95	0.0006	0.001429
Co	59	3	He	6.088	0.3448	16179.49	0.0563	0.002149
Co	59	3	He	5.551	0.3146	15228.54	0.0563	0.002149
Co	59	3	He	5.934	0.3361	15698.97	0.0563	0.002149
Ni	60	3	He	4.699	0.0432	3690.58	0.0086	0.002834
Ni	60	3	He	4.24	0.0392	3350.49	0.0086	0.002834
Ni	60	3	He	4.957	0.0454	3930.70	0.0086	0.002834
Cu	63	3	He	8.039	0.2111	18052.06	0.0257	0.004757
Cu	63	3	He	7.939	0.2086	17811.74	0.0257	0.004757
Cu	63	3	He	7.519	0.1978	17130.77	0.0257	0.004757
Zn	66	3	He	52.942	0.158	13506.86	0.0029	0.003818
Zn	66	3	He	50.792	0.1517	12956.25	0.0029	0.003818
Zn	66	3	He	55.225	0.1646	14257.57	0.0029	0.003818
As	75	3	He	6.308	0.0137	1174.06	0.002	0.0008061
As	75	3	He	6.099	0.0133	1136.05	0.002	0.0008061
As	75	3	He	5.58	0.0122	1060.05	0.002	0.0008061
Sr	88	3	He	263.355	2.3632	199833.94	0.009	0.0009645
Sr	88	3	He	251.599	2.2578	198638.67	0.009	0.0009645
Sr	88	3	He	252.266	2.2637	195749.47	0.009	0.0009645
Mo	98	3	He	0.457	0.0103	870.06	0.0219	0.0002706
Mo	98	3	He	0.392	0.0089	780.04	0.0219	0.0002706
Mo	98	3	He	0.41	0.0093	800.05	0.0219	0.0002706
Ag	107	3	He	0.015	0.0013	110.00	0.0465	0.0006206
Ag	107	3	He	0.018	0.0015	130.01	0.0465	0.0006206
Ag	107	3	He	0.012	0.0012	100.00	0.0465	0.0006206
Cd	111	3	He	0.796	0.0043	360.01	0.0053	0
Cd	111	3	He	0.804	0.0043	378.01	0.0053	0
Cd	111	3	He	0.891	0.0048	412.01	0.0053	0
Sn	120	3	He	0.26	0.0206	1740.17	0.0158	0.01648
Sn	120	3	He	0.166	0.0191	1680.16	0.0158	0.01648
Sn	120	3	He	-0.003	0.0164	1420.13	0.0158	0.01648
Sb	121	3	He	0.635	0.0097	820.05	0.0149	0.0002698
Sb	121	3	He	0.609	0.0093	820.06	0.0149	0.0002698
Sb	121	3	He	0.457	0.0071	610.04	0.0149	0.0002698
Ba	137	3	He	27.71	0.1332	11265.08	0.0048	0.0002317
Ba	137	3	He	28.1	0.1351	11885.68	0.0048	0.0002317
Ba	137	3	He	26.662	0.1282	11084.89	0.0048	0.0002317
Tl	205	3	He	0.048	0.0013	520.03	0.0247	0.0001339
Tl	205	3	He	0.035	0.001	400.02	0.0247	0.0001339
Tl	205	3	He	0.037	0.0011	420.02	0.0247	0.0001339
Pb	208	3	He	16.418	0.5384	113680.50	0.0327	0.00107
Pb	208	3	He	16.381	0.5372	115819.87	0.0327	0.00107
Pb	208	3	He	16.603	0.5445	115546.87	0.0327	0.00107
U	238	3	He	0.189	0.0094	2910.45	0.0493	7.55E-05
U	238	3	He	0.193	0.0096	2960.46	0.0493	7.55E-05
U	238	3	He	0.228	0.0113	3532.53	0.0493	7.55E-05
Sc	45	1	No Gas			2491233.24		
Sc	45	1	No Gas			2505277.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2519283.40		
Ge	72	1	No Gas			1249394.12		
Ge	72	1	No Gas			1249895.53		
Ge	72	1	No Gas			1254311.23		
Sc	45	2	H2			179323.20		
Sc	45	2	H2			182947.89		
Sc	45	2	H2			184020.92		
Ge	72	2	H2			164728.40		
Ge	72	2	H2			165277.71		
Ge	72	2	H2			163070.74		
In	115	2	H2			389295.42		
In	115	2	H2			384077.06		
In	115	2	H2			386380.78		
Sc	45	3	He			46926.33		
Sc	45	3	He			48411.20		
Sc	45	3	He			46706.14		
Ge	72	3	He			85505.48		
Ge	72	3	He			85405.08		
Ge	72	3	He			86612.59		
In	115	3	He			84567.36		
In	115	3	He			87988.46		
In	115	3	He			86478.02		
Tb	159	3	He			397142.85		
Tb	159	3	He			397998.86		
Tb	159	3	He			395851.99		
Bi	209	3	He			310882.24		
Bi	209	3	He			308234.57		
Bi	209	3	He			311878.92		

Quantitation Report

Data File Name	208SMPL.d
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Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

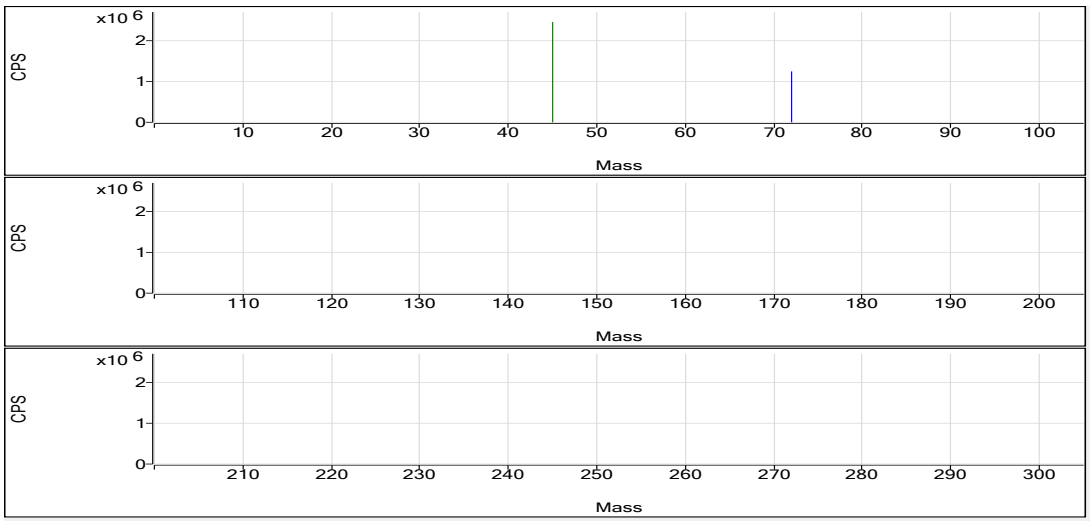
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.051	ppb	11.4	107.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.124	ppb	25.3	10.44	0.0001	Pulse	1.5000	3
Na	23	45	He	31165.346	ppb	3.0	5265187.53	111.8251	Analog	0.1000	3
Mg	24	45	He	966.830	ppb	4.6	81824.02	1.7383	Pulse	0.1000	3
Al	27	45	He	270.665	ppb	5.7	7482.94	0.1590	Pulse	0.1000	3
K	39	45	He	55.980	ppb	2.9	21676.65	0.4602	Pulse	0.1000	3
Ca	44	45	He	12335.596	ppb	1.7	39370.72	0.8360	Pulse	0.1000	3
Ti	47	45	He	3.564	ppb	8.7	93.33	0.0020	Pulse	0.1000	3
V	51	45	He	2.221	ppb	6.8	3455.77	0.0734	Pulse	0.5000	3
Cr	52	45	He	0.507	ppb	14.8	2597.00	0.0552	Pulse	0.1000	3
Mn	55	45	He	680.743	ppb	2.8	411458.77	8.7392	Pulse	0.1000	3
Fe	57	45	He	2359.675	ppb	2.8	64615.53	1.3724	Pulse	0.1000	3
Co	59	45	He	5.716	ppb	5.2	15245.15	0.3239	Pulse	0.1000	3
Ni	60	72	He	3.109	ppb	8.8	2550.32	0.0295	Pulse	0.1000	3
Cu	63	72	He	1.338	ppb	1.6	3373.84	0.0391	Pulse	0.1000	3
Zn	66	72	He	3.841	ppb	14.2	1293.45	0.0150	Pulse	0.1000	3
As	75	72	He	2.558	ppb	8.3	522.01	0.0060	Pulse	0.5000	3
Sr	88	115	He	65.863	ppb	2.3	51551.72	0.5917	Pulse	0.1000	3
Mo	98	115	He	0.164	ppb	6.2	336.68	0.0039	Pulse	0.1000	3
Ag	107	115	He	0.015	ppb	27.4	116.67	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.600	ppb	14.5	279.34	0.0032	Pulse	0.5000	3
Sn	120	115	He	-0.054	ppb	N/A	1363.45	0.0156	Pulse	0.1000	3
Sb	121	115	He	0.180	ppb	15.3	256.68	0.0029	Pulse	0.1000	3
Ba	137	115	He	14.785	ppb	3.2	6205.00	0.0712	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	5.1	276.68	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.797	ppb	0.9	10752.14	0.0271	Pulse	0.1000	3
U	238	209	He	0.152	ppb	4.6	2363.65	0.0075	Pulse	0.1000	3

ISTD Table:

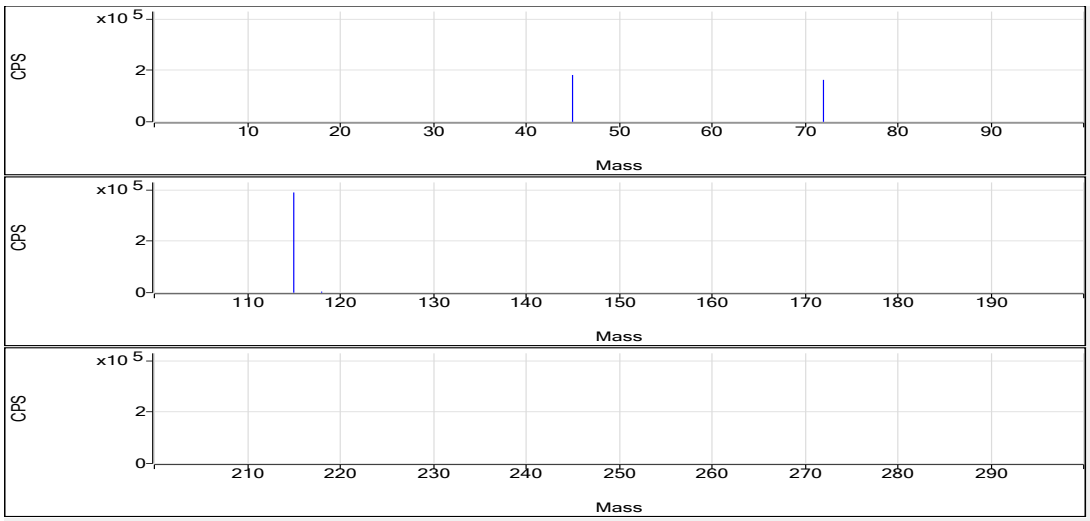
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2454455.64	1.0	102.3	Analog	0.1000	3
No Gas	Ge	72	1246434.51	0.5	108.1	Pulse	0.1000	3
H2	Sc	45	182178.99	0.6	97.4	Pulse	0.1000	3
H2	Ge	72	163230.10	0.7	99.7	Pulse	0.1000	3
H2	In	115	389916.99	0.6	100.2	Pulse	0.1000	3
He	Sc	45	47100.59	2.1	101.0	Pulse	0.1000	3
He	Ge	72	86310.30	1.7	106.3	Pulse	0.1000	3
He	In	115	87136.01	2.1	101.1	Pulse	0.1000	3
He	Tb	159	396153.83	0.2	99.4	Pulse	0.1000	3
He	Bi	209	313512.89	0.9	101.4	Pulse	0.1000	3

No Gas

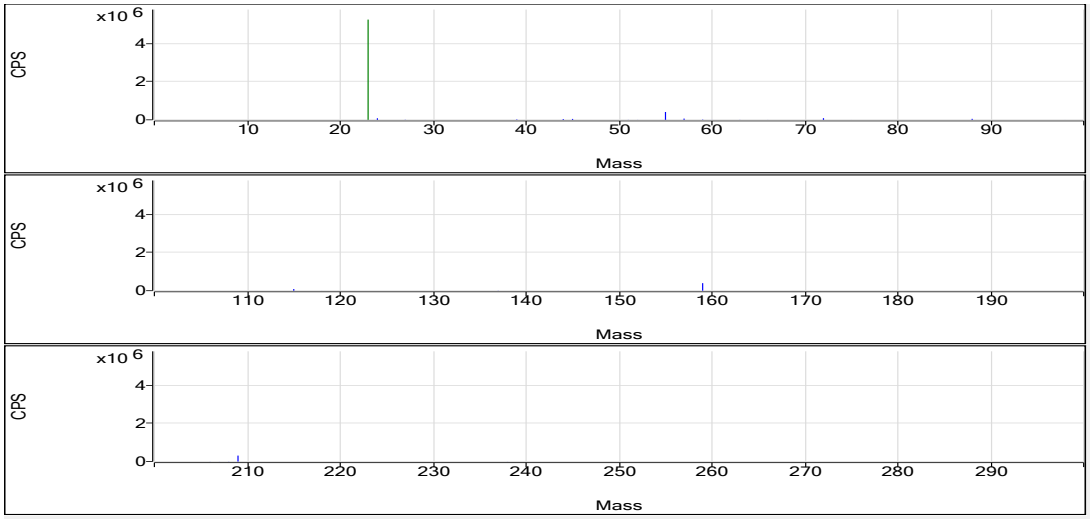


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.053	0	112.00	0.0008	4.685E-06
Be	9	1	No Gas	0.045	0	94.00	0.0008	4.685E-06
Be	9	1	No Gas	0.056	0	116.00	0.0008	4.685E-06
Se	78	2	H2	0.088	0	8.00	0.0004	1.219E-05
Se	78	2	H2	0.138	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.146	0.0001	12.00	0.0004	1.219E-05
Na	23	3	He	31243.711	112.1054	5341728.05	0.0036	0.3452
Na	23	3	He	32048.082	114.9827	5283861.80	0.0036	0.3452
Na	23	3	He	30204.244	108.3872	5169972.74	0.0036	0.3452
Mg	24	3	He	954.654	1.7165	81787.56	0.0018	0.003497
Mg	24	3	He	1016.042	1.8266	83938.91	0.0018	0.003497
Mg	24	3	He	929.794	1.6718	79745.58	0.0018	0.003497
Al	27	3	He	257.261	0.1511	7202.15	0.0006	0.0006432
Al	27	3	He	287.696	0.169	7764.10	0.0006	0.0006432
Al	27	3	He	267.038	0.1569	7482.56	0.0006	0.0006432
K	39	3	He	54.658	0.4587	21856.96	0.0012	0.3951
K	39	3	He	57.774	0.4623	21245.91	0.0012	0.3951
K	39	3	He	55.508	0.4597	21927.07	0.0012	0.3951
Ca	44	3	He	12438.578	0.843	40166.54	0.0001	0.002715
Ca	44	3	He	12478.971	0.8457	38862.59	0.0001	0.002715
Ca	44	3	He	12089.237	0.8194	39083.02	0.0001	0.002715
Ti	47	3	He	3.387	0.0019	90.00	0.0005	7.003E-05
Ti	47	3	He	3.922	0.0022	100.00	0.0005	7.003E-05
Ti	47	3	He	3.384	0.0019	90.00	0.0005	7.003E-05
V	51	3	He	2.233	0.0737	3510.44	0.0219	0.02486
V	51	3	He	2.365	0.0766	3518.45	0.0219	0.02486
V	51	3	He	2.064	0.07	3338.41	0.0219	0.02486
Cr	52	3	He	0.446	0.0533	2540.32	0.0299	0.03997
Cr	52	3	He	0.591	0.0577	2650.32	0.0299	0.03997
Cr	52	3	He	0.486	0.0545	2600.35	0.0299	0.03997
Mn	55	3	He	669.21	8.5912	409363.28	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	702.894	9.0235	414661.20	0.0128	0.002639
Mn	55	3	He	670.124	8.6029	410351.83	0.0128	0.002639
Fe	57	3	He	2303.289	1.3396	63831.67	0.0006	0.001429
Fe	57	3	He	2433.171	1.4151	65027.87	0.0006	0.001429
Fe	57	3	He	2342.565	1.3624	64987.06	0.0006	0.001429
Co	59	3	He	5.696	0.3227	15378.56	0.0563	0.002149
Co	59	3	He	6.024	0.3412	15679.11	0.0563	0.002149
Co	59	3	He	5.429	0.3077	14677.79	0.0563	0.002149
Ni	60	3	He	3.391	0.0319	2810.39	0.0086	0.002834
Ni	60	3	He	3.093	0.0294	2520.30	0.0086	0.002834
Ni	60	3	He	2.844	0.0272	2320.28	0.0086	0.002834
Cu	63	3	He	1.334	0.039	3430.51	0.0257	0.004757
Cu	63	3	He	1.318	0.0386	3310.51	0.0257	0.004757
Cu	63	3	He	1.361	0.0397	3380.51	0.0257	0.004757
Zn	66	3	He	3.413	0.0138	1210.11	0.0029	0.003818
Zn	66	3	He	3.654	0.0145	1240.11	0.0029	0.003818
Zn	66	3	He	4.456	0.0168	1430.13	0.0029	0.003818
As	75	3	He	2.658	0.0063	550.01	0.002	0.0008061
As	75	3	He	2.315	0.0055	476.01	0.002	0.0008061
As	75	3	He	2.701	0.0063	540.01	0.002	0.0008061
Sr	88	3	He	64.095	0.5759	50812.34	0.009	0.0009645
Sr	88	3	He	66.966	0.6016	51183.53	0.009	0.0009645
Sr	88	3	He	66.529	0.5977	52659.30	0.009	0.0009645
Mo	98	3	He	0.174	0.0041	360.02	0.0219	0.0002706
Mo	98	3	He	0.165	0.0039	330.01	0.0219	0.0002706
Mo	98	3	He	0.153	0.0036	320.02	0.0219	0.0002706
Ag	107	3	He	0.016	0.0014	120.01	0.0465	0.0006206
Ag	107	3	He	0.02	0.0015	130.01	0.0465	0.0006206
Ag	107	3	He	0.011	0.0011	100.00	0.0465	0.0006206
Cd	111	3	He	0.636	0.0034	300.01	0.0053	0
Cd	111	3	He	0.664	0.0035	302.01	0.0053	0
Cd	111	3	He	0.501	0.0027	236.00	0.0053	0
Sn	120	3	He	-0.003	0.0164	1450.13	0.0158	0.01648
Sn	120	3	He	-0.224	0.0129	1100.08	0.0158	0.01648
Sn	120	3	He	0.064	0.0175	1540.15	0.0158	0.01648
Sb	121	3	He	0.15	0.0025	220.01	0.0149	0.0002698
Sb	121	3	He	0.188	0.0031	260.01	0.0149	0.0002698
Sb	121	3	He	0.203	0.0033	290.02	0.0149	0.0002698
Ba	137	3	He	15.329	0.0738	6511.84	0.0048	0.0002317
Ba	137	3	He	14.43	0.0695	5911.55	0.0048	0.0002317
Ba	137	3	He	14.595	0.0703	6191.60	0.0048	0.0002317
Tl	205	3	He	0.024	0.0007	290.01	0.0247	0.0001339
Tl	205	3	He	0.022	0.0007	270.01	0.0247	0.0001339
Tl	205	3	He	0.022	0.0007	270.01	0.0247	0.0001339
Pb	208	3	He	0.8	0.0273	5671.41	0.0327	0.00107
Pb	208	3	He	0.801	0.0273	5661.41	0.0327	0.00107
Pb	208	3	He	0.788	0.0269	5671.48	0.0327	0.00107
U	238	3	He	0.152	0.0075	2350.32	0.0493	7.55E-05
U	238	3	He	0.158	0.0079	2460.33	0.0493	7.55E-05
U	238	3	He	0.145	0.0072	2280.31	0.0493	7.55E-05
Sc	45	1	No Gas			2477111.06		
Sc	45	1	No Gas			2428234.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2458021.84		
Ge	72	1	No Gas			1243618.89		
Ge	72	1	No Gas			1254197.09		
Ge	72	1	No Gas			1241487.56		
Sc	45	2	H2			181400.00		
Sc	45	2	H2			183424.45		
Sc	45	2	H2			181712.52		
Ge	72	2	H2			163365.04		
Ge	72	2	H2			162058.69		
Ge	72	2	H2			164266.58		
In	115	2	H2			391339.60		
In	115	2	H2			387107.34		
In	115	2	H2			391304.02		
Sc	45	3	He			47649.14		
Sc	45	3	He			45953.53		
Sc	45	3	He			47699.10		
Ge	72	3	He			87980.38		
Ge	72	3	He			85787.28		
Ge	72	3	He			85163.23		
In	115	3	He			88240.15		
In	115	3	He			85079.78		
In	115	3	He			88110.09		
Tb	159	3	He			396480.93		
Tb	159	3	He			396633.90		
Tb	159	3	He			395346.67		
Bi	209	3	He			311649.59		
Bi	209	3	He			312195.19		
Bi	209	3	He			316693.90		

Quantitation Report

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Acq Time	8/10/2023 5:48:47 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

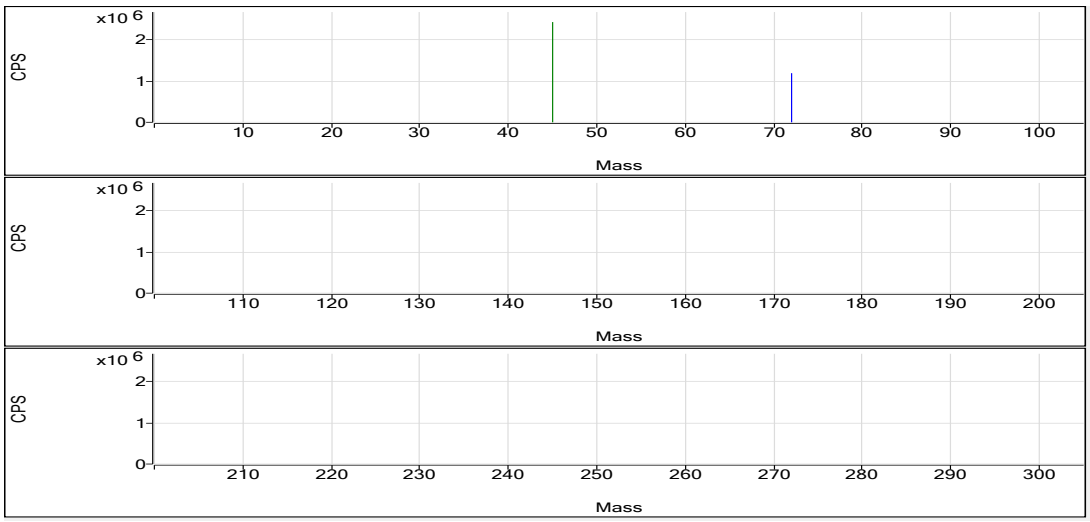
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	82.7	20.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.012	ppb	224.3	2.67	0.0000	Pulse	1.5000	3
Na	23	45	He	38.592	ppb	7.9	23198.76	0.4832	Pulse	0.1000	3
Mg	24	45	He	1.069	ppb	9.9	260.01	0.0054	Pulse	0.1000	3
Al	27	45	He	1.536	ppb	139.7	73.34	0.0015	Pulse	0.1000	3
K	39	45	He	-6.657	ppb	N/A	18595.70	0.3873	Pulse	0.1000	3
Ca	44	45	He	13.168	ppb	91.5	173.34	0.0036	Pulse	0.1000	3
Ti	47	45	He	0.131	ppb	173.0	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.404	ppb	16.8	1618.77	0.0337	Pulse	0.5000	3
Cr	52	45	He	-0.101	ppb	N/A	1773.50	0.0369	Pulse	0.1000	3
Mn	55	45	He	0.185	ppb	72.3	240.01	0.0050	Pulse	0.1000	3
Fe	57	45	He	2.548	ppb	33.3	140.01	0.0029	Pulse	0.1000	3
Co	59	45	He	0.017	ppb	74.7	150.01	0.0031	Pulse	0.1000	3
Ni	60	72	He	-0.008	ppb	N/A	226.68	0.0028	Pulse	0.1000	3
Cu	63	72	He	0.067	ppb	89.7	533.37	0.0065	Pulse	0.1000	3
Zn	66	72	He	2.837	ppb	2.5	993.41	0.0121	Pulse	0.1000	3
As	75	72	He	0.076	ppb	222.2	79.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.076	ppb	48.7	143.34	0.0016	Pulse	0.1000	3
Mo	98	115	He	0.012	ppb	125.0	46.67	0.0005	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	33.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.013	ppb	177.9	1450.13	0.0167	Pulse	0.1000	3
Sb	121	115	He	0.005	ppb	404.9	30.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	-0.008	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.012	ppb	22.1	166.68	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.001	ppb	563.1	436.69	0.0011	Pulse	0.1000	3
U	238	209	He	0.004	ppb	48.1	86.67	0.0003	Pulse	0.1000	3

ISTD Table:

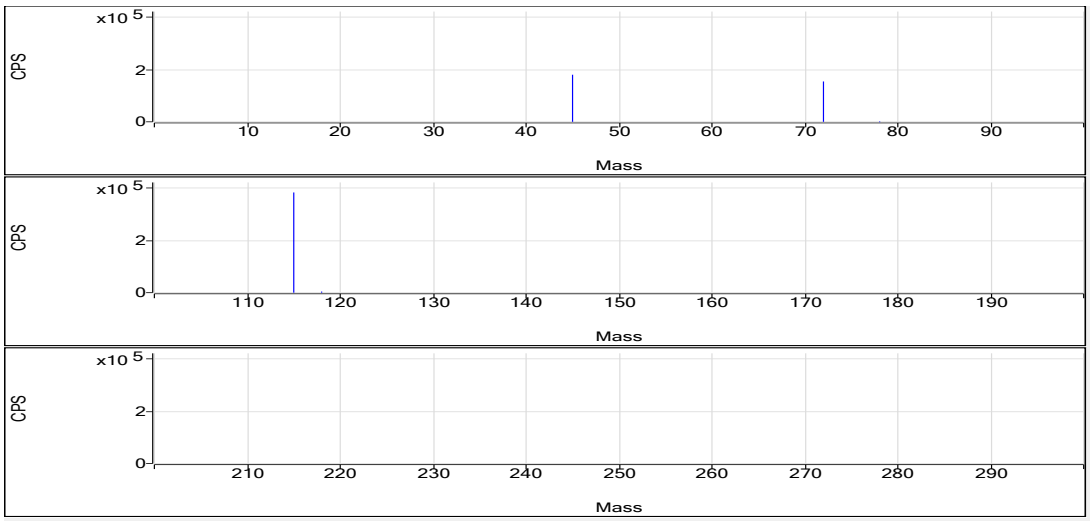
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2429690.75	0.9	101.3	Analog	0.1000	3
No Gas	Ge	72	1190695.74	0.4	103.2	Pulse	0.1000	3
H2	Sc	45	180682.75	0.3	96.6	Pulse	0.1000	3
H2	Ge	72	154842.09	2.0	94.6	Pulse	0.1000	3
H2	In	115	384608.56	0.8	98.8	Pulse	0.1000	3
He	Sc	45	48023.26	1.9	103.0	Pulse	0.1000	3
He	Ge	72	82243.39	1.5	101.3	Pulse	0.1000	3
He	In	115	86930.46	0.2	100.9	Pulse	0.1000	3
He	Tb	159	395488.44	0.1	99.2	Pulse	0.1000	3
He	Bi	209	307986.45	0.1	99.6	Pulse	0.1000	3

No Gas

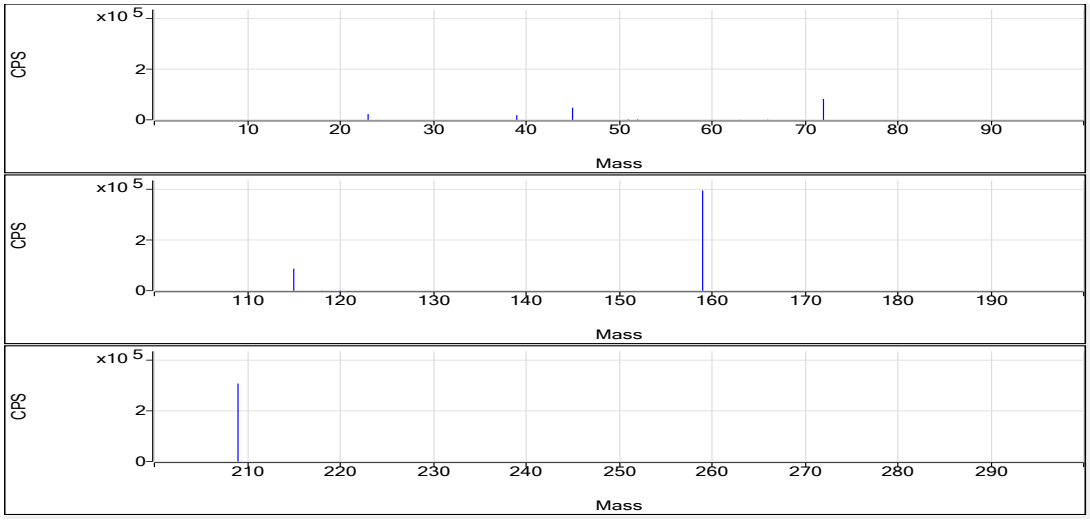


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Be	9	1	No Gas	0.008	0	26.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	22.00	0.0008	4.685E-06
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	0.042	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.002	0	2.00	0.0004	1.219E-05
Na	23	3	He	40.047	0.4884	23409.00	0.0036	0.3452
Na	23	3	He	40.649	0.4906	23128.68	0.0036	0.3452
Na	23	3	He	35.082	0.4706	23058.60	0.0036	0.3452
Mg	24	3	He	1.191	0.0056	270.01	0.0018	0.003497
Mg	24	3	He	1.006	0.0053	250.01	0.0018	0.003497
Mg	24	3	He	1.009	0.0053	260.01	0.0018	0.003497
Al	27	3	He	0.684	0.001	50.00	0.0006	0.0006432
Al	27	3	He	3.976	0.003	140.01	0.0006	0.0006432
Al	27	3	He	-0.053	0.0006	30.00	0.0006	0.0006432
K	39	3	He	-3.452	0.391	18742.62	0.0012	0.3951
K	39	3	He	-2.262	0.3924	18502.20	0.0012	0.3951
K	39	3	He	-14.257	0.3785	18542.27	0.0012	0.3951
Ca	44	3	He	24.673	0.0044	210.01	0.0001	0.002715
Ca	44	3	He	0.63	0.0028	130.01	0.0001	0.002715
Ca	44	3	He	14.2	0.0037	180.01	0.0001	0.002715
Ti	47	3	He	0.258	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.265	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.35	0.0325	1558.09	0.0219	0.02486
V	51	3	He	0.382	0.0332	1566.09	0.0219	0.02486
V	51	3	He	0.48	0.0354	1732.12	0.0219	0.02486
Cr	52	3	He	-0.039	0.0388	1860.19	0.0299	0.03997
Cr	52	3	He	-0.102	0.0369	1740.17	0.0299	0.03997
Cr	52	3	He	-0.162	0.0351	1720.15	0.0299	0.03997
Mn	55	3	He	0.103	0.004	190.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.34	0.007	330.02	0.0128	0.002639
Mn	55	3	He	0.112	0.0041	200.01	0.0128	0.002639
Fe	57	3	He	2.209	0.0027	130.00	0.0006	0.001429
Fe	57	3	He	1.922	0.0025	120.01	0.0006	0.001429
Fe	57	3	He	3.513	0.0035	170.01	0.0006	0.001429
Co	59	3	He	0.032	0.004	190.01	0.0563	0.002149
Co	59	3	He	0.011	0.0028	130.01	0.0563	0.002149
Co	59	3	He	0.009	0.0027	130.01	0.0563	0.002149
Ni	60	3	He	-0.135	0.0017	140.01	0.0086	0.002834
Ni	60	3	He	0.039	0.0032	260.01	0.0086	0.002834
Ni	60	3	He	0.072	0.0035	280.01	0.0086	0.002834
Cu	63	3	He	0.029	0.0055	460.03	0.0257	0.004757
Cu	63	3	He	0.137	0.0083	680.04	0.0257	0.004757
Cu	63	3	He	0.036	0.0057	460.03	0.0257	0.004757
Zn	66	3	He	2.885	0.0122	1020.08	0.0029	0.003818
Zn	66	3	He	2.87	0.0122	1000.08	0.0029	0.003818
Zn	66	3	He	2.756	0.0118	960.07	0.0029	0.003818
As	75	3	He	0.144	0.0011	92.00	0.002	0.0008061
As	75	3	He	0.201	0.0012	100.00	0.002	0.0008061
As	75	3	He	-0.117	0.0006	46.00	0.002	0.0008061
Sr	88	3	He	0.033	0.0013	110.00	0.009	0.0009645
Sr	88	3	He	0.098	0.0018	160.01	0.009	0.0009645
Sr	88	3	He	0.098	0.0018	160.01	0.009	0.0009645
Mo	98	3	He	0.003	0.0003	30.00	0.0219	0.0002706
Mo	98	3	He	0.003	0.0003	30.00	0.0219	0.0002706
Mo	98	3	He	0.03	0.0009	80.00	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.012	0.0167	1450.14	0.0158	0.01648
Sn	120	3	He	-0.01	0.0163	1420.13	0.0158	0.01648
Sn	120	3	He	0.037	0.0171	1480.13	0.0158	0.01648
Sb	121	3	He	0.028	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	0.048	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.009	0.0004	140.01	0.0247	0.0001339
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Tl	205	3	He	0.014	0.0005	190.01	0.0247	0.0001339
Pb	208	3	He	-0.006	0.0009	170.01	0.0327	0.00107
Pb	208	3	He	0.005	0.0012	300.01	0.0327	0.00107
Pb	208	3	He	0.004	0.0012	220.01	0.0327	0.00107
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
U	238	3	He	0.006	0.0004	120.00	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
Sc	45	1	No Gas			2424149.03		
Sc	45	1	No Gas			2454792.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2410130.43		
Ge	72	1	No Gas			1196593.58		
Ge	72	1	No Gas			1188146.47		
Ge	72	1	No Gas			1187347.17		
Sc	45	2	H2			180721.21		
Sc	45	2	H2			181266.56		
Sc	45	2	H2			180060.47		
Ge	72	2	H2			154014.51		
Ge	72	2	H2			158189.28		
Ge	72	2	H2			152322.48		
In	115	2	H2			381724.45		
In	115	2	H2			387549.10		
In	115	2	H2			384552.14		
Sc	45	3	He			47929.27		
Sc	45	3	He			47147.38		
Sc	45	3	He			48993.13		
Ge	72	3	He			83493.48		
Ge	72	3	He			82156.16		
Ge	72	3	He			81080.54		
In	115	3	He			87032.67		
In	115	3	He			87000.96		
In	115	3	He			86780.85		
Tb	159	3	He			395289.99		
Tb	159	3	He			395926.99		
Tb	159	3	He			395248.35		
Bi	209	3	He			308251.99		
Bi	209	3	He			308232.09		
Bi	209	3	He			307475.27		

Quantitation Report

Data File Name	210_CCV.d
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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

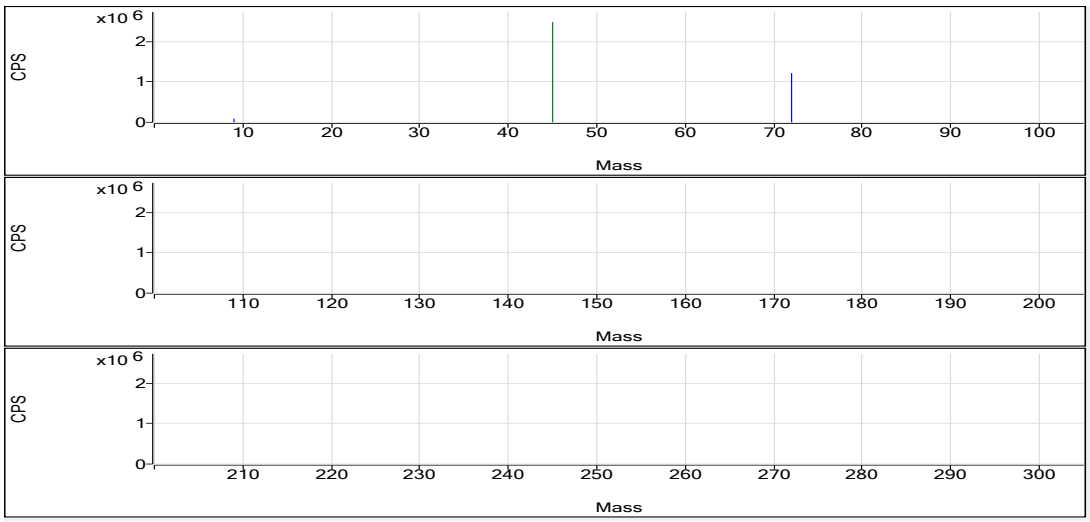
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.241	ppb	1.8	89468.44	0.0360	Pulse	0.5000	3
Se	78	72	H2	52.125	ppb	1.3	3447.31	0.0218	Pulse	1.5000	3
Na	23	45	He	4916.048	ppb	2.3	850882.44	17.9301	Pulse	0.1000	3
Mg	24	45	He	5036.619	ppb	2.5	429011.12	9.0408	Pulse	0.1000	3
Al	27	45	He	4977.765	ppb	2.4	138227.35	2.9128	Pulse	0.1000	3
K	39	45	He	5160.090	ppb	2.2	303865.27	6.4031	Pulse	0.1000	3
Ca	44	45	He	5143.474	ppb	3.7	16616.66	0.3502	Pulse	0.1000	3
Ti	47	45	He	5106.456	ppb	1.7	130130.83	2.7420	Pulse	0.1000	3
V	51	45	He	516.567	ppb	2.9	536962.29	11.3166	Pulse	0.5000	3
Cr	52	45	He	489.166	ppb	2.4	696898.82	14.6860	Pulse	0.1000	3
Mn	55	45	He	510.696	ppb	2.3	311152.20	6.5568	Pulse	0.1000	3
Fe	57	45	He	5109.848	ppb	3.4	140922.19	2.9702	Pulse	0.1000	3
Co	59	45	He	493.324	ppb	2.4	1317660.29	27.7676	Pulse	0.1000	3
Ni	60	72	He	509.689	ppb	0.2	369141.01	4.3776	Pulse	0.1000	3
Cu	63	72	He	487.501	ppb	0.6	1055675.04	12.5194	Pulse	0.1000	3
Zn	66	72	He	509.349	ppb	1.3	125370.82	1.4868	Pulse	0.1000	3
As	75	72	He	516.673	ppb	0.8	89330.39	1.0594	Pulse	0.5000	3
Sr	88	115	He	51.171	ppb	1.9	39663.45	0.4600	Pulse	0.1000	3
Mo	98	115	He	51.768	ppb	0.9	97906.85	1.1354	Pulse	0.1000	3
Ag	107	115	He	51.564	ppb	0.1	206770.13	2.3977	Pulse	0.1000	3
Cd	111	115	He	51.495	ppb	2.7	23741.52	0.2753	Pulse	0.5000	3
Sn	120	115	He	50.911	ppb	0.1	70784.06	0.8208	Pulse	0.1000	3
Sb	121	115	He	51.720	ppb	1.4	66269.19	0.7685	Pulse	0.1000	3
Ba	137	115	He	524.309	ppb	0.8	217015.80	2.5166	Pulse	0.1000	3
Tl	205	159	He	51.547	ppb	1.2	505116.68	1.2747	Pulse	0.1000	3
Pb	208	159	He	52.020	ppb	1.5	675080.87	1.7037	Pulse	0.1000	3
U	238	209	He	51.203	ppb	0.5	770444.26	2.5223	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2482942.36	1.4	103.5	Analog	0.1000	3
No Gas	Ge	72	1219180.55	0.4	105.7	Pulse	0.1000	3
H2	Sc	45	184436.46	0.8	98.6	Pulse	0.1000	3
H2	Ge	72	158495.24	0.7	96.8	Pulse	0.1000	3
H2	In	115	387986.78	0.5	99.7	Pulse	0.1000	3
He	Sc	45	47471.58	2.5	101.8	Pulse	0.1000	3
He	Ge	72	84325.00	0.7	103.9	Pulse	0.1000	3
He	In	115	86237.46	0.8	100.0	Pulse	0.1000	3
He	Tb	159	396307.30	1.4	99.4	Pulse	0.1000	3
He	Bi	209	305453.33	0.5	98.8	Pulse	0.1000	3

No Gas



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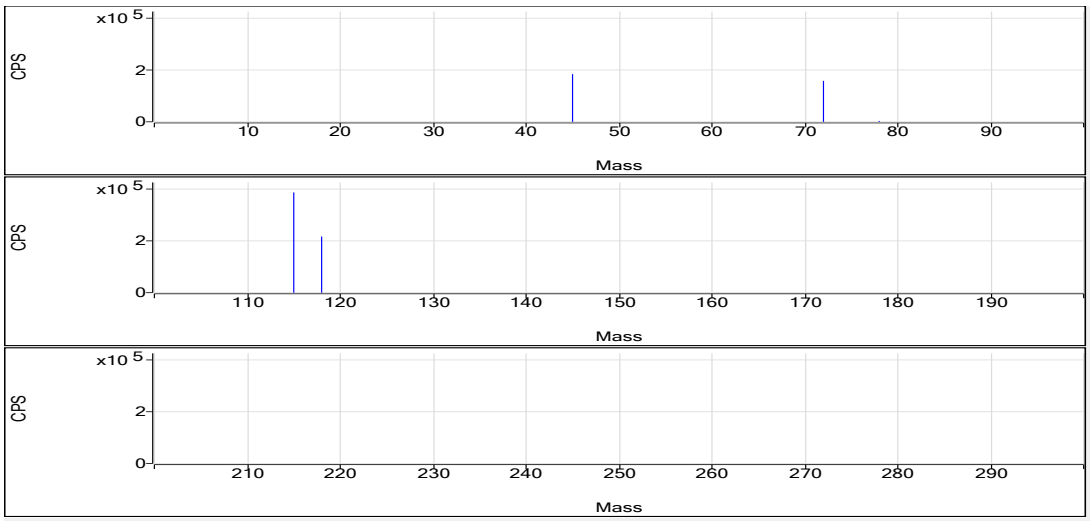
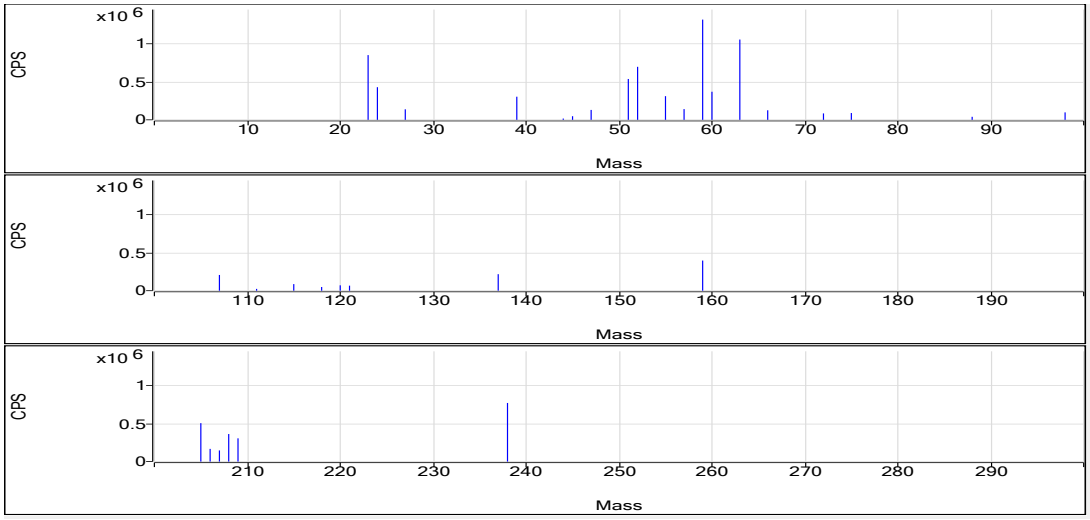


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.207	0.0368	89974.14	0.0008	4.685E-06
Be	9	1	No Gas	46.962	0.0358	89098.91	0.0008	4.685E-06
Be	9	1	No Gas	46.553	0.0355	89332.27	0.0008	4.685E-06
Se	78	2	H2	51.478	0.0215	3429.08	0.0004	1.219E-05
Se	78	2	H2	52.833	0.022	3467.76	0.0004	1.219E-05
Se	78	2	H2	52.062	0.0217	3445.09	0.0004	1.219E-05
Na	23	3	He	4841.387	17.663	842864.60	0.0036	0.3452
Na	23	3	He	4859.961	17.7295	859734.52	0.0036	0.3452
Na	23	3	He	5046.795	18.3978	850048.19	0.0036	0.3452
Mg	24	3	He	4974.204	8.9288	426075.42	0.0018	0.003497
Mg	24	3	He	4953.285	8.8913	431154.52	0.0018	0.003497
Mg	24	3	He	5182.369	9.3023	429803.43	0.0018	0.003497
Al	27	3	He	4897.318	2.8657	136750.82	0.0006	0.0006432
Al	27	3	He	4922.77	2.8806	139687.21	0.0006	0.0006432
Al	27	3	He	5113.207	2.992	138244.01	0.0006	0.0006432
K	39	3	He	5107.898	6.3423	302650.31	0.0012	0.3951
K	39	3	He	5082.188	6.3124	306099.37	0.0012	0.3951
K	39	3	He	5290.184	6.5546	302846.13	0.0012	0.3951
Ca	44	3	He	5286.506	0.3598	17170.70	0.0001	0.002715
Ca	44	3	He	4926.519	0.3355	16269.52	0.0001	0.002715
Ca	44	3	He	5217.396	0.3552	16409.75	0.0001	0.002715
Ti	47	3	He	5079.252	2.7274	130147.69	0.0005	7.003E-05
Ti	47	3	He	5038.639	2.7056	131197.64	0.0005	7.003E-05
Ti	47	3	He	5201.476	2.793	129047.16	0.0005	7.003E-05
V	51	3	He	512.14	11.2198	535399.88	0.0219	0.02486
V	51	3	He	504.245	11.0472	535701.13	0.0219	0.02486
V	51	3	He	533.316	11.6827	539785.88	0.0219	0.02486
Cr	52	3	He	484.796	14.5551	694558.04	0.0299	0.03997
Cr	52	3	He	480.371	14.4226	699379.52	0.0299	0.03997
Cr	52	3	He	502.331	15.0801	696758.90	0.0299	0.03997
Mn	55	3	He	505.312	6.4878	309590.00	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	502.866	6.4564	313080.37	0.0128	0.002639
Mn	55	3	He	523.909	6.7264	310786.23	0.0128	0.002639
Fe	57	3	He	5060.158	2.9413	140357.88	0.0006	0.001429
Fe	57	3	He	4966.524	2.8869	139992.65	0.0006	0.001429
Fe	57	3	He	5302.862	3.0823	142416.03	0.0006	0.001429
Co	59	3	He	491.95	27.6902	1321353.73	0.0563	0.002149
Co	59	3	He	482.339	27.1493	1316518.42	0.0563	0.002149
Co	59	3	He	505.684	28.4632	1315108.73	0.0563	0.002149
Ni	60	3	He	510.556	4.385	372869.76	0.0086	0.002834
Ni	60	3	He	509.405	4.3751	367756.87	0.0086	0.002834
Ni	60	3	He	509.106	4.3726	366796.40	0.0086	0.002834
Cu	63	3	He	484.808	12.4503	1058685.53	0.0257	0.004757
Cu	63	3	He	487.34	12.5153	1051987.25	0.0257	0.004757
Cu	63	3	He	490.356	12.5927	1056352.33	0.0257	0.004757
Zn	66	3	He	502.554	1.4671	124748.55	0.0029	0.003818
Zn	66	3	He	509.229	1.4865	124949.42	0.0029	0.003818
Zn	66	3	He	516.264	1.507	126414.48	0.0029	0.003818
As	75	3	He	511.885	1.0496	89249.80	0.002	0.0008061
As	75	3	He	518.399	1.0629	89346.43	0.002	0.0008061
As	75	3	He	519.734	1.0657	89394.95	0.002	0.0008061
Sr	88	3	He	50.047	0.4499	39015.19	0.009	0.0009645
Sr	88	3	He	51.775	0.4654	40268.62	0.009	0.0009645
Sr	88	3	He	51.691	0.4646	39706.54	0.009	0.0009645
Mo	98	3	He	51.795	1.1359	98514.12	0.0219	0.0002706
Mo	98	3	He	51.302	1.1251	97356.31	0.0219	0.0002706
Mo	98	3	He	52.207	1.145	97850.11	0.0219	0.0002706
Ag	107	3	He	51.566	2.3978	207946.38	0.0465	0.0006206
Ag	107	3	He	51.601	2.3994	207614.70	0.0465	0.0006206
Ag	107	3	He	51.525	2.3959	204749.31	0.0465	0.0006206
Cd	111	3	He	51.404	0.2749	23836.32	0.0053	0
Cd	111	3	He	50.139	0.2681	23197.24	0.0053	0
Cd	111	3	He	52.941	0.2831	24191.00	0.0053	0
Sn	120	3	He	50.954	0.8215	71242.85	0.0158	0.01648
Sn	120	3	He	50.837	0.8196	70921.25	0.0158	0.01648
Sn	120	3	He	50.943	0.8213	70188.07	0.0158	0.01648
Sb	121	3	He	51.942	0.7718	66932.05	0.0149	0.0002698
Sb	121	3	He	50.926	0.7567	65475.69	0.0149	0.0002698
Sb	121	3	He	52.291	0.777	66399.84	0.0149	0.0002698
Ba	137	3	He	524.473	2.5174	218315.43	0.0048	0.0002317
Ba	137	3	He	520.281	2.4972	216081.77	0.0048	0.0002317
Ba	137	3	He	528.174	2.5351	216650.19	0.0048	0.0002317
Tl	205	3	He	50.88	1.2582	506662.84	0.0247	0.0001339
Tl	205	3	He	51.728	1.2792	502934.95	0.0247	0.0001339
Tl	205	3	He	52.032	1.2867	505752.26	0.0247	0.0001339
Pb	208	3	He	51.12	1.6742	359487.81	0.0327	0.00107
Pb	208	3	He	52.278	1.7121	360288.47	0.0327	0.00107
Pb	208	3	He	52.662	1.7247	366120.15	0.0327	0.00107
U	238	3	He	50.936	2.5092	767627.10	0.0493	7.55E-05
U	238	3	He	51.487	2.5363	770032.10	0.0493	7.55E-05
U	238	3	He	51.187	2.5215	773673.58	0.0493	7.55E-05
Sc	45	1	No Gas			2446519.18		
Sc	45	1	No Gas			2486966.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2515341.06		
Ge	72	1	No Gas			1220938.81		
Ge	72	1	No Gas			1214102.95		
Ge	72	1	No Gas			1222499.90		
Sc	45	2	H2			185246.95		
Sc	45	2	H2			182703.40		
Sc	45	2	H2			185359.02		
Ge	72	2	H2			159624.20		
Ge	72	2	H2			157288.78		
Ge	72	2	H2			158572.74		
In	115	2	H2			387303.39		
In	115	2	H2			386370.89		
In	115	2	H2			390286.05		
Sc	45	3	He			47719.12		
Sc	45	3	He			48491.81		
Sc	45	3	He			46203.82		
Ge	72	3	He			85032.90		
Ge	72	3	He			84056.20		
Ge	72	3	He			83885.90		
In	115	3	He			87112.35		
In	115	3	He			86901.44		
In	115	3	He			85834.70		
Tb	159	3	He			402688.90		
Tb	159	3	He			393169.64		
Tb	159	3	He			393063.35		
Bi	209	3	He			305929.88		
Bi	209	3	He			303604.59		
Bi	209	3	He			306825.52		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

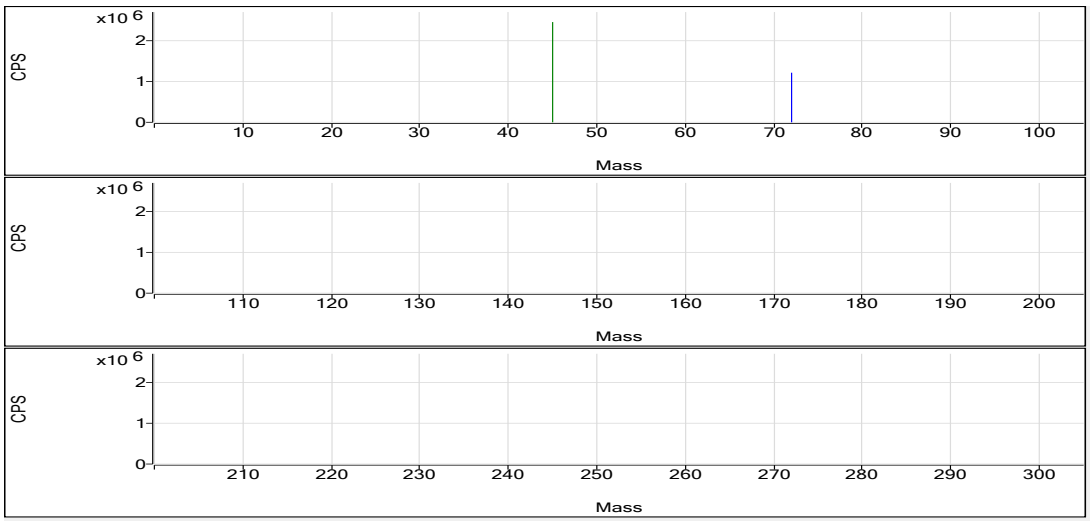
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.023	ppb	31.9	54.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.037	ppb	108.8	4.22	0.0000	Pulse	1.5000	3
Na	23	45	He	29.080	ppb	5.0	21319.31	0.4492	Pulse	0.1000	3
Mg	24	45	He	1.609	ppb	53.3	303.35	0.0064	Pulse	0.1000	3
Al	27	45	He	1.182	ppb	97.9	63.33	0.0013	Pulse	0.1000	3
K	39	45	He	-4.327	ppb	N/A	18512.27	0.3900	Pulse	0.1000	3
Ca	44	45	He	-0.754	ppb	N/A	126.67	0.0027	Pulse	0.1000	3
Ti	47	45	He	1.048	ppb	38.0	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	0.488	ppb	13.9	1686.11	0.0355	Pulse	0.5000	3
Cr	52	45	He	-0.059	ppb	N/A	1813.51	0.0382	Pulse	0.1000	3
Mn	55	45	He	0.210	ppb	20.6	253.34	0.0053	Pulse	0.1000	3
Fe	57	45	He	0.925	ppb	148.2	93.33	0.0020	Pulse	0.1000	3
Co	59	45	He	0.087	ppb	41.2	333.35	0.0070	Pulse	0.1000	3
Ni	60	72	He	-0.011	ppb	N/A	226.68	0.0027	Pulse	0.1000	3
Cu	63	72	He	0.070	ppb	64.8	543.36	0.0066	Pulse	0.1000	3
Zn	66	72	He	2.352	ppb	32.7	883.39	0.0107	Pulse	0.1000	3
As	75	72	He	0.235	ppb	42.6	106.67	0.0013	Pulse	0.5000	3
Sr	88	115	He	-0.017	ppb	N/A	70.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.060	ppb	28.7	136.67	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.011	ppb	57.0	100.00	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	86.6	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.093	ppb	68.5	1553.48	0.0179	Pulse	0.1000	3
Sb	121	115	He	0.026	ppb	62.8	56.67	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.056	ppb	108.4	43.33	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.065	ppb	4.3	690.05	0.0017	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	55.1	563.36	0.0014	Pulse	0.1000	3
U	238	209	He	0.048	ppb	9.3	746.71	0.0024	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2457624.18	1.3	102.5	Analog	0.1000	3
No Gas	Ge	72	1215947.41	0.3	105.4	Pulse	0.1000	3
H2	Sc	45	182188.46	0.2	97.4	Pulse	0.1000	3
H2	Ge	72	154861.69	1.7	94.6	Pulse	0.1000	3
H2	In	115	386431.17	0.5	99.3	Pulse	0.1000	3
He	Sc	45	47464.85	0.7	101.8	Pulse	0.1000	3
He	Ge	72	82819.50	0.4	102.0	Pulse	0.1000	3
He	In	115	86568.24	0.4	100.4	Pulse	0.1000	3
He	Tb	159	396455.68	0.2	99.5	Pulse	0.1000	3
He	Bi	209	308239.90	0.7	99.7	Pulse	0.1000	3

No Gas



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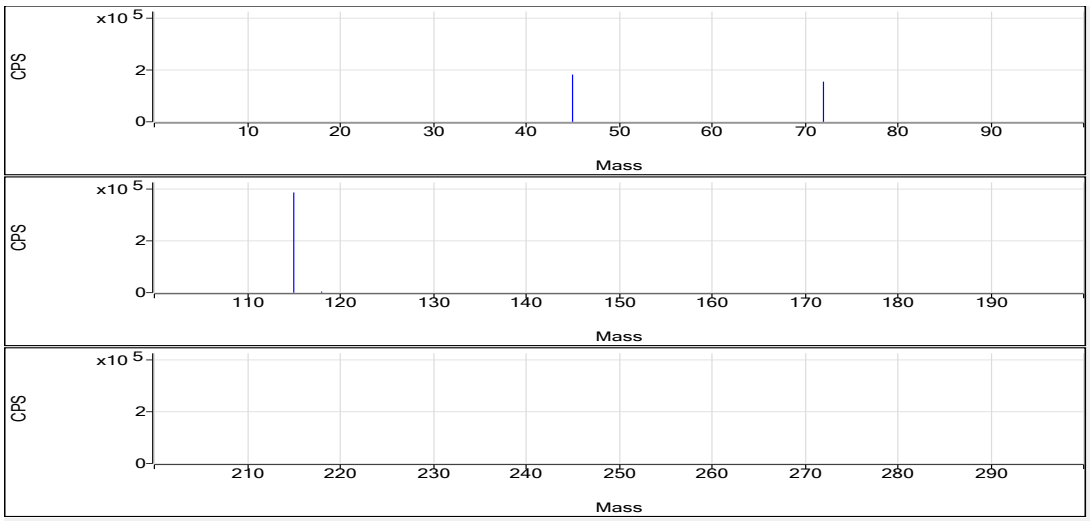
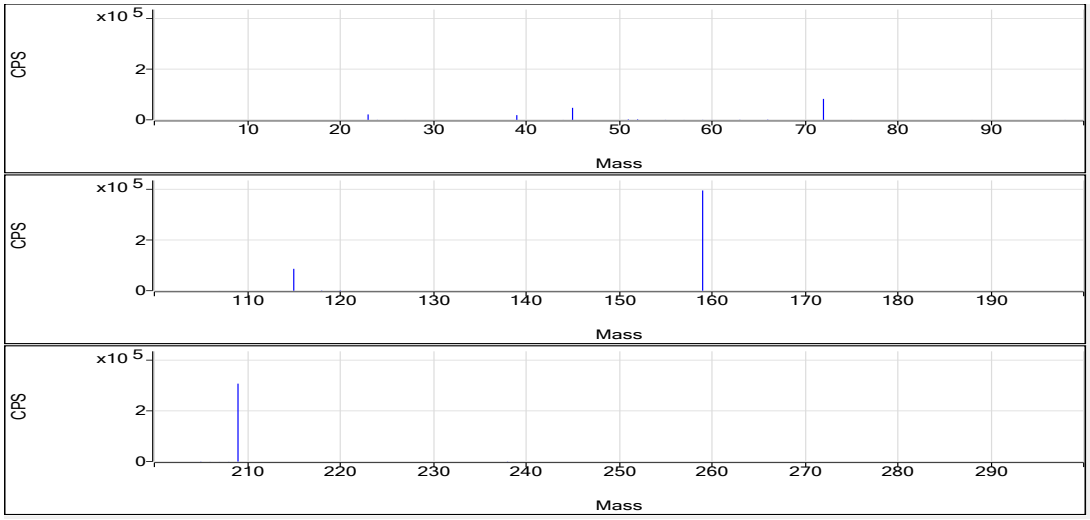


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Be	9	1	No Gas	0.019	0	46.00	0.0008	4.685E-06
Be	9	1	No Gas	0.018	0	46.00	0.0008	4.685E-06
Se	78	2	H2	0.064	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.054	0	5.33	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Na	23	3	He	30.014	0.4525	21326.01	0.0036	0.3452
Na	23	3	He	27.402	0.4432	21165.74	0.0036	0.3452
Na	23	3	He	29.824	0.4518	21466.18	0.0036	0.3452
Mg	24	3	He	0.771	0.0049	230.01	0.0018	0.003497
Mg	24	3	He	2.486	0.008	380.02	0.0018	0.003497
Mg	24	3	He	1.571	0.0063	300.01	0.0018	0.003497
Al	27	3	He	0.714	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	0.332	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	2.498	0.0021	100.00	0.0006	0.0006432
K	39	3	He	-3.758	0.3907	18412.13	0.0012	0.3951
K	39	3	He	-7.117	0.3868	18472.28	0.0012	0.3951
K	39	3	He	-2.107	0.3926	18652.40	0.0012	0.3951
Ca	44	3	He	-11.92	0.0019	90.00	0.0001	0.002715
Ca	44	3	He	21.804	0.0042	200.01	0.0001	0.002715
Ca	44	3	He	-12.147	0.0019	90.00	0.0001	0.002715
Ti	47	3	He	1.45	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	1.039	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.654	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.552	0.0369	1740.11	0.0219	0.02486
V	51	3	He	0.495	0.0357	1704.11	0.0219	0.02486
V	51	3	He	0.417	0.034	1614.10	0.0219	0.02486
Cr	52	3	He	0.09	0.0427	2010.21	0.0299	0.03997
Cr	52	3	He	-0.076	0.0377	1800.17	0.0299	0.03997
Cr	52	3	He	-0.189	0.0343	1630.16	0.0299	0.03997
Mn	55	3	He	0.257	0.0059	280.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.202	0.0052	250.01	0.0128	0.002639
Mn	55	3	He	0.172	0.0048	230.01	0.0128	0.002639
Fe	57	3	He	1.558	0.0023	110.00	0.0006	0.001429
Fe	57	3	He	1.865	0.0025	120.00	0.0006	0.001429
Fe	57	3	He	-0.648	0.0011	50.00	0.0006	0.001429
Co	59	3	He	0.094	0.0074	350.02	0.0563	0.002149
Co	59	3	He	0.118	0.0088	420.02	0.0563	0.002149
Co	59	3	He	0.048	0.0048	230.01	0.0563	0.002149
Ni	60	3	He	-0.033	0.0025	210.01	0.0086	0.002834
Ni	60	3	He	0.007	0.0029	240.01	0.0086	0.002834
Ni	60	3	He	-0.008	0.0028	230.01	0.0086	0.002834
Cu	63	3	He	0.122	0.0079	650.03	0.0257	0.004757
Cu	63	3	He	0.054	0.0061	510.03	0.0257	0.004757
Cu	63	3	He	0.035	0.0057	470.02	0.0257	0.004757
Zn	66	3	He	2.273	0.0104	860.05	0.0029	0.003818
Zn	66	3	He	3.159	0.013	1080.09	0.0029	0.003818
Zn	66	3	He	1.625	0.0085	710.04	0.0029	0.003818
As	75	3	He	0.234	0.0013	106.00	0.002	0.0008061
As	75	3	He	0.336	0.0015	124.00	0.002	0.0008061
As	75	3	He	0.135	0.0011	90.00	0.002	0.0008061
Sr	88	3	He	-0.004	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	-0.005	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	-0.043	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	0.072	0.0019	160.01	0.0219	0.0002706
Mo	98	3	He	0.04	0.0012	100.00	0.0219	0.0002706
Mo	98	3	He	0.067	0.0017	150.01	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.014	0.0013	110.00	0.0465	0.0006206
Ag	107	3	He	0.017	0.0014	120.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.02	0.0168	1450.13	0.0158	0.01648
Sn	120	3	He	0.122	0.0184	1600.15	0.0158	0.01648
Sn	120	3	He	0.137	0.0186	1610.17	0.0158	0.01648
Sb	121	3	He	0.044	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Ba	137	3	He	0.121	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	0.048	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.064	0.0017	680.05	0.0247	0.0001339
Tl	205	3	He	0.068	0.0018	720.05	0.0247	0.0001339
Tl	205	3	He	0.063	0.0017	670.04	0.0247	0.0001339
Pb	208	3	He	0.009	0.0014	220.01	0.0327	0.00107
Pb	208	3	He	0.006	0.0013	280.01	0.0327	0.00107
Pb	208	3	He	0.017	0.0016	320.02	0.0327	0.00107
U	238	3	He	0.043	0.0022	670.04	0.0493	7.55E-05
U	238	3	He	0.051	0.0026	800.05	0.0493	7.55E-05
U	238	3	He	0.049	0.0025	770.05	0.0493	7.55E-05
Sc	45	1	No Gas			2472572.15		
Sc	45	1	No Gas			2422268.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2478031.68		
Ge	72	1	No Gas			1214441.86		
Ge	72	1	No Gas			1213012.33		
Ge	72	1	No Gas			1220388.03		
Sc	45	2	H2			181772.65		
Sc	45	2	H2			182239.63		
Sc	45	2	H2			182553.10		
Ge	72	2	H2			154053.28		
Ge	72	2	H2			152778.06		
Ge	72	2	H2			157753.74		
In	115	2	H2			387639.29		
In	115	2	H2			384426.17		
In	115	2	H2			387228.04		
Sc	45	3	He			47127.03		
Sc	45	3	He			47759.19		
Sc	45	3	He			47508.33		
Ge	72	3	He			82407.15		
Ge	72	3	He			82991.07		
Ge	72	3	He			83060.28		
In	115	3	He			86378.03		
In	115	3	He			86932.06		
In	115	3	He			86418.12		
Tb	159	3	He			395908.04		
Tb	159	3	He			396069.68		
Tb	159	3	He			397389.33		
Bi	209	3	He			306979.55		
Bi	209	3	He			306897.61		
Bi	209	3	He			310842.55		

Quantitation Report

Data File Name	212SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 5:54:57 PM
Sample Name	410-136722-Q-4-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

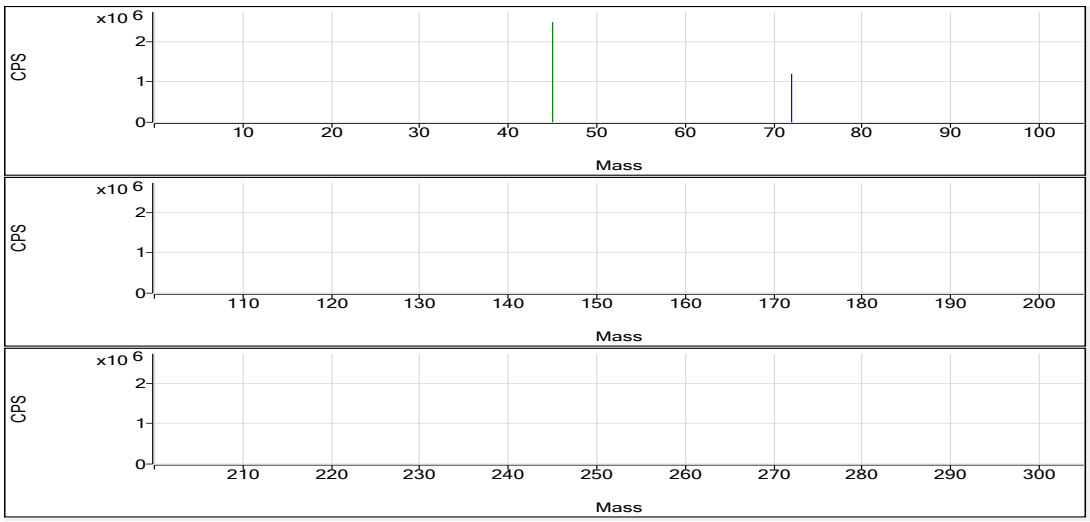
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.021	ppb	13.1	52.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.499	ppb	4.7	34.44	0.0002	Pulse	1.5000	3
Na	23	45	He	394149.224	ppb	0.5	67301929.00	1 410.2362	Analog	0.1000	3
Mg	24	45	He	11197.509	ppb	1.5	958993.76	20.0954	Pulse	0.1000	3
Al	27	45	He	57.559	ppb	9.6	1636.82	0.0343	Pulse	0.1000	3
K	39	45	He	5607.015	ppb	1.3	330407.06	6.9235	Pulse	0.1000	3
Ca	44	45	He	107689.989	ppb	0.8	347297.80	7.2774	Pulse	0.1000	3
Ti	47	45	He	0.913	ppb	50.5	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	0.489	ppb	11.1	1696.11	0.0355	Pulse	0.5000	3
Cr	52	45	He	0.386	ppb	27.1	2460.30	0.0515	Pulse	0.1000	3
Mn	55	45	He	3522.783	ppb	1.2	2157721.17	45.2136	Analog	0.1000	3
Fe	57	45	He	12167.538	ppb	0.6	337438.81	7.0707	Pulse	0.1000	3
Co	59	45	He	1.150	ppb	7.2	3193.79	0.0669	Pulse	0.1000	3
Ni	60	72	He	1.040	ppb	4.4	970.07	0.0118	Pulse	0.1000	3
Cu	63	72	He	1.313	ppb	12.0	3170.46	0.0385	Pulse	0.1000	3
Zn	66	72	He	19.127	ppb	4.1	4907.69	0.0595	Pulse	0.1000	3
As	75	72	He	2.123	ppb	4.7	425.34	0.0052	Pulse	0.5000	3
Sr	88	115	He	721.688	ppb	1.4	554020.37	6.4744	Pulse	0.1000	3
Mo	98	115	He	4.772	ppb	4.8	8976.53	0.1049	Pulse	0.1000	3
Ag	107	115	He	0.320	ppb	8.1	1326.78	0.0155	Pulse	0.1000	3
Cd	111	115	He	0.596	ppb	2.8	272.67	0.0032	Pulse	0.5000	3
Sn	120	115	He	-0.125	ppb	N/A	1240.10	0.0145	Pulse	0.1000	3
Sb	121	115	He	0.097	ppb	33.7	146.67	0.0017	Pulse	0.1000	3
Ba	137	115	He	12.002	ppb	5.5	4947.73	0.0578	Pulse	0.1000	3
Tl	205	159	He	0.018	ppb	43.5	223.35	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.549	ppb	2.9	7447.77	0.0190	Pulse	0.1000	3
U	238	209	He	0.516	ppb	2.1	7685.92	0.0255	Pulse	0.1000	3

ISTD Table:

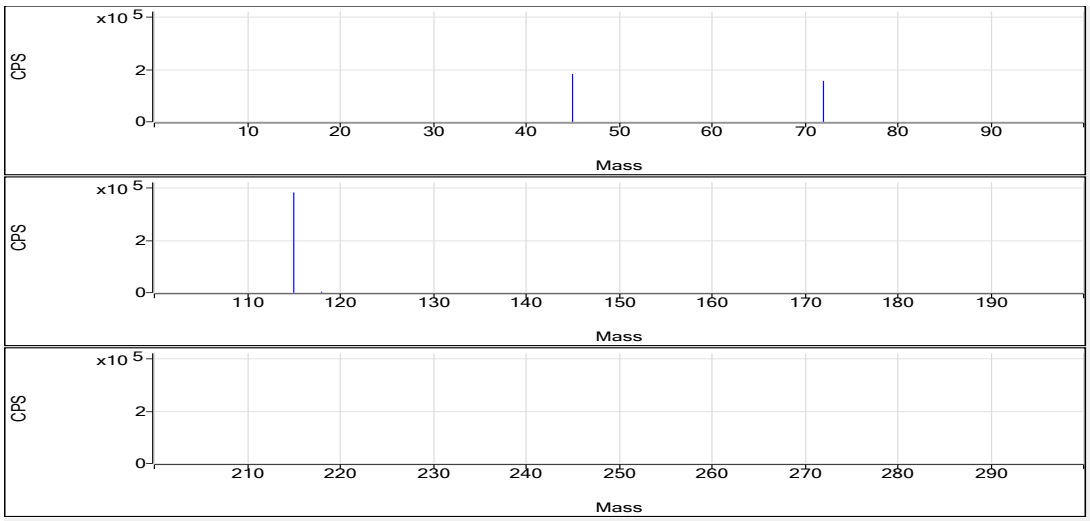
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2484718.97	0.4	103.6	Analog	0.1000	3
No Gas	Ge	72	1199005.11	0.3	104.0	Pulse	0.1000	3
H2	Sc	45	182982.39	1.6	97.8	Pulse	0.1000	3
H2	Ge	72	156428.92	1.4	95.5	Pulse	0.1000	3
H2	In	115	383031.91	0.7	98.4	Pulse	0.1000	3
He	Sc	45	47725.60	1.1	102.3	Pulse	0.1000	3
He	Ge	72	82484.15	1.3	101.6	Pulse	0.1000	3
He	In	115	85582.58	1.4	99.3	Pulse	0.1000	3
He	Tb	159	391159.98	0.7	98.1	Pulse	0.1000	3
He	Bi	209	301678.20	1.1	97.5	Pulse	0.1000	3

No Gas

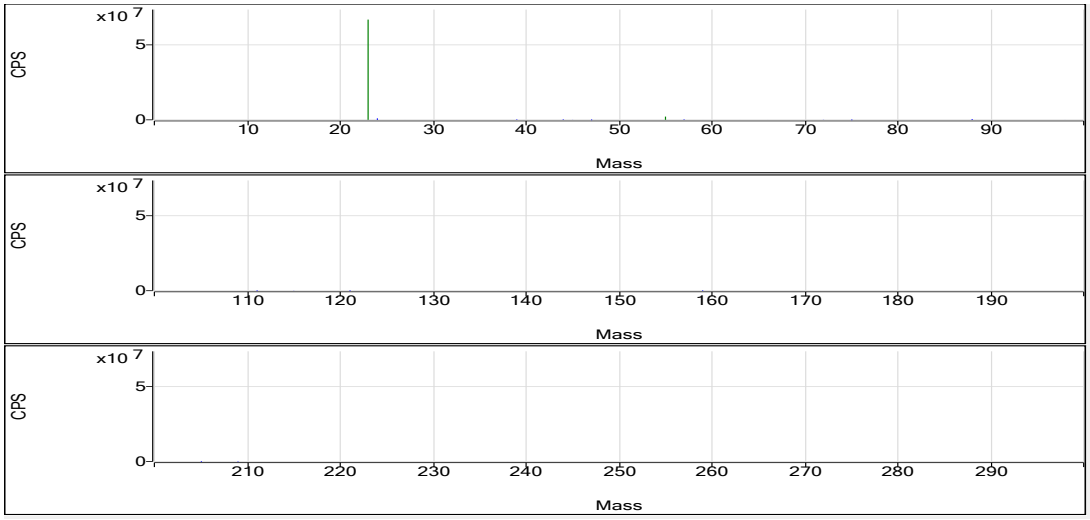


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.022	0	54.00	0.0008	4.685E-06
Be	9	1	No Gas	0.018	0	46.00	0.0008	4.685E-06
Be	9	1	No Gas	0.024	0	56.00	0.0008	4.685E-06
Se	78	2	H2	0.525	0.0002	36.67	0.0004	1.219E-05
Se	78	2	H2	0.489	0.0002	33.33	0.0004	1.219E-05
Se	78	2	H2	0.481	0.0002	33.33	0.0004	1.219E-05
Na	23	3	He	396450.852	1418.4693	67089994.00	0.0036	0.3452
Na	23	3	He	393828.147	1409.0877	67070674.00	0.0036	0.3452
Na	23	3	He	392168.673	1403.1517	67745118.99	0.0036	0.3452
Mg	24	3	He	11206.423	20.1114	951219.44	0.0018	0.003497
Mg	24	3	He	11363.127	20.3926	970660.45	0.0018	0.003497
Mg	24	3	He	11022.978	19.7823	955101.39	0.0018	0.003497
Al	27	3	He	63.596	0.0378	1790.17	0.0006	0.0006432
Al	27	3	He	56.363	0.0336	1600.14	0.0006	0.0006432
Al	27	3	He	52.719	0.0315	1520.14	0.0006	0.0006432
K	39	3	He	5609.411	6.9263	327594.19	0.0012	0.3951
K	39	3	He	5676.606	7.0045	333404.25	0.0012	0.3951
K	39	3	He	5535.027	6.8396	330222.73	0.0012	0.3951
Ca	44	3	He	108338.167	7.3212	346272.49	0.0001	0.002715
Ca	44	3	He	108021.847	7.2998	347460.46	0.0001	0.002715
Ca	44	3	He	106709.952	7.2112	348160.46	0.0001	0.002715
Ti	47	3	He	1.445	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	0.652	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.641	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.499	0.0358	1692.11	0.0219	0.02486
V	51	3	He	0.537	0.0366	1742.11	0.0219	0.02486
V	51	3	He	0.43	0.0343	1654.11	0.0219	0.02486
Cr	52	3	He	0.31	0.0493	2330.27	0.0299	0.03997
Cr	52	3	He	0.342	0.0502	2390.30	0.0299	0.03997
Cr	52	3	He	0.505	0.0551	2660.34	0.0299	0.03997
Mn	55	3	He	3524.629	45.2373	2139608.87	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3562.936	45.7289	2176634.97	0.0128	0.002639
Mn	55	3	He	3480.784	44.6746	2156919.66	0.0128	0.002639
Fe	57	3	He	12192.221	7.085	335102.38	0.0006	0.001429
Fe	57	3	He	12226.755	7.1051	338191.32	0.0006	0.001429
Fe	57	3	He	12083.64	7.0219	339022.73	0.0006	0.001429
Co	59	3	He	1.055	0.0615	2910.39	0.0563	0.002149
Co	59	3	He	1.201	0.0698	3320.49	0.0563	0.002149
Co	59	3	He	1.195	0.0694	3350.49	0.0563	0.002149
Ni	60	3	He	1.025	0.0116	970.07	0.0086	0.002834
Ni	60	3	He	1.004	0.0114	930.07	0.0086	0.002834
Ni	60	3	He	1.091	0.0122	1010.08	0.0086	0.002834
Cu	63	3	He	1.132	0.0338	2820.37	0.0257	0.004757
Cu	63	3	He	1.388	0.0404	3280.48	0.0257	0.004757
Cu	63	3	He	1.419	0.0412	3410.52	0.0257	0.004757
Zn	66	3	He	19.329	0.0601	5011.08	0.0029	0.003818
Zn	66	3	He	19.789	0.0614	4991.05	0.0029	0.003818
Zn	66	3	He	18.264	0.057	4720.95	0.0029	0.003818
As	75	3	He	2.124	0.0052	430.01	0.002	0.0008061
As	75	3	He	2.022	0.0049	402.01	0.002	0.0008061
As	75	3	He	2.223	0.0054	444.01	0.002	0.0008061
Sr	88	3	He	728.101	6.5319	553914.72	0.009	0.0009645
Sr	88	3	He	727.289	6.5246	554668.31	0.009	0.0009645
Sr	88	3	He	709.674	6.3666	553478.08	0.009	0.0009645
Mo	98	3	He	4.598	0.1011	8572.97	0.0219	0.0002706
Mo	98	3	He	5.032	0.1106	9403.48	0.0219	0.0002706
Mo	98	3	He	4.685	0.103	8953.15	0.0219	0.0002706
Ag	107	3	He	0.337	0.0163	1380.12	0.0465	0.0006206
Ag	107	3	He	0.29	0.0141	1200.09	0.0465	0.0006206
Ag	107	3	He	0.333	0.0161	1400.12	0.0465	0.0006206
Cd	111	3	He	0.604	0.0032	274.00	0.0053	0
Cd	111	3	He	0.607	0.0032	276.00	0.0053	0
Cd	111	3	He	0.577	0.0031	268.00	0.0053	0
Sn	120	3	He	-0.028	0.016	1360.11	0.0158	0.01648
Sn	120	3	He	-0.142	0.0142	1210.09	0.0158	0.01648
Sn	120	3	He	-0.205	0.0132	1150.09	0.0158	0.01648
Sb	121	3	He	0.093	0.0017	140.01	0.0149	0.0002698
Sb	121	3	He	0.132	0.0022	190.01	0.0149	0.0002698
Sb	121	3	He	0.067	0.0013	110.00	0.0149	0.0002698
Ba	137	3	He	12.756	0.0615	5211.18	0.0048	0.0002317
Ba	137	3	He	11.743	0.0566	4810.98	0.0048	0.0002317
Ba	137	3	He	11.507	0.0555	4821.02	0.0048	0.0002317
Tl	205	3	He	0.014	0.0005	190.01	0.0247	0.0001339
Tl	205	3	He	0.026	0.0008	310.02	0.0247	0.0001339
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Pb	208	3	He	0.533	0.0185	3850.70	0.0327	0.00107
Pb	208	3	He	0.55	0.0191	3610.63	0.0327	0.00107
Pb	208	3	He	0.565	0.0196	3990.77	0.0327	0.00107
U	238	3	He	0.522	0.0258	7692.60	0.0493	7.55E-05
U	238	3	He	0.503	0.0249	7512.46	0.0493	7.55E-05
U	238	3	He	0.522	0.0258	7852.69	0.0493	7.55E-05
Sc	45	1	No Gas			2496109.34		
Sc	45	1	No Gas			2482337.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2475710.43		
Ge	72	1	No Gas			1200042.33		
Ge	72	1	No Gas			1195228.34		
Ge	72	1	No Gas			1201744.67		
Sc	45	2	H2			185916.23		
Sc	45	2	H2			180020.29		
Sc	45	2	H2			183010.66		
Ge	72	2	H2			158561.70		
Ge	72	2	H2			154215.29		
Ge	72	2	H2			156509.78		
In	115	2	H2			384999.99		
In	115	2	H2			380089.76		
In	115	2	H2			384005.97		
Sc	45	3	He			47297.46		
Sc	45	3	He			47598.65		
Sc	45	3	He			48280.68		
Ge	72	3	He			83382.30		
Ge	72	3	He			81240.28		
Ge	72	3	He			82829.87		
In	115	3	He			84808.78		
In	115	3	He			85019.58		
In	115	3	He			86941.85		
Tb	159	3	He			391852.73		
Tb	159	3	He			393395.35		
Tb	159	3	He			388231.87		
Bi	209	3	He			298151.15		
Bi	209	3	He			302222.55		
Bi	209	3	He			304660.89		

Quantitation Report

Data File Name	213SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 5:57:01 PM
Sample Name	410-136722-Q-3-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

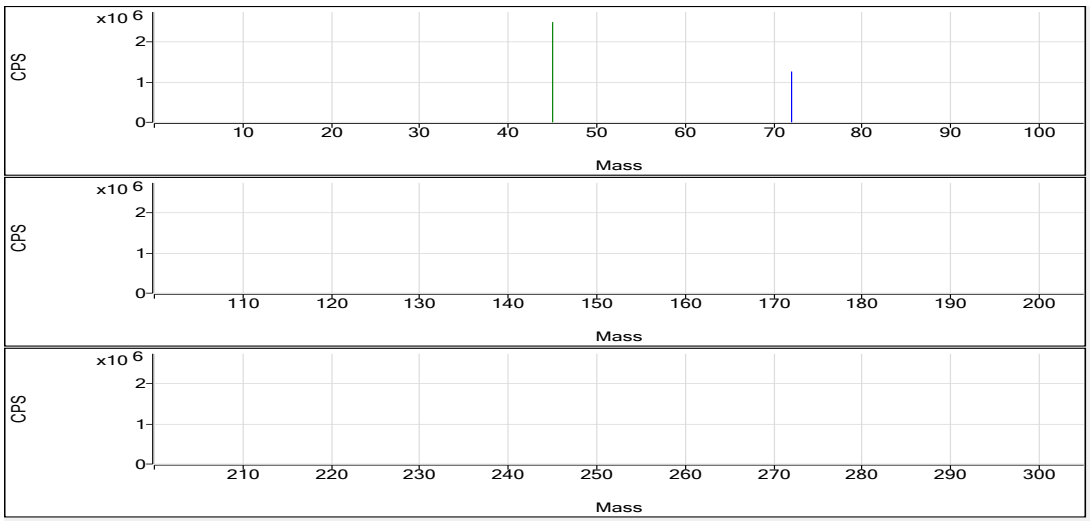
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.221	ppb	4.9	434.01	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.176	ppb	31.0	14.00	0.0001	Pulse	1.5000	3
Na	23	45	He	24741.820	ppb	1.8	4203609.52	88.8479	Analog	0.1000	3
Mg	24	45	He	8282.047	ppb	0.9	703305.87	14.8642	Pulse	0.1000	3
Al	27	45	He	1276.935	ppb	2.8	35374.66	0.7477	Pulse	0.1000	3
K	39	45	He	1305.813	ppb	1.2	90630.47	1.9155	Pulse	0.1000	3
Ca	44	45	He	51334.228	ppb	0.6	164207.42	3.4704	Pulse	0.1000	3
Ti	47	45	He	43.164	ppb	18.7	1100.30	0.0232	Pulse	0.1000	3
V	51	45	He	1.883	ppb	5.2	3124.36	0.0660	Pulse	0.5000	3
Cr	52	45	He	2.560	ppb	3.8	5517.93	0.1166	Pulse	0.1000	3
Mn	55	45	He	1870.731	ppb	2.2	1136010.14	24.0114	Pulse	0.1000	3
Fe	57	45	He	27983.845	ppb	1.9	769286.68	16.2598	Pulse	0.1000	3
Co	59	45	He	7.948	ppb	2.4	21266.37	0.4495	Pulse	0.1000	3
Ni	60	72	He	4.873	ppb	7.1	3900.69	0.0447	Pulse	0.1000	3
Cu	63	72	He	8.445	ppb	1.7	19346.82	0.2215	Pulse	0.1000	3
Zn	66	72	He	64.086	ppb	4.6	16626.85	0.1904	Pulse	0.1000	3
As	75	72	He	6.550	ppb	8.1	1242.73	0.0142	Pulse	0.5000	3
Sr	88	115	He	257.181	ppb	2.0	198256.39	2.3078	Pulse	0.1000	3
Mo	98	115	He	0.511	ppb	11.8	986.74	0.0115	Pulse	0.1000	3
Ag	107	115	He	0.039	ppb	20.8	210.01	0.0024	Pulse	0.1000	3
Cd	111	115	He	1.070	ppb	7.6	491.34	0.0057	Pulse	0.5000	3
Sn	120	115	He	0.055	ppb	191.1	1490.14	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.464	ppb	22.0	616.70	0.0072	Pulse	0.1000	3
Ba	137	115	He	28.156	ppb	1.3	11631.96	0.1354	Pulse	0.1000	3
Tl	205	159	He	0.067	ppb	6.3	713.38	0.0018	Pulse	0.1000	3
Pb	208	159	He	18.983	ppb	0.4	247793.76	0.6224	Pulse	0.1000	3
U	238	209	He	0.205	ppb	6.6	3164.01	0.0102	Pulse	0.1000	3

ISTD Table:

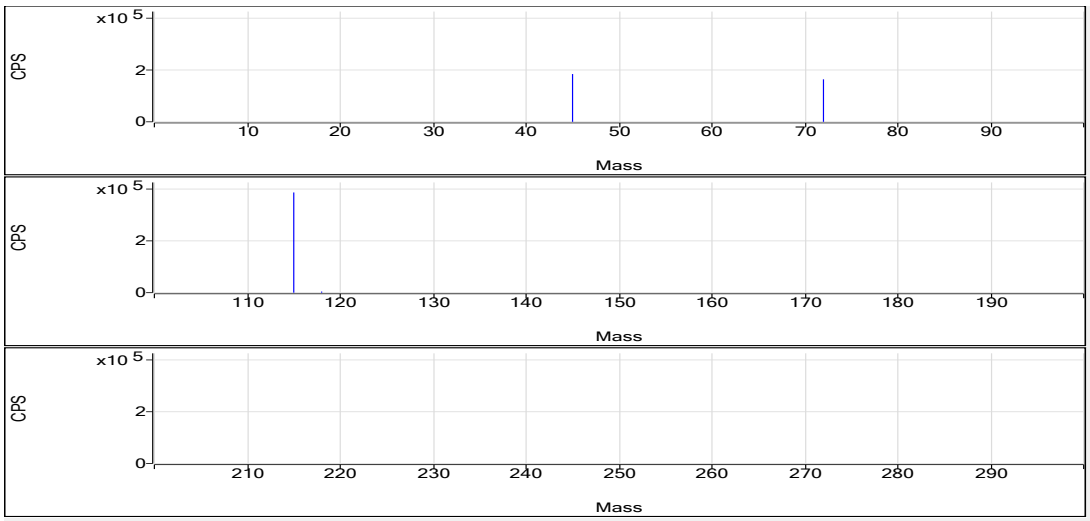
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2502688.50	1.0	104.3	Analog	0.1000	3
No Gas	Ge	72	1267973.03	1.1	109.9	Pulse	0.1000	3
H2	Sc	45	184028.56	0.2	98.4	Pulse	0.1000	3
H2	Ge	72	163701.86	1.2	100.0	Pulse	0.1000	3
H2	In	115	386132.74	0.3	99.2	Pulse	0.1000	3
He	Sc	45	47317.85	1.0	101.4	Pulse	0.1000	3
He	Ge	72	87326.52	0.5	107.6	Pulse	0.1000	3
He	In	115	85921.41	1.7	99.7	Pulse	0.1000	3
He	Tb	159	398131.94	0.9	99.9	Pulse	0.1000	3
He	Bi	209	310896.84	0.3	100.5	Pulse	0.1000	3

No Gas

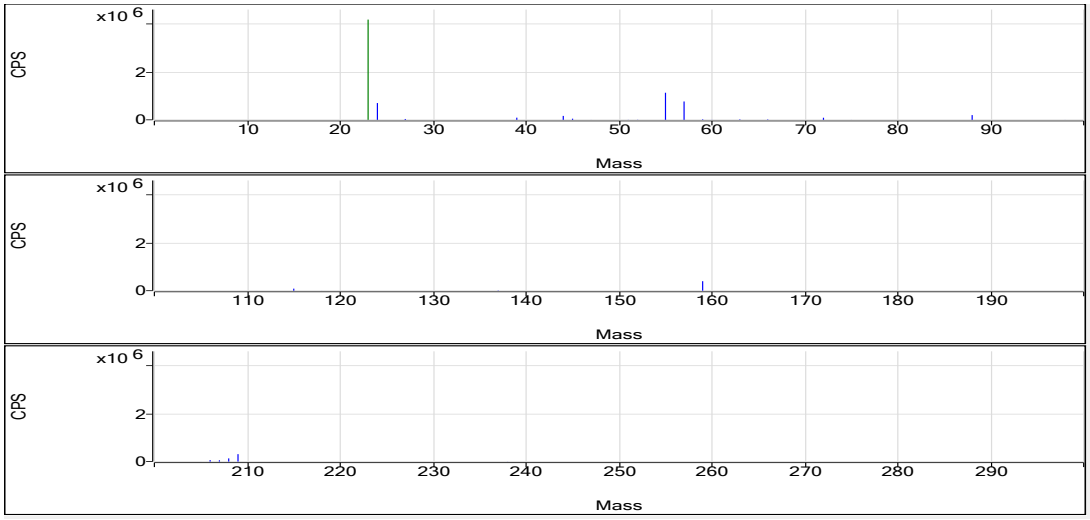


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.218	0.0002	426.01	0.0008	4.685E-06
Be	9	1	No Gas	0.233	0.0002	462.01	0.0008	4.685E-06
Be	9	1	No Gas	0.212	0.0002	414.01	0.0008	4.685E-06
Se	78	2	H2	0.183	0.0001	14.67	0.0004	1.219E-05
Se	78	2	H2	0.118	0.0001	10.00	0.0004	1.219E-05
Se	78	2	H2	0.227	0.0001	17.33	0.0004	1.219E-05
Na	23	3	He	24909.595	89.448	4232498.69	0.0036	0.3452
Na	23	3	He	25084.824	90.0748	4219671.19	0.0036	0.3452
Na	23	3	He	24231.041	87.0208	4158658.69	0.0036	0.3452
Mg	24	3	He	8324.975	14.9412	706986.55	0.0018	0.003497
Mg	24	3	He	8320.76	14.9336	699584.83	0.0018	0.003497
Mg	24	3	He	8200.405	14.7177	703346.24	0.0018	0.003497
Al	27	3	He	1248.47	0.731	34591.41	0.0006	0.0006432
Al	27	3	He	1316.409	0.7708	36108.57	0.0006	0.0006432
Al	27	3	He	1265.927	0.7413	35424.00	0.0006	0.0006432
K	39	3	He	1315.023	1.9262	91143.09	0.0012	0.3951
K	39	3	He	1314.733	1.9258	90218.70	0.0012	0.3951
K	39	3	He	1287.684	1.8944	90529.62	0.0012	0.3951
Ca	44	3	He	51487.216	3.4808	164703.22	0.0001	0.002715
Ca	44	3	He	51555.438	3.4854	163277.30	0.0001	0.002715
Ca	44	3	He	50960.028	3.4452	164641.74	0.0001	0.002715
Ti	47	3	He	52.246	0.0281	1330.74	0.0005	7.003E-05
Ti	47	3	He	36.844	0.0199	930.07	0.0005	7.003E-05
Ti	47	3	He	40.403	0.0218	1040.10	0.0005	7.003E-05
V	51	3	He	1.92	0.0668	3162.36	0.0219	0.02486
V	51	3	He	1.771	0.0636	2978.33	0.0219	0.02486
V	51	3	He	1.957	0.0676	3232.38	0.0219	0.02486
Cr	52	3	He	2.449	0.1133	5361.20	0.0299	0.03997
Cr	52	3	He	2.637	0.1189	5571.28	0.0299	0.03997
Cr	52	3	He	2.594	0.1176	5621.32	0.0299	0.03997
Mn	55	3	He	1889.716	24.255	1147698.58	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1899.882	24.3855	1142370.06	0.0128	0.002639
Mn	55	3	He	1822.593	23.3936	1117961.78	0.0128	0.002639
Fe	57	3	He	28148.444	16.3554	773905.30	0.0006	0.001429
Fe	57	3	He	28402.143	16.5028	773095.77	0.0006	0.001429
Fe	57	3	He	27400.949	15.9211	760858.97	0.0006	0.001429
Co	59	3	He	7.97	0.4507	21326.44	0.0563	0.002149
Co	59	3	He	8.126	0.4595	21526.84	0.0563	0.002149
Co	59	3	He	7.749	0.4383	20945.82	0.0563	0.002149
Ni	60	3	He	5.266	0.048	4220.80	0.0086	0.002834
Ni	60	3	He	4.623	0.0425	3700.64	0.0086	0.002834
Ni	60	3	He	4.73	0.0434	3780.62	0.0086	0.002834
Cu	63	3	He	8.438	0.2214	19453.63	0.0257	0.004757
Cu	63	3	He	8.592	0.2253	19613.86	0.0257	0.004757
Cu	63	3	He	8.305	0.2179	18972.97	0.0257	0.004757
Zn	66	3	He	62.782	0.1866	16399.79	0.0029	0.003818
Zn	66	3	He	67.466	0.2003	17431.14	0.0029	0.003818
Zn	66	3	He	62.009	0.1844	16049.62	0.0029	0.003818
As	75	3	He	7.138	0.0154	1356.07	0.002	0.0008061
As	75	3	He	6.414	0.0139	1214.06	0.002	0.0008061
As	75	3	He	6.099	0.0133	1158.05	0.002	0.0008061
Sr	88	3	He	262.806	2.3583	198868.73	0.009	0.0009645
Sr	88	3	He	255.602	2.2937	200210.66	0.009	0.0009645
Sr	88	3	He	253.136	2.2715	195689.78	0.009	0.0009645
Mo	98	3	He	0.534	0.012	1010.07	0.0219	0.0002706
Mo	98	3	He	0.557	0.0125	1090.09	0.0219	0.0002706
Mo	98	3	He	0.443	0.01	860.06	0.0219	0.0002706
Ag	107	3	He	0.048	0.0028	240.01	0.0465	0.0006206
Ag	107	3	He	0.038	0.0024	210.01	0.0465	0.0006206
Ag	107	3	He	0.032	0.0021	180.01	0.0465	0.0006206
Cd	111	3	He	1.149	0.0061	518.01	0.0053	0
Cd	111	3	He	1.076	0.0058	502.01	0.0053	0
Cd	111	3	He	0.986	0.0053	454.01	0.0053	0
Sn	120	3	He	0.053	0.0173	1460.12	0.0158	0.01648
Sn	120	3	He	-0.049	0.0157	1370.12	0.0158	0.01648
Sn	120	3	He	0.162	0.019	1640.17	0.0158	0.01648
Sb	121	3	He	0.349	0.0055	460.02	0.0149	0.0002698
Sb	121	3	He	0.499	0.0077	670.04	0.0149	0.0002698
Sb	121	3	He	0.545	0.0084	720.04	0.0149	0.0002698
Ba	137	3	He	27.836	0.1338	11285.03	0.0048	0.0002317
Ba	137	3	He	28.538	0.1372	11975.61	0.0048	0.0002317
Ba	137	3	He	28.093	0.1351	11635.25	0.0048	0.0002317
Tl	205	3	He	0.071	0.0019	760.05	0.0247	0.0001339
Tl	205	3	He	0.063	0.0017	670.04	0.0247	0.0001339
Tl	205	3	He	0.067	0.0018	710.05	0.0247	0.0001339
Pb	208	3	He	18.94	0.621	134131.46	0.0327	0.00107
Pb	208	3	He	19.065	0.6251	133534.20	0.0327	0.00107
Pb	208	3	He	18.946	0.6212	131927.88	0.0327	0.00107
U	238	3	He	0.202	0.01	3110.51	0.0493	7.55E-05
U	238	3	He	0.22	0.0109	3401.10	0.0493	7.55E-05
U	238	3	He	0.193	0.0096	2980.43	0.0493	7.55E-05
Sc	45	1	No Gas			2487057.62		
Sc	45	1	No Gas			2532459.02		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2488548.87		
Ge	72	1	No Gas			1268268.03		
Ge	72	1	No Gas			1281515.92		
Ge	72	1	No Gas			1254135.14		
Sc	45	2	H2			184384.76		
Sc	45	2	H2			183983.02		
Sc	45	2	H2			183717.91		
Ge	72	2	H2			165882.32		
Ge	72	2	H2			162757.05		
Ge	72	2	H2			162466.20		
In	115	2	H2			387297.34		
In	115	2	H2			386201.44		
In	115	2	H2			384899.45		
Sc	45	3	He			47317.98		
Sc	45	3	He			46846.30		
Sc	45	3	He			47789.26		
Ge	72	3	He			87879.75		
Ge	72	3	He			87045.53		
Ge	72	3	He			87054.28		
In	115	3	He			84335.95		
In	115	3	He			87294.33		
In	115	3	He			86156.57		
Tb	159	3	He			401646.20		
Tb	159	3	He			397960.50		
Tb	159	3	He			394789.13		
Bi	209	3	He			310586.15		
Bi	209	3	He			311833.24		
Bi	209	3	He			310271.13		

Quantitation Report

Data File Name	214SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 5:59:04 PM
Sample Name	410-136722-Q-9-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

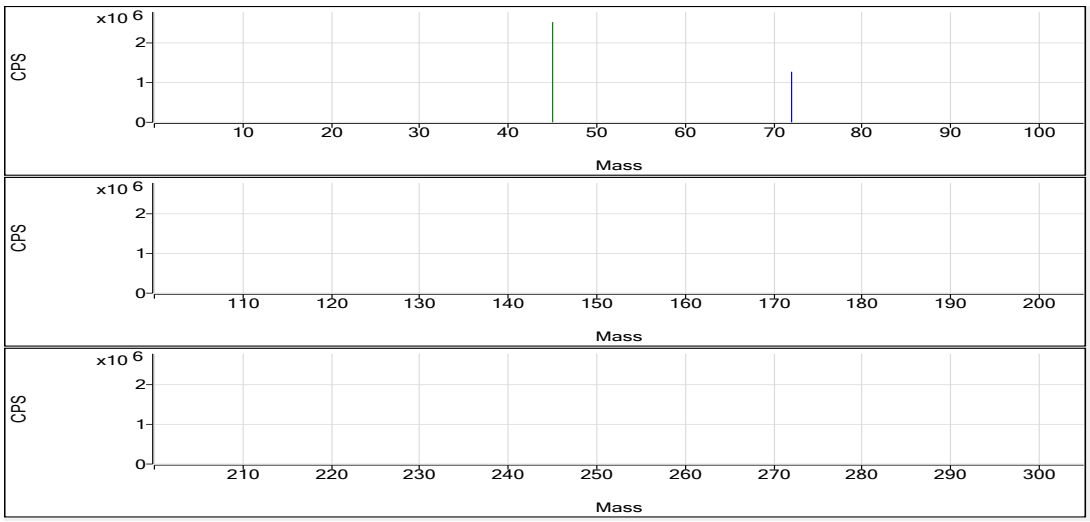
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.042	ppb	17.0	91.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.026	ppb	57.6	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	11402.899	ppb	1.5	2014602.42	41.1339	Analog	0.1000	3
Mg	24	45	He	8711.982	ppb	0.6	765847.80	15.6356	Pulse	0.1000	3
Al	27	45	He	35.775	ppb	2.6	1056.74	0.0216	Pulse	0.1000	3
K	39	45	He	559.175	ppb	2.6	51237.12	1.0461	Pulse	0.1000	3
Ca	44	45	He	22257.275	ppb	1.2	73773.73	1.5062	Pulse	0.1000	3
Ti	47	45	He	0.369	ppb	234.5	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.208	ppb	12.9	1440.08	0.0294	Pulse	0.5000	3
Cr	52	45	He	0.102	ppb	104.2	2106.89	0.0430	Pulse	0.1000	3
Mn	55	45	He	1248.739	ppb	2.0	784999.83	16.0288	Pulse	0.1000	3
Fe	57	45	He	10801.400	ppb	1.9	307412.04	6.2769	Pulse	0.1000	3
Co	59	45	He	4.304	ppb	2.7	11968.63	0.2444	Pulse	0.1000	3
Ni	60	72	He	1.727	ppb	1.0	1546.80	0.0177	Pulse	0.1000	3
Cu	63	72	He	0.572	ppb	20.1	1703.50	0.0194	Pulse	0.1000	3
Zn	66	72	He	3.235	ppb	17.7	1160.09	0.0132	Pulse	0.1000	3
As	75	72	He	30.581	ppb	1.8	5558.45	0.0635	Pulse	0.5000	3
Sr	88	115	He	91.855	ppb	0.7	72824.49	0.8249	Pulse	0.1000	3
Mo	98	115	He	0.366	ppb	20.7	730.05	0.0083	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	33.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	58.7	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.080	ppb	N/A	1340.12	0.0152	Pulse	0.1000	3
Sb	121	115	He	0.073	ppb	45.4	120.01	0.0014	Pulse	0.1000	3
Ba	137	115	He	9.748	ppb	5.1	4150.78	0.0470	Pulse	0.1000	3
Tl	205	159	He	0.008	ppb	70.0	130.01	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.603	ppb	5.6	8341.34	0.0208	Pulse	0.1000	3
U	238	209	He	0.021	ppb	9.1	353.35	0.0011	Pulse	0.1000	3

ISTD Table:

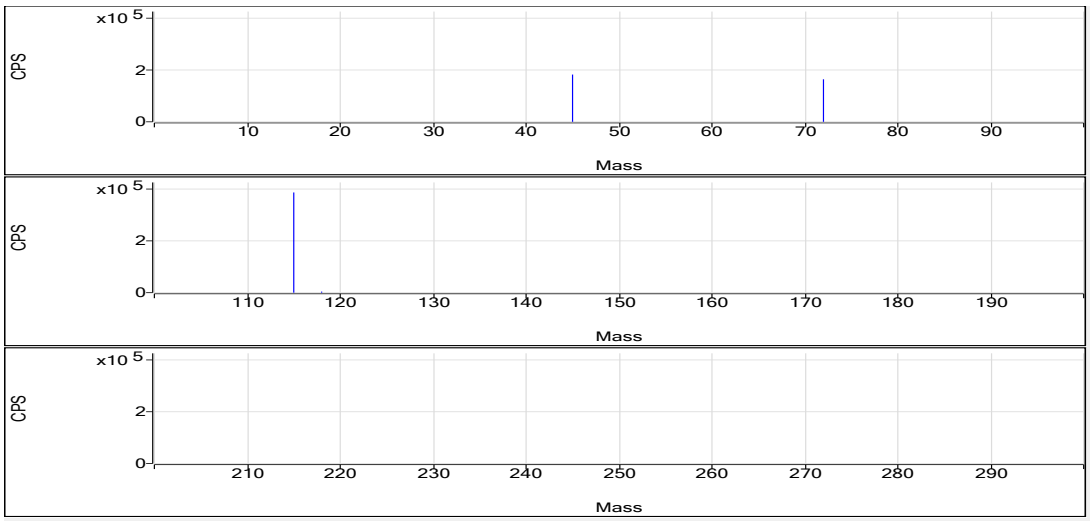
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2511342.57	0.4	104.7	Analog	0.1000	3
No Gas	Ge	72	1266878.86	0.6	109.8	Pulse	0.1000	3
H2	Sc	45	183162.40	0.5	97.9	Pulse	0.1000	3
H2	Ge	72	164791.30	0.6	100.7	Pulse	0.1000	3
H2	In	115	388441.99	1.4	99.8	Pulse	0.1000	3
He	Sc	45	48983.41	1.4	105.0	Pulse	0.1000	3
He	Ge	72	87584.38	0.9	107.9	Pulse	0.1000	3
He	In	115	88292.86	2.4	102.4	Pulse	0.1000	3
He	Tb	159	400852.62	0.7	100.6	Pulse	0.1000	3
He	Bi	209	313009.47	1.0	101.2	Pulse	0.1000	3

No Gas

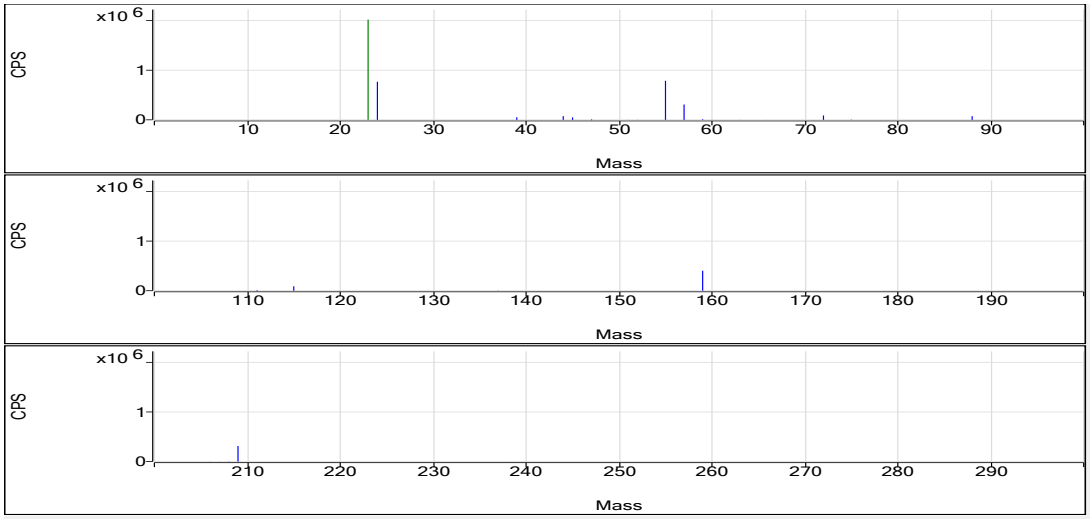


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.047	0	102.00	0.0008	4.685E-06
Be	9	1	No Gas	0.034	0	76.00	0.0008	4.685E-06
Be	9	1	No Gas	0.044	0	96.00	0.0008	4.685E-06
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.029	0	4.00	0.0004	1.219E-05
Se	78	2	H2	0.039	0	4.67	0.0004	1.219E-05
Na	23	3	He	11485.44	41.4291	2019757.63	0.0036	0.3452
Na	23	3	He	11515.747	41.5375	2012162.78	0.0036	0.3452
Na	23	3	He	11207.51	40.435	2011886.85	0.0036	0.3452
Mg	24	3	He	8757.113	15.7166	766216.16	0.0018	0.003497
Mg	24	3	He	8724.661	15.6583	758521.94	0.0018	0.003497
Mg	24	3	He	8654.172	15.5319	772805.30	0.0018	0.003497
Al	27	3	He	36.769	0.0222	1080.07	0.0006	0.0006432
Al	27	3	He	34.894	0.0211	1020.07	0.0006	0.0006432
Al	27	3	He	35.661	0.0215	1070.07	0.0006	0.0006432
K	39	3	He	552.079	1.0379	50598.18	0.0012	0.3951
K	39	3	He	576.106	1.0658	51631.57	0.0012	0.3951
K	39	3	He	549.341	1.0347	51481.60	0.0012	0.3951
Ca	44	3	He	22151.314	1.4991	73083.22	0.0001	0.002715
Ca	44	3	He	22570.09	1.5274	73988.77	0.0001	0.002715
Ca	44	3	He	22050.422	1.4923	74249.20	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	1.367	0.0008	40.00	0.0005	7.003E-05
V	51	3	He	0.218	0.0296	1444.08	0.0219	0.02486
V	51	3	He	0.228	0.0299	1446.08	0.0219	0.02486
V	51	3	He	0.177	0.0287	1430.08	0.0219	0.02486
Cr	52	3	He	0.22	0.0466	2270.26	0.0299	0.03997
Cr	52	3	He	0.072	0.0421	2040.22	0.0299	0.03997
Cr	52	3	He	0.014	0.0404	2010.20	0.0299	0.03997
Mn	55	3	He	1256.657	16.1304	786391.63	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1268.516	16.2826	788762.80	0.0128	0.002639
Mn	55	3	He	1221.043	15.6734	779845.07	0.0128	0.002639
Fe	57	3	He	10876.881	6.3208	308152.14	0.0006	0.001429
Fe	57	3	He	10956.131	6.3668	308422.63	0.0006	0.001429
Fe	57	3	He	10571.188	6.1432	305661.36	0.0006	0.001429
Co	59	3	He	4.301	0.2442	11905.27	0.0563	0.002149
Co	59	3	He	4.424	0.2511	12165.46	0.0563	0.002149
Co	59	3	He	4.188	0.2379	11835.17	0.0563	0.002149
Ni	60	3	He	1.714	0.0175	1520.12	0.0086	0.002834
Ni	60	3	He	1.721	0.0176	1550.13	0.0086	0.002834
Ni	60	3	He	1.747	0.0178	1570.14	0.0086	0.002834
Cu	63	3	He	0.566	0.0193	1670.16	0.0257	0.004757
Cu	63	3	He	0.461	0.0166	1460.14	0.0257	0.004757
Cu	63	3	He	0.691	0.0225	1980.20	0.0257	0.004757
Zn	66	3	He	2.693	0.0117	1010.07	0.0029	0.003818
Zn	66	3	He	3.175	0.0131	1150.09	0.0029	0.003818
Zn	66	3	He	3.837	0.015	1320.11	0.0029	0.003818
As	75	3	He	30.487	0.0633	5481.09	0.002	0.0008061
As	75	3	He	31.176	0.0647	5695.16	0.002	0.0008061
As	75	3	He	30.081	0.0624	5499.09	0.002	0.0008061
Sr	88	3	He	91.415	0.8209	74285.93	0.009	0.0009645
Sr	88	3	He	92.598	0.8316	71812.76	0.009	0.0009645
Sr	88	3	He	91.55	0.8222	72374.78	0.009	0.0009645
Mo	98	3	He	0.33	0.0075	680.04	0.0219	0.0002706
Mo	98	3	He	0.452	0.0102	880.06	0.0219	0.0002706
Mo	98	3	He	0.314	0.0072	630.04	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Sn	120	3	He	-0.203	0.0133	1200.09	0.0158	0.01648
Sn	120	3	He	0.137	0.0186	1610.16	0.0158	0.01648
Sn	120	3	He	-0.173	0.0137	1210.10	0.0158	0.01648
Sb	121	3	He	0.101	0.0018	160.01	0.0149	0.0002698
Sb	121	3	He	0.036	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.081	0.0015	130.01	0.0149	0.0002698
Ba	137	3	He	9.486	0.0458	4140.75	0.0048	0.0002317
Ba	137	3	He	9.436	0.0455	3930.74	0.0048	0.0002317
Ba	137	3	He	10.321	0.0498	4380.84	0.0048	0.0002317
Tl	205	3	He	0.01	0.0004	150.01	0.0247	0.0001339
Tl	205	3	He	0.002	0.0002	70.00	0.0247	0.0001339
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Pb	208	3	He	0.639	0.022	4681.00	0.0327	0.00107
Pb	208	3	He	0.572	0.0198	4220.84	0.0327	0.00107
Pb	208	3	He	0.599	0.0207	4300.85	0.0327	0.00107
U	238	3	He	0.021	0.0011	340.02	0.0493	7.55E-05
U	238	3	He	0.024	0.0012	390.02	0.0493	7.55E-05
U	238	3	He	0.02	0.0011	330.02	0.0493	7.55E-05
Sc	45	1	No Gas			2505511.21		
Sc	45	1	No Gas			2505316.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2523199.81		
Ge	72	1	No Gas			1261138.65		
Ge	72	1	No Gas			1264490.22		
Ge	72	1	No Gas			1275007.72		
Sc	45	2	H2			182866.48		
Sc	45	2	H2			184095.25		
Sc	45	2	H2			182525.47		
Ge	72	2	H2			164357.34		
Ge	72	2	H2			165893.30		
Ge	72	2	H2			164123.26		
In	115	2	H2			382355.07		
In	115	2	H2			391217.18		
In	115	2	H2			391753.71		
Sc	45	3	He			48752.10		
Sc	45	3	He			48442.02		
Sc	45	3	He			49756.11		
Ge	72	3	He			86631.40		
Ge	72	3	He			88050.31		
Ge	72	3	He			88071.43		
In	115	3	He			90494.46		
In	115	3	He			86367.56		
In	115	3	He			88037.85		
Tb	159	3	He			401996.28		
Tb	159	3	He			402876.17		
Tb	159	3	He			397685.42		
Bi	209	3	He			309348.78		
Bi	209	3	He			315684.43		
Bi	209	3	He			313995.21		

Quantitation Report

Data File Name	215SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 6:01:06 PM
Sample Name	410-136722-Q-8-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

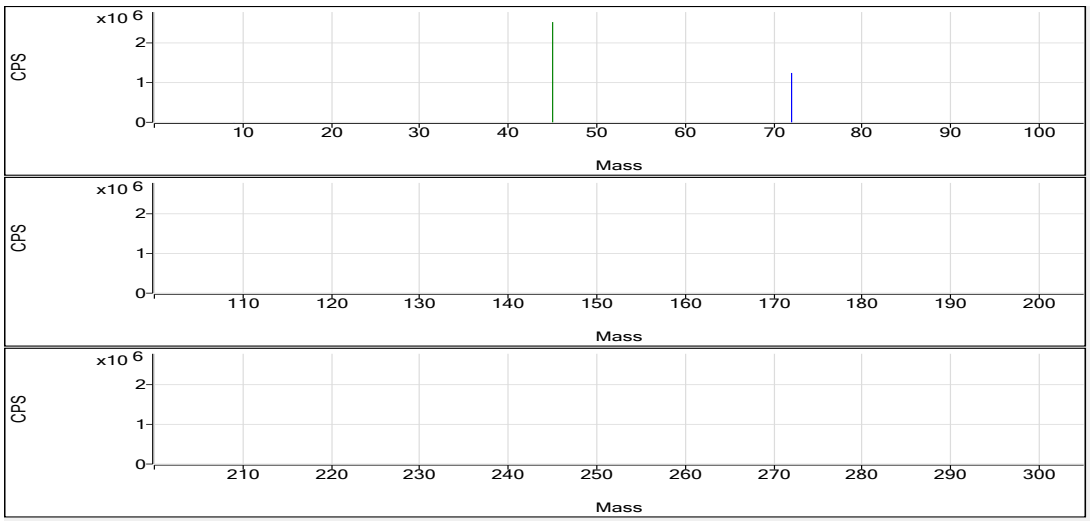
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.864	ppb	5.7	1674.77	0.0007	Pulse	0.5000	3
Se	78	72	H2	0.394	ppb	1.0	28.22	0.0002	Pulse	1.5000	3
Na	23	45	He	191891.402	ppb	0.8	33316234.50	686.7501	Analog	0.1000	3
Mg	24	45	He	3730.928	ppb	1.9	324920.27	6.6980	Pulse	0.1000	3
Al	27	45	He	6419.672	ppb	1.2	182234.05	3.7564	Pulse	0.1000	3
K	39	45	He	9952.424	ppb	1.7	581303.49	11.9829	Pulse	0.1000	3
Ca	44	45	He	33606.985	ppb	1.5	110262.65	2.2729	Pulse	0.1000	3
Ti	47	45	He	62.453	ppb	8.2	1630.14	0.0336	Pulse	0.1000	3
V	51	45	He	8.351	ppb	2.0	10062.87	0.2074	Pulse	0.5000	3
Cr	52	45	He	9.216	ppb	1.7	15325.20	0.3159	Pulse	0.1000	3
Mn	55	45	He	3389.233	ppb	0.8	2110349.45	43.4996	Analog	0.1000	3
Fe	57	45	He	38110.721	ppb	1.2	1074223.40	22.1434	Pulse	0.1000	3
Co	59	45	He	36.709	ppb	0.9	100334.06	2.0682	Pulse	0.1000	3
Ni	60	72	He	11.242	ppb	4.3	8546.15	0.0993	Pulse	0.1000	3
Cu	63	72	He	24.127	ppb	1.2	53694.54	0.6241	Pulse	0.1000	3
Zn	66	72	He	449.017	ppb	1.6	112803.76	1.3112	Pulse	0.1000	3
As	75	72	He	18.393	ppb	2.4	3311.74	0.0385	Pulse	0.5000	3
Sr	88	115	He	263.220	ppb	1.6	203917.70	2.3620	Pulse	0.1000	3
Mo	98	115	He	3.689	ppb	3.2	7005.33	0.0811	Pulse	0.1000	3
Ag	107	115	He	0.095	ppb	24.4	433.36	0.0050	Pulse	0.1000	3
Cd	111	115	He	0.272	ppb	13.3	125.33	0.0015	Pulse	0.5000	3
Sn	120	115	He	0.450	ppb	23.6	2036.88	0.0236	Pulse	0.1000	3
Sb	121	115	He	0.416	ppb	22.1	556.70	0.0064	Pulse	0.1000	3
Ba	137	115	He	192.266	ppb	0.3	79691.49	0.9230	Pulse	0.1000	3
Tl	205	159	He	0.071	ppb	21.1	773.38	0.0019	Pulse	0.1000	3
Pb	208	159	He	10.998	ppb	1.2	148477.84	0.3610	Pulse	0.1000	3
U	238	209	He	0.964	ppb	3.3	14508.59	0.0476	Pulse	0.1000	3

ISTD Table:

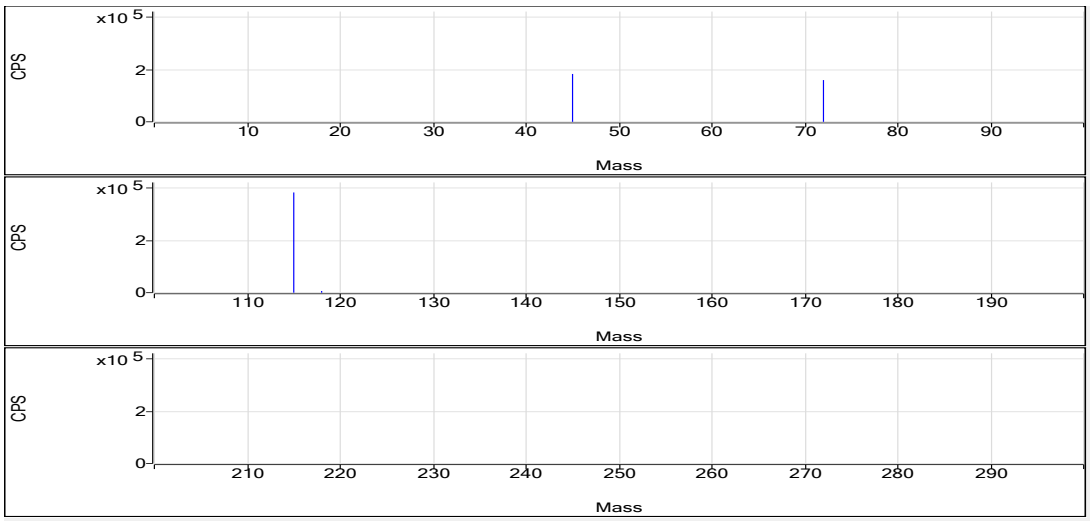
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2524643.56	0.4	105.2	Analog	0.1000	3
No Gas	Ge	72	1242915.32	0.8	107.8	Pulse	0.1000	3
H2	Sc	45	183409.91	0.2	98.1	Pulse	0.1000	3
H2	Ge	72	159980.43	0.6	97.7	Pulse	0.1000	3
H2	In	115	384131.83	0.6	98.7	Pulse	0.1000	3
He	Sc	45	48514.63	0.7	104.0	Pulse	0.1000	3
He	Ge	72	86035.19	0.5	106.0	Pulse	0.1000	3
He	In	115	86340.29	0.9	100.2	Pulse	0.1000	3
He	Tb	159	411289.45	0.9	103.2	Pulse	0.1000	3
He	Bi	209	305129.31	0.7	98.7	Pulse	0.1000	3

No Gas

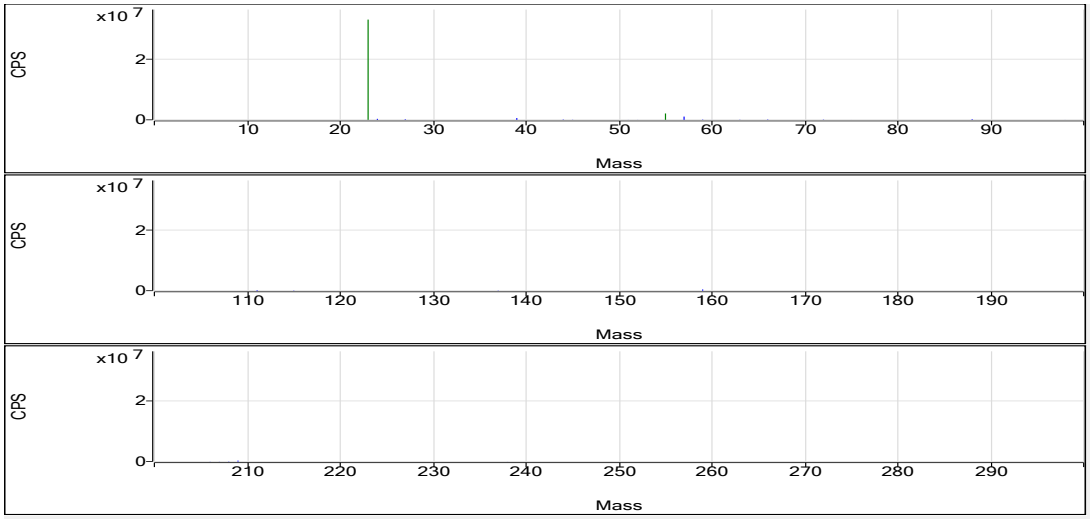


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.811	0.0006	1580.09	0.0008	4.685E-06
Be	9	1	No Gas	0.872	0.0007	1686.11	0.0008	4.685E-06
Be	9	1	No Gas	0.908	0.0007	1758.11	0.0008	4.685E-06
Se	78	2	H2	0.391	0.0002	28.00	0.0004	1.219E-05
Se	78	2	H2	0.398	0.0002	28.67	0.0004	1.219E-05
Se	78	2	H2	0.393	0.0002	28.00	0.0004	1.219E-05
Na	23	3	He	193593.95	692.8402	33346544.50	0.0036	0.3452
Na	23	3	He	191137.577	684.0536	33252757.00	0.0036	0.3452
Na	23	3	He	190942.679	683.3565	33349402.00	0.0036	0.3452
Mg	24	3	He	3808.966	6.838	329114.80	0.0018	0.003497
Mg	24	3	He	3717.58	6.674	324433.61	0.0018	0.003497
Mg	24	3	He	3666.236	6.5819	321212.40	0.0018	0.003497
Al	27	3	He	6483.067	3.7935	182580.19	0.0006	0.0006432
Al	27	3	He	6332.85	3.7056	180133.22	0.0006	0.0006432
Al	27	3	He	6443.098	3.7701	183988.75	0.0006	0.0006432
K	39	3	He	10136.045	12.1967	587031.32	0.0012	0.3951
K	39	3	He	9904.111	11.9267	579772.10	0.0012	0.3951
K	39	3	He	9817.115	11.8254	577107.06	0.0012	0.3951
Ca	44	3	He	34171.765	2.3111	111232.90	0.0001	0.002715
Ca	44	3	He	33422.043	2.2604	109882.88	0.0001	0.002715
Ca	44	3	He	33227.148	2.2473	109672.16	0.0001	0.002715
Ti	47	3	He	62.173	0.0335	1610.14	0.0005	7.003E-05
Ti	47	3	He	67.687	0.0364	1770.16	0.0005	7.003E-05
Ti	47	3	He	57.498	0.0309	1510.12	0.0005	7.003E-05
V	51	3	He	8.394	0.2083	10027.49	0.0219	0.02486
V	51	3	He	8.166	0.2034	9885.41	0.0219	0.02486
V	51	3	He	8.495	0.2106	10275.70	0.0219	0.02486
Cr	52	3	He	9.288	0.3181	15308.66	0.0299	0.03997
Cr	52	3	He	9.32	0.319	15508.63	0.0299	0.03997
Cr	52	3	He	9.039	0.3106	15158.31	0.0299	0.03997
Mn	55	3	He	3405.332	43.7063	2103591.06	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3356.356	43.0777	2094063.88	0.0128	0.002639
Mn	55	3	He	3406.012	43.715	2133393.41	0.0128	0.002639
Fe	57	3	He	38644.431	22.4535	1080691.16	0.0006	0.001429
Fe	57	3	He	37743.084	21.9298	1066037.48	0.0006	0.001429
Fe	57	3	He	37944.647	22.0469	1075941.55	0.0006	0.001429
Co	59	3	He	37.084	2.0893	100559.48	0.0563	0.002149
Co	59	3	He	36.628	2.0636	100316.72	0.0563	0.002149
Co	59	3	He	36.415	2.0517	100125.98	0.0563	0.002149
Ni	60	3	He	11.455	0.1012	8742.89	0.0086	0.002834
Ni	60	3	He	11.582	0.1022	8803.01	0.0086	0.002834
Ni	60	3	He	10.687	0.0946	8092.55	0.0086	0.002834
Cu	63	3	He	23.81	0.616	53239.11	0.0257	0.004757
Cu	63	3	He	24.348	0.6298	54223.79	0.0257	0.004757
Cu	63	3	He	24.223	0.6266	53620.73	0.0257	0.004757
Zn	66	3	He	448.167	1.3087	113112.19	0.0029	0.003818
Zn	66	3	He	442.141	1.2912	111167.92	0.0029	0.003818
Zn	66	3	He	456.745	1.3337	114131.16	0.0029	0.003818
As	75	3	He	18.899	0.0395	3416.43	0.002	0.0008061
As	75	3	He	18.236	0.0382	3286.40	0.002	0.0008061
As	75	3	He	18.042	0.0378	3232.38	0.002	0.0008061
Sr	88	3	He	260.533	2.3379	203445.08	0.009	0.0009645
Sr	88	3	He	261.088	2.3429	202561.01	0.009	0.0009645
Sr	88	3	He	268.038	2.4052	205747.01	0.009	0.0009645
Mo	98	3	He	3.558	0.0783	6811.88	0.0219	0.0002706
Mo	98	3	He	3.723	0.0819	7082.07	0.0219	0.0002706
Mo	98	3	He	3.785	0.0833	7122.04	0.0219	0.0002706
Ag	107	3	He	0.078	0.0043	370.02	0.0465	0.0006206
Ag	107	3	He	0.121	0.0062	540.04	0.0465	0.0006206
Ag	107	3	He	0.085	0.0046	390.02	0.0465	0.0006206
Cd	111	3	He	0.232	0.0012	108.00	0.0053	0
Cd	111	3	He	0.303	0.0016	140.00	0.0053	0
Cd	111	3	He	0.28	0.0015	128.00	0.0053	0
Sn	120	3	He	0.565	0.0254	2210.24	0.0158	0.01648
Sn	120	3	He	0.356	0.0221	1910.21	0.0158	0.01648
Sn	120	3	He	0.43	0.0233	1990.20	0.0158	0.01648
Sb	121	3	He	0.508	0.0078	680.05	0.0149	0.0002698
Sb	121	3	He	0.324	0.0051	440.02	0.0149	0.0002698
Sb	121	3	He	0.415	0.0064	550.03	0.0149	0.0002698
Ba	137	3	He	193.028	0.9266	80636.59	0.0048	0.0002317
Ba	137	3	He	191.885	0.9212	79641.22	0.0048	0.0002317
Ba	137	3	He	191.884	0.9211	78796.66	0.0048	0.0002317
Tl	205	3	He	0.06	0.0016	660.04	0.0247	0.0001339
Tl	205	3	He	0.065	0.0017	720.05	0.0247	0.0001339
Tl	205	3	He	0.088	0.0023	940.06	0.0247	0.0001339
Pb	208	3	He	11.002	0.3612	78866.11	0.0327	0.00107
Pb	208	3	He	10.862	0.3566	79369.90	0.0327	0.00107
Pb	208	3	He	11.129	0.3653	78243.34	0.0327	0.00107
U	238	3	He	0.927	0.0458	14018.01	0.0493	7.55E-05
U	238	3	He	0.977	0.0482	14588.66	0.0493	7.55E-05
U	238	3	He	0.987	0.0487	14919.09	0.0493	7.55E-05
Sc	45	1	No Gas			2535363.87		
Sc	45	1	No Gas			2516093.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2522473.56		
Ge	72	1	No Gas			1253285.22		
Ge	72	1	No Gas			1232559.20		
Ge	72	1	No Gas			1242901.54		
Sc	45	2	H2			182897.01		
Sc	45	2	H2			183577.17		
Sc	45	2	H2			183755.56		
Ge	72	2	H2			159885.42		
Ge	72	2	H2			160928.32		
Ge	72	2	H2			159127.54		
In	115	2	H2			385327.38		
In	115	2	H2			385693.51		
In	115	2	H2			381374.60		
Sc	45	3	He			48130.21		
Sc	45	3	He			48611.33		
Sc	45	3	He			48802.35		
Ge	72	3	He			86430.49		
Ge	72	3	He			86099.16		
Ge	72	3	He			85575.91		
In	115	3	He			87032.07		
In	115	3	He			86468.28		
In	115	3	He			85552.11		
Tb	159	3	He			409773.35		
Tb	159	3	He			415548.98		
Tb	159	3	He			408546.01		
Bi	209	3	He			306333.20		
Bi	209	3	He			302561.60		
Bi	209	3	He			306493.14		

Quantitation Report

Data File Name	216SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 6:03:11 PM
Sample Name	410-136722-Q-1-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

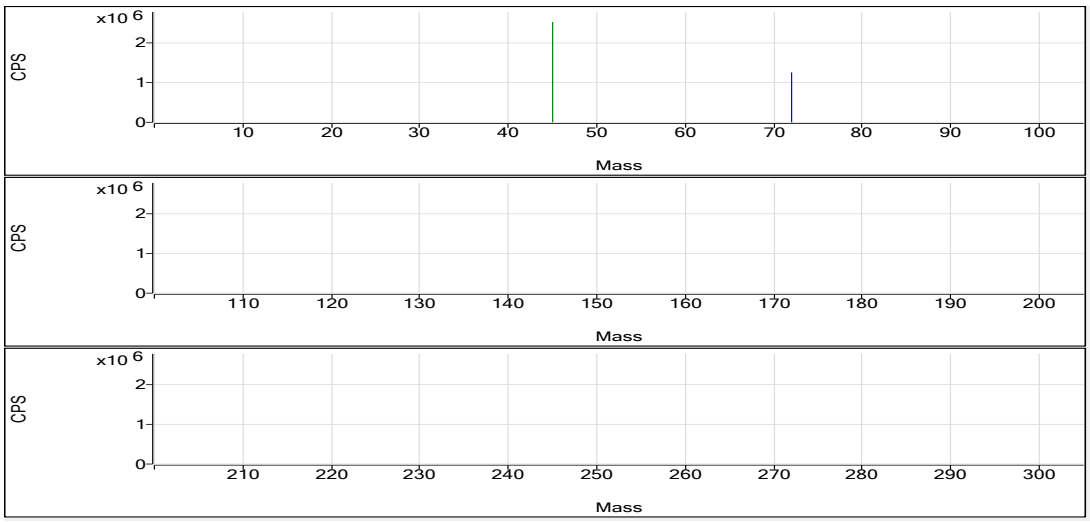
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.123	ppb	19.4	250.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.019	ppb	171.0	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	12936.325	ppb	1.5	2260948.14	46.6190	Analog	0.1000	3
Mg	24	45	He	8774.726	ppb	2.3	763705.35	15.7482	Pulse	0.1000	3
Al	27	45	He	357.975	ppb	1.4	10190.86	0.2101	Pulse	0.1000	3
K	39	45	He	592.455	ppb	3.8	52612.09	1.0849	Pulse	0.1000	3
Ca	44	45	He	21838.346	ppb	1.3	71683.33	1.4779	Pulse	0.1000	3
Ti	47	45	He	2.186	ppb	62.9	60.00	0.0012	Pulse	0.1000	3
V	51	45	He	0.540	ppb	13.3	1778.12	0.0367	Pulse	0.5000	3
Cr	52	45	He	0.858	ppb	11.2	3183.83	0.0657	Pulse	0.1000	3
Mn	55	45	He	1528.421	ppb	1.6	951451.18	19.6182	Pulse	0.1000	3
Fe	57	45	He	26098.929	ppb	1.8	735441.34	15.1647	Pulse	0.1000	3
Co	59	45	He	42.464	ppb	2.3	116004.67	2.3921	Pulse	0.1000	3
Ni	60	72	He	25.757	ppb	2.7	19697.45	0.2239	Pulse	0.1000	3
Cu	63	72	He	2.260	ppb	4.8	5521.26	0.0628	Pulse	0.1000	3
Zn	66	72	He	10.702	ppb	6.1	3077.10	0.0350	Pulse	0.1000	3
As	75	72	He	204.328	ppb	0.2	36901.42	0.4194	Pulse	0.5000	3
Sr	88	115	He	95.815	ppb	2.0	74794.39	0.8604	Pulse	0.1000	3
Mo	98	115	He	3.532	ppb	5.3	6755.19	0.0777	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	556.8	56.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.232	ppb	6.5	108.00	0.0012	Pulse	0.5000	3
Sn	120	115	He	-0.124	ppb	N/A	1263.44	0.0145	Pulse	0.1000	3
Sb	121	115	He	0.895	ppb	8.1	1180.09	0.0136	Pulse	0.1000	3
Ba	137	115	He	12.829	ppb	3.1	5374.58	0.0618	Pulse	0.1000	3
Tl	205	159	He	0.018	ppb	25.0	230.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	3.059	ppb	1.3	40766.18	0.1012	Pulse	0.1000	3
U	238	209	He	0.084	ppb	5.9	1320.12	0.0042	Pulse	0.1000	3

ISTD Table:

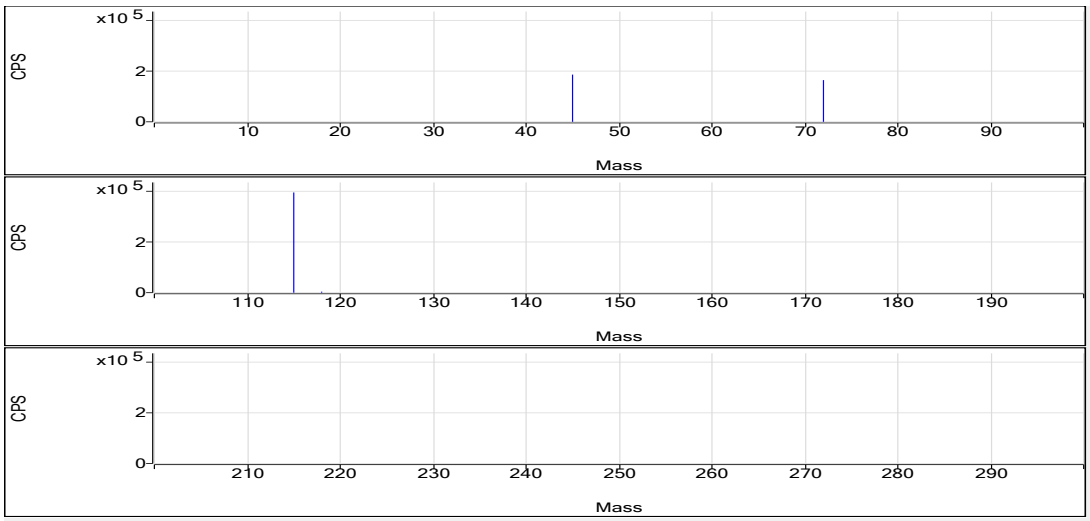
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2540438.76	0.9	105.9	Analog	0.1000	3
No Gas	Ge	72	1262832.58	1.3	109.5	Pulse	0.1000	3
H2	Sc	45	185291.53	1.8	99.1	Pulse	0.1000	3
H2	Ge	72	163661.04	1.3	100.0	Pulse	0.1000	3
H2	In	115	393339.12	0.4	101.1	Pulse	0.1000	3
He	Sc	45	48505.26	1.4	104.0	Pulse	0.1000	3
He	Ge	72	87976.79	0.6	108.4	Pulse	0.1000	3
He	In	115	86948.63	1.7	100.9	Pulse	0.1000	3
He	Tb	159	402832.49	0.3	101.1	Pulse	0.1000	3
He	Bi	209	313347.57	0.6	101.3	Pulse	0.1000	3

No Gas

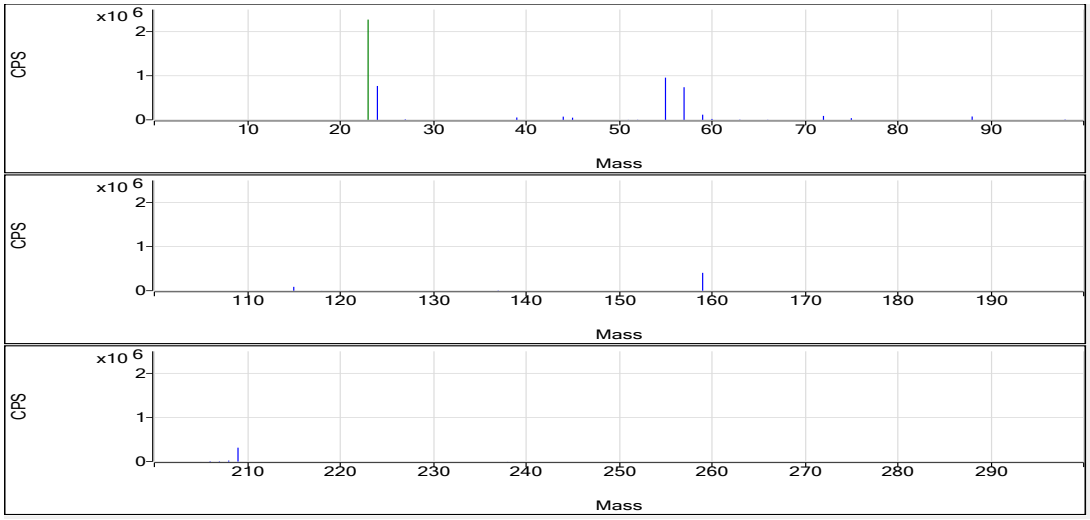


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.134	0.0001	270.00	0.0008	4.685E-06
Be	9	1	No Gas	0.095	0.0001	196.00	0.0008	4.685E-06
Be	9	1	No Gas	0.139	0.0001	284.00	0.0008	4.685E-06
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.058	0	6.00	0.0004	1.219E-05
Na	23	3	He	12822.28	46.2111	2262659.19	0.0036	0.3452
Na	23	3	He	13158.015	47.412	2261522.15	0.0036	0.3452
Na	23	3	He	12828.679	46.234	2258663.09	0.0036	0.3452
Mg	24	3	He	8623.629	15.4771	757812.10	0.0018	0.003497
Mg	24	3	He	8998.303	16.1493	770313.27	0.0018	0.003497
Mg	24	3	He	8702.246	15.6181	762990.69	0.0018	0.003497
Al	27	3	He	359.656	0.2111	10333.97	0.0006	0.0006432
Al	27	3	He	352.363	0.2068	9863.64	0.0006	0.0006432
Al	27	3	He	361.907	0.2124	10374.97	0.0006	0.0006432
K	39	3	He	591.718	1.084	53077.47	0.0012	0.3951
K	39	3	He	615.12	1.1113	53006.69	0.0012	0.3951
K	39	3	He	570.527	1.0593	51752.10	0.0012	0.3951
Ca	44	3	He	21979.61	1.4875	72832.29	0.0001	0.002715
Ca	44	3	He	22020.573	1.4902	71083.78	0.0001	0.002715
Ca	44	3	He	21514.855	1.4561	71133.93	0.0001	0.002715
Ti	47	3	He	1.391	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	3.774	0.0021	100.00	0.0005	7.003E-05
Ti	47	3	He	1.394	0.0008	40.00	0.0005	7.003E-05
V	51	3	He	0.486	0.0355	1738.12	0.0219	0.02486
V	51	3	He	0.622	0.0385	1834.13	0.0219	0.02486
V	51	3	He	0.513	0.0361	1762.12	0.0219	0.02486
Cr	52	3	He	0.793	0.0637	3120.43	0.0299	0.03997
Cr	52	3	He	0.969	0.069	3290.60	0.0299	0.03997
Cr	52	3	He	0.812	0.0643	3140.45	0.0299	0.03997
Mn	55	3	He	1506.61	19.3383	946871.39	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1553.644	19.9419	951216.24	0.0128	0.002639
Mn	55	3	He	1525.008	19.5744	956265.92	0.0128	0.002639
Fe	57	3	He	25671.807	14.9165	730365.61	0.0006	0.001429
Fe	57	3	He	26616.811	15.4656	737696.63	0.0006	0.001429
Fe	57	3	He	26008.169	15.1119	738261.79	0.0006	0.001429
Co	59	3	He	41.973	2.3645	115772.68	0.0563	0.002149
Co	59	3	He	43.586	2.4553	117114.38	0.0563	0.002149
Co	59	3	He	41.833	2.3566	115126.96	0.0563	0.002149
Ni	60	3	He	25.222	0.2193	19423.77	0.0086	0.002834
Ni	60	3	He	25.519	0.2219	19483.66	0.0086	0.002834
Ni	60	3	He	26.532	0.2306	20184.92	0.0086	0.002834
Cu	63	3	He	2.155	0.0601	5321.19	0.0257	0.004757
Cu	63	3	He	2.251	0.0625	5491.23	0.0257	0.004757
Cu	63	3	He	2.374	0.0657	5751.36	0.0257	0.004757
Zn	66	3	He	10.441	0.0342	3030.44	0.0029	0.003818
Zn	66	3	He	11.44	0.0371	3260.49	0.0029	0.003818
Zn	66	3	He	10.224	0.0336	2940.38	0.0029	0.003818
As	75	3	He	203.974	0.4187	37083.84	0.002	0.0008061
As	75	3	He	204.864	0.4205	36931.57	0.002	0.0008061
As	75	3	He	204.145	0.4191	36688.85	0.002	0.0008061
Sr	88	3	He	96.383	0.8655	75008.76	0.009	0.0009645
Sr	88	3	He	93.654	0.841	74476.04	0.009	0.0009645
Sr	88	3	He	97.409	0.8747	74898.37	0.009	0.0009645
Mo	98	3	He	3.73	0.0821	7112.03	0.0219	0.0002706
Mo	98	3	He	3.357	0.0739	6541.79	0.0219	0.0002706
Mo	98	3	He	3.509	0.0772	6611.76	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.01	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.237	0.0013	110.00	0.0053	0
Cd	111	3	He	0.215	0.0012	102.00	0.0053	0
Cd	111	3	He	0.245	0.0013	112.00	0.0053	0
Sn	120	3	He	-0.101	0.0149	1290.11	0.0158	0.01648
Sn	120	3	He	-0.085	0.0151	1340.12	0.0158	0.01648
Sn	120	3	He	-0.185	0.0135	1160.10	0.0158	0.01648
Sb	121	3	He	0.968	0.0147	1270.10	0.0149	0.0002698
Sb	121	3	He	0.894	0.0136	1200.09	0.0149	0.0002698
Sb	121	3	He	0.823	0.0125	1070.07	0.0149	0.0002698
Ba	137	3	He	12.384	0.0597	5171.17	0.0048	0.0002317
Ba	137	3	He	13.155	0.0634	5611.34	0.0048	0.0002317
Ba	137	3	He	12.949	0.0624	5341.24	0.0048	0.0002317
Tl	205	3	He	0.015	0.0005	200.01	0.0247	0.0001339
Tl	205	3	He	0.016	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.023	0.0007	280.01	0.0247	0.0001339
Pb	208	3	He	3.05	0.1009	21718.51	0.0327	0.00107
Pb	208	3	He	3.026	0.1001	21468.16	0.0327	0.00107
Pb	208	3	He	3.102	0.1026	22018.92	0.0327	0.00107
U	238	3	He	0.084	0.0042	1320.12	0.0493	7.55E-05
U	238	3	He	0.089	0.0045	1390.13	0.0493	7.55E-05
U	238	3	He	0.079	0.004	1250.11	0.0493	7.55E-05
Sc	45	1	No Gas			2524600.27		
Sc	45	1	No Gas			2529904.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2566811.68		
Ge	72	1	No Gas			1256739.04		
Ge	72	1	No Gas			1250482.56		
Ge	72	1	No Gas			1281276.15		
Sc	45	2	H2			181836.70		
Sc	45	2	H2			185651.60		
Sc	45	2	H2			188386.29		
Ge	72	2	H2			161442.86		
Ge	72	2	H2			163829.09		
Ge	72	2	H2			165711.17		
In	115	2	H2			392312.57		
In	115	2	H2			395381.05		
In	115	2	H2			392323.74		
Sc	45	3	He			48963.56		
Sc	45	3	He			47699.34		
Sc	45	3	He			48852.89		
Ge	72	3	He			88564.24		
Ge	72	3	He			87818.45		
Ge	72	3	He			87547.67		
In	115	3	He			86670.89		
In	115	3	He			88561.72		
In	115	3	He			85633.55		
Tb	159	3	He			402377.53		
Tb	159	3	He			404122.81		
Tb	159	3	He			401997.14		
Bi	209	3	He			313909.49		
Bi	209	3	He			311403.88		
Bi	209	3	He			314729.35		

Quantitation Report

Data File Name	217SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 6:05:13 PM
Sample Name	410-136722-Q-6-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

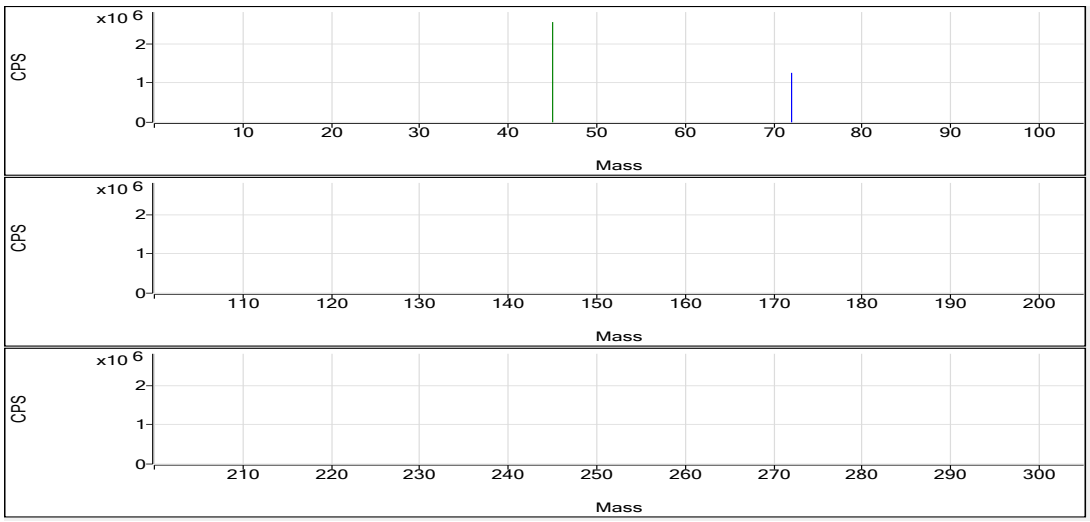
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.030	ppb	17.0	70.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.016	ppb	92.6	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	29436.156	ppb	1.5	5079765.86	105.6397	Analog	0.1000	3
Mg	24	45	He	14914.485	ppb	0.8	1287043.47	26.7649	Analog	0.1000	3
Al	27	45	He	393.543	ppb	3.8	11101.19	0.2309	Pulse	0.1000	3
K	39	45	He	2423.543	ppb	0.8	154684.48	3.2169	Pulse	0.1000	3
Ca	44	45	He	95680.957	ppb	0.7	310931.89	6.4661	Pulse	0.1000	3
Ti	47	45	He	26.212	ppb	13.1	680.04	0.0141	Pulse	0.1000	3
V	51	45	He	0.556	ppb	12.0	1780.12	0.0370	Pulse	0.5000	3
Cr	52	45	He	0.652	ppb	30.9	2860.37	0.0595	Pulse	0.1000	3
Mn	55	45	He	644.891	ppb	1.1	398094.85	8.2791	Pulse	0.1000	3
Fe	57	45	He	6676.527	ppb	1.3	186594.37	3.8804	Pulse	0.1000	3
Co	59	45	He	0.270	ppb	5.6	833.39	0.0173	Pulse	0.1000	3
Ni	60	72	He	1.176	ppb	7.9	1123.43	0.0129	Pulse	0.1000	3
Cu	63	72	He	0.744	ppb	3.7	2073.56	0.0239	Pulse	0.1000	3
Zn	66	72	He	5.307	ppb	6.9	1673.49	0.0193	Pulse	0.1000	3
As	75	72	He	1.864	ppb	6.5	402.01	0.0046	Pulse	0.5000	3
Sr	88	115	He	1130.473	ppb	0.5	891166.18	10.1411	Pulse	0.1000	3
Mo	98	115	He	0.610	ppb	10.7	1200.10	0.0137	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	42.7	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.111	ppb	N/A	1293.45	0.0147	Pulse	0.1000	3
Sb	121	115	He	0.227	ppb	19.9	320.02	0.0036	Pulse	0.1000	3
Ba	137	115	He	125.044	ppb	0.9	52755.40	0.6004	Pulse	0.1000	3
Tl	205	159	He	0.004	ppb	53.2	93.34	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.291	ppb	1.0	4247.10	0.0106	Pulse	0.1000	3
U	238	209	He	0.394	ppb	0.3	6024.93	0.0195	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2548556.78	1.0	106.2	Analog	0.1000	3
No Gas	Ge	72	1257546.59	0.4	109.0	Pulse	0.1000	3
H2	Sc	45	185533.54	1.6	99.2	Pulse	0.1000	3
H2	Ge	72	164765.19	0.7	100.6	Pulse	0.1000	3
H2	In	115	392038.87	0.6	100.8	Pulse	0.1000	3
He	Sc	45	48086.79	0.7	103.1	Pulse	0.1000	3
He	Ge	72	86903.36	1.6	107.0	Pulse	0.1000	3
He	In	115	87876.81	0.7	101.9	Pulse	0.1000	3
He	Tb	159	401256.69	0.3	100.7	Pulse	0.1000	3
He	Bi	209	309264.28	0.4	100.0	Pulse	0.1000	3

No Gas



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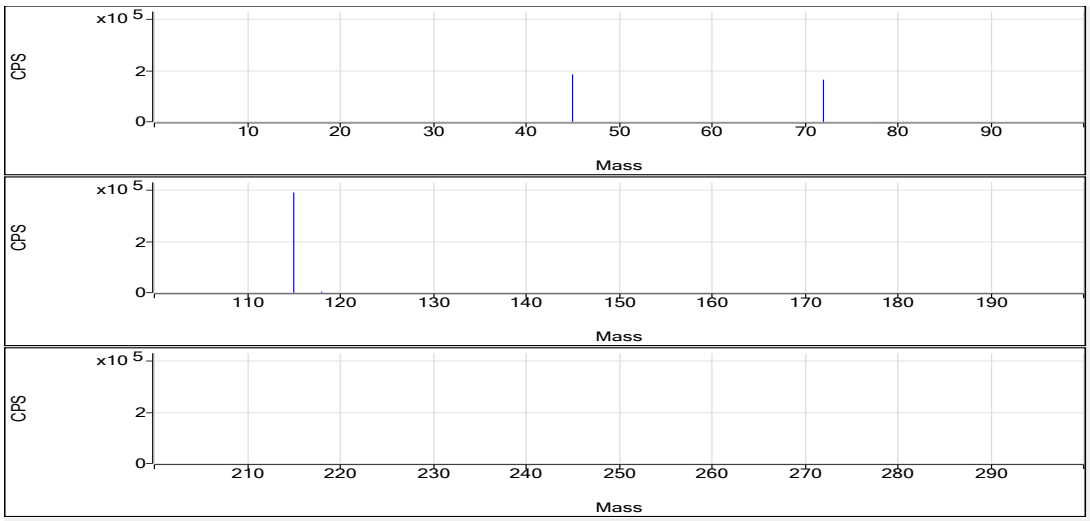
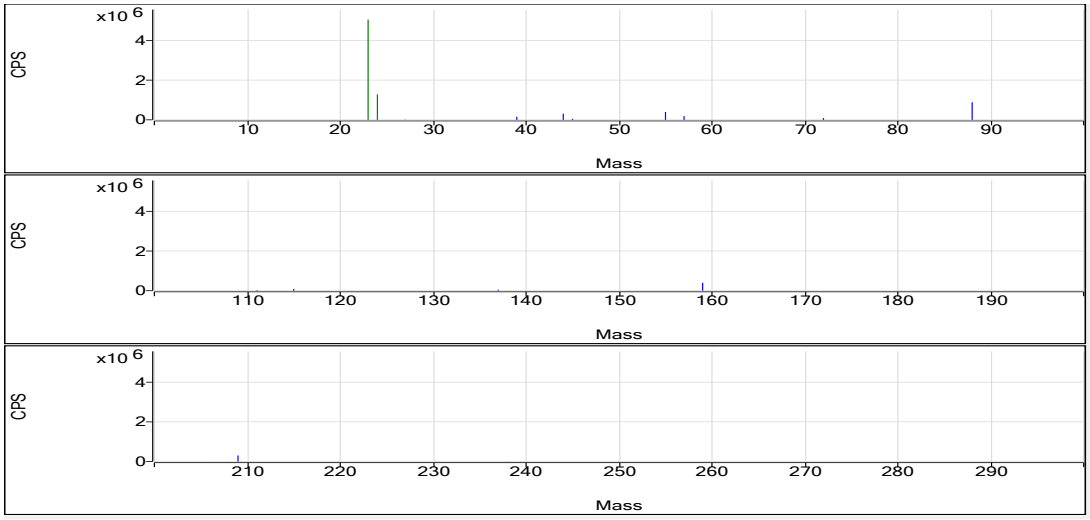


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.036	0	82.00	0.0008	4.685E-06
Be	9	1	No Gas	0.028	0	66.00	0.0008	4.685E-06
Be	9	1	No Gas	0.026	0	62.00	0.0008	4.685E-06
Se	78	2	H2	0.02	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.029	0	4.00	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Na	23	3	He	29171.252	104.6922	5009410.86	0.0036	0.3452
Na	23	3	He	29932.574	107.4154	5150566.17	0.0036	0.3452
Na	23	3	He	29204.641	104.8116	5079320.55	0.0036	0.3452
Mg	24	3	He	15010.254	26.9367	1288894.28	0.0018	0.003497
Mg	24	3	He	14779.572	26.5228	1271767.56	0.0018	0.003497
Mg	24	3	He	14953.628	26.8351	1300468.57	0.0018	0.003497
Al	27	3	He	388.436	0.2279	10904.38	0.0006	0.0006432
Al	27	3	He	410.447	0.2408	11544.87	0.0006	0.0006432
Al	27	3	He	381.747	0.224	10854.33	0.0006	0.0006432
K	39	3	He	2423.877	3.2173	153942.12	0.0012	0.3951
K	39	3	He	2443.621	3.2402	155369.33	0.0012	0.3951
K	39	3	He	2403.131	3.1931	154742.00	0.0012	0.3951
Ca	44	3	He	95374.636	6.4455	308408.24	0.0001	0.002715
Ca	44	3	He	96420.117	6.5161	312445.66	0.0001	0.002715
Ca	44	3	He	95248.117	6.4369	311941.77	0.0001	0.002715
Ti	47	3	He	24.003	0.013	620.04	0.0005	7.003E-05
Ti	47	3	He	30.167	0.0163	780.05	0.0005	7.003E-05
Ti	47	3	He	24.466	0.0132	640.03	0.0005	7.003E-05
V	51	3	He	0.559	0.0371	1774.12	0.0219	0.02486
V	51	3	He	0.622	0.0385	1844.13	0.0219	0.02486
V	51	3	He	0.488	0.0355	1722.11	0.0219	0.02486
Cr	52	3	He	0.48	0.0543	2600.34	0.0299	0.03997
Cr	52	3	He	0.873	0.0661	3170.44	0.0299	0.03997
Cr	52	3	He	0.602	0.058	2810.34	0.0299	0.03997
Mn	55	3	He	649.797	8.3421	399158.63	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	648.021	8.3193	398907.92	0.0128	0.002639
Mn	55	3	He	636.854	8.1759	396218.00	0.0128	0.002639
Fe	57	3	He	6618.956	3.847	184074.06	0.0006	0.001429
Fe	57	3	He	6776.163	3.9383	188842.15	0.0006	0.001429
Fe	57	3	He	6634.463	3.856	186866.89	0.0006	0.001429
Co	59	3	He	0.285	0.0182	870.06	0.0563	0.002149
Co	59	3	He	0.255	0.0165	790.05	0.0563	0.002149
Co	59	3	He	0.27	0.0173	840.05	0.0563	0.002149
Ni	60	3	He	1.202	0.0132	1160.10	0.0086	0.002834
Ni	60	3	He	1.074	0.012	1050.08	0.0086	0.002834
Ni	60	3	He	1.253	0.0136	1160.10	0.0086	0.002834
Cu	63	3	He	0.725	0.0234	2060.23	0.0257	0.004757
Cu	63	3	He	0.776	0.0247	2150.25	0.0257	0.004757
Cu	63	3	He	0.732	0.0235	2010.21	0.0257	0.004757
Zn	66	3	He	4.959	0.0183	1610.14	0.0029	0.003818
Zn	66	3	He	5.271	0.0192	1670.16	0.0029	0.003818
Zn	66	3	He	5.689	0.0204	1740.16	0.0029	0.003818
As	75	3	He	1.975	0.0049	428.01	0.002	0.0008061
As	75	3	He	1.735	0.0044	380.01	0.002	0.0008061
As	75	3	He	1.882	0.0047	398.01	0.002	0.0008061
Sr	88	3	He	1124.129	10.0842	886289.83	0.009	0.0009645
Sr	88	3	He	1133.317	10.1666	899171.39	0.009	0.0009645
Sr	88	3	He	1133.973	10.1725	888037.33	0.009	0.0009645
Mo	98	3	He	0.543	0.0122	1070.08	0.0219	0.0002706
Mo	98	3	He	0.674	0.015	1330.12	0.0219	0.0002706
Mo	98	3	He	0.615	0.0137	1200.10	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	-0.164	0.0139	1220.10	0.0158	0.01648
Sn	120	3	He	-0.084	0.0152	1340.12	0.0158	0.01648
Sn	120	3	He	-0.086	0.0151	1320.12	0.0158	0.01648
Sb	121	3	He	0.181	0.003	260.02	0.0149	0.0002698
Sb	121	3	He	0.271	0.0043	380.02	0.0149	0.0002698
Sb	121	3	He	0.229	0.0037	320.02	0.0149	0.0002698
Ba	137	3	He	124.798	0.5992	52661.36	0.0048	0.0002317
Ba	137	3	He	124.016	0.5954	52661.69	0.0048	0.0002317
Ba	137	3	He	126.316	0.6065	52943.14	0.0048	0.0002317
Tl	205	3	He	0.005	0.0002	100.00	0.0247	0.0001339
Tl	205	3	He	0.002	0.0002	70.00	0.0247	0.0001339
Tl	205	3	He	0.006	0.0003	110.01	0.0247	0.0001339
Pb	208	3	He	0.291	0.0106	2230.26	0.0327	0.00107
Pb	208	3	He	0.293	0.0107	2220.28	0.0327	0.00107
Pb	208	3	He	0.288	0.0105	2360.31	0.0327	0.00107
U	238	3	He	0.395	0.0195	6041.56	0.0493	7.55E-05
U	238	3	He	0.393	0.0194	6031.64	0.0493	7.55E-05
U	238	3	He	0.394	0.0195	6001.58	0.0493	7.55E-05
Sc	45	1	No Gas			2575189.02		
Sc	45	1	No Gas			2545336.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2525144.96		
Ge	72	1	No Gas			1261505.53		
Ge	72	1	No Gas			1260014.82		
Ge	72	1	No Gas			1251119.43		
Sc	45	2	H2			182977.85		
Sc	45	2	H2			188759.92		
Sc	45	2	H2			184862.85		
Ge	72	2	H2			163344.58		
Ge	72	2	H2			165380.00		
Ge	72	2	H2			165570.99		
In	115	2	H2			390674.37		
In	115	2	H2			394935.46		
In	115	2	H2			390506.79		
Sc	45	3	He			47848.96		
Sc	45	3	He			47949.96		
Sc	45	3	He			48461.44		
Ge	72	3	He			88191.68		
Ge	72	3	He			87144.90		
Ge	72	3	He			85373.50		
In	115	3	He			87896.33		
In	115	3	He			88451.44		
In	115	3	He			87304.02		
Tb	159	3	He			400566.83		
Tb	159	3	He			402838.04		
Tb	159	3	He			400365.19		
Bi	209	3	He			309262.16		
Bi	209	3	He			310646.34		
Bi	209	3	He			307884.35		

Quantitation Report

Data File Name	218SMPL.d
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Acq Time	8/10/2023 6:07:18 PM
Sample Name	410-136722-Q-7-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

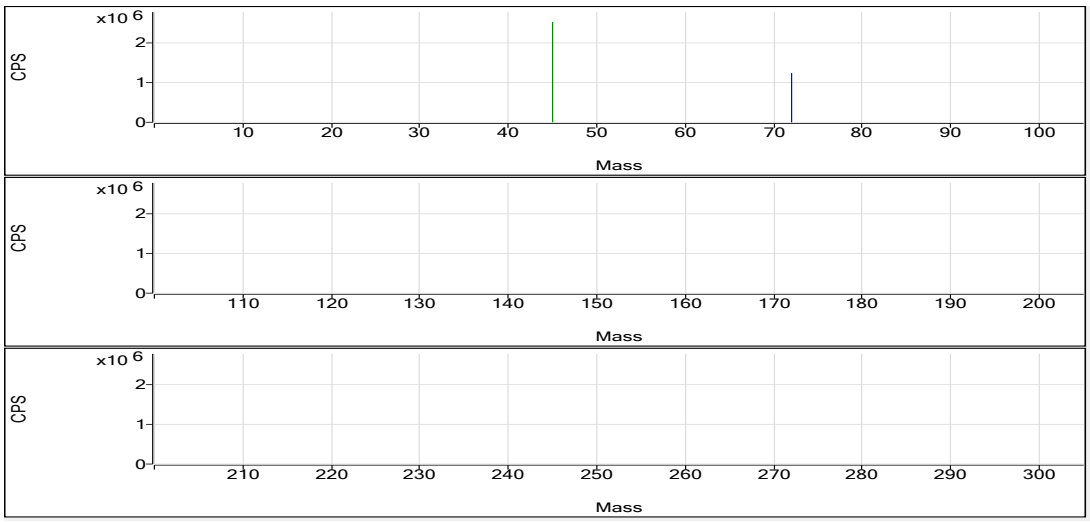
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.833	ppb	1.4	1614.77	0.0006	Pulse	0.5000	3
Se	78	72	H2	0.343	ppb	11.8	25.33	0.0002	Pulse	1.5000	3
Na	23	45	He	197483.215	ppb	1.1	33735898.66	706.7523	Analog	0.1000	3
Mg	24	45	He	3730.079	ppb	2.2	319598.77	6.6965	Pulse	0.1000	3
Al	27	45	He	6375.054	ppb	2.2	178029.33	3.7303	Pulse	0.1000	3
K	39	45	He	10301.971	ppb	3.0	591251.33	12.3899	Pulse	0.1000	3
Ca	44	45	He	35000.965	ppb	3.9	112953.21	2.3671	Pulse	0.1000	3
Ti	47	45	He	60.735	ppb	18.1	1563.51	0.0327	Pulse	0.1000	3
V	51	45	He	8.189	ppb	3.2	9729.30	0.2039	Pulse	0.5000	3
Cr	52	45	He	9.496	ppb	4.2	15475.46	0.3243	Pulse	0.1000	3
Mn	55	45	He	3506.699	ppb	2.2	2148084.76	45.0072	Analog	0.1000	3
Fe	57	45	He	38740.423	ppb	2.5	1074226.68	22.5093	Pulse	0.1000	3
Co	59	45	He	38.167	ppb	2.3	102623.32	2.1503	Pulse	0.1000	3
Ni	60	72	He	11.038	ppb	1.3	8519.44	0.0976	Pulse	0.1000	3
Cu	63	72	He	23.442	ppb	3.4	52944.86	0.6065	Pulse	0.1000	3
Zn	66	72	He	443.136	ppb	1.3	112972.16	1.2941	Pulse	0.1000	3
As	75	72	He	18.219	ppb	2.4	3329.07	0.0381	Pulse	0.5000	3
Sr	88	115	He	267.870	ppb	1.6	206651.49	2.4037	Pulse	0.1000	3
Mo	98	115	He	3.919	ppb	6.4	7408.90	0.0862	Pulse	0.1000	3
Ag	107	115	He	0.084	ppb	17.7	390.02	0.0045	Pulse	0.1000	3
Cd	111	115	He	0.308	ppb	7.3	141.33	0.0016	Pulse	0.5000	3
Sn	120	115	He	0.437	ppb	26.0	2010.21	0.0234	Pulse	0.1000	3
Sb	121	115	He	0.438	ppb	19.2	583.37	0.0068	Pulse	0.1000	3
Ba	137	115	He	197.830	ppb	1.0	81649.80	0.9497	Pulse	0.1000	3
Tl	205	159	He	0.063	ppb	12.7	700.04	0.0017	Pulse	0.1000	3
Pb	208	159	He	10.756	ppb	0.4	145980.33	0.3531	Pulse	0.1000	3
U	238	209	He	0.927	ppb	3.5	14051.42	0.0457	Pulse	0.1000	3

ISTD Table:

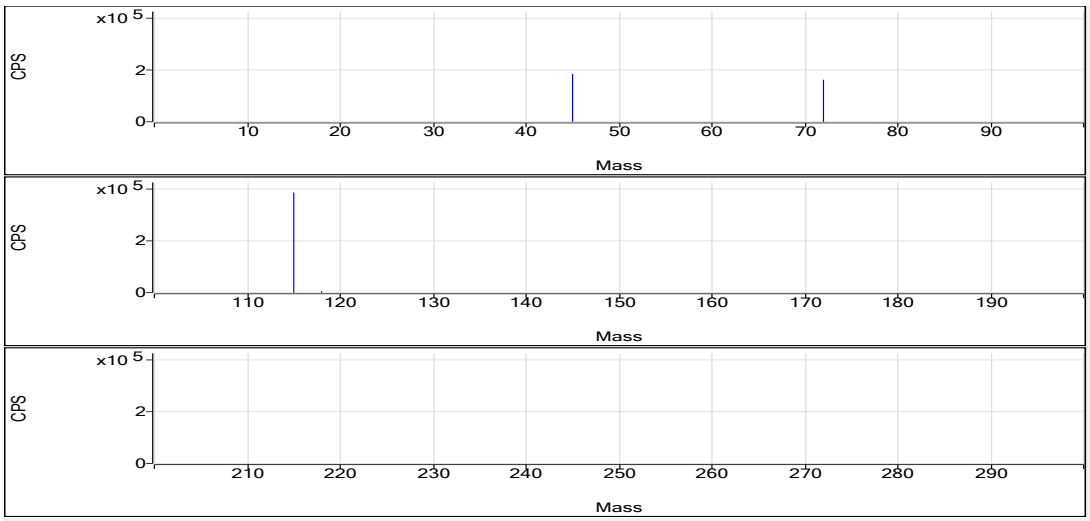
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2523178.14	0.9	105.2	Analog	0.1000	3
No Gas	Ge	72	1238767.40	0.4	107.4	Pulse	0.1000	3
H2	Sc	45	185178.85	1.4	99.0	Pulse	0.1000	3
H2	Ge	72	163261.13	1.4	99.7	Pulse	0.1000	3
H2	In	115	388808.65	0.7	99.9	Pulse	0.1000	3
He	Sc	45	47742.32	2.4	102.4	Pulse	0.1000	3
He	Ge	72	87306.38	0.8	107.5	Pulse	0.1000	3
He	In	115	85981.28	1.1	99.8	Pulse	0.1000	3
He	Tb	159	413441.41	1.0	103.7	Pulse	0.1000	3
He	Bi	209	307433.33	1.0	99.4	Pulse	0.1000	3

No Gas

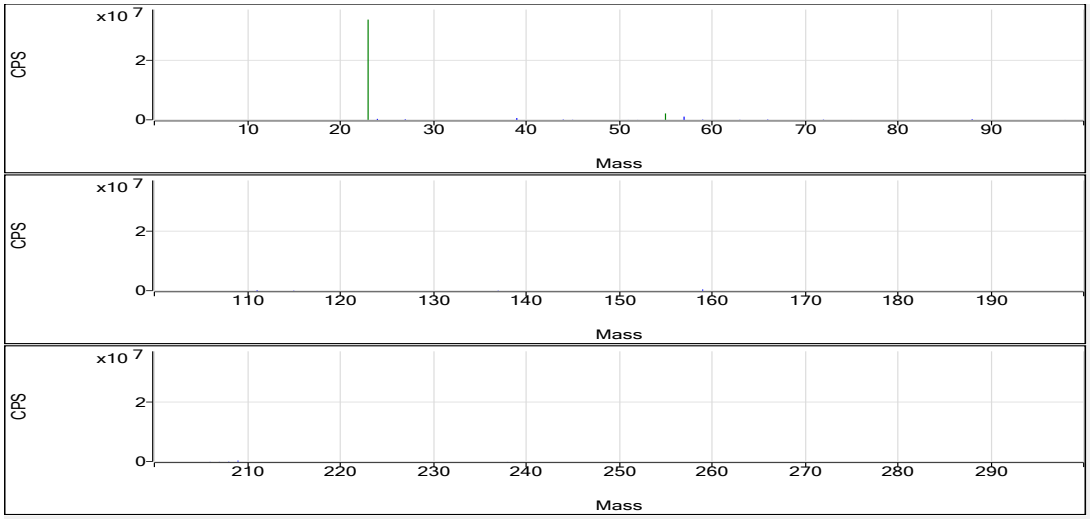


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.82	0.0006	1606.10	0.0008	4.685E-06
Be	9	1	No Gas	0.838	0.0006	1616.10	0.0008	4.685E-06
Be	9	1	No Gas	0.841	0.0006	1622.10	0.0008	4.685E-06
Se	78	2	H2	0.33	0.0001	24.67	0.0004	1.219E-05
Se	78	2	H2	0.311	0.0001	23.33	0.0004	1.219E-05
Se	78	2	H2	0.389	0.0002	28.00	0.0004	1.219E-05
Na	23	3	He	199937.606	715.5318	33340482.00	0.0036	0.3452
Na	23	3	He	195486.707	699.6107	34205904.49	0.0036	0.3452
Na	23	3	He	197025.332	705.1144	33661309.50	0.0036	0.3452
Mg	24	3	He	3822.597	6.8625	319759.31	0.0018	0.003497
Mg	24	3	He	3668.524	6.586	322008.28	0.0018	0.003497
Mg	24	3	He	3699.117	6.6409	317028.73	0.0018	0.003497
Al	27	3	He	6507.268	3.8076	177417.61	0.0006	0.0006432
Al	27	3	He	6228.337	3.6444	178186.64	0.0006	0.0006432
Al	27	3	He	6389.558	3.7388	178483.73	0.0006	0.0006432
K	39	3	He	10611.192	12.75	594089.37	0.0012	0.3951
K	39	3	He	10000.129	12.0385	588594.80	0.0012	0.3951
K	39	3	He	10294.591	12.3813	591069.83	0.0012	0.3951
Ca	44	3	He	36554.043	2.472	115184.28	0.0001	0.002715
Ca	44	3	He	34327.981	2.3216	113511.19	0.0001	0.002715
Ca	44	3	He	34120.871	2.3076	110164.17	0.0001	0.002715
Ti	47	3	He	57.429	0.0309	1440.11	0.0005	7.003E-05
Ti	47	3	He	73.016	0.0393	1920.30	0.0005	7.003E-05
Ti	47	3	He	51.76	0.0279	1330.11	0.0005	7.003E-05
V	51	3	He	8.491	0.2105	9807.37	0.0219	0.02486
V	51	3	He	8.052	0.2009	9821.36	0.0219	0.02486
V	51	3	He	8.023	0.2002	9559.18	0.0219	0.02486
Cr	52	3	He	9.947	0.3378	15739.19	0.0299	0.03997
Cr	52	3	He	9.348	0.3199	15638.87	0.0299	0.03997
Cr	52	3	He	9.193	0.3152	15048.32	0.0299	0.03997
Mn	55	3	He	3595.406	46.1456	2150173.87	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3460.466	44.4138	2171514.97	0.0128	0.002639
Mn	55	3	He	3464.225	44.4621	2122565.44	0.0128	0.002639
Fe	57	3	He	39800.532	23.1252	1077526.47	0.0006	0.001429
Fe	57	3	He	37922.527	22.0341	1077306.70	0.0006	0.001429
Fe	57	3	He	38498.21	22.3685	1067846.86	0.0006	0.001429
Co	59	3	He	39.174	2.207	102834.98	0.0563	0.002149
Co	59	3	He	37.456	2.1103	103177.05	0.0563	0.002149
Co	59	3	He	37.872	2.1337	101857.94	0.0563	0.002149
Ni	60	3	He	11.159	0.0986	8612.91	0.0086	0.002834
Ni	60	3	He	10.88	0.0962	8332.64	0.0086	0.002834
Ni	60	3	He	11.075	0.0979	8612.78	0.0086	0.002834
Cu	63	3	He	23.543	0.6091	53198.85	0.0257	0.004757
Cu	63	3	He	24.182	0.6255	54172.96	0.0257	0.004757
Cu	63	3	He	22.6	0.5849	51462.76	0.0257	0.004757
Zn	66	3	He	441.564	1.2895	112619.35	0.0029	0.003818
Zn	66	3	He	449.436	1.3124	113656.73	0.0029	0.003818
Zn	66	3	He	438.407	1.2803	112640.41	0.0029	0.003818
As	75	3	He	18.442	0.0386	3370.42	0.002	0.0008061
As	75	3	He	18.5	0.0387	3352.41	0.002	0.0008061
As	75	3	He	17.716	0.0371	3264.39	0.002	0.0008061
Sr	88	3	He	263.193	2.3618	205544.74	0.009	0.0009645
Sr	88	3	He	268.45	2.4089	205921.05	0.009	0.0009645
Sr	88	3	He	271.966	2.4404	208488.67	0.009	0.0009645
Mo	98	3	He	3.709	0.0816	7102.07	0.0219	0.0002706
Mo	98	3	He	3.852	0.0847	7242.19	0.0219	0.0002706
Mo	98	3	He	4.196	0.0923	7882.45	0.0219	0.0002706
Ag	107	3	He	0.09	0.0048	420.02	0.0465	0.0006206
Ag	107	3	He	0.067	0.0037	320.02	0.0465	0.0006206
Ag	107	3	He	0.095	0.005	430.02	0.0465	0.0006206
Cd	111	3	He	0.284	0.0015	132.00	0.0053	0
Cd	111	3	He	0.311	0.0017	142.00	0.0053	0
Cd	111	3	He	0.328	0.0018	150.00	0.0053	0
Sn	120	3	He	0.499	0.0244	2120.23	0.0158	0.01648
Sn	120	3	He	0.505	0.0245	2090.22	0.0158	0.01648
Sn	120	3	He	0.306	0.0213	1820.19	0.0158	0.01648
Sb	121	3	He	0.531	0.0082	710.05	0.0149	0.0002698
Sb	121	3	He	0.368	0.0057	490.03	0.0149	0.0002698
Sb	121	3	He	0.415	0.0064	550.03	0.0149	0.0002698
Ba	137	3	He	195.753	0.9397	81783.87	0.0048	0.0002317
Ba	137	3	He	197.998	0.9505	81250.89	0.0048	0.0002317
Ba	137	3	He	199.739	0.9588	81914.63	0.0048	0.0002317
Tl	205	3	He	0.072	0.0019	800.05	0.0247	0.0001339
Tl	205	3	He	0.057	0.0015	630.04	0.0247	0.0001339
Tl	205	3	He	0.06	0.0016	670.04	0.0247	0.0001339
Pb	208	3	He	10.712	0.3517	79037.98	0.0327	0.00107
Pb	208	3	He	10.806	0.3547	77760.30	0.0327	0.00107
Pb	208	3	He	10.749	0.3529	78444.72	0.0327	0.00107
U	238	3	He	0.891	0.0439	13657.62	0.0493	7.55E-05
U	238	3	He	0.936	0.0462	14168.18	0.0493	7.55E-05
U	238	3	He	0.953	0.047	14328.47	0.0493	7.55E-05
Sc	45	1	No Gas			2549161.99		
Sc	45	1	No Gas			2509116.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2511256.06		
Ge	72	1	No Gas			1242001.93		
Ge	72	1	No Gas			1241856.70		
Ge	72	1	No Gas			1232443.58		
Sc	45	2	H2			187038.71		
Sc	45	2	H2			186189.26		
Sc	45	2	H2			182308.57		
Ge	72	2	H2			164598.18		
Ge	72	2	H2			164519.76		
Ge	72	2	H2			160665.46		
In	115	2	H2			388863.04		
In	115	2	H2			391410.46		
In	115	2	H2			386152.46		
Sc	45	3	He			46595.39		
Sc	45	3	He			48892.77		
Sc	45	3	He			47738.79		
Ge	72	3	He			87336.84		
Ge	72	3	He			86602.00		
Ge	72	3	He			87980.31		
In	115	3	He			87042.27		
In	115	3	He			85492.84		
In	115	3	He			85442.18		
Tb	159	3	He			417632.65		
Tb	159	3	He			409544.72		
Tb	159	3	He			413146.87		
Bi	209	3	He			310809.57		
Bi	209	3	He			306716.58		
Bi	209	3	He			304773.84		

Quantitation Report

Data File Name	219SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 6:09:22 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

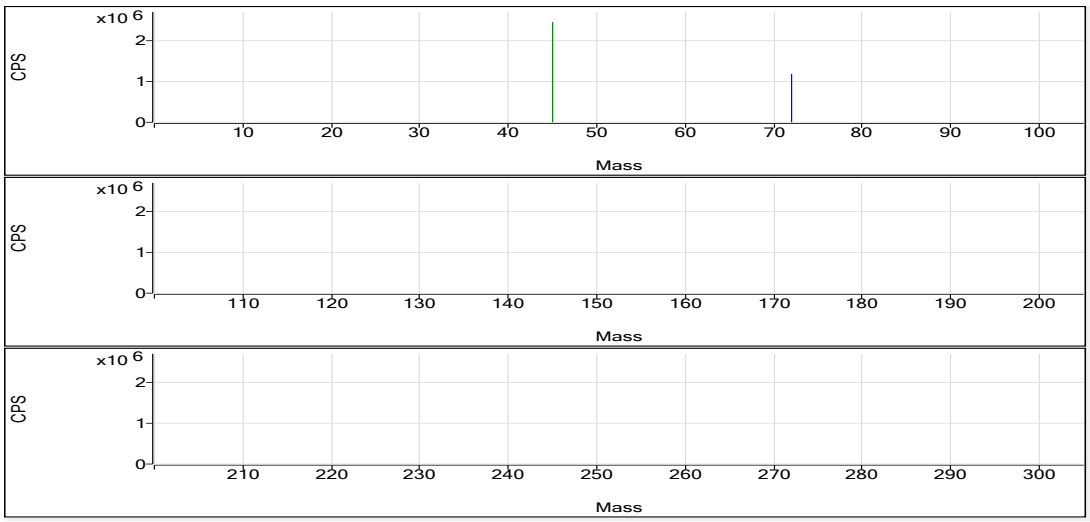
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	63.0	20.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.001	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	45	He	73.395	ppb	6.8	29259.84	0.6077	Pulse	0.1000	3
Mg	24	45	He	1.177	ppb	12.6	270.01	0.0056	Pulse	0.1000	3
Al	27	45	He	1.271	ppb	44.5	66.67	0.0014	Pulse	0.1000	3
K	39	45	He	-8.741	ppb	N/A	18535.61	0.3849	Pulse	0.1000	3
Ca	44	45	He	19.179	ppb	69.5	193.34	0.0040	Pulse	0.1000	3
Ti	47	45	He	0.384	ppb	56.5	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.155	ppb	19.5	1360.74	0.0283	Pulse	0.5000	3
Cr	52	45	He	-0.061	ppb	N/A	1836.85	0.0381	Pulse	0.1000	3
Mn	55	45	He	0.581	ppb	22.5	486.69	0.0101	Pulse	0.1000	3
Fe	57	45	He	5.875	ppb	33.8	233.34	0.0048	Pulse	0.1000	3
Co	59	45	He	0.023	ppb	49.7	166.68	0.0035	Pulse	0.1000	3
Ni	60	72	He	-0.144	ppb	N/A	133.34	0.0016	Pulse	0.1000	3
Cu	63	72	He	0.039	ppb	37.5	480.03	0.0058	Pulse	0.1000	3
Zn	66	72	He	2.546	ppb	18.6	936.73	0.0112	Pulse	0.1000	3
As	75	72	He	0.035	ppb	146.5	73.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.157	ppb	11.0	206.68	0.0024	Pulse	0.1000	3
Mo	98	115	He	0.009	ppb	123.0	40.00	0.0005	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	99.3	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.051	ppb	373.0	1503.47	0.0173	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.047	ppb	183.2	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.005	ppb	36.8	100.00	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	73.6	533.36	0.0013	Pulse	0.1000	3
U	238	209	He	0.002	ppb	26.8	60.00	0.0002	Pulse	0.1000	3

ISTD Table:

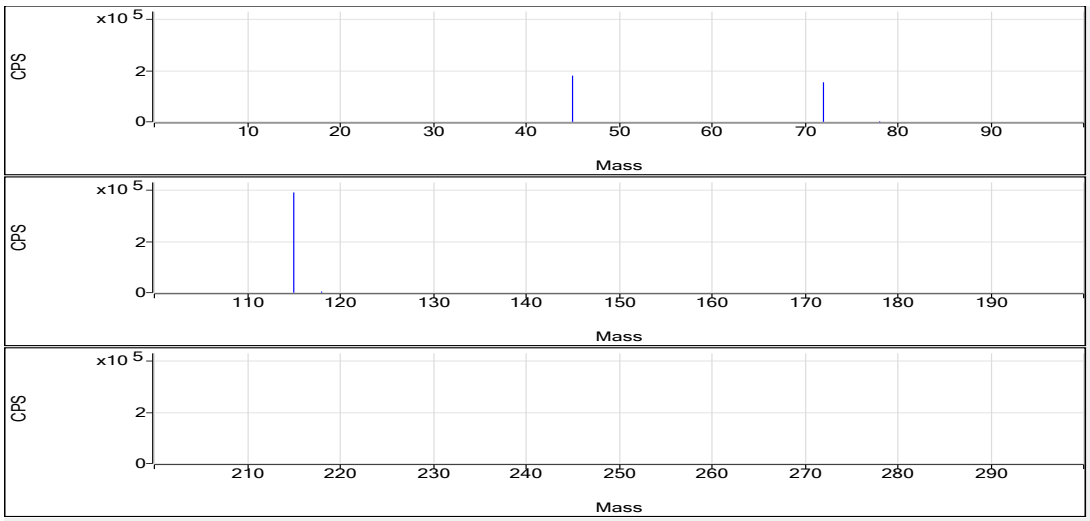
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2459409.44	0.4	102.5	Analog	0.1000	3
No Gas	Ge	72	1187791.86	0.5	103.0	Pulse	0.1000	3
H2	Sc	45	180637.85	0.8	96.6	Pulse	0.1000	3
H2	Ge	72	154538.38	2.0	94.4	Pulse	0.1000	3
H2	In	115	392026.57	0.5	100.8	Pulse	0.1000	3
He	Sc	45	48153.44	1.1	103.2	Pulse	0.1000	3
He	Ge	72	83466.85	1.0	102.8	Pulse	0.1000	3
He	In	115	87122.19	1.3	101.1	Pulse	0.1000	3
He	Tb	159	397303.34	0.5	99.7	Pulse	0.1000	3
He	Bi	209	309748.69	0.3	100.2	Pulse	0.1000	3

No Gas

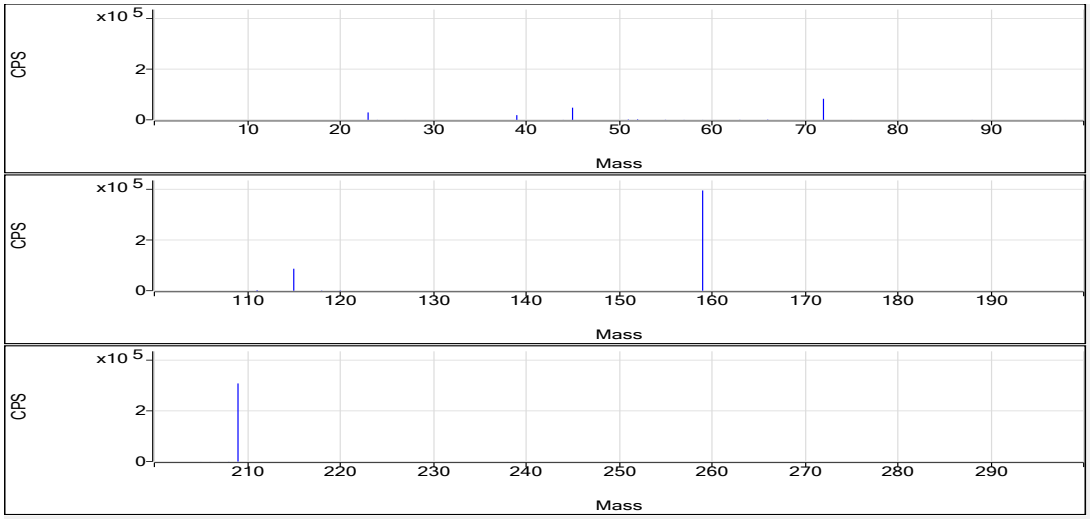


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	14.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	22.00	0.0008	4.685E-06
Se	78	2	H2	0.013	0	2.67	0.0004	1.219E-05
Se	78	2	H2	-0.019	0	0.67	0.0004	1.219E-05
Se	78	2	H2	0.002	0	2.00	0.0004	1.219E-05
Na	23	3	He	78.859	0.6272	29931.09	0.0036	0.3452
Na	23	3	He	72.225	0.6035	29410.19	0.0036	0.3452
Na	23	3	He	69.103	0.5923	28438.24	0.0036	0.3452
Mg	24	3	He	1.321	0.0059	280.01	0.0018	0.003497
Mg	24	3	He	1.025	0.0053	260.01	0.0018	0.003497
Mg	24	3	He	1.186	0.0056	270.01	0.0018	0.003497
Al	27	3	He	1.766	0.0017	80.00	0.0006	0.0006432
Al	27	3	He	0.654	0.001	50.00	0.0006	0.0006432
Al	27	3	He	1.393	0.0015	70.00	0.0006	0.0006432
K	39	3	He	-10.802	0.3825	18251.88	0.0012	0.3951
K	39	3	He	-2.808	0.3918	19093.00	0.0012	0.3951
K	39	3	He	-12.614	0.3804	18261.96	0.0012	0.3951
Ca	44	3	He	18.755	0.004	190.01	0.0001	0.002715
Ca	44	3	He	32.718	0.0049	240.01	0.0001	0.002715
Ca	44	3	He	6.064	0.0031	150.01	0.0001	0.002715
Ti	47	3	He	0.26	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.634	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.257	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.174	0.0287	1368.07	0.0219	0.02486
V	51	3	He	0.121	0.0275	1340.07	0.0219	0.02486
V	51	3	He	0.172	0.0286	1374.08	0.0219	0.02486
Cr	52	3	He	-0.18	0.0346	1650.15	0.0299	0.03997
Cr	52	3	He	-0.122	0.0363	1770.19	0.0299	0.03997
Cr	52	3	He	0.119	0.0435	2090.22	0.0299	0.03997
Mn	55	3	He	0.464	0.0086	410.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.722	0.0119	580.03	0.0128	0.002639
Mn	55	3	He	0.557	0.0098	470.03	0.0128	0.002639
Fe	57	3	He	6.559	0.0052	250.01	0.0006	0.001429
Fe	57	3	He	7.431	0.0057	280.01	0.0006	0.001429
Fe	57	3	He	3.636	0.0035	170.01	0.0006	0.001429
Co	59	3	He	0.021	0.0034	160.01	0.0563	0.002149
Co	59	3	He	0.013	0.0029	140.01	0.0563	0.002149
Co	59	3	He	0.036	0.0042	200.01	0.0563	0.002149
Ni	60	3	He	-0.148	0.0016	130.01	0.0086	0.002834
Ni	60	3	He	-0.151	0.0015	130.00	0.0086	0.002834
Ni	60	3	He	-0.133	0.0017	140.01	0.0086	0.002834
Cu	63	3	He	0.044	0.0059	490.03	0.0257	0.004757
Cu	63	3	He	0.022	0.0053	450.02	0.0257	0.004757
Cu	63	3	He	0.05	0.006	500.03	0.0257	0.004757
Zn	66	3	He	2.485	0.0111	920.06	0.0029	0.003818
Zn	66	3	He	2.106	0.01	840.06	0.0029	0.003818
Zn	66	3	He	3.047	0.0127	1050.08	0.0029	0.003818
As	75	3	He	0.087	0.001	82.00	0.002	0.0008061
As	75	3	He	0.034	0.0009	74.00	0.002	0.0008061
As	75	3	He	-0.016	0.0008	64.00	0.002	0.0008061
Sr	88	3	He	0.17	0.0025	220.01	0.009	0.0009645
Sr	88	3	He	0.163	0.0024	210.01	0.009	0.0009645
Sr	88	3	He	0.137	0.0022	190.01	0.009	0.0009645
Mo	98	3	He	-0.002	0.0002	20.00	0.0219	0.0002706
Mo	98	3	He	0.019	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.009	0.0005	40.00	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	-0.148	0.0141	1250.10	0.0158	0.01648
Sn	120	3	He	0.071	0.0176	1520.14	0.0158	0.01648
Sn	120	3	He	0.23	0.0201	1740.17	0.0158	0.01648
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Ba	137	3	He	0.07	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.121	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Tl	205	3	He	0.004	0.0002	90.00	0.0247	0.0001339
Tl	205	3	He	0.004	0.0002	90.00	0.0247	0.0001339
Tl	205	3	He	0.007	0.0003	120.00	0.0247	0.0001339
Pb	208	3	He	0.003	0.0012	300.01	0.0327	0.00107
Pb	208	3	He	0.007	0.0013	240.01	0.0327	0.00107
Pb	208	3	He	0.015	0.0016	370.02	0.0327	0.00107
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	50.00	0.0493	7.55E-05
U	238	3	He	0.003	0.0002	70.00	0.0493	7.55E-05
Sc	45	1	No Gas			2469317.15		
Sc	45	1	No Gas			2457101.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2451810.12		
Ge	72	1	No Gas			1181892.40		
Ge	72	1	No Gas			1194808.42		
Ge	72	1	No Gas			1186674.75		
Sc	45	2	H2			181984.72		
Sc	45	2	H2			180778.86		
Sc	45	2	H2			179149.96		
Ge	72	2	H2			152719.06		
Ge	72	2	H2			158187.21		
Ge	72	2	H2			152708.86		
In	115	2	H2			394497.38		
In	115	2	H2			390526.75		
In	115	2	H2			391055.58		
Sc	45	3	He			47718.63		
Sc	45	3	He			48731.91		
Sc	45	3	He			48009.79		
Ge	72	3	He			83231.92		
Ge	72	3	He			84419.34		
Ge	72	3	He			82749.29		
In	115	3	He			88461.02		
In	115	3	He			86398.78		
In	115	3	He			86529.09		
Tb	159	3	He			395078.63		
Tb	159	3	He			399058.78		
Tb	159	3	He			397772.61		
Bi	209	3	He			309246.81		
Bi	209	3	He			309024.72		
Bi	209	3	He			310974.53		

Quantitation Report

Data File Name	220_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 6:11:25 PM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

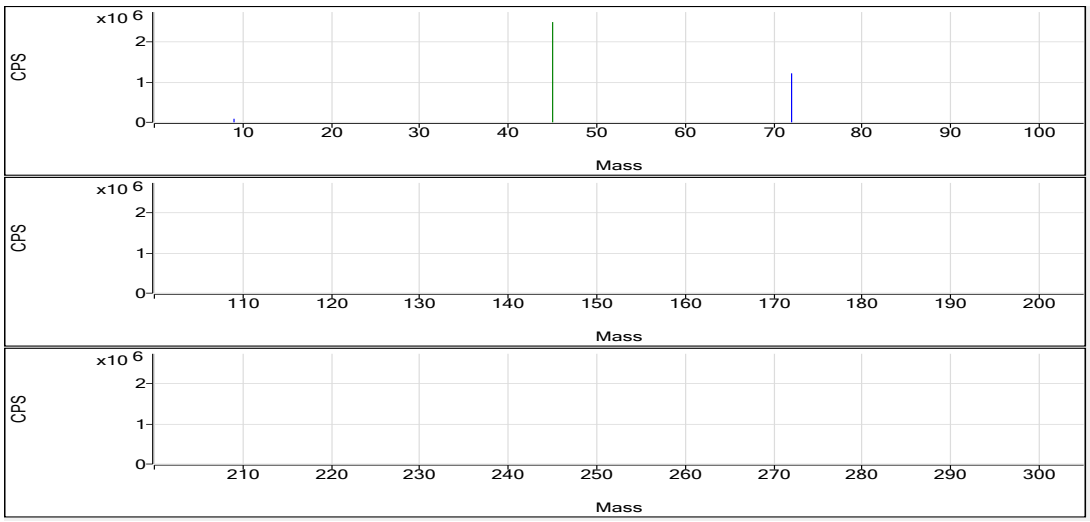
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.398	ppb	0.8	88187.63	0.0354	Pulse	0.5000	3
Se	78	72	H2	54.042	ppb	0.7	3523.77	0.0226	Pulse	1.5000	3
Na	23	45	He	4803.686	ppb	0.8	849046.11	17.5282	Pulse	0.1000	3
Mg	24	45	He	4927.706	ppb	1.1	428452.36	8.8454	Pulse	0.1000	3
Al	27	45	He	4827.891	ppb	1.0	136848.12	2.8251	Pulse	0.1000	3
K	39	45	He	5015.527	ppb	0.5	302028.49	6.2348	Pulse	0.1000	3
Ca	44	45	He	5060.347	ppb	2.9	16693.32	0.3446	Pulse	0.1000	3
Ti	47	45	He	5019.621	ppb	0.1	130567.29	2.6954	Pulse	0.1000	3
V	51	45	He	510.888	ppb	1.1	542142.89	11.1925	Pulse	0.5000	3
Cr	52	45	He	486.007	ppb	1.4	706758.59	14.5914	Pulse	0.1000	3
Mn	55	45	He	504.716	ppb	1.2	313880.47	6.4801	Pulse	0.1000	3
Fe	57	45	He	5059.430	ppb	1.3	142454.63	2.9409	Pulse	0.1000	3
Co	59	45	He	486.250	ppb	1.2	1325705.50	27.3694	Pulse	0.1000	3
Ni	60	72	He	513.493	ppb	0.9	373616.83	4.4102	Pulse	0.1000	3
Cu	63	72	He	487.245	ppb	0.6	1060048.73	12.5129	Pulse	0.1000	3
Zn	66	72	He	513.605	ppb	1.8	127008.09	1.4992	Pulse	0.1000	3
As	75	72	He	517.533	ppb	0.7	89897.93	1.0612	Pulse	0.5000	3
Sr	88	115	He	50.705	ppb	1.0	40087.57	0.4558	Pulse	0.1000	3
Mo	98	115	He	51.229	ppb	0.4	98819.60	1.1235	Pulse	0.1000	3
Ag	107	115	He	50.682	ppb	1.3	207276.41	2.3567	Pulse	0.1000	3
Cd	111	115	He	50.779	ppb	0.9	23881.07	0.2715	Pulse	0.5000	3
Sn	120	115	He	50.971	ppb	1.1	72275.62	0.8218	Pulse	0.1000	3
Sb	121	115	He	51.777	ppb	1.4	67665.39	0.7693	Pulse	0.1000	3
Ba	137	115	He	518.876	ppb	0.3	219050.54	2.4905	Pulse	0.1000	3
Tl	205	159	He	51.523	ppb	0.2	510762.39	1.2741	Pulse	0.1000	3
Pb	208	159	He	51.580	ppb	0.6	677193.68	1.6893	Pulse	0.1000	3
U	238	209	He	50.369	ppb	0.3	766699.00	2.4813	Pulse	0.1000	3

ISTD Table:

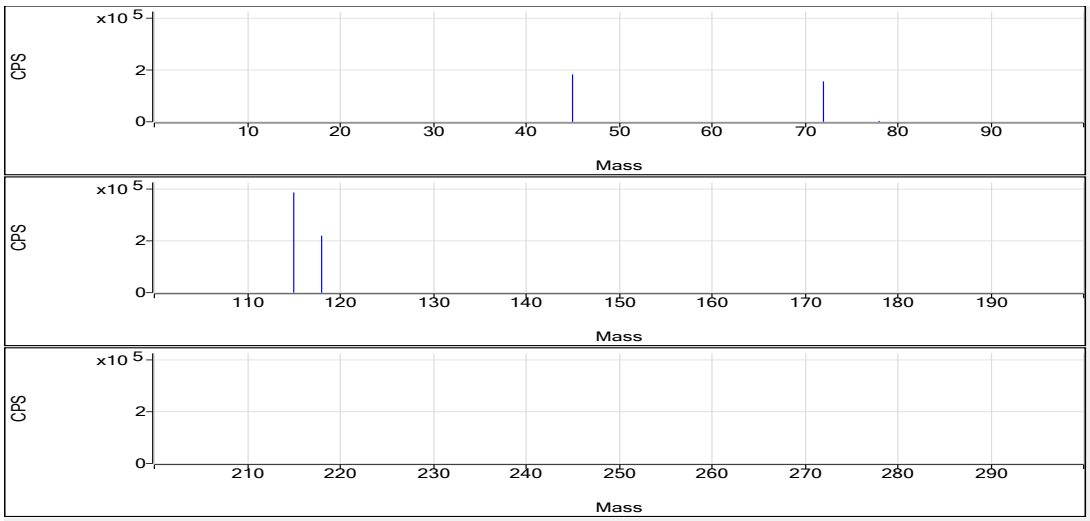
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2491496.99	1.0	103.9	Analog	0.1000	3
No Gas	Ge	72	1217297.56	0.5	105.5	Pulse	0.1000	3
H2	Sc	45	183451.62	1.1	98.1	Pulse	0.1000	3
H2	Ge	72	156256.67	0.7	95.4	Pulse	0.1000	3
H2	In	115	387442.77	1.4	99.6	Pulse	0.1000	3
He	Sc	45	48441.52	1.1	103.9	Pulse	0.1000	3
He	Ge	72	84717.25	0.3	104.3	Pulse	0.1000	3
He	In	115	87955.05	0.4	102.0	Pulse	0.1000	3
He	Tb	159	400880.61	0.1	100.6	Pulse	0.1000	3
He	Bi	209	308995.69	0.5	99.9	Pulse	0.1000	3

No Gas

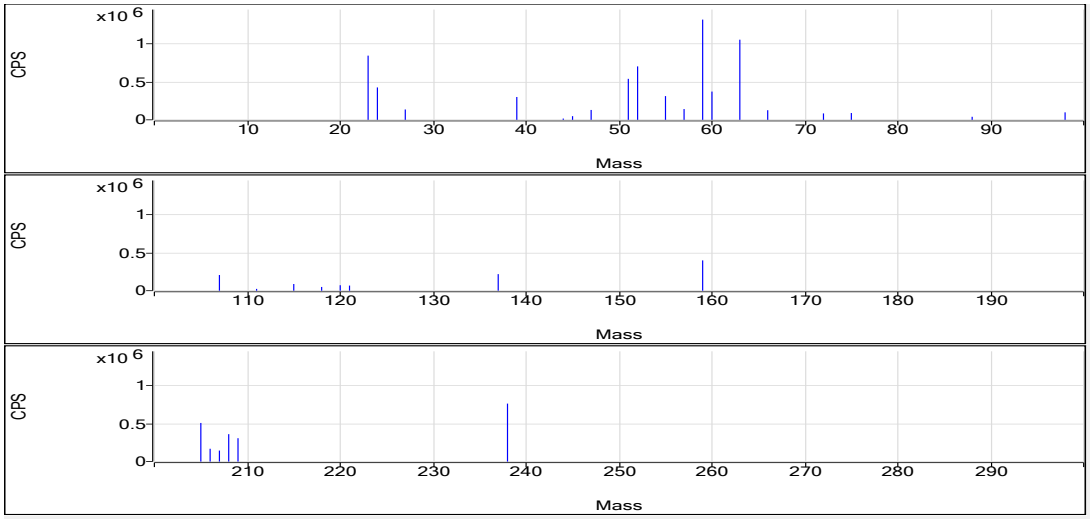


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.388	0.0354	87256.10	0.0008	4.685E-06
Be	9	1	No Gas	46.773	0.0357	88974.27	0.0008	4.685E-06
Be	9	1	No Gas	46.032	0.0351	88332.52	0.0008	4.685E-06
Se	78	2	H2	53.631	0.0224	3501.10	0.0004	1.219E-05
Se	78	2	H2	54.128	0.0226	3552.45	0.0004	1.219E-05
Se	78	2	H2	54.368	0.0227	3517.77	0.0004	1.219E-05
Na	23	3	He	4790.209	17.48	851498.11	0.0036	0.3452
Na	23	3	He	4846.27	17.6805	845994.83	0.0036	0.3452
Na	23	3	He	4774.579	17.4241	849645.38	0.0036	0.3452
Mg	24	3	He	4880.023	8.7598	426715.74	0.0018	0.003497
Mg	24	3	He	4988.27	8.9541	428442.96	0.0018	0.003497
Mg	24	3	He	4914.824	8.8223	430198.39	0.0018	0.003497
Al	27	3	He	4774.047	2.7936	136085.36	0.0006	0.0006432
Al	27	3	He	4860.952	2.8445	136105.08	0.0006	0.0006432
Al	27	3	He	4848.674	2.8373	138353.92	0.0006	0.0006432
K	39	3	He	5003.624	6.2209	303038.34	0.0012	0.3951
K	39	3	He	4998.281	6.2147	297367.24	0.0012	0.3951
K	39	3	He	5044.675	6.2687	305679.88	0.0012	0.3951
Ca	44	3	He	5037.849	0.343	16710.01	0.0001	0.002715
Ca	44	3	He	4928.187	0.3356	16059.25	0.0001	0.002715
Ca	44	3	He	5215.006	0.355	17310.71	0.0001	0.002715
Ti	47	3	He	5027.811	2.6997	131512.29	0.0005	7.003E-05
Ti	47	3	He	5016.872	2.6939	128899.27	0.0005	7.003E-05
Ti	47	3	He	5014.18	2.6924	131290.30	0.0005	7.003E-05
V	51	3	He	510.662	11.1875	544974.63	0.0219	0.02486
V	51	3	He	516.475	11.3146	541391.25	0.0219	0.02486
V	51	3	He	505.529	11.0753	540062.81	0.0219	0.02486
Cr	52	3	He	482.753	14.494	706041.01	0.0299	0.03997
Cr	52	3	He	493.874	14.8269	709454.21	0.0299	0.03997
Cr	52	3	He	481.394	14.4533	704780.54	0.0299	0.03997
Mn	55	3	He	499.276	6.4103	312263.18	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	511.552	6.5678	314264.68	0.0128	0.002639
Mn	55	3	He	503.319	6.4622	315113.55	0.0128	0.002639
Fe	57	3	He	5092.423	2.9601	144193.75	0.0006	0.001429
Fe	57	3	He	5100.556	2.9648	141863.03	0.0006	0.001429
Fe	57	3	He	4985.311	2.8978	141307.11	0.0006	0.001429
Co	59	3	He	482.649	27.1667	1323367.17	0.0563	0.002149
Co	59	3	He	492.962	27.7472	1327676.07	0.0563	0.002149
Co	59	3	He	483.14	27.1944	1326073.26	0.0563	0.002149
Ni	60	3	He	512.376	4.4006	371934.37	0.0086	0.002834
Ni	60	3	He	509.315	4.3744	371920.19	0.0086	0.002834
Ni	60	3	He	518.787	4.4557	376995.93	0.0086	0.002834
Cu	63	3	He	485.857	12.4772	1054554.75	0.0257	0.004757
Cu	63	3	He	485.219	12.4608	1059454.83	0.0257	0.004757
Cu	63	3	He	490.66	12.6005	1066136.62	0.0257	0.004757
Zn	66	3	He	524.071	1.5297	129288.80	0.0029	0.003818
Zn	66	3	He	508.11	1.4832	126109.16	0.0029	0.003818
Zn	66	3	He	508.632	1.4848	125626.32	0.0029	0.003818
As	75	3	He	521.929	1.0702	90449.16	0.002	0.0008061
As	75	3	He	515.091	1.0562	89797.61	0.002	0.0008061
As	75	3	He	515.58	1.0572	89447.02	0.002	0.0008061
Sr	88	3	He	50.889	0.4574	40308.10	0.009	0.0009645
Sr	88	3	He	50.151	0.4508	39776.61	0.009	0.0009645
Sr	88	3	He	51.076	0.4591	40178.01	0.009	0.0009645
Mo	98	3	He	51.372	1.1267	99279.82	0.0219	0.0002706
Mo	98	3	He	51.008	1.1187	98705.76	0.0219	0.0002706
Mo	98	3	He	51.306	1.1252	98473.21	0.0219	0.0002706
Ag	107	3	He	50.053	2.3274	205088.10	0.0465	0.0006206
Ag	107	3	He	50.593	2.3526	207574.27	0.0465	0.0006206
Ag	107	3	He	51.401	2.3901	209166.87	0.0465	0.0006206
Cd	111	3	He	50.327	0.2691	23712.09	0.0053	0
Cd	111	3	He	51.272	0.2741	24188.98	0.0053	0
Cd	111	3	He	50.739	0.2713	23742.14	0.0053	0
Sn	120	3	He	51.143	0.8245	72651.18	0.0158	0.01648
Sn	120	3	He	50.347	0.8119	71635.29	0.0158	0.01648
Sn	120	3	He	51.424	0.8289	72540.38	0.0158	0.01648
Sb	121	3	He	52.102	0.7742	68217.75	0.0149	0.0002698
Sb	121	3	He	50.922	0.7566	66761.07	0.0149	0.0002698
Sb	121	3	He	52.308	0.7772	68017.35	0.0149	0.0002698
Ba	137	3	He	520.358	2.4976	220084.33	0.0048	0.0002317
Ba	137	3	He	517.064	2.4818	218976.87	0.0048	0.0002317
Ba	137	3	He	519.205	2.4921	218090.41	0.0048	0.0002317
Tl	205	3	He	51.485	1.2732	509796.87	0.0247	0.0001339
Tl	205	3	He	51.656	1.2774	512440.50	0.0247	0.0001339
Tl	205	3	He	51.426	1.2717	510049.80	0.0247	0.0001339
Pb	208	3	He	51.315	1.6806	358113.63	0.0327	0.00107
Pb	208	3	He	51.512	1.687	362046.05	0.0327	0.00107
Pb	208	3	He	51.912	1.7001	366937.61	0.0327	0.00107
U	238	3	He	50.517	2.4886	766510.69	0.0493	7.55E-05
U	238	3	He	50.205	2.4732	762382.80	0.0493	7.55E-05
U	238	3	He	50.385	2.482	771203.50	0.0493	7.55E-05
Sc	45	1	No Gas			2465621.21		
Sc	45	1	No Gas			2493489.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2515379.96		
Ge	72	1	No Gas			1210964.59		
Ge	72	1	No Gas			1220528.81		
Ge	72	1	No Gas			1220399.28		
Sc	45	2	H2			182795.00		
Sc	45	2	H2			185713.06		
Sc	45	2	H2			181846.81		
Ge	72	2	H2			156438.82		
Ge	72	2	H2			157276.17		
Ge	72	2	H2			155055.02		
In	115	2	H2			384331.09		
In	115	2	H2			393623.71		
In	115	2	H2			384373.51		
Sc	45	3	He			48712.79		
Sc	45	3	He			47849.02		
Sc	45	3	He			48762.76		
Ge	72	3	He			84518.43		
Ge	72	3	He			85022.74		
Ge	72	3	He			84610.57		
In	115	3	He			88502.34		
In	115	3	He			88622.47		
In	115	3	He			87897.68		
Tb	159	3	He			400412.61		
Tb	159	3	He			401159.29		
Tb	159	3	He			401069.92		
Bi	209	3	He			308014.19		
Bi	209	3	He			308259.94		
Bi	209	3	He			310712.93		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

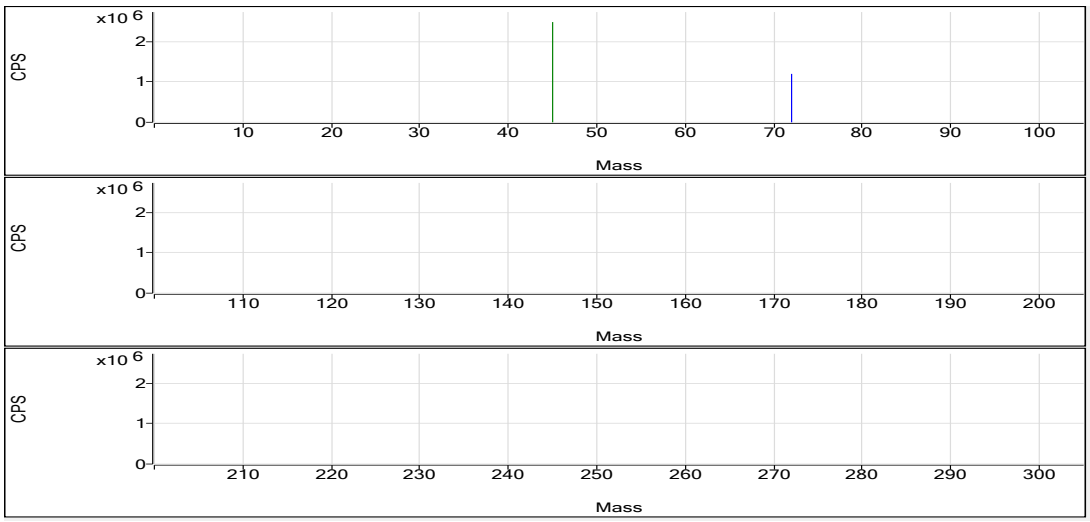
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.021	ppb	30.1	51.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.005	ppb	300.6	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	43.400	ppb	8.2	23752.90	0.5004	Pulse	0.1000	3
Mg	24	45	He	0.907	ppb	30.6	243.34	0.0051	Pulse	0.1000	3
Al	27	45	He	0.706	ppb	185.7	50.00	0.0011	Pulse	0.1000	3
K	39	45	He	0.954	ppb	919.2	18805.96	0.3962	Pulse	0.1000	3
Ca	44	45	He	5.643	ppb	237.5	146.67	0.0031	Pulse	0.1000	3
Ti	47	45	He	1.050	ppb	99.5	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	0.204	ppb	8.2	1391.41	0.0293	Pulse	0.5000	3
Cr	52	45	He	0.078	ppb	125.2	2006.89	0.0423	Pulse	0.1000	3
Mn	55	45	He	0.331	ppb	12.1	326.68	0.0069	Pulse	0.1000	3
Fe	57	45	He	3.096	ppb	58.8	153.34	0.0032	Pulse	0.1000	3
Co	59	45	He	0.059	ppb	18.6	260.01	0.0055	Pulse	0.1000	3
Ni	60	72	He	0.021	ppb	304.1	250.01	0.0030	Pulse	0.1000	3
Cu	63	72	He	0.068	ppb	59.2	540.03	0.0065	Pulse	0.1000	3
Zn	66	72	He	2.056	ppb	13.6	813.38	0.0098	Pulse	0.1000	3
As	75	72	He	0.171	ppb	53.5	96.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.003	ppb	1035.9	86.67	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.052	ppb	25.2	123.34	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	134.7	80.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	57.5	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.024	ppb	N/A	1406.79	0.0161	Pulse	0.1000	3
Sb	121	115	He	0.033	ppb	58.2	66.67	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.007	ppb	375.1	23.33	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.061	ppb	6.2	660.04	0.0016	Pulse	0.1000	3
Pb	208	159	He	0.016	ppb	38.0	646.70	0.0016	Pulse	0.1000	3
U	238	209	He	0.038	ppb	7.3	606.71	0.0020	Pulse	0.1000	3

ISTD Table:

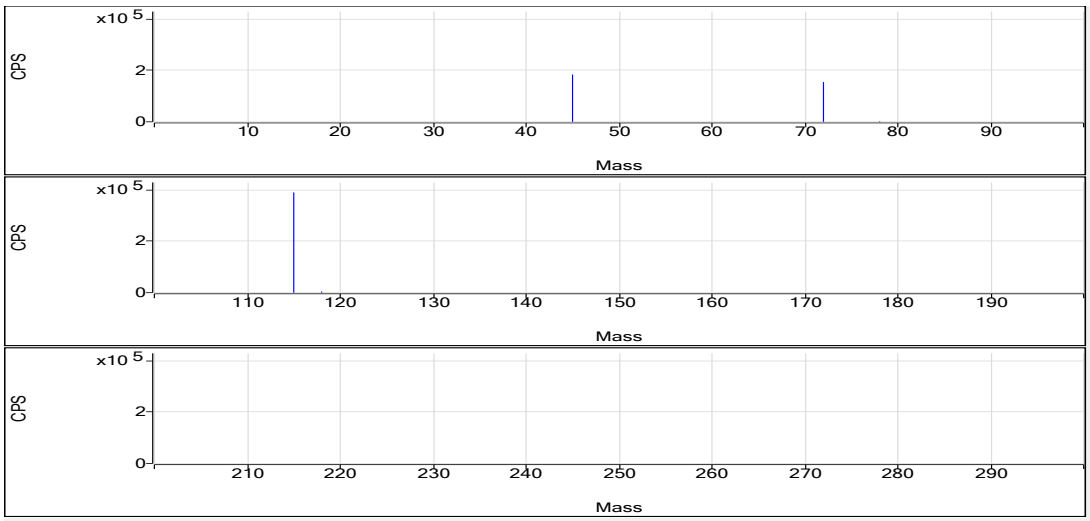
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2473756.52	0.7	103.1	Analog	0.1000	3
No Gas	Ge	72	1194832.61	0.8	103.6	Pulse	0.1000	3
H2	Sc	45	183881.17	1.4	98.3	Pulse	0.1000	3
H2	Ge	72	154360.63	0.6	94.3	Pulse	0.1000	3
H2	In	115	389698.23	1.7	100.2	Pulse	0.1000	3
He	Sc	45	47461.53	1.1	101.8	Pulse	0.1000	3
He	Ge	72	82987.04	0.9	102.2	Pulse	0.1000	3
He	In	115	87359.71	0.5	101.3	Pulse	0.1000	3
He	Tb	159	401930.66	0.3	100.8	Pulse	0.1000	3
He	Bi	209	310519.81	0.7	100.4	Pulse	0.1000	3

No Gas

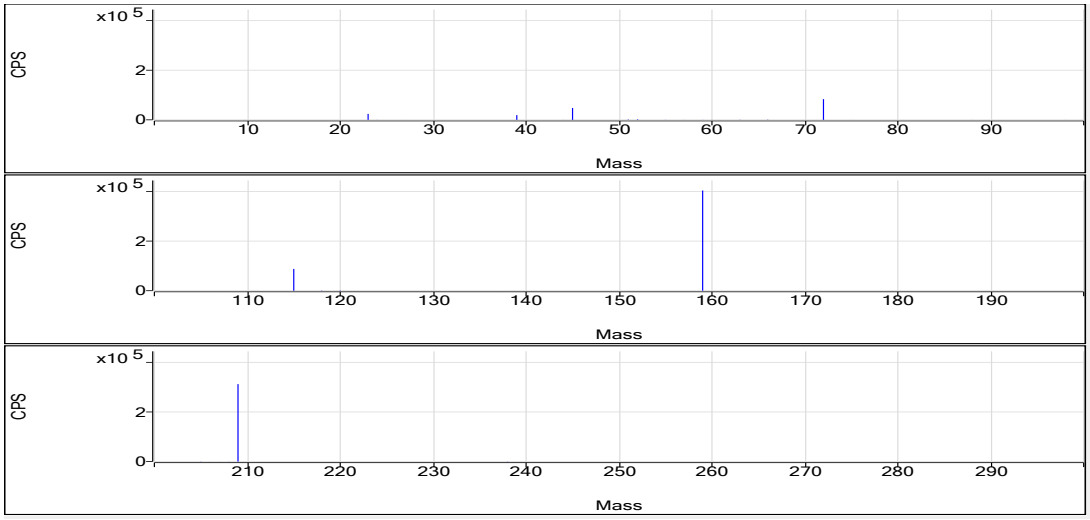


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.028	0	64.00	0.0008	4.685E-06
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.02	0	50.00	0.0008	4.685E-06
Se	78	2	H2	0.022	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.002	0	2.00	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Na	23	3	He	43.2	0.4997	23929.73	0.0036	0.3452
Na	23	3	He	47.052	0.5135	24450.66	0.0036	0.3452
Na	23	3	He	39.948	0.4881	22878.32	0.0036	0.3452
Mg	24	3	He	0.844	0.005	240.01	0.0018	0.003497
Mg	24	3	He	1.211	0.0057	270.01	0.0018	0.003497
Mg	24	3	He	0.667	0.0047	220.01	0.0018	0.003497
Al	27	3	He	1.042	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	-0.741	0.0002	10.00	0.0006	0.0006432
Al	27	3	He	1.818	0.0017	80.00	0.0006	0.0006432
K	39	3	He	11.01	0.4079	19533.38	0.0012	0.3951
K	39	3	He	-3.067	0.3915	18642.58	0.0012	0.3951
K	39	3	He	-5.082	0.3891	18241.92	0.0012	0.3951
Ca	44	3	He	-9.279	0.0021	100.00	0.0001	0.002715
Ca	44	3	He	9.552	0.0034	160.01	0.0001	0.002715
Ca	44	3	He	16.656	0.0038	180.01	0.0001	0.002715
Ti	47	3	He	1.425	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	1.856	0.0011	50.00	0.0005	7.003E-05
V	51	3	He	0.196	0.0292	1396.08	0.0219	0.02486
V	51	3	He	0.192	0.0291	1384.08	0.0219	0.02486
V	51	3	He	0.223	0.0297	1394.08	0.0219	0.02486
Cr	52	3	He	0.011	0.0403	1930.20	0.0299	0.03997
Cr	52	3	He	0.033	0.041	1950.22	0.0299	0.03997
Cr	52	3	He	0.19	0.0457	2140.24	0.0299	0.03997
Mn	55	3	He	0.348	0.0071	340.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.285	0.0063	300.01	0.0128	0.002639
Mn	55	3	He	0.36	0.0073	340.01	0.0128	0.002639
Fe	57	3	He	5.089	0.0044	210.01	0.0006	0.001429
Fe	57	3	He	1.517	0.0023	110.00	0.0006	0.001429
Fe	57	3	He	2.682	0.003	140.01	0.0006	0.001429
Co	59	3	He	0.051	0.005	240.01	0.0563	0.002149
Co	59	3	He	0.055	0.0053	250.01	0.0563	0.002149
Co	59	3	He	0.072	0.0062	290.01	0.0563	0.002149
Ni	60	3	He	0.095	0.0037	300.01	0.0086	0.002834
Ni	60	3	He	-0.008	0.0028	230.01	0.0086	0.002834
Ni	60	3	He	-0.024	0.0026	220.01	0.0086	0.002834
Cu	63	3	He	0.104	0.0074	610.04	0.0257	0.004757
Cu	63	3	He	0.077	0.0067	560.03	0.0257	0.004757
Cu	63	3	He	0.024	0.0054	450.03	0.0257	0.004757
Zn	66	3	He	2.074	0.0099	810.05	0.0029	0.003818
Zn	66	3	He	2.326	0.0106	880.06	0.0029	0.003818
Zn	66	3	He	1.767	0.009	750.04	0.0029	0.003818
As	75	3	He	0.129	0.0011	88.00	0.002	0.0008061
As	75	3	He	0.276	0.0014	114.00	0.002	0.0008061
As	75	3	He	0.108	0.001	86.00	0.002	0.0008061
Sr	88	3	He	0.033	0.0013	110.00	0.009	0.0009645
Sr	88	3	He	-0.031	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	0.008	0.001	90.00	0.009	0.0009645
Mo	98	3	He	0.066	0.0017	150.01	0.0219	0.0002706
Mo	98	3	He	0.04	0.0011	100.00	0.0219	0.0002706
Mo	98	3	He	0.051	0.0014	120.00	0.0219	0.0002706
Ag	107	3	He	0.011	0.0011	100.00	0.0465	0.0006206
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.011	0.0012	100.00	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.056	0.0174	1520.14	0.0158	0.01648
Sn	120	3	He	-0.061	0.0155	1360.12	0.0158	0.01648
Sn	120	3	He	-0.066	0.0154	1340.12	0.0158	0.01648
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.051	0.001	90.00	0.0149	0.0002698
Sb	121	3	He	0.036	0.0008	70.00	0.0149	0.0002698
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.058	0.0016	630.04	0.0247	0.0001339
Tl	205	3	He	0.06	0.0016	650.04	0.0247	0.0001339
Tl	205	3	He	0.065	0.0017	700.05	0.0247	0.0001339
Pb	208	3	He	0.014	0.0015	300.01	0.0327	0.00107
Pb	208	3	He	0.012	0.0015	390.02	0.0327	0.00107
Pb	208	3	He	0.024	0.0018	470.02	0.0327	0.00107
U	238	3	He	0.041	0.0021	640.04	0.0493	7.55E-05
U	238	3	He	0.035	0.0018	560.04	0.0493	7.55E-05
U	238	3	He	0.039	0.002	620.04	0.0493	7.55E-05
Sc	45	1	No Gas			2472429.49		
Sc	45	1	No Gas			2458073.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2490766.37		
Ge	72	1	No Gas			1195758.89		
Ge	72	1	No Gas			1184323.97		
Ge	72	1	No Gas			1204414.98		
Sc	45	2	H2			185512.03		
Sc	45	2	H2			185158.18		
Sc	45	2	H2			180973.30		
Ge	72	2	H2			154710.32		
Ge	72	2	H2			153366.87		
Ge	72	2	H2			155004.69		
In	115	2	H2			392034.53		
In	115	2	H2			382367.03		
In	115	2	H2			394693.12		
Sc	45	3	He			47889.37		
Sc	45	3	He			47618.83		
Sc	45	3	He			46876.40		
Ge	72	3	He			82185.63		
Ge	72	3	He			83101.42		
Ge	72	3	He			83674.07		
In	115	3	He			87555.08		
In	115	3	He			87716.67		
In	115	3	He			86830.94		
Tb	159	3	He			403251.95		
Tb	159	3	He			401262.85		
Tb	159	3	He			401277.18		
Bi	209	3	He			308506.91		
Bi	209	3	He			310142.98		
Bi	209	3	He			312909.55		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
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Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

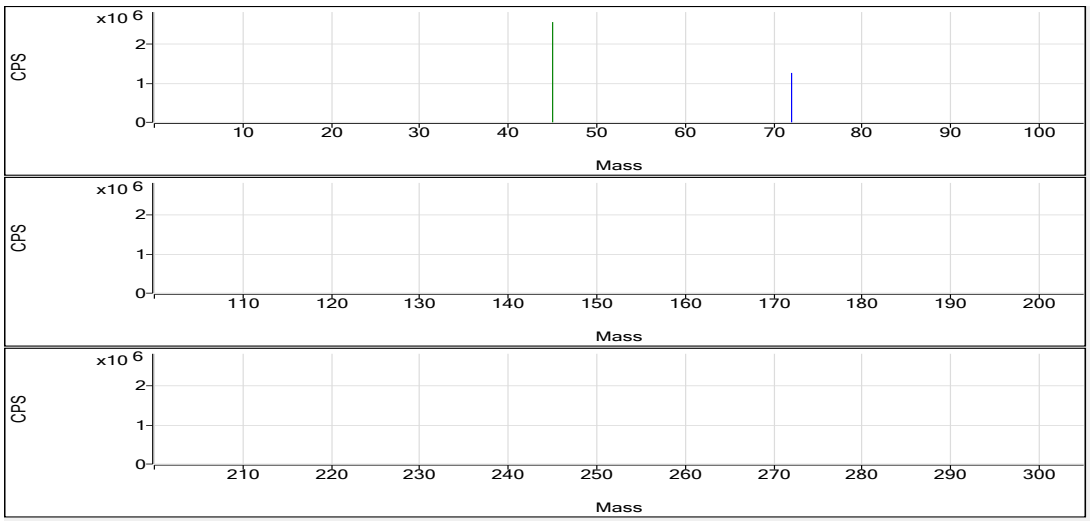
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.053	ppb	3.4	116.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.036	ppb	104.7	4.44	0.0000	Pulse	1.5000	3
Na	23	45	He	8315.718	ppb	3.1	1462019.82	30.0909	Analog	0.1000	3
Mg	24	45	He	15854.901	ppb	3.0	1382424.87	28.4523	Analog	0.1000	3
Al	27	45	He	1091.850	ppb	3.5	31067.31	0.6394	Pulse	0.1000	3
K	39	45	He	684.646	ppb	4.1	57929.26	1.1922	Pulse	0.1000	3
Ca	44	45	He	45101.877	ppb	2.2	148188.71	3.0494	Pulse	0.1000	3
Ti	47	45	He	9.900	ppb	47.2	263.35	0.0054	Pulse	0.1000	3
V	51	45	He	3.610	ppb	0.8	5044.24	0.1038	Pulse	0.5000	3
Cr	52	45	He	1.750	ppb	4.3	4490.83	0.0924	Pulse	0.1000	3
Mn	55	45	He	1447.603	ppb	1.6	903002.10	18.5810	Pulse	0.1000	3
Fe	57	45	He	87801.220	ppb	1.4	2479249.29	51.0131	Analog	0.1000	3
Co	59	45	He	1.514	ppb	7.8	4244.12	0.0874	Pulse	0.1000	3
Ni	60	72	He	4.244	ppb	7.9	3427.20	0.0393	Pulse	0.1000	3
Cu	63	72	He	1.585	ppb	5.6	3967.37	0.0454	Pulse	0.1000	3
Zn	66	72	He	9.268	ppb	7.8	2690.33	0.0308	Pulse	0.1000	3
As	75	72	He	15.755	ppb	1.5	2889.64	0.0331	Pulse	0.5000	3
Sr	88	115	He	213.965	ppb	0.5	166875.78	1.9202	Pulse	0.1000	3
Mo	98	115	He	1.587	ppb	8.0	3047.12	0.0351	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	248.6	70.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	33.4	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.060	ppb	227.3	1513.47	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.367	ppb	22.4	496.70	0.0057	Pulse	0.1000	3
Ba	137	115	He	108.117	ppb	2.1	45111.66	0.5191	Pulse	0.1000	3
Tl	205	159	He	0.011	ppb	36.6	163.34	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.424	ppb	6.9	5987.43	0.0149	Pulse	0.1000	3
U	238	209	He	0.195	ppb	3.5	3023.79	0.0097	Pulse	0.1000	3

ISTD Table:

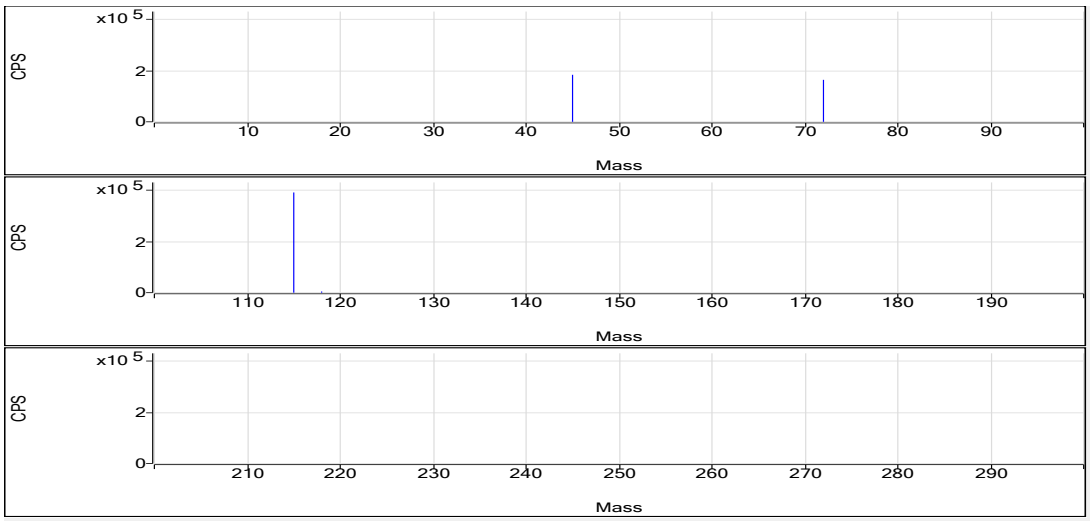
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2561620.07	0.4	106.8	Analog	0.1000	3
No Gas	Ge	72	1262033.73	0.6	109.4	Pulse	0.1000	3
H2	Sc	45	184014.15	0.2	98.4	Pulse	0.1000	3
H2	Ge	72	164295.62	1.2	100.4	Pulse	0.1000	3
H2	In	115	392278.22	0.2	100.8	Pulse	0.1000	3
He	Sc	45	48608.62	2.2	104.2	Pulse	0.1000	3
He	Ge	72	87340.08	1.2	107.6	Pulse	0.1000	3
He	In	115	86909.46	1.2	100.8	Pulse	0.1000	3
He	Tb	159	400610.01	0.1	100.5	Pulse	0.1000	3
He	Bi	209	312420.39	0.9	101.0	Pulse	0.1000	3

No Gas

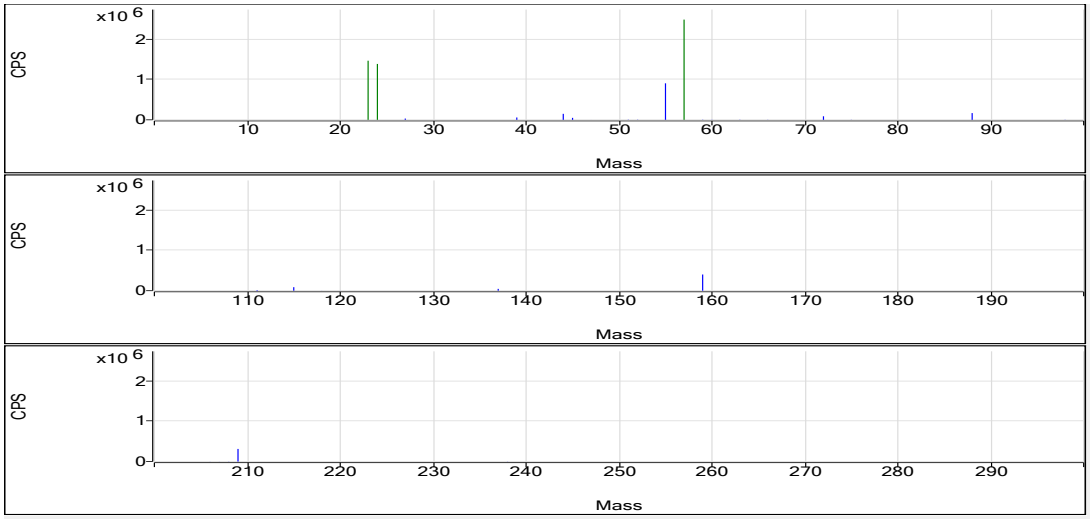


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.055	0	120.00	0.0008	4.685E-06
Be	9	1	No Gas	0.051	0	112.00	0.0008	4.685E-06
Be	9	1	No Gas	0.053	0	116.00	0.0008	4.685E-06
Se	78	2	H2	0.009	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.079	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.02	0	3.33	0.0004	1.219E-05
Na	23	3	He	8611.271	31.1481	1476047.01	0.0036	0.3452
Na	23	3	He	8121.694	29.3969	1449972.95	0.0036	0.3452
Na	23	3	He	8214.187	29.7277	1460039.51	0.0036	0.3452
Mg	24	3	He	16389.629	29.4118	1393765.76	0.0018	0.003497
Mg	24	3	He	15457.595	27.7394	1368220.29	0.0018	0.003497
Mg	24	3	He	15717.478	28.2057	1385288.57	0.0018	0.003497
Al	27	3	He	1127.697	0.6604	31294.35	0.0006	0.0006432
Al	27	3	He	1051.783	0.616	30382.30	0.0006	0.0006432
Al	27	3	He	1096.071	0.6419	31525.28	0.0006	0.0006432
K	39	3	He	716.737	1.2296	58267.48	0.0012	0.3951
K	39	3	He	668.465	1.1734	57875.82	0.0012	0.3951
K	39	3	He	668.736	1.1737	57644.49	0.0012	0.3951
Ca	44	3	He	46125.781	3.1186	147784.28	0.0001	0.002715
Ca	44	3	He	45053.934	3.0462	150250.72	0.0001	0.002715
Ca	44	3	He	44125.915	2.9835	146531.13	0.0001	0.002715
Ti	47	3	He	4.979	0.0027	130.01	0.0005	7.003E-05
Ti	47	3	He	10.442	0.0057	280.01	0.0005	7.003E-05
Ti	47	3	He	14.28	0.0077	380.02	0.0005	7.003E-05
V	51	3	He	3.638	0.1044	4946.88	0.0219	0.02486
V	51	3	He	3.581	0.1031	5086.91	0.0219	0.02486
V	51	3	He	3.612	0.1038	5098.93	0.0219	0.02486
Cr	52	3	He	1.746	0.0922	4370.81	0.0299	0.03997
Cr	52	3	He	1.828	0.0947	4670.87	0.0299	0.03997
Cr	52	3	He	1.678	0.0902	4430.81	0.0299	0.03997
Mn	55	3	He	1473.262	18.9103	896122.10	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1442.063	18.5099	912983.50	0.0128	0.002639
Mn	55	3	He	1427.483	18.3228	899900.69	0.0128	0.002639
Fe	57	3	He	89072.482	51.7517	2452412.31	0.0006	0.001429
Fe	57	3	He	87702.27	50.9556	2513340.28	0.0006	0.001429
Fe	57	3	He	86628.908	50.332	2471995.28	0.0006	0.001429
Co	59	3	He	1.619	0.0933	4420.83	0.0563	0.002149
Co	59	3	He	1.536	0.0886	4370.83	0.0563	0.002149
Co	59	3	He	1.387	0.0802	3940.70	0.0563	0.002149
Ni	60	3	He	4.534	0.0417	3600.57	0.0086	0.002834
Ni	60	3	He	3.877	0.0361	3190.47	0.0086	0.002834
Ni	60	3	He	4.323	0.0399	3490.55	0.0086	0.002834
Cu	63	3	He	1.685	0.048	4140.76	0.0257	0.004757
Cu	63	3	He	1.556	0.0447	3950.66	0.0257	0.004757
Cu	63	3	He	1.513	0.0436	3810.69	0.0257	0.004757
Zn	66	3	He	9.681	0.032	2760.35	0.0029	0.003818
Zn	66	3	He	9.69	0.032	2830.37	0.0029	0.003818
Zn	66	3	He	8.435	0.0284	2480.28	0.0029	0.003818
As	75	3	He	15.928	0.0334	2884.31	0.002	0.0008061
As	75	3	He	15.859	0.0333	2942.32	0.002	0.0008061
As	75	3	He	15.478	0.0325	2842.30	0.002	0.0008061
Sr	88	3	He	212.695	1.9088	168089.02	0.009	0.0009645
Sr	88	3	He	214.393	1.924	166372.22	0.009	0.0009645
Sr	88	3	He	214.805	1.9277	166166.09	0.009	0.0009645
Mo	98	3	He	1.599	0.0353	3110.47	0.0219	0.0002706
Mo	98	3	He	1.454	0.0322	2780.39	0.0219	0.0002706
Mo	98	3	He	1.707	0.0377	3250.50	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.014	0.0013	110.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	0.014	0.0167	1470.12	0.0158	0.01648
Sn	120	3	He	-0.047	0.0157	1360.12	0.0158	0.01648
Sn	120	3	He	0.213	0.0198	1710.17	0.0158	0.01648
Sb	121	3	He	0.295	0.0047	410.02	0.0149	0.0002698
Sb	121	3	He	0.457	0.0071	610.04	0.0149	0.0002698
Sb	121	3	He	0.349	0.0055	470.03	0.0149	0.0002698
Ba	137	3	He	106.084	0.5094	44854.40	0.0048	0.0002317
Ba	137	3	He	110.548	0.5308	45897.54	0.0048	0.0002317
Ba	137	3	He	107.72	0.5172	44583.05	0.0048	0.0002317
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Tl	205	3	He	0.015	0.0005	200.01	0.0247	0.0001339
Tl	205	3	He	0.007	0.0003	120.01	0.0247	0.0001339
Pb	208	3	He	0.446	0.0157	3350.53	0.0327	0.00107
Pb	208	3	He	0.436	0.0153	3200.52	0.0327	0.00107
Pb	208	3	He	0.39	0.0138	3060.49	0.0327	0.00107
U	238	3	He	0.199	0.0099	3120.48	0.0493	7.55E-05
U	238	3	He	0.198	0.0098	3070.47	0.0493	7.55E-05
U	238	3	He	0.187	0.0093	2880.42	0.0493	7.55E-05
Sc	45	1	No Gas			2571804.34		
Sc	45	1	No Gas			2550186.52		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2562869.34		
Ge	72	1	No Gas			1269456.39		
Ge	72	1	No Gas			1263275.76		
Ge	72	1	No Gas			1253369.04		
Sc	45	2	H2			184292.01		
Sc	45	2	H2			184081.52		
Sc	45	2	H2			183668.92		
Ge	72	2	H2			166540.19		
Ge	72	2	H2			162728.35		
Ge	72	2	H2			163618.31		
In	115	2	H2			391603.78		
In	115	2	H2			393033.24		
In	115	2	H2			392197.65		
Sc	45	3	He			47388.03		
Sc	45	3	He			49324.08		
Sc	45	3	He			49113.76		
Ge	72	3	He			86250.45		
Ge	72	3	He			88363.03		
Ge	72	3	He			87406.77		
In	115	3	He			88068.25		
In	115	3	He			86478.64		
In	115	3	He			86206.21		
Tb	159	3	He			400567.53		
Tb	159	3	He			401211.09		
Tb	159	3	He			400051.40		
Bi	209	3	He			315356.50		
Bi	209	3	He			311774.12		
Bi	209	3	He			310130.56		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 6:17:36 PM
Sample Name	410-136864-M-3-A
Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

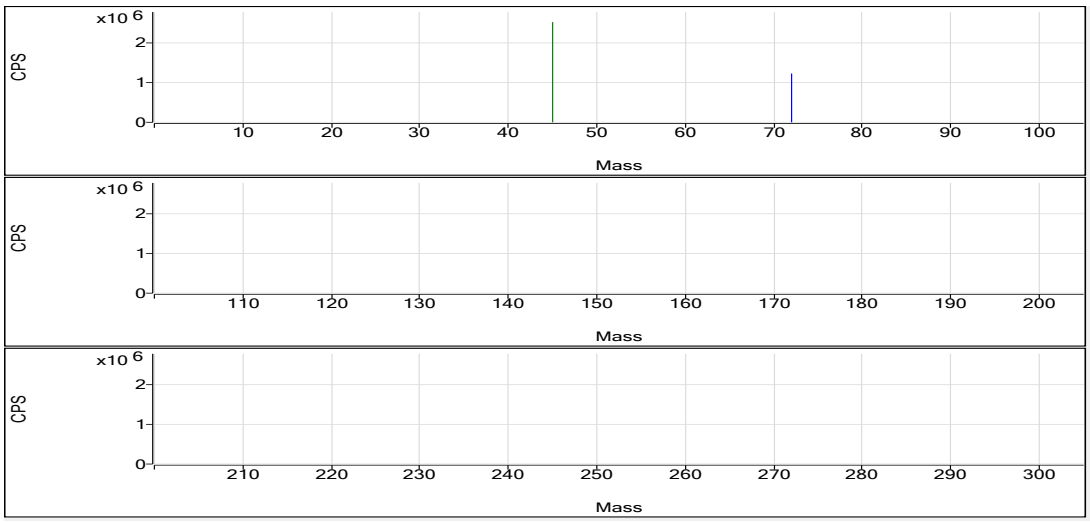
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.014	ppb	5.3	39.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.007	ppb	287.8	2.44	0.0000	Pulse	1.5000	3
Na	23	45	He	5948.681	ppb	3.0	1038647.38	21.6239	Mix	0.1000	3
Mg	24	45	He	48292.748	ppb	1.9	4160528.90	86.6562	Analog	0.1000	3
Al	27	45	He	7.913	ppb	20.7	253.35	0.0053	Pulse	0.1000	3
K	39	45	He	3583.321	ppb	0.8	219304.26	4.5672	Pulse	0.1000	3
Ca	44	45	He	135595.067	ppb	0.9	439947.27	9.1624	Pulse	0.1000	3
Ti	47	45	He	7.035	ppb	162.2	183.63	0.0038	Pulse	0.1000	3
V	51	45	He	0.007	ppb	201.9	1200.73	0.0250	Pulse	0.5000	3
Cr	52	45	He	0.447	ppb	42.1	2563.64	0.0534	Pulse	0.1000	3
Mn	55	45	He	403.717	ppb	0.6	248920.04	5.1839	Pulse	0.1000	3
Fe	57	45	He	2326.294	ppb	1.3	64966.54	1.3530	Pulse	0.1000	3
Co	59	45	He	5.677	ppb	3.7	15442.00	0.3217	Pulse	0.1000	3
Ni	60	72	He	17.117	ppb	0.4	13096.35	0.1498	Pulse	0.1000	3
Cu	63	72	He	0.539	ppb	5.2	1626.83	0.0186	Pulse	0.1000	3
Zn	66	72	He	7.632	ppb	5.4	2276.92	0.0260	Pulse	0.1000	3
As	75	72	He	2.598	ppb	7.0	536.01	0.0061	Pulse	0.5000	3
Sr	88	115	He	91.769	ppb	4.1	70288.45	0.8241	Pulse	0.1000	3
Mo	98	115	He	0.097	ppb	21.3	203.34	0.0024	Pulse	0.1000	3
Ag	107	115	He	0.031	ppb	6.9	176.68	0.0021	Pulse	0.1000	3
Cd	111	115	He	0.368	ppb	5.4	168.00	0.0020	Pulse	0.5000	3
Sn	120	115	He	0.063	ppb	101.0	1490.14	0.0175	Pulse	0.1000	3
Sb	121	115	He	0.045	ppb	64.8	80.00	0.0009	Pulse	0.1000	3
Ba	137	115	He	657.819	ppb	1.8	269364.33	3.1573	Pulse	0.1000	3
Tl	205	159	He	0.062	ppb	30.4	676.71	0.0017	Pulse	0.1000	3
Pb	208	159	He	0.115	ppb	2.8	1960.13	0.0048	Pulse	0.1000	3
U	238	209	He	1.096	ppb	1.4	16778.15	0.0541	Pulse	0.1000	3

ISTD Table:

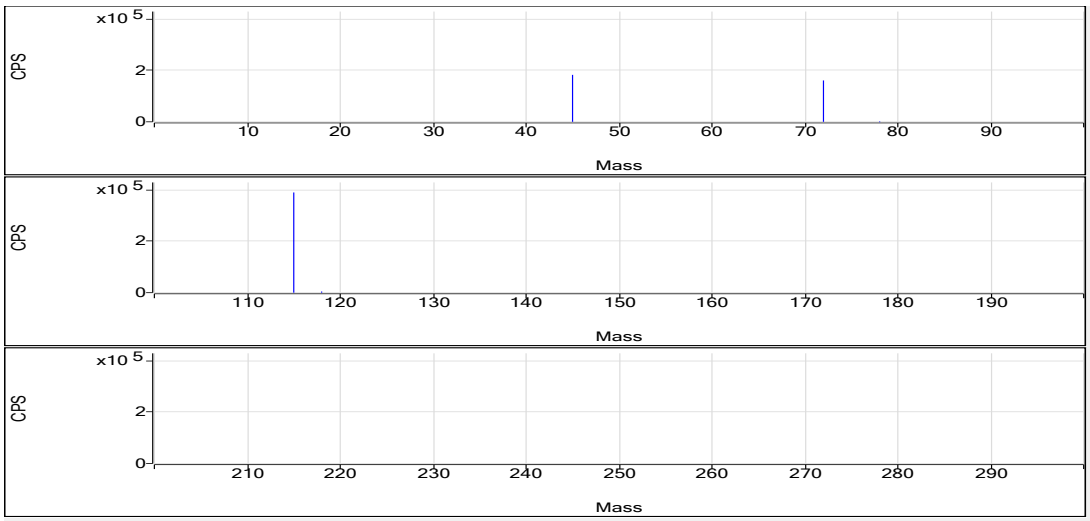
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2523800.59	1.2	105.2	Analog	0.1000	3
No Gas	Ge	72	1228680.03	0.6	106.5	Pulse	0.1000	3
H2	Sc	45	182790.48	1.9	97.7	Pulse	0.1000	3
H2	Ge	72	161059.61	1.6	98.4	Pulse	0.1000	3
H2	In	115	390183.25	0.2	100.3	Pulse	0.1000	3
He	Sc	45	48020.03	1.4	103.0	Pulse	0.1000	3
He	Ge	72	87453.65	0.3	107.7	Pulse	0.1000	3
He	In	115	85329.62	1.8	99.0	Pulse	0.1000	3
He	Tb	159	404183.08	0.8	101.4	Pulse	0.1000	3
He	Bi	209	310333.26	0.8	100.3	Pulse	0.1000	3

No Gas

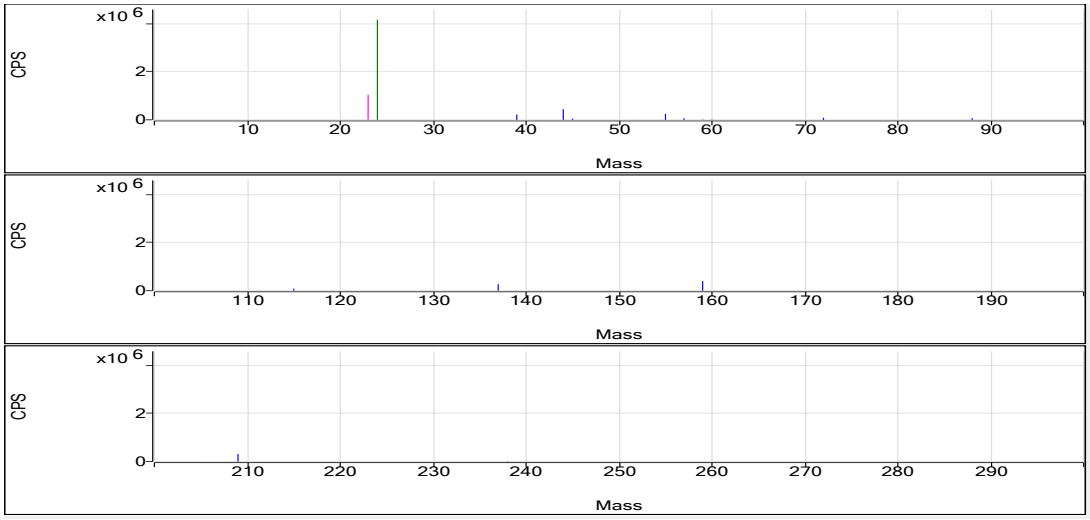


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.013	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.014	0	40.00	0.0008	4.685E-06
Se	78	2	H2	0.001	0	2.00	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	0.029	0	4.00	0.0004	1.219E-05
Na	23	3	He	5888.128	21.4073	1017454.28	0.0036	0.3452
Na	23	3	He	6149.92	22.3437	1090203.89	0.0036	0.3452
Na	23	3	He	5807.995	21.1206	1008283.97	0.0036	0.3452
Mg	24	3	He	48698.652	87.3846	4153249.94	0.0018	0.003497
Mg	24	3	He	47253.115	84.7908	4137146.50	0.0018	0.003497
Mg	24	3	He	48926.476	87.7933	4191190.25	0.0018	0.003497
Al	27	3	He	6.094	0.0042	200.01	0.0006	0.0006432
Al	27	3	He	8.36	0.0055	270.02	0.0006	0.0006432
Al	27	3	He	9.284	0.0061	290.01	0.0006	0.0006432
K	39	3	He	3615.926	4.6052	218877.16	0.0012	0.3951
K	39	3	He	3555.836	4.5352	221284.31	0.0012	0.3951
K	39	3	He	3578.202	4.5613	217751.31	0.0012	0.3951
Ca	44	3	He	136950.727	9.254	439827.88	0.0001	0.002715
Ca	44	3	He	134499.431	9.0884	443445.23	0.0001	0.002715
Ca	44	3	He	135335.043	9.1449	436568.70	0.0001	0.002715
Ti	47	3	He	1.045	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	20.19	0.0109	520.89	0.0005	7.003E-05
V	51	3	He	0.016	0.0252	1198.06	0.0219	0.02486
V	51	3	He	-0.009	0.0247	1204.06	0.0219	0.02486
V	51	3	He	0.012	0.0251	1200.06	0.0219	0.02486
Cr	52	3	He	0.232	0.0469	2230.24	0.0299	0.03997
Cr	52	3	He	0.527	0.0558	2720.33	0.0299	0.03997
Cr	52	3	He	0.582	0.0574	2740.35	0.0299	0.03997
Mn	55	3	He	403.511	5.1812	246256.32	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	401.308	5.153	251426.34	0.0128	0.002639
Mn	55	3	He	406.332	5.2175	249077.46	0.0128	0.002639
Fe	57	3	He	2360.074	1.3726	65238.00	0.0006	0.001429
Fe	57	3	He	2314.458	1.3461	65679.81	0.0006	0.001429
Fe	57	3	He	2304.349	1.3402	63981.82	0.0006	0.001429
Co	59	3	He	5.883	0.3333	15839.17	0.0563	0.002149
Co	59	3	He	5.463	0.3096	15108.27	0.0563	0.002149
Co	59	3	He	5.685	0.3221	15378.57	0.0563	0.002149
Ni	60	3	He	17.203	0.1505	13206.54	0.0086	0.002834
Ni	60	3	He	17.091	0.1495	13036.35	0.0086	0.002834
Ni	60	3	He	17.057	0.1492	13046.17	0.0086	0.002834
Cu	63	3	He	0.561	0.0191	1680.17	0.0257	0.004757
Cu	63	3	He	0.507	0.0178	1550.13	0.0257	0.004757
Cu	63	3	He	0.55	0.0189	1650.18	0.0257	0.004757
Zn	66	3	He	7.339	0.0252	2210.24	0.0029	0.003818
Zn	66	3	He	8.105	0.0274	2390.27	0.0029	0.003818
Zn	66	3	He	7.451	0.0255	2230.26	0.0029	0.003818
As	75	3	He	2.799	0.0065	574.02	0.002	0.0008061
As	75	3	He	2.551	0.006	526.01	0.002	0.0008061
As	75	3	He	2.443	0.0058	508.01	0.002	0.0008061
Sr	88	3	He	91.832	0.8247	70024.04	0.009	0.0009645
Sr	88	3	He	87.984	0.7902	68747.08	0.009	0.0009645
Sr	88	3	He	95.49	0.8575	72094.24	0.009	0.0009645
Mo	98	3	He	0.095	0.0024	200.01	0.0219	0.0002706
Mo	98	3	He	0.077	0.002	170.01	0.0219	0.0002706
Mo	98	3	He	0.118	0.0029	240.01	0.0219	0.0002706
Ag	107	3	He	0.03	0.002	170.01	0.0465	0.0006206
Ag	107	3	He	0.034	0.0022	190.01	0.0465	0.0006206
Ag	107	3	He	0.03	0.002	170.01	0.0465	0.0006206
Cd	111	3	He	0.37	0.002	168.00	0.0053	0
Cd	111	3	He	0.387	0.0021	180.00	0.0053	0
Cd	111	3	He	0.347	0.0019	156.00	0.0053	0
Sn	120	3	He	0.09	0.0179	1520.15	0.0158	0.01648
Sn	120	3	He	-0.01	0.0163	1420.12	0.0158	0.01648
Sn	120	3	He	0.109	0.0182	1530.14	0.0158	0.01648
Sb	121	3	He	0.053	0.0011	90.00	0.0149	0.0002698
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.07	0.0013	110.00	0.0149	0.0002698
Ba	137	3	He	653.502	3.1366	266330.00	0.0048	0.0002317
Ba	137	3	He	648.563	3.1129	270832.01	0.0048	0.0002317
Ba	137	3	He	671.393	3.2225	270930.97	0.0048	0.0002317
Tl	205	3	He	0.058	0.0016	630.04	0.0247	0.0001339
Tl	205	3	He	0.083	0.0022	890.06	0.0247	0.0001339
Tl	205	3	He	0.046	0.0013	510.03	0.0247	0.0001339
Pb	208	3	He	0.112	0.0047	1000.07	0.0327	0.00107
Pb	208	3	He	0.116	0.0049	1170.11	0.0327	0.00107
Pb	208	3	He	0.118	0.0049	1040.08	0.0327	0.00107
U	238	3	He	1.101	0.0543	16701.28	0.0493	7.55E-05
U	238	3	He	1.079	0.0532	16631.35	0.0493	7.55E-05
U	238	3	He	1.108	0.0547	17001.83	0.0493	7.55E-05
Sc	45	1	No Gas			2487511.37		
Sc	45	1	No Gas			2541290.27		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2542600.12		
Ge	72	1	No Gas			1219997.48		
Ge	72	1	No Gas			1235205.84		
Ge	72	1	No Gas			1230836.78		
Sc	45	2	H2			180771.34		
Sc	45	2	H2			180793.30		
Sc	45	2	H2			186806.81		
Ge	72	2	H2			159279.52		
Ge	72	2	H2			159846.65		
Ge	72	2	H2			164052.67		
In	115	2	H2			389662.14		
In	115	2	H2			390829.68		
In	115	2	H2			390057.92		
Sc	45	3	He			47528.42		
Sc	45	3	He			48792.40		
Sc	45	3	He			47739.27		
Ge	72	3	He			87759.06		
Ge	72	3	He			87184.88		
Ge	72	3	He			87417.01		
In	115	3	He			84919.82		
In	115	3	He			87011.42		
In	115	3	He			84084.14		
Tb	159	3	He			401540.19		
Tb	159	3	He			407608.74		
Tb	159	3	He			403400.31		
Bi	209	3	He			307546.52		
Bi	209	3	He			312398.82		
Bi	209	3	He			311054.45		

Quantitation Report

Data File Name	224SMPL.d
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Sample Type	Sample
Comment	T20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

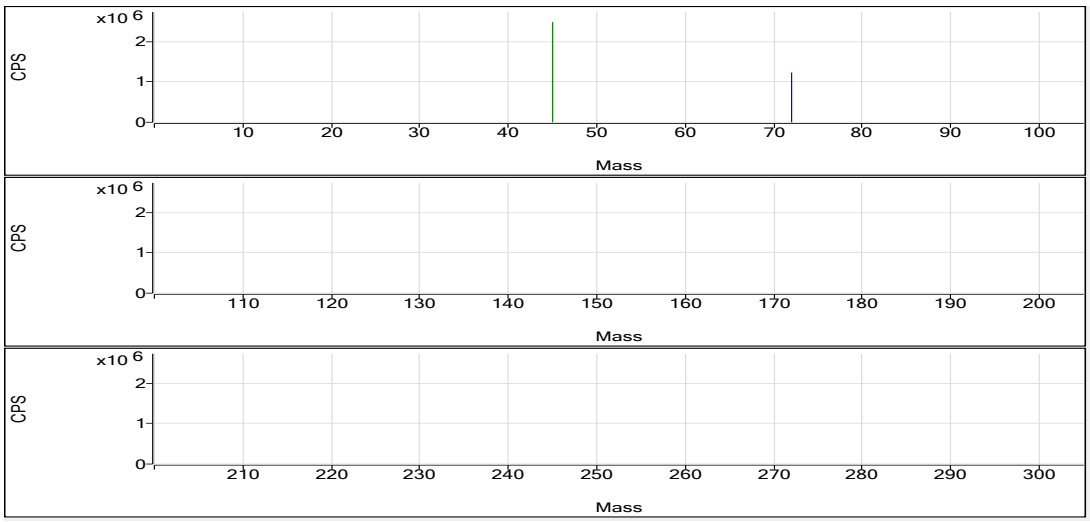
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	25.2	21.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.000	ppb	N/A	2.00	0.0000	Pulse	1.5000	3
Na	23	45	He	581.404	ppb	1.0	118120.02	2.4249	Pulse	0.1000	3
Mg	24	45	He	24795.323	ppb	2.9	2167006.74	44.4943	Analog	0.1000	3
Al	27	45	He	3.565	ppb	67.7	133.34	0.0027	Pulse	0.1000	3
K	39	45	He	1254.878	ppb	2.4	90409.10	1.8562	Pulse	0.1000	3
Ca	44	45	He	26208.185	ppb	2.5	86362.45	1.7731	Pulse	0.1000	3
Ti	47	45	He	0.126	ppb	175.9	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.109	ppb	61.1	1326.73	0.0272	Pulse	0.5000	3
Cr	52	45	He	0.029	ppb	235.1	1990.21	0.0408	Pulse	0.1000	3
Mn	55	45	He	0.888	ppb	12.1	683.38	0.0140	Pulse	0.1000	3
Fe	57	45	He	19.257	ppb	26.5	613.37	0.0126	Pulse	0.1000	3
Co	59	45	He	0.010	ppb	70.1	133.34	0.0027	Pulse	0.1000	3
Ni	60	72	He	0.067	ppb	90.3	300.02	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.101	ppb	52.5	646.71	0.0073	Pulse	0.1000	3
Zn	66	72	He	2.016	ppb	11.5	853.39	0.0097	Pulse	0.1000	3
As	75	72	He	0.172	ppb	24.8	102.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	47.854	ppb	1.0	37182.80	0.4302	Pulse	0.1000	3
Mo	98	115	He	2.428	ppb	3.8	4624.27	0.0535	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.019	ppb	35.2	8.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.103	ppb	N/A	1283.44	0.0149	Pulse	0.1000	3
Sb	121	115	He	0.044	ppb	52.3	80.00	0.0009	Pulse	0.1000	3
Ba	137	115	He	122.224	ppb	1.6	50718.19	0.5868	Pulse	0.1000	3
Tl	205	159	He	0.007	ppb	44.8	123.34	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	34.9	560.03	0.0014	Pulse	0.1000	3
U	238	209	He	0.342	ppb	6.4	5287.94	0.0169	Pulse	0.1000	3

ISTD Table:

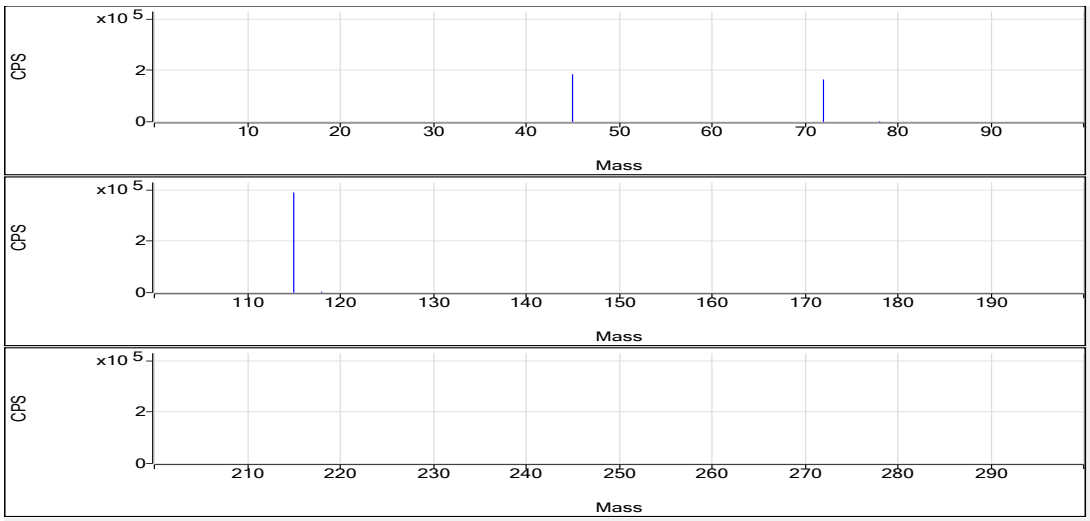
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2483746.32	1.3	103.5	Analog	0.1000	3
No Gas	Ge	72	1232968.47	1.7	106.9	Pulse	0.1000	3
H2	Sc	45	184825.24	1.2	98.8	Pulse	0.1000	3
H2	Ge	72	164406.80	1.1	100.4	Pulse	0.1000	3
H2	In	115	389373.57	1.0	100.1	Pulse	0.1000	3
He	Sc	45	48715.73	1.4	104.4	Pulse	0.1000	3
He	Ge	72	88061.43	0.9	108.5	Pulse	0.1000	3
He	In	115	86431.71	0.6	100.3	Pulse	0.1000	3
He	Tb	159	401972.72	0.6	100.8	Pulse	0.1000	3
He	Bi	209	312444.28	0.0	101.0	Pulse	0.1000	3

No Gas

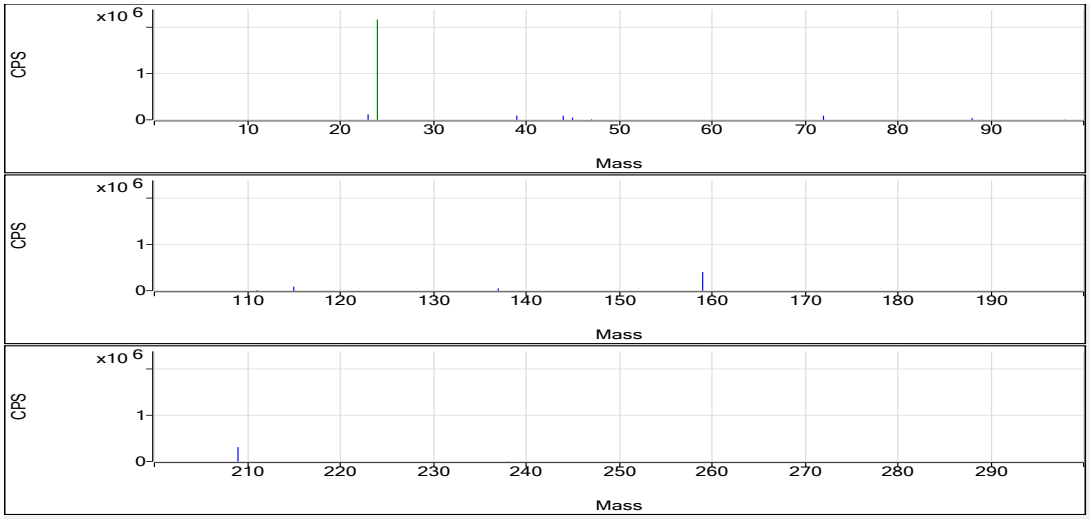


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.004	0	20.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	20.00	0.0008	4.685E-06
Se	78	2	H2	-0.01	0	1.33	0.0004	1.219E-05
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Na	23	3	He	587.339	2.4461	117756.20	0.0036	0.3452
Na	23	3	He	581.189	2.4241	117646.76	0.0036	0.3452
Na	23	3	He	575.683	2.4044	118957.11	0.0036	0.3452
Mg	24	3	He	25514.904	45.7854	2204131.22	0.0018	0.003497
Mg	24	3	He	24778.938	44.4649	2157976.22	0.0018	0.003497
Mg	24	3	He	24092.125	43.2325	2138912.78	0.0018	0.003497
Al	27	3	He	3.872	0.0029	140.01	0.0006	0.0006432
Al	27	3	He	1.014	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	5.811	0.004	200.01	0.0006	0.0006432
K	39	3	He	1286.23	1.8927	91113.38	0.0012	0.3951
K	39	3	He	1251.028	1.8517	89865.61	0.0012	0.3951
K	39	3	He	1227.376	1.8241	90248.30	0.0012	0.3951
Ca	44	3	He	26956.993	1.8237	87794.24	0.0001	0.002715
Ca	44	3	He	25938.305	1.7549	85168.90	0.0001	0.002715
Ca	44	3	He	25729.258	1.7408	86124.20	0.0001	0.002715
Ti	47	3	He	0.256	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.253	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.168	0.0285	1374.07	0.0219	0.02486
V	51	3	He	0.122	0.0275	1336.07	0.0219	0.02486
V	51	3	He	0.037	0.0257	1270.06	0.0219	0.02486
Cr	52	3	He	0.053	0.0415	2000.22	0.0299	0.03997
Cr	52	3	He	-0.048	0.0385	1870.21	0.0299	0.03997
Cr	52	3	He	0.083	0.0425	2100.21	0.0299	0.03997
Mn	55	3	He	0.911	0.0143	690.05	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.983	0.0152	740.05	0.0128	0.002639
Mn	55	3	He	0.771	0.0125	620.03	0.0128	0.002639
Fe	57	3	He	24.715	0.0158	760.05	0.0006	0.001429
Fe	57	3	He	18.467	0.0122	590.04	0.0006	0.001429
Fe	57	3	He	14.588	0.0099	490.02	0.0006	0.001429
Co	59	3	He	0.013	0.0029	140.00	0.0563	0.002149
Co	59	3	He	0.002	0.0023	110.00	0.0563	0.002149
Co	59	3	He	0.016	0.003	150.01	0.0563	0.002149
Ni	60	3	He	-0.003	0.0028	250.01	0.0086	0.002834
Ni	60	3	He	0.107	0.0038	330.02	0.0086	0.002834
Ni	60	3	He	0.097	0.0037	320.02	0.0086	0.002834
Cu	63	3	He	0.161	0.0089	790.05	0.0257	0.004757
Cu	63	3	He	0.063	0.0064	560.04	0.0257	0.004757
Cu	63	3	He	0.078	0.0068	590.03	0.0257	0.004757
Zn	66	3	He	2.281	0.0105	930.06	0.0029	0.003818
Zn	66	3	He	1.852	0.0092	810.05	0.0029	0.003818
Zn	66	3	He	1.915	0.0094	820.05	0.0029	0.003818
As	75	3	He	0.166	0.0011	102.00	0.002	0.0008061
As	75	3	He	0.217	0.0013	110.00	0.002	0.0008061
As	75	3	He	0.132	0.0011	94.00	0.002	0.0008061
Sr	88	3	He	47.3	0.4252	36928.79	0.009	0.0009645
Sr	88	3	He	48.25	0.4338	37560.52	0.009	0.0009645
Sr	88	3	He	48.013	0.4316	37059.10	0.009	0.0009645
Mo	98	3	He	2.362	0.0521	4520.88	0.0219	0.0002706
Mo	98	3	He	2.39	0.0527	4560.89	0.0219	0.0002706
Mo	98	3	He	2.533	0.0558	4791.05	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.026	0.0001	12.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Sn	120	3	He	-0.234	0.0128	1110.10	0.0158	0.01648
Sn	120	3	He	-0.056	0.0156	1350.10	0.0158	0.01648
Sn	120	3	He	-0.018	0.0162	1390.12	0.0158	0.01648
Sb	121	3	He	0.067	0.0013	110.00	0.0149	0.0002698
Sb	121	3	He	0.044	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Ba	137	3	He	122.21	0.5868	50956.07	0.0048	0.0002317
Ba	137	3	He	120.291	0.5775	50011.76	0.0048	0.0002317
Ba	137	3	He	124.172	0.5962	51186.75	0.0048	0.0002317
Tl	205	3	He	0.004	0.0002	90.00	0.0247	0.0001339
Tl	205	3	He	0.008	0.0003	130.01	0.0247	0.0001339
Tl	205	3	He	0.01	0.0004	150.01	0.0247	0.0001339
Pb	208	3	He	0.011	0.0014	270.01	0.0327	0.00107
Pb	208	3	He	0.006	0.0013	220.01	0.0327	0.00107
Pb	208	3	He	0.012	0.0015	340.02	0.0327	0.00107
U	238	3	He	0.348	0.0172	5381.30	0.0493	7.55E-05
U	238	3	He	0.318	0.0157	4911.10	0.0493	7.55E-05
U	238	3	He	0.36	0.0178	5571.42	0.0493	7.55E-05
Sc	45	1	No Gas			2467955.43		
Sc	45	1	No Gas			2521111.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2462171.68		
Ge	72	1	No Gas			1231030.29		
Ge	72	1	No Gas			1254343.26		
Ge	72	1	No Gas			1213531.86		
Sc	45	2	H2			184789.96		
Sc	45	2	H2			182666.03		
Sc	45	2	H2			187019.72		
Ge	72	2	H2			164689.33		
Ge	72	2	H2			162505.61		
Ge	72	2	H2			166025.47		
In	115	2	H2			385326.24		
In	115	2	H2			390138.74		
In	115	2	H2			392655.74		
Sc	45	3	He			48140.43		
Sc	45	3	He			48532.14		
Sc	45	3	He			49474.62		
Ge	72	3	He			88926.75		
Ge	72	3	He			87960.77		
Ge	72	3	He			87296.78		
In	115	3	He			86850.94		
In	115	3	He			86599.19		
In	115	3	He			85865.60		
Tb	159	3	He			403698.51		
Tb	159	3	He			403022.34		
Tb	159	3	He			399197.30		
Bi	209	3	He			312400.44		
Bi	209	3	He			312398.43		
Bi	209	3	He			312533.98		

Quantitation Report

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Sample Type	Sample
Comment	T20
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

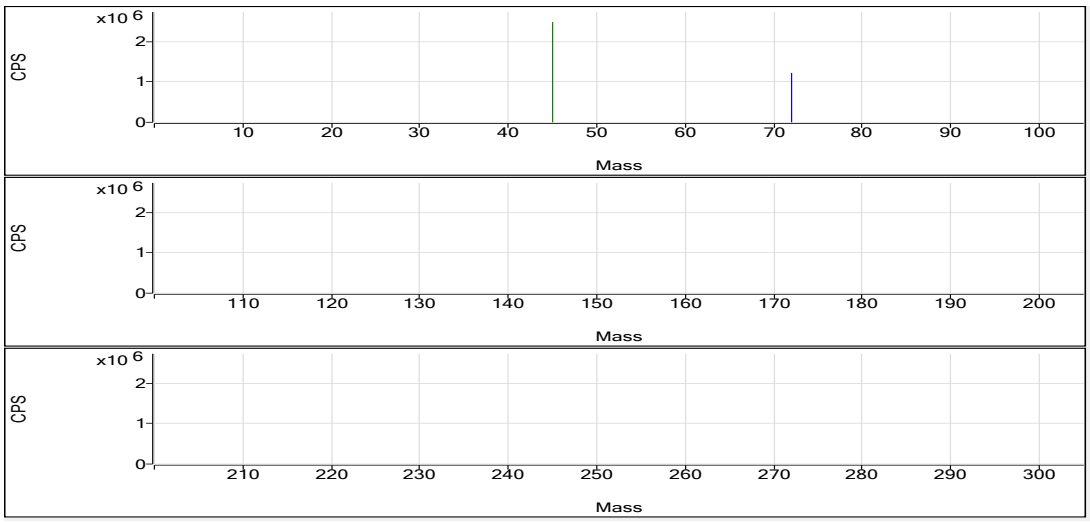
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.014	ppb	21.9	38.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.626	ppb	2.0	45.34	0.0003	Pulse	1.5000	3
Na	23	45	He	2931.342	ppb	2.3	517012.70	10.8307	Pulse	0.1000	3
Mg	24	45	He	28554.851	ppb	2.8	2445759.18	51.2401	Analog	0.1000	3
Al	27	45	He	48.335	ppb	16.9	1380.12	0.0289	Pulse	0.1000	3
K	39	45	He	1663.950	ppb	2.7	111339.05	2.3324	Pulse	0.1000	3
Ca	44	45	He	67008.988	ppb	1.8	216219.74	4.5293	Pulse	0.1000	3
Ti	47	45	He	0.648	ppb	58.7	20.00	0.0004	Pulse	0.1000	3
V	51	45	He	0.501	ppb	20.6	1708.78	0.0358	Pulse	0.5000	3
Cr	52	45	He	1.606	ppb	11.1	4200.78	0.0880	Pulse	0.1000	3
Mn	55	45	He	5.586	ppb	3.3	3550.56	0.0743	Pulse	0.1000	3
Fe	57	45	He	120.328	ppb	3.2	3407.20	0.0713	Pulse	0.1000	3
Co	59	45	He	0.298	ppb	11.5	903.39	0.0189	Pulse	0.1000	3
Ni	60	72	He	0.933	ppb	9.4	953.40	0.0108	Pulse	0.1000	3
Cu	63	72	He	0.701	ppb	8.0	2000.21	0.0228	Pulse	0.1000	3
Zn	66	72	He	3.168	ppb	11.7	1146.76	0.0130	Pulse	0.1000	3
As	75	72	He	0.091	ppb	131.0	87.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	61.529	ppb	2.7	47721.32	0.5529	Pulse	0.1000	3
Mo	98	115	He	1.504	ppb	2.1	2870.39	0.0333	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	51.6	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.014	ppb	N/A	1403.46	0.0163	Pulse	0.1000	3
Sb	121	115	He	0.013	ppb	179.6	40.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	176.622	ppb	2.7	73185.69	0.8479	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	29.2	286.68	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.210	ppb	5.9	3206.96	0.0080	Pulse	0.1000	3
U	238	209	He	0.460	ppb	5.2	7055.51	0.0228	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2480551.84	0.7	103.4	Analog	0.1000	3
No Gas	Ge	72	1221501.49	0.2	105.9	Pulse	0.1000	3
H2	Sc	45	185642.07	1.1	99.3	Pulse	0.1000	3
H2	Ge	72	165836.59	1.2	101.3	Pulse	0.1000	3
H2	In	115	387207.82	0.6	99.5	Pulse	0.1000	3
He	Sc	45	47749.13	2.0	102.4	Pulse	0.1000	3
He	Ge	72	87892.92	0.8	108.3	Pulse	0.1000	3
He	In	115	86340.44	1.8	100.2	Pulse	0.1000	3
He	Tb	159	403198.64	0.7	101.2	Pulse	0.1000	3
He	Bi	209	309999.55	0.3	100.2	Pulse	0.1000	3

No Gas



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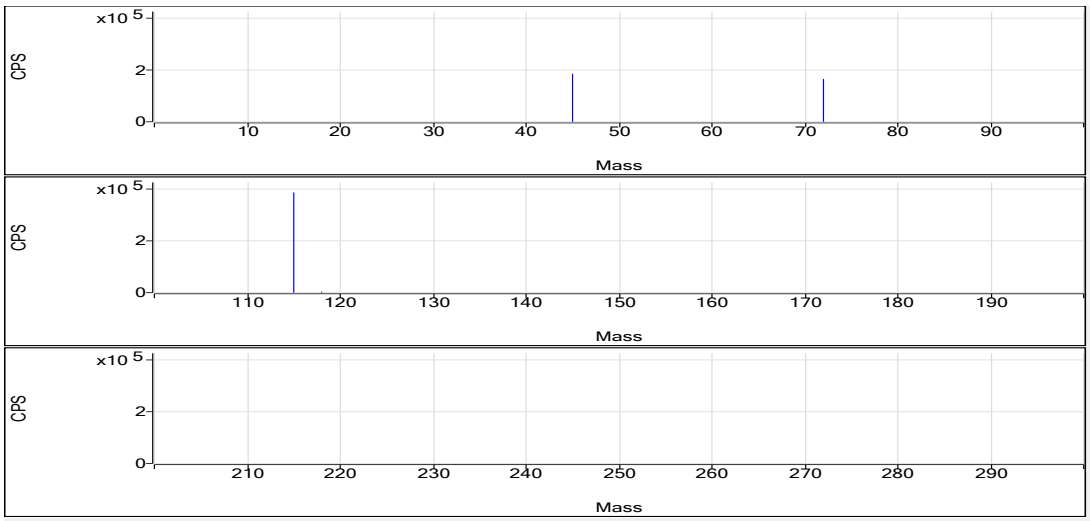
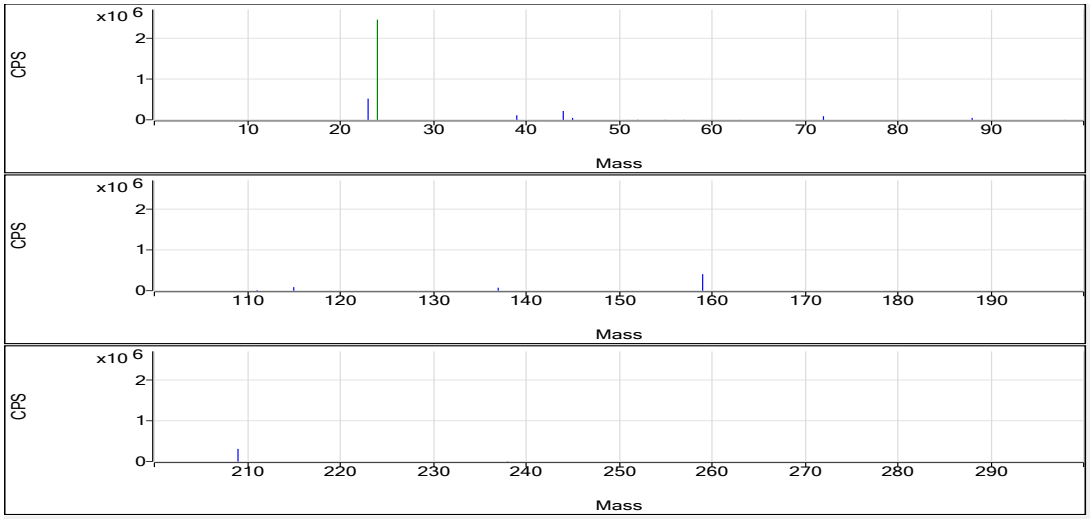


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Se	78	2	H2	0.639	0.0003	46.67	0.0004	1.219E-05
Se	78	2	H2	0.614	0.0003	44.67	0.0004	1.219E-05
Se	78	2	H2	0.626	0.0003	44.67	0.0004	1.219E-05
Na	23	3	He	2988.713	11.0359	515996.75	0.0036	0.3452
Na	23	3	He	2858.839	10.5714	514317.18	0.0036	0.3452
Na	23	3	He	2946.473	10.8848	520724.17	0.0036	0.3452
Mg	24	3	He	29433.679	52.817	2469514.49	0.0018	0.003497
Mg	24	3	He	27852.695	49.9802	2431632.62	0.0018	0.003497
Mg	24	3	He	28378.179	50.9231	2436130.43	0.0018	0.003497
Al	27	3	He	46.795	0.028	1310.11	0.0006	0.0006432
Al	27	3	He	41.064	0.0247	1200.09	0.0006	0.0006432
Al	27	3	He	57.146	0.0341	1630.16	0.0006	0.0006432
K	39	3	He	1710.204	2.3863	111574.08	0.0012	0.3951
K	39	3	He	1620.026	2.2813	110989.93	0.0012	0.3951
K	39	3	He	1661.62	2.3297	111453.15	0.0012	0.3951
Ca	44	3	He	68258.704	4.6137	215719.39	0.0001	0.002715
Ca	44	3	He	65921.573	4.4558	216785.31	0.0001	0.002715
Ca	44	3	He	66846.687	4.5183	216154.53	0.0001	0.002715
Ti	47	3	He	0.666	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1.018	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.259	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.61	0.0382	1786.12	0.0219	0.02486
V	51	3	He	0.405	0.0337	1640.10	0.0219	0.02486
V	51	3	He	0.488	0.0355	1700.11	0.0219	0.02486
Cr	52	3	He	1.773	0.0931	4350.82	0.0299	0.03997
Cr	52	3	He	1.418	0.0824	4010.70	0.0299	0.03997
Cr	52	3	He	1.626	0.0886	4240.82	0.0299	0.03997
Mn	55	3	He	5.378	0.0717	3350.49	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5.721	0.0761	3700.64	0.0128	0.002639
Mn	55	3	He	5.659	0.0753	3600.55	0.0128	0.002639
Fe	57	3	He	119.409	0.0708	3310.53	0.0006	0.001429
Fe	57	3	He	124.568	0.0738	3590.58	0.0006	0.001429
Fe	57	3	He	117.007	0.0694	3320.48	0.0006	0.001429
Co	59	3	He	0.338	0.0212	990.07	0.0563	0.002149
Co	59	3	He	0.28	0.0179	870.06	0.0563	0.002149
Co	59	3	He	0.278	0.0178	850.05	0.0563	0.002149
Ni	60	3	He	0.999	0.0114	1010.07	0.0086	0.002834
Ni	60	3	He	0.966	0.0111	980.07	0.0086	0.002834
Ni	60	3	He	0.834	0.01	870.06	0.0086	0.002834
Cu	63	3	He	0.699	0.0227	2010.21	0.0257	0.004757
Cu	63	3	He	0.646	0.0213	1880.19	0.0257	0.004757
Cu	63	3	He	0.759	0.0242	2110.23	0.0257	0.004757
Zn	66	3	He	3.462	0.0139	1230.11	0.0029	0.003818
Zn	66	3	He	3.29	0.0134	1180.10	0.0029	0.003818
Zn	66	3	He	2.752	0.0118	1030.07	0.0029	0.003818
As	75	3	He	0.202	0.0012	108.00	0.002	0.0008061
As	75	3	He	0.105	0.001	90.00	0.002	0.0008061
As	75	3	He	-0.035	0.0007	64.00	0.002	0.0008061
Sr	88	3	He	62.102	0.558	48413.44	0.009	0.0009645
Sr	88	3	He	59.652	0.536	46988.85	0.009	0.0009645
Sr	88	3	He	62.833	0.5646	47761.68	0.009	0.0009645
Mo	98	3	He	1.486	0.0329	2850.38	0.0219	0.0002706
Mo	98	3	He	1.486	0.0329	2880.41	0.0219	0.0002706
Mo	98	3	He	1.54	0.034	2880.39	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Sn	120	3	He	-0.051	0.0157	1360.12	0.0158	0.01648
Sn	120	3	He	-0.025	0.0161	1410.12	0.0158	0.01648
Sn	120	3	He	0.035	0.017	1440.13	0.0158	0.01648
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.036	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	177.617	0.8527	73979.43	0.0048	0.0002317
Ba	137	3	He	171.354	0.8226	72110.54	0.0048	0.0002317
Ba	137	3	He	180.895	0.8684	73467.10	0.0048	0.0002317
Tl	205	3	He	0.025	0.0008	310.02	0.0247	0.0001339
Tl	205	3	He	0.016	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.029	0.0008	340.02	0.0247	0.0001339
Pb	208	3	He	0.197	0.0075	1620.17	0.0327	0.00107
Pb	208	3	He	0.214	0.0081	1910.21	0.0327	0.00107
Pb	208	3	He	0.221	0.0083	1900.22	0.0327	0.00107
U	238	3	He	0.477	0.0236	7312.31	0.0493	7.55E-05
U	238	3	He	0.433	0.0214	6611.92	0.0493	7.55E-05
U	238	3	He	0.472	0.0233	7242.30	0.0493	7.55E-05
Sc	45	1	No Gas			2493139.65		
Sc	45	1	No Gas			2488017.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2460498.71		
Ge	72	1	No Gas			1222133.11		
Ge	72	1	No Gas			1218882.17		
Ge	72	1	No Gas			1223489.20		
Sc	45	2	H2			184436.01		
Sc	45	2	H2			184498.83		
Sc	45	2	H2			187991.36		
Ge	72	2	H2			167400.06		
Ge	72	2	H2			166600.66		
Ge	72	2	H2			163509.06		
In	115	2	H2			388831.05		
In	115	2	H2			388027.49		
In	115	2	H2			384764.92		
Sc	45	3	He			46756.06		
Sc	45	3	He			48651.92		
Sc	45	3	He			47839.41		
Ge	72	3	He			88512.86		
Ge	72	3	He			88091.19		
Ge	72	3	He			87074.72		
In	115	3	He			86770.19		
In	115	3	He			87666.40		
In	115	3	He			84607.51		
Tb	159	3	He			406226.09		
Tb	159	3	He			401885.11		
Tb	159	3	He			401484.72		
Bi	209	3	He			310304.25		
Bi	209	3	He			309068.92		
Bi	209	3	He			310625.48		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 6:23:46 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

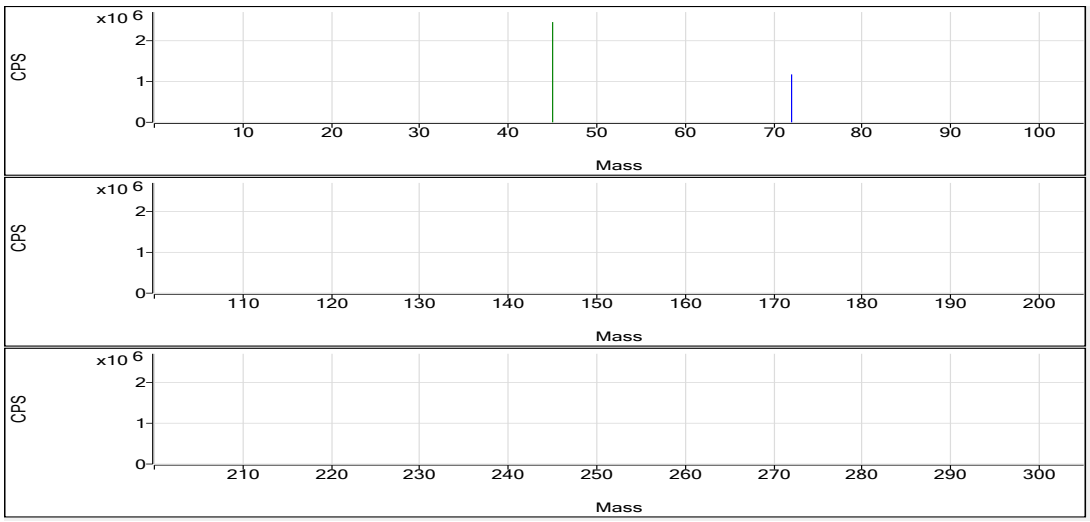
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	18.5	18.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.009	ppb	N/A	1.33	0.0000	Pulse	1.5000	3
Na	23	45	He	26.508	ppb	26.6	21389.26	0.4400	Pulse	0.1000	3
Mg	24	45	He	2.666	ppb	21.3	403.35	0.0083	Pulse	0.1000	3
Al	27	45	He	0.530	ppb	130.5	46.67	0.0010	Pulse	0.1000	3
K	39	45	He	-9.065	ppb	N/A	18702.43	0.3845	Pulse	0.1000	3
Ca	44	45	He	-1.798	ppb	N/A	126.67	0.0026	Pulse	0.1000	3
Ti	47	45	He	0.258	ppb	151.5	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.294	ppb	19.7	1522.09	0.0313	Pulse	0.5000	3
Cr	52	45	He	0.029	ppb	143.8	1986.87	0.0409	Pulse	0.1000	3
Mn	55	45	He	0.098	ppb	63.2	190.01	0.0039	Pulse	0.1000	3
Fe	57	45	He	2.366	ppb	66.2	136.67	0.0028	Pulse	0.1000	3
Co	59	45	He	-0.002	ppb	N/A	100.00	0.0021	Pulse	0.1000	3
Ni	60	72	He	-0.032	ppb	N/A	213.34	0.0026	Pulse	0.1000	3
Cu	63	72	He	0.027	ppb	146.7	453.36	0.0054	Pulse	0.1000	3
Zn	66	72	He	2.108	ppb	22.3	830.06	0.0100	Pulse	0.1000	3
As	75	72	He	0.071	ppb	258.6	79.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.058	ppb	145.4	130.01	0.0015	Pulse	0.1000	3
Mo	98	115	He	0.014	ppb	37.4	50.00	0.0006	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.069	ppb	14.1	1543.48	0.0176	Pulse	0.1000	3
Sb	121	115	He	-0.005	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.054	ppb	24.5	43.33	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.008	ppb	29.5	136.68	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.005	ppb	76.9	486.68	0.0012	Pulse	0.1000	3
U	238	209	He	0.002	ppb	64.4	50.00	0.0002	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2443099.86	1.4	101.8	Analog	0.1000	3
No Gas	Ge	72	1167825.79	0.5	101.3	Pulse	0.1000	3
H2	Sc	45	183850.54	0.3	98.3	Pulse	0.1000	3
H2	Ge	72	155407.49	0.6	94.9	Pulse	0.1000	3
H2	In	115	389848.34	0.7	100.2	Pulse	0.1000	3
He	Sc	45	48652.22	2.1	104.3	Pulse	0.1000	3
He	Ge	72	83332.77	0.6	102.6	Pulse	0.1000	3
He	In	115	87857.00	0.4	101.9	Pulse	0.1000	3
He	Tb	159	398978.47	0.6	100.1	Pulse	0.1000	3
He	Bi	209	311050.44	0.9	100.6	Pulse	0.1000	3

No Gas



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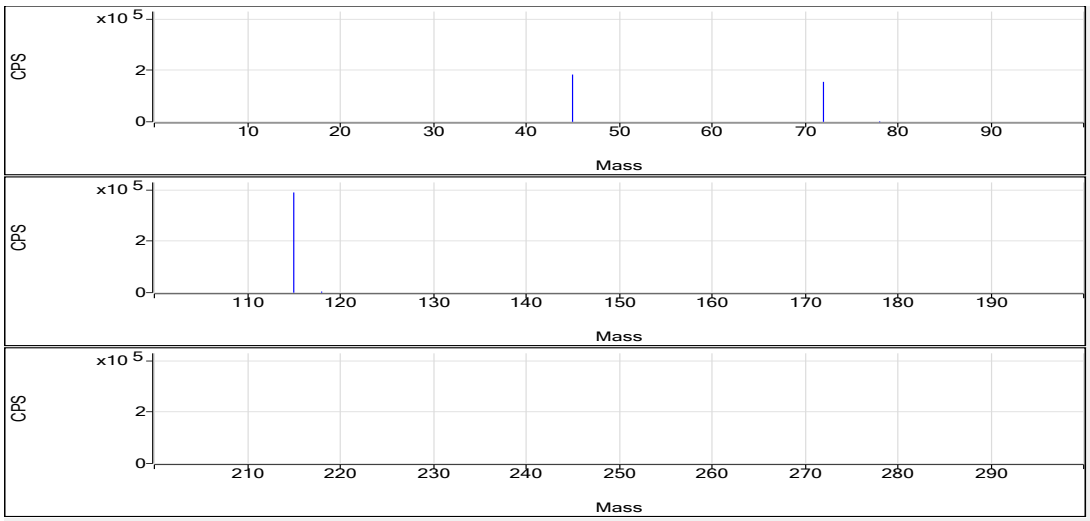
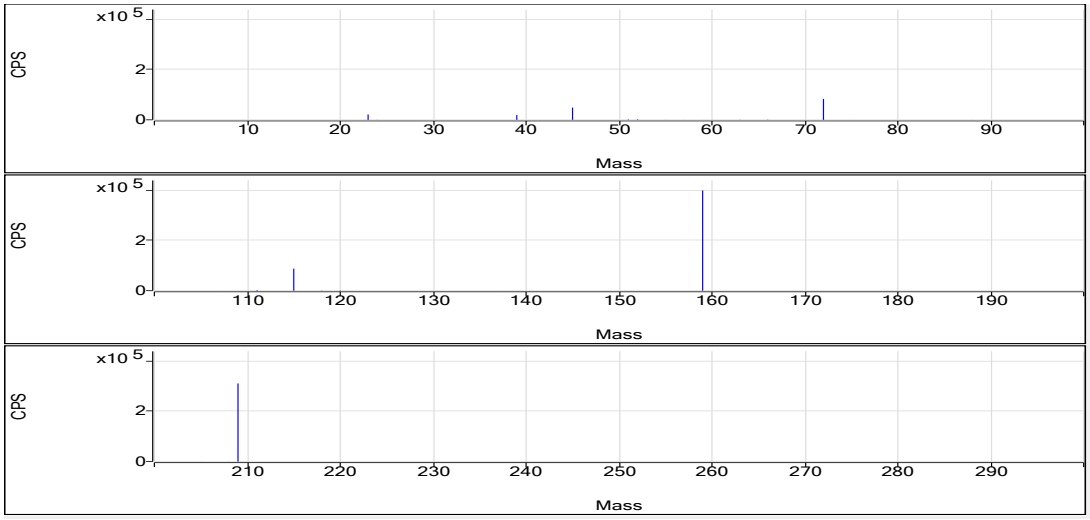


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0	20.00	0.0008	4.685E-06
Be	9	1	No Gas	0.004	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Na	23	3	He	20.192	0.4174	20754.99	0.0036	0.3452
Na	23	3	He	34.128	0.4672	22277.29	0.0036	0.3452
Na	23	3	He	25.205	0.4353	21135.51	0.0036	0.3452
Mg	24	3	He	2.871	0.0086	430.02	0.0018	0.003497
Mg	24	3	He	2.026	0.0071	340.02	0.0018	0.003497
Mg	24	3	He	3.102	0.0091	440.02	0.0018	0.003497
Al	27	3	He	1.307	0.0014	70.00	0.0006	0.0006432
Al	27	3	He	-0.024	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	0.309	0.0008	40.00	0.0006	0.0006432
K	39	3	He	-15.589	0.3769	18742.44	0.0012	0.3951
K	39	3	He	-3.309	0.3912	18652.57	0.0012	0.3951
K	39	3	He	-8.297	0.3854	18712.28	0.0012	0.3951
Ca	44	3	He	4.467	0.003	150.01	0.0001	0.002715
Ca	44	3	He	-18.457	0.0015	70.00	0.0001	0.002715
Ca	44	3	He	8.596	0.0033	160.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.651	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.253	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.263	0.0306	1522.09	0.0219	0.02486
V	51	3	He	0.361	0.0328	1562.10	0.0219	0.02486
V	51	3	He	0.259	0.0305	1482.09	0.0219	0.02486
Cr	52	3	He	-0.018	0.0394	1960.19	0.0299	0.03997
Cr	52	3	He	0.045	0.0413	1970.20	0.0299	0.03997
Cr	52	3	He	0.062	0.0418	2030.23	0.0299	0.03997
Mn	55	3	He	0.092	0.0038	190.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.04	0.0031	150.01	0.0128	0.002639
Mn	55	3	He	0.164	0.0047	230.01	0.0128	0.002639
Fe	57	3	He	2.387	0.0028	140.00	0.0006	0.001429
Fe	57	3	He	0.79	0.0019	90.00	0.0006	0.001429
Fe	57	3	He	3.922	0.0037	180.01	0.0006	0.001429
Co	59	3	He	-0.006	0.0018	90.00	0.0563	0.002149
Co	59	3	He	0.01	0.0027	130.01	0.0563	0.002149
Co	59	3	He	-0.009	0.0016	80.00	0.0563	0.002149
Ni	60	3	He	-0.077	0.0022	180.01	0.0086	0.002834
Ni	60	3	He	0.006	0.0029	240.01	0.0086	0.002834
Ni	60	3	He	-0.024	0.0026	220.01	0.0086	0.002834
Cu	63	3	He	0.059	0.0063	520.03	0.0257	0.004757
Cu	63	3	He	-0.017	0.0043	360.02	0.0257	0.004757
Cu	63	3	He	0.038	0.0057	480.03	0.0257	0.004757
Zn	66	3	He	1.588	0.0084	700.05	0.0029	0.003818
Zn	66	3	He	2.238	0.0103	860.07	0.0029	0.003818
Zn	66	3	He	2.499	0.0111	930.07	0.0029	0.003818
As	75	3	He	-0.087	0.0006	52.00	0.002	0.0008061
As	75	3	He	0.029	0.0009	72.00	0.002	0.0008061
As	75	3	He	0.27	0.0014	114.00	0.002	0.0008061
Sr	88	3	He	0.07	0.0016	140.01	0.009	0.0009645
Sr	88	3	He	0.135	0.0022	190.01	0.009	0.0009645
Sr	88	3	He	-0.032	0.0007	60.00	0.009	0.0009645
Mo	98	3	He	0.014	0.0006	50.00	0.0219	0.0002706
Mo	98	3	He	0.009	0.0005	40.00	0.0219	0.0002706
Mo	98	3	He	0.019	0.0007	60.00	0.0219	0.0002706
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.058	0.0174	1530.14	0.0158	0.01648
Sn	120	3	He	0.072	0.0176	1540.15	0.0158	0.01648
Sn	120	3	He	0.077	0.0177	1560.15	0.0158	0.01648
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Ba	137	3	He	0.046	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.047	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.07	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.009	0.0003	140.01	0.0247	0.0001339
Tl	205	3	He	0.011	0.0004	160.01	0.0247	0.0001339
Tl	205	3	He	0.006	0.0003	110.01	0.0247	0.0001339
Pb	208	3	He	0.003	0.0012	300.01	0.0327	0.00107
Pb	208	3	He	0.009	0.0014	280.01	0.0327	0.00107
Pb	208	3	He	0.002	0.0011	240.01	0.0327	0.00107
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
U	238	3	He	0	0.0001	30.00	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
Sc	45	1	No Gas			2418780.28		
Sc	45	1	No Gas			2429660.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2480858.71		
Ge	72	1	No Gas			1171596.70		
Ge	72	1	No Gas			1161009.75		
Ge	72	1	No Gas			1170870.92		
Sc	45	2	H2			184558.42		
Sc	45	2	H2			183414.70		
Sc	45	2	H2			183578.49		
Ge	72	2	H2			156073.58		
Ge	72	2	H2			154306.56		
Ge	72	2	H2			155842.34		
In	115	2	H2			388349.21		
In	115	2	H2			393117.88		
In	115	2	H2			388077.92		
Sc	45	3	He			49725.87		
Sc	45	3	He			47678.75		
Sc	45	3	He			48552.05		
Ge	72	3	He			82930.31		
Ge	72	3	He			83232.25		
Ge	72	3	He			83835.74		
In	115	3	He			87968.15		
In	115	3	He			87444.67		
In	115	3	He			88179.02		
Tb	159	3	He			400792.81		
Tb	159	3	He			399841.95		
Tb	159	3	He			396300.66		
Bi	209	3	He			310448.30		
Bi	209	3	He			308471.26		
Bi	209	3	He			314231.77		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

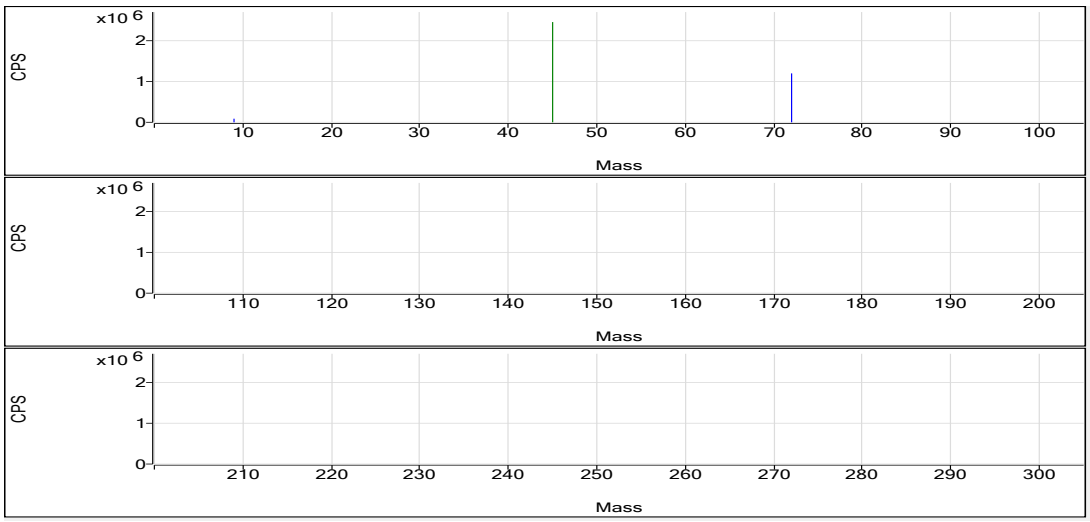
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.944	ppb	1.5	88396.27	0.0358	Pulse	0.5000	3
Se	78	72	H2	52.108	ppb	1.1	3453.09	0.0217	Pulse	1.5000	3
Na	23	45	He	4836.143	ppb	0.7	847249.44	17.6443	Pulse	0.1000	3
Mg	24	45	He	4988.275	ppb	1.0	429951.15	8.9541	Pulse	0.1000	3
Al	27	45	He	4867.441	ppb	1.9	136761.06	2.8483	Pulse	0.1000	3
K	39	45	He	5056.998	ppb	1.0	301699.25	6.2831	Pulse	0.1000	3
Ca	44	45	He	5161.660	ppb	3.1	16873.62	0.3514	Pulse	0.1000	3
Ti	47	45	He	5025.067	ppb	0.5	129574.21	2.6983	Pulse	0.1000	3
V	51	45	He	513.189	ppb	0.6	539860.38	11.2428	Pulse	0.5000	3
Cr	52	45	He	487.733	ppb	1.1	703117.72	14.6431	Pulse	0.1000	3
Mn	55	45	He	506.412	ppb	1.4	312196.69	6.5019	Pulse	0.1000	3
Fe	57	45	He	5054.591	ppb	0.6	141083.49	2.9381	Pulse	0.1000	3
Co	59	45	He	502.914	ppb	4.1	1359074.46	28.3073	Mix	0.1000	3
Ni	60	72	He	511.070	ppb	0.2	372682.58	4.3894	Pulse	0.1000	3
Cu	63	72	He	486.153	ppb	0.4	1060019.54	12.4848	Pulse	0.1000	3
Zn	66	72	He	514.598	ppb	1.3	127532.99	1.5021	Pulse	0.1000	3
As	75	72	He	519.195	ppb	1.2	90383.56	1.0646	Pulse	0.5000	3
Sr	88	115	He	50.631	ppb	2.1	39753.43	0.4551	Pulse	0.1000	3
Mo	98	115	He	51.497	ppb	1.1	98655.35	1.1294	Pulse	0.1000	3
Ag	107	115	He	50.851	ppb	0.5	206530.85	2.3645	Pulse	0.1000	3
Cd	111	115	He	50.897	ppb	1.5	23769.55	0.2721	Pulse	0.5000	3
Sn	120	115	He	51.430	ppb	1.0	72409.29	0.8290	Pulse	0.1000	3
Sb	121	115	He	51.773	ppb	1.8	67197.05	0.7693	Pulse	0.1000	3
Ba	137	115	He	521.675	ppb	1.2	218711.07	2.5039	Pulse	0.1000	3
Tl	205	159	He	51.417	ppb	1.3	508327.77	1.2715	Pulse	0.1000	3
Pb	208	159	He	51.583	ppb	1.8	675373.19	1.6894	Pulse	0.1000	3
U	238	209	He	50.215	ppb	1.2	766669.70	2.4736	Pulse	0.1000	3

ISTD Table:

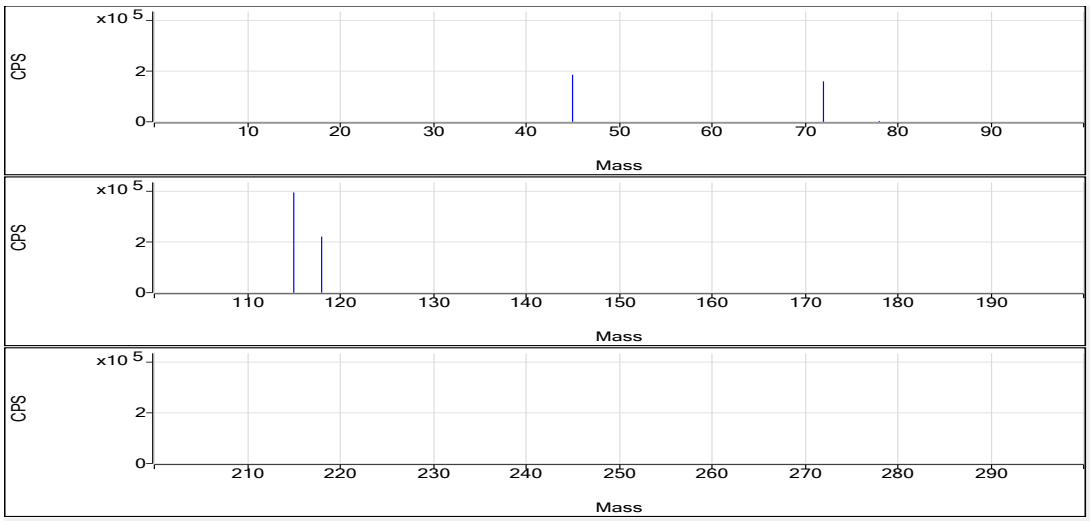
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2468443.92	0.7	102.9	Analog	0.1000	3
No Gas	Ge	72	1204621.62	1.1	104.4	Pulse	0.1000	3
H2	Sc	45	184663.56	0.3	98.7	Pulse	0.1000	3
H2	Ge	72	158804.35	0.9	97.0	Pulse	0.1000	3
H2	In	115	393352.94	0.1	101.1	Pulse	0.1000	3
He	Sc	45	48020.13	0.8	103.0	Pulse	0.1000	3
He	Ge	72	84905.56	0.6	104.6	Pulse	0.1000	3
He	In	115	87347.26	0.5	101.3	Pulse	0.1000	3
He	Tb	159	399830.05	1.1	100.3	Pulse	0.1000	3
He	Bi	209	309948.58	0.6	100.2	Pulse	0.1000	3

No Gas

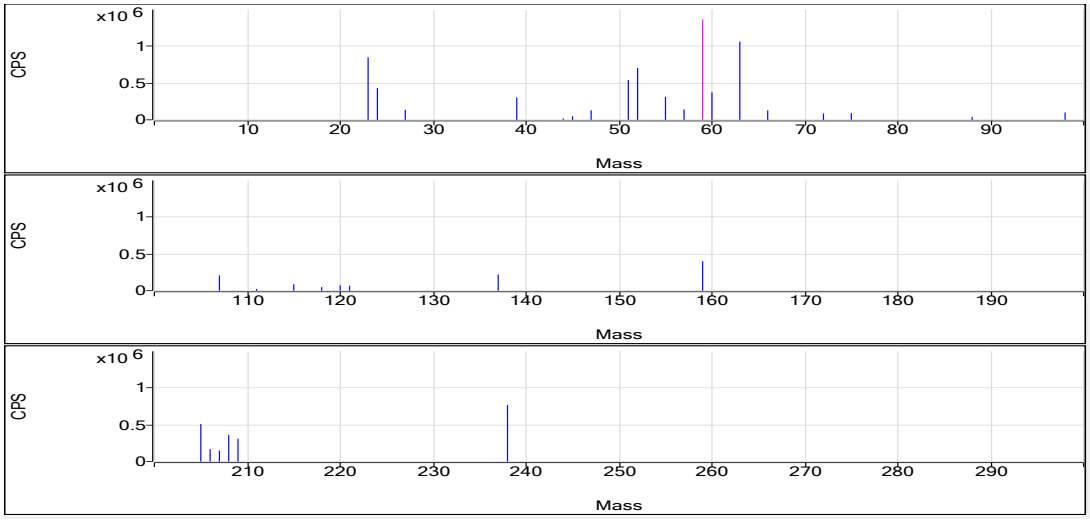


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.189	0.0352	87407.08	0.0008	4.685E-06
Be	9	1	No Gas	47.608	0.0363	88950.11	0.0008	4.685E-06
Be	9	1	No Gas	47.034	0.0359	88831.63	0.0008	4.685E-06
Se	78	2	H2	51.848	0.0216	3405.08	0.0004	1.219E-05
Se	78	2	H2	51.701	0.0216	3459.76	0.0004	1.219E-05
Se	78	2	H2	52.775	0.022	3494.43	0.0004	1.219E-05
Na	23	3	He	4864.517	17.7458	845746.24	0.0036	0.3452
Na	23	3	He	4801.428	17.5201	849050.77	0.0036	0.3452
Na	23	3	He	4842.484	17.667	846951.32	0.0036	0.3452
Mg	24	3	He	5029.616	9.0282	430277.45	0.0018	0.003497
Mg	24	3	He	4932.453	8.8539	429073.74	0.0018	0.003497
Mg	24	3	He	5002.756	8.9801	430502.26	0.0018	0.003497
Al	27	3	He	4909.629	2.8729	136921.84	0.0006	0.0006432
Al	27	3	He	4762.164	2.7867	135046.51	0.0006	0.0006432
Al	27	3	He	4930.53	2.8852	138314.82	0.0006	0.0006432
K	39	3	He	5110.697	6.3456	302424.45	0.0012	0.3951
K	39	3	He	5015.421	6.2347	302140.87	0.0012	0.3951
K	39	3	He	5044.876	6.2689	300532.44	0.0012	0.3951
Ca	44	3	He	5063.048	0.3447	16429.66	0.0001	0.002715
Ca	44	3	He	5073.407	0.3454	16740.22	0.0001	0.002715
Ca	44	3	He	5348.526	0.364	17450.97	0.0001	0.002715
Ti	47	3	He	5023.391	2.6974	128554.25	0.0005	7.003E-05
Ti	47	3	He	5053.064	2.7133	131491.04	0.0005	7.003E-05
Ti	47	3	He	4998.745	2.6841	128677.33	0.0005	7.003E-05
V	51	3	He	516.829	11.3223	539610.44	0.0219	0.02486
V	51	3	He	510.434	11.1825	541922.75	0.0219	0.02486
V	51	3	He	512.304	11.2234	538047.94	0.0219	0.02486
Cr	52	3	He	493.069	14.8028	705487.57	0.0299	0.03997
Cr	52	3	He	482.175	14.4767	701560.69	0.0299	0.03997
Cr	52	3	He	487.955	14.6497	702304.91	0.0299	0.03997
Mn	55	3	He	512.415	6.5789	313544.57	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	498.897	6.4054	310416.25	0.0128	0.002639
Mn	55	3	He	507.925	6.5213	312629.25	0.0128	0.002639
Fe	57	3	He	5071.576	2.948	140497.26	0.0006	0.001429
Fe	57	3	He	5019.863	2.9179	141406.99	0.0006	0.001429
Fe	57	3	He	5072.334	2.9484	141346.22	0.0006	0.001429
Co	59	3	He	526.588	29.6397	1412600.29	0.0563	0.002149
Co	59	3	He	490.554	27.6117	1338103.57	0.0563	0.002149
Co	59	3	He	491.6	27.6705	1326519.51	0.0563	0.002149
Ni	60	3	He	512.517	4.4018	371380.81	0.0086	0.002834
Ni	60	3	He	510.114	4.3812	374087.69	0.0086	0.002834
Ni	60	3	He	510.578	4.3852	372579.25	0.0086	0.002834
Cu	63	3	He	486.879	12.5035	1054909.28	0.0257	0.004757
Cu	63	3	He	484.034	12.4304	1061366.62	0.0257	0.004757
Cu	63	3	He	487.545	12.5206	1063782.72	0.0257	0.004757
Zn	66	3	He	519.741	1.5171	127997.06	0.0029	0.003818
Zn	66	3	He	506.729	1.4792	126302.26	0.0029	0.003818
Zn	66	3	He	517.324	1.5101	128299.64	0.0029	0.003818
As	75	3	He	525.915	1.0783	90978.59	0.002	0.0008061
As	75	3	He	514.355	1.0547	90050.93	0.002	0.0008061
As	75	3	He	517.313	1.0607	90121.15	0.002	0.0008061
Sr	88	3	He	51.814	0.4657	40679.32	0.009	0.0009645
Sr	88	3	He	49.803	0.4477	38894.42	0.009	0.0009645
Sr	88	3	He	50.274	0.4519	39686.55	0.009	0.0009645
Mo	98	3	He	51.242	1.1238	98161.87	0.0219	0.0002706
Mo	98	3	He	51.095	1.1206	97355.78	0.0219	0.0002706
Mo	98	3	He	52.154	1.1438	100448.41	0.0219	0.0002706
Ag	107	3	He	50.807	2.3625	206354.92	0.0465	0.0006206
Ag	107	3	He	51.138	2.3779	206586.50	0.0465	0.0006206
Ag	107	3	He	50.606	2.3532	206651.13	0.0465	0.0006206
Cd	111	3	He	50.854	0.2719	23750.21	0.0053	0
Cd	111	3	He	51.684	0.2763	24008.60	0.0053	0
Cd	111	3	He	50.153	0.2682	23549.85	0.0053	0
Sn	120	3	He	51.751	0.8341	72852.11	0.0158	0.01648
Sn	120	3	He	51.727	0.8337	72429.07	0.0158	0.01648
Sn	120	3	He	50.814	0.8193	71946.68	0.0158	0.01648
Sb	121	3	He	52.563	0.781	68218.47	0.0149	0.0002698
Sb	121	3	He	50.737	0.7539	65495.57	0.0149	0.0002698
Sb	121	3	He	52.019	0.7729	67877.10	0.0149	0.0002698
Ba	137	3	He	528.765	2.538	221678.98	0.0048	0.0002317
Ba	137	3	He	518.075	2.4866	216034.39	0.0048	0.0002317
Ba	137	3	He	518.185	2.4872	218419.84	0.0048	0.0002317
Tl	205	3	He	50.824	1.2568	507971.71	0.0247	0.0001339
Tl	205	3	He	52.113	1.2887	509429.02	0.0247	0.0001339
Tl	205	3	He	51.312	1.2689	507582.57	0.0247	0.0001339
Pb	208	3	He	50.565	1.6561	356131.44	0.0327	0.00107
Pb	208	3	He	52.416	1.7166	362756.40	0.0327	0.00107
Pb	208	3	He	51.768	1.6954	362370.58	0.0327	0.00107
U	238	3	He	49.917	2.459	765941.08	0.0493	7.55E-05
U	238	3	He	49.841	2.4552	761807.10	0.0493	7.55E-05
U	238	3	He	50.885	2.5067	772260.93	0.0493	7.55E-05
Sc	45	1	No Gas			2480560.43		
Sc	45	1	No Gas			2449086.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2475684.49		
Ge	72	1	No Gas			1215527.01		
Ge	72	1	No Gas			1208089.04		
Ge	72	1	No Gas			1190248.81		
Sc	45	2	H2			185316.40		
Sc	45	2	H2			184135.47		
Sc	45	2	H2			184538.81		
Ge	72	2	H2			157378.25		
Ge	72	2	H2			160361.05		
Ge	72	2	H2			158673.75		
In	115	2	H2			394006.17		
In	115	2	H2			393148.90		
In	115	2	H2			392903.74		
Sc	45	3	He			47659.02		
Sc	45	3	He			48461.52		
Sc	45	3	He			47939.84		
Ge	72	3	He			84369.34		
Ge	72	3	He			85384.50		
Ge	72	3	He			84962.83		
In	115	3	He			87726.56		
In	115	3	He			87253.61		
In	115	3	He			88209.00		
Tb	159	3	He			404167.53		
Tb	159	3	He			395304.76		
Tb	159	3	He			400017.85		
Bi	209	3	He			311484.84		
Bi	209	3	He			310280.33		
Bi	209	3	He			308080.58		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

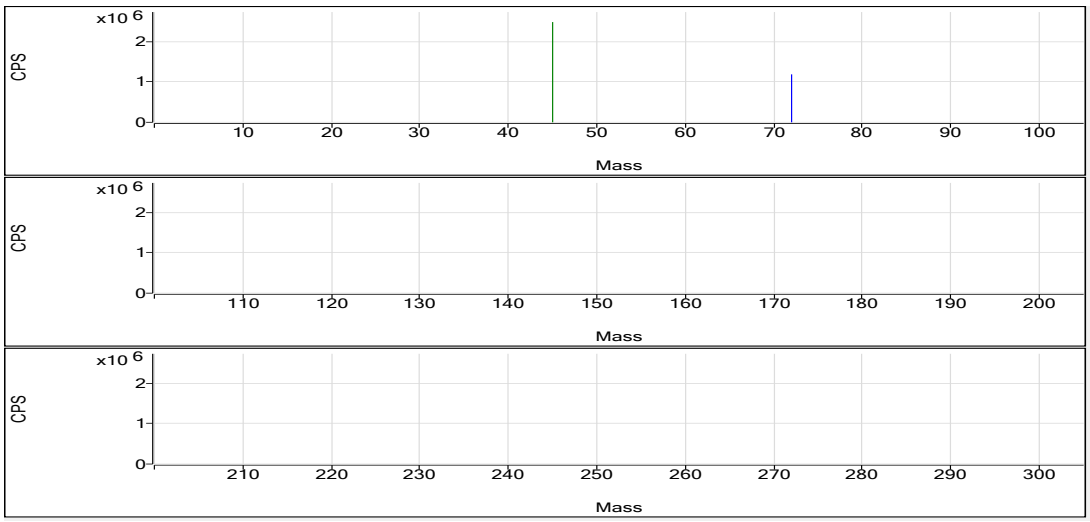
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.020	ppb	29.5	48.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.036	ppb	100.4	4.22	0.0000	Pulse	1.5000	3
Na	23	45	He	24.073	ppb	1.1	20791.93	0.4313	Pulse	0.1000	3
Mg	24	45	He	1.055	ppb	59.8	260.01	0.0054	Pulse	0.1000	3
Al	27	45	He	0.911	ppb	90.2	56.67	0.0012	Pulse	0.1000	3
K	39	45	He	-7.364	ppb	N/A	18632.37	0.3865	Pulse	0.1000	3
Ca	44	45	He	6.008	ppb	367.3	150.00	0.0031	Pulse	0.1000	3
Ti	47	45	He	1.160	ppb	39.2	33.33	0.0007	Pulse	0.1000	3
V	51	45	He	0.299	ppb	5.0	1513.42	0.0314	Pulse	0.5000	3
Cr	52	45	He	0.009	ppb	260.4	1940.21	0.0402	Pulse	0.1000	3
Mn	55	45	He	0.112	ppb	51.8	196.68	0.0041	Pulse	0.1000	3
Fe	57	45	He	1.948	ppb	57.4	123.34	0.0026	Pulse	0.1000	3
Co	59	45	He	0.042	ppb	29.1	216.68	0.0045	Pulse	0.1000	3
Ni	60	72	He	-0.020	ppb	N/A	220.01	0.0027	Pulse	0.1000	3
Cu	63	72	He	0.091	ppb	67.8	586.70	0.0071	Pulse	0.1000	3
Zn	66	72	He	2.375	ppb	1.8	886.73	0.0107	Pulse	0.1000	3
As	75	72	He	0.143	ppb	57.6	90.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	N/A	83.33	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.070	ppb	30.9	156.68	0.0018	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	570.0	60.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	173.2	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.059	ppb	59.6	1510.14	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.008	ppb	251.8	33.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.055	ppb	106.2	43.33	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.057	ppb	20.0	616.71	0.0016	Pulse	0.1000	3
Pb	208	159	He	0.018	ppb	46.4	663.37	0.0017	Pulse	0.1000	3
U	238	209	He	0.040	ppb	10.5	626.71	0.0020	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2486651.16	1.4	103.7	Analog	0.1000	3
No Gas	Ge	72	1189558.76	0.3	103.1	Pulse	0.1000	3
H2	Sc	45	183806.96	0.9	98.3	Pulse	0.1000	3
H2	Ge	72	155788.59	0.4	95.2	Pulse	0.1000	3
H2	In	115	389151.31	1.1	100.0	Pulse	0.1000	3
He	Sc	45	48210.40	1.1	103.4	Pulse	0.1000	3
He	Ge	72	82612.40	0.6	101.7	Pulse	0.1000	3
He	In	115	86736.43	1.5	100.6	Pulse	0.1000	3
He	Tb	159	396921.28	0.5	99.6	Pulse	0.1000	3
He	Bi	209	308702.77	0.5	99.8	Pulse	0.1000	3

No Gas



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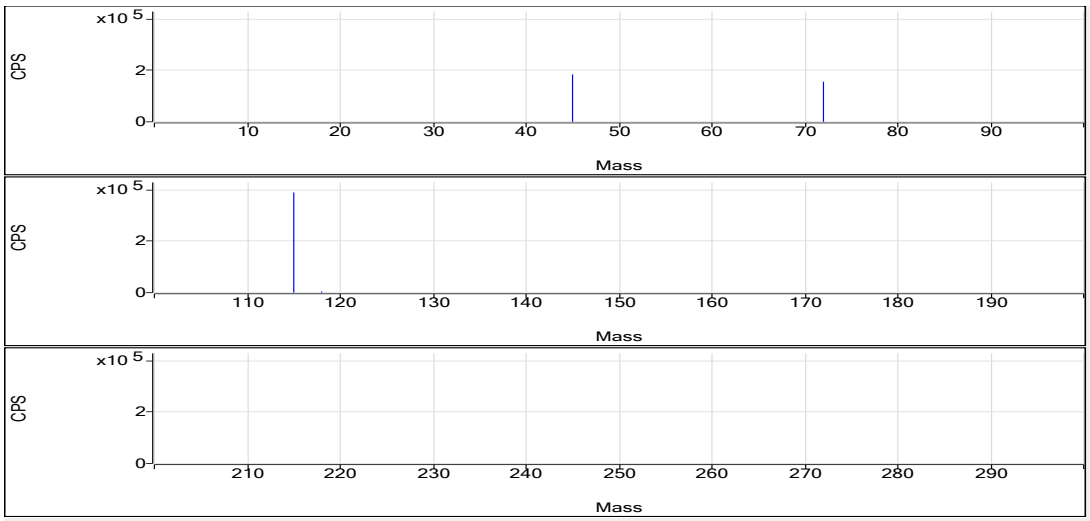
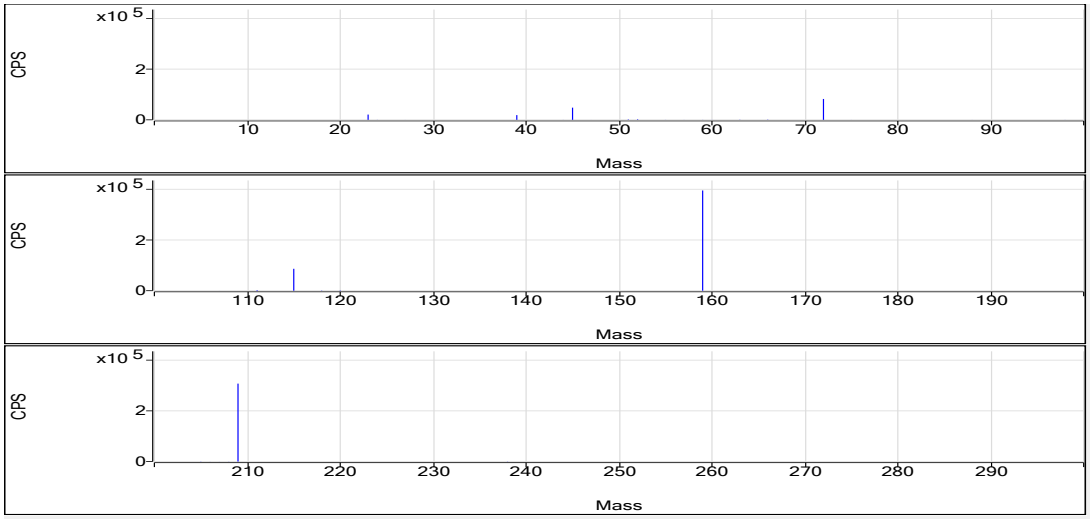


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.022	0	54.00	0.0008	4.685E-06
Be	9	1	No Gas	0.024	0	56.00	0.0008	4.685E-06
Be	9	1	No Gas	0.013	0	36.00	0.0008	4.685E-06
Se	78	2	H2	0.002	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.073	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.033	0	4.00	0.0004	1.219E-05
Na	23	3	He	24.339	0.4322	21045.61	0.0036	0.3452
Na	23	3	He	24.067	0.4312	20825.33	0.0036	0.3452
Na	23	3	He	23.812	0.4303	20504.86	0.0036	0.3452
Mg	24	3	He	0.913	0.0051	250.01	0.0018	0.003497
Mg	24	3	He	1.744	0.0066	320.02	0.0018	0.003497
Mg	24	3	He	0.507	0.0044	210.01	0.0018	0.003497
Al	27	3	He	1.358	0.0014	70.00	0.0006	0.0006432
Al	27	3	He	-0.038	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	1.412	0.0015	70.00	0.0006	0.0006432
K	39	3	He	-7.477	0.3864	18812.58	0.0012	0.3951
K	39	3	He	-9.528	0.384	18542.32	0.0012	0.3951
K	39	3	He	-5.087	0.3891	18542.20	0.0012	0.3951
Ca	44	3	He	-3.708	0.0025	120.00	0.0001	0.002715
Ca	44	3	He	-9.536	0.0021	100.00	0.0001	0.002715
Ca	44	3	He	31.268	0.0048	230.01	0.0001	0.002715
Ti	47	3	He	0.635	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1.412	0.0008	40.00	0.0005	7.003E-05
Ti	47	3	He	1.433	0.0008	40.00	0.0005	7.003E-05
V	51	3	He	0.304	0.0315	1534.09	0.0219	0.02486
V	51	3	He	0.31	0.0316	1528.09	0.0219	0.02486
V	51	3	He	0.282	0.031	1478.09	0.0219	0.02486
Cr	52	3	He	0.016	0.0405	1970.22	0.0299	0.03997
Cr	52	3	He	0.028	0.0408	1970.20	0.0299	0.03997
Cr	52	3	He	-0.017	0.0395	1880.20	0.0299	0.03997
Mn	55	3	He	0.178	0.0049	240.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.085	0.0037	180.01	0.0128	0.002639
Mn	55	3	He	0.072	0.0036	170.01	0.0128	0.002639
Fe	57	3	He	2.137	0.0027	130.01	0.0006	0.001429
Fe	57	3	He	0.749	0.0019	90.00	0.0006	0.001429
Fe	57	3	He	2.96	0.0031	150.01	0.0006	0.001429
Co	59	3	He	0.046	0.0047	230.01	0.0563	0.002149
Co	59	3	He	0.028	0.0037	180.01	0.0563	0.002149
Co	59	3	He	0.051	0.005	240.01	0.0563	0.002149
Ni	60	3	He	-0.077	0.0022	180.01	0.0086	0.002834
Ni	60	3	He	0.035	0.0031	260.01	0.0086	0.002834
Ni	60	3	He	-0.018	0.0027	220.01	0.0086	0.002834
Cu	63	3	He	0.162	0.0089	740.04	0.0257	0.004757
Cu	63	3	He	0.05	0.006	500.03	0.0257	0.004757
Cu	63	3	He	0.062	0.0063	520.03	0.0257	0.004757
Zn	66	3	He	2.333	0.0106	880.06	0.0029	0.003818
Zn	66	3	He	2.419	0.0109	900.06	0.0029	0.003818
Zn	66	3	He	2.373	0.0107	880.07	0.0029	0.003818
As	75	3	He	0.101	0.001	84.00	0.002	0.0008061
As	75	3	He	0.09	0.001	82.00	0.002	0.0008061
As	75	3	He	0.237	0.0013	106.00	0.002	0.0008061
Sr	88	3	He	0.035	0.0013	110.00	0.009	0.0009645
Sr	88	3	He	-0.032	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.004	0.0009	80.00	0.009	0.0009645
Mo	98	3	He	0.088	0.0022	190.01	0.0219	0.0002706
Mo	98	3	He	0.076	0.0019	170.01	0.0219	0.0002706
Mo	98	3	He	0.046	0.0013	110.01	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.097	0.018	1550.14	0.0158	0.01648
Sn	120	3	He	0.026	0.0169	1490.15	0.0158	0.01648
Sn	120	3	He	0.056	0.0174	1490.14	0.0158	0.01648
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.011	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	0.029	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.117	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	0.049	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.048	0.0013	530.03	0.0247	0.0001339
Tl	205	3	He	0.053	0.0015	580.04	0.0247	0.0001339
Tl	205	3	He	0.07	0.0019	740.05	0.0247	0.0001339
Pb	208	3	He	0.027	0.002	420.02	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	320.02	0.0327	0.00107
Pb	208	3	He	0.018	0.0016	390.02	0.0327	0.00107
U	238	3	He	0.044	0.0023	700.04	0.0493	7.55E-05
U	238	3	He	0.039	0.002	610.05	0.0493	7.55E-05
U	238	3	He	0.036	0.0019	570.03	0.0493	7.55E-05
Sc	45	1	No Gas			2525404.34		
Sc	45	1	No Gas			2460550.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2473998.56		
Ge	72	1	No Gas			1188593.89		
Ge	72	1	No Gas			1185965.06		
Ge	72	1	No Gas			1194117.33		
Sc	45	2	H2			183982.69		
Sc	45	2	H2			182158.42		
Sc	45	2	H2			185279.76		
Ge	72	2	H2			155792.97		
Ge	72	2	H2			156356.41		
Ge	72	2	H2			155216.39		
In	115	2	H2			393030.78		
In	115	2	H2			384428.47		
In	115	2	H2			389994.68		
Sc	45	3	He			48691.78		
Sc	45	3	He			48290.73		
Sc	45	3	He			47648.69		
Ge	72	3	He			82930.65		
Ge	72	3	He			82870.99		
Ge	72	3	He			82035.57		
In	115	3	He			86116.23		
In	115	3	He			88249.35		
In	115	3	He			85865.64		
Tb	159	3	He			397640.74		
Tb	159	3	He			398471.83		
Tb	159	3	He			394651.28		
Bi	209	3	He			310226.40		
Bi	209	3	He			308776.58		
Bi	209	3	He			307105.33		

Quantitation Report

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Acq Time	8/10/2023 6:30:07 PM
Sample Name	MB 410-406254/1-A
Sample Type	Sample
Comment	A20 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

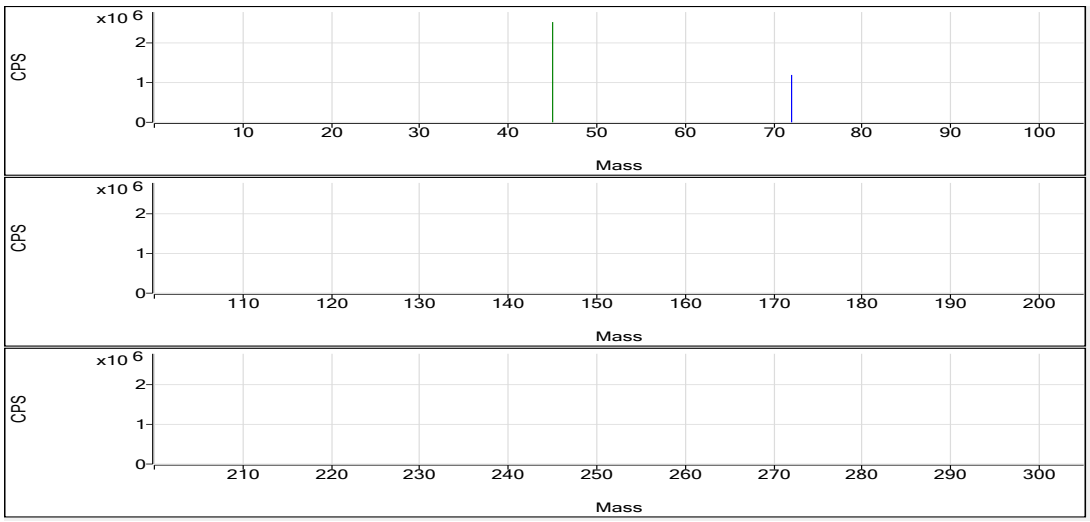
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	74.2	26.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.024	ppb	119.3	3.56	0.0000	Pulse	1.5000	3
Na	23	45	He	17.476	ppb	26.3	19803.85	0.4077	Pulse	0.1000	3
Mg	24	45	He	0.774	ppb	101.6	236.68	0.0049	Pulse	0.1000	3
Al	27	45	He	1.368	ppb	46.6	70.00	0.0014	Pulse	0.1000	3
K	39	45	He	-0.521	ppb	N/A	19166.45	0.3945	Pulse	0.1000	3
Ca	44	45	He	13.893	ppb	183.2	176.67	0.0037	Pulse	0.1000	3
Ti	47	45	He	0.249	ppb	151.8	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.021	ppb	255.6	1231.39	0.0253	Pulse	0.5000	3
Cr	52	45	He	-0.231	ppb	N/A	1606.81	0.0331	Pulse	0.1000	3
Mn	55	45	He	0.334	ppb	25.5	336.68	0.0069	Pulse	0.1000	3
Fe	57	45	He	2.625	ppb	36.6	143.34	0.0030	Pulse	0.1000	3
Co	59	45	He	0.013	ppb	96.6	140.01	0.0029	Pulse	0.1000	3
Ni	60	72	He	-0.021	ppb	N/A	220.01	0.0027	Pulse	0.1000	3
Cu	63	72	He	0.010	ppb	263.6	416.69	0.0050	Pulse	0.1000	3
Zn	66	72	He	2.041	ppb	0.8	810.05	0.0098	Pulse	0.1000	3
As	75	72	He	0.077	ppb	137.8	80.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.004	ppb	1098.5	90.00	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.008	ppb	58.8	40.00	0.0004	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	99.2	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.284	ppb	N/A	1073.41	0.0120	Pulse	0.1000	3
Sb	121	115	He	0.002	ppb	1049.7	26.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.021	ppb	186.5	30.00	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.015	ppb	15.7	206.68	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	77.1	546.69	0.0014	Pulse	0.1000	3
U	238	209	He	0.006	ppb	11.1	116.67	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2515868.45	1.0	104.9	Analog	0.1000	3
No Gas	Ge	72	1188953.44	0.3	103.1	Pulse	0.1000	3
H2	Sc	45	188582.25	0.5	100.8	Pulse	0.1000	3
H2	Ge	72	159573.02	1.3	97.5	Pulse	0.1000	3
H2	In	115	397870.44	1.4	102.3	Pulse	0.1000	3
He	Sc	45	48598.61	1.6	104.2	Pulse	0.1000	3
He	Ge	72	82984.43	0.5	102.2	Pulse	0.1000	3
He	In	115	89369.44	1.9	103.7	Pulse	0.1000	3
He	Tb	159	403443.60	0.6	101.2	Pulse	0.1000	3
He	Bi	209	315378.61	1.1	102.0	Pulse	0.1000	3

No Gas



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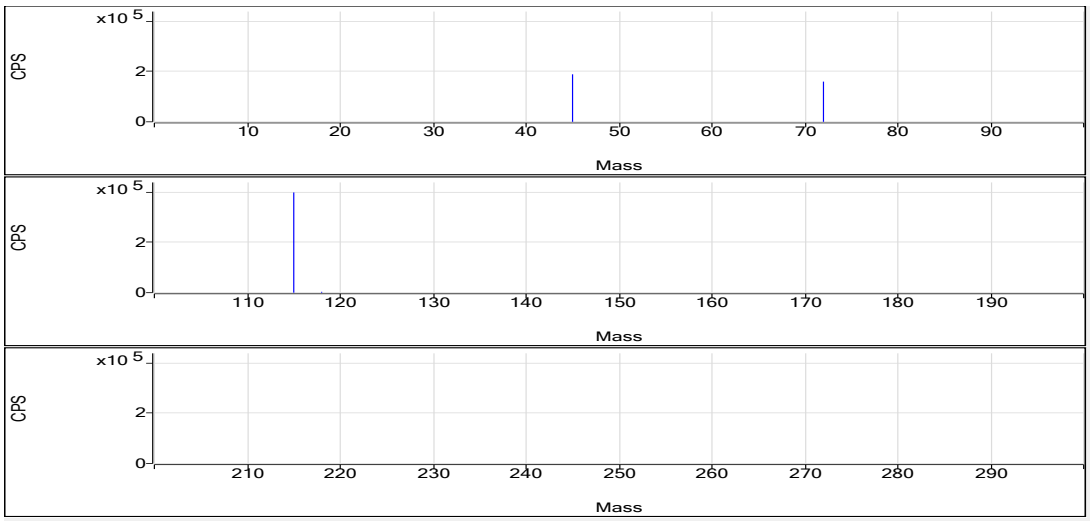
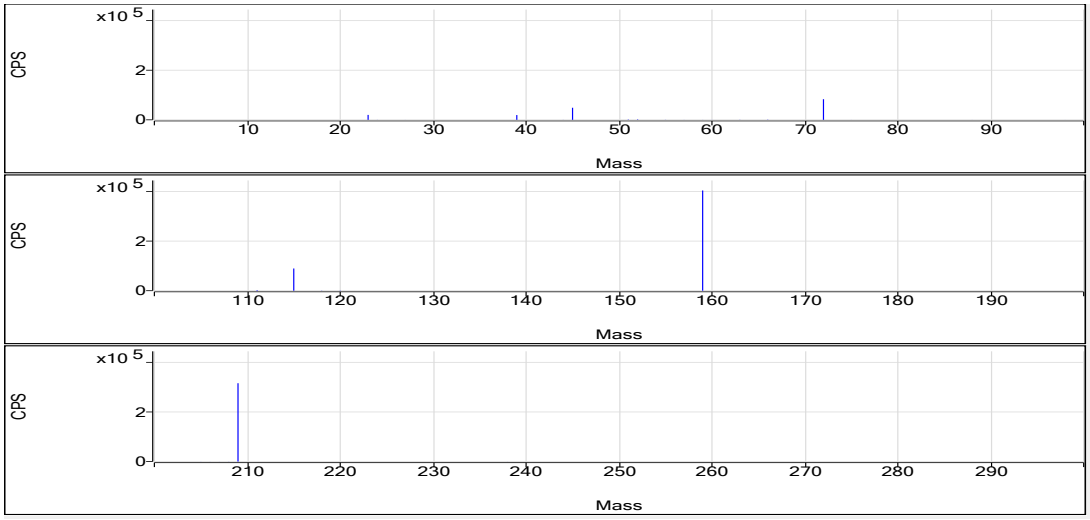


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	14.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	34.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Se	78	2	H2	0.041	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.04	0	4.67	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Na	23	3	He	22.738	0.4265	20364.58	0.0036	0.3452
Na	23	3	He	14.219	0.396	19533.49	0.0036	0.3452
Na	23	3	He	15.471	0.4005	19513.48	0.0036	0.3452
Mg	24	3	He	1.67	0.0065	310.01	0.0018	0.003497
Mg	24	3	He	0.198	0.0039	190.01	0.0018	0.003497
Mg	24	3	He	0.453	0.0043	210.01	0.0018	0.003497
Al	27	3	He	1.764	0.0017	80.00	0.0006	0.0006432
Al	27	3	He	0.633	0.001	50.00	0.0006	0.0006432
Al	27	3	He	1.707	0.0016	80.00	0.0006	0.0006432
K	39	3	He	7.182	0.4034	19263.24	0.0012	0.3951
K	39	3	He	-4.234	0.3901	19243.26	0.0012	0.3951
K	39	3	He	-4.51	0.3898	18992.85	0.0012	0.3951
Ca	44	3	He	37.319	0.0052	250.01	0.0001	0.002715
Ca	44	3	He	-13.18	0.0018	90.00	0.0001	0.002715
Ca	44	3	He	17.54	0.0039	190.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.625	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.252	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.03	0.0255	1218.06	0.0219	0.02486
V	51	3	He	0.072	0.0264	1304.07	0.0219	0.02486
V	51	3	He	-0.037	0.0241	1172.05	0.0219	0.02486
Cr	52	3	He	-0.251	0.0325	1550.14	0.0299	0.03997
Cr	52	3	He	-0.252	0.0324	1600.14	0.0299	0.03997
Cr	52	3	He	-0.19	0.0343	1670.15	0.0299	0.03997
Mn	55	3	He	0.349	0.0071	340.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.411	0.0079	390.02	0.0128	0.002639
Mn	55	3	He	0.242	0.0057	280.01	0.0128	0.002639
Fe	57	3	He	3.669	0.0036	170.01	0.0006	0.001429
Fe	57	3	He	2.426	0.0028	140.00	0.0006	0.001429
Fe	57	3	He	1.78	0.0025	120.00	0.0006	0.001429
Co	59	3	He	-0.001	0.0021	100.00	0.0563	0.002149
Co	59	3	He	0.023	0.0034	170.01	0.0563	0.002149
Co	59	3	He	0.017	0.0031	150.01	0.0563	0.002149
Ni	60	3	He	-0.091	0.0021	170.01	0.0086	0.002834
Ni	60	3	He	0.005	0.0029	240.01	0.0086	0.002834
Ni	60	3	He	0.022	0.003	250.01	0.0086	0.002834
Cu	63	3	He	-0.021	0.0042	350.02	0.0257	0.004757
Cu	63	3	He	0.029	0.0055	460.02	0.0257	0.004757
Cu	63	3	He	0.022	0.0053	440.02	0.0257	0.004757
Zn	66	3	He	2.047	0.0098	810.05	0.0029	0.003818
Zn	66	3	He	2.023	0.0097	810.05	0.0029	0.003818
Zn	66	3	He	2.054	0.0098	810.05	0.0029	0.003818
As	75	3	He	0.101	0.001	84.00	0.002	0.0008061
As	75	3	He	0.168	0.0012	96.00	0.002	0.0008061
As	75	3	He	-0.039	0.0007	60.00	0.002	0.0008061
Sr	88	3	He	-0.045	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	0.051	0.0014	130.01	0.009	0.0009645
Sr	88	3	He	0.007	0.001	90.00	0.009	0.0009645
Mo	98	3	He	0.008	0.0004	40.00	0.0219	0.0002706
Mo	98	3	He	0.013	0.0005	50.00	0.0219	0.0002706
Mo	98	3	He	0.003	0.0003	30.00	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Ag	107	3	He	-0.009	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.361	0.0108	960.07	0.0158	0.01648
Sn	120	3	He	-0.141	0.0143	1300.10	0.0158	0.01648
Sn	120	3	He	-0.351	0.0109	960.07	0.0158	0.01648
Sb	121	3	He	0.02	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.004	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Ba	137	3	He	0.045	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	0.043	0.0004	40.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.018	0.0006	230.01	0.0247	0.0001339
Tl	205	3	He	0.013	0.0004	180.01	0.0247	0.0001339
Tl	205	3	He	0.016	0.0005	210.01	0.0247	0.0001339
Pb	208	3	He	0.01	0.0014	280.01	0.0327	0.00107
Pb	208	3	He	0.015	0.0015	360.02	0.0327	0.00107
Pb	208	3	He	0.001	0.0011	260.01	0.0327	0.00107
U	238	3	He	0.006	0.0003	110.00	0.0493	7.55E-05
U	238	3	He	0.007	0.0004	130.00	0.0493	7.55E-05
U	238	3	He	0.006	0.0004	110.01	0.0493	7.55E-05
Sc	45	1	No Gas			2518894.34		
Sc	45	1	No Gas			2539124.65		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2489586.37		
Ge	72	1	No Gas			1193606.15		
Ge	72	1	No Gas			1186712.64		
Ge	72	1	No Gas			1186541.54		
Sc	45	2	H2			187526.83		
Sc	45	2	H2			189339.02		
Sc	45	2	H2			188880.90		
Ge	72	2	H2			158511.39		
Ge	72	2	H2			161990.11		
Ge	72	2	H2			158217.56		
In	115	2	H2			402006.56		
In	115	2	H2			400209.95		
In	115	2	H2			391394.80		
Sc	45	3	He			47748.76		
Sc	45	3	He			49324.34		
Sc	45	3	He			48722.72		
Ge	72	3	He			82840.56		
Ge	72	3	He			83443.55		
Ge	72	3	He			82669.18		
In	115	3	He			89106.27		
In	115	3	He			91219.12		
In	115	3	He			87797.76		
Tb	159	3	He			405585.78		
Tb	159	3	He			401035.78		
Tb	159	3	He			403709.25		
Bi	209	3	He			314793.41		
Bi	209	3	He			318983.45		
Bi	209	3	He			312358.98		

Quantitation Report

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Sample Type	Sample
Comment	A20 ICP
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

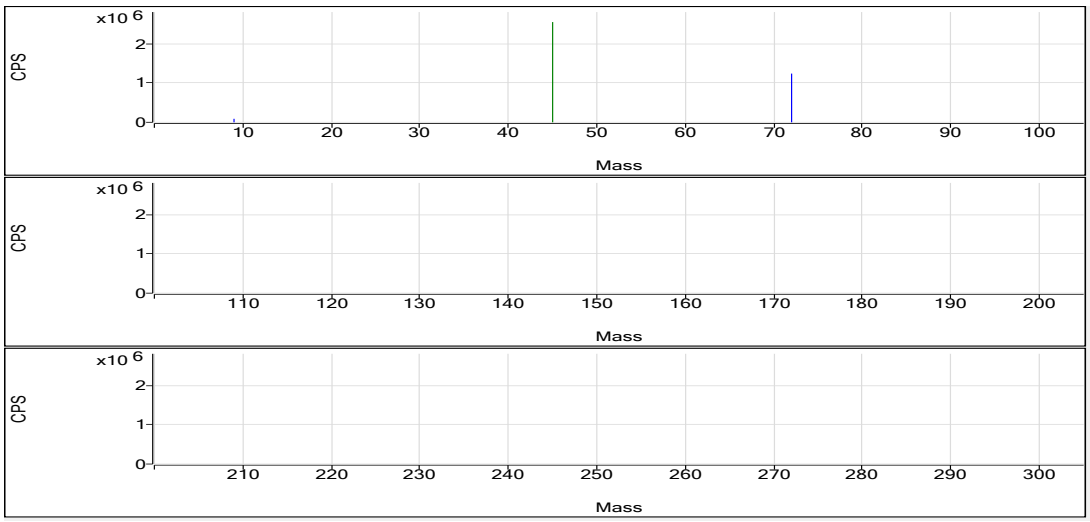
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.675	ppb	0.8	89099.14	0.0348	Pulse	0.5000	3
Se	78	72	H2	101.741	ppb	1.1	7011.72	0.0424	Pulse	1.5000	3
Na	23	45	He	4630.590	ppb	0.2	842845.87	16.9090	Pulse	0.1000	3
Mg	24	45	He	4801.283	ppb	0.5	429603.09	8.6185	Pulse	0.1000	3
Al	27	45	He	4772.331	ppb	1.0	139199.50	2.7926	Pulse	0.1000	3
K	39	45	He	4868.282	ppb	1.0	302233.61	6.0633	Pulse	0.1000	3
Ca	44	45	He	4934.388	ppb	1.4	16750.20	0.3360	Pulse	0.1000	3
Ti	47	45	He	482.187	ppb	2.1	12909.45	0.2590	Pulse	0.1000	3
V	51	45	He	492.954	ppb	0.7	538363.12	10.8004	Pulse	0.5000	3
Cr	52	45	He	467.967	ppb	0.7	700403.27	14.0513	Pulse	0.1000	3
Mn	55	45	He	482.315	ppb	0.3	308676.16	6.1926	Pulse	0.1000	3
Fe	57	45	He	4842.831	ppb	0.3	140320.19	2.8151	Pulse	0.1000	3
Co	59	45	He	471.958	ppb	0.6	1324155.71	26.5651	Pulse	0.1000	3
Ni	60	72	He	495.675	ppb	2.0	371158.85	4.2573	Pulse	0.1000	3
Cu	63	72	He	473.242	ppb	0.8	1059642.41	12.1534	Pulse	0.1000	3
Zn	66	72	He	500.095	ppb	1.0	127287.97	1.4599	Pulse	0.1000	3
As	75	72	He	503.818	ppb	1.2	90067.52	1.0331	Pulse	0.5000	3
Sr	88	115	He	51.084	ppb	0.5	40599.20	0.4592	Pulse	0.1000	3
Mo	98	115	He	49.072	ppb	1.0	95148.36	1.0762	Pulse	0.1000	3
Ag	107	115	He	49.746	ppb	0.8	204505.12	2.3132	Pulse	0.1000	3
Cd	111	115	He	50.681	ppb	0.3	23958.54	0.2710	Pulse	0.5000	3
Sn	120	115	He	98.969	ppb	1.2	139686.24	1.5801	Pulse	0.1000	3
Sb	121	115	He	96.806	ppb	1.3	127146.73	1.4382	Pulse	0.1000	3
Ba	137	115	He	511.366	ppb	1.4	216985.18	2.4544	Pulse	0.1000	3
Tl	205	159	He	100.598	ppb	0.2	1004919.59	2.4875	Pulse	0.1000	3
Pb	208	159	He	51.114	ppb	0.7	676271.48	1.6740	Pulse	0.1000	3
U	238	209	He	48.577	ppb	0.8	753772.04	2.3930	Pulse	0.1000	3

ISTD Table:

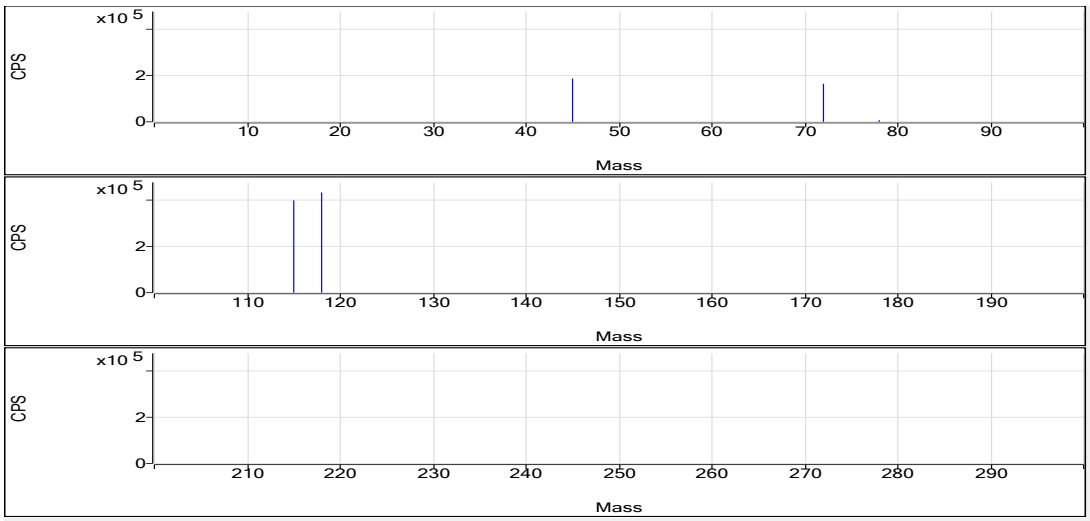
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2557171.99	1.0	106.6	Analog	0.1000	3
No Gas	Ge	72	1242477.79	0.9	107.7	Pulse	0.1000	3
H2	Sc	45	187640.36	0.2	100.3	Pulse	0.1000	3
H2	Ge	72	165197.18	0.4	100.9	Pulse	0.1000	3
H2	In	115	400928.95	0.2	103.0	Pulse	0.1000	3
He	Sc	45	49846.08	0.2	106.9	Pulse	0.1000	3
He	Ge	72	87195.35	1.5	107.4	Pulse	0.1000	3
He	In	115	88414.41	1.3	102.6	Pulse	0.1000	3
He	Tb	159	403980.72	0.0	101.3	Pulse	0.1000	3
He	Bi	209	315004.58	0.9	101.8	Pulse	0.1000	3

No Gas

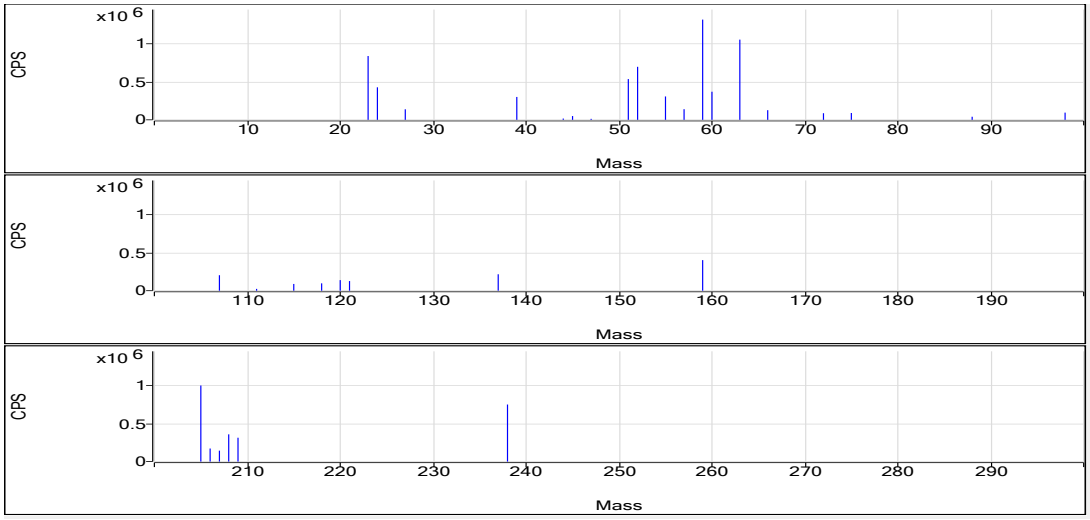


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.864	0.035	89203.96	0.0008	4.685E-06
Be	9	1	No Gas	45.244	0.0345	89260.07	0.0008	4.685E-06
Be	9	1	No Gas	45.917	0.035	88833.40	0.0008	4.685E-06
Se	78	2	H2	102.426	0.0427	7078.43	0.0004	1.219E-05
Se	78	2	H2	100.408	0.0419	6931.01	0.0004	1.219E-05
Se	78	2	H2	102.389	0.0427	7025.73	0.0004	1.219E-05
Na	23	3	He	4629.032	16.9034	843585.22	0.0036	0.3452
Na	23	3	He	4639.256	16.94	842522.17	0.0036	0.3452
Na	23	3	He	4623.481	16.8836	842430.22	0.0036	0.3452
Mg	24	3	He	4808.264	8.6311	430743.47	0.0018	0.003497
Mg	24	3	He	4776.074	8.5733	426399.21	0.0018	0.003497
Mg	24	3	He	4819.512	8.6513	431666.60	0.0018	0.003497
Al	27	3	He	4743.111	2.7755	138515.92	0.0006	0.0006432
Al	27	3	He	4828.461	2.8255	140526.14	0.0006	0.0006432
Al	27	3	He	4745.423	2.7769	138556.43	0.0006	0.0006432
K	39	3	He	4914.027	6.1166	305255.89	0.0012	0.3951
K	39	3	He	4870.628	6.0661	301699.84	0.0012	0.3951
K	39	3	He	4820.193	6.0073	299745.09	0.0012	0.3951
Ca	44	3	He	4854.105	0.3306	16499.92	0.0001	0.002715
Ca	44	3	He	4981.168	0.3392	16870.45	0.0001	0.002715
Ca	44	3	He	4967.893	0.3383	16880.24	0.0001	0.002715
Ti	47	3	He	492.327	0.2644	13196.40	0.0005	7.003E-05
Ti	47	3	He	471.904	0.2535	12605.91	0.0005	7.003E-05
Ti	47	3	He	482.331	0.2591	12926.03	0.0005	7.003E-05
V	51	3	He	496.192	10.8712	542540.56	0.0219	0.02486
V	51	3	He	489.726	10.7299	533656.50	0.0219	0.02486
V	51	3	He	492.944	10.8002	538892.31	0.0219	0.02486
Cr	52	3	He	471.623	14.1607	706705.85	0.0299	0.03997
Cr	52	3	He	465.985	13.9919	695895.69	0.0299	0.03997
Cr	52	3	He	466.294	14.0012	698608.27	0.0299	0.03997
Mn	55	3	He	482.469	6.1946	309147.79	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	483.583	6.2089	308802.89	0.0128	0.002639
Mn	55	3	He	480.892	6.1743	308077.79	0.0128	0.002639
Fe	57	3	He	4856.013	2.8227	140871.47	0.0006	0.001429
Fe	57	3	He	4842.993	2.8152	140013.97	0.0006	0.001429
Fe	57	3	He	4829.489	2.8073	140075.13	0.0006	0.001429
Co	59	3	He	469.197	26.4096	1318002.01	0.0563	0.002149
Co	59	3	He	474.472	26.7065	1328266.07	0.0563	0.002149
Co	59	3	He	472.207	26.579	1326199.04	0.0563	0.002149
Ni	60	3	He	490.694	4.2145	373041.17	0.0086	0.002834
Ni	60	3	He	506.928	4.3539	374336.13	0.0086	0.002834
Ni	60	3	He	489.401	4.2034	366099.25	0.0086	0.002834
Cu	63	3	He	469.564	12.059	1067374.36	0.0257	0.004757
Cu	63	3	He	476.653	12.2409	1052450.06	0.0257	0.004757
Cu	63	3	He	473.511	12.1603	1059102.80	0.0257	0.004757
Zn	66	3	He	498.009	1.4538	128682.69	0.0029	0.003818
Zn	66	3	He	505.562	1.4758	126887.86	0.0029	0.003818
Zn	66	3	He	496.715	1.4501	126293.36	0.0029	0.003818
As	75	3	He	497.148	1.0194	90229.80	0.002	0.0008061
As	75	3	He	509.397	1.0445	89803.23	0.002	0.0008061
As	75	3	He	504.909	1.0353	90169.54	0.002	0.0008061
Sr	88	3	He	51.335	0.4614	41341.31	0.009	0.0009645
Sr	88	3	He	51.041	0.4588	40097.71	0.009	0.0009645
Sr	88	3	He	50.876	0.4573	40358.58	0.009	0.0009645
Mo	98	3	He	48.516	1.0641	95333.03	0.0219	0.0002706
Mo	98	3	He	49.41	1.0837	94709.64	0.0219	0.0002706
Mo	98	3	He	49.29	1.081	95402.41	0.0219	0.0002706
Ag	107	3	He	49.335	2.2941	205532.61	0.0465	0.0006206
Ag	107	3	He	50.096	2.3294	203586.77	0.0465	0.0006206
Ag	107	3	He	49.808	2.3161	204395.97	0.0465	0.0006206
Cd	111	3	He	50.506	0.2701	24194.95	0.0053	0
Cd	111	3	He	50.682	0.271	23684.10	0.0053	0
Cd	111	3	He	50.854	0.2719	23996.58	0.0053	0
Sn	120	3	He	97.652	1.5592	139698.36	0.0158	0.01648
Sn	120	3	He	99.892	1.5946	139367.92	0.0158	0.01648
Sn	120	3	He	99.363	1.5863	139992.43	0.0158	0.01648
Sb	121	3	He	96.377	1.4318	128280.59	0.0149	0.0002698
Sb	121	3	He	98.247	1.4596	127564.13	0.0149	0.0002698
Sb	121	3	He	95.795	1.4231	125595.48	0.0149	0.0002698
Ba	137	3	He	505.408	2.4259	217340.97	0.0048	0.0002317
Ba	137	3	He	519.173	2.4919	217787.97	0.0048	0.0002317
Ba	137	3	He	509.517	2.4456	215826.60	0.0048	0.0002317
Tl	205	3	He	100.626	2.4882	1005669.28	0.0247	0.0001339
Tl	205	3	He	100.741	2.4911	1005835.06	0.0247	0.0001339
Tl	205	3	He	100.426	2.4833	1003254.44	0.0247	0.0001339
Pb	208	3	He	51.166	1.6757	358627.53	0.0327	0.00107
Pb	208	3	He	51.462	1.6854	362510.74	0.0327	0.00107
Pb	208	3	He	50.715	1.6609	357784.41	0.0327	0.00107
U	238	3	He	48.596	2.3939	748712.02	0.0493	7.55E-05
U	238	3	He	48.944	2.411	757395.22	0.0493	7.55E-05
U	238	3	He	48.191	2.3739	755208.89	0.0493	7.55E-05
Sc	45	1	No Gas			2549473.24		
Sc	45	1	No Gas			2586056.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2535986.37		
Ge	72	1	No Gas			1243111.54		
Ge	72	1	No Gas			1253009.04		
Ge	72	1	No Gas			1231312.79		
Sc	45	2	H2			187910.92		
Sc	45	2	H2			187818.45		
Sc	45	2	H2			187191.70		
Ge	72	2	H2			165652.24		
Ge	72	2	H2			165460.62		
Ge	72	2	H2			164478.69		
In	115	2	H2			401448.08		
In	115	2	H2			400058.70		
In	115	2	H2			401280.07		
Sc	45	3	He			49906.15		
Sc	45	3	He			49735.65		
Sc	45	3	He			49896.43		
Ge	72	3	He			88513.00		
Ge	72	3	He			85977.85		
Ge	72	3	He			87095.20		
In	115	3	He			90353.08		
In	115	3	He			88148.56		
In	115	3	He			89013.86		
Tb	159	3	He			404168.28		
Tb	159	3	He			403773.43		
Tb	159	3	He			404000.46		
Bi	209	3	He			312754.96		
Bi	209	3	He			314135.44		
Bi	209	3	He			318123.35		

Quantitation Report

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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

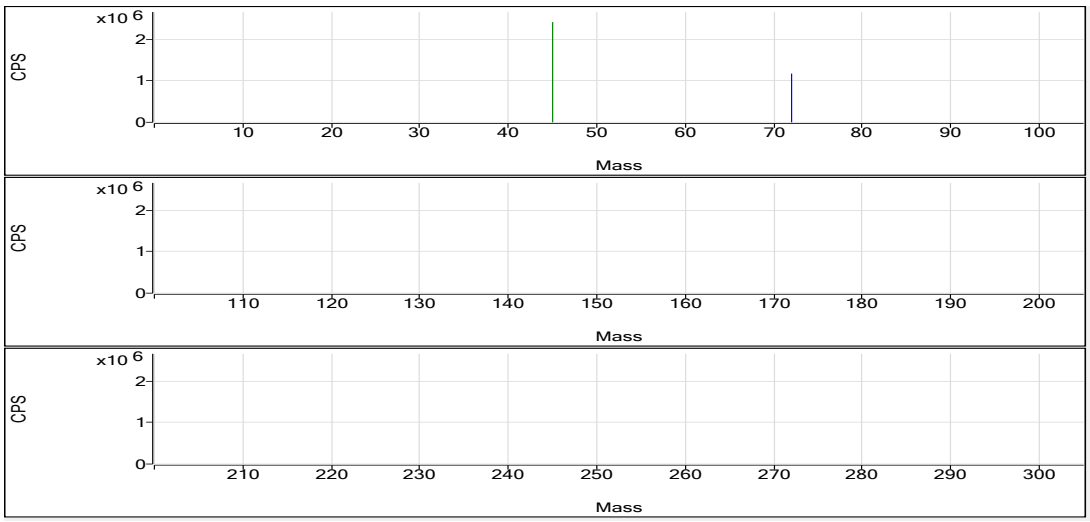
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.022	ppb	31.3	51.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.091	ppb	33.2	7.78	0.0001	Pulse	1.5000	3
Na	23	45	He	19.752	ppb	7.5	19606.93	0.4158	Pulse	0.1000	3
Mg	24	45	He	0.338	ppb	211.3	193.34	0.0041	Pulse	0.1000	3
Al	27	45	He	0.100	ppb	739.2	33.33	0.0007	Pulse	0.1000	3
K	39	45	He	-7.475	ppb	N/A	18218.58	0.3864	Pulse	0.1000	3
Ca	44	45	He	9.949	ppb	75.4	160.01	0.0034	Pulse	0.1000	3
Ti	47	45	He	0.138	ppb	336.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.320	ppb	34.0	1500.76	0.0318	Pulse	0.5000	3
Cr	52	45	He	-0.003	ppb	N/A	1880.19	0.0399	Pulse	0.1000	3
Mn	55	45	He	0.158	ppb	16.8	220.01	0.0047	Pulse	0.1000	3
Fe	57	45	He	1.555	ppb	69.4	110.00	0.0023	Pulse	0.1000	3
Co	59	45	He	0.078	ppb	46.7	306.68	0.0065	Pulse	0.1000	3
Ni	60	72	He	0.065	ppb	135.1	280.01	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.066	ppb	33.1	533.36	0.0065	Pulse	0.1000	3
Zn	66	72	He	2.350	ppb	16.7	880.06	0.0107	Pulse	0.1000	3
As	75	72	He	0.367	ppb	25.9	128.67	0.0016	Pulse	0.5000	3
Sr	88	115	He	-0.010	ppb	N/A	76.67	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.110	ppb	33.8	233.35	0.0027	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	61.8	70.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	43.6	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.119	ppb	31.8	1603.49	0.0184	Pulse	0.1000	3
Sb	121	115	He	0.419	ppb	8.9	566.70	0.0065	Pulse	0.1000	3
Ba	137	115	He	0.063	ppb	157.8	46.67	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.233	ppb	4.5	2333.63	0.0059	Pulse	0.1000	3
Pb	208	159	He	0.015	ppb	27.5	620.02	0.0016	Pulse	0.1000	3
U	238	209	He	0.150	ppb	5.8	2310.29	0.0075	Pulse	0.1000	3

ISTD Table:

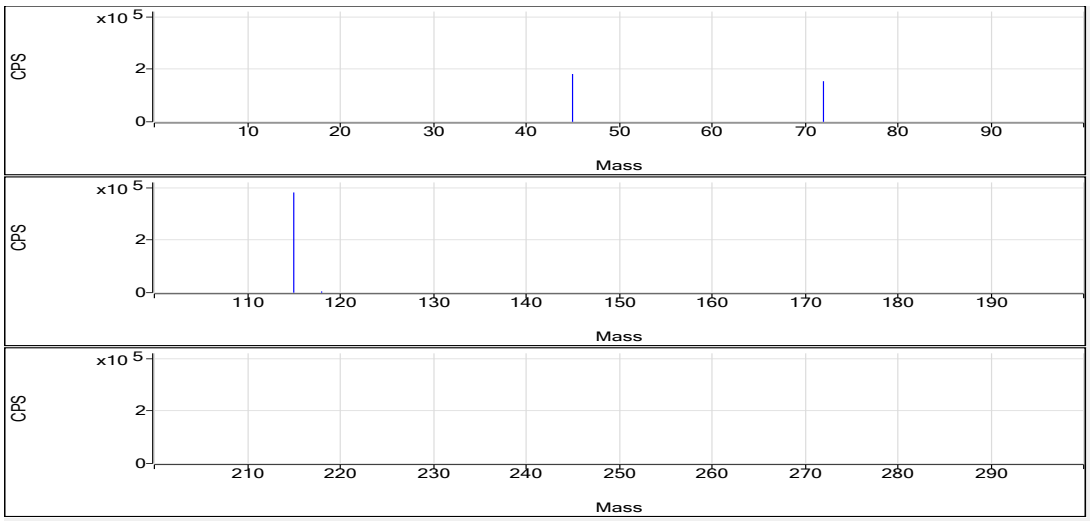
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2421382.52	0.5	100.9	Analog	0.1000	3
No Gas	Ge	72	1176084.78	0.6	102.0	Pulse	0.1000	3
H2	Sc	45	182449.52	1.0	97.6	Pulse	0.1000	3
H2	Ge	72	155020.05	1.1	94.7	Pulse	0.1000	3
H2	In	115	382494.53	0.5	98.3	Pulse	0.1000	3
He	Sc	45	47160.31	1.7	101.1	Pulse	0.1000	3
He	Ge	72	82538.08	0.1	101.7	Pulse	0.1000	3
He	In	115	87329.16	0.4	101.3	Pulse	0.1000	3
He	Tb	159	396607.56	0.4	99.5	Pulse	0.1000	3
He	Bi	209	308795.74	0.3	99.8	Pulse	0.1000	3

No Gas

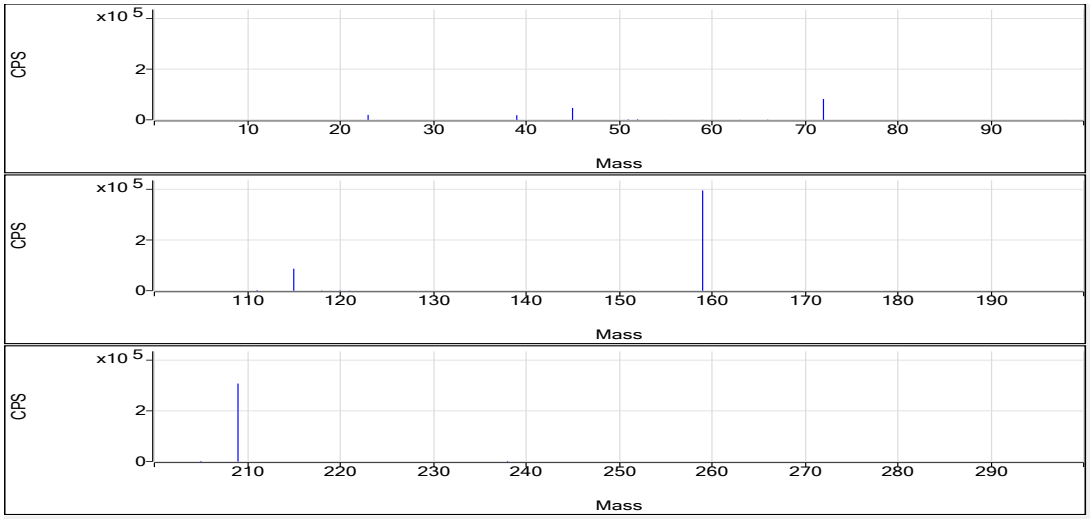


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.029	0	66.00	0.0008	4.685E-06
Be	9	1	No Gas	0.018	0	44.00	0.0008	4.685E-06
Be	9	1	No Gas	0.018	0	44.00	0.0008	4.685E-06
Se	78	2	H2	0.084	0	7.33	0.0004	1.219E-05
Se	78	2	H2	0.124	0.0001	10.00	0.0004	1.219E-05
Se	78	2	H2	0.065	0	6.00	0.0004	1.219E-05
Na	23	3	He	19.203	0.4138	19673.66	0.0036	0.3452
Na	23	3	He	18.623	0.4118	19653.52	0.0036	0.3452
Na	23	3	He	21.429	0.4218	19493.60	0.0036	0.3452
Mg	24	3	He	0.982	0.0053	250.01	0.0018	0.003497
Mg	24	3	He	-0.431	0.0027	130.01	0.0018	0.003497
Mg	24	3	He	0.463	0.0043	200.01	0.0018	0.003497
Al	27	3	He	0.339	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	0.691	0.001	50.00	0.0006	0.0006432
Al	27	3	He	-0.73	0.0002	10.00	0.0006	0.0006432
K	39	3	He	5.46	0.4014	19083.02	0.0012	0.3951
K	39	3	He	-22.942	0.3684	17581.12	0.0012	0.3951
K	39	3	He	-4.943	0.3893	17991.59	0.0012	0.3951
Ca	44	3	He	12.75	0.0036	170.01	0.0001	0.002715
Ca	44	3	He	15.641	0.0038	180.01	0.0001	0.002715
Ca	44	3	He	1.455	0.0028	130.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.676	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.3	0.0314	1494.09	0.0219	0.02486
V	51	3	He	0.222	0.0297	1418.08	0.0219	0.02486
V	51	3	He	0.437	0.0344	1590.10	0.0219	0.02486
Cr	52	3	He	0.028	0.0408	1940.20	0.0299	0.03997
Cr	52	3	He	-0.047	0.0386	1840.19	0.0299	0.03997
Cr	52	3	He	0.009	0.0403	1860.19	0.0299	0.03997
Mn	55	3	He	0.188	0.005	240.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.137	0.0044	210.01	0.0128	0.002639
Mn	55	3	He	0.148	0.0045	210.01	0.0128	0.002639
Fe	57	3	He	0.437	0.0017	80.00	0.0006	0.001429
Fe	57	3	He	2.59	0.0029	140.01	0.0006	0.001429
Fe	57	3	He	1.638	0.0024	110.00	0.0006	0.001429
Co	59	3	He	0.104	0.008	380.02	0.0563	0.002149
Co	59	3	He	0.036	0.0042	200.01	0.0563	0.002149
Co	59	3	He	0.093	0.0074	340.02	0.0563	0.002149
Ni	60	3	He	0.163	0.0042	350.02	0.0086	0.002834
Ni	60	3	He	-0.006	0.0028	230.01	0.0086	0.002834
Ni	60	3	He	0.037	0.0032	260.01	0.0086	0.002834
Cu	63	3	He	0.083	0.0069	570.03	0.0257	0.004757
Cu	63	3	He	0.074	0.0067	550.03	0.0257	0.004757
Cu	63	3	He	0.042	0.0058	480.03	0.0257	0.004757
Zn	66	3	He	2.555	0.0113	930.06	0.0029	0.003818
Zn	66	3	He	2.598	0.0114	940.06	0.0029	0.003818
Zn	66	3	He	1.899	0.0093	770.05	0.0029	0.003818
As	75	3	He	0.41	0.0016	136.00	0.002	0.0008061
As	75	3	He	0.434	0.0017	140.00	0.002	0.0008061
As	75	3	He	0.258	0.0013	110.00	0.002	0.0008061
Sr	88	3	He	-0.019	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	-0.031	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	0.02	0.0011	100.00	0.009	0.0009645
Mo	98	3	He	0.071	0.0018	160.01	0.0219	0.0002706
Mo	98	3	He	0.113	0.0028	240.01	0.0219	0.0002706
Mo	98	3	He	0.145	0.0034	300.02	0.0219	0.0002706
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.104	0.0181	1590.15	0.0158	0.01648
Sn	120	3	He	0.091	0.0179	1560.16	0.0158	0.01648
Sn	120	3	He	0.163	0.019	1660.15	0.0158	0.01648
Sb	121	3	He	0.389	0.006	530.03	0.0149	0.0002698
Sb	121	3	He	0.407	0.0063	550.03	0.0149	0.0002698
Sb	121	3	He	0.461	0.0071	620.04	0.0149	0.0002698
Ba	137	3	He	0.094	0.0007	60.00	0.0048	0.0002317
Ba	137	3	He	0.143	0.0009	80.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Tl	205	3	He	0.222	0.0056	2220.29	0.0247	0.0001339
Tl	205	3	He	0.234	0.0059	2340.28	0.0247	0.0001339
Tl	205	3	He	0.242	0.0061	2440.32	0.0247	0.0001339
Pb	208	3	He	0.016	0.0016	430.02	0.0327	0.00107
Pb	208	3	He	0.011	0.0014	280.02	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	440.02	0.0327	0.00107
U	238	3	He	0.16	0.008	2450.32	0.0493	7.55E-05
U	238	3	He	0.148	0.0074	2280.28	0.0493	7.55E-05
U	238	3	He	0.143	0.0071	2200.26	0.0493	7.55E-05
Sc	45	1	No Gas			2430464.50		
Sc	45	1	No Gas			2424771.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2408911.53		
Ge	72	1	No Gas			1181124.83		
Ge	72	1	No Gas			1179052.95		
Ge	72	1	No Gas			1168076.55		
Sc	45	2	H2			181133.98		
Sc	45	2	H2			184590.08		
Sc	45	2	H2			181624.49		
Ge	72	2	H2			155063.24		
Ge	72	2	H2			156651.64		
Ge	72	2	H2			153345.28		
In	115	2	H2			384271.09		
In	115	2	H2			382516.01		
In	115	2	H2			380696.48		
Sc	45	3	He			47538.33		
Sc	45	3	He			47728.73		
Sc	45	3	He			46213.87		
Ge	72	3	He			82617.90		
Ge	72	3	He			82598.90		
Ge	72	3	He			82397.45		
In	115	3	He			87747.71		
In	115	3	He			87084.18		
In	115	3	He			87182.82		
Tb	159	3	He			395558.39		
Tb	159	3	He			395684.33		
Tb	159	3	He			398579.95		
Bi	209	3	He			307933.75		
Bi	209	3	He			309661.79		
Bi	209	3	He			308791.68		

Quantitation Report

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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

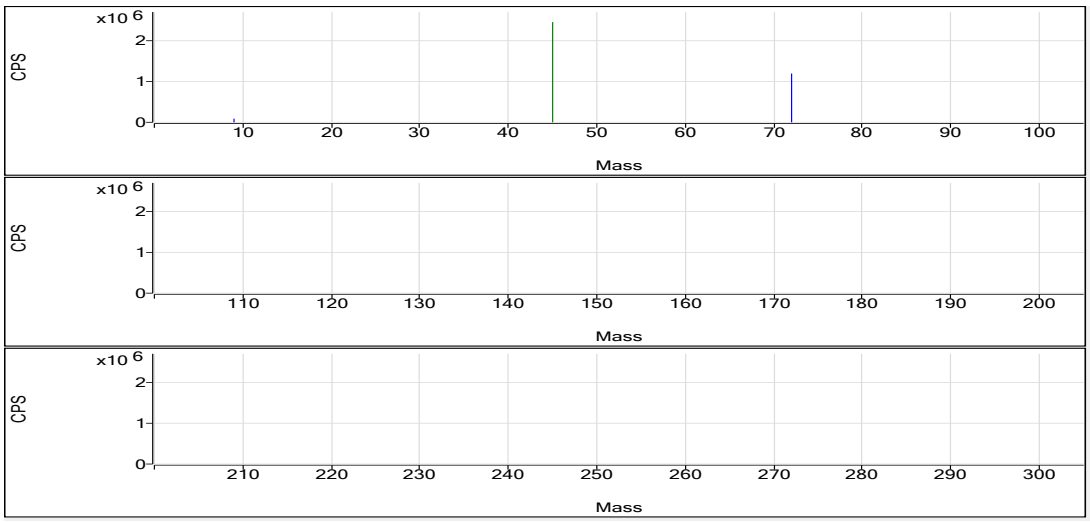
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.456	ppb	0.6	89038.66	0.0362	Pulse	0.5000	3
Se	78	72	H2	52.700	ppb	2.2	3470.21	0.0220	Pulse	1.5000	3
Na	23	45	He	4790.510	ppb	1.2	840196.99	17.4810	Pulse	0.1000	3
Mg	24	45	He	4953.989	ppb	0.9	427441.87	8.8925	Pulse	0.1000	3
Al	27	45	He	4850.035	ppb	1.7	136400.70	2.8381	Pulse	0.1000	3
K	39	45	He	5031.149	ppb	1.0	300539.53	6.2530	Pulse	0.1000	3
Ca	44	45	He	4976.071	ppb	4.3	16282.81	0.3389	Pulse	0.1000	3
Ti	47	45	He	4998.678	ppb	0.3	129015.89	2.6841	Pulse	0.1000	3
V	51	45	He	507.563	ppb	1.0	534454.33	11.1198	Pulse	0.5000	3
Cr	52	45	He	482.219	ppb	1.2	695853.92	14.4779	Pulse	0.1000	3
Mn	55	45	He	499.364	ppb	1.5	308147.29	6.4114	Pulse	0.1000	3
Fe	57	45	He	5051.936	ppb	1.1	141140.80	2.9366	Pulse	0.1000	3
Co	59	45	He	486.988	ppb	0.8	1317478.05	27.4109	Pulse	0.1000	3
Ni	60	72	He	510.543	ppb	1.1	371709.06	4.3849	Pulse	0.1000	3
Cu	63	72	He	482.621	ppb	0.9	1050650.66	12.3941	Pulse	0.1000	3
Zn	66	72	He	505.943	ppb	2.1	125196.00	1.4769	Pulse	0.1000	3
As	75	72	He	513.840	ppb	0.7	89313.58	1.0536	Pulse	0.5000	3
Sr	88	115	He	51.182	ppb	0.6	39716.61	0.4601	Pulse	0.1000	3
Mo	98	115	He	51.124	ppb	1.5	96779.53	1.1212	Pulse	0.1000	3
Ag	107	115	He	51.386	ppb	1.1	206247.53	2.3894	Pulse	0.1000	3
Cd	111	115	He	50.670	ppb	1.4	23384.94	0.2709	Pulse	0.5000	3
Sn	120	115	He	51.161	ppb	1.9	71186.58	0.8248	Pulse	0.1000	3
Sb	121	115	He	52.219	ppb	1.8	66968.96	0.7759	Pulse	0.1000	3
Ba	137	115	He	516.359	ppb	0.1	213950.58	2.4784	Pulse	0.1000	3
Tl	205	159	He	51.409	ppb	0.3	506441.87	1.2713	Pulse	0.1000	3
Pb	208	159	He	51.579	ppb	0.6	672932.60	1.6892	Pulse	0.1000	3
U	238	209	He	49.909	ppb	0.4	761442.72	2.4586	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2459491.58	1.4	102.5	Analog	0.1000	3
No Gas	Ge	72	1196923.58	0.2	103.8	Pulse	0.1000	3
H2	Sc	45	183158.46	1.3	97.9	Pulse	0.1000	3
H2	Ge	72	157816.68	1.5	96.4	Pulse	0.1000	3
H2	In	115	389726.95	0.3	100.2	Pulse	0.1000	3
He	Sc	45	48066.99	1.1	103.1	Pulse	0.1000	3
He	Ge	72	84771.26	0.3	104.4	Pulse	0.1000	3
He	In	115	86326.24	1.4	100.2	Pulse	0.1000	3
He	Tb	159	398370.07	0.3	99.9	Pulse	0.1000	3
He	Bi	209	309707.52	0.2	100.1	Pulse	0.1000	3

No Gas



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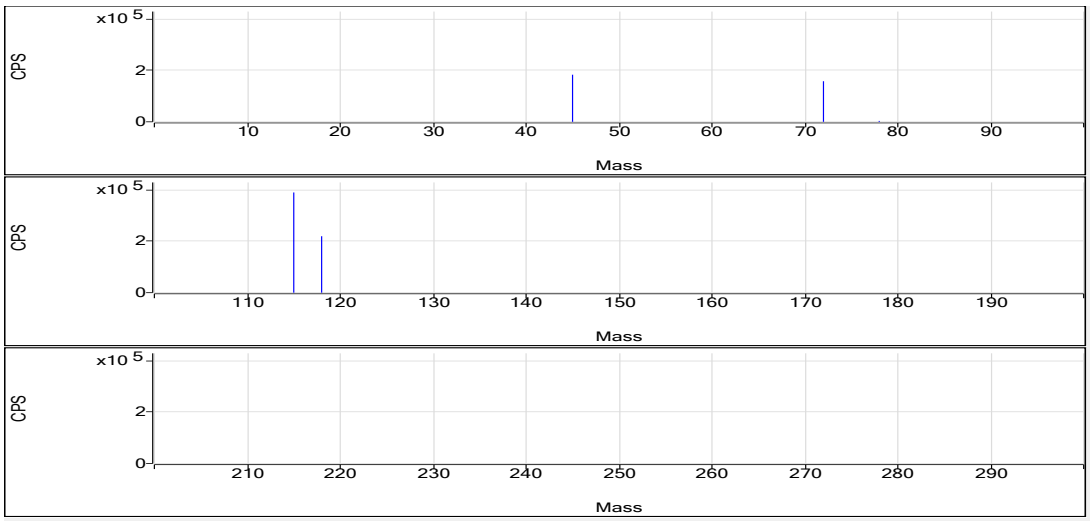
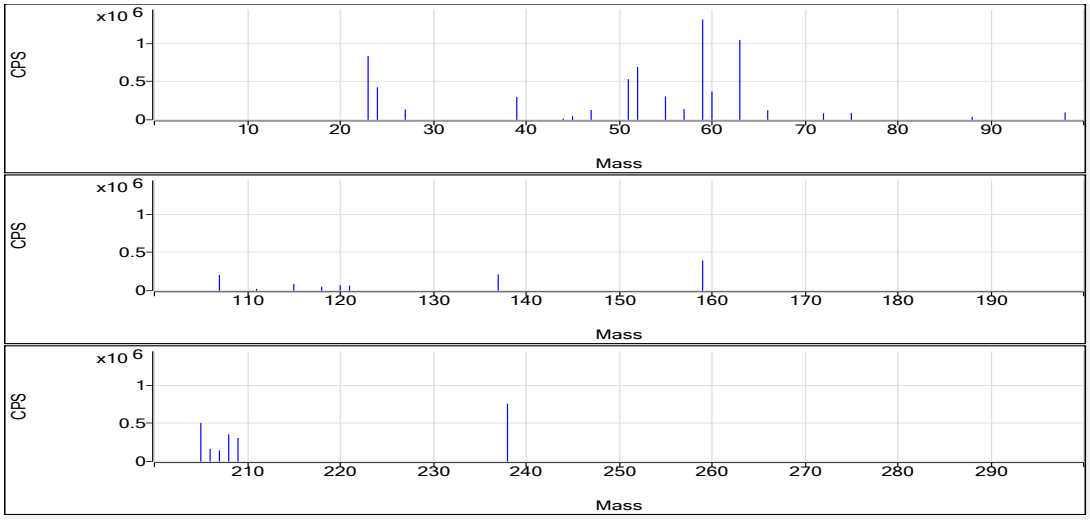


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.31	0.0361	90211.41	0.0008	4.685E-06
Be	9	1	No Gas	47.757	0.0364	88702.78	0.0008	4.685E-06
Be	9	1	No Gas	47.3	0.0361	88201.80	0.0008	4.685E-06
Se	78	2	H2	51.768	0.0216	3467.10	0.0004	1.219E-05
Se	78	2	H2	52.35	0.0218	3411.08	0.0004	1.219E-05
Se	78	2	H2	53.982	0.0225	3532.44	0.0004	1.219E-05
Na	23	3	He	4825.21	17.6052	846282.25	0.0036	0.3452
Na	23	3	He	4723.738	17.2422	838180.07	0.0036	0.3452
Na	23	3	He	4822.581	17.5958	836128.66	0.0036	0.3452
Mg	24	3	He	5004.49	8.9832	431821.48	0.0018	0.003497
Mg	24	3	He	4934.519	8.8576	430587.38	0.0018	0.003497
Mg	24	3	He	4922.957	8.8369	419916.75	0.0018	0.003497
Al	27	3	He	4871.588	2.8507	137033.02	0.0006	0.0006432
Al	27	3	He	4757.649	2.784	135337.80	0.0006	0.0006432
Al	27	3	He	4920.869	2.8795	136831.29	0.0006	0.0006432
K	39	3	He	5040.645	6.264	301112.20	0.0012	0.3951
K	39	3	He	4975.05	6.1876	300794.82	0.0012	0.3951
K	39	3	He	5077.752	6.3072	299711.56	0.0012	0.3951
Ca	44	3	He	5034.836	0.3428	16479.76	0.0001	0.002715
Ca	44	3	He	4740.435	0.3229	15698.82	0.0001	0.002715
Ca	44	3	He	5152.942	0.3508	16669.86	0.0001	0.002715
Ti	47	3	He	4983.208	2.6758	128625.90	0.0005	7.003E-05
Ti	47	3	He	5001.469	2.6856	130552.93	0.0005	7.003E-05
Ti	47	3	He	5011.358	2.6909	127868.85	0.0005	7.003E-05
V	51	3	He	507.98	11.1289	534966.88	0.0219	0.02486
V	51	3	He	502.351	11.0058	535017.56	0.0219	0.02486
V	51	3	He	512.358	11.2246	533378.56	0.0219	0.02486
Cr	52	3	He	478.969	14.3807	691279.68	0.0299	0.03997
Cr	52	3	He	478.588	14.3692	698519.60	0.0299	0.03997
Cr	52	3	He	489.099	14.6839	697762.49	0.0299	0.03997
Mn	55	3	He	494.896	6.3541	305440.84	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	495.221	6.3582	309088.04	0.0128	0.002639
Mn	55	3	He	507.974	6.5219	309912.98	0.0128	0.002639
Fe	57	3	He	5026.042	2.9215	140437.40	0.0006	0.001429
Fe	57	3	He	5014.65	2.9149	141699.23	0.0006	0.001429
Fe	57	3	He	5115.116	2.9733	141285.77	0.0006	0.001429
Co	59	3	He	487.804	27.4569	1319853.89	0.0563	0.002149
Co	59	3	He	482.505	27.1587	1320240.45	0.0563	0.002149
Co	59	3	He	490.654	27.6173	1312339.82	0.0563	0.002149
Ni	60	3	He	510.972	4.3886	373083.55	0.0086	0.002834
Ni	60	3	He	516.159	4.4331	374643.00	0.0086	0.002834
Ni	60	3	He	504.498	4.333	367400.62	0.0086	0.002834
Cu	63	3	He	480.318	12.335	1048630.84	0.0257	0.004757
Cu	63	3	He	487.844	12.5282	1058765.77	0.0257	0.004757
Cu	63	3	He	479.7	12.3192	1044555.38	0.0257	0.004757
Zn	66	3	He	495.175	1.4456	122891.95	0.0029	0.003818
Zn	66	3	He	516.782	1.5085	127482.98	0.0029	0.003818
Zn	66	3	He	505.873	1.4767	125213.07	0.0029	0.003818
As	75	3	He	510.114	1.046	88919.80	0.002	0.0008061
As	75	3	He	516.749	1.0596	89543.59	0.002	0.0008061
As	75	3	He	514.656	1.0553	89477.34	0.002	0.0008061
Sr	88	3	He	50.943	0.4579	39606.50	0.009	0.0009645
Sr	88	3	He	51.541	0.4633	40528.73	0.009	0.0009645
Sr	88	3	He	51.062	0.459	39014.61	0.009	0.0009645
Mo	98	3	He	50.829	1.1148	96420.60	0.0219	0.0002706
Mo	98	3	He	50.553	1.1087	96993.62	0.0219	0.0002706
Mo	98	3	He	51.991	1.1403	96924.36	0.0219	0.0002706
Ag	107	3	He	51.202	2.3809	205929.29	0.0465	0.0006206
Ag	107	3	He	50.948	2.369	207248.81	0.0465	0.0006206
Ag	107	3	He	52.008	2.4183	205564.49	0.0465	0.0006206
Cd	111	3	He	50.571	0.2704	23387.61	0.0053	0
Cd	111	3	He	50.025	0.2675	23399.62	0.0053	0
Cd	111	3	He	51.414	0.2749	23367.58	0.0053	0
Sn	120	3	He	50.512	0.8145	70449.55	0.0158	0.01648
Sn	120	3	He	50.672	0.817	71474.94	0.0158	0.01648
Sn	120	3	He	52.3	0.8427	71635.26	0.0158	0.01648
Sb	121	3	He	51.861	0.7706	66650.66	0.0149	0.0002698
Sb	121	3	He	51.522	0.7656	66972.43	0.0149	0.0002698
Sb	121	3	He	53.272	0.7915	67283.80	0.0149	0.0002698
Ba	137	3	He	516.016	2.4768	214224.80	0.0048	0.0002317
Ba	137	3	He	516.19	2.4776	216745.66	0.0048	0.0002317
Ba	137	3	He	516.873	2.4809	210881.29	0.0048	0.0002317
Tl	205	3	He	51.552	1.2748	507799.09	0.0247	0.0001339
Tl	205	3	He	51.297	1.2685	506680.46	0.0247	0.0001339
Tl	205	3	He	51.378	1.2705	504846.05	0.0247	0.0001339
Pb	208	3	He	51.583	1.6894	359849.92	0.0327	0.00107
Pb	208	3	He	51.281	1.6795	356338.24	0.0327	0.00107
Pb	208	3	He	51.873	1.6989	360919.64	0.0327	0.00107
U	238	3	He	50.124	2.4692	764692.25	0.0493	7.55E-05
U	238	3	He	49.706	2.4486	757056.00	0.0493	7.55E-05
U	238	3	He	49.897	2.458	762579.91	0.0493	7.55E-05
Sc	45	1	No Gas			2499494.03		
Sc	45	1	No Gas			2434666.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2444314.49		
Ge	72	1	No Gas			1197044.28		
Ge	72	1	No Gas			1199243.03		
Ge	72	1	No Gas			1194483.42		
Sc	45	2	H2			181725.54		
Sc	45	2	H2			181945.58		
Sc	45	2	H2			185804.26		
Ge	72	2	H2			160491.52		
Ge	72	2	H2			156145.69		
Ge	72	2	H2			156812.84		
In	115	2	H2			389146.21		
In	115	2	H2			388988.39		
In	115	2	H2			391046.24		
Sc	45	3	He			48070.09		
Sc	45	3	He			48612.13		
Sc	45	3	He			47518.74		
Ge	72	3	He			85012.37		
Ge	72	3	He			84510.35		
Ge	72	3	He			84791.07		
In	115	3	He			86871.24		
In	115	3	He			87867.65		
In	115	3	He			85392.24		
Tb	159	3	He			398331.09		
Tb	159	3	He			399428.78		
Tb	159	3	He			397350.35		
Bi	209	3	He			309693.53		
Bi	209	3	He			309182.77		
Bi	209	3	He			310246.26		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

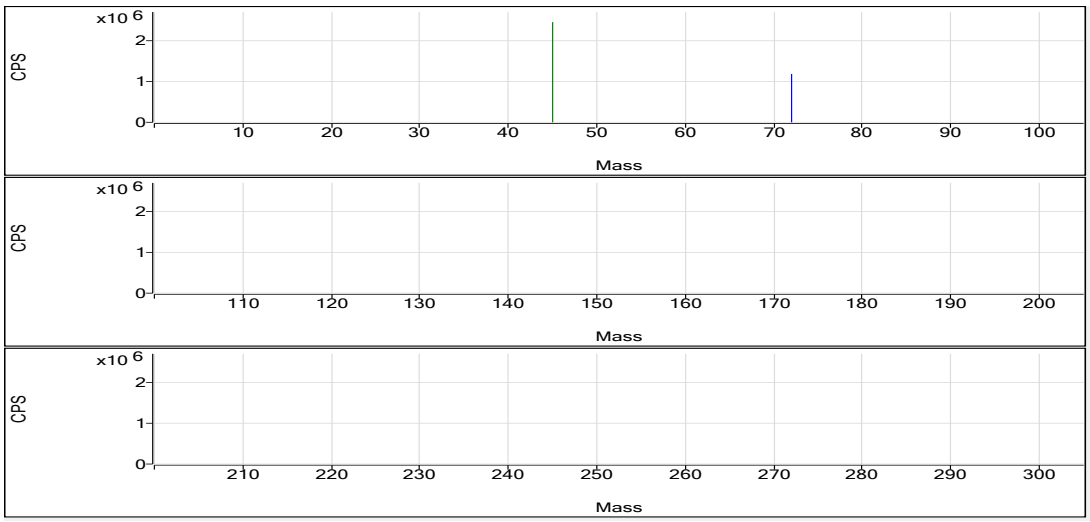
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.025	ppb	26.0	59.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.019	ppb	27.4	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	13.729	ppb	15.5	18939.31	0.3943	Pulse	0.1000	3
Mg	24	45	He	1.341	ppb	44.0	283.34	0.0059	Pulse	0.1000	3
Al	27	45	He	1.038	ppb	60.6	60.00	0.0013	Pulse	0.1000	3
K	39	45	He	-0.377	ppb	N/A	18956.16	0.3946	Pulse	0.1000	3
Ca	44	45	He	-0.157	ppb	N/A	130.00	0.0027	Pulse	0.1000	3
Ti	47	45	He	1.166	ppb	101.8	33.33	0.0007	Pulse	0.1000	3
V	51	45	He	0.334	ppb	19.9	1545.43	0.0322	Pulse	0.5000	3
Cr	52	45	He	0.065	ppb	81.0	2013.55	0.0419	Pulse	0.1000	3
Mn	55	45	He	0.276	ppb	13.5	296.68	0.0062	Pulse	0.1000	3
Fe	57	45	He	1.366	ppb	56.3	106.67	0.0022	Pulse	0.1000	3
Co	59	45	He	0.080	ppb	39.3	320.01	0.0067	Pulse	0.1000	3
Ni	60	72	He	0.064	ppb	122.4	280.01	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.080	ppb	41.9	563.37	0.0068	Pulse	0.1000	3
Zn	66	72	He	1.937	ppb	5.8	783.38	0.0095	Pulse	0.1000	3
As	75	72	He	0.282	ppb	17.7	114.67	0.0014	Pulse	0.5000	3
Sr	88	115	He	-0.005	ppb	N/A	80.00	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.060	ppb	48.9	136.67	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	61.7	70.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	132.1	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.084	ppb	83.9	1540.14	0.0178	Pulse	0.1000	3
Sb	121	115	He	0.067	ppb	20.2	110.00	0.0013	Pulse	0.1000	3
Ba	137	115	He	0.040	ppb	34.5	36.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.094	ppb	11.9	973.41	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	69.6	556.69	0.0014	Pulse	0.1000	3
U	238	209	He	0.054	ppb	18.0	840.06	0.0027	Pulse	0.1000	3

ISTD Table:

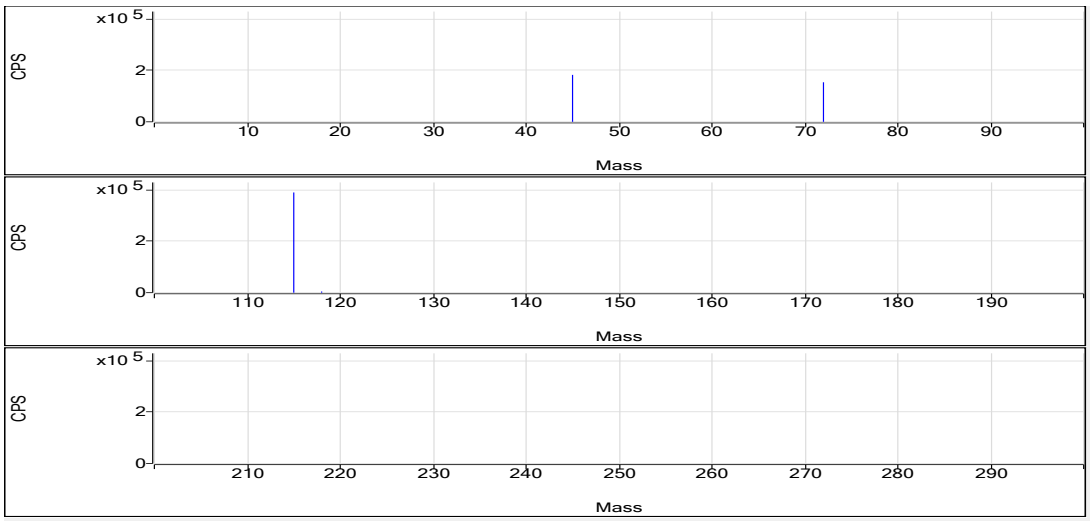
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2465482.88	0.7	102.8	Analog	0.1000	3
No Gas	Ge	72	1189262.85	0.9	103.1	Pulse	0.1000	3
H2	Sc	45	182793.99	1.8	97.7	Pulse	0.1000	3
H2	Ge	72	153965.68	2.0	94.0	Pulse	0.1000	3
H2	In	115	390328.82	0.3	100.3	Pulse	0.1000	3
He	Sc	45	48033.40	0.6	103.0	Pulse	0.1000	3
He	Ge	72	82847.16	0.9	102.0	Pulse	0.1000	3
He	In	115	86493.92	0.4	100.3	Pulse	0.1000	3
He	Tb	159	397168.65	1.0	99.6	Pulse	0.1000	3
He	Bi	209	309042.09	0.6	99.9	Pulse	0.1000	3

No Gas

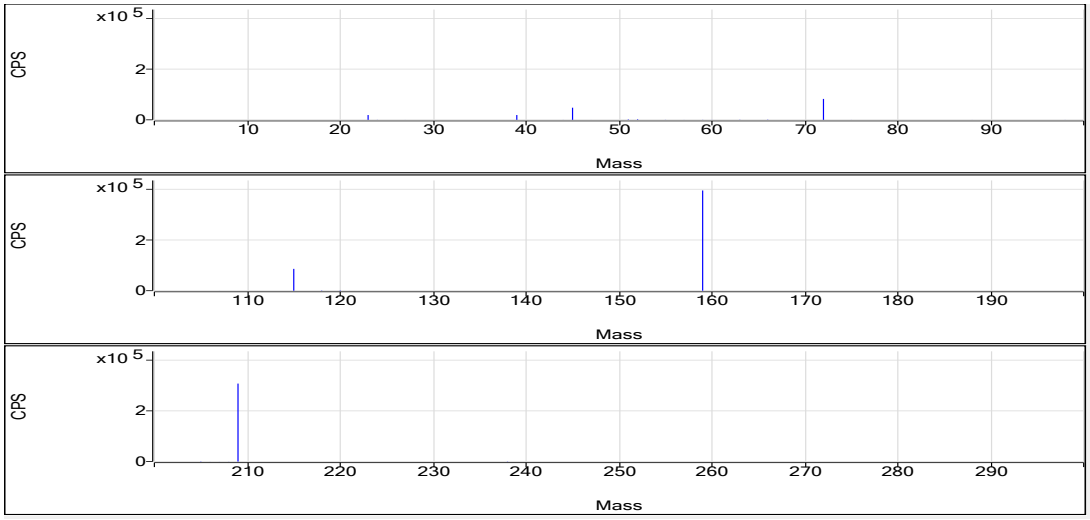


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	58.00	0.0008	4.685E-06
Be	9	1	No Gas	0.019	0	48.00	0.0008	4.685E-06
Be	9	1	No Gas	0.032	0	72.00	0.0008	4.685E-06
Se	78	2	H2	0.013	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.022	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.023	0	3.33	0.0004	1.219E-05
Na	23	3	He	16.157	0.403	19483.38	0.0036	0.3452
Na	23	3	He	12.223	0.3889	18662.27	0.0036	0.3452
Na	23	3	He	12.807	0.391	18672.28	0.0036	0.3452
Mg	24	3	He	1.048	0.0054	260.01	0.0018	0.003497
Mg	24	3	He	0.955	0.0052	250.01	0.0018	0.003497
Mg	24	3	He	2.019	0.0071	340.01	0.0018	0.003497
Al	27	3	He	0.668	0.001	50.00	0.0006	0.0006432
Al	27	3	He	0.681	0.001	50.00	0.0006	0.0006432
Al	27	3	He	1.764	0.0017	80.00	0.0006	0.0006432
K	39	3	He	2.33	0.3978	19233.25	0.0012	0.3951
K	39	3	He	2.215	0.3976	19082.92	0.0012	0.3951
K	39	3	He	-5.677	0.3885	18552.30	0.0012	0.3951
Ca	44	3	He	8.798	0.0033	160.01	0.0001	0.002715
Ca	44	3	He	-3.174	0.0025	120.00	0.0001	0.002715
Ca	44	3	He	-6.095	0.0023	110.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	2.198	0.0013	60.00	0.0005	7.003E-05
Ti	47	3	He	1.429	0.0008	40.00	0.0005	7.003E-05
V	51	3	He	0.358	0.0327	1580.10	0.0219	0.02486
V	51	3	He	0.386	0.0333	1598.10	0.0219	0.02486
V	51	3	He	0.259	0.0305	1458.09	0.0219	0.02486
Cr	52	3	He	0.06	0.0418	2020.22	0.0299	0.03997
Cr	52	3	He	0.12	0.0436	2090.23	0.0299	0.03997
Cr	52	3	He	0.015	0.0404	1930.19	0.0299	0.03997
Mn	55	3	He	0.294	0.0064	310.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.233	0.0056	270.01	0.0128	0.002639
Mn	55	3	He	0.3	0.0065	310.01	0.0128	0.002639
Fe	57	3	He	0.745	0.0019	90.00	0.0006	0.001429
Fe	57	3	He	1.127	0.0021	100.00	0.0006	0.001429
Fe	57	3	He	2.226	0.0027	130.01	0.0006	0.001429
Co	59	3	He	0.116	0.0087	420.02	0.0563	0.002149
Co	59	3	He	0.065	0.0058	280.01	0.0563	0.002149
Co	59	3	He	0.059	0.0054	260.01	0.0563	0.002149
Ni	60	3	He	0.082	0.0035	290.01	0.0086	0.002834
Ni	60	3	He	0.131	0.004	330.02	0.0086	0.002834
Ni	60	3	He	-0.022	0.0026	220.01	0.0086	0.002834
Cu	63	3	He	0.076	0.0067	550.03	0.0257	0.004757
Cu	63	3	He	0.048	0.006	500.03	0.0257	0.004757
Cu	63	3	He	0.115	0.0077	640.04	0.0257	0.004757
Zn	66	3	He	2.04	0.0098	800.05	0.0029	0.003818
Zn	66	3	He	1.818	0.0091	760.04	0.0029	0.003818
Zn	66	3	He	1.954	0.0095	790.04	0.0029	0.003818
As	75	3	He	0.226	0.0013	104.00	0.002	0.0008061
As	75	3	He	0.32	0.0015	122.00	0.002	0.0008061
As	75	3	He	0.3	0.0014	118.00	0.002	0.0008061
Sr	88	3	He	0.034	0.0013	110.00	0.009	0.0009645
Sr	88	3	He	-0.004	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	-0.043	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	0.045	0.0013	110.01	0.0219	0.0002706
Mo	98	3	He	0.04	0.0012	100.00	0.0219	0.0002706
Mo	98	3	He	0.093	0.0023	200.01	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Cd	111	3	He	0.022	0.0001	10.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.101	0.0181	1570.16	0.0158	0.01648
Sn	120	3	He	0.144	0.0188	1620.14	0.0158	0.01648
Sn	120	3	He	0.007	0.0166	1430.12	0.0158	0.01648
Sb	121	3	He	0.059	0.0012	100.00	0.0149	0.0002698
Sb	121	3	He	0.083	0.0015	130.01	0.0149	0.0002698
Sb	121	3	He	0.06	0.0012	100.00	0.0149	0.0002698
Ba	137	3	He	0.048	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.048	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.101	0.0026	1060.08	0.0247	0.0001339
Tl	205	3	He	0.081	0.0021	840.07	0.0247	0.0001339
Tl	205	3	He	0.099	0.0026	1020.08	0.0247	0.0001339
Pb	208	3	He	0.007	0.0013	260.01	0.0327	0.00107
Pb	208	3	He	0.005	0.0012	330.02	0.0327	0.00107
Pb	208	3	He	0.018	0.0017	280.01	0.0327	0.00107
U	238	3	He	0.046	0.0024	730.05	0.0493	7.55E-05
U	238	3	He	0.05	0.0025	790.05	0.0493	7.55E-05
U	238	3	He	0.065	0.0033	1000.08	0.0493	7.55E-05
Sc	45	1	No Gas			2479289.65		
Sc	45	1	No Gas			2471288.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2445870.74		
Ge	72	1	No Gas			1199169.98		
Ge	72	1	No Gas			1178197.64		
Ge	72	1	No Gas			1190420.92		
Sc	45	2	H2			179204.70		
Sc	45	2	H2			185408.75		
Sc	45	2	H2			183768.51		
Ge	72	2	H2			151092.31		
Ge	72	2	H2			157225.83		
Ge	72	2	H2			153578.89		
In	115	2	H2			391637.96		
In	115	2	H2			389957.34		
In	115	2	H2			389391.17		
Sc	45	3	He			48351.48		
Sc	45	3	He			47989.76		
Sc	45	3	He			47758.96		
Ge	72	3	He			82005.80		
Ge	72	3	He			83423.70		
Ge	72	3	He			83111.99		
In	115	3	He			86860.45		
In	115	3	He			86377.88		
In	115	3	He			86267.86		
Tb	159	3	He			401511.87		
Tb	159	3	He			393966.09		
Tb	159	3	He			396028.00		
Bi	209	3	He			310045.76		
Bi	209	3	He			310216.52		
Bi	209	3	He			306863.98		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

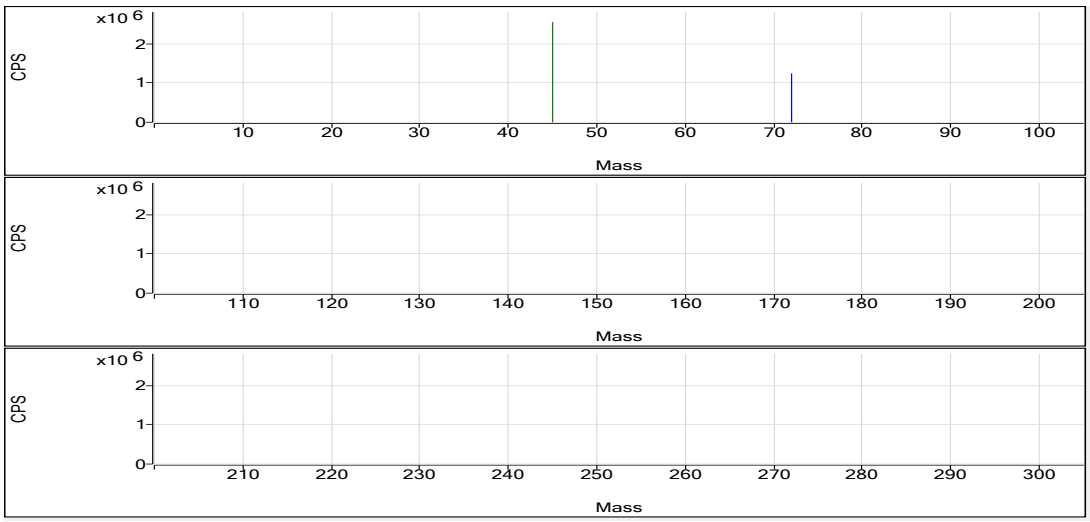
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.015	ppb	33.6	41.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.388	ppb	39.9	28.67	0.0002	Pulse	1.5000	3
Na	23	45	He	89923.495	ppb	3.7	15439669.77	322.0059	Analog	0.1000	3
Mg	24	45	He	21379.861	ppb	1.1	1840366.90	38.3659	Analog	0.1000	3
Al	27	45	He	7.356	ppb	21.9	236.68	0.0049	Pulse	0.1000	3
K	39	45	He	5914.379	ppb	2.8	349184.40	7.2813	Pulse	0.1000	3
Ca	44	45	He	48281.219	ppb	3.0	156527.49	3.2642	Pulse	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.232	ppb	21.4	1435.41	0.0299	Pulse	0.5000	3
Cr	52	45	He	-0.245	ppb	N/A	1566.81	0.0326	Pulse	0.1000	3
Mn	55	45	He	2282.741	ppb	2.6	1405131.60	29.2991	Analog	0.1000	3
Fe	57	45	He	6.731	ppb	16.6	256.68	0.0053	Pulse	0.1000	3
Co	59	45	He	1.330	ppb	2.6	3693.93	0.0770	Pulse	0.1000	3
Ni	60	72	He	0.999	ppb	9.7	1006.74	0.0114	Pulse	0.1000	3
Cu	63	72	He	0.101	ppb	49.9	650.04	0.0074	Pulse	0.1000	3
Zn	66	72	He	8.533	ppb	3.2	2530.32	0.0287	Pulse	0.1000	3
As	75	72	He	0.156	ppb	34.8	99.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	277.738	ppb	0.4	219735.34	2.4922	Pulse	0.1000	3
Mo	98	115	He	0.307	ppb	6.2	616.70	0.0070	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	794.3	56.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.031	ppb	54.8	14.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.198	ppb	N/A	1176.77	0.0133	Pulse	0.1000	3
Sb	121	115	He	0.122	ppb	23.8	183.34	0.0021	Pulse	0.1000	3
Ba	137	115	He	59.822	ppb	2.9	25337.36	0.2873	Pulse	0.1000	3
Tl	205	159	He	0.052	ppb	5.5	573.37	0.0014	Pulse	0.1000	3
Pb	208	159	He	0.012	ppb	87.2	583.36	0.0014	Pulse	0.1000	3
U	238	209	He	0.028	ppb	27.3	453.36	0.0015	Pulse	0.1000	3

ISTD Table:

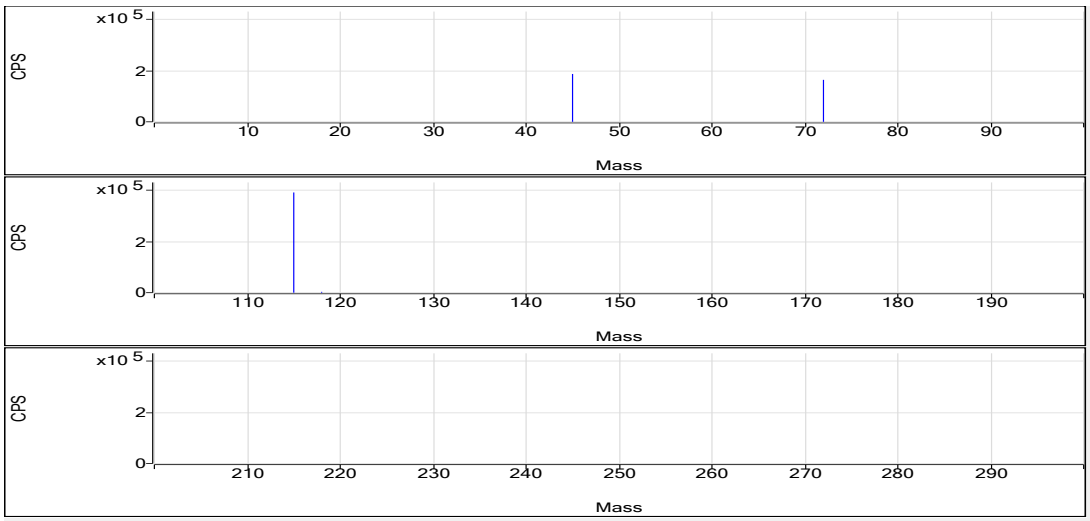
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2545012.20	0.8	106.1	Analog	0.1000	3
No Gas	Ge	72	1241908.08	0.9	107.7	Pulse	0.1000	3
H2	Sc	45	187323.42	1.3	100.2	Pulse	0.1000	3
H2	Ge	72	164298.08	1.6	100.4	Pulse	0.1000	3
H2	In	115	392391.28	0.4	100.8	Pulse	0.1000	3
He	Sc	45	47976.71	2.5	102.9	Pulse	0.1000	3
He	Ge	72	88264.98	1.5	108.7	Pulse	0.1000	3
He	In	115	88166.97	0.8	102.3	Pulse	0.1000	3
He	Tb	159	402182.80	0.6	100.9	Pulse	0.1000	3
He	Bi	209	307672.08	0.3	99.5	Pulse	0.1000	3

No Gas

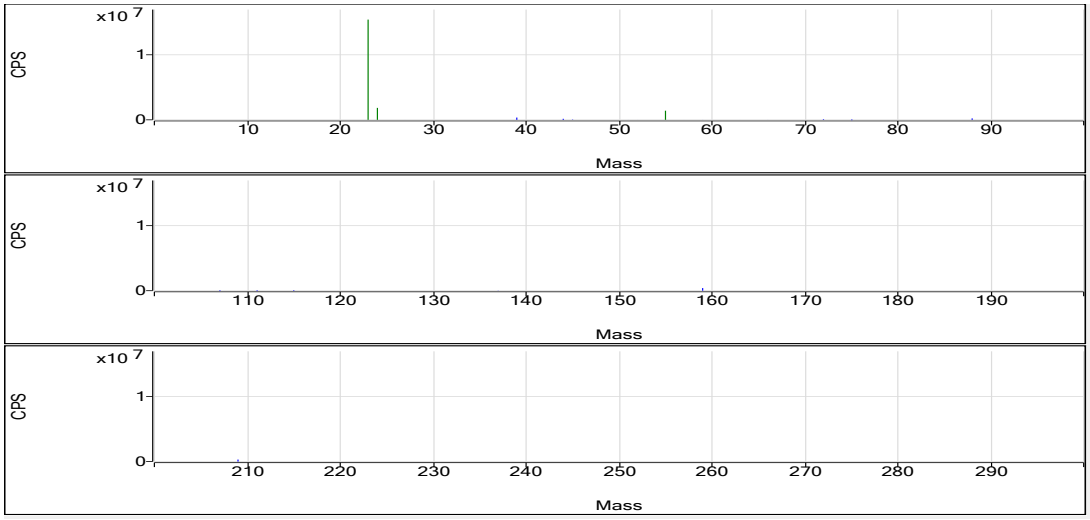


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.021	0	52.00	0.0008	4.685E-06
Be	9	1	No Gas	0.014	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	32.00	0.0008	4.685E-06
Se	78	2	H2	0.326	0.0001	24.00	0.0004	1.219E-05
Se	78	2	H2	0.274	0.0001	20.67	0.0004	1.219E-05
Se	78	2	H2	0.564	0.0002	41.33	0.0004	1.219E-05
Na	23	3	He	92462.419	331.0878	15692911.02	0.0036	0.3452
Na	23	3	He	91175.128	326.4831	15405798.52	0.0036	0.3452
Na	23	3	He	86132.938	308.4469	15220299.77	0.0036	0.3452
Mg	24	3	He	21591.612	38.7458	1836474.97	0.0018	0.003497
Mg	24	3	He	21421.553	38.4407	1813904.35	0.0018	0.003497
Mg	24	3	He	21126.419	37.9111	1870721.38	0.0018	0.003497
Al	27	3	He	7.195	0.0049	230.01	0.0006	0.0006432
Al	27	3	He	9.044	0.0059	280.01	0.0006	0.0006432
Al	27	3	He	5.829	0.0041	200.01	0.0006	0.0006432
K	39	3	He	5955.158	7.3288	347371.48	0.0012	0.3951
K	39	3	He	6056.871	7.4472	351414.02	0.0012	0.3951
K	39	3	He	5731.109	7.0679	348767.69	0.0012	0.3951
Ca	44	3	He	49117.123	3.3207	157393.26	0.0001	0.002715
Ca	44	3	He	49137.356	3.322	156757.39	0.0001	0.002715
Ca	44	3	He	46589.177	3.1499	155431.82	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.252	0.0304	1440.08	0.0219	0.02486
V	51	3	He	0.268	0.0307	1450.08	0.0219	0.02486
V	51	3	He	0.175	0.0287	1416.08	0.0219	0.02486
Cr	52	3	He	-0.229	0.0331	1570.14	0.0299	0.03997
Cr	52	3	He	-0.33	0.0301	1420.12	0.0299	0.03997
Cr	52	3	He	-0.178	0.0347	1710.16	0.0299	0.03997
Mn	55	3	He	2279.954	29.2633	1387022.17	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2343.845	30.0833	1419542.64	0.0128	0.002639
Mn	55	3	He	2224.425	28.5506	1408829.98	0.0128	0.002639
Fe	57	3	He	6.256	0.0051	240.01	0.0006	0.001429
Fe	57	3	He	5.931	0.0049	230.01	0.0006	0.001429
Fe	57	3	He	8.005	0.0061	300.01	0.0006	0.001429
Co	59	3	He	1.368	0.0791	3750.63	0.0563	0.002149
Co	59	3	He	1.299	0.0752	3550.55	0.0563	0.002149
Co	59	3	He	1.323	0.0766	3780.61	0.0563	0.002149
Ni	60	3	He	0.911	0.0107	940.06	0.0086	0.002834
Ni	60	3	He	0.984	0.0113	1010.07	0.0086	0.002834
Ni	60	3	He	1.103	0.0123	1070.08	0.0086	0.002834
Cu	63	3	He	0.049	0.006	530.03	0.0257	0.004757
Cu	63	3	He	0.15	0.0086	770.06	0.0257	0.004757
Cu	63	3	He	0.106	0.0075	650.04	0.0257	0.004757
Zn	66	3	He	8.266	0.0279	2460.32	0.0029	0.003818
Zn	66	3	He	8.813	0.0295	2640.34	0.0029	0.003818
Zn	66	3	He	8.521	0.0286	2490.30	0.0029	0.003818
As	75	3	He	0.093	0.001	88.00	0.002	0.0008061
As	75	3	He	0.184	0.0012	106.00	0.002	0.0008061
As	75	3	He	0.19	0.0012	104.00	0.002	0.0008061
Sr	88	3	He	276.984	2.4855	217205.02	0.009	0.0009645
Sr	88	3	He	278.968	2.5033	222079.90	0.009	0.0009645
Sr	88	3	He	277.263	2.488	219921.11	0.009	0.0009645
Mo	98	3	He	0.311	0.0071	620.04	0.0219	0.0002706
Mo	98	3	He	0.286	0.0065	580.03	0.0219	0.0002706
Mo	98	3	He	0.323	0.0074	650.03	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.034	0.0002	16.00	0.0053	0
Cd	111	3	He	0.046	0.0002	22.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Sn	120	3	He	-0.174	0.0137	1200.11	0.0158	0.01648
Sn	120	3	He	-0.265	0.0123	1090.08	0.0158	0.01648
Sn	120	3	He	-0.155	0.014	1240.12	0.0158	0.01648
Sb	121	3	He	0.136	0.0023	200.01	0.0149	0.0002698
Sb	121	3	He	0.141	0.0024	210.01	0.0149	0.0002698
Sb	121	3	He	0.088	0.0016	140.01	0.0149	0.0002698
Ba	137	3	He	58.038	0.2788	24362.30	0.0048	0.0002317
Ba	137	3	He	61.476	0.2953	26195.68	0.0048	0.0002317
Ba	137	3	He	59.952	0.288	25454.10	0.0048	0.0002317
Tl	205	3	He	0.05	0.0014	550.03	0.0247	0.0001339
Tl	205	3	He	0.052	0.0014	570.03	0.0247	0.0001339
Tl	205	3	He	0.055	0.0015	600.04	0.0247	0.0001339
Pb	208	3	He	0.022	0.0018	390.02	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	290.01	0.0327	0.00107
Pb	208	3	He	0.002	0.0012	170.01	0.0327	0.00107
U	238	3	He	0.027	0.0014	430.02	0.0493	7.55E-05
U	238	3	He	0.022	0.0011	350.02	0.0493	7.55E-05
U	238	3	He	0.037	0.0019	580.04	0.0493	7.55E-05
Sc	45	1	No Gas			2551496.21		
Sc	45	1	No Gas			2561079.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2522460.59		
Ge	72	1	No Gas			1240971.47		
Ge	72	1	No Gas			1253657.56		
Ge	72	1	No Gas			1231095.22		
Sc	45	2	H2			185046.52		
Sc	45	2	H2			186978.57		
Sc	45	2	H2			189945.17		
Ge	72	2	H2			162150.77		
Ge	72	2	H2			163625.85		
Ge	72	2	H2			167117.61		
In	115	2	H2			391907.53		
In	115	2	H2			390936.67		
In	115	2	H2			394329.64		
Sc	45	3	He			47398.04		
Sc	45	3	He			47187.13		
Sc	45	3	He			49344.96		
Ge	72	3	He			88231.12		
Ge	72	3	He			89570.06		
Ge	72	3	He			86993.75		
In	115	3	He			87394.62		
In	115	3	He			88722.24		
In	115	3	He			88401.60		
Tb	159	3	He			404736.13		
Tb	159	3	He			401852.38		
Tb	159	3	He			399959.88		
Bi	209	3	He			308761.77		
Bi	209	3	He			307404.27		
Bi	209	3	He			306850.19		

Quantitation Report

Data File Name	235SMPL.d
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Acq Time	8/10/2023 6:42:22 PM
Sample Name	410-137860-B-1-B PDS
Sample Type	Sample
Comment	A20 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

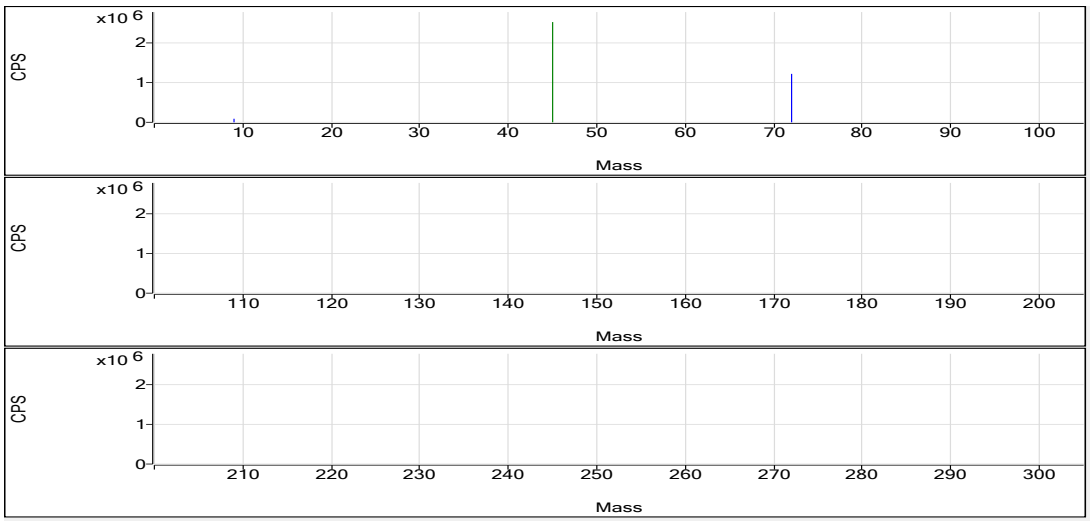
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.383	ppb	0.9	89508.21	0.0354	Pulse	0.5000	3
Se	78	72	H2	101.476	ppb	1.5	6911.23	0.0423	Pulse	1.5000	3
Na	23	45	He	88564.894	ppb	1.4	15757676.85	317.1461	Analog	0.1000	3
Mg	24	45	He	24840.961	ppb	2.2	2214665.02	44.5762	Analog	0.1000	3
Al	27	45	He	4721.045	ppb	2.3	137257.63	2.7626	Pulse	0.1000	3
K	39	45	He	10295.689	ppb	1.5	615247.88	12.3826	Pulse	0.1000	3
Ca	44	45	He	50393.232	ppb	1.3	169275.19	3.4069	Pulse	0.1000	3
Ti	47	45	He	483.450	ppb	3.3	12899.42	0.2597	Pulse	0.1000	3
V	51	45	He	490.667	ppb	1.5	534143.96	10.7504	Pulse	0.5000	3
Cr	52	45	He	457.361	ppb	1.2	682383.71	13.7337	Pulse	0.1000	3
Mn	55	45	He	2658.483	ppb	0.3	1695519.66	34.1213	Analog	0.1000	3
Fe	57	45	He	4761.856	ppb	1.0	137537.01	2.7680	Pulse	0.1000	3
Co	59	45	He	457.147	ppb	1.3	1278513.73	25.7314	Pulse	0.1000	3
Ni	60	72	He	480.541	ppb	2.2	358478.16	4.1274	Pulse	0.1000	3
Cu	63	72	He	458.691	ppb	1.7	1023165.66	11.7798	Pulse	0.1000	3
Zn	66	72	He	496.086	ppb	1.3	125801.34	1.4482	Pulse	0.1000	3
As	75	72	He	505.596	ppb	1.1	90052.90	1.0367	Pulse	0.5000	3
Sr	88	115	He	322.725	ppb	2.1	251055.58	2.8957	Pulse	0.1000	3
Mo	98	115	He	50.746	ppb	0.4	96507.31	1.1129	Pulse	0.1000	3
Ag	107	115	He	48.978	ppb	1.6	197460.70	2.2775	Pulse	0.1000	3
Cd	111	115	He	50.345	ppb	1.6	23339.53	0.2692	Pulse	0.5000	3
Sn	120	115	He	101.958	ppb	2.0	141086.21	1.6273	Pulse	0.1000	3
Sb	121	115	He	101.500	ppb	1.6	130736.24	1.5079	Pulse	0.1000	3
Ba	137	115	He	575.094	ppb	2.2	239323.61	2.7603	Pulse	0.1000	3
Tl	205	159	He	100.129	ppb	0.7	990476.42	2.4760	Pulse	0.1000	3
Pb	208	159	He	50.340	ppb	1.4	659502.41	1.6487	Pulse	0.1000	3
U	238	209	He	50.145	ppb	0.6	753044.89	2.4702	Pulse	0.1000	3

ISTD Table:

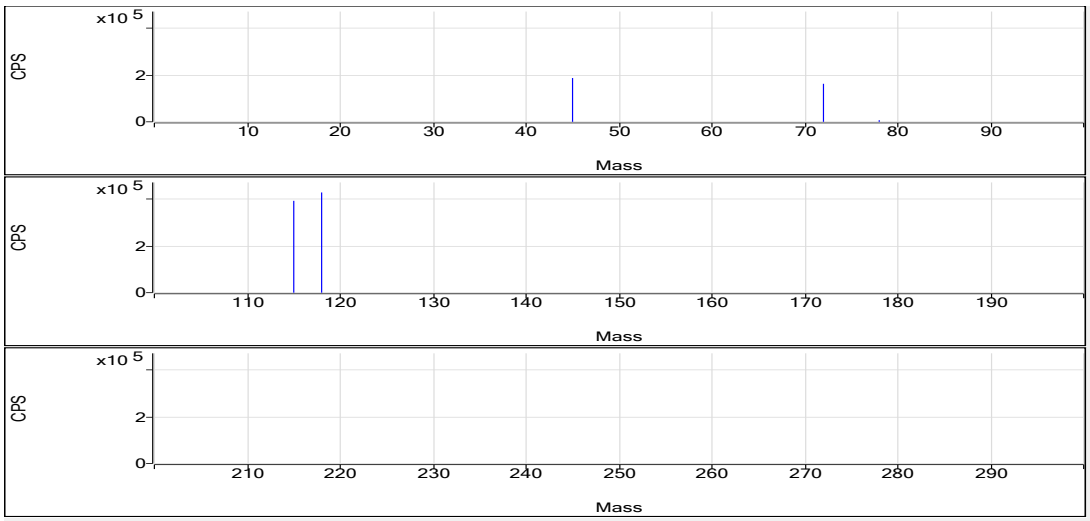
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2529558.50	0.9	105.5	Analog	0.1000	3
No Gas	Ge	72	1222093.55	1.2	106.0	Pulse	0.1000	3
H2	Sc	45	187942.02	0.4	100.5	Pulse	0.1000	3
H2	Ge	72	163254.20	0.1	99.7	Pulse	0.1000	3
H2	In	115	394368.99	0.3	101.4	Pulse	0.1000	3
He	Sc	45	49692.00	1.3	106.5	Pulse	0.1000	3
He	Ge	72	86876.65	2.0	107.0	Pulse	0.1000	3
He	In	115	86711.58	1.1	100.6	Pulse	0.1000	3
He	Tb	159	400046.26	0.7	100.4	Pulse	0.1000	3
He	Bi	209	304855.19	0.6	98.6	Pulse	0.1000	3

No Gas

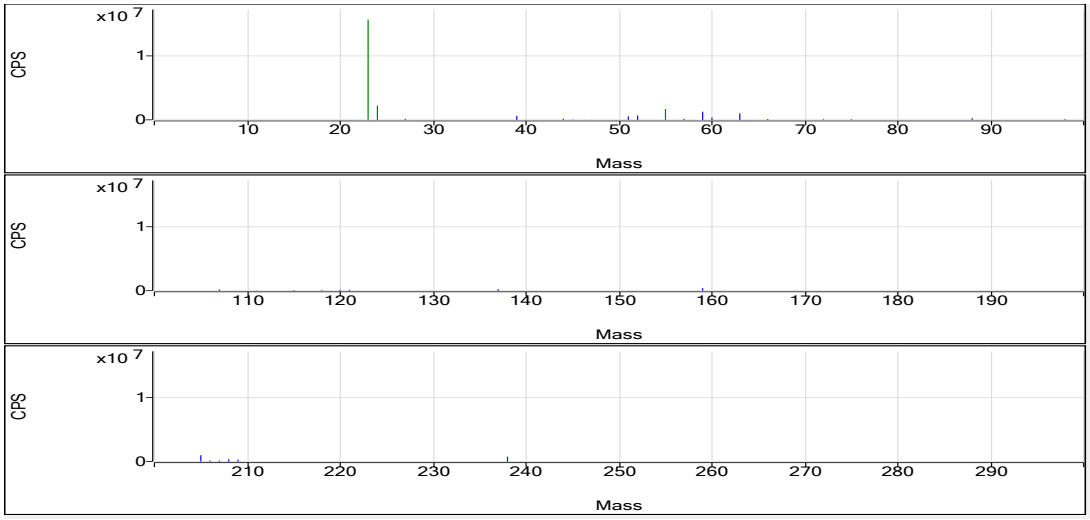


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.797	0.0357	90555.91	0.0008	4.685E-06
Be	9	1	No Gas	46.009	0.0351	89388.74	0.0008	4.685E-06
Be	9	1	No Gas	46.344	0.0354	88579.99	0.0008	4.685E-06
Se	78	2	H2	102.703	0.0428	6988.37	0.0004	1.219E-05
Se	78	2	H2	99.776	0.0416	6806.96	0.0004	1.219E-05
Se	78	2	H2	101.95	0.0425	6938.35	0.0004	1.219E-05
Na	23	3	He	87950.092	314.9469	15746141.02	0.0036	0.3452
Na	23	3	He	90024.428	322.3669	15780803.51	0.0036	0.3452
Na	23	3	He	87720.161	314.1245	15746086.02	0.0036	0.3452
Mg	24	3	He	24535.177	44.0275	2201206.53	0.0018	0.003497
Mg	24	3	He	25464.959	45.6958	2236944.34	0.0018	0.003497
Mg	24	3	He	24522.746	44.0052	2205844.19	0.0018	0.003497
Al	27	3	He	4616.92	2.7017	135074.77	0.0006	0.0006432
Al	27	3	He	4830.535	2.8267	138373.98	0.0006	0.0006432
Al	27	3	He	4715.679	2.7595	138324.15	0.0006	0.0006432
K	39	3	He	10161.186	12.226	611253.47	0.0012	0.3951
K	39	3	He	10461.665	12.5759	615625.15	0.0012	0.3951
K	39	3	He	10264.216	12.346	618865.03	0.0012	0.3951
Ca	44	3	He	50122.574	3.3886	169416.54	0.0001	0.002715
Ca	44	3	He	51148.609	3.4579	169274.35	0.0001	0.002715
Ca	44	3	He	49908.512	3.3741	169134.68	0.0001	0.002715
Ti	47	3	He	470.932	0.2529	12645.87	0.0005	7.003E-05
Ti	47	3	He	501.535	0.2694	13186.40	0.0005	7.003E-05
Ti	47	3	He	477.882	0.2567	12866.00	0.0005	7.003E-05
V	51	3	He	486.844	10.6669	533302.31	0.0219	0.02486
V	51	3	He	498.909	10.9306	535084.81	0.0219	0.02486
V	51	3	He	486.249	10.6539	534044.75	0.0219	0.02486
Cr	52	3	He	455.766	13.6859	684244.60	0.0299	0.03997
Cr	52	3	He	463.596	13.9204	681442.96	0.0299	0.03997
Cr	52	3	He	452.721	13.5948	681463.58	0.0299	0.03997
Mn	55	3	He	2661.333	34.1579	1707762.32	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2665.087	34.206	1674485.29	0.0128	0.002639
Mn	55	3	He	2649.028	33.9999	1704311.38	0.0128	0.002639
Fe	57	3	He	4748.947	2.7605	138015.60	0.0006	0.001429
Fe	57	3	He	4814.313	2.7985	136994.76	0.0006	0.001429
Fe	57	3	He	4722.308	2.745	137600.67	0.0006	0.001429
Co	59	3	He	451.801	25.4305	1271429.82	0.0563	0.002149
Co	59	3	He	463.743	26.1027	1277801.47	0.0563	0.002149
Co	59	3	He	455.897	25.6611	1286309.90	0.0563	0.002149
Ni	60	3	He	482.862	4.1473	355994.14	0.0086	0.002834
Ni	60	3	He	489.527	4.2045	361325.74	0.0086	0.002834
Ni	60	3	He	469.233	4.0303	358114.60	0.0086	0.002834
Cu	63	3	He	465.182	11.9465	1025454.67	0.0257	0.004757
Cu	63	3	He	461.109	11.8419	1017664.98	0.0257	0.004757
Cu	63	3	He	449.783	11.5512	1026377.33	0.0257	0.004757
Zn	66	3	He	494.564	1.4438	123931.89	0.0029	0.003818
Zn	66	3	He	503.295	1.4692	126261.12	0.0029	0.003818
Zn	66	3	He	490.399	1.4317	127211.02	0.0029	0.003818
As	75	3	He	508.698	1.0431	89533.76	0.002	0.0008061
As	75	3	He	508.744	1.0432	89646.27	0.002	0.0008061
As	75	3	He	499.347	1.0239	90978.66	0.002	0.0008061
Sr	88	3	He	315.261	2.8288	248329.76	0.009	0.0009645
Sr	88	3	He	324.755	2.914	252012.48	0.009	0.0009645
Sr	88	3	He	328.158	2.9445	252824.51	0.009	0.0009645
Mo	98	3	He	50.954	1.1175	98101.73	0.0219	0.0002706
Mo	98	3	He	50.638	1.1106	96047.72	0.0219	0.0002706
Mo	98	3	He	50.645	1.1107	95372.48	0.0219	0.0002706
Ag	107	3	He	48.152	2.2391	196558.90	0.0465	0.0006206
Ag	107	3	He	49.063	2.2814	197308.86	0.0465	0.0006206
Ag	107	3	He	49.72	2.312	198514.33	0.0465	0.0006206
Cd	111	3	He	49.707	0.2658	23331.49	0.0053	0
Cd	111	3	He	50.052	0.2676	23145.21	0.0053	0
Cd	111	3	He	51.278	0.2742	23541.88	0.0053	0
Sn	120	3	He	99.691	1.5915	139708.63	0.0158	0.01648
Sn	120	3	He	103.714	1.655	143133.56	0.0158	0.01648
Sn	120	3	He	102.468	1.6353	140416.45	0.0158	0.01648
Sb	121	3	He	99.694	1.4811	130017.30	0.0149	0.0002698
Sb	121	3	He	102.011	1.5155	131065.47	0.0149	0.0002698
Sb	121	3	He	102.796	1.5271	131125.94	0.0149	0.0002698
Ba	137	3	He	569.291	2.7324	239871.68	0.0048	0.0002317
Ba	137	3	He	566.406	2.7186	235117.48	0.0048	0.0002317
Ba	137	3	He	589.586	2.8299	242981.66	0.0048	0.0002317
Tl	205	3	He	100.367	2.4818	996717.09	0.0247	0.0001339
Tl	205	3	He	99.313	2.4558	986551.47	0.0247	0.0001339
Tl	205	3	He	100.707	2.4903	988160.69	0.0247	0.0001339
Pb	208	3	He	49.96	1.6363	349322.49	0.0327	0.00107
Pb	208	3	He	49.907	1.6345	351418.00	0.0327	0.00107
Pb	208	3	He	51.152	1.6753	353554.06	0.0327	0.00107
U	238	3	He	50.015	2.4638	755013.97	0.0493	7.55E-05
U	238	3	He	49.943	2.4603	751455.15	0.0493	7.55E-05
U	238	3	He	50.477	2.4866	752665.54	0.0493	7.55E-05
Sc	45	1	No Gas			2536544.02		
Sc	45	1	No Gas			2546724.02		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2505407.46		
Ge	72	1	No Gas			1226632.79		
Ge	72	1	No Gas			1234340.76		
Ge	72	1	No Gas			1205307.09		
Sc	45	2	H2			187434.45		
Sc	45	2	H2			187528.30		
Sc	45	2	H2			188863.30		
Ge	72	2	H2			163102.63		
Ge	72	2	H2			163528.02		
Ge	72	2	H2			163131.95		
In	115	2	H2			394069.84		
In	115	2	H2			395565.50		
In	115	2	H2			393471.63		
Sc	45	3	He			49996.17		
Sc	45	3	He			48952.92		
Sc	45	3	He			50126.90		
Ge	72	3	He			85837.47		
Ge	72	3	He			85937.57		
Ge	72	3	He			88854.90		
In	115	3	He			88531.82		
In	115	3	He			87233.54		
In	115	3	He			86608.66		
Tb	159	3	He			401604.21		
Tb	159	3	He			401724.88		
Tb	159	3	He			396809.68		
Bi	209	3	He			306439.12		
Bi	209	3	He			305434.16		
Bi	209	3	He			302692.28		

Quantitation Report

Data File Name	236SMPL.d
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Sample Type	Sample
Comment	A20 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

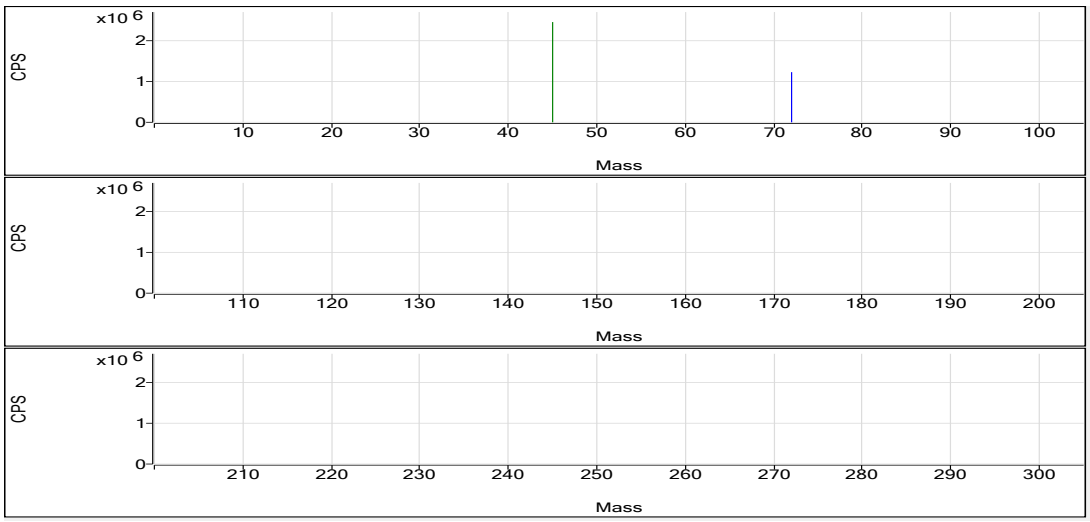
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.022	ppb	35.3	53.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.192	ppb	7.7	14.89	0.0001	Pulse	1.5000	3
Na	23	45	He	17975.703	ppb	2.0	3068740.06	64.6451	Analog	0.1000	3
Mg	24	45	He	4043.585	ppb	0.8	344610.46	7.2590	Pulse	0.1000	3
Al	27	45	He	3.347	ppb	65.1	123.34	0.0026	Pulse	0.1000	3
K	39	45	He	1180.913	ppb	1.4	84028.61	1.7700	Pulse	0.1000	3
Ca	44	45	He	9676.944	ppb	2.0	31160.51	0.6564	Pulse	0.1000	3
Ti	47	45	He	0.520	ppb	114.4	16.67	0.0003	Pulse	0.1000	3
V	51	45	He	0.295	ppb	12.9	1486.09	0.0313	Pulse	0.5000	3
Cr	52	45	He	0.046	ppb	182.5	1963.54	0.0413	Pulse	0.1000	3
Mn	55	45	He	433.952	ppb	2.2	264495.78	5.5719	Pulse	0.1000	3
Fe	57	45	He	4.073	ppb	31.8	180.01	0.0038	Pulse	0.1000	3
Co	59	45	He	0.335	ppb	11.9	996.74	0.0210	Pulse	0.1000	3
Ni	60	72	He	0.269	ppb	52.3	446.69	0.0051	Pulse	0.1000	3
Cu	63	72	He	0.160	ppb	34.0	770.05	0.0089	Pulse	0.1000	3
Zn	66	72	He	5.361	ppb	7.5	1690.16	0.0194	Pulse	0.1000	3
As	75	72	He	0.096	ppb	66.1	87.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	53.853	ppb	0.5	41889.43	0.4840	Pulse	0.1000	3
Mo	98	115	He	0.232	ppb	1.1	463.36	0.0054	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	195.1	66.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	24.4	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.043	ppb	N/A	1366.78	0.0158	Pulse	0.1000	3
Sb	121	115	He	0.158	ppb	20.2	226.68	0.0026	Pulse	0.1000	3
Ba	137	115	He	11.881	ppb	3.5	4954.43	0.0573	Pulse	0.1000	3
Tl	205	159	He	0.205	ppb	6.9	2076.90	0.0052	Pulse	0.1000	3
Pb	208	159	He	0.026	ppb	23.9	763.37	0.0019	Pulse	0.1000	3
U	238	209	He	0.146	ppb	3.5	2253.62	0.0073	Pulse	0.1000	3

ISTD Table:

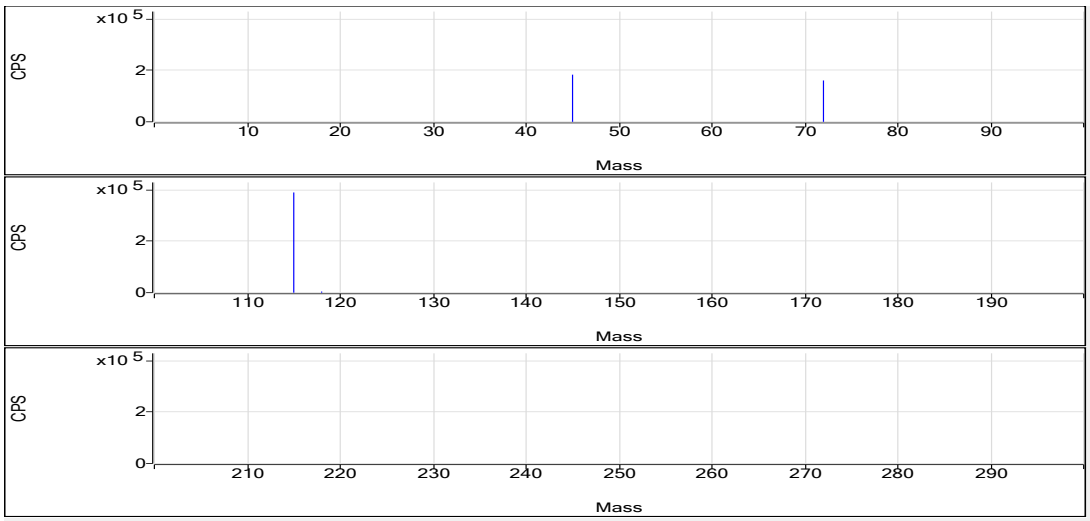
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2453837.52	1.1	102.3	Analog	0.1000	3
No Gas	Ge	72	1227376.00	0.3	106.4	Pulse	0.1000	3
H2	Sc	45	183599.04	1.0	98.2	Pulse	0.1000	3
H2	Ge	72	161014.90	0.3	98.4	Pulse	0.1000	3
H2	In	115	390288.88	0.9	100.3	Pulse	0.1000	3
He	Sc	45	47474.88	0.8	101.8	Pulse	0.1000	3
He	Ge	72	86994.30	0.8	107.1	Pulse	0.1000	3
He	In	115	86545.18	0.4	100.4	Pulse	0.1000	3
He	Tb	159	398416.21	0.6	100.0	Pulse	0.1000	3
He	Bi	209	309727.85	0.9	100.1	Pulse	0.1000	3

No Gas

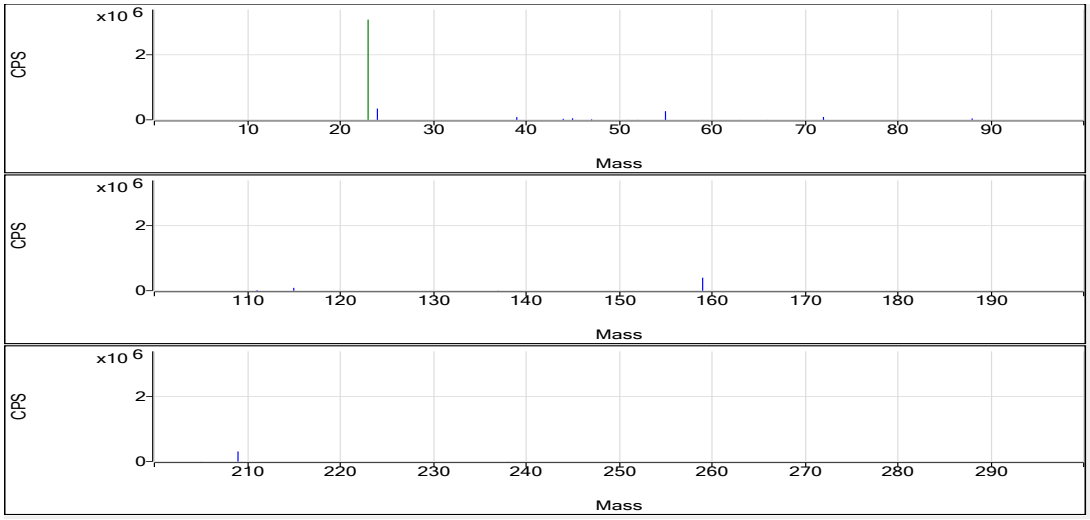


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.017	0	42.00	0.0008	4.685E-06
Be	9	1	No Gas	0.019	0	48.00	0.0008	4.685E-06
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Se	78	2	H2	0.209	0.0001	16.00	0.0004	1.219E-05
Se	78	2	H2	0.189	0.0001	14.67	0.0004	1.219E-05
Se	78	2	H2	0.18	0.0001	14.00	0.0004	1.219E-05
Na	23	3	He	18380.942	66.0947	3111545.58	0.0036	0.3452
Na	23	3	He	17796.092	64.0027	3061207.77	0.0036	0.3452
Na	23	3	He	17750.077	63.8381	3033466.83	0.0036	0.3452
Mg	24	3	He	4076.017	7.3172	344471.67	0.0018	0.003497
Mg	24	3	He	4039.805	7.2522	346868.67	0.0018	0.003497
Mg	24	3	He	4014.935	7.2076	342491.05	0.0018	0.003497
Al	27	3	He	3.621	0.0028	130.01	0.0006	0.0006432
Al	27	3	He	1.045	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	5.376	0.0038	180.01	0.0006	0.0006432
K	39	3	He	1198.718	1.7908	84304.04	0.0012	0.3951
K	39	3	He	1176.677	1.7651	84423.82	0.0012	0.3951
K	39	3	He	1167.342	1.7542	83357.98	0.0012	0.3951
Ca	44	3	He	9775.056	0.663	31213.93	0.0001	0.002715
Ca	44	3	He	9456.259	0.6415	30682.71	0.0001	0.002715
Ca	44	3	He	9799.516	0.6647	31584.89	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	1.038	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.653	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.312	0.0317	1492.09	0.0219	0.02486
V	51	3	He	0.32	0.0319	1524.09	0.0219	0.02486
V	51	3	He	0.251	0.0303	1442.08	0.0219	0.02486
Cr	52	3	He	-0.051	0.0385	1810.18	0.0299	0.03997
Cr	52	3	He	0.097	0.0429	2050.22	0.0299	0.03997
Cr	52	3	He	0.092	0.0427	2030.22	0.0299	0.03997
Mn	55	3	He	443.341	5.6924	267982.89	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	424.425	5.4497	260653.92	0.0128	0.002639
Mn	55	3	He	434.088	5.5737	264850.52	0.0128	0.002639
Fe	57	3	He	4.853	0.0042	200.01	0.0006	0.001429
Fe	57	3	He	2.579	0.0029	140.01	0.0006	0.001429
Fe	57	3	He	4.786	0.0042	200.01	0.0006	0.001429
Co	59	3	He	0.317	0.02	940.06	0.0563	0.002149
Co	59	3	He	0.307	0.0194	930.06	0.0563	0.002149
Co	59	3	He	0.381	0.0236	1120.09	0.0563	0.002149
Ni	60	3	He	0.368	0.006	520.03	0.0086	0.002834
Ni	60	3	He	0.108	0.0038	330.02	0.0086	0.002834
Ni	60	3	He	0.33	0.0057	490.03	0.0086	0.002834
Cu	63	3	He	0.219	0.0104	900.06	0.0257	0.004757
Cu	63	3	He	0.112	0.0076	670.04	0.0257	0.004757
Cu	63	3	He	0.148	0.0086	740.05	0.0257	0.004757
Zn	66	3	He	4.906	0.0181	1570.14	0.0029	0.003818
Zn	66	3	He	5.656	0.0203	1780.17	0.0029	0.003818
Zn	66	3	He	5.52	0.0199	1720.17	0.0029	0.003818
As	75	3	He	0.023	0.0009	74.00	0.002	0.0008061
As	75	3	He	0.129	0.0011	94.00	0.002	0.0008061
As	75	3	He	0.137	0.0011	94.00	0.002	0.0008061
Sr	88	3	He	53.684	0.4825	41581.88	0.009	0.0009645
Sr	88	3	He	54.148	0.4867	42253.89	0.009	0.0009645
Sr	88	3	He	53.726	0.4829	41832.53	0.009	0.0009645
Mo	98	3	He	0.231	0.0053	460.02	0.0219	0.0002706
Mo	98	3	He	0.235	0.0054	470.03	0.0219	0.0002706
Mo	98	3	He	0.23	0.0053	460.02	0.0219	0.0002706
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	-0.022	0.0161	1390.12	0.0158	0.01648
Sn	120	3	He	-0.066	0.0154	1340.11	0.0158	0.01648
Sn	120	3	He	-0.042	0.0158	1370.12	0.0158	0.01648
Sb	121	3	He	0.122	0.0021	180.01	0.0149	0.0002698
Sb	121	3	He	0.168	0.0028	240.01	0.0149	0.0002698
Sb	121	3	He	0.184	0.003	260.01	0.0149	0.0002698
Ba	137	3	He	12.116	0.0584	5031.12	0.0048	0.0002317
Ba	137	3	He	11.401	0.055	4771.00	0.0048	0.0002317
Ba	137	3	He	12.125	0.0584	5061.16	0.0048	0.0002317
Tl	205	3	He	0.193	0.0049	1950.23	0.0247	0.0001339
Tl	205	3	He	0.202	0.0051	2060.23	0.0247	0.0001339
Tl	205	3	He	0.221	0.0056	2220.25	0.0247	0.0001339
Pb	208	3	He	0.021	0.0018	400.02	0.0327	0.00107
Pb	208	3	He	0.033	0.0021	570.03	0.0327	0.00107
Pb	208	3	He	0.023	0.0018	330.02	0.0327	0.00107
U	238	3	He	0.141	0.007	2170.29	0.0493	7.55E-05
U	238	3	He	0.147	0.0073	2290.29	0.0493	7.55E-05
U	238	3	He	0.151	0.0075	2300.29	0.0493	7.55E-05
Sc	45	1	No Gas			2429647.62		
Sc	45	1	No Gas			2481844.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2450020.59		
Ge	72	1	No Gas			1223098.58		
Ge	72	1	No Gas			1229536.31		
Ge	72	1	No Gas			1229493.11		
Sc	45	2	H2			183930.31		
Sc	45	2	H2			185316.89		
Sc	45	2	H2			181549.92		
Ge	72	2	H2			161089.36		
Ge	72	2	H2			161462.31		
Ge	72	2	H2			160493.04		
In	115	2	H2			394408.20		
In	115	2	H2			389020.19		
In	115	2	H2			387438.24		
Sc	45	3	He			47077.09		
Sc	45	3	He			47829.39		
Sc	45	3	He			47518.16		
Ge	72	3	He			86743.38		
Ge	72	3	He			87758.34		
Ge	72	3	He			86481.17		
In	115	3	He			86187.53		
In	115	3	He			86830.98		
In	115	3	He			86639.35		
Tb	159	3	He			397170.66		
Tb	159	3	He			401146.56		
Tb	159	3	He			396931.40		
Bi	209	3	He			309859.84		
Bi	209	3	He			312333.47		
Bi	209	3	He			306990.23		

Quantitation Report

Data File Name	237SMPL.d
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Sample Name	410-137860-B-1-C DU
Sample Type	Sample
Comment	A20 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

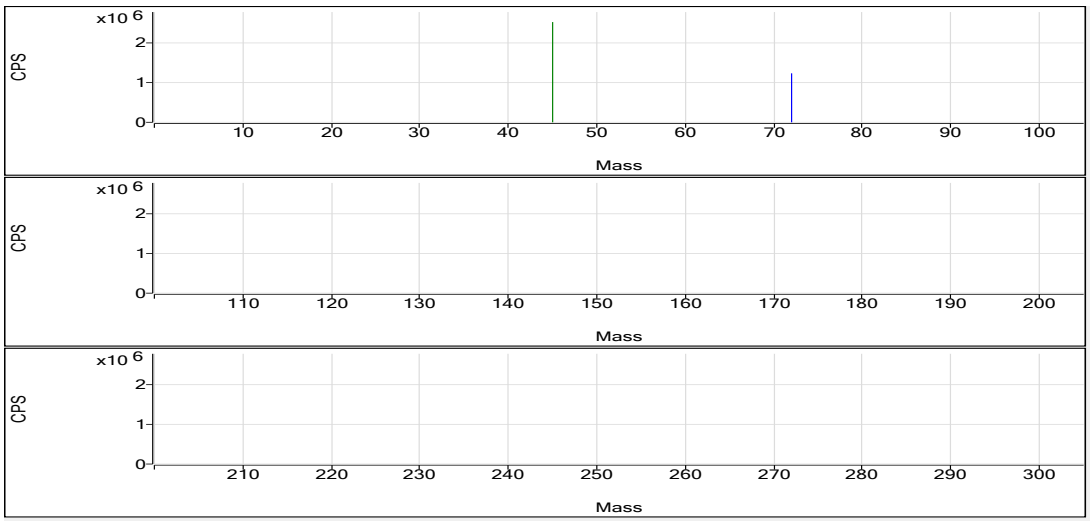
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.013	ppb	43.2	36.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.329	ppb	8.4	24.89	0.0001	Pulse	1.5000	3
Na	23	45	He	88960.679	ppb	1.6	15314631.44	318.5619	Analog	0.1000	3
Mg	24	45	He	21341.296	ppb	1.0	1841430.80	38.2967	Analog	0.1000	3
Al	27	45	He	6.117	ppb	26.2	203.34	0.0042	Pulse	0.1000	3
K	39	45	He	5885.593	ppb	0.7	348493.08	7.2478	Pulse	0.1000	3
Ca	44	45	He	48657.767	ppb	0.1	158165.87	3.2896	Pulse	0.1000	3
Ti	47	45	He	0.129	ppb	174.0	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.270	ppb	25.8	1480.09	0.0308	Pulse	0.5000	3
Cr	52	45	He	-0.199	ppb	N/A	1636.82	0.0340	Pulse	0.1000	3
Mn	55	45	He	2254.851	ppb	0.8	1391469.98	28.9411	Analog	0.1000	3
Fe	57	45	He	5.876	ppb	39.0	233.34	0.0048	Pulse	0.1000	3
Co	59	45	He	1.226	ppb	7.2	3420.52	0.0711	Pulse	0.1000	3
Ni	60	72	He	1.113	ppb	9.3	1083.41	0.0124	Pulse	0.1000	3
Cu	63	72	He	0.164	ppb	12.8	783.39	0.0090	Pulse	0.1000	3
Zn	66	72	He	9.182	ppb	14.0	2670.35	0.0306	Pulse	0.1000	3
As	75	72	He	0.139	ppb	82.4	95.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	277.287	ppb	3.4	217640.23	2.4882	Pulse	0.1000	3
Mo	98	115	He	0.287	ppb	8.9	573.37	0.0066	Pulse	0.1000	3
Ag	107	115	He	-0.007	ppb	N/A	26.67	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.044	ppb	16.9	20.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.169	ppb	N/A	1206.76	0.0138	Pulse	0.1000	3
Sb	121	115	He	0.095	ppb	35.7	146.67	0.0017	Pulse	0.1000	3
Ba	137	115	He	61.927	ppb	3.9	26012.13	0.2974	Pulse	0.1000	3
Tl	205	159	He	0.070	ppb	2.8	746.72	0.0019	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	104.1	550.02	0.0014	Pulse	0.1000	3
U	238	209	He	0.032	ppb	9.7	513.36	0.0017	Pulse	0.1000	3

ISTD Table:

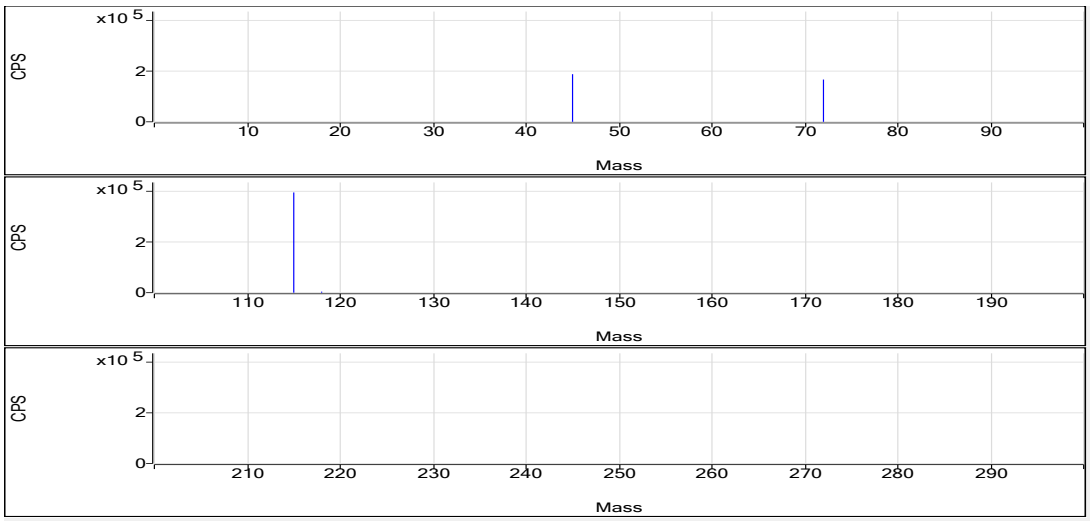
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2511251.78	0.4	104.7	Analog	0.1000	3
No Gas	Ge	72	1227074.43	0.2	106.4	Pulse	0.1000	3
H2	Sc	45	187683.66	0.2	100.4	Pulse	0.1000	3
H2	Ge	72	166528.33	1.3	101.7	Pulse	0.1000	3
H2	In	115	394908.50	0.5	101.5	Pulse	0.1000	3
He	Sc	45	48080.23	1.2	103.1	Pulse	0.1000	3
He	Ge	72	87454.37	1.1	107.7	Pulse	0.1000	3
He	In	115	87506.78	2.4	101.5	Pulse	0.1000	3
He	Tb	159	401176.88	0.7	100.6	Pulse	0.1000	3
He	Bi	209	306088.04	0.8	99.0	Pulse	0.1000	3

No Gas

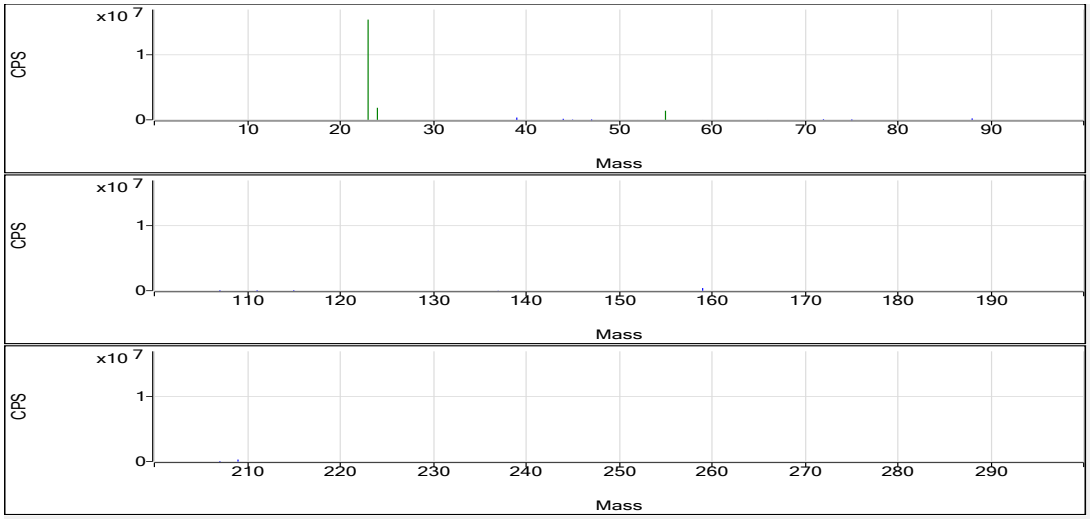


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.017	0	44.00	0.0008	4.685E-06
Se	78	2	H2	0.361	0.0002	27.33	0.0004	1.219E-05
Se	78	2	H2	0.314	0.0001	24.00	0.0004	1.219E-05
Se	78	2	H2	0.312	0.0001	23.33	0.0004	1.219E-05
Na	23	3	He	90584.656	324.3709	15397309.77	0.0036	0.3452
Na	23	3	He	88357.798	316.4053	15235014.77	0.0036	0.3452
Na	23	3	He	87939.582	314.9094	15311569.77	0.0036	0.3452
Mg	24	3	He	21213.974	38.0682	1807029.50	0.0018	0.003497
Mg	24	3	He	21230.632	38.0981	1834434.66	0.0018	0.003497
Mg	24	3	He	21579.28	38.7237	1882828.25	0.0018	0.003497
Al	27	3	He	4.302	0.0032	150.01	0.0006	0.0006432
Al	27	3	He	6.711	0.0046	220.01	0.0006	0.0006432
Al	27	3	He	7.338	0.0049	240.01	0.0006	0.0006432
K	39	3	He	5837.713	7.1921	341394.84	0.0012	0.3951
K	39	3	He	5913.762	7.2806	350563.94	0.0012	0.3951
K	39	3	He	5905.305	7.2708	353520.46	0.0012	0.3951
Ca	44	3	He	48694.639	3.2921	156271.58	0.0001	0.002715
Ca	44	3	He	48638.731	3.2884	158335.26	0.0001	0.002715
Ca	44	3	He	48639.931	3.2884	159890.78	0.0001	0.002715
Ti	47	3	He	0.262	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.256	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.218	0.0296	1406.08	0.0219	0.02486
V	51	3	He	0.244	0.0302	1454.08	0.0219	0.02486
V	51	3	He	0.349	0.0325	1580.10	0.0219	0.02486
Cr	52	3	He	-0.195	0.0341	1620.15	0.0299	0.03997
Cr	52	3	He	-0.392	0.0282	1360.11	0.0299	0.03997
Cr	52	3	He	-0.009	0.0397	1930.19	0.0299	0.03997
Mn	55	3	He	2268.15	29.1118	1381885.14	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2234.881	28.6848	1381183.42	0.0128	0.002639
Mn	55	3	He	2261.521	29.0267	1411341.39	0.0128	0.002639
Fe	57	3	He	3.343	0.0034	160.01	0.0006	0.001429
Fe	57	3	He	6.478	0.0052	250.01	0.0006	0.001429
Fe	57	3	He	7.807	0.006	290.01	0.0006	0.001429
Co	59	3	He	1.186	0.0689	3270.49	0.0563	0.002149
Co	59	3	He	1.327	0.0769	3700.60	0.0563	0.002149
Co	59	3	He	1.164	0.0677	3290.47	0.0563	0.002149
Ni	60	3	He	1.095	0.0122	1060.08	0.0086	0.002834
Ni	60	3	He	1.223	0.0133	1180.08	0.0086	0.002834
Ni	60	3	He	1.019	0.0116	1010.07	0.0086	0.002834
Cu	63	3	He	0.188	0.0096	830.05	0.0257	0.004757
Cu	63	3	He	0.149	0.0086	760.05	0.0257	0.004757
Cu	63	3	He	0.154	0.0087	760.06	0.0257	0.004757
Zn	66	3	He	10.662	0.0349	3020.43	0.0029	0.003818
Zn	66	3	He	8.509	0.0286	2530.30	0.0029	0.003818
Zn	66	3	He	8.376	0.0282	2460.32	0.0029	0.003818
As	75	3	He	0.226	0.0013	110.00	0.002	0.0008061
As	75	3	He	0.18	0.0012	104.00	0.002	0.0008061
As	75	3	He	0.009	0.0008	72.00	0.002	0.0008061
Sr	88	3	He	278.635	2.5003	214546.70	0.009	0.0009645
Sr	88	3	He	267.237	2.398	215379.51	0.009	0.0009645
Sr	88	3	He	285.989	2.5662	222994.47	0.009	0.0009645
Mo	98	3	He	0.285	0.0065	560.03	0.0219	0.0002706
Mo	98	3	He	0.262	0.006	540.03	0.0219	0.0002706
Mo	98	3	He	0.313	0.0071	620.04	0.0219	0.0002706
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.052	0.0003	24.00	0.0053	0
Cd	111	3	He	0.037	0.0002	18.00	0.0053	0
Cd	111	3	He	0.043	0.0002	20.00	0.0053	0
Sn	120	3	He	-0.076	0.0153	1310.12	0.0158	0.01648
Sn	120	3	He	-0.19	0.0135	1210.09	0.0158	0.01648
Sn	120	3	He	-0.242	0.0127	1100.08	0.0158	0.01648
Sb	121	3	He	0.107	0.0019	160.01	0.0149	0.0002698
Sb	121	3	He	0.057	0.0011	100.00	0.0149	0.0002698
Sb	121	3	He	0.121	0.0021	180.01	0.0149	0.0002698
Ba	137	3	He	63.463	0.3048	26155.74	0.0048	0.0002317
Ba	137	3	He	59.12	0.284	25504.48	0.0048	0.0002317
Ba	137	3	He	63.198	0.3035	26376.16	0.0048	0.0002317
Tl	205	3	He	0.068	0.0018	720.05	0.0247	0.0001339
Tl	205	3	He	0.07	0.0019	750.04	0.0247	0.0001339
Tl	205	3	He	0.072	0.0019	770.06	0.0247	0.0001339
Pb	208	3	He	0.016	0.0016	420.02	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	330.01	0.0327	0.00107
Pb	208	3	He	-0.002	0.001	210.01	0.0327	0.00107
U	238	3	He	0.032	0.0016	500.02	0.0493	7.55E-05
U	238	3	He	0.03	0.0015	470.02	0.0493	7.55E-05
U	238	3	He	0.036	0.0018	570.04	0.0493	7.55E-05
Sc	45	1	No Gas			2498612.15		
Sc	45	1	No Gas			2519140.74		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2516002.46		
Ge	72	1	No Gas			1224109.12		
Ge	72	1	No Gas			1229061.23		
Ge	72	1	No Gas			1228052.95		
Sc	45	2	H2			187261.91		
Sc	45	2	H2			188102.26		
Sc	45	2	H2			187686.81		
Ge	72	2	H2			167947.32		
Ge	72	2	H2			167514.51		
Ge	72	2	H2			164123.16		
In	115	2	H2			396859.64		
In	115	2	H2			393357.77		
In	115	2	H2			394508.08		
Sc	45	3	He			47468.22		
Sc	45	3	He			48150.31		
Sc	45	3	He			48622.15		
Ge	72	3	He			86643.12		
Ge	72	3	He			88493.67		
Ge	72	3	He			87226.32		
In	115	3	He			85814.32		
In	115	3	He			89819.71		
In	115	3	He			86901.61		
Tb	159	3	He			397991.09		
Tb	159	3	He			401634.37		
Tb	159	3	He			403905.19		
Bi	209	3	He			306505.99		
Bi	209	3	He			303513.32		
Bi	209	3	He			308244.82		

Quantitation Report

Data File Name	238SMPL.d
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Acq Time	8/10/2023 6:48:31 PM
Sample Name	410-137860-B-1-D MS
Sample Type	Sample
Comment	A20 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

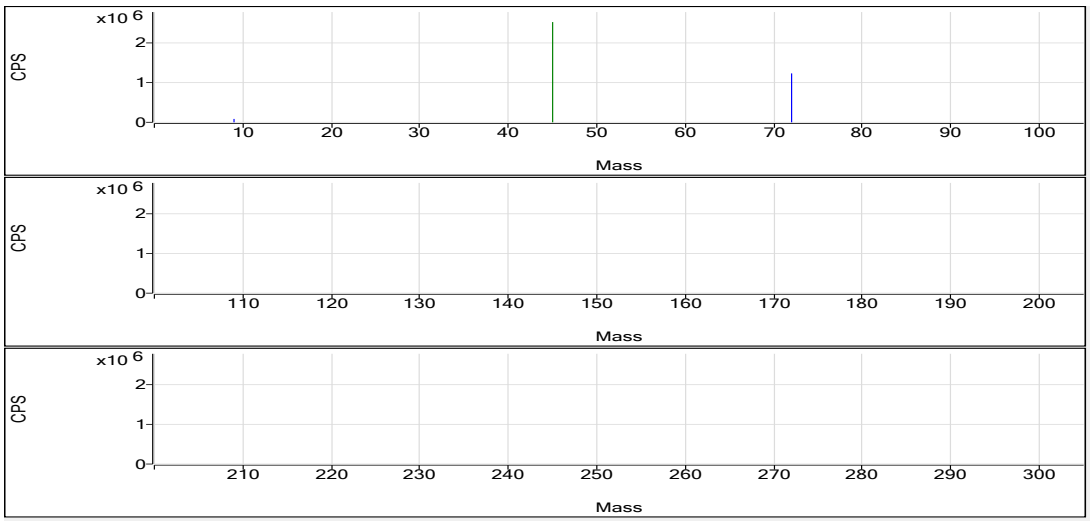
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	44.100	ppb	1.8	85230.72	0.0336	Pulse	0.5000	3
Se	78	72	H2	96.447	ppb	1.5	6692.01	0.0402	Pulse	1.5000	3
Na	23	45	He	92379.037	ppb	0.8	15979902.68	330.7895	Analog	0.1000	3
Mg	24	45	He	25514.047	ppb	1.4	2211763.61	45.7839	Analog	0.1000	3
Al	27	45	He	4688.607	ppb	1.2	132553.55	2.7436	Pulse	0.1000	3
K	39	45	He	10556.378	ppb	0.6	612861.97	12.6861	Pulse	0.1000	3
Ca	44	45	He	52401.403	ppb	0.7	171139.97	3.5425	Pulse	0.1000	3
Ti	47	45	He	484.557	ppb	0.6	12572.49	0.2603	Pulse	0.1000	3
V	51	45	He	491.584	ppb	0.8	520299.09	10.7705	Pulse	0.5000	3
Cr	52	45	He	459.269	ppb	1.3	666188.79	13.7908	Pulse	0.1000	3
Mn	55	45	He	2737.989	ppb	1.1	1697580.29	35.1417	Analog	0.1000	3
Fe	57	45	He	4719.997	ppb	1.0	132540.56	2.7437	Pulse	0.1000	3
Co	59	45	He	457.194	ppb	1.4	1243105.45	25.7341	Pulse	0.1000	3
Ni	60	72	He	458.890	ppb	1.8	348651.54	3.9416	Pulse	0.1000	3
Cu	63	72	He	439.658	ppb	1.4	998811.47	11.2913	Pulse	0.1000	3
Zn	66	72	He	470.843	ppb	1.2	121609.48	1.3747	Pulse	0.1000	3
As	75	72	He	485.517	ppb	1.2	88068.11	0.9956	Pulse	0.5000	3
Sr	88	115	He	329.396	ppb	1.5	257581.45	2.9556	Pulse	0.1000	3
Mo	98	115	He	48.052	ppb	3.0	91839.78	1.0539	Pulse	0.1000	3
Ag	107	115	He	46.969	ppb	1.1	190349.34	2.1841	Pulse	0.1000	3
Cd	111	115	He	48.945	ppb	1.4	22809.29	0.2617	Pulse	0.5000	3
Sn	120	115	He	98.317	ppb	1.5	136804.18	1.5697	Pulse	0.1000	3
Sb	121	115	He	99.042	ppb	0.7	128242.85	1.4714	Pulse	0.1000	3
Ba	137	115	He	562.622	ppb	0.8	235358.52	2.7004	Pulse	0.1000	3
Tl	205	159	He	96.969	ppb	0.3	961502.48	2.3978	Pulse	0.1000	3
Pb	208	159	He	48.255	ppb	0.4	633734.37	1.5804	Pulse	0.1000	3
U	238	209	He	48.221	ppb	0.3	729581.60	2.3755	Pulse	0.1000	3

ISTD Table:

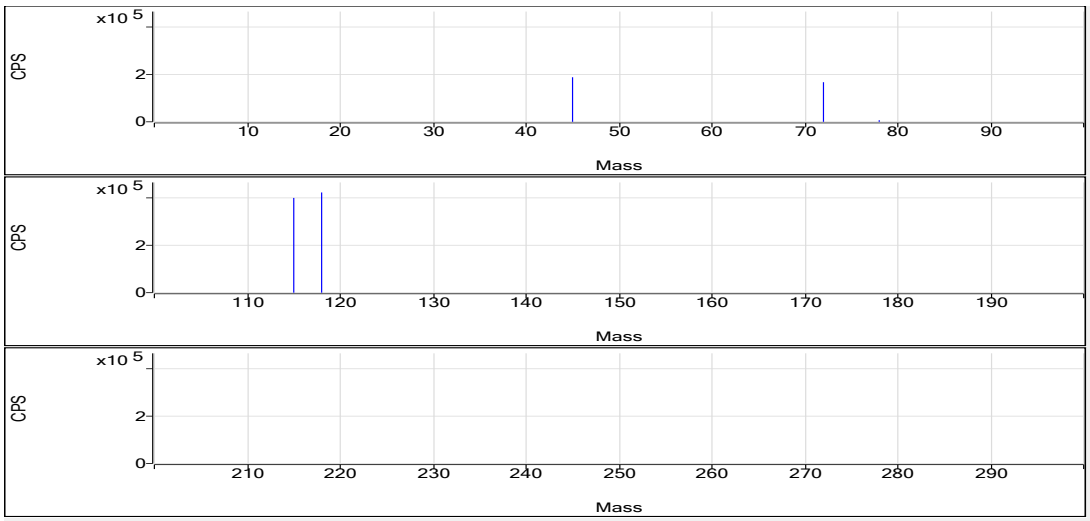
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2533747.20	1.5	105.6	Analog	0.1000	3
No Gas	Ge	72	1236229.49	0.4	107.2	Pulse	0.1000	3
H2	Sc	45	187114.95	0.3	100.1	Pulse	0.1000	3
H2	Ge	72	166315.68	0.2	101.6	Pulse	0.1000	3
H2	In	115	397850.07	1.1	102.3	Pulse	0.1000	3
He	Sc	45	48310.93	1.2	103.6	Pulse	0.1000	3
He	Ge	72	88470.47	1.5	109.0	Pulse	0.1000	3
He	In	115	87158.49	0.9	101.1	Pulse	0.1000	3
He	Tb	159	400989.11	0.3	100.6	Pulse	0.1000	3
He	Bi	209	307132.47	0.7	99.3	Pulse	0.1000	3

No Gas

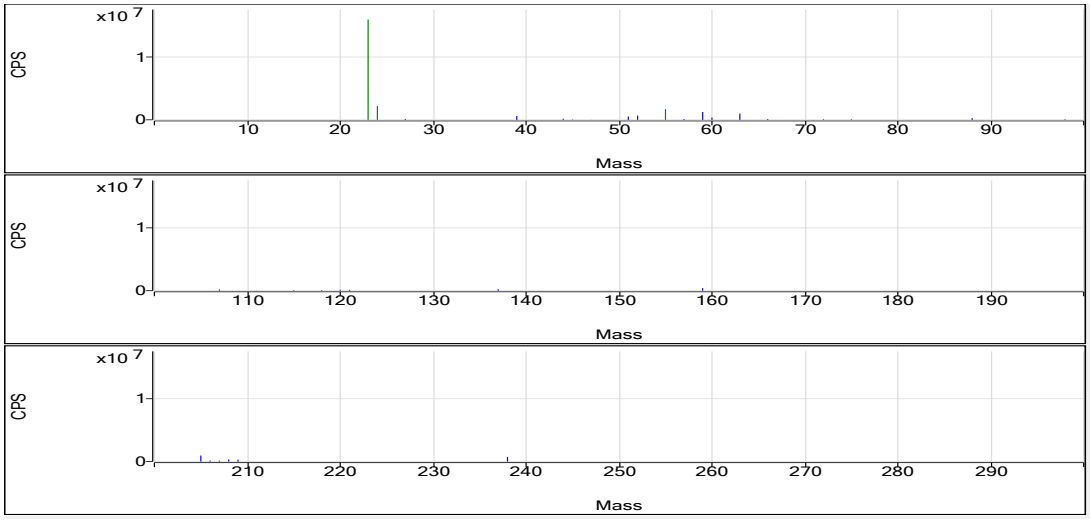


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	44.043	0.0336	84725.97	0.0008	4.685E-06
Be	9	1	No Gas	43.357	0.0331	85236.58	0.0008	4.685E-06
Be	9	1	No Gas	44.902	0.0343	85729.60	0.0008	4.685E-06
Se	78	2	H2	95.506	0.0398	6618.87	0.0004	1.219E-05
Se	78	2	H2	95.738	0.0399	6657.55	0.0004	1.219E-05
Se	78	2	H2	98.097	0.0409	6799.63	0.0004	1.219E-05
Na	23	3	He	91964.672	329.3073	16114059.76	0.0036	0.3452
Na	23	3	He	93255.619	333.9251	15947901.01	0.0036	0.3452
Na	23	3	He	91916.82	329.1361	15877747.26	0.0036	0.3452
Mg	24	3	He	25208.205	45.2351	2213499.81	0.0018	0.003497
Mg	24	3	He	25420.41	45.6159	2178565.91	0.0018	0.003497
Mg	24	3	He	25913.525	46.5007	2243225.12	0.0018	0.003497
Al	27	3	He	4738.784	2.773	135691.61	0.0006	0.0006432
Al	27	3	He	4700.445	2.7506	131364.11	0.0006	0.0006432
Al	27	3	He	4626.593	2.7074	130604.93	0.0006	0.0006432
K	39	3	He	10542.689	12.6702	619993.43	0.0012	0.3951
K	39	3	He	10628.647	12.7703	609894.91	0.0012	0.3951
K	39	3	He	10497.799	12.6179	608697.57	0.0012	0.3951
Ca	44	3	He	52461.261	3.5466	173545.17	0.0001	0.002715
Ca	44	3	He	52757.457	3.5666	170336.09	0.0001	0.002715
Ca	44	3	He	51985.492	3.5144	169538.65	0.0001	0.002715
Ti	47	3	He	481.166	0.2584	12645.88	0.0005	7.003E-05
Ti	47	3	He	485.974	0.261	12465.71	0.0005	7.003E-05
Ti	47	3	He	486.53	0.2613	12605.87	0.0005	7.003E-05
V	51	3	He	488.23	10.6972	523447.03	0.0219	0.02486
V	51	3	He	496.17	10.8707	519174.66	0.0219	0.02486
V	51	3	He	490.351	10.7435	518275.59	0.0219	0.02486
Cr	52	3	He	455.36	13.6738	669102.10	0.0299	0.03997
Cr	52	3	He	465.911	13.9897	668131.94	0.0299	0.03997
Cr	52	3	He	456.537	13.709	661332.33	0.0299	0.03997
Mn	55	3	He	2707.488	34.7502	1700438.72	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2764.829	35.4861	1694778.57	0.0128	0.002639
Mn	55	3	He	2741.65	35.1886	1697523.57	0.0128	0.002639
Fe	57	3	He	4663.595	2.7109	132654.71	0.0006	0.001429
Fe	57	3	He	4749.62	2.7609	131858.29	0.0006	0.001429
Fe	57	3	He	4746.777	2.7593	133108.67	0.0006	0.001429
Co	59	3	He	451.902	25.4363	1244677.48	0.0563	0.002149
Co	59	3	He	464.069	26.121	1247512.17	0.0563	0.002149
Co	59	3	He	455.609	25.6449	1237126.70	0.0563	0.002149
Ni	60	3	He	449.606	3.8619	346918.16	0.0086	0.002834
Ni	60	3	He	461.927	3.9676	350552.30	0.0086	0.002834
Ni	60	3	He	465.137	3.9952	348484.17	0.0086	0.002834
Cu	63	3	He	432.911	11.1181	998754.99	0.0257	0.004757
Cu	63	3	He	441.689	11.3434	1002225.06	0.0257	0.004757
Cu	63	3	He	444.374	11.4123	995454.36	0.0257	0.004757
Zn	66	3	He	464.842	1.3573	121925.16	0.0029	0.003818
Zn	66	3	He	472.29	1.3789	121834.28	0.0029	0.003818
Zn	66	3	He	475.396	1.388	121068.99	0.0029	0.003818
As	75	3	He	480.474	0.9852	88505.38	0.002	0.0008061
As	75	3	He	483.919	0.9923	87672.23	0.002	0.0008061
As	75	3	He	492.16	1.0092	88026.73	0.002	0.0008061
Sr	88	3	He	324.232	2.9093	255912.75	0.009	0.0009645
Sr	88	3	He	330.265	2.9634	258344.06	0.009	0.0009645
Sr	88	3	He	333.691	2.9941	258487.54	0.009	0.0009645
Mo	98	3	He	47.16	1.0343	90984.11	0.0219	0.0002706
Mo	98	3	He	47.27	1.0367	90381.01	0.0219	0.0002706
Mo	98	3	He	49.727	1.0906	94154.23	0.0219	0.0002706
Ag	107	3	He	46.606	2.1672	190637.48	0.0465	0.0006206
Ag	107	3	He	46.758	2.1743	189551.56	0.0465	0.0006206
Ag	107	3	He	47.543	2.2108	190858.98	0.0465	0.0006206
Cd	111	3	He	48.405	0.2588	22766.55	0.0053	0
Cd	111	3	He	49.726	0.2659	23179.23	0.0053	0
Cd	111	3	He	48.704	0.2604	22482.10	0.0053	0
Sn	120	3	He	96.994	1.5489	136244.89	0.0158	0.01648
Sn	120	3	He	97.996	1.5647	136407.70	0.0158	0.01648
Sn	120	3	He	99.959	1.5957	137759.96	0.0158	0.01648
Sb	121	3	He	98.61	1.465	128864.98	0.0149	0.0002698
Sb	121	3	He	99.842	1.4833	129309.52	0.0149	0.0002698
Sb	121	3	He	98.673	1.4659	126554.06	0.0149	0.0002698
Ba	137	3	He	557.843	2.6775	235526.09	0.0048	0.0002317
Ba	137	3	He	565.977	2.7165	236824.92	0.0048	0.0002317
Ba	137	3	He	564.046	2.7073	233724.55	0.0048	0.0002317
Tl	205	3	He	97.238	2.4045	967566.47	0.0247	0.0001339
Tl	205	3	He	96.908	2.3963	959979.67	0.0247	0.0001339
Tl	205	3	He	96.76	2.3926	956961.31	0.0247	0.0001339
Pb	208	3	He	48.103	1.5755	334710.00	0.0327	0.00107
Pb	208	3	He	48.491	1.5882	338131.99	0.0327	0.00107
Pb	208	3	He	48.171	1.5777	334217.81	0.0327	0.00107
U	238	3	He	48.191	2.3739	735201.47	0.0493	7.55E-05
U	238	3	He	48.403	2.3844	730492.25	0.0493	7.55E-05
U	238	3	He	48.071	2.3681	723051.08	0.0493	7.55E-05
Sc	45	1	No Gas			2521617.62		
Sc	45	1	No Gas			2576926.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2502697.15		
Ge	72	1	No Gas			1231248.89		
Ge	72	1	No Gas			1240866.15		
Ge	72	1	No Gas			1236573.42		
Sc	45	2	H2			186543.57		
Sc	45	2	H2			187720.80		
Sc	45	2	H2			187080.49		
Ge	72	2	H2			166116.83		
Ge	72	2	H2			166682.83		
Ge	72	2	H2			166147.38		
In	115	2	H2			401981.13		
In	115	2	H2			392942.38		
In	115	2	H2			398626.71		
Sc	45	3	He			48933.20		
Sc	45	3	He			47758.92		
Sc	45	3	He			48240.67		
Ge	72	3	He			89831.81		
Ge	72	3	He			88353.29		
Ge	72	3	He			87226.31		
In	115	3	He			88702.81		
In	115	3	He			87907.32		
In	115	3	He			87062.79		
Tb	159	3	He			402401.48		
Tb	159	3	He			400606.87		
Tb	159	3	He			399958.98		
Bi	209	3	He			309695.76		
Bi	209	3	He			306365.82		
Bi	209	3	He			305335.84		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

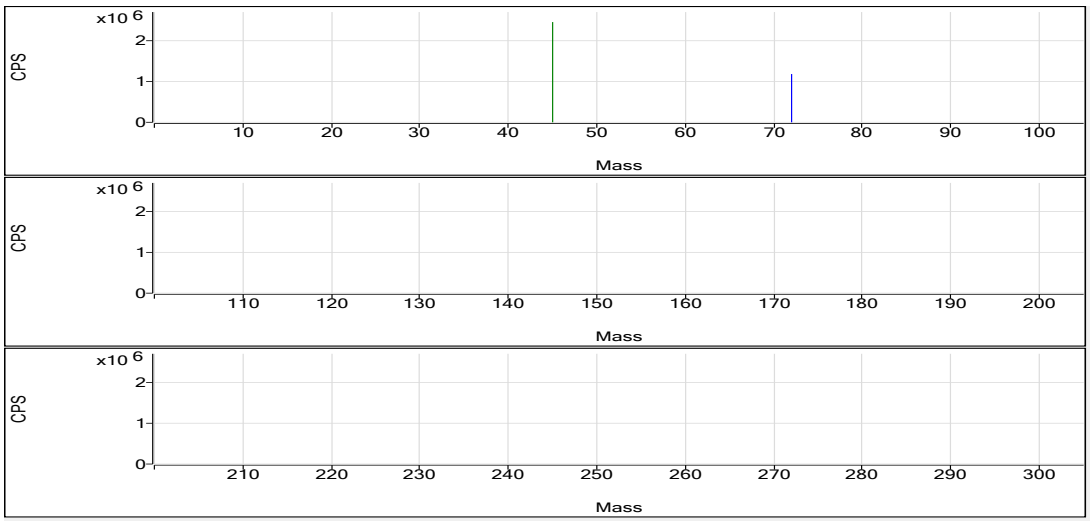
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.015	ppb	37.5	39.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.126	ppb	36.1	10.00	0.0001	Pulse	1.5000	3
Na	23	45	He	32.191	ppb	1.8	21967.03	0.4603	Pulse	0.1000	3
Mg	24	45	He	3.657	ppb	11.2	480.02	0.0101	Pulse	0.1000	3
Al	27	45	He	2.121	ppb	44.1	90.01	0.0019	Pulse	0.1000	3
K	39	45	He	-3.394	ppb	N/A	18665.81	0.3911	Pulse	0.1000	3
Ca	44	45	He	8.387	ppb	73.4	156.68	0.0033	Pulse	0.1000	3
Ti	47	45	He	0.130	ppb	173.7	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.364	ppb	13.3	1566.10	0.0328	Pulse	0.5000	3
Cr	52	45	He	-0.027	ppb	N/A	1870.19	0.0392	Pulse	0.1000	3
Mn	55	45	He	0.437	ppb	38.3	393.35	0.0082	Pulse	0.1000	3
Fe	57	45	He	1.019	ppb	175.5	96.67	0.0020	Pulse	0.1000	3
Co	59	45	He	0.090	ppb	9.4	343.35	0.0072	Pulse	0.1000	3
Ni	60	72	He	-0.046	ppb	N/A	203.34	0.0024	Pulse	0.1000	3
Cu	63	72	He	0.118	ppb	27.3	650.03	0.0078	Pulse	0.1000	3
Zn	66	72	He	2.392	ppb	10.2	900.06	0.0108	Pulse	0.1000	3
As	75	72	He	0.156	ppb	36.1	94.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.022	ppb	59.8	100.00	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.136	ppb	4.0	280.01	0.0033	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	125.0	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.033	ppb	241.7	1463.46	0.0170	Pulse	0.1000	3
Sb	121	115	He	0.078	ppb	70.3	123.34	0.0014	Pulse	0.1000	3
Ba	137	115	He	0.049	ppb	99.9	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.209	ppb	13.3	2096.91	0.0053	Pulse	0.1000	3
Pb	208	159	He	0.015	ppb	35.5	623.36	0.0016	Pulse	0.1000	3
U	238	209	He	0.141	ppb	9.1	2160.27	0.0070	Pulse	0.1000	3

ISTD Table:

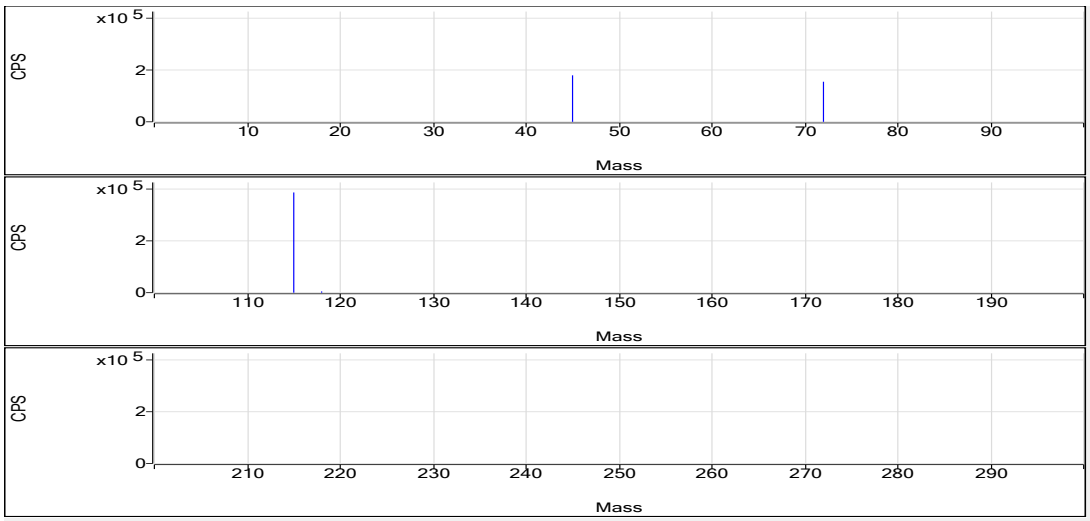
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2465979.96	1.7	102.8	Analog	0.1000	3
No Gas	Ge	72	1187425.01	1.2	103.0	Pulse	0.1000	3
H2	Sc	45	179219.03	1.1	95.8	Pulse	0.1000	3
H2	Ge	72	154507.56	1.2	94.4	Pulse	0.1000	3
H2	In	115	386376.61	0.2	99.3	Pulse	0.1000	3
He	Sc	45	47722.41	0.7	102.3	Pulse	0.1000	3
He	Ge	72	83517.64	1.0	102.9	Pulse	0.1000	3
He	In	115	86054.96	0.2	99.8	Pulse	0.1000	3
He	Tb	159	395791.77	0.8	99.3	Pulse	0.1000	3
He	Bi	209	307378.78	0.8	99.4	Pulse	0.1000	3

No Gas

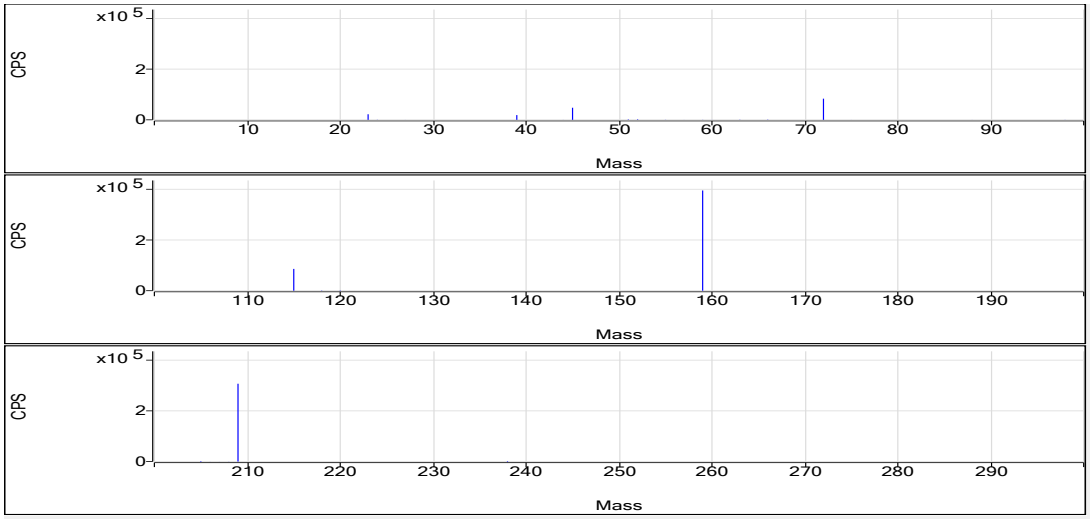


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.02	0	50.00	0.0008	4.685E-06
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Se	78	2	H2	0.178	0.0001	13.33	0.0004	1.219E-05
Se	78	2	H2	0.107	0.0001	8.67	0.0004	1.219E-05
Se	78	2	H2	0.093	0.0001	8.00	0.0004	1.219E-05
Na	23	3	He	32.429	0.4612	22177.17	0.0036	0.3452
Na	23	3	He	32.599	0.4618	21886.84	0.0036	0.3452
Na	23	3	He	31.546	0.458	21837.09	0.0036	0.3452
Mg	24	3	He	3.382	0.0096	460.02	0.0018	0.003497
Mg	24	3	He	3.46	0.0097	460.02	0.0018	0.003497
Mg	24	3	He	4.13	0.0109	520.03	0.0018	0.003497
Al	27	3	He	2.455	0.0021	100.01	0.0006	0.0006432
Al	27	3	He	1.064	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	2.844	0.0023	110.01	0.0006	0.0006432
K	39	3	He	0.612	0.3958	19033.08	0.0012	0.3951
K	39	3	He	-5.677	0.3885	18412.09	0.0012	0.3951
K	39	3	He	-5.118	0.3891	18552.27	0.0012	0.3951
Ca	44	3	He	15.221	0.0037	180.01	0.0001	0.002715
Ca	44	3	He	6.661	0.0032	150.01	0.0001	0.002715
Ca	44	3	He	3.28	0.0029	140.01	0.0001	0.002715
Ti	47	3	He	0.257	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.262	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.402	0.0336	1618.10	0.0219	0.02486
V	51	3	He	0.38	0.0332	1572.10	0.0219	0.02486
V	51	3	He	0.309	0.0316	1508.09	0.0219	0.02486
Cr	52	3	He	0.103	0.043	2070.22	0.0299	0.03997
Cr	52	3	He	-0.074	0.0378	1790.18	0.0299	0.03997
Cr	52	3	He	-0.109	0.0367	1750.16	0.0299	0.03997
Mn	55	3	He	0.41	0.0079	380.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.616	0.0105	500.03	0.0128	0.002639
Mn	55	3	He	0.285	0.0063	300.01	0.0128	0.002639
Fe	57	3	He	2.91	0.0031	150.01	0.0006	0.001429
Fe	57	3	He	-0.644	0.0011	50.00	0.0006	0.001429
Fe	57	3	He	0.79	0.0019	90.00	0.0006	0.001429
Co	59	3	He	0.099	0.0077	370.02	0.0563	0.002149
Co	59	3	He	0.082	0.0068	320.02	0.0563	0.002149
Co	59	3	He	0.089	0.0071	340.02	0.0563	0.002149
Ni	60	3	He	-0.082	0.0021	180.01	0.0086	0.002834
Ni	60	3	He	-0.009	0.0028	230.01	0.0086	0.002834
Ni	60	3	He	-0.048	0.0024	200.01	0.0086	0.002834
Cu	63	3	He	0.092	0.0071	600.03	0.0257	0.004757
Cu	63	3	He	0.108	0.0075	630.03	0.0257	0.004757
Cu	63	3	He	0.154	0.0087	720.04	0.0257	0.004757
Zn	66	3	He	2.15	0.0101	850.05	0.0029	0.003818
Zn	66	3	He	2.389	0.0108	900.06	0.0029	0.003818
Zn	66	3	He	2.637	0.0115	950.06	0.0029	0.003818
As	75	3	He	0.116	0.001	88.00	0.002	0.0008061
As	75	3	He	0.132	0.0011	90.00	0.002	0.0008061
As	75	3	He	0.221	0.0013	104.00	0.002	0.0008061
Sr	88	3	He	0.009	0.001	90.00	0.009	0.0009645
Sr	88	3	He	0.035	0.0013	110.00	0.009	0.0009645
Sr	88	3	He	0.022	0.0012	100.00	0.009	0.0009645
Mo	98	3	He	0.136	0.0032	280.01	0.0219	0.0002706
Mo	98	3	He	0.142	0.0034	290.01	0.0219	0.0002706
Mo	98	3	He	0.131	0.0031	270.02	0.0219	0.0002706
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.103	0.0181	1560.14	0.0158	0.01648
Sn	120	3	He	-0.055	0.0156	1340.11	0.0158	0.01648
Sn	120	3	He	0.053	0.0173	1490.12	0.0158	0.01648
Sb	121	3	He	0.083	0.0015	130.01	0.0149	0.0002698
Sb	121	3	He	0.131	0.0022	190.01	0.0149	0.0002698
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.097	0.0007	60.00	0.0048	0.0002317
Ba	137	3	He	0.049	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.202	0.0051	2050.22	0.0247	0.0001339
Tl	205	3	He	0.24	0.0061	2380.31	0.0247	0.0001339
Tl	205	3	He	0.185	0.0047	1860.20	0.0247	0.0001339
Pb	208	3	He	0.012	0.0015	320.01	0.0327	0.00107
Pb	208	3	He	0.022	0.0018	430.02	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	310.01	0.0327	0.00107
U	238	3	He	0.13	0.0065	2000.22	0.0493	7.55E-05
U	238	3	He	0.155	0.0077	2370.33	0.0493	7.55E-05
U	238	3	He	0.139	0.0069	2110.25	0.0493	7.55E-05
Sc	45	1	No Gas			2512124.96		
Sc	45	1	No Gas			2433680.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2452134.34		
Ge	72	1	No Gas			1204338.58		
Ge	72	1	No Gas			1178647.56		
Ge	72	1	No Gas			1179288.89		
Sc	45	2	H2			178240.00		
Sc	45	2	H2			178009.08		
Sc	45	2	H2			181408.02		
Ge	72	2	H2			154154.17		
Ge	72	2	H2			152840.59		
Ge	72	2	H2			156527.93		
In	115	2	H2			387099.64		
In	115	2	H2			385802.42		
In	115	2	H2			386227.77		
Sc	45	3	He			48090.17		
Sc	45	3	He			47397.99		
Sc	45	3	He			47679.07		
Ge	72	3	He			84358.94		
Ge	72	3	He			83545.00		
Ge	72	3	He			82648.99		
In	115	3	He			86187.28		
In	115	3	He			85905.79		
In	115	3	He			86096.06		
Tb	159	3	He			399428.08		
Tb	159	3	He			392973.55		
Tb	159	3	He			394973.67		
Bi	209	3	He			309654.29		
Bi	209	3	He			307553.34		
Bi	209	3	He			304928.71		

Quantitation Report

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Sample Type	CCV
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

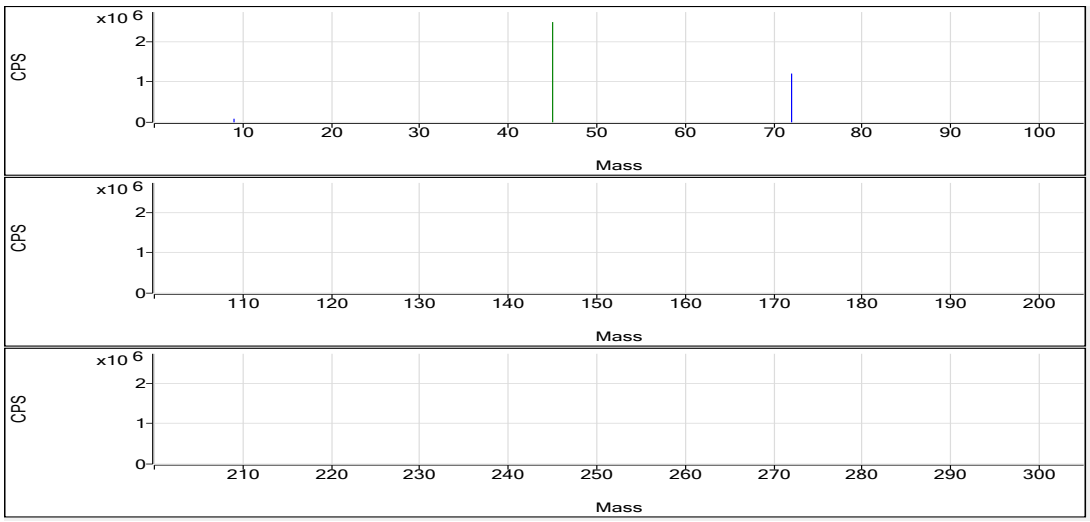
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.618	ppb	1.6	88130.11	0.0356	Pulse	0.5000	3
Se	78	72	H2	52.230	ppb	1.7	3467.31	0.0218	Pulse	1.5000	3
Na	23	45	He	4871.696	ppb	0.5	846420.69	17.7715	Pulse	0.1000	3
Mg	24	45	He	5036.469	ppb	0.4	430586.22	9.0405	Pulse	0.1000	3
Al	27	45	He	4997.519	ppb	0.2	139283.64	2.9244	Pulse	0.1000	3
K	39	45	He	5166.019	ppb	1.1	305309.59	6.4100	Pulse	0.1000	3
Ca	44	45	He	5257.406	ppb	3.6	17043.87	0.3579	Pulse	0.1000	3
Ti	47	45	He	5092.268	ppb	1.0	130236.44	2.7344	Pulse	0.1000	3
V	51	45	He	517.446	ppb	0.4	539903.59	11.3358	Pulse	0.5000	3
Cr	52	45	He	490.076	ppb	1.0	700750.36	14.7132	Pulse	0.1000	3
Mn	55	45	He	508.205	ppb	1.1	310763.00	6.5249	Pulse	0.1000	3
Fe	57	45	He	5094.072	ppb	1.5	141024.31	2.9610	Pulse	0.1000	3
Co	59	45	He	496.796	ppb	0.6	1331814.98	27.9630	Pulse	0.1000	3
Ni	60	72	He	513.762	ppb	1.6	371356.22	4.4125	Pulse	0.1000	3
Cu	63	72	He	490.937	ppb	2.0	1060978.63	12.6076	Pulse	0.1000	3
Zn	66	72	He	513.322	ppb	1.4	126107.50	1.4984	Pulse	0.1000	3
As	75	72	He	524.661	ppb	2.2	90527.19	1.0758	Pulse	0.5000	3
Sr	88	115	He	50.130	ppb	2.2	39405.74	0.4506	Pulse	0.1000	3
Mo	98	115	He	51.029	ppb	0.4	97867.48	1.1192	Pulse	0.1000	3
Ag	107	115	He	51.285	ppb	0.9	208532.35	2.3847	Pulse	0.1000	3
Cd	111	115	He	51.388	ppb	0.8	24027.30	0.2748	Pulse	0.5000	3
Sn	120	115	He	51.059	ppb	2.2	71983.94	0.8231	Pulse	0.1000	3
Sb	121	115	He	51.780	ppb	0.2	67280.70	0.7694	Pulse	0.1000	3
Ba	137	115	He	523.010	ppb	0.5	219521.27	2.5103	Pulse	0.1000	3
Tl	205	159	He	51.247	ppb	0.4	511903.40	1.2673	Pulse	0.1000	3
Pb	208	159	He	51.208	ppb	0.2	677438.87	1.6771	Pulse	0.1000	3
U	238	209	He	50.051	ppb	1.3	765312.85	2.4656	Pulse	0.1000	3

ISTD Table:

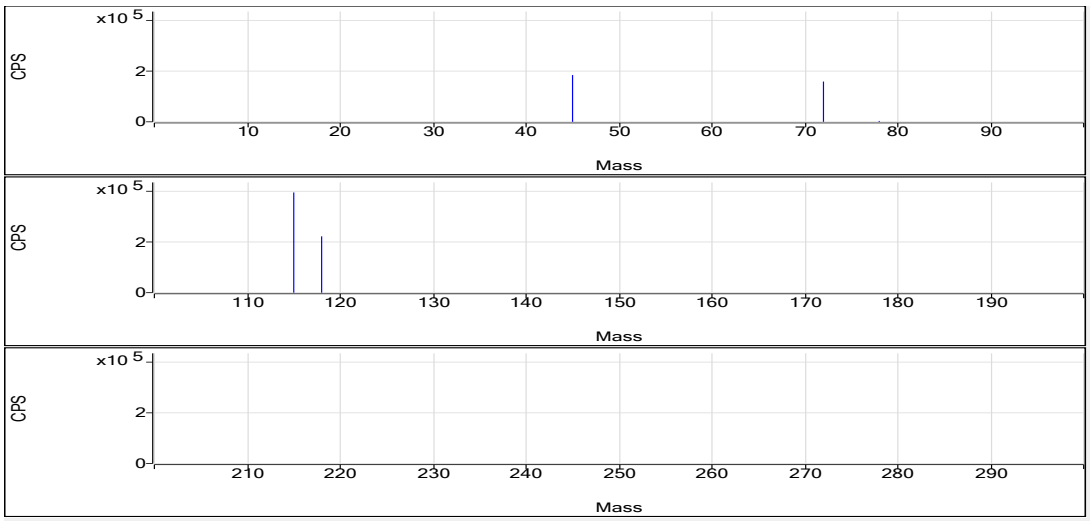
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2478403.45	1.3	103.3	Analog	0.1000	3
No Gas	Ge	72	1204967.09	1.2	104.5	Pulse	0.1000	3
H2	Sc	45	184736.42	0.8	98.8	Pulse	0.1000	3
H2	Ge	72	159103.81	1.2	97.2	Pulse	0.1000	3
H2	In	115	396016.98	0.4	101.8	Pulse	0.1000	3
He	Sc	45	47628.80	0.5	102.1	Pulse	0.1000	3
He	Ge	72	84177.44	2.1	103.7	Pulse	0.1000	3
He	In	115	87447.11	0.2	101.5	Pulse	0.1000	3
He	Tb	159	403938.68	0.5	101.3	Pulse	0.1000	3
He	Bi	209	310420.65	1.0	100.4	Pulse	0.1000	3

No Gas

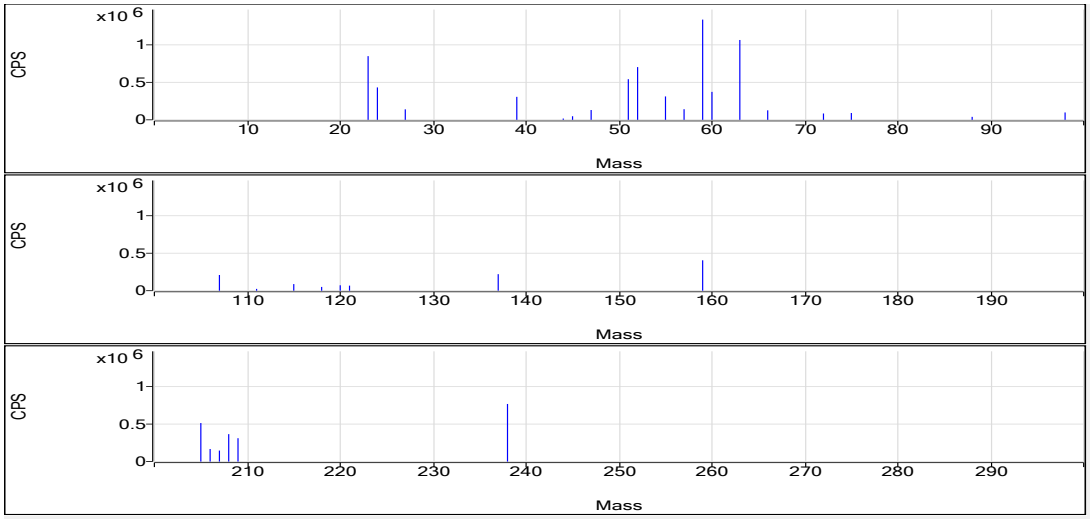


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.455	0.0362	88344.69	0.0008	4.685E-06
Be	9	1	No Gas	46.427	0.0354	88485.57	0.0008	4.685E-06
Be	9	1	No Gas	45.973	0.0351	87560.07	0.0008	4.685E-06
Se	78	2	H2	53.07	0.0221	3486.43	0.0004	1.219E-05
Se	78	2	H2	51.265	0.0214	3447.09	0.0004	1.219E-05
Se	78	2	H2	52.355	0.0218	3468.42	0.0004	1.219E-05
Na	23	3	He	4846.556	17.6815	846060.61	0.0036	0.3452
Na	23	3	He	4892.281	17.8451	845818.35	0.0036	0.3452
Na	23	3	He	4876.25	17.7877	847383.11	0.0036	0.3452
Mg	24	3	He	5013.782	8.9998	430641.91	0.0018	0.003497
Mg	24	3	He	5044.426	9.0548	429178.90	0.0018	0.003497
Mg	24	3	He	5051.199	9.067	431937.85	0.0018	0.003497
Al	27	3	He	4997.504	2.9244	139930.40	0.0006	0.0006432
Al	27	3	He	5005.853	2.9292	138839.70	0.0006	0.0006432
Al	27	3	He	4989.2	2.9195	139080.82	0.0006	0.0006432
K	39	3	He	5201.316	6.4511	308684.78	0.0012	0.3951
K	39	3	He	5100.85	6.3341	300223.61	0.0012	0.3951
K	39	3	He	5195.893	6.4448	307020.39	0.0012	0.3951
Ca	44	3	He	5079.906	0.3459	16549.98	0.0001	0.002715
Ca	44	3	He	5231.937	0.3561	16880.37	0.0001	0.002715
Ca	44	3	He	5460.376	0.3716	17701.25	0.0001	0.002715
Ti	47	3	He	5094.448	2.7355	130894.99	0.0005	7.003E-05
Ti	47	3	He	5042.773	2.7078	128343.01	0.0005	7.003E-05
Ti	47	3	He	5139.584	2.7598	131471.31	0.0005	7.003E-05
V	51	3	He	515.633	11.2962	540521.94	0.0219	0.02486
V	51	3	He	519.758	11.3864	539688.38	0.0219	0.02486
V	51	3	He	516.945	11.3249	539500.44	0.0219	0.02486
Cr	52	3	He	486.145	14.5955	698394.29	0.0299	0.03997
Cr	52	3	He	495.89	14.8873	705624.13	0.0299	0.03997
Cr	52	3	He	488.194	14.6569	698232.65	0.0299	0.03997
Mn	55	3	He	501.872	6.4436	308326.40	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	511.608	6.5686	311335.29	0.0128	0.002639
Mn	55	3	He	511.135	6.5625	312627.32	0.0128	0.002639
Fe	57	3	He	5036.523	2.9276	140085.68	0.0006	0.001429
Fe	57	3	He	5180.258	3.0111	142720.14	0.0006	0.001429
Fe	57	3	He	5065.437	2.9444	140267.12	0.0006	0.001429
Co	59	3	He	493.39	27.7713	1328854.67	0.0563	0.002149
Co	59	3	He	499.742	28.1288	1333243.26	0.0563	0.002149
Co	59	3	He	497.255	27.9888	1333347.01	0.0563	0.002149
Ni	60	3	He	511.683	4.3947	369536.21	0.0086	0.002834
Ni	60	3	He	507.037	4.3548	374593.24	0.0086	0.002834
Ni	60	3	He	522.566	4.4881	369939.21	0.0086	0.002834
Cu	63	3	He	488.688	12.5499	1055286.00	0.0257	0.004757
Cu	63	3	He	482.226	12.384	1065254.44	0.0257	0.004757
Cu	63	3	He	501.896	12.889	1062395.45	0.0257	0.004757
Zn	66	3	He	512.917	1.4972	125898.14	0.0029	0.003818
Zn	66	3	He	506.249	1.4778	127119.75	0.0029	0.003818
Zn	66	3	He	520.802	1.5202	125304.61	0.0029	0.003818
As	75	3	He	526.151	1.0788	90714.97	0.002	0.0008061
As	75	3	He	512.48	1.0508	90389.02	0.002	0.0008061
As	75	3	He	535.352	1.0977	90477.57	0.002	0.0008061
Sr	88	3	He	51.103	0.4593	40117.69	0.009	0.0009645
Sr	88	3	He	50.336	0.4525	39666.42	0.009	0.0009645
Sr	88	3	He	48.951	0.44	38433.12	0.009	0.0009645
Mo	98	3	He	50.786	1.1138	97276.77	0.0219	0.0002706
Mo	98	3	He	51.134	1.1214	98313.82	0.0219	0.0002706
Mo	98	3	He	51.168	1.1222	98011.86	0.0219	0.0002706
Ag	107	3	He	51.746	2.4061	210140.66	0.0465	0.0006206
Ag	107	3	He	50.864	2.3651	207342.67	0.0465	0.0006206
Ag	107	3	He	51.245	2.3828	208113.71	0.0465	0.0006206
Cd	111	3	He	51.43	0.275	24016.62	0.0053	0
Cd	111	3	He	50.971	0.2725	23892.40	0.0053	0
Cd	111	3	He	51.763	0.2768	24172.88	0.0053	0
Sn	120	3	He	50.437	0.8133	71032.03	0.0158	0.01648
Sn	120	3	He	52.37	0.8439	73977.80	0.0158	0.01648
Sn	120	3	He	50.37	0.8123	70942.00	0.0158	0.01648
Sb	121	3	He	51.64	0.7673	67012.47	0.0149	0.0002698
Sb	121	3	He	51.808	0.7698	67485.60	0.0149	0.0002698
Sb	121	3	He	51.893	0.7711	67344.04	0.0149	0.0002698
Ba	137	3	He	520.459	2.4981	218172.67	0.0048	0.0002317
Ba	137	3	He	523.402	2.5122	220237.28	0.0048	0.0002317
Ba	137	3	He	525.168	2.5207	220153.86	0.0048	0.0002317
Tl	205	3	He	51.392	1.2709	511051.28	0.0247	0.0001339
Tl	205	3	He	51.357	1.27	512699.17	0.0247	0.0001339
Tl	205	3	He	50.993	1.261	511959.76	0.0247	0.0001339
Pb	208	3	He	51.337	1.6813	365996.75	0.0327	0.00107
Pb	208	3	He	51.186	1.6764	362143.90	0.0327	0.00107
Pb	208	3	He	51.101	1.6736	364953.31	0.0327	0.00107
U	238	3	He	50.752	2.5001	770358.11	0.0493	7.55E-05
U	238	3	He	49.945	2.4604	761169.21	0.0493	7.55E-05
U	238	3	He	49.457	2.4363	764411.24	0.0493	7.55E-05
Sc	45	1	No Gas			2440307.31		
Sc	45	1	No Gas			2498313.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2496589.18		
Ge	72	1	No Gas			1187962.72		
Ge	72	1	No Gas			1214841.47		
Ge	72	1	No Gas			1212097.09		
Sc	45	2	H2			186248.75		
Sc	45	2	H2			183191.68		
Sc	45	2	H2			184768.83		
Ge	72	2	H2			157428.10		
Ge	72	2	H2			161130.08		
Ge	72	2	H2			158753.24		
In	115	2	H2			394467.06		
In	115	2	H2			397848.86		
In	115	2	H2			395735.03		
Sc	45	3	He			47849.97		
Sc	45	3	He			47397.83		
Sc	45	3	He			47638.59		
Ge	72	3	He			84087.14		
Ge	72	3	He			86018.42		
Ge	72	3	He			82426.77		
In	115	3	He			87726.18		
In	115	3	He			88059.31		
In	115	3	He			87726.42		
Tb	159	3	He			402126.67		
Tb	159	3	He			403694.88		
Tb	159	3	He			405994.49		
Bi	209	3	He			308130.05		
Bi	209	3	He			309372.85		
Bi	209	3	He			313759.04		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 6:54:44 PM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

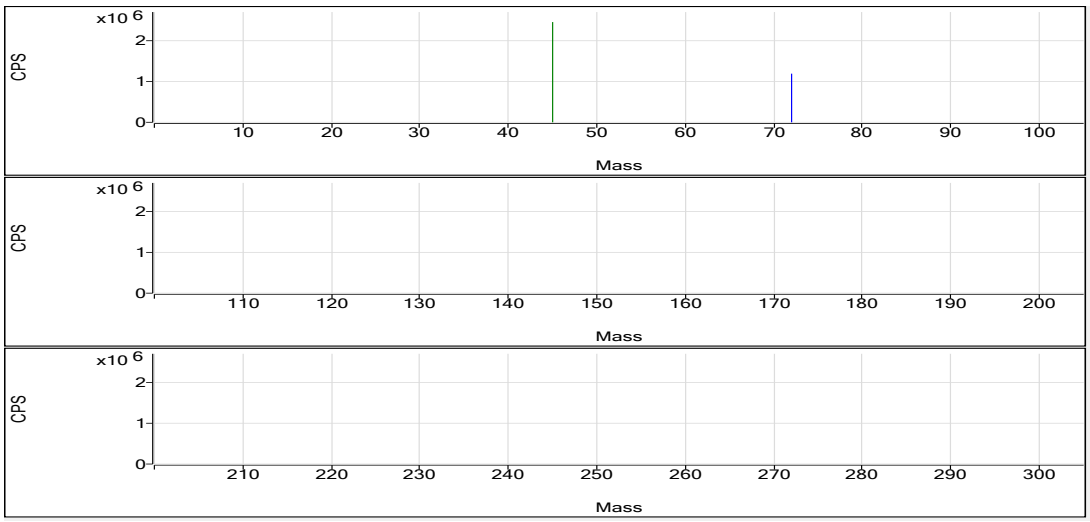
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.019	ppb	27.8	48.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.032	ppb	32.4	4.00	0.0000	Pulse	1.5000	3
Na	23	45	He	14.525	ppb	25.4	19122.93	0.3971	Pulse	0.1000	3
Mg	24	45	He	1.100	ppb	8.5	263.34	0.0055	Pulse	0.1000	3
Al	27	45	He	0.444	ppb	232.4	43.33	0.0009	Pulse	0.1000	3
K	39	45	He	-5.838	ppb	N/A	18692.49	0.3883	Pulse	0.1000	3
Ca	44	45	He	9.015	ppb	180.5	160.00	0.0033	Pulse	0.1000	3
Ti	47	45	He	1.799	ppb	64.2	50.00	0.0010	Pulse	0.1000	3
V	51	45	He	0.324	ppb	15.9	1538.09	0.0319	Pulse	0.5000	3
Cr	52	45	He	0.023	ppb	509.6	1956.86	0.0407	Pulse	0.1000	3
Mn	55	45	He	0.313	ppb	37.4	320.02	0.0067	Pulse	0.1000	3
Fe	57	45	He	1.814	ppb	159.0	120.00	0.0025	Pulse	0.1000	3
Co	59	45	He	0.086	ppb	29.9	336.68	0.0070	Pulse	0.1000	3
Ni	60	72	He	-0.017	ppb	N/A	223.35	0.0027	Pulse	0.1000	3
Cu	63	72	He	0.113	ppb	29.2	636.70	0.0077	Pulse	0.1000	3
Zn	66	72	He	2.201	ppb	9.7	850.06	0.0102	Pulse	0.1000	3
As	75	72	He	0.186	ppb	69.5	98.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	-0.002	ppb	N/A	83.34	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.055	ppb	32.8	130.01	0.0015	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	69.1	76.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	91.7	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.032	ppb	194.2	1493.47	0.0170	Pulse	0.1000	3
Sb	121	115	He	0.038	ppb	21.6	73.33	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.039	ppb	126.7	36.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.104	ppb	10.3	1073.42	0.0027	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	26.6	646.70	0.0016	Pulse	0.1000	3
U	238	209	He	0.053	ppb	5.2	830.06	0.0027	Pulse	0.1000	3

ISTD Table:

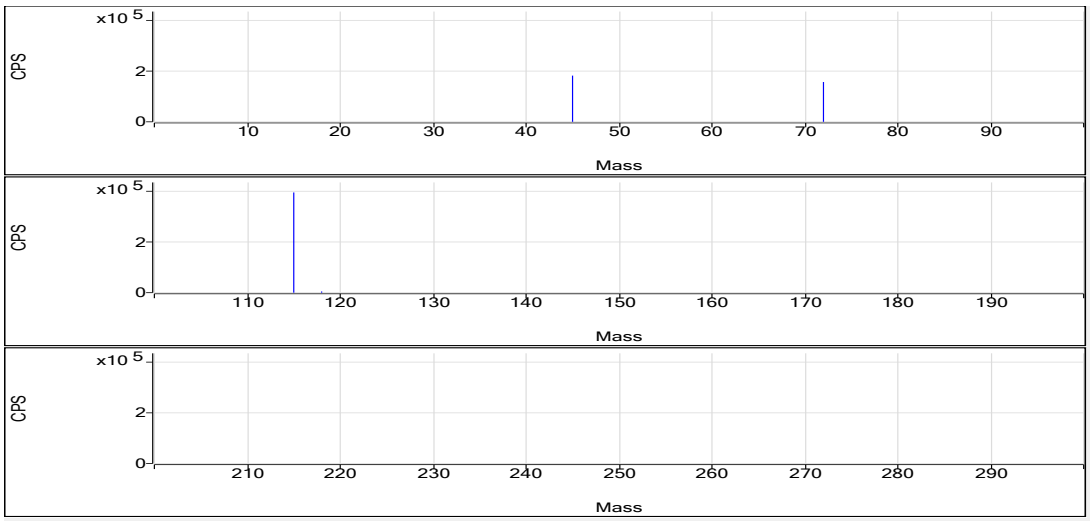
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2466905.07	1.3	102.8	Analog	0.1000	3
No Gas	Ge	72	1196845.24	0.6	103.8	Pulse	0.1000	3
H2	Sc	45	182145.59	0.5	97.4	Pulse	0.1000	3
H2	Ge	72	156879.45	0.6	95.8	Pulse	0.1000	3
H2	In	115	395146.47	1.1	101.6	Pulse	0.1000	3
He	Sc	45	48147.41	0.9	103.2	Pulse	0.1000	3
He	Ge	72	83148.65	0.9	102.4	Pulse	0.1000	3
He	In	115	87913.57	1.3	102.0	Pulse	0.1000	3
He	Tb	159	398370.32	0.4	99.9	Pulse	0.1000	3
He	Bi	209	310798.75	0.7	100.5	Pulse	0.1000	3

No Gas

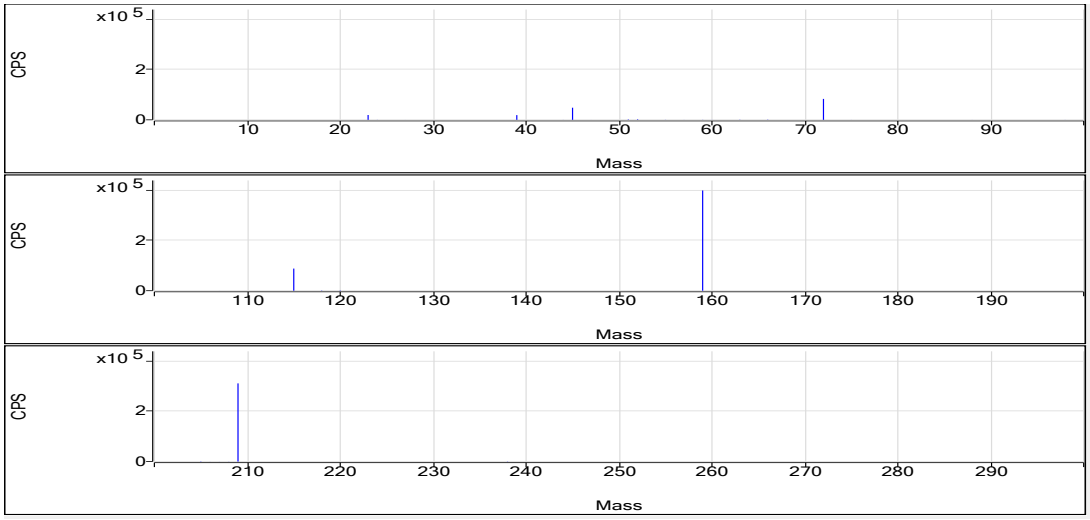


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	58.00	0.0008	4.685E-06
Be	9	1	No Gas	0.014	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.019	0	48.00	0.0008	4.685E-06
Se	78	2	H2	0.022	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.042	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.031	0	4.00	0.0004	1.219E-05
Na	23	3	He	17.671	0.4084	19683.76	0.0036	0.3452
Na	23	3	He	10.466	0.3826	18241.72	0.0036	0.3452
Na	23	3	He	15.437	0.4004	19443.31	0.0036	0.3452
Mg	24	3	He	1.057	0.0054	260.01	0.0018	0.003497
Mg	24	3	He	1.207	0.0057	270.01	0.0018	0.003497
Mg	24	3	He	1.035	0.0054	260.01	0.0018	0.003497
Al	27	3	He	1.028	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	1.052	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	-0.748	0.0002	10.00	0.0006	0.0006432
K	39	3	He	-9.093	0.3845	18532.24	0.0012	0.3951
K	39	3	He	0.297	0.3954	18852.81	0.0012	0.3951
K	39	3	He	-8.72	0.3849	18692.41	0.0012	0.3951
Ca	44	3	He	27.379	0.0046	220.01	0.0001	0.002715
Ca	44	3	He	3.277	0.0029	140.00	0.0001	0.002715
Ca	44	3	He	-3.611	0.0025	120.00	0.0001	0.002715
Ti	47	3	He	2.961	0.0017	80.00	0.0005	7.003E-05
Ti	47	3	He	0.651	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1.787	0.001	50.00	0.0005	7.003E-05
V	51	3	He	0.383	0.0332	1602.10	0.0219	0.02486
V	51	3	He	0.288	0.0312	1486.08	0.0219	0.02486
V	51	3	He	0.3	0.0314	1526.09	0.0219	0.02486
Cr	52	3	He	0.134	0.044	2120.22	0.0299	0.03997
Cr	52	3	He	0.031	0.0409	1950.20	0.0299	0.03997
Cr	52	3	He	-0.097	0.0371	1800.16	0.0299	0.03997
Mn	55	3	He	0.36	0.0073	350.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.399	0.0078	370.02	0.0128	0.002639
Mn	55	3	He	0.179	0.0049	240.01	0.0128	0.002639
Fe	57	3	He	1.112	0.0021	100.00	0.0006	0.001429
Fe	57	3	He	-0.654	0.001	50.00	0.0006	0.001429
Fe	57	3	He	4.984	0.0043	210.01	0.0006	0.001429
Co	59	3	He	0.106	0.0081	390.02	0.0563	0.002149
Co	59	3	He	0.096	0.0076	360.02	0.0563	0.002149
Co	59	3	He	0.057	0.0054	260.01	0.0563	0.002149
Ni	60	3	He	0.038	0.0032	260.02	0.0086	0.002834
Ni	60	3	He	-0.121	0.0018	150.01	0.0086	0.002834
Ni	60	3	He	0.032	0.0031	260.01	0.0086	0.002834
Cu	63	3	He	0.151	0.0086	710.04	0.0257	0.004757
Cu	63	3	He	0.09	0.0071	590.03	0.0257	0.004757
Cu	63	3	He	0.099	0.0073	610.04	0.0257	0.004757
Zn	66	3	He	2.447	0.0109	900.06	0.0029	0.003818
Zn	66	3	He	2.099	0.0099	830.06	0.0029	0.003818
Zn	66	3	He	2.058	0.0098	820.06	0.0029	0.003818
As	75	3	He	0.2	0.0012	100.00	0.002	0.0008061
As	75	3	He	0.307	0.0014	120.00	0.002	0.0008061
As	75	3	He	0.05	0.0009	76.00	0.002	0.0008061
Sr	88	3	He	-0.032	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.007	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	0.034	0.0013	110.01	0.009	0.0009645
Mo	98	3	He	0.06	0.0016	140.01	0.0219	0.0002706
Mo	98	3	He	0.07	0.0018	160.01	0.0219	0.0002706
Mo	98	3	He	0.035	0.001	90.00	0.0219	0.0002706
Ag	107	3	He	0.008	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.092	0.0179	1590.15	0.0158	0.01648
Sn	120	3	He	-0.033	0.0159	1410.12	0.0158	0.01648
Sn	120	3	He	0.038	0.0171	1480.13	0.0158	0.01648
Sb	121	3	He	0.043	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.043	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.028	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	-0.001	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.093	0.0007	60.00	0.0048	0.0002317
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Tl	205	3	He	0.116	0.003	1200.10	0.0247	0.0001339
Tl	205	3	He	0.097	0.0025	1010.08	0.0247	0.0001339
Tl	205	3	He	0.097	0.0025	1010.07	0.0247	0.0001339
Pb	208	3	He	0.018	0.0017	390.02	0.0327	0.00107
Pb	208	3	He	0.02	0.0017	330.02	0.0327	0.00107
Pb	208	3	He	0.012	0.0015	330.02	0.0327	0.00107
U	238	3	He	0.05	0.0025	790.06	0.0493	7.55E-05
U	238	3	He	0.055	0.0028	870.06	0.0493	7.55E-05
U	238	3	He	0.053	0.0027	830.06	0.0493	7.55E-05
Sc	45	1	No Gas			2446039.34		
Sc	45	1	No Gas			2452043.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2502632.31		
Ge	72	1	No Gas			1191674.75		
Ge	72	1	No Gas			1193813.65		
Ge	72	1	No Gas			1205047.33		
Sc	45	2	H2			182807.18		
Sc	45	2	H2			181095.33		
Sc	45	2	H2			182534.26		
Ge	72	2	H2			156477.65		
Ge	72	2	H2			156164.85		
Ge	72	2	H2			157995.85		
In	115	2	H2			392192.85		
In	115	2	H2			393106.01		
In	115	2	H2			400140.54		
Sc	45	3	He			48200.86		
Sc	45	3	He			47678.83		
Sc	45	3	He			48562.55		
Ge	72	3	He			82246.25		
Ge	72	3	He			83595.11		
Ge	72	3	He			83604.59		
In	115	3	He			88692.34		
In	115	3	He			88421.38		
In	115	3	He			86651.48		
Tb	159	3	He			400221.87		
Tb	159	3	He			396988.31		
Tb	159	3	He			397900.78		
Bi	209	3	He			312523.28		
Bi	209	3	He			311453.49		
Bi	209	3	He			308419.49		

Quantitation Report

Data File Name	242SMPL.d
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Acq Time	8/10/2023 6:56:55 PM
Sample Name	MB 410-402562/1-A
Sample Type	Sample
Comment	I3 ICP rr
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

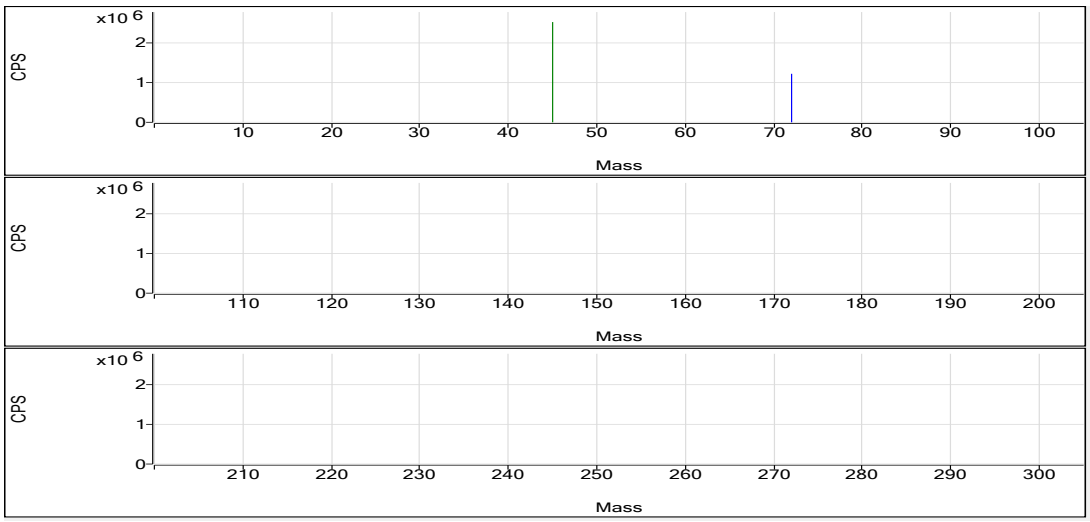
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.011	ppb	37.3	34.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.010	ppb	172.5	2.67	0.0000	Pulse	1.5000	3
Na	23	45	He	9.795	ppb	49.7	18632.25	0.3802	Pulse	0.1000	3
Mg	24	45	He	1.083	ppb	47.7	266.68	0.0054	Pulse	0.1000	3
Al	27	45	He	3.435	ppb	61.8	130.01	0.0027	Pulse	0.1000	3
K	39	45	He	10.087	ppb	85.5	19937.53	0.4068	Pulse	0.1000	3
Ca	44	45	He	16.213	ppb	48.1	186.68	0.0038	Pulse	0.1000	3
Ti	47	45	He	1.012	ppb	113.1	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	0.077	ppb	106.3	1301.40	0.0266	Pulse	0.5000	3
Cr	52	45	He	-0.260	ppb	N/A	1576.81	0.0322	Pulse	0.1000	3
Mn	55	45	He	3.536	ppb	6.5	2353.61	0.0480	Pulse	0.1000	3
Fe	57	45	He	1.289	ppb	57.8	106.67	0.0022	Pulse	0.1000	3
Co	59	45	He	0.038	ppb	57.9	210.01	0.0043	Pulse	0.1000	3
Ni	60	72	He	0.000	ppb	N/A	243.34	0.0028	Pulse	0.1000	3
Cu	63	72	He	0.081	ppb	24.8	586.70	0.0068	Pulse	0.1000	3
Zn	66	72	He	1.594	ppb	13.5	726.71	0.0085	Pulse	0.1000	3
As	75	72	He	0.095	ppb	51.3	86.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	-0.008	ppb	N/A	80.00	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.027	ppb	62.1	76.67	0.0009	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.158	ppb	N/A	1253.44	0.0140	Pulse	0.1000	3
Sb	121	115	He	0.009	ppb	231.1	36.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.030	ppb	200.9	33.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.029	ppb	20.6	343.35	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	36.7	573.35	0.0014	Pulse	0.1000	3
U	238	209	He	0.015	ppb	23.4	253.34	0.0008	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2523986.53	1.4	105.2	Analog	0.1000	3
No Gas	Ge	72	1221125.16	0.8	105.9	Pulse	0.1000	3
H2	Sc	45	193067.10	0.5	103.2	Pulse	0.1000	3
H2	Ge	72	162809.03	1.0	99.4	Pulse	0.1000	3
H2	In	115	404340.52	0.4	103.9	Pulse	0.1000	3
He	Sc	45	49010.10	0.4	105.1	Pulse	0.1000	3
He	Ge	72	85907.66	0.8	105.8	Pulse	0.1000	3
He	In	115	89645.82	1.6	104.0	Pulse	0.1000	3
He	Tb	159	405038.31	0.3	101.6	Pulse	0.1000	3
He	Bi	209	317173.93	1.0	102.6	Pulse	0.1000	3

No Gas



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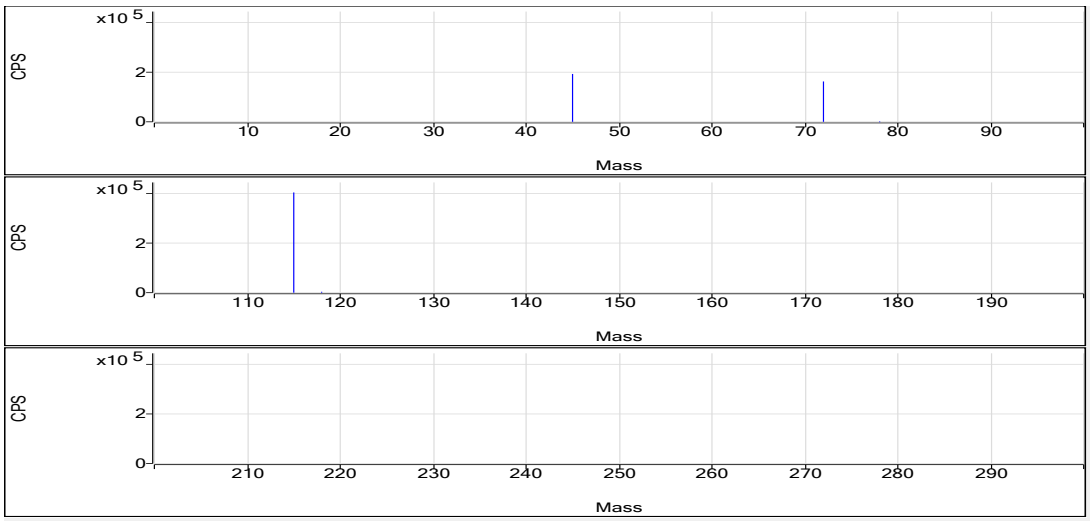
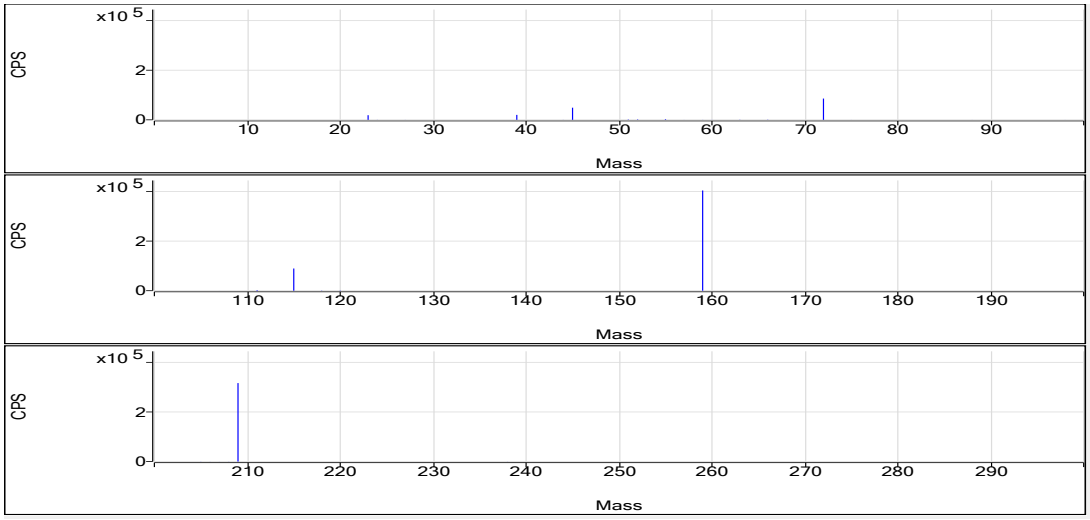


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.008	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	44.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Se	78	2	H2	0.03	0	4.00	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0	0	2.00	0.0004	1.219E-05
Na	23	3	He	14.174	0.3959	19323.01	0.0036	0.3452
Na	23	3	He	10.651	0.3833	18842.53	0.0036	0.3452
Na	23	3	He	4.559	0.3615	17731.20	0.0036	0.3452
Mg	24	3	He	0.791	0.0049	240.01	0.0018	0.003497
Mg	24	3	He	1.679	0.0065	320.01	0.0018	0.003497
Mg	24	3	He	0.778	0.0049	240.01	0.0018	0.003497
Al	27	3	He	4.504	0.0033	160.01	0.0006	0.0006432
Al	27	3	He	4.811	0.0035	170.01	0.0006	0.0006432
Al	27	3	He	0.991	0.0012	60.00	0.0006	0.0006432
K	39	3	He	9.854	0.4065	19844.26	0.0012	0.3951
K	39	3	He	1.582	0.3969	19513.64	0.0012	0.3951
K	39	3	He	18.826	0.417	20454.69	0.0012	0.3951
Ca	44	3	He	23.499	0.0043	210.01	0.0001	0.002715
Ca	44	3	He	7.989	0.0033	160.01	0.0001	0.002715
Ca	44	3	He	17.151	0.0039	190.01	0.0001	0.002715
Ti	47	3	He	2.159	0.0012	60.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	1.009	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	0.148	0.0281	1372.07	0.0219	0.02486
V	51	3	He	0.096	0.027	1326.07	0.0219	0.02486
V	51	3	He	-0.013	0.0246	1206.06	0.0219	0.02486
Cr	52	3	He	-0.185	0.0344	1680.16	0.0299	0.03997
Cr	52	3	He	-0.418	0.0275	1350.10	0.0299	0.03997
Cr	52	3	He	-0.177	0.0347	1700.18	0.0299	0.03997
Mn	55	3	He	3.642	0.0494	2410.30	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3.694	0.05	2460.30	0.0128	0.002639
Mn	55	3	He	3.273	0.0446	2190.24	0.0128	0.002639
Fe	57	3	He	2.125	0.0027	130.01	0.0006	0.001429
Fe	57	3	He	1.042	0.002	100.00	0.0006	0.001429
Fe	57	3	He	0.699	0.0018	90.00	0.0006	0.001429
Co	59	3	He	0.024	0.0035	170.01	0.0563	0.002149
Co	59	3	He	0.027	0.0037	180.01	0.0563	0.002149
Co	59	3	He	0.063	0.0057	280.02	0.0563	0.002149
Ni	60	3	He	0.012	0.0029	250.01	0.0086	0.002834
Ni	60	3	He	0.049	0.0033	280.01	0.0086	0.002834
Ni	60	3	He	-0.061	0.0023	200.01	0.0086	0.002834
Cu	63	3	He	0.098	0.0073	620.04	0.0257	0.004757
Cu	63	3	He	0.059	0.0063	540.03	0.0257	0.004757
Cu	63	3	He	0.085	0.0069	600.03	0.0257	0.004757
Zn	66	3	He	1.512	0.0082	700.04	0.0029	0.003818
Zn	66	3	He	1.839	0.0092	790.05	0.0029	0.003818
Zn	66	3	He	1.431	0.008	690.04	0.0029	0.003818
As	75	3	He	0.077	0.001	82.00	0.002	0.0008061
As	75	3	He	0.151	0.0011	96.00	0.002	0.0008061
As	75	3	He	0.058	0.0009	80.00	0.002	0.0008061
Sr	88	3	He	0.032	0.0012	110.00	0.009	0.0009645
Sr	88	3	He	-0.009	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	-0.046	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	0.039	0.0011	100.00	0.0219	0.0002706
Mo	98	3	He	0.033	0.001	90.01	0.0219	0.0002706
Mo	98	3	He	0.008	0.0004	40.00	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.002	0.0005	50.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	-0.166	0.0139	1220.10	0.0158	0.01648
Sn	120	3	He	-0.11	0.0147	1340.11	0.0158	0.01648
Sn	120	3	He	-0.198	0.0133	1200.10	0.0158	0.01648
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.034	0.0008	70.00	0.0149	0.0002698
Ba	137	3	He	0.094	0.0007	60.00	0.0048	0.0002317
Ba	137	3	He	-0.025	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	0.021	0.0003	30.00	0.0048	0.0002317
Tl	205	3	He	0.036	0.001	410.02	0.0247	0.0001339
Tl	205	3	He	0.026	0.0008	320.02	0.0247	0.0001339
Tl	205	3	He	0.025	0.0007	300.02	0.0247	0.0001339
Pb	208	3	He	0.01	0.0014	310.01	0.0327	0.00107
Pb	208	3	He	0.007	0.0013	290.01	0.0327	0.00107
Pb	208	3	He	0.015	0.0016	310.01	0.0327	0.00107
U	238	3	He	0.014	0.0008	240.01	0.0493	7.55E-05
U	238	3	He	0.018	0.001	310.01	0.0493	7.55E-05
U	238	3	He	0.012	0.0007	210.01	0.0493	7.55E-05
Sc	45	1	No Gas			2516650.90		
Sc	45	1	No Gas			2561533.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2493775.12		
Ge	72	1	No Gas			1218044.12		
Ge	72	1	No Gas			1231908.97		
Ge	72	1	No Gas			1213422.40		
Sc	45	2	H2			192014.82		
Sc	45	2	H2			193249.94		
Sc	45	2	H2			193936.54		
Ge	72	2	H2			160886.67		
Ge	72	2	H2			163891.25		
Ge	72	2	H2			163649.18		
In	115	2	H2			406005.27		
In	115	2	H2			404562.77		
In	115	2	H2			402453.51		
Sc	45	3	He			48812.62		
Sc	45	3	He			49164.08		
Sc	45	3	He			49053.61		
Ge	72	3	He			85152.98		
Ge	72	3	He			86139.20		
Ge	72	3	He			86430.81		
In	115	3	He			88059.22		
In	115	3	He			90977.42		
In	115	3	He			89919.95		
Tb	159	3	He			403722.88		
Tb	159	3	He			405973.12		
Tb	159	3	He			405418.94		
Bi	209	3	He			316457.07		
Bi	209	3	He			314424.19		
Bi	209	3	He			320640.52		

Quantitation Report

Data File Name	243SMPL.d
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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

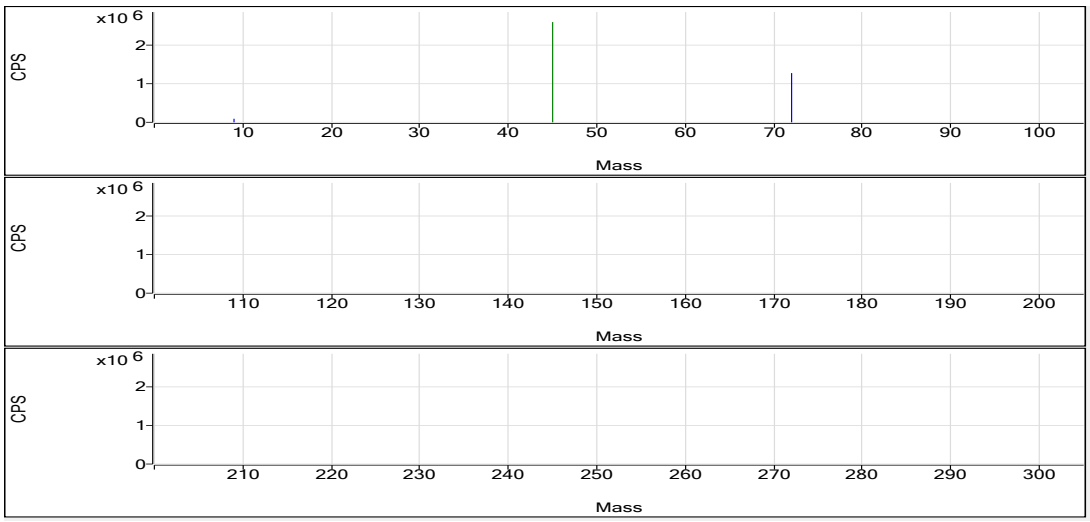
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.211	ppb	1.3	91063.42	0.0353	Pulse	0.5000	3
Se	78	72	H2	104.255	ppb	1.2	7264.30	0.0435	Pulse	1.5000	3
Na	23	45	He	4693.657	ppb	0.4	853846.34	17.1346	Pulse	0.1000	3
Mg	24	45	He	4898.467	ppb	1.2	438132.94	8.7929	Pulse	0.1000	3
Al	27	45	He	4867.579	ppb	0.8	141931.92	2.8483	Pulse	0.1000	3
K	39	45	He	4978.915	ppb	0.8	308557.19	6.1922	Pulse	0.1000	3
Ca	44	45	He	5328.670	ppb	1.7	18071.68	0.3627	Pulse	0.1000	3
Ti	47	45	He	503.249	ppb	2.4	13469.99	0.2703	Pulse	0.1000	3
V	51	45	He	506.720	ppb	1.3	553159.69	11.1013	Pulse	0.5000	3
Cr	52	45	He	480.669	ppb	1.1	719138.04	14.4316	Pulse	0.1000	3
Mn	55	45	He	503.692	ppb	1.4	322244.12	6.4670	Pulse	0.1000	3
Fe	57	45	He	5008.539	ppb	1.8	145057.68	2.9113	Pulse	0.1000	3
Co	59	45	He	493.084	ppb	2.8	1382809.61	27.7541	Mix	0.1000	3
Ni	60	72	He	509.654	ppb	0.6	383055.40	4.3773	Pulse	0.1000	3
Cu	63	72	He	482.147	ppb	0.5	1083549.25	12.3820	Pulse	0.1000	3
Zn	66	72	He	516.173	ppb	1.1	131851.13	1.5067	Pulse	0.1000	3
As	75	72	He	517.467	ppb	0.4	92851.32	1.0610	Pulse	0.5000	3
Sr	88	115	He	52.007	ppb	0.3	41678.95	0.4675	Pulse	0.1000	3
Mo	98	115	He	49.707	ppb	1.0	97195.77	1.0902	Pulse	0.1000	3
Ag	107	115	He	50.469	ppb	1.8	209223.83	2.3468	Pulse	0.1000	3
Cd	111	115	He	51.934	ppb	2.0	24757.26	0.2777	Pulse	0.5000	3
Sn	120	115	He	101.342	ppb	0.4	144221.31	1.6175	Pulse	0.1000	3
Sb	121	115	He	103.143	ppb	1.1	136615.94	1.5323	Pulse	0.1000	3
Ba	137	115	He	524.131	ppb	1.8	224285.29	2.5157	Pulse	0.1000	3
Tl	205	159	He	103.049	ppb	0.9	1038289.04	2.5482	Pulse	0.1000	3
Pb	208	159	He	51.634	ppb	0.8	689036.42	1.6910	Pulse	0.1000	3
U	238	209	He	49.810	ppb	0.4	778098.61	2.4537	Pulse	0.1000	3

ISTD Table:

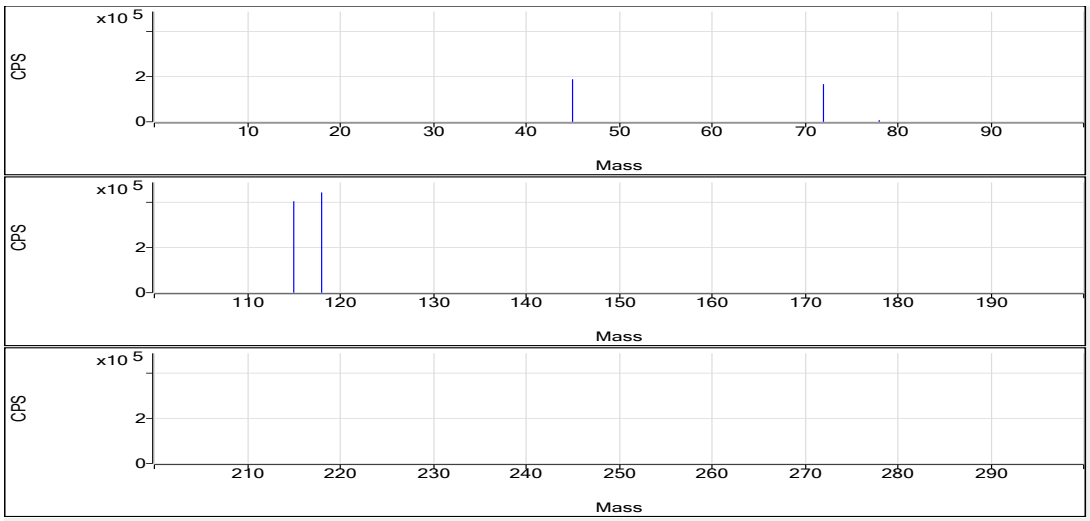
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2583134.28	0.7	107.7	Analog	0.1000	3
No Gas	Ge	72	1268184.33	0.8	110.0	Pulse	0.1000	3
H2	Sc	45	188713.19	0.2	100.9	Pulse	0.1000	3
H2	Ge	72	167037.00	1.5	102.0	Pulse	0.1000	3
H2	In	115	405447.56	0.4	104.2	Pulse	0.1000	3
He	Sc	45	49833.03	1.3	106.8	Pulse	0.1000	3
He	Ge	72	87510.44	0.3	107.8	Pulse	0.1000	3
He	In	115	89161.95	0.8	103.4	Pulse	0.1000	3
He	Tb	159	407472.93	0.4	102.2	Pulse	0.1000	3
He	Bi	209	317116.43	0.4	102.5	Pulse	0.1000	3

No Gas

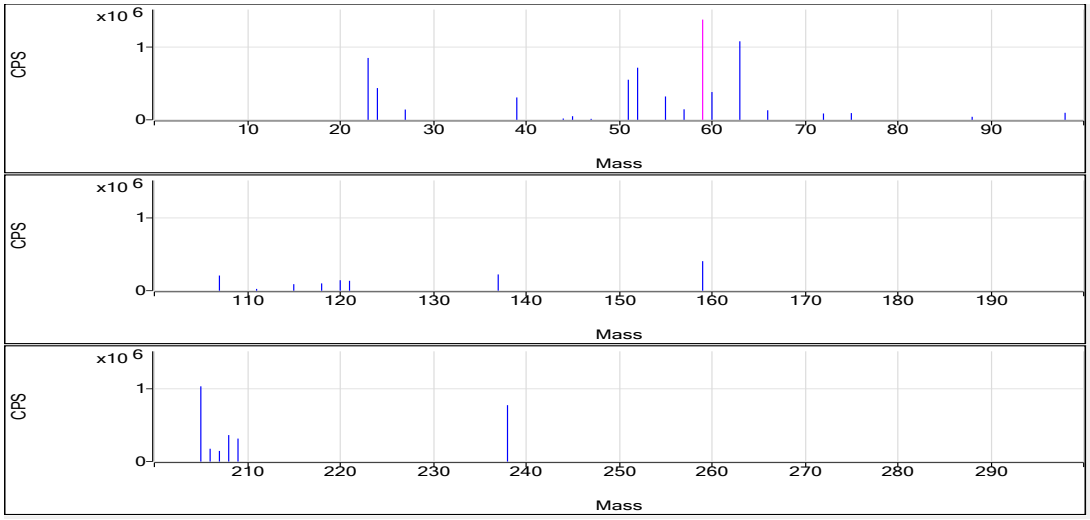


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.694	0.0356	92177.54	0.0008	4.685E-06
Be	9	1	No Gas	46.378	0.0354	90732.77	0.0008	4.685E-06
Be	9	1	No Gas	45.562	0.0348	90279.95	0.0008	4.685E-06
Se	78	2	H2	105.119	0.0439	7318.55	0.0004	1.219E-05
Se	78	2	H2	104.785	0.0437	7193.15	0.0004	1.219E-05
Se	78	2	H2	102.86	0.0429	7281.19	0.0004	1.219E-05
Na	23	3	He	4708.014	17.186	856657.80	0.0036	0.3452
Na	23	3	He	4671.889	17.0567	861168.66	0.0036	0.3452
Na	23	3	He	4701.067	17.1611	843712.57	0.0036	0.3452
Mg	24	3	He	4879.136	8.7582	436566.52	0.0018	0.003497
Mg	24	3	He	4851.481	8.7086	439684.80	0.0018	0.003497
Mg	24	3	He	4964.783	8.9119	438147.49	0.0018	0.003497
Al	27	3	He	4882.076	2.8568	142402.54	0.0006	0.0006432
Al	27	3	He	4822.048	2.8217	142463.81	0.0006	0.0006432
Al	27	3	He	4898.614	2.8665	140929.40	0.0006	0.0006432
K	39	3	He	4952.189	6.161	307105.21	0.0012	0.3951
K	39	3	He	4960.701	6.1709	311561.54	0.0012	0.3951
K	39	3	He	5023.856	6.2445	307004.82	0.0012	0.3951
Ca	44	3	He	5240.482	0.3567	17781.18	0.0001	0.002715
Ca	44	3	He	5320.17	0.3621	18282.01	0.0001	0.002715
Ca	44	3	He	5425.359	0.3692	18151.84	0.0001	0.002715
Ti	47	3	He	489.923	0.2631	13116.27	0.0005	7.003E-05
Ti	47	3	He	512.862	0.2755	13907.09	0.0005	7.003E-05
Ti	47	3	He	506.963	0.2723	13386.60	0.0005	7.003E-05
V	51	3	He	510.708	11.1885	557707.56	0.0219	0.02486
V	51	3	He	499.099	10.9347	552078.69	0.0219	0.02486
V	51	3	He	510.352	11.1807	549692.81	0.0219	0.02486
Cr	52	3	He	486.162	14.596	727558.74	0.0299	0.03997
Cr	52	3	He	475.557	14.2785	720898.97	0.0299	0.03997
Cr	52	3	He	480.289	14.4202	708956.40	0.0299	0.03997
Mn	55	3	He	497.26	6.3844	318240.17	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	502.779	6.4552	325915.44	0.0128	0.002639
Mn	55	3	He	511.036	6.5612	322576.75	0.0128	0.002639
Fe	57	3	He	5007.322	2.9106	145084.74	0.0006	0.001429
Fe	57	3	He	4917.805	2.8586	144327.81	0.0006	0.001429
Fe	57	3	He	5100.49	2.9648	145760.48	0.0006	0.001429
Co	59	3	He	482.839	27.1775	1354698.10	0.0563	0.002149
Co	59	3	He	487.928	27.4639	1386609.04	0.0563	0.002149
Co	59	3	He	508.485	28.6208	1407121.70	0.0563	0.002149
Ni	60	3	He	512.982	4.4058	384832.85	0.0086	0.002834
Ni	60	3	He	508.817	4.3701	383600.31	0.0086	0.002834
Ni	60	3	He	507.164	4.3559	380733.04	0.0086	0.002834
Cu	63	3	He	485.106	12.4579	1088153.97	0.0257	0.004757
Cu	63	3	He	481.16	12.3567	1084652.09	0.0257	0.004757
Cu	63	3	He	480.176	12.3314	1077841.70	0.0257	0.004757
Zn	66	3	He	521.861	1.5233	133052.35	0.0029	0.003818
Zn	66	3	He	510.988	1.4916	130932.30	0.0029	0.003818
Zn	66	3	He	515.671	1.5053	131568.73	0.0029	0.003818
As	75	3	He	518.788	1.0637	92913.06	0.002	0.0008061
As	75	3	He	518.591	1.0633	93337.83	0.002	0.0008061
As	75	3	He	515.024	1.056	92303.08	0.002	0.0008061
Sr	88	3	He	52.156	0.4688	41521.58	0.009	0.0009645
Sr	88	3	He	51.977	0.4672	41591.96	0.009	0.0009645
Sr	88	3	He	51.888	0.4664	41923.31	0.009	0.0009645
Mo	98	3	He	50.108	1.099	97337.05	0.0219	0.0002706
Mo	98	3	He	49.889	1.0942	97407.46	0.0219	0.0002706
Mo	98	3	He	49.123	1.0774	96842.80	0.0219	0.0002706
Ag	107	3	He	51.191	2.3803	210830.29	0.0465	0.0006206
Ag	107	3	He	50.751	2.3599	210088.96	0.0465	0.0006206
Ag	107	3	He	49.465	2.3001	206752.24	0.0465	0.0006206
Cd	111	3	He	51.889	0.2774	24573.61	0.0053	0
Cd	111	3	He	53.005	0.2834	25230.76	0.0053	0
Cd	111	3	He	50.907	0.2722	24467.41	0.0053	0
Sn	120	3	He	101.802	1.6248	143911.75	0.0158	0.01648
Sn	120	3	He	101.155	1.6146	143739.92	0.0158	0.01648
Sn	120	3	He	101.069	1.6132	145012.27	0.0158	0.01648
Sb	121	3	He	103.682	1.5403	136427.28	0.0149	0.0002698
Sb	121	3	He	103.956	1.5444	137488.45	0.0149	0.0002698
Sb	121	3	He	101.791	1.5122	135932.08	0.0149	0.0002698
Ba	137	3	He	531.782	2.5524	226072.30	0.0048	0.0002317
Ba	137	3	He	527.228	2.5306	225285.91	0.0048	0.0002317
Ba	137	3	He	513.383	2.4641	221497.65	0.0048	0.0002317
Tl	205	3	He	102.135	2.5256	1031910.45	0.0247	0.0001339
Tl	205	3	He	103.891	2.569	1041620.45	0.0247	0.0001339
Tl	205	3	He	103.122	2.55	1041336.23	0.0247	0.0001339
Pb	208	3	He	51.472	1.6857	366414.53	0.0327	0.00107
Pb	208	3	He	52.092	1.706	365048.98	0.0327	0.00107
Pb	208	3	He	51.338	1.6813	364506.28	0.0327	0.00107
U	238	3	He	50.008	2.4634	779187.57	0.0493	7.55E-05
U	238	3	He	49.785	2.4525	776044.60	0.0493	7.55E-05
U	238	3	He	49.636	2.4452	779063.66	0.0493	7.55E-05
Sc	45	1	No Gas			2587625.59		
Sc	45	1	No Gas			2564464.49		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2597312.77		
Ge	72	1	No Gas			1273144.75		
Ge	72	1	No Gas			1256313.34		
Ge	72	1	No Gas			1275094.90		
Sc	45	2	H2			188773.20		
Sc	45	2	H2			188232.93		
Sc	45	2	H2			189133.45		
Ge	72	2	H2			166884.96		
Ge	72	2	H2			164547.54		
Ge	72	2	H2			169678.49		
In	115	2	H2			403964.95		
In	115	2	H2			406935.97		
In	115	2	H2			405441.75		
Sc	45	3	He			49846.39		
Sc	45	3	He			50488.48		
Sc	45	3	He			49164.23		
Ge	72	3	He			87346.18		
Ge	72	3	He			87778.74		
Ge	72	3	He			87406.39		
In	115	3	He			89366.47		
In	115	3	He			89809.34		
In	115	3	He			90664.78		
Tb	159	3	He			408585.78		
Tb	159	3	He			405460.27		
Tb	159	3	He			408372.73		
Bi	209	3	He			316299.68		
Bi	209	3	He			316434.80		
Bi	209	3	He			318614.82		

Quantitation Report

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Acq Time	8/10/2023 7:01:04 PM
Sample Name	410-136369-E-6-A
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

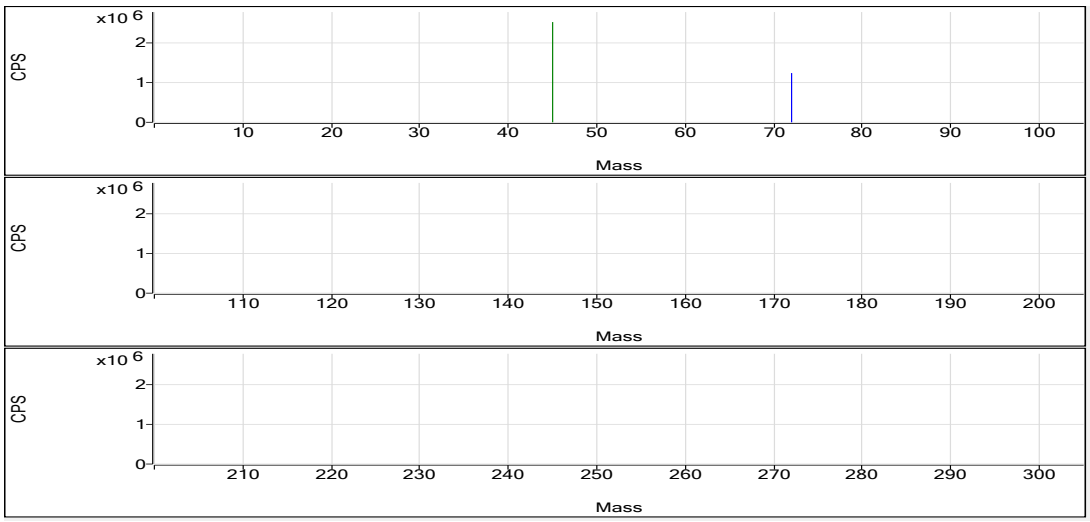
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.066	ppb	18.1	138.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.700	ppb	15.0	50.22	0.0003	Pulse	1.5000	3
Na	23	45	He	5033.853	ppb	2.3	878472.59	18.3515	Pulse	0.1000	3
Mg	24	45	He	11964.027	ppb	1.4	1028068.63	21.4708	Mix	0.1000	3
Al	27	45	He	85.104	ppb	5.1	2413.61	0.0504	Pulse	0.1000	3
K	39	45	He	3894.448	ppb	2.8	235956.62	4.9295	Pulse	0.1000	3
Ca	44	45	He	65590.381	ppb	2.3	212224.04	4.4335	Pulse	0.1000	3
Ti	47	45	He	4.782	ppb	18.1	126.67	0.0026	Pulse	0.1000	3
V	51	45	He	0.902	ppb	6.0	2134.17	0.0446	Pulse	0.5000	3
Cr	52	45	He	1.155	ppb	15.1	3567.24	0.0746	Pulse	0.1000	3
Mn	55	45	He	175.325	ppb	2.8	107827.45	2.2527	Pulse	0.1000	3
Fe	57	45	He	313.292	ppb	3.6	8779.60	0.1834	Pulse	0.1000	3
Co	59	45	He	0.300	ppb	3.5	910.06	0.0190	Pulse	0.1000	3
Ni	60	72	He	0.844	ppb	10.9	886.73	0.0101	Pulse	0.1000	3
Cu	63	72	He	14.135	ppb	2.4	32323.80	0.3676	Pulse	0.1000	3
Zn	66	72	He	139.122	ppb	2.3	35952.35	0.4089	Pulse	0.1000	3
As	75	72	He	0.735	ppb	13.1	203.33	0.0023	Pulse	0.5000	3
Sr	88	115	He	232.508	ppb	0.8	183924.57	2.0865	Pulse	0.1000	3
Mo	98	115	He	0.638	ppb	7.9	1256.78	0.0143	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	50.9	106.67	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.307	ppb	12.7	144.67	0.0016	Pulse	0.5000	3
Sn	120	115	He	-0.157	ppb	N/A	1233.44	0.0140	Pulse	0.1000	3
Sb	121	115	He	0.053	ppb	60.2	93.34	0.0011	Pulse	0.1000	3
Ba	137	115	He	126.335	ppb	2.1	53461.58	0.6066	Pulse	0.1000	3
Tl	205	159	He	0.196	ppb	16.3	1990.23	0.0050	Pulse	0.1000	3
Pb	208	159	He	0.264	ppb	8.2	3887.03	0.0097	Pulse	0.1000	3
U	238	209	He	0.490	ppb	2.7	7619.16	0.0242	Pulse	0.1000	3

ISTD Table:

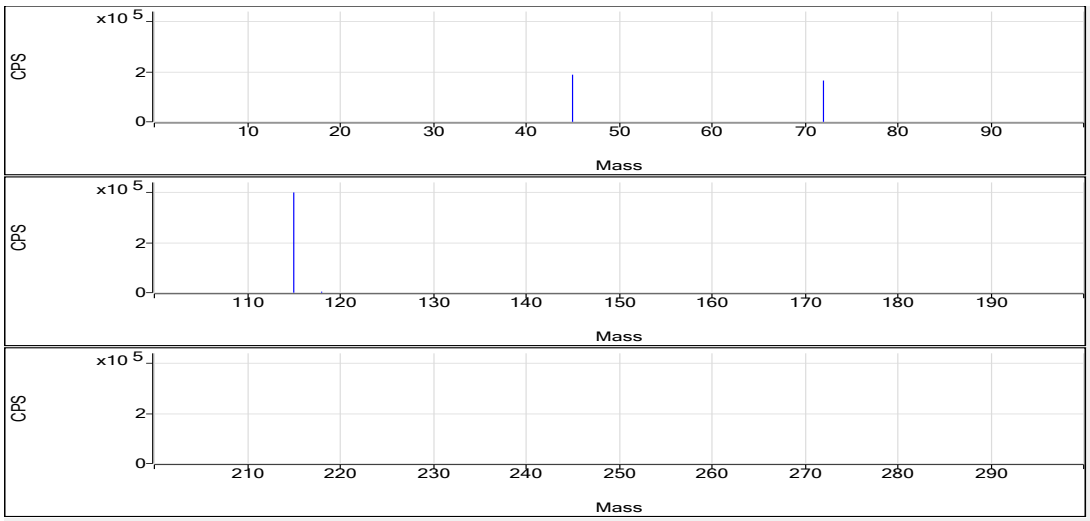
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2516339.65	1.2	104.9	Analog	0.1000	3
No Gas	Ge	72	1235884.54	0.8	107.2	Pulse	0.1000	3
H2	Sc	45	188692.50	1.0	100.9	Pulse	0.1000	3
H2	Ge	72	165327.61	1.0	101.0	Pulse	0.1000	3
H2	In	115	401357.44	0.7	103.2	Pulse	0.1000	3
He	Sc	45	47886.21	2.4	102.7	Pulse	0.1000	3
He	Ge	72	87940.00	1.0	108.3	Pulse	0.1000	3
He	In	115	88154.80	1.4	102.3	Pulse	0.1000	3
He	Tb	159	400093.30	0.1	100.4	Pulse	0.1000	3
He	Bi	209	314479.86	0.3	101.7	Pulse	0.1000	3

No Gas

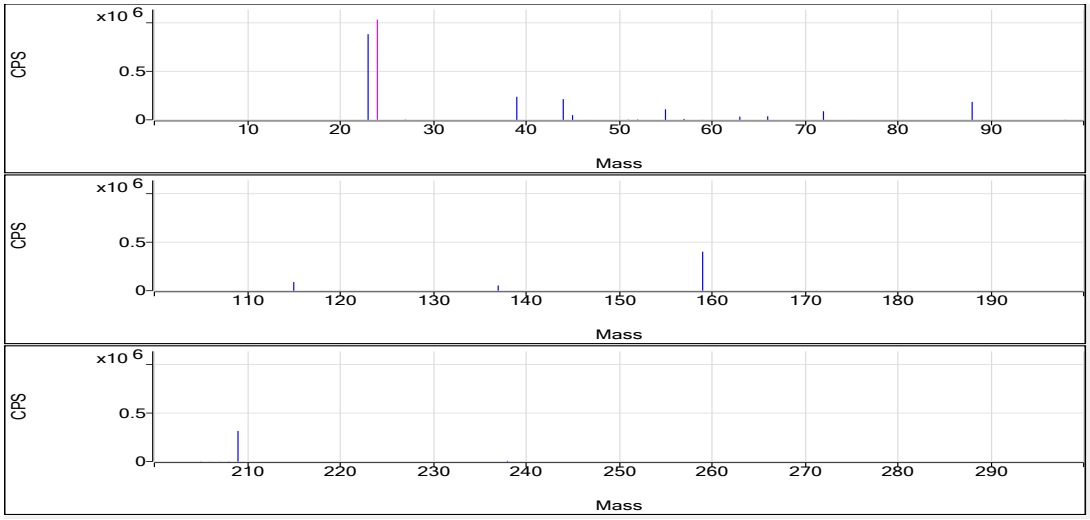


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.067	0.0001	138.00	0.0008	4.685E-06
Be	9	1	No Gas	0.077	0.0001	160.00	0.0008	4.685E-06
Be	9	1	No Gas	0.054	0	116.00	0.0008	4.685E-06
Se	78	2	H2	0.786	0.0003	56.00	0.0004	1.219E-05
Se	78	2	H2	0.73	0.0003	52.00	0.0004	1.219E-05
Se	78	2	H2	0.583	0.0003	42.67	0.0004	1.219E-05
Na	23	3	He	5037.144	18.3633	880885.46	0.0036	0.3452
Na	23	3	He	4918.469	17.9388	878871.16	0.0036	0.3452
Na	23	3	He	5145.946	18.7525	875661.16	0.0036	0.3452
Mg	24	3	He	11784.08	21.1479	1014465.61	0.0018	0.003497
Mg	24	3	He	12000.436	21.5361	1055117.02	0.0018	0.003497
Mg	24	3	He	12107.563	21.7284	1014623.27	0.0018	0.003497
Al	27	3	He	88.349	0.0523	2510.29	0.0006	0.0006432
Al	27	3	He	80.2	0.0476	2330.26	0.0006	0.0006432
Al	27	3	He	86.763	0.0514	2400.29	0.0006	0.0006432
K	39	3	He	3903.578	4.9401	236976.75	0.0012	0.3951
K	39	3	He	3780.281	4.7965	234996.60	0.0012	0.3951
K	39	3	He	3999.483	5.0518	235896.50	0.0012	0.3951
Ca	44	3	He	65274.327	4.4121	211649.27	0.0001	0.002715
Ca	44	3	He	64257.192	4.3434	212796.07	0.0001	0.002715
Ca	44	3	He	67239.623	4.5449	212226.79	0.0001	0.002715
Ti	47	3	He	4.917	0.0027	130.00	0.0005	7.003E-05
Ti	47	3	He	5.572	0.0031	150.01	0.0005	7.003E-05
Ti	47	3	He	3.858	0.0021	100.00	0.0005	7.003E-05
V	51	3	He	0.942	0.0454	2180.18	0.0219	0.02486
V	51	3	He	0.84	0.0432	2118.17	0.0219	0.02486
V	51	3	He	0.924	0.0451	2104.17	0.0219	0.02486
Cr	52	3	He	1.033	0.0709	3400.52	0.0299	0.03997
Cr	52	3	He	1.079	0.0723	3540.57	0.0299	0.03997
Cr	52	3	He	1.355	0.0805	3760.62	0.0299	0.03997
Mn	55	3	He	174.539	2.2427	107580.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	170.888	2.1958	107578.21	0.0128	0.002639
Mn	55	3	He	180.549	2.3198	108324.14	0.0128	0.002639
Fe	57	3	He	313.397	0.1835	8802.94	0.0006	0.001429
Fe	57	3	He	301.88	0.1768	8662.82	0.0006	0.001429
Fe	57	3	He	324.599	0.19	8873.03	0.0006	0.001429
Co	59	3	He	0.288	0.0183	880.06	0.0563	0.002149
Co	59	3	He	0.303	0.0192	940.06	0.0563	0.002149
Co	59	3	He	0.308	0.0195	910.07	0.0563	0.002149
Ni	60	3	He	0.901	0.0106	940.07	0.0086	0.002834
Ni	60	3	He	0.894	0.0105	920.06	0.0086	0.002834
Ni	60	3	He	0.738	0.0092	800.05	0.0086	0.002834
Cu	63	3	He	13.75	0.3577	31826.22	0.0257	0.004757
Cu	63	3	He	14.262	0.3709	32487.40	0.0257	0.004757
Cu	63	3	He	14.394	0.3743	32657.79	0.0257	0.004757
Zn	66	3	He	135.481	0.3983	35434.28	0.0029	0.003818
Zn	66	3	He	141.315	0.4153	36376.62	0.0029	0.003818
Zn	66	3	He	140.572	0.4131	36046.14	0.0029	0.003818
As	75	3	He	0.835	0.0025	224.00	0.002	0.0008061
As	75	3	He	0.643	0.0021	186.00	0.002	0.0008061
As	75	3	He	0.725	0.0023	200.00	0.002	0.0008061
Sr	88	3	He	233.395	2.0945	182270.19	0.009	0.0009645
Sr	88	3	He	230.308	2.0668	184872.50	0.009	0.0009645
Sr	88	3	He	233.822	2.0983	184631.01	0.009	0.0009645
Mo	98	3	He	0.685	0.0153	1330.12	0.0219	0.0002706
Mo	98	3	He	0.584	0.0131	1170.10	0.0219	0.0002706
Mo	98	3	He	0.646	0.0144	1270.11	0.0219	0.0002706
Ag	107	3	He	0.019	0.0015	130.01	0.0465	0.0006206
Ag	107	3	He	0.006	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	0.014	0.0013	110.01	0.0465	0.0006206
Cd	111	3	He	0.34	0.0018	158.00	0.0053	0
Cd	111	3	He	0.318	0.0017	152.00	0.0053	0
Cd	111	3	He	0.264	0.0014	124.00	0.0053	0
Sn	120	3	He	0.012	0.0167	1450.14	0.0158	0.01648
Sn	120	3	He	-0.137	0.0143	1280.10	0.0158	0.01648
Sn	120	3	He	-0.345	0.011	970.07	0.0158	0.01648
Sb	121	3	He	0.044	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.027	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.089	0.0016	140.01	0.0149	0.0002698
Ba	137	3	He	127.53	0.6123	53284.06	0.0048	0.0002317
Ba	137	3	He	123.23	0.5917	52923.02	0.0048	0.0002317
Ba	137	3	He	128.245	0.6157	54177.66	0.0048	0.0002317
Tl	205	3	He	0.232	0.0059	2350.30	0.0247	0.0001339
Tl	205	3	He	0.181	0.0046	1840.19	0.0247	0.0001339
Tl	205	3	He	0.174	0.0044	1780.19	0.0247	0.0001339
Pb	208	3	He	0.275	0.0101	2030.22	0.0327	0.00107
Pb	208	3	He	0.239	0.0089	1930.22	0.0327	0.00107
Pb	208	3	He	0.278	0.0102	2330.28	0.0327	0.00107
U	238	3	He	0.502	0.0248	7782.60	0.0493	7.55E-05
U	238	3	He	0.492	0.0243	7652.48	0.0493	7.55E-05
U	238	3	He	0.476	0.0235	7422.39	0.0493	7.55E-05
Sc	45	1	No Gas			2487342.78		
Sc	45	1	No Gas			2514096.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2547579.96		
Ge	72	1	No Gas			1224909.83		
Ge	72	1	No Gas			1241841.23		
Ge	72	1	No Gas			1240902.56		
Sc	45	2	H2			186510.15		
Sc	45	2	H2			189905.08		
Sc	45	2	H2			189662.26		
Ge	72	2	H2			164640.54		
Ge	72	2	H2			164165.04		
Ge	72	2	H2			167177.26		
In	115	2	H2			398806.36		
In	115	2	H2			404116.28		
In	115	2	H2			401149.68		
Sc	45	3	He			47969.97		
Sc	45	3	He			48992.85		
Sc	45	3	He			46695.80		
Ge	72	3	He			88966.94		
Ge	72	3	He			87597.22		
Ge	72	3	He			87255.85		
In	115	3	He			87031.60		
In	115	3	He			89457.40		
In	115	3	He			87997.54		
Tb	159	3	He			399756.56		
Tb	159	3	He			400193.51		
Tb	159	3	He			400329.84		
Bi	209	3	He			313552.83		
Bi	209	3	He			314567.10		
Bi	209	3	He			315319.66		

Quantitation Report

Data File Name	245SMPL.d
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Acq Time	8/10/2023 7:03:06 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

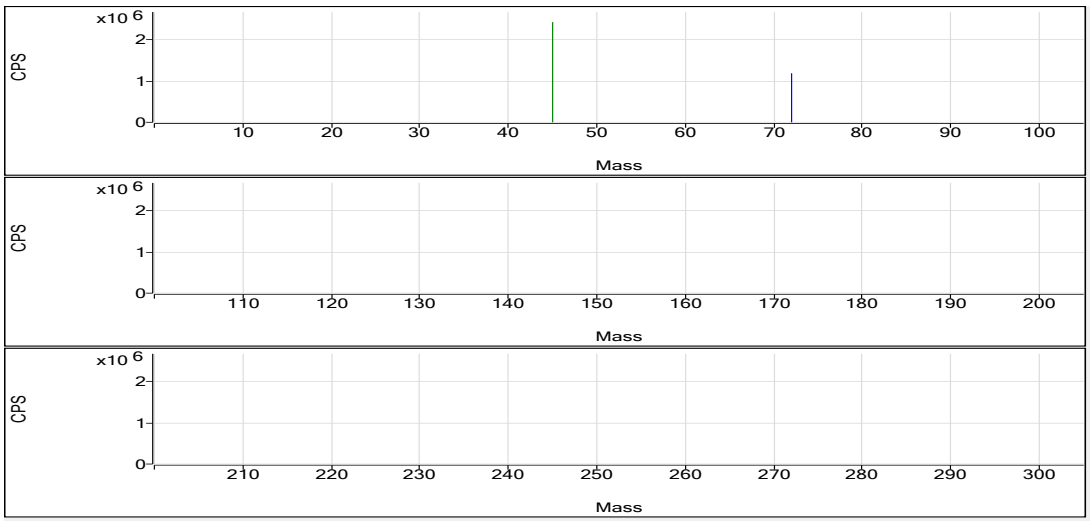
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.010	ppb	43.6	30.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.045	ppb	90.0	4.89	0.0000	Pulse	1.5000	3
Na	23	45	He	14.389	ppb	3.3	18906.01	0.3966	Pulse	0.1000	3
Mg	24	45	He	1.951	ppb	14.6	333.35	0.0070	Pulse	0.1000	3
Al	27	45	He	0.933	ppb	22.5	56.67	0.0012	Pulse	0.1000	3
K	39	45	He	-0.876	ppb	N/A	18779.34	0.3940	Pulse	0.1000	3
Ca	44	45	He	12.370	ppb	232.4	170.01	0.0036	Pulse	0.1000	3
Ti	47	45	He	0.130	ppb	347.0	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.358	ppb	4.4	1558.10	0.0327	Pulse	0.5000	3
Cr	52	45	He	-0.015	ppb	N/A	1883.53	0.0395	Pulse	0.1000	3
Mn	55	45	He	0.155	ppb	84.5	220.01	0.0046	Pulse	0.1000	3
Fe	57	45	He	2.363	ppb	38.2	133.34	0.0028	Pulse	0.1000	3
Co	59	45	He	0.056	ppb	15.9	253.34	0.0053	Pulse	0.1000	3
Ni	60	72	He	0.010	ppb	1086.1	240.01	0.0029	Pulse	0.1000	3
Cu	63	72	He	0.080	ppb	12.7	563.36	0.0068	Pulse	0.1000	3
Zn	66	72	He	2.309	ppb	11.9	870.06	0.0105	Pulse	0.1000	3
As	75	72	He	0.067	ppb	17.1	78.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.014	ppb	N/A	73.34	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.042	ppb	37.5	103.34	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	43.2	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.016	ppb	629.1	1460.12	0.0167	Pulse	0.1000	3
Sb	121	115	He	0.008	ppb	119.1	33.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.031	ppb	221.6	33.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.091	ppb	4.5	946.74	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	42.4	550.03	0.0014	Pulse	0.1000	3
U	238	209	He	0.041	ppb	17.2	656.71	0.0021	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2438967.36	0.7	101.7	Analog	0.1000	3
No Gas	Ge	72	1194331.05	0.7	103.6	Pulse	0.1000	3
H2	Sc	45	182711.67	1.1	97.7	Pulse	0.1000	3
H2	Ge	72	156884.10	2.0	95.8	Pulse	0.1000	3
H2	In	115	391490.96	0.9	100.6	Pulse	0.1000	3
He	Sc	45	47668.63	1.5	102.2	Pulse	0.1000	3
He	Ge	72	82611.81	1.8	101.7	Pulse	0.1000	3
He	In	115	87292.60	0.8	101.3	Pulse	0.1000	3
He	Tb	159	397795.15	0.2	99.8	Pulse	0.1000	3
He	Bi	209	310354.22	0.7	100.3	Pulse	0.1000	3

No Gas



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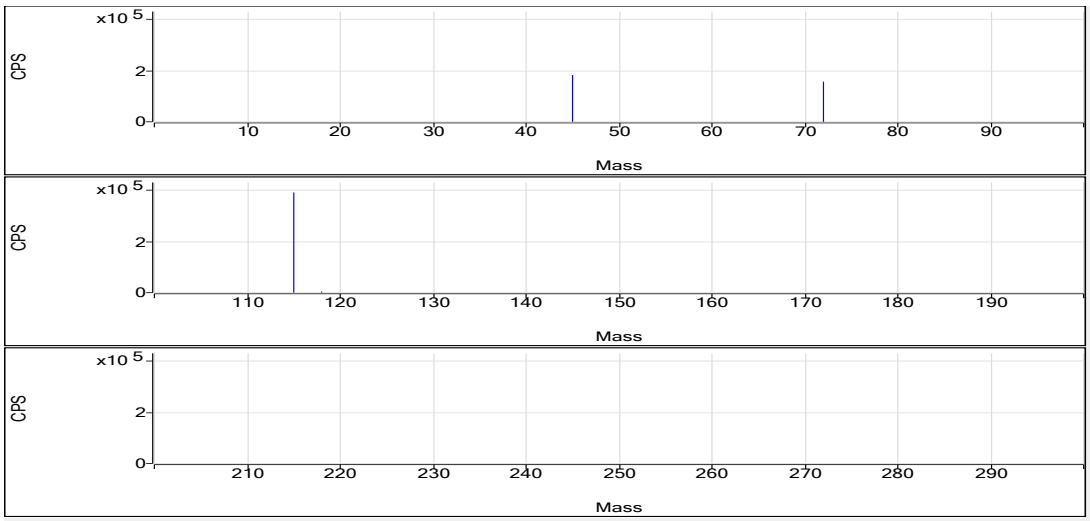
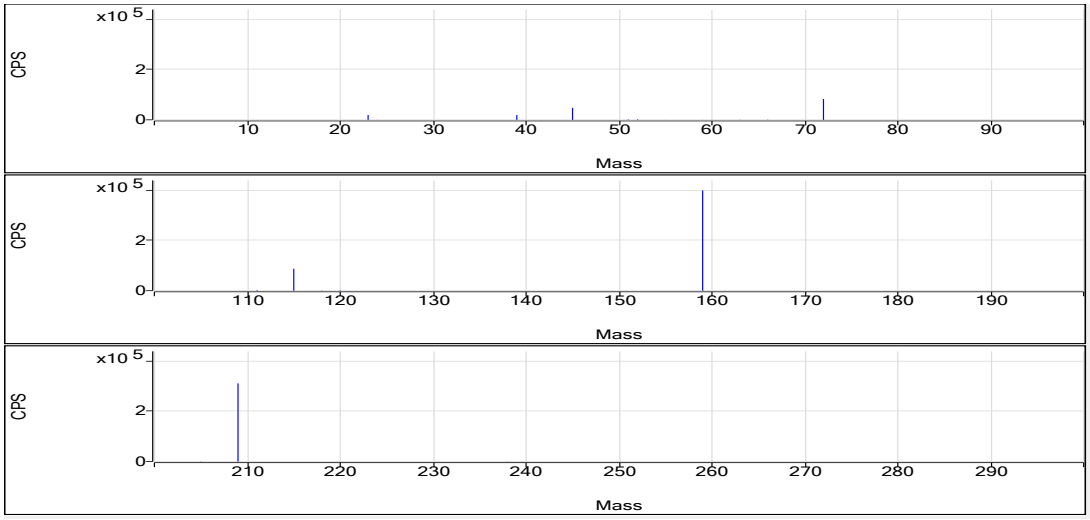


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	24.00	0.0008	4.685E-06
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Se	78	2	H2	0.023	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.021	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.092	0.0001	8.00	0.0004	1.219E-05
Na	23	3	He	14.914	0.3985	18712.31	0.0036	0.3452
Na	23	3	He	13.971	0.3951	19113.05	0.0036	0.3452
Na	23	3	He	14.283	0.3962	18892.66	0.0036	0.3452
Mg	24	3	He	2.087	0.0072	340.01	0.0018	0.003497
Mg	24	3	He	1.623	0.0064	310.02	0.0018	0.003497
Mg	24	3	He	2.143	0.0073	350.02	0.0018	0.003497
Al	27	3	He	1.085	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	1.021	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	0.693	0.001	50.00	0.0006	0.0006432
K	39	3	He	3.142	0.3987	18722.60	0.0012	0.3951
K	39	3	He	-12.741	0.3802	18392.14	0.0012	0.3951
K	39	3	He	6.971	0.4032	19223.27	0.0012	0.3951
Ca	44	3	He	-2.356	0.0026	120.01	0.0001	0.002715
Ca	44	3	He	45.504	0.0058	280.01	0.0001	0.002715
Ca	44	3	He	-6.038	0.0023	110.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.651	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.34	0.0323	1516.09	0.0219	0.02486
V	51	3	He	0.364	0.0328	1588.10	0.0219	0.02486
V	51	3	He	0.369	0.0329	1570.10	0.0219	0.02486
Cr	52	3	He	0.024	0.0407	1910.19	0.0299	0.03997
Cr	52	3	He	-0.099	0.037	1790.19	0.0299	0.03997
Cr	52	3	He	0.031	0.0409	1950.21	0.0299	0.03997
Mn	55	3	He	0.226	0.0055	260.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.004	0.0027	130.00	0.0128	0.002639
Mn	55	3	He	0.236	0.0057	270.01	0.0128	0.002639
Fe	57	3	He	3.406	0.0034	160.01	0.0006	0.001429
Fe	57	3	He	1.811	0.0025	120.00	0.0006	0.001429
Fe	57	3	He	1.873	0.0025	120.01	0.0006	0.001429
Co	59	3	He	0.049	0.0049	230.01	0.0563	0.002149
Co	59	3	He	0.054	0.0052	250.01	0.0563	0.002149
Co	59	3	He	0.066	0.0059	280.01	0.0563	0.002149
Ni	60	3	He	-0.109	0.0019	160.01	0.0086	0.002834
Ni	60	3	He	0.052	0.0033	270.01	0.0086	0.002834
Ni	60	3	He	0.086	0.0036	290.01	0.0086	0.002834
Cu	63	3	He	0.069	0.0065	550.03	0.0257	0.004757
Cu	63	3	He	0.089	0.007	580.03	0.0257	0.004757
Cu	63	3	He	0.083	0.0069	560.03	0.0257	0.004757
Zn	66	3	He	1.992	0.0096	810.05	0.0029	0.003818
Zn	66	3	He	2.483	0.011	910.06	0.0029	0.003818
Zn	66	3	He	2.453	0.011	890.06	0.0029	0.003818
As	75	3	He	0.059	0.0009	78.00	0.002	0.0008061
As	75	3	He	0.08	0.001	80.00	0.002	0.0008061
As	75	3	He	0.063	0.0009	76.00	0.002	0.0008061
Sr	88	3	He	-0.044	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.03	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	0.032	0.0013	110.01	0.009	0.0009645
Mo	98	3	He	0.045	0.0013	110.00	0.0219	0.0002706
Mo	98	3	He	0.025	0.0008	70.00	0.0219	0.0002706
Mo	98	3	He	0.055	0.0015	130.01	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0	0.0165	1440.12	0.0158	0.01648
Sn	120	3	He	0.127	0.0185	1600.14	0.0158	0.01648
Sn	120	3	He	-0.078	0.0152	1340.11	0.0158	0.01648
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	0.071	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	0.07	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.09	0.0024	940.07	0.0247	0.0001339
Tl	205	3	He	0.095	0.0025	990.08	0.0247	0.0001339
Tl	205	3	He	0.087	0.0023	910.07	0.0247	0.0001339
Pb	208	3	He	0.012	0.0015	230.01	0.0327	0.00107
Pb	208	3	He	0.012	0.0015	290.02	0.0327	0.00107
Pb	208	3	He	0.005	0.0012	280.02	0.0327	0.00107
U	238	3	He	0.034	0.0017	540.04	0.0493	7.55E-05
U	238	3	He	0.043	0.0022	680.05	0.0493	7.55E-05
U	238	3	He	0.047	0.0024	750.05	0.0493	7.55E-05
Sc	45	1	No Gas			2459720.74		
Sc	45	1	No Gas			2426444.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2430736.84		
Ge	72	1	No Gas			1203653.97		
Ge	72	1	No Gas			1189487.09		
Ge	72	1	No Gas			1189852.09		
Sc	45	2	H2			180367.03		
Sc	45	2	H2			183392.83		
Sc	45	2	H2			184375.15		
Ge	72	2	H2			153396.42		
Ge	72	2	H2			159675.28		
Ge	72	2	H2			157580.59		
In	115	2	H2			392693.20		
In	115	2	H2			387688.47		
In	115	2	H2			394091.21		
Sc	45	3	He			46956.20		
Sc	45	3	He			48370.91		
Sc	45	3	He			47678.78		
Ge	72	3	He			84228.05		
Ge	72	3	He			82387.12		
Ge	72	3	He			81220.26		
In	115	3	He			87424.23		
In	115	3	He			86589.33		
In	115	3	He			87887.33		
Tb	159	3	He			396806.60		
Tb	159	3	He			398158.28		
Tb	159	3	He			398420.58		
Bi	209	3	He			312374.66		
Bi	209	3	He			308071.66		
Bi	209	3	He			310616.34		

Quantitation Report

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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

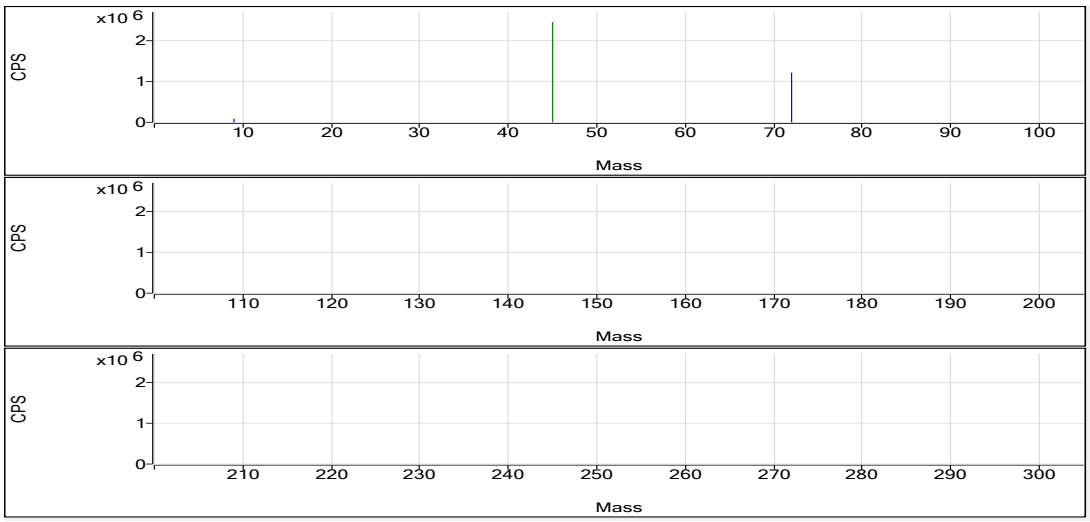
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.172	ppb	0.7	88819.50	0.0360	Pulse	0.5000	3
Se	78	72	H2	53.074	ppb	0.8	3481.32	0.0221	Pulse	1.5000	3
Na	23	45	He	4832.106	ppb	0.6	843077.38	17.6298	Pulse	0.1000	3
Mg	24	45	He	5012.862	ppb	1.1	430287.92	8.9982	Pulse	0.1000	3
Al	27	45	He	4939.018	ppb	1.5	138208.34	2.8901	Pulse	0.1000	3
K	39	45	He	5088.736	ppb	1.3	302224.21	6.3200	Pulse	0.1000	3
Ca	44	45	He	5238.052	ppb	4.5	17047.10	0.3566	Pulse	0.1000	3
Ti	47	45	He	5102.844	ppb	1.1	131026.66	2.7400	Pulse	0.1000	3
V	51	45	He	513.298	ppb	0.9	537743.79	11.2451	Pulse	0.5000	3
Cr	52	45	He	488.880	ppb	0.4	701924.96	14.6774	Pulse	0.1000	3
Mn	55	45	He	508.975	ppb	0.2	312505.52	6.5348	Pulse	0.1000	3
Fe	57	45	He	5111.029	ppb	0.7	142074.91	2.9709	Pulse	0.1000	3
Co	59	45	He	496.406	ppb	0.3	1336189.04	27.9410	Pulse	0.1000	3
Ni	60	72	He	513.379	ppb	1.9	372575.01	4.4092	Pulse	0.1000	3
Cu	63	72	He	488.490	ppb	1.5	1060039.33	12.5448	Pulse	0.1000	3
Zn	66	72	He	515.626	ppb	1.9	127179.33	1.5051	Pulse	0.1000	3
As	75	72	He	520.345	ppb	1.3	90156.83	1.0669	Pulse	0.5000	3
Sr	88	115	He	51.690	ppb	1.6	40659.45	0.4646	Pulse	0.1000	3
Mo	98	115	He	51.497	ppb	0.4	98833.76	1.1294	Pulse	0.1000	3
Ag	107	115	He	51.156	ppb	0.7	208160.37	2.3787	Pulse	0.1000	3
Cd	111	115	He	50.657	ppb	0.8	23702.76	0.2709	Pulse	0.5000	3
Sn	120	115	He	51.577	ppb	0.6	72748.00	0.8313	Pulse	0.1000	3
Sb	121	115	He	51.668	ppb	1.2	67183.46	0.7677	Pulse	0.1000	3
Ba	137	115	He	524.510	ppb	1.4	220306.76	2.5175	Pulse	0.1000	3
Tl	205	159	He	51.420	ppb	0.4	511248.46	1.2716	Pulse	0.1000	3
Pb	208	159	He	51.475	ppb	0.6	677798.46	1.6858	Pulse	0.1000	3
U	238	209	He	50.130	ppb	1.4	771861.86	2.4695	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2468197.57	1.1	102.9	Analog	0.1000	3
No Gas	Ge	72	1221952.64	0.4	106.0	Pulse	0.1000	3
H2	Sc	45	183487.67	0.4	98.1	Pulse	0.1000	3
H2	Ge	72	157190.25	0.3	96.0	Pulse	0.1000	3
H2	In	115	390793.14	1.1	100.4	Pulse	0.1000	3
He	Sc	45	47822.64	0.9	102.5	Pulse	0.1000	3
He	Ge	72	84509.62	1.1	104.1	Pulse	0.1000	3
He	In	115	87508.50	0.5	101.5	Pulse	0.1000	3
He	Tb	159	402061.67	0.4	100.9	Pulse	0.1000	3
He	Bi	209	312597.14	1.4	101.1	Pulse	0.1000	3

No Gas



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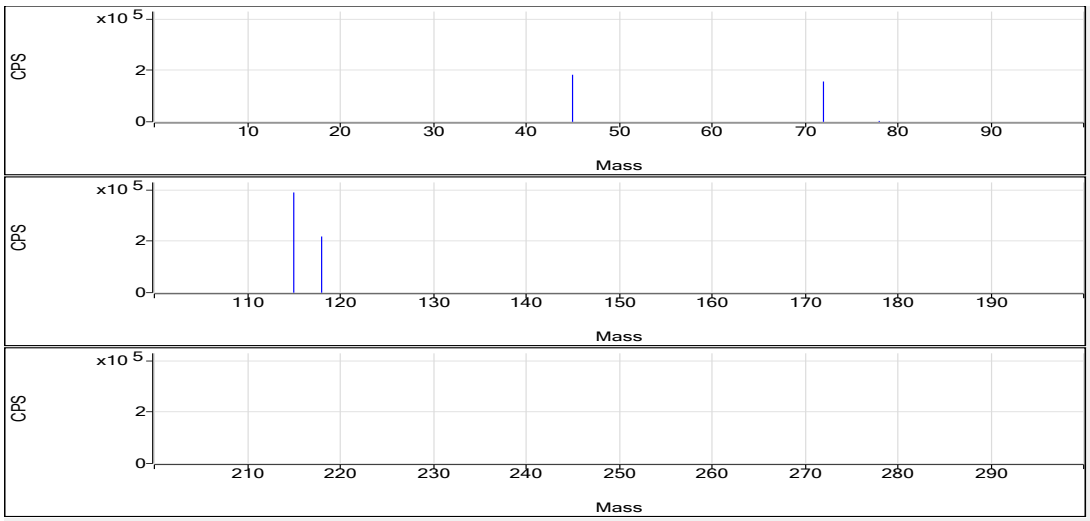
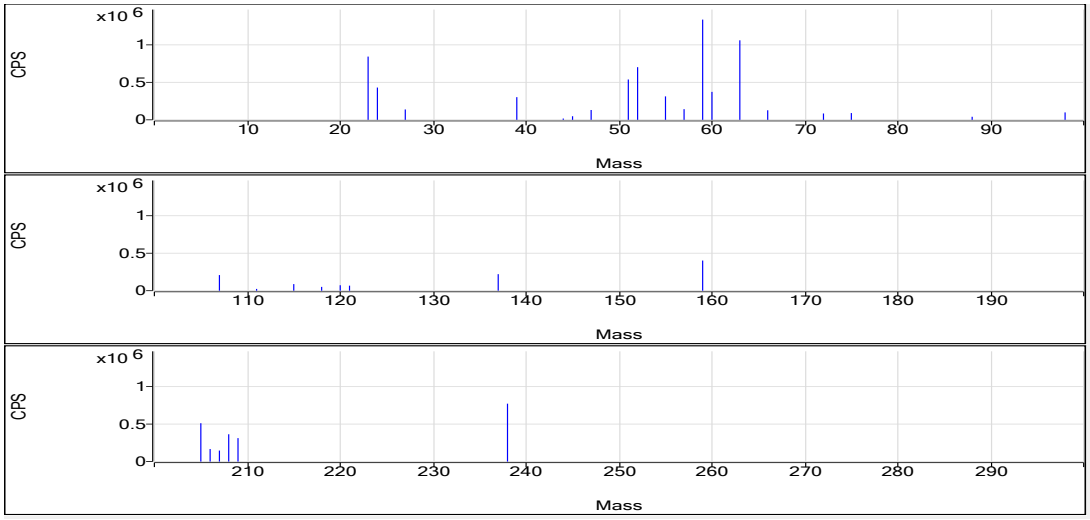


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.872	0.0358	88320.62	0.0008	4.685E-06
Be	9	1	No Gas	47.504	0.0362	88396.98	0.0008	4.685E-06
Be	9	1	No Gas	47.14	0.036	89740.91	0.0008	4.685E-06
Se	78	2	H2	53.224	0.0222	3483.76	0.0004	1.219E-05
Se	78	2	H2	53.407	0.0223	3497.10	0.0004	1.219E-05
Se	78	2	H2	52.59	0.0219	3463.09	0.0004	1.219E-05
Na	23	3	He	4833.32	17.6342	845731.00	0.0036	0.3452
Na	23	3	He	4803.64	17.528	844510.92	0.0036	0.3452
Na	23	3	He	4859.357	17.7273	838990.22	0.0036	0.3452
Mg	24	3	He	5012.292	8.9972	431501.63	0.0018	0.003497
Mg	24	3	He	4956.263	8.8966	428645.23	0.0018	0.003497
Mg	24	3	He	5070.032	9.1008	430716.91	0.0018	0.003497
Al	27	3	He	5001.583	2.9267	140365.88	0.0006	0.0006432
Al	27	3	He	4857.56	2.8425	136952.75	0.0006	0.0006432
Al	27	3	He	4957.912	2.9012	137306.38	0.0006	0.0006432
K	39	3	He	5126.467	6.3639	305213.39	0.0012	0.3951
K	39	3	He	5013.291	6.2322	300270.17	0.0012	0.3951
K	39	3	He	5126.449	6.3639	301189.06	0.0012	0.3951
Ca	44	3	He	5278.257	0.3593	17230.56	0.0001	0.002715
Ca	44	3	He	4983.222	0.3393	16349.67	0.0001	0.002715
Ca	44	3	He	5452.678	0.3711	17561.06	0.0001	0.002715
Ti	47	3	He	5080.904	2.7283	130846.51	0.0005	7.003E-05
Ti	47	3	He	5059.12	2.7166	130885.59	0.0005	7.003E-05
Ti	47	3	He	5168.507	2.7753	131347.89	0.0005	7.003E-05
V	51	3	He	513.052	11.2398	539056.44	0.0219	0.02486
V	51	3	He	508.873	11.1484	537137.88	0.0219	0.02486
V	51	3	He	517.969	11.3472	537037.06	0.0219	0.02486
Cr	52	3	He	490.468	14.7249	706204.29	0.0299	0.03997
Cr	52	3	He	489.196	14.6869	707622.33	0.0299	0.03997
Cr	52	3	He	486.977	14.6204	691948.27	0.0299	0.03997
Mn	55	3	He	508.651	6.5306	313206.21	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	508.04	6.5228	314270.56	0.0128	0.002639
Mn	55	3	He	510.236	6.5509	310039.80	0.0128	0.002639
Fe	57	3	He	5150.733	2.994	143589.45	0.0006	0.001429
Fe	57	3	He	5076.229	2.9507	142165.22	0.0006	0.001429
Fe	57	3	He	5106.125	2.968	140470.05	0.0006	0.001429
Co	59	3	He	496.664	27.9555	1340739.67	0.0563	0.002149
Co	59	3	He	494.625	27.8408	1341386.07	0.0563	0.002149
Co	59	3	He	497.931	28.0268	1326441.39	0.0563	0.002149
Ni	60	3	He	517.995	4.4489	372838.20	0.0086	0.002834
Ni	60	3	He	519.726	4.4637	375702.34	0.0086	0.002834
Ni	60	3	He	502.417	4.3151	369184.49	0.0086	0.002834
Cu	63	3	He	493.831	12.6819	1062813.50	0.0257	0.004757
Cu	63	3	He	491.648	12.6259	1062696.78	0.0257	0.004757
Cu	63	3	He	479.989	12.3266	1054607.72	0.0257	0.004757
Zn	66	3	He	523.247	1.5273	127996.88	0.0029	0.003818
Zn	66	3	He	519.338	1.5159	127592.90	0.0029	0.003818
Zn	66	3	He	504.292	1.4721	125948.21	0.0029	0.003818
As	75	3	He	525.179	1.0768	90243.99	0.002	0.0008061
As	75	3	He	523.311	1.073	90312.38	0.002	0.0008061
As	75	3	He	512.546	1.0509	89914.12	0.002	0.0008061
Sr	88	3	He	52.612	0.4729	41602.25	0.009	0.0009645
Sr	88	3	He	51.436	0.4623	40298.81	0.009	0.0009645
Sr	88	3	He	51.022	0.4586	40077.28	0.009	0.0009645
Mo	98	3	He	51.475	1.1289	99319.81	0.0219	0.0002706
Mo	98	3	He	51.693	1.1337	98818.24	0.0219	0.0002706
Mo	98	3	He	51.323	1.1256	98363.23	0.0219	0.0002706
Ag	107	3	He	51.478	2.3937	210587.22	0.0465	0.0006206
Ag	107	3	He	51.247	2.3829	207702.24	0.0465	0.0006206
Ag	107	3	He	50.743	2.3595	206191.66	0.0465	0.0006206
Cd	111	3	He	51.116	0.2733	24044.68	0.0053	0
Cd	111	3	He	50.587	0.2705	23575.87	0.0053	0
Cd	111	3	He	50.268	0.2688	23487.73	0.0053	0
Sn	120	3	He	51.618	0.832	73193.27	0.0158	0.01648
Sn	120	3	He	51.868	0.8359	72861.60	0.0158	0.01648
Sn	120	3	He	51.246	0.8261	72189.12	0.0158	0.01648
Sb	121	3	He	52.225	0.776	68269.01	0.0149	0.0002698
Sb	121	3	He	51.796	0.7696	67082.56	0.0149	0.0002698
Sb	121	3	He	50.983	0.7575	66198.81	0.0149	0.0002698
Ba	137	3	He	528.105	2.5348	222999.80	0.0048	0.0002317
Ba	137	3	He	529.509	2.5415	221525.90	0.0048	0.0002317
Ba	137	3	He	515.915	2.4763	216394.57	0.0048	0.0002317
Tl	205	3	He	51.641	1.277	514652.69	0.0247	0.0001339
Tl	205	3	He	51.365	1.2702	511591.20	0.0247	0.0001339
Tl	205	3	He	51.254	1.2675	507501.48	0.0247	0.0001339
Pb	208	3	He	51.186	1.6764	364099.37	0.0327	0.00107
Pb	208	3	He	51.466	1.6855	364228.63	0.0327	0.00107
Pb	208	3	He	51.772	1.6956	363576.01	0.0327	0.00107
U	238	3	He	49.655	2.446	775688.11	0.0493	7.55E-05
U	238	3	He	49.801	2.4533	765308.27	0.0493	7.55E-05
U	238	3	He	50.934	2.5091	774589.21	0.0493	7.55E-05
Sc	45	1	No Gas			2469952.62		
Sc	45	1	No Gas			2439205.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2495434.96		
Ge	72	1	No Gas			1217389.51		
Ge	72	1	No Gas			1221969.43		
Ge	72	1	No Gas			1226498.97		
Sc	45	2	H2			183222.42		
Sc	45	2	H2			184234.00		
Sc	45	2	H2			183006.60		
Ge	72	2	H2			156852.75		
Ge	72	2	H2			156914.58		
Ge	72	2	H2			157803.42		
In	115	2	H2			387492.65		
In	115	2	H2			389156.36		
In	115	2	H2			395730.42		
Sc	45	3	He			47959.75		
Sc	45	3	He			48180.64		
Sc	45	3	He			47327.54		
Ge	72	3	He			83805.36		
Ge	72	3	He			84168.05		
Ge	72	3	He			85555.45		
In	115	3	He			88370.61		
In	115	3	He			87565.26		
In	115	3	He			87778.04		
Tb	159	3	He			403008.90		
Tb	159	3	He			402766.48		
Tb	159	3	He			400409.64		
Bi	209	3	He			317118.69		
Bi	209	3	He			311956.28		
Bi	209	3	He			308716.46		

Quantitation Report

Data File Name	247_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 7:07:11 PM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

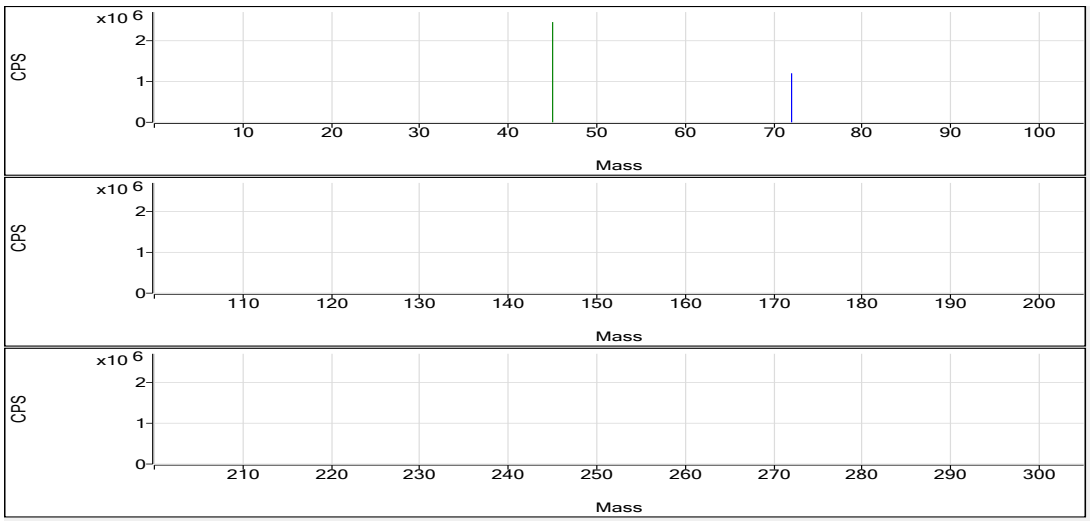
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.027	ppb	32.0	62.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.073	ppb	88.1	6.66	0.0000	Pulse	1.5000	3
Na	23	45	He	12.987	ppb	27.3	18712.31	0.3916	Pulse	0.1000	3
Mg	24	45	He	1.439	ppb	45.8	290.01	0.0061	Pulse	0.1000	3
Al	27	45	He	1.172	ppb	79.5	63.33	0.0013	Pulse	0.1000	3
K	39	45	He	8.429	ppb	105.5	19353.37	0.4049	Pulse	0.1000	3
Ca	44	45	He	3.183	ppb	20.6	140.01	0.0029	Pulse	0.1000	3
Ti	47	45	He	0.904	ppb	65.1	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	0.360	ppb	5.1	1564.76	0.0327	Pulse	0.5000	3
Cr	52	45	He	-0.044	ppb	N/A	1846.85	0.0386	Pulse	0.1000	3
Mn	55	45	He	0.170	ppb	62.6	230.01	0.0048	Pulse	0.1000	3
Fe	57	45	He	1.975	ppb	92.5	123.34	0.0026	Pulse	0.1000	3
Co	59	45	He	0.108	ppb	31.1	393.35	0.0082	Pulse	0.1000	3
Ni	60	72	He	0.069	ppb	123.9	286.68	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.085	ppb	33.6	580.04	0.0069	Pulse	0.1000	3
Zn	66	72	He	2.366	ppb	6.2	896.72	0.0107	Pulse	0.1000	3
As	75	72	He	0.135	ppb	49.9	90.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.054	ppb	59.0	126.67	0.0015	Pulse	0.1000	3
Mo	98	115	He	0.064	ppb	28.5	146.67	0.0017	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	121.5	73.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	43.9	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.017	ppb	529.9	1460.13	0.0167	Pulse	0.1000	3
Sb	121	115	He	0.031	ppb	58.9	63.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.072	ppb	121.5	50.00	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.090	ppb	6.8	933.40	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.015	ppb	49.4	623.36	0.0016	Pulse	0.1000	3
U	238	209	He	0.043	ppb	1.7	680.04	0.0022	Pulse	0.1000	3

ISTD Table:

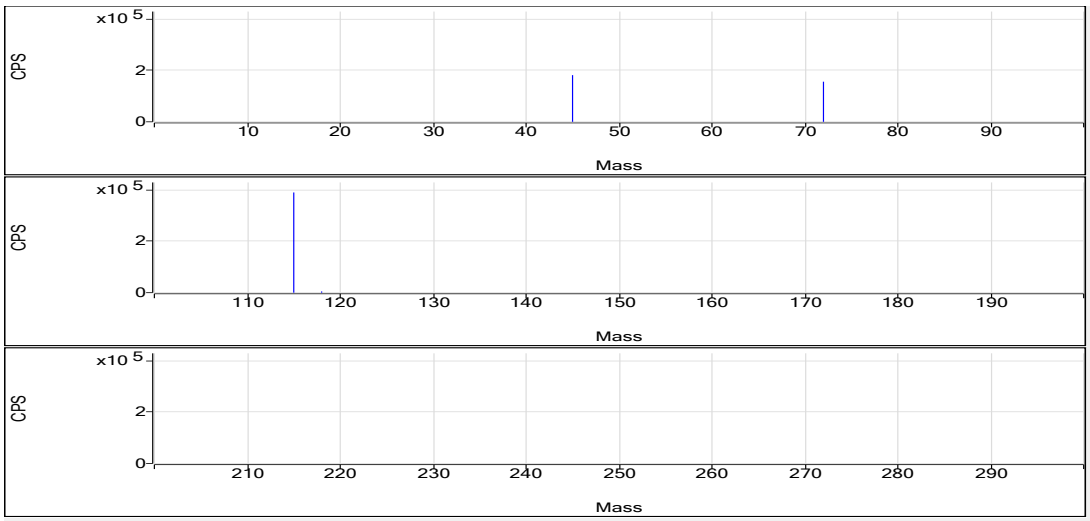
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2456971.42	1.4	102.4	Analog	0.1000	3
No Gas	Ge	72	1201836.29	0.5	104.2	Pulse	0.1000	3
H2	Sc	45	182057.44	1.0	97.4	Pulse	0.1000	3
H2	Ge	72	156475.93	0.5	95.6	Pulse	0.1000	3
H2	In	115	390908.26	0.9	100.5	Pulse	0.1000	3
He	Sc	45	47792.74	1.5	102.5	Pulse	0.1000	3
He	Ge	72	83775.17	1.5	103.2	Pulse	0.1000	3
He	In	115	87229.14	0.9	101.2	Pulse	0.1000	3
He	Tb	159	397007.52	0.3	99.6	Pulse	0.1000	3
He	Bi	209	310880.70	0.7	100.5	Pulse	0.1000	3

No Gas

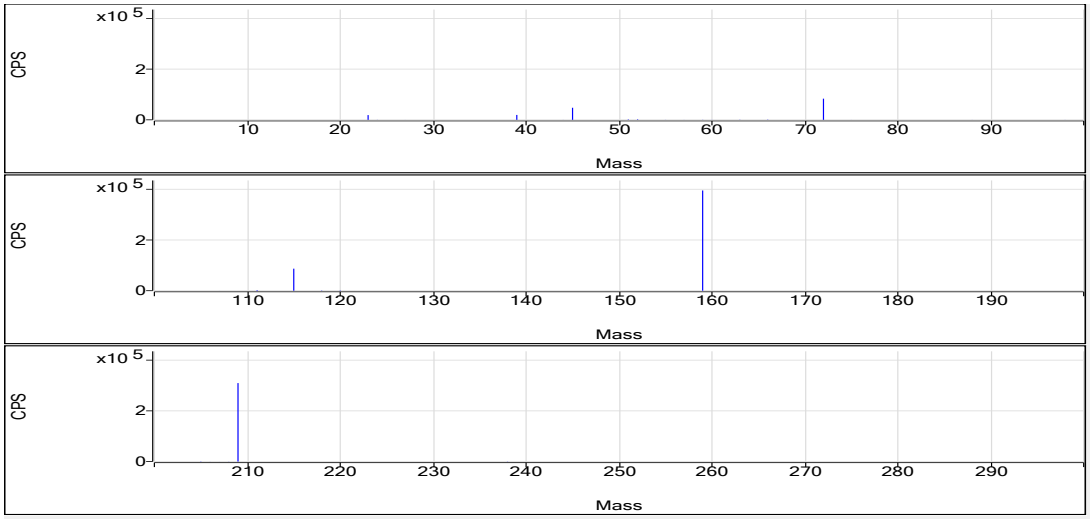


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.031	0	70.00	0.0008	4.685E-06
Be	9	1	No Gas	0.034	0	74.00	0.0008	4.685E-06
Be	9	1	No Gas	0.017	0	44.00	0.0008	4.685E-06
Se	78	2	H2	0.052	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.022	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.145	0.0001	11.33	0.0004	1.219E-05
Na	23	3	He	14.353	0.3965	18642.19	0.0036	0.3452
Na	23	3	He	8.955	0.3772	18271.76	0.0036	0.3452
Na	23	3	He	15.653	0.4011	19222.99	0.0036	0.3452
Mg	24	3	He	2.2	0.0074	350.02	0.0018	0.003497
Mg	24	3	He	1.043	0.0054	260.01	0.0018	0.003497
Mg	24	3	He	1.075	0.0054	260.01	0.0018	0.003497
Al	27	3	He	2.172	0.0019	90.00	0.0006	0.0006432
Al	27	3	He	1.018	0.0012	60.00	0.0006	0.0006432
Al	27	3	He	0.327	0.0008	40.00	0.0006	0.0006432
K	39	3	He	5.626	0.4016	18882.79	0.0012	0.3951
K	39	3	He	18.382	0.4165	20174.43	0.0012	0.3951
K	39	3	He	1.28	0.3966	19002.90	0.0012	0.3951
Ca	44	3	He	3.892	0.003	140.01	0.0001	0.002715
Ca	44	3	He	2.595	0.0029	140.01	0.0001	0.002715
Ca	44	3	He	3.061	0.0029	140.01	0.0001	0.002715
Ti	47	3	He	0.266	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.023	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	1.424	0.0008	40.00	0.0005	7.003E-05
V	51	3	He	0.375	0.0331	1554.10	0.0219	0.02486
V	51	3	He	0.34	0.0323	1564.10	0.0219	0.02486
V	51	3	He	0.367	0.0329	1576.09	0.0219	0.02486
Cr	52	3	He	-0.042	0.0387	1820.18	0.0299	0.03997
Cr	52	3	He	-0.039	0.0388	1880.19	0.0299	0.03997
Cr	52	3	He	-0.052	0.0384	1840.17	0.0299	0.03997
Mn	55	3	He	0.258	0.006	280.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.052	0.0033	160.01	0.0128	0.002639
Mn	55	3	He	0.201	0.0052	250.01	0.0128	0.002639
Fe	57	3	He	0.469	0.0017	80.00	0.0006	0.001429
Fe	57	3	He	1.449	0.0023	110.00	0.0006	0.001429
Fe	57	3	He	4.006	0.0038	180.01	0.0006	0.001429
Co	59	3	He	0.128	0.0094	440.02	0.0563	0.002149
Co	59	3	He	0.127	0.0093	450.02	0.0563	0.002149
Co	59	3	He	0.069	0.0061	290.01	0.0563	0.002149
Ni	60	3	He	0.107	0.0038	310.01	0.0086	0.002834
Ni	60	3	He	-0.029	0.0026	220.01	0.0086	0.002834
Ni	60	3	He	0.13	0.0039	330.01	0.0086	0.002834
Cu	63	3	He	0.117	0.0078	640.04	0.0257	0.004757
Cu	63	3	He	0.062	0.0063	540.04	0.0257	0.004757
Cu	63	3	He	0.076	0.0067	560.03	0.0257	0.004757
Zn	66	3	He	2.474	0.011	910.06	0.0029	0.003818
Zn	66	3	He	2.2	0.0102	870.05	0.0029	0.003818
Zn	66	3	He	2.426	0.0109	910.06	0.0029	0.003818
As	75	3	He	0.068	0.0009	78.00	0.002	0.0008061
As	75	3	He	0.134	0.0011	92.00	0.002	0.0008061
As	75	3	He	0.202	0.0012	102.00	0.002	0.0008061
Sr	88	3	He	0.021	0.0012	100.00	0.009	0.0009645
Sr	88	3	He	0.085	0.0017	150.01	0.009	0.0009645
Sr	88	3	He	0.057	0.0015	130.01	0.009	0.0009645
Mo	98	3	He	0.046	0.0013	110.00	0.0219	0.0002706
Mo	98	3	He	0.082	0.0021	180.01	0.0219	0.0002706
Mo	98	3	He	0.065	0.0017	150.01	0.0219	0.0002706
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.011	0.0012	100.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.103	0.0181	1570.15	0.0158	0.01648
Sn	120	3	He	-0.074	0.0153	1330.11	0.0158	0.01648
Sn	120	3	He	0.021	0.0168	1480.13	0.0158	0.01648
Sb	121	3	He	0.052	0.001	90.00	0.0149	0.0002698
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.02	0.0006	50.00	0.0149	0.0002698
Ba	137	3	He	0.168	0.001	90.00	0.0048	0.0002317
Ba	137	3	He	0.048	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	-0.001	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.085	0.0022	890.06	0.0247	0.0001339
Tl	205	3	He	0.087	0.0023	910.07	0.0247	0.0001339
Tl	205	3	He	0.097	0.0025	1000.08	0.0247	0.0001339
Pb	208	3	He	0.007	0.0013	390.02	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	360.02	0.0327	0.00107
Pb	208	3	He	0.021	0.0017	400.02	0.0327	0.00107
U	238	3	He	0.044	0.0022	690.04	0.0493	7.55E-05
U	238	3	He	0.042	0.0022	670.04	0.0493	7.55E-05
U	238	3	He	0.043	0.0022	680.05	0.0493	7.55E-05
Sc	45	1	No Gas			2494358.56		
Sc	45	1	No Gas			2424862.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2451693.40		
Ge	72	1	No Gas			1209090.84		
Ge	72	1	No Gas			1200162.33		
Ge	72	1	No Gas			1196255.69		
Sc	45	2	H2			181623.10		
Sc	45	2	H2			180569.10		
Sc	45	2	H2			183980.11		
Ge	72	2	H2			157358.72		
Ge	72	2	H2			156338.40		
Ge	72	2	H2			155730.68		
In	115	2	H2			395039.68		
In	115	2	H2			389346.79		
In	115	2	H2			388338.31		
Sc	45	3	He			47016.93		
Sc	45	3	He			48441.55		
Sc	45	3	He			47919.74		
Ge	72	3	He			82579.32		
Ge	72	3	He			85102.28		
Ge	72	3	He			83643.92		
In	115	3	He			86731.22		
In	115	3	He			86881.40		
In	115	3	He			88099.52		
Tb	159	3	He			396265.07		
Tb	159	3	He			398485.93		
Tb	159	3	He			396271.56		
Bi	209	3	He			309458.80		
Bi	209	3	He			309722.24		
Bi	209	3	He			313461.05		

Quantitation Report

Data File Name	248SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 7:09:16 PM
Sample Name	MB 410-402565/1-A
Sample Type	Sample
Comment	I9 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

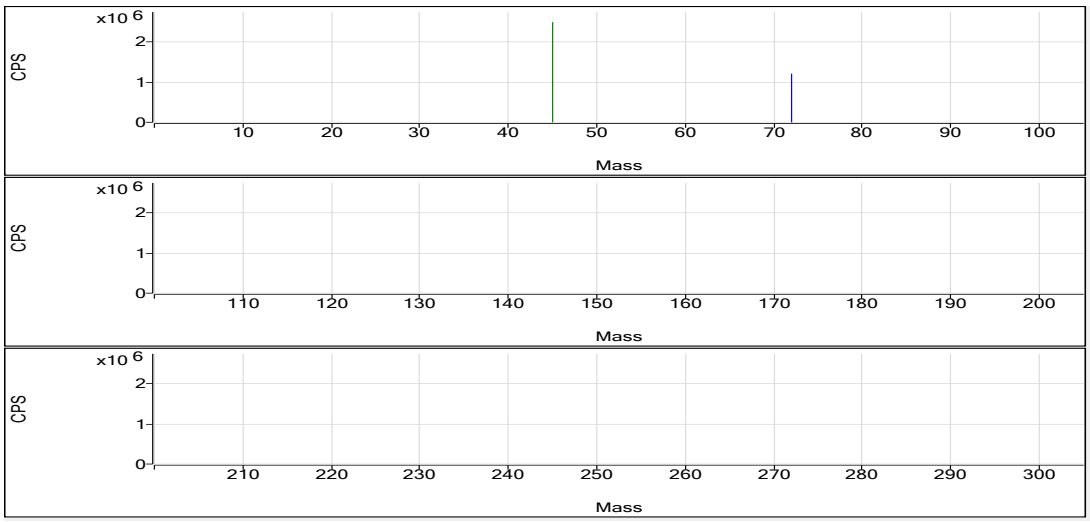
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.014	ppb	20.5	38.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.011	ppb	6.7	2.67	0.0000	Pulse	1.5000	3
Na	23	45	He	4.957	ppb	71.8	17881.35	0.3629	Pulse	0.1000	3
Mg	24	45	He	0.663	ppb	111.3	230.02	0.0047	Pulse	0.1000	3
Al	27	45	He	12.122	ppb	24.6	380.02	0.0077	Pulse	0.1000	3
K	39	45	He	-8.391	ppb	N/A	18992.92	0.3853	Pulse	0.1000	3
Ca	44	45	He	6.140	ppb	265.0	153.34	0.0031	Pulse	0.1000	3
Ti	47	45	He	0.125	ppb	177.1	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.036	ppb	85.5	1264.73	0.0257	Pulse	0.5000	3
Cr	52	45	He	-0.253	ppb	N/A	1596.82	0.0324	Pulse	0.1000	3
Mn	55	45	He	0.078	ppb	109.3	180.01	0.0036	Pulse	0.1000	3
Fe	57	45	He	0.681	ppb	46.5	90.00	0.0018	Pulse	0.1000	3
Co	59	45	He	0.033	ppb	12.0	196.68	0.0040	Pulse	0.1000	3
Ni	60	72	He	-0.094	ppb	N/A	170.01	0.0020	Pulse	0.1000	3
Cu	63	72	He	0.118	ppb	20.7	653.37	0.0078	Pulse	0.1000	3
Zn	66	72	He	1.874	ppb	20.6	776.72	0.0093	Pulse	0.1000	3
As	75	72	He	-0.060	ppb	N/A	57.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.011	ppb	N/A	76.67	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.022	ppb	14.8	66.67	0.0008	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.206	ppb	N/A	1173.42	0.0132	Pulse	0.1000	3
Sb	121	115	He	0.015	ppb	77.0	43.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.038	ppb	93.7	36.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.028	ppb	29.0	330.02	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	37.0	556.69	0.0014	Pulse	0.1000	3
U	238	209	He	0.014	ppb	15.5	240.01	0.0008	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2503328.30	0.6	104.4	Analog	0.1000	3
No Gas	Ge	72	1213834.72	0.7	105.2	Pulse	0.1000	3
H2	Sc	45	188065.75	1.3	100.6	Pulse	0.1000	3
H2	Ge	72	160250.72	1.8	97.9	Pulse	0.1000	3
H2	In	115	399969.08	1.2	102.8	Pulse	0.1000	3
He	Sc	45	49307.50	2.9	105.7	Pulse	0.1000	3
He	Ge	72	83919.21	2.5	103.4	Pulse	0.1000	3
He	In	115	88707.17	0.9	102.9	Pulse	0.1000	3
He	Tb	159	402188.64	1.0	100.9	Pulse	0.1000	3
He	Bi	209	317147.22	0.7	102.5	Pulse	0.1000	3

No Gas



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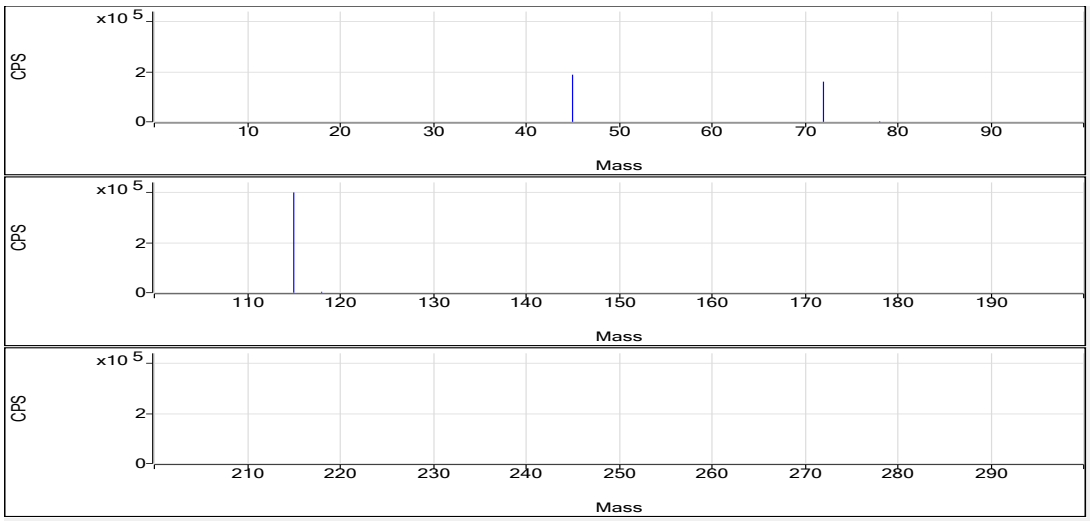
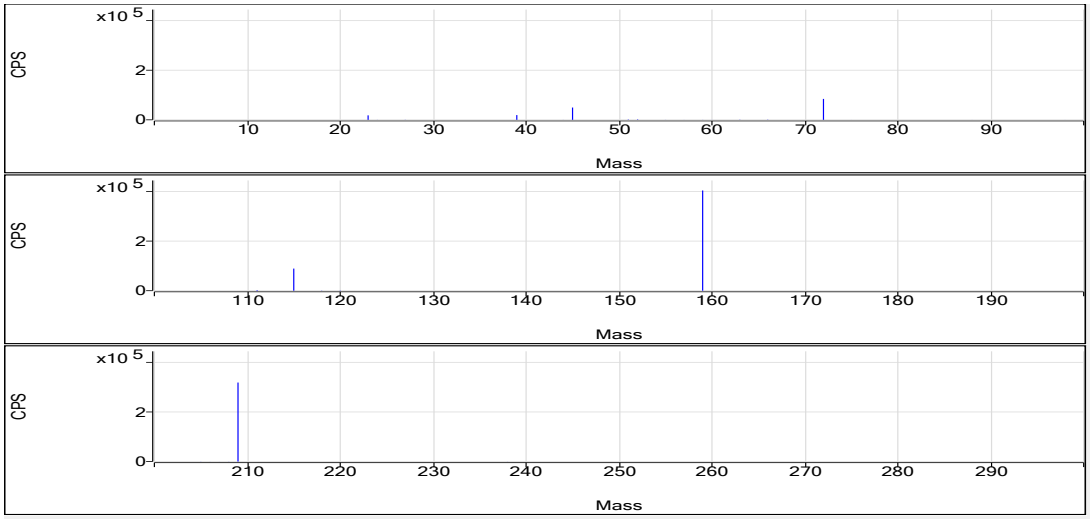


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.012	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Na	23	3	He	5.463	0.3647	18021.47	0.0036	0.3452
Na	23	3	He	1.172	0.3494	17701.20	0.0036	0.3452
Na	23	3	He	8.235	0.3746	17921.37	0.0036	0.3452
Mg	24	3	He	1.097	0.0055	270.02	0.0018	0.003497
Mg	24	3	He	-0.189	0.0032	160.01	0.0018	0.003497
Mg	24	3	He	1.08	0.0054	260.02	0.0018	0.003497
Al	27	3	He	13.775	0.0087	430.02	0.0006	0.0006432
Al	27	3	He	8.684	0.0057	290.01	0.0006	0.0006432
Al	27	3	He	13.908	0.0088	420.02	0.0006	0.0006432
K	39	3	He	9.423	0.406	20064.24	0.0012	0.3951
K	39	3	He	-22.966	0.3683	18662.57	0.0012	0.3951
K	39	3	He	-11.629	0.3815	18251.95	0.0012	0.3951
Ca	44	3	He	-1.243	0.0026	130.01	0.0001	0.002715
Ca	44	3	He	-5.131	0.0024	120.00	0.0001	0.002715
Ca	44	3	He	24.795	0.0044	210.01	0.0001	0.002715
Ti	47	3	He	0.246	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.259	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.062	0.0262	1296.07	0.0219	0.02486
V	51	3	He	0.002	0.0249	1262.06	0.0219	0.02486
V	51	3	He	0.045	0.0258	1236.06	0.0219	0.02486
Cr	52	3	He	-0.22	0.0334	1650.16	0.0299	0.03997
Cr	52	3	He	-0.287	0.0314	1590.15	0.0299	0.03997
Cr	52	3	He	-0.253	0.0324	1550.14	0.0299	0.03997
Mn	55	3	He	0.173	0.0049	240.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.056	0.0034	170.01	0.0128	0.002639
Mn	55	3	He	0.006	0.0027	130.00	0.0128	0.002639
Fe	57	3	He	0.327	0.0016	80.00	0.0006	0.001429
Fe	57	3	He	0.938	0.002	100.00	0.0006	0.001429
Fe	57	3	He	0.779	0.0019	90.00	0.0006	0.001429
Co	59	3	He	0.034	0.004	200.01	0.0563	0.002149
Co	59	3	He	0.028	0.0038	190.01	0.0563	0.002149
Co	59	3	He	0.036	0.0042	200.01	0.0563	0.002149
Ni	60	3	He	-0.124	0.0018	150.01	0.0086	0.002834
Ni	60	3	He	-0.071	0.0022	190.01	0.0086	0.002834
Ni	60	3	He	-0.087	0.0021	170.01	0.0086	0.002834
Cu	63	3	He	0.09	0.0071	600.03	0.0257	0.004757
Cu	63	3	He	0.134	0.0082	700.04	0.0257	0.004757
Cu	63	3	He	0.13	0.0081	660.04	0.0257	0.004757
Zn	66	3	He	1.601	0.0085	720.04	0.0029	0.003818
Zn	66	3	He	1.706	0.0088	750.05	0.0029	0.003818
Zn	66	3	He	2.314	0.0106	860.06	0.0029	0.003818
As	75	3	He	-0.129	0.0005	46.00	0.002	0.0008061
As	75	3	He	0.03	0.0009	74.00	0.002	0.0008061
As	75	3	He	-0.082	0.0006	52.00	0.002	0.0008061
Sr	88	3	He	-0.033	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.007	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	0.006	0.001	90.00	0.009	0.0009645
Mo	98	3	He	0.018	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.024	0.0008	70.00	0.0219	0.0002706
Mo	98	3	He	0.024	0.0008	70.00	0.0219	0.0002706
Ag	107	3	He	-0.004	0.0004	40.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	0.001	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	-0.209	0.0132	1180.09	0.0158	0.01648
Sn	120	3	He	-0.155	0.014	1240.10	0.0158	0.01648
Sn	120	3	He	-0.253	0.0125	1100.08	0.0158	0.01648
Sb	121	3	He	0.027	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	0.012	0.0005	40.00	0.0149	0.0002698
Ba	137	3	He	0.068	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	-0.001	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.046	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.032	0.0009	370.02	0.0247	0.0001339
Tl	205	3	He	0.019	0.0006	240.01	0.0247	0.0001339
Tl	205	3	He	0.033	0.001	380.02	0.0247	0.0001339
Pb	208	3	He	0.013	0.0015	300.01	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	370.02	0.0327	0.00107
Pb	208	3	He	0.006	0.0013	310.01	0.0327	0.00107
U	238	3	He	0.015	0.0008	260.01	0.0493	7.55E-05
U	238	3	He	0.015	0.0008	260.02	0.0493	7.55E-05
U	238	3	He	0.011	0.0006	200.01	0.0493	7.55E-05
Sc	45	1	No Gas			2486240.59		
Sc	45	1	No Gas			2513564.49		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2510179.81		
Ge	72	1	No Gas			1222263.50		
Ge	72	1	No Gas			1213027.40		
Ge	72	1	No Gas			1206213.26		
Sc	45	2	H2			190380.93		
Sc	45	2	H2			185631.52		
Sc	45	2	H2			188184.80		
Ge	72	2	H2			162122.34		
Ge	72	2	H2			156975.13		
Ge	72	2	H2			161654.69		
In	115	2	H2			404783.08		
In	115	2	H2			400221.13		
In	115	2	H2			394903.04		
Sc	45	3	He			49414.68		
Sc	45	3	He			50668.57		
Sc	45	3	He			47839.25		
Ge	72	3	He			84921.38		
Ge	72	3	He			85364.69		
Ge	72	3	He			81471.56		
In	115	3	He			89598.52		
In	115	3	He			88370.86		
In	115	3	He			88169.52		
Tb	159	3	He			403718.98		
Tb	159	3	He			405296.95		
Tb	159	3	He			397549.99		
Bi	209	3	He			319357.91		
Bi	209	3	He			316974.04		
Bi	209	3	He			315109.70		

Quantitation Report

Data File Name	249SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 7:11:18 PM
Sample Name	LCS 410-402565/2-A
Sample Type	Sample
Comment	I9 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

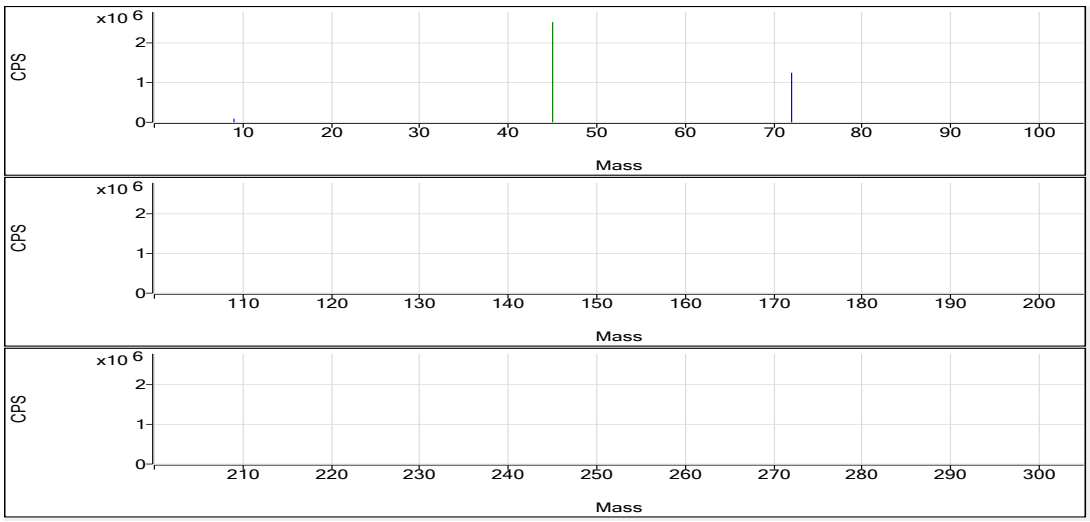
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.829	ppb	0.4	90375.98	0.0357	Pulse	0.5000	3
Se	78	72	H2	103.392	ppb	1.9	7115.78	0.0431	Pulse	1.5000	3
Na	23	45	He	4693.572	ppb	1.1	847821.99	17.1343	Pulse	0.1000	3
Mg	24	45	He	4873.693	ppb	1.4	432873.49	8.7485	Pulse	0.1000	3
Al	27	45	He	4883.328	ppb	0.5	141403.63	2.8576	Pulse	0.1000	3
K	39	45	He	4940.777	ppb	1.3	304196.00	6.1477	Pulse	0.1000	3
Ca	44	45	He	4957.949	ppb	4.7	16703.38	0.3376	Pulse	0.1000	3
Ti	47	45	He	502.390	ppb	2.5	13349.98	0.2698	Pulse	0.1000	3
V	51	45	He	501.347	ppb	1.2	543487.21	10.9839	Pulse	0.5000	3
Cr	52	45	He	475.755	ppb	1.5	706787.00	14.2844	Pulse	0.1000	3
Mn	55	45	He	499.994	ppb	0.9	317649.46	6.4195	Pulse	0.1000	3
Fe	57	45	He	4971.644	ppb	1.3	142992.98	2.8899	Pulse	0.1000	3
Co	59	45	He	480.525	ppb	1.4	1338288.11	27.0472	Pulse	0.1000	3
Ni	60	72	He	491.953	ppb	2.4	374743.46	4.2253	Pulse	0.1000	3
Cu	63	72	He	470.328	ppb	1.8	1071329.10	12.0786	Pulse	0.1000	3
Zn	66	72	He	498.286	ppb	1.2	129029.08	1.4546	Pulse	0.1000	3
As	75	72	He	501.140	ppb	1.7	91142.95	1.0276	Pulse	0.5000	3
Sr	88	115	He	50.715	ppb	1.9	40535.69	0.4559	Pulse	0.1000	3
Mo	98	115	He	49.499	ppb	1.7	96533.98	1.0856	Pulse	0.1000	3
Ag	107	115	He	49.858	ppb	1.1	206162.05	2.3184	Pulse	0.1000	3
Cd	111	115	He	51.110	ppb	0.7	24302.49	0.2733	Pulse	0.5000	3
Sn	120	115	He	101.820	ppb	0.6	144513.48	1.6251	Pulse	0.1000	3
Sb	121	115	He	103.120	ppb	0.7	136229.09	1.5320	Pulse	0.1000	3
Ba	137	115	He	517.316	ppb	1.0	220799.39	2.4830	Pulse	0.1000	3
Tl	205	159	He	102.262	ppb	0.3	1025311.37	2.5287	Pulse	0.1000	3
Pb	208	159	He	51.336	ppb	0.1	681708.49	1.6813	Pulse	0.1000	3
U	238	209	He	49.543	ppb	0.7	771546.06	2.4406	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2529696.84	0.9	105.5	Analog	0.1000	3
No Gas	Ge	72	1250326.23	0.3	108.4	Pulse	0.1000	3
H2	Sc	45	186875.98	0.5	99.9	Pulse	0.1000	3
H2	Ge	72	164993.33	1.6	100.8	Pulse	0.1000	3
H2	In	115	400280.59	0.8	102.9	Pulse	0.1000	3
He	Sc	45	49484.61	1.1	106.1	Pulse	0.1000	3
He	Ge	72	88714.53	1.8	109.3	Pulse	0.1000	3
He	In	115	88927.12	0.6	103.2	Pulse	0.1000	3
He	Tb	159	405466.56	0.2	101.7	Pulse	0.1000	3
He	Bi	209	316137.83	0.4	102.2	Pulse	0.1000	3

No Gas



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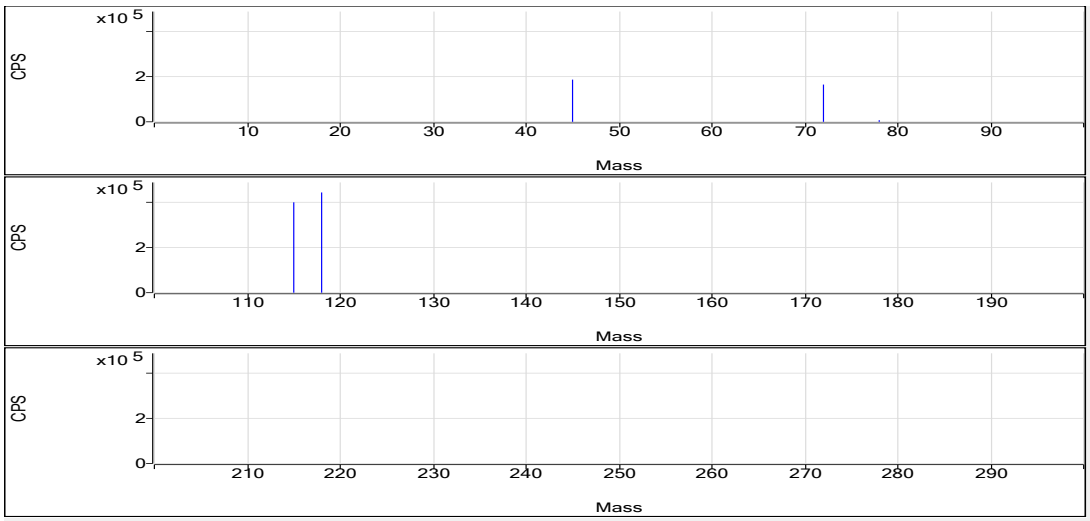
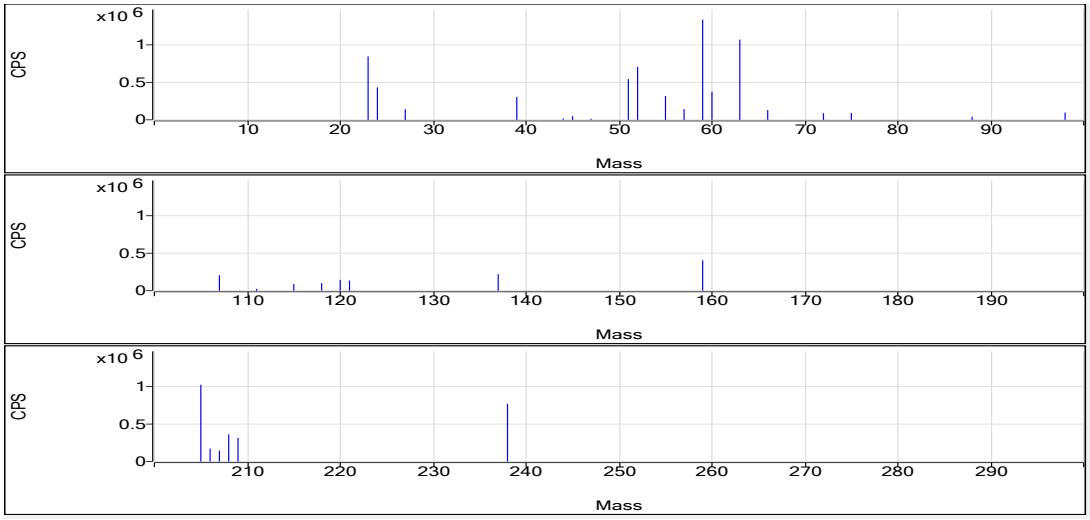


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.62	0.0356	89048.86	0.0008	4.685E-06
Be	9	1	No Gas	46.953	0.0358	91002.29	0.0008	4.685E-06
Be	9	1	No Gas	46.914	0.0358	91076.80	0.0008	4.685E-06
Se	78	2	H2	103.061	0.043	7203.15	0.0004	1.219E-05
Se	78	2	H2	105.498	0.044	7141.13	0.0004	1.219E-05
Se	78	2	H2	101.615	0.0424	7003.05	0.0004	1.219E-05
Na	23	3	He	4755.852	17.3571	849328.11	0.0036	0.3452
Na	23	3	He	4663.459	17.0266	843578.50	0.0036	0.3452
Na	23	3	He	4661.406	17.0192	850559.36	0.0036	0.3452
Mg	24	3	He	4945.86	8.878	434422.45	0.0018	0.003497
Mg	24	3	He	4858.729	8.7216	432110.97	0.0018	0.003497
Mg	24	3	He	4816.49	8.6458	432087.06	0.0018	0.003497
Al	27	3	He	4902.011	2.8685	140362.91	0.0006	0.0006432
Al	27	3	He	4857.479	2.8424	140827.99	0.0006	0.0006432
Al	27	3	He	4890.496	2.8618	143019.99	0.0006	0.0006432
K	39	3	He	4986.262	6.2007	303417.09	0.0012	0.3951
K	39	3	He	4966.499	6.1777	306072.61	0.0012	0.3951
K	39	3	He	4869.568	6.0648	303098.30	0.0012	0.3951
Ca	44	3	He	5078.657	0.3458	16920.33	0.0001	0.002715
Ca	44	3	He	5108.123	0.3478	17230.61	0.0001	0.002715
Ca	44	3	He	4687.067	0.3193	15959.21	0.0001	0.002715
Ti	47	3	He	515.081	0.2766	13536.86	0.0005	7.003E-05
Ti	47	3	He	501.942	0.2696	13356.66	0.0005	7.003E-05
Ti	47	3	He	490.145	0.2633	13156.42	0.0005	7.003E-05
V	51	3	He	507	11.1075	543517.81	0.0219	0.02486
V	51	3	He	502.403	11.007	545338.50	0.0219	0.02486
V	51	3	He	494.638	10.8372	541605.31	0.0219	0.02486
Cr	52	3	He	483.041	14.5026	709649.21	0.0299	0.03997
Cr	52	3	He	474.912	14.2592	706468.35	0.0299	0.03997
Cr	52	3	He	469.313	14.0915	704243.43	0.0299	0.03997
Mn	55	3	He	505.234	6.4868	317414.08	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	496.658	6.3767	315931.40	0.0128	0.002639
Mn	55	3	He	498.091	6.3951	319602.91	0.0128	0.002639
Fe	57	3	He	5046.439	2.9334	143537.34	0.0006	0.001429
Fe	57	3	He	4946.247	2.8752	142448.88	0.0006	0.001429
Fe	57	3	He	4922.245	2.8612	142992.73	0.0006	0.001429
Co	59	3	He	487.551	27.4427	1342842.95	0.0563	0.002149
Co	59	3	He	479.791	27.0059	1338002.64	0.0563	0.002149
Co	59	3	He	474.232	26.693	1334018.73	0.0563	0.002149
Ni	60	3	He	488.229	4.1934	374204.17	0.0086	0.002834
Ni	60	3	He	482.443	4.1437	372696.52	0.0086	0.002834
Ni	60	3	He	505.187	4.3389	377329.68	0.0086	0.002834
Cu	63	3	He	469.302	12.0522	1075505.61	0.0257	0.004757
Cu	63	3	He	462.608	11.8804	1068555.45	0.0257	0.004757
Cu	63	3	He	479.074	12.3031	1069926.23	0.0257	0.004757
Zn	66	3	He	494.849	1.4446	128914.19	0.0029	0.003818
Zn	66	3	He	494.581	1.4438	129863.54	0.0029	0.003818
Zn	66	3	He	505.43	1.4754	128309.52	0.0029	0.003818
As	75	3	He	498.02	1.0212	91127.38	0.002	0.0008061
As	75	3	He	494.668	1.0143	91230.38	0.002	0.0008061
As	75	3	He	510.732	1.0472	91071.10	0.002	0.0008061
Sr	88	3	He	50.668	0.4554	40599.34	0.009	0.0009645
Sr	88	3	He	51.687	0.4646	41010.63	0.009	0.0009645
Sr	88	3	He	49.789	0.4476	39997.11	0.009	0.0009645
Mo	98	3	He	49.643	1.0888	97054.70	0.0219	0.0002706
Mo	98	3	He	50.235	1.1017	97254.65	0.0219	0.0002706
Mo	98	3	He	48.619	1.0663	95292.58	0.0219	0.0002706
Ag	107	3	He	50.251	2.3366	208293.83	0.0465	0.0006206
Ag	107	3	He	50.108	2.33	205673.90	0.0465	0.0006206
Ag	107	3	He	49.216	2.2885	204518.43	0.0465	0.0006206
Cd	111	3	He	51.082	0.2731	24347.28	0.0053	0
Cd	111	3	He	50.778	0.2715	23966.55	0.0053	0
Cd	111	3	He	51.469	0.2752	24593.64	0.0053	0
Sn	120	3	He	102.262	1.6321	145487.35	0.0158	0.01648
Sn	120	3	He	102.055	1.6288	143779.13	0.0158	0.01648
Sn	120	3	He	101.144	1.6144	144273.96	0.0158	0.01648
Sb	121	3	He	103.316	1.5349	136821.25	0.0149	0.0002698
Sb	121	3	He	103.748	1.5413	136054.35	0.0149	0.0002698
Sb	121	3	He	102.296	1.5197	135811.68	0.0149	0.0002698
Ba	137	3	He	519.41	2.4931	222236.19	0.0048	0.0002317
Ba	137	3	He	521.01	2.5007	220747.03	0.0048	0.0002317
Ba	137	3	He	511.53	2.4552	219414.96	0.0048	0.0002317
Tl	205	3	He	102.03	2.523	1020576.63	0.0247	0.0001339
Tl	205	3	He	102.205	2.5273	1024700.06	0.0247	0.0001339
Tl	205	3	He	102.552	2.5359	1030657.41	0.0247	0.0001339
Pb	208	3	He	51.406	1.6836	364348.39	0.0327	0.00107
Pb	208	3	He	51.274	1.6793	365500.42	0.0327	0.00107
Pb	208	3	He	51.329	1.6811	360908.00	0.0327	0.00107
U	238	3	He	49.472	2.4371	771316.71	0.0493	7.55E-05
U	238	3	He	49.257	2.4265	769420.77	0.0493	7.55E-05
U	238	3	He	49.901	2.4582	773900.69	0.0493	7.55E-05
Sc	45	1	No Gas			2503760.59		
Sc	45	1	No Gas			2540590.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2544739.81		
Ge	72	1	No Gas			1245438.11		
Ge	72	1	No Gas			1253086.86		
Ge	72	1	No Gas			1252453.73		
Sc	45	2	H2			187553.77		
Sc	45	2	H2			185914.53		
Sc	45	2	H2			187159.63		
Ge	72	2	H2			167531.56		
Ge	72	2	H2			162253.42		
Ge	72	2	H2			165195.00		
In	115	2	H2			403713.78		
In	115	2	H2			398987.92		
In	115	2	H2			398140.07		
Sc	45	3	He			48932.68		
Sc	45	3	He			49544.80		
Sc	45	3	He			49976.35		
Ge	72	3	He			89236.96		
Ge	72	3	He			89942.73		
Ge	72	3	He			86963.89		
In	115	3	He			89920.84		
In	115	3	He			89064.35		
In	115	3	He			90142.20		
Tb	159	3	He			404516.56		
Tb	159	3	He			405453.12		
Tb	159	3	He			406429.99		
Bi	209	3	He			316494.64		
Bi	209	3	He			317096.83		
Bi	209	3	He			314822.01		

Quantitation Report

Data File Name	250SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 7:13:23 PM
Sample Name	RINSE
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

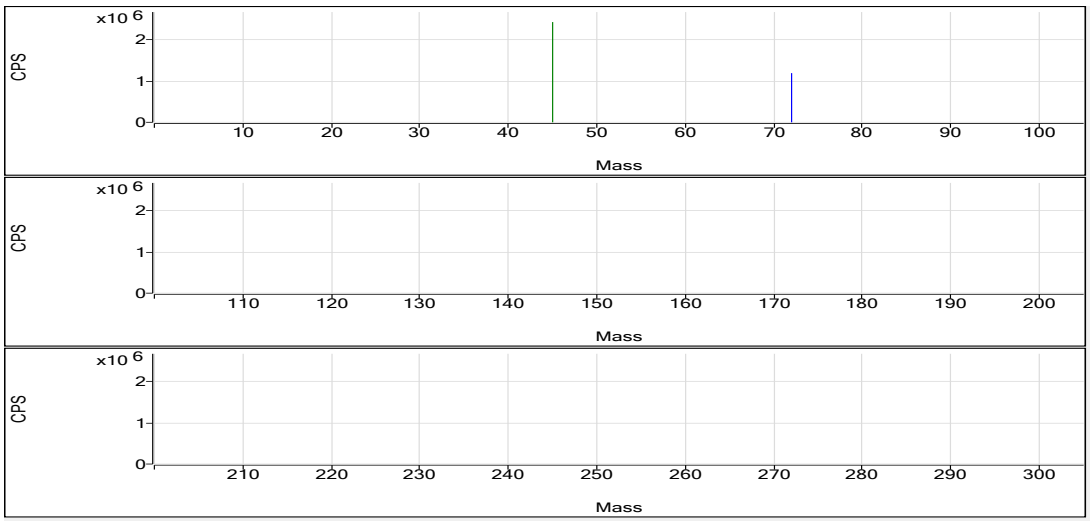
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.018	ppb	14.1	44.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.113	ppb	51.2	9.11	0.0001	Pulse	1.5000	3
Na	23	45	He	9.773	ppb	34.8	18128.32	0.3801	Pulse	0.1000	3
Mg	24	45	He	0.895	ppb	11.6	243.34	0.0051	Pulse	0.1000	3
Al	27	45	He	1.279	ppb	103.1	66.67	0.0014	Pulse	0.1000	3
K	39	45	He	-1.171	ppb	N/A	18775.97	0.3937	Pulse	0.1000	3
Ca	44	45	He	23.944	ppb	26.6	206.68	0.0043	Pulse	0.1000	3
Ti	47	45	He	0.262	ppb	149.1	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.290	ppb	20.5	1488.09	0.0312	Pulse	0.5000	3
Cr	52	45	He	0.019	ppb	180.8	1933.54	0.0405	Pulse	0.1000	3
Mn	55	45	He	0.159	ppb	52.2	223.34	0.0047	Pulse	0.1000	3
Fe	57	45	He	2.959	ppb	23.3	150.01	0.0031	Pulse	0.1000	3
Co	59	45	He	0.120	ppb	22.9	426.69	0.0089	Pulse	0.1000	3
Ni	60	72	He	0.088	ppb	31.3	293.34	0.0036	Pulse	0.1000	3
Cu	63	72	He	0.075	ppb	11.8	546.70	0.0067	Pulse	0.1000	3
Zn	66	72	He	1.896	ppb	1.5	763.38	0.0093	Pulse	0.1000	3
As	75	72	He	0.164	ppb	23.0	93.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	-0.013	ppb	N/A	73.34	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.126	ppb	17.8	263.35	0.0030	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	53.34	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	142.3	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.056	ppb	204.6	1506.80	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.021	ppb	66.4	50.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.056	ppb	22.9	43.33	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.228	ppb	2.9	2300.29	0.0058	Pulse	0.1000	3
Pb	208	159	He	0.023	ppb	22.3	720.04	0.0018	Pulse	0.1000	3
U	238	209	He	0.118	ppb	7.7	1796.87	0.0059	Pulse	0.1000	3

ISTD Table:

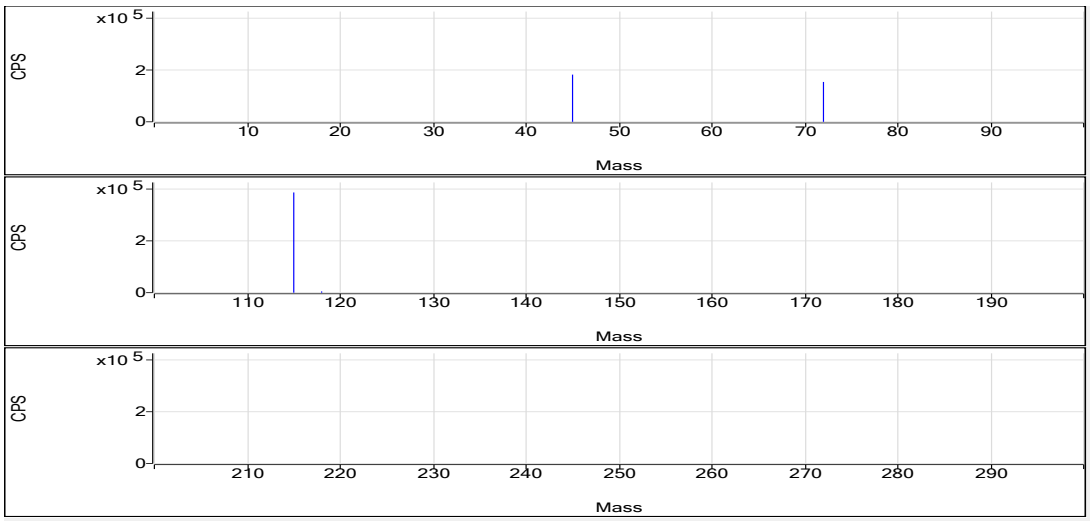
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2425571.27	1.5	101.1	Analog	0.1000	3
No Gas	Ge	72	1190032.46	1.4	103.2	Pulse	0.1000	3
H2	Sc	45	182091.04	0.8	97.4	Pulse	0.1000	3
H2	Ge	72	153790.30	1.4	93.9	Pulse	0.1000	3
H2	In	115	386660.92	0.6	99.4	Pulse	0.1000	3
He	Sc	45	47702.23	1.4	102.3	Pulse	0.1000	3
He	Ge	72	81737.18	1.4	100.7	Pulse	0.1000	3
He	In	115	86803.72	1.1	100.7	Pulse	0.1000	3
He	Tb	159	397802.05	0.9	99.8	Pulse	0.1000	3
He	Bi	209	305774.02	0.3	98.9	Pulse	0.1000	3

No Gas

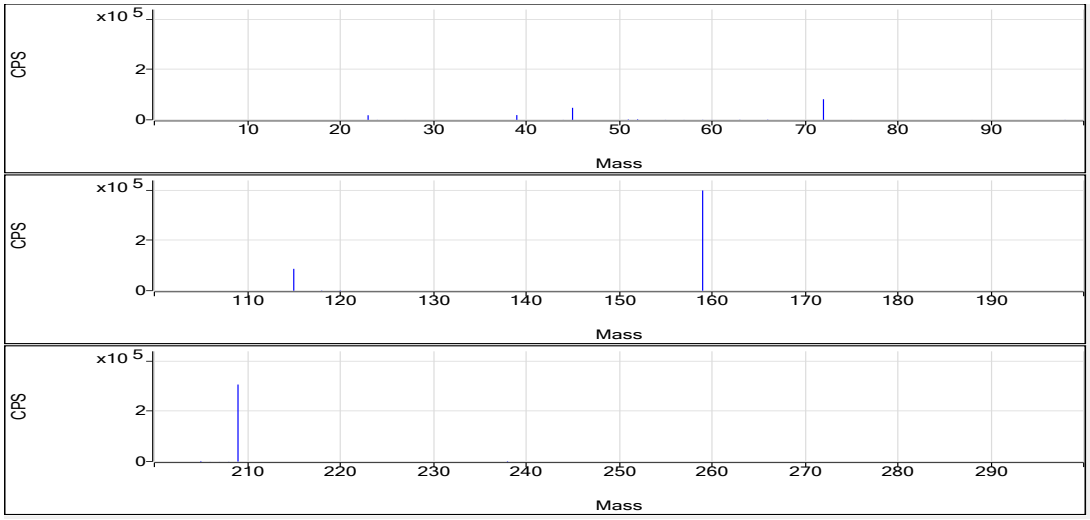


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.017	0	42.00	0.0008	4.685E-06
Be	9	1	No Gas	0.02	0	50.00	0.0008	4.685E-06
Se	78	2	H2	0.076	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.18	0.0001	13.33	0.0004	1.219E-05
Se	78	2	H2	0.083	0	7.33	0.0004	1.219E-05
Na	23	3	He	5.979	0.3665	17741.26	0.0036	0.3452
Na	23	3	He	12.567	0.3901	18592.18	0.0036	0.3452
Na	23	3	He	10.772	0.3837	18051.51	0.0036	0.3452
Mg	24	3	He	0.815	0.005	240.01	0.0018	0.003497
Mg	24	3	He	0.858	0.005	240.01	0.0018	0.003497
Mg	24	3	He	1.013	0.0053	250.01	0.0018	0.003497
Al	27	3	He	2.786	0.0023	110.01	0.0006	0.0006432
Al	27	3	He	0.335	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	0.717	0.0011	50.00	0.0006	0.0006432
K	39	3	He	-6.906	0.387	18732.49	0.0012	0.3951
K	39	3	He	-7.681	0.3861	18402.16	0.0012	0.3951
K	39	3	He	11.075	0.408	19193.27	0.0012	0.3951
Ca	44	3	He	20.982	0.0041	200.01	0.0001	0.002715
Ca	44	3	He	31.253	0.0048	230.01	0.0001	0.002715
Ca	44	3	He	19.597	0.004	190.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.651	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.265	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.222	0.0297	1438.08	0.0219	0.02486
V	51	3	He	0.331	0.0321	1530.09	0.0219	0.02486
V	51	3	He	0.317	0.0318	1496.09	0.0219	0.02486
Cr	52	3	He	0.011	0.0403	1950.20	0.0299	0.03997
Cr	52	3	He	-0.01	0.0397	1890.21	0.0299	0.03997
Cr	52	3	He	0.057	0.0417	1960.20	0.0299	0.03997
Mn	55	3	He	0.132	0.0043	210.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.252	0.0059	280.01	0.0128	0.002639
Mn	55	3	He	0.093	0.0038	180.01	0.0128	0.002639
Fe	57	3	He	2.164	0.0027	130.00	0.0006	0.001429
Fe	57	3	He	3.32	0.0034	160.01	0.0006	0.001429
Fe	57	3	He	3.395	0.0034	160.01	0.0006	0.001429
Co	59	3	He	0.149	0.0105	510.03	0.0563	0.002149
Co	59	3	He	0.118	0.0088	420.03	0.0563	0.002149
Co	59	3	He	0.094	0.0074	350.02	0.0563	0.002149
Ni	60	3	He	0.119	0.0039	320.01	0.0086	0.002834
Ni	60	3	He	0.074	0.0035	280.01	0.0086	0.002834
Ni	60	3	He	0.07	0.0034	280.01	0.0086	0.002834
Cu	63	3	He	0.073	0.0066	550.03	0.0257	0.004757
Cu	63	3	He	0.085	0.0069	560.03	0.0257	0.004757
Cu	63	3	He	0.068	0.0065	530.04	0.0257	0.004757
Zn	66	3	He	1.877	0.0093	770.04	0.0029	0.003818
Zn	66	3	He	1.882	0.0093	750.05	0.0029	0.003818
Zn	66	3	He	1.93	0.0094	770.05	0.0029	0.003818
As	75	3	He	0.207	0.0012	102.00	0.002	0.0008061
As	75	3	He	0.139	0.0011	88.00	0.002	0.0008061
As	75	3	He	0.145	0.0011	90.00	0.002	0.0008061
Sr	88	3	He	-0.057	0.0005	40.00	0.009	0.0009645
Sr	88	3	He	0.073	0.0016	140.01	0.009	0.0009645
Sr	88	3	He	-0.056	0.0005	40.00	0.009	0.0009645
Mo	98	3	He	0.107	0.0026	230.01	0.0219	0.0002706
Mo	98	3	He	0.151	0.0036	310.02	0.0219	0.0002706
Mo	98	3	He	0.12	0.0029	250.01	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.01	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.03	0.0002	14.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.039	0.0171	1500.13	0.0158	0.01648
Sn	120	3	He	0.177	0.0193	1670.17	0.0158	0.01648
Sn	120	3	He	-0.049	0.0157	1350.11	0.0158	0.01648
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Sb	121	3	He	0.028	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.029	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	0.07	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.048	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.049	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.224	0.0057	2230.27	0.0247	0.0001339
Tl	205	3	He	0.236	0.006	2390.32	0.0247	0.0001339
Tl	205	3	He	0.226	0.0057	2280.29	0.0247	0.0001339
Pb	208	3	He	0.027	0.002	420.02	0.0327	0.00107
Pb	208	3	He	0.024	0.0018	340.02	0.0327	0.00107
Pb	208	3	He	0.017	0.0016	350.02	0.0327	0.00107
U	238	3	He	0.108	0.0054	1640.16	0.0493	7.55E-05
U	238	3	He	0.12	0.006	1840.22	0.0493	7.55E-05
U	238	3	He	0.125	0.0062	1910.22	0.0493	7.55E-05
Sc	45	1	No Gas			2405877.00		
Sc	45	1	No Gas			2401960.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2468876.21		
Ge	72	1	No Gas			1186478.03		
Ge	72	1	No Gas			1175488.19		
Ge	72	1	No Gas			1208131.15		
Sc	45	2	H2			181733.38		
Sc	45	2	H2			180821.97		
Sc	45	2	H2			183717.77		
Ge	72	2	H2			152142.73		
Ge	72	2	H2			153053.85		
Ge	72	2	H2			156174.31		
In	115	2	H2			384490.81		
In	115	2	H2			389010.19		
In	115	2	H2			386481.75		
Sc	45	3	He			48401.15		
Sc	45	3	He			47658.73		
Sc	45	3	He			47046.82		
Ge	72	3	He			82940.49		
Ge	72	3	He			80677.17		
Ge	72	3	He			81593.88		
In	115	3	He			87816.89		
In	115	3	He			86651.03		
In	115	3	He			85965.78		
Tb	159	3	He			394002.30		
Tb	159	3	He			400600.78		
Tb	159	3	He			398803.08		
Bi	209	3	He			304860.60		
Bi	209	3	He			306234.37		
Bi	209	3	He			306227.10		

Quantitation Report

Data File Name	251_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 7:15:26 PM
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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

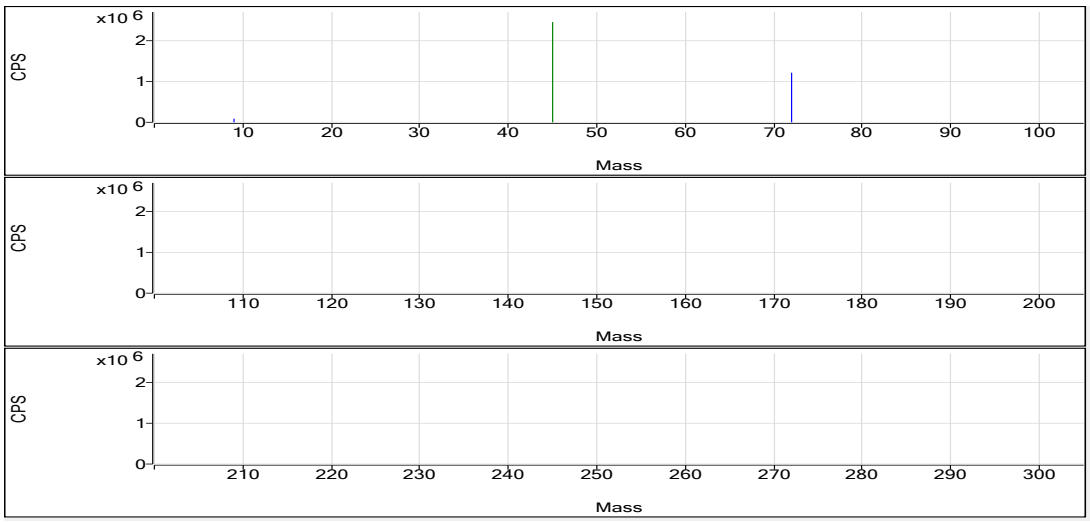
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.380	ppb	0.0	88942.71	0.0361	Pulse	0.5000	3
Se	78	72	H2	52.513	ppb	1.0	3479.76	0.0219	Pulse	1.5000	3
Na	23	45	He	4842.107	ppb	1.3	842045.33	17.6656	Pulse	0.1000	3
Mg	24	45	He	4974.747	ppb	1.5	425639.20	8.9298	Pulse	0.1000	3
Al	27	45	He	4860.349	ppb	0.7	135587.27	2.8441	Pulse	0.1000	3
K	39	45	He	5067.360	ppb	1.4	300063.60	6.2951	Pulse	0.1000	3
Ca	44	45	He	5224.684	ppb	0.8	16953.79	0.3557	Pulse	0.1000	3
Ti	47	45	He	5002.778	ppb	1.1	128061.32	2.6863	Pulse	0.1000	3
V	51	45	He	511.940	ppb	1.4	534588.56	11.2155	Pulse	0.5000	3
Cr	52	45	He	487.719	ppb	1.6	697931.11	14.6426	Pulse	0.1000	3
Mn	55	45	He	505.134	ppb	1.4	309132.07	6.4855	Pulse	0.1000	3
Fe	57	45	He	5065.662	ppb	1.2	140357.15	2.9445	Pulse	0.1000	3
Co	59	45	He	490.316	ppb	1.3	1315491.85	27.5983	Pulse	0.1000	3
Ni	60	72	He	520.526	ppb	2.7	370027.94	4.4706	Pulse	0.1000	3
Cu	63	72	He	493.720	ppb	2.6	1049460.69	12.6791	Pulse	0.1000	3
Zn	66	72	He	520.100	ppb	1.0	125698.14	1.5181	Pulse	0.1000	3
As	75	72	He	526.421	ppb	1.6	89354.58	1.0794	Pulse	0.5000	3
Sr	88	115	He	50.032	ppb	0.5	38974.59	0.4497	Pulse	0.1000	3
Mo	98	115	He	51.788	ppb	1.2	98423.63	1.1358	Pulse	0.1000	3
Ag	107	115	He	50.941	ppb	0.3	205276.10	2.3687	Pulse	0.1000	3
Cd	111	115	He	51.062	ppb	0.5	23660.70	0.2730	Pulse	0.5000	3
Sn	120	115	He	51.313	ppb	1.1	71682.53	0.8272	Pulse	0.1000	3
Sb	121	115	He	51.791	ppb	1.9	66684.07	0.7696	Pulse	0.1000	3
Ba	137	115	He	522.327	ppb	1.4	217250.27	2.5071	Pulse	0.1000	3
Tl	205	159	He	51.771	ppb	0.6	509748.67	1.2802	Pulse	0.1000	3
Pb	208	159	He	51.853	ppb	0.8	676148.59	1.6982	Pulse	0.1000	3
U	238	209	He	50.748	ppb	0.2	770628.24	2.4999	Pulse	0.1000	3

ISTD Table:

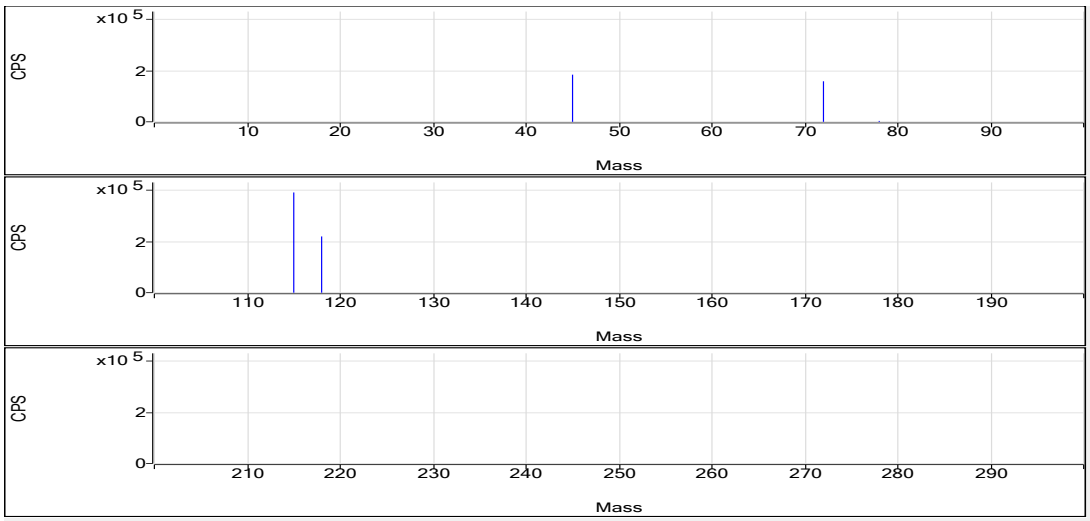
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2460688.97	0.2	102.6	Analog	0.1000	3
No Gas	Ge	72	1216832.95	0.4	105.5	Pulse	0.1000	3
H2	Sc	45	184703.36	2.1	98.8	Pulse	0.1000	3
H2	Ge	72	158797.29	0.5	97.0	Pulse	0.1000	3
H2	In	115	392666.89	1.1	100.9	Pulse	0.1000	3
He	Sc	45	47671.93	1.5	102.2	Pulse	0.1000	3
He	Ge	72	82800.05	2.1	102.0	Pulse	0.1000	3
He	In	115	86663.00	0.9	100.5	Pulse	0.1000	3
He	Tb	159	398171.32	0.6	99.9	Pulse	0.1000	3
He	Bi	209	308264.00	0.5	99.7	Pulse	0.1000	3

No Gas

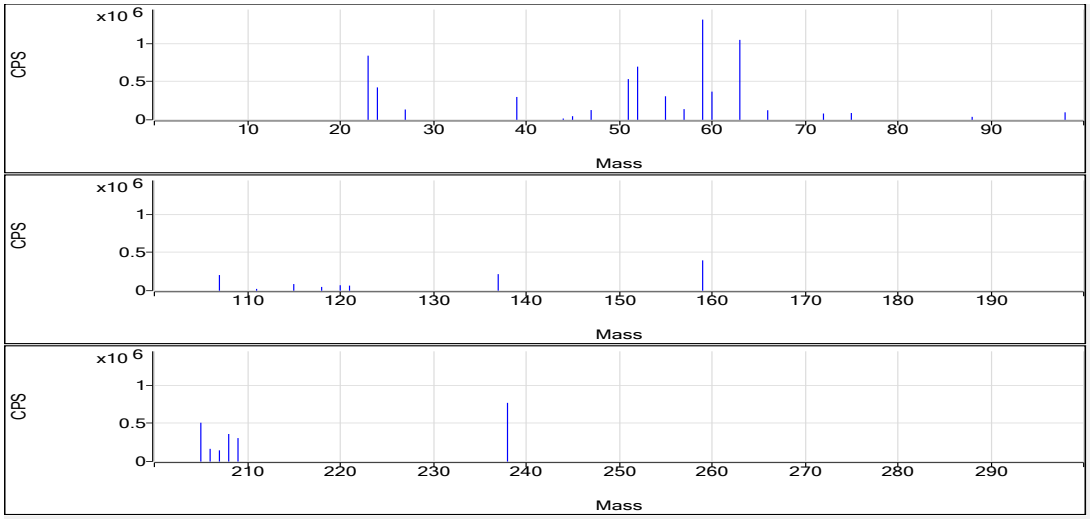


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.398	0.0362	88923.87	0.0008	4.685E-06
Be	9	1	No Gas	47.361	0.0361	89088.85	0.0008	4.685E-06
Be	9	1	No Gas	47.382	0.0361	88815.40	0.0008	4.685E-06
Se	78	2	H2	53.103	0.0222	3503.10	0.0004	1.219E-05
Se	78	2	H2	52.267	0.0218	3483.10	0.0004	1.219E-05
Se	78	2	H2	52.17	0.0218	3453.09	0.0004	1.219E-05
Na	23	3	He	4797.935	17.5076	844229.13	0.0036	0.3452
Na	23	3	He	4916.642	17.9322	840591.32	0.0036	0.3452
Na	23	3	He	4811.745	17.557	841315.53	0.0036	0.3452
Mg	24	3	He	4921.978	8.8351	426035.23	0.0018	0.003497
Mg	24	3	He	5057.86	9.0789	425583.82	0.0018	0.003497
Mg	24	3	He	4944.404	8.8753	425298.55	0.0018	0.003497
Al	27	3	He	4840.649	2.8326	136589.55	0.0006	0.0006432
Al	27	3	He	4841.176	2.8329	132795.03	0.0006	0.0006432
Al	27	3	He	4899.222	2.8669	137377.23	0.0006	0.0006432
K	39	3	He	5027.084	6.2482	301294.23	0.0012	0.3951
K	39	3	He	5147.981	6.389	299490.74	0.0012	0.3951
K	39	3	He	5027.016	6.2482	299405.84	0.0012	0.3951
Ca	44	3	He	5231.065	0.3561	17170.59	0.0001	0.002715
Ca	44	3	He	5262.188	0.3582	16790.32	0.0001	0.002715
Ca	44	3	He	5180.797	0.3527	16900.47	0.0001	0.002715
Ti	47	3	He	5048.704	2.711	130724.72	0.0005	7.003E-05
Ti	47	3	He	5016.763	2.6938	126275.36	0.0005	7.003E-05
Ti	47	3	He	4942.869	2.6541	127183.89	0.0005	7.003E-05
V	51	3	He	506.973	11.1069	535581.56	0.0219	0.02486
V	51	3	He	520.208	11.3962	534207.63	0.0219	0.02486
V	51	3	He	508.639	11.1433	533976.50	0.0219	0.02486
Cr	52	3	He	481.679	14.4618	697358.19	0.0299	0.03997
Cr	52	3	He	496.716	14.912	699015.07	0.0299	0.03997
Cr	52	3	He	484.763	14.5541	697420.07	0.0299	0.03997
Mn	55	3	He	500.055	6.4203	309590.58	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	513.15	6.5883	308835.33	0.0128	0.002639
Mn	55	3	He	502.195	6.4478	308970.29	0.0128	0.002639
Fe	57	3	He	5052.843	2.9371	141628.26	0.0006	0.001429
Fe	57	3	He	5133.045	2.9837	139863.06	0.0006	0.001429
Fe	57	3	He	5011.096	2.9128	139580.13	0.0006	0.001429
Co	59	3	He	486.449	27.3806	1320311.54	0.0563	0.002149
Co	59	3	He	497.916	28.026	1313748.57	0.0563	0.002149
Co	59	3	He	486.583	27.3882	1312415.45	0.0563	0.002149
Ni	60	3	He	527.555	4.5309	370556.32	0.0086	0.002834
Ni	60	3	He	529.759	4.5498	372424.14	0.0086	0.002834
Ni	60	3	He	504.264	4.331	367103.35	0.0086	0.002834
Cu	63	3	He	501.457	12.8777	1053188.19	0.0257	0.004757
Cu	63	3	He	500.572	12.855	1052237.48	0.0257	0.004757
Cu	63	3	He	479.131	12.3046	1042956.39	0.0257	0.004757
Zn	66	3	He	525.842	1.5349	125527.67	0.0029	0.003818
Zn	66	3	He	515.896	1.5059	123265.25	0.0029	0.003818
Zn	66	3	He	518.562	1.5137	128301.49	0.0029	0.003818
As	75	3	He	527.733	1.0821	88495.26	0.002	0.0008061
As	75	3	He	533.962	1.0948	89616.20	0.002	0.0008061
As	75	3	He	517.569	1.0612	89952.28	0.002	0.0008061
Sr	88	3	He	49.746	0.4472	39105.15	0.009	0.0009645
Sr	88	3	He	50.215	0.4514	38753.68	0.009	0.0009645
Sr	88	3	He	50.134	0.4507	39064.94	0.009	0.0009645
Mo	98	3	He	51.15	1.1218	98101.66	0.0219	0.0002706
Mo	98	3	He	52.411	1.1494	98685.55	0.0219	0.0002706
Mo	98	3	He	51.802	1.1361	98483.69	0.0219	0.0002706
Ag	107	3	He	50.764	2.3605	206424.53	0.0465	0.0006206
Ag	107	3	He	51.078	2.3751	203911.85	0.0465	0.0006206
Ag	107	3	He	50.981	2.3706	205491.91	0.0465	0.0006206
Cd	111	3	He	50.982	0.2726	23838.34	0.0053	0
Cd	111	3	He	51.357	0.2746	23575.87	0.0053	0
Cd	111	3	He	50.848	0.2719	23567.88	0.0053	0
Sn	120	3	He	50.851	0.8198	71695.25	0.0158	0.01648
Sn	120	3	He	51.119	0.8241	70751.13	0.0158	0.01648
Sn	120	3	He	51.97	0.8375	72601.22	0.0158	0.01648
Sb	121	3	He	50.977	0.7574	66238.55	0.0149	0.0002698
Sb	121	3	He	52.862	0.7854	67434.07	0.0149	0.0002698
Sb	121	3	He	51.536	0.7658	66379.60	0.0149	0.0002698
Ba	137	3	He	515.071	2.4722	216195.13	0.0048	0.0002317
Ba	137	3	He	529.716	2.5425	218286.87	0.0048	0.0002317
Ba	137	3	He	522.195	2.5064	217268.81	0.0048	0.0002317
Tl	205	3	He	51.473	1.2729	508870.23	0.0247	0.0001339
Tl	205	3	He	52.049	1.2871	508971.83	0.0247	0.0001339
Tl	205	3	He	51.791	1.2807	511403.94	0.0247	0.0001339
Pb	208	3	He	51.537	1.6879	361689.14	0.0327	0.00107
Pb	208	3	He	52.322	1.7136	363378.43	0.0327	0.00107
Pb	208	3	He	51.698	1.6931	360443.74	0.0327	0.00107
U	238	3	He	50.878	2.5063	771980.69	0.0493	7.55E-05
U	238	3	He	50.725	2.4988	766515.14	0.0493	7.55E-05
U	238	3	He	50.64	2.4946	773388.89	0.0493	7.55E-05
Sc	45	1	No Gas			2459253.87		
Sc	45	1	No Gas			2465737.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2457075.12		
Ge	72	1	No Gas			1214051.31		
Ge	72	1	No Gas			1214045.92		
Ge	72	1	No Gas			1222401.62		
Sc	45	2	H2			182806.62		
Sc	45	2	H2			189083.84		
Sc	45	2	H2			182219.63		
Ge	72	2	H2			158084.06		
Ge	72	2	H2			159694.38		
Ge	72	2	H2			158613.42		
In	115	2	H2			390952.46		
In	115	2	H2			397461.21		
In	115	2	H2			389586.99		
Sc	45	3	He			48220.70		
Sc	45	3	He			46876.01		
Sc	45	3	He			47919.08		
Ge	72	3	He			81783.96		
Ge	72	3	He			81854.42		
Ge	72	3	He			84761.76		
In	115	3	He			87836.70		
In	115	3	He			86237.16		
In	115	3	He			87073.12		
Tb	159	3	He			399779.56		
Tb	159	3	He			395433.47		
Tb	159	3	He			399300.93		
Bi	209	3	He			308014.25		
Bi	209	3	He			306752.48		
Bi	209	3	He			310025.27		

Quantitation Report

Data File Name	252_CCB.d
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Acq Time	8/10/2023 7:17:31 PM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

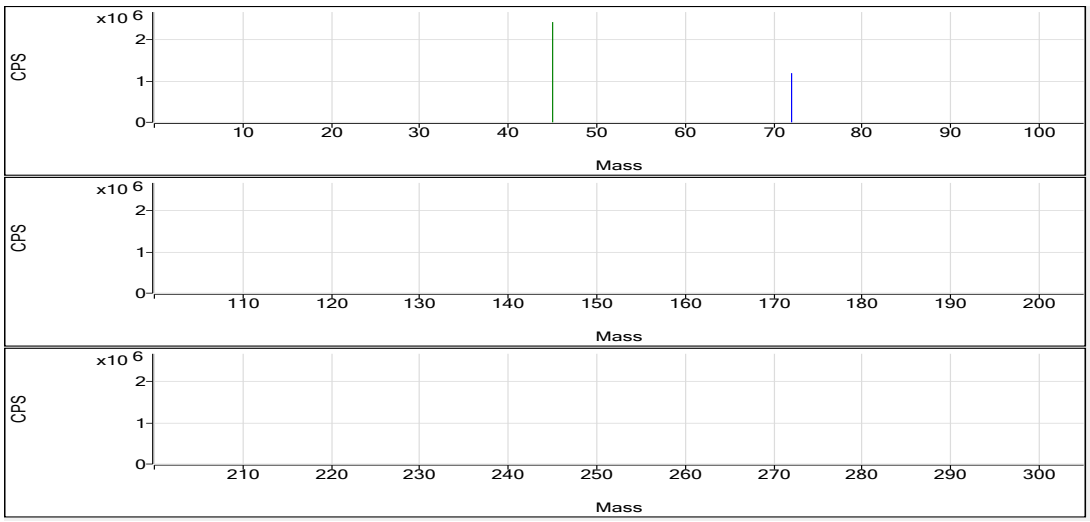
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.029	ppb	17.3	65.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.068	ppb	65.8	6.22	0.0000	Pulse	1.5000	3
Na	23	45	He	12.078	ppb	23.9	18325.25	0.3884	Pulse	0.1000	3
Mg	24	45	He	1.789	ppb	42.8	316.68	0.0067	Pulse	0.1000	3
Al	27	45	He	0.714	ppb	103.0	50.00	0.0011	Pulse	0.1000	3
K	39	45	He	-1.832	ppb	N/A	18538.95	0.3929	Pulse	0.1000	3
Ca	44	45	He	0.576	ppb	1063.1	130.01	0.0028	Pulse	0.1000	3
Ti	47	45	He	0.529	ppb	114.7	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	0.321	ppb	24.8	1504.09	0.0319	Pulse	0.5000	3
Cr	52	45	He	0.095	ppb	64.1	2020.21	0.0428	Pulse	0.1000	3
Mn	55	45	He	0.191	ppb	32.1	240.01	0.0051	Pulse	0.1000	3
Fe	57	45	He	0.815	ppb	230.7	90.00	0.0019	Pulse	0.1000	3
Co	59	45	He	0.097	ppb	18.3	360.02	0.0076	Pulse	0.1000	3
Ni	60	72	He	0.106	ppb	67.8	306.68	0.0037	Pulse	0.1000	3
Cu	63	72	He	0.110	ppb	27.3	620.04	0.0076	Pulse	0.1000	3
Zn	66	72	He	1.939	ppb	14.1	773.38	0.0095	Pulse	0.1000	3
As	75	72	He	0.184	ppb	45.1	96.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.023	ppb	155.0	100.00	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.059	ppb	22.0	133.34	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	152.2	63.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	43.8	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.087	ppb	34.2	1530.15	0.0179	Pulse	0.1000	3
Sb	121	115	He	0.018	ppb	65.0	46.67	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.065	ppb	20.9	46.67	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.106	ppb	6.4	1100.09	0.0028	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	39.4	596.70	0.0015	Pulse	0.1000	3
U	238	209	He	0.047	ppb	4.2	733.38	0.0024	Pulse	0.1000	3

ISTD Table:

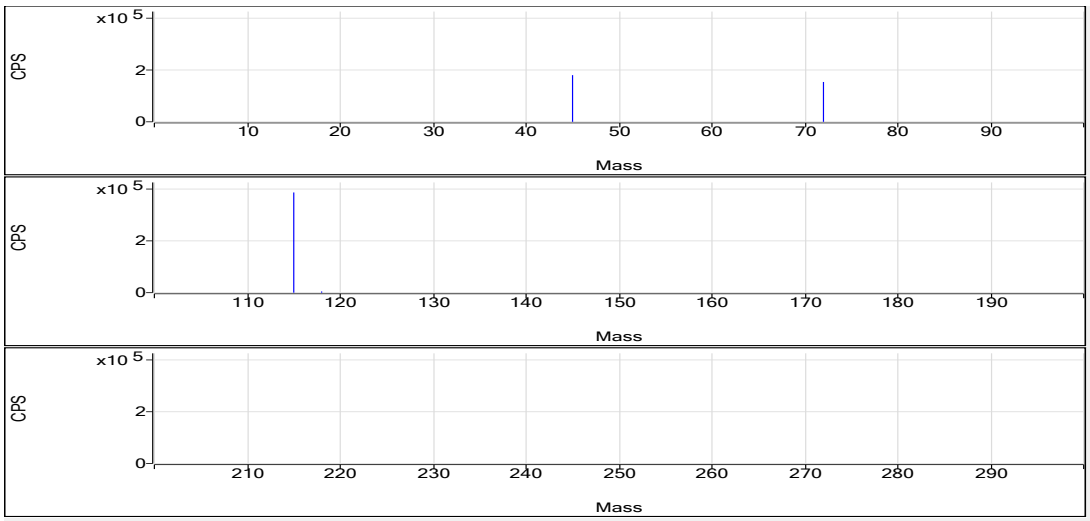
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2435863.61	0.7	101.5	Analog	0.1000	3
No Gas	Ge	72	1194637.32	0.6	103.6	Pulse	0.1000	3
H2	Sc	45	179640.17	0.8	96.1	Pulse	0.1000	3
H2	Ge	72	153328.69	1.4	93.7	Pulse	0.1000	3
H2	In	115	385764.27	0.5	99.1	Pulse	0.1000	3
He	Sc	45	47190.65	0.8	101.2	Pulse	0.1000	3
He	Ge	72	81790.90	1.6	100.7	Pulse	0.1000	3
He	In	115	85692.26	0.7	99.4	Pulse	0.1000	3
He	Tb	159	398315.76	0.3	99.9	Pulse	0.1000	3
He	Bi	209	306726.72	0.6	99.2	Pulse	0.1000	3

No Gas

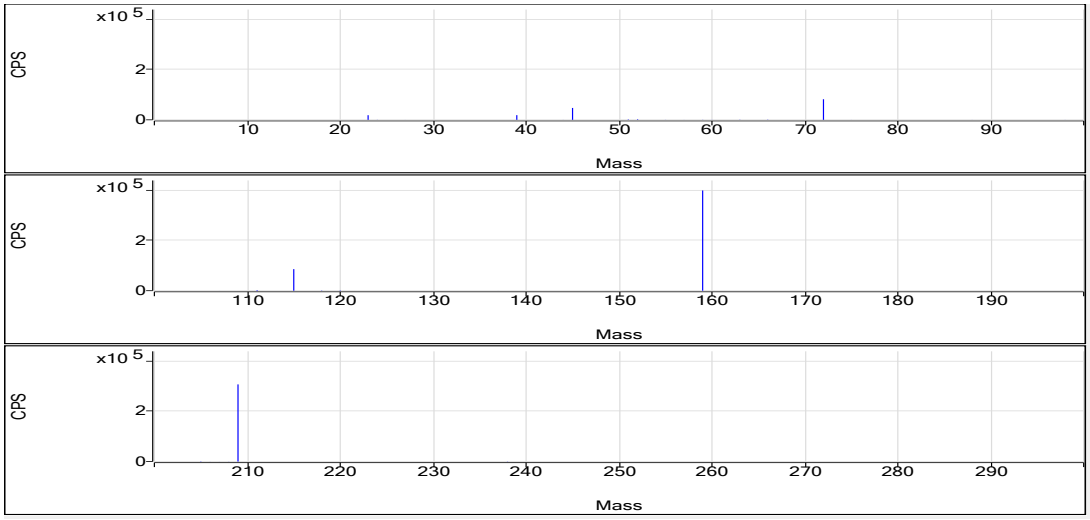


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.035	0	76.00	0.0008	4.685E-06
Be	9	1	No Gas	0.026	0	60.00	0.0008	4.685E-06
Be	9	1	No Gas	0.026	0	60.00	0.0008	4.685E-06
Se	78	2	H2	0.119	0.0001	9.33	0.0004	1.219E-05
Se	78	2	H2	0.054	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.033	0	4.00	0.0004	1.219E-05
Na	23	3	He	11.37	0.3858	18341.81	0.0036	0.3452
Na	23	3	He	9.615	0.3796	17921.40	0.0036	0.3452
Na	23	3	He	15.248	0.3997	18712.54	0.0036	0.3452
Mg	24	3	He	2.624	0.0082	390.02	0.0018	0.003497
Mg	24	3	He	1.12	0.0055	260.01	0.0018	0.003497
Mg	24	3	He	1.623	0.0064	300.01	0.0018	0.003497
Al	27	3	He	0.698	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	-0.013	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	1.456	0.0015	70.00	0.0006	0.0006432
K	39	3	He	-17.516	0.3747	17811.36	0.0012	0.3951
K	39	3	He	1.609	0.3969	18742.45	0.0012	0.3951
K	39	3	He	10.412	0.4072	19063.04	0.0012	0.3951
Ca	44	3	He	0.294	0.0027	130.01	0.0001	0.002715
Ca	44	3	He	6.84	0.0032	150.01	0.0001	0.002715
Ca	44	3	He	-5.405	0.0023	110.01	0.0001	0.002715
Ti	47	3	He	0.653	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	1.063	0.0006	30.00	0.0005	7.003E-05
V	51	3	He	0.235	0.03	1426.08	0.0219	0.02486
V	51	3	He	0.391	0.0334	1578.10	0.0219	0.02486
V	51	3	He	0.336	0.0322	1508.09	0.0219	0.02486
Cr	52	3	He	0.056	0.0417	1980.19	0.0299	0.03997
Cr	52	3	He	0.165	0.0449	2120.24	0.0299	0.03997
Cr	52	3	He	0.063	0.0419	1960.21	0.0299	0.03997
Mn	55	3	He	0.122	0.0042	200.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.24	0.0057	270.02	0.0128	0.002639
Mn	55	3	He	0.211	0.0053	250.01	0.0128	0.002639
Fe	57	3	He	1.886	0.0025	120.01	0.0006	0.001429
Fe	57	3	He	1.915	0.0025	120.00	0.0006	0.001429
Fe	57	3	He	-1.356	0.0006	30.00	0.0006	0.001429
Co	59	3	He	0.115	0.0086	410.02	0.0563	0.002149
Co	59	3	He	0.097	0.0076	360.02	0.0563	0.002149
Co	59	3	He	0.079	0.0066	310.01	0.0563	0.002149
Ni	60	3	He	0.068	0.0034	280.01	0.0086	0.002834
Ni	60	3	He	0.189	0.0045	370.02	0.0086	0.002834
Ni	60	3	He	0.061	0.0034	270.01	0.0086	0.002834
Cu	63	3	He	0.076	0.0067	550.03	0.0257	0.004757
Cu	63	3	He	0.134	0.0082	680.04	0.0257	0.004757
Cu	63	3	He	0.12	0.0078	630.04	0.0257	0.004757
Zn	66	3	He	2.126	0.01	820.05	0.0029	0.003818
Zn	66	3	He	1.625	0.0085	710.05	0.0029	0.003818
Zn	66	3	He	2.065	0.0098	790.05	0.0029	0.003818
As	75	3	He	0.238	0.0013	106.00	0.002	0.0008061
As	75	3	He	0.088	0.001	82.00	0.002	0.0008061
As	75	3	He	0.226	0.0013	102.00	0.002	0.0008061
Sr	88	3	He	0.036	0.0013	110.00	0.009	0.0009645
Sr	88	3	He	-0.017	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	0.049	0.0014	120.01	0.009	0.0009645
Mo	98	3	He	0.046	0.0013	110.00	0.0219	0.0002706
Mo	98	3	He	0.072	0.0019	160.01	0.0219	0.0002706
Mo	98	3	He	0.057	0.0015	130.01	0.0219	0.0002706
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	0.121	0.0184	1570.15	0.0158	0.01648
Sn	120	3	He	0.063	0.0175	1510.14	0.0158	0.01648
Sn	120	3	He	0.078	0.0177	1510.15	0.0158	0.01648
Sb	121	3	He	0.005	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	0.021	0.0006	50.00	0.0149	0.0002698
Sb	121	3	He	0.029	0.0007	60.00	0.0149	0.0002698
Ba	137	3	He	0.074	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.072	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.049	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.109	0.0028	1130.09	0.0247	0.0001339
Tl	205	3	He	0.098	0.0026	1020.09	0.0247	0.0001339
Tl	205	3	He	0.111	0.0029	1150.10	0.0247	0.0001339
Pb	208	3	He	0.007	0.0013	310.01	0.0327	0.00107
Pb	208	3	He	0.017	0.0016	370.02	0.0327	0.00107
Pb	208	3	He	0.016	0.0016	330.02	0.0327	0.00107
U	238	3	He	0.048	0.0024	750.05	0.0493	7.55E-05
U	238	3	He	0.045	0.0023	700.05	0.0493	7.55E-05
U	238	3	He	0.048	0.0025	750.05	0.0493	7.55E-05
Sc	45	1	No Gas			2431527.93		
Sc	45	1	No Gas			2422009.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2454053.56		
Ge	72	1	No Gas			1200450.37		
Ge	72	1	No Gas			1186362.79		
Ge	72	1	No Gas			1197098.81		
Sc	45	2	H2			179029.94		
Sc	45	2	H2			181327.46		
Sc	45	2	H2			178563.12		
Ge	72	2	H2			150939.99		
Ge	72	2	H2			154021.78		
Ge	72	2	H2			155024.31		
In	115	2	H2			388188.59		
In	115	2	H2			384336.01		
In	115	2	H2			384768.20		
Sc	45	3	He			47538.45		
Sc	45	3	He			47217.29		
Sc	45	3	He			46816.20		
Ge	72	3	He			81945.84		
Ge	72	3	He			83050.92		
Ge	72	3	He			80375.95		
In	115	3	He			85411.76		
In	115	3	He			86427.82		
In	115	3	He			85261.08		
Tb	159	3	He			398672.38		
Tb	159	3	He			397063.86		
Tb	159	3	He			399211.05		
Bi	209	3	He			308457.14		
Bi	209	3	He			306937.85		
Bi	209	3	He			304785.17		

Quantitation Report

Data File Name	253SMPL.d
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Sample Type	Sample
Comment	I9 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

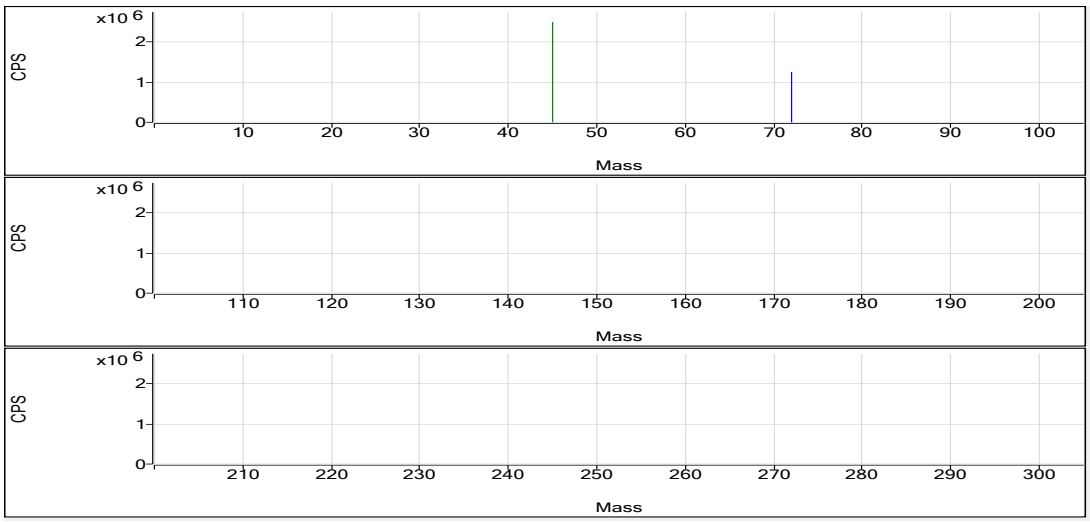
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.016	ppb	47.3	42.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.511	ppb	12.9	37.33	0.0002	Pulse	1.5000	3
Na	23	45	He	17592.734	ppb	1.8	3008264.85	63.2752	Analog	0.1000	3
Mg	24	45	He	11845.555	ppb	1.1	1010695.06	21.2582	Pulse	0.1000	3
Al	27	45	He	121.503	ppb	3.1	3410.53	0.0717	Pulse	0.1000	3
K	39	45	He	1329.431	ppb	2.0	92378.15	1.9430	Pulse	0.1000	3
Ca	44	45	He	46072.153	ppb	1.9	148093.27	3.1150	Pulse	0.1000	3
Ti	47	45	He	4.180	ppb	24.9	110.00	0.0023	Pulse	0.1000	3
V	51	45	He	1.046	ppb	5.6	2268.86	0.0477	Pulse	0.5000	3
Cr	52	45	He	0.686	ppb	4.6	2877.06	0.0605	Pulse	0.1000	3
Mn	55	45	He	16.826	ppb	4.9	10390.74	0.2186	Pulse	0.1000	3
Fe	57	45	He	490.524	ppb	2.6	13616.91	0.2864	Pulse	0.1000	3
Co	59	45	He	0.205	ppb	7.4	650.04	0.0137	Pulse	0.1000	3
Ni	60	72	He	0.504	ppb	22.6	623.37	0.0072	Pulse	0.1000	3
Cu	63	72	He	1.579	ppb	7.3	3937.35	0.0453	Pulse	0.1000	3
Zn	66	72	He	12.209	ppb	1.4	3423.84	0.0394	Pulse	0.1000	3
As	75	72	He	0.228	ppb	35.1	110.67	0.0013	Pulse	0.5000	3
Sr	88	115	He	108.615	ppb	0.8	85202.56	0.9752	Pulse	0.1000	3
Mo	98	115	He	0.339	ppb	7.1	673.37	0.0077	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	72.2	90.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.016	ppb	40.8	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.052	ppb	N/A	1366.79	0.0156	Pulse	0.1000	3
Sb	121	115	He	0.157	ppb	29.0	226.68	0.0026	Pulse	0.1000	3
Ba	137	115	He	144.553	ppb	0.8	60631.50	0.6940	Pulse	0.1000	3
Tl	205	159	He	0.038	ppb	17.0	430.02	0.0011	Pulse	0.1000	3
Pb	208	159	He	1.634	ppb	2.8	21691.13	0.0545	Pulse	0.1000	3
U	238	209	He	0.566	ppb	1.3	8759.98	0.0280	Pulse	0.1000	3

ISTD Table:

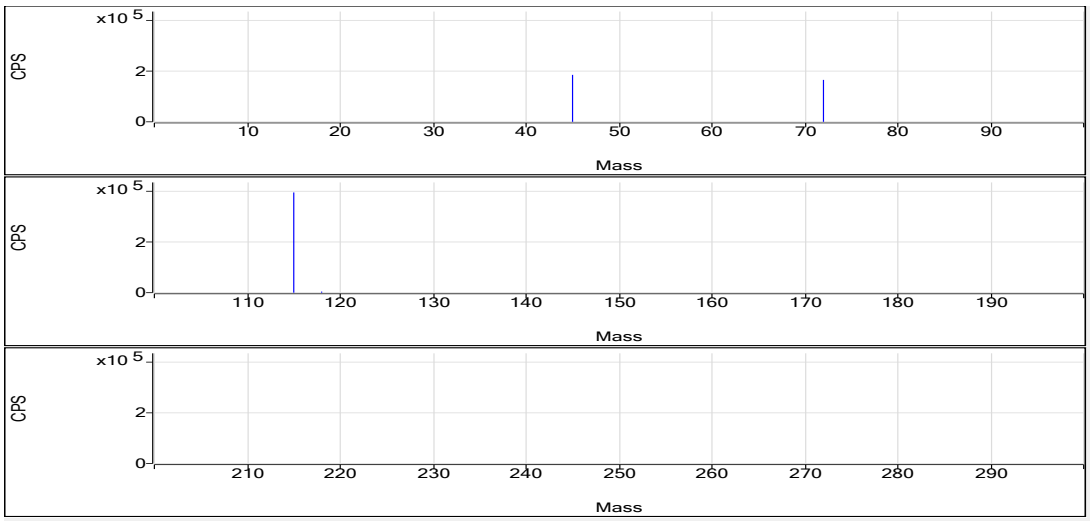
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2505874.34	1.1	104.5	Analog	0.1000	3
No Gas	Ge	72	1258744.41	0.9	109.1	Pulse	0.1000	3
H2	Sc	45	185506.05	1.3	99.2	Pulse	0.1000	3
H2	Ge	72	165653.82	0.6	101.2	Pulse	0.1000	3
H2	In	115	396069.77	1.1	101.8	Pulse	0.1000	3
He	Sc	45	47545.40	0.5	101.9	Pulse	0.1000	3
He	Ge	72	86964.58	1.2	107.1	Pulse	0.1000	3
He	In	115	87371.06	1.1	101.4	Pulse	0.1000	3
He	Tb	159	397750.78	0.9	99.8	Pulse	0.1000	3
He	Bi	209	313163.48	0.7	101.3	Pulse	0.1000	3

No Gas

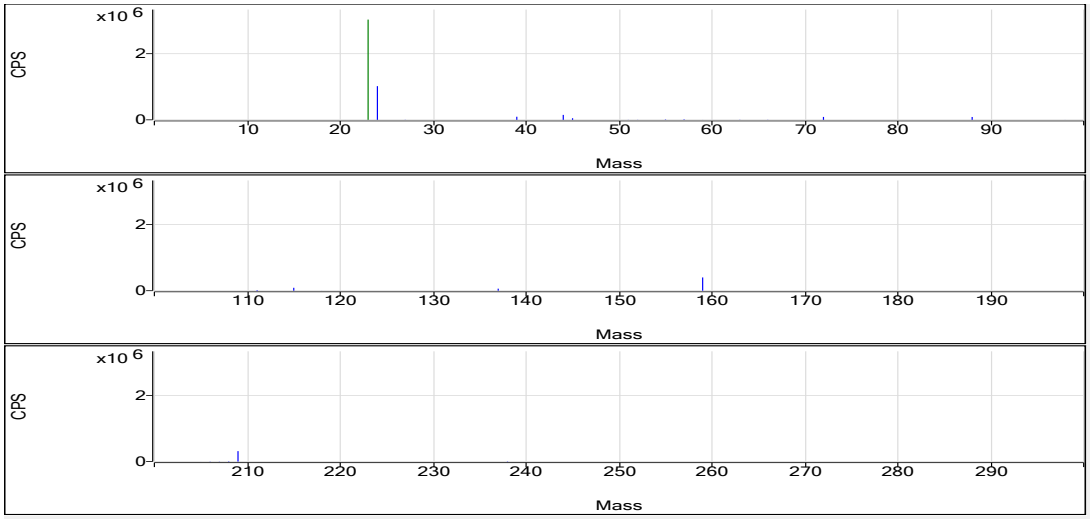


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.019	0	48.00	0.0008	4.685E-06
Be	9	1	No Gas	0.007	0	26.00	0.0008	4.685E-06
Be	9	1	No Gas	0.021	0	52.00	0.0008	4.685E-06
Se	78	2	H2	0.573	0.0003	41.33	0.0004	1.219E-05
Se	78	2	H2	0.52	0.0002	38.00	0.0004	1.219E-05
Se	78	2	H2	0.441	0.0002	32.67	0.0004	1.219E-05
Na	23	3	He	17945.705	64.5378	3049925.89	0.0036	0.3452
Na	23	3	He	17515.137	62.9977	3004301.83	0.0036	0.3452
Na	23	3	He	17317.36	62.2902	2970566.83	0.0036	0.3452
Mg	24	3	He	11986.402	21.511	1016564.13	0.0018	0.003497
Mg	24	3	He	11806.833	21.1888	1010472.72	0.0018	0.003497
Mg	24	3	He	11743.429	21.075	1005048.34	0.0018	0.003497
Al	27	3	He	118.641	0.0701	3310.52	0.0006	0.0006432
Al	27	3	He	120.067	0.0709	3380.51	0.0006	0.0006432
Al	27	3	He	125.803	0.0742	3540.55	0.0006	0.0006432
K	39	3	He	1332.861	1.947	92008.97	0.0012	0.3951
K	39	3	He	1353.998	1.9716	94022.02	0.0012	0.3951
K	39	3	He	1301.434	1.9104	91103.47	0.0012	0.3951
Ca	44	3	He	47056.579	3.1815	150350.09	0.0001	0.002715
Ca	44	3	He	45532.904	3.0785	146813.25	0.0001	0.002715
Ca	44	3	He	45626.977	3.0849	147116.46	0.0001	0.002715
Ti	47	3	He	4.599	0.0025	120.00	0.0005	7.003E-05
Ti	47	3	He	2.994	0.0017	80.00	0.0005	7.003E-05
Ti	47	3	He	4.947	0.0027	130.01	0.0005	7.003E-05
V	51	3	He	1.07	0.0482	2280.19	0.0219	0.02486
V	51	3	He	1.088	0.0487	2320.20	0.0219	0.02486
V	51	3	He	0.979	0.0463	2206.18	0.0219	0.02486
Cr	52	3	He	0.687	0.0605	2860.40	0.0299	0.03997
Cr	52	3	He	0.654	0.0596	2840.39	0.0299	0.03997
Cr	52	3	He	0.717	0.0614	2930.39	0.0299	0.03997
Mn	55	3	He	17.708	0.2299	10864.46	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	16.695	0.2169	10344.04	0.0128	0.002639
Mn	55	3	He	16.074	0.2089	9963.72	0.0128	0.002639
Fe	57	3	He	502.238	0.2932	13857.18	0.0006	0.001429
Fe	57	3	He	492.251	0.2874	13706.91	0.0006	0.001429
Fe	57	3	He	477.083	0.2786	13286.65	0.0006	0.001429
Co	59	3	He	0.187	0.0127	600.03	0.0563	0.002149
Co	59	3	He	0.211	0.0141	670.04	0.0563	0.002149
Co	59	3	He	0.215	0.0143	680.04	0.0563	0.002149
Ni	60	3	He	0.635	0.0083	730.04	0.0086	0.002834
Ni	60	3	He	0.453	0.0067	580.03	0.0086	0.002834
Ni	60	3	He	0.424	0.0065	560.03	0.0086	0.002834
Cu	63	3	He	1.459	0.0422	3720.62	0.0257	0.004757
Cu	63	3	He	1.689	0.0481	4150.75	0.0257	0.004757
Cu	63	3	He	1.589	0.0456	3940.69	0.0257	0.004757
Zn	66	3	He	12.368	0.0398	3510.52	0.0029	0.003818
Zn	66	3	He	12.031	0.0388	3350.49	0.0029	0.003818
Zn	66	3	He	12.23	0.0394	3410.51	0.0029	0.003818
As	75	3	He	0.171	0.0012	102.00	0.002	0.0008061
As	75	3	He	0.32	0.0015	126.00	0.002	0.0008061
As	75	3	He	0.193	0.0012	104.00	0.002	0.0008061
Sr	88	3	He	108.105	0.9707	85799.31	0.009	0.0009645
Sr	88	3	He	108.149	0.971	84602.55	0.009	0.0009645
Sr	88	3	He	109.59	0.984	85205.81	0.009	0.0009645
Mo	98	3	He	0.313	0.0071	630.04	0.0219	0.0002706
Mo	98	3	He	0.359	0.0081	710.04	0.0219	0.0002706
Mo	98	3	He	0.346	0.0079	680.04	0.0219	0.0002706
Ag	107	3	He	0.013	0.0012	110.00	0.0465	0.0006206
Ag	107	3	He	0.011	0.0011	100.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0.021	0.0001	10.00	0.0053	0
Cd	111	3	He	0.017	0.0001	8.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	-0.119	0.0146	1290.10	0.0158	0.01648
Sn	120	3	He	-0.026	0.0161	1400.12	0.0158	0.01648
Sn	120	3	He	-0.012	0.0163	1410.14	0.0158	0.01648
Sb	121	3	He	0.119	0.002	180.01	0.0149	0.0002698
Sb	121	3	He	0.144	0.0024	210.01	0.0149	0.0002698
Sb	121	3	He	0.207	0.0033	290.02	0.0149	0.0002698
Ba	137	3	He	143.449	0.6887	60875.97	0.0048	0.0002317
Ba	137	3	He	144.432	0.6934	60413.74	0.0048	0.0002317
Ba	137	3	He	145.779	0.6999	60604.78	0.0048	0.0002317
Tl	205	3	He	0.031	0.0009	360.02	0.0247	0.0001339
Tl	205	3	He	0.043	0.0012	480.03	0.0247	0.0001339
Tl	205	3	He	0.041	0.0011	450.02	0.0247	0.0001339
Pb	208	3	He	1.581	0.0528	11425.30	0.0327	0.00107
Pb	208	3	He	1.661	0.0554	11415.46	0.0327	0.00107
Pb	208	3	He	1.659	0.0554	11515.57	0.0327	0.00107
U	238	3	He	0.571	0.0282	8843.27	0.0493	7.55E-05
U	238	3	He	0.57	0.0282	8873.46	0.0493	7.55E-05
U	238	3	He	0.558	0.0276	8563.20	0.0493	7.55E-05
Sc	45	1	No Gas			2491959.49		
Sc	45	1	No Gas			2537659.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2488004.18		
Ge	72	1	No Gas			1257632.72		
Ge	72	1	No Gas			1270266.39		
Ge	72	1	No Gas			1248334.12		
Sc	45	2	H2			187990.37		
Sc	45	2	H2			183262.71		
Sc	45	2	H2			185265.08		
Ge	72	2	H2			164587.54		
Ge	72	2	H2			165965.90		
Ge	72	2	H2			166408.01		
In	115	2	H2			400805.97		
In	115	2	H2			391745.89		
In	115	2	H2			395657.46		
Sc	45	3	He			47257.96		
Sc	45	3	He			47689.10		
Sc	45	3	He			47689.15		
Ge	72	3	He			88142.01		
Ge	72	3	He			86249.80		
Ge	72	3	He			86501.93		
In	115	3	He			88401.27		
In	115	3	He			87133.51		
In	115	3	He			86599.86		
Tb	159	3	He			400579.33		
Tb	159	3	He			399145.97		
Tb	159	3	He			393527.03		
Bi	209	3	He			313832.18		
Bi	209	3	He			315021.40		
Bi	209	3	He			310636.87		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

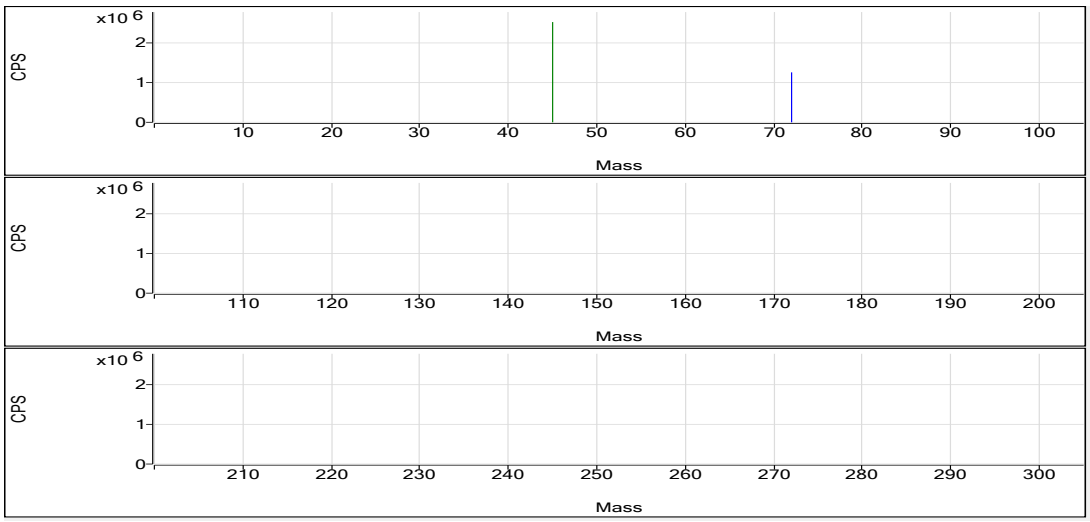
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	38.1	30.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.359	ppb	18.4	26.89	0.0002	Pulse	1.5000	3
Na	23	45	He	17385.570	ppb	2.1	2955230.06	62.5342	Analog	0.1000	3
Mg	24	45	He	11629.761	ppb	0.6	986469.18	20.8710	Pulse	0.1000	3
Al	27	45	He	111.746	ppb	0.3	3120.45	0.0660	Pulse	0.1000	3
K	39	45	He	1301.950	ppb	2.5	90308.28	1.9110	Pulse	0.1000	3
Ca	44	45	He	45565.982	ppb	2.6	145589.70	3.0808	Pulse	0.1000	3
Ti	47	45	He	4.740	ppb	25.1	123.34	0.0026	Pulse	0.1000	3
V	51	45	He	1.028	ppb	6.8	2236.85	0.0473	Pulse	0.5000	3
Cr	52	45	He	0.684	ppb	11.6	2857.05	0.0604	Pulse	0.1000	3
Mn	55	45	He	16.661	ppb	2.1	10233.95	0.2165	Pulse	0.1000	3
Fe	57	45	He	495.109	ppb	2.5	13666.97	0.2891	Pulse	0.1000	3
Co	59	45	He	0.170	ppb	16.5	553.36	0.0117	Pulse	0.1000	3
Ni	60	72	He	0.451	ppb	12.3	586.70	0.0067	Pulse	0.1000	3
Cu	63	72	He	1.651	ppb	4.2	4127.41	0.0471	Pulse	0.1000	3
Zn	66	72	He	11.779	ppb	9.1	3333.84	0.0381	Pulse	0.1000	3
As	75	72	He	0.295	ppb	42.3	123.33	0.0014	Pulse	0.5000	3
Sr	88	115	He	108.252	ppb	2.2	84042.95	0.9720	Pulse	0.1000	3
Mo	98	115	He	0.257	ppb	19.8	510.03	0.0059	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.023	ppb	11.4	10.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.062	ppb	N/A	1340.11	0.0155	Pulse	0.1000	3
Sb	121	115	He	0.179	ppb	13.5	253.34	0.0029	Pulse	0.1000	3
Ba	137	115	He	142.588	ppb	1.7	59195.29	0.6846	Pulse	0.1000	3
Tl	205	159	He	0.019	ppb	27.6	240.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	1.605	ppb	1.9	21437.68	0.0536	Pulse	0.1000	3
U	238	209	He	0.542	ppb	2.2	8389.68	0.0268	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2524142.20	1.1	105.2	Analog	0.1000	3
No Gas	Ge	72	1257494.96	1.1	109.0	Pulse	0.1000	3
H2	Sc	45	184424.83	0.7	98.6	Pulse	0.1000	3
H2	Ge	72	165981.80	0.8	101.4	Pulse	0.1000	3
H2	In	115	393934.46	0.7	101.2	Pulse	0.1000	3
He	Sc	45	47267.68	1.5	101.3	Pulse	0.1000	3
He	Ge	72	87554.01	1.7	107.8	Pulse	0.1000	3
He	In	115	86488.36	1.7	100.3	Pulse	0.1000	3
He	Tb	159	399858.18	0.2	100.3	Pulse	0.1000	3
He	Bi	209	313437.09	0.3	101.3	Pulse	0.1000	3

No Gas



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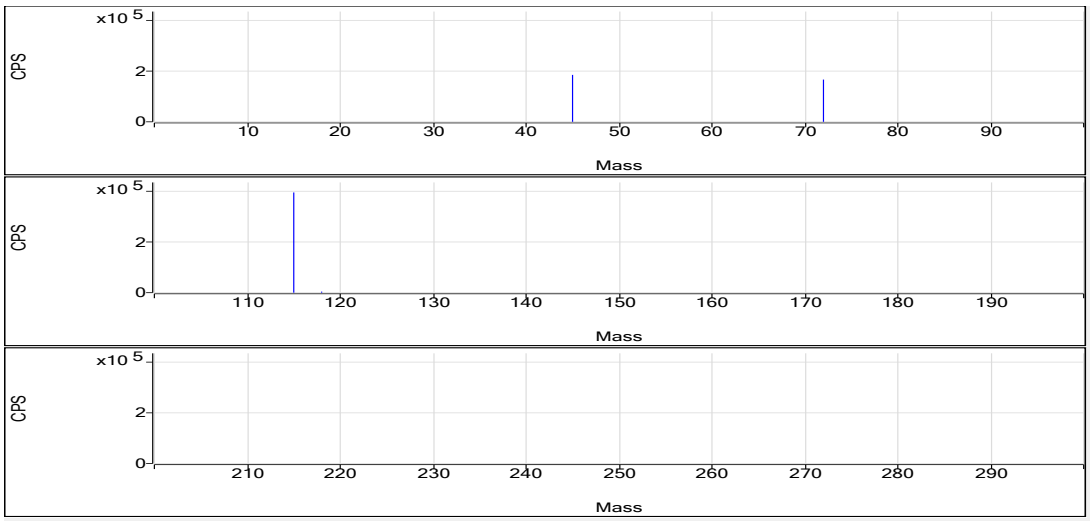
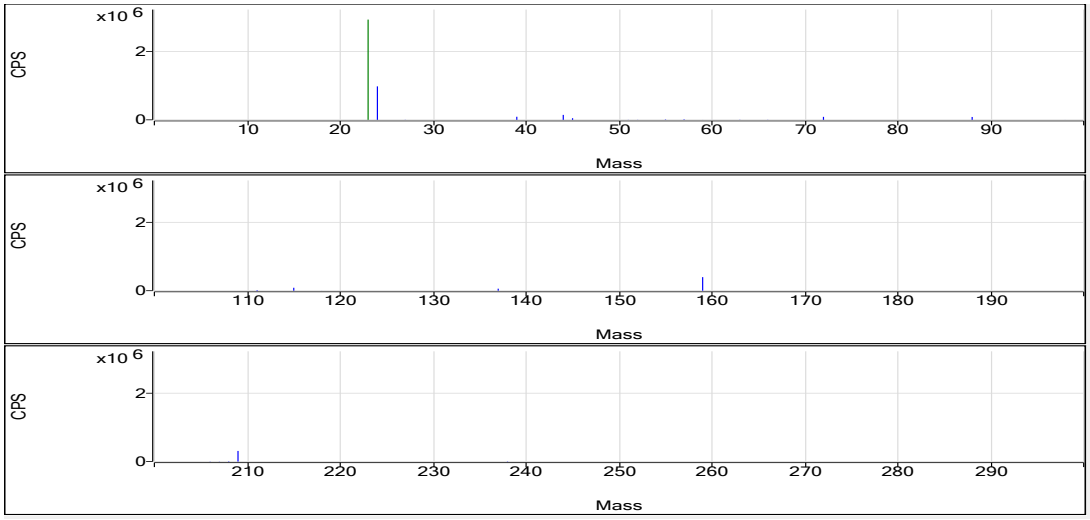


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	22.00	0.0008	4.685E-06
Be	9	1	No Gas	0.012	0	36.00	0.0008	4.685E-06
Se	78	2	H2	0.429	0.0002	32.00	0.0004	1.219E-05
Se	78	2	H2	0.298	0.0001	22.67	0.0004	1.219E-05
Se	78	2	H2	0.349	0.0002	26.00	0.0004	1.219E-05
Na	23	3	He	17715.905	63.7158	2963115.58	0.0036	0.3452
Na	23	3	He	17443.53	62.7415	2970048.08	0.0036	0.3452
Na	23	3	He	16997.275	61.1452	2932526.52	0.0036	0.3452
Mg	24	3	He	11707.417	21.0104	977091.16	0.0018	0.003497
Mg	24	3	He	11598.71	20.8153	985352.09	0.0018	0.003497
Mg	24	3	He	11583.156	20.7874	996964.28	0.0018	0.003497
Al	27	3	He	112.121	0.0662	3080.42	0.0006	0.0006432
Al	27	3	He	111.575	0.0659	3120.45	0.0006	0.0006432
Al	27	3	He	111.54	0.0659	3160.47	0.0006	0.0006432
K	39	3	He	1334.648	1.949	90640.12	0.0012	0.3951
K	39	3	He	1301.923	1.9109	90459.32	0.0012	0.3951
K	39	3	He	1269.28	1.8729	89825.41	0.0012	0.3951
Ca	44	3	He	46253.393	3.1272	145431.92	0.0001	0.002715
Ca	44	3	He	46228.297	3.1255	147955.58	0.0001	0.002715
Ca	44	3	He	44216.254	2.9896	143381.59	0.0001	0.002715
Ti	47	3	He	5.477	0.003	140.01	0.0005	7.003E-05
Ti	47	3	He	5.378	0.003	140.01	0.0005	7.003E-05
Ti	47	3	He	3.364	0.0019	90.00	0.0005	7.003E-05
V	51	3	He	1.086	0.0486	2260.19	0.0219	0.02486
V	51	3	He	1.049	0.0478	2262.19	0.0219	0.02486
V	51	3	He	0.95	0.0456	2188.18	0.0219	0.02486
Cr	52	3	He	0.633	0.0589	2740.34	0.0299	0.03997
Cr	52	3	He	0.775	0.0632	2990.41	0.0299	0.03997
Cr	52	3	He	0.643	0.0592	2840.39	0.0299	0.03997
Mn	55	3	He	16.254	0.2112	9823.61	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	16.854	0.2189	10364.11	0.0128	0.002639
Mn	55	3	He	16.876	0.2192	10514.12	0.0128	0.002639
Fe	57	3	He	481.141	0.281	13066.44	0.0006	0.001429
Fe	57	3	He	505.386	0.2951	13967.19	0.0006	0.001429
Fe	57	3	He	498.801	0.2912	13967.28	0.0006	0.001429
Co	59	3	He	0.203	0.0135	630.03	0.0563	0.002149
Co	59	3	He	0.153	0.0108	510.03	0.0563	0.002149
Co	59	3	He	0.154	0.0108	520.03	0.0563	0.002149
Ni	60	3	He	0.491	0.007	610.03	0.0086	0.002834
Ni	60	3	He	0.388	0.0062	550.03	0.0086	0.002834
Ni	60	3	He	0.475	0.0069	600.03	0.0086	0.002834
Cu	63	3	He	1.57	0.0451	3900.67	0.0257	0.004757
Cu	63	3	He	1.695	0.0483	4310.82	0.0257	0.004757
Cu	63	3	He	1.686	0.048	4170.74	0.0257	0.004757
Zn	66	3	He	12.378	0.0399	3450.52	0.0029	0.003818
Zn	66	3	He	10.538	0.0345	3080.46	0.0029	0.003818
Zn	66	3	He	12.421	0.04	3470.55	0.0029	0.003818
As	75	3	He	0.227	0.0013	110.00	0.002	0.0008061
As	75	3	He	0.219	0.0013	112.00	0.002	0.0008061
As	75	3	He	0.439	0.0017	148.00	0.002	0.0008061
Sr	88	3	He	109.06	0.9792	84210.85	0.009	0.0009645
Sr	88	3	He	105.577	0.948	83526.54	0.009	0.0009645
Sr	88	3	He	110.118	0.9887	84391.46	0.009	0.0009645
Mo	98	3	He	0.216	0.005	430.02	0.0219	0.0002706
Mo	98	3	He	0.241	0.0056	490.03	0.0219	0.0002706
Mo	98	3	He	0.314	0.0071	610.04	0.0219	0.0002706
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.026	0.0001	12.00	0.0053	0
Cd	111	3	He	0.021	0.0001	10.00	0.0053	0
Cd	111	3	He	0.022	0.0001	10.00	0.0053	0
Sn	120	3	He	-0.057	0.0156	1340.11	0.0158	0.01648
Sn	120	3	He	-0.073	0.0153	1350.10	0.0158	0.01648
Sn	120	3	He	-0.056	0.0156	1330.11	0.0158	0.01648
Sb	121	3	He	0.178	0.0029	250.01	0.0149	0.0002698
Sb	121	3	He	0.203	0.0033	290.01	0.0149	0.0002698
Sb	121	3	He	0.155	0.0026	220.01	0.0149	0.0002698
Ba	137	3	He	143.893	0.6908	59409.75	0.0048	0.0002317
Ba	137	3	He	139.8	0.6712	59138.14	0.0048	0.0002317
Ba	137	3	He	144.069	0.6917	59037.97	0.0048	0.0002317
Tl	205	3	He	0.016	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.016	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.025	0.0007	300.02	0.0247	0.0001339
Pb	208	3	He	1.572	0.0525	11255.35	0.0327	0.00107
Pb	208	3	He	1.615	0.0539	11365.22	0.0327	0.00107
Pb	208	3	He	1.629	0.0544	11795.68	0.0327	0.00107
U	238	3	He	0.556	0.0275	8623.21	0.0493	7.55E-05
U	238	3	He	0.535	0.0264	8302.94	0.0493	7.55E-05
U	238	3	He	0.534	0.0264	8242.89	0.0493	7.55E-05
Sc	45	1	No Gas			2520748.87		
Sc	45	1	No Gas			2497094.96		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2554582.77		
Ge	72	1	No Gas			1255255.22		
Ge	72	1	No Gas			1244682.40		
Ge	72	1	No Gas			1272547.25		
Sc	45	2	H2			184733.71		
Sc	45	2	H2			185571.95		
Sc	45	2	H2			182968.84		
Ge	72	2	H2			167391.42		
Ge	72	2	H2			165902.60		
Ge	72	2	H2			164651.38		
In	115	2	H2			395202.46		
In	115	2	H2			395789.99		
In	115	2	H2			390810.93		
Sc	45	3	He			46505.18		
Sc	45	3	He			47337.84		
Sc	45	3	He			47960.01		
Ge	72	3	He			86571.54		
Ge	72	3	He			89287.81		
Ge	72	3	He			86802.67		
In	115	3	He			86004.91		
In	115	3	He			88118.72		
In	115	3	He			85362.27		
Tb	159	3	He			399610.54		
Tb	159	3	He			399244.99		
Tb	159	3	He			400719.02		
Bi	209	3	He			314096.26		
Bi	209	3	He			313961.07		
Bi	209	3	He			312253.94		

Quantitation Report

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Acq Time	8/10/2023 7:23:43 PM
Sample Name	630-67886-C-1-B MS
Sample Type	Sample
Comment	I9 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

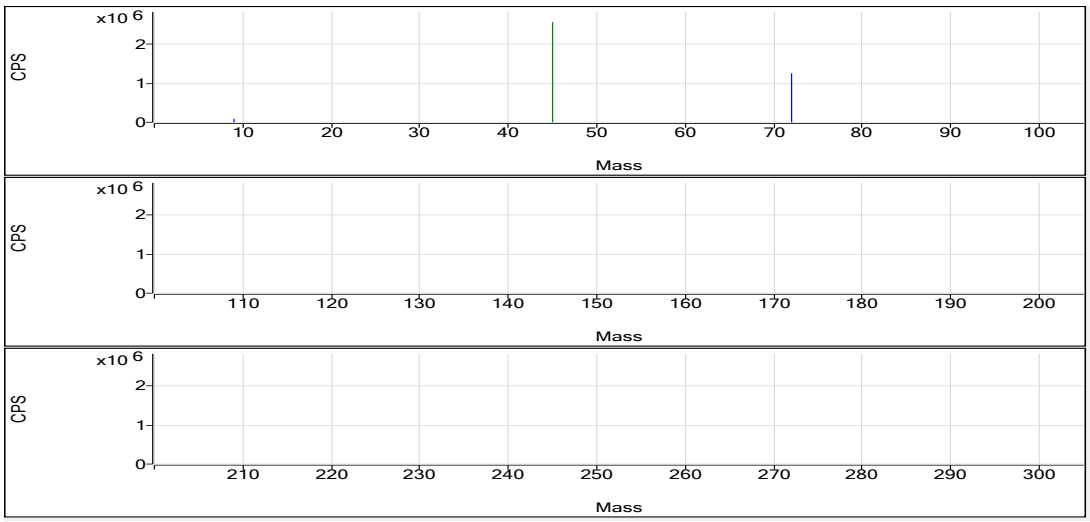
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.070	ppb	0.4	90074.71	0.0351	Pulse	0.5000	3
Se	78	72	H2	100.979	ppb	2.6	6813.19	0.0421	Pulse	1.5000	3
Na	23	45	He	21833.026	ppb	2.3	3781350.26	78.4430	Analog	0.1000	3
Mg	24	45	He	17065.135	ppb	1.4	1476322.17	30.6238	Analog	0.1000	3
Al	27	45	He	5073.808	ppb	1.8	143123.77	2.9690	Pulse	0.1000	3
K	39	45	He	6280.510	ppb	2.0	371551.60	7.7076	Pulse	0.1000	3
Ca	44	45	He	49759.522	ppb	1.2	162177.75	3.3641	Pulse	0.1000	3
Ti	47	45	He	512.951	ppb	2.6	13279.72	0.2755	Pulse	0.1000	3
V	51	45	He	507.673	ppb	2.0	536148.54	11.1222	Pulse	0.5000	3
Cr	52	45	He	478.431	ppb	2.9	692396.24	14.3646	Pulse	0.1000	3
Mn	55	45	He	514.685	ppb	2.0	318542.53	6.6080	Pulse	0.1000	3
Fe	57	45	He	5427.365	ppb	2.3	152068.22	3.1547	Pulse	0.1000	3
Co	59	45	He	475.694	ppb	1.5	1290764.67	26.7753	Pulse	0.1000	3
Ni	60	72	He	483.202	ppb	0.4	360709.67	4.1502	Pulse	0.1000	3
Cu	63	72	He	463.363	ppb	0.7	1034254.70	11.8998	Pulse	0.1000	3
Zn	66	72	He	503.621	ppb	0.1	127777.89	1.4702	Pulse	0.1000	3
As	75	72	He	504.225	ppb	0.6	89859.03	1.0339	Pulse	0.5000	3
Sr	88	115	He	157.139	ppb	1.6	123250.09	1.4105	Pulse	0.1000	3
Mo	98	115	He	49.961	ppb	1.9	95745.09	1.0957	Pulse	0.1000	3
Ag	107	115	He	49.778	ppb	2.2	202260.22	2.3147	Pulse	0.1000	3
Cd	111	115	He	50.854	ppb	2.0	23759.52	0.2719	Pulse	0.5000	3
Sn	120	115	He	103.381	ppb	3.0	144144.55	1.6498	Pulse	0.1000	3
Sb	121	115	He	102.814	ppb	2.7	133458.51	1.5274	Pulse	0.1000	3
Ba	137	115	He	653.510	ppb	1.4	274092.94	3.1366	Pulse	0.1000	3
Tl	205	159	He	102.709	ppb	0.3	1014253.03	2.5398	Pulse	0.1000	3
Pb	208	159	He	53.108	ppb	0.4	694588.24	1.7393	Pulse	0.1000	3
U	238	209	He	50.431	ppb	0.4	771917.96	2.4843	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2562890.95	0.6	106.8	Analog	0.1000	3
No Gas	Ge	72	1250836.62	0.1	108.5	Pulse	0.1000	3
H2	Sc	45	183198.10	0.3	98.0	Pulse	0.1000	3
H2	Ge	72	161760.40	1.2	98.8	Pulse	0.1000	3
H2	In	115	394592.88	0.5	101.4	Pulse	0.1000	3
He	Sc	45	48214.01	1.4	103.4	Pulse	0.1000	3
He	Ge	72	86913.75	0.3	107.0	Pulse	0.1000	3
He	In	115	87394.23	1.3	101.4	Pulse	0.1000	3
He	Tb	159	399351.39	0.4	100.2	Pulse	0.1000	3
He	Bi	209	310715.88	0.3	100.5	Pulse	0.1000	3

No Gas



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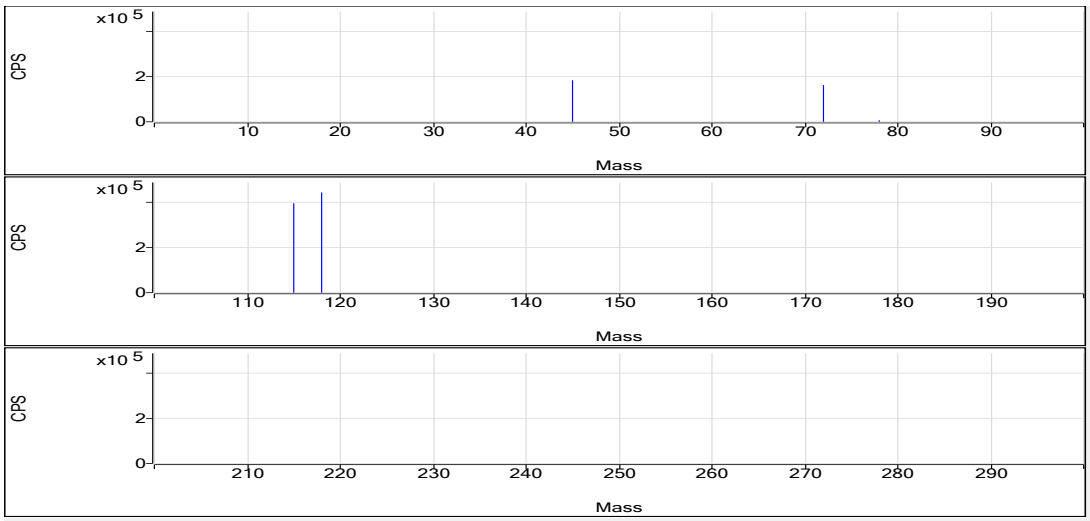
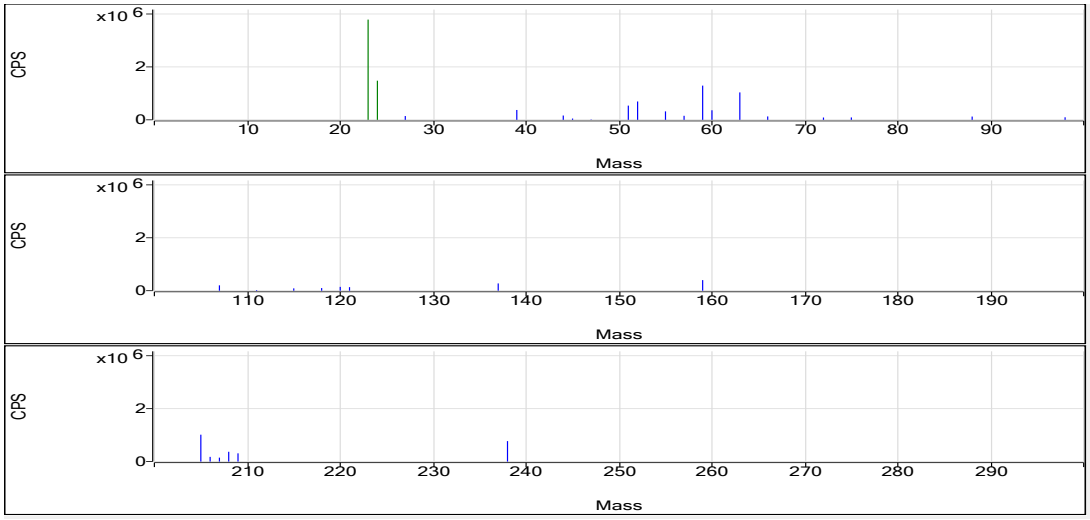


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.93	0.035	89937.86	0.0008	4.685E-06
Be	9	1	No Gas	45.975	0.0351	90318.30	0.0008	4.685E-06
Be	9	1	No Gas	46.305	0.0353	89967.98	0.0008	4.685E-06
Se	78	2	H2	103.743	0.0433	6916.35	0.0004	1.219E-05
Se	78	2	H2	98.567	0.0411	6726.92	0.0004	1.219E-05
Se	78	2	H2	100.629	0.042	6796.29	0.0004	1.219E-05
Na	23	3	He	21408.509	76.9244	3767227.76	0.0036	0.3452
Na	23	3	He	22400.765	80.4738	3837722.76	0.0036	0.3452
Na	23	3	He	21689.805	77.9307	3739100.26	0.0036	0.3452
Mg	24	3	He	16798.548	30.1455	1476318.26	0.0018	0.003497
Mg	24	3	He	17167.194	30.807	1469156.70	0.0018	0.003497
Mg	24	3	He	17229.663	30.9191	1483491.54	0.0018	0.003497
Al	27	3	He	4976.929	2.9123	142625.31	0.0006	0.0006432
Al	27	3	He	5157.659	3.0181	143928.26	0.0006	0.0006432
Al	27	3	He	5086.836	2.9766	142817.73	0.0006	0.0006432
K	39	3	He	6137.615	7.5413	369318.59	0.0012	0.3951
K	39	3	He	6361.652	7.8021	372075.46	0.0012	0.3951
K	39	3	He	6342.264	7.7795	373260.74	0.0012	0.3951
Ca	44	3	He	49094.24	3.3191	162547.78	0.0001	0.002715
Ca	44	3	He	50135.008	3.3894	161638.88	0.0001	0.002715
Ca	44	3	He	50049.318	3.3836	162346.59	0.0001	0.002715
Ti	47	3	He	497.521	0.2672	13086.28	0.0005	7.003E-05
Ti	47	3	He	521.079	0.2799	13346.40	0.0005	7.003E-05
Ti	47	3	He	520.252	0.2794	13406.47	0.0005	7.003E-05
V	51	3	He	496.951	10.8878	533209.19	0.0219	0.02486
V	51	3	He	516.474	11.3146	539581.56	0.0219	0.02486
V	51	3	He	509.594	11.1642	535654.88	0.0219	0.02486
Cr	52	3	He	464.585	13.95	683173.82	0.0299	0.03997
Cr	52	3	He	491.947	14.7692	704331.55	0.0299	0.03997
Cr	52	3	He	478.761	14.3744	689683.35	0.0299	0.03997
Mn	55	3	He	503.819	6.4686	316786.83	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	524.064	6.7284	320871.73	0.0128	0.002639
Mn	55	3	He	516.173	6.6271	317969.04	0.0128	0.002639
Fe	57	3	He	5296.86	3.0789	150781.08	0.0006	0.001429
Fe	57	3	He	5540.193	3.2202	153569.89	0.0006	0.001429
Fe	57	3	He	5445.042	3.1649	151853.70	0.0006	0.001429
Co	59	3	He	467.482	26.3131	1288633.34	0.0563	0.002149
Co	59	3	He	480.815	27.0635	1290634.82	0.0563	0.002149
Co	59	3	He	478.787	26.9494	1293025.84	0.0563	0.002149
Ni	60	3	He	484.353	4.1601	361320.78	0.0086	0.002834
Ni	60	3	He	481.113	4.1323	360193.20	0.0086	0.002834
Ni	60	3	He	484.14	4.1583	360615.03	0.0086	0.002834
Cu	63	3	He	459.788	11.808	1025569.75	0.0257	0.004757
Cu	63	3	He	464.35	11.9251	1039457.64	0.0257	0.004757
Cu	63	3	He	465.951	11.9662	1037736.70	0.0257	0.004757
Zn	66	3	He	503.073	1.4686	127551.11	0.0029	0.003818
Zn	66	3	He	503.906	1.471	128219.94	0.0029	0.003818
Zn	66	3	He	503.884	1.4709	127562.61	0.0029	0.003818
As	75	3	He	506.269	1.0381	90161.59	0.002	0.0008061
As	75	3	He	500.987	1.0273	89541.59	0.002	0.0008061
As	75	3	He	505.419	1.0363	89873.92	0.002	0.0008061
Sr	88	3	He	154.634	1.388	122930.28	0.009	0.0009645
Sr	88	3	He	157.177	1.4108	123214.13	0.009	0.0009645
Sr	88	3	He	159.605	1.4326	123605.85	0.009	0.0009645
Mo	98	3	He	48.918	1.0729	95019.95	0.0219	0.0002706
Mo	98	3	He	50.17	1.1003	96097.27	0.0219	0.0002706
Mo	98	3	He	50.794	1.114	96118.05	0.0219	0.0002706
Ag	107	3	He	48.57	2.2585	200026.42	0.0465	0.0006206
Ag	107	3	He	50.733	2.3591	206030.62	0.0465	0.0006206
Ag	107	3	He	50.03	2.3264	200723.61	0.0465	0.0006206
Cd	111	3	He	49.963	0.2671	23660.02	0.0053	0
Cd	111	3	He	50.667	0.2709	23660.03	0.0053	0
Cd	111	3	He	51.933	0.2777	23958.50	0.0053	0
Sn	120	3	He	99.859	1.5941	141184.94	0.0158	0.01648
Sn	120	3	He	104.832	1.6727	146084.83	0.0158	0.01648
Sn	120	3	He	105.45	1.6825	145163.89	0.0158	0.01648
Sb	121	3	He	100.949	1.4997	132822.78	0.0149	0.0002698
Sb	121	3	He	101.491	1.5078	131681.39	0.0149	0.0002698
Sb	121	3	He	106.001	1.5748	135871.37	0.0149	0.0002698
Ba	137	3	He	643.746	3.0898	273650.13	0.0048	0.0002317
Ba	137	3	He	655.803	3.1476	274901.46	0.0048	0.0002317
Ba	137	3	He	660.981	3.1725	273727.24	0.0048	0.0002317
Tl	205	3	He	102.735	2.5404	1010303.27	0.0247	0.0001339
Tl	205	3	He	102.96	2.546	1016817.09	0.0247	0.0001339
Tl	205	3	He	102.433	2.5329	1015638.73	0.0247	0.0001339
Pb	208	3	He	53.051	1.7374	364659.17	0.0327	0.00107
Pb	208	3	He	53.341	1.7469	374052.26	0.0327	0.00107
Pb	208	3	He	52.933	1.7336	368926.05	0.0327	0.00107
U	238	3	He	50.225	2.4741	767439.60	0.0493	7.55E-05
U	238	3	He	50.601	2.4927	777071.39	0.0493	7.55E-05
U	238	3	He	50.467	2.4861	771242.88	0.0493	7.55E-05
Sc	45	1	No Gas			2566759.81		
Sc	45	1	No Gas			2575098.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2546814.81		
Ge	72	1	No Gas			1250002.95		
Ge	72	1	No Gas			1252519.43		
Ge	72	1	No Gas			1249987.48		
Sc	45	2	H2			183099.12		
Sc	45	2	H2			182695.31		
Sc	45	2	H2			183799.86		
Ge	72	2	H2			159805.33		
Ge	72	2	H2			163587.12		
Ge	72	2	H2			161888.74		
In	115	2	H2			392311.28		
In	115	2	H2			395854.06		
In	115	2	H2			395613.31		
Sc	45	3	He			48973.09		
Sc	45	3	He			47689.10		
Sc	45	3	He			47979.84		
Ge	72	3	He			86853.78		
Ge	72	3	He			87165.30		
Ge	72	3	He			86722.17		
In	115	3	He			89335.74		
In	115	3	He			88118.85		
In	115	3	He			87041.53		
Tb	159	3	He			397695.07		
Tb	159	3	He			399383.59		
Tb	159	3	He			400975.50		
Bi	209	3	He			310184.00		
Bi	209	3	He			311741.19		
Bi	209	3	He			310222.44		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

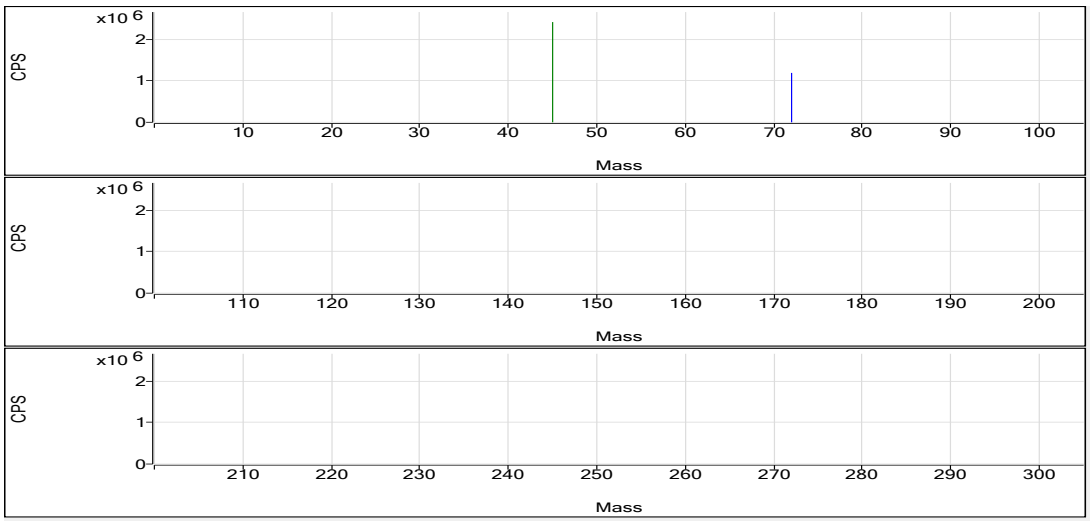
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.020	ppb	30.3	48.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.125	ppb	35.4	9.78	0.0001	Pulse	1.5000	3
Na	23	45	He	13.974	ppb	21.9	18502.09	0.3951	Pulse	0.1000	3
Mg	24	45	He	1.512	ppb	72.3	290.01	0.0062	Pulse	0.1000	3
Al	27	45	He	0.483	ppb	88.2	43.33	0.0009	Pulse	0.1000	3
K	39	45	He	5.744	ppb	110.6	18815.92	0.4018	Pulse	0.1000	3
Ca	44	45	He	6.344	ppb	287.0	146.67	0.0031	Pulse	0.1000	3
Ti	47	45	He	0.262	ppb	259.4	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.345	ppb	9.4	1518.09	0.0324	Pulse	0.5000	3
Cr	52	45	He	-0.026	ppb	N/A	1836.84	0.0392	Pulse	0.1000	3
Mn	55	45	He	0.184	ppb	73.5	233.35	0.0050	Pulse	0.1000	3
Fe	57	45	He	-0.127	ppb	N/A	63.33	0.0014	Pulse	0.1000	3
Co	59	45	He	0.074	ppb	26.4	296.68	0.0063	Pulse	0.1000	3
Ni	60	72	He	0.037	ppb	250.3	260.01	0.0032	Pulse	0.1000	3
Cu	63	72	He	0.105	ppb	40.8	616.71	0.0075	Pulse	0.1000	3
Zn	66	72	He	1.613	ppb	35.6	703.38	0.0085	Pulse	0.1000	3
As	75	72	He	0.162	ppb	55.4	94.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.018	ppb	173.2	96.67	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.108	ppb	45.4	226.67	0.0026	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.109	ppb	112.6	1563.49	0.0182	Pulse	0.1000	3
Sb	121	115	He	0.035	ppb	96.6	66.67	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.089	ppb	86.5	56.67	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.213	ppb	8.3	2130.26	0.0054	Pulse	0.1000	3
Pb	208	159	He	0.015	ppb	21.5	623.36	0.0016	Pulse	0.1000	3
U	238	209	He	0.126	ppb	9.9	1940.22	0.0063	Pulse	0.1000	3

ISTD Table:

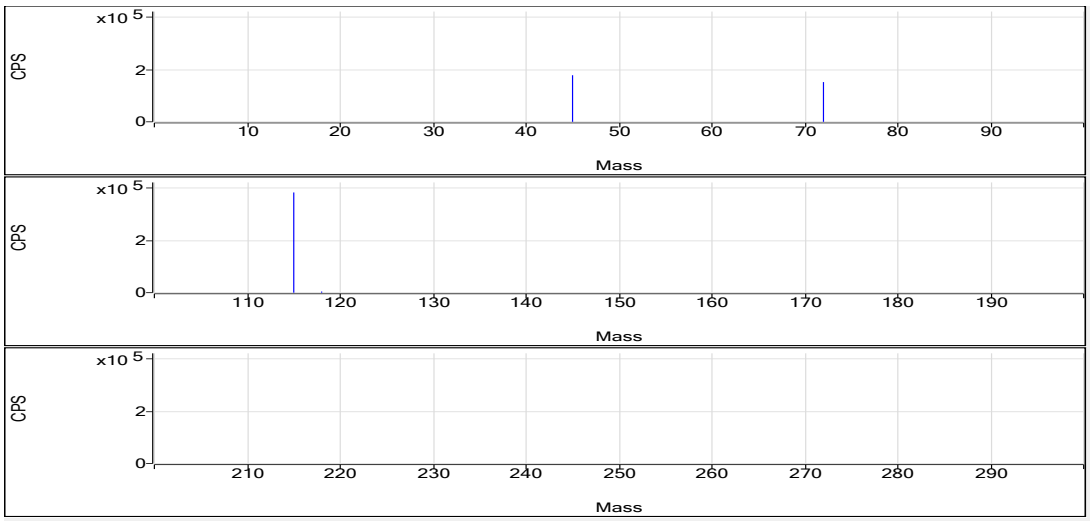
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2419640.43	1.3	100.9	Analog	0.1000	3
No Gas	Ge	72	1192456.88	1.0	103.4	Pulse	0.1000	3
H2	Sc	45	178216.09	1.3	95.3	Pulse	0.1000	3
H2	Ge	72	151977.98	1.6	92.8	Pulse	0.1000	3
H2	In	115	383427.13	0.7	98.5	Pulse	0.1000	3
He	Sc	45	46832.89	1.5	100.4	Pulse	0.1000	3
He	Ge	72	82846.99	2.6	102.0	Pulse	0.1000	3
He	In	115	85782.16	2.1	99.5	Pulse	0.1000	3
He	Tb	159	395370.24	0.4	99.2	Pulse	0.1000	3
He	Bi	209	308460.48	0.9	99.7	Pulse	0.1000	3

No Gas

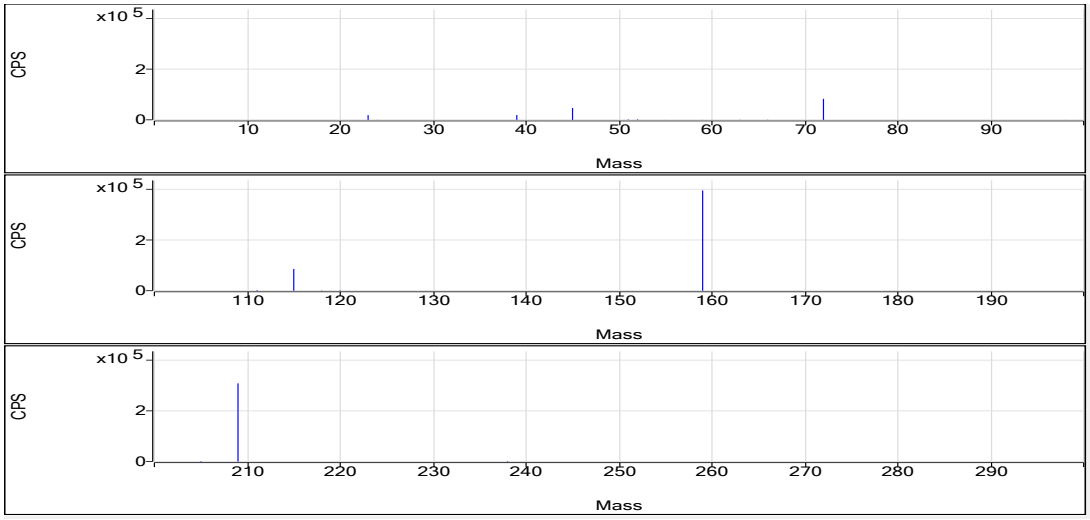


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.018	0	44.00	0.0008	4.685E-06
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.027	0	60.00	0.0008	4.685E-06
Se	78	2	H2	0.151	0.0001	11.33	0.0004	1.219E-05
Se	78	2	H2	0.074	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.151	0.0001	11.33	0.0004	1.219E-05
Na	23	3	He	13.581	0.3937	18682.38	0.0036	0.3452
Na	23	3	He	17.205	0.4067	18742.37	0.0036	0.3452
Na	23	3	He	11.135	0.385	18081.51	0.0036	0.3452
Mg	24	3	He	0.988	0.0053	250.01	0.0018	0.003497
Mg	24	3	He	2.768	0.0085	390.02	0.0018	0.003497
Mg	24	3	He	0.781	0.0049	230.01	0.0018	0.003497
Al	27	3	He	0.702	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	0.755	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	-0.008	0.0006	30.00	0.0006	0.0006432
K	39	3	He	11.37	0.4083	19373.45	0.0012	0.3951
K	39	3	He	7.006	0.4032	18582.15	0.0012	0.3951
K	39	3	He	-1.145	0.3937	18492.17	0.0012	0.3951
Ca	44	3	He	-5.872	0.0023	110.00	0.0001	0.002715
Ca	44	3	He	27.27	0.0046	210.01	0.0001	0.002715
Ca	44	3	He	-2.368	0.0026	120.00	0.0001	0.002715
Ti	47	3	He	1.047	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.359	0.0327	1552.09	0.0219	0.02486
V	51	3	He	0.308	0.0316	1456.08	0.0219	0.02486
V	51	3	He	0.368	0.0329	1546.09	0.0219	0.02486
Cr	52	3	He	0.045	0.0413	1960.20	0.0299	0.03997
Cr	52	3	He	-0.146	0.0356	1640.14	0.0299	0.03997
Cr	52	3	He	0.023	0.0407	1910.19	0.0299	0.03997
Mn	55	3	He	0.139	0.0044	210.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.335	0.0069	320.02	0.0128	0.002639
Mn	55	3	He	0.076	0.0036	170.01	0.0128	0.002639
Fe	57	3	He	-0.283	0.0013	60.00	0.0006	0.001429
Fe	57	3	He	0.529	0.0017	80.00	0.0006	0.001429
Fe	57	3	He	-0.627	0.0011	50.00	0.0006	0.001429
Co	59	3	He	0.097	0.0076	360.02	0.0563	0.002149
Co	59	3	He	0.066	0.0059	270.01	0.0563	0.002149
Co	59	3	He	0.06	0.0055	260.01	0.0563	0.002149
Ni	60	3	He	-0.057	0.0023	200.01	0.0086	0.002834
Ni	60	3	He	0.128	0.0039	320.02	0.0086	0.002834
Ni	60	3	He	0.04	0.0032	260.01	0.0086	0.002834
Cu	63	3	He	0.057	0.0062	530.03	0.0257	0.004757
Cu	63	3	He	0.121	0.0079	640.05	0.0257	0.004757
Cu	63	3	He	0.138	0.0083	680.04	0.0257	0.004757
Zn	66	3	He	1.104	0.007	600.03	0.0029	0.003818
Zn	66	3	He	2.235	0.0103	840.06	0.0029	0.003818
Zn	66	3	He	1.5	0.0082	670.04	0.0029	0.003818
As	75	3	He	0.076	0.001	82.00	0.002	0.0008061
As	75	3	He	0.254	0.0013	108.00	0.002	0.0008061
As	75	3	He	0.155	0.0011	92.00	0.002	0.0008061
Sr	88	3	He	-0.016	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	0.025	0.0012	100.00	0.009	0.0009645
Sr	88	3	He	0.045	0.0014	120.00	0.009	0.0009645
Mo	98	3	He	0.063	0.0016	140.00	0.0219	0.0002706
Mo	98	3	He	0.161	0.0038	320.01	0.0219	0.0002706
Mo	98	3	He	0.102	0.0025	220.01	0.0219	0.0002706
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.013	0.0167	1420.12	0.0158	0.01648
Sn	120	3	He	0.067	0.0175	1480.16	0.0158	0.01648
Sn	120	3	He	0.248	0.0204	1790.19	0.0158	0.01648
Sb	121	3	He	0.045	0.0009	80.00	0.0149	0.0002698
Sb	121	3	He	0.062	0.0012	100.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	0.001	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.124	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	0.142	0.0009	80.00	0.0048	0.0002317
Tl	205	3	He	0.233	0.0059	2320.30	0.0247	0.0001339
Tl	205	3	He	0.2	0.0051	2000.23	0.0247	0.0001339
Tl	205	3	He	0.205	0.0052	2070.25	0.0247	0.0001339
Pb	208	3	He	0.015	0.0015	360.02	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	410.02	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	200.01	0.0327	0.00107
U	238	3	He	0.113	0.0056	1750.19	0.0493	7.55E-05
U	238	3	He	0.137	0.0068	2090.25	0.0493	7.55E-05
U	238	3	He	0.129	0.0064	1980.21	0.0493	7.55E-05
Sc	45	1	No Gas			2411310.59		
Sc	45	1	No Gas			2454105.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2393505.28		
Ge	72	1	No Gas			1188409.98		
Ge	72	1	No Gas			1205752.09		
Ge	72	1	No Gas			1183208.58		
Sc	45	2	H2			178442.11		
Sc	45	2	H2			180384.57		
Sc	45	2	H2			175821.60		
Ge	72	2	H2			150859.03		
Ge	72	2	H2			154730.31		
Ge	72	2	H2			150344.61		
In	115	2	H2			384099.80		
In	115	2	H2			385682.53		
In	115	2	H2			380499.06		
Sc	45	3	He			47448.48		
Sc	45	3	He			46083.90		
Sc	45	3	He			46966.29		
Ge	72	3	He			85324.33		
Ge	72	3	He			81361.22		
Ge	72	3	He			81855.42		
In	115	3	He			85130.59		
In	115	3	He			84445.80		
In	115	3	He			87796.84		
Tb	159	3	He			394324.45		
Tb	159	3	He			394737.03		
Tb	159	3	He			397049.25		
Bi	209	3	He			311034.23		
Bi	209	3	He			305752.93		
Bi	209	3	He			308594.27		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

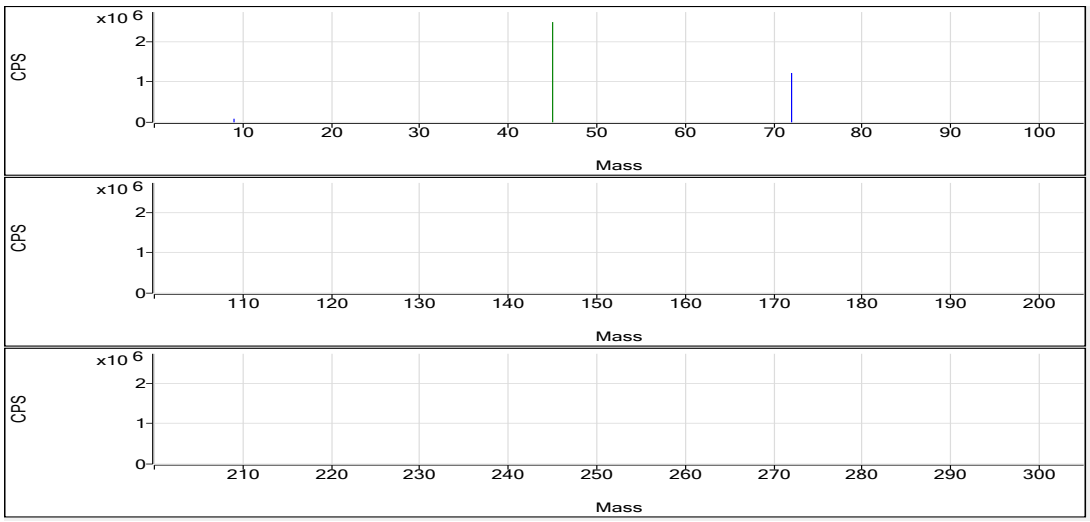
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.649	ppb	0.5	88196.38	0.0356	Pulse	0.5000	3
Se	78	72	H2	53.733	ppb	0.6	3469.09	0.0224	Pulse	1.5000	3
Na	23	45	He	4924.819	ppb	1.7	847669.31	17.9615	Pulse	0.1000	3
Mg	24	45	He	5086.950	ppb	1.6	430935.97	9.1311	Pulse	0.1000	3
Al	27	45	He	4976.113	ppb	0.9	137430.27	2.9118	Pulse	0.1000	3
K	39	45	He	5136.049	ppb	0.9	300890.36	6.3751	Pulse	0.1000	3
Ca	44	45	He	5158.517	ppb	2.1	16573.28	0.3512	Pulse	0.1000	3
Ti	47	45	He	5141.491	ppb	2.1	130286.93	2.7608	Pulse	0.1000	3
V	51	45	He	516.619	ppb	1.5	534139.75	11.3177	Pulse	0.5000	3
Cr	52	45	He	488.917	ppb	1.9	692723.30	14.6785	Pulse	0.1000	3
Mn	55	45	He	505.159	ppb	1.6	306106.04	6.4858	Pulse	0.1000	3
Fe	57	45	He	5065.592	ppb	1.7	138970.65	2.9445	Pulse	0.1000	3
Co	59	45	He	495.290	ppb	1.7	1315683.71	27.8782	Pulse	0.1000	3
Ni	60	72	He	510.036	ppb	1.4	367428.98	4.3806	Pulse	0.1000	3
Cu	63	72	He	486.802	ppb	1.6	1048568.71	12.5015	Pulse	0.1000	3
Zn	66	72	He	513.125	ppb	2.5	125622.69	1.4978	Pulse	0.1000	3
As	75	72	He	517.815	ppb	1.2	89056.73	1.0617	Pulse	0.5000	3
Sr	88	115	He	51.074	ppb	0.9	38964.45	0.4591	Pulse	0.1000	3
Mo	98	115	He	52.564	ppb	1.3	97842.75	1.1528	Pulse	0.1000	3
Ag	107	115	He	52.255	ppb	0.5	206234.40	2.4298	Pulse	0.1000	3
Cd	111	115	He	51.885	ppb	0.5	23547.19	0.2774	Pulse	0.5000	3
Sn	120	115	He	52.261	ppb	1.2	71474.45	0.8421	Pulse	0.1000	3
Sb	121	115	He	52.674	ppb	0.4	66429.88	0.7827	Pulse	0.1000	3
Ba	137	115	He	523.141	ppb	0.8	213126.40	2.5110	Pulse	0.1000	3
Tl	205	159	He	51.956	ppb	0.3	509244.97	1.2848	Pulse	0.1000	3
Pb	208	159	He	52.122	ppb	0.6	676583.32	1.7070	Pulse	0.1000	3
U	238	209	He	50.678	ppb	1.1	773033.79	2.4964	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2478334.34	1.1	103.3	Analog	0.1000	3
No Gas	Ge	72	1219397.22	0.9	105.7	Pulse	0.1000	3
H2	Sc	45	180706.73	0.7	96.6	Pulse	0.1000	3
H2	Ge	72	154717.61	0.7	94.5	Pulse	0.1000	3
H2	In	115	384922.31	0.6	98.9	Pulse	0.1000	3
He	Sc	45	47200.76	1.3	101.2	Pulse	0.1000	3
He	Ge	72	83889.60	1.7	103.3	Pulse	0.1000	3
He	In	115	84878.49	0.9	98.5	Pulse	0.1000	3
He	Tb	159	396356.84	0.5	99.4	Pulse	0.1000	3
He	Bi	209	309658.75	0.5	100.1	Pulse	0.1000	3

No Gas



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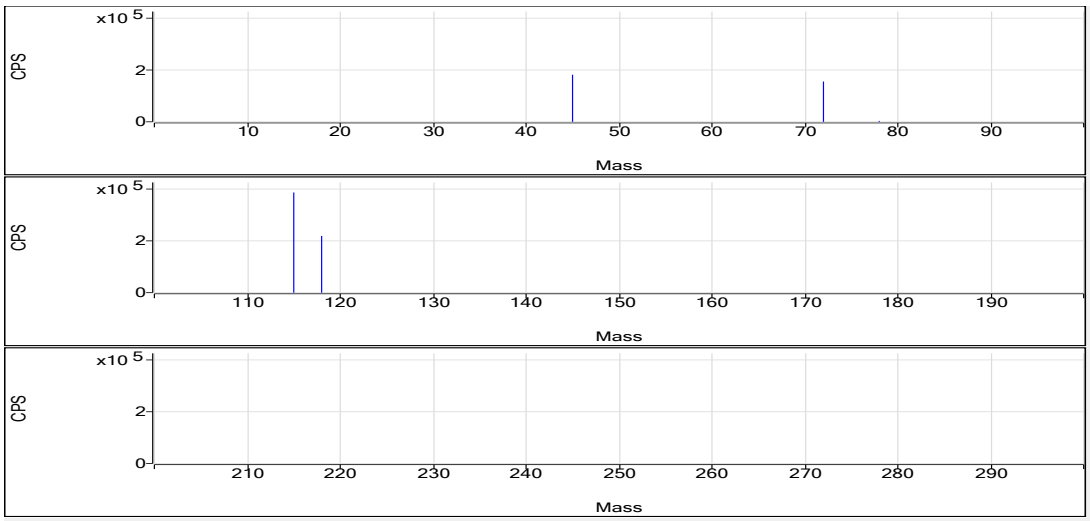
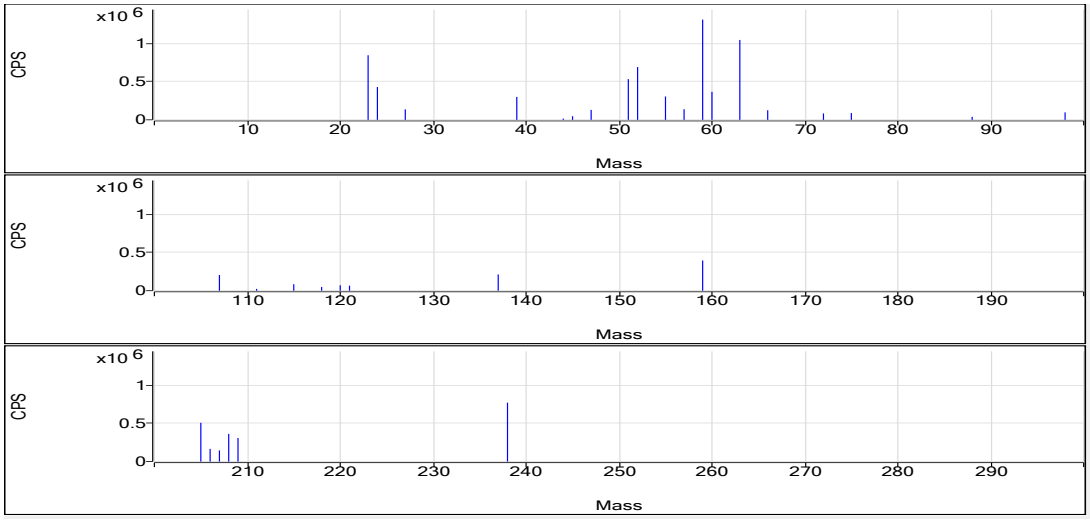


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.861	0.0357	87952.16	0.0008	4.685E-06
Be	9	1	No Gas	46.406	0.0354	88801.13	0.0008	4.685E-06
Be	9	1	No Gas	46.681	0.0356	87835.85	0.0008	4.685E-06
Se	78	2	H2	53.419	0.0223	3458.42	0.0004	1.219E-05
Se	78	2	H2	53.702	0.0224	3485.10	0.0004	1.219E-05
Se	78	2	H2	54.08	0.0226	3463.76	0.0004	1.219E-05
Na	23	3	He	5020.485	18.3037	851212.96	0.0036	0.3452
Na	23	3	He	4893.427	17.8492	845478.03	0.0036	0.3452
Na	23	3	He	4860.545	17.7316	846316.94	0.0036	0.3452
Mg	24	3	He	5180.905	9.2997	432483.16	0.0018	0.003497
Mg	24	3	He	5046.386	9.0583	429074.21	0.0018	0.003497
Mg	24	3	He	5033.559	9.0353	431250.54	0.0018	0.003497
Al	27	3	He	5027.089	2.9417	136802.20	0.0006	0.0006432
Al	27	3	He	4958.384	2.9015	137436.47	0.0006	0.0006432
Al	27	3	He	4942.866	2.8924	138052.14	0.0006	0.0006432
K	39	3	He	5187.374	6.4349	299253.49	0.0012	0.3951
K	39	3	He	5101.106	6.3344	300047.98	0.0012	0.3951
K	39	3	He	5119.668	6.356	303369.60	0.0012	0.3951
Ca	44	3	He	5253.445	0.3576	16629.97	0.0001	0.002715
Ca	44	3	He	5182.043	0.3528	16710.05	0.0001	0.002715
Ca	44	3	He	5040.065	0.3432	16379.82	0.0001	0.002715
Ti	47	3	He	5266.057	2.8277	131501.06	0.0005	7.003E-05
Ti	47	3	He	5097.154	2.737	129645.01	0.0005	7.003E-05
Ti	47	3	He	5061.264	2.7177	129714.71	0.0005	7.003E-05
V	51	3	He	525.389	11.5094	535246.63	0.0219	0.02486
V	51	3	He	511.947	11.2156	531259.25	0.0219	0.02486
V	51	3	He	512.522	11.2282	535913.38	0.0219	0.02486
Cr	52	3	He	499.687	15.001	697619.91	0.0299	0.03997
Cr	52	3	He	483.949	14.5298	688243.43	0.0299	0.03997
Cr	52	3	He	483.116	14.5048	692306.55	0.0299	0.03997
Mn	55	3	He	512.883	6.5849	306231.91	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	497.023	6.3814	302271.69	0.0128	0.002639
Mn	55	3	He	505.57	6.4911	309814.53	0.0128	0.002639
Fe	57	3	He	5142.978	2.9895	139024.53	0.0006	0.001429
Fe	57	3	He	4968.916	2.8883	136813.74	0.0006	0.001429
Fe	57	3	He	5084.881	2.9557	141073.69	0.0006	0.001429
Co	59	3	He	504.86	28.4169	1321526.39	0.0563	0.002149
Co	59	3	He	490.851	27.6284	1308697.09	0.0563	0.002149
Co	59	3	He	490.159	27.5894	1316827.64	0.0563	0.002149
Ni	60	3	He	515.096	4.424	368885.89	0.0086	0.002834
Ni	60	3	He	513.065	4.4065	364863.04	0.0086	0.002834
Ni	60	3	He	501.949	4.3111	368538.00	0.0086	0.002834
Cu	63	3	He	491.904	12.6325	1053336.23	0.0257	0.004757
Cu	63	3	He	490.504	12.5965	1042995.14	0.0257	0.004757
Cu	63	3	He	477.999	12.2755	1049374.75	0.0257	0.004757
Zn	66	3	He	524.112	1.5298	127562.43	0.0029	0.003818
Zn	66	3	He	516.267	1.507	124778.93	0.0029	0.003818
Zn	66	3	He	498.997	1.4567	124526.71	0.0029	0.003818
As	75	3	He	520.689	1.0676	89022.47	0.002	0.0008061
As	75	3	He	522.284	1.0709	88670.48	0.002	0.0008061
As	75	3	He	510.473	1.0467	89477.24	0.002	0.0008061
Sr	88	3	He	51.444	0.4624	38914.25	0.009	0.0009645
Sr	88	3	He	51.223	0.4604	39064.87	0.009	0.0009645
Sr	88	3	He	50.553	0.4544	38914.23	0.009	0.0009645
Mo	98	3	He	53.005	1.1625	97829.69	0.0219	0.0002706
Mo	98	3	He	52.937	1.161	98504.23	0.0219	0.0002706
Mo	98	3	He	51.751	1.135	97194.32	0.0219	0.0002706
Ag	107	3	He	52.22	2.4282	204346.58	0.0465	0.0006206
Ag	107	3	He	52.55	2.4435	207320.29	0.0465	0.0006206
Ag	107	3	He	51.994	2.4177	207036.34	0.0465	0.0006206
Cd	111	3	He	52.105	0.2786	23445.67	0.0053	0
Cd	111	3	He	51.567	0.2757	23393.62	0.0053	0
Cd	111	3	He	51.983	0.2779	23802.29	0.0053	0
Sn	120	3	He	52.973	0.8534	71816.17	0.0158	0.01648
Sn	120	3	He	51.829	0.8353	70871.15	0.0158	0.01648
Sn	120	3	He	51.98	0.8377	71736.02	0.0158	0.01648
Sb	121	3	He	52.941	0.7866	66198.77	0.0149	0.0002698
Sb	121	3	He	52.519	0.7804	66209.46	0.0149	0.0002698
Sb	121	3	He	52.563	0.781	66881.41	0.0149	0.0002698
Ba	137	3	He	525.846	2.5239	212404.10	0.0048	0.0002317
Ba	137	3	He	518.313	2.4878	211075.64	0.0048	0.0002317
Ba	137	3	He	525.265	2.5212	215899.45	0.0048	0.0002317
Tl	205	3	He	52.13	1.2891	509506.67	0.0247	0.0001339
Tl	205	3	He	51.934	1.2843	507765.62	0.0247	0.0001339
Tl	205	3	He	51.805	1.2811	510462.61	0.0247	0.0001339
Pb	208	3	He	52.461	1.7181	366394.72	0.0327	0.00107
Pb	208	3	He	51.84	1.6978	360855.58	0.0327	0.00107
Pb	208	3	He	52.065	1.7051	363889.25	0.0327	0.00107
U	238	3	He	51.172	2.5208	781725.77	0.0493	7.55E-05
U	238	3	He	50.1	2.468	767571.71	0.0493	7.55E-05
U	238	3	He	50.761	2.5005	769803.89	0.0493	7.55E-05
Sc	45	1	No Gas			2460213.56		
Sc	45	1	No Gas			2508312.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2466477.15		
Ge	72	1	No Gas			1208757.95		
Ge	72	1	No Gas			1231565.84		
Ge	72	1	No Gas			1217867.87		
Sc	45	2	H2			181977.30		
Sc	45	2	H2			179383.53		
Sc	45	2	H2			180759.37		
Ge	72	2	H2			155145.78		
Ge	72	2	H2			155519.37		
Ge	72	2	H2			153487.69		
In	115	2	H2			382168.78		
In	115	2	H2			386538.82		
In	115	2	H2			386059.33		
Sc	45	3	He			46505.02		
Sc	45	3	He			47367.87		
Sc	45	3	He			47729.40		
Ge	72	3	He			83383.35		
Ge	72	3	He			82800.21		
Ge	72	3	He			85485.23		
In	115	3	He			84536.87		
In	115	3	He			85230.67		
In	115	3	He			86016.19		
Tb	159	3	He			395236.13		
Tb	159	3	He			395375.38		
Tb	159	3	He			398459.02		
Bi	209	3	He			310108.65		
Bi	209	3	He			311013.28		
Bi	209	3	He			307854.33		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 7:29:53 PM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

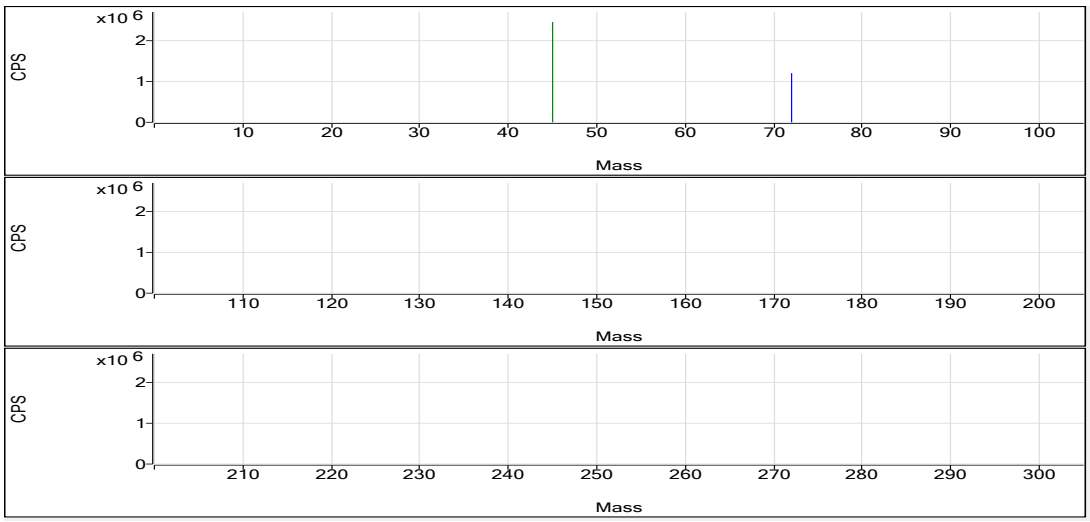
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.024	ppb	29.4	56.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.055	ppb	65.8	5.34	0.0000	Pulse	1.5000	3
Na	23	45	He	9.892	ppb	27.8	17921.32	0.3805	Pulse	0.1000	3
Mg	24	45	He	1.442	ppb	15.1	286.68	0.0061	Pulse	0.1000	3
Al	27	45	He	1.676	ppb	80.1	76.67	0.0016	Pulse	0.1000	3
K	39	45	He	-4.238	ppb	N/A	18382.16	0.3901	Pulse	0.1000	3
Ca	44	45	He	16.208	ppb	97.9	180.01	0.0038	Pulse	0.1000	3
Ti	47	45	He	0.537	ppb	156.5	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	0.373	ppb	7.4	1556.09	0.0330	Pulse	0.5000	3
Cr	52	45	He	-0.107	ppb	N/A	1733.50	0.0368	Pulse	0.1000	3
Mn	55	45	He	0.136	ppb	39.2	206.68	0.0044	Pulse	0.1000	3
Fe	57	45	He	0.457	ppb	203.6	80.00	0.0017	Pulse	0.1000	3
Co	59	45	He	0.101	ppb	22.7	370.02	0.0078	Pulse	0.1000	3
Ni	60	72	He	0.001	ppb	5811.1	230.01	0.0028	Pulse	0.1000	3
Cu	63	72	He	0.122	ppb	23.1	636.70	0.0079	Pulse	0.1000	3
Zn	66	72	He	1.991	ppb	41.0	773.38	0.0096	Pulse	0.1000	3
As	75	72	He	0.070	ppb	76.0	76.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.035	ppb	N/A	56.67	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.052	ppb	50.3	123.34	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	80.8	90.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	100.7	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.057	ppb	94.7	1506.81	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.036	ppb	93.5	70.00	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.032	ppb	114.0	33.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.097	ppb	10.6	993.41	0.0025	Pulse	0.1000	3
Pb	208	159	He	0.012	ppb	81.1	573.36	0.0015	Pulse	0.1000	3
U	238	209	He	0.054	ppb	11.9	830.06	0.0027	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2462171.68	1.0	102.6	Analog	0.1000	3
No Gas	Ge	72	1207274.72	0.6	104.7	Pulse	0.1000	3
H2	Sc	45	176273.16	0.2	94.3	Pulse	0.1000	3
H2	Ge	72	151586.63	0.7	92.6	Pulse	0.1000	3
H2	In	115	384030.58	1.1	98.7	Pulse	0.1000	3
He	Sc	45	47107.01	1.6	101.0	Pulse	0.1000	3
He	Ge	72	80721.75	2.2	99.4	Pulse	0.1000	3
He	In	115	86691.82	1.3	100.6	Pulse	0.1000	3
He	Tb	159	393439.66	0.7	98.7	Pulse	0.1000	3
He	Bi	209	305475.72	1.4	98.8	Pulse	0.1000	3

No Gas



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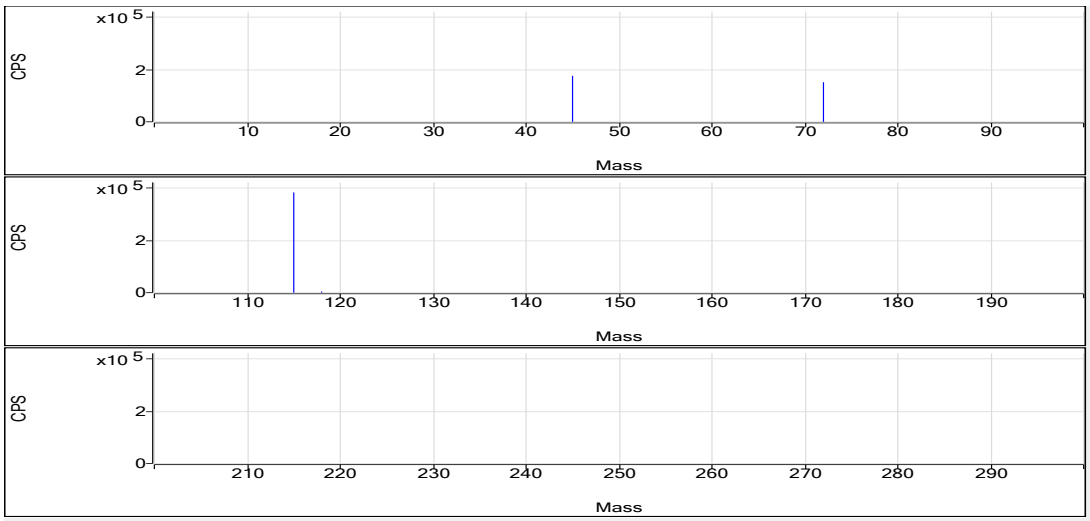
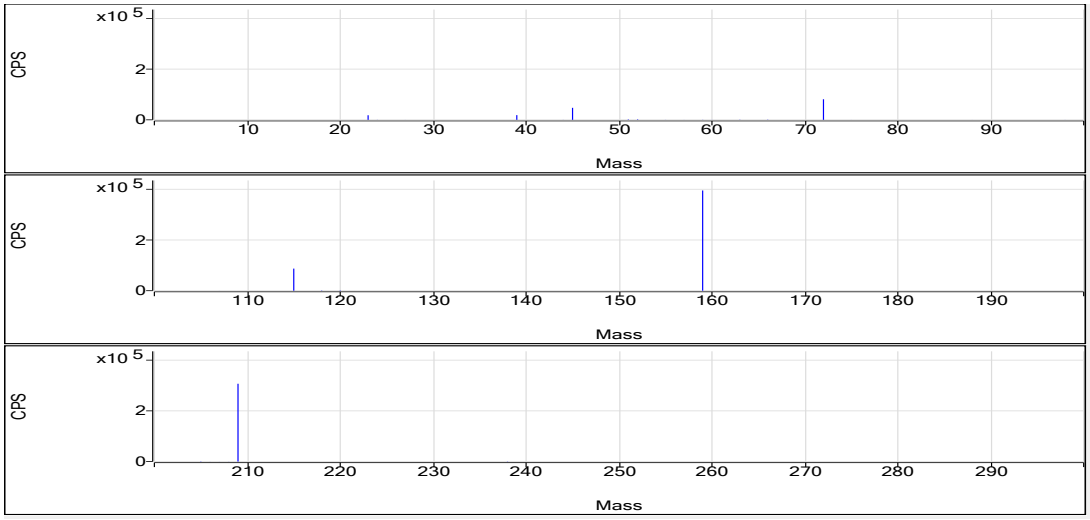


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.029	0	66.00	0.0008	4.685E-06
Be	9	1	No Gas	0.027	0	62.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Se	78	2	H2	0.077	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.075	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.013	0	2.67	0.0004	1.219E-05
Na	23	3	He	8.509	0.3756	17821.24	0.0036	0.3452
Na	23	3	He	8.109	0.3742	17821.09	0.0036	0.3452
Na	23	3	He	13.058	0.3919	18121.63	0.0036	0.3452
Mg	24	3	He	1.692	0.0065	310.01	0.0018	0.003497
Mg	24	3	He	1.328	0.0059	280.01	0.0018	0.003497
Mg	24	3	He	1.305	0.0058	270.01	0.0018	0.003497
Al	27	3	He	0.702	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	3.207	0.0025	120.01	0.0006	0.0006432
Al	27	3	He	1.118	0.0013	60.00	0.0006	0.0006432
K	39	3	He	-4.213	0.3902	18512.34	0.0012	0.3951
K	39	3	He	3.543	0.3992	19012.99	0.0012	0.3951
K	39	3	He	-12.043	0.381	17621.14	0.0012	0.3951
Ca	44	3	He	22.211	0.0042	200.01	0.0001	0.002715
Ca	44	3	He	28.19	0.0046	220.01	0.0001	0.002715
Ca	44	3	He	-1.777	0.0026	120.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.261	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	1.48	0.0009	40.00	0.0005	7.003E-05
V	51	3	He	0.369	0.0329	1562.09	0.0219	0.02486
V	51	3	He	0.403	0.0337	1604.10	0.0219	0.02486
V	51	3	He	0.348	0.0325	1502.09	0.0219	0.02486
Cr	52	3	He	-0.096	0.0371	1760.18	0.0299	0.03997
Cr	52	3	He	-0.052	0.0384	1830.17	0.0299	0.03997
Cr	52	3	He	-0.172	0.0348	1610.15	0.0299	0.03997
Mn	55	3	He	0.139	0.0044	210.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.187	0.005	240.01	0.0128	0.002639
Mn	55	3	He	0.081	0.0037	170.01	0.0128	0.002639
Fe	57	3	He	0.08	0.0015	70.00	0.0006	0.001429
Fe	57	3	He	1.516	0.0023	110.01	0.0006	0.001429
Fe	57	3	He	-0.226	0.0013	60.00	0.0006	0.001429
Co	59	3	He	0.123	0.0091	430.02	0.0563	0.002149
Co	59	3	He	0.104	0.008	380.02	0.0563	0.002149
Co	59	3	He	0.077	0.0065	300.01	0.0563	0.002149
Ni	60	3	He	0.018	0.003	240.01	0.0086	0.002834
Ni	60	3	He	0.05	0.0033	270.01	0.0086	0.002834
Ni	60	3	He	-0.065	0.0023	180.01	0.0086	0.002834
Cu	63	3	He	0.101	0.0073	590.03	0.0257	0.004757
Cu	63	3	He	0.112	0.0076	630.04	0.0257	0.004757
Cu	63	3	He	0.154	0.0087	690.04	0.0257	0.004757
Zn	66	3	He	2.067	0.0098	790.05	0.0029	0.003818
Zn	66	3	He	1.14	0.0071	590.03	0.0029	0.003818
Zn	66	3	He	2.767	0.0119	940.06	0.0029	0.003818
As	75	3	He	0.129	0.0011	86.00	0.002	0.0008061
As	75	3	He	0.055	0.0009	76.00	0.002	0.0008061
As	75	3	He	0.026	0.0009	68.00	0.002	0.0008061
Sr	88	3	He	-0.031	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	-0.044	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.029	0.0007	60.00	0.009	0.0009645
Mo	98	3	He	0.082	0.0021	180.01	0.0219	0.0002706
Mo	98	3	He	0.045	0.0013	110.01	0.0219	0.0002706
Mo	98	3	He	0.03	0.0009	80.00	0.0219	0.0002706
Ag	107	3	He	0.016	0.0014	120.00	0.0465	0.0006206
Ag	107	3	He	0.009	0.001	90.00	0.0465	0.0006206
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.018	0.0001	8.00	0.0053	0
Sn	120	3	He	0.015	0.0167	1460.14	0.0158	0.01648
Sn	120	3	He	0.118	0.0183	1600.15	0.0158	0.01648
Sn	120	3	He	0.039	0.0171	1460.13	0.0158	0.01648
Sb	121	3	He	0.059	0.0011	100.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.053	0.0011	90.00	0.0149	0.0002698
Ba	137	3	He	0.023	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.071	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.001	0.0002	20.00	0.0048	0.0002317
Tl	205	3	He	0.085	0.0022	890.06	0.0247	0.0001339
Tl	205	3	He	0.105	0.0027	1070.09	0.0247	0.0001339
Tl	205	3	He	0.099	0.0026	1020.08	0.0247	0.0001339
Pb	208	3	He	0.01	0.0014	280.01	0.0327	0.00107
Pb	208	3	He	0.022	0.0018	350.02	0.0327	0.00107
Pb	208	3	He	0.003	0.0012	210.01	0.0327	0.00107
U	238	3	He	0.055	0.0028	840.06	0.0493	7.55E-05
U	238	3	He	0.047	0.0024	740.05	0.0493	7.55E-05
U	238	3	He	0.06	0.003	910.06	0.0493	7.55E-05
Sc	45	1	No Gas			2436157.62		
Sc	45	1	No Gas			2467190.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2483167.15		
Ge	72	1	No Gas			1203559.75		
Ge	72	1	No Gas			1202649.90		
Ge	72	1	No Gas			1215614.51		
Sc	45	2	H2			175783.43		
Sc	45	2	H2			176417.20		
Sc	45	2	H2			176618.85		
Ge	72	2	H2			151182.00		
Ge	72	2	H2			152789.25		
Ge	72	2	H2			150788.64		
In	115	2	H2			386754.45		
In	115	2	H2			378950.89		
In	115	2	H2			386386.40		
Sc	45	3	He			47447.97		
Sc	45	3	He			47628.77		
Sc	45	3	He			46244.29		
Ge	72	3	He			80316.31		
Ge	72	3	He			82688.83		
Ge	72	3	He			79160.12		
In	115	3	He			87404.94		
In	115	3	He			87243.54		
In	115	3	He			85452.48		
Tb	159	3	He			396244.45		
Tb	159	3	He			390390.27		
Tb	159	3	He			393684.25		
Bi	209	3	He			303962.30		
Bi	209	3	He			310191.11		
Bi	209	3	He			302273.75		

Quantitation Report

Data File Name	259SMPL.d
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Sample Type	Sample
Comment	I9 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

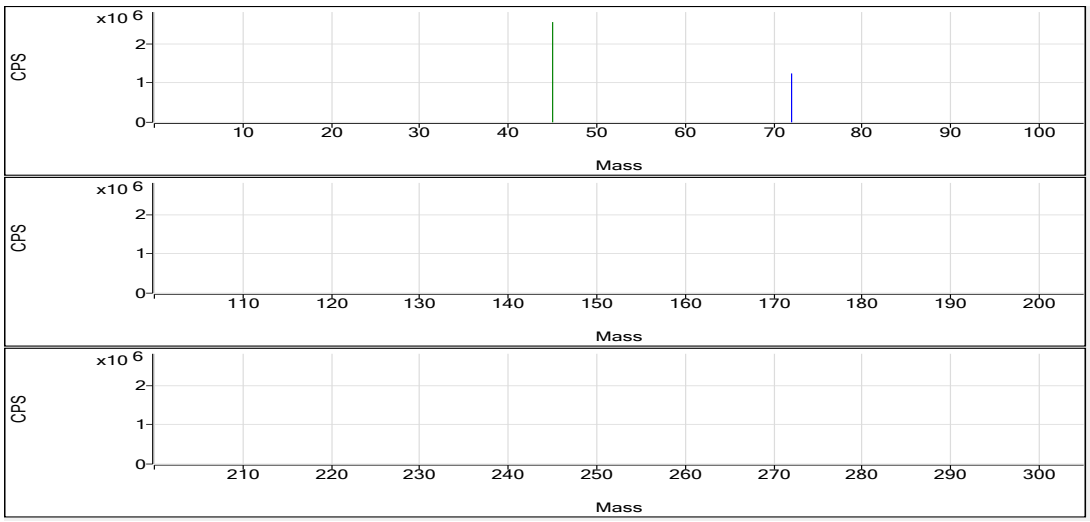
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.033	ppb	1.7	75.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.711	ppb	4.9	50.22	0.0003	Pulse	1.5000	3
Na	23	45	He	147308.458	ppb	1.4	25012847.13	527.2747	Analog	0.1000	3
Mg	24	45	He	8564.833	ppb	1.6	729179.88	15.3716	Pulse	0.1000	3
Al	27	45	He	259.575	ppb	4.6	7232.01	0.1525	Pulse	0.1000	3
K	39	45	He	28720.090	ppb	1.4	1605025.91	33.8346	Analog	0.1000	3
Ca	44	45	He	25937.908	ppb	1.9	83244.54	1.7549	Pulse	0.1000	3
Ti	47	45	He	3.661	ppb	15.5	96.67	0.0020	Pulse	0.1000	3
V	51	45	He	0.499	ppb	15.9	1697.44	0.0358	Pulse	0.5000	3
Cr	52	45	He	5.102	ppb	3.5	9143.23	0.1927	Pulse	0.1000	3
Mn	55	45	He	48.742	ppb	0.8	29804.69	0.6282	Pulse	0.1000	3
Fe	57	45	He	783.613	ppb	9.1	21650.19	0.4567	Pulse	0.1000	3
Co	59	45	He	0.696	ppb	9.3	1960.20	0.0413	Pulse	0.1000	3
Ni	60	72	He	13.385	ppb	2.5	10000.54	0.1177	Pulse	0.1000	3
Cu	63	72	He	65.736	ppb	1.6	143773.30	1.6923	Pulse	0.1000	3
Zn	66	72	He	233.521	ppb	2.2	58084.99	0.6837	Pulse	0.1000	3
As	75	72	He	1.005	ppb	17.6	243.33	0.0029	Pulse	0.5000	3
Sr	88	115	He	109.030	ppb	1.0	83761.23	0.9789	Pulse	0.1000	3
Mo	98	115	He	2.705	ppb	1.5	5097.76	0.0596	Pulse	0.1000	3
Ag	107	115	He	0.328	ppb	8.9	1356.78	0.0158	Pulse	0.1000	3
Cd	111	115	He	0.144	ppb	8.7	66.00	0.0008	Pulse	0.5000	3
Sn	120	115	He	24.181	ppb	0.8	34096.26	0.3985	Pulse	0.1000	3
Sb	121	115	He	0.951	ppb	14.4	1233.44	0.0144	Pulse	0.1000	3
Ba	137	115	He	44.874	ppb	4.0	18453.01	0.2156	Pulse	0.1000	3
Tl	205	159	He	0.038	ppb	11.5	430.02	0.0011	Pulse	0.1000	3
Pb	208	159	He	2.627	ppb	0.7	34525.85	0.0870	Pulse	0.1000	3
U	238	209	He	0.244	ppb	4.6	3770.70	0.0121	Pulse	0.1000	3

ISTD Table:

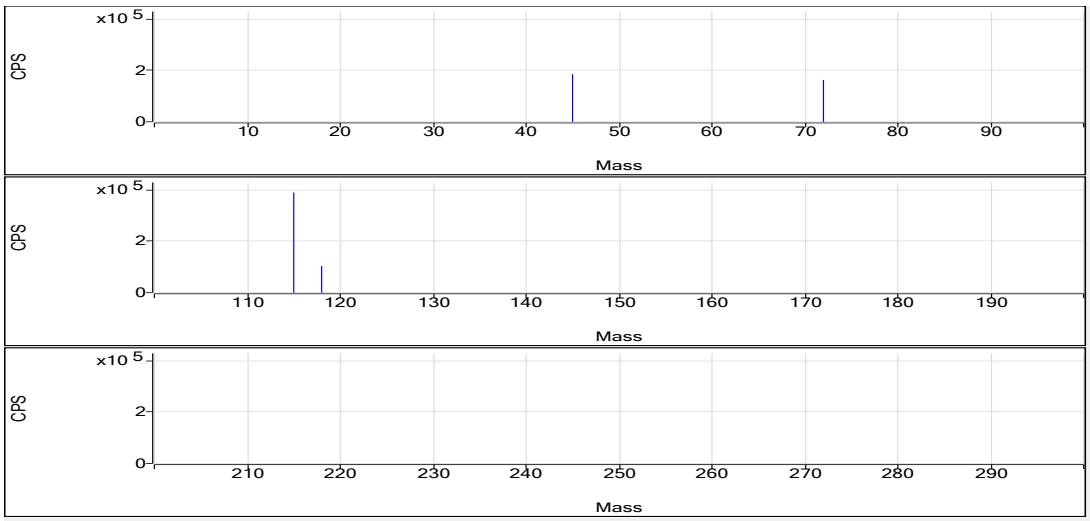
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2546066.94	0.8	106.1	Analog	0.1000	3
No Gas	Ge	72	1241197.77	0.3	107.6	Pulse	0.1000	3
H2	Sc	45	185244.03	1.2	99.1	Pulse	0.1000	3
H2	Ge	72	162556.15	1.9	99.3	Pulse	0.1000	3
H2	In	115	389512.04	0.7	100.1	Pulse	0.1000	3
He	Sc	45	47444.82	1.8	101.7	Pulse	0.1000	3
He	Ge	72	84962.38	0.9	104.6	Pulse	0.1000	3
He	In	115	85566.74	1.5	99.3	Pulse	0.1000	3
He	Tb	159	396681.16	0.6	99.5	Pulse	0.1000	3
He	Bi	209	311495.72	0.6	100.7	Pulse	0.1000	3

No Gas

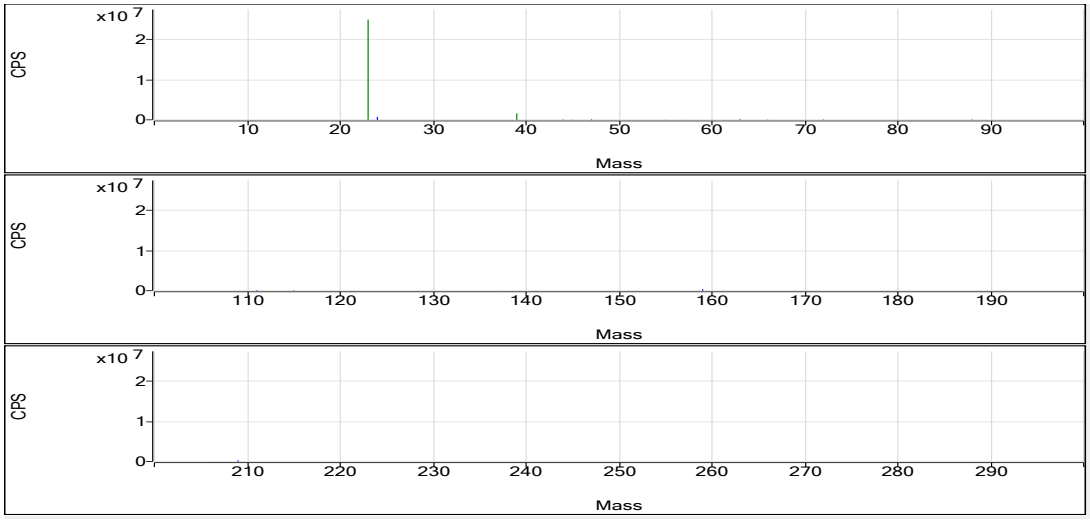


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.033	0	76.00	0.0008	4.685E-06
Be	9	1	No Gas	0.032	0	74.00	0.0008	4.685E-06
Be	9	1	No Gas	0.033	0	76.00	0.0008	4.685E-06
Se	78	2	H2	0.672	0.0003	46.67	0.0004	1.219E-05
Se	78	2	H2	0.739	0.0003	52.00	0.0004	1.219E-05
Se	78	2	H2	0.723	0.0003	52.00	0.0004	1.219E-05
Na	23	3	He	145905.014	522.2545	25230764.62	0.0036	0.3452
Na	23	3	He	146368.66	523.913	24821747.13	0.0036	0.3452
Na	23	3	He	149651.699	535.6566	24986029.63	0.0036	0.3452
Mg	24	3	He	8404.041	15.0831	728680.93	0.0018	0.003497
Mg	24	3	He	8653.74	15.5311	735826.00	0.0018	0.003497
Mg	24	3	He	8636.72	15.5006	723032.72	0.0018	0.003497
Al	27	3	He	250.882	0.1474	7121.93	0.0006	0.0006432
Al	27	3	He	254.765	0.1497	7091.94	0.0006	0.0006432
Al	27	3	He	273.08	0.1604	7482.16	0.0006	0.0006432
K	39	3	He	28344.709	33.3976	1613477.79	0.0012	0.3951
K	39	3	He	28686.922	33.796	1601174.35	0.0012	0.3951
K	39	3	He	29128.638	34.3103	1600425.60	0.0012	0.3951
Ca	44	3	He	25662.678	1.7363	83881.73	0.0001	0.002715
Ca	44	3	He	25656.751	1.7359	82241.72	0.0001	0.002715
Ca	44	3	He	26494.295	1.7925	83610.16	0.0001	0.002715
Ti	47	3	He	3.725	0.0021	100.00	0.0005	7.003E-05
Ti	47	3	He	4.194	0.0023	110.00	0.0005	7.003E-05
Ti	47	3	He	3.064	0.0017	80.00	0.0005	7.003E-05
V	51	3	He	0.516	0.0361	1746.12	0.0219	0.02486
V	51	3	He	0.568	0.0373	1766.12	0.0219	0.02486
V	51	3	He	0.412	0.0339	1580.09	0.0219	0.02486
Cr	52	3	He	4.979	0.189	9133.20	0.0299	0.03997
Cr	52	3	He	5.308	0.1989	9423.35	0.0299	0.03997
Cr	52	3	He	5.018	0.1902	8873.15	0.0299	0.03997
Mn	55	3	He	48.571	0.626	30242.40	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	49.202	0.6341	30041.68	0.0128	0.002639
Mn	55	3	He	48.454	0.6245	29129.98	0.0128	0.002639
Fe	57	3	He	748.773	0.4365	21085.88	0.0006	0.001429
Fe	57	3	He	736.662	0.4294	20345.01	0.0006	0.001429
Fe	57	3	He	865.405	0.5042	23519.69	0.0006	0.001429
Co	59	3	He	0.642	0.0383	1850.17	0.0563	0.002149
Co	59	3	He	0.768	0.0454	2150.25	0.0563	0.002149
Co	59	3	He	0.678	0.0403	1880.19	0.0563	0.002149
Ni	60	3	He	13.701	0.1204	10164.17	0.0086	0.002834
Ni	60	3	He	13.031	0.1147	9843.63	0.0086	0.002834
Ni	60	3	He	13.425	0.1181	9993.81	0.0086	0.002834
Cu	63	3	He	66.933	1.723	145419.13	0.0257	0.004757
Cu	63	3	He	65.342	1.6821	144390.67	0.0257	0.004757
Cu	63	3	He	64.935	1.6717	141510.10	0.0257	0.004757
Zn	66	3	He	235.481	0.6894	58188.93	0.0029	0.003818
Zn	66	3	He	227.616	0.6665	57214.70	0.0029	0.003818
Zn	66	3	He	237.466	0.6952	58851.34	0.0029	0.003818
As	75	3	He	1.191	0.0032	274.00	0.002	0.0008061
As	75	3	He	0.983	0.0028	242.00	0.002	0.0008061
As	75	3	He	0.84	0.0025	214.00	0.002	0.0008061
Sr	88	3	He	109.63	0.9843	85075.53	0.009	0.0009645
Sr	88	3	He	109.74	0.9853	82852.46	0.009	0.0009645
Sr	88	3	He	107.721	0.9672	83355.70	0.009	0.0009645
Mo	98	3	He	2.695	0.0594	5131.13	0.0219	0.0002706
Mo	98	3	He	2.749	0.0605	5091.08	0.0219	0.0002706
Mo	98	3	He	2.671	0.0588	5071.07	0.0219	0.0002706
Ag	107	3	He	0.36	0.0174	1500.14	0.0465	0.0006206
Ag	107	3	He	0.304	0.0147	1240.09	0.0465	0.0006206
Ag	107	3	He	0.319	0.0154	1330.11	0.0465	0.0006206
Cd	111	3	He	0.13	0.0007	60.00	0.0053	0
Cd	111	3	He	0.151	0.0008	68.00	0.0053	0
Cd	111	3	He	0.152	0.0008	70.00	0.0053	0
Sn	120	3	He	24.24	0.3994	34523.72	0.0158	0.01648
Sn	120	3	He	24.349	0.4012	33732.23	0.0158	0.01648
Sn	120	3	He	23.952	0.3949	34032.82	0.0158	0.01648
Sb	121	3	He	1.104	0.0167	1440.12	0.0149	0.0002698
Sb	121	3	He	0.839	0.0127	1070.08	0.0149	0.0002698
Sb	121	3	He	0.912	0.0138	1190.11	0.0149	0.0002698
Ba	137	3	He	44.534	0.214	18493.08	0.0048	0.0002317
Ba	137	3	He	43.295	0.208	17491.82	0.0048	0.0002317
Ba	137	3	He	46.792	0.2248	19374.14	0.0048	0.0002317
Tl	205	3	He	0.043	0.0012	480.03	0.0247	0.0001339
Tl	205	3	He	0.035	0.001	390.02	0.0247	0.0001339
Tl	205	3	He	0.037	0.0011	420.02	0.0247	0.0001339
Pb	208	3	He	2.605	0.0863	18463.50	0.0327	0.00107
Pb	208	3	He	2.636	0.0874	18864.18	0.0327	0.00107
Pb	208	3	He	2.639	0.0874	18393.47	0.0327	0.00107
U	238	3	He	0.246	0.0122	3820.73	0.0493	7.55E-05
U	238	3	He	0.254	0.0126	3930.75	0.0493	7.55E-05
U	238	3	He	0.232	0.0115	3560.62	0.0493	7.55E-05
Sc	45	1	No Gas			2569547.93		
Sc	45	1	No Gas			2536894.18		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2531758.71		
Ge	72	1	No Gas			1238585.76		
Ge	72	1	No Gas			1245877.33		
Ge	72	1	No Gas			1239130.22		
Sc	45	2	H2			182815.60		
Sc	45	2	H2			186919.61		
Sc	45	2	H2			185996.87		
Ge	72	2	H2			159582.34		
Ge	72	2	H2			162293.39		
Ge	72	2	H2			165792.71		
In	115	2	H2			386910.35		
In	115	2	H2			392598.98		
In	115	2	H2			389026.79		
Sc	45	3	He			48311.24		
Sc	45	3	He			47377.61		
Sc	45	3	He			46645.61		
Ge	72	3	He			84399.23		
Ge	72	3	He			85837.29		
Ge	72	3	He			84650.61		
In	115	3	He			86610.44		
In	115	3	He			84266.48		
In	115	3	He			86358.69		
Tb	159	3	He			399322.18		
Tb	159	3	He			394842.18		
Tb	159	3	He			395879.13		
Bi	209	3	He			313255.76		
Bi	209	3	He			311914.74		
Bi	209	3	He			309316.66		

Quantitation Report

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Sample Type	Sample
Comment	I9 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

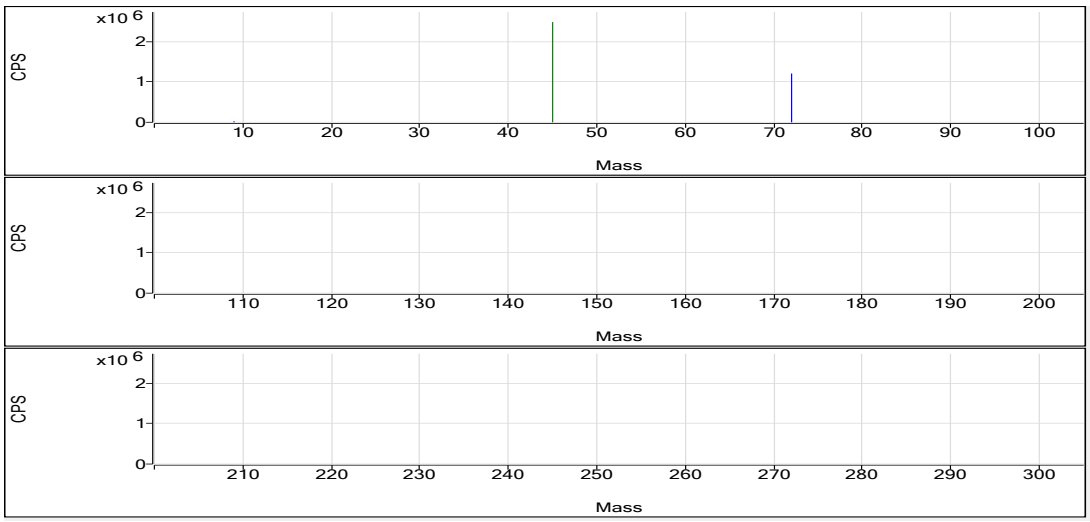
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	13.489	ppb	1.3	25534.44	0.0103	Pulse	0.5000	3
Se	78	72	H2	21.062	ppb	1.3	1384.51	0.0088	Pulse	1.5000	3
Na	23	45	He	22.146	ppb	21.7	20214.43	0.4244	Pulse	0.1000	3
Mg	24	45	He	1.246	ppb	50.6	273.35	0.0057	Pulse	0.1000	3
Al	27	45	He	169.111	ppb	4.8	4744.26	0.0996	Pulse	0.1000	3
K	39	45	He	-0.244	ppb	N/A	18812.77	0.3948	Pulse	0.1000	3
Ca	44	45	He	132.481	ppb	19.6	556.70	0.0117	Pulse	0.1000	3
Ti	47	45	He	0.388	ppb	55.4	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	155.353	ppb	1.6	162978.89	3.4208	Pulse	0.5000	3
Cr	52	45	He	85.023	ppb	2.1	123183.90	2.5856	Pulse	0.1000	3
Mn	55	45	He	89.379	ppb	0.3	54784.69	1.1497	Pulse	0.1000	3
Fe	57	45	He	155.900	ppb	3.0	4384.14	0.0920	Pulse	0.1000	3
Co	59	45	He	74.408	ppb	1.7	199626.16	4.1900	Pulse	0.1000	3
Ni	60	72	He	148.475	ppb	1.1	107224.08	1.2772	Pulse	0.1000	3
Cu	63	72	He	59.514	ppb	0.3	128661.30	1.5325	Pulse	0.1000	3
Zn	66	72	He	69.806	ppb	4.0	17384.35	0.2071	Pulse	0.1000	3
As	75	72	He	48.953	ppb	1.1	8487.90	0.1011	Pulse	0.5000	3
Sr	88	115	He	36.854	ppb	2.0	28760.04	0.3315	Pulse	0.1000	3
Mo	98	115	He	30.729	ppb	2.1	58465.79	0.6740	Pulse	0.1000	3
Ag	107	115	He	54.753	ppb	1.3	220837.05	2.5459	Pulse	0.1000	3
Cd	111	115	He	86.406	ppb	0.7	40076.56	0.4620	Pulse	0.5000	3
Sn	120	115	He	-0.121	ppb	N/A	1263.45	0.0146	Pulse	0.1000	3
Sb	121	115	He	34.109	ppb	1.7	43974.00	0.5069	Pulse	0.1000	3
Ba	137	115	He	199.187	ppb	0.6	82943.83	0.9562	Pulse	0.1000	3
Tl	205	159	He	22.889	ppb	1.2	226431.04	0.5661	Pulse	0.1000	3
Pb	208	159	He	125.012	ppb	0.9	1636945.51	4.0927	Pulse	0.1000	3
U	238	209	He	0.011	ppb	25.8	196.68	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2480789.60	0.8	103.4	Analog	0.1000	3
No Gas	Ge	72	1207861.10	0.2	104.7	Pulse	0.1000	3
H2	Sc	45	182974.47	0.5	97.8	Pulse	0.1000	3
H2	Ge	72	157374.96	1.5	96.1	Pulse	0.1000	3
H2	In	115	389849.54	0.7	100.2	Pulse	0.1000	3
He	Sc	45	47652.25	1.7	102.2	Pulse	0.1000	3
He	Ge	72	83952.75	0.4	103.4	Pulse	0.1000	3
He	In	115	86745.41	0.5	100.6	Pulse	0.1000	3
He	Tb	159	399999.81	1.2	100.3	Pulse	0.1000	3
He	Bi	209	315269.23	0.8	101.9	Pulse	0.1000	3

No Gas



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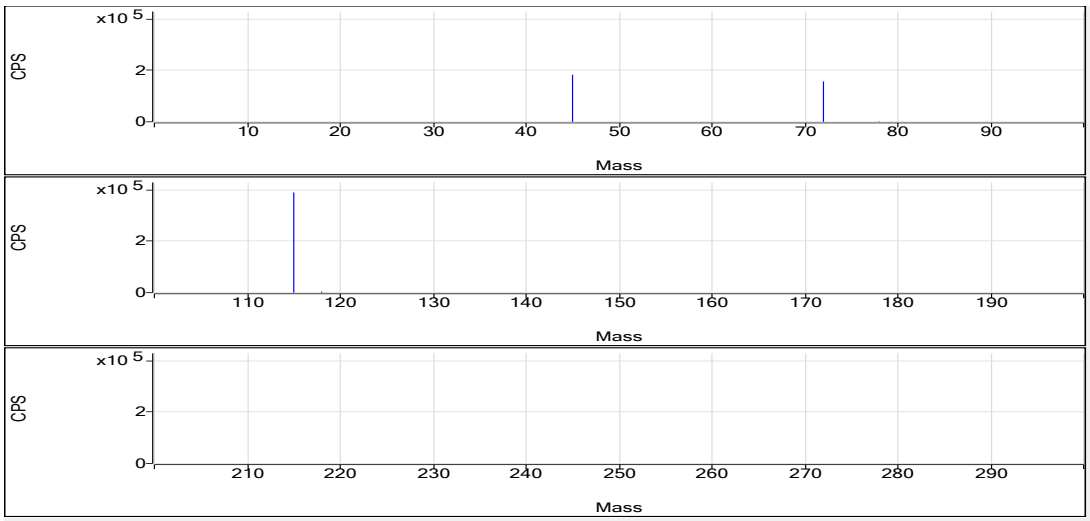
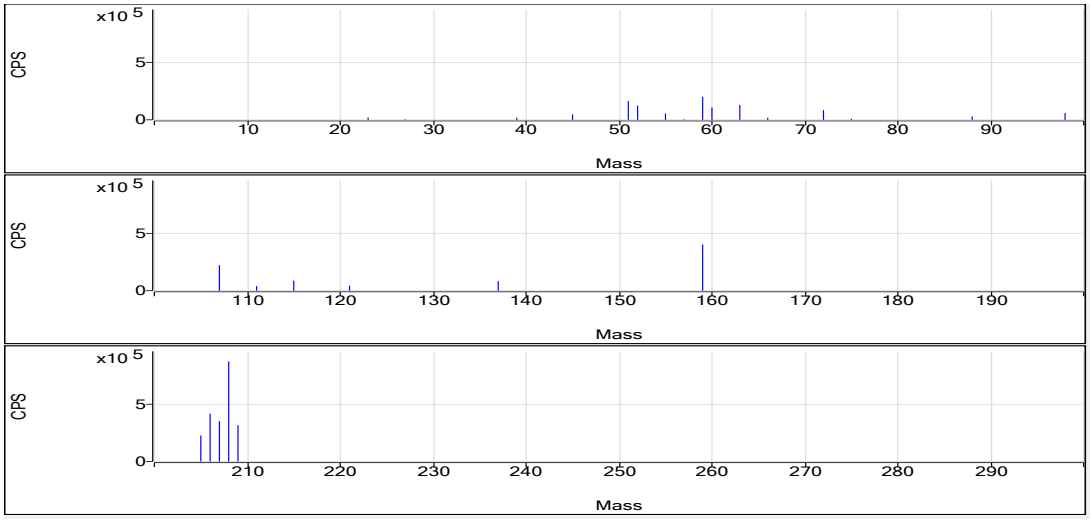


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	13.524	0.0103	25597.84	0.0008	4.685E-06
Be	9	1	No Gas	13.65	0.0104	25629.95	0.0008	4.685E-06
Be	9	1	No Gas	13.292	0.0101	25375.52	0.0008	4.685E-06
Se	78	2	H2	20.738	0.0087	1344.73	0.0004	1.219E-05
Se	78	2	H2	21.219	0.0089	1391.40	0.0004	1.219E-05
Se	78	2	H2	21.229	0.0089	1417.41	0.0004	1.219E-05
Na	23	3	He	26.664	0.4405	20805.38	0.0036	0.3452
Na	23	3	He	17.109	0.4064	19733.62	0.0036	0.3452
Na	23	3	He	22.665	0.4262	20104.28	0.0036	0.3452
Mg	24	3	He	0.529	0.0044	210.01	0.0018	0.003497
Mg	24	3	He	1.494	0.0062	300.01	0.0018	0.003497
Mg	24	3	He	1.714	0.0066	310.02	0.0018	0.003497
Al	27	3	He	178.454	0.105	4960.99	0.0006	0.0006432
Al	27	3	He	165.421	0.0974	4730.91	0.0006	0.0006432
Al	27	3	He	163.457	0.0963	4540.89	0.0006	0.0006432
K	39	3	He	4.818	0.4007	18922.87	0.0012	0.3951
K	39	3	He	0.496	0.3956	19213.23	0.0012	0.3951
K	39	3	He	-6.048	0.388	18302.20	0.0012	0.3951
Ca	44	3	He	110.272	0.0102	480.02	0.0001	0.002715
Ca	44	3	He	161.014	0.0136	660.04	0.0001	0.002715
Ca	44	3	He	126.158	0.0112	530.03	0.0001	0.002715
Ti	47	3	He	0.264	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.637	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.264	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	156.036	3.4357	162258.08	0.0219	0.02486
V	51	3	He	152.551	3.3595	163144.03	0.0219	0.02486
V	51	3	He	157.473	3.4671	163534.56	0.0219	0.02486
Cr	52	3	He	86.585	2.6324	124320.81	0.0299	0.03997
Cr	52	3	He	83.017	2.5256	122646.12	0.0299	0.03997
Cr	52	3	He	85.467	2.5989	122584.76	0.0299	0.03997
Mn	55	3	He	89.403	1.15	54312.67	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	89.083	1.1459	55647.94	0.0128	0.002639
Mn	55	3	He	89.65	1.1532	54393.46	0.0128	0.002639
Fe	57	3	He	151.366	0.0894	4220.75	0.0006	0.001429
Fe	57	3	He	155.648	0.0919	4460.84	0.0006	0.001429
Fe	57	3	He	160.687	0.0948	4470.84	0.0006	0.001429
Co	59	3	He	74.969	4.2216	199373.34	0.0563	0.002149
Co	59	3	He	72.956	4.1083	199505.06	0.0563	0.002149
Co	59	3	He	75.3	4.2402	200000.08	0.0563	0.002149
Ni	60	3	He	148.487	1.2773	106814.97	0.0086	0.002834
Ni	60	3	He	146.824	1.263	106510.88	0.0086	0.002834
Ni	60	3	He	150.115	1.2913	108346.39	0.0086	0.002834
Cu	63	3	He	59.41	1.5299	127934.36	0.0257	0.004757
Cu	63	3	He	59.411	1.5299	129014.82	0.0257	0.004757
Cu	63	3	He	59.721	1.5379	129034.71	0.0257	0.004757
Zn	66	3	He	71.02	0.2106	17611.25	0.0029	0.003818
Zn	66	3	He	71.762	0.2128	17941.73	0.0029	0.003818
Zn	66	3	He	66.638	0.1978	16600.08	0.0029	0.003818
As	75	3	He	49.395	0.102	8530.58	0.002	0.0008061
As	75	3	He	49.119	0.1014	8554.62	0.002	0.0008061
As	75	3	He	48.344	0.0999	8378.50	0.002	0.0008061
Sr	88	3	He	36.836	0.3314	28900.45	0.009	0.0009645
Sr	88	3	He	37.59	0.3381	29331.39	0.009	0.0009645
Sr	88	3	He	36.135	0.3251	28048.29	0.009	0.0009645
Mo	98	3	He	30.313	0.6649	57990.33	0.0219	0.0002706
Mo	98	3	He	30.414	0.6671	57869.95	0.0219	0.0002706
Mo	98	3	He	31.459	0.69	59537.08	0.0219	0.0002706
Ag	107	3	He	54.032	2.5124	219117.99	0.0465	0.0006206
Ag	107	3	He	54.746	2.5456	220811.62	0.0465	0.0006206
Ag	107	3	He	55.481	2.5798	222581.54	0.0465	0.0006206
Cd	111	3	He	85.87	0.4591	40043.07	0.0053	0
Cd	111	3	He	87.037	0.4654	40368.08	0.0053	0
Cd	111	3	He	86.313	0.4615	39818.52	0.0053	0
Sn	120	3	He	-0.121	0.0146	1270.11	0.0158	0.01648
Sn	120	3	He	-0.065	0.0154	1340.12	0.0158	0.01648
Sn	120	3	He	-0.177	0.0137	1180.12	0.0158	0.01648
Sb	121	3	He	34.366	0.5107	44542.39	0.0149	0.0002698
Sb	121	3	He	34.499	0.5127	44472.39	0.0149	0.0002698
Sb	121	3	He	33.463	0.4973	42907.23	0.0149	0.0002698
Ba	137	3	He	198.249	0.9517	83000.96	0.0048	0.0002317
Ba	137	3	He	198.697	0.9538	82739.14	0.0048	0.0002317
Ba	137	3	He	200.614	0.963	83091.39	0.0048	0.0002317
Tl	205	3	He	23.206	0.5739	228369.68	0.0247	0.0001339
Tl	205	3	He	22.77	0.5631	228288.28	0.0247	0.0001339
Tl	205	3	He	22.691	0.5612	222635.15	0.0247	0.0001339
Pb	208	3	He	125.58	4.1113	867958.03	0.0327	0.00107
Pb	208	3	He	123.681	4.0491	874299.44	0.0327	0.00107
Pb	208	3	He	125.774	4.1176	867038.50	0.0327	0.00107
U	238	3	He	0.009	0.0005	170.01	0.0493	7.55E-05
U	238	3	He	0.009	0.0005	170.01	0.0493	7.55E-05
U	238	3	He	0.014	0.0008	250.01	0.0493	7.55E-05
Sc	45	1	No Gas			2480184.49		
Sc	45	1	No Gas			2460537.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2501646.68		
Ge	72	1	No Gas			1208599.12		
Ge	72	1	No Gas			1204729.59		
Ge	72	1	No Gas			1210254.59		
Sc	45	2	H2			182228.06		
Sc	45	2	H2			182674.27		
Sc	45	2	H2			184021.07		
Ge	72	2	H2			155255.11		
Ge	72	2	H2			157004.80		
Ge	72	2	H2			159864.98		
In	115	2	H2			387118.86		
In	115	2	H2			392677.57		
In	115	2	H2			389752.18		
Sc	45	3	He			47227.33		
Sc	45	3	He			48561.88		
Sc	45	3	He			47167.55		
Ge	72	3	He			83624.28		
Ge	72	3	He			84328.35		
Ge	72	3	He			83905.63		
In	115	3	He			87223.11		
In	115	3	He			86749.88		
In	115	3	He			86287.58		
Tb	159	3	He			397907.61		
Tb	159	3	He			405383.12		
Tb	159	3	He			396708.71		
Bi	209	3	He			313781.68		
Bi	209	3	He			313976.09		
Bi	209	3	He			318049.92		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 7:36:02 PM
Sample Name	410-134023-B-6-C @5
Sample Type	Sample
Comment	I9 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

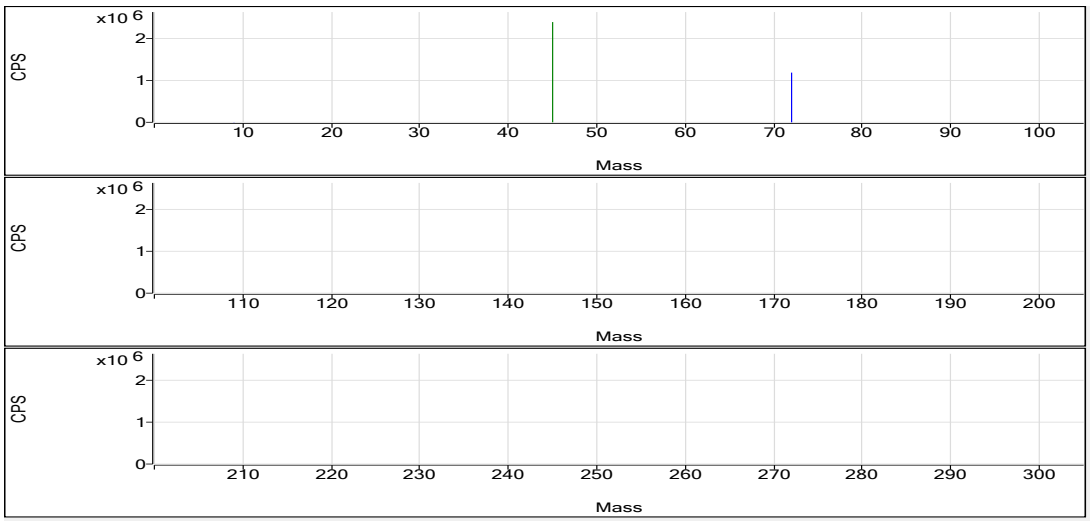
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	2.586	ppb	3.5	4743.45	0.0020	Pulse	0.5000	3
Se	78	72	H2	3.931	ppb	7.7	249.78	0.0017	Pulse	1.5000	3
Na	23	45	He	19.456	ppb	16.0	19396.58	0.4148	Pulse	0.1000	3
Mg	24	45	He	1.275	ppb	32.4	270.01	0.0058	Pulse	0.1000	3
Al	27	45	He	33.383	ppb	2.2	943.40	0.0202	Pulse	0.1000	3
K	39	45	He	7.880	ppb	187.1	18889.49	0.4042	Pulse	0.1000	3
Ca	44	45	He	35.668	ppb	27.4	240.01	0.0051	Pulse	0.1000	3
Ti	47	45	He	0.532	ppb	42.2	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	28.815	ppb	2.4	30603.49	0.6547	Pulse	0.5000	3
Cr	52	45	He	15.872	ppb	1.2	24087.36	0.5152	Pulse	0.1000	3
Mn	55	45	He	17.269	ppb	5.7	10477.44	0.2243	Pulse	0.1000	3
Fe	57	45	He	28.928	ppb	10.6	853.39	0.0182	Pulse	0.1000	3
Co	59	45	He	13.905	ppb	0.5	36690.77	0.7847	Pulse	0.1000	3
Ni	60	72	He	28.399	ppb	5.0	20101.29	0.2466	Pulse	0.1000	3
Cu	63	72	He	11.202	ppb	5.0	23827.08	0.2923	Pulse	0.1000	3
Zn	66	72	He	15.702	ppb	7.6	4037.36	0.0495	Pulse	0.1000	3
As	75	72	He	9.370	ppb	2.5	1630.77	0.0200	Pulse	0.5000	3
Sr	88	115	He	7.040	ppb	4.3	5401.22	0.0641	Pulse	0.1000	3
Mo	98	115	He	5.952	ppb	2.8	11014.65	0.1308	Pulse	0.1000	3
Ag	107	115	He	10.417	ppb	0.3	40843.70	0.4849	Pulse	0.1000	3
Cd	111	115	He	16.119	ppb	0.7	7259.93	0.0862	Pulse	0.5000	3
Sn	120	115	He	0.012	ppb	685.8	1403.45	0.0167	Pulse	0.1000	3
Sb	121	115	He	6.388	ppb	0.7	8015.94	0.0952	Pulse	0.1000	3
Ba	137	115	He	36.101	ppb	3.1	14614.88	0.1735	Pulse	0.1000	3
Tl	205	159	He	4.414	ppb	2.0	42640.02	0.1093	Pulse	0.1000	3
Pb	208	159	He	23.435	ppb	0.9	299645.31	0.7681	Pulse	0.1000	3
U	238	209	He	0.010	ppb	18.4	176.68	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2399509.60	1.1	100.0	Analog	0.1000	3
No Gas	Ge	72	1189342.06	0.4	103.1	Pulse	0.1000	3
H2	Sc	45	177589.25	0.6	95.0	Pulse	0.1000	3
H2	Ge	72	151189.29	0.6	92.3	Pulse	0.1000	3
H2	In	115	385229.87	0.2	99.0	Pulse	0.1000	3
He	Sc	45	46755.82	2.1	100.2	Pulse	0.1000	3
He	Ge	72	81528.86	0.8	100.4	Pulse	0.1000	3
He	In	115	84236.91	0.4	97.7	Pulse	0.1000	3
He	Tb	159	390127.12	0.8	97.9	Pulse	0.1000	3
He	Bi	209	306675.35	0.4	99.2	Pulse	0.1000	3

No Gas



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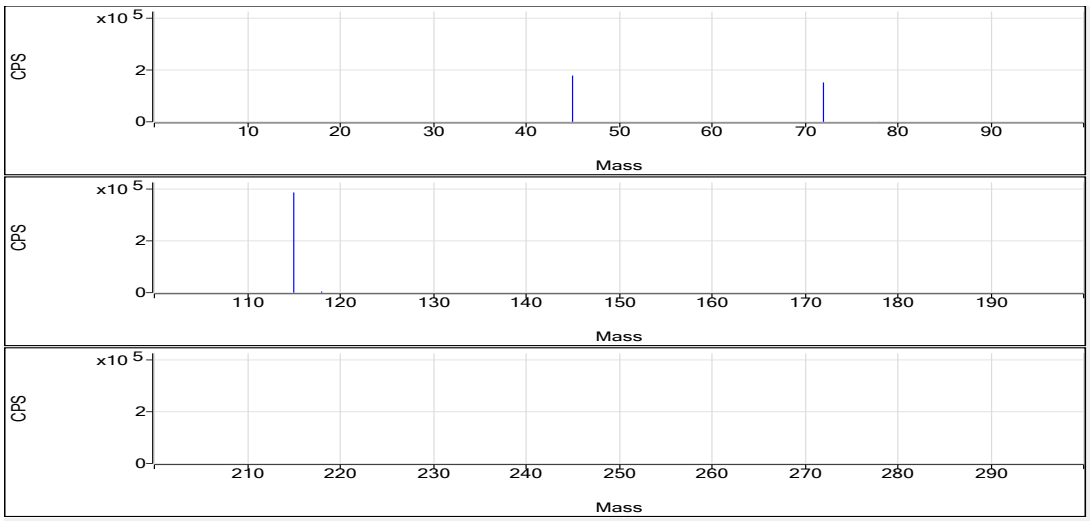
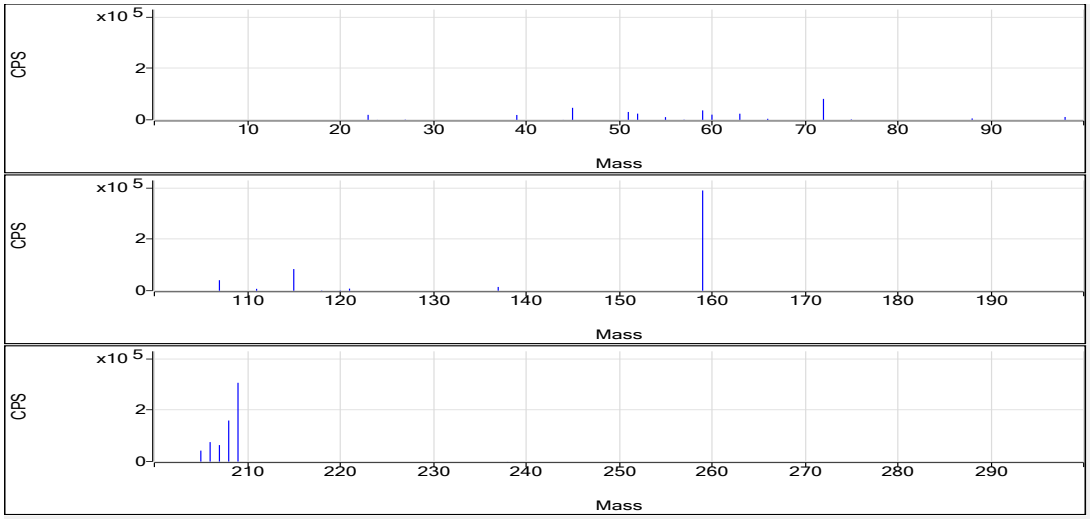


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	2.581	0.002	4740.78	0.0008	4.685E-06
Be	9	1	No Gas	2.68	0.002	4860.82	0.0008	4.685E-06
Be	9	1	No Gas	2.497	0.0019	4628.75	0.0008	4.685E-06
Se	78	2	H2	3.681	0.0015	232.67	0.0004	1.219E-05
Se	78	2	H2	4.265	0.0018	272.67	0.0004	1.219E-05
Se	78	2	H2	3.845	0.0016	244.00	0.0004	1.219E-05
Na	23	3	He	20.917	0.42	19413.30	0.0036	0.3452
Na	23	3	He	15.88	0.402	18552.09	0.0036	0.3452
Na	23	3	He	21.57	0.4223	20224.36	0.0036	0.3452
Mg	24	3	He	1.668	0.0065	300.01	0.0018	0.003497
Mg	24	3	He	1.312	0.0059	270.01	0.0018	0.003497
Mg	24	3	He	0.844	0.005	240.01	0.0018	0.003497
Al	27	3	He	32.553	0.0197	910.06	0.0006	0.0006432
Al	27	3	He	33.715	0.0204	940.06	0.0006	0.0006432
Al	27	3	He	33.882	0.0205	980.07	0.0006	0.0006432
K	39	3	He	17.497	0.4154	19203.31	0.0012	0.3951
K	39	3	He	15.242	0.4128	19052.96	0.0012	0.3951
K	39	3	He	-9.097	0.3845	18412.20	0.0012	0.3951
Ca	44	3	He	33.471	0.005	230.01	0.0001	0.002715
Ca	44	3	He	27.168	0.0046	210.01	0.0001	0.002715
Ca	44	3	He	46.365	0.0058	280.01	0.0001	0.002715
Ti	47	3	He	0.675	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.273	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	0.647	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	29.056	0.66	30507.97	0.0219	0.02486
V	51	3	He	29.356	0.6666	30764.45	0.0219	0.02486
V	51	3	He	28.035	0.6377	30538.05	0.0219	0.02486
Cr	52	3	He	15.688	0.5097	23559.90	0.0299	0.03997
Cr	52	3	He	16.076	0.5213	24060.51	0.0299	0.03997
Cr	52	3	He	15.851	0.5146	24641.67	0.0299	0.03997
Mn	55	3	He	17.956	0.2331	10774.39	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	17.714	0.23	10614.16	0.0128	0.002639
Mn	55	3	He	16.136	0.2097	10043.76	0.0128	0.002639
Fe	57	3	He	25.47	0.0162	750.05	0.0006	0.001429
Fe	57	3	He	29.988	0.0189	870.07	0.0006	0.001429
Fe	57	3	He	31.328	0.0196	940.06	0.0006	0.001429
Co	59	3	He	13.844	0.7813	36115.86	0.0563	0.002149
Co	59	3	He	13.973	0.7886	36396.71	0.0563	0.002149
Co	59	3	He	13.897	0.7843	37559.75	0.0563	0.002149
Ni	60	3	He	29.906	0.2595	21136.10	0.0086	0.002834
Ni	60	3	He	28.224	0.2451	19824.30	0.0086	0.002834
Ni	60	3	He	27.068	0.2352	19343.48	0.0086	0.002834
Cu	63	3	He	11.333	0.2957	24080.86	0.0257	0.004757
Cu	63	3	He	11.687	0.3048	24651.76	0.0257	0.004757
Cu	63	3	He	10.588	0.2766	22748.62	0.0257	0.004757
Zn	66	3	He	15.054	0.0476	3880.62	0.0029	0.003818
Zn	66	3	He	17.077	0.0535	4330.81	0.0029	0.003818
Zn	66	3	He	14.975	0.0474	3900.65	0.0029	0.003818
As	75	3	He	9.316	0.0199	1620.10	0.002	0.0008061
As	75	3	He	9.624	0.0205	1660.11	0.002	0.0008061
As	75	3	He	9.172	0.0196	1612.10	0.002	0.0008061
Sr	88	3	He	6.913	0.063	5301.13	0.009	0.0009645
Sr	88	3	He	6.825	0.0622	5221.15	0.009	0.0009645
Sr	88	3	He	7.382	0.0672	5681.37	0.009	0.0009645
Mo	98	3	He	6.075	0.1335	11234.78	0.0219	0.0002706
Mo	98	3	He	6.019	0.1323	11104.76	0.0219	0.0002706
Mo	98	3	He	5.76	0.1266	10704.41	0.0219	0.0002706
Ag	107	3	He	10.4	0.4841	40749.97	0.0465	0.0006206
Ag	107	3	He	10.447	0.4863	40830.37	0.0465	0.0006206
Ag	107	3	He	10.403	0.4842	40950.75	0.0465	0.0006206
Cd	111	3	He	16.232	0.0868	7305.96	0.0053	0
Cd	111	3	He	16.126	0.0862	7239.91	0.0053	0
Cd	111	3	He	15.998	0.0855	7233.91	0.0053	0
Sn	120	3	He	0.093	0.0179	1510.13	0.0158	0.01648
Sn	120	3	He	0.013	0.0167	1400.12	0.0158	0.01648
Sn	120	3	He	-0.07	0.0154	1300.10	0.0158	0.01648
Sb	121	3	He	6.342	0.0945	7952.61	0.0149	0.0002698
Sb	121	3	He	6.431	0.0958	8042.62	0.0149	0.0002698
Sb	121	3	He	6.392	0.0952	8052.59	0.0149	0.0002698
Ba	137	3	He	34.922	0.1678	14127.72	0.0048	0.0002317
Ba	137	3	He	36.277	0.1743	14638.26	0.0048	0.0002317
Ba	137	3	He	37.103	0.1783	15078.67	0.0048	0.0002317
Tl	205	3	He	4.451	0.1102	43131.79	0.0247	0.0001339
Tl	205	3	He	4.314	0.1068	41285.49	0.0247	0.0001339
Tl	205	3	He	4.478	0.1109	43502.77	0.0247	0.0001339
Pb	208	3	He	23.486	0.7698	161739.45	0.0327	0.00107
Pb	208	3	He	23.625	0.7743	159472.19	0.0327	0.00107
Pb	208	3	He	23.195	0.7602	158094.68	0.0327	0.00107
U	238	3	He	0.009	0.0005	160.01	0.0493	7.55E-05
U	238	3	He	0.012	0.0007	210.01	0.0493	7.55E-05
U	238	3	He	0.009	0.0005	160.01	0.0493	7.55E-05
Sc	45	1	No Gas			2402518.25		
Sc	45	1	No Gas			2372211.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2423798.87		
Ge	72	1	No Gas			1192178.65		
Ge	72	1	No Gas			1184441.39		
Ge	72	1	No Gas			1191406.15		
Sc	45	2	H2			176823.47		
Sc	45	2	H2			177096.35		
Sc	45	2	H2			178847.93		
Ge	72	2	H2			150342.69		
Ge	72	2	H2			152233.64		
Ge	72	2	H2			150991.54		
In	115	2	H2			385560.19		
In	115	2	H2			385754.45		
In	115	2	H2			384374.96		
Sc	45	3	He			46224.23		
Sc	45	3	He			46153.98		
Sc	45	3	He			47889.24		
Ge	72	3	He			81441.62		
Ge	72	3	He			80888.55		
Ge	72	3	He			82256.40		
In	115	3	He			84184.29		
In	115	3	He			83973.32		
In	115	3	He			84576.98		
Tb	159	3	He			391443.86		
Tb	159	3	He			386560.50		
Tb	159	3	He			392376.99		
Bi	209	3	He			305210.17		
Bi	209	3	He			307718.98		
Bi	209	3	He			307096.91		

Quantitation Report

Data File Name	262SMPL.d
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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

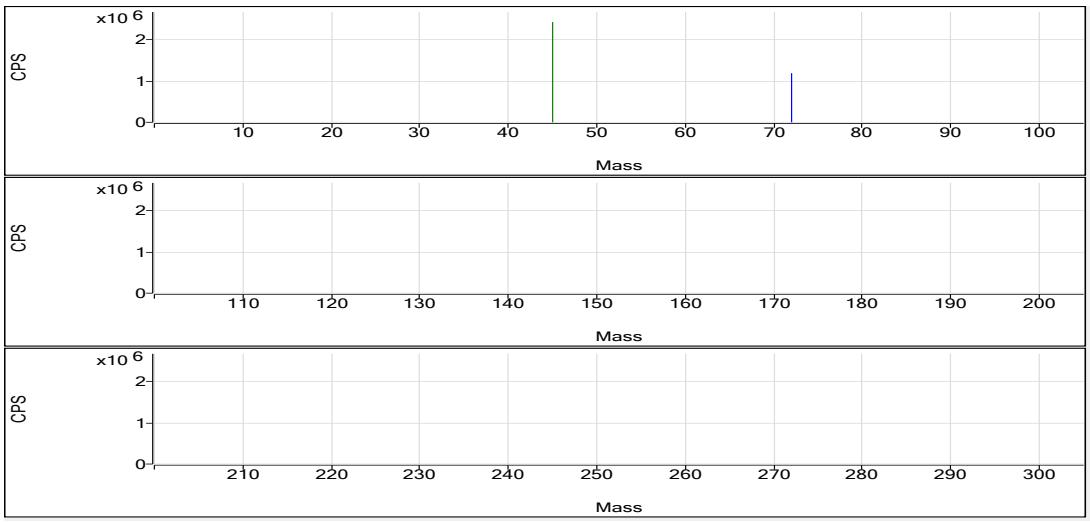
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	43.3	24.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.017	ppb	147.0	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	10.119	ppb	51.4	18004.77	0.3814	Pulse	0.1000	3
Mg	24	45	He	0.377	ppb	108.6	196.68	0.0042	Pulse	0.1000	3
Al	27	45	He	0.721	ppb	105.6	50.00	0.0011	Pulse	0.1000	3
K	39	45	He	5.295	ppb	218.4	18949.45	0.4012	Pulse	0.1000	3
Ca	44	45	He	15.171	ppb	105.1	176.68	0.0037	Pulse	0.1000	3
Ti	47	45	He	0.135	ppb	340.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.273	ppb	22.6	1455.42	0.0308	Pulse	0.5000	3
Cr	52	45	He	-0.070	ppb	N/A	1786.84	0.0379	Pulse	0.1000	3
Mn	55	45	He	0.075	ppb	102.6	170.01	0.0036	Pulse	0.1000	3
Fe	57	45	He	1.054	ppb	108.6	96.67	0.0020	Pulse	0.1000	3
Co	59	45	He	0.031	ppb	19.2	183.34	0.0039	Pulse	0.1000	3
Ni	60	72	He	0.007	ppb	1431.8	236.68	0.0029	Pulse	0.1000	3
Cu	63	72	He	0.042	ppb	38.6	476.69	0.0058	Pulse	0.1000	3
Zn	66	72	He	1.744	ppb	22.8	726.71	0.0089	Pulse	0.1000	3
As	75	72	He	0.001	ppb	11088.1	66.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	-0.024	ppb	N/A	63.33	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.038	ppb	49.2	93.33	0.0011	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	44.2	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.122	ppb	222.1	1567.25	0.0184	Pulse	0.1000	3
Sb	121	115	He	0.013	ppb	101.1	40.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.034	ppb	257.6	33.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.059	ppb	19.9	623.37	0.0016	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	23.1	636.70	0.0016	Pulse	0.1000	3
U	238	209	He	0.004	ppb	1.4	80.00	0.0003	Pulse	0.1000	3

ISTD Table:

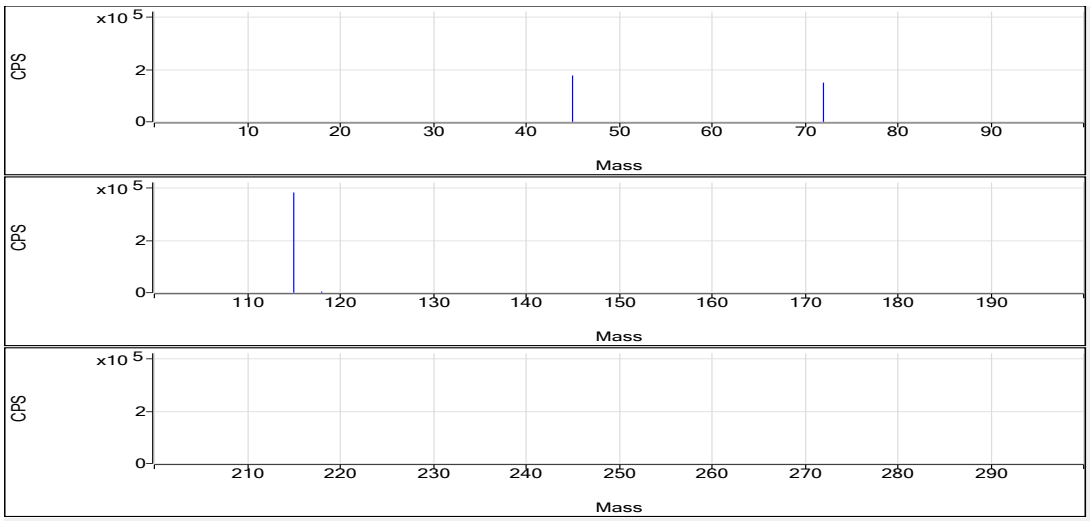
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2433131.68	0.9	101.4	Analog	0.1000	3
No Gas	Ge	72	1192009.22	0.5	103.4	Pulse	0.1000	3
H2	Sc	45	177018.93	1.2	94.7	Pulse	0.1000	3
H2	Ge	72	149886.56	1.0	91.6	Pulse	0.1000	3
H2	In	115	382960.02	0.4	98.4	Pulse	0.1000	3
He	Sc	45	47248.00	2.4	101.3	Pulse	0.1000	3
He	Ge	72	81706.96	0.7	100.6	Pulse	0.1000	3
He	In	115	85145.69	0.8	98.8	Pulse	0.1000	3
He	Tb	159	391632.43	1.2	98.3	Pulse	0.1000	3
He	Bi	209	305784.89	1.0	98.9	Pulse	0.1000	3

No Gas

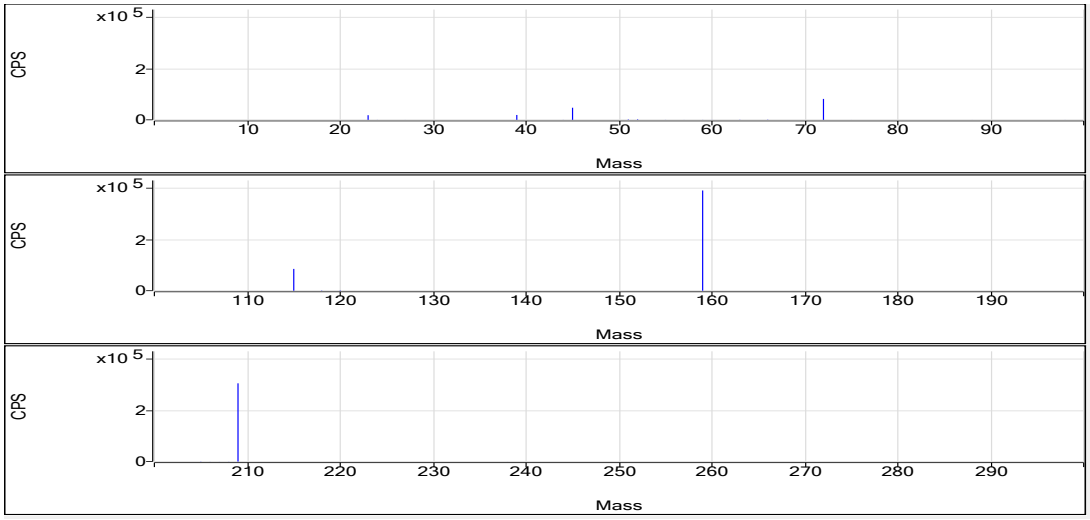


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.008	0	26.00	0.0008	4.685E-06
Be	9	1	No Gas	0.003	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Se	78	2	H2	0.002	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.046	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.003	0	2.00	0.0004	1.219E-05
Na	23	3	He	12.217	0.3889	18041.45	0.0036	0.3452
Na	23	3	He	13.943	0.395	18482.09	0.0036	0.3452
Na	23	3	He	4.197	0.3602	17490.78	0.0036	0.3452
Mg	24	3	He	0.814	0.005	230.01	0.0018	0.003497
Mg	24	3	He	0.315	0.0041	190.01	0.0018	0.003497
Mg	24	3	He	0.002	0.0035	170.01	0.0018	0.003497
Al	27	3	He	1.479	0.0015	70.00	0.0006	0.0006432
Al	27	3	He	0.727	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	-0.044	0.0006	30.00	0.0006	0.0006432
K	39	3	He	5.24	0.4012	18612.38	0.0012	0.3951
K	39	3	He	16.885	0.4147	19403.43	0.0012	0.3951
K	39	3	He	-6.24	0.3878	18832.54	0.0012	0.3951
Ca	44	3	He	1.292	0.0028	130.01	0.0001	0.002715
Ca	44	3	He	32.586	0.0049	230.01	0.0001	0.002715
Ca	44	3	He	11.634	0.0035	170.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.666	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.338	0.0322	1496.09	0.0219	0.02486
V	51	3	He	0.265	0.0307	1434.08	0.0219	0.02486
V	51	3	He	0.215	0.0296	1436.08	0.0219	0.02486
Cr	52	3	He	-0.054	0.0384	1780.16	0.0299	0.03997
Cr	52	3	He	0.079	0.0423	1980.21	0.0299	0.03997
Cr	52	3	He	-0.235	0.033	1600.14	0.0299	0.03997
Mn	55	3	He	0.013	0.0028	130.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.161	0.0047	220.01	0.0128	0.002639
Mn	55	3	He	0.051	0.0033	160.01	0.0128	0.002639
Fe	57	3	He	-0.233	0.0013	60.00	0.0006	0.001429
Fe	57	3	He	1.956	0.0026	120.01	0.0006	0.001429
Fe	57	3	He	1.44	0.0023	110.01	0.0006	0.001429
Co	59	3	He	0.035	0.0041	190.01	0.0563	0.002149
Co	59	3	He	0.034	0.0041	190.01	0.0563	0.002149
Co	59	3	He	0.024	0.0035	170.01	0.0563	0.002149
Ni	60	3	He	-0.043	0.0025	200.01	0.0086	0.002834
Ni	60	3	He	0.124	0.0039	320.01	0.0086	0.002834
Ni	60	3	He	-0.06	0.0023	190.01	0.0086	0.002834
Cu	63	3	He	0.055	0.0062	500.03	0.0257	0.004757
Cu	63	3	He	0.047	0.006	490.02	0.0257	0.004757
Cu	63	3	He	0.024	0.0054	440.02	0.0257	0.004757
Zn	66	3	He	1.95	0.0095	770.05	0.0029	0.003818
Zn	66	3	He	1.996	0.0096	790.05	0.0029	0.003818
Zn	66	3	He	1.287	0.0076	620.04	0.0029	0.003818
As	75	3	He	-0.068	0.0007	54.00	0.002	0.0008061
As	75	3	He	0.047	0.0009	74.00	0.002	0.0008061
As	75	3	He	0.023	0.0009	70.00	0.002	0.0008061
Sr	88	3	He	0.025	0.0012	100.00	0.009	0.0009645
Sr	88	3	He	-0.055	0.0005	40.00	0.009	0.0009645
Sr	88	3	He	-0.042	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	0.02	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.036	0.0011	90.00	0.0219	0.0002706
Mo	98	3	He	0.057	0.0015	130.00	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0004	30.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Cd	111	3	He	0.018	0.0001	8.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	0.045	0.0172	1450.13	0.0158	0.01648
Sn	120	3	He	-0.102	0.0149	1270.10	0.0158	0.01648
Sn	120	3	He	0.422	0.0231	1981.53	0.0158	0.01648
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	0.029	0.0007	60.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0004	30.00	0.0149	0.0002698
Ba	137	3	He	0.125	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Ba	137	3	He	0.025	0.0004	30.00	0.0048	0.0002317
Tl	205	3	He	0.048	0.0013	520.03	0.0247	0.0001339
Tl	205	3	He	0.071	0.0019	740.05	0.0247	0.0001339
Tl	205	3	He	0.058	0.0016	610.04	0.0247	0.0001339
Pb	208	3	He	0.018	0.0017	340.02	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	270.01	0.0327	0.00107
Pb	208	3	He	0.02	0.0017	380.02	0.0327	0.00107
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
Sc	45	1	No Gas			2433097.15		
Sc	45	1	No Gas			2454157.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2412140.59		
Ge	72	1	No Gas			1198237.40		
Ge	72	1	No Gas			1190535.37		
Ge	72	1	No Gas			1187254.90		
Sc	45	2	H2			178290.56		
Sc	45	2	H2			174547.26		
Sc	45	2	H2			178218.96		
Ge	72	2	H2			151151.80		
Ge	72	2	H2			148323.43		
Ge	72	2	H2			150184.46		
In	115	2	H2			384694.41		
In	115	2	H2			382552.30		
In	115	2	H2			381633.35		
Sc	45	3	He			46395.59		
Sc	45	3	He			46786.06		
Sc	45	3	He			48562.36		
Ge	72	3	He			81090.07		
Ge	72	3	He			82056.01		
Ge	72	3	He			81974.80		
In	115	3	He			84395.98		
In	115	3	He			85441.92		
In	115	3	He			85623.11		
Tb	159	3	He			396461.09		
Tb	159	3	He			391252.92		
Tb	159	3	He			387183.28		
Bi	209	3	He			309378.26		
Bi	209	3	He			304352.89		
Bi	209	3	He			303623.53		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
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Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

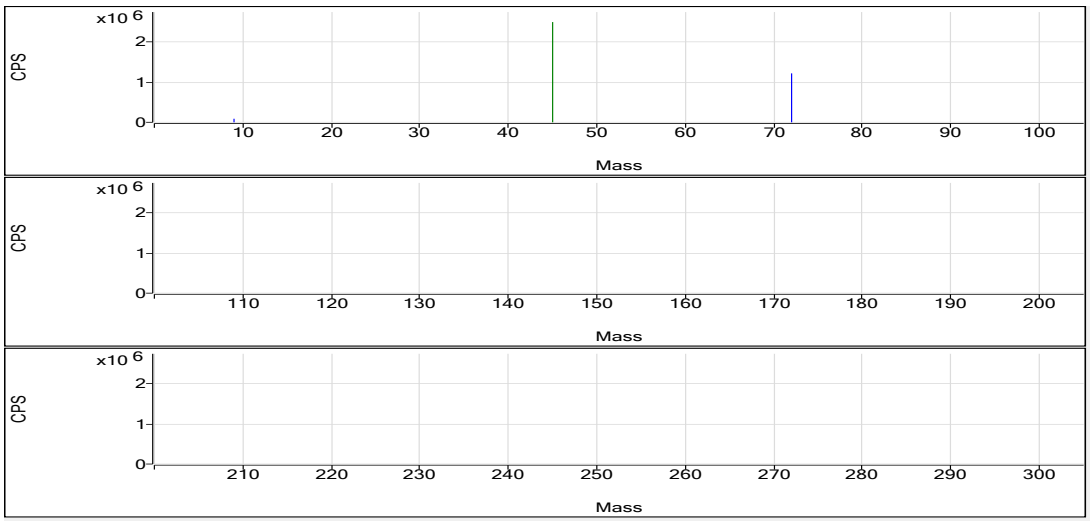
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.373	ppb	0.9	88248.75	0.0354	Pulse	0.5000	3
Se	78	72	H2	52.710	ppb	1.2	3370.63	0.0220	Pulse	1.5000	3
Na	23	45	He	4831.181	ppb	2.2	835605.07	17.6265	Pulse	0.1000	3
Mg	24	45	He	4968.867	ppb	1.9	422839.50	8.9192	Pulse	0.1000	3
Al	27	45	He	4869.934	ppb	2.4	135093.09	2.8497	Pulse	0.1000	3
K	39	45	He	5039.227	ppb	1.5	296909.79	6.2624	Pulse	0.1000	3
Ca	44	45	He	5216.157	ppb	1.7	16840.23	0.3551	Pulse	0.1000	3
Ti	47	45	He	4967.885	ppb	3.2	126436.49	2.6676	Pulse	0.1000	3
V	51	45	He	508.949	ppb	1.9	528591.29	11.1501	Pulse	0.5000	3
Cr	52	45	He	484.330	ppb	1.8	689364.13	14.5412	Pulse	0.1000	3
Mn	55	45	He	501.524	ppb	2.2	305243.90	6.4391	Pulse	0.1000	3
Fe	57	45	He	5033.050	ppb	2.0	138691.24	2.9256	Pulse	0.1000	3
Co	59	45	He	488.470	ppb	2.5	1303305.71	27.4944	Pulse	0.1000	3
Ni	60	72	He	512.128	ppb	0.7	365105.11	4.3985	Pulse	0.1000	3
Cu	63	72	He	487.296	ppb	0.3	1038776.50	12.5142	Pulse	0.1000	3
Zn	66	72	He	511.369	ppb	0.2	123907.85	1.4927	Pulse	0.1000	3
As	75	72	He	518.241	ppb	0.6	88204.78	1.0626	Pulse	0.5000	3
Sr	88	115	He	50.040	ppb	2.0	38606.88	0.4498	Pulse	0.1000	3
Mo	98	115	He	51.181	ppb	0.6	96349.36	1.1225	Pulse	0.1000	3
Ag	107	115	He	50.954	ppb	1.0	203366.18	2.3693	Pulse	0.1000	3
Cd	111	115	He	51.100	ppb	1.8	23451.00	0.2732	Pulse	0.5000	3
Sn	120	115	He	51.489	ppb	0.8	71236.49	0.8299	Pulse	0.1000	3
Sb	121	115	He	51.710	ppb	2.4	65951.03	0.7683	Pulse	0.1000	3
Ba	137	115	He	513.614	ppb	1.5	211598.82	2.4652	Pulse	0.1000	3
Tl	205	159	He	51.405	ppb	0.5	500052.27	1.2712	Pulse	0.1000	3
Pb	208	159	He	51.973	ppb	0.8	669561.77	1.7021	Pulse	0.1000	3
U	238	209	He	50.586	ppb	0.6	763015.01	2.4919	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2494548.82	0.7	104.0	Analog	0.1000	3
No Gas	Ge	72	1217678.00	1.0	105.6	Pulse	0.1000	3
H2	Sc	45	179478.57	0.9	96.0	Pulse	0.1000	3
H2	Ge	72	153240.95	1.2	93.6	Pulse	0.1000	3
H2	In	115	382921.14	0.5	98.4	Pulse	0.1000	3
He	Sc	45	47421.17	2.4	101.7	Pulse	0.1000	3
He	Ge	72	83007.56	0.3	102.2	Pulse	0.1000	3
He	In	115	85838.59	1.0	99.6	Pulse	0.1000	3
He	Tb	159	393371.74	0.7	98.7	Pulse	0.1000	3
He	Bi	209	306198.03	0.2	99.0	Pulse	0.1000	3

No Gas



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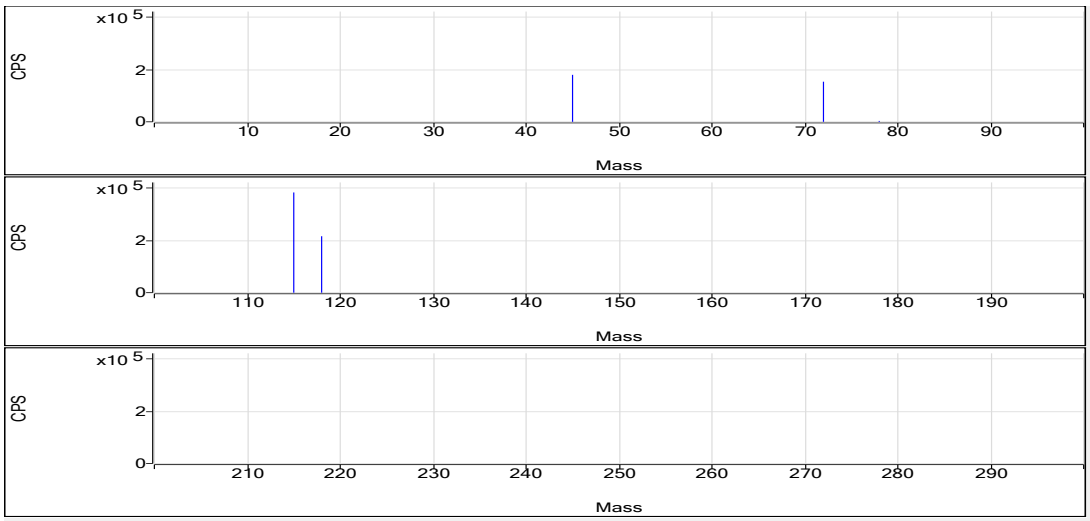
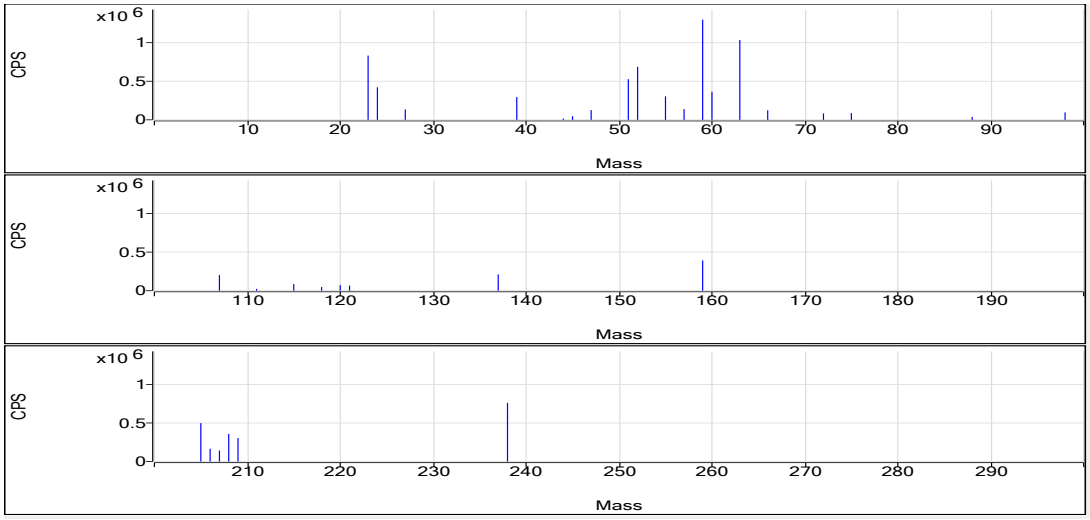


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.179	0.0352	88537.68	0.0008	4.685E-06
Be	9	1	No Gas	46.088	0.0352	87262.35	0.0008	4.685E-06
Be	9	1	No Gas	46.851	0.0357	88946.21	0.0008	4.685E-06
Se	78	2	H2	52.101	0.0217	3315.06	0.0004	1.219E-05
Se	78	2	H2	52.715	0.022	3417.75	0.0004	1.219E-05
Se	78	2	H2	53.315	0.0222	3379.07	0.0004	1.219E-05
Na	23	3	He	4714.982	17.2109	838550.38	0.0036	0.3452
Na	23	3	He	4925.441	17.9637	841163.89	0.0036	0.3452
Na	23	3	He	4853.12	17.705	827100.93	0.0036	0.3452
Mg	24	3	He	4863.467	8.7301	425349.99	0.0018	0.003497
Mg	24	3	He	5045.409	9.0566	424081.40	0.0018	0.003497
Mg	24	3	He	4997.723	8.971	419087.10	0.0018	0.003497
Al	27	3	He	4750.782	2.78	135448.24	0.0006	0.0006432
Al	27	3	He	4984.222	2.9166	136571.37	0.0006	0.0006432
Al	27	3	He	4874.799	2.8526	133259.67	0.0006	0.0006432
K	39	3	He	4959.54	6.1696	300595.48	0.0012	0.3951
K	39	3	He	5105.105	6.3391	296832.01	0.0012	0.3951
K	39	3	He	5053.036	6.2785	293301.89	0.0012	0.3951
Ca	44	3	He	5268.132	0.3586	17471.13	0.0001	0.002715
Ca	44	3	He	5112.744	0.3481	16299.60	0.0001	0.002715
Ca	44	3	He	5267.597	0.3586	16749.95	0.0001	0.002715
Ti	47	3	He	4787.301	2.5706	125245.39	0.0005	7.003E-05
Ti	47	3	He	5068.274	2.7215	127435.12	0.0005	7.003E-05
Ti	47	3	He	5048.081	2.7106	126628.95	0.0005	7.003E-05
V	51	3	He	497.866	10.9078	531451.19	0.0219	0.02486
V	51	3	He	514.053	11.2616	527334.63	0.0219	0.02486
V	51	3	He	514.928	11.2808	526988.06	0.0219	0.02486
Cr	52	3	He	474.394	14.2437	693981.55	0.0299	0.03997
Cr	52	3	He	488.243	14.6583	686386.40	0.0299	0.03997
Cr	52	3	He	490.353	14.7215	687724.44	0.0299	0.03997
Mn	55	3	He	488.801	6.2759	305772.91	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	505.796	6.494	304084.90	0.0128	0.002639
Mn	55	3	He	509.973	6.5476	305873.88	0.0128	0.002639
Fe	57	3	He	4918.811	2.8592	139306.88	0.0006	0.001429
Fe	57	3	He	5079.16	2.9524	138247.15	0.0006	0.001429
Fe	57	3	He	5101.179	2.9652	138519.70	0.0006	0.001429
Co	59	3	He	474.701	26.7194	1301826.70	0.0563	0.002149
Co	59	3	He	493.181	27.7595	1299861.15	0.0563	0.002149
Co	59	3	He	497.527	28.0041	1308229.28	0.0563	0.002149
Ni	60	3	He	508.363	4.3662	363537.53	0.0086	0.002834
Ni	60	3	He	513.03	4.4062	364881.36	0.0086	0.002834
Ni	60	3	He	514.99	4.4231	366896.44	0.0086	0.002834
Cu	63	3	He	489.111	12.5608	1045833.66	0.0257	0.004757
Cu	63	3	He	485.737	12.4741	1032983.89	0.0257	0.004757
Cu	63	3	He	487.039	12.5076	1037511.94	0.0257	0.004757
Zn	66	3	He	512.394	1.4957	124535.97	0.0029	0.003818
Zn	66	3	He	511.73	1.4938	123699.90	0.0029	0.003818
Zn	66	3	He	509.982	1.4887	123487.69	0.0029	0.003818
As	75	3	He	518.913	1.064	88589.89	0.002	0.0008061
As	75	3	He	521.213	1.0687	88499.32	0.002	0.0008061
As	75	3	He	514.597	1.0551	87525.13	0.002	0.0008061
Sr	88	3	He	51.13	0.4596	39054.88	0.009	0.0009645
Sr	88	3	He	49.242	0.4427	38392.84	0.009	0.0009645
Sr	88	3	He	49.749	0.4472	38372.92	0.009	0.0009645
Mo	98	3	He	51.391	1.1271	95775.85	0.0219	0.0002706
Mo	98	3	He	50.805	1.1143	96641.23	0.0219	0.0002706
Mo	98	3	He	51.348	1.1261	96630.99	0.0219	0.0002706
Ag	107	3	He	51.493	2.3944	203465.15	0.0465	0.0006206
Ag	107	3	He	50.5	2.3482	203666.64	0.0465	0.0006206
Ag	107	3	He	50.869	2.3654	202966.74	0.0465	0.0006206
Cd	111	3	He	52.148	0.2788	23694.05	0.0053	0
Cd	111	3	He	50.458	0.2698	23399.63	0.0053	0
Cd	111	3	He	50.696	0.2711	23259.33	0.0053	0
Sn	120	3	He	51.897	0.8364	71072.40	0.0158	0.01648
Sn	120	3	He	51.111	0.824	71464.32	0.0158	0.01648
Sn	120	3	He	51.458	0.8295	71172.76	0.0158	0.01648
Sb	121	3	He	52.732	0.7835	66580.75	0.0149	0.0002698
Sb	121	3	He	52.085	0.7739	67122.71	0.0149	0.0002698
Sb	121	3	He	50.314	0.7476	64149.64	0.0149	0.0002698
Ba	137	3	He	521.809	2.5046	212830.04	0.0048	0.0002317
Ba	137	3	He	511.883	2.4569	213094.33	0.0048	0.0002317
Ba	137	3	He	507.148	2.4342	208872.09	0.0048	0.0002317
Tl	205	3	He	51.345	1.2697	503269.06	0.0247	0.0001339
Tl	205	3	He	51.163	1.2652	494318.74	0.0247	0.0001339
Tl	205	3	He	51.707	1.2787	502569.02	0.0247	0.0001339
Pb	208	3	He	51.995	1.7028	362650.50	0.0327	0.00107
Pb	208	3	He	52.387	1.7157	359499.29	0.0327	0.00107
Pb	208	3	He	51.537	1.6879	355878.47	0.0327	0.00107
U	238	3	He	50.944	2.5096	767488.89	0.0493	7.55E-05
U	238	3	He	50.453	2.4854	760016.63	0.0493	7.55E-05
U	238	3	He	50.36	2.4808	761539.52	0.0493	7.55E-05
Sc	45	1	No Gas			2513188.40		
Sc	45	1	No Gas			2481896.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2488561.84		
Ge	72	1	No Gas			1229862.95		
Ge	72	1	No Gas			1204378.34		
Ge	72	1	No Gas			1218792.72		
Sc	45	2	H2			179626.46		
Sc	45	2	H2			181035.39		
Sc	45	2	H2			177773.86		
Ge	72	2	H2			152475.04		
Ge	72	2	H2			155367.60		
Ge	72	2	H2			151880.22		
In	115	2	H2			384961.87		
In	115	2	H2			381141.05		
In	115	2	H2			382660.50		
Sc	45	3	He			48722.11		
Sc	45	3	He			46825.75		
Sc	45	3	He			46715.65		
Ge	72	3	He			83261.99		
Ge	72	3	He			82810.02		
Ge	72	3	He			82950.66		
In	115	3	He			85361.54		
In	115	3	He			87112.83		
In	115	3	He			86176.11		
Tb	159	3	He			396368.43		
Tb	159	3	He			390704.72		
Tb	159	3	He			393042.06		
Bi	209	3	He			305826.87		
Bi	209	3	He			305795.05		
Bi	209	3	He			306972.18		

Quantitation Report

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Acq Time	8/10/2023 7:42:14 PM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

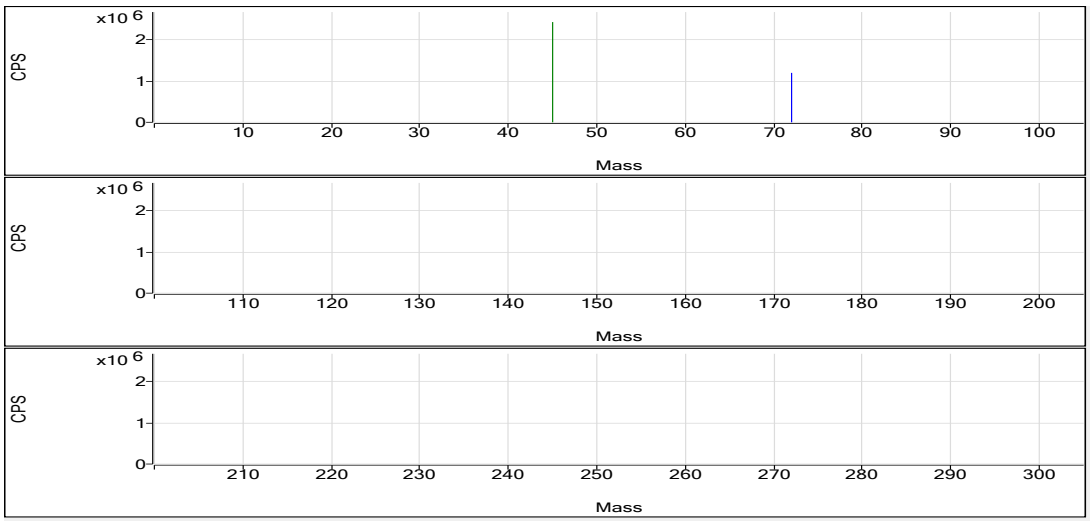
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.021	ppb	22.4	49.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.082	ppb	88.3	6.89	0.0000	Pulse	1.5000	3
Na	23	45	He	11.791	ppb	11.9	18104.94	0.3873	Pulse	0.1000	3
Mg	24	45	He	0.554	ppb	53.9	210.01	0.0045	Pulse	0.1000	3
Al	27	45	He	1.341	ppb	33.0	66.67	0.0014	Pulse	0.1000	3
K	39	45	He	3.493	ppb	68.3	18655.77	0.3991	Pulse	0.1000	3
Ca	44	45	He	14.620	ppb	137.4	173.34	0.0037	Pulse	0.1000	3
Ti	47	45	He	0.536	ppb	113.7	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	0.321	ppb	7.4	1490.75	0.0319	Pulse	0.5000	3
Cr	52	45	He	-0.021	ppb	N/A	1840.17	0.0393	Pulse	0.1000	3
Mn	55	45	He	0.239	ppb	20.8	266.68	0.0057	Pulse	0.1000	3
Fe	57	45	He	0.736	ppb	79.9	86.67	0.0019	Pulse	0.1000	3
Co	59	45	He	0.078	ppb	70.0	306.68	0.0065	Pulse	0.1000	3
Ni	60	72	He	0.009	ppb	997.1	236.68	0.0029	Pulse	0.1000	3
Cu	63	72	He	0.079	ppb	32.2	550.03	0.0068	Pulse	0.1000	3
Zn	66	72	He	1.612	ppb	14.6	690.04	0.0085	Pulse	0.1000	3
As	75	72	He	0.072	ppb	110.0	77.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	-0.015	ppb	N/A	70.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.081	ppb	28.6	173.34	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	354.8	60.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	57.9	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.012	ppb	336.3	1410.13	0.0167	Pulse	0.1000	3
Sb	121	115	He	0.024	ppb	77.2	53.33	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.083	ppb	34.4	53.33	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.083	ppb	5.3	850.07	0.0022	Pulse	0.1000	3
Pb	208	159	He	0.016	ppb	14.5	620.03	0.0016	Pulse	0.1000	3
U	238	209	He	0.046	ppb	8.1	706.72	0.0023	Pulse	0.1000	3

ISTD Table:

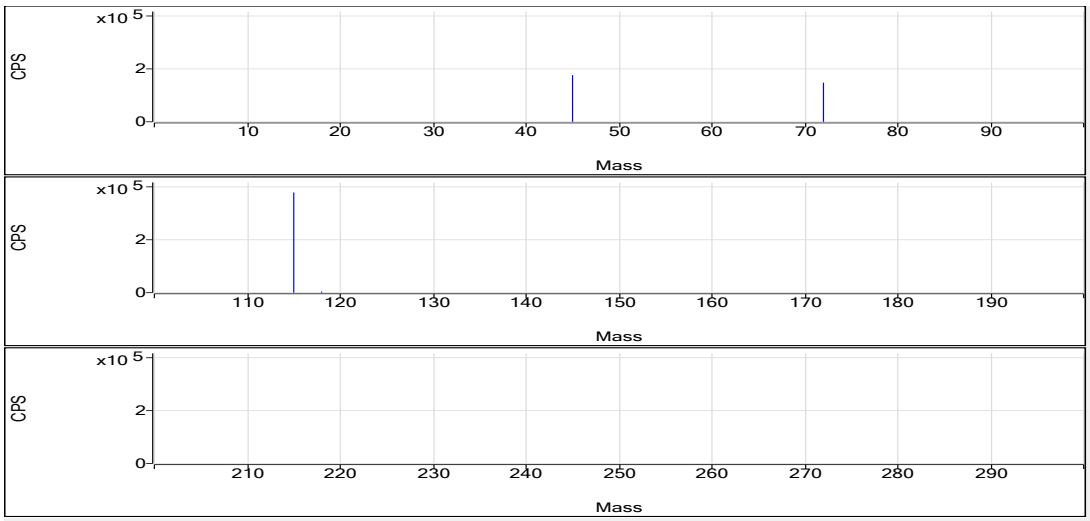
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2426859.39	0.7	101.2	Analog	0.1000	3
No Gas	Ge	72	1196896.02	0.4	103.8	Pulse	0.1000	3
H2	Sc	45	177243.44	1.1	94.8	Pulse	0.1000	3
H2	Ge	72	148670.69	2.0	90.8	Pulse	0.1000	3
H2	In	115	380744.19	1.0	97.9	Pulse	0.1000	3
He	Sc	45	46739.37	0.8	100.2	Pulse	0.1000	3
He	Ge	72	81100.50	0.8	99.9	Pulse	0.1000	3
He	In	115	84596.45	0.9	98.1	Pulse	0.1000	3
He	Tb	159	388526.95	0.8	97.5	Pulse	0.1000	3
He	Bi	209	304927.25	0.4	98.6	Pulse	0.1000	3

No Gas

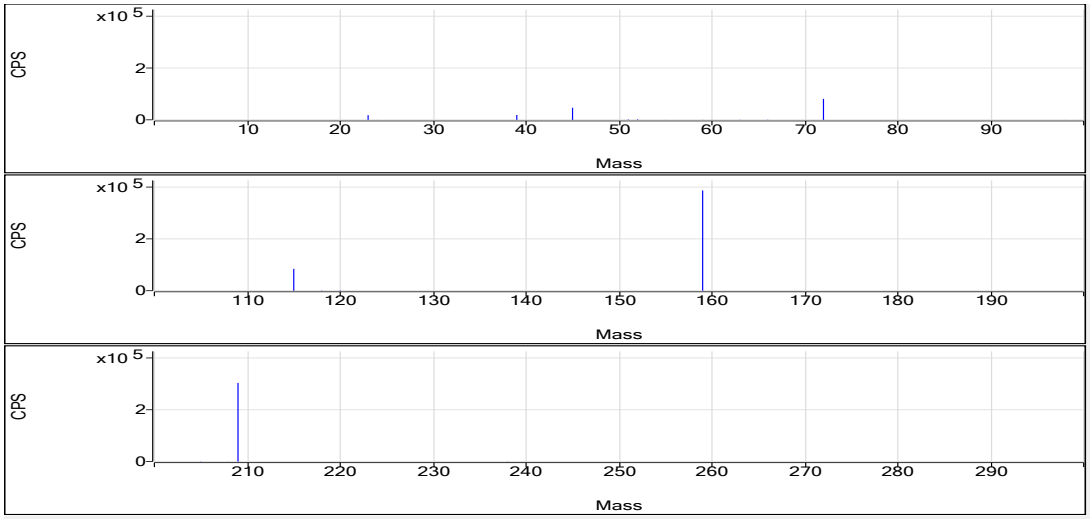


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.022	0	52.00	0.0008	4.685E-06
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.024	0	56.00	0.0008	4.685E-06
Se	78	2	H2	0.059	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.162	0.0001	12.00	0.0004	1.219E-05
Se	78	2	H2	0.024	0	3.33	0.0004	1.219E-05
Na	23	3	He	12.816	0.391	18281.80	0.0036	0.3452
Na	23	3	He	12.372	0.3894	18352.02	0.0036	0.3452
Na	23	3	He	10.186	0.3816	17680.99	0.0036	0.3452
Mg	24	3	He	0.316	0.0041	190.01	0.0018	0.003497
Mg	24	3	He	0.889	0.0051	240.01	0.0018	0.003497
Mg	24	3	He	0.457	0.0043	200.01	0.0018	0.003497
Al	27	3	He	1.094	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	1.077	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	1.852	0.0017	80.00	0.0006	0.0006432
K	39	3	He	5.524	0.4015	18772.55	0.0012	0.3951
K	39	3	He	4.088	0.3998	18842.71	0.0012	0.3951
K	39	3	He	0.868	0.3961	18352.05	0.0012	0.3951
Ca	44	3	He	29.466	0.0047	220.01	0.0001	0.002715
Ca	44	3	He	22.636	0.0042	200.01	0.0001	0.002715
Ca	44	3	He	-8.242	0.0022	100.00	0.0001	0.002715
Ti	47	3	He	1.065	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.673	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.334	0.0322	1504.09	0.0219	0.02486
V	51	3	He	0.336	0.0322	1518.09	0.0219	0.02486
V	51	3	He	0.294	0.0313	1450.08	0.0219	0.02486
Cr	52	3	He	-0.128	0.0361	1690.15	0.0299	0.03997
Cr	52	3	He	0.203	0.0461	2170.23	0.0299	0.03997
Cr	52	3	He	-0.138	0.0358	1660.14	0.0299	0.03997
Mn	55	3	He	0.294	0.0064	300.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.224	0.0055	260.01	0.0128	0.002639
Mn	55	3	He	0.198	0.0052	240.01	0.0128	0.002639
Fe	57	3	He	0.854	0.0019	90.00	0.0006	0.001429
Fe	57	3	He	0.097	0.0015	70.00	0.0006	0.001429
Fe	57	3	He	1.256	0.0022	100.00	0.0006	0.001429
Co	59	3	He	0.102	0.0079	370.02	0.0563	0.002149
Co	59	3	He	0.116	0.0087	410.02	0.0563	0.002149
Co	59	3	He	0.016	0.003	140.01	0.0563	0.002149
Ni	60	3	He	-0.098	0.002	160.01	0.0086	0.002834
Ni	60	3	He	0.057	0.0033	270.01	0.0086	0.002834
Ni	60	3	He	0.069	0.0034	280.01	0.0086	0.002834
Cu	63	3	He	0.072	0.0066	530.03	0.0257	0.004757
Cu	63	3	He	0.107	0.0075	610.04	0.0257	0.004757
Cu	63	3	He	0.058	0.0062	510.02	0.0257	0.004757
Zn	66	3	He	1.808	0.0091	730.04	0.0029	0.003818
Zn	66	3	He	1.352	0.0078	630.04	0.0029	0.003818
Zn	66	3	He	1.675	0.0087	710.04	0.0029	0.003818
As	75	3	He	0.08	0.001	78.00	0.002	0.0008061
As	75	3	He	0.147	0.0011	90.00	0.002	0.0008061
As	75	3	He	-0.011	0.0008	64.00	0.002	0.0008061
Sr	88	3	He	-0.042	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	0.024	0.0012	100.00	0.009	0.0009645
Sr	88	3	He	-0.028	0.0007	60.00	0.009	0.0009645
Mo	98	3	He	0.073	0.0019	160.01	0.0219	0.0002706
Mo	98	3	He	0.063	0.0017	140.01	0.0219	0.0002706
Mo	98	3	He	0.107	0.0026	220.01	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0004	30.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.018	0.0001	8.00	0.0053	0
Sn	120	3	He	-0.033	0.0159	1360.11	0.0158	0.01648
Sn	120	3	He	0.048	0.0172	1460.13	0.0158	0.01648
Sn	120	3	He	0.023	0.0168	1410.14	0.0158	0.01648
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.014	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	0.046	0.001	80.00	0.0149	0.0002698
Ba	137	3	He	0.098	0.0007	60.00	0.0048	0.0002317
Ba	137	3	He	0.05	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.101	0.0007	60.00	0.0048	0.0002317
Tl	205	3	He	0.088	0.0023	900.07	0.0247	0.0001339
Tl	205	3	He	0.079	0.0021	810.07	0.0247	0.0001339
Tl	205	3	He	0.083	0.0022	840.06	0.0247	0.0001339
Pb	208	3	He	0.013	0.0015	330.02	0.0327	0.00107
Pb	208	3	He	0.018	0.0016	380.02	0.0327	0.00107
Pb	208	3	He	0.017	0.0016	370.02	0.0327	0.00107
U	238	3	He	0.048	0.0024	740.06	0.0493	7.55E-05
U	238	3	He	0.048	0.0024	740.05	0.0493	7.55E-05
U	238	3	He	0.041	0.0021	640.04	0.0493	7.55E-05
Sc	45	1	No Gas			2440774.18		
Sc	45	1	No Gas			2431955.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2407848.09		
Ge	72	1	No Gas			1193128.26		
Ge	72	1	No Gas			1202593.50		
Ge	72	1	No Gas			1194966.31		
Sc	45	2	H2			175894.35		
Sc	45	2	H2			176378.90		
Sc	45	2	H2			179457.07		
Ge	72	2	H2			145323.07		
Ge	72	2	H2			150161.64		
Ge	72	2	H2			150527.37		
In	115	2	H2			385116.36		
In	115	2	H2			377513.35		
In	115	2	H2			379602.85		
Sc	45	3	He			46756.25		
Sc	45	3	He			47127.31		
Sc	45	3	He			46334.54		
Ge	72	3	He			80386.51		
Ge	72	3	He			81252.66		
Ge	72	3	He			81662.33		
In	115	3	He			85292.24		
In	115	3	He			84738.93		
In	115	3	He			83781.82		
Tb	159	3	He			391176.91		
Tb	159	3	He			389014.80		
Tb	159	3	He			385389.13		
Bi	209	3	He			306291.03		
Bi	209	3	He			304703.39		
Bi	209	3	He			303787.32		

Quantitation Report

Data File Name	265SMPL.d
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Acq Time	8/10/2023 7:46:59 PM
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Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

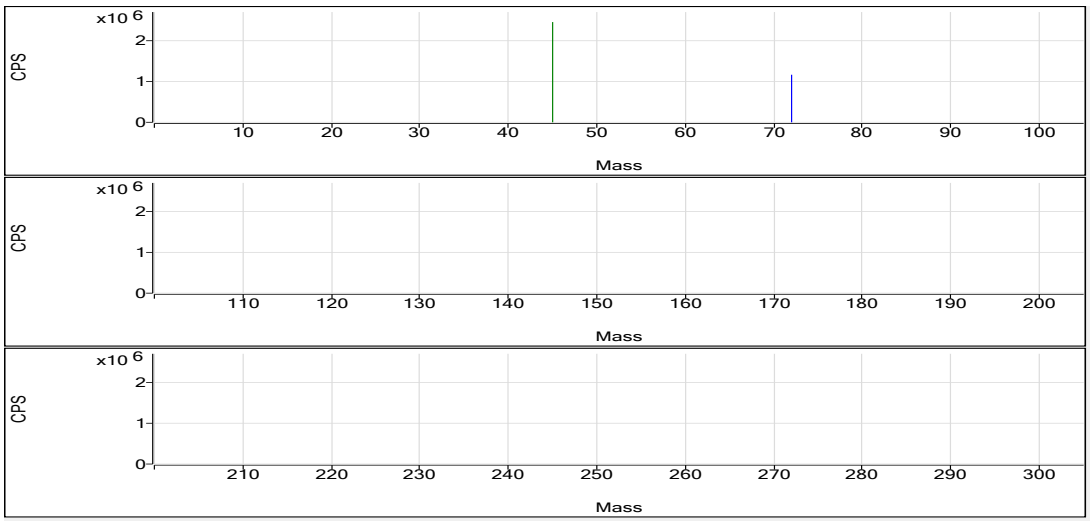
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.008	ppb	84.7	26.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.025	ppb	114.4	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	117408.336	ppb	0.7	19500067.21	420.3205	Analog	0.1000	3
Mg	24	45	He	6.894	ppb	15.5	736.71	0.0159	Pulse	0.1000	3
Al	27	45	He	2.468	ppb	68.4	96.67	0.0021	Pulse	0.1000	3
K	39	45	He	8.982	ppb	181.1	18809.40	0.4055	Pulse	0.1000	3
Ca	44	45	He	40.667	ppb	20.4	253.34	0.0055	Pulse	0.1000	3
Ti	47	45	He	0.535	ppb	154.5	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	0.312	ppb	8.1	1470.08	0.0317	Pulse	0.5000	3
Cr	52	45	He	-0.098	ppb	N/A	1716.83	0.0370	Pulse	0.1000	3
Mn	55	45	He	0.265	ppb	39.3	280.02	0.0060	Pulse	0.1000	3
Fe	57	45	He	3.604	ppb	36.6	163.34	0.0035	Pulse	0.1000	3
Co	59	45	He	0.046	ppb	63.4	220.01	0.0047	Pulse	0.1000	3
Ni	60	72	He	0.113	ppb	156.0	296.68	0.0038	Pulse	0.1000	3
Cu	63	72	He	0.104	ppb	13.7	580.03	0.0074	Pulse	0.1000	3
Zn	66	72	He	2.296	ppb	9.8	820.05	0.0105	Pulse	0.1000	3
As	75	72	He	-0.011	ppb	N/A	61.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.130	ppb	71.9	180.01	0.0021	Pulse	0.1000	3
Mo	98	115	He	0.016	ppb	114.2	53.33	0.0006	Pulse	0.1000	3
Ag	107	115	He	0.011	ppb	74.4	96.67	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.038	ppb	439.8	1443.46	0.0171	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	3428.6	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.288	ppb	12.2	136.68	0.0016	Pulse	0.1000	3
Tl	205	159	He	0.014	ppb	25.4	190.01	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	24.1	553.36	0.0014	Pulse	0.1000	3
U	238	209	He	0.006	ppb	19.0	110.00	0.0004	Pulse	0.1000	3

ISTD Table:

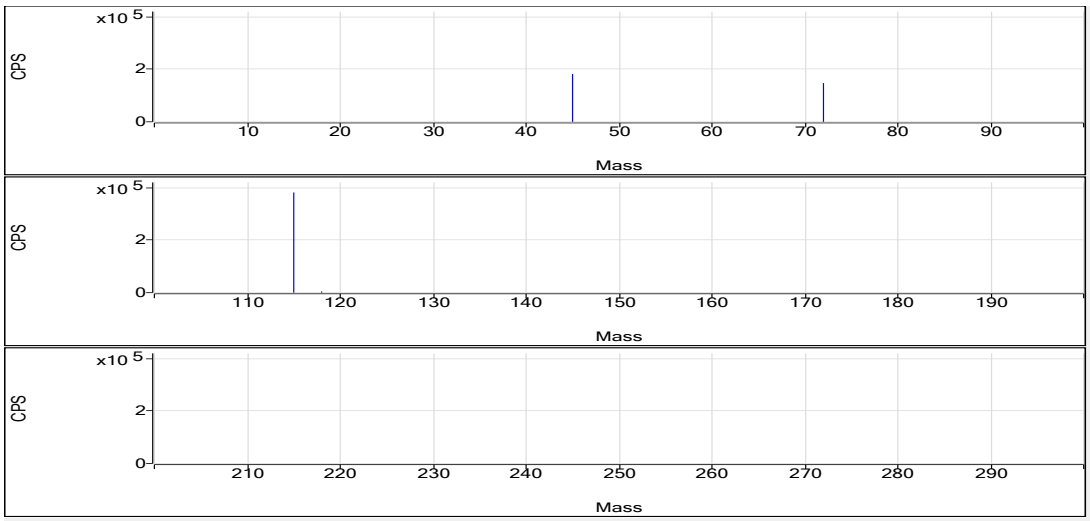
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2455908.03	1.8	102.4	Analog	0.1000	3
No Gas	Ge	72	1165349.46	1.3	101.0	Pulse	0.1000	3
H2	Sc	45	182106.44	1.6	97.4	Pulse	0.1000	3
H2	Ge	72	147732.91	1.2	90.2	Pulse	0.1000	3
H2	In	115	382054.12	0.5	98.2	Pulse	0.1000	3
He	Sc	45	46394.88	1.0	99.5	Pulse	0.1000	3
He	Ge	72	78082.99	0.8	96.2	Pulse	0.1000	3
He	In	115	84641.74	1.2	98.2	Pulse	0.1000	3
He	Tb	159	389500.88	0.5	97.7	Pulse	0.1000	3
He	Bi	209	303269.72	0.9	98.1	Pulse	0.1000	3

No Gas

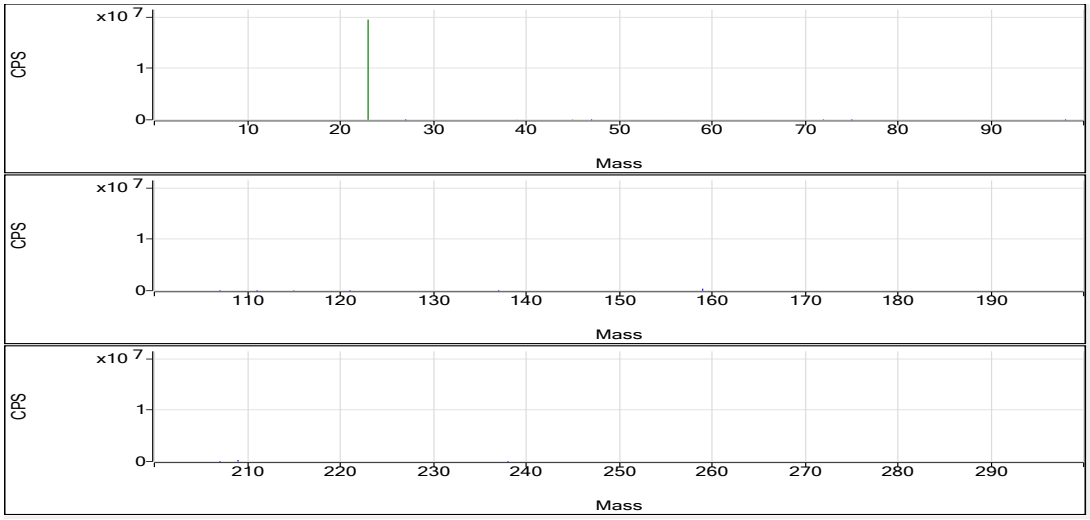


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	12.00	0.0008	4.685E-06
Be	9	1	No Gas	0.012	0	34.00	0.0008	4.685E-06
Be	9	1	No Gas	0.011	0	32.00	0.0008	4.685E-06
Se	78	2	H2	0.046	0	4.67	0.0004	1.219E-05
Se	78	2	H2	-0.007	0	1.33	0.0004	1.219E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.219E-05
Na	23	3	He	117292.16	419.905	19666689.71	0.0036	0.3452
Na	23	3	He	118336.478	423.6405	19446638.46	0.0036	0.3452
Na	23	3	He	116596.37	417.4161	19386873.46	0.0036	0.3452
Mg	24	3	He	8.047	0.0179	840.05	0.0018	0.003497
Mg	24	3	He	5.943	0.0142	650.03	0.0018	0.003497
Mg	24	3	He	6.691	0.0155	720.04	0.0018	0.003497
Al	27	3	He	2.55	0.0021	100.00	0.0006	0.0006432
Al	27	3	He	4.114	0.003	140.00	0.0006	0.0006432
Al	27	3	He	0.741	0.0011	50.00	0.0006	0.0006432
K	39	3	He	2.551	0.398	18642.46	0.0012	0.3951
K	39	3	He	27.482	0.4271	19603.83	0.0012	0.3951
K	39	3	He	-3.087	0.3915	18181.90	0.0012	0.3951
Ca	44	3	He	32.508	0.0049	230.01	0.0001	0.002715
Ca	44	3	He	40.435	0.0054	250.01	0.0001	0.002715
Ca	44	3	He	49.057	0.006	280.01	0.0001	0.002715
Ti	47	3	He	1.46	0.0009	40.00	0.0005	7.003E-05
Ti	47	3	He	0.275	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.287	0.0311	1458.08	0.0219	0.02486
V	51	3	He	0.338	0.0322	1480.08	0.0219	0.02486
V	51	3	He	0.312	0.0317	1472.08	0.0219	0.02486
Cr	52	3	He	-0.258	0.0322	1510.12	0.0299	0.03997
Cr	52	3	He	0.033	0.041	1880.19	0.0299	0.03997
Cr	52	3	He	-0.069	0.0379	1760.17	0.0299	0.03997
Mn	55	3	He	0.26	0.006	280.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.372	0.0074	340.02	0.0128	0.002639
Mn	55	3	He	0.164	0.0047	220.01	0.0128	0.002639
Fe	57	3	He	2.319	0.0028	130.01	0.0006	0.001429
Fe	57	3	He	3.541	0.0035	160.01	0.0006	0.001429
Fe	57	3	He	4.953	0.0043	200.01	0.0006	0.001429
Co	59	3	He	0.079	0.0066	310.02	0.0563	0.002149
Co	59	3	He	0.031	0.0039	180.01	0.0563	0.002149
Co	59	3	He	0.027	0.0037	170.01	0.0563	0.002149
Ni	60	3	He	0.028	0.0031	240.01	0.0086	0.002834
Ni	60	3	He	-0.004	0.0028	220.01	0.0086	0.002834
Ni	60	3	He	0.317	0.0056	430.02	0.0086	0.002834
Cu	63	3	He	0.089	0.007	550.03	0.0257	0.004757
Cu	63	3	He	0.117	0.0078	610.04	0.0257	0.004757
Cu	63	3	He	0.106	0.0075	580.03	0.0257	0.004757
Zn	66	3	He	2.555	0.0113	880.06	0.0029	0.003818
Zn	66	3	He	2.184	0.0102	800.05	0.0029	0.003818
Zn	66	3	He	2.148	0.0101	780.05	0.0029	0.003818
As	75	3	He	0.006	0.0008	64.00	0.002	0.0008061
As	75	3	He	0.103	0.001	80.00	0.002	0.0008061
As	75	3	He	-0.141	0.0005	40.00	0.002	0.0008061
Sr	88	3	He	0.023	0.0012	100.00	0.009	0.0009645
Sr	88	3	He	0.195	0.0027	230.01	0.009	0.0009645
Sr	88	3	He	0.173	0.0025	210.01	0.009	0.0009645
Mo	98	3	He	0.036	0.0011	90.00	0.0219	0.0002706
Mo	98	3	He	-0.002	0.0002	20.00	0.0219	0.0002706
Mo	98	3	He	0.015	0.0006	50.00	0.0219	0.0002706
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	0.015	0.0013	110.00	0.0465	0.0006206
Ag	107	3	He	0.018	0.0014	120.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.051	0.0157	1340.11	0.0158	0.01648
Sn	120	3	He	-0.065	0.0155	1310.11	0.0158	0.01648
Sn	120	3	He	0.229	0.0201	1680.17	0.0158	0.01648
Sb	121	3	He	-0.002	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.014	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	0.293	0.0016	140.01	0.0048	0.0002317
Ba	137	3	He	0.32	0.0018	150.01	0.0048	0.0002317
Ba	137	3	He	0.251	0.0014	120.01	0.0048	0.0002317
Tl	205	3	He	0.017	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.016	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.01	0.0004	150.01	0.0247	0.0001339
Pb	208	3	He	0.008	0.0013	200.01	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	270.01	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	280.01	0.0327	0.00107
U	238	3	He	0.005	0.0003	100.00	0.0493	7.55E-05
U	238	3	He	0.005	0.0003	100.00	0.0493	7.55E-05
U	238	3	He	0.007	0.0004	130.00	0.0493	7.55E-05
Sc	45	1	No Gas			2468681.68		
Sc	45	1	No Gas			2406564.18		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2492478.24		
Ge	72	1	No Gas			1172720.37		
Ge	72	1	No Gas			1147774.98		
Ge	72	1	No Gas			1175553.03		
Sc	45	2	H2			183990.95		
Sc	45	2	H2			178826.34		
Sc	45	2	H2			183502.03		
Ge	72	2	H2			149384.10		
Ge	72	2	H2			145917.80		
Ge	72	2	H2			147896.83		
In	115	2	H2			381830.54		
In	115	2	H2			380263.39		
In	115	2	H2			384068.43		
Sc	45	3	He			46836.05		
Sc	45	3	He			45903.63		
Sc	45	3	He			46444.96		
Ge	72	3	He			78183.67		
Ge	72	3	He			78615.85		
Ge	72	3	He			77449.46		
In	115	3	He			85553.68		
In	115	3	He			84798.32		
In	115	3	He			83600.84		
Tb	159	3	He			387074.45		
Tb	159	3	He			390830.89		
Tb	159	3	He			390597.30		
Bi	209	3	He			300290.82		
Bi	209	3	He			303810.07		
Bi	209	3	He			305708.28		

Quantitation Report

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Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

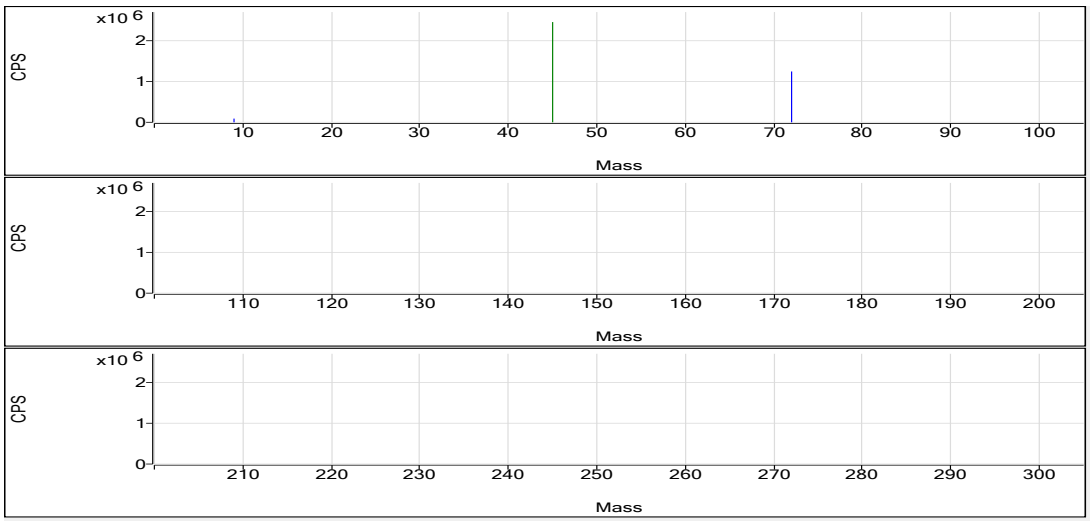
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.288	ppb	0.4	90946.77	0.0368	Pulse	0.5000	3
Se	78	72	H2	103.945	ppb	1.3	6799.39	0.0434	Pulse	1.5000	3
Na	23	45	He	121891.535	ppb	2.2	20565485.94	436.3572	Analog	0.1000	3
Mg	24	45	He	4963.965	ppb	2.2	419954.41	8.9104	Pulse	0.1000	3
Al	27	45	He	4954.568	ppb	1.8	136656.29	2.8992	Pulse	0.1000	3
K	39	45	He	4985.971	ppb	2.4	292219.25	6.2004	Pulse	0.1000	3
Ca	44	45	He	5138.172	ppb	1.1	16489.80	0.3498	Pulse	0.1000	3
Ti	47	45	He	508.586	ppb	4.6	12869.47	0.2732	Pulse	0.1000	3
V	51	45	He	510.399	ppb	2.5	526975.02	11.1818	Pulse	0.5000	3
Cr	52	45	He	480.351	ppb	2.3	679710.77	14.4220	Pulse	0.1000	3
Mn	55	45	He	494.291	ppb	1.8	299124.91	6.3463	Pulse	0.1000	3
Fe	57	45	He	4943.005	ppb	2.4	135416.85	2.8733	Pulse	0.1000	3
Co	59	45	He	484.032	ppb	2.3	1284057.77	27.2446	Pulse	0.1000	3
Ni	60	72	He	494.763	ppb	0.8	359092.86	4.2495	Pulse	0.1000	3
Cu	63	72	He	478.620	ppb	0.6	1038722.67	12.2914	Pulse	0.1000	3
Zn	66	72	He	507.897	ppb	0.3	125290.46	1.4826	Pulse	0.1000	3
As	75	72	He	504.442	ppb	0.6	87405.29	1.0343	Pulse	0.5000	3
Sr	88	115	He	50.686	ppb	1.7	38633.60	0.4556	Pulse	0.1000	3
Mo	98	115	He	50.678	ppb	2.9	94228.19	1.1115	Pulse	0.1000	3
Ag	107	115	He	50.340	ppb	3.2	198441.49	2.3408	Pulse	0.1000	3
Cd	111	115	He	51.105	ppb	2.3	23167.88	0.2733	Pulse	0.5000	3
Sn	120	115	He	101.109	ppb	2.4	136832.19	1.6139	Pulse	0.1000	3
Sb	121	115	He	102.617	ppb	2.0	129259.87	1.5245	Pulse	0.1000	3
Ba	137	115	He	516.359	ppb	2.4	210126.43	2.4784	Pulse	0.1000	3
Tl	205	159	He	103.722	ppb	0.7	997252.36	2.5648	Pulse	0.1000	3
Pb	208	159	He	52.086	ppb	1.2	663243.12	1.7058	Pulse	0.1000	3
U	238	209	He	51.202	ppb	0.2	763445.82	2.5223	Pulse	0.1000	3

ISTD Table:

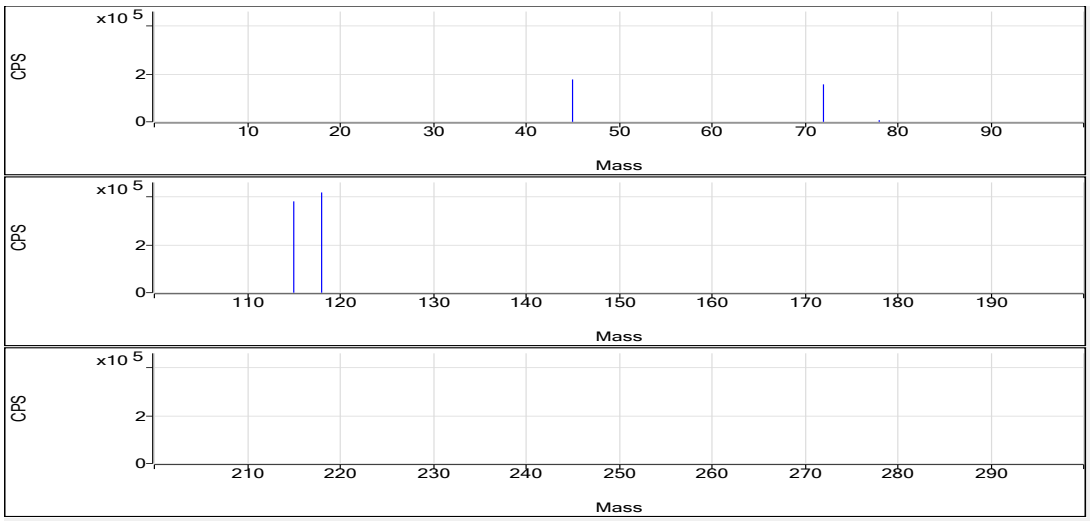
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2468841.63	0.2	102.9	Analog	0.1000	3
No Gas	Ge	72	1252136.46	0.1	108.6	Pulse	0.1000	3
H2	Sc	45	177367.10	0.7	94.8	Pulse	0.1000	3
H2	Ge	72	156799.30	0.2	95.8	Pulse	0.1000	3
H2	In	115	382324.99	0.7	98.3	Pulse	0.1000	3
He	Sc	45	47147.26	2.5	101.1	Pulse	0.1000	3
He	Ge	72	84505.88	0.8	104.1	Pulse	0.1000	3
He	In	115	84819.34	2.7	98.4	Pulse	0.1000	3
He	Tb	159	388836.47	0.9	97.5	Pulse	0.1000	3
He	Bi	209	302678.48	0.7	97.9	Pulse	0.1000	3

No Gas

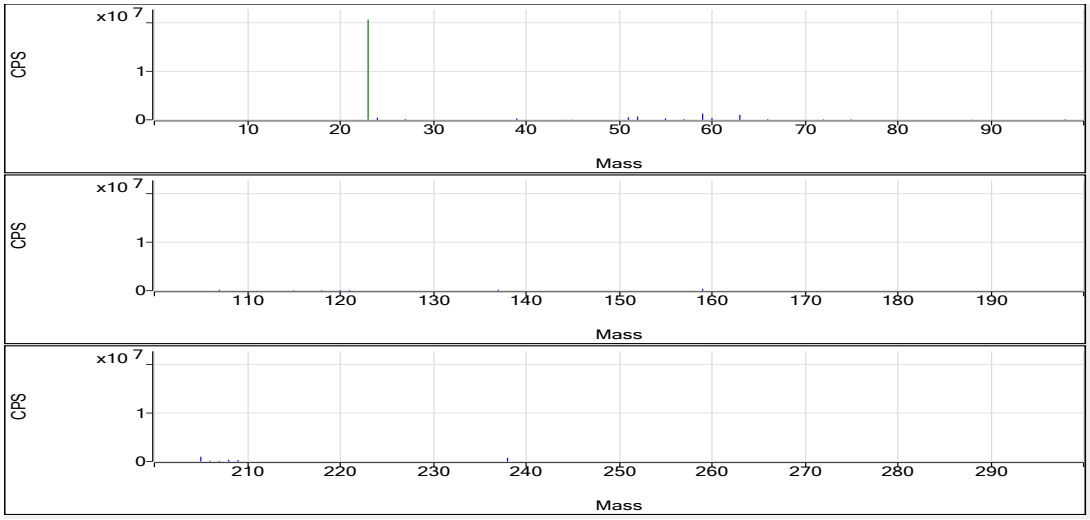


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.247	0.0368	91036.68	0.0008	4.685E-06
Be	9	1	No Gas	48.514	0.037	91189.72	0.0008	4.685E-06
Be	9	1	No Gas	48.102	0.0367	90613.92	0.0008	4.685E-06
Se	78	2	H2	102.431	0.0427	6713.58	0.0004	1.219E-05
Se	78	2	H2	104.612	0.0436	6824.29	0.0004	1.219E-05
Se	78	2	H2	104.792	0.0437	6860.31	0.0004	1.219E-05
Na	23	3	He	119276.177	427.0019	20645989.69	0.0036	0.3452
Na	23	3	He	121705.687	435.6924	20515398.44	0.0036	0.3452
Na	23	3	He	124692.74	446.3772	20535069.69	0.0036	0.3452
Mg	24	3	He	4840.19	8.6884	420091.17	0.0018	0.003497
Mg	24	3	He	5002.472	8.9795	422818.74	0.0018	0.003497
Mg	24	3	He	5049.232	9.0634	416953.31	0.0018	0.003497
Al	27	3	He	4852.214	2.8394	137285.90	0.0006	0.0006432
Al	27	3	He	5011.435	2.9325	138082.64	0.0006	0.0006432
Al	27	3	He	5000.054	2.9258	134600.32	0.0006	0.0006432
K	39	3	He	4856.559	6.0497	292508.73	0.0012	0.3951
K	39	3	He	5002.36	6.2194	292854.41	0.0012	0.3951
K	39	3	He	5098.995	6.332	291294.61	0.0012	0.3951
Ca	44	3	He	5072.773	0.3454	16699.99	0.0001	0.002715
Ca	44	3	He	5169.169	0.3519	16569.98	0.0001	0.002715
Ca	44	3	He	5172.575	0.3521	16199.44	0.0001	0.002715
Ti	47	3	He	491.201	0.2638	12755.97	0.0005	7.003E-05
Ti	47	3	He	499.646	0.2684	12635.98	0.0005	7.003E-05
Ti	47	3	He	534.912	0.2873	13216.47	0.0005	7.003E-05
V	51	3	He	496.095	10.8691	525532.25	0.0219	0.02486
V	51	3	He	514.245	11.2658	530473.00	0.0219	0.02486
V	51	3	He	520.856	11.4103	524919.81	0.0219	0.02486
Cr	52	3	He	471.498	14.157	684504.83	0.0299	0.03997
Cr	52	3	He	476.559	14.3085	673742.96	0.0299	0.03997
Cr	52	3	He	492.995	14.8006	680884.52	0.0299	0.03997
Mn	55	3	He	484.211	6.2169	300595.56	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	497.503	6.3875	300768.94	0.0128	0.002639
Mn	55	3	He	501.16	6.4345	296010.23	0.0128	0.002639
Fe	57	3	He	4805.301	2.7933	135057.27	0.0006	0.001429
Fe	57	3	He	5003.346	2.9083	136944.08	0.0006	0.001429
Fe	57	3	He	5020.368	2.9182	134249.21	0.0006	0.001429
Co	59	3	He	471.322	26.5292	1282717.01	0.0563	0.002149
Co	59	3	He	489.425	27.5481	1297153.81	0.0563	0.002149
Co	59	3	He	491.35	27.6564	1272302.48	0.0563	0.002149
Ni	60	3	He	498.559	4.282	360924.84	0.0086	0.002834
Ni	60	3	He	490.649	4.2141	359144.29	0.0086	0.002834
Ni	60	3	He	495.081	4.2522	357209.45	0.0086	0.002834
Cu	63	3	He	479.947	12.3255	1038892.17	0.0257	0.004757
Cu	63	3	He	480.561	12.3413	1051766.31	0.0257	0.004757
Cu	63	3	He	475.352	12.2076	1025509.52	0.0257	0.004757
Zn	66	3	He	509.471	1.4872	125353.41	0.0029	0.003818
Zn	66	3	He	507.852	1.4825	126342.78	0.0029	0.003818
Zn	66	3	He	506.368	1.4782	124175.19	0.0029	0.003818
As	75	3	He	504.656	1.0348	87219.60	0.002	0.0008061
As	75	3	He	501.29	1.0279	87599.76	0.002	0.0008061
As	75	3	He	507.379	1.0404	87396.50	0.002	0.0008061
Sr	88	3	He	49.731	0.447	39064.81	0.009	0.0009645
Sr	88	3	He	51.293	0.4611	38733.75	0.009	0.0009645
Sr	88	3	He	51.033	0.4587	38102.23	0.009	0.0009645
Mo	98	3	He	49.033	1.0754	93972.57	0.0219	0.0002706
Mo	98	3	He	51.756	1.1351	95362.32	0.0219	0.0002706
Mo	98	3	He	51.244	1.1239	93349.67	0.0219	0.0002706
Ag	107	3	He	48.525	2.2564	197173.96	0.0465	0.0006206
Ag	107	3	He	51.663	2.4023	201819.33	0.0465	0.0006206
Ag	107	3	He	50.833	2.3637	196331.19	0.0465	0.0006206
Cd	111	3	He	49.772	0.2661	23255.38	0.0053	0
Cd	111	3	He	51.677	0.2763	23213.28	0.0053	0
Cd	111	3	He	51.867	0.2773	23034.99	0.0053	0
Sn	120	3	He	98.334	1.57	137196.41	0.0158	0.01648
Sn	120	3	He	102.711	1.6392	137710.62	0.0158	0.01648
Sn	120	3	He	102.283	1.6324	135589.55	0.0158	0.01648
Sb	121	3	He	100.3	1.4901	130209.65	0.0149	0.0002698
Sb	121	3	He	103.437	1.5367	129098.64	0.0149	0.0002698
Sb	121	3	He	104.113	1.5467	128471.33	0.0149	0.0002698
Ba	137	3	He	501.831	2.4087	210482.63	0.0048	0.0002317
Ba	137	3	He	522.746	2.5091	210791.40	0.0048	0.0002317
Ba	137	3	He	524.5	2.5175	209105.25	0.0048	0.0002317
Tl	205	3	He	103.811	2.567	991142.49	0.0247	0.0001339
Tl	205	3	He	102.945	2.5456	999879.52	0.0247	0.0001339
Tl	205	3	He	104.41	2.5818	1000735.06	0.0247	0.0001339
Pb	208	3	He	52.44	1.7174	354985.11	0.0327	0.00107
Pb	208	3	He	51.379	1.6827	352823.08	0.0327	0.00107
Pb	208	3	He	52.439	1.7174	353429.76	0.0327	0.00107
U	238	3	He	51.086	2.5166	756582.88	0.0493	7.55E-05
U	238	3	He	51.249	2.5246	769009.29	0.0493	7.55E-05
U	238	3	He	51.271	2.5257	764745.30	0.0493	7.55E-05
Sc	45	1	No Gas			2473363.24		
Sc	45	1	No Gas			2463870.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2469291.21		
Ge	72	1	No Gas			1254117.09		
Ge	72	1	No Gas			1251372.40		
Ge	72	1	No Gas			1250919.90		
Sc	45	2	H2			175985.27		
Sc	45	2	H2			178210.29		
Sc	45	2	H2			177905.74		
Ge	72	2	H2			157106.26		
Ge	72	2	H2			156367.95		
Ge	72	2	H2			156923.69		
In	115	2	H2			383543.86		
In	115	2	H2			384140.23		
In	115	2	H2			379290.89		
Sc	45	3	He			48351.05		
Sc	45	3	He			47086.89		
Sc	45	3	He			46003.85		
Ge	72	3	He			84288.02		
Ge	72	3	He			85223.46		
Ge	72	3	He			84006.15		
In	115	3	He			88129.19		
In	115	3	He			84739.25		
In	115	3	He			83782.55		
Tb	159	3	He			386108.24		
Tb	159	3	He			392790.66		
Tb	159	3	He			387610.50		
Bi	209	3	He			300640.27		
Bi	209	3	He			304608.39		
Bi	209	3	He			302786.77		

Quantitation Report

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Sample Name	LCSD 410-403332/3-A
Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

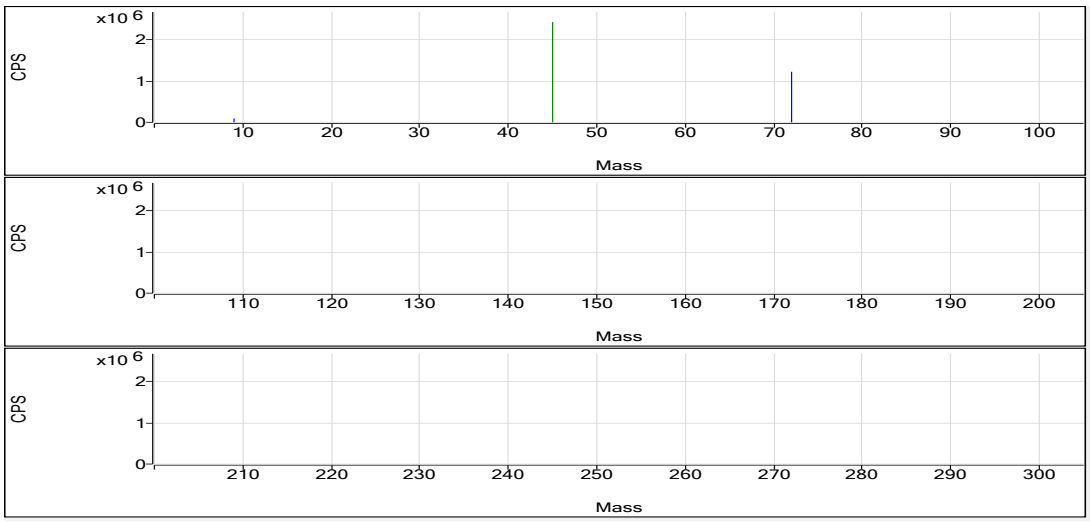
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.701	ppb	0.1	92503.44	0.0379	Pulse	0.5000	3
Se	78	72	H2	106.190	ppb	1.7	6821.85	0.0443	Pulse	1.5000	3
Na	23	45	He	118553.979	ppb	1.9	19789254.70	424.4186	Analog	0.1000	3
Mg	24	45	He	5103.746	ppb	1.1	427204.96	9.1613	Pulse	0.1000	3
Al	27	45	He	5059.800	ppb	3.2	138036.02	2.9608	Pulse	0.1000	3
K	39	45	He	5074.974	ppb	2.3	293922.33	6.3040	Pulse	0.1000	3
Ca	44	45	He	5193.343	ppb	4.5	16486.51	0.3535	Pulse	0.1000	3
Ti	47	45	He	515.430	ppb	5.2	12902.80	0.2768	Pulse	0.1000	3
V	51	45	He	520.897	ppb	1.9	532065.21	11.4112	Pulse	0.5000	3
Cr	52	45	He	491.502	ppb	2.0	688015.67	14.7559	Pulse	0.1000	3
Mn	55	45	He	509.554	ppb	0.5	305102.93	6.5422	Pulse	0.1000	3
Fe	57	45	He	5076.638	ppb	1.9	137591.03	2.9509	Pulse	0.1000	3
Co	59	45	He	496.784	ppb	2.0	1303776.39	27.9623	Pulse	0.1000	3
Ni	60	72	He	506.383	ppb	0.2	361862.05	4.3492	Pulse	0.1000	3
Cu	63	72	He	495.920	ppb	0.4	1059628.57	12.7355	Pulse	0.1000	3
Zn	66	72	He	518.796	ppb	1.1	125996.69	1.5144	Pulse	0.1000	3
As	75	72	He	517.349	ppb	0.1	88259.78	1.0608	Pulse	0.5000	3
Sr	88	115	He	51.897	ppb	2.9	38723.74	0.4665	Pulse	0.1000	3
Mo	98	115	He	52.924	ppb	1.8	96359.71	1.1607	Pulse	0.1000	3
Ag	107	115	He	52.025	ppb	0.6	200836.51	2.4191	Pulse	0.1000	3
Cd	111	115	He	53.257	ppb	2.2	23640.00	0.2848	Pulse	0.5000	3
Sn	120	115	He	105.695	ppb	1.5	139996.13	1.6863	Pulse	0.1000	3
Sb	121	115	He	106.626	ppb	0.9	131507.35	1.5840	Pulse	0.1000	3
Ba	137	115	He	536.903	ppb	1.7	213939.95	2.5770	Pulse	0.1000	3
Tl	205	159	He	105.998	ppb	1.0	1015389.12	2.6211	Pulse	0.1000	3
Pb	208	159	He	53.219	ppb	1.1	675188.53	1.7429	Pulse	0.1000	3
U	238	209	He	52.992	ppb	0.6	782443.74	2.6105	Pulse	0.1000	3

ISTD Table:

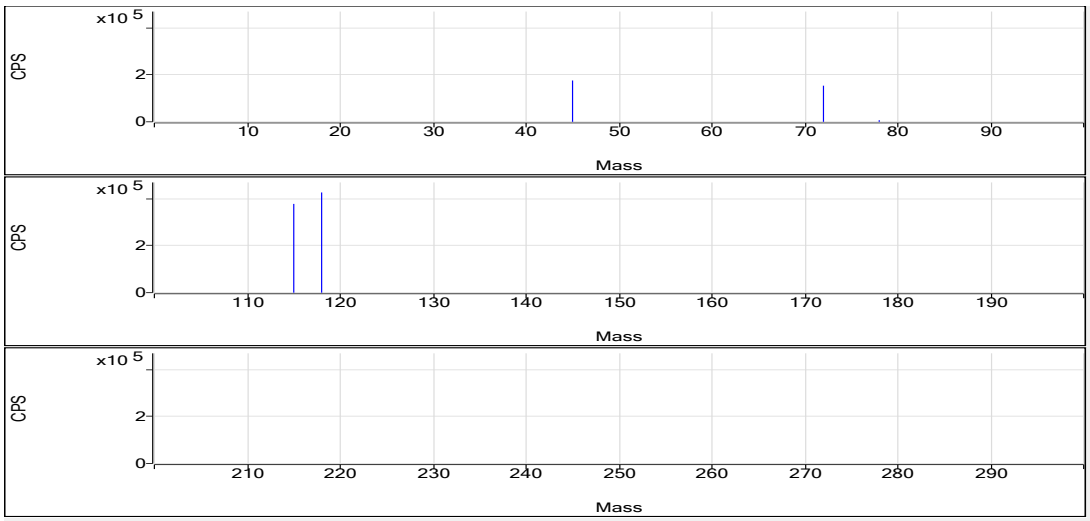
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2439684.96	0.4	101.7	Analog	0.1000	3
No Gas	Ge	72	1230390.71	0.6	106.7	Pulse	0.1000	3
H2	Sc	45	176198.85	1.0	94.2	Pulse	0.1000	3
H2	Ge	72	153994.78	1.3	94.1	Pulse	0.1000	3
H2	In	115	378516.66	1.0	97.3	Pulse	0.1000	3
He	Sc	45	46638.96	2.1	100.0	Pulse	0.1000	3
He	Ge	72	83202.19	0.1	102.5	Pulse	0.1000	3
He	In	115	83022.52	0.5	96.3	Pulse	0.1000	3
He	Tb	159	387413.50	0.8	97.2	Pulse	0.1000	3
He	Bi	209	299738.04	0.5	96.9	Pulse	0.1000	3

No Gas

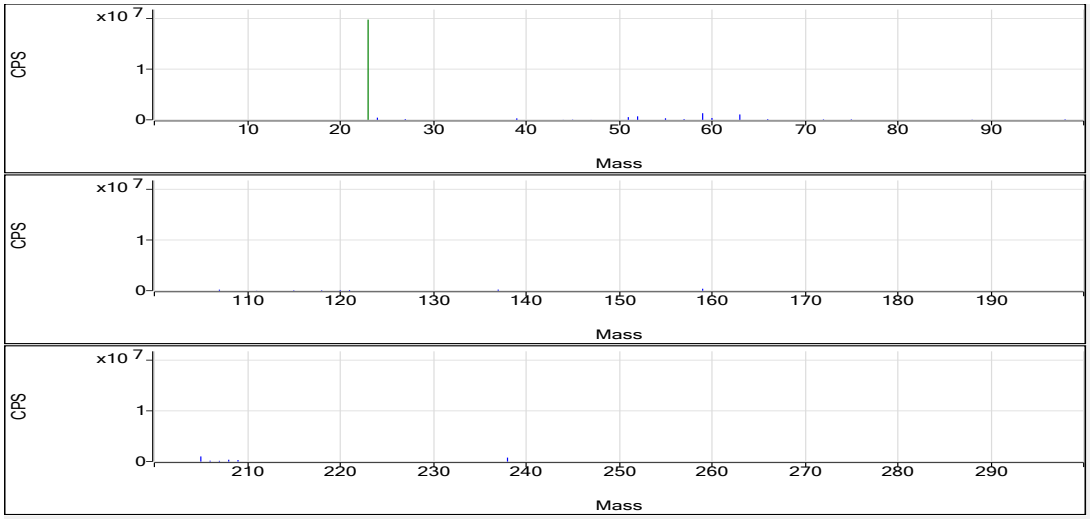


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.686	0.0379	92102.95	0.0008	4.685E-06
Be	9	1	No Gas	49.745	0.0379	92584.17	0.0008	4.685E-06
Be	9	1	No Gas	49.674	0.0379	92823.21	0.0008	4.685E-06
Se	78	2	H2	108.004	0.0451	6872.32	0.0004	1.219E-05
Se	78	2	H2	106.138	0.0443	6917.01	0.0004	1.219E-05
Se	78	2	H2	104.429	0.0436	6676.23	0.0004	1.219E-05
Na	23	3	He	115964.968	415.1575	19810902.20	0.0036	0.3452
Na	23	3	He	119549.211	427.9785	19838808.45	0.0036	0.3452
Na	23	3	He	120147.758	430.1196	19718053.46	0.0036	0.3452
Mg	24	3	He	5040.465	9.0477	431747.85	0.0018	0.003497
Mg	24	3	He	5118.031	9.1869	425855.46	0.0018	0.003497
Mg	24	3	He	5152.741	9.2492	424011.56	0.0018	0.003497
Al	27	3	He	4930.183	2.885	137667.98	0.0006	0.0006432
Al	27	3	He	5006.521	2.9296	135802.18	0.0006	0.0006432
Al	27	3	He	5242.697	3.0678	140637.90	0.0006	0.0006432
K	39	3	He	4943.567	6.151	293519.25	0.0012	0.3951
K	39	3	He	5106.762	6.341	293935.27	0.0012	0.3951
K	39	3	He	5174.593	6.42	294312.48	0.0012	0.3951
Ca	44	3	He	5211.992	0.3548	16930.46	0.0001	0.002715
Ca	44	3	He	4950.885	0.3372	15628.79	0.0001	0.002715
Ca	44	3	He	5417.152	0.3687	16900.27	0.0001	0.002715
Ti	47	3	He	485.21	0.2606	12435.72	0.0005	7.003E-05
Ti	47	3	He	536.089	0.2879	13346.55	0.0005	7.003E-05
Ti	47	3	He	524.992	0.282	12926.13	0.0005	7.003E-05
V	51	3	He	509.66	11.1656	532811.69	0.0219	0.02486
V	51	3	He	523.71	11.4727	531814.94	0.0219	0.02486
V	51	3	He	529.321	11.5954	531569.00	0.0219	0.02486
Cr	52	3	He	481.288	14.4501	689544.13	0.0299	0.03997
Cr	52	3	He	492.805	14.7949	685814.05	0.0299	0.03997
Cr	52	3	He	500.413	15.0227	688688.82	0.0299	0.03997
Mn	55	3	He	506.793	6.5068	310496.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	511.37	6.5655	304341.66	0.0128	0.002639
Mn	55	3	He	510.499	6.5543	300471.13	0.0128	0.002639
Fe	57	3	He	4972.014	2.8901	137913.81	0.0006	0.001429
Fe	57	3	He	5094.093	2.961	137258.52	0.0006	0.001429
Fe	57	3	He	5163.806	3.0016	137600.75	0.0006	0.001429
Co	59	3	He	485.983	27.3544	1305324.75	0.0563	0.002149
Co	59	3	He	499.429	28.1112	1303084.90	0.0563	0.002149
Co	59	3	He	504.938	28.4212	1302919.51	0.0563	0.002149
Ni	60	3	He	505.893	4.345	361816.17	0.0086	0.002834
Ni	60	3	He	505.737	4.3436	361618.59	0.0086	0.002834
Ni	60	3	He	507.52	4.359	362151.40	0.0086	0.002834
Cu	63	3	He	497.538	12.7771	1063974.12	0.0257	0.004757
Cu	63	3	He	496.303	12.7454	1061084.12	0.0257	0.004757
Cu	63	3	He	493.918	12.6842	1053827.48	0.0257	0.004757
Zn	66	3	He	520.741	1.52	126574.96	0.0029	0.003818
Zn	66	3	He	512.249	1.4953	124486.50	0.0029	0.003818
Zn	66	3	He	523.397	1.5277	126928.62	0.0029	0.003818
As	75	3	He	517.717	1.0615	88396.62	0.002	0.0008061
As	75	3	He	517.722	1.0616	88376.61	0.002	0.0008061
As	75	3	He	516.607	1.0593	88006.13	0.002	0.0008061
Sr	88	3	He	53.641	0.4821	39806.96	0.009	0.0009645
Sr	88	3	He	51.151	0.4598	38242.52	0.009	0.0009645
Sr	88	3	He	50.897	0.4575	38121.74	0.009	0.0009645
Mo	98	3	He	54.003	1.1844	97789.09	0.0219	0.0002706
Mo	98	3	He	52.156	1.1439	95141.32	0.0219	0.0002706
Mo	98	3	He	52.614	1.1539	96148.73	0.0219	0.0002706
Ag	107	3	He	52.343	2.4339	200959.31	0.0465	0.0006206
Ag	107	3	He	51.947	2.4155	200907.83	0.0465	0.0006206
Ag	107	3	He	51.785	2.4079	200642.40	0.0465	0.0006206
Cd	111	3	He	54.459	0.2912	24042.67	0.0053	0
Cd	111	3	He	53.246	0.2847	23680.07	0.0053	0
Cd	111	3	He	52.066	0.2784	23197.25	0.0053	0
Sn	120	3	He	107.096	1.7085	141062.61	0.0158	0.01648
Sn	120	3	He	105.983	1.6909	140638.04	0.0158	0.01648
Sn	120	3	He	104.005	1.6596	138287.74	0.0158	0.01648
Sb	121	3	He	107.567	1.598	131943.48	0.0149	0.0002698
Sb	121	3	He	105.727	1.5707	130641.89	0.0149	0.0002698
Sb	121	3	He	106.583	1.5834	131936.68	0.0149	0.0002698
Ba	137	3	He	544.527	2.6136	215797.83	0.0048	0.0002317
Ba	137	3	He	539.759	2.5907	215483.26	0.0048	0.0002317
Ba	137	3	He	526.423	2.5267	210538.77	0.0048	0.0002317
Tl	205	3	He	105.67	2.613	1015071.39	0.0247	0.0001339
Tl	205	3	He	107.202	2.6508	1017861.78	0.0247	0.0001339
Tl	205	3	He	105.122	2.5994	1013234.20	0.0247	0.0001339
Pb	208	3	He	53.143	1.7404	359653.35	0.0327	0.00107
Pb	208	3	He	53.856	1.7638	363692.96	0.0327	0.00107
Pb	208	3	He	52.659	1.7246	357004.25	0.0327	0.00107
U	238	3	He	52.668	2.5945	781695.61	0.0493	7.55E-05
U	238	3	He	53.264	2.6239	783901.24	0.0493	7.55E-05
U	238	3	He	53.045	2.6131	781734.36	0.0493	7.55E-05
Sc	45	1	No Gas			2429881.06		
Sc	45	1	No Gas			2439697.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2449475.90		
Ge	72	1	No Gas			1224121.08		
Ge	72	1	No Gas			1239126.23		
Ge	72	1	No Gas			1227924.83		
Sc	45	2	H2			175052.15		
Sc	45	2	H2			178329.94		
Sc	45	2	H2			175214.45		
Ge	72	2	H2			152524.99		
Ge	72	2	H2			156215.23		
Ge	72	2	H2			153244.12		
In	115	2	H2			378804.84		
In	115	2	H2			382219.80		
In	115	2	H2			374525.35		
Sc	45	3	He			47719.00		
Sc	45	3	He			46354.68		
Sc	45	3	He			45843.19		
Ge	72	3	He			83272.07		
Ge	72	3	He			83252.33		
Ge	72	3	He			83082.18		
In	115	3	He			83329.35		
In	115	3	He			83923.16		
In	115	3	He			84064.47		
Tb	159	3	He			388472.65		
Tb	159	3	He			383975.81		
Tb	159	3	He			389792.03		
Bi	209	3	He			301292.50		
Bi	209	3	He			298757.28		
Bi	209	3	He			299164.33		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

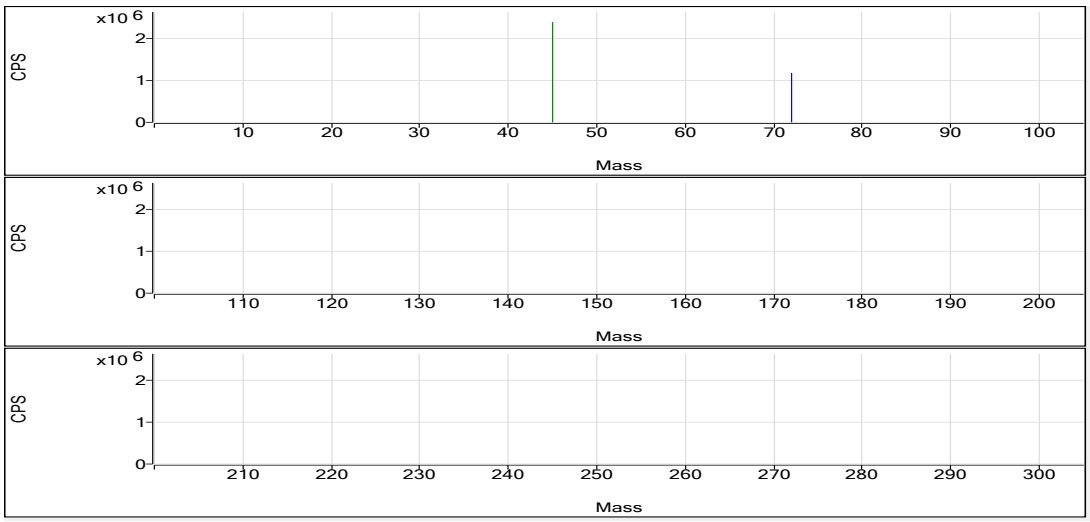
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.026	ppb	20.7	58.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.104	ppb	30.0	8.22	0.0001	Pulse	1.5000	3
Na	23	45	He	38.609	ppb	5.5	21960.30	0.4833	Pulse	0.1000	3
Mg	24	45	He	1.155	ppb	40.5	253.34	0.0056	Pulse	0.1000	3
Al	27	45	He	1.288	ppb	74.9	63.33	0.0014	Pulse	0.1000	3
K	39	45	He	4.505	ppb	25.7	18191.78	0.4003	Pulse	0.1000	3
Ca	44	45	He	6.593	ppb	253.9	143.34	0.0032	Pulse	0.1000	3
Ti	47	45	He	0.142	ppb	165.9	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.393	ppb	28.8	1520.09	0.0335	Pulse	0.5000	3
Cr	52	45	He	-0.046	ppb	N/A	1753.50	0.0386	Pulse	0.1000	3
Mn	55	45	He	0.274	ppb	41.8	280.01	0.0062	Pulse	0.1000	3
Fe	57	45	He	2.080	ppb	64.2	120.01	0.0026	Pulse	0.1000	3
Co	59	45	He	0.109	ppb	9.2	376.69	0.0083	Pulse	0.1000	3
Ni	60	72	He	0.039	ppb	273.2	253.35	0.0032	Pulse	0.1000	3
Cu	63	72	He	0.086	ppb	37.6	556.70	0.0070	Pulse	0.1000	3
Zn	66	72	He	1.869	ppb	18.7	740.05	0.0093	Pulse	0.1000	3
As	75	72	He	0.225	ppb	46.2	101.33	0.0013	Pulse	0.5000	3
Sr	88	115	He	-0.032	ppb	N/A	56.67	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.062	ppb	9.6	136.68	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	293.9	70.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	67.9	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.010	ppb	N/A	1370.12	0.0163	Pulse	0.1000	3
Sb	121	115	He	0.030	ppb	47.6	60.00	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.126	ppb	54.6	70.00	0.0008	Pulse	0.1000	3
Tl	205	159	He	0.165	ppb	12.8	1620.16	0.0042	Pulse	0.1000	3
Pb	208	159	He	0.015	ppb	57.8	603.37	0.0016	Pulse	0.1000	3
U	238	209	He	0.057	ppb	0.8	863.40	0.0029	Pulse	0.1000	3

ISTD Table:

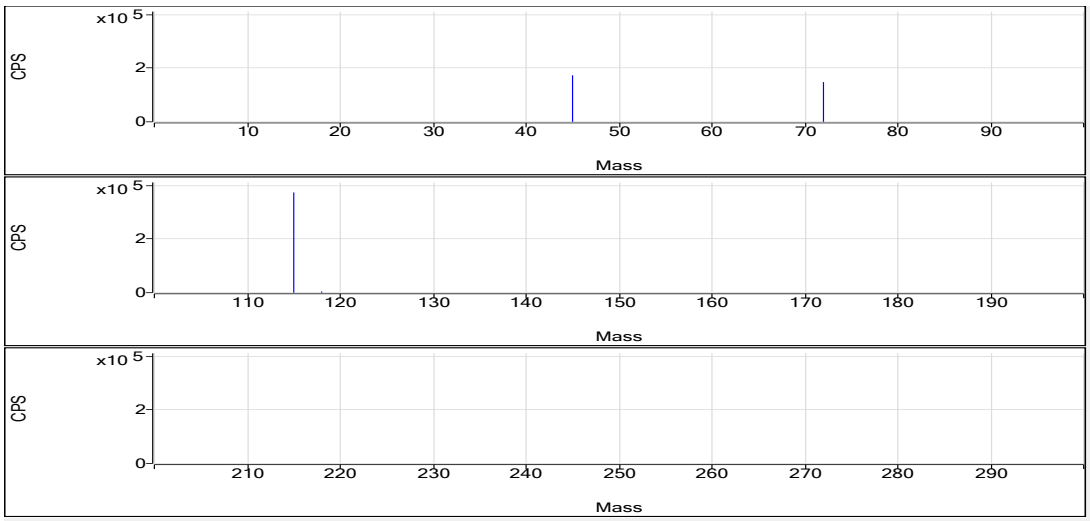
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2398702.57	1.2	100.0	Analog	0.1000	3
No Gas	Ge	72	1181536.99	0.6	102.4	Pulse	0.1000	3
H2	Sc	45	173719.92	0.3	92.9	Pulse	0.1000	3
H2	Ge	72	148356.83	0.2	90.6	Pulse	0.1000	3
H2	In	115	374396.72	0.1	96.2	Pulse	0.1000	3
He	Sc	45	45444.93	0.8	97.4	Pulse	0.1000	3
He	Ge	72	79937.00	0.5	98.5	Pulse	0.1000	3
He	In	115	83862.29	1.5	97.3	Pulse	0.1000	3
He	Tb	159	384137.60	0.3	96.4	Pulse	0.1000	3
He	Bi	209	301074.94	0.5	97.3	Pulse	0.1000	3

No Gas

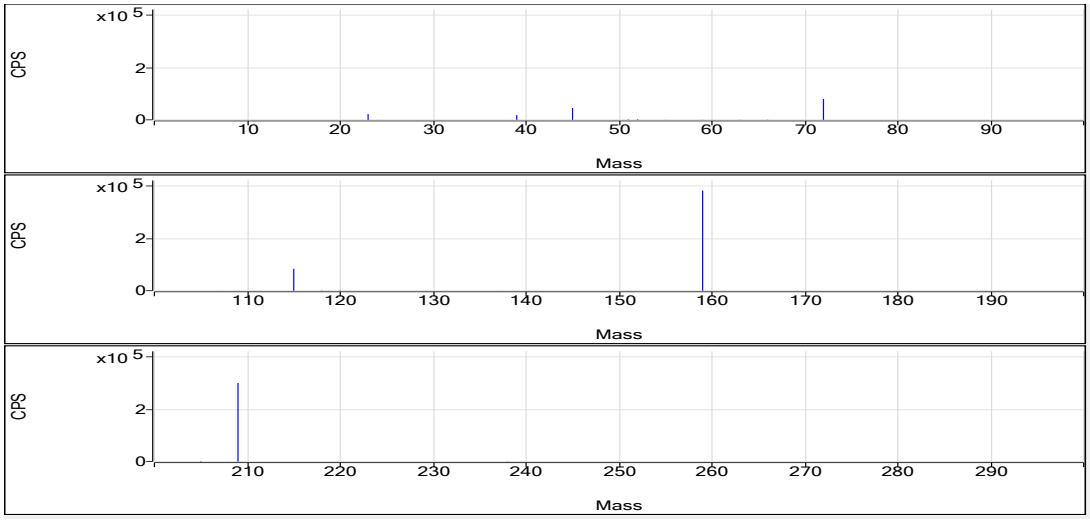


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	56.00	0.0008	4.685E-06
Be	9	1	No Gas	0.031	0	68.00	0.0008	4.685E-06
Be	9	1	No Gas	0.021	0	50.00	0.0008	4.685E-06
Se	78	2	H2	0.068	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.121	0.0001	9.33	0.0004	1.219E-05
Se	78	2	H2	0.122	0.0001	9.33	0.0004	1.219E-05
Na	23	3	He	40.945	0.4916	22197.20	0.0036	0.3452
Na	23	3	He	38.114	0.4815	21817.03	0.0036	0.3452
Na	23	3	He	36.769	0.4767	21866.68	0.0036	0.3452
Mg	24	3	He	0.89	0.0051	230.01	0.0018	0.003497
Mg	24	3	He	0.88	0.0051	230.01	0.0018	0.003497
Mg	24	3	He	1.696	0.0065	300.01	0.0018	0.003497
Al	27	3	He	2.308	0.002	90.00	0.0006	0.0006432
Al	27	3	He	1.164	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	0.391	0.0009	40.00	0.0006	0.0006432
K	39	3	He	5.214	0.4011	18111.77	0.0012	0.3951
K	39	3	He	5.133	0.401	18171.69	0.0012	0.3951
K	39	3	He	3.167	0.3988	18291.89	0.0012	0.3951
Ca	44	3	He	22.107	0.0042	190.01	0.0001	0.002715
Ca	44	3	He	8.819	0.0033	150.01	0.0001	0.002715
Ca	44	3	He	-11.147	0.002	90.00	0.0001	0.002715
Ti	47	3	He	0.282	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.276	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.486	0.0355	1602.10	0.0219	0.02486
V	51	3	He	0.428	0.0342	1550.09	0.0219	0.02486
V	51	3	He	0.267	0.0307	1408.08	0.0219	0.02486
Cr	52	3	He	-0.003	0.0399	1800.18	0.0299	0.03997
Cr	52	3	He	-0.038	0.0388	1760.16	0.0299	0.03997
Cr	52	3	He	-0.097	0.0371	1700.16	0.0299	0.03997
Mn	55	3	He	0.209	0.0053	240.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.207	0.0053	240.01	0.0128	0.002639
Mn	55	3	He	0.406	0.0078	360.02	0.0128	0.002639
Fe	57	3	He	0.59	0.0018	80.00	0.0006	0.001429
Fe	57	3	He	2.479	0.0029	130.01	0.0006	0.001429
Fe	57	3	He	3.169	0.0033	150.01	0.0006	0.001429
Co	59	3	He	0.119	0.0089	400.02	0.0563	0.002149
Co	59	3	He	0.099	0.0077	350.02	0.0563	0.002149
Co	59	3	He	0.109	0.0083	380.02	0.0563	0.002149
Ni	60	3	He	0.077	0.0035	280.01	0.0086	0.002834
Ni	60	3	He	0.12	0.0039	310.02	0.0086	0.002834
Ni	60	3	He	-0.081	0.0021	170.01	0.0086	0.002834
Cu	63	3	He	0.121	0.0079	630.05	0.0257	0.004757
Cu	63	3	He	0.058	0.0062	500.03	0.0257	0.004757
Cu	63	3	He	0.079	0.0068	540.03	0.0257	0.004757
Zn	66	3	He	1.476	0.0081	650.04	0.0029	0.003818
Zn	66	3	He	1.985	0.0096	770.05	0.0029	0.003818
Zn	66	3	He	2.146	0.0101	800.05	0.0029	0.003818
As	75	3	He	0.326	0.0015	118.00	0.002	0.0008061
As	75	3	He	0.118	0.001	84.00	0.002	0.0008061
As	75	3	He	0.233	0.0013	102.00	0.002	0.0008061
Sr	88	3	He	-0.026	0.0007	60.00	0.009	0.0009645
Sr	88	3	He	0.011	0.0011	90.00	0.009	0.0009645
Sr	88	3	He	-0.081	0.0002	20.00	0.009	0.0009645
Mo	98	3	He	0.06	0.0016	130.01	0.0219	0.0002706
Mo	98	3	He	0.069	0.0018	150.01	0.0219	0.0002706
Mo	98	3	He	0.058	0.0015	130.01	0.0219	0.0002706
Ag	107	3	He	0.021	0.0016	130.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0004	30.00	0.0465	0.0006206
Cd	111	3	He	0.023	0.0001	10.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Sn	120	3	He	-0.113	0.0147	1210.09	0.0158	0.01648
Sn	120	3	He	0.015	0.0167	1410.12	0.0158	0.01648
Sn	120	3	He	0.069	0.0176	1490.16	0.0158	0.01648
Sb	121	3	He	0.039	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.038	0.0008	70.00	0.0149	0.0002698
Sb	121	3	He	0.014	0.0005	40.00	0.0149	0.0002698
Ba	137	3	He	0.205	0.0012	100.01	0.0048	0.0002317
Ba	137	3	He	0.1	0.0007	60.00	0.0048	0.0002317
Ba	137	3	He	0.075	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.185	0.0047	1800.18	0.0247	0.0001339
Tl	205	3	He	0.143	0.0037	1410.14	0.0247	0.0001339
Tl	205	3	He	0.168	0.0043	1650.17	0.0247	0.0001339
Pb	208	3	He	0.026	0.0019	380.02	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	300.02	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	220.01	0.0327	0.00107
U	238	3	He	0.057	0.0029	870.06	0.0493	7.55E-05
U	238	3	He	0.057	0.0029	870.06	0.0493	7.55E-05
U	238	3	He	0.056	0.0028	850.07	0.0493	7.55E-05
Sc	45	1	No Gas			2381937.78		
Sc	45	1	No Gas			2381250.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2432919.49		
Ge	72	1	No Gas			1176385.92		
Ge	72	1	No Gas			1190084.36		
Ge	72	1	No Gas			1178140.69		
Sc	45	2	H2			174150.58		
Sc	45	2	H2			173068.57		
Sc	45	2	H2			173940.62		
Ge	72	2	H2			148422.37		
Ge	72	2	H2			148647.56		
Ge	72	2	H2			148000.57		
In	115	2	H2			374430.93		
In	115	2	H2			374728.78		
In	115	2	H2			374030.46		
Sc	45	3	He			45151.02		
Sc	45	3	He			45311.07		
Sc	45	3	He			45872.69		
Ge	72	3	He			80094.53		
Ge	72	3	He			80225.25		
Ge	72	3	He			79491.23		
In	115	3	He			82414.86		
In	115	3	He			84366.17		
In	115	3	He			84829.94		
Tb	159	3	He			383173.94		
Tb	159	3	He			385482.14		
Tb	159	3	He			383756.71		
Bi	209	3	He			302274.51		
Bi	209	3	He			301681.73		
Bi	209	3	He			299268.59		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

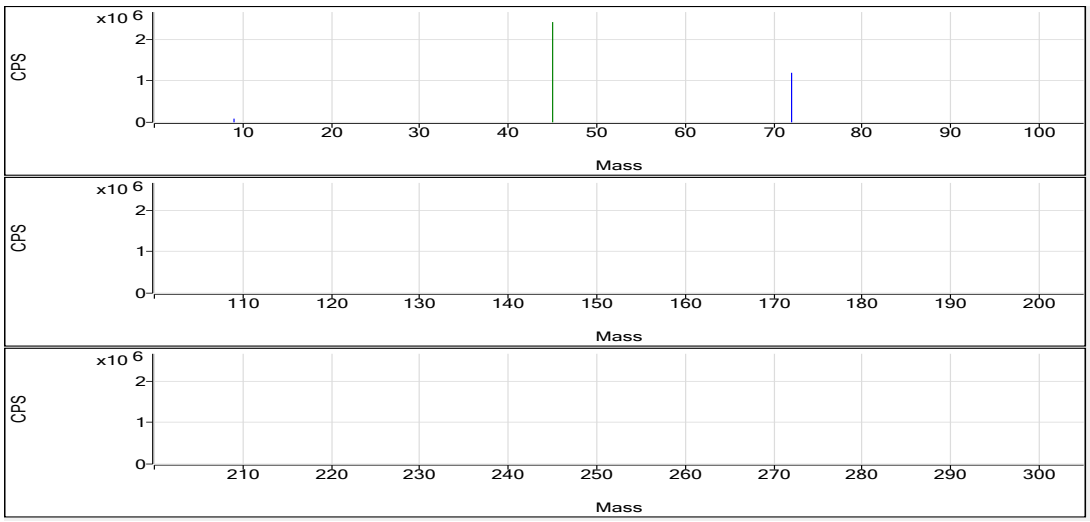
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.931	ppb	0.7	88607.46	0.0366	Pulse	0.5000	3
Se	78	72	H2	53.464	ppb	2.9	3339.51	0.0223	Pulse	1.5000	3
Na	23	45	He	4940.582	ppb	1.7	830449.26	18.0179	Pulse	0.1000	3
Mg	24	45	He	5081.692	ppb	1.5	420421.69	9.1217	Pulse	0.1000	3
Al	27	45	He	4977.818	ppb	2.4	134244.01	2.9128	Pulse	0.1000	3
K	39	45	He	5085.050	ppb	2.6	291070.94	6.3157	Pulse	0.1000	3
Ca	44	45	He	5117.338	ppb	5.1	16052.72	0.3484	Pulse	0.1000	3
Ti	47	45	He	5004.014	ppb	1.2	123847.91	2.6870	Pulse	0.1000	3
V	51	45	He	512.406	ppb	1.1	517417.01	11.2256	Pulse	0.5000	3
Cr	52	45	He	488.922	ppb	1.8	676528.58	14.6786	Pulse	0.1000	3
Mn	55	45	He	507.609	ppb	0.8	300402.82	6.5172	Pulse	0.1000	3
Fe	57	45	He	5088.236	ppb	0.7	136329.37	2.9576	Pulse	0.1000	3
Co	59	45	He	496.004	ppb	1.0	1286831.67	27.9184	Pulse	0.1000	3
Ni	60	72	He	518.717	ppb	1.8	361000.72	4.4551	Pulse	0.1000	3
Cu	63	72	He	494.038	ppb	1.8	1028065.01	12.6873	Pulse	0.1000	3
Zn	66	72	He	517.854	ppb	1.1	122495.97	1.5116	Pulse	0.1000	3
As	75	72	He	517.620	ppb	1.4	86004.84	1.0613	Pulse	0.5000	3
Sr	88	115	He	51.256	ppb	5.0	37988.56	0.4607	Pulse	0.1000	3
Mo	98	115	He	53.069	ppb	1.8	96000.56	1.1639	Pulse	0.1000	3
Ag	107	115	He	51.976	ppb	2.2	199337.76	2.4168	Pulse	0.1000	3
Cd	111	115	He	52.690	ppb	3.0	23234.68	0.2817	Pulse	0.5000	3
Sn	120	115	He	51.929	ppb	1.9	69028.85	0.8369	Pulse	0.1000	3
Sb	121	115	He	53.079	ppb	1.3	65056.58	0.7887	Pulse	0.1000	3
Ba	137	115	He	530.878	ppb	2.9	210147.75	2.5481	Pulse	0.1000	3
Tl	205	159	He	51.934	ppb	0.4	501432.21	1.2843	Pulse	0.1000	3
Pb	208	159	He	52.119	ppb	0.8	666437.34	1.7069	Pulse	0.1000	3
U	238	209	He	51.154	ppb	0.4	763406.99	2.5199	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2423327.78	1.0	101.0	Analog	0.1000	3
No Gas	Ge	72	1197271.28	0.9	103.8	Pulse	0.1000	3
H2	Sc	45	176191.30	0.3	94.2	Pulse	0.1000	3
H2	Ge	72	149699.38	0.7	91.4	Pulse	0.1000	3
H2	In	115	379121.40	0.8	97.4	Pulse	0.1000	3
He	Sc	45	46096.88	1.4	98.8	Pulse	0.1000	3
He	Ge	72	81043.22	1.2	99.8	Pulse	0.1000	3
He	In	115	82500.40	1.8	95.7	Pulse	0.1000	3
He	Tb	159	390438.41	0.1	98.0	Pulse	0.1000	3
He	Bi	209	302951.47	0.1	98.0	Pulse	0.1000	3

No Gas



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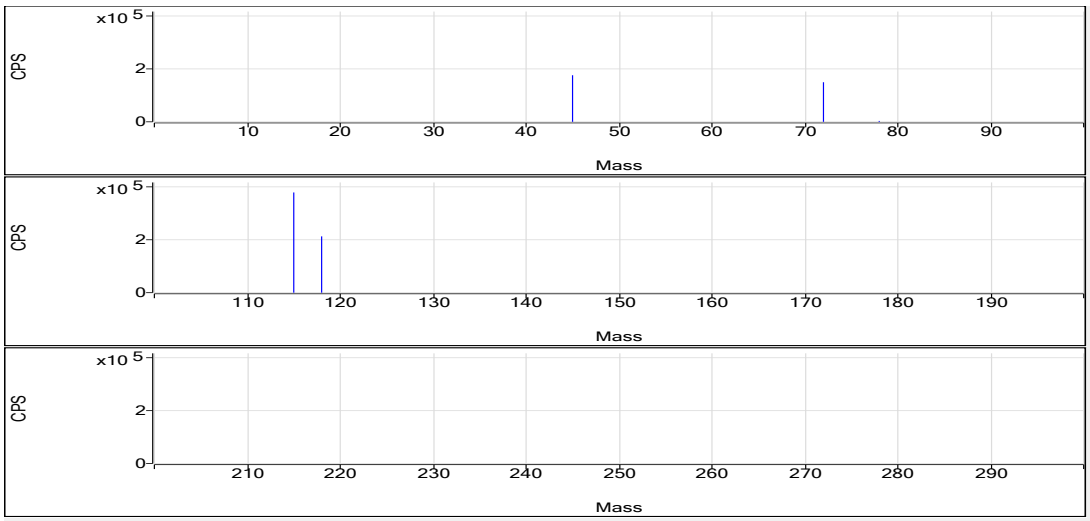
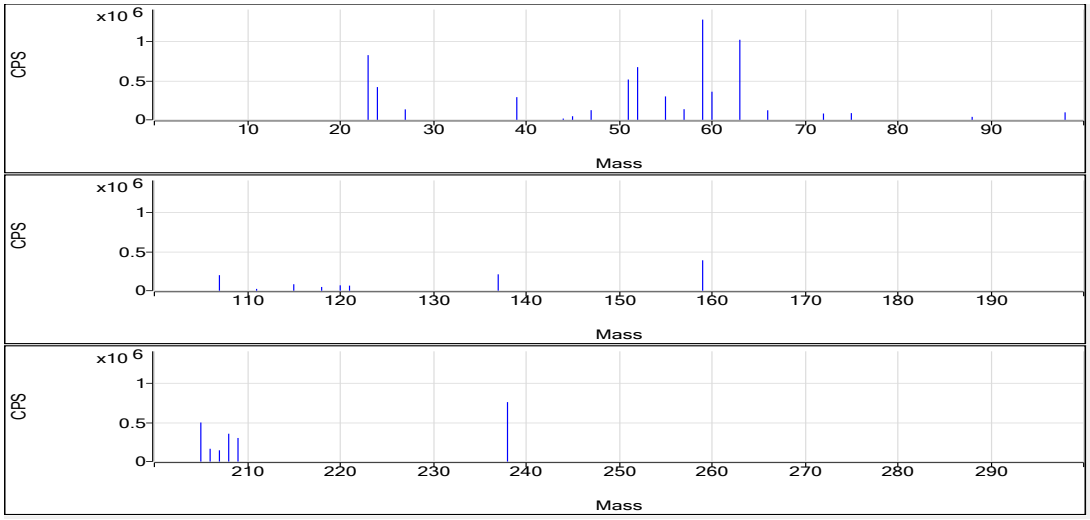


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.864	0.0365	89300.17	0.0008	4.685E-06
Be	9	1	No Gas	48.271	0.0368	88227.87	0.0008	4.685E-06
Be	9	1	No Gas	47.658	0.0364	88294.35	0.0008	4.685E-06
Se	78	2	H2	53.105	0.0222	3339.73	0.0004	1.219E-05
Se	78	2	H2	55.187	0.023	3421.75	0.0004	1.219E-05
Se	78	2	H2	52.101	0.0217	3257.04	0.0004	1.219E-05
Na	23	3	He	5030.913	18.341	836015.85	0.0036	0.3452
Na	23	3	He	4926.948	17.9691	824652.49	0.0036	0.3452
Na	23	3	He	4863.885	17.7435	830679.44	0.0036	0.3452
Mg	24	3	He	5147.844	9.2404	421193.94	0.0018	0.003497
Mg	24	3	He	5101.311	9.1569	420235.66	0.0018	0.003497
Mg	24	3	He	4995.921	8.9678	419835.46	0.0018	0.003497
Al	27	3	He	5050.535	2.9554	134711.77	0.0006	0.0006432
Al	27	3	He	5040.759	2.9497	135368.36	0.0006	0.0006432
Al	27	3	He	4842.162	2.8335	132651.89	0.0006	0.0006432
K	39	3	He	5201.246	6.451	294049.21	0.0012	0.3951
K	39	3	He	5109.118	6.3437	291132.59	0.0012	0.3951
K	39	3	He	4944.786	6.1524	288031.03	0.0012	0.3951
Ca	44	3	He	5347.65	0.364	16589.92	0.0001	0.002715
Ca	44	3	He	5169.06	0.3519	16149.45	0.0001	0.002715
Ca	44	3	He	4835.303	0.3293	15418.78	0.0001	0.002715
Ti	47	3	He	5031.015	2.7015	123137.94	0.0005	7.003E-05
Ti	47	3	He	5046.877	2.71	124368.92	0.0005	7.003E-05
Ti	47	3	He	4934.15	2.6495	124036.86	0.0005	7.003E-05
V	51	3	He	515.805	11.2999	515072.41	0.0219	0.02486
V	51	3	He	515.234	11.2875	518013.34	0.0219	0.02486
V	51	3	He	506.178	11.0895	519165.28	0.0219	0.02486
Cr	52	3	He	495.76	14.8834	678411.79	0.0299	0.03997
Cr	52	3	He	491.852	14.7664	677670.30	0.0299	0.03997
Cr	52	3	He	479.154	14.3862	673503.66	0.0299	0.03997
Mn	55	3	He	512.14	6.5754	299717.94	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	506.83	6.5072	298635.05	0.0128	0.002639
Mn	55	3	He	503.856	6.4691	302855.48	0.0128	0.002639
Fe	57	3	He	5115.654	2.9736	135541.13	0.0006	0.001429
Fe	57	3	He	5101.476	2.9653	136087.82	0.0006	0.001429
Fe	57	3	He	5047.577	2.934	137359.17	0.0006	0.001429
Co	59	3	He	499.988	28.1426	1282792.87	0.0563	0.002149
Co	59	3	He	497.527	28.0041	1285188.57	0.0563	0.002149
Co	59	3	He	490.496	27.6084	1292513.57	0.0563	0.002149
Ni	60	3	He	519.977	4.4659	362092.06	0.0086	0.002834
Ni	60	3	He	508.839	4.3703	358387.49	0.0086	0.002834
Ni	60	3	He	527.336	4.529	362522.61	0.0086	0.002834
Cu	63	3	He	494.966	12.7111	1030611.55	0.0257	0.004757
Cu	63	3	He	484.565	12.444	1020484.05	0.0257	0.004757
Cu	63	3	He	502.584	12.9066	1033099.44	0.0257	0.004757
Zn	66	3	He	515.242	1.504	121944.32	0.0029	0.003818
Zn	66	3	He	514.059	1.5006	123054.56	0.0029	0.003818
Zn	66	3	He	524.263	1.5303	122489.03	0.0029	0.003818
As	75	3	He	515.205	1.0564	85652.09	0.002	0.0008061
As	75	3	He	511.633	1.0491	86030.19	0.002	0.0008061
As	75	3	He	526.024	1.0786	86332.25	0.002	0.0008061
Sr	88	3	He	53.33	0.4793	39175.22	0.009	0.0009645
Sr	88	3	He	48.419	0.4353	36638.15	0.009	0.0009645
Sr	88	3	He	52.019	0.4676	38152.30	0.009	0.0009645
Mo	98	3	He	53.668	1.177	96197.60	0.0219	0.0002706
Mo	98	3	He	51.953	1.1394	95907.24	0.0219	0.0002706
Mo	98	3	He	53.586	1.1752	95896.83	0.0219	0.0002706
Ag	107	3	He	52.801	2.4552	200663.36	0.0465	0.0006206
Ag	107	3	He	50.669	2.3561	198320.09	0.0465	0.0006206
Ag	107	3	He	52.456	2.4391	199029.82	0.0465	0.0006206
Cd	111	3	He	53.665	0.2869	23451.77	0.0053	0
Cd	111	3	He	50.852	0.2719	22886.76	0.0053	0
Cd	111	3	He	53.554	0.2863	23365.51	0.0053	0
Sn	120	3	He	52.147	0.8403	68679.89	0.0158	0.01648
Sn	120	3	He	50.861	0.82	69022.46	0.0158	0.01648
Sn	120	3	He	52.779	0.8503	69384.21	0.0158	0.01648
Sb	121	3	He	53.66	0.7973	65164.07	0.0149	0.0002698
Sb	121	3	He	52.302	0.7771	65414.43	0.0149	0.0002698
Sb	121	3	He	53.274	0.7916	64591.24	0.0149	0.0002698
Ba	137	3	He	535.822	2.5718	210193.90	0.0048	0.0002317
Ba	137	3	He	513.392	2.4642	207417.11	0.0048	0.0002317
Ba	137	3	He	543.421	2.6083	212832.24	0.0048	0.0002317
Tl	205	3	He	51.668	1.2777	498457.69	0.0247	0.0001339
Tl	205	3	He	52.039	1.2869	502320.85	0.0247	0.0001339
Tl	205	3	He	52.096	1.2883	503518.08	0.0247	0.0001339
Pb	208	3	He	52.481	1.7188	361276.83	0.0327	0.00107
Pb	208	3	He	52.209	1.7098	357054.99	0.0327	0.00107
Pb	208	3	He	51.667	1.6921	354312.18	0.0327	0.00107
U	238	3	He	50.975	2.5111	761093.19	0.0493	7.55E-05
U	238	3	He	51.102	2.5174	763490.38	0.0493	7.55E-05
U	238	3	He	51.385	2.5313	765637.41	0.0493	7.55E-05
Sc	45	1	No Gas			2445611.37		
Sc	45	1	No Gas			2395865.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2428506.37		
Ge	72	1	No Gas			1209228.89		
Ge	72	1	No Gas			1186841.23		
Ge	72	1	No Gas			1195743.73		
Sc	45	2	H2			175822.20		
Sc	45	2	H2			176868.63		
Sc	45	2	H2			175883.08		
Ge	72	2	H2			150706.79		
Ge	72	2	H2			148585.10		
Ge	72	2	H2			149806.24		
In	115	2	H2			375872.26		
In	115	2	H2			381234.53		
In	115	2	H2			380257.42		
Sc	45	3	He			45581.85		
Sc	45	3	He			45892.83		
Sc	45	3	He			46815.95		
Ge	72	3	He			81079.81		
Ge	72	3	He			82005.79		
Ge	72	3	He			80044.06		
In	115	3	He			82112.49		
In	115	3	He			84537.30		
In	115	3	He			81973.07		
Tb	159	3	He			390126.05		
Tb	159	3	He			390346.40		
Tb	159	3	He			390842.77		
Bi	209	3	He			303093.59		
Bi	209	3	He			303291.13		
Bi	209	3	He			302469.68		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

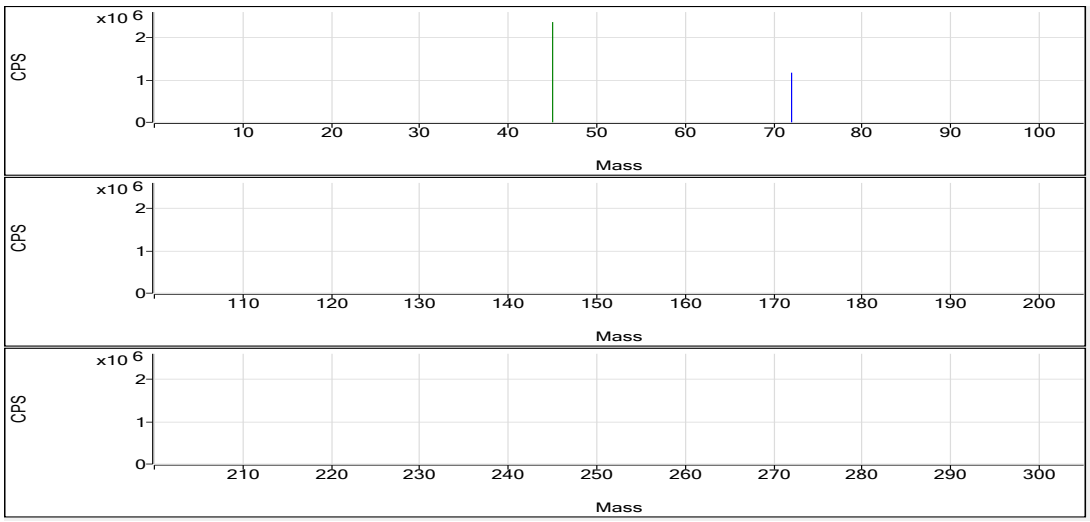
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.018	ppb	0.7	44.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.076	ppb	64.6	6.44	0.0000	Pulse	1.5000	3
Na	23	45	He	15.918	ppb	38.0	18391.90	0.4021	Pulse	0.1000	3
Mg	24	45	He	0.688	ppb	37.4	216.68	0.0047	Pulse	0.1000	3
Al	27	45	He	1.499	ppb	104.9	70.00	0.0015	Pulse	0.1000	3
K	39	45	He	0.365	ppb	1897.6	18101.72	0.3955	Pulse	0.1000	3
Ca	44	45	He	-2.586	ppb	N/A	116.67	0.0025	Pulse	0.1000	3
Ti	47	45	He	1.489	ppb	52.8	40.00	0.0009	Pulse	0.1000	3
V	51	45	He	0.367	ppb	8.5	1505.42	0.0329	Pulse	0.5000	3
Cr	52	45	He	0.022	ppb	226.4	1860.18	0.0406	Pulse	0.1000	3
Mn	55	45	He	0.169	ppb	34.0	220.01	0.0048	Pulse	0.1000	3
Fe	57	45	He	0.690	ppb	211.5	83.34	0.0018	Pulse	0.1000	3
Co	59	45	He	0.102	ppb	25.7	360.02	0.0079	Pulse	0.1000	3
Ni	60	72	He	0.021	ppb	291.3	240.01	0.0030	Pulse	0.1000	3
Cu	63	72	He	0.082	ppb	29.4	546.70	0.0069	Pulse	0.1000	3
Zn	66	72	He	1.663	ppb	16.2	690.04	0.0087	Pulse	0.1000	3
As	75	72	He	0.177	ppb	52.8	93.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	-0.036	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.053	ppb	17.4	120.00	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	434.0	56.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	99.8	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.027	ppb	517.2	1413.46	0.0169	Pulse	0.1000	3
Sb	121	115	He	0.060	ppb	15.4	96.67	0.0012	Pulse	0.1000	3
Ba	137	115	He	0.101	ppb	64.8	60.00	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.105	ppb	1.8	1060.09	0.0027	Pulse	0.1000	3
Pb	208	159	He	0.014	ppb	24.6	593.36	0.0015	Pulse	0.1000	3
U	238	209	He	0.044	ppb	18.6	680.05	0.0022	Pulse	0.1000	3

ISTD Table:

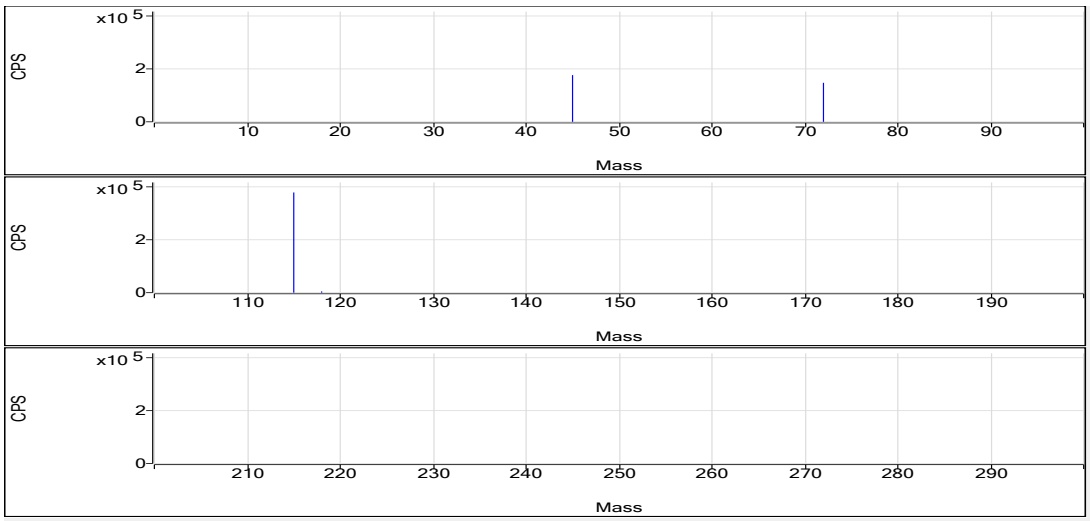
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2374221.74	0.5	99.0	Analog	0.1000	3
No Gas	Ge	72	1175344.38	0.6	101.9	Pulse	0.1000	3
H2	Sc	45	175736.98	1.3	94.0	Pulse	0.1000	3
H2	Ge	72	146804.50	0.6	89.7	Pulse	0.1000	3
H2	In	115	377147.15	0.7	96.9	Pulse	0.1000	3
He	Sc	45	45766.24	1.6	98.1	Pulse	0.1000	3
He	Ge	72	79735.97	1.0	98.2	Pulse	0.1000	3
He	In	115	83570.75	0.4	97.0	Pulse	0.1000	3
He	Tb	159	389408.08	0.5	97.7	Pulse	0.1000	3
He	Bi	209	303134.12	1.2	98.0	Pulse	0.1000	3

No Gas

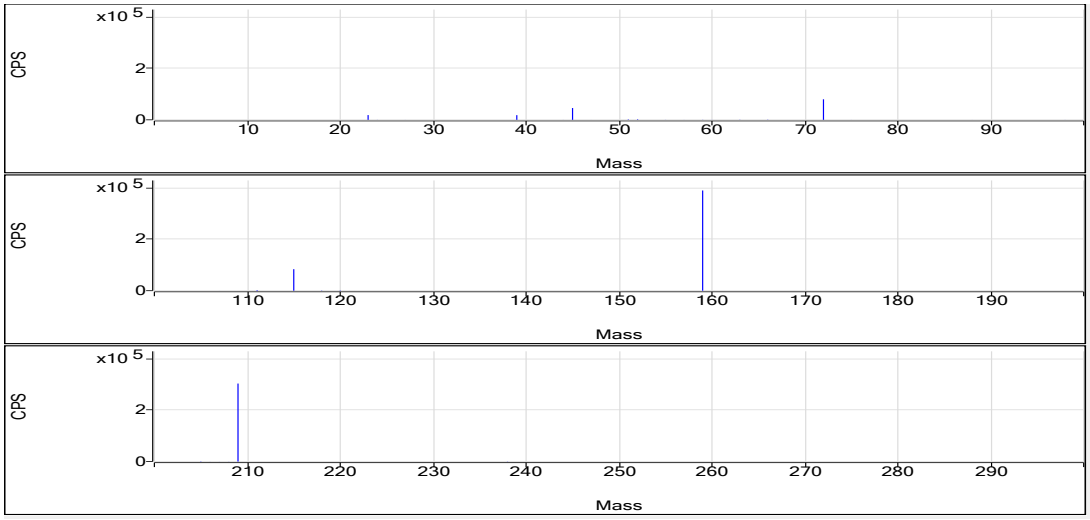


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.018	0	44.00	0.0008	4.685E-06
Be	9	1	No Gas	0.018	0	44.00	0.0008	4.685E-06
Be	9	1	No Gas	0.018	0	44.00	0.0008	4.685E-06
Se	78	2	H2	0.025	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.123	0.0001	9.33	0.0004	1.219E-05
Se	78	2	H2	0.08	0	6.67	0.0004	1.219E-05
Na	23	3	He	8.942	0.3771	17580.79	0.0036	0.3452
Na	23	3	He	19.523	0.415	18762.32	0.0036	0.3452
Na	23	3	He	19.289	0.4142	18832.59	0.0036	0.3452
Mg	24	3	He	0.801	0.0049	230.01	0.0018	0.003497
Mg	24	3	He	0.393	0.0042	190.01	0.0018	0.003497
Mg	24	3	He	0.87	0.0051	230.01	0.0018	0.003497
Al	27	3	He	3.301	0.0026	120.01	0.0006	0.0006432
Al	27	3	He	0.791	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	0.404	0.0009	40.00	0.0006	0.0006432
K	39	3	He	4.722	0.4006	18672.41	0.0012	0.3951
K	39	3	He	3.994	0.3997	18071.67	0.0012	0.3951
K	39	3	He	-7.621	0.3862	17561.08	0.0012	0.3951
Ca	44	3	He	13.799	0.0036	170.01	0.0001	0.002715
Ca	44	3	He	-0.899	0.0027	120.00	0.0001	0.002715
Ca	44	3	He	-20.658	0.0013	60.00	0.0001	0.002715
Ti	47	3	He	2.267	0.0013	60.00	0.0005	7.003E-05
Ti	47	3	He	0.693	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1.508	0.0009	40.00	0.0005	7.003E-05
V	51	3	He	0.356	0.0327	1522.09	0.0219	0.02486
V	51	3	He	0.403	0.0337	1522.09	0.0219	0.02486
V	51	3	He	0.343	0.0324	1472.09	0.0219	0.02486
Cr	52	3	He	0.041	0.0412	1920.21	0.0299	0.03997
Cr	52	3	He	0.061	0.0418	1890.18	0.0299	0.03997
Cr	52	3	He	-0.035	0.0389	1770.15	0.0299	0.03997
Mn	55	3	He	0.196	0.0051	240.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.208	0.0053	240.01	0.0128	0.002639
Mn	55	3	He	0.103	0.004	180.01	0.0128	0.002639
Fe	57	3	He	-0.982	0.0009	40.00	0.0006	0.001429
Fe	57	3	He	1.348	0.0022	100.00	0.0006	0.001429
Fe	57	3	He	1.705	0.0024	110.01	0.0006	0.001429
Co	59	3	He	0.08	0.0067	310.01	0.0563	0.002149
Co	59	3	He	0.131	0.0095	430.02	0.0563	0.002149
Co	59	3	He	0.095	0.0075	340.02	0.0563	0.002149
Ni	60	3	He	0.08	0.0035	280.01	0.0086	0.002834
Ni	60	3	He	-0.041	0.0025	200.01	0.0086	0.002834
Ni	60	3	He	0.024	0.003	240.01	0.0086	0.002834
Cu	63	3	He	0.104	0.0074	590.03	0.0257	0.004757
Cu	63	3	He	0.085	0.0069	560.03	0.0257	0.004757
Cu	63	3	He	0.056	0.0062	490.03	0.0257	0.004757
Zn	66	3	He	1.713	0.0088	700.04	0.0029	0.003818
Zn	66	3	He	1.372	0.0078	630.04	0.0029	0.003818
Zn	66	3	He	1.904	0.0094	740.04	0.0029	0.003818
As	75	3	He	0.196	0.0012	96.00	0.002	0.0008061
As	75	3	He	0.26	0.0013	108.00	0.002	0.0008061
As	75	3	He	0.076	0.001	76.00	0.002	0.0008061
Sr	88	3	He	-0.094	0.0001	10.00	0.009	0.0009645
Sr	88	3	He	-0.014	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	-0.001	0.001	80.00	0.009	0.0009645
Mo	98	3	He	0.058	0.0016	130.00	0.0219	0.0002706
Mo	98	3	He	0.042	0.0012	100.00	0.0219	0.0002706
Mo	98	3	He	0.058	0.0016	130.01	0.0219	0.0002706
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.001	80.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.009	0	4.00	0.0053	0
Sn	120	3	He	0.045	0.0172	1440.14	0.0158	0.01648
Sn	120	3	He	-0.122	0.0145	1210.10	0.0158	0.01648
Sn	120	3	He	0.159	0.019	1590.15	0.0158	0.01648
Sb	121	3	He	0.054	0.0011	90.00	0.0149	0.0002698
Sb	121	3	He	0.055	0.0011	90.00	0.0149	0.0002698
Sb	121	3	He	0.07	0.0013	110.01	0.0149	0.0002698
Ba	137	3	He	0.176	0.0011	90.01	0.0048	0.0002317
Ba	137	3	He	0.077	0.0006	50.00	0.0048	0.0002317
Ba	137	3	He	0.051	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.105	0.0027	1070.09	0.0247	0.0001339
Tl	205	3	He	0.106	0.0028	1070.09	0.0247	0.0001339
Tl	205	3	He	0.103	0.0027	1040.08	0.0247	0.0001339
Pb	208	3	He	0.01	0.0014	250.01	0.0327	0.00107
Pb	208	3	He	0.017	0.0016	310.02	0.0327	0.00107
Pb	208	3	He	0.014	0.0015	370.02	0.0327	0.00107
U	238	3	He	0.053	0.0027	830.07	0.0493	7.55E-05
U	238	3	He	0.039	0.002	610.04	0.0493	7.55E-05
U	238	3	He	0.039	0.002	600.03	0.0493	7.55E-05
Sc	45	1	No Gas			2374584.81		
Sc	45	1	No Gas			2362070.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2386009.81		
Ge	72	1	No Gas			1180405.84		
Ge	72	1	No Gas			1178150.76		
Ge	72	1	No Gas			1167476.55		
Sc	45	2	H2			176935.68		
Sc	45	2	H2			177207.11		
Sc	45	2	H2			173068.14		
Ge	72	2	H2			147524.67		
Ge	72	2	H2			147040.43		
Ge	72	2	H2			145848.41		
In	115	2	H2			376881.17		
In	115	2	H2			380066.17		
In	115	2	H2			374494.10		
Sc	45	3	He			46615.30		
Sc	45	3	He			45211.12		
Sc	45	3	He			45472.29		
Ge	72	3	He			79511.54		
Ge	72	3	He			80637.78		
Ge	72	3	He			79058.59		
In	115	3	He			83792.20		
In	115	3	He			83218.92		
In	115	3	He			83722.97		
Tb	159	3	He			391564.92		
Tb	159	3	He			387421.99		
Tb	159	3	He			389237.34		
Bi	209	3	He			306836.91		
Bi	209	3	He			303277.73		
Bi	209	3	He			299287.71		

Quantitation Report

Data File Name	271SMPL.d
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Sample Name	410-135157-C-5-E
Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

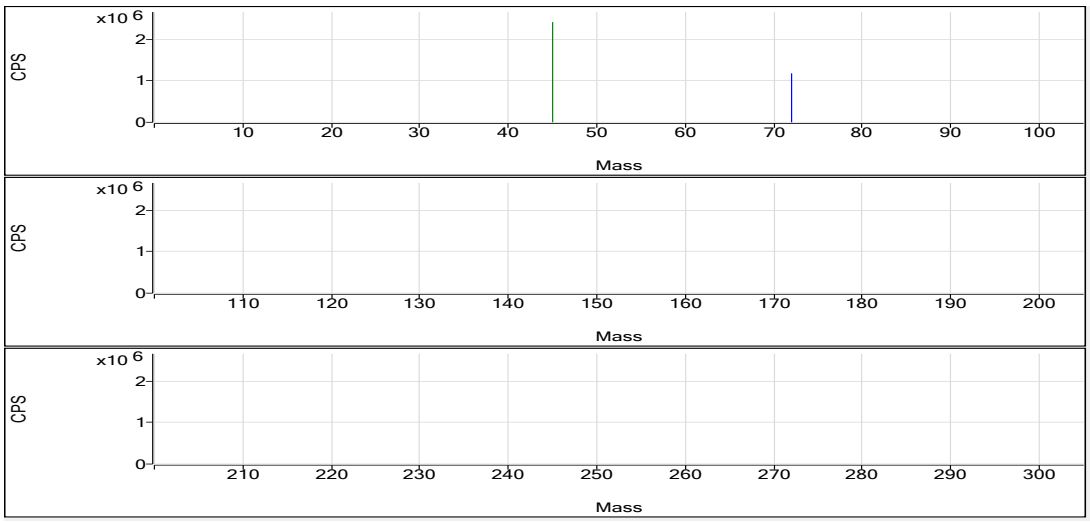
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.028	ppb	33.9	62.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.032	ppb	37.7	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	30205.268	ppb	1.7	5108389.93	108.3909	Analog	0.1000	3
Mg	24	45	He	6.570	ppb	21.7	720.04	0.0153	Pulse	0.1000	3
Al	27	45	He	7.712	ppb	17.3	243.34	0.0052	Pulse	0.1000	3
K	39	45	He	3.386	ppb	138.0	18806.00	0.3990	Pulse	0.1000	3
Ca	44	45	He	44.727	ppb	51.9	270.01	0.0057	Pulse	0.1000	3
Ti	47	45	He	0.135	ppb	170.2	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.280	ppb	11.9	1460.75	0.0310	Pulse	0.5000	3
Cr	52	45	He	0.090	ppb	44.4	2010.22	0.0427	Pulse	0.1000	3
Mn	55	45	He	0.175	ppb	52.7	230.01	0.0049	Pulse	0.1000	3
Fe	57	45	He	3.519	ppb	45.5	163.34	0.0035	Pulse	0.1000	3
Co	59	45	He	0.708	ppb	6.2	1980.20	0.0420	Pulse	0.1000	3
Ni	60	72	He	2.230	ppb	13.4	1753.50	0.0220	Pulse	0.1000	3
Cu	63	72	He	2.892	ppb	3.1	6301.61	0.0790	Pulse	0.1000	3
Zn	66	72	He	3.957	ppb	10.6	1223.43	0.0153	Pulse	0.1000	3
As	75	72	He	0.006	ppb	1807.4	65.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.227	ppb	57.8	250.01	0.0030	Pulse	0.1000	3
Mo	98	115	He	0.095	ppb	9.6	196.68	0.0024	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	45.8	83.33	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.016	ppb	58.0	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.024	ppb	N/A	1346.78	0.0161	Pulse	0.1000	3
Sb	121	115	He	0.266	ppb	13.9	353.35	0.0042	Pulse	0.1000	3
Ba	137	115	He	0.998	ppb	1.3	420.02	0.0050	Pulse	0.1000	3
Tl	205	159	He	0.039	ppb	14.9	423.36	0.0011	Pulse	0.1000	3
Pb	208	159	He	0.553	ppb	4.2	7444.46	0.0192	Pulse	0.1000	3
U	238	209	He	0.010	ppb	20.0	170.01	0.0006	Pulse	0.1000	3

ISTD Table:

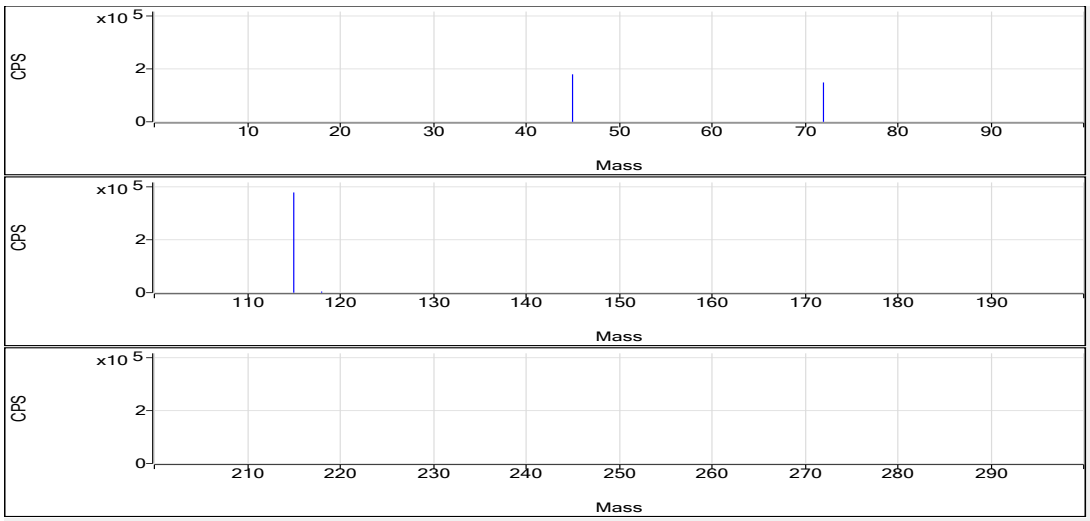
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2423012.20	0.8	101.0	Analog	0.1000	3
No Gas	Ge	72	1183646.29	0.9	102.6	Pulse	0.1000	3
H2	Sc	45	178727.90	2.4	95.6	Pulse	0.1000	3
H2	Ge	72	148037.13	2.5	90.4	Pulse	0.1000	3
H2	In	115	377118.07	0.9	96.9	Pulse	0.1000	3
He	Sc	45	47137.15	1.5	101.1	Pulse	0.1000	3
He	Ge	72	79768.97	0.6	98.2	Pulse	0.1000	3
He	In	115	83606.72	1.2	97.0	Pulse	0.1000	3
He	Tb	159	388572.05	1.0	97.5	Pulse	0.1000	3
He	Bi	209	305801.89	0.4	98.9	Pulse	0.1000	3

No Gas

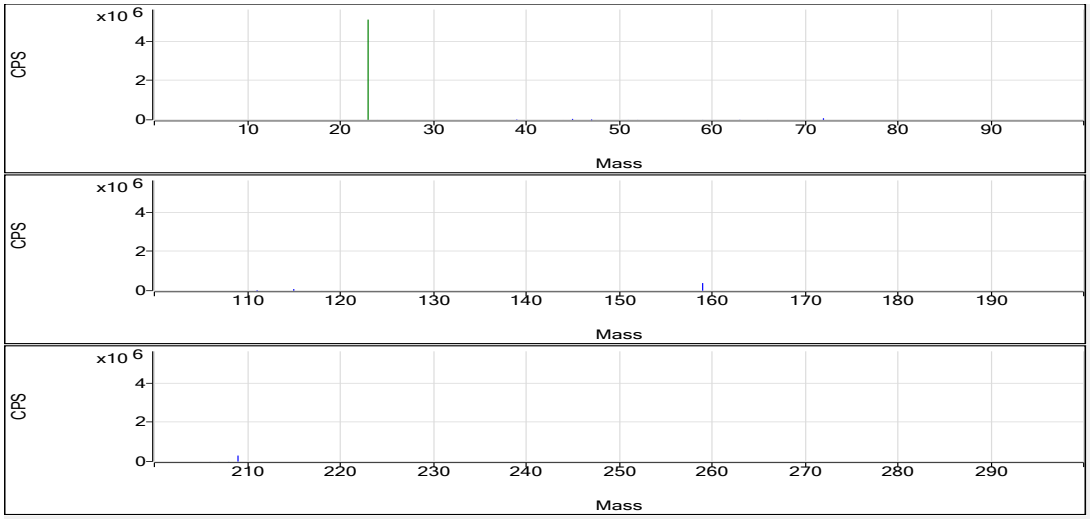


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.039	0	82.00	0.0008	4.685E-06
Be	9	1	No Gas	0.021	0	50.00	0.0008	4.685E-06
Be	9	1	No Gas	0.024	0	56.00	0.0008	4.685E-06
Se	78	2	H2	0.046	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.024	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.026	0	3.33	0.0004	1.219E-05
Na	23	3	He	30701.979	110.1676	5129945.24	0.0036	0.3452
Na	23	3	He	29658.598	106.4354	5098241.49	0.0036	0.3452
Na	23	3	He	30255.229	108.5696	5096983.05	0.0036	0.3452
Mg	24	3	He	8.105	0.018	840.05	0.0018	0.003497
Mg	24	3	He	6.312	0.0148	710.04	0.0018	0.003497
Mg	24	3	He	5.293	0.013	610.03	0.0018	0.003497
Al	27	3	He	6.977	0.0047	220.01	0.0006	0.0006432
Al	27	3	He	9.249	0.0061	290.01	0.0006	0.0006432
Al	27	3	He	6.911	0.0047	220.01	0.0006	0.0006432
K	39	3	He	4.728	0.4006	18652.55	0.0012	0.3951
K	39	3	He	-1.81	0.393	18822.68	0.0012	0.3951
K	39	3	He	7.239	0.4035	18942.78	0.0012	0.3951
Ca	44	3	He	39.29	0.0054	250.01	0.0001	0.002715
Ca	44	3	He	24.713	0.0044	210.01	0.0001	0.002715
Ca	44	3	He	70.179	0.0075	350.02	0.0001	0.002715
Ti	47	3	He	0.27	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.266	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.258	0.0305	1420.08	0.0219	0.02486
V	51	3	He	0.265	0.0306	1468.08	0.0219	0.02486
V	51	3	He	0.318	0.0318	1494.09	0.0219	0.02486
Cr	52	3	He	0.135	0.044	2050.22	0.0299	0.03997
Cr	52	3	He	0.067	0.042	2010.21	0.0299	0.03997
Cr	52	3	He	0.067	0.042	1970.22	0.0299	0.03997
Mn	55	3	He	0.28	0.0062	290.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.103	0.004	190.01	0.0128	0.002639
Mn	55	3	He	0.143	0.0045	210.01	0.0128	0.002639
Fe	57	3	He	5.303	0.0045	210.01	0.0006	0.001429
Fe	57	3	He	2.212	0.0027	130.01	0.0006	0.001429
Fe	57	3	He	3.041	0.0032	150.01	0.0006	0.001429
Co	59	3	He	0.74	0.0438	2040.21	0.0563	0.002149
Co	59	3	He	0.726	0.043	2060.22	0.0563	0.002149
Co	59	3	He	0.658	0.0392	1840.18	0.0563	0.002149
Ni	60	3	He	2.132	0.0211	1690.16	0.0086	0.002834
Ni	60	3	He	2.565	0.0249	1990.21	0.0086	0.002834
Ni	60	3	He	1.993	0.0199	1580.14	0.0086	0.002834
Cu	63	3	He	2.942	0.0803	6421.68	0.0257	0.004757
Cu	63	3	He	2.943	0.0803	6431.64	0.0257	0.004757
Cu	63	3	He	2.79	0.0764	6051.52	0.0257	0.004757
Zn	66	3	He	3.499	0.014	1120.09	0.0029	0.003818
Zn	66	3	He	4.05	0.0156	1250.10	0.0029	0.003818
Zn	66	3	He	4.324	0.0164	1300.11	0.0029	0.003818
As	75	3	He	-0.125	0.0006	44.00	0.002	0.0008061
As	75	3	He	0.094	0.001	80.00	0.002	0.0008061
As	75	3	He	0.05	0.0009	72.00	0.002	0.0008061
Sr	88	3	He	0.238	0.0031	260.01	0.009	0.0009645
Sr	88	3	He	0.352	0.0041	340.02	0.009	0.0009645
Sr	88	3	He	0.091	0.0018	150.01	0.009	0.0009645
Mo	98	3	He	0.086	0.0021	180.01	0.0219	0.0002706
Mo	98	3	He	0.104	0.0025	210.01	0.0219	0.0002706
Mo	98	3	He	0.096	0.0024	200.01	0.0219	0.0002706
Ag	107	3	He	0.007	0.001	80.00	0.0465	0.0006206
Ag	107	3	He	0.005	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	0.012	0.0012	100.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.027	0.0001	12.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Sn	120	3	He	-0.001	0.0165	1380.12	0.0158	0.01648
Sn	120	3	He	-0.092	0.015	1240.10	0.0158	0.01648
Sn	120	3	He	0.022	0.0168	1420.12	0.0158	0.01648
Sb	121	3	He	0.247	0.0039	330.01	0.0149	0.0002698
Sb	121	3	He	0.243	0.0039	320.02	0.0149	0.0002698
Sb	121	3	He	0.309	0.0049	410.02	0.0149	0.0002698
Ba	137	3	He	0.995	0.005	420.02	0.0048	0.0002317
Ba	137	3	He	0.987	0.005	410.02	0.0048	0.0002317
Ba	137	3	He	1.013	0.0051	430.02	0.0048	0.0002317
Tl	205	3	He	0.034	0.001	380.02	0.0247	0.0001339
Tl	205	3	He	0.045	0.0012	480.03	0.0247	0.0001339
Tl	205	3	He	0.037	0.0011	410.02	0.0247	0.0001339
Pb	208	3	He	0.579	0.02	4410.88	0.0327	0.00107
Pb	208	3	He	0.539	0.0187	3750.69	0.0327	0.00107
Pb	208	3	He	0.54	0.0187	4050.78	0.0327	0.00107
U	238	3	He	0.008	0.0005	140.01	0.0493	7.55E-05
U	238	3	He	0.01	0.0006	170.01	0.0493	7.55E-05
U	238	3	He	0.012	0.0007	200.01	0.0493	7.55E-05
Sc	45	1	No Gas			2405150.75		
Sc	45	1	No Gas			2419350.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2444534.96		
Ge	72	1	No Gas			1171235.22		
Ge	72	1	No Gas			1186877.33		
Ge	72	1	No Gas			1192826.31		
Sc	45	2	H2			181188.30		
Sc	45	2	H2			181268.77		
Sc	45	2	H2			173726.62		
Ge	72	2	H2			149444.07		
Ge	72	2	H2			150859.68		
Ge	72	2	H2			143807.65		
In	115	2	H2			380827.92		
In	115	2	H2			376701.09		
In	115	2	H2			373825.19		
Sc	45	3	He			46564.90		
Sc	45	3	He			47899.86		
Sc	45	3	He			46946.69		
Ge	72	3	He			79983.15		
Ge	72	3	He			80084.23		
Ge	72	3	He			79239.54		
In	115	3	He			83872.73		
In	115	3	He			82524.15		
In	115	3	He			84446.53		
Tb	159	3	He			391045.50		
Tb	159	3	He			384292.46		
Tb	159	3	He			390378.20		
Bi	209	3	He			304947.59		
Bi	209	3	He			305424.84		
Bi	209	3	He			307033.24		

Quantitation Report

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Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

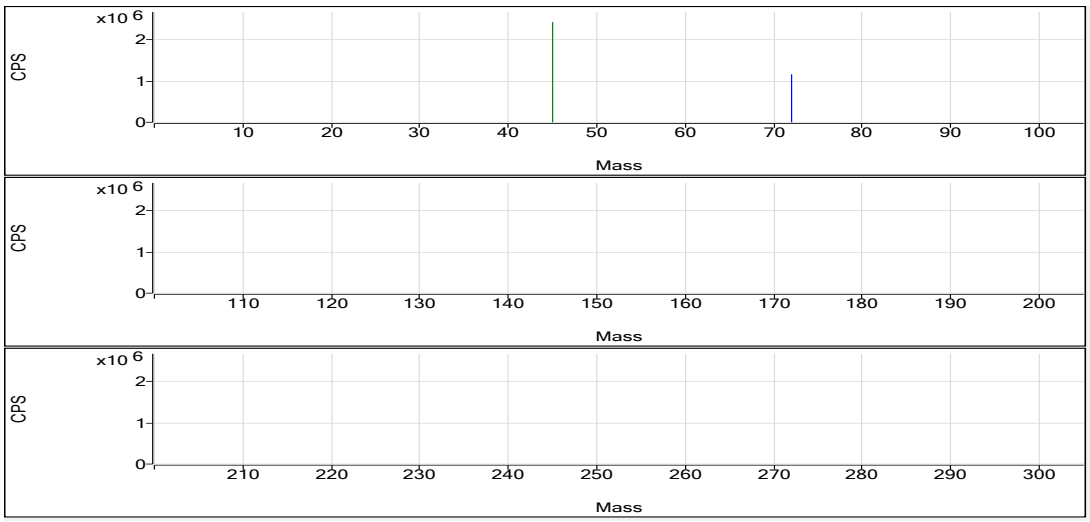
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.022	ppb	8.8	52.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.025	ppb	75.1	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	38432.343	ppb	1.4	6417641.99	137.8195	Analog	0.1000	3
Mg	24	45	He	9.009	ppb	8.7	916.73	0.0197	Pulse	0.1000	3
Al	27	45	He	8.287	ppb	31.7	256.68	0.0055	Pulse	0.1000	3
K	39	45	He	27.012	ppb	23.8	19867.32	0.4265	Pulse	0.1000	3
Ca	44	45	He	89.200	ppb	22.2	406.68	0.0087	Pulse	0.1000	3
Ti	47	45	He	0.135	ppb	340.0	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.295	ppb	3.4	1458.75	0.0313	Pulse	0.5000	3
Cr	52	45	He	0.126	ppb	184.1	2033.56	0.0438	Pulse	0.1000	3
Mn	55	45	He	0.237	ppb	45.4	263.34	0.0057	Pulse	0.1000	3
Fe	57	45	He	6.534	ppb	2.0	243.34	0.0052	Pulse	0.1000	3
Co	59	45	He	0.971	ppb	7.2	2643.67	0.0568	Pulse	0.1000	3
Ni	60	72	He	2.951	ppb	4.9	2243.58	0.0282	Pulse	0.1000	3
Cu	63	72	He	3.766	ppb	1.1	8085.84	0.1014	Pulse	0.1000	3
Zn	66	72	He	8.883	ppb	3.1	2366.95	0.0297	Pulse	0.1000	3
As	75	72	He	0.007	ppb	441.1	65.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.294	ppb	39.4	300.02	0.0036	Pulse	0.1000	3
Mo	98	115	He	0.079	ppb	36.7	166.67	0.0020	Pulse	0.1000	3
Ag	107	115	He	0.017	ppb	46.0	116.67	0.0014	Pulse	0.1000	3
Cd	111	115	He	0.014	ppb	100.8	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.166	ppb	26.7	1596.81	0.0191	Pulse	0.1000	3
Sb	121	115	He	0.361	ppb	15.2	470.02	0.0056	Pulse	0.1000	3
Ba	137	115	He	2.716	ppb	5.0	1110.08	0.0133	Pulse	0.1000	3
Tl	205	159	He	0.020	ppb	23.8	243.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.687	ppb	1.1	9104.89	0.0235	Pulse	0.1000	3
U	238	209	He	0.006	ppb	9.9	120.00	0.0004	Pulse	0.1000	3

ISTD Table:

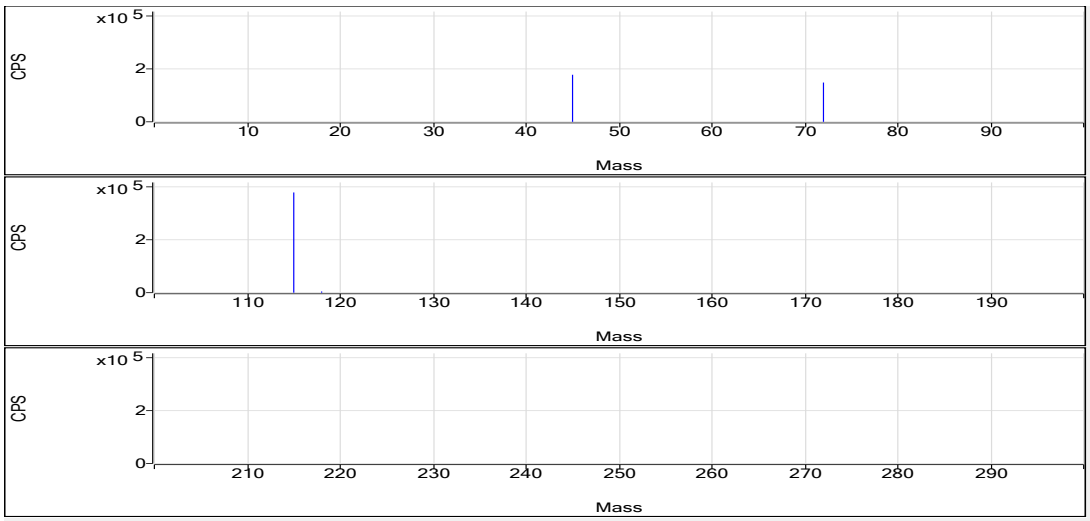
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2437545.17	0.4	101.6	Analog	0.1000	3
No Gas	Ge	72	1166547.07	1.2	101.1	Pulse	0.1000	3
H2	Sc	45	177340.06	0.6	94.8	Pulse	0.1000	3
H2	Ge	72	147993.08	0.5	90.4	Pulse	0.1000	3
H2	In	115	377739.18	1.0	97.1	Pulse	0.1000	3
He	Sc	45	46575.23	2.3	99.9	Pulse	0.1000	3
He	Ge	72	79718.86	2.1	98.2	Pulse	0.1000	3
He	In	115	83620.40	1.5	97.0	Pulse	0.1000	3
He	Tb	159	386644.41	1.0	97.0	Pulse	0.1000	3
He	Bi	209	307924.14	0.6	99.6	Pulse	0.1000	3

No Gas

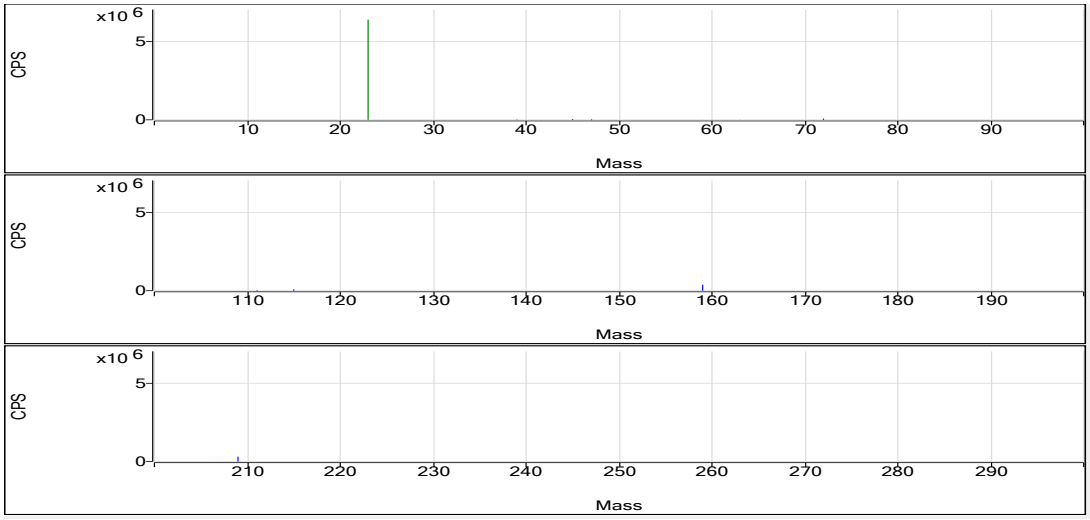


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.023	0	54.00	0.0008	4.685E-06
Be	9	1	No Gas	0.02	0	48.00	0.0008	4.685E-06
Be	9	1	No Gas	0.023	0	54.00	0.0008	4.685E-06
Se	78	2	H2	0.003	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.036	0	4.00	0.0004	1.219E-05
Se	78	2	H2	0.035	0	4.00	0.0004	1.219E-05
Na	23	3	He	38066.57	136.5111	6497708.03	0.0036	0.3452
Na	23	3	He	38180.711	136.9194	6394890.53	0.0036	0.3452
Na	23	3	He	39049.747	140.028	6360327.41	0.0036	0.3452
Mg	24	3	He	9.878	0.0212	1010.07	0.0018	0.003497
Mg	24	3	He	8.791	0.0193	900.06	0.0018	0.003497
Mg	24	3	He	8.358	0.0185	840.06	0.0018	0.003497
Al	27	3	He	9.315	0.0061	290.01	0.0006	0.0006432
Al	27	3	He	10.246	0.0066	310.02	0.0006	0.0006432
Al	27	3	He	5.298	0.0037	170.01	0.0006	0.0006432
K	39	3	He	25.443	0.4247	20214.59	0.0012	0.3951
K	39	3	He	34.073	0.4347	20304.67	0.0012	0.3951
K	39	3	He	21.519	0.4201	19082.70	0.0012	0.3951
Ca	44	3	He	93.549	0.009	430.02	0.0001	0.002715
Ca	44	3	He	67.576	0.0073	340.01	0.0001	0.002715
Ca	44	3	He	106.475	0.0099	450.02	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.667	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.291	0.0312	1486.08	0.0219	0.02486
V	51	3	He	0.289	0.0312	1456.08	0.0219	0.02486
V	51	3	He	0.307	0.0316	1434.08	0.0219	0.02486
Cr	52	3	He	0.019	0.0406	1930.20	0.0299	0.03997
Cr	52	3	He	-0.033	0.039	1820.18	0.0299	0.03997
Cr	52	3	He	0.393	0.0517	2350.29	0.0299	0.03997
Mn	55	3	He	0.171	0.0048	230.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.178	0.0049	230.01	0.0128	0.002639
Mn	55	3	He	0.361	0.0073	330.01	0.0128	0.002639
Fe	57	3	He	6.581	0.0053	250.01	0.0006	0.001429
Fe	57	3	He	6.386	0.0051	240.01	0.0006	0.001429
Fe	57	3	He	6.636	0.0053	240.01	0.0006	0.001429
Co	59	3	He	0.903	0.0529	2520.31	0.0563	0.002149
Co	59	3	He	0.97	0.0567	2650.34	0.0563	0.002149
Co	59	3	He	1.042	0.0608	2760.36	0.0563	0.002149
Ni	60	3	He	2.794	0.0268	2190.25	0.0086	0.002834
Ni	60	3	He	2.976	0.0284	2240.23	0.0086	0.002834
Ni	60	3	He	3.082	0.0293	2300.25	0.0086	0.002834
Cu	63	3	He	3.779	0.1018	8312.65	0.0257	0.004757
Cu	63	3	He	3.798	0.1023	8072.52	0.0257	0.004757
Cu	63	3	He	3.719	0.1002	7872.35	0.0257	0.004757
Zn	66	3	He	9.161	0.0305	2490.29	0.0029	0.003818
Zn	66	3	He	8.87	0.0296	2340.29	0.0029	0.003818
Zn	66	3	He	8.617	0.0289	2270.26	0.0029	0.003818
As	75	3	He	-0.011	0.0008	64.00	0.002	0.0008061
As	75	3	He	-0.01	0.0008	62.00	0.002	0.0008061
As	75	3	He	0.042	0.0009	70.00	0.002	0.0008061
Sr	88	3	He	0.196	0.0027	230.01	0.009	0.0009645
Sr	88	3	He	0.264	0.0033	280.01	0.009	0.0009645
Sr	88	3	He	0.421	0.0047	390.03	0.009	0.0009645
Mo	98	3	He	0.085	0.0021	180.01	0.0219	0.0002706
Mo	98	3	He	0.047	0.0013	110.00	0.0219	0.0002706
Mo	98	3	He	0.104	0.0026	210.01	0.0219	0.0002706
Ag	107	3	He	0.025	0.0018	150.01	0.0465	0.0006206
Ag	107	3	He	0.01	0.0011	90.00	0.0465	0.0006206
Ag	107	3	He	0.015	0.0013	110.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.027	0.0001	12.00	0.0053	0
Sn	120	3	He	0.163	0.019	1610.15	0.0158	0.01648
Sn	120	3	He	0.124	0.0184	1550.13	0.0158	0.01648
Sn	120	3	He	0.212	0.0198	1630.15	0.0158	0.01648
Sb	121	3	He	0.324	0.0051	430.02	0.0149	0.0002698
Sb	121	3	He	0.334	0.0052	440.02	0.0149	0.0002698
Sb	121	3	He	0.424	0.0066	540.03	0.0149	0.0002698
Ba	137	3	He	2.811	0.0137	1160.09	0.0048	0.0002317
Ba	137	3	He	2.776	0.0136	1140.09	0.0048	0.0002317
Ba	137	3	He	2.562	0.0125	1030.07	0.0048	0.0002317
Tl	205	3	He	0.023	0.0007	270.01	0.0247	0.0001339
Tl	205	3	He	0.015	0.0005	190.01	0.0247	0.0001339
Tl	205	3	He	0.023	0.0007	270.01	0.0247	0.0001339
Pb	208	3	He	0.679	0.0233	5041.16	0.0327	0.00107
Pb	208	3	He	0.694	0.0238	4771.03	0.0327	0.00107
Pb	208	3	He	0.687	0.0235	4560.96	0.0327	0.00107
U	238	3	He	0.006	0.0004	120.00	0.0493	7.55E-05
U	238	3	He	0.007	0.0004	130.01	0.0493	7.55E-05
U	238	3	He	0.006	0.0004	110.00	0.0493	7.55E-05
Sc	45	1	No Gas			2442602.78		
Sc	45	1	No Gas			2442421.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2427611.53		
Ge	72	1	No Gas			1174718.19		
Ge	72	1	No Gas			1174654.28		
Ge	72	1	No Gas			1150268.73		
Sc	45	2	H2			177632.03		
Sc	45	2	H2			176225.80		
Sc	45	2	H2			178162.34		
Ge	72	2	H2			147485.46		
Ge	72	2	H2			147746.25		
Ge	72	2	H2			148747.52		
In	115	2	H2			382134.33		
In	115	2	H2			375726.21		
In	115	2	H2			375356.99		
Sc	45	3	He			47598.37		
Sc	45	3	He			46705.50		
Sc	45	3	He			45421.82		
Ge	72	3	He			81672.89		
Ge	72	3	He			78948.27		
Ge	72	3	He			78535.41		
In	115	3	He			84546.52		
In	115	3	He			84114.41		
In	115	3	He			82222.82		
Tb	159	3	He			391041.56		
Tb	159	3	He			385369.21		
Tb	159	3	He			383522.46		
Bi	209	3	He			309642.81		
Bi	209	3	He			308385.66		
Bi	209	3	He			305743.96		

Quantitation Report

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Acq Time	8/10/2023 8:03:22 PM
Sample Name	410-135157-C-5-G MS @100
Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

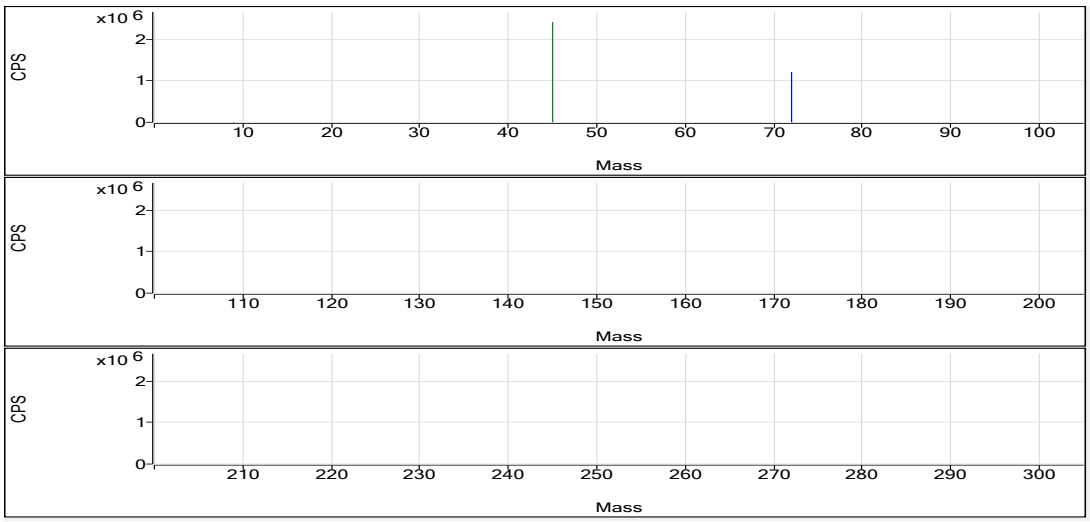
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	3.976	ppb	0.9	7326.50	0.0030	Pulse	0.5000	3
Se	78	72	H2	0.902	ppb	5.9	60.44	0.0004	Pulse	1.5000	3
Na	23	45	He	349.632	ppb	1.1	75094.16	1.5958	Pulse	0.1000	3
Mg	24	45	He	39.983	ppb	5.9	3540.57	0.0752	Pulse	0.1000	3
Al	27	45	He	10.282	ppb	14.3	313.35	0.0067	Pulse	0.1000	3
K	39	45	He	38.351	ppb	13.1	20691.92	0.4397	Pulse	0.1000	3
Ca	44	45	He	46.849	ppb	27.1	276.68	0.0059	Pulse	0.1000	3
Ti	47	45	He	9.896	ppb	19.7	253.35	0.0054	Pulse	0.1000	3
V	51	45	He	4.487	ppb	0.6	5785.18	0.1229	Pulse	0.5000	3
Cr	52	45	He	4.108	ppb	1.7	7668.97	0.1630	Pulse	0.1000	3
Mn	55	45	He	4.238	ppb	3.2	2683.69	0.0570	Pulse	0.1000	3
Fe	57	45	He	6.929	ppb	49.0	256.68	0.0055	Pulse	0.1000	3
Co	59	45	He	4.151	ppb	4.0	11094.59	0.2358	Pulse	0.1000	3
Ni	60	72	He	4.481	ppb	3.8	3410.52	0.0413	Pulse	0.1000	3
Cu	63	72	He	4.362	ppb	4.7	9643.54	0.1167	Pulse	0.1000	3
Zn	66	72	He	6.703	ppb	5.0	1926.86	0.0233	Pulse	0.1000	3
As	75	72	He	4.481	ppb	3.4	824.70	0.0100	Pulse	0.5000	3
Sr	88	115	He	4.691	ppb	8.0	3617.26	0.0430	Pulse	0.1000	3
Mo	98	115	He	8.781	ppb	2.4	16213.20	0.1928	Pulse	0.1000	3
Ag	107	115	He	4.456	ppb	1.6	17471.51	0.2077	Pulse	0.1000	3
Cd	111	115	He	0.903	ppb	1.7	406.01	0.0048	Pulse	0.5000	3
Sn	120	115	He	43.270	ppb	1.4	58869.41	0.7001	Pulse	0.1000	3
Sb	121	115	He	4.284	ppb	4.7	5371.23	0.0639	Pulse	0.1000	3
Ba	137	115	He	87.219	ppb	0.5	35219.65	0.4188	Pulse	0.1000	3
Tl	205	159	He	4.301	ppb	0.5	41539.97	0.1065	Pulse	0.1000	3
Pb	208	159	He	4.338	ppb	1.2	55801.43	0.1430	Pulse	0.1000	3
U	238	209	He	0.004	ppb	63.2	80.00	0.0003	Pulse	0.1000	3

ISTD Table:

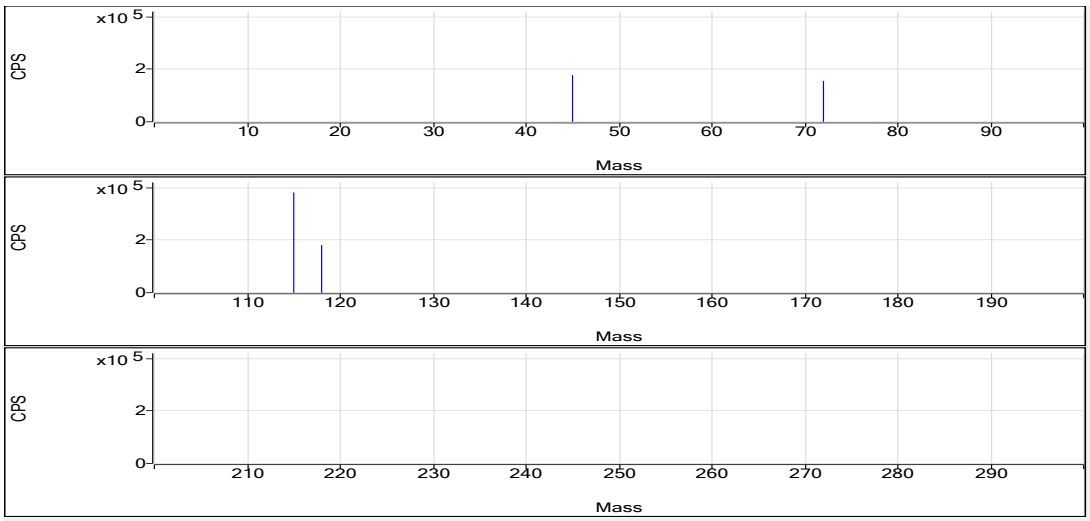
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2412231.32	0.3	100.6	Analog	0.1000	3
No Gas	Ge	72	1212888.45	1.0	105.2	Pulse	0.1000	3
H2	Sc	45	177438.68	1.2	94.9	Pulse	0.1000	3
H2	Ge	72	155612.52	1.0	95.1	Pulse	0.1000	3
H2	In	115	381164.37	0.3	98.0	Pulse	0.1000	3
He	Sc	45	47057.02	0.0	100.9	Pulse	0.1000	3
He	Ge	72	82598.63	1.0	101.7	Pulse	0.1000	3
He	In	115	84092.56	1.2	97.6	Pulse	0.1000	3
He	Tb	159	390094.19	0.3	97.9	Pulse	0.1000	3
He	Bi	209	302391.23	0.6	97.8	Pulse	0.1000	3

No Gas

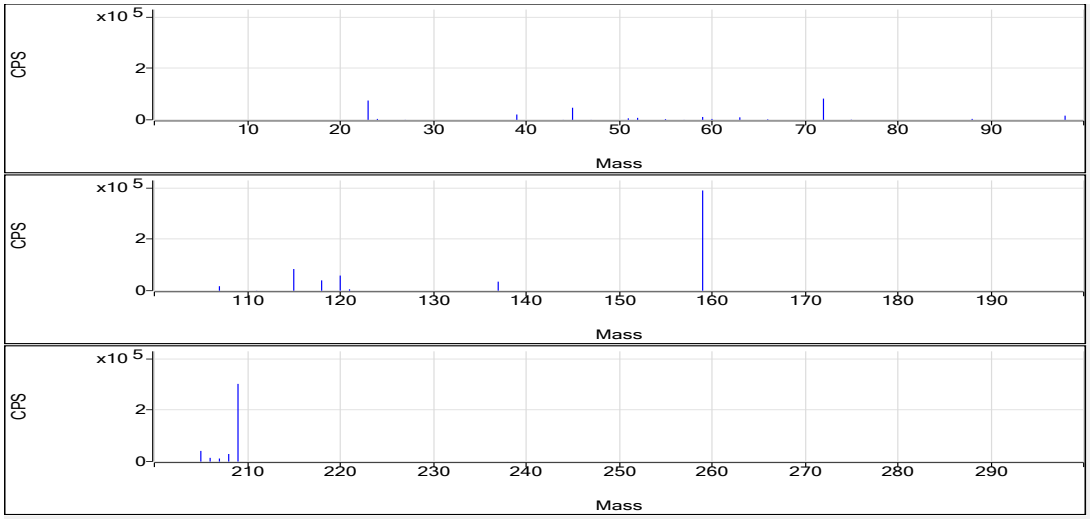


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	3.934	0.003	7227.78	0.0008	4.685E-06
Be	9	1	No Gas	3.999	0.0031	7365.85	0.0008	4.685E-06
Be	9	1	No Gas	3.994	0.0031	7385.87	0.0008	4.685E-06
Se	78	2	H2	0.915	0.0004	61.33	0.0004	1.219E-05
Se	78	2	H2	0.843	0.0004	56.00	0.0004	1.219E-05
Se	78	2	H2	0.947	0.0004	64.00	0.0004	1.219E-05
Na	23	3	He	353.461	1.6095	75754.90	0.0036	0.3452
Na	23	3	He	345.824	1.5822	74437.39	0.0036	0.3452
Na	23	3	He	349.612	1.5957	75090.19	0.0036	0.3452
Mg	24	3	He	42.698	0.0801	3770.62	0.0018	0.003497
Mg	24	3	He	38.926	0.0733	3450.54	0.0018	0.003497
Mg	24	3	He	38.325	0.0723	3400.55	0.0018	0.003497
Al	27	3	He	11.612	0.0074	350.03	0.0006	0.0006432
Al	27	3	He	8.71	0.0057	270.01	0.0006	0.0006432
Al	27	3	He	10.525	0.0068	320.01	0.0006	0.0006432
K	39	3	He	41.075	0.4429	20845.62	0.0012	0.3951
K	39	3	He	41.415	0.4433	20855.37	0.0012	0.3951
K	39	3	He	32.565	0.433	20374.77	0.0012	0.3951
Ca	44	3	He	54.168	0.0064	300.01	0.0001	0.002715
Ca	44	3	He	54.211	0.0064	300.02	0.0001	0.002715
Ca	44	3	He	32.167	0.0049	230.01	0.0001	0.002715
Ti	47	3	He	8.971	0.0049	230.01	0.0005	7.003E-05
Ti	47	3	He	8.579	0.0047	220.01	0.0005	7.003E-05
Ti	47	3	He	12.139	0.0066	310.02	0.0005	7.003E-05
V	51	3	He	4.482	0.1228	5781.17	0.0219	0.02486
V	51	3	He	4.461	0.1224	5757.17	0.0219	0.02486
V	51	3	He	4.518	0.1236	5817.19	0.0219	0.02486
Cr	52	3	He	4.187	0.1653	7782.32	0.0299	0.03997
Cr	52	3	He	4.055	0.1614	7592.26	0.0299	0.03997
Cr	52	3	He	4.082	0.1622	7632.32	0.0299	0.03997
Mn	55	3	He	4.314	0.058	2730.34	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4.316	0.058	2730.41	0.0128	0.002639
Mn	55	3	He	4.084	0.055	2590.32	0.0128	0.002639
Fe	57	3	He	9.244	0.0068	320.02	0.0006	0.001429
Fe	57	3	He	3.029	0.0032	150.01	0.0006	0.001429
Fe	57	3	He	8.514	0.0064	300.01	0.0006	0.001429
Co	59	3	He	4.071	0.2313	10884.48	0.0563	0.002149
Co	59	3	He	4.042	0.2296	10804.37	0.0563	0.002149
Co	59	3	He	4.34	0.2464	11594.93	0.0563	0.002149
Ni	60	3	He	4.33	0.04	3340.47	0.0086	0.002834
Ni	60	3	He	4.447	0.041	3370.50	0.0086	0.002834
Ni	60	3	He	4.667	0.0429	3520.58	0.0086	0.002834
Cu	63	3	He	4.444	0.1188	9923.69	0.0257	0.004757
Cu	63	3	He	4.129	0.1108	9103.23	0.0257	0.004757
Cu	63	3	He	4.515	0.1206	9903.70	0.0257	0.004757
Zn	66	3	He	6.339	0.0223	1860.19	0.0029	0.003818
Zn	66	3	He	7.005	0.0242	1990.21	0.0029	0.003818
Zn	66	3	He	6.765	0.0235	1930.18	0.0029	0.003818
As	75	3	He	4.329	0.0097	808.03	0.002	0.0008061
As	75	3	He	4.476	0.01	820.03	0.002	0.0008061
As	75	3	He	4.637	0.0103	846.03	0.002	0.0008061
Sr	88	3	He	5.079	0.0465	3870.68	0.009	0.0009645
Sr	88	3	He	4.329	0.0398	3390.55	0.009	0.0009645
Sr	88	3	He	4.665	0.0428	3590.56	0.009	0.0009645
Mo	98	3	He	8.934	0.1962	16320.07	0.0219	0.0002706
Mo	98	3	He	8.868	0.1947	16590.28	0.0219	0.0002706
Mo	98	3	He	8.541	0.1875	15729.26	0.0219	0.0002706
Ag	107	3	He	4.374	0.204	16970.99	0.0465	0.0006206
Ag	107	3	He	4.478	0.2088	17791.93	0.0465	0.0006206
Ag	107	3	He	4.514	0.2105	17651.60	0.0465	0.0006206
Cd	111	3	He	0.904	0.0048	402.01	0.0053	0
Cd	111	3	He	0.918	0.0049	418.01	0.0053	0
Cd	111	3	He	0.888	0.0047	398.01	0.0053	0
Sn	120	3	He	43.083	0.6971	58001.92	0.0158	0.01648
Sn	120	3	He	42.768	0.6922	58976.49	0.0158	0.01648
Sn	120	3	He	43.96	0.711	59629.81	0.0158	0.01648
Sb	121	3	He	4.474	0.0667	5551.34	0.0149	0.0002698
Sb	121	3	He	4.076	0.0608	5181.11	0.0149	0.0002698
Sb	121	3	He	4.302	0.0642	5381.24	0.0149	0.0002698
Ba	137	3	He	87.668	0.421	35026.11	0.0048	0.0002317
Ba	137	3	He	87.195	0.4187	35677.28	0.0048	0.0002317
Ba	137	3	He	86.795	0.4168	34955.56	0.0048	0.0002317
Tl	205	3	He	4.278	0.1059	41255.55	0.0247	0.0001339
Tl	205	3	He	4.308	0.1067	41737.30	0.0247	0.0001339
Tl	205	3	He	4.317	0.1069	41627.05	0.0247	0.0001339
Pb	208	3	He	4.375	0.1443	29343.95	0.0327	0.00107
Pb	208	3	He	4.277	0.1411	29283.16	0.0327	0.00107
Pb	208	3	He	4.362	0.1438	29624.47	0.0327	0.00107
U	238	3	He	0.007	0.0004	120.01	0.0493	7.55E-05
U	238	3	He	0.003	0.0002	70.00	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	50.00	0.0493	7.55E-05
Sc	45	1	No Gas			2404891.37		
Sc	45	1	No Gas			2411129.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2420673.56		
Ge	72	1	No Gas			1204288.89		
Ge	72	1	No Gas			1227060.84		
Ge	72	1	No Gas			1207315.61		
Sc	45	2	H2			175912.75		
Sc	45	2	H2			176581.21		
Sc	45	2	H2			179822.07		
Ge	72	2	H2			155749.97		
Ge	72	2	H2			153952.44		
Ge	72	2	H2			157135.14		
In	115	2	H2			380937.88		
In	115	2	H2			380304.49		
In	115	2	H2			382250.74		
Sc	45	3	He			47067.19		
Sc	45	3	He			47047.12		
Sc	45	3	He			47056.75		
Ge	72	3	He			83513.87		
Ge	72	3	He			82195.83		
Ge	72	3	He			82086.20		
In	115	3	He			83510.59		
In	115	3	He			85522.96		
In	115	3	He			84184.32		
Tb	159	3	He			389498.78		
Tb	159	3	He			391286.32		
Tb	159	3	He			389497.46		
Bi	209	3	He			302255.87		
Bi	209	3	He			300717.94		
Bi	209	3	He			304199.88		

Quantitation Report

Data File Name	274SMPL.d
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Sample Name	410-135157-C-5-H MSD @100
Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

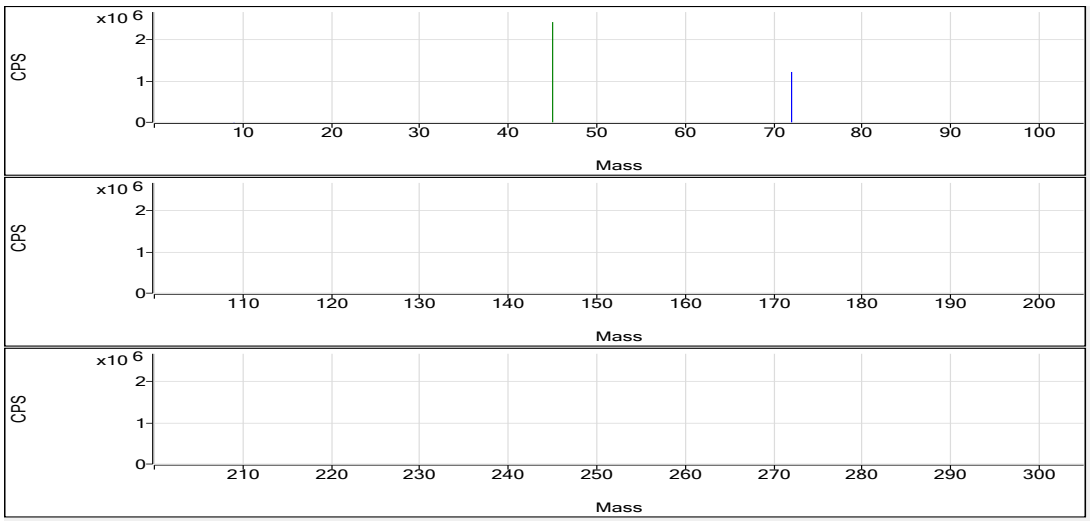
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	3.259	ppb	2.3	6055.25	0.0025	Pulse	0.5000	3
Se	78	72	H2	0.760	ppb	7.7	50.67	0.0003	Pulse	1.5000	3
Na	23	45	He	295.243	ppb	2.5	64233.72	1.4013	Pulse	0.1000	3
Mg	24	45	He	36.801	ppb	1.8	3187.14	0.0695	Pulse	0.1000	3
Al	27	45	He	7.611	ppb	23.4	233.35	0.0051	Pulse	0.1000	3
K	39	45	He	49.285	ppb	13.6	20742.01	0.4525	Pulse	0.1000	3
Ca	44	45	He	63.041	ppb	26.9	320.02	0.0070	Pulse	0.1000	3
Ti	47	45	He	5.428	ppb	34.0	136.67	0.0030	Pulse	0.1000	3
V	51	45	He	3.849	ppb	2.2	4996.89	0.1090	Pulse	0.5000	3
Cr	52	45	He	3.439	ppb	4.1	6551.70	0.1429	Pulse	0.1000	3
Mn	55	45	He	3.864	ppb	3.2	2393.60	0.0522	Pulse	0.1000	3
Fe	57	45	He	4.805	ppb	37.6	193.34	0.0042	Pulse	0.1000	3
Co	59	45	He	3.431	ppb	4.1	8949.71	0.1952	Pulse	0.1000	3
Ni	60	72	He	3.843	ppb	2.4	2987.08	0.0358	Pulse	0.1000	3
Cu	63	72	He	3.546	ppb	5.4	7985.82	0.0958	Pulse	0.1000	3
Zn	66	72	He	5.829	ppb	7.7	1733.49	0.0208	Pulse	0.1000	3
As	75	72	He	3.564	ppb	4.2	676.02	0.0081	Pulse	0.5000	3
Sr	88	115	He	3.546	ppb	5.2	2787.05	0.0328	Pulse	0.1000	3
Mo	98	115	He	7.144	ppb	0.9	13346.79	0.1569	Pulse	0.1000	3
Ag	107	115	He	3.583	ppb	2.0	14217.69	0.1672	Pulse	0.1000	3
Cd	111	115	He	0.730	ppb	9.9	332.01	0.0039	Pulse	0.5000	3
Sn	120	115	He	35.875	ppb	3.1	49602.94	0.5833	Pulse	0.1000	3
Sb	121	115	He	3.723	ppb	5.7	4724.30	0.0556	Pulse	0.1000	3
Ba	137	115	He	72.099	ppb	1.9	29455.66	0.3463	Pulse	0.1000	3
Tl	205	159	He	3.581	ppb	3.3	34539.79	0.0887	Pulse	0.1000	3
Pb	208	159	He	3.602	ppb	1.6	46320.27	0.1190	Pulse	0.1000	3
U	238	209	He	0.004	ppb	87.9	76.67	0.0003	Pulse	0.1000	3

ISTD Table:

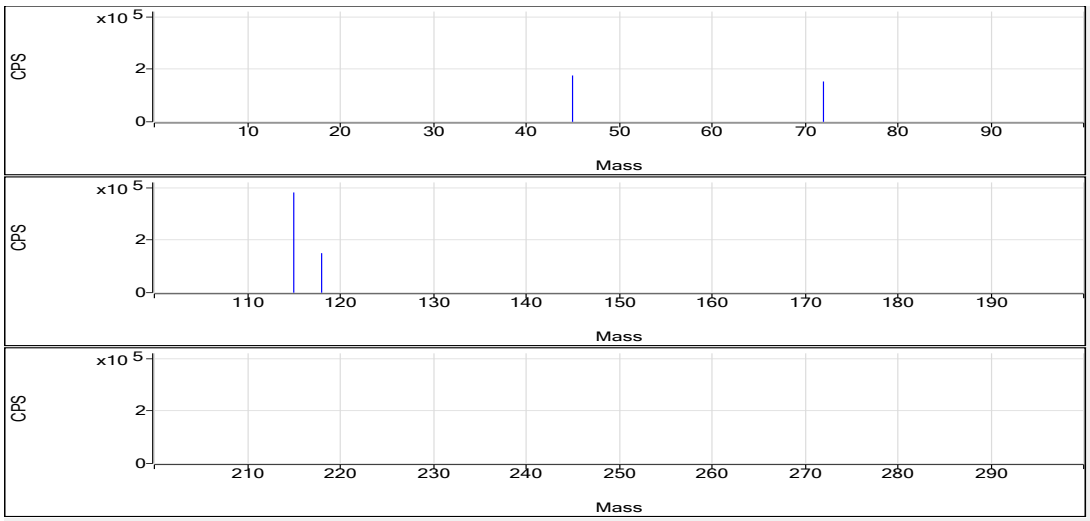
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2431653.30	2.1	101.4	Analog	0.1000	3
No Gas	Ge	72	1220991.18	0.8	105.9	Pulse	0.1000	3
H2	Sc	45	176821.46	0.6	94.6	Pulse	0.1000	3
H2	Ge	72	153905.33	0.5	94.0	Pulse	0.1000	3
H2	In	115	382414.69	1.2	98.3	Pulse	0.1000	3
He	Sc	45	45839.59	1.0	98.3	Pulse	0.1000	3
He	Ge	72	83376.24	1.3	102.7	Pulse	0.1000	3
He	In	115	85060.25	2.0	98.7	Pulse	0.1000	3
He	Tb	159	389377.96	1.0	97.7	Pulse	0.1000	3
He	Bi	209	303606.89	0.6	98.2	Pulse	0.1000	3

No Gas

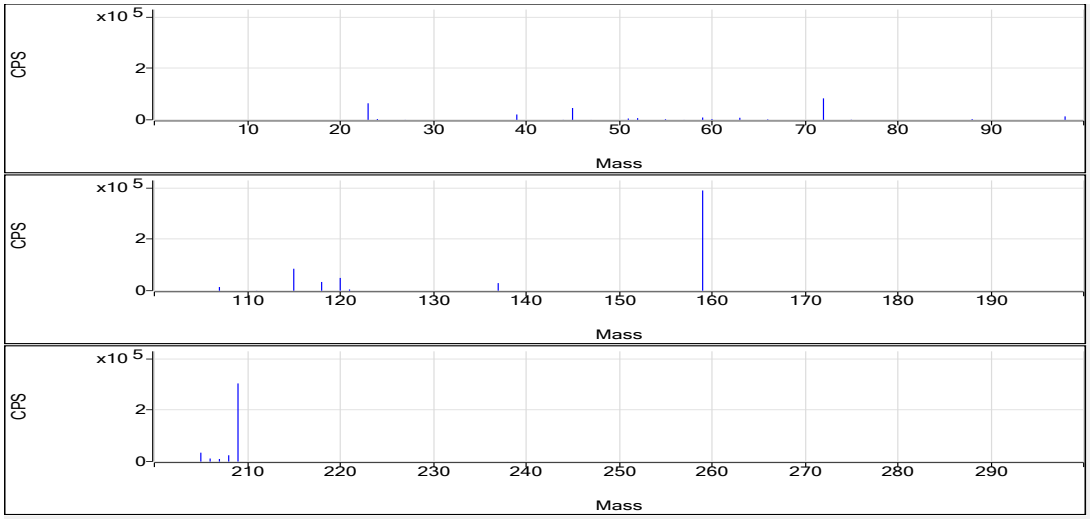


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	3.336	0.0025	6045.25	0.0008	4.685E-06
Be	9	1	No Gas	3.184	0.0024	5989.22	0.0008	4.685E-06
Be	9	1	No Gas	3.258	0.0025	6131.28	0.0008	4.685E-06
Se	78	2	H2	0.782	0.0003	52.00	0.0004	1.219E-05
Se	78	2	H2	0.805	0.0003	53.33	0.0004	1.219E-05
Se	78	2	H2	0.694	0.0003	46.67	0.0004	1.219E-05
Na	23	3	He	297.736	1.4102	63939.08	0.0036	0.3452
Na	23	3	He	286.811	1.3711	62964.86	0.0036	0.3452
Na	23	3	He	301.183	1.4225	65797.21	0.0036	0.3452
Mg	24	3	He	37.267	0.0704	3190.48	0.0018	0.003497
Mg	24	3	He	36.042	0.0682	3130.44	0.0018	0.003497
Mg	24	3	He	37.095	0.0701	3240.50	0.0018	0.003497
Al	27	3	He	8.703	0.0057	260.01	0.0006	0.0006432
Al	27	3	He	8.579	0.0057	260.02	0.0006	0.0006432
Al	27	3	He	5.553	0.0039	180.01	0.0006	0.0006432
K	39	3	He	45.503	0.448	20314.98	0.0012	0.3951
K	39	3	He	45.302	0.4478	20564.91	0.0012	0.3951
K	39	3	He	57.052	0.4615	21346.14	0.0012	0.3951
Ca	44	3	He	44.7	0.0057	260.01	0.0001	0.002715
Ca	44	3	He	66.192	0.0072	330.02	0.0001	0.002715
Ca	44	3	He	78.232	0.008	370.02	0.0001	0.002715
Ti	47	3	He	5.62	0.0031	140.01	0.0005	7.003E-05
Ti	47	3	He	7.17	0.0039	180.01	0.0005	7.003E-05
Ti	47	3	He	3.493	0.0019	90.00	0.0005	7.003E-05
V	51	3	He	3.789	0.1077	4882.84	0.0219	0.02486
V	51	3	He	3.946	0.1111	5102.92	0.0219	0.02486
V	51	3	He	3.813	0.1082	5004.90	0.0219	0.02486
Cr	52	3	He	3.579	0.1471	6671.76	0.0299	0.03997
Cr	52	3	He	3.299	0.1387	6371.57	0.0299	0.03997
Cr	52	3	He	3.439	0.1429	6611.76	0.0299	0.03997
Mn	55	3	He	4.005	0.054	2450.26	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3.799	0.0514	2360.28	0.0128	0.002639
Mn	55	3	He	3.787	0.0512	2370.27	0.0128	0.002639
Fe	57	3	He	6.272	0.0051	230.01	0.0006	0.001429
Fe	57	3	He	2.788	0.003	140.01	0.0006	0.001429
Fe	57	3	He	5.356	0.0045	210.01	0.0006	0.001429
Co	59	3	He	3.372	0.1919	8702.87	0.0563	0.002149
Co	59	3	He	3.592	0.2043	9383.34	0.0563	0.002149
Co	59	3	He	3.328	0.1895	8762.92	0.0563	0.002149
Ni	60	3	He	3.773	0.0352	2910.38	0.0086	0.002834
Ni	60	3	He	3.807	0.0355	2940.41	0.0086	0.002834
Ni	60	3	He	3.95	0.0367	3110.46	0.0086	0.002834
Cu	63	3	He	3.752	0.1011	8352.71	0.0257	0.004757
Cu	63	3	He	3.372	0.0913	7562.28	0.0257	0.004757
Cu	63	3	He	3.515	0.095	8042.48	0.0257	0.004757
Zn	66	3	He	5.38	0.0195	1610.16	0.0029	0.003818
Zn	66	3	He	6.279	0.0221	1830.17	0.0029	0.003818
Zn	66	3	He	5.829	0.0208	1760.15	0.0029	0.003818
As	75	3	He	3.693	0.0084	692.02	0.002	0.0008061
As	75	3	He	3.402	0.0078	644.02	0.002	0.0008061
As	75	3	He	3.596	0.0082	692.02	0.002	0.0008061
Sr	88	3	He	3.436	0.0318	2670.36	0.009	0.0009645
Sr	88	3	He	3.443	0.0318	2770.37	0.009	0.0009645
Sr	88	3	He	3.76	0.0347	2920.41	0.009	0.0009645
Mo	98	3	He	7.093	0.1558	13086.48	0.0219	0.0002706
Mo	98	3	He	7.121	0.1564	13607.10	0.0219	0.0002706
Mo	98	3	He	7.219	0.1585	13346.78	0.0219	0.0002706
Ag	107	3	He	3.61	0.1684	14147.60	0.0465	0.0006206
Ag	107	3	He	3.502	0.1634	14217.69	0.0465	0.0006206
Ag	107	3	He	3.638	0.1697	14287.77	0.0465	0.0006206
Cd	111	3	He	0.802	0.0043	360.01	0.0053	0
Cd	111	3	He	0.731	0.0039	340.01	0.0053	0
Cd	111	3	He	0.658	0.0035	296.00	0.0053	0
Sn	120	3	He	35.219	0.5729	48123.98	0.0158	0.01648
Sn	120	3	He	35.227	0.573	49850.61	0.0158	0.01648
Sn	120	3	He	37.179	0.6039	50834.23	0.0158	0.01648
Sb	121	3	He	3.958	0.0591	4961.12	0.0149	0.0002698
Sb	121	3	He	3.542	0.0529	4600.87	0.0149	0.0002698
Sb	121	3	He	3.669	0.0548	4610.90	0.0149	0.0002698
Ba	137	3	He	70.57	0.3389	28470.36	0.0048	0.0002317
Ba	137	3	He	72.653	0.3489	30354.19	0.0048	0.0002317
Ba	137	3	He	73.073	0.3509	29542.44	0.0048	0.0002317
Tl	205	3	He	3.478	0.0861	33343.40	0.0247	0.0001339
Tl	205	3	He	3.708	0.0918	36150.63	0.0247	0.0001339
Tl	205	3	He	3.558	0.0881	34125.34	0.0247	0.0001339
Pb	208	3	He	3.666	0.1211	24523.67	0.0327	0.00107
Pb	208	3	He	3.585	0.1184	24383.39	0.0327	0.00107
Pb	208	3	He	3.555	0.1174	24564.07	0.0327	0.00107
U	238	3	He	0.001	0.0001	40.00	0.0493	7.55E-05
U	238	3	He	0.007	0.0004	130.01	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
Sc	45	1	No Gas			2371420.59		
Sc	45	1	No Gas			2460900.74		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2462638.56		
Ge	72	1	No Gas			1210524.51		
Ge	72	1	No Gas			1229145.06		
Ge	72	1	No Gas			1223303.97		
Sc	45	2	H2			177917.83		
Sc	45	2	H2			176005.06		
Sc	45	2	H2			176541.50		
Ge	72	2	H2			153599.06		
Ge	72	2	H2			153345.65		
Ge	72	2	H2			154771.27		
In	115	2	H2			382988.86		
In	115	2	H2			377437.14		
In	115	2	H2			386818.08		
Sc	45	3	He			45341.25		
Sc	45	3	He			45923.01		
Sc	45	3	He			46254.50		
Ge	72	3	He			82648.51		
Ge	72	3	He			82809.92		
Ge	72	3	He			84670.29		
In	115	3	He			84264.93		
In	115	3	He			87263.36		
In	115	3	He			84446.24		
Tb	159	3	He			387132.69		
Tb	159	3	He			393704.33		
Tb	159	3	He			387296.87		
Bi	209	3	He			301660.72		
Bi	209	3	He			303846.89		
Bi	209	3	He			305313.06		

Quantitation Report

Data File Name	275SMPL.d
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Sample Name	LB 410-402548/1-B
Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

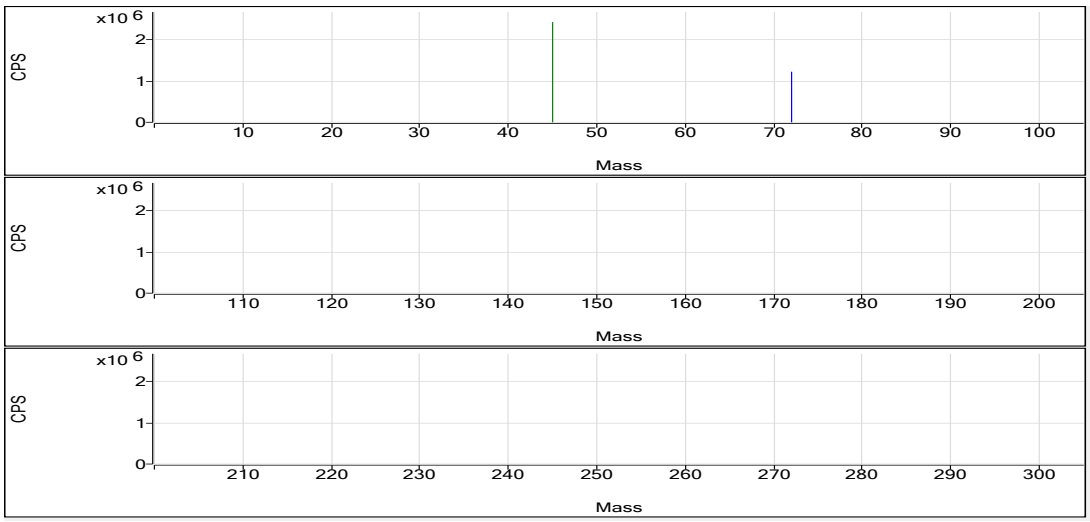
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.010	ppb	19.9	30.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.008	ppb	78.7	2.45	0.0000	Pulse	1.5000	3
Na	23	45	He	157.756	ppb	1.9	42522.04	0.9095	Pulse	0.1000	3
Mg	24	45	He	3.459	ppb	18.7	453.35	0.0097	Pulse	0.1000	3
Al	27	45	He	1.578	ppb	33.8	73.33	0.0016	Pulse	0.1000	3
K	39	45	He	10.561	ppb	99.8	19046.32	0.4074	Pulse	0.1000	3
Ca	44	45	He	2.044	ppb	481.7	133.34	0.0029	Pulse	0.1000	3
Ti	47	45	He	0.270	ppb	147.9	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.274	ppb	17.1	1442.75	0.0308	Pulse	0.5000	3
Cr	52	45	He	-0.151	ppb	N/A	1656.82	0.0354	Pulse	0.1000	3
Mn	55	45	He	0.183	ppb	12.7	233.34	0.0050	Pulse	0.1000	3
Fe	57	45	He	1.078	ppb	256.3	96.67	0.0021	Pulse	0.1000	3
Co	59	45	He	0.141	ppb	32.8	473.36	0.0101	Pulse	0.1000	3
Ni	60	72	He	0.167	ppb	52.7	356.68	0.0043	Pulse	0.1000	3
Cu	63	72	He	0.114	ppb	7.7	643.38	0.0077	Pulse	0.1000	3
Zn	66	72	He	1.682	ppb	23.3	730.04	0.0087	Pulse	0.1000	3
As	75	72	He	-0.028	ppb	N/A	62.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.029	ppb	126.5	103.34	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.026	ppb	96.7	70.00	0.0008	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	46.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	99.4	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.102	ppb	56.5	1530.14	0.0181	Pulse	0.1000	3
Sb	121	115	He	0.003	ppb	383.9	26.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.000	ppb	20376.2	20.00	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.026	ppb	7.7	300.01	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.016	ppb	31.8	626.70	0.0016	Pulse	0.1000	3
U	238	209	He	0.002	ppb	98.5	50.00	0.0002	Pulse	0.1000	3

ISTD Table:

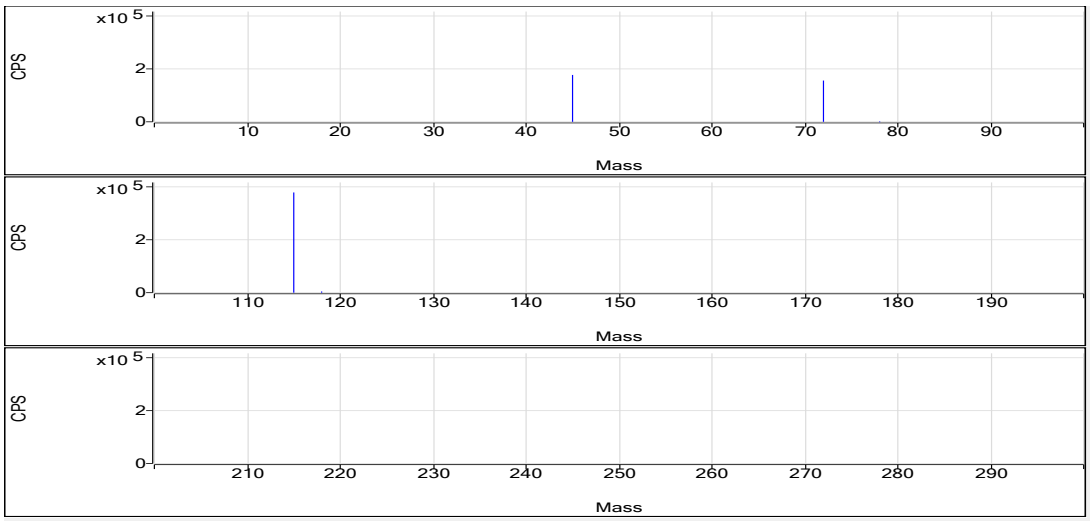
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2432599.96	1.1	101.4	Analog	0.1000	3
No Gas	Ge	72	1227684.96	0.6	106.4	Pulse	0.1000	3
H2	Sc	45	177537.02	1.1	94.9	Pulse	0.1000	3
H2	Ge	72	156307.96	2.1	95.5	Pulse	0.1000	3
H2	In	115	379650.83	1.2	97.6	Pulse	0.1000	3
He	Sc	45	46759.33	1.2	100.3	Pulse	0.1000	3
He	Ge	72	83684.71	1.4	103.1	Pulse	0.1000	3
He	In	115	84505.73	3.1	98.0	Pulse	0.1000	3
He	Tb	159	389648.75	0.5	97.8	Pulse	0.1000	3
He	Bi	209	306343.91	0.6	99.0	Pulse	0.1000	3

No Gas

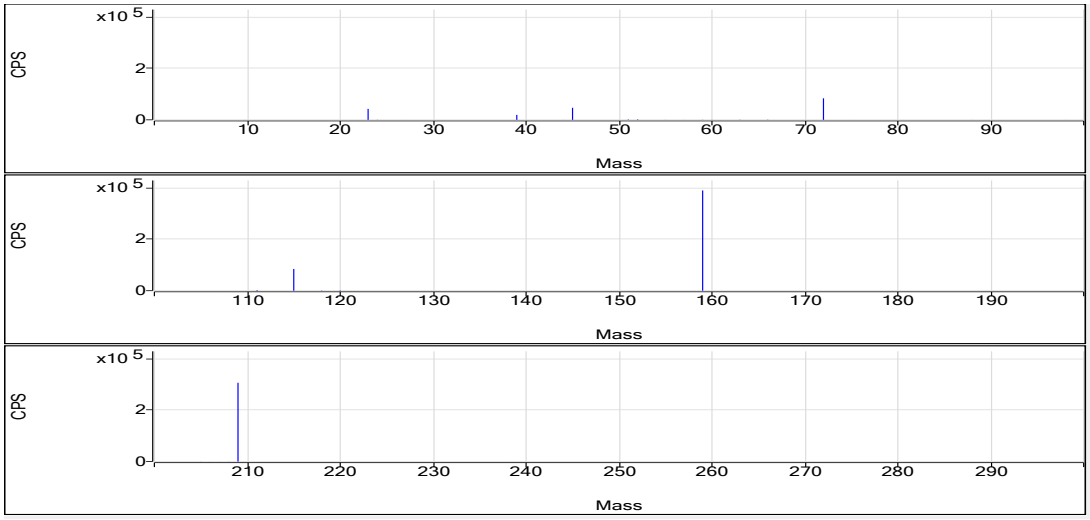


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Be	9	1	No Gas	0.008	0	26.00	0.0008	4.685E-06
Be	9	1	No Gas	0.012	0	34.00	0.0008	4.685E-06
Se	78	2	H2	0.001	0	2.00	0.0004	1.219E-05
Se	78	2	H2	0.013	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.012	0	2.67	0.0004	1.219E-05
Na	23	3	He	159.222	0.9147	42712.68	0.0036	0.3452
Na	23	3	He	154.265	0.897	42451.76	0.0036	0.3452
Na	23	3	He	159.781	0.9167	42401.67	0.0036	0.3452
Mg	24	3	He	3.183	0.0092	430.02	0.0018	0.003497
Mg	24	3	He	2.997	0.0089	420.02	0.0018	0.003497
Mg	24	3	He	4.196	0.011	510.02	0.0018	0.003497
Al	27	3	He	1.097	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	2.151	0.0019	90.00	0.0006	0.0006432
Al	27	3	He	1.487	0.0015	70.00	0.0006	0.0006432
K	39	3	He	-0.103	0.3949	18442.26	0.0012	0.3951
K	39	3	He	10.808	0.4077	19293.21	0.0012	0.3951
K	39	3	He	20.979	0.4195	19403.48	0.0012	0.3951
Ca	44	3	He	-8.489	0.0021	100.00	0.0001	0.002715
Ca	44	3	He	3.602	0.003	140.01	0.0001	0.002715
Ca	44	3	He	11.019	0.0035	160.01	0.0001	0.002715
Ti	47	3	He	0.667	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	0.272	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.266	0.0307	1432.08	0.0219	0.02486
V	51	3	He	0.324	0.0319	1512.09	0.0219	0.02486
V	51	3	He	0.231	0.0299	1384.08	0.0219	0.02486
Cr	52	3	He	-0.183	0.0345	1610.15	0.0299	0.03997
Cr	52	3	He	-0.171	0.0349	1650.14	0.0299	0.03997
Cr	52	3	He	-0.1	0.037	1710.16	0.0299	0.03997
Mn	55	3	He	0.195	0.0051	240.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.157	0.0046	220.01	0.0128	0.002639
Mn	55	3	He	0.199	0.0052	240.01	0.0128	0.002639
Fe	57	3	He	0.49	0.0017	80.00	0.0006	0.001429
Fe	57	3	He	4.087	0.0038	180.01	0.0006	0.001429
Fe	57	3	He	-1.343	0.0006	30.00	0.0006	0.001429
Co	59	3	He	0.16	0.0111	520.03	0.0563	0.002149
Co	59	3	He	0.176	0.012	570.03	0.0563	0.002149
Co	59	3	He	0.089	0.0071	330.01	0.0563	0.002149
Ni	60	3	He	0.081	0.0035	300.01	0.0086	0.002834
Ni	60	3	He	0.257	0.005	420.02	0.0086	0.002834
Ni	60	3	He	0.163	0.0042	350.02	0.0086	0.002834
Cu	63	3	He	0.122	0.0079	670.05	0.0257	0.004757
Cu	63	3	He	0.104	0.0074	620.04	0.0257	0.004757
Cu	63	3	He	0.116	0.0077	640.04	0.0257	0.004757
Zn	66	3	He	2.043	0.0098	830.05	0.0029	0.003818
Zn	66	3	He	1.738	0.0089	740.05	0.0029	0.003818
Zn	66	3	He	1.264	0.0075	620.03	0.0029	0.003818
As	75	3	He	-0.095	0.0006	52.00	0.002	0.0008061
As	75	3	He	0.075	0.001	80.00	0.002	0.0008061
As	75	3	He	-0.063	0.0007	56.00	0.002	0.0008061
Sr	88	3	He	0.021	0.0012	100.01	0.009	0.0009645
Sr	88	3	He	-0.003	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	0.07	0.0016	130.00	0.009	0.0009645
Mo	98	3	He	0.009	0.0005	40.00	0.0219	0.0002706
Mo	98	3	He	0.014	0.0006	50.00	0.0219	0.0002706
Mo	98	3	He	0.055	0.0015	120.00	0.0219	0.0002706
Ag	107	3	He	-0.006	0.0003	30.00	0.0465	0.0006206
Ag	107	3	He	-0.006	0.0004	30.00	0.0465	0.0006206
Ag	107	3	He	0.008	0.001	80.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.169	0.0191	1660.16	0.0158	0.01648
Sn	120	3	He	0.064	0.0175	1490.14	0.0158	0.01648
Sn	120	3	He	0.075	0.0177	1440.12	0.0158	0.01648
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	0.015	0.0005	40.00	0.0149	0.0002698
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	0.025	0.0004	30.00	0.0048	0.0002317
Ba	137	3	He	-0.048	0	0.00	0.0048	0.0002317
Tl	205	3	He	0.026	0.0008	300.01	0.0247	0.0001339
Tl	205	3	He	0.024	0.0007	280.01	0.0247	0.0001339
Tl	205	3	He	0.028	0.0008	320.02	0.0247	0.0001339
Pb	208	3	He	0.018	0.0017	270.02	0.0327	0.00107
Pb	208	3	He	0.01	0.0014	340.02	0.0327	0.00107
Pb	208	3	He	0.02	0.0017	410.02	0.0327	0.00107
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
U	238	3	He	0	0.0001	20.00	0.0493	7.55E-05
U	238	3	He	0.003	0.0002	70.00	0.0493	7.55E-05
Sc	45	1	No Gas			2442213.71		
Sc	45	1	No Gas			2403127.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2452458.56		
Ge	72	1	No Gas			1229256.70		
Ge	72	1	No Gas			1220017.95		
Ge	72	1	No Gas			1233780.22		
Sc	45	2	H2			177918.83		
Sc	45	2	H2			175450.62		
Sc	45	2	H2			179241.62		
Ge	72	2	H2			159775.08		
Ge	72	2	H2			153356.09		
Ge	72	2	H2			155792.70		
In	115	2	H2			382762.61		
In	115	2	H2			374538.08		
In	115	2	H2			381651.79		
Sc	45	3	He			46695.63		
Sc	45	3	He			47327.80		
Sc	45	3	He			46254.55		
Ge	72	3	He			85002.25		
Ge	72	3	He			83352.86		
Ge	72	3	He			82699.02		
In	115	3	He			86720.83		
In	115	3	He			85240.76		
In	115	3	He			81579.61		
Tb	159	3	He			388270.70		
Tb	159	3	He			389038.55		
Tb	159	3	He			391636.99		
Bi	209	3	He			304251.73		
Bi	209	3	He			307551.48		
Bi	209	3	He			307228.53		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 8:09:30 PM
Sample Name	LB 410-402550/1-B
Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

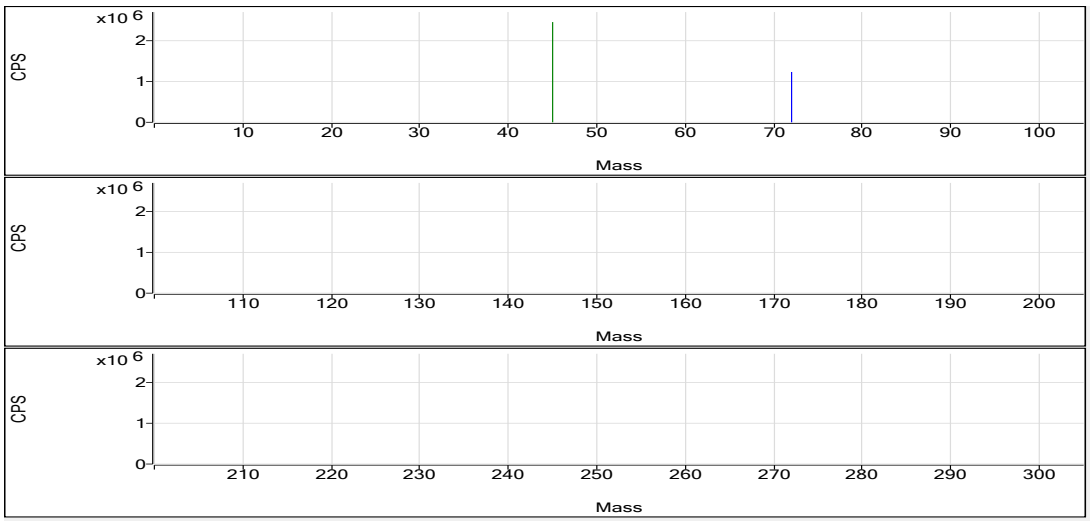
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	60.8	29.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.015	ppb	140.3	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	151.641	ppb	0.6	41452.28	0.8876	Pulse	0.1000	3
Mg	24	45	He	2.424	ppb	18.2	366.69	0.0078	Pulse	0.1000	3
Al	27	45	He	2.080	ppb	52.8	86.67	0.0019	Pulse	0.1000	3
K	39	45	He	8.043	ppb	90.6	18886.15	0.4044	Pulse	0.1000	3
Ca	44	45	He	24.119	ppb	71.6	203.34	0.0043	Pulse	0.1000	3
Ti	47	45	He	0.404	ppb	152.9	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.274	ppb	18.9	1440.75	0.0309	Pulse	0.5000	3
Cr	52	45	He	3.623	ppb	4.1	6931.91	0.1484	Pulse	0.1000	3
Mn	55	45	He	0.405	ppb	20.6	366.68	0.0078	Pulse	0.1000	3
Fe	57	45	He	28.543	ppb	16.1	840.05	0.0180	Pulse	0.1000	3
Co	59	45	He	0.092	ppb	30.6	343.35	0.0073	Pulse	0.1000	3
Ni	60	72	He	0.234	ppb	14.9	406.69	0.0048	Pulse	0.1000	3
Cu	63	72	He	0.099	ppb	27.3	613.37	0.0073	Pulse	0.1000	3
Zn	66	72	He	1.474	ppb	31.1	680.04	0.0081	Pulse	0.1000	3
As	75	72	He	0.067	ppb	31.4	79.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.023	ppb	60.1	100.00	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.034	ppb	39.3	86.67	0.0010	Pulse	0.1000	3
Ag	107	115	He	-0.007	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.034	ppb	N/A	1360.13	0.0159	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	1674.8	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.009	ppb	324.7	23.33	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.010	ppb	20.7	150.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	67.4	556.69	0.0014	Pulse	0.1000	3
U	238	209	He	0.002	ppb	54.4	60.00	0.0002	Pulse	0.1000	3

ISTD Table:

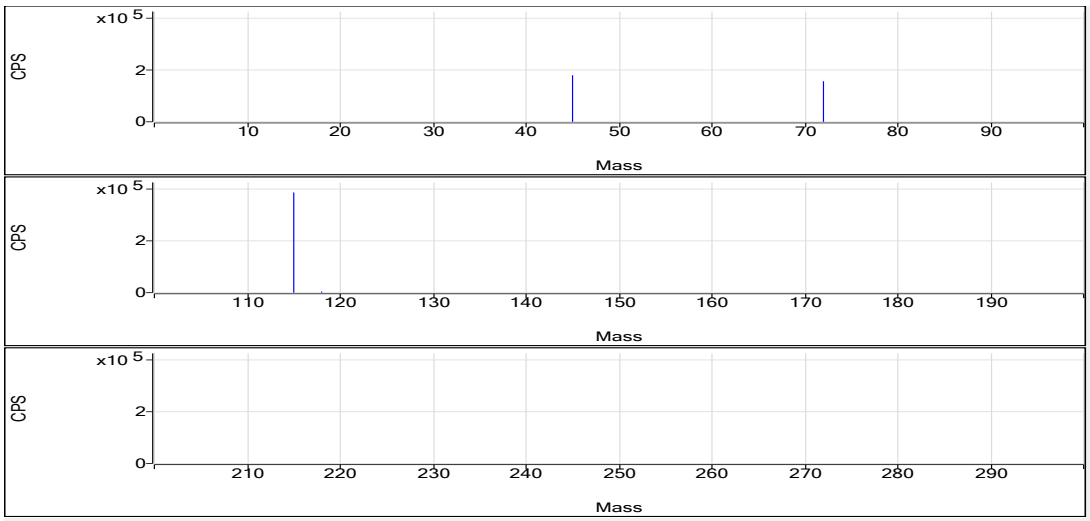
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2457589.60	0.8	102.5	Analog	0.1000	3
No Gas	Ge	72	1233769.43	0.3	107.0	Pulse	0.1000	3
H2	Sc	45	178810.55	1.5	95.6	Pulse	0.1000	3
H2	Ge	72	155943.21	0.9	95.3	Pulse	0.1000	3
H2	In	115	385201.52	1.1	99.0	Pulse	0.1000	3
He	Sc	45	46702.29	1.4	100.1	Pulse	0.1000	3
He	Ge	72	83976.67	1.8	103.4	Pulse	0.1000	3
He	In	115	85277.04	0.9	98.9	Pulse	0.1000	3
He	Tb	159	389011.94	0.2	97.6	Pulse	0.1000	3
He	Bi	209	306328.03	0.6	99.0	Pulse	0.1000	3

No Gas

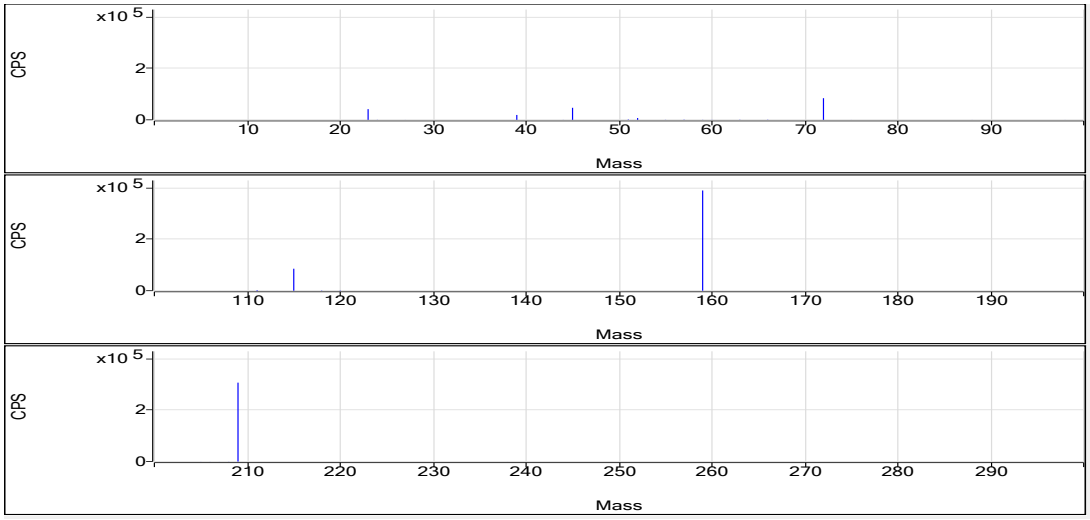


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Be	9	1	No Gas	0.004	0	18.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Se	78	2	H2	0.032	0	4.00	0.0004	1.219E-05
Se	78	2	H2	-0.009	0	1.33	0.0004	1.219E-05
Se	78	2	H2	0.022	0	3.33	0.0004	1.219E-05
Na	23	3	He	150.606	0.8839	41158.17	0.0036	0.3452
Na	23	3	He	152.361	0.8902	41058.02	0.0036	0.3452
Na	23	3	He	151.956	0.8887	42140.66	0.0036	0.3452
Mg	24	3	He	2.719	0.0084	390.02	0.0018	0.003497
Mg	24	3	He	1.918	0.0069	320.02	0.0018	0.003497
Mg	24	3	He	2.635	0.0082	390.02	0.0018	0.003497
Al	27	3	He	1.47	0.0015	70.00	0.0006	0.0006432
Al	27	3	He	3.348	0.0026	120.00	0.0006	0.0006432
Al	27	3	He	1.424	0.0015	70.00	0.0006	0.0006432
K	39	3	He	1.404	0.3967	18472.40	0.0012	0.3951
K	39	3	He	15.845	0.4135	19073.03	0.0012	0.3951
K	39	3	He	6.881	0.4031	19113.01	0.0012	0.3951
Ca	44	3	He	29.752	0.0047	220.01	0.0001	0.002715
Ca	44	3	He	4.745	0.003	140.01	0.0001	0.002715
Ca	44	3	He	37.861	0.0053	250.01	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	1.081	0.0007	30.00	0.0005	7.003E-05
Ti	47	3	He	0.262	0.0002	10.00	0.0005	7.003E-05
V	51	3	He	0.33	0.0321	1494.09	0.0219	0.02486
V	51	3	He	0.263	0.0306	1412.08	0.0219	0.02486
V	51	3	He	0.229	0.0299	1416.08	0.0219	0.02486
Cr	52	3	He	3.788	0.1534	7142.03	0.0299	0.03997
Cr	52	3	He	3.576	0.147	6781.82	0.0299	0.03997
Cr	52	3	He	3.505	0.1449	6871.89	0.0299	0.03997
Mn	55	3	He	0.414	0.0079	370.02	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.318	0.0067	310.01	0.0128	0.002639
Mn	55	3	He	0.485	0.0089	420.02	0.0128	0.002639
Fe	57	3	He	30.44	0.0191	890.05	0.0006	0.001429
Fe	57	3	He	31.874	0.0199	920.06	0.0006	0.001429
Fe	57	3	He	23.314	0.015	710.04	0.0006	0.001429
Co	59	3	He	0.122	0.009	420.02	0.0563	0.002149
Co	59	3	He	0.066	0.0059	270.01	0.0563	0.002149
Co	59	3	He	0.089	0.0072	340.01	0.0563	0.002149
Ni	60	3	He	0.258	0.005	430.02	0.0086	0.002834
Ni	60	3	He	0.194	0.0045	370.02	0.0086	0.002834
Ni	60	3	He	0.249	0.005	420.02	0.0086	0.002834
Cu	63	3	He	0.112	0.0076	650.04	0.0257	0.004757
Cu	63	3	He	0.118	0.0078	640.04	0.0257	0.004757
Cu	63	3	He	0.068	0.0065	550.03	0.0257	0.004757
Zn	66	3	He	0.947	0.0066	560.03	0.0029	0.003818
Zn	66	3	He	1.779	0.009	740.05	0.0029	0.003818
Zn	66	3	He	1.696	0.0088	740.05	0.0029	0.003818
As	75	3	He	0.088	0.001	84.00	0.002	0.0008061
As	75	3	He	0.046	0.0009	74.00	0.002	0.0008061
As	75	3	He	0.069	0.0009	80.00	0.002	0.0008061
Sr	88	3	He	0.01	0.0011	90.00	0.009	0.0009645
Sr	88	3	He	0.022	0.0012	100.00	0.009	0.0009645
Sr	88	3	He	0.038	0.0013	110.00	0.009	0.0009645
Mo	98	3	He	0.02	0.0007	60.00	0.0219	0.0002706
Mo	98	3	He	0.046	0.0013	110.00	0.0219	0.0002706
Mo	98	3	He	0.036	0.0011	90.00	0.0219	0.0002706
Ag	107	3	He	0.002	0.0007	60.00	0.0465	0.0006206
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Ag	107	3	He	-0.013	0	0.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.127	0.0185	1580.16	0.0158	0.01648
Sn	120	3	He	-0.055	0.0156	1340.12	0.0158	0.01648
Sn	120	3	He	-0.173	0.0137	1160.10	0.0158	0.01648
Sb	121	3	He	-0.002	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	-0.002	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Ba	137	3	He	0.025	0.0004	30.00	0.0048	0.0002317
Ba	137	3	He	0.025	0.0003	30.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Tl	205	3	He	0.008	0.0003	130.00	0.0247	0.0001339
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Tl	205	3	He	0.01	0.0004	150.01	0.0247	0.0001339
Pb	208	3	He	0.014	0.0015	360.02	0.0327	0.00107
Pb	208	3	He	0.017	0.0016	380.02	0.0327	0.00107
Pb	208	3	He	0.003	0.0012	270.01	0.0327	0.00107
U	238	3	He	0.001	0.0001	40.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	80.00	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
Sc	45	1	No Gas			2475282.46		
Sc	45	1	No Gas			2436429.96		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2461056.37		
Ge	72	1	No Gas			1232741.86		
Ge	72	1	No Gas			1238099.90		
Ge	72	1	No Gas			1230466.54		
Sc	45	2	H2			181042.85		
Sc	45	2	H2			175740.31		
Sc	45	2	H2			179648.49		
Ge	72	2	H2			157368.86		
Ge	72	2	H2			155832.61		
Ge	72	2	H2			154628.16		
In	115	2	H2			389072.65		
In	115	2	H2			385842.10		
In	115	2	H2			380689.80		
Sc	45	3	He			46565.05		
Sc	45	3	He			46124.17		
Sc	45	3	He			47417.65		
Ge	72	3	He			85163.61		
Ge	72	3	He			82256.34		
Ge	72	3	He			84510.05		
In	115	3	He			85523.11		
In	115	3	He			85905.76		
In	115	3	He			84426.35		
Tb	159	3	He			389653.67		
Tb	159	3	He			388454.02		
Tb	159	3	He			388928.12		
Bi	209	3	He			305138.67		
Bi	209	3	He			305284.98		
Bi	209	3	He			308560.43		

Quantitation Report

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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

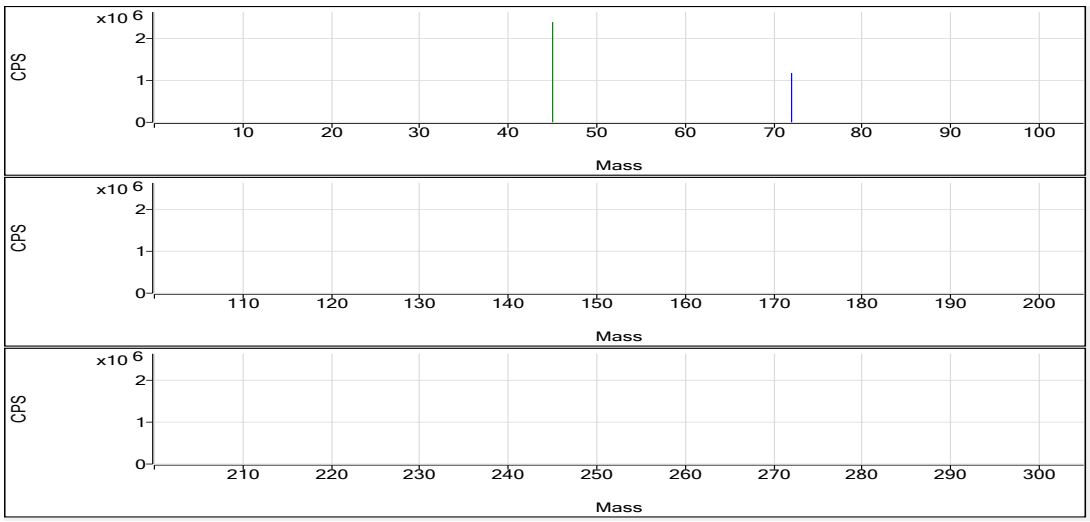
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	31.4	23.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.006	ppb	352.3	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	12.978	ppb	40.7	18567.26	0.3916	Pulse	0.1000	3
Mg	24	45	He	0.442	ppb	213.7	203.34	0.0043	Pulse	0.1000	3
Al	27	45	He	0.583	ppb	71.8	46.67	0.0010	Pulse	0.1000	3
K	39	45	He	3.880	ppb	124.5	18946.09	0.3996	Pulse	0.1000	3
Ca	44	45	He	-1.696	ppb	N/A	123.34	0.0026	Pulse	0.1000	3
Ti	47	45	He	-0.130	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.258	ppb	15.6	1446.08	0.0305	Pulse	0.5000	3
Cr	52	45	He	-0.098	ppb	N/A	1756.83	0.0370	Pulse	0.1000	3
Mn	55	45	He	0.112	ppb	74.9	193.34	0.0041	Pulse	0.1000	3
Fe	57	45	He	1.776	ppb	65.7	116.67	0.0025	Pulse	0.1000	3
Co	59	45	He	0.034	ppb	111.9	193.34	0.0041	Pulse	0.1000	3
Ni	60	72	He	-0.045	ppb	N/A	200.01	0.0024	Pulse	0.1000	3
Cu	63	72	He	0.034	ppb	21.2	460.02	0.0056	Pulse	0.1000	3
Zn	66	72	He	1.536	ppb	12.9	676.71	0.0083	Pulse	0.1000	3
As	75	72	He	0.057	ppb	51.8	75.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.005	ppb	1650.1	86.67	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.018	ppb	47.1	56.67	0.0007	Pulse	0.1000	3
Ag	107	115	He	-0.006	ppb	N/A	30.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	1.1	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.019	ppb	67.5	1436.80	0.0168	Pulse	0.1000	3
Sb	121	115	He	-0.008	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Ba	137	115	He	-0.008	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.012	ppb	51.3	170.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	44.3	586.70	0.0015	Pulse	0.1000	3
U	238	209	He	0.003	ppb	29.3	73.33	0.0002	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2397871.27	1.8	100.0	Analog	0.1000	3
No Gas	Ge	72	1179659.38	0.8	102.3	Pulse	0.1000	3
H2	Sc	45	177731.43	1.4	95.0	Pulse	0.1000	3
H2	Ge	72	149964.41	1.5	91.6	Pulse	0.1000	3
H2	In	115	381076.53	0.8	97.9	Pulse	0.1000	3
He	Sc	45	47414.80	0.1	101.7	Pulse	0.1000	3
He	Ge	72	81649.87	0.5	100.6	Pulse	0.1000	3
He	In	115	85612.72	1.1	99.3	Pulse	0.1000	3
He	Tb	159	388414.41	0.6	97.4	Pulse	0.1000	3
He	Bi	209	302581.82	0.8	97.8	Pulse	0.1000	3

No Gas



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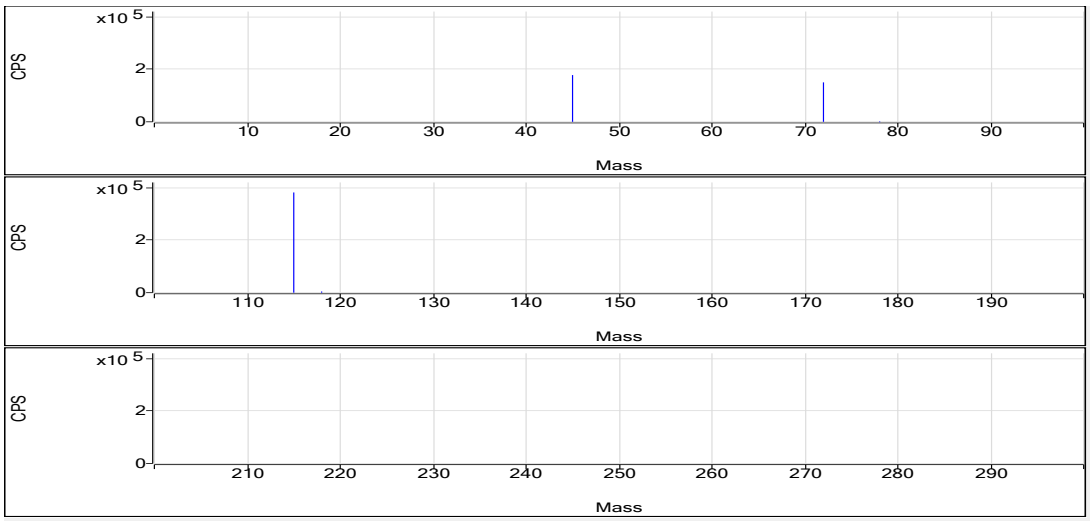
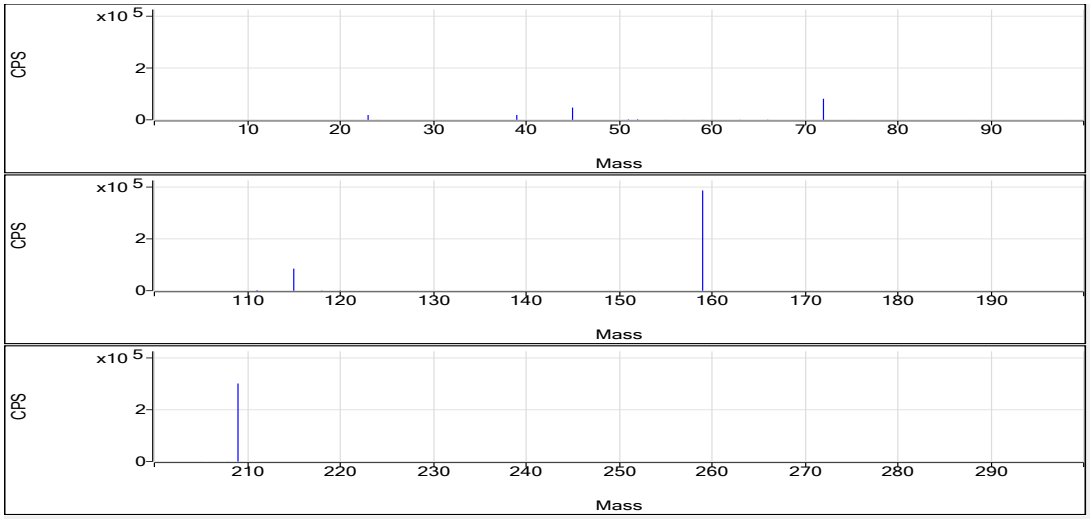


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	20.00	0.0008	4.685E-06
Be	9	1	No Gas	0.006	0	22.00	0.0008	4.685E-06
Se	78	2	H2	0.014	0	2.67	0.0004	1.219E-05
Se	78	2	H2	-0.018	0	0.67	0.0004	1.219E-05
Se	78	2	H2	0.023	0	3.33	0.0004	1.219E-05
Na	23	3	He	8.634	0.376	17831.23	0.0036	0.3452
Na	23	3	He	18.849	0.4126	19588.86	0.0036	0.3452
Na	23	3	He	11.45	0.3861	18281.70	0.0036	0.3452
Mg	24	3	He	1.342	0.0059	280.01	0.0018	0.003497
Mg	24	3	He	-0.54	0.0025	120.00	0.0018	0.003497
Mg	24	3	He	0.523	0.0044	210.01	0.0018	0.003497
Al	27	3	He	0.342	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	0.341	0.0008	40.00	0.0006	0.0006432
Al	27	3	He	1.067	0.0013	60.00	0.0006	0.0006432
K	39	3	He	-1.465	0.3934	18652.44	0.0012	0.3951
K	39	3	He	5.167	0.4011	19042.85	0.0012	0.3951
K	39	3	He	7.936	0.4043	19142.99	0.0012	0.3951
Ca	44	3	He	3.519	0.003	140.01	0.0001	0.002715
Ca	44	3	He	9.699	0.0034	160.01	0.0001	0.002715
Ca	44	3	He	-18.305	0.0015	70.00	0.0001	0.002715
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.283	0.031	1472.08	0.0219	0.02486
V	51	3	He	0.279	0.031	1470.08	0.0219	0.02486
V	51	3	He	0.211	0.0295	1396.08	0.0219	0.02486
Cr	52	3	He	-0.06	0.0382	1810.18	0.0299	0.03997
Cr	52	3	He	-0.005	0.0398	1890.18	0.0299	0.03997
Cr	52	3	He	-0.227	0.0332	1570.14	0.0299	0.03997
Mn	55	3	He	0.041	0.0032	150.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.205	0.0053	250.01	0.0128	0.002639
Mn	55	3	He	0.091	0.0038	180.01	0.0128	0.002639
Fe	57	3	He	0.445	0.0017	80.00	0.0006	0.001429
Fe	57	3	He	2.616	0.0029	140.01	0.0006	0.001429
Fe	57	3	He	2.267	0.0027	130.01	0.0006	0.001429
Co	59	3	He	0.018	0.0032	150.01	0.0563	0.002149
Co	59	3	He	0.007	0.0025	120.00	0.0563	0.002149
Co	59	3	He	0.078	0.0065	310.02	0.0563	0.002149
Ni	60	3	He	0.012	0.0029	240.01	0.0086	0.002834
Ni	60	3	He	-0.187	0.0012	100.00	0.0086	0.002834
Ni	60	3	He	0.039	0.0032	260.01	0.0086	0.002834
Cu	63	3	He	0.039	0.0058	470.02	0.0257	0.004757
Cu	63	3	He	0.026	0.0054	440.02	0.0257	0.004757
Cu	63	3	He	0.038	0.0057	470.02	0.0257	0.004757
Zn	66	3	He	1.338	0.0077	630.04	0.0029	0.003818
Zn	66	3	He	1.734	0.0089	720.04	0.0029	0.003818
Zn	66	3	He	1.535	0.0083	680.04	0.0029	0.003818
As	75	3	He	0.073	0.001	78.00	0.002	0.0008061
As	75	3	He	0.075	0.001	78.00	0.002	0.0008061
As	75	3	He	0.023	0.0009	70.00	0.002	0.0008061
Sr	88	3	He	-0.042	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	0.099	0.0019	160.01	0.009	0.0009645
Sr	88	3	He	-0.043	0.0006	50.00	0.009	0.0009645
Mo	98	3	He	0.025	0.0008	70.00	0.0219	0.0002706
Mo	98	3	He	0.009	0.0005	40.00	0.0219	0.0002706
Mo	98	3	He	0.019	0.0007	60.00	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.021	0.0168	1420.12	0.0158	0.01648
Sn	120	3	He	0.006	0.0166	1430.14	0.0158	0.01648
Sn	120	3	He	0.032	0.017	1460.14	0.0158	0.01648
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	-0.018	0	0.00	0.0149	0.0002698
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	-0.024	0.0001	10.00	0.0048	0.0002317
Ba	137	3	He	0.024	0.0003	30.00	0.0048	0.0002317
Tl	205	3	He	0.005	0.0003	100.00	0.0247	0.0001339
Tl	205	3	He	0.017	0.0005	210.01	0.0247	0.0001339
Tl	205	3	He	0.015	0.0005	200.01	0.0247	0.0001339
Pb	208	3	He	0.019	0.0017	350.01	0.0327	0.00107
Pb	208	3	He	0.008	0.0013	260.02	0.0327	0.00107
Pb	208	3	He	0.013	0.0015	310.02	0.0327	0.00107
U	238	3	He	0.003	0.0002	70.00	0.0493	7.55E-05
U	238	3	He	0.002	0.0002	60.00	0.0493	7.55E-05
U	238	3	He	0.004	0.0003	90.00	0.0493	7.55E-05
Sc	45	1	No Gas			2434303.09		
Sc	45	1	No Gas			2350178.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2409132.00		
Ge	72	1	No Gas			1189498.19		
Ge	72	1	No Gas			1172312.56		
Ge	72	1	No Gas			1177167.40		
Sc	45	2	H2			175680.06		
Sc	45	2	H2			177026.83		
Sc	45	2	H2			180487.40		
Ge	72	2	H2			148172.56		
Ge	72	2	H2			149202.10		
Ge	72	2	H2			152518.56		
In	115	2	H2			377816.56		
In	115	2	H2			381829.10		
In	115	2	H2			383583.94		
Sc	45	3	He			47418.12		
Sc	45	3	He			47478.58		
Sc	45	3	He			47347.71		
Ge	72	3	He			81693.20		
Ge	72	3	He			81200.92		
Ge	72	3	He			82055.48		
In	115	3	He			84516.60		
In	115	3	He			86338.41		
In	115	3	He			86005.07		
Tb	159	3	He			386690.50		
Tb	159	3	He			387269.88		
Tb	159	3	He			391282.85		
Bi	209	3	He			300526.15		
Bi	209	3	He			302143.02		
Bi	209	3	He			305076.30		

Quantitation Report

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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

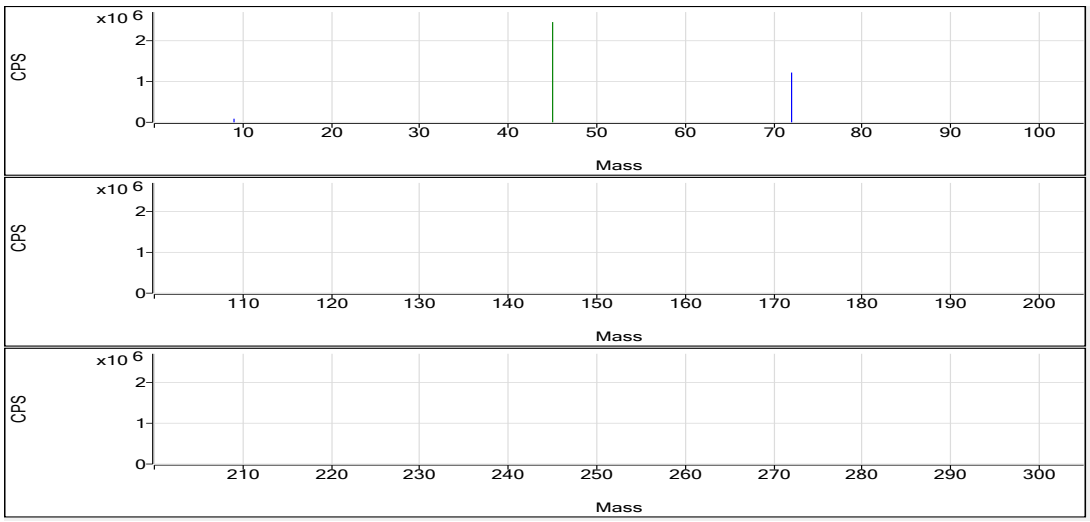
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.906	ppb	0.8	87569.52	0.0358	Pulse	0.5000	3
Se	78	72	H2	53.132	ppb	2.5	3385.74	0.0222	Pulse	1.5000	3
Na	23	45	He	4911.019	ppb	0.6	827120.12	17.9121	Pulse	0.1000	3
Mg	24	45	He	5072.705	ppb	0.9	420463.67	9.1056	Pulse	0.1000	3
Al	27	45	He	4921.858	ppb	0.6	132992.48	2.8801	Pulse	0.1000	3
K	39	45	He	5149.936	ppb	1.0	295124.55	6.3913	Pulse	0.1000	3
Ca	44	45	He	5134.125	ppb	3.2	16139.41	0.3495	Pulse	0.1000	3
Ti	47	45	He	5102.872	ppb	0.9	126530.84	2.7401	Pulse	0.1000	3
V	51	45	He	517.561	ppb	0.5	523563.05	11.3383	Pulse	0.5000	3
Cr	52	45	He	492.503	ppb	1.0	682746.16	14.7859	Pulse	0.1000	3
Mn	55	45	He	510.316	ppb	0.3	302548.96	6.5520	Pulse	0.1000	3
Fe	57	45	He	5099.355	ppb	0.7	136871.27	2.9641	Pulse	0.1000	3
Co	59	45	He	497.502	ppb	0.7	1293062.69	28.0027	Pulse	0.1000	3
Ni	60	72	He	515.482	ppb	0.8	362879.50	4.4273	Pulse	0.1000	3
Cu	63	72	He	493.026	ppb	0.9	1037760.24	12.6613	Pulse	0.1000	3
Zn	66	72	He	514.126	ppb	0.2	123014.06	1.5008	Pulse	0.1000	3
As	75	72	He	521.074	ppb	1.1	87570.18	1.0684	Pulse	0.5000	3
Sr	88	115	He	49.464	ppb	1.6	37938.35	0.4447	Pulse	0.1000	3
Mo	98	115	He	51.144	ppb	0.9	95698.51	1.1217	Pulse	0.1000	3
Ag	107	115	He	50.724	ppb	0.6	201233.06	2.3586	Pulse	0.1000	3
Cd	111	115	He	50.761	ppb	0.6	23156.55	0.2714	Pulse	0.5000	3
Sn	120	115	He	50.863	ppb	1.1	69963.71	0.8200	Pulse	0.1000	3
Sb	121	115	He	51.014	ppb	0.6	64671.35	0.7580	Pulse	0.1000	3
Ba	137	115	He	515.332	ppb	0.8	211030.59	2.4735	Pulse	0.1000	3
Tl	205	159	He	51.305	ppb	0.9	499166.19	1.2687	Pulse	0.1000	3
Pb	208	159	He	51.167	ppb	0.4	659319.92	1.6758	Pulse	0.1000	3
U	238	209	He	50.467	ppb	0.3	756537.54	2.4861	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2447197.72	0.1	102.0	Analog	0.1000	3
No Gas	Ge	72	1214479.96	1.1	105.3	Pulse	0.1000	3
H2	Sc	45	176678.54	1.3	94.5	Pulse	0.1000	3
H2	Ge	72	152718.83	0.7	93.3	Pulse	0.1000	3
H2	In	115	383251.38	0.7	98.5	Pulse	0.1000	3
He	Sc	45	46177.11	0.5	99.0	Pulse	0.1000	3
He	Ge	72	81968.45	1.0	101.0	Pulse	0.1000	3
He	In	115	85318.52	0.4	99.0	Pulse	0.1000	3
He	Tb	159	393447.01	0.2	98.7	Pulse	0.1000	3
He	Bi	209	304315.48	0.8	98.4	Pulse	0.1000	3

No Gas



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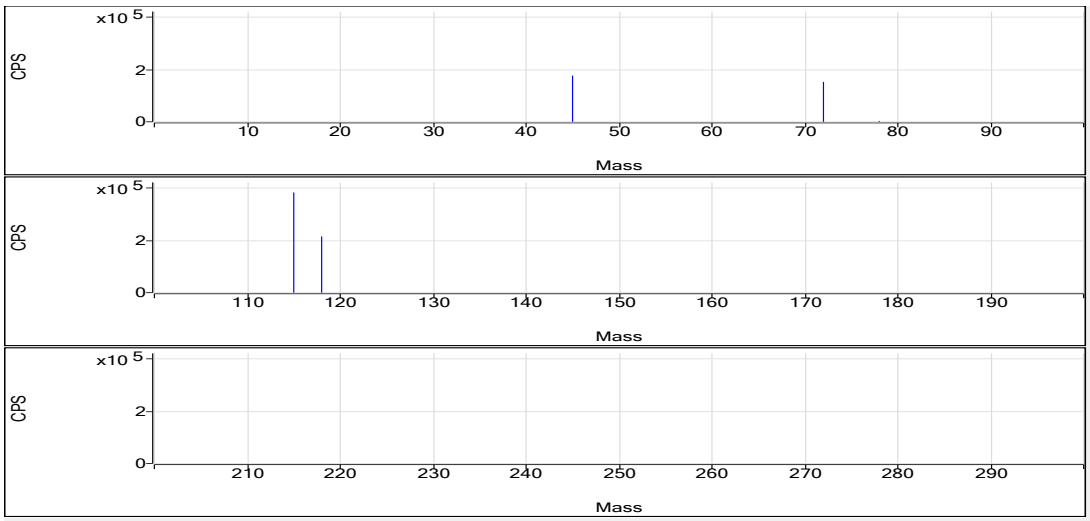
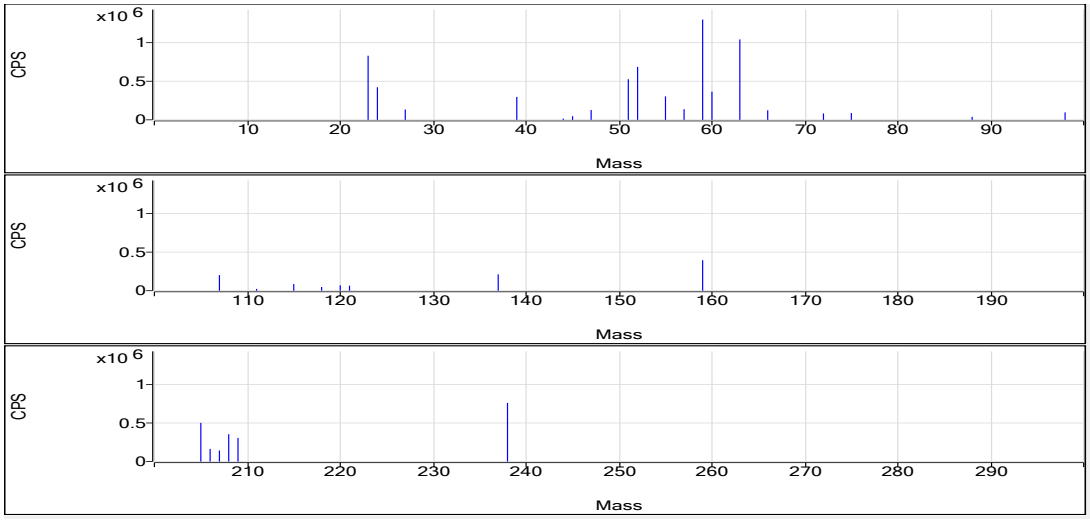


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.703	0.0356	87308.74	0.0008	4.685E-06
Be	9	1	No Gas	46.666	0.0356	87129.50	0.0008	4.685E-06
Be	9	1	No Gas	47.349	0.0361	88270.32	0.0008	4.685E-06
Se	78	2	H2	52.985	0.0221	3364.40	0.0004	1.219E-05
Se	78	2	H2	51.906	0.0217	3335.06	0.0004	1.219E-05
Se	78	2	H2	54.507	0.0227	3457.76	0.0004	1.219E-05
Na	23	3	He	4932.054	17.9874	831804.91	0.0036	0.3452
Na	23	3	He	4876.714	17.7894	824623.03	0.0036	0.3452
Na	23	3	He	4924.288	17.9596	824932.41	0.0036	0.3452
Mg	24	3	He	5113.396	9.1786	424452.77	0.0018	0.003497
Mg	24	3	He	5023.425	9.0171	417987.06	0.0018	0.003497
Mg	24	3	He	5081.293	9.121	418951.17	0.0018	0.003497
Al	27	3	He	4921.898	2.8801	133188.10	0.0006	0.0006432
Al	27	3	He	4894.11	2.8639	132753.83	0.0006	0.0006432
Al	27	3	He	4949.567	2.8963	133035.52	0.0006	0.0006432
K	39	3	He	5179.515	6.4257	297149.78	0.0012	0.3951
K	39	3	He	5091.527	6.3233	293113.34	0.0012	0.3951
K	39	3	He	5178.766	6.4248	295110.52	0.0012	0.3951
Ca	44	3	He	4966.037	0.3382	15638.76	0.0001	0.002715
Ca	44	3	He	5142.73	0.3501	16229.54	0.0001	0.002715
Ca	44	3	He	5293.607	0.3603	16549.94	0.0001	0.002715
Ti	47	3	He	5091.425	2.7339	126426.37	0.0005	7.003E-05
Ti	47	3	He	5153.021	2.767	128262.62	0.0005	7.003E-05
Ti	47	3	He	5064.169	2.7193	124903.53	0.0005	7.003E-05
V	51	3	He	517.175	11.3299	523937.16	0.0219	0.02486
V	51	3	He	515.196	11.2866	523188.69	0.0219	0.02486
V	51	3	He	520.313	11.3985	523563.31	0.0219	0.02486
Cr	52	3	He	491.444	14.7542	682290.07	0.0299	0.03997
Cr	52	3	He	488	14.651	679144.91	0.0299	0.03997
Cr	52	3	He	498.064	14.9524	686803.51	0.0299	0.03997
Mn	55	3	He	508.412	6.5275	301858.63	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	510.644	6.5562	303909.98	0.0128	0.002639
Mn	55	3	He	511.891	6.5722	301878.26	0.0128	0.002639
Fe	57	3	He	5112.348	2.9717	137420.85	0.0006	0.001429
Fe	57	3	He	5057.679	2.9399	136277.99	0.0006	0.001429
Fe	57	3	He	5128.037	2.9808	136914.97	0.0006	0.001429
Co	59	3	He	499.074	28.0912	1299044.28	0.0563	0.002149
Co	59	3	He	493.679	27.7876	1288084.59	0.0563	0.002149
Co	59	3	He	499.753	28.1294	1292059.20	0.0563	0.002149
Ni	60	3	He	518.858	4.4563	363195.85	0.0086	0.002834
Ni	60	3	He	516.658	4.4374	361614.60	0.0086	0.002834
Ni	60	3	He	510.929	4.3882	363828.04	0.0086	0.002834
Cu	63	3	He	494.589	12.7014	1035190.69	0.0257	0.004757
Cu	63	3	He	496.698	12.7555	1039482.56	0.0257	0.004757
Cu	63	3	He	487.791	12.5269	1038607.48	0.0257	0.004757
Zn	66	3	He	513.031	1.4976	122055.16	0.0029	0.003818
Zn	66	3	He	515.519	1.5048	122631.27	0.0029	0.003818
Zn	66	3	He	513.826	1.4999	124355.75	0.0029	0.003818
As	75	3	He	525.124	1.0767	87754.79	0.002	0.0008061
As	75	3	He	523.569	1.0735	87484.89	0.002	0.0008061
As	75	3	He	514.528	1.055	87470.87	0.002	0.0008061
Sr	88	3	He	49.787	0.4475	38262.65	0.009	0.0009645
Sr	88	3	He	48.581	0.4367	37109.35	0.009	0.0009645
Sr	88	3	He	50.025	0.4497	38443.06	0.009	0.0009645
Mo	98	3	He	51.423	1.1278	96420.56	0.0219	0.0002706
Mo	98	3	He	51.367	1.1266	95724.66	0.0219	0.0002706
Mo	98	3	He	50.641	1.1107	94950.32	0.0219	0.0002706
Ag	107	3	He	50.412	2.3441	200410.29	0.0465	0.0006206
Ag	107	3	He	50.98	2.3705	201425.88	0.0465	0.0006206
Ag	107	3	He	50.78	2.3612	201863.02	0.0465	0.0006206
Cd	111	3	He	50.868	0.272	23253.36	0.0053	0
Cd	111	3	He	51.001	0.2727	23171.27	0.0053	0
Cd	111	3	He	50.415	0.2696	23045.02	0.0053	0
Sn	120	3	He	51.078	0.8234	70399.27	0.0158	0.01648
Sn	120	3	He	51.271	0.8265	70228.15	0.0158	0.01648
Sn	120	3	He	50.239	0.8102	69263.71	0.0158	0.01648
Sb	121	3	He	50.679	0.753	64379.77	0.0149	0.0002698
Sb	121	3	He	51.175	0.7604	64611.00	0.0149	0.0002698
Sb	121	3	He	51.188	0.7606	65023.29	0.0149	0.0002698
Ba	137	3	He	510.96	2.4525	209674.76	0.0048	0.0002317
Ba	137	3	He	519.353	2.4928	211813.67	0.0048	0.0002317
Ba	137	3	He	515.684	2.4752	211603.34	0.0048	0.0002317
Tl	205	3	He	51.645	1.2771	501358.04	0.0247	0.0001339
Tl	205	3	He	50.751	1.255	494543.86	0.0247	0.0001339
Tl	205	3	He	51.519	1.274	501596.67	0.0247	0.0001339
Pb	208	3	He	51.066	1.6724	352559.37	0.0327	0.00107
Pb	208	3	He	51.055	1.6721	352164.80	0.0327	0.00107
Pb	208	3	He	51.38	1.6827	354407.34	0.0327	0.00107
U	238	3	He	50.572	2.4913	760189.21	0.0493	7.55E-05
U	238	3	He	50.53	2.4892	750737.18	0.0493	7.55E-05
U	238	3	He	50.297	2.4777	758686.24	0.0493	7.55E-05
Sc	45	1	No Gas			2450474.34		
Sc	45	1	No Gas			2447426.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2443691.99		
Ge	72	1	No Gas			1217548.11		
Ge	72	1	No Gas			1200286.86		
Ge	72	1	No Gas			1225604.90		
Sc	45	2	H2			174011.11		
Sc	45	2	H2			178481.74		
Sc	45	2	H2			177542.77		
Ge	72	2	H2			152163.67		
Ge	72	2	H2			153970.76		
Ge	72	2	H2			152022.05		
In	115	2	H2			386053.16		
In	115	2	H2			380866.44		
In	115	2	H2			382834.53		
Sc	45	3	He			46243.86		
Sc	45	3	He			46354.73		
Sc	45	3	He			45932.73		
Ge	72	3	He			81502.22		
Ge	72	3	He			81492.80		
Ge	72	3	He			82910.34		
In	115	3	He			85864.17		
In	115	3	He			85343.16		
In	115	3	He			85864.62		
Tb	159	3	He			392568.94		
Tb	159	3	He			394055.93		
Tb	159	3	He			393716.17		
Bi	209	3	He			305141.28		
Bi	209	3	He			301601.13		
Bi	209	3	He			306204.02		

Quantitation Report

Data File Name	279_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H10A00.b
Acq Time	8/10/2023 8:15:41 PM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

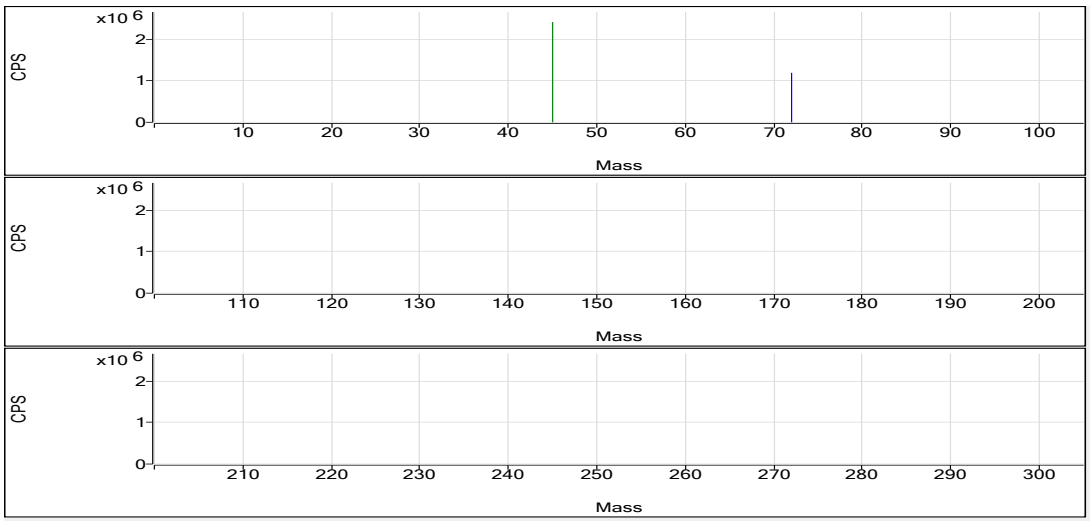
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.017	ppb	21.6	42.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.055	ppb	18.2	5.33	0.0000	Pulse	1.5000	3
Na	23	45	He	15.193	ppb	4.6	18231.73	0.3995	Pulse	0.1000	3
Mg	24	45	He	0.330	ppb	216.1	186.67	0.0041	Pulse	0.1000	3
Al	27	45	He	0.523	ppb	82.6	43.33	0.0009	Pulse	0.1000	3
K	39	45	He	18.763	ppb	15.6	19026.23	0.4169	Pulse	0.1000	3
Ca	44	45	He	16.041	ppb	31.2	173.34	0.0038	Pulse	0.1000	3
Ti	47	45	He	0.822	ppb	28.8	23.33	0.0005	Pulse	0.1000	3
V	51	45	He	0.316	ppb	3.7	1450.08	0.0318	Pulse	0.5000	3
Cr	52	45	He	0.056	ppb	258.4	1900.19	0.0416	Pulse	0.1000	3
Mn	55	45	He	0.182	ppb	55.3	226.68	0.0050	Pulse	0.1000	3
Fe	57	45	He	1.940	ppb	62.3	116.67	0.0026	Pulse	0.1000	3
Co	59	45	He	0.092	ppb	6.7	333.35	0.0073	Pulse	0.1000	3
Ni	60	72	He	0.039	ppb	226.8	256.68	0.0032	Pulse	0.1000	3
Cu	63	72	He	0.066	ppb	51.0	523.36	0.0065	Pulse	0.1000	3
Zn	66	72	He	1.725	ppb	3.5	716.71	0.0088	Pulse	0.1000	3
As	75	72	He	0.136	ppb	78.1	88.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.007	ppb	410.4	86.67	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.069	ppb	28.9	150.01	0.0018	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	109.9	66.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	108.3	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.092	ppb	163.7	1516.82	0.0179	Pulse	0.1000	3
Sb	121	115	He	0.008	ppb	147.7	33.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.076	ppb	119.8	50.00	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.073	ppb	16.6	756.72	0.0019	Pulse	0.1000	3
Pb	208	159	He	0.016	ppb	84.2	630.03	0.0016	Pulse	0.1000	3
U	238	209	He	0.035	ppb	4.8	546.70	0.0018	Pulse	0.1000	3

ISTD Table:

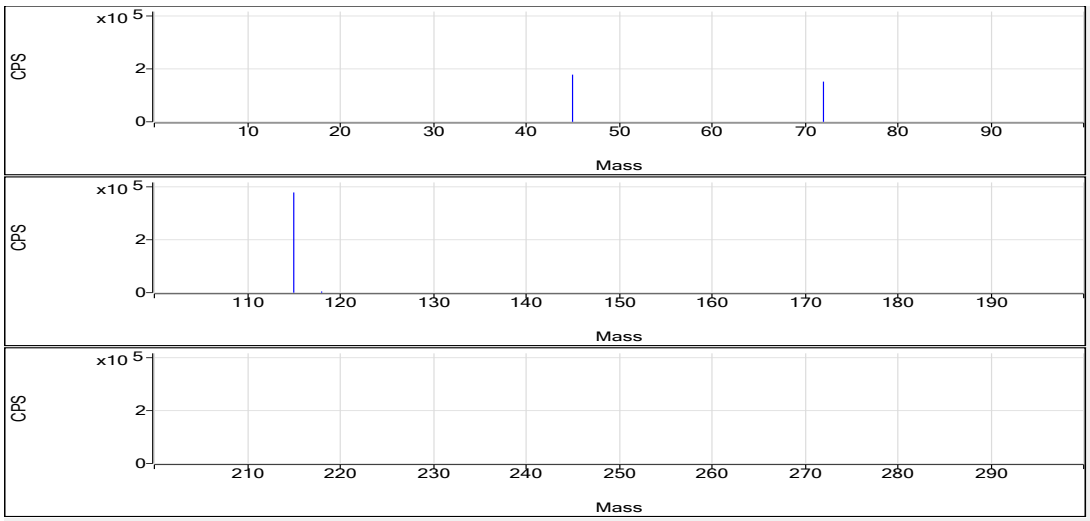
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2423911.32	1.0	101.0	Analog	0.1000	3
No Gas	Ge	72	1196174.18	0.2	103.7	Pulse	0.1000	3
H2	Sc	45	178608.85	1.2	95.5	Pulse	0.1000	3
H2	Ge	72	152213.37	0.9	93.0	Pulse	0.1000	3
H2	In	115	379490.81	1.2	97.5	Pulse	0.1000	3
He	Sc	45	45635.92	0.1	97.8	Pulse	0.1000	3
He	Ge	72	81069.52	0.2	99.8	Pulse	0.1000	3
He	In	115	84598.87	1.1	98.1	Pulse	0.1000	3
He	Tb	159	392689.01	0.8	98.5	Pulse	0.1000	3
He	Bi	209	304416.24	0.8	98.4	Pulse	0.1000	3

No Gas

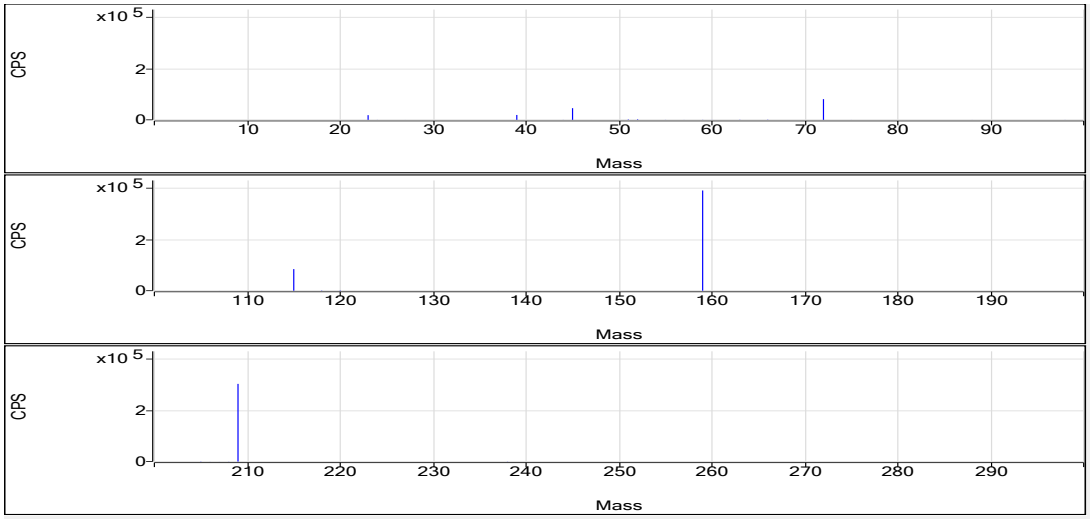


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.021	0	50.00	0.0008	4.685E-06
Be	9	1	No Gas	0.014	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.015	0	40.00	0.0008	4.685E-06
Se	78	2	H2	0.064	0	6.00	0.0004	1.219E-05
Se	78	2	H2	0.055	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.044	0	4.67	0.0004	1.219E-05
Na	23	3	He	15.937	0.4022	18331.83	0.0036	0.3452
Na	23	3	He	14.551	0.3972	18121.70	0.0036	0.3452
Na	23	3	He	15.091	0.3991	18241.67	0.0036	0.3452
Mg	24	3	He	-0.482	0.0026	120.00	0.0018	0.003497
Mg	24	3	He	0.861	0.005	230.01	0.0018	0.003497
Mg	24	3	He	0.612	0.0046	210.01	0.0018	0.003497
Al	27	3	He	0.775	0.0011	50.00	0.0006	0.0006432
Al	27	3	He	0.024	0.0007	30.00	0.0006	0.0006432
Al	27	3	He	0.771	0.0011	50.00	0.0006	0.0006432
K	39	3	He	20.062	0.4184	19072.86	0.0012	0.3951
K	39	3	He	15.413	0.413	18842.73	0.0012	0.3951
K	39	3	He	20.814	0.4193	19163.09	0.0012	0.3951
Ca	44	3	He	21.517	0.0042	190.01	0.0001	0.002715
Ca	44	3	He	11.729	0.0035	160.01	0.0001	0.002715
Ca	44	3	He	14.877	0.0037	170.01	0.0001	0.002715
Ti	47	3	He	1.095	0.0007	30.00	0.0005	7.003E-05
Ti	47	3	He	0.686	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.685	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.328	0.032	1460.08	0.0219	0.02486
V	51	3	He	0.305	0.0315	1438.08	0.0219	0.02486
V	51	3	He	0.316	0.0318	1452.08	0.0219	0.02486
Cr	52	3	He	0.109	0.0432	1970.21	0.0299	0.03997
Cr	52	3	He	0.166	0.0449	2050.20	0.0299	0.03997
Cr	52	3	He	-0.107	0.0368	1680.17	0.0299	0.03997
Mn	55	3	He	0.222	0.0055	250.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.256	0.0059	270.01	0.0128	0.002639
Mn	55	3	He	0.067	0.0035	160.01	0.0128	0.002639
Fe	57	3	He	0.562	0.0018	80.00	0.0006	0.001429
Fe	57	3	He	2.446	0.0028	130.01	0.0006	0.001429
Fe	57	3	He	2.814	0.0031	140.01	0.0006	0.001429
Co	59	3	He	0.098	0.0077	350.02	0.0563	0.002149
Co	59	3	He	0.09	0.0072	330.02	0.0563	0.002149
Co	59	3	He	0.086	0.007	320.01	0.0563	0.002149
Ni	60	3	He	-0.057	0.0023	190.01	0.0086	0.002834
Ni	60	3	He	0.057	0.0033	270.01	0.0086	0.002834
Ni	60	3	He	0.116	0.0038	310.01	0.0086	0.002834
Cu	63	3	He	0.098	0.0073	590.03	0.0257	0.004757
Cu	63	3	He	0.069	0.0065	530.03	0.0257	0.004757
Cu	63	3	He	0.031	0.0056	450.02	0.0257	0.004757
Zn	66	3	He	1.657	0.0086	700.05	0.0029	0.003818
Zn	66	3	He	1.776	0.009	730.05	0.0029	0.003818
Zn	66	3	He	1.743	0.0089	720.04	0.0029	0.003818
As	75	3	He	0.173	0.0012	94.00	0.002	0.0008061
As	75	3	He	0.219	0.0013	102.00	0.002	0.0008061
As	75	3	He	0.016	0.0008	68.00	0.002	0.0008061
Sr	88	3	He	-0.016	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	0.037	0.0013	110.00	0.009	0.0009645
Sr	88	3	He	-0.001	0.001	80.00	0.009	0.0009645
Mo	98	3	He	0.073	0.0019	160.01	0.0219	0.0002706
Mo	98	3	He	0.047	0.0013	110.01	0.0219	0.0002706
Mo	98	3	He	0.086	0.0022	180.01	0.0219	0.0002706
Ag	107	3	He	0.004	0.0008	70.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.001	80.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0.022	0.0001	10.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	-0.037	0.0159	1360.14	0.0158	0.01648
Sn	120	3	He	0.259	0.0206	1740.17	0.0158	0.01648
Sn	120	3	He	0.055	0.0173	1450.14	0.0158	0.01648
Sb	121	3	He	-0.002	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	0.022	0.0006	50.00	0.0149	0.0002698
Ba	137	3	He	0	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.05	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.176	0.0011	90.00	0.0048	0.0002317
Tl	205	3	He	0.059	0.0016	630.04	0.0247	0.0001339
Tl	205	3	He	0.076	0.002	780.05	0.0247	0.0001339
Tl	205	3	He	0.083	0.0022	860.06	0.0247	0.0001339
Pb	208	3	He	0.016	0.0016	430.02	0.0327	0.00107
Pb	208	3	He	0.003	0.0012	280.01	0.0327	0.00107
Pb	208	3	He	0.03	0.0021	460.03	0.0327	0.00107
U	238	3	He	0.034	0.0017	530.03	0.0493	7.55E-05
U	238	3	He	0.034	0.0018	530.03	0.0493	7.55E-05
U	238	3	He	0.037	0.0019	580.04	0.0493	7.55E-05
Sc	45	1	No Gas			2401960.59		
Sc	45	1	No Gas			2419986.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2449787.15		
Ge	72	1	No Gas			1199392.25		
Ge	72	1	No Gas			1194593.42		
Ge	72	1	No Gas			1194536.86		
Sc	45	2	H2			180972.75		
Sc	45	2	H2			177097.73		
Sc	45	2	H2			177756.07		
Ge	72	2	H2			153728.87		
Ge	72	2	H2			150889.20		
Ge	72	2	H2			152022.05		
In	115	2	H2			384232.57		
In	115	2	H2			375332.73		
In	115	2	H2			378907.14		
Sc	45	3	He			45582.54		
Sc	45	3	He			45622.71		
Sc	45	3	He			45702.52		
Ge	72	3	He			80998.91		
Ge	72	3	He			81230.34		
Ge	72	3	He			80979.31		
In	115	3	He			85562.40		
In	115	3	He			84626.79		
In	115	3	He			83631.23		
Tb	159	3	He			394104.49		
Tb	159	3	He			389287.34		
Tb	159	3	He			394675.19		
Bi	209	3	He			304376.28		
Bi	209	3	He			301968.24		
Bi	209	3	He			306904.21		

Quantitation Report

Data File Name	280SMPL.d
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Acq Time	8/10/2023 8:17:45 PM
Sample Name	410-136532-C-2-C
Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

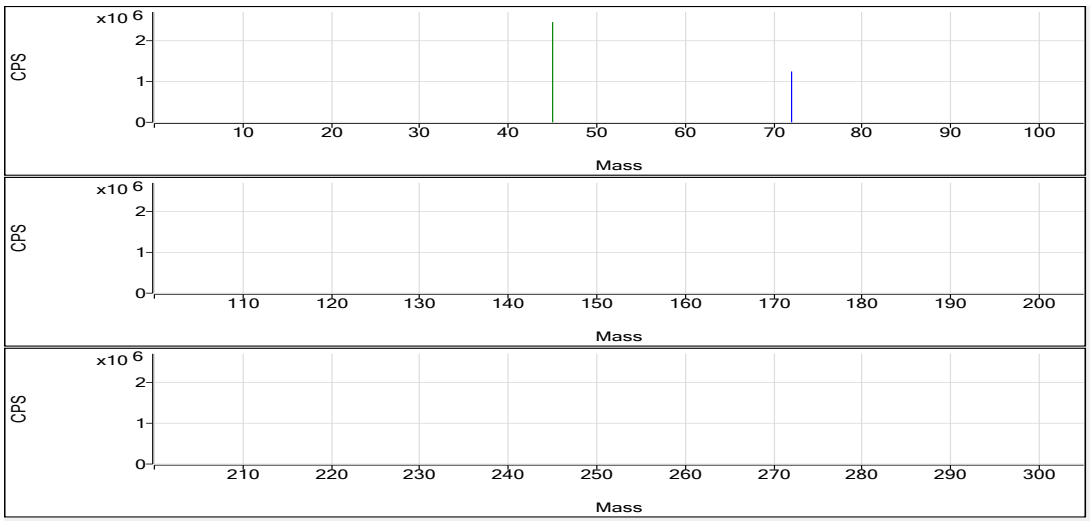
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	79.1	28.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.032	ppb	169.8	4.00	0.0000	Pulse	1.5000	3
Na	23	45	He	4276.181	ppb	3.5	722917.72	15.6413	Pulse	0.1000	3
Mg	24	45	He	1545.366	ppb	3.2	128327.80	2.7764	Pulse	0.1000	3
Al	27	45	He	2.945	ppb	59.4	110.01	0.0024	Pulse	0.1000	3
K	39	45	He	449.367	ppb	1.8	42462.45	0.9183	Pulse	0.1000	3
Ca	44	45	He	9801.847	ppb	2.4	30736.25	0.6648	Pulse	0.1000	3
Ti	47	45	He	0.943	ppb	24.4	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	0.270	ppb	11.9	1422.74	0.0308	Pulse	0.5000	3
Cr	52	45	He	-0.071	ppb	N/A	1746.83	0.0378	Pulse	0.1000	3
Mn	55	45	He	18.540	ppb	4.7	11121.39	0.2406	Pulse	0.1000	3
Fe	57	45	He	3.380	ppb	87.2	156.67	0.0034	Pulse	0.1000	3
Co	59	45	He	0.267	ppb	19.5	793.38	0.0172	Pulse	0.1000	3
Ni	60	72	He	0.365	ppb	25.6	500.03	0.0060	Pulse	0.1000	3
Cu	63	72	He	0.525	ppb	10.2	1530.13	0.0182	Pulse	0.1000	3
Zn	66	72	He	1.642	ppb	28.2	720.04	0.0086	Pulse	0.1000	3
As	75	72	He	0.172	ppb	32.9	97.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	52.960	ppb	1.0	40936.90	0.4760	Pulse	0.1000	3
Mo	98	115	He	0.970	ppb	5.1	1853.52	0.0215	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.178	ppb	53.6	1660.17	0.0193	Pulse	0.1000	3
Sb	121	115	He	0.055	ppb	81.5	93.34	0.0011	Pulse	0.1000	3
Ba	137	115	He	12.264	ppb	3.1	5081.11	0.0591	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	5.5	276.68	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.027	ppb	36.7	760.04	0.0019	Pulse	0.1000	3
U	238	209	He	0.061	ppb	18.0	936.74	0.0031	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2446869.29	0.3	102.0	Analog	0.1000	3
No Gas	Ge	72	1240344.67	0.6	107.5	Pulse	0.1000	3
H2	Sc	45	179043.92	0.4	95.7	Pulse	0.1000	3
H2	Ge	72	157950.41	0.5	96.5	Pulse	0.1000	3
H2	In	115	381564.92	0.7	98.1	Pulse	0.1000	3
He	Sc	45	46250.81	3.1	99.2	Pulse	0.1000	3
He	Ge	72	83879.13	1.6	103.3	Pulse	0.1000	3
He	In	115	86006.88	1.0	99.8	Pulse	0.1000	3
He	Tb	159	391951.90	0.4	98.3	Pulse	0.1000	3
He	Bi	209	305390.50	0.9	98.7	Pulse	0.1000	3

No Gas



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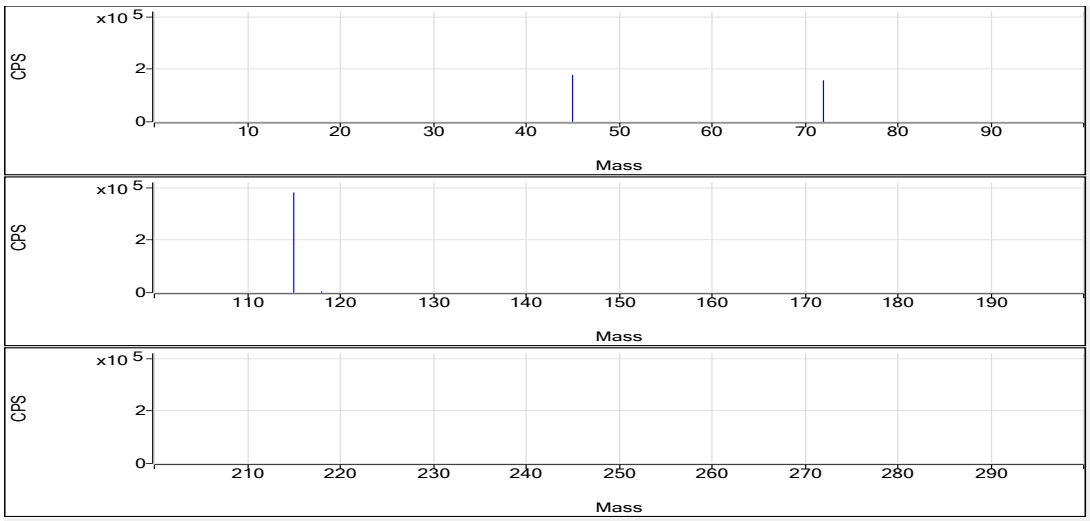
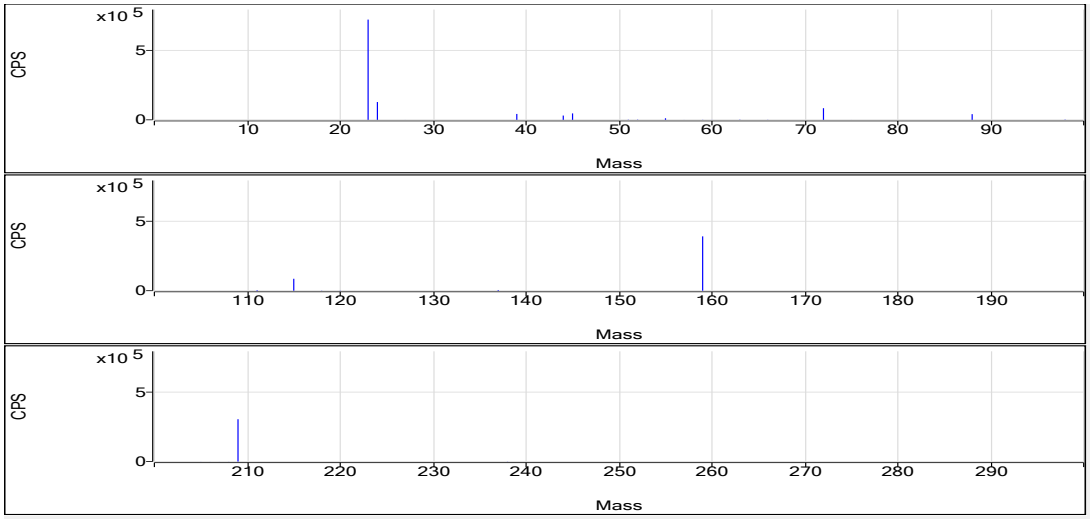


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.008	0	26.00	0.0008	4.685E-06
Be	9	1	No Gas	0.002	0	16.00	0.0008	4.685E-06
Be	9	1	No Gas	0.016	0	42.00	0.0008	4.685E-06
Se	78	2	H2	-0.029	0	0.00	0.0004	1.219E-05
Se	78	2	H2	0.072	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.052	0	5.33	0.0004	1.219E-05
Na	23	3	He	4117.03	15.072	720422.49	0.0036	0.3452
Na	23	3	He	4299.159	15.7235	722390.77	0.0036	0.3452
Na	23	3	He	4412.355	16.1284	725939.91	0.0036	0.3452
Mg	24	3	He	1495.657	2.6872	128444.35	0.0018	0.003497
Mg	24	3	He	1546.871	2.7791	127680.73	0.0018	0.003497
Mg	24	3	He	1593.569	2.8629	128858.31	0.0018	0.003497
Al	27	3	He	4.623	0.0033	160.01	0.0006	0.0006432
Al	27	3	He	1.133	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	3.078	0.0024	110.01	0.0006	0.0006432
K	39	3	He	441.866	0.9095	43475.05	0.0012	0.3951
K	39	3	He	448.111	0.9168	42121.66	0.0012	0.3951
K	39	3	He	458.123	0.9285	41790.63	0.0012	0.3951
Ca	44	3	He	9533.717	0.6467	30913.19	0.0001	0.002715
Ca	44	3	He	9959.12	0.6755	31033.57	0.0001	0.002715
Ca	44	3	He	9912.705	0.6723	30261.98	0.0001	0.002715
Ti	47	3	He	1.038	0.0006	30.00	0.0005	7.003E-05
Ti	47	3	He	0.68	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1.111	0.0007	30.00	0.0005	7.003E-05
V	51	3	He	0.264	0.0306	1464.08	0.0219	0.02486
V	51	3	He	0.304	0.0315	1448.08	0.0219	0.02486
V	51	3	He	0.241	0.0301	1356.07	0.0219	0.02486
Cr	52	3	He	-0.252	0.0324	1550.13	0.0299	0.03997
Cr	52	3	He	0.134	0.044	2020.21	0.0299	0.03997
Cr	52	3	He	-0.096	0.0371	1670.16	0.0299	0.03997
Mn	55	3	He	18.288	0.2373	11344.89	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	17.83	0.2315	10634.31	0.0128	0.002639
Mn	55	3	He	19.503	0.2529	11384.96	0.0128	0.002639
Fe	57	3	He	4.023	0.0038	180.01	0.0006	0.001429
Fe	57	3	He	0.163	0.0015	70.00	0.0006	0.001429
Fe	57	3	He	5.954	0.0049	220.01	0.0006	0.001429
Co	59	3	He	0.27	0.0174	830.05	0.0563	0.002149
Co	59	3	He	0.213	0.0141	650.04	0.0563	0.002149
Co	59	3	He	0.317	0.02	900.06	0.0563	0.002149
Ni	60	3	He	0.462	0.0068	560.03	0.0086	0.002834
Ni	60	3	He	0.276	0.0052	440.02	0.0086	0.002834
Ni	60	3	He	0.357	0.0059	500.03	0.0086	0.002834
Cu	63	3	He	0.548	0.0188	1550.13	0.0257	0.004757
Cu	63	3	He	0.464	0.0167	1410.13	0.0257	0.004757
Cu	63	3	He	0.564	0.0192	1630.14	0.0257	0.004757
Zn	66	3	He	2.152	0.0101	830.05	0.0029	0.003818
Zn	66	3	He	1.247	0.0074	630.04	0.0029	0.003818
Zn	66	3	He	1.526	0.0083	700.04	0.0029	0.003818
As	75	3	He	0.116	0.001	86.00	0.002	0.0008061
As	75	3	He	0.23	0.0013	108.00	0.002	0.0008061
As	75	3	He	0.171	0.0012	98.00	0.002	0.0008061
Sr	88	3	He	53.136	0.4776	40839.91	0.009	0.0009645
Sr	88	3	He	53.398	0.4799	41030.70	0.009	0.0009645
Sr	88	3	He	52.346	0.4705	40940.10	0.009	0.0009645
Mo	98	3	He	0.953	0.0212	1810.18	0.0219	0.0002706
Mo	98	3	He	0.932	0.0207	1770.18	0.0219	0.0002706
Mo	98	3	He	1.026	0.0228	1980.21	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0.009	0	4.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0	0	0.00	0.0053	0
Sn	120	3	He	0.179	0.0193	1650.15	0.0158	0.01648
Sn	120	3	He	0.083	0.0178	1520.15	0.0158	0.01648
Sn	120	3	He	0.274	0.0208	1810.20	0.0158	0.01648
Sb	121	3	He	0.092	0.0016	140.01	0.0149	0.0002698
Sb	121	3	He	0.068	0.0013	110.00	0.0149	0.0002698
Sb	121	3	He	0.005	0.0003	30.00	0.0149	0.0002698
Ba	137	3	He	12.552	0.0605	5171.16	0.0048	0.0002317
Ba	137	3	He	12.408	0.0598	5111.08	0.0048	0.0002317
Ba	137	3	He	11.831	0.057	4961.09	0.0048	0.0002317
Tl	205	3	He	0.025	0.0007	290.01	0.0247	0.0001339
Tl	205	3	He	0.022	0.0007	270.01	0.0247	0.0001339
Tl	205	3	He	0.022	0.0007	270.01	0.0247	0.0001339
Pb	208	3	He	0.019	0.0017	370.02	0.0327	0.00107
Pb	208	3	He	0.038	0.0023	540.03	0.0327	0.00107
Pb	208	3	He	0.023	0.0018	340.02	0.0327	0.00107
U	238	3	He	0.055	0.0028	860.06	0.0493	7.55E-05
U	238	3	He	0.073	0.0037	1120.10	0.0493	7.55E-05
U	238	3	He	0.054	0.0027	830.07	0.0493	7.55E-05
Sc	45	1	No Gas			2439438.56		
Sc	45	1	No Gas			2449670.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2451498.87		
Ge	72	1	No Gas			1233773.11		
Ge	72	1	No Gas			1249094.04		
Ge	72	1	No Gas			1238166.86		
Sc	45	2	H2			179192.20		
Sc	45	2	H2			178320.51		
Sc	45	2	H2			179619.06		
Ge	72	2	H2			158813.86		
Ge	72	2	H2			157205.12		
Ge	72	2	H2			157832.26		
In	115	2	H2			384634.64		
In	115	2	H2			379433.63		
In	115	2	H2			380626.48		
Sc	45	3	He			47798.80		
Sc	45	3	He			45943.50		
Sc	45	3	He			45010.13		
Ge	72	3	He			82316.76		
Ge	72	3	He			84569.67		
Ge	72	3	He			84750.96		
In	115	3	He			85521.98		
In	115	3	He			85503.16		
In	115	3	He			87022.34		
Tb	159	3	He			390599.21		
Tb	159	3	He			391668.63		
Tb	159	3	He			393587.85		
Bi	209	3	He			308595.17		
Bi	209	3	He			303623.45		
Bi	209	3	He			303952.87		

Quantitation Report

Data File Name	281SMPL.d
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Acq Time	8/10/2023 8:19:49 PM
Sample Name	410-136550-B-2-D
Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

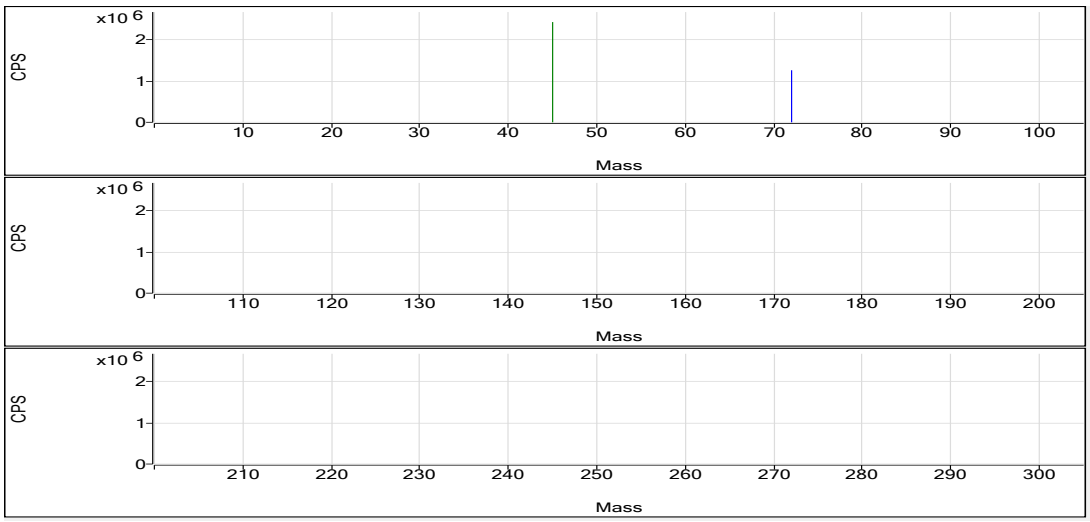
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	22.7	34.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.014	ppb	41.9	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	1185.404	ppb	2.9	214085.58	4.5854	Pulse	0.1000	3
Mg	24	45	He	377.482	ppb	1.3	31798.36	0.6808	Pulse	0.1000	3
Al	27	45	He	65.011	ppb	1.8	1806.84	0.0387	Pulse	0.1000	3
K	39	45	He	135.487	ppb	11.2	25806.82	0.5528	Pulse	0.1000	3
Ca	44	45	He	1282.142	ppb	5.6	4170.73	0.0893	Pulse	0.1000	3
Ti	47	45	He	2.263	ppb	18.4	60.00	0.0013	Pulse	0.1000	3
V	51	45	He	0.423	ppb	8.4	1593.43	0.0341	Pulse	0.5000	3
Cr	52	45	He	0.045	ppb	58.2	1930.19	0.0413	Pulse	0.1000	3
Mn	55	45	He	41.082	ppb	5.3	24728.59	0.5299	Pulse	0.1000	3
Fe	57	45	He	347.393	ppb	3.1	9490.07	0.2033	Pulse	0.1000	3
Co	59	45	He	0.900	ppb	7.1	2463.64	0.0528	Pulse	0.1000	3
Ni	60	72	He	0.910	ppb	24.6	910.06	0.0106	Pulse	0.1000	3
Cu	63	72	He	0.256	ppb	1.8	970.06	0.0113	Pulse	0.1000	3
Zn	66	72	He	1.966	ppb	6.0	816.72	0.0095	Pulse	0.1000	3
As	75	72	He	0.162	ppb	65.7	97.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	9.627	ppb	2.7	7475.59	0.0873	Pulse	0.1000	3
Mo	98	115	He	0.089	ppb	15.8	190.01	0.0022	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.175	ppb	55.4	1646.82	0.0192	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	7029.5	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	4.917	ppb	1.0	2040.21	0.0238	Pulse	0.1000	3
Tl	205	159	He	0.014	ppb	34.5	190.01	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.052	ppb	25.8	1080.06	0.0028	Pulse	0.1000	3
U	238	209	He	0.011	ppb	41.1	193.34	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2436702.26	0.6	101.6	Analog	0.1000	3
No Gas	Ge	72	1265405.06	0.2	109.7	Pulse	0.1000	3
H2	Sc	45	177184.91	0.9	94.7	Pulse	0.1000	3
H2	Ge	72	161069.41	0.3	98.4	Pulse	0.1000	3
H2	In	115	382222.14	0.8	98.2	Pulse	0.1000	3
He	Sc	45	46719.26	3.8	100.2	Pulse	0.1000	3
He	Ge	72	85599.31	0.8	105.4	Pulse	0.1000	3
He	In	115	85611.26	0.3	99.3	Pulse	0.1000	3
He	Tb	159	391864.08	1.0	98.3	Pulse	0.1000	3
He	Bi	209	305710.77	0.2	98.8	Pulse	0.1000	3

No Gas



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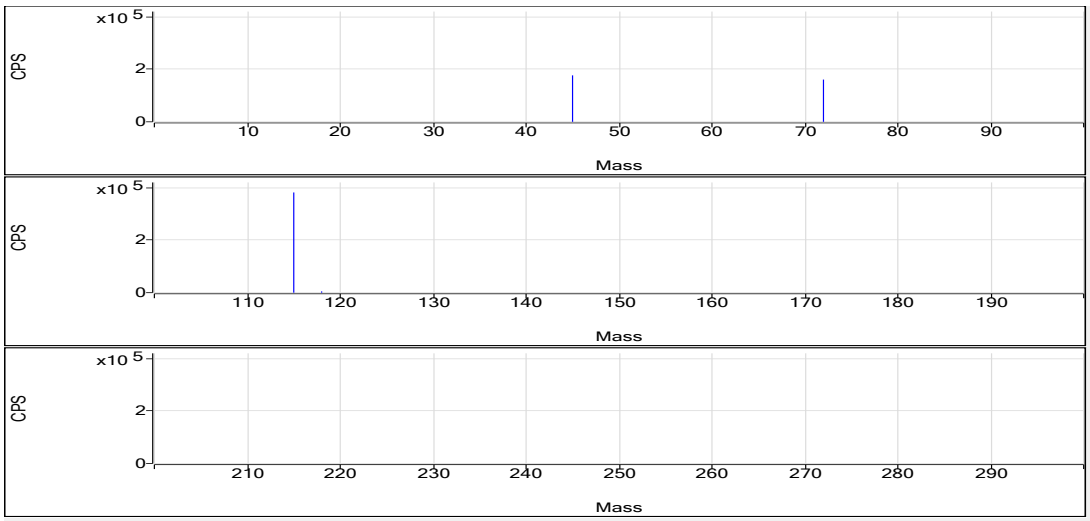
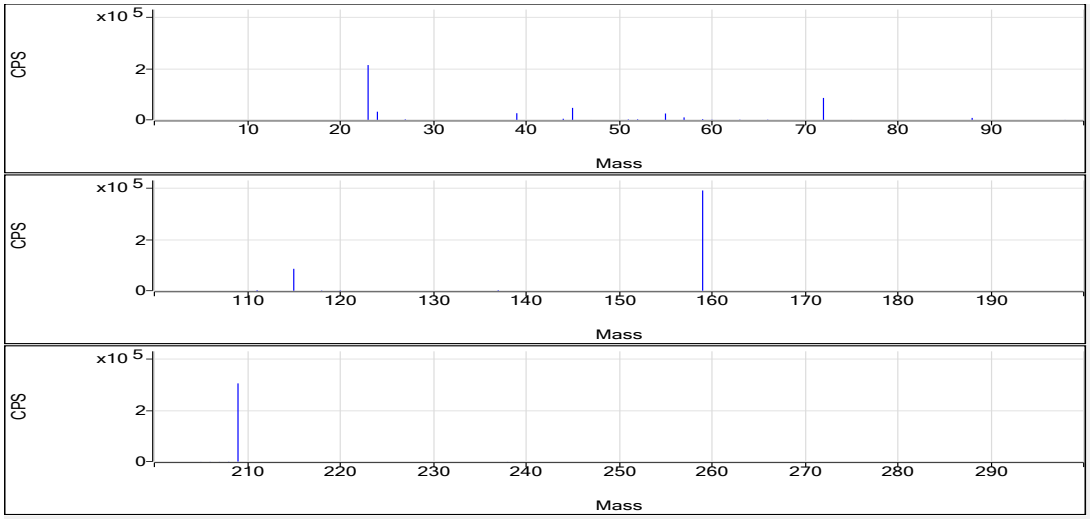


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.014	0	38.00	0.0008	4.685E-06
Be	9	1	No Gas	0.013	0	36.00	0.0008	4.685E-06
Se	78	2	H2	0.011	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.02	0	3.33	0.0004	1.219E-05
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Na	23	3	He	1204.517	4.6538	212781.87	0.0036	0.3452
Na	23	3	He	1146.369	4.4458	216699.86	0.0036	0.3452
Na	23	3	He	1205.328	4.6567	212775.00	0.0036	0.3452
Mg	24	3	He	382.059	0.689	31504.27	0.0018	0.003497
Mg	24	3	He	372.476	0.6718	32747.32	0.0018	0.003497
Mg	24	3	He	377.91	0.6816	31143.50	0.0018	0.003497
Al	27	3	He	63.956	0.0381	1740.19	0.0006	0.0006432
Al	27	3	He	64.834	0.0386	1880.17	0.0006	0.0006432
Al	27	3	He	66.243	0.0394	1800.17	0.0006	0.0006432
K	39	3	He	142.193	0.5606	25633.16	0.0012	0.3951
K	39	3	He	118.181	0.5327	25963.77	0.0012	0.3951
K	39	3	He	146.087	0.5652	25823.54	0.0012	0.3951
Ca	44	3	He	1365.213	0.0949	4340.78	0.0001	0.002715
Ca	44	3	He	1244.71	0.0868	4230.76	0.0001	0.002715
Ca	44	3	He	1236.503	0.0862	3940.66	0.0001	0.002715
Ti	47	3	He	2.721	0.0015	70.00	0.0005	7.003E-05
Ti	47	3	He	2.162	0.0012	60.00	0.0005	7.003E-05
Ti	47	3	He	1.908	0.0011	50.00	0.0005	7.003E-05
V	51	3	He	0.463	0.035	1600.10	0.0219	0.02486
V	51	3	He	0.396	0.0335	1634.11	0.0219	0.02486
V	51	3	He	0.41	0.0338	1546.09	0.0219	0.02486
Cr	52	3	He	0.06	0.0418	1910.19	0.0299	0.03997
Cr	52	3	He	0.015	0.0404	1970.19	0.0299	0.03997
Cr	52	3	He	0.061	0.0418	1910.20	0.0299	0.03997
Mn	55	3	He	40.883	0.5273	24110.78	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	39.026	0.5035	24541.64	0.0128	0.002639
Mn	55	3	He	43.336	0.5588	25533.35	0.0128	0.002639
Fe	57	3	He	346.625	0.2028	9273.18	0.0006	0.001429
Fe	57	3	He	337.011	0.1972	9613.51	0.0006	0.001429
Fe	57	3	He	358.544	0.2097	9583.52	0.0006	0.001429
Co	59	3	He	0.863	0.0507	2320.29	0.0563	0.002149
Co	59	3	He	0.862	0.0507	2470.30	0.0563	0.002149
Co	59	3	He	0.973	0.0569	2600.34	0.0563	0.002149
Ni	60	3	He	1.112	0.0124	1050.07	0.0086	0.002834
Ni	60	3	He	0.67	0.0086	740.05	0.0086	0.002834
Ni	60	3	He	0.947	0.011	940.06	0.0086	0.002834
Cu	63	3	He	0.251	0.0112	950.06	0.0257	0.004757
Cu	63	3	He	0.257	0.0114	980.07	0.0257	0.004757
Cu	63	3	He	0.26	0.0114	980.06	0.0257	0.004757
Zn	66	3	He	2.089	0.0099	840.06	0.0029	0.003818
Zn	66	3	He	1.955	0.0095	820.05	0.0029	0.003818
Zn	66	3	He	1.854	0.0092	790.06	0.0029	0.003818
As	75	3	He	0.262	0.0013	114.00	0.002	0.0008061
As	75	3	He	0.173	0.0012	100.00	0.002	0.0008061
As	75	3	He	0.051	0.0009	78.00	0.002	0.0008061
Sr	88	3	He	9.59	0.087	7452.23	0.009	0.0009645
Sr	88	3	He	9.906	0.0898	7712.39	0.009	0.0009645
Sr	88	3	He	9.385	0.0851	7262.15	0.009	0.0009645
Mo	98	3	He	0.073	0.0019	160.01	0.0219	0.0002706
Mo	98	3	He	0.099	0.0024	210.01	0.0219	0.0002706
Mo	98	3	He	0.095	0.0023	200.01	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	0.007	0.0009	80.00	0.0465	0.0006206
Ag	107	3	He	-0.003	0.0005	40.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.228	0.0201	1720.17	0.0158	0.01648
Sn	120	3	He	0.233	0.0201	1730.17	0.0158	0.01648
Sn	120	3	He	0.063	0.0175	1490.12	0.0158	0.01648
Sb	121	3	He	-0.01	0.0001	10.00	0.0149	0.0002698
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	-0.002	0.0002	20.00	0.0149	0.0002698
Ba	137	3	He	4.938	0.0239	2050.21	0.0048	0.0002317
Ba	137	3	He	4.951	0.024	2060.21	0.0048	0.0002317
Ba	137	3	He	4.862	0.0236	2010.22	0.0048	0.0002317
Tl	205	3	He	0.02	0.0006	240.01	0.0247	0.0001339
Tl	205	3	He	0.013	0.0005	180.01	0.0247	0.0001339
Tl	205	3	He	0.01	0.0004	150.01	0.0247	0.0001339
Pb	208	3	He	0.041	0.0024	460.03	0.0327	0.00107
Pb	208	3	He	0.067	0.0032	590.04	0.0327	0.00107
Pb	208	3	He	0.047	0.0026	560.04	0.0327	0.00107
U	238	3	He	0.006	0.0004	120.00	0.0493	7.55E-05
U	238	3	He	0.016	0.0008	260.01	0.0493	7.55E-05
U	238	3	He	0.012	0.0007	200.02	0.0493	7.55E-05
Sc	45	1	No Gas			2419597.31		
Sc	45	1	No Gas			2442265.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2448243.87		
Ge	72	1	No Gas			1262387.56		
Ge	72	1	No Gas			1265588.65		
Ge	72	1	No Gas			1268238.97		
Sc	45	2	H2			175742.15		
Sc	45	2	H2			178918.98		
Sc	45	2	H2			176893.61		
Ge	72	2	H2			161079.97		
Ge	72	2	H2			160654.54		
Ge	72	2	H2			161473.72		
In	115	2	H2			385718.12		
In	115	2	H2			380787.85		
In	115	2	H2			380160.46		
Sc	45	3	He			45722.42		
Sc	45	3	He			48742.87		
Sc	45	3	He			45692.48		
Ge	72	3	He			84841.82		
Ge	72	3	He			86228.91		
Ge	72	3	He			85727.19		
In	115	3	He			85683.43		
In	115	3	He			85875.57		
In	115	3	He			85301.15		
Tb	159	3	He			388568.35		
Tb	159	3	He			391098.86		
Tb	159	3	He			395925.03		
Bi	209	3	He			305377.09		
Bi	209	3	He			306521.34		
Bi	209	3	He			305233.88		

Quantitation Report

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Sample Type	Sample
Comment	F15 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

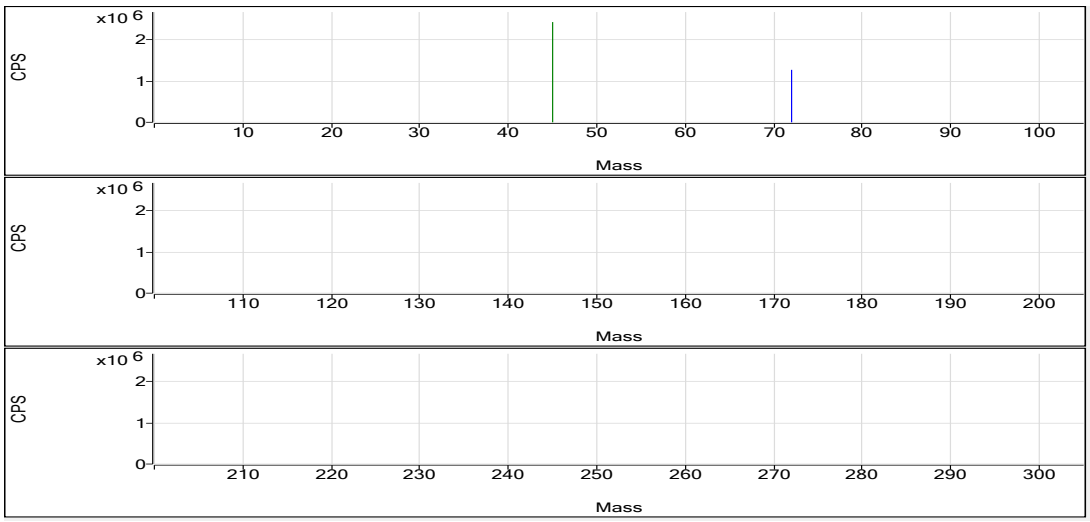
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.015	ppb	45.9	38.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.021	ppb	85.8	3.34	0.0000	Pulse	1.5000	3
Na	23	45	He	1672.939	ppb	1.3	297833.92	6.3293	Pulse	0.1000	3
Mg	24	45	He	736.527	ppb	0.8	62352.02	1.3251	Pulse	0.1000	3
Al	27	45	He	53.158	ppb	6.1	1493.47	0.0317	Pulse	0.1000	3
K	39	45	He	226.706	ppb	4.2	31010.22	0.6590	Pulse	0.1000	3
Ca	44	45	He	1732.521	ppb	5.8	5634.65	0.1198	Pulse	0.1000	3
Ti	47	45	He	0.925	ppb	49.6	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	0.486	ppb	16.7	1669.44	0.0355	Pulse	0.5000	3
Cr	52	45	He	0.151	ppb	23.4	2093.56	0.0445	Pulse	0.1000	3
Mn	55	45	He	31.770	ppb	1.4	19310.17	0.4104	Pulse	0.1000	3
Fe	57	45	He	303.191	ppb	3.3	8356.01	0.1776	Pulse	0.1000	3
Co	59	45	He	0.833	ppb	5.3	2306.93	0.0490	Pulse	0.1000	3
Ni	60	72	He	0.883	ppb	17.7	896.73	0.0104	Pulse	0.1000	3
Cu	63	72	He	0.334	ppb	32.1	1146.76	0.0133	Pulse	0.1000	3
Zn	66	72	He	2.188	ppb	2.6	876.73	0.0102	Pulse	0.1000	3
As	75	72	He	0.362	ppb	34.5	133.33	0.0015	Pulse	0.5000	3
Sr	88	115	He	12.543	ppb	3.5	9733.66	0.1135	Pulse	0.1000	3
Mo	98	115	He	0.076	ppb	14.0	166.68	0.0019	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	98.1	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.038	ppb	N/A	1360.12	0.0159	Pulse	0.1000	3
Sb	121	115	He	0.005	ppb	148.0	30.00	0.0004	Pulse	0.1000	3
Ba	137	115	He	5.448	ppb	5.4	2263.61	0.0264	Pulse	0.1000	3
Tl	205	159	He	0.013	ppb	33.1	176.68	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.069	ppb	15.4	1293.41	0.0033	Pulse	0.1000	3
U	238	209	He	0.018	ppb	22.4	300.01	0.0010	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2424274.39	1.0	101.1	Analog	0.1000	3
No Gas	Ge	72	1268894.46	0.6	110.0	Pulse	0.1000	3
H2	Sc	45	177450.86	0.9	94.9	Pulse	0.1000	3
H2	Ge	72	161035.56	0.9	98.4	Pulse	0.1000	3
H2	In	115	379330.55	0.4	97.5	Pulse	0.1000	3
He	Sc	45	47056.89	0.5	100.9	Pulse	0.1000	3
He	Ge	72	86048.55	1.3	106.0	Pulse	0.1000	3
He	In	115	85790.43	3.0	99.5	Pulse	0.1000	3
He	Tb	159	390427.42	0.9	97.9	Pulse	0.1000	3
He	Bi	209	306572.59	1.6	99.1	Pulse	0.1000	3

No Gas



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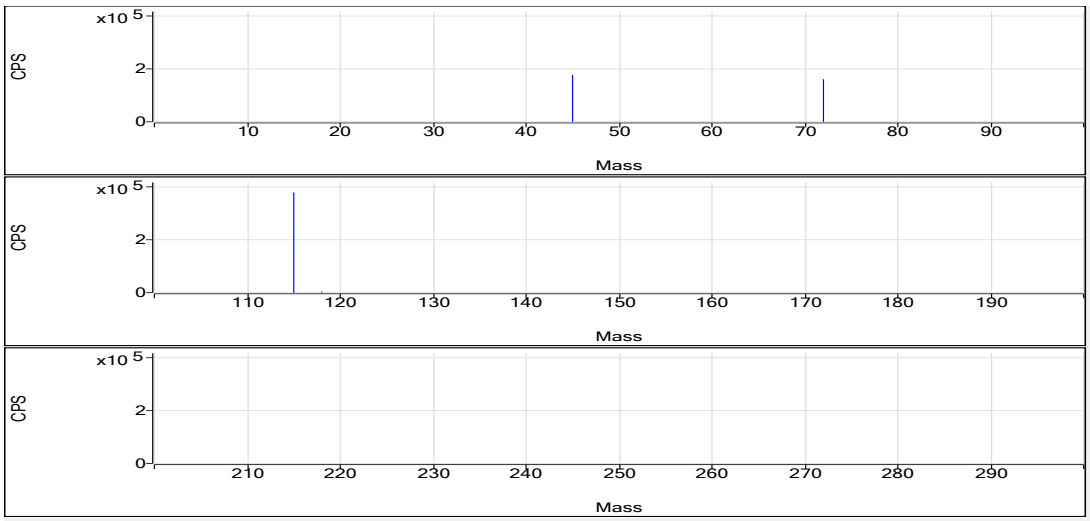
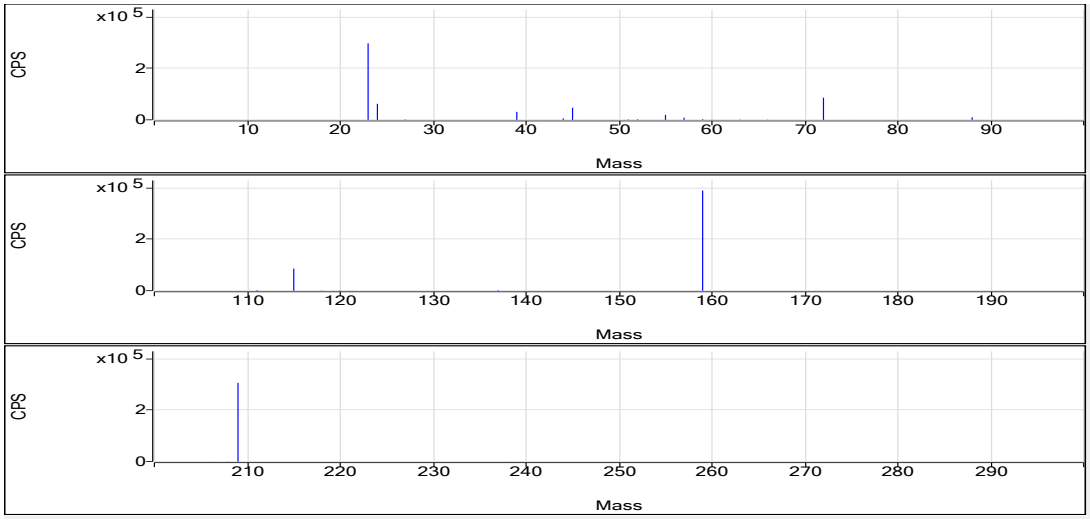


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.013	0	36.00	0.0008	4.685E-06
Be	9	1	No Gas	0.009	0	28.00	0.0008	4.685E-06
Be	9	1	No Gas	0.022	0	52.00	0.0008	4.685E-06
Se	78	2	H2	0.011	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.041	0	4.67	0.0004	1.219E-05
Se	78	2	H2	0.01	0	2.67	0.0004	1.219E-05
Na	23	3	He	1697.741	6.4181	300981.05	0.0036	0.3452
Na	23	3	He	1655.962	6.2686	294479.51	0.0036	0.3452
Na	23	3	He	1665.116	6.3014	298041.19	0.0036	0.3452
Mg	24	3	He	743.462	1.3375	62723.70	0.0018	0.003497
Mg	24	3	He	734.79	1.3219	62100.81	0.0018	0.003497
Mg	24	3	He	731.329	1.3157	62231.56	0.0018	0.003497
Al	27	3	He	54.307	0.0324	1520.13	0.0006	0.0006432
Al	27	3	He	55.668	0.0332	1560.14	0.0006	0.0006432
Al	27	3	He	49.5	0.0296	1400.13	0.0006	0.0006432
K	39	3	He	236.024	0.6699	31414.45	0.0012	0.3951
K	39	3	He	227.156	0.6596	30983.56	0.0012	0.3951
K	39	3	He	216.938	0.6477	30632.64	0.0012	0.3951
Ca	44	3	He	1844.802	0.1273	5971.49	0.0001	0.002715
Ca	44	3	He	1649.232	0.1141	5361.17	0.0001	0.002715
Ca	44	3	He	1703.527	0.1178	5571.29	0.0001	0.002715
Ti	47	3	He	0.664	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	1.455	0.0009	40.00	0.0005	7.003E-05
Ti	47	3	He	0.657	0.0004	20.00	0.0005	7.003E-05
V	51	3	He	0.58	0.0375	1760.12	0.0219	0.02486
V	51	3	He	0.438	0.0344	1618.10	0.0219	0.02486
V	51	3	He	0.439	0.0345	1630.10	0.0219	0.02486
Cr	52	3	He	0.139	0.0441	2070.22	0.0299	0.03997
Cr	52	3	He	0.123	0.0436	2050.20	0.0299	0.03997
Cr	52	3	He	0.19	0.0457	2160.25	0.0299	0.03997
Mn	55	3	He	32.001	0.4133	19383.47	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	32.062	0.4141	19453.77	0.0128	0.002639
Mn	55	3	He	31.249	0.4037	19093.28	0.0128	0.002639
Fe	57	3	He	314.387	0.1841	8632.83	0.0006	0.001429
Fe	57	3	He	294.777	0.1727	8112.49	0.0006	0.001429
Fe	57	3	He	300.408	0.176	8322.70	0.0006	0.001429
Co	59	3	He	0.852	0.0501	2350.27	0.0563	0.002149
Co	59	3	He	0.783	0.0462	2170.24	0.0563	0.002149
Co	59	3	He	0.863	0.0507	2400.27	0.0563	0.002149
Ni	60	3	He	0.886	0.0104	910.07	0.0086	0.002834
Ni	60	3	He	1.039	0.0117	1010.07	0.0086	0.002834
Ni	60	3	He	0.726	0.0091	770.04	0.0086	0.002834
Cu	63	3	He	0.355	0.0139	1210.09	0.0257	0.004757
Cu	63	3	He	0.218	0.0104	890.06	0.0257	0.004757
Cu	63	3	He	0.429	0.0158	1340.12	0.0257	0.004757
Zn	66	3	He	2.234	0.0103	900.07	0.0029	0.003818
Zn	66	3	He	2.204	0.0102	880.06	0.0029	0.003818
Zn	66	3	He	2.124	0.01	850.06	0.0029	0.003818
As	75	3	He	0.48	0.0018	156.00	0.002	0.0008061
As	75	3	He	0.231	0.0013	110.00	0.002	0.0008061
As	75	3	He	0.376	0.0016	134.00	0.002	0.0008061
Sr	88	3	He	12.044	0.109	9353.38	0.009	0.0009645
Sr	88	3	He	12.697	0.1149	10143.94	0.009	0.0009645
Sr	88	3	He	12.89	0.1166	9703.65	0.009	0.0009645
Mo	98	3	He	0.078	0.002	170.01	0.0219	0.0002706
Mo	98	3	He	0.065	0.0017	150.01	0.0219	0.0002706
Mo	98	3	He	0.086	0.0022	180.01	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Ag	107	3	He	0	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.008	0	4.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	-0.091	0.015	1290.10	0.0158	0.01648
Sn	120	3	He	-0.082	0.0152	1340.12	0.0158	0.01648
Sn	120	3	He	0.06	0.0174	1450.13	0.0158	0.01648
Sb	121	3	He	0.013	0.0005	40.00	0.0149	0.0002698
Sb	121	3	He	-0.003	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Ba	137	3	He	5.78	0.028	2400.31	0.0048	0.0002317
Ba	137	3	He	5.355	0.0259	2290.27	0.0048	0.0002317
Ba	137	3	He	5.209	0.0252	2100.25	0.0048	0.0002317
Tl	205	3	He	0.017	0.0006	220.01	0.0247	0.0001339
Tl	205	3	He	0.009	0.0004	140.01	0.0247	0.0001339
Tl	205	3	He	0.012	0.0004	170.01	0.0247	0.0001339
Pb	208	3	He	0.076	0.0035	700.05	0.0327	0.00107
Pb	208	3	He	0.056	0.0029	580.03	0.0327	0.00107
Pb	208	3	He	0.074	0.0035	740.05	0.0327	0.00107
U	238	3	He	0.023	0.0012	370.02	0.0493	7.55E-05
U	238	3	He	0.015	0.0008	250.01	0.0493	7.55E-05
U	238	3	He	0.017	0.0009	280.01	0.0493	7.55E-05
Sc	45	1	No Gas			2417146.21		
Sc	45	1	No Gas			2450876.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2404800.59		
Ge	72	1	No Gas			1260069.98		
Ge	72	1	No Gas			1273212.17		
Ge	72	1	No Gas			1273401.23		
Sc	45	2	H2			179232.09		
Sc	45	2	H2			176985.66		
Sc	45	2	H2			176134.82		
Ge	72	2	H2			160825.15		
Ge	72	2	H2			159744.85		
Ge	72	2	H2			162536.67		
In	115	2	H2			380503.51		
In	115	2	H2			379625.07		
In	115	2	H2			377863.08		
Sc	45	3	He			46895.95		
Sc	45	3	He			46976.81		
Sc	45	3	He			47297.92		
Ge	72	3	He			87185.23		
Ge	72	3	He			85979.08		
Ge	72	3	He			84981.34		
In	115	3	He			85824.84		
In	115	3	He			88330.57		
In	115	3	He			83239.74		
Tb	159	3	He			389473.24		
Tb	159	3	He			394356.83		
Tb	159	3	He			387452.18		
Bi	209	3	He			308285.03		
Bi	209	3	He			310457.16		
Bi	209	3	He			300975.58		

Quantitation Report

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Sample Name	RINSE
Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

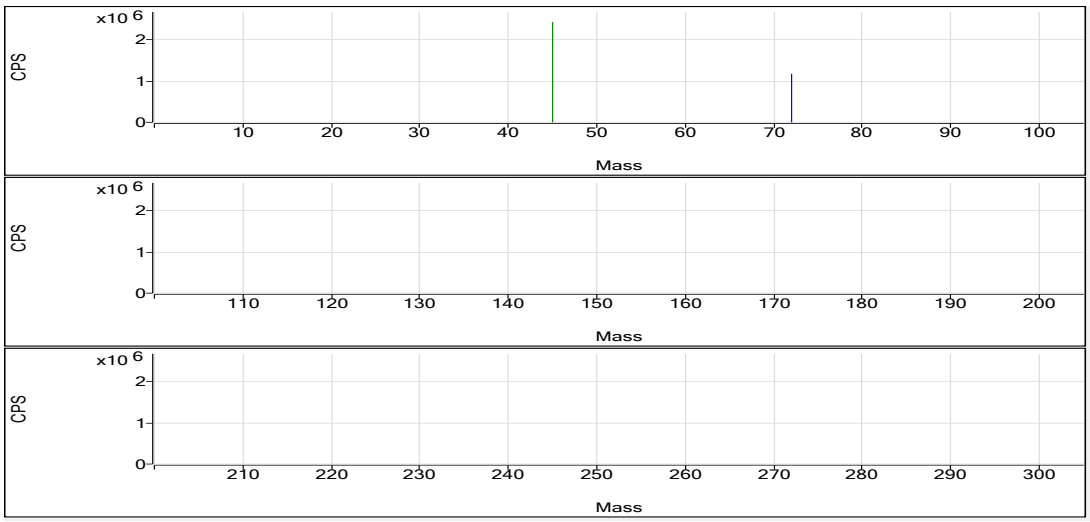
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.008	ppb	39.2	26.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.002	ppb	747.5	2.00	0.0000	Pulse	1.5000	3
Na	23	45	He	8.279	ppb	33.1	17400.72	0.3748	Pulse	0.1000	3
Mg	24	45	He	0.939	ppb	53.0	240.01	0.0052	Pulse	0.1000	3
Al	27	45	He	0.503	ppb	174.4	43.33	0.0009	Pulse	0.1000	3
K	39	45	He	4.606	ppb	240.1	18589.01	0.4004	Pulse	0.1000	3
Ca	44	45	He	-8.399	ppb	N/A	100.00	0.0021	Pulse	0.1000	3
Ti	47	45	He	0.005	ppb	4466.4	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.288	ppb	8.2	1446.75	0.0312	Pulse	0.5000	3
Cr	52	45	He	-0.127	ppb	N/A	1680.16	0.0362	Pulse	0.1000	3
Mn	55	45	He	0.135	ppb	66.7	203.34	0.0044	Pulse	0.1000	3
Fe	57	45	He	1.864	ppb	10.1	116.67	0.0025	Pulse	0.1000	3
Co	59	45	He	0.023	ppb	37.0	160.01	0.0034	Pulse	0.1000	3
Ni	60	72	He	-0.007	ppb	N/A	223.34	0.0028	Pulse	0.1000	3
Cu	63	72	He	0.018	ppb	31.0	420.02	0.0052	Pulse	0.1000	3
Zn	66	72	He	1.570	ppb	13.0	676.71	0.0084	Pulse	0.1000	3
As	75	72	He	0.083	ppb	39.5	78.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	-0.015	ppb	N/A	70.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.018	ppb	133.4	56.67	0.0007	Pulse	0.1000	3
Ag	107	115	He	-0.009	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.027	ppb	428.8	1433.46	0.0169	Pulse	0.1000	3
Sb	121	115	He	0.003	ppb	152.3	26.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.042	ppb	35.5	36.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.012	ppb	45.7	170.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.006	ppb	90.8	486.69	0.0013	Pulse	0.1000	3
U	238	209	He	0.003	ppb	81.3	66.67	0.0002	Pulse	0.1000	3

ISTD Table:

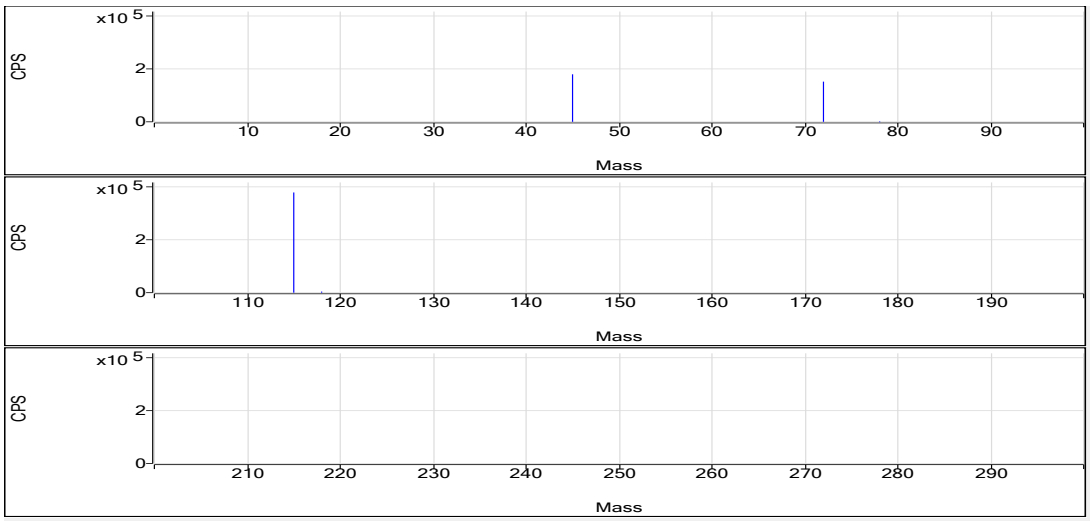
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2433602.88	1.5	101.5	Analog	0.1000	3
No Gas	Ge	72	1179240.94	0.3	102.2	Pulse	0.1000	3
H2	Sc	45	180195.17	0.3	96.4	Pulse	0.1000	3
H2	Ge	72	152356.18	2.1	93.1	Pulse	0.1000	3
H2	In	115	380111.91	0.4	97.7	Pulse	0.1000	3
He	Sc	45	46448.28	2.6	99.6	Pulse	0.1000	3
He	Ge	72	80593.55	1.7	99.3	Pulse	0.1000	3
He	In	115	84806.63	0.9	98.4	Pulse	0.1000	3
He	Tb	159	388174.37	0.6	97.4	Pulse	0.1000	3
He	Bi	209	304740.85	1.2	98.5	Pulse	0.1000	3

No Gas

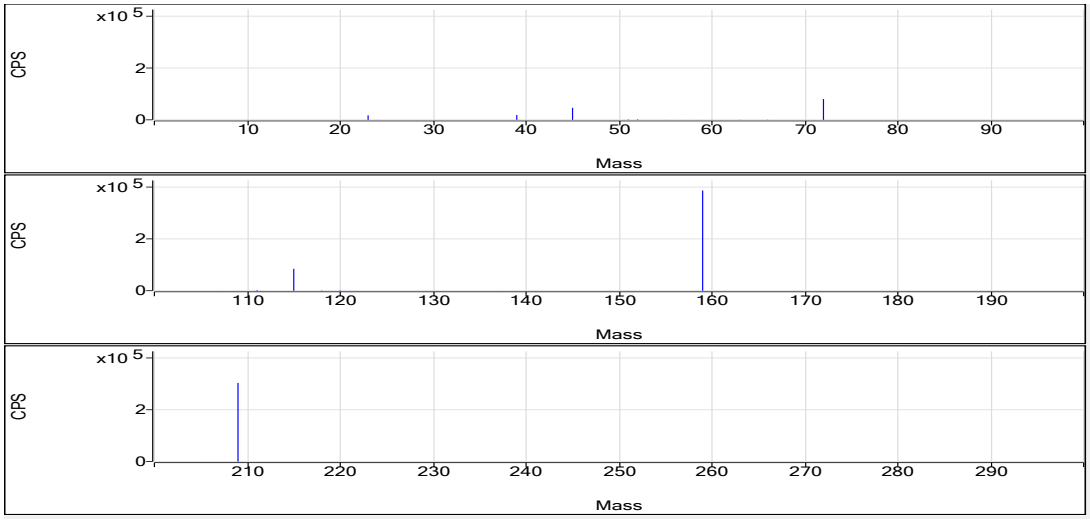


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Be	9	1	No Gas	0.005	0	20.00	0.0008	4.685E-06
Be	9	1	No Gas	0.01	0	30.00	0.0008	4.685E-06
Se	78	2	H2	0.014	0	2.67	0.0004	1.219E-05
Se	78	2	H2	0.013	0	2.67	0.0004	1.219E-05
Se	78	2	H2	-0.019	0	0.67	0.0004	1.219E-05
Na	23	3	He	10.993	0.3845	17590.99	0.0036	0.3452
Na	23	3	He	5.507	0.3649	17450.85	0.0036	0.3452
Na	23	3	He	8.338	0.375	17160.31	0.0036	0.3452
Mg	24	3	He	1.34	0.0059	270.01	0.0018	0.003497
Mg	24	3	He	0.382	0.0042	200.01	0.0018	0.003497
Mg	24	3	He	1.096	0.0055	250.01	0.0018	0.003497
Al	27	3	He	1.516	0.0015	70.00	0.0006	0.0006432
Al	27	3	He	-0.027	0.0006	30.00	0.0006	0.0006432
Al	27	3	He	0.021	0.0007	30.00	0.0006	0.0006432
K	39	3	He	11.586	0.4086	18692.51	0.0012	0.3951
K	39	3	He	-8.148	0.3856	18442.01	0.0012	0.3951
K	39	3	He	10.381	0.4072	18632.52	0.0012	0.3951
Ca	44	3	He	-20.777	0.0013	60.00	0.0001	0.002715
Ca	44	3	He	-3.05	0.0025	120.00	0.0001	0.002715
Ca	44	3	He	-1.37	0.0026	120.01	0.0001	0.002715
Ti	47	3	He	0.277	0.0002	10.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
Ti	47	3	He	-0.13	0	0.00	0.0005	7.003E-05
V	51	3	He	0.314	0.0317	1452.08	0.0219	0.02486
V	51	3	He	0.278	0.0309	1480.09	0.0219	0.02486
V	51	3	He	0.27	0.0308	1408.08	0.0219	0.02486
Cr	52	3	He	-0.145	0.0356	1630.15	0.0299	0.03997
Cr	52	3	He	-0.155	0.0353	1690.15	0.0299	0.03997
Cr	52	3	He	-0.08	0.0376	1720.19	0.0299	0.03997
Mn	55	3	He	0.033	0.0031	140.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.169	0.0048	230.01	0.0128	0.002639
Mn	55	3	He	0.203	0.0052	240.01	0.0128	0.002639
Fe	57	3	He	2.055	0.0026	120.00	0.0006	0.001429
Fe	57	3	He	1.859	0.0025	120.00	0.0006	0.001429
Fe	57	3	He	1.678	0.0024	110.01	0.0006	0.001429
Co	59	3	He	0.016	0.0031	140.00	0.0563	0.002149
Co	59	3	He	0.032	0.004	190.01	0.0563	0.002149
Co	59	3	He	0.02	0.0033	150.01	0.0563	0.002149
Ni	60	3	He	-0.017	0.0027	220.01	0.0086	0.002834
Ni	60	3	He	0.016	0.003	240.01	0.0086	0.002834
Ni	60	3	He	-0.021	0.0027	210.01	0.0086	0.002834
Cu	63	3	He	0.019	0.0052	430.02	0.0257	0.004757
Cu	63	3	He	0.022	0.0053	430.02	0.0257	0.004757
Cu	63	3	He	0.012	0.0051	400.02	0.0257	0.004757
Zn	66	3	He	1.708	0.0088	720.04	0.0029	0.003818
Zn	66	3	He	1.667	0.0087	700.05	0.0029	0.003818
Zn	66	3	He	1.336	0.0077	610.03	0.0029	0.003818
As	75	3	He	0.047	0.0009	74.00	0.002	0.0008061
As	75	3	He	0.09	0.001	80.00	0.002	0.0008061
As	75	3	He	0.112	0.001	82.00	0.002	0.0008061
Sr	88	3	He	-0.042	0.0006	50.00	0.009	0.0009645
Sr	88	3	He	-0.002	0.0009	80.00	0.009	0.0009645
Sr	88	3	He	-0.001	0.001	80.00	0.009	0.0009645
Mo	98	3	He	-0.007	0.0001	10.00	0.0219	0.0002706
Mo	98	3	He	0.041	0.0012	100.00	0.0219	0.0002706
Mo	98	3	He	0.02	0.0007	60.00	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	-0.011	0.0001	10.00	0.0465	0.0006206
Cd	111	3	He	0	0	0.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Cd	111	3	He	0.004	0	2.00	0.0053	0
Sn	120	3	He	0.066	0.0175	1500.14	0.0158	0.01648
Sn	120	3	He	0.115	0.0183	1550.13	0.0158	0.01648
Sn	120	3	He	-0.102	0.0149	1250.10	0.0158	0.01648
Sb	121	3	He	0.005	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	-0.002	0.0002	20.00	0.0149	0.0002698
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Ba	137	3	He	0.025	0.0004	30.00	0.0048	0.0002317
Ba	137	3	He	0.05	0.0005	40.00	0.0048	0.0002317
Ba	137	3	He	0.051	0.0005	40.00	0.0048	0.0002317
Tl	205	3	He	0.01	0.0004	150.01	0.0247	0.0001339
Tl	205	3	He	0.008	0.0003	130.01	0.0247	0.0001339
Tl	205	3	He	0.019	0.0006	230.01	0.0247	0.0001339
Pb	208	3	He	0.009	0.0014	220.01	0.0327	0.00107
Pb	208	3	He	0.008	0.0013	270.01	0.0327	0.00107
Pb	208	3	He	0	0.0011	190.01	0.0327	0.00107
U	238	3	He	0.003	0.0002	70.00	0.0493	7.55E-05
U	238	3	He	0	0.0001	30.00	0.0493	7.55E-05
U	238	3	He	0.005	0.0003	100.00	0.0493	7.55E-05
Sc	45	1	No Gas			2447984.49		
Sc	45	1	No Gas			2460239.49		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2392584.65		
Ge	72	1	No Gas			1180886.15		
Ge	72	1	No Gas			1181848.73		
Ge	72	1	No Gas			1174987.95		
Sc	45	2	H2			180639.68		
Sc	45	2	H2			179517.89		
Sc	45	2	H2			180427.93		
Ge	72	2	H2			148859.48		
Ge	72	2	H2			153305.45		
Ge	72	2	H2			154903.62		
In	115	2	H2			379176.52		
In	115	2	H2			381698.82		
In	115	2	H2			379460.38		
Sc	45	3	He			45752.59		
Sc	45	3	He			47829.30		
Sc	45	3	He			45762.96		
Ge	72	3	He			81914.11		
Ge	72	3	He			80717.30		
Ge	72	3	He			79149.25		
In	115	3	He			85612.73		
In	115	3	He			84728.06		
In	115	3	He			84104.13		
Tb	159	3	He			387724.60		
Tb	159	3	He			390882.10		
Tb	159	3	He			385916.40		
Bi	209	3	He			308914.66		
Bi	209	3	He			303771.34		
Bi	209	3	He			301536.54		

Quantitation Report

Data File Name	284_CCV.d
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Acq Time	8/10/2023 8:26:03 PM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

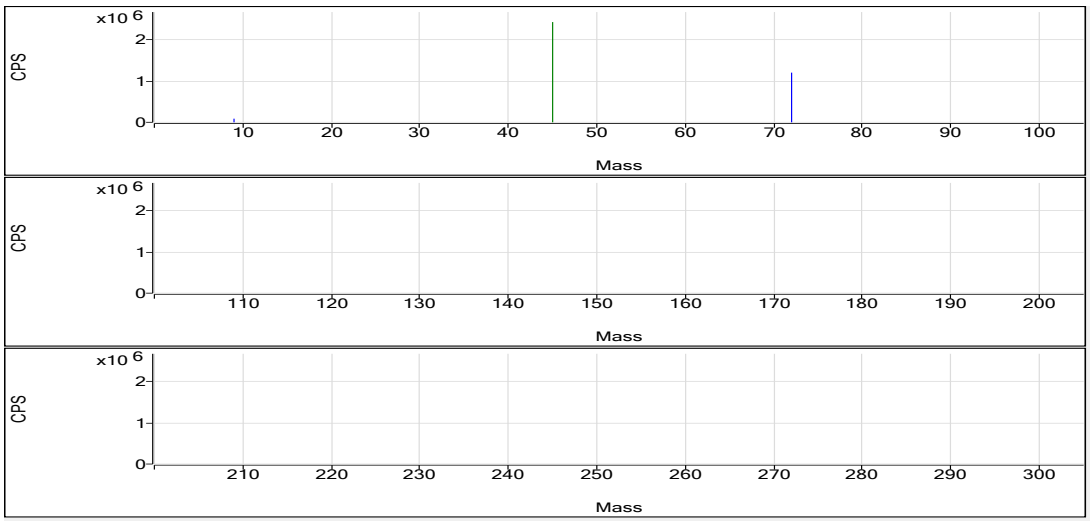
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.230	ppb	1.0	87495.08	0.0360	Pulse	0.5000	3
Se	78	72	H2	50.932	ppb	2.8	3307.95	0.0213	Pulse	1.5000	3
Na	23	45	He	4831.167	ppb	2.3	821673.27	17.6265	Pulse	0.1000	3
Mg	24	45	He	4979.305	ppb	3.0	416593.94	8.9380	Pulse	0.1000	3
Al	27	45	He	4958.952	ppb	2.3	135270.69	2.9018	Pulse	0.1000	3
K	39	45	He	5078.136	ppb	3.4	293988.26	6.3077	Pulse	0.1000	3
Ca	44	45	He	5127.840	ppb	1.1	16282.92	0.3491	Pulse	0.1000	3
Ti	47	45	He	4995.705	ppb	2.7	125041.90	2.6825	Pulse	0.1000	3
V	51	45	He	509.810	ppb	2.8	520598.23	11.1689	Pulse	0.5000	3
Cr	52	45	He	483.389	ppb	2.8	676465.59	14.5130	Pulse	0.1000	3
Mn	55	45	He	500.993	ppb	2.8	299821.53	6.4323	Pulse	0.1000	3
Fe	57	45	He	5053.963	ppb	2.8	136938.93	2.9377	Pulse	0.1000	3
Co	59	45	He	489.511	ppb	2.6	1284336.18	27.5530	Pulse	0.1000	3
Ni	60	72	He	511.865	ppb	0.5	358314.73	4.3962	Pulse	0.1000	3
Cu	63	72	He	491.397	ppb	0.7	1028519.78	12.6195	Pulse	0.1000	3
Zn	66	72	He	513.883	ppb	1.0	122257.15	1.5000	Pulse	0.1000	3
As	75	72	He	523.730	ppb	0.3	87525.32	1.0739	Pulse	0.5000	3
Sr	88	115	He	50.653	ppb	1.2	38373.00	0.4553	Pulse	0.1000	3
Mo	98	115	He	52.143	ppb	1.8	96369.33	1.1436	Pulse	0.1000	3
Ag	107	115	He	51.202	ppb	1.1	200640.89	2.3809	Pulse	0.1000	3
Cd	111	115	He	51.550	ppb	2.1	23227.32	0.2756	Pulse	0.5000	3
Sn	120	115	He	51.393	ppb	0.7	69813.47	0.8284	Pulse	0.1000	3
Sb	121	115	He	52.689	ppb	3.1	65977.94	0.7829	Pulse	0.1000	3
Ba	137	115	He	522.806	ppb	1.5	211465.20	2.5094	Pulse	0.1000	3
Tl	205	159	He	51.128	ppb	0.7	499320.07	1.2643	Pulse	0.1000	3
Pb	208	159	He	51.129	ppb	0.7	661301.94	1.6745	Pulse	0.1000	3
U	238	209	He	50.485	ppb	0.6	755817.73	2.4870	Pulse	0.1000	3

ISTD Table:

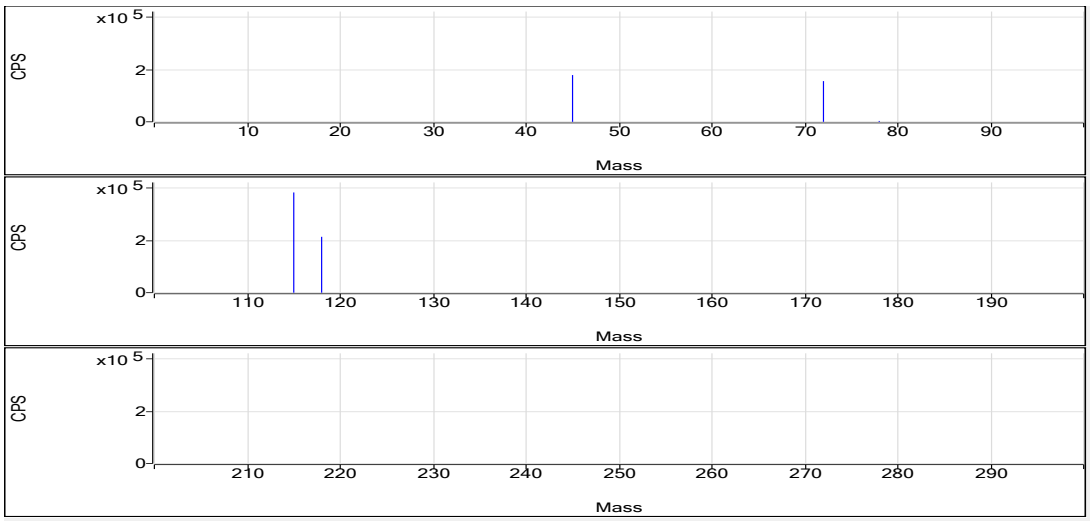
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2428311.84	0.7	101.2	Analog	0.1000	3
No Gas	Ge	72	1203293.13	0.6	104.3	Pulse	0.1000	3
H2	Sc	45	178767.27	0.8	95.6	Pulse	0.1000	3
H2	Ge	72	155654.02	1.3	95.1	Pulse	0.1000	3
H2	In	115	383249.91	1.0	98.5	Pulse	0.1000	3
He	Sc	45	46635.60	2.8	100.0	Pulse	0.1000	3
He	Ge	72	81505.98	0.8	100.4	Pulse	0.1000	3
He	In	115	84275.85	0.7	97.8	Pulse	0.1000	3
He	Tb	159	394932.61	0.5	99.1	Pulse	0.1000	3
He	Bi	209	303915.88	0.5	98.3	Pulse	0.1000	3

No Gas

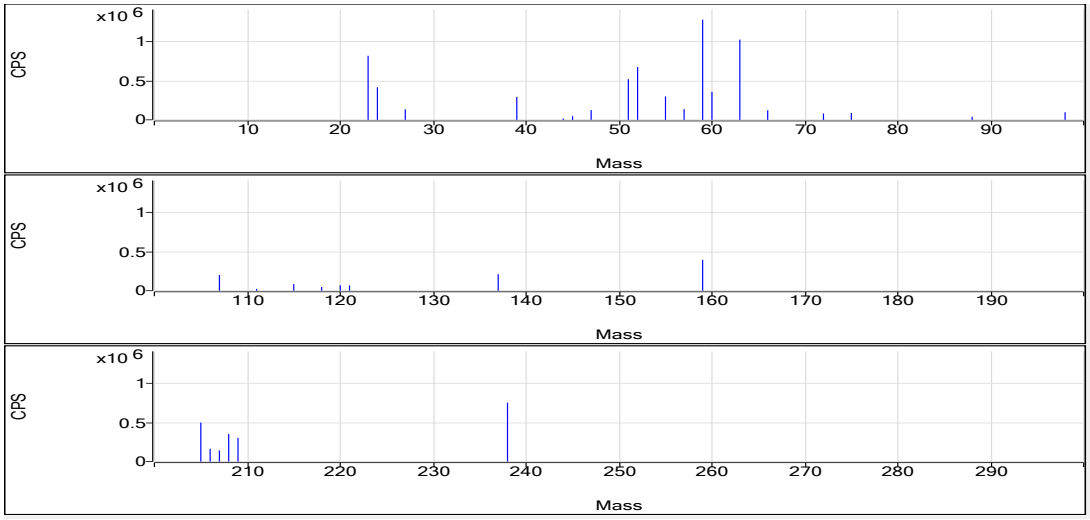


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.379	0.0361	87181.90	0.0008	4.685E-06
Be	9	1	No Gas	47.616	0.0363	88831.45	0.0008	4.685E-06
Be	9	1	No Gas	46.694	0.0356	86471.88	0.0008	4.685E-06
Se	78	2	H2	52.292	0.0218	3350.40	0.0004	1.219E-05
Se	78	2	H2	51.014	0.0213	3356.40	0.0004	1.219E-05
Se	78	2	H2	49.491	0.0207	3217.04	0.0004	1.219E-05
Na	23	3	He	4792.847	17.4894	822472.02	0.0036	0.3452
Na	23	3	He	4957.402	18.078	816781.47	0.0036	0.3452
Na	23	3	He	4743.253	17.312	825766.32	0.0036	0.3452
Mg	24	3	He	4937.642	8.8632	416809.29	0.0018	0.003497
Mg	24	3	He	5145.674	9.2365	417312.96	0.0018	0.003497
Mg	24	3	He	4854.599	8.7142	415659.56	0.0018	0.003497
Al	27	3	He	4894.276	2.864	134683.31	0.0006	0.0006432
Al	27	3	He	5091.547	2.9794	134610.85	0.0006	0.0006432
Al	27	3	He	4891.033	2.8621	136517.92	0.0006	0.0006432
K	39	3	He	5015.138	6.2343	293180.80	0.0012	0.3951
K	39	3	He	5272.954	6.5345	295234.86	0.0012	0.3951
K	39	3	He	4946.315	6.1542	293549.12	0.0012	0.3951
Ca	44	3	He	5188.406	0.3532	16609.97	0.0001	0.002715
Ca	44	3	He	5077.312	0.3457	15618.90	0.0001	0.002715
Ca	44	3	He	5117.803	0.3484	16619.89	0.0001	0.002715
Ti	47	3	He	4906.835	2.6348	123905.95	0.0005	7.003E-05
Ti	47	3	He	5149.296	2.765	124924.24	0.0005	7.003E-05
Ti	47	3	He	4930.984	2.6478	126295.50	0.0005	7.003E-05
V	51	3	He	506.462	11.0957	521795.97	0.0219	0.02486
V	51	3	He	525.421	11.5101	520037.81	0.0219	0.02486
V	51	3	He	497.549	10.9009	519960.91	0.0219	0.02486
Cr	52	3	He	479.195	14.3874	676595.15	0.0299	0.03997
Cr	52	3	He	498.689	14.9711	676406.86	0.0299	0.03997
Cr	52	3	He	472.283	14.1805	676394.76	0.0299	0.03997
Mn	55	3	He	496.344	6.3727	299685.80	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	516.524	6.6316	299623.30	0.0128	0.002639
Mn	55	3	He	490.113	6.2927	300155.48	0.0128	0.002639
Fe	57	3	He	4949.203	2.8769	135290.20	0.0006	0.001429
Fe	57	3	He	5213.381	3.0304	136914.16	0.0006	0.001429
Fe	57	3	He	4999.304	2.906	138612.43	0.0006	0.001429
Co	59	3	He	484.923	27.2947	1283586.07	0.0563	0.002149
Co	59	3	He	503.727	28.3531	1281016.70	0.0563	0.002149
Co	59	3	He	479.884	27.0111	1288405.76	0.0563	0.002149
Ni	60	3	He	514.479	4.4187	360001.36	0.0086	0.002834
Ni	60	3	He	511.932	4.3968	355433.67	0.0086	0.002834
Ni	60	3	He	509.185	4.3732	359509.17	0.0086	0.002834
Cu	63	3	He	492.54	12.6488	1030529.91	0.0257	0.004757
Cu	63	3	He	494.32	12.6945	1026207.02	0.0257	0.004757
Cu	63	3	He	487.332	12.5151	1028822.41	0.0257	0.004757
Zn	66	3	He	517.64	1.511	123103.96	0.0029	0.003818
Zn	66	3	He	516.181	1.5067	121802.99	0.0029	0.003818
Zn	66	3	He	507.828	1.4824	121864.50	0.0029	0.003818
As	75	3	He	525.471	1.0774	87780.77	0.002	0.0008061
As	75	3	He	523.496	1.0734	86770.82	0.002	0.0008061
As	75	3	He	522.222	1.0708	88024.37	0.002	0.0008061
Sr	88	3	He	51.117	0.4595	38633.72	0.009	0.0009645
Sr	88	3	He	49.94	0.4489	37610.87	0.009	0.0009645
Sr	88	3	He	50.901	0.4575	38874.40	0.009	0.0009645
Mo	98	3	He	51.768	1.1354	95463.48	0.0219	0.0002706
Mo	98	3	He	53.198	1.1667	97748.75	0.0219	0.0002706
Mo	98	3	He	51.462	1.1287	95895.77	0.0219	0.0002706
Ag	107	3	He	50.959	2.3695	199234.41	0.0465	0.0006206
Ag	107	3	He	51.852	2.4111	202003.77	0.0465	0.0006206
Ag	107	3	He	50.796	2.362	200684.49	0.0465	0.0006206
Cd	111	3	He	52.387	0.2801	23551.83	0.0053	0
Cd	111	3	He	51.917	0.2776	23257.36	0.0053	0
Cd	111	3	He	50.348	0.2692	22872.78	0.0053	0
Sn	120	3	He	51.386	0.8283	69646.00	0.0158	0.01648
Sn	120	3	He	51.764	0.8343	69897.12	0.0158	0.01648
Sn	120	3	He	51.029	0.8227	69897.30	0.0158	0.01648
Sb	121	3	He	54.548	0.8105	68148.44	0.0149	0.0002698
Sb	121	3	He	51.361	0.7632	63937.88	0.0149	0.0002698
Sb	121	3	He	52.158	0.775	65847.49	0.0149	0.0002698
Ba	137	3	He	529.662	2.5423	213757.38	0.0048	0.0002317
Ba	137	3	He	524.362	2.5168	210862.42	0.0048	0.0002317
Ba	137	3	He	514.393	2.469	209775.80	0.0048	0.0002317
Tl	205	3	He	50.792	1.256	498053.82	0.0247	0.0001339
Tl	205	3	He	51.083	1.2632	499966.36	0.0247	0.0001339
Tl	205	3	He	51.509	1.2738	499940.03	0.0247	0.0001339
Pb	208	3	He	50.771	1.6628	353782.85	0.0327	0.00107
Pb	208	3	He	51.105	1.6737	353822.77	0.0327	0.00107
Pb	208	3	He	51.51	1.687	356760.58	0.0327	0.00107
U	238	3	He	50.633	2.4942	756768.82	0.0493	7.55E-05
U	238	3	He	50.156	2.4708	754947.65	0.0493	7.55E-05
U	238	3	He	50.667	2.4959	755736.71	0.0493	7.55E-05
Sc	45	1	No Gas			2412036.84		
Sc	45	1	No Gas			2445429.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2427468.87		
Ge	72	1	No Gas			1199659.83		
Ge	72	1	No Gas			1210937.17		
Ge	72	1	No Gas			1199282.40		
Sc	45	2	H2			179061.21		
Sc	45	2	H2			180043.65		
Sc	45	2	H2			177196.95		
Ge	72	2	H2			153536.13		
Ge	72	2	H2			157662.73		
Ge	72	2	H2			155763.19		
In	115	2	H2			383404.80		
In	115	2	H2			386937.46		
In	115	2	H2			379407.46		
Sc	45	3	He			47026.87		
Sc	45	3	He			45180.89		
Sc	45	3	He			47699.05		
Ge	72	3	He			81472.64		
Ge	72	3	He			80838.79		
Ge	72	3	He			82206.52		
In	115	3	He			84445.73		
In	115	3	He			84154.45		
In	115	3	He			85341.43		
Tb	159	3	He			396525.93		
Tb	159	3	He			395780.74		
Tb	159	3	He			392491.17		
Bi	209	3	He			303408.30		
Bi	209	3	He			305551.66		
Bi	209	3	He			302787.67		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/10/2023 10:06:19 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

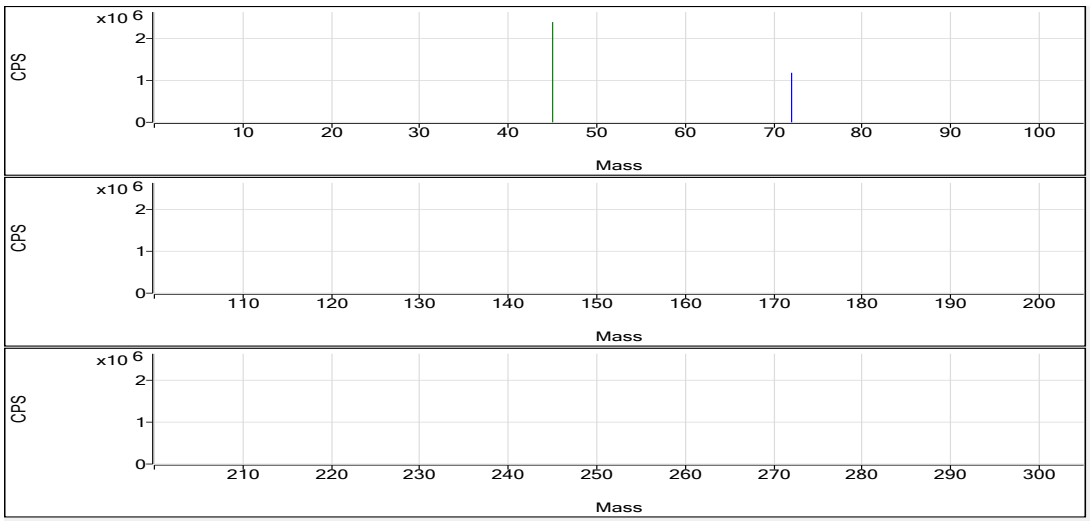
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.018	ppb	24.4	44.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.063	ppb	19.4	5.78	0.0000	Pulse	1.5000	3
Na	23	45	He	11.006	ppb	26.5	18018.11	0.3845	Pulse	0.1000	3
Mg	24	45	He	1.229	ppb	61.9	266.68	0.0057	Pulse	0.1000	3
Al	27	45	He	0.364	ppb	201.8	40.00	0.0009	Pulse	0.1000	3
K	39	45	He	-0.315	ppb	N/A	18488.93	0.3947	Pulse	0.1000	3
Ca	44	45	He	3.238	ppb	594.9	136.67	0.0029	Pulse	0.1000	3
Ti	47	45	He	1.443	ppb	92.4	40.00	0.0008	Pulse	0.1000	3
V	51	45	He	0.221	ppb	17.3	1391.41	0.0297	Pulse	0.5000	3
Cr	52	45	He	-0.116	ppb	N/A	1710.16	0.0365	Pulse	0.1000	3
Mn	55	45	He	0.161	ppb	40.2	220.01	0.0047	Pulse	0.1000	3
Fe	57	45	He	0.831	ppb	144.2	90.00	0.0019	Pulse	0.1000	3
Co	59	45	He	0.078	ppb	26.7	306.68	0.0066	Pulse	0.1000	3
Ni	60	72	He	0.017	ppb	315.3	240.01	0.0030	Pulse	0.1000	3
Cu	63	72	He	0.113	ppb	58.7	616.70	0.0077	Pulse	0.1000	3
Zn	66	72	He	1.729	ppb	19.8	713.38	0.0089	Pulse	0.1000	3
As	75	72	He	0.160	ppb	3.9	91.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	-0.033	ppb	N/A	56.67	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.053	ppb	32.8	120.01	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	3003.9	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	1.7	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.096	ppb	152.8	1520.15	0.0180	Pulse	0.1000	3
Sb	121	115	He	0.040	ppb	74.4	73.33	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.066	ppb	91.2	46.67	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.073	ppb	7.7	753.38	0.0019	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	69.6	586.69	0.0015	Pulse	0.1000	3
U	238	209	He	0.040	ppb	2.5	620.04	0.0020	Pulse	0.1000	3

ISTD Table:

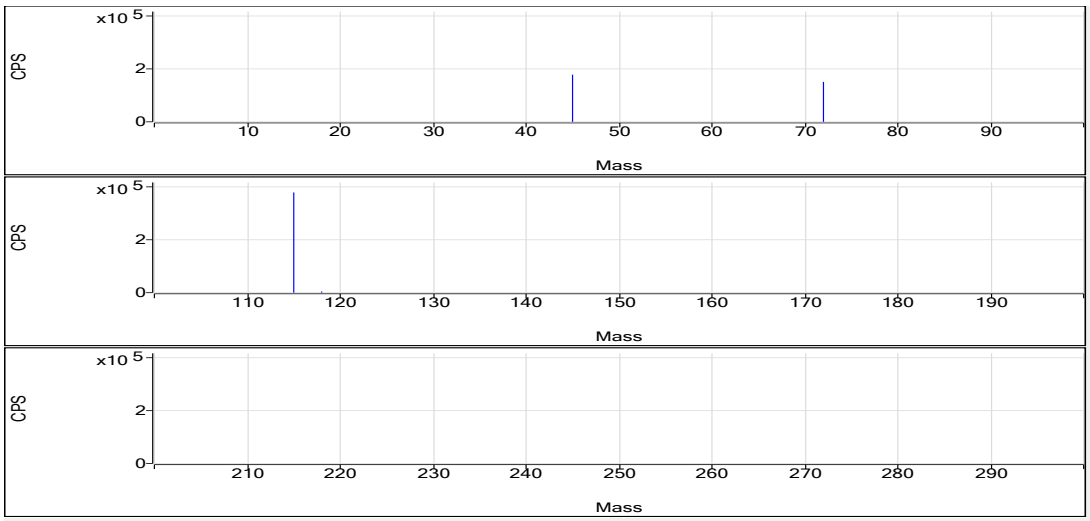
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2394093.20	0.6	99.8	Analog	0.1000	3
No Gas	Ge	72	1182831.75	0.5	102.6	Pulse	0.1000	3
H2	Sc	45	178294.84	0.8	95.3	Pulse	0.1000	3
H2	Ge	72	150947.46	0.3	92.2	Pulse	0.1000	3
H2	In	115	379276.52	0.5	97.5	Pulse	0.1000	3
He	Sc	45	46873.11	2.2	100.5	Pulse	0.1000	3
He	Ge	72	80600.60	0.4	99.3	Pulse	0.1000	3
He	In	115	84643.81	1.7	98.2	Pulse	0.1000	3
He	Tb	159	388456.15	0.2	97.5	Pulse	0.1000	3
He	Bi	209	305040.08	0.7	98.6	Pulse	0.1000	3

No Gas

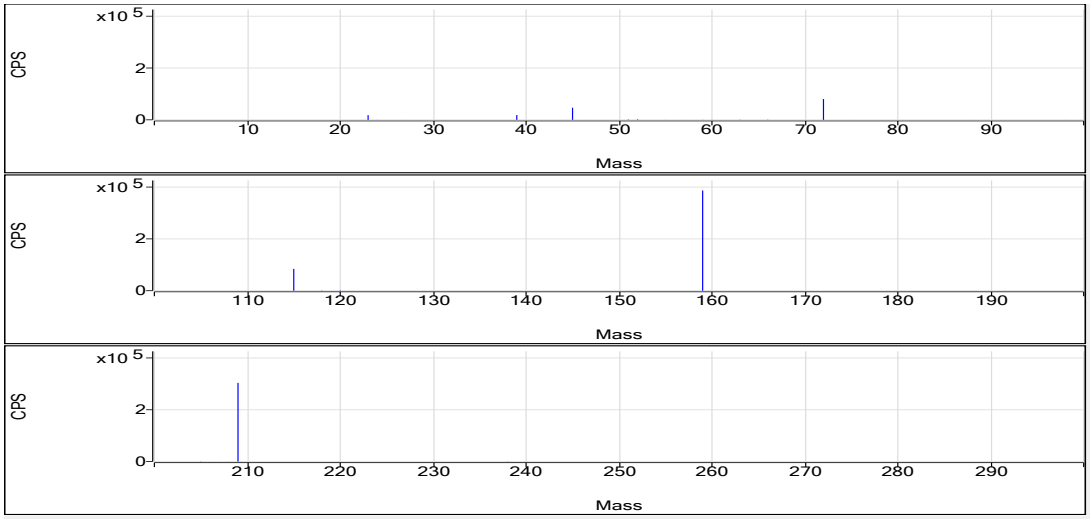


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.018	0	44.00	0.0008	4.685E-06
Be	9	1	No Gas	0.014	0	36.00	0.0008	4.685E-06
Be	9	1	No Gas	0.022	0	52.00	0.0008	4.685E-06
Se	78	2	H2	0.076	0	6.67	0.0004	1.219E-05
Se	78	2	H2	0.056	0	5.33	0.0004	1.219E-05
Se	78	2	H2	0.055	0	5.33	0.0004	1.219E-05
Na	23	3	He	12.633	0.3903	17871.18	0.0036	0.3452
Na	23	3	He	12.743	0.3907	18351.88	0.0036	0.3452
Na	23	3	He	7.642	0.3725	17831.26	0.0036	0.3452
Mg	24	3	He	1.46	0.0061	280.01	0.0018	0.003497
Mg	24	3	He	1.849	0.0068	320.02	0.0018	0.003497
Mg	24	3	He	0.38	0.0042	200.01	0.0018	0.003497
Al	27	3	He	0.394	0.0009	40.00	0.0006	0.0006432
Al	27	3	He	1.084	0.0013	60.00	0.0006	0.0006432
Al	27	3	He	-0.385	0.0004	20.00	0.0006	0.0006432
K	39	3	He	22.062	0.4208	19263.26	0.0012	0.3951
K	39	3	He	-18.178	0.3739	17561.00	0.0012	0.3951
K	39	3	He	-4.83	0.3894	18642.53	0.0012	0.3951
Ca	44	3	He	18.014	0.0039	180.01	0.0001	0.002715
Ca	44	3	He	10.243	0.0034	160.01	0.0001	0.002715
Ca	44	3	He	-18.544	0.0015	70.00	0.0001	0.002715
Ti	47	3	He	0.683	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	0.663	0.0004	20.00	0.0005	7.003E-05
Ti	47	3	He	2.982	0.0017	80.00	0.0005	7.003E-05
V	51	3	He	0.264	0.0306	1402.08	0.0219	0.02486
V	51	3	He	0.189	0.029	1362.07	0.0219	0.02486
V	51	3	He	0.21	0.0295	1410.08	0.0219	0.02486
Cr	52	3	He	-0.066	0.038	1740.17	0.0299	0.03997
Cr	52	3	He	-0.154	0.0353	1660.15	0.0299	0.03997
Cr	52	3	He	-0.128	0.0361	1730.16	0.0299	0.03997
Mn	55	3	He	0.186	0.005	230.01	0.0128	0.002639

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.209	0.0053	250.01	0.0128	0.002639
Mn	55	3	He	0.087	0.0038	180.01	0.0128	0.002639
Fe	57	3	He	0.172	0.0015	70.00	0.0006	0.001429
Fe	57	3	He	0.106	0.0015	70.00	0.0006	0.001429
Fe	57	3	He	2.215	0.0027	130.01	0.0006	0.001429
Co	59	3	He	0.086	0.007	320.02	0.0563	0.002149
Co	59	3	He	0.094	0.0075	350.02	0.0563	0.002149
Co	59	3	He	0.055	0.0052	250.01	0.0563	0.002149
Ni	60	3	He	-0.028	0.0026	210.01	0.0086	0.002834
Ni	60	3	He	0.076	0.0035	280.01	0.0086	0.002834
Ni	60	3	He	0.003	0.0029	230.01	0.0086	0.002834
Cu	63	3	He	0.046	0.0059	480.02	0.0257	0.004757
Cu	63	3	He	0.115	0.0077	620.04	0.0257	0.004757
Cu	63	3	He	0.178	0.0093	750.04	0.0257	0.004757
Zn	66	3	He	1.742	0.0089	720.05	0.0029	0.003818
Zn	66	3	He	2.065	0.0098	790.05	0.0029	0.003818
Zn	66	3	He	1.38	0.0078	630.03	0.0029	0.003818
As	75	3	He	0.161	0.0011	92.00	0.002	0.0008061
As	75	3	He	0.165	0.0011	92.00	0.002	0.0008061
As	75	3	He	0.153	0.0011	90.00	0.002	0.0008061
Sr	88	3	He	-0.017	0.0008	70.00	0.009	0.0009645
Sr	88	3	He	-0.054	0.0005	40.00	0.009	0.0009645
Sr	88	3	He	-0.028	0.0007	60.00	0.009	0.0009645
Mo	98	3	He	0.035	0.001	90.00	0.0219	0.0002706
Mo	98	3	He	0.07	0.0018	150.01	0.0219	0.0002706
Mo	98	3	He	0.053	0.0014	120.01	0.0219	0.0002706
Ag	107	3	He	-0.008	0.0002	20.00	0.0465	0.0006206
Ag	107	3	He	0.01	0.0011	90.00	0.0465	0.0006206
Ag	107	3	He	-0.001	0.0006	50.00	0.0465	0.0006206
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Cd	111	3	He	0.013	0.0001	6.00	0.0053	0
Sn	120	3	He	-0.051	0.0157	1350.12	0.0158	0.01648
Sn	120	3	He	0.241	0.0203	1690.16	0.0158	0.01648
Sn	120	3	He	0.097	0.018	1520.16	0.0158	0.01648
Sb	121	3	He	0.052	0.001	90.00	0.0149	0.0002698
Sb	121	3	He	0.006	0.0004	30.00	0.0149	0.0002698
Sb	121	3	He	0.062	0.0012	100.00	0.0149	0.0002698
Ba	137	3	He	0.121	0.0008	70.00	0.0048	0.0002317
Ba	137	3	He	0.002	0.0002	20.00	0.0048	0.0002317
Ba	137	3	He	0.075	0.0006	50.00	0.0048	0.0002317
Tl	205	3	He	0.079	0.0021	810.06	0.0247	0.0001339
Tl	205	3	He	0.073	0.0019	750.04	0.0247	0.0001339
Tl	205	3	He	0.068	0.0018	700.05	0.0247	0.0001339
Pb	208	3	He	0.003	0.0012	220.01	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	280.01	0.0327	0.00107
Pb	208	3	He	0.019	0.0017	380.02	0.0327	0.00107
U	238	3	He	0.041	0.0021	640.04	0.0493	7.55E-05
U	238	3	He	0.039	0.002	610.04	0.0493	7.55E-05
U	238	3	He	0.039	0.002	610.03	0.0493	7.55E-05
Sc	45	1	No Gas			2410104.50		
Sc	45	1	No Gas			2383844.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2388331.06		
Ge	72	1	No Gas			1187855.53		
Ge	72	1	No Gas			1183501.39		
Ge	72	1	No Gas			1177138.34		
Sc	45	2	H2			178505.90		
Sc	45	2	H2			179596.44		
Sc	45	2	H2			176782.17		
Ge	72	2	H2			151264.19		
Ge	72	2	H2			150414.34		
Ge	72	2	H2			151163.85		
In	115	2	H2			379379.84		
In	115	2	H2			380990.62		
In	115	2	H2			377459.10		
Sc	45	3	He			45782.68		
Sc	45	3	He			46966.96		
Sc	45	3	He			47869.69		
Ge	72	3	He			81009.72		
Ge	72	3	He			80376.01		
Ge	72	3	He			80416.07		
In	115	3	He			86196.95		
In	115	3	He			83358.74		
In	115	3	He			84396.19		
Tb	159	3	He			388973.00		
Tb	159	3	He			388973.31		
Tb	159	3	He			387422.14		
Bi	209	3	He			306714.47		
Bi	209	3	He			302694.12		
Bi	209	3	He			305711.64		

Quantitation Report

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Auto Dilution	1.0000
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Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

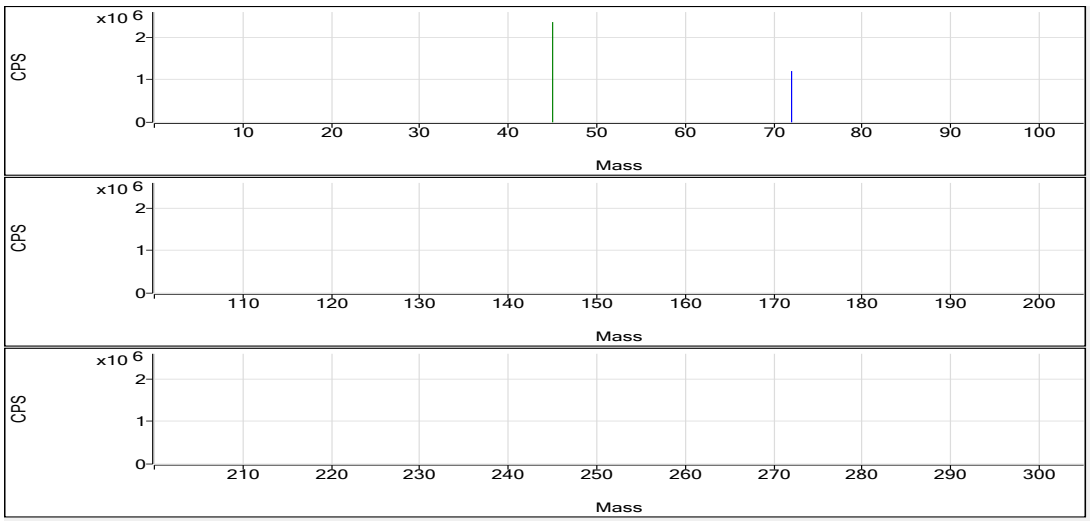
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	N/A	40.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.000	ppb	N/A	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	0.000	ppb	N/A	14781.23	0.3435	Pulse	0.1000	3
Mg	24	45	He	0.000	ppb	N/A	126.67	0.0029	Pulse	0.1000	3
Al	27	45	He	0.000	ppb	N/A	43.33	0.0010	Pulse	0.1000	3
K	39	45	He	0.000	ppb	N/A	17437.59	0.4052	Pulse	0.1000	3
Ca	44	45	He	0.000	ppb	N/A	150.01	0.0035	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.000	ppb	N/A	1332.74	0.0310	Pulse	0.5000	3
Cr	52	45	He	0.000	ppb	N/A	1703.49	0.0396	Pulse	0.1000	3
Mn	55	45	He	0.000	ppb	N/A	136.67	0.0032	Pulse	0.1000	3
Fe	57	45	He	0.000	ppb	N/A	86.67	0.0020	Pulse	0.1000	3
Co	59	45	He	0.000	ppb	N/A	176.68	0.0041	Pulse	0.1000	3
Ni	60	72	He	0.000	ppb	N/A	260.01	0.0033	Pulse	0.1000	3
Cu	63	72	He	0.000	ppb	N/A	390.02	0.0050	Pulse	0.1000	3
Zn	66	115	He	0.000	ppb	N/A	490.03	0.0061	Pulse	0.1000	3
As	75	115	He	0.000	ppb	N/A	73.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Mo	98	115	He	0.000	ppb	N/A	53.33	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	53.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.000	ppb	N/A	1430.14	0.0179	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	3.33	0.0000	Pulse	0.1000	3
Ba	137	115	He	0.000	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.000	ppb	N/A	283.35	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.000	ppb	N/A	640.04	0.0017	Pulse	0.1000	3
U	238	209	He	0.000	ppb	N/A	126.67	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2347260.90	0.9	100.0	Analog	0.1000	3
No Gas	Ge	72	1199900.45	0.2	100.0	Pulse	0.1000	3
H2	Sc	45	173758.33	1.3	100.0	Pulse	0.1000	3
H2	Ge	72	149542.78	0.6	100.0	Pulse	0.1000	3
H2	In	115	366008.29	0.3	100.0	Pulse	0.1000	3
He	Sc	45	43031.12	0.3	100.0	Pulse	0.1000	3
He	Ge	72	78160.28	1.1	100.0	Pulse	0.1000	3
He	In	115	79714.49	0.3	100.0	Pulse	0.1000	3
He	Tb	159	367930.05	1.3	100.0	Pulse	0.1000	3
He	Bi	209	292022.47	0.5	100.0	Pulse	0.1000	3

No Gas



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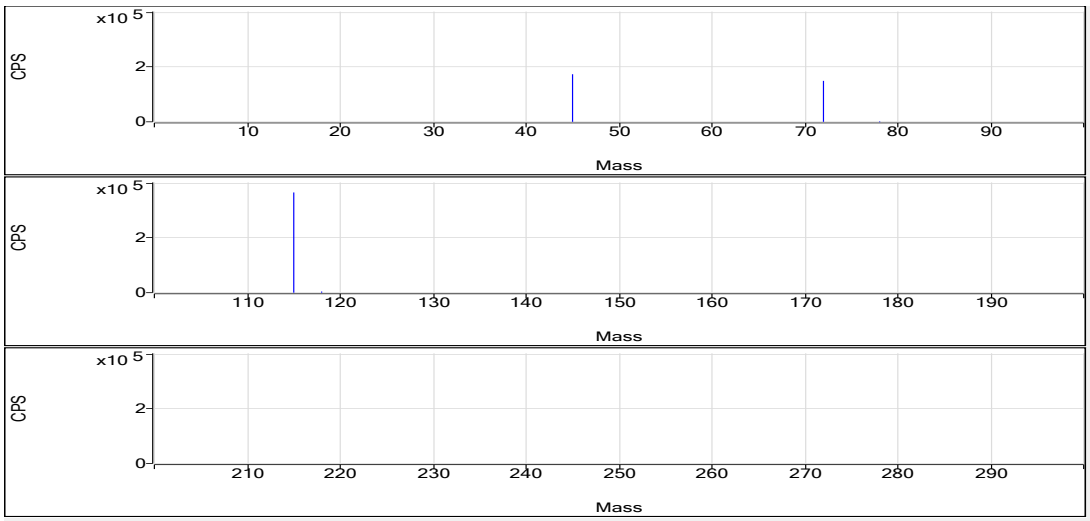
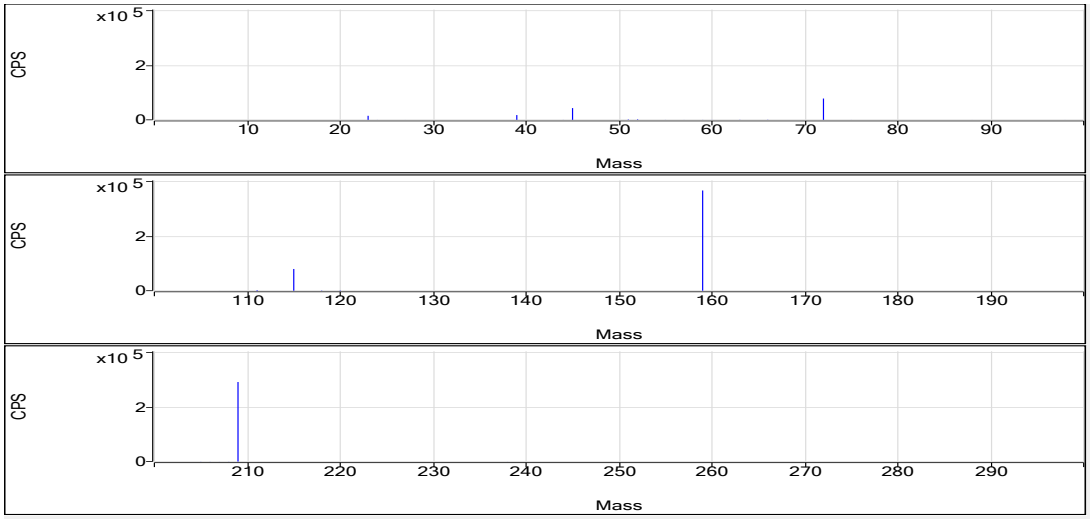


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	44.00	0.0007	1.705E-05
Be	9	1	No Gas	0	0	40.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.002	0	36.00	0.0007	1.705E-05
Se	78	2	H2	-0.004	0	2.00	0.0002	6.062E-06
Se	78	2	H2	-0.014	0	1.33	0.0002	6.062E-06
Se	78	2	H2	0.018	0	3.33	0.0002	6.062E-06
Na	23	3	He	-2.19	0.3353	14387.41	0.0037	0.3435
Na	23	3	He	1.167	0.3478	14958.13	0.0037	0.3435
Na	23	3	He	1.023	0.3473	14998.14	0.0037	0.3435
Mg	24	3	He	-0.08	0.0028	120.00	0.0018	0.002943
Mg	24	3	He	-0.084	0.0028	120.00	0.0018	0.002943
Mg	24	3	He	0.164	0.0032	140.01	0.0018	0.002943
Al	27	3	He	0.264	0.0012	50.00	0.0006	0.001008
Al	27	3	He	0.649	0.0014	60.00	0.0006	0.001008
Al	27	3	He	-0.913	0.0005	20.00	0.0006	0.001008
K	39	3	He	-2.495	0.4023	17260.81	0.0012	0.4052
K	39	3	He	10.385	0.4174	17951.51	0.0012	0.4052
K	39	3	He	-7.89	0.396	17100.45	0.0012	0.4052
Ca	44	3	He	10.311	0.0042	180.01	0.0001	0.003486
Ca	44	3	He	-13.493	0.0026	110.00	0.0001	0.003486
Ca	44	3	He	3.182	0.0037	160.01	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.016	0.0313	1344.07	0.0223	0.03097
V	51	3	He	-0.025	0.0304	1308.07	0.0223	0.03097
V	51	3	He	0.009	0.0312	1346.07	0.0223	0.03097
Cr	52	3	He	-0.127	0.0359	1540.13	0.029	0.03958
Cr	52	3	He	0.127	0.0433	1860.18	0.029	0.03958
Cr	52	3	He	0.001	0.0396	1710.17	0.029	0.03958
Mn	55	3	He	-0.154	0.0012	50.00	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.029	0.0028	120.00	0.013	0.003171
Mn	55	3	He	0.184	0.0056	240.01	0.013	0.003171
Fe	57	3	He	-0.649	0.0016	70.00	0.0006	0.002014
Fe	57	3	He	0.923	0.0026	110.00	0.0006	0.002014
Fe	57	3	He	-0.274	0.0019	80.00	0.0006	0.002014
Co	59	3	He	-0.007	0.0037	160.01	0.0572	0.004106
Co	59	3	He	0.014	0.0049	210.01	0.0572	0.004106
Co	59	3	He	-0.007	0.0037	160.01	0.0572	0.004106
Ni	60	3	He	-0.001	0.0033	260.01	0.0084	0.003329
Ni	60	3	He	-0.034	0.003	240.01	0.0084	0.003329
Ni	60	3	He	0.036	0.0036	280.01	0.0084	0.003329
Cu	63	3	He	-0.016	0.0046	360.02	0.0247	0.004989
Cu	63	3	He	0.019	0.0054	430.02	0.0247	0.004989
Cu	63	3	He	-0.003	0.0049	380.02	0.0247	0.004989
Zn	66	3	He	0.047	0.0063	500.02	0.0029	0.006147
Zn	66	3	He	-0.039	0.006	480.03	0.0029	0.006147
Zn	66	3	He	-0.008	0.0061	490.03	0.0029	0.006147
As	75	3	He	-0.033	0.0009	68.00	0.002	0.0009198
As	75	3	He	-0.007	0.0009	72.00	0.002	0.0009198
As	75	3	He	0.04	0.001	80.00	0.002	0.0009198
Sr	88	3	He	0.014	0.0006	50.00	0.0088	0.0005022
Sr	88	3	He	0.014	0.0006	50.00	0.0088	0.0005022
Sr	88	3	He	-0.029	0.0002	20.00	0.0088	0.0005022
Mo	98	3	He	0.009	0.0009	70.00	0.0223	0.0006689
Mo	98	3	He	-0.013	0.0004	30.00	0.0223	0.0006689
Mo	98	3	He	0.004	0.0007	60.00	0.0223	0.0006689
Ag	107	3	He	-0.009	0.0003	20.00	0.0471	0.0006687
Ag	107	3	He	0.004	0.0009	70.00	0.0471	0.0006687
Ag	107	3	He	0.004	0.0009	70.00	0.0471	0.0006687
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0.0001	4.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.047	0.0172	1370.13	0.0156	0.01794
Sn	120	3	He	0.099	0.0195	1550.17	0.0156	0.01794
Sn	120	3	He	-0.052	0.0171	1370.12	0.0156	0.01794
Sb	121	3	He	-0.003	0	0.00	0.0151	4.19E-05
Sb	121	3	He	0.006	0.0001	10.00	0.0151	4.19E-05
Sb	121	3	He	-0.003	0	0.00	0.0151	4.19E-05
Ba	137	3	He	0.034	0.0004	30.00	0.0049	0.0002094
Ba	137	3	He	0.009	0.0003	20.00	0.0049	0.0002094
Ba	137	3	He	-0.043	0	0.00	0.0049	0.0002094
Tl	205	3	He	0.003	0.0008	310.01	0.0252	0.0007688
Tl	205	3	He	-0.009	0.0006	200.01	0.0252	0.0007688
Tl	205	3	He	0.006	0.0009	340.02	0.0252	0.0007688
Pb	208	3	He	-0.002	0.0017	330.02	0.0337	0.001742
Pb	208	3	He	0.01	0.0021	340.02	0.0337	0.001742
Pb	208	3	He	-0.008	0.0015	260.02	0.0337	0.001742
U	238	3	He	0	0.0004	130.01	0.0502	0.0004339
U	238	3	He	-0.001	0.0004	110.00	0.0502	0.0004339
U	238	3	He	0.001	0.0005	140.01	0.0502	0.0004339
Sc	45	1	No Gas			2325539.18		
Sc	45	1	No Gas			2348531.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2367711.68		
Ge	72	1	No Gas			1202681.54		
Ge	72	1	No Gas			1198771.39		
Ge	72	1	No Gas			1198248.42		
Sc	45	2	H2			171380.58		
Sc	45	2	H2			173969.57		
Sc	45	2	H2			175924.84		
Ge	72	2	H2			148587.08		
Ge	72	2	H2			149839.39		
Ge	72	2	H2			150201.86		
In	115	2	H2			366986.79		
In	115	2	H2			364682.96		
In	115	2	H2			366355.11		
Sc	45	3	He			42903.95		
Sc	45	3	He			43004.09		
Sc	45	3	He			43185.33		
Ge	72	3	He			78334.34		
Ge	72	3	He			78917.91		
Ge	72	3	He			77228.59		
In	115	3	He			79597.17		
In	115	3	He			79557.45		
In	115	3	He			80011.17		
Tb	159	3	He			372585.62		
Tb	159	3	He			362987.10		
Tb	159	3	He			368217.42		
Bi	209	3	He			290323.00		
Bi	209	3	He			293133.49		
Bi	209	3	He			292610.93		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 7:39:57 AM
Sample Name	STD1 4674033
Sample Type	CalStd
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

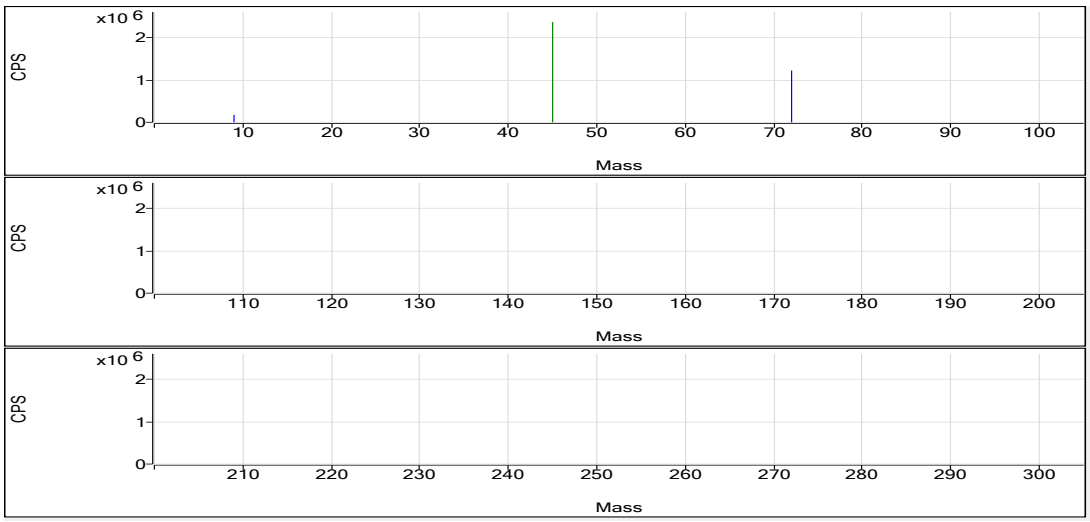
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	100.000	ppb	1.6	175607.63	0.0740	Pulse	0.5000	3
Se	78	115	H2	100.000	ppb	1.0	6409.44	0.0172	Pulse	1.5000	3
Na	23	45	He	10000.000	ppb	2.7	1636850.03	37.5526	Analog	0.1000	3
Mg	24	45	He	10000.000	ppb	1.1	796372.25	18.2678	Pulse	0.1000	3
Al	27	45	He	10000.000	ppb	1.3	260232.80	5.9695	Pulse	0.1000	3
K	39	45	He	10000.000	ppb	1.3	529549.67	12.1475	Pulse	0.1000	3
Ca	44	45	He	10000.000	ppb	2.5	30158.67	0.6915	Pulse	0.1000	3
Ti	47	45	He	10000.000	ppb	1.4	235950.05	5.4125	Pulse	0.1000	3
V	51	45	He	1000.000	ppb	1.7	971461.67	22.2857	Pulse	0.5000	3
Cr	52	45	He	1000.000	ppb	2.1	1264323.63	29.0041	Pulse	0.1000	3
Mn	55	45	He	1000.000	ppb	1.8	566608.27	12.9977	Pulse	0.1000	3
Fe	57	45	He	10000.000	ppb	1.4	256868.92	5.8925	Pulse	0.1000	3
Co	59	45	He	1000.000	ppb	2.5	2493082.26	57.1980	Analog	0.1000	3
Ni	60	72	He	1000.000	ppb	1.9	669571.99	8.3646	Pulse	0.1000	3
Cu	63	72	He	1000.000	ppb	0.8	1978707.58	24.7168	Analog	0.1000	3
Zn	66	115	He	1000.000	ppb	1.1	228321.44	2.8740	Pulse	0.1000	3
As	75	115	He	1000.000	ppb	1.3	159686.85	2.0101	Pulse	0.5000	3
Sr	88	115	He	100.000	ppb	1.0	70020.32	0.8812	Pulse	0.1000	3
Mo	98	115	He	100.000	ppb	1.3	177418.98	2.2333	Pulse	0.1000	3
Ag	107	115	He	100.000	ppb	1.2	374125.43	4.7093	Pulse	0.1000	3
Cd	111	115	He	100.000	ppb	1.8	42528.39	0.5354	Pulse	0.5000	3
Sn	120	115	He	100.000	ppb	1.0	125101.34	1.5747	Pulse	0.1000	3
Sb	121	115	He	100.000	ppb	2.0	120167.82	1.5127	Pulse	0.1000	3
Ba	137	115	He	1000.000	ppb	1.2	388784.12	4.8936	Pulse	0.1000	3
Tl	205	159	He	100.000	ppb	0.7	938308.08	2.5250	Pulse	0.1000	3
Pb	208	159	He	100.000	ppb	0.8	1254266.03	3.3753	Pulse	0.1000	3
U	238	209	He	100.000	ppb	1.0	1456916.80	5.0155	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2373145.33	1.2	101.1	Analog	0.1000	3
No Gas	Ge	72	1225789.85	0.6	102.2	Pulse	0.1000	3
H2	Sc	45	174317.58	1.0	100.3	Pulse	0.1000	3
H2	Ge	72	153992.96	0.6	103.0	Pulse	0.1000	3
H2	In	115	372384.61	1.0	101.7	Pulse	0.1000	3
He	Sc	45	43599.61	1.8	101.3	Pulse	0.1000	3
He	Ge	72	80060.70	1.5	102.4	Pulse	0.1000	3
He	In	115	79452.32	1.5	99.7	Pulse	0.1000	3
He	Tb	159	371606.32	0.5	101.0	Pulse	0.1000	3
He	Bi	209	290489.57	0.3	99.5	Pulse	0.1000	3

No Gas



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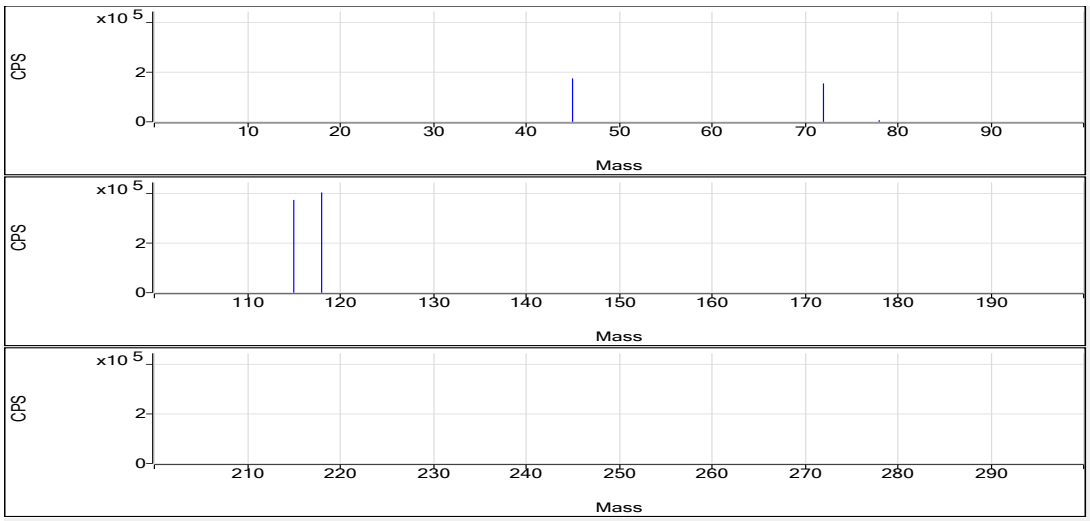
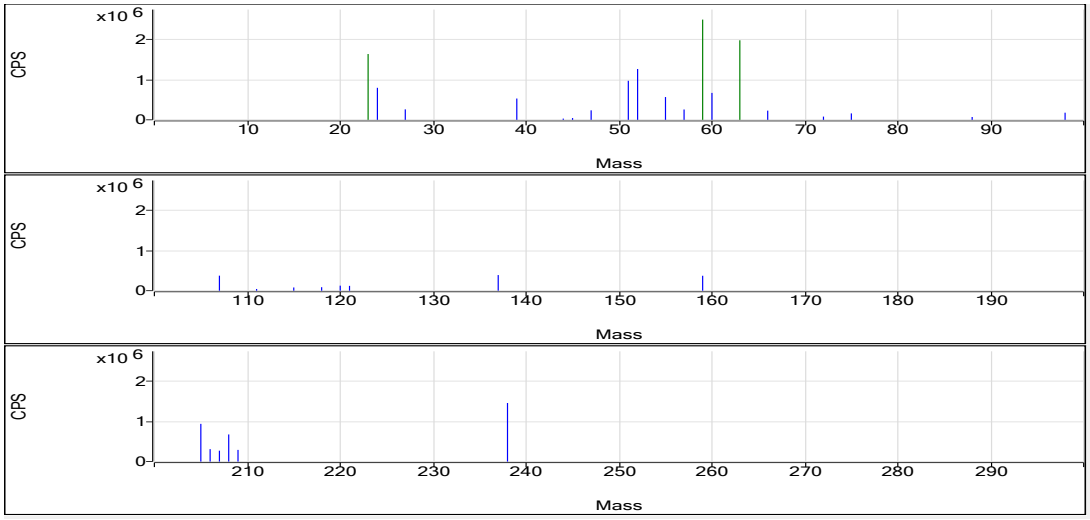


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	98.224	0.0727	174733.23	0.0007	1.705E-05
Be	9	1	No Gas	100.507	0.0744	174859.28	0.0007	1.705E-05
Be	9	1	No Gas	101.269	0.0749	177230.39	0.0007	1.705E-05
Se	78	2	H2	101.057	0.0174	6403.44	0.0002	6.062E-06
Se	78	2	H2	99.142	0.0171	6375.43	0.0002	6.062E-06
Se	78	2	H2	99.801	0.0172	6449.46	0.0002	6.062E-06
Na	23	3	He	9764.947	36.678	1608588.73	0.0037	0.3435
Na	23	3	He	10290.96	38.6353	1651022.63	0.0037	0.3435
Na	23	3	He	9944.093	37.3446	1650938.73	0.0037	0.3435
Mg	24	3	He	10021.158	18.3064	802865.38	0.0018	0.002943
Mg	24	3	He	10101.648	18.4534	788581.24	0.0018	0.002943
Mg	24	3	He	9877.194	18.0435	797670.14	0.0018	0.002943
Al	27	3	He	10033.506	5.9895	262681.73	0.0006	0.001008
Al	27	3	He	10112	6.0364	257954.80	0.0006	0.001008
Al	27	3	He	9854.493	5.8827	260061.87	0.0006	0.001008
K	39	3	He	9904.546	12.0354	527836.48	0.0012	0.4052
K	39	3	He	10153.507	12.3277	526807.73	0.0012	0.4052
K	39	3	He	9941.947	12.0793	534004.80	0.0012	0.4052
Ca	44	3	He	10071.223	0.6964	30542.71	0.0001	0.003486
Ca	44	3	He	9720.462	0.6723	28729.01	0.0001	0.003486
Ca	44	3	He	10208.316	0.7058	31204.28	0.0001	0.003486
Ti	47	3	He	10032.711	5.4302	238154.04	0.0005	0
Ti	47	3	He	10120.804	5.4779	234090.95	0.0005	0
Ti	47	3	He	9846.485	5.3294	235605.17	0.0005	0
V	51	3	He	987.166	22	964856.38	0.0223	0.03097
V	51	3	He	1019.889	22.7283	971260.38	0.0223	0.03097
V	51	3	He	992.945	22.1286	978268.25	0.0223	0.03097
Cr	52	3	He	980.238	28.4317	1246930.37	0.029	0.03958
Cr	52	3	He	1021.893	29.6382	1266547.72	0.029	0.03958
Cr	52	3	He	997.87	28.9424	1279492.79	0.029	0.03958
Mn	55	3	He	982.45	12.7696	560038.35	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1017.646	13.227	565236.91	0.013	0.003171
Mn	55	3	He	999.904	12.9964	574549.56	0.013	0.003171
Fe	57	3	He	9919.646	5.8451	256350.89	0.0006	0.002014
Fe	57	3	He	10160.691	5.9871	255851.70	0.0006	0.002014
Fe	57	3	He	9919.663	5.8452	258404.16	0.0006	0.002014
Co	59	3	He	993.852	56.8464	2493113.56	0.0572	0.004106
Co	59	3	He	1027.383	58.7642	2511202.62	0.0572	0.004106
Co	59	3	He	978.765	55.9835	2474930.59	0.0572	0.004106
Ni	60	3	He	979.897	8.1965	667294.44	0.0084	0.003329
Ni	60	3	He	1002.273	8.3836	663554.44	0.0084	0.003329
Ni	60	3	He	1017.83	8.5137	677867.10	0.0084	0.003329
Cu	63	3	He	993.189	24.5484	1998539.35	0.0247	0.004989
Cu	63	3	He	1008.422	24.9249	1972782.16	0.0247	0.004989
Cu	63	3	He	998.389	24.6769	1964801.22	0.0247	0.004989
Zn	66	3	He	997.628	2.8672	229956.85	0.0029	0.006147
Zn	66	3	He	1011.653	2.9074	227020.74	0.0029	0.006147
Zn	66	3	He	990.718	2.8474	227986.73	0.0029	0.006147
As	75	3	He	987.895	1.9858	159265.55	0.002	0.0009198
As	75	3	He	1013.998	2.0382	159152.09	0.002	0.0009198
As	75	3	He	998.107	2.0063	160642.91	0.002	0.0009198
Sr	88	3	He	101.194	0.8917	71521.13	0.0088	0.0005022
Sr	88	3	He	99.353	0.8755	68365.34	0.0088	0.0005022
Sr	88	3	He	99.453	0.8764	70174.49	0.0088	0.0005022
Mo	98	3	He	99.47	2.2215	178169.18	0.0223	0.0006689
Mo	98	3	He	101.484	2.2664	176972.15	0.0223	0.0006689
Mo	98	3	He	99.047	2.212	177115.62	0.0223	0.0006689
Ag	107	3	He	99.92	4.7055	377398.08	0.0471	0.0006687
Ag	107	3	He	101.237	4.7675	372268.24	0.0471	0.0006687
Ag	107	3	He	98.843	4.6548	372709.96	0.0471	0.0006687
Cd	111	3	He	98.229	0.5259	42177.31	0.0054	1.676E-05
Cd	111	3	He	101.918	0.5456	42604.64	0.0054	1.676E-05
Cd	111	3	He	99.853	0.5346	42803.23	0.0054	1.676E-05
Sn	120	3	He	99.958	1.574	126241.95	0.0156	0.01794
Sn	120	3	He	101.034	1.5908	124214.04	0.0156	0.01794
Sn	120	3	He	99.008	1.5592	124848.04	0.0156	0.01794
Sb	121	3	He	97.974	1.4821	118866.51	0.0151	4.19E-05
Sb	121	3	He	101.94	1.5421	120410.24	0.0151	4.19E-05
Sb	121	3	He	100.086	1.514	121226.72	0.0151	4.19E-05
Ba	137	3	He	1005.807	4.922	394763.24	0.0049	0.0002094
Ba	137	3	He	1007.976	4.9326	385159.96	0.0049	0.0002094
Ba	137	3	He	986.217	4.8262	386429.17	0.0049	0.0002094
Tl	205	3	He	100.019	2.5255	943039.91	0.0252	0.0007688
Tl	205	3	He	99.243	2.5059	927008.03	0.0252	0.0007688
Tl	205	3	He	100.738	2.5436	944876.31	0.0252	0.0007688
Pb	208	3	He	99.111	3.3453	670502.96	0.0337	0.001742
Pb	208	3	He	100.253	3.3839	673909.60	0.0337	0.001742
Pb	208	3	He	100.636	3.3968	678961.79	0.0337	0.001742
U	238	3	He	100.264	5.0287	1463864.82	0.0502	0.0004339
U	238	3	He	98.864	4.9585	1443107.63	0.0502	0.0004339
U	238	3	He	100.872	5.0592	1463777.95	0.0502	0.0004339
Sc	45	1	No Gas			2403763.09		
Sc	45	1	No Gas			2350866.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2364806.84		
Ge	72	1	No Gas			1234056.62		
Ge	72	1	No Gas			1223119.90		
Ge	72	1	No Gas			1220193.03		
Sc	45	2	H2			175518.12		
Sc	45	2	H2			175133.10		
Sc	45	2	H2			172301.52		
Ge	72	2	H2			153790.95		
Ge	72	2	H2			154952.60		
Ge	72	2	H2			153235.33		
In	115	2	H2			368125.74		
In	115	2	H2			373592.77		
In	115	2	H2			375435.31		
Sc	45	3	He			43857.03		
Sc	45	3	He			42733.57		
Sc	45	3	He			44208.23		
Ge	72	3	He			81412.07		
Ge	72	3	He			79149.10		
Ge	72	3	He			79620.92		
In	115	3	He			80884.44		
In	115	3	He			78752.98		
In	115	3	He			80755.16		
Tb	159	3	He			373412.18		
Tb	159	3	He			369936.32		
Tb	159	3	He			371470.46		
Bi	209	3	He			291102.38		
Bi	209	3	He			291036.34		
Bi	209	3	He			289329.98		

Quantitation Report

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Sample Type	ICV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

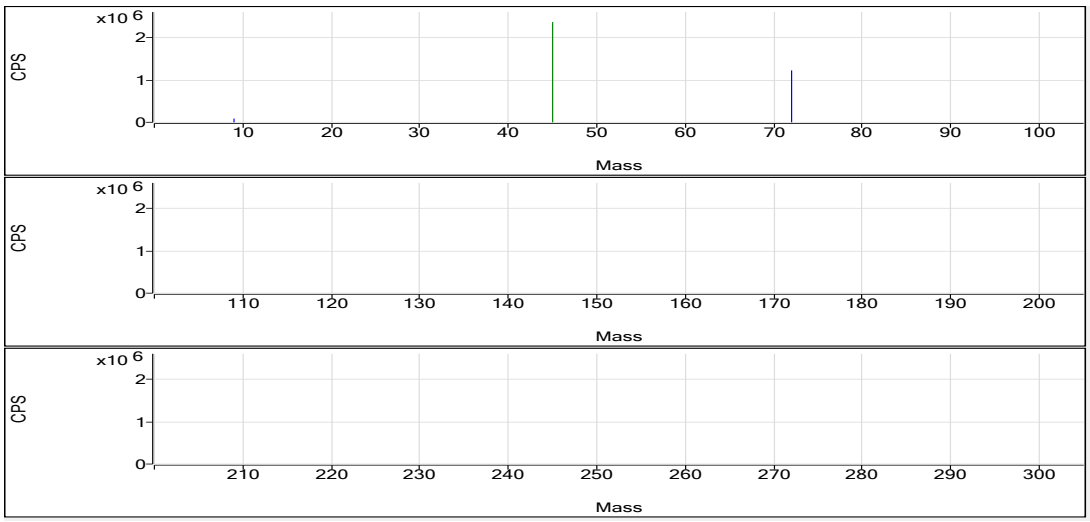
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.951	ppb	2.7	87781.98	0.0370	Pulse	0.5000	3
Se	78	115	H2	49.627	ppb	1.9	3187.92	0.0085	Pulse	1.5000	3
Na	23	45	He	4576.732	ppb	1.0	787372.46	17.3731	Pulse	0.1000	3
Mg	24	45	He	4889.935	ppb	1.1	404918.30	8.9343	Pulse	0.1000	3
Al	27	45	He	4833.443	ppb	1.6	130783.31	2.8858	Pulse	0.1000	3
K	39	45	He	4918.738	ppb	2.2	280103.48	6.1809	Pulse	0.1000	3
Ca	44	45	He	4887.225	ppb	3.3	15398.66	0.3397	Pulse	0.1000	3
Ti	47	45	He	4796.750	ppb	0.6	117673.05	2.5963	Pulse	0.1000	3
V	51	45	He	486.300	ppb	1.1	491886.88	10.8534	Pulse	0.5000	3
Cr	52	45	He	486.799	ppb	1.6	640785.65	14.1395	Pulse	0.1000	3
Mn	55	45	He	485.910	ppb	1.9	286291.77	6.3173	Pulse	0.1000	3
Fe	57	45	He	4839.016	ppb	2.2	129261.52	2.8524	Pulse	0.1000	3
Co	59	45	He	471.125	ppb	1.3	1221359.96	26.9496	Pulse	0.1000	3
Ni	60	72	He	512.272	ppb	0.6	341999.45	4.2866	Pulse	0.1000	3
Cu	63	72	He	495.103	ppb	0.2	976564.70	12.2399	Pulse	0.1000	3
Zn	66	115	He	508.162	ppb	1.5	116637.68	1.4635	Pulse	0.1000	3
As	75	115	He	492.628	ppb	0.9	78963.35	0.9907	Pulse	0.5000	3
Sr	88	115	He	52.674	ppb	1.0	37015.87	0.4644	Pulse	0.1000	3
Mo	98	115	He	49.649	ppb	1.6	88397.65	1.1092	Pulse	0.1000	3
Ag	107	115	He	49.373	ppb	2.3	185318.63	2.3255	Pulse	0.1000	3
Cd	111	115	He	54.789	ppb	1.3	23378.21	0.2933	Pulse	0.5000	3
Sn	120	115	He	51.472	ppb	1.7	65294.23	0.8192	Pulse	0.1000	3
Sb	121	115	He	54.183	ppb	2.1	65320.90	0.8197	Pulse	0.1000	3
Ba	137	115	He	509.356	ppb	0.4	198696.49	2.4927	Pulse	0.1000	3
Tl	205	159	He	49.615	ppb	1.1	474739.00	1.2532	Pulse	0.1000	3
Pb	208	159	He	49.185	ppb	0.3	629273.33	1.6610	Pulse	0.1000	3
U	238	209	He	49.737	ppb	0.9	742986.32	2.4947	Pulse	0.1000	3

ISTD Table:

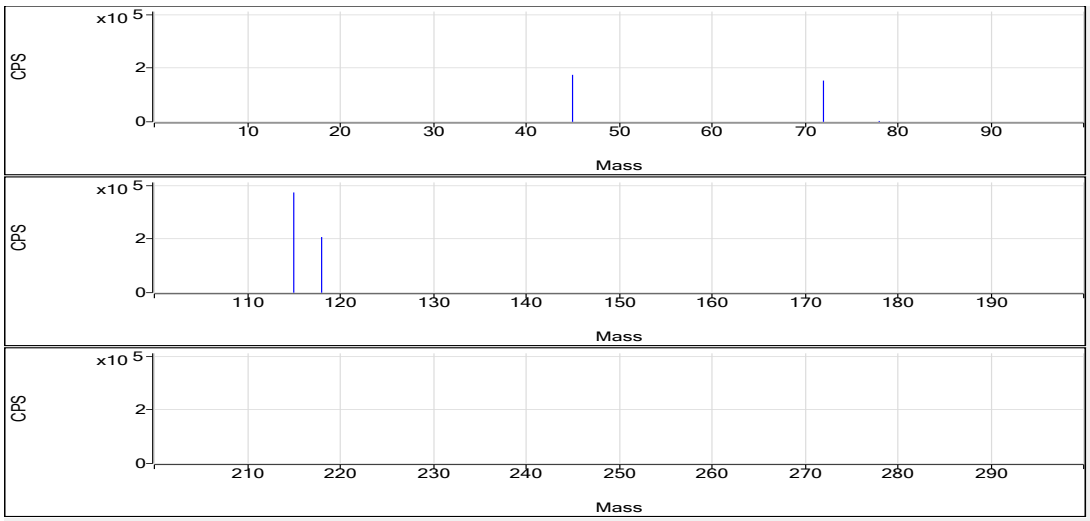
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2375185.64	2.6	101.2	Analog	0.1000	3
No Gas	Ge	72	1229747.66	0.7	102.5	Pulse	0.1000	3
H2	Sc	45	174850.84	0.3	100.6	Pulse	0.1000	3
H2	Ge	72	153511.51	1.7	102.7	Pulse	0.1000	3
H2	In	115	373096.38	0.9	101.9	Pulse	0.1000	3
He	Sc	45	45325.04	1.3	105.3	Pulse	0.1000	3
He	Ge	72	79785.95	0.6	102.1	Pulse	0.1000	3
He	In	115	79712.83	1.8	100.0	Pulse	0.1000	3
He	Tb	159	378843.07	0.3	103.0	Pulse	0.1000	3
He	Bi	209	297836.48	0.9	102.0	Pulse	0.1000	3

No Gas

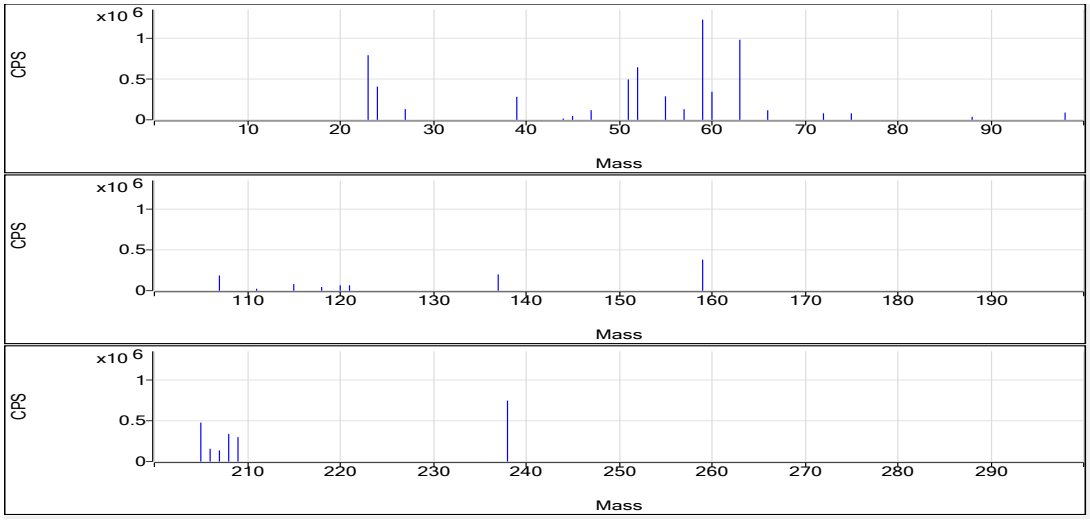


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.958	0.0362	87493.77	0.0007	1.705E-05
Be	9	1	No Gas	49.416	0.0366	88066.76	0.0007	1.705E-05
Be	9	1	No Gas	51.479	0.0381	87785.41	0.0007	1.705E-05
Se	78	2	H2	50.403	0.0087	3227.70	0.0002	6.062E-06
Se	78	2	H2	49.931	0.0086	3187.03	0.0002	6.062E-06
Se	78	2	H2	48.547	0.0084	3149.02	0.0002	6.062E-06
Na	23	3	He	4525.213	17.1814	790059.05	0.0037	0.3435
Na	23	3	He	4607.386	17.4872	784481.08	0.0037	0.3435
Na	23	3	He	4597.599	17.4508	787577.25	0.0037	0.3435
Mg	24	3	He	4832.618	8.8296	406016.44	0.0018	0.002943
Mg	24	3	He	4894.907	8.9434	401204.68	0.0018	0.002943
Mg	24	3	He	4942.28	9.0299	407533.78	0.0018	0.002943
Al	27	3	He	4753.823	2.8383	130515.69	0.0006	0.001008
Al	27	3	He	4912.717	2.9332	131582.68	0.0006	0.001008
Al	27	3	He	4833.787	2.8861	130251.57	0.0006	0.001008
K	39	3	He	4791.924	6.032	277373.00	0.0012	0.4052
K	39	3	He	4971.319	6.2427	280048.98	0.0012	0.4052
K	39	3	He	4992.972	6.2681	282888.45	0.0012	0.4052
Ca	44	3	He	4838.667	0.3364	15468.82	0.0001	0.003486
Ca	44	3	He	4756.717	0.3308	14838.11	0.0001	0.003486
Ca	44	3	He	5066.291	0.3521	15889.04	0.0001	0.003486
Ti	47	3	He	4791.57	2.5935	119255.64	0.0005	0
Ti	47	3	He	4828.918	2.6137	117250.08	0.0005	0
Ti	47	3	He	4769.762	2.5816	116513.44	0.0005	0
V	51	3	He	480.482	10.7239	493123.00	0.0223	0.03097
V	51	3	He	490.472	10.9463	491053.53	0.0223	0.03097
V	51	3	He	487.947	10.8901	491484.13	0.0223	0.03097
Cr	52	3	He	477.663	13.8749	638012.92	0.029	0.03958
Cr	52	3	He	491.281	14.2693	640126.55	0.029	0.03958
Cr	52	3	He	491.452	14.2743	644217.49	0.029	0.03958
Mn	55	3	He	475.458	6.1815	284246.73	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	488.666	6.3532	285004.72	0.013	0.003171
Mn	55	3	He	493.606	6.4173	289623.86	0.013	0.003171
Fe	57	3	He	4722.721	2.7839	128013.85	0.0006	0.002014
Fe	57	3	He	4934.966	2.9089	130496.12	0.0006	0.002014
Fe	57	3	He	4859.36	2.8644	129274.60	0.0006	0.002014
Co	59	3	He	464.241	26.5559	1221128.03	0.0572	0.004106
Co	59	3	He	474.783	27.1588	1218353.81	0.0572	0.004106
Co	59	3	He	474.35	27.1341	1224598.03	0.0572	0.004106
Ni	60	3	He	515.192	4.311	341731.60	0.0084	0.003329
Ni	60	3	He	508.811	4.2576	341610.66	0.0084	0.003329
Ni	60	3	He	512.812	4.2911	342656.09	0.0084	0.003329
Cu	63	3	He	495.358	12.2462	970752.80	0.0247	0.004989
Cu	63	3	He	494.178	12.217	980229.75	0.0247	0.004989
Cu	63	3	He	495.773	12.2564	978711.55	0.0247	0.004989
Zn	66	3	He	513.098	1.4776	117236.29	0.0029	0.006147
Zn	66	3	He	512.048	1.4746	115773.38	0.0029	0.006147
Zn	66	3	He	499.34	1.4382	116903.36	0.0029	0.006147
As	75	3	He	491.891	0.9892	78485.34	0.002	0.0009198
As	75	3	He	497.277	1	78513.74	0.002	0.0009198
As	75	3	He	488.716	0.9828	79890.98	0.002	0.0009198
Sr	88	3	He	52.991	0.4672	37069.31	0.0088	0.0005022
Sr	88	3	He	52.987	0.4672	36678.44	0.0088	0.0005022
Sr	88	3	He	52.044	0.4589	37299.87	0.0088	0.0005022
Mo	98	3	He	50.026	1.1176	88669.82	0.0223	0.0006689
Mo	98	3	He	50.182	1.1211	88015.28	0.0223	0.0006689
Mo	98	3	He	48.739	1.0888	88507.85	0.0223	0.0006689
Ag	107	3	He	49.921	2.3512	186550.35	0.0471	0.0006687
Ag	107	3	He	50.131	2.3612	185377.56	0.0471	0.0006687
Ag	107	3	He	48.067	2.2639	184027.97	0.0471	0.0006687
Cd	111	3	He	54.979	0.2943	23353.49	0.0054	1.676E-05
Cd	111	3	He	55.408	0.2966	23289.38	0.0054	1.676E-05
Cd	111	3	He	53.981	0.289	23491.77	0.0054	1.676E-05
Sn	120	3	He	52.314	0.8323	66037.98	0.0156	0.01794
Sn	120	3	He	51.514	0.8199	64369.66	0.0156	0.01794
Sn	120	3	He	50.589	0.8055	65475.05	0.0156	0.01794
Sb	121	3	He	54.234	0.8204	65093.74	0.0151	4.19E-05
Sb	121	3	He	55.272	0.8361	65645.18	0.0151	4.19E-05
Sb	121	3	He	53.042	0.8024	65223.78	0.0151	4.19E-05
Ba	137	3	He	507.387	2.4831	197008.59	0.0049	0.0002094
Ba	137	3	He	511.382	2.5026	196482.07	0.0049	0.0002094
Ba	137	3	He	509.298	2.4924	202598.81	0.0049	0.0002094
Tl	205	3	He	49.176	1.2421	470762.06	0.0252	0.0007688
Tl	205	3	He	49.449	1.249	474616.24	0.0252	0.0007688
Tl	205	3	He	50.22	1.2684	478838.70	0.0252	0.0007688
Pb	208	3	He	49.226	1.6624	339147.92	0.0337	0.001742
Pb	208	3	He	49.025	1.6556	338646.05	0.0337	0.001742
Pb	208	3	He	49.306	1.6651	335668.86	0.0337	0.001742
U	238	3	He	50.143	2.5151	741631.94	0.0502	0.0004339
U	238	3	He	49.8	2.4979	745678.11	0.0502	0.0004339
U	238	3	He	49.267	2.4712	741648.90	0.0502	0.0004339
Sc	45	1	No Gas			2414280.28		
Sc	45	1	No Gas			2407562.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2303713.87		
Ge	72	1	No Gas			1237370.84		
Ge	72	1	No Gas			1231493.50		
Ge	72	1	No Gas			1220378.65		
Sc	45	2	H2			174738.63		
Sc	45	2	H2			175387.61		
Sc	45	2	H2			174426.29		
Ge	72	2	H2			156338.39		
Ge	72	2	H2			151212.70		
Ge	72	2	H2			152983.43		
In	115	2	H2			371904.49		
In	115	2	H2			370685.93		
In	115	2	H2			376698.71		
Sc	45	3	He			45983.35		
Sc	45	3	He			44860.37		
Sc	45	3	He			45131.41		
Ge	72	3	He			79269.96		
Ge	72	3	He			80234.92		
Ge	72	3	He			79852.98		
In	115	3	He			79698.09		
In	115	3	He			78862.98		
In	115	3	He			81639.42		
Tb	159	3	He			379013.24		
Tb	159	3	He			380010.15		
Tb	159	3	He			377505.81		
Bi	209	3	He			294871.01		
Bi	209	3	He			298519.33		
Bi	209	3	He			300119.10		

Quantitation Report

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Sample Type	ICB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

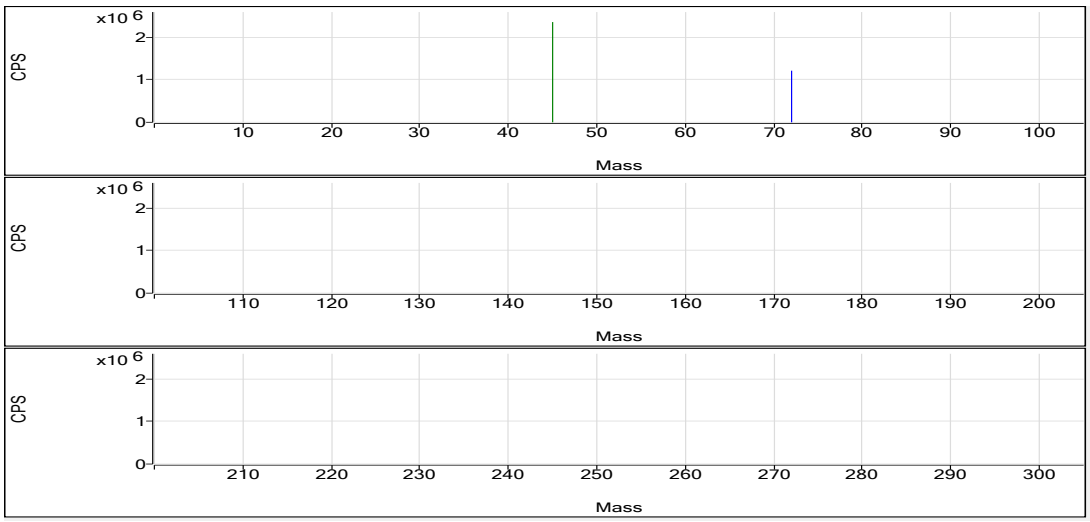
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.016	ppb	100.2	68.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.035	ppb	64.2	4.44	0.0000	Pulse	1.5000	3
Na	23	45	He	-3.431	ppb	N/A	14814.53	0.3307	Pulse	0.1000	3
Mg	24	45	He	1.485	ppb	19.8	253.34	0.0057	Pulse	0.1000	3
Al	27	45	He	0.051	ppb	1470.2	46.67	0.0010	Pulse	0.1000	3
K	39	45	He	-8.592	ppb	N/A	17704.62	0.3952	Pulse	0.1000	3
Ca	44	45	He	-13.975	ppb	N/A	113.34	0.0025	Pulse	0.1000	3
Ti	47	45	He	1.652	ppb	86.9	40.00	0.0009	Pulse	0.1000	3
V	51	45	He	-0.030	ppb	N/A	1358.07	0.0303	Pulse	0.5000	3
Cr	52	45	He	0.157	ppb	34.5	1976.87	0.0441	Pulse	0.1000	3
Mn	55	45	He	0.036	ppb	175.7	163.34	0.0036	Pulse	0.1000	3
Fe	57	45	He	0.241	ppb	632.1	96.67	0.0022	Pulse	0.1000	3
Co	59	45	He	0.060	ppb	19.2	336.68	0.0075	Pulse	0.1000	3
Ni	60	72	He	0.087	ppb	60.1	320.01	0.0041	Pulse	0.1000	3
Cu	63	72	He	0.131	ppb	33.4	650.03	0.0082	Pulse	0.1000	3
Zn	66	115	He	0.068	ppb	277.7	510.03	0.0063	Pulse	0.1000	3
As	75	115	He	0.025	ppb	219.0	78.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	-0.001	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Mo	98	115	He	0.061	ppb	54.7	163.34	0.0020	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	551.9	60.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	75.0	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.040	ppb	N/A	1393.46	0.0173	Pulse	0.1000	3
Sb	121	115	He	0.049	ppb	34.6	63.33	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.101	ppb	38.6	56.67	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.061	ppb	10.5	866.73	0.0023	Pulse	0.1000	3
Pb	208	159	He	0.003	ppb	55.3	690.04	0.0018	Pulse	0.1000	3
U	238	209	He	0.040	ppb	14.4	720.05	0.0025	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2358223.30	0.4	100.5	Analog	0.1000	3
No Gas	Ge	72	1214437.20	0.9	101.2	Pulse	0.1000	3
H2	Sc	45	172529.94	1.1	99.3	Pulse	0.1000	3
H2	Ge	72	152179.51	1.0	101.8	Pulse	0.1000	3
H2	In	115	369224.12	0.7	100.9	Pulse	0.1000	3
He	Sc	45	44803.13	1.1	104.1	Pulse	0.1000	3
He	Ge	72	78897.74	1.9	100.9	Pulse	0.1000	3
He	In	115	80395.40	0.5	100.9	Pulse	0.1000	3
He	Tb	159	375953.90	0.4	102.2	Pulse	0.1000	3
He	Bi	209	292718.75	0.6	100.2	Pulse	0.1000	3

No Gas



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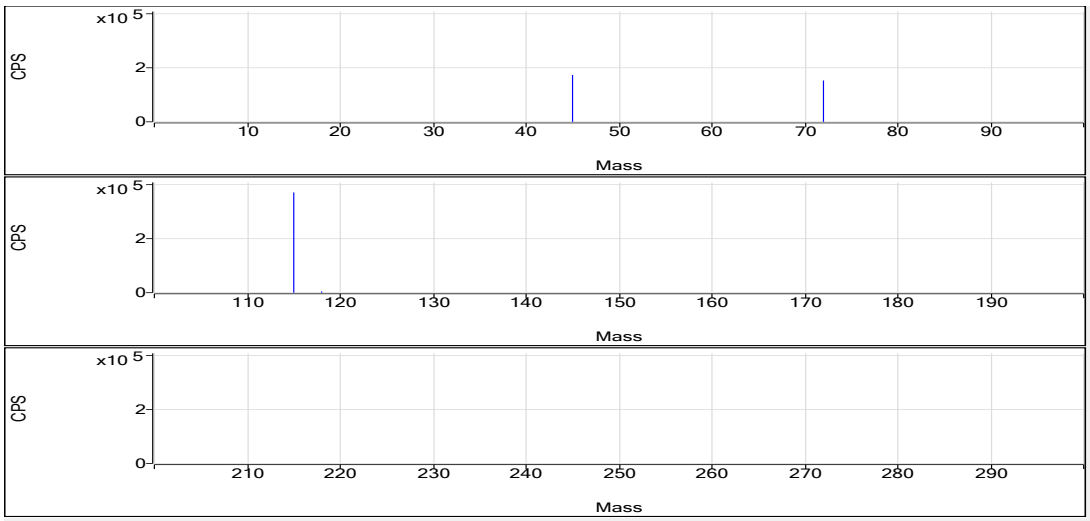
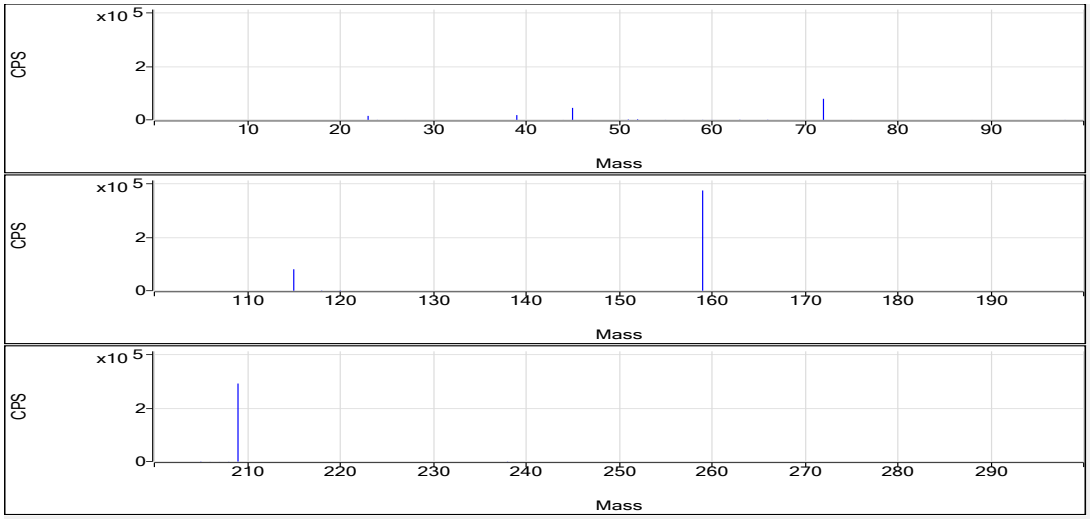


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.026	0	86.00	0.0007	1.705E-05
Be	9	1	No Gas	0.024	0	82.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.002	0	36.00	0.0007	1.705E-05
Se	78	2	H2	0.06	0	6.00	0.0002	6.062E-06
Se	78	2	H2	0.017	0	3.33	0.0002	6.062E-06
Se	78	2	H2	0.027	0	4.00	0.0002	6.062E-06
Na	23	3	He	0.25	0.3444	15288.30	0.0037	0.3435
Na	23	3	He	-5.17	0.3243	14477.51	0.0037	0.3435
Na	23	3	He	-5.372	0.3235	14677.78	0.0037	0.3435
Mg	24	3	He	1.349	0.0054	240.01	0.0018	0.002943
Mg	24	3	He	1.822	0.0063	280.01	0.0018	0.002943
Mg	24	3	He	1.285	0.0053	240.01	0.0018	0.002943
Al	27	3	He	-0.179	0.0009	40.00	0.0006	0.001008
Al	27	3	He	-0.563	0.0007	30.00	0.0006	0.001008
Al	27	3	He	0.896	0.0015	70.00	0.0006	0.001008
K	39	3	He	-7.999	0.3959	17571.18	0.0012	0.4052
K	39	3	He	-11.116	0.3922	17510.97	0.0012	0.4052
K	39	3	He	-6.662	0.3974	18031.70	0.0012	0.4052
Ca	44	3	He	-11.375	0.0027	120.01	0.0001	0.003486
Ca	44	3	He	-31.139	0.0013	60.00	0.0001	0.003486
Ca	44	3	He	0.587	0.0035	160.01	0.0001	0.003486
Ti	47	3	He	0.832	0.0005	20.00	0.0005	0
Ti	47	3	He	3.31	0.0018	80.00	0.0005	0
Ti	47	3	He	0.814	0.0004	20.00	0.0005	0
V	51	3	He	-0.11	0.0285	1266.06	0.0223	0.03097
V	51	3	He	-0.007	0.0308	1376.07	0.0223	0.03097
V	51	3	He	0.027	0.0316	1432.08	0.0223	0.03097
Cr	52	3	He	0.189	0.0451	2000.20	0.029	0.03958
Cr	52	3	He	0.188	0.045	2010.21	0.029	0.03958
Cr	52	3	He	0.094	0.0423	1920.19	0.029	0.03958
Mn	55	3	He	0.068	0.0041	180.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.037	0.0027	120.01	0.013	0.003171
Mn	55	3	He	0.078	0.0042	190.01	0.013	0.003171
Fe	57	3	He	1.17	0.0027	120.00	0.0006	0.002014
Fe	57	3	He	-1.518	0.0011	50.00	0.0006	0.002014
Fe	57	3	He	1.071	0.0026	120.00	0.0006	0.002014
Co	59	3	He	0.046	0.0068	300.01	0.0572	0.004106
Co	59	3	He	0.065	0.0078	350.02	0.0572	0.004106
Co	59	3	He	0.067	0.0079	360.02	0.0572	0.004106
Ni	60	3	He	0.04	0.0037	290.01	0.0084	0.003329
Ni	60	3	He	0.079	0.004	320.01	0.0084	0.003329
Ni	60	3	He	0.144	0.0045	350.02	0.0084	0.003329
Cu	63	3	He	0.11	0.0077	610.03	0.0247	0.004989
Cu	63	3	He	0.181	0.0095	760.04	0.0247	0.004989
Cu	63	3	He	0.102	0.0075	580.03	0.0247	0.004989
Zn	66	3	He	-0.139	0.0058	460.02	0.0029	0.006147
Zn	66	3	He	0.232	0.0068	550.03	0.0029	0.006147
Zn	66	3	He	0.111	0.0065	520.03	0.0029	0.006147
As	75	3	He	-0.022	0.0009	70.00	0.002	0.0009198
As	75	3	He	0.085	0.0011	88.00	0.002	0.0009198
As	75	3	He	0.012	0.0009	76.00	0.002	0.0009198
Sr	88	3	He	0.014	0.0006	50.00	0.0088	0.0005022
Sr	88	3	He	0.027	0.0007	60.00	0.0088	0.0005022
Sr	88	3	He	-0.043	0.0001	10.00	0.0088	0.0005022
Mo	98	3	He	0.065	0.0021	170.01	0.0223	0.0006689
Mo	98	3	He	0.092	0.0027	220.01	0.0223	0.0006689
Mo	98	3	He	0.026	0.0012	100.01	0.0223	0.0006689
Ag	107	3	He	0.012	0.0013	100.01	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.011	0.0001	6.00	0.0054	1.676E-05
Cd	111	3	He	0.002	0	2.00	0.0054	1.676E-05
Sn	120	3	He	-0.133	0.0159	1270.11	0.0156	0.01794
Sn	120	3	He	0.113	0.0197	1590.16	0.0156	0.01794
Sn	120	3	He	-0.098	0.0164	1320.11	0.0156	0.01794
Sb	121	3	He	0.055	0.0009	70.00	0.0151	4.19E-05
Sb	121	3	He	0.063	0.001	80.00	0.0151	4.19E-05
Sb	121	3	He	0.03	0.0005	40.00	0.0151	4.19E-05
Ba	137	3	He	0.11	0.0007	60.00	0.0049	0.0002094
Ba	137	3	He	0.058	0.0005	40.00	0.0049	0.0002094
Ba	137	3	He	0.135	0.0009	70.00	0.0049	0.0002094
Tl	205	3	He	0.054	0.0021	800.06	0.0252	0.0007688
Tl	205	3	He	0.065	0.0024	900.06	0.0252	0.0007688
Tl	205	3	He	0.064	0.0024	900.06	0.0252	0.0007688
Pb	208	3	He	0.002	0.0018	400.02	0.0337	0.001742
Pb	208	3	He	0.005	0.0019	350.02	0.0337	0.001742
Pb	208	3	He	0.002	0.0018	460.03	0.0337	0.001742
U	238	3	He	0.034	0.0021	620.04	0.0502	0.0004339
U	238	3	He	0.045	0.0027	790.05	0.0502	0.0004339
U	238	3	He	0.042	0.0025	750.05	0.0502	0.0004339
Sc	45	1	No Gas			2363406.21		
Sc	45	1	No Gas			2346884.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2364378.87		
Ge	72	1	No Gas			1205434.51		
Ge	72	1	No Gas			1210758.11		
Ge	72	1	No Gas			1227118.97		
Sc	45	2	H2			172612.75		
Sc	45	2	H2			170610.68		
Sc	45	2	H2			174366.38		
Ge	72	2	H2			151061.09		
Ge	72	2	H2			151626.93		
Ge	72	2	H2			153850.50		
In	115	2	H2			366442.61		
In	115	2	H2			369548.94		
In	115	2	H2			371680.81		
Sc	45	3	He			44388.43		
Sc	45	3	He			44649.13		
Sc	45	3	He			45371.84		
Ge	72	3	He			79199.51		
Ge	72	3	He			80255.06		
Ge	72	3	He			77238.66		
In	115	3	He			80009.59		
In	115	3	He			80745.13		
In	115	3	He			80452.61		
Tb	159	3	He			377325.11		
Tb	159	3	He			374603.63		
Tb	159	3	He			375932.96		
Bi	209	3	He			290678.00		
Bi	209	3	He			293160.33		
Bi	209	3	He			294317.93		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 7:47:17 AM
Sample Name	CRI 4604525
Sample Type	CRI
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

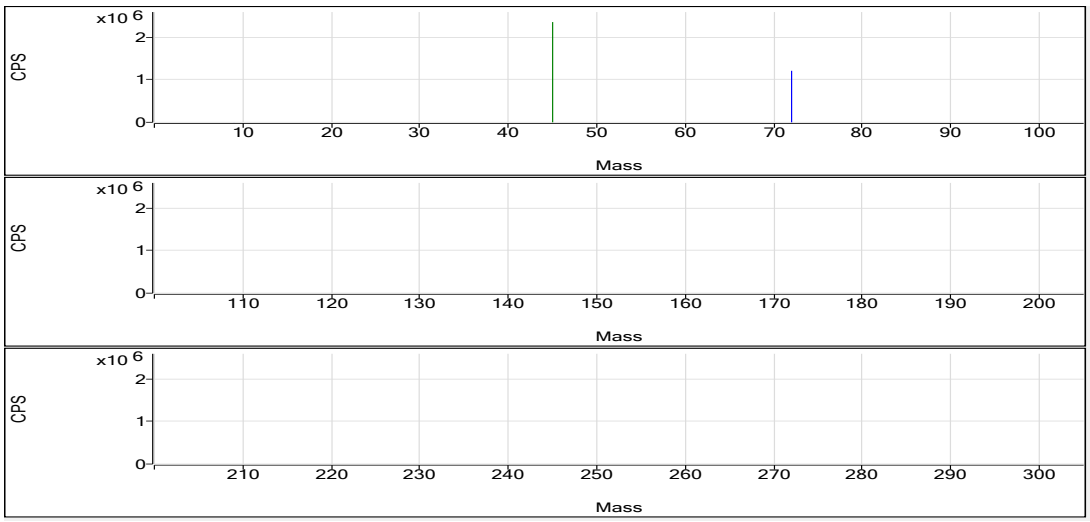
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.490	ppb	4.8	890.70	0.0004	Pulse	0.5000	3
Se	78	115	H2	1.089	ppb	9.6	72.22	0.0002	Pulse	1.5000	3
Na	23	45	He	182.258	ppb	3.3	46055.59	1.0217	Pulse	0.1000	3
Mg	24	45	He	50.401	ppb	6.5	4280.77	0.0950	Pulse	0.1000	3
Al	27	45	He	23.714	ppb	3.8	683.37	0.0152	Pulse	0.1000	3
K	39	45	He	202.791	ppb	9.2	28999.52	0.6434	Pulse	0.1000	3
Ca	44	45	He	97.456	ppb	22.2	460.03	0.0102	Pulse	0.1000	3
Ti	47	45	He	10.379	ppb	22.6	253.34	0.0056	Pulse	0.1000	3
V	51	45	He	1.861	ppb	4.5	3264.39	0.0724	Pulse	0.5000	3
Cr	52	45	He	1.936	ppb	11.1	4310.77	0.0957	Pulse	0.1000	3
Mn	55	45	He	1.839	ppb	4.9	1220.10	0.0271	Pulse	0.1000	3
Fe	57	45	He	51.690	ppb	5.0	1463.46	0.0325	Pulse	0.1000	3
Co	59	45	He	0.511	ppb	8.7	1503.47	0.0333	Pulse	0.1000	3
Ni	60	72	He	1.105	ppb	12.0	996.74	0.0126	Pulse	0.1000	3
Cu	63	72	He	1.133	ppb	7.8	2617.01	0.0330	Pulse	0.1000	3
Zn	66	115	He	11.943	ppb	5.0	3300.48	0.0404	Pulse	0.1000	3
As	75	115	He	2.105	ppb	12.8	420.68	0.0051	Pulse	0.5000	3
Sr	88	115	He	1.050	ppb	17.7	796.72	0.0098	Pulse	0.1000	3
Mo	98	115	He	0.502	ppb	7.6	970.07	0.0119	Pulse	0.1000	3
Ag	107	115	He	0.474	ppb	5.3	1876.86	0.0230	Pulse	0.1000	3
Cd	111	115	He	0.532	ppb	13.3	234.00	0.0029	Pulse	0.5000	3
Sn	120	115	He	2.020	ppb	11.9	4034.07	0.0494	Pulse	0.1000	3
Sb	121	115	He	0.968	ppb	9.6	1200.09	0.0147	Pulse	0.1000	3
Ba	137	115	He	1.874	ppb	18.3	766.71	0.0094	Pulse	0.1000	3
Tl	205	159	He	0.471	ppb	3.3	4774.38	0.0126	Pulse	0.1000	3
Pb	208	159	He	0.528	ppb	3.7	7384.44	0.0196	Pulse	0.1000	3
U	238	209	He	1.010	ppb	2.6	15029.31	0.0511	Pulse	0.1000	3

ISTD Table:

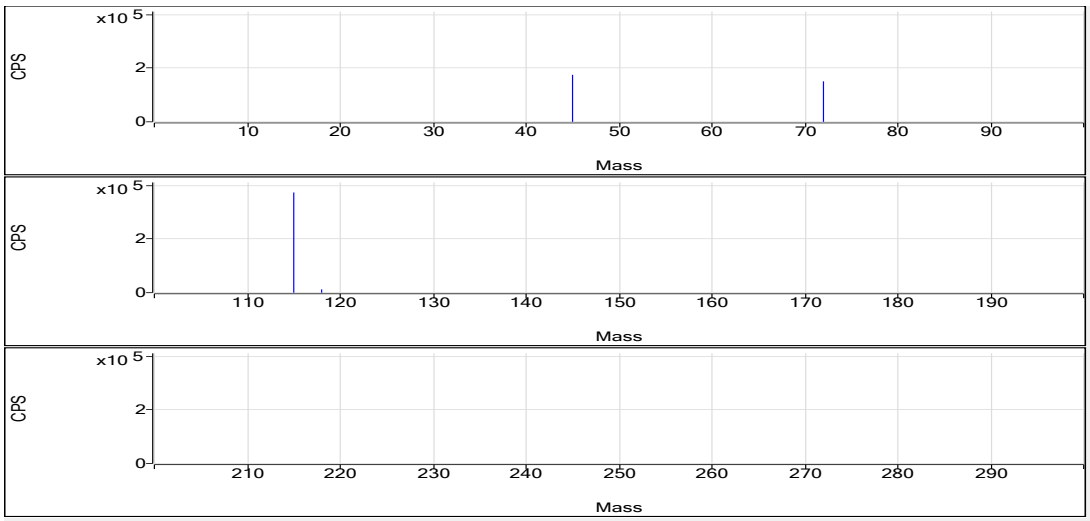
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2347939.55	1.1	100.0	Analog	0.1000	3
No Gas	Ge	72	1206614.38	1.6	100.6	Pulse	0.1000	3
H2	Sc	45	175036.14	1.0	100.7	Pulse	0.1000	3
H2	Ge	72	150778.74	1.4	100.8	Pulse	0.1000	3
H2	In	115	373232.96	1.2	102.0	Pulse	0.1000	3
He	Sc	45	45087.60	1.5	104.8	Pulse	0.1000	3
He	Ge	72	79343.50	0.8	101.5	Pulse	0.1000	3
He	In	115	81706.20	0.4	102.5	Pulse	0.1000	3
He	Tb	159	377377.16	0.7	102.6	Pulse	0.1000	3
He	Bi	209	294326.18	0.4	100.8	Pulse	0.1000	3

No Gas

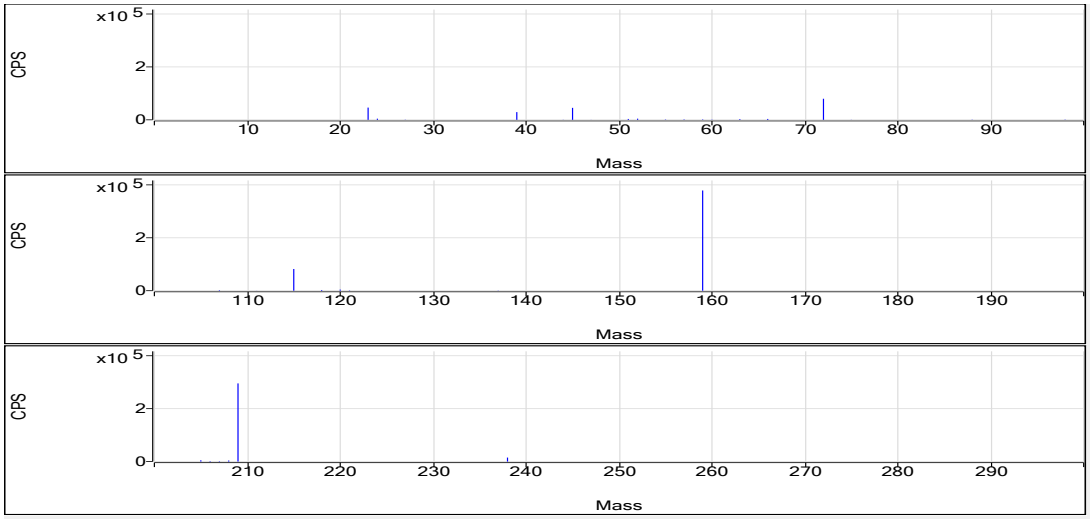


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.478	0.0004	864.03	0.0007	1.705E-05
Be	9	1	No Gas	0.517	0.0004	934.04	0.0007	1.705E-05
Be	9	1	No Gas	0.474	0.0004	874.03	0.0007	1.705E-05
Se	78	2	H2	0.994	0.0002	65.33	0.0002	6.062E-06
Se	78	2	H2	1.201	0.0002	79.33	0.0002	6.062E-06
Se	78	2	H2	1.073	0.0002	72.00	0.0002	6.062E-06
Na	23	3	He	180.381	1.0147	46373.50	0.0037	0.3435
Na	23	3	He	189.071	1.047	46433.51	0.0037	0.3435
Na	23	3	He	177.323	1.0033	45359.77	0.0037	0.3435
Mg	24	3	He	48.592	0.0917	4190.73	0.0018	0.002943
Mg	24	3	He	54.2	0.1019	4520.88	0.0018	0.002943
Mg	24	3	He	48.411	0.0914	4130.70	0.0018	0.002943
Al	27	3	He	23.241	0.0149	680.04	0.0006	0.001008
Al	27	3	He	24.758	0.0158	700.04	0.0006	0.001008
Al	27	3	He	23.142	0.0148	670.04	0.0006	0.001008
K	39	3	He	196.562	0.6361	29069.42	0.0012	0.4052
K	39	3	He	223.692	0.6679	29620.95	0.0012	0.4052
K	39	3	He	188.119	0.6261	28308.18	0.0012	0.4052
Ca	44	3	He	101.987	0.0105	480.03	0.0001	0.003486
Ca	44	3	He	73.872	0.0086	380.02	0.0001	0.003486
Ca	44	3	He	116.508	0.0115	520.03	0.0001	0.003486
Ti	47	3	He	8.894	0.0048	220.01	0.0005	0
Ti	47	3	He	9.166	0.005	220.01	0.0005	0
Ti	47	3	He	13.077	0.0071	320.01	0.0005	0
V	51	3	He	1.893	0.0731	3340.41	0.0223	0.03097
V	51	3	He	1.766	0.0703	3116.35	0.0223	0.03097
V	51	3	He	1.924	0.0738	3336.40	0.0223	0.03097
Cr	52	3	He	1.731	0.0897	4100.72	0.029	0.03958
Cr	52	3	He	2.161	0.1022	4530.85	0.029	0.03958
Cr	52	3	He	1.918	0.0951	4300.75	0.029	0.03958
Mn	55	3	He	1.794	0.0265	1210.09	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.943	0.0284	1260.11	0.013	0.003171
Mn	55	3	He	1.782	0.0263	1190.09	0.013	0.003171
Fe	57	3	He	49.332	0.0311	1420.11	0.0006	0.002014
Fe	57	3	He	51.326	0.0322	1430.14	0.0006	0.002014
Fe	57	3	He	54.413	0.0341	1540.14	0.0006	0.002014
Co	59	3	He	0.548	0.0354	1620.15	0.0572	0.004106
Co	59	3	He	0.524	0.0341	1510.13	0.0572	0.004106
Co	59	3	He	0.462	0.0305	1380.12	0.0572	0.004106
Ni	60	3	He	0.977	0.0115	920.07	0.0084	0.003329
Ni	60	3	He	1.241	0.0137	1080.08	0.0084	0.003329
Ni	60	3	He	1.098	0.0125	990.07	0.0084	0.003329
Cu	63	3	He	1.032	0.0305	2440.29	0.0247	0.004989
Cu	63	3	He	1.184	0.0343	2700.39	0.0247	0.004989
Cu	63	3	He	1.184	0.0342	2710.34	0.0247	0.004989
Zn	66	3	He	11.271	0.0385	3150.45	0.0029	0.006147
Zn	66	3	He	12.399	0.0417	3390.51	0.0029	0.006147
Zn	66	3	He	12.159	0.041	3360.49	0.0029	0.006147
As	75	3	He	2.387	0.0057	468.01	0.002	0.0009198
As	75	3	He	2.077	0.0051	414.01	0.002	0.0009198
As	75	3	He	1.851	0.0046	380.01	0.002	0.0009198
Sr	88	3	He	1.205	0.0111	910.07	0.0088	0.0005022
Sr	88	3	He	1.102	0.0102	830.05	0.0088	0.0005022
Sr	88	3	He	0.844	0.0079	650.04	0.0088	0.0005022
Mo	98	3	He	0.544	0.0128	1050.09	0.0223	0.0006689
Mo	98	3	He	0.471	0.0112	910.06	0.0223	0.0006689
Mo	98	3	He	0.489	0.0116	950.07	0.0223	0.0006689
Ag	107	3	He	0.486	0.0236	1930.21	0.0471	0.0006687
Ag	107	3	He	0.49	0.0237	1930.19	0.0471	0.0006687
Ag	107	3	He	0.445	0.0216	1770.18	0.0471	0.0006687
Cd	111	3	He	0.458	0.0025	202.00	0.0054	1.676E-05
Cd	111	3	He	0.539	0.0029	236.00	0.0054	1.676E-05
Cd	111	3	He	0.599	0.0032	264.00	0.0054	1.676E-05
Sn	120	3	He	1.766	0.0454	3720.67	0.0156	0.01794
Sn	120	3	He	2.246	0.0529	4300.80	0.0156	0.01794
Sn	120	3	He	2.047	0.0498	4080.74	0.0156	0.01794
Sb	121	3	He	0.869	0.0132	1080.08	0.0151	4.19E-05
Sb	121	3	He	1.054	0.016	1300.10	0.0151	4.19E-05
Sb	121	3	He	0.982	0.0149	1220.10	0.0151	4.19E-05
Ba	137	3	He	1.979	0.0099	810.05	0.0049	0.0002094
Ba	137	3	He	1.491	0.0075	610.03	0.0049	0.0002094
Ba	137	3	He	2.152	0.0107	880.06	0.0049	0.0002094
Tl	205	3	He	0.468	0.0126	4741.04	0.0252	0.0007688
Tl	205	3	He	0.457	0.0123	4610.95	0.0252	0.0007688
Tl	205	3	He	0.487	0.0131	4971.15	0.0252	0.0007688
Pb	208	3	He	0.546	0.0202	3860.71	0.0337	0.001742
Pb	208	3	He	0.507	0.0189	3800.70	0.0337	0.001742
Pb	208	3	He	0.532	0.0197	4050.81	0.0337	0.001742
U	238	3	He	0.979	0.0496	14608.84	0.0502	0.0004339
U	238	3	He	1.023	0.0518	15159.50	0.0502	0.0004339
U	238	3	He	1.026	0.0519	15319.59	0.0502	0.0004339
Sc	45	1	No Gas			2329157.31		
Sc	45	1	No Gas			2337457.00		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2377204.34		
Ge	72	1	No Gas			1191698.11		
Ge	72	1	No Gas			1199531.39		
Ge	72	1	No Gas			1228613.65		
Sc	45	2	H2			175742.42		
Sc	45	2	H2			176277.28		
Sc	45	2	H2			173088.73		
Ge	72	2	H2			151556.69		
Ge	72	2	H2			148413.62		
Ge	72	2	H2			152365.92		
In	115	2	H2			369012.30		
In	115	2	H2			372952.42		
In	115	2	H2			377734.17		
Sc	45	3	He			45703.04		
Sc	45	3	He			44348.88		
Sc	45	3	He			45210.88		
Ge	72	3	He			80043.42		
Ge	72	3	He			78827.75		
Ge	72	3	He			79159.32		
In	115	3	He			81911.20		
In	115	3	He			81317.81		
In	115	3	He			81951.61		
Tb	159	3	He			376886.28		
Tb	159	3	He			374983.67		
Tb	159	3	He			380261.52		
Bi	209	3	He			294807.42		
Bi	209	3	He			292929.86		
Bi	209	3	He			295241.25		

Quantitation Report

Data File Name	023ICSA.d
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Sample Type	ICSA
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

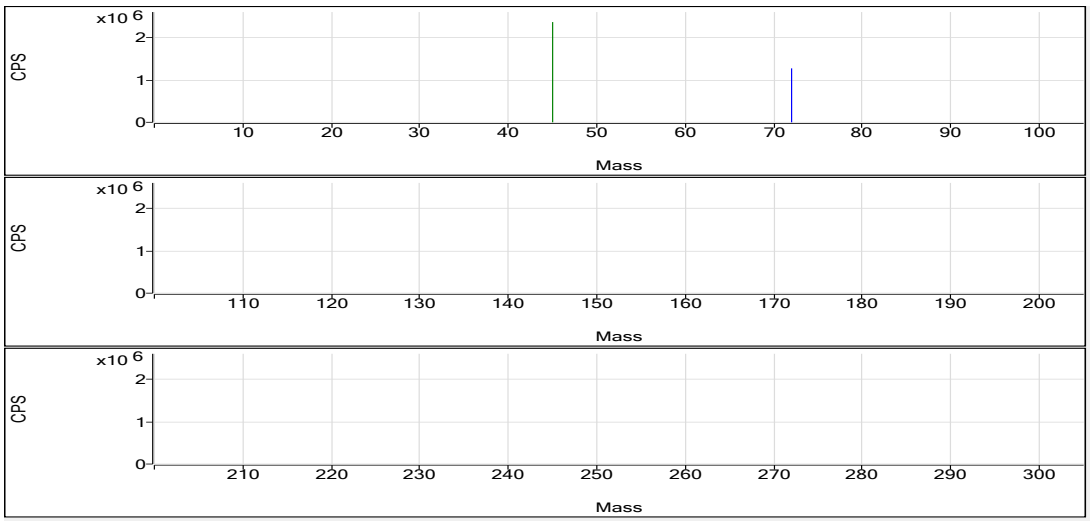
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.003	ppb	94.2	46.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.044	ppb	71.4	4.89	0.0000	Pulse	1.5000	3
Na	23	45	He	233758.521	ppb	0.2	39653970.24	870.1388	Analog	0.1000	3
Mg	24	45	He	97204.241	ppb	2.3	8090472.38	177.5449	Analog	0.1000	3
Al	27	45	He	99451.448	ppb	1.5	2704963.71	59.3586	Analog	0.1000	3
K	39	45	He	98726.507	ppb	0.5	5301542.21	116.3322	Analog	0.1000	3
Ca	44	45	He	287587.004	ppb	0.6	901882.17	19.7903	Pulse	0.1000	3
Ti	47	45	He	1966.780	ppb	2.1	48512.07	1.0645	Pulse	0.1000	3
V	51	45	He	-0.440	ppb	N/A	965.37	0.0212	Pulse	0.5000	3
Cr	52	45	He	3.276	ppb	2.9	6128.18	0.1345	Pulse	0.1000	3
Mn	55	45	He	0.826	ppb	14.2	633.37	0.0139	Pulse	0.1000	3
Fe	57	45	He	239833.327	ppb	1.2	6437960.32	141.2751	Analog	0.1000	3
Co	59	45	He	0.163	ppb	15.9	613.37	0.0135	Pulse	0.1000	3
Ni	60	72	He	0.492	ppb	32.5	623.37	0.0074	Pulse	0.1000	3
Cu	63	72	He	0.077	ppb	65.8	576.70	0.0069	Pulse	0.1000	3
Zn	66	115	He	2.014	ppb	8.1	933.40	0.0119	Pulse	0.1000	3
As	75	115	He	0.119	ppb	15.7	90.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	2.191	ppb	7.8	1550.14	0.0198	Pulse	0.1000	3
Mo	98	115	He	2134.660	ppb	1.3	3732255.57	47.6599	Analog	0.1000	3
Ag	107	115	He	0.006	ppb	193.0	73.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.342	ppb	12.8	144.67	0.0018	Pulse	0.5000	3
Sn	120	115	He	0.164	ppb	89.1	1603.50	0.0205	Pulse	0.1000	3
Sb	121	115	He	0.107	ppb	36.0	130.00	0.0017	Pulse	0.1000	3
Ba	137	115	He	0.401	ppb	11.8	170.01	0.0022	Pulse	0.1000	3
Tl	205	159	He	0.001	ppb	473.0	300.02	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.064	ppb	20.2	1466.76	0.0039	Pulse	0.1000	3
U	238	209	He	0.049	ppb	27.9	816.72	0.0029	Pulse	0.1000	3

ISTD Table:

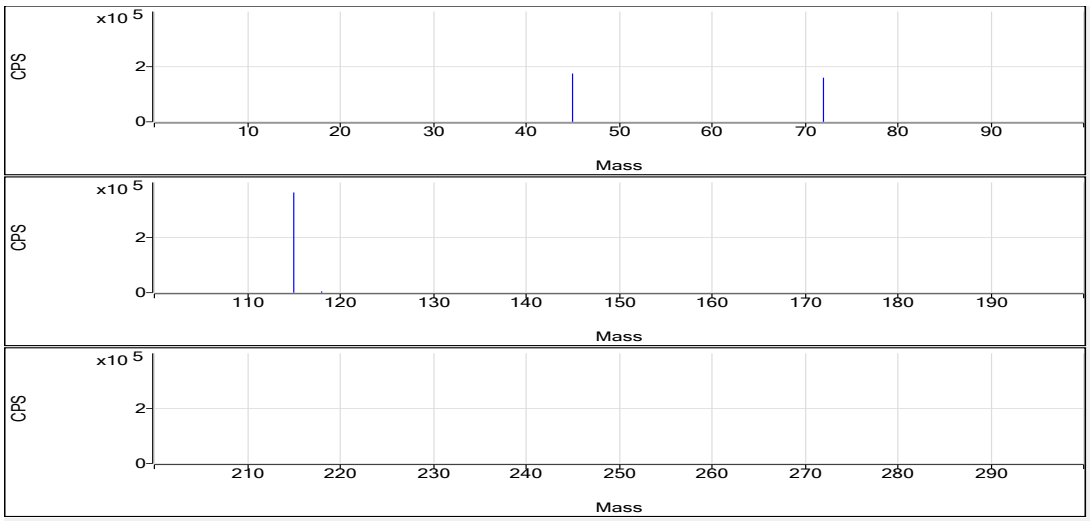
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2370460.90	0.1	101.0	Analog	0.1000	3
No Gas	Ge	72	1275616.86	0.8	106.3	Pulse	0.1000	3
H2	Sc	45	173759.86	0.1	100.0	Pulse	0.1000	3
H2	Ge	72	158824.01	0.8	106.2	Pulse	0.1000	3
H2	In	115	360714.56	0.3	98.6	Pulse	0.1000	3
He	Sc	45	45572.24	0.5	105.9	Pulse	0.1000	3
He	Ge	72	83758.07	0.9	107.2	Pulse	0.1000	3
He	In	115	78316.21	1.5	98.2	Pulse	0.1000	3
He	Tb	159	376202.18	0.8	102.2	Pulse	0.1000	3
He	Bi	209	281717.55	1.1	96.5	Pulse	0.1000	3

No Gas

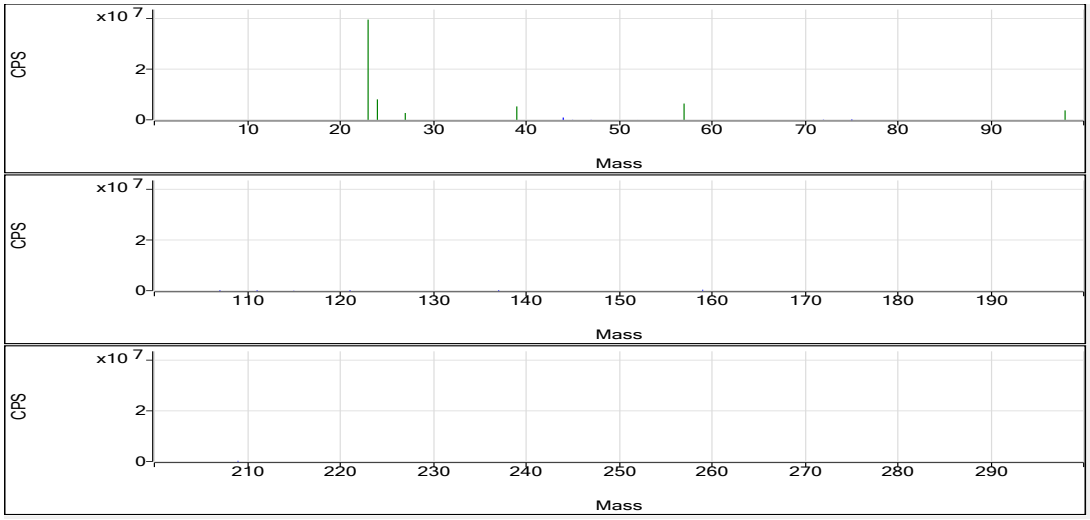


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	42.00	0.0007	1.705E-05
Be	9	1	No Gas	0.002	0	44.00	0.0007	1.705E-05
Be	9	1	No Gas	0.007	0	52.00	0.0007	1.705E-05
Se	78	2	H2	0.008	0	2.67	0.0002	6.062E-06
Se	78	2	H2	0.062	0	6.00	0.0002	6.062E-06
Se	78	2	H2	0.062	0	6.00	0.0002	6.062E-06
Na	23	3	He	233204.931	868.0789	39778239.41	0.0037	0.3435
Na	23	3	He	234263.372	872.0173	39722356.91	0.0037	0.3435
Na	23	3	He	233807.26	870.3201	39461314.41	0.0037	0.3435
Mg	24	3	He	94852.271	173.2491	7938843.63	0.0018	0.002943
Mg	24	3	He	97553.435	178.1827	8116624.25	0.0018	0.002943
Mg	24	3	He	99207.017	181.2029	8215949.25	0.0018	0.002943
Al	27	3	He	97773.114	58.3568	2674103.09	0.0006	0.001008
Al	27	3	He	99988.758	59.6792	2718524.65	0.0006	0.001008
Al	27	3	He	100592.473	60.0396	2722263.40	0.0006	0.001008
K	39	3	He	99119.879	116.7941	5351891.17	0.0012	0.4052
K	39	3	He	98116.935	115.6164	5266589.30	0.0012	0.4052
K	39	3	He	98942.708	116.5861	5286146.17	0.0012	0.4052
Ca	44	3	He	287815.695	19.806	907577.88	0.0001	0.003486
Ca	44	3	He	285809.735	19.668	895922.72	0.0001	0.003486
Ca	44	3	He	289135.581	19.8968	902145.92	0.0001	0.003486
Ti	47	3	He	1978.631	1.0709	49074.02	0.0005	0
Ti	47	3	He	1920	1.0392	47338.19	0.0005	0
Ti	47	3	He	2001.709	1.0834	49124.01	0.0005	0
V	51	3	He	-0.35	0.0232	1062.05	0.0223	0.03097
V	51	3	He	-0.508	0.0197	896.03	0.0223	0.03097
V	51	3	He	-0.462	0.0207	938.04	0.0223	0.03097
Cr	52	3	He	3.261	0.134	6141.52	0.029	0.03958
Cr	52	3	He	3.379	0.1375	6261.53	0.029	0.03958
Cr	52	3	He	3.188	0.1319	5981.48	0.029	0.03958
Mn	55	3	He	0.764	0.0131	600.03	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.753	0.013	590.03	0.013	0.003171
Mn	55	3	He	0.961	0.0157	710.05	0.013	0.003171
Fe	57	3	He	236452.974	139.2839	6382446.78	0.0006	0.002014
Fe	57	3	He	241277.023	142.1255	6474136.15	0.0006	0.002014
Fe	57	3	He	241769.983	142.4158	6457298.03	0.0006	0.002014
Co	59	3	He	0.192	0.0151	690.05	0.0572	0.004106
Co	59	3	He	0.159	0.0132	600.03	0.0572	0.004106
Co	59	3	He	0.14	0.0121	550.03	0.0572	0.004106
Ni	60	3	He	0.54	0.0078	650.04	0.0084	0.003329
Ni	60	3	He	0.314	0.006	500.03	0.0084	0.003329
Ni	60	3	He	0.622	0.0085	720.04	0.0084	0.003329
Cu	63	3	He	0.116	0.0078	650.03	0.0247	0.004989
Cu	63	3	He	0.02	0.0055	460.02	0.0247	0.004989
Cu	63	3	He	0.095	0.0073	620.04	0.0247	0.004989
Zn	66	3	He	1.937	0.0117	920.06	0.0029	0.006147
Zn	66	3	He	1.903	0.0116	920.07	0.0029	0.006147
Zn	66	3	He	2.202	0.0125	960.07	0.0029	0.006147
As	75	3	He	0.099	0.0011	88.00	0.002	0.0009198
As	75	3	He	0.12	0.0012	92.00	0.002	0.0009198
As	75	3	He	0.137	0.0012	92.00	0.002	0.0009198
Sr	88	3	He	1.994	0.0181	1420.12	0.0088	0.0005022
Sr	88	3	He	2.292	0.0207	1640.16	0.0088	0.0005022
Sr	88	3	He	2.286	0.0206	1590.15	0.0088	0.0005022
Mo	98	3	He	2154.489	48.1026	3782044.01	0.0223	0.0006689
Mo	98	3	He	2103.325	46.9603	3722950.88	0.0223	0.0006689
Mo	98	3	He	2146.166	47.9168	3691771.82	0.0223	0.0006689
Ag	107	3	He	0.016	0.0014	110.00	0.0471	0.0006687
Ag	107	3	He	0.007	0.001	80.00	0.0471	0.0006687
Ag	107	3	He	-0.006	0.0004	30.00	0.0471	0.0006687
Cd	111	3	He	0.377	0.002	160.00	0.0054	1.676E-05
Cd	111	3	He	0.355	0.0019	152.00	0.0054	1.676E-05
Cd	111	3	He	0.293	0.0016	122.00	0.0054	1.676E-05
Sn	120	3	He	0.065	0.019	1490.15	0.0156	0.01794
Sn	120	3	He	0.095	0.0194	1540.15	0.0156	0.01794
Sn	120	3	He	0.332	0.0231	1780.19	0.0156	0.01794
Sb	121	3	He	0.09	0.0014	110.00	0.0151	4.19E-05
Sb	121	3	He	0.081	0.0013	100.00	0.0151	4.19E-05
Sb	121	3	He	0.152	0.0023	180.01	0.0151	4.19E-05
Ba	137	3	He	0.347	0.0019	150.01	0.0049	0.0002094
Ba	137	3	He	0.421	0.0023	180.01	0.0049	0.0002094
Ba	137	3	He	0.435	0.0023	180.01	0.0049	0.0002094
Tl	205	3	He	0.001	0.0008	300.02	0.0252	0.0007688
Tl	205	3	He	0.007	0.0009	350.03	0.0252	0.0007688
Tl	205	3	He	-0.004	0.0007	250.01	0.0252	0.0007688
Pb	208	3	He	0.055	0.0036	740.06	0.0337	0.001742
Pb	208	3	He	0.079	0.0044	970.08	0.0337	0.001742
Pb	208	3	He	0.058	0.0037	720.04	0.0337	0.001742
U	238	3	He	0.035	0.0022	630.04	0.0502	0.0004339
U	238	3	He	0.063	0.0036	1000.08	0.0502	0.0004339
U	238	3	He	0.049	0.0029	820.05	0.0502	0.0004339
Sc	45	1	No Gas			2371368.71		
Sc	45	1	No Gas			2366842.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2373171.21		
Ge	72	1	No Gas			1274189.67		
Ge	72	1	No Gas			1266336.39		
Ge	72	1	No Gas			1286324.51		
Sc	45	2	H2			173656.31		
Sc	45	2	H2			173916.97		
Sc	45	2	H2			173706.29		
Ge	72	2	H2			160289.74		
Ge	72	2	H2			157944.60		
Ge	72	2	H2			158237.69		
In	115	2	H2			361978.04		
In	115	2	H2			360175.07		
In	115	2	H2			359990.58		
Sc	45	3	He			45823.30		
Sc	45	3	He			45552.26		
Sc	45	3	He			45341.15		
Ge	72	3	He			82869.17		
Ge	72	3	He			84026.57		
Ge	72	3	He			84378.47		
In	115	3	He			78632.78		
In	115	3	He			79285.85		
In	115	3	He			77053.49		
Tb	159	3	He			378361.32		
Tb	159	3	He			372770.31		
Tb	159	3	He			377474.92		
Bi	209	3	He			284761.01		
Bi	209	3	He			278376.99		
Bi	209	3	He			282014.64		

Quantitation Report

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Sample Type	ICSAB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

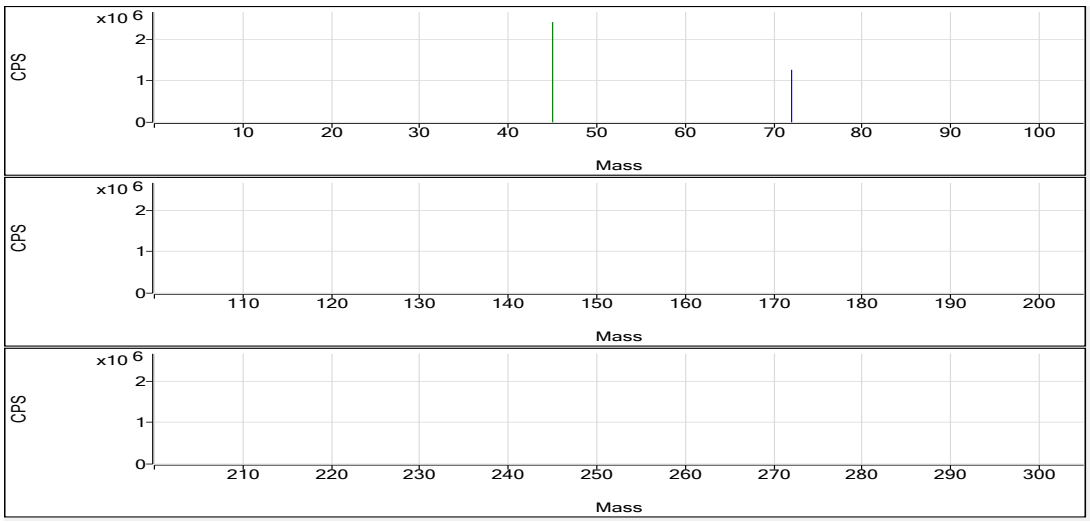
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.003	ppb	N/A	36.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	106.164	ppb	1.2	6687.12	0.0183	Pulse	1.5000	3
Na	23	45	He	226226.427	ppb	0.9	39811686.91	842.1125	Analog	0.1000	3
Mg	24	45	He	94922.753	ppb	0.6	8196738.21	173.3778	Analog	0.1000	3
Al	27	45	He	96425.927	ppb	0.4	2720951.52	57.5528	Analog	0.1000	3
K	39	45	He	96809.112	ppb	1.2	5393255.34	114.0807	Analog	0.1000	3
Ca	44	45	He	279960.626	ppb	0.7	910808.42	19.2656	Pulse	0.1000	3
Ti	47	45	He	1921.060	ppb	0.4	49157.59	1.0398	Pulse	0.1000	3
V	51	45	He	197.175	ppb	0.7	208915.59	4.4190	Pulse	0.5000	3
Cr	52	45	He	196.464	ppb	0.2	270904.57	5.7301	Pulse	0.1000	3
Mn	55	45	He	192.554	ppb	1.2	118439.38	2.5053	Pulse	0.1000	3
Fe	57	45	He	232758.653	ppb	0.9	6481894.69	137.1077	Analog	0.1000	3
Co	59	45	He	185.173	ppb	0.6	500887.47	10.5949	Pulse	0.1000	3
Ni	60	72	He	196.560	ppb	1.0	139355.89	1.6468	Pulse	0.1000	3
Cu	63	72	He	188.595	ppb	1.4	394799.29	4.6655	Pulse	0.1000	3
Zn	66	115	He	108.718	ppb	2.8	24952.42	0.3179	Pulse	0.1000	3
As	75	115	He	106.645	ppb	1.4	16888.02	0.2152	Pulse	0.5000	3
Sr	88	115	He	2.340	ppb	4.1	1656.83	0.0211	Pulse	0.1000	3
Mo	98	115	He	2171.934	ppb	1.0	3805715.36	48.4921	Analog	0.1000	3
Ag	107	115	He	51.504	ppb	0.3	190385.80	2.4258	Pulse	0.1000	3
Cd	111	115	He	103.690	ppb	0.9	43566.99	0.5551	Pulse	0.5000	3
Sn	120	115	He	-0.039	ppb	N/A	1360.12	0.0173	Pulse	0.1000	3
Sb	121	115	He	0.140	ppb	26.0	170.01	0.0022	Pulse	0.1000	3
Ba	137	115	He	0.304	ppb	25.6	133.34	0.0017	Pulse	0.1000	3
Tl	205	159	He	-0.002	ppb	N/A	270.01	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.060	ppb	15.5	1423.42	0.0038	Pulse	0.1000	3
U	238	209	He	0.052	ppb	5.0	856.73	0.0030	Pulse	0.1000	3

ISTD Table:

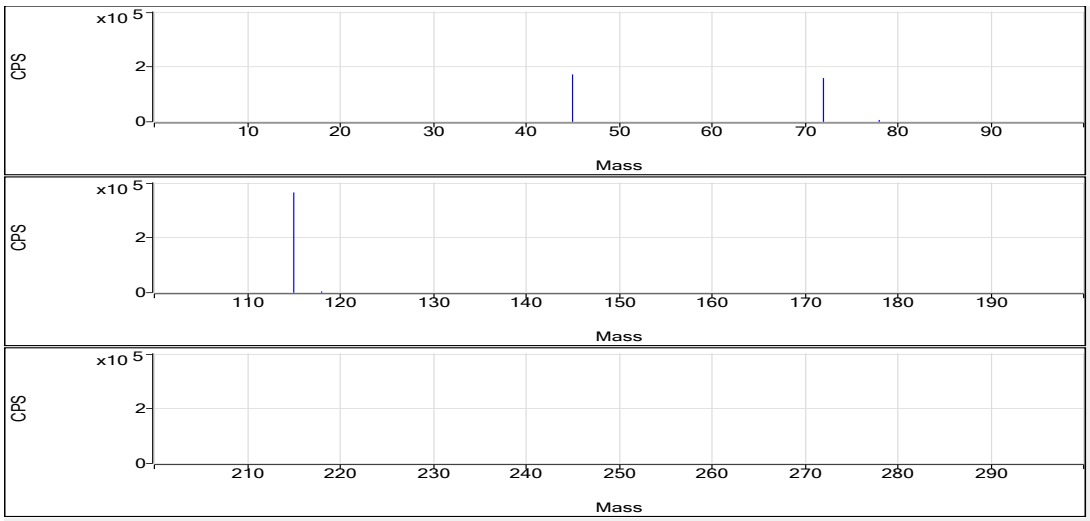
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2419852.26	1.2	103.1	Analog	0.1000	3
No Gas	Ge	72	1267828.50	0.8	105.7	Pulse	0.1000	3
H2	Sc	45	173157.77	1.2	99.7	Pulse	0.1000	3
H2	Ge	72	159691.11	1.4	106.8	Pulse	0.1000	3
H2	In	115	365966.69	1.6	100.0	Pulse	0.1000	3
He	Sc	45	47277.79	0.7	109.9	Pulse	0.1000	3
He	Ge	72	84627.23	1.1	108.3	Pulse	0.1000	3
He	In	115	78483.77	0.5	98.5	Pulse	0.1000	3
He	Tb	159	378588.30	0.9	102.9	Pulse	0.1000	3
He	Bi	209	282456.24	0.6	96.7	Pulse	0.1000	3

No Gas

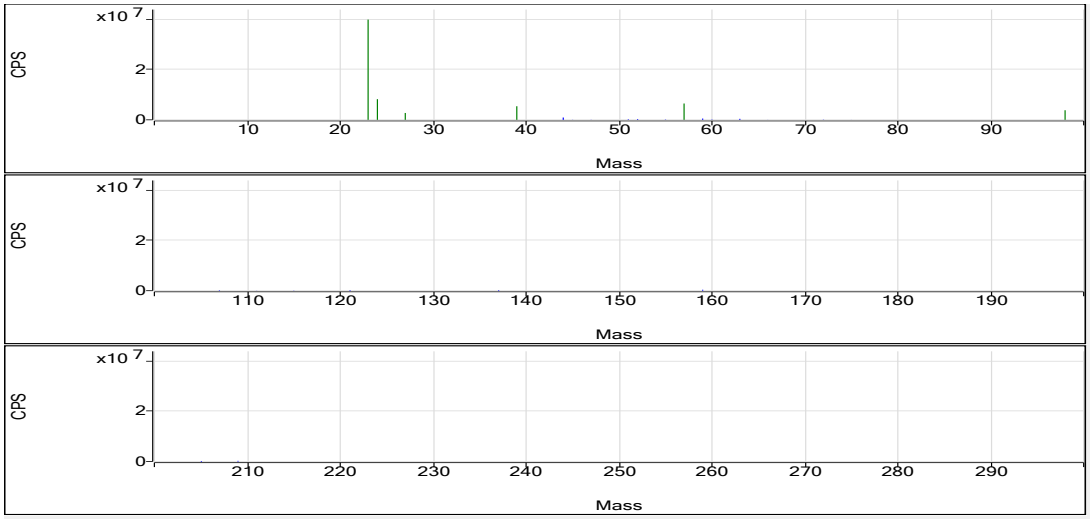


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.002	0	38.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.005	0	32.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.001	0	40.00	0.0007	1.705E-05
Se	78	2	H2	107.598	0.0185	6712.91	0.0002	6.062E-06
Se	78	2	H2	105.59	0.0182	6776.94	0.0002	6.062E-06
Se	78	2	H2	105.303	0.0181	6571.51	0.0002	6.062E-06
Na	23	3	He	224637.346	836.1996	39844076.91	0.0037	0.3435
Na	23	3	He	225621.337	839.861	39656211.91	0.0037	0.3435
Na	23	3	He	228420.598	850.2768	39934771.90	0.0037	0.3435
Mg	24	3	He	94295.465	172.2321	8206685.50	0.0018	0.002943
Mg	24	3	He	95441.839	174.3259	8231248.63	0.0018	0.002943
Mg	24	3	He	95030.956	173.5754	8152280.50	0.0018	0.002943
Al	27	3	He	96436.168	57.5589	2742623.40	0.0006	0.001008
Al	27	3	He	96064.172	57.3369	2707308.40	0.0006	0.001008
Al	27	3	He	96777.442	57.7626	2712922.77	0.0006	0.001008
K	39	3	He	96238.154	113.4103	5403888.04	0.0012	0.4052
K	39	3	He	96013.041	113.146	5342480.55	0.0012	0.4052
K	39	3	He	98176.142	115.6859	5433397.42	0.0012	0.4052
Ca	44	3	He	278609.654	19.1726	913556.78	0.0001	0.003486
Ca	44	3	He	279140.689	19.2092	907010.69	0.0001	0.003486
Ca	44	3	He	282131.535	19.4149	911857.80	0.0001	0.003486
Ti	47	3	He	1912.943	1.0354	49335.13	0.0005	0
Ti	47	3	He	1922.959	1.0408	49144.42	0.0005	0
Ti	47	3	He	1927.279	1.0431	48993.22	0.0005	0
V	51	3	He	195.818	4.3888	209124.08	0.0223	0.03097
V	51	3	He	197.223	4.4201	208706.77	0.0223	0.03097
V	51	3	He	198.484	4.4482	208915.91	0.0223	0.03097
Cr	52	3	He	196.506	5.7313	273089.88	0.029	0.03958
Cr	52	3	He	196.058	5.7183	270004.76	0.029	0.03958
Cr	52	3	He	196.829	5.7406	269619.08	0.029	0.03958
Mn	55	3	He	189.858	2.4703	117706.67	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	193.911	2.523	119127.71	0.013	0.003171
Mn	55	3	He	193.893	2.5227	118483.76	0.013	0.003171
Fe	57	3	He	230979.361	136.0597	6483106.78	0.0006	0.002014
Fe	57	3	He	232379.07	136.8842	6463339.90	0.0006	0.002014
Fe	57	3	He	234917.528	138.3794	6499237.40	0.0006	0.002014
Co	59	3	He	184.092	10.533	501887.77	0.0572	0.004106
Co	59	3	He	185.149	10.5935	500200.50	0.0572	0.004106
Co	59	3	He	186.278	10.658	500574.13	0.0572	0.004106
Ni	60	3	He	196.979	1.6503	139368.90	0.0084	0.003329
Ni	60	3	He	198.189	1.6604	139087.22	0.0084	0.003329
Ni	60	3	He	194.513	1.6297	139611.56	0.0084	0.003329
Cu	63	3	He	191.035	4.7258	399092.53	0.0247	0.004989
Cu	63	3	He	188.865	4.6722	391367.46	0.0247	0.004989
Cu	63	3	He	185.883	4.5985	393937.88	0.0247	0.004989
Zn	66	3	He	110	0.3216	25383.21	0.0029	0.006147
Zn	66	3	He	105.268	0.308	24150.92	0.0029	0.006147
Zn	66	3	He	110.885	0.3241	25323.13	0.0029	0.006147
As	75	3	He	104.992	0.2119	16721.79	0.002	0.0009198
As	75	3	He	107.641	0.2172	17028.19	0.002	0.0009198
As	75	3	He	107.301	0.2165	16914.07	0.002	0.0009198
Sr	88	3	He	2.446	0.022	1740.17	0.0088	0.0005022
Sr	88	3	He	2.26	0.0204	1600.16	0.0088	0.0005022
Sr	88	3	He	2.312	0.0209	1630.17	0.0088	0.0005022
Mo	98	3	He	2148.279	47.964	3785593.38	0.0223	0.0006689
Mo	98	3	He	2178.786	48.6451	3813911.82	0.0223	0.0006689
Mo	98	3	He	2188.736	48.8672	3817640.88	0.0223	0.0006689
Ag	107	3	He	51.496	2.4254	191426.99	0.0471	0.0006687
Ag	107	3	He	51.661	2.4332	190767.83	0.0471	0.0006687
Ag	107	3	He	51.355	2.4188	188962.59	0.0471	0.0006687
Cd	111	3	He	103.015	0.5515	43527.56	0.0054	1.676E-05
Cd	111	3	He	104.696	0.5605	43944.78	0.0054	1.676E-05
Cd	111	3	He	103.359	0.5533	43228.64	0.0054	1.676E-05
Sn	120	3	He	-0.037	0.0174	1370.11	0.0156	0.01794
Sn	120	3	He	-0.087	0.0166	1300.12	0.0156	0.01794
Sn	120	3	He	0.007	0.0181	1410.12	0.0156	0.01794
Sb	121	3	He	0.165	0.0025	200.01	0.0151	4.19E-05
Sb	121	3	He	0.098	0.0015	120.00	0.0151	4.19E-05
Sb	121	3	He	0.158	0.0024	190.01	0.0151	4.19E-05
Ba	137	3	He	0.372	0.002	160.01	0.0049	0.0002094
Ba	137	3	He	0.322	0.0018	140.01	0.0049	0.0002094
Ba	137	3	He	0.219	0.0013	100.00	0.0049	0.0002094
Tl	205	3	He	0.001	0.0008	300.01	0.0252	0.0007688
Tl	205	3	He	-0.005	0.0007	250.01	0.0252	0.0007688
Tl	205	3	He	-0.003	0.0007	260.01	0.0252	0.0007688
Pb	208	3	He	0.067	0.004	730.05	0.0337	0.001742
Pb	208	3	He	0.063	0.0039	780.06	0.0337	0.001742
Pb	208	3	He	0.049	0.0034	670.04	0.0337	0.001742
U	238	3	He	0.049	0.0029	820.05	0.0502	0.0004339
U	238	3	He	0.054	0.0031	880.07	0.0502	0.0004339
U	238	3	He	0.053	0.0031	870.07	0.0502	0.0004339
Sc	45	1	No Gas			2386502.46		
Sc	45	1	No Gas			2439555.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2433499.03		
Ge	72	1	No Gas			1255487.40		
Ge	72	1	No Gas			1274638.81		
Ge	72	1	No Gas			1273359.28		
Sc	45	2	H2			173524.26		
Sc	45	2	H2			174944.37		
Sc	45	2	H2			171004.67		
Ge	72	2	H2			158441.23		
Ge	72	2	H2			162303.21		
Ge	72	2	H2			158328.88		
In	115	2	H2			362462.92		
In	115	2	H2			372878.43		
In	115	2	H2			362558.71		
Sc	45	3	He			47649.00		
Sc	45	3	He			47217.59		
Sc	45	3	He			46966.79		
Ge	72	3	He			84449.50		
Ge	72	3	He			83765.49		
Ge	72	3	He			85666.71		
In	115	3	He			78934.58		
In	115	3	He			78410.54		
In	115	3	He			78129.90		
Tb	159	3	He			377598.16		
Tb	159	3	He			382275.11		
Tb	159	3	He			375891.64		
Bi	209	3	He			284363.34		
Bi	209	3	He			281635.74		
Bi	209	3	He			281369.64		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
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Sample Name	LRC 4661368
Sample Type	LRC
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

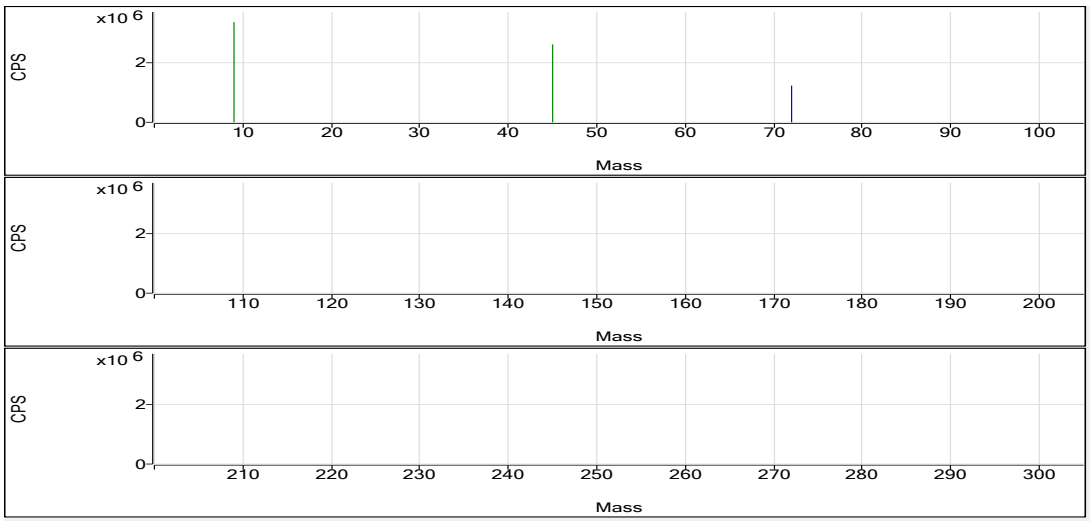
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	1739.703	ppb	1.6	3391734.00	1.2872	Analog	0.5000	3
Se	78	115	H2	1671.582	ppb	0.7	135976.96	0.2876	Pulse	1.5000	3
Na	23	45	He	176274.470	ppb	1.6	32675370.34	656.2456	Analog	0.1000	3
Mg	24	45	He	186878.527	ppb	1.6	16996025.58	341.3335	Analog	0.1000	3
Al	27	45	He	187110.308	ppb	1.6	5560594.50	111.6777	Analog	0.1000	3
K	39	45	He	190536.294	ppb	1.1	11160674.41	224.1374	Analog	0.1000	3
Ca	44	45	He	189577.655	ppb	1.5	649638.33	13.0470	Pulse	0.1000	3
Ti	47	45	He	1969.974	ppb	1.8	53091.18	1.0663	Pulse	0.1000	3
V	51	45	He	1917.213	ppb	1.6	2125994.58	42.6979	Analog	0.5000	3
Cr	52	45	He	1924.704	ppb	1.9	2777672.15	55.7877	Analog	0.1000	3
Mn	55	45	He	5629.545	ppb	1.1	3642738.80	73.1564	Analog	0.1000	3
Fe	57	45	He	148762.328	ppb	2.1	4362977.43	87.6300	Analog	0.1000	3
Co	59	45	He	1798.164	ppb	2.1	5120757.11	102.8481	Analog	0.1000	3
Ni	60	72	He	2012.710	ppb	0.5	1390860.29	16.8321	Pulse	0.1000	3
Cu	63	72	He	1992.144	ppb	1.1	4068228.69	49.2344	Analog	0.1000	3
Zn	66	115	He	1934.652	ppb	2.7	480157.30	5.5544	Pulse	0.1000	3
As	75	115	He	1968.236	ppb	2.4	341949.05	3.9554	Pulse	0.5000	3
Sr	88	115	He	2098.258	ppb	2.2	1597715.24	18.4805	Analog	0.1000	3
Mo	98	115	He	2057.415	ppb	2.6	3971204.42	45.9353	Analog	0.1000	3
Ag	107	115	He	1941.398	ppb	2.0	7903286.34	91.4138	Analog	0.1000	3
Cd	111	115	He	1928.734	ppb	2.6	892612.58	10.3254	Pulse	0.5000	3
Sn	120	115	He	2091.959	ppb	2.0	2817221.31	32.5843	Analog	0.1000	3
Sb	121	115	He	2037.401	ppb	1.5	2664731.52	30.8192	Analog	0.1000	3
Ba	137	115	He	1954.517	ppb	2.1	826888.45	9.5644	Pulse	0.1000	3
Tl	205	159	He	2050.687	ppb	0.3	19627740.54	51.7644	Analog	0.1000	3
Pb	208	159	He	2032.120	ppb	0.4	25994878.77	68.5569	Analog	0.1000	3
U	238	209	He	220.636	ppb	0.5	3102062.24	11.0654	Analog	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2635430.53	1.8	112.3	Analog	0.1000	3
No Gas	Ge	72	1240364.38	0.4	103.4	Pulse	0.1000	3
H2	Sc	45	177216.11	1.1	102.0	Pulse	0.1000	3
H2	Ge	72	156114.84	1.6	104.4	Pulse	0.1000	3
H2	In	115	472757.44	0.6	129.2	Pulse	0.1000	3
He	Sc	45	49799.40	1.5	115.7	Pulse	0.1000	3
He	Ge	72	82632.14	0.4	105.7	Pulse	0.1000	3
He	In	115	86485.10	2.5	108.5	Pulse	0.1000	3
He	Tb	159	379172.99	0.2	103.1	Pulse	0.1000	3
He	Bi	209	280339.97	0.2	96.0	Pulse	0.1000	3

No Gas



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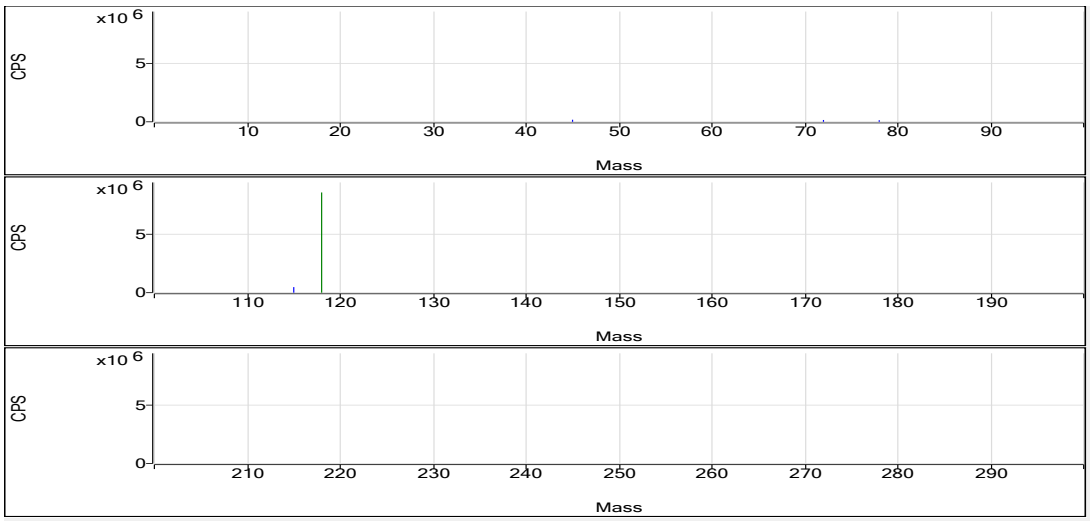
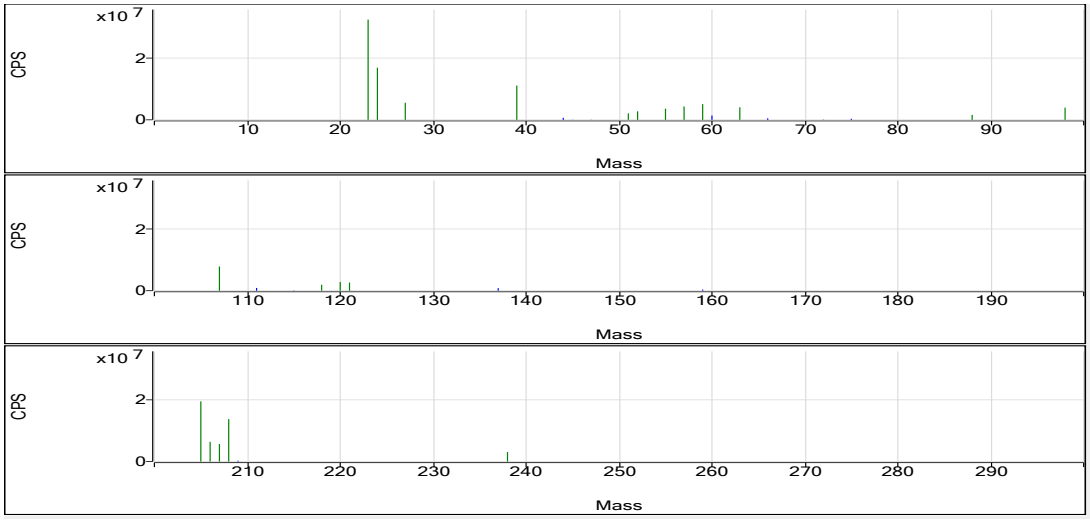


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1713.869	1.2681	3376055.75	0.0007	1.705E-05
Be	9	1	No Gas	1735.655	1.2842	3418937.25	0.0007	1.705E-05
Be	9	1	No Gas	1769.584	1.3093	3380209.00	0.0007	1.705E-05
Se	78	2	H2	1685.206	0.29	136408.23	0.0002	6.062E-06
Se	78	2	H2	1665.707	0.2866	135296.57	0.0002	6.062E-06
Se	78	2	H2	1663.833	0.2863	136226.07	0.0002	6.062E-06
Na	23	3	He	175361.15	652.8472	32666344.51	0.0037	0.3435
Na	23	3	He	179424.639	667.9671	32699052.01	0.0037	0.3435
Na	23	3	He	174037.623	647.9224	32660714.51	0.0037	0.3435
Mg	24	3	He	184170.516	336.3874	16831727.25	0.0018	0.002943
Mg	24	3	He	190028.425	347.0867	16990968.50	0.0018	0.002943
Mg	24	3	He	186436.64	340.5264	17165380.99	0.0018	0.002943
Al	27	3	He	186439.983	111.2776	5567969.29	0.0006	0.001008
Al	27	3	He	190348.809	113.6106	5561589.92	0.0006	0.001008
Al	27	3	He	184542.133	110.1449	5552224.29	0.0006	0.001008
K	39	3	He	190523.53	224.1224	11214353.58	0.0012	0.4052
K	39	3	He	192703.069	226.6817	11096767.33	0.0012	0.4052
K	39	3	He	188382.283	221.6081	11170902.33	0.0012	0.4052
Ca	44	3	He	189562.31	13.0459	652775.26	0.0001	0.003486
Ca	44	3	He	192373.631	13.2393	648106.90	0.0001	0.003486
Ca	44	3	He	186797.025	12.8557	648032.84	0.0001	0.003486
Ti	47	3	He	1986.52	1.0752	53800.02	0.0005	0
Ti	47	3	He	1994.923	1.0798	52857.51	0.0005	0
Ti	47	3	He	1928.479	1.0438	52616.02	0.0005	0
V	51	3	He	1914.596	42.6397	2133551.50	0.0223	0.03097
V	51	3	He	1949.071	43.4069	2124903.00	0.0223	0.03097
V	51	3	He	1887.971	42.0472	2119529.25	0.0223	0.03097
Cr	52	3	He	1912.666	55.4391	2773989.96	0.029	0.03958
Cr	52	3	He	1965.064	56.9567	2788208.40	0.029	0.03958
Cr	52	3	He	1896.382	54.9674	2770818.08	0.029	0.03958
Mn	55	3	He	5604.256	72.8278	3644065.26	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5700.466	74.078	3626346.82	0.013	0.003171
Mn	55	3	He	5583.912	72.5634	3657804.32	0.013	0.003171
Fe	57	3	He	148065.655	87.2196	4364184.93	0.0006	0.002014
Fe	57	3	He	152240.864	89.679	4390064.31	0.0006	0.002014
Fe	57	3	He	145980.465	85.9913	4334683.06	0.0006	0.002014
Co	59	3	He	1774.516	101.4956	5078508.99	0.0572	0.004106
Co	59	3	He	1840.881	105.2913	5154332.74	0.0572	0.004106
Co	59	3	He	1779.095	101.7575	5129429.61	0.0572	0.004106
Ni	60	3	He	2014.56	16.8476	1387520.29	0.0084	0.003329
Ni	60	3	He	2022.602	16.9148	1396455.76	0.0084	0.003329
Ni	60	3	He	2000.967	16.7339	1388604.82	0.0084	0.003329
Cu	63	3	He	2011.443	49.7113	4094079.00	0.0247	0.004989
Cu	63	3	He	1996.217	49.335	4073001.50	0.0247	0.004989
Cu	63	3	He	1968.771	48.6568	4037605.56	0.0247	0.004989
Zn	66	3	He	1876.284	5.387	479214.52	0.0029	0.006147
Zn	66	3	He	1948.453	5.594	478398.90	0.0029	0.006147
Zn	66	3	He	1979.219	5.6822	482858.47	0.0029	0.006147
As	75	3	He	1913.622	3.8457	342105.53	0.002	0.0009198
As	75	3	He	1988.629	3.9964	341775.56	0.002	0.0009198
As	75	3	He	2002.457	4.0242	341966.06	0.002	0.0009198
Sr	88	3	He	2044.703	18.0088	1602022.63	0.0088	0.0005022
Sr	88	3	He	2130.29	18.7626	1604589.35	0.0088	0.0005022
Sr	88	3	He	2119.78	18.6701	1586533.73	0.0088	0.0005022
Mo	98	3	He	1999.911	44.6515	3972083.07	0.0223	0.0006689
Mo	98	3	He	2104.015	46.9757	4017383.69	0.0223	0.0006689
Mo	98	3	He	2068.318	46.1787	3924146.50	0.0223	0.0006689
Ag	107	3	He	1896.31	89.2907	7943083.63	0.0471	0.0006687
Ag	107	3	He	1961.555	92.3629	7898915.51	0.0471	0.0006687
Ag	107	3	He	1966.33	92.5877	7867859.88	0.0471	0.0006687
Cd	111	3	He	1871.766	10.0204	891389.25	0.0054	1.676E-05
Cd	111	3	He	1956.482	10.4739	895733.69	0.0054	1.676E-05
Cd	111	3	He	1957.953	10.4818	890714.81	0.0054	1.676E-05
Sn	120	3	He	2046.675	31.8793	2835904.33	0.0156	0.01794
Sn	120	3	He	2128.716	33.1565	2835556.52	0.0156	0.01794
Sn	120	3	He	2100.485	32.717	2780203.08	0.0156	0.01794
Sb	121	3	He	2002.905	30.2974	2695183.71	0.0151	4.19E-05
Sb	121	3	He	2044.662	30.9291	2645066.84	0.0151	4.19E-05
Sb	121	3	He	2064.635	31.2312	2653944.02	0.0151	4.19E-05
Ba	137	3	He	1906.486	9.3294	829921.16	0.0049	0.0002094
Ba	137	3	He	1975.274	9.666	826641.86	0.0049	0.0002094
Ba	137	3	He	1981.791	9.6979	824102.33	0.0049	0.0002094
Tl	205	3	He	2057.207	51.929	19727262.21	0.0252	0.0007688
Tl	205	3	He	2049.509	51.7347	19624205.96	0.0252	0.0007688
Tl	205	3	He	2045.345	51.6296	19531753.46	0.0252	0.0007688
Pb	208	3	He	2024.689	68.3062	13828534.79	0.0337	0.001742
Pb	208	3	He	2040.298	68.8328	13931418.54	0.0337	0.001742
Pb	208	3	He	2031.373	68.5317	13775717.29	0.0337	0.001742
U	238	3	He	221.28	11.0977	3103663.39	0.0502	0.0004339
U	238	3	He	221.149	11.0911	3110522.14	0.0502	0.0004339
U	238	3	He	219.48	11.0074	3092001.20	0.0502	0.0004339
Sc	45	1	No Gas			2662322.15		
Sc	45	1	No Gas			2662296.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2581673.24		
Ge	72	1	No Gas			1235948.11		
Ge	72	1	No Gas			1245299.04		
Ge	72	1	No Gas			1239846.00		
Sc	45	2	H2			176510.29		
Sc	45	2	H2			175652.05		
Sc	45	2	H2			179485.99		
Ge	72	2	H2			154658.70		
Ge	72	2	H2			154741.04		
Ge	72	2	H2			158944.78		
In	115	2	H2			470412.57		
In	115	2	H2			472040.70		
In	115	2	H2			475819.06		
Sc	45	3	He			50036.74		
Sc	45	3	He			48953.09		
Sc	45	3	He			50408.37		
Ge	72	3	He			82357.12		
Ge	72	3	He			82557.99		
Ge	72	3	He			82981.31		
In	115	3	He			104178.27		
In	115	3	He			100713.42		
In	115	3	He			100049.11		
Tb	159	3	He			379889.17		
Tb	159	3	He			379324.13		
Tb	159	3	He			378305.66		
Bi	209	3	He			279667.59		
Bi	209	3	He			280451.54		
Bi	209	3	He			280900.78		

Quantitation Report

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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

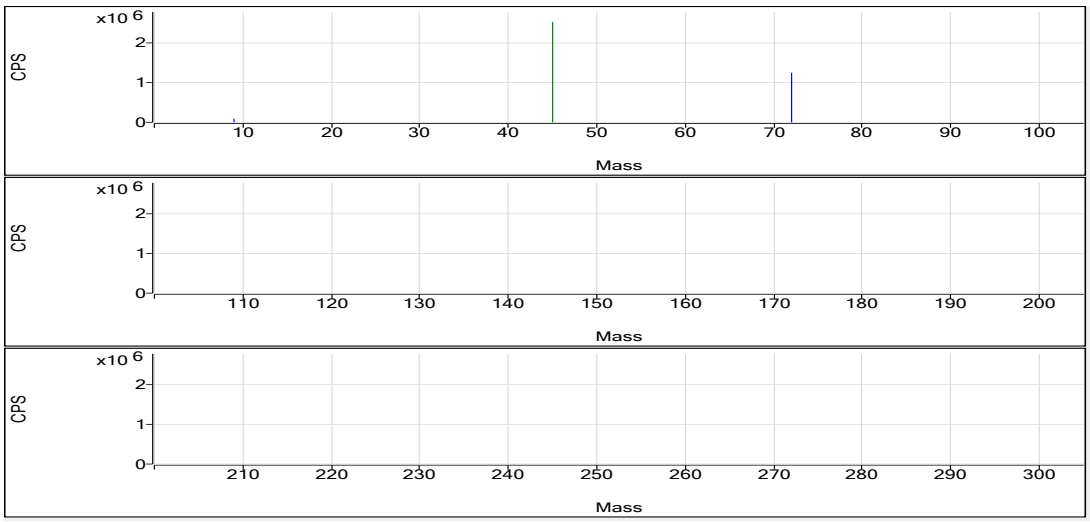
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.716	ppb	1.0	88788.51	0.0353	Pulse	0.5000	3
Se	78	115	H2	52.504	ppb	2.3	3463.98	0.0090	Pulse	1.5000	3
Na	23	45	He	4776.500	ppb	0.8	850105.35	18.1164	Pulse	0.1000	3
Mg	24	45	He	5006.345	ppb	0.2	429240.48	9.1469	Pulse	0.1000	3
Al	27	45	He	4941.281	ppb	0.9	138435.67	2.9502	Pulse	0.1000	3
K	39	45	He	5082.908	ppb	1.3	299087.88	6.3737	Pulse	0.1000	3
Ca	44	45	He	5091.385	ppb	2.6	16603.27	0.3538	Pulse	0.1000	3
Ti	47	45	He	4977.179	ppb	1.8	126405.11	2.6939	Pulse	0.1000	3
V	51	45	He	507.608	ppb	1.1	531535.69	11.3276	Pulse	0.5000	3
Cr	52	45	He	505.687	ppb	1.2	689141.76	14.6866	Pulse	0.1000	3
Mn	55	45	He	500.558	ppb	0.9	305373.06	6.5077	Pulse	0.1000	3
Fe	57	45	He	5060.120	ppb	1.5	139955.94	2.9827	Pulse	0.1000	3
Co	59	45	He	491.759	ppb	1.3	1319944.88	28.1297	Pulse	0.1000	3
Ni	60	72	He	545.542	ppb	0.3	370352.86	4.5647	Pulse	0.1000	3
Cu	63	72	He	522.875	ppb	0.6	1048732.17	12.9262	Pulse	0.1000	3
Zn	66	115	He	535.668	ppb	1.5	124738.03	1.5423	Pulse	0.1000	3
As	75	115	He	539.296	ppb	0.8	87707.06	1.0845	Pulse	0.5000	3
Sr	88	115	He	54.358	ppb	2.8	38757.15	0.4793	Pulse	0.1000	3
Mo	98	115	He	52.694	ppb	1.1	95201.64	1.1771	Pulse	0.1000	3
Ag	107	115	He	53.289	ppb	1.6	202980.12	2.5099	Pulse	0.1000	3
Cd	111	115	He	53.222	ppb	1.2	23044.35	0.2849	Pulse	0.5000	3
Sn	120	115	He	53.079	ppb	2.4	68275.49	0.8442	Pulse	0.1000	3
Sb	121	115	He	52.131	ppb	0.5	63780.75	0.7886	Pulse	0.1000	3
Ba	137	115	He	528.476	ppb	2.0	209156.31	2.5863	Pulse	0.1000	3
Tl	205	159	He	50.616	ppb	0.6	493215.67	1.2784	Pulse	0.1000	3
Pb	208	159	He	50.355	ppb	1.0	656042.67	1.7005	Pulse	0.1000	3
U	238	209	He	50.631	ppb	0.2	758952.20	2.5396	Pulse	0.1000	3

ISTD Table:

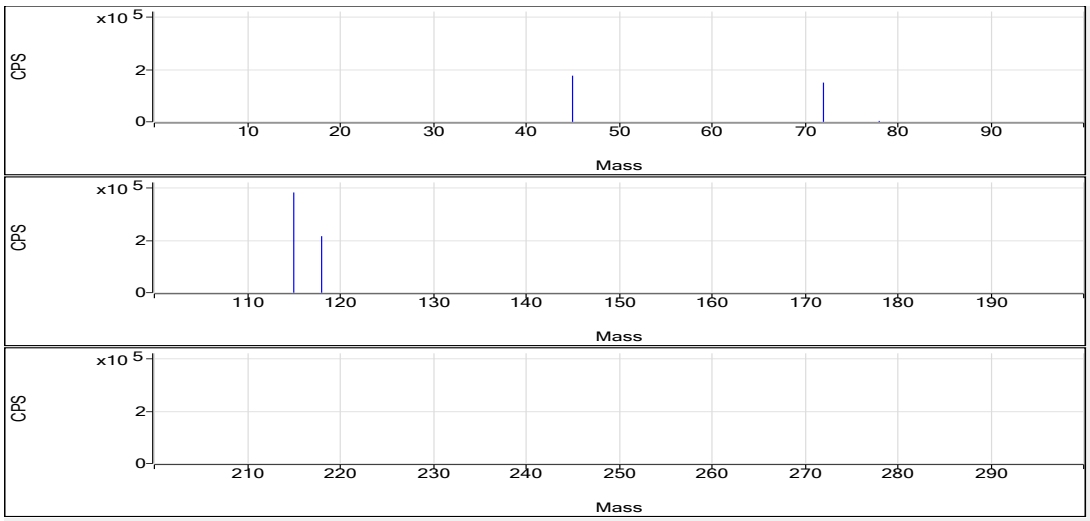
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2513663.82	0.5	107.1	Analog	0.1000	3
No Gas	Ge	72	1242080.74	0.7	103.5	Pulse	0.1000	3
H2	Sc	45	176421.83	0.3	101.5	Pulse	0.1000	3
H2	Ge	72	149919.66	1.3	100.3	Pulse	0.1000	3
H2	In	115	383215.66	0.9	104.7	Pulse	0.1000	3
He	Sc	45	46926.55	0.9	109.1	Pulse	0.1000	3
He	Ge	72	81133.94	0.9	103.8	Pulse	0.1000	3
He	In	115	80878.22	0.6	101.5	Pulse	0.1000	3
He	Tb	159	385819.47	1.1	104.9	Pulse	0.1000	3
He	Bi	209	298843.28	0.4	102.3	Pulse	0.1000	3

No Gas

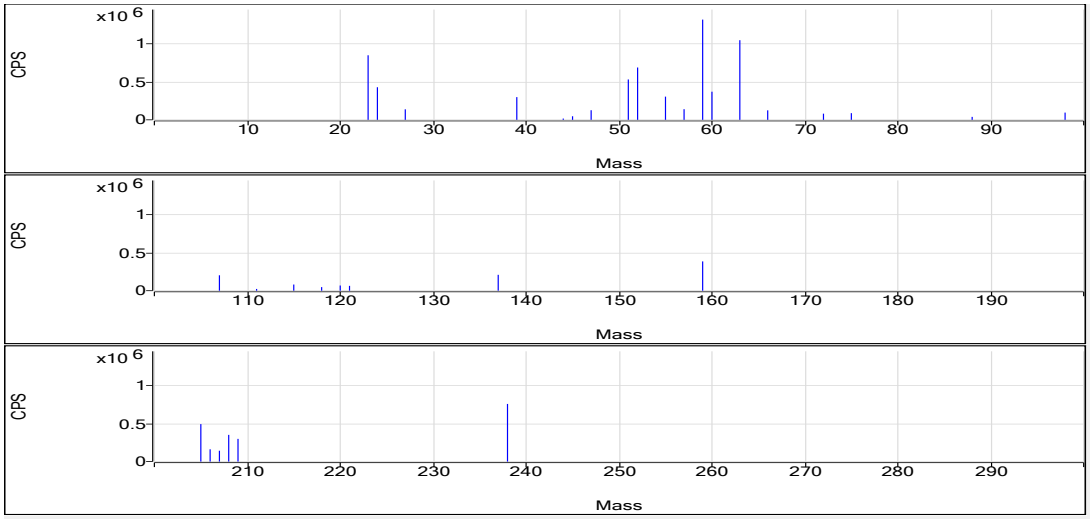


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.398	0.0351	88350.49	0.0007	1.705E-05
Be	9	1	No Gas	47.476	0.0351	87803.29	0.0007	1.705E-05
Be	9	1	No Gas	48.275	0.0357	90211.76	0.0007	1.705E-05
Se	78	2	H2	51.406	0.0089	3426.42	0.0002	6.062E-06
Se	78	2	H2	53.761	0.0093	3524.44	0.0002	6.062E-06
Se	78	2	H2	52.345	0.009	3441.09	0.0002	6.062E-06
Na	23	3	He	4733.993	17.9583	851189.52	0.0037	0.3435
Na	23	3	He	4788.798	18.1622	847186.63	0.0037	0.3435
Na	23	3	He	4806.709	18.2288	851939.91	0.0037	0.3435
Mg	24	3	He	5019.994	9.1719	434730.58	0.0018	0.002943
Mg	24	3	He	5002.082	9.1392	426301.87	0.0018	0.002943
Mg	24	3	He	4996.958	9.1298	426688.98	0.0018	0.002943
Al	27	3	He	4890.39	2.9198	138394.91	0.0006	0.001008
Al	27	3	He	4982.746	2.975	138768.69	0.0006	0.001008
Al	27	3	He	4950.707	2.9558	138143.41	0.0006	0.001008
K	39	3	He	5060.847	6.3478	300874.60	0.0012	0.4052
K	39	3	He	5158.558	6.4625	301449.16	0.0012	0.4052
K	39	3	He	5029.32	6.3108	294939.88	0.0012	0.4052
Ca	44	3	He	5150.087	0.3578	16960.36	0.0001	0.003486
Ca	44	3	He	4937.642	0.3432	16009.25	0.0001	0.003486
Ca	44	3	He	5186.424	0.3603	16840.19	0.0001	0.003486
Ti	47	3	He	4898.516	2.6513	125668.62	0.0005	0
Ti	47	3	He	5074.225	2.7464	128109.38	0.0005	0
Ti	47	3	He	4958.797	2.684	125437.32	0.0005	0
V	51	3	He	502.017	11.2032	531011.94	0.0223	0.03097
V	51	3	He	512.757	11.4422	533729.13	0.0223	0.03097
V	51	3	He	508.05	11.3375	529866.00	0.0223	0.03097
Cr	52	3	He	498.783	14.4866	686639.36	0.029	0.03958
Cr	52	3	He	511.123	14.844	692408.11	0.029	0.03958
Cr	52	3	He	507.156	14.7291	688377.80	0.029	0.03958
Mn	55	3	He	497.908	6.4732	306820.00	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	506.045	6.579	306880.41	0.013	0.003171
Mn	55	3	He	497.721	6.4708	302418.78	0.013	0.003171
Fe	57	3	He	4983.56	2.9376	139235.24	0.0006	0.002014
Fe	57	3	He	5065.147	2.9856	139266.19	0.0006	0.002014
Fe	57	3	He	5131.652	3.0248	141366.40	0.0006	0.002014
Co	59	3	He	485.844	27.7914	1317264.36	0.0572	0.004106
Co	59	3	He	498.155	28.4956	1329192.32	0.0572	0.004106
Co	59	3	He	491.277	28.1022	1313377.95	0.0572	0.004106
Ni	60	3	He	546.417	4.5721	372774.56	0.0084	0.003329
Ni	60	3	He	543.804	4.5502	371221.75	0.0084	0.003329
Ni	60	3	He	546.404	4.572	367062.26	0.0084	0.003329
Cu	63	3	He	519.37	12.8395	1046845.77	0.0247	0.004989
Cu	63	3	He	524.548	12.9675	1057930.06	0.0247	0.004989
Cu	63	3	He	524.709	12.9715	1041420.69	0.0247	0.004989
Zn	66	3	He	535.405	1.5416	124071.64	0.0029	0.006147
Zn	66	3	He	543.929	1.566	126503.10	0.0029	0.006147
Zn	66	3	He	527.669	1.5194	123639.34	0.0029	0.006147
As	75	3	He	540.277	1.0864	87438.61	0.002	0.0009198
As	75	3	He	542.968	1.0918	88197.36	0.002	0.0009198
As	75	3	He	534.643	1.0751	87485.20	0.002	0.0009198
Sr	88	3	He	55.719	0.4912	39536.22	0.0088	0.0005022
Sr	88	3	He	54.669	0.482	38934.33	0.0088	0.0005022
Sr	88	3	He	52.687	0.4645	37800.91	0.0088	0.0005022
Mo	98	3	He	53.35	1.1918	95917.52	0.0223	0.0006689
Mo	98	3	He	52.193	1.166	94184.73	0.0223	0.0006689
Mo	98	3	He	52.537	1.1736	95502.67	0.0223	0.0006689
Ag	107	3	He	54.061	2.5462	204926.13	0.0471	0.0006687
Ag	107	3	He	53.473	2.5185	203442.75	0.0471	0.0006687
Ag	107	3	He	52.333	2.4648	200571.48	0.0471	0.0006687
Cd	111	3	He	53.302	0.2854	22966.89	0.0054	1.676E-05
Cd	111	3	He	53.82	0.2881	23275.41	0.0054	1.676E-05
Cd	111	3	He	52.544	0.2813	22890.76	0.0054	1.676E-05
Sn	120	3	He	54.37	0.8643	69564.80	0.0156	0.01794
Sn	120	3	He	53.016	0.8433	68118.26	0.0156	0.01794
Sn	120	3	He	51.851	0.8251	67143.40	0.0156	0.01794
Sb	121	3	He	52.111	0.7883	63445.58	0.0151	4.19E-05
Sb	121	3	He	52.414	0.7929	64048.61	0.0151	4.19E-05
Sb	121	3	He	51.868	0.7846	63848.05	0.0151	4.19E-05
Ba	137	3	He	538.822	2.6369	212222.87	0.0049	0.0002094
Ba	137	3	He	528.606	2.5869	208966.23	0.0049	0.0002094
Ba	137	3	He	517.998	2.535	206279.84	0.0049	0.0002094
Tl	205	3	He	50.515	1.2759	492616.56	0.0252	0.0007688
Tl	205	3	He	50.361	1.272	495905.46	0.0252	0.0007688
Tl	205	3	He	50.972	1.2874	491124.99	0.0252	0.0007688
Pb	208	3	He	50.337	1.6999	351891.01	0.0337	0.001742
Pb	208	3	He	49.844	1.6833	353542.34	0.0337	0.001742
Pb	208	3	He	50.885	1.7184	349424.57	0.0337	0.001742
U	238	3	He	50.753	2.5457	763199.60	0.0502	0.0004339
U	238	3	He	50.611	2.5386	759902.57	0.0502	0.0004339
U	238	3	He	50.531	2.5346	753754.44	0.0502	0.0004339
Sc	45	1	No Gas			2518116.21		
Sc	45	1	No Gas			2498404.65		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2524470.59		
Ge	72	1	No Gas			1232562.64		
Ge	72	1	No Gas			1247679.59		
Ge	72	1	No Gas			1245999.98		
Sc	45	2	H2			176843.79		
Sc	45	2	H2			175791.13		
Sc	45	2	H2			176630.58		
Ge	72	2	H2			152082.85		
Ge	72	2	H2			148474.00		
Ge	72	2	H2			149202.13		
In	115	2	H2			387105.85		
In	115	2	H2			380745.97		
In	115	2	H2			381795.15		
Sc	45	3	He			47398.20		
Sc	45	3	He			46645.61		
Sc	45	3	He			46735.83		
Ge	72	3	He			81533.04		
Ge	72	3	He			81583.28		
Ge	72	3	He			80285.51		
In	115	3	He			80855.24		
In	115	3	He			81146.25		
In	115	3	He			81739.56		
Tb	159	3	He			386103.98		
Tb	159	3	He			389870.03		
Tb	159	3	He			381484.41		
Bi	209	3	He			299798.71		
Bi	209	3	He			299341.23		
Bi	209	3	He			297389.90		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

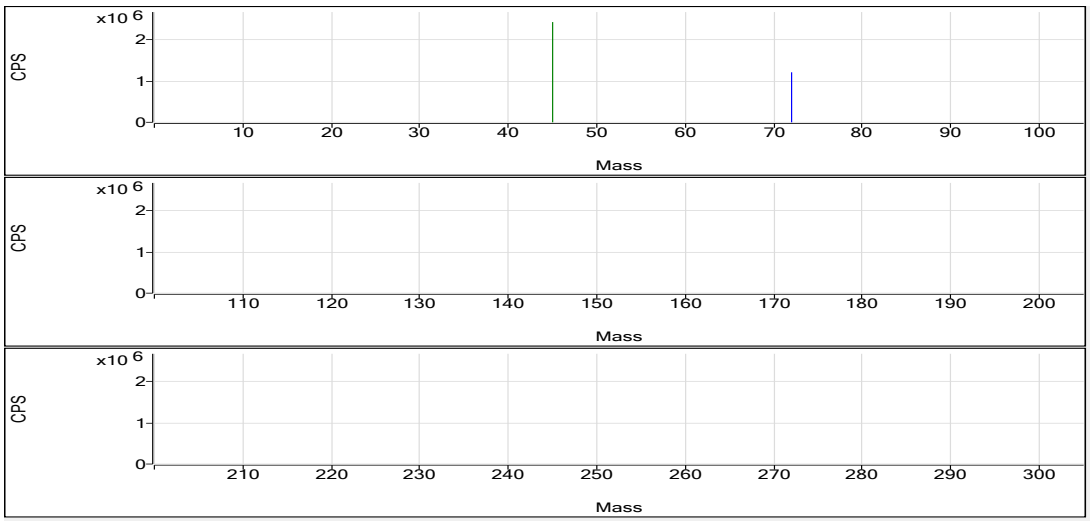
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.043	ppb	14.7	119.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.026	ppb	79.8	4.00	0.0000	Pulse	1.5000	3
Na	23	45	He	0.736	ppb	352.1	16232.72	0.3462	Pulse	0.1000	3
Mg	24	45	He	1.474	ppb	56.1	263.35	0.0056	Pulse	0.1000	3
Al	27	45	He	0.948	ppb	128.5	73.34	0.0016	Pulse	0.1000	3
K	39	45	He	-1.281	ppb	N/A	18926.16	0.4037	Pulse	0.1000	3
Ca	44	45	He	-18.583	ppb	N/A	103.34	0.0022	Pulse	0.1000	3
Ti	47	45	He	1.302	ppb	61.5	33.33	0.0007	Pulse	0.1000	3
V	51	45	He	-0.077	ppb	N/A	1371.41	0.0292	Pulse	0.5000	3
Cr	52	45	He	-0.017	ppb	N/A	1833.52	0.0391	Pulse	0.1000	3
Mn	55	45	He	0.102	ppb	102.9	210.01	0.0045	Pulse	0.1000	3
Fe	57	45	He	1.293	ppb	35.6	130.00	0.0028	Pulse	0.1000	3
Co	59	45	He	0.035	ppb	74.2	286.68	0.0061	Pulse	0.1000	3
Ni	60	72	He	-0.029	ppb	N/A	246.68	0.0031	Pulse	0.1000	3
Cu	63	72	He	0.083	ppb	12.9	563.36	0.0071	Pulse	0.1000	3
Zn	66	115	He	-0.450	ppb	N/A	393.36	0.0049	Pulse	0.1000	3
As	75	115	He	0.005	ppb	1469.4	75.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.051	ppb	59.3	76.67	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.079	ppb	34.0	196.68	0.0024	Pulse	0.1000	3
Ag	107	115	He	0.015	ppb	30.9	110.00	0.0014	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	42.2	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.070	ppb	220.4	1543.48	0.0190	Pulse	0.1000	3
Sb	121	115	He	0.062	ppb	25.9	80.00	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.041	ppb	71.5	33.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.101	ppb	3.1	1263.45	0.0033	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	129.7	790.04	0.0021	Pulse	0.1000	3
U	238	209	He	0.037	ppb	6.2	686.71	0.0023	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2428087.04	2.5	103.4	Analog	0.1000	3
No Gas	Ge	72	1211333.58	1.1	101.0	Pulse	0.1000	3
H2	Sc	45	171046.11	1.3	98.4	Pulse	0.1000	3
H2	Ge	72	147293.21	2.1	98.5	Pulse	0.1000	3
H2	In	115	379917.95	0.7	103.8	Pulse	0.1000	3
He	Sc	45	46903.17	2.1	109.0	Pulse	0.1000	3
He	Ge	72	79903.75	1.3	102.2	Pulse	0.1000	3
He	In	115	81058.71	0.7	101.7	Pulse	0.1000	3
He	Tb	159	381175.28	0.7	103.6	Pulse	0.1000	3
He	Bi	209	296982.03	0.4	101.7	Pulse	0.1000	3

No Gas



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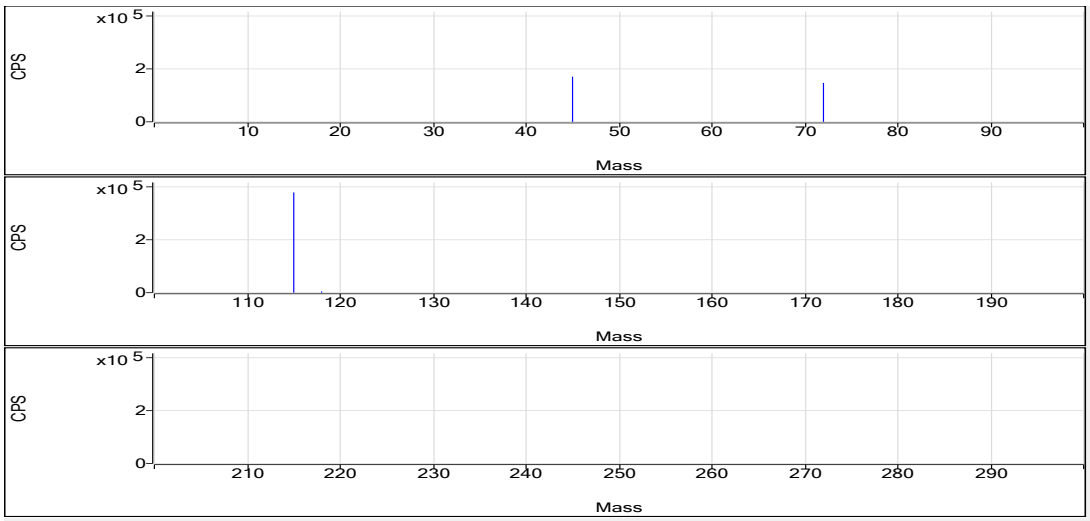
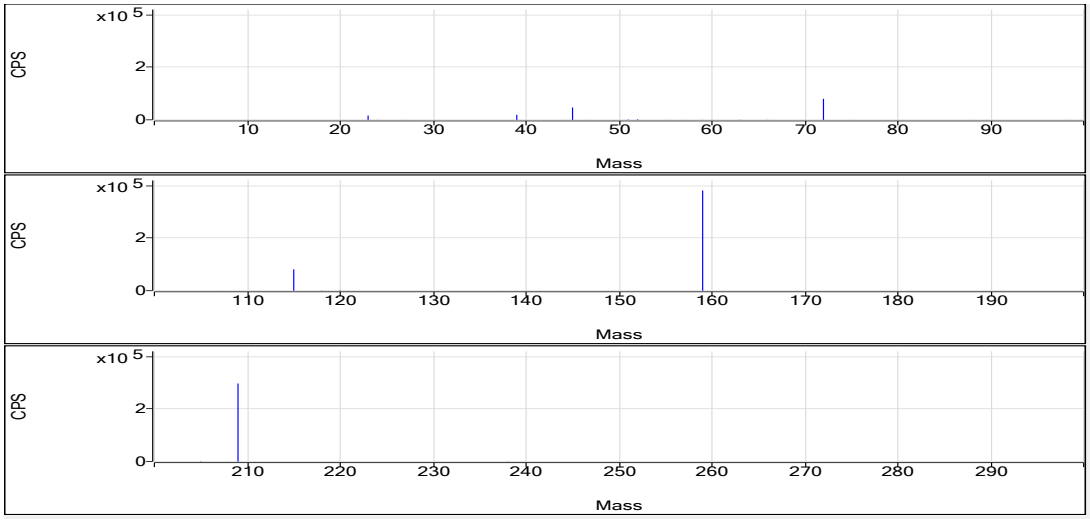


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.05	0.0001	128.00	0.0007	1.705E-05
Be	9	1	No Gas	0.043	0	120.00	0.0007	1.705E-05
Be	9	1	No Gas	0.038	0	110.00	0.0007	1.705E-05
Se	78	2	H2	0.005	0	2.67	0.0002	6.062E-06
Se	78	2	H2	0.047	0	5.33	0.0002	6.062E-06
Se	78	2	H2	0.026	0	4.00	0.0002	6.062E-06
Na	23	3	He	-0.887	0.3402	16199.38	0.0037	0.3435
Na	23	3	He	3.724	0.3573	16349.50	0.0037	0.3435
Na	23	3	He	-0.629	0.3411	16149.27	0.0037	0.3435
Mg	24	3	He	0.688	0.0042	200.01	0.0018	0.002943
Mg	24	3	He	2.338	0.0072	330.02	0.0018	0.002943
Mg	24	3	He	1.396	0.0055	260.01	0.0018	0.002943
Al	27	3	He	0.071	0.0011	50.00	0.0006	0.001008
Al	27	3	He	2.34	0.0024	110.01	0.0006	0.001008
Al	27	3	He	0.435	0.0013	60.00	0.0006	0.001008
K	39	3	He	-12.427	0.3907	18602.32	0.0012	0.4052
K	39	3	He	13.632	0.4213	19273.30	0.0012	0.4052
K	39	3	He	-5.048	0.3993	18902.85	0.0012	0.4052
Ca	44	3	He	-35.409	0.0011	50.00	0.0001	0.003486
Ca	44	3	He	-15.726	0.0024	110.00	0.0001	0.003486
Ca	44	3	He	-4.612	0.0032	150.01	0.0001	0.003486
Ti	47	3	He	1.94	0.0011	50.00	0.0005	0
Ti	47	3	He	0.404	0.0002	10.00	0.0005	0
Ti	47	3	He	1.561	0.0008	40.00	0.0005	0
V	51	3	He	-0.133	0.028	1334.07	0.0223	0.03097
V	51	3	He	-0.044	0.03	1372.07	0.0223	0.03097
V	51	3	He	-0.055	0.0297	1408.08	0.0223	0.03097
Cr	52	3	He	0.047	0.041	1950.22	0.029	0.03958
Cr	52	3	He	-0.008	0.0393	1800.17	0.029	0.03958
Cr	52	3	He	-0.09	0.037	1750.18	0.029	0.03958
Mn	55	3	He	-0.018	0.0029	140.00	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.176	0.0055	250.01	0.013	0.003171
Mn	55	3	He	0.146	0.0051	240.02	0.013	0.003171
Fe	57	3	He	0.859	0.0025	120.00	0.0006	0.002014
Fe	57	3	He	1.776	0.0031	140.00	0.0006	0.002014
Fe	57	3	He	1.243	0.0027	130.00	0.0006	0.002014
Co	59	3	He	0.005	0.0044	210.01	0.0572	0.004106
Co	59	3	He	0.047	0.0068	310.01	0.0572	0.004106
Co	59	3	He	0.054	0.0072	340.02	0.0572	0.004106
Ni	60	3	He	-0.042	0.003	240.01	0.0084	0.003329
Ni	60	3	He	0.012	0.0034	270.01	0.0084	0.003329
Ni	60	3	He	-0.056	0.0029	230.01	0.0084	0.003329
Cu	63	3	He	0.074	0.0068	550.03	0.0247	0.004989
Cu	63	3	He	0.081	0.007	550.03	0.0247	0.004989
Cu	63	3	He	0.095	0.0073	590.03	0.0247	0.004989
Zn	66	3	He	-0.064	0.006	480.03	0.0029	0.006147
Zn	66	3	He	-0.607	0.0044	360.02	0.0029	0.006147
Zn	66	3	He	-0.679	0.0042	340.02	0.0029	0.006147
As	75	3	He	0.037	0.001	80.00	0.002	0.0009198
As	75	3	He	-0.08	0.0008	62.00	0.002	0.0009198
As	75	3	He	0.058	0.001	84.00	0.002	0.0009198
Sr	88	3	He	0.084	0.0012	100.00	0.0088	0.0005022
Sr	88	3	He	0.026	0.0007	60.00	0.0088	0.0005022
Sr	88	3	He	0.041	0.0009	70.00	0.0088	0.0005022
Mo	98	3	He	0.048	0.0017	140.01	0.0223	0.0006689
Mo	98	3	He	0.091	0.0027	220.01	0.0223	0.0006689
Mo	98	3	He	0.097	0.0028	230.01	0.0223	0.0006689
Ag	107	3	He	0.017	0.0015	120.00	0.0471	0.0006687
Ag	107	3	He	0.017	0.0015	120.01	0.0471	0.0006687
Ag	107	3	He	0.009	0.0011	90.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	0.011	0.0001	6.00	0.0054	1.676E-05
Sn	120	3	He	-0.091	0.0165	1330.12	0.0156	0.01794
Sn	120	3	He	0.216	0.0213	1740.18	0.0156	0.01794
Sn	120	3	He	0.085	0.0193	1560.14	0.0156	0.01794
Sb	121	3	He	0.047	0.0007	60.00	0.0151	4.19E-05
Sb	121	3	He	0.062	0.001	80.00	0.0151	4.19E-05
Sb	121	3	He	0.079	0.0012	100.00	0.0151	4.19E-05
Ba	137	3	He	0.059	0.0005	40.00	0.0049	0.0002094
Ba	137	3	He	0.007	0.0002	20.00	0.0049	0.0002094
Ba	137	3	He	0.058	0.0005	40.00	0.0049	0.0002094
Tl	205	3	He	0.103	0.0034	1280.12	0.0252	0.0007688
Tl	205	3	He	0.097	0.0032	1220.10	0.0252	0.0007688
Tl	205	3	He	0.103	0.0034	1290.12	0.0252	0.0007688
Pb	208	3	He	0.022	0.0025	470.03	0.0337	0.001742
Pb	208	3	He	-0.003	0.0016	390.02	0.0337	0.001742
Pb	208	3	He	0.01	0.0021	460.02	0.0337	0.001742
U	238	3	He	0.038	0.0023	690.04	0.0502	0.0004339
U	238	3	He	0.035	0.0022	650.04	0.0502	0.0004339
U	238	3	He	0.04	0.0024	720.05	0.0502	0.0004339
Sc	45	1	No Gas			2360151.21		
Sc	45	1	No Gas			2473376.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2450733.71		
Ge	72	1	No Gas			1197285.84		
Ge	72	1	No Gas			1212075.06		
Ge	72	1	No Gas			1224639.83		
Sc	45	2	H2			168749.04		
Sc	45	2	H2			171298.49		
Sc	45	2	H2			173090.80		
Ge	72	2	H2			144444.20		
Ge	72	2	H2			146939.01		
Ge	72	2	H2			150496.41		
In	115	2	H2			381351.44		
In	115	2	H2			376662.26		
In	115	2	H2			381740.15		
Sc	45	3	He			47618.77		
Sc	45	3	He			45752.64		
Sc	45	3	He			47338.09		
Ge	72	3	He			80607.37		
Ge	72	3	He			78757.52		
Ge	72	3	He			80346.36		
In	115	3	He			80502.94		
In	115	3	He			81710.11		
In	115	3	He			80986.32		
Tb	159	3	He			380919.60		
Tb	159	3	He			378525.74		
Tb	159	3	He			384080.50		
Bi	209	3	He			295536.68		
Bi	209	3	He			297461.21		
Bi	209	3	He			297948.20		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:12:56 AM
Sample Name	MB 410-406768/1-A
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

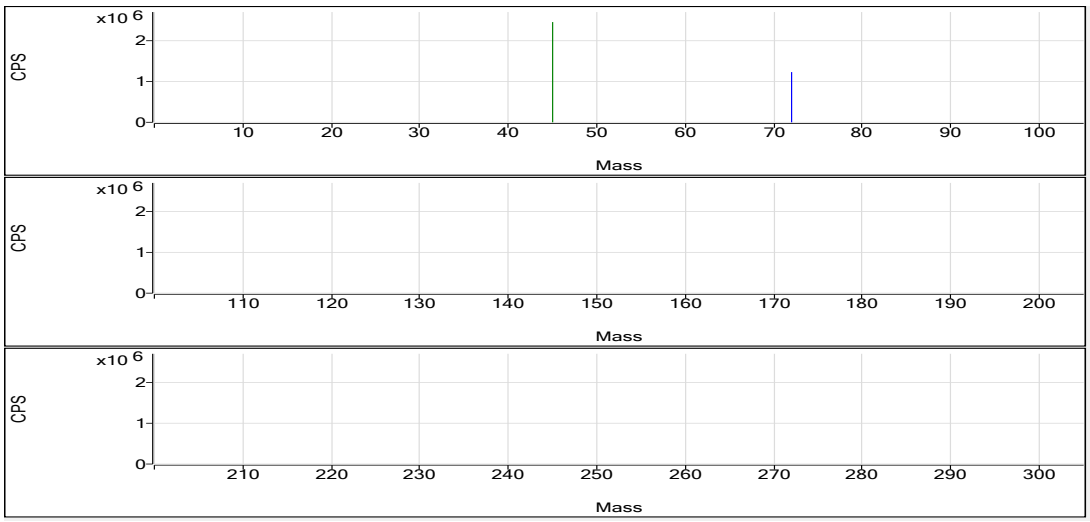
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.029	ppb	28.2	94.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.009	ppb	243.3	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	44.421	ppb	11.1	23442.46	0.5088	Pulse	0.1000	3
Mg	24	45	He	1.360	ppb	36.2	250.01	0.0054	Pulse	0.1000	3
Al	27	45	He	0.739	ppb	105.1	66.67	0.0014	Pulse	0.1000	3
K	39	45	He	-2.880	ppb	N/A	18515.52	0.4019	Pulse	0.1000	3
Ca	44	45	He	1.951	ppb	837.0	166.67	0.0036	Pulse	0.1000	3
Ti	47	45	He	0.134	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.114	ppb	N/A	1309.40	0.0284	Pulse	0.5000	3
Cr	52	45	He	-0.094	ppb	N/A	1700.16	0.0369	Pulse	0.1000	3
Mn	55	45	He	0.151	ppb	54.1	236.68	0.0051	Pulse	0.1000	3
Fe	57	45	He	0.381	ppb	359.6	103.34	0.0022	Pulse	0.1000	3
Co	59	45	He	0.034	ppb	8.0	280.01	0.0061	Pulse	0.1000	3
Ni	60	72	He	-0.015	ppb	N/A	256.68	0.0032	Pulse	0.1000	3
Cu	63	72	He	0.113	ppb	57.8	626.70	0.0078	Pulse	0.1000	3
Zn	66	115	He	-0.633	ppb	N/A	360.02	0.0043	Pulse	0.1000	3
As	75	115	He	-0.133	ppb	N/A	54.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.035	ppb	104.9	66.67	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.055	ppb	62.0	156.67	0.0019	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	85.4	83.33	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	216.1	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.179	ppb	N/A	1260.10	0.0152	Pulse	0.1000	3
Sb	121	115	He	0.013	ppb	62.6	20.00	0.0002	Pulse	0.1000	3
Ba	137	115	He	-0.035	ppb	N/A	3.33	0.0000	Pulse	0.1000	3
Tl	205	159	He	0.020	ppb	37.5	486.69	0.0013	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	61.1	776.71	0.0020	Pulse	0.1000	3
U	238	209	He	-0.003	ppb	N/A	90.00	0.0003	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2470082.31	1.5	105.2	Analog	0.1000	3
No Gas	Ge	72	1237052.35	1.4	103.1	Pulse	0.1000	3
H2	Sc	45	176685.05	0.6	101.7	Pulse	0.1000	3
H2	Ge	72	153389.59	0.9	102.6	Pulse	0.1000	3
H2	In	115	382016.68	0.3	104.4	Pulse	0.1000	3
He	Sc	45	46094.08	1.7	107.1	Pulse	0.1000	3
He	Ge	72	80345.79	1.2	102.8	Pulse	0.1000	3
He	In	115	83152.19	2.1	104.3	Pulse	0.1000	3
He	Tb	159	379842.26	0.5	103.2	Pulse	0.1000	3
He	Bi	209	302536.02	0.6	103.6	Pulse	0.1000	3

No Gas



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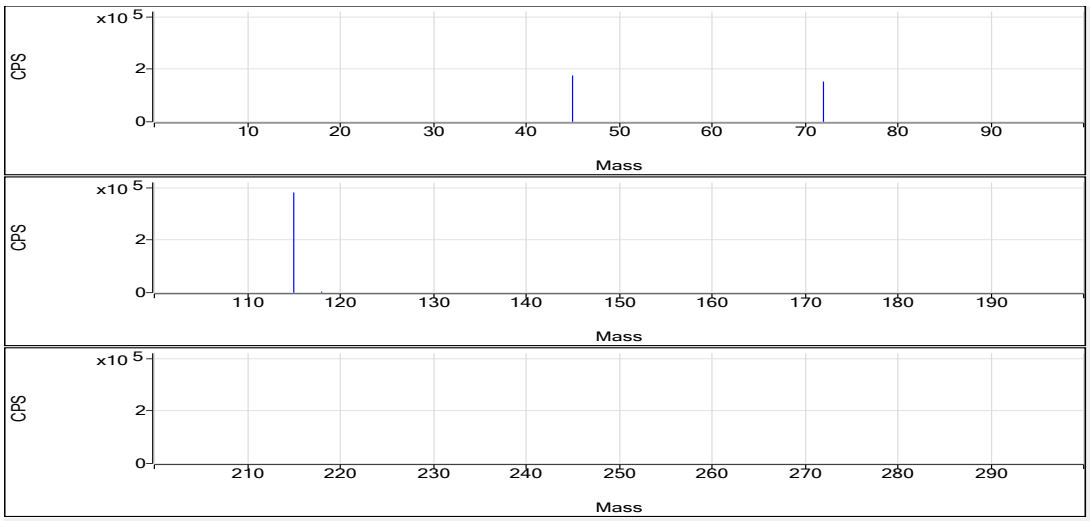
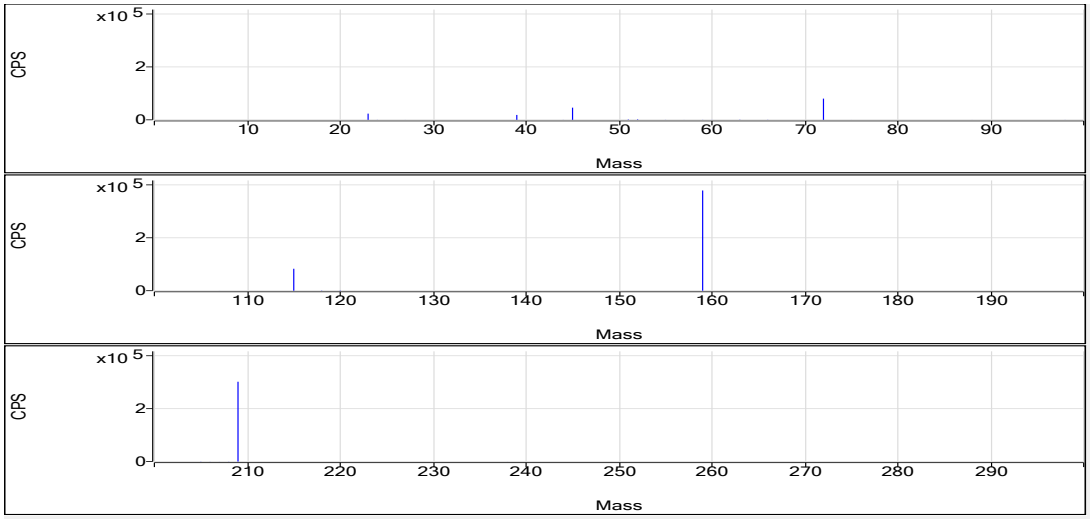


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.037	0	110.00	0.0007	1.705E-05
Be	9	1	No Gas	0.029	0	96.00	0.0007	1.705E-05
Be	9	1	No Gas	0.02	0	78.00	0.0007	1.705E-05
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Se	78	2	H2	0.015	0	3.33	0.0002	6.062E-06
Se	78	2	H2	0.025	0	4.00	0.0002	6.062E-06
Na	23	3	He	49.202	0.5266	23959.87	0.0037	0.3435
Na	23	3	He	44.718	0.5099	23359.06	0.0037	0.3435
Na	23	3	He	39.343	0.4899	23008.44	0.0037	0.3435
Mg	24	3	He	1.878	0.0064	290.01	0.0018	0.002943
Mg	24	3	He	0.898	0.0046	210.01	0.0018	0.002943
Mg	24	3	He	1.303	0.0053	250.01	0.0018	0.002943
Al	27	3	He	0.521	0.0013	60.00	0.0006	0.001008
Al	27	3	He	1.603	0.002	90.00	0.0006	0.001008
Al	27	3	He	0.095	0.0011	50.00	0.0006	0.001008
K	39	3	He	10.544	0.4176	19002.75	0.0012	0.4052
K	39	3	He	-2.477	0.4023	18432.08	0.0012	0.4052
K	39	3	He	-16.707	0.3856	18111.73	0.0012	0.4052
Ca	44	3	He	19.605	0.0048	220.01	0.0001	0.003486
Ca	44	3	He	-12.6	0.0026	120.00	0.0001	0.003486
Ca	44	3	He	-1.154	0.0034	160.01	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.403	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.058	0.0297	1350.07	0.0223	0.03097
V	51	3	He	-0.083	0.0291	1334.07	0.0223	0.03097
V	51	3	He	-0.201	0.0265	1244.06	0.0223	0.03097
Cr	52	3	He	-0.266	0.0319	1450.13	0.029	0.03958
Cr	52	3	He	0.043	0.0408	1870.18	0.029	0.03958
Cr	52	3	He	-0.058	0.0379	1780.18	0.029	0.03958
Mn	55	3	He	0.213	0.0059	270.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.058	0.0039	180.01	0.013	0.003171
Mn	55	3	He	0.182	0.0055	260.01	0.013	0.003171
Fe	57	3	He	1.058	0.0026	120.00	0.0006	0.002014
Fe	57	3	He	-1.196	0.0013	60.00	0.0006	0.002014
Fe	57	3	He	1.28	0.0028	130.01	0.0006	0.002014
Co	59	3	He	0.036	0.0062	280.01	0.0572	0.004106
Co	59	3	He	0.031	0.0059	270.01	0.0572	0.004106
Co	59	3	He	0.036	0.0062	290.02	0.0572	0.004106
Ni	60	3	He	-0.101	0.0025	200.01	0.0084	0.003329
Ni	60	3	He	0.16	0.0047	370.01	0.0084	0.003329
Ni	60	3	He	-0.103	0.0025	200.01	0.0084	0.003329
Cu	63	3	He	0.144	0.0086	690.04	0.0247	0.004989
Cu	63	3	He	0.038	0.0059	470.02	0.0247	0.004989
Cu	63	3	He	0.157	0.0089	720.04	0.0247	0.004989
Zn	66	3	He	-0.803	0.0038	320.01	0.0029	0.006147
Zn	66	3	He	-0.623	0.0044	370.02	0.0029	0.006147
Zn	66	3	He	-0.472	0.0048	390.02	0.0029	0.006147
As	75	3	He	-0.207	0.0005	42.00	0.002	0.0009198
As	75	3	He	-0.176	0.0006	48.00	0.002	0.0009198
As	75	3	He	-0.017	0.0009	72.00	0.002	0.0009198
Sr	88	3	He	0.038	0.0008	70.00	0.0088	0.0005022
Sr	88	3	He	-0.003	0.0005	40.00	0.0088	0.0005022
Sr	88	3	He	0.069	0.0011	90.00	0.0088	0.0005022
Mo	98	3	He	0.018	0.0011	90.00	0.0223	0.0006689
Mo	98	3	He	0.06	0.002	170.01	0.0223	0.0006689
Mo	98	3	He	0.086	0.0026	210.01	0.0223	0.0006689
Ag	107	3	He	0.006	0.001	80.00	0.0471	0.0006687
Ag	107	3	He	0.013	0.0013	110.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.014	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.034	0.0174	1450.11	0.0156	0.01794
Sn	120	3	He	-0.267	0.0138	1170.10	0.0156	0.01794
Sn	120	3	He	-0.237	0.0143	1160.10	0.0156	0.01794
Sb	121	3	He	0.013	0.0002	20.00	0.0151	4.19E-05
Sb	121	3	He	0.005	0.0001	10.00	0.0151	4.19E-05
Sb	121	3	He	0.022	0.0004	30.00	0.0151	4.19E-05
Ba	137	3	He	-0.043	0	0.00	0.0049	0.0002094
Ba	137	3	He	-0.019	0.0001	10.00	0.0049	0.0002094
Ba	137	3	He	-0.043	0	0.00	0.0049	0.0002094
Tl	205	3	He	0.025	0.0014	530.03	0.0252	0.0007688
Tl	205	3	He	0.025	0.0014	530.03	0.0252	0.0007688
Tl	205	3	He	0.012	0.0011	400.02	0.0252	0.0007688
Pb	208	3	He	0.003	0.0018	350.02	0.0337	0.001742
Pb	208	3	He	0.013	0.0022	450.02	0.0337	0.001742
Pb	208	3	He	0.011	0.0021	430.03	0.0337	0.001742
U	238	3	He	-0.004	0.0002	70.00	0.0502	0.0004339
U	238	3	He	-0.004	0.0002	70.00	0.0502	0.0004339
U	238	3	He	0	0.0004	130.01	0.0502	0.0004339
Sc	45	1	No Gas			2493567.62		
Sc	45	1	No Gas			2490597.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2426081.37		
Ge	72	1	No Gas			1245272.33		
Ge	72	1	No Gas			1248974.28		
Ge	72	1	No Gas			1216910.45		
Sc	45	2	H2			176286.31		
Sc	45	2	H2			177946.87		
Sc	45	2	H2			175821.97		
Ge	72	2	H2			153628.40		
Ge	72	2	H2			154610.35		
Ge	72	2	H2			151930.02		
In	115	2	H2			380644.72		
In	115	2	H2			382424.10		
In	115	2	H2			382981.21		
Sc	45	3	He			45502.10		
Sc	45	3	He			45812.92		
Sc	45	3	He			46967.23		
Ge	72	3	He			80637.29		
Ge	72	3	He			79299.84		
Ge	72	3	He			81100.23		
In	115	3	He			83258.93		
In	115	3	He			84849.48		
In	115	3	He			81367.88		
Tb	159	3	He			381641.91		
Tb	159	3	He			380209.25		
Tb	159	3	He			377675.62		
Bi	209	3	He			303323.61		
Bi	209	3	He			303705.21		
Bi	209	3	He			300579.25		

Quantitation Report

Data File Name	034SMPL.d
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Sample Name	LCS 410-406768/2-A
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

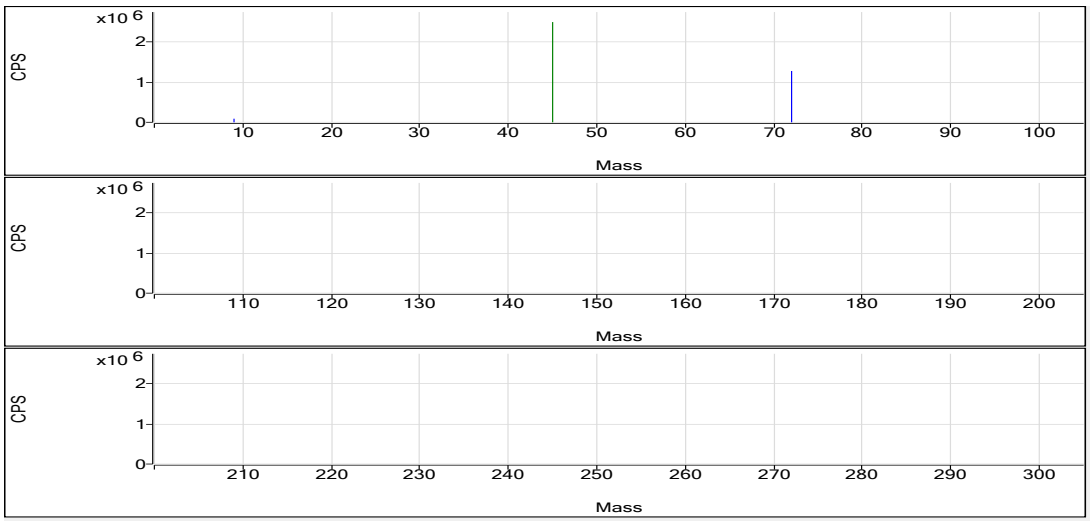
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.329	ppb	2.0	89499.43	0.0358	Pulse	0.5000	3
Se	78	115	H2	101.549	ppb	0.9	6734.04	0.0175	Pulse	1.5000	3
Na	23	45	He	4755.334	ppb	2.7	859105.95	18.0377	Pulse	0.1000	3
Mg	24	45	He	4934.856	ppb	2.4	429448.64	9.0164	Pulse	0.1000	3
Al	27	45	He	4891.390	ppb	3.1	139091.19	2.9204	Pulse	0.1000	3
K	39	45	He	5015.186	ppb	3.3	299757.80	6.2942	Pulse	0.1000	3
Ca	44	45	He	4969.358	ppb	4.2	16446.41	0.3454	Pulse	0.1000	3
Ti	47	45	He	508.778	ppb	4.3	13112.99	0.2754	Pulse	0.1000	3
V	51	45	He	498.755	ppb	2.3	530163.90	11.1306	Pulse	0.5000	3
Cr	52	45	He	496.936	ppb	2.6	687432.62	14.4331	Pulse	0.1000	3
Mn	55	45	He	493.977	ppb	2.0	305916.68	6.4222	Pulse	0.1000	3
Fe	57	45	He	4921.937	ppb	2.5	138186.73	2.9013	Pulse	0.1000	3
Co	59	45	He	479.199	ppb	1.7	1305753.08	27.4114	Pulse	0.1000	3
Ni	60	72	He	530.412	ppb	0.7	369379.96	4.4382	Pulse	0.1000	3
Cu	63	72	He	511.079	ppb	1.1	1051531.26	12.6347	Pulse	0.1000	3
Zn	66	115	He	516.112	ppb	2.0	124144.08	1.4863	Pulse	0.1000	3
As	75	115	He	519.052	ppb	0.7	87196.03	1.0438	Pulse	0.5000	3
Sr	88	115	He	51.675	ppb	2.5	38058.76	0.4556	Pulse	0.1000	3
Mo	98	115	He	51.336	ppb	2.2	95792.49	1.1468	Pulse	0.1000	3
Ag	107	115	He	50.167	ppb	1.3	197392.24	2.3628	Pulse	0.1000	3
Cd	111	115	He	51.589	ppb	1.8	23071.06	0.2762	Pulse	0.5000	3
Sn	120	115	He	104.634	ppb	1.6	137560.94	1.6468	Pulse	0.1000	3
Sb	121	115	He	101.447	ppb	1.0	128195.99	1.5346	Pulse	0.1000	3
Ba	137	115	He	510.408	ppb	1.0	208660.12	2.4978	Pulse	0.1000	3
Tl	205	159	He	102.258	ppb	0.1	983578.03	2.5820	Pulse	0.1000	3
Pb	208	159	He	51.568	ppb	0.7	663363.32	1.7414	Pulse	0.1000	3
U	238	209	He	50.041	ppb	0.5	756484.44	2.5100	Pulse	0.1000	3

ISTD Table:

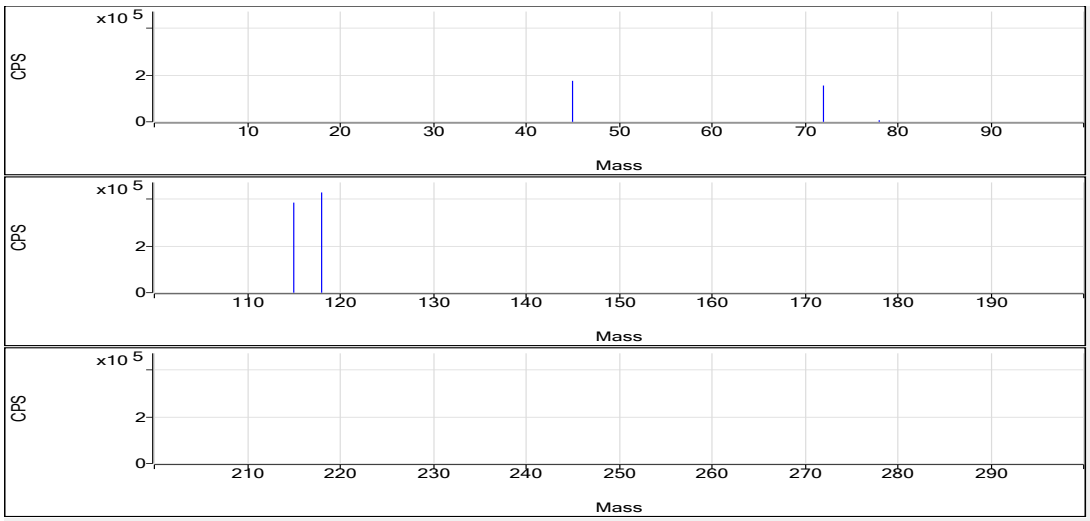
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2502135.17	1.3	106.6	Analog	0.1000	3
No Gas	Ge	72	1280886.65	0.3	106.7	Pulse	0.1000	3
H2	Sc	45	175329.66	1.1	100.9	Pulse	0.1000	3
H2	Ge	72	155152.14	1.4	103.8	Pulse	0.1000	3
H2	In	115	385244.19	0.8	105.3	Pulse	0.1000	3
He	Sc	45	47648.79	2.4	110.7	Pulse	0.1000	3
He	Ge	72	83228.78	0.6	106.5	Pulse	0.1000	3
He	In	115	83544.08	1.5	104.8	Pulse	0.1000	3
He	Tb	159	380939.71	0.4	103.5	Pulse	0.1000	3
He	Bi	209	301387.70	0.3	103.2	Pulse	0.1000	3

No Gas

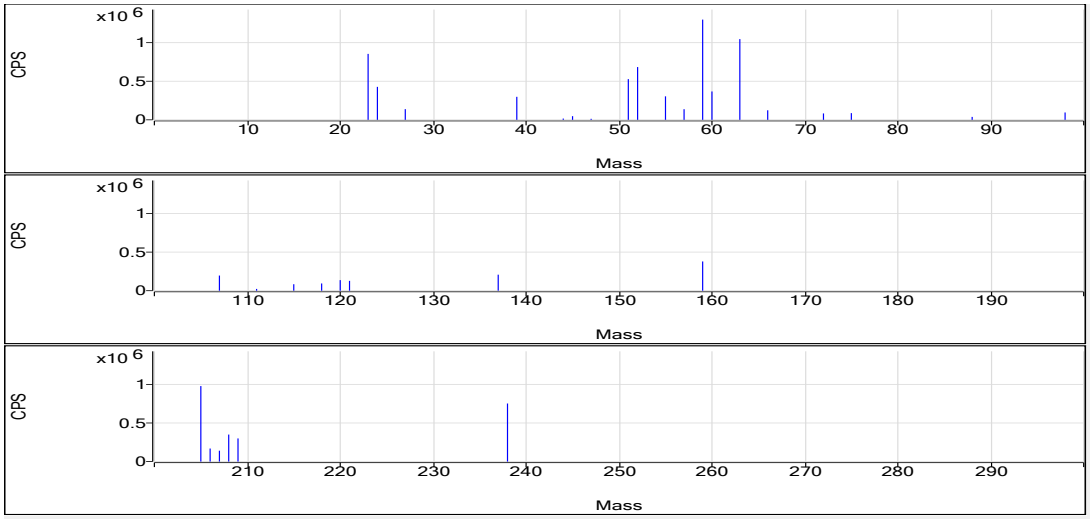


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.306	0.0365	90531.84	0.0007	1.705E-05
Be	9	1	No Gas	48.309	0.0358	88948.07	0.0007	1.705E-05
Be	9	1	No Gas	47.37	0.0351	89018.38	0.0007	1.705E-05
Se	78	2	H2	102.389	0.0176	6850.32	0.0002	6.062E-06
Se	78	2	H2	101.713	0.0175	6709.58	0.0002	6.062E-06
Se	78	2	H2	100.544	0.0173	6642.21	0.0002	6.062E-06
Na	23	3	He	4781.52	18.1351	859924.21	0.0037	0.3435
Na	23	3	He	4617.23	17.5238	857143.82	0.0037	0.3435
Na	23	3	He	4867.252	18.4541	860249.83	0.0037	0.3435
Mg	24	3	He	4946.044	9.0368	428504.25	0.0018	0.002943
Mg	24	3	He	4808.851	8.7862	429761.99	0.0018	0.002943
Mg	24	3	He	5049.673	9.2261	430079.68	0.0018	0.002943
Al	27	3	He	4992.501	2.9808	141341.55	0.0006	0.001008
Al	27	3	He	4716.414	2.816	137739.22	0.0006	0.001008
Al	27	3	He	4965.254	2.9645	138192.79	0.0006	0.001008
K	39	3	He	5057.672	6.3441	300821.21	0.0012	0.4052
K	39	3	He	4830.508	6.0773	297261.50	0.0012	0.4052
K	39	3	He	5157.378	6.4612	301190.70	0.0012	0.4052
Ca	44	3	He	5015.997	0.3486	16529.85	0.0001	0.003486
Ca	44	3	He	4742.078	0.3298	16129.34	0.0001	0.003486
Ca	44	3	He	5149.998	0.3578	16680.04	0.0001	0.003486
Ti	47	3	He	502.868	0.2722	12906.08	0.0005	0
Ti	47	3	He	490.522	0.2655	12986.26	0.0005	0
Ti	47	3	He	532.944	0.2885	13446.63	0.0005	0
V	51	3	He	501.925	11.2011	531131.94	0.0223	0.03097
V	51	3	He	486.139	10.8498	530699.56	0.0223	0.03097
V	51	3	He	508.202	11.3408	528660.19	0.0223	0.03097
Cr	52	3	He	502.808	14.6032	692448.27	0.029	0.03958
Cr	52	3	He	481.921	13.9982	684695.93	0.029	0.03958
Cr	52	3	He	506.08	14.6979	685153.66	0.029	0.03958
Mn	55	3	He	500.342	6.5049	308445.70	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	482.543	6.2736	306860.39	0.013	0.003171
Mn	55	3	He	499.046	6.488	302443.96	0.013	0.003171
Fe	57	3	He	4962.829	2.9254	138713.30	0.0006	0.002014
Fe	57	3	He	4785.655	2.821	137983.34	0.0006	0.002014
Fe	57	3	He	5017.328	2.9575	137863.55	0.0006	0.002014
Co	59	3	He	480.089	27.4623	1302197.32	0.0572	0.004106
Co	59	3	He	470.515	26.9147	1316481.86	0.0572	0.004106
Co	59	3	He	486.994	27.8572	1298580.06	0.0572	0.004106
Ni	60	3	He	534.361	4.4713	369722.77	0.0084	0.003329
Ni	60	3	He	526.71	4.4073	368468.86	0.0084	0.003329
Ni	60	3	He	530.165	4.4362	369948.24	0.0084	0.003329
Cu	63	3	He	517.046	12.7821	1056934.75	0.0247	0.004989
Cu	63	3	He	510.741	12.6263	1055612.80	0.0247	0.004989
Cu	63	3	He	505.45	12.4956	1042046.23	0.0247	0.004989
Zn	66	3	He	507.584	1.4618	123730.14	0.0029	0.006147
Zn	66	3	He	513.374	1.4784	123943.02	0.0029	0.006147
Zn	66	3	He	527.377	1.5186	124759.08	0.0029	0.006147
As	75	3	He	517.269	1.0402	88044.50	0.002	0.0009198
As	75	3	He	516.385	1.0384	87056.51	0.002	0.0009198
As	75	3	He	523.501	1.0527	86487.09	0.002	0.0009198
Sr	88	3	He	50.221	0.4428	37480.67	0.0088	0.0005022
Sr	88	3	He	52.715	0.4648	38964.47	0.0088	0.0005022
Sr	88	3	He	52.089	0.4593	37731.13	0.0088	0.0005022
Mo	98	3	He	50.061	1.1183	94658.90	0.0223	0.0006689
Mo	98	3	He	51.871	1.1588	97144.72	0.0223	0.0006689
Mo	98	3	He	52.076	1.1633	95573.85	0.0223	0.0006689
Ag	107	3	He	49.49	2.331	197297.07	0.0471	0.0006687
Ag	107	3	He	50.807	2.393	200614.14	0.0471	0.0006687
Ag	107	3	He	50.204	2.3646	194265.50	0.0471	0.0006687
Cd	111	3	He	51.315	0.2747	23253.36	0.0054	1.676E-05
Cd	111	3	He	50.849	0.2722	22822.68	0.0054	1.676E-05
Cd	111	3	He	52.603	0.2816	23137.13	0.0054	1.676E-05
Sn	120	3	He	103.649	1.6315	138092.34	0.0156	0.01794
Sn	120	3	He	103.675	1.6319	136809.82	0.0156	0.01794
Sn	120	3	He	106.577	1.6771	137780.66	0.0156	0.01794
Sb	121	3	He	101.048	1.5286	129380.02	0.0151	4.19E-05
Sb	121	3	He	100.731	1.5238	127745.74	0.0151	4.19E-05
Sb	121	3	He	102.562	1.5515	127462.22	0.0151	4.19E-05
Ba	137	3	He	508.177	2.4869	210497.26	0.0049	0.0002094
Ba	137	3	He	506.58	2.4791	207836.21	0.0049	0.0002094
Ba	137	3	He	516.466	2.5275	207646.89	0.0049	0.0002094
Tl	205	3	He	102.392	2.5854	982457.25	0.0252	0.0007688
Tl	205	3	He	102.204	2.5806	987431.86	0.0252	0.0007688
Tl	205	3	He	102.178	2.58	980844.99	0.0252	0.0007688
Pb	208	3	He	51.931	1.7537	353179.21	0.0337	0.001742
Pb	208	3	He	51.254	1.7308	352781.32	0.0337	0.001742
Pb	208	3	He	51.518	1.7397	349491.21	0.0337	0.001742
U	238	3	He	49.735	2.4947	749941.86	0.0502	0.0004339
U	238	3	He	50.243	2.5202	759332.18	0.0502	0.0004339
U	238	3	He	50.143	2.5151	760179.29	0.0502	0.0004339
Sc	45	1	No Gas			2480443.87		
Sc	45	1	No Gas			2487355.74		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2538605.90		
Ge	72	1	No Gas			1279111.70		
Ge	72	1	No Gas			1278348.42		
Ge	72	1	No Gas			1285199.82		
Sc	45	2	H2			177534.88		
Sc	45	2	H2			174465.37		
Sc	45	2	H2			173988.73		
Ge	72	2	H2			157603.39		
Ge	72	2	H2			153942.19		
Ge	72	2	H2			153910.84		
In	115	2	H2			388694.06		
In	115	2	H2			383239.84		
In	115	2	H2			383798.67		
Sc	45	3	He			47417.64		
Sc	45	3	He			48913.12		
Sc	45	3	He			46615.61		
Ge	72	3	He			82688.65		
Ge	72	3	He			83604.32		
Ge	72	3	He			83393.36		
In	115	3	He			85371.57		
In	115	3	He			84566.94		
In	115	3	He			82897.42		
Tb	159	3	He			380006.83		
Tb	159	3	He			382634.10		
Tb	159	3	He			380178.20		
Bi	209	3	He			300619.33		
Bi	209	3	He			301303.08		
Bi	209	3	He			302240.68		

Quantitation Report

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Sample Name	410-137404-A-1-E
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

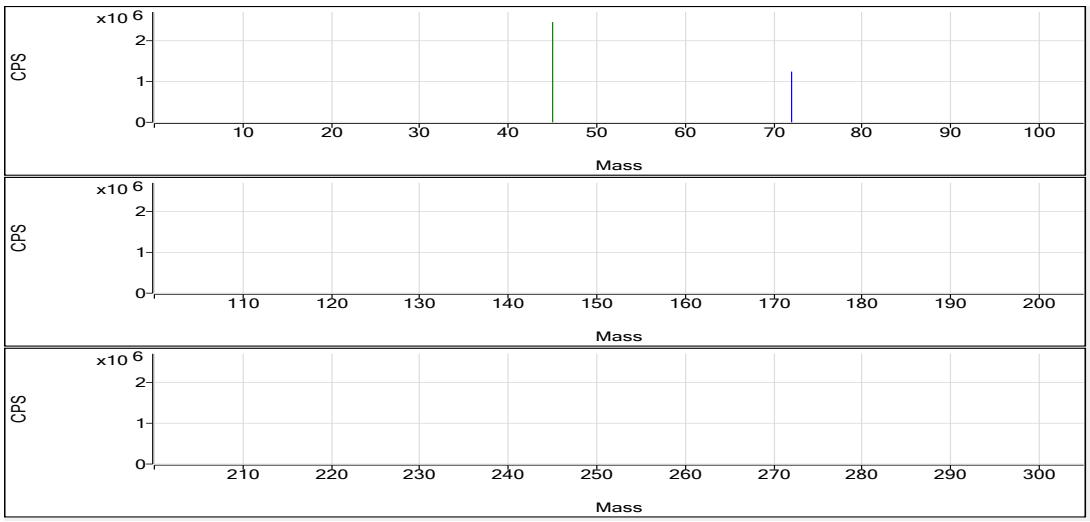
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.030	ppb	15.5	96.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.080	ppb	19.1	7.56	0.0000	Pulse	1.5000	3
Na	23	45	He	2409.402	ppb	3.2	432669.82	9.3087	Pulse	0.1000	3
Mg	24	45	He	17.689	ppb	8.2	1636.82	0.0353	Pulse	0.1000	3
Al	27	45	He	2.527	ppb	22.8	116.67	0.0025	Pulse	0.1000	3
K	39	45	He	34.974	ppb	23.7	20755.27	0.4463	Pulse	0.1000	3
Ca	44	45	He	507.805	ppb	9.8	1783.51	0.0384	Pulse	0.1000	3
Ti	47	45	He	0.128	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.151	ppb	N/A	1282.06	0.0276	Pulse	0.5000	3
Cr	52	45	He	0.385	ppb	11.2	2360.26	0.0507	Pulse	0.1000	3
Mn	55	45	He	11.554	ppb	2.3	7135.36	0.1533	Pulse	0.1000	3
Fe	57	45	He	3.789	ppb	36.7	196.68	0.0042	Pulse	0.1000	3
Co	59	45	He	0.053	ppb	52.0	330.02	0.0071	Pulse	0.1000	3
Ni	60	72	He	-0.043	ppb	N/A	246.68	0.0030	Pulse	0.1000	3
Cu	63	72	He	0.106	ppb	50.2	633.37	0.0076	Pulse	0.1000	3
Zn	66	115	He	1.478	ppb	47.7	860.06	0.0104	Pulse	0.1000	3
As	75	115	He	0.031	ppb	226.1	81.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.880	ppb	1.9	683.37	0.0083	Pulse	0.1000	3
Mo	98	115	He	0.123	ppb	39.2	283.35	0.0034	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	67.3	70.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	91.2	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.035	ppb	236.8	1530.15	0.0185	Pulse	0.1000	3
Sb	121	115	He	0.021	ppb	65.5	30.00	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.245	ppb	15.6	116.67	0.0014	Pulse	0.1000	3
Tl	205	159	He	0.127	ppb	3.5	1520.14	0.0040	Pulse	0.1000	3
Pb	208	159	He	0.006	ppb	52.8	750.04	0.0020	Pulse	0.1000	3
U	238	209	He	0.048	ppb	17.5	873.39	0.0029	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2461531.94	0.9	104.9	Analog	0.1000	3
No Gas	Ge	72	1245427.51	0.9	103.8	Pulse	0.1000	3
H2	Sc	45	174117.51	0.5	100.2	Pulse	0.1000	3
H2	Ge	72	152238.06	1.3	101.8	Pulse	0.1000	3
H2	In	115	381765.83	0.4	104.3	Pulse	0.1000	3
He	Sc	45	46515.24	3.7	108.1	Pulse	0.1000	3
He	Ge	72	83124.84	0.3	106.4	Pulse	0.1000	3
He	In	115	82796.10	0.5	103.9	Pulse	0.1000	3
He	Tb	159	383298.95	0.5	104.2	Pulse	0.1000	3
He	Bi	209	305004.30	0.6	104.4	Pulse	0.1000	3

No Gas



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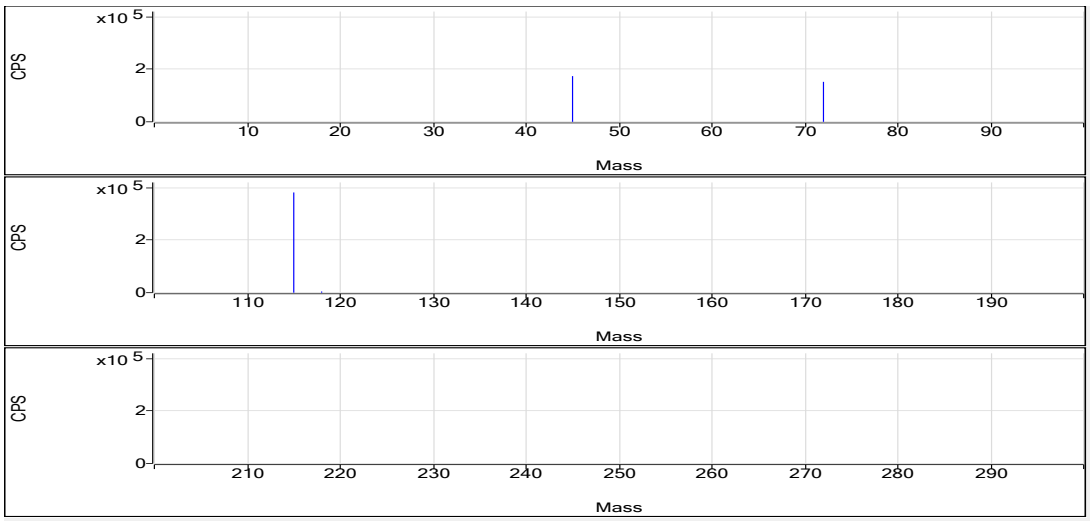
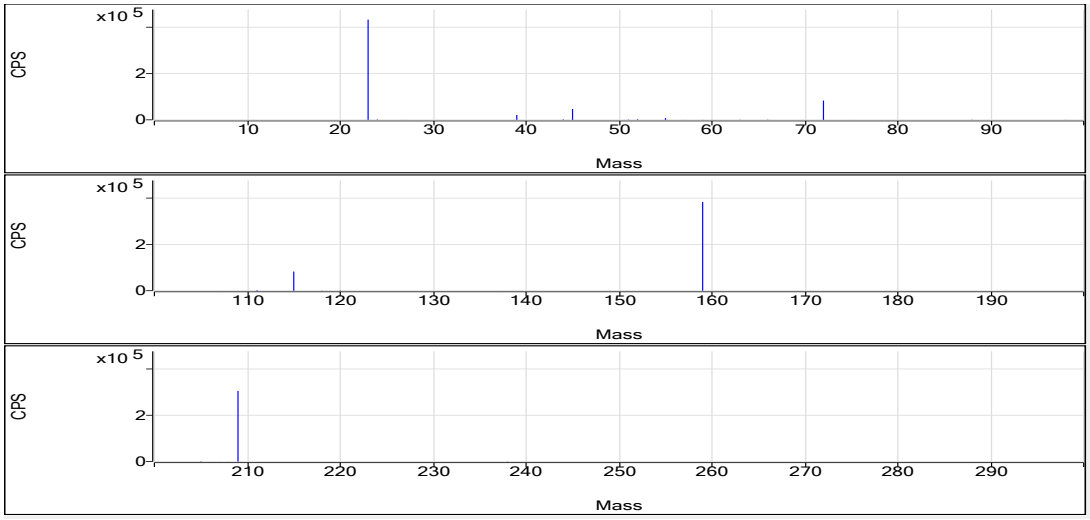


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.035	0	106.00	0.0007	1.705E-05
Be	9	1	No Gas	0.029	0	96.00	0.0007	1.705E-05
Be	9	1	No Gas	0.026	0	88.00	0.0007	1.705E-05
Se	78	2	H2	0.097	0	8.67	0.0002	6.062E-06
Se	78	2	H2	0.076	0	7.33	0.0002	6.062E-06
Se	78	2	H2	0.067	0	6.67	0.0002	6.062E-06
Na	23	3	He	2343.236	9.0625	434540.46	0.0037	0.3435
Na	23	3	He	2391.264	9.2412	434023.74	0.0037	0.3435
Na	23	3	He	2493.706	9.6224	429445.27	0.0037	0.3435
Mg	24	3	He	16.774	0.0336	1610.16	0.0018	0.002943
Mg	24	3	He	16.925	0.0339	1590.15	0.0018	0.002943
Mg	24	3	He	19.368	0.0383	1710.15	0.0018	0.002943
Al	27	3	He	2.155	0.0023	110.00	0.0006	0.001008
Al	27	3	He	2.235	0.0023	110.00	0.0006	0.001008
Al	27	3	He	3.192	0.0029	130.01	0.0006	0.001008
K	39	3	He	26.009	0.4358	20895.56	0.0012	0.4052
K	39	3	He	42.309	0.4549	21366.04	0.0012	0.4052
K	39	3	He	36.604	0.4482	20004.20	0.0012	0.4052
Ca	44	3	He	473.77	0.0361	1730.16	0.0001	0.003486
Ca	44	3	He	484.748	0.0368	1730.16	0.0001	0.003486
Ca	44	3	He	564.896	0.0424	1890.20	0.0001	0.003486
Ti	47	3	He	0.385	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.211	0.0263	1260.06	0.0223	0.03097
V	51	3	He	-0.186	0.0268	1260.06	0.0223	0.03097
V	51	3	He	-0.057	0.0297	1326.07	0.0223	0.03097
Cr	52	3	He	0.354	0.0498	2390.26	0.029	0.03958
Cr	52	3	He	0.435	0.0522	2450.27	0.029	0.03958
Cr	52	3	He	0.366	0.0502	2240.24	0.029	0.03958
Mn	55	3	He	11.797	0.1565	7502.23	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	11.59	0.1538	7222.07	0.013	0.003171
Mn	55	3	He	11.277	0.1497	6681.78	0.013	0.003171
Fe	57	3	He	2.246	0.0033	160.01	0.0006	0.002014
Fe	57	3	He	4.172	0.0045	210.01	0.0006	0.002014
Fe	57	3	He	4.95	0.0049	220.01	0.0006	0.002014
Co	59	3	He	0.023	0.0054	260.01	0.0572	0.004106
Co	59	3	He	0.059	0.0075	350.02	0.0572	0.004106
Co	59	3	He	0.077	0.0085	380.02	0.0572	0.004106
Ni	60	3	He	-0.068	0.0028	230.01	0.0084	0.003329
Ni	60	3	He	0.033	0.0036	300.01	0.0084	0.003329
Ni	60	3	He	-0.095	0.0025	210.01	0.0084	0.003329
Cu	63	3	He	0.08	0.007	580.03	0.0247	0.004989
Cu	63	3	He	0.168	0.0091	760.05	0.0247	0.004989
Cu	63	3	He	0.072	0.0068	560.03	0.0247	0.004989
Zn	66	3	He	2.278	0.0127	1050.08	0.0029	0.006147
Zn	66	3	He	0.947	0.0089	730.04	0.0029	0.006147
Zn	66	3	He	1.209	0.0096	800.05	0.0029	0.006147
As	75	3	He	0.011	0.0009	78.00	0.002	0.0009198
As	75	3	He	0.11	0.0011	94.00	0.002	0.0009198
As	75	3	He	-0.027	0.0009	72.00	0.002	0.0009198
Sr	88	3	He	0.875	0.0082	680.04	0.0088	0.0005022
Sr	88	3	He	0.867	0.0081	670.04	0.0088	0.0005022
Sr	88	3	He	0.898	0.0084	700.04	0.0088	0.0005022
Mo	98	3	He	0.073	0.0023	190.01	0.0223	0.0006689
Mo	98	3	He	0.128	0.0035	290.01	0.0223	0.0006689
Mo	98	3	He	0.169	0.0044	370.02	0.0223	0.0006689
Ag	107	3	He	0.006	0.001	80.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	0.004	0.0008	70.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Sn	120	3	He	-0.059	0.017	1410.14	0.0156	0.01794
Sn	120	3	He	0.095	0.0194	1600.15	0.0156	0.01794
Sn	120	3	He	0.067	0.019	1580.15	0.0156	0.01794
Sb	121	3	He	0.029	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.029	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.005	0.0001	10.00	0.0151	4.19E-05
Ba	137	3	He	0.204	0.0012	100.00	0.0049	0.0002094
Ba	137	3	He	0.28	0.0016	130.01	0.0049	0.0002094
Ba	137	3	He	0.252	0.0014	120.01	0.0049	0.0002094
Tl	205	3	He	0.124	0.0039	1490.14	0.0252	0.0007688
Tl	205	3	He	0.124	0.0039	1500.14	0.0252	0.0007688
Tl	205	3	He	0.132	0.0041	1570.15	0.0252	0.0007688
Pb	208	3	He	0.01	0.0021	460.03	0.0337	0.001742
Pb	208	3	He	0.003	0.0018	370.02	0.0337	0.001742
Pb	208	3	He	0.006	0.002	440.03	0.0337	0.001742
U	238	3	He	0.039	0.0024	730.05	0.0502	0.0004339
U	238	3	He	0.051	0.003	910.06	0.0502	0.0004339
U	238	3	He	0.055	0.0032	980.07	0.0502	0.0004339
Sc	45	1	No Gas			2469420.90		
Sc	45	1	No Gas			2478550.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2436624.49		
Ge	72	1	No Gas			1241127.87		
Ge	72	1	No Gas			1257930.92		
Ge	72	1	No Gas			1237223.73		
Sc	45	2	H2			173583.96		
Sc	45	2	H2			175163.73		
Sc	45	2	H2			173604.84		
Ge	72	2	H2			154294.89		
Ge	72	2	H2			150494.62		
Ge	72	2	H2			151924.68		
In	115	2	H2			382400.78		
In	115	2	H2			382975.81		
In	115	2	H2			379920.89		
Sc	45	3	He			47949.46		
Sc	45	3	He			46966.29		
Sc	45	3	He			44629.96		
Ge	72	3	He			83393.13		
Ge	72	3	He			83161.64		
Ge	72	3	He			82819.75		
In	115	3	He			82817.22		
In	115	3	He			82373.49		
In	115	3	He			83218.73		
Tb	159	3	He			381293.35		
Tb	159	3	He			385022.38		
Tb	159	3	He			383581.13		
Bi	209	3	He			305961.44		
Bi	209	3	He			303053.02		
Bi	209	3	He			305998.45		

Quantitation Report

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Sample Name	410-137404-A-1-E PDS
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

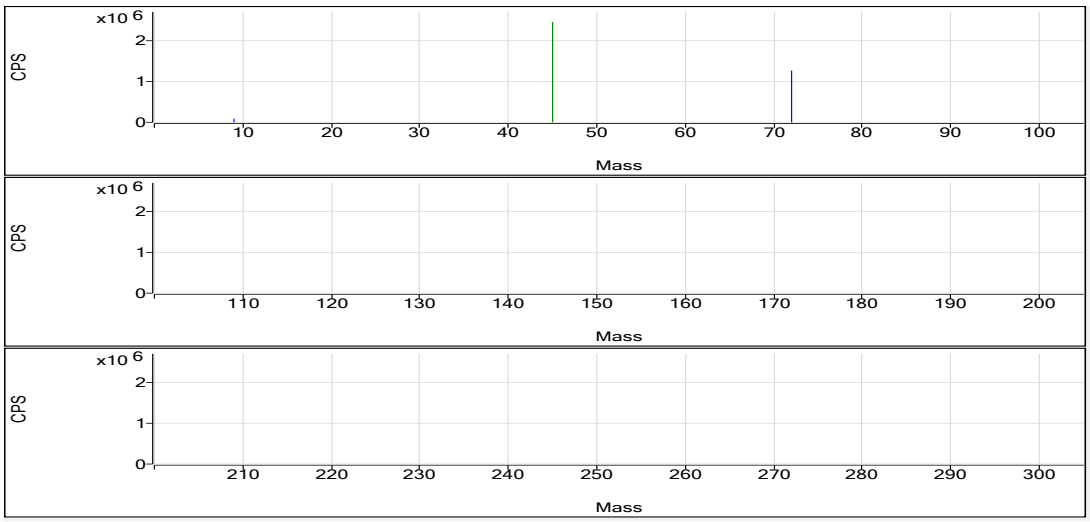
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.842	ppb	0.5	88520.92	0.0362	Pulse	0.5000	3
Se	78	115	H2	101.970	ppb	1.3	6685.12	0.0176	Pulse	1.5000	3
Na	23	45	He	7313.711	ppb	0.5	1294880.89	27.5572	Analog	0.1000	3
Mg	24	45	He	5012.954	ppb	0.9	430366.41	9.1590	Pulse	0.1000	3
Al	27	45	He	4905.831	ppb	0.6	137635.11	2.9291	Pulse	0.1000	3
K	39	45	He	5046.527	ppb	1.0	297483.86	6.3310	Pulse	0.1000	3
Ca	44	45	He	5523.369	ppb	0.5	18021.67	0.3835	Pulse	0.1000	3
Ti	47	45	He	502.228	ppb	4.1	12776.04	0.2718	Pulse	0.1000	3
V	51	45	He	498.985	ppb	1.4	523231.50	11.1357	Pulse	0.5000	3
Cr	52	45	He	499.842	ppb	1.3	682127.05	14.5173	Pulse	0.1000	3
Mn	55	45	He	506.974	ppb	1.2	309697.55	6.5911	Pulse	0.1000	3
Fe	57	45	He	4997.099	ppb	0.9	138404.81	2.9455	Pulse	0.1000	3
Co	59	45	He	483.165	ppb	1.1	1298657.77	27.6382	Pulse	0.1000	3
Ni	60	72	He	523.674	ppb	1.8	364342.72	4.3819	Pulse	0.1000	3
Cu	63	72	He	507.561	ppb	2.1	1043270.59	12.5477	Pulse	0.1000	3
Zn	66	115	He	512.561	ppb	1.0	122725.34	1.4761	Pulse	0.1000	3
As	75	115	He	514.431	ppb	0.6	86010.83	1.0345	Pulse	0.5000	3
Sr	88	115	He	52.117	ppb	0.6	38205.83	0.4595	Pulse	0.1000	3
Mo	98	115	He	50.019	ppb	1.4	92903.49	1.1174	Pulse	0.1000	3
Ag	107	115	He	51.529	ppb	1.2	201784.27	2.4270	Pulse	0.1000	3
Cd	111	115	He	51.551	ppb	1.5	22946.84	0.2760	Pulse	0.5000	3
Sn	120	115	He	101.925	ppb	0.6	133417.76	1.6047	Pulse	0.1000	3
Sb	121	115	He	97.251	ppb	0.6	122313.70	1.4711	Pulse	0.1000	3
Ba	137	115	He	509.710	ppb	0.4	207397.13	2.4944	Pulse	0.1000	3
Tl	205	159	He	101.481	ppb	0.6	981333.35	2.5624	Pulse	0.1000	3
Pb	208	159	He	50.586	ppb	0.7	654235.68	1.7083	Pulse	0.1000	3
U	238	209	He	49.753	ppb	0.8	751657.65	2.4956	Pulse	0.1000	3

ISTD Table:

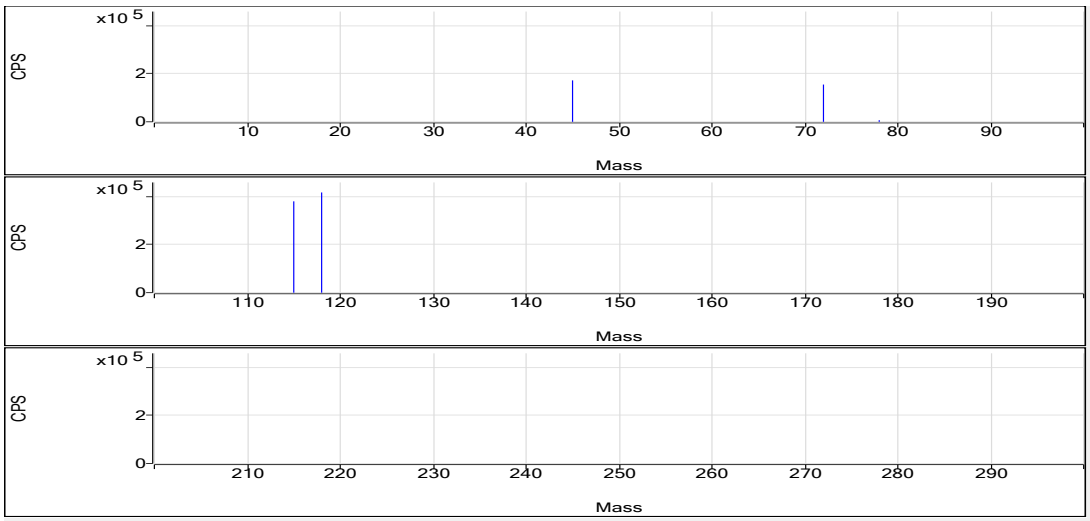
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2448382.20	0.3	104.3	Analog	0.1000	3
No Gas	Ge	72	1264059.30	0.5	105.3	Pulse	0.1000	3
H2	Sc	45	172800.26	1.9	99.4	Pulse	0.1000	3
H2	Ge	72	155384.05	1.0	103.9	Pulse	0.1000	3
H2	In	115	380900.25	0.7	104.1	Pulse	0.1000	3
He	Sc	45	46990.11	0.8	109.2	Pulse	0.1000	3
He	Ge	72	83161.51	1.5	106.4	Pulse	0.1000	3
He	In	115	83143.45	0.4	104.3	Pulse	0.1000	3
He	Tb	159	382983.47	0.7	104.1	Pulse	0.1000	3
He	Bi	209	301208.52	0.8	103.1	Pulse	0.1000	3

No Gas

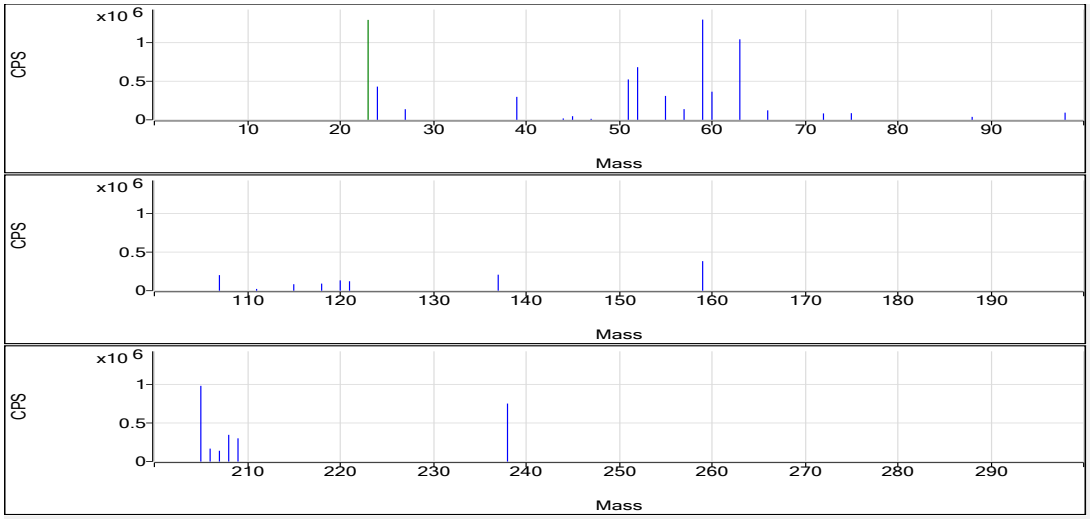


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.904	0.0362	88933.88	0.0007	1.705E-05
Be	9	1	No Gas	48.563	0.0359	87765.18	0.0007	1.705E-05
Be	9	1	No Gas	49.06	0.0363	88863.71	0.0007	1.705E-05
Se	78	2	H2	100.666	0.0173	6652.22	0.0002	6.062E-06
Se	78	2	H2	103.361	0.0178	6744.93	0.0002	6.062E-06
Se	78	2	H2	101.883	0.0175	6658.22	0.0002	6.062E-06
Na	23	3	He	7355.059	27.711	1291763.50	0.0037	0.3435
Na	23	3	He	7305.418	27.5263	1294198.65	0.0037	0.3435
Na	23	3	He	7280.654	27.4342	1298680.53	0.0037	0.3435
Mg	24	3	He	5062.468	9.2495	431168.08	0.0018	0.002943
Mg	24	3	He	4988.533	9.1144	428530.42	0.0018	0.002943
Mg	24	3	He	4987.861	9.1132	431400.74	0.0018	0.002943
Al	27	3	He	4900.381	2.9258	136387.52	0.0006	0.001008
Al	27	3	He	4938.367	2.9485	138627.53	0.0006	0.001008
Al	27	3	He	4878.744	2.9129	137890.27	0.0006	0.001008
K	39	3	He	5065.102	6.3528	296139.10	0.0012	0.4052
K	39	3	He	5085.285	6.3765	299802.55	0.0012	0.4052
K	39	3	He	4989.193	6.2637	296509.92	0.0012	0.4052
Ca	44	3	He	5493.404	0.3814	17781.40	0.0001	0.003486
Ca	44	3	He	5523.419	0.3835	18031.56	0.0001	0.003486
Ca	44	3	He	5553.284	0.3856	18252.05	0.0001	0.003486
Ti	47	3	He	479.391	0.2595	12095.40	0.0005	0
Ti	47	3	He	508.732	0.2754	12946.21	0.0005	0
Ti	47	3	He	518.561	0.2807	13286.50	0.0005	0
V	51	3	He	505.633	11.2837	525993.63	0.0223	0.03097
V	51	3	He	499.648	11.1505	524259.69	0.0223	0.03097
V	51	3	He	491.674	10.973	519441.19	0.0223	0.03097
Cr	52	3	He	504.679	14.6574	683260.69	0.029	0.03958
Cr	52	3	He	502.088	14.5823	685613.90	0.029	0.03958
Cr	52	3	He	492.758	14.3121	677506.55	0.029	0.03958
Mn	55	3	He	510.752	6.6402	309534.00	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	510.511	6.637	312050.89	0.013	0.003171
Mn	55	3	He	499.659	6.496	307507.75	0.013	0.003171
Fe	57	3	He	5043.471	2.9729	138581.10	0.0006	0.002014
Fe	57	3	He	4994.157	2.9438	138408.24	0.0006	0.002014
Fe	57	3	He	4953.67	2.92	138225.10	0.0006	0.002014
Co	59	3	He	486.75	27.8432	1297926.78	0.0572	0.004106
Co	59	3	He	485.586	27.7767	1305968.57	0.0572	0.004106
Co	59	3	He	477.159	27.2947	1292077.95	0.0572	0.004106
Ni	60	3	He	514.939	4.3089	363404.49	0.0084	0.003329
Ni	60	3	He	533.359	4.4629	365440.42	0.0084	0.003329
Ni	60	3	He	522.724	4.374	364183.24	0.0084	0.003329
Cu	63	3	He	497.941	12.31	1038206.94	0.0247	0.004989
Cu	63	3	He	519.211	12.8356	1051035.77	0.0247	0.004989
Cu	63	3	He	505.533	12.4976	1040569.05	0.0247	0.004989
Zn	66	3	He	509.778	1.4681	121733.06	0.0029	0.006147
Zn	66	3	He	509.521	1.4674	122550.42	0.0029	0.006147
Zn	66	3	He	518.384	1.4928	123892.55	0.0029	0.006147
As	75	3	He	514.608	1.0349	85808.98	0.002	0.0009198
As	75	3	He	511.144	1.0279	85847.11	0.002	0.0009198
As	75	3	He	517.542	1.0408	86376.41	0.002	0.0009198
Sr	88	3	He	52.378	0.4618	38292.68	0.0088	0.0005022
Sr	88	3	He	52.166	0.4599	38413.27	0.0088	0.0005022
Sr	88	3	He	51.809	0.4568	37911.55	0.0088	0.0005022
Mo	98	3	He	50.797	1.1348	94095.55	0.0223	0.0006689
Mo	98	3	He	49.493	1.1057	92342.11	0.0223	0.0006689
Mo	98	3	He	49.767	1.1118	92272.82	0.0223	0.0006689
Ag	107	3	He	52.195	2.4583	203840.54	0.0471	0.0006687
Ag	107	3	He	51.392	2.4205	202156.40	0.0471	0.0006687
Ag	107	3	He	50.999	2.402	199355.86	0.0471	0.0006687
Cd	111	3	He	51.036	0.2732	22656.33	0.0054	1.676E-05
Cd	111	3	He	51.19	0.2741	22888.76	0.0054	1.676E-05
Cd	111	3	He	52.428	0.2807	23295.42	0.0054	1.676E-05
Sn	120	3	He	101.236	1.5939	132165.29	0.0156	0.01794
Sn	120	3	He	102.312	1.6107	134518.45	0.0156	0.01794
Sn	120	3	He	102.229	1.6094	133569.55	0.0156	0.01794
Sb	121	3	He	97.862	1.4804	122750.20	0.0151	4.19E-05
Sb	121	3	He	96.826	1.4647	122328.21	0.0151	4.19E-05
Sb	121	3	He	97.066	1.4683	121862.69	0.0151	4.19E-05
Ba	137	3	He	507.6	2.4841	205978.24	0.0049	0.0002094
Ba	137	3	He	511.565	2.5035	209085.78	0.0049	0.0002094
Ba	137	3	He	509.967	2.4957	207127.36	0.0049	0.0002094
Tl	205	3	He	100.934	2.5486	974478.58	0.0252	0.0007688
Tl	205	3	He	101.392	2.5601	987578.27	0.0252	0.0007688
Tl	205	3	He	102.117	2.5784	981943.19	0.0252	0.0007688
Pb	208	3	He	50.384	1.7015	345064.02	0.0337	0.001742
Pb	208	3	He	50.39	1.7017	348686.01	0.0337	0.001742
Pb	208	3	He	50.984	1.7217	345577.18	0.0337	0.001742
U	238	3	He	49.782	2.497	752437.18	0.0502	0.0004339
U	238	3	He	49.337	2.4747	751256.24	0.0502	0.0004339
U	238	3	He	50.141	2.515	751279.52	0.0502	0.0004339
Sc	45	1	No Gas			2456725.12		
Sc	45	1	No Gas			2441448.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2446972.93		
Ge	72	1	No Gas			1269317.48		
Ge	72	1	No Gas			1266232.09		
Ge	72	1	No Gas			1256628.34		
Sc	45	2	H2			171390.19		
Sc	45	2	H2			176467.75		
Sc	45	2	H2			170542.85		
Ge	72	2	H2			154427.61		
Ge	72	2	H2			157225.90		
Ge	72	2	H2			154498.64		
In	115	2	H2			383914.06		
In	115	2	H2			379115.85		
In	115	2	H2			379670.85		
Sc	45	3	He			46615.50		
Sc	45	3	He			47016.77		
Sc	45	3	He			47338.06		
Ge	72	3	He			84338.60		
Ge	72	3	He			81884.37		
Ge	72	3	He			83261.57		
In	115	3	He			83631.52		
In	115	3	He			84245.26		
In	115	3	He			83701.46		
Tb	159	3	He			382363.51		
Tb	159	3	He			385754.06		
Tb	159	3	He			380832.85		
Bi	209	3	He			301336.36		
Bi	209	3	He			303571.58		
Bi	209	3	He			298717.61		

Quantitation Report

Data File Name	037SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:21:05 AM
Sample Name	410-137404-A-1-E SD @5
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

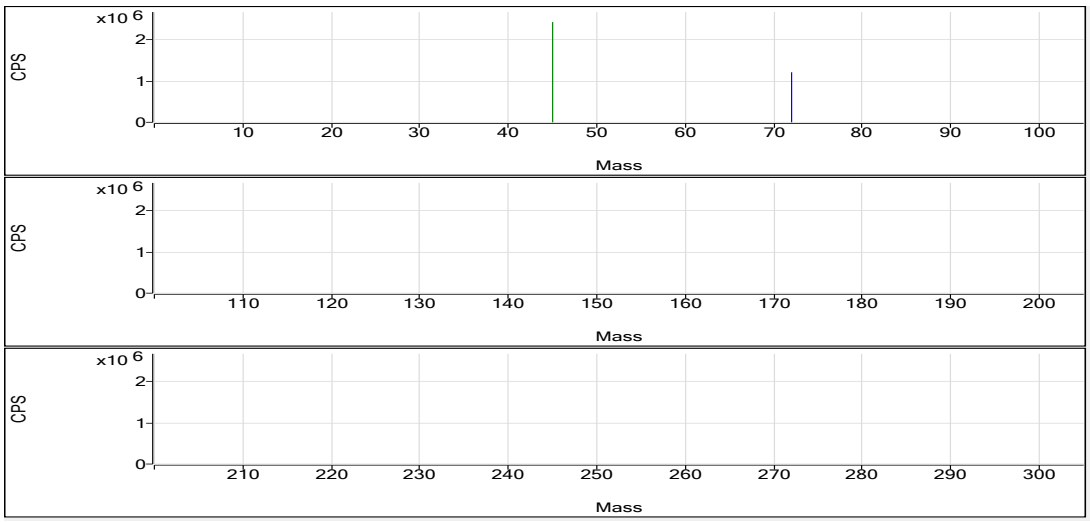
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.030	ppb	11.5	94.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.094	ppb	89.0	8.45	0.0000	Pulse	1.5000	3
Na	23	45	He	474.447	ppb	2.0	97581.26	2.1089	Pulse	0.1000	3
Mg	24	45	He	5.612	ppb	16.5	610.04	0.0132	Pulse	0.1000	3
Al	27	45	He	2.539	ppb	42.1	116.67	0.0025	Pulse	0.1000	3
K	39	45	He	-3.165	ppb	N/A	18579.06	0.4015	Pulse	0.1000	3
Ca	44	45	He	113.887	ppb	21.0	523.37	0.0113	Pulse	0.1000	3
Ti	47	45	He	0.531	ppb	41.9	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	-0.057	ppb	N/A	1375.41	0.0297	Pulse	0.5000	3
Cr	52	45	He	0.124	ppb	44.0	1996.88	0.0432	Pulse	0.1000	3
Mn	55	45	He	2.163	ppb	10.4	1446.80	0.0313	Pulse	0.1000	3
Fe	57	45	He	0.976	ppb	107.9	120.00	0.0026	Pulse	0.1000	3
Co	59	45	He	0.087	ppb	35.8	420.02	0.0091	Pulse	0.1000	3
Ni	60	72	He	0.100	ppb	69.5	333.35	0.0042	Pulse	0.1000	3
Cu	63	72	He	0.205	ppb	18.8	803.38	0.0100	Pulse	0.1000	3
Zn	66	115	He	0.858	ppb	33.9	700.04	0.0086	Pulse	0.1000	3
As	75	115	He	0.098	ppb	29.7	90.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.232	ppb	8.7	206.68	0.0025	Pulse	0.1000	3
Mo	98	115	He	0.108	ppb	33.9	250.01	0.0031	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	60.8	70.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	92.3	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.048	ppb	N/A	1396.79	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.266	ppb	3.7	330.02	0.0041	Pulse	0.1000	3
Ba	137	115	He	0.058	ppb	115.3	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.193	ppb	12.8	2130.26	0.0057	Pulse	0.1000	3
Pb	208	159	He	0.044	ppb	23.9	1220.07	0.0032	Pulse	0.1000	3
U	238	209	He	0.064	ppb	17.4	1080.09	0.0037	Pulse	0.1000	3

ISTD Table:

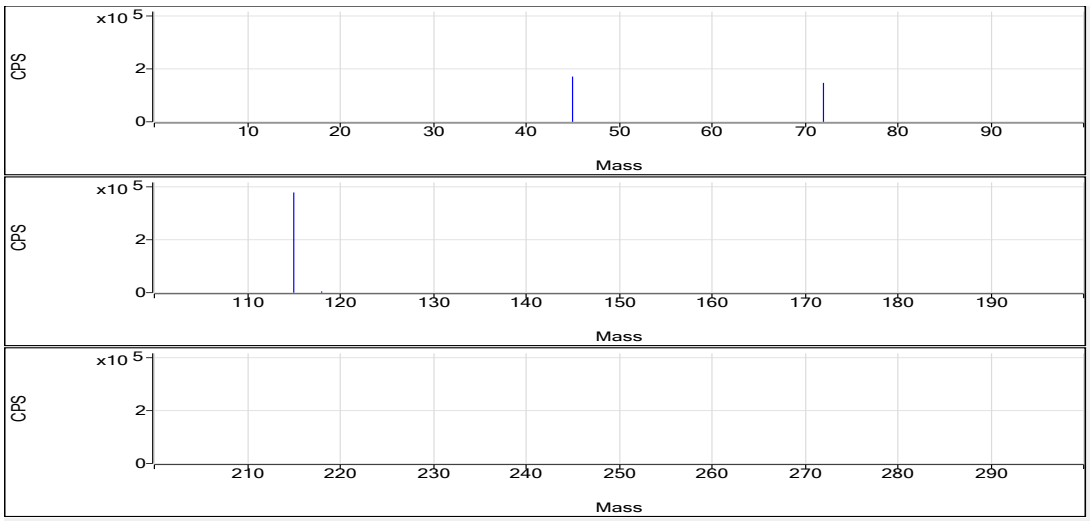
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2429332.00	0.3	103.5	Analog	0.1000	3
No Gas	Ge	72	1212449.15	0.7	101.0	Pulse	0.1000	3
H2	Sc	45	171386.64	0.9	98.6	Pulse	0.1000	3
H2	Ge	72	147505.57	0.6	98.6	Pulse	0.1000	3
H2	In	115	379645.37	0.5	103.7	Pulse	0.1000	3
He	Sc	45	46277.69	1.2	107.5	Pulse	0.1000	3
He	Ge	72	79983.65	0.6	102.3	Pulse	0.1000	3
He	In	115	81237.07	1.9	101.9	Pulse	0.1000	3
He	Tb	159	376860.02	0.4	102.4	Pulse	0.1000	3
He	Bi	209	294387.99	0.2	100.8	Pulse	0.1000	3

No Gas

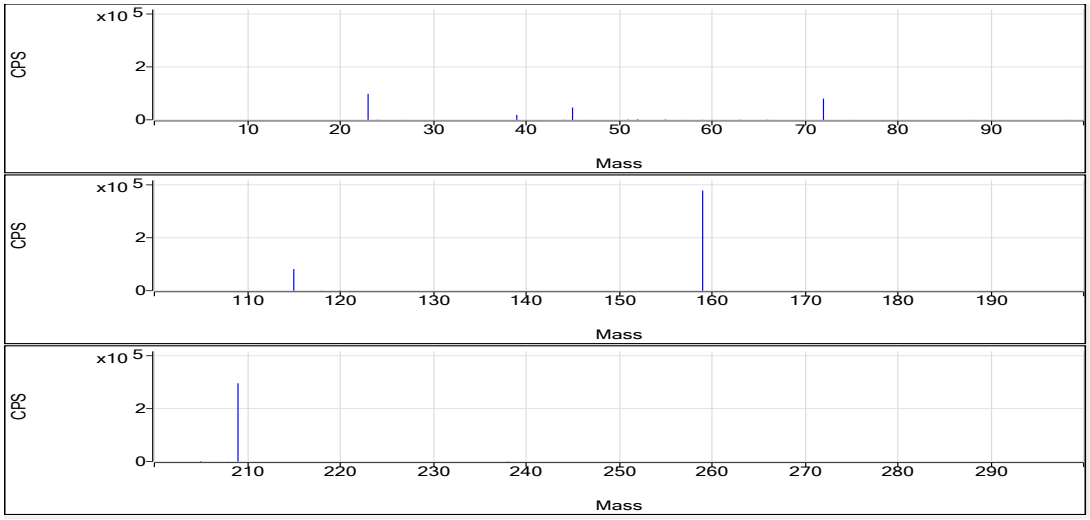


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.028	0	92.00	0.0007	1.705E-05
Be	9	1	No Gas	0.027	0	90.00	0.0007	1.705E-05
Be	9	1	No Gas	0.034	0	102.00	0.0007	1.705E-05
Se	78	2	H2	0.191	0	14.67	0.0002	6.062E-06
Se	78	2	H2	0.057	0	6.00	0.0002	6.062E-06
Se	78	2	H2	0.036	0	4.67	0.0002	6.062E-06
Na	23	3	He	482.045	2.1371	98336.52	0.0037	0.3435
Na	23	3	He	477.176	2.119	97248.99	0.0037	0.3435
Na	23	3	He	464.119	2.0704	97158.27	0.0037	0.3435
Mg	24	3	He	5.409	0.0128	590.04	0.0018	0.002943
Mg	24	3	He	6.621	0.015	690.04	0.0018	0.002943
Mg	24	3	He	4.806	0.0117	550.03	0.0018	0.002943
Al	27	3	He	3.774	0.0033	150.01	0.0006	0.001008
Al	27	3	He	1.962	0.0022	100.00	0.0006	0.001008
Al	27	3	He	1.882	0.0021	100.00	0.0006	0.001008
K	39	3	He	5.67	0.4119	18952.87	0.0012	0.4052
K	39	3	He	-4.375	0.4001	18362.19	0.0012	0.4052
K	39	3	He	-10.789	0.3926	18422.13	0.0012	0.4052
Ca	44	3	He	116.751	0.0115	530.03	0.0001	0.003486
Ca	44	3	He	136.194	0.0129	590.04	0.0001	0.003486
Ca	44	3	He	88.715	0.0096	450.03	0.0001	0.003486
Ti	47	3	He	0.402	0.0002	10.00	0.0005	0
Ti	47	3	He	0.403	0.0002	10.00	0.0005	0
Ti	47	3	He	0.787	0.0004	20.00	0.0005	0
V	51	3	He	-0.12	0.0283	1302.07	0.0223	0.03097
V	51	3	He	-0.091	0.0289	1328.07	0.0223	0.03097
V	51	3	He	0.041	0.0319	1496.09	0.0223	0.03097
Cr	52	3	He	0.157	0.0441	2030.23	0.029	0.03958
Cr	52	3	He	0.153	0.044	2020.20	0.029	0.03958
Cr	52	3	He	0.061	0.0413	1940.21	0.029	0.03958
Mn	55	3	He	2.365	0.0339	1560.14	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2.204	0.0318	1460.14	0.013	0.003171
Mn	55	3	He	1.921	0.0281	1320.12	0.013	0.003171
Fe	57	3	He	-0.098	0.002	90.00	0.0006	0.002014
Fe	57	3	He	1.02	0.0026	120.00	0.0006	0.002014
Fe	57	3	He	2.008	0.0032	150.01	0.0006	0.002014
Co	59	3	He	0.107	0.0102	470.03	0.0572	0.004106
Co	59	3	He	0.103	0.01	460.02	0.0572	0.004106
Co	59	3	He	0.051	0.007	330.02	0.0572	0.004106
Ni	60	3	He	0.128	0.0044	350.01	0.0084	0.003329
Ni	60	3	He	0.021	0.0035	280.01	0.0084	0.003329
Ni	60	3	He	0.151	0.0046	370.02	0.0084	0.003329
Cu	63	3	He	0.18	0.0094	750.04	0.0247	0.004989
Cu	63	3	He	0.249	0.0111	890.06	0.0247	0.004989
Cu	63	3	He	0.185	0.0096	770.05	0.0247	0.004989
Zn	66	3	He	1.058	0.0092	760.05	0.0029	0.006147
Zn	66	3	He	0.991	0.009	730.04	0.0029	0.006147
Zn	66	3	He	0.525	0.0077	610.03	0.0029	0.006147
As	75	3	He	0.071	0.0011	88.00	0.002	0.0009198
As	75	3	He	0.094	0.0011	90.00	0.002	0.0009198
As	75	3	He	0.129	0.0012	94.00	0.002	0.0009198
Sr	88	3	He	0.245	0.0027	220.01	0.0088	0.0005022
Sr	88	3	He	0.209	0.0023	190.01	0.0088	0.0005022
Sr	88	3	He	0.242	0.0026	210.01	0.0088	0.0005022
Mo	98	3	He	0.067	0.0022	180.01	0.0223	0.0006689
Mo	98	3	He	0.119	0.0033	270.01	0.0223	0.0006689
Mo	98	3	He	0.139	0.0038	300.01	0.0223	0.0006689
Ag	107	3	He	0.004	0.0008	70.00	0.0471	0.0006687
Ag	107	3	He	0.007	0.001	80.00	0.0471	0.0006687
Ag	107	3	He	0.002	0.0008	60.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0.0001	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.004	0.0179	1480.13	0.0156	0.01794
Sn	120	3	He	-0.101	0.0164	1330.11	0.0156	0.01794
Sn	120	3	He	-0.041	0.0173	1380.12	0.0156	0.01794
Sb	121	3	He	0.277	0.0042	350.02	0.0151	4.19E-05
Sb	121	3	He	0.258	0.0039	320.02	0.0151	4.19E-05
Sb	121	3	He	0.263	0.004	320.02	0.0151	4.19E-05
Ba	137	3	He	0.031	0.0004	30.00	0.0049	0.0002094
Ba	137	3	He	0.133	0.0009	70.00	0.0049	0.0002094
Ba	137	3	He	0.008	0.0003	20.00	0.0049	0.0002094
Tl	205	3	He	0.221	0.0063	2400.33	0.0252	0.0007688
Tl	205	3	He	0.173	0.0051	1930.20	0.0252	0.0007688
Tl	205	3	He	0.186	0.0055	2060.24	0.0252	0.0007688
Pb	208	3	He	0.032	0.0028	570.03	0.0337	0.001742
Pb	208	3	He	0.049	0.0034	630.04	0.0337	0.001742
Pb	208	3	He	0.052	0.0035	820.06	0.0337	0.001742
U	238	3	He	0.061	0.0035	1020.08	0.0502	0.0004339
U	238	3	He	0.056	0.0032	950.07	0.0502	0.0004339
U	238	3	He	0.077	0.0043	1270.11	0.0502	0.0004339
Sc	45	1	No Gas			2425718.25		
Sc	45	1	No Gas			2424525.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2437752.62		
Ge	72	1	No Gas			1204849.67		
Ge	72	1	No Gas			1210369.90		
Ge	72	1	No Gas			1222127.87		
Sc	45	2	H2			170752.56		
Sc	45	2	H2			170296.89		
Sc	45	2	H2			173110.47		
Ge	72	2	H2			146860.79		
Ge	72	2	H2			147129.58		
Ge	72	2	H2			148526.35		
In	115	2	H2			377680.89		
In	115	2	H2			380092.53		
In	115	2	H2			381162.69		
Sc	45	3	He			46013.24		
Sc	45	3	He			45893.38		
Sc	45	3	He			46926.45		
Ge	72	3	He			79511.44		
Ge	72	3	He			79912.64		
Ge	72	3	He			80526.88		
In	115	3	He			82776.72		
In	115	3	He			81227.08		
In	115	3	He			79728.40		
Tb	159	3	He			378036.99		
Tb	159	3	He			375231.60		
Tb	159	3	He			377311.48		
Bi	209	3	He			293705.91		
Bi	209	3	He			294328.69		
Bi	209	3	He			295129.37		

Quantitation Report

Data File Name	038SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:23:07 AM
Sample Name	410-137404-A-1-F DU
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

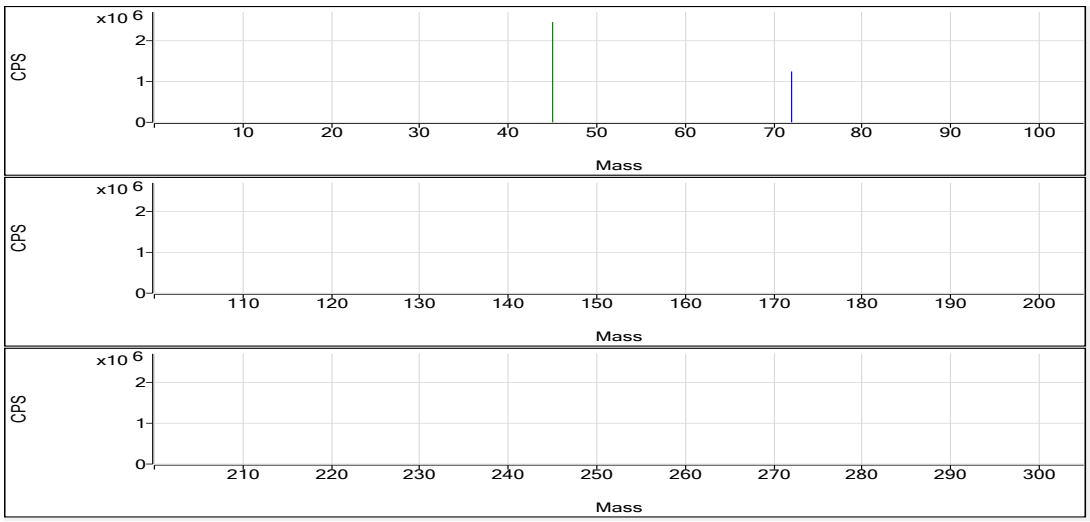
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.016	ppb	50.3	71.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.045	ppb	45.9	5.33	0.0000	Pulse	1.5000	3
Na	23	45	He	2422.051	ppb	2.1	441936.41	9.3557	Pulse	0.1000	3
Mg	24	45	He	19.055	ppb	4.2	1783.50	0.0377	Pulse	0.1000	3
Al	27	45	He	2.100	ppb	60.1	106.67	0.0023	Pulse	0.1000	3
K	39	45	He	25.119	ppb	40.7	20535.09	0.4347	Pulse	0.1000	3
Ca	44	45	He	463.400	ppb	9.9	1670.16	0.0354	Pulse	0.1000	3
Ti	47	45	He	0.259	ppb	86.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.146	ppb	N/A	1309.40	0.0277	Pulse	0.5000	3
Cr	52	45	He	0.058	ppb	118.7	1950.20	0.0413	Pulse	0.1000	3
Mn	55	45	He	0.093	ppb	63.9	206.68	0.0044	Pulse	0.1000	3
Fe	57	45	He	1.497	ppb	53.2	136.67	0.0029	Pulse	0.1000	3
Co	59	45	He	0.005	ppb	318.5	206.68	0.0044	Pulse	0.1000	3
Ni	60	72	He	-0.113	ppb	N/A	196.68	0.0024	Pulse	0.1000	3
Cu	63	72	He	0.067	ppb	54.0	546.70	0.0066	Pulse	0.1000	3
Zn	66	115	He	-0.428	ppb	N/A	410.02	0.0049	Pulse	0.1000	3
As	75	115	He	-0.032	ppb	N/A	71.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.829	ppb	8.5	650.04	0.0078	Pulse	0.1000	3
Mo	98	115	He	0.049	ppb	60.3	146.67	0.0018	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	271.9	76.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	333.2	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.140	ppb	N/A	1313.45	0.0158	Pulse	0.1000	3
Sb	121	115	He	0.050	ppb	39.7	66.67	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.170	ppb	46.1	86.67	0.0010	Pulse	0.1000	3
Tl	205	159	He	0.037	ppb	22.2	656.71	0.0017	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	27.4	773.38	0.0020	Pulse	0.1000	3
U	238	209	He	0.008	ppb	17.3	256.68	0.0008	Pulse	0.1000	3

ISTD Table:

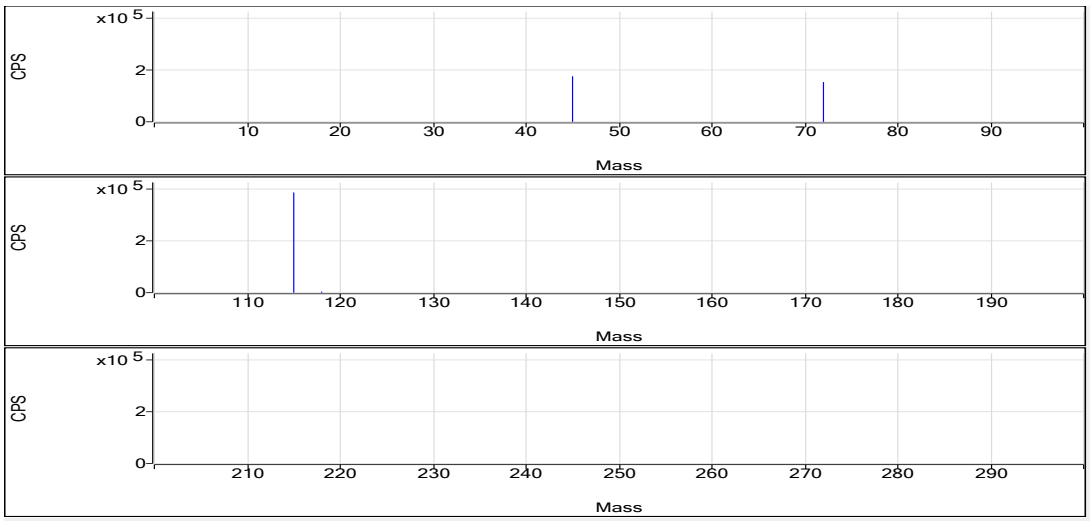
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2449834.65	0.7	104.4	Analog	0.1000	3
No Gas	Ge	72	1242650.32	0.2	103.6	Pulse	0.1000	3
H2	Sc	45	175710.21	0.9	101.1	Pulse	0.1000	3
H2	Ge	72	153351.24	1.0	102.5	Pulse	0.1000	3
H2	In	115	386912.23	0.7	105.7	Pulse	0.1000	3
He	Sc	45	47243.97	1.2	109.8	Pulse	0.1000	3
He	Ge	72	82326.87	1.3	105.3	Pulse	0.1000	3
He	In	115	83332.96	0.4	104.5	Pulse	0.1000	3
He	Tb	159	384807.21	0.4	104.6	Pulse	0.1000	3
He	Bi	209	303123.14	0.8	103.8	Pulse	0.1000	3

No Gas

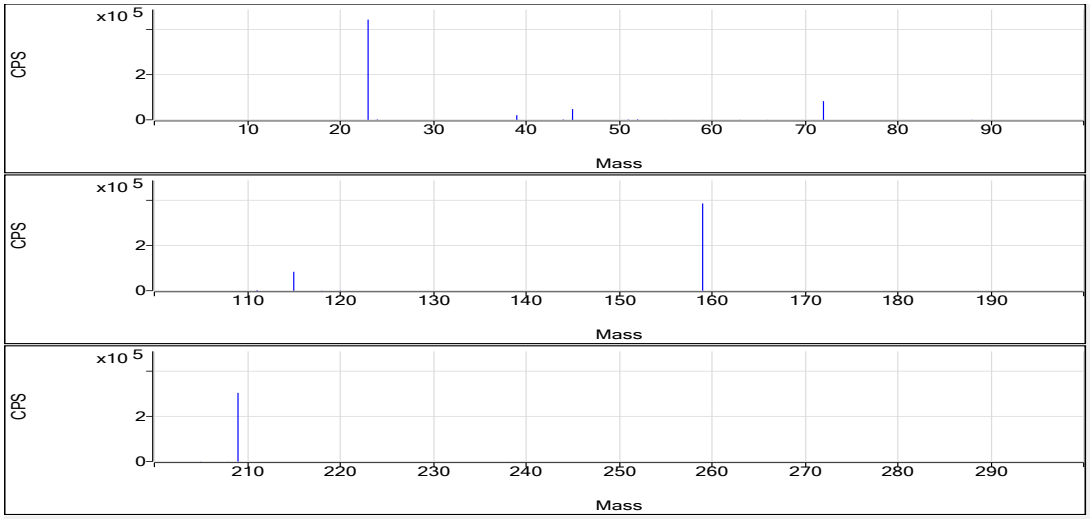


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	54.00	0.0007	1.705E-05
Be	9	1	No Gas	0.02	0	78.00	0.0007	1.705E-05
Be	9	1	No Gas	0.022	0	82.00	0.0007	1.705E-05
Se	78	2	H2	0.045	0	5.33	0.0002	6.062E-06
Se	78	2	H2	0.025	0	4.00	0.0002	6.062E-06
Se	78	2	H2	0.066	0	6.67	0.0002	6.062E-06
Na	23	3	He	2366.696	9.1498	437259.29	0.0037	0.3435
Na	23	3	He	2463.429	9.5097	444056.83	0.0037	0.3435
Na	23	3	He	2436.028	9.4077	444493.12	0.0037	0.3435
Mg	24	3	He	19.815	0.0391	1870.19	0.0018	0.002943
Mg	24	3	He	19.144	0.0379	1770.16	0.0018	0.002943
Mg	24	3	He	18.206	0.0362	1710.16	0.0018	0.002943
Al	27	3	He	0.765	0.0015	70.00	0.0006	0.001008
Al	27	3	He	2.259	0.0024	110.01	0.0006	0.001008
Al	27	3	He	3.276	0.003	140.01	0.0006	0.001008
K	39	3	He	13.334	0.4209	20114.43	0.0012	0.4052
K	39	3	He	30.502	0.4411	20595.32	0.0012	0.4052
K	39	3	He	31.521	0.4423	20895.53	0.0012	0.4052
Ca	44	3	He	411.652	0.0318	1520.13	0.0001	0.003486
Ca	44	3	He	478.519	0.0364	1700.16	0.0001	0.003486
Ca	44	3	He	500.027	0.0379	1790.19	0.0001	0.003486
Ti	47	3	He	0.387	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.391	0.0002	10.00	0.0005	0
V	51	3	He	-0.184	0.0269	1284.07	0.0223	0.03097
V	51	3	He	-0.129	0.0281	1312.07	0.0223	0.03097
V	51	3	He	-0.125	0.0282	1332.07	0.0223	0.03097
Cr	52	3	He	0.049	0.041	1960.20	0.029	0.03958
Cr	52	3	He	-0.006	0.0394	1840.17	0.029	0.03958
Cr	52	3	He	0.131	0.0434	2050.23	0.029	0.03958
Mn	55	3	He	0.094	0.0044	210.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.152	0.0051	240.01	0.013	0.003171
Mn	55	3	He	0.033	0.0036	170.01	0.013	0.003171
Fe	57	3	He	1.199	0.0027	130.01	0.0006	0.002014
Fe	57	3	He	2.398	0.0034	160.01	0.0006	0.002014
Fe	57	3	He	0.893	0.0025	120.00	0.0006	0.002014
Co	59	3	He	0.016	0.005	240.01	0.0572	0.004106
Co	59	3	He	-0.012	0.0034	160.01	0.0572	0.004106
Co	59	3	He	0.01	0.0047	220.01	0.0572	0.004106
Ni	60	3	He	-0.065	0.0028	230.01	0.0084	0.003329
Ni	60	3	He	-0.125	0.0023	190.01	0.0084	0.003329
Ni	60	3	He	-0.148	0.0021	170.01	0.0084	0.003329
Cu	63	3	He	0.033	0.0058	480.02	0.0247	0.004989
Cu	63	3	He	0.105	0.0076	630.04	0.0247	0.004989
Cu	63	3	He	0.062	0.0065	530.03	0.0247	0.004989
Zn	66	3	He	-0.263	0.0054	450.02	0.0029	0.006147
Zn	66	3	He	-0.475	0.0048	400.02	0.0029	0.006147
Zn	66	3	He	-0.547	0.0046	380.02	0.0029	0.006147
As	75	3	He	-0.088	0.0007	62.00	0.002	0.0009198
As	75	3	He	-0.017	0.0009	74.00	0.002	0.0009198
As	75	3	He	0.01	0.0009	78.00	0.002	0.0009198
Sr	88	3	He	0.76	0.0072	600.03	0.0088	0.0005022
Sr	88	3	He	0.826	0.0078	650.04	0.0088	0.0005022
Sr	88	3	He	0.901	0.0084	700.04	0.0088	0.0005022
Mo	98	3	He	0.077	0.0024	200.01	0.0223	0.0006689
Mo	98	3	He	0.05	0.0018	150.01	0.0223	0.0006689
Mo	98	3	He	0.019	0.0011	90.00	0.0223	0.0006689
Ag	107	3	He	0.021	0.0017	140.01	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.236	0.0143	1190.08	0.0156	0.01794
Sn	120	3	He	-0.1	0.0164	1370.13	0.0156	0.01794
Sn	120	3	He	-0.084	0.0166	1380.13	0.0156	0.01794
Sb	121	3	He	0.029	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.068	0.0011	90.00	0.0151	4.19E-05
Sb	121	3	He	0.053	0.0008	70.00	0.0151	4.19E-05
Ba	137	3	He	0.202	0.0012	100.00	0.0049	0.0002094
Ba	137	3	He	0.226	0.0013	110.00	0.0049	0.0002094
Ba	137	3	He	0.08	0.0006	50.00	0.0049	0.0002094
Tl	205	3	He	0.028	0.0015	570.03	0.0252	0.0007688
Tl	205	3	He	0.045	0.0019	730.05	0.0252	0.0007688
Tl	205	3	He	0.038	0.0017	670.04	0.0252	0.0007688
Pb	208	3	He	0.009	0.0021	430.03	0.0337	0.001742
Pb	208	3	He	0.005	0.0019	350.02	0.0337	0.001742
Pb	208	3	He	0.009	0.002	450.03	0.0337	0.001742
U	238	3	He	0.009	0.0009	270.01	0.0502	0.0004339
U	238	3	He	0.007	0.0008	230.01	0.0502	0.0004339
U	238	3	He	0.009	0.0009	270.01	0.0502	0.0004339
Sc	45	1	No Gas			2433732.46		
Sc	45	1	No Gas			2469680.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2446091.21		
Ge	72	1	No Gas			1241031.93		
Ge	72	1	No Gas			1245563.65		
Ge	72	1	No Gas			1241355.37		
Sc	45	2	H2			175436.19		
Sc	45	2	H2			177452.67		
Sc	45	2	H2			174241.77		
Ge	72	2	H2			151665.60		
Ge	72	2	H2			154619.07		
Ge	72	2	H2			153769.04		
In	115	2	H2			387880.50		
In	115	2	H2			389164.60		
In	115	2	H2			383691.60		
Sc	45	3	He			47789.15		
Sc	45	3	He			46695.17		
Sc	45	3	He			47247.60		
Ge	72	3	He			82688.57		
Ge	72	3	He			83141.77		
Ge	72	3	He			81150.26		
In	115	3	He			83439.92		
In	115	3	He			83591.26		
In	115	3	He			82987.12		
Tb	159	3	He			383617.53		
Tb	159	3	He			384368.24		
Tb	159	3	He			386435.85		
Bi	209	3	He			302548.98		
Bi	209	3	He			300985.72		
Bi	209	3	He			305834.72		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:25:09 AM
Sample Name	410-137404-A-1-G MS @100
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

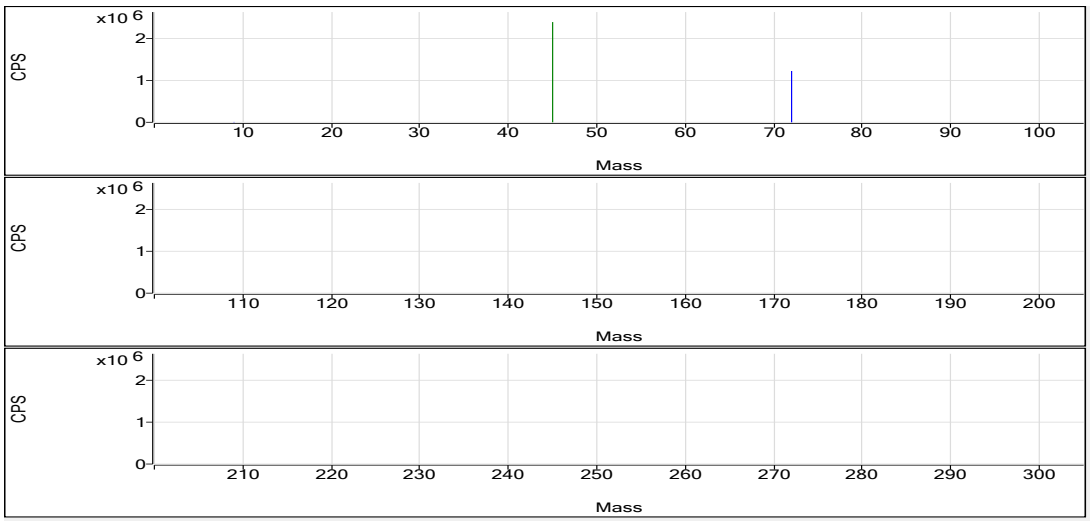
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	4.741	ppb	1.8	8475.10	0.0035	Pulse	0.5000	3
Se	78	115	H2	0.913	ppb	2.9	61.78	0.0002	Pulse	1.5000	3
Na	23	45	He	64.596	ppb	1.3	27422.72	0.5838	Pulse	0.1000	3
Mg	24	45	He	49.448	ppb	5.4	4377.47	0.0933	Pulse	0.1000	3
Al	27	45	He	10.583	ppb	17.5	343.35	0.0073	Pulse	0.1000	3
K	39	45	He	45.728	ppb	20.0	21549.74	0.4589	Pulse	0.1000	3
Ca	44	45	He	48.502	ppb	23.2	320.01	0.0068	Pulse	0.1000	3
Ti	47	45	He	10.507	ppb	18.0	266.68	0.0057	Pulse	0.1000	3
V	51	45	He	4.706	ppb	4.6	6370.76	0.1357	Pulse	0.5000	3
Cr	52	45	He	4.802	ppb	3.2	8389.39	0.1787	Pulse	0.1000	3
Mn	55	45	He	4.900	ppb	7.4	3140.46	0.0668	Pulse	0.1000	3
Fe	57	45	He	6.119	ppb	30.1	263.34	0.0056	Pulse	0.1000	3
Co	59	45	He	4.709	ppb	4.2	12836.15	0.2734	Pulse	0.1000	3
Ni	60	72	He	5.041	ppb	7.0	3720.61	0.0455	Pulse	0.1000	3
Cu	63	72	He	4.905	ppb	2.7	10327.42	0.1262	Pulse	0.1000	3
Zn	66	115	He	5.221	ppb	9.3	1740.16	0.0211	Pulse	0.1000	3
As	75	115	He	5.129	ppb	4.6	924.70	0.0112	Pulse	0.5000	3
Sr	88	115	He	5.045	ppb	6.2	3700.60	0.0449	Pulse	0.1000	3
Mo	98	115	He	9.725	ppb	0.4	17938.69	0.2178	Pulse	0.1000	3
Ag	107	115	He	4.097	ppb	3.0	15942.94	0.1936	Pulse	0.1000	3
Cd	111	115	He	1.042	ppb	3.4	460.68	0.0056	Pulse	0.5000	3
Sn	120	115	He	48.271	ppb	0.3	63372.07	0.7694	Pulse	0.1000	3
Sb	121	115	He	4.801	ppb	4.5	5984.87	0.0727	Pulse	0.1000	3
Ba	137	115	He	98.561	ppb	2.1	39741.79	0.4825	Pulse	0.1000	3
Tl	205	159	He	4.832	ppb	1.8	46754.11	0.1227	Pulse	0.1000	3
Pb	208	159	He	4.819	ppb	0.3	62587.77	0.1643	Pulse	0.1000	3
U	238	209	He	0.004	ppb	75.1	183.34	0.0006	Pulse	0.1000	3

ISTD Table:

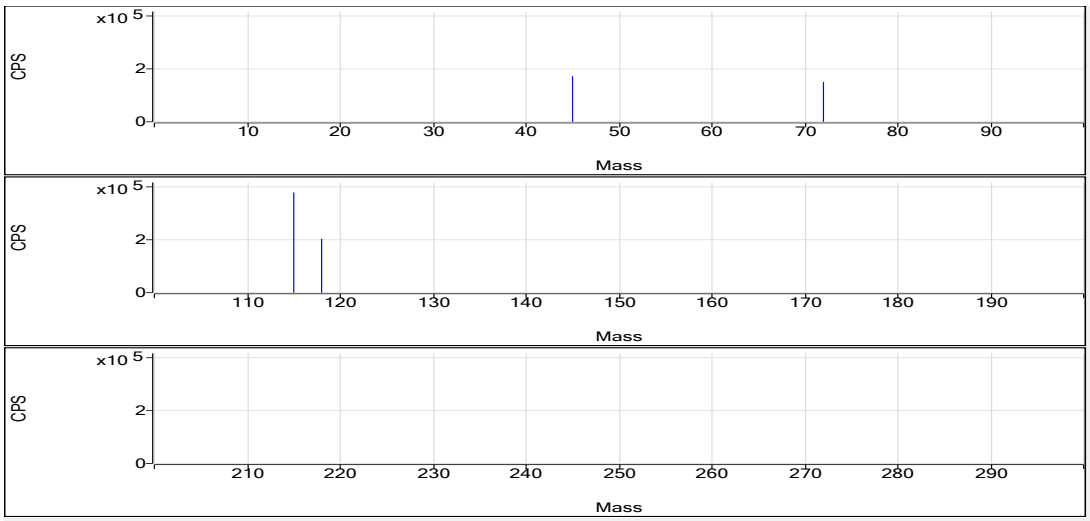
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2404757.36	1.8	102.4	Analog	0.1000	3
No Gas	Ge	72	1230741.05	0.6	102.6	Pulse	0.1000	3
H2	Sc	45	172466.71	1.8	99.3	Pulse	0.1000	3
H2	Ge	72	151095.64	1.3	101.0	Pulse	0.1000	3
H2	In	115	378775.05	0.1	103.5	Pulse	0.1000	3
He	Sc	45	46970.30	2.0	109.2	Pulse	0.1000	3
He	Ge	72	81830.85	2.5	104.7	Pulse	0.1000	3
He	In	115	82367.77	0.7	103.3	Pulse	0.1000	3
He	Tb	159	380896.60	0.2	103.5	Pulse	0.1000	3
He	Bi	209	298864.80	1.7	102.3	Pulse	0.1000	3

No Gas

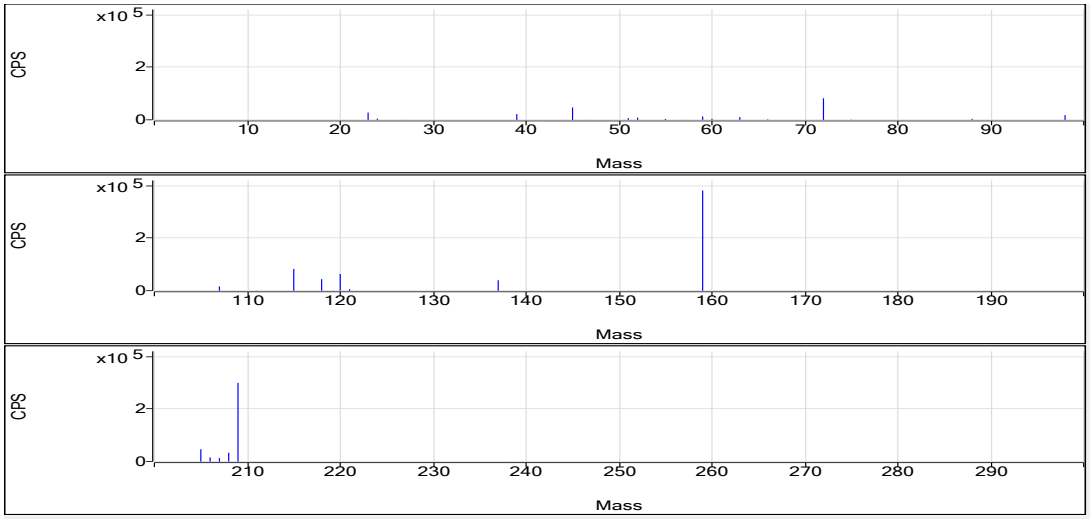


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	4.838	0.0036	8500.46	0.0007	1.705E-05
Be	9	1	No Gas	4.691	0.0035	8378.37	0.0007	1.705E-05
Be	9	1	No Gas	4.694	0.0035	8546.47	0.0007	1.705E-05
Se	78	2	H2	0.915	0.0002	62.00	0.0002	6.062E-06
Se	78	2	H2	0.884	0.0002	60.00	0.0002	6.062E-06
Se	78	2	H2	0.938	0.0002	63.33	0.0002	6.062E-06
Na	23	3	He	63.909	0.5813	27866.93	0.0037	0.3435
Na	23	3	He	65.547	0.5874	27546.34	0.0037	0.3435
Na	23	3	He	64.331	0.5829	26854.88	0.0037	0.3435
Mg	24	3	He	47.049	0.0889	4260.76	0.0018	0.002943
Mg	24	3	He	48.949	0.0923	4330.78	0.0018	0.002943
Mg	24	3	He	52.348	0.0986	4540.88	0.0018	0.002943
Al	27	3	He	8.796	0.0063	300.01	0.0006	0.001008
Al	27	3	He	10.459	0.0073	340.02	0.0006	0.001008
Al	27	3	He	12.494	0.0085	390.02	0.0006	0.001008
K	39	3	He	36.223	0.4478	21466.35	0.0012	0.4052
K	39	3	He	46.522	0.4599	21566.40	0.0012	0.4052
K	39	3	He	54.439	0.4692	21616.48	0.0012	0.4052
Ca	44	3	He	37.254	0.006	290.01	0.0001	0.003486
Ca	44	3	He	48.511	0.0068	320.02	0.0001	0.003486
Ca	44	3	He	59.742	0.0076	350.01	0.0001	0.003486
Ti	47	3	He	8.479	0.0046	220.01	0.0005	0
Ti	47	3	He	12.213	0.0066	310.01	0.0005	0
Ti	47	3	He	10.827	0.0059	270.01	0.0005	0
V	51	3	He	4.533	0.1319	6321.40	0.0223	0.03097
V	51	3	He	4.636	0.1342	6291.39	0.0223	0.03097
V	51	3	He	4.947	0.1411	6499.49	0.0223	0.03097
Cr	52	3	He	4.627	0.1736	8322.70	0.029	0.03958
Cr	52	3	He	4.856	0.1802	8452.72	0.029	0.03958
Cr	52	3	He	4.922	0.1822	8392.76	0.029	0.03958
Mn	55	3	He	4.797	0.0655	3140.46	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5.303	0.0721	3380.52	0.013	0.003171
Mn	55	3	He	4.6	0.063	2900.40	0.013	0.003171
Fe	57	3	He	4.018	0.0044	210.01	0.0006	0.002014
Fe	57	3	He	7.441	0.0064	300.01	0.0006	0.002014
Fe	57	3	He	6.898	0.0061	280.01	0.0006	0.002014
Co	59	3	He	4.518	0.2625	12585.92	0.0572	0.004106
Co	59	3	He	4.699	0.2729	12795.95	0.0572	0.004106
Co	59	3	He	4.91	0.2849	13126.59	0.0572	0.004106
Ni	60	3	He	5.431	0.0487	3990.69	0.0084	0.003329
Ni	60	3	He	4.75	0.043	3610.58	0.0084	0.003329
Ni	60	3	He	4.942	0.0447	3560.55	0.0084	0.003329
Cu	63	3	He	5.059	0.13	10644.30	0.0247	0.004989
Cu	63	3	He	4.842	0.1246	10454.20	0.0247	0.004989
Cu	63	3	He	4.814	0.1239	9883.76	0.0247	0.004989
Zn	66	3	He	5.704	0.0225	1860.17	0.0029	0.006147
Zn	66	3	He	5.231	0.0211	1750.15	0.0029	0.006147
Zn	66	3	He	4.729	0.0197	1610.17	0.0029	0.006147
As	75	3	He	5.383	0.0117	970.04	0.002	0.0009198
As	75	3	He	5.088	0.0111	922.04	0.002	0.0009198
As	75	3	He	4.916	0.0108	882.03	0.002	0.0009198
Sr	88	3	He	5.274	0.047	3880.68	0.0088	0.0005022
Sr	88	3	He	4.691	0.0418	3460.53	0.0088	0.0005022
Sr	88	3	He	5.169	0.046	3760.60	0.0088	0.0005022
Mo	98	3	He	9.676	0.2167	17911.92	0.0223	0.0006689
Mo	98	3	He	9.741	0.2181	18052.27	0.0223	0.0006689
Mo	98	3	He	9.757	0.2185	17851.89	0.0223	0.0006689
Ag	107	3	He	4.161	0.1966	16249.95	0.0471	0.0006687
Ag	107	3	He	3.956	0.1869	15469.10	0.0471	0.0006687
Ag	107	3	He	4.174	0.1972	16109.77	0.0471	0.0006687
Cd	111	3	He	1.082	0.0058	480.01	0.0054	1.676E-05
Cd	111	3	He	1.026	0.0055	456.01	0.0054	1.676E-05
Cd	111	3	He	1.017	0.0055	446.01	0.0054	1.676E-05
Sn	120	3	He	48.281	0.7695	63606.29	0.0156	0.01794
Sn	120	3	He	48.136	0.7673	63496.21	0.0156	0.01794
Sn	120	3	He	48.394	0.7713	63013.72	0.0156	0.01794
Sb	121	3	He	4.557	0.069	5701.44	0.0151	4.19E-05
Sb	121	3	He	4.872	0.0737	6101.62	0.0151	4.19E-05
Sb	121	3	He	4.975	0.0753	6151.56	0.0151	4.19E-05
Ba	137	3	He	100.315	0.4911	40590.82	0.0049	0.0002094
Ba	137	3	He	96.307	0.4715	39016.28	0.0049	0.0002094
Ba	137	3	He	99.059	0.4849	39618.28	0.0049	0.0002094
Tl	205	3	He	4.752	0.1207	45951.36	0.0252	0.0007688
Tl	205	3	He	4.821	0.1225	46763.96	0.0252	0.0007688
Tl	205	3	He	4.924	0.1251	47547.00	0.0252	0.0007688
Pb	208	3	He	4.806	0.1639	33684.19	0.0337	0.001742
Pb	208	3	He	4.832	0.1647	33844.35	0.0337	0.001742
Pb	208	3	He	4.819	0.1643	33453.72	0.0337	0.001742
U	238	3	He	0.002	0.0005	160.01	0.0502	0.0004339
U	238	3	He	0.002	0.0005	160.01	0.0502	0.0004339
U	238	3	He	0.007	0.0008	230.01	0.0502	0.0004339
Sc	45	1	No Gas			2363341.37		
Sc	45	1	No Gas			2402362.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2448568.09		
Ge	72	1	No Gas			1227486.62		
Ge	72	1	No Gas			1225198.03		
Ge	72	1	No Gas			1239538.50		
Sc	45	2	H2			175315.58		
Sc	45	2	H2			172808.53		
Sc	45	2	H2			169276.01		
Ge	72	2	H2			151153.03		
Ge	72	2	H2			153022.64		
Ge	72	2	H2			149111.25		
In	115	2	H2			379062.34		
In	115	2	H2			379135.62		
In	115	2	H2			378127.18		
Sc	45	3	He			47939.92		
Sc	45	3	He			46896.71		
Sc	45	3	He			46074.28		
Ge	72	3	He			81873.71		
Ge	72	3	He			83876.95		
Ge	72	3	He			79741.89		
In	115	3	He			82988.39		
In	115	3	He			83098.57		
In	115	3	He			82042.06		
Tb	159	3	He			380630.23		
Tb	159	3	He			381884.25		
Tb	159	3	He			380175.31		
Bi	209	3	He			293599.80		
Bi	209	3	He			303851.25		
Bi	209	3	He			299143.35		

Quantitation Report

Data File Name	040SMPL.d
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Acq Time	8/11/2023 8:27:13 AM
Sample Name	410-137404-A-1-H MSD @100
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

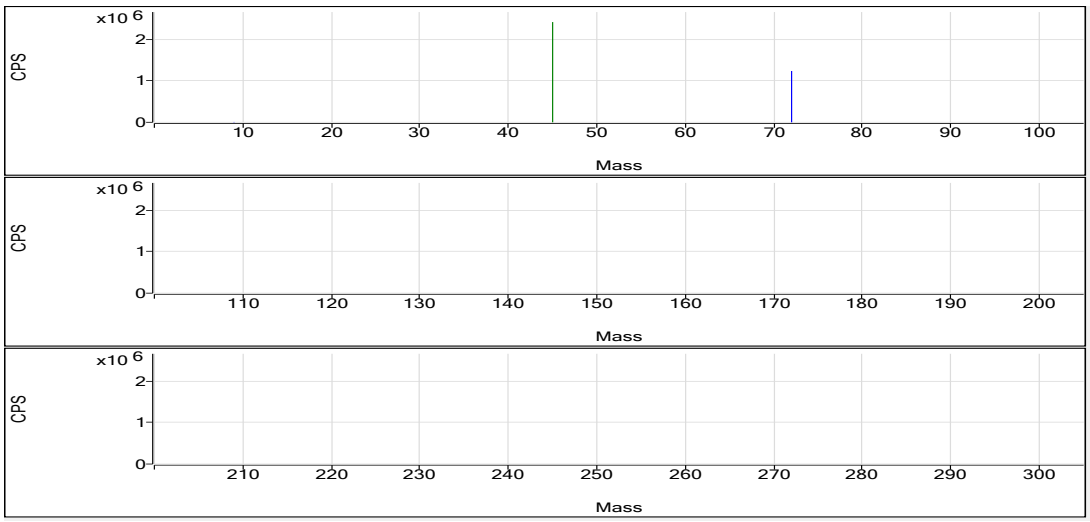
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	4.609	ppb	1.4	8260.99	0.0034	Pulse	0.5000	3
Se	78	115	H2	1.042	ppb	3.6	70.00	0.0002	Pulse	1.5000	3
Na	23	45	He	69.690	ppb	4.8	28077.42	0.6028	Pulse	0.1000	3
Mg	24	45	He	47.897	ppb	9.0	4210.74	0.0904	Pulse	0.1000	3
Al	27	45	He	10.074	ppb	18.2	326.68	0.0070	Pulse	0.1000	3
K	39	45	He	45.472	ppb	16.8	21362.83	0.4586	Pulse	0.1000	3
Ca	44	45	He	75.282	ppb	40.4	403.35	0.0087	Pulse	0.1000	3
Ti	47	45	He	7.685	ppb	21.0	193.34	0.0042	Pulse	0.1000	3
V	51	45	He	4.485	ppb	1.7	6092.64	0.1308	Pulse	0.5000	3
Cr	52	45	He	4.626	ppb	5.4	8085.84	0.1736	Pulse	0.1000	3
Mn	55	45	He	4.672	ppb	8.5	2973.73	0.0639	Pulse	0.1000	3
Fe	57	45	He	4.841	ppb	41.8	226.68	0.0049	Pulse	0.1000	3
Co	59	45	He	4.604	ppb	3.6	12455.75	0.2675	Pulse	0.1000	3
Ni	60	72	He	6.166	ppb	4.9	4434.16	0.0549	Pulse	0.1000	3
Cu	63	72	He	5.144	ppb	4.1	10667.68	0.1321	Pulse	0.1000	3
Zn	66	115	He	6.223	ppb	8.7	1983.54	0.0240	Pulse	0.1000	3
As	75	115	He	4.734	ppb	2.8	862.70	0.0104	Pulse	0.5000	3
Sr	88	115	He	5.103	ppb	7.7	3757.33	0.0454	Pulse	0.1000	3
Mo	98	115	He	9.641	ppb	0.6	17855.19	0.2159	Pulse	0.1000	3
Ag	107	115	He	4.081	ppb	2.8	15946.30	0.1929	Pulse	0.1000	3
Cd	111	115	He	0.953	ppb	8.6	423.34	0.0051	Pulse	0.5000	3
Sn	120	115	He	48.249	ppb	0.7	63596.32	0.7690	Pulse	0.1000	3
Sb	121	115	He	4.818	ppb	5.6	6031.54	0.0729	Pulse	0.1000	3
Ba	137	115	He	98.229	ppb	3.2	39761.67	0.4809	Pulse	0.1000	3
Tl	205	159	He	4.789	ppb	1.1	45968.19	0.1217	Pulse	0.1000	3
Pb	208	159	He	4.801	ppb	0.7	61859.18	0.1637	Pulse	0.1000	3
U	238	209	He	0.000	ppb	813.8	136.67	0.0005	Pulse	0.1000	3

ISTD Table:

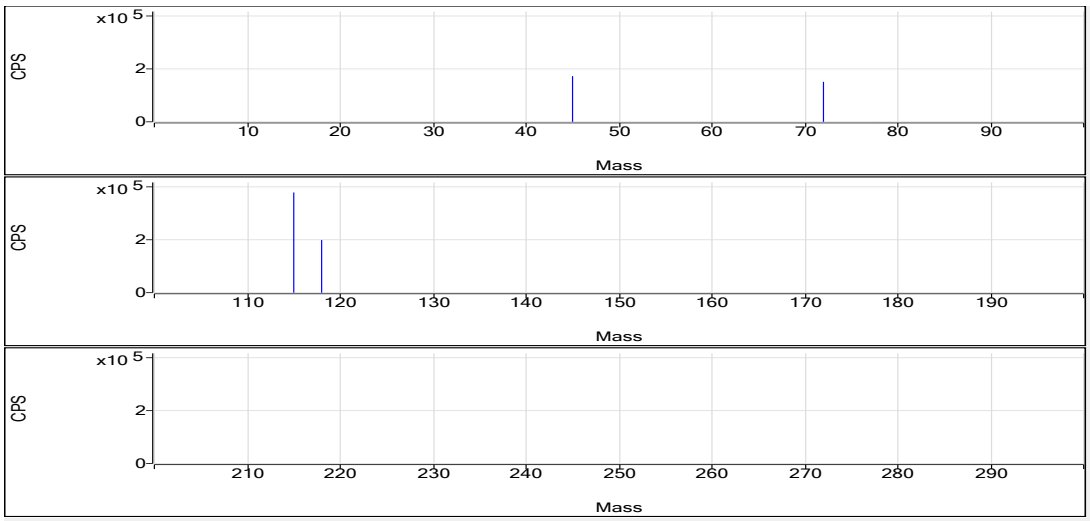
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2410614.65	0.7	102.7	Analog	0.1000	3
No Gas	Ge	72	1233446.44	0.8	102.8	Pulse	0.1000	3
H2	Sc	45	172142.96	0.6	99.1	Pulse	0.1000	3
H2	Ge	72	150650.92	2.6	100.7	Pulse	0.1000	3
H2	In	115	377799.37	0.8	103.2	Pulse	0.1000	3
He	Sc	45	46588.71	1.6	108.3	Pulse	0.1000	3
He	Ge	72	80774.33	1.0	103.3	Pulse	0.1000	3
He	In	115	82696.78	0.7	103.7	Pulse	0.1000	3
He	Tb	159	377835.71	0.7	102.7	Pulse	0.1000	3
He	Bi	209	299565.29	0.4	102.6	Pulse	0.1000	3

No Gas

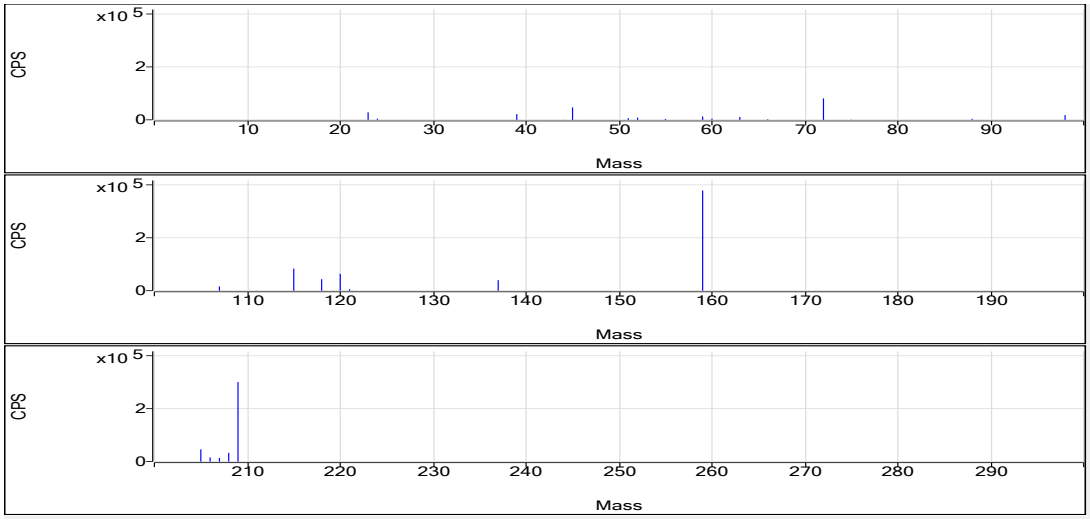


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	4.534	0.0034	8124.25	0.0007	1.705E-05
Be	9	1	No Gas	4.656	0.0035	8406.40	0.0007	1.705E-05
Be	9	1	No Gas	4.636	0.0034	8252.32	0.0007	1.705E-05
Se	78	2	H2	1.061	0.0002	70.67	0.0002	6.062E-06
Se	78	2	H2	1.065	0.0002	72.00	0.0002	6.062E-06
Se	78	2	H2	0.998	0.0002	67.33	0.0002	6.062E-06
Na	23	3	He	71.411	0.6092	28117.49	0.0037	0.3435
Na	23	3	He	65.837	0.5885	27927.11	0.0037	0.3435
Na	23	3	He	71.822	0.6107	28187.66	0.0037	0.3435
Mg	24	3	He	52.847	0.0995	4590.84	0.0018	0.002943
Mg	24	3	He	45.235	0.0856	4060.70	0.0018	0.002943
Mg	24	3	He	45.609	0.0862	3980.67	0.0018	0.002943
Al	27	3	He	12.106	0.0082	380.02	0.0006	0.001008
Al	27	3	He	8.55	0.0061	290.01	0.0006	0.001008
Al	27	3	He	9.565	0.0067	310.01	0.0006	0.001008
K	39	3	He	50.421	0.4644	21436.41	0.0012	0.4052
K	39	3	He	36.679	0.4483	21275.90	0.0012	0.4052
K	39	3	He	49.317	0.4632	21376.19	0.0012	0.4052
Ca	44	3	He	53.252	0.0072	330.01	0.0001	0.003486
Ca	44	3	He	62.651	0.0078	370.02	0.0001	0.003486
Ca	44	3	He	109.943	0.0111	510.03	0.0001	0.003486
Ti	47	3	He	8.807	0.0048	220.01	0.0005	0
Ti	47	3	He	5.84	0.0032	150.01	0.0005	0
Ti	47	3	He	8.407	0.0046	210.01	0.0005	0
V	51	3	He	4.558	0.1324	6111.33	0.0223	0.03097
V	51	3	He	4.41	0.1291	6127.31	0.0223	0.03097
V	51	3	He	4.488	0.1309	6039.29	0.0223	0.03097
Cr	52	3	He	4.41	0.1673	7722.24	0.029	0.03958
Cr	52	3	He	4.572	0.172	8162.62	0.029	0.03958
Cr	52	3	He	4.896	0.1814	8372.65	0.029	0.03958
Mn	55	3	He	4.942	0.0674	3110.42	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4.216	0.058	2750.35	0.013	0.003171
Mn	55	3	He	4.859	0.0663	3060.43	0.013	0.003171
Fe	57	3	He	6.88	0.0061	280.01	0.0006	0.002014
Fe	57	3	He	4.809	0.0048	230.01	0.0006	0.002014
Fe	57	3	He	2.834	0.0037	170.01	0.0006	0.002014
Co	59	3	He	4.745	0.2755	12716.00	0.0572	0.004106
Co	59	3	He	4.425	0.2572	12205.49	0.0572	0.004106
Co	59	3	He	4.643	0.2697	12445.76	0.0572	0.004106
Ni	60	3	He	6.411	0.0569	4600.87	0.0084	0.003329
Ni	60	3	He	6.263	0.0557	4540.85	0.0084	0.003329
Ni	60	3	He	5.824	0.052	4160.76	0.0084	0.003329
Cu	63	3	He	5.108	0.1312	10604.38	0.0247	0.004989
Cu	63	3	He	4.952	0.1274	10384.02	0.0247	0.004989
Cu	63	3	He	5.372	0.1377	11014.63	0.0247	0.004989
Zn	66	3	He	6.822	0.0257	2110.23	0.0029	0.006147
Zn	66	3	He	6.07	0.0236	1950.19	0.0029	0.006147
Zn	66	3	He	5.777	0.0227	1890.19	0.0029	0.006147
As	75	3	He	4.757	0.0105	860.03	0.002	0.0009198
As	75	3	He	4.592	0.0101	840.03	0.002	0.0009198
As	75	3	He	4.853	0.0107	888.03	0.002	0.0009198
Sr	88	3	He	5.491	0.0489	4010.78	0.0088	0.0005022
Sr	88	3	He	4.702	0.0419	3470.56	0.0088	0.0005022
Sr	88	3	He	5.115	0.0456	3790.65	0.0088	0.0005022
Mo	98	3	He	9.696	0.2171	17821.74	0.0223	0.0006689
Mo	98	3	He	9.649	0.2161	17891.95	0.0223	0.0006689
Mo	98	3	He	9.578	0.2145	17851.87	0.0223	0.0006689
Ag	107	3	He	4.214	0.1991	16339.96	0.0471	0.0006687
Ag	107	3	He	3.997	0.1889	15639.39	0.0471	0.0006687
Ag	107	3	He	4.033	0.1906	15859.55	0.0471	0.0006687
Cd	111	3	He	1.048	0.0056	462.01	0.0054	1.676E-05
Cd	111	3	He	0.904	0.0049	402.01	0.0054	1.676E-05
Cd	111	3	He	0.908	0.0049	406.01	0.0054	1.676E-05
Sn	120	3	He	48.582	0.7742	63546.59	0.0156	0.01794
Sn	120	3	He	47.939	0.7642	63274.77	0.0156	0.01794
Sn	120	3	He	48.224	0.7687	63967.61	0.0156	0.01794
Sb	121	3	He	4.509	0.0682	5601.35	0.0151	4.19E-05
Sb	121	3	He	4.933	0.0747	6181.60	0.0151	4.19E-05
Sb	121	3	He	5.011	0.0758	6311.66	0.0151	4.19E-05
Ba	137	3	He	101.871	0.4987	40932.00	0.0049	0.0002094
Ba	137	3	He	96.604	0.4729	39156.42	0.0049	0.0002094
Ba	137	3	He	96.211	0.471	39196.60	0.0049	0.0002094
Tl	205	3	He	4.83	0.1227	46684.38	0.0252	0.0007688
Tl	205	3	He	4.807	0.1221	46101.84	0.0252	0.0007688
Tl	205	3	He	4.731	0.1202	45118.34	0.0252	0.0007688
Pb	208	3	He	4.796	0.1635	33212.83	0.0337	0.001742
Pb	208	3	He	4.838	0.165	33303.11	0.0337	0.001742
Pb	208	3	He	4.77	0.1626	32250.19	0.0337	0.001742
U	238	3	He	-0.003	0.0003	80.00	0.0502	0.0004339
U	238	3	He	0.001	0.0005	140.01	0.0502	0.0004339
U	238	3	He	0.004	0.0006	190.01	0.0502	0.0004339
Sc	45	1	No Gas			2409598.87		
Sc	45	1	No Gas			2428182.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2394062.93		
Ge	72	1	No Gas			1241017.56		
Ge	72	1	No Gas			1237186.00		
Ge	72	1	No Gas			1222135.76		
Sc	45	2	H2			172189.37		
Sc	45	2	H2			173101.68		
Sc	45	2	H2			171137.83		
Ge	72	2	H2			154010.93		
Ge	72	2	H2			151566.88		
Ge	72	2	H2			146374.96		
In	115	2	H2			374577.30		
In	115	2	H2			380178.47		
In	115	2	H2			378642.34		
Sc	45	3	He			46154.57		
Sc	45	3	He			47457.78		
Sc	45	3	He			46153.78		
Ge	72	3	He			80817.97		
Ge	72	3	He			81531.74		
Ge	72	3	He			79973.28		
In	115	3	He			82414.55		
In	115	3	He			83128.66		
In	115	3	He			83562.52		
Tb	159	3	He			380520.35		
Tb	159	3	He			377584.56		
Tb	159	3	He			375402.22		
Bi	209	3	He			300836.54		
Bi	209	3	He			298274.19		
Bi	209	3	He			299585.15		

Quantitation Report

Data File Name	042_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:31:22 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

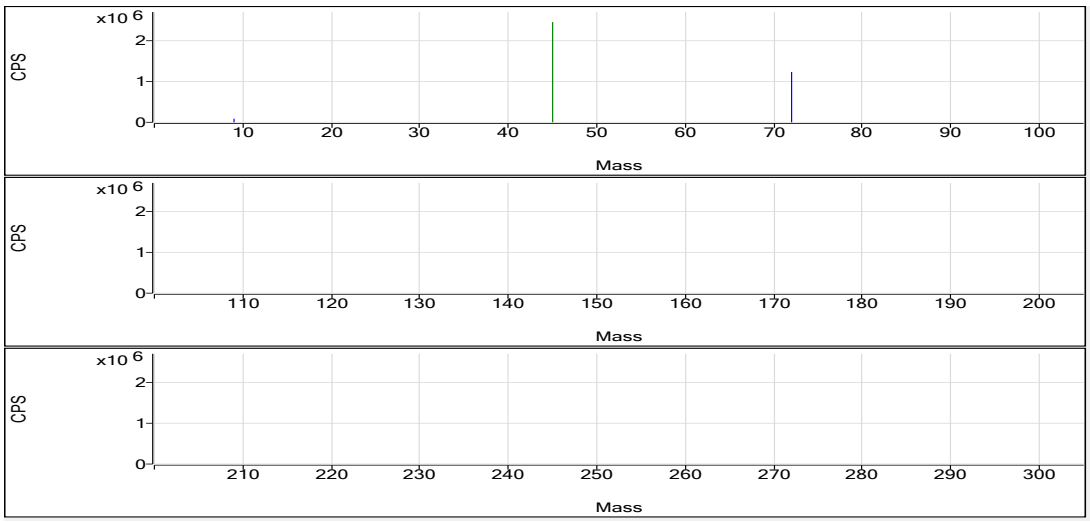
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.846	ppb	1.1	89310.31	0.0362	Pulse	0.5000	3
Se	78	115	H2	51.712	ppb	0.8	3369.96	0.0089	Pulse	1.5000	3
Na	23	45	He	4833.724	ppb	2.7	851182.64	18.3294	Pulse	0.1000	3
Mg	24	45	He	5038.366	ppb	2.1	427511.65	9.2054	Pulse	0.1000	3
Al	27	45	He	4991.941	ppb	2.9	138399.48	2.9804	Pulse	0.1000	3
K	39	45	He	5094.913	ppb	2.4	296656.49	6.3878	Pulse	0.1000	3
Ca	44	45	He	5143.265	ppb	5.8	16589.94	0.3574	Pulse	0.1000	3
Ti	47	45	He	5066.852	ppb	2.0	127378.83	2.7424	Pulse	0.1000	3
V	51	45	He	508.183	ppb	1.8	526684.89	11.3404	Pulse	0.5000	3
Cr	52	45	He	504.974	ppb	1.5	681160.95	14.6659	Pulse	0.1000	3
Mn	55	45	He	502.980	ppb	2.0	303689.88	6.5392	Pulse	0.1000	3
Fe	57	45	He	5019.455	ppb	0.7	137432.03	2.9587	Pulse	0.1000	3
Co	59	45	He	490.597	ppb	1.4	1303413.91	28.0632	Pulse	0.1000	3
Ni	60	72	He	548.941	ppb	0.4	366264.34	4.5932	Pulse	0.1000	3
Cu	63	72	He	529.338	ppb	0.4	1043491.50	13.0859	Pulse	0.1000	3
Zn	66	115	He	524.351	ppb	3.1	123098.68	1.5099	Pulse	0.1000	3
As	75	115	He	526.039	ppb	1.9	86257.13	1.0578	Pulse	0.5000	3
Sr	88	115	He	52.851	ppb	0.9	38001.96	0.4660	Pulse	0.1000	3
Mo	98	115	He	52.590	ppb	3.2	95785.59	1.1748	Pulse	0.1000	3
Ag	107	115	He	52.326	ppb	3.0	200930.87	2.4645	Pulse	0.1000	3
Cd	111	115	He	52.490	ppb	1.3	22917.47	0.2810	Pulse	0.5000	3
Sn	120	115	He	52.923	ppb	3.8	68627.47	0.8418	Pulse	0.1000	3
Sb	121	115	He	51.952	ppb	3.3	64071.92	0.7859	Pulse	0.1000	3
Ba	137	115	He	519.063	ppb	2.6	207129.52	2.5402	Pulse	0.1000	3
Tl	205	159	He	51.019	ppb	0.3	493866.13	1.2886	Pulse	0.1000	3
Pb	208	159	He	51.089	ppb	1.2	661198.46	1.7253	Pulse	0.1000	3
U	238	209	He	50.675	ppb	0.8	757434.86	2.5418	Pulse	0.1000	3

ISTD Table:

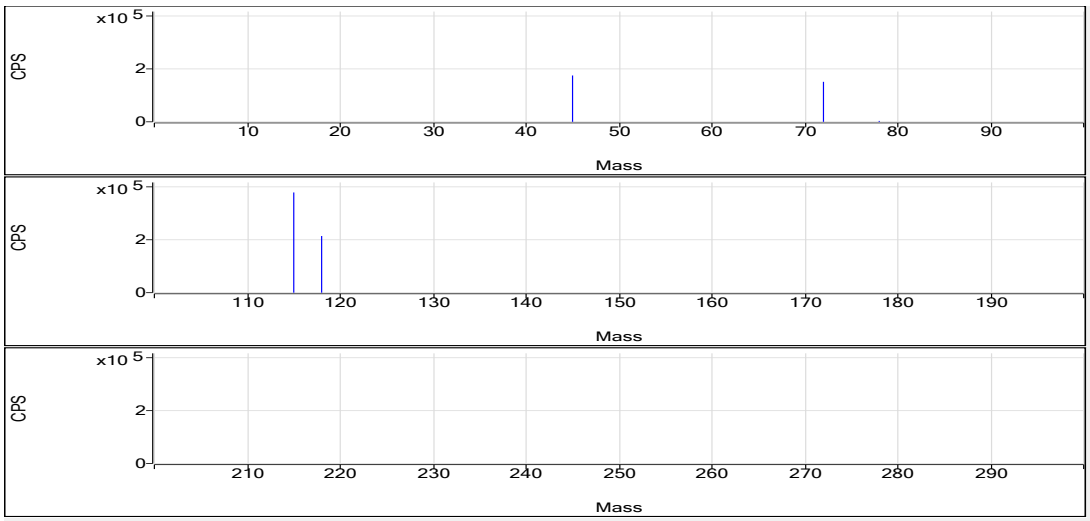
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2470380.53	1.8	105.2	Analog	0.1000	3
No Gas	Ge	72	1238709.36	0.9	103.2	Pulse	0.1000	3
H2	Sc	45	174998.64	1.2	100.7	Pulse	0.1000	3
H2	Ge	72	151017.38	1.6	101.0	Pulse	0.1000	3
H2	In	115	378484.92	0.7	103.4	Pulse	0.1000	3
He	Sc	45	46454.83	2.1	108.0	Pulse	0.1000	3
He	Ge	72	79742.20	0.5	102.0	Pulse	0.1000	3
He	In	115	81564.98	2.2	102.3	Pulse	0.1000	3
He	Tb	159	383257.48	0.6	104.2	Pulse	0.1000	3
He	Bi	209	298001.45	0.9	102.0	Pulse	0.1000	3

No Gas

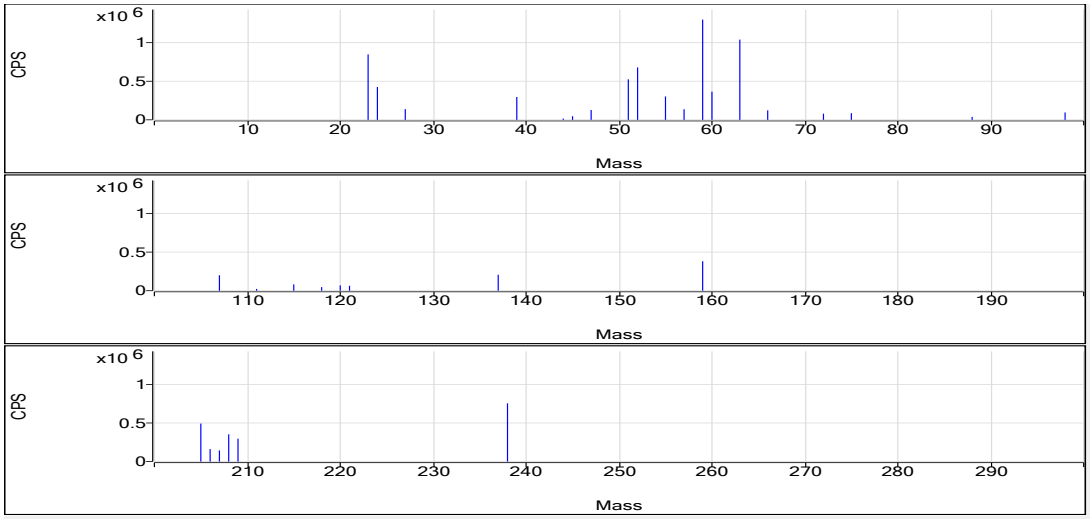


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.401	0.0366	88559.79	0.0007	1.705E-05
Be	9	1	No Gas	48.304	0.0358	89746.84	0.0007	1.705E-05
Be	9	1	No Gas	48.831	0.0361	89624.30	0.0007	1.705E-05
Se	78	2	H2	51.246	0.0088	3364.40	0.0002	6.062E-06
Se	78	2	H2	51.831	0.0089	3355.07	0.0002	6.062E-06
Se	78	2	H2	52.06	0.009	3390.41	0.0002	6.062E-06
Na	23	3	He	4685.45	17.7776	845476.16	0.0037	0.3435
Na	23	3	He	4907.452	18.6037	858069.67	0.0037	0.3435
Na	23	3	He	4908.271	18.6067	850002.10	0.0037	0.3435
Mg	24	3	He	4921.128	8.9913	427611.87	0.0018	0.002943
Mg	24	3	He	5070.315	9.2638	427279.56	0.0018	0.002943
Mg	24	3	He	5123.655	9.3612	427643.51	0.0018	0.002943
Al	27	3	He	4824.857	2.8807	137002.47	0.0006	0.001008
Al	27	3	He	5057.535	3.0196	139274.66	0.0006	0.001008
Al	27	3	He	5093.431	3.041	138921.31	0.0006	0.001008
K	39	3	He	4975.304	6.2474	297114.41	0.0012	0.4052
K	39	3	He	5093.802	6.3865	294568.65	0.0012	0.4052
K	39	3	He	5215.631	6.5296	298286.40	0.0012	0.4052
Ca	44	3	He	4823.535	0.3354	15949.15	0.0001	0.003486
Ca	44	3	He	5410.549	0.3757	17330.84	0.0001	0.003486
Ca	44	3	He	5195.712	0.361	16489.83	0.0001	0.003486
Ti	47	3	He	4978.886	2.6948	128162.15	0.0005	0
Ti	47	3	He	5174.57	2.8008	129180.84	0.0005	0
Ti	47	3	He	5047.1	2.7318	124793.51	0.0005	0
V	51	3	He	498.059	11.1151	528616.81	0.0223	0.03097
V	51	3	He	510.897	11.4008	525847.25	0.0223	0.03097
V	51	3	He	515.592	11.5053	525590.63	0.0223	0.03097
Cr	52	3	He	496.072	14.4081	685225.15	0.029	0.03958
Cr	52	3	He	509.409	14.7944	682369.91	0.029	0.03958
Cr	52	3	He	509.442	14.7953	675887.80	0.029	0.03958
Mn	55	3	He	491.49	6.3899	303891.11	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	507.144	6.5933	304104.94	0.013	0.003171
Mn	55	3	He	510.306	6.6344	303073.59	0.013	0.003171
Fe	57	3	He	4978.676	2.9347	139569.00	0.0006	0.002014
Fe	57	3	He	5028.491	2.964	136711.81	0.0006	0.002014
Fe	57	3	He	5051.198	2.9774	136015.29	0.0006	0.002014
Co	59	3	He	482.607	27.6063	1312909.82	0.0572	0.004106
Co	59	3	He	493.777	28.2452	1302769.20	0.0572	0.004106
Co	59	3	He	495.405	28.3383	1294562.72	0.0572	0.004106
Ni	60	3	He	546.68	4.5743	366511.17	0.0084	0.003329
Ni	60	3	He	549.181	4.5952	366844.76	0.0084	0.003329
Ni	60	3	He	550.961	4.6101	365437.10	0.0084	0.003329
Cu	63	3	He	530.443	13.1132	1050688.11	0.0247	0.004989
Cu	63	3	He	526.651	13.0195	1039378.11	0.0247	0.004989
Cu	63	3	He	530.92	13.125	1040408.27	0.0247	0.004989
Zn	66	3	He	519.758	1.4967	122963.69	0.0029	0.006147
Zn	66	3	He	542.498	1.5619	124255.67	0.0029	0.006147
Zn	66	3	He	510.798	1.471	122076.67	0.0029	0.006147
As	75	3	He	521.65	1.049	86181.37	0.002	0.0009198
As	75	3	He	537.602	1.0811	86000.40	0.002	0.0009198
As	75	3	He	518.864	1.0434	86589.62	0.002	0.0009198
Sr	88	3	He	52.602	0.4638	38102.58	0.0088	0.0005022
Sr	88	3	He	53.423	0.471	37470.56	0.0088	0.0005022
Sr	88	3	He	52.526	0.4631	38432.74	0.0088	0.0005022
Mo	98	3	He	52.987	1.1837	97245.22	0.0223	0.0006689
Mo	98	3	He	54.013	1.2066	95986.78	0.0223	0.0006689
Mo	98	3	He	50.771	1.1342	94124.78	0.0223	0.0006689
Ag	107	3	He	52.202	2.4587	201992.99	0.0471	0.0006687
Ag	107	3	He	53.962	2.5415	202184.86	0.0471	0.0006687
Ag	107	3	He	50.814	2.3933	198614.76	0.0471	0.0006687
Cd	111	3	He	52.645	0.2818	23155.22	0.0054	1.676E-05
Cd	111	3	He	53.083	0.2842	22608.27	0.0054	1.676E-05
Cd	111	3	He	51.742	0.277	22988.91	0.0054	1.676E-05
Sn	120	3	He	52.879	0.8411	69102.96	0.0156	0.01794
Sn	120	3	He	54.931	0.8731	69454.76	0.0156	0.01794
Sn	120	3	He	50.96	0.8113	67324.69	0.0156	0.01794
Sb	121	3	He	51.665	0.7816	64209.22	0.0151	4.19E-05
Sb	121	3	He	53.773	0.8134	64711.25	0.0151	4.19E-05
Sb	121	3	He	50.419	0.7627	63295.30	0.0151	4.19E-05
Ba	137	3	He	524.948	2.569	211056.34	0.0049	0.0002094
Ba	137	3	He	528.584	2.5868	205784.18	0.0049	0.0002094
Ba	137	3	He	503.658	2.4648	204548.04	0.0049	0.0002094
Tl	205	3	He	51.159	1.2921	498108.59	0.0252	0.0007688
Tl	205	3	He	50.827	1.2838	492073.66	0.0252	0.0007688
Tl	205	3	He	51.071	1.2899	491416.13	0.0252	0.0007688
Pb	208	3	He	50.729	1.7131	351716.75	0.0337	0.001742
Pb	208	3	He	50.749	1.7138	351932.77	0.0337	0.001742
Pb	208	3	He	51.79	1.7489	359263.35	0.0337	0.001742
U	238	3	He	51.027	2.5595	762952.72	0.0502	0.0004339
U	238	3	He	50.741	2.5451	751651.71	0.0502	0.0004339
U	238	3	He	50.255	2.5208	757700.14	0.0502	0.0004339
Sc	45	1	No Gas			2421749.96		
Sc	45	1	No Gas			2509933.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2479458.24		
Ge	72	1	No Gas			1228219.12		
Ge	72	1	No Gas			1236743.97		
Ge	72	1	No Gas			1251164.98		
Sc	45	2	H2			177278.86		
Sc	45	2	H2			173027.40		
Sc	45	2	H2			174689.67		
Ge	72	2	H2			153234.28		
Ge	72	2	H2			148433.03		
Ge	72	2	H2			151384.82		
In	115	2	H2			381285.78		
In	115	2	H2			375938.74		
In	115	2	H2			378230.23		
Sc	45	3	He			47558.39		
Sc	45	3	He			46123.62		
Sc	45	3	He			45682.48		
Ge	72	3	He			80124.60		
Ge	72	3	He			79832.59		
Ge	72	3	He			79269.42		
In	115	3	He			82504.44		
In	115	3	He			79919.94		
In	115	3	He			83359.42		
Tb	159	3	He			385496.83		
Tb	159	3	He			383307.57		
Tb	159	3	He			380968.04		
Bi	209	3	He			298089.62		
Bi	209	3	He			295329.62		
Bi	209	3	He			300585.11		

Quantitation Report

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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

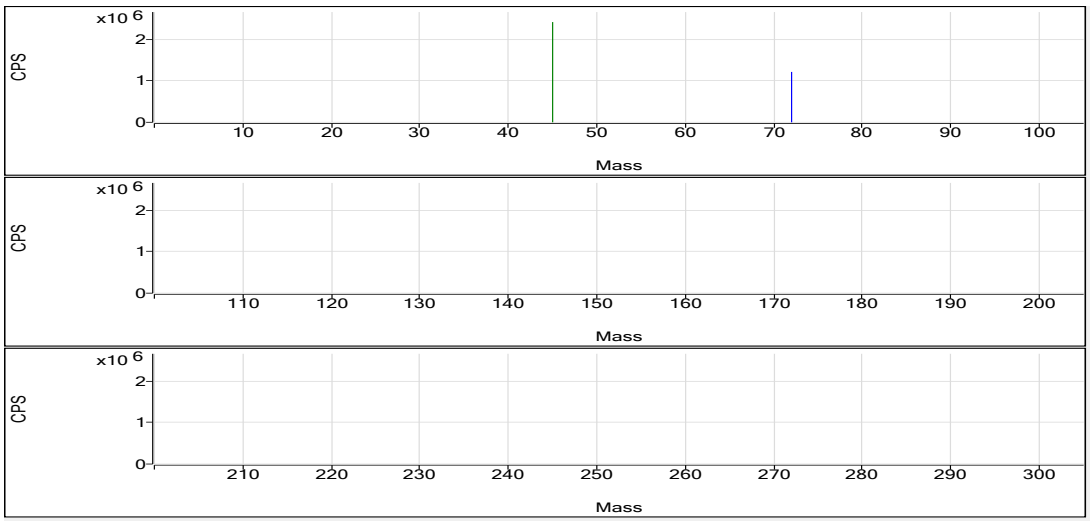
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.026	ppb	7.8	87.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.026	ppb	199.3	4.00	0.0000	Pulse	1.5000	3
Na	23	45	He	-2.068	ppb	N/A	15525.36	0.3358	Pulse	0.1000	3
Mg	24	45	He	1.668	ppb	36.0	276.68	0.0060	Pulse	0.1000	3
Al	27	45	He	0.478	ppb	389.5	60.00	0.0013	Pulse	0.1000	3
K	39	45	He	2.401	ppb	232.4	18859.42	0.4081	Pulse	0.1000	3
Ca	44	45	He	-9.707	ppb	N/A	130.00	0.0028	Pulse	0.1000	3
Ti	47	45	He	1.192	ppb	86.7	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	-0.061	ppb	N/A	1368.08	0.0296	Pulse	0.5000	3
Cr	52	45	He	-0.014	ppb	N/A	1813.50	0.0392	Pulse	0.1000	3
Mn	55	45	He	-0.012	ppb	N/A	140.01	0.0030	Pulse	0.1000	3
Fe	57	45	He	0.392	ppb	368.9	103.34	0.0022	Pulse	0.1000	3
Co	59	45	He	0.041	ppb	52.8	296.68	0.0064	Pulse	0.1000	3
Ni	60	72	He	-0.045	ppb	N/A	233.34	0.0030	Pulse	0.1000	3
Cu	63	72	He	0.045	ppb	78.9	480.02	0.0061	Pulse	0.1000	3
Zn	66	115	He	-0.331	ppb	N/A	426.69	0.0052	Pulse	0.1000	3
As	75	115	He	0.125	ppb	54.9	96.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.072	ppb	55.9	93.33	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.050	ppb	27.3	146.67	0.0018	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	541.1	66.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	318.4	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.028	ppb	N/A	1436.81	0.0175	Pulse	0.1000	3
Sb	121	115	He	0.046	ppb	30.9	60.00	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.049	ppb	30.4	36.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.063	ppb	13.2	896.73	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.001	ppb	641.2	676.70	0.0018	Pulse	0.1000	3
U	238	209	He	0.040	ppb	14.2	726.71	0.0024	Pulse	0.1000	3

ISTD Table:

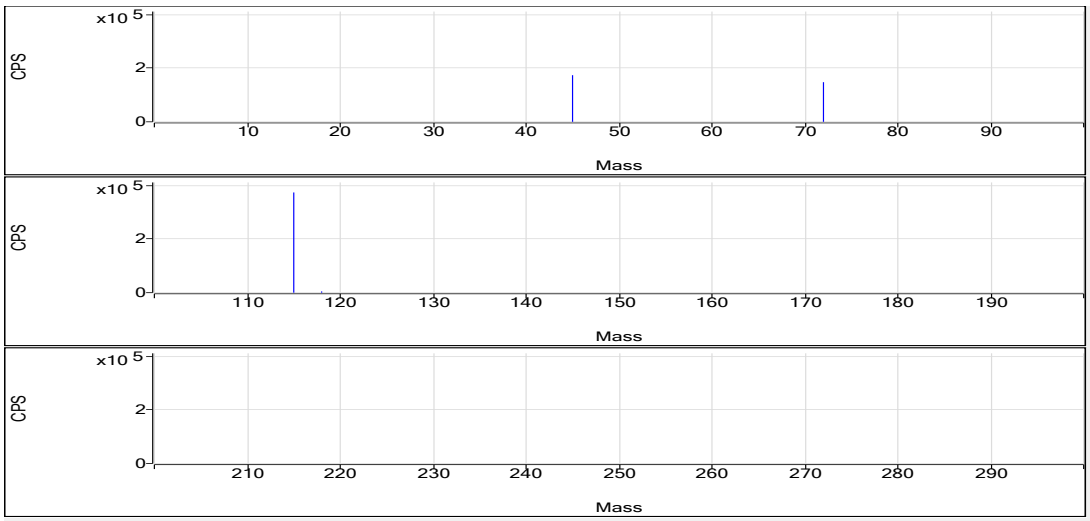
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2417872.47	1.7	103.0	Analog	0.1000	3
No Gas	Ge	72	1215415.63	0.3	101.3	Pulse	0.1000	3
H2	Sc	45	174368.81	0.8	100.4	Pulse	0.1000	3
H2	Ge	72	148184.30	0.5	99.1	Pulse	0.1000	3
H2	In	115	374766.61	1.4	102.4	Pulse	0.1000	3
He	Sc	45	46227.44	2.1	107.4	Pulse	0.1000	3
He	Ge	72	78911.29	1.3	101.0	Pulse	0.1000	3
He	In	115	82036.70	1.9	102.9	Pulse	0.1000	3
He	Tb	159	378630.27	0.4	102.9	Pulse	0.1000	3
He	Bi	209	296983.89	0.5	101.7	Pulse	0.1000	3

No Gas

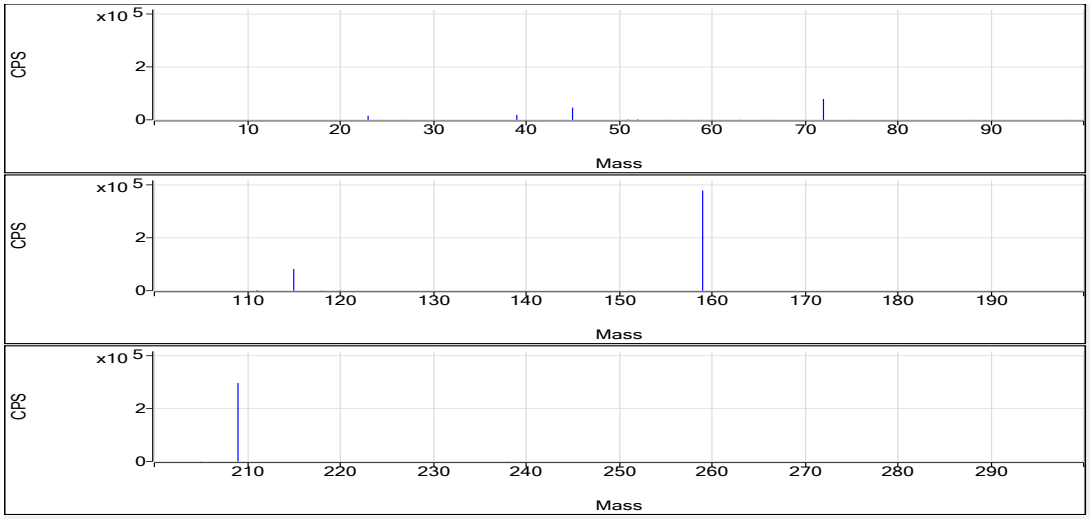


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.024	0	82.00	0.0007	1.705E-05
Be	9	1	No Gas	0.028	0	92.00	0.0007	1.705E-05
Be	9	1	No Gas	0.026	0	88.00	0.0007	1.705E-05
Se	78	2	H2	-0.004	0	2.00	0.0002	6.062E-06
Se	78	2	H2	0.087	0	8.00	0.0002	6.062E-06
Se	78	2	H2	-0.004	0	2.00	0.0002	6.062E-06
Na	23	3	He	0.478	0.3453	16219.58	0.0037	0.3435
Na	23	3	He	-2.741	0.3333	15038.13	0.0037	0.3435
Na	23	3	He	-3.941	0.3288	15318.38	0.0037	0.3435
Mg	24	3	He	2.002	0.0066	310.01	0.0018	0.002943
Mg	24	3	He	2.029	0.0066	300.01	0.0018	0.002943
Mg	24	3	He	0.974	0.0047	220.01	0.0018	0.002943
Al	27	3	He	-0.619	0.0006	30.00	0.0006	0.001008
Al	27	3	He	-0.575	0.0007	30.00	0.0006	0.001008
Al	27	3	He	2.627	0.0026	120.00	0.0006	0.001008
K	39	3	He	-1.163	0.4039	18972.90	0.0012	0.4052
K	39	3	He	8.832	0.4156	18752.54	0.0012	0.4052
K	39	3	He	-0.467	0.4047	18852.83	0.0012	0.4052
Ca	44	3	He	-13.543	0.0026	120.00	0.0001	0.003486
Ca	44	3	He	-2.348	0.0033	150.01	0.0001	0.003486
Ca	44	3	He	-13.231	0.0026	120.00	0.0001	0.003486
Ti	47	3	He	2.36	0.0013	60.00	0.0005	0
Ti	47	3	He	0.819	0.0004	20.00	0.0005	0
Ti	47	3	He	0.397	0.0002	10.00	0.0005	0
V	51	3	He	-0.072	0.0294	1380.08	0.0223	0.03097
V	51	3	He	0.029	0.0316	1426.08	0.0223	0.03097
V	51	3	He	-0.14	0.0279	1298.07	0.0223	0.03097
Cr	52	3	He	0.037	0.0407	1910.19	0.029	0.03958
Cr	52	3	He	-0.15	0.0352	1590.14	0.029	0.03958
Cr	52	3	He	0.071	0.0416	1940.18	0.029	0.03958
Mn	55	3	He	0.018	0.0034	160.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.056	0.0024	110.00	0.013	0.003171
Mn	55	3	He	0.004	0.0032	150.01	0.013	0.003171
Fe	57	3	He	-1.251	0.0013	60.00	0.0006	0.002014
Fe	57	3	He	1.473	0.0029	130.01	0.0006	0.002014
Fe	57	3	He	0.954	0.0026	120.00	0.0006	0.002014
Co	59	3	He	0.018	0.0051	240.01	0.0572	0.004106
Co	59	3	He	0.06	0.0075	340.01	0.0572	0.004106
Co	59	3	He	0.045	0.0067	310.01	0.0572	0.004106
Ni	60	3	He	-0.024	0.0031	250.01	0.0084	0.003329
Ni	60	3	He	-0.049	0.0029	230.01	0.0084	0.003329
Ni	60	3	He	-0.06	0.0028	220.01	0.0084	0.003329
Cu	63	3	He	0.016	0.0054	430.02	0.0247	0.004989
Cu	63	3	He	0.034	0.0058	460.02	0.0247	0.004989
Cu	63	3	He	0.084	0.0071	550.03	0.0247	0.004989
Zn	66	3	He	-0.321	0.0052	430.02	0.0029	0.006147
Zn	66	3	He	-0.263	0.0054	450.02	0.0029	0.006147
Zn	66	3	He	-0.408	0.005	400.02	0.0029	0.006147
As	75	3	He	0.062	0.001	86.00	0.002	0.0009198
As	75	3	He	0.115	0.0012	96.00	0.002	0.0009198
As	75	3	He	0.199	0.0013	106.00	0.002	0.0009198
Sr	88	3	He	0.081	0.0012	100.00	0.0088	0.0005022
Sr	88	3	He	0.106	0.0014	120.00	0.0088	0.0005022
Sr	88	3	He	0.028	0.0007	60.00	0.0088	0.0005022
Mo	98	3	He	0.057	0.0019	160.01	0.0223	0.0006689
Mo	98	3	He	0.034	0.0014	120.00	0.0223	0.0006689
Mo	98	3	He	0.059	0.002	160.01	0.0223	0.0006689
Ag	107	3	He	0.022	0.0017	140.01	0.0471	0.0006687
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.075	0.0168	1380.14	0.0156	0.01794
Sn	120	3	He	0.041	0.0186	1550.15	0.0156	0.01794
Sn	120	3	He	-0.049	0.0172	1380.13	0.0156	0.01794
Sb	121	3	He	0.029	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.053	0.0008	70.00	0.0151	4.19E-05
Sb	121	3	He	0.055	0.0009	70.00	0.0151	4.19E-05
Ba	137	3	He	0.032	0.0004	30.00	0.0049	0.0002094
Ba	137	3	He	0.055	0.0005	40.00	0.0049	0.0002094
Ba	137	3	He	0.059	0.0005	40.00	0.0049	0.0002094
Tl	205	3	He	0.062	0.0023	880.07	0.0252	0.0007688
Tl	205	3	He	0.056	0.0022	830.06	0.0252	0.0007688
Tl	205	3	He	0.073	0.0026	980.07	0.0252	0.0007688
Pb	208	3	He	0.001	0.0018	300.01	0.0337	0.001742
Pb	208	3	He	-0.007	0.0015	230.01	0.0337	0.001742
Pb	208	3	He	0.01	0.0021	320.02	0.0337	0.001742
U	238	3	He	0.047	0.0028	820.05	0.0502	0.0004339
U	238	3	He	0.037	0.0023	690.05	0.0502	0.0004339
U	238	3	He	0.036	0.0023	670.04	0.0502	0.0004339
Sc	45	1	No Gas			2371148.25		
Sc	45	1	No Gas			2450565.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2431904.03		
Ge	72	1	No Gas			1211648.42		
Ge	72	1	No Gas			1219894.04		
Ge	72	1	No Gas			1214704.44		
Sc	45	2	H2			175802.89		
Sc	45	2	H2			173089.00		
Sc	45	2	H2			174214.55		
Ge	72	2	H2			149039.94		
Ge	72	2	H2			147969.46		
Ge	72	2	H2			147543.49		
In	115	2	H2			372068.39		
In	115	2	H2			381012.10		
In	115	2	H2			371219.33		
Sc	45	3	He			46976.92		
Sc	45	3	He			45120.11		
Sc	45	3	He			46585.29		
Ge	72	3	He			79993.40		
Ge	72	3	He			78817.57		
Ge	72	3	He			77922.90		
In	115	3	He			82303.48		
In	115	3	He			83460.18		
In	115	3	He			80372.87		
Tb	159	3	He			378923.59		
Tb	159	3	He			379878.74		
Tb	159	3	He			377088.47		
Bi	209	3	He			295301.93		
Bi	209	3	He			298256.69		
Bi	209	3	He			297393.06		

Quantitation Report

Data File Name	044SMPL.d
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Sample Name	410-137404-A-2-B
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

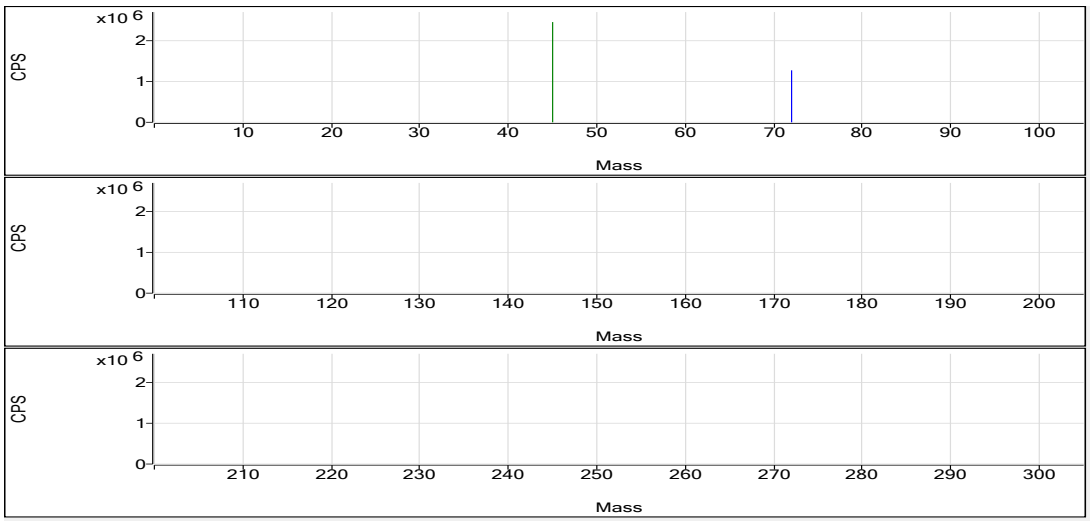
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.014	ppb	35.6	67.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.015	ppb	199.9	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	3345.782	ppb	2.3	599618.16	12.7929	Pulse	0.1000	3
Mg	24	45	He	206.342	ppb	1.5	17811.18	0.3798	Pulse	0.1000	3
Al	27	45	He	234.314	ppb	13.4	6588.48	0.1409	Pulse	0.1000	3
K	39	45	He	107.951	ppb	13.1	24935.35	0.5320	Pulse	0.1000	3
Ca	44	45	He	535.700	ppb	5.4	1890.18	0.0403	Pulse	0.1000	3
Ti	47	45	He	8.379	ppb	66.7	213.38	0.0045	Pulse	0.1000	3
V	51	45	He	0.129	ppb	33.6	1586.10	0.0338	Pulse	0.5000	3
Cr	52	45	He	0.190	ppb	13.0	2113.56	0.0451	Pulse	0.1000	3
Mn	55	45	He	1.164	ppb	9.2	856.72	0.0183	Pulse	0.1000	3
Fe	57	45	He	132.159	ppb	1.1	3743.97	0.0799	Pulse	0.1000	3
Co	59	45	He	0.039	ppb	19.2	296.68	0.0063	Pulse	0.1000	3
Ni	60	72	He	0.057	ppb	35.7	313.34	0.0038	Pulse	0.1000	3
Cu	63	72	He	0.360	ppb	6.0	1143.42	0.0139	Pulse	0.1000	3
Zn	66	115	He	0.555	ppb	71.4	643.37	0.0077	Pulse	0.1000	3
As	75	115	He	-0.003	ppb	N/A	76.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	1.240	ppb	21.5	950.07	0.0114	Pulse	0.1000	3
Mo	98	115	He	0.184	ppb	12.8	396.69	0.0048	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	66.9	73.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	132.6	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.072	ppb	N/A	1400.13	0.0168	Pulse	0.1000	3
Sb	121	115	He	0.066	ppb	67.4	86.67	0.0010	Pulse	0.1000	3
Ba	137	115	He	7.186	ppb	5.7	2943.77	0.0354	Pulse	0.1000	3
Tl	205	159	He	0.013	ppb	39.2	416.69	0.0011	Pulse	0.1000	3
Pb	208	159	He	0.241	ppb	4.0	3777.00	0.0099	Pulse	0.1000	3
U	238	209	He	0.015	ppb	36.1	356.69	0.0012	Pulse	0.1000	3

ISTD Table:

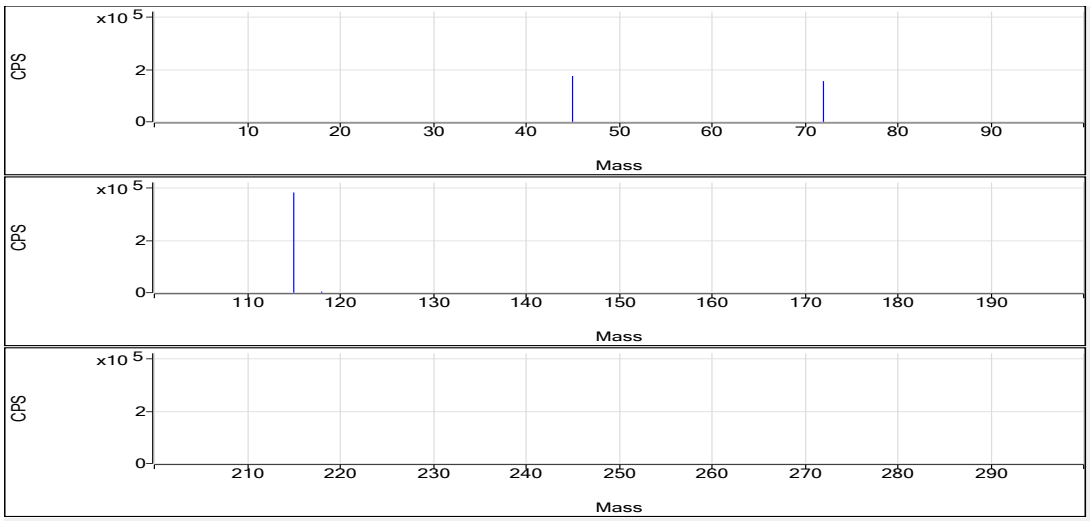
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2442680.54	1.6	104.1	Analog	0.1000	3
No Gas	Ge	72	1266888.65	1.1	105.6	Pulse	0.1000	3
H2	Sc	45	175313.58	1.0	100.9	Pulse	0.1000	3
H2	Ge	72	155934.07	0.3	104.3	Pulse	0.1000	3
H2	In	115	383707.12	0.6	104.8	Pulse	0.1000	3
He	Sc	45	46889.65	2.8	109.0	Pulse	0.1000	3
He	Ge	72	82287.01	1.8	105.3	Pulse	0.1000	3
He	In	115	83244.79	1.5	104.4	Pulse	0.1000	3
He	Tb	159	382660.71	0.3	104.0	Pulse	0.1000	3
He	Bi	209	304736.86	0.6	104.4	Pulse	0.1000	3

No Gas

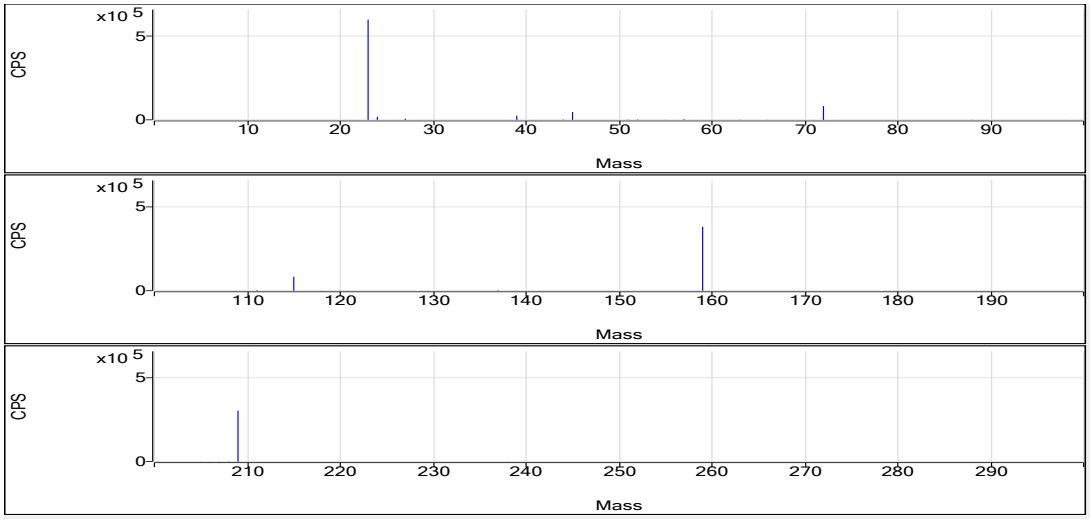


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.019	0	78.00	0.0007	1.705E-05
Be	9	1	No Gas	0.009	0	58.00	0.0007	1.705E-05
Be	9	1	No Gas	0.014	0	66.00	0.0007	1.705E-05
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Se	78	2	H2	0.046	0	5.33	0.0002	6.062E-06
Se	78	2	H2	0.015	0	3.33	0.0002	6.062E-06
Na	23	3	He	3270.811	12.5139	598409.21	0.0037	0.3435
Na	23	3	He	3424.48	13.0857	594109.60	0.0037	0.3435
Na	23	3	He	3342.055	12.779	606335.66	0.0037	0.3435
Mg	24	3	He	204.263	0.376	17981.39	0.0018	0.002943
Mg	24	3	He	204.843	0.3771	17120.28	0.0018	0.002943
Mg	24	3	He	209.92	0.3864	18331.88	0.0018	0.002943
Al	27	3	He	212.443	0.1278	6111.56	0.0006	0.001008
Al	27	3	He	270.369	0.1624	7372.19	0.0006	0.001008
Al	27	3	He	220.129	0.1324	6281.70	0.0006	0.001008
K	39	3	He	110.141	0.5346	25563.08	0.0012	0.4052
K	39	3	He	120.86	0.5472	24841.87	0.0012	0.4052
K	39	3	He	92.852	0.5143	24401.10	0.0012	0.4052
Ca	44	3	He	529.907	0.0399	1910.17	0.0001	0.003486
Ca	44	3	He	567.237	0.0425	1930.19	0.0001	0.003486
Ca	44	3	He	509.955	0.0386	1830.19	0.0001	0.003486
Ti	47	3	He	4.637	0.0025	120.01	0.0005	0
Ti	47	3	He	5.698	0.0031	140.01	0.0005	0
Ti	47	3	He	14.801	0.008	380.12	0.0005	0
V	51	3	He	0.133	0.0339	1622.10	0.0223	0.03097
V	51	3	He	0.17	0.0348	1578.10	0.0223	0.03097
V	51	3	He	0.084	0.0328	1558.09	0.0223	0.03097
Cr	52	3	He	0.2	0.0454	2170.23	0.029	0.03958
Cr	52	3	He	0.208	0.0456	2070.22	0.029	0.03958
Cr	52	3	He	0.162	0.0443	2100.24	0.029	0.03958
Mn	55	3	He	1.043	0.0167	800.05	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.248	0.0194	880.06	0.013	0.003171
Mn	55	3	He	1.2	0.0188	890.06	0.013	0.003171
Fe	57	3	He	131.509	0.0795	3800.65	0.0006	0.002014
Fe	57	3	He	133.832	0.0808	3670.60	0.0006	0.002014
Fe	57	3	He	131.135	0.0793	3760.65	0.0006	0.002014
Co	59	3	He	0.034	0.0061	290.01	0.0572	0.004106
Co	59	3	He	0.048	0.0068	310.01	0.0572	0.004106
Co	59	3	He	0.035	0.0061	290.01	0.0572	0.004106
Ni	60	3	He	0.062	0.0038	310.01	0.0084	0.003329
Ni	60	3	He	0.075	0.004	330.01	0.0084	0.003329
Ni	60	3	He	0.035	0.0036	300.01	0.0084	0.003329
Cu	63	3	He	0.35	0.0136	1100.08	0.0247	0.004989
Cu	63	3	He	0.385	0.0145	1210.09	0.0247	0.004989
Cu	63	3	He	0.345	0.0135	1120.09	0.0247	0.004989
Zn	66	3	He	0.38	0.0072	610.03	0.0029	0.006147
Zn	66	3	He	0.277	0.0069	580.04	0.0029	0.006147
Zn	66	3	He	1.009	0.009	740.04	0.0029	0.006147
As	75	3	He	0.014	0.0009	80.00	0.002	0.0009198
As	75	3	He	-0.089	0.0007	62.00	0.002	0.0009198
As	75	3	He	0.065	0.0011	86.00	0.002	0.0009198
Sr	88	3	He	1.357	0.0125	1050.07	0.0088	0.0005022
Sr	88	3	He	0.935	0.0087	730.05	0.0088	0.0005022
Sr	88	3	He	1.427	0.0131	1070.09	0.0088	0.0005022
Mo	98	3	He	0.172	0.0045	380.02	0.0223	0.0006689
Mo	98	3	He	0.168	0.0044	370.02	0.0223	0.0006689
Mo	98	3	He	0.211	0.0054	440.02	0.0223	0.0006689
Ag	107	3	He	0.006	0.0009	80.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	0.007	0.001	80.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Sn	120	3	He	-0.048	0.0172	1450.13	0.0156	0.01794
Sn	120	3	He	-0.122	0.016	1340.12	0.0156	0.01794
Sn	120	3	He	-0.046	0.0172	1410.13	0.0156	0.01794
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Sb	121	3	He	0.068	0.0011	90.00	0.0151	4.19E-05
Sb	121	3	He	0.11	0.0017	140.01	0.0151	4.19E-05
Ba	137	3	He	7.23	0.0356	3000.47	0.0049	0.0002094
Ba	137	3	He	6.756	0.0333	2780.38	0.0049	0.0002094
Ba	137	3	He	7.573	0.0373	3050.46	0.0049	0.0002094
Tl	205	3	He	0.018	0.0012	470.03	0.0252	0.0007688
Tl	205	3	He	0.011	0.001	400.02	0.0252	0.0007688
Tl	205	3	He	0.009	0.001	380.02	0.0252	0.0007688
Pb	208	3	He	0.242	0.0099	2010.22	0.0337	0.001742
Pb	208	3	He	0.25	0.0102	2070.22	0.0337	0.001742
Pb	208	3	He	0.231	0.0095	1940.21	0.0337	0.001742
U	238	3	He	0.013	0.0011	330.02	0.0502	0.0004339
U	238	3	He	0.01	0.001	290.01	0.0502	0.0004339
U	238	3	He	0.021	0.0015	450.03	0.0502	0.0004339
Sc	45	1	No Gas			2487174.34		
Sc	45	1	No Gas			2426625.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2414241.37		
Ge	72	1	No Gas			1282659.51		
Ge	72	1	No Gas			1259356.31		
Ge	72	1	No Gas			1258650.14		
Sc	45	2	H2			177240.80		
Sc	45	2	H2			174566.60		
Sc	45	2	H2			174133.34		
Ge	72	2	H2			155448.96		
Ge	72	2	H2			156287.60		
Ge	72	2	H2			156065.65		
In	115	2	H2			382495.27		
In	115	2	H2			382445.46		
In	115	2	H2			386180.62		
Sc	45	3	He			47819.59		
Sc	45	3	He			45401.49		
Sc	45	3	He			47447.87		
Ge	72	3	He			80597.47		
Ge	72	3	He			83413.00		
Ge	72	3	He			82850.55		
In	115	3	He			84315.70		
In	115	3	He			83580.88		
In	115	3	He			81860.34		
Tb	159	3	He			382059.25		
Tb	159	3	He			382086.32		
Tb	159	3	He			383836.56		
Bi	209	3	He			304473.94		
Bi	209	3	He			302920.11		
Bi	209	3	He			306816.54		

Quantitation Report

Data File Name	045SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
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Sample Name	LB 410-405098/1-B
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

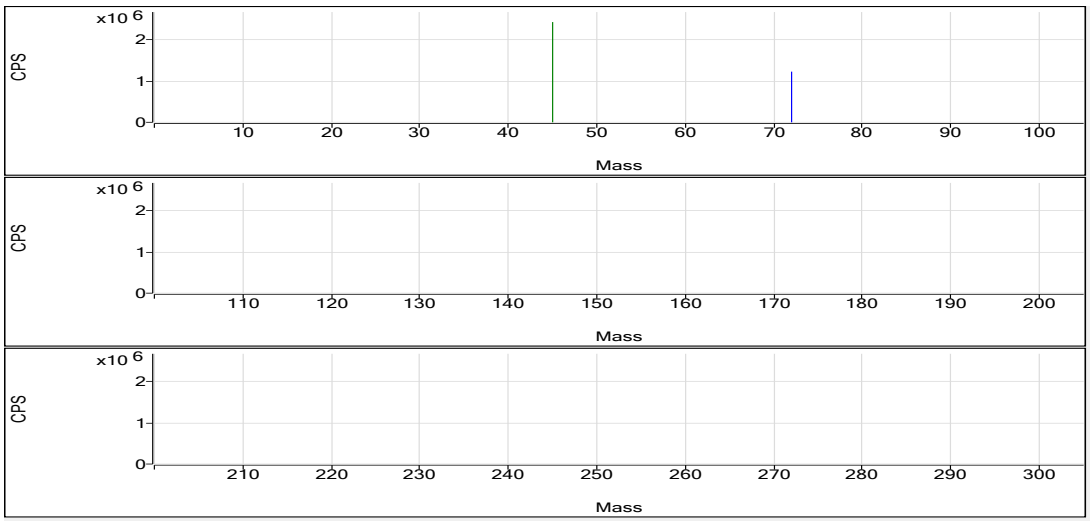
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.014	ppb	94.8	66.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.006	ppb	320.4	2.66	0.0000	Pulse	1.5000	3
Na	23	45	He	82.059	ppb	6.7	30178.18	0.6488	Pulse	0.1000	3
Mg	24	45	He	3.264	ppb	31.9	413.35	0.0089	Pulse	0.1000	3
Al	27	45	He	0.938	ppb	112.6	73.33	0.0016	Pulse	0.1000	3
K	39	45	He	-3.986	ppb	N/A	18639.10	0.4006	Pulse	0.1000	3
Ca	44	45	He	-9.074	ppb	N/A	133.34	0.0029	Pulse	0.1000	3
Ti	47	45	He	0.267	ppb	86.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.138	ppb	N/A	1298.07	0.0279	Pulse	0.5000	3
Cr	52	45	He	-0.091	ppb	N/A	1716.83	0.0370	Pulse	0.1000	3
Mn	55	45	He	0.043	ppb	16.3	173.34	0.0037	Pulse	0.1000	3
Fe	57	45	He	0.727	ppb	194.8	113.33	0.0024	Pulse	0.1000	3
Co	59	45	He	0.011	ppb	220.5	220.01	0.0047	Pulse	0.1000	3
Ni	60	72	He	-0.048	ppb	N/A	240.01	0.0029	Pulse	0.1000	3
Cu	63	72	He	0.066	ppb	79.9	543.36	0.0066	Pulse	0.1000	3
Zn	66	115	He	-0.698	ppb	N/A	340.02	0.0041	Pulse	0.1000	3
As	75	115	He	-0.111	ppb	N/A	57.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.040	ppb	62.6	70.00	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.008	ppb	58.2	70.00	0.0009	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	7.1	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.151	ppb	N/A	1280.10	0.0156	Pulse	0.1000	3
Sb	121	115	He	0.019	ppb	66.1	26.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.546	ppb	27.6	236.68	0.0029	Pulse	0.1000	3
Tl	205	159	He	-0.001	ppb	N/A	283.35	0.0007	Pulse	0.1000	3
Pb	208	159	He	-0.006	ppb	N/A	590.03	0.0015	Pulse	0.1000	3
U	238	209	He	-0.003	ppb	N/A	90.00	0.0003	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2428285.90	1.4	103.5	Analog	0.1000	3
No Gas	Ge	72	1227238.68	1.6	102.3	Pulse	0.1000	3
H2	Sc	45	175684.32	2.0	101.1	Pulse	0.1000	3
H2	Ge	72	151156.20	1.0	101.1	Pulse	0.1000	3
H2	In	115	379973.36	0.5	103.8	Pulse	0.1000	3
He	Sc	45	46528.49	1.9	108.1	Pulse	0.1000	3
He	Ge	72	81901.08	1.1	104.8	Pulse	0.1000	3
He	In	115	82076.18	2.3	103.0	Pulse	0.1000	3
He	Tb	159	381223.32	0.6	103.6	Pulse	0.1000	3
He	Bi	209	300980.32	0.4	103.1	Pulse	0.1000	3

No Gas



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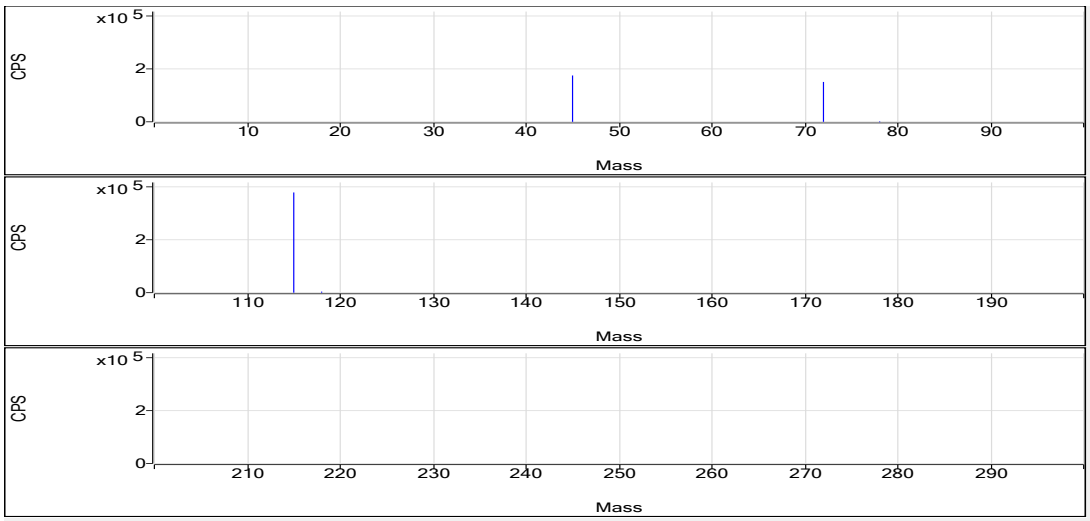
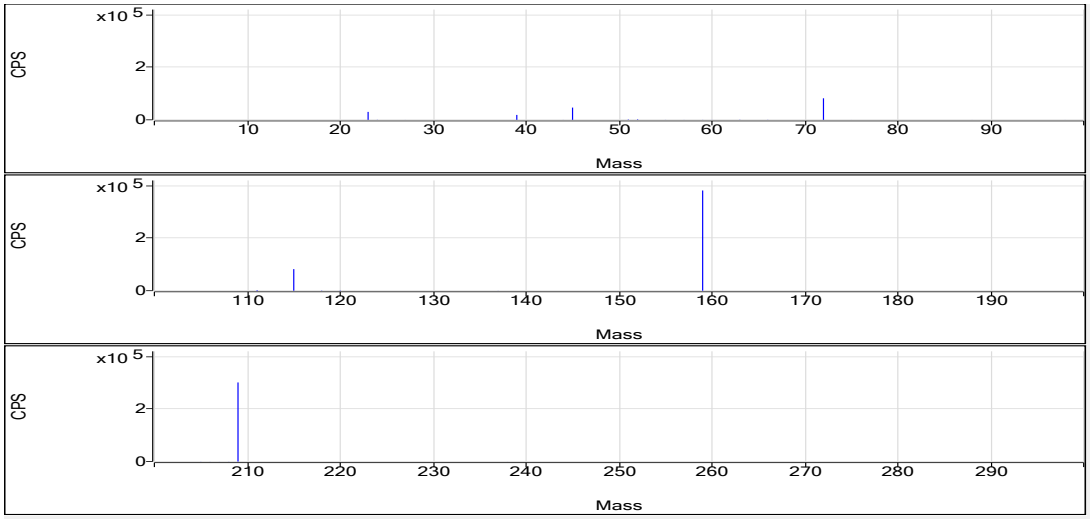


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.028	0	92.00	0.0007	1.705E-05
Be	9	1	No Gas	0.01	0	60.00	0.0007	1.705E-05
Be	9	1	No Gas	0.003	0	46.00	0.0007	1.705E-05
Se	78	2	H2	0.016	0	3.33	0.0002	6.062E-06
Se	78	2	H2	0.016	0	3.33	0.0002	6.062E-06
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Na	23	3	He	75.979	0.6262	29580.20	0.0037	0.3435
Na	23	3	He	83.499	0.6542	30632.58	0.0037	0.3435
Na	23	3	He	86.699	0.6661	30321.77	0.0037	0.3435
Mg	24	3	He	3.025	0.0085	400.02	0.0018	0.002943
Mg	24	3	He	2.364	0.0073	340.02	0.0018	0.002943
Mg	24	3	He	4.402	0.011	500.02	0.0018	0.002943
Al	27	3	He	1.858	0.0021	100.00	0.0006	0.001008
Al	27	3	He	1.174	0.0017	80.00	0.0006	0.001008
Al	27	3	He	-0.216	0.0009	40.00	0.0006	0.001008
K	39	3	He	-5.227	0.3991	18852.75	0.0012	0.4052
K	39	3	He	0.675	0.406	19012.93	0.0012	0.4052
K	39	3	He	-7.406	0.3965	18051.63	0.0012	0.4052
Ca	44	3	He	-10.668	0.0028	130.01	0.0001	0.003486
Ca	44	3	He	-1.005	0.0034	160.01	0.0001	0.003486
Ca	44	3	He	-15.549	0.0024	110.00	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.395	0.0002	10.00	0.0005	0
Ti	47	3	He	0.406	0.0002	10.00	0.0005	0
V	51	3	He	-0.174	0.0271	1280.06	0.0223	0.03097
V	51	3	He	-0.144	0.0278	1300.07	0.0223	0.03097
V	51	3	He	-0.095	0.0289	1314.07	0.0223	0.03097
Cr	52	3	He	-0.285	0.0313	1480.13	0.029	0.03958
Cr	52	3	He	-0.069	0.0376	1760.17	0.029	0.03958
Cr	52	3	He	0.082	0.042	1910.19	0.029	0.03958
Mn	55	3	He	0.049	0.0038	180.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.035	0.0036	170.01	0.013	0.003171
Mn	55	3	He	0.043	0.0037	170.01	0.013	0.003171
Fe	57	3	He	-0.903	0.0015	70.00	0.0006	0.002014
Fe	57	3	He	1.657	0.003	140.00	0.0006	0.002014
Fe	57	3	He	1.429	0.0029	130.00	0.0006	0.002014
Co	59	3	He	-0.005	0.0038	180.01	0.0572	0.004106
Co	59	3	He	-0.001	0.0041	190.01	0.0572	0.004106
Co	59	3	He	0.04	0.0064	290.01	0.0572	0.004106
Ni	60	3	He	-0.109	0.0024	200.01	0.0084	0.003329
Ni	60	3	He	0.068	0.0039	320.01	0.0084	0.003329
Ni	60	3	He	-0.103	0.0025	200.01	0.0084	0.003329
Cu	63	3	He	0.111	0.0077	640.04	0.0247	0.004989
Cu	63	3	He	0.079	0.0069	570.03	0.0247	0.004989
Cu	63	3	He	0.008	0.0052	420.02	0.0247	0.004989
Zn	66	3	He	-0.72	0.0041	330.02	0.0029	0.006147
Zn	66	3	He	-0.555	0.0046	370.02	0.0029	0.006147
Zn	66	3	He	-0.818	0.0038	320.02	0.0029	0.006147
As	75	3	He	-0.113	0.0007	56.00	0.002	0.0009198
As	75	3	He	-0.139	0.0006	52.00	0.002	0.0009198
As	75	3	He	-0.079	0.0008	64.00	0.002	0.0009198
Sr	88	3	He	0.027	0.0007	60.00	0.0088	0.0005022
Sr	88	3	He	0.069	0.0011	90.00	0.0088	0.0005022
Sr	88	3	He	0.024	0.0007	60.00	0.0088	0.0005022
Mo	98	3	He	0.009	0.0009	70.00	0.0223	0.0006689
Mo	98	3	He	0.003	0.0007	60.00	0.0223	0.0006689
Mo	98	3	He	0.013	0.001	80.00	0.0223	0.0006689
Ag	107	3	He	-0.001	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.006	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Sn	120	3	He	-0.294	0.0134	1080.07	0.0156	0.01794
Sn	120	3	He	-0.053	0.0171	1390.12	0.0156	0.01794
Sn	120	3	He	-0.107	0.0163	1370.12	0.0156	0.01794
Sb	121	3	He	0.005	0.0001	10.00	0.0151	4.19E-05
Sb	121	3	He	0.03	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Ba	137	3	He	0.387	0.0021	170.01	0.0049	0.0002094
Ba	137	3	He	0.687	0.0036	290.01	0.0049	0.0002094
Ba	137	3	He	0.564	0.003	250.01	0.0049	0.0002094
Tl	205	3	He	-0.005	0.0006	240.01	0.0252	0.0007688
Tl	205	3	He	0.004	0.0009	330.02	0.0252	0.0007688
Tl	205	3	He	-0.002	0.0007	280.01	0.0252	0.0007688
Pb	208	3	He	-0.006	0.0016	330.02	0.0337	0.001742
Pb	208	3	He	-0.011	0.0014	230.01	0.0337	0.001742
Pb	208	3	He	-0.001	0.0017	310.01	0.0337	0.001742
U	238	3	He	-0.002	0.0003	100.00	0.0502	0.0004339
U	238	3	He	-0.004	0.0002	70.00	0.0502	0.0004339
U	238	3	He	-0.002	0.0003	100.00	0.0502	0.0004339
Sc	45	1	No Gas			2435522.15		
Sc	45	1	No Gas			2458073.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2391261.84		
Ge	72	1	No Gas			1214918.03		
Ge	72	1	No Gas			1249633.26		
Ge	72	1	No Gas			1217164.75		
Sc	45	2	H2			172189.67		
Sc	45	2	H2			179244.24		
Sc	45	2	H2			175619.06		
Ge	72	2	H2			149789.10		
Ge	72	2	H2			152851.06		
Ge	72	2	H2			150828.45		
In	115	2	H2			380541.56		
In	115	2	H2			378000.74		
In	115	2	H2			381377.77		
Sc	45	3	He			47237.51		
Sc	45	3	He			46825.83		
Sc	45	3	He			45522.14		
Ge	72	3	He			82689.22		
Ge	72	3	He			82034.65		
Ge	72	3	He			80979.37		
In	115	3	He			80835.64		
In	115	3	He			81207.83		
In	115	3	He			84205.27		
Tb	159	3	He			380156.05		
Tb	159	3	He			379621.21		
Tb	159	3	He			383892.69		
Bi	209	3	He			302449.16		
Bi	209	3	He			300088.61		
Bi	209	3	He			300403.20		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:39:30 AM
Sample Name	410-137404-A-3-B
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

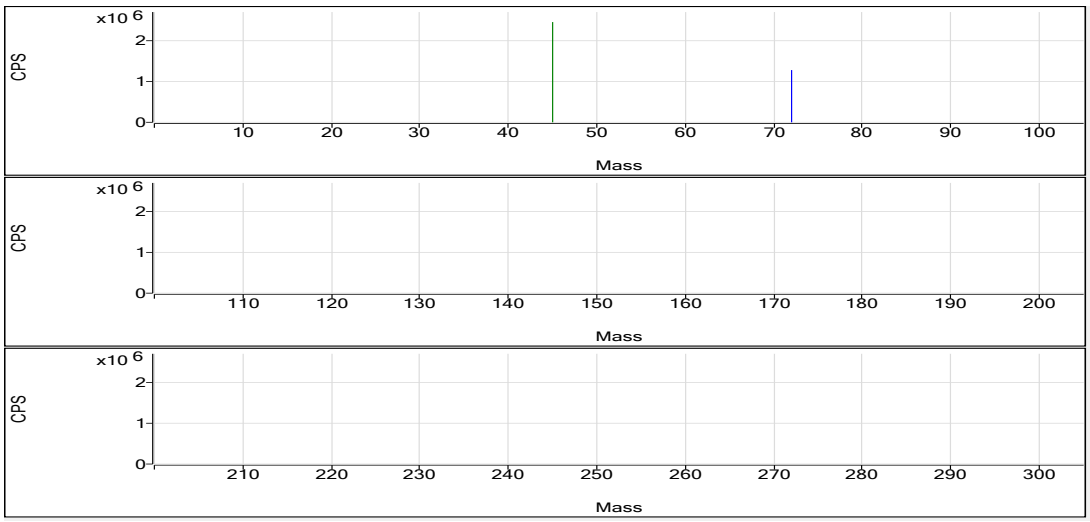
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	60.6	58.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.042	ppb	132.9	5.11	0.0000	Pulse	1.5000	3
Na	23	45	He	732.479	ppb	0.6	145228.71	3.0690	Pulse	0.1000	3
Mg	24	45	He	176.595	ppb	2.6	15401.90	0.3255	Pulse	0.1000	3
Al	27	45	He	122.469	ppb	19.3	3507.48	0.0741	Pulse	0.1000	3
K	39	45	He	70.162	ppb	13.1	23075.65	0.4876	Pulse	0.1000	3
Ca	44	45	He	1106.651	ppb	8.4	3767.30	0.0796	Pulse	0.1000	3
Ti	47	45	He	6.495	ppb	74.6	166.69	0.0035	Pulse	0.1000	3
V	51	45	He	0.227	ppb	29.1	1704.78	0.0360	Pulse	0.5000	3
Cr	52	45	He	0.129	ppb	55.6	2050.22	0.0433	Pulse	0.1000	3
Mn	55	45	He	0.564	ppb	28.4	496.70	0.0105	Pulse	0.1000	3
Fe	57	45	He	76.014	ppb	13.2	2213.60	0.0468	Pulse	0.1000	3
Co	59	45	He	0.002	ppb	468.9	200.01	0.0042	Pulse	0.1000	3
Ni	60	72	He	-0.069	ppb	N/A	236.68	0.0027	Pulse	0.1000	3
Cu	63	72	He	0.451	ppb	15.7	1396.79	0.0161	Pulse	0.1000	3
Zn	66	115	He	-0.392	ppb	N/A	420.02	0.0050	Pulse	0.1000	3
As	75	115	He	0.134	ppb	89.2	99.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	4.394	ppb	3.8	3277.15	0.0392	Pulse	0.1000	3
Mo	98	115	He	0.182	ppb	23.0	396.69	0.0047	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	748.7	60.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.021	ppb	13.3	10.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.068	ppb	N/A	1410.12	0.0169	Pulse	0.1000	3
Sb	121	115	He	0.042	ppb	70.6	56.67	0.0007	Pulse	0.1000	3
Ba	137	115	He	1.277	ppb	7.7	540.03	0.0065	Pulse	0.1000	3
Tl	205	159	He	-0.007	ppb	N/A	230.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.071	ppb	12.8	1590.09	0.0041	Pulse	0.1000	3
U	238	209	He	0.070	ppb	13.8	1210.10	0.0040	Pulse	0.1000	3

ISTD Table:

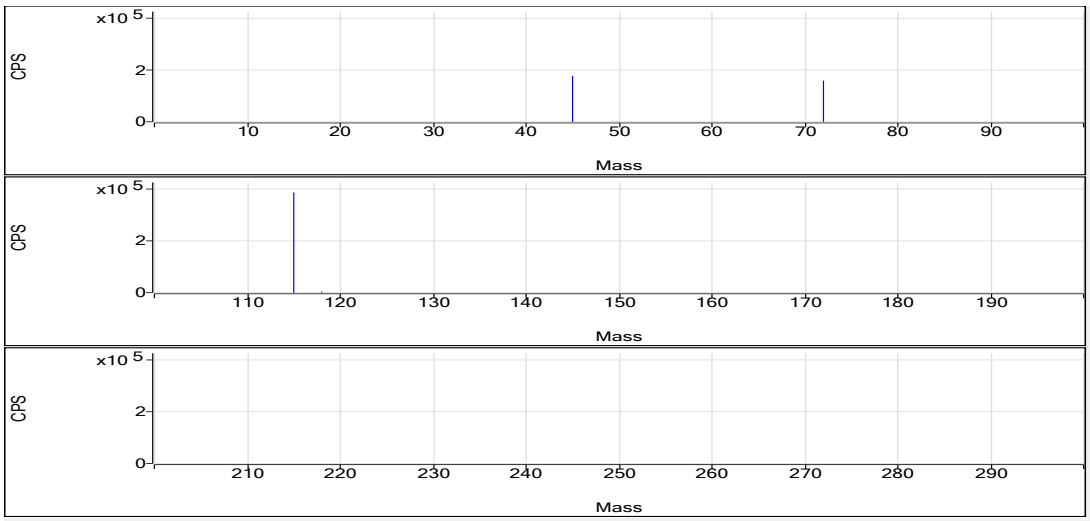
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2460364.76	0.5	104.8	Analog	0.1000	3
No Gas	Ge	72	1282084.30	0.5	106.8	Pulse	0.1000	3
H2	Sc	45	177125.00	0.8	101.9	Pulse	0.1000	3
H2	Ge	72	158749.94	1.9	106.2	Pulse	0.1000	3
H2	In	115	385988.86	0.4	105.5	Pulse	0.1000	3
He	Sc	45	47321.35	0.5	110.0	Pulse	0.1000	3
He	Ge	72	86400.65	2.8	110.5	Pulse	0.1000	3
He	In	115	83594.34	0.8	104.9	Pulse	0.1000	3
He	Tb	159	385749.63	0.3	104.8	Pulse	0.1000	3
He	Bi	209	305247.47	1.3	104.5	Pulse	0.1000	3

No Gas

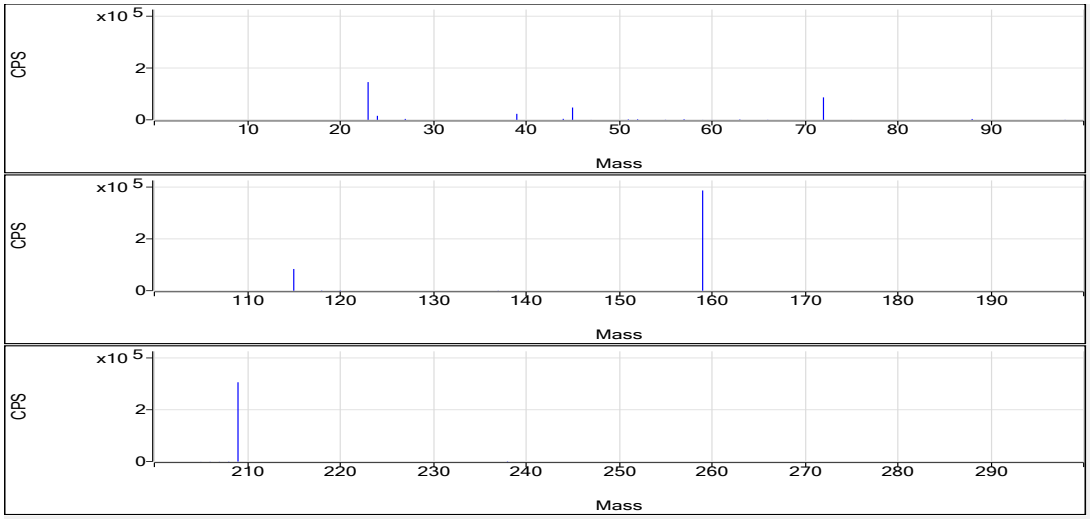


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	58.00	0.0007	1.705E-05
Be	9	1	No Gas	0.014	0	68.00	0.0007	1.705E-05
Be	9	1	No Gas	0.003	0	48.00	0.0007	1.705E-05
Se	78	2	H2	0.005	0	2.67	0.0002	6.062E-06
Se	78	2	H2	0.106	0	9.33	0.0002	6.062E-06
Se	78	2	H2	0.015	0	3.33	0.0002	6.062E-06
Na	23	3	He	733.587	3.0731	144672.54	0.0037	0.3435
Na	23	3	He	727.368	3.05	144440.79	0.0037	0.3435
Na	23	3	He	736.482	3.0839	146572.81	0.0037	0.3435
Mg	24	3	He	178.054	0.3282	15448.64	0.0018	0.002943
Mg	24	3	He	180.228	0.3321	15728.90	0.0018	0.002943
Mg	24	3	He	171.503	0.3162	15028.15	0.0018	0.002943
Al	27	3	He	122.545	0.0741	3490.71	0.0006	0.001008
Al	27	3	He	98.801	0.06	2840.42	0.0006	0.001008
Al	27	3	He	146.062	0.0882	4191.32	0.0006	0.001008
K	39	3	He	71.482	0.4892	23029.10	0.0012	0.4052
K	39	3	He	60.357	0.4761	22547.97	0.0012	0.4052
K	39	3	He	78.646	0.4976	23649.88	0.0012	0.4052
Ca	44	3	He	1209.189	0.0867	4080.73	0.0001	0.003486
Ca	44	3	He	1029.784	0.0743	3520.53	0.0001	0.003486
Ca	44	3	He	1080.98	0.0779	3700.63	0.0001	0.003486
Ti	47	3	He	3.14	0.0017	80.00	0.0005	0
Ti	47	3	He	4.291	0.0023	110.00	0.0005	0
Ti	47	3	He	12.054	0.0065	310.08	0.0005	0
V	51	3	He	0.197	0.0353	1664.11	0.0223	0.03097
V	51	3	He	0.182	0.035	1658.11	0.0223	0.03097
V	51	3	He	0.303	0.0377	1792.13	0.0223	0.03097
Cr	52	3	He	0.13	0.0433	2040.21	0.029	0.03958
Cr	52	3	He	0.201	0.0454	2150.25	0.029	0.03958
Cr	52	3	He	0.057	0.0412	1960.20	0.029	0.03958
Mn	55	3	He	0.737	0.0127	600.04	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.536	0.0101	480.03	0.013	0.003171
Mn	55	3	He	0.42	0.0086	410.02	0.013	0.003171
Fe	57	3	He	79.172	0.0486	2290.29	0.0006	0.002014
Fe	57	3	He	84.059	0.0515	2440.30	0.0006	0.002014
Fe	57	3	He	64.81	0.0402	1910.20	0.0006	0.002014
Co	59	3	He	0.006	0.0045	210.01	0.0572	0.004106
Co	59	3	He	0.009	0.0046	220.01	0.0572	0.004106
Co	59	3	He	-0.009	0.0036	170.01	0.0572	0.004106
Ni	60	3	He	-0.035	0.003	260.02	0.0084	0.003329
Ni	60	3	He	-0.143	0.0021	190.01	0.0084	0.003329
Ni	60	3	He	-0.03	0.0031	260.01	0.0084	0.003329
Cu	63	3	He	0.454	0.0162	1390.12	0.0247	0.004989
Cu	63	3	He	0.52	0.0178	1590.15	0.0247	0.004989
Cu	63	3	He	0.379	0.0143	1210.10	0.0247	0.004989
Zn	66	3	He	-0.27	0.0054	450.02	0.0029	0.006147
Zn	66	3	He	-0.461	0.0048	400.02	0.0029	0.006147
Zn	66	3	He	-0.444	0.0049	410.02	0.0029	0.006147
As	75	3	He	0.16	0.0012	104.00	0.002	0.0009198
As	75	3	He	0.239	0.0014	116.00	0.002	0.0009198
As	75	3	He	0.004	0.0009	78.00	0.002	0.0009198
Sr	88	3	He	4.201	0.0375	3140.47	0.0088	0.0005022
Sr	88	3	He	4.491	0.0401	3320.48	0.0088	0.0005022
Sr	88	3	He	4.491	0.0401	3370.50	0.0088	0.0005022
Mo	98	3	He	0.157	0.0042	350.02	0.0223	0.0006689
Mo	98	3	He	0.159	0.0042	350.02	0.0223	0.0006689
Mo	98	3	He	0.231	0.0058	490.03	0.0223	0.0006689
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	0.009	0.0011	90.00	0.0471	0.0006687
Cd	111	3	He	0.019	0.0001	10.00	0.0054	1.676E-05
Cd	111	3	He	0.024	0.0001	12.00	0.0054	1.676E-05
Cd	111	3	He	0.019	0.0001	10.00	0.0054	1.676E-05
Sn	120	3	He	-0.148	0.0156	1310.10	0.0156	0.01794
Sn	120	3	He	0.095	0.0194	1610.15	0.0156	0.01794
Sn	120	3	He	-0.152	0.0156	1310.11	0.0156	0.01794
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Sb	121	3	He	0.029	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.076	0.0012	100.00	0.0151	4.19E-05
Ba	137	3	He	1.226	0.0062	520.03	0.0049	0.0002094
Ba	137	3	He	1.214	0.0062	510.02	0.0049	0.0002094
Ba	137	3	He	1.39	0.007	590.04	0.0049	0.0002094
Tl	205	3	He	-0.009	0.0005	210.01	0.0252	0.0007688
Tl	205	3	He	-0.008	0.0006	220.01	0.0252	0.0007688
Tl	205	3	He	-0.004	0.0007	260.02	0.0252	0.0007688
Pb	208	3	He	0.065	0.0039	730.05	0.0337	0.001742
Pb	208	3	He	0.066	0.004	700.04	0.0337	0.001742
Pb	208	3	He	0.081	0.0045	770.05	0.0337	0.001742
U	238	3	He	0.064	0.0036	1100.09	0.0502	0.0004339
U	238	3	He	0.081	0.0045	1400.13	0.0502	0.0004339
U	238	3	He	0.066	0.0037	1130.09	0.0502	0.0004339
Sc	45	1	No Gas			2463805.59		
Sc	45	1	No Gas			2471573.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2445715.12		
Ge	72	1	No Gas			1279657.01		
Ge	72	1	No Gas			1289392.56		
Ge	72	1	No Gas			1277203.34		
Sc	45	2	H2			176299.43		
Sc	45	2	H2			176368.04		
Sc	45	2	H2			178707.52		
Ge	72	2	H2			161493.07		
Ge	72	2	H2			155466.61		
Ge	72	2	H2			159290.15		
In	115	2	H2			387800.81		
In	115	2	H2			384600.89		
In	115	2	H2			385564.88		
Sc	45	3	He			47077.05		
Sc	45	3	He			47358.19		
Sc	45	3	He			47528.80		
Ge	72	3	He			85716.30		
Ge	72	3	He			89117.58		
Ge	72	3	He			84368.08		
In	115	3	He			83752.54		
In	115	3	He			82907.04		
In	115	3	He			84145.27		
Tb	159	3	He			384358.63		
Tb	159	3	He			386138.78		
Tb	159	3	He			386751.48		
Bi	209	3	He			302695.56		
Bi	209	3	He			309869.88		
Bi	209	3	He			303176.97		

Quantitation Report

Data File Name	047SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:41:33 AM
Sample Name	410-135851-A-1-B
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

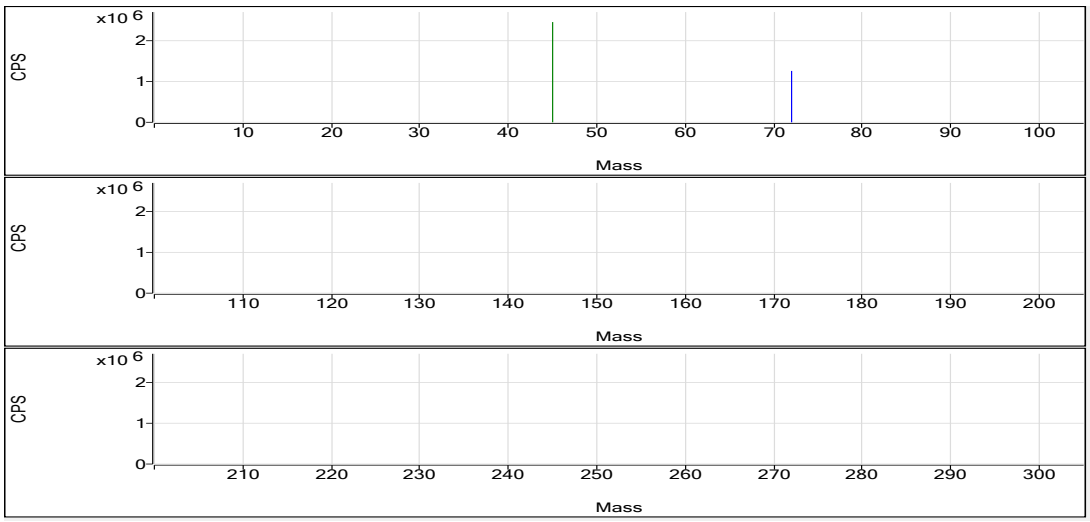
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	79.6	54.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.012	ppb	174.4	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	389.092	ppb	0.2	83824.81	1.7913	Pulse	0.1000	3
Mg	24	45	He	73.171	ppb	1.8	6391.58	0.1366	Pulse	0.1000	3
Al	27	45	He	0.699	ppb	242.1	66.67	0.0014	Pulse	0.1000	3
K	39	45	He	6.718	ppb	103.7	19333.42	0.4131	Pulse	0.1000	3
Ca	44	45	He	167.879	ppb	26.5	703.38	0.0150	Pulse	0.1000	3
Ti	47	45	He	0.528	ppb	114.7	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	-0.216	ppb	N/A	1224.72	0.0262	Pulse	0.5000	3
Cr	52	45	He	-0.216	ppb	N/A	1560.14	0.0333	Pulse	0.1000	3
Mn	55	45	He	0.238	ppb	13.8	293.34	0.0063	Pulse	0.1000	3
Fe	57	45	He	-0.274	ppb	N/A	86.67	0.0019	Pulse	0.1000	3
Co	59	45	He	0.009	ppb	186.0	216.68	0.0046	Pulse	0.1000	3
Ni	60	72	He	1.799	ppb	10.7	1536.81	0.0184	Pulse	0.1000	3
Cu	63	72	He	0.157	ppb	14.4	743.38	0.0089	Pulse	0.1000	3
Zn	66	115	He	-0.753	ppb	N/A	336.69	0.0040	Pulse	0.1000	3
As	75	115	He	-0.073	ppb	N/A	65.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	1.592	ppb	4.5	1226.77	0.0145	Pulse	0.1000	3
Mo	98	115	He	0.032	ppb	76.1	116.67	0.0014	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	94.0	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.192	ppb	N/A	1263.44	0.0150	Pulse	0.1000	3
Sb	121	115	He	0.021	ppb	136.3	30.00	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.264	ppb	19.3	126.67	0.0015	Pulse	0.1000	3
Tl	205	159	He	-0.010	ppb	N/A	196.68	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.000	ppb	N/A	666.70	0.0017	Pulse	0.1000	3
U	238	209	He	-0.005	ppb	N/A	53.33	0.0002	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2450742.47	1.8	104.4	Analog	0.1000	3
No Gas	Ge	72	1256260.69	0.9	104.7	Pulse	0.1000	3
H2	Sc	45	174568.28	0.5	100.5	Pulse	0.1000	3
H2	Ge	72	154403.24	1.4	103.3	Pulse	0.1000	3
H2	In	115	382691.96	0.3	104.6	Pulse	0.1000	3
He	Sc	45	46796.20	0.3	108.7	Pulse	0.1000	3
He	Ge	72	83718.82	1.6	107.1	Pulse	0.1000	3
He	In	115	84458.72	0.4	106.0	Pulse	0.1000	3
He	Tb	159	384160.39	1.5	104.4	Pulse	0.1000	3
He	Bi	209	304830.45	1.0	104.4	Pulse	0.1000	3

No Gas



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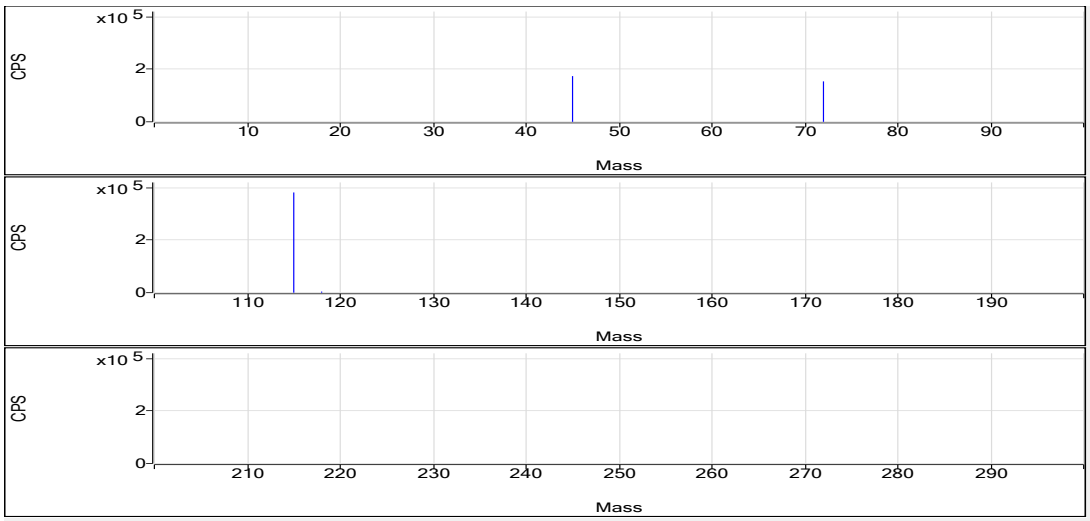
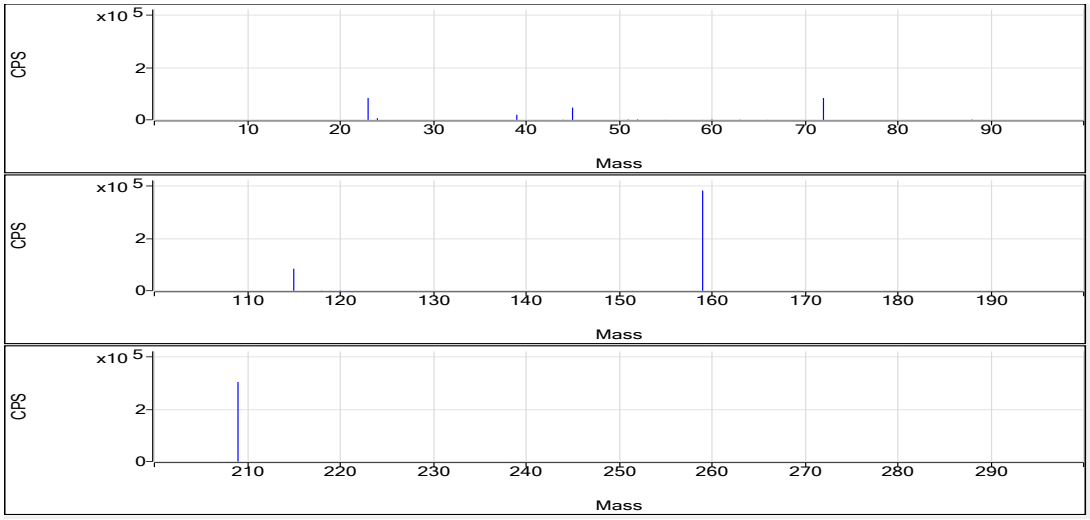


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0	60.00	0.0007	1.705E-05
Be	9	1	No Gas	0.001	0	42.00	0.0007	1.705E-05
Be	9	1	No Gas	0.011	0	62.00	0.0007	1.705E-05
Se	78	2	H2	0.035	0	4.67	0.0002	6.062E-06
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Se	78	2	H2	0.005	0	2.67	0.0002	6.062E-06
Na	23	3	He	389.885	1.7942	84251.49	0.0037	0.3435
Na	23	3	He	388.122	1.7877	83404.61	0.0037	0.3435
Na	23	3	He	389.268	1.7919	83818.32	0.0037	0.3435
Mg	24	3	He	71.628	0.1338	6281.51	0.0018	0.002943
Mg	24	3	He	73.98	0.1381	6441.60	0.0018	0.002943
Mg	24	3	He	73.904	0.1379	6451.62	0.0018	0.002943
Al	27	3	He	-0.618	0.0006	30.00	0.0006	0.001008
Al	27	3	He	0.107	0.0011	50.00	0.0006	0.001008
Al	27	3	He	2.61	0.0026	120.01	0.0006	0.001008
K	39	3	He	13.51	0.4211	19773.99	0.0012	0.4052
K	39	3	He	7.055	0.4135	19293.41	0.0012	0.4052
K	39	3	He	-0.412	0.4048	18932.86	0.0012	0.4052
Ca	44	3	He	116.481	0.0115	540.03	0.0001	0.003486
Ca	44	3	He	195.448	0.0169	790.05	0.0001	0.003486
Ca	44	3	He	191.71	0.0167	780.05	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.188	0.0006	30.00	0.0005	0
Ti	47	3	He	0.395	0.0002	10.00	0.0005	0
V	51	3	He	-0.174	0.0271	1272.06	0.0223	0.03097
V	51	3	He	-0.151	0.0276	1288.06	0.0223	0.03097
V	51	3	He	-0.321	0.0238	1114.05	0.0223	0.03097
Cr	52	3	He	-0.183	0.0343	1610.14	0.029	0.03958
Cr	52	3	He	-0.16	0.0349	1630.15	0.029	0.03958
Cr	52	3	He	-0.304	0.0308	1440.13	0.029	0.03958
Mn	55	3	He	0.264	0.0066	310.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.201	0.0058	270.01	0.013	0.003171
Mn	55	3	He	0.25	0.0064	300.01	0.013	0.003171
Fe	57	3	He	-0.888	0.0015	70.00	0.0006	0.002014
Fe	57	3	He	0.22	0.0021	100.00	0.0006	0.002014
Fe	57	3	He	-0.153	0.0019	90.00	0.0006	0.002014
Co	59	3	He	0.029	0.0058	270.01	0.0572	0.004106
Co	59	3	He	-0.001	0.0041	190.01	0.0572	0.004106
Co	59	3	He	-0.001	0.0041	190.01	0.0572	0.004106
Ni	60	3	He	1.605	0.0167	1410.13	0.0084	0.003329
Ni	60	3	He	1.802	0.0184	1560.14	0.0084	0.003329
Ni	60	3	He	1.989	0.02	1640.15	0.0084	0.003329
Cu	63	3	He	0.135	0.0083	700.05	0.0247	0.004989
Cu	63	3	He	0.18	0.0094	800.05	0.0247	0.004989
Cu	63	3	He	0.158	0.0089	730.04	0.0247	0.004989
Zn	66	3	He	-0.827	0.0038	320.02	0.0029	0.006147
Zn	66	3	He	-0.615	0.0044	370.02	0.0029	0.006147
Zn	66	3	He	-0.818	0.0038	320.02	0.0029	0.006147
As	75	3	He	-0.07	0.0008	66.00	0.002	0.0009198
As	75	3	He	-0.092	0.0007	62.00	0.002	0.0009198
As	75	3	He	-0.056	0.0008	68.00	0.002	0.0009198
Sr	88	3	He	1.51	0.0138	1170.10	0.0088	0.0005022
Sr	88	3	He	1.625	0.0148	1250.11	0.0088	0.0005022
Sr	88	3	He	1.642	0.015	1260.09	0.0088	0.0005022
Mo	98	3	He	0.06	0.002	170.01	0.0223	0.0006689
Mo	98	3	He	0.018	0.0011	90.00	0.0223	0.0006689
Mo	98	3	He	0.018	0.0011	90.00	0.0223	0.0006689
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.183	0.0151	1280.13	0.0156	0.01794
Sn	120	3	He	-0.125	0.016	1350.12	0.0156	0.01794
Sn	120	3	He	-0.267	0.0138	1160.08	0.0156	0.01794
Sb	121	3	He	-0.003	0	0.00	0.0151	4.19E-05
Sb	121	3	He	0.013	0.0002	20.00	0.0151	4.19E-05
Sb	121	3	He	0.052	0.0008	70.00	0.0151	4.19E-05
Ba	137	3	He	0.222	0.0013	110.00	0.0049	0.0002094
Ba	137	3	He	0.32	0.0018	150.01	0.0049	0.0002094
Ba	137	3	He	0.249	0.0014	120.01	0.0049	0.0002094
Tl	205	3	He	-0.014	0.0004	160.01	0.0252	0.0007688
Tl	205	3	He	-0.007	0.0006	230.01	0.0252	0.0007688
Tl	205	3	He	-0.009	0.0005	200.01	0.0252	0.0007688
Pb	208	3	He	0.005	0.0019	410.02	0.0337	0.001742
Pb	208	3	He	0.004	0.0019	380.02	0.0337	0.001742
Pb	208	3	He	-0.01	0.0014	290.02	0.0337	0.001742
U	238	3	He	-0.004	0.0002	70.00	0.0502	0.0004339
U	238	3	He	-0.006	0.0001	40.00	0.0502	0.0004339
U	238	3	He	-0.005	0.0002	50.00	0.0502	0.0004339
Sc	45	1	No Gas			2466840.28		
Sc	45	1	No Gas			2401766.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2483621.06		
Ge	72	1	No Gas			1246377.33		
Ge	72	1	No Gas			1253138.89		
Ge	72	1	No Gas			1269265.84		
Sc	45	2	H2			175602.63		
Sc	45	2	H2			174082.87		
Sc	45	2	H2			174019.35		
Ge	72	2	H2			152497.14		
Ge	72	2	H2			156630.13		
Ge	72	2	H2			154082.45		
In	115	2	H2			383874.41		
In	115	2	H2			381371.09		
In	115	2	H2			382830.38		
Sc	45	3	He			46957.21		
Sc	45	3	He			46655.76		
Sc	45	3	He			46775.62		
Ge	72	3	He			84188.19		
Ge	72	3	He			84801.57		
Ge	72	3	He			82166.71		
In	115	3	He			84798.37		
In	115	3	He			84405.27		
In	115	3	He			84194.44		
Tb	159	3	He			387234.49		
Tb	159	3	He			387627.46		
Tb	159	3	He			377619.21		
Bi	209	3	He			304506.34		
Bi	209	3	He			308118.34		
Bi	209	3	He			301866.68		

Quantitation Report

Data File Name	048SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:43:37 AM
Sample Name	410-135851-A-6-B
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

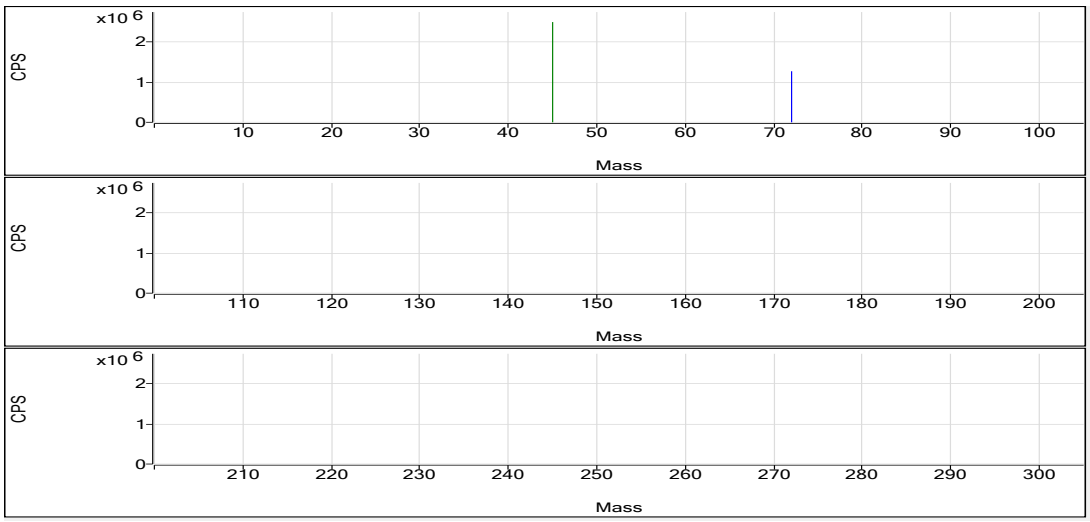
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.008	ppb	60.1	57.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.018	ppb	219.1	3.56	0.0000	Pulse	1.5000	3
Na	23	45	He	306.016	ppb	1.1	70140.09	1.4821	Pulse	0.1000	3
Mg	24	45	He	34.142	ppb	7.6	3090.43	0.0653	Pulse	0.1000	3
Al	27	45	He	45.987	ppb	11.4	1346.78	0.0285	Pulse	0.1000	3
K	39	45	He	-2.279	ppb	N/A	19049.59	0.4026	Pulse	0.1000	3
Ca	44	45	He	112.041	ppb	25.9	530.03	0.0112	Pulse	0.1000	3
Ti	47	45	He	0.261	ppb	86.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.139	ppb	N/A	1319.40	0.0279	Pulse	0.5000	3
Cr	52	45	He	0.496	ppb	12.6	2553.64	0.0540	Pulse	0.1000	3
Mn	55	45	He	1.366	ppb	5.6	990.07	0.0209	Pulse	0.1000	3
Fe	57	45	He	78.386	ppb	3.8	2280.26	0.0482	Pulse	0.1000	3
Co	59	45	He	0.072	ppb	20.4	390.02	0.0082	Pulse	0.1000	3
Ni	60	72	He	1.252	ppb	11.1	1160.09	0.0138	Pulse	0.1000	3
Cu	63	72	He	1.874	ppb	8.3	4314.14	0.0513	Pulse	0.1000	3
Zn	66	115	He	-0.560	ppb	N/A	383.35	0.0045	Pulse	0.1000	3
As	75	115	He	-0.057	ppb	N/A	68.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.488	ppb	6.5	406.69	0.0048	Pulse	0.1000	3
Mo	98	115	He	0.231	ppb	5.6	493.36	0.0058	Pulse	0.1000	3
Ag	107	115	He	-0.007	ppb	N/A	30.00	0.0004	Pulse	0.1000	3
Cd	111	115	He	-0.003	ppb	0.0	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.161	ppb	N/A	1306.78	0.0154	Pulse	0.1000	3
Sb	121	115	He	0.034	ppb	37.2	46.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.471	ppb	26.8	213.34	0.0025	Pulse	0.1000	3
Tl	205	159	He	-0.008	ppb	N/A	213.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	1.253	ppb	2.6	16864.95	0.0440	Pulse	0.1000	3
U	238	209	He	-0.003	ppb	N/A	86.67	0.0003	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2493785.43	0.4	106.2	Analog	0.1000	3
No Gas	Ge	72	1270259.51	0.2	105.9	Pulse	0.1000	3
H2	Sc	45	174965.92	1.5	100.7	Pulse	0.1000	3
H2	Ge	72	154757.17	0.6	103.5	Pulse	0.1000	3
H2	In	115	384260.61	0.7	105.0	Pulse	0.1000	3
He	Sc	45	47324.16	0.4	110.0	Pulse	0.1000	3
He	Ge	72	84140.72	1.1	107.7	Pulse	0.1000	3
He	In	115	84684.50	2.9	106.2	Pulse	0.1000	3
He	Tb	159	383266.14	0.7	104.2	Pulse	0.1000	3
He	Bi	209	303219.29	0.5	103.8	Pulse	0.1000	3

No Gas



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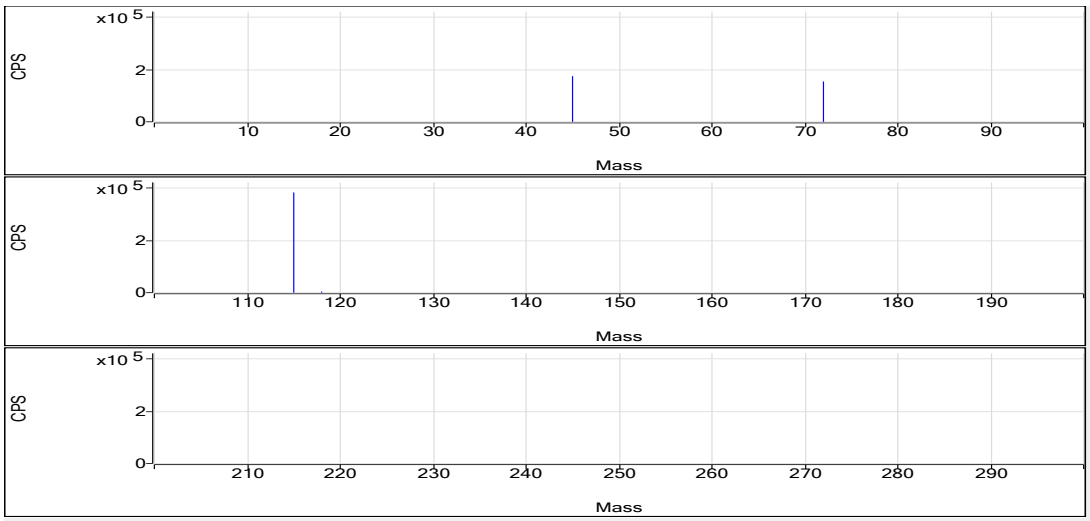
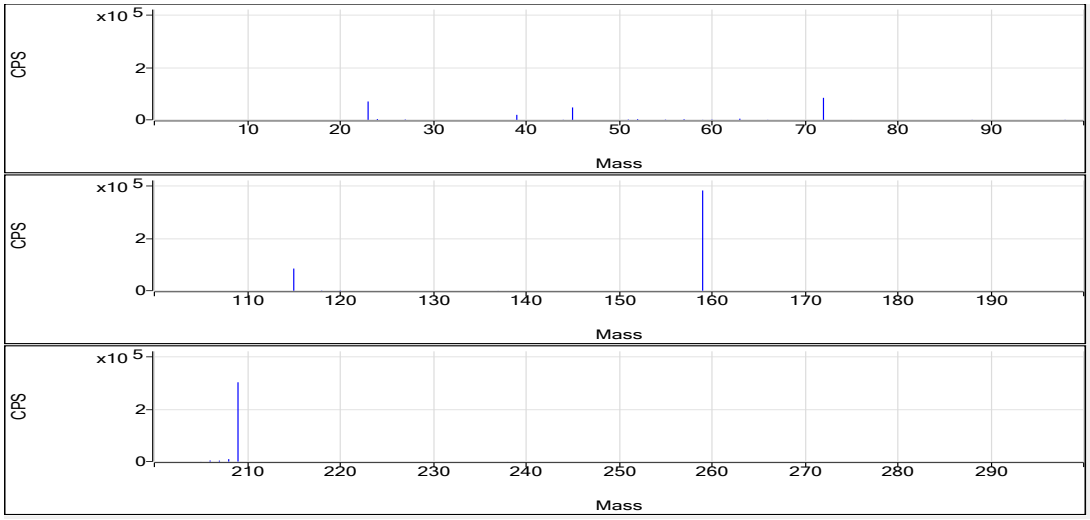


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	58.00	0.0007	1.705E-05
Be	9	1	No Gas	0.013	0	66.00	0.0007	1.705E-05
Be	9	1	No Gas	0.003	0	48.00	0.0007	1.705E-05
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Se	78	2	H2	0.065	0	6.67	0.0002	6.062E-06
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Na	23	3	He	302.534	1.4692	69695.06	0.0037	0.3435
Na	23	3	He	309.457	1.495	70437.63	0.0037	0.3435
Na	23	3	He	306.057	1.4823	70287.59	0.0037	0.3435
Mg	24	3	He	36.712	0.07	3320.48	0.0018	0.002943
Mg	24	3	He	34.183	0.0654	3080.41	0.0018	0.002943
Mg	24	3	He	31.531	0.0605	2870.40	0.0018	0.002943
Al	27	3	He	42.817	0.0266	1260.10	0.0006	0.001008
Al	27	3	He	43.12	0.0267	1260.10	0.0006	0.001008
Al	27	3	He	52.024	0.0321	1520.15	0.0006	0.001008
K	39	3	He	-9.72	0.3938	18682.35	0.0012	0.4052
K	39	3	He	10.121	0.4171	19653.74	0.0012	0.4052
K	39	3	He	-7.239	0.3967	18812.68	0.0012	0.4052
Ca	44	3	He	133.174	0.0126	600.04	0.0001	0.003486
Ca	44	3	He	78.895	0.0089	420.02	0.0001	0.003486
Ca	44	3	He	124.056	0.012	570.04	0.0001	0.003486
Ti	47	3	He	0.389	0.0002	10.00	0.0005	0
Ti	47	3	He	0.392	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.206	0.0264	1252.06	0.0223	0.03097
V	51	3	He	0.022	0.0315	1482.09	0.0223	0.03097
V	51	3	He	-0.232	0.0258	1224.06	0.0223	0.03097
Cr	52	3	He	0.438	0.0523	2480.29	0.029	0.03958
Cr	52	3	He	0.487	0.0537	2530.32	0.029	0.03958
Cr	52	3	He	0.563	0.0559	2650.32	0.029	0.03958
Mn	55	3	He	1.362	0.0209	990.07	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.291	0.02	940.06	0.013	0.003171
Mn	55	3	He	1.444	0.0219	1040.07	0.013	0.003171
Fe	57	3	He	74.963	0.0462	2190.24	0.0006	0.002014
Fe	57	3	He	80.542	0.0495	2330.27	0.0006	0.002014
Fe	57	3	He	79.651	0.0489	2320.27	0.0006	0.002014
Co	59	3	He	0.087	0.0091	430.02	0.0572	0.004106
Co	59	3	He	0.073	0.0083	390.02	0.0572	0.004106
Co	59	3	He	0.057	0.0074	350.02	0.0572	0.004106
Ni	60	3	He	1.326	0.0144	1200.09	0.0084	0.003329
Ni	60	3	He	1.337	0.0145	1220.09	0.0084	0.003329
Ni	60	3	He	1.091	0.0125	1060.08	0.0084	0.003329
Cu	63	3	He	2.035	0.0553	4600.91	0.0247	0.004989
Cu	63	3	He	1.863	0.051	4290.80	0.0247	0.004989
Cu	63	3	He	1.724	0.0476	4050.72	0.0247	0.004989
Zn	66	3	He	-0.232	0.0055	450.02	0.0029	0.006147
Zn	66	3	He	-0.668	0.0042	360.02	0.0029	0.006147
Zn	66	3	He	-0.779	0.0039	340.01	0.0029	0.006147
As	75	3	He	-0.021	0.0009	72.00	0.002	0.0009198
As	75	3	He	-0.037	0.0008	72.00	0.002	0.0009198
As	75	3	He	-0.114	0.0007	60.00	0.002	0.0009198
Sr	88	3	He	0.455	0.0045	370.02	0.0088	0.0005022
Sr	88	3	He	0.49	0.0048	410.02	0.0088	0.0005022
Sr	88	3	He	0.518	0.0051	440.03	0.0088	0.0005022
Mo	98	3	He	0.243	0.0061	500.03	0.0223	0.0006689
Mo	98	3	He	0.217	0.0055	470.02	0.0223	0.0006689
Mo	98	3	He	0.233	0.0059	510.03	0.0223	0.0006689
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Ag	107	3	He	-0.007	0.0003	30.00	0.0471	0.0006687
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.119	0.0161	1320.12	0.0156	0.01794
Sn	120	3	He	-0.171	0.0153	1300.11	0.0156	0.01794
Sn	120	3	He	-0.191	0.015	1300.11	0.0156	0.01794
Sb	121	3	He	0.046	0.0007	60.00	0.0151	4.19E-05
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Sb	121	3	He	0.035	0.0006	50.00	0.0151	4.19E-05
Ba	137	3	He	0.356	0.0019	160.01	0.0049	0.0002094
Ba	137	3	He	0.606	0.0032	270.01	0.0049	0.0002094
Ba	137	3	He	0.451	0.0024	210.01	0.0049	0.0002094
Tl	205	3	He	-0.006	0.0006	240.01	0.0252	0.0007688
Tl	205	3	He	-0.015	0.0004	150.01	0.0252	0.0007688
Tl	205	3	He	-0.005	0.0007	250.01	0.0252	0.0007688
Pb	208	3	He	1.241	0.0436	9493.71	0.0337	0.001742
Pb	208	3	He	1.29	0.0453	9533.79	0.0337	0.001742
Pb	208	3	He	1.227	0.0431	8693.17	0.0337	0.001742
U	238	3	He	-0.004	0.0002	70.00	0.0502	0.0004339
U	238	3	He	-0.003	0.0003	90.00	0.0502	0.0004339
U	238	3	He	-0.002	0.0003	100.00	0.0502	0.0004339
Sc	45	1	No Gas			2483353.87		
Sc	45	1	No Gas			2504175.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2493826.99		
Ge	72	1	No Gas			1271686.62		
Ge	72	1	No Gas			1272461.00		
Ge	72	1	No Gas			1266630.92		
Sc	45	2	H2			173826.62		
Sc	45	2	H2			177918.45		
Sc	45	2	H2			173152.69		
Ge	72	2	H2			155001.96		
Ge	72	2	H2			155588.04		
Ge	72	2	H2			153681.51		
In	115	2	H2			381368.00		
In	115	2	H2			386856.21		
In	115	2	H2			384557.61		
Sc	45	3	He			47437.70		
Sc	45	3	He			47116.93		
Sc	45	3	He			47417.86		
Ge	72	3	He			83231.48		
Ge	72	3	He			84077.24		
Ge	72	3	He			85113.43		
In	115	3	He			82082.08		
In	115	3	He			85100.70		
In	115	3	He			86891.40		
Tb	159	3	He			385931.44		
Tb	159	3	He			380740.89		
Tb	159	3	He			383126.09		
Bi	209	3	He			302127.73		
Bi	209	3	He			304964.88		
Bi	209	3	He			302565.27		

Quantitation Report

Data File Name	049SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:45:39 AM
Sample Name	410-135851-A-10-B
Sample Type	Sample
Comment	D8
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

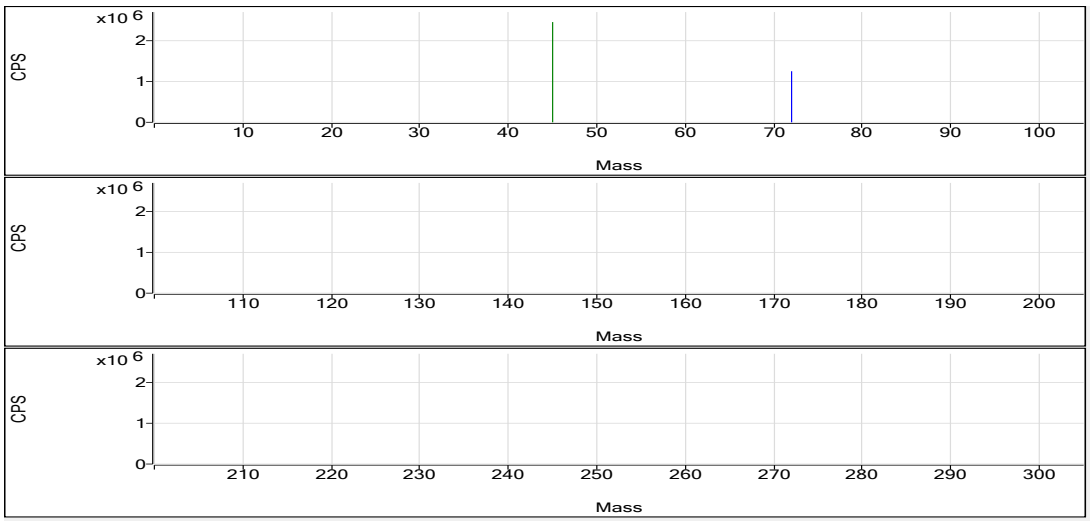
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	260.5	46.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	-0.002	ppb	N/A	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	177.012	ppb	2.0	47099.42	1.0021	Pulse	0.1000	3
Mg	24	45	He	12.370	ppb	14.2	1200.09	0.0255	Pulse	0.1000	3
Al	27	45	He	42.525	ppb	9.7	1240.12	0.0264	Pulse	0.1000	3
K	39	45	He	20.378	ppb	58.0	20167.71	0.4292	Pulse	0.1000	3
Ca	44	45	He	33.901	ppb	29.2	273.34	0.0058	Pulse	0.1000	3
Ti	47	45	He	1.048	ppb	57.1	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	-0.178	ppb	N/A	1269.40	0.0270	Pulse	0.5000	3
Cr	52	45	He	0.820	ppb	4.8	2977.07	0.0633	Pulse	0.1000	3
Mn	55	45	He	2.796	ppb	11.0	1856.85	0.0395	Pulse	0.1000	3
Fe	57	45	He	157.818	ppb	5.3	4464.19	0.0950	Pulse	0.1000	3
Co	59	45	He	0.096	ppb	13.0	450.02	0.0096	Pulse	0.1000	3
Ni	60	72	He	1.187	ppb	2.9	1103.42	0.0133	Pulse	0.1000	3
Cu	63	72	He	1.420	ppb	8.4	3333.84	0.0401	Pulse	0.1000	3
Zn	66	115	He	-0.074	ppb	N/A	506.70	0.0059	Pulse	0.1000	3
As	75	115	He	-0.046	ppb	N/A	70.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.209	ppb	17.4	200.01	0.0023	Pulse	0.1000	3
Mo	98	115	He	0.159	ppb	22.6	360.02	0.0042	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	347.5	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.139	ppb	N/A	1346.82	0.0158	Pulse	0.1000	3
Sb	121	115	He	0.023	ppb	51.9	33.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.340	ppb	12.7	160.01	0.0019	Pulse	0.1000	3
Tl	205	159	He	-0.013	ppb	N/A	166.67	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.486	ppb	5.1	7007.69	0.0181	Pulse	0.1000	3
U	238	209	He	-0.005	ppb	N/A	56.67	0.0002	Pulse	0.1000	3

ISTD Table:

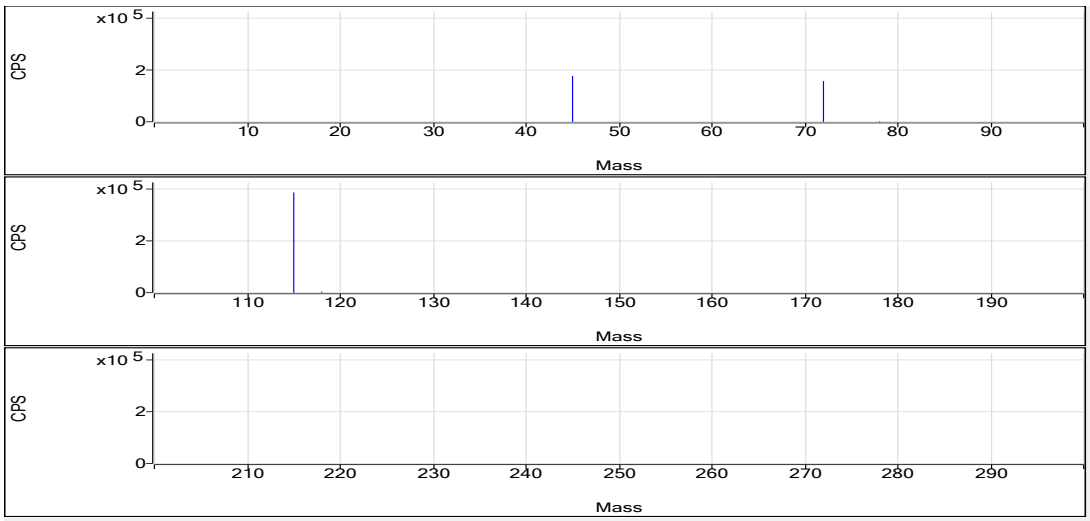
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2467294.13	1.1	105.1	Analog	0.1000	3
No Gas	Ge	72	1257082.59	0.4	104.8	Pulse	0.1000	3
H2	Sc	45	177377.44	0.8	102.1	Pulse	0.1000	3
H2	Ge	72	157223.11	0.4	105.1	Pulse	0.1000	3
H2	In	115	387261.32	0.5	105.8	Pulse	0.1000	3
He	Sc	45	46996.58	0.6	109.2	Pulse	0.1000	3
He	Ge	72	83215.81	1.3	106.5	Pulse	0.1000	3
He	In	115	85415.30	0.9	107.2	Pulse	0.1000	3
He	Tb	159	386484.54	0.7	105.0	Pulse	0.1000	3
He	Bi	209	303507.35	0.9	103.9	Pulse	0.1000	3

No Gas

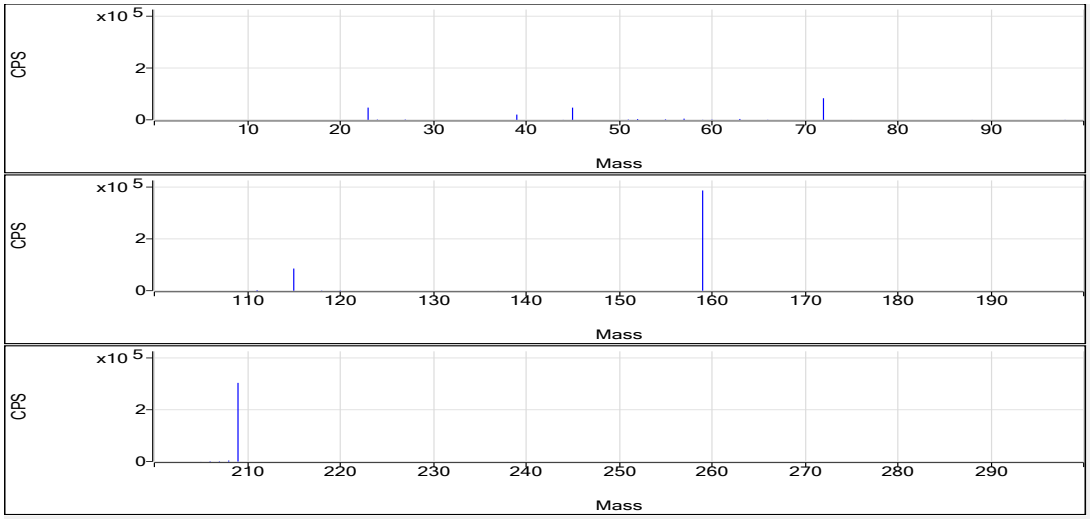


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	42.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.002	0	38.00	0.0007	1.705E-05
Be	9	1	No Gas	0.008	0	58.00	0.0007	1.705E-05
Se	78	2	H2	0.015	0	3.33	0.0002	6.062E-06
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Na	23	3	He	173.37	0.9886	46122.97	0.0037	0.3435
Na	23	3	He	180.486	1.0151	47928.65	0.0037	0.3435
Na	23	3	He	177.18	1.0028	47246.64	0.0037	0.3435
Mg	24	3	He	12.237	0.0253	1180.09	0.0018	0.002943
Mg	24	3	He	10.68	0.0225	1060.07	0.0018	0.002943
Mg	24	3	He	14.193	0.0289	1360.12	0.0018	0.002943
Al	27	3	He	42.486	0.0264	1230.11	0.0006	0.001008
Al	27	3	He	38.413	0.0239	1130.13	0.0006	0.001008
Al	27	3	He	46.678	0.0289	1360.13	0.0006	0.001008
K	39	3	He	31.18	0.4419	20615.04	0.0012	0.4052
K	39	3	He	22.187	0.4313	20364.70	0.0012	0.4052
K	39	3	He	7.768	0.4144	19523.39	0.0012	0.4052
Ca	44	3	He	42.79	0.0064	300.01	0.0001	0.003486
Ca	44	3	He	23.209	0.0051	240.01	0.0001	0.003486
Ca	44	3	He	35.706	0.0059	280.01	0.0001	0.003486
Ti	47	3	He	1.188	0.0006	30.00	0.0005	0
Ti	47	3	He	1.565	0.0008	40.00	0.0005	0
Ti	47	3	He	0.392	0.0002	10.00	0.0005	0
V	51	3	He	-0.118	0.0283	1322.07	0.0223	0.03097
V	51	3	He	-0.229	0.0259	1222.06	0.0223	0.03097
V	51	3	He	-0.186	0.0268	1264.06	0.0223	0.03097
Cr	52	3	He	0.809	0.063	2940.40	0.029	0.03958
Cr	52	3	He	0.864	0.0646	3050.43	0.029	0.03958
Cr	52	3	He	0.788	0.0624	2940.38	0.029	0.03958
Mn	55	3	He	2.808	0.0397	1850.18	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3.097	0.0434	2050.21	0.013	0.003171
Mn	55	3	He	2.484	0.0354	1670.15	0.013	0.003171
Fe	57	3	He	150.525	0.0907	4230.74	0.0006	0.002014
Fe	57	3	He	155.888	0.0938	4430.87	0.0006	0.002014
Fe	57	3	He	167.042	0.1004	4730.95	0.0006	0.002014
Co	59	3	He	0.082	0.0088	410.02	0.0572	0.004106
Co	59	3	He	0.106	0.0102	480.02	0.0572	0.004106
Co	59	3	He	0.099	0.0098	460.02	0.0572	0.004106
Ni	60	3	He	1.213	0.0135	1130.09	0.0084	0.003329
Ni	60	3	He	1.149	0.0129	1060.09	0.0084	0.003329
Ni	60	3	He	1.201	0.0134	1120.07	0.0084	0.003329
Cu	63	3	He	1.371	0.0389	3260.48	0.0247	0.004989
Cu	63	3	He	1.556	0.0434	3560.56	0.0247	0.004989
Cu	63	3	He	1.334	0.038	3180.47	0.0247	0.004989
Zn	66	3	He	0.607	0.0079	670.04	0.0029	0.006147
Zn	66	3	He	-0.204	0.0056	480.03	0.0029	0.006147
Zn	66	3	He	-0.626	0.0044	370.02	0.0029	0.006147
As	75	3	He	-0.036	0.0008	72.00	0.002	0.0009198
As	75	3	He	-0.008	0.0009	78.00	0.002	0.0009198
As	75	3	He	-0.095	0.0007	62.00	0.002	0.0009198
Sr	88	3	He	0.25	0.0027	230.01	0.0088	0.0005022
Sr	88	3	He	0.193	0.0022	190.01	0.0088	0.0005022
Sr	88	3	He	0.183	0.0021	180.01	0.0088	0.0005022
Mo	98	3	He	0.176	0.0046	390.02	0.0223	0.0006689
Mo	98	3	He	0.183	0.0048	410.02	0.0223	0.0006689
Mo	98	3	He	0.118	0.0033	280.01	0.0223	0.0006689
Ag	107	3	He	0.006	0.0009	80.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	0.027	0.0184	1560.14	0.0156	0.01794
Sn	120	3	He	-0.289	0.0134	1160.08	0.0156	0.01794
Sn	120	3	He	-0.155	0.0155	1320.23	0.0156	0.01794
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Sb	121	3	He	0.013	0.0002	20.00	0.0151	4.19E-05
Sb	121	3	He	0.036	0.0006	50.00	0.0151	4.19E-05
Ba	137	3	He	0.318	0.0018	150.01	0.0049	0.0002094
Ba	137	3	He	0.312	0.0017	150.01	0.0049	0.0002094
Ba	137	3	He	0.39	0.0021	180.01	0.0049	0.0002094
Tl	205	3	He	-0.021	0.0002	90.00	0.0252	0.0007688
Tl	205	3	He	-0.014	0.0004	160.01	0.0252	0.0007688
Tl	205	3	He	-0.005	0.0006	250.01	0.0252	0.0007688
Pb	208	3	He	0.484	0.0181	3780.74	0.0337	0.001742
Pb	208	3	He	0.512	0.019	3980.77	0.0337	0.001742
Pb	208	3	He	0.462	0.0173	3730.64	0.0337	0.001742
U	238	3	He	-0.006	0.0001	40.00	0.0502	0.0004339
U	238	3	He	-0.005	0.0002	60.00	0.0502	0.0004339
U	238	3	He	-0.004	0.0002	70.00	0.0502	0.0004339
Sc	45	1	No Gas			2458540.59		
Sc	45	1	No Gas			2446571.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2496770.74		
Ge	72	1	No Gas			1254502.01		
Ge	72	1	No Gas			1253358.89		
Ge	72	1	No Gas			1263386.86		
Sc	45	2	H2			175781.54		
Sc	45	2	H2			178250.66		
Sc	45	2	H2			178100.11		
Ge	72	2	H2			156903.55		
Ge	72	2	H2			157923.63		
Ge	72	2	H2			156842.15		
In	115	2	H2			385679.33		
In	115	2	H2			386798.82		
In	115	2	H2			389305.81		
Sc	45	3	He			46655.68		
Sc	45	3	He			47217.53		
Sc	45	3	He			47116.54		
Ge	72	3	He			83886.06		
Ge	72	3	He			81965.50		
Ge	72	3	He			83795.87		
In	115	3	He			84949.57		
In	115	3	He			86287.92		
In	115	3	He			85029.33		
Tb	159	3	He			389237.30		
Tb	159	3	He			384235.35		
Tb	159	3	He			385980.97		
Bi	209	3	He			302244.37		
Bi	209	3	He			306707.85		
Bi	209	3	He			301569.84		

Quantitation Report

Data File Name	051_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:49:47 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

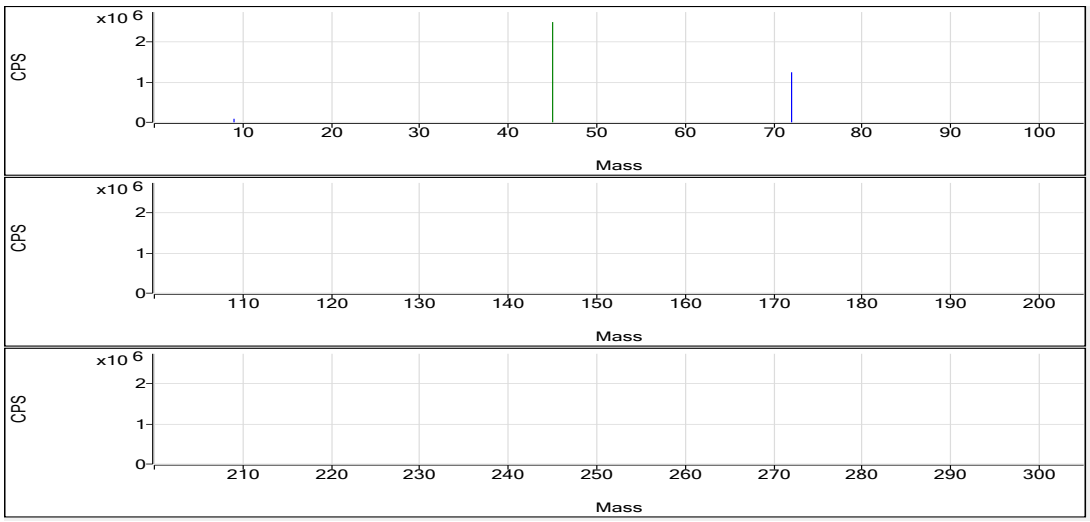
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.601	ppb	0.5	87786.01	0.0352	Pulse	0.5000	3
Se	78	115	H2	50.913	ppb	3.4	3372.85	0.0088	Pulse	1.5000	3
Na	23	45	He	4692.077	ppb	0.9	854567.17	17.8023	Pulse	0.1000	3
Mg	24	45	He	4925.606	ppb	2.0	431970.15	8.9995	Pulse	0.1000	3
Al	27	45	He	4847.517	ppb	0.8	138933.70	2.8942	Pulse	0.1000	3
K	39	45	He	5070.361	ppb	1.2	305249.29	6.3590	Pulse	0.1000	3
Ca	44	45	He	4881.796	ppb	4.6	16293.00	0.3394	Pulse	0.1000	3
Ti	47	45	He	4964.282	ppb	1.1	128988.87	2.6869	Pulse	0.1000	3
V	51	45	He	499.502	ppb	0.9	535101.92	11.1472	Pulse	0.5000	3
Cr	52	45	He	500.278	ppb	0.4	697523.90	14.5299	Pulse	0.1000	3
Mn	55	45	He	498.501	ppb	1.0	311117.90	6.4810	Pulse	0.1000	3
Fe	57	45	He	4954.876	ppb	2.3	140185.85	2.9207	Pulse	0.1000	3
Co	59	45	He	482.373	ppb	1.9	1324447.33	27.5929	Pulse	0.1000	3
Ni	60	72	He	546.828	ppb	0.5	372469.81	4.5755	Pulse	0.1000	3
Cu	63	72	He	526.129	ppb	0.2	1058802.15	13.0066	Pulse	0.1000	3
Zn	66	115	He	518.978	ppb	0.6	125744.71	1.4945	Pulse	0.1000	3
As	75	115	He	524.563	ppb	1.2	88754.11	1.0549	Pulse	0.5000	3
Sr	88	115	He	51.373	ppb	1.1	38112.17	0.4530	Pulse	0.1000	3
Mo	98	115	He	51.490	ppb	0.7	96782.31	1.1503	Pulse	0.1000	3
Ag	107	115	He	51.031	ppb	0.7	202233.65	2.4035	Pulse	0.1000	3
Cd	111	115	He	51.911	ppb	2.4	23382.24	0.2779	Pulse	0.5000	3
Sn	120	115	He	51.225	ppb	3.1	68607.01	0.8154	Pulse	0.1000	3
Sb	121	115	He	50.790	ppb	0.6	64648.00	0.7683	Pulse	0.1000	3
Ba	137	115	He	510.008	ppb	0.8	210009.95	2.4959	Pulse	0.1000	3
Tl	205	159	He	50.808	ppb	1.8	498113.43	1.2833	Pulse	0.1000	3
Pb	208	159	He	50.589	ppb	0.9	663178.23	1.7084	Pulse	0.1000	3
U	238	209	He	50.407	ppb	0.5	765267.38	2.5283	Pulse	0.1000	3

ISTD Table:

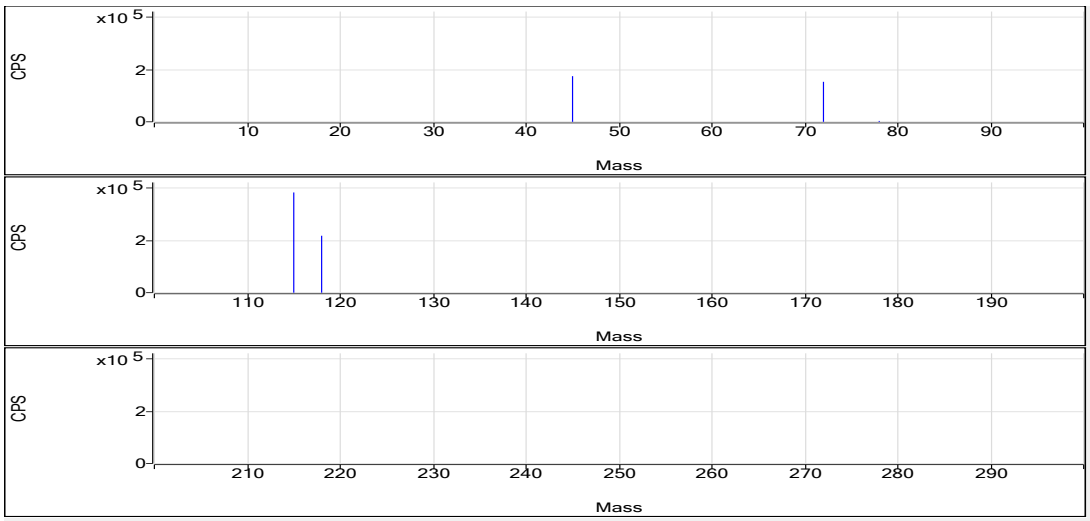
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2491358.66	0.4	106.1	Analog	0.1000	3
No Gas	Ge	72	1243439.28	0.9	103.6	Pulse	0.1000	3
H2	Sc	45	175308.70	1.3	100.9	Pulse	0.1000	3
H2	Ge	72	153558.64	0.6	102.7	Pulse	0.1000	3
H2	In	115	384796.82	0.7	105.1	Pulse	0.1000	3
He	Sc	45	48006.87	1.3	111.6	Pulse	0.1000	3
He	Ge	72	81405.04	0.3	104.2	Pulse	0.1000	3
He	In	115	84140.60	0.5	105.6	Pulse	0.1000	3
He	Tb	159	388217.94	1.2	105.5	Pulse	0.1000	3
He	Bi	209	302682.19	0.6	103.7	Pulse	0.1000	3

No Gas

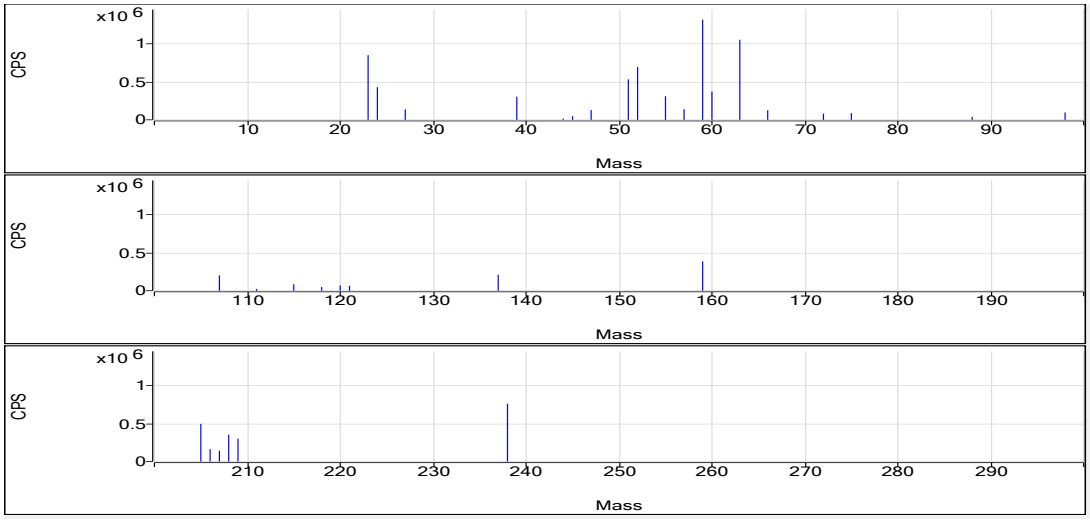


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.81	0.0354	88352.55	0.0007	1.705E-05
Be	9	1	No Gas	47.654	0.0353	87439.35	0.0007	1.705E-05
Be	9	1	No Gas	47.339	0.035	87566.13	0.0007	1.705E-05
Se	78	2	H2	52.888	0.0091	3478.43	0.0002	6.062E-06
Se	78	2	H2	49.901	0.0086	3310.39	0.0002	6.062E-06
Se	78	2	H2	49.95	0.0086	3329.73	0.0002	6.062E-06
Na	23	3	He	4649.705	17.6446	857035.69	0.0037	0.3435
Na	23	3	He	4735.851	17.9652	850612.33	0.0037	0.3435
Na	23	3	He	4690.674	17.7971	856053.50	0.0037	0.3435
Mg	24	3	He	4874.784	8.9067	432614.17	0.0018	0.002943
Mg	24	3	He	5039.562	9.2076	435960.81	0.0018	0.002943
Mg	24	3	He	4862.472	8.8842	427335.46	0.0018	0.002943
Al	27	3	He	4809.808	2.8717	139486.16	0.0006	0.001008
Al	27	3	He	4890.61	2.92	138254.05	0.0006	0.001008
Al	27	3	He	4842.132	2.891	139060.89	0.0006	0.001008
K	39	3	He	5044.081	6.3281	307369.51	0.0012	0.4052
K	39	3	He	5140.078	6.4408	304959.88	0.0012	0.4052
K	39	3	He	5026.924	6.308	303418.47	0.0012	0.4052
Ca	44	3	He	5069.363	0.3523	17110.61	0.0001	0.003486
Ca	44	3	He	4940.491	0.3434	16259.54	0.0001	0.003486
Ca	44	3	He	4635.533	0.3224	15508.86	0.0001	0.003486
Ti	47	3	He	4990.893	2.7013	131209.36	0.0005	0
Ti	47	3	He	4998.576	2.7055	128099.31	0.0005	0
Ti	47	3	He	4903.377	2.654	127657.95	0.0005	0
V	51	3	He	495.905	11.0672	537555.25	0.0223	0.03097
V	51	3	He	504.766	11.2644	533344.31	0.0223	0.03097
V	51	3	He	497.835	11.1101	534406.19	0.0223	0.03097
Cr	52	3	He	498.069	14.4659	702638.82	0.029	0.03958
Cr	52	3	He	500.512	14.5367	688280.61	0.029	0.03958
Cr	52	3	He	502.254	14.5871	701652.26	0.029	0.03958
Mn	55	3	He	499.406	6.4927	315363.80	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	502.842	6.5374	309529.88	0.013	0.003171
Mn	55	3	He	493.255	6.4128	308460.03	0.013	0.003171
Fe	57	3	He	4879.662	2.8764	139710.73	0.0006	0.002014
Fe	57	3	He	5085.583	2.9977	141932.70	0.0006	0.002014
Fe	57	3	He	4899.385	2.888	138914.13	0.0006	0.002014
Co	59	3	He	476.651	27.2657	1324347.64	0.0572	0.004106
Co	59	3	He	492.801	28.1893	1334703.73	0.0572	0.004106
Co	59	3	He	477.666	27.3237	1314290.61	0.0572	0.004106
Ni	60	3	He	550.146	4.6032	375454.99	0.0084	0.003329
Ni	60	3	He	544.34	4.5547	371540.15	0.0084	0.003329
Ni	60	3	He	545.996	4.5685	370414.29	0.0084	0.003329
Cu	63	3	He	527.087	13.0302	1062785.06	0.0247	0.004989
Cu	63	3	He	525.663	12.995	1060042.33	0.0247	0.004989
Cu	63	3	He	525.638	12.9944	1053579.05	0.0247	0.004989
Zn	66	3	He	516.564	1.4876	125769.10	0.0029	0.006147
Zn	66	3	He	522.17	1.5036	125889.31	0.0029	0.006147
Zn	66	3	He	518.199	1.4923	125575.71	0.0029	0.006147
As	75	3	He	523.131	1.052	88941.80	0.002	0.0009198
As	75	3	He	531.277	1.0683	89445.15	0.002	0.0009198
As	75	3	He	519.282	1.0442	87875.37	0.002	0.0009198
Sr	88	3	He	51.584	0.4548	38453.23	0.0088	0.0005022
Sr	88	3	He	51.792	0.4567	38232.24	0.0088	0.0005022
Sr	88	3	He	50.744	0.4474	37651.04	0.0088	0.0005022
Mo	98	3	He	51.221	1.1442	96742.10	0.0223	0.0006689
Mo	98	3	He	51.38	1.1478	96097.86	0.0223	0.0006689
Mo	98	3	He	51.868	1.1587	97506.96	0.0223	0.0006689
Ag	107	3	He	51.15	2.4091	203686.01	0.0471	0.0006687
Ag	107	3	He	51.331	2.4176	202411.87	0.0471	0.0006687
Ag	107	3	He	50.613	2.3838	200603.06	0.0471	0.0006687
Cd	111	3	He	50.571	0.2707	22890.78	0.0054	1.676E-05
Cd	111	3	He	53.067	0.2841	23786.26	0.0054	1.676E-05
Cd	111	3	He	52.094	0.2789	23469.68	0.0054	1.676E-05
Sn	120	3	He	52.091	0.8289	70077.57	0.0156	0.01794
Sn	120	3	He	52.175	0.8302	69504.27	0.0156	0.01794
Sn	120	3	He	49.411	0.7871	66239.18	0.0156	0.01794
Sb	121	3	He	50.793	0.7684	64963.08	0.0151	4.19E-05
Sb	121	3	He	50.475	0.7636	63927.95	0.0151	4.19E-05
Sb	121	3	He	51.102	0.773	65052.97	0.0151	4.19E-05
Ba	137	3	He	514.807	2.5194	213004.94	0.0049	0.0002094
Ba	137	3	He	507.507	2.4836	207938.08	0.0049	0.0002094
Ba	137	3	He	507.71	2.4846	209086.83	0.0049	0.0002094
Tl	205	3	He	50.09	1.2652	496534.33	0.0252	0.0007688
Tl	205	3	He	50.503	1.2756	496344.41	0.0252	0.0007688
Tl	205	3	He	51.83	1.3091	501461.56	0.0252	0.0007688
Pb	208	3	He	50.255	1.6971	356701.95	0.0337	0.001742
Pb	208	3	He	50.374	1.7011	355079.92	0.0337	0.001742
Pb	208	3	He	51.137	1.7269	353478.67	0.0337	0.001742
U	238	3	He	50.639	2.54	764874.91	0.0502	0.0004339
U	238	3	He	50.118	2.5139	766253.66	0.0502	0.0004339
U	238	3	He	50.463	2.5312	764673.58	0.0502	0.0004339
Sc	45	1	No Gas			2496446.53		
Sc	45	1	No Gas			2478757.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2498871.53		
Ge	72	1	No Gas			1255233.81		
Ge	72	1	No Gas			1233060.45		
Ge	72	1	No Gas			1242023.58		
Sc	45	2	H2			177966.05		
Sc	45	2	H2			174435.64		
Sc	45	2	H2			173524.41		
Ge	72	2	H2			154570.10		
Ge	72	2	H2			152961.75		
Ge	72	2	H2			153144.07		
In	115	2	H2			381979.37		
In	115	2	H2			385268.71		
In	115	2	H2			387142.38		
Sc	45	3	He			48572.01		
Sc	45	3	He			47347.83		
Sc	45	3	He			48100.78		
Ge	72	3	He			81563.04		
Ge	72	3	He			81572.83		
Ge	72	3	He			81079.26		
In	115	3	He			84930.04		
In	115	3	He			84093.89		
In	115	3	He			84526.56		
Tb	159	3	He			392468.74		
Tb	159	3	He			389115.58		
Tb	159	3	He			383069.49		
Bi	209	3	He			301129.86		
Bi	209	3	He			304812.38		
Bi	209	3	He			302104.33		

Quantitation Report

Data File Name	052_CCB.d
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Acq Time	8/11/2023 8:51:50 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

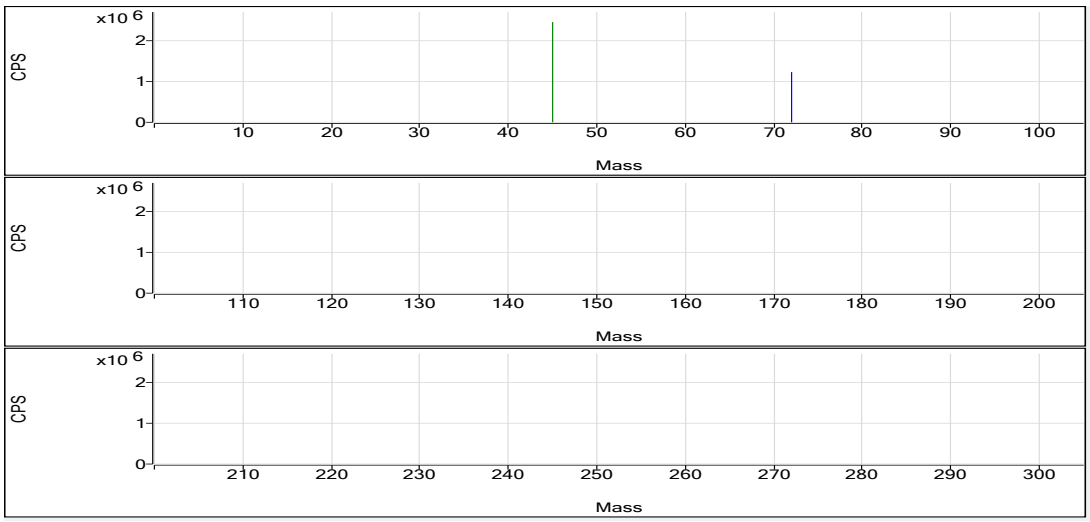
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	23.3	64.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.053	ppb	28.6	5.78	0.0000	Pulse	1.5000	3
Na	23	45	He	-4.146	ppb	N/A	15251.60	0.3281	Pulse	0.1000	3
Mg	24	45	He	0.778	ppb	63.8	203.34	0.0044	Pulse	0.1000	3
Al	27	45	He	0.713	ppb	28.9	66.67	0.0014	Pulse	0.1000	3
K	39	45	He	-4.455	ppb	N/A	18602.38	0.4000	Pulse	0.1000	3
Ca	44	45	He	-5.932	ppb	N/A	143.34	0.0031	Pulse	0.1000	3
Ti	47	45	He	0.787	ppb	84.8	20.00	0.0004	Pulse	0.1000	3
V	51	45	He	-0.084	ppb	N/A	1353.41	0.0291	Pulse	0.5000	3
Cr	52	45	He	-0.023	ppb	N/A	1810.17	0.0389	Pulse	0.1000	3
Mn	55	45	He	-0.002	ppb	N/A	146.67	0.0031	Pulse	0.1000	3
Fe	57	45	He	0.589	ppb	157.9	110.00	0.0024	Pulse	0.1000	3
Co	59	45	He	0.059	ppb	47.1	346.68	0.0075	Pulse	0.1000	3
Ni	60	72	He	0.049	ppb	158.4	300.02	0.0037	Pulse	0.1000	3
Cu	63	72	He	0.048	ppb	68.5	496.69	0.0062	Pulse	0.1000	3
Zn	66	115	He	-0.434	ppb	N/A	406.69	0.0049	Pulse	0.1000	3
As	75	115	He	0.031	ppb	47.0	81.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.016	ppb	247.3	53.33	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.064	ppb	28.5	173.34	0.0021	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	117.4	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.041	ppb	N/A	1433.45	0.0173	Pulse	0.1000	3
Sb	121	115	He	0.061	ppb	48.0	80.00	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.129	ppb	87.4	70.00	0.0008	Pulse	0.1000	3
Tl	205	159	He	0.042	ppb	10.6	696.71	0.0018	Pulse	0.1000	3
Pb	208	159	He	-0.007	ppb	N/A	580.03	0.0015	Pulse	0.1000	3
U	238	209	He	0.034	ppb	7.4	643.38	0.0021	Pulse	0.1000	3

ISTD Table:

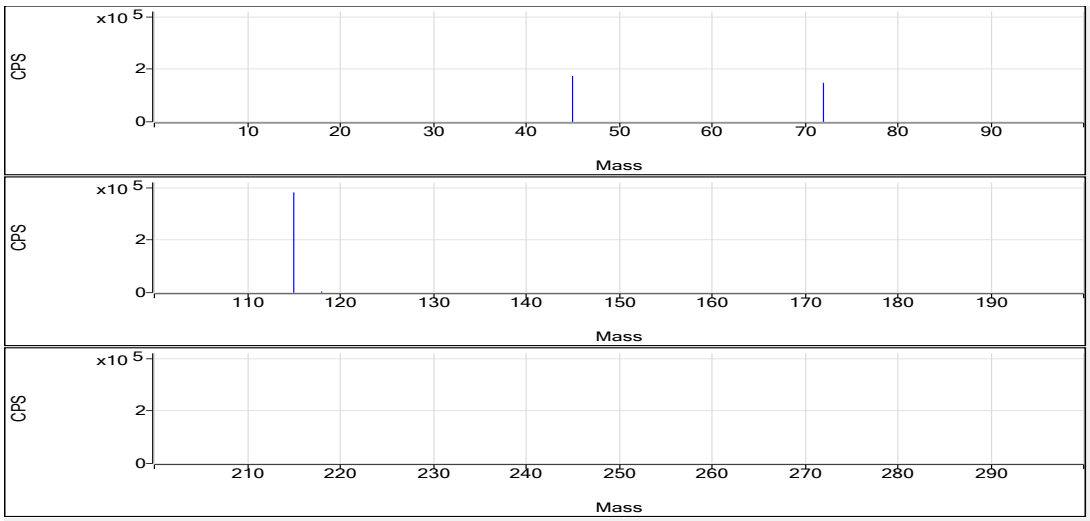
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2459085.23	0.5	104.8	Analog	0.1000	3
No Gas	Ge	72	1231532.95	0.2	102.6	Pulse	0.1000	3
H2	Sc	45	174372.75	0.9	100.4	Pulse	0.1000	3
H2	Ge	72	148504.99	1.2	99.3	Pulse	0.1000	3
H2	In	115	381503.42	0.5	104.2	Pulse	0.1000	3
He	Sc	45	46515.27	1.9	108.1	Pulse	0.1000	3
He	Ge	72	80328.74	0.6	102.8	Pulse	0.1000	3
He	In	115	82866.31	1.6	104.0	Pulse	0.1000	3
He	Tb	159	381125.24	0.6	103.6	Pulse	0.1000	3
He	Bi	209	300185.32	0.8	102.8	Pulse	0.1000	3

No Gas

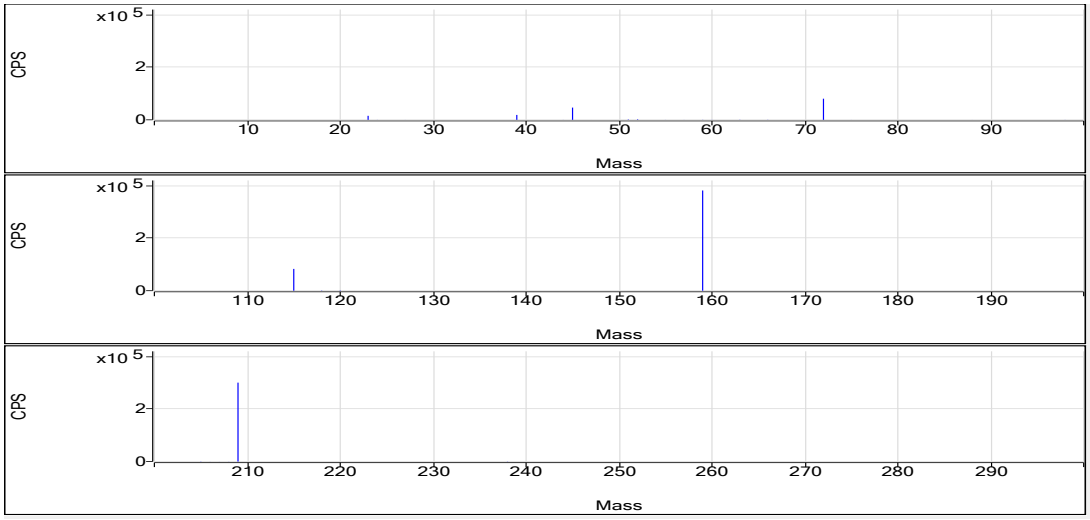


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0	62.00	0.0007	1.705E-05
Be	9	1	No Gas	0.015	0	70.00	0.0007	1.705E-05
Be	9	1	No Gas	0.01	0	60.00	0.0007	1.705E-05
Se	78	2	H2	0.036	0	4.67	0.0002	6.062E-06
Se	78	2	H2	0.056	0	6.00	0.0002	6.062E-06
Se	78	2	H2	0.066	0	6.67	0.0002	6.062E-06
Na	23	3	He	-3.522	0.3304	15308.31	0.0037	0.3435
Na	23	3	He	-8.249	0.3128	14847.84	0.0037	0.3435
Na	23	3	He	-0.666	0.341	15598.66	0.0037	0.3435
Mg	24	3	He	0.279	0.0035	160.01	0.0018	0.002943
Mg	24	3	He	1.272	0.0053	250.01	0.0018	0.002943
Mg	24	3	He	0.783	0.0044	200.01	0.0018	0.002943
Al	27	3	He	0.481	0.0013	60.00	0.0006	0.001008
Al	27	3	He	0.782	0.0015	70.00	0.0006	0.001008
Al	27	3	He	0.875	0.0015	70.00	0.0006	0.001008
K	39	3	He	3.603	0.4095	18972.85	0.0012	0.4052
K	39	3	He	-13.527	0.3894	18482.26	0.0012	0.4052
K	39	3	He	-3.441	0.4012	18352.03	0.0012	0.4052
Ca	44	3	He	2.659	0.0037	170.01	0.0001	0.003486
Ca	44	3	He	-4.739	0.0032	150.01	0.0001	0.003486
Ca	44	3	He	-15.715	0.0024	110.01	0.0001	0.003486
Ti	47	3	He	0.399	0.0002	10.00	0.0005	0
Ti	47	3	He	1.557	0.0008	40.00	0.0005	0
Ti	47	3	He	0.404	0.0002	10.00	0.0005	0
V	51	3	He	-0.082	0.0291	1350.07	0.0223	0.03097
V	51	3	He	-0.136	0.0279	1326.07	0.0223	0.03097
V	51	3	He	-0.032	0.0303	1384.08	0.0223	0.03097
Cr	52	3	He	0.057	0.0412	1910.18	0.029	0.03958
Cr	52	3	He	-0.036	0.0386	1830.19	0.029	0.03958
Cr	52	3	He	-0.091	0.0369	1690.15	0.029	0.03958
Mn	55	3	He	-0.028	0.0028	130.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.08	0.0042	200.01	0.013	0.003171
Mn	55	3	He	-0.059	0.0024	110.00	0.013	0.003171
Fe	57	3	He	1.344	0.0028	130.01	0.0006	0.002014
Fe	57	3	He	0.873	0.0025	120.00	0.0006	0.002014
Fe	57	3	He	-0.45	0.0017	80.00	0.0006	0.002014
Co	59	3	He	0.09	0.0093	430.02	0.0572	0.004106
Co	59	3	He	0.042	0.0065	310.02	0.0572	0.004106
Co	59	3	He	0.043	0.0066	300.01	0.0572	0.004106
Ni	60	3	He	0.096	0.0041	330.02	0.0084	0.003329
Ni	60	3	He	-0.04	0.003	240.01	0.0084	0.003329
Ni	60	3	He	0.09	0.0041	330.02	0.0084	0.003329
Cu	63	3	He	0.087	0.0071	570.03	0.0247	0.004989
Cu	63	3	He	0.03	0.0057	460.02	0.0247	0.004989
Cu	63	3	He	0.028	0.0057	460.02	0.0247	0.004989
Zn	66	3	He	-0.243	0.0054	460.02	0.0029	0.006147
Zn	66	3	He	-0.49	0.0047	390.02	0.0029	0.006147
Zn	66	3	He	-0.569	0.0045	370.02	0.0029	0.006147
As	75	3	He	0.038	0.001	84.00	0.002	0.0009198
As	75	3	He	0.014	0.0009	78.00	0.002	0.0009198
As	75	3	He	0.04	0.001	82.00	0.002	0.0009198
Sr	88	3	He	0.037	0.0008	70.00	0.0088	0.0005022
Sr	88	3	He	0.04	0.0009	70.00	0.0088	0.0005022
Sr	88	3	He	-0.029	0.0002	20.00	0.0088	0.0005022
Mo	98	3	He	0.05	0.0018	150.01	0.0223	0.0006689
Mo	98	3	He	0.084	0.0026	210.01	0.0223	0.0006689
Mo	98	3	He	0.058	0.002	160.01	0.0223	0.0006689
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.001	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.095	0.0165	1390.11	0.0156	0.01794
Sn	120	3	He	-0.044	0.0173	1420.12	0.0156	0.01794
Sn	120	3	He	0.016	0.0182	1490.13	0.0156	0.01794
Sb	121	3	He	0.036	0.0006	50.00	0.0151	4.19E-05
Sb	121	3	He	0.094	0.0015	120.01	0.0151	4.19E-05
Sb	121	3	He	0.054	0.0009	70.00	0.0151	4.19E-05
Ba	137	3	He	0.151	0.0009	80.00	0.0049	0.0002094
Ba	137	3	He	0.23	0.0013	110.00	0.0049	0.0002094
Ba	137	3	He	0.007	0.0002	20.00	0.0049	0.0002094
Tl	205	3	He	0.047	0.002	750.05	0.0252	0.0007688
Tl	205	3	He	0.04	0.0018	680.04	0.0252	0.0007688
Tl	205	3	He	0.039	0.0017	660.05	0.0252	0.0007688
Pb	208	3	He	0.004	0.0019	350.02	0.0337	0.001742
Pb	208	3	He	-0.006	0.0015	340.02	0.0337	0.001742
Pb	208	3	He	-0.017	0.0012	260.01	0.0337	0.001742
U	238	3	He	0.032	0.0021	620.04	0.0502	0.0004339
U	238	3	He	0.037	0.0023	690.05	0.0502	0.0004339
U	238	3	He	0.033	0.0021	620.04	0.0502	0.0004339
Sc	45	1	No Gas			2443679.03		
Sc	45	1	No Gas			2468513.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2465063.56		
Ge	72	1	No Gas			1228099.51		
Ge	72	1	No Gas			1232592.09		
Ge	72	1	No Gas			1233907.25		
Sc	45	2	H2			172766.03		
Sc	45	2	H2			174336.27		
Sc	45	2	H2			176015.95		
Ge	72	2	H2			148819.76		
Ge	72	2	H2			146534.07		
Ge	72	2	H2			150161.15		
In	115	2	H2			379675.78		
In	115	2	H2			381129.99		
In	115	2	H2			383704.49		
Sc	45	3	He			46334.75		
Sc	45	3	He			47468.46		
Sc	45	3	He			45742.59		
Ge	72	3	He			79922.98		
Ge	72	3	He			80184.37		
Ge	72	3	He			80878.86		
In	115	3	He			84416.12		
In	115	3	He			82273.47		
In	115	3	He			81932.18		
Tb	159	3	He			383770.19		
Tb	159	3	He			380711.36		
Tb	159	3	He			378894.17		
Bi	209	3	He			301528.04		
Bi	209	3	He			301538.41		
Bi	209	3	He			297489.51		

Quantitation Report

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Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

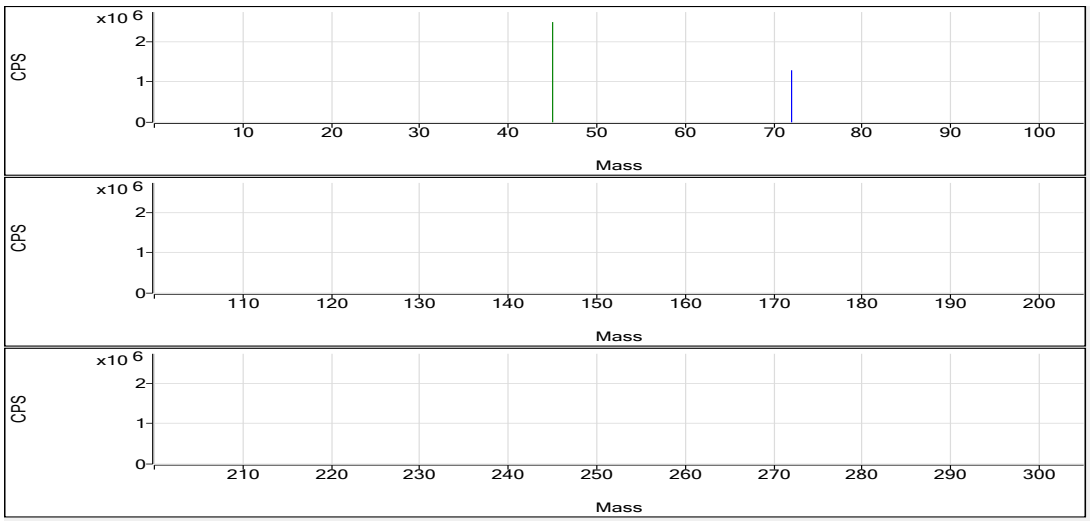
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	40.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.029	ppb	79.1	4.22	0.0000	Pulse	1.5000	3
Na	23	45	He	-3.817	ppb	N/A	15672.14	0.3293	Pulse	0.1000	3
Mg	24	45	He	4.110	ppb	18.9	496.69	0.0105	Pulse	0.1000	3
Al	27	45	He	1.837	ppb	35.0	100.01	0.0021	Pulse	0.1000	3
K	39	45	He	-4.842	ppb	N/A	19009.55	0.3996	Pulse	0.1000	3
Ca	44	45	He	-2.681	ppb	N/A	156.68	0.0033	Pulse	0.1000	3
Ti	47	45	He	0.385	ppb	100.1	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.132	ppb	N/A	1333.40	0.0280	Pulse	0.5000	3
Cr	52	45	He	0.281	ppb	34.7	2270.25	0.0477	Pulse	0.1000	3
Mn	55	45	He	0.074	ppb	52.0	196.68	0.0041	Pulse	0.1000	3
Fe	57	45	He	4.783	ppb	24.8	230.01	0.0048	Pulse	0.1000	3
Co	59	45	He	0.009	ppb	328.7	220.01	0.0046	Pulse	0.1000	3
Ni	60	72	He	-0.053	ppb	N/A	240.01	0.0029	Pulse	0.1000	3
Cu	63	72	He	0.036	ppb	93.8	490.03	0.0059	Pulse	0.1000	3
Zn	66	115	He	-0.701	ppb	N/A	343.35	0.0041	Pulse	0.1000	3
As	75	115	He	-0.018	ppb	N/A	73.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.058	ppb	172.2	83.34	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.013	ppb	37.6	80.00	0.0010	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	215.5	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.070	ppb	84.5	1580.14	0.0190	Pulse	0.1000	3
Sb	121	115	He	0.035	ppb	36.3	46.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.047	ppb	27.3	36.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	-0.002	ppb	N/A	280.01	0.0007	Pulse	0.1000	3
Pb	208	159	He	-0.003	ppb	N/A	630.03	0.0016	Pulse	0.1000	3
U	238	209	He	0.003	ppb	62.3	180.01	0.0006	Pulse	0.1000	3

ISTD Table:

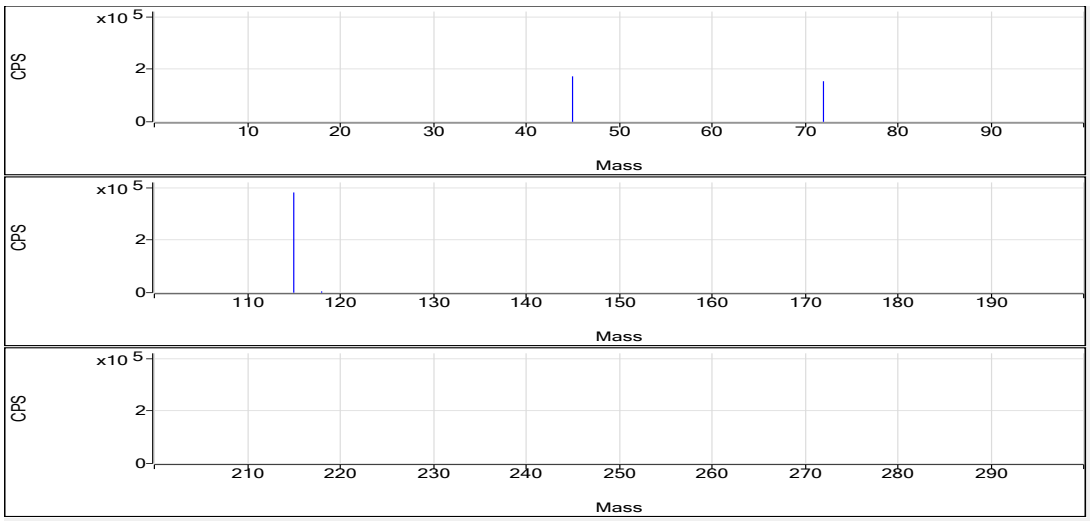
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2477361.73	0.3	105.5	Analog	0.1000	3
No Gas	Ge	72	1286387.59	0.3	107.2	Pulse	0.1000	3
H2	Sc	45	172958.22	0.7	99.5	Pulse	0.1000	3
H2	Ge	72	154333.30	0.1	103.2	Pulse	0.1000	3
H2	In	115	381096.84	0.8	104.1	Pulse	0.1000	3
He	Sc	45	47588.77	1.6	110.6	Pulse	0.1000	3
He	Ge	72	83300.09	0.7	106.6	Pulse	0.1000	3
He	In	115	83004.38	1.9	104.1	Pulse	0.1000	3
He	Tb	159	386142.83	0.7	105.0	Pulse	0.1000	3
He	Bi	209	304636.92	0.8	104.3	Pulse	0.1000	3

No Gas

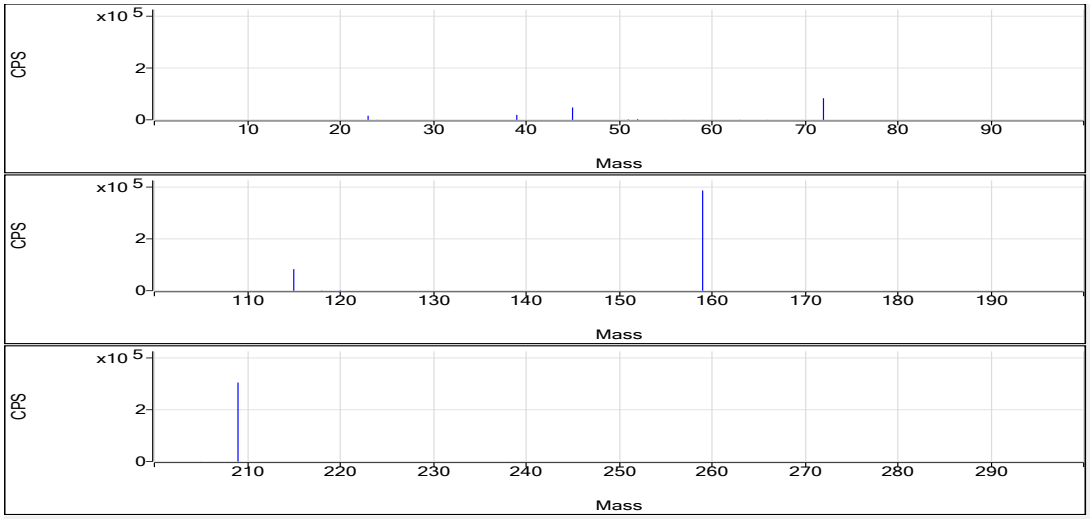


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	40.00	0.0007	1.705E-05
Be	9	1	No Gas	0.004	0	50.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.007	0	30.00	0.0007	1.705E-05
Se	78	2	H2	0.055	0	6.00	0.0002	6.062E-06
Se	78	2	H2	0.016	0	3.33	0.0002	6.062E-06
Se	78	2	H2	0.016	0	3.33	0.0002	6.062E-06
Na	23	3	He	-5.121	0.3244	15608.72	0.0037	0.3435
Na	23	3	He	-1.068	0.3395	16269.57	0.0037	0.3435
Na	23	3	He	-5.262	0.3239	15138.13	0.0037	0.3435
Mg	24	3	He	3.965	0.0102	490.02	0.0018	0.002943
Mg	24	3	He	3.416	0.0092	440.02	0.0018	0.002943
Mg	24	3	He	4.949	0.012	560.03	0.0018	0.002943
Al	27	3	He	1.097	0.0017	80.00	0.0006	0.001008
Al	27	3	He	2.158	0.0023	110.01	0.0006	0.001008
Al	27	3	He	2.255	0.0024	110.01	0.0006	0.001008
K	39	3	He	-2.176	0.4027	19373.49	0.0012	0.4052
K	39	3	He	-18.434	0.3836	18381.97	0.0012	0.4052
K	39	3	He	6.084	0.4124	19273.20	0.0012	0.4052
Ca	44	3	He	-17.436	0.0023	110.01	0.0001	0.003486
Ca	44	3	He	-2.139	0.0033	160.01	0.0001	0.003486
Ca	44	3	He	11.531	0.0043	200.01	0.0001	0.003486
Ti	47	3	He	0.384	0.0002	10.00	0.0005	0
Ti	47	3	He	0.771	0.0004	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.219	0.0261	1256.06	0.0223	0.03097
V	51	3	He	-0.122	0.0283	1354.07	0.0223	0.03097
V	51	3	He	-0.055	0.0297	1390.08	0.0223	0.03097
Cr	52	3	He	0.176	0.0447	2150.22	0.029	0.03958
Cr	52	3	He	0.298	0.0482	2310.27	0.029	0.03958
Cr	52	3	He	0.37	0.0503	2350.26	0.029	0.03958
Mn	55	3	He	0.06	0.0039	190.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.045	0.0038	180.01	0.013	0.003171
Mn	55	3	He	0.118	0.0047	220.01	0.013	0.003171
Fe	57	3	He	3.992	0.0044	210.01	0.0006	0.002014
Fe	57	3	He	6.147	0.0056	270.01	0.0006	0.002014
Fe	57	3	He	4.209	0.0045	210.01	0.0006	0.002014
Co	59	3	He	0.041	0.0064	310.01	0.0572	0.004106
Co	59	3	He	-0.017	0.0031	150.01	0.0572	0.004106
Co	59	3	He	0.003	0.0043	200.01	0.0572	0.004106
Ni	60	3	He	0.016	0.0035	290.01	0.0084	0.003329
Ni	60	3	He	-0.183	0.0018	150.01	0.0084	0.003329
Ni	60	3	He	0.007	0.0034	280.01	0.0084	0.003329
Cu	63	3	He	0.044	0.0061	510.03	0.0247	0.004989
Cu	63	3	He	0.065	0.0066	550.03	0.0247	0.004989
Cu	63	3	He	-0.001	0.005	410.02	0.0247	0.004989
Zn	66	3	He	-0.578	0.0045	380.02	0.0029	0.006147
Zn	66	3	He	-0.602	0.0044	360.02	0.0029	0.006147
Zn	66	3	He	-0.924	0.0035	290.01	0.0029	0.006147
As	75	3	He	-0.023	0.0009	74.00	0.002	0.0009198
As	75	3	He	0.055	0.001	84.00	0.002	0.0009198
As	75	3	He	-0.086	0.0007	62.00	0.002	0.0009198
Sr	88	3	He	0.037	0.0008	70.01	0.0088	0.0005022
Sr	88	3	He	0.166	0.002	160.01	0.0088	0.0005022
Sr	88	3	He	-0.03	0.0002	20.00	0.0088	0.0005022
Mo	98	3	He	0.018	0.0011	90.00	0.0223	0.0006689
Mo	98	3	He	0.014	0.001	80.00	0.0223	0.0006689
Mo	98	3	He	0.008	0.0008	70.00	0.0223	0.0006689
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.001	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.001	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Sn	120	3	He	0.1	0.0195	1650.14	0.0156	0.01794
Sn	120	3	He	0.109	0.0196	1600.15	0.0156	0.01794
Sn	120	3	He	0.002	0.018	1490.13	0.0156	0.01794
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Sb	121	3	He	0.038	0.0006	50.00	0.0151	4.19E-05
Sb	121	3	He	0.045	0.0007	60.00	0.0151	4.19E-05
Ba	137	3	He	0.054	0.0005	40.00	0.0049	0.0002094
Ba	137	3	He	0.032	0.0004	30.00	0.0049	0.0002094
Ba	137	3	He	0.056	0.0005	40.00	0.0049	0.0002094
Tl	205	3	He	0	0.0008	300.01	0.0252	0.0007688
Tl	205	3	He	0.003	0.0008	320.01	0.0252	0.0007688
Tl	205	3	He	-0.008	0.0006	220.01	0.0252	0.0007688
Pb	208	3	He	-0.007	0.0015	240.01	0.0337	0.001742
Pb	208	3	He	-0.001	0.0017	280.01	0.0337	0.001742
Pb	208	3	He	-0.002	0.0017	370.02	0.0337	0.001742
U	238	3	He	0.001	0.0005	150.01	0.0502	0.0004339
U	238	3	He	0.003	0.0006	180.01	0.0502	0.0004339
U	238	3	He	0.005	0.0007	210.01	0.0502	0.0004339
Sc	45	1	No Gas			2468175.90		
Sc	45	1	No Gas			2480417.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2483491.37		
Ge	72	1	No Gas			1287669.28		
Ge	72	1	No Gas			1281955.84		
Ge	72	1	No Gas			1289537.64		
Sc	45	2	H2			171712.69		
Sc	45	2	H2			173950.31		
Sc	45	2	H2			173211.66		
Ge	72	2	H2			154255.24		
Ge	72	2	H2			154276.94		
Ge	72	2	H2			154467.73		
In	115	2	H2			384338.35		
In	115	2	H2			380079.92		
In	115	2	H2			378872.26		
Sc	45	3	He			48110.51		
Sc	45	3	He			47920.05		
Sc	45	3	He			46735.75		
Ge	72	3	He			83856.28		
Ge	72	3	He			83403.73		
Ge	72	3	He			82640.25		
In	115	3	He			84647.65		
In	115	3	He			81468.87		
In	115	3	He			82918.46		
Tb	159	3	He			389204.92		
Tb	159	3	He			384294.29		
Tb	159	3	He			384929.29		
Bi	209	3	He			302681.56		
Bi	209	3	He			307322.20		
Bi	209	3	He			303906.99		

Quantitation Report

Data File Name	054SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:55:55 AM
Sample Name	410-136864-K-6-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

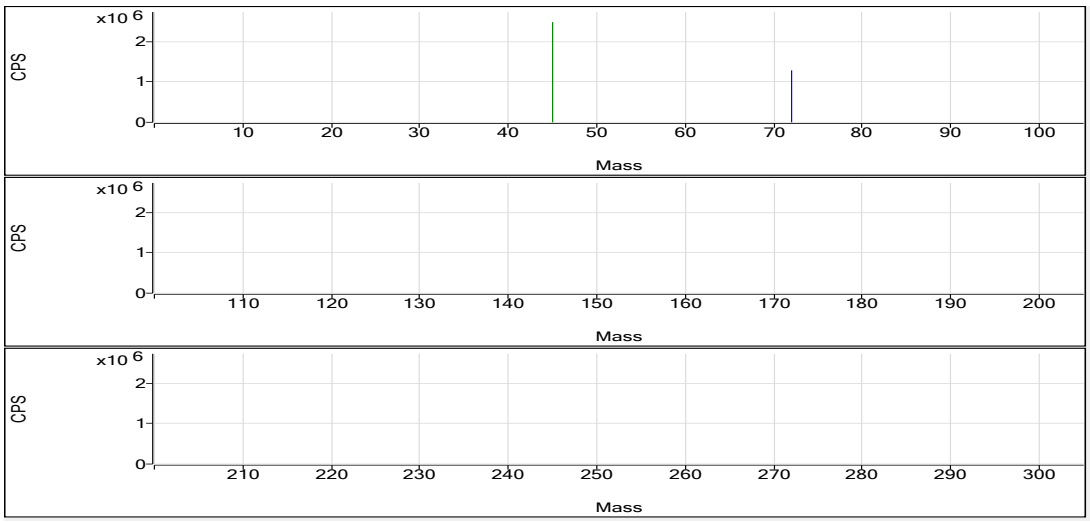
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.024	ppb	68.4	86.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.086	ppb	11.2	8.00	0.0000	Pulse	1.5000	3
Na	23	45	He	2269.149	ppb	1.8	418290.72	8.7868	Pulse	0.1000	3
Mg	24	45	He	22658.742	ppb	2.1	1970229.29	41.3888	Analog	0.1000	3
Al	27	45	He	26.710	ppb	3.5	806.71	0.0169	Pulse	0.1000	3
K	39	45	He	3576.369	ppb	2.8	219176.33	4.6047	Pulse	0.1000	3
Ca	44	45	He	48179.608	ppb	3.0	157945.09	3.3184	Pulse	0.1000	3
Ti	47	45	He	0.782	ppb	51.5	20.00	0.0004	Pulse	0.1000	3
V	51	45	He	0.203	ppb	44.5	1688.78	0.0355	Pulse	0.5000	3
Cr	52	45	He	3.112	ppb	5.6	6174.87	0.1297	Pulse	0.1000	3
Mn	55	45	He	2054.796	ppb	2.4	1271105.11	26.7043	Pulse	0.1000	3
Fe	57	45	He	450.378	ppb	4.9	12719.32	0.2673	Pulse	0.1000	3
Co	59	45	He	3.107	ppb	1.4	8656.20	0.1818	Pulse	0.1000	3
Ni	60	72	He	4.697	ppb	12.4	3613.92	0.0426	Pulse	0.1000	3
Cu	63	72	He	2.707	ppb	4.9	6101.45	0.0719	Pulse	0.1000	3
Zn	66	115	He	12.048	ppb	10.5	3407.20	0.0407	Pulse	0.1000	3
As	75	115	He	0.275	ppb	43.2	123.33	0.0015	Pulse	0.5000	3
Sr	88	115	He	176.714	ppb	0.6	130372.64	1.5569	Pulse	0.1000	3
Mo	98	115	He	0.180	ppb	21.2	393.35	0.0047	Pulse	0.1000	3
Ag	107	115	He	0.375	ppb	9.1	1533.47	0.0183	Pulse	0.1000	3
Cd	111	115	He	0.757	ppb	3.8	340.68	0.0041	Pulse	0.5000	3
Sn	120	115	He	0.310	ppb	53.7	1906.87	0.0228	Pulse	0.1000	3
Sb	121	115	He	0.495	ppb	4.9	630.04	0.0075	Pulse	0.1000	3
Ba	137	115	He	89.085	ppb	1.3	36519.56	0.4361	Pulse	0.1000	3
Tl	205	159	He	0.005	ppb	130.6	350.02	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.415	ppb	6.8	6154.13	0.0157	Pulse	0.1000	3
U	238	209	He	0.087	ppb	15.1	1443.47	0.0048	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2474534.65	0.7	105.4	Analog	0.1000	3
No Gas	Ge	72	1282605.16	0.5	106.9	Pulse	0.1000	3
H2	Sc	45	177281.09	1.4	102.0	Pulse	0.1000	3
H2	Ge	72	156466.08	0.9	104.6	Pulse	0.1000	3
H2	In	115	383540.50	0.8	104.8	Pulse	0.1000	3
He	Sc	45	47615.41	2.2	110.7	Pulse	0.1000	3
He	Ge	72	84902.28	1.1	108.6	Pulse	0.1000	3
He	In	115	83738.14	0.5	105.0	Pulse	0.1000	3
He	Tb	159	391264.10	0.8	106.3	Pulse	0.1000	3
He	Bi	209	301600.48	1.3	103.3	Pulse	0.1000	3

No Gas



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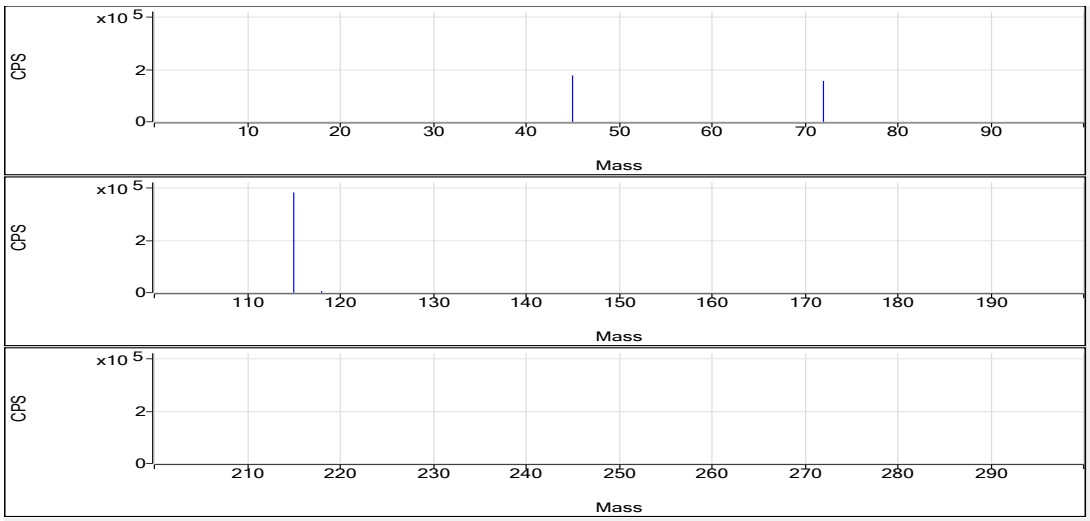
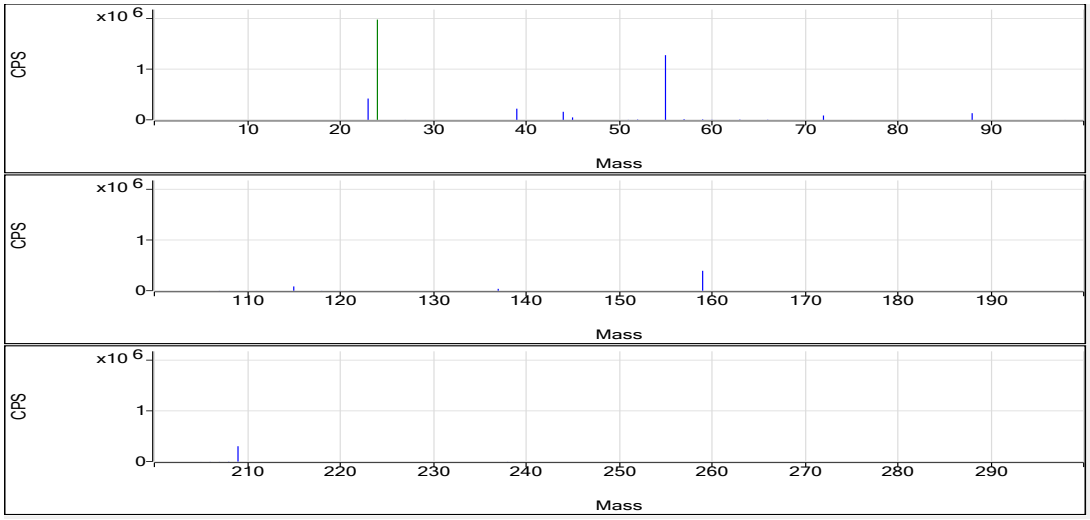


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.031	0	100.00	0.0007	1.705E-05
Be	9	1	No Gas	0.035	0	106.00	0.0007	1.705E-05
Be	9	1	No Gas	0.005	0	52.00	0.0007	1.705E-05
Se	78	2	H2	0.095	0	8.67	0.0002	6.062E-06
Se	78	2	H2	0.087	0	8.00	0.0002	6.062E-06
Se	78	2	H2	0.076	0	7.33	0.0002	6.062E-06
Na	23	3	He	2286.986	8.8532	414206.48	0.0037	0.3435
Na	23	3	He	2222.454	8.613	419993.82	0.0037	0.3435
Na	23	3	He	2298.007	8.8942	420671.87	0.0037	0.3435
Mg	24	3	He	22799.098	41.6451	1948419.50	0.0018	0.002943
Mg	24	3	He	22131.988	40.4267	1971304.81	0.0018	0.002943
Mg	24	3	He	23045.14	42.0945	1990963.56	0.0018	0.002943
Al	27	3	He	27.678	0.0175	820.05	0.0006	0.001008
Al	27	3	He	25.801	0.0164	800.05	0.0006	0.001008
Al	27	3	He	26.652	0.0169	800.04	0.0006	0.001008
K	39	3	He	3634.922	4.6735	218653.36	0.0012	0.4052
K	39	3	He	3460.37	4.4685	217894.74	0.0012	0.4052
K	39	3	He	3633.814	4.6722	220980.90	0.0012	0.4052
Ca	44	3	He	48727.666	3.3561	157018.90	0.0001	0.003486
Ca	44	3	He	46554.787	3.2066	156361.33	0.0001	0.003486
Ca	44	3	He	49256.37	3.3925	160455.04	0.0001	0.003486
Ti	47	3	He	1.185	0.0006	30.00	0.0005	0
Ti	47	3	He	0.379	0.0002	10.00	0.0005	0
Ti	47	3	He	0.781	0.0004	20.00	0.0005	0
V	51	3	He	0.264	0.0369	1724.12	0.0223	0.03097
V	51	3	He	0.099	0.0332	1618.10	0.0223	0.03097
V	51	3	He	0.246	0.0365	1724.11	0.0223	0.03097
Cr	52	3	He	3.313	0.1355	6341.59	0.029	0.03958
Cr	52	3	He	3.024	0.1272	6201.57	0.029	0.03958
Cr	52	3	He	3	0.1265	5981.45	0.029	0.03958
Mn	55	3	He	2083.977	27.0835	1267133.42	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1997.394	25.9584	1265794.20	0.013	0.003171
Mn	55	3	He	2083.016	27.071	1280387.72	0.013	0.003171
Fe	57	3	He	463.799	0.2752	12876.19	0.0006	0.002014
Fe	57	3	He	424.998	0.2524	12305.59	0.0006	0.002014
Fe	57	3	He	462.338	0.2744	12976.19	0.0006	0.002014
Co	59	3	He	3.106	0.1817	8502.82	0.0572	0.004106
Co	59	3	He	3.063	0.1793	8742.93	0.0572	0.004106
Co	59	3	He	3.153	0.1844	8722.85	0.0572	0.004106
Ni	60	3	He	4.804	0.0435	3680.60	0.0084	0.003329
Ni	60	3	He	5.218	0.047	3950.69	0.0084	0.003329
Ni	60	3	He	4.069	0.0374	3210.46	0.0084	0.003329
Cu	63	3	He	2.687	0.0714	6041.42	0.0247	0.004989
Cu	63	3	He	2.848	0.0754	6341.54	0.0247	0.004989
Cu	63	3	He	2.586	0.0689	5921.39	0.0247	0.004989
Zn	66	3	He	12.066	0.0407	3400.55	0.0029	0.006147
Zn	66	3	He	10.769	0.037	3120.44	0.0029	0.006147
Zn	66	3	He	13.31	0.0443	3700.61	0.0029	0.006147
As	75	3	He	0.353	0.0016	136.00	0.002	0.0009198
As	75	3	He	0.334	0.0016	134.00	0.002	0.0009198
As	75	3	He	0.138	0.0012	100.00	0.002	0.0009198
Sr	88	3	He	175.437	1.5456	128983.33	0.0088	0.0005022
Sr	88	3	He	177.628	1.5649	131869.49	0.0088	0.0005022
Sr	88	3	He	177.078	1.5601	130265.09	0.0088	0.0005022
Mo	98	3	He	0.201	0.0052	430.02	0.0223	0.0006689
Mo	98	3	He	0.204	0.0052	440.02	0.0223	0.0006689
Mo	98	3	He	0.136	0.0037	310.01	0.0223	0.0006689
Ag	107	3	He	0.345	0.0169	1410.12	0.0471	0.0006687
Ag	107	3	He	0.412	0.0201	1690.18	0.0471	0.0006687
Ag	107	3	He	0.367	0.018	1500.12	0.0471	0.0006687
Cd	111	3	He	0.749	0.004	336.01	0.0054	1.676E-05
Cd	111	3	He	0.733	0.0039	332.01	0.0054	1.676E-05
Cd	111	3	He	0.789	0.0042	354.01	0.0054	1.676E-05
Sn	120	3	He	0.118	0.0198	1650.16	0.0156	0.01794
Sn	120	3	He	0.41	0.0243	2050.23	0.0156	0.01794
Sn	120	3	He	0.402	0.0242	2020.22	0.0156	0.01794
Sb	121	3	He	0.52	0.0079	660.04	0.0151	4.19E-05
Sb	121	3	He	0.492	0.0075	630.04	0.0151	4.19E-05
Sb	121	3	He	0.472	0.0072	600.03	0.0151	4.19E-05
Ba	137	3	He	89.731	0.4393	36659.66	0.0049	0.0002094
Ba	137	3	He	87.721	0.4295	36188.84	0.0049	0.0002094
Ba	137	3	He	89.802	0.4396	36710.18	0.0049	0.0002094
Tl	205	3	He	0.003	0.0008	330.02	0.0252	0.0007688
Tl	205	3	He	0	0.0008	300.01	0.0252	0.0007688
Tl	205	3	He	0.012	0.0011	420.03	0.0252	0.0007688
Pb	208	3	He	0.434	0.0164	3270.53	0.0337	0.001742
Pb	208	3	He	0.383	0.0146	3080.47	0.0337	0.001742
Pb	208	3	He	0.427	0.0162	3510.61	0.0337	0.001742
U	238	3	He	0.095	0.0052	1550.15	0.0502	0.0004339
U	238	3	He	0.072	0.004	1230.11	0.0502	0.0004339
U	238	3	He	0.093	0.0051	1550.16	0.0502	0.0004339
Sc	45	1	No Gas			2478420.74		
Sc	45	1	No Gas			2455039.18		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2490144.03		
Ge	72	1	No Gas			1279976.23		
Ge	72	1	No Gas			1277789.12		
Ge	72	1	No Gas			1290050.14		
Sc	45	2	H2			174464.67		
Sc	45	2	H2			178429.12		
Sc	45	2	H2			178949.49		
Ge	72	2	H2			155166.99		
Ge	72	2	H2			156226.85		
Ge	72	2	H2			158004.40		
In	115	2	H2			386682.73		
In	115	2	H2			380355.74		
In	115	2	H2			383583.04		
Sc	45	3	He			46786.26		
Sc	45	3	He			48762.50		
Sc	45	3	He			47297.46		
Ge	72	3	He			84620.84		
Ge	72	3	He			84137.74		
Ge	72	3	He			85948.26		
In	115	3	He			83460.13		
In	115	3	He			84275.13		
In	115	3	He			83510.44		
Tb	159	3	He			389894.49		
Tb	159	3	He			394691.60		
Tb	159	3	He			389206.21		
Bi	209	3	He			297282.22		
Bi	209	3	He			304895.35		
Bi	209	3	He			302623.88		

Quantitation Report

Data File Name	055SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 8:57:58 AM
Sample Name	410-136864-K-2-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

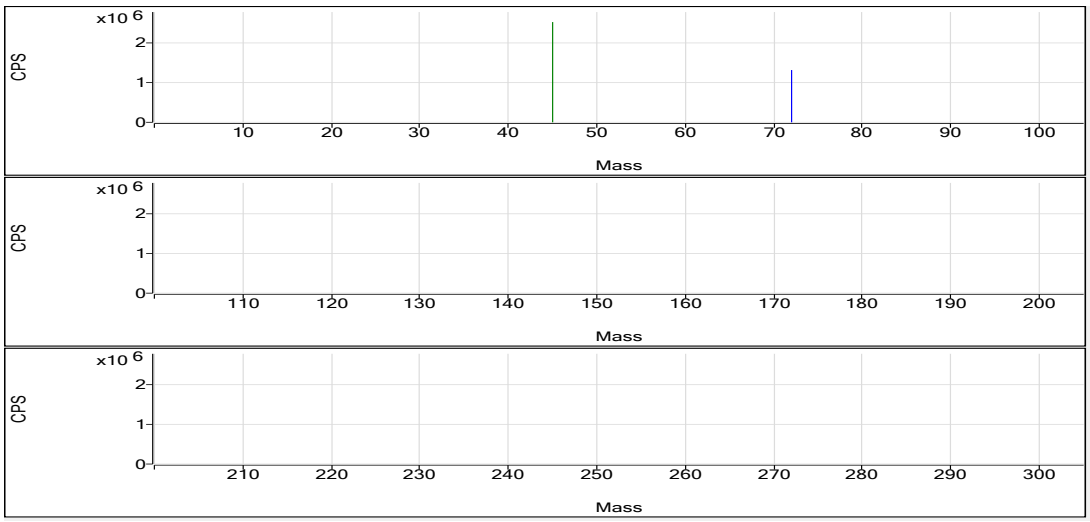
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.290	ppb	5.0	580.68	0.0002	Pulse	0.5000	3
Se	78	115	H2	0.001	ppb	1123.7	2.44	0.0000	Pulse	1.5000	3
Na	23	45	He	6704.779	ppb	3.3	1196152.72	25.2914	Analog	0.1000	3
Mg	24	45	He	5201.906	ppb	2.1	449554.95	9.5041	Pulse	0.1000	3
Al	27	45	He	23.652	ppb	23.7	716.71	0.0151	Pulse	0.1000	3
K	39	45	He	4179.089	ppb	1.5	251313.44	5.3124	Pulse	0.1000	3
Ca	44	45	He	9200.245	ppb	2.6	30105.24	0.6365	Pulse	0.1000	3
Ti	47	45	He	0.262	ppb	86.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.058	ppb	N/A	1404.08	0.0297	Pulse	0.5000	3
Cr	52	45	He	0.238	ppb	21.6	2200.25	0.0465	Pulse	0.1000	3
Mn	55	45	He	269.488	ppb	1.6	165804.29	3.5050	Pulse	0.1000	3
Fe	57	45	He	20.140	ppb	25.5	656.71	0.0139	Pulse	0.1000	3
Co	59	45	He	0.471	ppb	5.1	1470.12	0.0311	Pulse	0.1000	3
Ni	60	72	He	2.901	ppb	11.4	2386.95	0.0276	Pulse	0.1000	3
Cu	63	72	He	9.851	ppb	3.2	21513.32	0.2484	Pulse	0.1000	3
Zn	66	115	He	25.567	ppb	3.0	6755.13	0.0795	Pulse	0.1000	3
As	75	115	He	0.027	ppb	682.6	82.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	41.095	ppb	1.5	30810.91	0.3624	Pulse	0.1000	3
Mo	98	115	He	0.002	ppb	1123.7	60.00	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.023	ppb	47.6	150.01	0.0018	Pulse	0.1000	3
Cd	111	115	He	0.274	ppb	8.7	126.00	0.0015	Pulse	0.5000	3
Sn	120	115	He	0.021	ppb	566.1	1553.48	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.044	ppb	61.6	60.00	0.0007	Pulse	0.1000	3
Ba	137	115	He	146.656	ppb	0.8	61020.11	0.7179	Pulse	0.1000	3
Tl	205	159	He	0.045	ppb	28.2	740.05	0.0019	Pulse	0.1000	3
Pb	208	159	He	0.327	ppb	6.2	4957.21	0.0128	Pulse	0.1000	3
U	238	209	He	0.001	ppb	223.2	146.67	0.0005	Pulse	0.1000	3

ISTD Table:

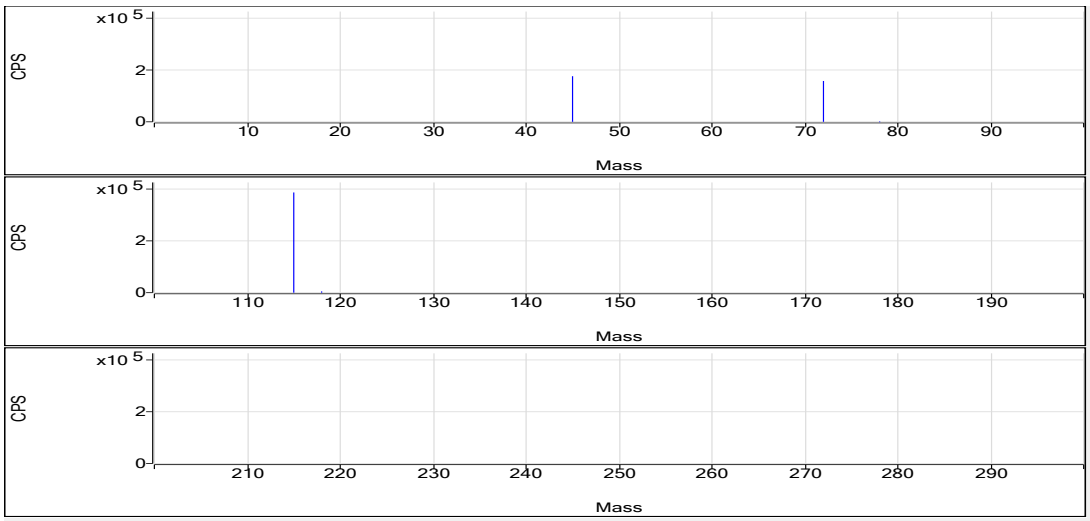
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2507931.94	2.3	106.8	Analog	0.1000	3
No Gas	Ge	72	1307636.75	1.0	109.0	Pulse	0.1000	3
H2	Sc	45	176432.63	0.1	101.5	Pulse	0.1000	3
H2	Ge	72	157930.96	0.6	105.6	Pulse	0.1000	3
H2	In	115	387654.56	0.6	105.9	Pulse	0.1000	3
He	Sc	45	47314.55	2.0	110.0	Pulse	0.1000	3
He	Ge	72	86582.10	1.0	110.8	Pulse	0.1000	3
He	In	115	85005.34	0.5	106.6	Pulse	0.1000	3
He	Tb	159	387638.92	0.4	105.4	Pulse	0.1000	3
He	Bi	209	301682.50	0.3	103.3	Pulse	0.1000	3

No Gas

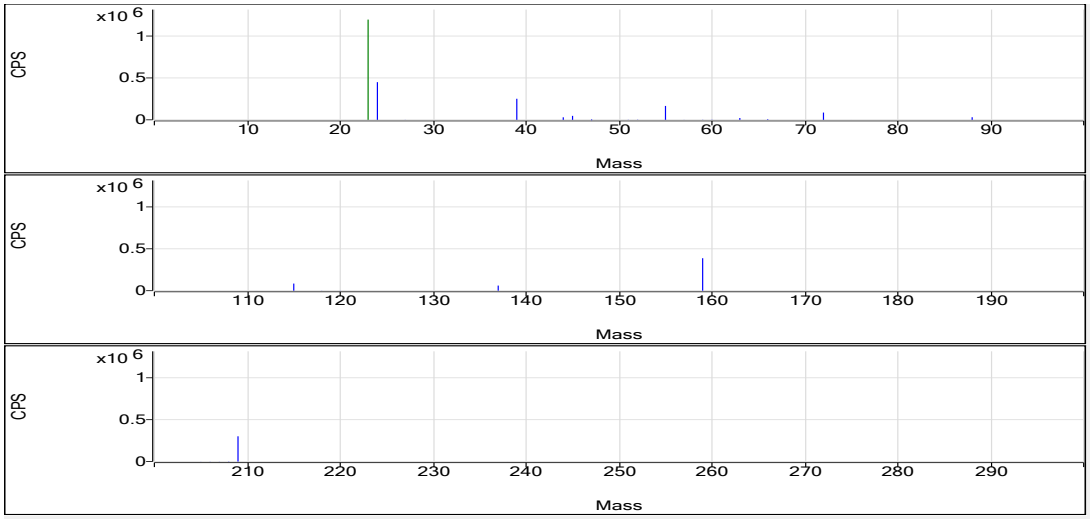


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.28	0.0002	570.01	0.0007	1.705E-05
Be	9	1	No Gas	0.283	0.0002	576.01	0.0007	1.705E-05
Be	9	1	No Gas	0.307	0.0002	596.02	0.0007	1.705E-05
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Se	78	2	H2	0.014	0	3.33	0.0002	6.062E-06
Se	78	2	H2	0.005	0	2.67	0.0002	6.062E-06
Na	23	3	He	6953.545	26.217	1211603.97	0.0037	0.3435
Na	23	3	He	6613.233	24.9508	1197639.67	0.0037	0.3435
Na	23	3	He	6547.56	24.7064	1179214.51	0.0037	0.3435
Mg	24	3	He	5328.756	9.7358	449935.34	0.0018	0.002943
Mg	24	3	He	5128.721	9.3705	449783.70	0.0018	0.002943
Mg	24	3	He	5148.24	9.4061	448945.81	0.0018	0.002943
Al	27	3	He	21.153	0.0136	630.04	0.0006	0.001008
Al	27	3	He	30.077	0.019	910.06	0.0006	0.001008
Al	27	3	He	19.726	0.0128	610.03	0.0006	0.001008
K	39	3	He	4237.588	5.3811	248685.04	0.0012	0.4052
K	39	3	He	4113.829	5.2358	251318.88	0.0012	0.4052
K	39	3	He	4185.851	5.3204	253936.40	0.0012	0.4052
Ca	44	3	He	9472.961	0.6553	30282.13	0.0001	0.003486
Ca	44	3	He	9118.704	0.6309	30282.29	0.0001	0.003486
Ca	44	3	He	9009.07	0.6233	29751.29	0.0001	0.003486
Ti	47	3	He	0.4	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.387	0.0002	10.00	0.0005	0
V	51	3	He	-0.081	0.0292	1348.07	0.0223	0.03097
V	51	3	He	-0.07	0.0294	1412.08	0.0223	0.03097
V	51	3	He	-0.025	0.0304	1452.08	0.0223	0.03097
Cr	52	3	He	0.195	0.0452	2090.22	0.029	0.03958
Cr	52	3	He	0.295	0.0481	2310.27	0.029	0.03958
Cr	52	3	He	0.225	0.0461	2200.25	0.029	0.03958
Mn	55	3	He	274.329	3.5679	164890.58	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	266.482	3.466	166367.28	0.013	0.003171
Mn	55	3	He	267.654	3.4812	166155.00	0.013	0.003171
Fe	57	3	He	18.99	0.0132	610.04	0.0006	0.002014
Fe	57	3	He	15.681	0.0113	540.03	0.0006	0.002014
Fe	57	3	He	25.749	0.0172	820.05	0.0006	0.002014
Co	59	3	He	0.469	0.0309	1430.12	0.0572	0.004106
Co	59	3	He	0.496	0.0325	1560.14	0.0572	0.004106
Co	59	3	He	0.448	0.0298	1420.11	0.0572	0.004106
Ni	60	3	He	3.25	0.0305	2610.34	0.0084	0.003329
Ni	60	3	He	2.589	0.025	2170.24	0.0084	0.003329
Ni	60	3	He	2.864	0.0273	2380.27	0.0084	0.003329
Cu	63	3	He	9.621	0.2427	20775.54	0.0247	0.004989
Cu	63	3	He	9.719	0.2452	21306.38	0.0247	0.004989
Cu	63	3	He	10.213	0.2574	22458.05	0.0247	0.004989
Zn	66	3	He	25.989	0.0807	6891.84	0.0029	0.006147
Zn	66	3	He	24.676	0.0769	6541.67	0.0029	0.006147
Zn	66	3	He	26.036	0.0808	6831.88	0.0029	0.006147
As	75	3	He	-0.062	0.0008	68.00	0.002	0.0009198
As	75	3	He	-0.095	0.0007	62.00	0.002	0.0009198
As	75	3	He	0.237	0.0014	118.00	0.002	0.0009198
Sr	88	3	He	41.779	0.3685	31475.74	0.0088	0.0005022
Sr	88	3	He	40.971	0.3613	30733.97	0.0088	0.0005022
Sr	88	3	He	40.535	0.3575	30223.03	0.0088	0.0005022
Mo	98	3	He	-0.004	0.0006	50.00	0.0223	0.0006689
Mo	98	3	He	-0.014	0.0004	30.00	0.0223	0.0006689
Mo	98	3	He	0.023	0.0012	100.00	0.0223	0.0006689
Ag	107	3	He	0.018	0.0015	130.01	0.0471	0.0006687
Ag	107	3	He	0.016	0.0014	120.01	0.0471	0.0006687
Ag	107	3	He	0.036	0.0024	200.01	0.0471	0.0006687
Cd	111	3	He	0.281	0.0015	130.00	0.0054	1.676E-05
Cd	111	3	He	0.247	0.0013	114.00	0.0054	1.676E-05
Cd	111	3	He	0.293	0.0016	134.00	0.0054	1.676E-05
Sn	120	3	He	0.141	0.0201	1720.16	0.0156	0.01794
Sn	120	3	He	0.018	0.0182	1550.14	0.0156	0.01794
Sn	120	3	He	-0.096	0.0164	1390.14	0.0156	0.01794
Sb	121	3	He	0.013	0.0002	20.00	0.0151	4.19E-05
Sb	121	3	He	0.059	0.0009	80.00	0.0151	4.19E-05
Sb	121	3	He	0.06	0.0009	80.00	0.0151	4.19E-05
Ba	137	3	He	145.95	0.7144	61026.96	0.0049	0.0002094
Ba	137	3	He	146.054	0.7149	60805.42	0.0049	0.0002094
Ba	137	3	He	147.964	0.7243	61227.95	0.0049	0.0002094
Tl	205	3	He	0.037	0.0017	660.04	0.0252	0.0007688
Tl	205	3	He	0.06	0.0023	880.06	0.0252	0.0007688
Tl	205	3	He	0.039	0.0017	680.05	0.0252	0.0007688
Pb	208	3	He	0.351	0.0136	2870.43	0.0337	0.001742
Pb	208	3	He	0.315	0.0124	2590.34	0.0337	0.001742
Pb	208	3	He	0.316	0.0124	2440.32	0.0337	0.001742
U	238	3	He	0.001	0.0005	150.01	0.0502	0.0004339
U	238	3	He	-0.001	0.0004	110.00	0.0502	0.0004339
U	238	3	He	0.003	0.0006	180.01	0.0502	0.0004339
Sc	45	1	No Gas			2538009.34		
Sc	45	1	No Gas			2543974.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2441811.68		
Ge	72	1	No Gas			1305024.12		
Ge	72	1	No Gas			1321998.26		
Ge	72	1	No Gas			1295887.87		
Sc	45	2	H2			176337.36		
Sc	45	2	H2			176327.75		
Sc	45	2	H2			176632.77		
Ge	72	2	H2			158916.25		
Ge	72	2	H2			156984.86		
Ge	72	2	H2			157891.77		
In	115	2	H2			385537.61		
In	115	2	H2			390139.72		
In	115	2	H2			387286.36		
Sc	45	3	He			46214.39		
Sc	45	3	He			48000.13		
Sc	45	3	He			47729.12		
Ge	72	3	He			85586.27		
Ge	72	3	He			86904.03		
Ge	72	3	He			87255.99		
In	115	3	He			85432.57		
In	115	3	He			85060.88		
In	115	3	He			84546.53		
Tb	159	3	He			388023.39		
Tb	159	3	He			385842.14		
Tb	159	3	He			389051.24		
Bi	209	3	He			300935.89		
Bi	209	3	He			302550.03		
Bi	209	3	He			301561.58		

Quantitation Report

Data File Name	056SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:00:02 AM
Sample Name	410-136864-M-1-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

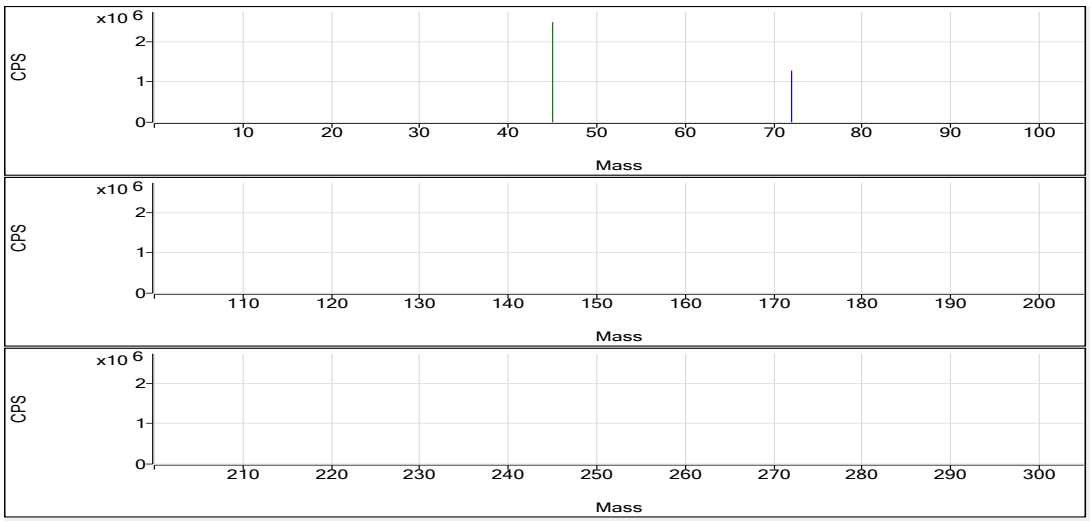
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.003	ppb	79.9	48.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.050	ppb	83.2	5.56	0.0000	Pulse	1.5000	3
Na	23	45	He	5032.467	ppb	0.7	907145.17	19.0689	Pulse	0.1000	3
Mg	24	45	He	30632.569	ppb	1.0	2661767.15	55.9528	Analog	0.1000	3
Al	27	45	He	1.716	ppb	31.1	96.67	0.0020	Pulse	0.1000	3
K	39	45	He	3757.072	ppb	0.3	229147.95	4.8169	Pulse	0.1000	3
Ca	44	45	He	92199.531	ppb	0.8	301947.83	6.3471	Pulse	0.1000	3
Ti	47	45	He	0.387	ppb	99.9	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.103	ppb	N/A	1364.07	0.0287	Pulse	0.5000	3
Cr	52	45	He	0.148	ppb	101.4	2086.89	0.0439	Pulse	0.1000	3
Mn	55	45	He	131.558	ppb	1.6	81475.95	1.7127	Pulse	0.1000	3
Fe	57	45	He	41.910	ppb	5.8	1270.10	0.0267	Pulse	0.1000	3
Co	59	45	He	0.624	ppb	7.9	1893.52	0.0398	Pulse	0.1000	3
Ni	60	72	He	4.032	ppb	4.8	3167.10	0.0370	Pulse	0.1000	3
Cu	63	72	He	0.084	ppb	43.5	603.37	0.0071	Pulse	0.1000	3
Zn	66	115	He	-0.295	ppb	N/A	436.69	0.0053	Pulse	0.1000	3
As	75	115	He	0.094	ppb	121.0	91.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	53.697	ppb	2.6	39014.55	0.4734	Pulse	0.1000	3
Mo	98	115	He	0.012	ppb	220.7	76.67	0.0009	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.044	ppb	46.0	20.67	0.0003	Pulse	0.5000	3
Sn	120	115	He	3.235	ppb	6.6	5631.37	0.0683	Pulse	0.1000	3
Sb	121	115	He	0.016	ppb	126.4	23.33	0.0003	Pulse	0.1000	3
Ba	137	115	He	202.868	ppb	1.5	81831.21	0.9929	Pulse	0.1000	3
Tl	205	159	He	-0.006	ppb	N/A	233.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	-0.004	ppb	N/A	623.36	0.0016	Pulse	0.1000	3
U	238	209	He	0.192	ppb	4.4	3007.15	0.0101	Pulse	0.1000	3

ISTD Table:

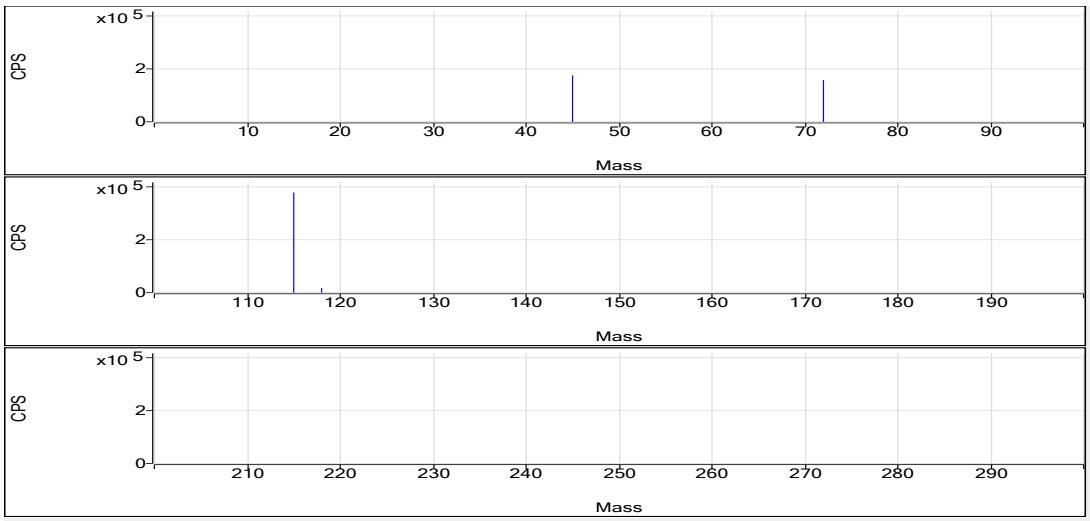
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2488643.97	0.9	106.0	Analog	0.1000	3
No Gas	Ge	72	1282003.65	0.8	106.8	Pulse	0.1000	3
H2	Sc	45	175019.11	0.3	100.7	Pulse	0.1000	3
H2	Ge	72	157415.21	0.9	105.3	Pulse	0.1000	3
H2	In	115	377849.93	0.6	103.2	Pulse	0.1000	3
He	Sc	45	47571.76	0.4	110.6	Pulse	0.1000	3
He	Ge	72	85471.78	1.3	109.4	Pulse	0.1000	3
He	In	115	82421.09	1.1	103.4	Pulse	0.1000	3
He	Tb	159	386031.64	0.8	104.9	Pulse	0.1000	3
He	Bi	209	298396.18	0.6	102.2	Pulse	0.1000	3

No Gas

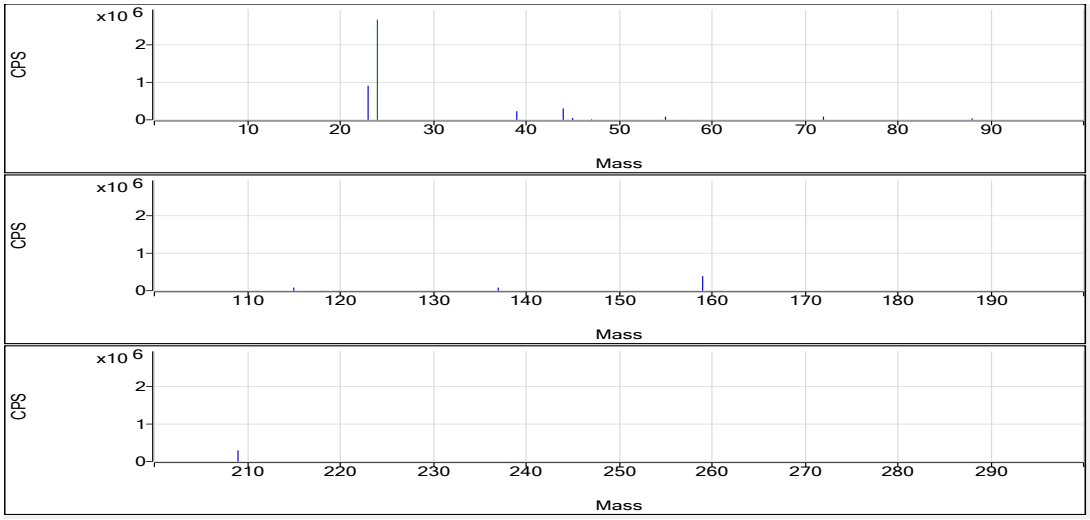


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	48.00	0.0007	1.705E-05
Be	9	1	No Gas	0.001	0	44.00	0.0007	1.705E-05
Be	9	1	No Gas	0.006	0	54.00	0.0007	1.705E-05
Se	78	2	H2	0.099	0	8.67	0.0002	6.062E-06
Se	78	2	H2	0.026	0	4.00	0.0002	6.062E-06
Se	78	2	H2	0.026	0	4.00	0.0002	6.062E-06
Na	23	3	He	5064.75	19.189	916260.46	0.0037	0.3435
Na	23	3	He	5036.608	19.0843	904363.42	0.0037	0.3435
Na	23	3	He	4996.042	18.9333	900811.63	0.0037	0.3435
Mg	24	3	He	30421.054	55.5665	2653260.90	0.0018	0.002943
Mg	24	3	He	30503.769	55.7176	2640338.40	0.0018	0.002943
Mg	24	3	He	30972.883	56.5744	2691702.15	0.0018	0.002943
Al	27	3	He	2.171	0.0023	110.01	0.0006	0.001008
Al	27	3	He	1.847	0.0021	100.00	0.0006	0.001008
Al	27	3	He	1.128	0.0017	80.00	0.0006	0.001008
K	39	3	He	3766.683	4.8282	230541.64	0.0012	0.4052
K	39	3	He	3761.02	4.8215	228481.66	0.0012	0.4052
K	39	3	He	3743.511	4.801	228420.54	0.0012	0.4052
Ca	44	3	He	92868.115	6.3931	305265.03	0.0001	0.003486
Ca	44	3	He	91401.639	6.2922	298173.24	0.0001	0.003486
Ca	44	3	He	92328.839	6.356	302405.21	0.0001	0.003486
Ti	47	3	He	0.774	0.0004	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.388	0.0002	10.00	0.0005	0
V	51	3	He	-0.076	0.0293	1398.08	0.0223	0.03097
V	51	3	He	-0.142	0.0278	1318.07	0.0223	0.03097
V	51	3	He	-0.092	0.0289	1376.07	0.0223	0.03097
Cr	52	3	He	0.217	0.0459	2190.23	0.029	0.03958
Cr	52	3	He	0.251	0.0469	2220.27	0.029	0.03958
Cr	52	3	He	-0.024	0.0389	1850.17	0.029	0.03958
Mn	55	3	He	132.419	1.7239	82314.40	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	133.118	1.733	82121.92	0.013	0.003171
Mn	55	3	He	129.139	1.6813	79991.52	0.013	0.003171
Fe	57	3	He	39.248	0.0251	1200.09	0.0006	0.002014
Fe	57	3	He	42.44	0.027	1280.10	0.0006	0.002014
Fe	57	3	He	44.041	0.028	1330.10	0.0006	0.002014
Co	59	3	He	0.591	0.0379	1810.18	0.0572	0.004106
Co	59	3	He	0.681	0.0431	2040.20	0.0572	0.004106
Co	59	3	He	0.601	0.0385	1830.18	0.0572	0.004106
Ni	60	3	He	4.242	0.0388	3340.47	0.0084	0.003329
Ni	60	3	He	3.989	0.0367	3160.44	0.0084	0.003329
Ni	60	3	He	3.866	0.0357	3000.39	0.0084	0.003329
Cu	63	3	He	0.047	0.0062	530.04	0.0247	0.004989
Cu	63	3	He	0.085	0.0071	610.03	0.0247	0.004989
Cu	63	3	He	0.12	0.008	670.04	0.0247	0.004989
Zn	66	3	He	-0.427	0.0049	410.02	0.0029	0.006147
Zn	66	3	He	-0.175	0.0056	460.03	0.0029	0.006147
Zn	66	3	He	-0.284	0.0053	440.02	0.0029	0.006147
As	75	3	He	0.032	0.001	82.00	0.002	0.0009198
As	75	3	He	0.226	0.0014	112.00	0.002	0.0009198
As	75	3	He	0.025	0.001	80.00	0.002	0.0009198
Sr	88	3	He	53.204	0.4691	39064.54	0.0088	0.0005022
Sr	88	3	He	55.269	0.4873	39696.53	0.0088	0.0005022
Sr	88	3	He	52.619	0.4639	38282.58	0.0088	0.0005022
Mo	98	3	He	-0.008	0.0005	40.00	0.0223	0.0006689
Mo	98	3	He	0.042	0.0016	130.00	0.0223	0.0006689
Mo	98	3	He	0.003	0.0007	60.00	0.0223	0.0006689
Ag	107	3	He	0.004	0.0008	70.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.006	0.0004	30.00	0.0471	0.0006687
Cd	111	3	He	0.064	0.0004	30.00	0.0054	1.676E-05
Cd	111	3	He	0.043	0.0002	20.00	0.0054	1.676E-05
Cd	111	3	He	0.024	0.0001	12.00	0.0054	1.676E-05
Sn	120	3	He	3.369	0.0704	5861.48	0.0156	0.01794
Sn	120	3	He	2.988	0.0645	5251.18	0.0156	0.01794
Sn	120	3	He	3.348	0.0701	5781.45	0.0156	0.01794
Sb	121	3	He	0.037	0.0006	50.00	0.0151	4.19E-05
Sb	121	3	He	-0.003	0	0.00	0.0151	4.19E-05
Sb	121	3	He	0.013	0.0002	20.00	0.0151	4.19E-05
Ba	137	3	He	202.029	0.9888	82347.38	0.0049	0.0002094
Ba	137	3	He	206.17	1.0091	82206.80	0.0049	0.0002094
Ba	137	3	He	200.405	0.9809	80939.44	0.0049	0.0002094
Tl	205	3	He	-0.011	0.0005	190.01	0.0252	0.0007688
Tl	205	3	He	-0.001	0.0008	290.01	0.0252	0.0007688
Tl	205	3	He	-0.008	0.0006	220.01	0.0252	0.0007688
Pb	208	3	He	-0.007	0.0015	340.02	0.0337	0.001742
Pb	208	3	He	-0.002	0.0017	360.02	0.0337	0.001742
Pb	208	3	He	-0.002	0.0017	380.02	0.0337	0.001742
U	238	3	He	0.199	0.0104	3130.52	0.0502	0.0004339
U	238	3	He	0.195	0.0102	3030.48	0.0502	0.0004339
U	238	3	He	0.183	0.0096	2860.44	0.0502	0.0004339
Sc	45	1	No Gas			2463118.40		
Sc	45	1	No Gas			2501322.46		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2501491.06		
Ge	72	1	No Gas			1277292.64		
Ge	72	1	No Gas			1293996.93		
Ge	72	1	No Gas			1274721.39		
Sc	45	2	H2			174375.27		
Sc	45	2	H2			175366.72		
Sc	45	2	H2			175315.33		
Ge	72	2	H2			157671.37		
Ge	72	2	H2			155952.61		
Ge	72	2	H2			158621.64		
In	115	2	H2			376254.68		
In	115	2	H2			376817.26		
In	115	2	H2			380477.85		
Sc	45	3	He			47749.29		
Sc	45	3	He			47387.89		
Sc	45	3	He			47578.09		
Ge	72	3	He			86098.36		
Ge	72	3	He			86159.56		
Ge	72	3	He			84157.42		
In	115	3	He			83308.81		
In	115	3	He			81499.08		
In	115	3	He			82544.94		
Tb	159	3	He			389516.13		
Tb	159	3	He			384845.23		
Tb	159	3	He			383733.55		
Bi	209	3	He			300453.65		
Bi	209	3	He			296928.80		
Bi	209	3	He			297806.09		

Quantitation Report

Data File Name	057SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:02:04 AM
Sample Name	410-136864-K-5-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

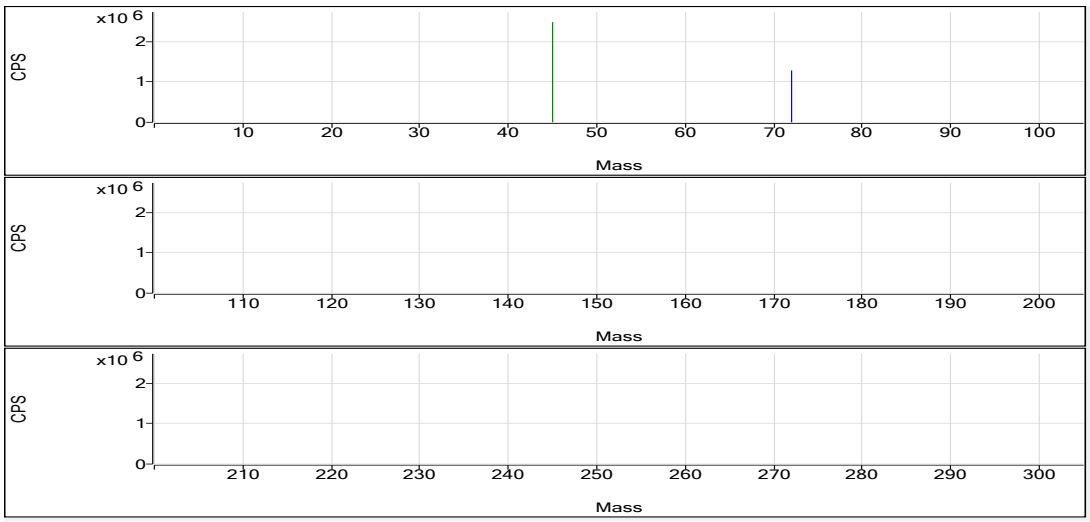
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.022	ppb	35.7	82.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.016	ppb	190.8	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	9172.066	ppb	1.5	1620635.18	34.4720	Analog	0.1000	3
Mg	24	45	He	41389.757	ppb	2.2	3553831.51	75.6007	Analog	0.1000	3
Al	27	45	He	3.774	ppb	19.4	153.34	0.0033	Pulse	0.1000	3
K	39	45	He	2965.977	ppb	1.3	182794.15	3.8880	Pulse	0.1000	3
Ca	44	45	He	111397.323	ppb	2.1	360459.53	7.6679	Pulse	0.1000	3
Ti	47	45	He	0.133	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.134	ppb	N/A	1316.74	0.0280	Pulse	0.5000	3
Cr	52	45	He	0.170	ppb	91.0	2090.23	0.0445	Pulse	0.1000	3
Mn	55	45	He	3817.615	ppb	1.9	2332258.82	49.6112	Analog	0.1000	3
Fe	57	45	He	8849.103	ppb	2.3	245132.38	5.2145	Pulse	0.1000	3
Co	59	45	He	14.324	ppb	2.8	38702.63	0.8233	Pulse	0.1000	3
Ni	60	72	He	14.386	ppb	3.6	10360.67	0.1236	Pulse	0.1000	3
Cu	63	72	He	0.081	ppb	34.8	586.70	0.0070	Pulse	0.1000	3
Zn	66	115	He	11.327	ppb	4.5	3153.80	0.0386	Pulse	0.1000	3
As	75	115	He	5.548	ppb	10.9	984.71	0.0121	Pulse	0.5000	3
Sr	88	115	He	109.852	ppb	1.1	79054.00	0.9680	Pulse	0.1000	3
Mo	98	115	He	0.606	ppb	12.6	1160.09	0.0142	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	197.6	60.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.005	ppb	118.6	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	1.332	ppb	10.5	3157.16	0.0387	Pulse	0.1000	3
Sb	121	115	He	0.038	ppb	57.5	50.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	530.062	ppb	1.6	211827.11	2.5940	Pulse	0.1000	3
Tl	205	159	He	0.047	ppb	19.5	750.05	0.0020	Pulse	0.1000	3
Pb	208	159	He	0.006	ppb	194.2	743.38	0.0019	Pulse	0.1000	3
U	238	209	He	0.773	ppb	1.0	11732.38	0.0392	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2477331.47	1.2	105.5	Analog	0.1000	3
No Gas	Ge	72	1281622.06	0.6	106.8	Pulse	0.1000	3
H2	Sc	45	174596.72	0.7	100.5	Pulse	0.1000	3
H2	Ge	72	156144.71	1.0	104.4	Pulse	0.1000	3
H2	In	115	375525.65	0.8	102.6	Pulse	0.1000	3
He	Sc	45	47023.61	2.3	109.3	Pulse	0.1000	3
He	Ge	72	83832.50	1.5	107.3	Pulse	0.1000	3
He	In	115	81677.03	2.0	102.5	Pulse	0.1000	3
He	Tb	159	384601.05	1.2	104.5	Pulse	0.1000	3
He	Bi	209	299439.75	1.1	102.5	Pulse	0.1000	3

No Gas



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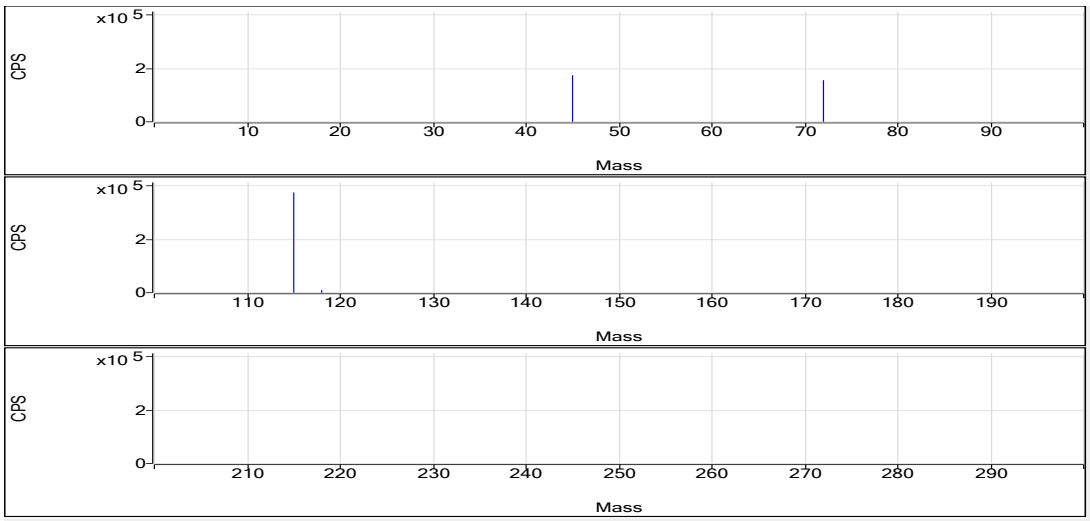
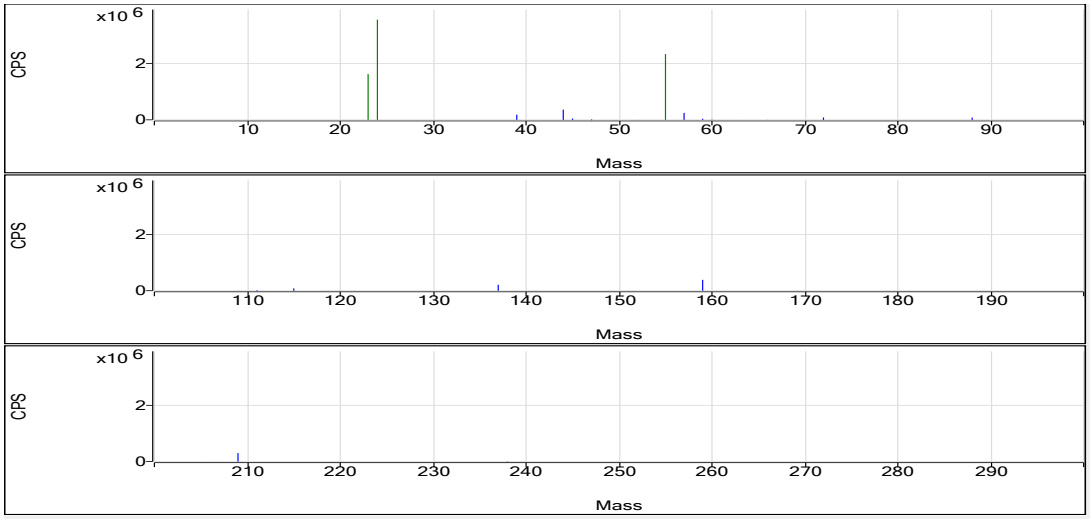


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.017	0	72.00	0.0007	1.705E-05
Be	9	1	No Gas	0.031	0	100.00	0.0007	1.705E-05
Be	9	1	No Gas	0.018	0	76.00	0.0007	1.705E-05
Se	78	2	H2	0.048	0	5.33	0.0002	6.062E-06
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Se	78	2	H2	0.016	0	3.33	0.0002	6.062E-06
Na	23	3	He	9014.234	33.8847	1634970.76	0.0037	0.3435
Na	23	3	He	9250.638	34.7643	1611833.10	0.0037	0.3435
Na	23	3	He	9251.326	34.7669	1615101.69	0.0037	0.3435
Mg	24	3	He	40334.055	73.6724	3554771.51	0.0018	0.002943
Mg	24	3	He	41927.871	76.5835	3550763.07	0.0018	0.002943
Mg	24	3	He	41907.345	76.546	3555959.95	0.0018	0.002943
Al	27	3	He	3.867	0.0033	160.01	0.0006	0.001008
Al	27	3	He	4.455	0.0037	170.01	0.0006	0.001008
Al	27	3	He	3	0.0028	130.00	0.0006	0.001008
K	39	3	He	2921.523	3.8358	185079.55	0.0012	0.4052
K	39	3	He	2982.088	3.9069	181140.86	0.0012	0.4052
K	39	3	He	2994.319	3.9212	182162.03	0.0012	0.4052
Ca	44	3	He	108700.983	7.4824	361034.88	0.0001	0.003486
Ca	44	3	He	113202.533	7.7921	361279.68	0.0001	0.003486
Ca	44	3	He	112288.454	7.7293	359064.02	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.398	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.103	0.0287	1384.08	0.0223	0.03097
V	51	3	He	-0.143	0.0278	1288.06	0.0223	0.03097
V	51	3	He	-0.155	0.0275	1278.07	0.0223	0.03097
Cr	52	3	He	0.014	0.04	1930.20	0.029	0.03958
Cr	52	3	He	0.324	0.049	2270.26	0.029	0.03958
Cr	52	3	He	0.172	0.0446	2070.23	0.029	0.03958
Mn	55	3	He	3736.299	48.5546	2342809.34	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3838.618	49.8842	2312859.34	0.013	0.003171
Mn	55	3	He	3877.927	50.395	2341107.78	0.013	0.003171
Fe	57	3	He	8648.093	5.0961	245894.31	0.0006	0.002014
Fe	57	3	He	9055.994	5.3364	247420.84	0.0006	0.002014
Fe	57	3	He	8843.223	5.2111	242081.99	0.0006	0.002014
Co	59	3	He	13.945	0.8017	38682.39	0.0572	0.004106
Co	59	3	He	14.746	0.8475	39293.89	0.0572	0.004106
Co	59	3	He	14.28	0.8208	38131.61	0.0572	0.004106
Ni	60	3	He	14.726	0.1265	10674.22	0.0084	0.003329
Ni	60	3	He	14.632	0.1257	10354.01	0.0084	0.003329
Ni	60	3	He	13.798	0.1187	10053.79	0.0084	0.003329
Cu	63	3	He	0.052	0.0063	530.03	0.0247	0.004989
Cu	63	3	He	0.083	0.007	580.03	0.0247	0.004989
Cu	63	3	He	0.109	0.0077	650.04	0.0247	0.004989
Zn	66	3	He	10.799	0.0371	3100.44	0.0029	0.006147
Zn	66	3	He	11.374	0.0388	3140.47	0.0029	0.006147
Zn	66	3	He	11.809	0.04	3220.48	0.0029	0.006147
As	75	3	He	5.155	0.0113	942.04	0.002	0.0009198
As	75	3	He	5.244	0.0115	928.04	0.002	0.0009198
As	75	3	He	6.246	0.0135	1084.05	0.002	0.0009198
Sr	88	3	He	108.567	0.9567	79915.43	0.0088	0.0005022
Sr	88	3	He	111.021	0.9783	79252.07	0.0088	0.0005022
Sr	88	3	He	109.969	0.969	77994.49	0.0088	0.0005022
Mo	98	3	He	0.651	0.0152	1270.10	0.0223	0.0006689
Mo	98	3	He	0.517	0.0122	990.07	0.0223	0.0006689
Mo	98	3	He	0.649	0.0152	1220.09	0.0223	0.0006689
Ag	107	3	He	-0.001	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	0.004	0.0009	70.00	0.0471	0.0006687
Ag	107	3	He	0.002	0.0007	60.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.011	0.0001	6.00	0.0054	1.676E-05
Cd	111	3	He	0.002	0	2.00	0.0054	1.676E-05
Sn	120	3	He	1.17	0.0362	3020.44	0.0156	0.01794
Sn	120	3	He	1.409	0.0399	3230.52	0.0156	0.01794
Sn	120	3	He	1.418	0.04	3220.53	0.0156	0.01794
Sb	121	3	He	0.029	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.063	0.001	80.00	0.0151	4.19E-05
Sb	121	3	He	0.022	0.0004	30.00	0.0151	4.19E-05
Ba	137	3	He	520.805	2.5487	212903.90	0.0049	0.0002094
Ba	137	3	He	532.086	2.6039	210943.90	0.0049	0.0002094
Ba	137	3	He	537.295	2.6294	211633.53	0.0049	0.0002094
Tl	205	3	He	0.038	0.0017	670.04	0.0252	0.0007688
Tl	205	3	He	0.056	0.0022	830.06	0.0252	0.0007688
Tl	205	3	He	0.047	0.002	750.05	0.0252	0.0007688
Pb	208	3	He	0.008	0.002	390.02	0.0337	0.001742
Pb	208	3	He	-0.006	0.0015	300.02	0.0337	0.001742
Pb	208	3	He	0.015	0.0022	380.02	0.0337	0.001742
U	238	3	He	0.78	0.0396	11955.94	0.0502	0.0004339
U	238	3	He	0.765	0.0388	11485.48	0.0502	0.0004339
U	238	3	He	0.772	0.0391	11755.72	0.0502	0.0004339
Sc	45	1	No Gas			2443186.37		
Sc	45	1	No Gas			2498313.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2490494.18		
Ge	72	1	No Gas			1275514.90		
Ge	72	1	No Gas			1290429.20		
Ge	72	1	No Gas			1278922.09		
Sc	45	2	H2			173300.74		
Sc	45	2	H2			175577.93		
Sc	45	2	H2			174911.50		
Ge	72	2	H2			155668.95		
Ge	72	2	H2			157832.90		
Ge	72	2	H2			154932.29		
In	115	2	H2			372061.28		
In	115	2	H2			377351.95		
In	115	2	H2			377163.71		
Sc	45	3	He			48251.04		
Sc	45	3	He			46364.59		
Sc	45	3	He			46455.19		
Ge	72	3	He			84409.19		
Ge	72	3	He			82387.65		
Ge	72	3	He			84700.67		
In	115	3	He			83551.38		
In	115	3	He			81025.56		
In	115	3	He			80503.78		
Tb	159	3	He			389643.43		
Tb	159	3	He			380535.11		
Tb	159	3	He			383624.60		
Bi	209	3	He			302148.94		
Bi	209	3	He			295865.58		
Bi	209	3	He			300304.74		

Quantitation Report

Data File Name	058SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:04:04 AM
Sample Name	410-136848-W-3-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

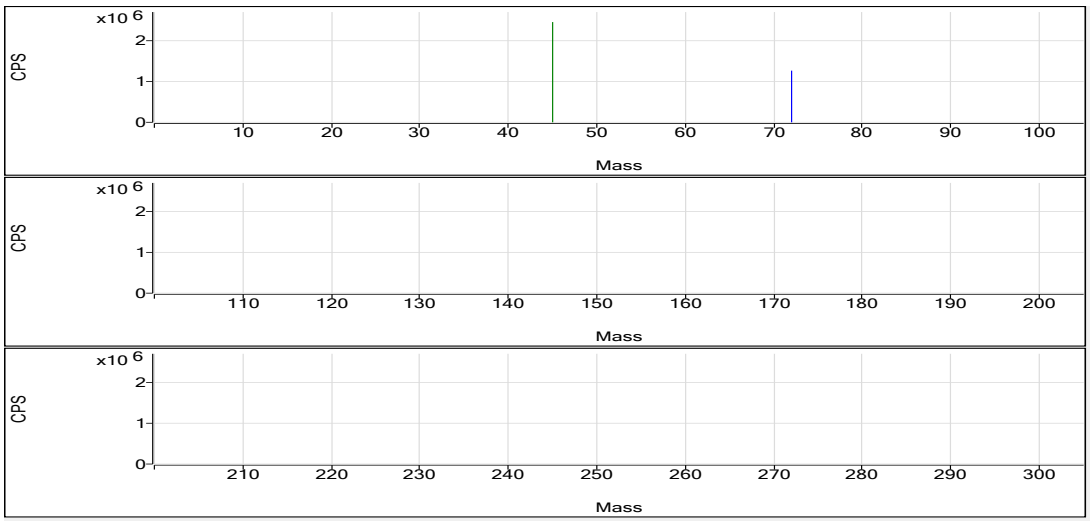
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	N/A	42.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.046	ppb	21.4	5.33	0.0000	Pulse	1.5000	3
Na	23	45	He	65308.823	ppb	1.7	11346181.08	243.3520	Analog	0.1000	3
Mg	24	45	He	11478.333	ppb	2.5	977527.09	20.9679	Pulse	0.1000	3
Al	27	45	He	36.418	ppb	8.1	1060.08	0.0227	Pulse	0.1000	3
K	39	45	He	2249.915	ppb	2.7	142061.43	3.0471	Pulse	0.1000	3
Ca	44	45	He	88872.007	ppb	2.3	285237.13	6.1181	Pulse	0.1000	3
Ti	47	45	He	0.267	ppb	86.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.027	ppb	N/A	1415.41	0.0304	Pulse	0.5000	3
Cr	52	45	He	0.167	ppb	106.1	2070.23	0.0444	Pulse	0.1000	3
Mn	55	45	He	875.987	ppb	1.8	530872.95	11.3862	Pulse	0.1000	3
Fe	57	45	He	245.199	ppb	6.5	6828.53	0.1464	Pulse	0.1000	3
Co	59	45	He	0.105	ppb	13.5	470.02	0.0101	Pulse	0.1000	3
Ni	60	72	He	0.341	ppb	53.1	520.03	0.0062	Pulse	0.1000	3
Cu	63	72	He	0.339	ppb	9.6	1126.75	0.0134	Pulse	0.1000	3
Zn	66	115	He	5.627	ppb	6.3	1856.85	0.0223	Pulse	0.1000	3
As	75	115	He	0.382	ppb	7.6	140.67	0.0017	Pulse	0.5000	3
Sr	88	115	He	303.137	ppb	2.0	222564.40	2.6703	Pulse	0.1000	3
Mo	98	115	He	0.747	ppb	6.7	1446.80	0.0173	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	183.1	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.033	ppb	N/A	1453.46	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.047	ppb	47.6	63.33	0.0008	Pulse	0.1000	3
Ba	137	115	He	27.928	ppb	4.6	11408.46	0.1369	Pulse	0.1000	3
Tl	205	159	He	-0.017	ppb	N/A	133.34	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.133	ppb	0.9	2393.52	0.0062	Pulse	0.1000	3
U	238	209	He	0.330	ppb	3.9	5037.86	0.0170	Pulse	0.1000	3

ISTD Table:

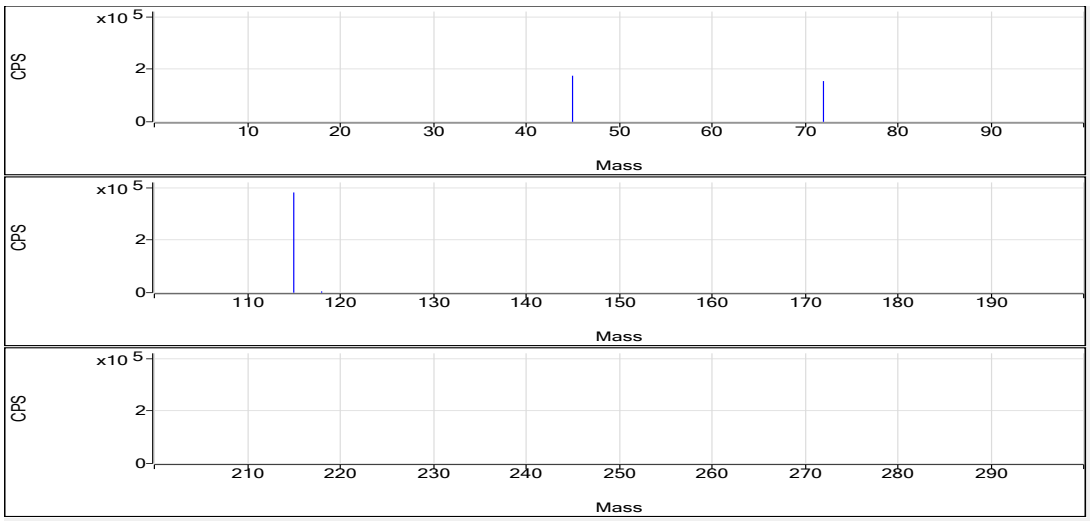
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2461047.78	1.5	104.8	Analog	0.1000	3
No Gas	Ge	72	1268438.55	0.8	105.7	Pulse	0.1000	3
H2	Sc	45	175795.62	0.5	101.2	Pulse	0.1000	3
H2	Ge	72	155340.28	0.9	103.9	Pulse	0.1000	3
H2	In	115	382195.40	1.3	104.4	Pulse	0.1000	3
He	Sc	45	46635.48	2.0	108.4	Pulse	0.1000	3
He	Ge	72	84295.29	1.4	107.8	Pulse	0.1000	3
He	In	115	83364.47	1.6	104.6	Pulse	0.1000	3
He	Tb	159	384097.30	0.6	104.4	Pulse	0.1000	3
He	Bi	209	296691.57	0.5	101.6	Pulse	0.1000	3

No Gas

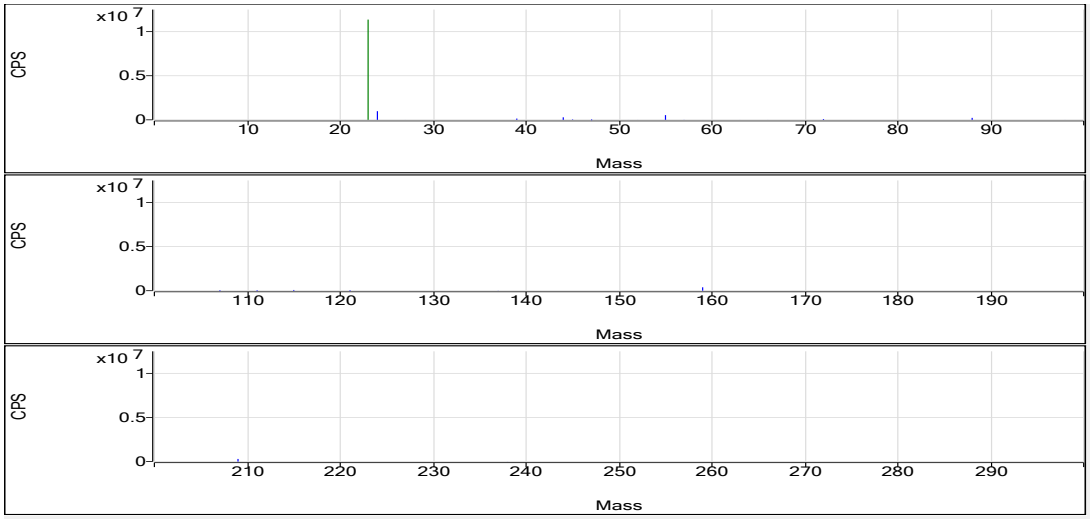


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	34.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.009	0	26.00	0.0007	1.705E-05
Be	9	1	No Gas	0.013	0	66.00	0.0007	1.705E-05
Se	78	2	H2	0.047	0	5.33	0.0002	6.062E-06
Se	78	2	H2	0.036	0	4.67	0.0002	6.062E-06
Se	78	2	H2	0.055	0	6.00	0.0002	6.062E-06
Na	23	3	He	66158.893	246.515	11340551.08	0.0037	0.3435
Na	23	3	He	64013.759	238.5332	11382566.08	0.0037	0.3435
Na	23	3	He	65753.816	245.0078	11315426.08	0.0037	0.3435
Mg	24	3	He	11635.283	21.2546	977785.61	0.0018	0.002943
Mg	24	3	He	11151.777	20.3715	972106.86	0.0018	0.002943
Mg	24	3	He	11647.939	21.2777	982688.81	0.0018	0.002943
Al	27	3	He	39.833	0.0248	1140.08	0.0006	0.001008
Al	27	3	He	34.83	0.0218	1040.08	0.0006	0.001008
Al	27	3	He	34.592	0.0217	1000.07	0.0006	0.001008
K	39	3	He	2272.856	3.0741	141418.53	0.0012	0.4052
K	39	3	He	2179.992	2.965	141488.76	0.0012	0.4052
K	39	3	He	2296.896	3.1023	143277.00	0.0012	0.4052
Ca	44	3	He	89803.767	6.1822	284404.80	0.0001	0.003486
Ca	44	3	He	86563.877	5.9593	284373.34	0.0001	0.003486
Ca	44	3	He	90248.378	6.2128	286933.24	0.0001	0.003486
Ti	47	3	He	0.402	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.4	0.0002	10.00	0.0005	0
V	51	3	He	-0.038	0.0301	1386.07	0.0223	0.03097
V	51	3	He	-0.085	0.0291	1388.08	0.0223	0.03097
V	51	3	He	0.041	0.0319	1472.08	0.0223	0.03097
Cr	52	3	He	0.104	0.0426	1960.19	0.029	0.03958
Cr	52	3	He	0.03	0.0404	1930.21	0.029	0.03958
Cr	52	3	He	0.368	0.0502	2320.28	0.029	0.03958
Mn	55	3	He	888.14	11.5441	531070.27	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	858.173	11.1547	532292.34	0.013	0.003171
Mn	55	3	He	881.646	11.4597	529256.24	0.013	0.003171
Fe	57	3	He	232.453	0.1389	6391.72	0.0006	0.002014
Fe	57	3	He	239.985	0.1434	6841.79	0.0006	0.002014
Fe	57	3	He	263.157	0.157	7252.08	0.0006	0.002014
Co	59	3	He	0.107	0.0102	470.02	0.0572	0.004106
Co	59	3	He	0.089	0.0092	440.02	0.0572	0.004106
Co	59	3	He	0.118	0.0108	500.02	0.0572	0.004106
Ni	60	3	He	0.175	0.0048	410.02	0.0084	0.003329
Ni	60	3	He	0.315	0.006	500.03	0.0084	0.003329
Ni	60	3	He	0.534	0.0078	650.04	0.0084	0.003329
Cu	63	3	He	0.304	0.0125	1070.07	0.0247	0.004989
Cu	63	3	He	0.368	0.0141	1180.09	0.0247	0.004989
Cu	63	3	He	0.346	0.0135	1130.08	0.0247	0.004989
Zn	66	3	He	5.248	0.0212	1800.18	0.0029	0.006147
Zn	66	3	He	5.946	0.0232	1920.19	0.0029	0.006147
Zn	66	3	He	5.685	0.0225	1850.18	0.0029	0.006147
As	75	3	He	0.41	0.0017	148.00	0.002	0.0009198
As	75	3	He	0.384	0.0017	140.00	0.002	0.0009198
As	75	3	He	0.352	0.0016	134.00	0.002	0.0009198
Sr	88	3	He	296.236	2.6096	221602.01	0.0088	0.0005022
Sr	88	3	He	307.97	2.7129	224540.15	0.0088	0.0005022
Sr	88	3	He	305.204	2.6885	221551.05	0.0088	0.0005022
Mo	98	3	He	0.798	0.0185	1570.15	0.0223	0.0006689
Mo	98	3	He	0.744	0.0173	1430.14	0.0223	0.0006689
Mo	98	3	He	0.698	0.0163	1340.11	0.0223	0.0006689
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	0.006	0.001	80.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	0.043	0.0186	1580.16	0.0156	0.01794
Sn	120	3	He	-0.043	0.0173	1430.12	0.0156	0.01794
Sn	120	3	He	-0.1	0.0164	1350.11	0.0156	0.01794
Sb	121	3	He	0.06	0.0009	80.00	0.0151	4.19E-05
Sb	121	3	He	0.061	0.001	80.00	0.0151	4.19E-05
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Ba	137	3	He	27.283	0.1337	11355.16	0.0049	0.0002094
Ba	137	3	He	29.402	0.1441	11925.51	0.0049	0.0002094
Ba	137	3	He	27.099	0.1328	10944.70	0.0049	0.0002094
Tl	205	3	He	-0.016	0.0004	140.01	0.0252	0.0007688
Tl	205	3	He	-0.018	0.0003	120.01	0.0252	0.0007688
Tl	205	3	He	-0.016	0.0004	140.01	0.0252	0.0007688
Pb	208	3	He	0.133	0.0062	1280.12	0.0337	0.001742
Pb	208	3	He	0.134	0.0063	1210.10	0.0337	0.001742
Pb	208	3	He	0.132	0.0062	1120.09	0.0337	0.001742
U	238	3	He	0.32	0.0165	4921.11	0.0502	0.0004339
U	238	3	He	0.325	0.0167	4961.21	0.0502	0.0004339
U	238	3	He	0.344	0.0177	5231.25	0.0502	0.0004339
Sc	45	1	No Gas			2434303.09		
Sc	45	1	No Gas			2446220.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2502619.34		
Ge	72	1	No Gas			1268423.89		
Ge	72	1	No Gas			1258493.42		
Ge	72	1	No Gas			1278398.34		
Sc	45	2	H2			175692.38		
Sc	45	2	H2			176683.16		
Sc	45	2	H2			175011.33		
Ge	72	2	H2			154942.20		
Ge	72	2	H2			156863.96		
Ge	72	2	H2			154214.69		
In	115	2	H2			376718.39		
In	115	2	H2			383687.46		
In	115	2	H2			386180.35		
Sc	45	3	He			46003.49		
Sc	45	3	He			47719.01		
Sc	45	3	He			46183.95		
Ge	72	3	He			85636.96		
Ge	72	3	He			83835.82		
Ge	72	3	He			83413.10		
In	115	3	He			84928.97		
In	115	3	He			82776.68		
In	115	3	He			82413.83		
Tb	159	3	He			381772.18		
Tb	159	3	He			384233.28		
Tb	159	3	He			386286.44		
Bi	209	3	He			298193.49		
Bi	209	3	He			296489.27		
Bi	209	3	He			295391.95		

Quantitation Report

Data File Name	059SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:06:08 AM
Sample Name	410-136848-U-5-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

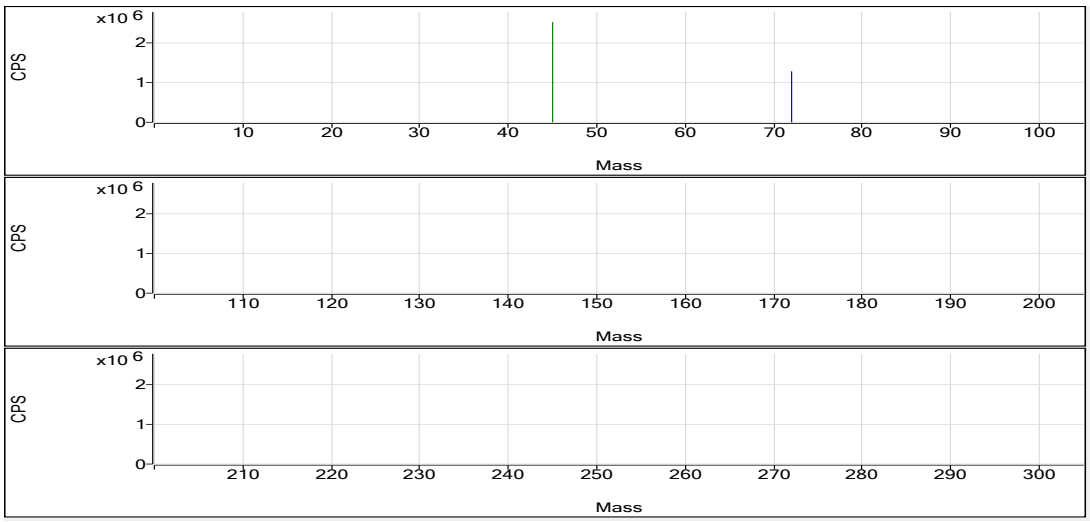
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.002	ppb	N/A	39.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.136	ppb	31.1	11.11	0.0000	Pulse	1.5000	3
Na	23	45	He	8201.746	ppb	1.2	1477846.38	30.8615	Analog	0.1000	3
Mg	24	45	He	14827.762	ppb	1.9	1296991.88	27.0856	Analog	0.1000	3
Al	27	45	He	15.116	ppb	14.8	480.03	0.0100	Pulse	0.1000	3
K	39	45	He	2029.677	ppb	1.7	133531.64	2.7885	Pulse	0.1000	3
Ca	44	45	He	140863.664	ppb	1.7	464264.03	9.6953	Pulse	0.1000	3
Ti	47	45	He	0.517	ppb	86.6	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	-0.050	ppb	N/A	1430.08	0.0299	Pulse	0.5000	3
Cr	52	45	He	0.265	ppb	2.6	2263.58	0.0473	Pulse	0.1000	3
Mn	55	45	He	2750.883	ppb	1.0	1711940.71	35.7496	Analog	0.1000	3
Fe	57	45	He	7546.215	ppb	1.2	212960.31	4.4471	Pulse	0.1000	3
Co	59	45	He	0.677	ppb	6.8	2050.21	0.0428	Pulse	0.1000	3
Ni	60	72	He	1.691	ppb	0.7	1496.80	0.0175	Pulse	0.1000	3
Cu	63	72	He	0.512	ppb	12.5	1510.14	0.0176	Pulse	0.1000	3
Zn	66	115	He	6.875	ppb	3.2	2136.91	0.0259	Pulse	0.1000	3
As	75	115	He	1.221	ppb	8.7	278.67	0.0034	Pulse	0.5000	3
Sr	88	115	He	505.563	ppb	0.3	367949.97	4.4532	Pulse	0.1000	3
Mo	98	115	He	0.346	ppb	16.5	693.38	0.0084	Pulse	0.1000	3
Ag	107	115	He	-0.012	ppb	N/A	10.00	0.0001	Pulse	0.1000	3
Cd	111	115	He	0.056	ppb	27.5	26.00	0.0003	Pulse	0.5000	3
Sn	120	115	He	0.139	ppb	81.7	1660.16	0.0201	Pulse	0.1000	3
Sb	121	115	He	0.064	ppb	26.8	83.33	0.0010	Pulse	0.1000	3
Ba	137	115	He	88.648	ppb	1.0	35857.86	0.4340	Pulse	0.1000	3
Tl	205	159	He	-0.016	ppb	N/A	143.34	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.215	ppb	3.0	3460.31	0.0090	Pulse	0.1000	3
U	238	209	He	0.316	ppb	4.2	4881.11	0.0163	Pulse	0.1000	3

ISTD Table:

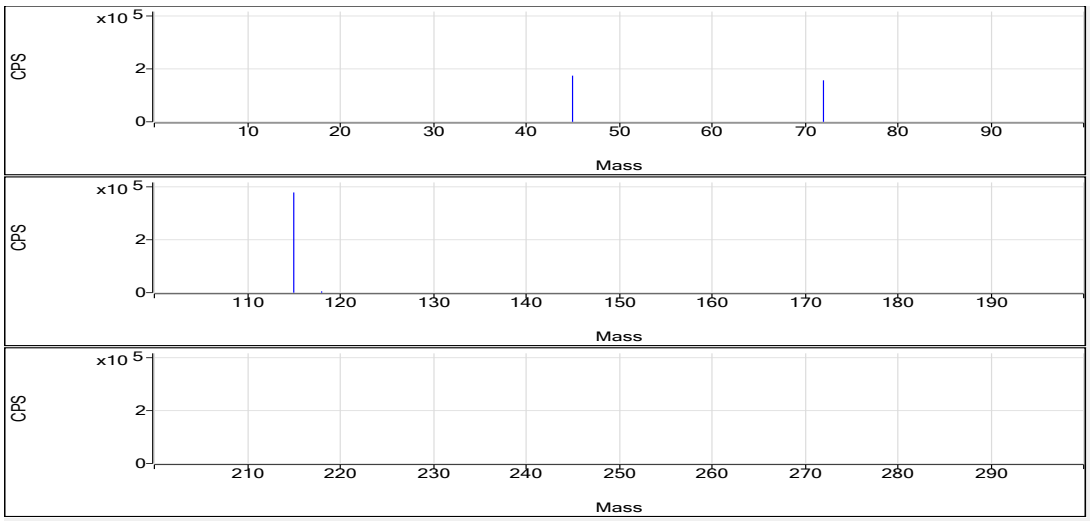
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2526363.97	0.6	107.6	Analog	0.1000	3
No Gas	Ge	72	1285384.59	0.7	107.1	Pulse	0.1000	3
H2	Sc	45	173851.58	1.2	100.1	Pulse	0.1000	3
H2	Ge	72	156296.62	1.2	104.5	Pulse	0.1000	3
H2	In	115	377424.16	0.5	103.1	Pulse	0.1000	3
He	Sc	45	47889.54	0.8	111.3	Pulse	0.1000	3
He	Ge	72	85680.10	1.4	109.6	Pulse	0.1000	3
He	In	115	82627.06	1.1	103.7	Pulse	0.1000	3
He	Tb	159	384460.49	0.7	104.5	Pulse	0.1000	3
He	Bi	209	300253.03	0.1	102.8	Pulse	0.1000	3

No Gas

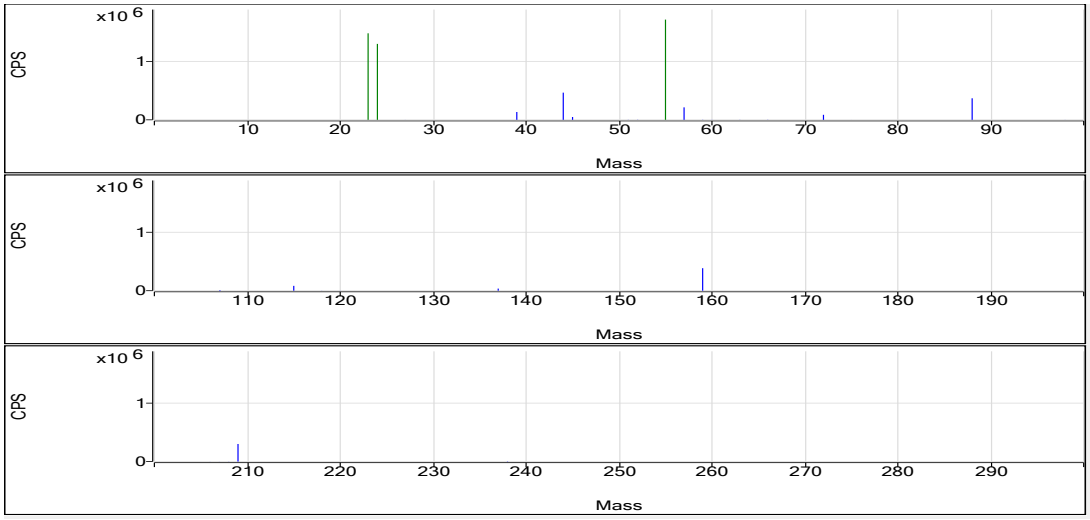


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	46.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.007	0	30.00	0.0007	1.705E-05
Be	9	1	No Gas	0	0	42.00	0.0007	1.705E-05
Se	78	2	H2	0.16	0	12.67	0.0002	6.062E-06
Se	78	2	H2	0.16	0	12.67	0.0002	6.062E-06
Se	78	2	H2	0.087	0	8.00	0.0002	6.062E-06
Na	23	3	He	8208.563	30.8868	1477610.13	0.0037	0.3435
Na	23	3	He	8300.228	31.2279	1484521.70	0.0037	0.3435
Na	23	3	He	8096.448	30.4697	1471407.32	0.0037	0.3435
Mg	24	3	He	14918.057	27.2505	1303650.84	0.0018	0.002943
Mg	24	3	He	15047.355	27.4867	1306669.98	0.0018	0.002943
Mg	24	3	He	14517.873	26.5196	1280654.82	0.0018	0.002943
Al	27	3	He	16.524	0.0109	520.03	0.0006	0.001008
Al	27	3	He	16.287	0.0107	510.03	0.0006	0.001008
Al	27	3	He	12.537	0.0085	410.02	0.0006	0.001008
K	39	3	He	2044.088	2.8055	134211.62	0.0012	0.4052
K	39	3	He	2055.234	2.8185	133988.81	0.0012	0.4052
K	39	3	He	1989.709	2.7416	132394.50	0.0012	0.4052
Ca	44	3	He	140353.65	9.6602	462139.88	0.0001	0.003486
Ca	44	3	He	143488.909	9.8759	469485.03	0.0001	0.003486
Ca	44	3	He	138748.432	9.5498	461167.18	0.0001	0.003486
Ti	47	3	He	0.772	0.0004	20.00	0.0005	0
Ti	47	3	He	0.777	0.0004	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.086	0.0291	1390.08	0.0223	0.03097
V	51	3	He	-0.038	0.0301	1432.08	0.0223	0.03097
V	51	3	He	-0.026	0.0304	1468.08	0.0223	0.03097
Cr	52	3	He	0.257	0.047	2250.25	0.029	0.03958
Cr	52	3	He	0.268	0.0473	2250.24	0.029	0.03958
Cr	52	3	He	0.271	0.0474	2290.26	0.029	0.03958
Mn	55	3	He	2748.482	35.7184	1708748.10	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2779.997	36.1279	1717458.26	0.013	0.003171
Mn	55	3	He	2724.17	35.4025	1709615.76	0.013	0.003171
Fe	57	3	He	7472.507	4.4037	210669.25	0.0006	0.002014
Fe	57	3	He	7649.107	4.5077	214288.10	0.0006	0.002014
Fe	57	3	He	7517.03	4.4299	213923.59	0.0006	0.002014
Co	59	3	He	0.703	0.0443	2120.22	0.0572	0.004106
Co	59	3	He	0.704	0.0444	2110.23	0.0572	0.004106
Co	59	3	He	0.623	0.0398	1920.19	0.0572	0.004106
Ni	60	3	He	1.696	0.0175	1520.14	0.0084	0.003329
Ni	60	3	He	1.678	0.0174	1490.13	0.0084	0.003329
Ni	60	3	He	1.7	0.0175	1480.12	0.0084	0.003329
Cu	63	3	He	0.521	0.0179	1550.14	0.0247	0.004989
Cu	63	3	He	0.444	0.016	1370.12	0.0247	0.004989
Cu	63	3	He	0.57	0.0191	1610.15	0.0247	0.004989
Zn	66	3	He	7.045	0.0264	2190.27	0.0029	0.006147
Zn	66	3	He	6.623	0.0251	2090.23	0.0029	0.006147
Zn	66	3	He	6.957	0.0261	2130.23	0.0029	0.006147
As	75	3	He	1.279	0.0035	290.01	0.002	0.0009198
As	75	3	He	1.099	0.0031	260.00	0.002	0.0009198
As	75	3	He	1.286	0.0035	286.00	0.002	0.0009198
Sr	88	3	He	506.779	4.4639	371040.93	0.0088	0.0005022
Sr	88	3	He	504.128	4.4405	369179.21	0.0088	0.0005022
Sr	88	3	He	505.781	4.4551	363629.76	0.0088	0.0005022
Mo	98	3	He	0.336	0.0082	680.04	0.0223	0.0006689
Mo	98	3	He	0.406	0.0097	810.06	0.0223	0.0006689
Mo	98	3	He	0.294	0.0072	590.05	0.0223	0.0006689
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Ag	107	3	He	-0.012	0.0001	10.00	0.0471	0.0006687
Ag	107	3	He	-0.014	0	0.00	0.0471	0.0006687
Cd	111	3	He	0.046	0.0003	22.00	0.0054	1.676E-05
Cd	111	3	He	0.073	0.0004	34.00	0.0054	1.676E-05
Cd	111	3	He	0.047	0.0003	22.00	0.0054	1.676E-05
Sn	120	3	He	0.146	0.0202	1680.17	0.0156	0.01794
Sn	120	3	He	0.022	0.0183	1520.14	0.0156	0.01794
Sn	120	3	He	0.248	0.0218	1780.18	0.0156	0.01794
Sb	121	3	He	0.069	0.0011	90.00	0.0151	4.19E-05
Sb	121	3	He	0.045	0.0007	60.00	0.0151	4.19E-05
Sb	121	3	He	0.078	0.0012	100.00	0.0151	4.19E-05
Ba	137	3	He	88.387	0.4327	35968.36	0.0049	0.0002094
Ba	137	3	He	87.949	0.4306	35797.88	0.0049	0.0002094
Ba	137	3	He	89.609	0.4387	35807.33	0.0049	0.0002094
Tl	205	3	He	-0.022	0.0002	80.00	0.0252	0.0007688
Tl	205	3	He	-0.008	0.0006	220.01	0.0252	0.0007688
Tl	205	3	He	-0.017	0.0003	130.01	0.0252	0.0007688
Pb	208	3	He	0.208	0.0088	1730.19	0.0337	0.001742
Pb	208	3	He	0.22	0.0092	1890.21	0.0337	0.001742
Pb	208	3	He	0.218	0.0091	1900.20	0.0337	0.001742
U	238	3	He	0.315	0.0162	4871.14	0.0502	0.0004339
U	238	3	He	0.329	0.0169	5081.14	0.0502	0.0004339
U	238	3	He	0.303	0.0156	4691.04	0.0502	0.0004339
Sc	45	1	No Gas			2541342.15		
Sc	45	1	No Gas			2527777.46		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2509972.31		
Ge	72	1	No Gas			1285541.07		
Ge	72	1	No Gas			1294132.32		
Ge	72	1	No Gas			1276480.37		
Sc	45	2	H2			172603.57		
Sc	45	2	H2			172603.90		
Sc	45	2	H2			176347.28		
Ge	72	2	H2			154809.73		
Ge	72	2	H2			155660.22		
Ge	72	2	H2			158419.90		
In	115	2	H2			376265.81		
In	115	2	H2			376291.64		
In	115	2	H2			379715.03		
Sc	45	3	He			47839.47		
Sc	45	3	He			47538.28		
Sc	45	3	He			48290.88		
Ge	72	3	He			86804.21		
Ge	72	3	He			85857.19		
Ge	72	3	He			84378.90		
In	115	3	He			83128.90		
In	115	3	He			83148.20		
In	115	3	He			81629.89		
Tb	159	3	He			385105.11		
Tb	159	3	He			386834.80		
Tb	159	3	He			381441.56		
Bi	209	3	He			300494.31		
Bi	209	3	He			299820.64		
Bi	209	3	He			300444.14		

Quantitation Report

Data File Name	060SMPL.d
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Acq Time	8/11/2023 9:08:12 AM
Sample Name	410-136848-W-2-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

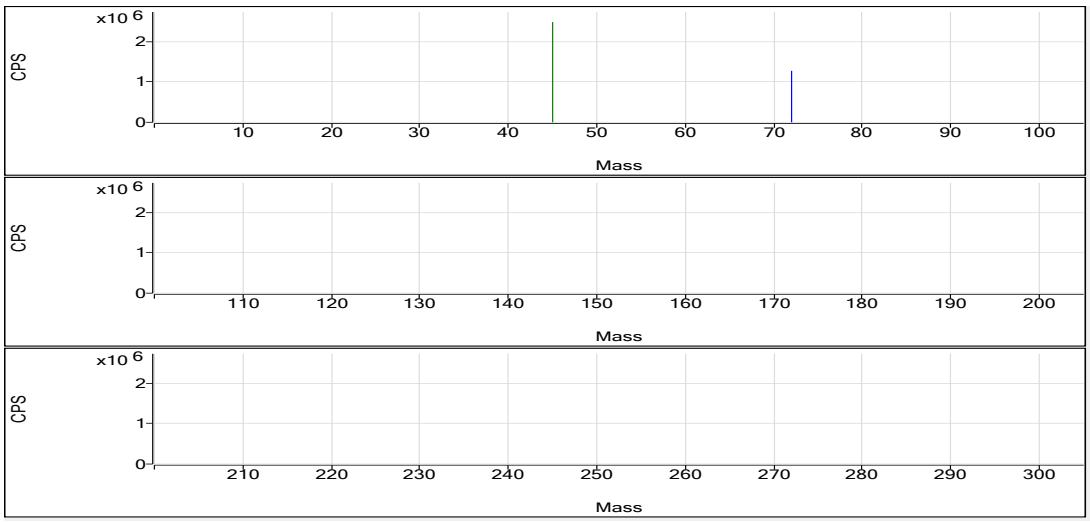
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.009	ppb	N/A	25.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.049	ppb	12.2	5.55	0.0000	Pulse	1.5000	3
Na	23	45	He	26976.783	ppb	0.2	4724796.39	100.7218	Analog	0.1000	3
Mg	24	45	He	6933.878	ppb	0.8	594210.65	12.6676	Pulse	0.1000	3
Al	27	45	He	4.858	ppb	14.9	183.34	0.0039	Pulse	0.1000	3
K	39	45	He	2585.637	ppb	1.3	161425.67	3.4414	Pulse	0.1000	3
Ca	44	45	He	45784.023	ppb	0.6	147928.26	3.1536	Pulse	0.1000	3
Ti	47	45	He	0.131	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.014	ppb	266.6	1467.42	0.0313	Pulse	0.5000	3
Cr	52	45	He	0.034	ppb	364.7	1903.52	0.0406	Pulse	0.1000	3
Mn	55	45	He	1130.982	ppb	0.9	689531.84	14.6997	Pulse	0.1000	3
Fe	57	45	He	54.635	ppb	10.6	1603.48	0.0342	Pulse	0.1000	3
Co	59	45	He	0.392	ppb	8.5	1243.43	0.0265	Pulse	0.1000	3
Ni	60	72	He	0.471	ppb	20.7	610.04	0.0073	Pulse	0.1000	3
Cu	63	72	He	0.576	ppb	8.0	1613.48	0.0192	Pulse	0.1000	3
Zn	66	115	He	6.517	ppb	7.5	2083.55	0.0248	Pulse	0.1000	3
As	75	115	He	0.661	ppb	11.8	188.67	0.0022	Pulse	0.5000	3
Sr	88	115	He	158.572	ppb	1.8	117153.06	1.3971	Pulse	0.1000	3
Mo	98	115	He	1.099	ppb	2.4	2113.58	0.0252	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	146.3	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.060	ppb	133.2	1583.49	0.0189	Pulse	0.1000	3
Sb	121	115	He	0.221	ppb	17.0	283.35	0.0034	Pulse	0.1000	3
Ba	137	115	He	18.773	ppb	6.1	7719.09	0.0921	Pulse	0.1000	3
Tl	205	159	He	-0.016	ppb	N/A	143.34	0.0004	Pulse	0.1000	3
Pb	208	159	He	-0.007	ppb	N/A	576.70	0.0015	Pulse	0.1000	3
U	238	209	He	0.438	ppb	5.4	6685.37	0.0224	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2489595.01	1.1	106.1	Analog	0.1000	3
No Gas	Ge	72	1277265.45	1.2	106.4	Pulse	0.1000	3
H2	Sc	45	175035.56	1.2	100.7	Pulse	0.1000	3
H2	Ge	72	155509.07	0.6	104.0	Pulse	0.1000	3
H2	In	115	383768.63	0.2	104.9	Pulse	0.1000	3
He	Sc	45	46909.66	0.7	109.0	Pulse	0.1000	3
He	Ge	72	83949.88	1.1	107.4	Pulse	0.1000	3
He	In	115	83864.26	0.9	105.2	Pulse	0.1000	3
He	Tb	159	385573.51	0.4	104.8	Pulse	0.1000	3
He	Bi	209	298664.34	0.5	102.3	Pulse	0.1000	3

No Gas



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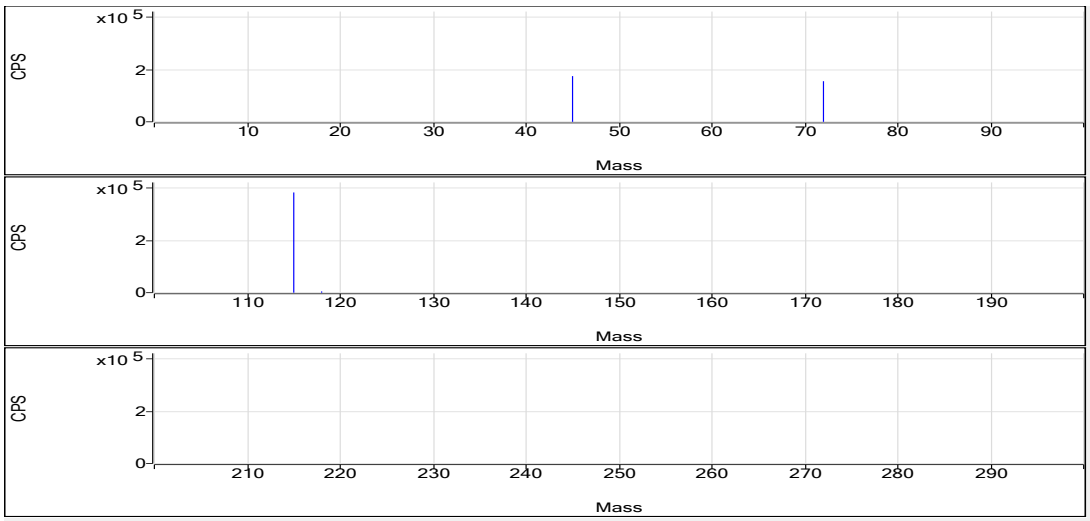
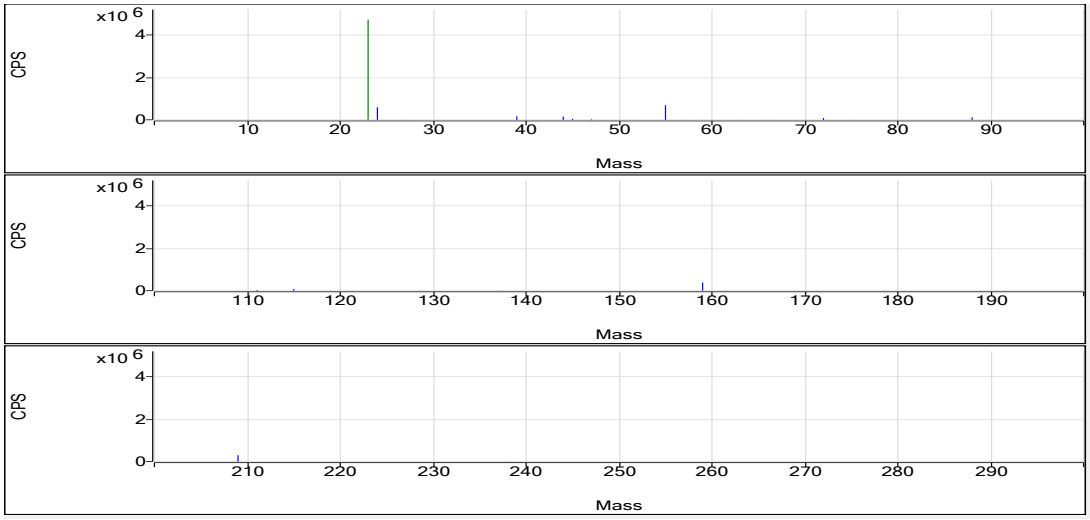


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.012	0	20.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.004	0	36.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.012	0	20.00	0.0007	1.705E-05
Se	78	2	H2	0.045	0	5.33	0.0002	6.062E-06
Se	78	2	H2	0.046	0	5.33	0.0002	6.062E-06
Se	78	2	H2	0.056	0	6.00	0.0002	6.062E-06
Na	23	3	He	26927.59	100.5387	4751253.05	0.0037	0.3435
Na	23	3	He	26982.725	100.7439	4698210.87	0.0037	0.3435
Na	23	3	He	27020.035	100.8827	4724925.24	0.0037	0.3435
Mg	24	3	He	6886.171	12.5804	594524.83	0.0018	0.002943
Mg	24	3	He	6997.917	12.7845	596208.82	0.0018	0.002943
Mg	24	3	He	6917.544	12.6377	591898.31	0.0018	0.002943
Al	27	3	He	5.402	0.0042	200.01	0.0006	0.001008
Al	27	3	He	5.138	0.0041	190.01	0.0006	0.001008
Al	27	3	He	4.035	0.0034	160.01	0.0006	0.001008
K	39	3	He	2548.161	3.3974	160551.86	0.0012	0.4052
K	39	3	He	2598.642	3.4566	161200.57	0.0012	0.4052
K	39	3	He	2610.107	3.4701	162524.57	0.0012	0.4052
Ca	44	3	He	45459.643	3.1312	147975.98	0.0001	0.003486
Ca	44	3	He	45994.524	3.168	147742.27	0.0001	0.003486
Ca	44	3	He	45897.903	3.1614	148066.52	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.394	0.0002	10.00	0.0005	0
V	51	3	He	-0.028	0.0303	1434.08	0.0223	0.03097
V	51	3	He	0.044	0.032	1490.09	0.0223	0.03097
V	51	3	He	0.026	0.0316	1478.08	0.0223	0.03097
Cr	52	3	He	0.131	0.0434	2050.19	0.029	0.03958
Cr	52	3	He	0.077	0.0418	1950.21	0.029	0.03958
Cr	52	3	He	-0.106	0.0365	1710.16	0.029	0.03958
Mn	55	3	He	1119.7	14.5531	687751.47	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1139.653	14.8124	690780.15	0.013	0.003171
Mn	55	3	He	1133.593	14.7337	690063.90	0.013	0.003171
Fe	57	3	He	49.752	0.0313	1480.12	0.0006	0.002014
Fe	57	3	He	61.021	0.038	1770.18	0.0006	0.002014
Fe	57	3	He	53.132	0.0333	1560.15	0.0006	0.002014
Co	59	3	He	0.383	0.026	1230.10	0.0572	0.004106
Co	59	3	He	0.363	0.0249	1160.08	0.0572	0.004106
Co	59	3	He	0.428	0.0286	1340.10	0.0572	0.004106
Ni	60	3	He	0.364	0.0064	540.03	0.0084	0.003329
Ni	60	3	He	0.497	0.0075	620.04	0.0084	0.003329
Ni	60	3	He	0.554	0.008	670.04	0.0084	0.003329
Cu	63	3	He	0.533	0.0182	1540.12	0.0247	0.004989
Cu	63	3	He	0.57	0.0191	1580.15	0.0247	0.004989
Cu	63	3	He	0.625	0.0204	1720.16	0.0247	0.004989
Zn	66	3	He	6.265	0.0241	2020.22	0.0029	0.006147
Zn	66	3	He	6.204	0.0239	1990.19	0.0029	0.006147
Zn	66	3	He	7.08	0.0265	2240.25	0.0029	0.006147
As	75	3	He	0.695	0.0023	194.00	0.002	0.0009198
As	75	3	He	0.572	0.0021	172.00	0.002	0.0009198
As	75	3	He	0.718	0.0024	200.00	0.002	0.0009198
Sr	88	3	He	158.577	1.3971	117043.05	0.0088	0.0005022
Sr	88	3	He	161.456	1.4225	118252.22	0.0088	0.0005022
Sr	88	3	He	155.682	1.3716	116163.92	0.0088	0.0005022
Mo	98	3	He	1.12	0.0257	2150.26	0.0223	0.0006689
Mo	98	3	He	1.069	0.0245	2040.23	0.0223	0.0006689
Mo	98	3	He	1.107	0.0254	2150.25	0.0223	0.0006689
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	-0.001	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.023	0.0001	12.00	0.0054	1.676E-05
Sn	120	3	He	0.151	0.0203	1700.17	0.0156	0.01794
Sn	120	3	He	-0.001	0.0179	1490.14	0.0156	0.01794
Sn	120	3	He	0.031	0.0184	1560.16	0.0156	0.01794
Sb	121	3	He	0.218	0.0033	280.01	0.0151	4.19E-05
Sb	121	3	He	0.26	0.004	330.02	0.0151	4.19E-05
Sb	121	3	He	0.185	0.0028	240.01	0.0151	4.19E-05
Ba	137	3	He	18.38	0.0902	7552.28	0.0049	0.0002094
Ba	137	3	He	20.073	0.0984	8182.73	0.0049	0.0002094
Ba	137	3	He	17.867	0.0876	7422.25	0.0049	0.0002094
Tl	205	3	He	-0.016	0.0004	140.01	0.0252	0.0007688
Tl	205	3	He	-0.013	0.0004	170.01	0.0252	0.0007688
Tl	205	3	He	-0.018	0.0003	120.00	0.0252	0.0007688
Pb	208	3	He	-0.011	0.0014	220.01	0.0337	0.001742
Pb	208	3	He	-0.004	0.0016	330.02	0.0337	0.001742
Pb	208	3	He	-0.007	0.0015	290.01	0.0337	0.001742
U	238	3	He	0.46	0.0235	6992.22	0.0502	0.0004339
U	238	3	He	0.413	0.0211	6301.82	0.0502	0.0004339
U	238	3	He	0.441	0.0225	6762.08	0.0502	0.0004339
Sc	45	1	No Gas			2491751.99		
Sc	45	1	No Gas			2516923.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2460109.81		
Ge	72	1	No Gas			1263158.73		
Ge	72	1	No Gas			1293555.76		
Ge	72	1	No Gas			1275081.86		
Sc	45	2	H2			172977.75		
Sc	45	2	H2			175023.59		
Sc	45	2	H2			177105.33		
Ge	72	2	H2			155053.00		
Ge	72	2	H2			156632.44		
Ge	72	2	H2			154841.78		
In	115	2	H2			384803.12		
In	115	2	H2			383217.26		
In	115	2	H2			383285.50		
Sc	45	3	He			47257.94		
Sc	45	3	He			46635.20		
Sc	45	3	He			46835.83		
Ge	72	3	He			84760.99		
Ge	72	3	He			82890.16		
Ge	72	3	He			84198.50		
In	115	3	He			83782.02		
In	115	3	He			83137.64		
In	115	3	He			84697.38		
Tb	159	3	He			385718.35		
Tb	159	3	He			387223.98		
Tb	159	3	He			383778.20		
Bi	209	3	He			297661.05		
Bi	209	3	He			298136.13		
Bi	209	3	He			300195.84		

Quantitation Report

Data File Name	062_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:12:18 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

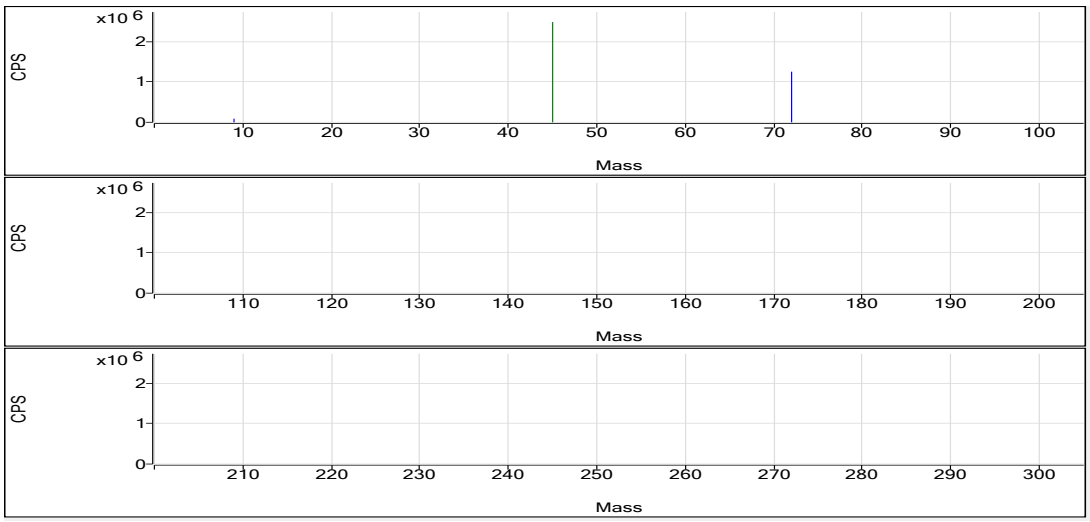
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.472	ppb	0.6	88834.91	0.0359	Pulse	0.5000	3
Se	78	115	H2	51.528	ppb	1.5	3389.96	0.0089	Pulse	1.5000	3
Na	23	45	He	4698.057	ppb	0.2	853306.08	17.8246	Pulse	0.1000	3
Mg	24	45	He	4928.813	ppb	0.9	431095.06	9.0053	Pulse	0.1000	3
Al	27	45	He	4870.027	ppb	0.6	139196.11	2.9077	Pulse	0.1000	3
K	39	45	He	4987.740	ppb	1.1	299773.87	6.2620	Pulse	0.1000	3
Ca	44	45	He	4994.211	ppb	2.2	16616.74	0.3471	Pulse	0.1000	3
Ti	47	45	He	4899.686	ppb	1.4	126950.81	2.6520	Pulse	0.1000	3
V	51	45	He	497.429	ppb	1.0	531421.98	11.1011	Pulse	0.5000	3
Cr	52	45	He	497.694	ppb	0.3	692002.75	14.4551	Pulse	0.1000	3
Mn	55	45	He	494.433	ppb	0.5	307732.88	6.4281	Pulse	0.1000	3
Fe	57	45	He	5003.913	ppb	0.9	141198.33	2.9496	Pulse	0.1000	3
Co	59	45	He	483.119	ppb	1.3	1322926.10	27.6356	Pulse	0.1000	3
Ni	60	72	He	537.245	ppb	1.4	371526.56	4.4954	Pulse	0.1000	3
Cu	63	72	He	516.774	ppb	0.8	1055875.11	12.7754	Pulse	0.1000	3
Zn	66	115	He	522.673	ppb	1.9	125622.46	1.5051	Pulse	0.1000	3
As	75	115	He	522.647	ppb	2.3	87715.73	1.0510	Pulse	0.5000	3
Sr	88	115	He	52.467	ppb	0.5	38620.36	0.4626	Pulse	0.1000	3
Mo	98	115	He	51.569	ppb	2.6	96142.25	1.1520	Pulse	0.1000	3
Ag	107	115	He	51.534	ppb	1.3	202594.33	2.4272	Pulse	0.1000	3
Cd	111	115	He	51.845	ppb	1.5	23167.21	0.2776	Pulse	0.5000	3
Sn	120	115	He	52.525	ppb	0.3	69756.04	0.8356	Pulse	0.1000	3
Sb	121	115	He	51.766	ppb	1.5	65361.60	0.7831	Pulse	0.1000	3
Ba	137	115	He	518.129	ppb	1.5	211640.57	2.5356	Pulse	0.1000	3
Tl	205	159	He	50.995	ppb	0.9	501421.13	1.2880	Pulse	0.1000	3
Pb	208	159	He	50.478	ppb	0.5	663614.40	1.7047	Pulse	0.1000	3
U	238	209	He	50.339	ppb	0.3	762665.67	2.5250	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2475866.06	0.9	105.5	Analog	0.1000	3
No Gas	Ge	72	1250471.18	0.1	104.2	Pulse	0.1000	3
H2	Sc	45	175788.99	2.0	101.2	Pulse	0.1000	3
H2	Ge	72	152031.24	1.9	101.7	Pulse	0.1000	3
H2	In	115	382071.39	0.3	104.4	Pulse	0.1000	3
He	Sc	45	47872.69	0.6	111.3	Pulse	0.1000	3
He	Ge	72	82652.15	0.7	105.7	Pulse	0.1000	3
He	In	115	83480.43	1.7	104.7	Pulse	0.1000	3
He	Tb	159	389299.94	0.5	105.8	Pulse	0.1000	3
He	Bi	209	302052.73	0.5	103.4	Pulse	0.1000	3

No Gas



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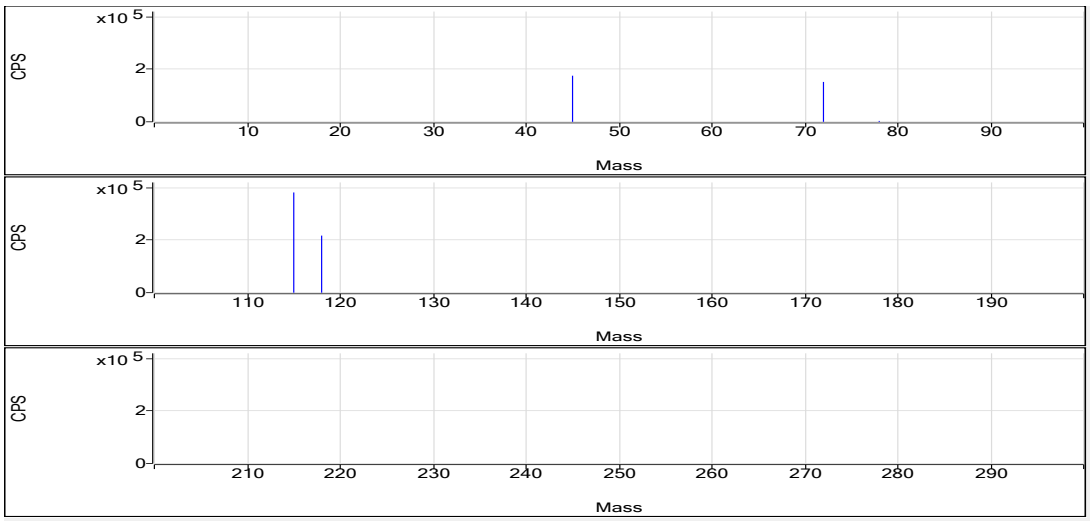
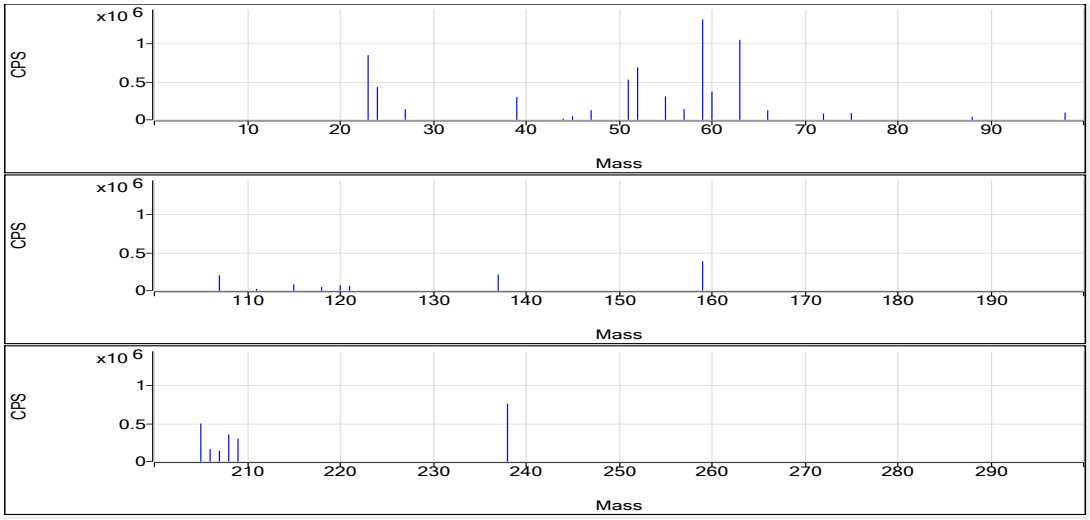


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.214	0.0357	89131.38	0.0007	1.705E-05
Be	9	1	No Gas	48.812	0.0361	89553.73	0.0007	1.705E-05
Be	9	1	No Gas	48.388	0.0358	87819.61	0.0007	1.705E-05
Se	78	2	H2	51.8	0.0089	3415.08	0.0002	6.062E-06
Se	78	2	H2	52.144	0.009	3434.42	0.0002	6.062E-06
Se	78	2	H2	50.639	0.0087	3320.39	0.0002	6.062E-06
Na	23	3	He	4710.046	17.8692	855031.86	0.0037	0.3435
Na	23	3	He	4696.317	17.8181	848464.52	0.0037	0.3435
Na	23	3	He	4687.809	17.7864	856421.86	0.0037	0.3435
Mg	24	3	He	4937.71	9.0216	431679.17	0.0018	0.002943
Mg	24	3	He	4969.273	9.0792	432336.83	0.0018	0.002943
Mg	24	3	He	4879.455	8.9152	429269.17	0.0018	0.002943
Al	27	3	He	4852.712	2.8973	138636.79	0.0006	0.001008
Al	27	3	He	4902.579	2.9271	139383.64	0.0006	0.001008
Al	27	3	He	4854.79	2.8986	139567.89	0.0006	0.001008
K	39	3	He	5050.326	6.3355	303148.71	0.0012	0.4052
K	39	3	He	4967.302	6.238	297040.50	0.0012	0.4052
K	39	3	He	4945.59	6.2125	299132.40	0.0012	0.4052
Ca	44	3	He	4866.913	0.3383	16189.61	0.0001	0.003486
Ca	44	3	He	5064.962	0.352	16760.18	0.0001	0.003486
Ca	44	3	He	5050.757	0.351	16900.42	0.0001	0.003486
Ti	47	3	He	4931.803	2.6694	127727.43	0.0005	0
Ti	47	3	He	4945.606	2.6768	127465.52	0.0005	0
Ti	47	3	He	4821.649	2.6097	125659.48	0.0005	0
V	51	3	He	500.333	11.1657	534275.56	0.0223	0.03097
V	51	3	He	500.295	11.1649	531651.13	0.0223	0.03097
V	51	3	He	491.66	10.9727	528339.25	0.0223	0.03097
Cr	52	3	He	496.017	14.4065	689343.74	0.029	0.03958
Cr	52	3	He	498.549	14.4798	689502.57	0.029	0.03958
Cr	52	3	He	498.516	14.4789	697161.94	0.029	0.03958
Mn	55	3	He	491.83	6.3943	305963.06	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	494.58	6.43	306184.86	0.013	0.003171
Mn	55	3	He	496.888	6.46	311050.72	0.013	0.003171
Fe	57	3	He	5024.292	2.9616	141709.23	0.0006	0.002014
Fe	57	3	He	5037.255	2.9692	141387.55	0.0006	0.002014
Fe	57	3	He	4950.191	2.9179	140498.20	0.0006	0.002014
Co	59	3	He	485.86	27.7923	1329850.14	0.0572	0.004106
Co	59	3	He	487.699	27.8975	1328429.04	0.0572	0.004106
Co	59	3	He	475.798	27.2168	1310499.12	0.0572	0.004106
Ni	60	3	He	540.217	4.5202	372409.14	0.0084	0.003329
Ni	60	3	He	528.562	4.4228	368650.74	0.0084	0.003329
Ni	60	3	He	542.957	4.5431	373519.80	0.0084	0.003329
Cu	63	3	He	518.586	12.8202	1056219.20	0.0247	0.004989
Cu	63	3	He	512.318	12.6653	1055686.08	0.0247	0.004989
Cu	63	3	He	519.419	12.8408	1055720.06	0.0247	0.004989
Zn	66	3	He	527.503	1.5189	124627.22	0.0029	0.006147
Zn	66	3	He	529.045	1.5234	127118.51	0.0029	0.006147
Zn	66	3	He	511.472	1.473	125121.66	0.0029	0.006147
As	75	3	He	536.105	1.078	88452.93	0.002	0.0009198
As	75	3	He	519.416	1.0445	87161.02	0.002	0.0009198
As	75	3	He	512.42	1.0305	87533.25	0.002	0.0009198
Sr	88	3	He	52.226	0.4605	37781.13	0.0088	0.0005022
Sr	88	3	He	52.401	0.462	38553.52	0.0088	0.0005022
Sr	88	3	He	52.776	0.4653	39526.44	0.0088	0.0005022
Mo	98	3	He	52.929	1.1824	97014.36	0.0223	0.0006689
Mo	98	3	He	51.557	1.1517	96109.22	0.0223	0.0006689
Mo	98	3	He	50.221	1.1219	95303.18	0.0223	0.0006689
Ag	107	3	He	52.033	2.4507	201079.65	0.0471	0.0006687
Ag	107	3	He	51.784	2.439	203523.24	0.0471	0.0006687
Ag	107	3	He	50.784	2.3919	203180.11	0.0471	0.0006687
Cd	111	3	He	52.649	0.2819	23127.15	0.0054	1.676E-05
Cd	111	3	He	51.817	0.2774	23149.18	0.0054	1.676E-05
Cd	111	3	He	51.069	0.2734	23225.31	0.0054	1.676E-05
Sn	120	3	He	52.721	0.8387	68811.63	0.0156	0.01794
Sn	120	3	He	52.437	0.8343	69615.64	0.0156	0.01794
Sn	120	3	He	52.418	0.834	70840.84	0.0156	0.01794
Sb	121	3	He	52.388	0.7925	65023.45	0.0151	4.19E-05
Sb	121	3	He	52.012	0.7868	65656.27	0.0151	4.19E-05
Sb	121	3	He	50.898	0.77	65405.09	0.0151	4.19E-05
Ba	137	3	He	527.143	2.5797	211664.92	0.0049	0.0002094
Ba	137	3	He	514.705	2.5189	210190.17	0.0049	0.0002094
Ba	137	3	He	512.539	2.5083	213066.62	0.0049	0.0002094
Tl	205	3	He	50.605	1.2782	498344.37	0.0252	0.0007688
Tl	205	3	He	51.518	1.3012	508835.15	0.0252	0.0007688
Tl	205	3	He	50.861	1.2846	497083.86	0.0252	0.0007688
Pb	208	3	He	50.382	1.7014	357016.71	0.0337	0.001742
Pb	208	3	He	50.262	1.6974	355798.71	0.0337	0.001742
Pb	208	3	He	50.791	1.7152	354263.94	0.0337	0.001742
U	238	3	He	50.238	2.5199	765061.63	0.0502	0.0004339
U	238	3	He	50.505	2.5333	761880.07	0.0502	0.0004339
U	238	3	He	50.275	2.5217	761055.30	0.0502	0.0004339
Sc	45	1	No Gas			2497354.34		
Sc	45	1	No Gas			2478485.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2451758.24		
Ge	72	1	No Gas			1251544.28		
Ge	72	1	No Gas			1249650.22		
Ge	72	1	No Gas			1250219.04		
Sc	45	2	H2			173474.29		
Sc	45	2	H2			179748.02		
Sc	45	2	H2			174144.65		
Ge	72	2	H2			153417.14		
Ge	72	2	H2			153909.88		
Ge	72	2	H2			148766.71		
In	115	2	H2			382889.10		
In	115	2	H2			382522.57		
In	115	2	H2			380802.49		
Sc	45	3	He			47849.57		
Sc	45	3	He			47618.18		
Sc	45	3	He			48150.32		
Ge	72	3	He			82387.33		
Ge	72	3	He			83352.78		
Ge	72	3	He			82216.34		
In	115	3	He			82423.62		
In	115	3	He			83822.19		
In	115	3	He			85322.21		
Tb	159	3	He			389894.02		
Tb	159	3	He			391054.13		
Tb	159	3	He			386951.67		
Bi	209	3	He			303609.31		
Bi	209	3	He			300750.19		
Bi	209	3	He			301798.69		

Quantitation Report

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Sample Type	CCB
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

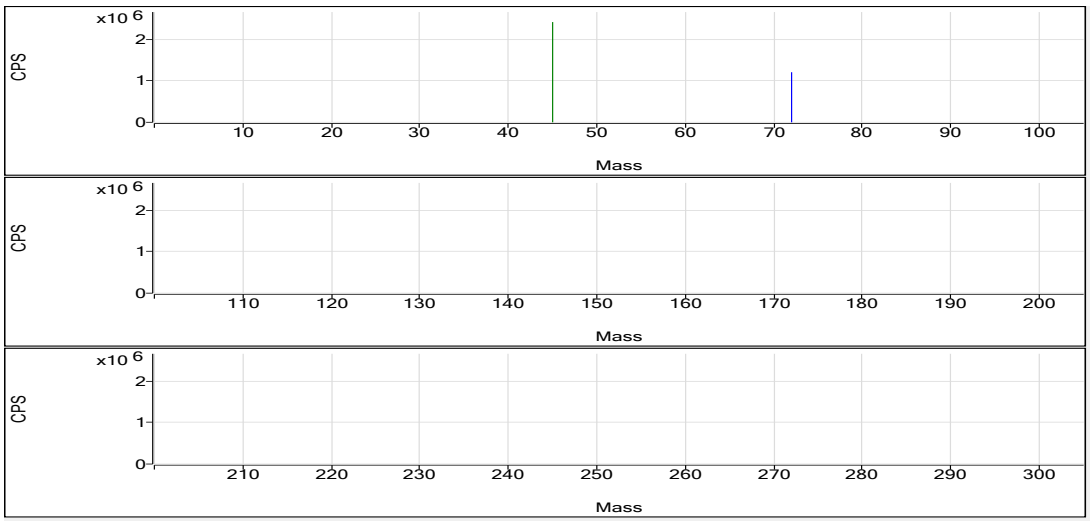
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	81.6	63.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.050	ppb	30.7	5.56	0.0000	Pulse	1.5000	3
Na	23	45	He	-4.085	ppb	N/A	15244.95	0.3283	Pulse	0.1000	3
Mg	24	45	He	1.968	ppb	31.5	303.35	0.0065	Pulse	0.1000	3
Al	27	45	He	0.238	ppb	319.9	53.33	0.0012	Pulse	0.1000	3
K	39	45	He	1.766	ppb	800.0	18912.78	0.4073	Pulse	0.1000	3
Ca	44	45	He	-2.635	ppb	N/A	153.34	0.0033	Pulse	0.1000	3
Ti	47	45	He	2.519	ppb	8.8	63.33	0.0014	Pulse	0.1000	3
V	51	45	He	-0.044	ppb	N/A	1392.08	0.0300	Pulse	0.5000	3
Cr	52	45	He	-0.036	ppb	N/A	1790.18	0.0385	Pulse	0.1000	3
Mn	55	45	He	0.148	ppb	53.3	236.68	0.0051	Pulse	0.1000	3
Fe	57	45	He	-0.123	ppb	N/A	90.00	0.0019	Pulse	0.1000	3
Co	59	45	He	0.036	ppb	79.0	286.68	0.0062	Pulse	0.1000	3
Ni	60	72	He	-0.003	ppb	N/A	266.68	0.0033	Pulse	0.1000	3
Cu	63	72	He	0.104	ppb	74.5	606.70	0.0075	Pulse	0.1000	3
Zn	66	115	He	-0.500	ppb	N/A	386.69	0.0047	Pulse	0.1000	3
As	75	115	He	0.015	ppb	302.0	78.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.035	ppb	121.7	66.67	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.030	ppb	62.1	110.00	0.0013	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	77.2	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.033	ppb	N/A	1430.13	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.051	ppb	9.5	66.67	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.057	ppb	87.0	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.043	ppb	16.0	710.04	0.0019	Pulse	0.1000	3
Pb	208	159	He	-0.011	ppb	N/A	530.02	0.0014	Pulse	0.1000	3
U	238	209	He	0.032	ppb	4.8	610.04	0.0020	Pulse	0.1000	3

ISTD Table:

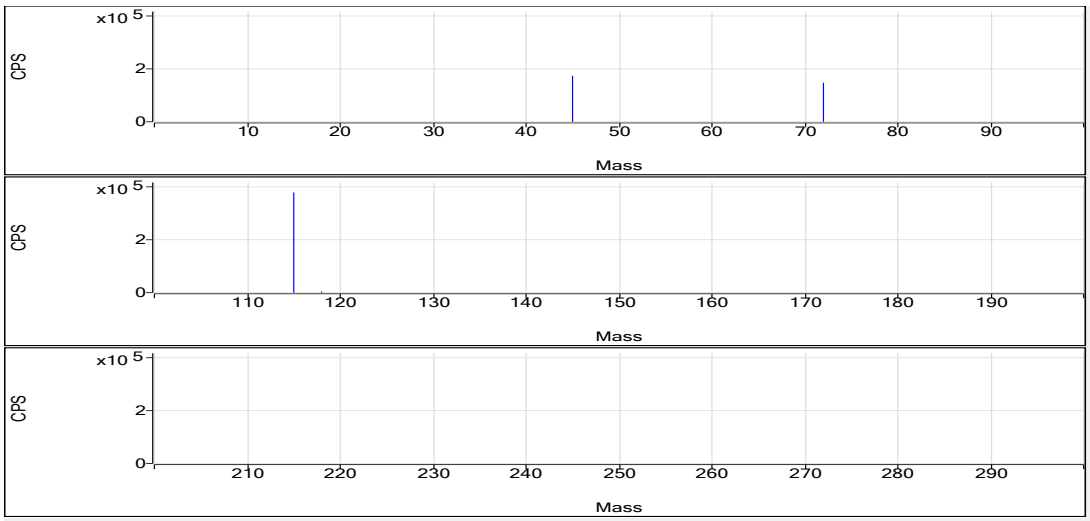
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2420517.98	1.8	103.1	Analog	0.1000	3
No Gas	Ge	72	1209265.37	0.3	100.8	Pulse	0.1000	3
H2	Sc	45	174678.11	0.7	100.5	Pulse	0.1000	3
H2	Ge	72	148398.49	1.5	99.2	Pulse	0.1000	3
H2	In	115	380439.40	0.5	103.9	Pulse	0.1000	3
He	Sc	45	46441.66	0.9	107.9	Pulse	0.1000	3
He	Ge	72	80497.08	1.4	103.0	Pulse	0.1000	3
He	In	115	82071.08	0.8	103.0	Pulse	0.1000	3
He	Tb	159	382346.10	0.7	103.9	Pulse	0.1000	3
He	Bi	209	300369.52	0.5	102.9	Pulse	0.1000	3

No Gas

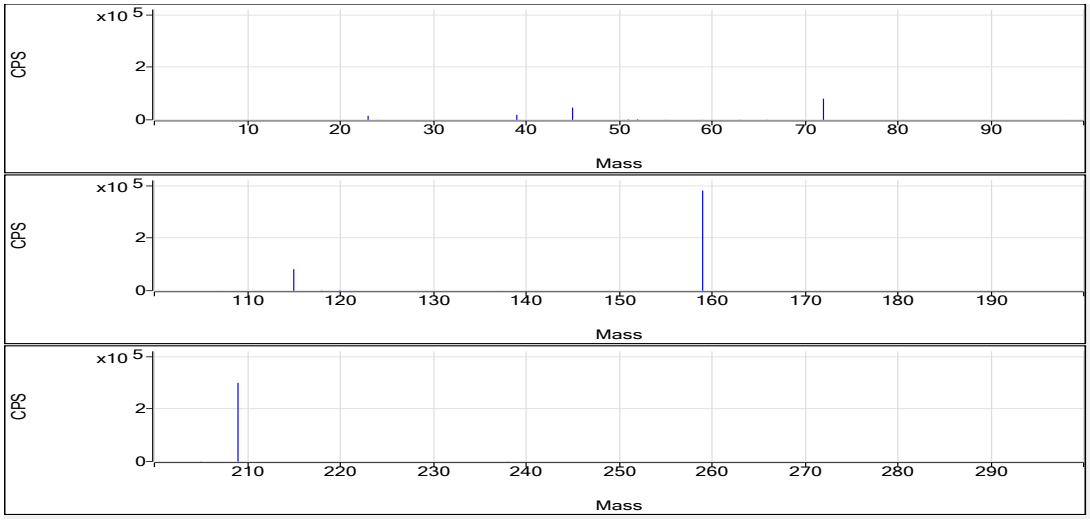


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.023	0	82.00	0.0007	1.705E-05
Be	9	1	No Gas	0.011	0	60.00	0.0007	1.705E-05
Be	9	1	No Gas	0.003	0	48.00	0.0007	1.705E-05
Se	78	2	H2	0.036	0	4.67	0.0002	6.062E-06
Se	78	2	H2	0.066	0	6.67	0.0002	6.062E-06
Se	78	2	H2	0.046	0	5.33	0.0002	6.062E-06
Na	23	3	He	-4.668	0.3261	15238.15	0.0037	0.3435
Na	23	3	He	-2.628	0.3337	15338.40	0.0037	0.3435
Na	23	3	He	-4.959	0.325	15158.29	0.0037	0.3435
Mg	24	3	He	2.021	0.0066	310.01	0.0018	0.002943
Mg	24	3	He	2.558	0.0076	350.02	0.0018	0.002943
Mg	24	3	He	1.324	0.0054	250.01	0.0018	0.002943
Al	27	3	He	0.463	0.0013	60.00	0.0006	0.001008
Al	27	3	He	0.863	0.0015	70.00	0.0006	0.001008
Al	27	3	He	-0.611	0.0006	30.00	0.0006	0.001008
K	39	3	He	2.146	0.4078	19053.02	0.0012	0.4052
K	39	3	He	15.696	0.4237	19473.48	0.0012	0.4052
K	39	3	He	-12.545	0.3905	18211.84	0.0012	0.4052
Ca	44	3	He	-7.122	0.003	140.00	0.0001	0.003486
Ca	44	3	He	6.252	0.0039	180.01	0.0001	0.003486
Ca	44	3	He	-7.035	0.003	140.01	0.0001	0.003486
Ti	47	3	He	2.372	0.0013	60.00	0.0005	0
Ti	47	3	He	2.412	0.0013	60.00	0.0005	0
Ti	47	3	He	2.773	0.0015	70.00	0.0005	0
V	51	3	He	-0.059	0.0297	1386.08	0.0223	0.03097
V	51	3	He	0.077	0.0327	1502.09	0.0223	0.03097
V	51	3	He	-0.151	0.0276	1288.07	0.0223	0.03097
Cr	52	3	He	-0.199	0.0338	1580.15	0.029	0.03958
Cr	52	3	He	-0.067	0.0376	1730.17	0.029	0.03958
Cr	52	3	He	0.159	0.0442	2060.22	0.029	0.03958
Mn	55	3	He	0.184	0.0056	260.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.057	0.0039	180.01	0.013	0.003171
Mn	55	3	He	0.202	0.0058	270.01	0.013	0.003171
Fe	57	3	He	-1.239	0.0013	60.00	0.0006	0.002014
Fe	57	3	He	1.013	0.0026	120.00	0.0006	0.002014
Fe	57	3	He	-0.143	0.0019	90.00	0.0006	0.002014
Co	59	3	He	0.052	0.0071	330.02	0.0572	0.004106
Co	59	3	He	0.054	0.0072	330.02	0.0572	0.004106
Co	59	3	He	0.003	0.0043	200.01	0.0572	0.004106
Ni	60	3	He	-0.127	0.0023	180.01	0.0084	0.003329
Ni	60	3	He	0.028	0.0036	290.01	0.0084	0.003329
Ni	60	3	He	0.091	0.0041	330.01	0.0084	0.003329
Cu	63	3	He	0.13	0.0082	650.04	0.0247	0.004989
Cu	63	3	He	0.017	0.0054	440.02	0.0247	0.004989
Cu	63	3	He	0.164	0.009	730.05	0.0247	0.004989
Zn	66	3	He	-0.578	0.0045	370.02	0.0029	0.006147
Zn	66	3	He	-0.494	0.0047	390.02	0.0029	0.006147
Zn	66	3	He	-0.429	0.0049	400.02	0.0029	0.006147
As	75	3	He	0.025	0.001	80.00	0.002	0.0009198
As	75	3	He	-0.035	0.0008	70.00	0.002	0.0009198
As	75	3	He	0.056	0.001	84.00	0.002	0.0009198
Sr	88	3	He	0.026	0.0007	60.00	0.0088	0.0005022
Sr	88	3	He	-0.002	0.0005	40.00	0.0088	0.0005022
Sr	88	3	He	0.083	0.0012	100.00	0.0088	0.0005022
Mo	98	3	He	0.052	0.0018	150.01	0.0223	0.0006689
Mo	98	3	He	0.019	0.0011	90.00	0.0223	0.0006689
Mo	98	3	He	0.02	0.0011	90.00	0.0223	0.0006689
Ag	107	3	He	0.006	0.001	80.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.011	0.0001	6.00	0.0054	1.676E-05
Sn	120	3	He	-0.085	0.0166	1370.11	0.0156	0.01794
Sn	120	3	He	-0.038	0.0173	1430.13	0.0156	0.01794
Sn	120	3	He	0.024	0.0183	1490.15	0.0156	0.01794
Sb	121	3	He	0.045	0.0007	60.00	0.0151	4.19E-05
Sb	121	3	He	0.053	0.0008	70.00	0.0151	4.19E-05
Sb	121	3	He	0.054	0.0009	70.00	0.0151	4.19E-05
Ba	137	3	He	0.056	0.0005	40.00	0.0049	0.0002094
Ba	137	3	He	0.106	0.0007	60.00	0.0049	0.0002094
Ba	137	3	He	0.007	0.0002	20.00	0.0049	0.0002094
Tl	205	3	He	0.041	0.0018	690.04	0.0252	0.0007688
Tl	205	3	He	0.037	0.0017	660.04	0.0252	0.0007688
Tl	205	3	He	0.051	0.0021	780.05	0.0252	0.0007688
Pb	208	3	He	-0.002	0.0017	300.02	0.0337	0.001742
Pb	208	3	He	-0.016	0.0012	260.01	0.0337	0.001742
Pb	208	3	He	-0.013	0.0013	200.01	0.0337	0.001742
U	238	3	He	0.031	0.002	600.04	0.0502	0.0004339
U	238	3	He	0.031	0.002	590.04	0.0502	0.0004339
U	238	3	He	0.034	0.0021	640.04	0.0502	0.0004339
Sc	45	1	No Gas			2392377.15		
Sc	45	1	No Gas			2398485.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2470691.68		
Ge	72	1	No Gas			1206953.89		
Ge	72	1	No Gas			1207281.62		
Ge	72	1	No Gas			1213560.61		
Sc	45	2	H2			173272.26		
Sc	45	2	H2			175517.73		
Sc	45	2	H2			175244.33		
Ge	72	2	H2			146314.46		
Ge	72	2	H2			150728.48		
Ge	72	2	H2			148152.52		
In	115	2	H2			378457.38		
In	115	2	H2			381611.44		
In	115	2	H2			381249.37		
Sc	45	3	He			46725.79		
Sc	45	3	He			45963.37		
Sc	45	3	He			46635.81		
Ge	72	3	He			79301.22		
Ge	72	3	He			81471.84		
Ge	72	3	He			80718.19		
In	115	3	He			82434.47		
In	115	3	He			82464.31		
In	115	3	He			81338.10		
Tb	159	3	He			381404.56		
Tb	159	3	He			385412.14		
Tb	159	3	He			380221.60		
Bi	209	3	He			299702.12		
Bi	209	3	He			299207.61		
Bi	209	3	He			302198.84		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

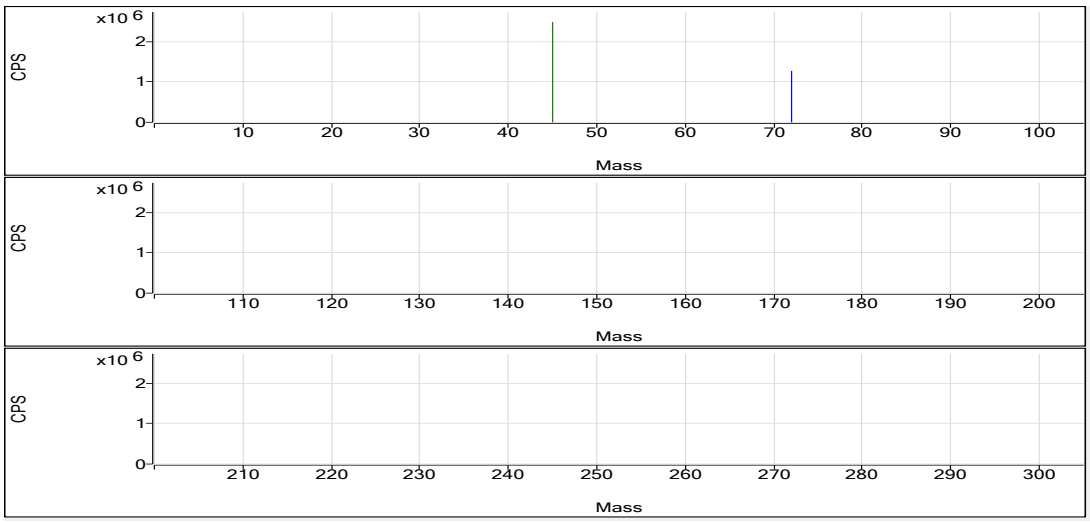
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	151.3	46.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.051	ppb	23.3	5.56	0.0000	Pulse	1.5000	3
Na	23	45	He	11711.500	ppb	0.4	2038428.15	43.9210	Analog	0.1000	3
Mg	24	45	He	18147.773	ppb	1.7	1538463.57	33.1496	Analog	0.1000	3
Al	27	45	He	8.063	ppb	27.6	270.01	0.0058	Pulse	0.1000	3
K	39	45	He	6631.244	ppb	1.4	380181.86	8.1918	Pulse	0.1000	3
Ca	44	45	He	102509.927	ppb	1.5	327491.15	7.0565	Pulse	0.1000	3
Ti	47	45	He	0.530	ppb	86.6	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.075	ppb	65.8	1515.42	0.0326	Pulse	0.5000	3
Cr	52	45	He	0.203	ppb	12.7	2110.23	0.0455	Pulse	0.1000	3
Mn	55	45	He	444.488	ppb	1.1	268210.13	5.7791	Pulse	0.1000	3
Fe	57	45	He	217.841	ppb	6.6	6048.15	0.1303	Pulse	0.1000	3
Co	59	45	He	0.223	ppb	11.0	783.38	0.0169	Pulse	0.1000	3
Ni	60	72	He	0.656	ppb	13.1	733.38	0.0088	Pulse	0.1000	3
Cu	63	72	He	0.289	ppb	17.0	1010.07	0.0121	Pulse	0.1000	3
Zn	66	115	He	7.916	ppb	5.6	2343.60	0.0288	Pulse	0.1000	3
As	75	115	He	0.367	ppb	33.3	134.67	0.0017	Pulse	0.5000	3
Sr	88	115	He	360.405	ppb	1.9	257890.87	3.1747	Pulse	0.1000	3
Mo	98	115	He	0.253	ppb	17.9	513.36	0.0063	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.055	ppb	22.3	25.33	0.0003	Pulse	0.5000	3
Sn	120	115	He	0.037	ppb	305.6	1503.47	0.0185	Pulse	0.1000	3
Sb	121	115	He	0.092	ppb	12.5	116.67	0.0014	Pulse	0.1000	3
Ba	137	115	He	46.352	ppb	1.7	18446.32	0.2270	Pulse	0.1000	3
Tl	205	159	He	-0.004	ppb	N/A	250.02	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.051	ppb	6.9	1316.75	0.0035	Pulse	0.1000	3
U	238	209	He	0.746	ppb	3.9	11265.35	0.0378	Pulse	0.1000	3

ISTD Table:

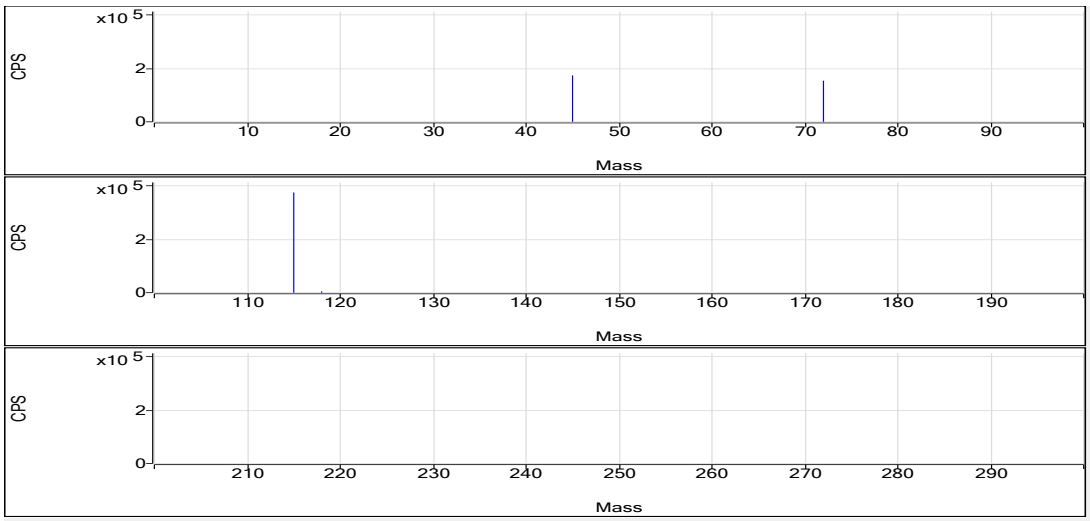
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2480456.78	0.4	105.7	Analog	0.1000	3
No Gas	Ge	72	1272327.51	0.2	106.0	Pulse	0.1000	3
H2	Sc	45	174192.20	1.1	100.2	Pulse	0.1000	3
H2	Ge	72	154450.85	0.4	103.3	Pulse	0.1000	3
H2	In	115	376193.89	0.3	102.8	Pulse	0.1000	3
He	Sc	45	46411.63	0.4	107.9	Pulse	0.1000	3
He	Ge	72	83272.87	1.8	106.5	Pulse	0.1000	3
He	In	115	81245.53	1.3	101.9	Pulse	0.1000	3
He	Tb	159	381452.27	0.3	103.7	Pulse	0.1000	3
He	Bi	209	297821.66	0.6	102.0	Pulse	0.1000	3

No Gas

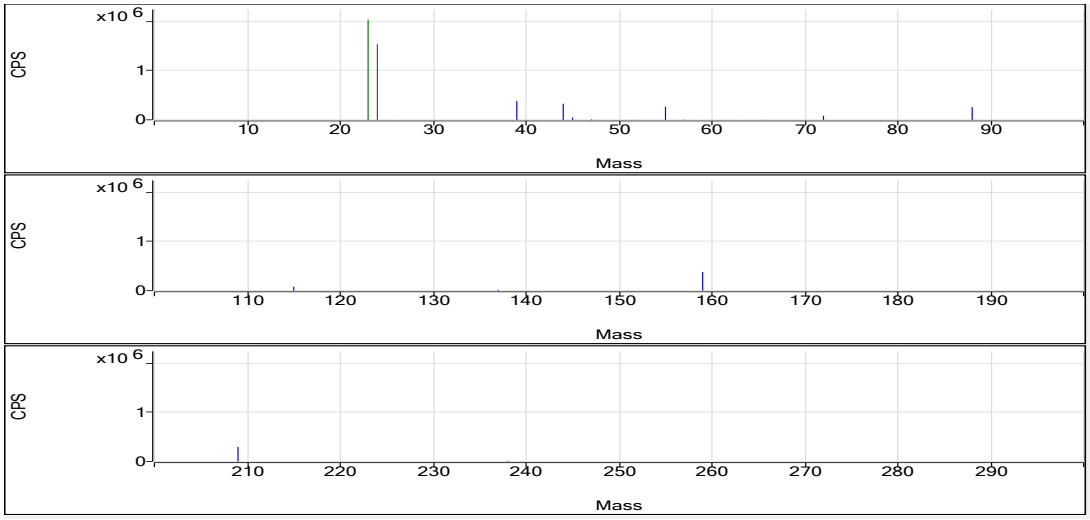


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	54.00	0.0007	1.705E-05
Be	9	1	No Gas	0	0	42.00	0.0007	1.705E-05
Be	9	1	No Gas	0.001	0	44.00	0.0007	1.705E-05
Se	78	2	H2	0.057	0	6.00	0.0002	6.062E-06
Se	78	2	H2	0.037	0	4.67	0.0002	6.062E-06
Se	78	2	H2	0.058	0	6.00	0.0002	6.062E-06
Na	23	3	He	11760.229	44.1023	2037717.94	0.0037	0.3435
Na	23	3	He	11663.061	43.7407	2032408.25	0.0037	0.3435
Na	23	3	He	11711.21	43.9199	2045158.25	0.0037	0.3435
Mg	24	3	He	18497.164	33.7877	1561139.51	0.0018	0.002943
Mg	24	3	He	17894.213	32.6864	1518771.38	0.0018	0.002943
Mg	24	3	He	18051.941	32.9745	1535479.82	0.0018	0.002943
Al	27	3	He	9.553	0.0067	310.01	0.0006	0.001008
Al	27	3	He	9.129	0.0065	300.01	0.0006	0.001008
Al	27	3	He	5.508	0.0043	200.01	0.0006	0.001008
K	39	3	He	6735.037	8.3137	384128.24	0.0012	0.4052
K	39	3	He	6591.256	8.1448	378449.49	0.0012	0.4052
K	39	3	He	6567.438	8.1169	377967.85	0.0012	0.4052
Ca	44	3	He	103680.523	7.137	329760.74	0.0001	0.003486
Ca	44	3	He	103023.727	7.0918	329520.42	0.0001	0.003486
Ca	44	3	He	100825.531	6.9406	323192.30	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.795	0.0004	20.00	0.0005	0
Ti	47	3	He	0.794	0.0004	20.00	0.0005	0
V	51	3	He	0.019	0.0314	1450.08	0.0223	0.03097
V	51	3	He	0.098	0.0331	1540.09	0.0223	0.03097
V	51	3	He	0.11	0.0334	1556.09	0.0223	0.03097
Cr	52	3	He	0.18	0.0448	2070.23	0.029	0.03958
Cr	52	3	He	0.231	0.0463	2150.23	0.029	0.03958
Cr	52	3	He	0.198	0.0453	2110.23	0.029	0.03958
Mn	55	3	He	447.912	5.8236	269074.29	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	446.732	5.8082	269879.21	0.013	0.003171
Mn	55	3	He	438.82	5.7054	265676.89	0.013	0.003171
Fe	57	3	He	232.895	0.1392	6431.66	0.0006	0.002014
Fe	57	3	He	204.156	0.1223	5681.32	0.0006	0.002014
Fe	57	3	He	216.472	0.1295	6031.47	0.0006	0.002014
Co	59	3	He	0.204	0.0158	730.04	0.0572	0.004106
Co	59	3	He	0.214	0.0164	760.05	0.0572	0.004106
Co	59	3	He	0.251	0.0185	860.05	0.0572	0.004106
Ni	60	3	He	0.56	0.008	680.04	0.0084	0.003329
Ni	60	3	He	0.684	0.009	750.05	0.0084	0.003329
Ni	60	3	He	0.725	0.0094	770.05	0.0084	0.003329
Cu	63	3	He	0.256	0.0113	960.07	0.0247	0.004989
Cu	63	3	He	0.267	0.0116	960.06	0.0247	0.004989
Cu	63	3	He	0.346	0.0135	1110.08	0.0247	0.004989
Zn	66	3	He	8.166	0.0296	2430.29	0.0029	0.006147
Zn	66	3	He	8.181	0.0296	2370.25	0.0029	0.006147
Zn	66	3	He	7.4	0.0274	2230.27	0.0029	0.006147
As	75	3	He	0.438	0.0018	148.00	0.002	0.0009198
As	75	3	He	0.438	0.0018	144.00	0.002	0.0009198
As	75	3	He	0.226	0.0014	112.00	0.002	0.0009198
Sr	88	3	He	356.9	3.1438	258408.10	0.0088	0.0005022
Sr	88	3	He	368.103	3.2425	259567.65	0.0088	0.0005022
Sr	88	3	He	356.212	3.1378	255696.87	0.0088	0.0005022
Mo	98	3	He	0.21	0.0054	440.02	0.0223	0.0006689
Mo	98	3	He	0.3	0.0074	590.03	0.0223	0.0006689
Mo	98	3	He	0.25	0.0063	510.03	0.0223	0.0006689
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Ag	107	3	He	0.007	0.001	80.00	0.0471	0.0006687
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Cd	111	3	He	0.042	0.0002	20.00	0.0054	1.676E-05
Cd	111	3	He	0.067	0.0004	30.00	0.0054	1.676E-05
Cd	111	3	He	0.056	0.0003	26.00	0.0054	1.676E-05
Sn	120	3	He	-0.082	0.0167	1370.11	0.0156	0.01794
Sn	120	3	He	0.051	0.0187	1500.15	0.0156	0.01794
Sn	120	3	He	0.14	0.0201	1640.15	0.0156	0.01794
Sb	121	3	He	0.094	0.0015	120.01	0.0151	4.19E-05
Sb	121	3	He	0.08	0.0012	100.00	0.0151	4.19E-05
Sb	121	3	He	0.103	0.0016	130.01	0.0151	4.19E-05
Ba	137	3	He	47.18	0.2311	18993.74	0.0049	0.0002094
Ba	137	3	He	46.272	0.2266	18142.63	0.0049	0.0002094
Ba	137	3	He	45.605	0.2234	18202.60	0.0049	0.0002094
Tl	205	3	He	-0.005	0.0007	250.01	0.0252	0.0007688
Tl	205	3	He	-0.004	0.0007	250.02	0.0252	0.0007688
Tl	205	3	He	-0.005	0.0007	250.02	0.0252	0.0007688
Pb	208	3	He	0.052	0.0035	730.04	0.0337	0.001742
Pb	208	3	He	0.054	0.0036	710.04	0.0337	0.001742
Pb	208	3	He	0.047	0.0033	650.05	0.0337	0.001742
U	238	3	He	0.725	0.0368	11025.14	0.0502	0.0004339
U	238	3	He	0.733	0.0372	11015.10	0.0502	0.0004339
U	238	3	He	0.779	0.0395	11755.80	0.0502	0.0004339
Sc	45	1	No Gas			2468461.21		
Sc	45	1	No Gas			2486292.46		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2486616.68		
Ge	72	1	No Gas			1268978.50		
Ge	72	1	No Gas			1274199.04		
Ge	72	1	No Gas			1273804.98		
Sc	45	2	H2			175256.17		
Sc	45	2	H2			175334.55		
Sc	45	2	H2			171985.88		
Ge	72	2	H2			154761.81		
Ge	72	2	H2			153820.17		
Ge	72	2	H2			154770.57		
In	115	2	H2			377403.08		
In	115	2	H2			375749.10		
In	115	2	H2			375429.49		
Sc	45	3	He			46204.36		
Sc	45	3	He			46464.89		
Sc	45	3	He			46565.65		
Ge	72	3	He			84871.63		
Ge	72	3	He			82930.88		
Ge	72	3	He			82016.09		
In	115	3	He			82203.11		
In	115	3	He			80060.84		
In	115	3	He			81498.93		
Tb	159	3	He			381653.63		
Tb	159	3	He			380189.99		
Tb	159	3	He			382513.20		
Bi	209	3	He			299671.09		
Bi	209	3	He			296202.28		
Bi	209	3	He			297591.62		

Quantitation Report

Data File Name	065SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:18:29 AM
Sample Name	410-136848-W-7-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

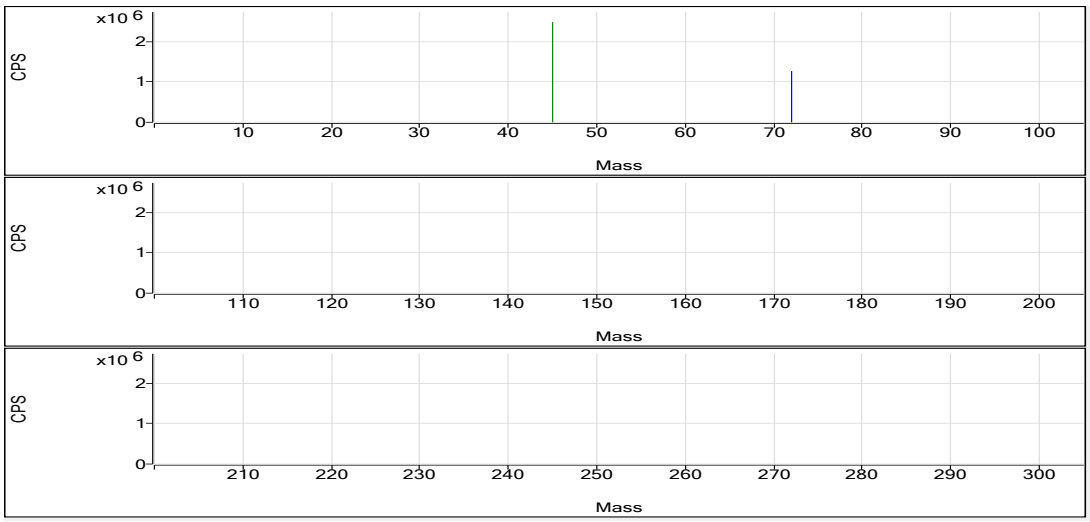
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.003	ppb	N/A	36.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.085	ppb	15.6	7.78	0.0000	Pulse	1.5000	3
Na	23	45	He	11229.943	ppb	0.7	1967212.05	42.1291	Analog	0.1000	3
Mg	24	45	He	14501.506	ppb	0.6	1236925.35	26.4897	Analog	0.1000	3
Al	27	45	He	56.087	ppb	5.2	1610.14	0.0345	Pulse	0.1000	3
K	39	45	He	2950.185	ppb	0.8	180681.03	3.8694	Pulse	0.1000	3
Ca	44	45	He	127597.646	ppb	1.9	410069.73	8.7826	Pulse	0.1000	3
Ti	47	45	He	0.924	ppb	25.0	23.33	0.0005	Pulse	0.1000	3
V	51	45	He	0.004	ppb	1499.8	1450.75	0.0311	Pulse	0.5000	3
Cr	52	45	He	0.082	ppb	272.7	1960.21	0.0420	Pulse	0.1000	3
Mn	55	45	He	435.584	ppb	1.2	264439.68	5.6634	Pulse	0.1000	3
Fe	57	45	He	434.746	ppb	0.9	12052.04	0.2581	Pulse	0.1000	3
Co	59	45	He	0.251	ppb	26.6	863.39	0.0185	Pulse	0.1000	3
Ni	60	72	He	0.772	ppb	16.5	823.39	0.0098	Pulse	0.1000	3
Cu	63	72	He	1.120	ppb	3.7	2747.03	0.0327	Pulse	0.1000	3
Zn	66	115	He	5.333	ppb	13.7	1746.83	0.0214	Pulse	0.1000	3
As	75	115	He	0.645	ppb	29.4	180.67	0.0022	Pulse	0.5000	3
Sr	88	115	He	487.481	ppb	0.8	350064.42	4.2939	Pulse	0.1000	3
Mo	98	115	He	0.312	ppb	23.9	623.38	0.0076	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	131.9	70.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.015	ppb	120.1	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.177	ppb	50.1	1686.83	0.0207	Pulse	0.1000	3
Sb	121	115	He	0.167	ppb	28.7	210.01	0.0026	Pulse	0.1000	3
Ba	137	115	He	41.274	ppb	2.8	16480.39	0.2022	Pulse	0.1000	3
Tl	205	159	He	-0.012	ppb	N/A	180.01	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.186	ppb	5.2	3063.59	0.0080	Pulse	0.1000	3
U	238	209	He	0.574	ppb	3.3	8709.92	0.0292	Pulse	0.1000	3

ISTD Table:

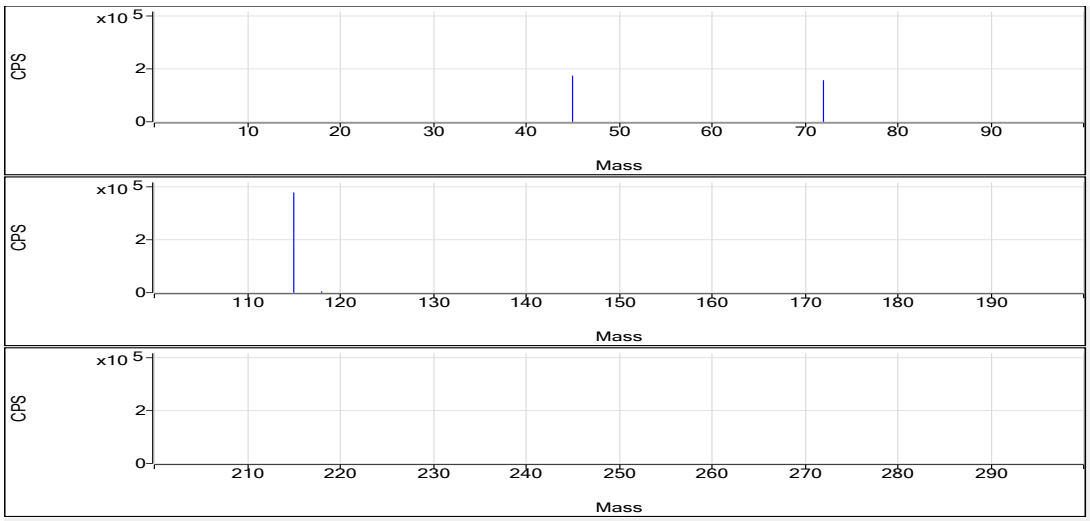
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2476730.59	0.8	105.5	Analog	0.1000	3
No Gas	Ge	72	1266304.07	0.7	105.5	Pulse	0.1000	3
H2	Sc	45	173481.45	1.8	99.8	Pulse	0.1000	3
H2	Ge	72	156579.10	0.5	104.7	Pulse	0.1000	3
H2	In	115	377049.33	1.0	103.0	Pulse	0.1000	3
He	Sc	45	46695.78	0.8	108.5	Pulse	0.1000	3
He	Ge	72	84123.80	0.7	107.6	Pulse	0.1000	3
He	In	115	81531.30	1.4	102.3	Pulse	0.1000	3
He	Tb	159	381466.12	0.2	103.7	Pulse	0.1000	3
He	Bi	209	298170.31	0.7	102.1	Pulse	0.1000	3

No Gas

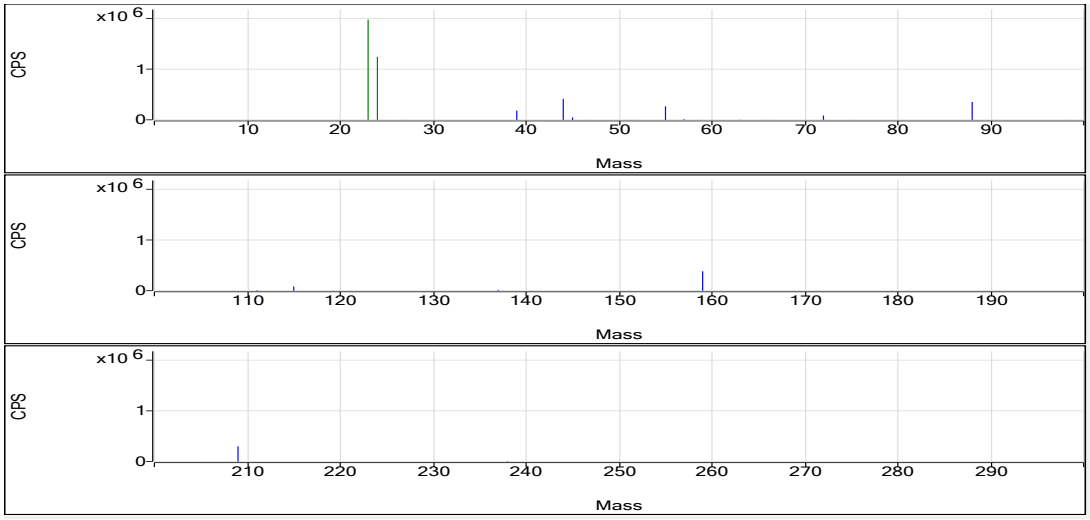


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.005	0	32.00	0.0007	1.705E-05
Be	9	1	No Gas	0.003	0	48.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.008	0	28.00	0.0007	1.705E-05
Se	78	2	H2	0.077	0	7.33	0.0002	6.062E-06
Se	78	2	H2	0.077	0	7.33	0.0002	6.062E-06
Se	78	2	H2	0.1	0	8.67	0.0002	6.062E-06
Na	23	3	He	11199.761	42.0168	1978869.19	0.0037	0.3435
Na	23	3	He	11172.081	41.9138	1952982.78	0.0037	0.3435
Na	23	3	He	11317.986	42.4567	1969784.19	0.0037	0.3435
Mg	24	3	He	14435.448	26.3691	1241904.83	0.0018	0.002943
Mg	24	3	He	14469.984	26.4321	1231609.90	0.0018	0.002943
Mg	24	3	He	14599.087	26.6679	1237261.31	0.0018	0.002943
Al	27	3	He	54.524	0.0336	1580.14	0.0006	0.001008
Al	27	3	He	59.445	0.0365	1700.14	0.0006	0.001008
Al	27	3	He	54.291	0.0334	1550.14	0.0006	0.001008
K	39	3	He	2926.5	3.8416	180928.40	0.0012	0.4052
K	39	3	He	2976.118	3.8999	181715.11	0.0012	0.4052
K	39	3	He	2947.938	3.8668	179399.59	0.0012	0.4052
Ca	44	3	He	125029.375	8.6059	405311.05	0.0001	0.003486
Ca	44	3	He	128049.035	8.8136	410672.61	0.0001	0.003486
Ca	44	3	He	129714.528	8.9282	414225.54	0.0001	0.003486
Ti	47	3	He	0.785	0.0004	20.00	0.0005	0
Ti	47	3	He	1.19	0.0006	30.00	0.0005	0
Ti	47	3	He	0.796	0.0004	20.00	0.0005	0
V	51	3	He	-0.008	0.0308	1450.08	0.0223	0.03097
V	51	3	He	0.074	0.0326	1520.09	0.0223	0.03097
V	51	3	He	-0.053	0.0298	1382.08	0.0223	0.03097
Cr	52	3	He	0.268	0.0474	2230.24	0.029	0.03958
Cr	52	3	He	-0.166	0.0348	1620.14	0.029	0.03958
Cr	52	3	He	0.144	0.0438	2030.24	0.029	0.03958
Mn	55	3	He	429.855	5.5889	263221.91	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	436.974	5.6814	264727.59	0.013	0.003171
Mn	55	3	He	439.924	5.7198	265369.55	0.013	0.003171
Fe	57	3	He	432.572	0.2568	12095.43	0.0006	0.002014
Fe	57	3	He	439.456	0.2609	12155.47	0.0006	0.002014
Fe	57	3	He	432.209	0.2566	11905.23	0.0006	0.002014
Co	59	3	He	0.318	0.0223	1050.07	0.0572	0.004106
Co	59	3	He	0.251	0.0185	860.06	0.0572	0.004106
Co	59	3	He	0.184	0.0147	680.04	0.0572	0.004106
Ni	60	3	He	0.732	0.0094	790.05	0.0084	0.003329
Ni	60	3	He	0.915	0.011	930.06	0.0084	0.003329
Ni	60	3	He	0.669	0.0089	750.05	0.0084	0.003329
Cu	63	3	He	1.134	0.033	2760.34	0.0247	0.004989
Cu	63	3	He	1.073	0.0315	2670.35	0.0247	0.004989
Cu	63	3	He	1.151	0.0334	2810.39	0.0247	0.004989
Zn	66	3	He	6.171	0.0238	1920.20	0.0029	0.006147
Zn	66	3	He	4.808	0.0199	1650.14	0.0029	0.006147
Zn	66	3	He	5.021	0.0205	1670.15	0.0029	0.006147
As	75	3	He	0.482	0.0019	152.00	0.002	0.0009198
As	75	3	He	0.6	0.0021	176.00	0.002	0.0009198
As	75	3	He	0.853	0.0026	214.00	0.002	0.0009198
Sr	88	3	He	489.011	4.3074	346891.01	0.0088	0.0005022
Sr	88	3	He	483.065	4.255	352218.32	0.0088	0.0005022
Sr	88	3	He	490.366	4.3193	351083.94	0.0088	0.0005022
Mo	98	3	He	0.276	0.0068	550.04	0.0223	0.0006689
Mo	98	3	He	0.398	0.0095	790.06	0.0223	0.0006689
Mo	98	3	He	0.262	0.0065	530.03	0.0223	0.0006689
Ag	107	3	He	0.01	0.0011	90.00	0.0471	0.0006687
Ag	107	3	He	0.004	0.0008	70.00	0.0471	0.0006687
Ag	107	3	He	-0.001	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	0.033	0.0002	16.00	0.0054	1.676E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Sn	120	3	He	0.116	0.0197	1590.15	0.0156	0.01794
Sn	120	3	He	0.136	0.0201	1660.16	0.0156	0.01794
Sn	120	3	He	0.278	0.0223	1810.18	0.0156	0.01794
Sb	121	3	He	0.112	0.0017	140.01	0.0151	4.19E-05
Sb	121	3	He	0.189	0.0029	240.01	0.0151	4.19E-05
Sb	121	3	He	0.201	0.0031	250.01	0.0151	4.19E-05
Ba	137	3	He	41.522	0.2034	16380.25	0.0049	0.0002094
Ba	137	3	He	40.001	0.1959	16220.10	0.0049	0.0002094
Ba	137	3	He	42.298	0.2072	16840.83	0.0049	0.0002094
Tl	205	3	He	-0.011	0.0005	190.01	0.0252	0.0007688
Tl	205	3	He	-0.013	0.0004	170.01	0.0252	0.0007688
Tl	205	3	He	-0.012	0.0005	180.01	0.0252	0.0007688
Pb	208	3	He	0.197	0.0084	1590.16	0.0337	0.001742
Pb	208	3	He	0.179	0.0078	1620.17	0.0337	0.001742
Pb	208	3	He	0.183	0.0079	1710.18	0.0337	0.001742
U	238	3	He	0.582	0.0296	8833.35	0.0502	0.0004339
U	238	3	He	0.587	0.0299	8973.46	0.0502	0.0004339
U	238	3	He	0.552	0.0281	8322.96	0.0502	0.0004339
Sc	45	1	No Gas			2464220.59		
Sc	45	1	No Gas			2465582.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2500388.87		
Ge	72	1	No Gas			1267875.22		
Ge	72	1	No Gas			1256208.42		
Ge	72	1	No Gas			1274828.57		
Sc	45	2	H2			172097.48		
Sc	45	2	H2			177007.13		
Sc	45	2	H2			171339.74		
Ge	72	2	H2			157347.88		
Ge	72	2	H2			155779.09		
Ge	72	2	H2			156610.34		
In	115	2	H2			379367.26		
In	115	2	H2			379208.71		
In	115	2	H2			372572.03		
Sc	45	3	He			47097.06		
Sc	45	3	He			46595.18		
Sc	45	3	He			46395.09		
Ge	72	3	He			83603.48		
Ge	72	3	He			84730.96		
Ge	72	3	He			84036.95		
In	115	3	He			80542.80		
In	115	3	He			82786.44		
In	115	3	He			81288.37		
Tb	159	3	He			381037.92		
Tb	159	3	He			382180.46		
Tb	159	3	He			381179.99		
Bi	209	3	He			298206.66		
Bi	209	3	He			300270.37		
Bi	209	3	He			296033.90		

Quantitation Report

Data File Name	066SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:20:30 AM
Sample Name	410-136848-X-11-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

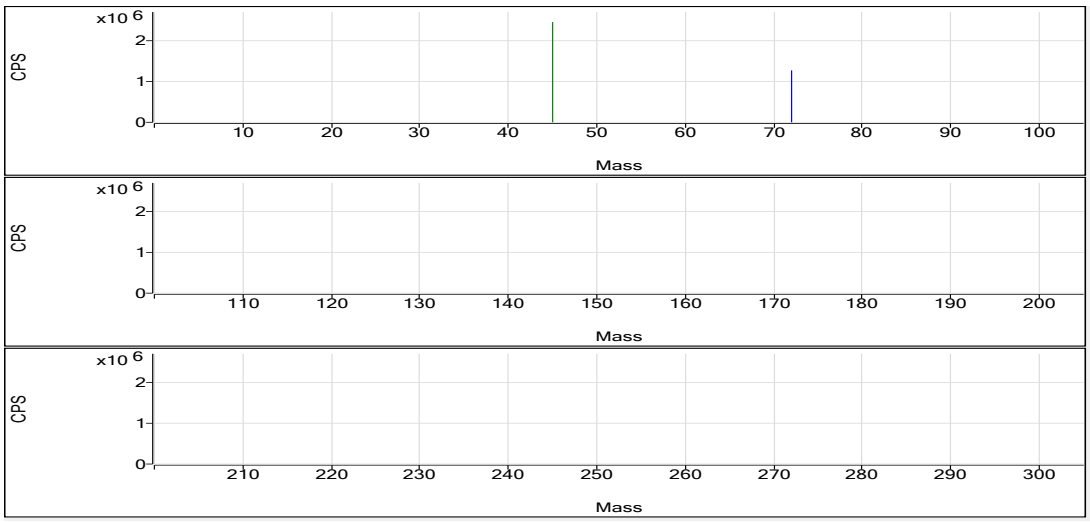
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	172.1	49.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	6.470	ppb	6.3	422.89	0.0011	Pulse	1.5000	3
Na	23	45	He	3928.927	ppb	3.4	701109.63	14.9627	Pulse	0.1000	3
Mg	24	45	He	7172.571	ppb	2.6	614056.12	13.1035	Pulse	0.1000	3
Al	27	45	He	122.384	ppb	10.0	3474.21	0.0741	Pulse	0.1000	3
K	39	45	He	2847.750	ppb	3.4	175682.03	3.7491	Pulse	0.1000	3
Ca	44	45	He	70405.103	ppb	1.4	227207.17	4.8476	Pulse	0.1000	3
Ti	47	45	He	1.311	ppb	62.8	33.33	0.0007	Pulse	0.1000	3
V	51	45	He	0.348	ppb	14.4	1814.80	0.0387	Pulse	0.5000	3
Cr	52	45	He	0.194	ppb	45.8	2116.91	0.0452	Pulse	0.1000	3
Mn	55	45	He	1212.500	ppb	2.3	738525.77	15.7590	Pulse	0.1000	3
Fe	57	45	He	159.259	ppb	8.7	4487.54	0.0958	Pulse	0.1000	3
Co	59	45	He	0.651	ppb	13.5	1933.54	0.0413	Pulse	0.1000	3
Ni	60	72	He	1.820	ppb	6.6	1576.80	0.0185	Pulse	0.1000	3
Cu	63	72	He	0.632	ppb	4.2	1750.16	0.0206	Pulse	0.1000	3
Zn	66	115	He	1.047	ppb	7.6	760.05	0.0092	Pulse	0.1000	3
As	75	115	He	0.290	ppb	48.1	124.67	0.0015	Pulse	0.5000	3
Sr	88	115	He	238.652	ppb	0.3	174599.79	2.1024	Pulse	0.1000	3
Mo	98	115	He	4.318	ppb	3.2	8059.30	0.0971	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	277.3	66.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.034	ppb	28.8	16.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.162	ppb	50.6	1700.17	0.0205	Pulse	0.1000	3
Sb	121	115	He	0.125	ppb	22.1	160.01	0.0019	Pulse	0.1000	3
Ba	137	115	He	35.225	ppb	2.9	14331.32	0.1726	Pulse	0.1000	3
Tl	205	159	He	-0.008	ppb	N/A	213.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.123	ppb	4.7	2256.84	0.0059	Pulse	0.1000	3
U	238	209	He	0.967	ppb	4.2	14682.20	0.0489	Pulse	0.1000	3

ISTD Table:

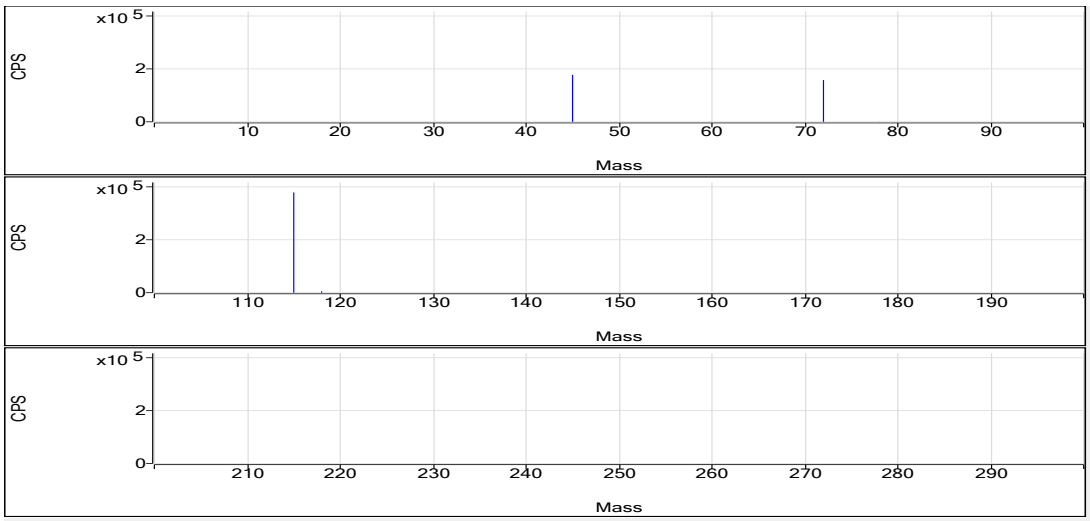
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2451118.50	0.7	104.4	Analog	0.1000	3
No Gas	Ge	72	1270427.35	0.3	105.9	Pulse	0.1000	3
H2	Sc	45	177109.79	1.3	101.9	Pulse	0.1000	3
H2	Ge	72	157405.77	2.1	105.3	Pulse	0.1000	3
H2	In	115	377862.94	0.6	103.2	Pulse	0.1000	3
He	Sc	45	46879.84	2.2	108.9	Pulse	0.1000	3
He	Ge	72	85002.57	1.7	108.8	Pulse	0.1000	3
He	In	115	83049.13	1.4	104.2	Pulse	0.1000	3
He	Tb	159	383581.58	0.5	104.3	Pulse	0.1000	3
He	Bi	209	300260.55	2.0	102.8	Pulse	0.1000	3

No Gas

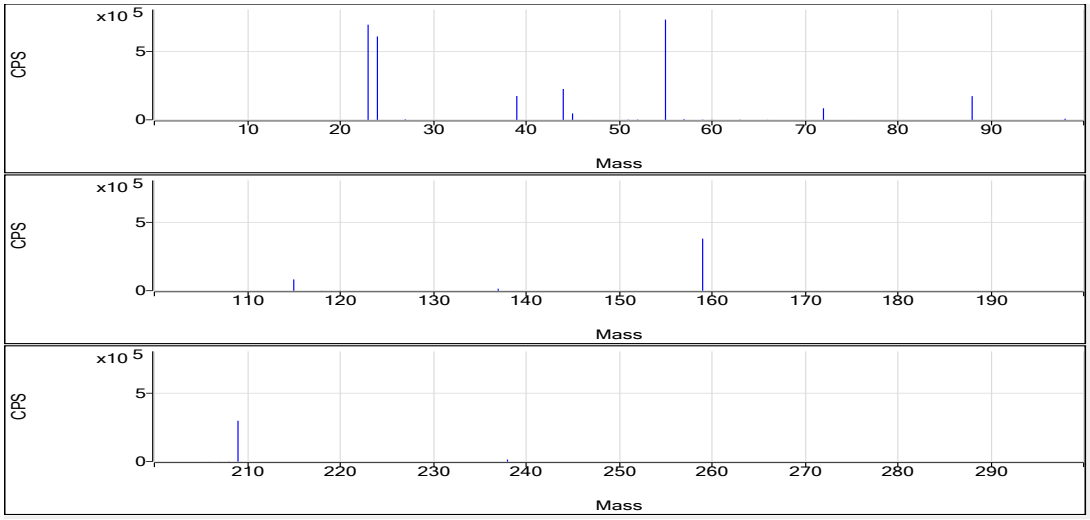


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.013	0	64.00	0.0007	1.705E-05
Be	9	1	No Gas	0	0	42.00	0.0007	1.705E-05
Be	9	1	No Gas	0	0	42.00	0.0007	1.705E-05
Se	78	2	H2	6.62	0.0011	433.34	0.0002	6.062E-06
Se	78	2	H2	6.785	0.0012	440.67	0.0002	6.062E-06
Se	78	2	H2	6.007	0.001	394.67	0.0002	6.062E-06
Na	23	3	He	4029.503	15.3369	709244.76	0.0037	0.3435
Na	23	3	He	3979.029	15.1491	701629.99	0.0037	0.3435
Na	23	3	He	3778.249	14.402	692454.13	0.0037	0.3435
Mg	24	3	He	7307	13.3491	617317.45	0.0018	0.002943
Mg	24	3	He	7251.423	13.2475	613559.17	0.0018	0.002943
Mg	24	3	He	6959.289	12.714	611291.75	0.0018	0.002943
Al	27	3	He	128.766	0.0779	3600.67	0.0006	0.001008
Al	27	3	He	108.301	0.0656	3040.44	0.0006	0.001008
Al	27	3	He	130.086	0.0786	3781.51	0.0006	0.001008
K	39	3	He	2926.977	3.8422	177678.20	0.0012	0.4052
K	39	3	He	2876.624	3.783	175211.27	0.0012	0.4052
K	39	3	He	2739.649	3.6222	174156.62	0.0012	0.4052
Ca	44	3	He	71334.734	4.9115	227129.72	0.0001	0.003486
Ca	44	3	He	70565.912	4.8586	225026.79	0.0001	0.003486
Ca	44	3	He	69314.665	4.7725	229465.00	0.0001	0.003486
Ti	47	3	He	1.998	0.0011	50.00	0.0005	0
Ti	47	3	He	0.399	0.0002	10.00	0.0005	0
Ti	47	3	He	1.537	0.0008	40.00	0.0005	0
V	51	3	He	0.4	0.0399	1844.13	0.0223	0.03097
V	51	3	He	0.345	0.0387	1790.13	0.0223	0.03097
V	51	3	He	0.3	0.0376	1810.13	0.0223	0.03097
Cr	52	3	He	0.246	0.0467	2160.26	0.029	0.03958
Cr	52	3	He	0.244	0.0466	2160.26	0.029	0.03958
Cr	52	3	He	0.091	0.0422	2030.20	0.029	0.03958
Mn	55	3	He	1226.906	15.9462	737421.86	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1230.848	15.9974	740920.54	0.013	0.003171
Mn	55	3	He	1179.746	15.3334	737234.91	0.013	0.003171
Fe	57	3	He	158.874	0.0956	4420.88	0.0006	0.002014
Fe	57	3	He	173.293	0.1041	4820.99	0.0006	0.002014
Fe	57	3	He	145.611	0.0878	4220.75	0.0006	0.002014
Co	59	3	He	0.673	0.0426	1970.19	0.0572	0.004106
Co	59	3	He	0.725	0.0456	2110.26	0.0572	0.004106
Co	59	3	He	0.554	0.0358	1720.17	0.0572	0.004106
Ni	60	3	He	1.824	0.0186	1610.14	0.0084	0.003329
Ni	60	3	He	1.699	0.0175	1470.13	0.0084	0.003329
Ni	60	3	He	1.937	0.0195	1650.14	0.0084	0.003329
Cu	63	3	He	0.601	0.0198	1720.16	0.0247	0.004989
Cu	63	3	He	0.643	0.0209	1750.16	0.0247	0.004989
Cu	63	3	He	0.651	0.0211	1780.16	0.0247	0.004989
Zn	66	3	He	0.968	0.0089	740.04	0.0029	0.006147
Zn	66	3	He	1.127	0.0094	790.06	0.0029	0.006147
Zn	66	3	He	1.047	0.0091	750.05	0.0029	0.006147
As	75	3	He	0.442	0.0018	150.00	0.002	0.0009198
As	75	3	He	0.169	0.0013	106.00	0.002	0.0009198
As	75	3	He	0.259	0.0014	118.00	0.002	0.0009198
Sr	88	3	He	239.476	2.1096	174970.52	0.0088	0.0005022
Sr	88	3	He	238.015	2.0968	176601.62	0.0088	0.0005022
Sr	88	3	He	238.466	2.1008	172227.24	0.0088	0.0005022
Mo	98	3	He	4.335	0.0975	8082.63	0.0223	0.0006689
Mo	98	3	He	4.173	0.0938	7902.53	0.0223	0.0006689
Mo	98	3	He	4.446	0.0999	8192.73	0.0223	0.0006689
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	0.012	0.0012	100.00	0.0471	0.0006687
Cd	111	3	He	0.028	0.0002	14.00	0.0054	1.676E-05
Cd	111	3	He	0.046	0.0003	22.00	0.0054	1.676E-05
Cd	111	3	He	0.029	0.0002	14.00	0.0054	1.676E-05
Sn	120	3	He	0.257	0.0219	1820.19	0.0156	0.01794
Sn	120	3	He	0.121	0.0198	1670.16	0.0156	0.01794
Sn	120	3	He	0.109	0.0196	1610.15	0.0156	0.01794
Sb	121	3	He	0.093	0.0014	120.01	0.0151	4.19E-05
Sb	121	3	He	0.139	0.0021	180.01	0.0151	4.19E-05
Sb	121	3	He	0.142	0.0022	180.01	0.0151	4.19E-05
Ba	137	3	He	36.346	0.1781	14768.53	0.0049	0.0002094
Ba	137	3	He	34.357	0.1683	14177.73	0.0049	0.0002094
Ba	137	3	He	34.973	0.1713	14047.71	0.0049	0.0002094
Tl	205	3	He	-0.004	0.0007	260.01	0.0252	0.0007688
Tl	205	3	He	-0.012	0.0005	180.01	0.0252	0.0007688
Tl	205	3	He	-0.01	0.0005	200.01	0.0252	0.0007688
Pb	208	3	He	0.119	0.0058	1090.09	0.0337	0.001742
Pb	208	3	He	0.12	0.0058	1250.11	0.0337	0.001742
Pb	208	3	He	0.129	0.0061	1180.11	0.0337	0.001742
U	238	3	He	0.937	0.0474	14428.69	0.0502	0.0004339
U	238	3	He	0.95	0.0481	14578.67	0.0502	0.0004339
U	238	3	He	1.014	0.0513	15039.23	0.0502	0.0004339
Sc	45	1	No Gas			2432902.62		
Sc	45	1	No Gas			2462573.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2457879.18		
Ge	72	1	No Gas			1270693.81		
Ge	72	1	No Gas			1274072.56		
Ge	72	1	No Gas			1266515.68		
Sc	45	2	H2			179607.38		
Sc	45	2	H2			175172.22		
Sc	45	2	H2			176549.78		
Ge	72	2	H2			160299.93		
Ge	72	2	H2			153769.72		
Ge	72	2	H2			158147.66		
In	115	2	H2			378437.77		
In	115	2	H2			375519.41		
In	115	2	H2			379631.63		
Sc	45	3	He			46244.27		
Sc	45	3	He			46314.92		
Sc	45	3	He			48080.32		
Ge	72	3	He			86661.68		
Ge	72	3	He			83846.08		
Ge	72	3	He			84499.95		
In	115	3	He			82947.44		
In	115	3	He			84234.90		
In	115	3	He			81992.20		
Tb	159	3	He			384683.43		
Tb	159	3	He			384515.74		
Tb	159	3	He			381545.58		
Bi	209	3	He			304147.42		
Bi	209	3	He			303258.75		
Bi	209	3	He			293375.48		

Quantitation Report

Data File Name	067SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:22:32 AM
Sample Name	410-136848-W-10-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

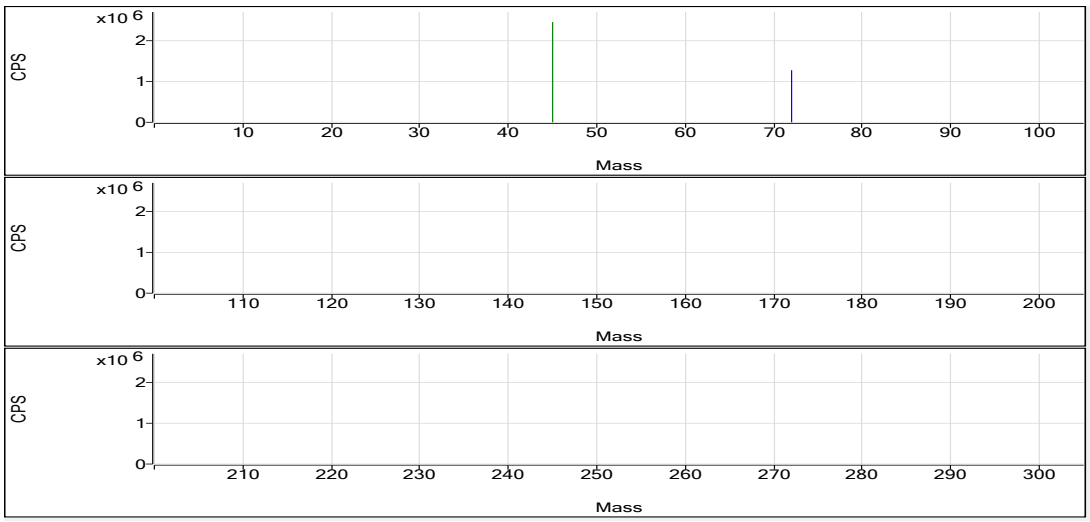
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.027	ppb	13.8	91.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.248	ppb	31.0	18.45	0.0000	Pulse	1.5000	3
Na	23	45	He	4242.726	ppb	0.8	766741.26	16.1303	Pulse	0.1000	3
Mg	24	45	He	7538.359	ppb	1.1	654595.06	13.7716	Pulse	0.1000	3
Al	27	45	He	808.958	ppb	1.0	22998.78	0.4838	Pulse	0.1000	3
K	39	45	He	23750.963	ppb	0.4	1344953.84	28.2942	Analog	0.1000	3
Ca	44	45	He	27744.382	ppb	1.0	90899.42	1.9124	Pulse	0.1000	3
Ti	47	45	He	7.382	ppb	20.8	190.01	0.0040	Pulse	0.1000	3
V	51	45	He	1.371	ppb	0.7	2922.31	0.0615	Pulse	0.5000	3
Cr	52	45	He	1.226	ppb	13.5	3570.55	0.0751	Pulse	0.1000	3
Mn	55	45	He	519.640	ppb	0.9	321111.85	6.7556	Pulse	0.1000	3
Fe	57	45	He	1127.259	ppb	2.0	31655.52	0.6660	Pulse	0.1000	3
Co	59	45	He	0.962	ppb	11.6	2810.39	0.0591	Pulse	0.1000	3
Ni	60	72	He	2.739	ppb	15.0	2226.92	0.0262	Pulse	0.1000	3
Cu	63	72	He	1.921	ppb	6.8	4457.51	0.0525	Pulse	0.1000	3
Zn	66	115	He	13.078	ppb	5.0	3627.26	0.0437	Pulse	0.1000	3
As	75	115	He	0.736	ppb	17.5	199.33	0.0024	Pulse	0.5000	3
Sr	88	115	He	82.237	ppb	2.0	60236.13	0.7248	Pulse	0.1000	3
Mo	98	115	He	0.405	ppb	16.7	806.72	0.0097	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.057	ppb	24.7	26.67	0.0003	Pulse	0.5000	3
Sn	120	115	He	0.286	ppb	40.2	1860.24	0.0224	Pulse	0.1000	3
Sb	121	115	He	0.156	ppb	19.8	200.01	0.0024	Pulse	0.1000	3
Ba	137	115	He	65.798	ppb	1.9	26773.43	0.3222	Pulse	0.1000	3
Tl	205	159	He	0.015	ppb	58.9	436.69	0.0012	Pulse	0.1000	3
Pb	208	159	He	0.772	ppb	5.1	10528.73	0.0278	Pulse	0.1000	3
U	238	209	He	0.070	ppb	9.7	1186.77	0.0040	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2462789.81	0.2	104.9	Analog	0.1000	3
No Gas	Ge	72	1279268.42	0.8	106.6	Pulse	0.1000	3
H2	Sc	45	174745.97	1.1	100.6	Pulse	0.1000	3
H2	Ge	72	157152.77	0.9	105.1	Pulse	0.1000	3
H2	In	115	378835.37	0.3	103.5	Pulse	0.1000	3
He	Sc	45	47534.99	0.9	110.5	Pulse	0.1000	3
He	Ge	72	85029.43	2.0	108.8	Pulse	0.1000	3
He	In	115	83105.52	0.6	104.3	Pulse	0.1000	3
He	Tb	159	379218.48	0.7	103.1	Pulse	0.1000	3
He	Bi	209	299454.54	0.1	102.5	Pulse	0.1000	3

No Gas



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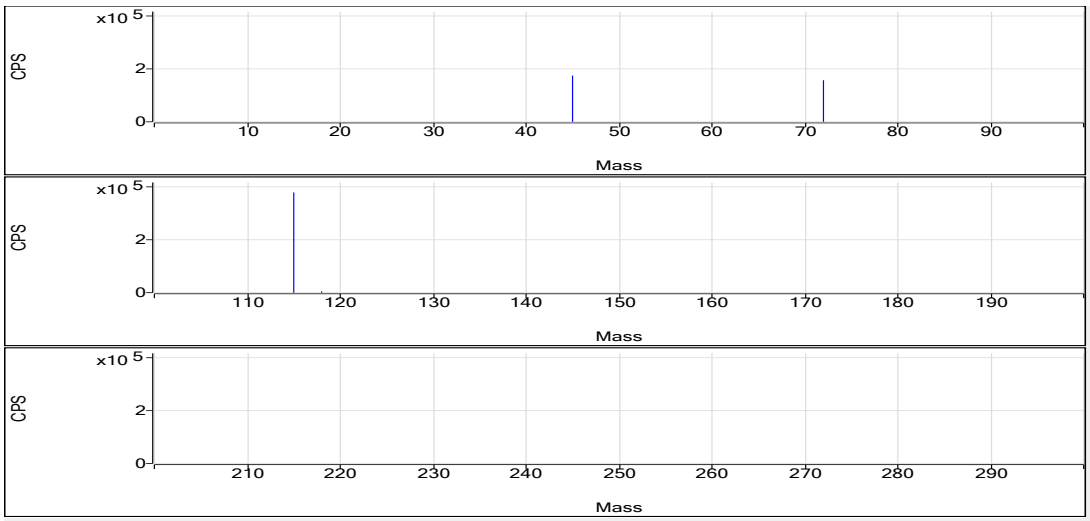
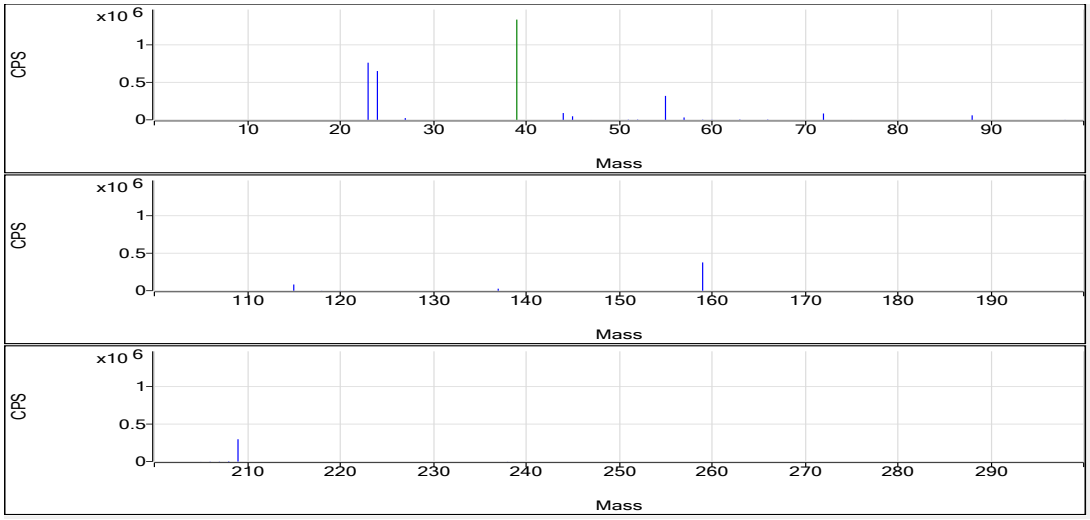


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.023	0	84.00	0.0007	1.705E-05
Be	9	1	No Gas	0.031	0	98.00	0.0007	1.705E-05
Be	9	1	No Gas	0.027	0	92.00	0.0007	1.705E-05
Se	78	2	H2	0.302	0.0001	22.00	0.0002	6.062E-06
Se	78	2	H2	0.281	0.0001	20.67	0.0002	6.062E-06
Se	78	2	H2	0.16	0	12.67	0.0002	6.062E-06
Na	23	3	He	4214.834	16.0265	769113.50	0.0037	0.3435
Na	23	3	He	4232.193	16.0911	758326.16	0.0037	0.3435
Na	23	3	He	4281.152	16.2733	772784.13	0.0037	0.3435
Mg	24	3	He	7442.716	13.5969	652517.76	0.0018	0.002943
Mg	24	3	He	7583.982	13.855	652943.04	0.0018	0.002943
Mg	24	3	He	7588.378	13.863	658324.37	0.0018	0.002943
Al	27	3	He	803.354	0.4805	23058.71	0.0006	0.001008
Al	27	3	He	804.929	0.4814	22688.32	0.0006	0.001008
Al	27	3	He	818.591	0.4896	23249.30	0.0006	0.001008
K	39	3	He	23765.687	28.3115	1358668.26	0.0012	0.4052
K	39	3	He	23837.501	28.3958	1338208.89	0.0012	0.4052
K	39	3	He	23649.7	28.1753	1337984.36	0.0012	0.4052
Ca	44	3	He	27437.635	1.8913	90762.34	0.0001	0.003486
Ca	44	3	He	27984.287	1.9289	90902.64	0.0001	0.003486
Ca	44	3	He	27811.225	1.917	91033.29	0.0001	0.003486
Ti	47	3	He	7.315	0.004	190.01	0.0005	0
Ti	47	3	He	5.881	0.0032	150.01	0.0005	0
Ti	47	3	He	8.949	0.0048	230.01	0.0005	0
V	51	3	He	1.376	0.0616	2956.32	0.0223	0.03097
V	51	3	He	1.376	0.0616	2902.31	0.0223	0.03097
V	51	3	He	1.36	0.0612	2908.31	0.0223	0.03097
Cr	52	3	He	1.368	0.0792	3800.61	0.029	0.03958
Cr	52	3	He	1.044	0.0698	3290.47	0.029	0.03958
Cr	52	3	He	1.266	0.0762	3620.57	0.029	0.03958
Mn	55	3	He	514.304	6.6863	320875.78	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	523.365	6.804	320654.25	0.013	0.003171
Mn	55	3	He	521.251	6.7766	321805.52	0.013	0.003171
Fe	57	3	He	1105.056	0.6529	31334.79	0.0006	0.002014
Fe	57	3	He	1150.624	0.6798	32036.25	0.0006	0.002014
Fe	57	3	He	1126.098	0.6653	31595.52	0.0006	0.002014
Co	59	3	He	1.036	0.0634	3040.43	0.0572	0.004106
Co	59	3	He	1.015	0.0622	2930.42	0.0572	0.004106
Co	59	3	He	0.834	0.0518	2460.32	0.0572	0.004106
Ni	60	3	He	2.604	0.0251	2130.24	0.0084	0.003329
Ni	60	3	He	3.2	0.0301	2510.31	0.0084	0.003329
Ni	60	3	He	2.413	0.0235	2040.21	0.0084	0.003329
Cu	63	3	He	1.997	0.0543	4610.87	0.0247	0.004989
Cu	63	3	He	1.995	0.0543	4530.88	0.0247	0.004989
Cu	63	3	He	1.771	0.0487	4230.78	0.0247	0.004989
Zn	66	3	He	13.692	0.0454	3760.63	0.0029	0.006147
Zn	66	3	He	13.148	0.0439	3630.58	0.0029	0.006147
Zn	66	3	He	12.394	0.0417	3490.56	0.0029	0.006147
As	75	3	He	0.792	0.0025	208.00	0.002	0.0009198
As	75	3	He	0.588	0.0021	174.00	0.002	0.0009198
As	75	3	He	0.826	0.0026	216.00	0.002	0.0009198
Sr	88	3	He	83.422	0.7352	60881.97	0.0088	0.0005022
Sr	88	3	He	80.371	0.7084	58642.72	0.0088	0.0005022
Sr	88	3	He	82.919	0.7308	61183.71	0.0088	0.0005022
Mo	98	3	He	0.338	0.0082	680.05	0.0223	0.0006689
Mo	98	3	He	0.473	0.0112	930.07	0.0223	0.0006689
Mo	98	3	He	0.403	0.0097	810.05	0.0223	0.0006689
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Cd	111	3	He	0.069	0.0004	32.00	0.0054	1.676E-05
Cd	111	3	He	0.06	0.0003	28.00	0.0054	1.676E-05
Cd	111	3	He	0.041	0.0002	20.00	0.0054	1.676E-05
Sn	120	3	He	0.314	0.0228	1890.34	0.0156	0.01794
Sn	120	3	He	0.384	0.0239	1980.21	0.0156	0.01794
Sn	120	3	He	0.16	0.0204	1710.16	0.0156	0.01794
Sb	121	3	He	0.157	0.0024	200.01	0.0151	4.19E-05
Sb	121	3	He	0.125	0.0019	160.01	0.0151	4.19E-05
Sb	121	3	He	0.187	0.0029	240.01	0.0151	4.19E-05
Ba	137	3	He	67.102	0.3286	27207.62	0.0049	0.0002094
Ba	137	3	He	65.708	0.3217	26636.49	0.0049	0.0002094
Ba	137	3	He	64.583	0.3162	26476.17	0.0049	0.0002094
Tl	205	3	He	0.022	0.0013	510.03	0.0252	0.0007688
Tl	205	3	He	0.018	0.0012	460.03	0.0252	0.0007688
Tl	205	3	He	0.005	0.0009	340.02	0.0252	0.0007688
Pb	208	3	He	0.727	0.0263	5361.33	0.0337	0.001742
Pb	208	3	He	0.784	0.0282	5591.42	0.0337	0.001742
Pb	208	3	He	0.803	0.0288	5741.46	0.0337	0.001742
U	238	3	He	0.077	0.0043	1280.11	0.0502	0.0004339
U	238	3	He	0.063	0.0036	1080.09	0.0502	0.0004339
U	238	3	He	0.071	0.004	1200.10	0.0502	0.0004339
Sc	45	1	No Gas			2456478.71		
Sc	45	1	No Gas			2467851.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2464039.03		
Ge	72	1	No Gas			1269335.53		
Ge	72	1	No Gas			1288567.56		
Ge	72	1	No Gas			1279902.17		
Sc	45	2	H2			175932.81		
Sc	45	2	H2			175699.59		
Sc	45	2	H2			172605.51		
Ge	72	2	H2			157752.86		
Ge	72	2	H2			155548.63		
Ge	72	2	H2			158156.83		
In	115	2	H2			379113.04		
In	115	2	H2			379975.38		
In	115	2	H2			377417.69		
Sc	45	3	He			47990.04		
Sc	45	3	He			47127.02		
Sc	45	3	He			47487.90		
Ge	72	3	He			84851.37		
Ge	72	3	He			83443.71		
Ge	72	3	He			86793.20		
In	115	3	He			82817.44		
In	115	3	He			82796.45		
In	115	3	He			83731.70		
Tb	159	3	He			382094.10		
Tb	159	3	He			377865.50		
Tb	159	3	He			377695.85		
Bi	209	3	He			299045.48		
Bi	209	3	He			299747.28		
Bi	209	3	He			299570.87		

Quantitation Report

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Acq Time	8/11/2023 9:24:35 AM
Sample Name	410-136848-U-4-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

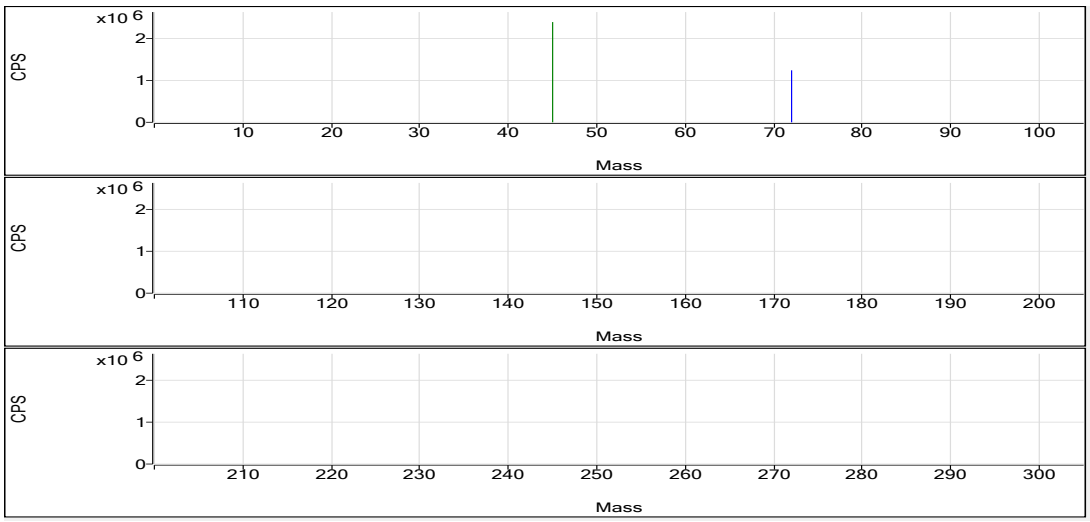
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.005	ppb	N/A	31.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.074	ppb	44.3	7.11	0.0000	Pulse	1.5000	3
Na	23	45	He	62160.945	ppb	0.6	10607059.01	231.6390	Analog	0.1000	3
Mg	24	45	He	11520.080	ppb	1.3	963600.32	21.0442	Pulse	0.1000	3
Al	27	45	He	20.761	ppb	15.2	613.37	0.0134	Pulse	0.1000	3
K	39	45	He	1883.934	ppb	2.1	119848.34	2.6174	Pulse	0.1000	3
Ca	44	45	He	86762.467	ppb	0.9	273519.50	5.9730	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.029	ppb	78.4	1448.08	0.0316	Pulse	0.5000	3
Cr	52	45	He	0.098	ppb	124.2	1943.53	0.0424	Pulse	0.1000	3
Mn	55	45	He	14.366	ppb	2.7	8692.88	0.1899	Pulse	0.1000	3
Fe	57	45	He	22.168	ppb	12.1	690.04	0.0151	Pulse	0.1000	3
Co	59	45	He	0.067	ppb	5.5	363.35	0.0079	Pulse	0.1000	3
Ni	60	72	He	0.214	ppb	29.3	426.69	0.0051	Pulse	0.1000	3
Cu	63	72	He	0.323	ppb	10.8	1080.08	0.0130	Pulse	0.1000	3
Zn	66	115	He	1.794	ppb	21.1	926.73	0.0113	Pulse	0.1000	3
As	75	115	He	0.342	ppb	22.0	132.00	0.0016	Pulse	0.5000	3
Sr	88	115	He	296.740	ppb	0.8	214526.42	2.6140	Pulse	0.1000	3
Mo	98	115	He	0.678	ppb	6.1	1296.78	0.0158	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	58.4	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.116	ppb	145.4	1620.15	0.0198	Pulse	0.1000	3
Sb	121	115	He	0.094	ppb	36.8	120.00	0.0015	Pulse	0.1000	3
Ba	137	115	He	14.004	ppb	3.2	5641.38	0.0687	Pulse	0.1000	3
Tl	205	159	He	-0.018	ppb	N/A	116.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.023	ppb	6.4	960.05	0.0025	Pulse	0.1000	3
U	238	209	He	0.556	ppb	5.6	8356.29	0.0283	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2407562.78	1.7	102.6	Analog	0.1000	3
No Gas	Ge	72	1248766.96	1.0	104.1	Pulse	0.1000	3
H2	Sc	45	173258.63	1.5	99.7	Pulse	0.1000	3
H2	Ge	72	154975.99	0.7	103.6	Pulse	0.1000	3
H2	In	115	377412.00	0.4	103.1	Pulse	0.1000	3
He	Sc	45	45792.93	0.9	106.4	Pulse	0.1000	3
He	Ge	72	83309.23	1.1	106.6	Pulse	0.1000	3
He	In	115	82071.32	0.6	103.0	Pulse	0.1000	3
He	Tb	159	381131.60	1.0	103.6	Pulse	0.1000	3
He	Bi	209	294894.43	0.5	101.0	Pulse	0.1000	3

No Gas



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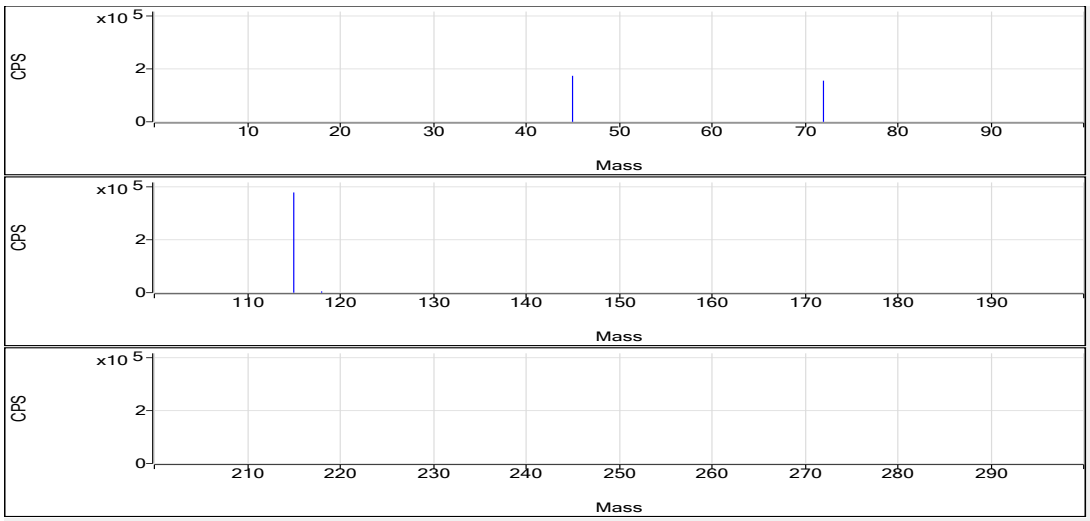
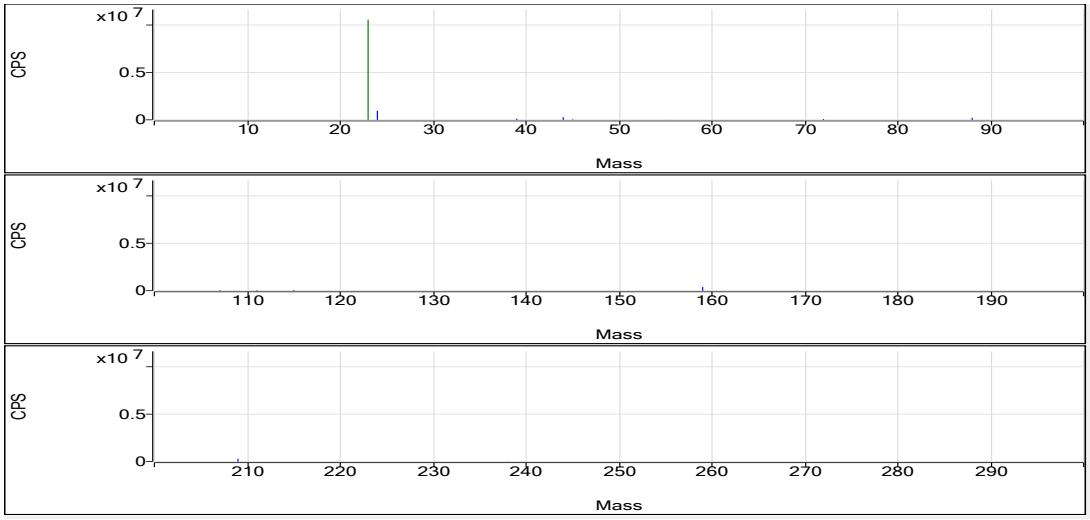


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.005	0	32.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.008	0	28.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.004	0	34.00	0.0007	1.705E-05
Se	78	2	H2	0.037	0	4.67	0.0002	6.062E-06
Se	78	2	H2	0.099	0	8.67	0.0002	6.062E-06
Se	78	2	H2	0.087	0	8.00	0.0002	6.062E-06
Na	23	3	He	61748.26	230.1034	10645581.09	0.0037	0.3435
Na	23	3	He	62339.226	232.3024	10605167.34	0.0037	0.3435
Na	23	3	He	62395.35	232.5112	10570428.59	0.0037	0.3435
Mg	24	3	He	11357.182	20.7466	959829.83	0.0018	0.002943
Mg	24	3	He	11565.709	21.1275	964522.64	0.0018	0.002943
Mg	24	3	He	11637.35	21.2584	966448.50	0.0018	0.002943
Al	27	3	He	18.593	0.0121	560.03	0.0006	0.001008
Al	27	3	He	24.37	0.0156	710.04	0.0006	0.001008
Al	27	3	He	19.319	0.0125	570.03	0.0006	0.001008
K	39	3	He	1855.859	2.5844	119567.15	0.0012	0.4052
K	39	3	He	1865.764	2.5961	118516.71	0.0012	0.4052
K	39	3	He	1930.181	2.6717	121461.15	0.0012	0.4052
Ca	44	3	He	86888.665	5.9817	276738.26	0.0001	0.003486
Ca	44	3	He	85916.533	5.9148	270024.59	0.0001	0.003486
Ca	44	3	He	87482.203	6.0225	273795.64	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.021	0.0314	1454.08	0.0223	0.03097
V	51	3	He	0.055	0.0322	1470.08	0.0223	0.03097
V	51	3	He	0.012	0.0312	1420.08	0.0223	0.03097
Cr	52	3	He	0.223	0.046	2130.24	0.029	0.03958
Cr	52	3	He	-0.02	0.039	1780.16	0.029	0.03958
Cr	52	3	He	0.092	0.0422	1920.20	0.029	0.03958
Mn	55	3	He	13.949	0.1844	8532.75	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	14.73	0.1946	8883.00	0.013	0.003171
Mn	55	3	He	14.42	0.1906	8662.90	0.013	0.003171
Fe	57	3	He	21.902	0.0149	690.04	0.0006	0.002014
Fe	57	3	He	19.638	0.0136	620.03	0.0006	0.002014
Fe	57	3	He	24.963	0.0167	760.05	0.0006	0.002014
Co	59	3	He	0.068	0.008	370.02	0.0572	0.004106
Co	59	3	He	0.07	0.0081	370.02	0.0572	0.004106
Co	59	3	He	0.063	0.0077	350.02	0.0572	0.004106
Ni	60	3	He	0.278	0.0057	470.02	0.0084	0.003329
Ni	60	3	He	0.212	0.0051	430.02	0.0084	0.003329
Ni	60	3	He	0.153	0.0046	380.02	0.0084	0.003329
Cu	63	3	He	0.295	0.0123	1020.07	0.0247	0.004989
Cu	63	3	He	0.312	0.0127	1070.08	0.0247	0.004989
Cu	63	3	He	0.362	0.0139	1150.08	0.0247	0.004989
Zn	66	3	He	1.871	0.0115	950.07	0.0029	0.006147
Zn	66	3	He	2.129	0.0123	1000.07	0.0029	0.006147
Zn	66	3	He	1.383	0.0101	830.06	0.0029	0.006147
As	75	3	He	0.411	0.0017	144.00	0.002	0.0009198
As	75	3	He	0.262	0.0014	118.00	0.002	0.0009198
As	75	3	He	0.355	0.0016	134.00	0.002	0.0009198
Sr	88	3	He	294.487	2.5941	214090.21	0.0088	0.0005022
Sr	88	3	He	299.36	2.6371	215217.50	0.0088	0.0005022
Sr	88	3	He	296.372	2.6107	214271.56	0.0088	0.0005022
Mo	98	3	He	0.697	0.0162	1340.12	0.0223	0.0006689
Mo	98	3	He	0.706	0.0164	1340.12	0.0223	0.0006689
Mo	98	3	He	0.63	0.0147	1210.09	0.0223	0.0006689
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Ag	107	3	He	0.012	0.0012	100.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.039	0.0173	1430.12	0.0156	0.01794
Sn	120	3	He	0.296	0.0225	1840.18	0.0156	0.01794
Sn	120	3	He	0.092	0.0194	1590.14	0.0156	0.01794
Sb	121	3	He	0.133	0.0021	170.01	0.0151	4.19E-05
Sb	121	3	He	0.07	0.0011	90.00	0.0151	4.19E-05
Sb	121	3	He	0.078	0.0012	100.00	0.0151	4.19E-05
Ba	137	3	He	14.397	0.0707	5831.47	0.0049	0.0002094
Ba	137	3	He	14.108	0.0692	5651.36	0.0049	0.0002094
Ba	137	3	He	13.506	0.0663	5441.32	0.0049	0.0002094
Tl	205	3	He	-0.016	0.0004	140.01	0.0252	0.0007688
Tl	205	3	He	-0.019	0.0003	110.00	0.0252	0.0007688
Tl	205	3	He	-0.02	0.0003	100.00	0.0252	0.0007688
Pb	208	3	He	0.025	0.0026	510.03	0.0337	0.001742
Pb	208	3	He	0.023	0.0025	510.03	0.0337	0.001742
Pb	208	3	He	0.022	0.0025	490.03	0.0337	0.001742
U	238	3	He	0.592	0.0301	8863.31	0.0502	0.0004339
U	238	3	He	0.534	0.0272	8002.70	0.0502	0.0004339
U	238	3	He	0.543	0.0277	8202.87	0.0502	0.0004339
Sc	45	1	No Gas			2380770.59		
Sc	45	1	No Gas			2455116.99		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2386800.75		
Ge	72	1	No Gas			1256867.72		
Ge	72	1	No Gas			1254602.09		
Ge	72	1	No Gas			1234831.08		
Sc	45	2	H2			173058.94		
Sc	45	2	H2			170723.63		
Sc	45	2	H2			175993.32		
Ge	72	2	H2			154265.43		
Ge	72	2	H2			154487.24		
Ge	72	2	H2			156175.29		
In	115	2	H2			376784.84		
In	115	2	H2			376409.10		
In	115	2	H2			379042.06		
Sc	45	3	He			46264.33		
Sc	45	3	He			45652.43		
Sc	45	3	He			45462.02		
Ge	72	3	He			83111.43		
Ge	72	3	He			84278.18		
Ge	72	3	He			82538.09		
In	115	3	He			82535.99		
In	115	3	He			81619.74		
In	115	3	He			82081.95		
Tb	159	3	He			376886.83		
Tb	159	3	He			382860.35		
Tb	159	3	He			383647.61		
Bi	209	3	He			294154.64		
Bi	209	3	He			293878.57		
Bi	209	3	He			296650.07		

Quantitation Report

Data File Name	069SMPL.d
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Sample Name	410-136848-V-1-A
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

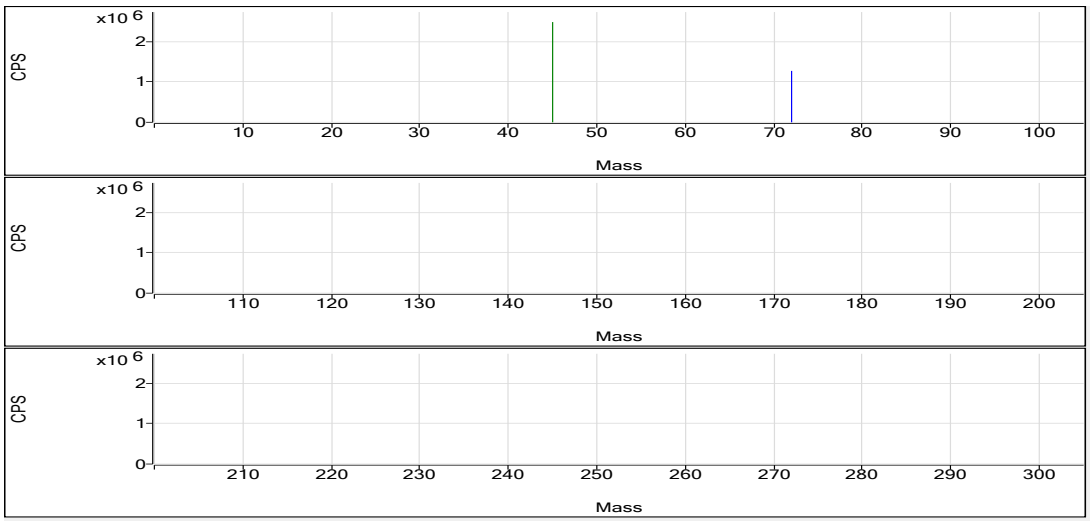
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.007	ppb	N/A	30.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.108	ppb	34.0	9.33	0.0000	Pulse	1.5000	3
Na	23	45	He	28267.544	ppb	2.4	5042174.40	105.5246	Analog	0.1000	3
Mg	24	45	He	7405.720	ppb	1.6	646499.57	13.5294	Pulse	0.1000	3
Al	27	45	He	23.104	ppb	13.8	706.71	0.0148	Pulse	0.1000	3
K	39	45	He	2927.889	ppb	1.8	183651.14	3.8432	Pulse	0.1000	3
Ca	44	45	He	49199.217	ppb	2.1	161912.20	3.3885	Pulse	0.1000	3
Ti	47	45	He	0.515	ppb	42.8	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.520	ppb	12.4	2032.82	0.0425	Pulse	0.5000	3
Cr	52	45	He	0.260	ppb	29.5	2250.26	0.0471	Pulse	0.1000	3
Mn	55	45	He	47.138	ppb	2.0	29420.71	0.6157	Pulse	0.1000	3
Fe	57	45	He	47.238	ppb	12.8	1426.79	0.0298	Pulse	0.1000	3
Co	59	45	He	0.027	ppb	18.1	270.01	0.0057	Pulse	0.1000	3
Ni	60	72	He	0.413	ppb	22.7	570.04	0.0068	Pulse	0.1000	3
Cu	63	72	He	0.749	ppb	7.3	1973.53	0.0235	Pulse	0.1000	3
Zn	66	115	He	1.131	ppb	37.7	776.71	0.0094	Pulse	0.1000	3
As	75	115	He	0.926	ppb	15.3	229.33	0.0028	Pulse	0.5000	3
Sr	88	115	He	182.644	ppb	2.1	132879.53	1.6091	Pulse	0.1000	3
Mo	98	115	He	1.378	ppb	7.7	2593.67	0.0314	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	803.7	56.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	141.9	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.121	ppb	75.5	1636.82	0.0198	Pulse	0.1000	3
Sb	121	115	He	0.302	ppb	17.1	380.02	0.0046	Pulse	0.1000	3
Ba	137	115	He	16.634	ppb	7.7	6735.24	0.0816	Pulse	0.1000	3
Tl	205	159	He	-0.015	ppb	N/A	150.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.035	ppb	4.6	1110.07	0.0029	Pulse	0.1000	3
U	238	209	He	0.585	ppb	3.0	8900.12	0.0298	Pulse	0.1000	3

ISTD Table:

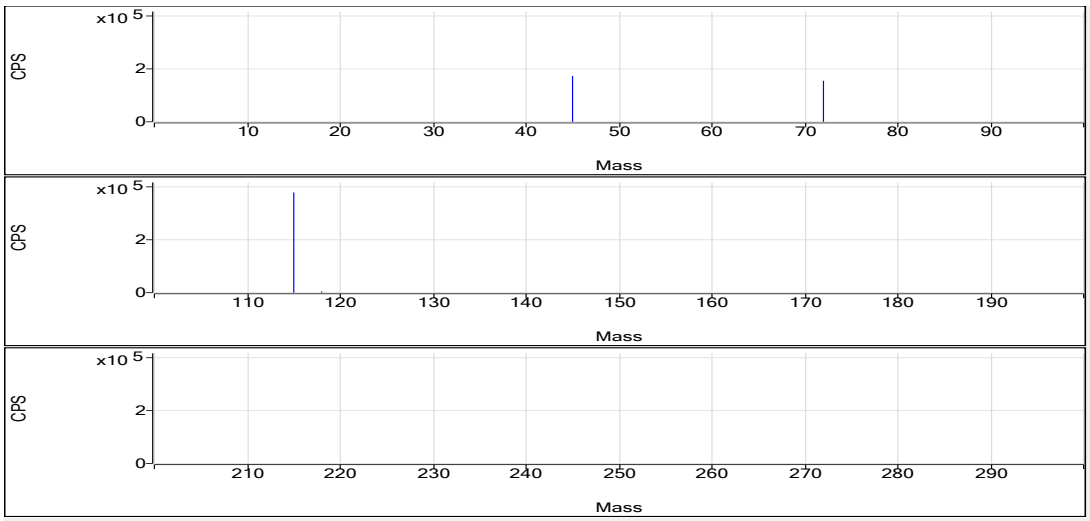
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2475135.54	0.9	105.4	Analog	0.1000	3
No Gas	Ge	72	1269499.51	0.0	105.8	Pulse	0.1000	3
H2	Sc	45	173086.73	1.0	99.6	Pulse	0.1000	3
H2	Ge	72	155013.62	0.4	103.7	Pulse	0.1000	3
H2	In	115	378543.38	0.2	103.4	Pulse	0.1000	3
He	Sc	45	47792.48	1.5	111.1	Pulse	0.1000	3
He	Ge	72	84039.96	1.4	107.5	Pulse	0.1000	3
He	In	115	82597.02	1.5	103.6	Pulse	0.1000	3
He	Tb	159	381013.51	0.6	103.6	Pulse	0.1000	3
He	Bi	209	299045.68	0.2	102.4	Pulse	0.1000	3

No Gas

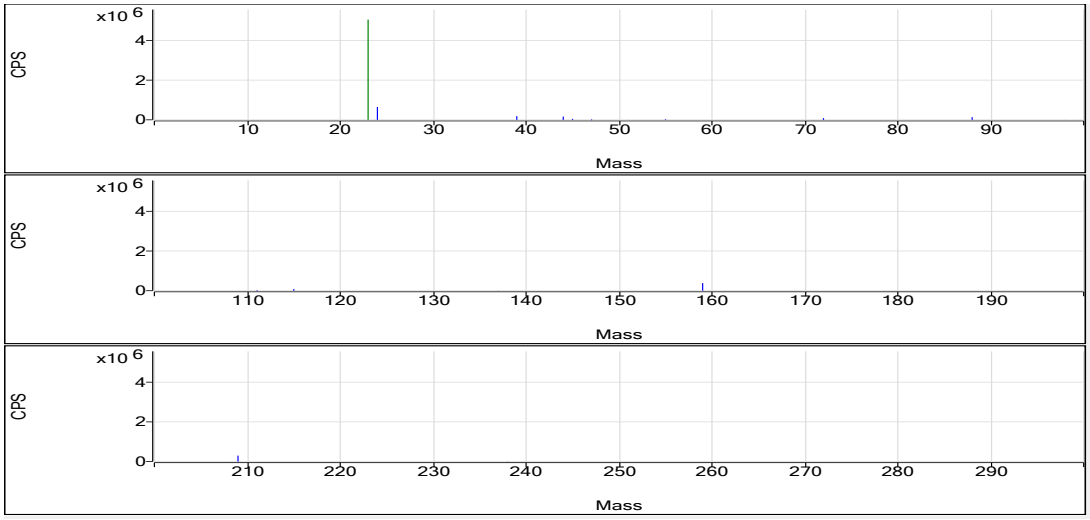


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.008	0	28.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.004	0	34.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.008	0	28.00	0.0007	1.705E-05
Se	78	2	H2	0.149	0	12.00	0.0002	6.062E-06
Se	78	2	H2	0.098	0	8.67	0.0002	6.062E-06
Se	78	2	H2	0.078	0	7.33	0.0002	6.062E-06
Na	23	3	He	28339.084	105.7908	5083239.30	0.0037	0.3435
Na	23	3	He	28911.17	107.9195	5070754.30	0.0037	0.3435
Na	23	3	He	27552.376	102.8635	4972529.61	0.0037	0.3435
Mg	24	3	He	7371.773	13.4674	647105.93	0.0018	0.002943
Mg	24	3	He	7537.403	13.7699	646998.35	0.0018	0.002943
Mg	24	3	He	7307.985	13.3509	645394.44	0.0018	0.002943
Al	27	3	He	19.583	0.0127	610.04	0.0006	0.001008
Al	27	3	He	25.77	0.0164	770.05	0.0006	0.001008
Al	27	3	He	23.961	0.0153	740.04	0.0006	0.001008
K	39	3	He	2934.444	3.8509	185037.17	0.0012	0.4052
K	39	3	He	2976.94	3.9008	183286.48	0.0012	0.4052
K	39	3	He	2872.283	3.7779	182629.78	0.0012	0.4052
Ca	44	3	He	48833.066	3.3633	161608.34	0.0001	0.003486
Ca	44	3	He	50380.549	3.4698	163034.27	0.0001	0.003486
Ca	44	3	He	48384.036	3.3324	161094.00	0.0001	0.003486
Ti	47	3	He	0.769	0.0004	20.00	0.0005	0
Ti	47	3	He	0.393	0.0002	10.00	0.0005	0
Ti	47	3	He	0.382	0.0002	10.00	0.0005	0
V	51	3	He	0.544	0.0431	2070.16	0.0223	0.03097
V	51	3	He	0.569	0.0436	2050.16	0.0223	0.03097
V	51	3	He	0.447	0.0409	1978.15	0.0223	0.03097
Cr	52	3	He	0.186	0.045	2160.23	0.029	0.03958
Cr	52	3	He	0.338	0.0494	2320.26	0.029	0.03958
Cr	52	3	He	0.255	0.047	2270.28	0.029	0.03958
Mn	55	3	He	46.956	0.6133	29470.91	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	48.155	0.6289	29551.02	0.013	0.003171
Mn	55	3	He	46.304	0.6049	29240.19	0.013	0.003171
Fe	57	3	He	54.176	0.0339	1630.15	0.0006	0.002014
Fe	57	3	He	43.193	0.0275	1290.10	0.0006	0.002014
Fe	57	3	He	44.346	0.0281	1360.12	0.0006	0.002014
Co	59	3	He	0.023	0.0054	260.01	0.0572	0.004106
Co	59	3	He	0.032	0.006	280.01	0.0572	0.004106
Co	59	3	He	0.026	0.0056	270.01	0.0572	0.004106
Ni	60	3	He	0.349	0.0062	530.03	0.0084	0.003329
Ni	60	3	He	0.521	0.0077	650.05	0.0084	0.003329
Ni	60	3	He	0.369	0.0064	530.03	0.0084	0.003329
Cu	63	3	He	0.767	0.0239	2030.21	0.0247	0.004989
Cu	63	3	He	0.688	0.022	1860.18	0.0247	0.004989
Cu	63	3	He	0.792	0.0246	2030.21	0.0247	0.004989
Zn	66	3	He	1.319	0.0099	820.05	0.0029	0.006147
Zn	66	3	He	1.432	0.0103	860.05	0.0029	0.006147
Zn	66	3	He	0.643	0.008	650.04	0.0029	0.006147
As	75	3	He	0.916	0.0028	228.00	0.002	0.0009198
As	75	3	He	0.788	0.0025	210.00	0.002	0.0009198
As	75	3	He	1.072	0.0031	250.00	0.002	0.0009198
Sr	88	3	He	183.686	1.6183	133647.03	0.0088	0.0005022
Sr	88	3	He	178.339	1.5712	131769.43	0.0088	0.0005022
Sr	88	3	He	185.908	1.6379	133222.14	0.0088	0.0005022
Mo	98	3	He	1.397	0.0318	2630.33	0.0223	0.0006689
Mo	98	3	He	1.263	0.0289	2420.30	0.0223	0.0006689
Mo	98	3	He	1.474	0.0336	2730.37	0.0223	0.0006689
Ag	107	3	He	-0.001	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	0.004	0.0009	70.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.02	0.0001	10.00	0.0054	1.676E-05
Sn	120	3	He	0.1	0.0195	1610.15	0.0156	0.01794
Sn	120	3	He	0.042	0.0186	1560.13	0.0156	0.01794
Sn	120	3	He	0.222	0.0214	1740.18	0.0156	0.01794
Sb	121	3	He	0.245	0.0038	310.02	0.0151	4.19E-05
Sb	121	3	He	0.313	0.0048	400.02	0.0151	4.19E-05
Sb	121	3	He	0.347	0.0053	430.02	0.0151	4.19E-05
Ba	137	3	He	17.086	0.0838	6922.01	0.0049	0.0002094
Ba	137	3	He	15.191	0.0745	6251.66	0.0049	0.0002094
Ba	137	3	He	17.624	0.0865	7032.04	0.0049	0.0002094
Tl	205	3	He	-0.018	0.0003	120.01	0.0252	0.0007688
Tl	205	3	He	-0.018	0.0003	120.01	0.0252	0.0007688
Tl	205	3	He	-0.009	0.0005	210.01	0.0252	0.0007688
Pb	208	3	He	0.033	0.0029	640.04	0.0337	0.001742
Pb	208	3	He	0.036	0.003	580.04	0.0337	0.001742
Pb	208	3	He	0.035	0.0029	520.03	0.0337	0.001742
U	238	3	He	0.567	0.0289	8643.21	0.0502	0.0004339
U	238	3	He	0.585	0.0298	8913.58	0.0502	0.0004339
U	238	3	He	0.602	0.0306	9143.56	0.0502	0.0004339
Sc	45	1	No Gas			2500103.56		
Sc	45	1	No Gas			2458916.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2466386.37		
Ge	72	1	No Gas			1268779.36		
Ge	72	1	No Gas			1269864.67		
Ge	72	1	No Gas			1269854.51		
Sc	45	2	H2			174910.90		
Sc	45	2	H2			172838.49		
Sc	45	2	H2			171510.80		
Ge	72	2	H2			154983.40		
Ge	72	2	H2			155690.40		
Ge	72	2	H2			154367.06		
In	115	2	H2			378947.03		
In	115	2	H2			379017.92		
In	115	2	H2			377665.19		
Sc	45	3	He			48049.93		
Sc	45	3	He			46986.47		
Sc	45	3	He			48341.05		
Ge	72	3	He			84811.14		
Ge	72	3	He			84629.58		
Ge	72	3	He			82679.16		
In	115	3	He			82594.95		
In	115	3	He			83873.32		
In	115	3	He			81346.67		
Tb	159	3	He			378576.48		
Tb	159	3	He			382276.28		
Tb	159	3	He			382187.77		
Bi	209	3	He			299227.61		
Bi	209	3	He			299565.31		
Bi	209	3	He			298344.12		

Quantitation Report

Data File Name	071_CCV.d
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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

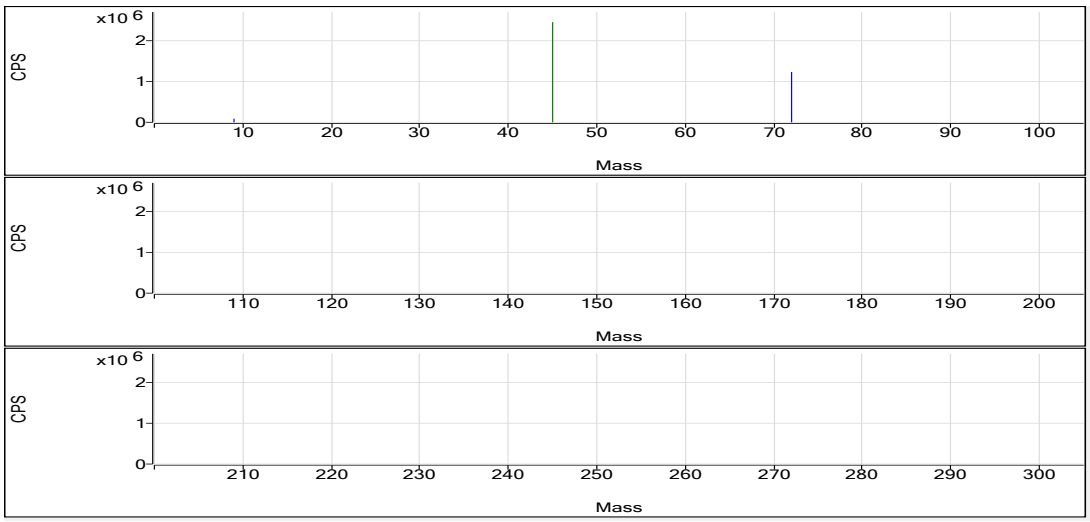
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.308	ppb	0.5	87725.68	0.0358	Pulse	0.5000	3
Se	78	115	H2	51.109	ppb	1.7	3354.18	0.0088	Pulse	1.5000	3
Na	23	45	He	4930.731	ppb	1.0	848804.34	18.6903	Pulse	0.1000	3
Mg	24	45	He	5139.493	ppb	0.8	426436.74	9.3901	Pulse	0.1000	3
Al	27	45	He	5085.706	ppb	1.0	137893.95	3.0364	Pulse	0.1000	3
K	39	45	He	5197.245	ppb	1.1	295550.35	6.5080	Pulse	0.1000	3
Ca	44	45	He	5147.926	ppb	1.5	16242.87	0.3577	Pulse	0.1000	3
Ti	47	45	He	5136.881	ppb	2.5	126255.78	2.7804	Pulse	0.1000	3
V	51	45	He	519.717	ppb	0.9	526658.50	11.5971	Pulse	0.5000	3
Cr	52	45	He	517.304	ppb	1.3	682226.01	15.0230	Pulse	0.1000	3
Mn	55	45	He	514.878	ppb	1.3	303974.70	6.6938	Pulse	0.1000	3
Fe	57	45	He	5137.546	ppb	2.3	137510.85	3.0283	Pulse	0.1000	3
Co	59	45	He	498.705	ppb	1.1	1295479.25	28.5270	Pulse	0.1000	3
Ni	60	72	He	536.380	ppb	1.3	363465.66	4.4881	Pulse	0.1000	3
Cu	63	72	He	515.709	ppb	0.6	1032483.32	12.7491	Pulse	0.1000	3
Zn	66	115	He	526.050	ppb	1.5	124862.88	1.5148	Pulse	0.1000	3
As	75	115	He	524.956	ppb	1.1	87019.65	1.0556	Pulse	0.5000	3
Sr	88	115	He	52.216	ppb	0.3	37955.34	0.4604	Pulse	0.1000	3
Mo	98	115	He	51.709	ppb	0.7	95224.91	1.1552	Pulse	0.1000	3
Ag	107	115	He	51.339	ppb	1.1	199336.61	2.4180	Pulse	0.1000	3
Cd	111	115	He	51.588	ppb	1.9	22767.89	0.2762	Pulse	0.5000	3
Sn	120	115	He	51.562	ppb	2.9	67635.62	0.8206	Pulse	0.1000	3
Sb	121	115	He	51.013	ppb	0.6	63620.09	0.7717	Pulse	0.1000	3
Ba	137	115	He	510.066	ppb	1.0	205773.97	2.4962	Pulse	0.1000	3
Tl	205	159	He	50.860	ppb	0.7	493082.12	1.2846	Pulse	0.1000	3
Pb	208	159	He	50.605	ppb	0.4	655969.42	1.7089	Pulse	0.1000	3
U	238	209	He	49.889	ppb	0.5	751358.22	2.5024	Pulse	0.1000	3

ISTD Table:

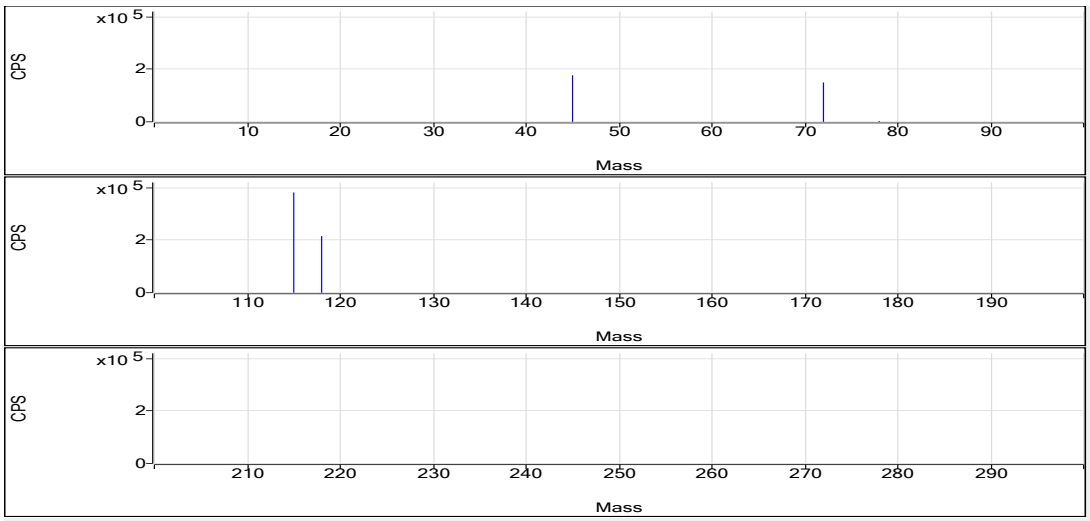
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2453284.13	0.7	104.5	Analog	0.1000	3
No Gas	Ge	72	1231462.56	0.6	102.6	Pulse	0.1000	3
H2	Sc	45	176992.57	1.7	101.9	Pulse	0.1000	3
H2	Ge	72	149582.46	1.3	100.0	Pulse	0.1000	3
H2	In	115	381188.71	1.0	104.1	Pulse	0.1000	3
He	Sc	45	45415.31	0.9	105.5	Pulse	0.1000	3
He	Ge	72	80985.86	0.4	103.6	Pulse	0.1000	3
He	In	115	82440.54	1.4	103.4	Pulse	0.1000	3
He	Tb	159	383850.15	0.4	104.3	Pulse	0.1000	3
He	Bi	209	300263.45	0.9	102.8	Pulse	0.1000	3

No Gas

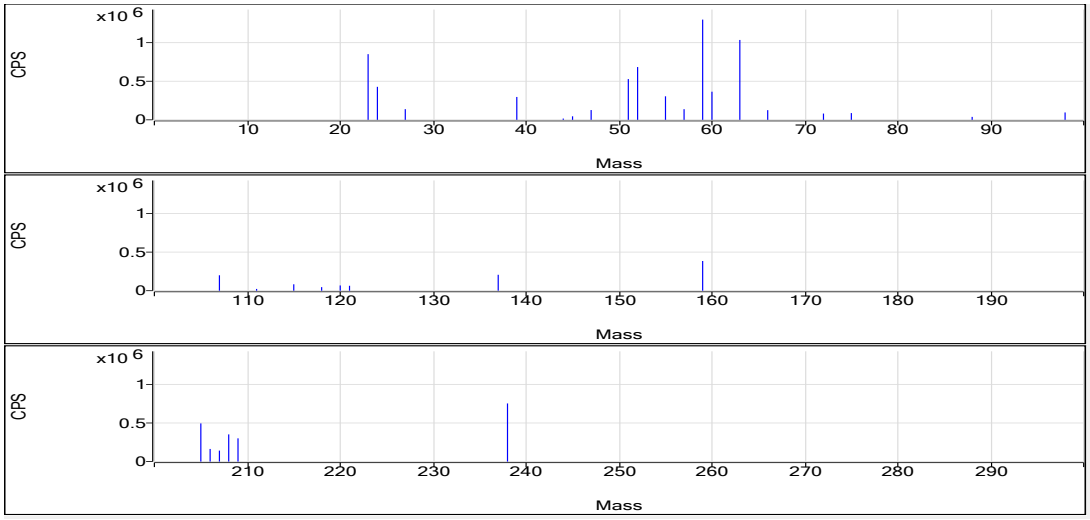


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.414	0.0358	87632.74	0.0007	1.705E-05
Be	9	1	No Gas	48.495	0.0359	87604.13	0.0007	1.705E-05
Be	9	1	No Gas	48.015	0.0355	87940.18	0.0007	1.705E-05
Se	78	2	H2	50.729	0.0087	3348.40	0.0002	6.062E-06
Se	78	2	H2	50.486	0.0087	3335.06	0.0002	6.062E-06
Se	78	2	H2	52.113	0.009	3379.07	0.0002	6.062E-06
Na	23	3	He	4984.089	18.8889	855128.42	0.0037	0.3435
Na	23	3	He	4896.152	18.5616	851672.10	0.0037	0.3435
Na	23	3	He	4911.951	18.6204	839612.49	0.0037	0.3435
Mg	24	3	He	5174.2	9.4535	427976.56	0.0018	0.002943
Mg	24	3	He	5091.016	9.3016	426789.29	0.0018	0.002943
Mg	24	3	He	5153.265	9.4153	424544.37	0.0018	0.002943
Al	27	3	He	5141.519	3.0697	138971.16	0.0006	0.001008
Al	27	3	He	5037.896	3.0079	138011.57	0.0006	0.001008
Al	27	3	He	5077.704	3.0316	136699.11	0.0006	0.001008
K	39	3	He	5258.041	6.5794	297857.94	0.0012	0.4052
K	39	3	He	5147.705	6.4498	295938.80	0.0012	0.4052
K	39	3	He	5185.989	6.4948	292854.31	0.0012	0.4052
Ca	44	3	He	5124.413	0.3561	16119.43	0.0001	0.003486
Ca	44	3	He	5087.069	0.3535	16219.39	0.0001	0.003486
Ca	44	3	He	5232.297	0.3635	16389.80	0.0001	0.003486
Ti	47	3	He	5262.035	2.8481	128937.69	0.0005	0
Ti	47	3	He	5004.672	2.7088	124288.78	0.0005	0
Ti	47	3	He	5143.936	2.7842	125540.86	0.0005	0
V	51	3	He	522.075	11.6496	527395.69	0.0223	0.03097
V	51	3	He	514.37	11.4781	526655.06	0.0223	0.03097
V	51	3	He	522.707	11.6637	525924.75	0.0223	0.03097
Cr	52	3	He	522.46	15.1724	686878.43	0.029	0.03958
Cr	52	3	He	509.542	14.7982	678993.43	0.029	0.03958
Cr	52	3	He	519.909	15.0985	680806.16	0.029	0.03958
Mn	55	3	He	518.359	6.739	305085.39	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	506.905	6.5902	302379.02	0.013	0.003171
Mn	55	3	He	519.369	6.7521	304459.68	0.013	0.003171
Fe	57	3	He	5154.224	3.0381	137539.29	0.0006	0.002014
Fe	57	3	He	5012.024	2.9543	135554.83	0.0006	0.002014
Fe	57	3	He	5246.391	3.0924	139438.42	0.0006	0.002014
Co	59	3	He	501.639	28.6948	1299058.26	0.0572	0.004106
Co	59	3	He	492.569	28.176	1292813.50	0.0572	0.004106
Co	59	3	He	501.907	28.7101	1294566.00	0.0572	0.004106
Ni	60	3	He	541.915	4.5344	366967.30	0.0084	0.003329
Ni	60	3	He	528.871	4.4254	360095.58	0.0084	0.003329
Ni	60	3	He	538.354	4.5047	363334.10	0.0084	0.003329
Cu	63	3	He	519.219	12.8358	1038791.23	0.0247	0.004989
Cu	63	3	He	512.635	12.6731	1031222.09	0.0247	0.004989
Cu	63	3	He	515.272	12.7383	1027436.63	0.0247	0.004989
Zn	66	3	He	520.329	1.4984	125374.75	0.0029	0.006147
Zn	66	3	He	535.164	1.5409	125423.61	0.0029	0.006147
Zn	66	3	He	522.656	1.505	123790.28	0.0029	0.006147
As	75	3	He	519.387	1.0445	87394.72	0.002	0.0009198
As	75	3	He	530.481	1.0667	86829.02	0.002	0.0009198
As	75	3	He	525	1.0557	86835.22	0.002	0.0009198
Sr	88	3	He	52.367	0.4617	38633.81	0.0088	0.0005022
Sr	88	3	He	52.142	0.4597	37420.51	0.0088	0.0005022
Sr	88	3	He	52.14	0.4597	37811.71	0.0088	0.0005022
Mo	98	3	He	51.351	1.1471	95986.62	0.0223	0.0006689
Mo	98	3	He	52.119	1.1643	94768.71	0.0223	0.0006689
Mo	98	3	He	51.659	1.154	94919.39	0.0223	0.0006689
Ag	107	3	He	51.363	2.4191	202420.86	0.0471	0.0006687
Ag	107	3	He	51.885	2.4438	198911.68	0.0471	0.0006687
Ag	107	3	He	50.769	2.3912	196677.30	0.0471	0.0006687
Cd	111	3	He	51.657	0.2766	23141.17	0.0054	1.676E-05
Cd	111	3	He	52.51	0.2811	22882.71	0.0054	1.676E-05
Cd	111	3	He	50.595	0.2709	22279.79	0.0054	1.676E-05
Sn	120	3	He	49.869	0.7943	66459.92	0.0156	0.01794
Sn	120	3	He	52.605	0.8369	68118.04	0.0156	0.01794
Sn	120	3	He	52.211	0.8307	68328.91	0.0156	0.01794
Sb	121	3	He	50.893	0.7699	64420.52	0.0151	4.19E-05
Sb	121	3	He	50.759	0.7679	62501.27	0.0151	4.19E-05
Sb	121	3	He	51.387	0.7774	63938.49	0.0151	4.19E-05
Ba	137	3	He	505.152	2.4721	206853.92	0.0049	0.0002094
Ba	137	3	He	510.174	2.4967	203221.03	0.0049	0.0002094
Ba	137	3	He	514.874	2.5197	207246.95	0.0049	0.0002094
Tl	205	3	He	51.133	1.2915	494175.58	0.0252	0.0007688
Tl	205	3	He	50.969	1.2873	493528.39	0.0252	0.0007688
Tl	205	3	He	50.479	1.275	491542.38	0.0252	0.0007688
Pb	208	3	He	50.617	1.7093	351671.99	0.0337	0.001742
Pb	208	3	He	50.778	1.7148	350986.87	0.0337	0.001742
Pb	208	3	He	50.42	1.7027	350998.28	0.0337	0.001742
U	238	3	He	49.896	2.5027	751421.47	0.0502	0.0004339
U	238	3	He	50.137	2.5148	748378.50	0.0502	0.0004339
U	238	3	He	49.635	2.4896	754274.68	0.0502	0.0004339
Sc	45	1	No Gas			2445274.18		
Sc	45	1	No Gas			2440346.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2474231.99		
Ge	72	1	No Gas			1223096.54		
Ge	72	1	No Gas			1237212.64		
Ge	72	1	No Gas			1234078.50		
Sc	45	2	H2			174767.17		
Sc	45	2	H2			180520.86		
Sc	45	2	H2			175689.68		
Ge	72	2	H2			149395.00		
Ge	72	2	H2			151545.64		
Ge	72	2	H2			147806.75		
In	115	2	H2			383337.18		
In	115	2	H2			383648.55		
In	115	2	H2			376580.39		
Sc	45	3	He			45271.59		
Sc	45	3	He			45883.43		
Sc	45	3	He			45090.92		
Ge	72	3	He			80929.17		
Ge	72	3	He			81370.93		
Ge	72	3	He			80657.49		
In	115	3	He			84033.60		
In	115	3	He			81749.99		
In	115	3	He			82615.21		
Tb	159	3	He			382645.50		
Tb	159	3	He			383374.49		
Tb	159	3	He			385530.46		
Bi	209	3	He			300239.47		
Bi	209	3	He			297584.25		
Bi	209	3	He			302966.62		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

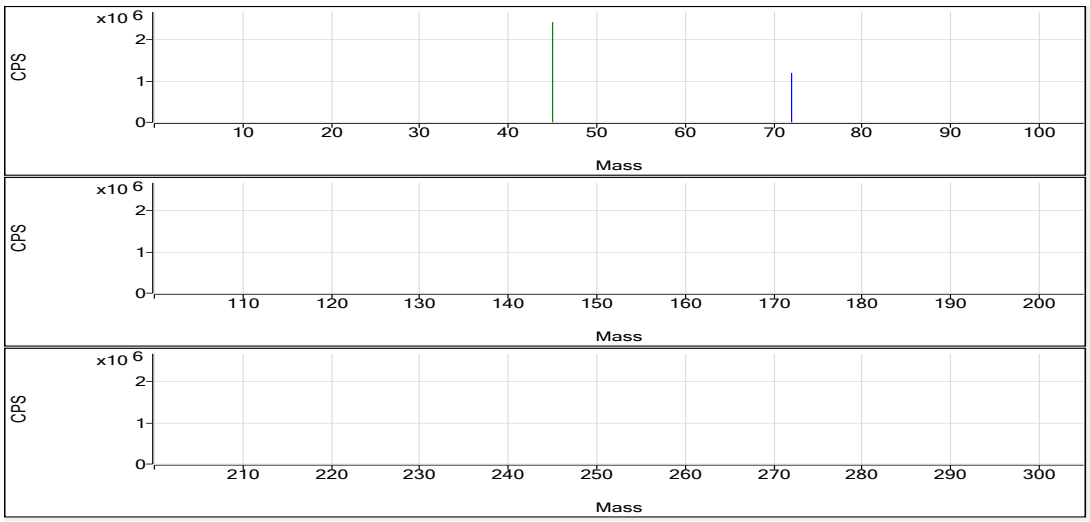
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.011	ppb	47.7	62.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.041	ppb	76.5	4.89	0.0000	Pulse	1.5000	3
Na	23	45	He	-3.115	ppb	N/A	15425.13	0.3319	Pulse	0.1000	3
Mg	24	45	He	1.213	ppb	48.9	240.01	0.0052	Pulse	0.1000	3
Al	27	45	He	1.068	ppb	125.6	76.67	0.0016	Pulse	0.1000	3
K	39	45	He	-4.782	ppb	N/A	18575.70	0.3996	Pulse	0.1000	3
Ca	44	45	He	-10.072	ppb	N/A	130.00	0.0028	Pulse	0.1000	3
Ti	47	45	He	1.061	ppb	57.1	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	-0.020	ppb	N/A	1418.75	0.0305	Pulse	0.5000	3
Cr	52	45	He	-0.165	ppb	N/A	1616.81	0.0348	Pulse	0.1000	3
Mn	55	45	He	0.033	ppb	318.9	166.67	0.0036	Pulse	0.1000	3
Fe	57	45	He	1.088	ppb	41.1	123.34	0.0027	Pulse	0.1000	3
Co	59	45	He	0.027	ppb	29.8	263.34	0.0057	Pulse	0.1000	3
Ni	60	72	He	-0.040	ppb	N/A	236.68	0.0030	Pulse	0.1000	3
Cu	63	72	He	0.054	ppb	75.8	500.03	0.0063	Pulse	0.1000	3
Zn	66	115	He	-0.531	ppb	N/A	380.02	0.0046	Pulse	0.1000	3
As	75	115	He	0.107	ppb	77.0	93.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.012	ppb	197.5	50.00	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.048	ppb	46.9	143.34	0.0017	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	156.5	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.022	ppb	354.9	1503.47	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.032	ppb	28.4	43.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.032	ppb	135.6	30.00	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.034	ppb	44.2	610.03	0.0016	Pulse	0.1000	3
Pb	208	159	He	-0.006	ppb	N/A	576.69	0.0015	Pulse	0.1000	3
U	238	209	He	0.036	ppb	12.4	663.38	0.0023	Pulse	0.1000	3

ISTD Table:

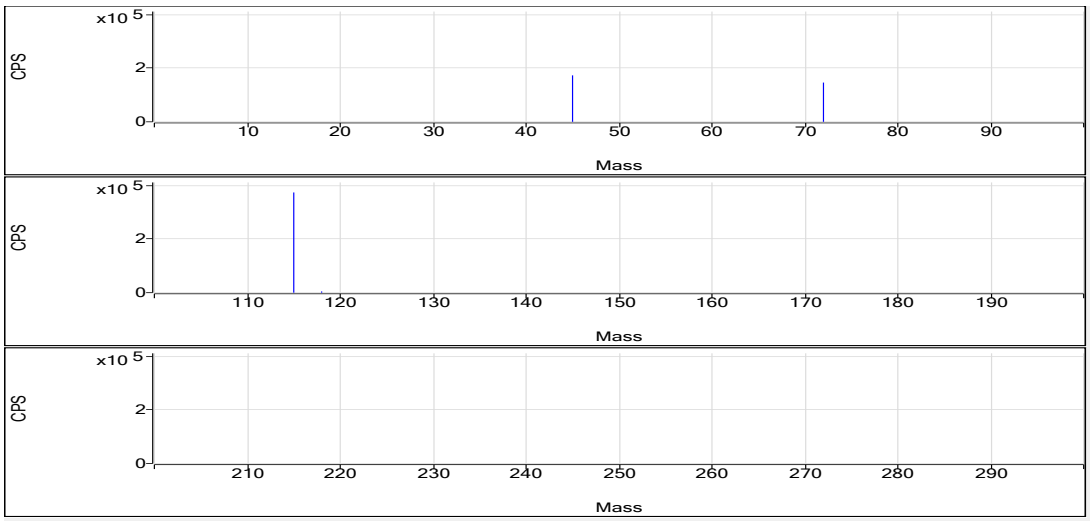
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2439105.64	1.4	103.9	Analog	0.1000	3
No Gas	Ge	72	1202073.24	0.5	100.2	Pulse	0.1000	3
H2	Sc	45	173144.39	2.0	99.6	Pulse	0.1000	3
H2	Ge	72	146241.73	1.0	97.8	Pulse	0.1000	3
H2	In	115	373478.85	1.1	102.0	Pulse	0.1000	3
He	Sc	45	46481.90	1.1	108.0	Pulse	0.1000	3
He	Ge	72	78908.24	0.5	101.0	Pulse	0.1000	3
He	In	115	82175.24	0.7	103.1	Pulse	0.1000	3
He	Tb	159	376299.55	0.9	102.3	Pulse	0.1000	3
He	Bi	209	294862.84	0.4	101.0	Pulse	0.1000	3

No Gas

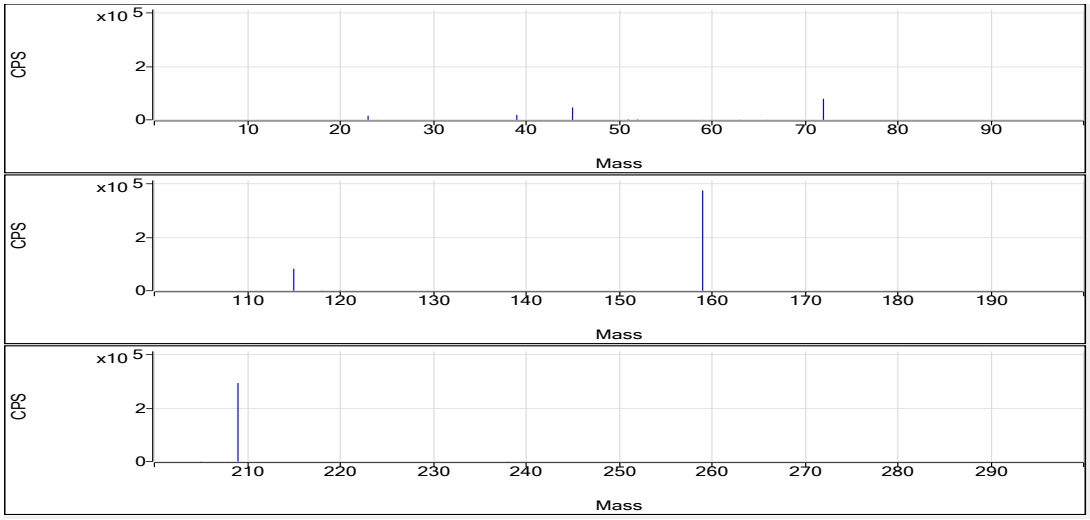


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0	70.00	0.0007	1.705E-05
Be	9	1	No Gas	0.013	0	64.00	0.0007	1.705E-05
Be	9	1	No Gas	0.005	0	52.00	0.0007	1.705E-05
Se	78	2	H2	0.007	0	2.67	0.0002	6.062E-06
Se	78	2	H2	0.068	0	6.67	0.0002	6.062E-06
Se	78	2	H2	0.047	0	5.33	0.0002	6.062E-06
Na	23	3	He	-5.049	0.3247	15198.21	0.0037	0.3435
Na	23	3	He	-3.074	0.3321	15528.62	0.0037	0.3435
Na	23	3	He	-1.222	0.3389	15548.57	0.0037	0.3435
Mg	24	3	He	1.898	0.0064	300.01	0.0018	0.002943
Mg	24	3	He	0.847	0.0045	210.01	0.0018	0.002943
Mg	24	3	He	0.895	0.0046	210.01	0.0018	0.002943
Al	27	3	He	2.607	0.0026	120.01	0.0006	0.001008
Al	27	3	He	0.461	0.0013	60.00	0.0006	0.001008
Al	27	3	He	0.137	0.0011	50.00	0.0006	0.001008
K	39	3	He	-1.914	0.403	18862.76	0.0012	0.4052
K	39	3	He	-7.086	0.3969	18562.37	0.0012	0.4052
K	39	3	He	-5.346	0.399	18301.97	0.0012	0.4052
Ca	44	3	He	-25.829	0.0017	80.00	0.0001	0.003486
Ca	44	3	He	14.599	0.0045	210.01	0.0001	0.003486
Ca	44	3	He	-18.987	0.0022	100.00	0.0001	0.003486
Ti	47	3	He	0.395	0.0002	10.00	0.0005	0
Ti	47	3	He	1.58	0.0009	40.00	0.0005	0
Ti	47	3	He	1.208	0.0007	30.00	0.0005	0
V	51	3	He	-0.03	0.0303	1418.08	0.0223	0.03097
V	51	3	He	-0.012	0.0307	1436.08	0.0223	0.03097
V	51	3	He	-0.018	0.0306	1402.08	0.0223	0.03097
Cr	52	3	He	-0.26	0.032	1500.12	0.029	0.03958
Cr	52	3	He	-0.193	0.034	1590.16	0.029	0.03958
Cr	52	3	He	-0.042	0.0384	1760.16	0.029	0.03958
Mn	55	3	He	-0.08	0.0021	100.00	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.052	0.0038	180.01	0.013	0.003171
Mn	55	3	He	0.125	0.0048	220.01	0.013	0.003171
Fe	57	3	He	1.296	0.0028	130.01	0.0006	0.002014
Fe	57	3	He	0.574	0.0024	110.01	0.0006	0.002014
Fe	57	3	He	1.392	0.0028	130.00	0.0006	0.002014
Co	59	3	He	0.033	0.006	280.01	0.0572	0.004106
Co	59	3	He	0.018	0.0051	240.01	0.0572	0.004106
Co	59	3	He	0.031	0.0059	270.01	0.0572	0.004106
Ni	60	3	He	0.04	0.0037	290.01	0.0084	0.003329
Ni	60	3	He	-0.109	0.0024	190.01	0.0084	0.003329
Ni	60	3	He	-0.05	0.0029	230.01	0.0084	0.003329
Cu	63	3	He	0.043	0.0061	480.03	0.0247	0.004989
Cu	63	3	He	0.02	0.0055	430.02	0.0247	0.004989
Cu	63	3	He	0.1	0.0075	590.04	0.0247	0.004989
Zn	66	3	He	-0.535	0.0046	380.02	0.0029	0.006147
Zn	66	3	He	-0.581	0.0045	370.02	0.0029	0.006147
Zn	66	3	He	-0.476	0.0048	390.02	0.0029	0.006147
As	75	3	He	0.195	0.0013	108.00	0.002	0.0009198
As	75	3	He	0.097	0.0011	92.00	0.002	0.0009198
As	75	3	He	0.03	0.001	80.00	0.002	0.0009198
Sr	88	3	He	0.039	0.0008	70.00	0.0088	0.0005022
Sr	88	3	He	-0.002	0.0005	40.00	0.0088	0.0005022
Sr	88	3	He	-0.001	0.0005	40.00	0.0088	0.0005022
Mo	98	3	He	0.073	0.0023	190.01	0.0223	0.0006689
Mo	98	3	He	0.03	0.0013	110.00	0.0223	0.0006689
Mo	98	3	He	0.041	0.0016	130.01	0.0223	0.0006689
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.006	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.01	0.0001	6.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	0.009	0.0181	1490.14	0.0156	0.01794
Sn	120	3	He	0.108	0.0196	1620.17	0.0156	0.01794
Sn	120	3	He	-0.05	0.0172	1400.11	0.0156	0.01794
Sb	121	3	He	0.037	0.0006	50.00	0.0151	4.19E-05
Sb	121	3	He	0.037	0.0006	50.00	0.0151	4.19E-05
Sb	121	3	He	0.022	0.0004	30.00	0.0151	4.19E-05
Ba	137	3	He	0.056	0.0005	40.00	0.0049	0.0002094
Ba	137	3	He	-0.018	0.0001	10.00	0.0049	0.0002094
Ba	137	3	He	0.057	0.0005	40.00	0.0049	0.0002094
Tl	205	3	He	0.05	0.002	770.05	0.0252	0.0007688
Tl	205	3	He	0.029	0.0015	570.03	0.0252	0.0007688
Tl	205	3	He	0.022	0.0013	490.02	0.0252	0.0007688
Pb	208	3	He	-0.003	0.0016	230.01	0.0337	0.001742
Pb	208	3	He	-0.017	0.0012	220.01	0.0337	0.001742
Pb	208	3	He	0.002	0.0018	320.01	0.0337	0.001742
U	238	3	He	0.038	0.0023	690.05	0.0502	0.0004339
U	238	3	He	0.031	0.002	590.04	0.0502	0.0004339
U	238	3	He	0.039	0.0024	710.04	0.0502	0.0004339
Sc	45	1	No Gas			2431333.40		
Sc	45	1	No Gas			2410662.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2475321.37		
Ge	72	1	No Gas			1206907.56		
Ge	72	1	No Gas			1194829.36		
Ge	72	1	No Gas			1204482.79		
Sc	45	2	H2			177187.97		
Sc	45	2	H2			170712.09		
Sc	45	2	H2			171533.12		
Ge	72	2	H2			147161.00		
Ge	72	2	H2			144494.54		
Ge	72	2	H2			147069.66		
In	115	2	H2			368880.85		
In	115	2	H2			375154.25		
In	115	2	H2			376401.44		
Sc	45	3	He			46806.37		
Sc	45	3	He			46765.72		
Sc	45	3	He			45873.62		
Ge	72	3	He			79199.90		
Ge	72	3	He			78475.22		
Ge	72	3	He			79049.61		
In	115	3	He			82395.04		
In	115	3	He			82595.88		
In	115	3	He			81560.14		
Tb	159	3	He			377377.77		
Tb	159	3	He			378920.58		
Tb	159	3	He			372600.31		
Bi	209	3	He			293798.43		
Bi	209	3	He			295998.80		
Bi	209	3	He			294791.28		

Quantitation Report

Data File Name	073SMPL.d
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Acq Time	8/11/2023 9:34:53 AM
Sample Name	LCS 410-406254/2-A
Sample Type	Sample
Comment	A20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

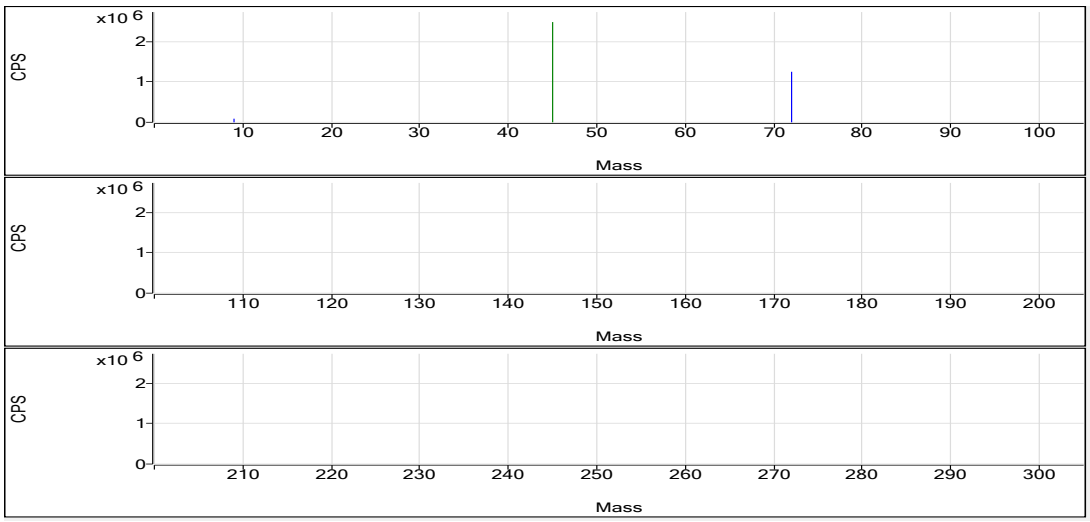
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.463	ppb	1.1	88846.22	0.0359	Pulse	0.5000	3
Se	78	115	H2	99.545	ppb	1.3	6676.23	0.0171	Pulse	1.5000	3
Na	23	45	He	4602.965	ppb	1.1	838730.17	17.4707	Pulse	0.1000	3
Mg	24	45	He	4866.038	ppb	1.8	426792.45	8.8907	Pulse	0.1000	3
Al	27	45	He	4820.073	ppb	0.3	138163.71	2.8779	Pulse	0.1000	3
K	39	45	He	4830.356	ppb	1.3	291749.77	6.0772	Pulse	0.1000	3
Ca	44	45	He	4889.527	ppb	1.9	16319.64	0.3399	Pulse	0.1000	3
Ti	47	45	He	499.234	ppb	5.6	12972.83	0.2702	Pulse	0.1000	3
V	51	45	He	486.816	ppb	1.1	521590.97	10.8649	Pulse	0.5000	3
Cr	52	45	He	482.600	ppb	0.6	672974.36	14.0179	Pulse	0.1000	3
Mn	55	45	He	482.612	ppb	0.7	301230.03	6.2745	Pulse	0.1000	3
Fe	57	45	He	4832.655	ppb	1.4	136756.07	2.8487	Pulse	0.1000	3
Co	59	45	He	468.603	ppb	2.1	1286751.99	26.8053	Pulse	0.1000	3
Ni	60	72	He	521.157	ppb	2.4	361627.02	4.3609	Pulse	0.1000	3
Cu	63	72	He	498.846	ppb	1.8	1022736.65	12.3324	Pulse	0.1000	3
Zn	66	115	He	512.119	ppb	0.5	123581.99	1.4748	Pulse	0.1000	3
As	75	115	He	509.052	ppb	0.7	85779.49	1.0237	Pulse	0.5000	3
Sr	88	115	He	50.959	ppb	4.2	37644.31	0.4493	Pulse	0.1000	3
Mo	98	115	He	48.995	ppb	0.7	91718.77	1.0946	Pulse	0.1000	3
Ag	107	115	He	49.769	ppb	0.5	196423.91	2.3441	Pulse	0.1000	3
Cd	111	115	He	50.842	ppb	0.5	22808.62	0.2722	Pulse	0.5000	3
Sn	120	115	He	101.408	ppb	1.6	133784.96	1.5966	Pulse	0.1000	3
Sb	121	115	He	95.678	ppb	0.9	121277.15	1.4473	Pulse	0.1000	3
Ba	137	115	He	501.768	ppb	1.3	205755.04	2.4556	Pulse	0.1000	3
Tl	205	159	He	100.623	ppb	0.7	980672.67	2.5407	Pulse	0.1000	3
Pb	208	159	He	50.212	ppb	0.7	654494.64	1.6957	Pulse	0.1000	3
U	238	209	He	49.092	ppb	0.6	743303.61	2.4624	Pulse	0.1000	3

ISTD Table:

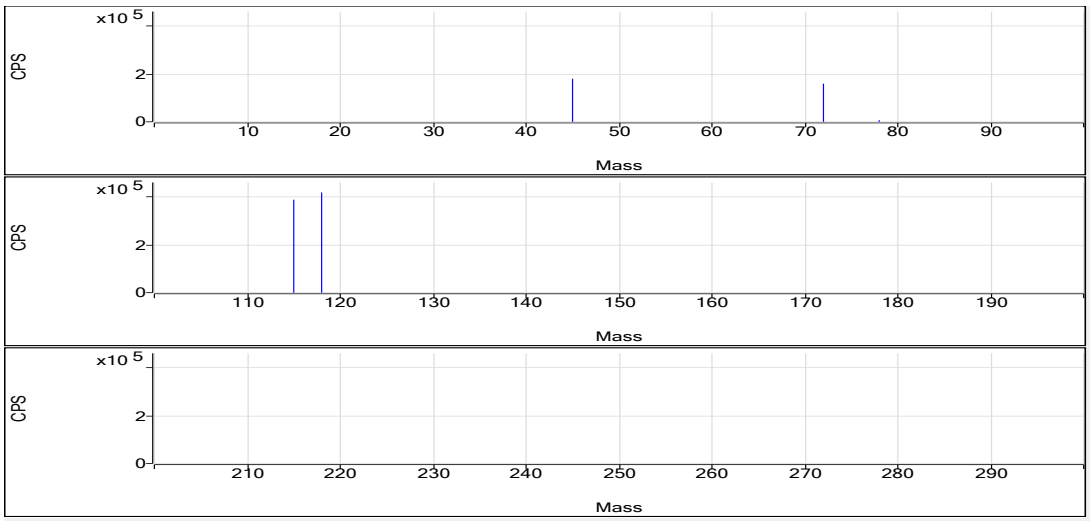
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2476912.15	1.8	105.5	Analog	0.1000	3
No Gas	Ge	72	1248553.58	1.3	104.1	Pulse	0.1000	3
H2	Sc	45	180565.64	1.1	103.9	Pulse	0.1000	3
H2	Ge	72	159813.12	0.5	106.9	Pulse	0.1000	3
H2	In	115	389660.27	0.7	106.5	Pulse	0.1000	3
He	Sc	45	48010.16	1.0	111.6	Pulse	0.1000	3
He	Ge	72	82947.55	1.7	106.1	Pulse	0.1000	3
He	In	115	83796.67	0.7	105.1	Pulse	0.1000	3
He	Tb	159	385986.61	0.6	104.9	Pulse	0.1000	3
He	Bi	209	301859.29	0.4	103.4	Pulse	0.1000	3

No Gas

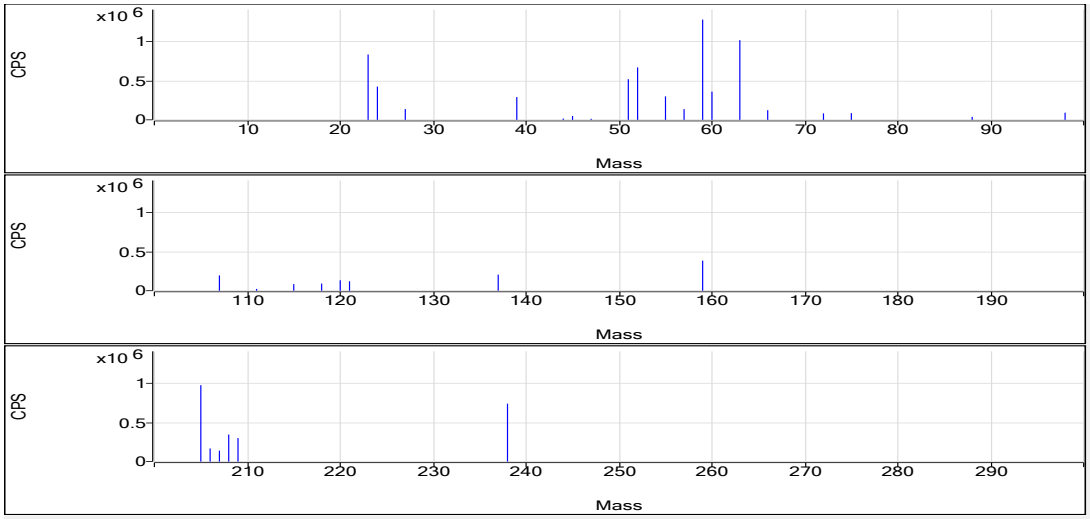


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.895	0.0362	87940.24	0.0007	1.705E-05
Be	9	1	No Gas	47.869	0.0354	89121.16	0.0007	1.705E-05
Be	9	1	No Gas	48.624	0.036	89477.26	0.0007	1.705E-05
Se	78	2	H2	100.717	0.0173	6706.91	0.0002	6.062E-06
Se	78	2	H2	99.763	0.0172	6686.90	0.0002	6.062E-06
Se	78	2	H2	98.155	0.0169	6634.88	0.0002	6.062E-06
Na	23	3	He	4642.262	17.6169	846502.17	0.0037	0.3435
Na	23	3	He	4621.833	17.5409	833514.75	0.0037	0.3435
Na	23	3	He	4544.8	17.2543	836173.58	0.0037	0.3435
Mg	24	3	He	4865.953	8.8905	427193.78	0.0018	0.002943
Mg	24	3	He	4954.224	9.0518	430123.63	0.0018	0.002943
Mg	24	3	He	4777.938	8.7298	423059.95	0.0018	0.002943
Al	27	3	He	4817.023	2.876	138195.29	0.0006	0.001008
Al	27	3	He	4837.848	2.8885	137255.35	0.0006	0.001008
Al	27	3	He	4805.346	2.8691	139040.50	0.0006	0.001008
K	39	3	He	4880.951	6.1366	294864.86	0.0012	0.4052
K	39	3	He	4850.513	6.1008	289900.78	0.0012	0.4052
K	39	3	He	4759.604	5.9941	290483.67	0.0012	0.4052
Ca	44	3	He	4988.614	0.3467	16659.92	0.0001	0.003486
Ca	44	3	He	4800.14	0.3337	15859.21	0.0001	0.003486
Ca	44	3	He	4879.827	0.3392	16439.80	0.0001	0.003486
Ti	47	3	He	531.27	0.2876	13816.97	0.0005	0
Ti	47	3	He	485.847	0.263	12495.70	0.0005	0
Ti	47	3	He	480.586	0.2601	12605.82	0.0005	0
V	51	3	He	489.192	10.9178	524604.06	0.0223	0.03097
V	51	3	He	490.733	10.9521	520423.91	0.0223	0.03097
V	51	3	He	480.522	10.7248	519744.94	0.0223	0.03097
Cr	52	3	He	481.51	13.9863	672047.80	0.029	0.03958
Cr	52	3	He	485.903	14.1135	670650.85	0.029	0.03958
Cr	52	3	He	480.387	13.9538	676224.44	0.029	0.03958
Mn	55	3	He	479.378	6.2325	299472.20	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	486.201	6.3211	300368.61	0.013	0.003171
Mn	55	3	He	482.258	6.2699	303849.29	0.013	0.003171
Fe	57	3	He	4885.174	2.8796	138366.55	0.0006	0.002014
Fe	57	3	He	4859.56	2.8645	136117.14	0.0006	0.002014
Fe	57	3	He	4753.232	2.8019	135784.52	0.0006	0.002014
Co	59	3	He	465.615	26.6344	1279797.17	0.0572	0.004106
Co	59	3	He	479.673	27.4385	1303829.20	0.0572	0.004106
Co	59	3	He	460.52	26.343	1276629.59	0.0572	0.004106
Ni	60	3	He	527.842	4.4168	362732.46	0.0084	0.003329
Ni	60	3	He	506.65	4.2396	358369.92	0.0084	0.003329
Ni	60	3	He	528.98	4.4263	363778.67	0.0084	0.003329
Cu	63	3	He	504.557	12.4735	1024403.66	0.0247	0.004989
Cu	63	3	He	488.551	12.0779	1020947.64	0.0247	0.004989
Cu	63	3	He	503.429	12.4456	1022858.66	0.0247	0.004989
Zn	66	3	He	514.414	1.4814	123388.12	0.0029	0.006147
Zn	66	3	He	509.726	1.468	123991.38	0.0029	0.006147
Zn	66	3	He	512.217	1.4751	123366.47	0.0029	0.006147
As	75	3	He	512.783	1.0312	85889.63	0.002	0.0009198
As	75	3	He	505.97	1.0175	85943.72	0.002	0.0009198
As	75	3	He	508.402	1.0224	85505.12	0.002	0.0009198
Sr	88	3	He	53.387	0.4707	39205.06	0.0088	0.0005022
Sr	88	3	He	49.261	0.4344	36688.57	0.0088	0.0005022
Sr	88	3	He	50.228	0.4429	37039.29	0.0088	0.0005022
Mo	98	3	He	49.356	1.1026	91839.17	0.0223	0.0006689
Mo	98	3	He	48.974	1.0941	92412.24	0.0223	0.0006689
Mo	98	3	He	48.655	1.087	90904.91	0.0223	0.0006689
Ag	107	3	He	50.065	2.358	196404.84	0.0471	0.0006687
Ag	107	3	He	49.672	2.3395	197610.54	0.0471	0.0006687
Ag	107	3	He	49.569	2.3347	195256.36	0.0471	0.0006687
Cd	111	3	He	51.113	0.2736	22792.57	0.0054	1.676E-05
Cd	111	3	He	50.651	0.2712	22904.80	0.0054	1.676E-05
Cd	111	3	He	50.762	0.2718	22728.49	0.0054	1.676E-05
Sn	120	3	He	103.207	1.6246	135316.03	0.0156	0.01794
Sn	120	3	He	101.012	1.5904	134336.96	0.0156	0.01794
Sn	120	3	He	100.005	1.5748	131701.90	0.0156	0.01794
Sb	121	3	He	96.431	1.4587	121499.48	0.0151	4.19E-05
Sb	121	3	He	94.782	1.4338	121105.68	0.0151	4.19E-05
Sb	121	3	He	95.822	1.4495	121226.30	0.0151	4.19E-05
Ba	137	3	He	505.873	2.4757	206201.40	0.0049	0.0002094
Ba	137	3	He	494.029	2.4177	204211.33	0.0049	0.0002094
Ba	137	3	He	505.401	2.4733	206852.38	0.0049	0.0002094
Tl	205	3	He	100.349	2.5338	985158.11	0.0252	0.0007688
Tl	205	3	He	101.47	2.5621	985263.74	0.0252	0.0007688
Tl	205	3	He	100.051	2.5263	971596.16	0.0252	0.0007688
Pb	208	3	He	49.852	1.6836	348281.83	0.0337	0.001742
Pb	208	3	He	50.266	1.6975	345638.24	0.0337	0.001742
Pb	208	3	He	50.518	1.706	346598.94	0.0337	0.001742
U	238	3	He	49.021	2.4588	745240.30	0.0502	0.0004339
U	238	3	He	49.405	2.4781	746632.65	0.0502	0.0004339
U	238	3	He	48.851	2.4503	738037.88	0.0502	0.0004339
Sc	45	1	No Gas			2429712.46		
Sc	45	1	No Gas			2515081.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2485942.31		
Ge	72	1	No Gas			1233876.47		
Ge	72	1	No Gas			1245831.08		
Ge	72	1	No Gas			1265953.18		
Sc	45	2	H2			178483.40		
Sc	45	2	H2			180682.07		
Sc	45	2	H2			182531.44		
Ge	72	2	H2			160636.06		
Ge	72	2	H2			159249.55		
Ge	72	2	H2			159553.76		
In	115	2	H2			386874.06		
In	115	2	H2			389404.68		
In	115	2	H2			392702.06		
Sc	45	3	He			48050.45		
Sc	45	3	He			47518.27		
Sc	45	3	He			48461.76		
Ge	72	3	He			82126.44		
Ge	72	3	He			84529.97		
Ge	72	3	He			82186.23		
In	115	3	He			84013.59		
In	115	3	He			85180.95		
In	115	3	He			84345.62		
Tb	159	3	He			388807.18		
Tb	159	3	He			384554.45		
Tb	159	3	He			384598.20		
Bi	209	3	He			303085.23		
Bi	209	3	He			301293.75		
Bi	209	3	He			301198.88		

Quantitation Report

Data File Name	074SMPL.d
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Sample Name	410-137860-B-1-B
Sample Type	Sample
Comment	A20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

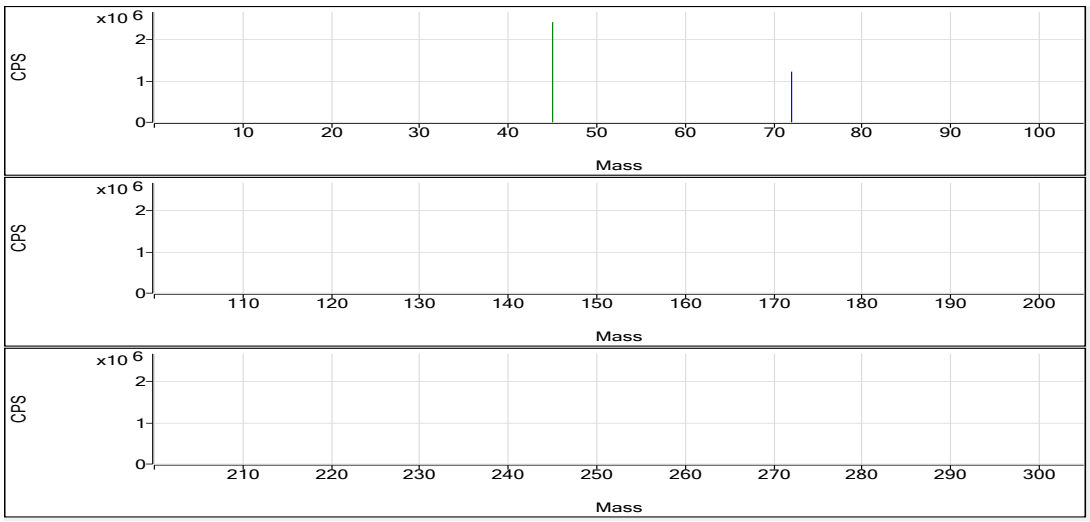
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	43.3	62.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.385	ppb	13.7	27.33	0.0001	Pulse	1.5000	3
Na	23	45	He	87202.228	ppb	1.9	15276991.85	324.8154	Analog	0.1000	3
Mg	24	45	He	20955.432	ppb	1.1	1800500.60	38.2777	Analog	0.1000	3
Al	27	45	He	3.411	ppb	38.8	143.34	0.0030	Pulse	0.1000	3
K	39	45	He	5759.728	ppb	2.5	337136.48	7.1684	Pulse	0.1000	3
Ca	44	45	He	46535.063	ppb	1.0	150767.61	3.2052	Pulse	0.1000	3
Ti	47	45	He	0.261	ppb	86.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.005	ppb	2210.3	1460.75	0.0311	Pulse	0.5000	3
Cr	52	45	He	-0.158	ppb	N/A	1646.82	0.0350	Pulse	0.1000	3
Mn	55	45	He	2138.923	ppb	0.8	1307630.06	27.7974	Mix	0.1000	3
Fe	57	45	He	5.495	ppb	22.3	246.68	0.0053	Pulse	0.1000	3
Co	59	45	He	1.258	ppb	10.2	3573.90	0.0760	Pulse	0.1000	3
Ni	60	72	He	1.143	ppb	22.1	1056.74	0.0129	Pulse	0.1000	3
Cu	63	72	He	0.137	ppb	19.1	686.71	0.0084	Pulse	0.1000	3
Zn	66	115	He	6.931	ppb	6.0	2153.58	0.0260	Pulse	0.1000	3
As	75	115	He	0.243	ppb	46.4	116.67	0.0014	Pulse	0.5000	3
Sr	88	115	He	282.746	ppb	1.3	206069.63	2.4907	Pulse	0.1000	3
Mo	98	115	He	0.392	ppb	12.2	780.05	0.0094	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	74.1	90.00	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.042	ppb	38.8	20.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.293	ppb	N/A	1106.75	0.0134	Pulse	0.1000	3
Sb	121	115	He	0.274	ppb	7.3	346.68	0.0042	Pulse	0.1000	3
Ba	137	115	He	60.654	ppb	1.5	24572.80	0.2970	Pulse	0.1000	3
Tl	205	159	He	0.164	ppb	15.1	1860.21	0.0049	Pulse	0.1000	3
Pb	208	159	He	-0.010	ppb	N/A	536.70	0.0014	Pulse	0.1000	3
U	238	209	He	0.118	ppb	14.2	1883.55	0.0064	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2430352.15	1.9	103.5	Analog	0.1000	3
No Gas	Ge	72	1228045.58	0.7	102.3	Pulse	0.1000	3
H2	Sc	45	177359.87	0.4	102.1	Pulse	0.1000	3
H2	Ge	72	156433.06	0.4	104.6	Pulse	0.1000	3
H2	In	115	378062.87	1.1	103.3	Pulse	0.1000	3
He	Sc	45	47043.45	1.8	109.3	Pulse	0.1000	3
He	Ge	72	82008.24	0.5	104.9	Pulse	0.1000	3
He	In	115	82746.38	1.7	103.8	Pulse	0.1000	3
He	Tb	159	379667.64	0.2	103.2	Pulse	0.1000	3
He	Bi	209	295582.70	0.4	101.2	Pulse	0.1000	3

No Gas



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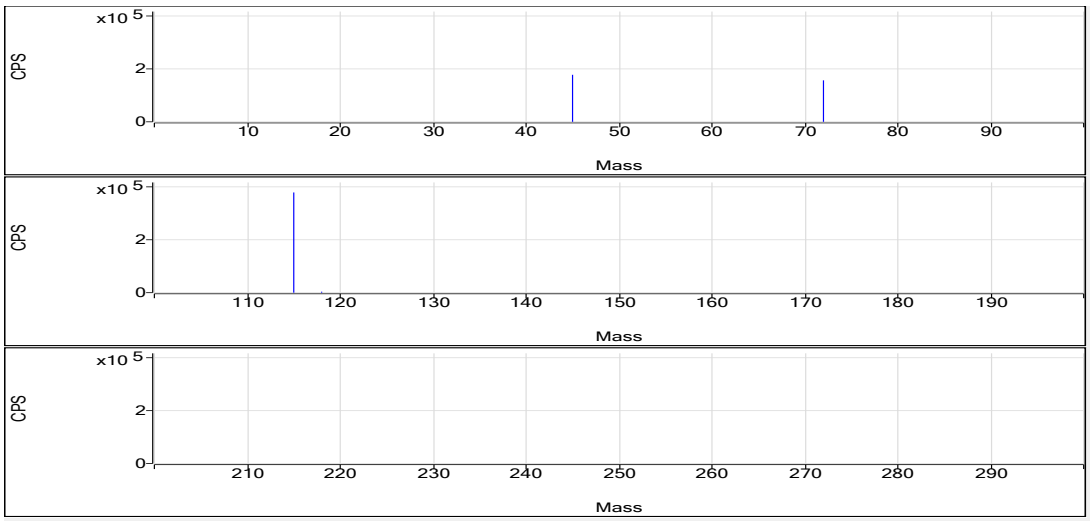
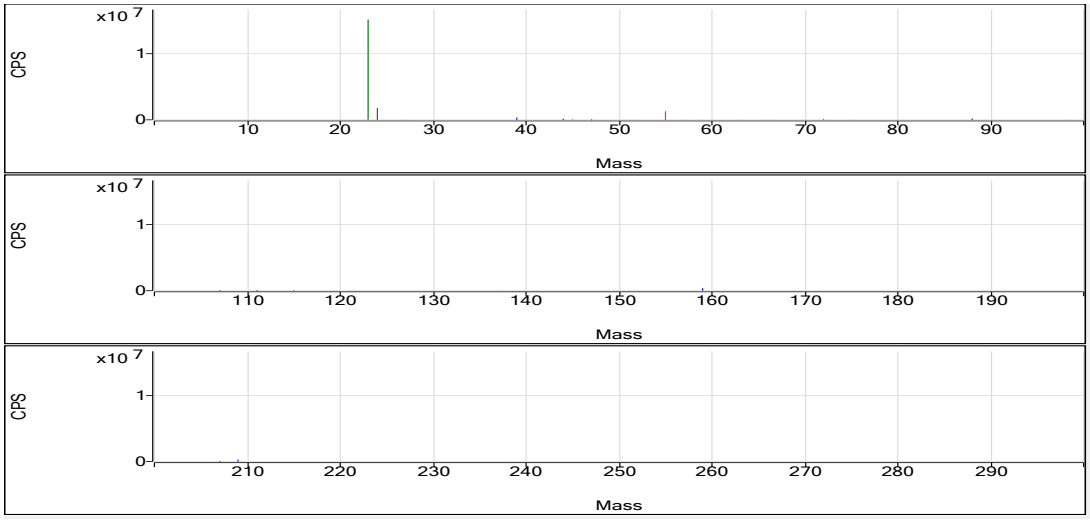


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.018	0	74.00	0.0007	1.705E-05
Be	9	1	No Gas	0.009	0	56.00	0.0007	1.705E-05
Be	9	1	No Gas	0.009	0	58.00	0.0007	1.705E-05
Se	78	2	H2	0.4	0.0001	28.67	0.0002	6.062E-06
Se	78	2	H2	0.428	0.0001	30.00	0.0002	6.062E-06
Se	78	2	H2	0.326	0.0001	23.33	0.0002	6.062E-06
Na	23	3	He	87934.508	327.5402	15261938.52	0.0037	0.3435
Na	23	3	He	88397.533	329.2631	15322211.02	0.0037	0.3435
Na	23	3	He	85274.643	317.6431	15246826.02	0.0037	0.3435
Mg	24	3	He	21137.273	38.6098	1799048.72	0.0018	0.002943
Mg	24	3	He	21021.321	38.398	1786847.47	0.0018	0.002943
Mg	24	3	He	20707.701	37.8252	1815605.60	0.0018	0.002943
Al	27	3	He	4.424	0.0036	170.01	0.0006	0.001008
Al	27	3	He	1.912	0.0021	100.00	0.0006	0.001008
Al	27	3	He	3.897	0.0033	160.01	0.0006	0.001008
K	39	3	He	5815.426	7.2339	337065.74	0.0012	0.4052
K	39	3	He	5866.898	7.2943	339438.78	0.0012	0.4052
K	39	3	He	5596.859	6.9772	334904.92	0.0012	0.4052
Ca	44	3	He	46787.428	3.2226	150158.86	0.0001	0.003486
Ca	44	3	He	46816.761	3.2246	150056.97	0.0001	0.003486
Ca	44	3	He	46001	3.1685	152086.99	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.397	0.0002	10.00	0.0005	0
Ti	47	3	He	0.385	0.0002	10.00	0.0005	0
V	51	3	He	0.066	0.0325	1512.09	0.0223	0.03097
V	51	3	He	0.066	0.0325	1510.09	0.0223	0.03097
V	51	3	He	-0.118	0.0283	1360.07	0.0223	0.03097
Cr	52	3	He	-0.129	0.0358	1670.16	0.029	0.03958
Cr	52	3	He	-0.142	0.0355	1650.16	0.029	0.03958
Cr	52	3	He	-0.201	0.0338	1620.14	0.029	0.03958
Mn	55	3	He	2158.818	28.056	1307285.68	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2128.953	27.6679	1287521.70	0.013	0.003171
Mn	55	3	He	2128.997	27.6685	1328082.79	0.013	0.003171
Fe	57	3	He	5.325	0.0052	240.01	0.0006	0.002014
Fe	57	3	He	6.796	0.006	280.01	0.0006	0.002014
Fe	57	3	He	4.362	0.0046	220.01	0.0006	0.002014
Co	59	3	He	1.373	0.0826	3850.64	0.0572	0.004106
Co	59	3	He	1.281	0.0774	3600.58	0.0572	0.004106
Co	59	3	He	1.12	0.0681	3270.49	0.0572	0.004106
Ni	60	3	He	1.257	0.0138	1140.08	0.0084	0.003329
Ni	60	3	He	1.319	0.0144	1170.09	0.0084	0.003329
Ni	60	3	He	0.854	0.0105	860.05	0.0084	0.003329
Cu	63	3	He	0.108	0.0076	630.04	0.0247	0.004989
Cu	63	3	He	0.146	0.0086	700.03	0.0247	0.004989
Cu	63	3	He	0.158	0.0089	730.05	0.0247	0.004989
Zn	66	3	He	6.491	0.0248	2030.21	0.0029	0.006147
Zn	66	3	He	7.316	0.0271	2220.28	0.0029	0.006147
Zn	66	3	He	6.987	0.0262	2210.25	0.0029	0.006147
As	75	3	He	0.149	0.0012	100.00	0.002	0.0009198
As	75	3	He	0.211	0.0013	110.00	0.002	0.0009198
As	75	3	He	0.368	0.0017	140.00	0.002	0.0009198
Sr	88	3	He	283.581	2.4981	204805.31	0.0088	0.0005022
Sr	88	3	He	285.877	2.5183	206113.75	0.0088	0.0005022
Sr	88	3	He	278.778	2.4558	207289.84	0.0088	0.0005022
Mo	98	3	He	0.342	0.0083	680.05	0.0223	0.0006689
Mo	98	3	He	0.397	0.0095	780.05	0.0223	0.0006689
Mo	98	3	He	0.437	0.0104	880.06	0.0223	0.0006689
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	0.012	0.0012	100.00	0.0471	0.0006687
Ag	107	3	He	0.013	0.0013	110.00	0.0471	0.0006687
Cd	111	3	He	0.024	0.0001	12.00	0.0054	1.676E-05
Cd	111	3	He	0.056	0.0003	26.00	0.0054	1.676E-05
Cd	111	3	He	0.046	0.0003	22.00	0.0054	1.676E-05
Sn	120	3	He	-0.298	0.0133	1090.09	0.0156	0.01794
Sn	120	3	He	-0.266	0.0138	1130.09	0.0156	0.01794
Sn	120	3	He	-0.315	0.013	1100.08	0.0156	0.01794
Sb	121	3	He	0.255	0.0039	320.01	0.0151	4.19E-05
Sb	121	3	He	0.272	0.0042	340.02	0.0151	4.19E-05
Sb	121	3	He	0.295	0.0045	380.02	0.0151	4.19E-05
Ba	137	3	He	61.408	0.3007	24652.87	0.0049	0.0002094
Ba	137	3	He	60.886	0.2982	24402.48	0.0049	0.0002094
Ba	137	3	He	59.668	0.2922	24663.04	0.0049	0.0002094
Tl	205	3	He	0.191	0.0056	2120.27	0.0252	0.0007688
Tl	205	3	He	0.142	0.0044	1650.16	0.0252	0.0007688
Tl	205	3	He	0.158	0.0048	1810.20	0.0252	0.0007688
Pb	208	3	He	-0.008	0.0015	260.01	0.0337	0.001742
Pb	208	3	He	-0.015	0.0012	210.01	0.0337	0.001742
Pb	208	3	He	-0.006	0.0015	310.02	0.0337	0.001742
U	238	3	He	0.103	0.0056	1650.15	0.0502	0.0004339
U	238	3	He	0.116	0.0063	1860.21	0.0502	0.0004339
U	238	3	He	0.136	0.0073	2140.28	0.0502	0.0004339
Sc	45	1	No Gas			2457606.84		
Sc	45	1	No Gas			2377593.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2455856.21		
Ge	72	1	No Gas			1237387.40		
Ge	72	1	No Gas			1219417.25		
Ge	72	1	No Gas			1227332.09		
Sc	45	2	H2			178129.39		
Sc	45	2	H2			176772.67		
Sc	45	2	H2			177177.56		
Ge	72	2	H2			156227.37		
Ge	72	2	H2			155996.23		
Ge	72	2	H2			157075.59		
In	115	2	H2			382617.10		
In	115	2	H2			376319.06		
In	115	2	H2			375252.46		
Sc	45	3	He			46595.62		
Sc	45	3	He			46534.86		
Sc	45	3	He			47999.87		
Ge	72	3	He			82386.74		
Ge	72	3	He			81511.72		
Ge	72	3	He			82126.27		
In	115	3	He			81991.26		
In	115	3	He			81851.02		
In	115	3	He			84415.51		
Tb	159	3	He			379829.13		
Tb	159	3	He			378726.40		
Tb	159	3	He			380447.38		
Bi	209	3	He			295452.96		
Bi	209	3	He			296729.39		
Bi	209	3	He			294565.74		

Quantitation Report

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Sample Name	410-137860-B-1-B PDS
Sample Type	Sample
Comment	A20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

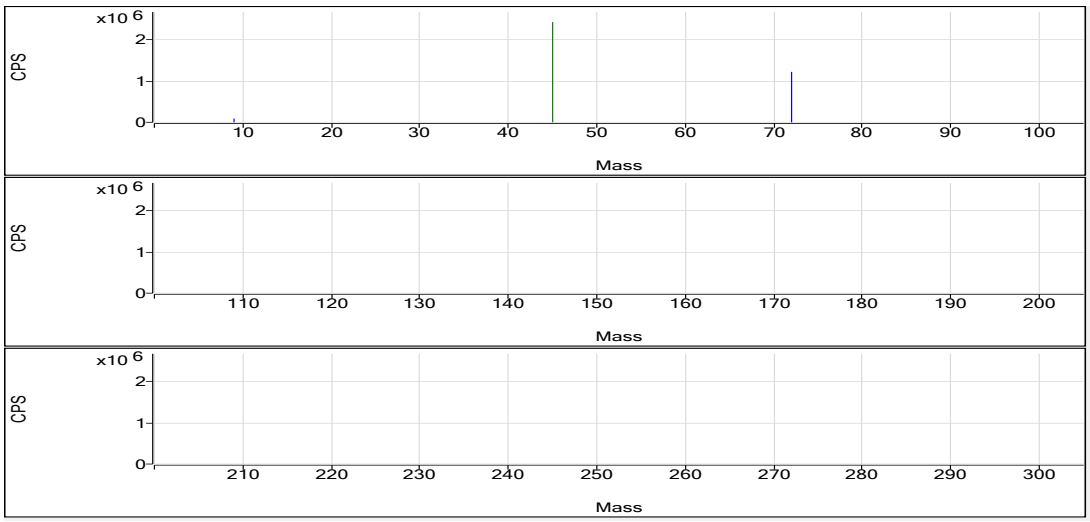
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.924	ppb	2.3	91897.67	0.0377	Pulse	0.5000	3
Se	78	115	H2	105.973	ppb	0.3	6865.21	0.0182	Pulse	1.5000	3
Na	23	45	He	89568.991	ppb	0.6	15685779.77	333.6220	Analog	0.1000	3
Mg	24	45	He	25417.136	ppb	1.6	2182795.75	46.4269	Analog	0.1000	3
Al	27	45	He	5046.028	ppb	2.5	141645.86	3.0127	Pulse	0.1000	3
K	39	45	He	10688.953	ppb	1.1	609158.39	12.9565	Pulse	0.1000	3
Ca	44	45	He	50815.814	ppb	1.6	164544.13	3.4998	Pulse	0.1000	3
Ti	47	45	He	545.041	ppb	4.7	13870.39	0.2950	Pulse	0.1000	3
V	51	45	He	513.948	ppb	0.5	539217.06	11.4687	Pulse	0.5000	3
Cr	52	45	He	503.897	ppb	0.6	688072.10	14.6347	Pulse	0.1000	3
Mn	55	45	He	2668.164	ppb	0.6	1630282.74	34.6747	Analog	0.1000	3
Fe	57	45	He	5066.346	ppb	1.1	140404.30	2.9863	Pulse	0.1000	3
Co	59	45	He	482.398	ppb	0.6	1297379.88	27.5943	Pulse	0.1000	3
Ni	60	72	He	523.619	ppb	1.2	360110.20	4.3814	Pulse	0.1000	3
Cu	63	72	He	511.194	ppb	1.1	1038652.38	12.6375	Pulse	0.1000	3
Zn	66	115	He	538.642	ppb	2.7	126968.54	1.5509	Pulse	0.1000	3
As	75	115	He	540.733	ppb	2.0	89026.48	1.0873	Pulse	0.5000	3
Sr	88	115	He	331.834	ppb	1.6	239338.25	2.9231	Pulse	0.1000	3
Mo	98	115	He	51.933	ppb	2.2	94986.57	1.1601	Pulse	0.1000	3
Ag	107	115	He	52.527	ppb	1.7	202564.81	2.4740	Pulse	0.1000	3
Cd	111	115	He	53.147	ppb	1.5	23300.77	0.2845	Pulse	0.5000	3
Sn	120	115	He	107.839	ppb	1.7	138923.84	1.6967	Pulse	0.1000	3
Sb	121	115	He	101.799	ppb	2.2	126079.93	1.5399	Pulse	0.1000	3
Ba	137	115	He	591.167	ppb	2.0	236869.73	2.8930	Pulse	0.1000	3
Tl	205	159	He	104.156	ppb	1.4	998476.42	2.6299	Pulse	0.1000	3
Pb	208	159	He	52.042	ppb	0.8	667249.24	1.7574	Pulse	0.1000	3
U	238	209	He	52.120	ppb	0.9	775886.47	2.6142	Pulse	0.1000	3

ISTD Table:

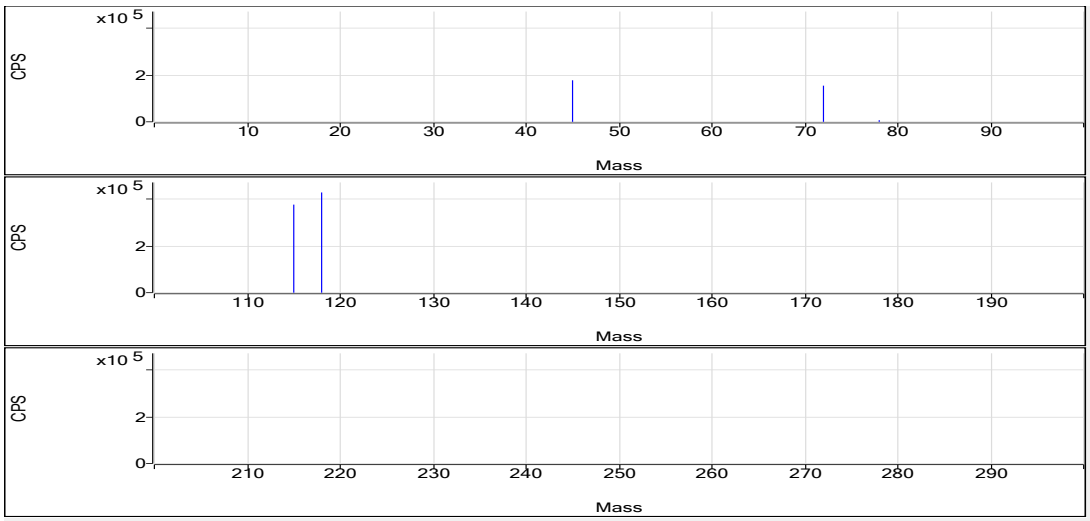
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2438841.99	2.5	103.9	Analog	0.1000	3
No Gas	Ge	72	1226817.09	0.8	102.2	Pulse	0.1000	3
H2	Sc	45	177491.70	1.4	102.1	Pulse	0.1000	3
H2	Ge	72	154450.48	1.0	103.3	Pulse	0.1000	3
H2	In	115	376369.74	0.1	102.8	Pulse	0.1000	3
He	Sc	45	47016.77	0.3	109.3	Pulse	0.1000	3
He	Ge	72	82192.95	0.9	105.2	Pulse	0.1000	3
He	In	115	81895.84	1.9	102.7	Pulse	0.1000	3
He	Tb	159	379695.00	0.9	103.2	Pulse	0.1000	3
He	Bi	209	296802.91	0.6	101.6	Pulse	0.1000	3

No Gas

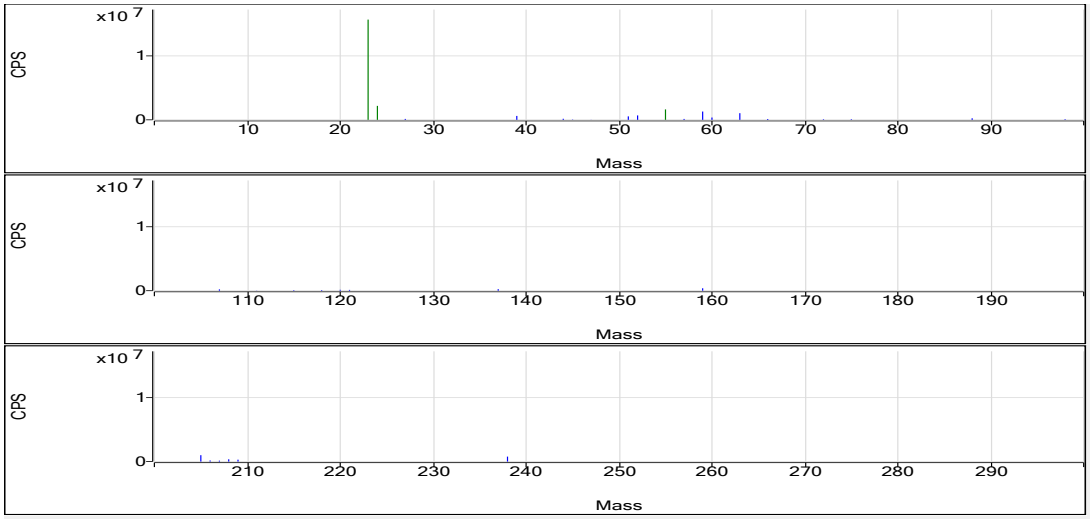


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	52.254	0.0387	91609.82	0.0007	1.705E-05
Be	9	1	No Gas	50.112	0.0371	91469.10	0.0007	1.705E-05
Be	9	1	No Gas	50.405	0.0373	92614.08	0.0007	1.705E-05
Se	78	2	H2	105.619	0.0182	6850.31	0.0002	6.062E-06
Se	78	2	H2	106.205	0.0183	6877.66	0.0002	6.062E-06
Se	78	2	H2	106.095	0.0183	6867.66	0.0002	6.062E-06
Na	23	3	He	90098.961	335.5939	15738171.02	0.0037	0.3435
Na	23	3	He	89568.22	333.6191	15742531.02	0.0037	0.3435
Na	23	3	He	89039.792	331.6529	15576637.27	0.0037	0.3435
Mg	24	3	He	25874.518	47.2623	2216436.22	0.0018	0.002943
Mg	24	3	He	25204.473	46.0385	2172425.12	0.0018	0.002943
Mg	24	3	He	25172.416	45.9799	2159525.91	0.0018	0.002943
Al	27	3	He	5183.674	3.0949	145139.01	0.0006	0.001008
Al	27	3	He	5025.163	3.0003	141574.35	0.0006	0.001008
Al	27	3	He	4929.247	2.943	138224.22	0.0006	0.001008
K	39	3	He	10806.147	13.0941	614065.73	0.0012	0.4052
K	39	3	He	10582.371	12.8313	605472.73	0.0012	0.4052
K	39	3	He	10678.34	12.944	607936.71	0.0012	0.4052
Ca	44	3	He	51734.01	3.5629	167089.08	0.0001	0.003486
Ca	44	3	He	50455.456	3.475	163973.75	0.0001	0.003486
Ca	44	3	He	50257.976	3.4614	162569.55	0.0001	0.003486
Ti	47	3	He	520.685	0.2818	13216.47	0.0005	0
Ti	47	3	He	542.556	0.2937	13856.97	0.0005	0
Ti	47	3	He	571.881	0.3095	14537.72	0.0005	0
V	51	3	He	516.906	11.5345	540929.63	0.0223	0.03097
V	51	3	He	512.035	11.4261	539167.31	0.0223	0.03097
V	51	3	He	512.902	11.4454	537554.25	0.0223	0.03097
Cr	52	3	He	507.496	14.739	691205.54	0.029	0.03958
Cr	52	3	He	502.19	14.5853	688237.88	0.029	0.03958
Cr	52	3	He	502.006	14.58	684772.88	0.029	0.03958
Mn	55	3	He	2684.899	34.8922	1636318.73	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2664.6	34.6284	1634013.88	0.013	0.003171
Mn	55	3	He	2654.991	34.5035	1620515.60	0.013	0.003171
Fe	57	3	He	5112.338	3.0134	141318.76	0.0006	0.002014
Fe	57	3	He	5006.598	2.9511	139255.59	0.0006	0.002014
Fe	57	3	He	5080.102	2.9944	140638.54	0.0006	0.002014
Co	59	3	He	485.777	27.7876	1303139.75	0.0572	0.004106
Co	59	3	He	479.64	27.4366	1294655.29	0.0572	0.004106
Co	59	3	He	481.776	27.5588	1294344.59	0.0572	0.004106
Ni	60	3	He	527.49	4.4138	364446.83	0.0084	0.003329
Ni	60	3	He	526.809	4.4081	358424.68	0.0084	0.003329
Ni	60	3	He	516.558	4.3224	357459.10	0.0084	0.003329
Cu	63	3	He	511.908	12.6551	1044930.84	0.0247	0.004989
Cu	63	3	He	516.351	12.7649	1037917.95	0.0247	0.004989
Cu	63	3	He	505.321	12.4924	1033108.34	0.0247	0.004989
Zn	66	3	He	531.229	1.5296	127100.65	0.0029	0.006147
Zn	66	3	He	555.114	1.5981	128006.79	0.0029	0.006147
Zn	66	3	He	529.583	1.5249	125798.18	0.0029	0.006147
As	75	3	He	530.342	1.0665	88616.04	0.002	0.0009198
As	75	3	He	552.274	1.1105	88951.93	0.002	0.0009198
As	75	3	He	539.585	1.085	89511.46	0.002	0.0009198
Sr	88	3	He	328.955	2.8977	240779.68	0.0088	0.0005022
Sr	88	3	He	338.097	2.9782	238551.68	0.0088	0.0005022
Sr	88	3	He	328.45	2.8933	238683.39	0.0088	0.0005022
Mo	98	3	He	51.537	1.1513	95664.51	0.0223	0.0006689
Mo	98	3	He	53.2	1.1884	95191.23	0.0223	0.0006689
Mo	98	3	He	51.062	1.1407	94103.97	0.0223	0.0006689
Ag	107	3	He	52.075	2.4527	203799.41	0.0471	0.0006687
Ag	107	3	He	53.541	2.5217	201983.57	0.0471	0.0006687
Ag	107	3	He	51.965	2.4475	201911.44	0.0471	0.0006687
Cd	111	3	He	52.294	0.28	23263.33	0.0054	1.676E-05
Cd	111	3	He	53.324	0.2855	22866.77	0.0054	1.676E-05
Cd	111	3	He	53.824	0.2882	23772.20	0.0054	1.676E-05
Sn	120	3	He	106.29	1.6726	138980.71	0.0156	0.01794
Sn	120	3	He	109.837	1.7278	138395.12	0.0156	0.01794
Sn	120	3	He	107.39	1.6897	139395.68	0.0156	0.01794
Sb	121	3	He	100.811	1.525	126715.54	0.0151	4.19E-05
Sb	121	3	He	104.388	1.5791	126482.23	0.0151	4.19E-05
Sb	121	3	He	100.2	1.5157	125042.02	0.0151	4.19E-05
Ba	137	3	He	586.838	2.8718	238630.25	0.0049	0.0002094
Ba	137	3	He	604.674	2.9591	237020.78	0.0049	0.0002094
Ba	137	3	He	581.989	2.8481	234958.16	0.0049	0.0002094
Tl	205	3	He	102.469	2.5873	991283.81	0.0252	0.0007688
Tl	205	3	He	105.303	2.6588	1001156.78	0.0252	0.0007688
Tl	205	3	He	104.697	2.6435	1002988.66	0.0252	0.0007688
Pb	208	3	He	51.718	1.7465	355173.39	0.0337	0.001742
Pb	208	3	He	52.544	1.7744	356939.80	0.0337	0.001742
Pb	208	3	He	51.863	1.7514	351459.25	0.0337	0.001742
U	238	3	He	52.439	2.6303	777331.86	0.0502	0.0004339
U	238	3	He	52.331	2.6249	776678.04	0.0502	0.0004339
U	238	3	He	51.589	2.5876	773649.52	0.0502	0.0004339
Sc	45	1	No Gas			2368463.87		
Sc	45	1	No Gas			2465841.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2482220.43		
Ge	72	1	No Gas			1215234.83		
Ge	72	1	No Gas			1234328.11		
Ge	72	1	No Gas			1230888.34		
Sc	45	2	H2			178141.81		
Sc	45	2	H2			179596.93		
Sc	45	2	H2			174736.36		
Ge	72	2	H2			156053.91		
Ge	72	2	H2			154254.76		
Ge	72	2	H2			153042.76		
In	115	2	H2			376811.09		
In	115	2	H2			376228.59		
In	115	2	H2			376069.53		
Sc	45	3	He			46896.47		
Sc	45	3	He			47187.14		
Sc	45	3	He			46966.69		
Ge	72	3	He			82569.63		
Ge	72	3	He			81310.11		
Ge	72	3	He			82699.12		
In	115	3	He			83843.41		
In	115	3	He			80844.30		
In	115	3	He			83229.02		
Tb	159	3	He			383134.13		
Tb	159	3	He			376539.56		
Tb	159	3	He			379411.32		
Bi	209	3	He			295534.86		
Bi	209	3	He			295892.71		
Bi	209	3	He			298981.17		

Quantitation Report

Data File Name	076SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:41:03 AM
Sample Name	410-137860-B-1-B SD @5
Sample Type	Sample
Comment	A20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

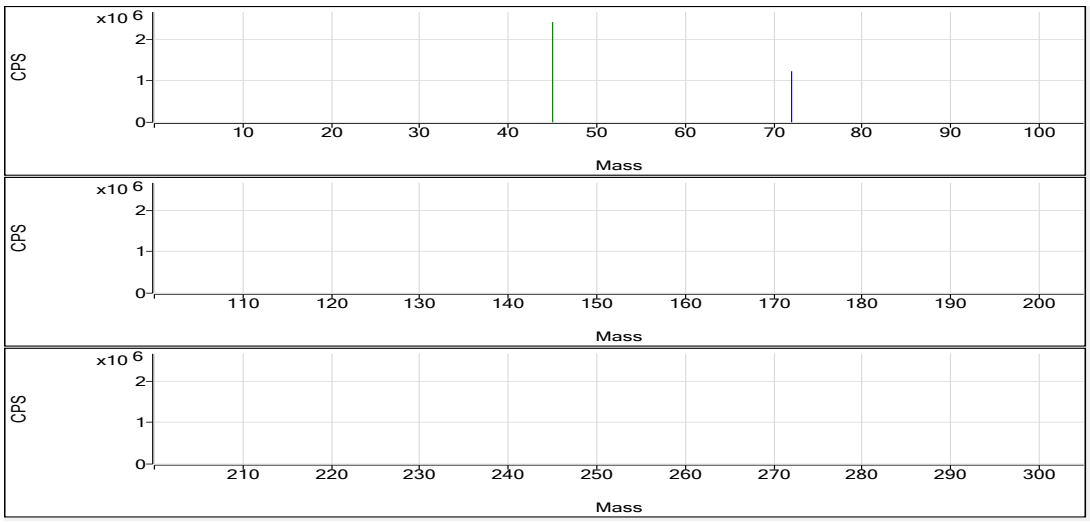
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.024	ppb	30.1	84.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.204	ppb	21.5	15.56	0.0000	Pulse	1.5000	3
Na	23	45	He	16583.280	ppb	2.6	2901260.48	62.0484	Analog	0.1000	3
Mg	24	45	He	3818.005	ppb	1.1	326250.54	6.9765	Pulse	0.1000	3
Al	27	45	He	2.602	ppb	67.1	120.00	0.0026	Pulse	0.1000	3
K	39	45	He	1101.167	ppb	2.9	79409.25	1.6983	Pulse	0.1000	3
Ca	44	45	He	8737.764	ppb	3.1	28271.53	0.6047	Pulse	0.1000	3
Ti	47	45	He	0.393	ppb	99.0	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.043	ppb	N/A	1403.41	0.0300	Pulse	0.5000	3
Cr	52	45	He	0.019	ppb	281.3	1876.86	0.0401	Pulse	0.1000	3
Mn	55	45	He	400.977	ppb	0.5	243833.24	5.2137	Pulse	0.1000	3
Fe	57	45	He	1.530	ppb	92.4	136.67	0.0029	Pulse	0.1000	3
Co	59	45	He	0.284	ppb	11.1	950.06	0.0203	Pulse	0.1000	3
Ni	60	72	He	0.218	ppb	44.5	420.02	0.0051	Pulse	0.1000	3
Cu	63	72	He	0.119	ppb	58.0	646.71	0.0079	Pulse	0.1000	3
Zn	66	115	He	2.045	ppb	28.3	990.08	0.0120	Pulse	0.1000	3
As	75	115	He	0.256	ppb	14.7	118.00	0.0014	Pulse	0.5000	3
Sr	88	115	He	53.098	ppb	3.4	38533.39	0.4681	Pulse	0.1000	3
Mo	98	115	He	0.193	ppb	27.9	410.02	0.0050	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	961.2	56.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	60.4	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.047	ppb	245.0	1540.14	0.0187	Pulse	0.1000	3
Sb	121	115	He	0.523	ppb	31.0	653.37	0.0080	Pulse	0.1000	3
Ba	137	115	He	11.531	ppb	4.5	4660.97	0.0566	Pulse	0.1000	3
Tl	205	159	He	0.179	ppb	12.6	2016.89	0.0053	Pulse	0.1000	3
Pb	208	159	He	0.012	ppb	50.2	813.38	0.0021	Pulse	0.1000	3
U	238	209	He	0.160	ppb	6.0	2510.35	0.0084	Pulse	0.1000	3

ISTD Table:

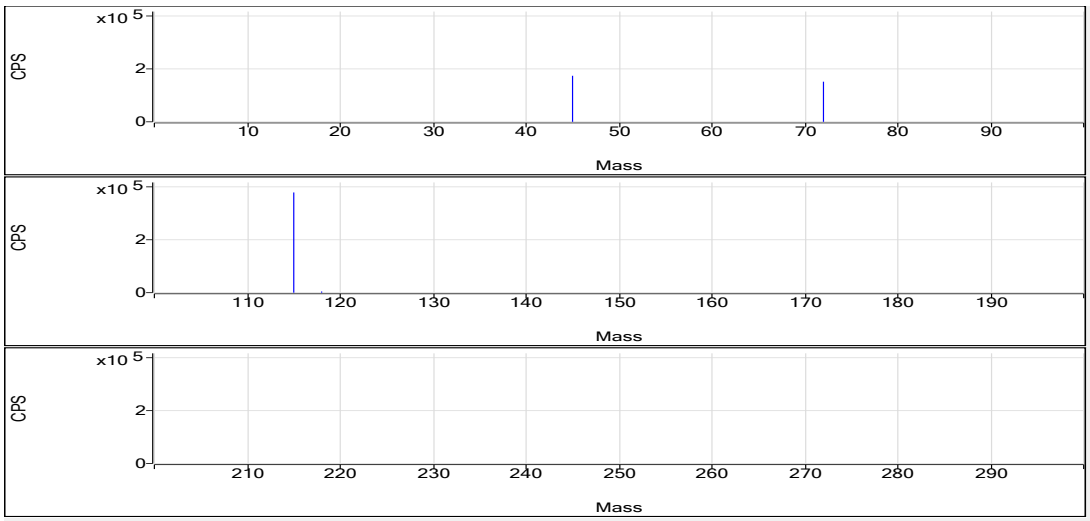
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2412931.58	0.3	102.8	Analog	0.1000	3
No Gas	Ge	72	1228585.63	1.0	102.4	Pulse	0.1000	3
H2	Sc	45	173911.84	2.5	100.1	Pulse	0.1000	3
H2	Ge	72	151536.63	1.3	101.3	Pulse	0.1000	3
H2	In	115	378570.88	1.0	103.4	Pulse	0.1000	3
He	Sc	45	46769.42	1.5	108.7	Pulse	0.1000	3
He	Ge	72	81592.46	0.3	104.4	Pulse	0.1000	3
He	In	115	82349.92	2.2	103.3	Pulse	0.1000	3
He	Tb	159	380735.96	0.2	103.5	Pulse	0.1000	3
He	Bi	209	297533.19	0.4	101.9	Pulse	0.1000	3

No Gas

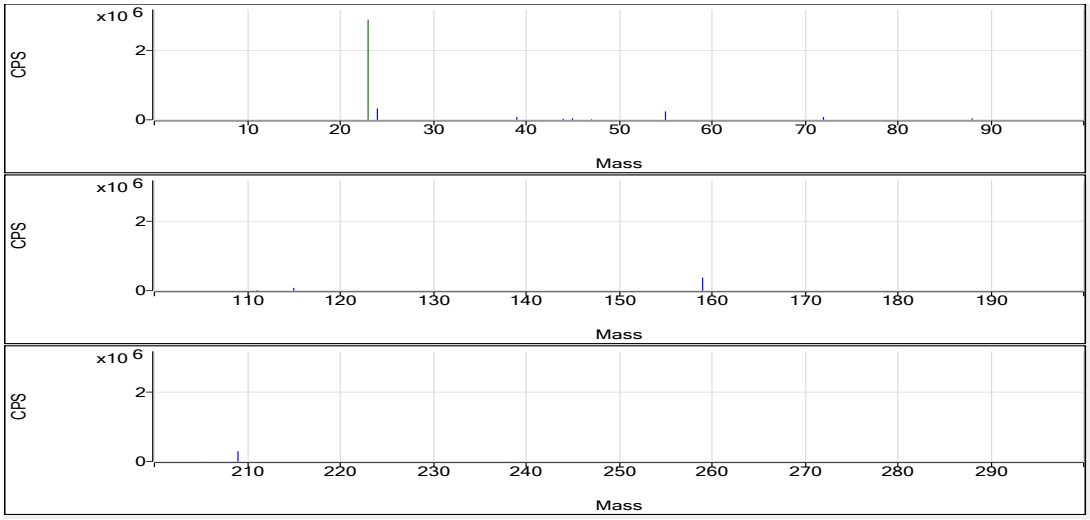


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.031	0	96.00	0.0007	1.705E-05
Be	9	1	No Gas	0.026	0	88.00	0.0007	1.705E-05
Be	9	1	No Gas	0.016	0	70.00	0.0007	1.705E-05
Se	78	2	H2	0.252	0	18.67	0.0002	6.062E-06
Se	78	2	H2	0.167	0	13.33	0.0002	6.062E-06
Se	78	2	H2	0.192	0	14.67	0.0002	6.062E-06
Na	23	3	He	16417.417	61.4313	2872894.02	0.0037	0.3435
Na	23	3	He	16261.499	60.8511	2889121.21	0.0037	0.3435
Na	23	3	He	17070.923	63.8629	2941766.21	0.0037	0.3435
Mg	24	3	He	3800.241	6.944	324743.98	0.0018	0.002943
Mg	24	3	He	3786.475	6.9189	328498.08	0.0018	0.002943
Mg	24	3	He	3867.298	7.0665	325509.57	0.0018	0.002943
Al	27	3	He	0.819	0.0015	70.00	0.0006	0.001008
Al	27	3	He	4.311	0.0036	170.01	0.0006	0.001008
Al	27	3	He	2.676	0.0026	120.00	0.0006	0.001008
K	39	3	He	1095.4	1.6915	79104.05	0.0012	0.4052
K	39	3	He	1072.702	1.6648	79043.86	0.0012	0.4052
K	39	3	He	1135.4	1.7385	80079.83	0.0012	0.4052
Ca	44	3	He	8666.185	0.5997	28047.65	0.0001	0.003486
Ca	44	3	He	8510.909	0.5891	27967.76	0.0001	0.003486
Ca	44	3	He	9036.199	0.6252	28799.19	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.778	0.0004	20.00	0.0005	0
Ti	47	3	He	0.401	0.0002	10.00	0.0005	0
V	51	3	He	-0.091	0.029	1354.07	0.0223	0.03097
V	51	3	He	-0.025	0.0304	1444.08	0.0223	0.03097
V	51	3	He	-0.014	0.0307	1412.08	0.0223	0.03097
Cr	52	3	He	-0.038	0.0385	1800.18	0.029	0.03958
Cr	52	3	He	0.066	0.0415	1970.22	0.029	0.03958
Cr	52	3	He	0.028	0.0404	1860.18	0.029	0.03958
Mn	55	3	He	403.03	5.2404	245070.50	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	398.741	5.1846	246158.08	0.013	0.003171
Mn	55	3	He	401.16	5.2161	240271.13	0.013	0.003171
Fe	57	3	He	2.39	0.0034	160.01	0.0006	0.002014
Fe	57	3	He	2.302	0.0034	160.01	0.0006	0.002014
Fe	57	3	He	-0.102	0.002	90.00	0.0006	0.002014
Co	59	3	He	0.283	0.0203	950.06	0.0572	0.004106
Co	59	3	He	0.252	0.0185	880.05	0.0572	0.004106
Co	59	3	He	0.315	0.0221	1020.07	0.0572	0.004106
Ni	60	3	He	0.201	0.005	410.02	0.0084	0.003329
Ni	60	3	He	0.322	0.006	490.03	0.0084	0.003329
Ni	60	3	He	0.13	0.0044	360.02	0.0084	0.003329
Cu	63	3	He	0.174	0.0093	760.05	0.0247	0.004989
Cu	63	3	He	0.141	0.0085	690.04	0.0247	0.004989
Cu	63	3	He	0.042	0.006	490.03	0.0247	0.004989
Zn	66	3	He	1.385	0.0101	820.06	0.0029	0.006147
Zn	66	3	He	2.279	0.0127	1070.08	0.0029	0.006147
Zn	66	3	He	2.47	0.0132	1080.09	0.0029	0.006147
As	75	3	He	0.242	0.0014	114.00	0.002	0.0009198
As	75	3	He	0.227	0.0014	116.00	0.002	0.0009198
As	75	3	He	0.298	0.0015	124.00	0.002	0.0009198
Sr	88	3	He	54.669	0.482	39064.66	0.0088	0.0005022
Sr	88	3	He	51.1	0.4506	38012.09	0.0088	0.0005022
Sr	88	3	He	53.524	0.4719	38523.41	0.0088	0.0005022
Mo	98	3	He	0.158	0.0042	340.01	0.0223	0.0006689
Mo	98	3	He	0.166	0.0044	370.02	0.0223	0.0006689
Mo	98	3	He	0.255	0.0064	520.03	0.0223	0.0006689
Ag	107	3	He	0.004	0.0009	70.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.067	0.0169	1370.11	0.0156	0.01794
Sn	120	3	He	0.165	0.0205	1730.16	0.0156	0.01794
Sn	120	3	He	0.044	0.0186	1520.15	0.0156	0.01794
Sb	121	3	He	0.707	0.0107	870.05	0.0151	4.19E-05
Sb	121	3	He	0.46	0.007	590.03	0.0151	4.19E-05
Sb	121	3	He	0.402	0.0061	500.02	0.0151	4.19E-05
Ba	137	3	He	11.785	0.0579	4690.98	0.0049	0.0002094
Ba	137	3	He	10.932	0.0537	4530.92	0.0049	0.0002094
Ba	137	3	He	11.876	0.0583	4761.02	0.0049	0.0002094
Tl	205	3	He	0.163	0.0049	1860.19	0.0252	0.0007688
Tl	205	3	He	0.205	0.0059	2260.27	0.0252	0.0007688
Tl	205	3	He	0.17	0.0051	1930.21	0.0252	0.0007688
Pb	208	3	He	0.013	0.0022	480.03	0.0337	0.001742
Pb	208	3	He	0.005	0.0019	340.02	0.0337	0.001742
Pb	208	3	He	0.017	0.0023	470.03	0.0337	0.001742
U	238	3	He	0.171	0.009	2660.40	0.0502	0.0004339
U	238	3	He	0.152	0.0081	2410.32	0.0502	0.0004339
U	238	3	He	0.156	0.0083	2460.32	0.0502	0.0004339
Sc	45	1	No Gas			2416679.34		
Sc	45	1	No Gas			2417275.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2404839.50		
Ge	72	1	No Gas			1220147.25		
Ge	72	1	No Gas			1242251.86		
Ge	72	1	No Gas			1223357.79		
Sc	45	2	H2			169983.10		
Sc	45	2	H2			178522.73		
Sc	45	2	H2			173229.68		
Ge	72	2	H2			151102.73		
Ge	72	2	H2			153747.83		
Ge	72	2	H2			149759.32		
In	115	2	H2			377338.43		
In	115	2	H2			382697.53		
In	115	2	H2			375676.67		
Sc	45	3	He			46765.98		
Sc	45	3	He			47478.52		
Sc	45	3	He			46063.76		
Ge	72	3	He			81904.30		
Ge	72	3	He			81401.27		
Ge	72	3	He			81471.82		
In	115	3	He			81056.20		
In	115	3	He			84375.53		
In	115	3	He			81640.81		
Tb	159	3	He			381307.49		
Tb	159	3	He			380065.35		
Tb	159	3	He			380835.03		
Bi	209	3	He			296036.48		
Bi	209	3	He			298419.35		
Bi	209	3	He			298143.75		

Quantitation Report

Data File Name	077SMPL.d
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Sample Type	Sample
Comment	A20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

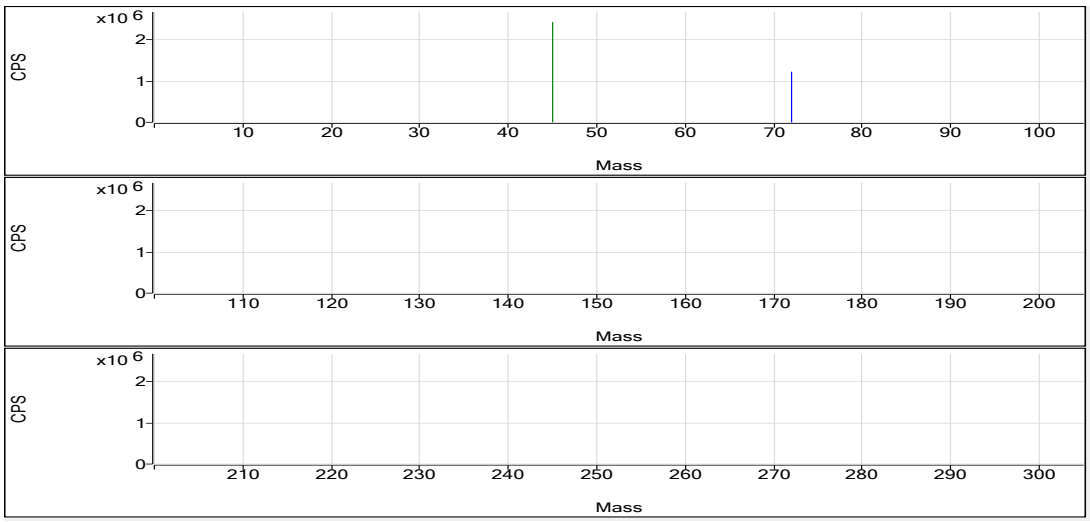
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	101.0	54.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.369	ppb	21.5	26.22	0.0001	Pulse	1.5000	3
Na	23	45	He	87294.182	ppb	1.4	15155048.10	325.1576	Analog	0.1000	3
Mg	24	45	He	21031.151	ppb	1.9	1790428.72	38.4160	Analog	0.1000	3
Al	27	45	He	4.170	ppb	42.8	163.34	0.0035	Pulse	0.1000	3
K	39	45	He	5818.399	ppb	1.4	337328.16	7.2373	Pulse	0.1000	3
Ca	44	45	He	46988.949	ppb	2.4	150832.82	3.2365	Pulse	0.1000	3
Ti	47	45	He	0.266	ppb	86.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.017	ppb	260.0	1460.75	0.0313	Pulse	0.5000	3
Cr	52	45	He	-0.268	ppb	N/A	1483.46	0.0318	Pulse	0.1000	3
Mn	55	45	He	2152.626	ppb	1.8	1303836.72	27.9755	Pulse	0.1000	3
Fe	57	45	He	4.354	ppb	7.7	213.34	0.0046	Pulse	0.1000	3
Co	59	45	He	1.308	ppb	6.3	3680.60	0.0789	Pulse	0.1000	3
Ni	60	72	He	1.152	ppb	10.9	1070.08	0.0130	Pulse	0.1000	3
Cu	63	72	He	0.136	ppb	68.9	690.04	0.0084	Pulse	0.1000	3
Zn	66	115	He	6.356	ppb	0.9	2006.86	0.0244	Pulse	0.1000	3
As	75	115	He	0.167	ppb	43.3	103.33	0.0013	Pulse	0.5000	3
Sr	88	115	He	283.590	ppb	0.9	205671.36	2.4982	Pulse	0.1000	3
Mo	98	115	He	0.325	ppb	13.5	653.37	0.0079	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.045	ppb	65.6	21.33	0.0003	Pulse	0.5000	3
Sn	120	115	He	-0.339	ppb	N/A	1043.41	0.0127	Pulse	0.1000	3
Sb	121	115	He	0.163	ppb	31.7	206.68	0.0025	Pulse	0.1000	3
Ba	137	115	He	61.214	ppb	1.6	24679.69	0.2998	Pulse	0.1000	3
Tl	205	159	He	0.050	ppb	17.7	783.39	0.0020	Pulse	0.1000	3
Pb	208	159	He	-0.009	ppb	N/A	553.36	0.0014	Pulse	0.1000	3
U	238	209	He	0.031	ppb	15.2	593.37	0.0020	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2430546.68	1.0	103.5	Analog	0.1000	3
No Gas	Ge	72	1226357.69	1.1	102.2	Pulse	0.1000	3
H2	Sc	45	176431.17	1.3	101.5	Pulse	0.1000	3
H2	Ge	72	154502.07	2.3	103.3	Pulse	0.1000	3
H2	In	115	377044.36	0.2	103.0	Pulse	0.1000	3
He	Sc	45	46615.32	1.6	108.3	Pulse	0.1000	3
He	Ge	72	82544.66	0.5	105.6	Pulse	0.1000	3
He	In	115	82331.64	0.6	103.3	Pulse	0.1000	3
He	Tb	159	384148.91	0.6	104.4	Pulse	0.1000	3
He	Bi	209	297727.64	1.0	102.0	Pulse	0.1000	3

No Gas



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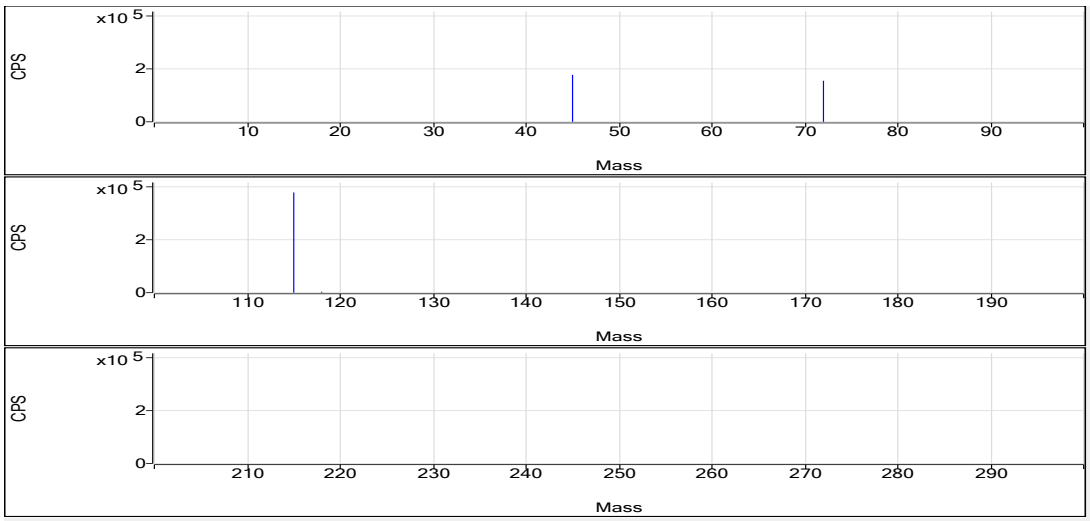
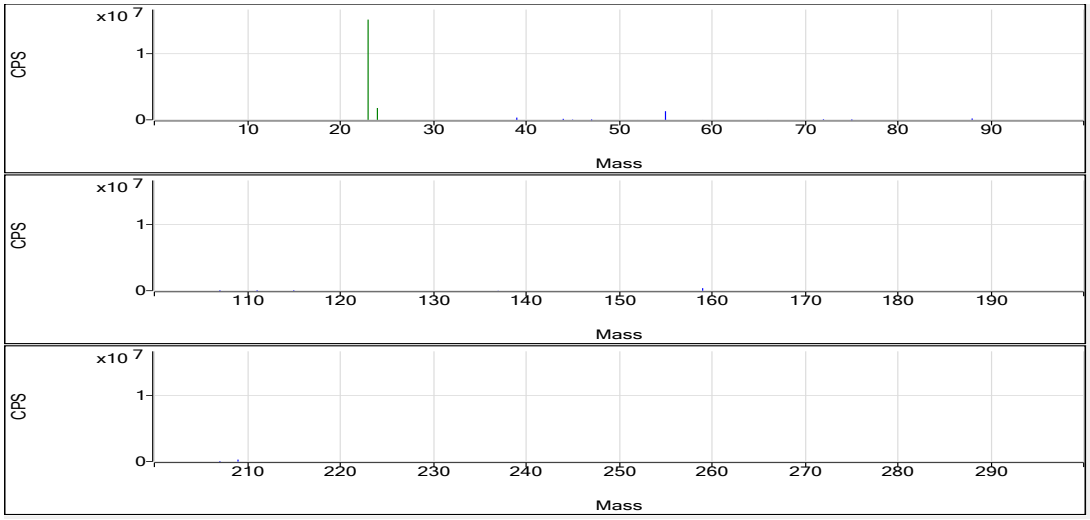


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.012	0	64.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.001	0	40.00	0.0007	1.705E-05
Be	9	1	No Gas	0.01	0	58.00	0.0007	1.705E-05
Se	78	2	H2	0.305	0.0001	22.00	0.0002	6.062E-06
Se	78	2	H2	0.458	0.0001	32.00	0.0002	6.062E-06
Se	78	2	H2	0.344	0.0001	24.67	0.0002	6.062E-06
Na	23	3	He	86584.041	322.5152	15147321.02	0.0037	0.3435
Na	23	3	He	86569.858	322.4625	15193431.02	0.0037	0.3435
Na	23	3	He	88728.649	330.4951	15124392.27	0.0037	0.3435
Mg	24	3	He	20963.123	38.2917	1798418.41	0.0018	0.002943
Mg	24	3	He	20673.071	37.762	1779226.85	0.0018	0.002943
Mg	24	3	He	21457.259	39.1943	1793640.91	0.0018	0.002943
Al	27	3	He	6.16	0.0047	220.01	0.0006	0.001008
Al	27	3	He	3.646	0.0032	150.01	0.0006	0.001008
Al	27	3	He	2.705	0.0026	120.00	0.0006	0.001008
K	39	3	He	5815.26	7.2337	339737.49	0.0012	0.4052
K	39	3	He	5740.362	7.1457	336683.63	0.0012	0.4052
K	39	3	He	5899.576	7.3327	335563.35	0.0012	0.4052
Ca	44	3	He	46058.556	3.1724	148997.87	0.0001	0.003486
Ca	44	3	He	46661.375	3.2139	151430.10	0.0001	0.003486
Ca	44	3	He	48246.916	3.323	152070.48	0.0001	0.003486
Ti	47	3	He	0.393	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.404	0.0002	10.00	0.0005	0
V	51	3	He	0.051	0.0321	1508.09	0.0223	0.03097
V	51	3	He	-0.032	0.0303	1426.08	0.0223	0.03097
V	51	3	He	0.03	0.0316	1448.08	0.0223	0.03097
Cr	52	3	He	-0.279	0.0315	1480.12	0.029	0.03958
Cr	52	3	He	-0.238	0.0327	1540.13	0.029	0.03958
Cr	52	3	He	-0.288	0.0313	1430.13	0.029	0.03958
Mn	55	3	He	2132.389	27.7125	1301553.26	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2127.86	27.6537	1302956.23	0.013	0.003171
Mn	55	3	He	2197.629	28.5603	1307000.68	0.013	0.003171
Fe	57	3	He	4.172	0.0045	210.01	0.0006	0.002014
Fe	57	3	He	4.148	0.0045	210.01	0.0006	0.002014
Fe	57	3	He	4.743	0.0048	220.01	0.0006	0.002014
Co	59	3	He	1.313	0.0792	3720.61	0.0572	0.004106
Co	59	3	He	1.387	0.0834	3930.69	0.0572	0.004106
Co	59	3	He	1.224	0.0741	3390.51	0.0572	0.004106
Ni	60	3	He	1.159	0.013	1080.08	0.0084	0.003329
Ni	60	3	He	1.274	0.014	1150.09	0.0084	0.003329
Ni	60	3	He	1.024	0.0119	980.07	0.0084	0.003329
Cu	63	3	He	0.242	0.011	910.06	0.0247	0.004989
Cu	63	3	He	0.103	0.0075	620.03	0.0247	0.004989
Cu	63	3	He	0.063	0.0066	540.03	0.0247	0.004989
Zn	66	3	He	6.42	0.0246	2010.19	0.0029	0.006147
Zn	66	3	He	6.324	0.0243	2010.20	0.0029	0.006147
Zn	66	3	He	6.325	0.0243	2000.19	0.0029	0.006147
As	75	3	He	0.248	0.0014	116.00	0.002	0.0009198
As	75	3	He	0.107	0.0011	94.00	0.002	0.0009198
As	75	3	He	0.147	0.0012	100.00	0.002	0.0009198
Sr	88	3	He	285.958	2.519	206194.63	0.0088	0.0005022
Sr	88	3	He	280.845	2.474	204797.09	0.0088	0.0005022
Sr	88	3	He	283.967	2.5015	206022.36	0.0088	0.0005022
Mo	98	3	He	0.304	0.0075	610.03	0.0223	0.0006689
Mo	98	3	He	0.376	0.0091	750.05	0.0223	0.0006689
Mo	98	3	He	0.296	0.0073	600.03	0.0223	0.0006689
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.006	0.0004	30.00	0.0471	0.0006687
Cd	111	3	He	0.074	0.0004	34.00	0.0054	1.676E-05
Cd	111	3	He	0.047	0.0003	22.00	0.0054	1.676E-05
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Sn	120	3	He	-0.446	0.011	900.06	0.0156	0.01794
Sn	120	3	He	-0.245	0.0141	1170.08	0.0156	0.01794
Sn	120	3	He	-0.326	0.0129	1060.09	0.0156	0.01794
Sb	121	3	He	0.143	0.0022	180.01	0.0151	4.19E-05
Sb	121	3	He	0.125	0.0019	160.01	0.0151	4.19E-05
Sb	121	3	He	0.222	0.0034	280.02	0.0151	4.19E-05
Ba	137	3	He	60.455	0.296	24232.27	0.0049	0.0002094
Ba	137	3	He	60.867	0.2981	24673.06	0.0049	0.0002094
Ba	137	3	He	62.321	0.3052	25133.74	0.0049	0.0002094
Tl	205	3	He	0.06	0.0023	880.07	0.0252	0.0007688
Tl	205	3	He	0.043	0.0019	710.05	0.0252	0.0007688
Tl	205	3	He	0.047	0.002	760.04	0.0252	0.0007688
Pb	208	3	He	-0.014	0.0013	300.01	0.0337	0.001742
Pb	208	3	He	-0.012	0.0013	250.01	0.0337	0.001742
Pb	208	3	He	-0.001	0.0017	430.03	0.0337	0.001742
U	238	3	He	0.027	0.0018	530.03	0.0502	0.0004339
U	238	3	He	0.036	0.0022	660.04	0.0502	0.0004339
U	238	3	He	0.031	0.002	590.03	0.0502	0.0004339
Sc	45	1	No Gas			2437052.31		
Sc	45	1	No Gas			2451926.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2402660.90		
Ge	72	1	No Gas			1219089.90		
Ge	72	1	No Gas			1242022.79		
Ge	72	1	No Gas			1217960.37		
Sc	45	2	H2			173820.27		
Sc	45	2	H2			177939.27		
Sc	45	2	H2			177533.98		
Ge	72	2	H2			152455.61		
Ge	72	2	H2			152468.00		
Ge	72	2	H2			158582.61		
In	115	2	H2			376121.79		
In	115	2	H2			377387.73		
In	115	2	H2			377623.55		
Sc	45	3	He			46966.22		
Sc	45	3	He			47116.90		
Sc	45	3	He			45762.83		
Ge	72	3	He			82960.30		
Ge	72	3	He			82237.15		
Ge	72	3	He			82436.53		
In	115	3	He			81861.13		
In	115	3	He			82786.14		
In	115	3	He			82364.17		
Tb	159	3	He			384197.42		
Tb	159	3	He			381964.60		
Tb	159	3	He			386284.72		
Bi	209	3	He			299380.72		
Bi	209	3	He			294208.86		
Bi	209	3	He			299593.34		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
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Sample Name	410-137860-B-1-D MS
Sample Type	Sample
Comment	A20
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

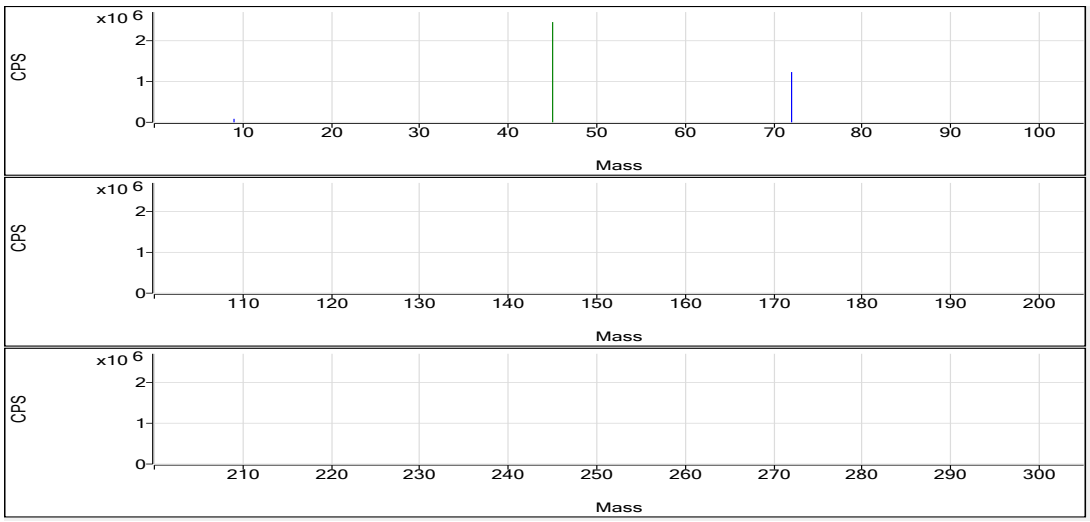
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.922	ppb	1.4	85437.26	0.0347	Pulse	0.5000	3
Se	78	115	H2	96.601	ppb	1.2	6377.43	0.0166	Pulse	1.5000	3
Na	23	45	He	89903.056	ppb	2.8	15831925.18	334.8650	Analog	0.1000	3
Mg	24	45	He	25476.237	ppb	1.7	2200324.86	46.5349	Analog	0.1000	3
Al	27	45	He	4691.859	ppb	1.4	132461.94	2.8013	Pulse	0.1000	3
K	39	45	He	10478.733	ppb	2.8	600877.59	12.7096	Pulse	0.1000	3
Ca	44	45	He	51203.828	ppb	3.4	166709.13	3.5265	Pulse	0.1000	3
Ti	47	45	He	491.548	ppb	4.4	12579.19	0.2661	Pulse	0.1000	3
V	51	45	He	479.095	ppb	2.4	505561.86	10.6931	Pulse	0.5000	3
Cr	52	45	He	470.134	ppb	2.4	645683.69	13.6568	Pulse	0.1000	3
Mn	55	45	He	2674.072	ppb	1.9	1643153.05	34.7515	Analog	0.1000	3
Fe	57	45	He	4694.844	ppb	3.0	130832.06	2.7675	Pulse	0.1000	3
Co	59	45	He	448.377	ppb	2.0	1212708.83	25.6485	Pulse	0.1000	3
Ni	60	72	He	483.581	ppb	0.8	337102.42	4.0467	Pulse	0.1000	3
Cu	63	72	He	471.850	ppb	1.0	971744.23	11.6652	Pulse	0.1000	3
Zn	66	115	He	495.895	ppb	1.3	117991.93	1.4283	Pulse	0.1000	3
As	75	115	He	506.907	ppb	1.0	84214.34	1.0194	Pulse	0.5000	3
Sr	88	115	He	330.780	ppb	2.0	240693.57	2.9138	Pulse	0.1000	3
Mo	98	115	He	48.639	ppb	1.6	89762.80	1.0866	Pulse	0.1000	3
Ag	107	115	He	47.319	ppb	1.1	184123.69	2.2288	Pulse	0.1000	3
Cd	111	115	He	49.597	ppb	0.4	21938.55	0.2655	Pulse	0.5000	3
Sn	120	115	He	100.074	ppb	0.8	130190.47	1.5758	Pulse	0.1000	3
Sb	121	115	He	98.097	ppb	1.8	122582.88	1.4839	Pulse	0.1000	3
Ba	137	115	He	548.170	ppb	1.6	221606.36	2.6826	Pulse	0.1000	3
Tl	205	159	He	95.915	ppb	0.8	932331.05	2.4219	Pulse	0.1000	3
Pb	208	159	He	47.767	ppb	0.6	621019.80	1.6132	Pulse	0.1000	3
U	238	209	He	47.890	ppb	0.6	712715.33	2.4021	Pulse	0.1000	3

ISTD Table:

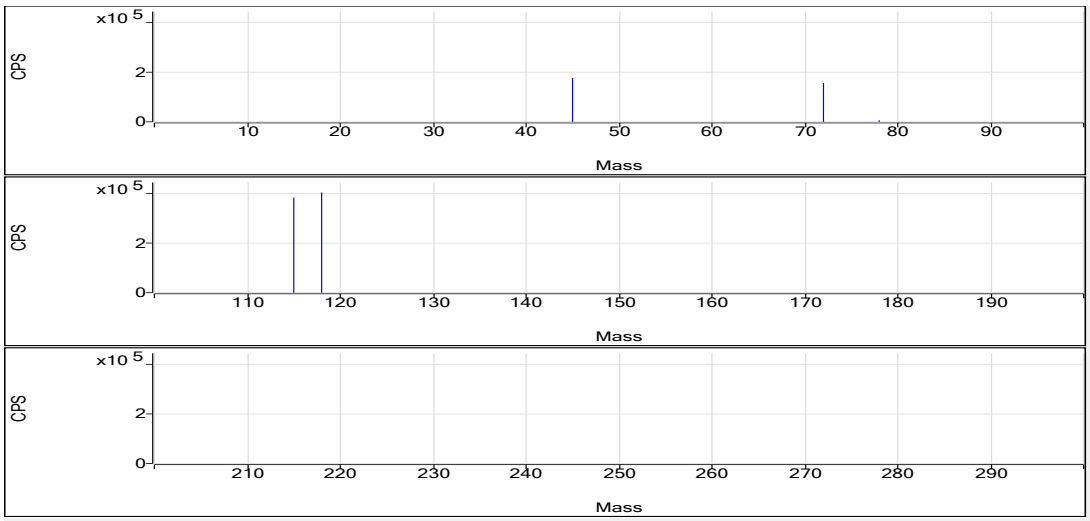
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2459807.15	0.8	104.8	Analog	0.1000	3
No Gas	Ge	72	1232636.57	0.8	102.7	Pulse	0.1000	3
H2	Sc	45	176533.77	1.1	101.6	Pulse	0.1000	3
H2	Ge	72	157142.34	1.1	105.1	Pulse	0.1000	3
H2	In	115	383538.80	0.2	104.8	Pulse	0.1000	3
He	Sc	45	47294.34	2.1	109.9	Pulse	0.1000	3
He	Ge	72	83309.02	1.2	106.6	Pulse	0.1000	3
He	In	115	82621.64	1.5	103.6	Pulse	0.1000	3
He	Tb	159	384955.17	0.4	104.6	Pulse	0.1000	3
He	Bi	209	296709.81	1.0	101.6	Pulse	0.1000	3

No Gas

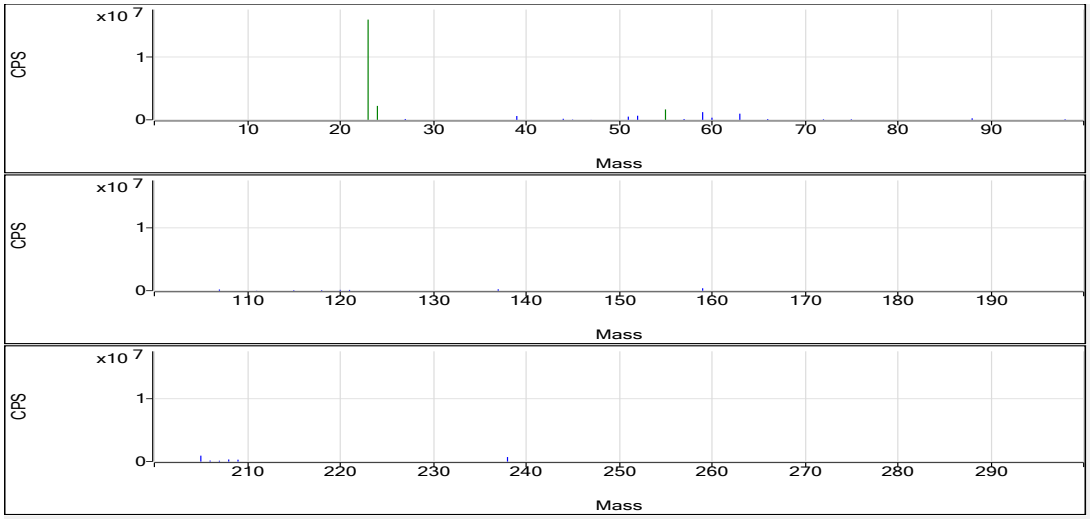


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.478	0.0344	84170.89	0.0007	1.705E-05
Be	9	1	No Gas	46.587	0.0345	85560.62	0.0007	1.705E-05
Be	9	1	No Gas	47.702	0.0353	86580.27	0.0007	1.705E-05
Se	78	2	H2	97.155	0.0167	6398.11	0.0002	6.062E-06
Se	78	2	H2	95.231	0.0164	6298.06	0.0002	6.062E-06
Se	78	2	H2	97.418	0.0168	6436.12	0.0002	6.062E-06
Na	23	3	He	90979.73	338.8712	16092478.51	0.0037	0.3435
Na	23	3	He	91742.449	341.7092	15798587.26	0.0037	0.3435
Na	23	3	He	86986.989	324.0146	15604709.77	0.0037	0.3435
Mg	24	3	He	25395.16	46.3868	2202837.94	0.0018	0.002943
Mg	24	3	He	25940.193	47.3823	2190672.78	0.0018	0.002943
Mg	24	3	He	25093.358	45.8355	2207463.87	0.0018	0.002943
Al	27	3	He	4695.277	2.8034	133128.32	0.0006	0.001008
Al	27	3	He	4757.599	2.8406	131331.34	0.0006	0.001008
Al	27	3	He	4622.701	2.7601	132926.15	0.0006	0.001008
K	39	3	He	10496.87	12.7309	604571.59	0.0012	0.4052
K	39	3	He	10757.735	13.0372	602763.19	0.0012	0.4052
K	39	3	He	10181.593	12.3607	595298.00	0.0012	0.4052
Ca	44	3	He	51673.988	3.5588	169002.26	0.0001	0.003486
Ca	44	3	He	52676.488	3.6278	167726.83	0.0001	0.003486
Ca	44	3	He	49261.007	3.3928	163398.31	0.0001	0.003486
Ti	47	3	He	511.079	0.2766	13136.40	0.0005	0
Ti	47	3	He	494.948	0.2679	12385.74	0.0005	0
Ti	47	3	He	468.616	0.2536	12215.43	0.0005	0
V	51	3	He	481.011	10.7357	509823.16	0.0223	0.03097
V	51	3	He	489.651	10.928	505245.19	0.0223	0.03097
V	51	3	He	466.623	10.4155	501617.22	0.0223	0.03097
Cr	52	3	He	471.114	13.6852	649888.55	0.029	0.03958
Cr	52	3	He	480.852	13.9672	645761.51	0.029	0.03958
Cr	52	3	He	458.436	13.318	641401.01	0.029	0.03958
Mn	55	3	He	2690.669	34.9671	1660535.44	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2715.499	35.2898	1631588.26	0.013	0.003171
Mn	55	3	He	2616.048	33.9975	1637335.44	0.013	0.003171
Fe	57	3	He	4675.007	2.7558	130869.30	0.0006	0.002014
Fe	57	3	He	4846.768	2.857	132089.96	0.0006	0.002014
Fe	57	3	He	4562.756	2.6897	129536.91	0.0006	0.002014
Co	59	3	He	449.613	25.7192	1221367.01	0.0572	0.004106
Co	59	3	He	456.708	26.125	1207864.12	0.0572	0.004106
Co	59	3	He	438.81	25.1014	1208895.37	0.0572	0.004106
Ni	60	3	He	479.626	4.0136	338057.22	0.0084	0.003329
Ni	60	3	He	483.458	4.0457	337702.73	0.0084	0.003329
Ni	60	3	He	487.66	4.0808	335547.30	0.0084	0.003329
Cu	63	3	He	467.871	11.5669	974255.61	0.0247	0.004989
Cu	63	3	He	470.825	11.6399	971618.81	0.0247	0.004989
Cu	63	3	He	476.855	11.7889	969358.27	0.0247	0.004989
Zn	66	3	He	488.741	1.4078	118323.64	0.0029	0.006147
Zn	66	3	He	501.946	1.4456	118124.12	0.0029	0.006147
Zn	66	3	He	496.998	1.4315	117528.04	0.0029	0.006147
As	75	3	He	500.86	1.0072	84658.34	0.002	0.0009198
As	75	3	He	510.265	1.0261	83845.60	0.002	0.0009198
As	75	3	He	509.595	1.0248	84139.07	0.002	0.0009198
Sr	88	3	He	323.493	2.8496	239510.60	0.0088	0.0005022
Sr	88	3	He	336.404	2.9633	242134.31	0.0088	0.0005022
Sr	88	3	He	332.442	2.9284	240435.80	0.0088	0.0005022
Mo	98	3	He	47.72	1.0661	89604.72	0.0223	0.0006689
Mo	98	3	He	49.171	1.0985	89756.91	0.0223	0.0006689
Mo	98	3	He	49.028	1.0953	89926.76	0.0223	0.0006689
Ag	107	3	He	46.783	2.2035	185205.09	0.0471	0.0006687
Ag	107	3	He	47.865	2.2544	184210.54	0.0471	0.0006687
Ag	107	3	He	47.31	2.2283	182955.45	0.0471	0.0006687
Cd	111	3	He	49.557	0.2653	22299.79	0.0054	1.676E-05
Cd	111	3	He	49.428	0.2646	21622.73	0.0054	1.676E-05
Cd	111	3	He	49.806	0.2667	21893.14	0.0054	1.676E-05
Sn	120	3	He	99.518	1.5672	131721.43	0.0156	0.01794
Sn	120	3	He	100.948	1.5894	129873.61	0.0156	0.01794
Sn	120	3	He	99.756	1.5709	128976.36	0.0156	0.01794
Sb	121	3	He	96.061	1.4531	122135.63	0.0151	4.19E-05
Sb	121	3	He	99.195	1.5005	122609.12	0.0151	4.19E-05
Sb	121	3	He	99.037	1.4981	123003.89	0.0151	4.19E-05
Ba	137	3	He	537.934	2.6325	221265.60	0.0049	0.0002094
Ba	137	3	He	554.683	2.7145	221802.83	0.0049	0.0002094
Ba	137	3	He	551.894	2.7008	221750.66	0.0049	0.0002094
Tl	205	3	He	96.758	2.4432	944878.89	0.0252	0.0007688
Tl	205	3	He	95.767	2.4181	929260.53	0.0252	0.0007688
Tl	205	3	He	95.22	2.4043	922853.74	0.0252	0.0007688
Pb	208	3	He	48.113	1.6249	332802.18	0.0337	0.001742
Pb	208	3	He	47.528	1.6051	325833.67	0.0337	0.001742
Pb	208	3	He	47.66	1.6096	327237.26	0.0337	0.001742
U	238	3	He	47.642	2.3897	717546.24	0.0502	0.0004339
U	238	3	He	48.188	2.4171	712365.93	0.0502	0.0004339
U	238	3	He	47.841	2.3997	708233.82	0.0502	0.0004339
Sc	45	1	No Gas			2446454.34		
Sc	45	1	No Gas			2481027.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2451939.81		
Ge	72	1	No Gas			1228950.84		
Ge	72	1	No Gas			1243176.47		
Ge	72	1	No Gas			1225782.40		
Sc	45	2	H2			175112.48		
Sc	45	2	H2			175852.67		
Sc	45	2	H2			178636.17		
Ge	72	2	H2			156518.50		
Ge	72	2	H2			155873.30		
Ge	72	2	H2			159035.21		
In	115	2	H2			382585.58		
In	115	2	H2			384208.90		
In	115	2	H2			383821.91		
Sc	45	3	He			47488.48		
Sc	45	3	He			46234.01		
Sc	45	3	He			48160.52		
Ge	72	3	He			84227.80		
Ge	72	3	He			83473.02		
Ge	72	3	He			82226.23		
In	115	3	He			84748.68		
In	115	3	He			82414.04		
In	115	3	He			82796.69		
Tb	159	3	He			386745.81		
Tb	159	3	He			384288.90		
Tb	159	3	He			383830.81		
Bi	209	3	He			300268.35		
Bi	209	3	He			294721.56		
Bi	209	3	He			295139.53		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

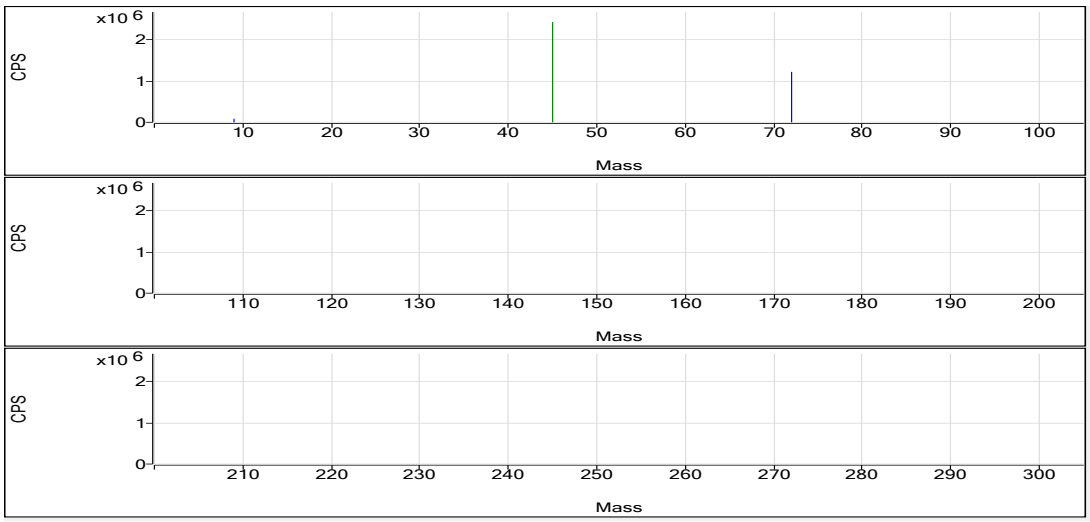
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.831	ppb	0.7	86178.15	0.0354	Pulse	0.5000	3
Se	78	115	H2	51.644	ppb	2.3	3404.85	0.0089	Pulse	1.5000	3
Na	23	45	He	4714.851	ppb	1.4	857777.77	17.8870	Pulse	0.1000	3
Mg	24	45	He	4937.249	ppb	1.5	432589.12	9.0207	Pulse	0.1000	3
Al	27	45	He	4888.339	ppb	1.9	139966.49	2.9186	Pulse	0.1000	3
K	39	45	He	5008.616	ppb	2.2	301465.38	6.2865	Pulse	0.1000	3
Ca	44	45	He	4946.016	ppb	1.3	16486.51	0.3438	Pulse	0.1000	3
Ti	47	45	He	4980.875	ppb	1.7	129280.97	2.6959	Pulse	0.1000	3
V	51	45	He	498.178	ppb	1.1	533167.65	11.1178	Pulse	0.5000	3
Cr	52	45	He	494.173	ppb	1.0	688328.66	14.3531	Pulse	0.1000	3
Mn	55	45	He	494.585	ppb	0.6	308373.01	6.4301	Pulse	0.1000	3
Fe	57	45	He	4896.979	ppb	1.6	138424.76	2.8866	Pulse	0.1000	3
Co	59	45	He	481.385	ppb	1.0	1320548.99	27.5364	Pulse	0.1000	3
Ni	60	72	He	530.703	ppb	2.1	367728.39	4.4407	Pulse	0.1000	3
Cu	63	72	He	513.456	ppb	1.7	1051185.40	12.6934	Pulse	0.1000	3
Zn	66	115	He	526.991	ppb	0.2	126587.58	1.5175	Pulse	0.1000	3
As	75	115	He	524.491	ppb	1.2	87978.14	1.0547	Pulse	0.5000	3
Sr	88	115	He	52.669	ppb	1.5	38737.22	0.4644	Pulse	0.1000	3
Mo	98	115	He	52.085	ppb	1.9	97054.17	1.1635	Pulse	0.1000	3
Ag	107	115	He	51.249	ppb	1.6	201340.11	2.4138	Pulse	0.1000	3
Cd	111	115	He	51.804	ppb	1.6	23134.51	0.2773	Pulse	0.5000	3
Sn	120	115	He	51.990	ppb	2.4	69002.67	0.8273	Pulse	0.1000	3
Sb	121	115	He	52.081	ppb	0.1	65723.07	0.7879	Pulse	0.1000	3
Ba	137	115	He	514.798	ppb	1.1	210148.81	2.5193	Pulse	0.1000	3
Tl	205	159	He	51.364	ppb	0.4	501190.57	1.2973	Pulse	0.1000	3
Pb	208	159	He	51.021	ppb	0.2	665654.18	1.7230	Pulse	0.1000	3
U	238	209	He	50.360	ppb	0.7	764235.87	2.5260	Pulse	0.1000	3

ISTD Table:

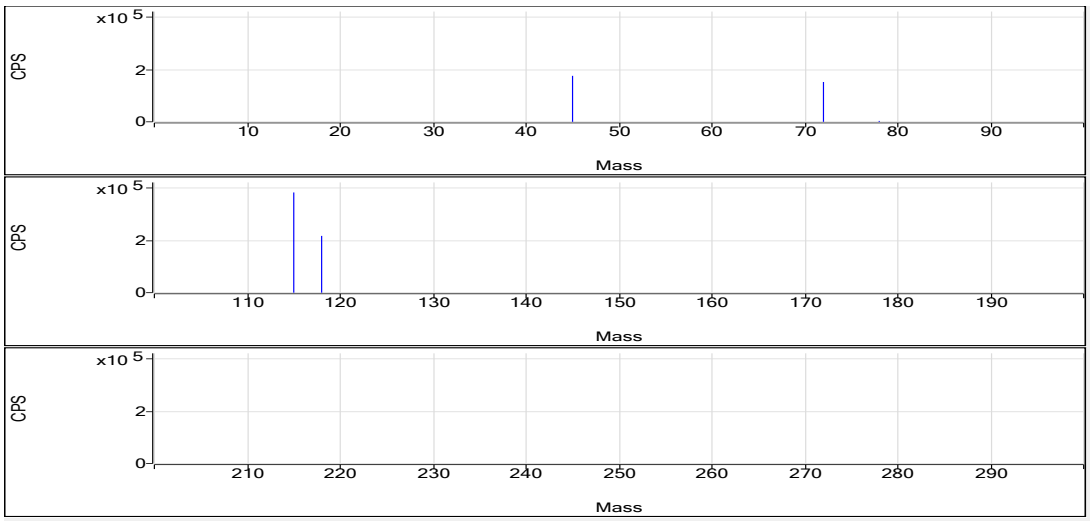
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2434009.18	0.7	103.7	Analog	0.1000	3
No Gas	Ge	72	1224598.71	0.8	102.1	Pulse	0.1000	3
H2	Sc	45	175640.69	1.3	101.1	Pulse	0.1000	3
H2	Ge	72	152110.12	1.2	101.7	Pulse	0.1000	3
H2	In	115	382867.98	0.6	104.6	Pulse	0.1000	3
He	Sc	45	47959.97	1.1	111.5	Pulse	0.1000	3
He	Ge	72	82829.58	1.8	106.0	Pulse	0.1000	3
He	In	115	83419.54	0.8	104.6	Pulse	0.1000	3
He	Tb	159	386343.00	0.9	105.0	Pulse	0.1000	3
He	Bi	209	302548.52	0.4	103.6	Pulse	0.1000	3

No Gas

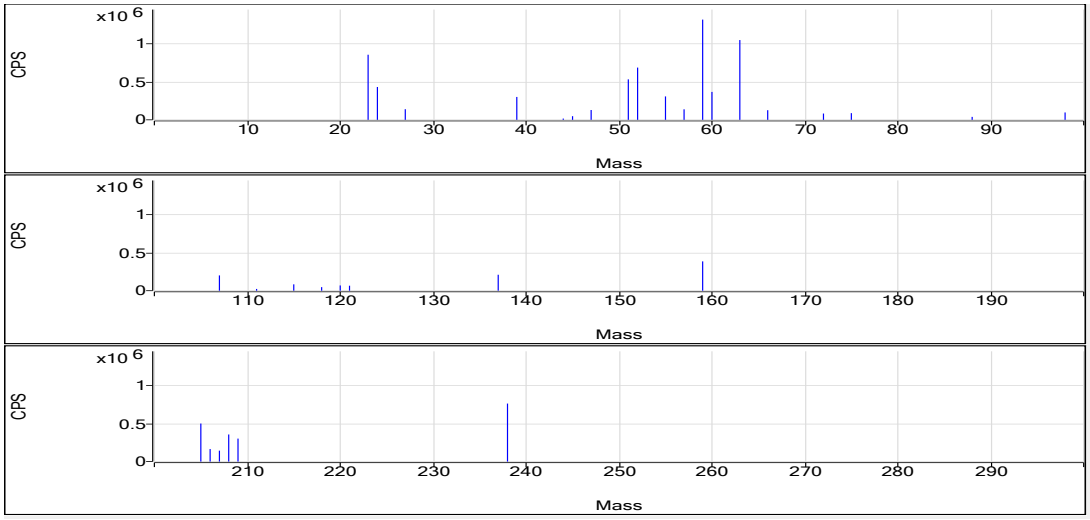


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.242	0.0357	86457.74	0.0007	1.705E-05
Be	9	1	No Gas	47.667	0.0353	85671.33	0.0007	1.705E-05
Be	9	1	No Gas	47.584	0.0352	86405.38	0.0007	1.705E-05
Se	78	2	H2	52.014	0.009	3422.41	0.0002	6.062E-06
Se	78	2	H2	52.583	0.0091	3489.10	0.0002	6.062E-06
Se	78	2	H2	50.336	0.0087	3303.05	0.0002	6.062E-06
Na	23	3	He	4784.883	18.1476	860349.44	0.0037	0.3435
Na	23	3	He	4654.259	17.6616	855375.46	0.0037	0.3435
Na	23	3	He	4705.411	17.8519	857608.42	0.0037	0.3435
Mg	24	3	He	5018.47	9.1691	434691.99	0.0018	0.002943
Mg	24	3	He	4876.545	8.9099	431517.69	0.0018	0.002943
Mg	24	3	He	4916.733	8.9833	431557.69	0.0018	0.002943
Al	27	3	He	4905.029	2.9286	138838.85	0.0006	0.001008
Al	27	3	He	4786.754	2.858	138415.99	0.0006	0.001008
Al	27	3	He	4973.235	2.9693	142644.64	0.0006	0.001008
K	39	3	He	5066.452	6.3544	301251.27	0.0012	0.4052
K	39	3	He	4881.013	6.1366	297206.21	0.0012	0.4052
K	39	3	He	5078.383	6.3684	305938.67	0.0012	0.4052
Ca	44	3	He	5010.898	0.3483	16509.99	0.0001	0.003486
Ca	44	3	He	4885.906	0.3397	16449.76	0.0001	0.003486
Ca	44	3	He	4941.244	0.3435	16499.77	0.0001	0.003486
Ti	47	3	He	5057.886	2.7376	129785.04	0.0005	0
Ti	47	3	He	4892.581	2.6481	128252.43	0.0005	0
Ti	47	3	He	4992.158	2.702	129805.45	0.0005	0
V	51	3	He	502.971	11.2244	532132.44	0.0223	0.03097
V	51	3	He	492.237	10.9855	532045.56	0.0223	0.03097
V	51	3	He	499.325	11.1433	535324.94	0.0223	0.03097
Cr	52	3	He	497.895	14.4609	685567.49	0.029	0.03958
Cr	52	3	He	488.264	14.1819	686849.99	0.029	0.03958
Cr	52	3	He	496.361	14.4165	692568.51	0.029	0.03958
Mn	55	3	He	497.143	6.4633	306415.05	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	491.034	6.3839	309182.51	0.013	0.003171
Mn	55	3	He	495.579	6.443	309521.48	0.013	0.003171
Fe	57	3	He	4964.416	2.9263	138730.54	0.0006	0.002014
Fe	57	3	He	4813.856	2.8376	137428.99	0.0006	0.002014
Fe	57	3	He	4912.664	2.8958	139114.74	0.0006	0.002014
Co	59	3	He	486.932	27.8536	1320495.61	0.0572	0.004106
Co	59	3	He	477.635	27.3219	1323238.11	0.0572	0.004106
Co	59	3	He	479.588	27.4336	1317913.26	0.0572	0.004106
Ni	60	3	He	538.189	4.5033	369969.25	0.0084	0.003329
Ni	60	3	He	536.251	4.4871	367104.76	0.0084	0.003329
Ni	60	3	He	517.669	4.3317	366111.17	0.0084	0.003329
Cu	63	3	He	519.996	12.855	1056111.55	0.0247	0.004989
Cu	63	3	He	516.89	12.7782	1045438.50	0.0247	0.004989
Cu	63	3	He	503.484	12.447	1052006.16	0.0247	0.004989
Zn	66	3	He	528.168	1.5208	128036.32	0.0029	0.006147
Zn	66	3	He	526.238	1.5153	126100.72	0.0029	0.006147
Zn	66	3	He	526.567	1.5162	125625.69	0.0029	0.006147
As	75	3	He	518.158	1.042	87722.79	0.002	0.0009198
As	75	3	He	524.85	1.0554	87831.05	0.002	0.0009198
As	75	3	He	530.466	1.0667	88380.59	0.002	0.0009198
Sr	88	3	He	52.629	0.464	39065.07	0.0088	0.0005022
Sr	88	3	He	51.902	0.4576	38081.87	0.0088	0.0005022
Sr	88	3	He	53.477	0.4715	39064.72	0.0088	0.0005022
Mo	98	3	He	51.493	1.1503	96842.97	0.0223	0.0006689
Mo	98	3	He	51.513	1.1508	95765.44	0.0223	0.0006689
Mo	98	3	He	53.248	1.1895	98554.11	0.0223	0.0006689
Ag	107	3	He	50.399	2.3738	199841.99	0.0471	0.0006687
Ag	107	3	He	51.266	2.4146	200938.53	0.0471	0.0006687
Ag	107	3	He	52.082	2.453	203239.80	0.0471	0.0006687
Cd	111	3	He	51.134	0.2738	23047.08	0.0054	1.676E-05
Cd	111	3	He	51.527	0.2759	22956.84	0.0054	1.676E-05
Cd	111	3	He	52.752	0.2824	23399.62	0.0054	1.676E-05
Sn	120	3	He	50.563	0.8051	67777.18	0.0156	0.01794
Sn	120	3	He	52.468	0.8347	69464.79	0.0156	0.01794
Sn	120	3	He	52.938	0.842	69766.04	0.0156	0.01794
Sb	121	3	He	52.129	0.7886	66389.39	0.0151	4.19E-05
Sb	121	3	He	52.011	0.7868	65475.52	0.0151	4.19E-05
Sb	121	3	He	52.103	0.7882	65304.29	0.0151	4.19E-05
Ba	137	3	He	509.12	2.4915	209756.99	0.0049	0.0002094
Ba	137	3	He	515.255	2.5216	209839.04	0.0049	0.0002094
Ba	137	3	He	520.02	2.5449	210850.39	0.0049	0.0002094
Tl	205	3	He	51.462	1.2998	500320.81	0.0252	0.0007688
Tl	205	3	He	51.516	1.3011	499265.62	0.0252	0.0007688
Tl	205	3	He	51.115	1.291	503985.27	0.0252	0.0007688
Pb	208	3	He	51.077	1.7249	359622.38	0.0337	0.001742
Pb	208	3	He	51.064	1.7244	353439.14	0.0337	0.001742
Pb	208	3	He	50.922	1.7196	357675.54	0.0337	0.001742
U	238	3	He	50.512	2.5336	769377.80	0.0502	0.0004339
U	238	3	He	49.949	2.5054	758554.44	0.0502	0.0004339
U	238	3	He	50.62	2.539	764775.38	0.0502	0.0004339
Sc	45	1	No Gas			2421049.65		
Sc	45	1	No Gas			2427948.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2453029.18		
Ge	72	1	No Gas			1235263.03		
Ge	72	1	No Gas			1214809.59		
Ge	72	1	No Gas			1223723.50		
Sc	45	2	H2			174781.68		
Sc	45	2	H2			178191.03		
Sc	45	2	H2			173949.35		
Ge	72	2	H2			151447.31		
Ge	72	2	H2			154215.30		
Ge	72	2	H2			150667.75		
In	115	2	H2			382137.30		
In	115	2	H2			385368.39		
In	115	2	H2			381098.24		
Sc	45	3	He			47408.38		
Sc	45	3	He			48431.41		
Sc	45	3	He			48040.13		
Ge	72	3	He			82155.67		
Ge	72	3	He			81813.93		
Ge	72	3	He			84519.14		
In	115	3	He			84557.05		
In	115	3	He			83581.18		
In	115	3	He			83219.82		
Tb	159	3	He			384930.97		
Tb	159	3	He			383716.44		
Tb	159	3	He			390381.60		
Bi	209	3	He			303666.73		
Bi	209	3	He			302771.09		
Bi	209	3	He			301207.75		

Quantitation Report

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Sample Type	CCB
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

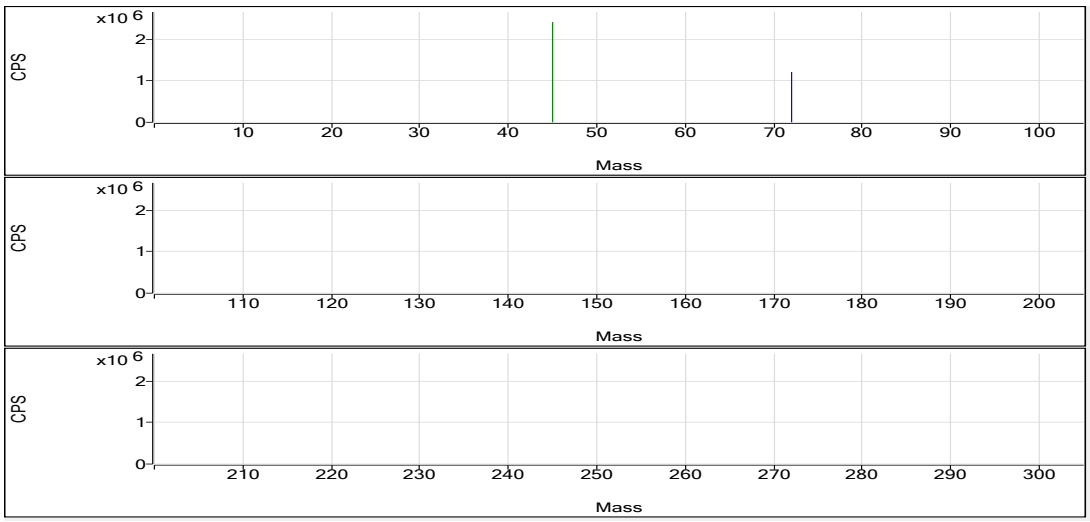
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	20.9	63.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.035	ppb	29.0	4.67	0.0000	Pulse	1.5000	3
Na	23	45	He	1.838	ppb	241.7	16349.49	0.3503	Pulse	0.1000	3
Mg	24	45	He	1.590	ppb	27.5	273.34	0.0058	Pulse	0.1000	3
Al	27	45	He	0.106	ppb	672.5	50.00	0.0011	Pulse	0.1000	3
K	39	45	He	-15.434	ppb	N/A	18071.68	0.3871	Pulse	0.1000	3
Ca	44	45	He	-10.190	ppb	N/A	130.01	0.0028	Pulse	0.1000	3
Ti	47	45	He	1.057	ppb	57.1	26.67	0.0006	Pulse	0.1000	3
V	51	45	He	0.056	ppb	61.2	1504.09	0.0322	Pulse	0.5000	3
Cr	52	45	He	-0.061	ppb	N/A	1766.83	0.0378	Pulse	0.1000	3
Mn	55	45	He	0.169	ppb	46.3	250.01	0.0054	Pulse	0.1000	3
Fe	57	45	He	-0.501	ppb	N/A	80.00	0.0017	Pulse	0.1000	3
Co	59	45	He	0.067	ppb	53.0	370.02	0.0079	Pulse	0.1000	3
Ni	60	72	He	0.064	ppb	71.0	310.01	0.0039	Pulse	0.1000	3
Cu	63	72	He	0.096	ppb	2.6	590.03	0.0074	Pulse	0.1000	3
Zn	66	115	He	-0.640	ppb	N/A	363.36	0.0043	Pulse	0.1000	3
As	75	115	He	0.046	ppb	68.9	85.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.064	ppb	64.9	90.00	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.082	ppb	38.9	210.01	0.0025	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	610.8	63.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	34.5	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.088	ppb	N/A	1396.79	0.0166	Pulse	0.1000	3
Sb	121	115	He	0.073	ppb	65.2	96.67	0.0011	Pulse	0.1000	3
Ba	137	115	He	0.022	ppb	231.5	26.67	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.078	ppb	12.8	1050.08	0.0027	Pulse	0.1000	3
Pb	208	159	He	-0.007	ppb	N/A	573.36	0.0015	Pulse	0.1000	3
U	238	209	He	0.048	ppb	16.6	843.40	0.0028	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2420530.90	1.7	103.1	Analog	0.1000	3
No Gas	Ge	72	1214218.52	0.7	101.2	Pulse	0.1000	3
H2	Sc	45	174854.29	1.4	100.6	Pulse	0.1000	3
H2	Ge	72	151091.10	0.2	101.0	Pulse	0.1000	3
H2	In	115	384178.65	0.6	105.0	Pulse	0.1000	3
He	Sc	45	46689.26	1.4	108.5	Pulse	0.1000	3
He	Ge	72	80211.55	1.4	102.6	Pulse	0.1000	3
He	In	115	84321.63	1.2	105.8	Pulse	0.1000	3
He	Tb	159	385421.65	1.0	104.8	Pulse	0.1000	3
He	Bi	209	299036.14	1.4	102.4	Pulse	0.1000	3

No Gas



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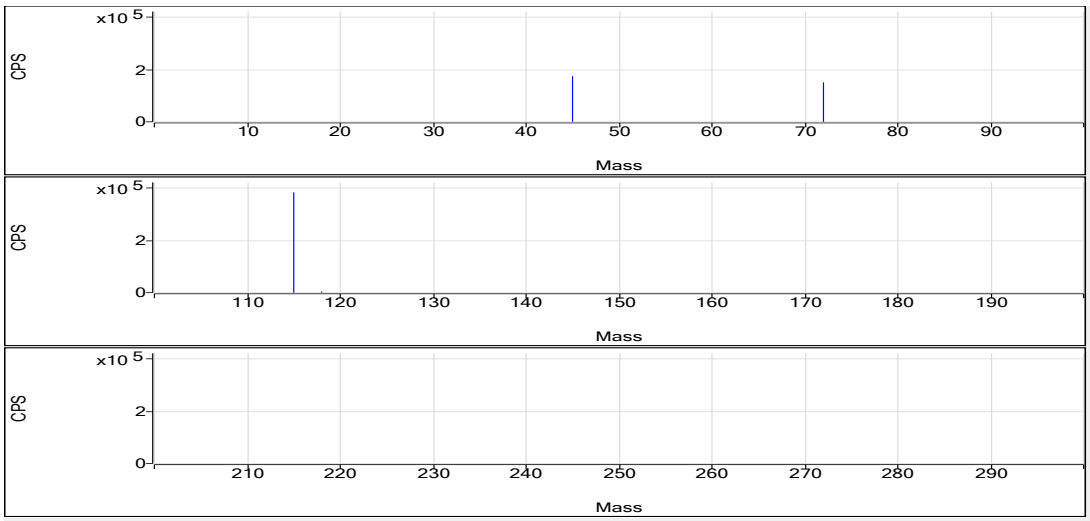
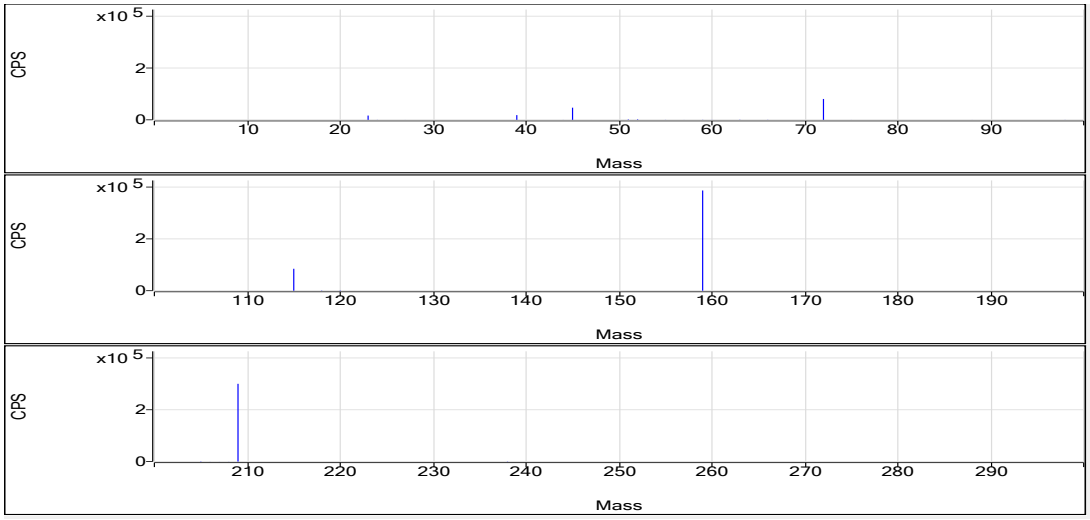


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.014	0	66.00	0.0007	1.705E-05
Be	9	1	No Gas	0.013	0	66.00	0.0007	1.705E-05
Be	9	1	No Gas	0.009	0	58.00	0.0007	1.705E-05
Se	78	2	H2	0.025	0	4.00	0.0002	6.062E-06
Se	78	2	H2	0.036	0	4.67	0.0002	6.062E-06
Se	78	2	H2	0.045	0	5.33	0.0002	6.062E-06
Na	23	3	He	6.839	0.3689	16950.33	0.0037	0.3435
Na	23	3	He	-1.646	0.3374	15888.91	0.0037	0.3435
Na	23	3	He	0.32	0.3447	16209.23	0.0037	0.3435
Mg	24	3	He	1.13	0.005	230.01	0.0018	0.002943
Mg	24	3	He	1.644	0.0059	280.01	0.0018	0.002943
Mg	24	3	He	1.998	0.0066	310.01	0.0018	0.002943
Al	27	3	He	0.135	0.0011	50.00	0.0006	0.001008
Al	27	3	He	-0.621	0.0006	30.00	0.0006	0.001008
Al	27	3	He	0.805	0.0015	70.00	0.0006	0.001008
K	39	3	He	-9.575	0.394	18101.74	0.0012	0.4052
K	39	3	He	-20.692	0.3809	17941.49	0.0012	0.4052
K	39	3	He	-16.037	0.3864	18171.82	0.0012	0.4052
Ca	44	3	He	-9.541	0.0028	130.01	0.0001	0.003486
Ca	44	3	He	-16.721	0.0023	110.01	0.0001	0.003486
Ca	44	3	He	-4.308	0.0032	150.01	0.0001	0.003486
Ti	47	3	He	1.206	0.0007	30.00	0.0005	0
Ti	47	3	He	0.392	0.0002	10.00	0.0005	0
Ti	47	3	He	1.571	0.0009	40.00	0.0005	0
V	51	3	He	0.089	0.033	1514.09	0.0223	0.03097
V	51	3	He	0.059	0.0323	1520.09	0.0223	0.03097
V	51	3	He	0.021	0.0314	1478.09	0.0223	0.03097
Cr	52	3	He	-0.112	0.0364	1670.15	0.029	0.03958
Cr	52	3	He	-0.076	0.0374	1760.17	0.029	0.03958
Cr	52	3	He	0.006	0.0398	1870.18	0.029	0.03958
Mn	55	3	He	0.258	0.0065	300.02	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.132	0.0049	230.01	0.013	0.003171
Mn	55	3	He	0.116	0.0047	220.01	0.013	0.003171
Fe	57	3	He	0.646	0.0024	110.01	0.0006	0.002014
Fe	57	3	He	-1.256	0.0013	60.00	0.0006	0.002014
Fe	57	3	He	-0.892	0.0015	70.00	0.0006	0.002014
Co	59	3	He	0.103	0.01	460.03	0.0572	0.004106
Co	59	3	He	0.032	0.0059	280.01	0.0572	0.004106
Co	59	3	He	0.066	0.0079	370.02	0.0572	0.004106
Ni	60	3	He	0.113	0.0043	340.02	0.0084	0.003329
Ni	60	3	He	0.057	0.0038	310.01	0.0084	0.003329
Ni	60	3	He	0.023	0.0035	280.01	0.0084	0.003329
Cu	63	3	He	0.093	0.0073	580.03	0.0247	0.004989
Cu	63	3	He	0.096	0.0074	600.03	0.0247	0.004989
Cu	63	3	He	0.098	0.0074	590.03	0.0247	0.004989
Zn	66	3	He	-0.584	0.0045	380.02	0.0029	0.006147
Zn	66	3	He	-0.91	0.0035	300.02	0.0029	0.006147
Zn	66	3	He	-0.425	0.0049	410.03	0.0029	0.006147
As	75	3	He	0.081	0.0011	92.00	0.002	0.0009198
As	75	3	He	0.035	0.001	84.00	0.002	0.0009198
As	75	3	He	0.021	0.001	80.00	0.002	0.0009198
Sr	88	3	He	0.023	0.0007	60.00	0.0088	0.0005022
Sr	88	3	He	0.063	0.0011	90.00	0.0088	0.0005022
Sr	88	3	He	0.107	0.0014	120.00	0.0088	0.0005022
Mo	98	3	He	0.06	0.002	170.01	0.0223	0.0006689
Mo	98	3	He	0.118	0.0033	280.01	0.0223	0.0006689
Mo	98	3	He	0.067	0.0022	180.01	0.0223	0.0006689
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	0.013	0.0013	110.00	0.0471	0.0006687
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Cd	111	3	He	0.01	0.0001	6.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.071	0.0168	1430.13	0.0156	0.01794
Sn	120	3	He	-0.115	0.0162	1370.12	0.0156	0.01794
Sn	120	3	He	-0.079	0.0167	1390.12	0.0156	0.01794
Sb	121	3	He	0.083	0.0013	110.00	0.0151	4.19E-05
Sb	121	3	He	0.114	0.0018	150.01	0.0151	4.19E-05
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Ba	137	3	He	0.077	0.0006	50.00	0.0049	0.0002094
Ba	137	3	He	0.005	0.0002	20.00	0.0049	0.0002094
Ba	137	3	He	-0.018	0.0001	10.00	0.0049	0.0002094
Tl	205	3	He	0.076	0.0027	1050.08	0.0252	0.0007688
Tl	205	3	He	0.088	0.003	1140.08	0.0252	0.0007688
Tl	205	3	He	0.068	0.0025	960.08	0.0252	0.0007688
Pb	208	3	He	-0.01	0.0014	230.01	0.0337	0.001742
Pb	208	3	He	-0.002	0.0017	330.02	0.0337	0.001742
Pb	208	3	He	-0.01	0.0014	280.01	0.0337	0.001742
U	238	3	He	0.045	0.0027	820.06	0.0502	0.0004339
U	238	3	He	0.041	0.0025	750.06	0.0502	0.0004339
U	238	3	He	0.056	0.0033	960.07	0.0502	0.0004339
Sc	45	1	No Gas			2383273.40		
Sc	45	1	No Gas			2464765.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2413554.03		
Ge	72	1	No Gas			1204585.37		
Ge	72	1	No Gas			1221311.31		
Ge	72	1	No Gas			1216758.89		
Sc	45	2	H2			177604.12		
Sc	45	2	H2			173485.80		
Sc	45	2	H2			173472.95		
Ge	72	2	H2			151182.82		
Ge	72	2	H2			151373.20		
Ge	72	2	H2			150717.27		
In	115	2	H2			386518.04		
In	115	2	H2			382022.22		
In	115	2	H2			383995.70		
Sc	45	3	He			45943.54		
Sc	45	3	He			47097.17		
Sc	45	3	He			47027.08		
Ge	72	3	He			79560.82		
Ge	72	3	He			81491.67		
Ge	72	3	He			79582.16		
In	115	3	He			84970.01		
In	115	3	He			84828.45		
In	115	3	He			83188.98		
Tb	159	3	He			389071.95		
Tb	159	3	He			381438.39		
Tb	159	3	He			385754.60		
Bi	209	3	He			302213.00		
Bi	209	3	He			300709.10		
Bi	209	3	He			294186.32		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 9:53:22 AM
Sample Name	MB 410-406649/1-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

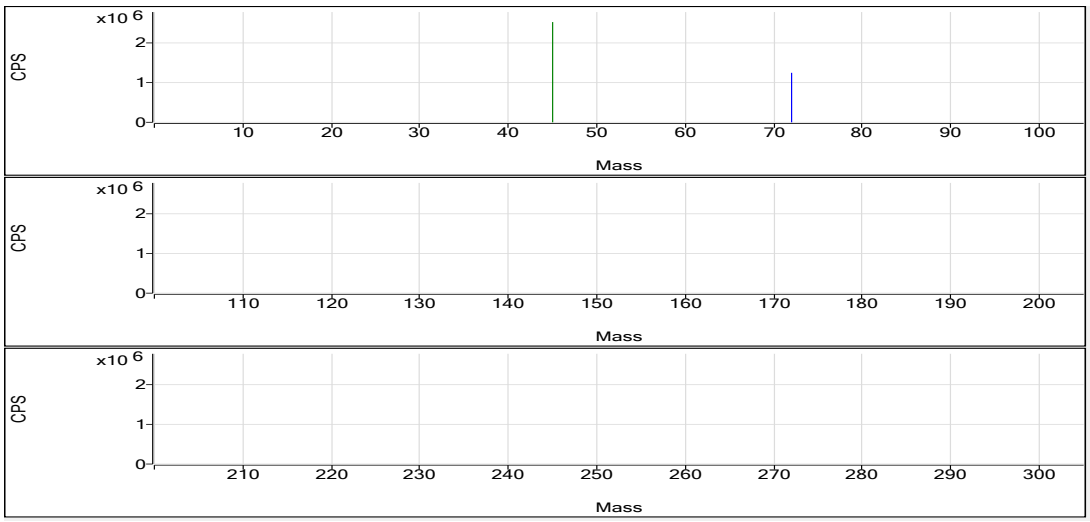
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	N/A	42.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.017	ppb	181.0	3.56	0.0000	Pulse	1.5000	3
Na	23	45	He	-5.862	ppb	N/A	15695.42	0.3217	Pulse	0.1000	3
Mg	24	45	He	1.569	ppb	23.1	283.35	0.0058	Pulse	0.1000	3
Al	27	45	He	4.382	ppb	11.5	176.68	0.0036	Pulse	0.1000	3
K	39	45	He	-15.781	ppb	N/A	18875.99	0.3867	Pulse	0.1000	3
Ca	44	45	He	-13.836	ppb	N/A	123.34	0.0025	Pulse	0.1000	3
Ti	47	45	He	0.249	ppb	173.2	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.288	ppb	N/A	1198.06	0.0246	Pulse	0.5000	3
Cr	52	45	He	-0.218	ppb	N/A	1623.47	0.0333	Pulse	0.1000	3
Mn	55	45	He	0.045	ppb	63.4	183.34	0.0038	Pulse	0.1000	3
Fe	57	45	He	-0.175	ppb	N/A	93.34	0.0019	Pulse	0.1000	3
Co	59	45	He	0.009	ppb	138.4	226.68	0.0046	Pulse	0.1000	3
Ni	60	72	He	-0.114	ppb	N/A	200.01	0.0024	Pulse	0.1000	3
Cu	63	72	He	0.056	ppb	30.2	536.70	0.0064	Pulse	0.1000	3
Zn	66	115	He	-0.888	ppb	N/A	310.01	0.0036	Pulse	0.1000	3
As	75	115	He	-0.130	ppb	N/A	56.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.110	ppb	41.9	126.67	0.0015	Pulse	0.1000	3
Mo	98	115	He	0.003	ppb	268.8	63.33	0.0007	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	46.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	60.4	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.163	ppb	N/A	1326.78	0.0154	Pulse	0.1000	3
Sb	121	115	He	0.041	ppb	29.6	56.67	0.0007	Pulse	0.1000	3
Ba	137	115	He	-0.003	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.000	ppb	N/A	296.68	0.0008	Pulse	0.1000	3
Pb	208	159	He	-0.013	ppb	N/A	510.03	0.0013	Pulse	0.1000	3
U	238	209	He	0.008	ppb	42.3	263.35	0.0009	Pulse	0.1000	3

ISTD Table:

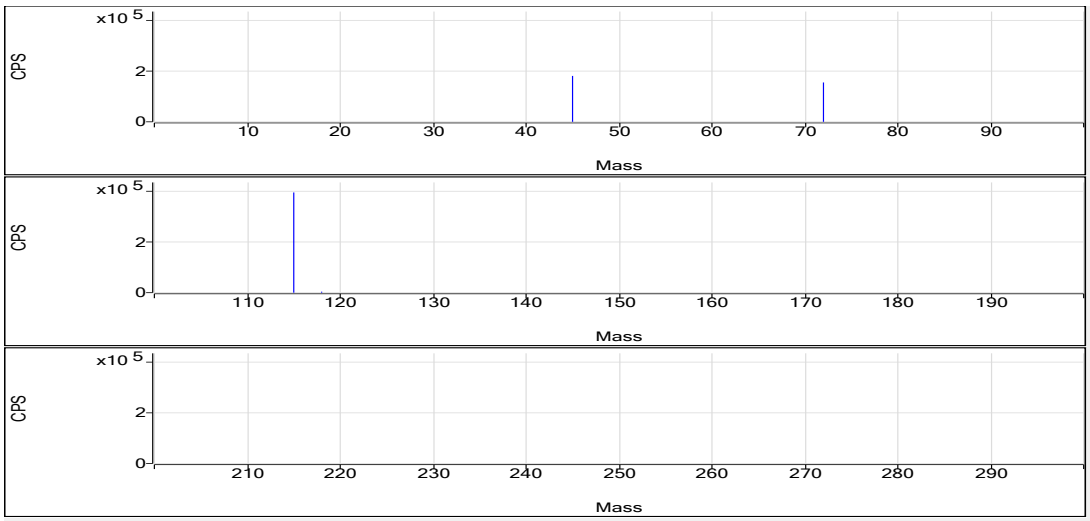
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2515660.95	1.4	107.2	Analog	0.1000	3
No Gas	Ge	72	1242223.11	1.0	103.5	Pulse	0.1000	3
H2	Sc	45	180221.66	1.0	103.7	Pulse	0.1000	3
H2	Ge	72	154478.87	1.3	103.3	Pulse	0.1000	3
H2	In	115	393526.95	1.7	107.5	Pulse	0.1000	3
He	Sc	45	48809.18	1.7	113.4	Pulse	0.1000	3
He	Ge	72	84067.18	1.2	107.6	Pulse	0.1000	3
He	In	115	86110.50	0.9	108.0	Pulse	0.1000	3
He	Tb	159	389484.03	1.1	105.9	Pulse	0.1000	3
He	Bi	209	308880.29	0.9	105.8	Pulse	0.1000	3

No Gas

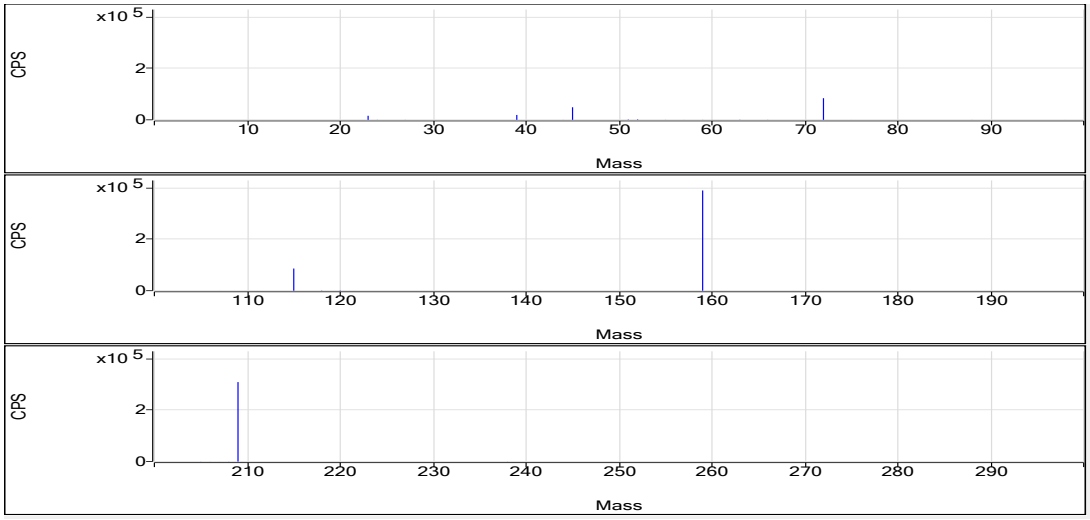


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	48.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.002	0	40.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.003	0	38.00	0.0007	1.705E-05
Se	78	2	H2	-0.006	0	2.00	0.0002	6.062E-06
Se	78	2	H2	0.005	0	2.67	0.0002	6.062E-06
Se	78	2	H2	0.052	0	6.00	0.0002	6.062E-06
Na	23	3	He	-2.771	0.3332	15949.05	0.0037	0.3435
Na	23	3	He	-7.392	0.316	15528.55	0.0037	0.3435
Na	23	3	He	-7.423	0.3159	15608.67	0.0037	0.3435
Mg	24	3	He	1.706	0.0061	290.01	0.0018	0.002943
Mg	24	3	He	1.843	0.0063	310.02	0.0018	0.002943
Mg	24	3	He	1.159	0.0051	250.01	0.0018	0.002943
Al	27	3	He	4.962	0.004	190.01	0.0006	0.001008
Al	27	3	He	4.107	0.0035	170.01	0.0006	0.001008
Al	27	3	He	4.076	0.0034	170.01	0.0006	0.001008
K	39	3	He	-17.731	0.3844	18401.98	0.0012	0.4052
K	39	3	He	-12.683	0.3904	19183.17	0.0012	0.4052
K	39	3	He	-16.928	0.3854	19042.83	0.0012	0.4052
Ca	44	3	He	-5.123	0.0031	150.01	0.0001	0.003486
Ca	44	3	He	-6.304	0.0031	150.01	0.0001	0.003486
Ca	44	3	He	-30.081	0.0014	70.00	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.748	0.0004	20.00	0.0005	0
V	51	3	He	-0.248	0.0254	1218.06	0.0223	0.03097
V	51	3	He	-0.307	0.0241	1186.06	0.0223	0.03097
V	51	3	He	-0.31	0.0241	1190.06	0.0223	0.03097
Cr	52	3	He	-0.169	0.0347	1660.13	0.029	0.03958
Cr	52	3	He	-0.165	0.0348	1710.16	0.029	0.03958
Cr	52	3	He	-0.319	0.0304	1500.13	0.029	0.03958
Mn	55	3	He	0.078	0.0042	200.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.022	0.0035	170.01	0.013	0.003171
Mn	55	3	He	0.036	0.0036	180.01	0.013	0.003171
Fe	57	3	He	-0.227	0.0019	90.00	0.0006	0.002014
Fe	57	3	He	-1.001	0.0014	70.00	0.0006	0.002014
Fe	57	3	He	0.704	0.0024	120.01	0.0006	0.002014
Co	59	3	He	0.001	0.0042	200.01	0.0572	0.004106
Co	59	3	He	0.024	0.0055	270.01	0.0572	0.004106
Co	59	3	He	0.003	0.0042	210.01	0.0572	0.004106
Ni	60	3	He	-0.139	0.0022	180.01	0.0084	0.003329
Ni	60	3	He	-0.116	0.0024	200.01	0.0084	0.003329
Ni	60	3	He	-0.087	0.0026	220.01	0.0084	0.003329
Cu	63	3	He	0.062	0.0065	540.03	0.0247	0.004989
Cu	63	3	He	0.07	0.0067	570.03	0.0247	0.004989
Cu	63	3	He	0.037	0.0059	500.03	0.0247	0.004989
Zn	66	3	He	-0.879	0.0036	310.01	0.0029	0.006147
Zn	66	3	He	-0.94	0.0035	300.01	0.0029	0.006147
Zn	66	3	He	-0.844	0.0037	320.01	0.0029	0.006147
As	75	3	He	-0.074	0.0008	66.00	0.002	0.0009198
As	75	3	He	-0.183	0.0006	48.00	0.002	0.0009198
As	75	3	He	-0.133	0.0007	56.00	0.002	0.0009198
Sr	88	3	He	0.062	0.0011	90.00	0.0088	0.0005022
Sr	88	3	He	0.113	0.0015	130.01	0.0088	0.0005022
Sr	88	3	He	0.155	0.0019	160.01	0.0088	0.0005022
Mo	98	3	He	0.001	0.0007	60.00	0.0223	0.0006689
Mo	98	3	He	-0.004	0.0006	50.00	0.0223	0.0006689
Mo	98	3	He	0.012	0.0009	80.00	0.0223	0.0006689
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	0	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.005	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.183	0.0151	1290.10	0.0156	0.01794
Sn	120	3	He	-0.111	0.0162	1410.12	0.0156	0.01794
Sn	120	3	He	-0.195	0.0149	1280.11	0.0156	0.01794
Sb	121	3	He	0.051	0.0008	70.00	0.0151	4.19E-05
Sb	121	3	He	0.028	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.043	0.0007	60.00	0.0151	4.19E-05
Ba	137	3	He	0.005	0.0002	20.00	0.0049	0.0002094
Ba	137	3	He	0.004	0.0002	20.00	0.0049	0.0002094
Ba	137	3	He	-0.019	0.0001	10.00	0.0049	0.0002094
Tl	205	3	He	-0.005	0.0006	250.01	0.0252	0.0007688
Tl	205	3	He	0.002	0.0008	320.02	0.0252	0.0007688
Tl	205	3	He	0.002	0.0008	320.02	0.0252	0.0007688
Pb	208	3	He	-0.008	0.0015	320.02	0.0337	0.001742
Pb	208	3	He	-0.012	0.0013	250.02	0.0337	0.001742
Pb	208	3	He	-0.018	0.0011	240.01	0.0337	0.001742
U	238	3	He	0.005	0.0007	210.01	0.0502	0.0004339
U	238	3	He	0.008	0.0009	260.01	0.0502	0.0004339
U	238	3	He	0.012	0.001	320.02	0.0502	0.0004339
Sc	45	1	No Gas			2488730.43		
Sc	45	1	No Gas			2555762.77		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2502489.65		
Ge	72	1	No Gas			1231418.58		
Ge	72	1	No Gas			1239535.14		
Ge	72	1	No Gas			1255715.61		
Sc	45	2	H2			182280.49		
Sc	45	2	H2			178657.32		
Sc	45	2	H2			179727.18		
Ge	72	2	H2			155824.69		
Ge	72	2	H2			152173.08		
Ge	72	2	H2			155438.83		
In	115	2	H2			397195.93		
In	115	2	H2			385874.56		
In	115	2	H2			397510.35		
Sc	45	3	He			47869.12		
Sc	45	3	He			49143.45		
Sc	45	3	He			49414.98		
Ge	72	3	He			82950.74		
Ge	72	3	He			84710.86		
Ge	72	3	He			84539.95		
In	115	3	He			85513.10		
In	115	3	He			86961.25		
In	115	3	He			85876.35		
Tb	159	3	He			388703.31		
Tb	159	3	He			385451.75		
Tb	159	3	He			394297.03		
Bi	209	3	He			310406.87		
Bi	209	3	He			305847.51		
Bi	209	3	He			310386.48		

Quantitation Report

Data File Name	083SMPL.d
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Acq Time	8/11/2023 9:55:24 AM
Sample Name	LCS 410-406649/2-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

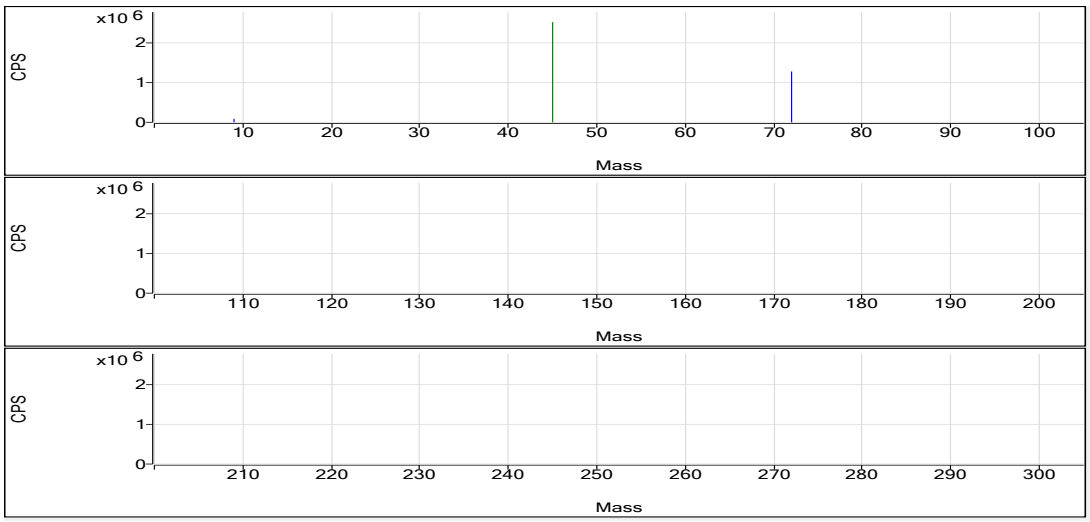
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.440	ppb	0.6	87167.10	0.0344	Pulse	0.5000	3
Se	78	115	H2	102.084	ppb	1.2	7039.74	0.0176	Pulse	1.5000	3
Na	23	45	He	4554.981	ppb	1.2	854326.71	17.2922	Pulse	0.1000	3
Mg	24	45	He	4832.074	ppb	1.1	436187.40	8.8286	Pulse	0.1000	3
Al	27	45	He	4800.195	ppb	0.8	141602.81	2.8660	Pulse	0.1000	3
K	39	45	He	4899.916	ppb	1.2	304284.27	6.1588	Pulse	0.1000	3
Ca	44	45	He	4862.434	ppb	3.5	16700.14	0.3380	Pulse	0.1000	3
Ti	47	45	He	491.076	ppb	5.9	13126.30	0.2658	Pulse	0.1000	3
V	51	45	He	492.375	ppb	1.3	542892.73	10.9886	Pulse	0.5000	3
Cr	52	45	He	485.840	ppb	1.3	697188.53	14.1117	Pulse	0.1000	3
Mn	55	45	He	489.110	ppb	1.4	314167.64	6.3589	Pulse	0.1000	3
Fe	57	45	He	4874.766	ppb	0.7	141972.20	2.8735	Pulse	0.1000	3
Co	59	45	He	482.745	ppb	1.6	1364385.71	27.6142	Mix	0.1000	3
Ni	60	72	He	514.168	ppb	1.3	372806.25	4.3024	Pulse	0.1000	3
Cu	63	72	He	497.045	ppb	1.0	1064763.47	12.2879	Pulse	0.1000	3
Zn	66	115	He	516.208	ppb	1.1	128430.90	1.4865	Pulse	0.1000	3
As	75	115	He	514.692	ppb	0.9	89422.81	1.0350	Pulse	0.5000	3
Sr	88	115	He	53.335	ppb	0.2	40628.84	0.4702	Pulse	0.1000	3
Mo	98	115	He	49.739	ppb	0.6	96003.83	1.1112	Pulse	0.1000	3
Ag	107	115	He	49.705	ppb	0.1	202273.40	2.3411	Pulse	0.1000	3
Cd	111	115	He	51.048	ppb	1.1	23611.91	0.2733	Pulse	0.5000	3
Sn	120	115	He	104.015	ppb	0.5	141449.44	1.6372	Pulse	0.1000	3
Sb	121	115	He	99.778	ppb	1.2	130402.82	1.5094	Pulse	0.1000	3
Ba	137	115	He	507.777	ppb	1.4	214686.43	2.4850	Pulse	0.1000	3
Tl	205	159	He	101.617	ppb	0.5	1010394.23	2.5658	Pulse	0.1000	3
Pb	208	159	He	50.558	ppb	0.8	672328.25	1.7074	Pulse	0.1000	3
U	238	209	He	48.987	ppb	1.0	761057.90	2.4572	Pulse	0.1000	3

ISTD Table:

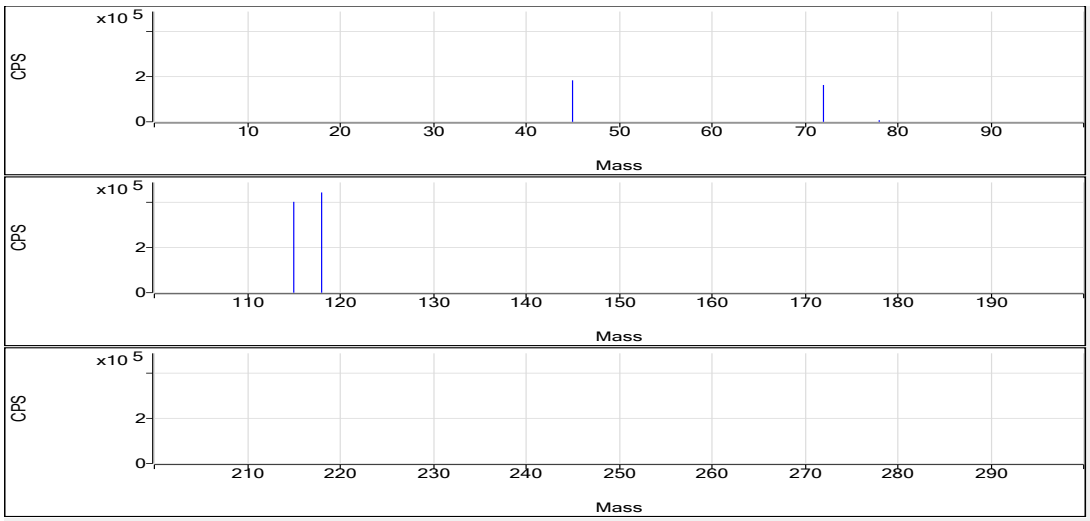
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2535606.00	0.1	108.0	Analog	0.1000	3
No Gas	Ge	72	1286213.47	0.4	107.2	Pulse	0.1000	3
H2	Sc	45	182987.69	1.1	105.3	Pulse	0.1000	3
H2	Ge	72	162433.41	0.9	108.6	Pulse	0.1000	3
H2	In	115	400656.84	0.6	109.5	Pulse	0.1000	3
He	Sc	45	49411.11	1.4	114.8	Pulse	0.1000	3
He	Ge	72	86655.51	0.7	110.9	Pulse	0.1000	3
He	In	115	86401.01	0.9	108.4	Pulse	0.1000	3
He	Tb	159	393796.14	0.9	107.0	Pulse	0.1000	3
He	Bi	209	309746.75	0.7	106.1	Pulse	0.1000	3

No Gas

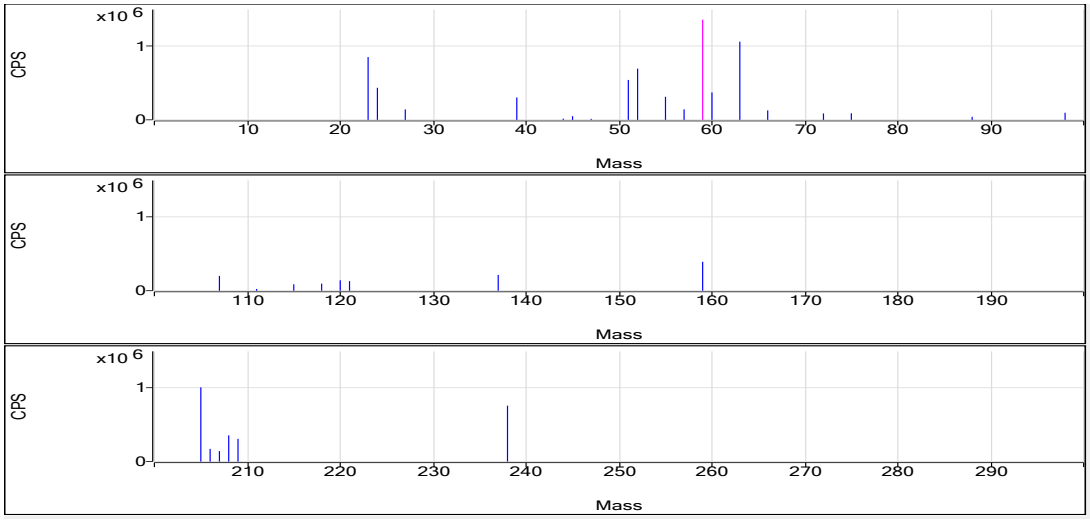


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.184	0.0342	86749.17	0.0007	1.705E-05
Be	9	1	No Gas	46.407	0.0344	87023.14	0.0007	1.705E-05
Be	9	1	No Gas	46.729	0.0346	87729.00	0.0007	1.705E-05
Se	78	2	H2	101.596	0.0175	7019.06	0.0002	6.062E-06
Se	78	2	H2	103.524	0.0178	7088.44	0.0002	6.062E-06
Se	78	2	H2	101.132	0.0174	7011.72	0.0002	6.062E-06
Na	23	3	He	4536.946	17.2251	853409.36	0.0037	0.3435
Na	23	3	He	4618.28	17.5277	852577.88	0.0037	0.3435
Na	23	3	He	4509.716	17.1238	856992.88	0.0037	0.3435
Mg	24	3	He	4829.403	8.8238	437170.07	0.0018	0.002943
Mg	24	3	He	4886.634	8.9283	434287.85	0.0018	0.002943
Mg	24	3	He	4780.185	8.7339	437104.29	0.0018	0.002943
Al	27	3	He	4774.349	2.8506	141230.62	0.0006	0.001008
Al	27	3	He	4843.594	2.8919	140667.21	0.0006	0.001008
Al	27	3	He	4782.644	2.8555	142910.60	0.0006	0.001008
K	39	3	He	4865.237	6.1181	303119.66	0.0012	0.4052
K	39	3	He	4968.214	6.239	303477.36	0.0012	0.4052
K	39	3	He	4866.297	6.1194	306255.78	0.0012	0.4052
Ca	44	3	He	5021.723	0.349	17290.83	0.0001	0.003486
Ca	44	3	He	4885.514	0.3396	16519.88	0.0001	0.003486
Ca	44	3	He	4680.064	0.3255	16289.71	0.0001	0.003486
Ti	47	3	He	474.933	0.2571	12735.89	0.0005	0
Ti	47	3	He	524.432	0.2839	13806.98	0.0005	0
Ti	47	3	He	473.862	0.2565	12836.02	0.0005	0
V	51	3	He	492.383	10.9888	544435.63	0.0223	0.03097
V	51	3	He	498.843	11.1326	541506.88	0.0223	0.03097
V	51	3	He	485.9	10.8445	542735.69	0.0223	0.03097
Cr	52	3	He	485.374	14.0982	698490.85	0.029	0.03958
Cr	52	3	He	492.388	14.3014	695643.58	0.029	0.03958
Cr	52	3	He	479.757	13.9355	697431.16	0.029	0.03958
Mn	55	3	He	483.512	6.2862	311446.36	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	496.643	6.4568	314070.03	0.013	0.003171
Mn	55	3	He	487.175	6.3338	316986.54	0.013	0.003171
Fe	57	3	He	4873.761	2.8729	142336.05	0.0006	0.002014
Fe	57	3	He	4909.977	2.8942	140779.83	0.0006	0.002014
Fe	57	3	He	4840.561	2.8533	142800.71	0.0006	0.002014
Co	59	3	He	490.771	28.0732	1390876.07	0.0572	0.004106
Co	59	3	He	482.208	27.5835	1341707.64	0.0572	0.004106
Co	59	3	He	475.257	27.1859	1360573.42	0.0572	0.004106
Ni	60	3	He	507.708	4.2484	370996.05	0.0084	0.003329
Ni	60	3	He	521.359	4.3626	375657.38	0.0084	0.003329
Ni	60	3	He	513.438	4.2963	371765.31	0.0084	0.003329
Cu	63	3	He	491.532	12.1516	1061149.05	0.0247	0.004989
Cu	63	3	He	500.195	12.3657	1064805.06	0.0247	0.004989
Cu	63	3	He	499.409	12.3463	1068336.31	0.0247	0.004989
Zn	66	3	He	514.983	1.483	127956.50	0.0029	0.006147
Zn	66	3	He	522.411	1.5043	128935.26	0.0029	0.006147
Zn	66	3	He	511.23	1.4723	128400.93	0.0029	0.006147
As	75	3	He	516.721	1.0391	89654.32	0.002	0.0009198
As	75	3	He	517.831	1.0413	89251.81	0.002	0.0009198
As	75	3	He	509.524	1.0246	89362.30	0.002	0.0009198
Sr	88	3	He	53.224	0.4693	40488.40	0.0088	0.0005022
Sr	88	3	He	53.42	0.471	40368.15	0.0088	0.0005022
Sr	88	3	He	53.359	0.4705	41029.98	0.0088	0.0005022
Mo	98	3	He	49.47	1.1051	95352.68	0.0223	0.0006689
Mo	98	3	He	50.047	1.118	95825.45	0.0223	0.0006689
Mo	98	3	He	49.701	1.1103	96833.36	0.0223	0.0006689
Ag	107	3	He	49.7	2.3409	201970.27	0.0471	0.0006687
Ag	107	3	He	49.75	2.3432	200836.11	0.0471	0.0006687
Ag	107	3	He	49.666	2.3393	204013.81	0.0471	0.0006687
Cd	111	3	He	51.559	0.276	23816.28	0.0054	1.676E-05
Cd	111	3	He	51.169	0.2739	23479.68	0.0054	1.676E-05
Cd	111	3	He	50.415	0.2699	23539.77	0.0054	1.676E-05
Sn	120	3	He	103.967	1.6364	141192.88	0.0156	0.01794
Sn	120	3	He	104.6	1.6463	141103.03	0.0156	0.01794
Sn	120	3	He	103.476	1.6288	142052.40	0.0156	0.01794
Sb	121	3	He	100.729	1.5237	131469.16	0.0151	4.19E-05
Sb	121	3	He	100.194	1.5156	129905.03	0.0151	4.19E-05
Sb	121	3	He	98.413	1.4887	129834.28	0.0151	4.19E-05
Ba	137	3	He	511.558	2.5035	216000.45	0.0049	0.0002094
Ba	137	3	He	512.449	2.5078	214944.06	0.0049	0.0002094
Ba	137	3	He	499.325	2.4436	213114.78	0.0049	0.0002094
Tl	205	3	He	102.202	2.5806	1015560.22	0.0252	0.0007688
Tl	205	3	He	101.398	2.5603	999602.64	0.0252	0.0007688
Tl	205	3	He	101.251	2.5566	1016019.83	0.0252	0.0007688
Pb	208	3	He	50.849	1.7172	357687.06	0.0337	0.001742
Pb	208	3	He	50.723	1.7129	355287.30	0.0337	0.001742
Pb	208	3	He	50.102	1.692	356941.09	0.0337	0.001742
U	238	3	He	49.392	2.4775	763131.08	0.0502	0.0004339
U	238	3	He	49.13	2.4643	761086.63	0.0502	0.0004339
U	238	3	He	48.439	2.4297	758956.00	0.0502	0.0004339
Sc	45	1	No Gas			2537438.87		
Sc	45	1	No Gas			2533224.18		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2536154.96		
Ge	72	1	No Gas			1288251.00		
Ge	72	1	No Gas			1280931.70		
Ge	72	1	No Gas			1289457.72		
Sc	45	2	H2			183311.19		
Sc	45	2	H2			180872.13		
Sc	45	2	H2			184779.76		
Ge	72	2	H2			161572.94		
Ge	72	2	H2			161694.53		
Ge	72	2	H2			164032.75		
In	115	2	H2			401375.03		
In	115	2	H2			397798.82		
In	115	2	H2			402796.67		
Sc	45	3	He			49544.60		
Sc	45	3	He			48641.72		
Sc	45	3	He			50047.02		
Ge	72	3	He			87325.82		
Ge	72	3	He			86109.57		
Ge	72	3	He			86531.14		
In	115	3	He			87021.89		
In	115	3	He			86468.58		
In	115	3	He			87967.63		
Tb	159	3	He			393542.49		
Tb	159	3	He			390427.69		
Tb	159	3	He			397418.24		
Bi	209	3	He			308028.76		
Bi	209	3	He			308844.12		
Bi	209	3	He			312367.38		

Quantitation Report

Data File Name	084SMPL.d
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Sample Name	410-138075-W-1-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

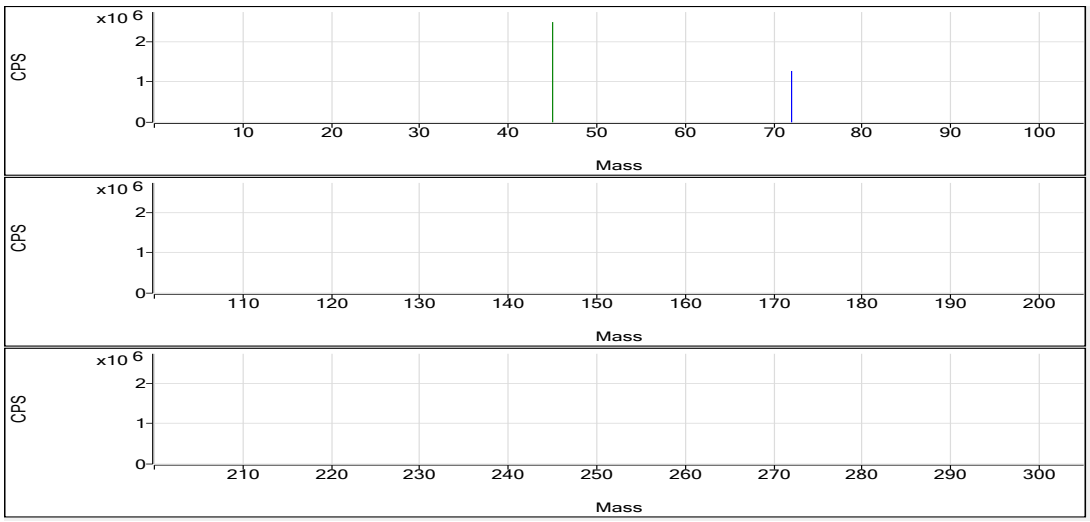
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	16.1	64.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.040	ppb	86.1	5.11	0.0000	Pulse	1.5000	3
Na	23	45	He	32877.158	ppb	1.6	5847228.46	122.6766	Analog	0.1000	3
Mg	24	45	He	9077.616	ppb	0.6	790432.12	16.5831	Pulse	0.1000	3
Al	27	45	He	3.699	ppb	44.7	153.34	0.0032	Pulse	0.1000	3
K	39	45	He	1689.198	ppb	2.3	113855.43	2.3887	Pulse	0.1000	3
Ca	44	45	He	35693.855	ppb	0.9	117222.95	2.4593	Pulse	0.1000	3
Ti	47	45	He	0.259	ppb	86.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.177	ppb	N/A	1288.73	0.0270	Pulse	0.5000	3
Cr	52	45	He	-0.027	ppb	N/A	1850.18	0.0388	Pulse	0.1000	3
Mn	55	45	He	160.792	ppb	1.2	99742.93	2.0926	Pulse	0.1000	3
Fe	57	45	He	141.663	ppb	5.3	4074.05	0.0855	Pulse	0.1000	3
Co	59	45	He	0.050	ppb	67.7	333.35	0.0070	Pulse	0.1000	3
Ni	60	72	He	0.086	ppb	71.9	343.35	0.0040	Pulse	0.1000	3
Cu	63	72	He	0.378	ppb	6.3	1216.76	0.0143	Pulse	0.1000	3
Zn	66	115	He	2.016	ppb	11.3	1040.08	0.0119	Pulse	0.1000	3
As	75	115	He	1.350	ppb	5.5	316.68	0.0036	Pulse	0.5000	3
Sr	88	115	He	951.097	ppb	1.6	730186.42	8.3771	Pulse	0.1000	3
Mo	98	115	He	0.215	ppb	17.9	476.69	0.0055	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	221.1	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.192	ppb	N/A	1303.44	0.0150	Pulse	0.1000	3
Sb	121	115	He	0.058	ppb	27.2	80.00	0.0009	Pulse	0.1000	3
Ba	137	115	He	614.314	ppb	1.5	262048.04	3.0063	Pulse	0.1000	3
Tl	205	159	He	0.148	ppb	14.3	1793.53	0.0045	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	72.4	830.04	0.0021	Pulse	0.1000	3
U	238	209	He	0.247	ppb	4.9	3940.75	0.0128	Pulse	0.1000	3

ISTD Table:

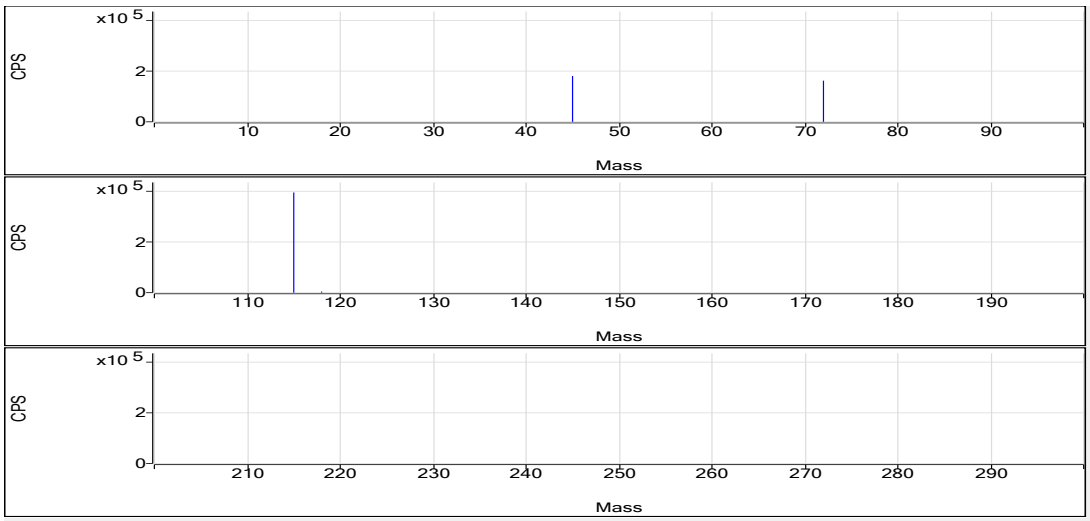
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2487096.47	1.3	106.0	Analog	0.1000	3
No Gas	Ge	72	1273286.44	0.7	106.1	Pulse	0.1000	3
H2	Sc	45	180316.67	0.3	103.8	Pulse	0.1000	3
H2	Ge	72	161818.94	1.1	108.2	Pulse	0.1000	3
H2	In	115	394155.45	0.3	107.7	Pulse	0.1000	3
He	Sc	45	47665.64	0.4	110.8	Pulse	0.1000	3
He	Ge	72	84941.99	1.7	108.7	Pulse	0.1000	3
He	In	115	87175.83	1.2	109.4	Pulse	0.1000	3
He	Tb	159	397539.97	1.1	108.0	Pulse	0.1000	3
He	Bi	209	307102.25	0.6	105.2	Pulse	0.1000	3

No Gas

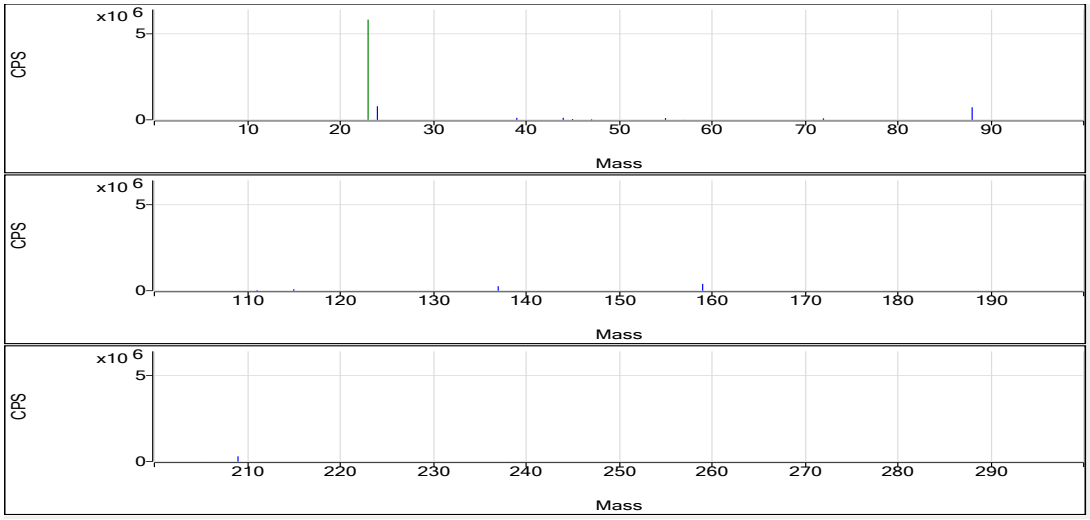


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.014	0	68.00	0.0007	1.705E-05
Be	9	1	No Gas	0.01	0	62.00	0.0007	1.705E-05
Be	9	1	No Gas	0.012	0	64.00	0.0007	1.705E-05
Se	78	2	H2	0.073	0	7.33	0.0002	6.062E-06
Se	78	2	H2	0.004	0	2.67	0.0002	6.062E-06
Se	78	2	H2	0.044	0	5.33	0.0002	6.062E-06
Na	23	3	He	33475.499	124.9029	5932710.54	0.0037	0.3435
Na	23	3	He	32732.398	122.1379	5818479.29	0.0037	0.3435
Na	23	3	He	32423.576	120.9888	5790495.54	0.0037	0.3435
Mg	24	3	He	9138.68	16.6946	792969.21	0.0018	0.002943
Mg	24	3	He	9052.879	16.5379	787841.39	0.0018	0.002943
Mg	24	3	He	9041.289	16.5167	790485.77	0.0018	0.002943
Al	27	3	He	1.839	0.0021	100.00	0.0006	0.001008
Al	27	3	He	4.994	0.004	190.01	0.0006	0.001008
Al	27	3	He	4.263	0.0036	170.01	0.0006	0.001008
K	39	3	He	1729.087	2.4356	115686.39	0.0012	0.4052
K	39	3	He	1685.692	2.3846	113600.03	0.0012	0.4052
K	39	3	He	1652.816	2.346	112279.86	0.0012	0.4052
Ca	44	3	He	35848.81	2.47	117320.88	0.0001	0.003486
Ca	44	3	He	35918.27	2.4748	117894.42	0.0001	0.003486
Ca	44	3	He	35314.485	2.4332	116453.54	0.0001	0.003486
Ti	47	3	He	0.389	0.0002	10.00	0.0005	0
Ti	47	3	He	0.388	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.211	0.0263	1248.06	0.0223	0.03097
V	51	3	He	-0.201	0.0265	1262.07	0.0223	0.03097
V	51	3	He	-0.119	0.0283	1356.07	0.0223	0.03097
Cr	52	3	He	-0.087	0.0371	1760.16	0.029	0.03958
Cr	52	3	He	0.09	0.0422	2010.22	0.029	0.03958
Cr	52	3	He	-0.082	0.0372	1780.16	0.029	0.03958
Mn	55	3	He	160.492	2.0887	99209.38	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	162.833	2.1191	100951.36	0.013	0.003171
Mn	55	3	He	159.051	2.07	99068.04	0.013	0.003171
Fe	57	3	He	135.28	0.0817	3880.65	0.0006	0.002014
Fe	57	3	He	139.863	0.0844	4020.69	0.0006	0.002014
Fe	57	3	He	149.846	0.0903	4320.80	0.0006	0.002014
Co	59	3	He	0.079	0.0086	410.02	0.0572	0.004106
Co	59	3	He	0.013	0.0048	230.01	0.0572	0.004106
Co	59	3	He	0.06	0.0075	360.02	0.0572	0.004106
Ni	60	3	He	0.137	0.0045	380.02	0.0084	0.003329
Ni	60	3	He	0.103	0.0042	350.02	0.0084	0.003329
Ni	60	3	He	0.017	0.0035	300.02	0.0084	0.003329
Cu	63	3	He	0.355	0.0138	1170.09	0.0247	0.004989
Cu	63	3	He	0.375	0.0143	1190.09	0.0247	0.004989
Cu	63	3	He	0.403	0.0149	1290.10	0.0247	0.004989
Zn	66	3	He	1.764	0.0112	970.08	0.0029	0.006147
Zn	66	3	He	2.208	0.0125	1080.08	0.0029	0.006147
Zn	66	3	He	2.076	0.0121	1070.09	0.0029	0.006147
As	75	3	He	1.371	0.0037	318.01	0.002	0.0009198
As	75	3	He	1.268	0.0035	300.01	0.002	0.0009198
As	75	3	He	1.411	0.0038	332.01	0.002	0.0009198
Sr	88	3	He	958.825	8.4452	731037.41	0.0088	0.0005022
Sr	88	3	He	960.701	8.4617	732282.18	0.0088	0.0005022
Sr	88	3	He	933.764	8.2245	727239.68	0.0088	0.0005022
Mo	98	3	He	0.213	0.0054	470.03	0.0223	0.0006689
Mo	98	3	He	0.255	0.0064	550.03	0.0223	0.0006689
Mo	98	3	He	0.178	0.0046	410.02	0.0223	0.0006689
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.005	0.0005	40.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.014	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.307	0.0132	1140.08	0.0156	0.01794
Sn	120	3	He	-0.069	0.0169	1460.13	0.0156	0.01794
Sn	120	3	He	-0.201	0.0148	1310.10	0.0156	0.01794
Sb	121	3	He	0.074	0.0012	100.00	0.0151	4.19E-05
Sb	121	3	He	0.058	0.0009	80.00	0.0151	4.19E-05
Sb	121	3	He	0.042	0.0007	60.00	0.0151	4.19E-05
Ba	137	3	He	614.243	3.0059	260202.96	0.0049	0.0002094
Ba	137	3	He	623.618	3.0518	264106.95	0.0049	0.0002094
Ba	137	3	He	605.082	2.9611	261834.21	0.0049	0.0002094
Tl	205	3	He	0.173	0.0051	2060.24	0.0252	0.0007688
Tl	205	3	He	0.134	0.0042	1650.17	0.0252	0.0007688
Tl	205	3	He	0.138	0.0042	1670.18	0.0252	0.0007688
Pb	208	3	He	0.01	0.0021	450.03	0.0337	0.001742
Pb	208	3	He	0.003	0.0018	330.02	0.0337	0.001742
Pb	208	3	He	0.018	0.0023	430.02	0.0337	0.001742
U	238	3	He	0.233	0.0121	3750.66	0.0502	0.0004339
U	238	3	He	0.256	0.0133	4080.83	0.0502	0.0004339
U	238	3	He	0.252	0.0131	3990.77	0.0502	0.0004339
Sc	45	1	No Gas			2476306.99		
Sc	45	1	No Gas			2523485.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2461497.31		
Ge	72	1	No Gas			1266812.48		
Ge	72	1	No Gas			1284201.00		
Ge	72	1	No Gas			1268845.84		
Sc	45	2	H2			179757.69		
Sc	45	2	H2			180247.93		
Sc	45	2	H2			180944.39		
Ge	72	2	H2			163314.05		
Ge	72	2	H2			159868.87		
Ge	72	2	H2			162273.89		
In	115	2	H2			393781.32		
In	115	2	H2			395450.70		
In	115	2	H2			393234.33		
Sc	45	3	He			47498.57		
Sc	45	3	He			47638.60		
Sc	45	3	He			47859.76		
Ge	72	3	He			84962.44		
Ge	72	3	He			83483.65		
Ge	72	3	He			86379.87		
In	115	3	He			86570.16		
In	115	3	He			86548.52		
In	115	3	He			88431.60		
Tb	159	3	He			402124.13		
Tb	159	3	He			397371.95		
Tb	159	3	He			393123.82		
Bi	209	3	He			308998.06		
Bi	209	3	He			306933.45		
Bi	209	3	He			305375.25		

Quantitation Report

Data File Name	085SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
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Sample Name	410-138075-W-1-A PDS
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

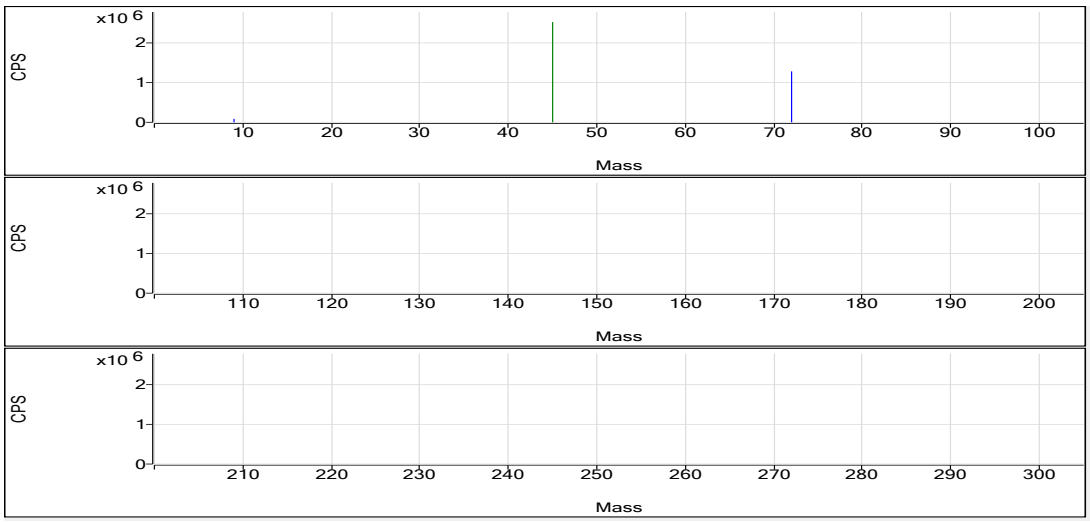
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.653	ppb	0.8	87025.68	0.0345	Pulse	0.5000	3
Se	78	115	H2	101.655	ppb	1.1	6898.56	0.0175	Pulse	1.5000	3
Na	23	45	He	35769.890	ppb	2.1	6562123.86	133.4402	Analog	0.1000	3
Mg	24	45	He	13761.306	ppb	2.4	1236164.46	25.1377	Analog	0.1000	3
Al	27	45	He	4790.734	ppb	2.8	140652.85	2.8604	Pulse	0.1000	3
K	39	45	He	6474.174	ppb	2.4	393766.04	8.0074	Pulse	0.1000	3
Ca	44	45	He	38810.565	ppb	2.7	131482.96	2.6738	Pulse	0.1000	3
Ti	47	45	He	477.308	ppb	1.6	12709.32	0.2583	Pulse	0.1000	3
V	51	45	He	491.865	ppb	1.4	539861.25	10.9773	Pulse	0.5000	3
Cr	52	45	He	483.726	ppb	1.9	690967.23	14.0505	Pulse	0.1000	3
Mn	55	45	He	636.403	ppb	1.5	406860.50	8.2729	Pulse	0.1000	3
Fe	57	45	He	4935.869	ppb	1.8	143083.29	2.9095	Pulse	0.1000	3
Co	59	45	He	465.831	ppb	1.9	1310424.01	26.6468	Pulse	0.1000	3
Ni	60	72	He	507.239	ppb	1.9	366467.26	4.2445	Pulse	0.1000	3
Cu	63	72	He	492.238	ppb	1.3	1050744.98	12.1690	Pulse	0.1000	3
Zn	66	115	He	524.819	ppb	0.9	127489.36	1.5112	Pulse	0.1000	3
As	75	115	He	531.557	ppb	0.9	90175.48	1.0689	Pulse	0.5000	3
Sr	88	115	He	1006.712	ppb	0.9	748015.75	8.8669	Pulse	0.1000	3
Mo	98	115	He	51.977	ppb	1.4	97950.52	1.1611	Pulse	0.1000	3
Ag	107	115	He	52.428	ppb	0.2	208322.84	2.4693	Pulse	0.1000	3
Cd	111	115	He	51.927	ppb	1.5	23451.69	0.2780	Pulse	0.5000	3
Sn	120	115	He	104.346	ppb	1.7	138540.81	1.6423	Pulse	0.1000	3
Sb	121	115	He	99.054	ppb	0.7	126413.42	1.4984	Pulse	0.1000	3
Ba	137	115	He	1134.441	ppb	1.0	468320.97	5.5515	Pulse	0.1000	3
Tl	205	159	He	100.742	ppb	0.3	1000012.98	2.5437	Pulse	0.1000	3
Pb	208	159	He	50.188	ppb	0.4	666314.48	1.6949	Pulse	0.1000	3
U	238	209	He	49.922	ppb	1.0	764885.46	2.5040	Pulse	0.1000	3

ISTD Table:

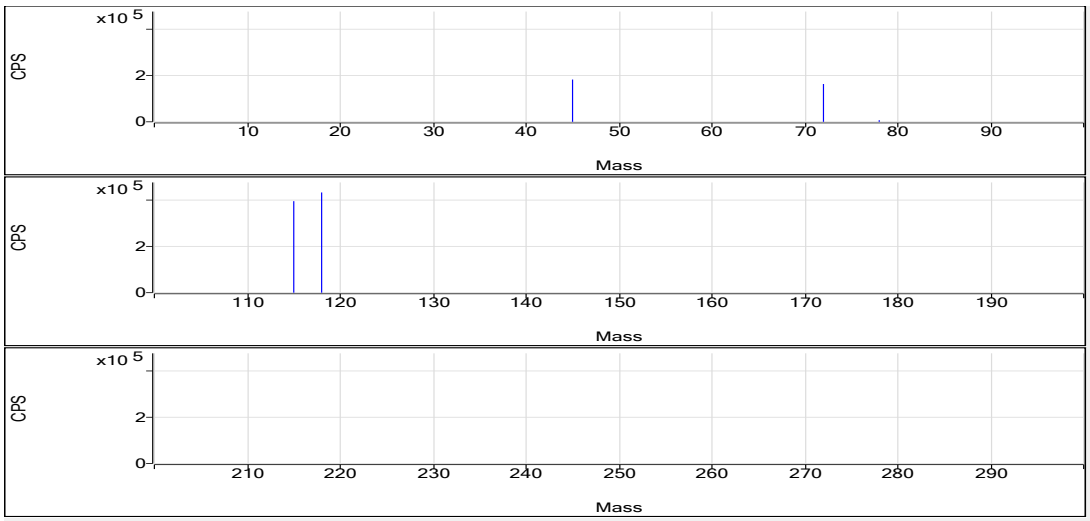
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2520035.59	0.9	107.4	Analog	0.1000	3
No Gas	Ge	72	1280308.34	1.0	106.7	Pulse	0.1000	3
H2	Sc	45	182089.39	0.8	104.8	Pulse	0.1000	3
H2	Ge	72	162846.17	0.5	108.9	Pulse	0.1000	3
H2	In	115	394270.48	0.6	107.7	Pulse	0.1000	3
He	Sc	45	49187.31	1.6	114.3	Pulse	0.1000	3
He	Ge	72	86357.72	1.7	110.5	Pulse	0.1000	3
He	In	115	84364.81	0.9	105.8	Pulse	0.1000	3
He	Tb	159	393130.42	0.1	106.8	Pulse	0.1000	3
He	Bi	209	305470.28	0.6	104.6	Pulse	0.1000	3

No Gas

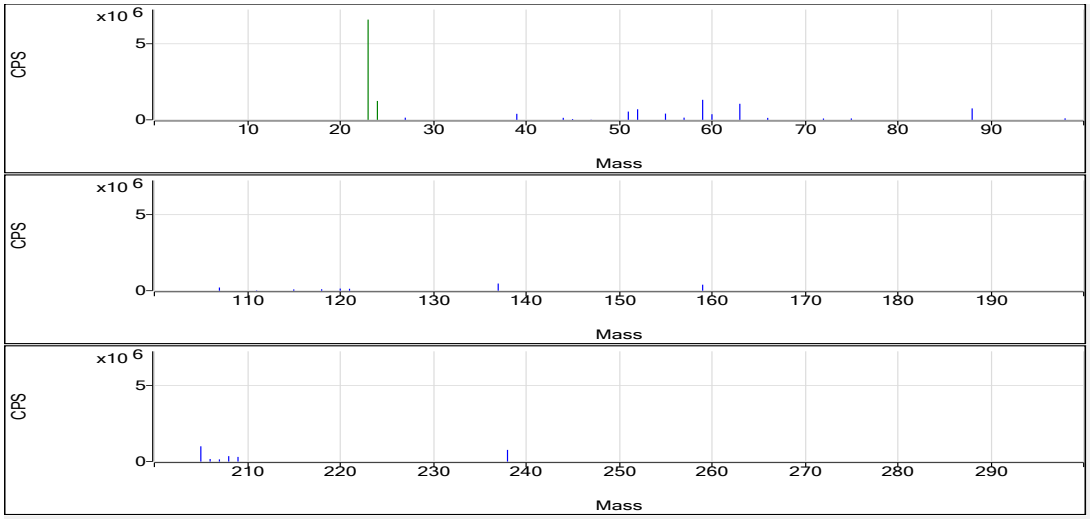


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.744	0.0346	86694.96	0.0007	1.705E-05
Be	9	1	No Gas	46.993	0.0348	87209.95	0.0007	1.705E-05
Be	9	1	No Gas	46.223	0.0342	87172.13	0.0007	1.705E-05
Se	78	2	H2	102.933	0.0177	6962.37	0.0002	6.062E-06
Se	78	2	H2	100.726	0.0173	6884.33	0.0002	6.062E-06
Se	78	2	H2	101.305	0.0174	6848.98	0.0002	6.062E-06
Na	23	3	He	35685.377	133.1257	6550308.65	0.0037	0.3435
Na	23	3	He	36556.403	136.3667	6600314.90	0.0037	0.3435
Na	23	3	He	35067.889	130.8281	6535748.03	0.0037	0.3435
Mg	24	3	He	13864.886	25.3269	1246184.75	0.0018	0.002943
Mg	24	3	He	14021.071	25.6122	1239661.70	0.0018	0.002943
Mg	24	3	He	13397.961	24.4741	1222646.93	0.0018	0.002943
Al	27	3	He	4818.092	2.8767	141544.17	0.0006	0.001008
Al	27	3	He	4907.805	2.9302	141826.64	0.0006	0.001008
Al	27	3	He	4646.306	2.7742	138587.73	0.0006	0.001008
K	39	3	He	6472.232	8.0051	393881.87	0.0012	0.4052
K	39	3	He	6630.912	8.1914	396474.41	0.0012	0.4052
K	39	3	He	6319.378	7.8256	390941.83	0.0012	0.4052
Ca	44	3	He	39382.984	2.7131	133497.62	0.0001	0.003486
Ca	44	3	He	39440.072	2.7171	131509.83	0.0001	0.003486
Ca	44	3	He	37608.638	2.5911	129441.43	0.0001	0.003486
Ti	47	3	He	475.596	0.2574	12665.97	0.0005	0
Ti	47	3	He	470.874	0.2549	12335.64	0.0005	0
Ti	47	3	He	485.455	0.2628	13126.34	0.0005	0
V	51	3	He	491.974	10.9797	540244.81	0.0223	0.03097
V	51	3	He	498.842	11.1325	538828.88	0.0223	0.03097
V	51	3	He	484.778	10.8196	540510.06	0.0223	0.03097
Cr	52	3	He	482.173	14.0055	689125.38	0.029	0.03958
Cr	52	3	He	493.693	14.3392	694033.82	0.029	0.03958
Cr	52	3	He	475.312	13.8068	689742.49	0.029	0.03958
Mn	55	3	He	637.569	8.2881	407805.93	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	645.103	8.386	405891.75	0.013	0.003171
Mn	55	3	He	626.537	8.1447	406883.82	0.013	0.003171
Fe	57	3	He	4911.34	2.895	142446.54	0.0006	0.002014
Fe	57	3	He	5032.212	2.9662	143568.77	0.0006	0.002014
Fe	57	3	He	4864.055	2.8672	143234.56	0.0006	0.002014
Co	59	3	He	465.695	26.639	1310744.82	0.0572	0.004106
Co	59	3	He	474.686	27.1533	1314251.54	0.0572	0.004106
Co	59	3	He	457.112	26.1481	1306275.68	0.0572	0.004106
Ni	60	3	He	518.218	4.3363	367248.39	0.0084	0.003329
Ni	60	3	He	500.658	4.1895	365598.04	0.0084	0.003329
Ni	60	3	He	502.84	4.2077	366555.35	0.0084	0.003329
Cu	63	3	He	499.269	12.3428	1045335.53	0.0247	0.004989
Cu	63	3	He	487.539	12.0529	1051813.73	0.0247	0.004989
Cu	63	3	He	489.904	12.1114	1055085.69	0.0247	0.004989
Zn	66	3	He	522.8	1.5054	128088.40	0.0029	0.006147
Zn	66	3	He	521.46	1.5016	126827.19	0.0029	0.006147
Zn	66	3	He	530.198	1.5267	127552.50	0.0029	0.006147
As	75	3	He	526.388	1.0585	90062.77	0.002	0.0009198
As	75	3	He	535.392	1.0766	90932.19	0.002	0.0009198
As	75	3	He	532.892	1.0716	89531.49	0.002	0.0009198
Sr	88	3	He	997.421	8.7851	747465.93	0.0088	0.0005022
Sr	88	3	He	1006.882	8.8684	749038.35	0.0088	0.0005022
Sr	88	3	He	1015.833	8.9473	747542.96	0.0088	0.0005022
Mo	98	3	He	51.603	1.1528	98081.55	0.0223	0.0006689
Mo	98	3	He	51.492	1.1503	97154.82	0.0223	0.0006689
Mo	98	3	He	52.836	1.1803	98615.20	0.0223	0.0006689
Ag	107	3	He	52.507	2.473	210414.76	0.0471	0.0006687
Ag	107	3	He	52.291	2.4629	208017.54	0.0471	0.0006687
Ag	107	3	He	52.485	2.472	206536.23	0.0471	0.0006687
Cd	111	3	He	51.101	0.2736	23277.39	0.0054	1.676E-05
Cd	111	3	He	52.018	0.2785	23521.77	0.0054	1.676E-05
Cd	111	3	He	52.662	0.2819	23555.90	0.0054	1.676E-05
Sn	120	3	He	102.359	1.6114	137103.34	0.0156	0.01794
Sn	120	3	He	104.735	1.6484	139224.70	0.0156	0.01794
Sn	120	3	He	105.943	1.6672	139294.38	0.0156	0.01794
Sb	121	3	He	99.653	1.5075	128260.02	0.0151	4.19E-05
Sb	121	3	He	98.34	1.4876	125645.40	0.0151	4.19E-05
Sb	121	3	He	99.167	1.5001	125334.83	0.0151	4.19E-05
Ba	137	3	He	1123.797	5.4994	467907.18	0.0049	0.0002094
Ba	137	3	He	1132.867	5.5438	468234.41	0.0049	0.0002094
Ba	137	3	He	1146.659	5.6113	468821.32	0.0049	0.0002094
Tl	205	3	He	100.681	2.5422	1000805.84	0.0252	0.0007688
Tl	205	3	He	100.514	2.538	996903.81	0.0252	0.0007688
Tl	205	3	He	101.032	2.551	1002329.28	0.0252	0.0007688
Pb	208	3	He	50.411	1.7024	356118.47	0.0337	0.001742
Pb	208	3	He	50.188	1.6949	355325.07	0.0337	0.001742
Pb	208	3	He	49.966	1.6874	353807.18	0.0337	0.001742
U	238	3	He	49.434	2.4796	759632.10	0.0502	0.0004339
U	238	3	He	50.417	2.5289	766806.71	0.0502	0.0004339
U	238	3	He	49.915	2.5037	768217.57	0.0502	0.0004339
Sc	45	1	No Gas			2505472.31		
Sc	45	1	No Gas			2507015.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2547618.87		
Ge	72	1	No Gas			1269937.79		
Ge	72	1	No Gas			1276562.32		
Ge	72	1	No Gas			1294424.90		
Sc	45	2	H2			181735.08		
Sc	45	2	H2			180904.78		
Sc	45	2	H2			183628.32		
Ge	72	2	H2			161857.34		
Ge	72	2	H2			163174.34		
Ge	72	2	H2			163506.83		
In	115	2	H2			392964.29		
In	115	2	H2			397071.87		
In	115	2	H2			392775.27		
Sc	45	3	He			49203.94		
Sc	45	3	He			48401.22		
Sc	45	3	He			49956.77		
Ge	72	3	He			84691.87		
Ge	72	3	He			87266.14		
Ge	72	3	He			87115.14		
In	115	3	He			85815.17		
In	115	3	He			85201.14		
In	115	3	He			84285.93		
Tb	159	3	He			393683.12		
Tb	159	3	He			392797.18		
Tb	159	3	He			392910.97		
Bi	209	3	He			306357.38		
Bi	209	3	He			303219.82		
Bi	209	3	He			306833.65		

Quantitation Report

Data File Name	086SMPL.d
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Sample Name	410-138075-W-1-A SD @5
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

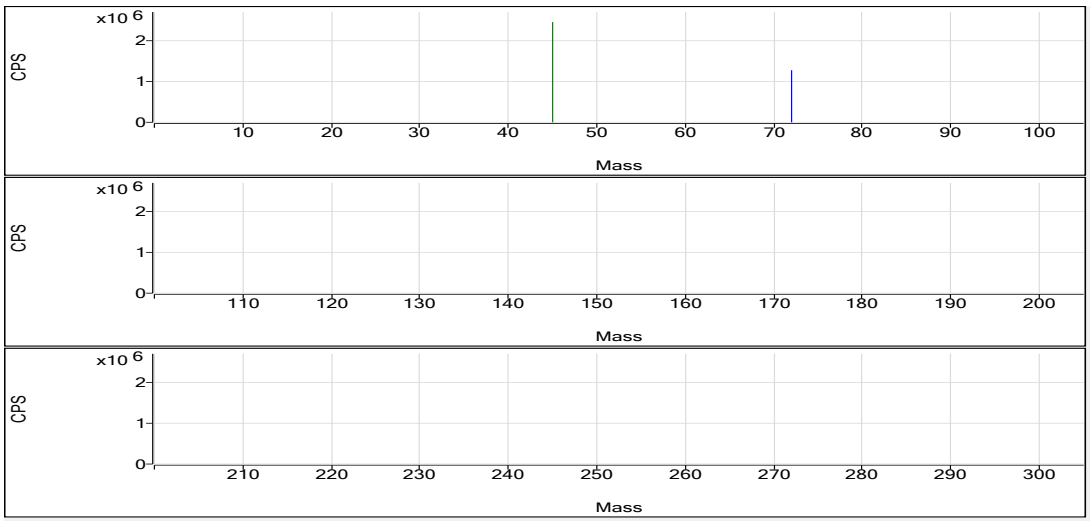
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.014	ppb	36.5	68.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.095	ppb	11.4	8.89	0.0000	Pulse	1.5000	3
Na	23	45	He	6585.818	ppb	1.9	1196166.67	24.8487	Analog	0.1000	3
Mg	24	45	He	1777.731	ppb	1.0	156459.12	3.2499	Pulse	0.1000	3
Al	27	45	He	2.141	ppb	17.4	110.00	0.0023	Pulse	0.1000	3
K	39	45	He	315.521	ppb	3.9	37342.00	0.7757	Pulse	0.1000	3
Ca	44	45	He	7124.256	ppb	1.5	23769.96	0.4937	Pulse	0.1000	3
Ti	47	45	He	0.516	ppb	115.8	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	-0.160	ppb	N/A	1320.07	0.0274	Pulse	0.5000	3
Cr	52	45	He	0.037	ppb	127.0	1956.88	0.0407	Pulse	0.1000	3
Mn	55	45	He	31.524	ppb	4.0	19867.55	0.4128	Pulse	0.1000	3
Fe	57	45	He	29.732	ppb	1.7	940.06	0.0195	Pulse	0.1000	3
Co	59	45	He	0.082	ppb	20.9	423.35	0.0088	Pulse	0.1000	3
Ni	60	72	He	0.008	ppb	346.9	293.34	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.199	ppb	32.5	856.72	0.0099	Pulse	0.1000	3
Zn	66	115	He	0.743	ppb	48.3	720.04	0.0083	Pulse	0.1000	3
As	75	115	He	0.504	ppb	18.4	168.00	0.0019	Pulse	0.5000	3
Sr	88	115	He	186.670	ppb	1.1	142953.95	1.6446	Pulse	0.1000	3
Mo	98	115	He	0.142	ppb	34.0	333.35	0.0038	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	40.6	96.67	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.005	ppb	77.9	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.004	ppb	N/A	1553.48	0.0179	Pulse	0.1000	3
Sb	121	115	He	0.380	ppb	8.4	503.36	0.0058	Pulse	0.1000	3
Ba	137	115	He	121.174	ppb	1.4	51561.00	0.5932	Pulse	0.1000	3
Tl	205	159	He	0.181	ppb	8.2	2096.90	0.0053	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	72.3	813.38	0.0021	Pulse	0.1000	3
U	238	209	He	0.148	ppb	12.6	2410.31	0.0079	Pulse	0.1000	3

ISTD Table:

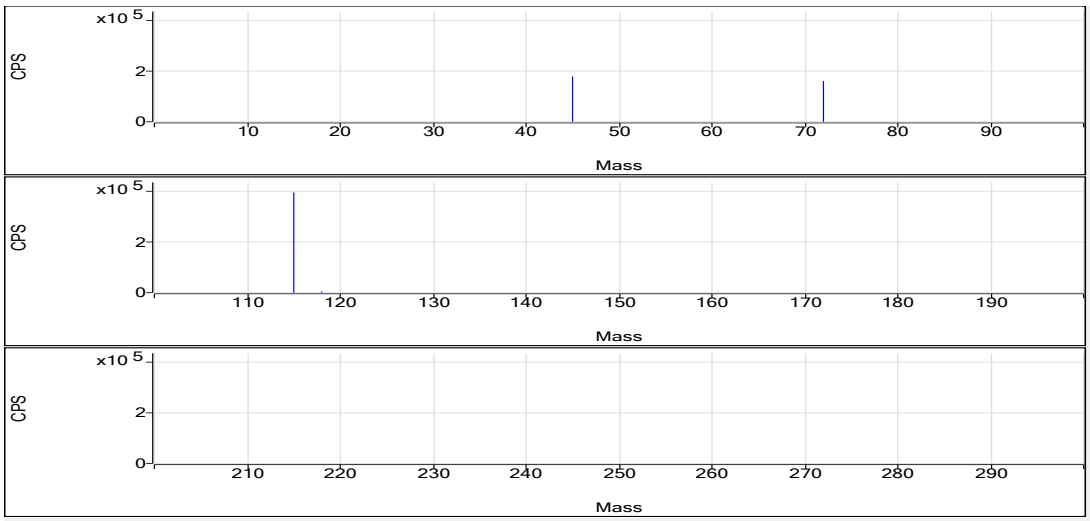
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2448594.03	1.4	104.3	Analog	0.1000	3
No Gas	Ge	72	1272529.87	0.6	106.1	Pulse	0.1000	3
H2	Sc	45	179081.90	1.5	103.1	Pulse	0.1000	3
H2	Ge	72	161072.96	1.0	107.7	Pulse	0.1000	3
H2	In	115	395642.27	0.6	108.1	Pulse	0.1000	3
He	Sc	45	48147.25	1.6	111.9	Pulse	0.1000	3
He	Ge	72	86504.70	1.3	110.7	Pulse	0.1000	3
He	In	115	86929.86	1.0	109.1	Pulse	0.1000	3
He	Tb	159	393209.85	0.3	106.9	Pulse	0.1000	3
He	Bi	209	306131.91	0.3	104.8	Pulse	0.1000	3

No Gas

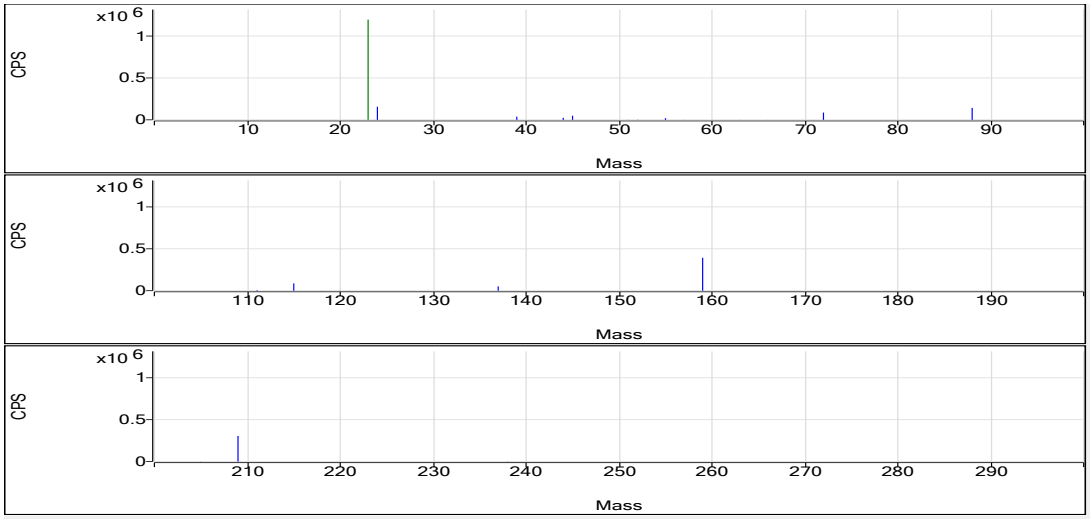


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.02	0	80.00	0.0007	1.705E-05
Be	9	1	No Gas	0.01	0	60.00	0.0007	1.705E-05
Be	9	1	No Gas	0.013	0	64.00	0.0007	1.705E-05
Se	78	2	H2	0.101	0	9.33	0.0002	6.062E-06
Se	78	2	H2	0.083	0	8.00	0.0002	6.062E-06
Se	78	2	H2	0.102	0	9.33	0.0002	6.062E-06
Na	23	3	He	6701.531	25.2793	1196154.90	0.0037	0.3435
Na	23	3	He	6458.568	24.3753	1191299.98	0.0037	0.3435
Na	23	3	He	6597.354	24.8917	1201045.14	0.0037	0.3435
Mg	24	3	He	1796.496	3.2842	155400.91	0.0018	0.002943
Mg	24	3	He	1762.257	3.2217	157454.06	0.0018	0.002943
Mg	24	3	He	1774.44	3.2439	156522.38	0.0018	0.002943
Al	27	3	He	2.207	0.0023	110.01	0.0006	0.001008
Al	27	3	He	1.739	0.002	100.00	0.0006	0.001008
Al	27	3	He	2.478	0.0025	120.00	0.0006	0.001008
K	39	3	He	329.431	0.7921	37478.72	0.0012	0.4052
K	39	3	He	305.697	0.7642	37348.93	0.0012	0.4052
K	39	3	He	311.434	0.7709	37198.34	0.0012	0.4052
Ca	44	3	He	7029.068	0.4871	23048.68	0.0001	0.003486
Ca	44	3	He	7107.576	0.4925	24070.50	0.0001	0.003486
Ca	44	3	He	7236.122	0.5014	24190.69	0.0001	0.003486
Ti	47	3	He	1.171	0.0006	30.00	0.0005	0
Ti	47	3	He	0.378	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.167	0.0273	1290.07	0.0223	0.03097
V	51	3	He	-0.104	0.0286	1400.08	0.0223	0.03097
V	51	3	He	-0.209	0.0263	1270.06	0.0223	0.03097
Cr	52	3	He	0.064	0.0414	1960.22	0.029	0.03958
Cr	52	3	He	-0.017	0.0391	1910.20	0.029	0.03958
Cr	52	3	He	0.065	0.0415	2000.21	0.029	0.03958
Mn	55	3	He	32.975	0.4317	20425.12	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	30.577	0.4005	19573.76	0.013	0.003171
Mn	55	3	He	31.022	0.4063	19603.76	0.013	0.003171
Fe	57	3	He	30.308	0.0199	940.06	0.0006	0.002014
Fe	57	3	He	29.582	0.0194	950.06	0.0006	0.002014
Fe	57	3	He	29.304	0.0193	930.06	0.0006	0.002014
Co	59	3	He	0.102	0.0099	470.02	0.0572	0.004106
Co	59	3	He	0.071	0.0082	400.02	0.0572	0.004106
Co	59	3	He	0.073	0.0083	400.02	0.0572	0.004106
Ni	60	3	He	0.037	0.0036	310.01	0.0084	0.003329
Ni	60	3	He	-0.016	0.0032	280.01	0.0084	0.003329
Ni	60	3	He	0.002	0.0033	290.01	0.0084	0.003329
Cu	63	3	He	0.273	0.0117	1000.06	0.0247	0.004989
Cu	63	3	He	0.149	0.0087	760.05	0.0247	0.004989
Cu	63	3	He	0.176	0.0093	810.05	0.0247	0.004989
Zn	66	3	He	0.537	0.0077	670.03	0.0029	0.006147
Zn	66	3	He	0.534	0.0077	660.04	0.0029	0.006147
Zn	66	3	He	1.157	0.0095	830.05	0.0029	0.006147
As	75	3	He	0.41	0.0017	152.00	0.002	0.0009198
As	75	3	He	0.596	0.0021	182.00	0.002	0.0009198
As	75	3	He	0.507	0.0019	170.00	0.002	0.0009198
Sr	88	3	He	187.986	1.6562	144341.86	0.0088	0.0005022
Sr	88	3	He	187.746	1.654	142158.71	0.0088	0.0005022
Sr	88	3	He	184.277	1.6235	142361.27	0.0088	0.0005022
Mo	98	3	He	0.093	0.0028	240.01	0.0223	0.0006689
Mo	98	3	He	0.142	0.0038	330.02	0.0223	0.0006689
Mo	98	3	He	0.19	0.0049	430.02	0.0223	0.0006689
Ag	107	3	He	0.013	0.0013	110.01	0.0471	0.0006687
Ag	107	3	He	0.011	0.0012	100.00	0.0471	0.0006687
Ag	107	3	He	0.005	0.0009	80.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.01	0.0001	6.00	0.0054	1.676E-05
Sn	120	3	He	0.071	0.019	1660.16	0.0156	0.01794
Sn	120	3	He	0.006	0.018	1550.15	0.0156	0.01794
Sn	120	3	He	-0.09	0.0165	1450.13	0.0156	0.01794
Sb	121	3	He	0.392	0.006	520.03	0.0151	4.19E-05
Sb	121	3	He	0.405	0.0062	530.03	0.0151	4.19E-05
Sb	121	3	He	0.344	0.0052	460.03	0.0151	4.19E-05
Ba	137	3	He	122.472	0.5995	52250.58	0.0049	0.0002094
Ba	137	3	He	121.735	0.5959	51215.97	0.0049	0.0002094
Ba	137	3	He	119.317	0.5841	51216.44	0.0049	0.0002094
Tl	205	3	He	0.172	0.0051	2010.22	0.0252	0.0007688
Tl	205	3	He	0.198	0.0058	2260.25	0.0252	0.0007688
Tl	205	3	He	0.173	0.0051	2020.23	0.0252	0.0007688
Pb	208	3	He	0.018	0.0023	450.03	0.0337	0.001742
Pb	208	3	He	0.004	0.0019	390.02	0.0337	0.001742
Pb	208	3	He	0.007	0.002	360.02	0.0337	0.001742
U	238	3	He	0.132	0.007	2150.24	0.0502	0.0004339
U	238	3	He	0.145	0.0077	2360.30	0.0502	0.0004339
U	238	3	He	0.169	0.0089	2720.38	0.0502	0.0004339
Sc	45	1	No Gas			2488821.21		
Sc	45	1	No Gas			2425562.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2431398.25		
Ge	72	1	No Gas			1281616.07		
Ge	72	1	No Gas			1268287.32		
Ge	72	1	No Gas			1267686.23		
Sc	45	2	H2			181005.70		
Sc	45	2	H2			175912.77		
Sc	45	2	H2			180327.24		
Ge	72	2	H2			162788.02		
Ge	72	2	H2			160645.01		
Ge	72	2	H2			159785.84		
In	115	2	H2			398544.64		
In	115	2	H2			393867.92		
In	115	2	H2			394514.25		
Sc	45	3	He			47317.55		
Sc	45	3	He			48873.32		
Sc	45	3	He			48250.88		
Ge	72	3	He			85254.59		
Ge	72	3	He			87567.15		
Ge	72	3	He			86692.36		
In	115	3	He			87162.99		
In	115	3	He			85955.32		
In	115	3	He			87695.83		
Tb	159	3	He			393928.90		
Tb	159	3	He			392080.23		
Tb	159	3	He			393620.42		
Bi	209	3	He			305382.30		
Bi	209	3	He			306914.29		
Bi	209	3	He			306099.14		

Quantitation Report

Data File Name	087SMPL.d
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Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

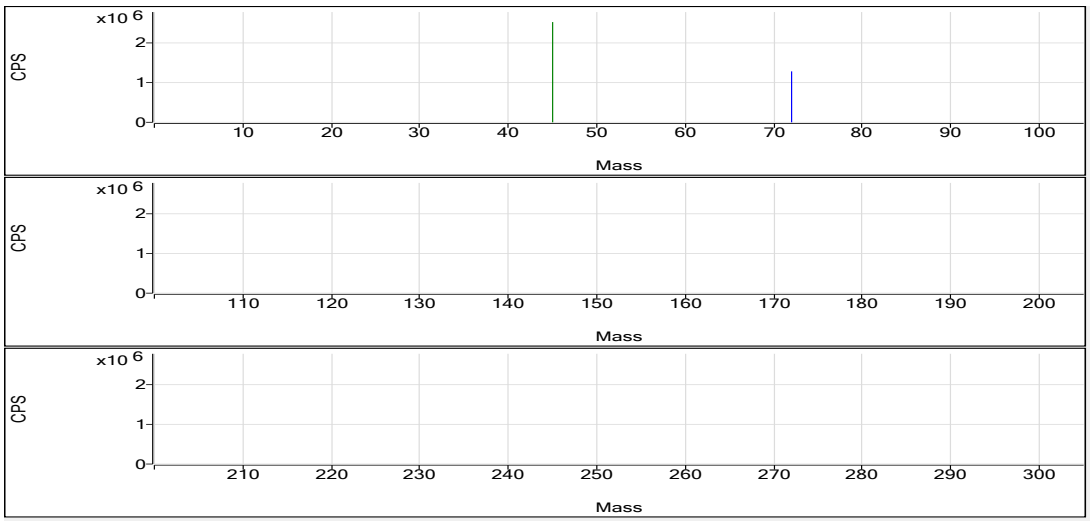
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	20.6	47.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.032	ppb	117.8	4.67	0.0000	Pulse	1.5000	3
Na	23	45	He	32871.783	ppb	2.1	5926381.79	122.6566	Analog	0.1000	3
Mg	24	45	He	9008.707	ppb	2.2	795160.66	16.4572	Pulse	0.1000	3
Al	27	45	He	4.222	ppb	24.9	170.01	0.0035	Pulse	0.1000	3
K	39	45	He	1669.723	ppb	2.7	114311.13	2.3659	Pulse	0.1000	3
Ca	44	45	He	35802.724	ppb	4.6	119138.29	2.4668	Pulse	0.1000	3
Ti	47	45	He	0.389	ppb	101.0	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.257	ppb	N/A	1220.06	0.0253	Pulse	0.5000	3
Cr	52	45	He	-0.068	ppb	N/A	1816.85	0.0376	Pulse	0.1000	3
Mn	55	45	He	161.437	ppb	2.0	101515.14	2.1010	Pulse	0.1000	3
Fe	57	45	He	140.871	ppb	7.7	4107.38	0.0850	Pulse	0.1000	3
Co	59	45	He	0.014	ppb	131.4	236.68	0.0049	Pulse	0.1000	3
Ni	60	72	He	-0.041	ppb	N/A	256.68	0.0030	Pulse	0.1000	3
Cu	63	72	He	1.791	ppb	0.9	4237.44	0.0493	Pulse	0.1000	3
Zn	66	115	He	1.424	ppb	36.9	883.40	0.0102	Pulse	0.1000	3
As	75	115	He	1.469	ppb	5.1	334.68	0.0039	Pulse	0.5000	3
Sr	88	115	He	965.023	ppb	1.3	734820.74	8.4998	Pulse	0.1000	3
Mo	98	115	He	0.163	ppb	13.9	373.35	0.0043	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	79.5	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.048	ppb	N/A	1486.82	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.061	ppb	33.2	83.33	0.0010	Pulse	0.1000	3
Ba	137	115	He	618.550	ppb	2.0	261665.09	3.0270	Pulse	0.1000	3
Tl	205	159	He	0.029	ppb	20.6	590.03	0.0015	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	34.3	860.05	0.0022	Pulse	0.1000	3
U	238	209	He	0.165	ppb	7.0	2683.71	0.0087	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2518959.18	1.3	107.3	Analog	0.1000	3
No Gas	Ge	72	1280170.87	0.7	106.7	Pulse	0.1000	3
H2	Sc	45	184720.48	1.6	106.3	Pulse	0.1000	3
H2	Ge	72	163682.19	2.1	109.5	Pulse	0.1000	3
H2	In	115	400596.33	1.8	109.5	Pulse	0.1000	3
He	Sc	45	48334.35	2.6	112.3	Pulse	0.1000	3
He	Ge	72	86028.47	0.4	110.1	Pulse	0.1000	3
He	In	115	86469.25	2.3	108.5	Pulse	0.1000	3
He	Tb	159	395733.19	0.8	107.6	Pulse	0.1000	3
He	Bi	209	307373.26	0.5	105.3	Pulse	0.1000	3

No Gas



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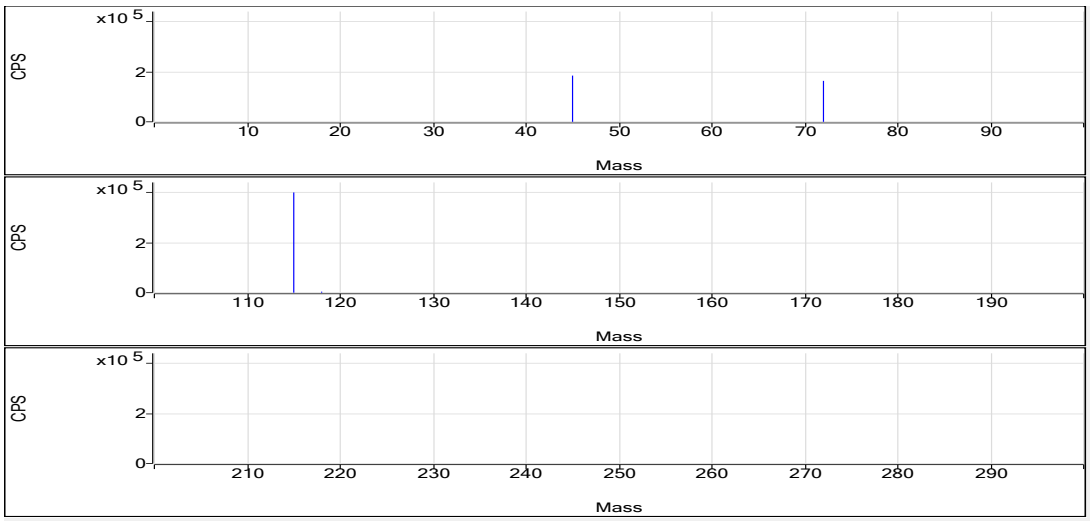
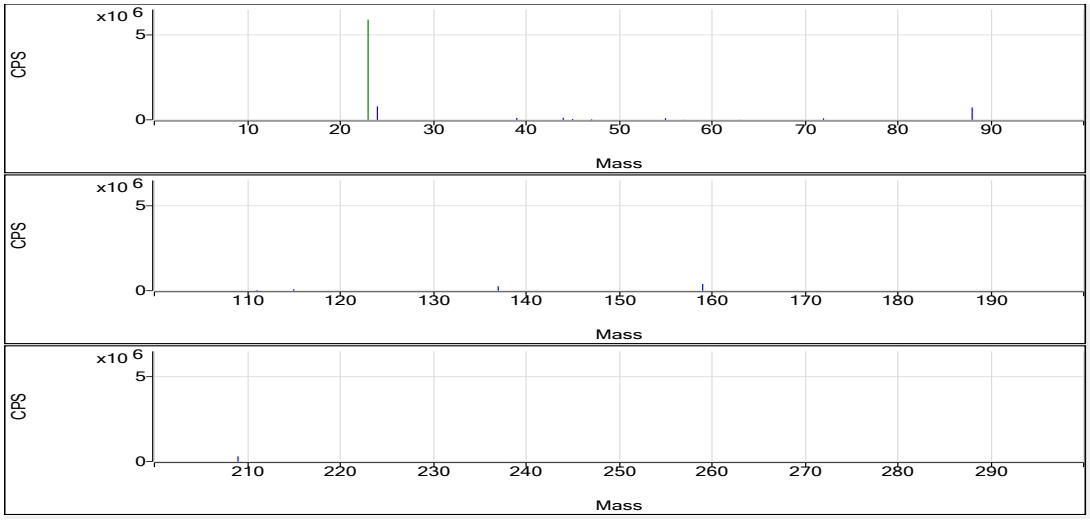


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.002	0	46.00	0.0007	1.705E-05
Be	9	1	No Gas	0.003	0	48.00	0.0007	1.705E-05
Be	9	1	No Gas	0.002	0	48.00	0.0007	1.705E-05
Se	78	2	H2	0.07	0	7.33	0.0002	6.062E-06
Se	78	2	H2	-0.006	0	2.00	0.0002	6.062E-06
Se	78	2	H2	0.032	0	4.67	0.0002	6.062E-06
Na	23	3	He	32289.704	120.4907	5968509.91	0.0037	0.3435
Na	23	3	He	32675.624	121.9267	5905069.29	0.0037	0.3435
Na	23	3	He	33650.02	125.5523	5905566.16	0.0037	0.3435
Mg	24	3	He	8858.12	16.1822	801583.50	0.0018	0.002943
Mg	24	3	He	8940.06	16.3318	790971.39	0.0018	0.002943
Mg	24	3	He	9227.941	16.8576	792927.10	0.0018	0.002943
Al	27	3	He	3.047	0.0028	140.01	0.0006	0.001008
Al	27	3	He	4.539	0.0037	180.01	0.0006	0.001008
Al	27	3	He	5.08	0.004	190.01	0.0006	0.001008
K	39	3	He	1619.345	2.3067	114263.18	0.0012	0.4052
K	39	3	He	1683.631	2.3822	115373.17	0.0012	0.4052
K	39	3	He	1706.193	2.4087	113297.04	0.0012	0.4052
Ca	44	3	He	34434.932	2.3727	117532.20	0.0001	0.003486
Ca	44	3	He	35323.619	2.4339	117874.71	0.0001	0.003486
Ca	44	3	He	37649.621	2.5939	122007.96	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.381	0.0002	10.00	0.0005	0
Ti	47	3	He	0.786	0.0004	20.00	0.0005	0
V	51	3	He	-0.269	0.025	1238.06	0.0223	0.03097
V	51	3	He	-0.282	0.0247	1196.06	0.0223	0.03097
V	51	3	He	-0.22	0.0261	1226.07	0.0223	0.03097
Cr	52	3	He	-0.23	0.0329	1630.14	0.029	0.03958
Cr	52	3	He	0.109	0.0427	2070.24	0.029	0.03958
Cr	52	3	He	-0.082	0.0372	1750.18	0.029	0.03958
Mn	55	3	He	158.954	2.0687	102473.10	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	160.308	2.0863	101041.84	0.013	0.003171
Mn	55	3	He	165.049	2.1479	101030.47	0.013	0.003171
Fe	57	3	He	146.377	0.0882	4370.82	0.0006	0.002014
Fe	57	3	He	128.401	0.0776	3760.61	0.0006	0.002014
Fe	57	3	He	147.833	0.0891	4190.72	0.0006	0.002014
Co	59	3	He	0.031	0.0059	290.01	0.0572	0.004106
Co	59	3	He	0.015	0.005	240.01	0.0572	0.004106
Co	59	3	He	-0.005	0.0038	180.01	0.0572	0.004106
Ni	60	3	He	-0.022	0.0031	270.01	0.0084	0.003329
Ni	60	3	He	-0.149	0.0021	180.01	0.0084	0.003329
Ni	60	3	He	0.048	0.0037	320.02	0.0084	0.003329
Cu	63	3	He	1.806	0.0496	4260.77	0.0247	0.004989
Cu	63	3	He	1.793	0.0493	4260.77	0.0247	0.004989
Cu	63	3	He	1.774	0.0488	4190.78	0.0247	0.004989
Zn	66	3	He	2.027	0.012	1020.09	0.0029	0.006147
Zn	66	3	He	1.166	0.0095	810.05	0.0029	0.006147
Zn	66	3	He	1.077	0.0092	820.06	0.0029	0.006147
As	75	3	He	1.55	0.004	344.01	0.002	0.0009198
As	75	3	He	1.455	0.0038	328.01	0.002	0.0009198
As	75	3	He	1.403	0.0037	332.01	0.002	0.0009198
Sr	88	3	He	972.804	8.5683	730750.69	0.0088	0.0005022
Sr	88	3	He	971.687	8.5585	730344.83	0.0088	0.0005022
Sr	88	3	He	950.577	8.3725	743366.71	0.0088	0.0005022
Mo	98	3	He	0.17	0.0045	380.02	0.0223	0.0006689
Mo	98	3	He	0.138	0.0037	320.01	0.0223	0.0006689
Mo	98	3	He	0.182	0.0047	420.02	0.0223	0.0006689
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.005	0.0005	40.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.01	0.0001	6.00	0.0054	1.676E-05
Cd	111	3	He	0.005	0	4.00	0.0054	1.676E-05
Sn	120	3	He	0.06	0.0189	1610.18	0.0156	0.01794
Sn	120	3	He	-0.136	0.0158	1350.11	0.0156	0.01794
Sn	120	3	He	-0.067	0.0169	1500.17	0.0156	0.01794
Sb	121	3	He	0.059	0.0009	80.00	0.0151	4.19E-05
Sb	121	3	He	0.082	0.0013	110.00	0.0151	4.19E-05
Sb	121	3	He	0.042	0.0007	60.00	0.0151	4.19E-05
Ba	137	3	He	622.921	3.0484	259985.02	0.0049	0.0002094
Ba	137	3	He	628.169	3.0741	262331.01	0.0049	0.0002094
Ba	137	3	He	604.558	2.9586	262679.25	0.0049	0.0002094
Tl	205	3	He	0.035	0.0017	660.04	0.0252	0.0007688
Tl	205	3	He	0.027	0.0015	570.03	0.0252	0.0007688
Tl	205	3	He	0.024	0.0014	540.03	0.0252	0.0007688
Pb	208	3	He	0.009	0.002	370.02	0.0337	0.001742
Pb	208	3	He	0.013	0.0022	490.03	0.0337	0.001742
Pb	208	3	He	0.017	0.0023	420.02	0.0337	0.001742
U	238	3	He	0.174	0.0092	2810.41	0.0502	0.0004339
U	238	3	He	0.17	0.009	2770.41	0.0502	0.0004339
U	238	3	He	0.152	0.0081	2470.31	0.0502	0.0004339
Sc	45	1	No Gas			2494384.49		
Sc	45	1	No Gas			2505796.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2556696.52		
Ge	72	1	No Gas			1280806.47		
Ge	72	1	No Gas			1271419.04		
Ge	72	1	No Gas			1288287.09		
Sc	45	2	H2			186149.78		
Sc	45	2	H2			181367.34		
Sc	45	2	H2			186644.31		
Ge	72	2	H2			166905.27		
Ge	72	2	H2			159936.92		
Ge	72	2	H2			164204.39		
In	115	2	H2			405100.19		
In	115	2	H2			392418.43		
In	115	2	H2			404270.38		
Sc	45	3	He			49535.03		
Sc	45	3	He			48431.32		
Sc	45	3	He			47036.70		
Ge	72	3	He			85867.17		
Ge	72	3	He			86410.60		
Ge	72	3	He			85807.65		
In	115	3	He			85291.62		
In	115	3	He			85342.11		
In	115	3	He			88792.58		
Tb	159	3	He			398888.63		
Tb	159	3	He			392927.38		
Tb	159	3	He			395383.55		
Bi	209	3	He			306911.77		
Bi	209	3	He			309180.60		
Bi	209	3	He			306027.40		

Quantitation Report

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Acq Time	8/11/2023 10:05:43 AM
Sample Name	410-138075-X-1-A MS
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

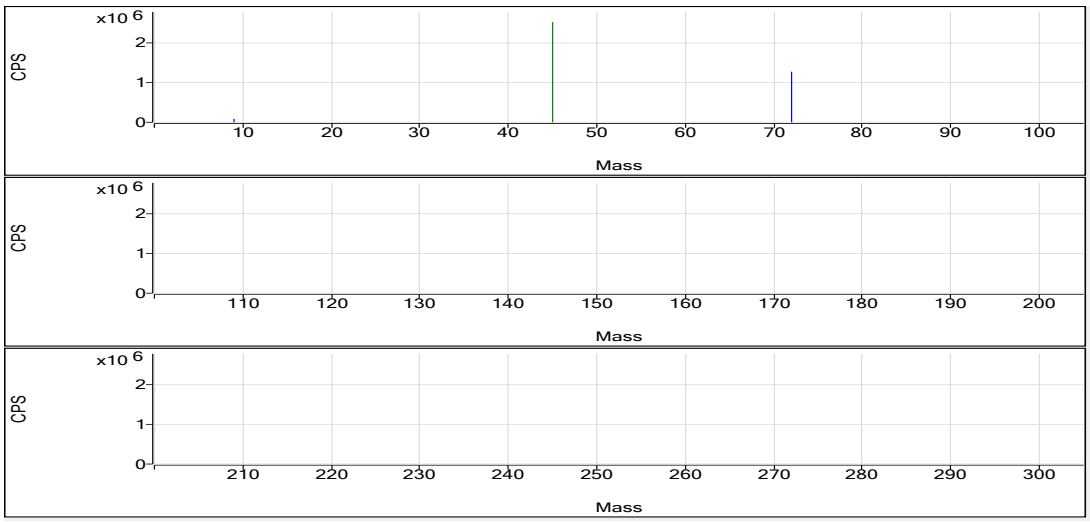
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.629	ppb	0.3	86837.16	0.0345	Pulse	0.5000	3
Se	78	115	H2	100.713	ppb	1.3	6889.00	0.0173	Pulse	1.5000	3
Na	23	45	He	37595.892	ppb	0.1	6734037.40	140.2346	Analog	0.1000	3
Mg	24	45	He	14391.927	ppb	0.9	1262324.09	26.2896	Analog	0.1000	3
Al	27	45	He	4898.534	ppb	1.5	140424.46	2.9247	Pulse	0.1000	3
K	39	45	He	6662.297	ppb	1.5	395072.36	8.2283	Pulse	0.1000	3
Ca	44	45	He	40863.065	ppb	1.8	135155.75	2.8150	Pulse	0.1000	3
Ti	47	45	He	508.037	ppb	4.1	13199.78	0.2750	Pulse	0.1000	3
V	51	45	He	502.616	ppb	1.4	538548.08	11.2165	Pulse	0.5000	3
Cr	52	45	He	497.904	ppb	1.6	694327.31	14.4611	Pulse	0.1000	3
Mn	55	45	He	655.572	ppb	1.7	409166.44	8.5220	Pulse	0.1000	3
Fe	57	45	He	5057.987	ppb	1.1	143171.60	2.9814	Pulse	0.1000	3
Co	59	45	He	475.936	ppb	0.5	1307273.39	27.2247	Pulse	0.1000	3
Ni	60	72	He	511.210	ppb	2.0	363814.67	4.2777	Pulse	0.1000	3
Cu	63	72	He	497.155	ppb	0.8	1045381.76	12.2906	Pulse	0.1000	3
Zn	66	115	He	511.530	ppb	3.2	126265.05	1.4731	Pulse	0.1000	3
As	75	115	He	523.805	ppb	2.6	90295.07	1.0533	Pulse	0.5000	3
Sr	88	115	He	1020.957	ppb	2.7	770846.86	8.9924	Pulse	0.1000	3
Mo	98	115	He	50.341	ppb	2.8	96406.26	1.1246	Pulse	0.1000	3
Ag	107	115	He	49.187	ppb	2.5	198599.64	2.3167	Pulse	0.1000	3
Cd	111	115	He	50.846	ppb	3.0	23333.49	0.2722	Pulse	0.5000	3
Sn	120	115	He	103.178	ppb	2.4	139235.44	1.6242	Pulse	0.1000	3
Sb	121	115	He	101.670	ppb	3.0	131830.22	1.5380	Pulse	0.1000	3
Ba	137	115	He	1140.987	ppb	3.0	478601.36	5.5835	Pulse	0.1000	3
Tl	205	159	He	100.804	ppb	1.0	998927.07	2.5453	Pulse	0.1000	3
Pb	208	159	He	49.981	ppb	1.2	662429.18	1.6879	Pulse	0.1000	3
U	238	209	He	49.605	ppb	0.7	762568.22	2.4882	Pulse	0.1000	3

ISTD Table:

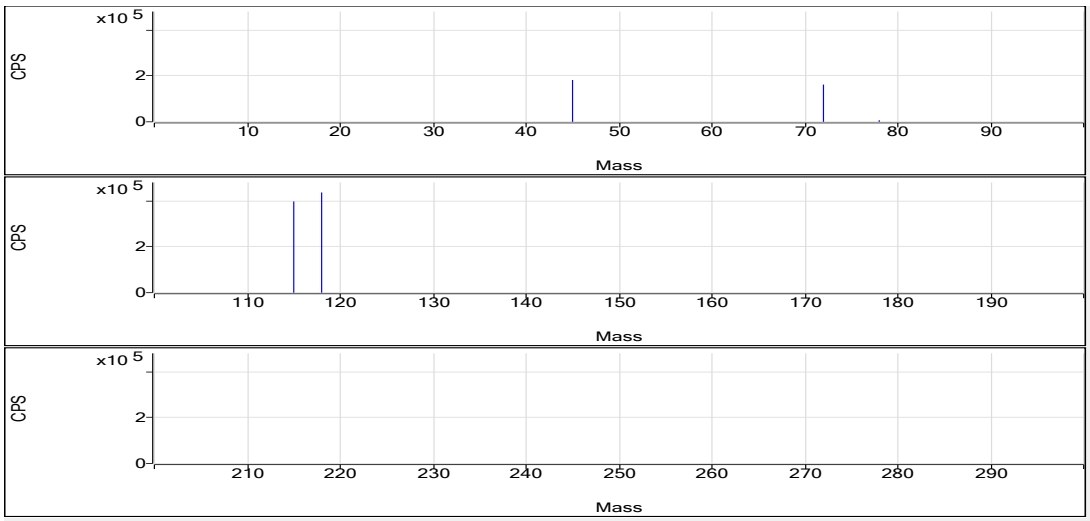
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2515820.90	0.8	107.2	Analog	0.1000	3
No Gas	Ge	72	1269674.38	0.7	105.8	Pulse	0.1000	3
H2	Sc	45	182019.49	0.4	104.8	Pulse	0.1000	3
H2	Ge	72	162182.58	1.0	108.5	Pulse	0.1000	3
H2	In	115	397406.40	0.8	108.6	Pulse	0.1000	3
He	Sc	45	48019.72	1.3	111.6	Pulse	0.1000	3
He	Ge	72	85059.21	0.9	108.8	Pulse	0.1000	3
He	In	115	85771.07	3.2	107.6	Pulse	0.1000	3
He	Tb	159	392487.79	1.0	106.7	Pulse	0.1000	3
He	Bi	209	306481.27	0.2	105.0	Pulse	0.1000	3

No Gas

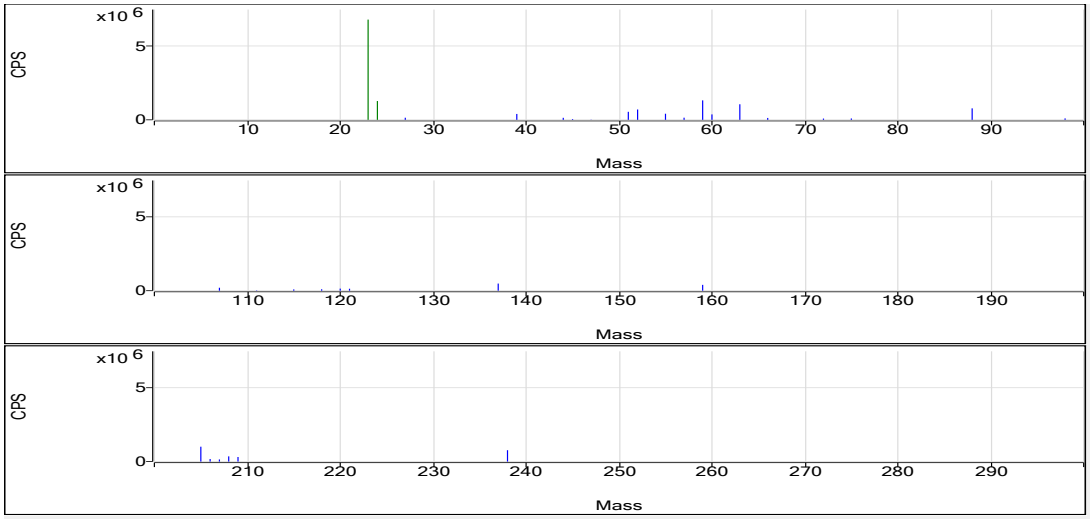


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.687	0.0346	87048.98	0.0007	1.705E-05
Be	9	1	No Gas	46.723	0.0346	86286.63	0.0007	1.705E-05
Be	9	1	No Gas	46.476	0.0344	87175.88	0.0007	1.705E-05
Se	78	2	H2	99.173	0.0171	6810.96	0.0002	6.062E-06
Se	78	2	H2	101.619	0.0175	6890.33	0.0002	6.062E-06
Se	78	2	H2	101.348	0.0174	6965.70	0.0002	6.062E-06
Na	23	3	He	37577.185	140.1649	6633663.65	0.0037	0.3435
Na	23	3	He	37632.212	140.3697	6767290.52	0.0037	0.3435
Na	23	3	He	37578.28	140.169	6801158.02	0.0037	0.3435
Mg	24	3	He	14528.002	26.5381	1255983.26	0.0018	0.002943
Mg	24	3	He	14362.079	26.235	1264804.12	0.0018	0.002943
Mg	24	3	He	14285.701	26.0955	1266184.90	0.0018	0.002943
Al	27	3	He	4981.723	2.9743	140768.54	0.0006	0.001008
Al	27	3	He	4879.883	2.9136	140464.29	0.0006	0.001008
Al	27	3	He	4833.998	2.8862	140040.55	0.0006	0.001008
K	39	3	He	6775.358	8.361	395706.83	0.0012	0.4052
K	39	3	He	6611.574	8.1687	393817.22	0.0012	0.4052
K	39	3	He	6599.959	8.1551	395693.04	0.0012	0.4052
Ca	44	3	He	41699.835	2.8726	135950.99	0.0001	0.003486
Ca	44	3	He	40304.895	2.7766	133860.21	0.0001	0.003486
Ca	44	3	He	40584.464	2.7958	135656.04	0.0001	0.003486
Ti	47	3	He	529.226	0.2864	13556.75	0.0005	0
Ti	47	3	He	507.258	0.2746	13236.44	0.0005	0
Ti	47	3	He	487.626	0.2639	12806.14	0.0005	0
V	51	3	He	510.603	11.3943	539263.50	0.0223	0.03097
V	51	3	He	500.885	11.178	538897.19	0.0223	0.03097
V	51	3	He	496.36	11.0773	537483.56	0.0223	0.03097
Cr	52	3	He	506.241	14.7026	695839.44	0.029	0.03958
Cr	52	3	He	496.563	14.4223	695305.38	0.029	0.03958
Cr	52	3	He	490.907	14.2585	691837.10	0.029	0.03958
Mn	55	3	He	668.355	8.6881	411187.61	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	649.954	8.449	407330.93	0.013	0.003171
Mn	55	3	He	648.408	8.4289	408980.78	0.013	0.003171
Fe	57	3	He	5019.279	2.9586	140023.49	0.0006	0.002014
Fe	57	3	He	5118.656	3.0171	145457.85	0.0006	0.002014
Fe	57	3	He	5036.027	2.9685	144033.45	0.0006	0.002014
Co	59	3	He	478.375	27.3642	1295081.86	0.0572	0.004106
Co	59	3	He	475.139	27.1792	1310320.21	0.0572	0.004106
Co	59	3	He	474.294	27.1308	1316418.11	0.0572	0.004106
Ni	60	3	He	523.209	4.378	368704.06	0.0084	0.003329
Ni	60	3	He	505.262	4.228	360578.04	0.0084	0.003329
Ni	60	3	He	505.158	4.2271	362161.91	0.0084	0.003329
Cu	63	3	He	501.569	12.3997	1044262.64	0.0247	0.004989
Cu	63	3	He	494.358	12.2214	1042294.44	0.0247	0.004989
Cu	63	3	He	495.538	12.2506	1049588.19	0.0247	0.004989
Zn	66	3	He	496.485	1.43	126654.75	0.0029	0.006147
Zn	66	3	He	529.367	1.5243	126575.55	0.0029	0.006147
Zn	66	3	He	508.739	1.4651	125564.86	0.0029	0.006147
As	75	3	He	510.993	1.0276	91014.90	0.002	0.0009198
As	75	3	He	538.318	1.0825	89889.88	0.002	0.0009198
As	75	3	He	522.103	1.0499	89980.43	0.002	0.0009198
Sr	88	3	He	991.441	8.7324	773440.69	0.0088	0.0005022
Sr	88	3	He	1045.506	9.2086	764678.82	0.0088	0.0005022
Sr	88	3	He	1025.924	9.0361	774421.08	0.0088	0.0005022
Mo	98	3	He	49.376	1.103	97698.03	0.0223	0.0006689
Mo	98	3	He	51.966	1.1609	96399.73	0.0223	0.0006689
Mo	98	3	He	49.682	1.1099	95121.02	0.0223	0.0006689
Ag	107	3	He	47.915	2.2568	199885.84	0.0471	0.0006687
Ag	107	3	He	50.334	2.3707	196863.00	0.0471	0.0006687
Ag	107	3	He	49.312	2.3226	199050.08	0.0471	0.0006687
Cd	111	3	He	49.397	0.2645	23423.62	0.0054	1.676E-05
Cd	111	3	He	52.458	0.2808	23321.50	0.0054	1.676E-05
Cd	111	3	He	50.684	0.2713	23255.35	0.0054	1.676E-05
Sn	120	3	He	100.979	1.5899	140820.33	0.0156	0.01794
Sn	120	3	He	105.907	1.6666	138397.31	0.0156	0.01794
Sn	120	3	He	102.649	1.6159	138488.68	0.0156	0.01794
Sb	121	3	He	98.954	1.4969	132580.75	0.0151	4.19E-05
Sb	121	3	He	104.967	1.5878	131854.42	0.0151	4.19E-05
Sb	121	3	He	101.089	1.5292	131055.50	0.0151	4.19E-05
Ba	137	3	He	1108.999	5.427	480673.63	0.0049	0.0002094
Ba	137	3	He	1176.252	5.7561	477982.77	0.0049	0.0002094
Ba	137	3	He	1137.71	5.5675	477147.69	0.0049	0.0002094
Tl	205	3	He	99.992	2.5248	1001492.72	0.0252	0.0007688
Tl	205	3	He	100.442	2.5361	994457.33	0.0252	0.0007688
Tl	205	3	He	101.979	2.5749	1000831.16	0.0252	0.0007688
Pb	208	3	He	49.305	1.6651	346836.87	0.0337	0.001742
Pb	208	3	He	50.273	1.6977	353871.36	0.0337	0.001742
Pb	208	3	He	50.365	1.7008	347402.69	0.0337	0.001742
U	238	3	He	49.223	2.469	758358.74	0.0502	0.0004339
U	238	3	He	49.907	2.5033	767543.97	0.0502	0.0004339
U	238	3	He	49.686	2.4922	761801.94	0.0502	0.0004339
Sc	45	1	No Gas			2518764.65		
Sc	45	1	No Gas			2494786.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2533911.52		
Ge	72	1	No Gas			1274446.00		
Ge	72	1	No Gas			1260043.50		
Ge	72	1	No Gas			1274533.65		
Sc	45	2	H2			181844.86		
Sc	45	2	H2			181337.26		
Sc	45	2	H2			182876.36		
Ge	72	2	H2			161798.55		
Ge	72	2	H2			160796.41		
Ge	72	2	H2			163952.77		
In	115	2	H2			398991.01		
In	115	2	H2			393927.65		
In	115	2	H2			399300.54		
Sc	45	3	He			47327.55		
Sc	45	3	He			48210.48		
Sc	45	3	He			48521.12		
Ge	72	3	He			84217.09		
Ge	72	3	He			85284.11		
Ge	72	3	He			85676.43		
In	115	3	He			89326.22		
In	115	3	He			83782.53		
In	115	3	He			86447.75		
Tb	159	3	He			396666.83		
Tb	159	3	He			392114.29		
Tb	159	3	He			388682.26		
Bi	209	3	He			307155.68		
Bi	209	3	He			306613.32		
Bi	209	3	He			305674.80		

Quantitation Report

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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

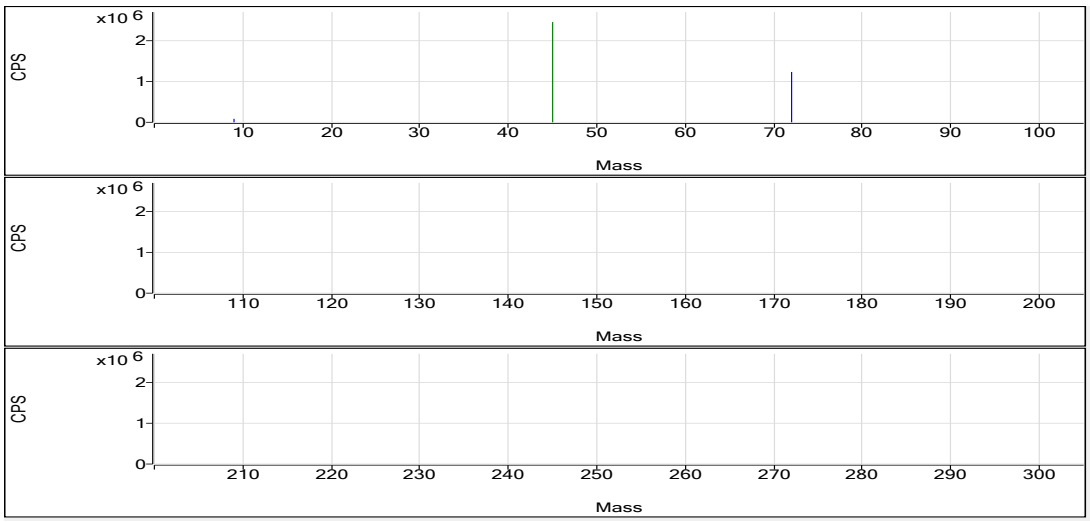
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.891	ppb	1.5	85493.70	0.0347	Pulse	0.5000	3
Se	78	115	H2	51.423	ppb	1.9	3428.42	0.0089	Pulse	1.5000	3
Na	23	45	He	4697.105	ppb	2.1	844150.33	17.8210	Pulse	0.1000	3
Mg	24	45	He	4962.621	ppb	2.0	429499.27	9.0671	Pulse	0.1000	3
Al	27	45	He	4870.481	ppb	1.6	137756.50	2.9080	Pulse	0.1000	3
K	39	45	He	5025.801	ppb	3.6	298674.23	6.3067	Pulse	0.1000	3
Ca	44	45	He	4919.383	ppb	6.2	16186.20	0.3420	Pulse	0.1000	3
Ti	47	45	He	5012.037	ppb	1.3	128522.03	2.7128	Pulse	0.1000	3
V	51	45	He	504.541	ppb	2.7	533277.40	11.2594	Pulse	0.5000	3
Cr	52	45	He	503.053	ppb	3.4	691911.97	14.6103	Pulse	0.1000	3
Mn	55	45	He	502.392	ppb	3.1	309340.25	6.5315	Pulse	0.1000	3
Fe	57	45	He	5035.345	ppb	2.4	140582.43	2.9681	Pulse	0.1000	3
Co	59	45	He	485.497	ppb	2.5	1315394.09	27.7716	Pulse	0.1000	3
Ni	60	72	He	544.580	ppb	1.0	371254.64	4.5567	Pulse	0.1000	3
Cu	63	72	He	522.082	ppb	0.8	1051548.68	12.9065	Pulse	0.1000	3
Zn	66	115	He	508.562	ppb	0.7	124758.39	1.4646	Pulse	0.1000	3
As	75	115	He	514.750	ppb	1.2	88163.83	1.0351	Pulse	0.5000	3
Sr	88	115	He	52.432	ppb	1.5	39372.07	0.4623	Pulse	0.1000	3
Mo	98	115	He	50.663	ppb	0.8	96399.09	1.1318	Pulse	0.1000	3
Ag	107	115	He	50.696	ppb	0.6	203379.30	2.3878	Pulse	0.1000	3
Cd	111	115	He	51.304	ppb	0.9	23394.25	0.2747	Pulse	0.5000	3
Sn	120	115	He	51.166	ppb	2.8	69360.74	0.8145	Pulse	0.1000	3
Sb	121	115	He	50.375	ppb	1.9	64902.87	0.7621	Pulse	0.1000	3
Ba	137	115	He	510.709	ppb	1.2	212870.67	2.4993	Pulse	0.1000	3
Tl	205	159	He	50.771	ppb	0.3	500681.65	1.2823	Pulse	0.1000	3
Pb	208	159	He	50.590	ppb	0.5	667057.03	1.7084	Pulse	0.1000	3
U	238	209	He	50.346	ppb	0.1	766432.41	2.5253	Pulse	0.1000	3

ISTD Table:

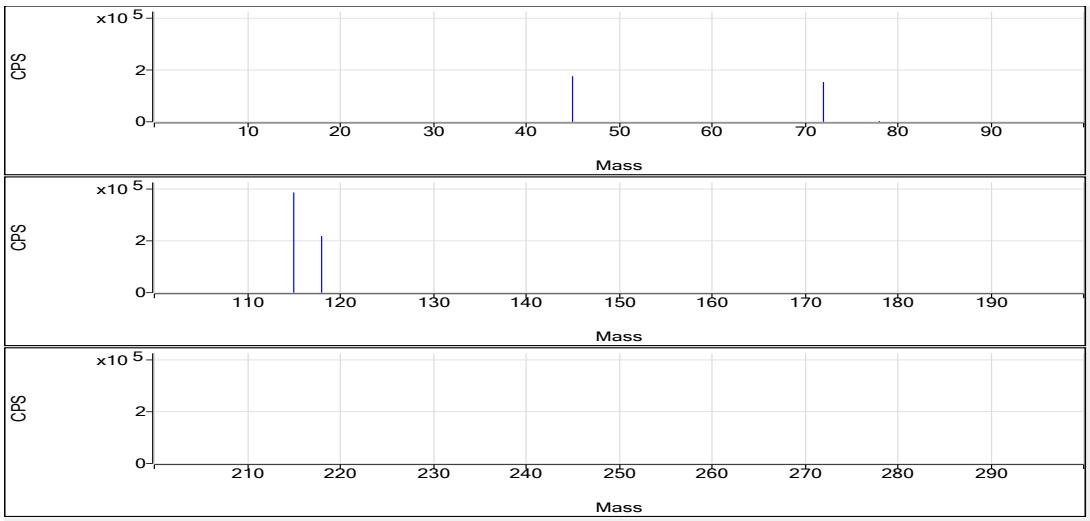
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2463550.64	2.3	105.0	Analog	0.1000	3
No Gas	Ge	72	1237113.84	0.6	103.1	Pulse	0.1000	3
H2	Sc	45	176247.62	1.2	101.4	Pulse	0.1000	3
H2	Ge	72	153612.53	1.0	102.7	Pulse	0.1000	3
H2	In	115	387239.94	0.8	105.8	Pulse	0.1000	3
He	Sc	45	47385.03	2.6	110.1	Pulse	0.1000	3
He	Ge	72	81478.95	1.3	104.2	Pulse	0.1000	3
He	In	115	85179.79	1.4	106.9	Pulse	0.1000	3
He	Tb	159	390449.03	0.7	106.1	Pulse	0.1000	3
He	Bi	209	303501.87	0.3	103.9	Pulse	0.1000	3

No Gas

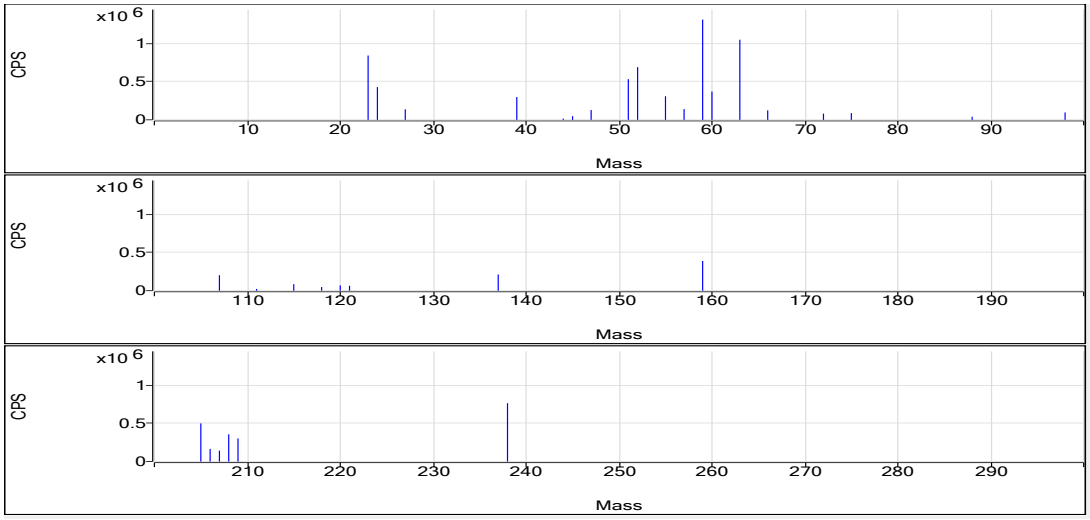


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.828	0.0347	85944.73	0.0007	1.705E-05
Be	9	1	No Gas	47.608	0.0352	84607.49	0.0007	1.705E-05
Be	9	1	No Gas	46.238	0.0342	85928.87	0.0007	1.705E-05
Se	78	2	H2	52.379	0.009	3471.76	0.0002	6.062E-06
Se	78	2	H2	51.436	0.0089	3418.42	0.0002	6.062E-06
Se	78	2	H2	50.455	0.0087	3395.07	0.0002	6.062E-06
Na	23	3	He	4657.412	17.6733	848675.07	0.0037	0.3435
Na	23	3	He	4808.996	18.2373	838260.30	0.0037	0.3435
Na	23	3	He	4624.909	17.5524	845515.61	0.0037	0.3435
Mg	24	3	He	4925.78	8.9998	432171.67	0.0018	0.002943
Mg	24	3	He	5073.065	9.2688	426031.20	0.0018	0.002943
Mg	24	3	He	4889.018	8.9327	430294.95	0.0018	0.002943
Al	27	3	He	4855.251	2.8989	139203.76	0.0006	0.001008
Al	27	3	He	4955.523	2.9587	135993.93	0.0006	0.001008
Al	27	3	He	4800.668	2.8663	138071.81	0.0006	0.001008
K	39	3	He	4982.812	6.2562	300422.44	0.0012	0.4052
K	39	3	He	5221.802	6.5368	300457.24	0.0012	0.4052
K	39	3	He	4872.789	6.127	295143.02	0.0012	0.4052
Ca	44	3	He	4770.655	0.3317	15929.29	0.0001	0.003486
Ca	44	3	He	5271.239	0.3662	16830.28	0.0001	0.003486
Ca	44	3	He	4716.255	0.328	15799.04	0.0001	0.003486
Ti	47	3	He	5026.062	2.7204	130632.63	0.0005	0
Ti	47	3	He	5069.294	2.7438	126114.55	0.0005	0
Ti	47	3	He	4940.756	2.6742	128818.91	0.0005	0
V	51	3	He	499.494	11.147	535282.69	0.0223	0.03097
V	51	3	He	520.043	11.6044	533382.69	0.0223	0.03097
V	51	3	He	494.086	11.0267	531166.81	0.0223	0.03097
Cr	52	3	He	498.869	14.4891	695768.04	0.029	0.03958
Cr	52	3	He	521.938	15.1573	696688.58	0.029	0.03958
Cr	52	3	He	488.351	14.1845	683279.29	0.029	0.03958
Mn	55	3	He	500.818	6.5111	312661.81	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	518.821	6.745	310026.87	0.013	0.003171
Mn	55	3	He	487.539	6.3385	305332.07	0.013	0.003171
Fe	57	3	He	4964.328	2.9262	140518.23	0.0006	0.002014
Fe	57	3	He	5177.62	3.0519	140276.16	0.0006	0.002014
Fe	57	3	He	4964.088	2.9261	140952.89	0.0006	0.002014
Co	59	3	He	481.514	27.5438	1322654.82	0.0572	0.004106
Co	59	3	He	499.137	28.5517	1312347.32	0.0572	0.004106
Co	59	3	He	475.84	27.2193	1311180.14	0.0572	0.004106
Ni	60	3	He	548.622	4.5905	375245.89	0.0084	0.003329
Ni	60	3	He	538.124	4.5027	370967.49	0.0084	0.003329
Ni	60	3	He	546.995	4.5769	367550.54	0.0084	0.003329
Cu	63	3	He	523.029	12.93	1056946.78	0.0247	0.004989
Cu	63	3	He	517.733	12.7991	1054482.02	0.0247	0.004989
Cu	63	3	He	525.482	12.9906	1043217.25	0.0247	0.004989
Zn	66	3	He	510.25	1.4695	127118.07	0.0029	0.006147
Zn	66	3	He	504.212	1.4521	122791.87	0.0029	0.006147
Zn	66	3	He	511.223	1.4722	124365.24	0.0029	0.006147
As	75	3	He	507.808	1.0212	88340.42	0.002	0.0009198
As	75	3	He	516.588	1.0388	87843.05	0.002	0.0009198
As	75	3	He	519.854	1.0454	88308.02	0.002	0.0009198
Sr	88	3	He	51.505	0.4541	39285.08	0.0088	0.0005022
Sr	88	3	He	53.003	0.4673	39515.87	0.0088	0.0005022
Sr	88	3	He	52.787	0.4654	39315.27	0.0088	0.0005022
Mo	98	3	He	50.184	1.1211	96983.38	0.0223	0.0006689
Mo	98	3	He	50.823	1.1354	96006.23	0.0223	0.0006689
Mo	98	3	He	50.982	1.1389	96207.65	0.0223	0.0006689
Ag	107	3	He	50.352	2.3716	205156.72	0.0471	0.0006687
Ag	107	3	He	50.827	2.3939	202428.75	0.0471	0.0006687
Ag	107	3	He	50.91	2.3978	202552.42	0.0471	0.0006687
Cd	111	3	He	50.792	0.2719	23523.82	0.0054	1.676E-05
Cd	111	3	He	51.524	0.2758	23325.47	0.0054	1.676E-05
Cd	111	3	He	51.594	0.2762	23333.47	0.0054	1.676E-05
Sn	120	3	He	49.623	0.7904	68379.20	0.0156	0.01794
Sn	120	3	He	52.442	0.8343	70549.71	0.0156	0.01794
Sn	120	3	He	51.434	0.8186	69153.31	0.0156	0.01794
Sb	121	3	He	49.488	0.7486	64762.22	0.0151	4.19E-05
Sb	121	3	He	51.429	0.778	65786.81	0.0151	4.19E-05
Sb	121	3	He	50.208	0.7595	64159.58	0.0151	4.19E-05
Ba	137	3	He	504.577	2.4693	213612.34	0.0049	0.0002094
Ba	137	3	He	510.504	2.4983	211255.37	0.0049	0.0002094
Ba	137	3	He	517.046	2.5303	213744.31	0.0049	0.0002094
Tl	205	3	He	50.933	1.2864	499806.63	0.0252	0.0007688
Tl	205	3	He	50.658	1.2795	498290.19	0.0252	0.0007688
Tl	205	3	He	50.721	1.2811	503948.12	0.0252	0.0007688
Pb	208	3	He	50.402	1.7021	352704.41	0.0337	0.001742
Pb	208	3	He	50.903	1.719	357325.62	0.0337	0.001742
Pb	208	3	He	50.466	1.7043	362647.96	0.0337	0.001742
U	238	3	He	50.368	2.5264	769081.71	0.0502	0.0004339
U	238	3	He	50.377	2.5269	764879.44	0.0502	0.0004339
U	238	3	He	50.292	2.5226	765336.08	0.0502	0.0004339
Sc	45	1	No Gas			2479354.49		
Sc	45	1	No Gas			2400806.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2510491.06		
Ge	72	1	No Gas			1240534.83		
Ge	72	1	No Gas			1229047.01		
Ge	72	1	No Gas			1241759.67		
Sc	45	2	H2			178189.88		
Sc	45	2	H2			174000.82		
Sc	45	2	H2			176552.17		
Ge	72	2	H2			153407.09		
Ge	72	2	H2			152255.06		
Ge	72	2	H2			155175.45		
In	115	2	H2			384948.28		
In	115	2	H2			385980.31		
In	115	2	H2			390791.24		
Sc	45	3	He			48020.14		
Sc	45	3	He			45963.94		
Sc	45	3	He			48171.01		
Ge	72	3	He			81743.96		
Ge	72	3	He			82387.27		
Ge	72	3	He			80305.62		
In	115	3	He			86880.88		
In	115	3	He			84929.65		
In	115	3	He			84847.75		
Tb	159	3	He			388526.75		
Tb	159	3	He			389443.98		
Tb	159	3	He			393376.36		
Bi	209	3	He			304415.46		
Bi	209	3	He			302697.16		
Bi	209	3	He			303393.00		

Quantitation Report

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Sample Type	CCB
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Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

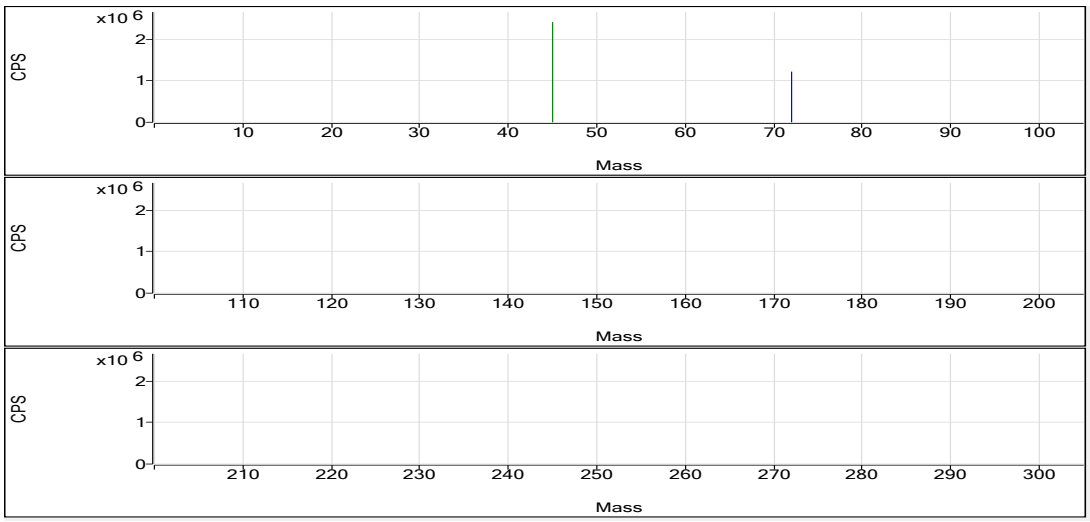
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.013	ppb	77.2	64.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.046	ppb	44.7	5.33	0.0000	Pulse	1.5000	3
Na	23	45	He	-1.751	ppb	N/A	15855.60	0.3370	Pulse	0.1000	3
Mg	24	45	He	0.990	ppb	32.2	223.34	0.0048	Pulse	0.1000	3
Al	27	45	He	0.802	ppb	133.4	70.00	0.0015	Pulse	0.1000	3
K	39	45	He	-3.022	ppb	N/A	18892.77	0.4017	Pulse	0.1000	3
Ca	44	45	He	1.900	ppb	457.3	170.01	0.0036	Pulse	0.1000	3
Ti	47	45	He	1.178	ppb	1.5	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	-0.082	ppb	N/A	1371.41	0.0292	Pulse	0.5000	3
Cr	52	45	He	0.011	ppb	726.5	1876.86	0.0399	Pulse	0.1000	3
Mn	55	45	He	0.105	ppb	32.8	213.34	0.0045	Pulse	0.1000	3
Fe	57	45	He	0.068	ppb	261.6	96.67	0.0021	Pulse	0.1000	3
Co	59	45	He	0.062	ppb	20.1	360.02	0.0077	Pulse	0.1000	3
Ni	60	72	He	-0.005	ppb	N/A	263.34	0.0033	Pulse	0.1000	3
Cu	63	72	He	0.106	ppb	19.7	610.03	0.0076	Pulse	0.1000	3
Zn	66	115	He	-0.521	ppb	N/A	390.02	0.0047	Pulse	0.1000	3
As	75	115	He	0.077	ppb	60.5	90.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.033	ppb	63.1	66.67	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.056	ppb	39.0	160.01	0.0019	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	65.0	73.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	1.0	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.026	ppb	N/A	1470.14	0.0175	Pulse	0.1000	3
Sb	121	115	He	0.076	ppb	36.5	100.00	0.0012	Pulse	0.1000	3
Ba	137	115	He	0.144	ppb	67.7	76.67	0.0009	Pulse	0.1000	3
Tl	205	159	He	0.086	ppb	15.7	1123.42	0.0029	Pulse	0.1000	3
Pb	208	159	He	-0.004	ppb	N/A	616.70	0.0016	Pulse	0.1000	3
U	238	209	He	0.055	ppb	14.3	953.40	0.0032	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2415382.57	0.8	102.9	Analog	0.1000	3
No Gas	Ge	72	1221791.23	1.4	101.8	Pulse	0.1000	3
H2	Sc	45	173164.36	0.8	99.7	Pulse	0.1000	3
H2	Ge	72	148087.39	1.0	99.0	Pulse	0.1000	3
H2	In	115	382971.05	0.4	104.6	Pulse	0.1000	3
He	Sc	45	47050.42	1.5	109.3	Pulse	0.1000	3
He	Ge	72	80194.67	1.0	102.6	Pulse	0.1000	3
He	In	115	83820.09	0.6	105.2	Pulse	0.1000	3
He	Tb	159	382532.02	0.3	104.0	Pulse	0.1000	3
He	Bi	209	300009.39	0.1	102.7	Pulse	0.1000	3

No Gas



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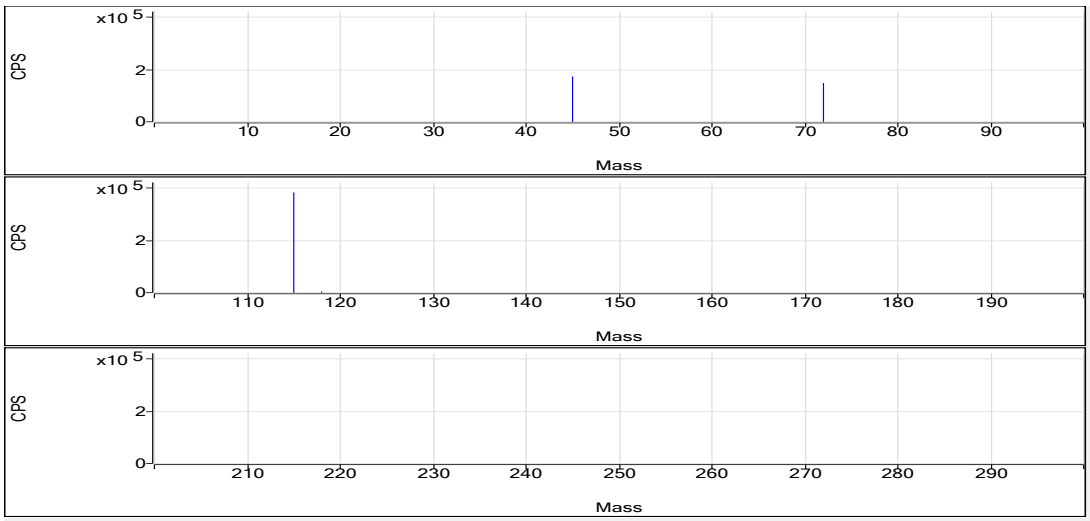
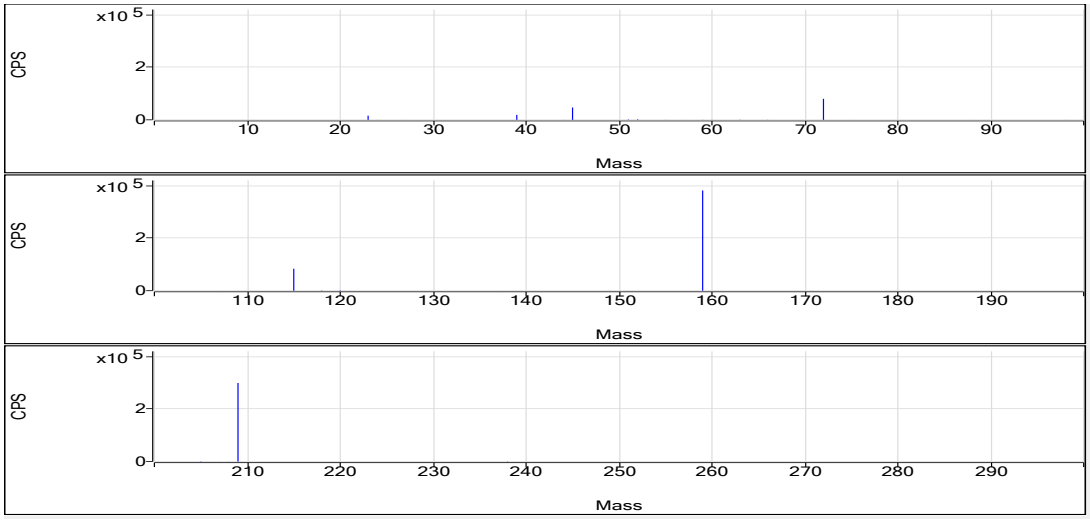


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.013	0	64.00	0.0007	1.705E-05
Be	9	1	No Gas	0.023	0	82.00	0.0007	1.705E-05
Be	9	1	No Gas	0.003	0	46.00	0.0007	1.705E-05
Se	78	2	H2	0.066	0	6.67	0.0002	6.062E-06
Se	78	2	H2	0.045	0	5.33	0.0002	6.062E-06
Se	78	2	H2	0.026	0	4.00	0.0002	6.062E-06
Na	23	3	He	-1.534	0.3378	16169.37	0.0037	0.3435
Na	23	3	He	-0.488	0.3417	15988.99	0.0037	0.3435
Na	23	3	He	-3.231	0.3315	15408.44	0.0037	0.3435
Mg	24	3	He	0.676	0.0042	200.01	0.0018	0.002943
Mg	24	3	He	1.314	0.0053	250.01	0.0018	0.002943
Mg	24	3	He	0.98	0.0047	220.01	0.0018	0.002943
Al	27	3	He	0.761	0.0015	70.00	0.0006	0.001008
Al	27	3	He	1.892	0.0021	100.00	0.0006	0.001008
Al	27	3	He	-0.247	0.0009	40.00	0.0006	0.001008
K	39	3	He	-17.729	0.3844	18402.23	0.0012	0.4052
K	39	3	He	3.989	0.4099	19183.06	0.0012	0.4052
K	39	3	He	4.675	0.4107	19093.03	0.0012	0.4052
Ca	44	3	He	-2.087	0.0033	160.01	0.0001	0.003486
Ca	44	3	He	-4.079	0.0032	150.01	0.0001	0.003486
Ca	44	3	He	11.866	0.0043	200.01	0.0001	0.003486
Ti	47	3	He	1.158	0.0006	30.00	0.0005	0
Ti	47	3	He	1.184	0.0006	30.00	0.0005	0
Ti	47	3	He	1.192	0.0006	30.00	0.0005	0
V	51	3	He	-0.124	0.0282	1350.07	0.0223	0.03097
V	51	3	He	-0.042	0.03	1406.08	0.0223	0.03097
V	51	3	He	-0.079	0.0292	1358.07	0.0223	0.03097
Cr	52	3	He	-0.076	0.0374	1790.17	0.029	0.03958
Cr	52	3	He	0.02	0.0402	1880.19	0.029	0.03958
Cr	52	3	He	0.089	0.0422	1960.22	0.029	0.03958
Mn	55	3	He	0.11	0.0046	220.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.068	0.0041	190.01	0.013	0.003171
Mn	55	3	He	0.137	0.0049	230.01	0.013	0.003171
Fe	57	3	He	0.128	0.0021	100.01	0.0006	0.002014
Fe	57	3	He	0.209	0.0021	100.00	0.0006	0.002014
Fe	57	3	He	-0.132	0.0019	90.00	0.0006	0.002014
Co	59	3	He	0.067	0.0079	380.02	0.0572	0.004106
Co	59	3	He	0.048	0.0068	320.02	0.0572	0.004106
Co	59	3	He	0.071	0.0082	380.02	0.0572	0.004106
Ni	60	3	He	-0.027	0.0031	250.01	0.0084	0.003329
Ni	60	3	He	-0.028	0.0031	250.01	0.0084	0.003329
Ni	60	3	He	0.039	0.0037	290.01	0.0084	0.003329
Cu	63	3	He	0.125	0.0081	650.04	0.0247	0.004989
Cu	63	3	He	0.084	0.0071	570.03	0.0247	0.004989
Cu	63	3	He	0.109	0.0077	610.03	0.0247	0.004989
Zn	66	3	He	-0.804	0.0038	320.01	0.0029	0.006147
Zn	66	3	He	-0.145	0.0057	480.03	0.0029	0.006147
Zn	66	3	He	-0.614	0.0044	370.02	0.0029	0.006147
As	75	3	He	0.032	0.001	82.00	0.002	0.0009198
As	75	3	He	0.124	0.0012	98.00	0.002	0.0009198
As	75	3	He	0.073	0.0011	90.00	0.002	0.0009198
Sr	88	3	He	0.038	0.0008	70.00	0.0088	0.0005022
Sr	88	3	He	0.051	0.001	80.00	0.0088	0.0005022
Sr	88	3	He	0.01	0.0006	50.00	0.0088	0.0005022
Mo	98	3	He	0.078	0.0024	200.01	0.0223	0.0006689
Mo	98	3	He	0.034	0.0014	120.00	0.0223	0.0006689
Mo	98	3	He	0.055	0.0019	160.01	0.0223	0.0006689
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	0.006	0.001	80.00	0.0471	0.0006687
Ag	107	3	He	0.006	0.0009	80.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.035	0.0174	1450.15	0.0156	0.01794
Sn	120	3	He	-0.002	0.0179	1500.14	0.0156	0.01794
Sn	120	3	He	-0.041	0.0173	1460.13	0.0156	0.01794
Sb	121	3	He	0.108	0.0017	140.01	0.0151	4.19E-05
Sb	121	3	He	0.06	0.001	80.00	0.0151	4.19E-05
Sb	121	3	He	0.06	0.0009	80.00	0.0151	4.19E-05
Ba	137	3	He	0.055	0.0005	40.00	0.0049	0.0002094
Ba	137	3	He	0.128	0.0008	70.00	0.0049	0.0002094
Ba	137	3	He	0.248	0.0014	120.00	0.0049	0.0002094
Tl	205	3	He	0.083	0.0029	1100.09	0.0252	0.0007688
Tl	205	3	He	0.074	0.0026	1010.08	0.0252	0.0007688
Tl	205	3	He	0.1	0.0033	1260.10	0.0252	0.0007688
Pb	208	3	He	-0.003	0.0016	340.02	0.0337	0.001742
Pb	208	3	He	-0.001	0.0017	350.02	0.0337	0.001742
Pb	208	3	He	-0.007	0.0015	320.02	0.0337	0.001742
U	238	3	He	0.05	0.0029	880.06	0.0502	0.0004339
U	238	3	He	0.051	0.003	890.07	0.0502	0.0004339
U	238	3	He	0.064	0.0036	1090.08	0.0502	0.0004339
Sc	45	1	No Gas			2419999.18		
Sc	45	1	No Gas			2430749.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2395398.71		
Ge	72	1	No Gas			1212115.22		
Ge	72	1	No Gas			1242013.65		
Ge	72	1	No Gas			1211244.83		
Sc	45	2	H2			171542.03		
Sc	45	2	H2			174152.67		
Sc	45	2	H2			173798.38		
Ge	72	2	H2			146828.67		
Ge	72	2	H2			149777.75		
Ge	72	2	H2			147655.76		
In	115	2	H2			381598.71		
In	115	2	H2			384643.78		
In	115	2	H2			382670.66		
Sc	45	3	He			47869.52		
Sc	45	3	He			46796.37		
Sc	45	3	He			46485.37		
Ge	72	3	He			80476.58		
Ge	72	3	He			80777.75		
Ge	72	3	He			79329.68		
In	115	3	He			83329.64		
In	115	3	He			83772.24		
In	115	3	He			84385.39		
Tb	159	3	He			382622.18		
Tb	159	3	He			383555.85		
Tb	159	3	He			381418.04		
Bi	209	3	He			300017.83		
Bi	209	3	He			299661.25		
Bi	209	3	He			300349.10		

Quantitation Report

Data File Name	092SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:14:00 AM
Sample Name	410-138233-C-1-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

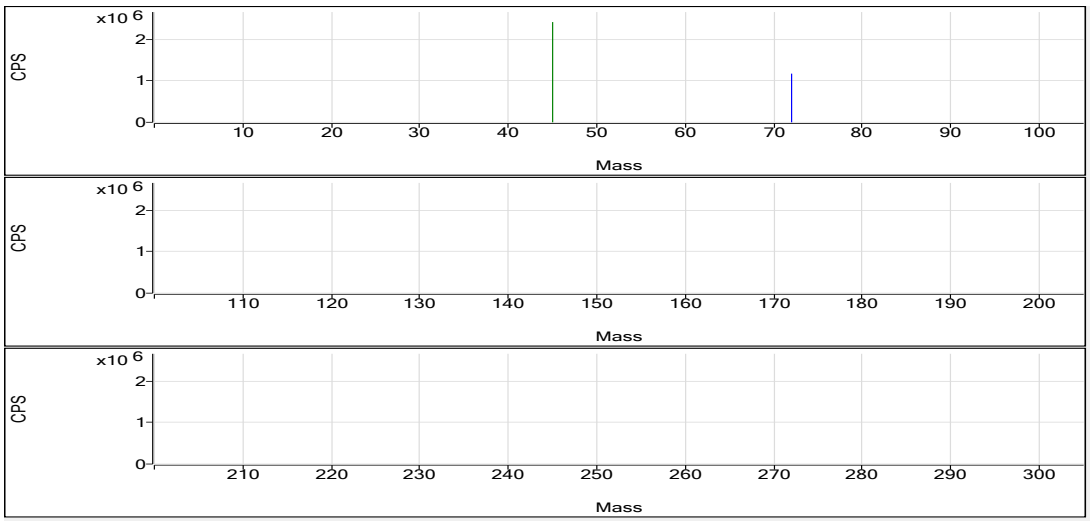
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.005	ppb	N/A	32.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.915	ppb	9.6	61.11	0.0002	Pulse	1.5000	3
Na	23	45	He	935006.185	ppb	1.3	165646134.20	3 479.4207	Analog	0.1000	3
Mg	24	45	He	5345.145	ppb	1.4	464918.93	9.7658	Pulse	0.1000	3
Al	27	45	He	21.083	ppb	16.6	646.70	0.0136	Pulse	0.1000	3
K	39	45	He	12804.282	ppb	1.3	735075.56	15.4403	Pulse	0.1000	3
Ca	44	45	He	88472.005	ppb	1.1	289963.19	6.0906	Pulse	0.1000	3
Ti	47	45	He	1.548	ppb	42.2	40.00	0.0008	Pulse	0.1000	3
V	51	45	He	0.168	ppb	12.7	1652.11	0.0347	Pulse	0.5000	3
Cr	52	45	He	286.770	ppb	1.6	397322.00	8.3457	Pulse	0.1000	3
Mn	55	45	He	93.273	ppb	0.7	57856.18	1.2152	Pulse	0.1000	3
Fe	57	45	He	3173.436	ppb	0.7	89097.72	1.8713	Pulse	0.1000	3
Co	59	45	He	0.984	ppb	11.1	2873.72	0.0604	Pulse	0.1000	3
Ni	60	72	He	8.037	ppb	3.1	5637.96	0.0705	Pulse	0.1000	3
Cu	63	72	He	3.670	ppb	4.2	7645.64	0.0957	Pulse	0.1000	3
Zn	66	115	He	4.190	ppb	24.8	1490.14	0.0182	Pulse	0.1000	3
As	75	115	He	0.474	ppb	59.5	153.33	0.0019	Pulse	0.5000	3
Sr	88	115	He	797.365	ppb	2.5	576792.47	7.0231	Pulse	0.1000	3
Mo	98	115	He	5.564	ppb	3.1	10257.46	0.1249	Pulse	0.1000	3
Ag	107	115	He	-0.010	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	180.7	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.059	ppb	N/A	1396.79	0.0170	Pulse	0.1000	3
Sb	121	115	He	0.362	ppb	6.3	453.36	0.0055	Pulse	0.1000	3
Ba	137	115	He	68.914	ppb	2.8	27712.16	0.3374	Pulse	0.1000	3
Tl	205	159	He	0.005	ppb	128.3	343.35	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.057	ppb	6.5	1390.08	0.0037	Pulse	0.1000	3
U	238	209	He	0.016	ppb	16.3	366.69	0.0013	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2419346.53	1.4	103.1	Analog	0.1000	3
No Gas	Ge	72	1174286.62	1.0	97.9	Pulse	0.1000	3
H2	Sc	45	179512.67	1.9	103.3	Pulse	0.1000	3
H2	Ge	72	148168.47	0.7	99.1	Pulse	0.1000	3
H2	In	115	374005.40	1.1	102.2	Pulse	0.1000	3
He	Sc	45	47612.04	1.1	110.6	Pulse	0.1000	3
He	Ge	72	79940.40	1.3	102.3	Pulse	0.1000	3
He	In	115	82150.02	1.7	103.1	Pulse	0.1000	3
He	Tb	159	379452.37	0.4	103.1	Pulse	0.1000	3
He	Bi	209	292117.01	1.0	100.0	Pulse	0.1000	3

No Gas



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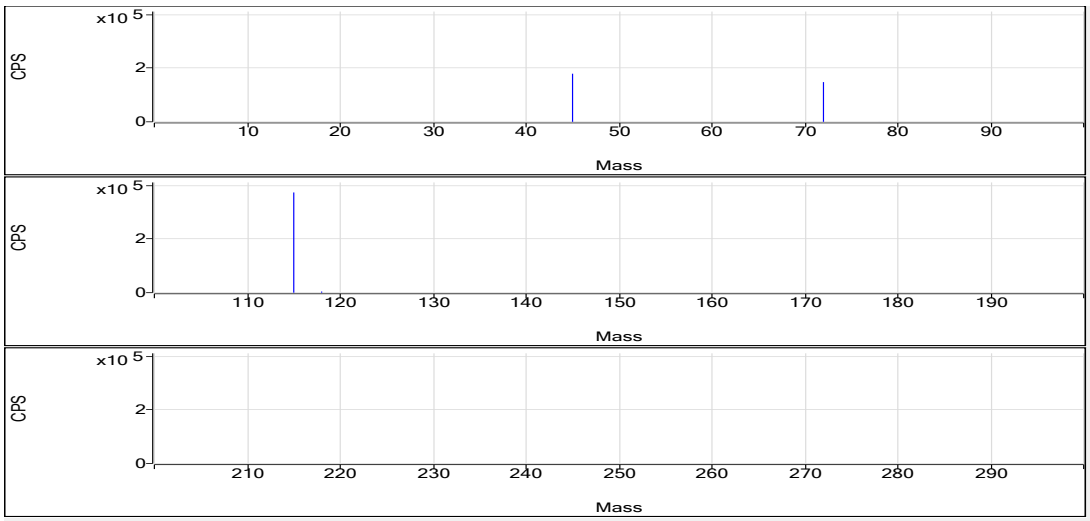
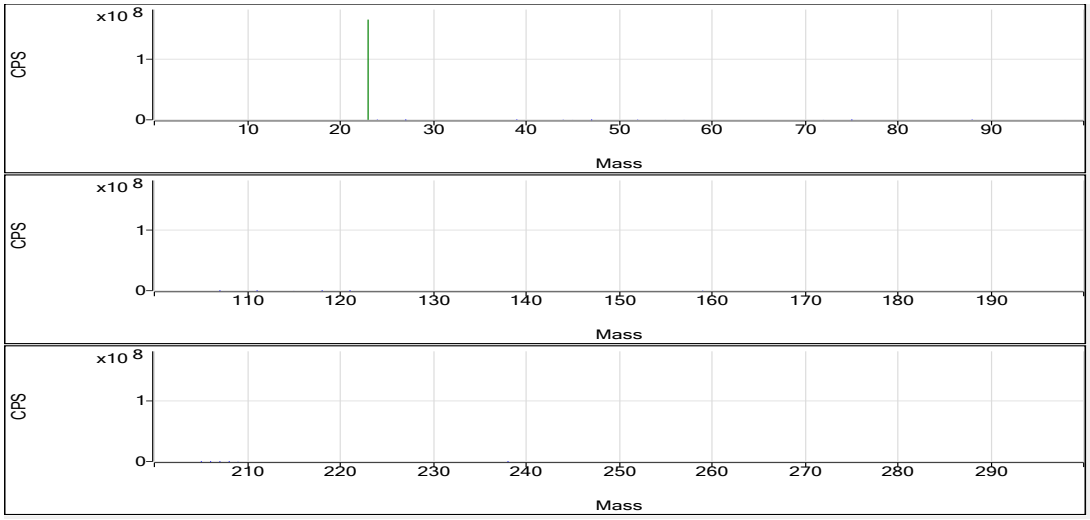


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.009	0	24.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.002	0	38.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.003	0	36.00	0.0007	1.705E-05
Se	78	2	H2	0.825	0.0001	56.00	0.0002	6.062E-06
Se	78	2	H2	1.001	0.0002	66.67	0.0002	6.062E-06
Se	78	2	H2	0.918	0.0002	60.67	0.0002	6.062E-06
Na	23	3	He	935251.285	3480.3327	165763827.53	0.0037	0.3435
Na	23	3	He	946821.362	3523.384	165799527.53	0.0037	0.3435
Na	23	3	He	922945.907	3434.5455	165375047.54	0.0037	0.3435
Mg	24	3	He	5349.447	9.7736	465505.15	0.0018	0.002943
Mg	24	3	He	5416.673	9.8964	465694.29	0.0018	0.002943
Mg	24	3	He	5269.315	9.6273	463557.34	0.0018	0.002943
Al	27	3	He	17.66	0.0115	550.03	0.0006	0.001008
Al	27	3	He	24.66	0.0157	740.04	0.0006	0.001008
Al	27	3	He	20.93	0.0135	650.03	0.0006	0.001008
K	39	3	He	12778.999	15.4106	733989.21	0.0012	0.4052
K	39	3	He	12979.667	15.6463	736264.91	0.0012	0.4052
K	39	3	He	12654.179	15.2641	734972.57	0.0012	0.4052
Ca	44	3	He	88210.553	6.0726	289231.48	0.0001	0.003486
Ca	44	3	He	89530.427	6.1634	290032.26	0.0001	0.003486
Ca	44	3	He	87675.035	6.0358	290625.82	0.0001	0.003486
Ti	47	3	He	1.164	0.0006	30.00	0.0005	0
Ti	47	3	He	1.178	0.0006	30.00	0.0005	0
Ti	47	3	He	2.302	0.0012	60.00	0.0005	0
V	51	3	He	0.144	0.0342	1628.10	0.0223	0.03097
V	51	3	He	0.186	0.0351	1652.11	0.0223	0.03097
V	51	3	He	0.172	0.0348	1676.11	0.0223	0.03097
Cr	52	3	He	290.227	8.4459	402265.81	0.029	0.03958
Cr	52	3	He	288.494	8.3957	395075.07	0.029	0.03958
Cr	52	3	He	281.588	8.1957	394625.11	0.029	0.03958
Mn	55	3	He	92.701	1.2078	57525.00	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	94.027	1.225	57645.30	0.013	0.003171
Mn	55	3	He	93.09	1.2128	58398.24	0.013	0.003171
Fe	57	3	He	3149.256	1.8571	88450.02	0.0006	0.002014
Fe	57	3	He	3182.485	1.8766	88309.17	0.0006	0.002014
Fe	57	3	He	3188.568	1.8802	90533.97	0.0006	0.002014
Co	59	3	He	1.081	0.0659	3140.45	0.0572	0.004106
Co	59	3	He	1.006	0.0616	2900.39	0.0572	0.004106
Co	59	3	He	0.865	0.0536	2580.31	0.0572	0.004106
Ni	60	3	He	8.214	0.072	5811.37	0.0084	0.003329
Ni	60	3	He	8.15	0.0715	5631.30	0.0084	0.003329
Ni	60	3	He	7.748	0.0681	5471.22	0.0084	0.003329
Cu	63	3	He	3.64	0.0949	7662.33	0.0247	0.004989
Cu	63	3	He	3.836	0.0998	7862.46	0.0247	0.004989
Cu	63	3	He	3.532	0.0923	7412.14	0.0247	0.004989
Zn	66	3	He	5.037	0.0206	1690.18	0.0029	0.006147
Zn	66	3	He	4.503	0.0191	1540.14	0.0029	0.006147
Zn	66	3	He	3.03	0.0148	1240.10	0.0029	0.006147
As	75	3	He	0.609	0.0021	176.00	0.002	0.0009198
As	75	3	He	0.663	0.0023	182.00	0.002	0.0009198
As	75	3	He	0.15	0.0012	102.00	0.002	0.0009198
Sr	88	3	He	800.447	7.0503	578660.19	0.0088	0.0005022
Sr	88	3	He	815.272	7.1809	580208.00	0.0088	0.0005022
Sr	88	3	He	776.377	6.8383	571509.21	0.0088	0.0005022
Mo	98	3	He	5.484	0.1231	10104.00	0.0223	0.0006689
Mo	98	3	He	5.76	0.1293	10444.31	0.0223	0.0006689
Mo	98	3	He	5.449	0.1223	10224.08	0.0223	0.0006689
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Ag	107	3	He	-0.006	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	-0.014	0	0.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.08	0.0167	1370.12	0.0156	0.01794
Sn	120	3	He	0.096	0.0194	1570.15	0.0156	0.01794
Sn	120	3	He	-0.192	0.015	1250.11	0.0156	0.01794
Sb	121	3	He	0.368	0.0056	460.03	0.0151	4.19E-05
Sb	121	3	He	0.382	0.0058	470.03	0.0151	4.19E-05
Sb	121	3	He	0.337	0.0051	430.02	0.0151	4.19E-05
Ba	137	3	He	69.921	0.3424	28099.54	0.0049	0.0002094
Ba	137	3	He	70.139	0.3434	27748.82	0.0049	0.0002094
Ba	137	3	He	66.682	0.3265	27288.12	0.0049	0.0002094
Tl	205	3	He	0.001	0.0008	300.01	0.0252	0.0007688
Tl	205	3	He	0.002	0.0008	310.01	0.0252	0.0007688
Tl	205	3	He	0.013	0.0011	420.03	0.0252	0.0007688
Pb	208	3	He	0.053	0.0035	710.05	0.0337	0.001742
Pb	208	3	He	0.058	0.0037	680.04	0.0337	0.001742
Pb	208	3	He	0.06	0.0038	730.05	0.0337	0.001742
U	238	3	He	0.015	0.0012	350.02	0.0502	0.0004339
U	238	3	He	0.015	0.0012	340.02	0.0502	0.0004339
U	238	3	He	0.019	0.0014	410.02	0.0502	0.0004339
Sc	45	1	No Gas			2387410.28		
Sc	45	1	No Gas			2454961.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2415667.93		
Ge	72	1	No Gas			1160794.98		
Ge	72	1	No Gas			1182914.59		
Ge	72	1	No Gas			1179150.29		
Sc	45	2	H2			183243.57		
Sc	45	2	H2			178470.66		
Sc	45	2	H2			176823.79		
Ge	72	2	H2			148869.16		
Ge	72	2	H2			148648.30		
Ge	72	2	H2			146987.94		
In	115	2	H2			378147.22		
In	115	2	H2			374001.91		
In	115	2	H2			369867.06		
Sc	45	3	He			47628.73		
Sc	45	3	He			47056.90		
Sc	45	3	He			48150.49		
Ge	72	3	He			80707.92		
Ge	72	3	He			78786.92		
Ge	72	3	He			80326.35		
In	115	3	He			82082.80		
In	115	3	He			80805.94		
In	115	3	He			83582.00		
Tb	159	3	He			380464.56		
Tb	159	3	He			377843.43		
Tb	159	3	He			380049.13		
Bi	209	3	He			295436.89		
Bi	209	3	He			290215.46		
Bi	209	3	He			290698.69		

Quantitation Report

Data File Name	093SMPL.d
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Acq Time	8/11/2023 10:16:09 AM
Sample Name	410-138069-W-1-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

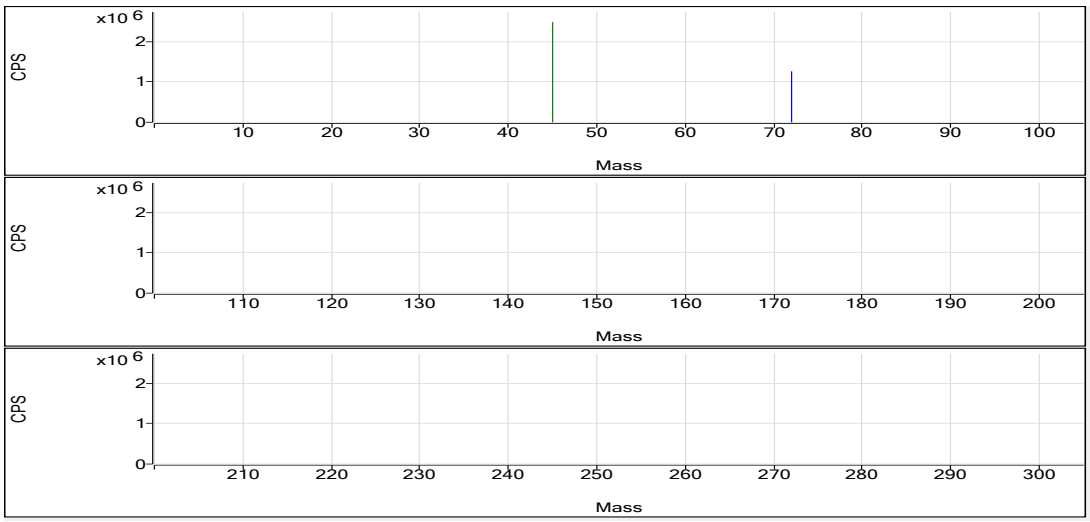
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.005	ppb	N/A	34.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.051	ppb	40.8	5.78	0.0000	Pulse	1.5000	3
Na	23	45	He	7405.115	ppb	1.3	1325125.50	27.8973	Analog	0.1000	3
Mg	24	45	He	6044.921	ppb	2.1	524545.38	11.0439	Pulse	0.1000	3
Al	27	45	He	1.004	ppb	137.9	76.67	0.0016	Pulse	0.1000	3
K	39	45	He	750.322	ppb	0.3	61104.88	1.2863	Pulse	0.1000	3
Ca	44	45	He	30108.241	ppb	3.0	98549.23	2.0750	Pulse	0.1000	3
Ti	47	45	He	0.389	ppb	100.8	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.272	ppb	N/A	1183.39	0.0249	Pulse	0.5000	3
Cr	52	45	He	0.069	ppb	110.9	1976.87	0.0416	Pulse	0.1000	3
Mn	55	45	He	34.747	ppb	4.7	21593.40	0.4547	Pulse	0.1000	3
Fe	57	45	He	2.895	ppb	18.7	176.68	0.0037	Pulse	0.1000	3
Co	59	45	He	0.013	ppb	83.1	230.01	0.0048	Pulse	0.1000	3
Ni	60	72	He	0.224	ppb	21.5	446.69	0.0052	Pulse	0.1000	3
Cu	63	72	He	1.763	ppb	4.2	4167.40	0.0486	Pulse	0.1000	3
Zn	66	115	He	5.789	ppb	14.3	1953.53	0.0227	Pulse	0.1000	3
As	75	115	He	0.106	ppb	14.0	97.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	738.555	ppb	1.0	558412.62	6.5052	Pulse	0.1000	3
Mo	98	115	He	1.176	ppb	4.8	2310.27	0.0269	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	78.6	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.180	ppb	N/A	1300.12	0.0151	Pulse	0.1000	3
Sb	121	115	He	0.025	ppb	76.4	36.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	138.325	ppb	1.3	58120.72	0.6771	Pulse	0.1000	3
Tl	205	159	He	0.002	ppb	496.1	313.35	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.180	ppb	11.7	3033.59	0.0078	Pulse	0.1000	3
U	238	209	He	0.320	ppb	5.1	5041.15	0.0165	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2481680.07	0.4	105.7	Analog	0.1000	3
No Gas	Ge	72	1262639.77	0.4	105.2	Pulse	0.1000	3
H2	Sc	45	174644.89	1.0	100.5	Pulse	0.1000	3
H2	Ge	72	156135.20	0.7	104.4	Pulse	0.1000	3
H2	In	115	388076.47	0.2	106.0	Pulse	0.1000	3
He	Sc	45	47505.00	1.3	110.4	Pulse	0.1000	3
He	Ge	72	85830.78	2.3	109.8	Pulse	0.1000	3
He	In	115	85844.35	0.7	107.7	Pulse	0.1000	3
He	Tb	159	387907.21	0.2	105.4	Pulse	0.1000	3
He	Bi	209	305536.23	0.8	104.6	Pulse	0.1000	3

No Gas



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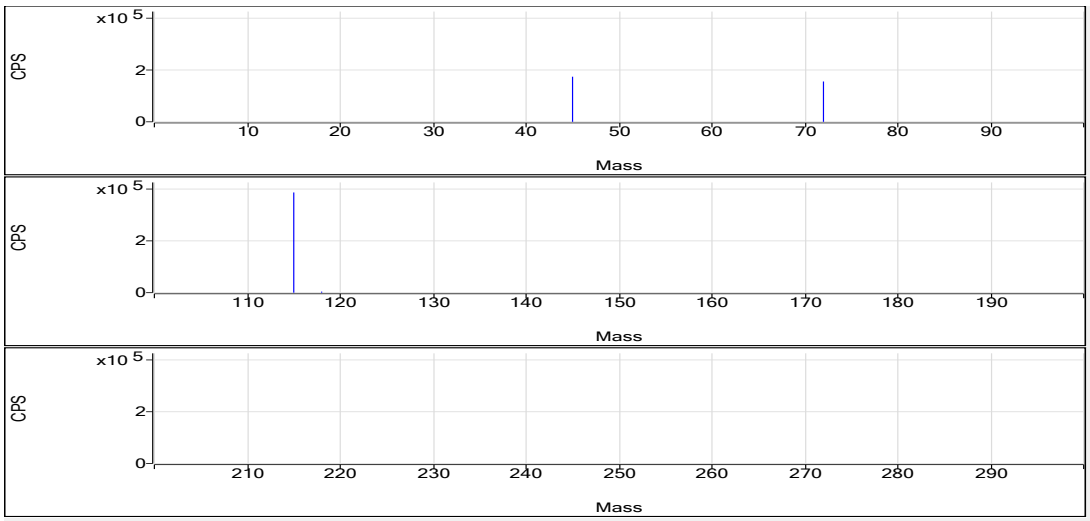
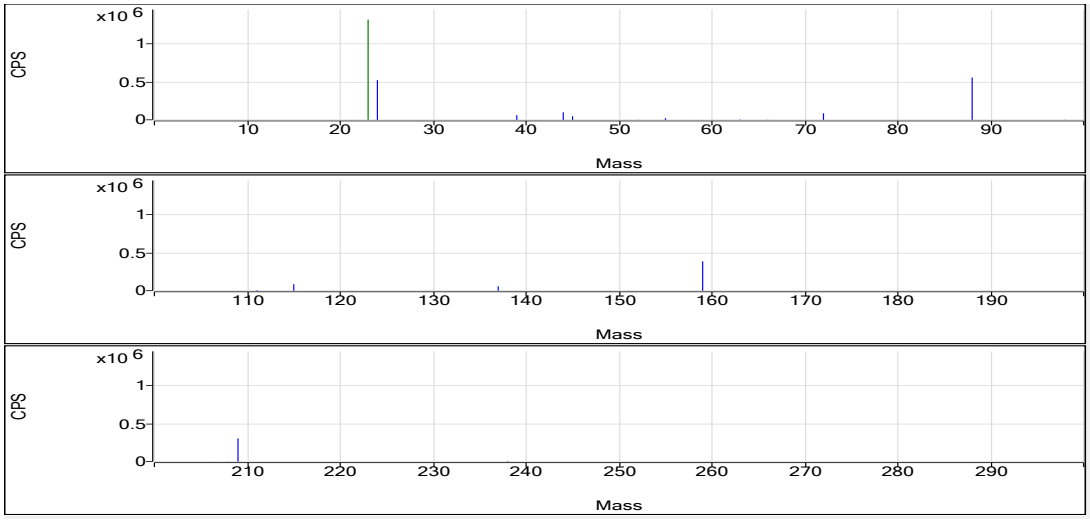


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.005	0	34.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.008	0	28.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.001	0	40.00	0.0007	1.705E-05
Se	78	2	H2	0.075	0	7.33	0.0002	6.062E-06
Se	78	2	H2	0.044	0	5.33	0.0002	6.062E-06
Se	78	2	H2	0.035	0	4.67	0.0002	6.062E-06
Na	23	3	He	7502.962	28.2614	1332437.64	0.0037	0.3435
Na	23	3	He	7304.674	27.5236	1327477.95	0.0037	0.3435
Na	23	3	He	7407.709	27.9069	1315460.92	0.0037	0.3435
Mg	24	3	He	6103.83	11.1515	525758.90	0.0018	0.002943
Mg	24	3	He	5902.077	10.783	520070.27	0.0018	0.002943
Mg	24	3	He	6128.855	11.1972	527806.98	0.0018	0.002943
Al	27	3	He	-0.267	0.0008	40.00	0.0006	0.001008
Al	27	3	He	2.48	0.0025	120.00	0.0006	0.001008
Al	27	3	He	0.799	0.0015	70.00	0.0006	0.001008
K	39	3	He	752.708	1.2891	60776.69	0.0012	0.4052
K	39	3	He	749.683	1.2855	62002.31	0.0012	0.4052
K	39	3	He	748.575	1.2842	60535.64	0.0012	0.4052
Ca	44	3	He	30880.015	2.1281	100334.42	0.0001	0.003486
Ca	44	3	He	29120.264	2.007	96800.99	0.0001	0.003486
Ca	44	3	He	30324.443	2.0899	98512.27	0.0001	0.003486
Ti	47	3	He	0.784	0.0004	20.00	0.0005	0
Ti	47	3	He	0.383	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.256	0.0253	1192.06	0.0223	0.03097
V	51	3	He	-0.298	0.0243	1174.05	0.0223	0.03097
V	51	3	He	-0.263	0.0251	1184.06	0.0223	0.03097
Cr	52	3	He	0.025	0.0403	1900.18	0.029	0.03958
Cr	52	3	He	0.158	0.0442	2130.23	0.029	0.03958
Cr	52	3	He	0.025	0.0403	1900.20	0.029	0.03958
Mn	55	3	He	36.511	0.4776	22518.20	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	33.288	0.4357	21015.69	0.013	0.003171
Mn	55	3	He	34.442	0.4507	21246.31	0.013	0.003171
Fe	57	3	He	3.423	0.004	190.01	0.0006	0.002014
Fe	57	3	He	2.917	0.0037	180.01	0.0006	0.002014
Fe	57	3	He	2.344	0.0034	160.01	0.0006	0.002014
Co	59	3	He	0.017	0.0051	240.01	0.0572	0.004106
Co	59	3	He	0.001	0.0041	200.01	0.0572	0.004106
Co	59	3	He	0.021	0.0053	250.01	0.0572	0.004106
Ni	60	3	He	0.246	0.0054	450.02	0.0084	0.003329
Ni	60	3	He	0.169	0.0047	410.02	0.0084	0.003329
Ni	60	3	He	0.258	0.0055	480.02	0.0084	0.003329
Cu	63	3	He	1.783	0.0491	4100.72	0.0247	0.004989
Cu	63	3	He	1.68	0.0465	4020.69	0.0247	0.004989
Cu	63	3	He	1.825	0.0501	4380.79	0.0247	0.004989
Zn	66	3	He	6.013	0.0234	2000.22	0.0029	0.006147
Zn	66	3	He	4.873	0.0201	1720.15	0.0029	0.006147
Zn	66	3	He	6.48	0.0247	2140.23	0.0029	0.006147
As	75	3	He	0.113	0.0011	98.00	0.002	0.0009198
As	75	3	He	0.089	0.0011	94.00	0.002	0.0009198
As	75	3	He	0.117	0.0012	100.00	0.002	0.0009198
Sr	88	3	He	745.806	6.5691	561691.79	0.0088	0.0005022
Sr	88	3	He	738.371	6.5036	555960.19	0.0088	0.0005022
Sr	88	3	He	731.489	6.443	557585.89	0.0088	0.0005022
Mo	98	3	He	1.159	0.0266	2270.27	0.0223	0.0006689
Mo	98	3	He	1.238	0.0283	2420.29	0.0223	0.0006689
Mo	98	3	He	1.129	0.0259	2240.26	0.0223	0.0006689
Ag	107	3	He	-0.012	0.0001	10.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	0.01	0.0001	6.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Sn	120	3	He	-0.183	0.0151	1290.12	0.0156	0.01794
Sn	120	3	He	-0.198	0.0149	1270.11	0.0156	0.01794
Sn	120	3	He	-0.158	0.0155	1340.13	0.0156	0.01794
Sb	121	3	He	0.005	0.0001	10.00	0.0151	4.19E-05
Sb	121	3	He	0.044	0.0007	60.00	0.0151	4.19E-05
Sb	121	3	He	0.028	0.0005	40.00	0.0151	4.19E-05
Ba	137	3	He	139.327	0.682	58314.44	0.0049	0.0002094
Ba	137	3	He	139.362	0.6822	58315.16	0.0049	0.0002094
Ba	137	3	He	136.285	0.6671	57732.56	0.0049	0.0002094
Tl	205	3	He	-0.006	0.0006	240.01	0.0252	0.0007688
Tl	205	3	He	0.009	0.001	390.02	0.0252	0.0007688
Tl	205	3	He	0.001	0.0008	310.02	0.0252	0.0007688
Pb	208	3	He	0.198	0.0084	1660.16	0.0337	0.001742
Pb	208	3	He	0.186	0.008	1680.17	0.0337	0.001742
Pb	208	3	He	0.157	0.007	1430.13	0.0337	0.001742
U	238	3	He	0.304	0.0157	4771.06	0.0502	0.0004339
U	238	3	He	0.321	0.0165	5091.19	0.0502	0.0004339
U	238	3	He	0.336	0.0173	5261.21	0.0502	0.0004339
Sc	45	1	No Gas			2482259.34		
Sc	45	1	No Gas			2471223.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2491557.46		
Ge	72	1	No Gas			1265589.20		
Ge	72	1	No Gas			1256437.17		
Ge	72	1	No Gas			1265892.95		
Sc	45	2	H2			175031.91		
Sc	45	2	H2			172765.64		
Sc	45	2	H2			176137.11		
Ge	72	2	H2			156490.52		
Ge	72	2	H2			154860.16		
Ge	72	2	H2			157054.91		
In	115	2	H2			387088.20		
In	115	2	H2			388742.57		
In	115	2	H2			388398.63		
Sc	45	3	He			47146.97		
Sc	45	3	He			48230.62		
Sc	45	3	He			47137.42		
Ge	72	3	He			83593.92		
Ge	72	3	He			86441.05		
Ge	72	3	He			87457.38		
In	115	3	He			85512.80		
In	115	3	He			85492.03		
In	115	3	He			86549.27		
Tb	159	3	He			388611.75		
Tb	159	3	He			388180.42		
Tb	159	3	He			386929.45		
Bi	209	3	He			304222.85		
Bi	209	3	He			308402.24		
Bi	209	3	He			303983.59		

Quantitation Report

Data File Name	094SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
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Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

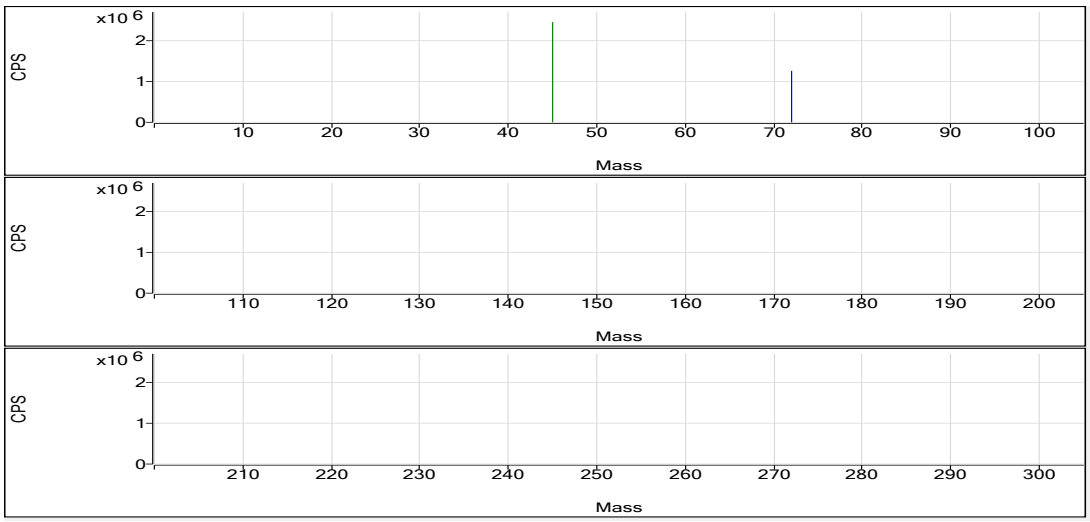
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	64.0	52.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	-0.005	ppb	N/A	2.00	0.0000	Pulse	1.5000	3
Na	23	45	He	24861.006	ppb	2.2	4478053.27	92.8491	Analog	0.1000	3
Mg	24	45	He	8293.842	ppb	1.3	730795.17	15.1515	Pulse	0.1000	3
Al	27	45	He	0.506	ppb	208.4	63.33	0.0013	Pulse	0.1000	3
K	39	45	He	1591.432	ppb	3.7	109655.86	2.2739	Pulse	0.1000	3
Ca	44	45	He	30184.900	ppb	3.0	100324.18	2.0803	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.295	ppb	N/A	1176.72	0.0244	Pulse	0.5000	3
Cr	52	45	He	0.021	ppb	523.0	1936.87	0.0402	Pulse	0.1000	3
Mn	55	45	He	37.210	ppb	0.6	23476.47	0.4867	Pulse	0.1000	3
Fe	57	45	He	30.858	ppb	6.4	973.40	0.0202	Pulse	0.1000	3
Co	59	45	He	-0.009	ppb	N/A	173.34	0.0036	Pulse	0.1000	3
Ni	60	72	He	-0.085	ppb	N/A	223.34	0.0026	Pulse	0.1000	3
Cu	63	72	He	4.346	ppb	1.5	9563.49	0.1124	Pulse	0.1000	3
Zn	66	115	He	9.259	ppb	6.9	2773.70	0.0327	Pulse	0.1000	3
As	75	115	He	0.408	ppb	24.9	147.33	0.0017	Pulse	0.5000	3
Sr	88	115	He	1222.281	ppb	1.2	912713.94	10.7655	Pulse	0.1000	3
Mo	98	115	He	0.106	ppb	12.4	256.68	0.0030	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	50.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.117	ppb	N/A	1366.78	0.0161	Pulse	0.1000	3
Sb	121	115	He	0.018	ppb	65.9	26.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	1411.584	ppb	1.7	585613.16	6.9077	Pulse	0.1000	3
Tl	205	159	He	-0.007	ppb	N/A	233.35	0.0006	Pulse	0.1000	3
Pb	208	159	He	2.613	ppb	2.5	34799.42	0.0899	Pulse	0.1000	3
U	238	209	He	0.058	ppb	11.5	1016.75	0.0034	Pulse	0.1000	3

ISTD Table:

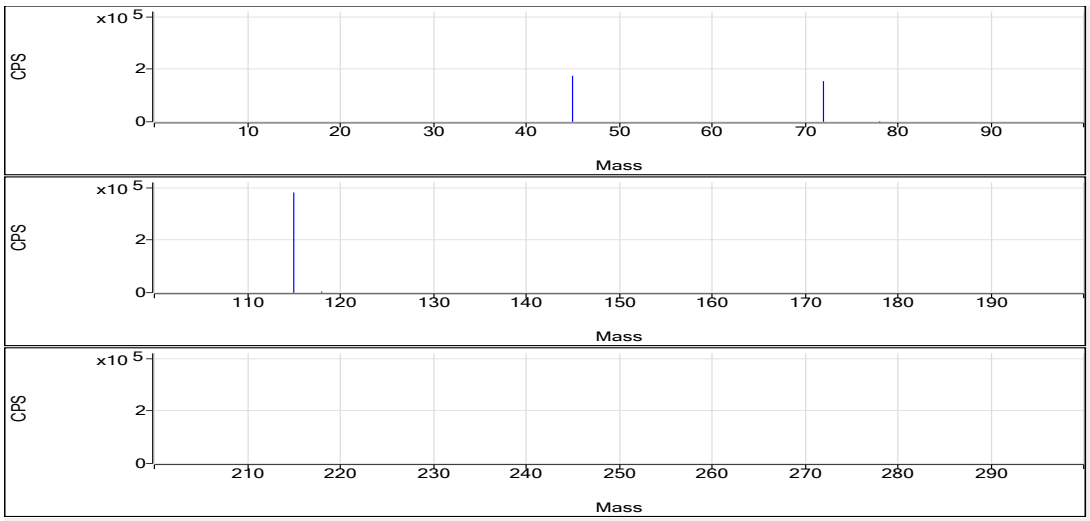
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2465016.00	1.5	105.0	Analog	0.1000	3
No Gas	Ge	72	1264536.28	0.8	105.4	Pulse	0.1000	3
H2	Sc	45	175791.67	1.2	101.2	Pulse	0.1000	3
H2	Ge	72	155306.46	0.6	103.9	Pulse	0.1000	3
H2	In	115	382717.99	0.8	104.6	Pulse	0.1000	3
He	Sc	45	48237.58	1.6	112.1	Pulse	0.1000	3
He	Ge	72	85095.92	1.2	108.9	Pulse	0.1000	3
He	In	115	84791.76	1.5	106.4	Pulse	0.1000	3
He	Tb	159	387055.71	0.7	105.2	Pulse	0.1000	3
He	Bi	209	303302.31	0.5	103.9	Pulse	0.1000	3

No Gas

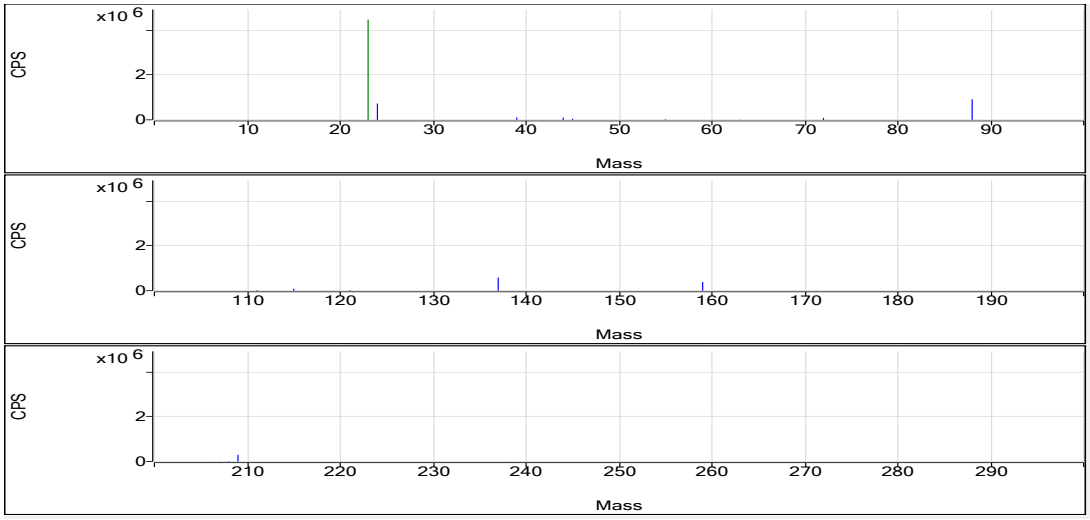


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.004	0	48.00	0.0007	1.705E-05
Be	9	1	No Gas	0.003	0	48.00	0.0007	1.705E-05
Be	9	1	No Gas	0.009	0	60.00	0.0007	1.705E-05
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Na	23	3	He	25499.915	95.2265	4528829.00	0.0037	0.3435
Na	23	3	He	24507.537	91.5339	4400081.18	0.0037	0.3435
Na	23	3	He	24575.565	91.787	4505249.62	0.0037	0.3435
Mg	24	3	He	8415.009	15.3728	731108.35	0.0018	0.002943
Mg	24	3	He	8236.085	15.046	723269.60	0.0018	0.002943
Mg	24	3	He	8230.431	15.0357	738007.57	0.0018	0.002943
Al	27	3	He	-0.632	0.0006	30.00	0.0006	0.001008
Al	27	3	He	1.448	0.0019	90.00	0.0006	0.001008
Al	27	3	He	0.701	0.0014	70.00	0.0006	0.001008
K	39	3	He	1656.433	2.3503	111775.08	0.0012	0.4052
K	39	3	He	1577.977	2.2581	108549.92	0.0012	0.4052
K	39	3	He	1539.887	2.2134	108642.58	0.0012	0.4052
Ca	44	3	He	31233.993	2.1525	102368.50	0.0001	0.003486
Ca	44	3	He	29646.268	2.0432	98219.32	0.0001	0.003486
Ca	44	3	He	29674.441	2.0452	100384.71	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.279	0.0248	1178.05	0.0223	0.03097
V	51	3	He	-0.281	0.0247	1188.06	0.0223	0.03097
V	51	3	He	-0.326	0.0237	1164.05	0.0223	0.03097
Cr	52	3	He	0.056	0.0412	1960.20	0.029	0.03958
Cr	52	3	He	0.106	0.0427	2050.22	0.029	0.03958
Cr	52	3	He	-0.1	0.0367	1800.19	0.029	0.03958
Mn	55	3	He	37.457	0.4899	23299.34	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	36.976	0.4837	23249.49	0.013	0.003171
Mn	55	3	He	37.197	0.4865	23880.57	0.013	0.003171
Fe	57	3	He	32.994	0.0214	1020.07	0.0006	0.002014
Fe	57	3	He	30.487	0.02	960.07	0.0006	0.002014
Fe	57	3	He	29.095	0.0192	940.06	0.0006	0.002014
Co	59	3	He	0.005	0.0044	210.01	0.0572	0.004106
Co	59	3	He	0.001	0.0042	200.01	0.0572	0.004106
Co	59	3	He	-0.033	0.0022	110.00	0.0572	0.004106
Ni	60	3	He	0.033	0.0036	310.01	0.0084	0.003329
Ni	60	3	He	-0.184	0.0018	150.01	0.0084	0.003329
Ni	60	3	He	-0.104	0.0025	210.01	0.0084	0.003329
Cu	63	3	He	4.375	0.1131	9723.57	0.0247	0.004989
Cu	63	3	He	4.392	0.1135	9533.47	0.0247	0.004989
Cu	63	3	He	4.272	0.1105	9433.43	0.0247	0.004989
Zn	66	3	He	8.877	0.0316	2700.37	0.0029	0.006147
Zn	66	3	He	9.992	0.0348	2980.42	0.0029	0.006147
Zn	66	3	He	8.91	0.0317	2640.32	0.0029	0.006147
As	75	3	He	0.428	0.0018	152.00	0.002	0.0009198
As	75	3	He	0.298	0.0015	130.00	0.002	0.0009198
As	75	3	He	0.498	0.0019	160.00	0.002	0.0009198
Sr	88	3	He	1218.365	10.731	916908.89	0.0088	0.0005022
Sr	88	3	He	1209.37	10.6518	912199.28	0.0088	0.0005022
Sr	88	3	He	1239.109	10.9137	909033.66	0.0088	0.0005022
Mo	98	3	He	0.096	0.0028	240.01	0.0223	0.0006689
Mo	98	3	He	0.101	0.0029	250.02	0.0223	0.0006689
Mo	98	3	He	0.121	0.0034	280.01	0.0223	0.0006689
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.198	0.0149	1270.10	0.0156	0.01794
Sn	120	3	He	-0.072	0.0168	1440.12	0.0156	0.01794
Sn	120	3	He	-0.08	0.0167	1390.12	0.0156	0.01794
Sb	121	3	He	0.028	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.005	0.0001	10.00	0.0151	4.19E-05
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Ba	137	3	He	1406.122	6.8809	587938.35	0.0049	0.0002094
Ba	137	3	He	1390.63	6.8051	582776.87	0.0049	0.0002094
Ba	137	3	He	1438.001	7.0369	586124.25	0.0049	0.0002094
Tl	205	3	He	-0.009	0.0005	210.01	0.0252	0.0007688
Tl	205	3	He	0.005	0.0009	350.02	0.0252	0.0007688
Tl	205	3	He	-0.016	0.0004	140.01	0.0252	0.0007688
Pb	208	3	He	2.678	0.0921	18463.56	0.0337	0.001742
Pb	208	3	He	2.546	0.0876	18573.74	0.0337	0.001742
Pb	208	3	He	2.617	0.09	18944.18	0.0337	0.001742
U	238	3	He	0.051	0.003	910.07	0.0502	0.0004339
U	238	3	He	0.06	0.0034	1040.08	0.0502	0.0004339
U	238	3	He	0.064	0.0036	1100.09	0.0502	0.0004339
Sc	45	1	No Gas			2425316.21		
Sc	45	1	No Gas			2474517.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2495214.49		
Ge	72	1	No Gas			1253617.64		
Ge	72	1	No Gas			1268261.15		
Ge	72	1	No Gas			1271730.06		
Sc	45	2	H2			176601.87		
Sc	45	2	H2			173341.33		
Sc	45	2	H2			177431.81		
Ge	72	2	H2			156133.78		
Ge	72	2	H2			154338.19		
Ge	72	2	H2			155447.42		
In	115	2	H2			380749.64		
In	115	2	H2			386261.67		
In	115	2	H2			381142.65		
Sc	45	3	He			47558.51		
Sc	45	3	He			48070.50		
Sc	45	3	He			49083.72		
Ge	72	3	He			85967.44		
Ge	72	3	He			83985.52		
Ge	72	3	He			85334.81		
In	115	3	He			85452.04		
In	115	3	He			85644.63		
In	115	3	He			83299.44		
Tb	159	3	He			388331.87		
Tb	159	3	He			389019.41		
Tb	159	3	He			383815.85		
Bi	209	3	He			304690.60		
Bi	209	3	He			303621.54		
Bi	209	3	He			301594.80		

Quantitation Report

Data File Name	095SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:20:13 AM
Sample Name	410-138076-W-1-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

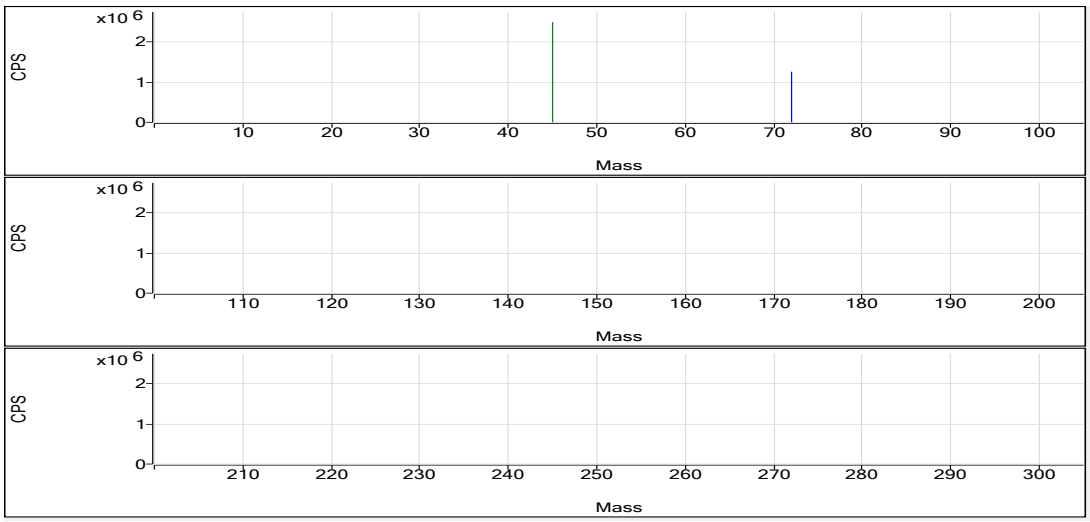
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.005	ppb	N/A	32.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	-0.008	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	45	He	33633.062	ppb	0.6	5872537.41	125.4892	Analog	0.1000	3
Mg	24	45	He	9138.397	ppb	1.4	781172.41	16.6941	Pulse	0.1000	3
Al	27	45	He	0.105	ppb	364.6	50.00	0.0011	Pulse	0.1000	3
K	39	45	He	1692.706	ppb	1.6	111970.72	2.3929	Pulse	0.1000	3
Ca	44	45	He	35601.014	ppb	0.6	114790.09	2.4529	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.249	ppb	N/A	1190.06	0.0254	Pulse	0.5000	3
Cr	52	45	He	-0.096	ppb	N/A	1723.50	0.0368	Pulse	0.1000	3
Mn	55	45	He	1.620	ppb	9.9	1133.42	0.0242	Pulse	0.1000	3
Fe	57	45	He	42.327	ppb	12.5	1260.09	0.0269	Pulse	0.1000	3
Co	59	45	He	-0.010	ppb	N/A	166.68	0.0036	Pulse	0.1000	3
Ni	60	72	He	0.088	ppb	113.1	343.35	0.0041	Pulse	0.1000	3
Cu	63	72	He	2.118	ppb	7.5	4837.64	0.0573	Pulse	0.1000	3
Zn	66	115	He	12.137	ppb	12.5	3430.52	0.0410	Pulse	0.1000	3
As	75	115	He	1.152	ppb	5.8	271.33	0.0032	Pulse	0.5000	3
Sr	88	115	He	937.373	ppb	1.4	692049.13	8.2562	Pulse	0.1000	3
Mo	98	115	He	0.141	ppb	10.7	320.02	0.0038	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	90.0	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.219	ppb	N/A	1220.10	0.0145	Pulse	0.1000	3
Sb	121	115	He	0.039	ppb	23.9	53.33	0.0006	Pulse	0.1000	3
Ba	137	115	He	577.374	ppb	0.8	236855.36	2.8255	Pulse	0.1000	3
Tl	205	159	He	-0.015	ppb	N/A	146.67	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.102	ppb	5.0	1990.13	0.0052	Pulse	0.1000	3
U	238	209	He	0.201	ppb	6.5	3180.53	0.0105	Pulse	0.1000	3

ISTD Table:

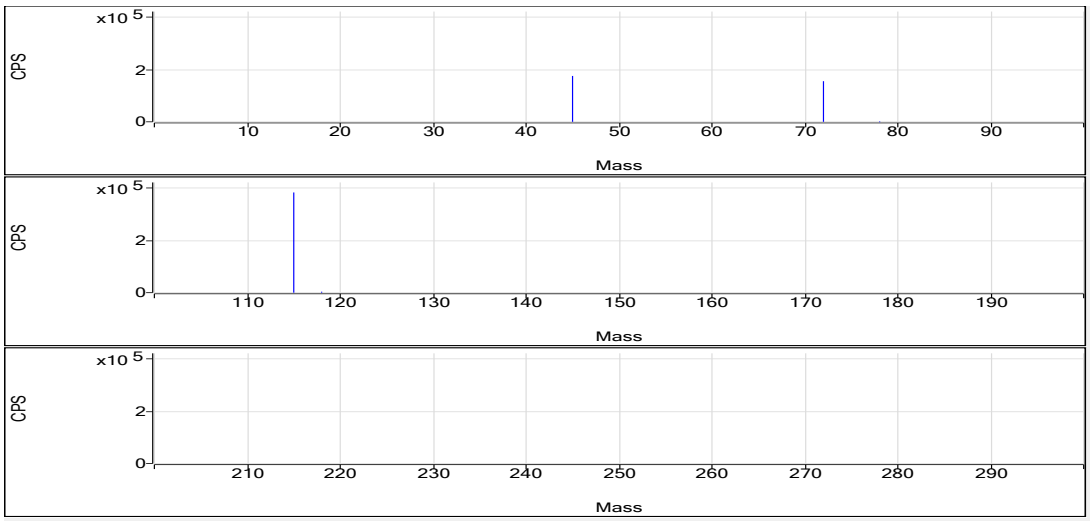
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2496766.37	1.2	106.4	Analog	0.1000	3
No Gas	Ge	72	1260096.80	0.5	105.0	Pulse	0.1000	3
H2	Sc	45	175670.28	1.0	101.1	Pulse	0.1000	3
H2	Ge	72	155559.20	0.9	104.0	Pulse	0.1000	3
H2	In	115	383800.68	0.5	104.9	Pulse	0.1000	3
He	Sc	45	46799.51	1.4	108.8	Pulse	0.1000	3
He	Ge	72	84351.37	1.2	107.9	Pulse	0.1000	3
He	In	115	83832.96	1.5	105.2	Pulse	0.1000	3
He	Tb	159	384356.73	0.6	104.5	Pulse	0.1000	3
He	Bi	209	301759.45	1.4	103.3	Pulse	0.1000	3

No Gas

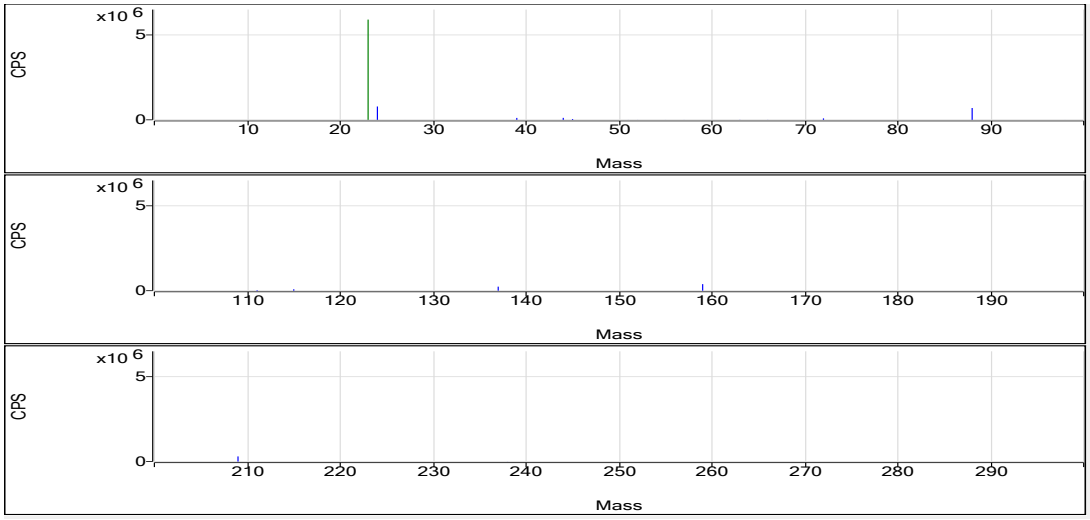


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.003	0	36.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.009	0	26.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.003	0	36.00	0.0007	1.705E-05
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Na	23	3	He	33679.117	125.6606	5870329.29	0.0037	0.3435
Na	23	3	He	33427.597	124.7247	5921782.41	0.0037	0.3435
Na	23	3	He	33792.473	126.0824	5825500.54	0.0037	0.3435
Mg	24	3	He	9175.659	16.7621	783055.85	0.0018	0.002943
Mg	24	3	He	8991.958	16.4266	779916.08	0.0018	0.002943
Mg	24	3	He	9247.573	16.8935	780545.30	0.0018	0.002943
Al	27	3	He	0.105	0.0011	50.00	0.0006	0.001008
Al	27	3	He	-0.277	0.0008	40.00	0.0006	0.001008
Al	27	3	He	0.487	0.0013	60.00	0.0006	0.001008
K	39	3	He	1693.097	2.3933	111805.61	0.0012	0.4052
K	39	3	He	1664.86	2.3602	112057.64	0.0012	0.4052
K	39	3	He	1720.16	2.4251	112048.92	0.0012	0.4052
Ca	44	3	He	35600.467	2.4529	114589.13	0.0001	0.003486
Ca	44	3	He	35388.235	2.4383	115767.57	0.0001	0.003486
Ca	44	3	He	35814.341	2.4676	114013.56	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.316	0.0239	1118.05	0.0223	0.03097
V	51	3	He	-0.212	0.0262	1246.06	0.0223	0.03097
V	51	3	He	-0.219	0.0261	1206.06	0.0223	0.03097
Cr	52	3	He	-0.014	0.0392	1830.19	0.029	0.03958
Cr	52	3	He	-0.05	0.0381	1810.18	0.029	0.03958
Cr	52	3	He	-0.223	0.0331	1530.12	0.029	0.03958
Mn	55	3	He	1.436	0.0218	1020.08	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.685	0.0251	1190.10	0.013	0.003171
Mn	55	3	He	1.738	0.0258	1190.08	0.013	0.003171
Fe	57	3	He	38.738	0.0248	1160.08	0.0006	0.002014
Fe	57	3	He	39.849	0.0255	1210.09	0.0006	0.002014
Fe	57	3	He	48.392	0.0305	1410.11	0.0006	0.002014
Co	59	3	He	-0.001	0.0041	190.01	0.0572	0.004106
Co	59	3	He	-0.009	0.0036	170.01	0.0572	0.004106
Co	59	3	He	-0.019	0.003	140.01	0.0572	0.004106
Ni	60	3	He	-0.024	0.0031	260.01	0.0084	0.003329
Ni	60	3	He	0.123	0.0044	370.02	0.0084	0.003329
Ni	60	3	He	0.165	0.0047	400.02	0.0084	0.003329
Cu	63	3	He	1.94	0.0529	4400.79	0.0247	0.004989
Cu	63	3	He	2.246	0.0605	5141.10	0.0247	0.004989
Cu	63	3	He	2.168	0.0586	4971.04	0.0247	0.004989
Zn	66	3	He	10.518	0.0363	3070.41	0.0029	0.006147
Zn	66	3	He	12.376	0.0416	3520.55	0.0029	0.006147
Zn	66	3	He	13.519	0.0449	3700.61	0.0029	0.006147
As	75	3	He	1.178	0.0033	278.00	0.002	0.0009198
As	75	3	He	1.202	0.0033	282.00	0.002	0.0009198
As	75	3	He	1.077	0.0031	254.00	0.002	0.0009198
Sr	88	3	He	929.909	8.1905	692598.66	0.0088	0.0005022
Sr	88	3	He	929.724	8.1889	692364.99	0.0088	0.0005022
Sr	88	3	He	952.485	8.3893	691183.74	0.0088	0.0005022
Mo	98	3	He	0.15	0.004	340.02	0.0223	0.0006689
Mo	98	3	He	0.124	0.0034	290.01	0.0223	0.0006689
Mo	98	3	He	0.149	0.004	330.02	0.0223	0.0006689
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	0.004	0.0008	70.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Sn	120	3	He	-0.142	0.0157	1330.11	0.0156	0.01794
Sn	120	3	He	-0.172	0.0153	1290.11	0.0156	0.01794
Sn	120	3	He	-0.342	0.0126	1040.07	0.0156	0.01794
Sb	121	3	He	0.029	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.044	0.0007	60.00	0.0151	4.19E-05
Sb	121	3	He	0.045	0.0007	60.00	0.0151	4.19E-05
Ba	137	3	He	576.53	2.8214	238580.82	0.0049	0.0002094
Ba	137	3	He	573.28	2.8055	237203.14	0.0049	0.0002094
Ba	137	3	He	582.313	2.8497	234782.11	0.0049	0.0002094
Tl	205	3	He	-0.014	0.0004	160.01	0.0252	0.0007688
Tl	205	3	He	-0.021	0.0002	90.00	0.0252	0.0007688
Tl	205	3	He	-0.011	0.0005	190.01	0.0252	0.0007688
Pb	208	3	He	0.107	0.0054	1150.11	0.0337	0.001742
Pb	208	3	He	0.097	0.005	1030.08	0.0337	0.001742
Pb	208	3	He	0.101	0.0051	1000.07	0.0337	0.001742
U	238	3	He	0.193	0.0101	3030.48	0.0502	0.0004339
U	238	3	He	0.216	0.0113	3460.62	0.0502	0.0004339
U	238	3	He	0.195	0.0102	3050.49	0.0502	0.0004339
Sc	45	1	No Gas			2473103.87		
Sc	45	1	No Gas			2529333.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2487861.53		
Ge	72	1	No Gas			1266680.29		
Ge	72	1	No Gas			1259480.29		
Ge	72	1	No Gas			1254129.83		
Sc	45	2	H2			177574.20		
Sc	45	2	H2			174285.21		
Sc	45	2	H2			175151.42		
Ge	72	2	H2			157245.81		
Ge	72	2	H2			154540.10		
Ge	72	2	H2			154891.68		
In	115	2	H2			382009.88		
In	115	2	H2			385638.00		
In	115	2	H2			383754.17		
Sc	45	3	He			46715.76		
Sc	45	3	He			47478.83		
Sc	45	3	He			46203.93		
Ge	72	3	He			83160.99		
Ge	72	3	He			85002.00		
Ge	72	3	He			84891.11		
In	115	3	He			84567.28		
In	115	3	He			84556.84		
In	115	3	He			82393.87		
Tb	159	3	He			385644.10		
Tb	159	3	He			385719.88		
Tb	159	3	He			381706.21		
Bi	209	3	He			300001.69		
Bi	209	3	He			306639.70		
Bi	209	3	He			298636.97		

Quantitation Report

Data File Name	096SMPL.d
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Acq Time	8/11/2023 10:22:17 AM
Sample Name	410-138073-W-1-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

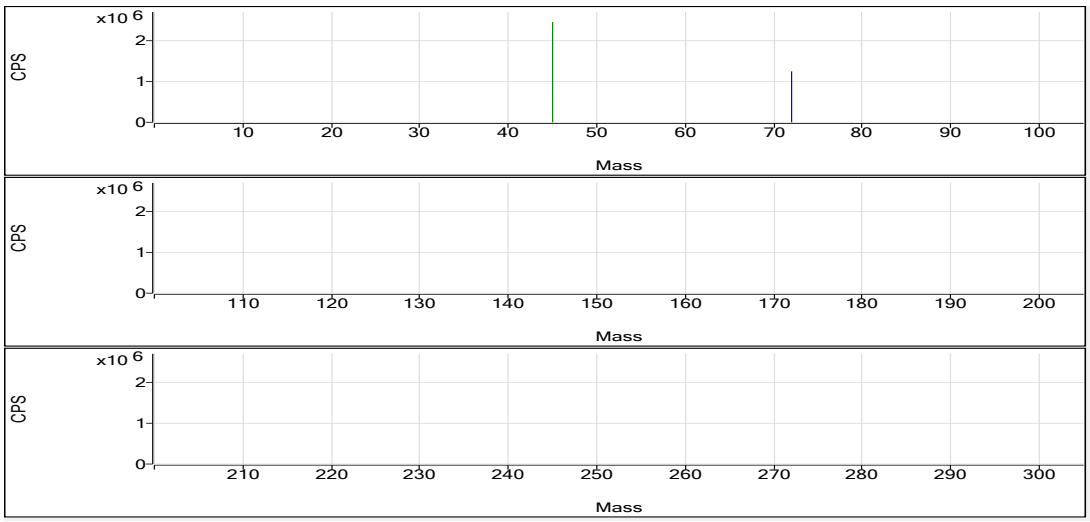
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.002	ppb	N/A	37.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.035	ppb	56.2	4.67	0.0000	Pulse	1.5000	3
Na	23	45	He	9732.158	ppb	3.0	1716311.54	36.5560	Analog	0.1000	3
Mg	24	45	He	7269.401	ppb	2.1	623583.65	13.2804	Pulse	0.1000	3
Al	27	45	He	2.468	ppb	27.9	116.67	0.0025	Pulse	0.1000	3
K	39	45	He	1631.276	ppb	1.6	108991.33	2.3207	Pulse	0.1000	3
Ca	44	45	He	40130.126	ppb	2.8	129797.98	2.7646	Pulse	0.1000	3
Ti	47	45	He	0.264	ppb	86.6	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	-0.216	ppb	N/A	1229.39	0.0262	Pulse	0.5000	3
Cr	52	45	He	-0.113	ppb	N/A	1703.50	0.0363	Pulse	0.1000	3
Mn	55	45	He	0.940	ppb	9.1	723.38	0.0154	Pulse	0.1000	3
Fe	57	45	He	1.419	ppb	113.0	133.34	0.0028	Pulse	0.1000	3
Co	59	45	He	0.000	ppb	14936.2	193.34	0.0041	Pulse	0.1000	3
Ni	60	72	He	1.184	ppb	11.3	1120.09	0.0132	Pulse	0.1000	3
Cu	63	72	He	2.080	ppb	3.1	4777.63	0.0564	Pulse	0.1000	3
Zn	66	115	He	2.454	ppb	18.7	1110.08	0.0132	Pulse	0.1000	3
As	75	115	He	-0.044	ppb	N/A	70.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	1704.682	ppb	0.9	1264374.15	15.0142	Pulse	0.1000	3
Mo	98	115	He	1.633	ppb	1.1	3127.12	0.0371	Pulse	0.1000	3
Ag	107	115	He	-0.007	ppb	N/A	26.67	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.306	ppb	N/A	1110.09	0.0132	Pulse	0.1000	3
Sb	121	115	He	0.034	ppb	35.9	46.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	216.970	ppb	2.1	89421.63	1.0619	Pulse	0.1000	3
Tl	205	159	He	-0.010	ppb	N/A	203.35	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.036	ppb	24.0	1143.39	0.0030	Pulse	0.1000	3
U	238	209	He	0.705	ppb	4.0	10915.01	0.0358	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2455834.60	1.0	104.6	Analog	0.1000	3
No Gas	Ge	72	1248723.16	1.1	104.1	Pulse	0.1000	3
H2	Sc	45	177647.30	0.8	102.2	Pulse	0.1000	3
H2	Ge	72	156701.70	1.2	104.8	Pulse	0.1000	3
H2	In	115	385689.54	1.5	105.4	Pulse	0.1000	3
He	Sc	45	46966.61	1.8	109.1	Pulse	0.1000	3
He	Ge	72	84727.77	0.8	108.4	Pulse	0.1000	3
He	In	115	84215.32	0.8	105.6	Pulse	0.1000	3
He	Tb	159	384682.20	0.7	104.6	Pulse	0.1000	3
He	Bi	209	304870.06	0.7	104.4	Pulse	0.1000	3

No Gas



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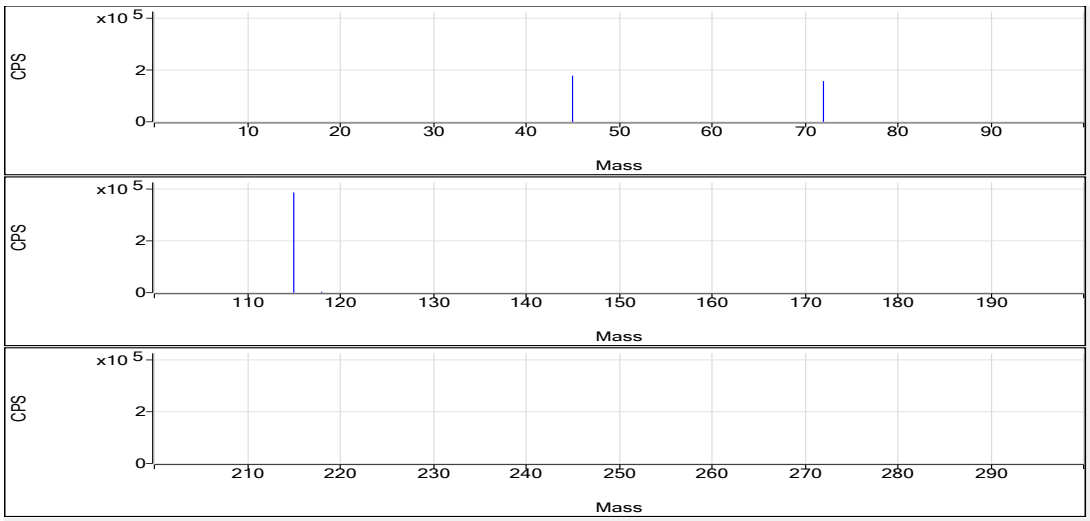
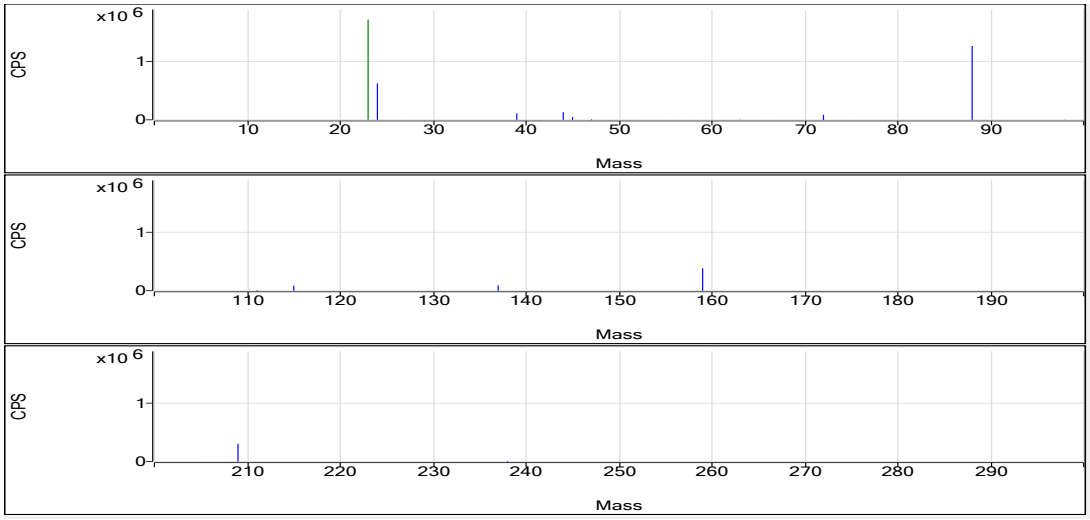


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.011	0	22.00	0.0007	1.705E-05
Be	9	1	No Gas	0.005	0	50.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.001	0	40.00	0.0007	1.705E-05
Se	78	2	H2	0.055	0	6.00	0.0002	6.062E-06
Se	78	2	H2	0.034	0	4.67	0.0002	6.062E-06
Se	78	2	H2	0.016	0	3.33	0.0002	6.062E-06
Na	23	3	He	9575.89	35.9745	1708361.22	0.0037	0.3435
Na	23	3	He	10067.796	37.8049	1739168.88	0.0037	0.3435
Na	23	3	He	9552.787	35.8886	1701404.51	0.0037	0.3435
Mg	24	3	He	7222.416	13.1946	626584.25	0.0018	0.002943
Mg	24	3	He	7443.251	13.5979	625556.08	0.0018	0.002943
Mg	24	3	He	7142.535	13.0487	618610.62	0.0018	0.002943
Al	27	3	He	3.251	0.0029	140.01	0.0006	0.001008
Al	27	3	He	1.953	0.0022	100.00	0.0006	0.001008
Al	27	3	He	2.199	0.0023	110.00	0.0006	0.001008
K	39	3	He	1649.642	2.3423	111230.82	0.0012	0.4052
K	39	3	He	1641.834	2.3331	107332.54	0.0012	0.4052
K	39	3	He	1602.35	2.2868	108410.62	0.0012	0.4052
Ca	44	3	He	39443.109	2.7173	129038.60	0.0001	0.003486
Ca	44	3	He	41450.051	2.8554	131357.86	0.0001	0.003486
Ca	44	3	He	39497.219	2.721	128997.47	0.0001	0.003486
Ti	47	3	He	0.389	0.0002	10.00	0.0005	0
Ti	47	3	He	0.402	0.0002	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.19	0.0267	1270.06	0.0223	0.03097
V	51	3	He	-0.237	0.0257	1182.06	0.0223	0.03097
V	51	3	He	-0.22	0.0261	1236.06	0.0223	0.03097
Cr	52	3	He	-0.283	0.0314	1490.13	0.029	0.03958
Cr	52	3	He	0.022	0.0402	1850.20	0.029	0.03958
Cr	52	3	He	-0.078	0.0373	1770.17	0.029	0.03958
Mn	55	3	He	1.004	0.0162	770.05	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.843	0.0141	650.04	0.013	0.003171
Mn	55	3	He	0.973	0.0158	750.05	0.013	0.003171
Fe	57	3	He	0.871	0.0025	120.00	0.0006	0.002014
Fe	57	3	He	3.224	0.0039	180.01	0.0006	0.002014
Fe	57	3	He	0.162	0.0021	100.00	0.0006	0.002014
Co	59	3	He	-0.013	0.0034	160.01	0.0572	0.004106
Co	59	3	He	-0.007	0.0037	170.01	0.0572	0.004106
Co	59	3	He	0.02	0.0053	250.01	0.0572	0.004106
Ni	60	3	He	1.171	0.0131	1110.08	0.0084	0.003329
Ni	60	3	He	1.057	0.0122	1040.09	0.0084	0.003329
Ni	60	3	He	1.323	0.0144	1210.09	0.0084	0.003329
Cu	63	3	He	2.085	0.0565	4780.96	0.0247	0.004989
Cu	63	3	He	2.014	0.0548	4680.93	0.0247	0.004989
Cu	63	3	He	2.142	0.0579	4871.01	0.0247	0.004989
Zn	66	3	He	2.98	0.0147	1230.10	0.0029	0.006147
Zn	66	3	He	2.133	0.0123	1030.07	0.0029	0.006147
Zn	66	3	He	2.25	0.0126	1070.07	0.0029	0.006147
As	75	3	He	-0.018	0.0009	74.00	0.002	0.0009198
As	75	3	He	-0.162	0.0006	50.00	0.002	0.0009198
As	75	3	He	0.046	0.001	86.00	0.002	0.0009198
Sr	88	3	He	1709.355	15.0553	1260364.59	0.0088	0.0005022
Sr	88	3	He	1716.588	15.119	1269947.79	0.0088	0.0005022
Sr	88	3	He	1688.103	14.8682	1262810.06	0.0088	0.0005022
Mo	98	3	He	1.613	0.0367	3070.45	0.0223	0.0006689
Mo	98	3	He	1.639	0.0373	3130.45	0.0223	0.0006689
Mo	98	3	He	1.647	0.0374	3180.47	0.0223	0.0006689
Ag	107	3	He	-0.014	0	0.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Sn	120	3	He	-0.339	0.0127	1060.07	0.0156	0.01794
Sn	120	3	He	-0.319	0.013	1090.09	0.0156	0.01794
Sn	120	3	He	-0.26	0.0139	1180.10	0.0156	0.01794
Sb	121	3	He	0.037	0.0006	50.00	0.0151	4.19E-05
Sb	121	3	He	0.044	0.0007	60.00	0.0151	4.19E-05
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Ba	137	3	He	219.397	1.0738	89894.18	0.0049	0.0002094
Ba	137	3	He	219.743	1.0755	90338.26	0.0049	0.0002094
Ba	137	3	He	211.77	1.0365	88032.46	0.0049	0.0002094
Tl	205	3	He	-0.003	0.0007	270.02	0.0252	0.0007688
Tl	205	3	He	-0.012	0.0005	180.01	0.0252	0.0007688
Tl	205	3	He	-0.014	0.0004	160.01	0.0252	0.0007688
Pb	208	3	He	0.04	0.0031	600.03	0.0337	0.001742
Pb	208	3	He	0.043	0.0032	640.04	0.0337	0.001742
Pb	208	3	He	0.026	0.0026	650.04	0.0337	0.001742
U	238	3	He	0.679	0.0345	10594.76	0.0502	0.0004339
U	238	3	He	0.736	0.0373	11315.38	0.0502	0.0004339
U	238	3	He	0.702	0.0356	10834.90	0.0502	0.0004339
Sc	45	1	No Gas			2483128.24		
Sc	45	1	No Gas			2441811.68		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2442563.87		
Ge	72	1	No Gas			1263208.11		
Ge	72	1	No Gas			1245634.36		
Ge	72	1	No Gas			1237327.01		
Sc	45	2	H2			178544.12		
Sc	45	2	H2			178453.55		
Sc	45	2	H2			175944.22		
Ge	72	2	H2			156803.84		
Ge	72	2	H2			158551.47		
Ge	72	2	H2			154749.79		
In	115	2	H2			386221.40		
In	115	2	H2			391212.03		
In	115	2	H2			379635.19		
Sc	45	3	He			47488.05		
Sc	45	3	He			46003.81		
Sc	45	3	He			47407.96		
Ge	72	3	He			84590.59		
Ge	72	3	He			85495.15		
Ge	72	3	He			84097.57		
In	115	3	He			83722.61		
In	115	3	He			84003.24		
In	115	3	He			84939.61		
Tb	159	3	He			387683.67		
Tb	159	3	He			383046.05		
Tb	159	3	He			383316.87		
Bi	209	3	He			307299.74		
Bi	209	3	He			303195.70		
Bi	209	3	He			304114.74		

Quantitation Report

Data File Name	097SMPL.d
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Sample Name	410-138077-W-1-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

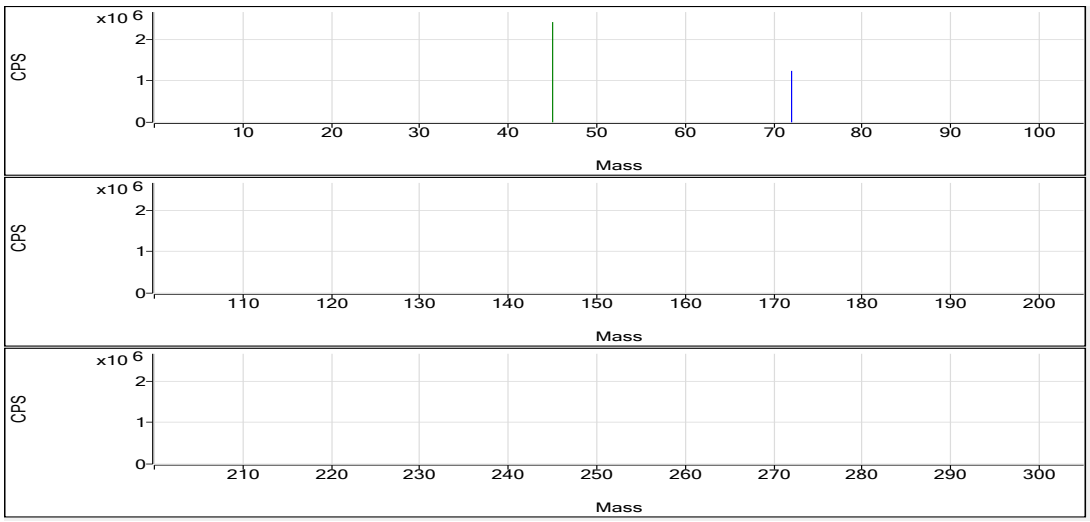
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	162.3	45.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.042	ppb	60.7	5.11	0.0000	Pulse	1.5000	3
Na	23	45	He	91968.946	ppb	1.7	15614740.60	342.5520	Analog	0.1000	3
Mg	24	45	He	1441.244	ppb	1.6	120136.03	2.6354	Pulse	0.1000	3
Al	27	45	He	43.874	ppb	24.7	1236.92	0.0272	Pulse	0.1000	3
K	39	45	He	2135.588	ppb	3.4	132762.71	2.9129	Pulse	0.1000	3
Ca	44	45	He	13494.138	ppb	1.7	42492.99	0.9319	Pulse	0.1000	3
Ti	47	45	He	0.543	ppb	45.3	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	-0.176	ppb	N/A	1233.39	0.0271	Pulse	0.5000	3
Cr	52	45	He	-0.023	ppb	N/A	1773.52	0.0389	Pulse	0.1000	3
Mn	55	45	He	11.651	ppb	3.8	7045.27	0.1546	Pulse	0.1000	3
Fe	57	45	He	21.783	ppb	16.2	676.71	0.0148	Pulse	0.1000	3
Co	59	45	He	0.042	ppb	27.1	296.68	0.0065	Pulse	0.1000	3
Ni	60	72	He	0.359	ppb	19.7	526.70	0.0063	Pulse	0.1000	3
Cu	63	72	He	17.511	ppb	0.1	36420.30	0.4377	Pulse	0.1000	3
Zn	66	115	He	10.583	ppb	2.4	3013.75	0.0365	Pulse	0.1000	3
As	75	115	He	2.412	ppb	5.6	476.01	0.0058	Pulse	0.5000	3
Sr	88	115	He	544.533	ppb	0.4	396010.82	4.7964	Pulse	0.1000	3
Mo	98	115	He	0.437	ppb	0.9	860.06	0.0104	Pulse	0.1000	3
Ag	107	115	He	-0.008	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	238.3	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.104	ppb	N/A	1346.78	0.0163	Pulse	0.1000	3
Sb	121	115	He	0.120	ppb	17.4	153.34	0.0019	Pulse	0.1000	3
Ba	137	115	He	259.303	ppb	0.6	104785.44	1.2691	Pulse	0.1000	3
Tl	205	159	He	-0.016	ppb	N/A	136.67	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.697	ppb	3.9	9555.01	0.0252	Pulse	0.1000	3
U	238	209	He	0.473	ppb	6.8	7359.02	0.0242	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2409672.31	1.9	102.7	Analog	0.1000	3
No Gas	Ge	72	1236250.14	0.6	103.0	Pulse	0.1000	3
H2	Sc	45	176354.16	1.1	101.5	Pulse	0.1000	3
H2	Ge	72	155560.26	0.2	104.0	Pulse	0.1000	3
H2	In	115	382959.21	0.4	104.6	Pulse	0.1000	3
He	Sc	45	45592.21	1.7	106.0	Pulse	0.1000	3
He	Ge	72	83205.45	0.6	106.5	Pulse	0.1000	3
He	In	115	82565.57	0.7	103.6	Pulse	0.1000	3
He	Tb	159	378642.75	1.2	102.9	Pulse	0.1000	3
He	Bi	209	304610.11	0.4	104.3	Pulse	0.1000	3

No Gas



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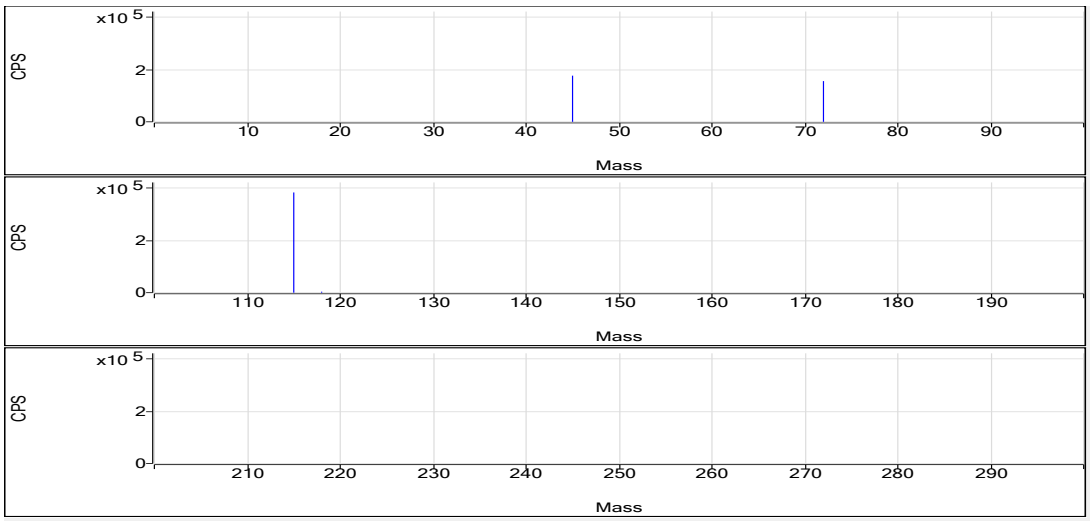
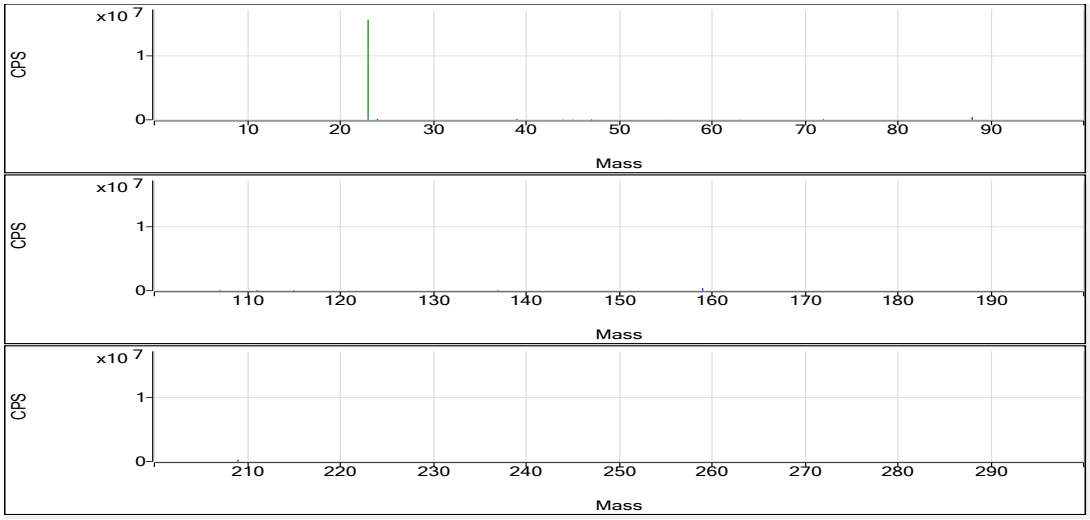


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.002	0	46.00	0.0007	1.705E-05
Be	9	1	No Gas	0.006	0	52.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.001	0	38.00	0.0007	1.705E-05
Se	78	2	H2	0.066	0	6.67	0.0002	6.062E-06
Se	78	2	H2	0.015	0	3.33	0.0002	6.062E-06
Se	78	2	H2	0.045	0	5.33	0.0002	6.062E-06
Na	23	3	He	91374.505	340.3401	15656847.27	0.0037	0.3435
Na	23	3	He	90838.16	338.3444	15595624.77	0.0037	0.3435
Na	23	3	He	93694.174	348.9714	15591749.77	0.0037	0.3435
Mg	24	3	He	1416.516	2.5902	119157.71	0.0018	0.002943
Mg	24	3	He	1446.44	2.6448	121911.13	0.0018	0.002943
Mg	24	3	He	1460.776	2.671	119339.25	0.0018	0.002943
Al	27	3	He	33.28	0.0209	960.13	0.0006	0.001008
Al	27	3	He	43.389	0.0269	1240.14	0.0006	0.001008
Al	27	3	He	54.954	0.0338	1510.48	0.0006	0.001008
K	39	3	He	2123.401	2.8986	133345.37	0.0012	0.4052
K	39	3	He	2069.705	2.8355	130701.08	0.0012	0.4052
K	39	3	He	2213.657	3.0046	134241.69	0.0012	0.4052
Ca	44	3	He	13751.548	0.9496	43686.44	0.0001	0.003486
Ca	44	3	He	13395.576	0.9251	42643.36	0.0001	0.003486
Ca	44	3	He	13335.291	0.921	41149.18	0.0001	0.003486
Ti	47	3	He	0.402	0.0002	10.00	0.0005	0
Ti	47	3	He	0.401	0.0002	10.00	0.0005	0
Ti	47	3	He	0.827	0.0004	20.00	0.0005	0
V	51	3	He	-0.2	0.0265	1220.06	0.0223	0.03097
V	51	3	He	-0.152	0.0276	1272.06	0.0223	0.03097
V	51	3	He	-0.177	0.027	1208.06	0.0223	0.03097
Cr	52	3	He	-0.173	0.0346	1590.16	0.029	0.03958
Cr	52	3	He	0.019	0.0401	1850.19	0.029	0.03958
Cr	52	3	He	0.086	0.0421	1880.20	0.029	0.03958
Mn	55	3	He	11.904	0.1579	7262.08	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	11.145	0.148	6821.82	0.013	0.003171
Mn	55	3	He	11.902	0.1578	7051.90	0.013	0.003171
Fe	57	3	He	17.986	0.0126	580.04	0.0006	0.002014
Fe	57	3	He	24.943	0.0167	770.06	0.0006	0.002014
Fe	57	3	He	22.42	0.0152	680.04	0.0006	0.002014
Co	59	3	He	0.042	0.0065	300.02	0.0572	0.004106
Co	59	3	He	0.031	0.0059	270.01	0.0572	0.004106
Co	59	3	He	0.053	0.0072	320.02	0.0572	0.004106
Ni	60	3	He	0.279	0.0057	470.03	0.0084	0.003329
Ni	60	3	He	0.411	0.0068	560.03	0.0084	0.003329
Ni	60	3	He	0.387	0.0066	550.03	0.0084	0.003329
Cu	63	3	He	17.531	0.4382	36407.24	0.0247	0.004989
Cu	63	3	He	17.507	0.4376	36216.17	0.0247	0.004989
Cu	63	3	He	17.495	0.4373	36637.48	0.0247	0.004989
Zn	66	3	He	10.853	0.0373	3100.42	0.0029	0.006147
Zn	66	3	He	10.343	0.0358	2950.40	0.0029	0.006147
Zn	66	3	He	10.553	0.0364	2990.43	0.0029	0.006147
As	75	3	He	2.295	0.0055	460.01	0.002	0.0009198
As	75	3	He	2.382	0.0057	470.01	0.002	0.0009198
As	75	3	He	2.56	0.0061	498.01	0.002	0.0009198
Sr	88	3	He	542.343	4.7771	397365.78	0.0088	0.0005022
Sr	88	3	He	546.967	4.8178	396935.23	0.0088	0.0005022
Sr	88	3	He	544.289	4.7942	393731.44	0.0088	0.0005022
Mo	98	3	He	0.439	0.0105	870.07	0.0223	0.0006689
Mo	98	3	He	0.432	0.0103	850.06	0.0223	0.0006689
Mo	98	3	He	0.439	0.0105	860.06	0.0223	0.0006689
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Ag	107	3	He	-0.006	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Cd	111	3	He	0.01	0.0001	6.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Sn	120	3	He	-0.195	0.0149	1240.11	0.0156	0.01794
Sn	120	3	He	0.001	0.018	1480.13	0.0156	0.01794
Sn	120	3	He	-0.12	0.0161	1320.10	0.0156	0.01794
Sb	121	3	He	0.101	0.0016	130.00	0.0151	4.19E-05
Sb	121	3	He	0.118	0.0018	150.01	0.0151	4.19E-05
Sb	121	3	He	0.142	0.0022	180.01	0.0151	4.19E-05
Ba	137	3	He	261.187	1.2783	106330.91	0.0049	0.0002094
Ba	137	3	He	258.2	1.2637	104113.70	0.0049	0.0002094
Ba	137	3	He	258.524	1.2653	103911.70	0.0049	0.0002094
Tl	205	3	He	-0.018	0.0003	120.00	0.0252	0.0007688
Tl	205	3	He	-0.014	0.0004	160.01	0.0252	0.0007688
Tl	205	3	He	-0.017	0.0003	130.01	0.0252	0.0007688
Pb	208	3	He	0.668	0.0243	4650.97	0.0337	0.001742
Pb	208	3	He	0.722	0.0261	4991.11	0.0337	0.001742
Pb	208	3	He	0.699	0.0253	4951.11	0.0337	0.001742
U	238	3	He	0.495	0.0253	7732.58	0.0502	0.0004339
U	238	3	He	0.436	0.0223	6802.03	0.0502	0.0004339
U	238	3	He	0.487	0.0249	7542.44	0.0502	0.0004339
Sc	45	1	No Gas			2460239.49		
Sc	45	1	No Gas			2396228.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2372548.87		
Ge	72	1	No Gas			1245014.20		
Ge	72	1	No Gas			1233862.25		
Ge	72	1	No Gas			1229873.97		
Sc	45	2	H2			174263.02		
Sc	45	2	H2			176631.11		
Sc	45	2	H2			178168.36		
Ge	72	2	H2			155794.22		
Ge	72	2	H2			155224.38		
Ge	72	2	H2			155662.19		
In	115	2	H2			381336.28		
In	115	2	H2			382993.51		
In	115	2	H2			384547.85		
Sc	45	3	He			46003.53		
Sc	45	3	He			46093.93		
Sc	45	3	He			44679.16		
Ge	72	3	He			83081.67		
Ge	72	3	He			82758.98		
Ge	72	3	He			83775.71		
In	115	3	He			83188.29		
In	115	3	He			82394.07		
In	115	3	He			82132.68		
Tb	159	3	He			383166.67		
Tb	159	3	He			378773.24		
Tb	159	3	He			373988.35		
Bi	209	3	He			305891.30		
Bi	209	3	He			304722.24		
Bi	209	3	He			303216.79		

Quantitation Report

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Acq Time	8/11/2023 10:26:24 AM
Sample Name	410-138070-W-1-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

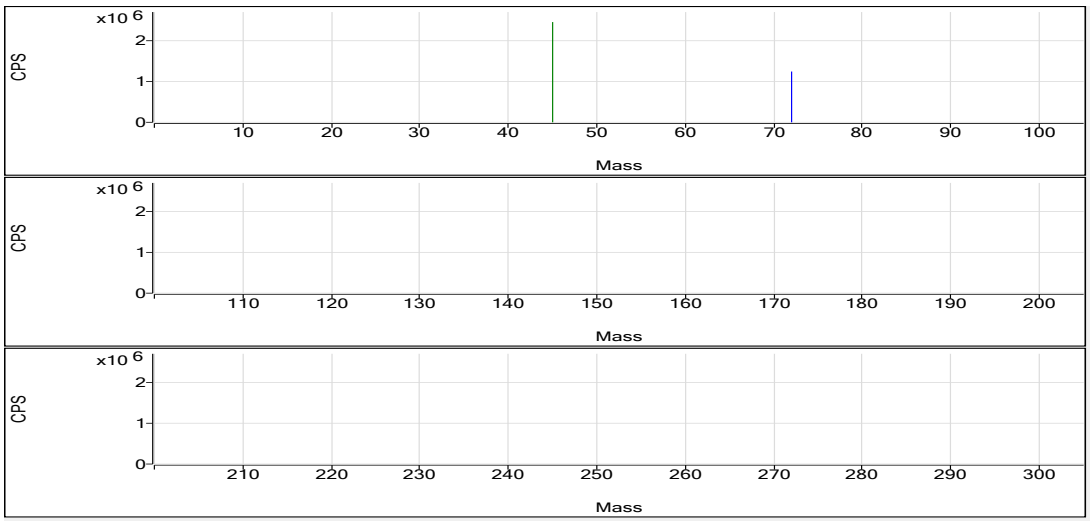
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.005	ppb	N/A	33.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.023	ppb	28.0	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	9834.230	ppb	1.2	1719528.67	36.9358	Analog	0.1000	3
Mg	24	45	He	7515.675	ppb	2.5	639020.59	13.7302	Pulse	0.1000	3
Al	27	45	He	6.112	ppb	15.1	216.68	0.0047	Pulse	0.1000	3
K	39	45	He	1644.980	ppb	2.6	108769.91	2.3368	Pulse	0.1000	3
Ca	44	45	He	40988.760	ppb	4.3	131375.07	2.8236	Pulse	0.1000	3
Ti	47	45	He	0.658	ppb	68.0	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	-0.208	ppb	N/A	1226.73	0.0263	Pulse	0.5000	3
Cr	52	45	He	-0.189	ppb	N/A	1586.81	0.0341	Pulse	0.1000	3
Mn	55	45	He	496.988	ppb	2.3	300727.93	6.4613	Pulse	0.1000	3
Fe	57	45	He	1.911	ppb	55.0	146.67	0.0031	Pulse	0.1000	3
Co	59	45	He	0.169	ppb	29.1	640.04	0.0138	Pulse	0.1000	3
Ni	60	72	He	0.631	ppb	8.5	720.04	0.0086	Pulse	0.1000	3
Cu	63	72	He	1.410	ppb	3.4	3333.82	0.0398	Pulse	0.1000	3
Zn	66	115	He	1.464	ppb	33.1	863.39	0.0103	Pulse	0.1000	3
As	75	115	He	0.456	ppb	33.6	153.33	0.0018	Pulse	0.5000	3
Sr	88	115	He	1727.996	ppb	1.8	1269526.26	15.2195	Pulse	0.1000	3
Mo	98	115	He	2.598	ppb	3.0	4894.35	0.0587	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	57.7	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.231	ppb	N/A	1196.76	0.0143	Pulse	0.1000	3
Sb	121	115	He	0.074	ppb	70.2	96.67	0.0012	Pulse	0.1000	3
Ba	137	115	He	286.719	ppb	2.1	117046.67	1.4032	Pulse	0.1000	3
Tl	205	159	He	-0.008	ppb	N/A	216.68	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.092	ppb	13.8	1846.80	0.0048	Pulse	0.1000	3
U	238	209	He	0.830	ppb	3.4	12700.08	0.0421	Pulse	0.1000	3

ISTD Table:

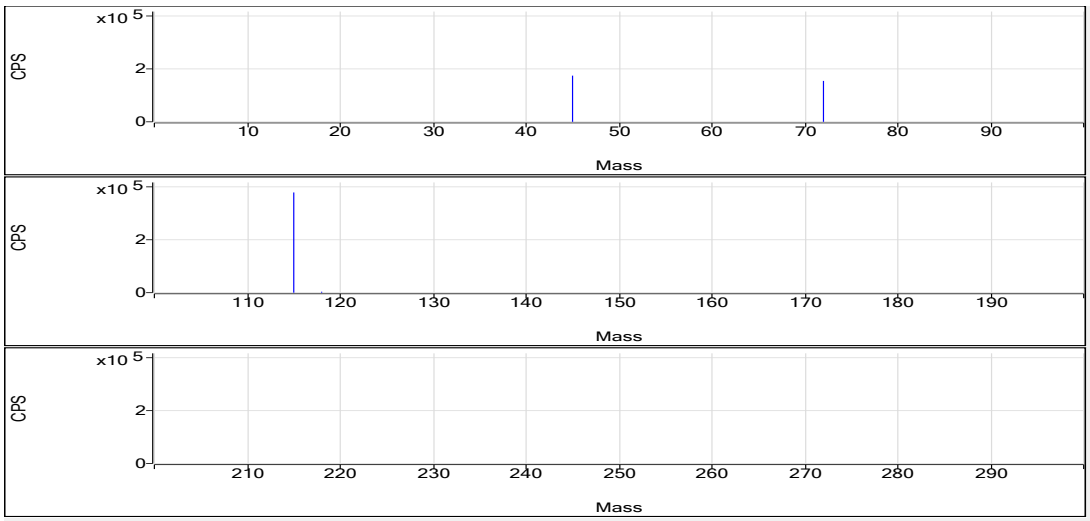
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2453020.54	1.0	104.5	Analog	0.1000	3
No Gas	Ge	72	1242680.32	0.9	103.6	Pulse	0.1000	3
H2	Sc	45	175258.55	0.9	100.9	Pulse	0.1000	3
H2	Ge	72	155256.31	0.8	103.8	Pulse	0.1000	3
H2	In	115	380384.27	1.0	103.9	Pulse	0.1000	3
He	Sc	45	46562.01	2.7	108.2	Pulse	0.1000	3
He	Ge	72	83688.21	1.0	107.1	Pulse	0.1000	3
He	In	115	83424.05	1.1	104.7	Pulse	0.1000	3
He	Tb	159	381828.56	0.8	103.8	Pulse	0.1000	3
He	Bi	209	301879.74	0.8	103.4	Pulse	0.1000	3

No Gas

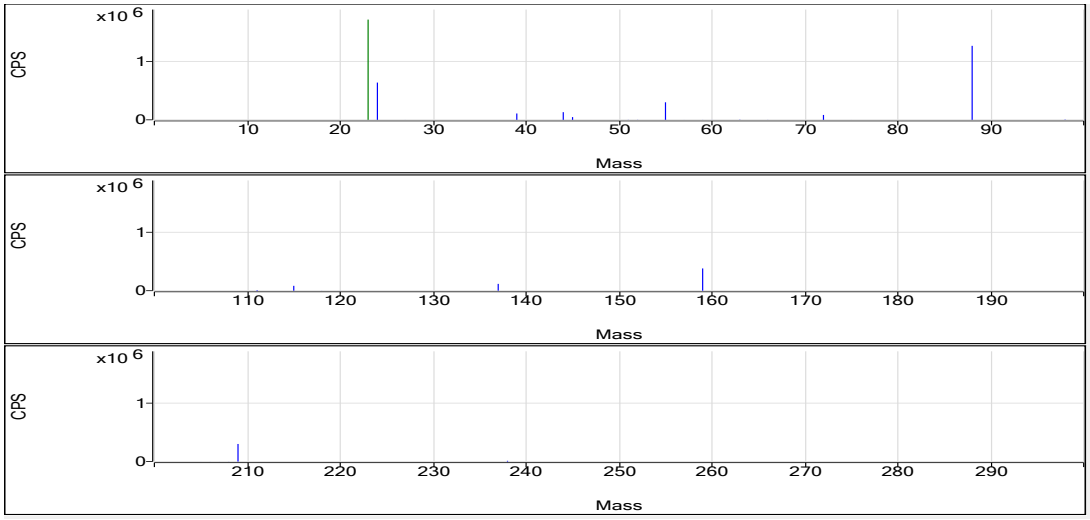


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.01	0	24.00	0.0007	1.705E-05
Be	9	1	No Gas	0	0	42.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.004	0	34.00	0.0007	1.705E-05
Se	78	2	H2	0.027	0	4.00	0.0002	6.062E-06
Se	78	2	H2	0.015	0	3.33	0.0002	6.062E-06
Se	78	2	H2	0.026	0	4.00	0.0002	6.062E-06
Na	23	3	He	9862.521	37.0411	1747122.47	0.0037	0.3435
Na	23	3	He	9708.819	36.4692	1727831.85	0.0037	0.3435
Na	23	3	He	9931.349	37.2972	1683631.69	0.0037	0.3435
Mg	24	3	He	7413.616	13.5438	638822.14	0.0018	0.002943
Mg	24	3	He	7398.733	13.5166	640388.23	0.0018	0.002943
Mg	24	3	He	7734.677	14.1302	637851.40	0.0018	0.002943
Al	27	3	He	5.061	0.004	190.01	0.0006	0.001008
Al	27	3	He	6.799	0.0051	240.01	0.0006	0.001008
Al	27	3	He	6.477	0.0049	220.01	0.0006	0.001008
K	39	3	He	1646.685	2.3388	110315.44	0.0012	0.4052
K	39	3	He	1601.221	2.2854	108278.98	0.0012	0.4052
K	39	3	He	1687.034	2.3862	107715.32	0.0012	0.4052
Ca	44	3	He	40022.231	2.7571	130046.04	0.0001	0.003486
Ca	44	3	He	39937.184	2.7513	130349.79	0.0001	0.003486
Ca	44	3	He	43006.865	2.9625	133729.39	0.0001	0.003486
Ti	47	3	He	1.175	0.0006	30.00	0.0005	0
Ti	47	3	He	0.39	0.0002	10.00	0.0005	0
Ti	47	3	He	0.409	0.0002	10.00	0.0005	0
V	51	3	He	-0.197	0.0266	1254.06	0.0223	0.03097
V	51	3	He	-0.206	0.0264	1250.06	0.0223	0.03097
V	51	3	He	-0.221	0.0261	1176.06	0.0223	0.03097
Cr	52	3	He	-0.115	0.0363	1710.17	0.029	0.03958
Cr	52	3	He	-0.303	0.0308	1460.12	0.029	0.03958
Cr	52	3	He	-0.15	0.0352	1590.14	0.029	0.03958
Mn	55	3	He	492.52	6.4032	302022.38	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	488.385	6.3495	300825.66	0.013	0.003171
Mn	55	3	He	510.058	6.6311	299335.74	0.013	0.003171
Fe	57	3	He	2.7	0.0036	170.01	0.0006	0.002014
Fe	57	3	He	2.314	0.0034	160.01	0.0006	0.002014
Fe	57	3	He	0.718	0.0024	110.00	0.0006	0.002014
Co	59	3	He	0.114	0.0106	500.02	0.0572	0.004106
Co	59	3	He	0.187	0.0148	700.05	0.0572	0.004106
Co	59	3	He	0.207	0.016	720.04	0.0572	0.004106
Ni	60	3	He	0.589	0.0083	690.04	0.0084	0.003329
Ni	60	3	He	0.612	0.0084	700.04	0.0084	0.003329
Ni	60	3	He	0.691	0.0091	770.05	0.0084	0.003329
Cu	63	3	He	1.435	0.0404	3380.50	0.0247	0.004989
Cu	63	3	He	1.355	0.0385	3190.45	0.0247	0.004989
Cu	63	3	He	1.44	0.0406	3430.52	0.0247	0.004989
Zn	66	3	He	1.259	0.0098	820.05	0.0029	0.006147
Zn	66	3	He	1.115	0.0093	770.05	0.0029	0.006147
Zn	66	3	He	2.017	0.0119	1000.08	0.0029	0.006147
As	75	3	He	0.537	0.002	168.00	0.002	0.0009198
As	75	3	He	0.279	0.0015	122.00	0.002	0.0009198
As	75	3	He	0.552	0.002	170.00	0.002	0.0009198
Sr	88	3	He	1718.199	15.1332	1271911.15	0.0088	0.0005022
Sr	88	3	He	1762.034	15.5193	1278926.23	0.0088	0.0005022
Sr	88	3	He	1703.756	15.006	1257741.39	0.0088	0.0005022
Mo	98	3	He	2.539	0.0574	4820.98	0.0223	0.0006689
Mo	98	3	He	2.688	0.0607	5001.08	0.0223	0.0006689
Mo	98	3	He	2.568	0.058	4861.00	0.0223	0.0006689
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	0.004	0.0008	70.00	0.0471	0.0006687
Ag	107	3	He	-0.012	0.0001	10.00	0.0471	0.0006687
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.182	0.0151	1270.10	0.0156	0.01794
Sn	120	3	He	-0.217	0.0146	1200.10	0.0156	0.01794
Sn	120	3	He	-0.294	0.0134	1120.08	0.0156	0.01794
Sb	121	3	He	0.052	0.0008	70.00	0.0151	4.19E-05
Sb	121	3	He	0.134	0.0021	170.01	0.0151	4.19E-05
Sb	121	3	He	0.037	0.0006	50.00	0.0151	4.19E-05
Ba	137	3	He	282.757	1.3839	116309.59	0.0049	0.0002094
Ba	137	3	He	293.635	1.4371	118428.46	0.0049	0.0002094
Ba	137	3	He	283.765	1.3888	116401.96	0.0049	0.0002094
Tl	205	3	He	-0.015	0.0004	150.01	0.0252	0.0007688
Tl	205	3	He	-0.006	0.0006	240.01	0.0252	0.0007688
Tl	205	3	He	-0.004	0.0007	260.01	0.0252	0.0007688
Pb	208	3	He	0.08	0.0044	1020.08	0.0337	0.001742
Pb	208	3	He	0.09	0.0048	1000.08	0.0337	0.001742
Pb	208	3	He	0.105	0.0053	1270.11	0.0337	0.001742
U	238	3	He	0.86	0.0436	13077.16	0.0502	0.0004339
U	238	3	He	0.804	0.0407	12406.51	0.0502	0.0004339
U	238	3	He	0.827	0.0419	12616.56	0.0502	0.0004339
Sc	45	1	No Gas			2452886.53		
Sc	45	1	No Gas			2476657.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2429517.93		
Ge	72	1	No Gas			1250878.26		
Ge	72	1	No Gas			1247328.11		
Ge	72	1	No Gas			1229834.59		
Sc	45	2	H2			174081.89		
Sc	45	2	H2			174728.83		
Sc	45	2	H2			176964.94		
Ge	72	2	H2			156075.24		
Ge	72	2	H2			153831.51		
Ge	72	2	H2			155862.19		
In	115	2	H2			375969.45		
In	115	2	H2			383328.59		
In	115	2	H2			381854.76		
Sc	45	3	He			47167.16		
Sc	45	3	He			47377.88		
Sc	45	3	He			45140.99		
Ge	72	3	He			83594.25		
Ge	72	3	He			82910.79		
Ge	72	3	He			84559.58		
In	115	3	He			84053.99		
In	115	3	He			82414.62		
In	115	3	He			83821.88		
Tb	159	3	He			378158.24		
Tb	159	3	He			383685.85		
Tb	159	3	He			383641.60		
Bi	209	3	He			300022.61		
Bi	209	3	He			304505.97		
Bi	209	3	He			301110.64		

Quantitation Report

Data File Name	099SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:28:29 AM
Sample Name	410-138071-W-1-A
Sample Type	Sample
Comment	D10
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

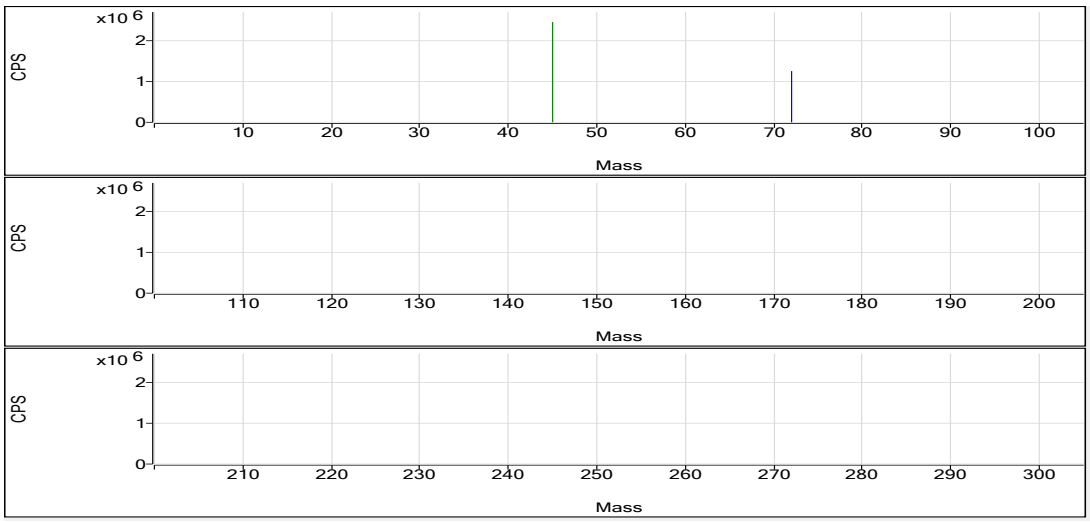
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.010	ppb	N/A	24.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.005	ppb	400.4	2.67	0.0000	Pulse	1.5000	3
Na	23	45	He	9704.203	ppb	2.9	1738380.65	36.4520	Analog	0.1000	3
Mg	24	45	He	5842.563	ppb	2.4	509056.13	10.6743	Pulse	0.1000	3
Al	27	45	He	12.380	ppb	11.9	400.03	0.0084	Pulse	0.1000	3
K	39	45	He	1154.365	ppb	3.9	83961.32	1.7607	Pulse	0.1000	3
Ca	44	45	He	27537.235	ppb	2.7	90517.13	1.8981	Pulse	0.1000	3
Ti	47	45	He	0.129	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.227	ppb	N/A	1236.06	0.0259	Pulse	0.5000	3
Cr	52	45	He	-0.138	ppb	N/A	1696.82	0.0356	Pulse	0.1000	3
Mn	55	45	He	1122.157	ppb	1.9	695603.19	14.5851	Pulse	0.1000	3
Fe	57	45	He	124.148	ppb	6.7	3587.24	0.0751	Pulse	0.1000	3
Co	59	45	He	0.338	ppb	7.1	1120.08	0.0235	Pulse	0.1000	3
Ni	60	72	He	0.119	ppb	23.9	370.02	0.0043	Pulse	0.1000	3
Cu	63	72	He	2.313	ppb	9.6	5324.53	0.0621	Pulse	0.1000	3
Zn	66	115	He	1.131	ppb	35.4	793.39	0.0094	Pulse	0.1000	3
As	75	115	He	4.595	ppb	0.3	856.70	0.0102	Pulse	0.5000	3
Sr	88	115	He	630.741	ppb	1.1	468754.61	5.5556	Pulse	0.1000	3
Mo	98	115	He	3.101	ppb	8.1	5894.78	0.0699	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	76.2	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.276	ppb	N/A	1150.09	0.0136	Pulse	0.1000	3
Sb	121	115	He	0.021	ppb	65.6	30.00	0.0004	Pulse	0.1000	3
Ba	137	115	He	259.552	ppb	1.7	107177.43	1.2703	Pulse	0.1000	3
Tl	205	159	He	-0.019	ppb	N/A	106.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.341	ppb	8.4	5073.90	0.0133	Pulse	0.1000	3
U	238	209	He	1.264	ppb	3.9	19418.65	0.0638	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2464925.27	1.4	105.0	Analog	0.1000	3
No Gas	Ge	72	1259451.21	0.5	105.0	Pulse	0.1000	3
H2	Sc	45	175275.32	1.0	100.9	Pulse	0.1000	3
H2	Ge	72	156172.03	0.3	104.4	Pulse	0.1000	3
H2	In	115	384728.03	0.3	105.1	Pulse	0.1000	3
He	Sc	45	47705.83	2.1	110.9	Pulse	0.1000	3
He	Ge	72	85602.62	1.4	109.5	Pulse	0.1000	3
He	In	115	84383.38	1.5	105.9	Pulse	0.1000	3
He	Tb	159	382756.27	0.5	104.0	Pulse	0.1000	3
He	Bi	209	304360.95	0.5	104.2	Pulse	0.1000	3

No Gas



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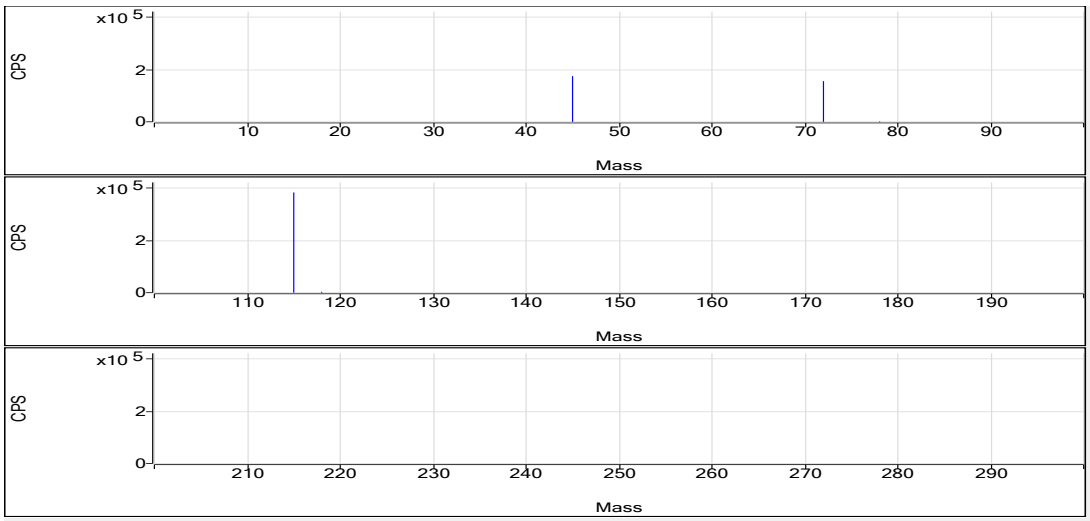
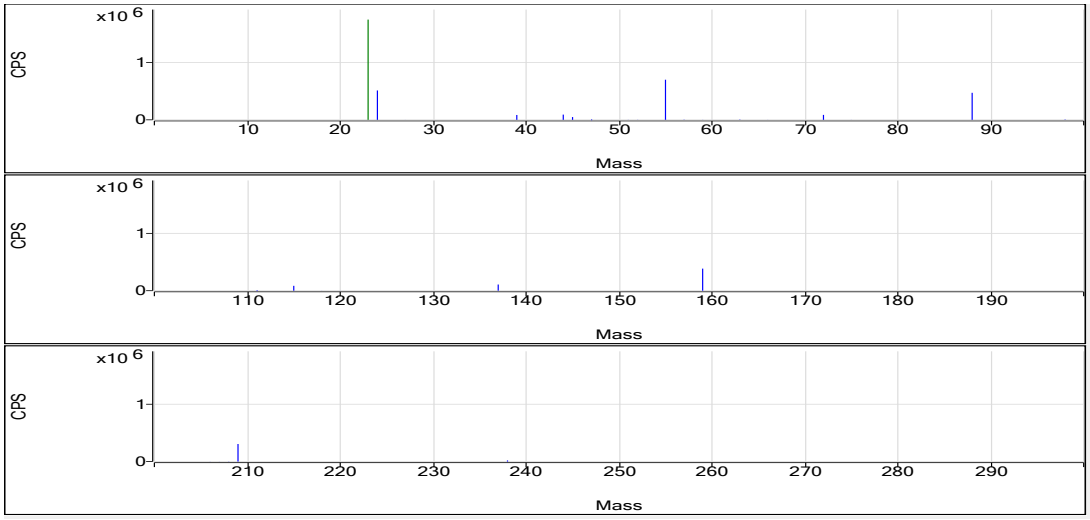


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.012	0	20.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.004	0	34.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.012	0	20.00	0.0007	1.705E-05
Se	78	2	H2	0.025	0	4.00	0.0002	6.062E-06
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Se	78	2	H2	0.005	0	2.67	0.0002	6.062E-06
Na	23	3	He	10030.77	37.6671	1759281.85	0.0037	0.3435
Na	23	3	He	9552.873	35.8889	1748971.38	0.0037	0.3435
Na	23	3	He	9528.967	35.8	1706888.72	0.0037	0.3435
Mg	24	3	He	5982.041	10.929	510452.34	0.0018	0.002943
Mg	24	3	He	5706.856	10.4264	508110.11	0.0018	0.002943
Mg	24	3	He	5838.793	10.6674	508605.93	0.0018	0.002943
Al	27	3	He	13.379	0.009	420.03	0.0006	0.001008
Al	27	3	He	10.689	0.0074	360.03	0.0006	0.001008
Al	27	3	He	13.071	0.0088	420.02	0.0006	0.001008
K	39	3	He	1199.931	1.8142	84735.50	0.0012	0.4052
K	39	3	He	1110.369	1.7091	83287.68	0.0012	0.4052
K	39	3	He	1152.794	1.7589	83860.79	0.0012	0.4052
Ca	44	3	He	28227.592	1.9456	90872.48	0.0001	0.003486
Ca	44	3	He	26742.576	1.8435	89836.84	0.0001	0.003486
Ca	44	3	He	27641.538	1.9053	90842.06	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.388	0.0002	10.00	0.0005	0
V	51	3	He	-0.191	0.0267	1248.06	0.0223	0.03097
V	51	3	He	-0.261	0.0252	1226.06	0.0223	0.03097
V	51	3	He	-0.229	0.0259	1234.06	0.0223	0.03097
Cr	52	3	He	-0.088	0.037	1730.16	0.029	0.03958
Cr	52	3	He	-0.127	0.0359	1750.17	0.029	0.03958
Cr	52	3	He	-0.201	0.0338	1610.14	0.029	0.03958
Mn	55	3	He	1141.677	14.8387	693057.88	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1098.68	14.28	695905.77	0.013	0.003171
Mn	55	3	He	1126.114	14.6365	697845.93	0.013	0.003171
Fe	57	3	He	121.273	0.0734	3430.53	0.0006	0.002014
Fe	57	3	He	133.509	0.0807	3930.66	0.0006	0.002014
Fe	57	3	He	117.661	0.0713	3400.52	0.0006	0.002014
Co	59	3	He	0.329	0.0229	1070.08	0.0572	0.004106
Co	59	3	He	0.366	0.025	1220.09	0.0572	0.004106
Co	59	3	He	0.321	0.0224	1070.08	0.0572	0.004106
Ni	60	3	He	0.151	0.0046	390.02	0.0084	0.003329
Ni	60	3	He	0.097	0.0041	360.02	0.0084	0.003329
Ni	60	3	He	0.109	0.0042	360.02	0.0084	0.003329
Cu	63	3	He	2.243	0.0604	5131.14	0.0247	0.004989
Cu	63	3	He	2.561	0.0683	5941.43	0.0247	0.004989
Cu	63	3	He	2.135	0.0578	4901.01	0.0247	0.004989
Zn	66	3	He	0.67	0.0081	670.04	0.0029	0.006147
Zn	66	3	He	1.398	0.0102	860.06	0.0029	0.006147
Zn	66	3	He	1.325	0.0099	850.06	0.0029	0.006147
As	75	3	He	4.59	0.0101	842.03	0.002	0.0009198
As	75	3	He	4.586	0.0101	858.03	0.002	0.0009198
As	75	3	He	4.61	0.0102	870.03	0.002	0.0009198
Sr	88	3	He	638.727	5.626	467134.52	0.0088	0.0005022
Sr	88	3	He	627.312	5.5254	467846.91	0.0088	0.0005022
Sr	88	3	He	626.184	5.5155	471282.41	0.0088	0.0005022
Mo	98	3	He	3.386	0.0763	6331.67	0.0223	0.0006689
Mo	98	3	He	2.912	0.0657	5561.28	0.0223	0.0006689
Mo	98	3	He	3.006	0.0678	5791.40	0.0223	0.0006689
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.01	0.0001	6.00	0.0054	1.676E-05
Sn	120	3	He	-0.154	0.0155	1290.11	0.0156	0.01794
Sn	120	3	He	-0.31	0.0131	1110.08	0.0156	0.01794
Sn	120	3	He	-0.363	0.0123	1050.08	0.0156	0.01794
Sb	121	3	He	0.029	0.0005	40.00	0.0151	4.19E-05
Sb	121	3	He	0.005	0.0001	10.00	0.0151	4.19E-05
Sb	121	3	He	0.028	0.0005	40.00	0.0151	4.19E-05
Ba	137	3	He	264.509	1.2946	107489.60	0.0049	0.0002094
Ba	137	3	He	255.861	1.2522	106028.92	0.0049	0.0002094
Ba	137	3	He	258.285	1.2641	108013.76	0.0049	0.0002094
Tl	205	3	He	-0.023	0.0002	70.00	0.0252	0.0007688
Tl	205	3	He	-0.019	0.0003	110.00	0.0252	0.0007688
Tl	205	3	He	-0.016	0.0004	140.01	0.0252	0.0007688
Pb	208	3	He	0.36	0.0139	2840.40	0.0337	0.001742
Pb	208	3	He	0.356	0.0138	2720.38	0.0337	0.001742
Pb	208	3	He	0.308	0.0121	2810.38	0.0337	0.001742
U	238	3	He	1.276	0.0644	19565.62	0.0502	0.0004339
U	238	3	He	1.305	0.0659	19986.16	0.0502	0.0004339
U	238	3	He	1.21	0.0611	18704.18	0.0502	0.0004339
Sc	45	1	No Gas			2505303.71		
Sc	45	1	No Gas			2446207.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2443264.18		
Ge	72	1	No Gas			1261082.72		
Ge	72	1	No Gas			1252169.04		
Ge	72	1	No Gas			1265101.86		
Sc	45	2	H2			175043.28		
Sc	45	2	H2			177056.27		
Sc	45	2	H2			173726.40		
Ge	72	2	H2			156672.47		
Ge	72	2	H2			155981.32		
Ge	72	2	H2			155862.29		
In	115	2	H2			385080.07		
In	115	2	H2			383247.34		
In	115	2	H2			385856.67		
Sc	45	3	He			46706.04		
Sc	45	3	He			48732.93		
Sc	45	3	He			47678.52		
Ge	72	3	He			84931.46		
Ge	72	3	He			87025.00		
Ge	72	3	He			84851.41		
In	115	3	He			83037.94		
In	115	3	He			84678.39		
In	115	3	He			85452.77		
Tb	159	3	He			383564.88		
Tb	159	3	He			380701.87		
Tb	159	3	He			384002.06		
Bi	209	3	He			303590.03		
Bi	209	3	He			303330.87		
Bi	209	3	He			306161.95		

Quantitation Report

Data File Name	101_CCV.d
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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

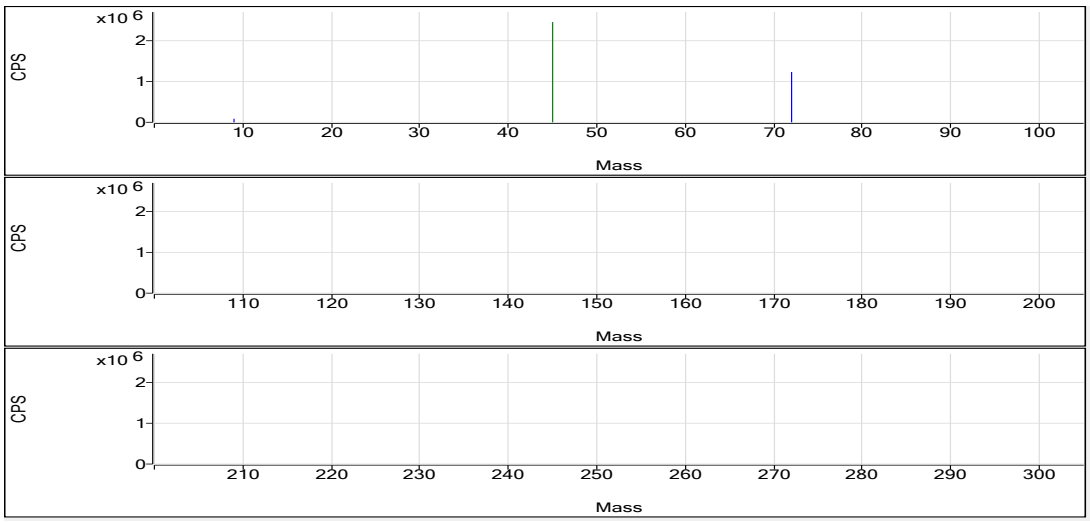
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.755	ppb	1.0	86592.61	0.0354	Pulse	0.5000	3
Se	78	115	H2	50.866	ppb	0.7	3324.61	0.0088	Pulse	1.5000	3
Na	23	45	He	4861.952	ppb	1.8	848290.09	18.4344	Pulse	0.1000	3
Mg	24	45	He	5086.980	ppb	1.2	427722.52	9.2942	Pulse	0.1000	3
Al	27	45	He	4986.744	ppb	2.8	136996.87	2.9773	Pulse	0.1000	3
K	39	45	He	5106.149	ppb	1.3	294573.72	6.4010	Pulse	0.1000	3
Ca	44	45	He	5059.251	ppb	1.3	16179.48	0.3516	Pulse	0.1000	3
Ti	47	45	He	5044.467	ppb	3.5	125623.22	2.7303	Pulse	0.1000	3
V	51	45	He	511.368	ppb	1.9	525097.88	11.4113	Pulse	0.5000	3
Cr	52	45	He	509.473	ppb	1.8	680867.23	14.7962	Pulse	0.1000	3
Mn	55	45	He	503.252	ppb	0.5	301121.19	6.5427	Pulse	0.1000	3
Fe	57	45	He	5048.337	ppb	1.9	136931.32	2.9757	Pulse	0.1000	3
Co	59	45	He	492.059	ppb	1.2	1295320.06	28.1469	Pulse	0.1000	3
Ni	60	72	He	535.217	ppb	1.1	363757.78	4.4784	Pulse	0.1000	3
Cu	63	72	He	515.009	ppb	0.7	1034129.59	12.7318	Pulse	0.1000	3
Zn	66	115	He	521.582	ppb	0.8	123840.99	1.5020	Pulse	0.1000	3
As	75	115	He	524.960	ppb	0.7	87040.47	1.0557	Pulse	0.5000	3
Sr	88	115	He	52.212	ppb	1.7	37955.21	0.4604	Pulse	0.1000	3
Mo	98	115	He	51.639	ppb	0.7	95117.86	1.1536	Pulse	0.1000	3
Ag	107	115	He	51.712	ppb	0.9	200819.77	2.4356	Pulse	0.1000	3
Cd	111	115	He	51.589	ppb	0.3	22773.22	0.2762	Pulse	0.5000	3
Sn	120	115	He	52.358	ppb	1.3	68681.02	0.8330	Pulse	0.1000	3
Sb	121	115	He	51.583	ppb	3.1	64329.76	0.7803	Pulse	0.1000	3
Ba	137	115	He	518.535	ppb	1.4	209221.46	2.5376	Pulse	0.1000	3
Tl	205	159	He	50.979	ppb	0.8	495388.47	1.2876	Pulse	0.1000	3
Pb	208	159	He	50.762	ppb	0.3	659543.27	1.7142	Pulse	0.1000	3
U	238	209	He	50.153	ppb	0.8	758056.47	2.5156	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2449679.03	1.1	104.4	Analog	0.1000	3
No Gas	Ge	72	1228130.55	0.4	102.4	Pulse	0.1000	3
H2	Sc	45	173393.34	1.8	99.8	Pulse	0.1000	3
H2	Ge	72	149340.57	1.5	99.9	Pulse	0.1000	3
H2	In	115	379588.09	0.7	103.7	Pulse	0.1000	3
He	Sc	45	46027.37	2.0	107.0	Pulse	0.1000	3
He	Ge	72	81227.33	0.8	103.9	Pulse	0.1000	3
He	In	115	82455.19	0.9	103.4	Pulse	0.1000	3
He	Tb	159	384751.27	0.6	104.6	Pulse	0.1000	3
He	Bi	209	301338.96	0.5	103.2	Pulse	0.1000	3

No Gas



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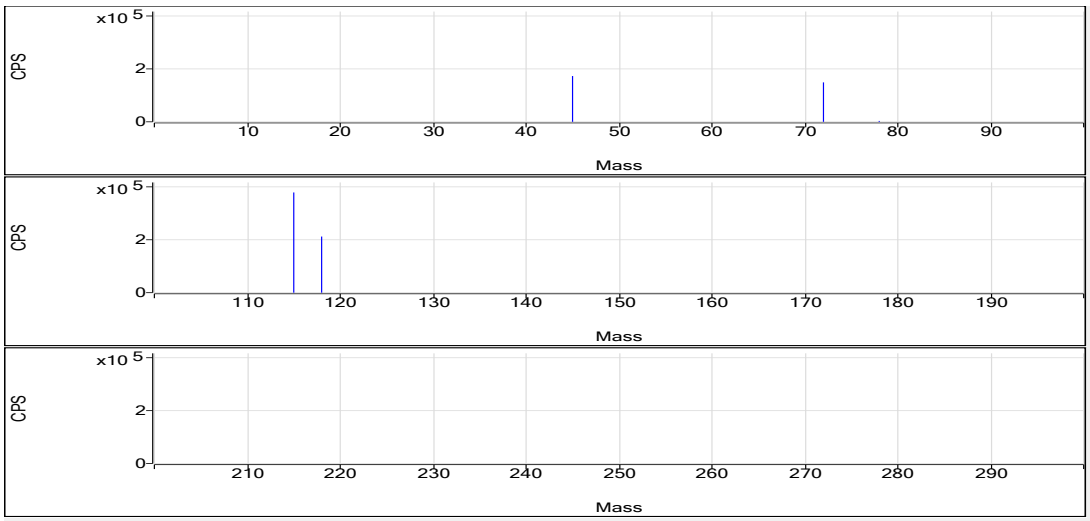
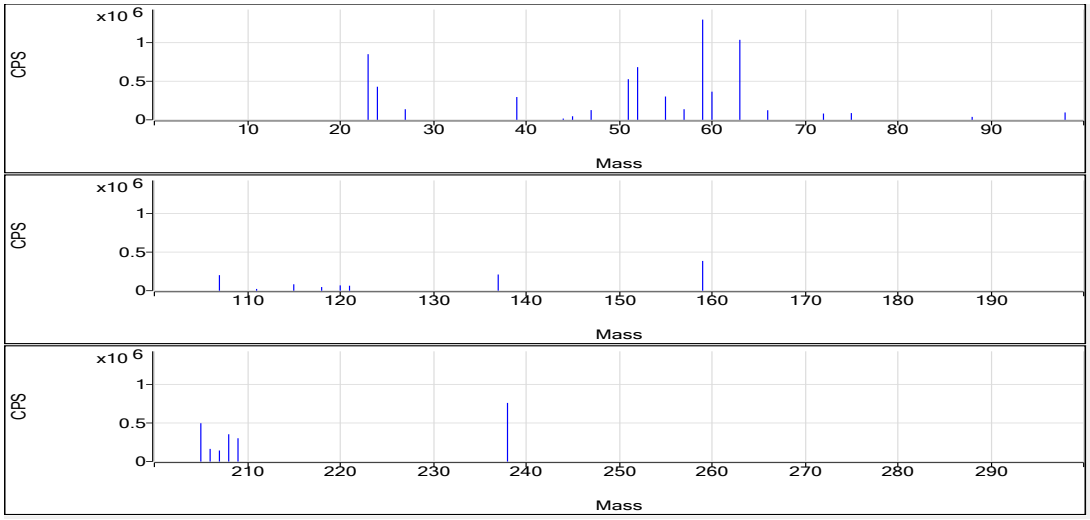


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.77	0.0354	87242.30	0.0007	1.705E-05
Be	9	1	No Gas	47.269	0.035	86200.34	0.0007	1.705E-05
Be	9	1	No Gas	48.227	0.0357	86335.20	0.0007	1.705E-05
Se	78	2	H2	50.511	0.0087	3285.05	0.0002	6.062E-06
Se	78	2	H2	50.917	0.0088	3356.40	0.0002	6.062E-06
Se	78	2	H2	51.169	0.0088	3332.39	0.0002	6.062E-06
Na	23	3	He	4928.114	18.6806	851320.61	0.0037	0.3435
Na	23	3	He	4896.95	18.5646	843242.64	0.0037	0.3435
Na	23	3	He	4760.792	18.058	850307.02	0.0037	0.3435
Mg	24	3	He	5095.214	9.3093	424246.63	0.0018	0.002943
Mg	24	3	He	5144.984	9.4002	426974.92	0.0018	0.002943
Mg	24	3	He	5020.742	9.1732	431946.01	0.0018	0.002943
Al	27	3	He	5120.943	3.0574	139335.19	0.0006	0.001008
Al	27	3	He	4992.765	2.9809	135400.22	0.0006	0.001008
Al	27	3	He	4846.525	2.8937	136255.20	0.0006	0.001008
K	39	3	He	5141.797	6.4429	293617.22	0.0012	0.4052
K	39	3	He	5146.635	6.4485	292905.84	0.0012	0.4052
K	39	3	He	5030.014	6.3116	297198.10	0.0012	0.4052
Ca	44	3	He	5115.766	0.3555	16199.46	0.0001	0.003486
Ca	44	3	He	5078.436	0.3529	16029.31	0.0001	0.003486
Ca	44	3	He	4983.552	0.3464	16309.68	0.0001	0.003486
Ti	47	3	He	5228.583	2.83	128969.59	0.0005	0
Ti	47	3	He	5032.924	2.7241	123733.52	0.0005	0
Ti	47	3	He	4871.892	2.6369	124166.54	0.0005	0
V	51	3	He	516.041	11.5153	524780.69	0.0223	0.03097
V	51	3	He	518.025	11.5595	525054.19	0.0223	0.03097
V	51	3	He	500.039	11.1592	525458.75	0.0223	0.03097
Cr	52	3	He	515.085	14.9588	681709.76	0.029	0.03958
Cr	52	3	He	514.626	14.9455	678854.76	0.029	0.03958
Cr	52	3	He	498.708	14.4844	682037.18	0.029	0.03958
Mn	55	3	He	505.097	6.5667	299259.60	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	504.589	6.5601	297971.56	0.013	0.003171
Mn	55	3	He	500.07	6.5013	306132.40	0.013	0.003171
Fe	57	3	He	5071.717	2.9895	136238.66	0.0006	0.002014
Fe	57	3	He	5128.877	3.0232	137318.18	0.0006	0.002014
Fe	57	3	He	4944.417	2.9145	137237.11	0.0006	0.002014
Co	59	3	He	495.049	28.3179	1290515.84	0.0572	0.004106
Co	59	3	He	495.828	28.3625	1288280.76	0.0572	0.004106
Co	59	3	He	485.299	27.7603	1307163.57	0.0572	0.004106
Ni	60	3	He	538.645	4.5071	362713.94	0.0084	0.003329
Ni	60	3	He	528.476	4.4221	361117.18	0.0084	0.003329
Ni	60	3	He	538.53	4.5061	367442.22	0.0084	0.003329
Cu	63	3	He	519.136	12.8338	1032815.22	0.0247	0.004989
Cu	63	3	He	512.31	12.6651	1034263.81	0.0247	0.004989
Cu	63	3	He	513.582	12.6965	1035309.75	0.0247	0.004989
Zn	66	3	He	517.705	1.4908	122800.71	0.0029	0.006147
Zn	66	3	He	525.909	1.5144	123791.31	0.0029	0.006147
Zn	66	3	He	521.133	1.5007	124930.96	0.0029	0.006147
As	75	3	He	524.188	1.0541	86826.91	0.002	0.0009198
As	75	3	He	529.113	1.064	86976.45	0.002	0.0009198
As	75	3	He	521.579	1.0489	87318.05	0.002	0.0009198
Sr	88	3	He	52.823	0.4657	38362.70	0.0088	0.0005022
Sr	88	3	He	52.602	0.4638	37911.85	0.0088	0.0005022
Sr	88	3	He	51.212	0.4515	37591.08	0.0088	0.0005022
Mo	98	3	He	52.033	1.1624	95745.46	0.0223	0.0006689
Mo	98	3	He	51.438	1.1491	93933.32	0.0223	0.0006689
Mo	98	3	He	51.445	1.1492	95674.80	0.0223	0.0006689
Ag	107	3	He	52.003	2.4493	201750.84	0.0471	0.0006687
Ag	107	3	He	51.932	2.4459	199942.85	0.0471	0.0006687
Ag	107	3	He	51.202	2.4116	200765.62	0.0471	0.0006687
Cd	111	3	He	51.53	0.2759	22724.47	0.0054	1.676E-05
Cd	111	3	He	51.76	0.2771	22652.38	0.0054	1.676E-05
Cd	111	3	He	51.476	0.2756	22942.81	0.0054	1.676E-05
Sn	120	3	He	52.307	0.8322	68550.30	0.0156	0.01794
Sn	120	3	He	53.048	0.8438	68972.87	0.0156	0.01794
Sn	120	3	He	51.718	0.8231	68519.89	0.0156	0.01794
Sb	121	3	He	51.578	0.7802	64269.29	0.0151	4.19E-05
Sb	121	3	He	53.2	0.8048	65787.22	0.0151	4.19E-05
Sb	121	3	He	49.971	0.7559	62932.76	0.0151	4.19E-05
Ba	137	3	He	520.026	2.5449	209624.63	0.0049	0.0002094
Ba	137	3	He	524.788	2.5682	209937.71	0.0049	0.0002094
Ba	137	3	He	510.791	2.4997	208102.03	0.0049	0.0002094
Tl	205	3	He	51.081	1.2902	498723.43	0.0252	0.0007688
Tl	205	3	He	51.32	1.2962	495222.84	0.0252	0.0007688
Tl	205	3	He	50.535	1.2764	492219.13	0.0252	0.0007688
Pb	208	3	He	50.726	1.713	355948.35	0.0337	0.001742
Pb	208	3	He	50.904	1.719	349174.21	0.0337	0.001742
Pb	208	3	He	50.655	1.7106	353289.10	0.0337	0.001742
U	238	3	He	49.705	2.4931	749022.96	0.0502	0.0004339
U	238	3	He	50.416	2.5288	759597.33	0.0502	0.0004339
U	238	3	He	50.337	2.5249	765549.13	0.0502	0.0004339
Sc	45	1	No Gas			2467138.40		
Sc	45	1	No Gas			2463520.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2418378.25		
Ge	72	1	No Gas			1231956.54		
Ge	72	1	No Gas			1229671.23		
Ge	72	1	No Gas			1222763.89		
Sc	45	2	H2			177055.45		
Sc	45	2	H2			171927.54		
Sc	45	2	H2			171197.03		
Ge	72	2	H2			151455.65		
Ge	72	2	H2			149474.23		
Ge	72	2	H2			147091.84		
In	115	2	H2			377709.45		
In	115	2	H2			382831.24		
In	115	2	H2			378223.59		
Sc	45	3	He			45572.50		
Sc	45	3	He			45422.03		
Sc	45	3	He			47087.59		
Ge	72	3	He			80476.41		
Ge	72	3	He			81662.73		
Ge	72	3	He			81542.86		
In	115	3	He			82737.23		
In	115	3	He			82121.97		
In	115	3	He			83611.05		
Tb	159	3	He			386555.54		
Tb	159	3	He			382061.60		
Tb	159	3	He			385636.67		
Bi	209	3	He			300434.31		
Bi	209	3	He			300378.71		
Bi	209	3	He			303203.86		

Quantitation Report

Data File Name	102_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:34:39 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

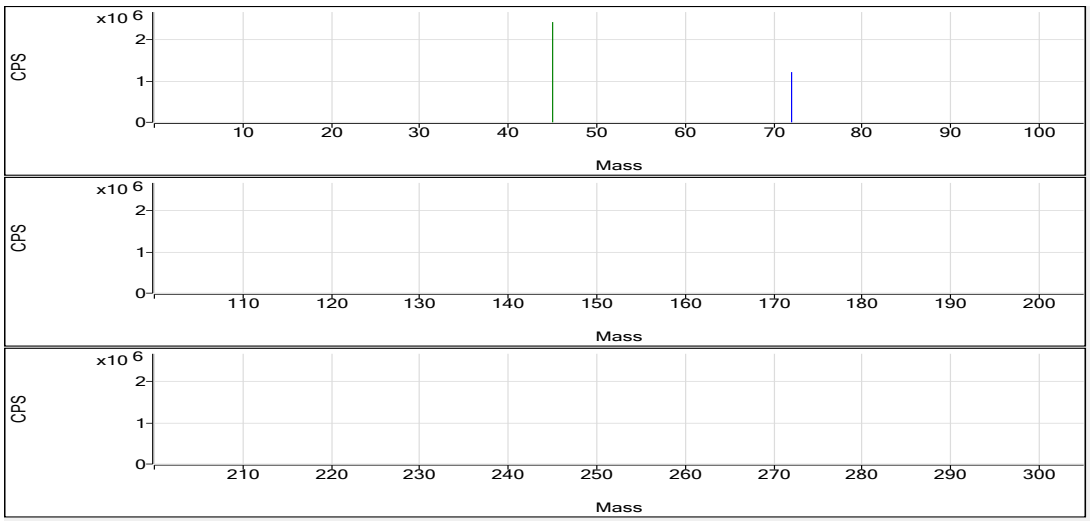
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.008	ppb	245.4	54.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.047	ppb	79.1	5.33	0.0000	Pulse	1.5000	3
Na	23	45	He	3.655	ppb	21.3	16252.86	0.3571	Pulse	0.1000	3
Mg	24	45	He	0.593	ppb	113.2	183.34	0.0040	Pulse	0.1000	3
Al	27	45	He	0.867	ppb	144.8	70.00	0.0015	Pulse	0.1000	3
K	39	45	He	4.354	ppb	49.9	18679.16	0.4104	Pulse	0.1000	3
Ca	44	45	He	-8.037	ppb	N/A	133.34	0.0029	Pulse	0.1000	3
Ti	47	45	He	2.029	ppb	34.5	50.00	0.0011	Pulse	0.1000	3
V	51	45	He	0.060	ppb	157.0	1470.08	0.0323	Pulse	0.5000	3
Cr	52	45	He	-0.015	ppb	N/A	1783.50	0.0392	Pulse	0.1000	3
Mn	55	45	He	0.010	ppb	486.4	150.01	0.0033	Pulse	0.1000	3
Fe	57	45	He	1.344	ppb	168.3	126.67	0.0028	Pulse	0.1000	3
Co	59	45	He	0.010	ppb	148.5	213.34	0.0047	Pulse	0.1000	3
Ni	60	72	He	-0.034	ppb	N/A	243.34	0.0030	Pulse	0.1000	3
Cu	63	72	He	0.017	ppb	260.5	433.36	0.0054	Pulse	0.1000	3
Zn	66	115	He	-0.886	ppb	N/A	296.68	0.0036	Pulse	0.1000	3
As	75	115	He	0.068	ppb	130.4	86.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.086	ppb	49.0	103.34	0.0013	Pulse	0.1000	3
Mo	98	115	He	0.072	ppb	52.8	186.67	0.0023	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	46.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.039	ppb	N/A	1420.12	0.0173	Pulse	0.1000	3
Sb	121	115	He	0.021	ppb	98.2	30.00	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.099	ppb	31.4	56.67	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.045	ppb	15.2	713.38	0.0019	Pulse	0.1000	3
Pb	208	159	He	-0.009	ppb	N/A	540.02	0.0014	Pulse	0.1000	3
U	238	209	He	0.047	ppb	11.9	826.72	0.0028	Pulse	0.1000	3

ISTD Table:

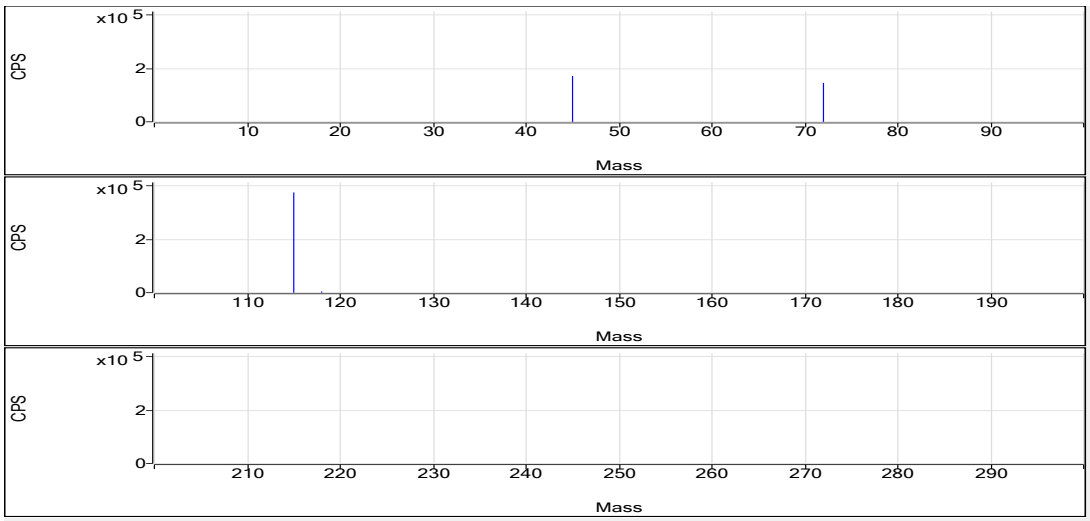
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2427183.61	1.0	103.4	Analog	0.1000	3
No Gas	Ge	72	1215429.80	0.6	101.3	Pulse	0.1000	3
H2	Sc	45	171336.61	0.7	98.6	Pulse	0.1000	3
H2	Ge	72	145615.28	0.8	97.4	Pulse	0.1000	3
H2	In	115	375425.30	0.6	102.6	Pulse	0.1000	3
He	Sc	45	45518.68	2.6	105.8	Pulse	0.1000	3
He	Ge	72	79969.86	1.4	102.3	Pulse	0.1000	3
He	In	115	81978.04	1.7	102.8	Pulse	0.1000	3
He	Tb	159	375915.94	0.9	102.2	Pulse	0.1000	3
He	Bi	209	297571.00	0.6	101.9	Pulse	0.1000	3

No Gas

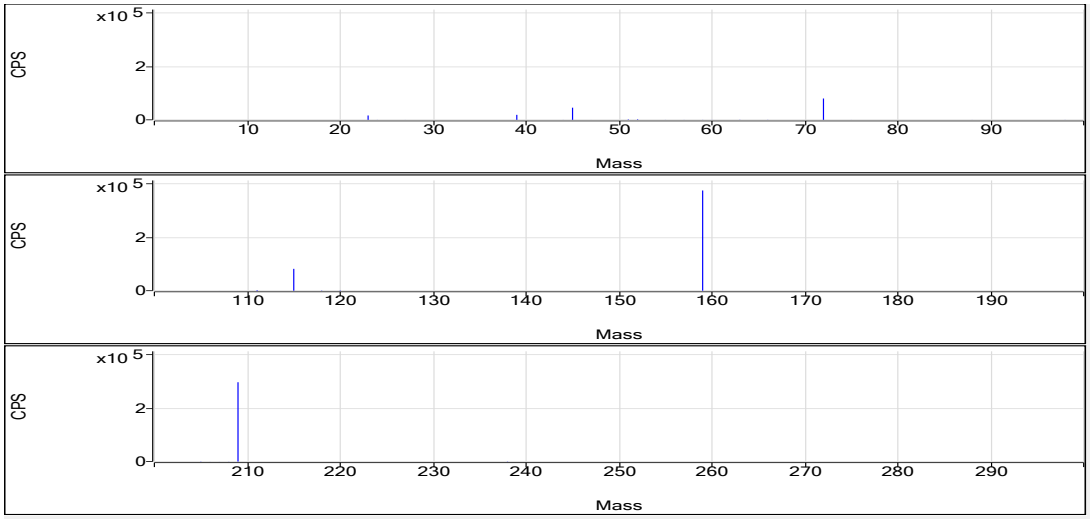


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.029	0	92.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.002	0	38.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.004	0	34.00	0.0007	1.705E-05
Se	78	2	H2	0.058	0	6.00	0.0002	6.062E-06
Se	78	2	H2	0.079	0	7.33	0.0002	6.062E-06
Se	78	2	H2	0.006	0	2.67	0.0002	6.062E-06
Na	23	3	He	2.921	0.3544	16159.46	0.0037	0.3435
Na	23	3	He	4.469	0.3601	15949.10	0.0037	0.3435
Na	23	3	He	3.576	0.3568	16650.01	0.0037	0.3435
Mg	24	3	He	-0.171	0.0026	120.00	0.0018	0.002943
Mg	24	3	He	0.861	0.0045	200.01	0.0018	0.002943
Mg	24	3	He	1.087	0.0049	230.01	0.0018	0.002943
Al	27	3	He	0.516	0.0013	60.00	0.0006	0.001008
Al	27	3	He	-0.175	0.0009	40.00	0.0006	0.001008
Al	27	3	He	2.261	0.0024	110.00	0.0006	0.001008
K	39	3	He	1.913	0.4075	18582.26	0.0012	0.4052
K	39	3	He	5.083	0.4112	18211.94	0.0012	0.4052
K	39	3	He	6.066	0.4124	19243.28	0.0012	0.4052
Ca	44	3	He	6.703	0.0039	180.01	0.0001	0.003486
Ca	44	3	He	-11.289	0.0027	120.00	0.0001	0.003486
Ca	44	3	He	-19.525	0.0021	100.00	0.0001	0.003486
Ti	47	3	He	2.836	0.0015	70.00	0.0005	0
Ti	47	3	He	1.669	0.0009	40.00	0.0005	0
Ti	47	3	He	1.584	0.0009	40.00	0.0005	0
V	51	3	He	0.165	0.0346	1580.09	0.0223	0.03097
V	51	3	He	0.029	0.0316	1400.08	0.0223	0.03097
V	51	3	He	-0.015	0.0306	1430.08	0.0223	0.03097
Cr	52	3	He	-0.057	0.0379	1730.16	0.029	0.03958
Cr	52	3	He	-0.033	0.0386	1710.17	0.029	0.03958
Cr	52	3	He	0.047	0.0409	1910.18	0.029	0.03958
Mn	55	3	He	0.026	0.0035	160.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.051	0.0038	170.01	0.013	0.003171
Mn	55	3	He	-0.046	0.0026	120.00	0.013	0.003171
Fe	57	3	He	0.676	0.0024	110.01	0.0006	0.002014
Fe	57	3	He	3.864	0.0043	190.01	0.0006	0.002014
Fe	57	3	He	-0.509	0.0017	80.00	0.0006	0.002014
Co	59	3	He	-0.007	0.0037	170.01	0.0572	0.004106
Co	59	3	He	0.023	0.0054	240.01	0.0572	0.004106
Co	59	3	He	0.014	0.0049	230.01	0.0572	0.004106
Ni	60	3	He	-0.087	0.0026	210.01	0.0084	0.003329
Ni	60	3	He	0.012	0.0034	270.01	0.0084	0.003329
Ni	60	3	He	-0.027	0.0031	250.01	0.0084	0.003329
Cu	63	3	He	0.069	0.0067	540.03	0.0247	0.004989
Cu	63	3	He	-0.007	0.0048	380.02	0.0247	0.004989
Cu	63	3	He	-0.011	0.0047	380.02	0.0247	0.004989
Zn	66	3	He	-0.555	0.0046	380.02	0.0029	0.006147
Zn	66	3	He	-1.322	0.0024	190.01	0.0029	0.006147
Zn	66	3	He	-0.78	0.0039	320.01	0.0029	0.006147
As	75	3	He	0.055	0.001	86.00	0.002	0.0009198
As	75	3	He	-0.014	0.0009	72.00	0.002	0.0009198
As	75	3	He	0.162	0.0012	102.00	0.002	0.0009198
Sr	88	3	He	0.134	0.0017	140.01	0.0088	0.0005022
Sr	88	3	He	0.056	0.001	80.00	0.0088	0.0005022
Sr	88	3	He	0.068	0.0011	90.00	0.0088	0.0005022
Mo	98	3	He	0.029	0.0013	110.00	0.0223	0.0006689
Mo	98	3	He	0.087	0.0026	210.01	0.0223	0.0006689
Mo	98	3	He	0.101	0.0029	240.01	0.0223	0.0006689
Ag	107	3	He	0.004	0.0008	70.00	0.0471	0.0006687
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.006	0.0004	30.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.159	0.0155	1290.10	0.0156	0.01794
Sn	120	3	He	-0.054	0.0171	1380.12	0.0156	0.01794
Sn	120	3	He	0.095	0.0194	1590.15	0.0156	0.01794
Sb	121	3	He	0.045	0.0007	60.00	0.0151	4.19E-05
Sb	121	3	He	0.005	0.0001	10.00	0.0151	4.19E-05
Sb	121	3	He	0.013	0.0002	20.00	0.0151	4.19E-05
Ba	137	3	He	0.08	0.0006	50.00	0.0049	0.0002094
Ba	137	3	He	0.135	0.0009	70.00	0.0049	0.0002094
Ba	137	3	He	0.082	0.0006	50.00	0.0049	0.0002094
Tl	205	3	He	0.045	0.0019	720.05	0.0252	0.0007688
Tl	205	3	He	0.038	0.0017	650.04	0.0252	0.0007688
Tl	205	3	He	0.052	0.0021	770.05	0.0252	0.0007688
Pb	208	3	He	-0.002	0.0017	410.02	0.0337	0.001742
Pb	208	3	He	-0.008	0.0015	330.02	0.0337	0.001742
Pb	208	3	He	-0.017	0.0012	250.01	0.0337	0.001742
U	238	3	He	0.042	0.0025	750.05	0.0502	0.0004339
U	238	3	He	0.046	0.0027	810.05	0.0502	0.0004339
U	238	3	He	0.053	0.0031	920.07	0.0502	0.0004339
Sc	45	1	No Gas			2401934.65		
Sc	45	1	No Gas			2449034.96		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2430581.21		
Ge	72	1	No Gas			1212919.83		
Ge	72	1	No Gas			1223241.86		
Ge	72	1	No Gas			1210127.72		
Sc	45	2	H2			170388.53		
Sc	45	2	H2			170844.96		
Sc	45	2	H2			172776.35		
Ge	72	2	H2			145353.05		
Ge	72	2	H2			144634.96		
Ge	72	2	H2			146857.83		
In	115	2	H2			374640.66		
In	115	2	H2			373711.13		
In	115	2	H2			377924.10		
Sc	45	3	He			45601.92		
Sc	45	3	He			44288.47		
Sc	45	3	He			46665.64		
Ge	72	3	He			80727.10		
Ge	72	3	He			78716.27		
Ge	72	3	He			80466.21		
In	115	3	He			83421.05		
In	115	3	He			80684.28		
In	115	3	He			81850.79		
Tb	159	3	He			379019.37		
Tb	159	3	He			376561.28		
Tb	159	3	He			372167.18		
Bi	209	3	He			297572.24		
Bi	209	3	He			295872.16		
Bi	209	3	He			299268.59		

Quantitation Report

Data File Name	103SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:37:53 AM
Sample Name	MB 410-405036/1-A
Sample Type	Sample
Comment	E7
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

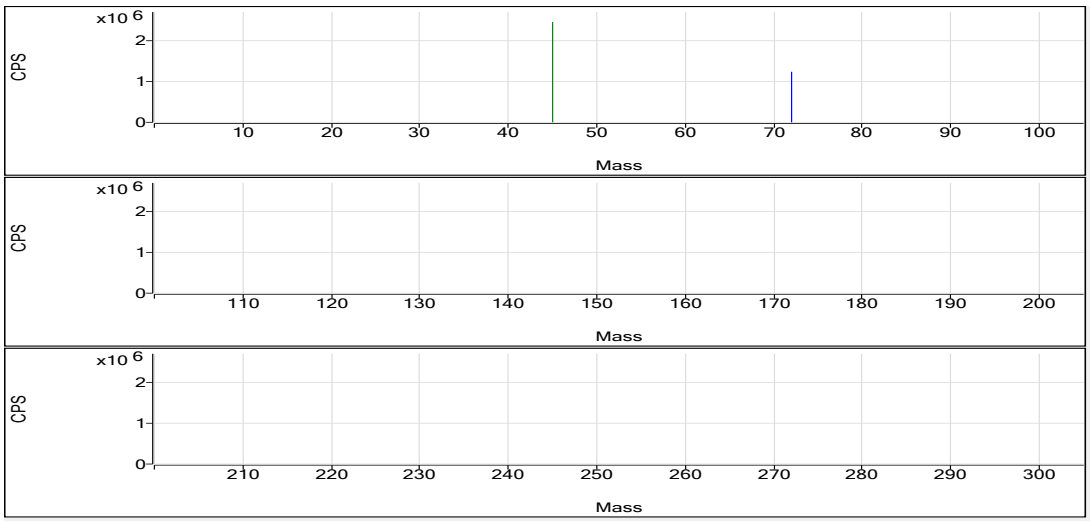
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.003	ppb	126.5	47.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.009	ppb	377.9	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	-0.769	ppb	N/A	16009.07	0.3406	Pulse	0.1000	3
Mg	24	45	He	0.755	ppb	35.9	203.34	0.0043	Pulse	0.1000	3
Al	27	45	He	0.690	ppb	109.2	66.67	0.0014	Pulse	0.1000	3
K	39	45	He	0.411	ppb	3677.3	19076.37	0.4057	Pulse	0.1000	3
Ca	44	45	He	-23.898	ppb	N/A	86.67	0.0018	Pulse	0.1000	3
Ti	47	45	He	0.393	ppb	100.5	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.134	ppb	N/A	1315.40	0.0280	Pulse	0.5000	3
Cr	52	45	He	-0.113	ppb	N/A	1706.83	0.0363	Pulse	0.1000	3
Mn	55	45	He	0.100	ppb	99.5	210.01	0.0045	Pulse	0.1000	3
Fe	57	45	He	0.551	ppb	171.1	110.01	0.0023	Pulse	0.1000	3
Co	59	45	He	-0.010	ppb	N/A	166.68	0.0035	Pulse	0.1000	3
Ni	60	72	He	-0.022	ppb	N/A	256.68	0.0031	Pulse	0.1000	3
Cu	63	72	He	0.255	ppb	13.4	923.40	0.0113	Pulse	0.1000	3
Zn	66	115	He	-0.831	ppb	N/A	313.35	0.0038	Pulse	0.1000	3
As	75	115	He	-0.027	ppb	N/A	72.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.075	ppb	77.0	96.67	0.0012	Pulse	0.1000	3
Mo	98	115	He	-0.010	ppb	N/A	36.67	0.0004	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.001	ppb	325.9	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.195	ppb	N/A	1240.11	0.0149	Pulse	0.1000	3
Sb	121	115	He	0.010	ppb	87.6	16.67	0.0002	Pulse	0.1000	3
Ba	137	115	He	-0.002	ppb	N/A	16.67	0.0002	Pulse	0.1000	3
Tl	205	159	He	-0.011	ppb	N/A	183.34	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.006	ppb	171.3	743.37	0.0019	Pulse	0.1000	3
U	238	209	He	-0.001	ppb	N/A	123.34	0.0004	Pulse	0.1000	3

ISTD Table:

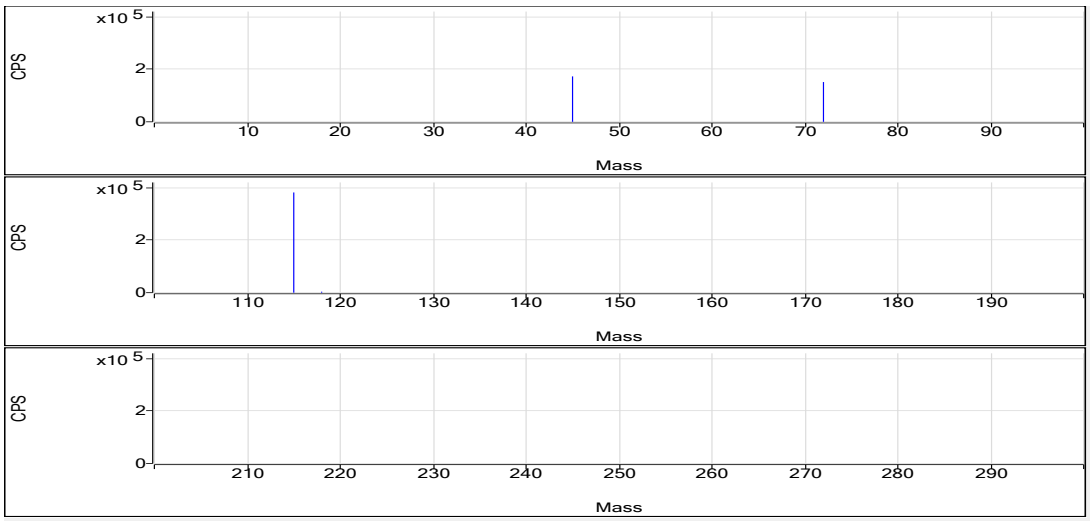
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2456759.60	0.8	104.7	Analog	0.1000	3
No Gas	Ge	72	1238514.54	0.8	103.2	Pulse	0.1000	3
H2	Sc	45	173414.08	0.4	99.8	Pulse	0.1000	3
H2	Ge	72	151768.86	1.6	101.5	Pulse	0.1000	3
H2	In	115	382574.93	0.5	104.5	Pulse	0.1000	3
He	Sc	45	47009.97	0.9	109.2	Pulse	0.1000	3
He	Ge	72	81797.50	1.9	104.7	Pulse	0.1000	3
He	In	115	83161.93	1.1	104.3	Pulse	0.1000	3
He	Tb	159	382185.18	0.3	103.9	Pulse	0.1000	3
He	Bi	209	305878.08	1.0	104.7	Pulse	0.1000	3

No Gas

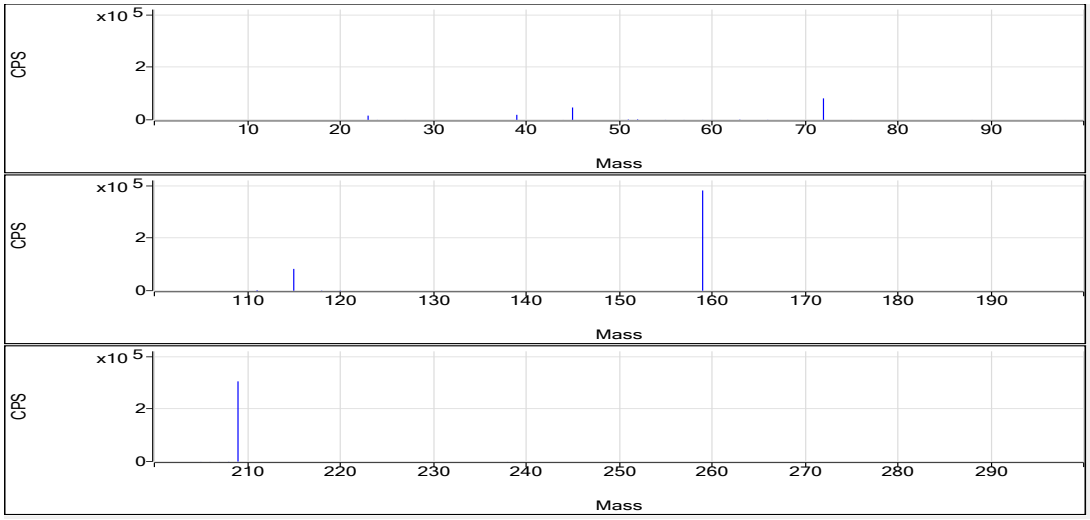


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	54.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.001	0	40.00	0.0007	1.705E-05
Be	9	1	No Gas	0.004	0	48.00	0.0007	1.705E-05
Se	78	2	H2	-0.005	0	2.00	0.0002	6.062E-06
Se	78	2	H2	0.045	0	5.33	0.0002	6.062E-06
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Na	23	3	He	-4.905	0.3252	15448.47	0.0037	0.3435
Na	23	3	He	0.678	0.346	16209.30	0.0037	0.3435
Na	23	3	He	1.92	0.3506	16369.43	0.0037	0.3435
Mg	24	3	He	1.04	0.0048	230.01	0.0018	0.002943
Mg	24	3	He	0.726	0.0043	200.01	0.0018	0.002943
Mg	24	3	He	0.5	0.0039	180.01	0.0018	0.002943
Al	27	3	He	0.075	0.0011	50.00	0.0006	0.001008
Al	27	3	He	1.53	0.0019	90.00	0.0006	0.001008
Al	27	3	He	0.465	0.0013	60.00	0.0006	0.001008
K	39	3	He	13.731	0.4214	20014.31	0.0012	0.4052
K	39	3	He	-16.038	0.3864	18101.79	0.0012	0.4052
K	39	3	He	3.542	0.4094	19113.00	0.0012	0.4052
Ca	44	3	He	-20.071	0.0021	100.00	0.0001	0.003486
Ca	44	3	He	-22.747	0.0019	90.00	0.0001	0.003486
Ca	44	3	He	-28.877	0.0015	70.00	0.0001	0.003486
Ti	47	3	He	0.389	0.0002	10.00	0.0005	0
Ti	47	3	He	0.789	0.0004	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.137	0.0279	1326.07	0.0223	0.03097
V	51	3	He	-0.16	0.0274	1284.07	0.0223	0.03097
V	51	3	He	-0.106	0.0286	1336.07	0.0223	0.03097
Cr	52	3	He	-0.138	0.0356	1690.16	0.029	0.03958
Cr	52	3	He	-0.143	0.0354	1660.15	0.029	0.03958
Cr	52	3	He	-0.058	0.0379	1770.18	0.029	0.03958
Mn	55	3	He	0.096	0.0044	210.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.002	0.0032	150.01	0.013	0.003171
Mn	55	3	He	0.201	0.0058	270.01	0.013	0.003171
Fe	57	3	He	0.87	0.0025	120.01	0.0006	0.002014
Fe	57	3	He	1.292	0.0028	130.01	0.0006	0.002014
Fe	57	3	He	-0.51	0.0017	80.00	0.0006	0.002014
Co	59	3	He	-0.013	0.0034	160.01	0.0572	0.004106
Co	59	3	He	-0.016	0.0032	150.01	0.0572	0.004106
Co	59	3	He	-0.001	0.0041	190.01	0.0572	0.004106
Ni	60	3	He	0.033	0.0036	290.01	0.0084	0.003329
Ni	60	3	He	-0.083	0.0026	220.01	0.0084	0.003329
Ni	60	3	He	-0.016	0.0032	260.01	0.0084	0.003329
Cu	63	3	He	0.226	0.0106	850.06	0.0247	0.004989
Cu	63	3	He	0.292	0.0122	1020.07	0.0247	0.004989
Cu	63	3	He	0.245	0.011	900.08	0.0247	0.004989
Zn	66	3	He	-0.914	0.0035	290.01	0.0029	0.006147
Zn	66	3	He	-0.928	0.0035	290.01	0.0029	0.006147
Zn	66	3	He	-0.65	0.0043	360.02	0.0029	0.006147
As	75	3	He	-0.071	0.0008	64.00	0.002	0.0009198
As	75	3	He	-0.063	0.0008	66.00	0.002	0.0009198
As	75	3	He	0.052	0.001	86.00	0.002	0.0009198
Sr	88	3	He	0.122	0.0016	130.00	0.0088	0.0005022
Sr	88	3	He	0.093	0.0013	110.00	0.0088	0.0005022
Sr	88	3	He	0.011	0.0006	50.00	0.0088	0.0005022
Mo	98	3	He	-0.019	0.0002	20.00	0.0223	0.0006689
Mo	98	3	He	-0.008	0.0005	40.00	0.0223	0.0006689
Mo	98	3	He	-0.003	0.0006	50.00	0.0223	0.0006689
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.001	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.052	0.0171	1410.13	0.0156	0.01794
Sn	120	3	He	-0.442	0.0111	920.06	0.0156	0.01794
Sn	120	3	He	-0.09	0.0165	1390.13	0.0156	0.01794
Sb	121	3	He	0.005	0.0001	10.00	0.0151	4.19E-05
Sb	121	3	He	0.021	0.0004	30.00	0.0151	4.19E-05
Sb	121	3	He	0.005	0.0001	10.00	0.0151	4.19E-05
Ba	137	3	He	0.032	0.0004	30.00	0.0049	0.0002094
Ba	137	3	He	-0.018	0.0001	10.00	0.0049	0.0002094
Ba	137	3	He	-0.018	0.0001	10.00	0.0049	0.0002094
Tl	205	3	He	-0.012	0.0005	180.01	0.0252	0.0007688
Tl	205	3	He	-0.009	0.0005	210.01	0.0252	0.0007688
Tl	205	3	He	-0.014	0.0004	160.01	0.0252	0.0007688
Pb	208	3	He	0.015	0.0023	490.03	0.0337	0.001742
Pb	208	3	He	-0.005	0.0016	350.02	0.0337	0.001742
Pb	208	3	He	0.008	0.002	410.02	0.0337	0.001742
U	238	3	He	-0.001	0.0004	120.00	0.0502	0.0004339
U	238	3	He	0.001	0.0005	150.01	0.0502	0.0004339
U	238	3	He	-0.002	0.0003	100.00	0.0502	0.0004339
Sc	45	1	No Gas			2475606.68		
Sc	45	1	No Gas			2457853.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2436818.87		
Ge	72	1	No Gas			1248711.62		
Ge	72	1	No Gas			1229968.34		
Ge	72	1	No Gas			1236863.65		
Sc	45	2	H2			174102.52		
Sc	45	2	H2			173496.29		
Sc	45	2	H2			172643.43		
Ge	72	2	H2			149040.13		
Ge	72	2	H2			152527.17		
Ge	72	2	H2			153739.28		
In	115	2	H2			380566.40		
In	115	2	H2			384203.12		
In	115	2	H2			382955.27		
Sc	45	3	He			47498.69		
Sc	45	3	He			46845.98		
Sc	45	3	He			46685.24		
Ge	72	3	He			80406.21		
Ge	72	3	He			83523.92		
Ge	72	3	He			81462.38		
In	115	3	He			82284.12		
In	115	3	He			83189.20		
In	115	3	He			84033.52		
Tb	159	3	He			381905.97		
Tb	159	3	He			383436.60		
Tb	159	3	He			381212.96		
Bi	209	3	He			302237.44		
Bi	209	3	He			307582.28		
Bi	209	3	He			307814.53		

Quantitation Report

Data File Name	104SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:40:00 AM
Sample Name	LCS 410-405036/2-A
Sample Type	Sample
Comment	E7
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

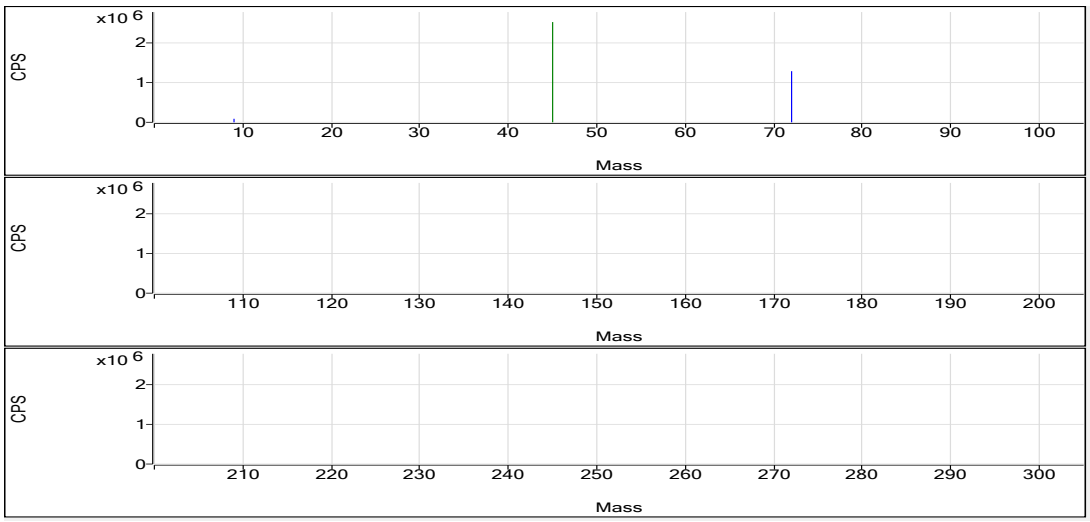
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.373	ppb	1.4	88064.32	0.0351	Pulse	0.5000	3
Se	78	115	H2	100.748	ppb	1.2	6661.11	0.0173	Pulse	1.5000	3
Na	23	45	He	4642.025	ppb	2.2	837316.66	17.6161	Pulse	0.1000	3
Mg	24	45	He	4936.419	ppb	1.6	428722.81	9.0192	Pulse	0.1000	3
Al	27	45	He	4847.605	ppb	1.1	137584.33	2.8943	Pulse	0.1000	3
K	39	45	He	4945.620	ppb	2.6	295278.73	6.2125	Pulse	0.1000	3
Ca	44	45	He	4944.633	ppb	2.8	16336.35	0.3437	Pulse	0.1000	3
Ti	47	45	He	496.879	ppb	2.2	12782.72	0.2689	Pulse	0.1000	3
V	51	45	He	495.872	ppb	1.8	526019.42	11.0664	Pulse	0.5000	3
Cr	52	45	He	496.758	ppb	1.8	685802.10	14.4279	Pulse	0.1000	3
Mn	55	45	He	494.015	ppb	1.4	305302.49	6.4227	Pulse	0.1000	3
Fe	57	45	He	4956.811	ppb	1.7	138883.30	2.9218	Pulse	0.1000	3
Co	59	45	He	479.632	ppb	1.8	1304114.83	27.4361	Pulse	0.1000	3
Ni	60	72	He	524.506	ppb	0.2	366544.29	4.3889	Pulse	0.1000	3
Cu	63	72	He	506.684	ppb	0.4	1046136.31	12.5261	Pulse	0.1000	3
Zn	66	115	He	519.651	ppb	1.0	125366.66	1.4964	Pulse	0.1000	3
As	75	115	He	517.836	ppb	1.2	87239.58	1.0413	Pulse	0.5000	3
Sr	88	115	He	53.183	ppb	1.7	39285.34	0.4689	Pulse	0.1000	3
Mo	98	115	He	50.682	ppb	1.7	94852.93	1.1322	Pulse	0.1000	3
Ag	107	115	He	51.429	ppb	0.7	202933.13	2.4223	Pulse	0.1000	3
Cd	111	115	He	52.175	ppb	1.1	23401.59	0.2793	Pulse	0.5000	3
Sn	120	115	He	104.814	ppb	0.1	138208.20	1.6496	Pulse	0.1000	3
Sb	121	115	He	102.437	ppb	0.9	129821.24	1.5496	Pulse	0.1000	3
Ba	137	115	He	513.503	ppb	0.9	210534.32	2.5130	Pulse	0.1000	3
Tl	205	159	He	101.886	ppb	1.0	998908.45	2.5726	Pulse	0.1000	3
Pb	208	159	He	50.281	ppb	0.9	659324.91	1.6980	Pulse	0.1000	3
U	238	209	He	49.574	ppb	0.2	760317.64	2.4866	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2511545.69	1.3	107.0	Analog	0.1000	3
No Gas	Ge	72	1280896.52	0.3	106.8	Pulse	0.1000	3
H2	Sc	45	172857.28	1.4	99.5	Pulse	0.1000	3
H2	Ge	72	154410.17	0.2	103.3	Pulse	0.1000	3
H2	In	115	384131.56	0.7	105.0	Pulse	0.1000	3
He	Sc	45	47541.64	1.6	110.5	Pulse	0.1000	3
He	Ge	72	83517.03	0.2	106.9	Pulse	0.1000	3
He	In	115	83781.70	0.8	105.1	Pulse	0.1000	3
He	Tb	159	388302.06	0.4	105.5	Pulse	0.1000	3
He	Bi	209	305766.54	0.4	104.7	Pulse	0.1000	3

No Gas



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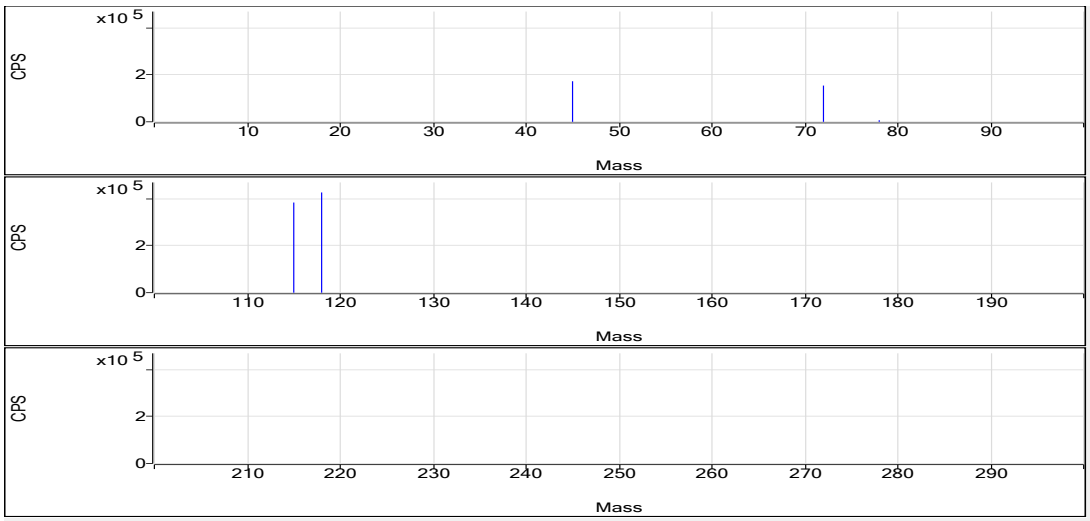
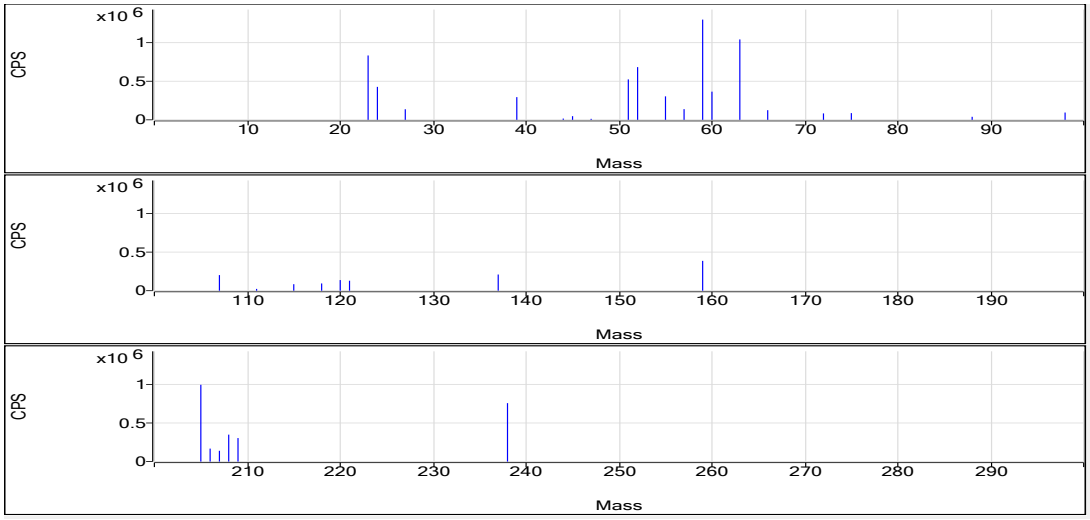


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.73	0.0346	88145.55	0.0007	1.705E-05
Be	9	1	No Gas	48.05	0.0356	88477.34	0.0007	1.705E-05
Be	9	1	No Gas	47.338	0.035	87570.08	0.0007	1.705E-05
Se	78	2	H2	99.726	0.0172	6619.54	0.0002	6.062E-06
Se	78	2	H2	100.47	0.0173	6667.56	0.0002	6.062E-06
Se	78	2	H2	102.049	0.0176	6696.24	0.0002	6.062E-06
Na	23	3	He	4718.266	17.8998	844457.41	0.0037	0.3435
Na	23	3	He	4679.074	17.7539	835085.46	0.0037	0.3435
Na	23	3	He	4528.735	17.1945	832407.10	0.0037	0.3435
Mg	24	3	He	4999.823	9.135	430964.13	0.0018	0.002943
Mg	24	3	He	4958.662	9.0599	426145.66	0.0018	0.002943
Mg	24	3	He	4850.773	8.8628	429058.63	0.0018	0.002943
Al	27	3	He	4873.527	2.9098	137274.36	0.0006	0.001008
Al	27	3	He	4880.511	2.9139	137062.00	0.0006	0.001008
Al	27	3	He	4788.778	2.8592	138416.64	0.0006	0.001008
K	39	3	He	4982.649	6.256	295138.90	0.0012	0.4052
K	39	3	He	5049.715	6.3347	297964.90	0.0012	0.4052
K	39	3	He	4804.496	6.0468	292732.38	0.0012	0.4052
Ca	44	3	He	4887.626	0.3398	16029.30	0.0001	0.003486
Ca	44	3	He	5100.385	0.3544	16670.15	0.0001	0.003486
Ca	44	3	He	4845.886	0.3369	16309.59	0.0001	0.003486
Ti	47	3	He	502.688	0.2721	12836.01	0.0005	0
Ti	47	3	He	503.803	0.2727	12826.19	0.0005	0
Ti	47	3	He	484.147	0.262	12685.95	0.0005	0
V	51	3	He	500.713	11.1742	527164.44	0.0223	0.03097
V	51	3	He	501.094	11.1827	525995.38	0.0223	0.03097
V	51	3	He	485.809	10.8425	524898.44	0.0223	0.03097
Cr	52	3	He	498.1	14.4668	682502.18	0.029	0.03958
Cr	52	3	He	505.055	14.6683	689946.40	0.029	0.03958
Cr	52	3	He	487.119	14.1488	684957.72	0.029	0.03958
Mn	55	3	He	500.365	6.5052	306895.00	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	495.223	6.4384	302838.77	0.013	0.003171
Mn	55	3	He	486.457	6.3244	306173.69	0.013	0.003171
Fe	57	3	He	5025.176	2.9621	139742.08	0.0006	0.002014
Fe	57	3	He	4985.127	2.9385	138216.66	0.0006	0.002014
Fe	57	3	He	4860.13	2.8649	138691.15	0.0006	0.002014
Co	59	3	He	482.624	27.6072	1302428.11	0.0572	0.004106
Co	59	3	He	486.238	27.814	1308276.39	0.0572	0.004106
Co	59	3	He	470.034	26.8872	1301639.98	0.0572	0.004106
Ni	60	3	He	523.806	4.383	365998.12	0.0084	0.003329
Ni	60	3	He	524.328	4.3874	367023.12	0.0084	0.003329
Ni	60	3	He	525.383	4.3962	366611.64	0.0084	0.003329
Cu	63	3	He	505.168	12.4886	1042845.06	0.0247	0.004989
Cu	63	3	He	506.249	12.5153	1046958.27	0.0247	0.004989
Cu	63	3	He	508.636	12.5743	1048605.61	0.0247	0.004989
Zn	66	3	He	525.443	1.513	125634.27	0.0029	0.006147
Zn	66	3	He	518.349	1.4927	125909.17	0.0029	0.006147
Zn	66	3	He	515.16	1.4835	124556.53	0.0029	0.006147
As	75	3	He	524.813	1.0554	87631.85	0.002	0.0009198
As	75	3	He	512.072	1.0298	86861.30	0.002	0.0009198
As	75	3	He	516.623	1.0389	87225.60	0.002	0.0009198
Sr	88	3	He	52.976	0.4671	38783.75	0.0088	0.0005022
Sr	88	3	He	52.419	0.4622	38984.62	0.0088	0.0005022
Sr	88	3	He	54.155	0.4775	40087.64	0.0088	0.0005022
Mo	98	3	He	51.024	1.1399	94648.06	0.0223	0.0006689
Mo	98	3	He	49.688	1.11	93630.85	0.0223	0.0006689
Mo	98	3	He	51.333	1.1467	96279.89	0.0223	0.0006689
Ag	107	3	He	51.773	2.4385	202479.68	0.0471	0.0006687
Ag	107	3	He	51.022	2.4031	202704.41	0.0471	0.0006687
Ag	107	3	He	51.491	2.4252	203615.29	0.0471	0.0006687
Cd	111	3	He	52.812	0.2827	23477.71	0.0054	1.676E-05
Cd	111	3	He	51.651	0.2765	23325.48	0.0054	1.676E-05
Cd	111	3	He	52.062	0.2787	23401.59	0.0054	1.676E-05
Sn	120	3	He	104.756	1.6487	136901.57	0.0156	0.01794
Sn	120	3	He	104.712	1.648	139013.61	0.0156	0.01794
Sn	120	3	He	104.974	1.6521	138709.42	0.0156	0.01794
Sb	121	3	He	103.421	1.5645	129905.23	0.0151	4.19E-05
Sb	121	3	He	102.196	1.5459	130400.26	0.0151	4.19E-05
Sb	121	3	He	101.695	1.5383	129158.22	0.0151	4.19E-05
Ba	137	3	He	516.614	2.5282	209930.11	0.0049	0.0002094
Ba	137	3	He	508.276	2.4874	209814.86	0.0049	0.0002094
Ba	137	3	He	515.62	2.5233	211858.00	0.0049	0.0002094
Tl	205	3	He	101.94	2.5739	999596.86	0.0252	0.0007688
Tl	205	3	He	102.914	2.5985	1004701.47	0.0252	0.0007688
Tl	205	3	He	100.804	2.5453	992427.02	0.0252	0.0007688
Pb	208	3	He	50.283	1.6981	351076.36	0.0337	0.001742
Pb	208	3	He	50.743	1.7136	349787.30	0.0337	0.001742
Pb	208	3	He	49.817	1.6824	350256.28	0.0337	0.001742
U	238	3	He	49.532	2.4845	762908.58	0.0502	0.0004339
U	238	3	He	49.691	2.4925	759399.05	0.0502	0.0004339
U	238	3	He	49.5	2.4829	758645.30	0.0502	0.0004339
Sc	45	1	No Gas			2548124.49		
Sc	45	1	No Gas			2487485.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2499027.15		
Ge	72	1	No Gas			1277004.04		
Ge	72	1	No Gas			1280401.70		
Ge	72	1	No Gas			1285283.81		
Sc	45	2	H2			175234.06		
Sc	45	2	H2			172857.58		
Sc	45	2	H2			170480.19		
Ge	72	2	H2			154709.04		
Ge	72	2	H2			154517.80		
Ge	72	2	H2			154003.67		
In	115	2	H2			385625.81		
In	115	2	H2			385549.96		
In	115	2	H2			381218.90		
Sc	45	3	He			47177.05		
Sc	45	3	He			47036.68		
Sc	45	3	He			48411.18		
Ge	72	3	He			83503.86		
Ge	72	3	He			83654.33		
Ge	72	3	He			83392.91		
In	115	3	He			83773.21		
In	115	3	He			85079.74		
In	115	3	He			84697.81		
Tb	159	3	He			388352.30		
Tb	159	3	He			386642.18		
Tb	159	3	He			389911.71		
Bi	209	3	He			307072.59		
Bi	209	3	He			304678.67		
Bi	209	3	He			305548.35		

Quantitation Report

Data File Name	105SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:42:02 AM
Sample Name	LCS 410-402409/2-A @2
Sample Type	Sample
Comment	G3
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

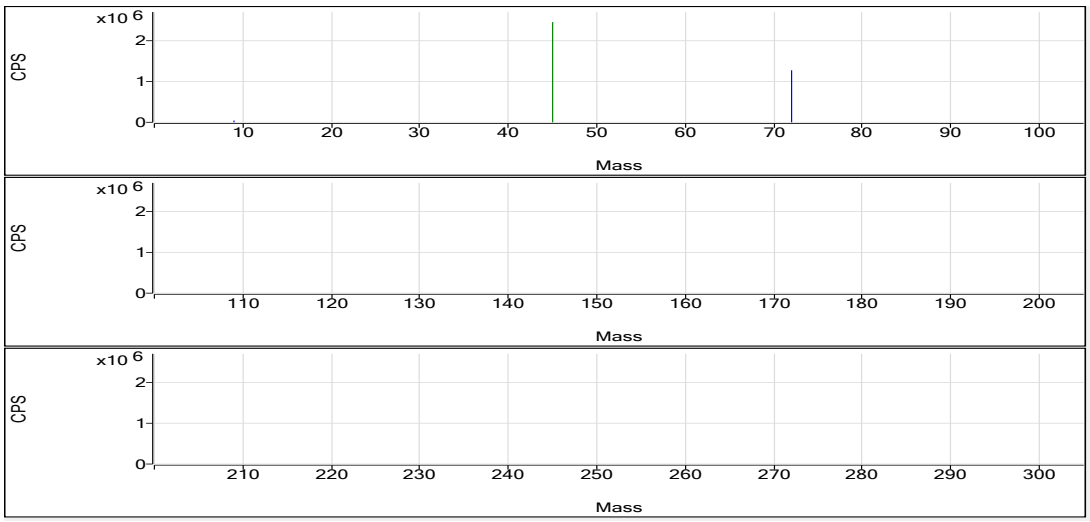
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	23.645	ppb	2.6	42823.68	0.0175	Pulse	0.5000	3
Se	78	115	H2	50.390	ppb	1.1	3255.93	0.0087	Pulse	1.5000	3
Na	23	45	He	2346.880	ppb	0.3	421779.63	9.0760	Pulse	0.1000	3
Mg	24	45	He	2481.099	ppb	0.9	210733.02	4.5346	Pulse	0.1000	3
Al	27	45	He	2433.546	ppb	0.6	67545.49	1.4535	Pulse	0.1000	3
K	39	45	He	2503.592	ppb	0.3	155448.91	3.3450	Pulse	0.1000	3
Ca	44	45	He	2461.419	ppb	1.7	8032.45	0.1728	Pulse	0.1000	3
Ti	47	45	He	250.948	ppb	5.8	6311.59	0.1358	Pulse	0.1000	3
V	51	45	He	248.135	ppb	0.4	258062.22	5.5531	Pulse	0.5000	3
Cr	52	45	He	245.748	ppb	1.8	332610.07	7.1576	Pulse	0.1000	3
Mn	55	45	He	250.043	ppb	0.4	151144.66	3.2524	Pulse	0.1000	3
Fe	57	45	He	2507.972	ppb	0.6	68747.62	1.4793	Pulse	0.1000	3
Co	59	45	He	241.608	ppb	0.5	642356.28	13.8226	Pulse	0.1000	3
Ni	60	72	He	252.754	ppb	1.5	179404.71	2.1167	Pulse	0.1000	3
Cu	63	72	He	244.258	ppb	1.2	512041.46	6.0410	Pulse	0.1000	3
Zn	66	115	He	259.900	ppb	1.8	61729.75	0.7515	Pulse	0.1000	3
As	75	115	He	256.984	ppb	0.9	42492.09	0.5172	Pulse	0.5000	3
Sr	88	115	He	26.424	ppb	0.7	19160.24	0.2332	Pulse	0.1000	3
Mo	98	115	He	25.281	ppb	2.0	46417.57	0.5651	Pulse	0.1000	3
Ag	107	115	He	25.608	ppb	0.4	99114.13	1.2065	Pulse	0.1000	3
Cd	111	115	He	25.910	ppb	2.0	11394.70	0.1387	Pulse	0.5000	3
Sn	120	115	He	52.457	ppb	1.2	68556.47	0.8346	Pulse	0.1000	3
Sb	121	115	He	50.684	ppb	1.5	62980.32	0.7667	Pulse	0.1000	3
Ba	137	115	He	253.956	ppb	0.7	102109.32	1.2429	Pulse	0.1000	3
Tl	205	159	He	50.586	ppb	1.0	493738.39	1.2777	Pulse	0.1000	3
Pb	208	159	He	25.183	ppb	1.7	328968.86	0.8513	Pulse	0.1000	3
U	238	209	He	24.775	ppb	0.6	377978.39	1.2429	Pulse	0.1000	3

ISTD Table:

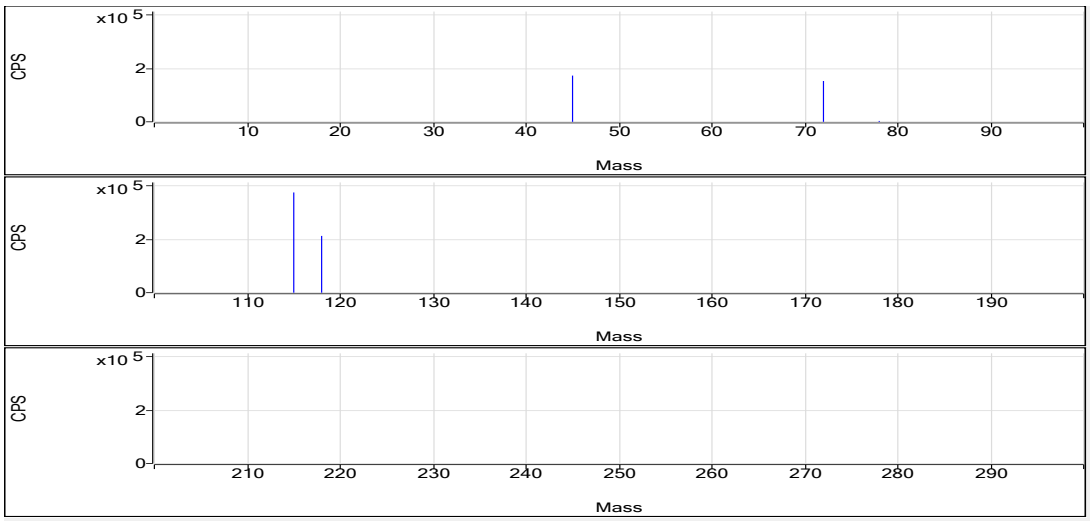
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2446341.89	2.2	104.2	Analog	0.1000	3
No Gas	Ge	72	1269760.29	0.7	105.8	Pulse	0.1000	3
H2	Sc	45	173066.12	0.4	99.6	Pulse	0.1000	3
H2	Ge	72	152786.95	0.1	102.2	Pulse	0.1000	3
H2	In	115	375251.48	0.2	102.5	Pulse	0.1000	3
He	Sc	45	46471.87	0.4	108.0	Pulse	0.1000	3
He	Ge	72	84770.71	1.6	108.5	Pulse	0.1000	3
He	In	115	82151.13	1.0	103.1	Pulse	0.1000	3
He	Tb	159	386461.32	0.8	105.0	Pulse	0.1000	3
He	Bi	209	304121.50	0.8	104.1	Pulse	0.1000	3

No Gas

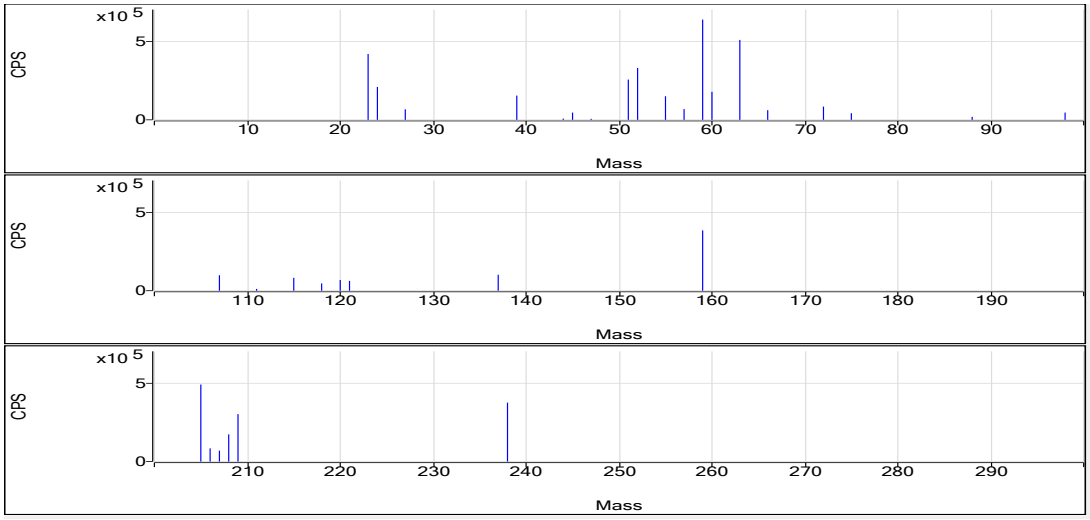


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.683	0.0175	43119.80	0.0007	1.705E-05
Be	9	1	No Gas	24.248	0.018	42895.24	0.0007	1.705E-05
Be	9	1	No Gas	23.004	0.017	42456.00	0.0007	1.705E-05
Se	78	2	H2	50.905	0.0088	3289.72	0.0002	6.062E-06
Se	78	2	H2	50.479	0.0087	3268.38	0.0002	6.062E-06
Se	78	2	H2	49.786	0.0086	3209.70	0.0002	6.062E-06
Na	23	3	He	2353.482	9.1006	421949.52	0.0037	0.3435
Na	23	3	He	2341.211	9.0549	419829.60	0.0037	0.3435
Na	23	3	He	2345.948	9.0726	423559.76	0.0037	0.3435
Mg	24	3	He	2503.177	4.575	212118.04	0.0018	0.002943
Mg	24	3	He	2457.527	4.4916	208250.72	0.0018	0.002943
Mg	24	3	He	2482.594	4.5374	211830.31	0.0018	0.002943
Al	27	3	He	2418.094	1.4442	66962.57	0.0006	0.001008
Al	27	3	He	2447.545	1.4618	67777.06	0.0006	0.001008
Al	27	3	He	2434.999	1.4543	67896.85	0.0006	0.001008
K	39	3	He	2498.274	3.3388	154802.48	0.0012	0.4052
K	39	3	He	2511.664	3.3545	155530.32	0.0012	0.4052
K	39	3	He	2500.838	3.3418	156013.93	0.0012	0.4052
Ca	44	3	He	2420.248	0.17	7882.35	0.0001	0.003486
Ca	44	3	He	2461.058	0.1728	8012.48	0.0001	0.003486
Ca	44	3	He	2502.95	0.1757	8202.53	0.0001	0.003486
Ti	47	3	He	267.85	0.145	6721.76	0.0005	0
Ti	47	3	He	243.135	0.1316	6101.48	0.0005	0
Ti	47	3	He	241.86	0.1309	6111.53	0.0005	0
V	51	3	He	248.975	5.5718	258338.23	0.0223	0.03097
V	51	3	He	248.387	5.5588	257730.06	0.0223	0.03097
V	51	3	He	247.043	5.5288	258118.36	0.0223	0.03097
Cr	52	3	He	249.246	7.2589	336559.02	0.029	0.03958
Cr	52	3	He	247.298	7.2025	333940.50	0.029	0.03958
Cr	52	3	He	240.7	7.0114	327330.68	0.029	0.03958
Mn	55	3	He	249.146	3.2407	150255.57	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	249.799	3.2492	150647.76	0.013	0.003171
Mn	55	3	He	251.183	3.2672	152530.65	0.013	0.003171
Fe	57	3	He	2516.235	1.4842	68814.76	0.0006	0.002014
Fe	57	3	He	2491.214	1.4695	68130.90	0.0006	0.002014
Fe	57	3	He	2516.468	1.4843	69297.20	0.0006	0.002014
Co	59	3	He	241.252	13.8022	639941.98	0.0572	0.004106
Co	59	3	He	242.984	13.9013	644529.80	0.0572	0.004106
Co	59	3	He	240.588	13.7643	642597.06	0.0572	0.004106
Ni	60	3	He	249.411	2.0887	179709.16	0.0084	0.003329
Ni	60	3	He	252.072	2.111	179161.19	0.0084	0.003329
Ni	60	3	He	256.78	2.1503	179343.79	0.0084	0.003329
Cu	63	3	He	240.98	5.96	512789.21	0.0247	0.004989
Cu	63	3	He	245.088	6.0616	514452.26	0.0247	0.004989
Cu	63	3	He	246.705	6.1015	508882.92	0.0247	0.004989
Zn	66	3	He	254.818	0.7369	61250.70	0.0029	0.006147
Zn	66	3	He	264.259	0.764	62516.70	0.0029	0.006147
Zn	66	3	He	260.624	0.7536	61421.84	0.0029	0.006147
As	75	3	He	257.202	0.5177	43028.32	0.002	0.0009198
As	75	3	He	254.683	0.5126	41947.18	0.002	0.0009198
As	75	3	He	259.068	0.5214	42500.78	0.002	0.0009198
Sr	88	3	He	26.518	0.2341	19453.87	0.0088	0.0005022
Sr	88	3	He	26.534	0.2342	19163.63	0.0088	0.0005022
Sr	88	3	He	26.22	0.2314	18863.21	0.0088	0.0005022
Mo	98	3	He	24.859	0.5557	46186.86	0.0223	0.0006689
Mo	98	3	He	25.158	0.5623	46016.06	0.0223	0.0006689
Mo	98	3	He	25.825	0.5772	47049.80	0.0223	0.0006689
Ag	107	3	He	25.676	1.2096	100541.28	0.0471	0.0006687
Ag	107	3	He	25.662	1.209	98929.22	0.0471	0.0006687
Ag	107	3	He	25.487	1.2008	97871.89	0.0471	0.0006687
Cd	111	3	He	25.335	0.1356	11274.59	0.0054	1.676E-05
Cd	111	3	He	26.027	0.1393	11402.71	0.0054	1.676E-05
Cd	111	3	He	26.368	0.1412	11506.79	0.0054	1.676E-05
Sn	120	3	He	51.919	0.8262	68670.04	0.0156	0.01794
Sn	120	3	He	53.149	0.8453	69172.88	0.0156	0.01794
Sn	120	3	He	52.302	0.8321	67826.48	0.0156	0.01794
Sb	121	3	He	49.852	0.7541	62682.39	0.0151	4.19E-05
Sb	121	3	He	50.897	0.7699	63003.65	0.0151	4.19E-05
Sb	121	3	He	51.301	0.7761	63254.92	0.0151	4.19E-05
Ba	137	3	He	254.551	1.2458	103549.78	0.0049	0.0002094
Ba	137	3	He	255.316	1.2496	102250.82	0.0049	0.0002094
Ba	137	3	He	252	1.2333	100527.36	0.0049	0.0002094
Tl	205	3	He	50.503	1.2756	493658.51	0.0252	0.0007688
Tl	205	3	He	50.135	1.2663	493056.79	0.0252	0.0007688
Tl	205	3	He	51.119	1.2911	494499.88	0.0252	0.0007688
Pb	208	3	He	25.212	0.8523	175432.28	0.0337	0.001742
Pb	208	3	He	24.738	0.8363	172189.98	0.0337	0.001742
Pb	208	3	He	25.599	0.8653	175513.73	0.0337	0.001742
U	238	3	He	24.591	1.2337	378506.24	0.0502	0.0004339
U	238	3	He	24.881	1.2482	378890.23	0.0502	0.0004339
U	238	3	He	24.852	1.2468	376538.71	0.0502	0.0004339
Sc	45	1	No Gas			2458384.96		
Sc	45	1	No Gas			2388681.21		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2491959.49		
Ge	72	1	No Gas			1272492.64		
Ge	72	1	No Gas			1259352.32		
Ge	72	1	No Gas			1277435.92		
Sc	45	2	H2			172312.28		
Sc	45	2	H2			173260.41		
Sc	45	2	H2			173625.68		
Ge	72	2	H2			152860.81		
Ge	72	2	H2			152657.54		
Ge	72	2	H2			152842.49		
In	115	2	H2			375317.69		
In	115	2	H2			376025.58		
In	115	2	H2			374411.17		
Sc	45	3	He			46365.06		
Sc	45	3	He			46364.73		
Sc	45	3	He			46685.81		
Ge	72	3	He			86038.07		
Ge	72	3	He			84871.39		
Ge	72	3	He			83402.68		
In	115	3	He			83470.18		
In	115	3	He			82203.75		
In	115	3	He			81871.67		
Tb	159	3	He			387007.85		
Tb	159	3	He			389372.14		
Tb	159	3	He			383003.98		
Bi	209	3	He			306805.29		
Bi	209	3	He			303546.52		
Bi	209	3	He			302012.69		

Quantitation Report

Data File Name	106SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:44:04 AM
Sample Name	410-136338-G-1-A @2
Sample Type	Sample
Comment	G5
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

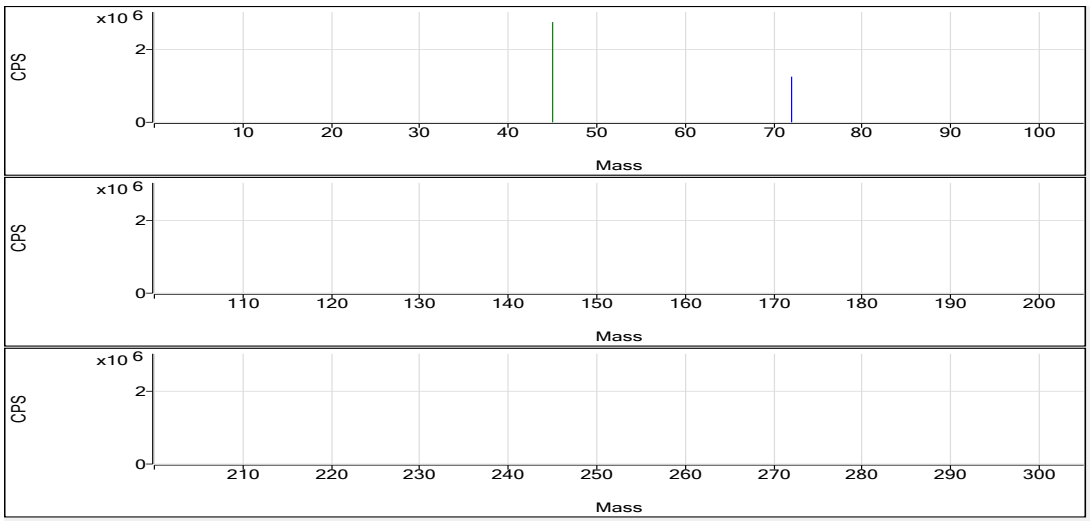
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	1.636	ppb	2.9	3386.40	0.0012	Pulse	0.5000	3
Se	78	115	H2	1.157	ppb	7.6	75.55	0.0002	Pulse	1.5000	3
Na	23	45	He	2928.251	ppb	1.5	597620.12	11.2393	Pulse	0.1000	3
Mg	24	45	He	29773.592	ppb	1.6	2891719.43	54.3839	Analog	0.1000	3
Al	27	45	He	58103.157	ppb	1.9	1843960.28	34.6798	Analog	0.1000	3
K	39	45	He	9930.941	ppb	1.4	641609.25	12.0664	Pulse	0.1000	3
Ca	44	45	He	67351.471	ppb	1.1	246593.98	4.6375	Pulse	0.1000	3
Ti	47	45	He	3797.221	ppb	0.3	109295.63	2.0553	Pulse	0.1000	3
V	51	45	He	193.873	ppb	1.4	231064.10	4.3455	Pulse	0.5000	3
Cr	52	45	He	172.937	ppb	1.6	268445.72	5.0486	Pulse	0.1000	3
Mn	55	45	He	1403.766	ppb	1.5	970095.01	18.2444	Pulse	0.1000	3
Fe	57	45	He	79801.994	ppb	2.2	2499450.12	47.0091	Analog	0.1000	3
Co	59	45	He	37.881	ppb	3.0	115406.56	2.1707	Pulse	0.1000	3
Ni	60	72	He	224.969	ppb	1.5	156051.40	1.8844	Pulse	0.1000	3
Cu	63	72	He	128.396	ppb	0.5	263171.30	3.1779	Pulse	0.1000	3
Zn	66	115	He	377.722	ppb	0.7	88818.18	1.0894	Pulse	0.1000	3
As	75	115	He	21.491	ppb	1.5	3595.14	0.0441	Pulse	0.5000	3
Sr	88	115	He	337.402	ppb	0.9	242309.27	2.9721	Pulse	0.1000	3
Mo	98	115	He	10.534	ppb	2.1	19230.51	0.2359	Pulse	0.1000	3
Ag	107	115	He	0.272	ppb	15.9	1096.75	0.0135	Pulse	0.1000	3
Cd	111	115	He	0.775	ppb	11.0	339.34	0.0042	Pulse	0.5000	3
Sn	120	115	He	3.206	ppb	1.8	5531.30	0.0678	Pulse	0.1000	3
Sb	121	115	He	0.925	ppb	21.0	1143.42	0.0140	Pulse	0.1000	3
Ba	137	115	He	795.150	ppb	0.3	317255.95	3.8912	Pulse	0.1000	3
Tl	205	159	He	0.494	ppb	9.5	5234.59	0.0132	Pulse	0.1000	3
Pb	208	159	He	51.798	ppb	0.4	690819.21	1.7492	Pulse	0.1000	3
U	238	209	He	2.501	ppb	1.5	38478.55	0.1259	Pulse	0.1000	3

ISTD Table:

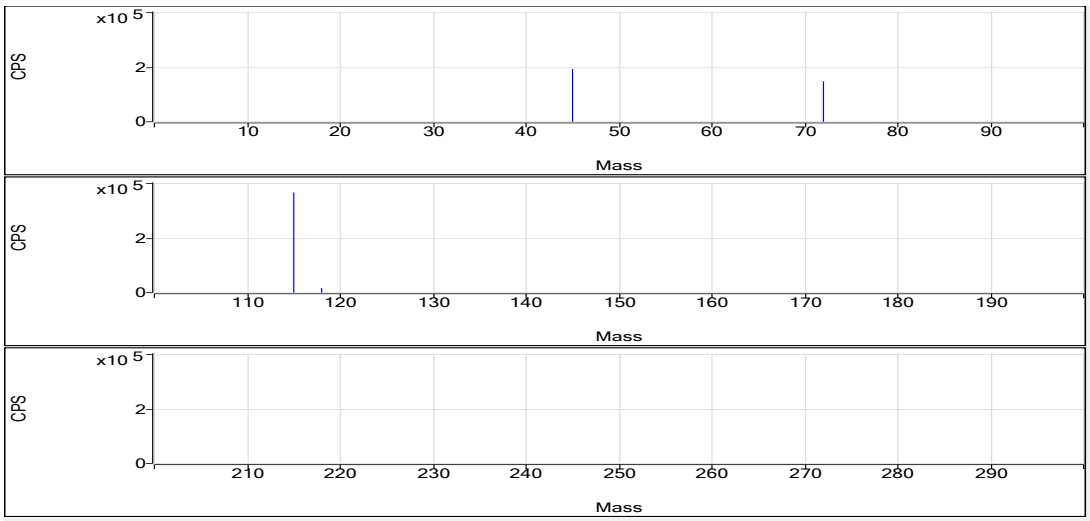
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2759367.04	1.1	117.6	Analog	0.1000	3
No Gas	Ge	72	1255487.01	0.4	104.6	Pulse	0.1000	3
H2	Sc	45	194390.48	0.4	111.9	Pulse	0.1000	3
H2	Ge	72	148945.86	0.8	99.6	Pulse	0.1000	3
H2	In	115	368432.58	0.5	100.7	Pulse	0.1000	3
He	Sc	45	53178.02	1.1	123.6	Pulse	0.1000	3
He	Ge	72	82813.24	1.0	106.0	Pulse	0.1000	3
He	In	115	81530.79	0.7	102.3	Pulse	0.1000	3
He	Tb	159	394941.06	0.7	107.3	Pulse	0.1000	3
He	Bi	209	305758.01	0.8	104.7	Pulse	0.1000	3

No Gas

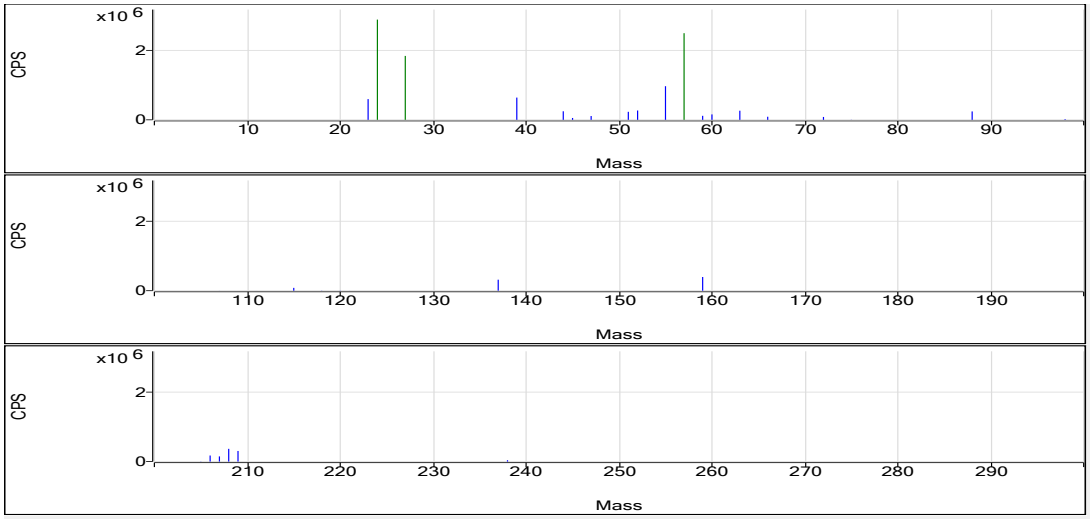


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1.682	0.0013	3462.42	0.0007	1.705E-05
Be	9	1	No Gas	1.587	0.0012	3328.39	0.0007	1.705E-05
Be	9	1	No Gas	1.639	0.0012	3368.40	0.0007	1.705E-05
Se	78	2	H2	1.232	0.0002	80.00	0.0002	6.062E-06
Se	78	2	H2	1.06	0.0002	69.33	0.0002	6.062E-06
Se	78	2	H2	1.178	0.0002	77.33	0.0002	6.062E-06
Na	23	3	He	2883.422	11.0725	593258.62	0.0037	0.3435
Na	23	3	He	2974.014	11.4095	598948.00	0.0037	0.3435
Na	23	3	He	2927.318	11.2358	600653.74	0.0037	0.3435
Mg	24	3	He	29702.914	54.2548	2906956.83	0.0018	0.002943
Mg	24	3	He	30292.773	55.3322	2904684.64	0.0018	0.002943
Mg	24	3	He	29325.09	53.5647	2863516.83	0.0018	0.002943
Al	27	3	He	57665.768	34.4188	1844148.25	0.0006	0.001008
Al	27	3	He	59328.319	35.4111	1858918.41	0.0006	0.001008
Al	27	3	He	57315.383	34.2097	1828814.19	0.0006	0.001008
K	39	3	He	9796.794	11.9089	638073.31	0.0012	0.4052
K	39	3	He	10065.714	12.2246	641736.98	0.0012	0.4052
K	39	3	He	9930.316	12.0656	645017.45	0.0012	0.4052
Ca	44	3	He	67306.586	4.6344	248308.28	0.0001	0.003486
Ca	44	3	He	68116.786	4.6901	246209.49	0.0001	0.003486
Ca	44	3	He	66631.039	4.5879	245264.16	0.0001	0.003486
Ti	47	3	He	3789.767	2.0512	109903.92	0.0005	0
Ti	47	3	He	3790.018	2.0514	107686.87	0.0005	0
Ti	47	3	He	3811.878	2.0632	110296.11	0.0005	0
V	51	3	He	191.75	4.2983	230302.06	0.0223	0.03097
V	51	3	He	196.87	4.4122	231622.47	0.0223	0.03097
V	51	3	He	192.998	4.3261	231267.78	0.0223	0.03097
Cr	52	3	He	172.061	5.0232	269143.80	0.029	0.03958
Cr	52	3	He	176.003	5.1374	269691.50	0.029	0.03958
Cr	52	3	He	170.746	4.9852	266501.85	0.029	0.03958
Mn	55	3	He	1385.393	18.0057	964739.28	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1427.315	18.5504	973812.88	0.013	0.003171
Mn	55	3	He	1398.589	18.1772	971732.88	0.013	0.003171
Fe	57	3	He	78175.832	46.0512	2467410.90	0.0006	0.002014
Fe	57	3	He	81722.114	48.1402	2527136.06	0.0006	0.002014
Fe	57	3	He	79508.035	46.836	2503803.40	0.0006	0.002014
Co	59	3	He	37.132	2.1278	114007.67	0.0572	0.004106
Co	59	3	He	39.207	2.2465	117930.20	0.0572	0.004106
Co	59	3	He	37.305	2.1377	114281.80	0.0572	0.004106
Ni	60	3	He	228.86	1.9169	158968.09	0.0084	0.003329
Ni	60	3	He	223.003	1.8679	156128.63	0.0084	0.003329
Ni	60	3	He	223.044	1.8683	153057.48	0.0084	0.003329
Cu	63	3	He	127.659	3.1597	262032.63	0.0247	0.004989
Cu	63	3	He	128.94	3.1913	266745.09	0.0247	0.004989
Cu	63	3	He	128.587	3.1826	260736.17	0.0247	0.004989
Zn	66	3	He	376.039	1.0846	87909.22	0.0029	0.006147
Zn	66	3	He	376.32	1.0854	89197.38	0.0029	0.006147
Zn	66	3	He	380.808	1.0982	89347.95	0.0029	0.006147
As	75	3	He	21.626	0.0444	3596.47	0.002	0.0009198
As	75	3	He	21.13	0.0434	3564.47	0.002	0.0009198
As	75	3	He	21.716	0.0446	3624.49	0.002	0.0009198
Sr	88	3	He	340.989	3.0037	243465.25	0.0088	0.0005022
Sr	88	3	He	334.935	2.9504	242467.05	0.0088	0.0005022
Sr	88	3	He	336.282	2.9622	240995.52	0.0088	0.0005022
Mo	98	3	He	10.333	0.2314	18753.24	0.0223	0.0006689
Mo	98	3	He	10.502	0.2351	19323.77	0.0223	0.0006689
Mo	98	3	He	10.769	0.2411	19614.52	0.0223	0.0006689
Ag	107	3	He	0.266	0.0132	1070.08	0.0471	0.0006687
Ag	107	3	He	0.231	0.0116	950.07	0.0471	0.0006687
Ag	107	3	He	0.317	0.0156	1270.10	0.0471	0.0006687
Cd	111	3	He	0.859	0.0046	374.01	0.0054	1.676E-05
Cd	111	3	He	0.688	0.0037	304.01	0.0054	1.676E-05
Cd	111	3	He	0.778	0.0042	340.01	0.0054	1.676E-05
Sn	120	3	He	3.239	0.0684	5541.27	0.0156	0.01794
Sn	120	3	He	3.14	0.0668	5491.33	0.0156	0.01794
Sn	120	3	He	3.239	0.0684	5561.30	0.0156	0.01794
Sb	121	3	He	0.968	0.0147	1190.09	0.0151	4.19E-05
Sb	121	3	He	0.713	0.0108	890.06	0.0151	4.19E-05
Sb	121	3	He	1.094	0.0166	1350.11	0.0151	4.19E-05
Ba	137	3	He	792.082	3.8762	314184.41	0.0049	0.0002094
Ba	137	3	He	796.596	3.8983	320366.56	0.0049	0.0002094
Ba	137	3	He	796.773	3.8991	317216.87	0.0049	0.0002094
Tl	205	3	He	0.478	0.0128	5071.22	0.0252	0.0007688
Tl	205	3	He	0.547	0.0146	5801.48	0.0252	0.0007688
Tl	205	3	He	0.458	0.0123	4831.08	0.0252	0.0007688
Pb	208	3	He	51.946	1.7542	367333.74	0.0337	0.001742
Pb	208	3	He	51.536	1.7403	367650.42	0.0337	0.001742
Pb	208	3	He	51.913	1.7531	366570.27	0.0337	0.001742
U	238	3	He	2.508	0.1262	38237.91	0.0502	0.0004339
U	238	3	He	2.535	0.1276	39060.36	0.0502	0.0004339
U	238	3	He	2.46	0.1238	38137.37	0.0502	0.0004339
Sc	45	1	No Gas			2745357.15		
Sc	45	1	No Gas			2794013.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2738730.27		
Ge	72	1	No Gas			1259080.22		
Ge	72	1	No Gas			1249982.17		
Ge	72	1	No Gas			1257398.65		
Sc	45	2	H2			194841.83		
Sc	45	2	H2			193540.54		
Sc	45	2	H2			194789.08		
Ge	72	2	H2			149433.23		
Ge	72	2	H2			147646.89		
Ge	72	2	H2			149757.47		
In	115	2	H2			366750.07		
In	115	2	H2			368010.62		
In	115	2	H2			370537.06		
Sc	45	3	He			53579.69		
Sc	45	3	He			52495.38		
Sc	45	3	He			53458.99		
Ge	72	3	He			82930.15		
Ge	72	3	He			83584.36		
Ge	72	3	He			81925.21		
In	115	3	He			81086.30		
In	115	3	He			82213.25		
In	115	3	He			81387.63		
Tb	159	3	He			394786.28		
Tb	159	3	He			397893.82		
Tb	159	3	He			392143.08		
Bi	209	3	He			303014.96		
Bi	209	3	He			306233.45		
Bi	209	3	He			308025.62		

Quantitation Report

Data File Name	108_CCV.d
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Acq Time	8/11/2023 10:48:13 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

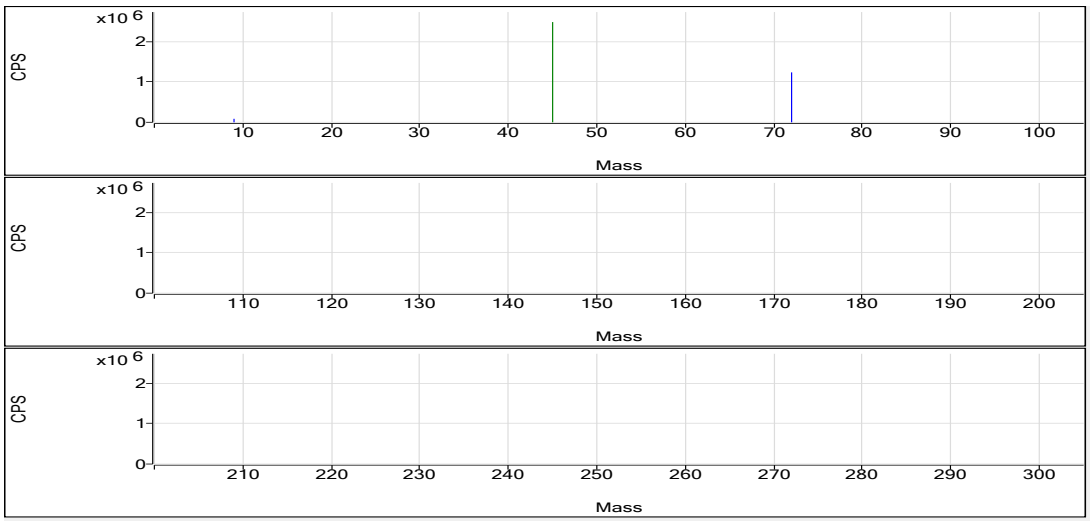
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.033	ppb	1.1	86567.75	0.0348	Pulse	0.5000	3
Se	78	115	H2	52.196	ppb	1.1	3384.63	0.0090	Pulse	1.5000	3
Na	23	45	He	4767.157	ppb	1.5	844871.63	18.0817	Pulse	0.1000	3
Mg	24	45	He	4954.846	ppb	1.7	422994.91	9.0529	Pulse	0.1000	3
Al	27	45	He	4890.872	ppb	1.5	136447.75	2.9201	Pulse	0.1000	3
K	39	45	He	5078.778	ppb	2.4	297562.26	6.3689	Pulse	0.1000	3
Ca	44	45	He	5050.048	ppb	2.7	16396.36	0.3509	Pulse	0.1000	3
Ti	47	45	He	5002.998	ppb	1.9	126523.78	2.7079	Pulse	0.1000	3
V	51	45	He	504.233	ppb	2.0	525750.44	11.2525	Pulse	0.5000	3
Cr	52	45	He	501.970	ppb	2.3	681146.79	14.5789	Pulse	0.1000	3
Mn	55	45	He	499.803	ppb	2.7	303580.31	6.4979	Pulse	0.1000	3
Fe	57	45	He	5025.197	ppb	2.4	138394.87	2.9621	Pulse	0.1000	3
Co	59	45	He	486.081	ppb	1.8	1299142.43	27.8050	Pulse	0.1000	3
Ni	60	72	He	536.562	ppb	1.3	365541.33	4.4897	Pulse	0.1000	3
Cu	63	72	He	515.007	ppb	0.9	1036621.29	12.7317	Pulse	0.1000	3
Zn	66	115	He	511.839	ppb	1.3	122646.94	1.4740	Pulse	0.1000	3
As	75	115	He	516.600	ppb	1.3	86438.90	1.0389	Pulse	0.5000	3
Sr	88	115	He	50.491	ppb	0.1	37046.30	0.4452	Pulse	0.1000	3
Mo	98	115	He	51.251	ppb	1.1	95265.19	1.1449	Pulse	0.1000	3
Ag	107	115	He	50.840	ppb	1.5	199240.18	2.3945	Pulse	0.1000	3
Cd	111	115	He	52.034	ppb	1.6	23178.54	0.2786	Pulse	0.5000	3
Sn	120	115	He	51.868	ppb	2.2	68673.72	0.8254	Pulse	0.1000	3
Sb	121	115	He	50.713	ppb	1.8	63831.01	0.7672	Pulse	0.1000	3
Ba	137	115	He	509.345	ppb	1.9	207396.78	2.4926	Pulse	0.1000	3
Tl	205	159	He	51.091	ppb	0.8	494408.64	1.2904	Pulse	0.1000	3
Pb	208	159	He	51.146	ppb	1.2	661711.33	1.7272	Pulse	0.1000	3
U	238	209	He	50.536	ppb	0.4	759990.51	2.5348	Pulse	0.1000	3

ISTD Table:

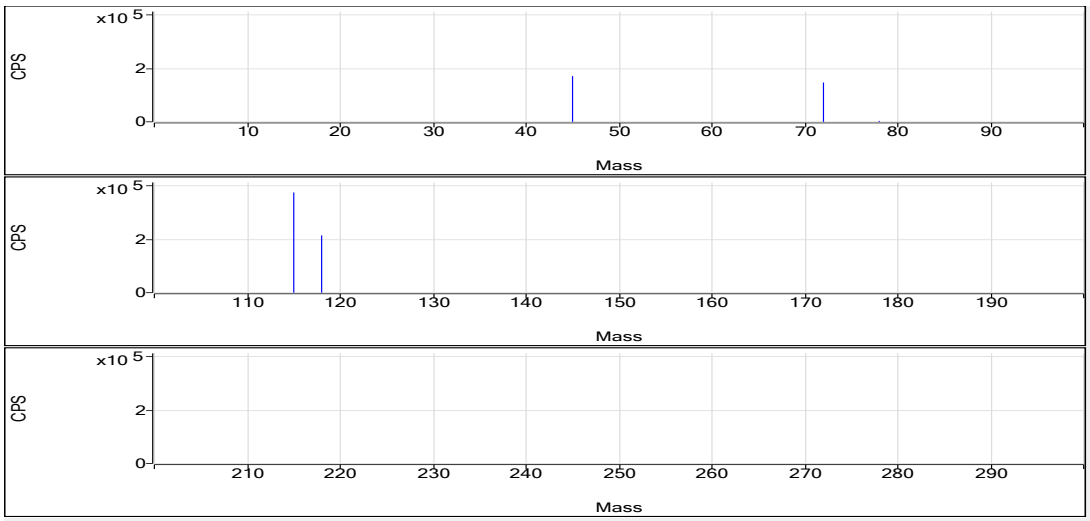
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2486465.38	0.4	105.9	Analog	0.1000	3
No Gas	Ge	72	1238358.00	0.5	103.2	Pulse	0.1000	3
H2	Sc	45	171601.96	0.5	98.8	Pulse	0.1000	3
H2	Ge	72	147639.78	2.3	98.7	Pulse	0.1000	3
H2	In	115	376616.58	0.8	102.9	Pulse	0.1000	3
He	Sc	45	46732.85	1.7	108.6	Pulse	0.1000	3
He	Ge	72	81425.08	1.0	104.2	Pulse	0.1000	3
He	In	115	83214.31	1.2	104.4	Pulse	0.1000	3
He	Tb	159	383141.66	0.9	104.1	Pulse	0.1000	3
He	Bi	209	299817.87	1.0	102.7	Pulse	0.1000	3

No Gas

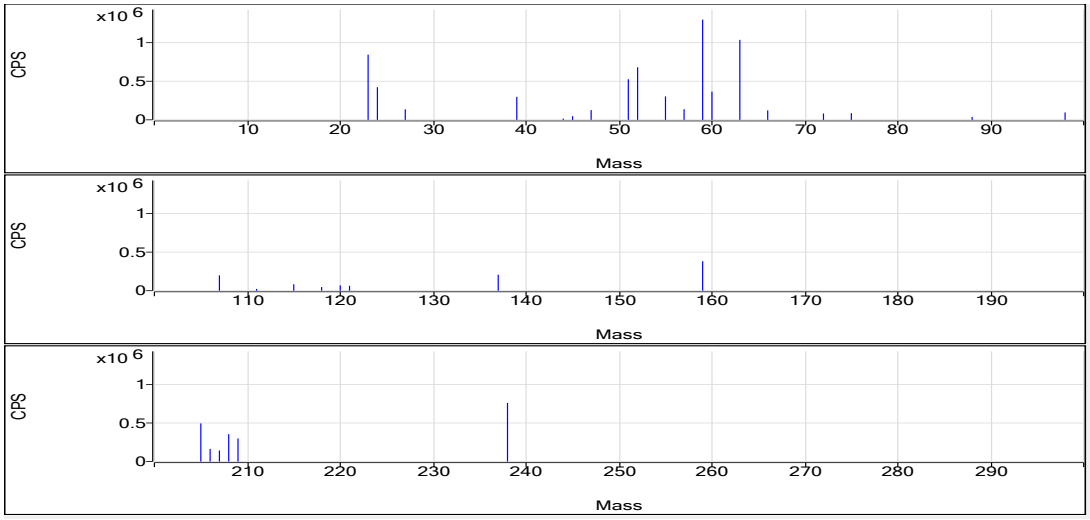


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.473	0.0344	85751.69	0.0007	1.705E-05
Be	9	1	No Gas	47.5	0.0352	87073.26	0.0007	1.705E-05
Be	9	1	No Gas	47.127	0.0349	86878.31	0.0007	1.705E-05
Se	78	2	H2	52.495	0.009	3375.07	0.0002	6.062E-06
Se	78	2	H2	51.507	0.0089	3363.73	0.0002	6.062E-06
Se	78	2	H2	52.586	0.0091	3415.08	0.0002	6.062E-06
Na	23	3	He	4823.004	18.2895	846711.00	0.0037	0.3435
Na	23	3	He	4685.178	17.7766	846689.91	0.0037	0.3435
Na	23	3	He	4793.291	18.1789	841213.97	0.0037	0.3435
Mg	24	3	He	5036.192	9.2015	425981.79	0.0018	0.002943
Mg	24	3	He	4865.917	8.8905	423447.10	0.0018	0.002943
Mg	24	3	He	4962.43	9.0667	419555.85	0.0018	0.002943
Al	27	3	He	4966.808	2.9654	137285.26	0.0006	0.001008
Al	27	3	He	4823.37	2.8798	137164.70	0.0006	0.001008
Al	27	3	He	4882.437	2.9151	134893.29	0.0006	0.001008
K	39	3	He	5178.406	6.4858	300262.28	0.0012	0.4052
K	39	3	He	4939.982	6.2059	295582.44	0.0012	0.4052
K	39	3	He	5117.947	6.4149	296842.07	0.0012	0.4052
Ca	44	3	He	5182.862	0.3601	16670.00	0.0001	0.003486
Ca	44	3	He	4911.011	0.3414	16259.62	0.0001	0.003486
Ca	44	3	He	5056.271	0.3514	16259.46	0.0001	0.003486
Ti	47	3	He	5093.387	2.7568	127626.59	0.0005	0
Ti	47	3	He	4905.273	2.655	126455.74	0.0005	0
Ti	47	3	He	5010.333	2.7119	125489.01	0.0005	0
V	51	3	He	512.482	11.4361	529434.38	0.0223	0.03097
V	51	3	He	493.013	11.0028	524056.94	0.0223	0.03097
V	51	3	He	507.204	11.3186	523760.00	0.0223	0.03097
Cr	52	3	He	511.648	14.8592	687907.49	0.029	0.03958
Cr	52	3	He	489.057	14.2049	676569.68	0.029	0.03958
Cr	52	3	He	505.205	14.6726	678963.19	0.029	0.03958
Mn	55	3	He	512.086	6.6575	308208.39	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	485.38	6.3105	300562.85	0.013	0.003171
Mn	55	3	He	501.942	6.5257	301969.70	0.013	0.003171
Fe	57	3	He	5145.015	3.0327	140397.38	0.0006	0.002014
Fe	57	3	He	4902.888	2.89	137651.03	0.0006	0.002014
Fe	57	3	He	5027.689	2.9636	137136.19	0.0006	0.002014
Co	59	3	He	491.989	28.1429	1302874.67	0.0572	0.004106
Co	59	3	He	475.833	27.2189	1296417.17	0.0572	0.004106
Co	59	3	He	490.42	28.0531	1298135.45	0.0572	0.004106
Ni	60	3	He	535.05	4.477	366326.52	0.0084	0.003329
Ni	60	3	He	530.417	4.4383	363693.74	0.0084	0.003329
Ni	60	3	He	544.219	4.5537	366603.74	0.0084	0.003329
Cu	63	3	He	513.16	12.6861	1038021.55	0.0247	0.004989
Cu	63	3	He	511.55	12.6463	1036294.83	0.0247	0.004989
Cu	63	3	He	520.313	12.8628	1035547.48	0.0247	0.004989
Zn	66	3	He	513.329	1.4783	123517.15	0.0029	0.006147
Zn	66	3	He	517.759	1.491	122338.02	0.0029	0.006147
Zn	66	3	He	504.428	1.4528	122085.64	0.0029	0.006147
As	75	3	He	517.295	1.0403	86917.73	0.002	0.0009198
As	75	3	He	523.141	1.052	86318.27	0.002	0.0009198
As	75	3	He	509.362	1.0243	86080.70	0.002	0.0009198
Sr	88	3	He	50.467	0.445	37179.73	0.0088	0.0005022
Sr	88	3	He	50.518	0.4454	36548.45	0.0088	0.0005022
Sr	88	3	He	50.488	0.4452	37410.73	0.0088	0.0005022
Mo	98	3	He	51.074	1.141	95332.93	0.0223	0.0006689
Mo	98	3	He	51.905	1.1595	95140.44	0.0223	0.0006689
Mo	98	3	He	50.775	1.1343	95322.20	0.0223	0.0006689
Ag	107	3	He	51.147	2.409	201281.03	0.0471	0.0006687
Ag	107	3	He	51.384	2.4201	198575.02	0.0471	0.0006687
Ag	107	3	He	49.99	2.3545	197864.49	0.0471	0.0006687
Cd	111	3	He	51.723	0.2769	23137.13	0.0054	1.676E-05
Cd	111	3	He	52.989	0.2837	23277.40	0.0054	1.676E-05
Cd	111	3	He	51.39	0.2751	23121.10	0.0054	1.676E-05
Sn	120	3	He	52.043	0.8281	69193.22	0.0156	0.01794
Sn	120	3	He	52.907	0.8416	69052.17	0.0156	0.01794
Sn	120	3	He	50.654	0.8065	67775.78	0.0156	0.01794
Sb	121	3	He	49.854	0.7542	63013.84	0.0151	4.19E-05
Sb	121	3	He	51.698	0.7821	64169.51	0.0151	4.19E-05
Sb	121	3	He	50.587	0.7653	64309.67	0.0151	4.19E-05
Ba	137	3	He	513.227	2.5116	209857.89	0.0049	0.0002094
Ba	137	3	He	516.507	2.5277	207400.35	0.0049	0.0002094
Ba	137	3	He	498.3	2.4386	204932.11	0.0049	0.0002094
Tl	205	3	He	50.649	1.2792	492627.38	0.0252	0.0007688
Tl	205	3	He	51.425	1.2988	500264.41	0.0252	0.0007688
Tl	205	3	He	51.2	1.2932	490334.13	0.0252	0.0007688
Pb	208	3	He	50.777	1.7148	353561.60	0.0337	0.001742
Pb	208	3	He	50.777	1.7148	354335.85	0.0337	0.001742
Pb	208	3	He	51.884	1.7521	356942.73	0.0337	0.001742
U	238	3	He	50.677	2.5419	770121.63	0.0502	0.0004339
U	238	3	He	50.598	2.5379	754593.58	0.0502	0.0004339
U	238	3	He	50.332	2.5246	755256.32	0.0502	0.0004339
Sc	45	1	No Gas			2492633.87		
Sc	45	1	No Gas			2476384.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2490377.46		
Ge	72	1	No Gas			1231492.79		
Ge	72	1	No Gas			1240991.78		
Ge	72	1	No Gas			1242589.43		
Sc	45	2	H2			170933.90		
Sc	45	2	H2			171258.69		
Sc	45	2	H2			172613.28		
Ge	72	2	H2			146191.18		
Ge	72	2	H2			145150.25		
Ge	72	2	H2			151577.92		
In	115	2	H2			373399.02		
In	115	2	H2			379275.03		
In	115	2	H2			377175.70		
Sc	45	3	He			46295.00		
Sc	45	3	He			47629.38		
Sc	45	3	He			46274.17		
Ge	72	3	He			81823.71		
Ge	72	3	He			81944.59		
Ge	72	3	He			80506.93		
In	115	3	He			83922.82		
In	115	3	He			82424.78		
In	115	3	He			84396.01		
Tb	159	3	He			385092.42		
Tb	159	3	He			385159.72		
Tb	159	3	He			379172.85		
Bi	209	3	He			302970.44		
Bi	209	3	He			297326.38		
Bi	209	3	He			299156.79		

Quantitation Report

Data File Name	109_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:50:32 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

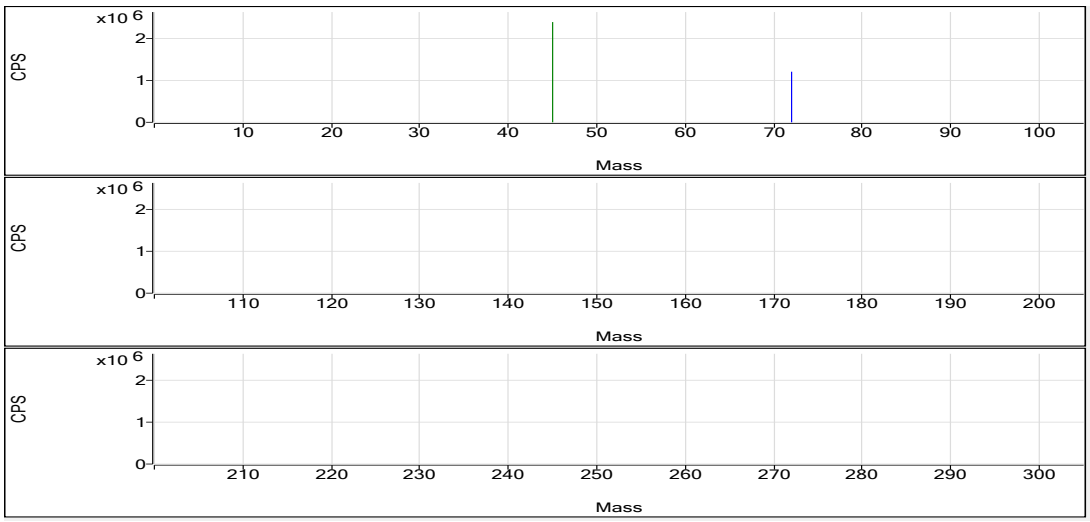
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	289.3	47.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.020	ppb	211.0	3.56	0.0000	Pulse	1.5000	3
Na	23	45	He	1.013	ppb	65.5	15959.12	0.3473	Pulse	0.1000	3
Mg	24	45	He	1.285	ppb	55.6	243.34	0.0053	Pulse	0.1000	3
Al	27	45	He	1.837	ppb	101.7	96.67	0.0021	Pulse	0.1000	3
K	39	45	He	-3.404	ppb	N/A	18442.13	0.4012	Pulse	0.1000	3
Ca	44	45	He	-21.120	ppb	N/A	93.33	0.0020	Pulse	0.1000	3
Ti	47	45	He	0.537	ppb	86.6	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	-0.091	ppb	N/A	1330.74	0.0290	Pulse	0.5000	3
Cr	52	45	He	-0.002	ppb	N/A	1816.85	0.0395	Pulse	0.1000	3
Mn	55	45	He	0.062	ppb	240.8	183.34	0.0040	Pulse	0.1000	3
Fe	57	45	He	1.387	ppb	117.2	130.01	0.0028	Pulse	0.1000	3
Co	59	45	He	0.047	ppb	20.2	313.35	0.0068	Pulse	0.1000	3
Ni	60	72	He	0.059	ppb	202.7	303.35	0.0038	Pulse	0.1000	3
Cu	63	72	He	0.113	ppb	70.7	620.03	0.0078	Pulse	0.1000	3
Zn	66	115	He	-0.545	ppb	N/A	373.35	0.0046	Pulse	0.1000	3
As	75	115	He	0.035	ppb	188.6	80.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.073	ppb	87.9	93.33	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.018	ppb	37.8	86.67	0.0011	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	43.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	74.8	4.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.094	ppb	N/A	1343.45	0.0165	Pulse	0.1000	3
Sb	121	115	He	0.049	ppb	25.6	63.33	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.083	ppb	31.4	50.00	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.036	ppb	8.4	633.37	0.0017	Pulse	0.1000	3
Pb	208	159	He	-0.004	ppb	N/A	606.69	0.0016	Pulse	0.1000	3
U	238	209	He	0.023	ppb	14.1	480.02	0.0016	Pulse	0.1000	3

ISTD Table:

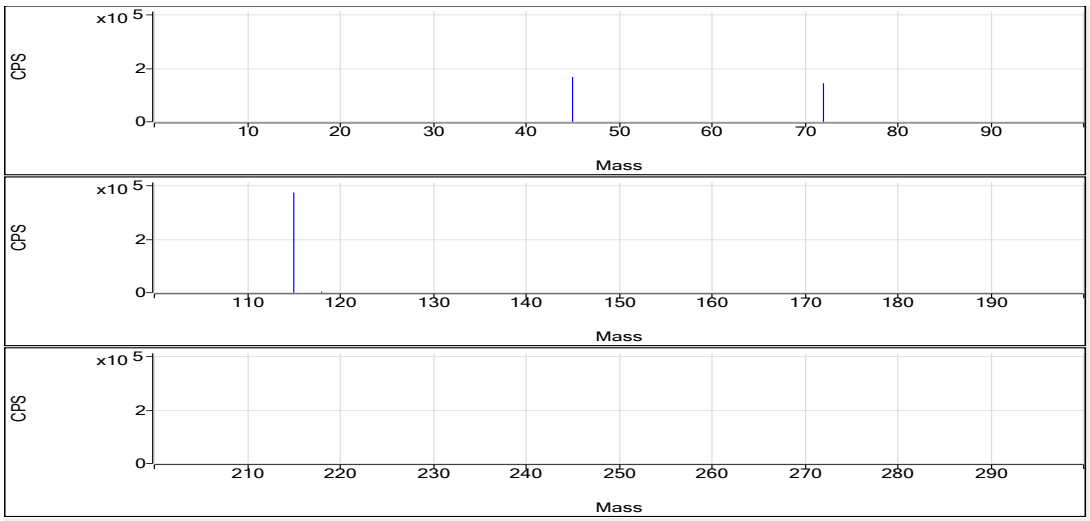
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2399682.46	0.9	102.2	Analog	0.1000	3
No Gas	Ge	72	1211071.94	1.4	100.9	Pulse	0.1000	3
H2	Sc	45	167997.47	0.6	96.7	Pulse	0.1000	3
H2	Ge	72	144777.91	0.5	96.8	Pulse	0.1000	3
H2	In	115	376008.51	0.2	102.7	Pulse	0.1000	3
He	Sc	45	45956.68	0.7	106.8	Pulse	0.1000	3
He	Ge	72	79551.84	1.6	101.8	Pulse	0.1000	3
He	In	115	81458.10	1.0	102.2	Pulse	0.1000	3
He	Tb	159	379362.01	0.4	103.1	Pulse	0.1000	3
He	Bi	209	299533.18	0.8	102.6	Pulse	0.1000	3

No Gas

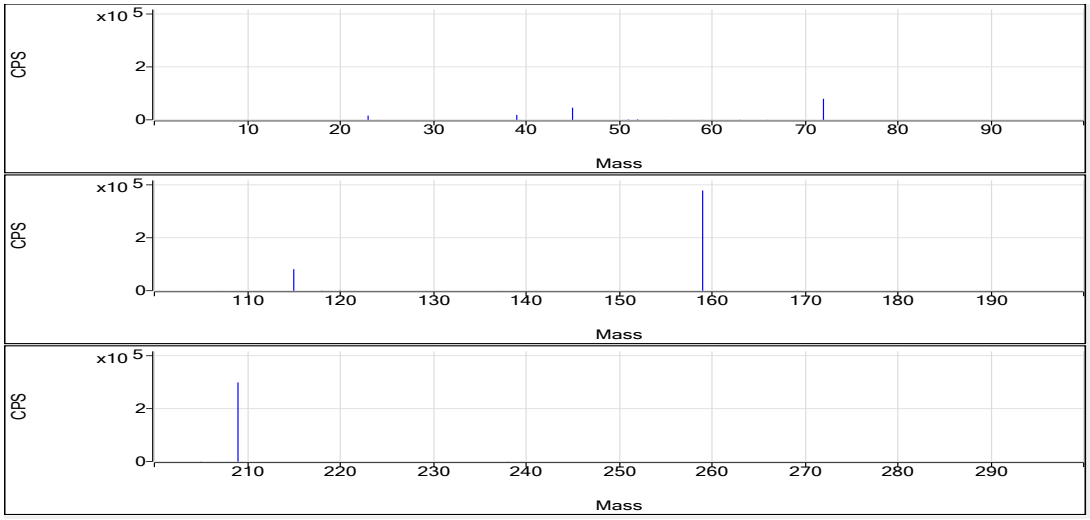


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.008	0	56.00	0.0007	1.705E-05
Be	9	1	No Gas	0.01	0	60.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.008	0	26.00	0.0007	1.705E-05
Se	78	2	H2	0.058	0	6.00	0.0002	6.062E-06
Se	78	2	H2	0.026	0	4.00	0.0002	6.062E-06
Se	78	2	H2	-0.025	0	0.67	0.0002	6.062E-06
Na	23	3	He	0.521	0.3454	15748.86	0.0037	0.3435
Na	23	3	He	1.767	0.3501	16139.35	0.0037	0.3435
Na	23	3	He	0.75	0.3463	15989.15	0.0037	0.3435
Mg	24	3	He	0.67	0.0042	190.01	0.0018	0.002943
Mg	24	3	He	2.07	0.0067	310.01	0.0018	0.002943
Mg	24	3	He	1.116	0.005	230.01	0.0018	0.002943
Al	27	3	He	2.354	0.0024	110.00	0.0006	0.001008
Al	27	3	He	-0.235	0.0009	40.00	0.0006	0.001008
Al	27	3	He	3.392	0.003	140.01	0.0006	0.001008
K	39	3	He	-13.909	0.3889	17731.34	0.0012	0.4052
K	39	3	He	2.942	0.4087	18842.51	0.0012	0.4052
K	39	3	He	0.754	0.4061	18752.55	0.0012	0.4052
Ca	44	3	He	-12.416	0.0026	120.00	0.0001	0.003486
Ca	44	3	He	-28.602	0.0015	70.00	0.0001	0.003486
Ca	44	3	He	-22.341	0.0019	90.00	0.0001	0.003486
Ti	47	3	He	0.81	0.0004	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.8	0.0004	20.00	0.0005	0
V	51	3	He	-0.079	0.0292	1332.07	0.0223	0.03097
V	51	3	He	-0.101	0.0287	1324.07	0.0223	0.03097
V	51	3	He	-0.091	0.0289	1336.07	0.0223	0.03097
Cr	52	3	He	0.042	0.0408	1860.19	0.029	0.03958
Cr	52	3	He	-0.071	0.0375	1730.17	0.029	0.03958
Cr	52	3	He	0.024	0.0403	1860.19	0.029	0.03958
Mn	55	3	He	-0.075	0.0022	100.00	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.04	0.0037	170.01	0.013	0.003171
Mn	55	3	He	0.223	0.0061	280.01	0.013	0.003171
Fe	57	3	He	2.539	0.0035	160.01	0.0006	0.002014
Fe	57	3	He	-0.473	0.0017	80.00	0.0006	0.002014
Fe	57	3	He	2.096	0.0032	150.01	0.0006	0.002014
Co	59	3	He	0.047	0.0068	310.01	0.0572	0.004106
Co	59	3	He	0.057	0.0074	340.02	0.0572	0.004106
Co	59	3	He	0.038	0.0063	290.01	0.0572	0.004106
Ni	60	3	He	-0.014	0.0032	260.01	0.0084	0.003329
Ni	60	3	He	0.197	0.005	390.02	0.0084	0.003329
Ni	60	3	He	-0.006	0.0033	260.01	0.0084	0.003329
Cu	63	3	He	0.203	0.01	810.05	0.0247	0.004989
Cu	63	3	He	0.082	0.007	550.03	0.0247	0.004989
Cu	63	3	He	0.053	0.0063	500.02	0.0247	0.004989
Zn	66	3	He	-0.662	0.0042	350.02	0.0029	0.006147
Zn	66	3	He	-0.375	0.0051	410.02	0.0029	0.006147
Zn	66	3	He	-0.597	0.0044	360.02	0.0029	0.006147
As	75	3	He	0.086	0.0011	90.00	0.002	0.0009198
As	75	3	He	-0.039	0.0008	68.00	0.002	0.0009198
As	75	3	He	0.057	0.001	84.00	0.002	0.0009198
Sr	88	3	He	0.108	0.0015	120.00	0.0088	0.0005022
Sr	88	3	He	0.112	0.0015	120.00	0.0088	0.0005022
Sr	88	3	He	-0.001	0.0005	40.00	0.0088	0.0005022
Mo	98	3	He	0.014	0.001	80.00	0.0223	0.0006689
Mo	98	3	He	0.025	0.0012	100.00	0.0223	0.0006689
Mo	98	3	He	0.014	0.001	80.00	0.0223	0.0006689
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	0.002	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.012	0.0001	10.00	0.0471	0.0006687
Cd	111	3	He	0.01	0.0001	6.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Sn	120	3	He	-0.014	0.0177	1460.12	0.0156	0.01794
Sn	120	3	He	-0.072	0.0168	1360.12	0.0156	0.01794
Sn	120	3	He	-0.195	0.0149	1210.11	0.0156	0.01794
Sb	121	3	He	0.045	0.0007	60.00	0.0151	4.19E-05
Sb	121	3	He	0.038	0.0006	50.00	0.0151	4.19E-05
Sb	121	3	He	0.062	0.001	80.00	0.0151	4.19E-05
Ba	137	3	He	0.056	0.0005	40.00	0.0049	0.0002094
Ba	137	3	He	0.084	0.0006	50.00	0.0049	0.0002094
Ba	137	3	He	0.108	0.0007	60.00	0.0049	0.0002094
Tl	205	3	He	0.038	0.0017	660.04	0.0252	0.0007688
Tl	205	3	He	0.032	0.0016	600.03	0.0252	0.0007688
Tl	205	3	He	0.037	0.0017	640.05	0.0252	0.0007688
Pb	208	3	He	-0.014	0.0013	310.02	0.0337	0.001742
Pb	208	3	He	0.007	0.002	410.02	0.0337	0.001742
Pb	208	3	He	-0.006	0.0015	290.01	0.0337	0.001742
U	238	3	He	0.021	0.0015	440.02	0.0502	0.0004339
U	238	3	He	0.022	0.0015	460.02	0.0502	0.0004339
U	238	3	He	0.027	0.0018	540.03	0.0502	0.0004339
Sc	45	1	No Gas			2399872.62		
Sc	45	1	No Gas			2421762.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2377411.84		
Ge	72	1	No Gas			1217818.97		
Ge	72	1	No Gas			1223720.37		
Ge	72	1	No Gas			1191676.47		
Sc	45	2	H2			167475.37		
Sc	45	2	H2			167394.69		
Sc	45	2	H2			169122.36		
Ge	72	2	H2			145414.47		
Ge	72	2	H2			144110.32		
Ge	72	2	H2			144808.94		
In	115	2	H2			375333.59		
In	115	2	H2			376796.36		
In	115	2	H2			375895.58		
Sc	45	3	He			45592.30		
Sc	45	3	He			46103.79		
Sc	45	3	He			46173.96		
Ge	72	3	He			80869.53		
Ge	72	3	He			78385.70		
Ge	72	3	He			79400.28		
In	115	3	He			82404.64		
In	115	3	He			80835.30		
In	115	3	He			81156.66		
Tb	159	3	He			381060.89		
Tb	159	3	He			378379.92		
Tb	159	3	He			378645.23		
Bi	209	3	He			297212.96		
Bi	209	3	He			299677.30		
Bi	209	3	He			301709.27		

Quantitation Report

Data File Name	110SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:52:39 AM
Sample Name	MB 410-403512/1-A
Sample Type	Sample
Comment	D25
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

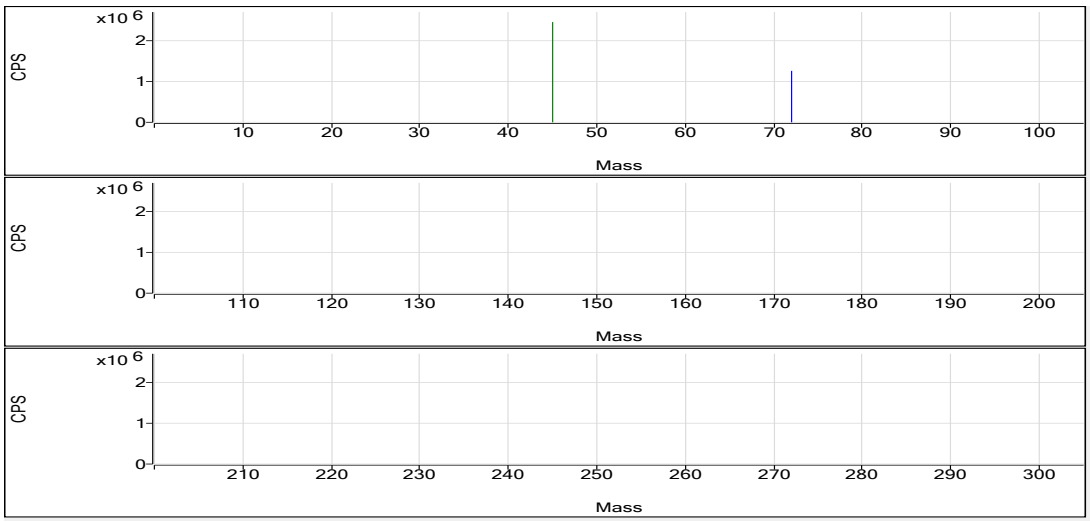
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	40.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.009	ppb	359.7	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	-2.266	ppb	N/A	15785.53	0.3351	Pulse	0.1000	3
Mg	24	45	He	1.991	ppb	26.1	310.01	0.0066	Pulse	0.1000	3
Al	27	45	He	2.697	ppb	6.6	123.33	0.0026	Pulse	0.1000	3
K	39	45	He	-10.155	ppb	N/A	18525.62	0.3933	Pulse	0.1000	3
Ca	44	45	He	2.995	ppb	562.9	173.34	0.0037	Pulse	0.1000	3
Ti	47	45	He	0.655	ppb	91.0	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	-0.071	ppb	N/A	1385.41	0.0294	Pulse	0.5000	3
Cr	52	45	He	-0.052	ppb	N/A	1793.50	0.0381	Pulse	0.1000	3
Mn	55	45	He	0.056	ppb	147.8	183.34	0.0039	Pulse	0.1000	3
Fe	57	45	He	1.274	ppb	79.1	130.01	0.0028	Pulse	0.1000	3
Co	59	45	He	0.012	ppb	106.0	226.68	0.0048	Pulse	0.1000	3
Ni	60	72	He	-0.029	ppb	N/A	256.68	0.0031	Pulse	0.1000	3
Cu	63	72	He	0.049	ppb	41.2	516.69	0.0062	Pulse	0.1000	3
Zn	66	115	He	0.719	ppb	39.1	676.71	0.0082	Pulse	0.1000	3
As	75	115	He	-0.068	ppb	N/A	64.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.094	ppb	24.9	110.01	0.0013	Pulse	0.1000	3
Mo	98	115	He	0.006	ppb	182.1	66.67	0.0008	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	3495.7	56.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	212.8	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.064	ppb	N/A	1396.79	0.0169	Pulse	0.1000	3
Sb	121	115	He	0.034	ppb	106.3	46.67	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.048	ppb	107.9	36.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.002	ppb	78.8	316.68	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.001	ppb	1482.6	673.37	0.0018	Pulse	0.1000	3
U	238	209	He	0.001	ppb	179.2	153.34	0.0005	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2453111.26	1.4	104.5	Analog	0.1000	3
No Gas	Ge	72	1258887.69	0.7	104.9	Pulse	0.1000	3
H2	Sc	45	173164.89	0.9	99.7	Pulse	0.1000	3
H2	Ge	72	151641.42	1.7	101.4	Pulse	0.1000	3
H2	In	115	377630.83	0.6	103.2	Pulse	0.1000	3
He	Sc	45	47110.44	1.7	109.5	Pulse	0.1000	3
He	Ge	72	83185.40	1.4	106.4	Pulse	0.1000	3
He	In	115	82439.67	0.7	103.4	Pulse	0.1000	3
He	Tb	159	382543.46	0.9	104.0	Pulse	0.1000	3
He	Bi	209	304550.17	0.6	104.3	Pulse	0.1000	3

No Gas



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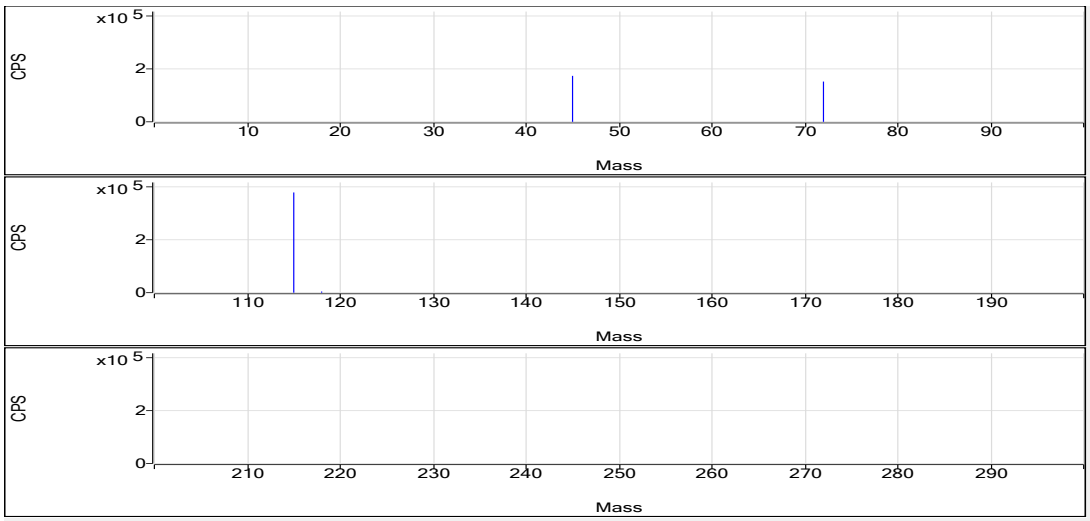
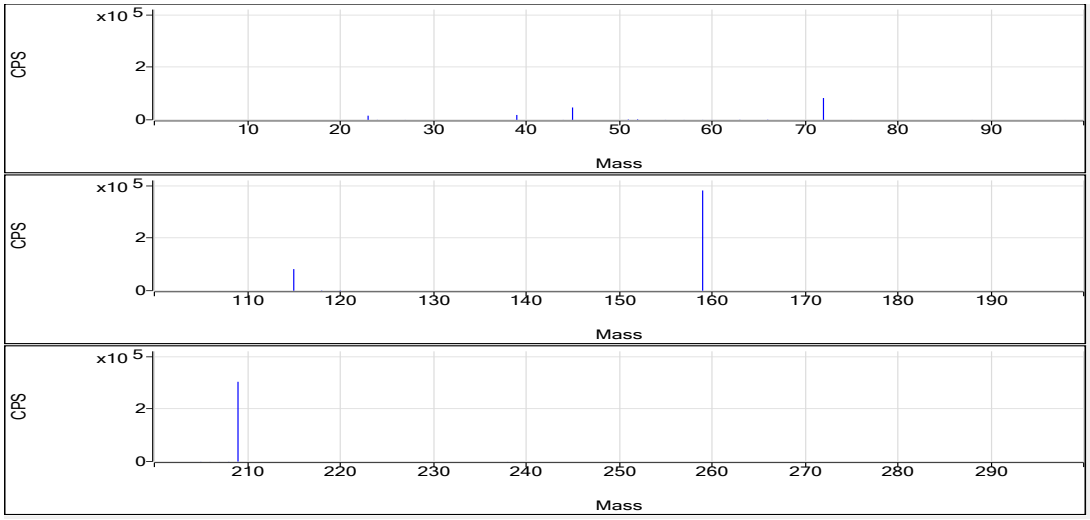


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	42.00	0.0007	1.705E-05
Be	9	1	No Gas	-0.003	0	36.00	0.0007	1.705E-05
Be	9	1	No Gas	0.002	0	44.00	0.0007	1.705E-05
Se	78	2	H2	-0.004	0	2.00	0.0002	6.062E-06
Se	78	2	H2	-0.015	0	1.33	0.0002	6.062E-06
Se	78	2	H2	0.046	0	5.33	0.0002	6.062E-06
Na	23	3	He	-2.745	0.3333	15388.46	0.0037	0.3435
Na	23	3	He	-4.656	0.3262	15518.53	0.0037	0.3435
Na	23	3	He	0.603	0.3457	16449.60	0.0037	0.3435
Mg	24	3	He	1.946	0.0065	300.01	0.0018	0.002943
Mg	24	3	He	1.496	0.0057	270.01	0.0018	0.002943
Mg	24	3	He	2.531	0.0076	360.01	0.0018	0.002943
Al	27	3	He	2.666	0.0026	120.00	0.0006	0.001008
Al	27	3	He	2.889	0.0027	130.00	0.0006	0.001008
Al	27	3	He	2.537	0.0025	120.00	0.0006	0.001008
K	39	3	He	-3.305	0.4014	18532.36	0.0012	0.4052
K	39	3	He	-13.939	0.3889	18502.29	0.0012	0.4052
K	39	3	He	-13.223	0.3897	18542.22	0.0012	0.4052
Ca	44	3	He	21.731	0.005	230.01	0.0001	0.003486
Ca	44	3	He	-10.955	0.0027	130.01	0.0001	0.003486
Ca	44	3	He	-1.79	0.0034	160.01	0.0001	0.003486
Ti	47	3	He	0.8	0.0004	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.165	0.0006	30.00	0.0005	0
V	51	3	He	-0.119	0.0283	1308.07	0.0223	0.03097
V	51	3	He	-0.083	0.0291	1386.07	0.0223	0.03097
V	51	3	He	-0.011	0.0307	1462.08	0.0223	0.03097
Cr	52	3	He	-0.043	0.0383	1770.16	0.029	0.03958
Cr	52	3	He	-0.002	0.0395	1880.20	0.029	0.03958
Cr	52	3	He	-0.111	0.0364	1730.15	0.029	0.03958
Mn	55	3	He	0.073	0.0041	190.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.034	0.0027	130.01	0.013	0.003171
Mn	55	3	He	0.128	0.0048	230.01	0.013	0.003171
Fe	57	3	He	2.096	0.0032	150.01	0.0006	0.002014
Fe	57	3	He	0.149	0.0021	100.00	0.0006	0.002014
Fe	57	3	He	1.577	0.0029	140.01	0.0006	0.002014
Co	59	3	He	0.015	0.005	230.01	0.0572	0.004106
Co	59	3	He	-0.002	0.004	190.01	0.0572	0.004106
Co	59	3	He	0.024	0.0055	260.01	0.0572	0.004106
Ni	60	3	He	-0.047	0.0029	240.01	0.0084	0.003329
Ni	60	3	He	0.016	0.0035	290.01	0.0084	0.003329
Ni	60	3	He	-0.056	0.0029	240.01	0.0084	0.003329
Cu	63	3	He	0.041	0.006	490.02	0.0247	0.004989
Cu	63	3	He	0.035	0.0059	490.02	0.0247	0.004989
Cu	63	3	He	0.073	0.0068	570.03	0.0247	0.004989
Zn	66	3	He	1.042	0.0091	750.05	0.0029	0.006147
Zn	66	3	He	0.531	0.0077	630.04	0.0029	0.006147
Zn	66	3	He	0.585	0.0078	650.04	0.0029	0.006147
As	75	3	He	-0.155	0.0006	50.00	0.002	0.0009198
As	75	3	He	-0.009	0.0009	74.00	0.002	0.0009198
As	75	3	He	-0.038	0.0008	70.00	0.002	0.0009198
Sr	88	3	He	0.109	0.0015	120.01	0.0088	0.0005022
Sr	88	3	He	0.067	0.0011	90.00	0.0088	0.0005022
Sr	88	3	He	0.107	0.0014	120.01	0.0088	0.0005022
Mo	98	3	He	0.003	0.0007	60.00	0.0223	0.0006689
Mo	98	3	He	0.019	0.0011	90.00	0.0223	0.0006689
Mo	98	3	He	-0.003	0.0006	50.00	0.0223	0.0006689
Ag	107	3	He	-0.004	0.0005	40.00	0.0471	0.0006687
Ag	107	3	He	-0.009	0.0002	20.00	0.0471	0.0006687
Ag	107	3	He	0.014	0.0013	110.00	0.0471	0.0006687
Cd	111	3	He	0.015	0.0001	8.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	-0.003	0	0.00	0.0054	1.676E-05
Sn	120	3	He	-0.034	0.0174	1430.12	0.0156	0.01794
Sn	120	3	He	-0.026	0.0175	1440.13	0.0156	0.01794
Sn	120	3	He	-0.132	0.0159	1320.11	0.0156	0.01794
Sb	121	3	He	0.013	0.0002	20.00	0.0151	4.19E-05
Sb	121	3	He	0.013	0.0002	20.00	0.0151	4.19E-05
Sb	121	3	He	0.077	0.0012	100.00	0.0151	4.19E-05
Ba	137	3	He	0.107	0.0007	60.00	0.0049	0.0002094
Ba	137	3	He	0.007	0.0002	20.00	0.0049	0.0002094
Ba	137	3	He	0.031	0.0004	30.00	0.0049	0.0002094
Tl	205	3	He	0.004	0.0009	330.01	0.0252	0.0007688
Tl	205	3	He	0.003	0.0008	320.02	0.0252	0.0007688
Tl	205	3	He	0	0.0008	300.02	0.0252	0.0007688
Pb	208	3	He	-0.001	0.0017	320.02	0.0337	0.001742
Pb	208	3	He	0.009	0.0021	470.03	0.0337	0.001742
Pb	208	3	He	-0.007	0.0015	310.01	0.0337	0.001742
U	238	3	He	-0.001	0.0004	110.00	0.0502	0.0004339
U	238	3	He	0.003	0.0006	170.01	0.0502	0.0004339
U	238	3	He	0.003	0.0006	180.01	0.0502	0.0004339
Sc	45	1	No Gas			2459941.21		
Sc	45	1	No Gas			2484762.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2414630.43		
Ge	72	1	No Gas			1263330.61		
Ge	72	1	No Gas			1265153.65		
Ge	72	1	No Gas			1248178.81		
Sc	45	2	H2			171338.45		
Sc	45	2	H2			173708.71		
Sc	45	2	H2			174447.52		
Ge	72	2	H2			149091.44		
Ge	72	2	H2			151628.39		
Ge	72	2	H2			154204.44		
In	115	2	H2			376751.32		
In	115	2	H2			375997.34		
In	115	2	H2			380143.82		
Sc	45	3	He			46173.66		
Sc	45	3	He			47578.94		
Sc	45	3	He			47578.73		
Ge	72	3	He			81803.98		
Ge	72	3	He			83725.03		
Ge	72	3	He			84027.18		
In	115	3	He			82102.21		
In	115	3	He			82162.17		
In	115	3	He			83078.58		
Tb	159	3	He			378534.02		
Tb	159	3	He			383915.58		
Tb	159	3	He			385180.78		
Bi	209	3	He			305504.94		
Bi	209	3	He			302455.33		
Bi	209	3	He			305690.25		

Quantitation Report

Data File Name	111SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H11A00.b
Acq Time	8/11/2023 10:54:43 AM
Sample Name	LCS 410-403512/2-A
Sample Type	Sample
Comment	D25
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

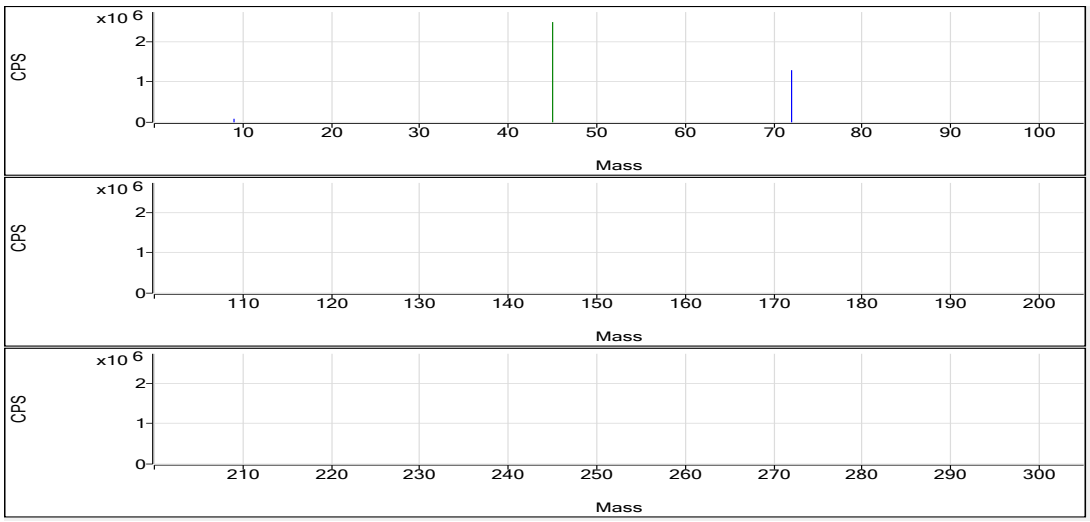
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.574	ppb	0.8	87520.36	0.0352	Pulse	0.5000	3
Se	78	115	H2	102.753	ppb	2.1	6798.29	0.0177	Pulse	1.5000	3
Na	23	45	He	4829.501	ppb	1.0	868014.94	18.3136	Pulse	0.1000	3
Mg	24	45	He	5091.942	ppb	1.4	440956.54	9.3033	Pulse	0.1000	3
Al	27	45	He	4976.758	ppb	1.0	140830.86	2.9714	Pulse	0.1000	3
K	39	45	He	5157.641	ppb	0.9	306265.43	6.4615	Pulse	0.1000	3
Ca	44	45	He	5121.623	ppb	0.8	16866.93	0.3559	Pulse	0.1000	3
Ti	47	45	He	507.407	ppb	2.5	13016.24	0.2746	Pulse	0.1000	3
V	51	45	He	514.105	ppb	0.8	543745.95	11.4722	Pulse	0.5000	3
Cr	52	45	He	511.658	ppb	0.6	704294.39	14.8595	Pulse	0.1000	3
Mn	55	45	He	503.830	ppb	1.3	310446.53	6.5502	Pulse	0.1000	3
Fe	57	45	He	5098.415	ppb	1.5	142430.77	3.0052	Pulse	0.1000	3
Co	59	45	He	495.122	ppb	1.5	1342310.19	28.3220	Pulse	0.1000	3
Ni	60	72	He	529.236	ppb	1.7	374513.19	4.4284	Pulse	0.1000	3
Cu	63	72	He	513.346	ppb	0.9	1073331.29	12.6907	Pulse	0.1000	3
Zn	66	115	He	539.824	ppb	0.9	127892.49	1.5543	Pulse	0.1000	3
As	75	115	He	544.185	ppb	0.5	90043.46	1.0943	Pulse	0.5000	3
Sr	88	115	He	54.406	ppb	2.3	39465.98	0.4797	Pulse	0.1000	3
Mo	98	115	He	53.062	ppb	1.0	97534.27	1.1854	Pulse	0.1000	3
Ag	107	115	He	52.957	ppb	1.6	205228.89	2.4942	Pulse	0.1000	3
Cd	111	115	He	54.293	ppb	0.7	23917.13	0.2907	Pulse	0.5000	3
Sn	120	115	He	108.858	ppb	0.6	140917.55	1.7126	Pulse	0.1000	3
Sb	121	115	He	104.381	ppb	0.6	129928.71	1.5790	Pulse	0.1000	3
Ba	137	115	He	536.258	ppb	1.0	215942.60	2.6243	Pulse	0.1000	3
Tl	205	159	He	106.002	ppb	0.1	1030019.41	2.6765	Pulse	0.1000	3
Pb	208	159	He	52.398	ppb	1.0	680939.18	1.7694	Pulse	0.1000	3
U	238	209	He	51.863	ppb	0.9	787838.32	2.6014	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2485237.67	0.6	105.9	Analog	0.1000	3
No Gas	Ge	72	1292602.51	0.6	107.7	Pulse	0.1000	3
H2	Sc	45	172128.13	0.4	99.1	Pulse	0.1000	3
H2	Ge	72	153409.11	0.6	102.6	Pulse	0.1000	3
H2	In	115	384370.66	0.7	105.0	Pulse	0.1000	3
He	Sc	45	47398.07	0.9	110.1	Pulse	0.1000	3
He	Ge	72	84583.73	1.5	108.2	Pulse	0.1000	3
He	In	115	82285.73	0.7	103.2	Pulse	0.1000	3
He	Tb	159	384838.38	0.9	104.6	Pulse	0.1000	3
He	Bi	209	302849.17	0.2	103.7	Pulse	0.1000	3

No Gas



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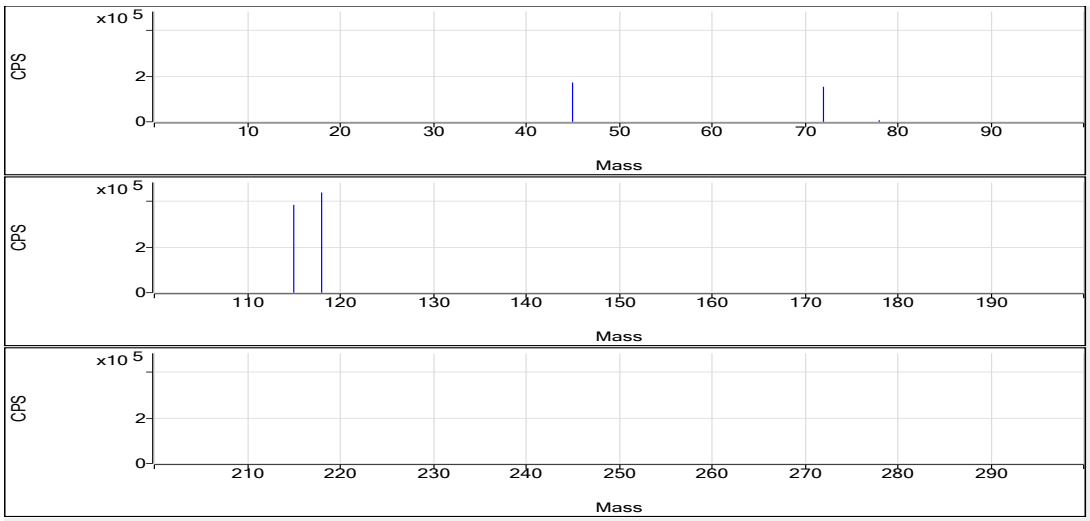
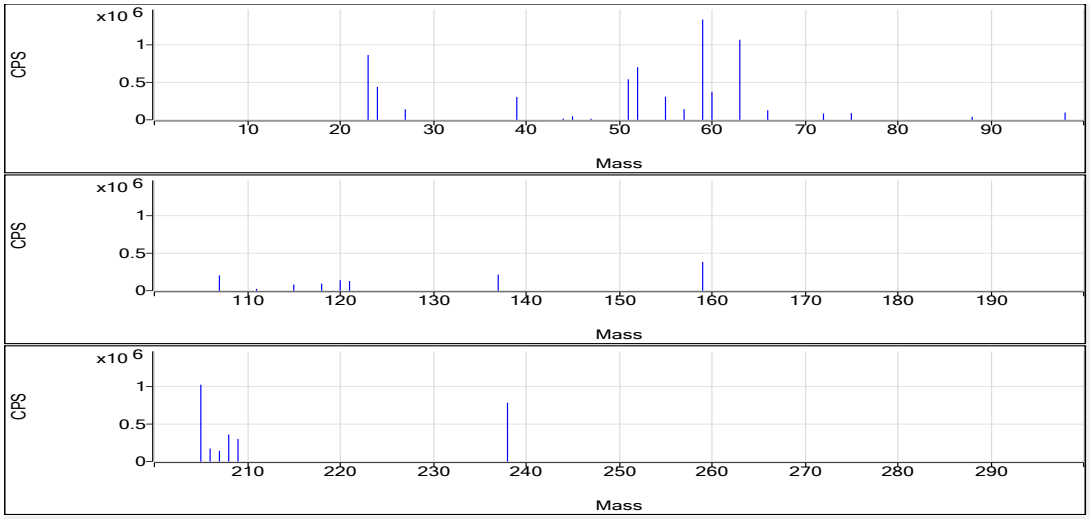


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.74	0.0353	87201.88	0.0007	1.705E-05
Be	9	1	No Gas	47.133	0.0349	87157.71	0.0007	1.705E-05
Be	9	1	No Gas	47.85	0.0354	88201.50	0.0007	1.705E-05
Se	78	2	H2	100.783	0.0173	6694.24	0.0002	6.062E-06
Se	78	2	H2	102.483	0.0176	6725.59	0.0002	6.062E-06
Se	78	2	H2	104.994	0.0181	6975.04	0.0002	6.062E-06
Na	23	3	He	4775.361	18.1122	859575.07	0.0037	0.3435
Na	23	3	He	4867.059	18.4534	866695.07	0.0037	0.3435
Na	23	3	He	4846.084	18.3754	877774.67	0.0037	0.3435
Mg	24	3	He	5010.145	9.1539	434428.63	0.0018	0.002943
Mg	24	3	He	5126.751	9.3669	439930.93	0.0018	0.002943
Mg	24	3	He	5138.932	9.3891	448510.07	0.0018	0.002943
Al	27	3	He	4993.958	2.9816	141504.19	0.0006	0.001008
Al	27	3	He	5013.809	2.9935	140594.69	0.0006	0.001008
Al	27	3	He	4922.507	2.939	140393.69	0.0006	0.001008
K	39	3	He	5106.101	6.4009	303778.34	0.0012	0.4052
K	39	3	He	5163.26	6.4681	303783.57	0.0012	0.4052
K	39	3	He	5203.562	6.5154	311234.37	0.0012	0.4052
Ca	44	3	He	5146.579	0.3576	16970.43	0.0001	0.003486
Ca	44	3	He	5142.123	0.3573	16780.22	0.0001	0.003486
Ca	44	3	He	5076.167	0.3527	16850.14	0.0001	0.003486
Ti	47	3	He	494.257	0.2675	12695.97	0.0005	0
Ti	47	3	He	519.119	0.281	13196.45	0.0005	0
Ti	47	3	He	508.845	0.2754	13156.29	0.0005	0
V	51	3	He	509.9	11.3786	540011.13	0.0223	0.03097
V	51	3	He	518.147	11.5622	543036.63	0.0223	0.03097
V	51	3	He	514.267	11.4758	548190.13	0.0223	0.03097
Cr	52	3	He	513.256	14.9058	707405.15	0.029	0.03958
Cr	52	3	He	513.309	14.9073	700147.96	0.029	0.03958
Cr	52	3	He	508.408	14.7654	705330.07	0.029	0.03958
Mn	55	3	He	505.999	6.5784	312199.49	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	508.827	6.6151	310691.26	0.013	0.003171
Mn	55	3	He	496.663	6.4571	308448.84	0.013	0.003171
Fe	57	3	He	5049.125	2.9762	141244.86	0.0006	0.002014
Fe	57	3	He	5186.014	3.0568	143568.69	0.0006	0.002014
Fe	57	3	He	5060.106	2.9827	142478.76	0.0006	0.002014
Co	59	3	He	490.575	28.062	1331776.07	0.0572	0.004106
Co	59	3	He	503.434	28.7975	1352522.01	0.0572	0.004106
Co	59	3	He	491.356	28.1067	1342632.48	0.0572	0.004106
Ni	60	3	He	538.552	4.5063	377656.60	0.0084	0.003329
Ni	60	3	He	520.054	4.3516	374629.80	0.0084	0.003329
Ni	60	3	He	529.102	4.4273	371253.16	0.0084	0.003329
Cu	63	3	He	516.495	12.7685	1070079.12	0.0247	0.004989
Cu	63	3	He	508.307	12.5662	1081811.94	0.0247	0.004989
Cu	63	3	He	515.237	12.7374	1068102.80	0.0247	0.004989
Zn	66	3	He	542.348	1.5615	127471.20	0.0029	0.006147
Zn	66	3	He	542.837	1.5629	129227.64	0.0029	0.006147
Zn	66	3	He	534.288	1.5384	126978.62	0.0029	0.006147
As	75	3	He	544.25	1.0944	89340.54	0.002	0.0009198
As	75	3	He	541.495	1.0889	90032.67	0.002	0.0009198
As	75	3	He	546.81	1.0996	90757.16	0.002	0.0009198
Sr	88	3	He	55.854	0.4924	40198.33	0.0088	0.0005022
Sr	88	3	He	53.862	0.4749	39265.28	0.0088	0.0005022
Sr	88	3	He	53.501	0.4717	38934.32	0.0088	0.0005022
Mo	98	3	He	53.564	1.1966	97678.78	0.0223	0.0006689
Mo	98	3	He	53.074	1.1856	98031.17	0.0223	0.0006689
Mo	98	3	He	52.549	1.1739	96892.86	0.0223	0.0006689
Ag	107	3	He	53.354	2.5129	205135.45	0.0471	0.0006687
Ag	107	3	He	51.996	2.4489	202488.63	0.0471	0.0006687
Ag	107	3	He	53.521	2.5208	208062.58	0.0471	0.0006687
Cd	111	3	He	54.664	0.2927	23890.48	0.0054	1.676E-05
Cd	111	3	He	53.865	0.2884	23844.31	0.0054	1.676E-05
Cd	111	3	He	54.349	0.291	24016.61	0.0054	1.676E-05
Sn	120	3	He	109.523	1.7229	140648.35	0.0156	0.01794
Sn	120	3	He	108.885	1.713	141637.51	0.0156	0.01794
Sn	120	3	He	108.166	1.7018	140466.78	0.0156	0.01794
Sb	121	3	He	104.175	1.5759	128643.88	0.0151	4.19E-05
Sb	121	3	He	105.046	1.589	131388.98	0.0151	4.19E-05
Sb	121	3	He	103.92	1.572	129753.27	0.0151	4.19E-05
Ba	137	3	He	538.646	2.636	215187.16	0.0049	0.0002094
Ba	137	3	He	539.81	2.6417	218427.56	0.0049	0.0002094
Ba	137	3	He	530.319	2.5953	214213.08	0.0049	0.0002094
Tl	205	3	He	105.855	2.6728	1018492.72	0.0252	0.0007688
Tl	205	3	He	106.045	2.6776	1038566.00	0.0252	0.0007688
Tl	205	3	He	106.106	2.6791	1032999.52	0.0252	0.0007688
Pb	208	3	He	52.225	1.7636	356354.64	0.0337	0.001742
Pb	208	3	He	51.99	1.7557	361064.76	0.0337	0.001742
Pb	208	3	He	52.978	1.789	370228.90	0.0337	0.001742
U	238	3	He	51.462	2.5813	781047.02	0.0502	0.0004339
U	238	3	He	51.717	2.5941	784686.71	0.0502	0.0004339
U	238	3	He	52.41	2.6288	797781.24	0.0502	0.0004339
Sc	45	1	No Gas			2467566.37		
Sc	45	1	No Gas			2498041.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2490105.12		
Ge	72	1	No Gas			1284829.90		
Ge	72	1	No Gas			1300723.73		
Ge	72	1	No Gas			1292253.89		
Sc	45	2	H2			171379.57		
Sc	45	2	H2			172441.77		
Sc	45	2	H2			172563.06		
Ge	72	2	H2			152293.17		
Ge	72	2	H2			154194.72		
Ge	72	2	H2			153739.45		
In	115	2	H2			385888.24		
In	115	2	H2			381267.42		
In	115	2	H2			385956.32		
Sc	45	3	He			47458.36		
Sc	45	3	He			46966.70		
Sc	45	3	He			47769.14		
Ge	72	3	He			83806.24		
Ge	72	3	He			86089.32		
Ge	72	3	He			83855.62		
In	115	3	He			82373.42		
In	115	3	He			83430.16		
In	115	3	He			83280.04		
Tb	159	3	He			381063.39		
Tb	159	3	He			387875.70		
Tb	159	3	He			385576.05		
Bi	209	3	He			302583.02		
Bi	209	3	He			302490.93		
Bi	209	3	He			303473.55		

Quantitation Report

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Sample Type	Sample
Comment	D25
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

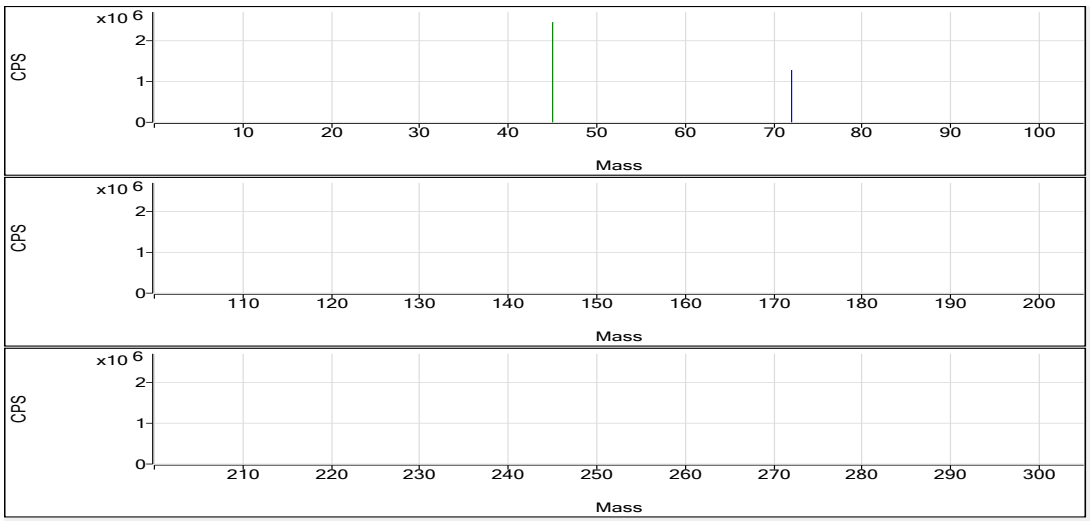
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.018	ppb	40.4	74.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.073	ppb	56.2	7.11	0.0000	Pulse	1.5000	3
Na	23	45	He	470.143	ppb	0.3	97755.29	2.0928	Pulse	0.1000	3
Mg	24	45	He	15.582	ppb	15.9	1466.79	0.0314	Pulse	0.1000	3
Al	27	45	He	6.562	ppb	33.2	230.01	0.0049	Pulse	0.1000	3
K	39	45	He	0.389	ppb	2630.4	18949.55	0.4057	Pulse	0.1000	3
Ca	44	45	He	102.825	ppb	24.3	493.36	0.0106	Pulse	0.1000	3
Ti	47	45	He	0.396	ppb	100.1	10.00	0.0002	Pulse	0.1000	3
V	51	45	He	-0.005	ppb	N/A	1441.41	0.0309	Pulse	0.5000	3
Cr	52	45	He	0.169	ppb	45.3	2076.89	0.0445	Pulse	0.1000	3
Mn	55	45	He	0.420	ppb	5.8	403.35	0.0086	Pulse	0.1000	3
Fe	57	45	He	0.943	ppb	115.8	120.01	0.0026	Pulse	0.1000	3
Co	59	45	He	0.067	ppb	9.8	370.02	0.0079	Pulse	0.1000	3
Ni	60	72	He	0.108	ppb	72.5	360.02	0.0042	Pulse	0.1000	3
Cu	63	72	He	0.401	ppb	8.1	1266.77	0.0149	Pulse	0.1000	3
Zn	66	115	He	-0.356	ppb	N/A	426.69	0.0051	Pulse	0.1000	3
As	75	115	He	0.140	ppb	57.0	100.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.629	ppb	5.0	503.36	0.0060	Pulse	0.1000	3
Mo	98	115	He	0.036	ppb	97.5	123.34	0.0015	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	816.8	60.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	57.7	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.511	ppb	11.5	2156.94	0.0259	Pulse	0.1000	3
Sb	121	115	He	0.161	ppb	19.4	206.68	0.0025	Pulse	0.1000	3
Ba	137	115	He	0.668	ppb	14.1	290.01	0.0035	Pulse	0.1000	3
Tl	205	159	He	0.087	ppb	1.0	1136.77	0.0030	Pulse	0.1000	3
Pb	208	159	He	0.006	ppb	177.5	740.04	0.0019	Pulse	0.1000	3
U	238	209	He	0.041	ppb	13.7	750.05	0.0025	Pulse	0.1000	3

ISTD Table:

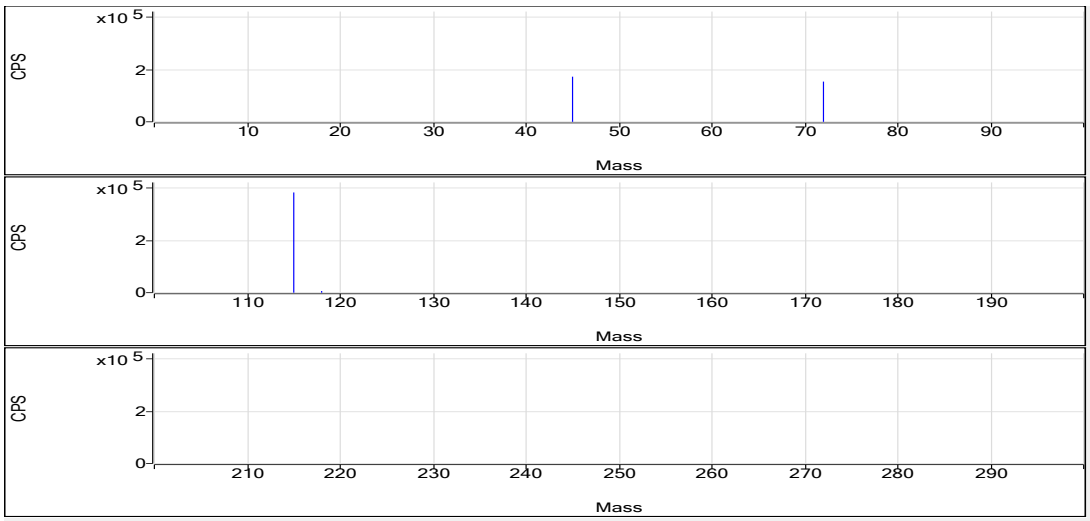
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2460714.91	1.5	104.8	Analog	0.1000	3
No Gas	Ge	72	1283310.40	0.9	107.0	Pulse	0.1000	3
H2	Sc	45	172729.55	0.3	99.4	Pulse	0.1000	3
H2	Ge	72	153915.15	0.7	102.9	Pulse	0.1000	3
H2	In	115	383603.75	0.0	104.8	Pulse	0.1000	3
He	Sc	45	46709.07	0.1	108.5	Pulse	0.1000	3
He	Ge	72	85126.61	1.8	108.9	Pulse	0.1000	3
He	In	115	83279.92	0.8	104.5	Pulse	0.1000	3
He	Tb	159	382191.96	0.5	103.9	Pulse	0.1000	3
He	Bi	209	304232.24	0.8	104.2	Pulse	0.1000	3

No Gas

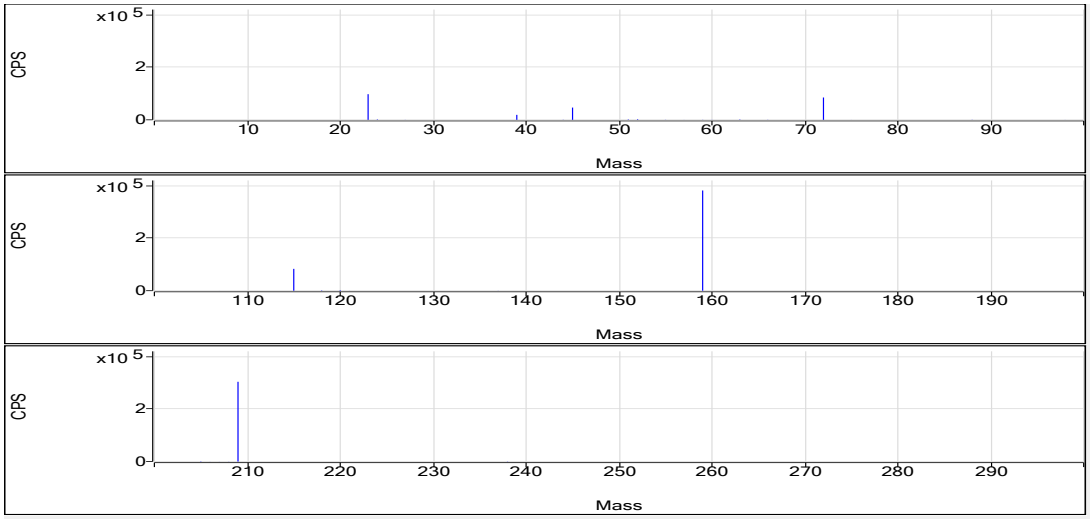


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.023	0	82.00	0.0007	1.705E-05
Be	9	1	No Gas	0.021	0	80.00	0.0007	1.705E-05
Be	9	1	No Gas	0.009	0	60.00	0.0007	1.705E-05
Se	78	2	H2	0.066	0	6.67	0.0002	6.062E-06
Se	78	2	H2	0.036	0	4.67	0.0002	6.062E-06
Se	78	2	H2	0.116	0	10.00	0.0002	6.062E-06
Na	23	3	He	470.85	2.0955	97912.93	0.0037	0.3435
Na	23	3	He	471.297	2.0971	98074.51	0.0037	0.3435
Na	23	3	He	468.28	2.0859	97278.42	0.0037	0.3435
Mg	24	3	He	17.958	0.0357	1670.14	0.0018	0.002943
Mg	24	3	He	13.024	0.0267	1250.11	0.0018	0.002943
Mg	24	3	He	15.765	0.0317	1480.12	0.0018	0.002943
Al	27	3	He	9.069	0.0064	300.01	0.0006	0.001008
Al	27	3	He	5.119	0.0041	190.01	0.0006	0.001008
Al	27	3	He	5.497	0.0043	200.01	0.0006	0.001008
K	39	3	He	8.532	0.4153	19403.37	0.0012	0.4052
K	39	3	He	-11.096	0.3922	18342.16	0.0012	0.4052
K	39	3	He	3.731	0.4096	19103.12	0.0012	0.4052
Ca	44	3	He	98.646	0.0103	480.03	0.0001	0.003486
Ca	44	3	He	129.597	0.0124	580.03	0.0001	0.003486
Ca	44	3	He	80.231	0.009	420.02	0.0001	0.003486
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.395	0.0002	10.00	0.0005	0
Ti	47	3	He	0.792	0.0004	20.00	0.0005	0
V	51	3	He	-0.016	0.0306	1430.08	0.0223	0.03097
V	51	3	He	-0.012	0.0307	1436.08	0.0223	0.03097
V	51	3	He	0.013	0.0313	1458.08	0.0223	0.03097
Cr	52	3	He	0.082	0.042	1960.22	0.029	0.03958
Cr	52	3	He	0.199	0.0453	2120.23	0.029	0.03958
Cr	52	3	He	0.225	0.0461	2150.23	0.029	0.03958
Mn	55	3	He	0.415	0.0086	400.02	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.447	0.009	420.02	0.013	0.003171
Mn	55	3	He	0.4	0.0084	390.02	0.013	0.003171
Fe	57	3	He	2.031	0.0032	150.01	0.0006	0.002014
Fe	57	3	He	-0.152	0.0019	90.00	0.0006	0.002014
Fe	57	3	He	0.95	0.0026	120.01	0.0006	0.002014
Co	59	3	He	0.059	0.0075	350.01	0.0572	0.004106
Co	59	3	He	0.07	0.0081	380.02	0.0572	0.004106
Co	59	3	He	0.071	0.0081	380.02	0.0572	0.004106
Ni	60	3	He	0.032	0.0036	310.01	0.0084	0.003329
Ni	60	3	He	0.188	0.0049	420.02	0.0084	0.003329
Ni	60	3	He	0.104	0.0042	350.03	0.0084	0.003329
Cu	63	3	He	0.398	0.0148	1280.10	0.0247	0.004989
Cu	63	3	He	0.369	0.0141	1210.09	0.0247	0.004989
Cu	63	3	He	0.434	0.0157	1310.11	0.0247	0.004989
Zn	66	3	He	-0.199	0.0056	460.02	0.0029	0.006147
Zn	66	3	He	-0.348	0.0051	430.02	0.0029	0.006147
Zn	66	3	He	-0.521	0.0047	390.02	0.0029	0.006147
As	75	3	He	0.23	0.0014	114.00	0.002	0.0009198
As	75	3	He	0.114	0.0011	96.00	0.002	0.0009198
As	75	3	He	0.077	0.0011	90.00	0.002	0.0009198
Sr	88	3	He	0.645	0.0062	510.03	0.0088	0.0005022
Sr	88	3	He	0.65	0.0062	520.03	0.0088	0.0005022
Sr	88	3	He	0.593	0.0057	480.03	0.0088	0.0005022
Mo	98	3	He	0.019	0.0011	90.00	0.0223	0.0006689
Mo	98	3	He	0.013	0.001	80.00	0.0223	0.0006689
Mo	98	3	He	0.077	0.0024	200.01	0.0223	0.0006689
Ag	107	3	He	0.012	0.0012	100.00	0.0471	0.0006687
Ag	107	3	He	-0.007	0.0004	30.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	0.01	0.0001	6.00	0.0054	1.676E-05
Cd	111	3	He	0.019	0.0001	10.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	0.576	0.0269	2220.36	0.0156	0.01794
Sn	120	3	He	0.463	0.0251	2100.23	0.0156	0.01794
Sn	120	3	He	0.495	0.0257	2150.24	0.0156	0.01794
Sb	121	3	He	0.133	0.0021	170.01	0.0151	4.19E-05
Sb	121	3	He	0.195	0.003	250.01	0.0151	4.19E-05
Sb	121	3	He	0.155	0.0024	200.01	0.0151	4.19E-05
Ba	137	3	He	0.577	0.003	250.01	0.0049	0.0002094
Ba	137	3	He	0.765	0.004	330.01	0.0049	0.0002094
Ba	137	3	He	0.664	0.0035	290.01	0.0049	0.0002094
Tl	205	3	He	0.088	0.003	1140.10	0.0252	0.0007688
Tl	205	3	He	0.087	0.003	1140.10	0.0252	0.0007688
Tl	205	3	He	0.087	0.003	1130.10	0.0252	0.0007688
Pb	208	3	He	0.016	0.0023	440.02	0.0337	0.001742
Pb	208	3	He	0.006	0.0019	400.02	0.0337	0.001742
Pb	208	3	He	-0.004	0.0016	300.01	0.0337	0.001742
U	238	3	He	0.042	0.0026	780.05	0.0502	0.0004339
U	238	3	He	0.045	0.0027	810.06	0.0502	0.0004339
U	238	3	He	0.034	0.0022	660.04	0.0502	0.0004339
Sc	45	1	No Gas			2419493.56		
Sc	45	1	No Gas			2470795.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2491855.74		
Ge	72	1	No Gas			1270559.43		
Ge	72	1	No Gas			1286690.61		
Ge	72	1	No Gas			1292681.15		
Sc	45	2	H2			173383.81		
Sc	45	2	H2			172535.11		
Sc	45	2	H2			172269.72		
Ge	72	2	H2			152616.96		
Ge	72	2	H2			154560.00		
Ge	72	2	H2			154568.48		
In	115	2	H2			383621.99		
In	115	2	H2			383412.65		
In	115	2	H2			383776.60		
Sc	45	3	He			46725.71		
Sc	45	3	He			46765.74		
Sc	45	3	He			46635.76		
Ge	72	3	He			86289.86		
Ge	72	3	He			85727.20		
Ge	72	3	He			83362.76		
In	115	3	He			82505.53		
In	115	3	He			83540.72		
In	115	3	He			83824.32		
Tb	159	3	He			380205.81		
Tb	159	3	He			383741.63		
Tb	159	3	He			382628.43		
Bi	209	3	He			304370.29		
Bi	209	3	He			301751.91		
Bi	209	3	He			306574.53		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
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Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

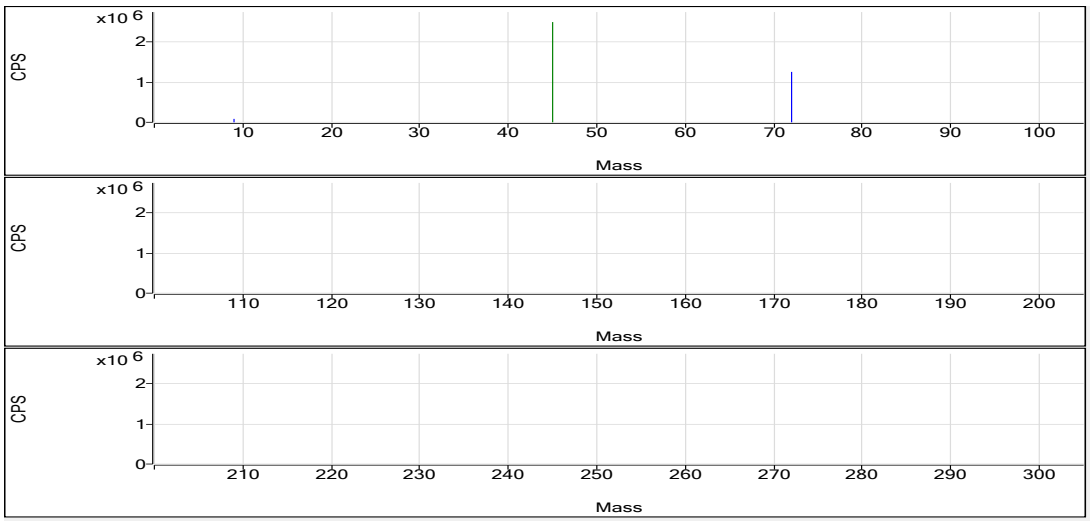
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.998	ppb	1.2	84849.94	0.0341	Pulse	0.5000	3
Se	78	115	H2	51.841	ppb	0.9	3439.75	0.0089	Pulse	1.5000	3
Na	23	45	He	4705.323	ppb	0.2	845826.94	17.8516	Pulse	0.1000	3
Mg	24	45	He	4960.093	ppb	0.7	429394.73	9.0625	Pulse	0.1000	3
Al	27	45	He	4835.235	ppb	1.0	136787.83	2.8869	Pulse	0.1000	3
K	39	45	He	5034.841	ppb	0.4	299321.45	6.3173	Pulse	0.1000	3
Ca	44	45	He	4936.657	ppb	4.6	16259.63	0.3431	Pulse	0.1000	3
Ti	47	45	He	5004.837	ppb	1.6	128346.50	2.7089	Pulse	0.1000	3
V	51	45	He	504.318	ppb	0.3	533244.75	11.2544	Pulse	0.5000	3
Cr	52	45	He	503.101	ppb	0.2	692321.08	14.6117	Pulse	0.1000	3
Mn	55	45	He	503.314	ppb	0.7	310042.51	6.5435	Pulse	0.1000	3
Fe	57	45	He	5050.989	ppb	0.4	141067.70	2.9773	Pulse	0.1000	3
Co	59	45	He	489.899	ppb	0.4	1327784.77	28.0233	Pulse	0.1000	3
Ni	60	72	He	536.632	ppb	1.2	372630.18	4.4903	Pulse	0.1000	3
Cu	63	72	He	513.841	ppb	0.8	1054185.30	12.7029	Pulse	0.1000	3
Zn	66	115	He	516.764	ppb	1.2	126076.75	1.4881	Pulse	0.1000	3
As	75	115	He	518.969	ppb	0.5	88420.76	1.0436	Pulse	0.5000	3
Sr	88	115	He	52.306	ppb	2.8	39068.18	0.4612	Pulse	0.1000	3
Mo	98	115	He	51.341	ppb	3.4	97168.76	1.1469	Pulse	0.1000	3
Ag	107	115	He	51.184	ppb	2.2	204240.44	2.4108	Pulse	0.1000	3
Cd	111	115	He	51.408	ppb	1.6	23319.46	0.2752	Pulse	0.5000	3
Sn	120	115	He	51.860	ppb	2.2	69917.09	0.8253	Pulse	0.1000	3
Sb	121	115	He	51.299	ppb	1.4	65746.45	0.7760	Pulse	0.1000	3
Ba	137	115	He	515.844	ppb	1.4	213883.93	2.5244	Pulse	0.1000	3
Tl	205	159	He	50.760	ppb	0.6	501336.00	1.2820	Pulse	0.1000	3
Pb	208	159	He	50.458	ppb	0.5	666340.62	1.7040	Pulse	0.1000	3
U	238	209	He	50.150	ppb	0.7	762146.45	2.5155	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2491877.36	0.4	106.2	Analog	0.1000	3
No Gas	Ge	72	1253180.37	0.5	104.4	Pulse	0.1000	3
H2	Sc	45	176246.84	0.9	101.4	Pulse	0.1000	3
H2	Ge	72	150078.45	0.4	100.4	Pulse	0.1000	3
H2	In	115	385373.29	0.9	105.3	Pulse	0.1000	3
He	Sc	45	47381.19	0.3	110.1	Pulse	0.1000	3
He	Ge	72	82990.40	0.6	106.2	Pulse	0.1000	3
He	In	115	84725.90	0.8	106.3	Pulse	0.1000	3
He	Tb	159	391049.43	0.7	106.3	Pulse	0.1000	3
He	Bi	209	303001.30	1.2	103.8	Pulse	0.1000	3

No Gas



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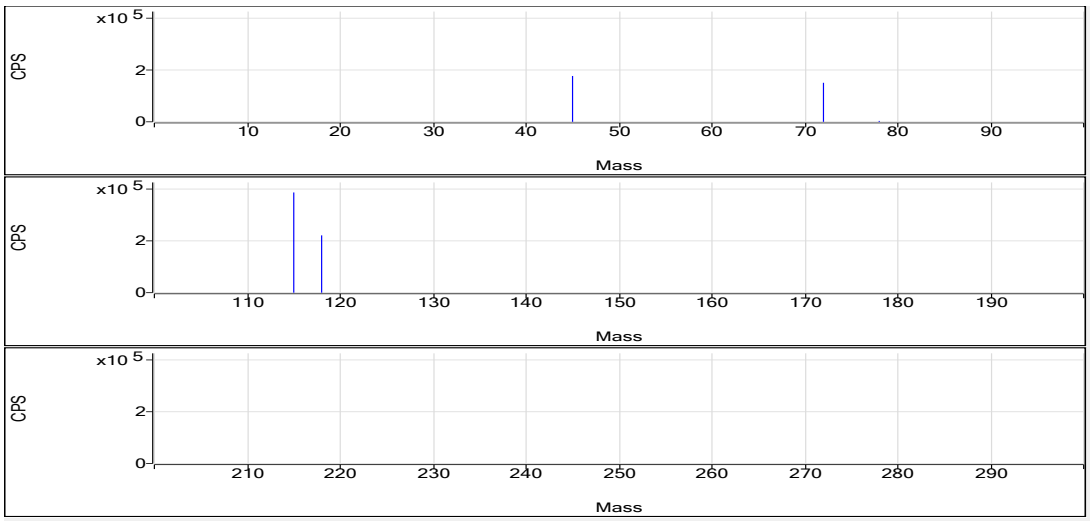
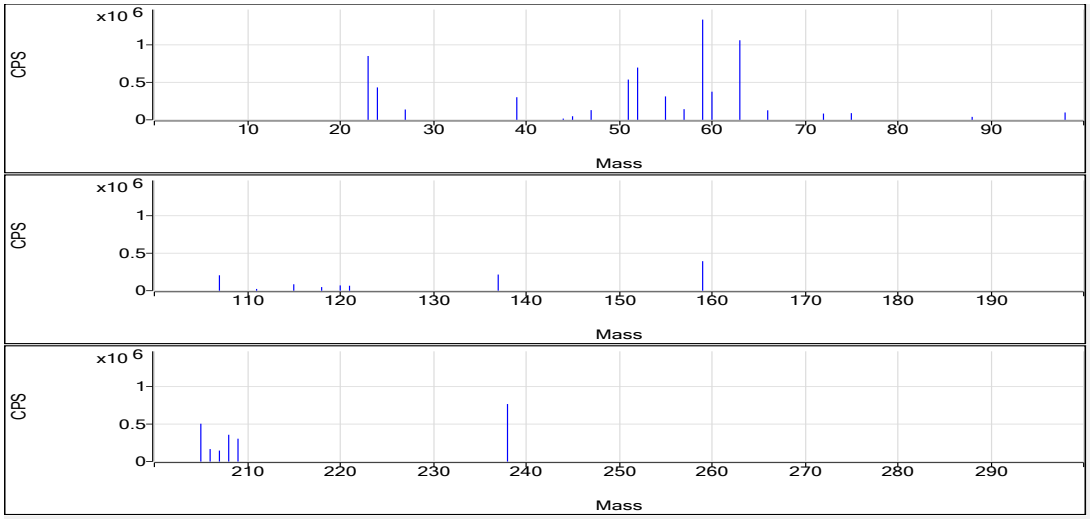


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.439	0.0336	83487.07	0.0007	1.705E-05
Be	9	1	No Gas	46.571	0.0345	85890.34	0.0007	1.705E-05
Be	9	1	No Gas	45.983	0.034	85172.42	0.0007	1.705E-05
Se	78	2	H2	51.288	0.0088	3438.42	0.0002	6.062E-06
Se	78	2	H2	52.118	0.009	3437.08	0.0002	6.062E-06
Se	78	2	H2	52.117	0.009	3443.75	0.0002	6.062E-06
Na	23	3	He	4715.252	17.8885	845373.27	0.0037	0.3435
Na	23	3	He	4699.2	17.8288	847012.49	0.0037	0.3435
Na	23	3	He	4701.516	17.8374	845095.07	0.0037	0.3435
Mg	24	3	He	4919.6	8.9885	424777.57	0.0018	0.002943
Mg	24	3	He	4974.509	9.0888	431791.67	0.0018	0.002943
Mg	24	3	He	4986.169	9.1101	431614.95	0.0018	0.002943
Al	27	3	He	4782.878	2.8557	134952.59	0.0006	0.001008
Al	27	3	He	4877.053	2.9119	138337.59	0.0006	0.001008
Al	27	3	He	4845.775	2.8932	137073.30	0.0006	0.001008
K	39	3	He	5019.059	6.2987	297664.72	0.0012	0.4052
K	39	3	He	5054.369	6.3402	301210.80	0.0012	0.4052
K	39	3	He	5031.093	6.3129	299088.84	0.0012	0.4052
Ca	44	3	He	4808.423	0.3343	15799.22	0.0001	0.003486
Ca	44	3	He	5196.27	0.361	17150.64	0.0001	0.003486
Ca	44	3	He	4805.277	0.3341	15829.02	0.0001	0.003486
Ti	47	3	He	5091.363	2.7557	130229.17	0.0005	0
Ti	47	3	He	4930.008	2.6684	126769.74	0.0005	0
Ti	47	3	He	4993.141	2.7026	128040.60	0.0005	0
V	51	3	He	505.193	11.2739	532778.88	0.0223	0.03097
V	51	3	He	502.729	11.2191	532995.88	0.0223	0.03097
V	51	3	He	505.031	11.2703	533959.50	0.0223	0.03097
Cr	52	3	He	501.757	14.5727	688675.77	0.029	0.03958
Cr	52	3	He	503.801	14.6319	695135.38	0.029	0.03958
Cr	52	3	He	503.746	14.6304	693152.10	0.029	0.03958
Mn	55	3	He	500.113	6.5019	307265.66	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	507.01	6.5915	313150.46	0.013	0.003171
Mn	55	3	He	502.82	6.5371	309711.42	0.013	0.003171
Fe	57	3	He	5050.597	2.9771	140689.00	0.0006	0.002014
Fe	57	3	He	5070.92	2.989	142002.78	0.0006	0.002014
Fe	57	3	He	5031.45	2.9658	140511.33	0.0006	0.002014
Co	59	3	He	489.67	28.0103	1323704.36	0.0572	0.004106
Co	59	3	He	491.923	28.1391	1336836.23	0.0572	0.004106
Co	59	3	He	488.103	27.9206	1322813.73	0.0572	0.004106
Ni	60	3	He	542.885	4.5425	374382.69	0.0084	0.003329
Ni	60	3	He	537.072	4.4939	373675.93	0.0084	0.003329
Ni	60	3	He	529.938	4.4343	369831.91	0.0084	0.003329
Cu	63	3	He	517.866	12.8024	1055135.69	0.0247	0.004989
Cu	63	3	He	514.412	12.717	1057434.75	0.0247	0.004989
Cu	63	3	He	509.245	12.5893	1049985.45	0.0247	0.004989
Zn	66	3	He	517.336	1.4898	125655.97	0.0029	0.006147
Zn	66	3	He	522.884	1.5057	127028.71	0.0029	0.006147
Zn	66	3	He	510.073	1.4689	125545.57	0.0029	0.006147
As	75	3	He	517.151	1.04	87716.37	0.002	0.0009198
As	75	3	He	521.739	1.0492	88515.39	0.002	0.0009198
As	75	3	He	518.016	1.0417	89030.51	0.002	0.0009198
Sr	88	3	He	52.881	0.4662	39325.68	0.0088	0.0005022
Sr	88	3	He	53.368	0.4705	39696.81	0.0088	0.0005022
Sr	88	3	He	50.668	0.4467	38182.06	0.0088	0.0005022
Mo	98	3	He	50.007	1.1171	94225.26	0.0223	0.0006689
Mo	98	3	He	53.325	1.1912	100498.80	0.0223	0.0006689
Mo	98	3	He	50.69	1.1324	96782.21	0.0223	0.0006689
Ag	107	3	He	50.616	2.384	201078.34	0.0471	0.0006687
Ag	107	3	He	52.502	2.4728	208617.54	0.0471	0.0006687
Ag	107	3	He	50.436	2.3755	203025.45	0.0471	0.0006687
Cd	111	3	He	50.483	0.2703	22796.57	0.0054	1.676E-05
Cd	111	3	He	52.006	0.2784	23489.75	0.0054	1.676E-05
Cd	111	3	He	51.735	0.277	23672.07	0.0054	1.676E-05
Sn	120	3	He	51.284	0.8163	68851.75	0.0156	0.01794
Sn	120	3	He	53.154	0.8454	71324.17	0.0156	0.01794
Sn	120	3	He	51.141	0.8141	69575.34	0.0156	0.01794
Sb	121	3	He	51.15	0.7738	65264.58	0.0151	4.19E-05
Sb	121	3	He	52.074	0.7878	66459.74	0.0151	4.19E-05
Sb	121	3	He	50.673	0.7666	65515.03	0.0151	4.19E-05
Ba	137	3	He	509.045	2.4912	210119.06	0.0049	0.0002094
Ba	137	3	He	523.609	2.5624	216182.36	0.0049	0.0002094
Ba	137	3	He	514.877	2.5197	215350.37	0.0049	0.0002094
Tl	205	3	He	50.56	1.277	498100.89	0.0252	0.0007688
Tl	205	3	He	50.585	1.2776	503412.38	0.0252	0.0007688
Tl	205	3	He	51.134	1.2915	502494.72	0.0252	0.0007688
Pb	208	3	He	50.254	1.6971	351342.38	0.0337	0.001742
Pb	208	3	He	50.386	1.7015	358554.10	0.0337	0.001742
Pb	208	3	He	50.736	1.7134	355457.77	0.0337	0.001742
U	238	3	He	50.55	2.5355	757421.32	0.0502	0.0004339
U	238	3	He	49.917	2.5038	765542.96	0.0502	0.0004339
U	238	3	He	49.983	2.5071	763475.07	0.0502	0.0004339
Sc	45	1	No Gas			2482038.87		
Sc	45	1	No Gas			2491401.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2502191.37		
Ge	72	1	No Gas			1248779.20		
Ge	72	1	No Gas			1250082.79		
Ge	72	1	No Gas			1260679.12		
Sc	45	2	H2			177705.11		
Sc	45	2	H2			176367.48		
Sc	45	2	H2			174667.93		
Ge	72	2	H2			149669.09		
Ge	72	2	H2			149727.11		
Ge	72	2	H2			150839.14		
In	115	2	H2			389351.56		
In	115	2	H2			383009.56		
In	115	2	H2			383758.74		
Sc	45	3	He			47257.83		
Sc	45	3	He			47508.09		
Sc	45	3	He			47377.64		
Ge	72	3	He			82417.13		
Ge	72	3	He			83151.23		
Ge	72	3	He			83402.85		
In	115	3	He			84717.38		
In	115	3	He			84737.73		
In	115	3	He			85844.09		
Tb	159	3	He			390052.30		
Tb	159	3	He			394015.38		
Tb	159	3	He			389080.62		
Bi	209	3	He			298723.10		
Bi	209	3	He			305755.97		
Bi	209	3	He			304524.82		

Quantitation Report

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Sample Type	CCB
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2023 8:29:02 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

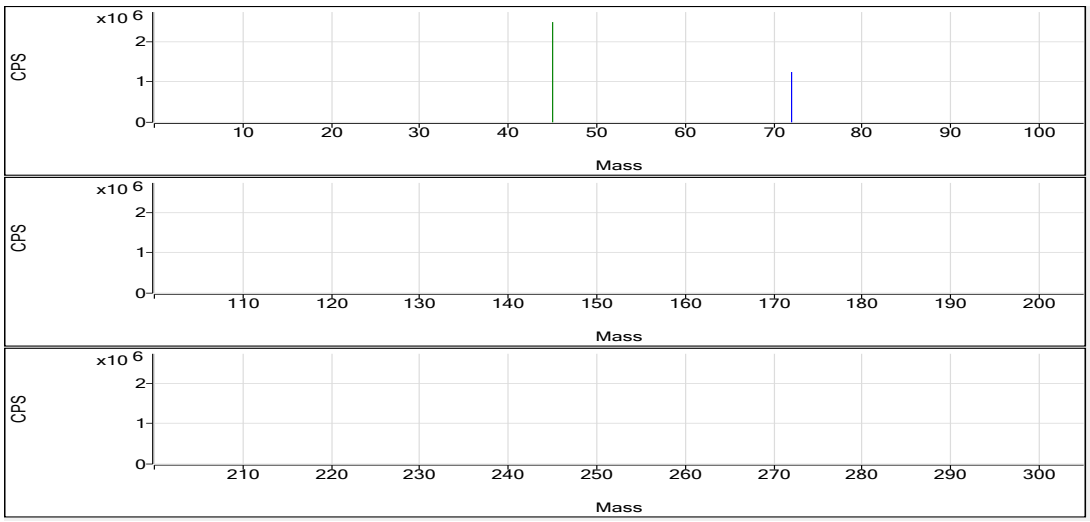
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.014	ppb	42.4	68.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.072	ppb	63.6	7.11	0.0000	Pulse	1.5000	3
Na	23	45	He	-0.448	ppb	N/A	16052.64	0.3418	Pulse	0.1000	3
Mg	24	45	He	1.496	ppb	17.0	266.68	0.0057	Pulse	0.1000	3
Al	27	45	He	-0.496	ppb	N/A	33.33	0.0007	Pulse	0.1000	3
K	39	45	He	-1.804	ppb	N/A	18929.35	0.4031	Pulse	0.1000	3
Ca	44	45	He	-12.499	ppb	N/A	123.34	0.0026	Pulse	0.1000	3
Ti	47	45	He	1.182	ppb	33.8	30.00	0.0006	Pulse	0.1000	3
V	51	45	He	-0.091	ppb	N/A	1359.41	0.0290	Pulse	0.5000	3
Cr	52	45	He	-0.068	ppb	N/A	1766.84	0.0376	Pulse	0.1000	3
Mn	55	45	He	0.116	ppb	61.0	220.01	0.0047	Pulse	0.1000	3
Fe	57	45	He	1.042	ppb	24.9	123.34	0.0026	Pulse	0.1000	3
Co	59	45	He	0.043	ppb	52.5	306.68	0.0065	Pulse	0.1000	3
Ni	60	72	He	0.057	ppb	191.7	313.35	0.0038	Pulse	0.1000	3
Cu	63	72	He	0.088	ppb	19.3	590.03	0.0072	Pulse	0.1000	3
Zn	66	115	He	-0.966	ppb	N/A	286.68	0.0034	Pulse	0.1000	3
As	75	115	He	0.038	ppb	131.5	84.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.055	ppb	77.4	83.33	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.025	ppb	57.4	103.34	0.0012	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	53.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	92.5	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.073	ppb	N/A	1430.13	0.0168	Pulse	0.1000	3
Sb	121	115	He	0.052	ppb	26.4	70.00	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.053	ppb	43.8	40.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.047	ppb	30.6	756.72	0.0020	Pulse	0.1000	3
Pb	208	159	He	-0.003	ppb	N/A	630.03	0.0016	Pulse	0.1000	3
U	238	209	He	0.033	ppb	21.0	626.71	0.0021	Pulse	0.1000	3

ISTD Table:

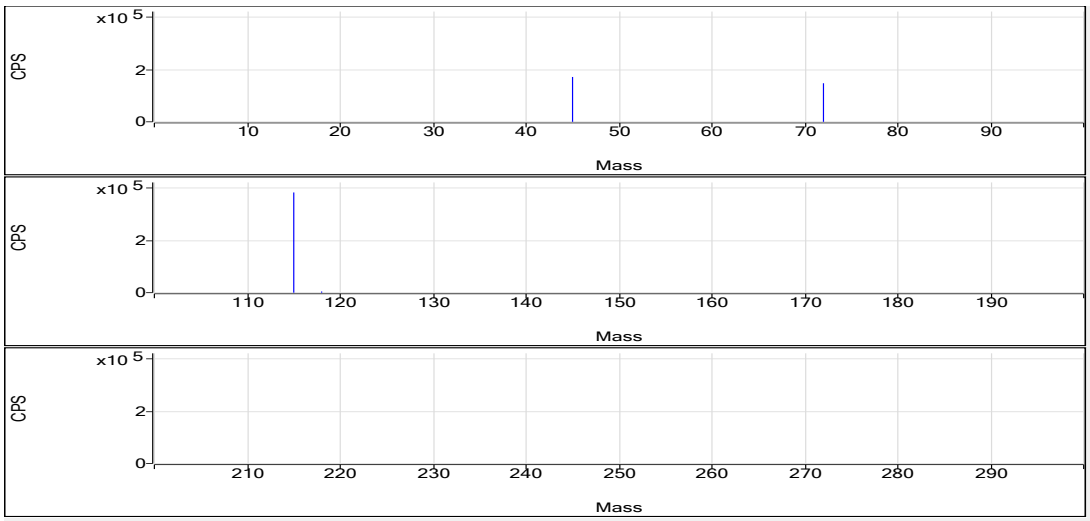
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2474361.73	0.9	105.4	Analog	0.1000	3
No Gas	Ge	72	1241022.01	0.2	103.4	Pulse	0.1000	3
H2	Sc	45	171606.73	0.7	98.8	Pulse	0.1000	3
H2	Ge	72	147603.67	2.0	98.7	Pulse	0.1000	3
H2	In	115	383561.11	0.9	104.8	Pulse	0.1000	3
He	Sc	45	46960.04	1.3	109.1	Pulse	0.1000	3
He	Ge	72	82374.04	0.1	105.4	Pulse	0.1000	3
He	In	115	85095.20	1.5	106.7	Pulse	0.1000	3
He	Tb	159	385168.59	0.1	104.7	Pulse	0.1000	3
He	Bi	209	300788.26	0.4	103.0	Pulse	0.1000	3

No Gas

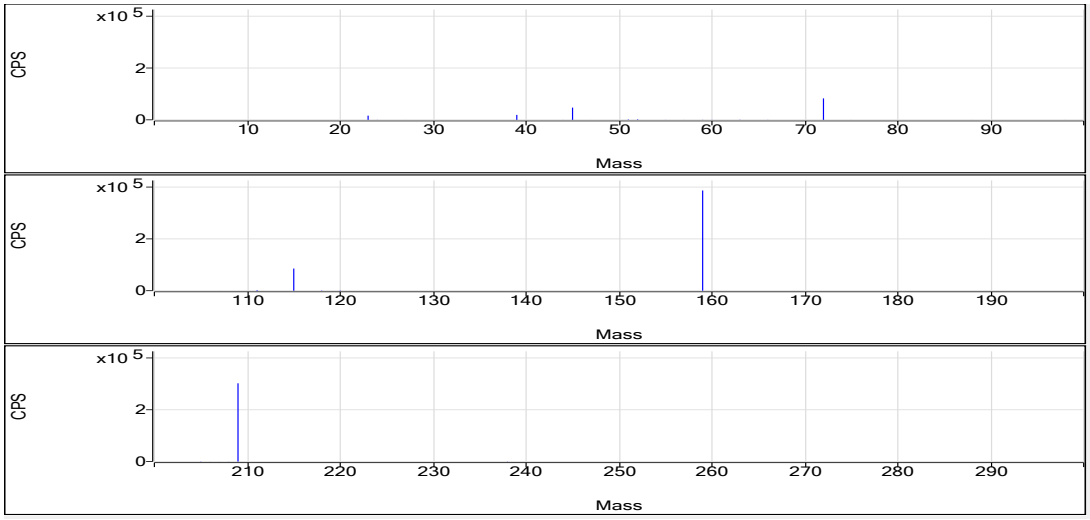


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.012	0	64.00	0.0007	1.705E-05
Be	9	1	No Gas	0.021	0	82.00	0.0007	1.705E-05
Be	9	1	No Gas	0.01	0	60.00	0.0007	1.705E-05
Se	78	2	H2	0.126	0	10.67	0.0002	6.062E-06
Se	78	2	H2	0.045	0	5.33	0.0002	6.062E-06
Se	78	2	H2	0.046	0	5.33	0.0002	6.062E-06
Na	23	3	He	-0.541	0.3415	15839.12	0.0037	0.3435
Na	23	3	He	0.206	0.3443	16389.72	0.0037	0.3435
Na	23	3	He	-1.009	0.3397	15929.08	0.0037	0.3435
Mg	24	3	He	1.222	0.0052	240.01	0.0018	0.002943
Mg	24	3	He	1.724	0.0061	290.01	0.0018	0.002943
Mg	24	3	He	1.542	0.0058	270.01	0.0018	0.002943
Al	27	3	He	-0.244	0.0009	40.00	0.0006	0.001008
Al	27	3	He	-0.985	0.0004	20.00	0.0006	0.001008
Al	27	3	He	-0.259	0.0009	40.00	0.0006	0.001008
K	39	3	He	-1.37	0.4036	18722.32	0.0012	0.4052
K	39	3	He	-6.448	0.3977	18932.71	0.0012	0.4052
K	39	3	He	2.407	0.4081	19133.01	0.0012	0.4052
Ca	44	3	He	-6.799	0.003	140.01	0.0001	0.003486
Ca	44	3	He	-7.927	0.0029	140.01	0.0001	0.003486
Ca	44	3	He	-22.771	0.0019	90.00	0.0001	0.003486
Ti	47	3	He	1.195	0.0006	30.00	0.0005	0
Ti	47	3	He	0.776	0.0004	20.00	0.0005	0
Ti	47	3	He	1.576	0.0009	40.00	0.0005	0
V	51	3	He	-0.035	0.0302	1400.08	0.0223	0.03097
V	51	3	He	-0.104	0.0287	1364.07	0.0223	0.03097
V	51	3	He	-0.132	0.028	1314.07	0.0223	0.03097
Cr	52	3	He	-0.138	0.0356	1650.14	0.029	0.03958
Cr	52	3	He	-0.025	0.0389	1850.19	0.029	0.03958
Cr	52	3	He	-0.041	0.0384	1800.18	0.029	0.03958
Mn	55	3	He	0.038	0.0037	170.01	0.013	0.003171

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.176	0.0055	260.01	0.013	0.003171
Mn	55	3	He	0.133	0.0049	230.01	0.013	0.003171
Fe	57	3	He	1.339	0.0028	130.01	0.0006	0.002014
Fe	57	3	He	0.86	0.0025	120.00	0.0006	0.002014
Fe	57	3	He	0.926	0.0026	120.00	0.0006	0.002014
Co	59	3	He	0.068	0.008	370.02	0.0572	0.004106
Co	59	3	He	0.035	0.0061	290.01	0.0572	0.004106
Co	59	3	He	0.025	0.0055	260.01	0.0572	0.004106
Ni	60	3	He	-0.006	0.0033	270.01	0.0084	0.003329
Ni	60	3	He	0.183	0.0049	400.02	0.0084	0.003329
Ni	60	3	He	-0.007	0.0033	270.01	0.0084	0.003329
Cu	63	3	He	0.078	0.0069	570.03	0.0247	0.004989
Cu	63	3	He	0.108	0.0076	630.03	0.0247	0.004989
Cu	63	3	He	0.078	0.0069	570.03	0.0247	0.004989
Zn	66	3	He	-1.051	0.0031	270.01	0.0029	0.006147
Zn	66	3	He	-0.644	0.0043	360.02	0.0029	0.006147
Zn	66	3	He	-1.204	0.0027	230.01	0.0029	0.006147
As	75	3	He	-0.007	0.0009	78.00	0.002	0.0009198
As	75	3	He	0.03	0.001	82.00	0.002	0.0009198
As	75	3	He	0.09	0.0011	94.00	0.002	0.0009198
Sr	88	3	He	0.009	0.0006	50.00	0.0088	0.0005022
Sr	88	3	He	0.092	0.0013	110.00	0.0088	0.0005022
Sr	88	3	He	0.063	0.0011	90.00	0.0088	0.0005022
Mo	98	3	He	0.012	0.0009	80.00	0.0223	0.0006689
Mo	98	3	He	0.04	0.0016	130.01	0.0223	0.0006689
Mo	98	3	He	0.023	0.0012	100.00	0.0223	0.0006689
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Ag	107	3	He	0.001	0.0007	60.00	0.0471	0.0006687
Ag	107	3	He	-0.002	0.0006	50.00	0.0471	0.0006687
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.001	0	2.00	0.0054	1.676E-05
Cd	111	3	He	0.006	0	4.00	0.0054	1.676E-05
Sn	120	3	He	-0.139	0.0158	1360.12	0.0156	0.01794
Sn	120	3	He	-0.071	0.0168	1410.12	0.0156	0.01794
Sn	120	3	He	-0.009	0.0178	1520.14	0.0156	0.01794
Sb	121	3	He	0.059	0.0009	80.00	0.0151	4.19E-05
Sb	121	3	He	0.06	0.001	80.00	0.0151	4.19E-05
Sb	121	3	He	0.036	0.0006	50.00	0.0151	4.19E-05
Ba	137	3	He	0.052	0.0005	40.00	0.0049	0.0002094
Ba	137	3	He	0.03	0.0004	30.00	0.0049	0.0002094
Ba	137	3	He	0.077	0.0006	50.00	0.0049	0.0002094
Tl	205	3	He	0.032	0.0016	610.04	0.0252	0.0007688
Tl	205	3	He	0.061	0.0023	890.07	0.0252	0.0007688
Tl	205	3	He	0.049	0.002	770.05	0.0252	0.0007688
Pb	208	3	He	-0.001	0.0017	410.02	0.0337	0.001742
Pb	208	3	He	-0.005	0.0016	280.01	0.0337	0.001742
Pb	208	3	He	-0.003	0.0016	330.02	0.0337	0.001742
U	238	3	He	0.027	0.0018	530.04	0.0502	0.0004339
U	238	3	He	0.032	0.002	610.03	0.0502	0.0004339
U	238	3	He	0.04	0.0025	740.05	0.0502	0.0004339
Sc	45	1	No Gas			2454338.87		
Sc	45	1	No Gas			2496368.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2472377.62		
Ge	72	1	No Gas			1240623.65		
Ge	72	1	No Gas			1243843.34		
Ge	72	1	No Gas			1238599.04		
Sc	45	2	H2			170763.51		
Sc	45	2	H2			173070.72		
Sc	45	2	H2			170985.95		
Ge	72	2	H2			147535.96		
Ge	72	2	H2			150587.85		
Ge	72	2	H2			144687.21		
In	115	2	H2			385779.92		
In	115	2	H2			385262.57		
In	115	2	H2			379640.85		
Sc	45	3	He			46384.43		
Sc	45	3	He			47609.00		
Sc	45	3	He			46886.69		
Ge	72	3	He			82277.13		
Ge	72	3	He			82376.82		
Ge	72	3	He			82468.18		
In	115	3	He			86196.33		
In	115	3	He			83752.28		
In	115	3	He			85361.16		
Tb	159	3	He			385182.14		
Tb	159	3	He			384881.01		
Tb	159	3	He			385442.61		
Bi	209	3	He			299289.25		
Bi	209	3	He			301801.83		
Bi	209	3	He			301273.71		

US EPA Tune Check Report

Operator Name	us19_usr_ins22323
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA_ICPMS.b
Acq. Date-Time	8/11/2023 6:50:26 AM
Report Comment	E09 Tune Report
Instrument Name	G8403A SG20064740

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9	10.00	4521	45206.08			0.956	5.000
24	10.00	18732	187319.26			1.123	5.000
25	10.00	2642	26415.79			1.010	5.000
26	10.00	2967	29674.44			0.862	5.000
59	10.00	32832	328315.45			0.784	5.000
115	10.00	55032	550315.65			1.198	5.000
206	10.00	13517	135172.73			1.373	5.000
207	10.00	11852	118522.57			1.560	5.000
208	10.00	28381	283805.95			1.610	5.000

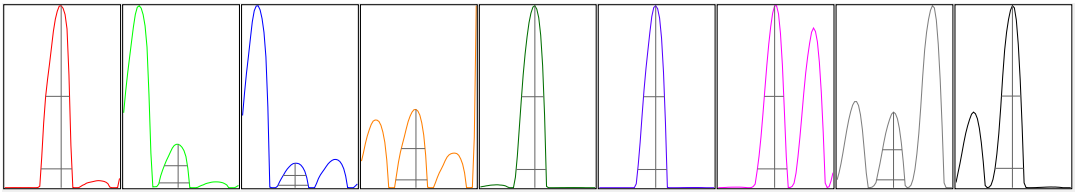
Mass	RSD% (Flag)
9	
24	
25	
26	
59	
115	
206	
207	
208	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	4491	4499	4485	4586	4543
24	18521	18552	18689	18997	18900
25	2622	2606	2664	2651	2665
26	2953	2933	2976	3001	2974
59	32572	32616	32765	33104	33101
115	54312	54502	54921	55759	55664
206	13296	13406	13467	13711	13707
207	11636	11814	11729	12076	12006
208	27716	28321	28244	28798	28825

Integration Time [sec] 0.1

Resolution/Axis

US EPA Tune Check Report



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	7921.18	9.00	8.90 - 9.10	
24	33769.49	23.95	23.90 - 24.10	
25	4544.13	24.90	24.90 - 25.10	
26	5251.58	25.95	25.90 - 26.10	
59	60605.06	58.95	58.90 - 59.10	
115	106210.56	115.00	114.90 - 115.10	
206	27147.89	206.00	205.90 - 206.10	
207	23828.78	207.00	206.90 - 207.10	
208	57365.87	208.00	207.90 - 208.10	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
9	0.61	0.798	0.900	
24	0.59	0.780	0.900	
25	0.59	0.778	0.900	
26	0.61	0.807	0.900	
59	0.57	0.770	0.900	
115	0.54	0.748	0.900	
206	0.50	0.762	0.900	
207	0.50	0.724	0.900	
208	0.50	0.733	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	235
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.05 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	0.90 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.2 V	Deflect	12.8 V
Extract 2	-165.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.5 V

US EPA Tune Check Report

He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	170 V		

QP Parameters

Mass Gain	132	Axis Gain	1.0006	QP Bias	-2.5 V
Mass Offset	123	Axis Offset	-0.03		

Hardware Settings

Torch

Torch H	-0.8 mm	Torch V	-0.7 mm		

EM

Discriminator	3.7 mV	Analog HV	2187 V	Pulse HV	1732 V

Quantitation Report

Data File Name	012CALB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/14/2023 12:08:44 PM
Sample Name	ICIS 4654618
Sample Type	CalBlk
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

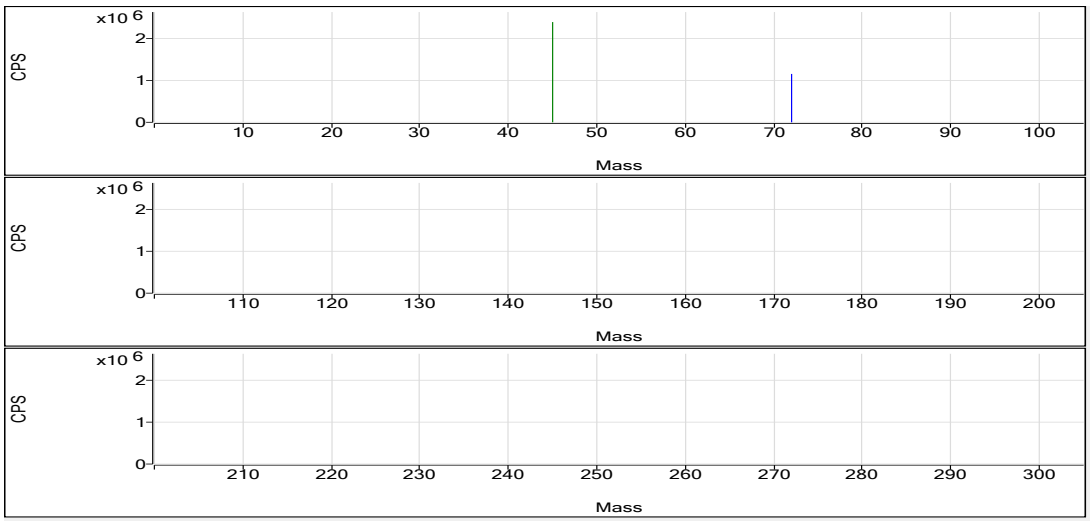
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	N/A	36.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.000	ppb	N/A	1.33	0.0000	Pulse	1.5000	3
Na	23	45	He	0.000	ppb	N/A	13156.21	0.3007	Pulse	0.1000	3
Mg	24	45	He	0.000	ppb	N/A	143.34	0.0033	Pulse	0.1000	3
Al	27	45	He	0.000	ppb	N/A	60.00	0.0014	Pulse	0.1000	3
K	39	45	He	0.000	ppb	N/A	16539.87	0.3780	Pulse	0.1000	3
Ca	44	45	He	0.000	ppb	N/A	140.01	0.0032	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.000	ppb	N/A	1083.38	0.0248	Pulse	0.5000	3
Cr	52	45	He	0.000	ppb	N/A	1823.50	0.0417	Pulse	0.1000	3
Mn	55	45	He	0.000	ppb	N/A	283.35	0.0065	Pulse	0.1000	3
Fe	57	45	He	0.000	ppb	N/A	93.33	0.0021	Pulse	0.1000	3
Co	59	45	He	0.000	ppb	N/A	130.01	0.0030	Pulse	0.1000	3
Ni	60	72	He	0.000	ppb	N/A	223.34	0.0029	Pulse	0.1000	3
Cu	63	72	He	0.000	ppb	N/A	346.68	0.0045	Pulse	0.1000	3
Zn	66	72	He	0.000	ppb	N/A	220.01	0.0029	Pulse	0.1000	3
As	75	72	He	0.000	ppb	N/A	52.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	N/A	83.33	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.000	ppb	N/A	40.00	0.0005	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	23.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.000	ppb	N/A	1370.12	0.0177	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	6.67	0.0001	Pulse	0.1000	3
Ba	137	115	He	0.000	ppb	N/A	10.00	0.0001	Pulse	0.1000	3
Tl	205	159	He	0.000	ppb	N/A	63.33	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.000	ppb	N/A	540.02	0.0015	Pulse	0.1000	3
U	238	209	He	0.000	ppb	N/A	30.00	0.0001	Pulse	0.1000	3

ISTD Table:

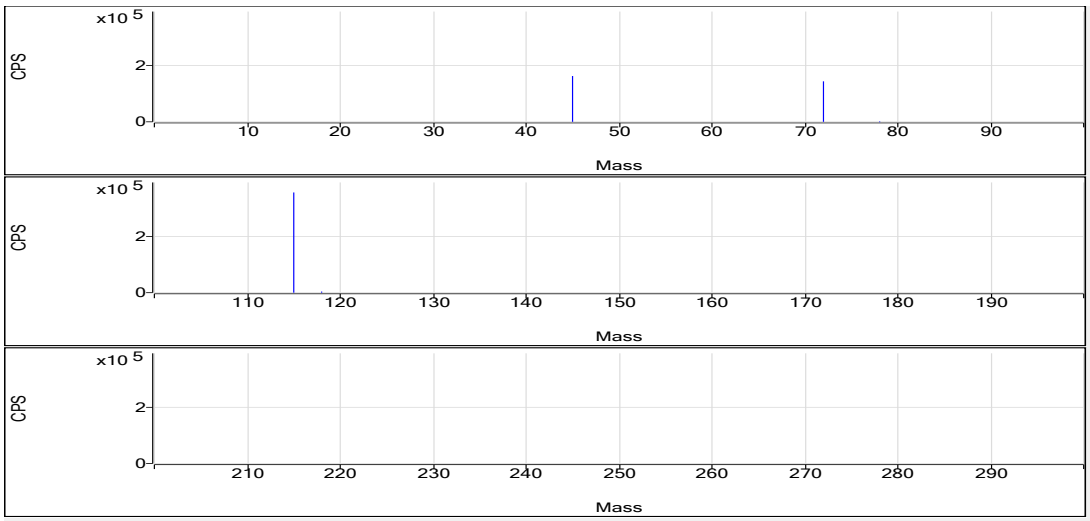
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2407532.52	0.6	100.0	Analog	0.1000	3
No Gas	Ge	72	1161714.70	1.1	100.0	Pulse	0.1000	3
H2	Sc	45	164407.53	0.1	100.0	Pulse	0.1000	3
H2	Ge	72	145346.03	1.6	100.0	Pulse	0.1000	3
H2	In	115	359852.31	0.3	100.0	Pulse	0.1000	3
He	Sc	45	43759.87	0.8	100.0	Pulse	0.1000	3
He	Ge	72	76504.54	0.6	100.0	Pulse	0.1000	3
He	In	115	77529.98	2.9	100.0	Pulse	0.1000	3
He	Tb	159	370920.75	0.5	100.0	Pulse	0.1000	3
He	Bi	209	292328.39	0.5	100.0	Pulse	0.1000	3

No Gas

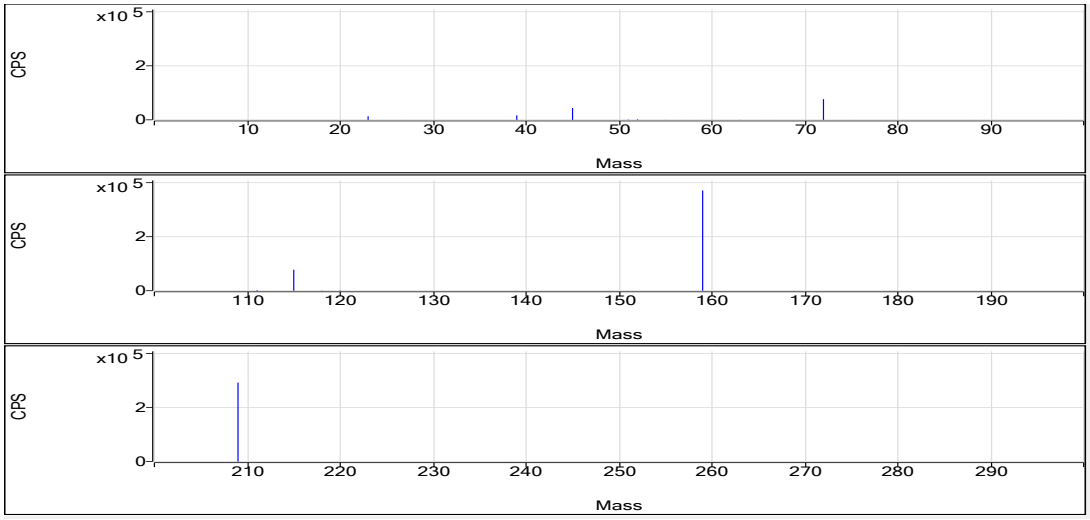


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	36.00	0.0007	1.523E-05
Be	9	1	No Gas	0	0	36.00	0.0007	1.523E-05
Be	9	1	No Gas	0.001	0	38.00	0.0007	1.523E-05
Se	78	2	H2	0.022	0	2.67	0.0002	3.71E-06
Se	78	2	H2	-0.021	0	0.00	0.0002	3.71E-06
Se	78	2	H2	0	0	1.33	0.0002	3.71E-06
Na	23	3	He	-0.865	0.2975	13126.17	0.0036	0.3007
Na	23	3	He	0.878	0.3038	13276.34	0.0036	0.3007
Na	23	3	He	-0.013	0.3006	13066.11	0.0036	0.3007
Mg	24	3	He	0.318	0.0039	170.01	0.0018	0.003274
Mg	24	3	He	-0.289	0.0027	120.01	0.0018	0.003274
Mg	24	3	He	-0.029	0.0032	140.01	0.0018	0.003274
Al	27	3	He	0.373	0.0016	70.00	0.0006	0.00137
Al	27	3	He	0.005	0.0014	60.00	0.0006	0.00137
Al	27	3	He	-0.378	0.0012	50.00	0.0006	0.00137
K	39	3	He	-2.635	0.3749	16539.77	0.0012	0.378
K	39	3	He	-8.902	0.3675	16059.34	0.0012	0.378
K	39	3	He	11.536	0.3916	17020.49	0.0012	0.378
Ca	44	3	He	-10.197	0.0025	110.00	0.0001	0.003203
Ca	44	3	He	3.314	0.0034	150.01	0.0001	0.003203
Ca	44	3	He	6.883	0.0037	160.01	0.0001	0.003203
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.031	0.0241	1062.05	0.0224	0.02476
V	51	3	He	-0.004	0.0247	1078.05	0.0224	0.02476
V	51	3	He	0.035	0.0255	1110.05	0.0224	0.02476
Cr	52	3	He	-0.014	0.0413	1820.16	0.0293	0.04167
Cr	52	3	He	0.086	0.0442	1930.19	0.0293	0.04167
Cr	52	3	He	-0.071	0.0396	1720.15	0.0293	0.04167
Mn	55	3	He	-0.045	0.0059	260.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.101	0.0078	340.02	0.0129	0.006476
Mn	55	3	He	-0.056	0.0058	250.01	0.0129	0.006476
Fe	57	3	He	1	0.0027	120.00	0.0006	0.00213
Fe	57	3	He	-0.119	0.0021	90.00	0.0006	0.00213
Fe	57	3	He	-0.881	0.0016	70.00	0.0006	0.00213
Co	59	3	He	0.004	0.0032	140.01	0.0572	0.00297
Co	59	3	He	0	0.003	130.01	0.0572	0.00297
Co	59	3	He	-0.004	0.0028	120.00	0.0572	0.00297
Ni	60	3	He	0.055	0.0034	260.01	0.0086	0.002921
Ni	60	3	He	-0.082	0.0022	170.01	0.0086	0.002921
Ni	60	3	He	0.027	0.0032	240.01	0.0086	0.002921
Cu	63	3	He	0.012	0.0048	370.02	0.0257	0.004531
Cu	63	3	He	-0.004	0.0044	340.02	0.0257	0.004531
Cu	63	3	He	-0.007	0.0043	330.01	0.0257	0.004531
Zn	66	3	He	-0.001	0.0029	220.01	0.0029	0.002877
Zn	66	3	He	-0.095	0.0026	200.01	0.0029	0.002877
Zn	66	3	He	0.097	0.0032	240.01	0.0029	0.002877
As	75	3	He	0.051	0.0008	60.00	0.002	0.0006798
As	75	3	He	-0.04	0.0006	46.00	0.002	0.0006798
As	75	3	He	-0.011	0.0007	50.00	0.002	0.0006798
Sr	88	3	He	0.013	0.0012	90.00	0.009	0.001075
Sr	88	3	He	-0.019	0.0009	70.00	0.009	0.001075
Sr	88	3	He	0.006	0.0011	90.00	0.009	0.001075
Mo	98	3	He	-0.017	0.0001	10.00	0.0226	0.0005115
Mo	98	3	He	0.012	0.0008	60.00	0.0226	0.0005115
Mo	98	3	He	0.005	0.0006	50.00	0.0226	0.0005115
Ag	107	3	He	0.002	0.0004	30.00	0.0487	0.0003023
Ag	107	3	He	-0.001	0.0003	20.00	0.0487	0.0003023
Ag	107	3	He	-0.001	0.0003	20.00	0.0487	0.0003023
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Cd	111	3	He	0.003	0	2.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Sn	120	3	He	0.128	0.0198	1490.15	0.0161	0.0177
Sn	120	3	He	-0.04	0.0171	1320.11	0.0161	0.0177
Sn	120	3	He	-0.088	0.0163	1300.10	0.0161	0.0177
Sb	121	3	He	-0.006	0	0.00	0.0152	8.618E-05
Sb	121	3	He	0.011	0.0003	20.00	0.0152	8.618E-05
Sb	121	3	He	-0.006	0	0.00	0.0152	8.618E-05
Ba	137	3	He	0.001	0.0001	10.00	0.0049	0.0001277
Ba	137	3	He	-0.026	0	0.00	0.0049	0.0001277
Ba	137	3	He	0.025	0.0003	20.00	0.0049	0.0001277
Tl	205	3	He	0.002	0.0002	80.00	0.0249	0.000171
Tl	205	3	He	-0.004	0.0001	30.00	0.0249	0.000171
Tl	205	3	He	0.002	0.0002	80.00	0.0249	0.000171
Pb	208	3	He	0.003	0.0016	220.01	0.0334	0.001456
Pb	208	3	He	-0.002	0.0014	340.01	0.0334	0.001456
Pb	208	3	He	-0.001	0.0014	270.01	0.0334	0.001456
U	238	3	He	-0.001	0	10.00	0.0493	0.0001028
U	238	3	He	0.002	0.0002	60.00	0.0493	0.0001028
U	238	3	He	-0.001	0.0001	20.00	0.0493	0.0001028
Sc	45	1	No Gas			2403425.90		
Sc	45	1	No Gas			2395891.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2423280.12		
Ge	72	1	No Gas			1154163.81		
Ge	72	1	No Gas			1153848.81		
Ge	72	1	No Gas			1177131.47		
Sc	45	2	H2			164634.14		
Sc	45	2	H2			164188.57		
Sc	45	2	H2			164399.88		
Ge	72	2	H2			143635.36		
Ge	72	2	H2			144444.26		
Ge	72	2	H2			147958.48		
In	115	2	H2			358678.94		
In	115	2	H2			359930.66		
In	115	2	H2			360947.34		
Sc	45	3	He			44117.73		
Sc	45	3	He			43696.27		
Sc	45	3	He			43465.60		
Ge	72	3	He			76564.84		
Ge	72	3	He			76896.53		
Ge	72	3	He			76052.24		
In	115	3	He			75394.87		
In	115	3	He			77365.25		
In	115	3	He			79849.32		
Tb	159	3	He			369969.56		
Tb	159	3	He			372922.34		
Tb	159	3	He			369870.35		
Bi	209	3	He			294049.31		
Bi	209	3	He			291652.50		
Bi	209	3	He			291283.37		

Quantitation Report

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Sample Type	CalStd
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

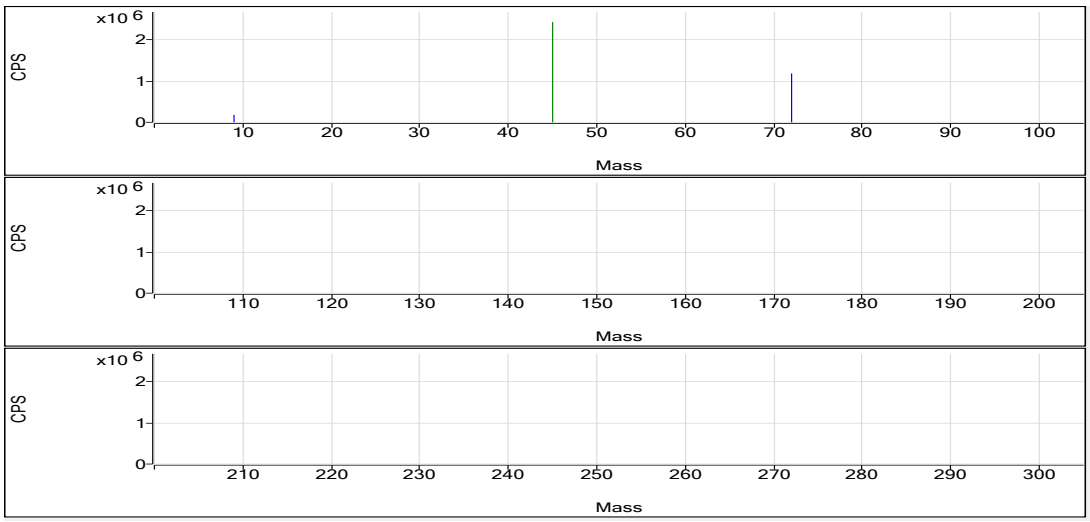
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	100.000	ppb	1.0	179868.12	0.0740	Pulse	0.5000	3
Se	78	115	H2	100.000	ppb	0.8	6294.06	0.0174	Pulse	1.5000	3
Na	23	45	He	10000.000	ppb	0.8	1580167.84	36.4694	Analog	0.1000	3
Mg	24	45	He	10000.000	ppb	0.7	789990.30	18.2330	Pulse	0.1000	3
Al	27	45	He	10000.000	ppb	0.4	252025.05	5.8166	Pulse	0.1000	3
K	39	45	He	10000.000	ppb	1.3	526497.46	12.1516	Pulse	0.1000	3
Ca	44	45	He	10000.000	ppb	1.0	30275.74	0.6987	Pulse	0.1000	3
Ti	47	45	He	10000.000	ppb	0.4	232572.86	5.3676	Pulse	0.1000	3
V	51	45	He	1000.000	ppb	0.7	971551.06	22.4234	Pulse	0.5000	3
Cr	52	45	He	1000.000	ppb	3.8	1270594.04	29.3281	Mix	0.1000	3
Mn	55	45	He	1000.000	ppb	1.4	560796.22	12.9436	Pulse	0.1000	3
Fe	57	45	He	10000.000	ppb	1.2	255704.03	5.9018	Pulse	0.1000	3
Co	59	45	He	1000.000	ppb	1.0	2479227.36	57.2212	Analog	0.1000	3
Ni	60	72	He	1000.000	ppb	1.1	674420.72	8.6186	Pulse	0.1000	3
Cu	63	72	He	1000.000	ppb	0.4	2010001.74	25.6837	Analog	0.1000	3
Zn	66	72	He	1000.000	ppb	1.4	226324.58	2.8924	Pulse	0.1000	3
As	75	72	He	1000.000	ppb	1.2	159536.30	2.0388	Pulse	0.5000	3
Sr	88	115	He	100.000	ppb	1.3	69782.79	0.9008	Pulse	0.1000	3
Mo	98	115	He	100.000	ppb	1.2	174972.43	2.2587	Pulse	0.1000	3
Ag	107	115	He	100.000	ppb	0.6	377118.64	4.8681	Pulse	0.1000	3
Cd	111	115	He	100.000	ppb	1.6	42020.25	0.5425	Pulse	0.5000	3
Sn	120	115	He	100.000	ppb	1.4	126464.12	1.6325	Pulse	0.1000	3
Sb	121	115	He	100.000	ppb	1.3	117708.04	1.5194	Pulse	0.1000	3
Ba	137	115	He	1000.000	ppb	0.8	381715.40	4.9274	Pulse	0.1000	3
Tl	205	159	He	100.000	ppb	0.5	931740.95	2.4917	Pulse	0.1000	3
Pb	208	159	He	100.000	ppb	0.7	1250343.35	3.3438	Pulse	0.1000	3
U	238	209	He	100.000	ppb	0.6	1436545.91	4.9336	Pulse	0.1000	3

ISTD Table:

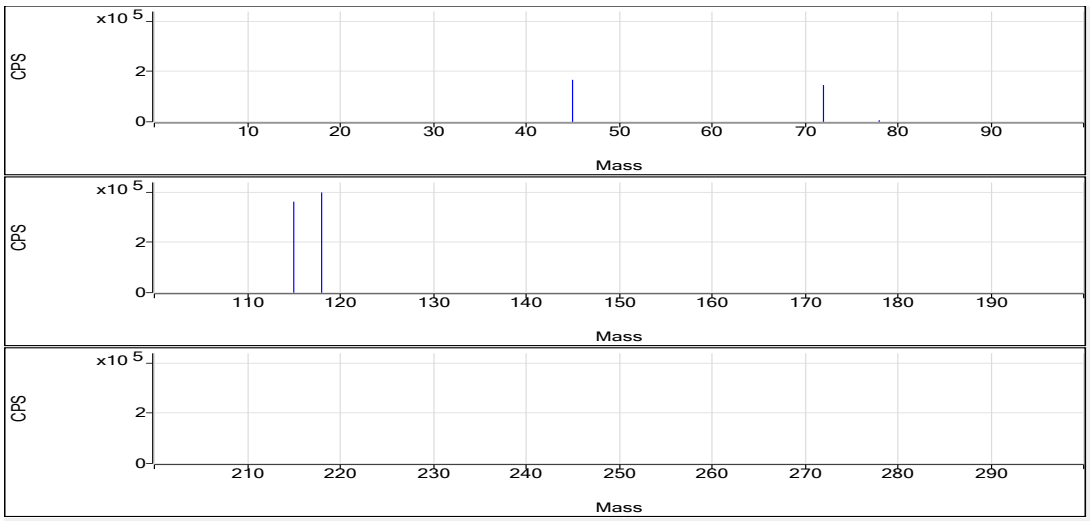
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2429435.75	1.4	100.9	Analog	0.1000	3
No Gas	Ge	72	1185076.23	1.2	102.0	Pulse	0.1000	3
H2	Sc	45	167246.81	1.9	101.7	Pulse	0.1000	3
H2	Ge	72	146434.22	0.6	100.7	Pulse	0.1000	3
H2	In	115	362455.32	0.5	100.7	Pulse	0.1000	3
He	Sc	45	43328.66	0.6	99.0	Pulse	0.1000	3
He	Ge	72	78257.65	1.2	102.3	Pulse	0.1000	3
He	In	115	77469.62	0.8	99.9	Pulse	0.1000	3
He	Tb	159	373934.43	0.3	100.8	Pulse	0.1000	3
He	Bi	209	291183.54	0.7	99.6	Pulse	0.1000	3

No Gas

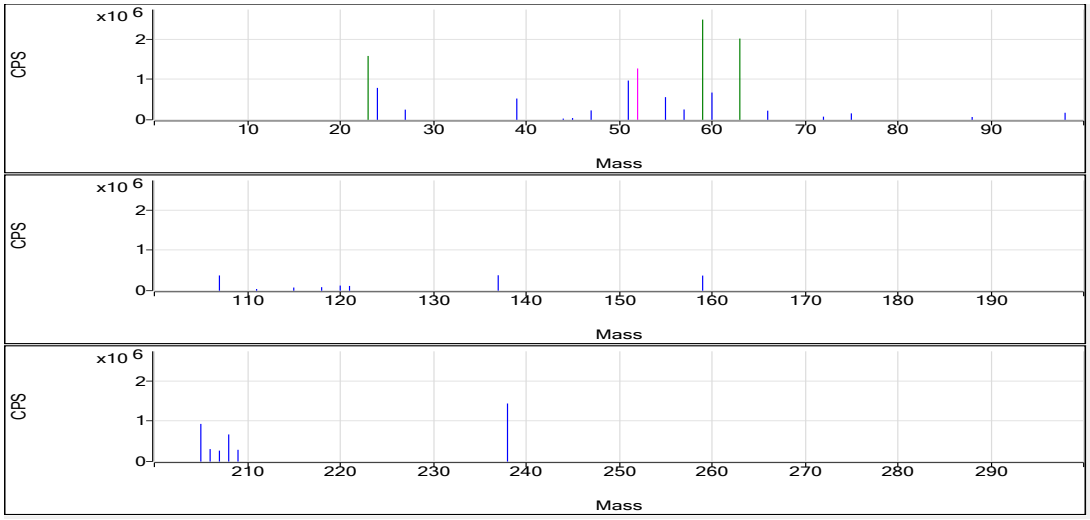


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	98.954	0.0733	180812.72	0.0007	1.523E-05
Be	9	1	No Gas	101.019	0.0748	180403.64	0.0007	1.523E-05
Be	9	1	No Gas	100.027	0.0741	178388.00	0.0007	1.523E-05
Se	78	2	H2	99.159	0.0172	6274.05	0.0002	3.71E-06
Se	78	2	H2	99.997	0.0174	6274.72	0.0002	3.71E-06
Se	78	2	H2	100.844	0.0175	6333.41	0.0002	3.71E-06
Na	23	3	He	9913.678	36.1572	1563250.60	0.0036	0.3007
Na	23	3	He	10076.113	36.7447	1584988.57	0.0036	0.3007
Na	23	3	He	10010.209	36.5064	1592264.35	0.0036	0.3007
Mg	24	3	He	9987.108	18.2095	787282.72	0.0018	0.003274
Mg	24	3	He	10078.506	18.3761	792654.60	0.0018	0.003274
Mg	24	3	He	9934.387	18.1134	790033.58	0.0018	0.003274
Al	27	3	He	9970.028	5.7992	250727.67	0.0006	0.00137
Al	27	3	He	10046.795	5.8439	252075.25	0.0006	0.00137
Al	27	3	He	9983.176	5.8069	253272.22	0.0006	0.00137
K	39	3	He	9918.206	12.0553	521210.38	0.0012	0.378
K	39	3	He	10155.233	12.3344	532046.28	0.0012	0.378
K	39	3	He	9926.561	12.0652	526235.73	0.0012	0.378
Ca	44	3	He	9964.439	0.6962	30102.02	0.0001	0.003203
Ca	44	3	He	9920.761	0.6932	29901.58	0.0001	0.003203
Ca	44	3	He	10114.8	0.7067	30823.61	0.0001	0.003203
Ti	47	3	He	9948.881	5.3402	230880.82	0.0005	0
Ti	47	3	He	10018.276	5.3774	231955.23	0.0005	0
Ti	47	3	He	10032.843	5.3852	234882.52	0.0005	0
V	51	3	He	999.259	22.4068	968754.06	0.0224	0.02476
V	51	3	He	1007.529	22.592	974510.75	0.0224	0.02476
V	51	3	He	993.211	22.2713	971388.38	0.0224	0.02476
Cr	52	3	He	988.245	28.9838	1253110.76	0.0293	0.04167
Cr	52	3	He	1042.146	30.5624	1318314.04	0.0293	0.04167
Cr	52	3	He	969.609	28.4381	1240357.33	0.0293	0.04167
Mn	55	3	He	1004.858	13.0064	562329.21	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1010.904	13.0846	564406.71	0.0129	0.006476
Mn	55	3	He	984.238	12.7396	555652.73	0.0129	0.006476
Fe	57	3	He	9993.188	5.8977	254987.50	0.0006	0.00213
Fe	57	3	He	10123.499	5.9746	257715.78	0.0006	0.00213
Fe	57	3	He	9883.312	5.8329	254408.82	0.0006	0.00213
Co	59	3	He	1007.242	57.6356	2491864.65	0.0572	0.00297
Co	59	3	He	1004.251	57.4645	2478736.68	0.0572	0.00297
Co	59	3	He	988.506	56.5636	2467080.74	0.0572	0.00297
Ni	60	3	He	1010.852	8.7121	672649.21	0.0086	0.002921
Ni	60	3	He	1001.091	8.628	679430.46	0.0086	0.002921
Ni	60	3	He	988.057	8.5157	671182.49	0.0086	0.002921
Cu	63	3	He	995.567	25.5698	1974210.75	0.0257	0.004531
Cu	63	3	He	1003.581	25.7756	2029758.72	0.0257	0.004531
Cu	63	3	He	1000.852	25.7055	2026035.75	0.0257	0.004531
Zn	66	3	He	1016.341	2.9396	226960.88	0.0029	0.002877
Zn	66	3	He	994.269	2.8758	226461.48	0.0029	0.002877
Zn	66	3	He	989.39	2.8617	225551.38	0.0029	0.002877
As	75	3	He	1013.323	2.0659	159508.30	0.002	0.0006798
As	75	3	He	993.916	2.0264	159572.27	0.002	0.0006798
As	75	3	He	992.761	2.024	159528.33	0.002	0.0006798
Sr	88	3	He	98.531	0.8876	69230.16	0.009	0.001075
Sr	88	3	He	100.673	0.9069	70385.20	0.009	0.001075
Sr	88	3	He	100.796	0.908	69733.00	0.009	0.001075
Mo	98	3	He	98.612	2.2273	173723.65	0.0226	0.0005115
Mo	98	3	He	100.959	2.2803	176983.53	0.0226	0.0005115
Mo	98	3	He	100.429	2.2684	174210.10	0.0226	0.0005115
Ag	107	3	He	99.602	4.8488	378185.19	0.0487	0.0003023
Ag	107	3	He	99.667	4.8519	376568.55	0.0487	0.0003023
Ag	107	3	He	100.731	4.9037	376602.18	0.0487	0.0003023
Cd	111	3	He	98.29	0.5332	41585.63	0.0054	8.618E-06
Cd	111	3	He	100.214	0.5436	42191.43	0.0054	8.618E-06
Cd	111	3	He	101.497	0.5506	42283.69	0.0054	8.618E-06
Sn	120	3	He	98.414	1.6069	125334.46	0.0161	0.0177
Sn	120	3	He	100.475	1.6402	127301.85	0.0161	0.0177
Sn	120	3	He	101.111	1.6505	126756.04	0.0161	0.0177
Sb	121	3	He	99.727	1.5152	118181.10	0.0152	8.618E-05
Sb	121	3	He	101.401	1.5406	119573.44	0.0152	8.618E-05
Sb	121	3	He	98.872	1.5022	115369.57	0.0152	8.618E-05
Ba	137	3	He	990.604	4.8811	380709.45	0.0049	0.0001277
Ba	137	3	He	1006.384	4.9589	384872.85	0.0049	0.0001277
Ba	137	3	He	1003.011	4.9423	379563.90	0.0049	0.0001277
Tl	205	3	He	99.506	2.4794	928780.53	0.0249	0.000171
Tl	205	3	He	100.567	2.5059	934109.36	0.0249	0.000171
Tl	205	3	He	99.927	2.4899	932332.95	0.0249	0.000171
Pb	208	3	He	99.843	3.3386	674054.05	0.0334	0.001456
Pb	208	3	He	100.747	3.3687	675105.30	0.0334	0.001456
Pb	208	3	He	99.41	3.3241	663389.60	0.0334	0.001456
U	238	3	He	100.6	4.9632	1434022.32	0.0493	0.0001028
U	238	3	He	100.069	4.937	1443002.32	0.0493	0.0001028
U	238	3	He	99.331	4.9006	1432613.10	0.0493	0.0001028
Sc	45	1	No Gas			2467799.81		
Sc	45	1	No Gas			2411907.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2408600.28		
Ge	72	1	No Gas			1199892.95		
Ge	72	1	No Gas			1182617.48		
Ge	72	1	No Gas			1172718.26		
Sc	45	2	H2			163682.79		
Sc	45	2	H2			169317.13		
Sc	45	2	H2			168740.52		
Ge	72	2	H2			146504.92		
Ge	72	2	H2			147313.36		
Ge	72	2	H2			145484.39		
In	115	2	H2			364360.42		
In	115	2	H2			361345.35		
In	115	2	H2			361660.19		
Sc	45	3	He			43234.80		
Sc	45	3	He			43135.12		
Sc	45	3	He			43616.07		
Ge	72	3	He			77208.65		
Ge	72	3	He			78747.22		
Ge	72	3	He			78817.09		
In	115	3	He			78662.94		
In	115	3	He			78299.92		
In	115	3	He			77486.25		
Tb	159	3	He			374594.72		
Tb	159	3	He			372768.43		
Tb	159	3	He			374440.15		
Bi	209	3	He			288932.01		
Bi	209	3	He			292283.88		
Bi	209	3	He			292334.74		

Quantitation Report

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Sample Type	ICV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

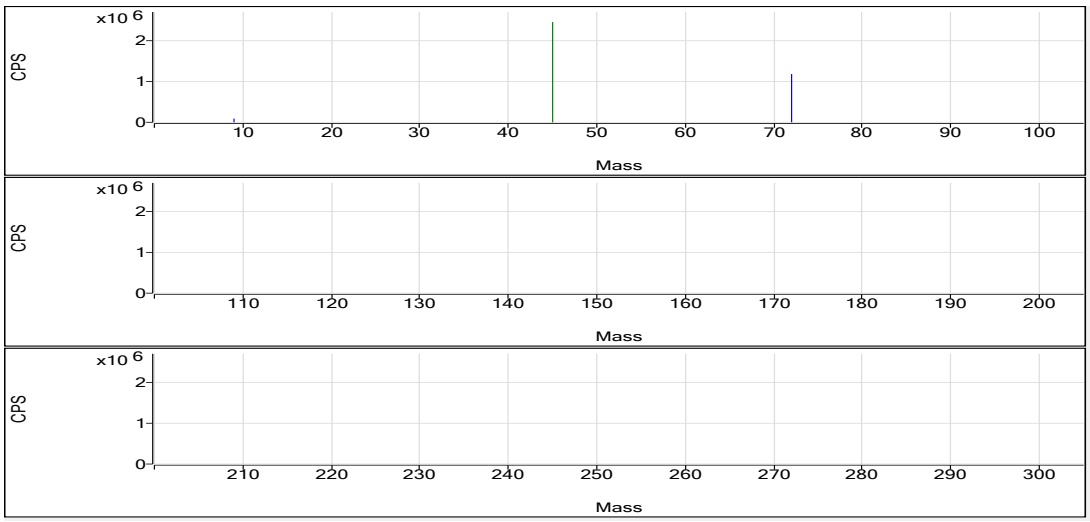
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.828	ppb	2.0	90764.20	0.0369	Pulse	0.5000	3
Se	78	115	H2	50.744	ppb	2.2	3181.03	0.0088	Pulse	1.5000	3
Na	23	45	He	4823.266	ppb	2.0	770046.78	17.7458	Pulse	0.1000	3
Mg	24	45	He	4993.931	ppb	2.1	395173.16	9.1071	Pulse	0.1000	3
Al	27	45	He	4955.361	ppb	2.7	125094.29	2.8830	Pulse	0.1000	3
K	39	45	He	5061.463	ppb	2.3	274984.33	6.3372	Pulse	0.1000	3
Ca	44	45	He	5031.645	ppb	2.6	15325.19	0.3532	Pulse	0.1000	3
Ti	47	45	He	4915.450	ppb	2.5	114481.58	2.6384	Pulse	0.1000	3
V	51	45	He	498.930	ppb	2.1	485999.07	11.2001	Pulse	0.5000	3
Cr	52	45	He	496.804	ppb	2.2	633153.64	14.5913	Pulse	0.1000	3
Mn	55	45	He	498.830	ppb	2.2	280303.32	6.4599	Pulse	0.1000	3
Fe	57	45	He	4976.617	ppb	1.5	127506.48	2.9381	Pulse	0.1000	3
Co	59	45	He	485.360	ppb	2.3	1205167.12	27.7744	Pulse	0.1000	3
Ni	60	72	He	506.963	ppb	0.8	339984.52	4.3707	Pulse	0.1000	3
Cu	63	72	He	487.429	ppb	0.4	974011.13	12.5213	Pulse	0.1000	3
Zn	66	72	He	511.781	ppb	0.8	115256.85	1.4817	Pulse	0.1000	3
As	75	72	He	495.488	ppb	0.8	78605.56	1.0105	Pulse	0.5000	3
Sr	88	115	He	48.844	ppb	3.1	34436.03	0.4405	Pulse	0.1000	3
Mo	98	115	He	49.591	ppb	0.3	87582.73	1.1204	Pulse	0.1000	3
Ag	107	115	He	48.960	ppb	1.1	186323.52	2.3836	Pulse	0.1000	3
Cd	111	115	He	54.464	ppb	1.2	23095.08	0.2954	Pulse	0.5000	3
Sn	120	115	He	51.462	ppb	2.5	66342.85	0.8487	Pulse	0.1000	3
Sb	121	115	He	52.728	ppb	1.7	62625.33	0.8012	Pulse	0.1000	3
Ba	137	115	He	499.189	ppb	1.2	192286.24	2.4598	Pulse	0.1000	3
Tl	205	159	He	50.218	ppb	0.7	468598.12	1.2514	Pulse	0.1000	3
Pb	208	159	He	50.193	ppb	0.6	628764.02	1.6791	Pulse	0.1000	3
U	238	209	He	50.814	ppb	0.7	735288.37	2.5070	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2460018.97	1.3	102.2	Analog	0.1000	3
No Gas	Ge	72	1184397.27	0.7	102.0	Pulse	0.1000	3
H2	Sc	45	166850.17	0.7	101.5	Pulse	0.1000	3
H2	Ge	72	145488.91	0.9	100.1	Pulse	0.1000	3
H2	In	115	360940.64	0.7	100.3	Pulse	0.1000	3
He	Sc	45	43405.65	2.2	99.2	Pulse	0.1000	3
He	Ge	72	77788.64	0.8	101.7	Pulse	0.1000	3
He	In	115	78173.20	0.6	100.8	Pulse	0.1000	3
He	Tb	159	374471.19	0.4	101.0	Pulse	0.1000	3
He	Bi	209	293298.88	0.6	100.3	Pulse	0.1000	3

No Gas



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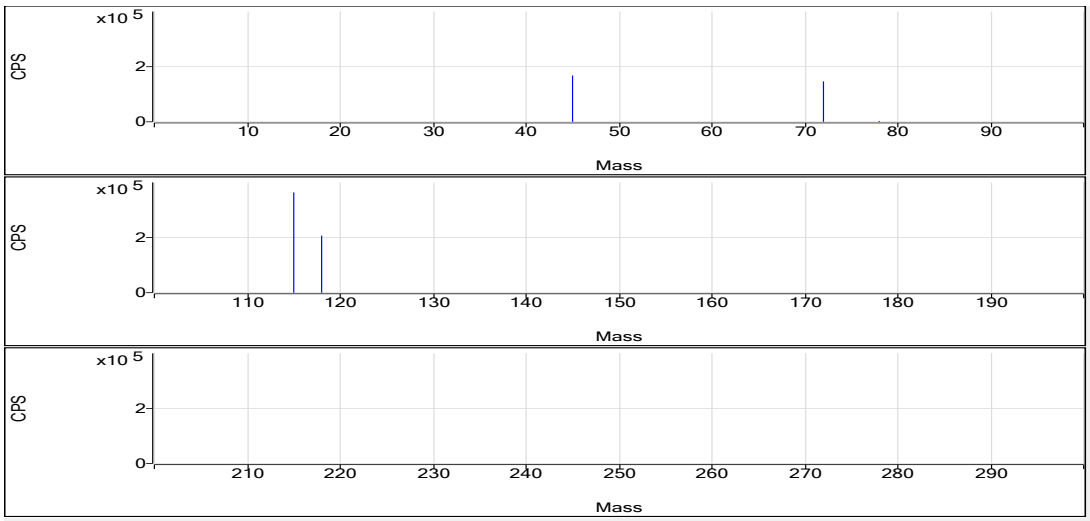
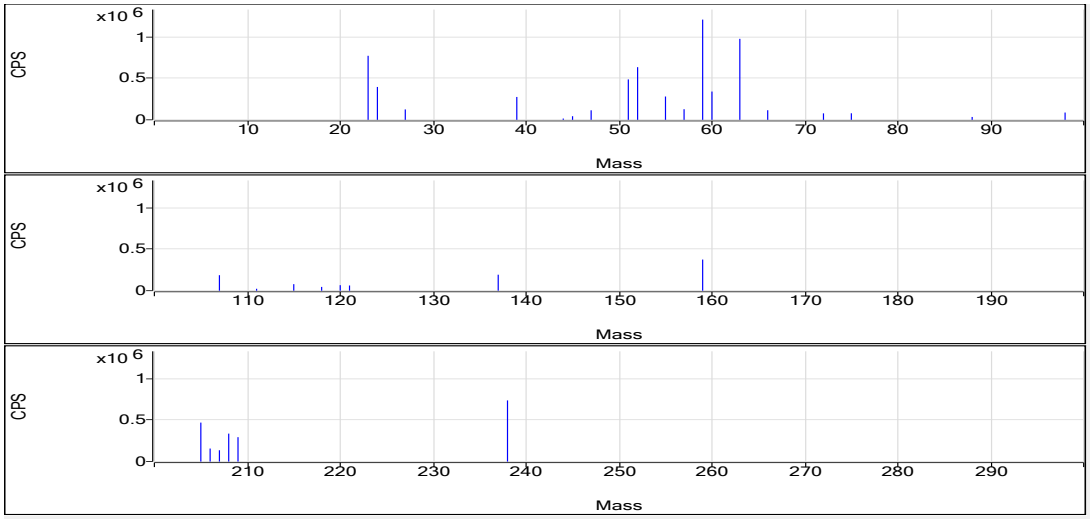


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.55	0.0367	89941.80	0.0007	1.523E-05
Be	9	1	No Gas	48.996	0.0363	90583.68	0.0007	1.523E-05
Be	9	1	No Gas	50.937	0.0377	91767.12	0.0007	1.523E-05
Se	78	2	H2	51.756	0.009	3218.37	0.0002	3.71E-06
Se	78	2	H2	49.56	0.0086	3115.68	0.0002	3.71E-06
Se	78	2	H2	50.917	0.0088	3209.03	0.0002	3.71E-06
Na	23	3	He	4934.857	18.1494	767579.44	0.0036	0.3007
Na	23	3	He	4785.89	17.6106	775178.27	0.0036	0.3007
Na	23	3	He	4749.05	17.4774	767382.64	0.0036	0.3007
Mg	24	3	He	5115.619	9.3289	394539.29	0.0018	0.003274
Mg	24	3	He	4916.239	8.9654	394636.71	0.0018	0.003274
Mg	24	3	He	4949.935	9.0269	396343.47	0.0018	0.003274
Al	27	3	He	5094.413	2.9639	125350.18	0.0006	0.00137
Al	27	3	He	4831.985	2.8113	123746.67	0.0006	0.00137
Al	27	3	He	4939.684	2.8739	126186.03	0.0006	0.00137
K	39	3	He	5193.286	6.4924	274577.48	0.0012	0.378
K	39	3	He	5018.01	6.286	276695.95	0.0012	0.378
K	39	3	He	4973.092	6.2331	273679.55	0.0012	0.378
Ca	44	3	He	5141.272	0.3608	15258.44	0.0001	0.003203
Ca	44	3	He	5068.769	0.3557	15658.98	0.0001	0.003203
Ca	44	3	He	4884.893	0.343	15058.16	0.0001	0.003203
Ti	47	3	He	5048.687	2.7099	114609.02	0.0005	0
Ti	47	3	He	4807.281	2.5804	113581.11	0.0005	0
Ti	47	3	He	4890.383	2.625	115254.60	0.0005	0
V	51	3	He	511.012	11.4707	485122.72	0.0224	0.02476
V	51	3	He	494.52	11.1013	488654.25	0.0224	0.02476
V	51	3	He	491.258	11.0283	484220.25	0.0224	0.02476
Cr	52	3	He	508.793	14.9424	631946.83	0.0293	0.04167
Cr	52	3	He	494.864	14.5345	639773.62	0.0293	0.04167
Cr	52	3	He	486.755	14.297	627740.46	0.0293	0.04167
Mn	55	3	He	511.667	6.6259	280225.91	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	493.9	6.3961	281541.15	0.0129	0.006476
Mn	55	3	He	490.922	6.3576	279142.89	0.0129	0.006476
Fe	57	3	He	5056.7	2.9854	126258.85	0.0006	0.00213
Fe	57	3	He	4962.471	2.9298	128962.90	0.0006	0.00213
Fe	57	3	He	4910.68	2.8992	127297.69	0.0006	0.00213
Co	59	3	He	498.065	28.5014	1205385.45	0.0572	0.00297
Co	59	3	He	481.174	27.5349	1212021.94	0.0572	0.00297
Co	59	3	He	476.841	27.287	1198093.97	0.0572	0.00297
Ni	60	3	He	511.436	4.4093	340658.35	0.0086	0.002921
Ni	60	3	He	504.882	4.3528	341458.51	0.0086	0.002921
Ni	60	3	He	504.569	4.3501	337836.71	0.0086	0.002921
Cu	63	3	He	486.064	12.4862	964675.69	0.0257	0.004531
Cu	63	3	He	486.365	12.494	980093.03	0.0257	0.004531
Cu	63	3	He	489.858	12.5837	977264.67	0.0257	0.004531
Zn	66	3	He	508.132	1.4711	113657.29	0.0029	0.002877
Zn	66	3	He	510.62	1.4783	115966.17	0.0029	0.002877
Zn	66	3	He	516.59	1.4956	116147.09	0.0029	0.002877
As	75	3	He	496.817	1.0132	78282.51	0.002	0.0006798
As	75	3	He	491.023	1.0014	78558.03	0.002	0.0006798
As	75	3	He	498.624	1.0169	78976.13	0.002	0.0006798
Sr	88	3	He	48.712	0.4394	34182.16	0.009	0.001075
Sr	88	3	He	50.406	0.4546	35475.25	0.009	0.001075
Sr	88	3	He	47.413	0.4277	33650.67	0.009	0.001075
Mo	98	3	He	49.703	1.1229	87360.88	0.0226	0.0005115
Mo	98	3	He	49.456	1.1173	87190.50	0.0226	0.0005115
Mo	98	3	He	49.615	1.1209	88196.82	0.0226	0.0005115
Ag	107	3	He	49.371	2.4036	187000.78	0.0487	0.0003023
Ag	107	3	He	49.163	2.3935	186775.84	0.0487	0.0003023
Ag	107	3	He	48.346	2.3537	185193.94	0.0487	0.0003023
Cd	111	3	He	54.728	0.2969	23097.09	0.0054	8.618E-06
Cd	111	3	He	54.936	0.298	23255.36	0.0054	8.618E-06
Cd	111	3	He	53.729	0.2915	22932.79	0.0054	8.618E-06
Sn	120	3	He	51.611	0.8511	66219.05	0.0161	0.0177
Sn	120	3	He	52.648	0.8679	67726.42	0.0161	0.0177
Sn	120	3	He	50.126	0.8272	65083.09	0.0161	0.0177
Sb	121	3	He	53.186	0.8081	62872.87	0.0152	8.618E-05
Sb	121	3	He	53.331	0.8103	63234.90	0.0152	8.618E-05
Sb	121	3	He	51.666	0.785	61768.22	0.0152	8.618E-05
Ba	137	3	He	495.823	2.4432	190081.23	0.0049	0.0001277
Ba	137	3	He	506.061	2.4936	194594.06	0.0049	0.0001277
Ba	137	3	He	495.682	2.4425	192183.42	0.0049	0.0001277
Tl	205	3	He	49.8	1.241	466882.26	0.0249	0.000171
Tl	205	3	He	50.501	1.2584	469571.63	0.0249	0.000171
Tl	205	3	He	50.353	1.2548	469340.46	0.0249	0.000171
Pb	208	3	He	50.241	1.6807	340705.35	0.0334	0.001456
Pb	208	3	He	50.49	1.689	333490.78	0.0334	0.001456
Pb	208	3	He	49.849	1.6676	334188.39	0.0334	0.001456
U	238	3	He	50.834	2.508	735881.94	0.0493	0.0001028
U	238	3	He	51.142	2.5232	735317.49	0.0493	0.0001028
U	238	3	He	50.468	2.4899	734665.69	0.0493	0.0001028
Sc	45	1	No Gas			2451019.03		
Sc	45	1	No Gas			2496368.71		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2432669.18		
Ge	72	1	No Gas			1182761.00		
Ge	72	1	No Gas			1177633.73		
Ge	72	1	No Gas			1192797.09		
Sc	45	2	H2			165622.73		
Sc	45	2	H2			167210.02		
Sc	45	2	H2			167717.75		
Ge	72	2	H2			144222.37		
Ge	72	2	H2			145345.14		
Ge	72	2	H2			146899.22		
In	115	2	H2			358019.10		
In	115	2	H2			361944.53		
In	115	2	H2			362858.28		
Sc	45	3	He			42292.19		
Sc	45	3	He			44017.61		
Sc	45	3	He			43907.15		
Ge	72	3	He			77259.22		
Ge	72	3	He			78445.28		
Ge	72	3	He			77661.42		
In	115	3	He			78149.01		
In	115	3	He			78390.68		
In	115	3	He			79044.52		
Tb	159	3	He			376225.19		
Tb	159	3	He			373139.33		
Tb	159	3	He			374049.06		
Bi	209	3	He			293415.80		
Bi	209	3	He			291426.19		
Bi	209	3	He			295054.64		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/14/2023 12:15:03 PM
Sample Name	ICB 4654618
Sample Type	ICB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

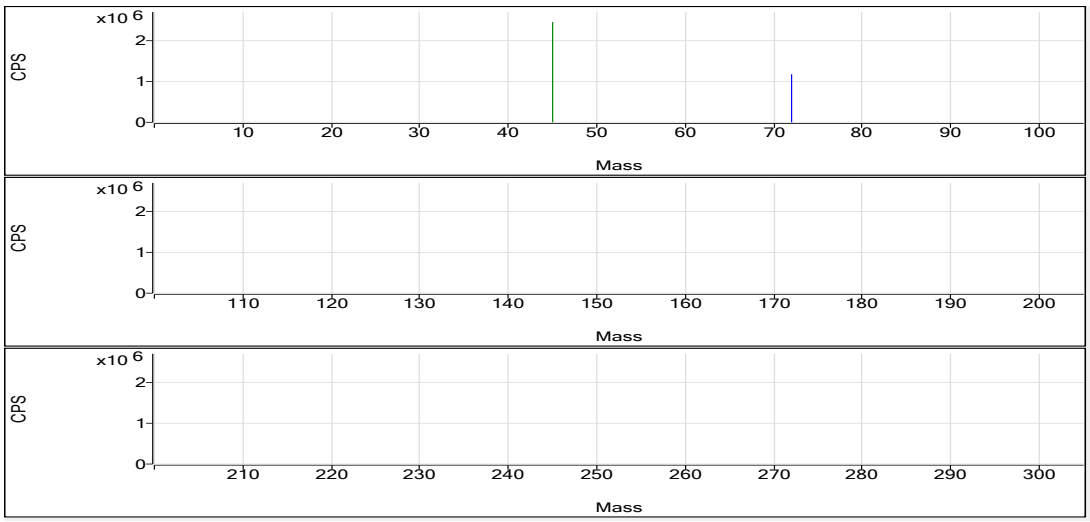
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.046	ppb	24.2	120.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.110	ppb	5.4	8.22	0.0000	Pulse	1.5000	3
Na	23	45	He	-0.836	ppb	N/A	12936.06	0.2976	Pulse	0.1000	3
Mg	24	45	He	2.116	ppb	6.6	310.02	0.0071	Pulse	0.1000	3
Al	27	45	He	1.598	ppb	23.5	100.00	0.0023	Pulse	0.1000	3
K	39	45	He	9.078	ppb	116.1	16896.84	0.3887	Pulse	0.1000	3
Ca	44	45	He	3.458	ppb	155.1	150.01	0.0034	Pulse	0.1000	3
Ti	47	45	He	2.700	ppb	48.8	63.33	0.0014	Pulse	0.1000	3
V	51	45	He	0.216	ppb	14.0	1286.73	0.0296	Pulse	0.5000	3
Cr	52	45	He	0.030	ppb	502.9	1846.85	0.0425	Pulse	0.1000	3
Mn	55	45	He	0.075	ppb	122.9	323.35	0.0074	Pulse	0.1000	3
Fe	57	45	He	1.303	ppb	175.8	126.67	0.0029	Pulse	0.1000	3
Co	59	45	He	0.205	ppb	2.9	640.04	0.0147	Pulse	0.1000	3
Ni	60	72	He	0.209	ppb	11.2	363.35	0.0047	Pulse	0.1000	3
Cu	63	72	He	0.247	ppb	5.0	836.72	0.0109	Pulse	0.1000	3
Zn	66	72	He	0.369	ppb	34.0	303.35	0.0039	Pulse	0.1000	3
As	75	72	He	0.266	ppb	47.7	94.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.004	ppb	540.7	86.67	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.080	ppb	38.0	180.01	0.0023	Pulse	0.1000	3
Ag	107	115	He	0.023	ppb	12.2	110.00	0.0014	Pulse	0.1000	3
Cd	111	115	He	0.016	ppb	87.7	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.066	ppb	N/A	1296.78	0.0166	Pulse	0.1000	3
Sb	121	115	He	0.079	ppb	49.5	100.00	0.0013	Pulse	0.1000	3
Ba	137	115	He	0.174	ppb	16.2	76.67	0.0010	Pulse	0.1000	3
Tl	205	159	He	0.112	ppb	6.3	1090.08	0.0030	Pulse	0.1000	3
Pb	208	159	He	0.016	ppb	11.8	733.37	0.0020	Pulse	0.1000	3
U	238	209	He	0.073	ppb	11.6	1080.09	0.0037	Pulse	0.1000	3

ISTD Table:

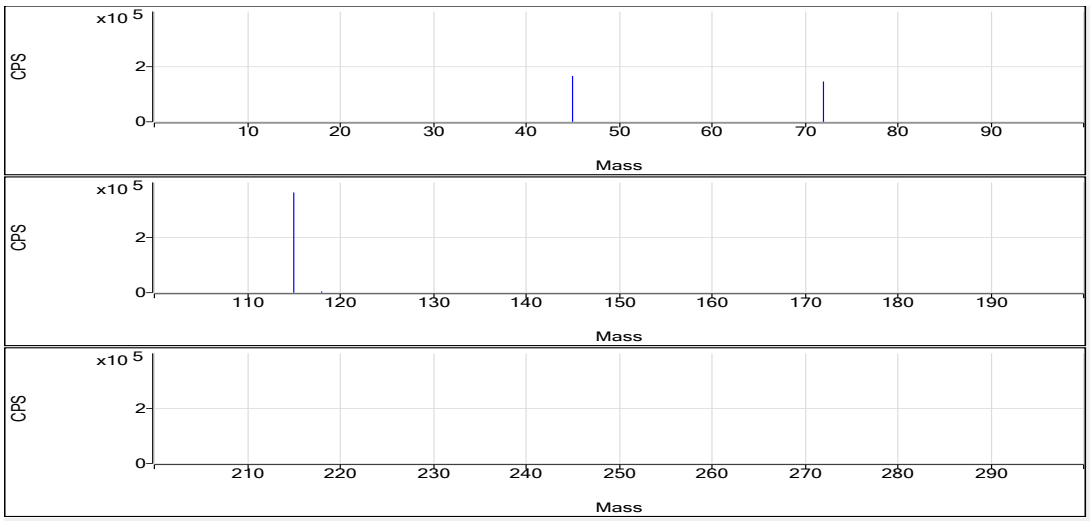
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2451667.46	1.6	101.8	Analog	0.1000	3
No Gas	Ge	72	1175478.99	1.1	101.2	Pulse	0.1000	3
H2	Sc	45	165027.88	0.6	100.4	Pulse	0.1000	3
H2	Ge	72	145107.99	1.1	99.8	Pulse	0.1000	3
H2	In	115	360432.65	0.2	100.2	Pulse	0.1000	3
He	Sc	45	43489.08	2.6	99.4	Pulse	0.1000	3
He	Ge	72	76893.48	0.9	100.5	Pulse	0.1000	3
He	In	115	77951.87	1.1	100.5	Pulse	0.1000	3
He	Tb	159	369019.36	0.5	99.5	Pulse	0.1000	3
He	Bi	209	293102.53	0.6	100.3	Pulse	0.1000	3

No Gas

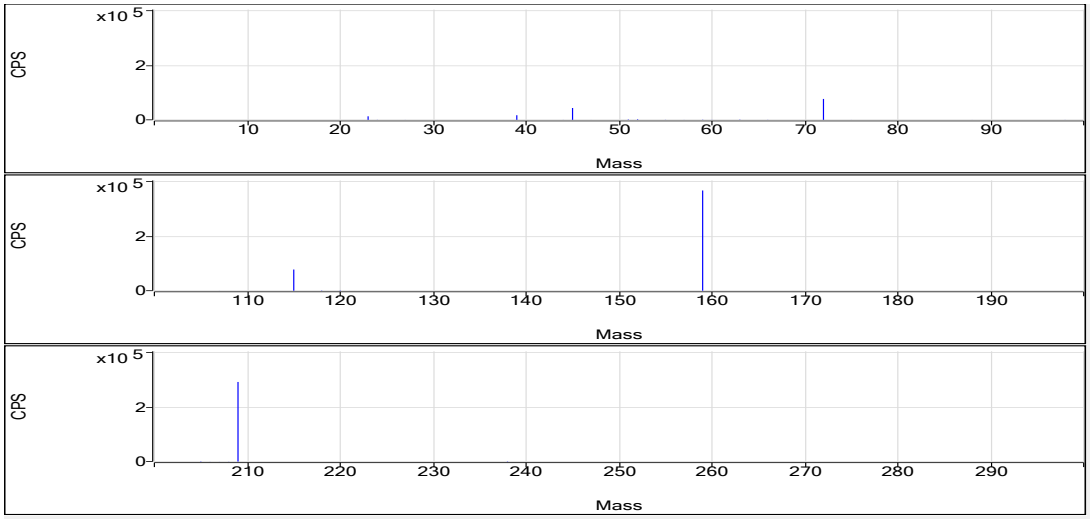


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.039	0	106.00	0.0007	1.523E-05
Be	9	1	No Gas	0.058	0.0001	144.00	0.0007	1.523E-05
Be	9	1	No Gas	0.039	0	110.00	0.0007	1.523E-05
Se	78	2	H2	0.106	0	8.00	0.0002	3.71E-06
Se	78	2	H2	0.117	0	8.67	0.0002	3.71E-06
Se	78	2	H2	0.107	0	8.00	0.0002	3.71E-06
Na	23	3	He	-2.789	0.2906	12725.87	0.0036	0.3007
Na	23	3	He	-2.287	0.2924	12996.14	0.0036	0.3007
Na	23	3	He	2.567	0.3099	13086.16	0.0036	0.3007
Mg	24	3	He	1.962	0.0069	300.01	0.0018	0.003274
Mg	24	3	He	2.154	0.0072	320.02	0.0018	0.003274
Mg	24	3	He	2.232	0.0073	310.02	0.0018	0.003274
Al	27	3	He	1.178	0.0021	90.00	0.0006	0.00137
Al	27	3	He	1.9	0.0025	110.00	0.0006	0.00137
Al	27	3	He	1.717	0.0024	100.00	0.0006	0.00137
K	39	3	He	15.037	0.3957	17330.59	0.0012	0.378
K	39	3	He	-3.093	0.3744	16639.91	0.0012	0.378
K	39	3	He	15.29	0.396	16720.03	0.0012	0.378
Ca	44	3	He	3.201	0.0034	150.01	0.0001	0.003203
Ca	44	3	He	8.947	0.0038	170.01	0.0001	0.003203
Ca	44	3	He	-1.773	0.0031	130.01	0.0001	0.003203
Ti	47	3	He	1.702	0.0009	40.00	0.0005	0
Ti	47	3	He	4.191	0.0022	100.00	0.0005	0
Ti	47	3	He	2.206	0.0012	50.00	0.0005	0
V	51	3	He	0.193	0.0291	1274.06	0.0224	0.02476
V	51	3	He	0.204	0.0293	1304.07	0.0224	0.02476
V	51	3	He	0.25	0.0304	1282.06	0.0224	0.02476
Cr	52	3	He	-0.05	0.0402	1760.16	0.0293	0.04167
Cr	52	3	He	-0.063	0.0398	1770.19	0.0293	0.04167
Cr	52	3	He	0.203	0.0476	2010.21	0.0293	0.04167
Mn	55	3	He	-0.024	0.0062	270.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.091	0.0076	340.02	0.0129	0.006476
Mn	55	3	He	0.159	0.0085	360.02	0.0129	0.006476
Fe	57	3	He	3.743	0.0043	190.01	0.0006	0.00213
Fe	57	3	He	0.966	0.0027	120.00	0.0006	0.00213
Fe	57	3	He	-0.8	0.0017	70.00	0.0006	0.00213
Co	59	3	He	0.211	0.0151	660.04	0.0572	0.00297
Co	59	3	He	0.2	0.0144	640.04	0.0572	0.00297
Co	59	3	He	0.205	0.0147	620.03	0.0572	0.00297
Ni	60	3	He	0.186	0.0045	350.02	0.0086	0.002921
Ni	60	3	He	0.233	0.0049	380.02	0.0086	0.002921
Ni	60	3	He	0.21	0.0047	360.02	0.0086	0.002921
Cu	63	3	He	0.261	0.0112	870.05	0.0257	0.004531
Cu	63	3	He	0.237	0.0106	820.05	0.0257	0.004531
Cu	63	3	He	0.243	0.0108	820.05	0.0257	0.004531
Zn	66	3	He	0.479	0.0043	330.02	0.0029	0.002877
Zn	66	3	He	0.395	0.004	310.01	0.0029	0.002877
Zn	66	3	He	0.233	0.0035	270.01	0.0029	0.002877
As	75	3	He	0.402	0.0015	116.00	0.002	0.0006798
As	75	3	He	0.15	0.001	76.00	0.002	0.0006798
As	75	3	He	0.247	0.0012	90.00	0.002	0.0006798
Sr	88	3	He	-0.021	0.0009	70.00	0.009	0.001075
Sr	88	3	He	0.023	0.0013	100.00	0.009	0.001075
Sr	88	3	He	0.01	0.0012	90.00	0.009	0.001075
Mo	98	3	He	0.045	0.0015	120.00	0.0226	0.0005115
Mo	98	3	He	0.097	0.0027	210.01	0.0226	0.0005115
Mo	98	3	He	0.098	0.0027	210.01	0.0226	0.0005115
Ag	107	3	He	0.02	0.0013	100.00	0.0487	0.0003023
Ag	107	3	He	0.025	0.0015	120.00	0.0487	0.0003023
Ag	107	3	He	0.023	0.0014	110.00	0.0487	0.0003023
Cd	111	3	He	0.008	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.008	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.032	0.0002	14.00	0.0054	8.618E-06
Sn	120	3	He	-0.09	0.0162	1280.11	0.0161	0.0177
Sn	120	3	He	-0.08	0.0164	1280.11	0.0161	0.0177
Sn	120	3	He	-0.028	0.0173	1330.11	0.0161	0.0177
Sb	121	3	He	0.036	0.0006	50.00	0.0152	8.618E-05
Sb	121	3	He	0.113	0.0018	140.01	0.0152	8.618E-05
Sb	121	3	He	0.088	0.0014	110.00	0.0152	8.618E-05
Ba	137	3	He	0.206	0.0011	90.00	0.0049	0.0001277
Ba	137	3	He	0.156	0.0009	70.00	0.0049	0.0001277
Ba	137	3	He	0.158	0.0009	70.00	0.0049	0.0001277
Tl	205	3	He	0.107	0.0028	1050.08	0.0249	0.000171
Tl	205	3	He	0.108	0.0029	1060.08	0.0249	0.000171
Tl	205	3	He	0.12	0.0032	1160.09	0.0249	0.000171
Pb	208	3	He	0.014	0.0019	400.02	0.0334	0.001456
Pb	208	3	He	0.018	0.002	410.02	0.0334	0.001456
Pb	208	3	He	0.016	0.002	370.02	0.0334	0.001456
U	238	3	He	0.063	0.0032	940.07	0.0493	0.0001028
U	238	3	He	0.078	0.0039	1160.10	0.0493	0.0001028
U	238	3	He	0.077	0.0039	1140.10	0.0493	0.0001028
Sc	45	1	No Gas			2407951.84		
Sc	45	1	No Gas			2468889.18		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2478161.37		
Ge	72	1	No Gas			1161939.75		
Ge	72	1	No Gas			1176796.39		
Ge	72	1	No Gas			1187700.84		
Sc	45	2	H2			165259.63		
Sc	45	2	H2			165856.40		
Sc	45	2	H2			163967.60		
Ge	72	2	H2			146919.78		
Ge	72	2	H2			144424.86		
Ge	72	2	H2			143979.32		
In	115	2	H2			360424.06		
In	115	2	H2			361009.25		
In	115	2	H2			359864.64		
Sc	45	3	He			43796.61		
Sc	45	3	He			44448.88		
Sc	45	3	He			42221.76		
Ge	72	3	He			77429.40		
Ge	72	3	He			77168.25		
Ge	72	3	He			76082.80		
In	115	3	He			78803.21		
In	115	3	He			77969.49		
In	115	3	He			77104.73		
Tb	159	3	He			368835.15		
Tb	159	3	He			370765.46		
Tb	159	3	He			367457.46		
Bi	209	3	He			293287.53		
Bi	209	3	He			294636.38		
Bi	209	3	He			291383.67		

Quantitation Report

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Sample Type	CRI
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

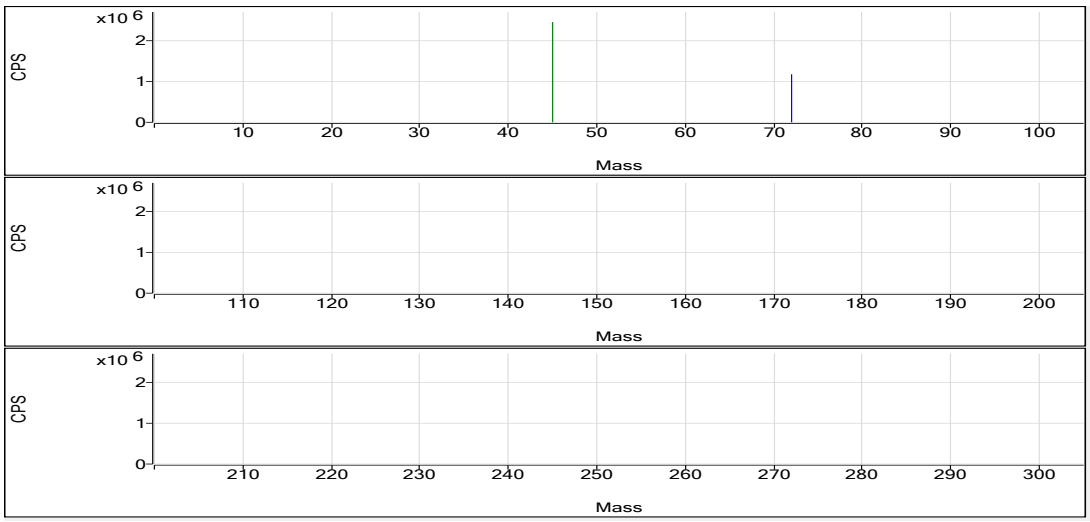
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.509	ppb	7.4	958.70	0.0004	Pulse	0.5000	3
Se	78	115	H2	1.028	ppb	13.5	65.55	0.0002	Pulse	1.5000	3
Na	23	45	He	194.699	ppb	4.7	43735.40	1.0049	Pulse	0.1000	3
Mg	24	45	He	53.356	ppb	0.0	4377.44	0.1005	Pulse	0.1000	3
Al	27	45	He	27.658	ppb	2.4	760.04	0.0175	Pulse	0.1000	3
K	39	45	He	199.417	ppb	5.1	26675.18	0.6128	Pulse	0.1000	3
Ca	44	45	He	83.509	ppb	40.3	393.35	0.0090	Pulse	0.1000	3
Ti	47	45	He	11.540	ppb	18.5	270.01	0.0062	Pulse	0.1000	3
V	51	45	He	2.119	ppb	1.5	3144.36	0.0722	Pulse	0.5000	3
Cr	52	45	He	1.930	ppb	8.0	4277.43	0.0982	Pulse	0.1000	3
Mn	55	45	He	1.877	ppb	19.6	1336.78	0.0308	Pulse	0.1000	3
Fe	57	45	He	53.751	ppb	3.1	1473.47	0.0338	Pulse	0.1000	3
Co	59	45	He	0.520	ppb	24.6	1420.13	0.0327	Pulse	0.1000	3
Ni	60	72	He	1.099	ppb	9.1	940.06	0.0124	Pulse	0.1000	3
Cu	63	72	He	1.100	ppb	13.7	2483.63	0.0328	Pulse	0.1000	3
Zn	66	72	He	10.861	ppb	13.5	2600.34	0.0343	Pulse	0.1000	3
As	75	72	He	2.041	ppb	13.7	367.34	0.0048	Pulse	0.5000	3
Sr	88	115	He	0.883	ppb	11.3	700.05	0.0090	Pulse	0.1000	3
Mo	98	115	He	0.497	ppb	11.6	910.07	0.0117	Pulse	0.1000	3
Ag	107	115	He	0.501	ppb	4.8	1916.86	0.0247	Pulse	0.1000	3
Cd	111	115	He	0.472	ppb	14.5	199.33	0.0026	Pulse	0.5000	3
Sn	120	115	He	1.960	ppb	15.7	3827.33	0.0494	Pulse	0.1000	3
Sb	121	115	He	0.982	ppb	12.6	1163.43	0.0150	Pulse	0.1000	3
Ba	137	115	He	1.726	ppb	9.2	670.05	0.0086	Pulse	0.1000	3
Tl	205	159	He	0.524	ppb	6.6	4861.05	0.0132	Pulse	0.1000	3
Pb	208	159	He	0.527	ppb	4.2	7011.01	0.0191	Pulse	0.1000	3
U	238	209	He	1.022	ppb	1.0	14772.25	0.0505	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2446432.67	0.8	101.6	Analog	0.1000	3
No Gas	Ge	72	1172143.83	0.1	100.9	Pulse	0.1000	3
H2	Sc	45	165786.74	1.3	100.8	Pulse	0.1000	3
H2	Ge	72	142828.58	1.0	98.3	Pulse	0.1000	3
H2	In	115	359738.28	0.8	100.0	Pulse	0.1000	3
He	Sc	45	43539.22	1.6	99.5	Pulse	0.1000	3
He	Ge	72	75851.72	1.3	99.1	Pulse	0.1000	3
He	In	115	77607.68	1.4	100.1	Pulse	0.1000	3
He	Tb	159	367406.88	0.7	99.1	Pulse	0.1000	3
He	Bi	209	292432.65	0.2	100.0	Pulse	0.1000	3

No Gas



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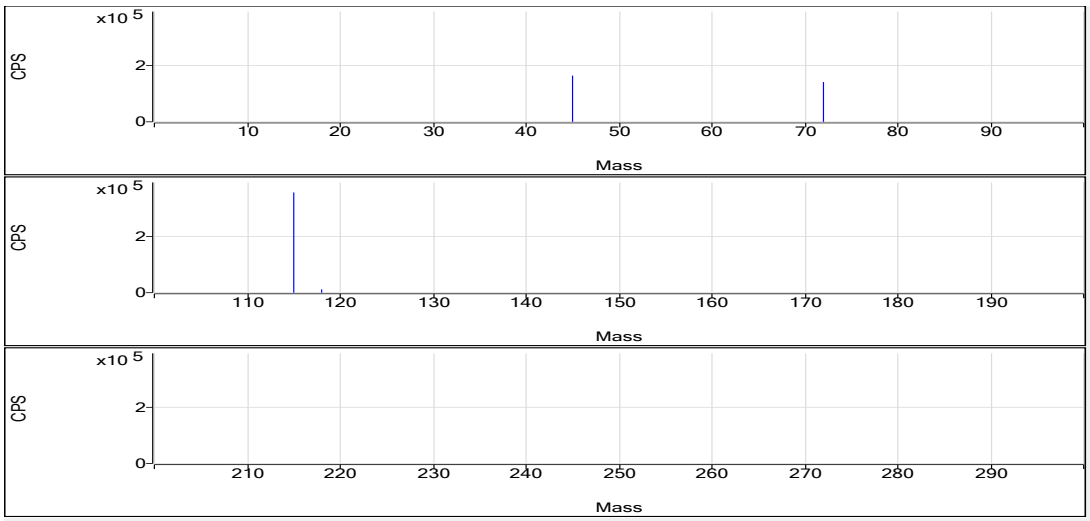
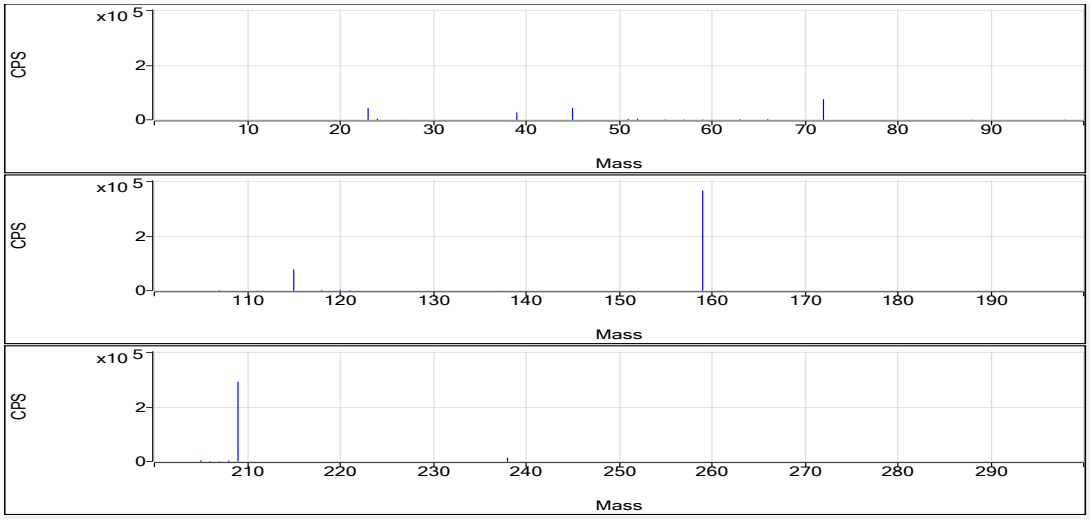


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.545	0.0004	1022.04	0.0007	1.523E-05
Be	9	1	No Gas	0.511	0.0004	970.04	0.0007	1.523E-05
Be	9	1	No Gas	0.47	0.0004	884.03	0.0007	1.523E-05
Se	78	2	H2	1.066	0.0002	67.33	0.0002	3.71E-06
Se	78	2	H2	1.144	0.0002	73.33	0.0002	3.71E-06
Se	78	2	H2	0.874	0.0002	56.00	0.0002	3.71E-06
Na	23	3	He	204.175	1.0391	44457.84	0.0036	0.3007
Na	23	3	He	193.918	1.002	43755.00	0.0036	0.3007
Na	23	3	He	186.004	0.9734	42993.37	0.0036	0.3007
Mg	24	3	He	53.347	0.1005	4300.76	0.0018	0.003274
Mg	24	3	He	53.363	0.1006	4390.77	0.0018	0.003274
Mg	24	3	He	53.358	0.1005	4440.80	0.0018	0.003274
Al	27	3	He	27.389	0.0173	740.04	0.0006	0.00137
Al	27	3	He	27.181	0.0172	750.04	0.0006	0.00137
Al	27	3	He	28.404	0.0179	790.05	0.0006	0.00137
K	39	3	He	211.094	0.6265	26805.57	0.0012	0.378
K	39	3	He	193.516	0.6058	26454.78	0.0012	0.378
K	39	3	He	193.641	0.606	26765.20	0.0012	0.378
Ca	44	3	He	44.694	0.0063	270.01	0.0001	0.003203
Ca	44	3	He	102.131	0.0103	450.02	0.0001	0.003203
Ca	44	3	He	103.703	0.0104	460.02	0.0001	0.003203
Ti	47	3	He	10.887	0.0058	250.01	0.0005	0
Ti	47	3	He	9.813	0.0053	230.01	0.0005	0
Ti	47	3	He	13.92	0.0075	330.02	0.0005	0
V	51	3	He	2.109	0.072	3080.34	0.0224	0.02476
V	51	3	He	2.093	0.0716	3128.36	0.0224	0.02476
V	51	3	He	2.154	0.073	3224.38	0.0224	0.02476
Cr	52	3	He	1.778	0.0937	4010.69	0.0293	0.04167
Cr	52	3	He	1.925	0.098	4280.78	0.0293	0.04167
Cr	52	3	He	2.088	0.1028	4540.83	0.0293	0.04167
Mn	55	3	He	2.228	0.0353	1510.13	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.907	0.0311	1360.13	0.0129	0.006476
Mn	55	3	He	1.495	0.0258	1140.09	0.0129	0.006476
Fe	57	3	He	54.238	0.0341	1460.14	0.0006	0.00213
Fe	57	3	He	51.904	0.0328	1430.12	0.0006	0.00213
Fe	57	3	He	55.112	0.0346	1530.14	0.0006	0.00213
Co	59	3	He	0.663	0.0409	1750.19	0.0572	0.00297
Co	59	3	He	0.476	0.0302	1320.11	0.0572	0.00297
Co	59	3	He	0.419	0.0269	1190.09	0.0572	0.00297
Ni	60	3	He	1.01	0.0116	870.06	0.0086	0.002921
Ni	60	3	He	1.207	0.0133	1010.07	0.0086	0.002921
Ni	60	3	He	1.08	0.0122	940.06	0.0086	0.002921
Cu	63	3	He	1.27	0.0371	2780.35	0.0257	0.004531
Cu	63	3	He	1.046	0.0314	2380.27	0.0257	0.004531
Cu	63	3	He	0.984	0.0298	2290.28	0.0257	0.004531
Zn	66	3	He	10.658	0.0337	2520.30	0.0029	0.002877
Zn	66	3	He	9.503	0.0303	2300.29	0.0029	0.002877
Zn	66	3	He	12.422	0.0388	2980.44	0.0029	0.002877
As	75	3	He	2.04	0.0048	362.01	0.002	0.0006798
As	75	3	He	1.763	0.0043	324.01	0.002	0.0006798
As	75	3	He	2.322	0.0054	416.01	0.002	0.0006798
Sr	88	3	He	0.776	0.0081	630.04	0.009	0.001075
Sr	88	3	He	0.9	0.0092	700.06	0.009	0.001075
Sr	88	3	He	0.974	0.0098	770.05	0.009	0.001075
Mo	98	3	He	0.447	0.0106	830.06	0.0226	0.0005115
Mo	98	3	He	0.482	0.0114	870.06	0.0226	0.0005115
Mo	98	3	He	0.56	0.0132	1030.09	0.0226	0.0005115
Ag	107	3	He	0.498	0.0246	1920.20	0.0487	0.0003023
Ag	107	3	He	0.527	0.0259	1980.21	0.0487	0.0003023
Ag	107	3	He	0.479	0.0236	1850.18	0.0487	0.0003023
Cd	111	3	He	0.399	0.0022	170.00	0.0054	8.618E-06
Cd	111	3	He	0.481	0.0026	200.00	0.0054	8.618E-06
Cd	111	3	He	0.535	0.0029	228.00	0.0054	8.618E-06
Sn	120	3	He	1.692	0.045	3520.59	0.0161	0.0177
Sn	120	3	He	2.295	0.0548	4180.76	0.0161	0.0177
Sn	120	3	He	1.894	0.0483	3780.65	0.0161	0.0177
Sb	121	3	He	0.996	0.0152	1190.10	0.0152	8.618E-05
Sb	121	3	He	1.098	0.0168	1280.10	0.0152	8.618E-05
Sb	121	3	He	0.852	0.013	1020.08	0.0152	8.618E-05
Ba	137	3	He	1.895	0.0095	740.05	0.0049	0.0001277
Ba	137	3	He	1.702	0.0085	650.05	0.0049	0.0001277
Ba	137	3	He	1.581	0.0079	620.04	0.0049	0.0001277
Tl	205	3	He	0.49	0.0124	4520.92	0.0249	0.000171
Tl	205	3	He	0.523	0.0132	4881.06	0.0249	0.000171
Tl	205	3	He	0.559	0.0141	5181.18	0.0249	0.000171
Pb	208	3	He	0.503	0.0183	3490.58	0.0334	0.001456
Pb	208	3	He	0.533	0.0193	3850.73	0.0334	0.001456
Pb	208	3	He	0.546	0.0197	3840.72	0.0334	0.001456
U	238	3	He	1.033	0.0511	14919.10	0.0493	0.0001028
U	238	3	He	1.013	0.0501	14638.65	0.0493	0.0001028
U	238	3	He	1.019	0.0504	14758.99	0.0493	0.0001028
Sc	45	1	No Gas			2439646.06		
Sc	45	1	No Gas			2467281.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2432370.90		
Ge	72	1	No Gas			1170331.62		
Ge	72	1	No Gas			1173171.62		
Ge	72	1	No Gas			1172928.26		
Sc	45	2	H2			165310.29		
Sc	45	2	H2			168132.44		
Sc	45	2	H2			163917.50		
Ge	72	2	H2			141122.28		
Ge	72	2	H2			143847.42		
Ge	72	2	H2			143516.04		
In	115	2	H2			356604.10		
In	115	2	H2			362312.06		
In	115	2	H2			360298.67		
Sc	45	3	He			42783.65		
Sc	45	3	He			43666.21		
Sc	45	3	He			44167.80		
Ge	72	3	He			74846.37		
Ge	72	3	He			75831.66		
Ge	72	3	He			76877.13		
In	115	3	He			78210.29		
In	115	3	He			76359.64		
In	115	3	He			78310.51		
Tb	159	3	He			364888.16		
Tb	159	3	He			369960.50		
Tb	159	3	He			367371.99		
Bi	209	3	He			292055.84		
Bi	209	3	He			292316.05		
Bi	209	3	He			292926.05		

Quantitation Report

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Sample Type	ICSA
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

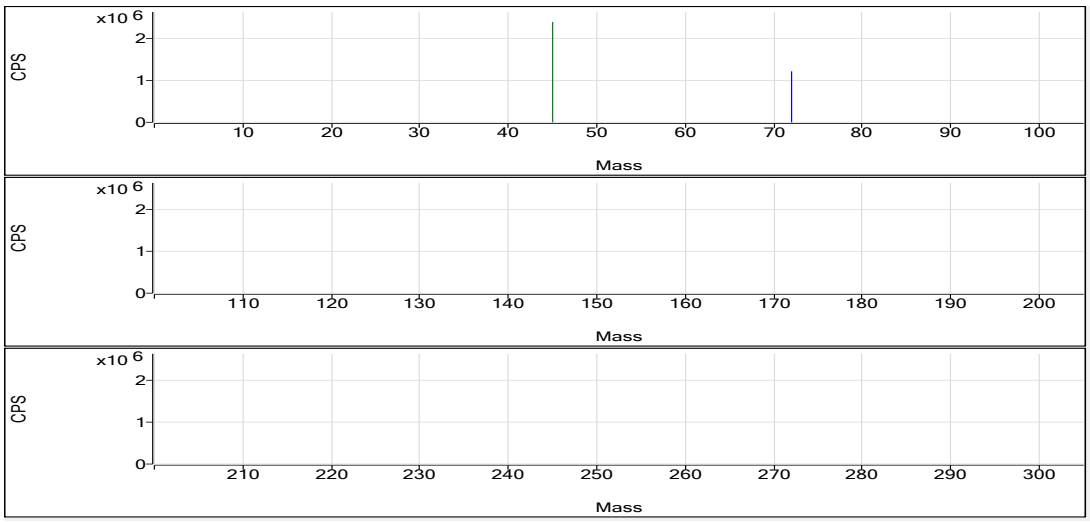
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	52.2	52.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.058	ppb	34.1	4.67	0.0000	Pulse	1.5000	3
Na	23	45	He	239577.804	ppb	2.6	36670287.79	866.8246	Analog	0.1000	3
Mg	24	45	He	99000.385	ppb	1.9	7635625.30	180.4780	Analog	0.1000	3
Al	27	45	He	101573.271	ppb	1.4	2499345.49	59.0690	Analog	0.1000	3
K	39	45	He	99049.447	ppb	3.2	4948949.09	116.9953	Analog	0.1000	3
Ca	44	45	He	285038.544	ppb	2.7	838781.68	19.8281	Pulse	0.1000	3
Ti	47	45	He	1975.720	ppb	2.8	44876.96	1.0605	Pulse	0.1000	3
V	51	45	He	-0.180	ppb	N/A	878.03	0.0207	Pulse	0.5000	3
Cr	52	45	He	3.217	ppb	5.2	5748.00	0.1359	Pulse	0.1000	3
Mn	55	45	He	0.520	ppb	46.1	556.70	0.0132	Pulse	0.1000	3
Fe	57	45	He	243730.974	ppb	2.4	6083344.70	143.7943	Analog	0.1000	3
Co	59	45	He	0.236	ppb	5.9	696.71	0.0165	Pulse	0.1000	3
Ni	60	72	He	0.487	ppb	27.6	556.70	0.0071	Pulse	0.1000	3
Cu	63	72	He	0.102	ppb	18.0	560.04	0.0072	Pulse	0.1000	3
Zn	66	72	He	1.611	ppb	18.2	590.03	0.0075	Pulse	0.1000	3
As	75	72	He	0.189	ppb	6.0	83.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	2.032	ppb	9.8	1423.46	0.0194	Pulse	0.1000	3
Mo	98	115	He	2102.832	ppb	0.5	3492378.28	47.4860	Analog	0.1000	3
Ag	107	115	He	0.011	ppb	52.7	60.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.293	ppb	10.2	117.33	0.0016	Pulse	0.5000	3
Sn	120	115	He	0.102	ppb	51.8	1423.46	0.0194	Pulse	0.1000	3
Sb	121	115	He	0.161	ppb	26.8	186.68	0.0025	Pulse	0.1000	3
Ba	137	115	He	0.397	ppb	28.5	153.34	0.0021	Pulse	0.1000	3
Tl	205	159	He	0.025	ppb	9.4	283.35	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.061	ppb	15.9	1266.74	0.0035	Pulse	0.1000	3
U	238	209	He	0.056	ppb	9.7	783.39	0.0029	Pulse	0.1000	3

ISTD Table:

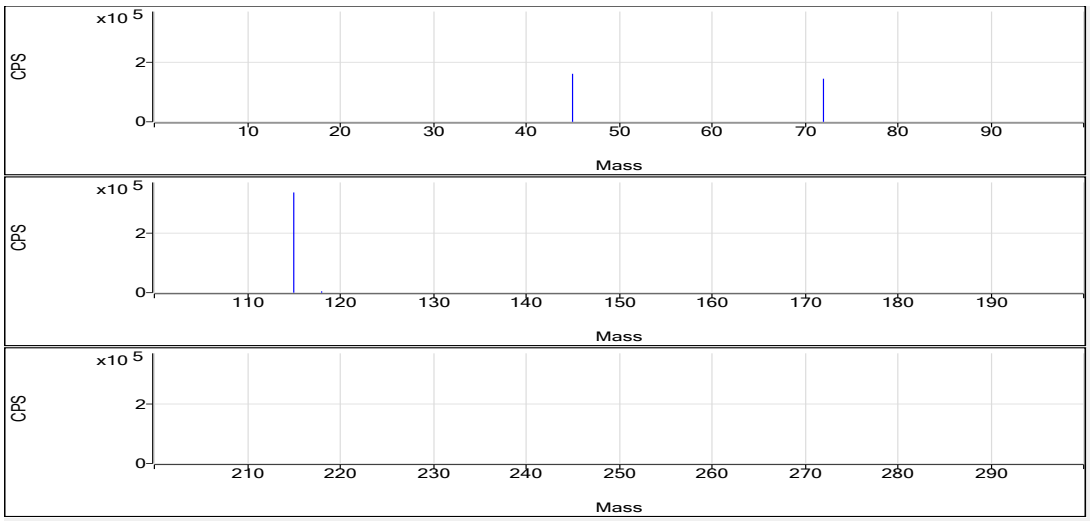
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2378202.88	0.7	98.8	Analog	0.1000	3
No Gas	Ge	72	1209557.80	0.3	104.1	Pulse	0.1000	3
H2	Sc	45	162562.52	1.5	98.9	Pulse	0.1000	3
H2	Ge	72	145925.10	0.9	100.4	Pulse	0.1000	3
H2	In	115	339306.10	0.5	94.3	Pulse	0.1000	3
He	Sc	45	42319.25	2.2	96.7	Pulse	0.1000	3
He	Ge	72	78274.35	1.7	102.3	Pulse	0.1000	3
He	In	115	73545.06	0.7	94.9	Pulse	0.1000	3
He	Tb	159	361437.68	0.7	97.4	Pulse	0.1000	3
He	Bi	209	273104.27	0.6	93.4	Pulse	0.1000	3

No Gas

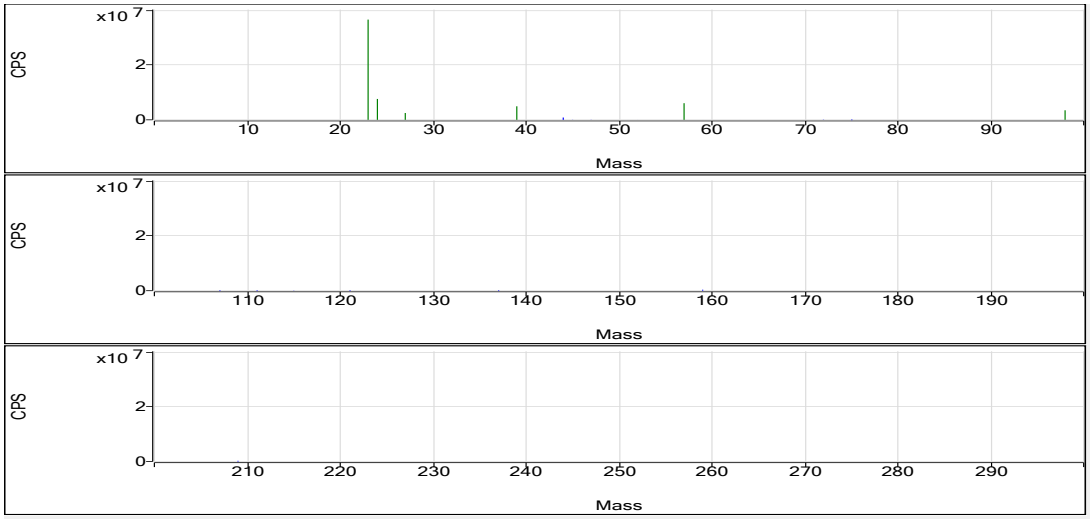


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.004	0	44.00	0.0007	1.523E-05
Be	9	1	No Gas	0.014	0	60.00	0.0007	1.523E-05
Be	9	1	No Gas	0.009	0	52.00	0.0007	1.523E-05
Se	78	2	H2	0.081	0	6.00	0.0002	3.71E-06
Se	78	2	H2	0.046	0	4.00	0.0002	3.71E-06
Se	78	2	H2	0.047	0	4.00	0.0002	3.71E-06
Na	23	3	He	232943.507	842.8291	36558134.46	0.0036	0.3007
Na	23	3	He	240817.786	871.3094	36482971.96	0.0036	0.3007
Na	23	3	He	244972.118	886.3351	36969756.95	0.0036	0.3007
Mg	24	3	He	96912.956	176.6727	7663264.89	0.0018	0.003274
Mg	24	3	He	99459.829	181.3155	7591940.51	0.0018	0.003274
Mg	24	3	He	100628.369	183.4457	7651670.51	0.0018	0.003274
Al	27	3	He	100332.803	58.3476	2530856.06	0.0006	0.00137
Al	27	3	He	101313.448	58.9179	2466975.28	0.0006	0.00137
Al	27	3	He	103073.561	59.9414	2500205.12	0.0006	0.00137
K	39	3	He	95624.275	112.9626	4899809.30	0.0012	0.378
K	39	3	He	99602.305	117.6462	4926014.30	0.0012	0.378
K	39	3	He	101921.761	120.377	5021023.68	0.0012	0.378
Ca	44	3	He	276090.905	19.2058	833059.68	0.0001	0.003203
Ca	44	3	He	289672.207	20.1504	843724.67	0.0001	0.003203
Ca	44	3	He	289352.521	20.1281	839560.69	0.0001	0.003203
Ti	47	3	He	1962.995	1.0537	45702.91	0.0005	0
Ti	47	3	He	2035.302	1.0925	45743.23	0.0005	0
Ti	47	3	He	1928.864	1.0353	43184.75	0.0005	0
V	51	3	He	-0.15	0.0214	928.04	0.0224	0.02476
V	51	3	He	-0.206	0.0202	844.03	0.0224	0.02476
V	51	3	He	-0.183	0.0207	862.03	0.0224	0.02476
Cr	52	3	He	3.026	0.1303	5651.33	0.0293	0.04167
Cr	52	3	He	3.324	0.139	5821.36	0.0293	0.04167
Cr	52	3	He	3.302	0.1384	5771.30	0.0293	0.04167
Mn	55	3	He	0.248	0.0097	420.02	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.699	0.0155	650.04	0.0129	0.006476
Mn	55	3	He	0.611	0.0144	600.03	0.0129	0.006476
Fe	57	3	He	237881.895	140.3436	6087471.78	0.0006	0.00213
Fe	57	3	He	243523.499	143.6719	6015747.41	0.0006	0.00213
Fe	57	3	He	249787.528	147.3674	6146814.91	0.0006	0.00213
Co	59	3	He	0.222	0.0157	680.04	0.0572	0.00297
Co	59	3	He	0.236	0.0165	690.04	0.0572	0.00297
Co	59	3	He	0.25	0.0173	720.04	0.0572	0.00297
Ni	60	3	He	0.626	0.0083	640.04	0.0086	0.002921
Ni	60	3	He	0.478	0.007	560.03	0.0086	0.002921
Ni	60	3	He	0.358	0.006	470.02	0.0086	0.002921
Cu	63	3	He	0.082	0.0066	510.03	0.0257	0.004531
Cu	63	3	He	0.107	0.0073	580.04	0.0257	0.004531
Cu	63	3	He	0.117	0.0075	590.04	0.0257	0.004531
Zn	66	3	He	1.297	0.0066	510.03	0.0029	0.002877
Zn	66	3	He	1.657	0.0077	610.03	0.0029	0.002877
Zn	66	3	He	1.879	0.0083	650.03	0.0029	0.002877
As	75	3	He	0.202	0.0011	84.00	0.002	0.0006798
As	75	3	He	0.184	0.0011	84.00	0.002	0.0006798
As	75	3	He	0.181	0.001	82.00	0.002	0.0006798
Sr	88	3	He	2.182	0.0207	1510.15	0.009	0.001075
Sr	88	3	He	2.11	0.0201	1480.13	0.009	0.001075
Sr	88	3	He	1.806	0.0173	1280.11	0.009	0.001075
Mo	98	3	He	2099.166	47.4032	3457390.57	0.0226	0.0005115
Mo	98	3	He	2114.293	47.7448	3523582.13	0.0226	0.0005115
Mo	98	3	He	2095.037	47.31	3496162.14	0.0226	0.0005115
Ag	107	3	He	0.011	0.0008	60.00	0.0487	0.0003023
Ag	107	3	He	0.005	0.0005	40.00	0.0487	0.0003023
Ag	107	3	He	0.016	0.0011	80.00	0.0487	0.0003023
Cd	111	3	He	0.292	0.0016	116.00	0.0054	8.618E-06
Cd	111	3	He	0.263	0.0014	106.00	0.0054	8.618E-06
Cd	111	3	He	0.323	0.0018	130.00	0.0054	8.618E-06
Sn	120	3	He	0.058	0.0186	1360.11	0.0161	0.0177
Sn	120	3	He	0.087	0.0191	1410.13	0.0161	0.0177
Sn	120	3	He	0.161	0.0203	1500.13	0.0161	0.0177
Sb	121	3	He	0.112	0.0018	130.01	0.0152	8.618E-05
Sb	121	3	He	0.191	0.003	220.01	0.0152	8.618E-05
Sb	121	3	He	0.181	0.0028	210.01	0.0152	8.618E-05
Ba	137	3	He	0.308	0.0016	120.01	0.0049	0.0001277
Ba	137	3	He	0.524	0.0027	200.01	0.0049	0.0001277
Ba	137	3	He	0.359	0.0019	140.01	0.0049	0.0001277
Tl	205	3	He	0.026	0.0008	290.01	0.0249	0.000171
Tl	205	3	He	0.026	0.0008	300.02	0.0249	0.000171
Tl	205	3	He	0.022	0.0007	260.01	0.0249	0.000171
Pb	208	3	He	0.053	0.0032	610.03	0.0334	0.001456
Pb	208	3	He	0.058	0.0034	620.04	0.0334	0.001456
Pb	208	3	He	0.072	0.0039	750.05	0.0334	0.001456
U	238	3	He	0.062	0.0032	870.06	0.0493	0.0001028
U	238	3	He	0.053	0.0027	750.05	0.0493	0.0001028
U	238	3	He	0.052	0.0027	730.05	0.0493	0.0001028
Sc	45	1	No Gas			2380057.31		
Sc	45	1	No Gas			2359852.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2394698.40		
Ge	72	1	No Gas			1207716.47		
Ge	72	1	No Gas			1214375.84		
Ge	72	1	No Gas			1206581.08		
Sc	45	2	H2			163710.67		
Sc	45	2	H2			159738.82		
Sc	45	2	H2			164238.06		
Ge	72	2	H2			144504.22		
Ge	72	2	H2			146220.37		
Ge	72	2	H2			147050.71		
In	115	2	H2			338655.97		
In	115	2	H2			341124.57		
In	115	2	H2			338137.77		
Sc	45	3	He			43375.50		
Sc	45	3	He			41871.43		
Sc	45	3	He			41710.81		
Ge	72	3	He			76976.59		
Ge	72	3	He			79581.75		
Ge	72	3	He			78264.70		
In	115	3	He			72942.12		
In	115	3	He			73806.66		
In	115	3	He			73906.45		
Tb	159	3	He			358489.76		
Tb	159	3	He			363626.48		
Tb	159	3	He			362196.79		
Bi	209	3	He			273828.12		
Bi	209	3	He			274273.98		
Bi	209	3	He			271210.72		

Quantitation Report

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Acq Time	8/14/2023 12:25:18 PM
Sample Name	ICSAB 4677744
Sample Type	ICSAB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

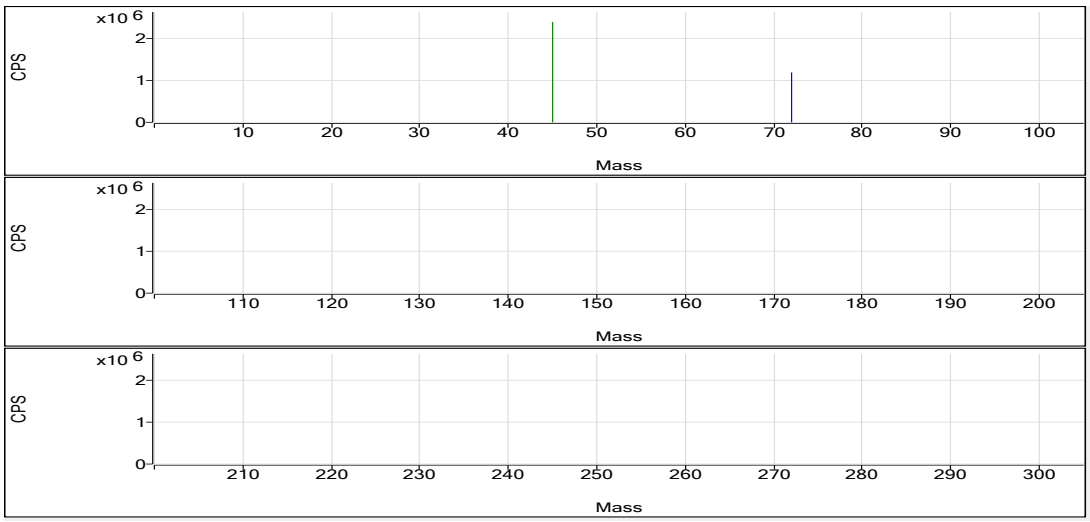
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	55.6	48.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	105.504	ppb	2.0	6191.35	0.0183	Pulse	1.5000	3
Na	23	45	He	235508.947	ppb	1.0	36793143.62	852.1080	Analog	0.1000	3
Mg	24	45	He	95923.108	ppb	0.9	7550803.64	174.8682	Analog	0.1000	3
Al	27	45	He	99807.842	ppb	1.7	2506160.90	58.0423	Analog	0.1000	3
K	39	45	He	96722.533	ppb	1.3	4933355.03	114.2557	Analog	0.1000	3
Ca	44	45	He	281032.308	ppb	0.5	844150.25	19.5494	Pulse	0.1000	3
Ti	47	45	He	1903.827	ppb	1.5	44124.52	1.0219	Pulse	0.1000	3
V	51	45	He	198.668	ppb	1.2	193208.37	4.4746	Pulse	0.5000	3
Cr	52	45	He	196.076	ppb	1.6	249741.79	5.7840	Pulse	0.1000	3
Mn	55	45	He	194.281	ppb	1.4	108804.12	2.5199	Pulse	0.1000	3
Fe	57	45	He	238204.147	ppb	1.1	6068053.66	140.5337	Analog	0.1000	3
Co	59	45	He	188.010	ppb	1.0	464632.62	10.7606	Pulse	0.1000	3
Ni	60	72	He	190.812	ppb	1.3	128381.31	1.6469	Pulse	0.1000	3
Cu	63	72	He	182.544	ppb	1.9	365750.94	4.6921	Pulse	0.1000	3
Zn	66	72	He	97.464	ppb	1.2	22177.71	0.2845	Pulse	0.1000	3
As	75	72	He	94.779	ppb	0.8	15112.03	0.1939	Pulse	0.5000	3
Sr	88	115	He	1.997	ppb	5.5	1386.78	0.0190	Pulse	0.1000	3
Mo	98	115	He	2143.598	ppb	1.7	3522998.18	48.4066	Analog	0.1000	3
Ag	107	115	He	50.514	ppb	1.5	178985.15	2.4592	Pulse	0.1000	3
Cd	111	115	He	103.139	ppb	1.0	40720.47	0.5595	Pulse	0.5000	3
Sn	120	115	He	0.022	ppb	745.0	1313.44	0.0181	Pulse	0.1000	3
Sb	121	115	He	0.121	ppb	16.3	140.01	0.0019	Pulse	0.1000	3
Ba	137	115	He	0.430	ppb	10.2	163.34	0.0022	Pulse	0.1000	3
Tl	205	159	He	0.031	ppb	44.5	343.35	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.070	ppb	6.2	1376.75	0.0038	Pulse	0.1000	3
U	238	209	He	0.050	ppb	2.9	713.38	0.0026	Pulse	0.1000	3

ISTD Table:

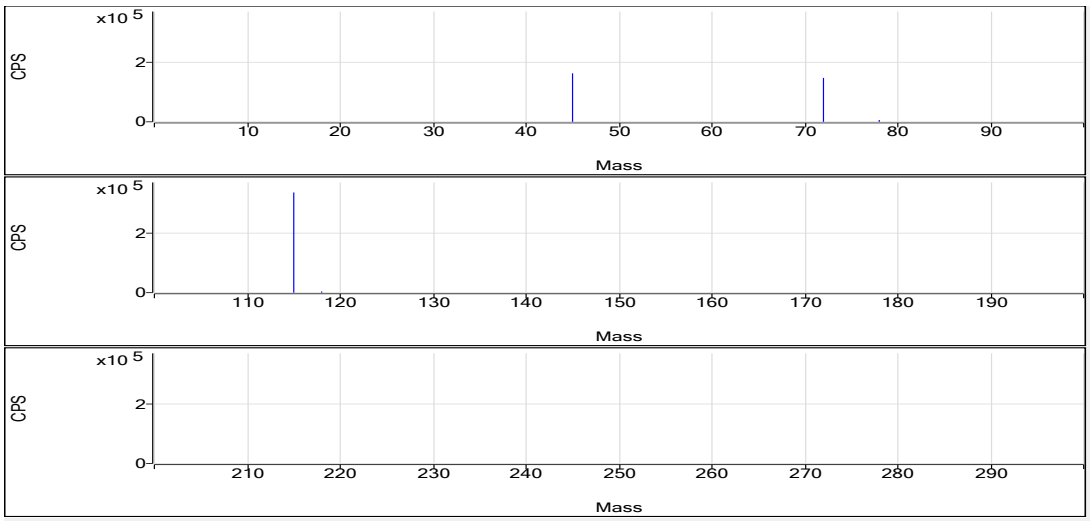
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2407145.70	0.6	100.0	Analog	0.1000	3
No Gas	Ge	72	1196654.75	0.5	103.0	Pulse	0.1000	3
H2	Sc	45	163496.61	0.9	99.4	Pulse	0.1000	3
H2	Ge	72	148100.32	0.5	101.9	Pulse	0.1000	3
H2	In	115	337957.25	0.7	93.9	Pulse	0.1000	3
He	Sc	45	43181.48	0.9	98.7	Pulse	0.1000	3
He	Ge	72	77962.41	1.3	101.9	Pulse	0.1000	3
He	In	115	72789.90	1.5	93.9	Pulse	0.1000	3
He	Tb	159	363276.78	0.3	97.9	Pulse	0.1000	3
He	Bi	209	275488.08	0.5	94.2	Pulse	0.1000	3

No Gas

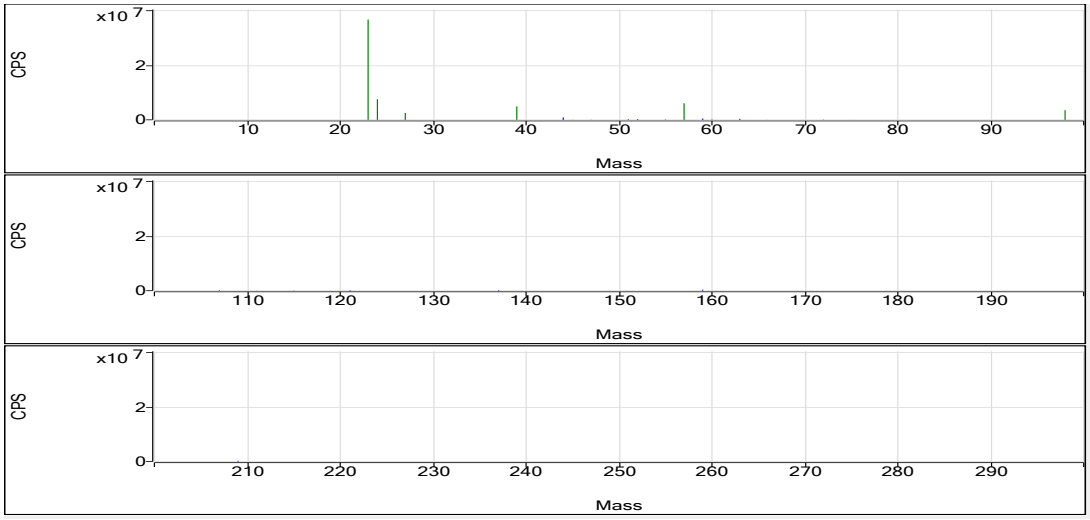


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0	46.00	0.0007	1.523E-05
Be	9	1	No Gas	0.011	0	56.00	0.0007	1.523E-05
Be	9	1	No Gas	0.004	0	44.00	0.0007	1.523E-05
Se	78	2	H2	107.894	0.0187	6303.40	0.0002	3.71E-06
Se	78	2	H2	104.148	0.0181	6159.33	0.0002	3.71E-06
Se	78	2	H2	104.469	0.0181	6111.32	0.0002	3.71E-06
Na	23	3	He	232929.918	842.78	36648741.95	0.0036	0.3007
Na	23	3	He	235785.98	853.11	36961476.95	0.0036	0.3007
Na	23	3	He	237810.943	860.434	36769211.95	0.0036	0.3007
Mg	24	3	He	94892.208	172.9889	7522515.51	0.0018	0.003274
Mg	24	3	He	96499.425	175.9188	7621782.39	0.0018	0.003274
Mg	24	3	He	96377.691	175.6969	7508113.01	0.0018	0.003274
Al	27	3	He	97849.452	56.9035	2474477.62	0.0006	0.00137
Al	27	3	He	100621.316	58.5154	2535211.84	0.0006	0.00137
Al	27	3	He	100952.759	58.7081	2508793.24	0.0006	0.00137
K	39	3	He	96025.94	113.4355	4932804.30	0.0012	0.378
K	39	3	He	96002.079	113.4074	4913440.86	0.0012	0.378
K	39	3	He	98139.581	115.924	4953819.93	0.0012	0.378
Ca	44	3	He	279329.865	19.431	844969.28	0.0001	0.003203
Ca	44	3	He	281457.662	19.579	848272.72	0.0001	0.003203
Ca	44	3	He	282309.398	19.6383	839208.74	0.0001	0.003203
Ti	47	3	He	1909.898	1.0252	44579.50	0.0005	0
Ti	47	3	He	1872.092	1.0049	43536.31	0.0005	0
Ti	47	3	He	1929.49	1.0357	44257.76	0.0005	0
V	51	3	He	196.826	4.4334	192788.95	0.0224	0.02476
V	51	3	He	197.931	4.4582	193151.98	0.0224	0.02476
V	51	3	He	201.246	4.5324	193684.19	0.0224	0.02476
Cr	52	3	He	192.666	5.6842	247178.79	0.0293	0.04167
Cr	52	3	He	196.717	5.8028	251409.72	0.0293	0.04167
Cr	52	3	He	198.845	5.8651	250636.87	0.0293	0.04167
Mn	55	3	He	191.422	2.4829	107970.97	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	194.433	2.5219	109261.67	0.0129	0.006476
Mn	55	3	He	196.987	2.5549	109179.72	0.0129	0.006476
Fe	57	3	He	236655.581	139.6201	6071454.28	0.0006	0.00213
Fe	57	3	He	236752.167	139.6771	6051588.03	0.0006	0.00213
Fe	57	3	He	241204.694	142.3039	6081118.66	0.0006	0.00213
Co	59	3	He	186.066	10.6493	463092.38	0.0572	0.00297
Co	59	3	He	188.289	10.7765	466899.95	0.0572	0.00297
Co	59	3	He	189.675	10.8558	463905.54	0.0572	0.00297
Ni	60	3	He	192.002	1.6572	128045.35	0.0086	0.002921
Ni	60	3	He	188.001	1.6227	128448.87	0.0086	0.002921
Ni	60	3	He	192.432	1.6609	128649.71	0.0086	0.002921
Cu	63	3	He	185.909	4.7785	369228.31	0.0257	0.004531
Cu	63	3	He	178.993	4.6009	364202.42	0.0257	0.004531
Cu	63	3	He	182.731	4.6969	363822.10	0.0257	0.004531
Zn	66	3	He	98.248	0.2868	22157.71	0.0029	0.002877
Zn	66	3	He	96.097	0.2805	22207.85	0.0029	0.002877
Zn	66	3	He	98.047	0.2862	22167.58	0.0029	0.002877
As	75	3	He	95.055	0.1944	15021.93	0.002	0.0006798
As	75	3	He	93.956	0.1922	15212.12	0.002	0.0006798
As	75	3	He	95.327	0.195	15102.04	0.002	0.0006798
Sr	88	3	He	2.049	0.0195	1410.12	0.009	0.001075
Sr	88	3	He	1.871	0.0179	1290.10	0.009	0.001075
Sr	88	3	He	2.072	0.0197	1460.13	0.009	0.001075
Mo	98	3	He	2178.427	49.1931	3555659.63	0.0226	0.0005115
Mo	98	3	He	2146.932	48.4818	3493107.14	0.0226	0.0005115
Mo	98	3	He	2105.437	47.5448	3520227.76	0.0226	0.0005115
Ag	107	3	He	51.198	2.4925	180159.96	0.0487	0.0003023
Ag	107	3	He	50.634	2.4651	177608.04	0.0487	0.0003023
Ag	107	3	He	49.711	2.4201	179187.46	0.0487	0.0003023
Cd	111	3	He	103.495	0.5614	40578.75	0.0054	8.618E-06
Cd	111	3	He	103.913	0.5637	40612.81	0.0054	8.618E-06
Cd	111	3	He	102.008	0.5533	40969.86	0.0054	8.618E-06
Sn	120	3	He	0.206	0.021	1520.13	0.0161	0.0177
Sn	120	3	He	-0.031	0.0172	1240.11	0.0161	0.0177
Sn	120	3	He	-0.109	0.0159	1180.09	0.0161	0.0177
Sb	121	3	He	0.122	0.0019	140.01	0.0152	8.618E-05
Sb	121	3	He	0.141	0.0022	160.01	0.0152	8.618E-05
Sb	121	3	He	0.101	0.0016	120.01	0.0152	8.618E-05
Ba	137	3	He	0.48	0.0025	180.01	0.0049	0.0001277
Ba	137	3	He	0.397	0.0021	150.01	0.0049	0.0001277
Ba	137	3	He	0.413	0.0022	160.01	0.0049	0.0001277
Tl	205	3	He	0.017	0.0006	220.01	0.0249	0.000171
Tl	205	3	He	0.031	0.0009	340.02	0.0249	0.000171
Tl	205	3	He	0.045	0.0013	470.03	0.0249	0.000171
Pb	208	3	He	0.069	0.0038	750.06	0.0334	0.001456
Pb	208	3	He	0.075	0.0039	820.06	0.0334	0.001456
Pb	208	3	He	0.066	0.0037	730.04	0.0334	0.001456
U	238	3	He	0.049	0.0025	700.05	0.0493	0.0001028
U	238	3	He	0.05	0.0026	700.04	0.0493	0.0001028
U	238	3	He	0.052	0.0027	740.05	0.0493	0.0001028
Sc	45	1	No Gas			2419623.25		
Sc	45	1	No Gas			2392519.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2409294.03		
Ge	72	1	No Gas			1201621.70		
Ge	72	1	No Gas			1189769.59		
Ge	72	1	No Gas			1198572.95		
Sc	45	2	H2			165128.22		
Sc	45	2	H2			162973.76		
Sc	45	2	H2			162387.85		
Ge	72	2	H2			147615.17		
Ge	72	2	H2			148959.75		
Ge	72	2	H2			147726.03		
In	115	2	H2			336432.92		
In	115	2	H2			340566.44		
In	115	2	H2			336872.38		
Sc	45	3	He			43485.54		
Sc	45	3	He			43325.57		
Sc	45	3	He			42733.33		
Ge	72	3	He			77268.37		
Ge	72	3	He			79158.84		
Ge	72	3	He			77460.01		
In	115	3	He			72288.45		
In	115	3	He			72057.30		
In	115	3	He			74047.29		
Tb	159	3	He			362459.06		
Tb	159	3	He			364591.44		
Tb	159	3	He			362779.84		
Bi	209	3	He			275149.92		
Bi	209	3	He			274375.27		
Bi	209	3	He			276939.06		

Quantitation Report

Data File Name	019_LRC.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/14/2023 12:27:22 PM
Sample Name	LRC 4661368
Sample Type	LRC
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

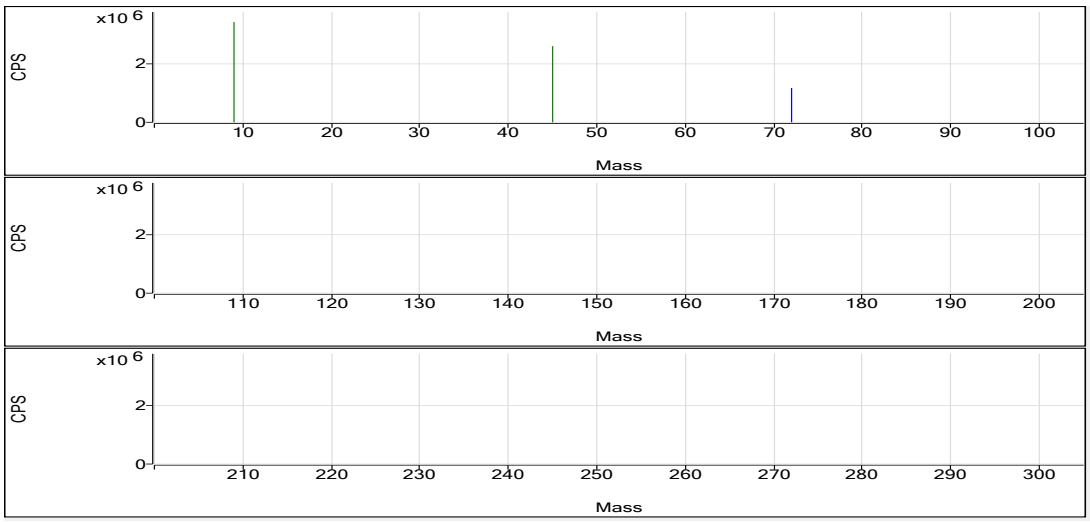
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	1778.512	ppb	2.3	3433313.75	1.3166	Analog	0.5000	3
Se	78	115	H2	1609.726	ppb	0.5	121785.37	0.2795	Pulse	1.5000	3
Na	23	45	He	177289.886	ppb	1.4	29653152.06	641.5367	Analog	0.1000	3
Mg	24	45	He	183113.697	ppb	1.0	15429855.19	333.8140	Analog	0.1000	3
Al	27	45	He	186776.642	ppb	0.8	5020749.51	108.6170	Analog	0.1000	3
K	39	45	He	183654.656	ppb	1.7	10011526.10	216.6064	Analog	0.1000	3
Ca	44	45	He	183482.883	ppb	1.7	589982.75	12.7647	Pulse	0.1000	3
Ti	47	45	He	1931.611	ppb	2.0	47926.58	1.0368	Pulse	0.1000	3
V	51	45	He	1868.689	ppb	1.8	1935726.71	41.8808	Analog	0.5000	3
Cr	52	45	He	1854.056	ppb	0.7	2511849.81	54.3404	Analog	0.1000	3
Mn	55	45	He	5568.869	ppb	1.6	3330250.89	72.0514	Analog	0.1000	3
Fe	57	45	He	144691.474	ppb	1.5	3945641.61	85.3647	Analog	0.1000	3
Co	59	45	He	1773.734	ppb	0.7	4691461.08	101.4929	Analog	0.1000	3
Ni	60	72	He	1903.884	ppb	1.4	1268031.44	16.4062	Pulse	0.1000	3
Cu	63	72	He	1887.089	ppb	1.1	3745835.36	48.4633	Analog	0.1000	3
Zn	66	72	He	1936.057	ppb	1.2	432604.38	5.5971	Pulse	0.1000	3
As	75	72	He	1952.054	ppb	1.6	307541.31	3.9792	Pulse	0.5000	3
Sr	88	115	He	1877.407	ppb	1.0	1362670.29	16.8930	Pulse	0.1000	3
Mo	98	115	He	1981.839	ppb	0.4	3610120.57	44.7538	Analog	0.1000	3
Ag	107	115	He	1885.828	ppb	1.4	7404814.68	91.7988	Analog	0.1000	3
Cd	111	115	He	1853.406	ppb	1.0	810978.17	10.0537	Pulse	0.5000	3
Sn	120	115	He	2019.339	ppb	0.3	2631907.46	32.6267	Analog	0.1000	3
Sb	121	115	He	1962.853	ppb	1.5	2405447.78	29.8211	Analog	0.1000	3
Ba	137	115	He	1867.970	ppb	1.4	742436.60	9.2042	Pulse	0.1000	3
Tl	205	159	He	2028.203	ppb	0.5	18462543.47	50.5344	Analog	0.1000	3
Pb	208	159	He	2025.564	ppb	0.3	24734321.29	67.7025	Analog	0.1000	3
U	238	209	He	218.390	ppb	0.6	2925139.23	10.7744	Analog	0.1000	3

ISTD Table:

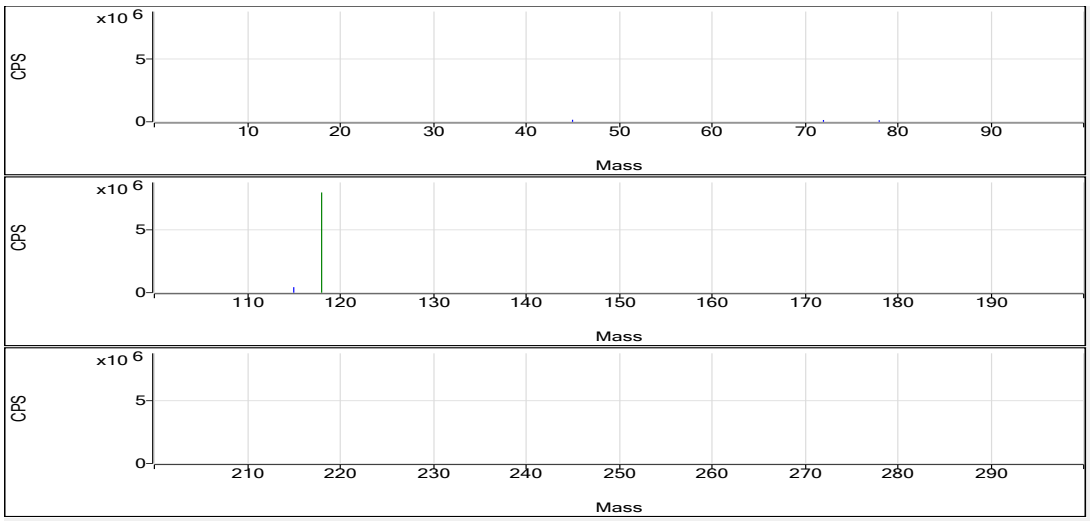
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2608435.12	1.9	108.3	Analog	0.1000	3
No Gas	Ge	72	1175450.06	1.2	101.2	Pulse	0.1000	3
H2	Sc	45	162000.83	1.4	98.5	Pulse	0.1000	3
H2	Ge	72	143841.31	1.4	99.0	Pulse	0.1000	3
H2	In	115	435755.15	0.2	121.1	Pulse	0.1000	3
He	Sc	45	46227.65	1.5	105.6	Pulse	0.1000	3
He	Ge	72	77302.33	1.8	101.0	Pulse	0.1000	3
He	In	115	80667.71	0.6	104.0	Pulse	0.1000	3
He	Tb	159	365340.98	0.5	98.5	Pulse	0.1000	3
He	Bi	209	271497.09	0.6	92.9	Pulse	0.1000	3

No Gas

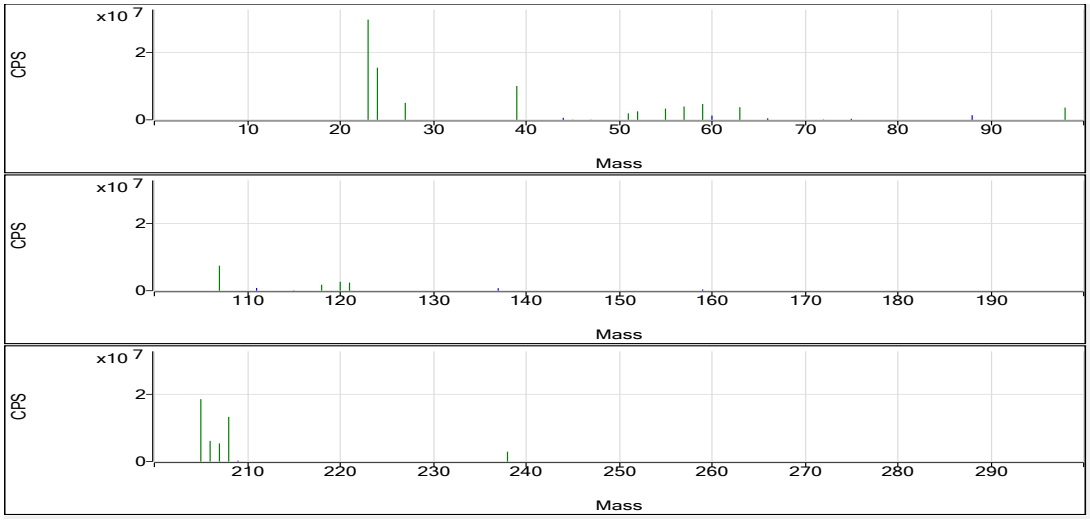


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1779.203	1.3171	3456155.25	0.0007	1.523E-05
Be	9	1	No Gas	1819.525	1.347	3438722.00	0.0007	1.523E-05
Be	9	1	No Gas	1736.807	1.2857	3405064.00	0.0007	1.523E-05
Se	78	2	H2	1604.581	0.2786	121198.90	0.0002	3.71E-06
Se	78	2	H2	1605.625	0.2788	121474.80	0.0002	3.71E-06
Se	78	2	H2	1618.973	0.2811	122682.42	0.0002	3.71E-06
Na	23	3	He	174833.657	632.6528	29529387.06	0.0036	0.3007
Na	23	3	He	177384.327	641.8783	29902349.55	0.0036	0.3007
Na	23	3	He	179651.673	650.079	29527719.56	0.0036	0.3007
Mg	24	3	He	182319.705	332.3666	15513376.02	0.0018	0.003274
Mg	24	3	He	181734.555	331.2999	15433836.02	0.0018	0.003274
Mg	24	3	He	185286.832	337.7756	15342353.52	0.0018	0.003274
Al	27	3	He	186519.476	108.4675	5062773.05	0.0006	0.00137
Al	27	3	He	185461.118	107.852	5024360.86	0.0006	0.00137
Al	27	3	He	188349.331	109.5316	4975114.61	0.0006	0.00137
K	39	3	He	181002.474	213.4838	9964464.85	0.0012	0.378
K	39	3	He	182835.909	215.6425	10045854.85	0.0012	0.378
K	39	3	He	187125.584	220.693	10024258.60	0.0012	0.378
Ca	44	3	He	181144.696	12.6021	588209.56	0.0001	0.003203
Ca	44	3	He	182270.994	12.6804	590727.22	0.0001	0.003203
Ca	44	3	He	187032.96	13.0116	591011.48	0.0001	0.003203
Ti	47	3	He	1889.072	1.014	47327.94	0.0005	0
Ti	47	3	He	1964.141	1.0543	49114.02	0.0005	0
Ti	47	3	He	1941.619	1.0422	47337.78	0.0005	0
V	51	3	He	1835.661	41.1411	1920280.13	0.0224	0.02476
V	51	3	He	1866.715	41.8366	1948989.25	0.0224	0.02476
V	51	3	He	1903.69	42.6648	1937910.75	0.0224	0.02476
Cr	52	3	He	1844.559	54.0622	2523382.46	0.0293	0.04167
Cr	52	3	He	1848.56	54.1794	2523986.06	0.0293	0.04167
Cr	52	3	He	1869.05	54.7795	2488180.90	0.0293	0.04167
Mn	55	3	He	5483.397	70.9456	3311421.51	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5558.506	71.9173	3350317.76	0.0129	0.006476
Mn	55	3	He	5664.704	73.2912	3329013.39	0.0129	0.006476
Fe	57	3	He	144219.257	85.0861	3971436.19	0.0006	0.00213
Fe	57	3	He	142722.641	84.2032	3922662.75	0.0006	0.00213
Fe	57	3	He	147132.525	86.8048	3942825.88	0.0006	0.00213
Co	59	3	He	1765.844	101.0415	4716160.87	0.0572	0.00297
Co	59	3	He	1767.948	101.1619	4712696.49	0.0572	0.00297
Co	59	3	He	1787.409	102.2754	4645525.87	0.0572	0.00297
Ni	60	3	He	1913.721	16.4909	1267599.43	0.0086	0.002921
Ni	60	3	He	1874.54	16.1534	1273489.28	0.0086	0.002921
Ni	60	3	He	1923.39	16.5742	1263005.61	0.0086	0.002921
Cu	63	3	He	1894.772	48.6606	3740372.44	0.0257	0.004531
Cu	63	3	He	1863.301	47.8525	3772569.01	0.0257	0.004531
Cu	63	3	He	1903.193	48.8769	3724564.63	0.0257	0.004531
Zn	66	3	He	1942.137	5.6147	431578.78	0.0029	0.002877
Zn	66	3	He	1909.538	5.5205	435219.06	0.0029	0.002877
Zn	66	3	He	1956.497	5.6561	431015.31	0.0029	0.002877
As	75	3	He	1959.429	3.9942	307020.44	0.002	0.0006798
As	75	3	He	1917.808	3.9094	308205.22	0.002	0.0006798
As	75	3	He	1978.926	4.0339	307398.28	0.002	0.0006798
Sr	88	3	He	1890.347	17.0094	1362552.79	0.009	0.001075
Sr	88	3	He	1885.719	16.9678	1370315.14	0.009	0.001075
Sr	88	3	He	1856.155	16.7018	1355142.95	0.009	0.001075
Mo	98	3	He	1990.313	44.9451	3600361.51	0.0226	0.0005115
Mo	98	3	He	1980.787	44.73	3612386.82	0.0226	0.0005115
Mo	98	3	He	1974.416	44.5862	3617613.38	0.0226	0.0005115
Ag	107	3	He	1905.28	92.7457	7429461.76	0.0487	0.0003023
Ag	107	3	He	1895.795	92.284	7452836.76	0.0487	0.0003023
Ag	107	3	He	1856.41	90.3668	7332145.52	0.0487	0.0003023
Cd	111	3	He	1867.81	10.1318	811618.38	0.0054	8.618E-06
Cd	111	3	He	1860.123	10.0901	814877.81	0.0054	8.618E-06
Cd	111	3	He	1832.286	9.9391	806438.31	0.0054	8.618E-06
Sn	120	3	He	2024.572	32.7112	2620354.34	0.0161	0.0177
Sn	120	3	He	2011.602	32.5018	2624836.21	0.0161	0.0177
Sn	120	3	He	2021.842	32.6671	2650531.84	0.0161	0.0177
Sb	121	3	He	1993.076	30.2803	2425624.34	0.0152	8.618E-05
Sb	121	3	He	1960.489	29.7852	2405446.68	0.0152	8.618E-05
Sb	121	3	He	1934.994	29.3979	2385272.31	0.0152	8.618E-05
Ba	137	3	He	1889.452	9.31	745785.07	0.0049	0.0001277
Ba	137	3	He	1876.714	9.2472	746805.69	0.0049	0.0001277
Ba	137	3	He	1837.743	9.0552	734719.05	0.0049	0.0001277
Tl	205	3	He	2039.117	50.8063	18638583.47	0.0249	0.000171
Tl	205	3	He	2026.858	50.5009	18462297.22	0.0249	0.000171
Tl	205	3	He	2018.632	50.2959	18286749.73	0.0249	0.000171
Pb	208	3	He	2019.828	67.5108	13308431.05	0.0334	0.001456
Pb	208	3	He	2026.688	67.7401	13218878.55	0.0334	0.001456
Pb	208	3	He	2030.175	67.8566	13148868.55	0.0334	0.001456
U	238	3	He	219.375	10.8229	2925084.33	0.0493	0.0001028
U	238	3	He	216.93	10.7023	2924338.08	0.0493	0.0001028
U	238	3	He	218.866	10.7978	2925995.27	0.0493	0.0001028
Sc	45	1	No Gas			2624027.15		
Sc	45	1	No Gas			2552935.74		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2648342.46		
Ge	72	1	No Gas			1191598.65		
Ge	72	1	No Gas			1166489.28		
Ge	72	1	No Gas			1168262.25		
Sc	45	2	H2			162813.44		
Sc	45	2	H2			163833.54		
Sc	45	2	H2			159355.52		
Ge	72	2	H2			141534.79		
Ge	72	2	H2			145030.02		
Ge	72	2	H2			144959.11		
In	115	2	H2			435049.33		
In	115	2	H2			435756.13		
In	115	2	H2			436459.99		
Sc	45	3	He			46675.50		
Sc	45	3	He			46585.70		
Sc	45	3	He			45421.74		
Ge	72	3	He			76866.51		
Ge	72	3	He			78837.47		
Ge	72	3	He			76203.00		
In	115	3	He			93927.21		
In	115	3	He			94823.42		
In	115	3	He			94802.49		
Tb	159	3	He			366855.78		
Tb	159	3	He			365583.82		
Tb	159	3	He			363583.35		
Bi	209	3	He			270267.01		
Bi	209	3	He			273243.82		
Bi	209	3	He			270980.45		

US EPA Tune Check Report

Operator Name	us19_usr_ins22323
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA_ICPMS.b
Acq. Date-Time	8/14/2023 6:50:30 AM
Report Comment	E09 Tune Report
Instrument Name	G8403A SG20064740

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9	10.00	5934	59343.20			0.622	5.000
24	10.00	24593	245926.67			0.291	5.000
25	10.00	3365	33646.50			0.540	5.000
26	10.00	3905	39051.39			0.700	5.000
59	10.00	40186	401860.00			0.331	5.000
115	10.00	63341	633406.19			0.181	5.000
206	10.00	15097	150968.92			0.591	5.000
207	10.00	13322	133216.78			0.823	5.000
208	10.00	32082	320817.33			0.596	5.000

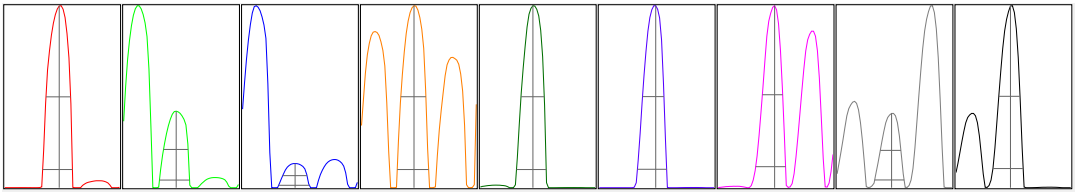
Mass	RSD% (Flag)
9	
24	
25	
26	
59	
115	
206	
207	
208	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	5972	5957	5914	5948	5880
24	24604	24683	24634	24530	24512
25	3381	3381	3357	3365	3338
26	3921	3916	3869	3885	3935
59	40089	40393	40080	40245	40124
115	63277	63486	63204	63309	63427
206	14971	15058	15091	15182	15182
207	13139	13305	13373	13376	13415
208	31781	32016	32268	32181	32164

Integration Time [sec] 0.1

Resolution/Axis

US EPA Tune Check Report



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	9991.26	8.95	8.90 - 9.10	
24	41574.33	23.90	23.90 - 24.10	
25	5528.94	24.90	24.90 - 25.10	
26	6443.23	25.90	25.90 - 26.10	
59	71137.40	58.90	58.90 - 59.10	
115	118235.10	115.00	114.90 - 115.10	
206	28806.97	206.00	205.90 - 206.10	
207	24781.34	206.95	206.90 - 207.10	
208	60594.50	207.95	207.90 - 208.10	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
9	0.63	0.766	0.900	
24	0.63	0.774	0.900	
25	0.62	0.792	0.900	
26	0.64	0.808	0.900	
59	0.60	0.763	0.900	
115	0.55	0.752	0.900	
206	0.52	0.768	0.900	
207	0.53	0.757	0.900	
208	0.55	0.777	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	235
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.05 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	0.90 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.1 V	Deflect	12.8 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.5 V

US EPA Tune Check Report

He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	150 V		

QP Parameters

Mass Gain	131	Axis Gain	1.0003	QP Bias	-2.5 V
Mass Offset	124	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	-0.8 mm	Torch V	-0.6 mm		

EM

Discriminator	4.0 mV	Analog HV	2186 V	Pulse HV	1743 V

Quantitation Report

Data File Name	231_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/14/2023 8:43:23 PM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

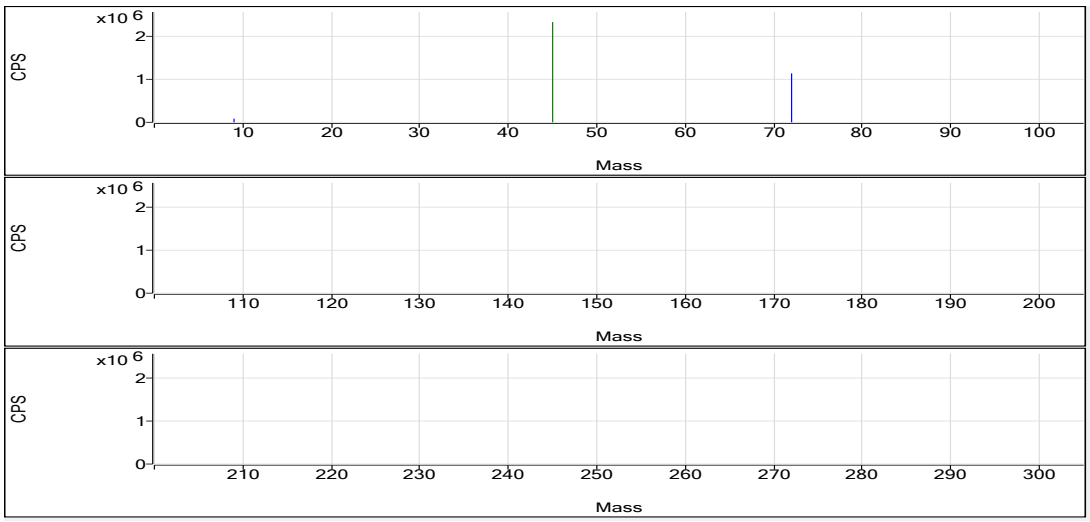
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.960	ppb	1.8	85824.11	0.0370	Pulse	0.5000	3
Se	78	115	H2	50.805	ppb	0.8	2880.74	0.0088	Pulse	1.5000	3
Na	23	45	He	5437.967	ppb	3.2	788905.20	19.9691	Pulse	0.1000	3
Mg	24	45	He	5180.176	ppb	2.3	373261.96	9.4466	Pulse	0.1000	3
Al	27	45	He	5000.856	ppb	3.0	114949.26	2.9095	Pulse	0.1000	3
K	39	45	He	5116.104	ppb	3.2	252910.40	6.4015	Pulse	0.1000	3
Ca	44	45	He	5050.453	ppb	6.9	13993.84	0.3545	Pulse	0.1000	3
Ti	47	45	He	5028.664	ppb	3.1	106656.48	2.6992	Pulse	0.1000	3
V	51	45	He	514.353	ppb	2.8	456159.03	11.5456	Pulse	0.5000	3
Cr	52	45	He	507.545	ppb	3.1	588885.63	14.9059	Pulse	0.1000	3
Mn	55	45	He	504.439	ppb	4.2	258020.73	6.5324	Pulse	0.1000	3
Fe	57	45	He	5078.704	ppb	4.9	118413.35	2.9984	Pulse	0.1000	3
Co	59	45	He	505.026	ppb	2.3	1141927.74	28.8997	Pulse	0.1000	3
Ni	60	72	He	528.089	ppb	1.2	319845.06	4.5528	Pulse	0.1000	3
Cu	63	72	He	503.180	ppb	1.0	908085.09	12.9258	Pulse	0.1000	3
Zn	66	72	He	528.641	ppb	2.0	107511.36	1.5304	Pulse	0.1000	3
As	75	72	He	525.155	ppb	1.3	75243.57	1.0710	Pulse	0.5000	3
Sr	88	115	He	49.831	ppb	2.1	32043.77	0.4494	Pulse	0.1000	3
Mo	98	115	He	53.068	ppb	1.9	85479.27	1.1989	Pulse	0.1000	3
Ag	107	115	He	52.366	ppb	1.7	181776.44	2.5494	Pulse	0.1000	3
Cd	111	115	He	52.582	ppb	1.9	20337.50	0.2852	Pulse	0.5000	3
Sn	120	115	He	52.941	ppb	0.8	62227.19	0.8726	Pulse	0.1000	3
Sb	121	115	He	52.118	ppb	2.6	56459.30	0.7919	Pulse	0.1000	3
Ba	137	115	He	520.604	ppb	1.7	182909.68	2.5653	Pulse	0.1000	3
Tl	205	159	He	53.350	ppb	0.9	461725.24	1.3294	Pulse	0.1000	3
Pb	208	159	He	53.337	ppb	1.2	619641.46	1.7842	Pulse	0.1000	3
U	238	209	He	51.790	ppb	0.9	707468.71	2.5551	Pulse	0.1000	3

ISTD Table:

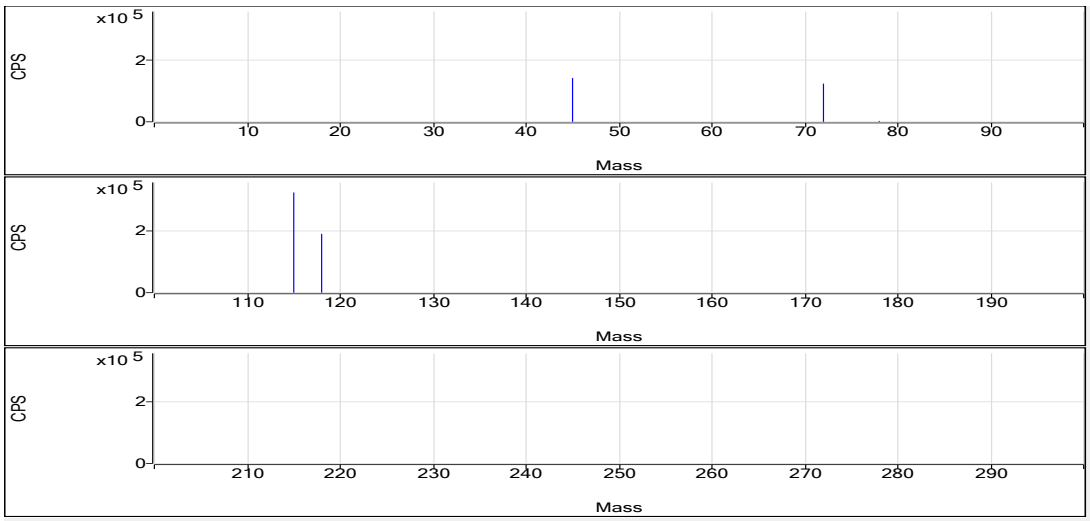
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2320274.13	2.7	96.4	Analog	0.1000	3
No Gas	Ge	72	1132626.36	1.3	97.5	Pulse	0.1000	3
H2	Sc	45	142479.23	1.2	86.7	Pulse	0.1000	3
H2	Ge	72	124345.01	1.9	85.6	Pulse	0.1000	3
H2	In	115	326450.68	0.4	90.7	Pulse	0.1000	3
He	Sc	45	39531.30	3.0	90.3	Pulse	0.1000	3
He	Ge	72	70256.73	0.7	91.8	Pulse	0.1000	3
He	In	115	71309.17	1.1	92.0	Pulse	0.1000	3
He	Tb	159	347329.94	1.1	93.6	Pulse	0.1000	3
He	Bi	209	276893.96	0.9	94.7	Pulse	0.1000	3

No Gas

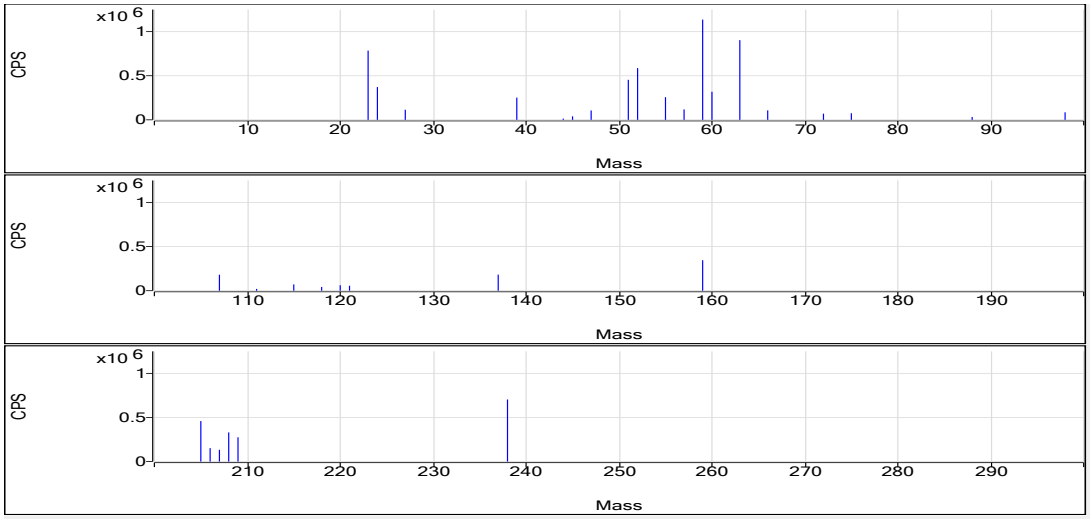


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.059	0.0371	84600.94	0.0007	1.523E-05
Be	9	1	No Gas	50.788	0.0376	85956.87	0.0007	1.523E-05
Be	9	1	No Gas	49.033	0.0363	86914.53	0.0007	1.523E-05
Se	78	2	H2	50.44	0.0088	2854.96	0.0002	3.71E-06
Se	78	2	H2	50.701	0.0088	2866.96	0.0002	3.71E-06
Se	78	2	H2	51.272	0.0089	2920.30	0.0002	3.71E-06
Na	23	3	He	5394.28	19.8111	792566.32	0.0036	0.3007
Na	23	3	He	5287.404	19.4246	784887.41	0.0036	0.3007
Na	23	3	He	5632.218	20.6717	789261.86	0.0036	0.3007
Mg	24	3	He	5126.215	9.3482	373985.85	0.0018	0.003274
Mg	24	3	He	5096.149	9.2934	375518.12	0.0018	0.003274
Mg	24	3	He	5318.163	9.6981	370281.91	0.0018	0.003274
Al	27	3	He	4904.629	2.8535	114159.30	0.0006	0.00137
Al	27	3	He	4924.16	2.8649	115762.00	0.0006	0.00137
Al	27	3	He	5173.778	3.0101	114926.49	0.0006	0.00137
K	39	3	He	5058.249	6.3334	253375.13	0.0012	0.378
K	39	3	He	4991.819	6.2552	252753.36	0.0012	0.378
K	39	3	He	5298.244	6.616	252602.71	0.0012	0.378
Ca	44	3	He	4995.213	0.3506	14027.26	0.0001	0.003203
Ca	44	3	He	4731.462	0.3323	13426.56	0.0001	0.003203
Ca	44	3	He	5424.684	0.3805	14527.71	0.0001	0.003203
Ti	47	3	He	5103.503	2.7394	109591.11	0.0005	0
Ti	47	3	He	4852.215	2.6045	105238.95	0.0005	0
Ti	47	3	He	5130.273	2.7537	105139.38	0.0005	0
V	51	3	He	509.26	11.4315	457330.34	0.0224	0.02476
V	51	3	He	503.325	11.2986	456540.22	0.0224	0.02476
V	51	3	He	530.475	11.9067	454606.53	0.0224	0.02476
Cr	52	3	He	502.428	14.756	590330.38	0.0293	0.04167
Cr	52	3	He	495.08	14.5408	587550.30	0.0293	0.04167
Cr	52	3	He	525.126	15.4207	588776.20	0.0293	0.04167
Mn	55	3	He	496.98	6.4359	257477.44	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	488.116	6.3213	255423.32	0.0129	0.006476
Mn	55	3	He	528.222	6.8401	261161.42	0.0129	0.006476
Fe	57	3	He	4945.974	2.9201	116820.75	0.0006	0.00213
Fe	57	3	He	4921.815	2.9058	117415.25	0.0006	0.00213
Fe	57	3	He	5368.323	3.1692	121004.05	0.0006	0.00213
Co	59	3	He	501.128	28.6766	1147240.92	0.0572	0.00297
Co	59	3	He	496.097	28.3887	1147103.19	0.0572	0.00297
Co	59	3	He	517.855	29.6337	1131439.12	0.0572	0.00297
Ni	60	3	He	527.507	4.5477	320088.73	0.0086	0.002921
Ni	60	3	He	521.827	4.4988	317818.20	0.0086	0.002921
Ni	60	3	He	534.934	4.6117	321628.24	0.0086	0.002921
Cu	63	3	He	503.661	12.9381	910636.78	0.0257	0.004531
Cu	63	3	He	498.072	12.7946	903873.66	0.0257	0.004531
Cu	63	3	He	507.807	13.0446	909744.83	0.0257	0.004531
Zn	66	3	He	532.402	1.5412	108479.02	0.0029	0.002877
Zn	66	3	He	516.906	1.4965	105718.05	0.0029	0.002877
Zn	66	3	He	536.614	1.5534	108337.02	0.0029	0.002877
As	75	3	He	531.599	1.0841	76305.80	0.002	0.0006798
As	75	3	He	518.087	1.0566	74643.13	0.002	0.0006798
As	75	3	He	525.78	1.0723	74781.80	0.002	0.0006798
Sr	88	3	He	49.546	0.4469	32097.54	0.009	0.001075
Sr	88	3	He	48.976	0.4417	31656.14	0.009	0.001075
Sr	88	3	He	50.97	0.4597	32377.64	0.009	0.001075
Mo	98	3	He	52.255	1.1805	84794.90	0.0226	0.0005115
Mo	98	3	He	52.73	1.1912	85369.27	0.0226	0.0005115
Mo	98	3	He	54.218	1.2249	86273.64	0.0226	0.0005115
Ag	107	3	He	52.375	2.5498	183147.17	0.0487	0.0003023
Ag	107	3	He	51.472	2.5059	179580.52	0.0487	0.0003023
Ag	107	3	He	53.251	2.5925	182601.62	0.0487	0.0003023
Cd	111	3	He	52.271	0.2836	20366.85	0.0054	8.618E-06
Cd	111	3	He	51.752	0.2807	20118.53	0.0054	8.618E-06
Cd	111	3	He	53.724	0.2914	20527.12	0.0054	8.618E-06
Sn	120	3	He	53.404	0.8801	63215.46	0.0161	0.0177
Sn	120	3	He	52.678	0.8684	62230.60	0.0161	0.0177
Sn	120	3	He	52.741	0.8694	61235.51	0.0161	0.0177
Sb	121	3	He	51.296	0.7794	55983.90	0.0152	8.618E-05
Sb	121	3	He	51.387	0.7808	55954.04	0.0152	8.618E-05
Sb	121	3	He	53.671	0.8155	57439.95	0.0152	8.618E-05
Ba	137	3	He	519.21	2.5584	183766.52	0.0049	0.0001277
Ba	137	3	He	512.601	2.5259	181012.69	0.0049	0.0001277
Ba	137	3	He	530	2.6116	183949.82	0.0049	0.0001277
Tl	205	3	He	53.024	1.3213	464598.66	0.0249	0.000171
Tl	205	3	He	53.927	1.3438	462656.95	0.0249	0.000171
Tl	205	3	He	53.1	1.3232	457920.11	0.0249	0.000171
Pb	208	3	He	52.616	1.76	331818.32	0.0334	0.001456
Pb	208	3	He	53.801	1.7997	333548.55	0.0334	0.001456
Pb	208	3	He	53.596	1.7928	331303.78	0.0334	0.001456
U	238	3	He	51.96	2.5635	709211.32	0.0493	0.0001028
U	238	3	He	51.278	2.5299	707214.13	0.0493	0.0001028
U	238	3	He	52.131	2.572	705980.69	0.0493	0.0001028
Sc	45	1	No Gas			2282044.03		
Sc	45	1	No Gas			2285312.00		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2393466.37		
Ge	72	1	No Gas			1131136.39		
Ge	72	1	No Gas			1118516.94		
Ge	72	1	No Gas			1148225.76		
Sc	45	2	H2			144300.24		
Sc	45	2	H2			142149.98		
Sc	45	2	H2			140987.47		
Ge	72	2	H2			122582.28		
Ge	72	2	H2			127011.66		
Ge	72	2	H2			123441.08		
In	115	2	H2			325871.95		
In	115	2	H2			325555.85		
In	115	2	H2			327924.25		
Sc	45	3	He			40006.15		
Sc	45	3	He			40406.97		
Sc	45	3	He			38180.78		
Ge	72	3	He			70384.02		
Ge	72	3	He			70644.97		
Ge	72	3	He			69741.21		
In	115	3	He			72157.70		
In	115	3	He			71997.17		
In	115	3	He			70770.10		
Tb	159	3	He			351624.45		
Tb	159	3	He			344291.56		
Tb	159	3	He			346073.82		
Bi	209	3	He			276653.53		
Bi	209	3	He			279540.41		
Bi	209	3	He			274487.95		

Quantitation Report

Data File Name	232_CCB.d
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Acq Time	8/14/2023 8:45:26 PM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

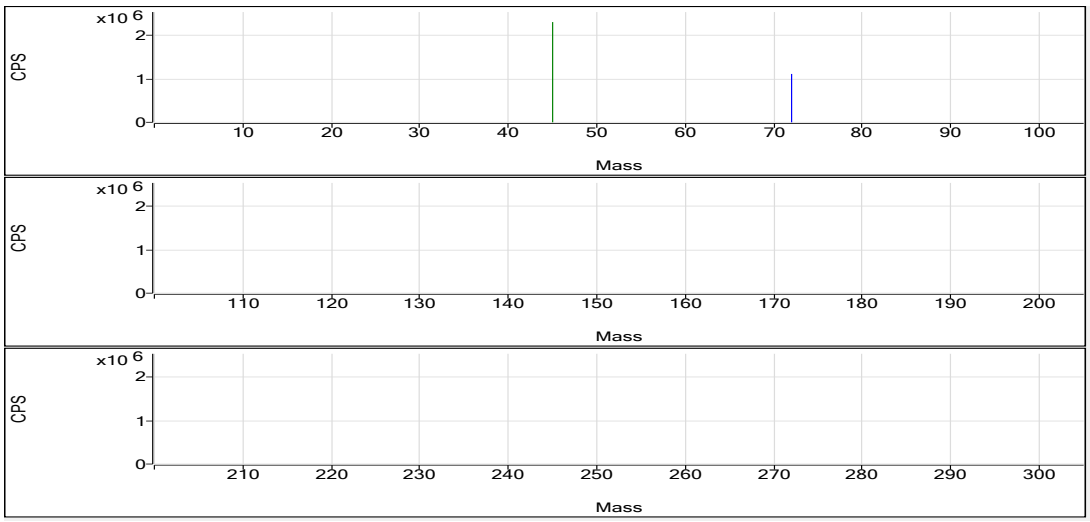
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.023	ppb	28.2	75.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.313	ppb	20.6	18.89	0.0001	Pulse	1.5000	3
Na	23	45	He	360.590	ppb	4.5	61374.41	1.6049	Pulse	0.1000	3
Mg	24	45	He	6.046	ppb	9.2	546.70	0.0143	Pulse	0.1000	3
Al	27	45	He	1.994	ppb	92.1	96.67	0.0025	Pulse	0.1000	3
K	39	45	He	47.259	ppb	13.0	16586.54	0.4336	Pulse	0.1000	3
Ca	44	45	He	7.763	ppb	279.3	143.34	0.0037	Pulse	0.1000	3
Ti	47	45	He	0.972	ppb	99.6	20.00	0.0005	Pulse	0.1000	3
V	51	45	He	0.557	ppb	9.3	1424.08	0.0372	Pulse	0.5000	3
Cr	52	45	He	0.169	ppb	17.9	1783.51	0.0466	Pulse	0.1000	3
Mn	55	45	He	0.004	ppb	4115.9	250.01	0.0065	Pulse	0.1000	3
Fe	57	45	He	0.380	ppb	122.7	90.00	0.0024	Pulse	0.1000	3
Co	59	45	He	0.134	ppb	16.5	406.69	0.0106	Pulse	0.1000	3
Ni	60	72	He	0.180	ppb	35.8	310.01	0.0045	Pulse	0.1000	3
Cu	63	72	He	0.204	ppb	11.2	676.71	0.0098	Pulse	0.1000	3
Zn	66	72	He	0.337	ppb	64.7	266.68	0.0038	Pulse	0.1000	3
As	75	72	He	0.290	ppb	24.0	88.00	0.0013	Pulse	0.5000	3
Sr	88	115	He	0.164	ppb	49.0	180.01	0.0025	Pulse	0.1000	3
Mo	98	115	He	0.082	ppb	36.8	166.68	0.0024	Pulse	0.1000	3
Ag	107	115	He	0.015	ppb	161.7	73.34	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	49.7	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.010	ppb	N/A	1236.77	0.0175	Pulse	0.1000	3
Sb	121	115	He	0.035	ppb	42.0	43.33	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.166	ppb	44.2	66.67	0.0009	Pulse	0.1000	3
Tl	205	159	He	0.091	ppb	17.0	843.39	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.018	ppb	62.3	706.70	0.0021	Pulse	0.1000	3
U	238	209	He	0.060	ppb	3.1	833.39	0.0030	Pulse	0.1000	3

ISTD Table:

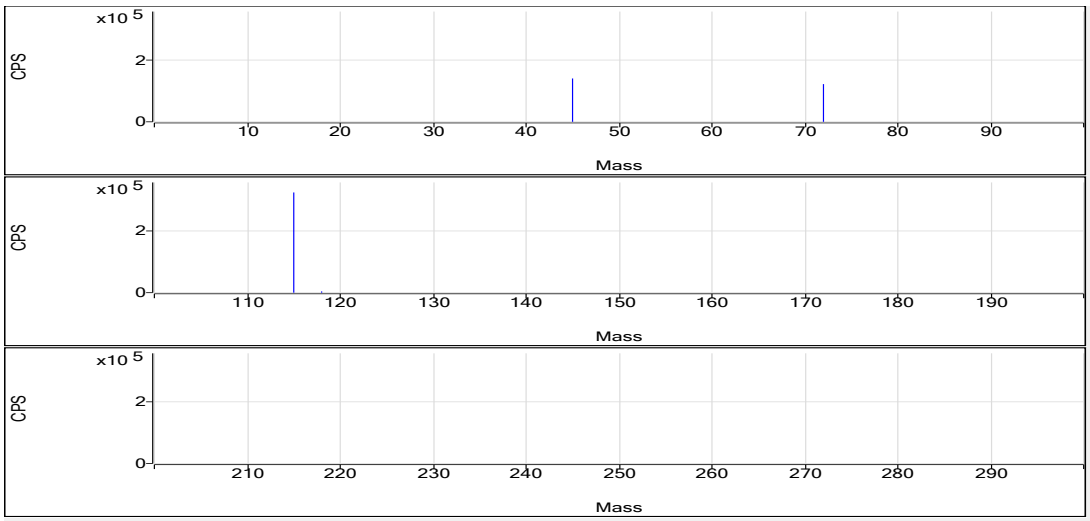
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2313880.85	1.6	96.1	Analog	0.1000	3
No Gas	Ge	72	1116237.51	1.6	96.1	Pulse	0.1000	3
H2	Sc	45	140477.45	0.7	85.4	Pulse	0.1000	3
H2	Ge	72	122207.15	0.8	84.1	Pulse	0.1000	3
H2	In	115	324852.97	0.9	90.3	Pulse	0.1000	3
He	Sc	45	38247.73	0.6	87.4	Pulse	0.1000	3
He	Ge	72	69335.15	0.9	90.6	Pulse	0.1000	3
He	In	115	70512.87	1.7	90.9	Pulse	0.1000	3
He	Tb	159	344180.68	0.5	92.8	Pulse	0.1000	3
He	Bi	209	273841.43	0.6	93.7	Pulse	0.1000	3

No Gas

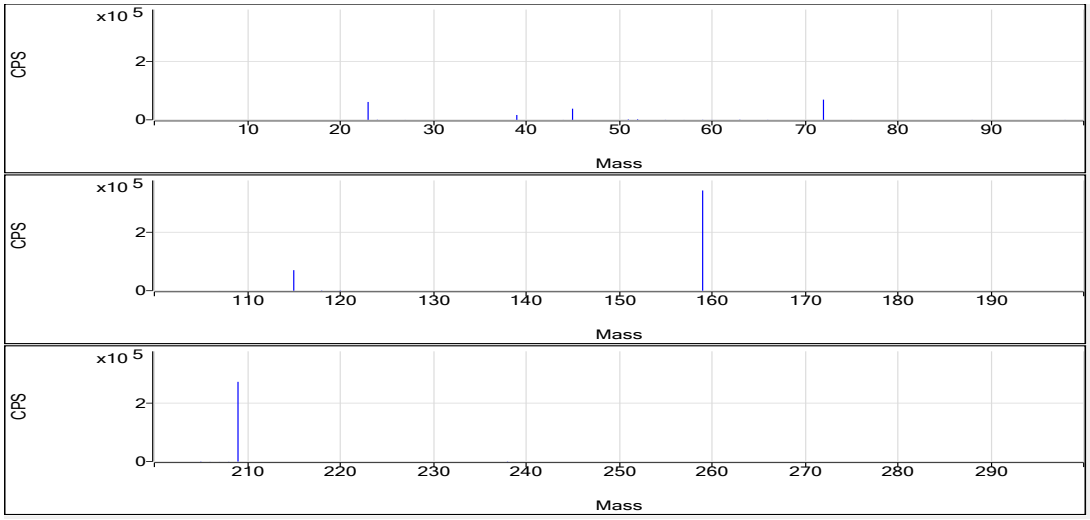


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	78.00	0.0007	1.523E-05
Be	9	1	No Gas	0.016	0	64.00	0.0007	1.523E-05
Be	9	1	No Gas	0.029	0	84.00	0.0007	1.523E-05
Se	78	2	H2	0.241	0	14.67	0.0002	3.71E-06
Se	78	2	H2	0.334	0.0001	20.00	0.0002	3.71E-06
Se	78	2	H2	0.365	0.0001	22.00	0.0002	3.71E-06
Na	23	3	He	378.398	1.6693	63516.68	0.0036	0.3007
Na	23	3	He	346.78	1.5549	59851.65	0.0036	0.3007
Na	23	3	He	356.592	1.5904	60754.89	0.0036	0.3007
Mg	24	3	He	5.845	0.0139	530.03	0.0018	0.003274
Mg	24	3	He	5.615	0.0135	520.03	0.0018	0.003274
Mg	24	3	He	6.677	0.0154	590.03	0.0018	0.003274
Al	27	3	He	3.972	0.0037	140.01	0.0006	0.00137
Al	27	3	He	1.665	0.0023	90.00	0.0006	0.00137
Al	27	3	He	0.345	0.0016	60.00	0.0006	0.00137
K	39	3	He	47.695	0.4342	16519.85	0.0012	0.378
K	39	3	He	53.184	0.4406	16960.31	0.0012	0.378
K	39	3	He	40.898	0.4262	16279.47	0.0012	0.378
Ca	44	3	He	-0.702	0.0032	120.00	0.0001	0.003203
Ca	44	3	He	32.399	0.0055	210.01	0.0001	0.003203
Ca	44	3	He	-8.408	0.0026	100.00	0.0001	0.003203
Ti	47	3	He	0.979	0.0005	20.00	0.0005	0
Ti	47	3	He	1.936	0.001	40.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.601	0.0382	1454.08	0.0224	0.02476
V	51	3	He	0.5	0.036	1384.08	0.0224	0.02476
V	51	3	He	0.571	0.0375	1434.08	0.0224	0.02476
Cr	52	3	He	0.157	0.0463	1760.17	0.0293	0.04167
Cr	52	3	He	0.148	0.046	1770.17	0.0293	0.04167
Cr	52	3	He	0.204	0.0476	1820.18	0.0293	0.04167
Mn	55	3	He	-0.196	0.0039	150.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.102	0.0078	300.02	0.0129	0.006476
Mn	55	3	He	0.107	0.0079	300.01	0.0129	0.006476
Fe	57	3	He	0.844	0.0026	100.00	0.0006	0.00213
Fe	57	3	He	-0.088	0.0021	80.00	0.0006	0.00213
Fe	57	3	He	0.383	0.0024	90.00	0.0006	0.00213
Co	59	3	He	0.132	0.0105	400.02	0.0572	0.00297
Co	59	3	He	0.157	0.012	460.03	0.0572	0.00297
Co	59	3	He	0.113	0.0094	360.02	0.0572	0.00297
Ni	60	3	He	0.234	0.0049	340.01	0.0086	0.002921
Ni	60	3	He	0.108	0.0039	270.01	0.0086	0.002921
Ni	60	3	He	0.199	0.0046	320.01	0.0086	0.002921
Cu	63	3	He	0.225	0.0103	710.04	0.0257	0.004531
Cu	63	3	He	0.179	0.0091	640.04	0.0257	0.004531
Cu	63	3	He	0.207	0.0099	680.04	0.0257	0.004531
Zn	66	3	He	0.41	0.0041	280.01	0.0029	0.002877
Zn	66	3	He	0.091	0.0031	220.01	0.0029	0.002877
Zn	66	3	He	0.508	0.0043	300.01	0.0029	0.002877
As	75	3	He	0.307	0.0013	90.00	0.002	0.0006798
As	75	3	He	0.213	0.0011	78.00	0.002	0.0006798
As	75	3	He	0.349	0.0014	96.00	0.002	0.0006798
Sr	88	3	He	0.072	0.0017	120.00	0.009	0.001075
Sr	88	3	He	0.221	0.0031	220.01	0.009	0.001075
Sr	88	3	He	0.198	0.0029	200.01	0.009	0.001075
Mo	98	3	He	0.06	0.0019	130.01	0.0226	0.0005115
Mo	98	3	He	0.07	0.0021	150.01	0.0226	0.0005115
Mo	98	3	He	0.117	0.0031	220.01	0.0226	0.0005115
Ag	107	3	He	0.044	0.0024	170.01	0.0487	0.0003023
Ag	107	3	He	0	0.0003	20.00	0.0487	0.0003023
Ag	107	3	He	0.003	0.0004	30.00	0.0487	0.0003023
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.019	0.0001	8.00	0.0054	8.618E-06
Sn	120	3	He	-0.083	0.0164	1140.09	0.0161	0.0177
Sn	120	3	He	-0.08	0.0164	1180.09	0.0161	0.0177
Sn	120	3	He	0.133	0.0199	1390.12	0.0161	0.0177
Sb	121	3	He	0.032	0.0006	40.00	0.0152	8.618E-05
Sb	121	3	He	0.022	0.0004	30.00	0.0152	8.618E-05
Sb	121	3	He	0.051	0.0009	60.00	0.0152	8.618E-05
Ba	137	3	He	0.236	0.0013	90.00	0.0049	0.0001277
Ba	137	3	He	0.172	0.001	70.00	0.0049	0.0001277
Ba	137	3	He	0.09	0.0006	40.00	0.0049	0.0001277
Tl	205	3	He	0.109	0.0029	1000.07	0.0249	0.000171
Tl	205	3	He	0.083	0.0022	770.06	0.0249	0.000171
Tl	205	3	He	0.082	0.0022	760.05	0.0249	0.000171
Pb	208	3	He	0.021	0.0022	360.02	0.0334	0.001456
Pb	208	3	He	0.027	0.0023	410.02	0.0334	0.001456
Pb	208	3	He	0.005	0.0016	340.02	0.0334	0.001456
U	238	3	He	0.057	0.0029	800.06	0.0493	0.0001028
U	238	3	He	0.061	0.0031	850.06	0.0493	0.0001028
U	238	3	He	0.06	0.0031	850.06	0.0493	0.0001028
Sc	45	1	No Gas			2291666.37		
Sc	45	1	No Gas			2357466.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2292509.34		
Ge	72	1	No Gas			1102855.30		
Ge	72	1	No Gas			1137093.42		
Ge	72	1	No Gas			1108763.81		
Sc	45	2	H2			141595.88		
Sc	45	2	H2			139655.81		
Sc	45	2	H2			140180.65		
Ge	72	2	H2			121383.60		
Ge	72	2	H2			121947.33		
Ge	72	2	H2			123290.52		
In	115	2	H2			322360.70		
In	115	2	H2			324292.83		
In	115	2	H2			327905.39		
Sc	45	3	He			38050.43		
Sc	45	3	He			38491.91		
Sc	45	3	He			38200.86		
Ge	72	3	He			68926.53		
Ge	72	3	He			70041.80		
Ge	72	3	He			69037.13		
In	115	3	He			69655.50		
In	115	3	He			71896.05		
In	115	3	He			70007.10		
Tb	159	3	He			345314.21		
Tb	159	3	He			344881.87		
Tb	159	3	He			342345.97		
Bi	209	3	He			272345.23		
Bi	209	3	He			273651.68		
Bi	209	3	He			275527.38		

Quantitation Report

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Sample Type	ICSA
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

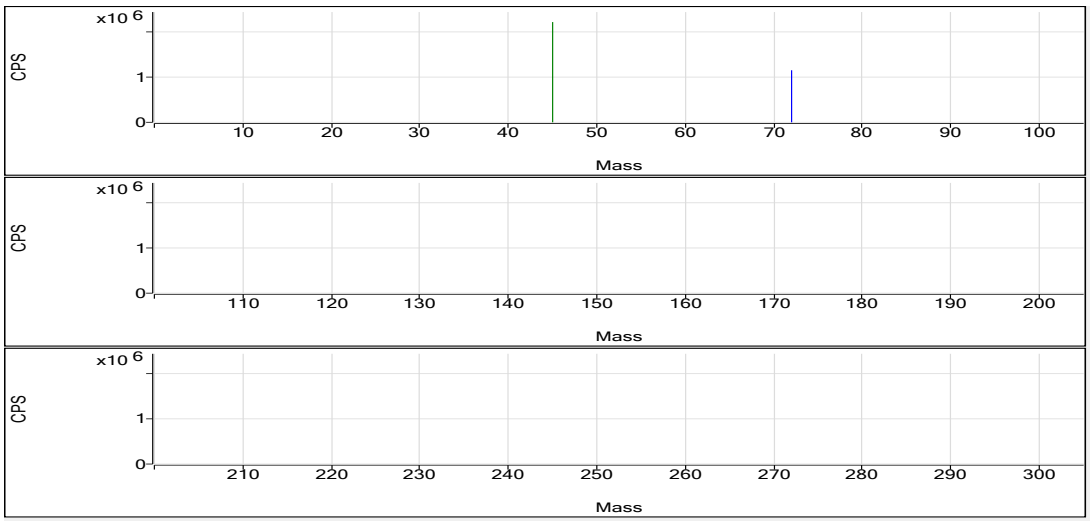
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.009	ppb	N/A	18.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.125	ppb	29.9	7.78	0.0000	Pulse	1.5000	3
Na	23	45	He	244137.792	ppb	3.3	32996269.51	883.3175	Analog	0.1000	3
Mg	24	45	He	99694.734	ppb	3.1	6789498.44	181.7438	Analog	0.1000	3
Al	27	45	He	99892.354	ppb	4.3	2169536.01	58.0915	Analog	0.1000	3
K	39	45	He	96030.692	ppb	3.6	4237334.31	113.4411	Analog	0.1000	3
Ca	44	45	He	277849.644	ppb	2.9	722077.25	19.3281	Pulse	0.1000	3
Ti	47	45	He	1893.530	ppb	3.9	37963.80	1.0164	Pulse	0.1000	3
V	51	45	He	-0.010	ppb	N/A	916.03	0.0245	Pulse	0.5000	3
Cr	52	45	He	3.208	ppb	19.3	5054.41	0.1356	Pulse	0.1000	3
Mn	55	45	He	0.267	ppb	104.9	370.02	0.0099	Pulse	0.1000	3
Fe	57	45	He	243055.772	ppb	2.8	5357152.21	143.3959	Analog	0.1000	3
Co	59	45	He	0.198	ppb	19.7	533.36	0.0143	Pulse	0.1000	3
Ni	60	72	He	0.520	ppb	30.1	526.70	0.0074	Pulse	0.1000	3
Cu	63	72	He	0.039	ppb	74.8	393.36	0.0055	Pulse	0.1000	3
Zn	66	72	He	2.104	ppb	12.4	636.71	0.0090	Pulse	0.1000	3
As	75	72	He	0.117	ppb	37.8	65.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	2.034	ppb	5.2	1253.43	0.0194	Pulse	0.1000	3
Mo	98	115	He	2224.698	ppb	3.1	3246071.41	50.2379	Analog	0.1000	3
Ag	107	115	He	0.018	ppb	80.7	76.67	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.282	ppb	11.4	99.33	0.0015	Pulse	0.5000	3
Sn	120	115	He	0.052	ppb	316.8	1200.10	0.0185	Pulse	0.1000	3
Sb	121	115	He	0.168	ppb	33.4	170.01	0.0026	Pulse	0.1000	3
Ba	137	115	He	0.509	ppb	33.6	170.01	0.0026	Pulse	0.1000	3
Tl	205	159	He	0.010	ppb	48.6	140.01	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.065	ppb	10.5	1200.06	0.0036	Pulse	0.1000	3
U	238	209	He	0.059	ppb	7.1	770.05	0.0030	Pulse	0.1000	3

ISTD Table:

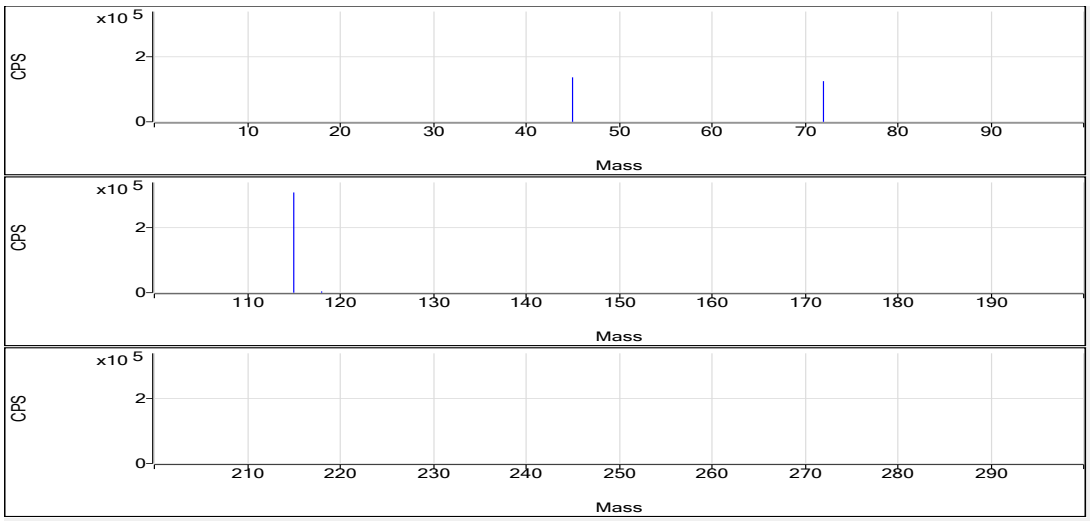
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2229423.61	0.9	92.6	Analog	0.1000	3
No Gas	Ge	72	1157795.48	0.3	99.7	Pulse	0.1000	3
H2	Sc	45	136075.65	1.0	82.8	Pulse	0.1000	3
H2	Ge	72	124398.35	1.0	85.6	Pulse	0.1000	3
H2	In	115	306635.30	0.7	85.2	Pulse	0.1000	3
He	Sc	45	37382.16	3.3	85.4	Pulse	0.1000	3
He	Ge	72	71087.00	1.0	92.9	Pulse	0.1000	3
He	In	115	64644.54	2.3	83.4	Pulse	0.1000	3
He	Tb	159	330675.71	1.2	89.1	Pulse	0.1000	3
He	Bi	209	253843.21	0.1	86.8	Pulse	0.1000	3

No Gas

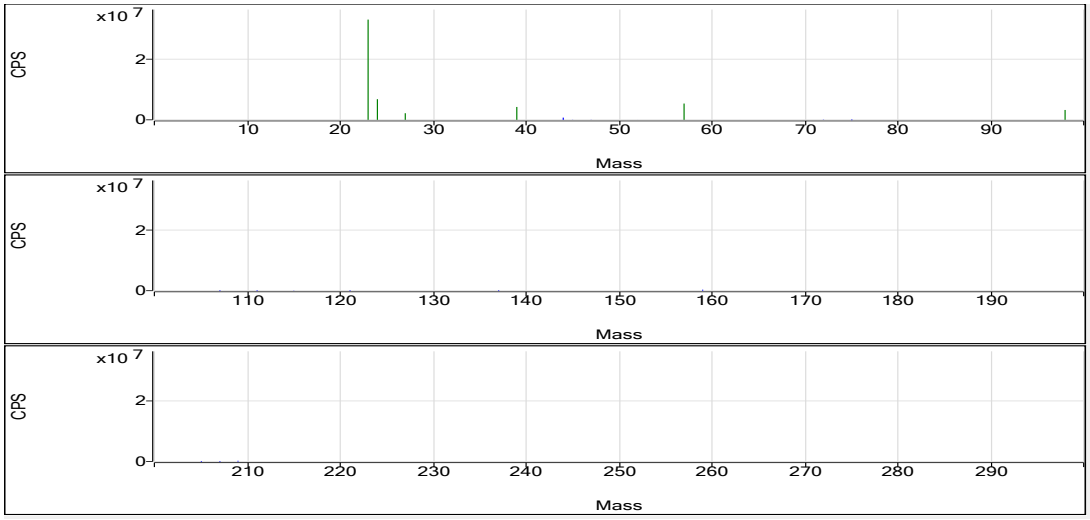


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.013	0	12.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.01	0	18.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.005	0	26.00	0.0007	1.523E-05
Se	78	2	H2	0.092	0	6.00	0.0002	3.71E-06
Se	78	2	H2	0.165	0	10.00	0.0002	3.71E-06
Se	78	2	H2	0.117	0	7.33	0.0002	3.71E-06
Na	23	3	He	244661.607	885.2121	32963854.51	0.0036	0.3007
Na	23	3	He	235802.118	853.1684	33002327.01	0.0036	0.3007
Na	23	3	He	251949.651	911.572	33022627.01	0.0036	0.3007
Mg	24	3	He	100914.417	183.9672	6850638.65	0.0018	0.003274
Mg	24	3	He	96193.525	175.3612	6783334.27	0.0018	0.003274
Mg	24	3	He	101976.259	185.9029	6734522.40	0.0018	0.003274
Al	27	3	He	100940.204	58.7008	2185922.62	0.0006	0.00137
Al	27	3	He	95158.525	55.3386	2140612.62	0.0006	0.00137
Al	27	3	He	103578.334	60.235	2182072.78	0.0006	0.00137
K	39	3	He	96259.25	113.7102	4234382.44	0.0012	0.378
K	39	3	He	92472.665	109.252	4226094.94	0.0012	0.378
K	39	3	He	99360.161	117.3611	4251525.56	0.0012	0.378
Ca	44	3	He	277425.216	19.2986	718647.25	0.0001	0.003203
Ca	44	3	He	270150.084	18.7926	726935.77	0.0001	0.003203
Ca	44	3	He	285973.632	19.8931	720648.74	0.0001	0.003203
Ti	47	3	He	1869.055	1.0032	37358.80	0.0005	0
Ti	47	3	He	1834.554	0.9847	38090.83	0.0005	0
Ti	47	3	He	1976.981	1.0612	38441.77	0.0005	0
V	51	3	He	0.062	0.0262	974.04	0.0224	0.02476
V	51	3	He	-0.104	0.0224	868.03	0.0224	0.02476
V	51	3	He	0.011	0.025	906.03	0.0224	0.02476
Cr	52	3	He	3.291	0.1381	5141.12	0.0293	0.04167
Cr	52	3	He	2.55	0.1164	4500.86	0.0293	0.04167
Cr	52	3	He	3.781	0.1524	5521.25	0.0293	0.04167
Mn	55	3	He	0.579	0.014	520.03	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.039	0.007	270.01	0.0129	0.006476
Mn	55	3	He	0.182	0.0088	320.02	0.0129	0.006476
Fe	57	3	He	243593.221	143.713	5351638.67	0.0006	0.00213
Fe	57	3	He	236007.004	139.2374	5385993.67	0.0006	0.00213
Fe	57	3	He	249567.09	147.2374	5333824.30	0.0006	0.00213
Co	59	3	He	0.169	0.0126	470.02	0.0572	0.00297
Co	59	3	He	0.183	0.0134	520.03	0.0572	0.00297
Co	59	3	He	0.242	0.0168	610.03	0.0572	0.00297
Ni	60	3	He	0.352	0.006	420.02	0.0086	0.002921
Ni	60	3	He	0.545	0.0076	540.03	0.0086	0.002921
Ni	60	3	He	0.662	0.0086	620.04	0.0086	0.002921
Cu	63	3	He	0.033	0.0054	380.02	0.0257	0.004531
Cu	63	3	He	0.071	0.0064	450.03	0.0257	0.004531
Cu	63	3	He	0.013	0.0049	350.02	0.0257	0.004531
Zn	66	3	He	1.852	0.0082	580.04	0.0029	0.002877
Zn	66	3	He	2.374	0.0097	690.04	0.0029	0.002877
Zn	66	3	He	2.086	0.0089	640.04	0.0029	0.002877
As	75	3	He	0.07	0.0008	58.00	0.002	0.0006798
As	75	3	He	0.123	0.0009	66.00	0.002	0.0006798
As	75	3	He	0.158	0.001	72.00	0.002	0.0006798
Sr	88	3	He	2.094	0.0199	1310.11	0.009	0.001075
Sr	88	3	He	2.097	0.0199	1300.10	0.009	0.001075
Sr	88	3	He	1.911	0.0183	1150.09	0.009	0.001075
Mo	98	3	He	2163.466	48.8552	3214188.70	0.0226	0.0005115
Mo	98	3	He	2210.938	49.9272	3254622.45	0.0226	0.0005115
Mo	98	3	He	2299.692	51.9314	3269403.08	0.0226	0.0005115
Ag	107	3	He	0.034	0.002	130.01	0.0487	0.0003023
Ag	107	3	He	0.013	0.0009	60.00	0.0487	0.0003023
Ag	107	3	He	0.007	0.0006	40.00	0.0487	0.0003023
Cd	111	3	He	0.245	0.0013	88.00	0.0054	8.618E-06
Cd	111	3	He	0.304	0.0017	108.00	0.0054	8.618E-06
Cd	111	3	He	0.297	0.0016	102.00	0.0054	8.618E-06
Sn	120	3	He	-0.033	0.0172	1130.09	0.0161	0.0177
Sn	120	3	He	0.243	0.0216	1410.12	0.0161	0.0177
Sn	120	3	He	-0.054	0.0168	1060.08	0.0161	0.0177
Sb	121	3	He	0.184	0.0029	190.01	0.0152	8.618E-05
Sb	121	3	He	0.105	0.0017	110.00	0.0152	8.618E-05
Sb	121	3	He	0.214	0.0033	210.01	0.0152	8.618E-05
Ba	137	3	He	0.313	0.0017	110.00	0.0049	0.0001277
Ba	137	3	He	0.628	0.0032	210.01	0.0049	0.0001277
Ba	137	3	He	0.587	0.003	190.01	0.0049	0.0001277
Tl	205	3	He	0.015	0.0005	180.01	0.0249	0.000171
Tl	205	3	He	0.01	0.0004	140.01	0.0249	0.000171
Tl	205	3	He	0.005	0.0003	100.00	0.0249	0.000171
Pb	208	3	He	0.068	0.0037	600.04	0.0334	0.001456
Pb	208	3	He	0.057	0.0034	650.04	0.0334	0.001456
Pb	208	3	He	0.07	0.0038	640.03	0.0334	0.001456
U	238	3	He	0.061	0.0031	790.05	0.0493	0.0001028
U	238	3	He	0.055	0.0028	710.05	0.0493	0.0001028
U	238	3	He	0.063	0.0032	810.06	0.0493	0.0001028
Sc	45	1	No Gas			2211639.97		
Sc	45	1	No Gas			2225334.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2251296.53		
Ge	72	1	No Gas			1153982.09		
Ge	72	1	No Gas			1158384.75		
Ge	72	1	No Gas			1161019.59		
Sc	45	2	H2			135901.45		
Sc	45	2	H2			137463.62		
Sc	45	2	H2			134861.88		
Ge	72	2	H2			123581.09		
Ge	72	2	H2			123753.46		
Ge	72	2	H2			125860.51		
In	115	2	H2			305990.82		
In	115	2	H2			309037.01		
In	115	2	H2			304878.08		
Sc	45	3	He			37238.37		
Sc	45	3	He			38682.08		
Sc	45	3	He			36226.02		
Ge	72	3	He			70504.60		
Ge	72	3	He			70865.69		
Ge	72	3	He			71890.71		
In	115	3	He			65795.87		
In	115	3	He			65193.21		
In	115	3	He			62963.50		
Tb	159	3	He			327820.70		
Tb	159	3	He			335178.63		
Tb	159	3	He			329027.81		
Bi	209	3	He			253689.68		
Bi	209	3	He			253769.90		
Bi	209	3	He			254070.05		

Quantitation Report

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Sample Type	ICSAB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

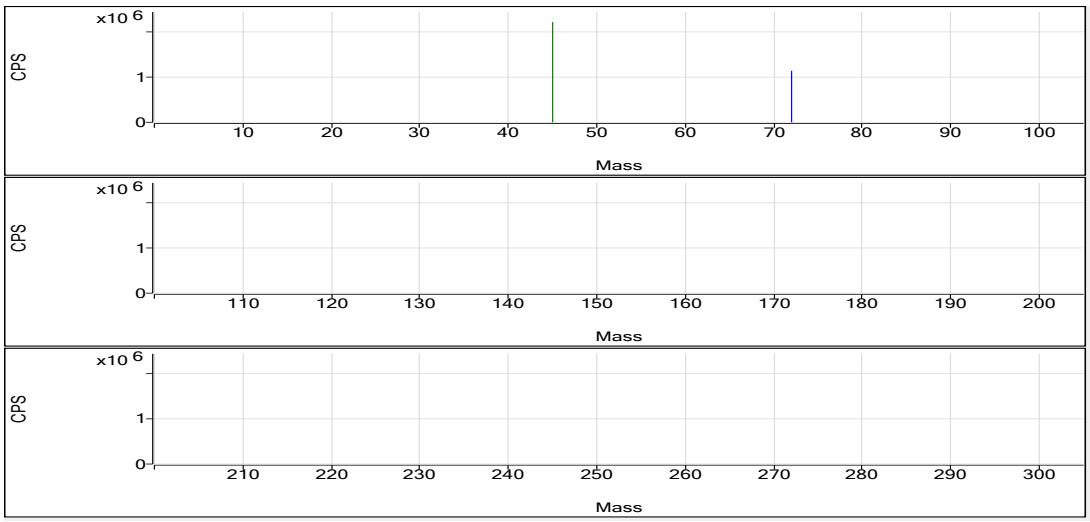
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.010	ppb	N/A	18.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	100.852	ppb	1.8	5272.98	0.0175	Pulse	1.5000	3
Na	23	45	He	243133.454	ppb	2.3	32750103.68	879.6849	Analog	0.1000	3
Mg	24	45	He	98827.905	ppb	0.7	6708083.24	180.1636	Analog	0.1000	3
Al	27	45	He	98419.708	ppb	1.9	2130938.72	57.2351	Analog	0.1000	3
K	39	45	He	96816.483	ppb	1.9	4257984.20	114.3663	Analog	0.1000	3
Ca	44	45	He	275980.503	ppb	1.7	714778.79	19.1981	Pulse	0.1000	3
Ti	47	45	He	1902.811	ppb	2.0	38033.70	1.0214	Pulse	0.1000	3
V	51	45	He	201.484	ppb	1.2	168949.21	4.5377	Pulse	0.5000	3
Cr	52	45	He	201.933	ppb	1.8	221732.05	5.9556	Pulse	0.1000	3
Mn	55	45	He	190.437	ppb	1.9	91972.10	2.4702	Pulse	0.1000	3
Fe	57	45	He	241953.680	ppb	1.6	5314637.84	142.7458	Analog	0.1000	3
Co	59	45	He	192.475	ppb	0.8	410165.28	11.0160	Pulse	0.1000	3
Ni	60	72	He	189.886	ppb	2.0	114690.49	1.6389	Pulse	0.1000	3
Cu	63	72	He	180.496	ppb	0.5	324723.62	4.6395	Pulse	0.1000	3
Zn	66	72	He	98.046	ppb	1.6	20027.95	0.2862	Pulse	0.1000	3
As	75	72	He	94.310	ppb	2.3	13497.74	0.1929	Pulse	0.5000	3
Sr	88	115	He	1.784	ppb	17.8	1090.08	0.0171	Pulse	0.1000	3
Mo	98	115	He	2250.873	ppb	1.5	3240430.68	50.8290	Analog	0.1000	3
Ag	107	115	He	52.820	ppb	1.7	163922.82	2.5715	Pulse	0.1000	3
Cd	111	115	He	107.327	ppb	2.1	37111.75	0.5822	Pulse	0.5000	3
Sn	120	115	He	0.182	ppb	30.9	1316.77	0.0206	Pulse	0.1000	3
Sb	121	115	He	0.184	ppb	11.0	183.34	0.0029	Pulse	0.1000	3
Ba	137	115	He	0.559	ppb	25.4	183.34	0.0029	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	14.0	246.68	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.065	ppb	11.7	1200.06	0.0036	Pulse	0.1000	3
U	238	209	He	0.052	ppb	15.5	676.71	0.0027	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2228674.55	3.1	92.6	Analog	0.1000	3
No Gas	Ge	72	1144801.96	1.4	98.5	Pulse	0.1000	3
H2	Sc	45	132803.11	1.4	80.8	Pulse	0.1000	3
H2	Ge	72	121608.14	1.4	83.7	Pulse	0.1000	3
H2	In	115	301051.80	1.5	83.7	Pulse	0.1000	3
He	Sc	45	37234.97	1.0	85.1	Pulse	0.1000	3
He	Ge	72	69994.53	1.8	91.5	Pulse	0.1000	3
He	In	115	63759.46	1.8	82.2	Pulse	0.1000	3
He	Tb	159	329387.03	0.8	88.8	Pulse	0.1000	3
He	Bi	209	253658.60	0.4	86.8	Pulse	0.1000	3

No Gas



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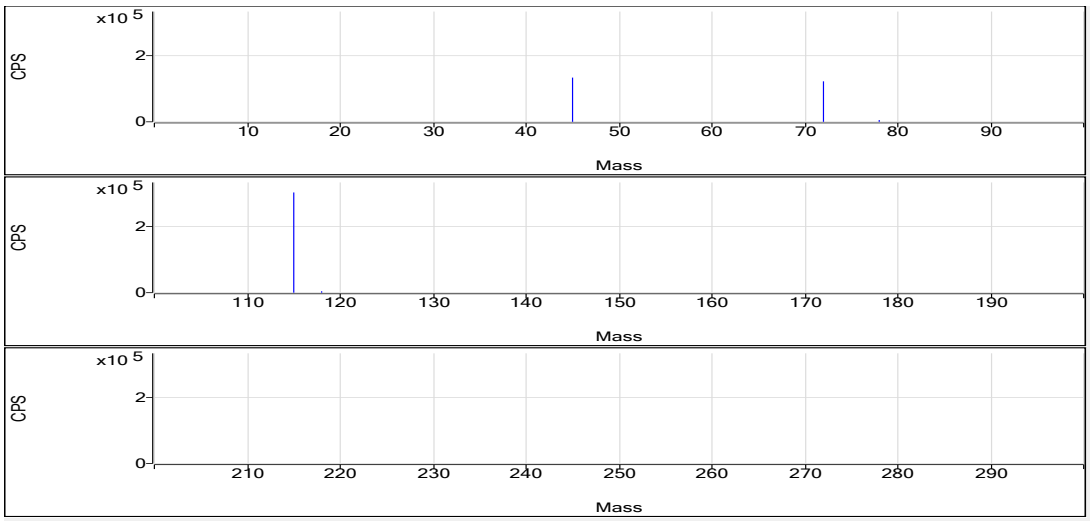
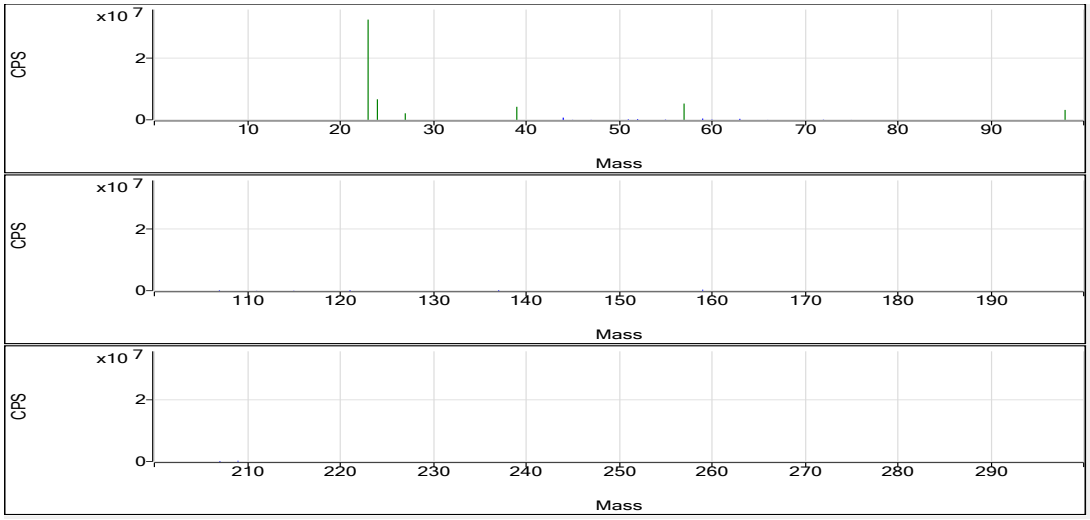


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.008	0	20.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.012	0	14.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.008	0	20.00	0.0007	1.523E-05
Se	78	2	H2	101.05	0.0175	5214.29	0.0002	3.71E-06
Se	78	2	H2	98.899	0.0172	5155.60	0.0002	3.71E-06
Se	78	2	H2	102.608	0.0178	5449.04	0.0002	3.71E-06
Na	23	3	He	248512.936	899.1419	33211944.51	0.0036	0.3007
Na	23	3	He	237370.272	858.8402	32343432.02	0.0036	0.3007
Na	23	3	He	243517.154	881.0727	32694934.51	0.0036	0.3007
Mg	24	3	He	99494.375	181.3785	6699646.78	0.0018	0.003274
Mg	24	3	He	98135.292	178.9009	6737307.40	0.0018	0.003274
Mg	24	3	He	98854.047	180.2112	6687295.53	0.0018	0.003274
Al	27	3	He	100576.506	58.4893	2160442.00	0.0006	0.00137
Al	27	3	He	97144.273	56.4934	2127508.41	0.0006	0.00137
Al	27	3	He	97538.346	56.7225	2104865.75	0.0006	0.00137
K	39	3	He	98838.229	116.7466	4312313.37	0.0012	0.378
K	39	3	He	95407.957	112.7079	4244515.87	0.0012	0.378
K	39	3	He	96203.263	113.6443	4217123.37	0.0012	0.378
Ca	44	3	He	281268.863	19.5659	722713.11	0.0001	0.003203
Ca	44	3	He	272814.626	18.9779	714696.71	0.0001	0.003203
Ca	44	3	He	273858.019	19.0505	706926.55	0.0001	0.003203
Ti	47	3	He	1904.501	1.0223	37759.61	0.0005	0
Ti	47	3	He	1940.406	1.0415	39223.51	0.0005	0
Ti	47	3	He	1863.526	1.0003	37117.98	0.0005	0
V	51	3	He	203.736	4.5882	169475.36	0.0224	0.02476
V	51	3	He	199.019	4.4825	168809.36	0.0224	0.02476
V	51	3	He	201.696	4.5425	168562.91	0.0224	0.02476
Cr	52	3	He	205.816	6.0693	224183.08	0.0293	0.04167
Cr	52	3	He	198.831	5.8647	220861.62	0.0293	0.04167
Cr	52	3	He	201.152	5.9327	220151.44	0.0293	0.04167
Mn	55	3	He	194.345	2.5207	93109.08	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	189.617	2.4596	92626.06	0.0129	0.006476
Mn	55	3	He	187.349	2.4302	90181.17	0.0129	0.006476
Fe	57	3	He	246069.737	145.1741	5362349.92	0.0006	0.00213
Fe	57	3	He	238653.375	140.7987	5302398.67	0.0006	0.00213
Fe	57	3	He	241137.927	142.2645	5279164.92	0.0006	0.00213
Co	59	3	He	192.613	11.024	407196.44	0.0572	0.00297
Co	59	3	He	190.901	10.926	411465.78	0.0572	0.00297
Co	59	3	He	193.911	11.0982	411833.63	0.0572	0.00297
Ni	60	3	He	185.795	1.6037	113725.69	0.0086	0.002921
Ni	60	3	He	193.419	1.6694	114391.45	0.0086	0.002921
Ni	60	3	He	190.445	1.6437	115954.33	0.0086	0.002921
Cu	63	3	He	180.321	4.635	328697.26	0.0257	0.004531
Cu	63	3	He	181.445	4.6639	319588.92	0.0257	0.004531
Cu	63	3	He	179.722	4.6196	325884.68	0.0257	0.004531
Zn	66	3	He	96.239	0.281	19924.30	0.0029	0.002877
Zn	66	3	He	99.28	0.2897	19854.52	0.0029	0.002877
Zn	66	3	He	98.62	0.2878	20305.03	0.0029	0.002877
As	75	3	He	92.602	0.1894	13432.34	0.002	0.0006798
As	75	3	He	96.763	0.1979	13560.48	0.002	0.0006798
As	75	3	He	93.566	0.1914	13500.41	0.002	0.0006798
Sr	88	3	He	2.057	0.0196	1230.10	0.009	0.001075
Sr	88	3	He	1.436	0.014	910.06	0.009	0.001075
Sr	88	3	He	1.861	0.0178	1130.09	0.009	0.001075
Mo	98	3	He	2289.104	51.6923	3247584.01	0.0226	0.0005115
Mo	98	3	He	2232.034	50.4036	3277489.95	0.0226	0.0005115
Mo	98	3	He	2231.482	50.3911	3196218.08	0.0226	0.0005115
Ag	107	3	He	53.608	2.6098	163963.14	0.0487	0.0003023
Ag	107	3	He	51.868	2.5251	164196.29	0.0487	0.0003023
Ag	107	3	He	52.983	2.5794	163609.03	0.0487	0.0003023
Cd	111	3	He	109.531	0.5942	37327.68	0.0054	8.618E-06
Cd	111	3	He	105.058	0.5699	37056.95	0.0054	8.618E-06
Cd	111	3	He	107.393	0.5826	36950.63	0.0054	8.618E-06
Sn	120	3	He	0.146	0.0201	1260.09	0.0161	0.0177
Sn	120	3	He	0.247	0.0217	1410.12	0.0161	0.0177
Sn	120	3	He	0.153	0.0202	1280.11	0.0161	0.0177
Sb	121	3	He	0.193	0.003	190.01	0.0152	8.618E-05
Sb	121	3	He	0.197	0.0031	200.01	0.0152	8.618E-05
Sb	121	3	He	0.16	0.0025	160.01	0.0152	8.618E-05
Ba	137	3	He	0.717	0.0037	230.01	0.0049	0.0001277
Ba	137	3	He	0.442	0.0023	150.01	0.0049	0.0001277
Ba	137	3	He	0.518	0.0027	170.01	0.0049	0.0001277
Tl	205	3	He	0.026	0.0008	270.02	0.0249	0.000171
Tl	205	3	He	0.02	0.0007	220.01	0.0249	0.000171
Tl	205	3	He	0.024	0.0008	250.01	0.0249	0.000171
Pb	208	3	He	0.074	0.0039	650.03	0.0334	0.001456
Pb	208	3	He	0.059	0.0034	580.03	0.0334	0.001456
Pb	208	3	He	0.063	0.0036	620.04	0.0334	0.001456
U	238	3	He	0.061	0.0031	790.05	0.0493	0.0001028
U	238	3	He	0.046	0.0024	610.04	0.0493	0.0001028
U	238	3	He	0.048	0.0025	630.04	0.0493	0.0001028
Sc	45	1	No Gas			2164844.50		
Sc	45	1	No Gas			2303259.97		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2217919.19		
Ge	72	1	No Gas			1132426.62		
Ge	72	1	No Gas			1163144.98		
Ge	72	1	No Gas			1138834.28		
Sc	45	2	H2			132511.30		
Sc	45	2	H2			131157.60		
Sc	45	2	H2			134740.42		
Ge	72	2	H2			121312.98		
Ge	72	2	H2			120112.28		
Ge	72	2	H2			123399.17		
In	115	2	H2			297149.76		
In	115	2	H2			300193.90		
In	115	2	H2			305811.75		
Sc	45	3	He			36937.38		
Sc	45	3	He			37659.43		
Sc	45	3	He			37108.10		
Ge	72	3	He			70915.93		
Ge	72	3	He			68524.34		
Ge	72	3	He			70543.31		
In	115	3	He			62833.06		
In	115	3	He			65032.41		
In	115	3	He			63435.14		
Tb	159	3	He			328414.57		
Tb	159	3	He			332365.89		
Tb	159	3	He			327380.62		
Bi	209	3	He			252922.89		
Bi	209	3	He			254854.00		
Bi	209	3	He			253198.92		

Quantitation Report

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Acq Time	8/14/2023 10:25:00 PM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

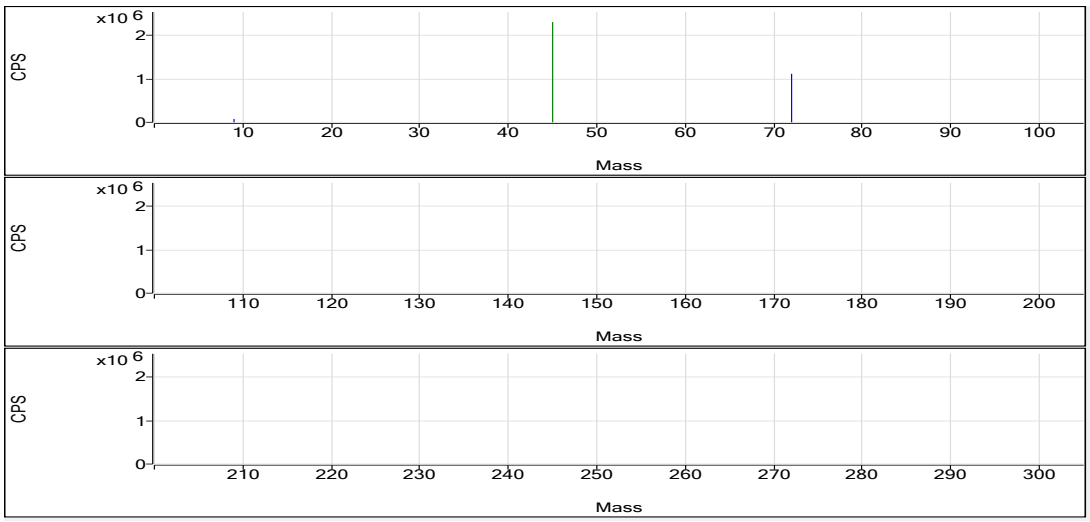
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.582	ppb	1.1	77945.37	0.0338	Pulse	0.5000	3
Se	78	115	H2	47.125	ppb	1.8	2574.90	0.0082	Pulse	1.5000	3
Na	23	45	He	5027.582	ppb	1.4	698366.32	18.4848	Pulse	0.1000	3
Mg	24	45	He	5053.785	ppb	1.3	348199.05	9.2162	Pulse	0.1000	3
Al	27	45	He	4899.503	ppb	1.4	107698.49	2.8506	Pulse	0.1000	3
K	39	45	He	4884.799	ppb	1.4	231578.10	6.1292	Pulse	0.1000	3
Ca	44	45	He	4886.888	ppb	5.3	12959.56	0.3431	Pulse	0.1000	3
Ti	47	45	He	4995.565	ppb	1.2	101308.17	2.6814	Pulse	0.1000	3
V	51	45	He	508.006	ppb	0.9	430839.56	11.4034	Pulse	0.5000	3
Cr	52	45	He	507.592	ppb	0.9	563219.74	14.9072	Pulse	0.1000	3
Mn	55	45	He	494.727	ppb	0.9	242061.83	6.4068	Pulse	0.1000	3
Fe	57	45	He	5020.500	ppb	0.5	111989.05	2.9640	Pulse	0.1000	3
Co	59	45	He	502.219	ppb	0.9	1085807.15	28.7391	Pulse	0.1000	3
Ni	60	72	He	511.968	ppb	0.9	306173.88	4.4139	Pulse	0.1000	3
Cu	63	72	He	485.395	ppb	1.7	864864.57	12.4690	Pulse	0.1000	3
Zn	66	72	He	508.300	ppb	1.0	102078.68	1.4716	Pulse	0.1000	3
As	75	72	He	501.546	ppb	1.9	70947.87	1.0229	Pulse	0.5000	3
Sr	88	115	He	47.838	ppb	1.7	29828.84	0.4315	Pulse	0.1000	3
Mo	98	115	He	51.828	ppb	2.7	80919.37	1.1709	Pulse	0.1000	3
Ag	107	115	He	52.785	ppb	2.1	177620.13	2.5698	Pulse	0.1000	3
Cd	111	115	He	51.712	ppb	0.9	19392.16	0.2805	Pulse	0.5000	3
Sn	120	115	He	51.928	ppb	2.8	59180.27	0.8563	Pulse	0.1000	3
Sb	121	115	He	49.951	ppb	2.0	52470.19	0.7590	Pulse	0.1000	3
Ba	137	115	He	502.554	ppb	1.9	171161.67	2.4764	Pulse	0.1000	3
Tl	205	159	He	52.400	ppb	0.6	442522.73	1.3057	Pulse	0.1000	3
Pb	208	159	He	52.351	ppb	0.4	593492.29	1.7512	Pulse	0.1000	3
U	238	209	He	50.798	ppb	0.5	683518.50	2.5062	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2309000.54	1.1	95.9	Analog	0.1000	3
No Gas	Ge	72	1117092.74	1.1	96.2	Pulse	0.1000	3
H2	Sc	45	129136.87	1.4	78.5	Pulse	0.1000	3
H2	Ge	72	115655.89	1.3	79.6	Pulse	0.1000	3
H2	In	115	314586.83	0.7	87.4	Pulse	0.1000	3
He	Sc	45	37783.32	0.8	86.3	Pulse	0.1000	3
He	Ge	72	69372.58	1.5	90.7	Pulse	0.1000	3
He	In	115	69137.56	2.2	89.2	Pulse	0.1000	3
He	Tb	159	338903.60	0.3	91.4	Pulse	0.1000	3
He	Bi	209	272730.85	0.4	93.3	Pulse	0.1000	3

No Gas



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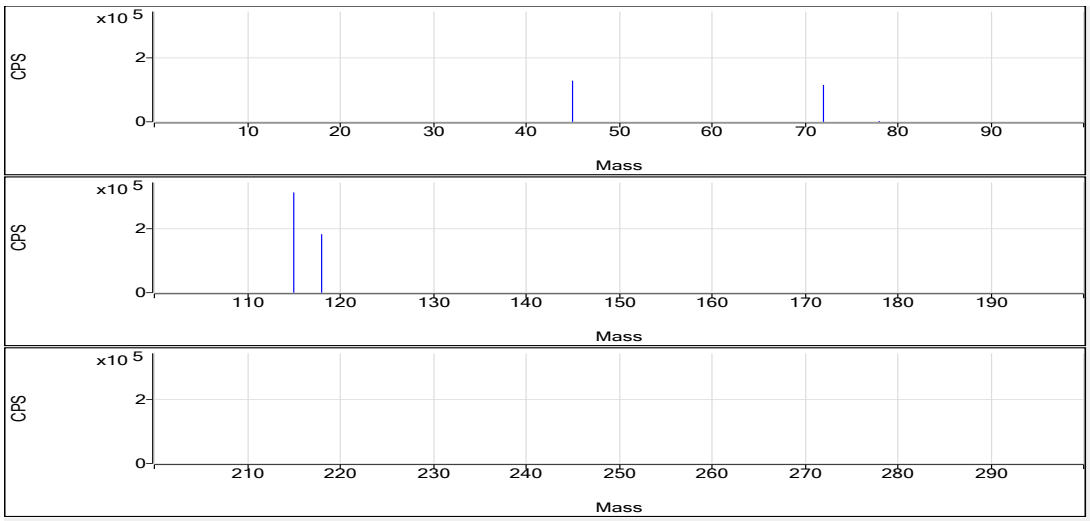
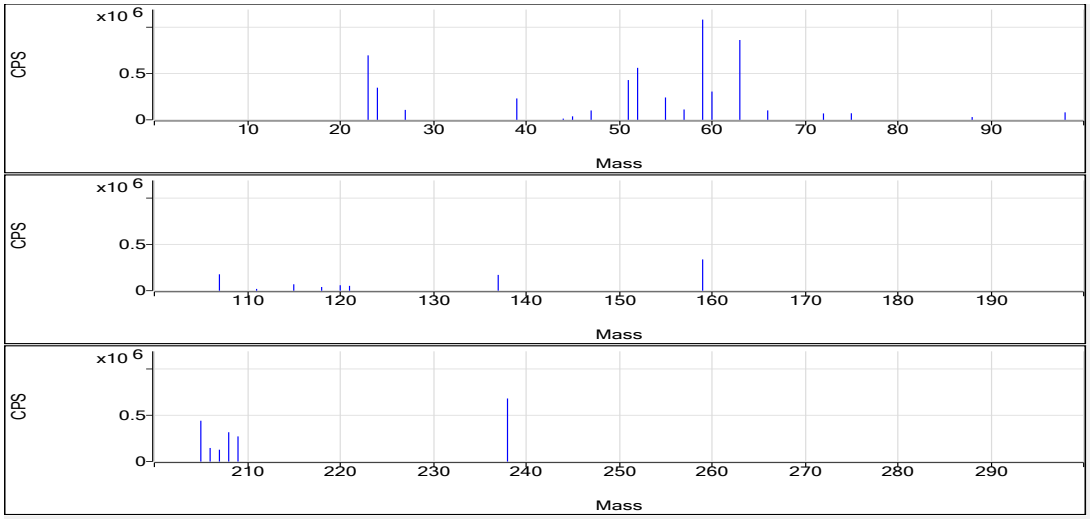


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	44.993	0.0333	77549.23	0.0007	1.523E-05
Be	9	1	No Gas	45.764	0.0339	77268.08	0.0007	1.523E-05
Be	9	1	No Gas	45.989	0.0341	79018.80	0.0007	1.523E-05
Se	78	2	H2	47.598	0.0083	2580.90	0.0002	3.71E-06
Se	78	2	H2	47.608	0.0083	2608.24	0.0002	3.71E-06
Se	78	2	H2	46.17	0.008	2535.56	0.0002	3.71E-06
Na	23	3	He	4980.097	18.3131	696817.18	0.0036	0.3007
Na	23	3	He	4992.905	18.3594	694914.29	0.0036	0.3007
Na	23	3	He	5109.745	18.782	703367.49	0.0036	0.3007
Mg	24	3	He	5045.997	9.202	350137.69	0.0018	0.003274
Mg	24	3	He	4989.862	9.0996	344427.07	0.0018	0.003274
Mg	24	3	He	5125.495	9.3469	350032.38	0.0018	0.003274
Al	27	3	He	4899.159	2.8504	108457.11	0.0006	0.00137
Al	27	3	He	4833.023	2.8119	106432.27	0.0006	0.00137
Al	27	3	He	4966.325	2.8894	108206.10	0.0006	0.00137
K	39	3	He	4925.868	6.1775	235057.26	0.0012	0.378
K	39	3	He	4803.971	6.034	228391.64	0.0012	0.378
K	39	3	He	4924.558	6.176	231285.39	0.0012	0.378
Ca	44	3	He	4645.361	0.3263	12415.61	0.0001	0.003203
Ca	44	3	He	4856.436	0.341	12906.13	0.0001	0.003203
Ca	44	3	He	5158.867	0.362	13556.93	0.0001	0.003203
Ti	47	3	He	4990.497	2.6787	101925.26	0.0005	0
Ti	47	3	He	4937.052	2.65	100304.61	0.0005	0
Ti	47	3	He	5059.145	2.7155	101694.65	0.0005	0
V	51	3	He	506.279	11.3647	432430.56	0.0224	0.02476
V	51	3	He	504.393	11.3225	428563.22	0.0224	0.02476
V	51	3	He	513.345	11.523	431524.91	0.0224	0.02476
Cr	52	3	He	503.189	14.7783	562317.88	0.0293	0.04167
Cr	52	3	He	507.725	14.9111	564395.46	0.0293	0.04167
Cr	52	3	He	511.863	15.0323	562945.89	0.0293	0.04167
Mn	55	3	He	494.326	6.4016	243582.93	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	490.5	6.3521	240431.40	0.0129	0.006476
Mn	55	3	He	499.356	6.4667	242171.17	0.0129	0.006476
Fe	57	3	He	5019.846	2.9637	112767.77	0.0006	0.00213
Fe	57	3	He	4994.92	2.9489	111619.43	0.0006	0.00213
Fe	57	3	He	5046.733	2.9795	111579.96	0.0006	0.00213
Co	59	3	He	497.608	28.4752	1083489.67	0.0572	0.00297
Co	59	3	He	502.58	28.7597	1088572.72	0.0572	0.00297
Co	59	3	He	506.47	28.9823	1085359.05	0.0572	0.00297
Ni	60	3	He	510.462	4.4009	305817.01	0.0086	0.002921
Ni	60	3	He	508.213	4.3815	308213.59	0.0086	0.002921
Ni	60	3	He	517.228	4.4592	304491.03	0.0086	0.002921
Cu	63	3	He	482.113	12.3848	860615.38	0.0257	0.004531
Cu	63	3	He	479.079	12.3069	865713.66	0.0257	0.004531
Cu	63	3	He	494.992	12.7155	868264.67	0.0257	0.004531
Zn	66	3	He	507.809	1.4702	102162.79	0.0029	0.002877
Zn	66	3	He	503.416	1.4575	102525.68	0.0029	0.002877
Zn	66	3	He	513.676	1.4871	101547.58	0.0029	0.002877
As	75	3	He	496.389	1.0124	70349.57	0.002	0.0006798
As	75	3	He	495.838	1.0113	71135.38	0.002	0.0006798
As	75	3	He	512.411	1.045	71358.65	0.002	0.0006798
Sr	88	3	He	47.056	0.4245	29260.98	0.009	0.001075
Sr	88	3	He	47.767	0.4309	30493.48	0.009	0.001075
Sr	88	3	He	48.69	0.4392	29732.07	0.009	0.001075
Mo	98	3	He	51.863	1.1717	80771.26	0.0226	0.0005115
Mo	98	3	He	50.429	1.1393	80631.66	0.0226	0.0005115
Mo	98	3	He	53.192	1.2017	81355.18	0.0226	0.0005115
Ag	107	3	He	53.524	2.6057	179631.81	0.0487	0.0003023
Ag	107	3	He	51.506	2.5075	177464.86	0.0487	0.0003023
Ag	107	3	He	53.327	2.5961	175763.71	0.0487	0.0003023
Cd	111	3	He	51.432	0.279	19233.28	0.0054	8.618E-06
Cd	111	3	He	51.427	0.279	19743.99	0.0054	8.618E-06
Cd	111	3	He	52.277	0.2836	19199.20	0.0054	8.618E-06
Sn	120	3	He	51.097	0.8428	58102.33	0.0161	0.0177
Sn	120	3	He	51.069	0.8424	59618.61	0.0161	0.0177
Sn	120	3	He	53.62	0.8836	59819.88	0.0161	0.0177
Sb	121	3	He	48.847	0.7422	51164.97	0.0152	8.618E-05
Sb	121	3	He	50.156	0.7621	53936.24	0.0152	8.618E-05
Sb	121	3	He	50.851	0.7726	52309.35	0.0152	8.618E-05
Ba	137	3	He	501.305	2.4702	170288.77	0.0049	0.0001277
Ba	137	3	He	493.604	2.4323	172140.08	0.0049	0.0001277
Ba	137	3	He	512.753	2.5266	171056.17	0.0049	0.0001277
Tl	205	3	He	52.044	1.2969	439940.19	0.0249	0.000171
Tl	205	3	He	52.444	1.3069	441555.70	0.0249	0.000171
Tl	205	3	He	52.711	1.3135	446072.30	0.0249	0.000171
Pb	208	3	He	52.468	1.7551	320385.05	0.0334	0.001456
Pb	208	3	He	52.12	1.7435	313142.93	0.0334	0.001456
Pb	208	3	He	52.465	1.755	319664.19	0.0334	0.001456
U	238	3	He	50.51	2.492	680682.88	0.0493	0.0001028
U	238	3	He	50.915	2.512	681926.86	0.0493	0.0001028
U	238	3	He	50.968	2.5146	687945.77	0.0493	0.0001028
Sc	45	1	No Gas			2327251.06		
Sc	45	1	No Gas			2279748.72		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2320001.84		
Ge	72	1	No Gas			1117642.17		
Ge	72	1	No Gas			1104894.98		
Ge	72	1	No Gas			1128741.08		
Sc	45	2	H2			130096.84		
Sc	45	2	H2			130281.39		
Sc	45	2	H2			127032.39		
Ge	72	2	H2			115725.56		
Ge	72	2	H2			117086.73		
Ge	72	2	H2			114155.39		
In	115	2	H2			312173.71		
In	115	2	H2			315416.50		
In	115	2	H2			316170.27		
Sc	45	3	He			38050.28		
Sc	45	3	He			37850.62		
Sc	45	3	He			37449.05		
Ge	72	3	He			69489.76		
Ge	72	3	He			70343.97		
Ge	72	3	He			68284.01		
In	115	3	He			69242.23		
In	115	3	He			71092.57		
In	115	3	He			68016.99		
Tb	159	3	He			339230.78		
Tb	159	3	He			337874.53		
Tb	159	3	He			339605.50		
Bi	209	3	He			273144.21		
Bi	209	3	He			271469.12		
Bi	209	3	He			273579.23		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

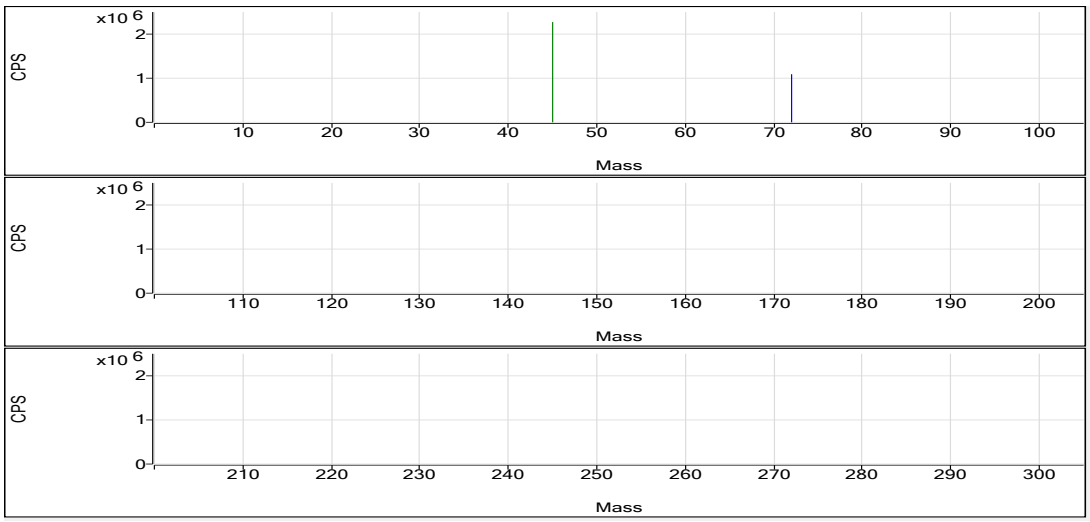
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.020	ppb	29.4	68.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.077	ppb	17.3	5.33	0.0000	Pulse	1.5000	3
Na	23	45	He	50.572	ppb	3.6	17594.37	0.4836	Pulse	0.1000	3
Mg	24	45	He	2.775	ppb	26.9	303.35	0.0083	Pulse	0.1000	3
Al	27	45	He	-0.461	ppb	N/A	40.00	0.0011	Pulse	0.1000	3
K	39	45	He	25.662	ppb	54.3	14851.37	0.4082	Pulse	0.1000	3
Ca	44	45	He	-14.429	ppb	N/A	80.00	0.0022	Pulse	0.1000	3
Ti	47	45	He	1.192	ppb	64.9	23.33	0.0006	Pulse	0.1000	3
V	51	45	He	0.195	ppb	38.7	1059.38	0.0291	Pulse	0.5000	3
Cr	52	45	He	0.182	ppb	42.9	1710.16	0.0470	Pulse	0.1000	3
Mn	55	45	He	-0.161	ppb	N/A	160.01	0.0044	Pulse	0.1000	3
Fe	57	45	He	1.978	ppb	39.8	120.00	0.0033	Pulse	0.1000	3
Co	59	45	He	0.143	ppb	13.0	406.69	0.0112	Pulse	0.1000	3
Ni	60	72	He	0.048	ppb	132.1	223.34	0.0033	Pulse	0.1000	3
Cu	63	72	He	0.137	ppb	53.1	540.03	0.0081	Pulse	0.1000	3
Zn	66	72	He	0.071	ppb	358.3	206.68	0.0031	Pulse	0.1000	3
As	75	72	He	0.125	ppb	39.7	62.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.009	ppb	N/A	66.67	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.095	ppb	8.3	180.01	0.0027	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	100.7	40.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	90.2	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.017	ppb	N/A	1176.77	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.043	ppb	68.8	50.00	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.114	ppb	79.3	46.67	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.092	ppb	5.4	820.06	0.0025	Pulse	0.1000	3
Pb	208	159	He	0.007	ppb	54.3	563.36	0.0017	Pulse	0.1000	3
U	238	209	He	0.049	ppb	11.1	680.04	0.0025	Pulse	0.1000	3

ISTD Table:

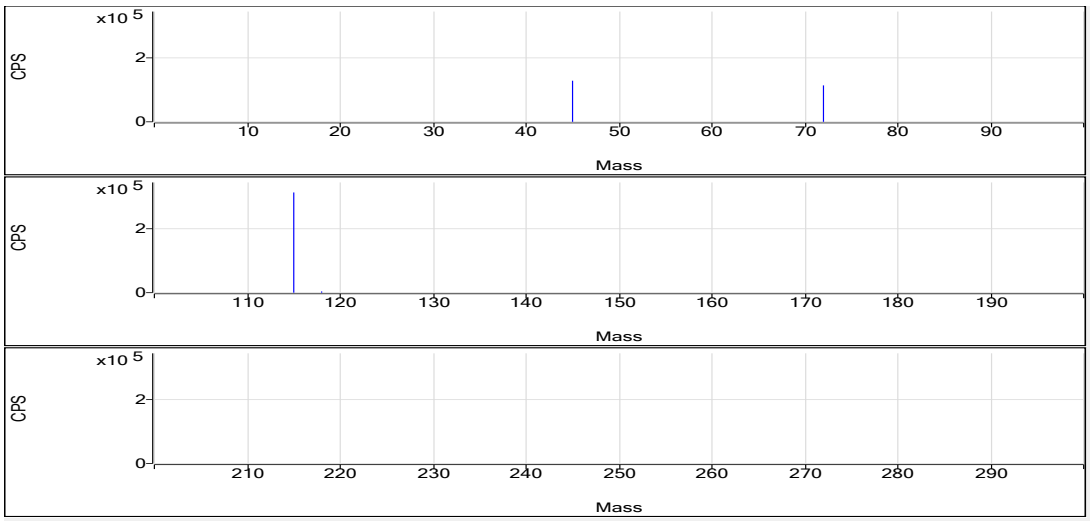
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2286703.92	1.0	95.0	Analog	0.1000	3
No Gas	Ge	72	1096943.60	0.5	94.4	Pulse	0.1000	3
H2	Sc	45	127794.39	1.6	77.7	Pulse	0.1000	3
H2	Ge	72	113254.07	0.9	77.9	Pulse	0.1000	3
H2	In	115	311633.39	1.5	86.6	Pulse	0.1000	3
He	Sc	45	36386.18	0.6	83.1	Pulse	0.1000	3
He	Ge	72	67047.97	0.6	87.6	Pulse	0.1000	3
He	In	115	67557.21	1.1	87.1	Pulse	0.1000	3
He	Tb	159	334033.45	0.8	90.1	Pulse	0.1000	3
He	Bi	209	270331.06	0.5	92.5	Pulse	0.1000	3

No Gas

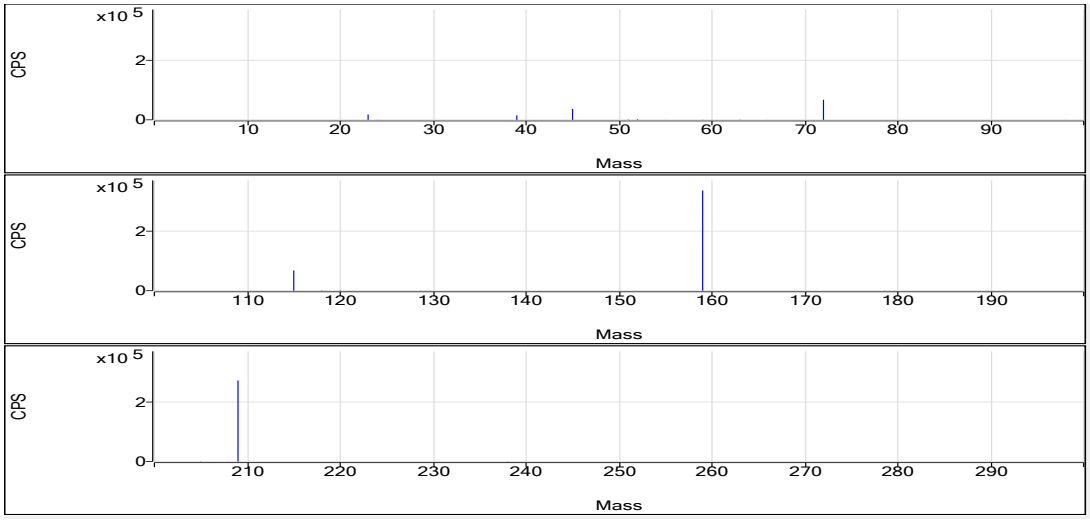


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	76.00	0.0007	1.523E-05
Be	9	1	No Gas	0.013	0	58.00	0.0007	1.523E-05
Be	9	1	No Gas	0.021	0	70.00	0.0007	1.523E-05
Se	78	2	H2	0.078	0	5.33	0.0002	3.71E-06
Se	78	2	H2	0.063	0	4.67	0.0002	3.71E-06
Se	78	2	H2	0.09	0	6.00	0.0002	3.71E-06
Na	23	3	He	48.488	0.476	17430.67	0.0036	0.3007
Na	23	3	He	51.477	0.4868	17631.22	0.0036	0.3007
Na	23	3	He	51.752	0.4878	17721.21	0.0036	0.3007
Mg	24	3	He	3.598	0.0098	360.02	0.0018	0.003274
Mg	24	3	He	2.143	0.0072	260.01	0.0018	0.003274
Mg	24	3	He	2.584	0.008	290.01	0.0018	0.003274
Al	27	3	He	-1.886	0.0003	10.00	0.0006	0.00137
Al	27	3	He	0.493	0.0017	60.00	0.0006	0.00137
Al	27	3	He	0.011	0.0014	50.00	0.0006	0.00137
K	39	3	He	13.37	0.3937	14417.64	0.0012	0.378
K	39	3	He	40.784	0.426	15428.59	0.0012	0.378
K	39	3	He	22.832	0.4049	14707.87	0.0012	0.378
Ca	44	3	He	-14.633	0.0022	80.00	0.0001	0.003203
Ca	44	3	He	-10.315	0.0025	90.00	0.0001	0.003203
Ca	44	3	He	-18.34	0.0019	70.00	0.0001	0.003203
Ti	47	3	He	2.035	0.0011	40.00	0.0005	0
Ti	47	3	He	0.514	0.0003	10.00	0.0005	0
Ti	47	3	He	1.026	0.0006	20.00	0.0005	0
V	51	3	He	0.111	0.0273	998.04	0.0224	0.02476
V	51	3	He	0.258	0.0305	1106.05	0.0224	0.02476
V	51	3	He	0.215	0.0296	1074.05	0.0224	0.02476
Cr	52	3	He	0.191	0.0473	1730.16	0.0293	0.04167
Cr	52	3	He	0.256	0.0492	1780.17	0.0293	0.04167
Cr	52	3	He	0.1	0.0446	1620.16	0.0293	0.04167
Mn	55	3	He	-0.057	0.0057	210.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.138	0.0047	170.01	0.0129	0.006476
Mn	55	3	He	-0.288	0.0028	100.00	0.0129	0.006476
Fe	57	3	He	2.407	0.0036	130.00	0.0006	0.00213
Fe	57	3	He	1.07	0.0028	100.00	0.0006	0.00213
Fe	57	3	He	2.456	0.0036	130.01	0.0006	0.00213
Co	59	3	He	0.153	0.0117	430.02	0.0572	0.00297
Co	59	3	He	0.122	0.0099	360.02	0.0572	0.00297
Co	59	3	He	0.155	0.0118	430.02	0.0572	0.00297
Ni	60	3	He	0.114	0.0039	260.01	0.0086	0.002921
Ni	60	3	He	0.042	0.0033	220.01	0.0086	0.002921
Ni	60	3	He	-0.012	0.0028	190.01	0.0086	0.002921
Cu	63	3	He	0.192	0.0095	630.04	0.0257	0.004531
Cu	63	3	He	0.166	0.0088	590.04	0.0257	0.004531
Cu	63	3	He	0.054	0.0059	400.02	0.0257	0.004531
Zn	66	3	He	0.251	0.0036	240.01	0.0029	0.002877
Zn	66	3	He	-0.221	0.0022	150.01	0.0029	0.002877
Zn	66	3	He	0.184	0.0034	230.01	0.0029	0.002877
As	75	3	He	0.123	0.0009	62.00	0.002	0.0006798
As	75	3	He	0.076	0.0008	56.00	0.002	0.0006798
As	75	3	He	0.176	0.001	70.00	0.002	0.0006798
Sr	88	3	He	0.012	0.0012	80.00	0.009	0.001075
Sr	88	3	He	0.03	0.0013	90.00	0.009	0.001075
Sr	88	3	He	-0.071	0.0004	30.00	0.009	0.001075
Mo	98	3	He	0.095	0.0027	180.01	0.0226	0.0005115
Mo	98	3	He	0.103	0.0028	190.01	0.0226	0.0005115
Mo	98	3	He	0.088	0.0025	170.01	0.0226	0.0005115
Ag	107	3	He	0.006	0.0006	40.00	0.0487	0.0003023
Ag	107	3	He	0	0.0003	20.00	0.0487	0.0003023
Ag	107	3	He	0.012	0.0009	60.00	0.0487	0.0003023
Cd	111	3	He	0.037	0.0002	14.00	0.0054	8.618E-06
Cd	111	3	He	0.015	0.0001	6.00	0.0054	8.618E-06
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Sn	120	3	He	-0.025	0.0173	1170.10	0.0161	0.0177
Sn	120	3	He	0.054	0.0186	1240.11	0.0161	0.0177
Sn	120	3	He	-0.081	0.0164	1120.09	0.0161	0.0177
Sb	121	3	He	0.014	0.0003	20.00	0.0152	8.618E-05
Sb	121	3	He	0.073	0.0012	80.00	0.0152	8.618E-05
Sb	121	3	He	0.043	0.0007	50.00	0.0152	8.618E-05
Ba	137	3	He	0.034	0.0003	20.00	0.0049	0.0001277
Ba	137	3	He	0.096	0.0006	40.00	0.0049	0.0001277
Ba	137	3	He	0.212	0.0012	80.00	0.0049	0.0001277
Tl	205	3	He	0.094	0.0025	840.06	0.0249	0.000171
Tl	205	3	He	0.095	0.0025	840.06	0.0249	0.000171
Tl	205	3	He	0.086	0.0023	780.05	0.0249	0.000171
Pb	208	3	He	0.009	0.0018	330.02	0.0334	0.001456
Pb	208	3	He	0.009	0.0017	300.02	0.0334	0.001456
Pb	208	3	He	0.003	0.0015	260.01	0.0334	0.001456
U	238	3	He	0.043	0.0022	600.04	0.0493	0.0001028
U	238	3	He	0.052	0.0027	720.04	0.0493	0.0001028
U	238	3	He	0.052	0.0027	720.05	0.0493	0.0001028
Sc	45	1	No Gas			2272123.40		
Sc	45	1	No Gas			2313076.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2274911.53		
Ge	72	1	No Gas			1095747.25		
Ge	72	1	No Gas			1102587.01		
Ge	72	1	No Gas			1092496.55		
Sc	45	2	H2			126304.76		
Sc	45	2	H2			130107.14		
Sc	45	2	H2			126971.28		
Ge	72	2	H2			112440.84		
Ge	72	2	H2			114325.47		
Ge	72	2	H2			112995.89		
In	115	2	H2			308221.91		
In	115	2	H2			317052.59		
In	115	2	H2			309625.66		
Sc	45	3	He			36616.75		
Sc	45	3	He			36215.63		
Sc	45	3	He			36326.16		
Ge	72	3	He			66635.85		
Ge	72	3	He			67038.00		
Ge	72	3	He			67470.05		
In	115	3	He			67645.00		
In	115	3	He			66760.16		
In	115	3	He			68287.84		
Tb	159	3	He			333295.11		
Tb	159	3	He			331732.89		
Tb	159	3	He			337072.34		
Bi	209	3	He			271946.36		
Bi	209	3	He			269763.69		
Bi	209	3	He			269283.12		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

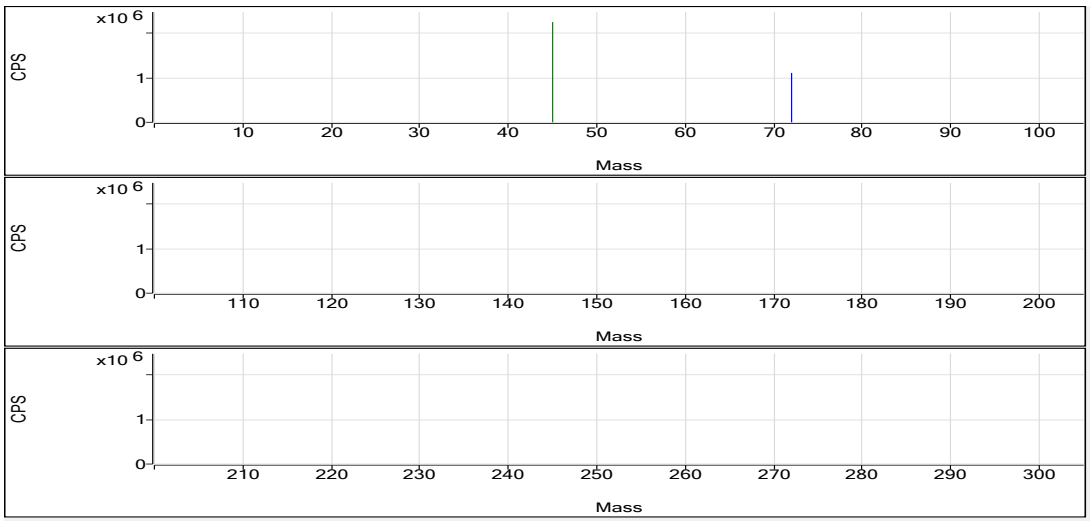
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	32.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.076	ppb	81.0	5.33	0.0000	Pulse	1.5000	3
Na	23	45	He	36.450	ppb	9.4	16706.51	0.4325	Pulse	0.1000	3
Mg	24	45	He	2.984	ppb	2.2	336.68	0.0087	Pulse	0.1000	3
Al	27	45	He	1.060	ppb	108.1	76.67	0.0020	Pulse	0.1000	3
K	39	45	He	8.942	ppb	87.2	15008.11	0.3885	Pulse	0.1000	3
Ca	44	45	He	-17.560	ppb	N/A	76.67	0.0020	Pulse	0.1000	3
Ti	47	45	He	0.163	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.078	ppb	N/A	888.70	0.0230	Pulse	0.5000	3
Cr	52	45	He	0.009	ppb	1088.5	1620.14	0.0419	Pulse	0.1000	3
Mn	55	45	He	-0.202	ppb	N/A	150.01	0.0039	Pulse	0.1000	3
Fe	57	45	He	-0.678	ppb	N/A	66.67	0.0017	Pulse	0.1000	3
Co	59	45	He	0.031	ppb	80.7	183.34	0.0047	Pulse	0.1000	3
Ni	60	72	He	0.067	ppb	157.3	240.01	0.0035	Pulse	0.1000	3
Cu	63	72	He	0.069	ppb	93.4	430.02	0.0063	Pulse	0.1000	3
Zn	66	72	He	-0.220	ppb	N/A	153.34	0.0022	Pulse	0.1000	3
As	75	72	He	-0.027	ppb	N/A	42.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.049	ppb	N/A	43.33	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.025	ppb	42.3	73.33	0.0011	Pulse	0.1000	3
Ag	107	115	He	0.010	ppb	87.9	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	1380.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.134	ppb	N/A	1063.41	0.0155	Pulse	0.1000	3
Sb	121	115	He	0.023	ppb	83.3	30.00	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.103	ppb	88.5	43.33	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.020	ppb	14.9	223.34	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.001	ppb	851.0	506.69	0.0015	Pulse	0.1000	3
U	238	209	He	0.009	ppb	69.3	146.67	0.0005	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2252835.49	1.0	93.6	Analog	0.1000	3
No Gas	Ge	72	1109516.96	0.7	95.5	Pulse	0.1000	3
H2	Sc	45	128657.03	2.2	78.3	Pulse	0.1000	3
H2	Ge	72	116643.63	1.7	80.3	Pulse	0.1000	3
H2	In	115	315421.32	1.0	87.7	Pulse	0.1000	3
He	Sc	45	38638.96	2.0	88.3	Pulse	0.1000	3
He	Ge	72	68491.46	2.1	89.5	Pulse	0.1000	3
He	In	115	68473.96	1.5	88.3	Pulse	0.1000	3
He	Tb	159	339680.33	0.9	91.6	Pulse	0.1000	3
He	Bi	209	276037.30	1.2	94.4	Pulse	0.1000	3

No Gas



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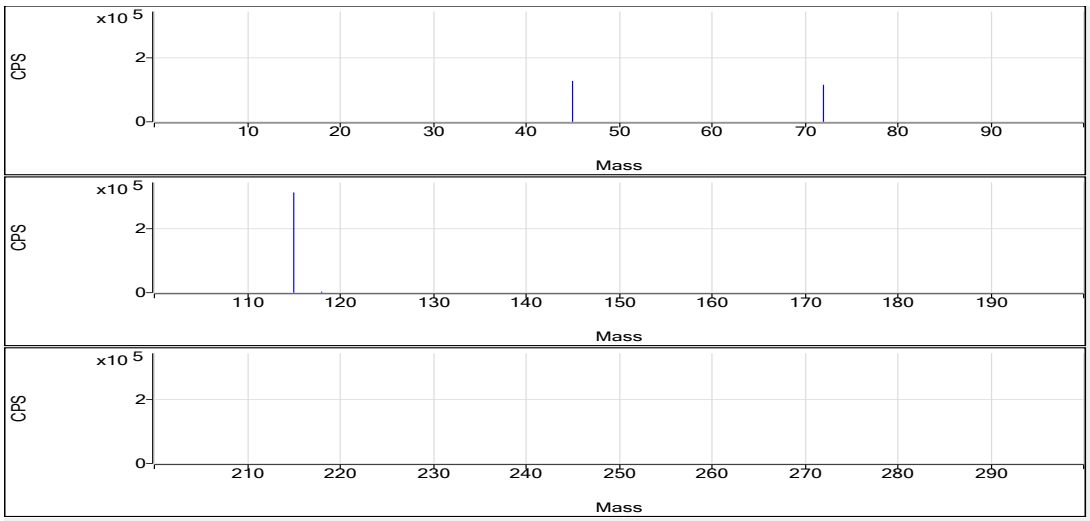
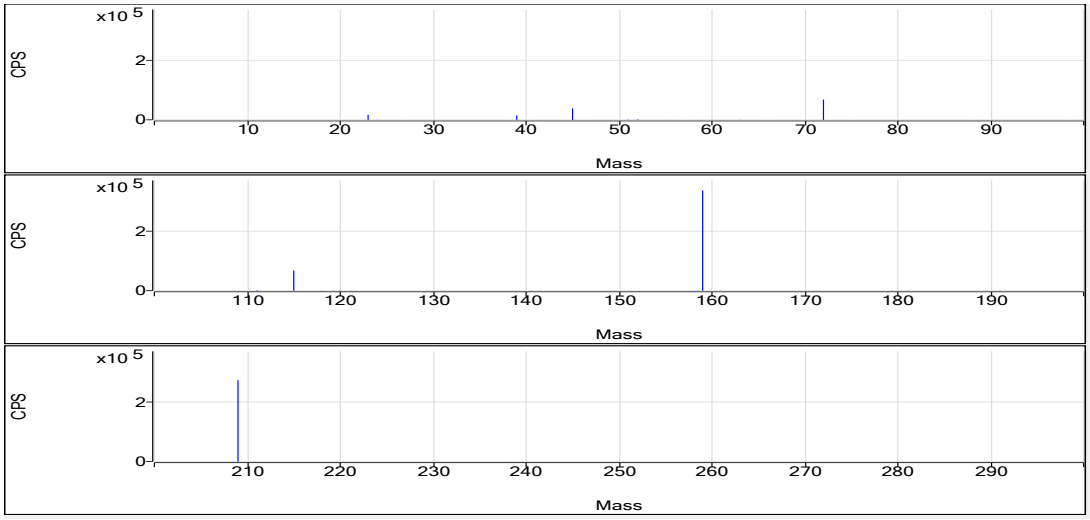


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.002	0	38.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.003	0	30.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.003	0	30.00	0.0007	1.523E-05
Se	78	2	H2	0.015	0	2.00	0.0002	3.71E-06
Se	78	2	H2	0.075	0	5.33	0.0002	3.71E-06
Se	78	2	H2	0.139	0	8.67	0.0002	3.71E-06
Na	23	3	He	40.417	0.4468	16980.13	0.0036	0.3007
Na	23	3	He	34.543	0.4256	16799.96	0.0036	0.3007
Na	23	3	He	34.39	0.425	16339.44	0.0036	0.3007
Mg	24	3	He	2.968	0.0087	330.02	0.0018	0.003274
Mg	24	3	He	2.929	0.0086	340.01	0.0018	0.003274
Mg	24	3	He	3.056	0.0088	340.02	0.0018	0.003274
Al	27	3	He	2.169	0.0026	100.00	0.0006	0.00137
Al	27	3	He	1.129	0.002	80.00	0.0006	0.00137
Al	27	3	He	-0.119	0.0013	50.00	0.0006	0.00137
K	39	3	He	17.297	0.3984	15138.18	0.0012	0.378
K	39	3	He	1.866	0.3802	15008.09	0.0012	0.378
K	39	3	He	7.663	0.387	14878.05	0.0012	0.378
Ca	44	3	He	-27.128	0.0013	50.00	0.0001	0.003203
Ca	44	3	He	-16.907	0.002	80.00	0.0001	0.003203
Ca	44	3	He	-8.644	0.0026	100.00	0.0001	0.003203
Ti	47	3	He	0.49	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.104	0.0224	852.03	0.0224	0.02476
V	51	3	He	-0.135	0.0217	858.03	0.0224	0.02476
V	51	3	He	0.005	0.0249	956.04	0.0224	0.02476
Cr	52	3	He	0.114	0.045	1710.16	0.0293	0.04167
Cr	52	3	He	0.005	0.0418	1650.15	0.0293	0.04167
Cr	52	3	He	-0.09	0.039	1500.12	0.0293	0.04167
Mn	55	3	He	-0.216	0.0037	140.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.07	0.0056	220.01	0.0129	0.006476
Mn	55	3	He	-0.32	0.0023	90.00	0.0129	0.006476
Fe	57	3	He	-0.488	0.0018	70.00	0.0006	0.00213
Fe	57	3	He	-1.463	0.0013	50.00	0.0006	0.00213
Fe	57	3	He	-0.083	0.0021	80.00	0.0006	0.00213
Co	59	3	He	0.022	0.0042	160.01	0.0572	0.00297
Co	59	3	He	0.059	0.0063	250.01	0.0572	0.00297
Co	59	3	He	0.012	0.0036	140.00	0.0572	0.00297
Ni	60	3	He	0.091	0.0037	250.01	0.0086	0.002921
Ni	60	3	He	-0.048	0.0025	170.01	0.0086	0.002921
Ni	60	3	He	0.158	0.0043	300.01	0.0086	0.002921
Cu	63	3	He	0.141	0.0081	550.03	0.0257	0.004531
Cu	63	3	He	0.047	0.0057	390.02	0.0257	0.004531
Cu	63	3	He	0.018	0.005	350.02	0.0257	0.004531
Zn	66	3	He	-0.175	0.0024	160.01	0.0029	0.002877
Zn	66	3	He	-0.23	0.0022	150.01	0.0029	0.002877
Zn	66	3	He	-0.255	0.0021	150.01	0.0029	0.002877
As	75	3	He	-0.043	0.0006	40.00	0.002	0.0006798
As	75	3	He	0.028	0.0007	50.00	0.002	0.0006798
As	75	3	He	-0.068	0.0005	38.00	0.002	0.0006798
Sr	88	3	He	-0.054	0.0006	40.00	0.009	0.001075
Sr	88	3	He	-0.054	0.0006	40.00	0.009	0.001075
Sr	88	3	He	-0.04	0.0007	50.00	0.009	0.001075
Mo	98	3	He	0.023	0.001	70.00	0.0226	0.0005115
Mo	98	3	He	0.036	0.0013	90.00	0.0226	0.0005115
Mo	98	3	He	0.016	0.0009	60.00	0.0226	0.0005115
Ag	107	3	He	0.015	0.001	70.00	0.0487	0.0003023
Ag	107	3	He	0	0.0003	20.00	0.0487	0.0003023
Ag	107	3	He	0.014	0.001	70.00	0.0487	0.0003023
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Sn	120	3	He	-0.206	0.0144	980.06	0.0161	0.0177
Sn	120	3	He	-0.025	0.0173	1170.10	0.0161	0.0177
Sn	120	3	He	-0.171	0.0149	1040.08	0.0161	0.0177
Sb	121	3	He	0.043	0.0007	50.00	0.0152	8.618E-05
Sb	121	3	He	0.024	0.0004	30.00	0.0152	8.618E-05
Sb	121	3	He	0.004	0.0001	10.00	0.0152	8.618E-05
Ba	137	3	He	0.182	0.001	70.00	0.0049	0.0001277
Ba	137	3	He	0.124	0.0007	50.00	0.0049	0.0001277
Ba	137	3	He	0.003	0.0001	10.00	0.0049	0.0001277
Tl	205	3	He	0.019	0.0007	220.01	0.0249	0.000171
Tl	205	3	He	0.017	0.0006	200.01	0.0249	0.000171
Tl	205	3	He	0.022	0.0007	250.01	0.0249	0.000171
Pb	208	3	He	-0.006	0.0012	230.01	0.0334	0.001456
Pb	208	3	He	-0.001	0.0014	240.01	0.0334	0.001456
Pb	208	3	He	0.011	0.0018	330.02	0.0334	0.001456
U	238	3	He	0.01	0.0006	160.01	0.0493	0.0001028
U	238	3	He	0.002	0.0002	60.00	0.0493	0.0001028
U	238	3	He	0.014	0.0008	220.01	0.0493	0.0001028
Sc	45	1	No Gas			2232233.40		
Sc	45	1	No Gas			2276130.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2250142.47		
Ge	72	1	No Gas			1104017.72		
Ge	72	1	No Gas			1117836.62		
Ge	72	1	No Gas			1106696.55		
Sc	45	2	H2			125872.70		
Sc	45	2	H2			131492.75		
Sc	45	2	H2			128605.64		
Ge	72	2	H2			115322.76		
Ge	72	2	H2			118902.19		
Ge	72	2	H2			115705.95		
In	115	2	H2			316179.57		
In	115	2	H2			318144.68		
In	115	2	H2			311939.72		
Sc	45	3	He			38000.50		
Sc	45	3	He			39474.25		
Sc	45	3	He			38442.14		
Ge	72	3	He			67510.29		
Ge	72	3	He			67851.80		
Ge	72	3	He			70112.30		
In	115	3	He			68187.71		
In	115	3	He			67655.31		
In	115	3	He			69594.30		
Tb	159	3	He			336014.88		
Tb	159	3	He			341050.62		
Tb	159	3	He			341975.50		
Bi	209	3	He			276493.59		
Bi	209	3	He			278960.02		
Bi	209	3	He			272658.30		

Quantitation Report

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Acq Time	8/14/2023 10:31:12 PM
Sample Name	LCS 410-406024/2-A
Sample Type	Sample
Comment	F1
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

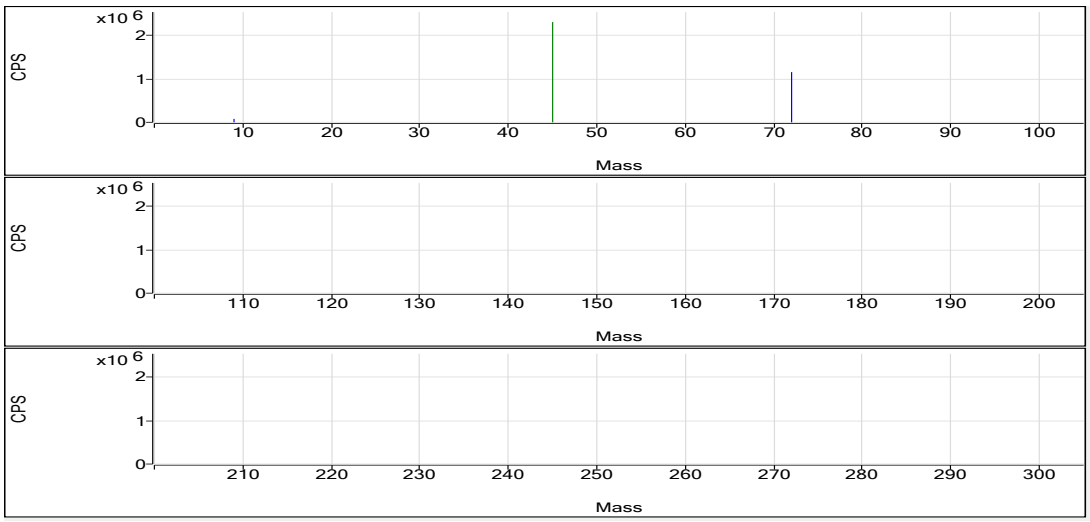
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.094	ppb	0.7	79026.95	0.0341	Pulse	0.5000	3
Se	78	115	H2	95.490	ppb	1.7	5322.33	0.0166	Pulse	1.5000	3
Na	23	45	He	4963.926	ppb	1.4	703245.22	18.2546	Pulse	0.1000	3
Mg	24	45	He	5094.727	ppb	1.9	357910.36	9.2908	Pulse	0.1000	3
Al	27	45	He	4891.155	ppb	3.0	109606.06	2.8457	Pulse	0.1000	3
K	39	45	He	4839.965	ppb	1.6	234078.65	6.0764	Pulse	0.1000	3
Ca	44	45	He	4823.131	ppb	1.5	13046.21	0.3387	Pulse	0.1000	3
Ti	47	45	He	494.329	ppb	5.4	10217.23	0.2653	Pulse	0.1000	3
V	51	45	He	508.628	ppb	1.5	439821.76	11.4173	Pulse	0.5000	3
Cr	52	45	He	505.571	ppb	1.8	571959.46	14.8480	Pulse	0.1000	3
Mn	55	45	He	496.065	ppb	1.9	247469.97	6.4241	Pulse	0.1000	3
Fe	57	45	He	5034.926	ppb	2.1	114505.40	2.9725	Pulse	0.1000	3
Co	59	45	He	502.668	ppb	2.0	1108028.55	28.7648	Pulse	0.1000	3
Ni	60	72	He	494.668	ppb	1.2	309959.34	4.2648	Pulse	0.1000	3
Cu	63	72	He	476.660	ppb	1.2	889943.19	12.2447	Pulse	0.1000	3
Zn	66	72	He	497.703	ppb	2.4	104713.74	1.4410	Pulse	0.1000	3
As	75	72	He	488.921	ppb	2.4	72462.01	0.9972	Pulse	0.5000	3
Sr	88	115	He	50.282	ppb	3.0	31242.03	0.4535	Pulse	0.1000	3
Mo	98	115	He	52.947	ppb	1.6	82415.34	1.1962	Pulse	0.1000	3
Ag	107	115	He	52.757	ppb	1.0	176959.78	2.5684	Pulse	0.1000	3
Cd	111	115	He	53.318	ppb	1.5	19926.89	0.2892	Pulse	0.5000	3
Sn	120	115	He	105.408	ppb	1.0	118497.18	1.7199	Pulse	0.1000	3
Sb	121	115	He	102.873	ppb	0.6	107693.45	1.5630	Pulse	0.1000	3
Ba	137	115	He	513.280	ppb	0.5	174264.31	2.5292	Pulse	0.1000	3
Tl	205	159	He	106.412	ppb	1.3	906027.61	2.6515	Pulse	0.1000	3
Pb	208	159	He	52.907	ppb	0.9	604762.06	1.7698	Pulse	0.1000	3
U	238	209	He	51.436	ppb	1.7	694084.36	2.5377	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2315099.86	1.6	96.2	Analog	0.1000	3
No Gas	Ge	72	1158592.82	0.5	99.7	Pulse	0.1000	3
H2	Sc	45	131225.92	0.9	79.8	Pulse	0.1000	3
H2	Ge	72	121315.55	0.8	83.5	Pulse	0.1000	3
H2	In	115	321033.86	2.0	89.2	Pulse	0.1000	3
He	Sc	45	38528.28	1.6	88.0	Pulse	0.1000	3
He	Ge	72	72688.17	1.7	95.0	Pulse	0.1000	3
He	In	115	68902.70	0.8	88.9	Pulse	0.1000	3
He	Tb	159	341729.41	0.9	92.1	Pulse	0.1000	3
He	Bi	209	273536.84	0.9	93.6	Pulse	0.1000	3

No Gas



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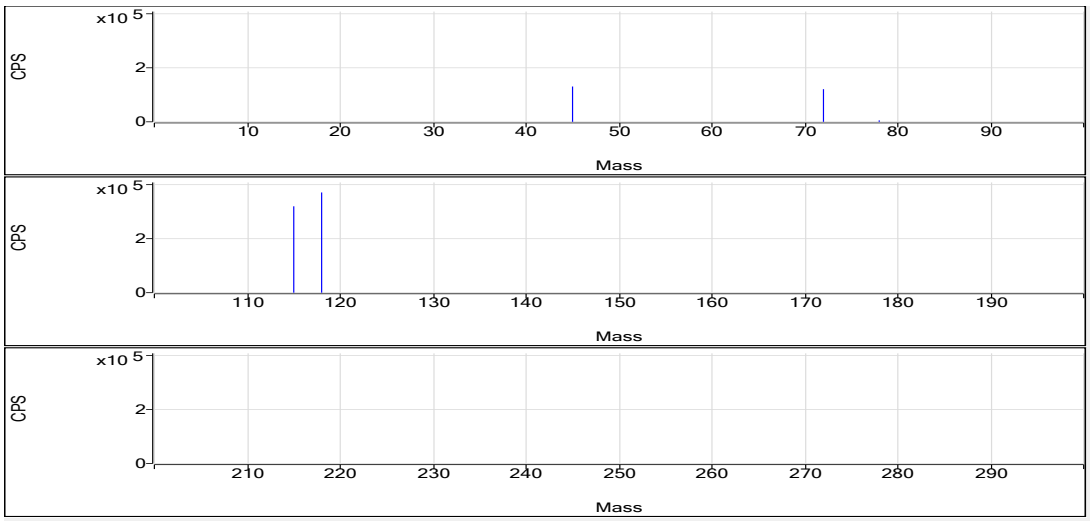
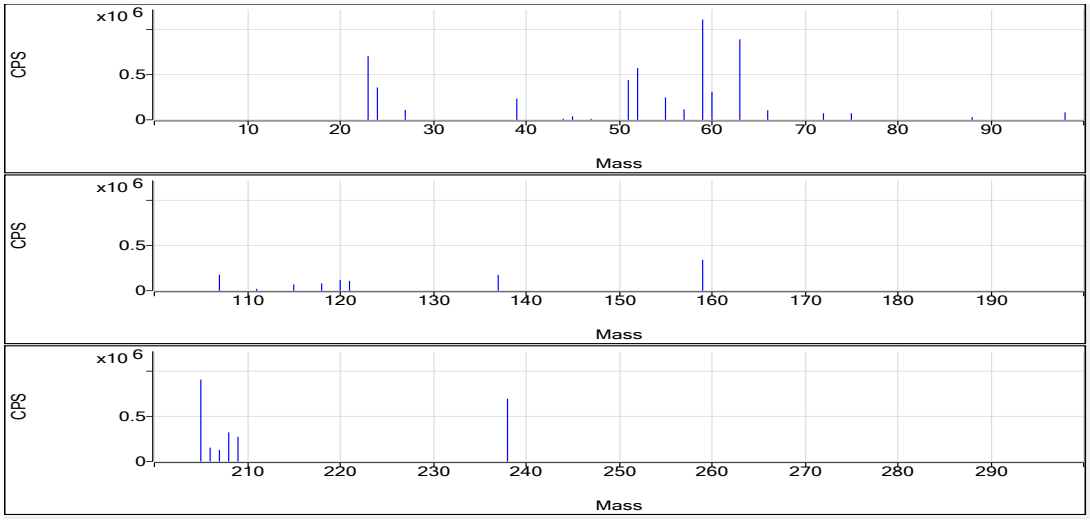


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.752	0.0339	79835.19	0.0007	1.523E-05
Be	9	1	No Gas	46.187	0.0342	78687.19	0.0007	1.523E-05
Be	9	1	No Gas	46.345	0.0343	78558.46	0.0007	1.523E-05
Se	78	2	H2	95.677	0.0166	5315.66	0.0002	3.71E-06
Se	78	2	H2	97.044	0.0169	5313.66	0.0002	3.71E-06
Se	78	2	H2	93.751	0.0163	5337.67	0.0002	3.71E-06
Na	23	3	He	4933.01	18.1428	710895.38	0.0036	0.3007
Na	23	3	He	5043.131	18.541	704000.46	0.0036	0.3007
Na	23	3	He	4915.638	18.0799	694839.83	0.0036	0.3007
Mg	24	3	He	5057.709	9.2233	361401.48	0.0018	0.003274
Mg	24	3	He	5207.077	9.4956	360546.95	0.0018	0.003274
Mg	24	3	He	5019.396	9.1535	351782.65	0.0018	0.003274
Al	27	3	He	4728.255	2.751	107792.73	0.0006	0.00137
Al	27	3	He	5007.681	2.9135	110624.01	0.0006	0.00137
Al	27	3	He	4937.529	2.8727	110401.44	0.0006	0.00137
K	39	3	He	4771.856	5.9962	234952.26	0.0012	0.378
K	39	3	He	4920.794	6.1716	234333.43	0.0012	0.378
K	39	3	He	4827.246	6.0614	232950.25	0.0012	0.378
Ca	44	3	He	4774.141	0.3353	13136.31	0.0001	0.003203
Ca	44	3	He	4905.428	0.3444	13076.16	0.0001	0.003203
Ca	44	3	He	4789.825	0.3363	12926.17	0.0001	0.003203
Ti	47	3	He	468.982	0.2517	9863.68	0.0005	0
Ti	47	3	He	522.267	0.2803	10644.17	0.0005	0
Ti	47	3	He	491.738	0.2639	10143.83	0.0005	0
V	51	3	He	501.039	11.2474	440710.06	0.0224	0.02476
V	51	3	He	516.141	11.5856	439904.34	0.0224	0.02476
V	51	3	He	508.703	11.419	438850.88	0.0224	0.02476
Cr	52	3	He	496.207	14.5738	571051.36	0.0293	0.04167
Cr	52	3	He	514.735	15.1164	573967.96	0.0293	0.04167
Cr	52	3	He	505.771	14.8539	570859.05	0.0293	0.04167
Mn	55	3	He	490.527	6.3525	248910.99	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	507.09	6.5667	249337.83	0.0129	0.006476
Mn	55	3	He	490.579	6.3531	244161.09	0.0129	0.006476
Fe	57	3	He	4961.357	2.9291	114773.95	0.0006	0.00213
Fe	57	3	He	5154.726	3.0432	115550.77	0.0006	0.00213
Fe	57	3	He	4988.695	2.9453	113191.49	0.0006	0.00213
Co	59	3	He	493.539	28.2424	1106633.58	0.0572	0.00297
Co	59	3	He	513.713	29.3967	1116187.95	0.0572	0.00297
Co	59	3	He	500.753	28.6552	1101264.12	0.0572	0.00297
Ni	60	3	He	493.334	4.2533	310476.13	0.0086	0.002921
Ni	60	3	He	489.459	4.2199	311221.81	0.0086	0.002921
Ni	60	3	He	501.213	4.3212	308180.09	0.0086	0.002921
Cu	63	3	He	478.249	12.2856	896798.50	0.0257	0.004531
Cu	63	3	He	470.518	12.087	891420.92	0.0257	0.004531
Cu	63	3	He	481.213	12.3617	881610.14	0.0257	0.004531
Zn	66	3	He	496.975	1.4389	105032.56	0.0029	0.002877
Zn	66	3	He	485.975	1.4071	103773.71	0.0029	0.002877
Zn	66	3	He	510.159	1.477	105334.96	0.0029	0.002877
As	75	3	He	488.497	0.9963	72725.26	0.002	0.0006798
As	75	3	He	477.629	0.9741	71842.88	0.002	0.0006798
As	75	3	He	500.636	1.021	72817.88	0.002	0.0006798
Sr	88	3	He	49.172	0.4435	30584.09	0.009	0.001075
Sr	88	3	He	51.984	0.4688	32027.08	0.009	0.001075
Sr	88	3	He	49.689	0.4482	31114.92	0.009	0.001075
Mo	98	3	He	52.02	1.1752	81044.19	0.0226	0.0005115
Mo	98	3	He	53.677	1.2126	82843.77	0.0226	0.0005115
Mo	98	3	He	53.145	1.2006	83358.05	0.0226	0.0005115
Ag	107	3	He	52.522	2.557	176330.35	0.0487	0.0003023
Ag	107	3	He	53.37	2.5983	177506.87	0.0487	0.0003023
Ag	107	3	He	52.378	2.55	177042.11	0.0487	0.0003023
Cd	111	3	He	53.331	0.2893	19950.28	0.0054	8.618E-06
Cd	111	3	He	54.114	0.2935	20054.39	0.0054	8.618E-06
Cd	111	3	He	52.508	0.2848	19776.00	0.0054	8.618E-06
Sn	120	3	He	105.582	1.7227	118797.43	0.0161	0.0177
Sn	120	3	He	106.356	1.7352	118543.77	0.0161	0.0177
Sn	120	3	He	104.285	1.7017	118150.34	0.0161	0.0177
Sb	121	3	He	103.547	1.5733	108493.12	0.0152	8.618E-05
Sb	121	3	He	102.824	1.5623	106730.29	0.0152	8.618E-05
Sb	121	3	He	102.246	1.5535	107856.94	0.0152	8.618E-05
Ba	137	3	He	513.016	2.5279	174327.09	0.0049	0.0001277
Ba	137	3	He	516.044	2.5428	173719.98	0.0049	0.0001277
Ba	137	3	He	510.779	2.5169	174745.86	0.0049	0.0001277
Tl	205	3	He	106.611	2.6565	906651.31	0.0249	0.000171
Tl	205	3	He	107.719	2.6841	909936.00	0.0249	0.000171
Tl	205	3	He	104.906	2.614	901495.53	0.0249	0.000171
Pb	208	3	He	52.751	1.7646	320819.51	0.0334	0.001456
Pb	208	3	He	53.465	1.7884	322205.74	0.0334	0.001456
Pb	208	3	He	52.506	1.7564	324947.44	0.0334	0.001456
U	238	3	He	52.263	2.5785	698260.77	0.0493	0.0001028
U	238	3	He	51.495	2.5406	697200.30	0.0493	0.0001028
U	238	3	He	50.549	2.4939	686792.02	0.0493	0.0001028
Sc	45	1	No Gas			2356131.06		
Sc	45	1	No Gas			2300381.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2288787.47		
Ge	72	1	No Gas			1164601.62		
Ge	72	1	No Gas			1155024.12		
Ge	72	1	No Gas			1156152.72		
Sc	45	2	H2			132411.16		
Sc	45	2	H2			130170.03		
Sc	45	2	H2			131096.56		
Ge	72	2	H2			122411.52		
Ge	72	2	H2			120848.52		
Ge	72	2	H2			120686.62		
In	115	2	H2			319934.39		
In	115	2	H2			315310.37		
In	115	2	H2			327856.83		
Sc	45	3	He			39183.43		
Sc	45	3	He			37969.83		
Sc	45	3	He			38431.57		
Ge	72	3	He			72996.15		
Ge	72	3	He			73750.27		
Ge	72	3	He			71318.09		
In	115	3	He			69594.49		
In	115	3	He			68951.56		
In	115	3	He			70047.26		
Tb	159	3	He			341299.68		
Tb	159	3	He			339013.43		
Tb	159	3	He			344875.11		
Bi	209	3	He			270802.61		
Bi	209	3	He			274422.22		
Bi	209	3	He			275385.70		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

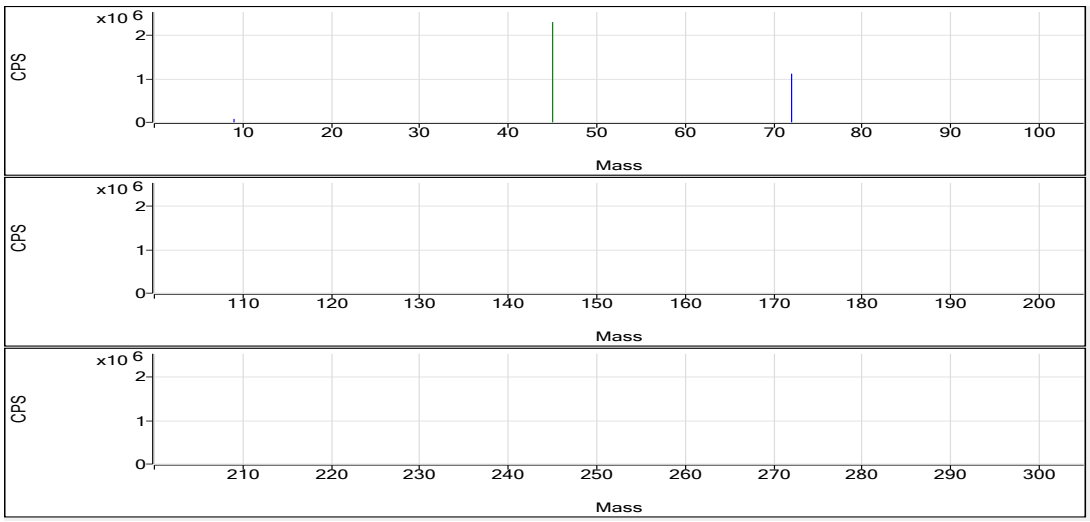
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.327	ppb	0.9	77302.06	0.0336	Pulse	0.5000	3
Se	78	115	H2	48.063	ppb	1.9	2622.02	0.0083	Pulse	1.5000	3
Na	23	45	He	4999.438	ppb	1.2	690579.23	18.3830	Pulse	0.1000	3
Mg	24	45	He	5027.893	ppb	1.6	344432.52	9.1690	Pulse	0.1000	3
Al	27	45	He	4879.570	ppb	1.4	106647.98	2.8390	Pulse	0.1000	3
K	39	45	He	4915.464	ppb	1.7	231600.67	6.1653	Pulse	0.1000	3
Ca	44	45	He	4977.920	ppb	2.2	13126.31	0.3494	Pulse	0.1000	3
Ti	47	45	He	4955.765	ppb	0.9	99932.11	2.6601	Pulse	0.1000	3
V	51	45	He	510.845	ppb	1.1	430774.07	11.4670	Pulse	0.5000	3
Cr	52	45	He	507.887	ppb	1.5	560322.06	14.9159	Pulse	0.1000	3
Mn	55	45	He	497.274	ppb	1.4	241918.06	6.4398	Pulse	0.1000	3
Fe	57	45	He	5033.807	ppb	1.6	111653.49	2.9719	Pulse	0.1000	3
Co	59	45	He	508.091	ppb	0.8	1092270.56	29.0750	Pulse	0.1000	3
Ni	60	72	He	508.799	ppb	3.1	303359.00	4.3866	Pulse	0.1000	3
Cu	63	72	He	489.103	ppb	2.4	868974.83	12.5643	Pulse	0.1000	3
Zn	66	72	He	504.755	ppb	3.4	101058.12	1.4614	Pulse	0.1000	3
As	75	72	He	503.337	ppb	1.6	71004.88	1.0265	Pulse	0.5000	3
Sr	88	115	He	48.337	ppb	2.1	29962.49	0.4360	Pulse	0.1000	3
Mo	98	115	He	52.344	ppb	2.4	81251.80	1.1825	Pulse	0.1000	3
Ag	107	115	He	53.502	ppb	1.9	178974.18	2.6047	Pulse	0.1000	3
Cd	111	115	He	52.503	ppb	1.6	19570.40	0.2848	Pulse	0.5000	3
Sn	120	115	He	52.323	ppb	0.3	59284.75	0.8626	Pulse	0.1000	3
Sb	121	115	He	49.859	ppb	1.3	52058.62	0.7576	Pulse	0.1000	3
Ba	137	115	He	507.461	ppb	1.5	171825.39	2.5005	Pulse	0.1000	3
Tl	205	159	He	52.092	ppb	0.6	442753.69	1.2981	Pulse	0.1000	3
Pb	208	159	He	51.914	ppb	1.4	592307.93	1.7366	Pulse	0.1000	3
U	238	209	He	50.779	ppb	1.0	680853.14	2.5053	Pulse	0.1000	3

ISTD Table:

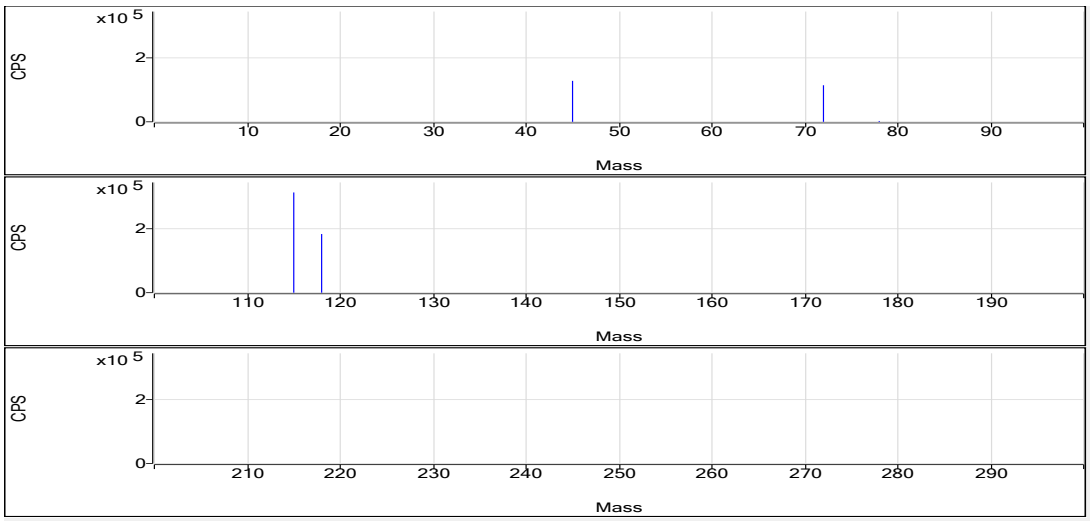
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2302879.60	1.1	95.7	Analog	0.1000	3
No Gas	Ge	72	1116608.84	0.2	96.1	Pulse	0.1000	3
H2	Sc	45	128390.21	1.0	78.1	Pulse	0.1000	3
H2	Ge	72	114584.17	1.5	78.8	Pulse	0.1000	3
H2	In	115	314092.29	0.4	87.3	Pulse	0.1000	3
He	Sc	45	37569.11	1.0	85.9	Pulse	0.1000	3
He	Ge	72	69184.08	2.0	90.4	Pulse	0.1000	3
He	In	115	68727.12	1.7	88.6	Pulse	0.1000	3
He	Tb	159	341093.59	0.7	92.0	Pulse	0.1000	3
He	Bi	209	271789.14	1.1	93.0	Pulse	0.1000	3

No Gas

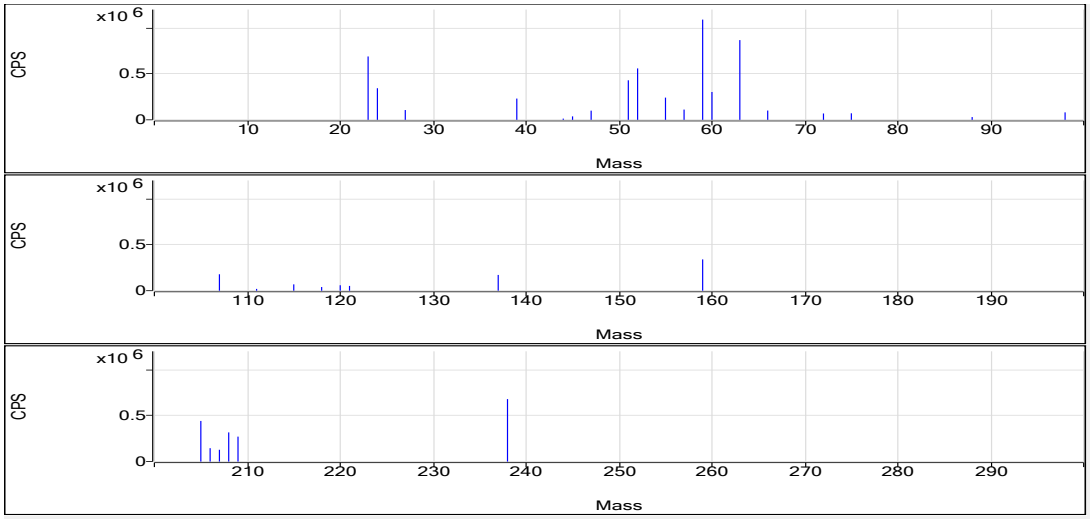


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.603	0.0338	77050.89	0.0007	1.523E-05
Be	9	1	No Gas	45.547	0.0337	77519.10	0.0007	1.523E-05
Be	9	1	No Gas	44.831	0.0332	77336.18	0.0007	1.523E-05
Se	78	2	H2	47.496	0.0082	2590.24	0.0002	3.71E-06
Se	78	2	H2	47.568	0.0083	2605.58	0.0002	3.71E-06
Se	78	2	H2	49.126	0.0085	2670.25	0.0002	3.71E-06
Na	23	3	He	4962.795	18.2505	690591.16	0.0036	0.3007
Na	23	3	He	4966.614	18.2643	689110.46	0.0036	0.3007
Na	23	3	He	5068.905	18.6343	692036.08	0.0036	0.3007
Mg	24	3	He	4979.103	9.08	343584.72	0.0018	0.003274
Mg	24	3	He	4981.394	9.0842	342746.28	0.0018	0.003274
Mg	24	3	He	5123.181	9.3427	346966.56	0.0018	0.003274
Al	27	3	He	4829.429	2.8098	106322.22	0.0006	0.00137
Al	27	3	He	4854.946	2.8247	106573.89	0.0006	0.00137
Al	27	3	He	4954.335	2.8824	107047.84	0.0006	0.00137
K	39	3	He	4876.109	6.119	231539.00	0.0012	0.378
K	39	3	He	4858.987	6.0988	230107.26	0.0012	0.378
K	39	3	He	5011.296	6.2781	233155.76	0.0012	0.378
Ca	44	3	He	4998.564	0.3509	13276.43	0.0001	0.003203
Ca	44	3	He	4860.633	0.3413	12875.99	0.0001	0.003203
Ca	44	3	He	5074.563	0.3561	13226.50	0.0001	0.003203
Ti	47	3	He	4902.821	2.6316	99580.17	0.0005	0
Ti	47	3	He	4982.129	2.6742	100897.64	0.0005	0
Ti	47	3	He	4982.345	2.6743	99318.53	0.0005	0
V	51	3	He	506.56	11.371	430275.22	0.0224	0.02476
V	51	3	He	508.895	11.4233	431001.19	0.0224	0.02476
V	51	3	He	517.08	11.6067	431045.81	0.0224	0.02476
Cr	52	3	He	501.572	14.7309	557412.96	0.0293	0.04167
Cr	52	3	He	505.989	14.8603	560677.92	0.0293	0.04167
Cr	52	3	He	516.1	15.1564	562875.30	0.0293	0.04167
Mn	55	3	He	489.442	6.3384	239843.63	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	499.619	6.4701	244115.82	0.0129	0.006476
Mn	55	3	He	502.762	6.5107	241794.72	0.0129	0.006476
Fe	57	3	He	4972.011	2.9354	111075.54	0.0006	0.00213
Fe	57	3	He	5126.852	3.0268	114200.21	0.0006	0.00213
Fe	57	3	He	5002.557	2.9535	109684.72	0.0006	0.00213
Co	59	3	He	506.929	29.0085	1097671.70	0.0572	0.00297
Co	59	3	He	504.83	28.8885	1089959.91	0.0572	0.00297
Co	59	3	He	512.513	29.3281	1089180.06	0.0572	0.00297
Ni	60	3	He	522.824	4.5074	307011.25	0.0086	0.002921
Ni	60	3	He	511.79	4.4123	303237.81	0.0086	0.002921
Ni	60	3	He	491.785	4.24	299827.94	0.0086	0.002921
Cu	63	3	He	496.858	12.7634	869351.24	0.0257	0.004531
Cu	63	3	He	494.924	12.7137	873752.02	0.0257	0.004531
Cu	63	3	He	475.526	12.2156	863821.24	0.0257	0.004531
Zn	66	3	He	516.302	1.4947	101809.77	0.0029	0.002877
Zn	66	3	He	513.016	1.4852	102072.40	0.0029	0.002877
Zn	66	3	He	484.948	1.4041	99292.19	0.0029	0.002877
As	75	3	He	510.399	1.0409	70900.33	0.002	0.0006798
As	75	3	He	505.189	1.0303	70807.94	0.002	0.0006798
As	75	3	He	494.425	1.0084	71306.37	0.002	0.0006798
Sr	88	3	He	49.399	0.4455	30222.95	0.009	0.001075
Sr	88	3	He	48.26	0.4353	30503.67	0.009	0.001075
Sr	88	3	He	47.353	0.4271	29160.86	0.009	0.001075
Mo	98	3	He	53.685	1.2128	82270.43	0.0226	0.0005115
Mo	98	3	He	51.167	1.1559	81003.68	0.0226	0.0005115
Mo	98	3	He	52.181	1.1788	80481.28	0.0226	0.0005115
Ag	107	3	He	53.929	2.6254	178094.59	0.0487	0.0003023
Ag	107	3	He	52.319	2.5471	178487.36	0.0487	0.0003023
Ag	107	3	He	54.259	2.6415	180340.58	0.0487	0.0003023
Cd	111	3	He	53.308	0.2892	19615.80	0.0054	8.618E-06
Cd	111	3	He	51.624	0.28	19623.79	0.0054	8.618E-06
Cd	111	3	He	52.577	0.2852	19471.62	0.0054	8.618E-06
Sn	120	3	He	52.488	0.8653	58696.41	0.0161	0.0177
Sn	120	3	He	52.157	0.86	60261.70	0.0161	0.0177
Sn	120	3	He	52.325	0.8627	58896.13	0.0161	0.0177
Sb	121	3	He	50.45	0.7666	51998.84	0.0152	8.618E-05
Sb	121	3	He	49.137	0.7466	52319.11	0.0152	8.618E-05
Sb	121	3	He	49.991	0.7596	51857.91	0.0152	8.618E-05
Ba	137	3	He	511.904	2.5224	171106.33	0.0049	0.0001277
Ba	137	3	He	498.637	2.4571	172179.67	0.0049	0.0001277
Ba	137	3	He	511.842	2.5221	172190.17	0.0049	0.0001277
Tl	205	3	He	52.328	1.304	441225.89	0.0249	0.000171
Tl	205	3	He	51.756	1.2897	442749.09	0.0249	0.000171
Tl	205	3	He	52.191	1.3006	444286.09	0.0249	0.000171
Pb	208	3	He	52.62	1.7602	320488.67	0.0334	0.001456
Pb	208	3	He	51.212	1.7131	314403.16	0.0334	0.001456
Pb	208	3	He	51.912	1.7365	318656.21	0.0334	0.001456
U	238	3	He	50.779	2.5053	678920.15	0.0493	0.0001028
U	238	3	He	50.267	2.48	682252.72	0.0493	0.0001028
U	238	3	He	51.289	2.5305	681386.55	0.0493	0.0001028
Sc	45	1	No Gas			2281382.78		
Sc	45	1	No Gas			2298020.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2329235.12		
Ge	72	1	No Gas			1118783.97		
Ge	72	1	No Gas			1116713.42		
Ge	72	1	No Gas			1114329.12		
Sc	45	2	H2			128535.24		
Sc	45	2	H2			129553.51		
Sc	45	2	H2			127081.88		
Ge	72	2	H2			113126.03		
Ge	72	2	H2			116411.80		
Ge	72	2	H2			114214.68		
In	115	2	H2			313977.98		
In	115	2	H2			315357.75		
In	115	2	H2			312941.15		
Sc	45	3	He			37839.61		
Sc	45	3	He			37729.92		
Sc	45	3	He			37137.81		
Ge	72	3	He			68112.72		
Ge	72	3	He			68725.02		
Ge	72	3	He			70714.51		
In	115	3	He			68137.28		
In	115	3	He			70397.74		
In	115	3	He			68580.34		
Tb	159	3	He			338375.46		
Tb	159	3	He			343293.00		
Tb	159	3	He			341612.30		
Bi	209	3	He			270995.41		
Bi	209	3	He			275097.38		
Bi	209	3	He			269274.62		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

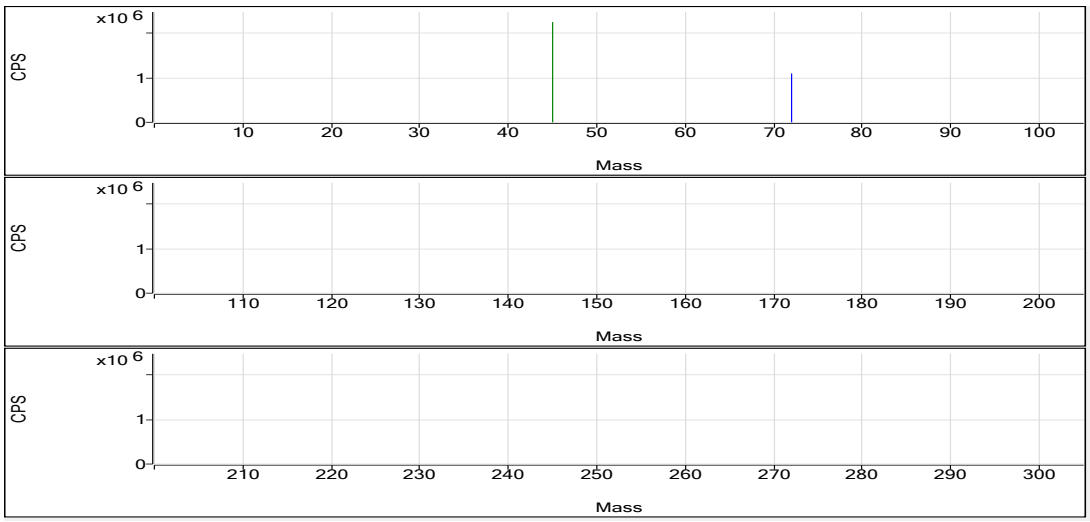
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.023	ppb	36.5	72.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.161	ppb	33.8	10.00	0.0000	Pulse	1.5000	3
Na	23	45	He	46.218	ppb	7.7	17237.18	0.4678	Pulse	0.1000	3
Mg	24	45	He	2.467	ppb	7.3	286.68	0.0078	Pulse	0.1000	3
Al	27	45	He	1.713	ppb	69.3	86.67	0.0024	Pulse	0.1000	3
K	39	45	He	19.127	ppb	83.4	14751.27	0.4005	Pulse	0.1000	3
Ca	44	45	He	3.515	ppb	264.9	126.67	0.0034	Pulse	0.1000	3
Ti	47	45	He	1.679	ppb	33.6	33.33	0.0009	Pulse	0.1000	3
V	51	45	He	0.106	ppb	53.5	999.37	0.0271	Pulse	0.5000	3
Cr	52	45	He	0.109	ppb	18.8	1653.49	0.0449	Pulse	0.1000	3
Mn	55	45	He	-0.075	ppb	N/A	203.34	0.0055	Pulse	0.1000	3
Fe	57	45	He	1.228	ppb	259.3	106.67	0.0029	Pulse	0.1000	3
Co	59	45	He	0.159	ppb	38.6	443.35	0.0120	Pulse	0.1000	3
Ni	60	72	He	0.136	ppb	82.9	276.68	0.0041	Pulse	0.1000	3
Cu	63	72	He	0.139	ppb	15.6	546.70	0.0081	Pulse	0.1000	3
Zn	66	72	He	0.217	ppb	121.4	236.68	0.0035	Pulse	0.1000	3
As	75	72	He	0.111	ppb	97.3	61.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.008	ppb	N/A	70.00	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.047	ppb	57.7	110.01	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	88.5	66.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.023	ppb	46.4	9.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.055	ppb	N/A	1170.09	0.0168	Pulse	0.1000	3
Sb	121	115	He	0.060	ppb	30.4	70.00	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.101	ppb	93.2	43.33	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.114	ppb	11.3	1016.74	0.0030	Pulse	0.1000	3
Pb	208	159	He	0.014	ppb	48.5	650.03	0.0019	Pulse	0.1000	3
U	238	209	He	0.050	ppb	10.8	696.71	0.0026	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2249558.82	0.6	93.4	Analog	0.1000	3
No Gas	Ge	72	1096070.01	0.5	94.3	Pulse	0.1000	3
H2	Sc	45	128841.88	0.3	78.4	Pulse	0.1000	3
H2	Ge	72	113771.54	0.4	78.3	Pulse	0.1000	3
H2	In	115	316472.45	1.1	87.9	Pulse	0.1000	3
He	Sc	45	36864.17	3.2	84.2	Pulse	0.1000	3
He	Ge	72	67603.39	0.5	88.4	Pulse	0.1000	3
He	In	115	69554.72	1.3	89.7	Pulse	0.1000	3
He	Tb	159	337083.37	0.9	90.9	Pulse	0.1000	3
He	Bi	209	270860.52	0.3	92.7	Pulse	0.1000	3

No Gas



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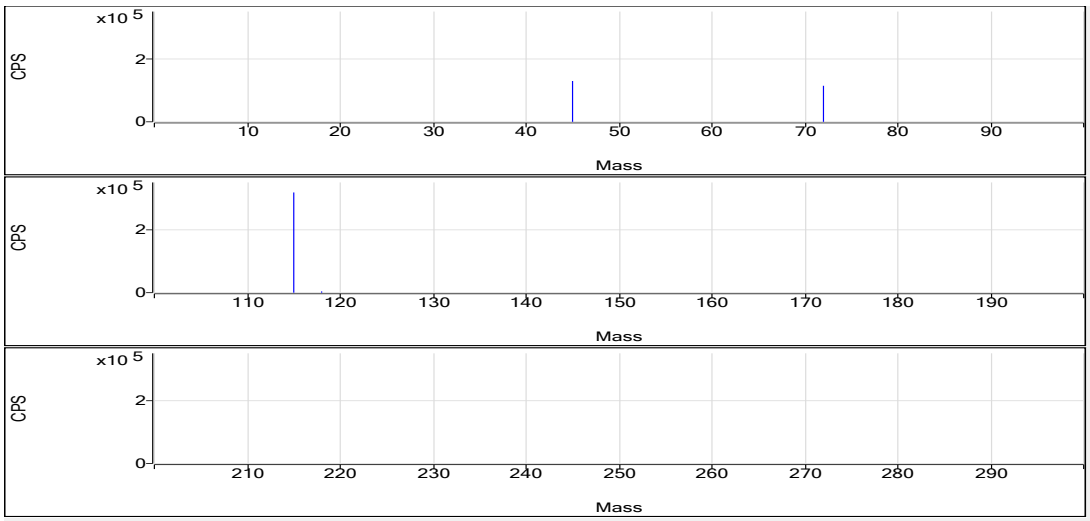
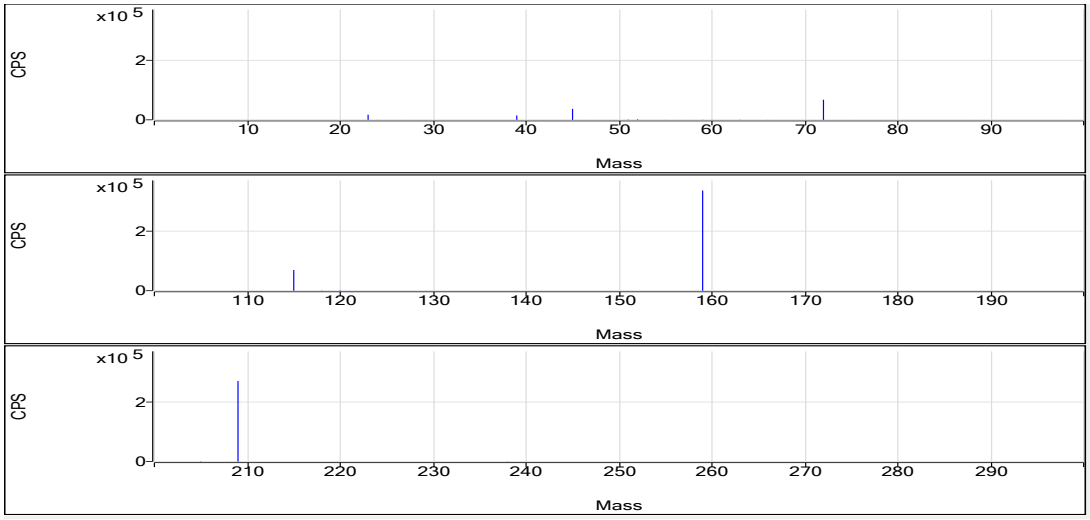


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.032	0	88.00	0.0007	1.523E-05
Be	9	1	No Gas	0.019	0	66.00	0.0007	1.523E-05
Be	9	1	No Gas	0.017	0	62.00	0.0007	1.523E-05
Se	78	2	H2	0.2	0	12.00	0.0002	3.71E-06
Se	78	2	H2	0.185	0	11.33	0.0002	3.71E-06
Se	78	2	H2	0.099	0	6.67	0.0002	3.71E-06
Na	23	3	He	49.858	0.481	17380.73	0.0036	0.3007
Na	23	3	He	42.787	0.4554	17410.74	0.0036	0.3007
Na	23	3	He	46.01	0.4671	16920.07	0.0036	0.3007
Mg	24	3	He	2.455	0.0077	280.01	0.0018	0.003274
Mg	24	3	He	2.653	0.0081	310.02	0.0018	0.003274
Mg	24	3	He	2.293	0.0075	270.01	0.0018	0.003274
Al	27	3	He	2.403	0.0028	100.01	0.0006	0.00137
Al	27	3	He	0.343	0.0016	60.00	0.0006	0.00137
Al	27	3	He	2.391	0.0028	100.01	0.0006	0.00137
K	39	3	He	22.054	0.404	14597.62	0.0012	0.378
K	39	3	He	1.919	0.3803	14537.74	0.0012	0.378
K	39	3	He	33.408	0.4173	15118.44	0.0012	0.378
Ca	44	3	He	13.641	0.0042	150.01	0.0001	0.003203
Ca	44	3	He	-4.677	0.0029	110.00	0.0001	0.003203
Ca	44	3	He	1.581	0.0033	120.00	0.0001	0.003203
Ti	47	3	He	1.031	0.0006	20.00	0.0005	0
Ti	47	3	He	1.949	0.001	40.00	0.0005	0
Ti	47	3	He	2.057	0.0011	40.00	0.0005	0
V	51	3	He	0.088	0.0267	966.04	0.0224	0.02476
V	51	3	He	0.06	0.0261	998.04	0.0224	0.02476
V	51	3	He	0.169	0.0285	1034.04	0.0224	0.02476
Cr	52	3	He	0.099	0.0446	1610.15	0.0293	0.04167
Cr	52	3	He	0.096	0.0445	1700.16	0.0293	0.04167
Cr	52	3	He	0.133	0.0456	1650.16	0.0293	0.04167
Mn	55	3	He	-0.18	0.0042	150.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.036	0.006	230.01	0.0129	0.006476
Mn	55	3	He	-0.01	0.0063	230.01	0.0129	0.006476
Fe	57	3	He	0.142	0.0022	80.00	0.0006	0.00213
Fe	57	3	He	4.814	0.005	190.01	0.0006	0.00213
Fe	57	3	He	-1.271	0.0014	50.00	0.0006	0.00213
Co	59	3	He	0.224	0.0158	570.03	0.0572	0.00297
Co	59	3	He	0.149	0.0115	440.02	0.0572	0.00297
Co	59	3	He	0.102	0.0088	320.01	0.0572	0.00297
Ni	60	3	He	0.039	0.0033	220.01	0.0086	0.002921
Ni	60	3	He	0.259	0.0052	350.02	0.0086	0.002921
Ni	60	3	He	0.109	0.0039	260.01	0.0086	0.002921
Cu	63	3	He	0.14	0.0081	550.04	0.0257	0.004531
Cu	63	3	He	0.116	0.0075	510.03	0.0257	0.004531
Cu	63	3	He	0.159	0.0086	580.03	0.0257	0.004531
Zn	66	3	He	0.182	0.0034	230.01	0.0029	0.002877
Zn	66	3	He	-0.027	0.0028	190.01	0.0029	0.002877
Zn	66	3	He	0.496	0.0043	290.01	0.0029	0.002877
As	75	3	He	0.16	0.001	68.00	0.002	0.0006798
As	75	3	He	0.187	0.0011	72.00	0.002	0.0006798
As	75	3	He	-0.013	0.0007	44.00	0.002	0.0006798
Sr	88	3	He	0.008	0.0011	80.00	0.009	0.001075
Sr	88	3	He	-0.025	0.0009	60.00	0.009	0.001075
Sr	88	3	He	-0.006	0.001	70.00	0.009	0.001075
Mo	98	3	He	0.066	0.002	140.01	0.0226	0.0005115
Mo	98	3	He	0.059	0.0018	130.01	0.0226	0.0005115
Mo	98	3	He	0.016	0.0009	60.00	0.0226	0.0005115
Ag	107	3	He	0.026	0.0016	110.00	0.0487	0.0003023
Ag	107	3	He	0.011	0.0009	60.00	0.0487	0.0003023
Ag	107	3	He	0.003	0.0004	30.00	0.0487	0.0003023
Cd	111	3	He	0.02	0.0001	8.00	0.0054	8.618E-06
Cd	111	3	He	0.035	0.0002	14.00	0.0054	8.618E-06
Cd	111	3	He	0.015	0.0001	6.00	0.0054	8.618E-06
Sn	120	3	He	0.034	0.0183	1270.10	0.0161	0.0177
Sn	120	3	He	-0.085	0.0163	1150.10	0.0161	0.0177
Sn	120	3	He	-0.113	0.0159	1090.08	0.0161	0.0177
Sb	121	3	He	0.042	0.0007	50.00	0.0152	8.618E-05
Sb	121	3	He	0.078	0.0013	90.00	0.0152	8.618E-05
Sb	121	3	He	0.061	0.001	70.00	0.0152	8.618E-05
Ba	137	3	He	0.207	0.0011	80.00	0.0049	0.0001277
Ba	137	3	He	0.032	0.0003	20.00	0.0049	0.0001277
Ba	137	3	He	0.063	0.0004	30.00	0.0049	0.0001277
Tl	205	3	He	0.101	0.0027	900.06	0.0249	0.000171
Tl	205	3	He	0.115	0.003	1030.08	0.0249	0.000171
Tl	205	3	He	0.127	0.0033	1120.09	0.0249	0.000171
Pb	208	3	He	0.017	0.002	410.02	0.0334	0.001456
Pb	208	3	He	0.019	0.0021	290.01	0.0334	0.001456
Pb	208	3	He	0.006	0.0017	240.01	0.0334	0.001456
U	238	3	He	0.05	0.0025	690.05	0.0493	0.0001028
U	238	3	He	0.045	0.0023	630.04	0.0493	0.0001028
U	238	3	He	0.056	0.0028	770.05	0.0493	0.0001028
Sc	45	1	No Gas			2255627.94		
Sc	45	1	No Gas			2258467.94		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2234580.59		
Ge	72	1	No Gas			1095176.55		
Ge	72	1	No Gas			1101437.01		
Ge	72	1	No Gas			1091596.47		
Sc	45	2	H2			128403.84		
Sc	45	2	H2			129291.47		
Sc	45	2	H2			128830.34		
Ge	72	2	H2			113268.05		
Ge	72	2	H2			113772.28		
Ge	72	2	H2			114274.30		
In	115	2	H2			312785.82		
In	115	2	H2			316643.57		
In	115	2	H2			319987.96		
Sc	45	3	He			36135.61		
Sc	45	3	He			38230.83		
Sc	45	3	He			36226.06		
Ge	72	3	He			67600.06		
Ge	72	3	He			67911.60		
Ge	72	3	He			67298.52		
In	115	3	He			69574.64		
In	115	3	He			70448.64		
In	115	3	He			68660.32		
Tb	159	3	He			334637.65		
Tb	159	3	He			340355.89		
Tb	159	3	He			336256.56		
Bi	209	3	He			270647.34		
Bi	209	3	He			271661.05		
Bi	209	3	He			270273.16		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/14/2023 10:39:26 PM
Sample Name	410-137532-M-5-A
Sample Type	Sample
Comment	F1
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

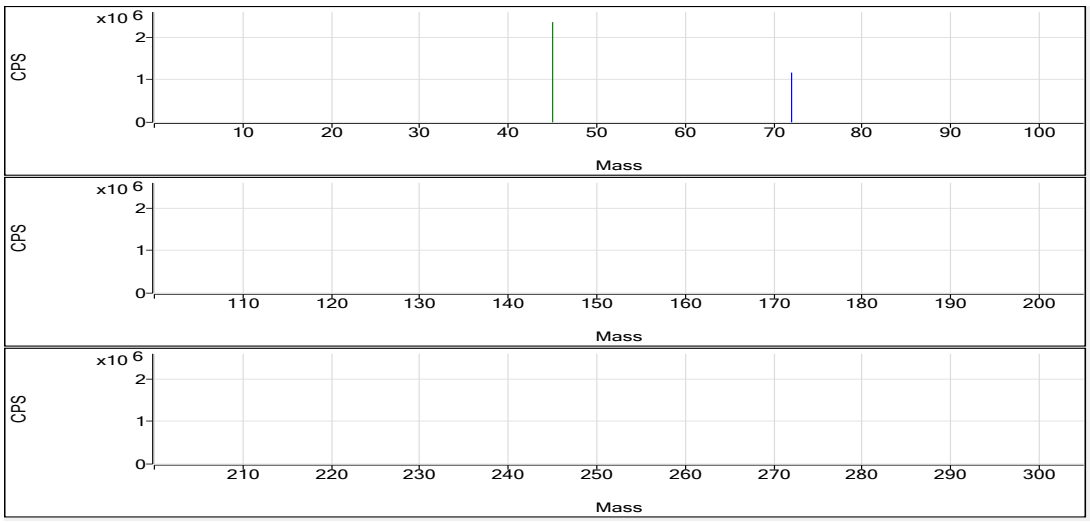
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	95.0	48.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	2.400	ppb	2.5	134.22	0.0004	Pulse	1.5000	3
Na	23	45	He	10819.242	ppb	1.6	1503506.12	39.4325	Analog	0.1000	3
Mg	24	45	He	12898.229	ppb	2.4	896537.20	23.5164	Pulse	0.1000	3
Al	27	45	He	152.131	ppb	4.7	3423.85	0.0898	Pulse	0.1000	3
K	39	45	He	8706.948	ppb	2.2	405253.24	10.6293	Pulse	0.1000	3
Ca	44	45	He	51600.980	ppb	2.0	136959.99	3.5921	Pulse	0.1000	3
Ti	47	45	He	6.847	ppb	15.0	140.01	0.0037	Pulse	0.1000	3
V	51	45	He	18.085	ppb	1.8	16388.62	0.4298	Pulse	0.5000	3
Cr	52	45	He	0.424	ppb	42.1	2060.22	0.0541	Pulse	0.1000	3
Mn	55	45	He	4.419	ppb	3.1	2426.96	0.0636	Pulse	0.1000	3
Fe	57	45	He	95.275	ppb	6.3	2223.59	0.0583	Pulse	0.1000	3
Co	59	45	He	0.116	ppb	29.9	366.69	0.0096	Pulse	0.1000	3
Ni	60	72	He	0.734	ppb	14.5	680.04	0.0092	Pulse	0.1000	3
Cu	63	72	He	0.788	ppb	1.5	1820.18	0.0248	Pulse	0.1000	3
Zn	66	72	He	0.558	ppb	43.1	330.02	0.0045	Pulse	0.1000	3
As	75	72	He	4.262	ppb	5.4	688.69	0.0094	Pulse	0.5000	3
Sr	88	115	He	595.413	ppb	0.5	382304.62	5.3583	Pulse	0.1000	3
Mo	98	115	He	2.847	ppb	3.8	4624.25	0.0648	Pulse	0.1000	3
Ag	107	115	He	0.165	ppb	26.0	593.37	0.0083	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	248.7	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.179	ppb	N/A	1056.74	0.0148	Pulse	0.1000	3
Sb	121	115	He	0.118	ppb	41.6	133.34	0.0019	Pulse	0.1000	3
Ba	137	115	He	214.490	ppb	3.5	75394.26	1.0570	Pulse	0.1000	3
Tl	205	159	He	0.034	ppb	27.1	346.68	0.0010	Pulse	0.1000	3
Pb	208	159	He	0.174	ppb	4.8	2493.53	0.0073	Pulse	0.1000	3
U	238	209	He	6.383	ppb	1.3	87366.29	0.3150	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2356706.01	0.9	97.9	Analog	0.1000	3
No Gas	Ge	72	1168785.61	0.4	100.6	Pulse	0.1000	3
H2	Sc	45	131005.79	1.1	79.7	Pulse	0.1000	3
H2	Ge	72	120396.78	0.3	82.8	Pulse	0.1000	3
H2	In	115	319283.67	1.2	88.7	Pulse	0.1000	3
He	Sc	45	38137.38	2.3	87.2	Pulse	0.1000	3
He	Ge	72	73519.40	0.7	96.1	Pulse	0.1000	3
He	In	115	71350.47	1.3	92.0	Pulse	0.1000	3
He	Tb	159	343150.50	1.0	92.5	Pulse	0.1000	3
He	Bi	209	277363.91	0.9	94.9	Pulse	0.1000	3

No Gas



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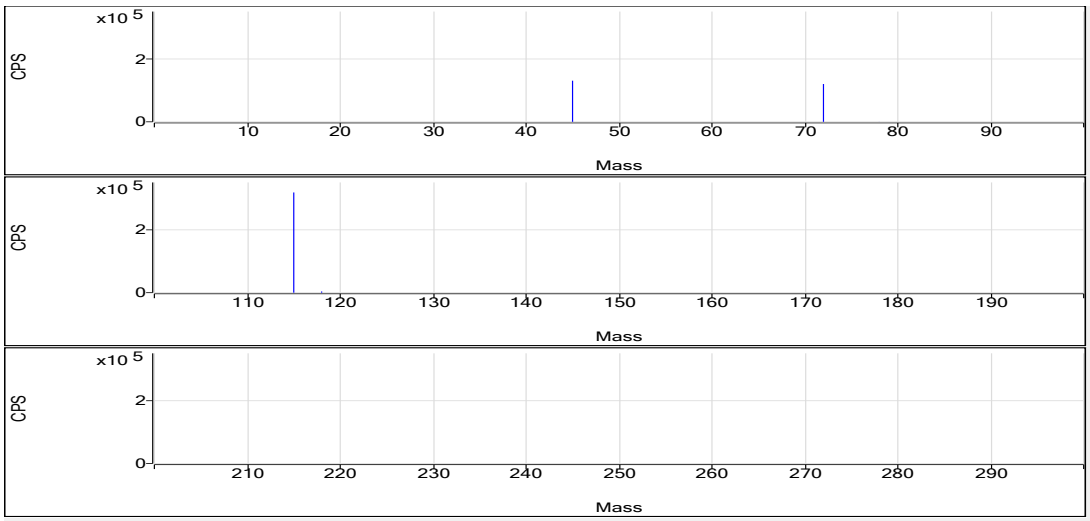
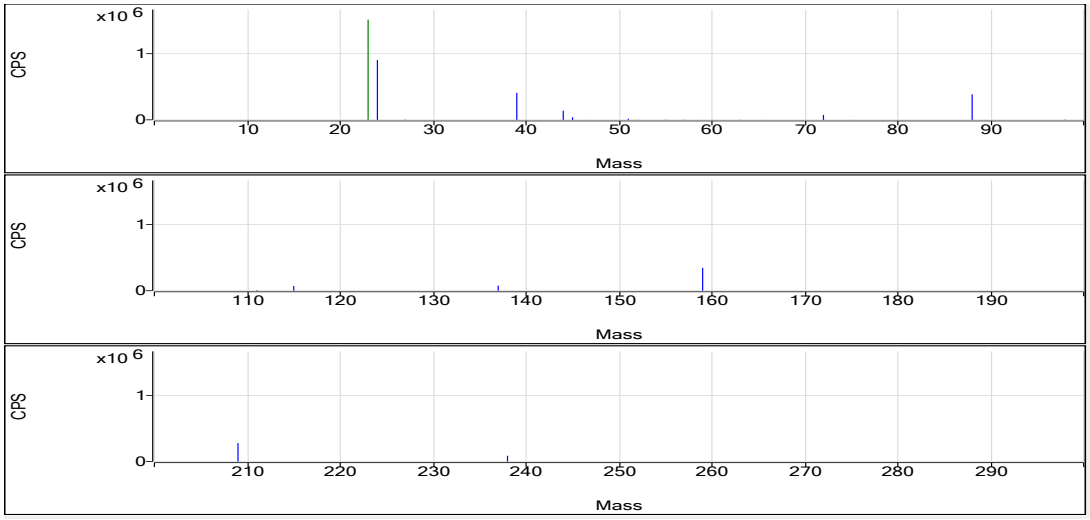


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0	44.00	0.0007	1.523E-05
Be	9	1	No Gas	0.002	0	40.00	0.0007	1.523E-05
Be	9	1	No Gas	0.015	0	62.00	0.0007	1.523E-05
Se	78	2	H2	2.336	0.0004	130.00	0.0002	3.71E-06
Se	78	2	H2	2.405	0.0004	133.33	0.0002	3.71E-06
Se	78	2	H2	2.457	0.0004	139.33	0.0002	3.71E-06
Na	23	3	He	11005.808	40.1073	1491928.88	0.0036	0.3007
Na	23	3	He	10680.991	38.9325	1514189.98	0.0036	0.3007
Na	23	3	He	10770.927	39.2578	1504399.51	0.0036	0.3007
Mg	24	3	He	13195.97	24.0591	894961.31	0.0018	0.003274
Mg	24	3	He	12576.234	22.9294	891784.75	0.0018	0.003274
Mg	24	3	He	12922.483	23.5606	902865.53	0.0018	0.003274
Al	27	3	He	160.39	0.0946	3520.51	0.0006	0.00137
Al	27	3	He	147.111	0.0869	3380.52	0.0006	0.00137
Al	27	3	He	148.892	0.088	3370.51	0.0006	0.00137
K	39	3	He	8864.572	10.8148	402294.56	0.0012	0.378
K	39	3	He	8487.884	10.3713	403369.06	0.0012	0.378
K	39	3	He	8768.39	10.7016	410096.09	0.0012	0.378
Ca	44	3	He	52345.084	3.6439	135546.79	0.0001	0.003203
Ca	44	3	He	50454.873	3.5124	136607.44	0.0001	0.003203
Ca	44	3	He	52002.984	3.6201	138725.73	0.0001	0.003203
Ti	47	3	He	7.012	0.0038	140.01	0.0005	0
Ti	47	3	He	5.748	0.0031	120.00	0.0005	0
Ti	47	3	He	7.779	0.0042	160.01	0.0005	0
V	51	3	He	18.438	0.4377	16283.16	0.0224	0.02476
V	51	3	He	17.793	0.4233	16463.38	0.0224	0.02476
V	51	3	He	18.024	0.4285	16419.31	0.0224	0.02476
Cr	52	3	He	0.624	0.06	2230.26	0.0293	0.04167
Cr	52	3	He	0.281	0.0499	1940.19	0.0293	0.04167
Cr	52	3	He	0.368	0.0525	2010.22	0.0293	0.04167
Mn	55	3	He	4.404	0.0635	2360.28	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4.29	0.062	2410.29	0.0129	0.006476
Mn	55	3	He	4.563	0.0655	2510.32	0.0129	0.006476
Fe	57	3	He	101.206	0.0618	2300.27	0.0006	0.00213
Fe	57	3	He	95.332	0.0584	2270.25	0.0006	0.00213
Fe	57	3	He	89.288	0.0548	2100.25	0.0006	0.00213
Co	59	3	He	0.089	0.0081	300.01	0.0572	0.00297
Co	59	3	He	0.155	0.0118	460.03	0.0572	0.00297
Co	59	3	He	0.103	0.0089	340.02	0.0572	0.00297
Ni	60	3	He	0.666	0.0087	640.04	0.0086	0.002921
Ni	60	3	He	0.857	0.0103	760.05	0.0086	0.002921
Ni	60	3	He	0.68	0.0088	640.03	0.0086	0.002921
Cu	63	3	He	0.793	0.0249	1840.18	0.0257	0.004531
Cu	63	3	He	0.795	0.025	1840.18	0.0257	0.004531
Cu	63	3	He	0.774	0.0244	1780.17	0.0257	0.004531
Zn	66	3	He	0.41	0.0041	300.02	0.0029	0.002877
Zn	66	3	He	0.835	0.0053	390.02	0.0029	0.002877
Zn	66	3	He	0.428	0.0041	300.02	0.0029	0.002877
As	75	3	He	4.527	0.0099	732.03	0.002	0.0006798
As	75	3	He	4.097	0.009	666.02	0.002	0.0006798
As	75	3	He	4.162	0.0092	668.02	0.002	0.0006798
Sr	88	3	He	594.174	5.3471	386499.37	0.009	0.001075
Sr	88	3	He	598.734	5.3882	379669.64	0.009	0.001075
Sr	88	3	He	593.331	5.3396	380744.84	0.009	0.001075
Mo	98	3	He	2.839	0.0646	4670.95	0.0226	0.0005115
Mo	98	3	He	2.743	0.0625	4400.82	0.0226	0.0005115
Mo	98	3	He	2.959	0.0673	4800.99	0.0226	0.0005115
Ag	107	3	He	0.125	0.0064	460.02	0.0487	0.0003023
Ag	107	3	He	0.16	0.0081	570.03	0.0487	0.0003023
Ag	107	3	He	0.21	0.0105	750.06	0.0487	0.0003023
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Cd	111	3	He	0.014	0.0001	6.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Sn	120	3	He	-0.145	0.0154	1110.08	0.0161	0.0177
Sn	120	3	He	-0.156	0.0152	1070.07	0.0161	0.0177
Sn	120	3	He	-0.237	0.0139	990.07	0.0161	0.0177
Sb	121	3	He	0.076	0.0012	90.00	0.0152	8.618E-05
Sb	121	3	He	0.172	0.0027	190.01	0.0152	8.618E-05
Sb	121	3	He	0.105	0.0017	120.01	0.0152	8.618E-05
Ba	137	3	He	206.507	1.0176	73557.18	0.0049	0.0001277
Ba	137	3	He	221.164	1.0899	76795.85	0.0049	0.0001277
Ba	137	3	He	215.8	1.0634	75829.76	0.0049	0.0001277
Tl	205	3	He	0.033	0.001	340.02	0.0249	0.000171
Tl	205	3	He	0.025	0.0008	270.01	0.0249	0.000171
Tl	205	3	He	0.043	0.0012	430.02	0.0249	0.000171
Pb	208	3	He	0.183	0.0076	1470.14	0.0334	0.001456
Pb	208	3	He	0.173	0.0072	1210.11	0.0334	0.001456
Pb	208	3	He	0.166	0.007	1240.11	0.0334	0.001456
U	238	3	He	6.474	0.3195	87859.58	0.0493	0.0001028
U	238	3	He	6.303	0.311	86228.55	0.0493	0.0001028
U	238	3	He	6.372	0.3145	88010.73	0.0493	0.0001028
Sc	45	1	No Gas			2368541.68		
Sc	45	1	No Gas			2369371.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2332204.81		
Ge	72	1	No Gas			1169979.05		
Ge	72	1	No Gas			1172679.67		
Ge	72	1	No Gas			1163698.11		
Sc	45	2	H2			130966.00		
Sc	45	2	H2			132458.80		
Sc	45	2	H2			129592.56		
Ge	72	2	H2			120736.90		
Ge	72	2	H2			120473.71		
Ge	72	2	H2			119979.74		
In	115	2	H2			317577.81		
In	115	2	H2			316530.05		
In	115	2	H2			323743.16		
Sc	45	3	He			37198.41		
Sc	45	3	He			38892.69		
Sc	45	3	He			38321.04		
Ge	72	3	He			73891.38		
Ge	72	3	He			73750.69		
Ge	72	3	He			72916.12		
In	115	3	He			72287.99		
In	115	3	He			70469.18		
In	115	3	He			71313.28		
Tb	159	3	He			339751.56		
Tb	159	3	He			343203.08		
Tb	159	3	He			346496.87		
Bi	209	3	He			275001.60		
Bi	209	3	He			277221.71		
Bi	209	3	He			279868.43		

Quantitation Report

Data File Name	256SMPL.d
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Acq Time	8/14/2023 10:41:30 PM
Sample Name	410-137532-M-5-A PDS
Sample Type	Sample
Comment	F1
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

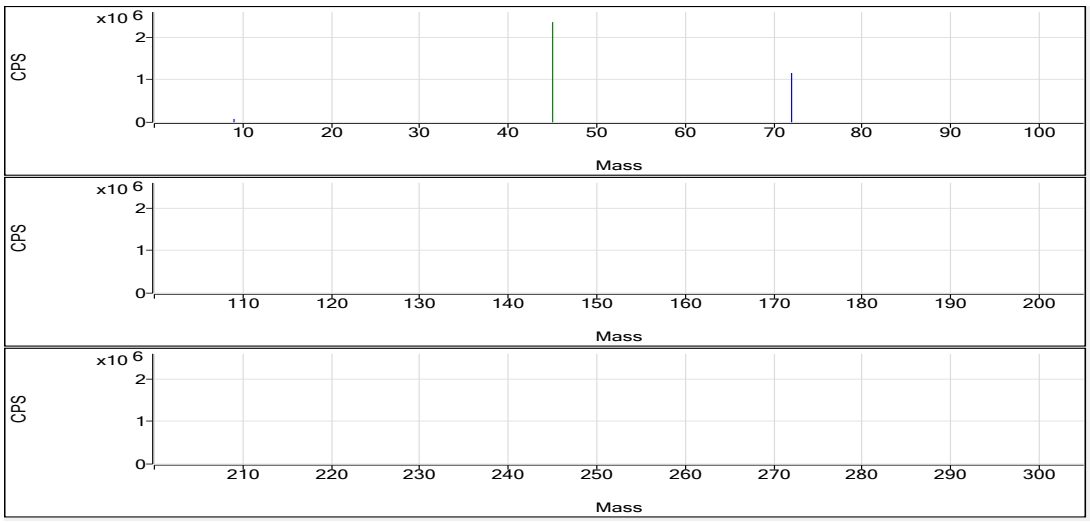
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.649	ppb	0.5	79752.84	0.0338	Pulse	0.5000	3
Se	78	115	H2	96.600	ppb	1.0	5357.45	0.0168	Pulse	1.5000	3
Na	23	45	He	15466.701	ppb	3.6	2191178.20	56.2418	Analog	0.1000	3
Mg	24	45	He	18032.835	ppb	2.9	1281017.64	32.8766	Analog	0.1000	3
Al	27	45	He	4935.169	ppb	2.7	111883.20	2.8713	Pulse	0.1000	3
K	39	45	He	13119.002	ppb	2.2	616659.59	15.8238	Pulse	0.1000	3
Ca	44	45	He	53720.414	ppb	2.4	145729.94	3.7395	Pulse	0.1000	3
Ti	47	45	He	493.355	ppb	0.1	10324.01	0.2648	Pulse	0.1000	3
V	51	45	He	521.113	ppb	2.7	455782.06	11.6970	Pulse	0.5000	3
Cr	52	45	He	499.590	ppb	2.7	571741.36	14.6729	Pulse	0.1000	3
Mn	55	45	He	495.331	ppb	3.1	249940.47	6.4146	Pulse	0.1000	3
Fe	57	45	He	5049.529	ppb	3.3	116151.60	2.9812	Pulse	0.1000	3
Co	59	45	He	490.841	ppb	1.8	1094667.98	28.0880	Pulse	0.1000	3
Ni	60	72	He	492.074	ppb	1.3	306167.34	4.2425	Pulse	0.1000	3
Cu	63	72	He	473.518	ppb	1.2	877874.70	12.1641	Pulse	0.1000	3
Zn	66	72	He	503.265	ppb	1.9	105157.29	1.4571	Pulse	0.1000	3
As	75	72	He	503.204	ppb	0.9	74065.51	1.0263	Pulse	0.5000	3
Sr	88	115	He	645.921	ppb	0.3	401190.92	5.8127	Pulse	0.1000	3
Mo	98	115	He	54.932	ppb	0.3	85651.21	1.2410	Pulse	0.1000	3
Ag	107	115	He	48.039	ppb	0.8	161410.60	2.3387	Pulse	0.1000	3
Cd	111	115	He	53.059	ppb	2.2	19863.48	0.2878	Pulse	0.5000	3
Sn	120	115	He	107.906	ppb	1.7	121479.64	1.7602	Pulse	0.1000	3
Sb	121	115	He	104.733	ppb	1.4	109830.44	1.5913	Pulse	0.1000	3
Ba	137	115	He	736.484	ppb	0.7	250462.81	3.6290	Pulse	0.1000	3
Tl	205	159	He	107.087	ppb	0.9	910593.56	2.6683	Pulse	0.1000	3
Pb	208	159	He	53.313	ppb	1.0	608588.01	1.7834	Pulse	0.1000	3
U	238	209	He	57.665	ppb	1.0	787077.59	2.8450	Pulse	0.1000	3

ISTD Table:

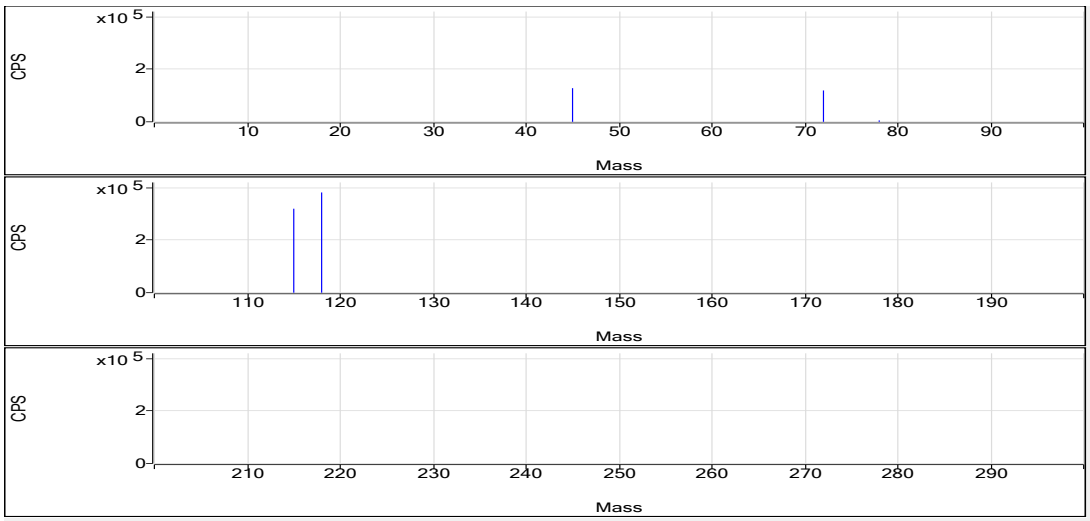
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2359023.04	0.8	98.0	Analog	0.1000	3
No Gas	Ge	72	1161057.82	0.6	99.9	Pulse	0.1000	3
H2	Sc	45	127929.88	1.3	77.8	Pulse	0.1000	3
H2	Ge	72	119274.87	0.5	82.1	Pulse	0.1000	3
H2	In	115	319354.49	0.6	88.7	Pulse	0.1000	3
He	Sc	45	38986.22	2.9	89.1	Pulse	0.1000	3
He	Ge	72	72175.91	1.4	94.3	Pulse	0.1000	3
He	In	115	69018.57	0.6	89.0	Pulse	0.1000	3
He	Tb	159	341284.17	1.3	92.0	Pulse	0.1000	3
He	Bi	209	276665.28	0.7	94.6	Pulse	0.1000	3

No Gas

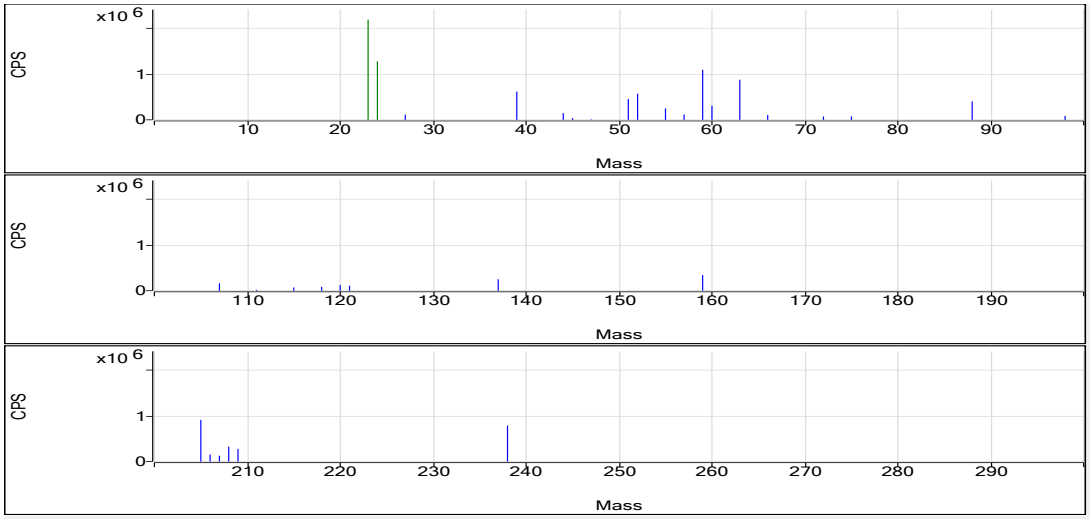


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.508	0.0337	79648.36	0.0007	1.523E-05
Be	9	1	No Gas	45.55	0.0337	80132.69	0.0007	1.523E-05
Be	9	1	No Gas	45.89	0.034	79477.48	0.0007	1.523E-05
Se	78	2	H2	97.297	0.0169	5424.37	0.0002	3.71E-06
Se	78	2	H2	95.49	0.0166	5257.64	0.0002	3.71E-06
Se	78	2	H2	97.014	0.0168	5390.35	0.0002	3.71E-06
Na	23	3	He	14836.61	53.9629	2173972.16	0.0036	0.3007
Na	23	3	He	15700.488	57.0874	2187649.34	0.0036	0.3007
Na	23	3	He	15863.006	57.6752	2211913.09	0.0036	0.3007
Mg	24	3	He	17429.439	31.7766	1280166.62	0.0018	0.003274
Mg	24	3	He	18392.186	33.5317	1284968.57	0.0018	0.003274
Mg	24	3	He	18276.879	33.3215	1277917.72	0.0018	0.003274
Al	27	3	He	4781.504	2.7819	112074.58	0.0006	0.00137
Al	27	3	He	5008.322	2.9138	111661.53	0.0006	0.00137
Al	27	3	He	5015.681	2.9181	111913.48	0.0006	0.00137
K	39	3	He	12789.019	15.4353	621834.72	0.0012	0.378
K	39	3	He	13263.778	15.9943	612918.23	0.0012	0.378
K	39	3	He	13304.207	16.0419	615225.81	0.0012	0.378
Ca	44	3	He	52386.197	3.6467	146914.42	0.0001	0.003203
Ca	44	3	He	54935.926	3.8241	146542.87	0.0001	0.003203
Ca	44	3	He	53839.119	3.7478	143732.52	0.0001	0.003203
Ti	47	3	He	493.161	0.2647	10664.18	0.0005	0
Ti	47	3	He	493.161	0.2647	10143.93	0.0005	0
Ti	47	3	He	493.744	0.265	10163.91	0.0005	0
V	51	3	He	504.727	11.3299	456443.28	0.0224	0.02476
V	51	3	He	531.165	11.9221	456868.50	0.0224	0.02476
V	51	3	He	527.447	11.8389	454034.41	0.0224	0.02476
Cr	52	3	He	483.918	14.2139	572628.08	0.0293	0.04167
Cr	52	3	He	508.439	14.932	572210.93	0.0293	0.04167
Cr	52	3	He	506.412	14.8727	570385.07	0.0293	0.04167
Mn	55	3	He	478.491	6.1968	249645.05	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	499.281	6.4657	247772.98	0.0129	0.006476
Mn	55	3	He	508.221	6.5814	252403.38	0.0129	0.006476
Fe	57	3	He	4859.785	2.8692	115590.71	0.0006	0.00213
Fe	57	3	He	5132.417	3.0301	116115.20	0.0006	0.00213
Fe	57	3	He	5156.387	3.0442	116748.88	0.0006	0.00213
Co	59	3	He	480.671	27.5061	1108123.66	0.0572	0.00297
Co	59	3	He	496.67	28.4216	1089143.89	0.0572	0.00297
Co	59	3	He	495.183	28.3365	1086736.39	0.0572	0.00297
Ni	60	3	He	487.578	4.2037	306646.26	0.0086	0.002921
Ni	60	3	He	489.05	4.2164	305749.72	0.0086	0.002921
Ni	60	3	He	499.594	4.3073	306106.05	0.0086	0.002921
Cu	63	3	He	472.844	12.1467	886057.64	0.0257	0.004531
Cu	63	3	He	468.068	12.0241	871919.05	0.0257	0.004531
Cu	63	3	He	479.643	12.3214	875647.41	0.0257	0.004531
Zn	66	3	He	508.165	1.4712	107319.15	0.0029	0.002877
Zn	66	3	He	491.973	1.4244	103291.11	0.0029	0.002877
Zn	66	3	He	509.657	1.4755	104861.60	0.0029	0.002877
As	75	3	He	499.286	1.0183	74279.36	0.002	0.0006798
As	75	3	He	502.262	1.0243	74279.33	0.002	0.0006798
As	75	3	He	508.064	1.0362	73637.84	0.002	0.0006798
Sr	88	3	He	647.522	5.8271	403603.35	0.009	0.001075
Sr	88	3	He	646.332	5.8164	402758.90	0.009	0.001075
Sr	88	3	He	643.909	5.7946	397210.50	0.009	0.001075
Mo	98	3	He	54.906	1.2404	85911.91	0.0226	0.0005115
Mo	98	3	He	55.133	1.2455	86245.13	0.0226	0.0005115
Mo	98	3	He	54.758	1.237	84796.60	0.0226	0.0005115
Ag	107	3	He	47.836	2.3289	161302.49	0.0487	0.0003023
Ag	107	3	He	47.782	2.3262	161080.81	0.0487	0.0003023
Ag	107	3	He	48.498	2.3611	161848.49	0.0487	0.0003023
Cd	111	3	He	52.475	0.2847	19715.91	0.0054	8.618E-06
Cd	111	3	He	52.296	0.2837	19643.83	0.0054	8.618E-06
Cd	111	3	He	54.406	0.2951	20230.69	0.0054	8.618E-06
Sn	120	3	He	106.162	1.7321	119966.60	0.0161	0.0177
Sn	120	3	He	107.805	1.7586	121772.34	0.0161	0.0177
Sn	120	3	He	109.75	1.79	122699.98	0.0161	0.0177
Sb	121	3	He	104.073	1.5812	109520.38	0.0152	8.618E-05
Sb	121	3	He	106.39	1.6164	111930.60	0.0152	8.618E-05
Sb	121	3	He	103.737	1.5761	108040.34	0.0152	8.618E-05
Ba	137	3	He	730.716	3.6006	249386.01	0.0049	0.0001277
Ba	137	3	He	737.5	3.634	251636.66	0.0049	0.0001277
Ba	137	3	He	741.236	3.6524	250365.76	0.0049	0.0001277
Tl	205	3	He	106.466	2.6529	917353.66	0.0249	0.000171
Tl	205	3	He	108.155	2.6949	908474.13	0.0249	0.000171
Tl	205	3	He	106.638	2.6571	905952.88	0.0249	0.000171
Pb	208	3	He	52.935	1.7707	326169.39	0.0334	0.001456
Pb	208	3	He	53.938	1.8042	323692.09	0.0334	0.001456
Pb	208	3	He	53.068	1.7752	322994.27	0.0334	0.001456
U	238	3	He	58.319	2.8772	789732.80	0.0493	0.0001028
U	238	3	He	57.125	2.8184	784170.22	0.0493	0.0001028
U	238	3	He	57.552	2.8394	787329.75	0.0493	0.0001028
Sc	45	1	No Gas			2363211.68		
Sc	45	1	No Gas			2375375.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2338481.53		
Ge	72	1	No Gas			1153888.42		
Ge	72	1	No Gas			1161957.33		
Ge	72	1	No Gas			1167327.72		
Sc	45	2	H2			128758.32		
Sc	45	2	H2			126002.11		
Sc	45	2	H2			129029.21		
Ge	72	2	H2			119829.71		
Ge	72	2	H2			118730.29		
Ge	72	2	H2			119264.62		
In	115	2	H2			321041.17		
In	115	2	H2			317062.65		
In	115	2	H2			319959.66		
Sc	45	3	He			40286.44		
Sc	45	3	He			38321.04		
Sc	45	3	He			38351.18		
Ge	72	3	He			72946.11		
Ge	72	3	He			72514.18		
Ge	72	3	He			71067.45		
In	115	3	He			69916.37		
In	115	3	He			69906.09		
In	115	3	He			69182.55		
Tb	159	3	He			345798.39		
Tb	159	3	He			337103.90		
Tb	159	3	He			340950.23		
Bi	209	3	He			274475.58		
Bi	209	3	He			278234.59		
Bi	209	3	He			277285.68		

Quantitation Report

Data File Name	257SMPL.d
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Sample Type	Sample
Comment	F1
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

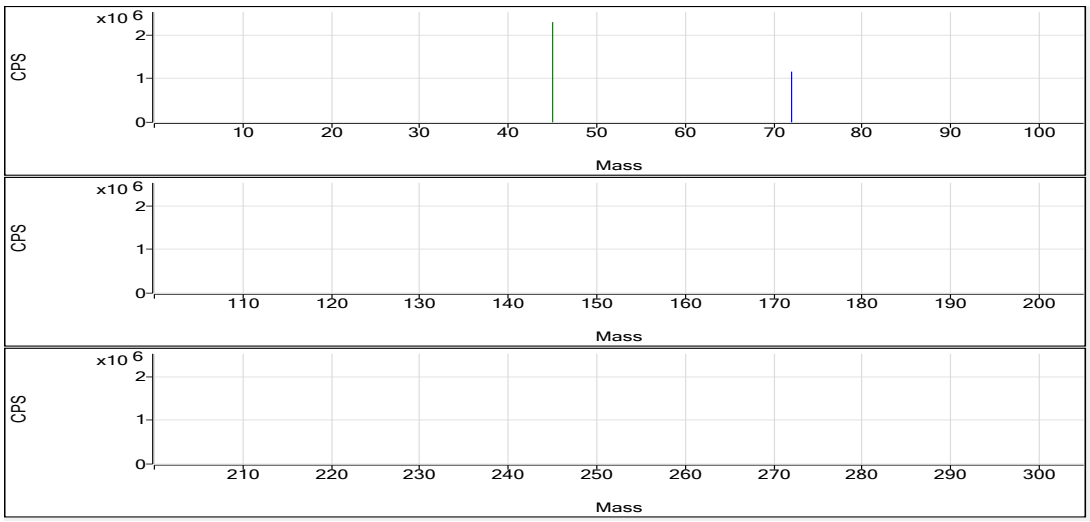
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.027	ppb	14.6	80.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.548	ppb	2.2	31.33	0.0001	Pulse	1.5000	3
Na	23	45	He	2027.179	ppb	0.6	292498.32	7.6327	Pulse	0.1000	3
Mg	24	45	He	2520.124	ppb	0.7	176181.71	4.5974	Pulse	0.1000	3
Al	27	45	He	33.559	ppb	6.8	800.05	0.0209	Pulse	0.1000	3
K	39	45	He	1675.767	ppb	1.7	90084.99	2.3510	Pulse	0.1000	3
Ca	44	45	He	9797.708	ppb	1.8	26237.71	0.6846	Pulse	0.1000	3
Ti	47	45	He	1.302	ppb	78.9	26.67	0.0007	Pulse	0.1000	3
V	51	45	He	3.417	ppb	0.7	3881.87	0.1013	Pulse	0.5000	3
Cr	52	45	He	0.148	ppb	78.0	1763.51	0.0460	Pulse	0.1000	3
Mn	55	45	He	0.870	ppb	24.9	680.04	0.0177	Pulse	0.1000	3
Fe	57	45	He	21.146	ppb	23.1	560.03	0.0146	Pulse	0.1000	3
Co	59	45	He	0.185	ppb	15.3	520.03	0.0136	Pulse	0.1000	3
Ni	60	72	He	0.287	ppb	53.8	386.68	0.0054	Pulse	0.1000	3
Cu	63	72	He	0.291	ppb	21.8	860.06	0.0120	Pulse	0.1000	3
Zn	66	72	He	0.761	ppb	60.0	363.35	0.0051	Pulse	0.1000	3
As	75	72	He	0.971	ppb	21.9	190.67	0.0027	Pulse	0.5000	3
Sr	88	115	He	119.387	ppb	1.8	74804.48	1.0753	Pulse	0.1000	3
Mo	98	115	He	0.645	ppb	18.2	1050.08	0.0151	Pulse	0.1000	3
Ag	107	115	He	0.050	ppb	30.6	190.01	0.0027	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	57.6	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.008	ppb	2078.1	1240.11	0.0178	Pulse	0.1000	3
Sb	121	115	He	0.121	ppb	47.2	133.34	0.0019	Pulse	0.1000	3
Ba	137	115	He	43.050	ppb	1.9	14768.50	0.2122	Pulse	0.1000	3
Tl	205	159	He	0.225	ppb	1.4	1973.57	0.0058	Pulse	0.1000	3
Pb	208	159	He	0.054	ppb	17.7	1113.40	0.0033	Pulse	0.1000	3
U	238	209	He	1.331	ppb	1.3	18236.83	0.0658	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2291938.82	0.7	95.2	Analog	0.1000	3
No Gas	Ge	72	1158518.71	0.3	99.7	Pulse	0.1000	3
H2	Sc	45	129207.77	0.8	78.6	Pulse	0.1000	3
H2	Ge	72	120784.16	0.5	83.1	Pulse	0.1000	3
H2	In	115	317128.18	0.1	88.1	Pulse	0.1000	3
He	Sc	45	38321.22	0.9	87.6	Pulse	0.1000	3
He	Ge	72	71656.71	0.6	93.7	Pulse	0.1000	3
He	In	115	69579.11	1.4	89.7	Pulse	0.1000	3
He	Tb	159	342094.03	0.7	92.2	Pulse	0.1000	3
He	Bi	209	277223.19	0.2	94.8	Pulse	0.1000	3

No Gas



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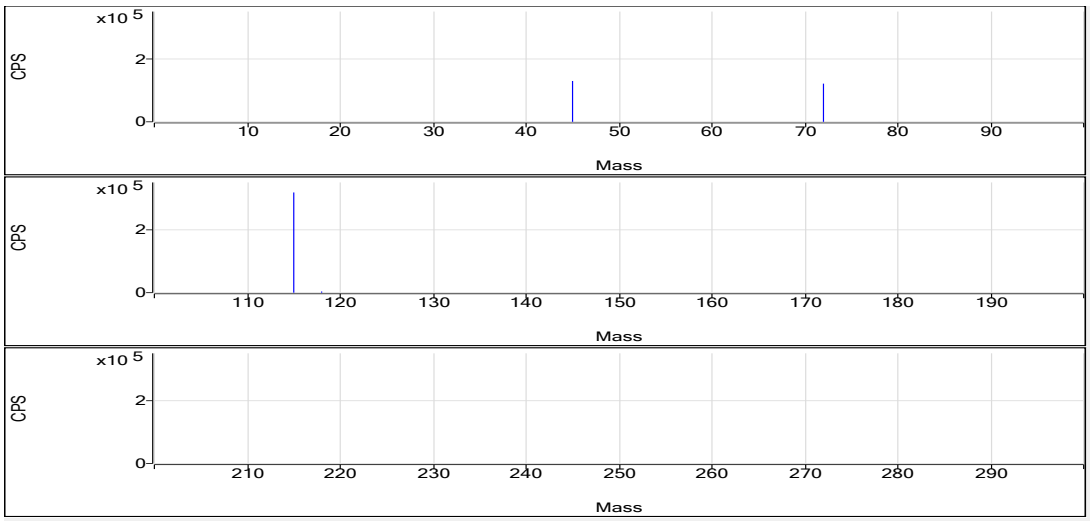
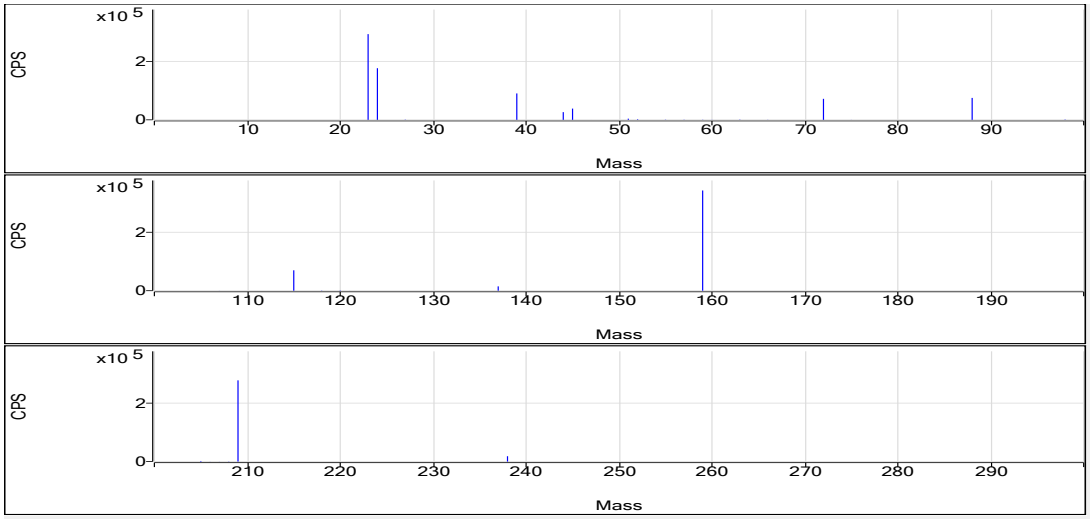


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.027	0	80.00	0.0007	1.523E-05
Be	9	1	No Gas	0.031	0	86.00	0.0007	1.523E-05
Be	9	1	No Gas	0.023	0	74.00	0.0007	1.523E-05
Se	78	2	H2	0.548	0.0001	31.33	0.0002	3.71E-06
Se	78	2	H2	0.535	0.0001	30.67	0.0002	3.71E-06
Se	78	2	H2	0.56	0.0001	32.00	0.0002	3.71E-06
Na	23	3	He	2020.471	7.6085	288591.77	0.0036	0.3007
Na	23	3	He	2041.656	7.6851	295579.60	0.0036	0.3007
Na	23	3	He	2019.411	7.6046	293323.59	0.0036	0.3007
Mg	24	3	He	2505.33	4.5704	173357.63	0.0018	0.003274
Mg	24	3	He	2540.72	4.6349	178266.34	0.0018	0.003274
Mg	24	3	He	2514.321	4.5868	176921.15	0.0018	0.003274
Al	27	3	He	36.182	0.0224	850.06	0.0006	0.00137
Al	27	3	He	32.073	0.02	770.06	0.0006	0.00137
Al	27	3	He	32.42	0.0202	780.04	0.0006	0.00137
K	39	3	He	1708.634	2.3897	90641.80	0.0012	0.378
K	39	3	He	1665.721	2.3392	89967.71	0.0012	0.378
K	39	3	He	1652.946	2.3241	89645.46	0.0012	0.378
Ca	44	3	He	9685.624	0.6769	25673.31	0.0001	0.003203
Ca	44	3	He	10004.444	0.699	26885.65	0.0001	0.003203
Ca	44	3	He	9703.055	0.6781	26154.18	0.0001	0.003203
Ti	47	3	He	2.456	0.0013	50.00	0.0005	0
Ti	47	3	He	0.484	0.0003	10.00	0.0005	0
Ti	47	3	He	0.966	0.0005	20.00	0.0005	0
V	51	3	He	3.403	0.101	3830.52	0.0224	0.02476
V	51	3	He	3.445	0.1019	3920.56	0.0224	0.02476
V	51	3	He	3.402	0.101	3894.54	0.0224	0.02476
Cr	52	3	He	0.081	0.044	1670.14	0.0293	0.04167
Cr	52	3	He	0.282	0.0499	1920.22	0.0293	0.04167
Cr	52	3	He	0.082	0.0441	1700.17	0.0293	0.04167
Mn	55	3	He	0.681	0.0153	580.03	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.107	0.0208	800.06	0.0129	0.006476
Mn	55	3	He	0.822	0.0171	660.03	0.0129	0.006476
Fe	57	3	He	19.182	0.0134	510.03	0.0006	0.00213
Fe	57	3	He	17.545	0.0125	480.03	0.0006	0.00213
Fe	57	3	He	26.713	0.0179	690.04	0.0006	0.00213
Co	59	3	He	0.202	0.0145	550.03	0.0572	0.00297
Co	59	3	He	0.153	0.0117	450.02	0.0572	0.00297
Co	59	3	He	0.202	0.0145	560.03	0.0572	0.00297
Ni	60	3	He	0.327	0.0057	410.02	0.0086	0.002921
Ni	60	3	He	0.417	0.0065	470.02	0.0086	0.002921
Ni	60	3	He	0.116	0.0039	280.01	0.0086	0.002921
Cu	63	3	He	0.363	0.0139	990.07	0.0257	0.004531
Cu	63	3	He	0.266	0.0114	820.06	0.0257	0.004531
Cu	63	3	He	0.244	0.0108	770.05	0.0257	0.004531
Zn	66	3	He	1.135	0.0062	440.02	0.0029	0.002877
Zn	66	3	He	0.252	0.0036	260.01	0.0029	0.002877
Zn	66	3	He	0.896	0.0055	390.02	0.0029	0.002877
As	75	3	He	0.847	0.0024	172.00	0.002	0.0006798
As	75	3	He	1.217	0.0032	228.00	0.002	0.0006798
As	75	3	He	0.849	0.0024	172.00	0.002	0.0006798
Sr	88	3	He	120.868	1.0886	75491.62	0.009	0.001075
Sr	88	3	He	120.307	1.0835	74465.60	0.009	0.001075
Sr	88	3	He	116.986	1.0537	74456.21	0.009	0.001075
Mo	98	3	He	0.584	0.0137	950.07	0.0226	0.0005115
Mo	98	3	He	0.57	0.0134	920.07	0.0226	0.0005115
Mo	98	3	He	0.78	0.0181	1280.11	0.0226	0.0005115
Ag	107	3	He	0.032	0.0019	130.01	0.0487	0.0003023
Ag	107	3	He	0.06	0.0032	220.01	0.0487	0.0003023
Ag	107	3	He	0.058	0.0031	220.01	0.0487	0.0003023
Cd	111	3	He	0.014	0.0001	6.00	0.0054	8.618E-06
Cd	111	3	He	0.015	0.0001	6.00	0.0054	8.618E-06
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Sn	120	3	He	0.19	0.0208	1440.12	0.0161	0.0177
Sn	120	3	He	-0.087	0.0163	1120.09	0.0161	0.0177
Sn	120	3	He	-0.08	0.0164	1160.11	0.0161	0.0177
Sb	121	3	He	0.08	0.0013	90.00	0.0152	8.618E-05
Sb	121	3	He	0.186	0.0029	200.01	0.0152	8.618E-05
Sb	121	3	He	0.097	0.0016	110.01	0.0152	8.618E-05
Ba	137	3	He	42.111	0.2076	14398.03	0.0049	0.0001277
Ba	137	3	He	43.528	0.2146	14748.54	0.0049	0.0001277
Ba	137	3	He	43.511	0.2145	15158.92	0.0049	0.0001277
Tl	205	3	He	0.227	0.0058	2000.24	0.0249	0.000171
Tl	205	3	He	0.221	0.0057	1950.22	0.0249	0.000171
Tl	205	3	He	0.226	0.0058	1970.24	0.0249	0.000171
Pb	208	3	He	0.053	0.0032	710.05	0.0334	0.001456
Pb	208	3	He	0.064	0.0036	710.05	0.0334	0.001456
Pb	208	3	He	0.045	0.0029	640.04	0.0334	0.001456
U	238	3	He	1.311	0.0648	17933.04	0.0493	0.0001028
U	238	3	He	1.339	0.0662	18383.57	0.0493	0.0001028
U	238	3	He	1.344	0.0664	18393.87	0.0493	0.0001028
Sc	45	1	No Gas			2294765.90		
Sc	45	1	No Gas			2273511.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2307539.50		
Ge	72	1	No Gas			1157213.19		
Ge	72	1	No Gas			1156390.22		
Ge	72	1	No Gas			1161952.72		
Sc	45	2	H2			130401.94		
Sc	45	2	H2			128788.23		
Sc	45	2	H2			128433.14		
Ge	72	2	H2			121059.64		
Ge	72	2	H2			120040.88		
Ge	72	2	H2			121251.95		
In	115	2	H2			316747.71		
In	115	2	H2			317440.78		
In	115	2	H2			317196.05		
Sc	45	3	He			37930.40		
Sc	45	3	He			38461.50		
Sc	45	3	He			38571.76		
Ge	72	3	He			71479.93		
Ge	72	3	He			72142.25		
Ge	72	3	He			71347.96		
In	115	3	He			69353.39		
In	115	3	He			68730.31		
In	115	3	He			70670.47		
Tb	159	3	He			343762.73		
Tb	159	3	He			343310.85		
Tb	159	3	He			339208.51		
Bi	209	3	He			276783.92		
Bi	209	3	He			277888.92		
Bi	209	3	He			276996.73		

Quantitation Report

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Acq Time	8/14/2023 10:45:39 PM
Sample Name	410-137532-J-5-D DU
Sample Type	Sample
Comment	F1
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

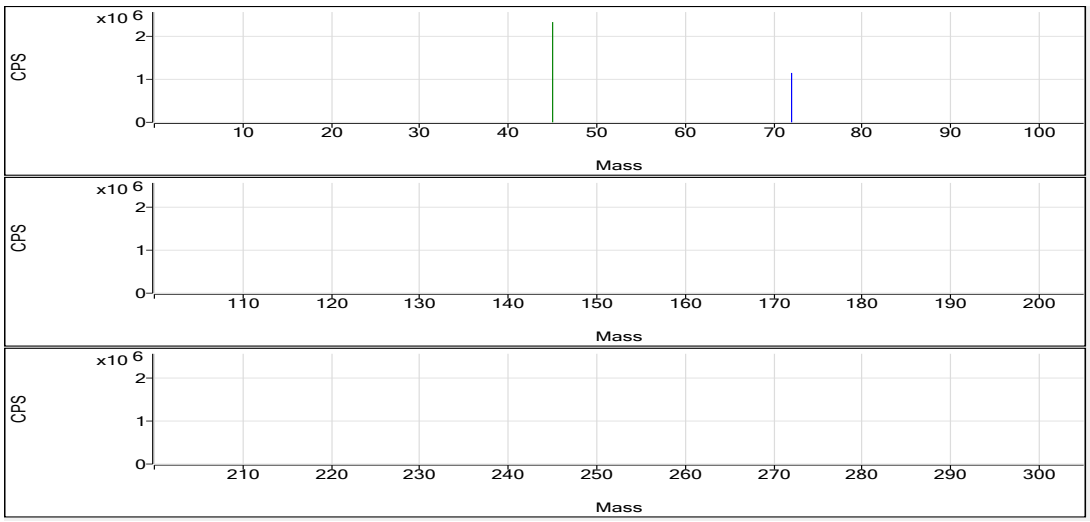
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	15.6	48.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	2.407	ppb	2.0	133.34	0.0004	Pulse	1.5000	3
Na	23	45	He	10905.625	ppb	2.9	1504926.12	39.7450	Analog	0.1000	3
Mg	24	45	He	12900.164	ppb	2.3	890638.32	23.5199	Pulse	0.1000	3
Al	27	45	He	165.613	ppb	5.3	3697.25	0.0977	Pulse	0.1000	3
K	39	45	He	8712.884	ppb	2.8	402740.99	10.6362	Pulse	0.1000	3
Ca	44	45	He	51274.099	ppb	2.3	135163.26	3.5694	Pulse	0.1000	3
Ti	47	45	He	4.281	ppb	28.4	86.67	0.0023	Pulse	0.1000	3
V	51	45	He	17.703	ppb	2.3	15954.13	0.4213	Pulse	0.5000	3
Cr	52	45	He	0.698	ppb	11.7	2353.61	0.0621	Pulse	0.1000	3
Mn	55	45	He	4.538	ppb	3.3	2470.29	0.0652	Pulse	0.1000	3
Fe	57	45	He	92.668	ppb	15.0	2146.90	0.0568	Pulse	0.1000	3
Co	59	45	He	0.112	ppb	24.3	356.68	0.0094	Pulse	0.1000	3
Ni	60	72	He	0.677	ppb	15.1	630.04	0.0088	Pulse	0.1000	3
Cu	63	72	He	0.796	ppb	12.1	1796.86	0.0250	Pulse	0.1000	3
Zn	66	72	He	0.676	ppb	55.7	346.68	0.0048	Pulse	0.1000	3
As	75	72	He	4.766	ppb	2.3	747.36	0.0104	Pulse	0.5000	3
Sr	88	115	He	611.814	ppb	1.6	377207.99	5.5059	Pulse	0.1000	3
Mo	98	115	He	2.844	ppb	5.3	4434.17	0.0647	Pulse	0.1000	3
Ag	107	115	He	0.134	ppb	10.1	466.69	0.0068	Pulse	0.1000	3
Cd	111	115	He	0.016	ppb	49.7	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.075	ppb	N/A	1130.09	0.0165	Pulse	0.1000	3
Sb	121	115	He	0.119	ppb	35.3	130.01	0.0019	Pulse	0.1000	3
Ba	137	115	He	221.251	ppb	1.1	74704.15	1.0903	Pulse	0.1000	3
Tl	205	159	He	0.063	ppb	16.9	596.70	0.0017	Pulse	0.1000	3
Pb	208	159	He	0.205	ppb	3.1	2833.55	0.0083	Pulse	0.1000	3
U	238	209	He	6.388	ppb	0.3	87366.31	0.3153	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2344978.51	1.7	97.4	Analog	0.1000	3
No Gas	Ge	72	1155236.68	0.7	99.4	Pulse	0.1000	3
H2	Sc	45	129308.85	0.8	78.7	Pulse	0.1000	3
H2	Ge	72	119127.00	1.1	82.0	Pulse	0.1000	3
H2	In	115	316337.33	1.2	87.9	Pulse	0.1000	3
He	Sc	45	37880.35	2.3	86.6	Pulse	0.1000	3
He	Ge	72	71894.88	1.5	94.0	Pulse	0.1000	3
He	In	115	68517.08	1.0	88.4	Pulse	0.1000	3
He	Tb	159	341247.77	0.4	92.0	Pulse	0.1000	3
He	Bi	209	277129.87	0.6	94.8	Pulse	0.1000	3

No Gas



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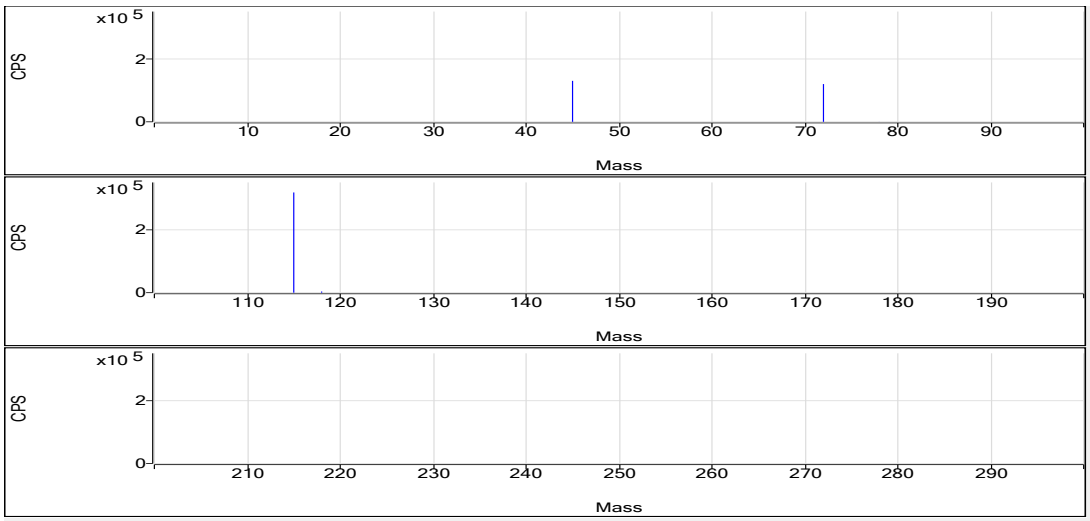
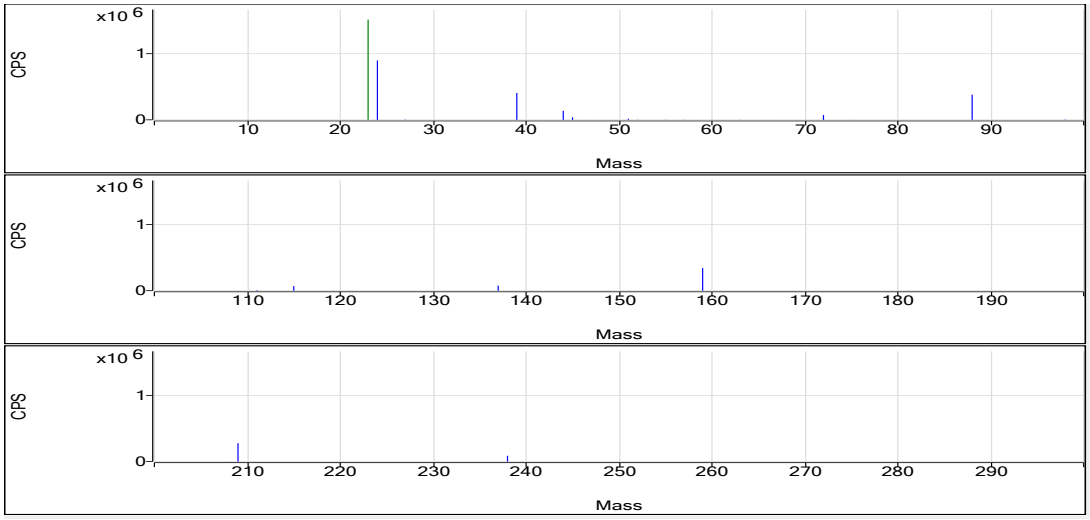


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	48.00	0.0007	1.523E-05
Be	9	1	No Gas	0.009	0	50.00	0.0007	1.523E-05
Be	9	1	No Gas	0.007	0	48.00	0.0007	1.523E-05
Se	78	2	H2	2.398	0.0004	134.67	0.0002	3.71E-06
Se	78	2	H2	2.458	0.0004	134.67	0.0002	3.71E-06
Se	78	2	H2	2.363	0.0004	130.67	0.0002	3.71E-06
Na	23	3	He	11135.632	40.5769	1523627.32	0.0036	0.3007
Na	23	3	He	10542.014	38.4298	1493504.04	0.0036	0.3007
Na	23	3	He	11039.228	40.2282	1497647.01	0.0036	0.3007
Mg	24	3	He	12969.779	23.6468	887916.55	0.0018	0.003274
Mg	24	3	He	12581.385	22.9388	891471.94	0.0018	0.003274
Mg	24	3	He	13149.327	23.9741	892526.47	0.0018	0.003274
Al	27	3	He	166.201	0.098	3680.59	0.0006	0.00137
Al	27	3	He	156.518	0.0924	3590.54	0.0006	0.00137
Al	27	3	He	174.12	0.1026	3820.63	0.0006	0.00137
K	39	3	He	8847.474	10.7947	405331.79	0.0012	0.378
K	39	3	He	8431.543	10.305	400484.56	0.0012	0.378
K	39	3	He	8859.635	10.809	402406.63	0.0012	0.378
Ca	44	3	He	51685.841	3.598	135103.13	0.0001	0.003203
Ca	44	3	He	49958.799	3.4779	135162.73	0.0001	0.003203
Ca	44	3	He	52177.656	3.6322	135223.93	0.0001	0.003203
Ti	47	3	He	4.962	0.0027	100.00	0.0005	0
Ti	47	3	He	2.876	0.0015	60.00	0.0005	0
Ti	47	3	He	5.004	0.0027	100.00	0.0005	0
V	51	3	He	18.1	0.4302	16153.02	0.0224	0.02476
V	51	3	He	17.29	0.412	16012.86	0.0224	0.02476
V	51	3	He	17.718	0.4216	15696.51	0.0224	0.02476
Cr	52	3	He	0.733	0.0631	2370.27	0.0293	0.04167
Cr	52	3	He	0.756	0.0638	2480.29	0.0293	0.04167
Cr	52	3	He	0.604	0.0594	2210.26	0.0293	0.04167
Mn	55	3	He	4.441	0.0639	2400.28	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4.711	0.0674	2620.33	0.0129	0.006476
Mn	55	3	He	4.462	0.0642	2390.27	0.0129	0.006476
Fe	57	3	He	97.067	0.0594	2230.26	0.0006	0.00213
Fe	57	3	He	77.085	0.0476	1850.18	0.0006	0.00213
Fe	57	3	He	103.852	0.0634	2360.27	0.0006	0.00213
Co	59	3	He	0.083	0.0077	290.01	0.0572	0.00297
Co	59	3	He	0.137	0.0108	420.02	0.0572	0.00297
Co	59	3	He	0.117	0.0097	360.02	0.0572	0.00297
Ni	60	3	He	0.586	0.008	570.03	0.0086	0.002921
Ni	60	3	He	0.658	0.0086	610.03	0.0086	0.002921
Ni	60	3	He	0.788	0.0097	710.05	0.0086	0.002921
Cu	63	3	He	0.722	0.0231	1650.16	0.0257	0.004531
Cu	63	3	He	0.761	0.0241	1710.18	0.0257	0.004531
Cu	63	3	He	0.905	0.0278	2030.24	0.0257	0.004531
Zn	66	3	He	0.553	0.0045	320.02	0.0029	0.002877
Zn	66	3	He	1.099	0.0061	430.02	0.0029	0.002877
Zn	66	3	He	0.377	0.004	290.01	0.0029	0.002877
As	75	3	He	4.811	0.0105	750.02	0.002	0.0006798
As	75	3	He	4.64	0.0101	720.02	0.002	0.0006798
As	75	3	He	4.847	0.0106	772.03	0.002	0.0006798
Sr	88	3	He	607.128	5.4637	376869.88	0.009	0.001075
Sr	88	3	He	605.427	5.4484	374929.92	0.009	0.001075
Sr	88	3	He	622.887	5.6055	379824.17	0.009	0.001075
Mo	98	3	He	2.873	0.0654	4510.89	0.0226	0.0005115
Mo	98	3	He	2.681	0.061	4200.73	0.0226	0.0005115
Mo	98	3	He	2.978	0.0678	4590.88	0.0226	0.0005115
Ag	107	3	He	0.119	0.0061	420.02	0.0487	0.0003023
Ag	107	3	He	0.137	0.007	480.02	0.0487	0.0003023
Ag	107	3	He	0.145	0.0074	500.03	0.0487	0.0003023
Cd	111	3	He	0.025	0.0001	10.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.015	0.0001	6.00	0.0054	8.618E-06
Sn	120	3	He	-0.091	0.0162	1120.09	0.0161	0.0177
Sn	120	3	He	-0.007	0.0176	1210.10	0.0161	0.0177
Sn	120	3	He	-0.128	0.0156	1060.08	0.0161	0.0177
Sb	121	3	He	0.147	0.0023	160.01	0.0152	8.618E-05
Sb	121	3	He	0.071	0.0012	80.00	0.0152	8.618E-05
Sb	121	3	He	0.14	0.0022	150.01	0.0152	8.618E-05
Ba	137	3	He	219.037	1.0794	74452.98	0.0049	0.0001277
Ba	137	3	He	224.001	1.1038	75960.89	0.0049	0.0001277
Ba	137	3	He	220.714	1.0877	73698.57	0.0049	0.0001277
Tl	205	3	He	0.06	0.0017	570.03	0.0249	0.000171
Tl	205	3	He	0.055	0.0015	520.03	0.0249	0.000171
Tl	205	3	He	0.075	0.002	700.05	0.0249	0.000171
Pb	208	3	He	0.203	0.0083	1350.11	0.0334	0.001456
Pb	208	3	He	0.199	0.0081	1520.13	0.0334	0.001456
Pb	208	3	He	0.212	0.0085	1400.14	0.0334	0.001456
U	238	3	He	6.374	0.3146	87285.99	0.0493	0.0001028
U	238	3	He	6.38	0.3148	87688.09	0.0493	0.0001028
U	238	3	He	6.41	0.3164	87124.85	0.0493	0.0001028
Sc	45	1	No Gas			2373054.50		
Sc	45	1	No Gas			2297943.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2363937.93		
Ge	72	1	No Gas			1157689.83		
Ge	72	1	No Gas			1146707.64		
Ge	72	1	No Gas			1161312.56		
Sc	45	2	H2			129523.82		
Sc	45	2	H2			128131.38		
Sc	45	2	H2			130271.34		
Ge	72	2	H2			119749.53		
Ge	72	2	H2			117681.60		
Ge	72	2	H2			119949.88		
In	115	2	H2			320572.36		
In	115	2	H2			312788.00		
In	115	2	H2			315651.62		
Sc	45	3	He			37549.14		
Sc	45	3	He			38863.13		
Sc	45	3	He			37228.78		
Ge	72	3	He			71529.15		
Ge	72	3	He			71038.05		
Ge	72	3	He			73117.43		
In	115	3	He			68982.33		
In	115	3	He			68820.66		
In	115	3	He			67765.96		
Tb	159	3	He			341658.28		
Tb	159	3	He			339862.18		
Tb	159	3	He			342222.85		
Bi	209	3	He			277479.80		
Bi	209	3	He			278510.29		
Bi	209	3	He			275399.51		

Quantitation Report

Data File Name	259SMPL.d
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Sample Name	410-137532-M-5-B MS
Sample Type	Sample
Comment	F1
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

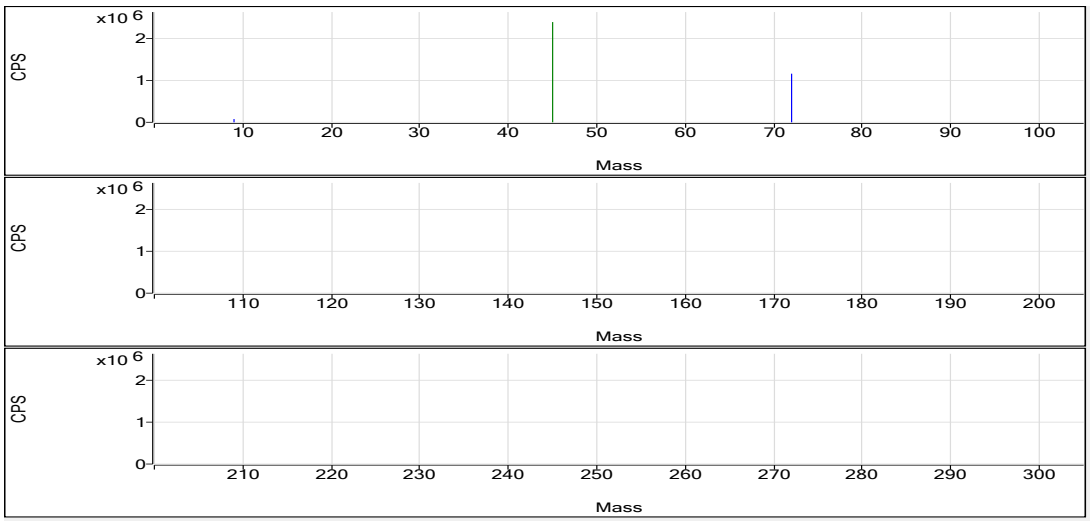
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	43.560	ppb	0.9	76758.00	0.0323	Pulse	0.5000	3
Se	78	115	H2	96.277	ppb	1.8	5338.56	0.0167	Pulse	1.5000	3
Na	23	45	He	15747.314	ppb	2.9	2198846.58	57.2568	Analog	0.1000	3
Mg	24	45	He	18929.956	ppb	1.7	1325482.79	34.5120	Analog	0.1000	3
Al	27	45	He	5066.731	ppb	1.7	113216.09	2.9478	Pulse	0.1000	3
K	39	45	He	13621.882	ppb	2.6	630410.94	16.4159	Pulse	0.1000	3
Ca	44	45	He	56717.964	ppb	1.6	151632.93	3.9480	Pulse	0.1000	3
Ti	47	45	He	502.011	ppb	0.7	10350.70	0.2695	Pulse	0.1000	3
V	51	45	He	521.073	ppb	2.1	449185.06	11.6961	Pulse	0.5000	3
Cr	52	45	He	500.694	ppb	2.9	564687.31	14.7052	Pulse	0.1000	3
Mn	55	45	He	493.172	ppb	2.2	245273.53	6.3867	Pulse	0.1000	3
Fe	57	45	He	5113.497	ppb	1.9	115943.15	3.0189	Pulse	0.1000	3
Co	59	45	He	488.420	ppb	1.6	1073451.99	27.9495	Pulse	0.1000	3
Ni	60	72	He	485.695	ppb	0.5	299367.62	4.1875	Pulse	0.1000	3
Cu	63	72	He	470.268	ppb	0.3	863680.43	12.0806	Pulse	0.1000	3
Zn	66	72	He	496.598	ppb	1.2	102793.44	1.4378	Pulse	0.1000	3
As	75	72	He	495.066	ppb	1.4	72180.03	1.0097	Pulse	0.5000	3
Sr	88	115	He	665.933	ppb	1.7	411714.25	5.9928	Pulse	0.1000	3
Mo	98	115	He	55.475	ppb	3.1	86082.91	1.2532	Pulse	0.1000	3
Ag	107	115	He	51.973	ppb	2.3	173816.66	2.5303	Pulse	0.1000	3
Cd	111	115	He	52.255	ppb	2.4	19472.94	0.2835	Pulse	0.5000	3
Sn	120	115	He	107.183	ppb	0.9	120138.24	1.7485	Pulse	0.1000	3
Sb	121	115	He	102.218	ppb	2.5	106685.35	1.5531	Pulse	0.1000	3
Ba	137	115	He	732.063	ppb	1.4	247831.85	3.6072	Pulse	0.1000	3
Tl	205	159	He	104.750	ppb	0.9	888827.12	2.6101	Pulse	0.1000	3
Pb	208	159	He	52.462	ppb	1.2	597601.09	1.7549	Pulse	0.1000	3
U	238	209	He	57.491	ppb	1.3	774226.18	2.8364	Pulse	0.1000	3

ISTD Table:

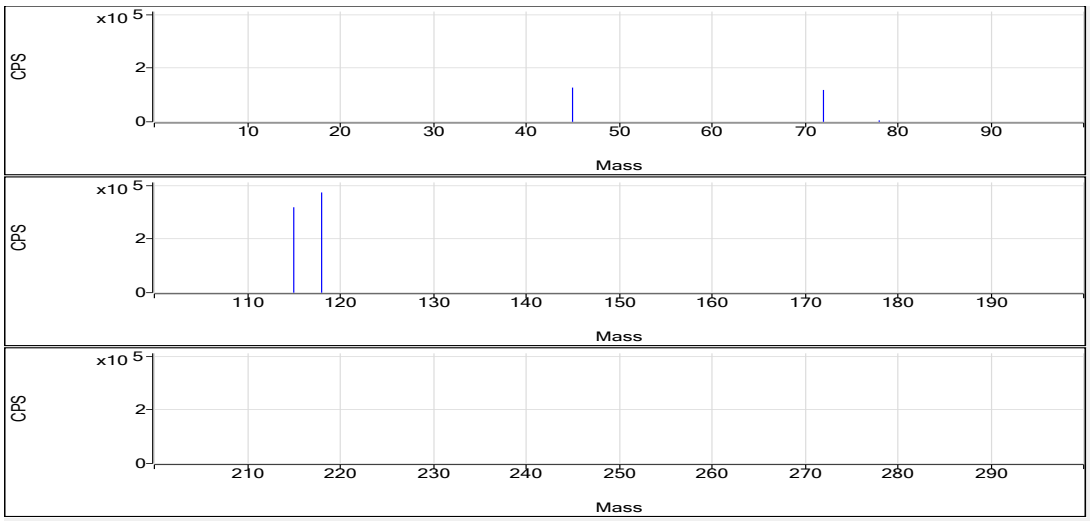
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2379261.94	0.6	98.8	Analog	0.1000	3
No Gas	Ge	72	1153769.07	0.2	99.3	Pulse	0.1000	3
H2	Sc	45	127929.75	1.0	77.8	Pulse	0.1000	3
H2	Ge	72	119127.51	0.4	82.0	Pulse	0.1000	3
H2	In	115	319323.18	0.5	88.7	Pulse	0.1000	3
He	Sc	45	38415.18	2.0	87.8	Pulse	0.1000	3
He	Ge	72	71492.56	0.8	93.4	Pulse	0.1000	3
He	In	115	68715.77	1.9	88.6	Pulse	0.1000	3
He	Tb	159	340548.25	0.7	91.8	Pulse	0.1000	3
He	Bi	209	272966.90	0.4	93.4	Pulse	0.1000	3

No Gas

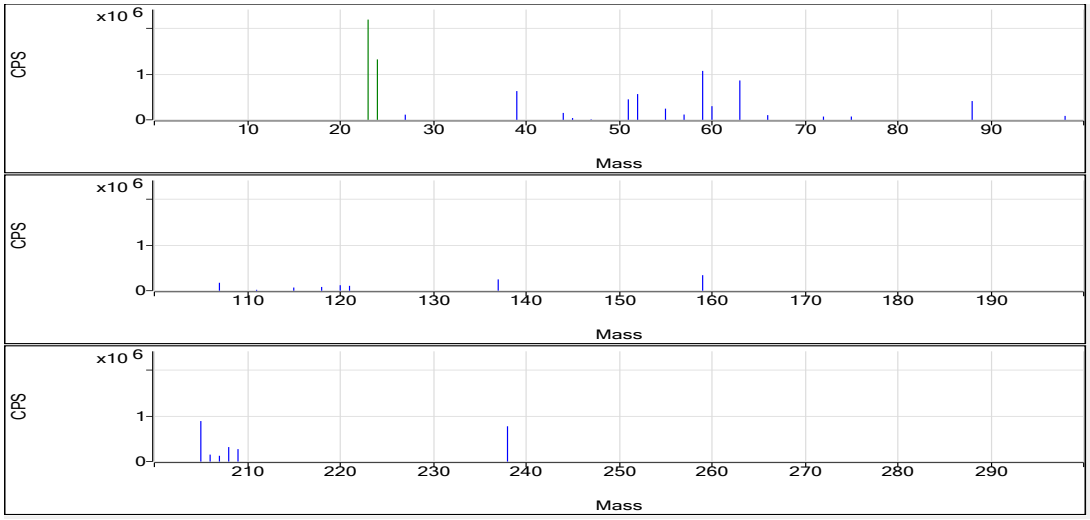


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	43.338	0.0321	76071.85	0.0007	1.523E-05
Be	9	1	No Gas	44.02	0.0326	77304.20	0.0007	1.523E-05
Be	9	1	No Gas	43.322	0.0321	76897.95	0.0007	1.523E-05
Se	78	2	H2	95.631	0.0166	5333.67	0.0002	3.71E-06
Se	78	2	H2	94.978	0.0165	5262.31	0.0002	3.71E-06
Se	78	2	H2	98.222	0.0171	5419.70	0.0002	3.71E-06
Na	23	3	He	16255.298	59.0941	2238517.00	0.0036	0.3007
Na	23	3	He	15363.093	55.8671	2195255.28	0.0036	0.3007
Na	23	3	He	15623.551	56.8091	2162767.47	0.0036	0.3007
Mg	24	3	He	19096.878	34.8163	1318860.76	0.0018	0.003274
Mg	24	3	He	18549.107	33.8177	1328842.17	0.0018	0.003274
Mg	24	3	He	19143.884	34.902	1328745.45	0.0018	0.003274
Al	27	3	He	5151.693	2.9972	113536.27	0.0006	0.00137
Al	27	3	He	4976.326	2.8952	113766.16	0.0006	0.00137
Al	27	3	He	5072.172	2.951	112345.85	0.0006	0.00137
K	39	3	He	13882.148	16.7223	633451.71	0.0012	0.378
K	39	3	He	13225.852	15.9496	626729.29	0.0012	0.378
K	39	3	He	13757.645	16.5758	631051.83	0.0012	0.378
Ca	44	3	He	57254.539	3.9853	150967.14	0.0001	0.003203
Ca	44	3	He	55698.937	3.8772	152349.76	0.0001	0.003203
Ca	44	3	He	57200.416	3.9816	151581.88	0.0001	0.003203
Ti	47	3	He	501.354	0.2691	10193.91	0.0005	0
Ti	47	3	He	498.975	0.2678	10524.18	0.0005	0
Ti	47	3	He	505.705	0.2714	10334.01	0.0005	0
V	51	3	He	531.158	11.922	451610.78	0.0224	0.02476
V	51	3	He	509.246	11.4312	449179.69	0.0224	0.02476
V	51	3	He	522.815	11.7351	446764.72	0.0224	0.02476
Cr	52	3	He	510.055	14.9794	567427.14	0.0293	0.04167
Cr	52	3	He	483.992	14.2161	558610.19	0.0293	0.04167
Cr	52	3	He	508.036	14.9202	568024.60	0.0293	0.04167
Mn	55	3	He	499.553	6.4692	245057.85	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	480.536	6.2232	244536.07	0.0129	0.006476
Mn	55	3	He	499.427	6.4676	246226.66	0.0129	0.006476
Fe	57	3	He	5170.899	3.0528	115640.49	0.0006	0.00213
Fe	57	3	He	5003.882	2.9542	116084.35	0.0006	0.00213
Fe	57	3	He	5165.71	3.0497	116104.61	0.0006	0.00213
Co	59	3	He	494.429	28.2933	1071766.08	0.0572	0.00297
Co	59	3	He	479.306	27.428	1077764.05	0.0572	0.00297
Co	59	3	He	491.526	28.1273	1070825.84	0.0572	0.00297
Ni	60	3	He	485	4.1815	299269.51	0.0086	0.002921
Ni	60	3	He	483.482	4.1684	300178.18	0.0086	0.002921
Ni	60	3	He	488.604	4.2126	298655.17	0.0086	0.002921
Cu	63	3	He	471.489	12.112	866847.72	0.0257	0.004531
Cu	63	3	He	470.188	12.0785	869800.30	0.0257	0.004531
Cu	63	3	He	469.128	12.0513	854393.27	0.0257	0.004531
Zn	66	3	He	490.202	1.4193	101579.16	0.0029	0.002877
Zn	66	3	He	502.472	1.4548	104760.48	0.0029	0.002877
Zn	66	3	He	497.12	1.4393	102040.69	0.0029	0.002877
As	75	3	He	498.519	1.0167	72765.70	0.002	0.0006798
As	75	3	He	487.345	0.9939	71575.68	0.002	0.0006798
As	75	3	He	499.333	1.0184	72198.70	0.002	0.0006798
Sr	88	3	He	671.543	6.0433	413325.85	0.009	0.001075
Sr	88	3	He	673.072	6.057	409361.13	0.009	0.001075
Sr	88	3	He	653.184	5.8781	412455.78	0.009	0.001075
Mo	98	3	He	55.773	1.2599	86173.53	0.0226	0.0005115
Mo	98	3	He	57.034	1.2884	87078.98	0.0226	0.0005115
Mo	98	3	He	53.619	1.2113	84996.22	0.0226	0.0005115
Ag	107	3	He	52.145	2.5386	173627.46	0.0487	0.0003023
Ag	107	3	He	53.084	2.5843	174660.92	0.0487	0.0003023
Ag	107	3	He	50.69	2.4678	173161.60	0.0487	0.0003023
Cd	111	3	He	53.168	0.2884	19725.94	0.0054	8.618E-06
Cd	111	3	He	52.756	0.2862	19341.45	0.0054	8.618E-06
Cd	111	3	He	50.84	0.2758	19351.42	0.0054	8.618E-06
Sn	120	3	He	107.661	1.7562	120117.44	0.0161	0.0177
Sn	120	3	He	107.865	1.7595	118918.09	0.0161	0.0177
Sn	120	3	He	106.025	1.7298	121379.19	0.0161	0.0177
Sb	121	3	He	102.804	1.562	106829.58	0.0152	8.618E-05
Sb	121	3	He	104.409	1.5863	107212.51	0.0152	8.618E-05
Sb	121	3	He	99.44	1.5109	106013.96	0.0152	8.618E-05
Ba	137	3	He	729.975	3.5969	246009.76	0.0049	0.0001277
Ba	137	3	He	743.108	3.6616	247469.96	0.0049	0.0001277
Ba	137	3	He	723.106	3.5631	250015.82	0.0049	0.0001277
Tl	205	3	He	105.644	2.6324	890919.60	0.0249	0.000171
Tl	205	3	He	103.855	2.5878	888212.56	0.0249	0.000171
Tl	205	3	He	104.752	2.6101	887349.21	0.0249	0.000171
Pb	208	3	He	53.173	1.7787	321985.39	0.0334	0.001456
Pb	208	3	He	51.924	1.7369	316687.75	0.0334	0.001456
Pb	208	3	He	52.29	1.7492	314886.05	0.0334	0.001456
U	238	3	He	58.313	2.877	783203.97	0.0493	0.0001028
U	238	3	He	56.9	2.8073	769699.36	0.0493	0.0001028
U	238	3	He	57.259	2.825	769775.22	0.0493	0.0001028
Sc	45	1	No Gas			2370032.93		
Sc	45	1	No Gas			2371122.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2396630.59		
Ge	72	1	No Gas			1155265.22		
Ge	72	1	No Gas			1151392.56		
Ge	72	1	No Gas			1154649.44		
Sc	45	2	H2			127547.24		
Sc	45	2	H2			129402.47		
Sc	45	2	H2			126839.53		
Ge	72	2	H2			118680.94		
Ge	72	2	H2			119588.33		
Ge	72	2	H2			119113.25		
In	115	2	H2			321172.50		
In	115	2	H2			319052.28		
In	115	2	H2			317744.76		
Sc	45	3	He			37880.55		
Sc	45	3	He			39294.24		
Sc	45	3	He			38070.76		
Ge	72	3	He			71569.51		
Ge	72	3	He			72012.03		
Ge	72	3	He			70896.15		
In	115	3	He			69042.89		
In	115	3	He			68217.47		
In	115	3	He			70810.83		
Tb	159	3	He			338449.02		
Tb	159	3	He			343232.61		
Tb	159	3	He			339963.12		
Bi	209	3	He			272230.43		
Bi	209	3	He			274180.93		
Bi	209	3	He			272489.33		

Quantitation Report

Data File Name	260SMPL.d
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Sample Type	Sample
Comment	F1
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

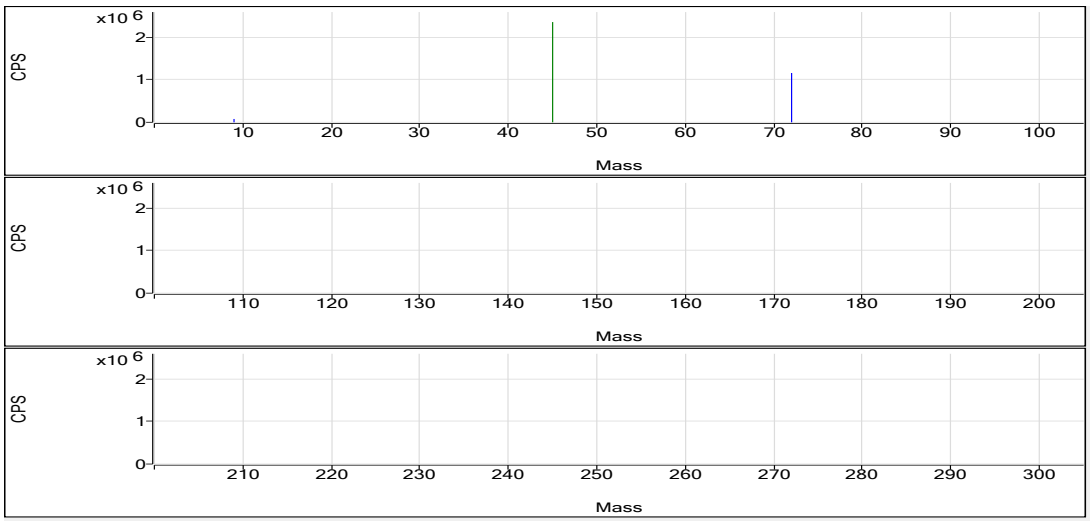
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	44.786	ppb	1.0	78203.43	0.0332	Pulse	0.5000	3
Se	78	115	H2	97.205	ppb	0.4	5364.57	0.0169	Pulse	1.5000	3
Na	23	45	He	15608.953	ppb	1.5	2201201.53	56.7563	Analog	0.1000	3
Mg	24	45	He	18519.223	ppb	2.0	1309655.71	33.7633	Analog	0.1000	3
Al	27	45	He	4898.327	ppb	1.1	110533.58	2.8499	Pulse	0.1000	3
K	39	45	He	13377.593	ppb	0.3	625539.19	16.1283	Pulse	0.1000	3
Ca	44	45	He	55662.819	ppb	0.9	150280.14	3.8746	Pulse	0.1000	3
Ti	47	45	He	490.344	ppb	3.0	10207.29	0.2632	Pulse	0.1000	3
V	51	45	He	514.488	ppb	1.0	447902.33	11.5486	Pulse	0.5000	3
Cr	52	45	He	495.438	ppb	1.0	564359.59	14.5513	Pulse	0.1000	3
Mn	55	45	He	482.176	ppb	0.8	242186.39	6.2444	Pulse	0.1000	3
Fe	57	45	He	4974.837	ppb	0.6	113920.68	2.9371	Pulse	0.1000	3
Co	59	45	He	483.996	ppb	0.7	1074188.13	27.6964	Pulse	0.1000	3
Ni	60	72	He	491.622	ppb	1.3	298860.39	4.2386	Pulse	0.1000	3
Cu	63	72	He	477.152	ppb	1.8	864212.20	12.2574	Pulse	0.1000	3
Zn	66	72	He	504.270	ppb	3.3	102920.94	1.4600	Pulse	0.1000	3
As	75	72	He	504.249	ppb	1.7	72508.31	1.0284	Pulse	0.5000	3
Sr	88	115	He	676.543	ppb	2.0	413515.55	6.0883	Pulse	0.1000	3
Mo	98	115	He	55.598	ppb	1.6	85312.12	1.2560	Pulse	0.1000	3
Ag	107	115	He	52.444	ppb	1.9	173411.78	2.5532	Pulse	0.1000	3
Cd	111	115	He	53.721	ppb	2.1	19792.71	0.2914	Pulse	0.5000	3
Sn	120	115	He	108.109	ppb	3.1	119761.36	1.7635	Pulse	0.1000	3
Sb	121	115	He	103.149	ppb	1.4	106451.16	1.5672	Pulse	0.1000	3
Ba	137	115	He	744.472	ppb	2.5	249137.36	3.6684	Pulse	0.1000	3
Tl	205	159	He	106.099	ppb	1.0	898077.90	2.6437	Pulse	0.1000	3
Pb	208	159	He	52.728	ppb	1.0	599171.64	1.7638	Pulse	0.1000	3
U	238	209	He	57.664	ppb	0.7	776376.29	2.8450	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2357933.71	1.4	97.9	Analog	0.1000	3
No Gas	Ge	72	1159518.50	0.2	99.8	Pulse	0.1000	3
H2	Sc	45	128286.13	1.3	78.0	Pulse	0.1000	3
H2	Ge	72	118327.52	1.2	81.4	Pulse	0.1000	3
H2	In	115	317815.50	1.9	88.3	Pulse	0.1000	3
He	Sc	45	38785.79	0.7	88.6	Pulse	0.1000	3
He	Ge	72	70518.05	1.5	92.2	Pulse	0.1000	3
He	In	115	67936.02	1.9	87.6	Pulse	0.1000	3
He	Tb	159	339712.08	0.4	91.6	Pulse	0.1000	3
He	Bi	209	272901.98	0.5	93.4	Pulse	0.1000	3

No Gas



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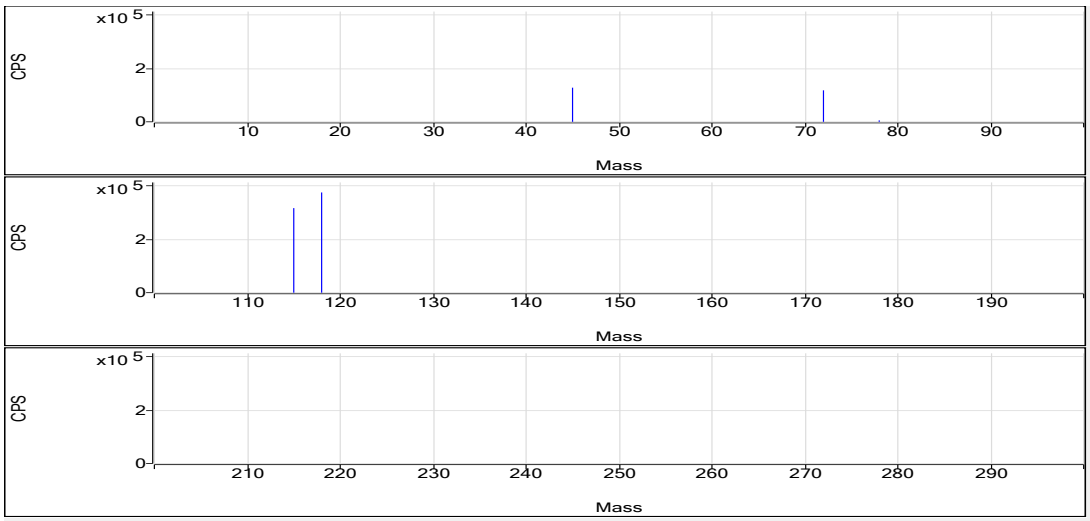
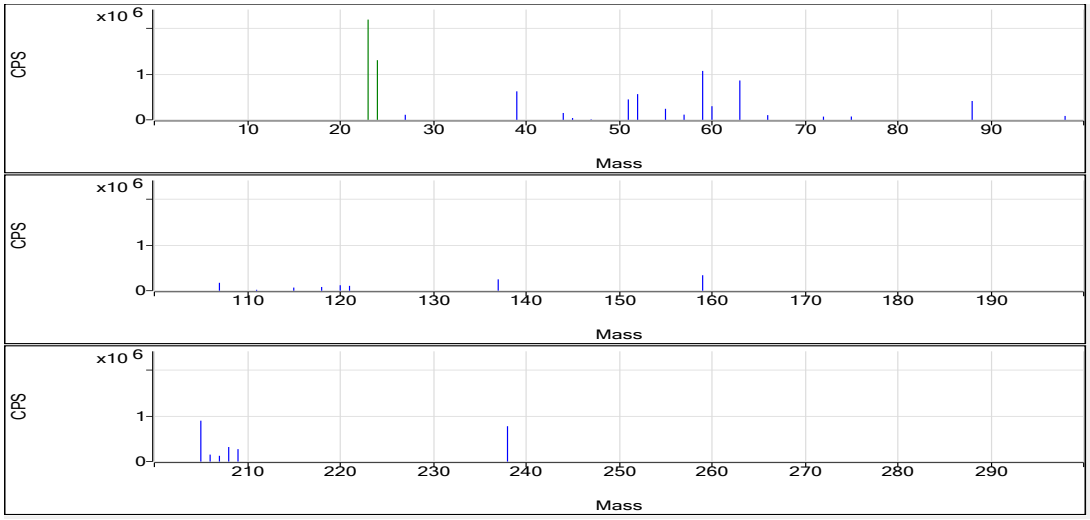


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.311	0.0336	77893.25	0.0007	1.523E-05
Be	9	1	No Gas	44.568	0.033	78715.28	0.0007	1.523E-05
Be	9	1	No Gas	44.478	0.0329	78001.77	0.0007	1.523E-05
Se	78	2	H2	96.931	0.0168	5457.05	0.0002	3.71E-06
Se	78	2	H2	97.015	0.0168	5337.00	0.0002	3.71E-06
Se	78	2	H2	97.671	0.017	5299.66	0.0002	3.71E-06
Na	23	3	He	15353.046	55.8308	2179811.69	0.0036	0.3007
Na	23	3	He	15784.873	57.3926	2209131.22	0.0036	0.3007
Na	23	3	He	15688.94	57.0457	2214661.69	0.0036	0.3007
Mg	24	3	He	18789.47	34.2559	1337460.29	0.0018	0.003274
Mg	24	3	He	18097.216	32.9939	1269988.26	0.0018	0.003274
Mg	24	3	He	18670.984	34.0399	1321518.57	0.0018	0.003274
Al	27	3	He	4851.28	2.8225	110200.20	0.0006	0.00137
Al	27	3	He	4886.21	2.8428	109425.03	0.0006	0.00137
Al	27	3	He	4957.492	2.8843	111975.51	0.0006	0.00137
K	39	3	He	13335.4	16.0786	627760.97	0.0012	0.378
K	39	3	He	13424.349	16.1834	622922.26	0.0012	0.378
K	39	3	He	13373.029	16.1229	625934.33	0.0012	0.378
Ca	44	3	He	55943.023	3.8941	152039.26	0.0001	0.003203
Ca	44	3	He	55960.07	3.8953	149936.70	0.0001	0.003203
Ca	44	3	He	55085.363	3.8345	148864.46	0.0001	0.003203
Ti	47	3	He	487.863	0.2619	10224.06	0.0005	0
Ti	47	3	He	505.987	0.2716	10454.06	0.0005	0
Ti	47	3	He	477.183	0.2561	9943.75	0.0005	0
V	51	3	He	511.725	11.4867	448477.75	0.0224	0.02476
V	51	3	He	520.371	11.6804	449594.91	0.0224	0.02476
V	51	3	He	511.369	11.4787	445634.34	0.0224	0.02476
Cr	52	3	He	493.339	14.4898	565729.05	0.0293	0.04167
Cr	52	3	He	501.354	14.7246	566770.89	0.0293	0.04167
Cr	52	3	He	491.621	14.4395	560578.82	0.0293	0.04167
Mn	55	3	He	478.056	6.1911	241721.42	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	485.264	6.2844	241895.19	0.0129	0.006476
Mn	55	3	He	483.207	6.2578	242942.57	0.0129	0.006476
Fe	57	3	He	5009.811	2.9577	115479.29	0.0006	0.00213
Fe	57	3	He	4951.592	2.9234	112525.58	0.0006	0.00213
Fe	57	3	He	4963.107	2.9302	113757.17	0.0006	0.00213
Co	59	3	He	480.949	27.522	1074548.19	0.0572	0.00297
Co	59	3	He	487.957	27.923	1074801.23	0.0572	0.00297
Co	59	3	He	483.082	27.6441	1073214.98	0.0572	0.00297
Ni	60	3	He	495.329	4.2705	299633.49	0.0086	0.002921
Ni	60	3	He	495.185	4.2693	297654.12	0.0086	0.002921
Ni	60	3	He	484.354	4.176	299293.57	0.0086	0.002921
Cu	63	3	He	479.863	12.327	864902.72	0.0257	0.004531
Cu	63	3	He	484.252	12.4397	867297.72	0.0257	0.004531
Cu	63	3	He	467.34	12.0054	860436.16	0.0257	0.004531
Zn	66	3	He	508.035	1.4708	103198.79	0.0029	0.002877
Zn	66	3	He	518.623	1.5014	104680.02	0.0029	0.002877
Zn	66	3	He	486.152	1.4076	100884.01	0.0029	0.002877
As	75	3	He	507.405	1.0348	72606.75	0.002	0.0006798
As	75	3	He	510.831	1.0418	72635.01	0.002	0.0006798
As	75	3	He	494.511	1.0085	72283.17	0.002	0.0006798
Sr	88	3	He	691.884	6.2263	414007.92	0.009	0.001075
Sr	88	3	He	671.585	6.0436	416128.12	0.009	0.001075
Sr	88	3	He	666.16	5.9948	410410.62	0.009	0.001075
Mo	98	3	He	56.577	1.2781	84987.10	0.0226	0.0005115
Mo	98	3	He	54.928	1.2409	85439.52	0.0226	0.0005115
Mo	98	3	He	55.289	1.249	85509.74	0.0226	0.0005115
Ag	107	3	He	53.604	2.6097	173525.10	0.0487	0.0003023
Ag	107	3	He	51.882	2.5258	173913.38	0.0487	0.0003023
Ag	107	3	He	51.845	2.524	172796.85	0.0487	0.0003023
Cd	111	3	He	54.993	0.2983	19836.07	0.0054	8.618E-06
Cd	111	3	He	53.172	0.2884	19860.14	0.0054	8.618E-06
Cd	111	3	He	52.998	0.2875	19681.92	0.0054	8.618E-06
Sn	120	3	He	111.926	1.8251	121358.50	0.0161	0.0177
Sn	120	3	He	106.945	1.7447	120128.11	0.0161	0.0177
Sn	120	3	He	105.457	1.7207	117797.46	0.0161	0.0177
Sb	121	3	He	104.767	1.5918	105843.40	0.0152	8.618E-05
Sb	121	3	He	102.216	1.553	106931.52	0.0152	8.618E-05
Sb	121	3	He	102.464	1.5568	106578.55	0.0152	8.618E-05
Ba	137	3	He	766.164	3.7752	251029.10	0.0049	0.0001277
Ba	137	3	He	734.7	3.6202	249265.25	0.0049	0.0001277
Ba	137	3	He	732.553	3.6096	247117.73	0.0049	0.0001277
Tl	205	3	He	105.033	2.6172	890512.88	0.0249	0.000171
Tl	205	3	He	107.106	2.6688	902322.33	0.0249	0.000171
Tl	205	3	He	106.157	2.6451	901398.50	0.0249	0.000171
Pb	208	3	He	52.697	1.7628	320074.23	0.0334	0.001456
Pb	208	3	He	53.285	1.7824	320353.76	0.0334	0.001456
Pb	208	3	He	52.203	1.7463	317806.23	0.0334	0.001456
U	238	3	He	57.587	2.8412	777083.27	0.0493	0.0001028
U	238	3	He	57.321	2.828	774490.93	0.0493	0.0001028
U	238	3	He	58.084	2.8657	777554.68	0.0493	0.0001028
Sc	45	1	No Gas			2321143.09		
Sc	45	1	No Gas			2384738.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2367919.18		
Ge	72	1	No Gas			1156497.01		
Ge	72	1	No Gas			1160082.72		
Ge	72	1	No Gas			1161975.76		
Sc	45	2	H2			129039.22		
Sc	45	2	H2			126426.97		
Sc	45	2	H2			129392.21		
Ge	72	2	H2			119950.65		
Ge	72	2	H2			117238.51		
Ge	72	2	H2			117793.39		
In	115	2	H2			324196.54		
In	115	2	H2			316788.61		
In	115	2	H2			312461.34		
Sc	45	3	He			39043.20		
Sc	45	3	He			38491.55		
Sc	45	3	He			38822.62		
Ge	72	3	He			70163.31		
Ge	72	3	He			69720.15		
Ge	72	3	He			71670.69		
In	115	3	He			67133.14		
In	115	3	He			69493.31		
In	115	3	He			69091.90		
Tb	159	3	He			340259.99		
Tb	159	3	He			338101.52		
Tb	159	3	He			340774.72		
Bi	209	3	He			273508.10		
Bi	209	3	He			273864.96		
Bi	209	3	He			271332.87		

Quantitation Report

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Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

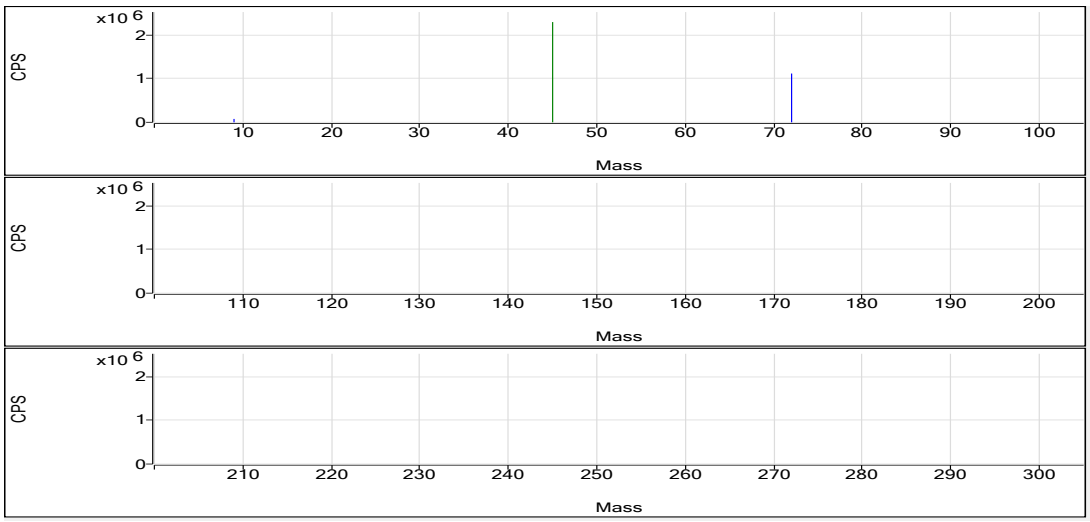
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.390	ppb	1.6	76899.97	0.0336	Pulse	0.5000	3
Se	78	115	H2	47.756	ppb	0.3	2598.69	0.0083	Pulse	1.5000	3
Na	23	45	He	4893.212	ppb	1.5	690068.82	17.9988	Pulse	0.1000	3
Mg	24	45	He	4915.404	ppb	2.1	343634.28	8.9639	Pulse	0.1000	3
Al	27	45	He	4715.350	ppb	2.2	105174.31	2.7435	Pulse	0.1000	3
K	39	45	He	4791.280	ppb	2.1	230748.12	6.0191	Pulse	0.1000	3
Ca	44	45	He	4595.657	ppb	3.4	12379.12	0.3228	Pulse	0.1000	3
Ti	47	45	He	4801.227	ppb	2.0	98795.38	2.5771	Pulse	0.1000	3
V	51	45	He	496.489	ppb	1.6	427297.28	11.1454	Pulse	0.5000	3
Cr	52	45	He	496.826	ppb	1.4	559448.83	14.5919	Pulse	0.1000	3
Mn	55	45	He	483.111	ppb	1.6	239865.40	6.2565	Pulse	0.1000	3
Fe	57	45	He	4921.257	ppb	1.1	111401.54	2.9055	Pulse	0.1000	3
Co	59	45	He	490.276	ppb	1.8	1075590.27	28.0557	Pulse	0.1000	3
Ni	60	72	He	524.630	ppb	1.7	304978.71	4.5230	Pulse	0.1000	3
Cu	63	72	He	499.081	ppb	0.6	864508.58	12.8205	Pulse	0.1000	3
Zn	66	72	He	522.196	ppb	1.8	101937.14	1.5118	Pulse	0.1000	3
As	75	72	He	510.917	ppb	1.2	70260.55	1.0420	Pulse	0.5000	3
Sr	88	115	He	48.407	ppb	2.1	30259.85	0.4366	Pulse	0.1000	3
Mo	98	115	He	51.814	ppb	1.8	81134.07	1.1706	Pulse	0.1000	3
Ag	107	115	He	52.974	ppb	1.2	178761.68	2.5790	Pulse	0.1000	3
Cd	111	115	He	51.750	ppb	1.8	19456.22	0.2807	Pulse	0.5000	3
Sn	120	115	He	51.559	ppb	3.0	58926.12	0.8503	Pulse	0.1000	3
Sb	121	115	He	50.888	ppb	0.7	53597.69	0.7732	Pulse	0.1000	3
Ba	137	115	He	499.254	ppb	2.2	170493.16	2.4601	Pulse	0.1000	3
Tl	205	159	He	52.391	ppb	1.0	443057.09	1.3055	Pulse	0.1000	3
Pb	208	159	He	52.411	ppb	0.9	594988.68	1.7532	Pulse	0.1000	3
U	238	209	He	50.947	ppb	1.1	682428.25	2.5135	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2288026.74	1.9	95.0	Analog	0.1000	3
No Gas	Ge	72	1113056.75	0.2	95.8	Pulse	0.1000	3
H2	Sc	45	127855.73	0.8	77.8	Pulse	0.1000	3
H2	Ge	72	112641.79	0.4	77.5	Pulse	0.1000	3
H2	In	115	313289.73	0.8	87.1	Pulse	0.1000	3
He	Sc	45	38347.90	2.4	87.6	Pulse	0.1000	3
He	Ge	72	67433.23	0.6	88.1	Pulse	0.1000	3
He	In	115	69322.34	1.9	89.4	Pulse	0.1000	3
He	Tb	159	339376.78	0.5	91.5	Pulse	0.1000	3
He	Bi	209	271514.86	1.0	92.9	Pulse	0.1000	3

No Gas



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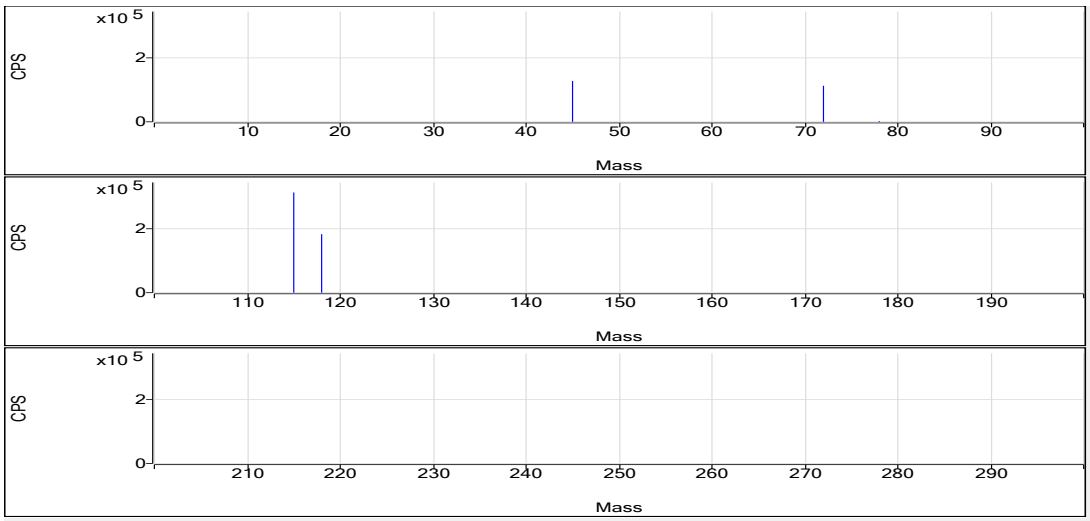
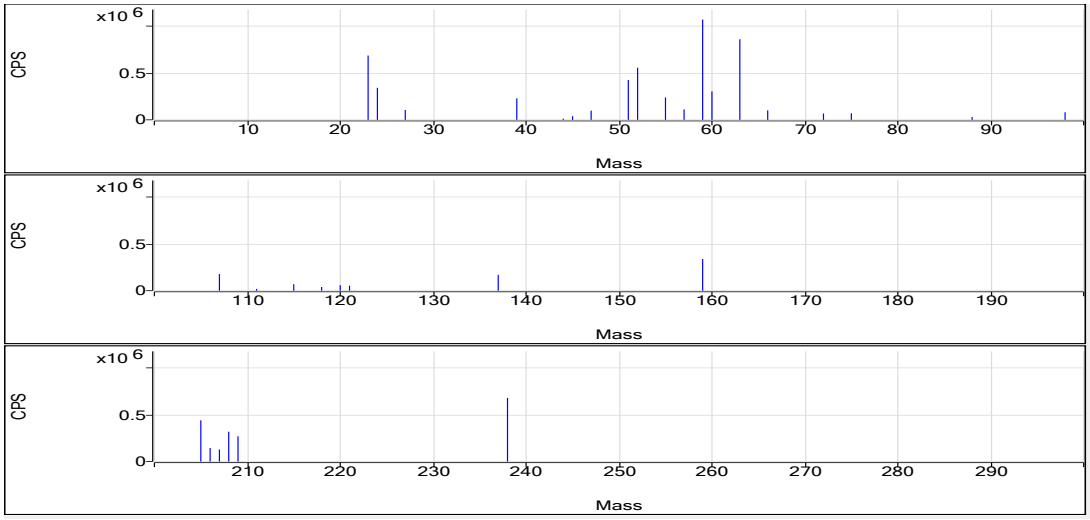


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	44.588	0.033	77094.87	0.0007	1.523E-05
Be	9	1	No Gas	45.624	0.0338	77062.88	0.0007	1.523E-05
Be	9	1	No Gas	45.958	0.034	76542.15	0.0007	1.523E-05
Se	78	2	H2	47.668	0.0083	2616.91	0.0002	3.71E-06
Se	78	2	H2	47.908	0.0083	2590.91	0.0002	3.71E-06
Se	78	2	H2	47.69	0.0083	2588.24	0.0002	3.71E-06
Na	23	3	He	4809.23	17.6951	693882.10	0.0036	0.3007
Na	23	3	He	4921.848	18.1024	695518.43	0.0036	0.3007
Na	23	3	He	4948.559	18.199	680805.93	0.0036	0.3007
Mg	24	3	He	4830.527	8.8092	345437.22	0.0018	0.003274
Mg	24	3	He	4883.537	8.9058	342173.59	0.0018	0.003274
Mg	24	3	He	5032.147	9.1767	343292.03	0.0018	0.003274
Al	27	3	He	4597.023	2.6747	104882.43	0.0006	0.00137
Al	27	3	He	4762.628	2.771	106464.33	0.0006	0.00137
Al	27	3	He	4786.398	2.7848	104176.16	0.0006	0.00137
K	39	3	He	4704.021	5.9163	231999.74	0.0012	0.378
K	39	3	He	4767.836	5.9915	230200.97	0.0012	0.378
K	39	3	He	4901.983	6.1494	230043.65	0.0012	0.378
Ca	44	3	He	4671.45	0.3281	12866.26	0.0001	0.003203
Ca	44	3	He	4416.58	0.3104	11925.33	0.0001	0.003203
Ca	44	3	He	4698.942	0.33	12345.77	0.0001	0.003203
Ti	47	3	He	4718.132	2.5325	99307.94	0.0005	0
Ti	47	3	He	4776.911	2.5641	98514.51	0.0005	0
Ti	47	3	He	4908.636	2.6348	98563.70	0.0005	0
V	51	3	He	489.638	10.992	431032.66	0.0224	0.02476
V	51	3	He	494.552	11.1021	426556.03	0.0224	0.02476
V	51	3	He	505.277	11.3423	424303.16	0.0224	0.02476
Cr	52	3	He	490.9	14.4184	565393.43	0.0293	0.04167
Cr	52	3	He	495.131	14.5423	558734.72	0.0293	0.04167
Cr	52	3	He	504.446	14.8151	554218.35	0.0293	0.04167
Mn	55	3	He	475.505	6.1581	241480.58	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	483.201	6.2577	240428.82	0.0129	0.006476
Mn	55	3	He	490.625	6.3537	237686.81	0.0129	0.006476
Fe	57	3	He	4863.933	2.8717	112607.70	0.0006	0.00213
Fe	57	3	He	4934.022	2.913	111922.16	0.0006	0.00213
Fe	57	3	He	4965.816	2.9318	109674.77	0.0006	0.00213
Co	59	3	He	480.821	27.5147	1078943.03	0.0572	0.00297
Co	59	3	He	492.24	28.1681	1082257.09	0.0572	0.00297
Co	59	3	He	497.767	28.4843	1065570.69	0.0572	0.00297
Ni	60	3	He	534.584	4.6087	308822.93	0.0086	0.002921
Ni	60	3	He	520.757	4.4896	302775.31	0.0086	0.002921
Ni	60	3	He	518.551	4.4706	303337.89	0.0086	0.002921
Cu	63	3	He	500.987	12.8694	862359.75	0.0257	0.004531
Cu	63	3	He	500.459	12.8559	866993.19	0.0257	0.004531
Cu	63	3	He	495.797	12.7362	864172.80	0.0257	0.004531
Zn	66	3	He	525.086	1.5201	101859.74	0.0029	0.002877
Zn	66	3	He	529.579	1.5331	103390.53	0.0029	0.002877
Zn	66	3	He	511.922	1.4821	100561.14	0.0029	0.002877
As	75	3	He	517.389	1.0552	70705.43	0.002	0.0006798
As	75	3	He	510.731	1.0416	70245.07	0.002	0.0006798
As	75	3	He	504.63	1.0292	69831.14	0.002	0.0006798
Sr	88	3	He	47.24	0.4261	30153.13	0.009	0.001075
Sr	88	3	He	49.059	0.4425	30573.91	0.009	0.001075
Sr	88	3	He	48.922	0.4412	30052.50	0.009	0.001075
Mo	98	3	He	50.852	1.1488	81295.01	0.0226	0.0005115
Mo	98	3	He	52.724	1.1911	82301.01	0.0226	0.0005115
Mo	98	3	He	51.867	1.1718	79806.19	0.0226	0.0005115
Ag	107	3	He	52.324	2.5474	180259.12	0.0487	0.0003023
Ag	107	3	He	53.636	2.6112	180423.28	0.0487	0.0003023
Ag	107	3	He	52.96	2.5783	175602.65	0.0487	0.0003023
Cd	111	3	He	50.689	0.275	19457.56	0.0054	8.618E-06
Cd	111	3	He	52.281	0.2836	19595.74	0.0054	8.618E-06
Cd	111	3	He	52.28	0.2836	19315.35	0.0054	8.618E-06
Sn	120	3	He	49.82	0.8222	58182.66	0.0161	0.0177
Sn	120	3	He	52.786	0.8701	60121.34	0.0161	0.0177
Sn	120	3	He	52.07	0.8586	58474.37	0.0161	0.0177
Sb	121	3	He	50.536	0.7679	54336.91	0.0152	8.618E-05
Sb	121	3	He	51.259	0.7789	53815.19	0.0152	8.618E-05
Sb	121	3	He	50.868	0.7729	52640.97	0.0152	8.618E-05
Ba	137	3	He	489.236	2.4107	170591.44	0.0049	0.0001277
Ba	137	3	He	497.385	2.4509	169345.58	0.0049	0.0001277
Ba	137	3	He	511.142	2.5187	171542.46	0.0049	0.0001277
Tl	205	3	He	52.448	1.307	441773.04	0.0249	0.000171
Tl	205	3	He	52.906	1.3184	446674.06	0.0249	0.000171
Tl	205	3	He	51.82	1.2913	440724.17	0.0249	0.000171
Pb	208	3	He	52.947	1.7711	321919.51	0.0334	0.001456
Pb	208	3	He	52.176	1.7454	318761.69	0.0334	0.001456
Pb	208	3	He	52.111	1.7432	320777.24	0.0334	0.001456
U	238	3	He	50.591	2.496	676645.15	0.0493	0.0001028
U	238	3	He	51.606	2.5461	685177.80	0.0493	0.0001028
U	238	3	He	50.642	2.4985	685461.79	0.0493	0.0001028
Sc	45	1	No Gas			2334604.03		
Sc	45	1	No Gas			2280669.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2248806.69		
Ge	72	1	No Gas			1116059.12		
Ge	72	1	No Gas			1110846.08		
Ge	72	1	No Gas			1112265.06		
Sc	45	2	H2			129089.60		
Sc	45	2	H2			127243.36		
Sc	45	2	H2			127234.23		
Ge	72	2	H2			112945.03		
Ge	72	2	H2			112126.62		
Ge	72	2	H2			112853.73		
In	115	2	H2			316060.97		
In	115	2	H2			311354.43		
In	115	2	H2			312453.78		
Sc	45	3	He			39213.33		
Sc	45	3	He			38421.37		
Sc	45	3	He			37408.99		
Ge	72	3	He			67008.37		
Ge	72	3	He			67439.40		
Ge	72	3	He			67851.93		
In	115	3	He			71071.54		
In	115	3	He			69404.31		
In	115	3	He			68418.45		
Tb	159	3	He			338014.80		
Tb	159	3	He			338812.42		
Tb	159	3	He			341303.12		
Bi	209	3	He			271089.23		
Bi	209	3	He			269110.33		
Bi	209	3	He			274345.03		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

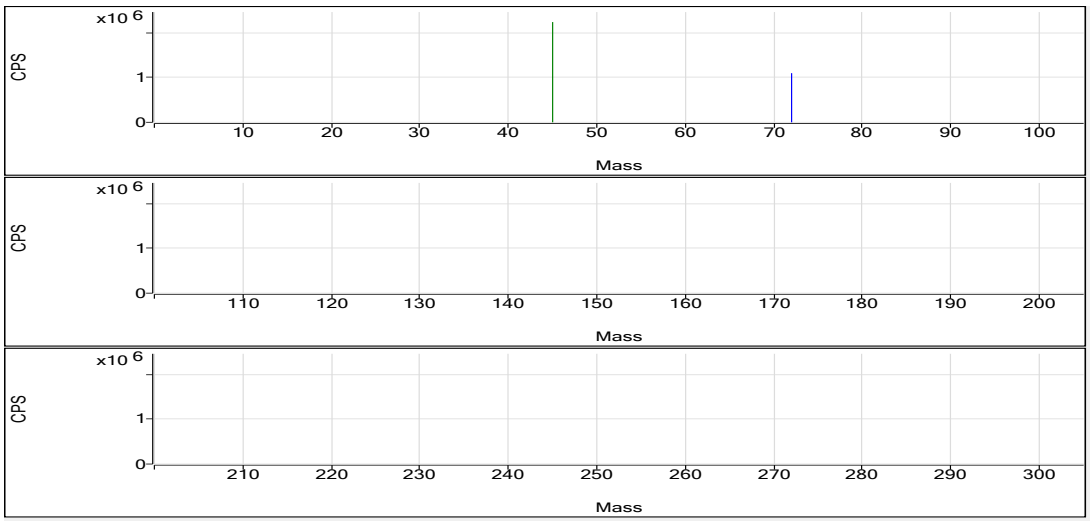
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.025	ppb	33.4	76.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.131	ppb	40.7	8.22	0.0000	Pulse	1.5000	3
Na	23	45	He	37.265	ppb	15.0	16249.41	0.4354	Pulse	0.1000	3
Mg	24	45	He	3.489	ppb	26.4	360.01	0.0096	Pulse	0.1000	3
Al	27	45	He	0.863	ppb	103.6	70.00	0.0019	Pulse	0.1000	3
K	39	45	He	20.562	ppb	43.2	15011.50	0.4022	Pulse	0.1000	3
Ca	44	45	He	-6.156	ppb	N/A	103.34	0.0028	Pulse	0.1000	3
Ti	47	45	He	1.834	ppb	42.3	36.67	0.0010	Pulse	0.1000	3
V	51	45	He	0.106	ppb	29.5	1012.71	0.0271	Pulse	0.5000	3
Cr	52	45	He	0.197	ppb	72.4	1770.16	0.0474	Pulse	0.1000	3
Mn	55	45	He	-0.189	ppb	N/A	150.01	0.0040	Pulse	0.1000	3
Fe	57	45	He	1.223	ppb	146.9	106.67	0.0029	Pulse	0.1000	3
Co	59	45	He	0.154	ppb	22.5	440.02	0.0118	Pulse	0.1000	3
Ni	60	72	He	0.115	ppb	96.3	260.01	0.0039	Pulse	0.1000	3
Cu	63	72	He	0.203	ppb	13.7	650.04	0.0098	Pulse	0.1000	3
Zn	66	72	He	0.094	ppb	155.2	210.01	0.0031	Pulse	0.1000	3
As	75	72	He	0.260	ppb	34.3	80.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.076	ppb	16.7	120.00	0.0018	Pulse	0.1000	3
Mo	98	115	He	0.057	ppb	52.7	123.34	0.0018	Pulse	0.1000	3
Ag	107	115	He	0.021	ppb	12.0	90.00	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.020	ppb	27.1	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.017	ppb	381.8	1223.44	0.0180	Pulse	0.1000	3
Sb	121	115	He	0.043	ppb	38.7	50.00	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.134	ppb	58.0	53.33	0.0008	Pulse	0.1000	3
Tl	205	159	He	0.121	ppb	2.7	1076.75	0.0032	Pulse	0.1000	3
Pb	208	159	He	0.012	ppb	28.5	630.03	0.0019	Pulse	0.1000	3
U	238	209	He	0.066	ppb	21.3	913.40	0.0034	Pulse	0.1000	3

ISTD Table:

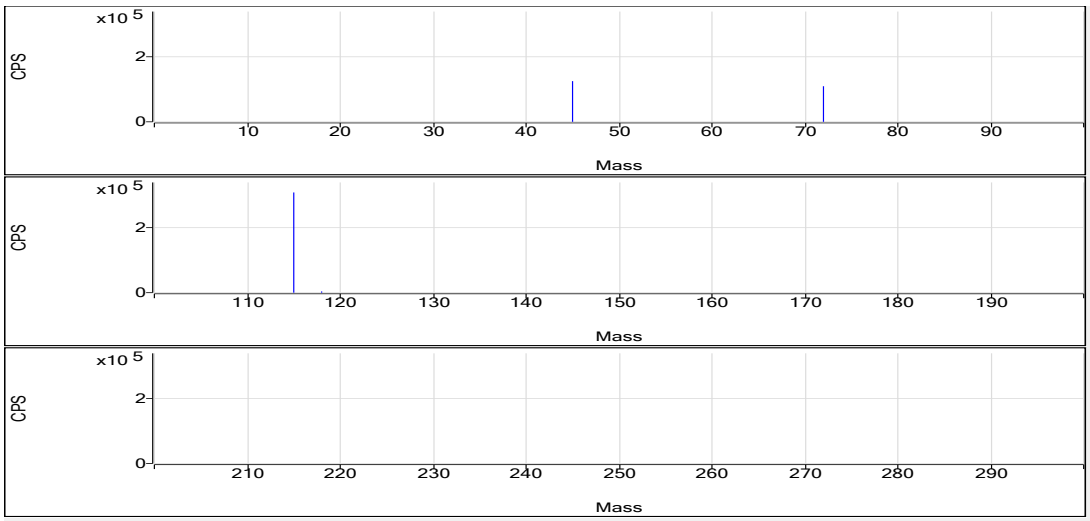
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2233896.79	0.2	92.8	Analog	0.1000	3
No Gas	Ge	72	1094977.12	0.2	94.3	Pulse	0.1000	3
H2	Sc	45	125445.37	0.6	76.3	Pulse	0.1000	3
H2	Ge	72	109723.34	1.9	75.5	Pulse	0.1000	3
H2	In	115	309069.95	1.7	85.9	Pulse	0.1000	3
He	Sc	45	37328.69	1.0	85.3	Pulse	0.1000	3
He	Ge	72	66632.95	1.3	87.1	Pulse	0.1000	3
He	In	115	68023.05	2.0	87.7	Pulse	0.1000	3
He	Tb	159	336703.92	1.2	90.8	Pulse	0.1000	3
He	Bi	209	271380.84	1.6	92.8	Pulse	0.1000	3

No Gas

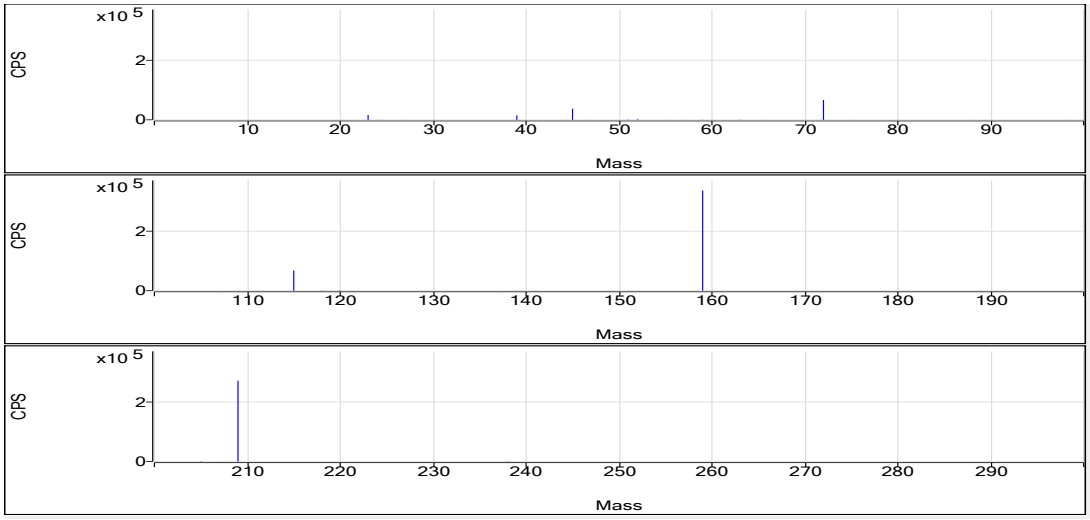


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.035	0	92.00	0.0007	1.523E-05
Be	9	1	No Gas	0.019	0	66.00	0.0007	1.523E-05
Be	9	1	No Gas	0.022	0	70.00	0.0007	1.523E-05
Se	78	2	H2	0.186	0	11.33	0.0002	3.71E-06
Se	78	2	H2	0.079	0	5.33	0.0002	3.71E-06
Se	78	2	H2	0.129	0	8.00	0.0002	3.71E-06
Na	23	3	He	34.319	0.4248	15958.95	0.0036	0.3007
Na	23	3	He	43.703	0.4587	16930.23	0.0036	0.3007
Na	23	3	He	33.772	0.4228	15859.04	0.0036	0.3007
Mg	24	3	He	3.607	0.0098	370.01	0.0018	0.003274
Mg	24	3	He	2.515	0.0079	290.01	0.0018	0.003274
Mg	24	3	He	4.347	0.0112	420.02	0.0018	0.003274
Al	27	3	He	1.763	0.0024	90.00	0.0006	0.00137
Al	27	3	He	-0.026	0.0014	50.00	0.0006	0.00137
Al	27	3	He	0.853	0.0019	70.00	0.0006	0.00137
K	39	3	He	16.202	0.3971	14918.07	0.0012	0.378
K	39	3	He	30.78	0.4142	15288.56	0.0012	0.378
K	39	3	He	14.703	0.3953	14827.87	0.0012	0.378
Ca	44	3	He	-23.084	0.0016	60.00	0.0001	0.003203
Ca	44	3	He	8.497	0.0038	140.01	0.0001	0.003203
Ca	44	3	He	-3.881	0.0029	110.00	0.0001	0.003203
Ti	47	3	He	1.984	0.0011	40.00	0.0005	0
Ti	47	3	He	2.524	0.0014	50.00	0.0005	0
Ti	47	3	He	0.993	0.0005	20.00	0.0005	0
V	51	3	He	0.073	0.0264	992.04	0.0224	0.02476
V	51	3	He	0.136	0.0278	1026.04	0.0224	0.02476
V	51	3	He	0.109	0.0272	1020.04	0.0224	0.02476
Cr	52	3	He	0.259	0.0492	1850.18	0.0293	0.04167
Cr	52	3	He	0.298	0.0504	1860.17	0.0293	0.04167
Cr	52	3	He	0.034	0.0427	1600.14	0.0293	0.04167
Mn	55	3	He	-0.212	0.0037	140.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.103	0.0051	190.01	0.0129	0.006476
Mn	55	3	He	-0.253	0.0032	120.01	0.0129	0.006476
Fe	57	3	He	3.158	0.004	150.01	0.0006	0.00213
Fe	57	3	He	-0.396	0.0019	70.00	0.0006	0.00213
Fe	57	3	He	0.908	0.0027	100.00	0.0006	0.00213
Co	59	3	He	0.134	0.0106	400.02	0.0572	0.00297
Co	59	3	He	0.194	0.0141	520.03	0.0572	0.00297
Co	59	3	He	0.134	0.0107	400.02	0.0572	0.00297
Ni	60	3	He	-0.013	0.0028	190.01	0.0086	0.002921
Ni	60	3	He	0.172	0.0044	290.01	0.0086	0.002921
Ni	60	3	He	0.185	0.0045	300.01	0.0086	0.002921
Cu	63	3	He	0.198	0.0096	650.04	0.0257	0.004531
Cu	63	3	He	0.178	0.0091	600.03	0.0257	0.004531
Cu	63	3	He	0.234	0.0105	700.04	0.0257	0.004531
Zn	66	3	He	0.233	0.0036	240.01	0.0029	0.002877
Zn	66	3	He	0.108	0.0032	210.01	0.0029	0.002877
Zn	66	3	He	-0.059	0.0027	180.01	0.0029	0.002877
As	75	3	He	0.233	0.0012	78.00	0.002	0.0006798
As	75	3	He	0.188	0.0011	70.00	0.002	0.0006798
As	75	3	He	0.36	0.0014	94.00	0.002	0.0006798
Sr	88	3	He	0.078	0.0018	120.00	0.009	0.001075
Sr	88	3	He	0.063	0.0016	110.00	0.009	0.001075
Sr	88	3	He	0.088	0.0019	130.00	0.009	0.001075
Mo	98	3	He	0.036	0.0013	90.00	0.0226	0.0005115
Mo	98	3	He	0.043	0.0015	100.01	0.0226	0.0005115
Mo	98	3	He	0.092	0.0026	180.01	0.0226	0.0005115
Ag	107	3	He	0.021	0.0013	90.00	0.0487	0.0003023
Ag	107	3	He	0.018	0.0012	80.00	0.0487	0.0003023
Ag	107	3	He	0.023	0.0014	100.00	0.0487	0.0003023
Cd	111	3	He	0.026	0.0001	10.00	0.0054	8.618E-06
Cd	111	3	He	0.015	0.0001	6.00	0.0054	8.618E-06
Cd	111	3	He	0.02	0.0001	8.00	0.0054	8.618E-06
Sn	120	3	He	-0.058	0.0168	1130.09	0.0161	0.0177
Sn	120	3	He	0.058	0.0186	1250.12	0.0161	0.0177
Sn	120	3	He	0.051	0.0185	1290.11	0.0161	0.0177
Sb	121	3	He	0.024	0.0004	30.00	0.0152	8.618E-05
Sb	121	3	He	0.053	0.0009	60.00	0.0152	8.618E-05
Sb	121	3	He	0.051	0.0009	60.00	0.0152	8.618E-05
Ba	137	3	He	0.125	0.0007	50.00	0.0049	0.0001277
Ba	137	3	He	0.216	0.0012	80.00	0.0049	0.0001277
Ba	137	3	He	0.062	0.0004	30.00	0.0049	0.0001277
Tl	205	3	He	0.124	0.0033	1080.09	0.0249	0.000171
Tl	205	3	He	0.123	0.0032	1100.09	0.0249	0.000171
Tl	205	3	He	0.118	0.0031	1050.08	0.0249	0.000171
Pb	208	3	He	0.015	0.002	410.03	0.0334	0.001456
Pb	208	3	He	0.008	0.0017	250.01	0.0334	0.001456
Pb	208	3	He	0.014	0.0019	320.01	0.0334	0.001456
U	238	3	He	0.051	0.0026	700.04	0.0493	0.0001028
U	238	3	He	0.069	0.0035	940.07	0.0493	0.0001028
U	238	3	He	0.079	0.004	1100.09	0.0493	0.0001028
Sc	45	1	No Gas			2233011.53		
Sc	45	1	No Gas			2229053.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2239625.28		
Ge	72	1	No Gas			1096554.67		
Ge	72	1	No Gas			1096207.95		
Ge	72	1	No Gas			1092168.73		
Sc	45	2	H2			126196.13		
Sc	45	2	H2			124742.27		
Sc	45	2	H2			125397.70		
Ge	72	2	H2			111725.42		
Ge	72	2	H2			107564.06		
Ge	72	2	H2			109880.54		
In	115	2	H2			314945.07		
In	115	2	H2			305267.20		
In	115	2	H2			306997.59		
Sc	45	3	He			37569.61		
Sc	45	3	He			36907.33		
Sc	45	3	He			37509.14		
Ge	72	3	He			67580.46		
Ge	72	3	He			65832.68		
Ge	72	3	He			66485.70		
In	115	3	He			67413.51		
In	115	3	He			67062.82		
In	115	3	He			69614.81		
Tb	159	3	He			332095.66		
Tb	159	3	He			339759.92		
Tb	159	3	He			338256.17		
Bi	209	3	He			268272.44		
Bi	209	3	He			269574.53		
Bi	209	3	He			276295.54		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

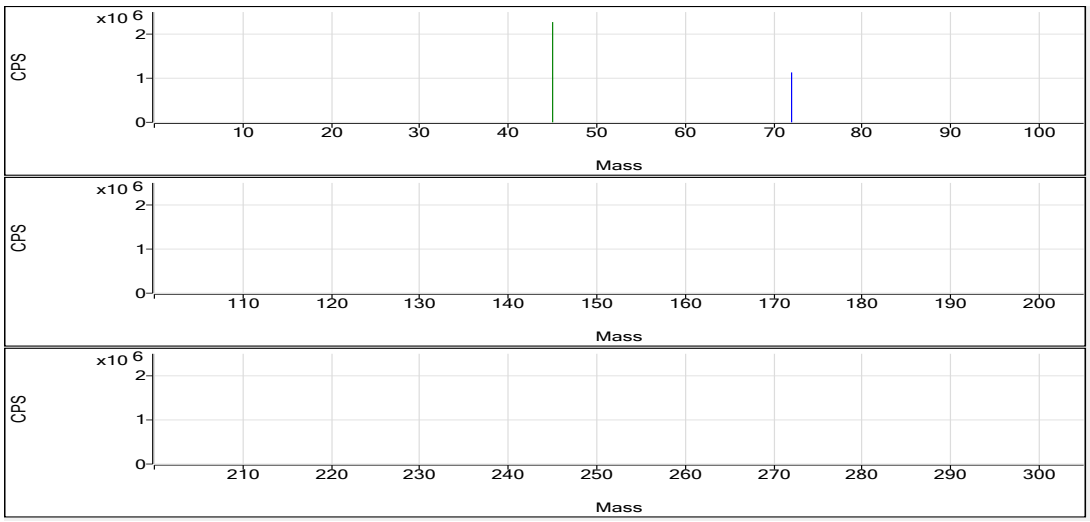
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	75.5	41.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.092	ppb	29.9	6.22	0.0000	Pulse	1.5000	3
Na	23	45	He	131126.937	ppb	0.4	17604836.40	474.5709	Analog	0.1000	3
Mg	24	45	He	943.872	ppb	0.7	63949.45	1.7239	Pulse	0.1000	3
Al	27	45	He	14.183	ppb	3.5	356.69	0.0096	Pulse	0.1000	3
K	39	45	He	1547.074	ppb	2.1	81580.89	2.1995	Pulse	0.1000	3
Ca	44	45	He	5717.961	ppb	1.6	14874.74	0.4009	Pulse	0.1000	3
Ti	47	45	He	0.337	ppb	86.6	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	0.055	ppb	82.5	964.04	0.0260	Pulse	0.5000	3
Cr	52	45	He	0.052	ppb	203.5	1603.47	0.0432	Pulse	0.1000	3
Mn	55	45	He	12.980	ppb	3.0	6471.66	0.1744	Pulse	0.1000	3
Fe	57	45	He	33.664	ppb	19.8	816.72	0.0220	Pulse	0.1000	3
Co	59	45	He	0.041	ppb	9.7	196.68	0.0053	Pulse	0.1000	3
Ni	60	72	He	0.036	ppb	285.7	226.68	0.0032	Pulse	0.1000	3
Cu	63	72	He	3.311	ppb	3.6	6268.25	0.0896	Pulse	0.1000	3
Zn	66	72	He	7.554	ppb	11.8	1730.16	0.0247	Pulse	0.1000	3
As	75	72	He	0.008	ppb	327.4	48.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	385.954	ppb	1.5	240321.66	3.4737	Pulse	0.1000	3
Mo	98	115	He	0.169	ppb	13.2	300.01	0.0043	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	46.3	33.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.005	ppb	54.1	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.225	ppb	N/A	973.40	0.0141	Pulse	0.1000	3
Sb	121	115	He	0.013	ppb	69.7	20.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	423.473	ppb	2.3	144354.02	2.0867	Pulse	0.1000	3
Tl	205	159	He	0.033	ppb	26.8	333.35	0.0010	Pulse	0.1000	3
Pb	208	159	He	0.073	ppb	10.5	1313.41	0.0039	Pulse	0.1000	3
U	238	209	He	0.014	ppb	13.3	220.01	0.0008	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2282999.44	0.5	94.8	Analog	0.1000	3
No Gas	Ge	72	1136293.45	0.4	97.8	Pulse	0.1000	3
H2	Sc	45	129681.82	1.9	78.9	Pulse	0.1000	3
H2	Ge	72	116385.71	2.0	80.1	Pulse	0.1000	3
H2	In	115	314930.20	0.6	87.5	Pulse	0.1000	3
He	Sc	45	37097.86	1.5	84.8	Pulse	0.1000	3
He	Ge	72	70004.99	1.6	91.5	Pulse	0.1000	3
He	In	115	69193.37	1.4	89.2	Pulse	0.1000	3
He	Tb	159	337931.40	0.8	91.1	Pulse	0.1000	3
He	Bi	209	274605.65	0.5	93.9	Pulse	0.1000	3

No Gas



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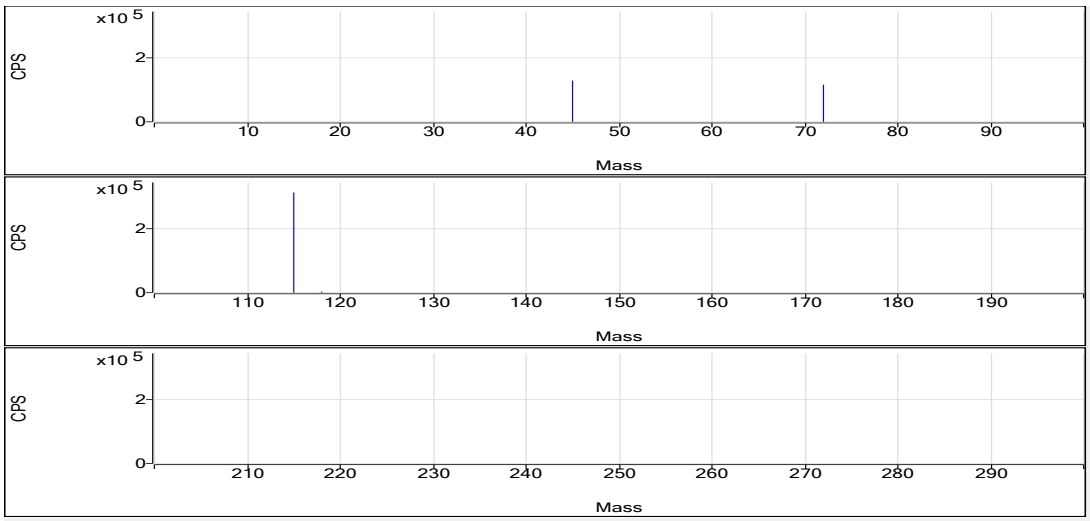
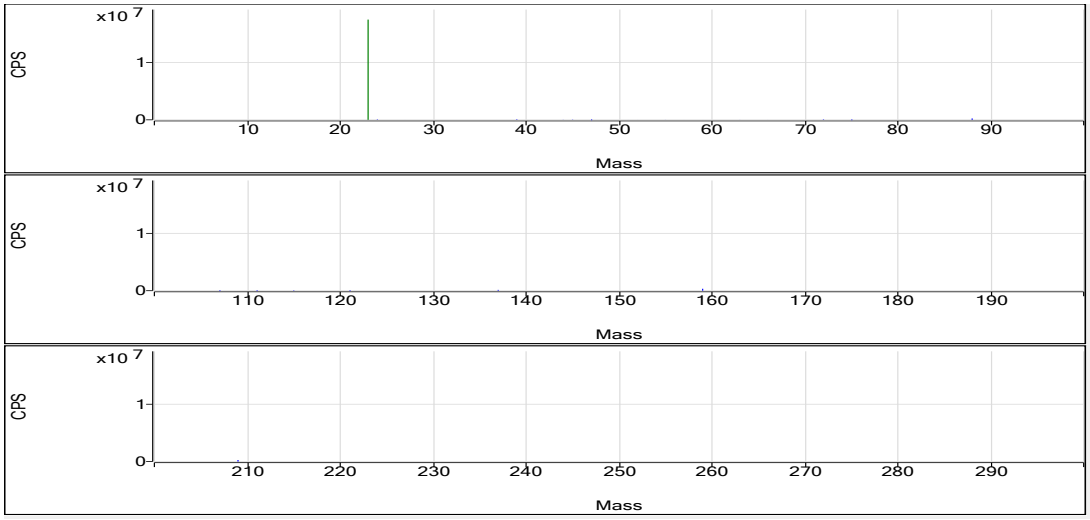


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	46.00	0.0007	1.523E-05
Be	9	1	No Gas	0.004	0	42.00	0.0007	1.523E-05
Be	9	1	No Gas	0.001	0	36.00	0.0007	1.523E-05
Se	78	2	H2	0.076	0	5.33	0.0002	3.71E-06
Se	78	2	H2	0.124	0	8.00	0.0002	3.71E-06
Se	78	2	H2	0.077	0	5.33	0.0002	3.71E-06
Na	23	3	He	130616.678	472.7254	17797812.23	0.0036	0.3007
Na	23	3	He	131670.843	476.5382	17396644.74	0.0036	0.3007
Na	23	3	He	131093.29	474.4492	17620052.24	0.0036	0.3007
Mg	24	3	He	936.247	1.71	64381.28	0.0018	0.003274
Mg	24	3	He	949.168	1.7336	63286.50	0.0018	0.003274
Mg	24	3	He	946.201	1.7282	64180.57	0.0018	0.003274
Al	27	3	He	13.631	0.0093	350.02	0.0006	0.00137
Al	27	3	He	14.603	0.0099	360.02	0.0006	0.00137
Al	27	3	He	14.315	0.0097	360.03	0.0006	0.00137
K	39	3	He	1514.772	2.1614	81376.90	0.0012	0.378
K	39	3	He	1580.656	2.239	81738.00	0.0012	0.378
K	39	3	He	1545.793	2.198	81627.77	0.0012	0.378
Ca	44	3	He	5811.571	0.4074	15338.60	0.0001	0.003203
Ca	44	3	He	5632.219	0.3949	14417.52	0.0001	0.003203
Ca	44	3	He	5710.093	0.4003	14868.11	0.0001	0.003203
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.51	0.0003	10.00	0.0005	0
Ti	47	3	He	0.502	0.0003	10.00	0.0005	0
V	51	3	He	0.016	0.0251	946.04	0.0224	0.02476
V	51	3	He	0.105	0.0271	990.04	0.0224	0.02476
V	51	3	He	0.044	0.0257	956.04	0.0224	0.02476
Cr	52	3	He	0.174	0.0468	1760.15	0.0293	0.04167
Cr	52	3	He	0.008	0.0419	1530.14	0.0293	0.04167
Cr	52	3	He	-0.025	0.0409	1520.13	0.0293	0.04167
Mn	55	3	He	13.361	0.1793	6751.79	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	12.588	0.1693	6181.52	0.0129	0.006476
Mn	55	3	He	12.99	0.1745	6481.66	0.0129	0.006476
Fe	57	3	He	40.964	0.0263	990.07	0.0006	0.00213
Fe	57	3	He	32.144	0.0211	770.05	0.0006	0.00213
Fe	57	3	He	27.884	0.0186	690.05	0.0006	0.00213
Co	59	3	He	0.036	0.005	190.01	0.0572	0.00297
Co	59	3	He	0.044	0.0055	200.01	0.0572	0.00297
Co	59	3	He	0.042	0.0054	200.01	0.0572	0.00297
Ni	60	3	He	0.133	0.0041	290.02	0.0086	0.002921
Ni	60	3	He	0.046	0.0033	230.01	0.0086	0.002921
Ni	60	3	He	-0.072	0.0023	160.01	0.0086	0.002921
Cu	63	3	He	3.205	0.0868	6191.57	0.0257	0.004531
Cu	63	3	He	3.438	0.0928	6431.65	0.0257	0.004531
Cu	63	3	He	3.291	0.089	6181.53	0.0257	0.004531
Zn	66	3	He	7.985	0.026	1850.19	0.0029	0.002877
Zn	66	3	He	8.146	0.0264	1830.17	0.0029	0.002877
Zn	66	3	He	6.532	0.0218	1510.12	0.0029	0.002877
As	75	3	He	-0.017	0.0006	46.00	0.002	0.0006798
As	75	3	He	0.006	0.0007	48.00	0.002	0.0006798
As	75	3	He	0.034	0.0007	52.00	0.002	0.0006798
Sr	88	3	He	385.088	3.4659	240109.02	0.009	0.001075
Sr	88	3	He	392.033	3.5284	240463.98	0.009	0.001075
Sr	88	3	He	380.74	3.4268	240391.97	0.009	0.001075
Mo	98	3	He	0.195	0.0049	340.01	0.0226	0.0005115
Mo	98	3	He	0.153	0.004	270.01	0.0226	0.0005115
Mo	98	3	He	0.16	0.0041	290.01	0.0226	0.0005115
Ag	107	3	He	0.006	0.0006	40.00	0.0487	0.0003023
Ag	107	3	He	0.003	0.0004	30.00	0.0487	0.0003023
Ag	107	3	He	0.003	0.0004	30.00	0.0487	0.0003023
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Sn	120	3	He	-0.22	0.0141	980.07	0.0161	0.0177
Sn	120	3	He	-0.16	0.0151	1030.07	0.0161	0.0177
Sn	120	3	He	-0.293	0.013	910.06	0.0161	0.0177
Sb	121	3	He	0.013	0.0003	20.00	0.0152	8.618E-05
Sb	121	3	He	0.004	0.0001	10.00	0.0152	8.618E-05
Sb	121	3	He	0.022	0.0004	30.00	0.0152	8.618E-05
Ba	137	3	He	421.414	2.0766	143859.06	0.0049	0.0001277
Ba	137	3	He	434.069	2.1389	145769.65	0.0049	0.0001277
Ba	137	3	He	414.935	2.0446	143433.35	0.0049	0.0001277
Tl	205	3	He	0.031	0.0009	320.01	0.0249	0.000171
Tl	205	3	He	0.025	0.0008	270.01	0.0249	0.000171
Tl	205	3	He	0.042	0.0012	410.02	0.0249	0.000171
Pb	208	3	He	0.065	0.0036	590.03	0.0334	0.001456
Pb	208	3	He	0.08	0.0041	770.05	0.0334	0.001456
Pb	208	3	He	0.073	0.0039	740.05	0.0334	0.001456
U	238	3	He	0.012	0.0007	190.01	0.0493	0.0001028
U	238	3	He	0.016	0.0009	240.01	0.0493	0.0001028
U	238	3	He	0.015	0.0008	230.01	0.0493	0.0001028
Sc	45	1	No Gas			2294247.15		
Sc	45	1	No Gas			2270865.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2283885.59		
Ge	72	1	No Gas			1139998.89		
Ge	72	1	No Gas			1137030.22		
Ge	72	1	No Gas			1131851.23		
Sc	45	2	H2			129927.20		
Sc	45	2	H2			132066.42		
Sc	45	2	H2			127051.85		
Ge	72	2	H2			114890.58		
Ge	72	2	H2			119023.24		
Ge	72	2	H2			115243.31		
In	115	2	H2			315267.40		
In	115	2	H2			316550.87		
In	115	2	H2			312972.34		
Sc	45	3	He			37649.37		
Sc	45	3	He			36506.30		
Sc	45	3	He			37137.91		
Ge	72	3	He			71297.97		
Ge	72	3	He			69288.15		
Ge	72	3	He			69428.85		
In	115	3	He			69282.83		
In	115	3	He			68157.60		
In	115	3	He			70157.16		
Tb	159	3	He			338643.20		
Tb	159	3	He			340230.74		
Tb	159	3	He			334920.27		
Bi	209	3	He			273454.43		
Bi	209	3	He			276070.29		
Bi	209	3	He			274292.22		

Quantitation Report

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Sample Type	Sample
Comment	F1
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

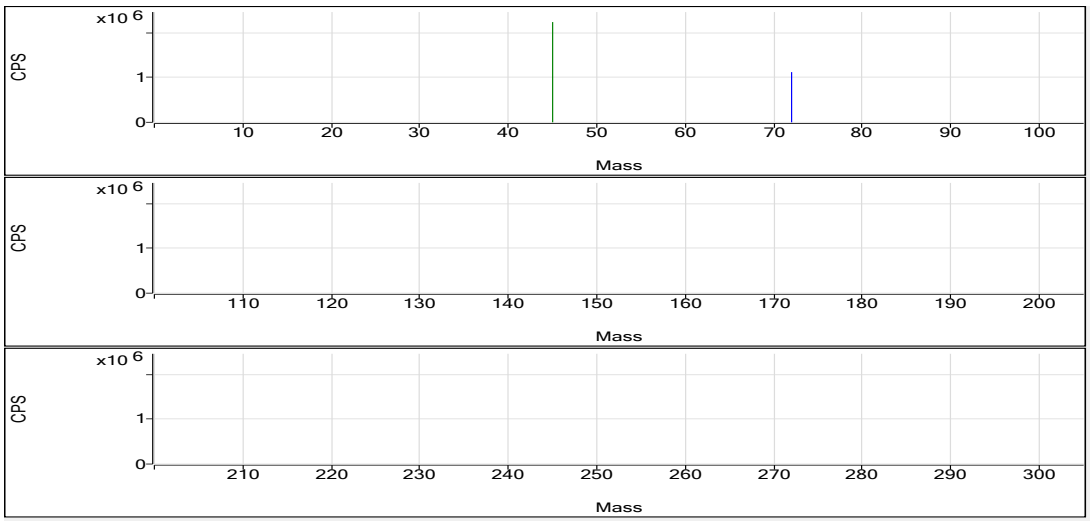
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.001	ppb	164.4	36.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.057	ppb	12.9	4.22	0.0000	Pulse	1.5000	3
Na	23	45	He	25076.318	ppb	1.8	3387692.97	90.9987	Analog	0.1000	3
Mg	24	45	He	23824.484	ppb	2.2	1616895.81	43.4346	Analog	0.1000	3
Al	27	45	He	136.160	ppb	16.4	2993.93	0.0806	Pulse	0.1000	3
K	39	45	He	1803.937	ppb	3.0	93132.61	2.5019	Pulse	0.1000	3
Ca	44	45	He	78952.854	ppb	2.6	204530.83	5.4945	Pulse	0.1000	3
Ti	47	45	He	0.506	ppb	100.4	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	0.043	ppb	243.5	956.71	0.0257	Pulse	0.5000	3
Cr	52	45	He	0.066	ppb	154.5	1623.48	0.0436	Pulse	0.1000	3
Mn	55	45	He	335.463	ppb	1.6	161813.29	4.3464	Pulse	0.1000	3
Fe	57	45	He	585.541	ppb	1.9	12939.53	0.3476	Pulse	0.1000	3
Co	59	45	He	0.109	ppb	29.2	343.35	0.0092	Pulse	0.1000	3
Ni	60	72	He	0.202	ppb	19.7	326.68	0.0047	Pulse	0.1000	3
Cu	63	72	He	1.873	ppb	8.7	3687.28	0.0526	Pulse	0.1000	3
Zn	66	72	He	15.390	ppb	13.7	3317.17	0.0473	Pulse	0.1000	3
As	75	72	He	1.523	ppb	4.7	265.33	0.0038	Pulse	0.5000	3
Sr	88	115	He	801.781	ppb	1.2	494038.61	7.2151	Pulse	0.1000	3
Mo	98	115	He	0.367	ppb	2.7	603.37	0.0088	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	81.5	46.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	1455.4	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.186	ppb	N/A	1006.74	0.0147	Pulse	0.1000	3
Sb	121	115	He	0.026	ppb	54.2	33.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	19.018	ppb	2.2	6425.10	0.0938	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	42.3	250.01	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.080	ppb	17.5	1386.75	0.0041	Pulse	0.1000	3
U	238	209	He	0.190	ppb	7.2	2557.03	0.0095	Pulse	0.1000	3

ISTD Table:

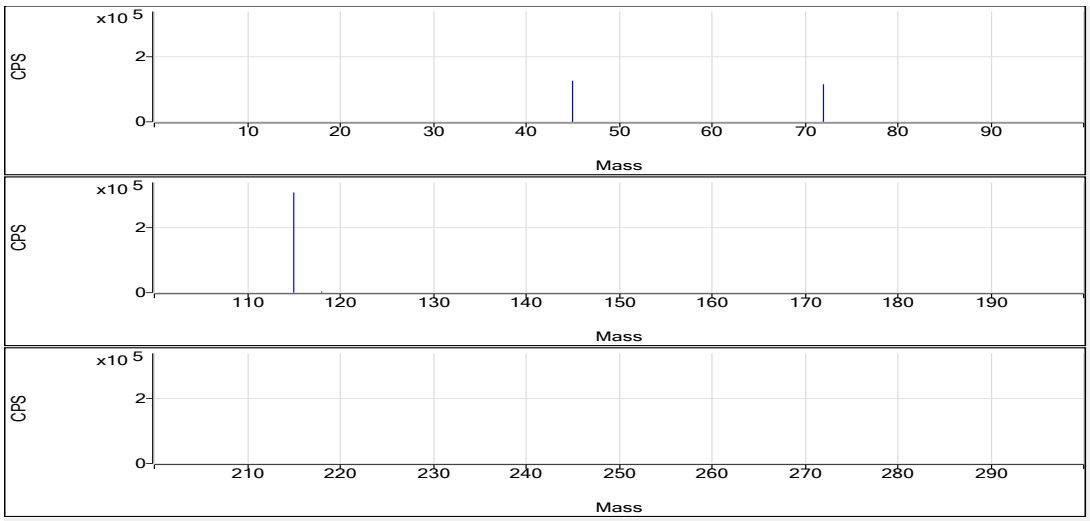
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2240005.69	1.3	93.0	Analog	0.1000	3
No Gas	Ge	72	1121267.38	0.9	96.5	Pulse	0.1000	3
H2	Sc	45	127404.96	0.8	77.5	Pulse	0.1000	3
H2	Ge	72	116290.88	0.4	80.0	Pulse	0.1000	3
H2	In	115	310308.53	0.6	86.2	Pulse	0.1000	3
He	Sc	45	37235.03	1.7	85.1	Pulse	0.1000	3
He	Ge	72	70109.34	1.4	91.6	Pulse	0.1000	3
He	In	115	68479.69	1.3	88.3	Pulse	0.1000	3
He	Tb	159	336640.70	0.4	90.8	Pulse	0.1000	3
He	Bi	209	269532.72	0.9	92.2	Pulse	0.1000	3

No Gas

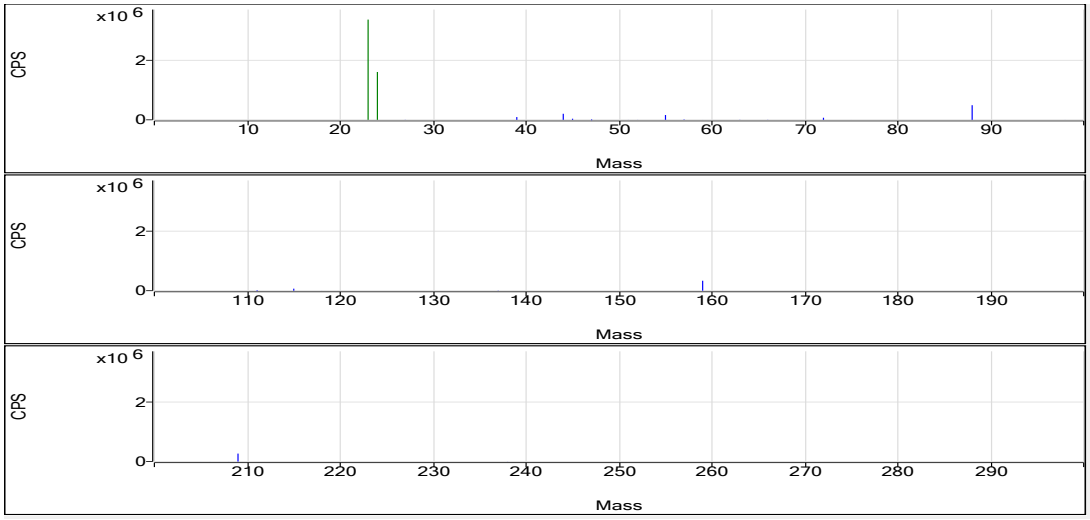


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	40.00	0.0007	1.523E-05
Be	9	1	No Gas	0	0	34.00	0.0007	1.523E-05
Be	9	1	No Gas	0	0	34.00	0.0007	1.523E-05
Se	78	2	H2	0.052	0	4.00	0.0002	3.71E-06
Se	78	2	H2	0.066	0	4.67	0.0002	3.71E-06
Se	78	2	H2	0.053	0	4.00	0.0002	3.71E-06
Na	23	3	He	25544.016	92.6903	3401473.39	0.0036	0.3007
Na	23	3	He	24653.083	89.4679	3392619.95	0.0036	0.3007
Na	23	3	He	25031.853	90.8378	3368985.57	0.0036	0.3007
Mg	24	3	He	24226.763	44.1679	1620839.35	0.0018	0.003274
Mg	24	3	He	23237.438	42.3644	1606457.94	0.0018	0.003274
Mg	24	3	He	24009.251	43.7714	1623390.13	0.0018	0.003274
Al	27	3	He	157.477	0.0929	3410.90	0.0006	0.00137
Al	27	3	He	112.843	0.067	2540.31	0.0006	0.00137
Al	27	3	He	138.159	0.0817	3030.58	0.0006	0.00137
K	39	3	He	1859.032	2.5668	94192.94	0.0012	0.378
K	39	3	He	1751.769	2.4405	92542.67	0.0012	0.378
K	39	3	He	1801.011	2.4984	92662.23	0.0012	0.378
Ca	44	3	He	81180.36	5.6494	207318.12	0.0001	0.003203
Ca	44	3	He	77042.704	5.3616	203313.49	0.0001	0.003203
Ca	44	3	He	78635.5	5.4724	202960.88	0.0001	0.003203
Ti	47	3	He	1.015	0.0005	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.502	0.0003	10.00	0.0005	0
V	51	3	He	0.155	0.0282	1036.05	0.0224	0.02476
V	51	3	He	-0.051	0.0236	896.03	0.0224	0.02476
V	51	3	He	0.024	0.0253	938.04	0.0224	0.02476
Cr	52	3	He	-0.018	0.0412	1510.13	0.0293	0.04167
Cr	52	3	He	0.036	0.0427	1620.14	0.0293	0.04167
Cr	52	3	He	0.179	0.0469	1740.16	0.0293	0.04167
Mn	55	3	He	341.45	4.4238	162342.65	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	331.454	4.2945	162848.05	0.0129	0.006476
Mn	55	3	He	333.485	4.3208	160249.18	0.0129	0.006476
Fe	57	3	He	597.141	0.3544	13006.25	0.0006	0.00213
Fe	57	3	He	575.533	0.3417	12956.24	0.0006	0.00213
Fe	57	3	He	583.95	0.3466	12856.10	0.0006	0.00213
Co	59	3	He	0.143	0.0112	410.02	0.0572	0.00297
Co	59	3	He	0.105	0.009	340.02	0.0572	0.00297
Co	59	3	He	0.08	0.0075	280.01	0.0572	0.00297
Ni	60	3	He	0.163	0.0043	300.01	0.0086	0.002921
Ni	60	3	He	0.199	0.0046	330.01	0.0086	0.002921
Ni	60	3	He	0.243	0.005	350.02	0.0086	0.002921
Cu	63	3	He	1.909	0.0535	3710.61	0.0257	0.004531
Cu	63	3	He	1.695	0.048	3420.53	0.0257	0.004531
Cu	63	3	He	2.015	0.0563	3930.69	0.0257	0.004531
Zn	66	3	He	17.785	0.0543	3760.61	0.0029	0.002877
Zn	66	3	He	14.612	0.0451	3210.47	0.0029	0.002877
Zn	66	3	He	13.773	0.0427	2980.44	0.0029	0.002877
As	75	3	He	1.479	0.0037	256.00	0.002	0.0006798
As	75	3	He	1.486	0.0037	264.00	0.002	0.0006798
As	75	3	He	1.605	0.004	276.00	0.002	0.0006798
Sr	88	3	He	802.619	7.2226	492231.79	0.009	0.001075
Sr	88	3	He	791.79	7.1252	494904.64	0.009	0.001075
Sr	88	3	He	810.934	7.2974	494979.41	0.009	0.001075
Mo	98	3	He	0.374	0.009	610.03	0.0226	0.0005115
Mo	98	3	He	0.373	0.0089	620.04	0.0226	0.0005115
Mo	98	3	He	0.356	0.0086	580.04	0.0226	0.0005115
Ag	107	3	He	0.003	0.0004	30.00	0.0487	0.0003023
Ag	107	3	He	0.006	0.0006	40.00	0.0487	0.0003023
Ag	107	3	He	0.015	0.001	70.00	0.0487	0.0003023
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Sn	120	3	He	-0.179	0.0148	1010.08	0.0161	0.0177
Sn	120	3	He	-0.187	0.0147	1020.09	0.0161	0.0177
Sn	120	3	He	-0.192	0.0146	990.06	0.0161	0.0177
Sb	121	3	He	0.023	0.0004	30.00	0.0152	8.618E-05
Sb	121	3	He	0.042	0.0007	50.00	0.0152	8.618E-05
Sb	121	3	He	0.014	0.0003	20.00	0.0152	8.618E-05
Ba	137	3	He	19.455	0.096	6541.81	0.0049	0.0001277
Ba	137	3	He	18.621	0.0919	6381.75	0.0049	0.0001277
Ba	137	3	He	18.979	0.0936	6351.75	0.0049	0.0001277
Tl	205	3	He	0.031	0.001	320.01	0.0249	0.000171
Tl	205	3	He	0.012	0.0005	160.01	0.0249	0.000171
Tl	205	3	He	0.025	0.0008	270.01	0.0249	0.000171
Pb	208	3	He	0.094	0.0046	920.07	0.0334	0.001456
Pb	208	3	He	0.079	0.0041	750.05	0.0334	0.001456
Pb	208	3	He	0.066	0.0037	620.03	0.0334	0.001456
U	238	3	He	0.18	0.009	2420.34	0.0493	0.0001028
U	238	3	He	0.185	0.0092	2460.33	0.0493	0.0001028
U	238	3	He	0.206	0.0103	2790.42	0.0493	0.0001028
Sc	45	1	No Gas			2267792.15		
Sc	45	1	No Gas			2208034.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2244190.12		
Ge	72	1	No Gas			1132836.47		
Ge	72	1	No Gas			1113107.01		
Ge	72	1	No Gas			1117858.66		
Sc	45	2	H2			127203.91		
Sc	45	2	H2			126537.27		
Sc	45	2	H2			128473.69		
Ge	72	2	H2			116271.13		
Ge	72	2	H2			115867.83		
Ge	72	2	H2			116733.69		
In	115	2	H2			312338.63		
In	115	2	H2			309607.85		
In	115	2	H2			308979.10		
Sc	45	3	He			36697.20		
Sc	45	3	He			37919.98		
Sc	45	3	He			37087.91		
Ge	72	3	He			69298.88		
Ge	72	3	He			71188.17		
Ge	72	3	He			69840.97		
In	115	3	He			68157.35		
In	115	3	He			69463.81		
In	115	3	He			67835.38		
Tb	159	3	He			336809.72		
Tb	159	3	He			335218.55		
Tb	159	3	He			337893.82		
Bi	209	3	He			269326.01		
Bi	209	3	He			267090.43		
Bi	209	3	He			272181.73		

Quantitation Report

Data File Name	266SMPL.d
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Sample Type	Sample
Comment	F1
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

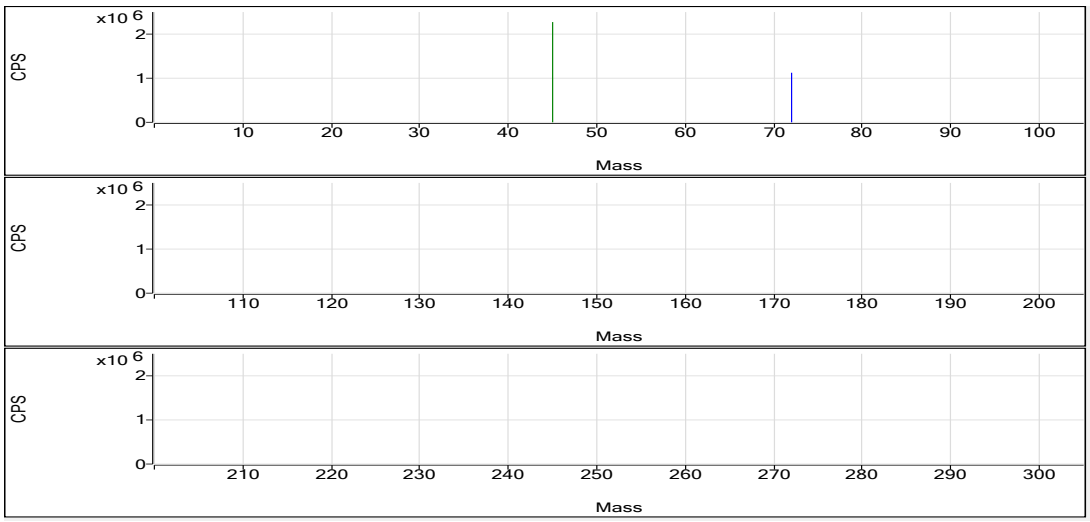
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	N/A	34.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.112	ppb	62.5	7.11	0.0000	Pulse	1.5000	3
Na	23	45	He	17297.061	ppb	0.5	2322770.12	62.8620	Analog	0.1000	3
Mg	24	45	He	24312.141	ppb	0.4	1637808.78	44.3236	Analog	0.1000	3
Al	27	45	He	0.901	ppb	88.9	70.00	0.0019	Pulse	0.1000	3
K	39	45	He	1715.563	ppb	0.6	88601.25	2.3978	Pulse	0.1000	3
Ca	44	45	He	60431.402	ppb	0.6	155422.77	4.2063	Pulse	0.1000	3
Ti	47	45	He	0.506	ppb	99.9	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.051	ppb	N/A	872.70	0.0236	Pulse	0.5000	3
Cr	52	45	He	0.053	ppb	180.8	1596.81	0.0432	Pulse	0.1000	3
Mn	55	45	He	508.697	ppb	0.9	243405.53	6.5875	Pulse	0.1000	3
Fe	57	45	He	1035.989	ppb	1.2	22661.83	0.6133	Pulse	0.1000	3
Co	59	45	He	0.043	ppb	51.5	200.01	0.0054	Pulse	0.1000	3
Ni	60	72	He	0.630	ppb	26.5	580.03	0.0083	Pulse	0.1000	3
Cu	63	72	He	16.856	ppb	0.2	30362.95	0.4374	Pulse	0.1000	3
Zn	66	72	He	21.560	ppb	4.0	4524.19	0.0652	Pulse	0.1000	3
As	75	72	He	7.098	ppb	5.3	1051.38	0.0151	Pulse	0.5000	3
Sr	88	115	He	218.211	ppb	0.6	131336.13	1.9644	Pulse	0.1000	3
Mo	98	115	He	0.558	ppb	6.0	876.73	0.0131	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	70.3	36.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	153.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.203	ppb	N/A	963.40	0.0144	Pulse	0.1000	3
Sb	121	115	He	0.057	ppb	55.9	63.33	0.0009	Pulse	0.1000	3
Ba	137	115	He	39.881	ppb	3.5	13143.45	0.1966	Pulse	0.1000	3
Tl	205	159	He	0.017	ppb	47.0	196.68	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.027	ppb	35.7	796.71	0.0024	Pulse	0.1000	3
U	238	209	He	0.630	ppb	3.8	8426.36	0.0312	Pulse	0.1000	3

ISTD Table:

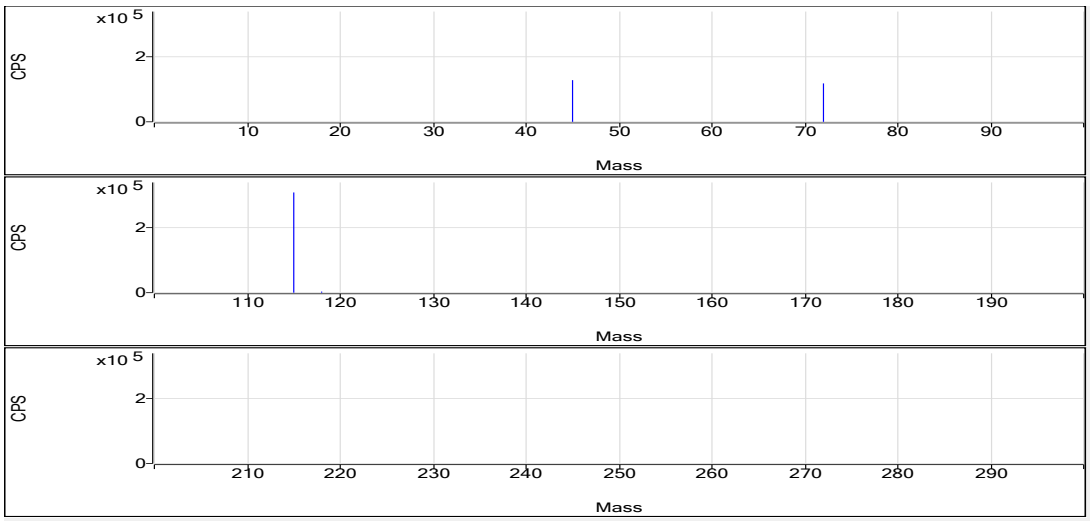
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2277794.86	1.7	94.6	Analog	0.1000	3
No Gas	Ge	72	1126318.55	1.4	97.0	Pulse	0.1000	3
H2	Sc	45	127545.80	1.0	77.6	Pulse	0.1000	3
H2	Ge	72	117557.86	1.0	80.9	Pulse	0.1000	3
H2	In	115	306805.75	1.0	85.3	Pulse	0.1000	3
He	Sc	45	36951.03	0.7	84.4	Pulse	0.1000	3
He	Ge	72	69422.68	1.0	90.7	Pulse	0.1000	3
He	In	115	66859.62	1.2	86.2	Pulse	0.1000	3
He	Tb	159	335772.86	0.6	90.5	Pulse	0.1000	3
He	Bi	209	270266.23	0.7	92.5	Pulse	0.1000	3

No Gas

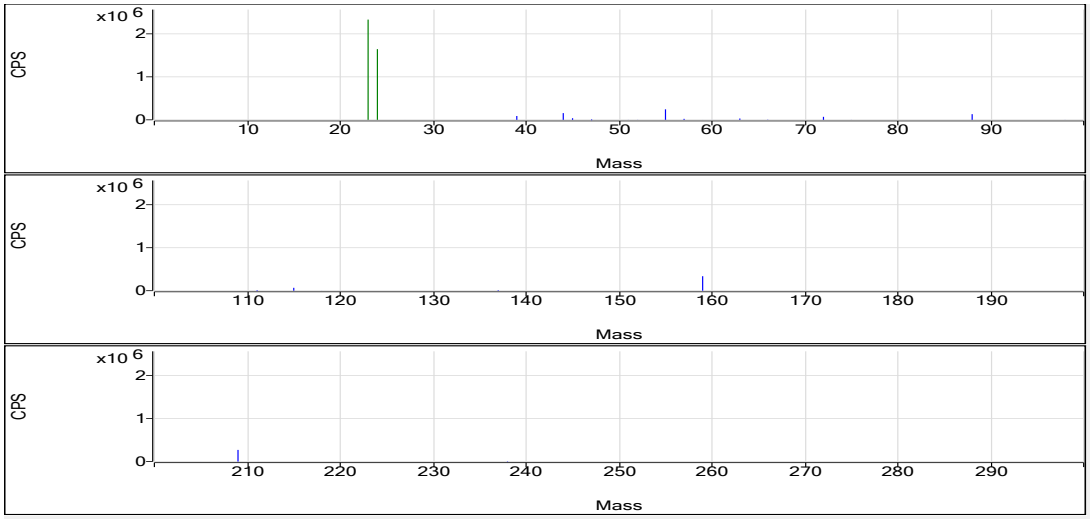


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	28.00	0.0007	1.523E-05
Be	9	1	No Gas	0.005	0	42.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.002	0	32.00	0.0007	1.523E-05
Se	78	2	H2	0.093	0	6.00	0.0002	3.71E-06
Se	78	2	H2	0.189	0	11.33	0.0002	3.71E-06
Se	78	2	H2	0.054	0	4.00	0.0002	3.71E-06
Na	23	3	He	17400.206	63.2351	2323715.75	0.0036	0.3007
Na	23	3	He	17226.088	62.6053	2331321.68	0.0036	0.3007
Na	23	3	He	17264.89	62.7457	2313272.93	0.0036	0.3007
Mg	24	3	He	24211.593	44.1403	1622033.73	0.0018	0.003274
Mg	24	3	He	24311.619	44.3226	1650502.94	0.0018	0.003274
Mg	24	3	He	24413.21	44.5078	1640889.66	0.0018	0.003274
Al	27	3	He	1.388	0.0022	80.00	0.0006	0.00137
Al	27	3	He	1.338	0.0021	80.00	0.0006	0.00137
Al	27	3	He	-0.024	0.0014	50.00	0.0006	0.00137
K	39	3	He	1727.671	2.4121	88638.08	0.0012	0.378
K	39	3	He	1708.44	2.3895	88979.60	0.0012	0.378
K	39	3	He	1710.578	2.392	88186.06	0.0012	0.378
Ca	44	3	He	60682.347	4.2238	155211.44	0.0001	0.003203
Ca	44	3	He	59994.477	4.1759	155504.32	0.0001	0.003203
Ca	44	3	He	60617.381	4.2192	155552.55	0.0001	0.003203
Ti	47	3	He	0.507	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.011	0.0005	20.00	0.0005	0
V	51	3	He	-0.051	0.0236	868.03	0.0224	0.02476
V	51	3	He	-0.026	0.0242	900.04	0.0224	0.02476
V	51	3	He	-0.076	0.0231	850.03	0.0224	0.02476
Cr	52	3	He	-0.02	0.0411	1510.14	0.0293	0.04167
Cr	52	3	He	0.017	0.0422	1570.13	0.0293	0.04167
Cr	52	3	He	0.161	0.0464	1710.16	0.0293	0.04167
Mn	55	3	He	512.371	6.6351	243820.02	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	503.3	6.5177	242709.10	0.0129	0.006476
Mn	55	3	He	510.421	6.6098	243687.46	0.0129	0.006476
Fe	57	3	He	1049.862	0.6215	22838.75	0.0006	0.00213
Fe	57	3	He	1024.564	0.6066	22588.23	0.0006	0.00213
Fe	57	3	He	1033.542	0.6119	22558.50	0.0006	0.00213
Co	59	3	He	0.038	0.0052	190.01	0.0572	0.00297
Co	59	3	He	0.023	0.0043	160.01	0.0572	0.00297
Co	59	3	He	0.067	0.0068	250.01	0.0572	0.00297
Ni	60	3	He	0.821	0.01	700.04	0.0086	0.002921
Ni	60	3	He	0.556	0.0077	530.03	0.0086	0.002921
Ni	60	3	He	0.512	0.0073	510.03	0.0086	0.002921
Cu	63	3	He	16.827	0.4366	30573.42	0.0257	0.004531
Cu	63	3	He	16.894	0.4384	30122.39	0.0257	0.004531
Cu	63	3	He	16.846	0.4371	30393.03	0.0257	0.004531
Zn	66	3	He	20.755	0.0628	4400.83	0.0029	0.002877
Zn	66	3	He	21.471	0.0649	4460.85	0.0029	0.002877
Zn	66	3	He	22.453	0.0678	4710.90	0.0029	0.002877
As	75	3	He	6.702	0.0143	1004.04	0.002	0.0006798
As	75	3	He	7.136	0.0152	1046.05	0.002	0.0006798
As	75	3	He	7.457	0.0159	1104.05	0.002	0.0006798
Sr	88	3	He	217.09	1.9543	130578.99	0.009	0.001075
Sr	88	3	He	217.787	1.9606	132638.27	0.009	0.001075
Sr	88	3	He	219.755	1.9783	130791.13	0.009	0.001075
Mo	98	3	He	0.527	0.0124	830.06	0.0226	0.0005115
Mo	98	3	He	0.553	0.013	880.06	0.0226	0.0005115
Mo	98	3	He	0.594	0.0139	920.07	0.0226	0.0005115
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Ag	107	3	He	0.003	0.0004	30.00	0.0487	0.0003023
Ag	107	3	He	0.003	0.0005	30.00	0.0487	0.0003023
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Sn	120	3	He	-0.049	0.0169	1130.09	0.0161	0.0177
Sn	120	3	He	-0.419	0.0109	740.04	0.0161	0.0177
Sn	120	3	He	-0.141	0.0154	1020.07	0.0161	0.0177
Sb	121	3	He	0.093	0.0015	100.00	0.0152	8.618E-05
Sb	121	3	He	0.033	0.0006	40.00	0.0152	8.618E-05
Sb	121	3	He	0.044	0.0008	50.00	0.0152	8.618E-05
Ba	137	3	He	39.512	0.1948	13016.69	0.0049	0.0001277
Ba	137	3	He	38.723	0.1909	12916.59	0.0049	0.0001277
Ba	137	3	He	41.407	0.2042	13497.07	0.0049	0.0001277
Tl	205	3	He	0.015	0.0005	180.01	0.0249	0.000171
Tl	205	3	He	0.025	0.0008	270.01	0.0249	0.000171
Tl	205	3	He	0.01	0.0004	140.01	0.0249	0.000171
Pb	208	3	He	0.039	0.0028	560.03	0.0334	0.001456
Pb	208	3	He	0.022	0.0022	400.02	0.0334	0.001456
Pb	208	3	He	0.022	0.0022	390.02	0.0334	0.001456
U	238	3	He	0.649	0.0321	8713.16	0.0493	0.0001028
U	238	3	He	0.603	0.0298	8002.81	0.0493	0.0001028
U	238	3	He	0.637	0.0316	8563.10	0.0493	0.0001028
Sc	45	1	No Gas			2314269.97		
Sc	45	1	No Gas			2236902.00		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2282212.62		
Ge	72	1	No Gas			1143046.08		
Ge	72	1	No Gas			1112734.44		
Ge	72	1	No Gas			1123175.14		
Sc	45	2	H2			128544.25		
Sc	45	2	H2			127908.28		
Sc	45	2	H2			126184.88		
Ge	72	2	H2			116593.13		
Ge	72	2	H2			117208.57		
Ge	72	2	H2			118871.89		
In	115	2	H2			303430.31		
In	115	2	H2			309659.51		
In	115	2	H2			307327.42		
Sc	45	3	He			36747.25		
Sc	45	3	He			37238.39		
Sc	45	3	He			36867.45		
Ge	72	3	He			70021.88		
Ge	72	3	He			68715.98		
Ge	72	3	He			69530.17		
In	115	3	He			66821.32		
In	115	3	He			67655.57		
In	115	3	He			66118.18		
Tb	159	3	He			334394.84		
Tb	159	3	He			338124.33		
Tb	159	3	He			334799.41		
Bi	209	3	He			271242.55		
Bi	209	3	He			268169.86		
Bi	209	3	He			271386.29		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

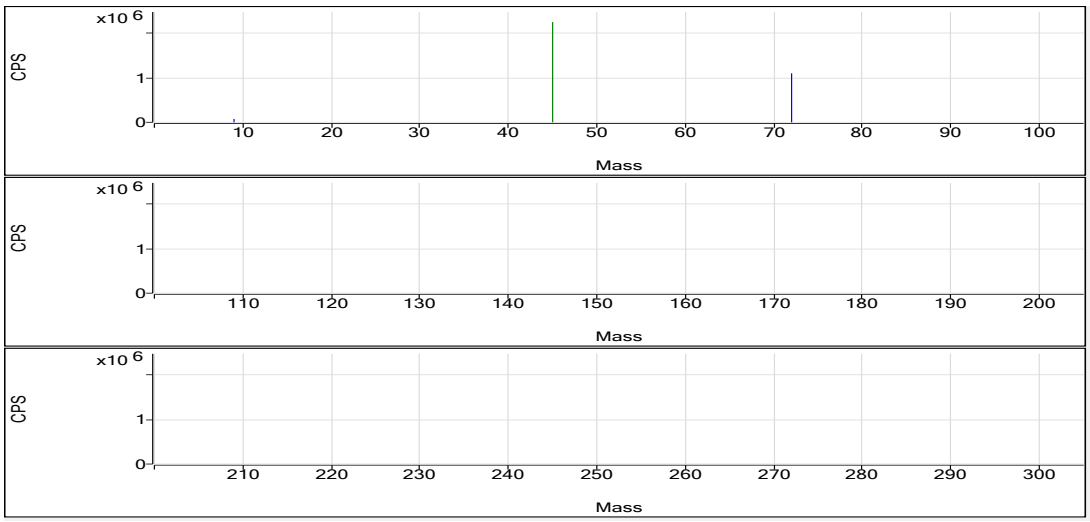
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.399	ppb	1.3	75740.92	0.0336	Pulse	0.5000	3
Se	78	115	H2	47.271	ppb	1.7	2571.57	0.0082	Pulse	1.5000	3
Na	23	45	He	4918.668	ppb	2.0	679335.43	18.0909	Pulse	0.1000	3
Mg	24	45	He	4994.120	ppb	2.4	341968.07	9.1074	Pulse	0.1000	3
Al	27	45	He	4776.634	ppb	3.8	104328.02	2.7791	Pulse	0.1000	3
K	39	45	He	4887.183	ppb	3.2	230221.03	6.1320	Pulse	0.1000	3
Ca	44	45	He	4663.214	ppb	2.4	12305.56	0.3275	Pulse	0.1000	3
Ti	47	45	He	4911.300	ppb	4.2	98956.06	2.6362	Pulse	0.1000	3
V	51	45	He	506.591	ppb	2.3	426993.34	11.3717	Pulse	0.5000	3
Cr	52	45	He	505.368	ppb	2.0	557335.10	14.8421	Pulse	0.1000	3
Mn	55	45	He	493.677	ppb	2.1	240065.12	6.3932	Pulse	0.1000	3
Fe	57	45	He	5016.291	ppb	2.9	111193.08	2.9616	Pulse	0.1000	3
Co	59	45	He	502.982	ppb	2.0	1080809.31	28.7827	Pulse	0.1000	3
Ni	60	72	He	517.872	ppb	3.8	301938.93	4.4647	Pulse	0.1000	3
Cu	63	72	He	494.349	ppb	2.8	858934.78	12.6990	Pulse	0.1000	3
Zn	66	72	He	521.652	ppb	3.5	102135.64	1.5102	Pulse	0.1000	3
As	75	72	He	509.996	ppb	2.4	70354.96	1.0401	Pulse	0.5000	3
Sr	88	115	He	48.643	ppb	1.1	29912.27	0.4387	Pulse	0.1000	3
Mo	98	115	He	52.133	ppb	0.9	80299.54	1.1778	Pulse	0.1000	3
Ag	107	115	He	53.502	ppb	1.5	177556.78	2.6047	Pulse	0.1000	3
Cd	111	115	He	51.673	ppb	0.7	19109.74	0.2803	Pulse	0.5000	3
Sn	120	115	He	52.055	ppb	1.0	58513.97	0.8583	Pulse	0.1000	3
Sb	121	115	He	50.590	ppb	0.9	52403.25	0.7687	Pulse	0.1000	3
Ba	137	115	He	509.930	ppb	0.8	171296.53	2.5127	Pulse	0.1000	3
Tl	205	159	He	53.074	ppb	0.5	446685.88	1.3226	Pulse	0.1000	3
Pb	208	159	He	52.734	ppb	0.5	595790.05	1.7640	Pulse	0.1000	3
U	238	209	He	50.649	ppb	1.3	680989.94	2.4988	Pulse	0.1000	3

ISTD Table:

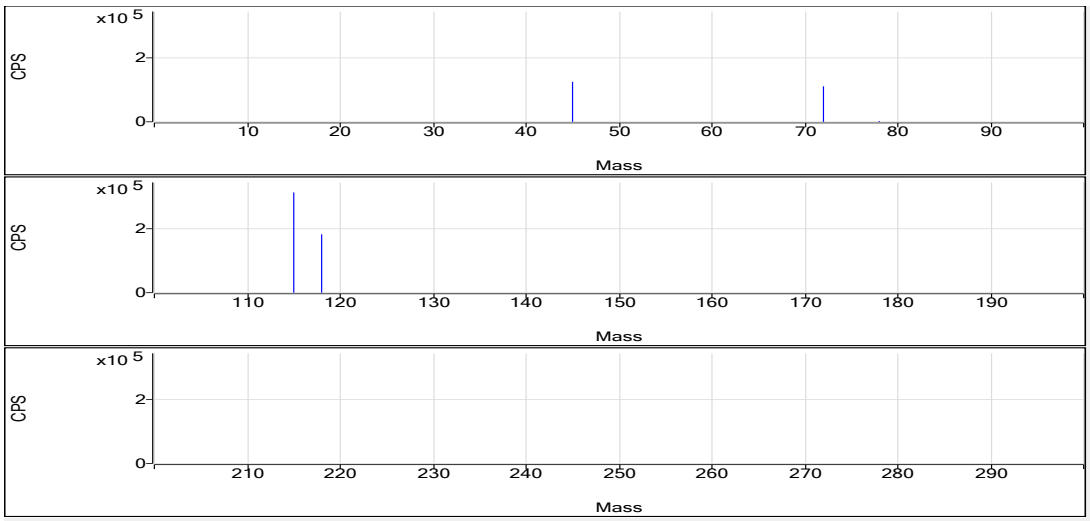
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2252744.71	1.1	93.6	Analog	0.1000	3
No Gas	Ge	72	1100700.48	1.2	94.7	Pulse	0.1000	3
H2	Sc	45	125011.64	0.4	76.0	Pulse	0.1000	3
H2	Ge	72	110932.01	0.9	76.3	Pulse	0.1000	3
H2	In	115	313183.00	0.5	87.0	Pulse	0.1000	3
He	Sc	45	37562.78	2.4	85.8	Pulse	0.1000	3
He	Ge	72	67664.27	2.1	88.4	Pulse	0.1000	3
He	In	115	68175.96	1.0	87.9	Pulse	0.1000	3
He	Tb	159	337745.83	0.3	91.1	Pulse	0.1000	3
He	Bi	209	272538.75	1.2	93.2	Pulse	0.1000	3

No Gas

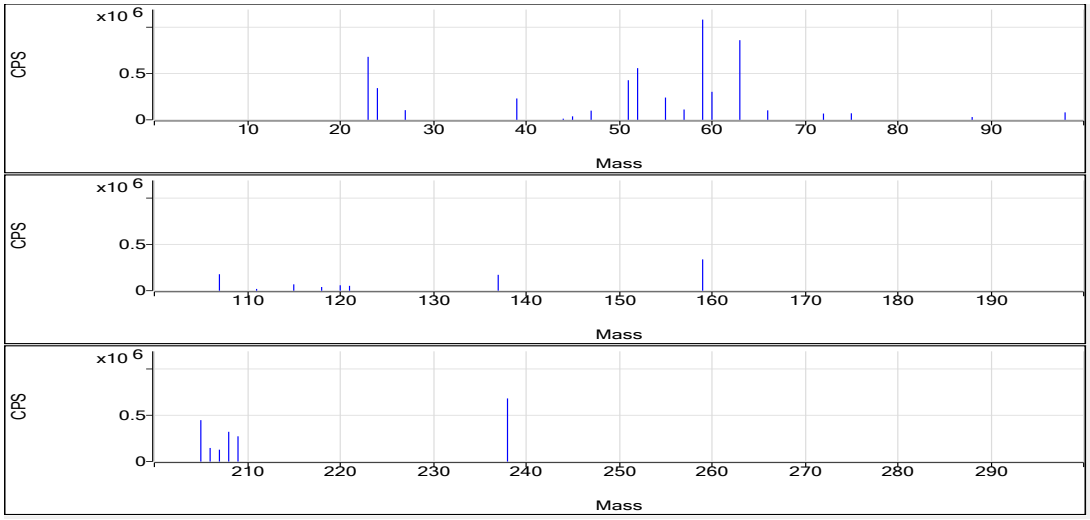


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	44.73	0.0331	75157.40	0.0007	1.523E-05
Be	9	1	No Gas	45.744	0.0339	76749.23	0.0007	1.523E-05
Be	9	1	No Gas	45.724	0.0339	75316.13	0.0007	1.523E-05
Se	78	2	H2	47.114	0.0082	2550.23	0.0002	3.71E-06
Se	78	2	H2	48.119	0.0084	2628.91	0.0002	3.71E-06
Se	78	2	H2	46.581	0.0081	2535.56	0.0002	3.71E-06
Na	23	3	He	5013.842	18.4351	680766.08	0.0036	0.3007
Na	23	3	He	4814.976	17.7158	684049.36	0.0036	0.3007
Na	23	3	He	4927.186	18.1217	673190.85	0.0036	0.3007
Mg	24	3	He	5103.682	9.3071	343690.78	0.0018	0.003274
Mg	24	3	He	4863.019	8.8684	342429.72	0.0018	0.003274
Mg	24	3	He	5015.66	9.1467	339783.71	0.0018	0.003274
Al	27	3	He	4871.808	2.8345	104669.93	0.0006	0.00137
Al	27	3	He	4568.593	2.6581	102636.50	0.0006	0.00137
Al	27	3	He	4889.501	2.8447	105677.63	0.0006	0.00137
K	39	3	He	4991.348	6.2546	230969.23	0.0012	0.378
K	39	3	He	4704.803	5.9173	228479.37	0.0012	0.378
K	39	3	He	4965.398	6.2241	231214.49	0.0012	0.378
Ca	44	3	He	4713.957	0.3311	12225.49	0.0001	0.003203
Ca	44	3	He	4741.083	0.333	12856.06	0.0001	0.003203
Ca	44	3	He	4534.601	0.3186	11835.14	0.0001	0.003203
Ti	47	3	He	5032.001	2.701	99740.82	0.0005	0
Ti	47	3	He	4675.485	2.5096	96901.95	0.0005	0
Ti	47	3	He	5026.413	2.698	100225.42	0.0005	0
V	51	3	He	513.936	11.5362	426006.47	0.0224	0.02476
V	51	3	He	493.065	11.0688	427389.94	0.0224	0.02476
V	51	3	He	512.772	11.5102	427583.63	0.0224	0.02476
Cr	52	3	He	510.689	14.9979	553838.86	0.0293	0.04167
Cr	52	3	He	493.919	14.5068	560141.28	0.0293	0.04167
Cr	52	3	He	511.495	15.0215	558025.15	0.0293	0.04167
Mn	55	3	He	502.517	6.5076	240309.82	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	482.056	6.2429	241051.85	0.0129	0.006476
Mn	55	3	He	496.458	6.4292	238833.69	0.0129	0.006476
Fe	57	3	He	5084.698	3.0019	110853.64	0.0006	0.00213
Fe	57	3	He	4849.009	2.8629	110541.77	0.0006	0.00213
Fe	57	3	He	5115.167	3.0199	112183.82	0.0006	0.00213
Co	59	3	He	510.035	29.1863	1077782.33	0.0572	0.00297
Co	59	3	He	491.557	28.129	1086126.55	0.0572	0.00297
Co	59	3	He	507.352	29.0328	1078519.05	0.0572	0.00297
Ni	60	3	He	509.807	4.3953	300564.47	0.0086	0.002921
Ni	60	3	He	540.508	4.6598	307555.80	0.0086	0.002921
Ni	60	3	He	503.301	4.3392	297696.52	0.0086	0.002921
Cu	63	3	He	483.707	12.4257	849718.42	0.0257	0.004531
Cu	63	3	He	510.208	13.1062	865043.42	0.0257	0.004531
Cu	63	3	He	489.133	12.5651	862042.49	0.0257	0.004531
Zn	66	3	He	510.127	1.4769	100995.01	0.0029	0.002877
Zn	66	3	He	542.449	1.5703	103642.10	0.0029	0.002877
Zn	66	3	He	512.379	1.4834	101769.81	0.0029	0.002877
As	75	3	He	507.551	1.0351	70785.74	0.002	0.0006798
As	75	3	He	523.23	1.0671	70429.88	0.002	0.0006798
As	75	3	He	499.207	1.0181	69849.25	0.002	0.0006798
Sr	88	3	He	48.048	0.4334	29320.78	0.009	0.001075
Sr	88	3	He	48.808	0.4402	30363.45	0.009	0.001075
Sr	88	3	He	49.072	0.4426	30052.59	0.009	0.001075
Mo	98	3	He	52.077	1.1765	79595.44	0.0226	0.0005115
Mo	98	3	He	52.632	1.189	82009.63	0.0226	0.0005115
Mo	98	3	He	51.691	1.1678	79293.56	0.0226	0.0005115
Ag	107	3	He	54.04	2.6309	177991.15	0.0487	0.0003023
Ag	107	3	He	52.555	2.5586	176472.91	0.0487	0.0003023
Ag	107	3	He	53.91	2.6245	178206.27	0.0487	0.0003023
Cd	111	3	He	51.424	0.279	18872.76	0.0054	8.618E-06
Cd	111	3	He	51.496	0.2793	19267.29	0.0054	8.618E-06
Cd	111	3	He	52.097	0.2826	19189.18	0.0054	8.618E-06
Sn	120	3	He	52.656	0.868	58724.75	0.0161	0.0177
Sn	120	3	He	51.872	0.8554	58995.89	0.0161	0.0177
Sn	120	3	He	51.637	0.8516	57821.27	0.0161	0.0177
Sb	121	3	He	50.564	0.7683	51978.44	0.0152	8.618E-05
Sb	121	3	He	50.153	0.762	52560.42	0.0152	8.618E-05
Sb	121	3	He	51.052	0.7757	52670.88	0.0152	8.618E-05
Ba	137	3	He	513.504	2.5303	171187.81	0.0049	0.0001277
Ba	137	3	He	505.456	2.4907	171786.89	0.0049	0.0001277
Ba	137	3	He	510.83	2.5171	170914.88	0.0049	0.0001277
Tl	205	3	He	52.826	1.3164	444141.40	0.0249	0.000171
Tl	205	3	He	53.324	1.3288	447593.59	0.0249	0.000171
Tl	205	3	He	53.073	1.3225	448322.65	0.0249	0.000171
Pb	208	3	He	52.893	1.7693	321072.05	0.0334	0.001456
Pb	208	3	He	52.461	1.7549	319269.00	0.0334	0.001456
Pb	208	3	He	52.849	1.7678	322443.08	0.0334	0.001456
U	238	3	He	50.29	2.4812	672464.76	0.0493	0.0001028
U	238	3	He	51.404	2.5361	685748.51	0.0493	0.0001028
U	238	3	He	50.252	2.4793	684756.55	0.0493	0.0001028
Sc	45	1	No Gas			2268725.75		
Sc	45	1	No Gas			2265431.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2224076.53		
Ge	72	1	No Gas			1087114.28		
Ge	72	1	No Gas			1113130.37		
Ge	72	1	No Gas			1101856.78		
Sc	45	2	H2			124774.47		
Sc	45	2	H2			125518.70		
Sc	45	2	H2			124741.76		
Ge	72	2	H2			111925.99		
Ge	72	2	H2			110848.60		
Ge	72	2	H2			110021.45		
In	115	2	H2			311633.37		
In	115	2	H2			314536.66		
In	115	2	H2			313378.98		
Sc	45	3	He			36927.68		
Sc	45	3	He			38612.30		
Sc	45	3	He			37148.35		
Ge	72	3	He			68383.93		
Ge	72	3	He			66002.53		
Ge	72	3	He			68606.36		
In	115	3	He			67966.48		
In	115	3	He			69283.76		
In	115	3	He			68207.82		
Tb	159	3	He			337398.78		
Tb	159	3	He			336848.20		
Tb	159	3	He			338990.50		
Bi	209	3	He			271027.32		
Bi	209	3	He			270396.19		
Bi	209	3	He			276192.75		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

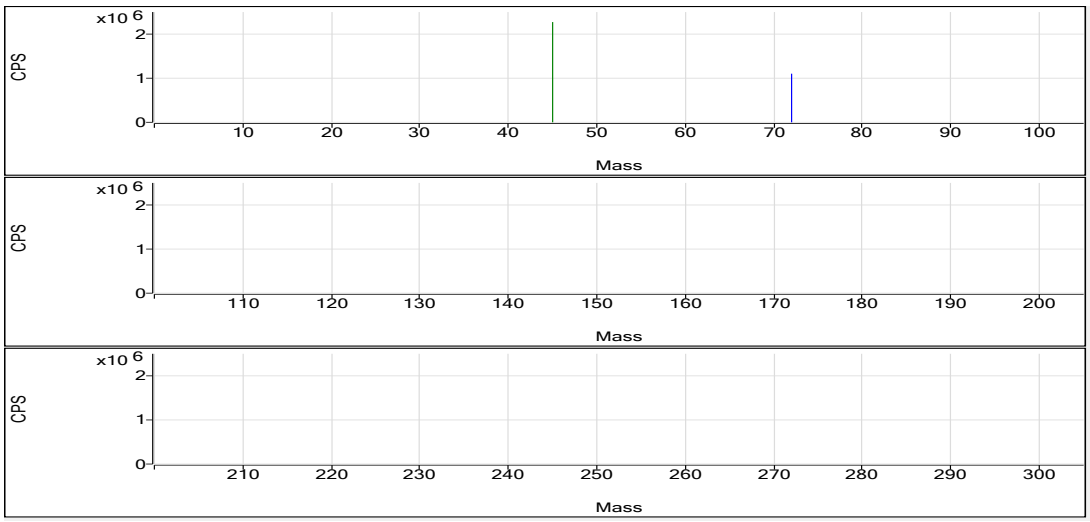
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.019	ppb	12.6	66.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.135	ppb	36.8	8.44	0.0000	Pulse	1.5000	3
Na	23	45	He	29.916	ppb	7.3	15451.85	0.4089	Pulse	0.1000	3
Mg	24	45	He	1.877	ppb	50.2	253.35	0.0067	Pulse	0.1000	3
Al	27	45	He	0.674	ppb	100.1	66.67	0.0018	Pulse	0.1000	3
K	39	45	He	2.222	ppb	565.7	14380.88	0.3806	Pulse	0.1000	3
Ca	44	45	He	-2.977	ppb	N/A	113.34	0.0030	Pulse	0.1000	3
Ti	47	45	He	1.643	ppb	17.0	33.33	0.0009	Pulse	0.1000	3
V	51	45	He	0.136	ppb	60.2	1050.71	0.0278	Pulse	0.5000	3
Cr	52	45	He	0.177	ppb	38.6	1770.16	0.0469	Pulse	0.1000	3
Mn	55	45	He	-0.104	ppb	N/A	193.34	0.0051	Pulse	0.1000	3
Fe	57	45	He	1.014	ppb	328.9	103.34	0.0027	Pulse	0.1000	3
Co	59	45	He	0.111	ppb	41.3	353.35	0.0093	Pulse	0.1000	3
Ni	60	72	He	0.149	ppb	58.1	280.02	0.0042	Pulse	0.1000	3
Cu	63	72	He	0.124	ppb	25.2	516.69	0.0077	Pulse	0.1000	3
Zn	66	72	He	0.077	ppb	252.4	206.68	0.0031	Pulse	0.1000	3
As	75	72	He	0.155	ppb	136.0	66.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	77598.0	73.33	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.090	ppb	7.8	173.34	0.0025	Pulse	0.1000	3
Ag	107	115	He	0.014	ppb	62.1	66.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	123.0	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.184	ppb	46.0	1410.13	0.0207	Pulse	0.1000	3
Sb	121	115	He	0.030	ppb	49.7	36.67	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.162	ppb	89.9	63.33	0.0009	Pulse	0.1000	3
Tl	205	159	He	0.100	ppb	12.2	903.40	0.0027	Pulse	0.1000	3
Pb	208	159	He	0.030	ppb	37.9	833.38	0.0025	Pulse	0.1000	3
U	238	209	He	0.048	ppb	26.0	670.04	0.0025	Pulse	0.1000	3

ISTD Table:

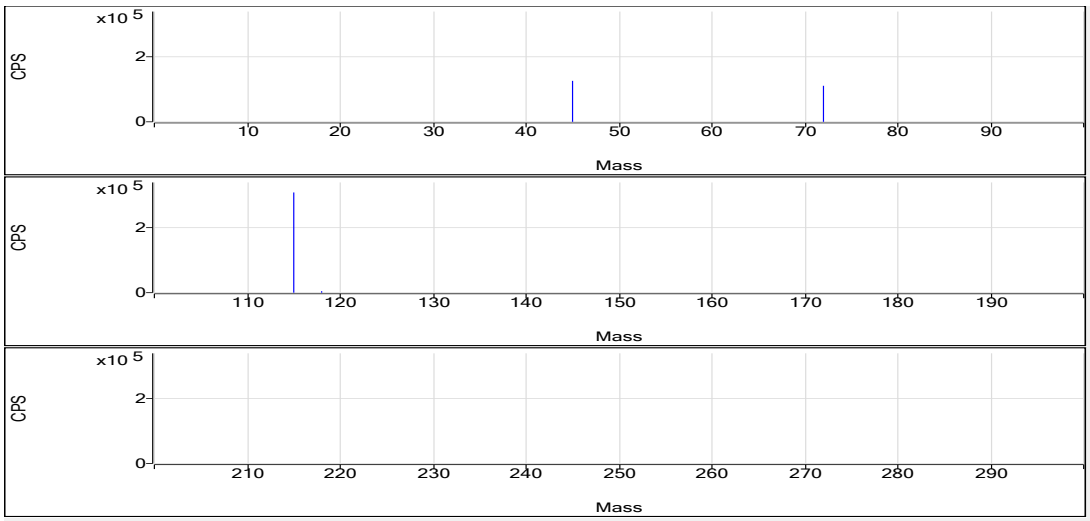
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2269136.48	0.1	94.3	Analog	0.1000	3
No Gas	Ge	72	1100247.30	0.3	94.7	Pulse	0.1000	3
H2	Sc	45	126979.23	0.9	77.2	Pulse	0.1000	3
H2	Ge	72	111651.11	0.3	76.8	Pulse	0.1000	3
H2	In	115	310650.97	0.2	86.3	Pulse	0.1000	3
He	Sc	45	37789.71	0.7	86.4	Pulse	0.1000	3
He	Ge	72	66830.50	2.7	87.4	Pulse	0.1000	3
He	In	115	68223.69	0.5	88.0	Pulse	0.1000	3
He	Tb	159	338769.88	0.3	91.3	Pulse	0.1000	3
He	Bi	209	271345.84	0.4	92.8	Pulse	0.1000	3

No Gas

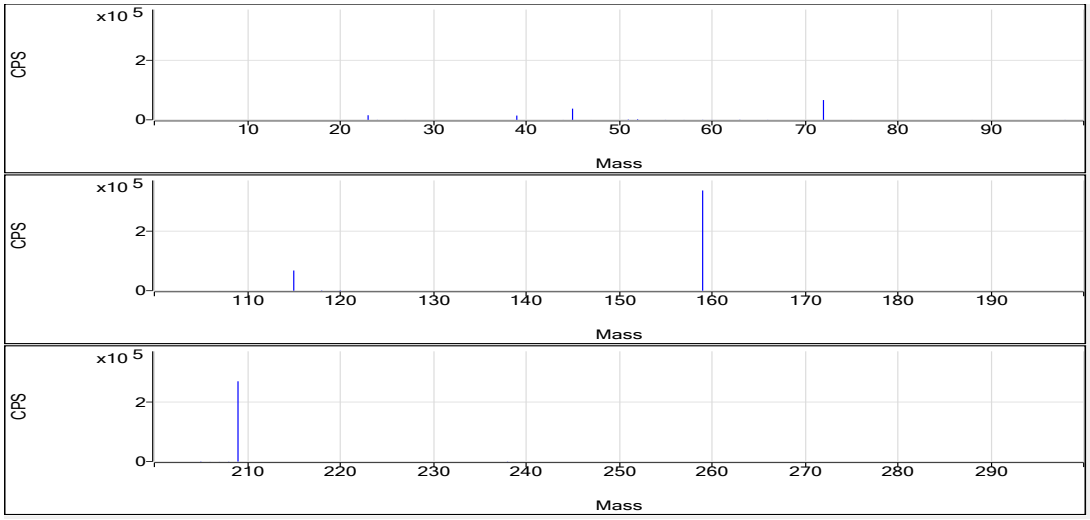


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0	62.00	0.0007	1.523E-05
Be	9	1	No Gas	0.021	0	70.00	0.0007	1.523E-05
Be	9	1	No Gas	0.019	0	66.00	0.0007	1.523E-05
Se	78	2	H2	0.09	0	6.00	0.0002	3.71E-06
Se	78	2	H2	0.127	0	8.00	0.0002	3.71E-06
Se	78	2	H2	0.188	0	11.33	0.0002	3.71E-06
Na	23	3	He	32.291	0.4174	15859.02	0.0036	0.3007
Na	23	3	He	27.988	0.4019	15058.07	0.0036	0.3007
Na	23	3	He	29.469	0.4072	15438.47	0.0036	0.3007
Mg	24	3	He	2.681	0.0082	310.02	0.0018	0.003274
Mg	24	3	He	0.84	0.0048	180.01	0.0018	0.003274
Mg	24	3	He	2.111	0.0071	270.02	0.0018	0.003274
Al	27	3	He	1.265	0.0021	80.00	0.0006	0.00137
Al	27	3	He	-0.061	0.0013	50.00	0.0006	0.00137
Al	27	3	He	0.819	0.0018	70.00	0.0006	0.00137
K	39	3	He	-2.305	0.3753	14257.36	0.0012	0.378
K	39	3	He	16.429	0.3973	14888.05	0.0012	0.378
K	39	3	He	-7.458	0.3692	13997.23	0.0012	0.378
Ca	44	3	He	3.154	0.0034	130.00	0.0001	0.003203
Ca	44	3	He	-15.347	0.0021	80.00	0.0001	0.003203
Ca	44	3	He	3.262	0.0034	130.01	0.0001	0.003203
Ti	47	3	He	1.471	0.0008	30.00	0.0005	0
Ti	47	3	He	1.492	0.0008	30.00	0.0005	0
Ti	47	3	He	1.966	0.0011	40.00	0.0005	0
V	51	3	He	0.044	0.0257	978.04	0.0224	0.02476
V	51	3	He	0.201	0.0293	1096.05	0.0224	0.02476
V	51	3	He	0.164	0.0284	1078.05	0.0224	0.02476
Cr	52	3	He	0.177	0.0469	1780.16	0.0293	0.04167
Cr	52	3	He	0.245	0.0488	1830.18	0.0293	0.04167
Cr	52	3	He	0.109	0.0448	1700.15	0.0293	0.04167
Mn	55	3	He	-0.236	0.0034	130.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.098	0.0077	290.01	0.0129	0.006476
Mn	55	3	He	-0.174	0.0042	160.01	0.0129	0.006476
Fe	57	3	He	4.867	0.005	190.01	0.0006	0.00213
Fe	57	3	He	-0.896	0.0016	60.00	0.0006	0.00213
Fe	57	3	He	-0.928	0.0016	60.00	0.0006	0.00213
Co	59	3	He	0.164	0.0124	470.02	0.0572	0.00297
Co	59	3	He	0.088	0.008	300.01	0.0572	0.00297
Co	59	3	He	0.082	0.0076	290.01	0.0572	0.00297
Ni	60	3	He	0.18	0.0045	300.02	0.0086	0.002921
Ni	60	3	He	0.215	0.0048	310.02	0.0086	0.002921
Ni	60	3	He	0.051	0.0034	230.01	0.0086	0.002921
Cu	63	3	He	0.114	0.0074	500.03	0.0257	0.004531
Cu	63	3	He	0.099	0.0071	460.02	0.0257	0.004531
Cu	63	3	He	0.159	0.0086	590.03	0.0257	0.004531
Zn	66	3	He	0.242	0.0036	240.01	0.0029	0.002877
Zn	66	3	He	0.124	0.0032	210.01	0.0029	0.002877
Zn	66	3	He	-0.136	0.0025	170.01	0.0029	0.002877
As	75	3	He	0.397	0.0015	100.00	0.002	0.0006798
As	75	3	He	0.014	0.0007	46.00	0.002	0.0006798
As	75	3	He	0.054	0.0008	54.00	0.002	0.0006798
Sr	88	3	He	-0.006	0.001	70.00	0.009	0.001075
Sr	88	3	He	-0.038	0.0007	50.00	0.009	0.001075
Sr	88	3	He	0.044	0.0015	100.00	0.009	0.001075
Mo	98	3	He	0.094	0.0026	180.01	0.0226	0.0005115
Mo	98	3	He	0.094	0.0026	180.01	0.0226	0.0005115
Mo	98	3	He	0.082	0.0024	160.01	0.0226	0.0005115
Ag	107	3	He	0.024	0.0015	100.00	0.0487	0.0003023
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Cd	111	3	He	0.025	0.0001	10.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Sn	120	3	He	0.087	0.0191	1310.13	0.0161	0.0177
Sn	120	3	He	0.219	0.0212	1450.12	0.0161	0.0177
Sn	120	3	He	0.245	0.0217	1470.13	0.0161	0.0177
Sb	121	3	He	0.014	0.0003	20.00	0.0152	8.618E-05
Sb	121	3	He	0.043	0.0007	50.00	0.0152	8.618E-05
Sb	121	3	He	0.033	0.0006	40.00	0.0152	8.618E-05
Ba	137	3	He	0.329	0.0018	120.00	0.0049	0.0001277
Ba	137	3	He	0.063	0.0004	30.00	0.0049	0.0001277
Ba	137	3	He	0.094	0.0006	40.00	0.0049	0.0001277
Tl	205	3	He	0.113	0.003	1010.08	0.0249	0.000171
Tl	205	3	He	0.098	0.0026	890.05	0.0249	0.000171
Tl	205	3	He	0.089	0.0024	810.06	0.0249	0.000171
Pb	208	3	He	0.042	0.0029	610.03	0.0334	0.001456
Pb	208	3	He	0.028	0.0024	510.03	0.0334	0.001456
Pb	208	3	He	0.02	0.0021	400.03	0.0334	0.001456
U	238	3	He	0.034	0.0018	480.02	0.0493	0.0001028
U	238	3	He	0.057	0.0029	790.05	0.0493	0.0001028
U	238	3	He	0.053	0.0027	740.05	0.0493	0.0001028
Sc	45	1	No Gas			2267312.31		
Sc	45	1	No Gas			2269620.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2270476.53		
Ge	72	1	No Gas			1100635.53		
Ge	72	1	No Gas			1096384.59		
Ge	72	1	No Gas			1103721.78		
Sc	45	2	H2			125702.75		
Sc	45	2	H2			127576.04		
Sc	45	2	H2			127658.89		
Ge	72	2	H2			111795.88		
Ge	72	2	H2			111231.06		
Ge	72	2	H2			111926.38		
In	115	2	H2			310784.84		
In	115	2	H2			309953.96		
In	115	2	H2			311214.10		
Sc	45	3	He			37990.39		
Sc	45	3	He			37468.73		
Sc	45	3	He			37910.02		
Ge	72	3	He			67128.54		
Ge	72	3	He			64917.98		
Ge	72	3	He			68444.97		
In	115	3	He			68539.19		
In	115	3	He			68289.43		
In	115	3	He			67865.69		
Tb	159	3	He			337767.57		
Tb	159	3	He			339189.21		
Tb	159	3	He			339352.85		
Bi	209	3	He			271184.76		
Bi	209	3	He			270334.04		
Bi	209	3	He			272518.71		

Quantitation Report

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Sample Type	Sample
Comment	T20
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

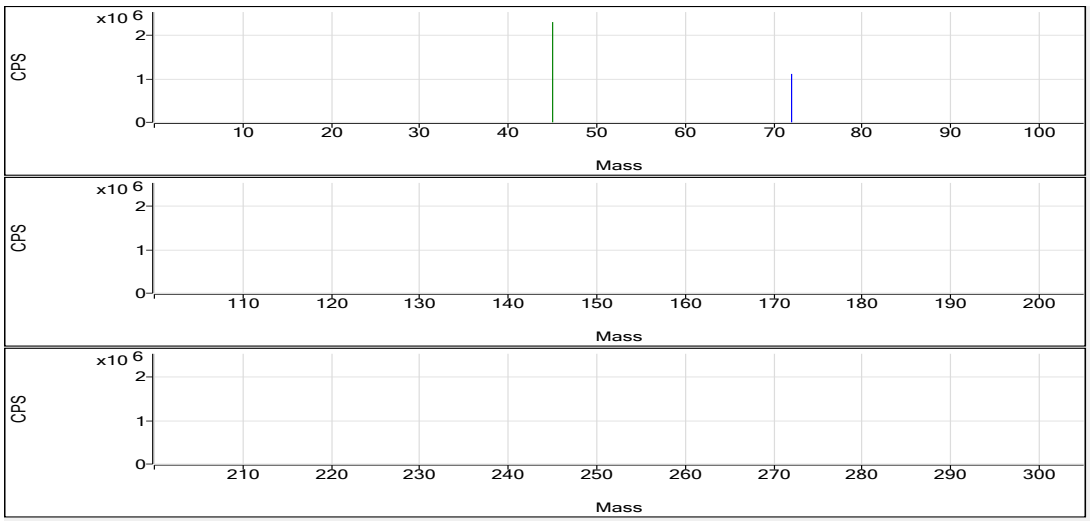
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.006	ppb	N/A	25.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.060	ppb	51.4	4.45	0.0000	Pulse	1.5000	3
Na	23	45	He	25.927	ppb	21.9	15098.12	0.3944	Pulse	0.1000	3
Mg	24	45	He	0.978	ppb	48.9	193.34	0.0051	Pulse	0.1000	3
Al	27	45	He	-0.241	ppb	N/A	46.67	0.0012	Pulse	0.1000	3
K	39	45	He	9.240	ppb	77.7	14891.39	0.3889	Pulse	0.1000	3
Ca	44	45	He	-18.555	ppb	N/A	73.34	0.0019	Pulse	0.1000	3
Ti	47	45	He	1.128	ppb	64.5	23.33	0.0006	Pulse	0.1000	3
V	51	45	He	-0.028	ppb	N/A	924.70	0.0241	Pulse	0.5000	3
Cr	52	45	He	-0.136	ppb	N/A	1443.45	0.0377	Pulse	0.1000	3
Mn	55	45	He	-0.212	ppb	N/A	143.34	0.0037	Pulse	0.1000	3
Fe	57	45	He	0.515	ppb	120.6	93.33	0.0024	Pulse	0.1000	3
Co	59	45	He	0.067	ppb	9.7	260.01	0.0068	Pulse	0.1000	3
Ni	60	72	He	0.054	ppb	205.8	233.35	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.190	ppb	5.9	646.70	0.0094	Pulse	0.1000	3
Zn	66	72	He	0.901	ppb	78.6	376.69	0.0055	Pulse	0.1000	3
As	75	72	He	0.024	ppb	583.4	50.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.004	ppb	982.8	76.67	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.024	ppb	159.1	73.34	0.0011	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	78.3	36.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	130.0	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.017	ppb	N/A	1203.43	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.029	ppb	98.6	36.67	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.072	ppb	23.0	33.33	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.022	ppb	14.1	250.01	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.080	ppb	22.8	1420.08	0.0041	Pulse	0.1000	3
U	238	209	He	0.011	ppb	36.1	173.34	0.0006	Pulse	0.1000	3

ISTD Table:

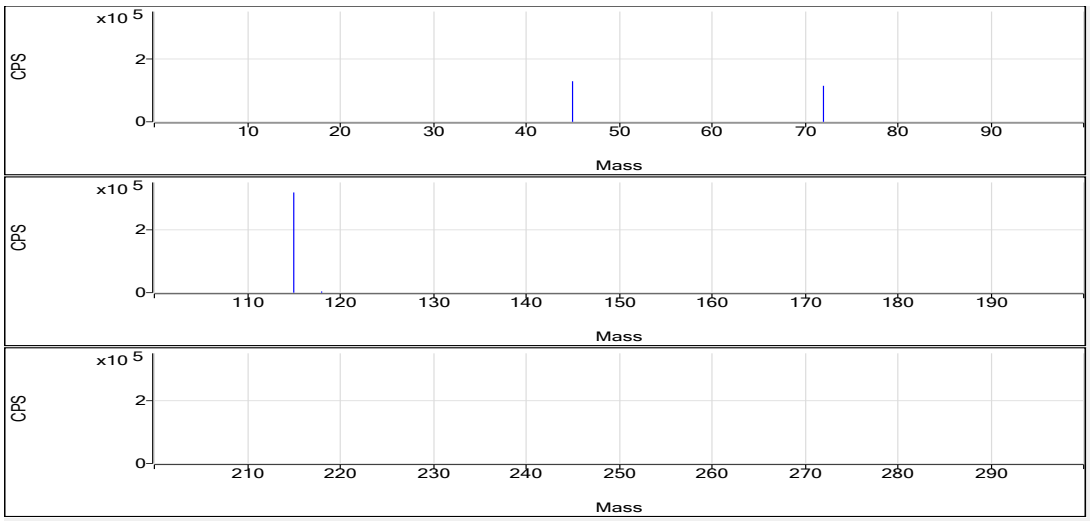
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2303899.81	1.0	95.7	Analog	0.1000	3
No Gas	Ge	72	1112085.22	1.5	95.7	Pulse	0.1000	3
H2	Sc	45	128279.73	1.4	78.0	Pulse	0.1000	3
H2	Ge	72	113817.98	0.7	78.3	Pulse	0.1000	3
H2	In	115	316801.78	1.3	88.0	Pulse	0.1000	3
He	Sc	45	38301.47	1.7	87.5	Pulse	0.1000	3
He	Ge	72	68792.33	0.8	89.9	Pulse	0.1000	3
He	In	115	69044.63	2.3	89.1	Pulse	0.1000	3
He	Tb	159	342793.14	0.7	92.4	Pulse	0.1000	3
He	Bi	209	276551.79	0.6	94.6	Pulse	0.1000	3

No Gas

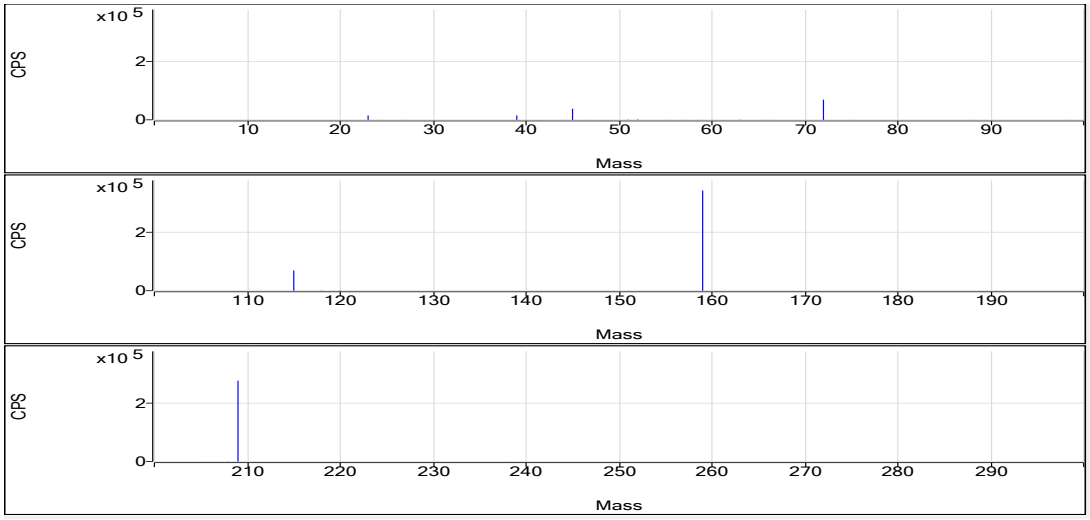


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.006	0	24.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.004	0	28.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.006	0	24.00	0.0007	1.523E-05
Se	78	2	H2	0.027	0	2.67	0.0002	3.71E-06
Se	78	2	H2	0.065	0	4.67	0.0002	3.71E-06
Se	78	2	H2	0.087	0	6.00	0.0002	3.71E-06
Na	23	3	He	23.153	0.3844	14857.89	0.0036	0.3007
Na	23	3	He	22.174	0.3809	14747.67	0.0036	0.3007
Na	23	3	He	32.455	0.418	15688.81	0.0036	0.3007
Mg	24	3	He	1.043	0.0052	200.01	0.0018	0.003274
Mg	24	3	He	0.471	0.0041	160.01	0.0018	0.003274
Mg	24	3	He	1.42	0.0059	220.01	0.0018	0.003274
Al	27	3	He	-1.466	0.0005	20.00	0.0006	0.00137
Al	27	3	He	-1.024	0.0008	30.00	0.0006	0.00137
Al	27	3	He	1.768	0.0024	90.00	0.0006	0.00137
K	39	3	He	9.396	0.3891	15038.31	0.0012	0.378
K	39	3	He	1.986	0.3803	14727.77	0.0012	0.378
K	39	3	He	16.337	0.3972	14908.08	0.0012	0.378
Ca	44	3	He	-5.124	0.0028	110.01	0.0001	0.003203
Ca	44	3	He	-27.48	0.0013	50.00	0.0001	0.003203
Ca	44	3	He	-23.059	0.0016	60.00	0.0001	0.003203
Ti	47	3	He	0.964	0.0005	20.00	0.0005	0
Ti	47	3	He	1.924	0.001	40.00	0.0005	0
Ti	47	3	He	0.496	0.0003	10.00	0.0005	0
V	51	3	He	-0.077	0.023	890.03	0.0224	0.02476
V	51	3	He	0.041	0.0257	994.04	0.0224	0.02476
V	51	3	He	-0.047	0.0237	890.03	0.0224	0.02476
Cr	52	3	He	-0.23	0.0349	1350.11	0.0293	0.04167
Cr	52	3	He	-0.074	0.0395	1530.13	0.0293	0.04167
Cr	52	3	He	-0.103	0.0386	1450.12	0.0293	0.04167
Mn	55	3	He	-0.161	0.0044	170.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.221	0.0036	140.01	0.0129	0.006476
Mn	55	3	He	-0.253	0.0032	120.00	0.0129	0.006476
Fe	57	3	He	0.336	0.0023	90.00	0.0006	0.00213
Fe	57	3	He	1.205	0.0028	110.00	0.0006	0.00213
Fe	57	3	He	0.003	0.0021	80.00	0.0006	0.00213
Co	59	3	He	0.061	0.0065	250.01	0.0572	0.00297
Co	59	3	He	0.065	0.0067	260.02	0.0572	0.00297
Co	59	3	He	0.074	0.0072	270.01	0.0572	0.00297
Ni	60	3	He	0.179	0.0045	310.02	0.0086	0.002921
Ni	60	3	He	0.018	0.0031	210.01	0.0086	0.002921
Ni	60	3	He	-0.035	0.0026	180.01	0.0086	0.002921
Cu	63	3	He	0.177	0.0091	630.04	0.0257	0.004531
Cu	63	3	He	0.194	0.0095	650.03	0.0257	0.004531
Cu	63	3	He	0.198	0.0096	660.04	0.0257	0.004531
Zn	66	3	He	0.699	0.0049	340.02	0.0029	0.002877
Zn	66	3	He	1.689	0.0078	530.04	0.0029	0.002877
Zn	66	3	He	0.316	0.0038	260.01	0.0029	0.002877
As	75	3	He	-0.107	0.0005	32.00	0.002	0.0006798
As	75	3	He	0.011	0.0007	48.00	0.002	0.0006798
As	75	3	He	0.167	0.001	70.00	0.002	0.0006798
Sr	88	3	He	-0.041	0.0007	50.00	0.009	0.001075
Sr	88	3	He	0.041	0.0014	100.00	0.009	0.001075
Sr	88	3	He	0.013	0.0012	80.00	0.009	0.001075
Mo	98	3	He	-0.01	0.0003	20.00	0.0226	0.0005115
Mo	98	3	He	0.067	0.002	140.01	0.0226	0.0005115
Mo	98	3	He	0.017	0.0009	60.00	0.0226	0.0005115
Ag	107	3	He	0.003	0.0004	30.00	0.0487	0.0003023
Ag	107	3	He	0.003	0.0004	30.00	0.0487	0.0003023
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.031	0.0002	12.00	0.0054	8.618E-06
Sn	120	3	He	-0.032	0.0172	1210.11	0.0161	0.0177
Sn	120	3	He	0.018	0.018	1250.10	0.0161	0.0177
Sn	120	3	He	-0.038	0.0171	1150.09	0.0161	0.0177
Sb	121	3	He	0.004	0.0001	10.00	0.0152	8.618E-05
Sb	121	3	He	0.061	0.001	70.00	0.0152	8.618E-05
Sb	121	3	He	0.024	0.0004	30.00	0.0152	8.618E-05
Ba	137	3	He	0.061	0.0004	30.00	0.0049	0.0001277
Ba	137	3	He	0.091	0.0006	40.00	0.0049	0.0001277
Ba	137	3	He	0.065	0.0004	30.00	0.0049	0.0001277
Tl	205	3	He	0.026	0.0008	280.02	0.0249	0.000171
Tl	205	3	He	0.02	0.0007	230.01	0.0249	0.000171
Tl	205	3	He	0.021	0.0007	240.01	0.0249	0.000171
Pb	208	3	He	0.1	0.0048	910.07	0.0334	0.001456
Pb	208	3	He	0.077	0.004	640.04	0.0334	0.001456
Pb	208	3	He	0.064	0.0036	690.04	0.0334	0.001456
U	238	3	He	0.01	0.0006	160.01	0.0493	0.0001028
U	238	3	He	0.007	0.0005	130.01	0.0493	0.0001028
U	238	3	He	0.015	0.0008	230.01	0.0493	0.0001028
Sc	45	1	No Gas			2301457.47		
Sc	45	1	No Gas			2328729.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2281512.47		
Ge	72	1	No Gas			1111694.83		
Ge	72	1	No Gas			1129257.56		
Ge	72	1	No Gas			1095303.26		
Sc	45	2	H2			126587.96		
Sc	45	2	H2			128152.43		
Sc	45	2	H2			130098.80		
Ge	72	2	H2			113529.49		
Ge	72	2	H2			113156.21		
Ge	72	2	H2			114768.25		
In	115	2	H2			320136.71		
In	115	2	H2			312274.70		
In	115	2	H2			317993.94		
Sc	45	3	He			38652.45		
Sc	45	3	He			38722.56		
Sc	45	3	He			37529.41		
Ge	72	3	He			69439.11		
Ge	72	3	He			68323.61		
Ge	72	3	He			68614.28		
In	115	3	He			70398.93		
In	115	3	He			69443.71		
In	115	3	He			67313.17		
Tb	159	3	He			341576.32		
Tb	159	3	He			341090.07		
Tb	159	3	He			345713.04		
Bi	209	3	He			277540.37		
Bi	209	3	He			277393.88		
Bi	209	3	He			274721.11		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

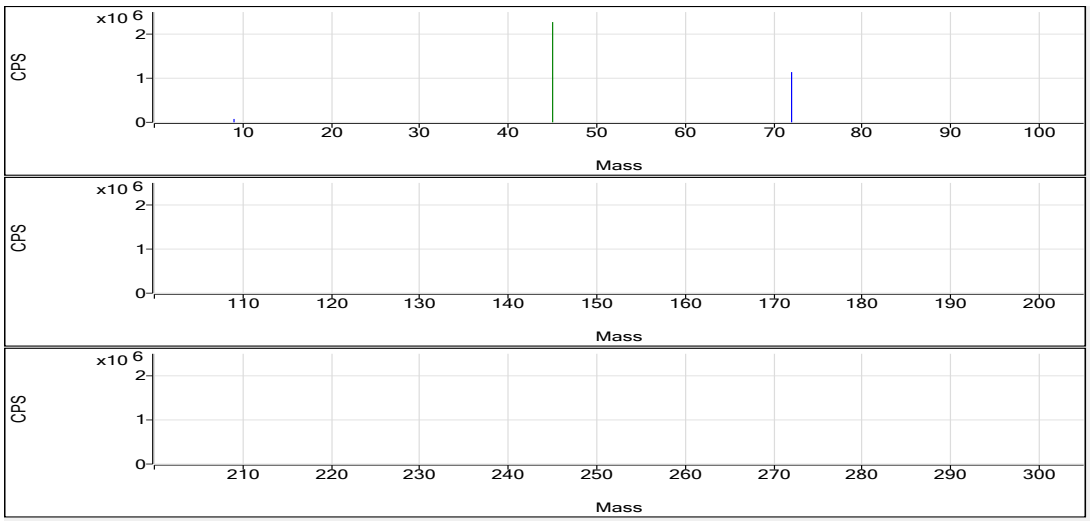
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.081	ppb	0.9	76301.04	0.0334	Pulse	0.5000	3
Se	78	115	H2	95.521	ppb	1.7	5296.10	0.0166	Pulse	1.5000	3
Na	23	45	He	5012.251	ppb	3.9	697676.11	18.4294	Pulse	0.1000	3
Mg	24	45	He	5111.713	ppb	4.1	352875.67	9.3218	Pulse	0.1000	3
Al	27	45	He	4892.714	ppb	3.5	107771.73	2.8466	Pulse	0.1000	3
K	39	45	He	4913.619	ppb	3.4	233347.40	6.1631	Pulse	0.1000	3
Ca	44	45	He	5025.564	ppb	1.5	13366.55	0.3527	Pulse	0.1000	3
Ti	47	45	He	492.529	ppb	4.7	10010.48	0.2644	Pulse	0.1000	3
V	51	45	He	515.309	ppb	2.7	437988.21	11.5670	Pulse	0.5000	3
Cr	52	45	He	509.259	ppb	2.5	566364.30	14.9561	Pulse	0.1000	3
Mn	55	45	He	501.486	ppb	2.2	245937.23	6.4942	Pulse	0.1000	3
Fe	57	45	He	5051.129	ppb	4.4	112882.29	2.9821	Pulse	0.1000	3
Co	59	45	He	512.646	ppb	3.4	1110677.54	29.3357	Pulse	0.1000	3
Ni	60	72	He	497.414	ppb	1.1	307968.60	4.2885	Pulse	0.1000	3
Cu	63	72	He	479.463	ppb	0.8	884466.19	12.3167	Pulse	0.1000	3
Zn	66	72	He	505.158	ppb	1.7	105016.38	1.4625	Pulse	0.1000	3
As	75	72	He	493.408	ppb	1.0	72260.50	1.0063	Pulse	0.5000	3
Sr	88	115	He	50.268	ppb	4.0	31255.29	0.4534	Pulse	0.1000	3
Mo	98	115	He	52.528	ppb	0.9	81851.30	1.1867	Pulse	0.1000	3
Ag	107	115	He	52.180	ppb	0.2	175216.91	2.5403	Pulse	0.1000	3
Cd	111	115	He	53.775	ppb	3.3	20112.50	0.2917	Pulse	0.5000	3
Sn	120	115	He	105.633	ppb	2.1	118849.81	1.7235	Pulse	0.1000	3
Sb	121	115	He	104.154	ppb	1.5	109133.97	1.5825	Pulse	0.1000	3
Ba	137	115	He	519.759	ppb	1.1	176636.41	2.5611	Pulse	0.1000	3
Tl	205	159	He	107.013	ppb	0.6	913818.09	2.6665	Pulse	0.1000	3
Pb	208	159	He	52.801	ppb	1.0	605290.54	1.7662	Pulse	0.1000	3
U	238	209	He	51.030	ppb	0.3	698208.53	2.5177	Pulse	0.1000	3

ISTD Table:

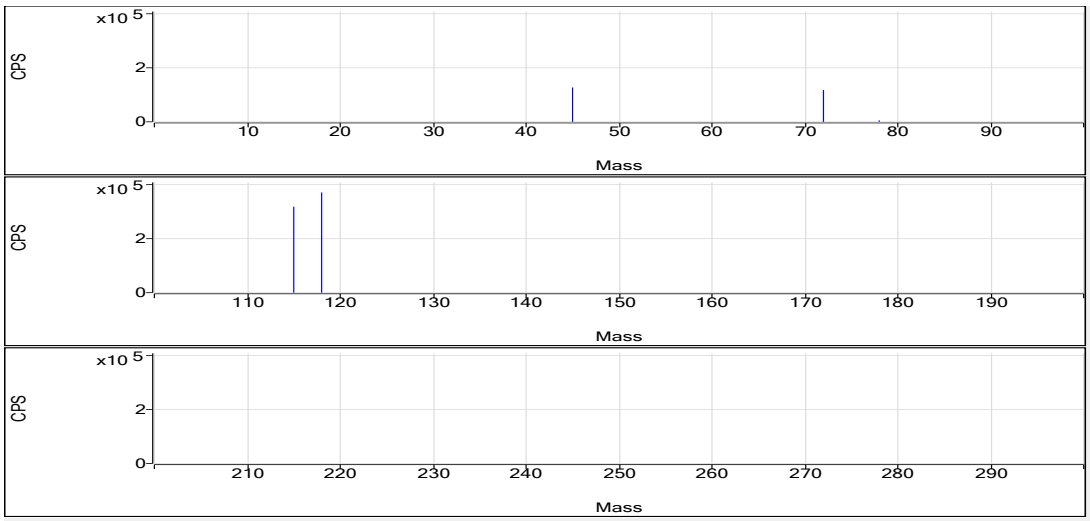
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2285376.89	1.0	94.9	Analog	0.1000	3
No Gas	Ge	72	1144467.69	0.8	98.5	Pulse	0.1000	3
H2	Sc	45	127629.83	0.8	77.6	Pulse	0.1000	3
H2	Ge	72	117998.72	0.8	81.2	Pulse	0.1000	3
H2	In	115	319314.63	1.1	88.7	Pulse	0.1000	3
He	Sc	45	37886.79	3.1	86.6	Pulse	0.1000	3
He	Ge	72	71814.34	1.3	93.9	Pulse	0.1000	3
He	In	115	68976.12	1.9	89.0	Pulse	0.1000	3
He	Tb	159	342711.41	0.5	92.4	Pulse	0.1000	3
He	Bi	209	277322.62	0.4	94.9	Pulse	0.1000	3

No Gas

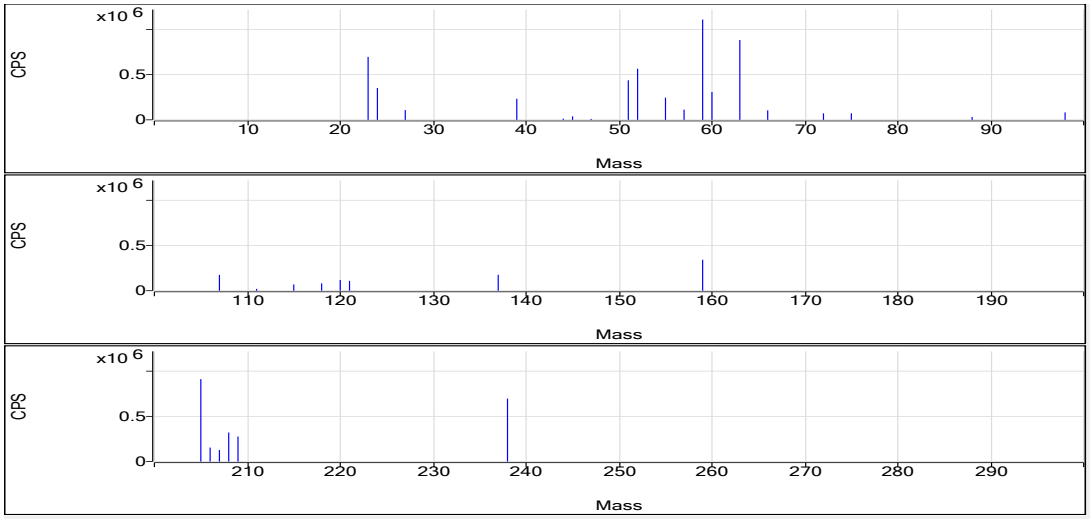


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.415	0.0336	76011.59	0.0007	1.523E-05
Be	9	1	No Gas	44.601	0.033	75645.80	0.0007	1.523E-05
Be	9	1	No Gas	45.226	0.0335	77245.73	0.0007	1.523E-05
Se	78	2	H2	96.117	0.0167	5329.00	0.0002	3.71E-06
Se	78	2	H2	96.785	0.0168	5308.32	0.0002	3.71E-06
Se	78	2	H2	93.661	0.0163	5250.97	0.0002	3.71E-06
Na	23	3	He	4920.951	18.0991	694849.13	0.0036	0.3007
Na	23	3	He	5237.031	19.2424	703246.71	0.0036	0.3007
Na	23	3	He	4878.771	17.9466	694932.49	0.0036	0.3007
Mg	24	3	He	5061.265	9.2298	354344.06	0.0018	0.003274
Mg	24	3	He	5343.519	9.7443	356124.68	0.0018	0.003274
Mg	24	3	He	4930.355	8.9912	348158.28	0.0018	0.003274
Al	27	3	He	4855.614	2.825	108456.90	0.0006	0.00137
Al	27	3	He	5081.794	2.9566	108053.17	0.0006	0.00137
Al	27	3	He	4740.733	2.7582	106805.11	0.0006	0.00137
K	39	3	He	4827.463	6.0617	232715.84	0.0012	0.378
K	39	3	He	5106.488	6.3902	233541.32	0.0012	0.378
K	39	3	He	4806.906	6.0375	233785.04	0.0012	0.378
Ca	44	3	He	4982.303	0.3497	13426.57	0.0001	0.003203
Ca	44	3	He	4984.081	0.3499	12786.02	0.0001	0.003203
Ca	44	3	He	5110.307	0.3586	13887.07	0.0001	0.003203
Ti	47	3	He	506.827	0.272	10444.14	0.0005	0
Ti	47	3	He	504.857	0.271	9903.70	0.0005	0
Ti	47	3	He	465.903	0.2501	9683.60	0.0005	0
V	51	3	He	508.552	11.4156	438260.38	0.0224	0.02476
V	51	3	He	531.573	11.9313	436049.47	0.0224	0.02476
V	51	3	He	505.803	11.3541	439654.78	0.0224	0.02476
Cr	52	3	He	500.084	14.6873	563866.01	0.0293	0.04167
Cr	52	3	He	523.494	15.3729	561831.98	0.0293	0.04167
Cr	52	3	He	504.199	14.8079	573394.91	0.0293	0.04167
Mn	55	3	He	498.226	6.4521	247702.83	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	513.568	6.6505	243056.05	0.0129	0.006476
Mn	55	3	He	492.665	6.3801	247052.81	0.0129	0.006476
Fe	57	3	He	4995.273	2.9492	113221.80	0.0006	0.00213
Fe	57	3	He	5293.792	3.1253	114218.59	0.0006	0.00213
Fe	57	3	He	4864.324	2.8719	111206.49	0.0006	0.00213
Co	59	3	He	509.799	29.1728	1119979.83	0.0572	0.00297
Co	59	3	He	531.308	30.4035	1111149.75	0.0572	0.00297
Co	59	3	He	496.83	28.4307	1100903.03	0.0572	0.00297
Ni	60	3	He	502.768	4.3346	312531.60	0.0086	0.002921
Ni	60	3	He	497.216	4.2868	303485.93	0.0086	0.002921
Ni	60	3	He	492.259	4.2441	307888.28	0.0086	0.002921
Cu	63	3	He	480.815	12.3514	890556.47	0.0257	0.004531
Cu	63	3	He	482.574	12.3966	877630.38	0.0257	0.004531
Cu	63	3	He	475.001	12.2021	885211.71	0.0257	0.004531
Zn	66	3	He	506.008	1.465	105627.21	0.0029	0.002877
Zn	66	3	He	513.143	1.4856	105174.23	0.0029	0.002877
Zn	66	3	He	496.323	1.437	104247.69	0.0029	0.002877
As	75	3	He	493.156	1.0058	72518.54	0.002	0.0006798
As	75	3	He	498.551	1.0168	71983.79	0.002	0.0006798
As	75	3	He	488.516	0.9963	72279.17	0.002	0.0006798
Sr	88	3	He	49.078	0.4426	30914.66	0.009	0.001075
Sr	88	3	He	52.613	0.4745	32006.89	0.009	0.001075
Sr	88	3	He	49.115	0.443	30844.33	0.009	0.001075
Mo	98	3	He	52.946	1.1961	83537.66	0.0226	0.0005115
Mo	98	3	He	52.643	1.1893	80228.48	0.0226	0.0005115
Mo	98	3	He	51.995	1.1746	81787.77	0.0226	0.0005115
Ag	107	3	He	52.14	2.5384	177282.17	0.0487	0.0003023
Ag	107	3	He	52.282	2.5453	171705.45	0.0487	0.0003023
Ag	107	3	He	52.117	2.5372	176663.12	0.0487	0.0003023
Cd	111	3	He	52.596	0.2853	19926.24	0.0054	8.618E-06
Cd	111	3	He	55.803	0.3027	20420.93	0.0054	8.618E-06
Cd	111	3	He	52.926	0.2871	19990.33	0.0054	8.618E-06
Sn	120	3	He	104.202	1.7004	118756.11	0.0161	0.0177
Sn	120	3	He	108.157	1.7643	119017.95	0.0161	0.0177
Sn	120	3	He	104.54	1.7059	118775.38	0.0161	0.0177
Sb	121	3	He	102.595	1.5588	108865.79	0.0152	8.618E-05
Sb	121	3	He	105.693	1.6058	108330.88	0.0152	8.618E-05
Sb	121	3	He	104.174	1.5828	110205.23	0.0152	8.618E-05
Ba	137	3	He	519.895	2.5618	178916.54	0.0049	0.0001277
Ba	137	3	He	525.587	2.5898	174711.77	0.0049	0.0001277
Ba	137	3	He	513.796	2.5318	176280.93	0.0049	0.0001277
Tl	205	3	He	106.965	2.6653	915230.61	0.0249	0.000171
Tl	205	3	He	107.627	2.6818	913398.27	0.0249	0.000171
Tl	205	3	He	106.447	2.6524	912825.38	0.0249	0.000171
Pb	208	3	He	52.336	1.7507	319773.32	0.0334	0.001456
Pb	208	3	He	53.393	1.786	325345.82	0.0334	0.001456
Pb	208	3	He	52.673	1.762	321017.16	0.0334	0.001456
U	238	3	He	50.931	2.5128	694005.69	0.0493	0.0001028
U	238	3	He	51.206	2.5264	702840.46	0.0493	0.0001028
U	238	3	He	50.953	2.5139	697779.44	0.0493	0.0001028
Sc	45	1	No Gas			2259894.50		
Sc	45	1	No Gas			2290071.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2306164.81		
Ge	72	1	No Gas			1144684.98		
Ge	72	1	No Gas			1135388.26		
Ge	72	1	No Gas			1153329.83		
Sc	45	2	H2			126768.04		
Sc	45	2	H2			127283.69		
Sc	45	2	H2			128837.76		
Ge	72	2	H2			116875.26		
Ge	72	2	H2			118448.83		
Ge	72	2	H2			118672.07		
In	115	2	H2			319268.16		
In	115	2	H2			315834.98		
In	115	2	H2			322840.74		
Sc	45	3	He			38391.28		
Sc	45	3	He			36546.80		
Sc	45	3	He			38722.28		
Ge	72	3	He			72101.49		
Ge	72	3	He			70795.94		
Ge	72	3	He			72545.58		
In	115	3	He			70479.35		
In	115	3	He			68086.95		
In	115	3	He			70268.43		
Tb	159	3	He			343388.51		
Tb	159	3	He			340592.81		
Tb	159	3	He			344152.92		
Bi	209	3	He			276193.43		
Bi	209	3	He			278202.91		
Bi	209	3	He			277571.52		

Quantitation Report

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Sample Name	410-136864-M-3-A
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

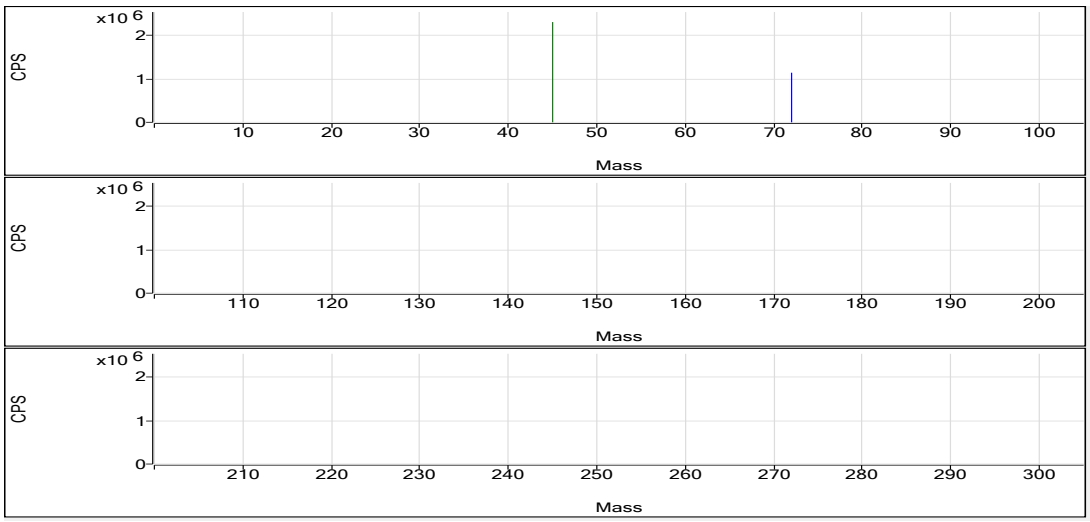
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.022	ppb	36.9	73.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.151	ppb	21.9	9.33	0.0000	Pulse	1.5000	3
Na	23	45	He	6022.018	ppb	2.2	822163.82	22.0816	Pulse	0.1000	3
Mg	24	45	He	49143.150	ppb	3.3	3335310.37	89.5897	Analog	0.1000	3
Al	27	45	He	5.934	ppb	33.6	180.01	0.0048	Pulse	0.1000	3
K	39	45	He	3460.394	ppb	1.7	165778.20	4.4521	Pulse	0.1000	3
Ca	44	45	He	129593.719	ppb	1.8	335731.74	9.0167	Pulse	0.1000	3
Ti	47	45	He	0.661	ppb	86.6	13.33	0.0004	Pulse	0.1000	3
V	51	45	He	0.069	ppb	161.4	978.71	0.0263	Pulse	0.5000	3
Cr	52	45	He	0.718	ppb	25.9	2336.94	0.0627	Pulse	0.1000	3
Mn	55	45	He	400.005	ppb	0.8	192953.36	5.1814	Pulse	0.1000	3
Fe	57	45	He	2335.262	ppb	0.5	51385.43	1.3798	Pulse	0.1000	3
Co	59	45	He	5.963	ppb	4.3	12812.74	0.3441	Pulse	0.1000	3
Ni	60	72	He	17.298	ppb	6.0	10707.61	0.1520	Pulse	0.1000	3
Cu	63	72	He	0.625	ppb	6.5	1450.13	0.0206	Pulse	0.1000	3
Zn	66	72	He	5.726	ppb	10.7	1370.11	0.0194	Pulse	0.1000	3
As	75	72	He	2.511	ppb	3.4	408.68	0.0058	Pulse	0.5000	3
Sr	88	115	He	88.523	ppb	1.6	53100.46	0.7976	Pulse	0.1000	3
Mo	98	115	He	0.177	ppb	32.8	300.02	0.0045	Pulse	0.1000	3
Ag	107	115	He	0.045	ppb	26.2	166.68	0.0025	Pulse	0.1000	3
Cd	111	115	He	0.398	ppb	11.8	144.67	0.0022	Pulse	0.5000	3
Sn	120	115	He	0.314	ppb	7.8	1516.80	0.0228	Pulse	0.1000	3
Sb	121	115	He	0.103	ppb	23.7	110.00	0.0016	Pulse	0.1000	3
Ba	137	115	He	653.717	ppb	2.2	214438.35	3.2212	Pulse	0.1000	3
Tl	205	159	He	0.199	ppb	8.0	1730.17	0.0051	Pulse	0.1000	3
Pb	208	159	He	0.128	ppb	13.9	1933.47	0.0057	Pulse	0.1000	3
U	238	209	He	1.191	ppb	3.5	15816.93	0.0588	Pulse	0.1000	3

ISTD Table:

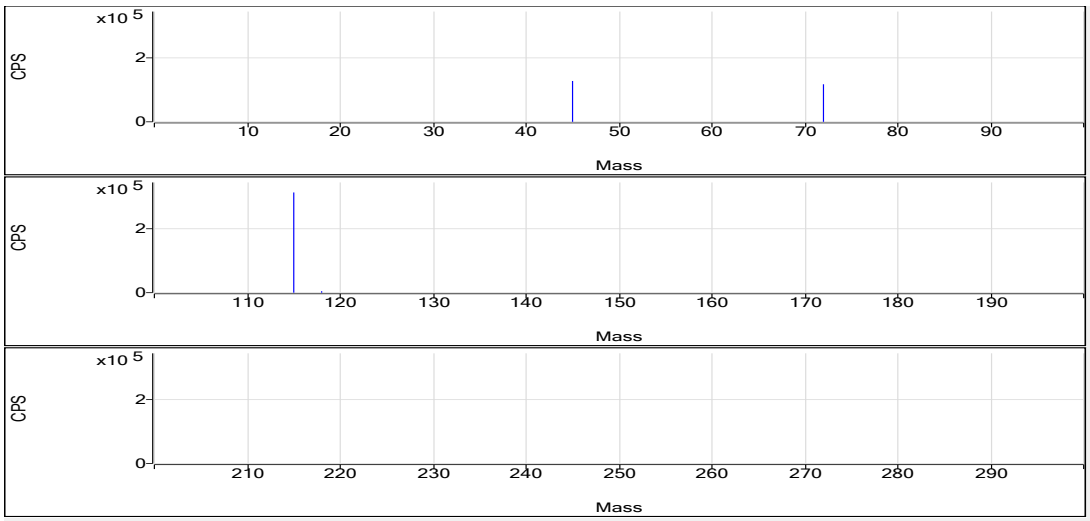
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2310409.76	1.2	96.0	Analog	0.1000	3
No Gas	Ge	72	1142903.78	0.1	98.4	Pulse	0.1000	3
H2	Sc	45	126849.75	1.9	77.2	Pulse	0.1000	3
H2	Ge	72	116644.55	1.7	80.3	Pulse	0.1000	3
H2	In	115	311310.58	0.4	86.5	Pulse	0.1000	3
He	Sc	45	37241.78	1.6	85.1	Pulse	0.1000	3
He	Ge	72	70503.85	1.4	92.2	Pulse	0.1000	3
He	In	115	66592.61	2.3	85.9	Pulse	0.1000	3
He	Tb	159	337507.96	0.4	91.0	Pulse	0.1000	3
He	Bi	209	268849.38	0.4	92.0	Pulse	0.1000	3

No Gas

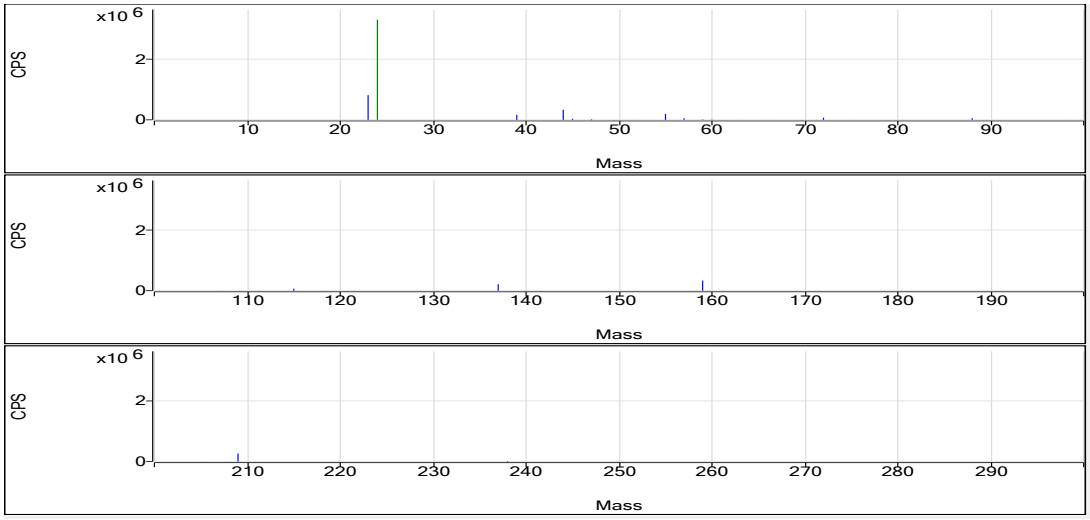


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.031	0	88.00	0.0007	1.523E-05
Be	9	1	No Gas	0.021	0	72.00	0.0007	1.523E-05
Be	9	1	No Gas	0.015	0	60.00	0.0007	1.523E-05
Se	78	2	H2	0.114	0	7.33	0.0002	3.71E-06
Se	78	2	H2	0.177	0	10.67	0.0002	3.71E-06
Se	78	2	H2	0.164	0	10.00	0.0002	3.71E-06
Na	23	3	He	6167.512	22.6078	826469.05	0.0036	0.3007
Na	23	3	He	5991.629	21.9717	823032.57	0.0036	0.3007
Na	23	3	He	5906.914	21.6652	816989.83	0.0036	0.3007
Mg	24	3	He	50872.23	92.7418	3390344.64	0.0018	0.003274
Mg	24	3	He	48880.639	89.1112	3338002.14	0.0018	0.003274
Mg	24	3	He	47676.581	86.9162	3277584.33	0.0018	0.003274
Al	27	3	He	3.76	0.0036	130.01	0.0006	0.00137
Al	27	3	He	6.367	0.0051	190.01	0.0006	0.00137
Al	27	3	He	7.677	0.0058	220.01	0.0006	0.00137
K	39	3	He	3523.416	4.5263	165468.77	0.0012	0.378
K	39	3	He	3451.936	4.4422	166399.22	0.0012	0.378
K	39	3	He	3405.831	4.3879	165466.60	0.0012	0.378
Ca	44	3	He	132182.95	9.1967	336203.39	0.0001	0.003203
Ca	44	3	He	128775.462	8.9597	335621.52	0.0001	0.003203
Ca	44	3	He	127822.744	8.8935	335370.31	0.0001	0.003203
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.995	0.0005	20.00	0.0005	0
Ti	47	3	He	0.988	0.0005	20.00	0.0005	0
V	51	3	He	0.155	0.0282	1032.05	0.0224	0.02476
V	51	3	He	0.108	0.0272	1018.04	0.0224	0.02476
V	51	3	He	-0.056	0.0235	886.03	0.0224	0.02476
Cr	52	3	He	0.53	0.0572	2090.24	0.0293	0.04167
Cr	52	3	He	0.902	0.0681	2550.30	0.0293	0.04167
Cr	52	3	He	0.723	0.0629	2370.27	0.0293	0.04167
Mn	55	3	He	401.638	5.2025	190186.52	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	401.951	5.2065	195031.07	0.0129	0.006476
Mn	55	3	He	396.427	5.1351	193642.48	0.0129	0.006476
Fe	57	3	He	2347.18	1.3869	50699.85	0.0006	0.00213
Fe	57	3	He	2331.886	1.3779	51612.87	0.0006	0.00213
Fe	57	3	He	2326.719	1.3748	51843.56	0.0006	0.00213
Co	59	3	He	6.104	0.3522	12876.10	0.0572	0.00297
Co	59	3	He	6.119	0.3531	13226.51	0.0572	0.00297
Co	59	3	He	5.665	0.3271	12335.61	0.0572	0.00297
Ni	60	3	He	18.278	0.1604	11134.59	0.0086	0.002921
Ni	60	3	He	16.221	0.1427	10183.86	0.0086	0.002921
Ni	60	3	He	17.395	0.1528	10804.39	0.0086	0.002921
Cu	63	3	He	0.671	0.0218	1510.13	0.0257	0.004531
Cu	63	3	He	0.609	0.0202	1440.12	0.0257	0.004531
Cu	63	3	He	0.595	0.0198	1400.13	0.0257	0.004531
Zn	66	3	He	5.486	0.0187	1300.10	0.0029	0.002877
Zn	66	3	He	6.423	0.0214	1530.14	0.0029	0.002877
Zn	66	3	He	5.269	0.0181	1280.10	0.0029	0.002877
As	75	3	He	2.607	0.006	416.01	0.002	0.0006798
As	75	3	He	2.485	0.0057	410.01	0.002	0.0006798
As	75	3	He	2.442	0.0057	400.01	0.002	0.0006798
Sr	88	3	He	86.943	0.7833	53211.21	0.009	0.001075
Sr	88	3	He	89.536	0.8067	52397.99	0.009	0.001075
Sr	88	3	He	89.089	0.8027	53692.18	0.009	0.001075
Mo	98	3	He	0.114	0.0031	210.01	0.0226	0.0005115
Mo	98	3	He	0.189	0.0048	310.02	0.0226	0.0005115
Mo	98	3	He	0.229	0.0057	380.02	0.0226	0.0005115
Ag	107	3	He	0.057	0.0031	210.01	0.0487	0.0003023
Ag	107	3	He	0.044	0.0025	160.01	0.0487	0.0003023
Ag	107	3	He	0.034	0.0019	130.01	0.0487	0.0003023
Cd	111	3	He	0.449	0.0024	166.00	0.0054	8.618E-06
Cd	111	3	He	0.356	0.0019	126.00	0.0054	8.618E-06
Cd	111	3	He	0.39	0.0021	142.00	0.0054	8.618E-06
Sn	120	3	He	0.289	0.0224	1520.15	0.0161	0.0177
Sn	120	3	He	0.315	0.0228	1480.13	0.0161	0.0177
Sn	120	3	He	0.339	0.0232	1550.13	0.0161	0.0177
Sb	121	3	He	0.13	0.0021	140.01	0.0152	8.618E-05
Sb	121	3	He	0.096	0.0015	100.00	0.0152	8.618E-05
Sb	121	3	He	0.083	0.0013	90.00	0.0152	8.618E-05
Ba	137	3	He	637.837	3.1429	213495.91	0.0049	0.0001277
Ba	137	3	He	666.743	3.2854	213402.73	0.0049	0.0001277
Ba	137	3	He	656.57	3.2352	216416.40	0.0049	0.0001277
Tl	205	3	He	0.217	0.0056	1890.20	0.0249	0.000171
Tl	205	3	He	0.192	0.005	1670.15	0.0249	0.000171
Tl	205	3	He	0.188	0.0048	1630.17	0.0249	0.000171
Pb	208	3	He	0.107	0.005	1000.07	0.0334	0.001456
Pb	208	3	He	0.137	0.006	1070.08	0.0334	0.001456
Pb	208	3	He	0.14	0.0061	1130.10	0.0334	0.001456
U	238	3	He	1.189	0.0587	15810.15	0.0493	0.0001028
U	238	3	He	1.15	0.0568	15319.66	0.0493	0.0001028
U	238	3	He	1.234	0.061	16320.97	0.0493	0.0001028
Sc	45	1	No Gas			2299408.40		
Sc	45	1	No Gas			2340880.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2290940.28		
Ge	72	1	No Gas			1143605.84		
Ge	72	1	No Gas			1141098.11		
Ge	72	1	No Gas			1144007.40		
Sc	45	2	H2			129674.60		
Sc	45	2	H2			125476.88		
Sc	45	2	H2			125397.77		
Ge	72	2	H2			118852.44		
Ge	72	2	H2			115030.74		
Ge	72	2	H2			116050.48		
In	115	2	H2			312339.82		
In	115	2	H2			310089.84		
In	115	2	H2			311502.09		
Sc	45	3	He			36556.81		
Sc	45	3	He			37458.84		
Sc	45	3	He			37709.69		
Ge	72	3	He			69418.67		
Ge	72	3	He			71377.87		
Ge	72	3	He			70715.00		
In	115	3	He			67936.00		
In	115	3	He			64962.14		
In	115	3	He			66901.60		
Tb	159	3	He			338949.45		
Tb	159	3	He			337321.75		
Tb	159	3	He			336252.69		
Bi	209	3	He			269157.61		
Bi	209	3	He			269647.48		
Bi	209	3	He			267743.04		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

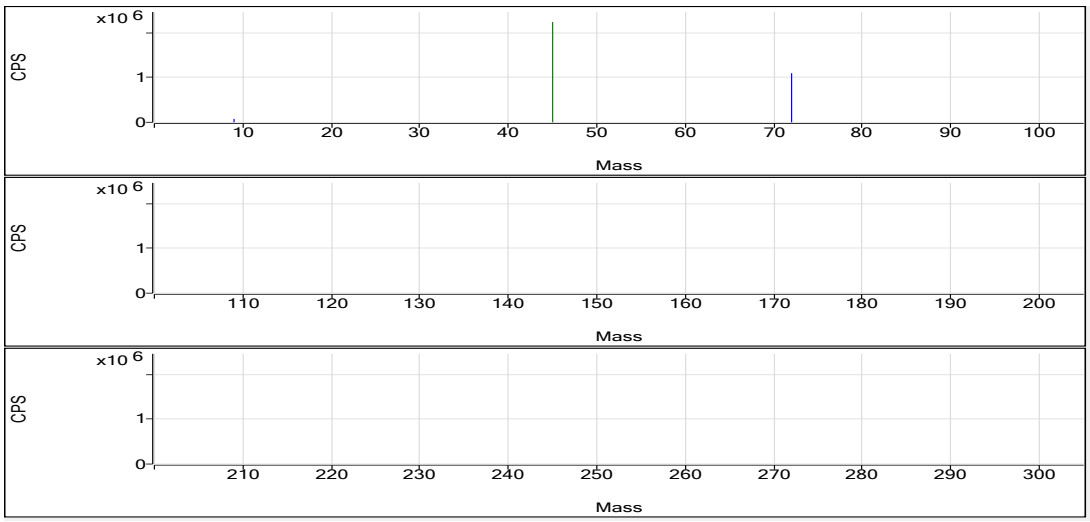
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.795	ppb	0.9	75835.32	0.0339	Pulse	0.5000	3
Se	78	115	H2	48.096	ppb	1.8	2591.35	0.0084	Pulse	1.5000	3
Na	23	45	He	4994.974	ppb	1.1	679970.46	18.3669	Pulse	0.1000	3
Mg	24	45	He	5067.233	ppb	1.4	342095.52	9.2407	Pulse	0.1000	3
Al	27	45	He	4870.849	ppb	1.8	104908.65	2.8339	Pulse	0.1000	3
K	39	45	He	4874.569	ppb	0.6	226474.69	6.1171	Pulse	0.1000	3
Ca	44	45	He	4750.391	ppb	6.3	12345.70	0.3336	Pulse	0.1000	3
Ti	47	45	He	4947.386	ppb	0.2	98319.14	2.6556	Pulse	0.1000	3
V	51	45	He	510.452	ppb	1.4	424185.66	11.4582	Pulse	0.5000	3
Cr	52	45	He	506.979	ppb	1.2	551217.65	14.8893	Pulse	0.1000	3
Mn	55	45	He	499.374	ppb	0.6	239424.06	6.4669	Pulse	0.1000	3
Fe	57	45	He	5069.901	ppb	1.1	110824.24	2.9932	Pulse	0.1000	3
Co	59	45	He	506.567	ppb	1.1	1073166.31	28.9879	Pulse	0.1000	3
Ni	60	72	He	521.999	ppb	0.9	302883.66	4.5003	Pulse	0.1000	3
Cu	63	72	He	496.798	ppb	1.0	858901.29	12.7619	Pulse	0.1000	3
Zn	66	72	He	519.699	ppb	0.2	101263.46	1.5045	Pulse	0.1000	3
As	75	72	He	510.734	ppb	0.7	70103.77	1.0416	Pulse	0.5000	3
Sr	88	115	He	47.588	ppb	1.4	29431.30	0.4293	Pulse	0.1000	3
Mo	98	115	He	52.174	ppb	0.9	80816.12	1.1787	Pulse	0.1000	3
Ag	107	115	He	52.758	ppb	1.3	176108.23	2.5685	Pulse	0.1000	3
Cd	111	115	He	51.801	ppb	0.9	19267.97	0.2810	Pulse	0.5000	3
Sn	120	115	He	51.427	ppb	1.7	58152.65	0.8482	Pulse	0.1000	3
Sb	121	115	He	50.769	ppb	1.1	52891.77	0.7714	Pulse	0.1000	3
Ba	137	115	He	501.282	ppb	0.6	169364.56	2.4701	Pulse	0.1000	3
Tl	205	159	He	52.740	ppb	0.5	444417.36	1.3142	Pulse	0.1000	3
Pb	208	159	He	52.414	ppb	0.9	592895.05	1.7533	Pulse	0.1000	3
U	238	209	He	50.532	ppb	0.7	681760.98	2.4931	Pulse	0.1000	3

ISTD Table:

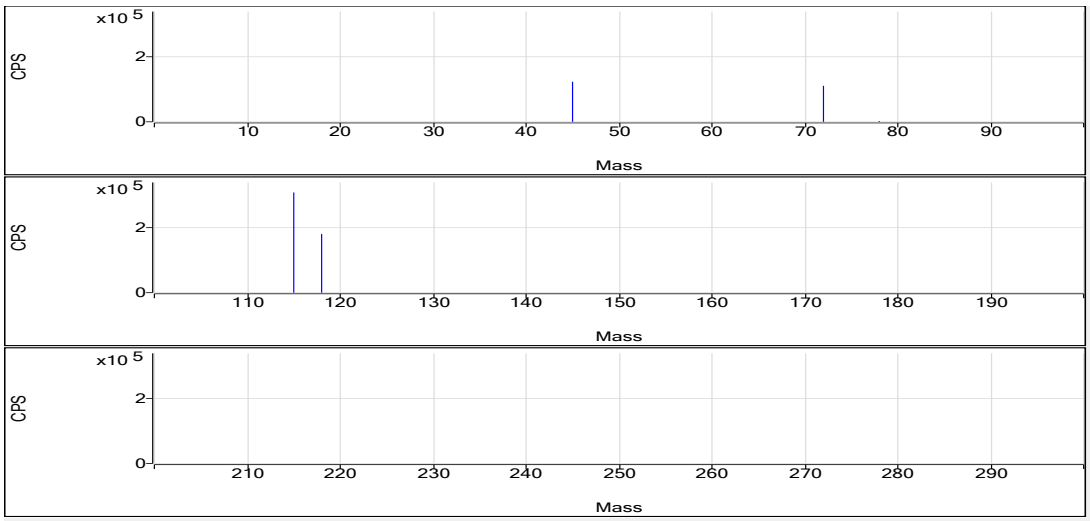
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2235972.57	0.0	92.9	Analog	0.1000	3
No Gas	Ge	72	1094934.59	0.3	94.3	Pulse	0.1000	3
H2	Sc	45	124049.44	1.3	75.5	Pulse	0.1000	3
H2	Ge	72	111476.40	1.6	76.7	Pulse	0.1000	3
H2	In	115	310176.24	0.9	86.2	Pulse	0.1000	3
He	Sc	45	37024.46	1.2	84.6	Pulse	0.1000	3
He	Ge	72	67305.86	0.9	88.0	Pulse	0.1000	3
He	In	115	68566.77	0.6	88.4	Pulse	0.1000	3
He	Tb	159	338166.99	0.5	91.2	Pulse	0.1000	3
He	Bi	209	273466.89	1.1	93.5	Pulse	0.1000	3

No Gas

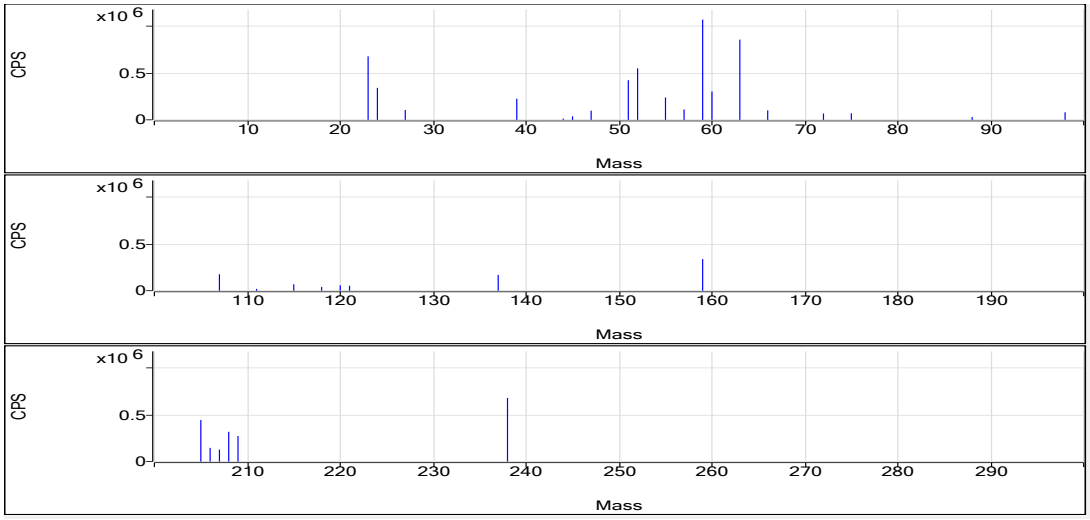


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.828	0.0339	75890.84	0.0007	1.523E-05
Be	9	1	No Gas	46.175	0.0342	76445.70	0.0007	1.523E-05
Be	9	1	No Gas	45.381	0.0336	75169.43	0.0007	1.523E-05
Se	78	2	H2	48.555	0.0084	2642.92	0.0002	3.71E-06
Se	78	2	H2	47.116	0.0082	2522.23	0.0002	3.71E-06
Se	78	2	H2	48.616	0.0084	2608.91	0.0002	3.71E-06
Na	23	3	He	4979.057	18.3093	685108.11	0.0036	0.3007
Na	23	3	He	5058.613	18.597	679098.82	0.0036	0.3007
Na	23	3	He	4947.253	18.1943	675704.44	0.0036	0.3007
Mg	24	3	He	5036.384	9.1844	343669.02	0.0018	0.003274
Mg	24	3	He	5148.361	9.3886	342837.96	0.0018	0.003274
Mg	24	3	He	5016.955	9.149	339779.57	0.0018	0.003274
Al	27	3	He	4785.644	2.7844	104186.45	0.0006	0.00137
Al	27	3	He	4956.593	2.8838	105304.87	0.0006	0.00137
Al	27	3	He	4870.311	2.8336	105234.63	0.0006	0.00137
K	39	3	He	4846.737	6.0844	227668.77	0.0012	0.378
K	39	3	He	4900.296	6.1474	224482.77	0.0012	0.378
K	39	3	He	4876.675	6.1196	227272.54	0.0012	0.378
Ca	44	3	He	4416.96	0.3104	11615.07	0.0001	0.003203
Ca	44	3	He	4992.213	0.3504	12796.07	0.0001	0.003203
Ca	44	3	He	4841.999	0.34	12625.96	0.0001	0.003203
Ti	47	3	He	4941.464	2.6524	99248.31	0.0005	0
Ti	47	3	He	4958.292	2.6614	97185.45	0.0005	0
Ti	47	3	He	4942.403	2.6529	98523.65	0.0005	0
V	51	3	He	504.365	11.3219	423647.56	0.0224	0.02476
V	51	3	He	518.039	11.6281	424618.19	0.0224	0.02476
V	51	3	He	508.953	11.4246	424291.22	0.0224	0.02476
Cr	52	3	He	504.568	14.8187	554494.17	0.0293	0.04167
Cr	52	3	He	514.047	15.0963	551263.08	0.0293	0.04167
Cr	52	3	He	502.32	14.7528	547895.69	0.0293	0.04167
Mn	55	3	He	498.526	6.4559	241572.09	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	502.715	6.5101	237727.46	0.0129	0.006476
Mn	55	3	He	496.881	6.4347	238972.63	0.0129	0.006476
Fe	57	3	He	5124.83	3.0256	113213.20	0.0006	0.00213
Fe	57	3	He	5067.68	2.9919	109252.65	0.0006	0.00213
Fe	57	3	He	5017.193	2.9621	110006.88	0.0006	0.00213
Co	59	3	He	502.95	28.7809	1076939.44	0.0572	0.00297
Co	59	3	He	512.874	29.3487	1071711.55	0.0572	0.00297
Co	59	3	He	503.879	28.8341	1070847.95	0.0572	0.00297
Ni	60	3	He	524.3	4.5201	304428.59	0.0086	0.002921
Ni	60	3	He	524.817	4.5246	301817.96	0.0086	0.002921
Ni	60	3	He	516.882	4.4562	302404.43	0.0086	0.002921
Cu	63	3	He	498.758	12.8122	862897.33	0.0257	0.004531
Cu	63	3	He	500.718	12.8625	858014.05	0.0257	0.004531
Cu	63	3	He	490.918	12.6109	855792.49	0.0257	0.004531
Zn	66	3	He	520.82	1.5078	101548.52	0.0029	0.002877
Zn	66	3	He	519.949	1.5053	100410.60	0.0029	0.002877
Zn	66	3	He	518.327	1.5006	101831.26	0.0029	0.002877
As	75	3	He	508.615	1.0373	69861.20	0.002	0.0006798
As	75	3	He	515.076	1.0505	70072.41	0.002	0.0006798
As	75	3	He	508.511	1.0371	70377.69	0.002	0.0006798
Sr	88	3	He	48.344	0.436	29772.02	0.009	0.001075
Sr	88	3	He	47.235	0.4261	29140.91	0.009	0.001075
Sr	88	3	He	47.186	0.4256	29380.96	0.009	0.001075
Mo	98	3	He	52.581	1.1879	81104.17	0.0226	0.0005115
Mo	98	3	He	52.25	1.1804	80732.20	0.0226	0.0005115
Mo	98	3	He	51.692	1.1678	80611.99	0.0226	0.0005115
Ag	107	3	He	53.533	2.6062	177942.26	0.0487	0.0003023
Ag	107	3	He	52.276	2.545	174062.18	0.0487	0.0003023
Ag	107	3	He	52.467	2.5543	176320.25	0.0487	0.0003023
Cd	111	3	He	51.805	0.281	19187.20	0.0054	8.618E-06
Cd	111	3	He	51.338	0.2785	19047.00	0.0054	8.618E-06
Cd	111	3	He	52.262	0.2835	19569.71	0.0054	8.618E-06
Sn	120	3	He	52.266	0.8617	58835.51	0.0161	0.0177
Sn	120	3	He	51.447	0.8485	58032.07	0.0161	0.0177
Sn	120	3	He	50.568	0.8343	57590.37	0.0161	0.0177
Sb	121	3	He	51.41	0.7811	53333.67	0.0152	8.618E-05
Sb	121	3	He	50.278	0.7639	52249.10	0.0152	8.618E-05
Sb	121	3	He	50.619	0.7691	53092.55	0.0152	8.618E-05
Ba	137	3	He	499.658	2.4621	168103.85	0.0049	0.0001277
Ba	137	3	He	504.654	2.4867	170076.42	0.0049	0.0001277
Ba	137	3	He	499.533	2.4615	169913.42	0.0049	0.0001277
Tl	205	3	He	52.86	1.3172	445031.91	0.0249	0.000171
Tl	205	3	He	52.945	1.3193	444123.74	0.0249	0.000171
Tl	205	3	He	52.414	1.3061	444096.44	0.0249	0.000171
Pb	208	3	He	52.731	1.7639	320656.97	0.0334	0.001456
Pb	208	3	He	52.63	1.7605	318216.03	0.0334	0.001456
Pb	208	3	He	51.88	1.7355	318247.24	0.0334	0.001456
U	238	3	He	50.235	2.4784	686577.88	0.0493	0.0001028
U	238	3	He	50.901	2.5113	683480.38	0.0493	0.0001028
U	238	3	He	50.461	2.4896	675224.68	0.0493	0.0001028
Sc	45	1	No Gas			2235981.22		
Sc	45	1	No Gas			2235410.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2236525.90		
Ge	72	1	No Gas			1097832.09		
Ge	72	1	No Gas			1091697.87		
Ge	72	1	No Gas			1095273.81		
Sc	45	2	H2			122514.33		
Sc	45	2	H2			125618.92		
Sc	45	2	H2			124015.06		
Ge	72	2	H2			109820.39		
Ge	72	2	H2			111190.87		
Ge	72	2	H2			113417.95		
In	115	2	H2			313376.26		
In	115	2	H2			308198.78		
In	115	2	H2			308953.69		
Sc	45	3	He			37418.58		
Sc	45	3	He			36516.49		
Sc	45	3	He			37138.31		
Ge	72	3	He			67349.70		
Ge	72	3	He			66706.45		
Ge	72	3	He			67861.42		
In	115	3	He			68589.61		
In	115	3	He			68710.07		
In	115	3	He			69343.32		
Tb	159	3	He			337855.27		
Tb	159	3	He			336628.08		
Tb	159	3	He			340017.61		
Bi	209	3	He			277021.60		
Bi	209	3	He			272160.91		
Bi	209	3	He			271218.16		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

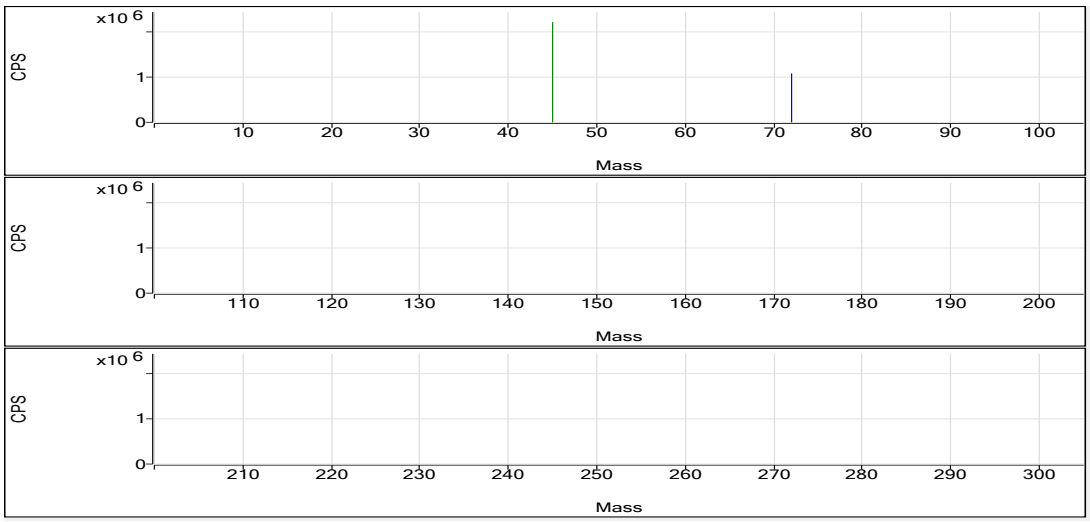
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.028	ppb	16.3	80.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.090	ppb	14.2	6.00	0.0000	Pulse	1.5000	3
Na	23	45	He	30.910	ppb	8.0	15338.50	0.4125	Pulse	0.1000	3
Mg	24	45	He	3.761	ppb	21.8	376.69	0.0101	Pulse	0.1000	3
Al	27	45	He	-0.350	ppb	N/A	43.33	0.0012	Pulse	0.1000	3
K	39	45	He	1.390	ppb	710.7	14117.23	0.3796	Pulse	0.1000	3
Ca	44	45	He	-9.927	ppb	N/A	93.34	0.0025	Pulse	0.1000	3
Ti	47	45	He	2.339	ppb	44.7	46.67	0.0013	Pulse	0.1000	3
V	51	45	He	0.131	ppb	19.4	1030.04	0.0277	Pulse	0.5000	3
Cr	52	45	He	0.046	ppb	382.2	1600.14	0.0430	Pulse	0.1000	3
Mn	55	45	He	-0.043	ppb	N/A	220.01	0.0059	Pulse	0.1000	3
Fe	57	45	He	2.010	ppb	33.8	123.34	0.0033	Pulse	0.1000	3
Co	59	45	He	0.147	ppb	10.4	423.35	0.0114	Pulse	0.1000	3
Ni	60	72	He	0.224	ppb	22.1	320.01	0.0049	Pulse	0.1000	3
Cu	63	72	He	0.168	ppb	31.2	583.37	0.0089	Pulse	0.1000	3
Zn	66	72	He	0.192	ppb	298.8	226.68	0.0034	Pulse	0.1000	3
As	75	72	He	0.163	ppb	13.2	66.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	-0.021	ppb	N/A	60.00	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.060	ppb	25.9	126.67	0.0019	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	27.5	63.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	123.9	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.117	ppb	55.9	1330.11	0.0196	Pulse	0.1000	3
Sb	121	115	He	0.050	ppb	75.8	56.67	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.073	ppb	45.8	33.33	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.102	ppb	2.0	906.73	0.0027	Pulse	0.1000	3
Pb	208	159	He	0.021	ppb	13.5	723.37	0.0022	Pulse	0.1000	3
U	238	209	He	0.057	ppb	4.6	783.39	0.0029	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2230154.19	1.3	92.6	Analog	0.1000	3
No Gas	Ge	72	1086664.62	1.1	93.5	Pulse	0.1000	3
H2	Sc	45	124082.46	1.4	75.5	Pulse	0.1000	3
H2	Ge	72	109588.44	0.9	75.4	Pulse	0.1000	3
H2	In	115	310595.57	0.5	86.3	Pulse	0.1000	3
He	Sc	45	37188.22	0.3	85.0	Pulse	0.1000	3
He	Ge	72	65936.39	0.6	86.2	Pulse	0.1000	3
He	In	115	67939.26	1.2	87.6	Pulse	0.1000	3
He	Tb	159	335573.49	0.2	90.5	Pulse	0.1000	3
He	Bi	209	268085.32	1.0	91.7	Pulse	0.1000	3

No Gas



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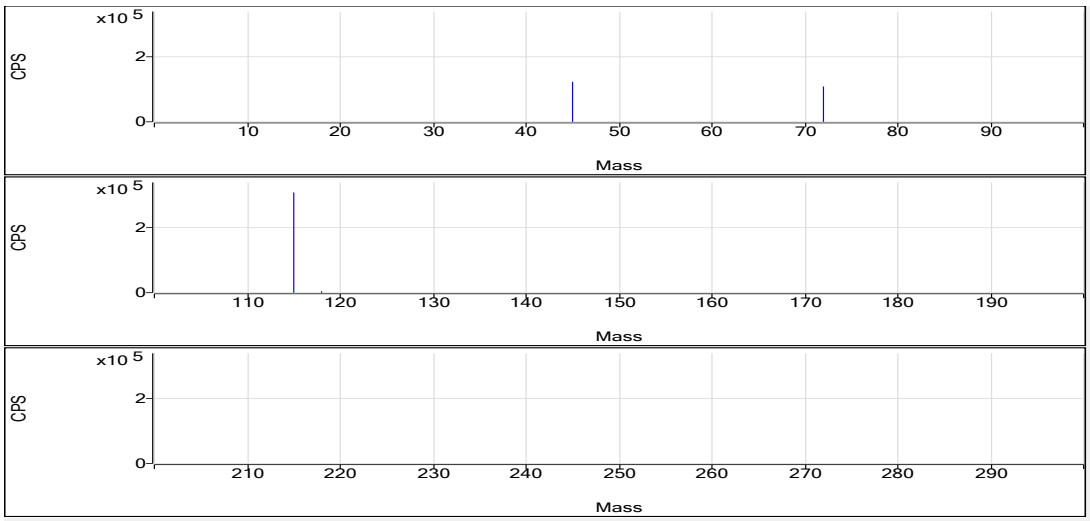
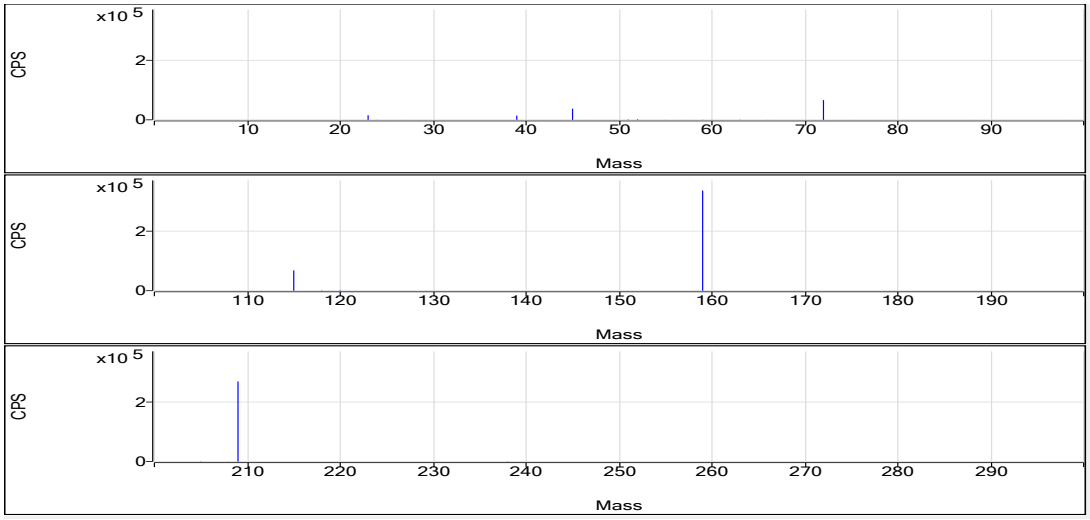


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.032	0	88.00	0.0007	1.523E-05
Be	9	1	No Gas	0.023	0	72.00	0.0007	1.523E-05
Be	9	1	No Gas	0.029	0	80.00	0.0007	1.523E-05
Se	78	2	H2	0.077	0	5.33	0.0002	3.71E-06
Se	78	2	H2	0.102	0	6.67	0.0002	3.71E-06
Se	78	2	H2	0.09	0	6.00	0.0002	3.71E-06
Na	23	3	He	28.054	0.4021	14938.09	0.0036	0.3007
Na	23	3	He	32.53	0.4183	15518.61	0.0036	0.3007
Na	23	3	He	32.145	0.4169	15558.81	0.0036	0.3007
Mg	24	3	He	4.702	0.0118	440.02	0.0018	0.003274
Mg	24	3	He	3.38	0.0094	350.02	0.0018	0.003274
Mg	24	3	He	3.202	0.0091	340.02	0.0018	0.003274
Al	27	3	He	1.347	0.0022	80.00	0.0006	0.00137
Al	27	3	He	-0.502	0.0011	40.00	0.0006	0.00137
Al	27	3	He	-1.895	0.0003	10.00	0.0006	0.00137
K	39	3	He	7.442	0.3868	14367.54	0.0012	0.378
K	39	3	He	6.735	0.3859	14317.37	0.0012	0.378
K	39	3	He	-10.008	0.3662	13666.78	0.0012	0.378
Ca	44	3	He	-7.341	0.0027	100.00	0.0001	0.003203
Ca	44	3	He	4.341	0.0035	130.01	0.0001	0.003203
Ca	44	3	He	-26.782	0.0013	50.00	0.0001	0.003203
Ti	47	3	He	3.511	0.0019	70.00	0.0005	0
Ti	47	3	He	2.009	0.0011	40.00	0.0005	0
Ti	47	3	He	1.498	0.0008	30.00	0.0005	0
V	51	3	He	0.128	0.0276	1026.04	0.0224	0.02476
V	51	3	He	0.158	0.0283	1050.04	0.0224	0.02476
V	51	3	He	0.108	0.0272	1014.04	0.0224	0.02476
Cr	52	3	He	0.186	0.0471	1750.17	0.0293	0.04167
Cr	52	3	He	-0.153	0.0372	1380.11	0.0293	0.04167
Cr	52	3	He	0.105	0.0448	1670.15	0.0293	0.04167
Mn	55	3	He	-0.064	0.0057	210.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0	0.0065	240.01	0.0129	0.006476
Mn	55	3	He	-0.066	0.0056	210.01	0.0129	0.006476
Fe	57	3	He	1.865	0.0032	120.00	0.0006	0.00213
Fe	57	3	He	1.415	0.003	110.00	0.0006	0.00213
Fe	57	3	He	2.749	0.0038	140.01	0.0006	0.00213
Co	59	3	He	0.165	0.0124	460.02	0.0572	0.00297
Co	59	3	He	0.137	0.0108	400.02	0.0572	0.00297
Co	59	3	He	0.14	0.011	410.02	0.0572	0.00297
Ni	60	3	He	0.264	0.0052	340.02	0.0086	0.002921
Ni	60	3	He	0.241	0.005	330.01	0.0086	0.002921
Ni	60	3	He	0.169	0.0044	290.01	0.0086	0.002921
Cu	63	3	He	0.228	0.0104	680.04	0.0257	0.004531
Cu	63	3	He	0.13	0.0079	520.03	0.0257	0.004531
Cu	63	3	He	0.147	0.0083	550.04	0.0257	0.004531
Zn	66	3	He	-0.467	0.0015	100.00	0.0029	0.002877
Zn	66	3	He	0.576	0.0045	300.02	0.0029	0.002877
Zn	66	3	He	0.467	0.0042	280.01	0.0029	0.002877
As	75	3	He	0.161	0.001	66.00	0.002	0.0006798
As	75	3	He	0.142	0.001	64.00	0.002	0.0006798
As	75	3	He	0.185	0.0011	70.00	0.002	0.0006798
Sr	88	3	He	-0.038	0.0007	50.00	0.009	0.001075
Sr	88	3	He	-0.006	0.001	70.00	0.009	0.001075
Sr	88	3	He	-0.02	0.0009	60.00	0.009	0.001075
Mo	98	3	He	0.062	0.0019	130.01	0.0226	0.0005115
Mo	98	3	He	0.074	0.0022	150.01	0.0226	0.0005115
Mo	98	3	He	0.043	0.0015	100.00	0.0226	0.0005115
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Ag	107	3	He	0.015	0.001	70.00	0.0487	0.0003023
Ag	107	3	He	0.015	0.001	70.00	0.0487	0.0003023
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Cd	111	3	He	0.026	0.0001	10.00	0.0054	8.618E-06
Sn	120	3	He	0.102	0.0194	1320.12	0.0161	0.0177
Sn	120	3	He	0.06	0.0187	1280.10	0.0161	0.0177
Sn	120	3	He	0.188	0.0207	1390.11	0.0161	0.0177
Sb	121	3	He	0.033	0.0006	40.00	0.0152	8.618E-05
Sb	121	3	He	0.023	0.0004	30.00	0.0152	8.618E-05
Sb	121	3	He	0.093	0.0015	100.00	0.0152	8.618E-05
Ba	137	3	He	0.093	0.0006	40.00	0.0049	0.0001277
Ba	137	3	He	0.092	0.0006	40.00	0.0049	0.0001277
Ba	137	3	He	0.035	0.0003	20.00	0.0049	0.0001277
Tl	205	3	He	0.099	0.0026	890.07	0.0249	0.000171
Tl	205	3	He	0.102	0.0027	910.06	0.0249	0.000171
Tl	205	3	He	0.103	0.0027	920.06	0.0249	0.000171
Pb	208	3	He	0.02	0.0021	400.02	0.0334	0.001456
Pb	208	3	He	0.024	0.0023	480.03	0.0334	0.001456
Pb	208	3	He	0.019	0.0021	340.02	0.0334	0.001456
U	238	3	He	0.06	0.0031	820.06	0.0493	0.0001028
U	238	3	He	0.056	0.0029	780.06	0.0493	0.0001028
U	238	3	He	0.055	0.0028	750.06	0.0493	0.0001028
Sc	45	1	No Gas			2258766.22		
Sc	45	1	No Gas			2230353.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2201343.25		
Ge	72	1	No Gas			1095243.42		
Ge	72	1	No Gas			1092208.26		
Ge	72	1	No Gas			1072542.17		
Sc	45	2	H2			125860.83		
Sc	45	2	H2			124084.52		
Sc	45	2	H2			122302.04		
Ge	72	2	H2			110455.42		
Ge	72	2	H2			109728.55		
Ge	72	2	H2			108581.35		
In	115	2	H2			312341.64		
In	115	2	H2			310443.37		
In	115	2	H2			309001.71		
Sc	45	3	He			37147.97		
Sc	45	3	He			37098.18		
Sc	45	3	He			37318.50		
Ge	72	3	He			65460.29		
Ge	72	3	He			66074.36		
Ge	72	3	He			66274.53		
In	115	3	He			68218.86		
In	115	3	He			68569.37		
In	115	3	He			67052.49		
Tb	159	3	He			336272.89		
Tb	159	3	He			335749.72		
Tb	159	3	He			334697.85		
Bi	209	3	He			267207.44		
Bi	209	3	He			271010.31		
Bi	209	3	He			266038.20		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/14/2023 11:30:45 PM
Sample Name	MB 410-406027/1-A
Sample Type	Sample
Comment	A12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

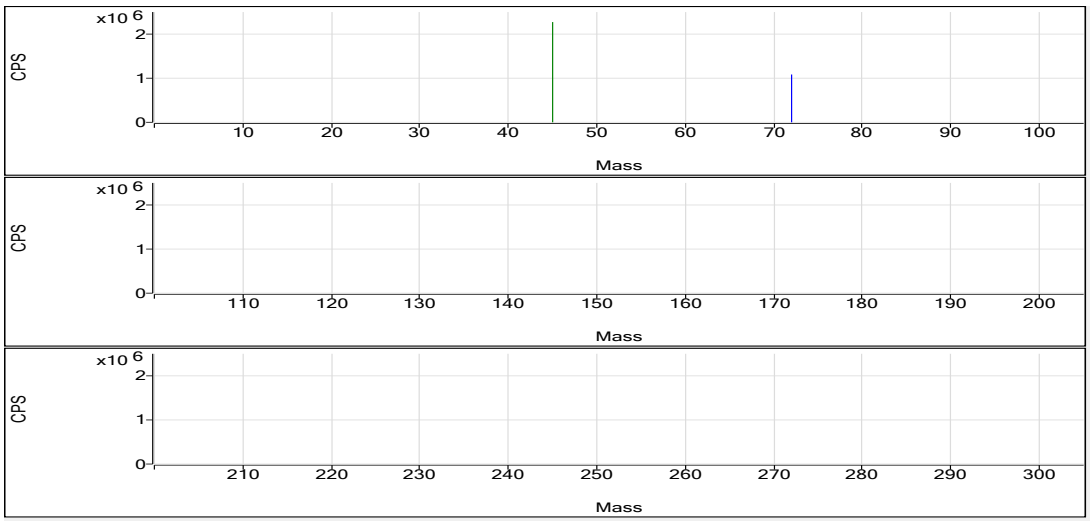
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	209.6	38.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.081	ppb	23.8	5.56	0.0000	Pulse	1.5000	3
Na	23	45	He	23.514	ppb	16.0	14444.21	0.3857	Pulse	0.1000	3
Mg	24	45	He	1.529	ppb	27.1	226.68	0.0061	Pulse	0.1000	3
Al	27	45	He	0.550	ppb	39.2	63.33	0.0017	Pulse	0.1000	3
K	39	45	He	7.934	ppb	76.9	14504.30	0.3873	Pulse	0.1000	3
Ca	44	45	He	-6.456	ppb	N/A	103.34	0.0028	Pulse	0.1000	3
Ti	47	45	He	0.488	ppb	173.2	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.127	ppb	N/A	820.70	0.0219	Pulse	0.5000	3
Cr	52	45	He	-0.109	ppb	N/A	1440.12	0.0385	Pulse	0.1000	3
Mn	55	45	He	-0.101	ppb	N/A	193.34	0.0052	Pulse	0.1000	3
Fe	57	45	He	0.291	ppb	689.8	86.67	0.0023	Pulse	0.1000	3
Co	59	45	He	0.043	ppb	23.9	203.34	0.0054	Pulse	0.1000	3
Ni	60	72	He	-0.005	ppb	N/A	193.34	0.0029	Pulse	0.1000	3
Cu	63	72	He	0.067	ppb	33.8	420.02	0.0062	Pulse	0.1000	3
Zn	66	72	He	-0.222	ppb	N/A	150.00	0.0022	Pulse	0.1000	3
As	75	72	He	0.027	ppb	161.7	49.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.044	ppb	N/A	46.67	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.001	ppb	370.7	36.67	0.0005	Pulse	0.1000	3
Ag	107	115	He	0.011	ppb	111.7	56.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	112.1	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.252	ppb	N/A	933.40	0.0136	Pulse	0.1000	3
Sb	121	115	He	0.023	ppb	41.1	30.00	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.053	ppb	84.9	26.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.035	ppb	23.0	350.02	0.0010	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	60.9	603.36	0.0018	Pulse	0.1000	3
U	238	209	He	0.010	ppb	4.5	163.34	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2268239.08	2.5	94.2	Analog	0.1000	3
No Gas	Ge	72	1081847.02	1.9	93.1	Pulse	0.1000	3
H2	Sc	45	129025.13	1.3	78.5	Pulse	0.1000	3
H2	Ge	72	112084.06	0.5	77.1	Pulse	0.1000	3
H2	In	115	314223.07	0.5	87.3	Pulse	0.1000	3
He	Sc	45	37442.42	1.6	85.6	Pulse	0.1000	3
He	Ge	72	67208.55	2.1	87.8	Pulse	0.1000	3
He	In	115	68550.03	1.7	88.4	Pulse	0.1000	3
He	Tb	159	336559.28	0.9	90.7	Pulse	0.1000	3
He	Bi	209	276184.03	1.5	94.5	Pulse	0.1000	3

No Gas



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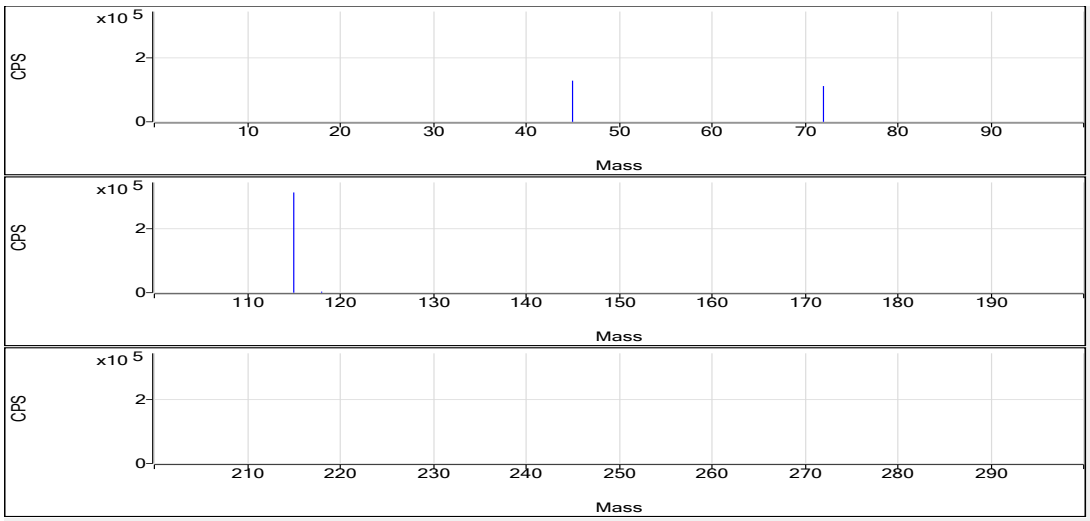
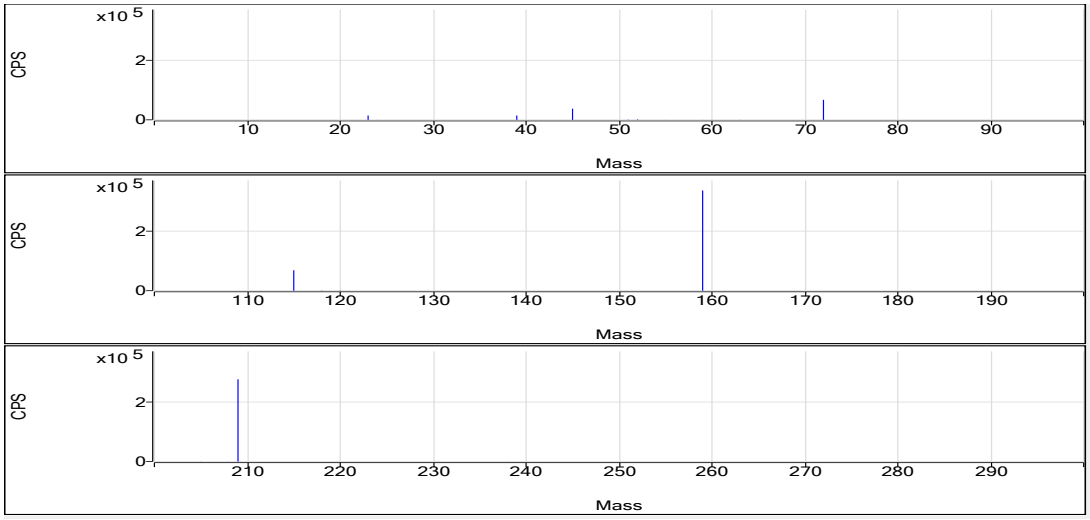


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.008	0	48.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.001	0	32.00	0.0007	1.523E-05
Be	9	1	No Gas	0	0	36.00	0.0007	1.523E-05
Se	78	2	H2	0.064	0	4.67	0.0002	3.71E-06
Se	78	2	H2	0.076	0	5.33	0.0002	3.71E-06
Se	78	2	H2	0.101	0	6.67	0.0002	3.71E-06
Na	23	3	He	25.664	0.3935	14577.68	0.0036	0.3007
Na	23	3	He	25.712	0.3937	15018.23	0.0036	0.3007
Na	23	3	He	19.168	0.37	13736.72	0.0036	0.3007
Mg	24	3	He	1.61	0.0062	230.01	0.0018	0.003274
Mg	24	3	He	1.08	0.0052	200.01	0.0018	0.003274
Mg	24	3	He	1.898	0.0067	250.01	0.0018	0.003274
Al	27	3	He	0.429	0.0016	60.00	0.0006	0.00137
Al	27	3	He	0.799	0.0018	70.00	0.0006	0.00137
Al	27	3	He	0.423	0.0016	60.00	0.0006	0.00137
K	39	3	He	0.983	0.3792	14047.18	0.0012	0.378
K	39	3	He	10.392	0.3902	14888.04	0.0012	0.378
K	39	3	He	12.427	0.3926	14577.69	0.0012	0.378
Ca	44	3	He	-14.999	0.0022	80.00	0.0001	0.003203
Ca	44	3	He	2.951	0.0034	130.01	0.0001	0.003203
Ca	44	3	He	-7.321	0.0027	100.00	0.0001	0.003203
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.465	0.0008	30.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.173	0.0209	774.03	0.0224	0.02476
V	51	3	He	-0.144	0.0215	822.03	0.0224	0.02476
V	51	3	He	-0.064	0.0233	866.03	0.0224	0.02476
Cr	52	3	He	0.034	0.0427	1580.14	0.0293	0.04167
Cr	52	3	He	-0.152	0.0372	1420.12	0.0293	0.04167
Cr	52	3	He	-0.209	0.0356	1320.10	0.0293	0.04167
Mn	55	3	He	-0.146	0.0046	170.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.095	0.0052	200.01	0.0129	0.006476
Mn	55	3	He	-0.063	0.0057	210.01	0.0129	0.006476
Fe	57	3	He	-0.865	0.0016	60.00	0.0006	0.00213
Fe	57	3	He	2.61	0.0037	140.01	0.0006	0.00213
Fe	57	3	He	-0.871	0.0016	60.00	0.0006	0.00213
Co	59	3	He	0.033	0.0049	180.01	0.0572	0.00297
Co	59	3	He	0.053	0.006	230.01	0.0572	0.00297
Co	59	3	He	0.042	0.0054	200.01	0.0572	0.00297
Ni	60	3	He	0.012	0.003	200.01	0.0086	0.002921
Ni	60	3	He	0.015	0.0031	210.01	0.0086	0.002921
Ni	60	3	He	-0.044	0.0025	170.01	0.0086	0.002921
Cu	63	3	He	0.048	0.0058	380.02	0.0257	0.004531
Cu	63	3	He	0.061	0.0061	420.02	0.0257	0.004531
Cu	63	3	He	0.092	0.0069	460.02	0.0257	0.004531
Zn	66	3	He	-0.367	0.0018	120.00	0.0029	0.002877
Zn	66	3	He	-0.392	0.0017	120.00	0.0029	0.002877
Zn	66	3	He	0.093	0.0031	210.01	0.0029	0.002877
As	75	3	He	0.068	0.0008	54.00	0.002	0.0006798
As	75	3	He	-0.02	0.0006	44.00	0.002	0.0006798
As	75	3	He	0.034	0.0007	50.00	0.002	0.0006798
Sr	88	3	He	-0.02	0.0009	60.00	0.009	0.001075
Sr	88	3	He	-0.055	0.0006	40.00	0.009	0.001075
Sr	88	3	He	-0.055	0.0006	40.00	0.009	0.001075
Mo	98	3	He	0.004	0.0006	40.00	0.0226	0.0005115
Mo	98	3	He	0.003	0.0006	40.00	0.0226	0.0005115
Mo	98	3	He	-0.003	0.0004	30.00	0.0226	0.0005115
Ag	107	3	He	0	0.0003	20.00	0.0487	0.0003023
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Ag	107	3	He	0.023	0.0014	100.00	0.0487	0.0003023
Cd	111	3	He	0.015	0.0001	6.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Sn	120	3	He	-0.166	0.015	1010.08	0.0161	0.0177
Sn	120	3	He	-0.363	0.0118	820.06	0.0161	0.0177
Sn	120	3	He	-0.229	0.014	970.07	0.0161	0.0177
Sb	121	3	He	0.024	0.0004	30.00	0.0152	8.618E-05
Sb	121	3	He	0.013	0.0003	20.00	0.0152	8.618E-05
Sb	121	3	He	0.032	0.0006	40.00	0.0152	8.618E-05
Ba	137	3	He	0.065	0.0004	30.00	0.0049	0.0001277
Ba	137	3	He	0.091	0.0006	40.00	0.0049	0.0001277
Ba	137	3	He	0.003	0.0001	10.00	0.0049	0.0001277
Tl	205	3	He	0.028	0.0009	290.01	0.0249	0.000171
Tl	205	3	He	0.033	0.001	340.02	0.0249	0.000171
Tl	205	3	He	0.044	0.0013	420.02	0.0249	0.000171
Pb	208	3	He	0.013	0.0019	290.01	0.0334	0.001456
Pb	208	3	He	0.003	0.0016	300.01	0.0334	0.001456
Pb	208	3	He	0.015	0.0019	360.02	0.0334	0.001456
U	238	3	He	0.009	0.0006	160.01	0.0493	0.0001028
U	238	3	He	0.01	0.0006	160.01	0.0493	0.0001028
U	238	3	He	0.01	0.0006	170.01	0.0493	0.0001028
Sc	45	1	No Gas			2233906.37		
Sc	45	1	No Gas			2237031.69		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2333779.18		
Ge	72	1	No Gas			1072238.34		
Ge	72	1	No Gas			1067865.77		
Ge	72	1	No Gas			1105436.94		
Sc	45	2	H2			127141.28		
Sc	45	2	H2			130370.05		
Sc	45	2	H2			129564.07		
Ge	72	2	H2			111542.73		
Ge	72	2	H2			112026.60		
Ge	72	2	H2			112682.86		
In	115	2	H2			315938.39		
In	115	2	H2			314046.87		
In	115	2	H2			312683.94		
Sc	45	3	He			37048.12		
Sc	45	3	He			38151.14		
Sc	45	3	He			37128.01		
Ge	72	3	He			66043.11		
Ge	72	3	He			68796.06		
Ge	72	3	He			66786.49		
In	115	3	He			67203.27		
In	115	3	He			69222.08		
In	115	3	He			69243.00		
Tb	159	3	He			336011.21		
Tb	159	3	He			339757.61		
Tb	159	3	He			333909.02		
Bi	209	3	He			280081.40		
Bi	209	3	He			271920.74		
Bi	209	3	He			276549.94		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

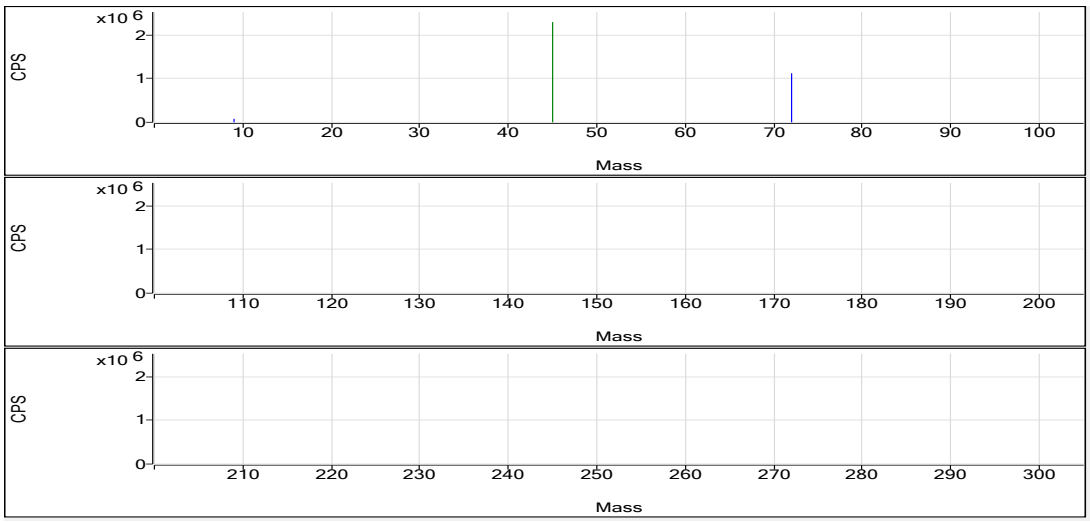
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.699	ppb	0.3	79529.00	0.0346	Pulse	0.5000	3
Se	78	115	H2	95.310	ppb	1.4	5227.63	0.0166	Pulse	1.5000	3
Na	23	45	He	5006.949	ppb	1.9	695289.49	18.4102	Pulse	0.1000	3
Mg	24	45	He	5132.527	ppb	2.2	353475.27	9.3597	Pulse	0.1000	3
Al	27	45	He	4923.812	ppb	2.3	108195.34	2.8647	Pulse	0.1000	3
K	39	45	He	4883.839	ppb	2.6	231438.13	6.1281	Pulse	0.1000	3
Ca	44	45	He	4969.472	ppb	0.4	13176.41	0.3488	Pulse	0.1000	3
Ti	47	45	He	507.725	ppb	6.7	10290.63	0.2725	Pulse	0.1000	3
V	51	45	He	512.555	ppb	1.4	434536.26	11.5053	Pulse	0.5000	3
Cr	52	45	He	507.802	ppb	1.4	563261.53	14.9134	Pulse	0.1000	3
Mn	55	45	He	499.705	ppb	1.7	244403.11	6.4712	Pulse	0.1000	3
Fe	57	45	He	5079.589	ppb	1.5	113265.27	2.9989	Pulse	0.1000	3
Co	59	45	He	505.448	ppb	1.6	1092394.83	28.9238	Pulse	0.1000	3
Ni	60	72	He	503.408	ppb	2.1	306081.33	4.3401	Pulse	0.1000	3
Cu	63	72	He	482.931	ppb	1.0	875011.84	12.4058	Pulse	0.1000	3
Zn	66	72	He	512.129	ppb	0.5	104579.63	1.4827	Pulse	0.1000	3
As	75	72	He	495.388	ppb	1.5	71256.71	1.0103	Pulse	0.5000	3
Sr	88	115	He	49.327	ppb	3.6	30674.01	0.4449	Pulse	0.1000	3
Mo	98	115	He	51.956	ppb	3.4	80929.77	1.1738	Pulse	0.1000	3
Ag	107	115	He	52.883	ppb	2.2	177550.65	2.5746	Pulse	0.1000	3
Cd	111	115	He	53.147	ppb	2.4	19881.48	0.2883	Pulse	0.5000	3
Sn	120	115	He	104.640	ppb	2.0	117754.66	1.7075	Pulse	0.1000	3
Sb	121	115	He	101.999	ppb	2.6	106867.03	1.5497	Pulse	0.1000	3
Ba	137	115	He	508.789	ppb	1.9	172903.23	2.5071	Pulse	0.1000	3
Tl	205	159	He	107.855	ppb	0.4	907816.42	2.6874	Pulse	0.1000	3
Pb	208	159	He	53.642	ppb	0.7	606125.66	1.7944	Pulse	0.1000	3
U	238	209	He	50.430	ppb	1.2	687723.40	2.4880	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2299481.89	0.2	95.5	Analog	0.1000	3
No Gas	Ge	72	1124595.90	0.3	96.8	Pulse	0.1000	3
H2	Sc	45	128006.98	1.8	77.9	Pulse	0.1000	3
H2	Ge	72	115978.54	1.2	79.8	Pulse	0.1000	3
H2	In	115	315876.26	1.1	87.8	Pulse	0.1000	3
He	Sc	45	37773.01	1.4	86.3	Pulse	0.1000	3
He	Ge	72	70538.15	1.5	92.2	Pulse	0.1000	3
He	In	115	68984.77	2.3	89.0	Pulse	0.1000	3
He	Tb	159	337797.87	0.2	91.1	Pulse	0.1000	3
He	Bi	209	276433.60	1.1	94.6	Pulse	0.1000	3

No Gas



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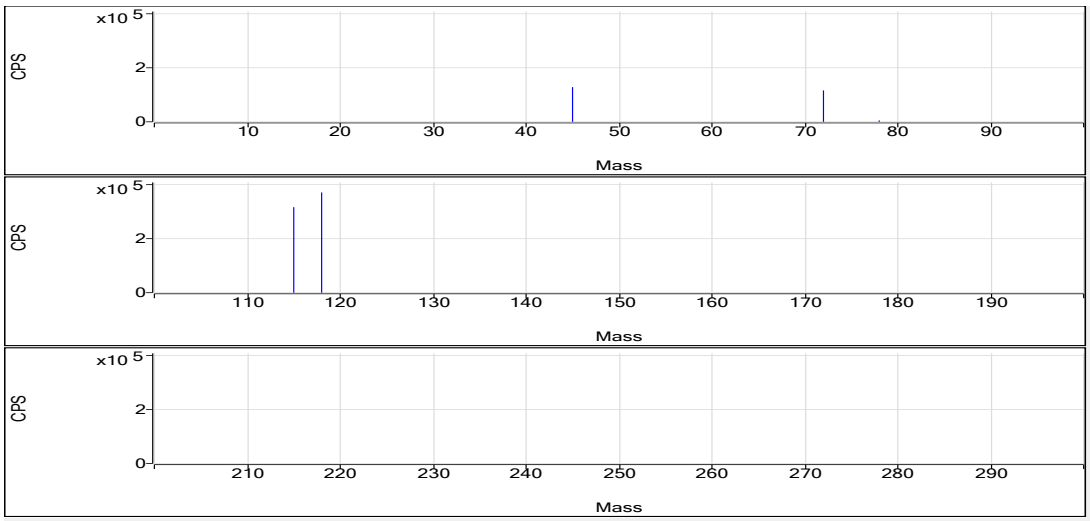
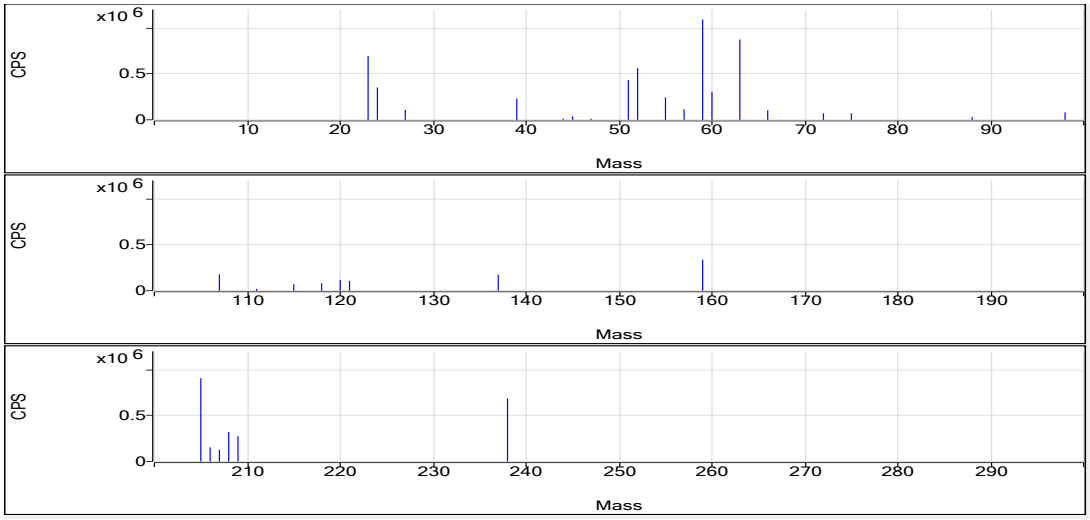


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.773	0.0346	79511.60	0.0007	1.523E-05
Be	9	1	No Gas	46.761	0.0346	79652.25	0.0007	1.523E-05
Be	9	1	No Gas	46.564	0.0345	79423.16	0.0007	1.523E-05
Se	78	2	H2	95.512	0.0166	5194.28	0.0002	3.71E-06
Se	78	2	H2	93.879	0.0163	5215.63	0.0002	3.71E-06
Se	78	2	H2	96.538	0.0168	5272.98	0.0002	3.71E-06
Na	23	3	He	4897.458	18.0142	691225.61	0.0036	0.3007
Na	23	3	He	5042.094	18.5373	694756.63	0.0036	0.3007
Na	23	3	He	5081.296	18.6791	699886.24	0.0036	0.3007
Mg	24	3	He	5005.197	9.1276	350237.03	0.0018	0.003274
Mg	24	3	He	5210.433	9.5017	356114.14	0.0018	0.003274
Mg	24	3	He	5181.949	9.4498	354074.64	0.0018	0.003274
Al	27	3	He	4848.205	2.8207	108234.91	0.0006	0.00137
Al	27	3	He	5056.64	2.9419	110260.61	0.0006	0.00137
Al	27	3	He	4866.59	2.8314	106090.51	0.0006	0.00137
K	39	3	He	4777.346	6.0027	230330.11	0.0012	0.378
K	39	3	He	5024.444	6.2936	235876.99	0.0012	0.378
K	39	3	He	4849.728	6.0879	228107.28	0.0012	0.378
Ca	44	3	He	4958.71	0.3481	13356.59	0.0001	0.003203
Ca	44	3	He	4958.842	0.3481	13046.31	0.0001	0.003203
Ca	44	3	He	4990.864	0.3503	13126.32	0.0001	0.003203
Ti	47	3	He	486.197	0.261	10013.78	0.0005	0
Ti	47	3	He	489.81	0.2629	9853.59	0.0005	0
Ti	47	3	He	547.167	0.2937	11004.53	0.0005	0
V	51	3	He	504.567	11.3264	434607.22	0.0224	0.02476
V	51	3	He	514.856	11.5568	433136.88	0.0224	0.02476
V	51	3	He	518.242	11.6327	435864.69	0.0224	0.02476
Cr	52	3	He	500.805	14.7085	564382.14	0.0293	0.04167
Cr	52	3	He	507.337	14.8998	558426.55	0.0293	0.04167
Cr	52	3	He	515.263	15.1319	566975.89	0.0293	0.04167
Mn	55	3	He	490.962	6.3581	243967.40	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	507.891	6.5771	246502.14	0.0129	0.006476
Mn	55	3	He	500.263	6.4784	242739.80	0.0129	0.006476
Fe	57	3	He	5010.359	2.9581	113504.15	0.0006	0.00213
Fe	57	3	He	5159.795	3.0462	114168.68	0.0006	0.00213
Fe	57	3	He	5068.614	2.9924	112122.99	0.0006	0.00213
Co	59	3	He	496.982	28.4394	1091255.76	0.0572	0.00297
Co	59	3	He	513.35	29.3759	1100976.70	0.0572	0.00297
Co	59	3	He	506.011	28.956	1084952.02	0.0572	0.00297
Ni	60	3	He	493.843	4.2577	303395.33	0.0086	0.002921
Ni	60	3	He	501.513	4.3238	307150.37	0.0086	0.002921
Ni	60	3	He	514.868	4.4389	307698.28	0.0086	0.002921
Cu	63	3	He	477.385	12.2634	873861.32	0.0257	0.004531
Cu	63	3	He	484.462	12.4451	884065.46	0.0257	0.004531
Cu	63	3	He	486.947	12.5089	867108.74	0.0257	0.004531
Zn	66	3	He	510.201	1.4771	105254.67	0.0029	0.002877
Zn	66	3	He	511.296	1.4803	105153.67	0.0029	0.002877
Zn	66	3	He	514.891	1.4906	103330.55	0.0029	0.002877
As	75	3	He	489.185	0.9977	71093.30	0.002	0.0006798
As	75	3	He	493.564	1.0066	71507.18	0.002	0.0006798
As	75	3	He	503.415	1.0267	71169.64	0.002	0.0006798
Sr	88	3	He	49.532	0.4467	30874.48	0.009	0.001075
Sr	88	3	He	47.471	0.4282	30192.98	0.009	0.001075
Sr	88	3	He	50.977	0.4597	30954.56	0.009	0.001075
Mo	98	3	He	51.437	1.162	80309.21	0.0226	0.0005115
Mo	98	3	He	50.49	1.1407	80430.97	0.0226	0.0005115
Mo	98	3	He	53.941	1.2186	82049.13	0.0226	0.0005115
Ag	107	3	He	52.346	2.5484	176120.15	0.0487	0.0003023
Ag	107	3	He	52.112	2.537	178893.57	0.0487	0.0003023
Ag	107	3	He	54.192	2.6383	177638.22	0.0487	0.0003023
Cd	111	3	He	52.654	0.2856	19739.95	0.0054	8.618E-06
Cd	111	3	He	52.193	0.2831	19964.27	0.0054	8.618E-06
Cd	111	3	He	54.594	0.2962	19940.23	0.0054	8.618E-06
Sn	120	3	He	103.752	1.6931	117012.53	0.0161	0.0177
Sn	120	3	He	103.117	1.6829	118664.98	0.0161	0.0177
Sn	120	3	He	107.051	1.7464	117586.47	0.0161	0.0177
Sb	121	3	He	100.77	1.531	105811.60	0.0152	8.618E-05
Sb	121	3	He	100.197	1.5223	107345.03	0.0152	8.618E-05
Sb	121	3	He	105.03	1.5958	107444.47	0.0152	8.618E-05
Ba	137	3	He	512.717	2.5264	174603.01	0.0049	0.0001277
Ba	137	3	He	497.555	2.4517	172878.30	0.0049	0.0001277
Ba	137	3	He	516.097	2.5431	171228.38	0.0049	0.0001277
Tl	205	3	He	107.871	2.6878	906803.89	0.0249	0.000171
Tl	205	3	He	108.248	2.6972	912794.05	0.0249	0.000171
Tl	205	3	He	107.445	2.6773	903851.31	0.0249	0.000171
Pb	208	3	He	53.863	1.8017	325462.55	0.0334	0.001456
Pb	208	3	He	53.215	1.7801	319215.66	0.0334	0.001456
Pb	208	3	He	53.849	1.8013	325426.25	0.0334	0.001456
U	238	3	He	50.177	2.4756	690365.77	0.0493	0.0001028
U	238	3	He	51.099	2.5211	688246.47	0.0493	0.0001028
U	238	3	He	50.013	2.4675	684557.96	0.0493	0.0001028
Sc	45	1	No Gas			2295362.31		
Sc	45	1	No Gas			2300004.97		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2303078.40		
Ge	72	1	No Gas			1126501.94		
Ge	72	1	No Gas			1126259.75		
Ge	72	1	No Gas			1121026.00		
Sc	45	2	H2			128595.61		
Sc	45	2	H2			129916.33		
Sc	45	2	H2			125509.01		
Ge	72	2	H2			115212.91		
Ge	72	2	H2			117590.34		
Ge	72	2	H2			115132.38		
In	115	2	H2			313167.81		
In	115	2	H2			319925.29		
In	115	2	H2			314535.68		
Sc	45	3	He			38371.22		
Sc	45	3	He			37478.85		
Sc	45	3	He			37468.97		
Ge	72	3	He			71257.87		
Ge	72	3	He			71037.28		
Ge	72	3	He			69319.29		
In	115	3	He			69755.76		
In	115	3	He			71142.45		
In	115	3	He			67966.41		
Tb	159	3	He			337372.10		
Tb	159	3	He			338417.30		
Tb	159	3	He			337604.21		
Bi	209	3	He			278871.21		
Bi	209	3	He			272999.43		
Bi	209	3	He			277430.17		

Quantitation Report

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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

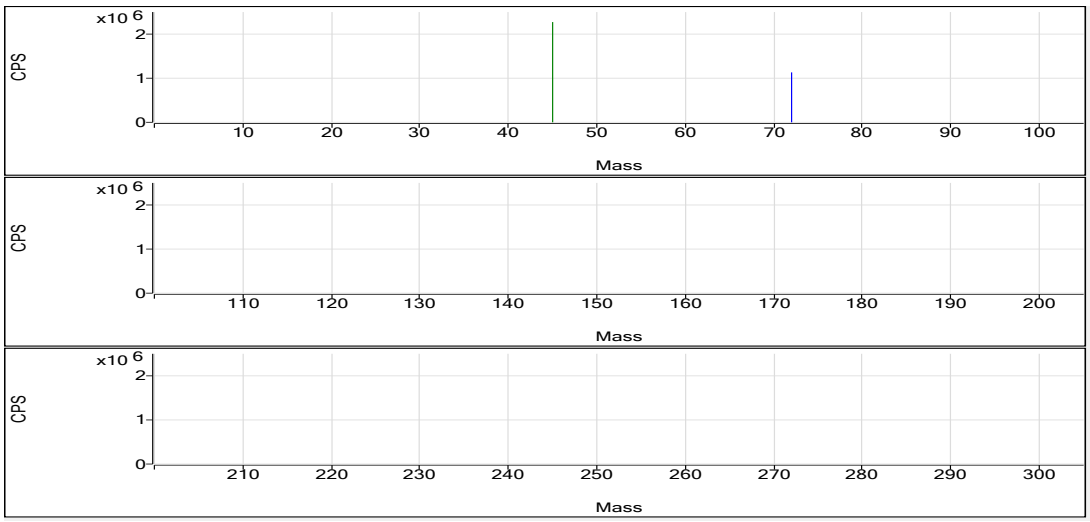
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.025	ppb	56.2	76.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.162	ppb	35.1	10.00	0.0000	Pulse	1.5000	3
Na	23	45	He	9641.909	ppb	0.7	1313645.71	35.1743	Analog	0.1000	3
Mg	24	45	He	9664.122	ppb	1.7	658029.82	17.6207	Pulse	0.1000	3
Al	27	45	He	1.941	ppb	95.8	93.34	0.0025	Pulse	0.1000	3
K	39	45	He	961.530	ppb	3.1	56389.48	1.5101	Pulse	0.1000	3
Ca	44	45	He	24196.528	ppb	2.3	62969.84	1.6861	Pulse	0.1000	3
Ti	47	45	He	1.000	ppb	50.8	20.00	0.0005	Pulse	0.1000	3
V	51	45	He	0.047	ppb	185.7	963.37	0.0258	Pulse	0.5000	3
Cr	52	45	He	0.045	ppb	227.4	1606.82	0.0430	Pulse	0.1000	3
Mn	55	45	He	30.467	ppb	2.6	14961.53	0.4006	Pulse	0.1000	3
Fe	57	45	He	4.409	ppb	41.7	176.68	0.0047	Pulse	0.1000	3
Co	59	45	He	0.150	ppb	39.1	430.02	0.0115	Pulse	0.1000	3
Ni	60	72	He	0.081	ppb	27.5	256.68	0.0036	Pulse	0.1000	3
Cu	63	72	He	19.612	ppb	1.8	36035.93	0.5081	Pulse	0.1000	3
Zn	66	72	He	11.773	ppb	4.2	2617.00	0.0369	Pulse	0.1000	3
As	75	72	He	0.478	ppb	0.8	117.33	0.0017	Pulse	0.5000	3
Sr	88	115	He	161.160	ppb	0.4	100086.46	1.4511	Pulse	0.1000	3
Mo	98	115	He	0.480	ppb	10.5	783.39	0.0114	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	25.9	63.34	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.020	ppb	26.9	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.046	ppb	N/A	1170.09	0.0170	Pulse	0.1000	3
Sb	121	115	He	0.131	ppb	24.6	143.34	0.0021	Pulse	0.1000	3
Ba	137	115	He	94.507	ppb	1.5	32124.98	0.4658	Pulse	0.1000	3
Tl	205	159	He	0.215	ppb	8.2	1886.86	0.0055	Pulse	0.1000	3
Pb	208	159	He	1.283	ppb	2.0	15107.32	0.0443	Pulse	0.1000	3
U	238	209	He	0.668	ppb	6.3	9120.23	0.0331	Pulse	0.1000	3

ISTD Table:

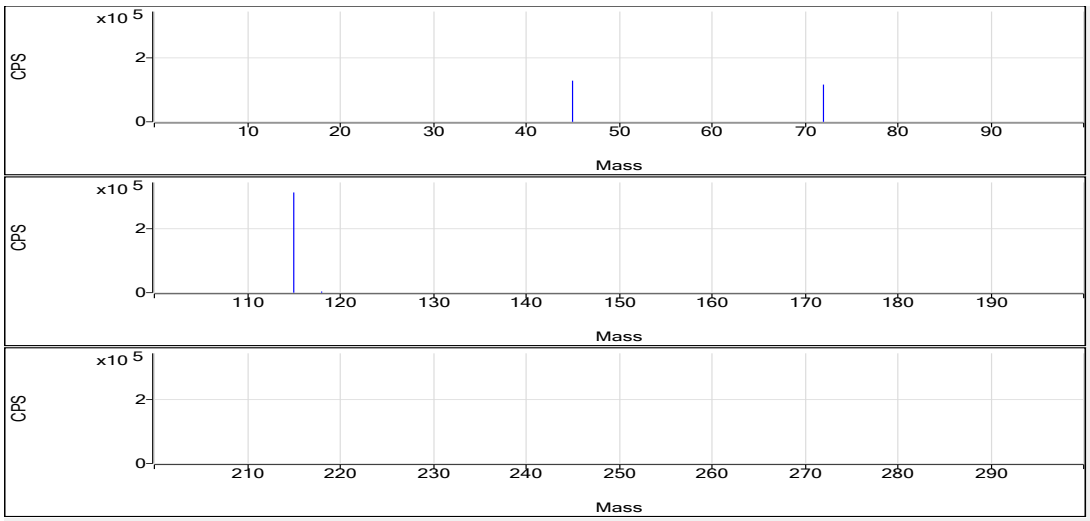
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2278568.61	0.8	94.6	Analog	0.1000	3
No Gas	Ge	72	1134744.34	0.3	97.7	Pulse	0.1000	3
H2	Sc	45	129346.26	1.6	78.7	Pulse	0.1000	3
H2	Ge	72	117019.97	0.7	80.5	Pulse	0.1000	3
H2	In	115	315020.59	0.4	87.5	Pulse	0.1000	3
He	Sc	45	37348.88	1.2	85.3	Pulse	0.1000	3
He	Ge	72	70922.96	0.7	92.7	Pulse	0.1000	3
He	In	115	68972.55	1.0	89.0	Pulse	0.1000	3
He	Tb	159	340760.25	0.6	91.9	Pulse	0.1000	3
He	Bi	209	275737.29	0.2	94.3	Pulse	0.1000	3

No Gas

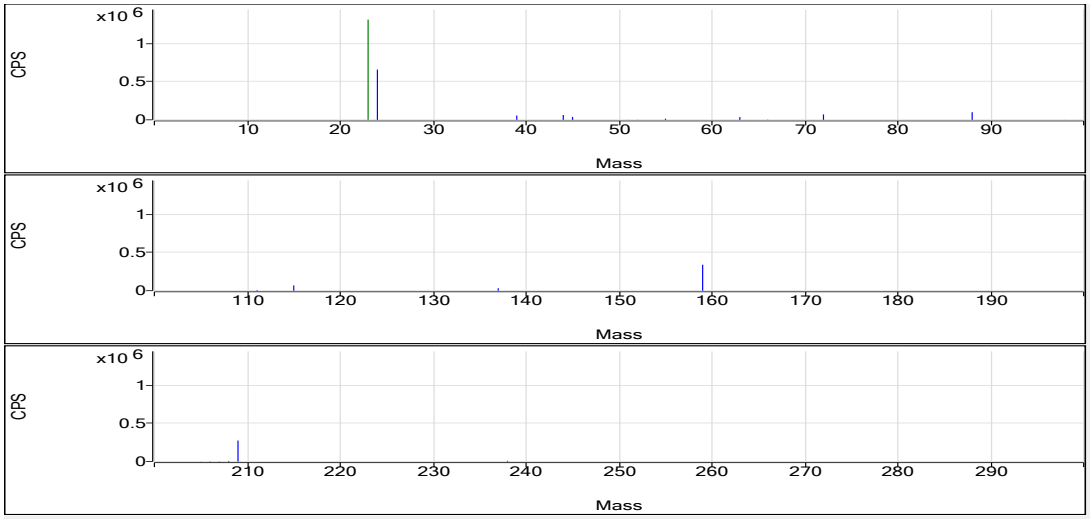


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.023	0	74.00	0.0007	1.523E-05
Be	9	1	No Gas	0.04	0	102.00	0.0007	1.523E-05
Be	9	1	No Gas	0.012	0	54.00	0.0007	1.523E-05
Se	78	2	H2	0.112	0	7.33	0.0002	3.71E-06
Se	78	2	H2	0.224	0	13.33	0.0002	3.71E-06
Se	78	2	H2	0.149	0	9.33	0.0002	3.71E-06
Na	23	3	He	9707.003	35.4097	1306882.48	0.0036	0.3007
Na	23	3	He	9653.136	35.2149	1315602.17	0.0036	0.3007
Na	23	3	He	9565.589	34.8982	1318452.48	0.0036	0.3007
Mg	24	3	He	9850.173	17.9598	662852.10	0.0018	0.003274
Mg	24	3	He	9601.942	17.5073	654060.81	0.0018	0.003274
Mg	24	3	He	9540.252	17.3949	657176.55	0.0018	0.003274
Al	27	3	He	0.906	0.0019	70.00	0.0006	0.00137
Al	27	3	He	4.089	0.0037	140.01	0.0006	0.00137
Al	27	3	He	0.83	0.0019	70.00	0.0006	0.00137
K	39	3	He	992.124	1.5461	57062.41	0.0012	0.378
K	39	3	He	959.112	1.5072	56308.91	0.0012	0.378
K	39	3	He	933.353	1.4769	55797.11	0.0012	0.378
Ca	44	3	He	24142.969	1.6824	62092.54	0.0001	0.003203
Ca	44	3	He	24766.735	1.7258	64473.45	0.0001	0.003203
Ca	44	3	He	23679.881	1.6502	62343.52	0.0001	0.003203
Ti	47	3	He	1.514	0.0008	30.00	0.0005	0
Ti	47	3	He	0.499	0.0003	10.00	0.0005	0
Ti	47	3	He	0.986	0.0005	20.00	0.0005	0
V	51	3	He	0.138	0.0279	1028.04	0.0224	0.02476
V	51	3	He	0.037	0.0256	956.04	0.0224	0.02476
V	51	3	He	-0.035	0.024	906.03	0.0224	0.02476
Cr	52	3	He	-0.072	0.0396	1460.12	0.0293	0.04167
Cr	52	3	He	0.085	0.0442	1650.15	0.0293	0.04167
Cr	52	3	He	0.123	0.0453	1710.18	0.0293	0.04167
Mn	55	3	He	31.267	0.411	15168.41	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	29.682	0.3905	14587.87	0.0129	0.006476
Mn	55	3	He	30.452	0.4004	15128.32	0.0129	0.006476
Fe	57	3	He	5.575	0.0054	200.01	0.0006	0.00213
Fe	57	3	He	2.288	0.0035	130.01	0.0006	0.00213
Fe	57	3	He	5.363	0.0053	200.01	0.0006	0.00213
Co	59	3	He	0.209	0.0149	550.03	0.0572	0.00297
Co	59	3	He	0.149	0.0115	430.02	0.0572	0.00297
Co	59	3	He	0.092	0.0082	310.01	0.0572	0.00297
Ni	60	3	He	0.086	0.0037	260.01	0.0086	0.002921
Ni	60	3	He	0.057	0.0034	240.02	0.0086	0.002921
Ni	60	3	He	0.1	0.0038	270.01	0.0086	0.002921
Cu	63	3	He	19.554	0.5067	35965.95	0.0257	0.004531
Cu	63	3	He	19.989	0.5178	36466.87	0.0257	0.004531
Cu	63	3	He	19.292	0.4999	35674.96	0.0257	0.004531
Zn	66	3	He	11.487	0.0361	2560.33	0.0029	0.002877
Zn	66	3	He	11.488	0.0361	2540.32	0.0029	0.002877
Zn	66	3	He	12.343	0.0385	2750.35	0.0029	0.002877
As	75	3	He	0.482	0.0017	118.00	0.002	0.0006798
As	75	3	He	0.475	0.0016	116.00	0.002	0.0006798
As	75	3	He	0.478	0.0017	118.00	0.002	0.0006798
Sr	88	3	He	160.449	1.4447	100244.07	0.009	0.001075
Sr	88	3	He	161.79	1.4568	101069.94	0.009	0.001075
Sr	88	3	He	161.242	1.4518	98945.36	0.009	0.001075
Mo	98	3	He	0.475	0.0112	780.05	0.0226	0.0005115
Mo	98	3	He	0.533	0.0125	870.07	0.0226	0.0005115
Mo	98	3	He	0.432	0.0103	700.04	0.0226	0.0005115
Ag	107	3	He	0.015	0.001	70.00	0.0487	0.0003023
Ag	107	3	He	0.015	0.001	70.01	0.0487	0.0003023
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Cd	111	3	He	0.025	0.0001	10.00	0.0054	8.618E-06
Cd	111	3	He	0.014	0.0001	6.00	0.0054	8.618E-06
Cd	111	3	He	0.02	0.0001	8.00	0.0054	8.618E-06
Sn	120	3	He	-0.052	0.0169	1170.08	0.0161	0.0177
Sn	120	3	He	-0.061	0.0167	1160.09	0.0161	0.0177
Sn	120	3	He	-0.024	0.0173	1180.09	0.0161	0.0177
Sb	121	3	He	0.118	0.0019	130.00	0.0152	8.618E-05
Sb	121	3	He	0.108	0.0017	120.01	0.0152	8.618E-05
Sb	121	3	He	0.168	0.0026	180.01	0.0152	8.618E-05
Ba	137	3	He	92.832	0.4575	31747.34	0.0049	0.0001277
Ba	137	3	He	95.248	0.4694	32569.55	0.0049	0.0001277
Ba	137	3	He	95.441	0.4704	32058.04	0.0049	0.0001277
Tl	205	3	He	0.228	0.0059	1980.21	0.0249	0.000171
Tl	205	3	He	0.223	0.0057	1960.21	0.0249	0.000171
Tl	205	3	He	0.195	0.005	1720.17	0.0249	0.000171
Pb	208	3	He	1.293	0.0447	8302.86	0.0334	0.001456
Pb	208	3	He	1.253	0.0433	8042.78	0.0334	0.001456
Pb	208	3	He	1.302	0.045	8012.73	0.0334	0.001456
U	238	3	He	0.626	0.031	8533.10	0.0493	0.0001028
U	238	3	He	0.669	0.0331	9153.60	0.0493	0.0001028
U	238	3	He	0.71	0.0351	9673.99	0.0493	0.0001028
Sc	45	1	No Gas			2283729.97		
Sc	45	1	No Gas			2293663.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2258312.31		
Ge	72	1	No Gas			1132268.66		
Ge	72	1	No Gas			1138125.30		
Ge	72	1	No Gas			1133839.05		
Sc	45	2	H2			131674.80		
Sc	45	2	H2			128585.82		
Sc	45	2	H2			127778.15		
Ge	72	2	H2			117803.84		
Ge	72	2	H2			116975.42		
Ge	72	2	H2			116280.65		
In	115	2	H2			315640.03		
In	115	2	H2			313444.49		
In	115	2	H2			315977.24		
Sc	45	3	He			36907.46		
Sc	45	3	He			37359.27		
Sc	45	3	He			37779.92		
Ge	72	3	He			70986.31		
Ge	72	3	He			70423.73		
Ge	72	3	He			71358.84		
In	115	3	He			69393.49		
In	115	3	He			69384.50		
In	115	3	He			68157.82		
Tb	159	3	He			338466.24		
Tb	159	3	He			342270.31		
Tb	159	3	He			341544.21		
Bi	209	3	He			275589.88		
Bi	209	3	He			276345.97		
Bi	209	3	He			275276.03		

Quantitation Report

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Acq Time	8/14/2023 11:36:53 PM
Sample Name	410-137706-B-9-A
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

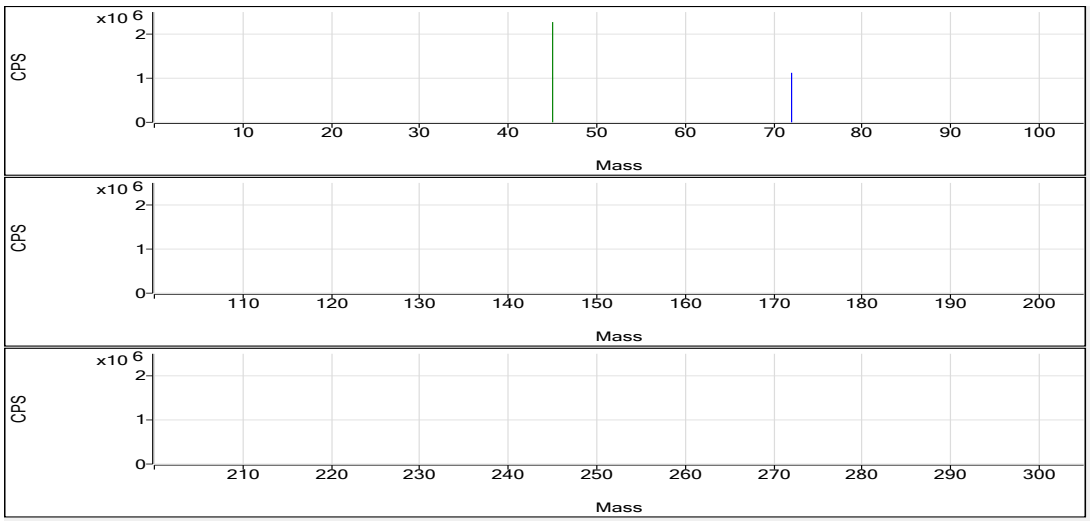
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.017	ppb	28.8	63.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.741	ppb	3.4	41.11	0.0001	Pulse	1.5000	3
Na	23	45	He	337094.664	ppb	0.8	46006574.32	1 219.5312	Analog	0.1000	3
Mg	24	45	He	54255.850	ppb	0.4	3731487.76	98.9100	Analog	0.1000	3
Al	27	45	He	236.895	ppb	11.5	5251.12	0.1391	Pulse	0.1000	3
K	39	45	He	10577.662	ppb	0.9	484073.29	12.8318	Pulse	0.1000	3
Ca	44	45	He	24876.924	ppb	0.6	65393.90	1.7334	Pulse	0.1000	3
Ti	47	45	He	10.214	ppb	15.6	206.68	0.0055	Pulse	0.1000	3
V	51	45	He	5.263	ppb	1.9	5381.03	0.1426	Pulse	0.5000	3
Cr	52	45	He	6.154	ppb	3.1	8372.70	0.2219	Pulse	0.1000	3
Mn	55	45	He	182.821	ppb	1.6	89466.22	2.3716	Pulse	0.1000	3
Fe	57	45	He	1613.141	ppb	2.0	35982.42	0.9538	Pulse	0.1000	3
Co	59	45	He	0.489	ppb	1.3	1166.75	0.0309	Pulse	0.1000	3
Ni	60	72	He	12.821	ppb	3.2	7872.43	0.1134	Pulse	0.1000	3
Cu	63	72	He	42.881	ppb	2.3	76775.06	1.1057	Pulse	0.1000	3
Zn	66	72	He	495.159	ppb	1.3	99541.47	1.4336	Pulse	0.1000	3
As	75	72	He	1.263	ppb	8.9	226.00	0.0033	Pulse	0.5000	3
Sr	88	115	He	152.368	ppb	1.7	93095.75	1.3720	Pulse	0.1000	3
Mo	98	115	He	5.088	ppb	2.2	7829.10	0.1154	Pulse	0.1000	3
Ag	107	115	He	0.030	ppb	18.6	120.01	0.0018	Pulse	0.1000	3
Cd	111	115	He	0.129	ppb	6.3	48.00	0.0007	Pulse	0.5000	3
Sn	120	115	He	0.033	ppb	266.1	1236.77	0.0182	Pulse	0.1000	3
Sb	121	115	He	0.625	ppb	6.9	650.04	0.0096	Pulse	0.1000	3
Ba	137	115	He	989.942	ppb	1.6	330948.58	4.8779	Pulse	0.1000	3
Tl	205	159	He	0.091	ppb	9.9	816.72	0.0024	Pulse	0.1000	3
Pb	208	159	He	2.274	ppb	2.5	26011.08	0.0775	Pulse	0.1000	3
U	238	209	He	0.365	ppb	9.0	4787.74	0.0181	Pulse	0.1000	3

ISTD Table:

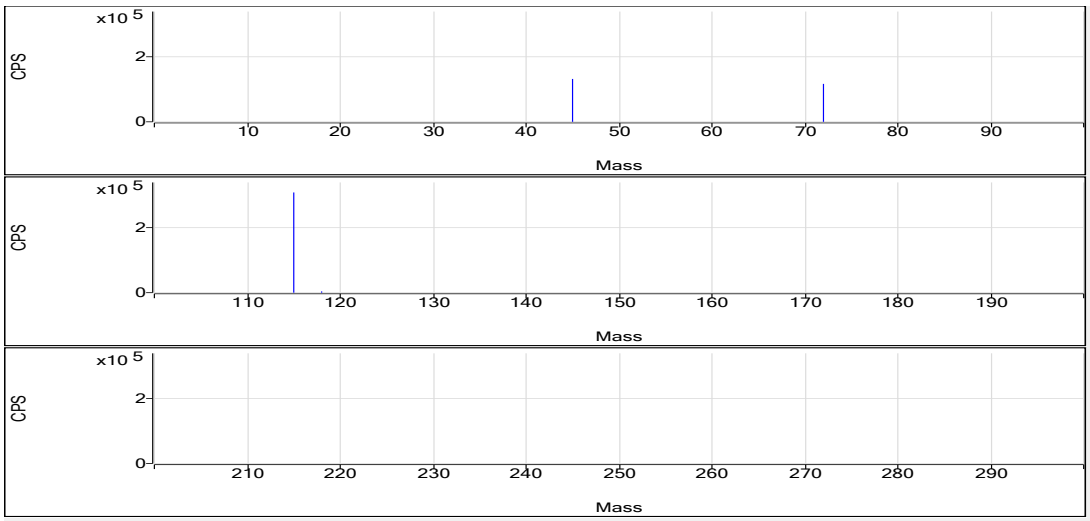
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2258999.71	1.0	93.8	Analog	0.1000	3
No Gas	Ge	72	1115679.67	0.4	96.0	Pulse	0.1000	3
H2	Sc	45	132778.41	2.1	80.8	Pulse	0.1000	3
H2	Ge	72	117487.13	1.2	80.8	Pulse	0.1000	3
H2	In	115	310415.16	0.5	86.3	Pulse	0.1000	3
He	Sc	45	37726.25	0.8	86.2	Pulse	0.1000	3
He	Ge	72	69435.87	0.5	90.8	Pulse	0.1000	3
He	In	115	67855.27	1.3	87.5	Pulse	0.1000	3
He	Tb	159	335847.01	0.2	90.5	Pulse	0.1000	3
He	Bi	209	263970.32	0.3	90.3	Pulse	0.1000	3

No Gas

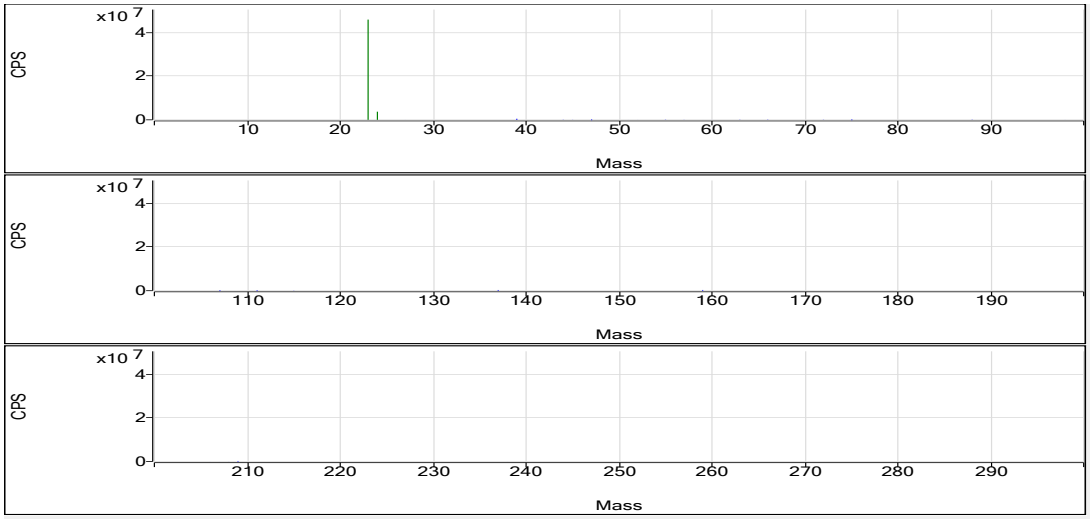


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.02	0	68.00	0.0007	1.523E-05
Be	9	1	No Gas	0.021	0	68.00	0.0007	1.523E-05
Be	9	1	No Gas	0.012	0	54.00	0.0007	1.523E-05
Se	78	2	H2	0.713	0.0001	39.33	0.0002	3.71E-06
Se	78	2	H2	0.757	0.0001	42.00	0.0002	3.71E-06
Se	78	2	H2	0.754	0.0001	42.00	0.0002	3.71E-06
Na	23	3	He	334487.978	1210.1032	45862789.32	0.0036	0.3007
Na	23	3	He	336883.142	1218.7662	46191214.31	0.0036	0.3007
Na	23	3	He	339912.872	1229.7244	45965719.32	0.0036	0.3007
Mg	24	3	He	54448.425	99.2611	3761985.88	0.0018	0.003274
Mg	24	3	He	54007.62	98.4575	3731538.38	0.0018	0.003274
Mg	24	3	He	54311.504	99.0115	3700939.01	0.0018	0.003274
Al	27	3	He	228.636	0.1343	5091.02	0.0006	0.00137
Al	27	3	He	267.222	0.1568	5941.45	0.0006	0.00137
Al	27	3	He	214.829	0.1263	4720.90	0.0006	0.00137
K	39	3	He	10512.15	12.7546	483399.25	0.0012	0.378
K	39	3	He	10540.179	12.7876	484651.01	0.0012	0.378
K	39	3	He	10680.657	12.953	484169.60	0.0012	0.378
Ca	44	3	He	24812.603	1.729	65527.36	0.0001	0.003203
Ca	44	3	He	24774.815	1.7263	65427.89	0.0001	0.003203
Ca	44	3	He	25043.355	1.745	65226.44	0.0001	0.003203
Ti	47	3	He	9.832	0.0053	200.01	0.0005	0
Ti	47	3	He	8.849	0.0047	180.01	0.0005	0
Ti	47	3	He	11.963	0.0064	240.01	0.0005	0
V	51	3	He	5.233	0.142	5381.03	0.0224	0.02476
V	51	3	He	5.181	0.1408	5337.02	0.0224	0.02476
V	51	3	He	5.374	0.1451	5425.04	0.0224	0.02476
Cr	52	3	He	6.301	0.2262	8572.92	0.0293	0.04167
Cr	52	3	He	6.22	0.2238	8482.73	0.0293	0.04167
Cr	52	3	He	5.942	0.2157	8062.46	0.0293	0.04167
Mn	55	3	He	179.954	2.3345	88479.17	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	182.644	2.3693	89798.27	0.0129	0.006476
Mn	55	3	He	185.865	2.411	90121.23	0.0129	0.006476
Fe	57	3	He	1634.058	0.9662	36617.49	0.0006	0.00213
Fe	57	3	He	1575.298	0.9315	35303.72	0.0006	0.00213
Fe	57	3	He	1630.066	0.9638	36026.06	0.0006	0.00213
Co	59	3	He	0.483	0.0306	1160.08	0.0572	0.00297
Co	59	3	He	0.488	0.0309	1170.09	0.0572	0.00297
Co	59	3	He	0.495	0.0313	1170.09	0.0572	0.00297
Ni	60	3	He	13.044	0.1153	8012.53	0.0086	0.002921
Ni	60	3	He	13.072	0.1155	7982.55	0.0086	0.002921
Ni	60	3	He	12.348	0.1093	7622.20	0.0086	0.002921
Cu	63	3	He	41.789	1.0776	74884.74	0.0257	0.004531
Cu	63	3	He	43.155	1.1127	76875.14	0.0257	0.004531
Cu	63	3	He	43.7	1.1267	78565.29	0.0257	0.004531
Zn	66	3	He	493.871	1.4299	99363.66	0.0029	0.002877
Zn	66	3	He	502.243	1.4541	100460.37	0.0029	0.002877
Zn	66	3	He	489.365	1.4169	98800.38	0.0029	0.002877
As	75	3	He	1.389	0.0035	244.00	0.002	0.0006798
As	75	3	He	1.229	0.0032	220.00	0.002	0.0006798
As	75	3	He	1.172	0.0031	214.00	0.002	0.0006798
Sr	88	3	He	153.949	1.3862	92814.30	0.009	0.001075
Sr	88	3	He	149.365	1.345	91404.02	0.009	0.001075
Sr	88	3	He	153.79	1.3848	95068.92	0.009	0.001075
Mo	98	3	He	5.217	0.1183	7922.44	0.0226	0.0005115
Mo	98	3	He	5.036	0.1142	7762.45	0.0226	0.0005115
Mo	98	3	He	5.01	0.1137	7802.40	0.0226	0.0005115
Ag	107	3	He	0.024	0.0015	100.01	0.0487	0.0003023
Ag	107	3	He	0.03	0.0018	120.00	0.0487	0.0003023
Ag	107	3	He	0.036	0.002	140.01	0.0487	0.0003023
Cd	111	3	He	0.125	0.0007	46.00	0.0054	8.618E-06
Cd	111	3	He	0.123	0.0007	46.00	0.0054	8.618E-06
Cd	111	3	He	0.138	0.0008	52.00	0.0054	8.618E-06
Sn	120	3	He	0.078	0.019	1270.11	0.0161	0.0177
Sn	120	3	He	0.088	0.0191	1300.10	0.0161	0.0177
Sn	120	3	He	-0.068	0.0166	1140.09	0.0161	0.0177
Sb	121	3	He	0.653	0.01	670.05	0.0152	8.618E-05
Sb	121	3	He	0.575	0.0088	600.04	0.0152	8.618E-05
Sb	121	3	He	0.646	0.0099	680.04	0.0152	8.618E-05
Ba	137	3	He	1007.791	4.9658	332483.47	0.0049	0.0001277
Ba	137	3	He	981.329	4.8354	328612.46	0.0049	0.0001277
Ba	137	3	He	980.705	4.8323	331749.80	0.0049	0.0001277
Tl	205	3	He	0.091	0.0024	820.05	0.0249	0.000171
Tl	205	3	He	0.1	0.0027	890.07	0.0249	0.000171
Tl	205	3	He	0.082	0.0022	740.05	0.0249	0.000171
Pb	208	3	He	2.208	0.0753	13387.38	0.0334	0.001456
Pb	208	3	He	2.314	0.0788	14047.98	0.0334	0.001456
Pb	208	3	He	2.298	0.0783	13807.75	0.0334	0.001456
U	238	3	He	0.383	0.019	5021.17	0.0493	0.0001028
U	238	3	He	0.328	0.0163	4280.88	0.0493	0.0001028
U	238	3	He	0.386	0.0192	5061.17	0.0493	0.0001028
Sc	45	1	No Gas			2273407.31		
Sc	45	1	No Gas			2234049.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2269542.78		
Ge	72	1	No Gas			1119248.19		
Ge	72	1	No Gas			1110603.66		
Ge	72	1	No Gas			1117187.17		
Sc	45	2	H2			132832.15		
Sc	45	2	H2			129986.03		
Sc	45	2	H2			135517.06		
Ge	72	2	H2			115926.97		
Ge	72	2	H2			117772.29		
Ge	72	2	H2			118762.14		
In	115	2	H2			308657.71		
In	115	2	H2			310746.32		
In	115	2	H2			311841.46		
Sc	45	3	He			37899.90		
Sc	45	3	He			37899.98		
Sc	45	3	He			37378.88		
Ge	72	3	He			69489.46		
Ge	72	3	He			69087.66		
Ge	72	3	He			69730.48		
In	115	3	He			66961.62		
In	115	3	He			67966.13		
In	115	3	He			68659.76		
Tb	159	3	He			336558.82		
Tb	159	3	He			335492.89		
Tb	159	3	He			335489.33		
Bi	209	3	He			264568.49		
Bi	209	3	He			263161.15		
Bi	209	3	He			264181.32		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

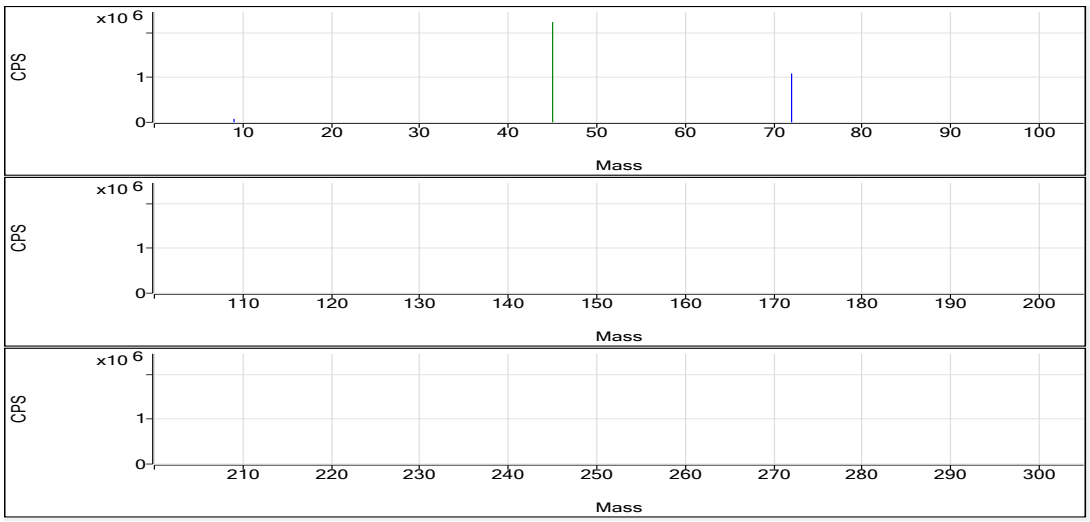
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.355	ppb	1.1	76678.99	0.0343	Pulse	0.5000	3
Se	78	115	H2	47.484	ppb	1.2	2536.45	0.0082	Pulse	1.5000	3
Na	23	45	He	5034.107	ppb	1.7	682324.05	18.5084	Pulse	0.1000	3
Mg	24	45	He	5043.247	ppb	1.9	339034.23	9.1970	Pulse	0.1000	3
Al	27	45	He	4825.988	ppb	1.3	103514.96	2.8078	Pulse	0.1000	3
K	39	45	He	4889.585	ppb	1.7	226160.62	6.1348	Pulse	0.1000	3
Ca	44	45	He	4913.489	ppb	0.8	12719.30	0.3449	Pulse	0.1000	3
Ti	47	45	He	4925.499	ppb	0.7	97472.68	2.6438	Pulse	0.1000	3
V	51	45	He	509.619	ppb	1.4	421724.83	11.4395	Pulse	0.5000	3
Cr	52	45	He	508.756	ppb	1.5	550814.98	14.9413	Pulse	0.1000	3
Mn	55	45	He	501.056	ppb	1.9	239197.33	6.4887	Pulse	0.1000	3
Fe	57	45	He	5051.180	ppb	1.2	109940.08	2.9821	Pulse	0.1000	3
Co	59	45	He	503.659	ppb	1.9	1062486.26	28.8215	Pulse	0.1000	3
Ni	60	72	He	510.304	ppb	1.3	295894.51	4.3995	Pulse	0.1000	3
Cu	63	72	He	493.397	ppb	1.1	852432.07	12.6745	Pulse	0.1000	3
Zn	66	72	He	517.127	ppb	0.6	100695.24	1.4971	Pulse	0.1000	3
As	75	72	He	509.396	ppb	1.1	69870.66	1.0389	Pulse	0.5000	3
Sr	88	115	He	47.749	ppb	1.2	29147.54	0.4307	Pulse	0.1000	3
Mo	98	115	He	52.406	ppb	1.0	80112.29	1.1839	Pulse	0.1000	3
Ag	107	115	He	53.537	ppb	0.8	176366.12	2.6064	Pulse	0.1000	3
Cd	111	115	He	52.615	ppb	1.4	19314.71	0.2854	Pulse	0.5000	3
Sn	120	115	He	51.526	ppb	1.5	57500.10	0.8498	Pulse	0.1000	3
Sb	121	115	He	51.842	ppb	1.3	53300.18	0.7877	Pulse	0.1000	3
Ba	137	115	He	505.664	ppb	0.7	168610.52	2.4917	Pulse	0.1000	3
Tl	205	159	He	52.803	ppb	1.2	442855.98	1.3158	Pulse	0.1000	3
Pb	208	159	He	52.661	ppb	0.4	592903.03	1.7616	Pulse	0.1000	3
U	238	209	He	50.805	ppb	0.5	679018.29	2.5065	Pulse	0.1000	3

ISTD Table:

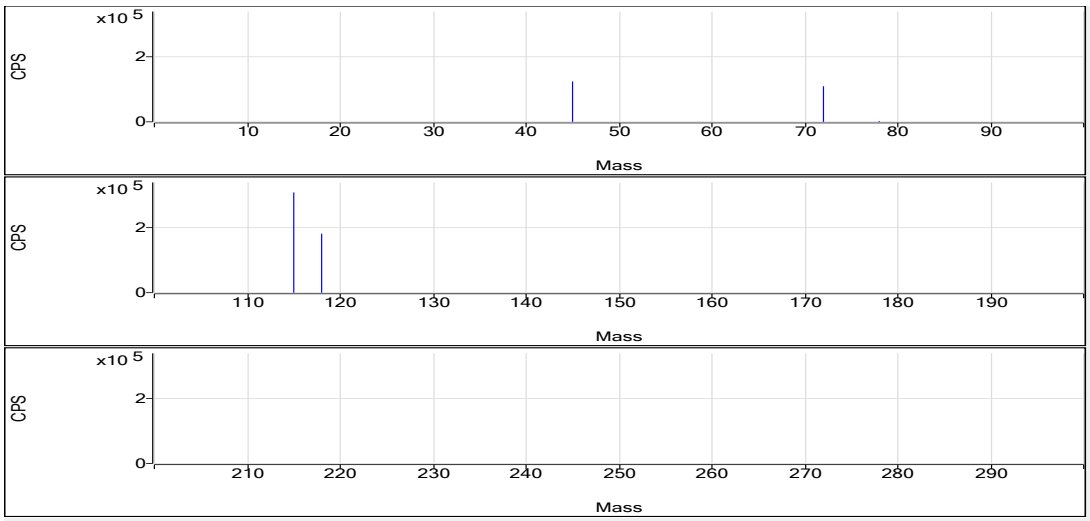
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2233525.90	0.1	92.8	Analog	0.1000	3
No Gas	Ge	72	1087154.96	0.6	93.6	Pulse	0.1000	3
H2	Sc	45	123797.02	0.8	75.3	Pulse	0.1000	3
H2	Ge	72	109151.79	0.7	75.1	Pulse	0.1000	3
H2	In	115	307524.71	0.5	85.5	Pulse	0.1000	3
He	Sc	45	36870.90	1.6	84.3	Pulse	0.1000	3
He	Ge	72	67261.70	1.3	87.9	Pulse	0.1000	3
He	In	115	67671.28	1.1	87.3	Pulse	0.1000	3
He	Tb	159	336574.96	0.4	90.7	Pulse	0.1000	3
He	Bi	209	270900.58	0.3	92.7	Pulse	0.1000	3

No Gas

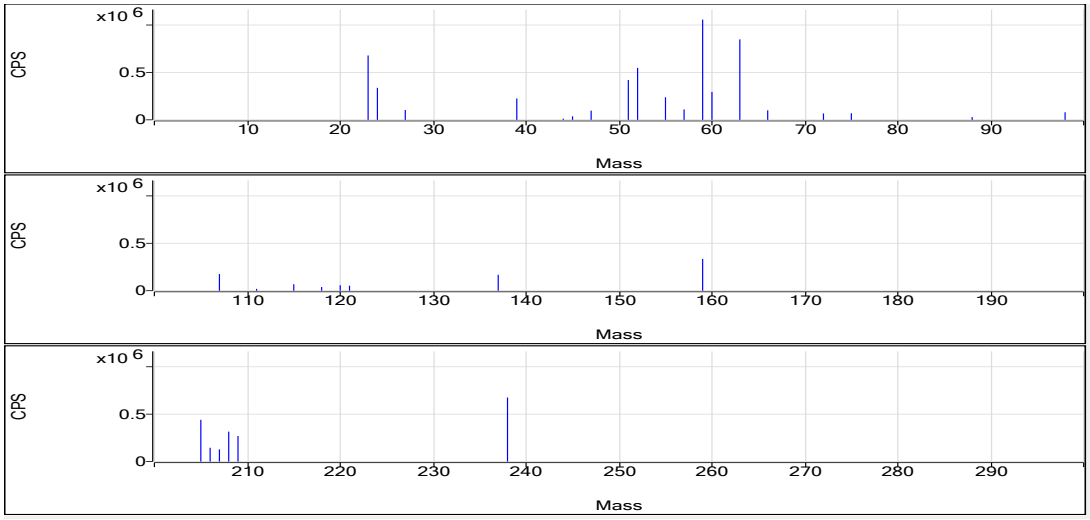


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.792	0.0339	75818.67	0.0007	1.523E-05
Be	9	1	No Gas	46.516	0.0345	76954.42	0.0007	1.523E-05
Be	9	1	No Gas	46.758	0.0346	77263.88	0.0007	1.523E-05
Se	78	2	H2	47.981	0.0083	2562.90	0.0002	3.71E-06
Se	78	2	H2	46.833	0.0081	2488.89	0.0002	3.71E-06
Se	78	2	H2	47.638	0.0083	2557.57	0.0002	3.71E-06
Na	23	3	He	5032.255	18.5017	675251.63	0.0036	0.3007
Na	23	3	He	5122.239	18.8272	688826.08	0.0036	0.3007
Na	23	3	He	4947.828	18.1963	682894.44	0.0036	0.3007
Mg	24	3	He	5102.303	9.3046	339587.92	0.0018	0.003274
Mg	24	3	He	5093.813	9.2891	339859.96	0.0018	0.003274
Mg	24	3	He	4933.625	8.9971	337654.80	0.0018	0.003274
Al	27	3	He	4828.781	2.8094	102535.18	0.0006	0.00137
Al	27	3	He	4886.442	2.843	104015.09	0.0006	0.00137
Al	27	3	He	4762.741	2.771	103994.61	0.0006	0.00137
K	39	3	He	4920.812	6.1716	225242.77	0.0012	0.378
K	39	3	He	4952.449	6.2088	227161.54	0.0012	0.378
K	39	3	He	4795.493	6.024	226077.56	0.0012	0.378
Ca	44	3	He	4876.641	0.3424	12495.77	0.0001	0.003203
Ca	44	3	He	4911.713	0.3448	12615.86	0.0001	0.003203
Ca	44	3	He	4952.112	0.3476	13046.27	0.0001	0.003203
Ti	47	3	He	4957.306	2.6609	97113.49	0.0005	0
Ti	47	3	He	4932.312	2.6475	96862.38	0.0005	0
Ti	47	3	He	4886.88	2.6231	98442.17	0.0005	0
V	51	3	He	513.924	11.5359	421024.22	0.0224	0.02476
V	51	3	He	513.557	11.5277	421763.09	0.0224	0.02476
V	51	3	He	501.376	11.2549	422387.19	0.0224	0.02476
Cr	52	3	He	512.04	15.0375	548819.37	0.0293	0.04167
Cr	52	3	He	514.385	15.1062	552686.75	0.0293	0.04167
Cr	52	3	He	499.842	14.6803	550938.82	0.0293	0.04167
Mn	55	3	He	505.944	6.5519	239123.18	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	507.038	6.5661	240231.34	0.0129	0.006476
Mn	55	3	He	490.186	6.3481	238237.46	0.0129	0.006476
Fe	57	3	He	5093.262	3.007	109744.29	0.0006	0.00213
Fe	57	3	He	5080.74	2.9996	109744.92	0.0006	0.00213
Fe	57	3	He	4979.539	2.9399	110331.04	0.0006	0.00213
Co	59	3	He	505.189	28.909	1055084.28	0.0572	0.00297
Co	59	3	He	512.371	29.32	1072723.73	0.0572	0.00297
Co	59	3	He	493.416	28.2354	1059650.77	0.0572	0.00297
Ni	60	3	He	503.826	4.3437	296384.21	0.0086	0.002921
Ni	60	3	He	516.597	4.4537	297806.36	0.0086	0.002921
Ni	60	3	He	510.489	4.4011	293492.96	0.0086	0.002921
Cu	63	3	He	487.123	12.5134	853825.61	0.0257	0.004531
Cu	63	3	He	496.58	12.7563	852966.32	0.0257	0.004531
Cu	63	3	He	496.487	12.7539	850504.28	0.0257	0.004531
Zn	66	3	He	514.783	1.4903	101689.66	0.0029	0.002877
Zn	66	3	He	520.727	1.5075	100801.91	0.0029	0.002877
Zn	66	3	He	515.872	1.4935	99594.14	0.0029	0.002877
As	75	3	He	503.011	1.0259	69997.93	0.002	0.0006798
As	75	3	He	512.117	1.0444	69837.21	0.002	0.0006798
As	75	3	He	513.06	1.0464	69776.84	0.002	0.0006798
Sr	88	3	He	47.454	0.428	29090.74	0.009	0.001075
Sr	88	3	He	48.422	0.4368	29812.45	0.009	0.001075
Sr	88	3	He	47.37	0.4273	28539.42	0.009	0.001075
Mo	98	3	He	51.874	1.1719	79645.71	0.0226	0.0005115
Mo	98	3	He	52.392	1.1836	80792.66	0.0226	0.0005115
Mo	98	3	He	52.951	1.1962	79898.49	0.0226	0.0005115
Ag	107	3	He	53.558	2.6074	177203.57	0.0487	0.0003023
Ag	107	3	He	53.101	2.5852	176463.38	0.0487	0.0003023
Ag	107	3	He	53.951	2.6265	175431.42	0.0487	0.0003023
Cd	111	3	He	51.844	0.2812	19113.12	0.0054	8.618E-06
Cd	111	3	He	53.278	0.289	19727.92	0.0054	8.618E-06
Cd	111	3	He	52.724	0.286	19103.09	0.0054	8.618E-06
Sn	120	3	He	50.72	0.8368	56867.51	0.0161	0.0177
Sn	120	3	He	51.596	0.8509	58082.21	0.0161	0.0177
Sn	120	3	He	52.261	0.8616	57550.57	0.0161	0.0177
Sb	121	3	He	51.444	0.7817	53123.54	0.0152	8.618E-05
Sb	121	3	He	51.47	0.7821	53383.09	0.0152	8.618E-05
Sb	121	3	He	52.612	0.7994	53393.90	0.0152	8.618E-05
Ba	137	3	He	501.661	2.472	167999.27	0.0049	0.0001277
Ba	137	3	He	506.914	2.4978	170501.54	0.0049	0.0001277
Ba	137	3	He	508.416	2.5052	167330.74	0.0049	0.0001277
Tl	205	3	He	52.05	1.297	437289.60	0.0249	0.000171
Tl	205	3	He	53.172	1.325	447004.80	0.0249	0.000171
Tl	205	3	He	53.185	1.3253	444273.55	0.0249	0.000171
Pb	208	3	He	52.597	1.7594	316212.61	0.0334	0.001456
Pb	208	3	He	52.899	1.7695	320219.39	0.0334	0.001456
Pb	208	3	He	52.488	1.7558	315382.28	0.0334	0.001456
U	238	3	He	50.988	2.5156	679380.69	0.0493	0.0001028
U	238	3	He	50.499	2.4914	676123.97	0.0493	0.0001028
U	238	3	He	50.927	2.5126	681550.22	0.0493	0.0001028
Sc	45	1	No Gas			2235592.15		
Sc	45	1	No Gas			2233789.65		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2231195.90		
Ge	72	1	No Gas			1084373.58		
Ge	72	1	No Gas			1083018.19		
Ge	72	1	No Gas			1094073.11		
Sc	45	2	H2			122745.90		
Sc	45	2	H2			123924.30		
Sc	45	2	H2			124720.87		
Ge	72	2	H2			108257.76		
Ge	72	2	H2			109680.08		
Ge	72	2	H2			109517.52		
In	115	2	H2			307525.13		
In	115	2	H2			305961.07		
In	115	2	H2			309087.93		
Sc	45	3	He			36496.71		
Sc	45	3	He			36586.80		
Sc	45	3	He			37529.20		
Ge	72	3	He			68232.74		
Ge	72	3	He			66866.44		
Ge	72	3	He			66685.91		
In	115	3	He			68268.98		
In	115	3	He			68569.75		
In	115	3	He			67091.98		
Tb	159	3	He			337143.59		
Tb	159	3	He			337362.14		
Tb	159	3	He			335219.14		
Bi	209	3	He			270069.78		
Bi	209	3	He			271378.61		
Bi	209	3	He			271253.36		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

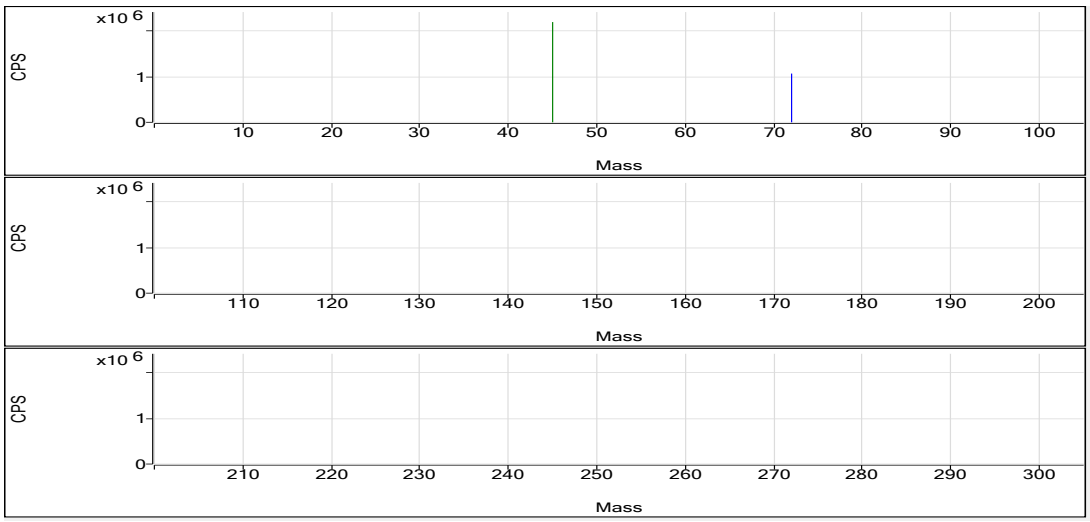
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.020	ppb	14.8	66.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.104	ppb	54.2	6.67	0.0000	Pulse	1.5000	3
Na	23	45	He	47.541	ppb	6.3	17500.92	0.4726	Pulse	0.1000	3
Mg	24	45	He	3.600	ppb	30.4	363.35	0.0098	Pulse	0.1000	3
Al	27	45	He	0.723	ppb	187.9	66.67	0.0018	Pulse	0.1000	3
K	39	45	He	14.034	ppb	51.5	14607.83	0.3945	Pulse	0.1000	3
Ca	44	45	He	-4.812	ppb	N/A	106.67	0.0029	Pulse	0.1000	3
Ti	47	45	He	2.003	ppb	42.2	40.00	0.0011	Pulse	0.1000	3
V	51	45	He	0.205	ppb	24.4	1086.72	0.0294	Pulse	0.5000	3
Cr	52	45	He	0.184	ppb	87.0	1740.17	0.0470	Pulse	0.1000	3
Mn	55	45	He	-0.167	ppb	N/A	160.01	0.0043	Pulse	0.1000	3
Fe	57	45	He	2.021	ppb	61.2	123.34	0.0033	Pulse	0.1000	3
Co	59	45	He	0.113	ppb	16.4	350.02	0.0094	Pulse	0.1000	3
Ni	60	72	He	0.221	ppb	28.9	316.68	0.0048	Pulse	0.1000	3
Cu	63	72	He	0.151	ppb	35.6	553.36	0.0084	Pulse	0.1000	3
Zn	66	72	He	0.626	ppb	38.0	306.68	0.0047	Pulse	0.1000	3
As	75	72	He	0.120	ppb	27.5	60.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.015	ppb	N/A	63.33	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.072	ppb	17.9	143.34	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.014	ppb	31.8	66.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	90.3	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.059	ppb	94.2	1256.77	0.0187	Pulse	0.1000	3
Sb	121	115	He	0.050	ppb	49.1	56.67	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.185	ppb	15.4	70.00	0.0010	Pulse	0.1000	3
Tl	205	159	He	0.115	ppb	16.2	1020.08	0.0030	Pulse	0.1000	3
Pb	208	159	He	0.015	ppb	10.5	656.70	0.0020	Pulse	0.1000	3
U	238	209	He	0.056	ppb	19.8	770.06	0.0029	Pulse	0.1000	3

ISTD Table:

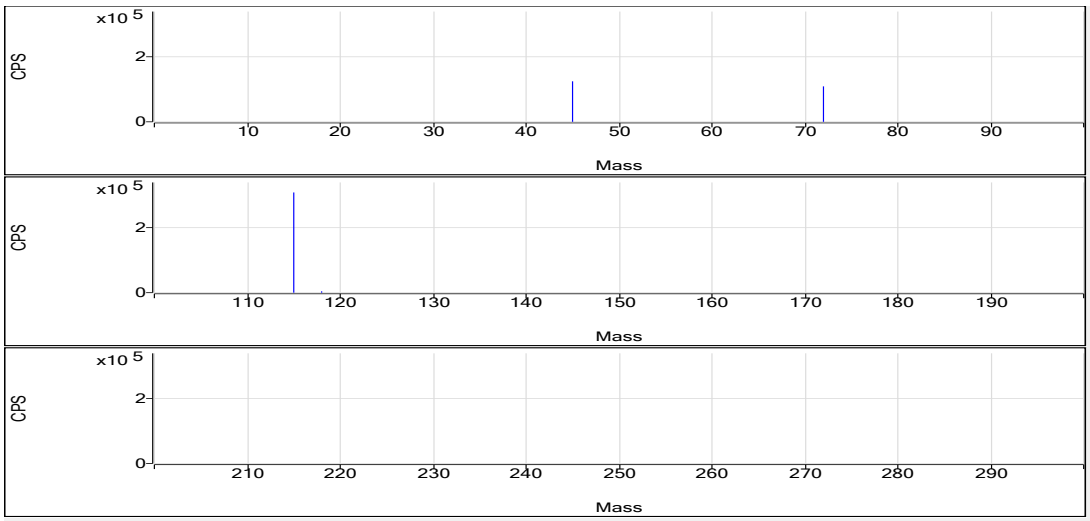
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2199186.27	2.0	91.3	Analog	0.1000	3
No Gas	Ge	72	1068957.87	0.1	92.0	Pulse	0.1000	3
H2	Sc	45	124664.52	0.5	75.8	Pulse	0.1000	3
H2	Ge	72	109078.24	0.3	75.0	Pulse	0.1000	3
H2	In	115	308435.99	1.2	85.7	Pulse	0.1000	3
He	Sc	45	37031.13	1.9	84.6	Pulse	0.1000	3
He	Ge	72	65601.08	2.2	85.7	Pulse	0.1000	3
He	In	115	67344.03	1.2	86.9	Pulse	0.1000	3
He	Tb	159	335351.70	1.3	90.4	Pulse	0.1000	3
He	Bi	209	268625.80	1.1	91.9	Pulse	0.1000	3

No Gas

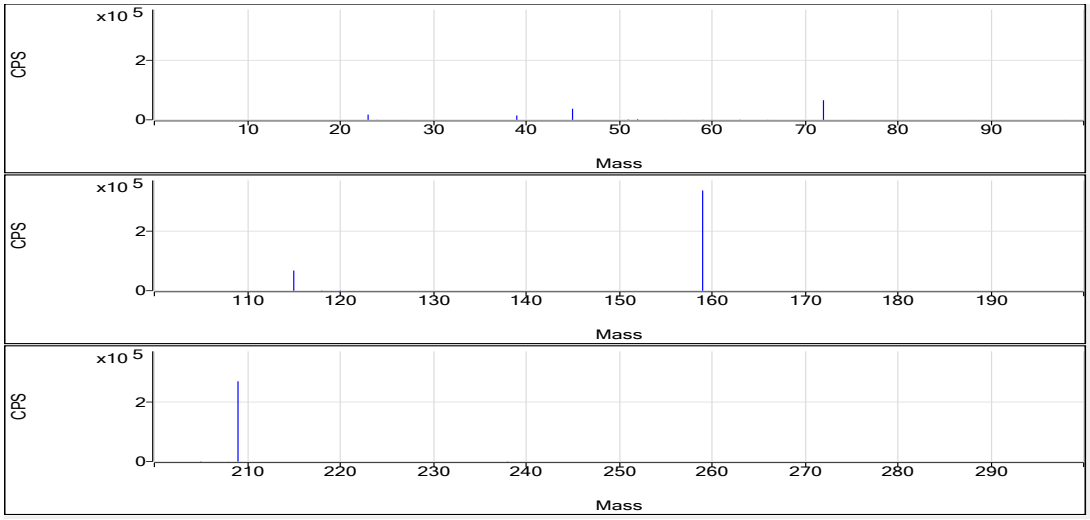


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.017	0	60.00	0.0007	1.523E-05
Be	9	1	No Gas	0.023	0	72.00	0.0007	1.523E-05
Be	9	1	No Gas	0.021	0	68.00	0.0007	1.523E-05
Se	78	2	H2	0.168	0	10.00	0.0002	3.71E-06
Se	78	2	H2	0.065	0	4.67	0.0002	3.71E-06
Se	78	2	H2	0.077	0	5.33	0.0002	3.71E-06
Na	23	3	He	50.965	0.485	18011.54	0.0036	0.3007
Na	23	3	He	46.368	0.4684	16990.39	0.0036	0.3007
Na	23	3	He	45.291	0.4645	17500.82	0.0036	0.3007
Mg	24	3	He	3.079	0.0089	330.02	0.0018	0.003274
Mg	24	3	He	4.858	0.0121	440.02	0.0018	0.003274
Mg	24	3	He	2.863	0.0085	320.02	0.0018	0.003274
Al	27	3	He	0.422	0.0016	60.00	0.0006	0.00137
Al	27	3	He	-0.46	0.0011	40.00	0.0006	0.00137
Al	27	3	He	2.208	0.0027	100.00	0.0006	0.00137
K	39	3	He	20.809	0.4025	14948.11	0.0012	0.378
K	39	3	He	14.871	0.3955	14347.59	0.0012	0.378
K	39	3	He	6.421	0.3856	14527.78	0.0012	0.378
Ca	44	3	He	-7.331	0.0027	100.00	0.0001	0.003203
Ca	44	3	He	-18.302	0.0019	70.00	0.0001	0.003203
Ca	44	3	He	11.196	0.004	150.01	0.0001	0.003203
Ti	47	3	He	2.508	0.0013	50.00	0.0005	0
Ti	47	3	He	1.027	0.0006	20.00	0.0005	0
Ti	47	3	He	2.472	0.0013	50.00	0.0005	0
V	51	3	He	0.174	0.0287	1064.05	0.0224	0.02476
V	51	3	He	0.263	0.0307	1112.05	0.0224	0.02476
V	51	3	He	0.179	0.0288	1084.05	0.0224	0.02476
Cr	52	3	He	0.26	0.0493	1830.18	0.0293	0.04167
Cr	52	3	He	0.291	0.0502	1820.19	0.0293	0.04167
Cr	52	3	He	0	0.0417	1570.15	0.0293	0.04167
Mn	55	3	He	-0.209	0.0038	140.00	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.181	0.0041	150.01	0.0129	0.006476
Mn	55	3	He	-0.111	0.005	190.01	0.0129	0.006476
Fe	57	3	He	2.78	0.0038	140.01	0.0006	0.00213
Fe	57	3	He	0.595	0.0025	90.00	0.0006	0.00213
Fe	57	3	He	2.688	0.0037	140.01	0.0006	0.00213
Co	59	3	He	0.118	0.0097	360.02	0.0572	0.00297
Co	59	3	He	0.093	0.0083	300.02	0.0572	0.00297
Co	59	3	He	0.129	0.0104	390.02	0.0572	0.00297
Ni	60	3	He	0.182	0.0045	300.02	0.0086	0.002921
Ni	60	3	He	0.187	0.0045	290.01	0.0086	0.002921
Ni	60	3	He	0.295	0.0055	360.02	0.0086	0.002921
Cu	63	3	He	0.167	0.0088	590.03	0.0257	0.004531
Cu	63	3	He	0.091	0.0069	440.03	0.0257	0.004531
Cu	63	3	He	0.196	0.0096	630.03	0.0257	0.004531
Zn	66	3	He	0.454	0.0042	280.01	0.0029	0.002877
Zn	66	3	He	0.897	0.0055	350.02	0.0029	0.002877
Zn	66	3	He	0.527	0.0044	290.01	0.0029	0.002877
As	75	3	He	0.107	0.0009	60.00	0.002	0.0006798
As	75	3	He	0.096	0.0009	56.00	0.002	0.0006798
As	75	3	He	0.158	0.001	66.00	0.002	0.0006798
Sr	88	3	He	0.028	0.0013	90.00	0.009	0.001075
Sr	88	3	He	-0.037	0.0007	50.00	0.009	0.001075
Sr	88	3	He	-0.036	0.0008	50.00	0.009	0.001075
Mo	98	3	He	0.075	0.0022	150.01	0.0226	0.0005115
Mo	98	3	He	0.082	0.0024	160.01	0.0226	0.0005115
Mo	98	3	He	0.057	0.0018	120.00	0.0226	0.0005115
Ag	107	3	He	0.015	0.001	70.00	0.0487	0.0003023
Ag	107	3	He	0.018	0.0012	80.00	0.0487	0.0003023
Ag	107	3	He	0.009	0.0008	50.00	0.0487	0.0003023
Cd	111	3	He	0.015	0.0001	6.00	0.0054	8.618E-06
Cd	111	3	He	0.037	0.0002	14.00	0.0054	8.618E-06
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Sn	120	3	He	0.015	0.0179	1220.10	0.0161	0.0177
Sn	120	3	He	0.122	0.0197	1330.11	0.0161	0.0177
Sn	120	3	He	0.041	0.0184	1220.10	0.0161	0.0177
Sb	121	3	He	0.072	0.0012	80.00	0.0152	8.618E-05
Sb	121	3	He	0.024	0.0004	30.00	0.0152	8.618E-05
Sb	121	3	He	0.054	0.0009	60.00	0.0152	8.618E-05
Ba	137	3	He	0.183	0.001	70.00	0.0049	0.0001277
Ba	137	3	He	0.214	0.0012	80.01	0.0049	0.0001277
Ba	137	3	He	0.157	0.0009	60.00	0.0049	0.0001277
Tl	205	3	He	0.12	0.0032	1060.08	0.0249	0.000171
Tl	205	3	He	0.131	0.0034	1140.09	0.0249	0.000171
Tl	205	3	He	0.095	0.0025	860.06	0.0249	0.000171
Pb	208	3	He	0.016	0.002	400.02	0.0334	0.001456
Pb	208	3	He	0.013	0.0019	240.01	0.0334	0.001456
Pb	208	3	He	0.016	0.002	380.02	0.0334	0.001456
U	238	3	He	0.045	0.0023	610.04	0.0493	0.0001028
U	238	3	He	0.067	0.0034	920.08	0.0493	0.0001028
U	238	3	He	0.057	0.0029	780.05	0.0493	0.0001028
Sc	45	1	No Gas			2160467.62		
Sc	45	1	No Gas			2247120.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2189970.28		
Ge	72	1	No Gas			1067660.92		
Ge	72	1	No Gas			1069594.83		
Ge	72	1	No Gas			1069617.87		
Sc	45	2	H2			125235.57		
Sc	45	2	H2			124026.44		
Sc	45	2	H2			124731.55		
Ge	72	2	H2			108721.54		
Ge	72	2	H2			109408.44		
Ge	72	2	H2			109104.74		
In	115	2	H2			304060.41		
In	115	2	H2			310054.29		
In	115	2	H2			311193.26		
Sc	45	3	He			37137.94		
Sc	45	3	He			36276.04		
Sc	45	3	He			37679.42		
Ge	72	3	He			66866.65		
Ge	72	3	He			64004.10		
Ge	72	3	He			65932.48		
In	115	3	He			67996.88		
In	115	3	He			67615.06		
In	115	3	He			66439.41		
Tb	159	3	He			334062.96		
Tb	159	3	He			331841.71		
Tb	159	3	He			340150.42		
Bi	209	3	He			265434.61		
Bi	209	3	He			271353.08		
Bi	209	3	He			269089.72		

Quantitation Report

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Acq Time	8/14/2023 11:45:07 PM
Sample Name	MB 410-401237/1-A
Sample Type	Sample
Comment	H6
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

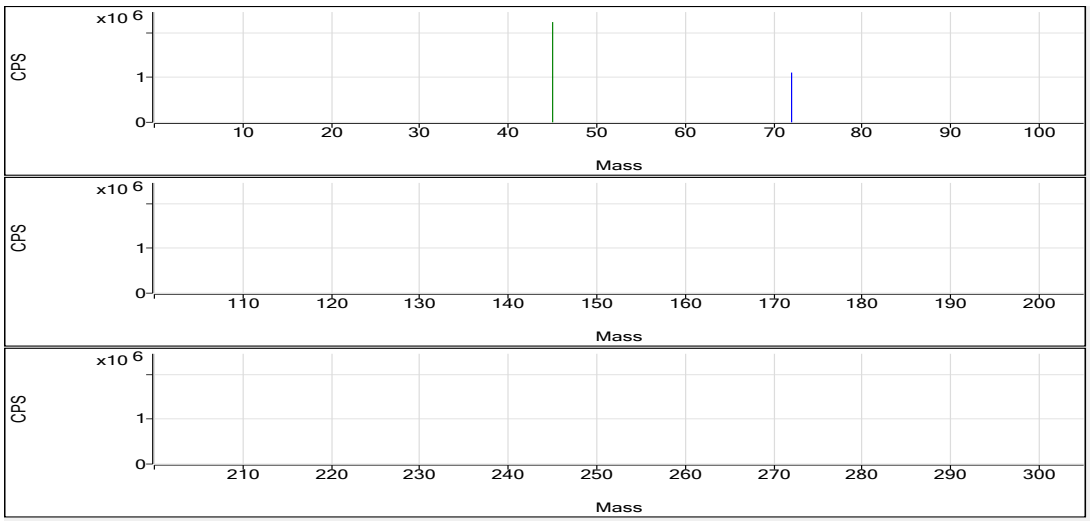
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.002	ppb	N/A	31.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.088	ppb	0.7	6.00	0.0000	Pulse	1.5000	3
Na	23	45	He	57.995	ppb	3.7	18946.09	0.5104	Pulse	0.1000	3
Mg	24	45	He	2.588	ppb	21.2	296.68	0.0080	Pulse	0.1000	3
Al	27	45	He	0.117	ppb	1609.4	53.33	0.0014	Pulse	0.1000	3
K	39	45	He	21.218	ppb	10.9	14958.14	0.4030	Pulse	0.1000	3
Ca	44	45	He	-7.297	ppb	N/A	100.00	0.0027	Pulse	0.1000	3
Ti	47	45	He	0.669	ppb	114.7	13.33	0.0004	Pulse	0.1000	3
V	51	45	He	0.054	ppb	53.8	964.04	0.0260	Pulse	0.5000	3
Cr	52	45	He	0.022	ppb	923.5	1570.15	0.0423	Pulse	0.1000	3
Mn	55	45	He	-0.181	ppb	N/A	153.34	0.0041	Pulse	0.1000	3
Fe	57	45	He	1.410	ppb	179.7	110.01	0.0030	Pulse	0.1000	3
Co	59	45	He	0.061	ppb	75.8	240.01	0.0065	Pulse	0.1000	3
Ni	60	72	He	0.072	ppb	227.2	240.02	0.0035	Pulse	0.1000	3
Cu	63	72	He	0.076	ppb	15.6	440.02	0.0065	Pulse	0.1000	3
Zn	66	72	He	0.110	ppb	91.6	216.68	0.0032	Pulse	0.1000	3
As	75	72	He	0.051	ppb	308.6	53.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	-0.027	ppb	N/A	56.67	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.023	ppb	48.8	70.00	0.0010	Pulse	0.1000	3
Ag	107	115	He	0.012	ppb	101.8	60.00	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	41.8	3.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.059	ppb	N/A	1140.08	0.0167	Pulse	0.1000	3
Sb	121	115	He	0.020	ppb	73.6	26.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.083	ppb	54.6	36.67	0.0005	Pulse	0.1000	3
Tl	205	159	He	0.031	ppb	23.7	320.02	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	120.2	580.02	0.0017	Pulse	0.1000	3
U	238	209	He	0.014	ppb	52.7	213.35	0.0008	Pulse	0.1000	3

ISTD Table:

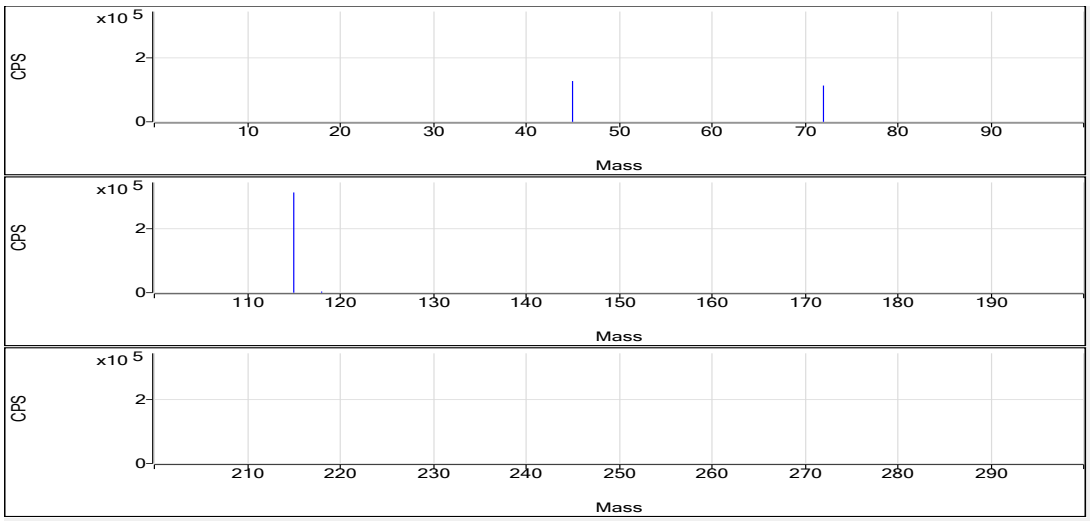
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2231234.86	0.8	92.7	Analog	0.1000	3
No Gas	Ge	72	1107101.08	0.3	95.3	Pulse	0.1000	3
H2	Sc	45	128077.35	1.3	77.9	Pulse	0.1000	3
H2	Ge	72	113884.86	0.4	78.4	Pulse	0.1000	3
H2	In	115	314811.84	0.5	87.5	Pulse	0.1000	3
He	Sc	45	37118.21	0.2	84.8	Pulse	0.1000	3
He	Ge	72	67821.43	0.8	88.7	Pulse	0.1000	3
He	In	115	68134.33	0.6	87.9	Pulse	0.1000	3
He	Tb	159	338893.55	0.4	91.4	Pulse	0.1000	3
He	Bi	209	276334.43	0.7	94.5	Pulse	0.1000	3

No Gas

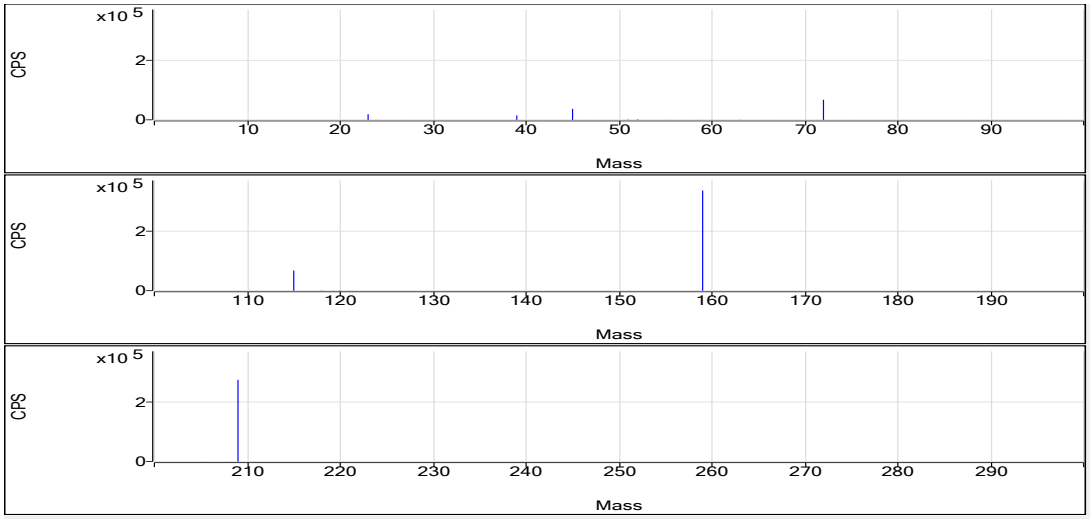


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	28.00	0.0007	1.523E-05
Be	9	1	No Gas	0.002	0	38.00	0.0007	1.523E-05
Be	9	1	No Gas	-0.003	0	28.00	0.0007	1.523E-05
Se	78	2	H2	0.089	0	6.00	0.0002	3.71E-06
Se	78	2	H2	0.088	0	6.00	0.0002	3.71E-06
Se	78	2	H2	0.088	0	6.00	0.0002	3.71E-06
Na	23	3	He	60.385	0.5191	19313.38	0.0036	0.3007
Na	23	3	He	56.332	0.5044	18692.26	0.0036	0.3007
Na	23	3	He	57.266	0.5078	18832.63	0.0036	0.3007
Mg	24	3	He	3.217	0.0091	340.02	0.0018	0.003274
Mg	24	3	He	2.201	0.0073	270.01	0.0018	0.003274
Mg	24	3	He	2.346	0.0075	280.01	0.0018	0.003274
Al	27	3	He	-0.969	0.0008	30.00	0.0006	0.00137
Al	27	3	He	2.284	0.0027	100.00	0.0006	0.00137
Al	27	3	He	-0.965	0.0008	30.00	0.0006	0.00137
K	39	3	He	22.677	0.4047	15058.21	0.0012	0.378
K	39	3	He	18.562	0.3999	14818.01	0.0012	0.378
K	39	3	He	22.416	0.4044	14998.21	0.0012	0.378
Ca	44	3	He	-18.997	0.0019	70.00	0.0001	0.003203
Ca	44	3	He	-7.248	0.0027	100.00	0.0001	0.003203
Ca	44	3	He	4.355	0.0035	130.01	0.0001	0.003203
Ti	47	3	He	0.501	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.507	0.0008	30.00	0.0005	0
V	51	3	He	0.087	0.0267	994.04	0.0224	0.02476
V	51	3	He	0.041	0.0257	952.04	0.0224	0.02476
V	51	3	He	0.033	0.0255	946.04	0.0224	0.02476
Cr	52	3	He	-0.165	0.0368	1370.11	0.0293	0.04167
Cr	52	3	He	0.236	0.0486	1800.19	0.0293	0.04167
Cr	52	3	He	-0.005	0.0415	1540.14	0.0293	0.04167
Mn	55	3	He	-0.21	0.0038	140.00	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.229	0.0035	130.01	0.0129	0.006476
Mn	55	3	He	-0.105	0.0051	190.01	0.0129	0.006476
Fe	57	3	He	3.679	0.0043	160.01	0.0006	0.00213
Fe	57	3	He	-1.324	0.0013	50.00	0.0006	0.00213
Fe	57	3	He	1.874	0.0032	120.01	0.0006	0.00213
Co	59	3	He	0.075	0.0073	270.01	0.0572	0.00297
Co	59	3	He	0.009	0.0035	130.01	0.0572	0.00297
Co	59	3	He	0.099	0.0086	320.01	0.0572	0.00297
Ni	60	3	He	-0.033	0.0026	180.01	0.0086	0.002921
Ni	60	3	He	0.259	0.0052	350.03	0.0086	0.002921
Ni	60	3	He	-0.011	0.0028	190.01	0.0086	0.002921
Cu	63	3	He	0.069	0.0063	430.02	0.0257	0.004531
Cu	63	3	He	0.07	0.0063	430.03	0.0257	0.004531
Cu	63	3	He	0.09	0.0068	460.02	0.0257	0.004531
Zn	66	3	He	0.22	0.0035	240.01	0.0029	0.002877
Zn	66	3	He	0.024	0.0029	200.01	0.0029	0.002877
Zn	66	3	He	0.085	0.0031	210.01	0.0029	0.002877
As	75	3	He	0.169	0.001	70.00	0.002	0.0006798
As	75	3	He	0.114	0.0009	62.00	0.002	0.0006798
As	75	3	He	-0.129	0.0004	28.00	0.002	0.0006798
Sr	88	3	He	-0.006	0.001	70.00	0.009	0.001075
Sr	88	3	He	-0.054	0.0006	40.00	0.009	0.001075
Sr	88	3	He	-0.021	0.0009	60.00	0.009	0.001075
Mo	98	3	He	0.029	0.0012	80.00	0.0226	0.0005115
Mo	98	3	He	0.029	0.0012	80.00	0.0226	0.0005115
Mo	98	3	He	0.01	0.0007	50.00	0.0226	0.0005115
Ag	107	3	He	0.012	0.0009	60.00	0.0487	0.0003023
Ag	107	3	He	0.024	0.0015	100.00	0.0487	0.0003023
Ag	107	3	He	0	0.0003	20.00	0.0487	0.0003023
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.004	0	2.00	0.0054	8.618E-06
Sn	120	3	He	-0.275	0.0133	910.06	0.0161	0.0177
Sn	120	3	He	-0.003	0.0177	1200.09	0.0161	0.0177
Sn	120	3	He	0.099	0.0193	1310.10	0.0161	0.0177
Sb	121	3	He	0.023	0.0004	30.00	0.0152	8.618E-05
Sb	121	3	He	0.004	0.0001	10.00	0.0152	8.618E-05
Sb	121	3	He	0.033	0.0006	40.00	0.0152	8.618E-05
Ba	137	3	He	0.092	0.0006	40.00	0.0049	0.0001277
Ba	137	3	He	0.123	0.0007	50.00	0.0049	0.0001277
Ba	137	3	He	0.034	0.0003	20.00	0.0049	0.0001277
Tl	205	3	He	0.027	0.0009	290.01	0.0249	0.000171
Tl	205	3	He	0.04	0.0012	390.02	0.0249	0.000171
Tl	205	3	He	0.026	0.0008	280.02	0.0249	0.000171
Pb	208	3	He	0.018	0.0021	370.02	0.0334	0.001456
Pb	208	3	He	0.001	0.0015	270.01	0.0334	0.001456
Pb	208	3	He	0.004	0.0016	270.01	0.0334	0.001456
U	238	3	He	0.007	0.0005	130.01	0.0493	0.0001028
U	238	3	He	0.012	0.0007	190.01	0.0493	0.0001028
U	238	3	He	0.021	0.0012	320.02	0.0493	0.0001028
Sc	45	1	No Gas			2250894.65		
Sc	45	1	No Gas			2227824.19		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2214985.75		
Ge	72	1	No Gas			1102978.50		
Ge	72	1	No Gas			1108737.64		
Ge	72	1	No Gas			1109587.09		
Sc	45	2	H2			126748.35		
Sc	45	2	H2			127598.47		
Sc	45	2	H2			129885.23		
Ge	72	2	H2			113800.85		
Ge	72	2	H2			113498.29		
Ge	72	2	H2			114355.43		
In	115	2	H2			312993.20		
In	115	2	H2			316367.65		
In	115	2	H2			315074.68		
Sc	45	3	He			37208.21		
Sc	45	3	He			37058.32		
Sc	45	3	He			37088.10		
Ge	72	3	He			68313.36		
Ge	72	3	He			67901.83		
Ge	72	3	He			67249.09		
In	115	3	He			68579.59		
In	115	3	He			67957.16		
In	115	3	He			67886.68		
Tb	159	3	He			340072.53		
Tb	159	3	He			337453.47		
Tb	159	3	He			339154.64		
Bi	209	3	He			278291.89		
Bi	209	3	He			274692.24		
Bi	209	3	He			276019.16		

Quantitation Report

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Sample Type	Sample
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

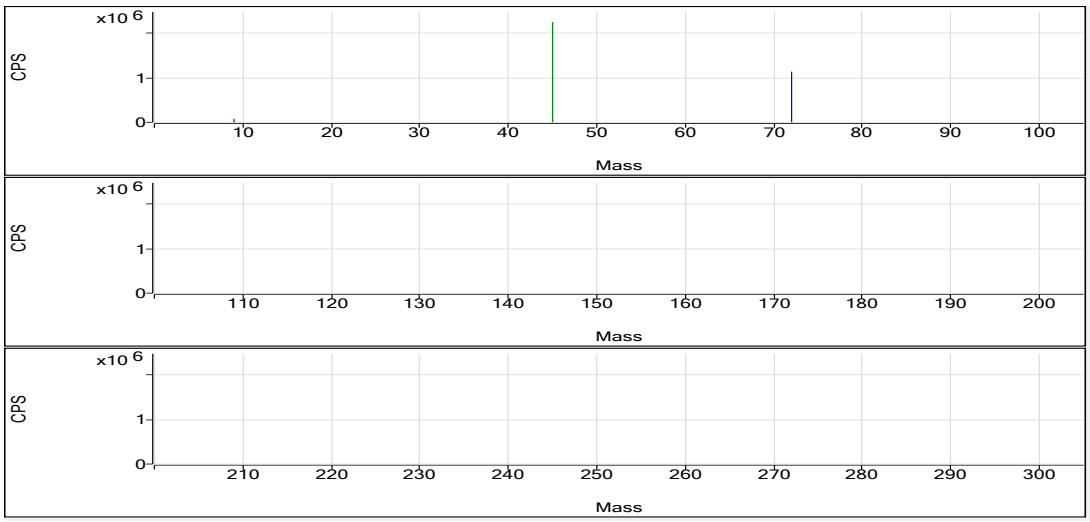
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.402	ppb	0.5	79256.95	0.0351	Pulse	0.5000	3
Se	78	115	H2	95.729	ppb	0.5	5236.08	0.0166	Pulse	1.5000	3
Na	23	45	He	5061.222	ppb	1.6	696268.50	18.6065	Pulse	0.1000	3
Mg	24	45	He	5185.077	ppb	1.8	353817.29	9.4555	Pulse	0.1000	3
Al	27	45	He	4961.955	ppb	0.6	108051.69	2.8869	Pulse	0.1000	3
K	39	45	He	4959.206	ppb	1.3	232647.96	6.2168	Pulse	0.1000	3
Ca	44	45	He	5003.557	ppb	6.8	13132.95	0.3512	Pulse	0.1000	3
Ti	47	45	He	507.558	ppb	2.4	10193.93	0.2724	Pulse	0.1000	3
V	51	45	He	521.060	ppb	1.8	437650.60	11.6958	Pulse	0.5000	3
Cr	52	45	He	515.252	ppb	1.8	566209.39	15.1316	Pulse	0.1000	3
Mn	55	45	He	508.804	ppb	2.9	246516.17	6.5889	Pulse	0.1000	3
Fe	57	45	He	5168.471	ppb	3.6	114149.55	3.0513	Pulse	0.1000	3
Co	59	45	He	512.518	ppb	2.6	1097329.34	29.3284	Pulse	0.1000	3
Ni	60	72	He	506.547	ppb	1.9	308232.19	4.3672	Pulse	0.1000	3
Cu	63	72	He	489.104	ppb	1.6	886813.37	12.5643	Pulse	0.1000	3
Zn	66	72	He	508.982	ppb	2.5	103995.46	1.4736	Pulse	0.1000	3
As	75	72	He	500.318	ppb	1.8	72020.51	1.0204	Pulse	0.5000	3
Sr	88	115	He	49.935	ppb	0.9	30694.21	0.4504	Pulse	0.1000	3
Mo	98	115	He	53.067	ppb	0.5	81704.07	1.1989	Pulse	0.1000	3
Ag	107	115	He	53.236	ppb	0.9	176618.46	2.5917	Pulse	0.1000	3
Cd	111	115	He	54.733	ppb	0.7	20234.66	0.2969	Pulse	0.5000	3
Sn	120	115	He	106.649	ppb	1.0	118585.26	1.7399	Pulse	0.1000	3
Sb	121	115	He	104.843	ppb	0.9	108553.10	1.5929	Pulse	0.1000	3
Ba	137	115	He	518.066	ppb	1.1	173966.76	2.5528	Pulse	0.1000	3
Tl	205	159	He	108.227	ppb	0.1	913705.48	2.6967	Pulse	0.1000	3
Pb	208	159	He	54.284	ppb	0.5	615215.28	1.8158	Pulse	0.1000	3
U	238	209	He	51.984	ppb	0.8	701030.67	2.5647	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2257663.98	0.6	93.8	Analog	0.1000	3
No Gas	Ge	72	1141486.05	0.3	98.3	Pulse	0.1000	3
H2	Sc	45	127303.59	0.5	77.4	Pulse	0.1000	3
H2	Ge	72	118236.72	1.2	81.3	Pulse	0.1000	3
H2	In	115	314972.94	0.1	87.5	Pulse	0.1000	3
He	Sc	45	37428.90	2.1	85.5	Pulse	0.1000	3
He	Ge	72	70598.13	2.1	92.3	Pulse	0.1000	3
He	In	115	68151.06	1.1	87.9	Pulse	0.1000	3
He	Tb	159	338818.25	0.6	91.3	Pulse	0.1000	3
He	Bi	209	273346.92	0.7	93.5	Pulse	0.1000	3

No Gas



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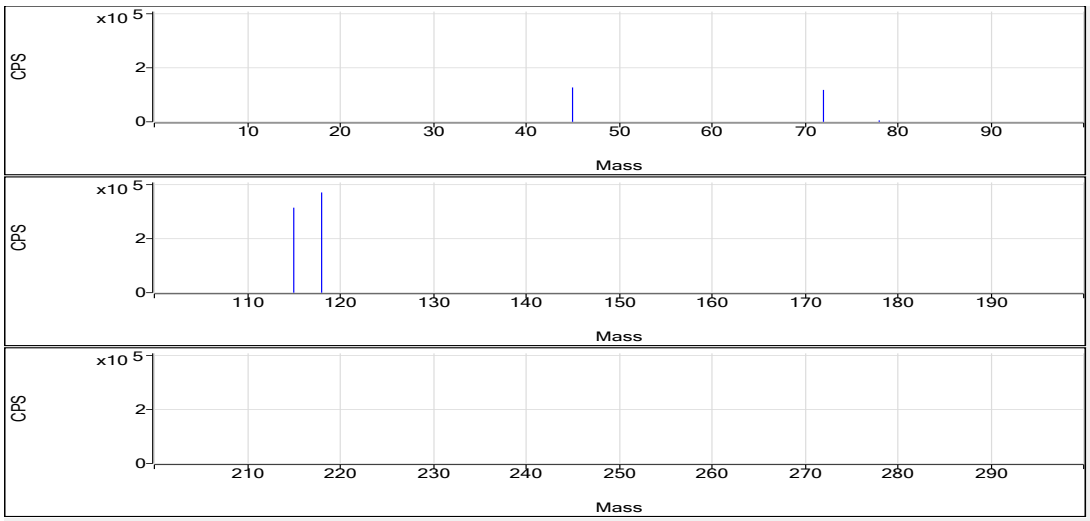
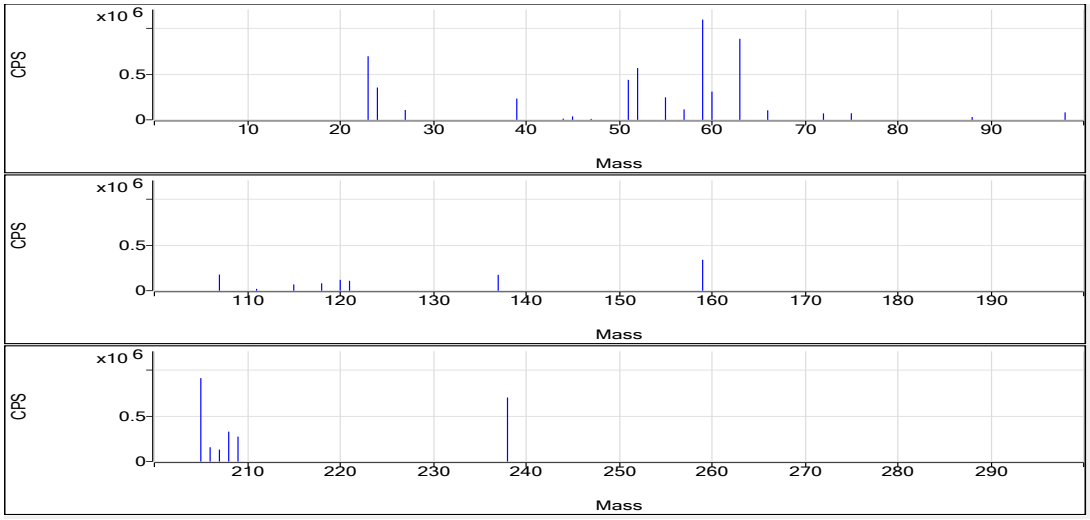


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.303	0.035	79666.52	0.0007	1.523E-05
Be	9	1	No Gas	47.668	0.0353	79410.93	0.0007	1.523E-05
Be	9	1	No Gas	47.235	0.035	78693.39	0.0007	1.523E-05
Se	78	2	H2	95.174	0.0165	5200.29	0.0002	3.71E-06
Se	78	2	H2	95.86	0.0166	5251.63	0.0002	3.71E-06
Se	78	2	H2	96.153	0.0167	5256.31	0.0002	3.71E-06
Na	23	3	He	4997.207	18.3749	696779.44	0.0036	0.3007
Na	23	3	He	5035.186	18.5123	700881.63	0.0036	0.3007
Na	23	3	He	5151.271	18.9322	691144.44	0.0036	0.3007
Mg	24	3	He	5119.18	9.3354	353998.51	0.0018	0.003274
Mg	24	3	He	5141.885	9.3768	355007.42	0.0018	0.003274
Mg	24	3	He	5294.166	9.6544	352445.93	0.0018	0.003274
Al	27	3	He	4931.575	2.8692	108800.81	0.0006	0.00137
Al	27	3	He	4989.669	2.903	109908.29	0.0006	0.00137
Al	27	3	He	4964.62	2.8884	105445.98	0.0006	0.00137
K	39	3	He	4919.306	6.1698	233959.98	0.0012	0.378
K	39	3	He	4925.944	6.1776	233886.99	0.0012	0.378
K	39	3	He	5032.367	6.3029	230096.91	0.0012	0.378
Ca	44	3	He	4862.633	0.3414	12946.16	0.0001	0.003203
Ca	44	3	He	4756.328	0.334	12645.82	0.0001	0.003203
Ca	44	3	He	5391.71	0.3782	13806.86	0.0001	0.003203
Ti	47	3	He	506.733	0.272	10314.03	0.0005	0
Ti	47	3	He	495.717	0.2661	10073.91	0.0005	0
Ti	47	3	He	520.223	0.2792	10193.84	0.0005	0
V	51	3	He	515.965	11.5817	439178.25	0.0224	0.02476
V	51	3	He	515.467	11.5705	438063.47	0.0224	0.02476
V	51	3	He	531.748	11.9352	435710.09	0.0224	0.02476
Cr	52	3	He	509.706	14.9691	567631.16	0.0293	0.04167
Cr	52	3	He	509.808	14.9721	566849.87	0.0293	0.04167
Cr	52	3	He	526.241	15.4534	564147.14	0.0293	0.04167
Mn	55	3	He	501.668	6.4966	246351.25	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	499.219	6.4649	244763.39	0.0129	0.006476
Mn	55	3	He	525.525	6.8052	248433.86	0.0129	0.006476
Fe	57	3	He	5058.763	2.9866	113252.52	0.0006	0.00213
Fe	57	3	He	5063.125	2.9892	113171.39	0.0006	0.00213
Fe	57	3	He	5383.526	3.1782	116024.75	0.0006	0.00213
Co	59	3	He	505.786	28.9432	1097527.80	0.0572	0.00297
Co	59	3	He	504.087	28.8459	1092114.91	0.0572	0.00297
Co	59	3	He	527.682	30.196	1102345.30	0.0572	0.00297
Ni	60	3	He	510.148	4.3982	308768.26	0.0086	0.002921
Ni	60	3	He	513.751	4.4292	307115.85	0.0086	0.002921
Ni	60	3	He	495.742	4.2741	308812.46	0.0086	0.002921
Cu	63	3	He	492.36	12.6479	887926.08	0.0257	0.004531
Cu	63	3	He	494.911	12.7134	881527.72	0.0257	0.004531
Cu	63	3	He	480.04	12.3316	890986.31	0.0257	0.004531
Zn	66	3	He	510.429	1.4778	103743.37	0.0029	0.002877
Zn	66	3	He	520.785	1.5077	104539.83	0.0029	0.002877
Zn	66	3	He	495.732	1.4353	103703.17	0.0029	0.002877
As	75	3	He	498.418	1.0165	71362.39	0.002	0.0006798
As	75	3	He	509.962	1.04	72114.41	0.002	0.0006798
As	75	3	He	492.574	1.0046	72584.73	0.002	0.0006798
Sr	88	3	He	49.507	0.4465	30393.47	0.009	0.001075
Sr	88	3	He	49.865	0.4497	30343.47	0.009	0.001075
Sr	88	3	He	50.433	0.4548	31345.69	0.009	0.001075
Mo	98	3	He	53.389	1.2061	82099.76	0.0226	0.0005115
Mo	98	3	He	52.82	1.1933	80510.67	0.0226	0.0005115
Mo	98	3	He	52.992	1.1972	82501.78	0.0226	0.0005115
Ag	107	3	He	53.177	2.5888	176219.68	0.0487	0.0003023
Ag	107	3	He	53.763	2.6174	176594.98	0.0487	0.0003023
Ag	107	3	He	52.769	2.569	177040.72	0.0487	0.0003023
Cd	111	3	He	55.12	0.299	20352.79	0.0054	8.618E-06
Cd	111	3	He	54.373	0.295	19900.23	0.0054	8.618E-06
Cd	111	3	He	54.706	0.2968	20450.97	0.0054	8.618E-06
Sn	120	3	He	106.905	1.7441	118715.79	0.0161	0.0177
Sn	120	3	He	105.432	1.7203	116065.68	0.0161	0.0177
Sn	120	3	He	107.61	1.7554	120974.30	0.0161	0.0177
Sb	121	3	He	104.885	1.5936	108472.65	0.0152	8.618E-05
Sb	121	3	He	105.777	1.6071	108432.37	0.0152	8.618E-05
Sb	121	3	He	103.867	1.5781	108754.27	0.0152	8.618E-05
Ba	137	3	He	513.161	2.5286	172120.76	0.0049	0.0001277
Ba	137	3	He	524.604	2.585	174409.53	0.0049	0.0001277
Ba	137	3	He	516.434	2.5447	175369.98	0.0049	0.0001277
Tl	205	3	He	108.114	2.6939	908035.85	0.0249	0.000171
Tl	205	3	He	108.202	2.6961	912130.30	0.0249	0.000171
Tl	205	3	He	108.366	2.7002	920950.30	0.0249	0.000171
Pb	208	3	He	54.614	1.8268	327803.71	0.0334	0.001456
Pb	208	3	He	54.102	1.8097	325881.32	0.0334	0.001456
Pb	208	3	He	54.135	1.8108	329184.21	0.0334	0.001456
U	238	3	He	52.205	2.5756	700763.82	0.0493	0.0001028
U	238	3	He	52.253	2.578	702497.33	0.0493	0.0001028
U	238	3	He	51.494	2.5405	699830.85	0.0493	0.0001028
Sc	45	1	No Gas			2274055.75		
Sc	45	1	No Gas			2249429.19		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2249507.00		
Ge	72	1	No Gas			1145326.62		
Ge	72	1	No Gas			1137915.45		
Ge	72	1	No Gas			1141216.08		
Sc	45	2	H2			127869.85		
Sc	45	2	H2			127413.09		
Sc	45	2	H2			126627.83		
Ge	72	2	H2			117046.82		
Ge	72	2	H2			117773.39		
Ge	72	2	H2			119889.94		
In	115	2	H2			314644.88		
In	115	2	H2			315477.92		
In	115	2	H2			314796.03		
Sc	45	3	He			37920.08		
Sc	45	3	He			37860.29		
Sc	45	3	He			36506.33		
Ge	72	3	He			70203.43		
Ge	72	3	He			69338.38		
Ge	72	3	He			72252.57		
In	115	3	He			68701.24		
In	115	3	He			68097.83		
In	115	3	He			69544.80		
Tb	159	3	He			337070.62		
Tb	159	3	He			338313.98		
Tb	159	3	He			341070.15		
Bi	209	3	He			272076.75		
Bi	209	3	He			272497.32		
Bi	209	3	He			275466.68		

Quantitation Report

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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

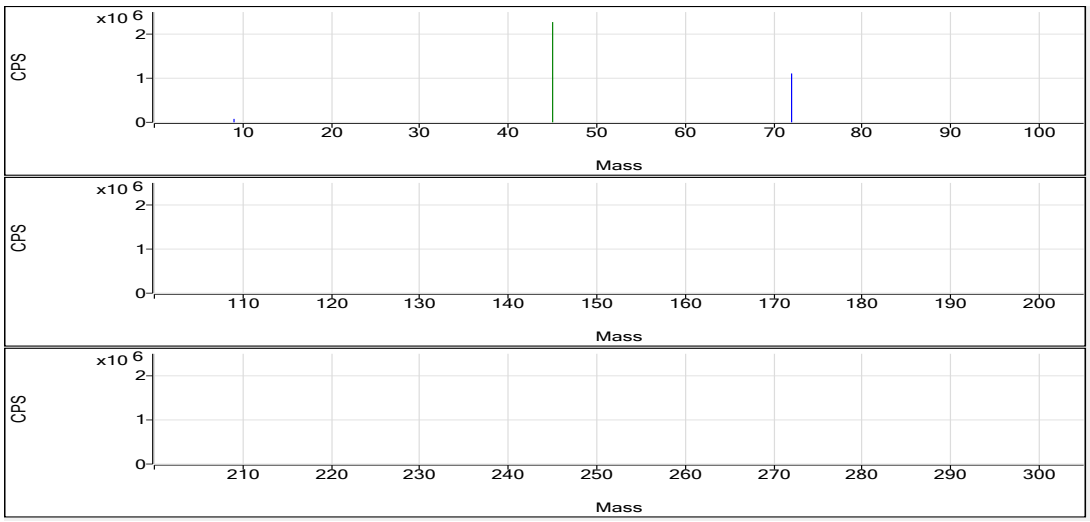
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	46.029	ppb	0.7	77116.44	0.0341	Pulse	0.5000	3
Se	78	115	H2	47.218	ppb	1.2	2573.57	0.0082	Pulse	1.5000	3
Na	23	45	He	5040.547	ppb	2.4	694640.41	18.5317	Pulse	0.1000	3
Mg	24	45	He	5099.171	ppb	2.6	348546.81	9.2989	Pulse	0.1000	3
Al	27	45	He	4787.328	ppb	2.2	104409.03	2.7853	Pulse	0.1000	3
K	39	45	He	4924.593	ppb	2.6	231503.68	6.1760	Pulse	0.1000	3
Ca	44	45	He	4955.216	ppb	0.9	13042.97	0.3478	Pulse	0.1000	3
Ti	47	45	He	4941.300	ppb	2.5	99415.24	2.6523	Pulse	0.1000	3
V	51	45	He	511.339	ppb	2.2	430253.14	11.4781	Pulse	0.5000	3
Cr	52	45	He	509.328	ppb	1.6	560743.25	14.9581	Pulse	0.1000	3
Mn	55	45	He	498.229	ppb	1.4	241879.31	6.4521	Pulse	0.1000	3
Fe	57	45	He	5037.803	ppb	2.0	111495.21	2.9742	Pulse	0.1000	3
Co	59	45	He	505.761	ppb	2.5	1084820.53	28.9417	Pulse	0.1000	3
Ni	60	72	He	515.600	ppb	1.6	304507.43	4.4452	Pulse	0.1000	3
Cu	63	72	He	492.767	ppb	1.0	867172.67	12.6584	Pulse	0.1000	3
Zn	66	72	He	513.367	ppb	0.6	101819.96	1.4862	Pulse	0.1000	3
As	75	72	He	507.687	ppb	1.2	70932.45	1.0354	Pulse	0.5000	3
Sr	88	115	He	48.091	ppb	0.8	29778.77	0.4338	Pulse	0.1000	3
Mo	98	115	He	52.307	ppb	1.3	81117.30	1.1817	Pulse	0.1000	3
Ag	107	115	He	53.470	ppb	1.8	178683.73	2.6031	Pulse	0.1000	3
Cd	111	115	He	52.466	ppb	0.2	19539.03	0.2846	Pulse	0.5000	3
Sn	120	115	He	52.375	ppb	2.7	59267.13	0.8635	Pulse	0.1000	3
Sb	121	115	He	51.870	ppb	0.5	54109.56	0.7881	Pulse	0.1000	3
Ba	137	115	He	509.655	ppb	1.4	172393.20	2.5113	Pulse	0.1000	3
Tl	205	159	He	53.142	ppb	1.5	450223.42	1.3242	Pulse	0.1000	3
Pb	208	159	He	52.317	ppb	1.6	594994.09	1.7501	Pulse	0.1000	3
U	238	209	He	51.112	ppb	1.0	689944.65	2.5217	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2262315.17	1.2	94.0	Analog	0.1000	3
No Gas	Ge	72	1102263.47	1.2	94.9	Pulse	0.1000	3
H2	Sc	45	128763.46	0.6	78.3	Pulse	0.1000	3
H2	Ge	72	112554.34	0.6	77.4	Pulse	0.1000	3
H2	In	115	313790.96	0.5	87.2	Pulse	0.1000	3
He	Sc	45	37495.80	2.1	85.7	Pulse	0.1000	3
He	Ge	72	68511.57	1.2	89.6	Pulse	0.1000	3
He	In	115	68653.29	1.4	88.6	Pulse	0.1000	3
He	Tb	159	340034.24	1.5	91.7	Pulse	0.1000	3
He	Bi	209	273614.84	0.7	93.6	Pulse	0.1000	3

No Gas



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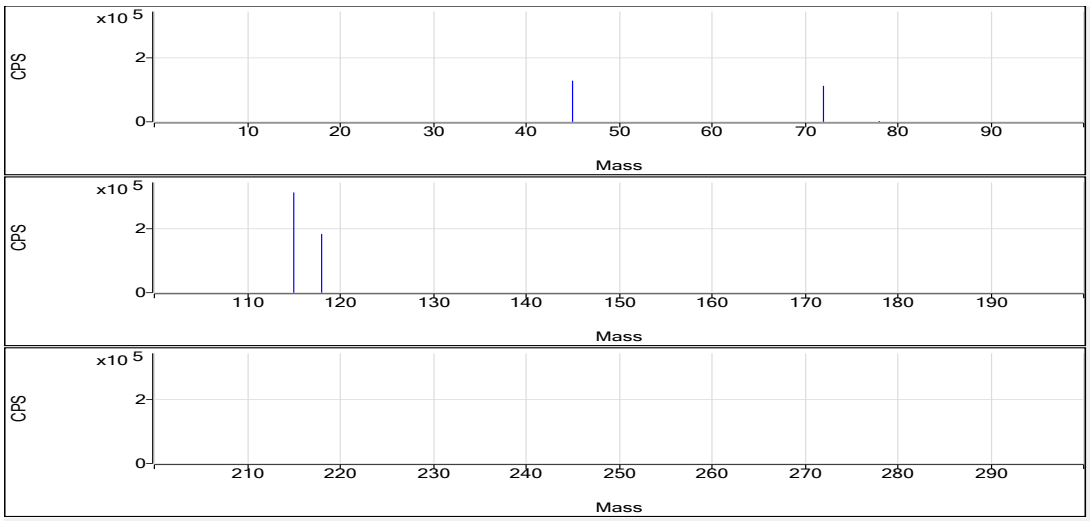
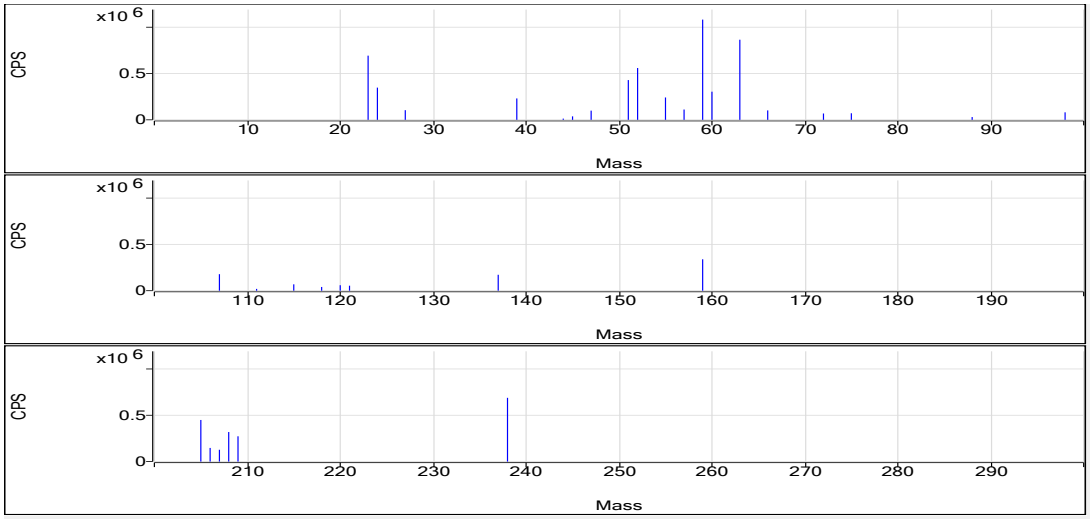


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.724	0.0339	77279.90	0.0007	1.523E-05
Be	9	1	No Gas	46.367	0.0343	76636.60	0.0007	1.523E-05
Be	9	1	No Gas	45.996	0.0341	77432.81	0.0007	1.523E-05
Se	78	2	H2	47.823	0.0083	2602.24	0.0002	3.71E-06
Se	78	2	H2	46.686	0.0081	2535.56	0.0002	3.71E-06
Se	78	2	H2	47.143	0.0082	2582.90	0.0002	3.71E-06
Na	23	3	He	4957.829	18.2325	692842.65	0.0036	0.3007
Na	23	3	He	5176.495	19.0234	696385.77	0.0036	0.3007
Na	23	3	He	4987.318	18.3392	694692.80	0.0036	0.3007
Mg	24	3	He	4988.252	9.0967	345678.20	0.0018	0.003274
Mg	24	3	He	5247.876	9.57	350326.60	0.0018	0.003274
Mg	24	3	He	5061.384	9.23	349635.62	0.0018	0.003274
Al	27	3	He	4763.467	2.7715	105316.29	0.0006	0.00137
Al	27	3	He	4903.209	2.8527	104428.82	0.0006	0.00137
Al	27	3	He	4695.309	2.7318	103481.97	0.0006	0.00137
K	39	3	He	4807.41	6.0381	229449.08	0.0012	0.378
K	39	3	He	5057.54	6.3326	231814.96	0.0012	0.378
K	39	3	He	4908.83	6.1575	233246.99	0.0012	0.378
Ca	44	3	He	4999.996	0.351	13336.62	0.0001	0.003203
Ca	44	3	He	4952.254	0.3476	12725.97	0.0001	0.003203
Ca	44	3	He	4913.399	0.3449	13066.31	0.0001	0.003203
Ti	47	3	He	4848.988	2.6027	98905.19	0.0005	0
Ti	47	3	He	5084.333	2.7291	99902.35	0.0005	0
Ti	47	3	He	4890.578	2.6251	99438.19	0.0005	0
V	51	3	He	505.766	11.3532	431427.25	0.0224	0.02476
V	51	3	He	524.039	11.7625	430588.06	0.0224	0.02476
V	51	3	He	504.211	11.3184	428744.13	0.0224	0.02476
Cr	52	3	He	501.844	14.7389	560083.27	0.0293	0.04167
Cr	52	3	He	518.389	15.2234	557281.32	0.0293	0.04167
Cr	52	3	He	507.75	14.9119	564865.15	0.0293	0.04167
Mn	55	3	He	493.922	6.3964	243065.13	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	506.493	6.559	240104.35	0.0129	0.006476
Mn	55	3	He	494.273	6.4009	242468.45	0.0129	0.006476
Fe	57	3	He	4935.638	2.914	110732.02	0.0006	0.00213
Fe	57	3	He	5133.961	3.031	110954.24	0.0006	0.00213
Fe	57	3	He	5043.808	2.9778	112799.37	0.0006	0.00213
Co	59	3	He	497.312	28.4583	1081425.45	0.0572	0.00297
Co	59	3	He	520.307	29.774	1089930.69	0.0572	0.00297
Co	59	3	He	499.664	28.5929	1083105.45	0.0572	0.00297
Ni	60	3	He	511.8	4.4124	303114.60	0.0086	0.002921
Ni	60	3	He	509.935	4.3964	304310.15	0.0086	0.002921
Ni	60	3	He	525.066	4.5267	306097.53	0.0086	0.002921
Cu	63	3	He	491.568	12.6276	867460.14	0.0257	0.004531
Cu	63	3	He	488.351	12.545	868347.02	0.0257	0.004531
Cu	63	3	He	498.382	12.8025	865710.85	0.0257	0.004531
Zn	66	3	He	511.813	1.4818	101790.09	0.0029	0.002877
Zn	66	3	He	511.206	1.48	102443.78	0.0029	0.002877
Zn	66	3	He	517.082	1.497	101226.01	0.0029	0.002877
As	75	3	He	501.873	1.0235	70313.48	0.002	0.0006798
As	75	3	He	507.48	1.035	71639.85	0.002	0.0006798
As	75	3	He	513.71	1.0477	70844.01	0.002	0.0006798
Sr	88	3	He	47.884	0.4319	29361.14	0.009	0.001075
Sr	88	3	He	47.852	0.4316	30112.93	0.009	0.001075
Sr	88	3	He	48.536	0.4378	29862.25	0.009	0.001075
Mo	98	3	He	52.935	1.1959	81295.56	0.0226	0.0005115
Mo	98	3	He	51.585	1.1654	81304.54	0.0226	0.0005115
Mo	98	3	He	52.4	1.1838	80751.79	0.0226	0.0005115
Ag	107	3	He	53.886	2.6234	178335.13	0.0487	0.0003023
Ag	107	3	He	52.375	2.5498	177891.19	0.0487	0.0003023
Ag	107	3	He	54.149	2.6362	179824.88	0.0487	0.0003023
Cd	111	3	He	52.433	0.2844	19335.43	0.0054	8.618E-06
Cd	111	3	He	52.403	0.2843	19832.10	0.0054	8.618E-06
Cd	111	3	He	52.562	0.2851	19449.57	0.0054	8.618E-06
Sn	120	3	He	53.853	0.8873	60321.65	0.0161	0.0177
Sn	120	3	He	51.065	0.8423	58765.14	0.0161	0.0177
Sn	120	3	He	52.206	0.8607	58714.59	0.0161	0.0177
Sb	121	3	He	51.887	0.7884	53594.16	0.0152	8.618E-05
Sb	121	3	He	52.111	0.7918	55240.64	0.0152	8.618E-05
Sb	121	3	He	51.612	0.7842	53493.89	0.0152	8.618E-05
Ba	137	3	He	510.542	2.5157	171017.58	0.0049	0.0001277
Ba	137	3	He	502.327	2.4752	172687.89	0.0049	0.0001277
Ba	137	3	He	516.097	2.5431	173474.14	0.0049	0.0001277
Tl	205	3	He	54.06	1.3471	450168.31	0.0249	0.000171
Tl	205	3	He	52.842	1.3168	451876.91	0.0249	0.000171
Tl	205	3	He	52.525	1.3089	448625.03	0.0249	0.000171
Pb	208	3	He	53.254	1.7814	320447.81	0.0334	0.001456
Pb	208	3	He	52.031	1.7405	319523.65	0.0334	0.001456
Pb	208	3	He	51.666	1.7283	319049.88	0.0334	0.001456
U	238	3	He	51.61	2.5463	692004.83	0.0493	0.0001028
U	238	3	He	51.176	2.5249	690940.46	0.0493	0.0001028
U	238	3	He	50.55	2.494	686888.66	0.0493	0.0001028
Sc	45	1	No Gas			2282108.87		
Sc	45	1	No Gas			2231727.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2273109.03		
Ge	72	1	No Gas			1116594.67		
Ge	72	1	No Gas			1089913.34		
Ge	72	1	No Gas			1100282.41		
Sc	45	2	H2			128131.52		
Sc	45	2	H2			128626.38		
Sc	45	2	H2			129532.47		
Ge	72	2	H2			113185.83		
Ge	72	2	H2			112662.81		
Ge	72	2	H2			111814.38		
In	115	2	H2			313271.17		
In	115	2	H2			312674.53		
In	115	2	H2			315427.18		
Sc	45	3	He			38000.37		
Sc	45	3	He			36606.78		
Sc	45	3	He			37880.25		
Ge	72	3	He			68695.74		
Ge	72	3	He			69218.78		
Ge	72	3	He			67620.20		
In	115	3	He			68288.69		
In	115	3	He			70076.68		
In	115	3	He			68538.59		
Tb	159	3	He			334174.92		
Tb	159	3	He			343172.03		
Tb	159	3	He			342755.78		
Bi	209	3	He			271773.61		
Bi	209	3	He			273652.61		
Bi	209	3	He			275418.30		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/14/2023 11:53:20 PM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

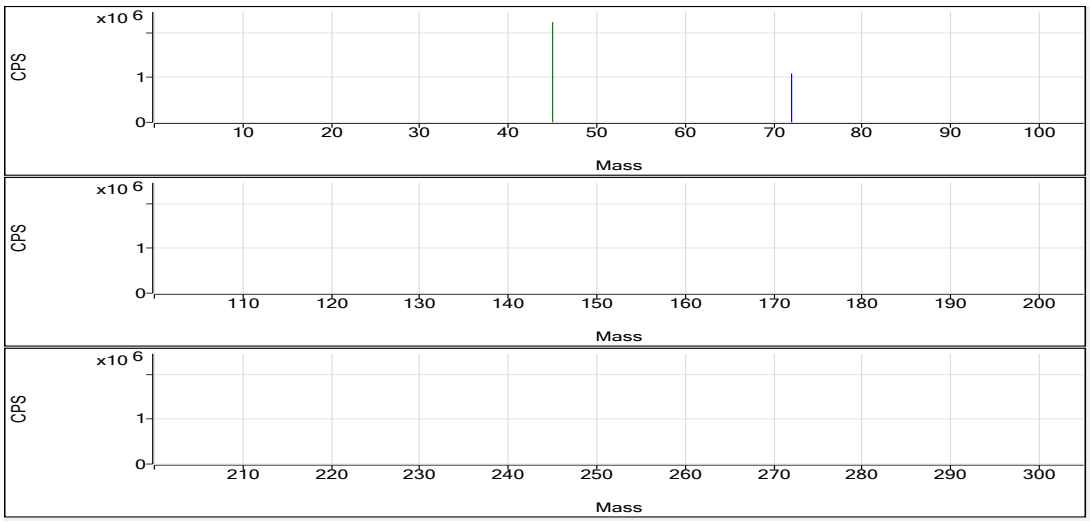
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.027	ppb	7.7	78.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.126	ppb	34.3	8.00	0.0000	Pulse	1.5000	3
Na	23	45	He	33.589	ppb	18.0	15685.48	0.4221	Pulse	0.1000	3
Mg	24	45	He	2.534	ppb	17.0	293.35	0.0079	Pulse	0.1000	3
Al	27	45	He	0.260	ppb	360.3	56.67	0.0015	Pulse	0.1000	3
K	39	45	He	13.910	ppb	46.2	14657.83	0.3944	Pulse	0.1000	3
Ca	44	45	He	-9.928	ppb	N/A	93.33	0.0025	Pulse	0.1000	3
Ti	47	45	He	2.666	ppb	59.5	53.33	0.0014	Pulse	0.1000	3
V	51	45	He	0.197	ppb	38.9	1084.05	0.0292	Pulse	0.5000	3
Cr	52	45	He	0.102	ppb	45.8	1660.15	0.0447	Pulse	0.1000	3
Mn	55	45	He	-0.119	ppb	N/A	183.34	0.0049	Pulse	0.1000	3
Fe	57	45	He	1.102	ppb	95.3	103.34	0.0028	Pulse	0.1000	3
Co	59	45	He	0.158	ppb	10.4	446.69	0.0120	Pulse	0.1000	3
Ni	60	72	He	0.204	ppb	62.4	313.35	0.0047	Pulse	0.1000	3
Cu	63	72	He	0.225	ppb	17.0	690.04	0.0103	Pulse	0.1000	3
Zn	66	72	He	0.450	ppb	98.6	280.01	0.0042	Pulse	0.1000	3
As	75	72	He	0.156	ppb	110.3	66.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	-0.038	ppb	N/A	50.00	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.083	ppb	18.5	163.34	0.0024	Pulse	0.1000	3
Ag	107	115	He	0.025	ppb	37.7	103.34	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.016	ppb	50.8	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.110	ppb	44.7	1333.45	0.0195	Pulse	0.1000	3
Sb	121	115	He	0.058	ppb	74.5	66.67	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.172	ppb	53.3	66.67	0.0010	Pulse	0.1000	3
Tl	205	159	He	0.102	ppb	7.7	923.40	0.0027	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	68.7	620.03	0.0018	Pulse	0.1000	3
U	238	209	He	0.051	ppb	18.9	710.05	0.0026	Pulse	0.1000	3

ISTD Table:

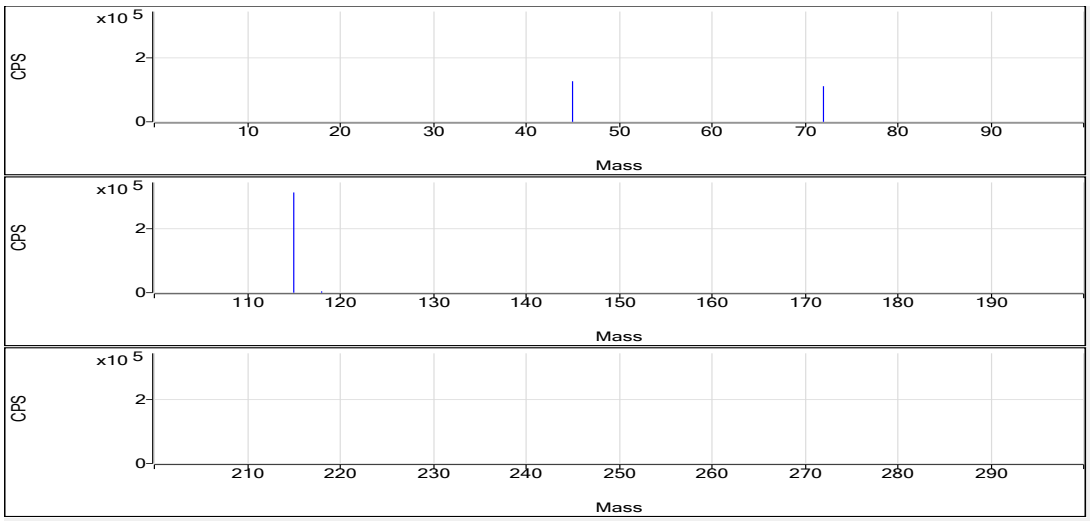
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2240831.27	2.2	93.1	Analog	0.1000	3
No Gas	Ge	72	1090069.72	1.3	93.8	Pulse	0.1000	3
H2	Sc	45	126866.91	0.1	77.2	Pulse	0.1000	3
H2	Ge	72	111277.84	0.7	76.6	Pulse	0.1000	3
H2	In	115	313276.50	0.7	87.1	Pulse	0.1000	3
He	Sc	45	37168.49	0.9	84.9	Pulse	0.1000	3
He	Ge	72	67007.41	0.9	87.6	Pulse	0.1000	3
He	In	115	68451.72	0.8	88.3	Pulse	0.1000	3
He	Tb	159	340557.00	1.1	91.8	Pulse	0.1000	3
He	Bi	209	268859.54	0.4	92.0	Pulse	0.1000	3

No Gas

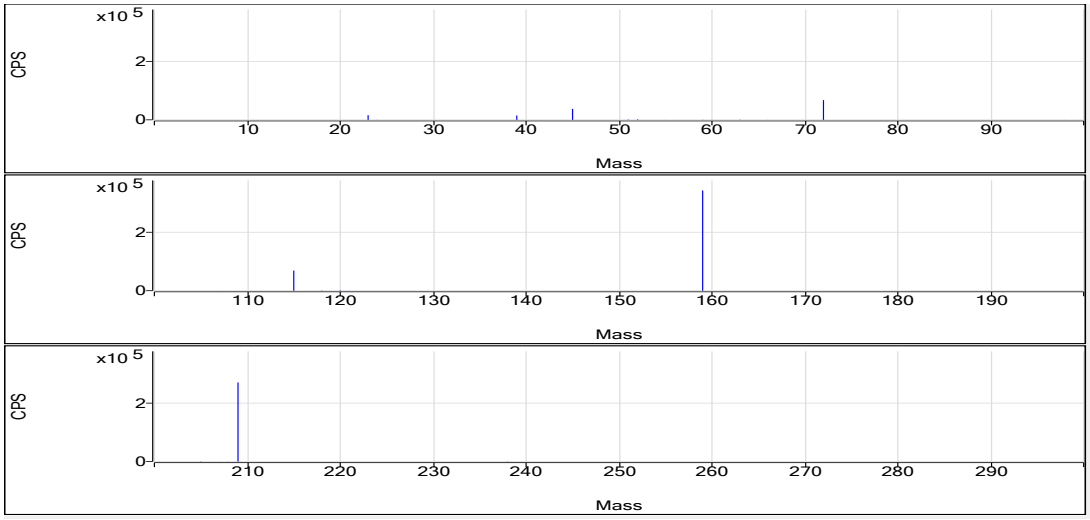


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.029	0	82.00	0.0007	1.523E-05
Be	9	1	No Gas	0.025	0	78.00	0.0007	1.523E-05
Be	9	1	No Gas	0.026	0	76.00	0.0007	1.523E-05
Se	78	2	H2	0.09	0	6.00	0.0002	3.71E-06
Se	78	2	H2	0.173	0	10.67	0.0002	3.71E-06
Se	78	2	H2	0.114	0	7.33	0.0002	3.71E-06
Na	23	3	He	33.111	0.4204	15638.83	0.0036	0.3007
Na	23	3	He	39.876	0.4449	16379.48	0.0036	0.3007
Na	23	3	He	27.78	0.4011	15038.14	0.0036	0.3007
Mg	24	3	He	2.038	0.007	260.01	0.0018	0.003274
Mg	24	3	He	2.823	0.0084	310.01	0.0018	0.003274
Mg	24	3	He	2.741	0.0083	310.02	0.0018	0.003274
Al	27	3	He	-0.045	0.0013	50.00	0.0006	0.00137
Al	27	3	He	-0.488	0.0011	40.00	0.0006	0.00137
Al	27	3	He	1.314	0.0021	80.00	0.0006	0.00137
K	39	3	He	20.48	0.4021	14958.13	0.0012	0.378
K	39	3	He	13.622	0.394	14507.63	0.0012	0.378
K	39	3	He	7.628	0.387	14507.73	0.0012	0.378
Ca	44	3	He	-11.259	0.0024	90.00	0.0001	0.003203
Ca	44	3	He	-6.994	0.0027	100.00	0.0001	0.003203
Ca	44	3	He	-11.529	0.0024	90.00	0.0001	0.003203
Ti	47	3	He	1.502	0.0008	30.00	0.0005	0
Ti	47	3	He	2.024	0.0011	40.00	0.0005	0
Ti	47	3	He	4.473	0.0024	90.00	0.0005	0
V	51	3	He	0.22	0.0297	1104.05	0.0224	0.02476
V	51	3	He	0.26	0.0306	1126.05	0.0224	0.02476
V	51	3	He	0.112	0.0273	1022.04	0.0224	0.02476
Cr	52	3	He	0.092	0.0444	1650.16	0.0293	0.04167
Cr	52	3	He	0.061	0.0435	1600.15	0.0293	0.04167
Cr	52	3	He	0.153	0.0462	1730.15	0.0293	0.04167
Mn	55	3	He	-0.168	0.0043	160.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.081	0.0054	200.01	0.0129	0.006476
Mn	55	3	He	-0.109	0.0051	190.01	0.0129	0.006476
Fe	57	3	He	2.314	0.0035	130.01	0.0006	0.00213
Fe	57	3	He	0.533	0.0024	90.00	0.0006	0.00213
Fe	57	3	He	0.459	0.0024	90.00	0.0006	0.00213
Co	59	3	He	0.169	0.0126	470.03	0.0572	0.00297
Co	59	3	He	0.166	0.0125	460.02	0.0572	0.00297
Co	59	3	He	0.139	0.0109	410.02	0.0572	0.00297
Ni	60	3	He	0.177	0.0044	300.01	0.0086	0.002921
Ni	60	3	He	0.344	0.0059	390.02	0.0086	0.002921
Ni	60	3	He	0.093	0.0037	250.01	0.0086	0.002921
Cu	63	3	He	0.181	0.0092	620.04	0.0257	0.004531
Cu	63	3	He	0.241	0.0107	710.04	0.0257	0.004531
Cu	63	3	He	0.253	0.011	740.05	0.0257	0.004531
Zn	66	3	He	0.183	0.0034	230.01	0.0029	0.002877
Zn	66	3	He	0.205	0.0035	230.01	0.0029	0.002877
Zn	66	3	He	0.962	0.0057	380.02	0.0029	0.002877
As	75	3	He	0.015	0.0007	48.00	0.002	0.0006798
As	75	3	He	0.347	0.0014	92.00	0.002	0.0006798
As	75	3	He	0.105	0.0009	60.00	0.002	0.0006798
Sr	88	3	He	-0.054	0.0006	40.00	0.009	0.001075
Sr	88	3	He	-0.055	0.0006	40.00	0.009	0.001075
Sr	88	3	He	-0.005	0.001	70.00	0.009	0.001075
Mo	98	3	He	0.101	0.0028	190.01	0.0226	0.0005115
Mo	98	3	He	0.074	0.0022	150.01	0.0226	0.0005115
Mo	98	3	He	0.075	0.0022	150.01	0.0226	0.0005115
Ag	107	3	He	0.033	0.0019	130.01	0.0487	0.0003023
Ag	107	3	He	0.015	0.001	70.00	0.0487	0.0003023
Ag	107	3	He	0.027	0.0016	110.00	0.0487	0.0003023
Cd	111	3	He	0.025	0.0001	10.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.015	0.0001	6.00	0.0054	8.618E-06
Sn	120	3	He	0.085	0.0191	1300.11	0.0161	0.0177
Sn	120	3	He	0.079	0.019	1310.11	0.0161	0.0177
Sn	120	3	He	0.167	0.0204	1390.12	0.0161	0.0177
Sb	121	3	He	0.014	0.0003	20.00	0.0152	8.618E-05
Sb	121	3	He	0.061	0.001	70.00	0.0152	8.618E-05
Sb	121	3	He	0.101	0.0016	110.01	0.0152	8.618E-05
Ba	137	3	He	0.153	0.0009	60.00	0.0049	0.0001277
Ba	137	3	He	0.092	0.0006	40.00	0.0049	0.0001277
Ba	137	3	He	0.272	0.0015	100.00	0.0049	0.0001277
Tl	205	3	He	0.103	0.0027	940.08	0.0249	0.000171
Tl	205	3	He	0.094	0.0025	850.06	0.0249	0.000171
Tl	205	3	He	0.109	0.0029	980.07	0.0249	0.000171
Pb	208	3	He	0.016	0.002	340.02	0.0334	0.001456
Pb	208	3	He	0.002	0.0015	230.01	0.0334	0.001456
Pb	208	3	He	0.014	0.0019	340.02	0.0334	0.001456
U	238	3	He	0.043	0.0022	600.04	0.0493	0.0001028
U	238	3	He	0.062	0.0032	850.06	0.0493	0.0001028
U	238	3	He	0.049	0.0025	680.05	0.0493	0.0001028
Sc	45	1	No Gas			2224270.90		
Sc	45	1	No Gas			2295764.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2202458.56		
Ge	72	1	No Gas			1093728.50		
Ge	72	1	No Gas			1101527.01		
Ge	72	1	No Gas			1074953.66		
Sc	45	2	H2			126779.09		
Sc	45	2	H2			127082.07		
Sc	45	2	H2			126739.58		
Ge	72	2	H2			110958.48		
Ge	72	2	H2			112198.24		
Ge	72	2	H2			110676.81		
In	115	2	H2			311303.98		
In	115	2	H2			315648.18		
In	115	2	H2			312877.34		
Sc	45	3	He			37198.61		
Sc	45	3	He			36817.63		
Sc	45	3	He			37489.22		
Ge	72	3	He			67530.15		
Ge	72	3	He			66314.47		
Ge	72	3	He			67177.60		
In	115	3	He			68167.06		
In	115	3	He			69051.84		
In	115	3	He			68158.32		
Tb	159	3	He			344743.82		
Tb	159	3	He			338846.79		
Tb	159	3	He			338080.39		
Bi	209	3	He			270018.28		
Bi	209	3	He			268433.39		
Bi	209	3	He			268126.95		

Quantitation Report

Data File Name	292SMPL.d
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Acq Time	8/14/2023 11:55:23 PM
Sample Name	410-135858-W-40-A
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

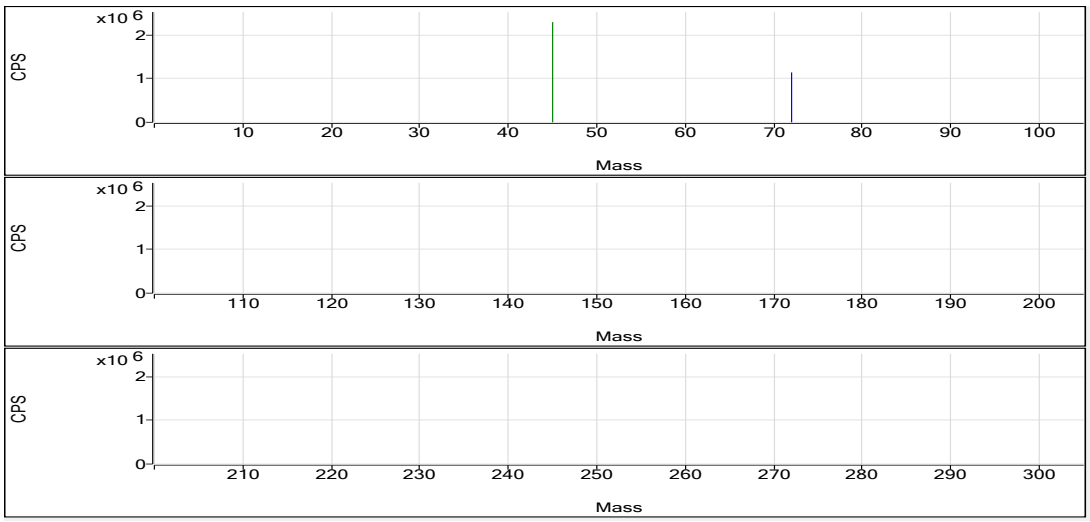
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.010	ppb	29.6	51.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.071	ppb	51.3	5.11	0.0000	Pulse	1.5000	3
Na	23	45	He	79472.196	ppb	1.7	10660182.34	287.7420	Analog	0.1000	3
Mg	24	45	He	10835.201	ppb	1.6	731902.25	19.7555	Pulse	0.1000	3
Al	27	45	He	12.778	ppb	43.8	326.68	0.0088	Pulse	0.1000	3
K	39	45	He	1694.168	ppb	3.8	87890.84	2.3727	Pulse	0.1000	3
Ca	44	45	He	82197.416	ppb	1.6	211932.73	5.7202	Pulse	0.1000	3
Ti	47	45	He	1.006	ppb	1.6	20.00	0.0005	Pulse	0.1000	3
V	51	45	He	0.051	ppb	11.2	960.04	0.0259	Pulse	0.5000	3
Cr	52	45	He	0.230	ppb	18.4	1793.51	0.0484	Pulse	0.1000	3
Mn	55	45	He	10537.444	ppb	2.1	5050573.15	136.3302	Analog	0.1000	3
Fe	57	45	He	378.219	ppb	5.0	8342.66	0.2253	Pulse	0.1000	3
Co	59	45	He	1.890	ppb	2.5	4117.39	0.1111	Pulse	0.1000	3
Ni	60	72	He	3.905	ppb	2.5	2556.98	0.0366	Pulse	0.1000	3
Cu	63	72	He	0.345	ppb	7.3	936.73	0.0134	Pulse	0.1000	3
Zn	66	72	He	1.248	ppb	20.4	453.35	0.0065	Pulse	0.1000	3
As	75	72	He	0.087	ppb	25.3	60.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	268.057	ppb	1.6	166484.69	2.4129	Pulse	0.1000	3
Mo	98	115	He	0.367	ppb	31.9	606.70	0.0088	Pulse	0.1000	3
Ag	107	115	He	0.011	ppb	58.5	56.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.139	ppb	17.6	52.67	0.0008	Pulse	0.5000	3
Sn	120	115	He	-0.001	ppb	N/A	1220.10	0.0177	Pulse	0.1000	3
Sb	121	115	He	0.045	ppb	51.9	53.33	0.0008	Pulse	0.1000	3
Ba	137	115	He	11.092	ppb	8.6	3777.33	0.0548	Pulse	0.1000	3
Tl	205	159	He	0.055	ppb	25.4	523.36	0.0015	Pulse	0.1000	3
Pb	208	159	He	0.035	ppb	9.3	886.72	0.0026	Pulse	0.1000	3
U	238	209	He	0.519	ppb	2.2	6918.78	0.0257	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2288182.31	1.0	95.0	Analog	0.1000	3
No Gas	Ge	72	1138130.74	0.2	98.0	Pulse	0.1000	3
H2	Sc	45	130118.92	0.5	79.1	Pulse	0.1000	3
H2	Ge	72	118145.49	0.4	81.3	Pulse	0.1000	3
H2	In	115	317060.84	1.3	88.1	Pulse	0.1000	3
He	Sc	45	37054.55	1.6	84.7	Pulse	0.1000	3
He	Ge	72	69934.74	0.6	91.4	Pulse	0.1000	3
He	In	115	69003.51	1.2	89.0	Pulse	0.1000	3
He	Tb	159	338373.36	0.5	91.2	Pulse	0.1000	3
He	Bi	209	269157.01	1.1	92.1	Pulse	0.1000	3

No Gas



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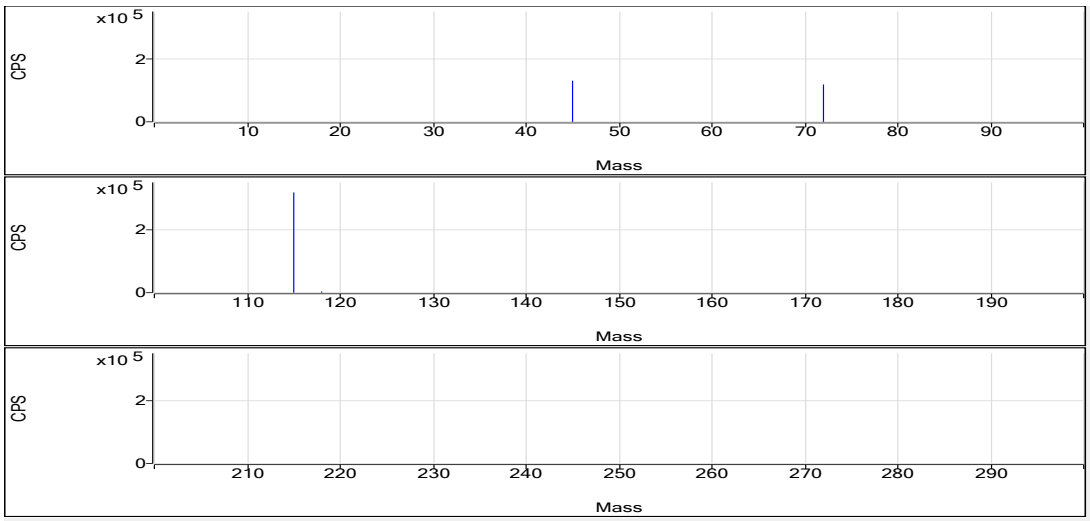
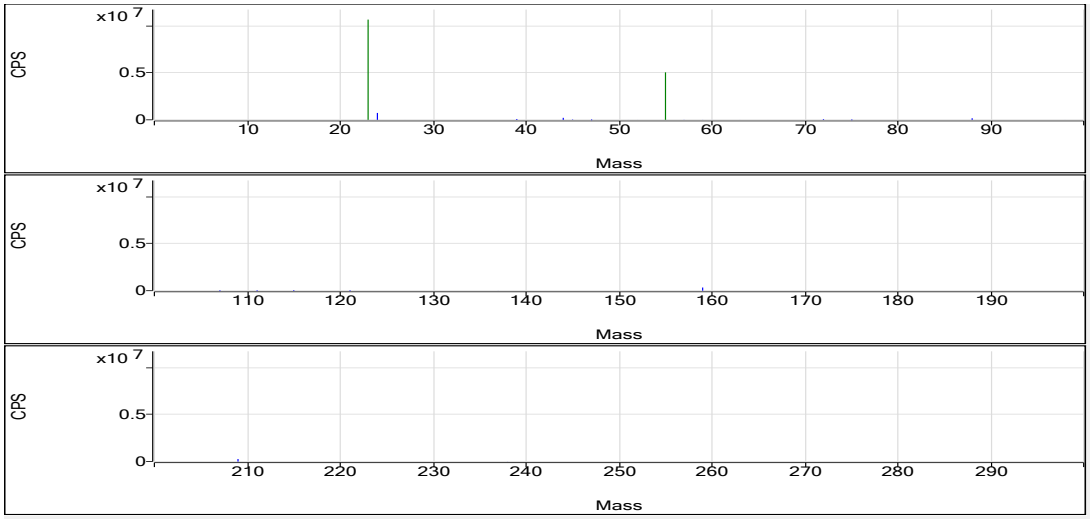


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	46.00	0.0007	1.523E-05
Be	9	1	No Gas	0.012	0	54.00	0.0007	1.523E-05
Be	9	1	No Gas	0.011	0	54.00	0.0007	1.523E-05
Se	78	2	H2	0.111	0	7.33	0.0002	3.71E-06
Se	78	2	H2	0.065	0	4.67	0.0002	3.71E-06
Se	78	2	H2	0.039	0	3.33	0.0002	3.71E-06
Na	23	3	He	80562.529	291.6856	10657161.09	0.0036	0.3007
Na	23	3	He	77961.099	282.2765	10647413.59	0.0036	0.3007
Na	23	3	He	79892.958	289.2638	10675972.34	0.0036	0.3007
Mg	24	3	He	11008.612	20.0716	733346.86	0.0018	0.003274
Mg	24	3	He	10651.786	19.4212	732562.18	0.0018	0.003274
Mg	24	3	He	10845.206	19.7738	729797.72	0.0018	0.003274
Al	27	3	He	14.589	0.0099	360.02	0.0006	0.00137
Al	27	3	He	17.248	0.0114	430.02	0.0006	0.00137
Al	27	3	He	6.497	0.0051	190.01	0.0006	0.00137
K	39	3	He	1765.922	2.4571	89775.06	0.0012	0.378
K	39	3	He	1642.688	2.312	87209.87	0.0012	0.378
K	39	3	He	1673.895	2.3488	86687.60	0.0012	0.378
Ca	44	3	He	83713.006	5.8256	212845.97	0.0001	0.003203
Ca	44	3	He	81541.14	5.6745	214041.72	0.0001	0.003203
Ca	44	3	He	81338.102	5.6604	208910.49	0.0001	0.003203
Ti	47	3	He	1.02	0.0005	20.00	0.0005	0
Ti	47	3	He	0.988	0.0005	20.00	0.0005	0
Ti	47	3	He	1.01	0.0005	20.00	0.0005	0
V	51	3	He	0.058	0.0261	952.04	0.0224	0.02476
V	51	3	He	0.047	0.0258	974.04	0.0224	0.02476
V	51	3	He	0.049	0.0258	954.04	0.0224	0.02476
Cr	52	3	He	0.278	0.0498	1820.18	0.0293	0.04167
Cr	52	3	He	0.198	0.0475	1790.18	0.0293	0.04167
Cr	52	3	He	0.215	0.048	1770.16	0.0293	0.04167
Mn	55	3	He	10780.151	139.4701	5095745.86	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	10339.645	133.7713	5045824.92	0.0129	0.006476
Mn	55	3	He	10492.535	135.7492	5010148.68	0.0129	0.006476
Fe	57	3	He	391.318	0.233	8512.75	0.0006	0.00213
Fe	57	3	He	356.446	0.2124	8012.43	0.0006	0.00213
Fe	57	3	He	386.893	0.2304	8502.81	0.0006	0.00213
Co	59	3	He	1.881	0.1106	4040.71	0.0572	0.00297
Co	59	3	He	1.848	0.1087	4100.68	0.0572	0.00297
Co	59	3	He	1.942	0.1141	4210.77	0.0572	0.00297
Ni	60	3	He	4.004	0.0374	2600.34	0.0086	0.002921
Ni	60	3	He	3.903	0.0365	2560.29	0.0086	0.002921
Ni	60	3	He	3.808	0.0357	2510.32	0.0086	0.002921
Cu	63	3	He	0.328	0.013	900.06	0.0257	0.004531
Cu	63	3	He	0.374	0.0141	990.06	0.0257	0.004531
Cu	63	3	He	0.333	0.0131	920.06	0.0257	0.004531
Zn	66	3	He	1.196	0.0063	440.02	0.0029	0.002877
Zn	66	3	He	1.524	0.0073	510.02	0.0029	0.002877
Zn	66	3	He	1.024	0.0058	410.02	0.0029	0.002877
As	75	3	He	0.062	0.0008	56.00	0.002	0.0006798
As	75	3	He	0.101	0.0009	62.00	0.002	0.0006798
As	75	3	He	0.099	0.0009	62.00	0.002	0.0006798
Sr	88	3	He	267.487	2.4078	164510.02	0.009	0.001075
Sr	88	3	He	272.69	2.4546	168665.95	0.009	0.001075
Sr	88	3	He	263.994	2.3764	166278.10	0.009	0.001075
Mo	98	3	He	0.496	0.0117	800.05	0.0226	0.0005115
Mo	98	3	He	0.267	0.0065	450.02	0.0226	0.0005115
Mo	98	3	He	0.338	0.0081	570.03	0.0226	0.0005115
Ag	107	3	He	0.006	0.0006	40.00	0.0487	0.0003023
Ag	107	3	He	0.018	0.0012	80.00	0.0487	0.0003023
Ag	107	3	He	0.008	0.0007	50.00	0.0487	0.0003023
Cd	111	3	He	0.123	0.0007	46.00	0.0054	8.618E-06
Cd	111	3	He	0.127	0.0007	48.00	0.0054	8.618E-06
Cd	111	3	He	0.167	0.0009	64.00	0.0054	8.618E-06
Sn	120	3	He	0.082	0.019	1300.11	0.0161	0.0177
Sn	120	3	He	-0.069	0.0166	1140.09	0.0161	0.0177
Sn	120	3	He	-0.017	0.0174	1220.10	0.0161	0.0177
Sb	121	3	He	0.042	0.0007	50.00	0.0152	8.618E-05
Sb	121	3	He	0.023	0.0004	30.00	0.0152	8.618E-05
Sb	121	3	He	0.07	0.0011	80.00	0.0152	8.618E-05
Ba	137	3	He	11.917	0.0588	4020.75	0.0049	0.0001277
Ba	137	3	He	11.318	0.0559	3840.65	0.0049	0.0001277
Ba	137	3	He	10.04	0.0496	3470.58	0.0049	0.0001277
Tl	205	3	He	0.044	0.0013	430.02	0.0249	0.000171
Tl	205	3	He	0.071	0.0019	660.04	0.0249	0.000171
Tl	205	3	He	0.05	0.0014	480.03	0.0249	0.000171
Pb	208	3	He	0.038	0.0027	480.03	0.0334	0.001456
Pb	208	3	He	0.035	0.0026	480.03	0.0334	0.001456
Pb	208	3	He	0.032	0.0025	460.03	0.0334	0.001456
U	238	3	He	0.532	0.0263	7102.18	0.0493	0.0001028
U	238	3	He	0.511	0.0253	6882.14	0.0493	0.0001028
U	238	3	He	0.514	0.0255	6772.03	0.0493	0.0001028
Sc	45	1	No Gas			2301533.87		
Sc	45	1	No Gas			2262073.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2300939.97		
Ge	72	1	No Gas			1140511.15		
Ge	72	1	No Gas			1135663.58		
Ge	72	1	No Gas			1138217.48		
Sc	45	2	H2			129443.70		
Sc	45	2	H2			130753.08		
Sc	45	2	H2			130159.99		
Ge	72	2	H2			118689.80		
Ge	72	2	H2			117650.70		
Ge	72	2	H2			118095.96		
In	115	2	H2			319025.19		
In	115	2	H2			312498.59		
In	115	2	H2			319658.75		
Sc	45	3	He			36536.47		
Sc	45	3	He			37719.80		
Sc	45	3	He			36907.39		
Ge	72	3	He			69489.16		
Ge	72	3	He			70051.92		
Ge	72	3	He			70263.14		
In	115	3	He			68329.57		
In	115	3	He			68720.25		
In	115	3	He			69977.24		
Tb	159	3	He			336861.56		
Tb	159	3	He			340310.78		
Tb	159	3	He			337947.73		
Bi	209	3	He			269600.00		
Bi	209	3	He			271987.20		
Bi	209	3	He			265883.84		

Quantitation Report

Data File Name	293SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/14/2023 11:57:24 PM
Sample Name	410-135858-W-40-A PDS
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

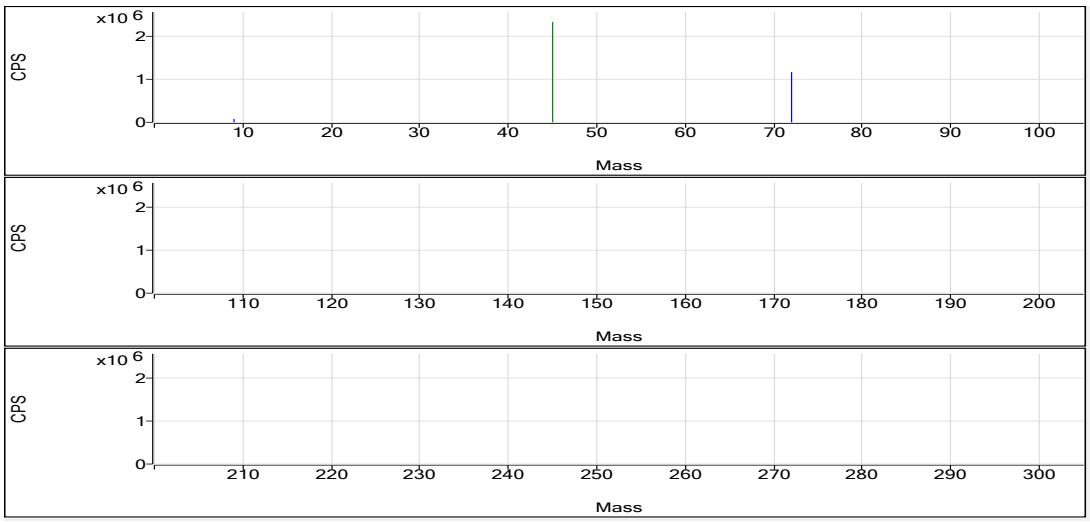
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	44.910	ppb	0.8	77159.94	0.0333	Pulse	0.5000	3
Se	78	115	H2	96.868	ppb	0.8	5336.33	0.0168	Pulse	1.5000	3
Na	23	45	He	11197.308	ppb	0.5	1543710.13	40.8000	Analog	0.1000	3
Mg	24	45	He	37489.416	ppb	0.5	2585917.98	68.3453	Analog	0.1000	3
Al	27	45	He	4777.735	ppb	1.1	105173.51	2.7798	Pulse	0.1000	3
K	39	45	He	5939.842	ppb	1.0	278899.44	7.3714	Pulse	0.1000	3
Ca	44	45	He	86546.863	ppb	0.3	227879.06	6.0227	Pulse	0.1000	3
Ti	47	45	He	497.799	ppb	1.3	10110.48	0.2672	Pulse	0.1000	3
V	51	45	He	508.758	ppb	0.4	432097.87	11.4203	Pulse	0.5000	3
Cr	52	45	He	503.843	ppb	1.1	559864.56	14.7974	Pulse	0.1000	3
Mn	55	45	He	495.156	ppb	0.8	242614.54	6.4123	Pulse	0.1000	3
Fe	57	45	He	5010.343	ppb	0.4	111924.64	2.9580	Pulse	0.1000	3
Co	59	45	He	486.269	ppb	0.3	1052861.91	27.8264	Pulse	0.1000	3
Ni	60	72	He	488.904	ppb	1.1	300245.50	4.2152	Pulse	0.1000	3
Cu	63	72	He	462.829	ppb	0.9	846902.46	11.8896	Pulse	0.1000	3
Zn	66	72	He	495.663	ppb	0.6	102225.51	1.4351	Pulse	0.1000	3
As	75	72	He	495.365	ppb	0.9	71966.32	1.0103	Pulse	0.5000	3
Sr	88	115	He	1292.839	ppb	0.8	792167.54	11.6334	Pulse	0.1000	3
Mo	98	115	He	53.321	ppb	0.5	82025.95	1.2046	Pulse	0.1000	3
Ag	107	115	He	59.829	ppb	0.4	198342.43	2.9127	Pulse	0.1000	3
Cd	111	115	He	52.935	ppb	1.4	19552.36	0.2872	Pulse	0.5000	3
Sn	120	115	He	107.563	ppb	1.3	119475.96	1.7547	Pulse	0.1000	3
Sb	121	115	He	103.104	ppb	2.0	106662.11	1.5665	Pulse	0.1000	3
Ba	137	115	He	631.703	ppb	1.0	211947.84	3.1127	Pulse	0.1000	3
Tl	205	159	He	103.419	ppb	1.0	885519.86	2.5769	Pulse	0.1000	3
Pb	208	159	He	51.719	ppb	0.8	594514.96	1.7301	Pulse	0.1000	3
U	238	209	He	51.621	ppb	0.5	698363.06	2.5468	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2319932.72	1.0	96.4	Analog	0.1000	3
No Gas	Ge	72	1161484.13	0.6	100.0	Pulse	0.1000	3
H2	Sc	45	129887.42	0.4	79.0	Pulse	0.1000	3
H2	Ge	72	119235.07	0.3	82.0	Pulse	0.1000	3
H2	In	115	317236.73	0.8	88.2	Pulse	0.1000	3
He	Sc	45	37836.75	0.6	86.5	Pulse	0.1000	3
He	Ge	72	71234.71	0.9	93.1	Pulse	0.1000	3
He	In	115	68095.22	0.9	87.8	Pulse	0.1000	3
He	Tb	159	343653.24	0.9	92.6	Pulse	0.1000	3
He	Bi	209	274215.49	0.4	93.8	Pulse	0.1000	3

No Gas



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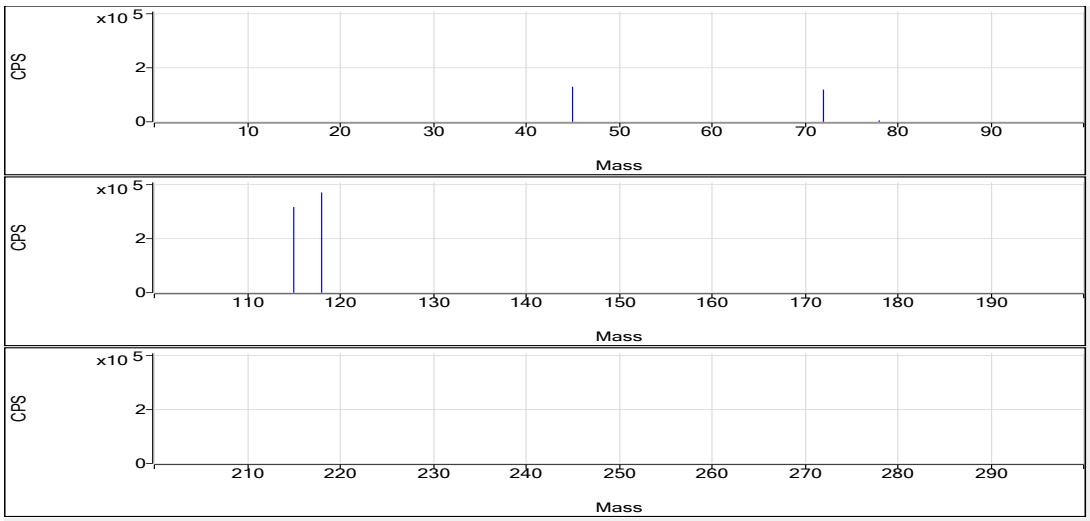
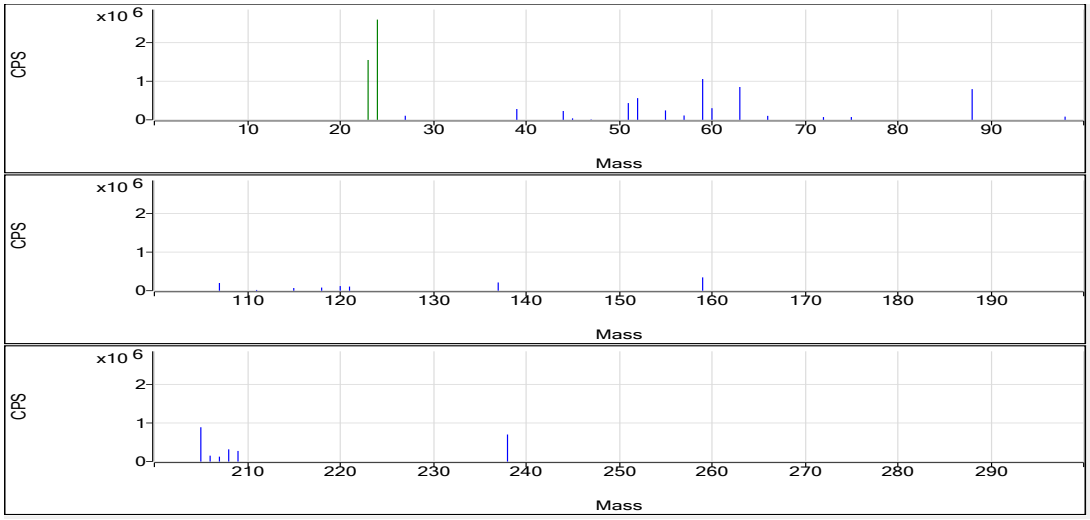


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	44.528	0.033	77014.46	0.0007	1.523E-05
Be	9	1	No Gas	44.95	0.0333	77599.64	0.0007	1.523E-05
Be	9	1	No Gas	45.252	0.0335	76865.73	0.0007	1.523E-05
Se	78	2	H2	96.616	0.0168	5373.68	0.0002	3.71E-06
Se	78	2	H2	97.785	0.017	5352.34	0.0002	3.71E-06
Se	78	2	H2	96.203	0.0167	5282.98	0.0002	3.71E-06
Na	23	3	He	11186.705	40.7616	1536305.60	0.0036	0.3007
Na	23	3	He	11263.029	41.0377	1547109.35	0.0036	0.3007
Na	23	3	He	11142.19	40.6006	1547715.45	0.0036	0.3007
Mg	24	3	He	37503.818	68.3716	2576926.21	0.0018	0.003274
Mg	24	3	He	37661.314	68.6587	2588415.43	0.0018	0.003274
Mg	24	3	He	37303.117	68.0057	2592412.31	0.0018	0.003274
Al	27	3	He	4758.521	2.7686	104347.73	0.0006	0.00137
Al	27	3	He	4837.23	2.8143	106100.24	0.0006	0.00137
Al	27	3	He	4737.454	2.7563	105072.56	0.0006	0.00137
K	39	3	He	5927.267	7.3566	277268.61	0.0012	0.378
K	39	3	He	6006.475	7.4498	280855.95	0.0012	0.378
K	39	3	He	5885.785	7.3077	278573.77	0.0012	0.378
Ca	44	3	He	86302.982	6.0057	226355.37	0.0001	0.003203
Ca	44	3	He	86733.604	6.0357	227542.93	0.0001	0.003203
Ca	44	3	He	86604.004	6.0266	229738.88	0.0001	0.003203
Ti	47	3	He	492.505	0.2644	9963.62	0.0005	0
Ti	47	3	He	495.845	0.2661	10033.78	0.0005	0
Ti	47	3	He	505.047	0.2711	10334.05	0.0005	0
V	51	3	He	509.197	11.4301	430800.06	0.0224	0.02476
V	51	3	He	510.637	11.4623	432127.13	0.0224	0.02476
V	51	3	He	506.44	11.3683	433366.44	0.0224	0.02476
Cr	52	3	He	503.566	14.7893	557410.23	0.0293	0.04167
Cr	52	3	He	509.495	14.963	564099.99	0.0293	0.04167
Cr	52	3	He	498.467	14.64	558083.47	0.0293	0.04167
Mn	55	3	He	495.905	6.422	242046.52	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	498.643	6.4575	243444.57	0.0129	0.006476
Mn	55	3	He	490.919	6.3575	242352.54	0.0129	0.006476
Fe	57	3	He	4994.379	2.9486	111133.78	0.0006	0.00213
Fe	57	3	He	5004.541	2.9546	111388.48	0.0006	0.00213
Fe	57	3	He	5032.108	2.9709	113251.65	0.0006	0.00213
Co	59	3	He	484.644	27.7334	1045273.89	0.0572	0.00297
Co	59	3	He	487.784	27.9131	1052317.17	0.0572	0.00297
Co	59	3	He	486.378	27.8327	1060994.67	0.0572	0.00297
Ni	60	3	He	487.053	4.1992	300533.55	0.0086	0.002921
Ni	60	3	He	495.139	4.2689	300933.18	0.0086	0.002921
Ni	60	3	He	484.52	4.1774	299269.78	0.0086	0.002921
Cu	63	3	He	460.031	11.8177	845782.88	0.0257	0.004531
Cu	63	3	He	467.895	12.0197	847321.86	0.0257	0.004531
Cu	63	3	He	460.562	11.8314	847602.64	0.0257	0.004531
Zn	66	3	He	496.773	1.4383	102937.39	0.0029	0.002877
Zn	66	3	He	497.928	1.4416	101627.41	0.0029	0.002877
Zn	66	3	He	492.289	1.4253	102111.74	0.0029	0.002877
As	75	3	He	490.129	0.9996	71541.52	0.002	0.0006798
As	75	3	He	497.17	1.014	71479.08	0.002	0.0006798
As	75	3	He	498.797	1.0173	72878.36	0.002	0.0006798
Sr	88	3	He	1281.227	11.5289	785086.79	0.009	0.001075
Sr	88	3	He	1296.136	11.663	801196.39	0.009	0.001075
Sr	88	3	He	1301.155	11.7082	790219.44	0.009	0.001075
Mo	98	3	He	53.046	1.1984	81606.91	0.0226	0.0005115
Mo	98	3	He	53.414	1.2067	82893.95	0.0226	0.0005115
Mo	98	3	He	53.502	1.2087	81576.99	0.0226	0.0005115
Ag	107	3	He	60.034	2.9226	199024.53	0.0487	0.0003023
Ag	107	3	He	59.868	2.9146	200216.70	0.0487	0.0003023
Ag	107	3	He	59.586	2.9008	195786.07	0.0487	0.0003023
Cd	111	3	He	52.527	0.2849	19403.49	0.0054	8.618E-06
Cd	111	3	He	52.51	0.2848	19567.69	0.0054	8.618E-06
Cd	111	3	He	53.769	0.2917	19685.90	0.0054	8.618E-06
Sn	120	3	He	107.244	1.7495	119137.95	0.0161	0.0177
Sn	120	3	He	106.385	1.7357	119231.19	0.0161	0.0177
Sn	120	3	He	109.059	1.7788	120058.75	0.0161	0.0177
Sb	121	3	He	101.676	1.5448	105197.90	0.0152	8.618E-05
Sb	121	3	He	102.191	1.5526	106658.96	0.0152	8.618E-05
Sb	121	3	He	105.445	1.6021	108129.46	0.0152	8.618E-05
Ba	137	3	He	630.796	3.1082	211663.24	0.0049	0.0001277
Ba	137	3	He	625.637	3.0828	211775.70	0.0049	0.0001277
Ba	137	3	He	638.675	3.1471	212404.59	0.0049	0.0001277
Tl	205	3	He	102.48	2.5535	885843.81	0.0249	0.000171
Tl	205	3	He	104.546	2.605	887830.85	0.0249	0.000171
Tl	205	3	He	103.231	2.5722	882884.91	0.0249	0.000171
Pb	208	3	He	51.357	1.718	317188.92	0.0334	0.001456
Pb	208	3	He	52.149	1.7445	317326.91	0.0334	0.001456
Pb	208	3	He	51.65	1.7278	311783.14	0.0334	0.001456
U	238	3	He	51.359	2.5339	697952.88	0.0493	0.0001028
U	238	3	He	51.868	2.559	698883.11	0.0493	0.0001028
U	238	3	He	51.635	2.5475	698253.19	0.0493	0.0001028
Sc	45	1	No Gas			2335291.37		
Sc	45	1	No Gas			2330985.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2293520.90		
Ge	72	1	No Gas			1163093.19		
Ge	72	1	No Gas			1167551.94		
Ge	72	1	No Gas			1153807.25		
Sc	45	2	H2			130533.63		
Sc	45	2	H2			129594.64		
Sc	45	2	H2			129533.99		
Ge	72	2	H2			119215.24		
Ge	72	2	H2			119567.48		
Ge	72	2	H2			118922.49		
In	115	2	H2			320282.46		
In	115	2	H2			315197.94		
In	115	2	H2			316229.80		
Sc	45	3	He			37690.01		
Sc	45	3	He			37699.74		
Sc	45	3	He			38120.50		
Ge	72	3	He			71569.06		
Ge	72	3	He			70494.69		
Ge	72	3	He			71640.37		
In	115	3	He			68720.66		
In	115	3	He			69334.07		
In	115	3	He			68117.39		
Tb	159	3	He			346907.18		
Tb	159	3	He			340816.40		
Tb	159	3	He			343236.13		
Bi	209	3	He			275446.05		
Bi	209	3	He			273109.76		
Bi	209	3	He			274090.66		

Quantitation Report

Data File Name	294SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/14/2023 11:59:28 PM
Sample Name	410-135858-W-40-A SD@5
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

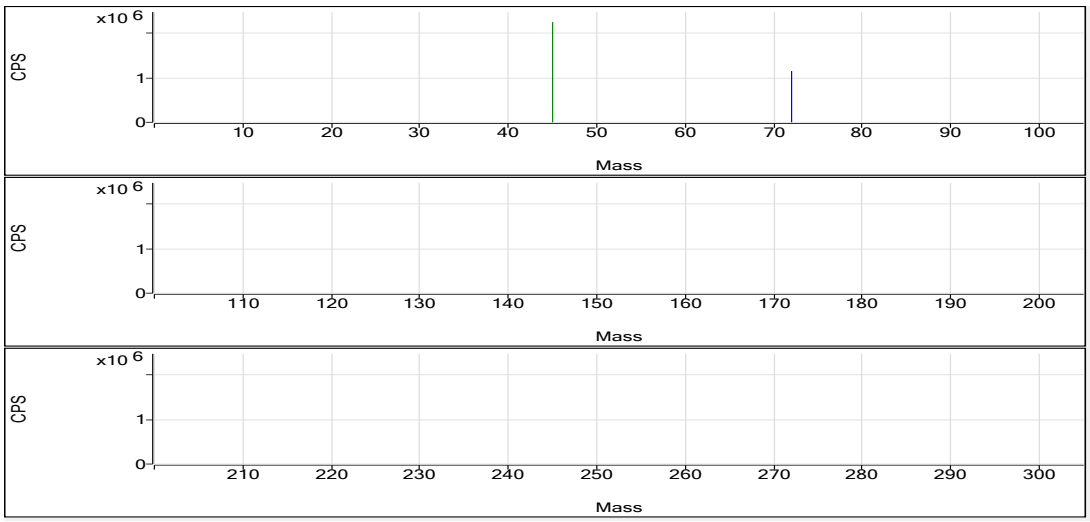
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.024	ppb	29.9	74.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.387	ppb	4.5	22.22	0.0001	Pulse	1.5000	3
Na	23	45	He	1189.865	ppb	1.8	173398.25	4.6043	Pulse	0.1000	3
Mg	24	45	He	6235.802	ppb	1.9	428211.92	11.3710	Pulse	0.1000	3
Al	27	45	He	3.436	ppb	48.1	126.67	0.0034	Pulse	0.1000	3
K	39	45	He	240.670	ppb	11.6	24901.95	0.6614	Pulse	0.1000	3
Ca	44	45	He	16653.112	ppb	1.9	43739.63	1.1615	Pulse	0.1000	3
Ti	47	45	He	0.167	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.197	ppb	67.4	1098.05	0.0292	Pulse	0.5000	3
Cr	52	45	He	0.827	ppb	22.3	2480.30	0.0659	Pulse	0.1000	3
Mn	55	45	He	1.367	ppb	9.2	910.06	0.0242	Pulse	0.1000	3
Fe	57	45	He	12.585	ppb	14.8	360.02	0.0096	Pulse	0.1000	3
Co	59	45	He	0.156	ppb	18.4	446.69	0.0119	Pulse	0.1000	3
Ni	60	72	He	1.413	ppb	18.1	1073.41	0.0151	Pulse	0.1000	3
Cu	63	72	He	0.290	ppb	11.1	853.39	0.0120	Pulse	0.1000	3
Zn	66	72	He	1.576	ppb	22.6	530.03	0.0074	Pulse	0.1000	3
As	75	72	He	0.084	ppb	120.6	60.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	242.464	ppb	1.0	151440.82	2.1826	Pulse	0.1000	3
Mo	98	115	He	0.292	ppb	14.3	493.36	0.0071	Pulse	0.1000	3
Ag	107	115	He	0.016	ppb	80.6	73.33	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.020	ppb	26.7	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.118	ppb	92.6	1360.11	0.0196	Pulse	0.1000	3
Sb	121	115	He	0.042	ppb	67.6	50.00	0.0007	Pulse	0.1000	3
Ba	137	115	He	23.736	ppb	2.0	8122.66	0.1171	Pulse	0.1000	3
Tl	205	159	He	0.240	ppb	3.9	2086.92	0.0061	Pulse	0.1000	3
Pb	208	159	He	0.055	ppb	31.2	1116.73	0.0033	Pulse	0.1000	3
U	238	209	He	0.222	ppb	6.2	3010.47	0.0111	Pulse	0.1000	3

ISTD Table:

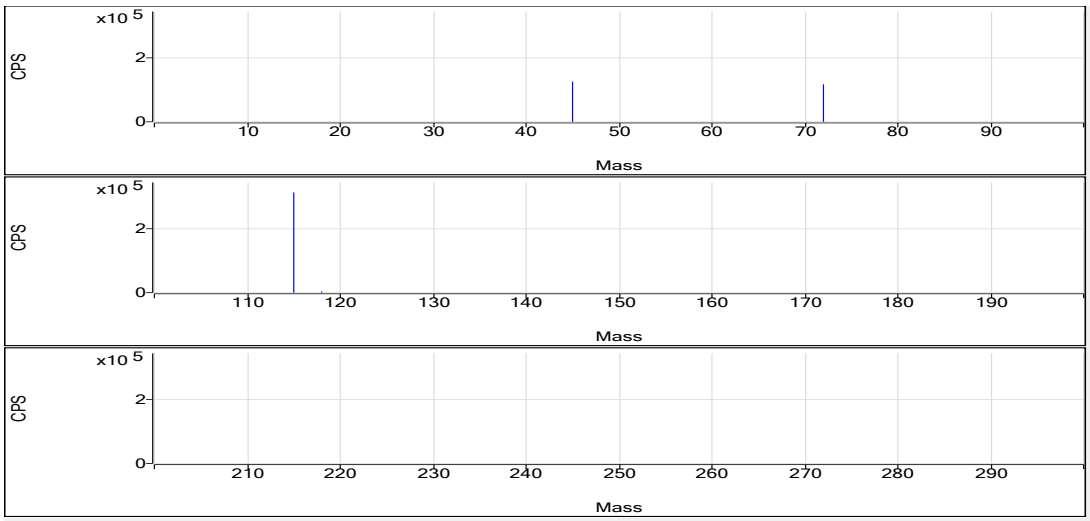
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2250756.27	1.1	93.5	Analog	0.1000	3
No Gas	Ge	72	1151195.01	0.5	99.1	Pulse	0.1000	3
H2	Sc	45	125686.66	2.5	76.4	Pulse	0.1000	3
H2	Ge	72	117235.61	1.1	80.7	Pulse	0.1000	3
H2	In	115	313580.05	0.6	87.1	Pulse	0.1000	3
He	Sc	45	37662.76	1.0	86.1	Pulse	0.1000	3
He	Ge	72	71250.92	2.2	93.1	Pulse	0.1000	3
He	In	115	69383.62	0.8	89.5	Pulse	0.1000	3
He	Tb	159	339818.72	0.9	91.6	Pulse	0.1000	3
He	Bi	209	272210.57	1.2	93.1	Pulse	0.1000	3

No Gas

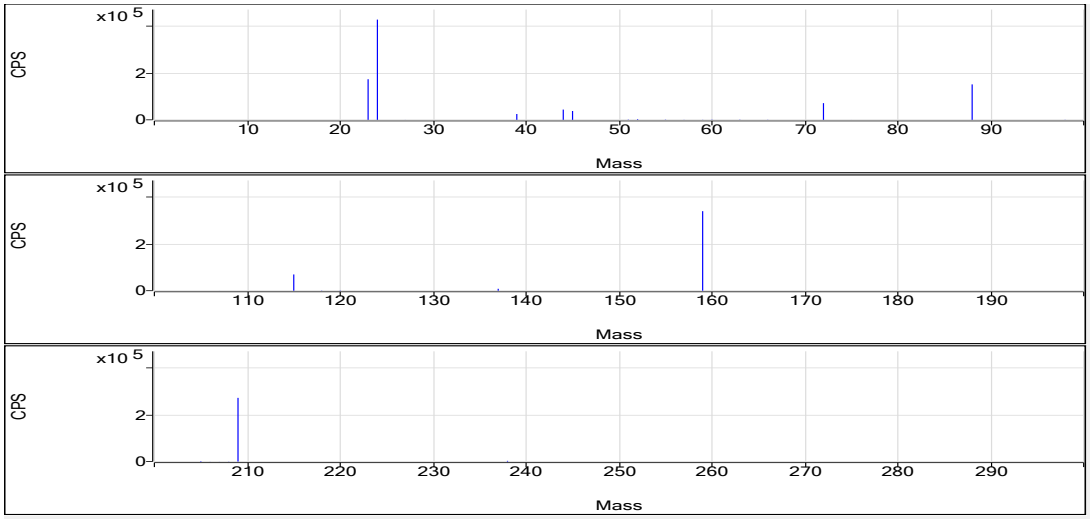


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.018	0	64.00	0.0007	1.523E-05
Be	9	1	No Gas	0.032	0	86.00	0.0007	1.523E-05
Be	9	1	No Gas	0.022	0	72.00	0.0007	1.523E-05
Se	78	2	H2	0.381	0.0001	22.00	0.0002	3.71E-06
Se	78	2	H2	0.373	0.0001	21.33	0.0002	3.71E-06
Se	78	2	H2	0.407	0.0001	23.33	0.0002	3.71E-06
Na	23	3	He	1202.236	4.649	175916.99	0.0036	0.3007
Na	23	3	He	1202.227	4.649	173166.33	0.0036	0.3007
Na	23	3	He	1165.132	4.5148	171111.42	0.0036	0.3007
Mg	24	3	He	6207.801	11.3199	428342.53	0.0018	0.003274
Mg	24	3	He	6363.36	11.6035	432210.81	0.0018	0.003274
Mg	24	3	He	6136.247	11.1895	424082.42	0.0018	0.003274
Al	27	3	He	1.734	0.0024	90.00	0.0006	0.00137
Al	27	3	He	5.031	0.0043	160.01	0.0006	0.00137
Al	27	3	He	3.543	0.0034	130.01	0.0006	0.00137
K	39	3	He	244.863	0.6663	25212.48	0.0012	0.378
K	39	3	He	266.185	0.6914	25753.48	0.0012	0.378
K	39	3	He	210.961	0.6264	23739.90	0.0012	0.378
Ca	44	3	He	16751.221	1.1683	44207.31	0.0001	0.003203
Ca	44	3	He	16901.899	1.1788	43906.75	0.0001	0.003203
Ca	44	3	He	16306.215	1.1373	43104.82	0.0001	0.003203
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.5	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.19	0.029	1098.05	0.0224	0.02476
V	51	3	He	0.333	0.0322	1200.06	0.0224	0.02476
V	51	3	He	0.068	0.0263	996.04	0.0224	0.02476
Cr	52	3	He	0.68	0.0616	2330.29	0.0293	0.04167
Cr	52	3	He	1.034	0.072	2680.33	0.0293	0.04167
Cr	52	3	He	0.767	0.0641	2430.27	0.0293	0.04167
Mn	55	3	He	1.501	0.0259	980.07	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.346	0.0239	890.06	0.0129	0.006476
Mn	55	3	He	1.254	0.0227	860.06	0.0129	0.006476
Fe	57	3	He	11.621	0.009	340.02	0.0006	0.00213
Fe	57	3	He	11.407	0.0089	330.01	0.0006	0.00213
Fe	57	3	He	14.727	0.0108	410.02	0.0006	0.00213
Co	59	3	He	0.165	0.0124	470.03	0.0572	0.00297
Co	59	3	He	0.178	0.0132	490.03	0.0572	0.00297
Co	59	3	He	0.123	0.01	380.02	0.0572	0.00297
Ni	60	3	He	1.132	0.0127	920.07	0.0086	0.002921
Ni	60	3	He	1.476	0.0156	1120.08	0.0086	0.002921
Ni	60	3	He	1.631	0.017	1180.09	0.0086	0.002921
Cu	63	3	He	0.312	0.0125	910.07	0.0257	0.004531
Cu	63	3	He	0.253	0.011	790.04	0.0257	0.004531
Cu	63	3	He	0.305	0.0124	860.05	0.0257	0.004531
Zn	66	3	He	1.532	0.0073	530.03	0.0029	0.002877
Zn	66	3	He	1.951	0.0085	610.03	0.0029	0.002877
Zn	66	3	He	1.244	0.0065	450.02	0.0029	0.002877
As	75	3	He	0.018	0.0007	52.00	0.002	0.0006798
As	75	3	He	0.201	0.0011	78.00	0.002	0.0006798
As	75	3	He	0.033	0.0007	52.00	0.002	0.0006798
Sr	88	3	He	241.172	2.171	149310.78	0.009	0.001075
Sr	88	3	He	240.93	2.1688	151514.50	0.009	0.001075
Sr	88	3	He	245.29	2.2081	153497.18	0.009	0.001075
Mo	98	3	He	0.28	0.0068	470.02	0.0226	0.0005115
Mo	98	3	He	0.339	0.0082	570.03	0.0226	0.0005115
Mo	98	3	He	0.258	0.0063	440.02	0.0226	0.0005115
Ag	107	3	He	0.03	0.0017	120.00	0.0487	0.0003023
Ag	107	3	He	0.006	0.0006	40.00	0.0487	0.0003023
Ag	107	3	He	0.012	0.0009	60.00	0.0487	0.0003023
Cd	111	3	He	0.02	0.0001	8.00	0.0054	8.618E-06
Cd	111	3	He	0.025	0.0001	10.00	0.0054	8.618E-06
Cd	111	3	He	0.014	0.0001	6.00	0.0054	8.618E-06
Sn	120	3	He	0.236	0.0215	1480.12	0.0161	0.0177
Sn	120	3	He	0.021	0.018	1260.09	0.0161	0.0177
Sn	120	3	He	0.097	0.0193	1340.11	0.0161	0.0177
Sb	121	3	He	0.013	0.0003	20.00	0.0152	8.618E-05
Sb	121	3	He	0.07	0.0011	80.00	0.0152	8.618E-05
Sb	121	3	He	0.042	0.0007	50.00	0.0152	8.618E-05
Ba	137	3	He	24.269	0.1197	8232.78	0.0049	0.0001277
Ba	137	3	He	23.368	0.1153	8052.57	0.0049	0.0001277
Ba	137	3	He	23.571	0.1163	8082.63	0.0049	0.0001277
Tl	205	3	He	0.245	0.0063	2150.24	0.0249	0.000171
Tl	205	3	He	0.245	0.0063	2110.25	0.0249	0.000171
Tl	205	3	He	0.229	0.0059	2000.26	0.0249	0.000171
Pb	208	3	He	0.053	0.0032	630.04	0.0334	0.001456
Pb	208	3	He	0.038	0.0027	580.04	0.0334	0.001456
Pb	208	3	He	0.072	0.0039	690.05	0.0334	0.001456
U	238	3	He	0.208	0.0104	2830.43	0.0493	0.0001028
U	238	3	He	0.223	0.0111	3050.48	0.0493	0.0001028
U	238	3	He	0.236	0.0117	3150.50	0.0493	0.0001028
Sc	45	1	No Gas			2258493.87		
Sc	45	1	No Gas			2222870.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2270904.50		
Ge	72	1	No Gas			1157246.39		
Ge	72	1	No Gas			1148480.69		
Ge	72	1	No Gas			1147857.95		
Sc	45	2	H2			127807.92		
Sc	45	2	H2			122140.19		
Sc	45	2	H2			127111.86		
Ge	72	2	H2			118236.96		
Ge	72	2	H2			115755.91		
Ge	72	2	H2			117713.95		
In	115	2	H2			315163.00		
In	115	2	H2			311530.29		
In	115	2	H2			314046.87		
Sc	45	3	He			37839.76		
Sc	45	3	He			37248.36		
Sc	45	3	He			37900.15		
Ge	72	3	He			72584.78		
Ge	72	3	He			71638.92		
Ge	72	3	He			69529.06		
In	115	3	He			68781.00		
In	115	3	He			69866.16		
In	115	3	He			69524.14		
Tb	159	3	He			342370.07		
Tb	159	3	He			336345.82		
Tb	159	3	He			340740.27		
Bi	209	3	He			273006.66		
Bi	209	3	He			274979.72		
Bi	209	3	He			268645.33		

Quantitation Report

Data File Name	295SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/15/2023 12:01:32 AM
Sample Name	410-135858-Z-40-A DU
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

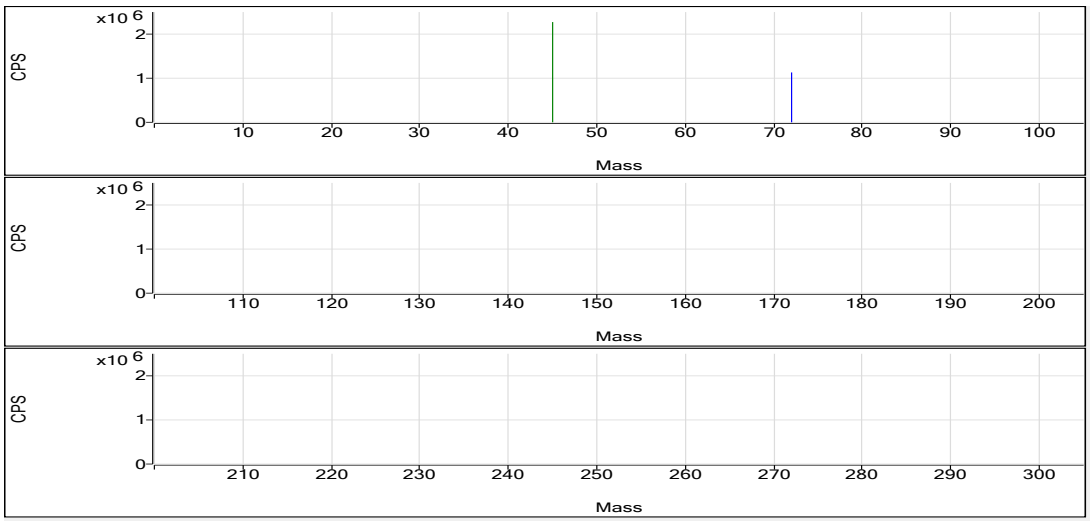
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.006	ppb	44.7	44.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.085	ppb	47.3	5.78	0.0000	Pulse	1.5000	3
Na	23	45	He	78563.600	ppb	0.7	10671121.92	284.4557	Analog	0.1000	3
Mg	24	45	He	10745.384	ppb	0.6	734977.99	19.5918	Pulse	0.1000	3
Al	27	45	He	8.026	ppb	42.9	226.68	0.0060	Pulse	0.1000	3
K	39	45	He	1688.099	ppb	1.3	88748.95	2.3655	Pulse	0.1000	3
Ca	44	45	He	81754.839	ppb	0.5	213448.32	5.6894	Pulse	0.1000	3
Ti	47	45	He	0.166	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.049	ppb	90.7	970.71	0.0259	Pulse	0.5000	3
Cr	52	45	He	0.100	ppb	9.6	1673.48	0.0446	Pulse	0.1000	3
Mn	55	45	He	10174.710	ppb	1.8	4937957.53	131.6375	Analog	0.1000	3
Fe	57	45	He	321.892	ppb	2.8	7205.38	0.1920	Pulse	0.1000	3
Co	59	45	He	1.634	ppb	2.5	3620.56	0.0965	Pulse	0.1000	3
Ni	60	72	He	3.599	ppb	5.4	2356.93	0.0339	Pulse	0.1000	3
Cu	63	72	He	0.369	ppb	17.0	973.40	0.0140	Pulse	0.1000	3
Zn	66	72	He	0.945	ppb	40.1	390.02	0.0056	Pulse	0.1000	3
As	75	72	He	0.147	ppb	66.8	68.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	269.376	ppb	2.2	167955.06	2.4248	Pulse	0.1000	3
Mo	98	115	He	0.253	ppb	13.6	430.02	0.0062	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	93.0	40.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.089	ppb	9.9	34.00	0.0005	Pulse	0.5000	3
Sn	120	115	He	-0.170	ppb	N/A	1036.74	0.0150	Pulse	0.1000	3
Sb	121	115	He	0.057	ppb	39.5	66.67	0.0010	Pulse	0.1000	3
Ba	137	115	He	10.634	ppb	3.4	3640.62	0.0525	Pulse	0.1000	3
Tl	205	159	He	0.080	ppb	8.0	730.05	0.0022	Pulse	0.1000	3
Pb	208	159	He	0.026	ppb	56.2	786.72	0.0023	Pulse	0.1000	3
U	238	209	He	0.506	ppb	2.7	6745.36	0.0251	Pulse	0.1000	3

ISTD Table:

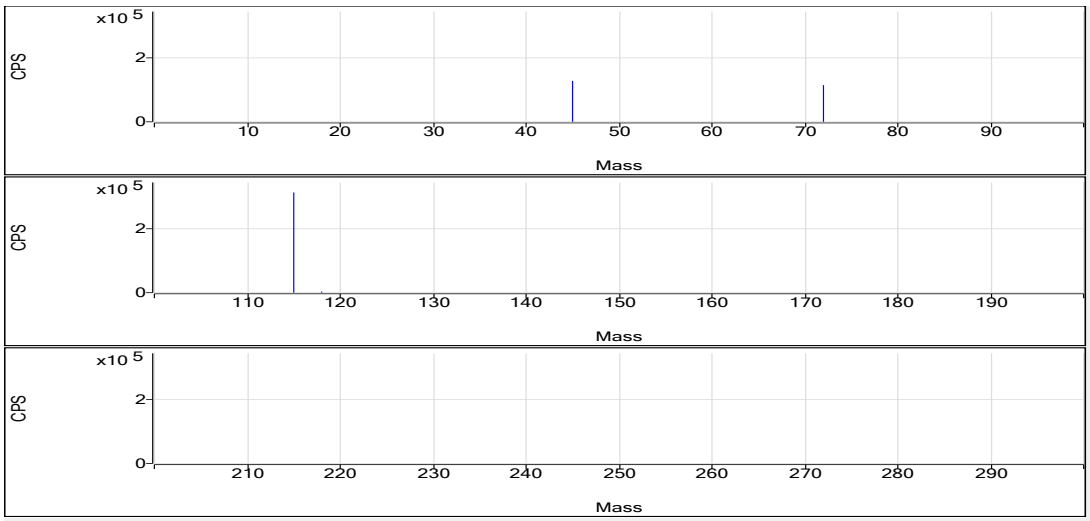
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2266533.71	0.3	94.1	Analog	0.1000	3
No Gas	Ge	72	1127330.19	1.1	97.0	Pulse	0.1000	3
H2	Sc	45	128661.21	1.2	78.3	Pulse	0.1000	3
H2	Ge	72	115161.39	0.9	79.2	Pulse	0.1000	3
H2	In	115	314727.92	1.3	87.5	Pulse	0.1000	3
He	Sc	45	37515.83	1.0	85.7	Pulse	0.1000	3
He	Ge	72	69458.73	0.9	90.8	Pulse	0.1000	3
He	In	115	69287.09	2.2	89.4	Pulse	0.1000	3
He	Tb	159	339375.89	1.1	91.5	Pulse	0.1000	3
He	Bi	209	269015.94	0.7	92.0	Pulse	0.1000	3

No Gas

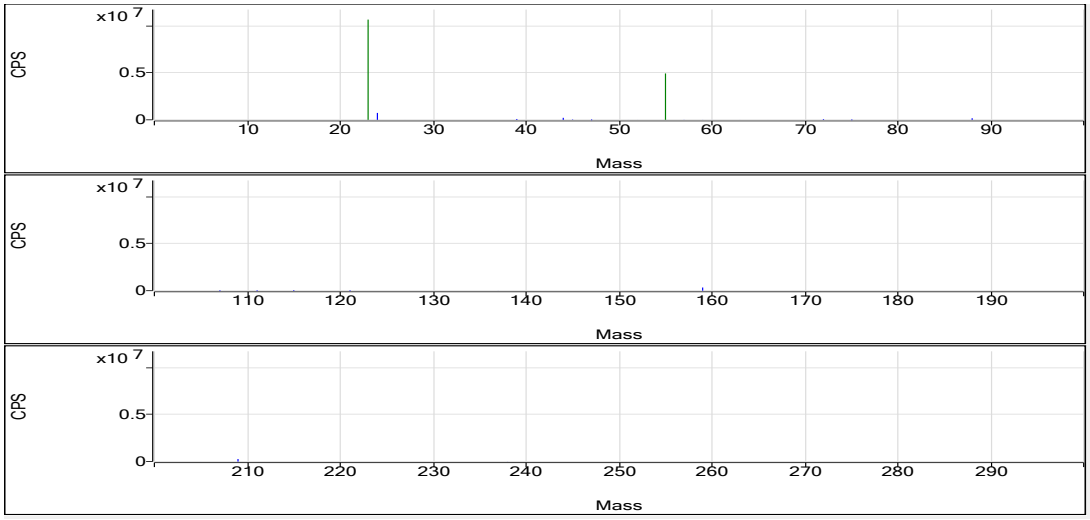


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.004	0	42.00	0.0007	1.523E-05
Be	9	1	No Gas	0.009	0	50.00	0.0007	1.523E-05
Be	9	1	No Gas	0.005	0	42.00	0.0007	1.523E-05
Se	78	2	H2	0.102	0	6.67	0.0002	3.71E-06
Se	78	2	H2	0.113	0	7.33	0.0002	3.71E-06
Se	78	2	H2	0.039	0	3.33	0.0002	3.71E-06
Na	23	3	He	77951.44	282.2416	10708426.09	0.0036	0.3007
Na	23	3	He	78863.073	285.5388	10650184.84	0.0036	0.3007
Na	23	3	He	78876.288	285.5866	10654754.84	0.0036	0.3007
Mg	24	3	He	10682.723	19.4776	738990.85	0.0018	0.003274
Mg	24	3	He	10752.928	19.6055	731258.04	0.0018	0.003274
Mg	24	3	He	10800.503	19.6923	734685.07	0.0018	0.003274
Al	27	3	He	9.429	0.0069	260.01	0.0006	0.00137
Al	27	3	He	4.099	0.0038	140.01	0.0006	0.00137
Al	27	3	He	10.55	0.0075	280.01	0.0006	0.00137
K	39	3	He	1707.812	2.3887	90629.53	0.0012	0.378
K	39	3	He	1693.056	2.3713	88447.77	0.0012	0.378
K	39	3	He	1663.429	2.3365	87169.54	0.0012	0.378
Ca	44	3	He	82186.164	5.7194	216996.99	0.0001	0.003203
Ca	44	3	He	81344.311	5.6608	211140.72	0.0001	0.003203
Ca	44	3	He	81734.041	5.6879	212207.26	0.0001	0.003203
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.499	0.0003	10.00	0.0005	0
V	51	3	He	0.092	0.0268	1018.04	0.0224	0.02476
V	51	3	He	0.003	0.0248	926.04	0.0224	0.02476
V	51	3	He	0.053	0.0259	968.04	0.0224	0.02476
Cr	52	3	He	0.089	0.0443	1680.14	0.0293	0.04167
Cr	52	3	He	0.106	0.0448	1670.14	0.0293	0.04167
Cr	52	3	He	0.106	0.0448	1670.17	0.0293	0.04167
Mn	55	3	He	9980.043	129.1191	4898859.61	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	10210.142	132.0959	4926984.30	0.0129	0.006476
Mn	55	3	He	10333.946	133.6975	4988028.68	0.0129	0.006476
Fe	57	3	He	330.215	0.1969	7472.20	0.0006	0.00213
Fe	57	3	He	312.319	0.1864	6951.94	0.0006	0.00213
Fe	57	3	He	323.142	0.1928	7191.99	0.0006	0.00213
Co	59	3	He	1.68	0.0991	3760.60	0.0572	0.00297
Co	59	3	He	1.621	0.0957	3570.55	0.0572	0.00297
Co	59	3	He	1.602	0.0946	3530.54	0.0572	0.00297
Ni	60	3	He	3.558	0.0336	2350.25	0.0086	0.002921
Ni	60	3	He	3.81	0.0357	2490.27	0.0086	0.002921
Ni	60	3	He	3.428	0.0325	2230.26	0.0086	0.002921
Cu	63	3	He	0.436	0.0157	1100.08	0.0257	0.004531
Cu	63	3	He	0.36	0.0138	960.07	0.0257	0.004531
Cu	63	3	He	0.311	0.0125	860.06	0.0257	0.004531
Zn	66	3	He	1.23	0.0064	450.02	0.0029	0.002877
Zn	66	3	He	1.091	0.006	420.02	0.0029	0.002877
Zn	66	3	He	0.515	0.0044	300.02	0.0029	0.002877
As	75	3	He	0.073	0.0008	58.00	0.002	0.0006798
As	75	3	He	0.258	0.0012	84.00	0.002	0.0006798
As	75	3	He	0.109	0.0009	62.00	0.002	0.0006798
Sr	88	3	He	263.268	2.3698	168270.93	0.009	0.001075
Sr	88	3	He	269.968	2.4301	166836.29	0.009	0.001075
Sr	88	3	He	274.891	2.4744	168757.95	0.009	0.001075
Mo	98	3	He	0.214	0.0054	380.02	0.0226	0.0005115
Mo	98	3	He	0.281	0.0068	470.03	0.0226	0.0005115
Mo	98	3	He	0.263	0.0065	440.02	0.0226	0.0005115
Ag	107	3	He	0	0.0003	20.00	0.0487	0.0003023
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Cd	111	3	He	0.097	0.0005	38.00	0.0054	8.618E-06
Cd	111	3	He	0.09	0.0005	34.00	0.0054	8.618E-06
Cd	111	3	He	0.08	0.0004	30.00	0.0054	8.618E-06
Sn	120	3	He	-0.181	0.0148	1050.08	0.0161	0.0177
Sn	120	3	He	-0.05	0.0169	1160.09	0.0161	0.0177
Sn	120	3	He	-0.279	0.0132	900.06	0.0161	0.0177
Sb	121	3	He	0.078	0.0013	90.00	0.0152	8.618E-05
Sb	121	3	He	0.061	0.001	70.00	0.0152	8.618E-05
Sb	121	3	He	0.033	0.0006	40.00	0.0152	8.618E-05
Ba	137	3	He	10.98	0.0542	3850.68	0.0049	0.0001277
Ba	137	3	He	10.263	0.0507	3480.56	0.0049	0.0001277
Ba	137	3	He	10.659	0.0526	3590.62	0.0049	0.0001277
Tl	205	3	He	0.073	0.002	680.04	0.0249	0.000171
Tl	205	3	He	0.081	0.0022	740.06	0.0249	0.000171
Tl	205	3	He	0.085	0.0023	770.05	0.0249	0.000171
Pb	208	3	He	0.024	0.0023	460.03	0.0334	0.001456
Pb	208	3	He	0.012	0.0019	330.02	0.0334	0.001456
Pb	208	3	He	0.041	0.0028	550.04	0.0334	0.001456
U	238	3	He	0.518	0.0257	6962.20	0.0493	0.0001028
U	238	3	He	0.509	0.0252	6742.01	0.0493	0.0001028
U	238	3	He	0.491	0.0243	6531.88	0.0493	0.0001028
Sc	45	1	No Gas			2270307.93		
Sc	45	1	No Gas			2271318.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2257975.12		
Ge	72	1	No Gas			1130714.05		
Ge	72	1	No Gas			1137825.06		
Ge	72	1	No Gas			1113451.47		
Sc	45	2	H2			128876.09		
Sc	45	2	H2			130026.30		
Sc	45	2	H2			127081.23		
Ge	72	2	H2			114123.08		
Ge	72	2	H2			116169.63		
Ge	72	2	H2			115191.47		
In	115	2	H2			310672.94		
In	115	2	H2			314914.43		
In	115	2	H2			318596.38		
Sc	45	3	He			37940.64		
Sc	45	3	He			37298.55		
Sc	45	3	He			37308.31		
Ge	72	3	He			69990.90		
Ge	72	3	He			69660.19		
Ge	72	3	He			68725.09		
In	115	3	He			71011.55		
In	115	3	He			68659.81		
In	115	3	He			68207.37		
Tb	159	3	He			343450.93		
Tb	159	3	He			338634.02		
Tb	159	3	He			336042.73		
Bi	209	3	He			271177.79		
Bi	209	3	He			267443.51		
Bi	209	3	He			268426.52		

Quantitation Report

Data File Name	296SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/15/2023 12:03:34 AM
Sample Name	410-135858-X-40-A MS
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

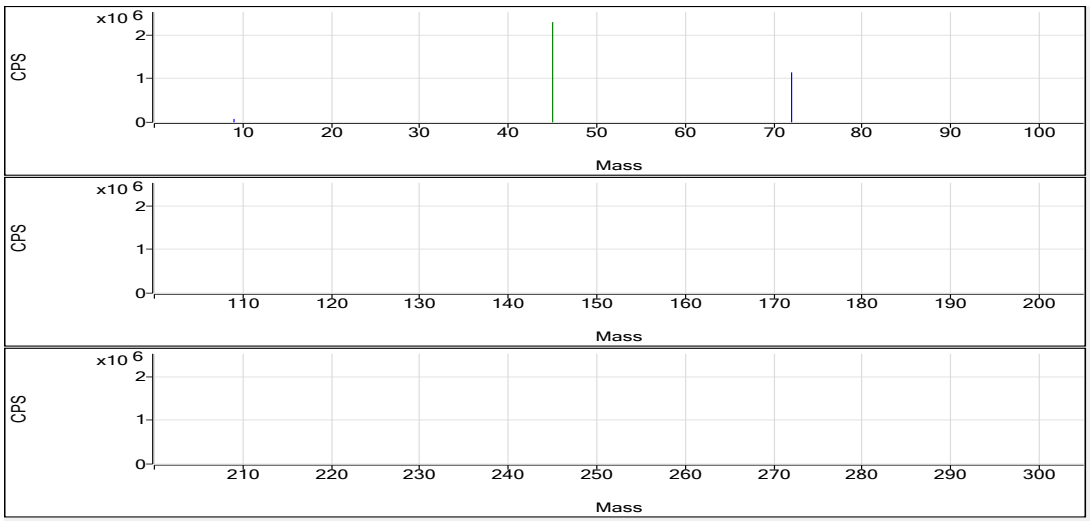
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.707	ppb	1.4	77649.91	0.0339	Pulse	0.5000	3
Se	78	115	H2	95.561	ppb	0.6	5251.64	0.0166	Pulse	1.5000	3
Na	23	45	He	80129.865	ppb	1.2	11098017.33	290.1207	Analog	0.1000	3
Mg	24	45	He	15398.979	ppb	1.7	1073928.81	28.0751	Pulse	0.1000	3
Al	27	45	He	4862.220	ppb	1.4	108216.16	2.8289	Pulse	0.1000	3
K	39	45	He	6496.631	ppb	1.6	307053.11	8.0269	Pulse	0.1000	3
Ca	44	45	He	83795.461	ppb	1.0	223073.23	5.8313	Pulse	0.1000	3
Ti	47	45	He	485.822	ppb	1.5	9977.13	0.2608	Pulse	0.1000	3
V	51	45	He	517.520	ppb	1.1	444370.78	11.6165	Pulse	0.5000	3
Cr	52	45	He	506.082	ppb	0.7	568585.54	14.8630	Pulse	0.1000	3
Mn	55	45	He	10202.262	ppb	1.5	5049063.78	131.9939	Analog	0.1000	3
Fe	57	45	He	5350.750	ppb	2.9	120827.17	3.1589	Pulse	0.1000	3
Co	59	45	He	499.976	ppb	1.4	1094435.40	28.6107	Pulse	0.1000	3
Ni	60	72	He	499.523	ppb	1.7	307098.65	4.3066	Pulse	0.1000	3
Cu	63	72	He	479.880	ppb	1.3	879094.44	12.3274	Pulse	0.1000	3
Zn	66	72	He	508.310	ppb	1.1	104945.76	1.4716	Pulse	0.1000	3
As	75	72	He	502.048	ppb	2.2	73008.70	1.0239	Pulse	0.5000	3
Sr	88	115	He	318.066	ppb	1.3	197567.97	2.8629	Pulse	0.1000	3
Mo	98	115	He	52.809	ppb	1.1	82331.31	1.1930	Pulse	0.1000	3
Ag	107	115	He	51.948	ppb	1.8	174528.85	2.5291	Pulse	0.1000	3
Cd	111	115	He	53.029	ppb	1.0	19852.13	0.2877	Pulse	0.5000	3
Sn	120	115	He	105.096	ppb	0.9	118348.44	1.7148	Pulse	0.1000	3
Sb	121	115	He	105.170	ppb	1.8	110270.97	1.5979	Pulse	0.1000	3
Ba	137	115	He	527.826	ppb	1.0	179489.08	2.6009	Pulse	0.1000	3
Tl	205	159	He	106.684	ppb	0.5	910262.77	2.6583	Pulse	0.1000	3
Pb	208	159	He	52.700	ppb	0.3	603656.34	1.7629	Pulse	0.1000	3
U	238	209	He	54.027	ppb	0.9	712737.75	2.6655	Pulse	0.1000	3

ISTD Table:

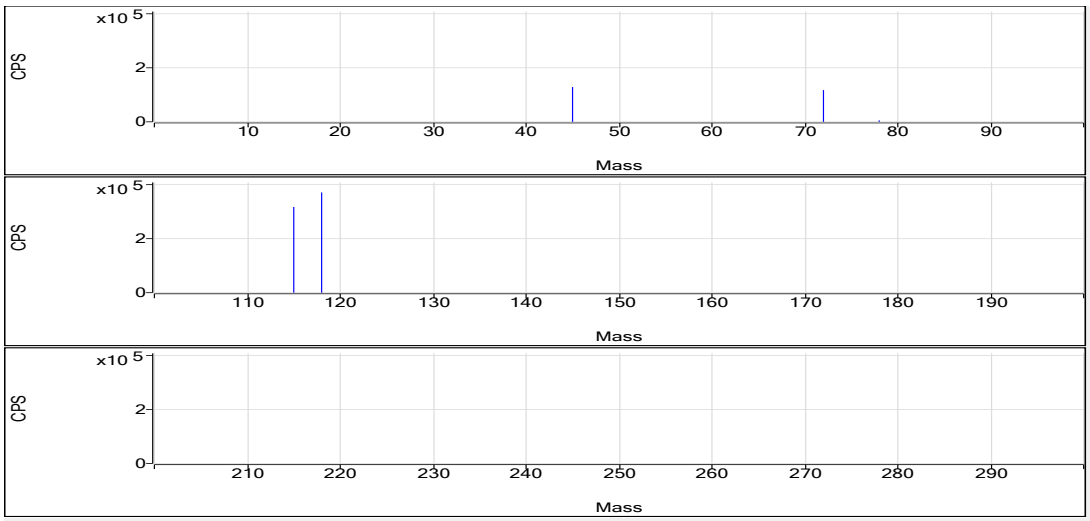
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2293903.46	0.2	95.3	Analog	0.1000	3
No Gas	Ge	72	1142033.86	0.9	98.3	Pulse	0.1000	3
H2	Sc	45	128335.80	1.5	78.1	Pulse	0.1000	3
H2	Ge	72	117107.68	0.4	80.6	Pulse	0.1000	3
H2	In	115	316464.96	0.3	87.9	Pulse	0.1000	3
He	Sc	45	38257.71	1.5	87.4	Pulse	0.1000	3
He	Ge	72	71321.83	1.7	93.2	Pulse	0.1000	3
He	In	115	69013.00	0.5	89.0	Pulse	0.1000	3
He	Tb	159	342428.38	0.3	92.3	Pulse	0.1000	3
He	Bi	209	267392.91	0.4	91.5	Pulse	0.1000	3

No Gas

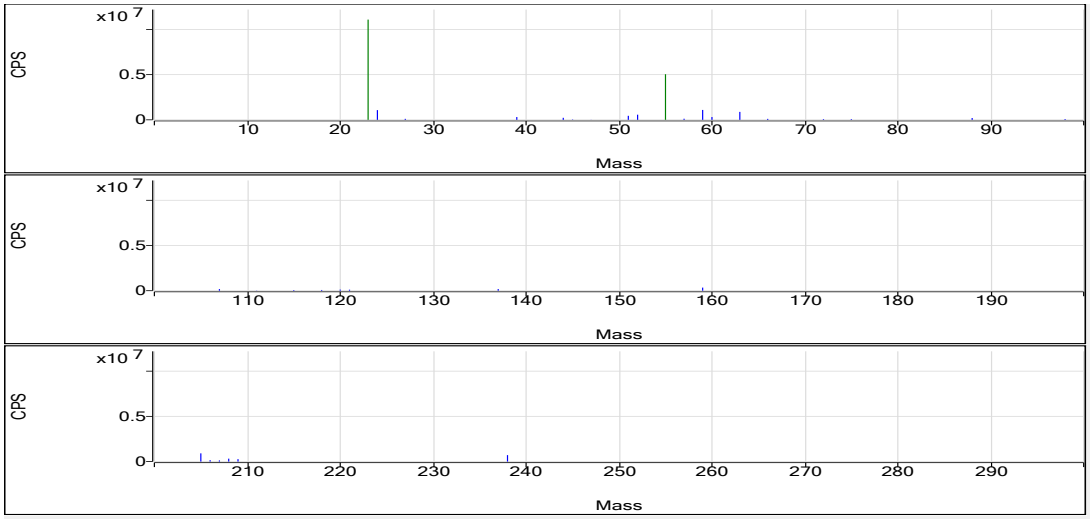


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.587	0.0338	77342.41	0.0007	1.523E-05
Be	9	1	No Gas	45.13	0.0334	76795.49	0.0007	1.523E-05
Be	9	1	No Gas	46.403	0.0344	78811.83	0.0007	1.523E-05
Se	78	2	H2	96.002	0.0167	5257.64	0.0002	3.71E-06
Se	78	2	H2	94.865	0.0165	5213.62	0.0002	3.71E-06
Se	78	2	H2	95.815	0.0166	5283.65	0.0002	3.71E-06
Na	23	3	He	81255.323	294.1913	11084943.58	0.0036	0.3007
Na	23	3	He	79338.942	287.26	11155107.33	0.0036	0.3007
Na	23	3	He	79795.332	288.9107	11054001.09	0.0036	0.3007
Mg	24	3	He	15569.039	28.3852	1069534.98	0.0018	0.003274
Mg	24	3	He	15106.132	27.5413	1069505.30	0.0018	0.003274
Mg	24	3	He	15521.765	28.299	1082746.16	0.0018	0.003274
Al	27	3	He	4880.342	2.8394	106987.56	0.0006	0.00137
Al	27	3	He	4787.065	2.7852	108156.20	0.0006	0.00137
Al	27	3	He	4919.254	2.862	109504.72	0.0006	0.00137
K	39	3	He	6547.655	8.087	304712.20	0.0012	0.378
K	39	3	He	6380.013	7.8896	306375.23	0.0012	0.378
K	39	3	He	6562.226	8.1041	310071.89	0.0012	0.378
Ca	44	3	He	84301.666	5.8665	221046.70	0.0001	0.003203
Ca	44	3	He	82851.922	5.7657	223897.67	0.0001	0.003203
Ca	44	3	He	84232.794	5.8617	224275.33	0.0001	0.003203
Ti	47	3	He	478.8	0.257	9683.63	0.0005	0
Ti	47	3	He	485.218	0.2604	10113.84	0.0005	0
Ti	47	3	He	493.449	0.2649	10133.93	0.0005	0
V	51	3	He	523.441	11.7491	442699.81	0.0224	0.02476
V	51	3	He	511.722	11.4866	446058.00	0.0224	0.02476
V	51	3	He	517.399	11.6138	444354.53	0.0224	0.02476
Cr	52	3	He	508.78	14.942	563006.55	0.0293	0.04167
Cr	52	3	He	501.81	14.7379	572313.62	0.0293	0.04167
Cr	52	3	He	507.656	14.9091	570436.44	0.0293	0.04167
Mn	55	3	He	10324.488	133.5752	5033028.05	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	10034.244	129.8203	5041282.74	0.0129	0.006476
Mn	55	3	He	10248.054	132.5863	5072880.55	0.0129	0.006476
Fe	57	3	He	5393.077	3.1838	119965.22	0.0006	0.00213
Fe	57	3	He	5180.039	3.0582	118756.87	0.0006	0.00213
Fe	57	3	He	5479.133	3.2346	123759.43	0.0006	0.00213
Co	59	3	He	505.669	28.9365	1090308.34	0.0572	0.00297
Co	59	3	He	492.383	28.1763	1094164.05	0.0572	0.00297
Co	59	3	He	501.876	28.7195	1098833.81	0.0572	0.00297
Ni	60	3	He	508.88	4.3873	306632.34	0.0086	0.002921
Ni	60	3	He	492.071	4.2424	306060.07	0.0086	0.002921
Ni	60	3	He	497.617	4.2902	308603.55	0.0086	0.002921
Cu	63	3	He	486.114	12.4875	872770.07	0.0257	0.004531
Cu	63	3	He	473.963	12.1755	878368.35	0.0257	0.004531
Cu	63	3	He	479.562	12.3193	886144.91	0.0257	0.004531
Zn	66	3	He	514.907	1.4907	104186.79	0.0029	0.002877
Zn	66	3	He	505.238	1.4628	105526.63	0.0029	0.002877
Zn	66	3	He	504.783	1.4614	105123.87	0.0029	0.002877
As	75	3	He	514.742	1.0498	73370.52	0.002	0.0006798
As	75	3	He	497.387	1.0144	73181.64	0.002	0.0006798
As	75	3	He	494.017	1.0075	72473.94	0.002	0.0006798
Sr	88	3	He	318.111	2.8633	198152.75	0.009	0.001075
Sr	88	3	He	322.209	2.9001	199076.54	0.009	0.001075
Sr	88	3	He	313.877	2.8252	195474.61	0.009	0.001075
Mo	98	3	He	52.68	1.1901	82361.28	0.0226	0.0005115
Mo	98	3	He	53.422	1.2069	82844.40	0.0226	0.0005115
Mo	98	3	He	52.324	1.1821	81788.26	0.0226	0.0005115
Ag	107	3	He	51.038	2.4848	171957.60	0.0487	0.0003023
Ag	107	3	He	52.904	2.5756	176797.38	0.0487	0.0003023
Ag	107	3	He	51.903	2.5268	174831.56	0.0487	0.0003023
Cd	111	3	He	52.417	0.2843	19677.91	0.0054	8.618E-06
Cd	111	3	He	53.432	0.2898	19896.19	0.0054	8.618E-06
Cd	111	3	He	53.239	0.2888	19982.30	0.0054	8.618E-06
Sn	120	3	He	104.933	1.7122	118492.82	0.0161	0.0177
Sn	120	3	He	104.2	1.7004	116719.10	0.0161	0.0177
Sn	120	3	He	106.155	1.7319	119833.40	0.0161	0.0177
Sb	121	3	He	103.25	1.5687	108564.77	0.0152	8.618E-05
Sb	121	3	He	106.954	1.625	111546.39	0.0152	8.618E-05
Sb	121	3	He	105.306	1.6	110701.76	0.0152	8.618E-05
Ba	137	3	He	525.731	2.5906	179279.96	0.0049	0.0001277
Ba	137	3	He	533.812	2.6304	180558.38	0.0049	0.0001277
Ba	137	3	He	523.934	2.5817	178628.90	0.0049	0.0001277
Tl	205	3	He	106.057	2.6427	908277.72	0.0249	0.000171
Tl	205	3	He	106.848	2.6624	911055.30	0.0249	0.000171
Tl	205	3	He	107.148	2.6698	911455.30	0.0249	0.000171
Pb	208	3	He	52.674	1.762	322984.59	0.0334	0.001456
Pb	208	3	He	52.544	1.7576	322246.19	0.0334	0.001456
Pb	208	3	He	52.883	1.769	320770.15	0.0334	0.001456
U	238	3	He	53.539	2.6414	705046.08	0.0493	0.0001028
U	238	3	He	54.514	2.6895	717328.11	0.0493	0.0001028
U	238	3	He	54.028	2.6656	715839.05	0.0493	0.0001028
Sc	45	1	No Gas			2290817.00		
Sc	45	1	No Gas			2297618.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2293274.50		
Ge	72	1	No Gas			1134474.98		
Ge	72	1	No Gas			1138389.90		
Ge	72	1	No Gas			1153236.70		
Sc	45	2	H2			126426.64		
Sc	45	2	H2			128361.98		
Sc	45	2	H2			130218.77		
Ge	72	2	H2			116634.25		
Ge	72	2	H2			117167.50		
Ge	72	2	H2			117521.30		
In	115	2	H2			315370.03		
In	115	2	H2			316476.56		
In	115	2	H2			317548.28		
Sc	45	3	He			37679.37		
Sc	45	3	He			38832.79		
Sc	45	3	He			38260.96		
Ge	72	3	He			69891.45		
Ge	72	3	He			72142.32		
Ge	72	3	He			71931.71		
In	115	3	He			69816.63		
In	115	3	He			69283.01		
In	115	3	He			69825.83		
Tb	159	3	He			343698.04		
Tb	159	3	He			342198.71		
Tb	159	3	He			341388.39		
Bi	209	3	He			266919.08		
Bi	209	3	He			266711.46		
Bi	209	3	He			268548.20		

Quantitation Report

Data File Name	297SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/15/2023 12:05:40 AM
Sample Name	410-135858-Y-40-A MSD
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

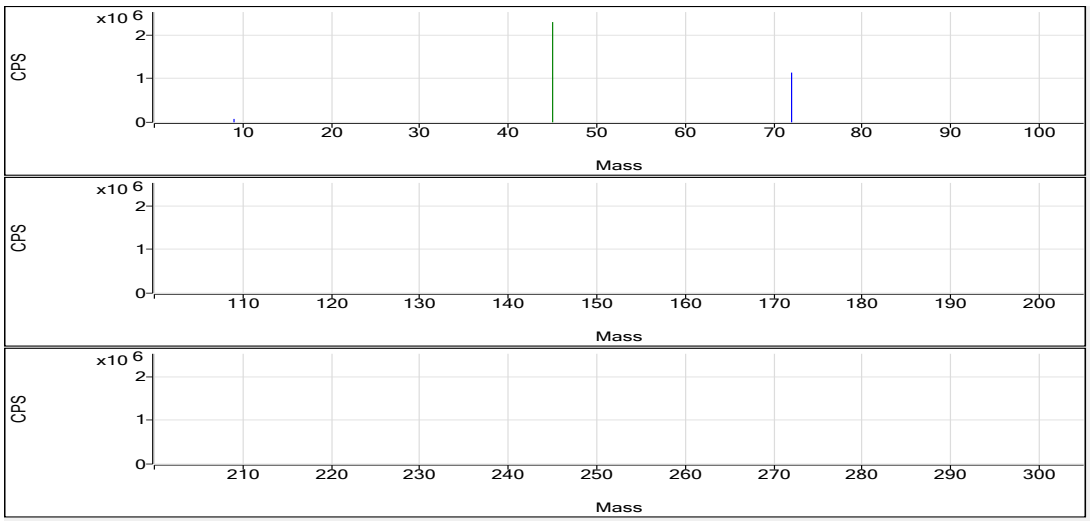
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.557	ppb	1.5	77189.59	0.0337	Pulse	0.5000	3
Se	78	115	H2	95.261	ppb	1.4	5228.74	0.0165	Pulse	1.5000	3
Na	23	45	He	80829.904	ppb	3.7	11246454.83	292.6526	Analog	0.1000	3
Mg	24	45	He	15771.782	ppb	4.7	1104767.51	28.7548	Mix	0.1000	3
Al	27	45	He	4888.155	ppb	4.3	109273.96	2.8440	Pulse	0.1000	3
K	39	45	He	6500.228	ppb	3.0	308674.11	8.0311	Pulse	0.1000	3
Ca	44	45	He	84044.216	ppb	2.4	224814.18	5.8486	Pulse	0.1000	3
Ti	47	45	He	505.500	ppb	5.6	10430.73	0.2713	Pulse	0.1000	3
V	51	45	He	516.154	ppb	3.4	445248.33	11.5859	Pulse	0.5000	3
Cr	52	45	He	503.660	ppb	3.8	568414.82	14.7921	Pulse	0.1000	3
Mn	55	45	He	11427.227	ppb	3.5	5681398.88	147.8414	Analog	0.1000	3
Fe	57	45	He	5444.418	ppb	3.5	123518.80	3.2141	Pulse	0.1000	3
Co	59	45	He	499.506	ppb	2.9	1098603.08	28.5838	Pulse	0.1000	3
Ni	60	72	He	502.134	ppb	1.5	306765.06	4.3291	Pulse	0.1000	3
Cu	63	72	He	481.888	ppb	1.5	877155.92	12.3790	Pulse	0.1000	3
Zn	66	72	He	507.088	ppb	1.6	104025.73	1.4681	Pulse	0.1000	3
As	75	72	He	510.486	ppb	2.2	73767.35	1.0411	Pulse	0.5000	3
Sr	88	115	He	320.672	ppb	0.9	199615.64	2.8863	Pulse	0.1000	3
Mo	98	115	He	53.986	ppb	2.2	84329.16	1.2196	Pulse	0.1000	3
Ag	107	115	He	51.907	ppb	1.4	174752.31	2.5270	Pulse	0.1000	3
Cd	111	115	He	53.293	ppb	2.6	19988.33	0.2891	Pulse	0.5000	3
Sn	120	115	He	106.482	ppb	2.0	120124.88	1.7372	Pulse	0.1000	3
Sb	121	115	He	104.664	ppb	1.9	109995.89	1.5902	Pulse	0.1000	3
Ba	137	115	He	529.358	ppb	1.7	180381.40	2.6084	Pulse	0.1000	3
Tl	205	159	He	107.115	ppb	0.5	910439.94	2.6690	Pulse	0.1000	3
Pb	208	159	He	52.800	ppb	0.1	602477.18	1.7662	Pulse	0.1000	3
U	238	209	He	53.315	ppb	0.9	710590.93	2.6304	Pulse	0.1000	3

ISTD Table:

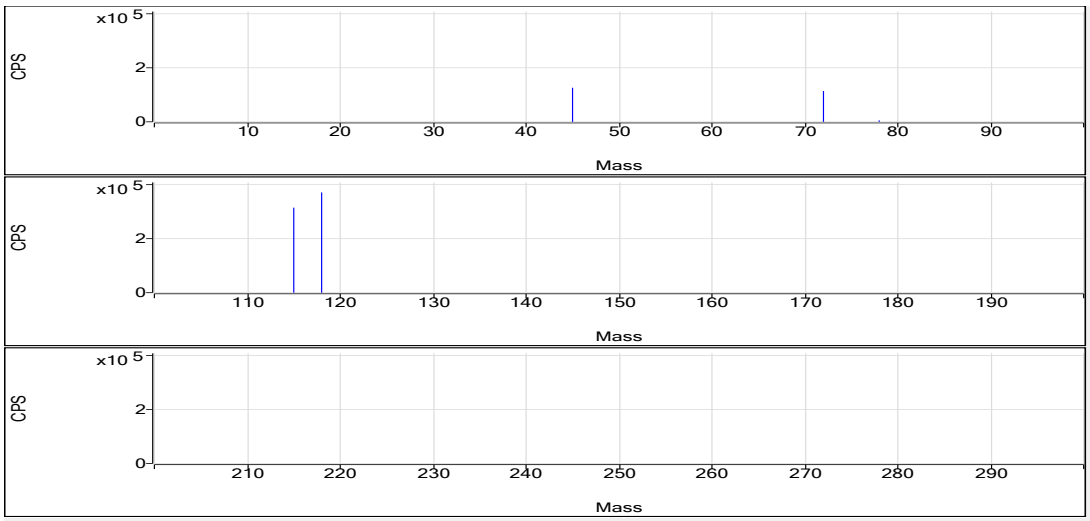
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2288173.66	1.7	95.0	Analog	0.1000	3
No Gas	Ge	72	1134742.54	0.5	97.7	Pulse	0.1000	3
H2	Sc	45	126584.60	1.4	77.0	Pulse	0.1000	3
H2	Ge	72	114384.60	1.1	78.7	Pulse	0.1000	3
H2	In	115	316066.56	0.6	87.8	Pulse	0.1000	3
He	Sc	45	38458.26	3.2	87.9	Pulse	0.1000	3
He	Ge	72	70869.13	1.5	92.6	Pulse	0.1000	3
He	In	115	69165.32	2.0	89.2	Pulse	0.1000	3
He	Tb	159	341113.35	0.1	92.0	Pulse	0.1000	3
He	Bi	209	270156.60	0.7	92.4	Pulse	0.1000	3

No Gas

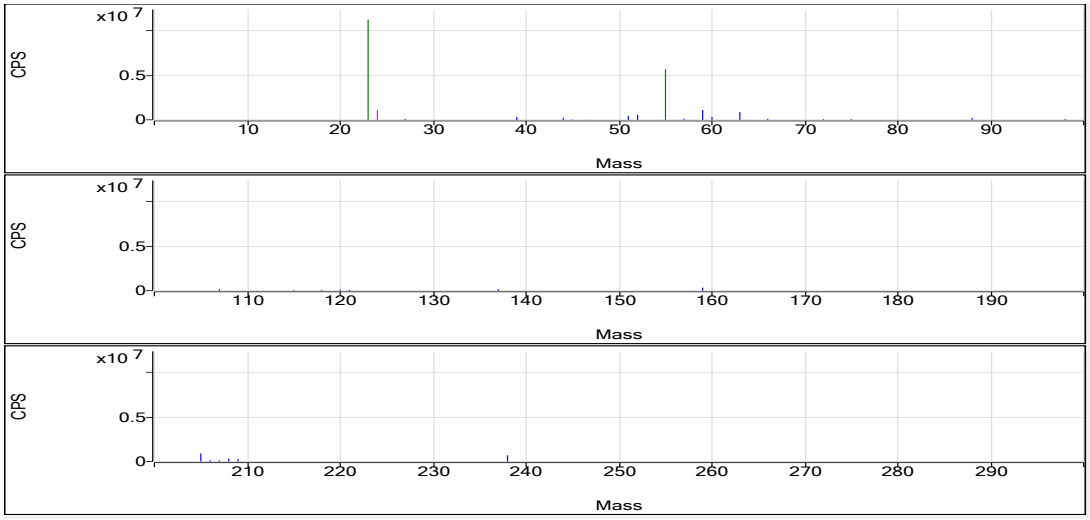


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	46.275	0.0343	77207.59	0.0007	1.523E-05
Be	9	1	No Gas	45.527	0.0337	76954.55	0.0007	1.523E-05
Be	9	1	No Gas	44.869	0.0332	77406.62	0.0007	1.523E-05
Se	78	2	H2	94.159	0.0164	5132.93	0.0002	3.71E-06
Se	78	2	H2	94.84	0.0165	5226.96	0.0002	3.71E-06
Se	78	2	H2	96.783	0.0168	5326.33	0.0002	3.71E-06
Na	23	3	He	79876.743	289.2052	11369704.83	0.0036	0.3007
Na	23	3	He	84194.035	304.8203	11286791.08	0.0036	0.3007
Na	23	3	He	78418.934	283.9324	11082868.58	0.0036	0.3007
Mg	24	3	He	15119.516	27.5657	1083707.48	0.0018	0.003274
Mg	24	3	He	16575.308	30.2196	1118960.45	0.0018	0.003274
Mg	24	3	He	15620.521	28.479	1111634.59	0.0018	0.003274
Al	27	3	He	4768.996	2.7747	109082.33	0.0006	0.00137
Al	27	3	He	5128.575	2.9838	110482.28	0.0006	0.00137
Al	27	3	He	4766.894	2.7734	108257.27	0.0006	0.00137
K	39	3	He	6351.931	7.8565	308869.08	0.0012	0.378
K	39	3	He	6720.28	8.2902	306967.71	0.0012	0.378
K	39	3	He	6428.472	7.9467	310185.54	0.0012	0.378
Ca	44	3	He	83201.499	5.79	227625.90	0.0001	0.003203
Ca	44	3	He	86362.467	6.0098	222530.86	0.0001	0.003203
Ca	44	3	He	82568.683	5.746	224285.78	0.0001	0.003203
Ti	47	3	He	474.064	0.2545	10003.70	0.0005	0
Ti	47	3	He	512.903	0.2753	10193.93	0.0005	0
Ti	47	3	He	529.533	0.2842	11094.57	0.0005	0
V	51	3	He	504.331	11.3211	445073.31	0.0224	0.02476
V	51	3	He	536.238	12.0358	445656.91	0.0224	0.02476
V	51	3	He	507.892	11.4009	445014.78	0.0224	0.02476
Cr	52	3	He	491.538	14.4371	567574.13	0.0293	0.04167
Cr	52	3	He	525.601	15.4346	571509.33	0.0293	0.04167
Cr	52	3	He	493.84	14.5045	566161.01	0.0293	0.04167
Mn	55	3	He	11195.412	144.8424	5694279.92	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	11894.764	153.8899	5698189.29	0.0129	0.006476
Mn	55	3	He	11191.504	144.7918	5651727.42	0.0129	0.006476
Fe	57	3	He	5347.865	3.1572	124119.83	0.0006	0.00213
Fe	57	3	He	5662.095	3.3426	123767.07	0.0006	0.00213
Fe	57	3	He	5323.295	3.1427	122669.51	0.0006	0.00213
Co	59	3	He	490.726	28.0815	1103984.20	0.0572	0.00297
Co	59	3	He	516.074	29.5318	1093495.06	0.0572	0.00297
Co	59	3	He	491.717	28.1382	1098329.98	0.0572	0.00297
Ni	60	3	He	507.241	4.3731	309996.21	0.0086	0.002921
Ni	60	3	He	493.477	4.2546	306119.37	0.0086	0.002921
Ni	60	3	He	505.685	4.3597	304179.59	0.0086	0.002921
Cu	63	3	He	481.102	12.3588	876070.22	0.0257	0.004531
Cu	63	3	He	475.194	12.2071	878311.94	0.0257	0.004531
Cu	63	3	He	489.368	12.5711	877085.61	0.0257	0.004531
Zn	66	3	He	507.37	1.4689	104125.99	0.0029	0.002877
Zn	66	3	He	498.688	1.4438	103884.79	0.0029	0.002877
Zn	66	3	He	515.207	1.4916	104066.41	0.0029	0.002877
As	75	3	He	516.559	1.0535	74677.41	0.002	0.0006798
As	75	3	He	497.369	1.0144	72984.80	0.002	0.0006798
As	75	3	He	517.531	1.0555	73639.85	0.002	0.0006798
Sr	88	3	He	322.598	2.9036	201536.68	0.009	0.001075
Sr	88	3	He	317.346	2.8564	201064.57	0.009	0.001075
Sr	88	3	He	322.07	2.8989	196245.68	0.009	0.001075
Mo	98	3	He	54.001	1.2199	84674.43	0.0226	0.0005115
Mo	98	3	He	52.766	1.1921	83910.47	0.0226	0.0005115
Mo	98	3	He	55.189	1.2468	84402.58	0.0226	0.0005115
Ag	107	3	He	51.995	2.5313	175693.71	0.0487	0.0003023
Ag	107	3	He	51.142	2.4898	175259.90	0.0487	0.0003023
Ag	107	3	He	52.584	2.56	173303.32	0.0487	0.0003023
Cd	111	3	He	53.046	0.2878	19972.33	0.0054	8.618E-06
Cd	111	3	He	52.022	0.2822	19864.15	0.0054	8.618E-06
Cd	111	3	He	54.812	0.2973	20128.51	0.0054	8.618E-06
Sn	120	3	He	106.802	1.7424	120935.62	0.0161	0.0177
Sn	120	3	He	104.205	1.7004	119695.65	0.0161	0.0177
Sn	120	3	He	108.439	1.7688	119743.37	0.0161	0.0177
Sb	121	3	He	102.594	1.5588	108191.08	0.0152	8.618E-05
Sb	121	3	He	106.61	1.6198	114018.09	0.0152	8.618E-05
Sb	121	3	He	104.787	1.5921	107778.50	0.0152	8.618E-05
Ba	137	3	He	521.679	2.5706	178419.86	0.0049	0.0001277
Ba	137	3	He	527.098	2.5973	182826.56	0.0049	0.0001277
Ba	137	3	He	539.298	2.6574	179897.77	0.0049	0.0001277
Tl	205	3	He	107.138	2.6696	912125.85	0.0249	0.000171
Tl	205	3	He	107.593	2.6809	913424.83	0.0249	0.000171
Tl	205	3	He	106.614	2.6565	905769.13	0.0249	0.000171
Pb	208	3	He	52.759	1.7648	322572.65	0.0334	0.001456
Pb	208	3	He	52.888	1.7692	321742.73	0.0334	0.001456
Pb	208	3	He	52.753	1.7646	317495.66	0.0334	0.001456
U	238	3	He	53.766	2.6526	712923.11	0.0493	0.0001028
U	238	3	He	53.364	2.6328	709074.91	0.0493	0.0001028
U	238	3	He	52.816	2.6058	709774.76	0.0493	0.0001028
Sc	45	1	No Gas			2252839.81		
Sc	45	1	No Gas			2282290.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2329390.75		
Ge	72	1	No Gas			1138143.97		
Ge	72	1	No Gas			1127879.36		
Ge	72	1	No Gas			1138204.28		
Sc	45	2	H2			126598.67		
Sc	45	2	H2			124842.32		
Sc	45	2	H2			128312.80		
Ge	72	2	H2			113728.71		
Ge	72	2	H2			113649.14		
Ge	72	2	H2			115775.95		
In	115	2	H2			313914.55		
In	115	2	H2			317371.48		
In	115	2	H2			316913.65		
Sc	45	3	He			39313.63		
Sc	45	3	He			37027.69		
Sc	45	3	He			39033.47		
Ge	72	3	He			70886.30		
Ge	72	3	He			71950.91		
Ge	72	3	He			69770.18		
In	115	3	He			70047.12		
In	115	3	He			71021.96		
In	115	3	He			68318.10		
Tb	159	3	He			341672.34		
Tb	159	3	He			340710.58		
Tb	159	3	He			340957.14		
Bi	209	3	He			268761.17		
Bi	209	3	He			269323.16		
Bi	209	3	He			272385.46		

Quantitation Report

Data File Name	299_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H14B00.b
Acq Time	8/15/2023 12:09:46 AM
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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

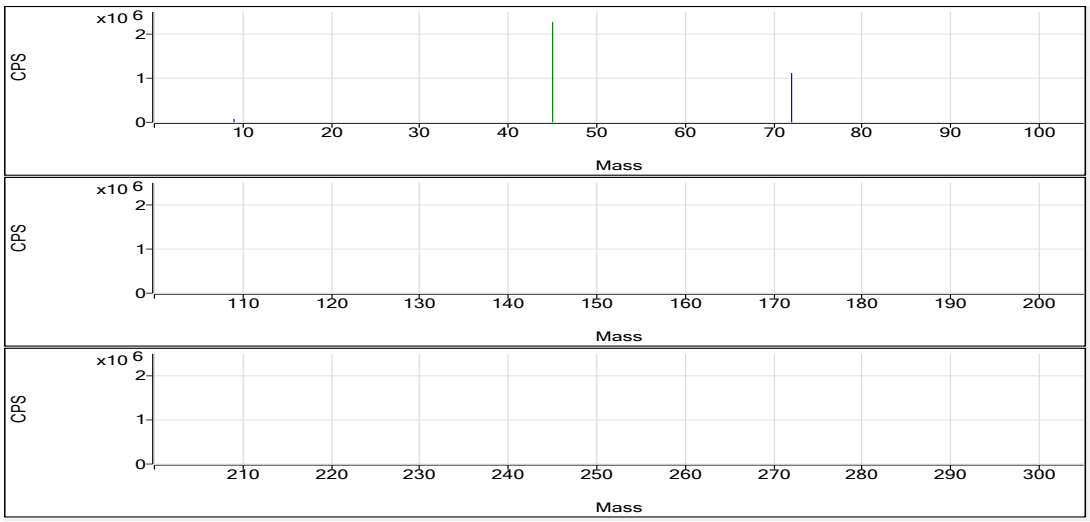
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	44.818	ppb	1.3	75560.84	0.0332	Pulse	0.5000	3
Se	78	115	H2	47.679	ppb	0.8	2630.91	0.0083	Pulse	1.5000	3
Na	23	45	He	4960.026	ppb	2.0	686291.03	18.2405	Pulse	0.1000	3
Mg	24	45	He	5010.993	ppb	1.0	343856.38	9.1382	Pulse	0.1000	3
Al	27	45	He	4754.434	ppb	2.3	104072.38	2.7662	Pulse	0.1000	3
K	39	45	He	4882.554	ppb	0.4	230550.47	6.1265	Pulse	0.1000	3
Ca	44	45	He	4853.121	ppb	2.5	12822.69	0.3407	Pulse	0.1000	3
Ti	47	45	He	4886.792	ppb	1.3	98700.88	2.6230	Pulse	0.1000	3
V	51	45	He	509.103	ppb	1.7	429983.99	11.4280	Pulse	0.5000	3
Cr	52	45	He	507.972	ppb	2.3	561273.14	14.9184	Pulse	0.1000	3
Mn	55	45	He	501.608	ppb	2.6	244382.73	6.4958	Pulse	0.1000	3
Fe	57	45	He	5086.954	ppb	2.5	112993.78	3.0032	Pulse	0.1000	3
Co	59	45	He	504.903	ppb	1.7	1087107.02	28.8926	Pulse	0.1000	3
Ni	60	72	He	511.478	ppb	1.8	303931.40	4.4096	Pulse	0.1000	3
Cu	63	72	He	491.977	ppb	2.0	871058.81	12.6381	Pulse	0.1000	3
Zn	66	72	He	513.786	ppb	2.0	102521.40	1.4875	Pulse	0.1000	3
As	75	72	He	505.540	ppb	1.8	71063.23	1.0310	Pulse	0.5000	3
Sr	88	115	He	48.596	ppb	0.6	29989.34	0.4383	Pulse	0.1000	3
Mo	98	115	He	52.790	ppb	2.1	81590.98	1.1926	Pulse	0.1000	3
Ag	107	115	He	54.285	ppb	0.9	180815.29	2.6428	Pulse	0.1000	3
Cd	111	115	He	53.179	ppb	0.3	19737.97	0.2885	Pulse	0.5000	3
Sn	120	115	He	52.562	ppb	1.7	59281.00	0.8665	Pulse	0.1000	3
Sb	121	115	He	51.384	ppb	0.6	53420.53	0.7807	Pulse	0.1000	3
Ba	137	115	He	507.034	ppb	0.4	170942.10	2.4984	Pulse	0.1000	3
Tl	205	159	He	52.758	ppb	0.9	450545.40	1.3147	Pulse	0.1000	3
Pb	208	159	He	52.335	ppb	1.7	599927.96	1.7507	Pulse	0.1000	3
U	238	209	He	50.887	ppb	1.7	688426.55	2.5106	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2276627.73	1.3	94.6	Analog	0.1000	3
No Gas	Ge	72	1116528.08	0.8	96.1	Pulse	0.1000	3
H2	Sc	45	126621.73	0.8	77.0	Pulse	0.1000	3
H2	Ge	72	112124.55	0.6	77.1	Pulse	0.1000	3
H2	In	115	317681.49	0.4	88.3	Pulse	0.1000	3
He	Sc	45	37632.87	1.8	86.0	Pulse	0.1000	3
He	Ge	72	68940.06	1.9	90.1	Pulse	0.1000	3
He	In	115	68421.15	0.8	88.3	Pulse	0.1000	3
He	Tb	159	342728.32	1.2	92.4	Pulse	0.1000	3
He	Bi	209	274234.42	0.9	93.8	Pulse	0.1000	3

No Gas



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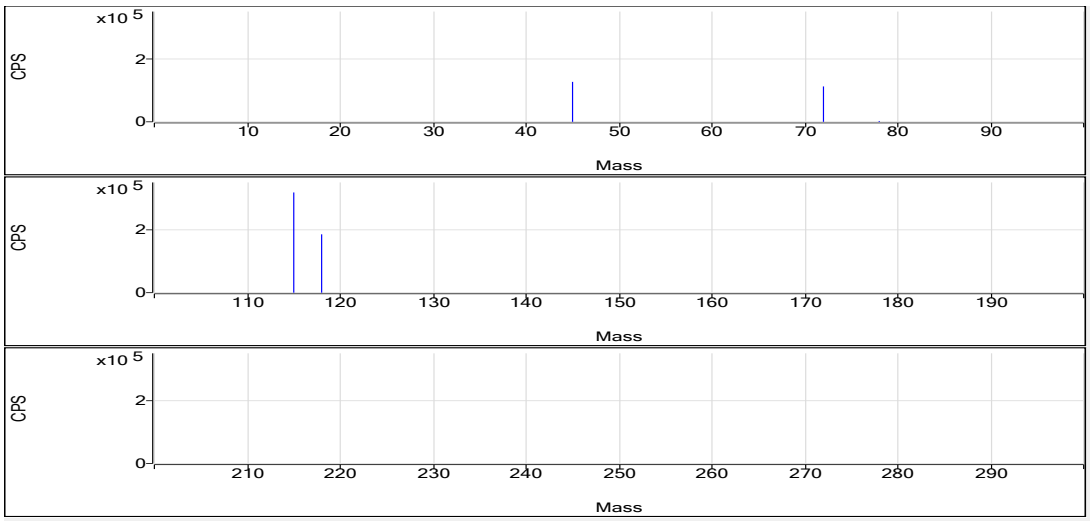
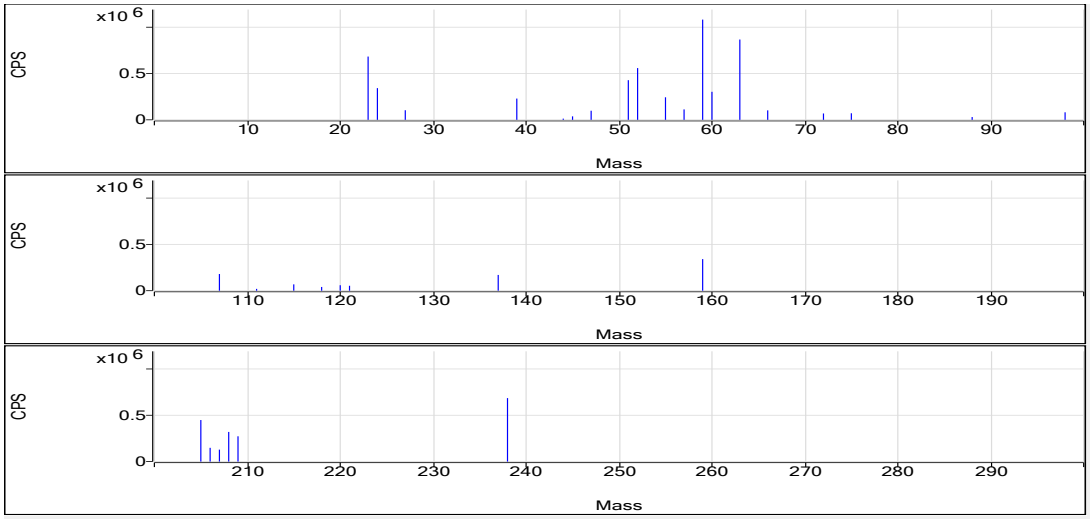


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	44.208	0.0327	75648.07	0.0007	1.523E-05
Be	9	1	No Gas	45.408	0.0336	76025.88	0.0007	1.523E-05
Be	9	1	No Gas	44.838	0.0332	75008.56	0.0007	1.523E-05
Se	78	2	H2	47.315	0.0082	2605.58	0.0002	3.71E-06
Se	78	2	H2	47.644	0.0083	2641.58	0.0002	3.71E-06
Se	78	2	H2	48.078	0.0084	2645.58	0.0002	3.71E-06
Na	23	3	He	4873.595	17.9279	681992.96	0.0036	0.3007
Na	23	3	He	5067.119	18.6278	686756.24	0.0036	0.3007
Na	23	3	He	4939.365	18.1657	690123.90	0.0036	0.3007
Mg	24	3	He	4968.833	9.0613	344700.78	0.0018	0.003274
Mg	24	3	He	5066.087	9.2386	340601.64	0.0018	0.003274
Mg	24	3	He	4998.058	9.1146	346266.71	0.0018	0.003274
Al	27	3	He	4668.614	2.7163	103330.45	0.0006	0.00137
Al	27	3	He	4877.911	2.838	104629.50	0.0006	0.00137
Al	27	3	He	4716.777	2.7443	104257.19	0.0006	0.00137
K	39	3	He	4865.854	6.1069	232311.75	0.0012	0.378
K	39	3	He	4902.471	6.15	226733.45	0.0012	0.378
K	39	3	He	4879.339	6.1228	232606.21	0.0012	0.378
Ca	44	3	He	4960.539	0.3482	13246.47	0.0001	0.003203
Ca	44	3	He	4877.86	0.3425	12625.76	0.0001	0.003203
Ca	44	3	He	4720.964	0.3316	12595.84	0.0001	0.003203
Ti	47	3	He	4896.095	2.628	99972.72	0.0005	0
Ti	47	3	He	4944.164	2.6538	97839.40	0.0005	0
Ti	47	3	He	4820.116	2.5872	98290.52	0.0005	0
V	51	3	He	505.284	11.3424	431476.88	0.0224	0.02476
V	51	3	He	518.884	11.6471	429395.19	0.0224	0.02476
V	51	3	He	503.141	11.2944	429079.91	0.0224	0.02476
Cr	52	3	He	501.257	14.7217	560027.88	0.0293	0.04167
Cr	52	3	He	521.196	15.3056	564276.98	0.0293	0.04167
Cr	52	3	He	501.465	14.7278	559514.56	0.0293	0.04167
Mn	55	3	He	492.403	6.3767	242576.81	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	516.365	6.6867	246521.42	0.0129	0.006476
Mn	55	3	He	496.056	6.424	244049.96	0.0129	0.006476
Fe	57	3	He	5092.969	3.0068	114381.22	0.0006	0.00213
Fe	57	3	He	5208.921	3.0752	113374.12	0.0006	0.00213
Fe	57	3	He	4958.973	2.9277	111226.00	0.0006	0.00213
Co	59	3	He	497.892	28.4915	1083844.28	0.0572	0.00297
Co	59	3	He	514.164	29.4225	1084726.94	0.0572	0.00297
Co	59	3	He	502.652	28.7638	1092749.83	0.0572	0.00297
Ni	60	3	He	503.011	4.3367	303707.73	0.0086	0.002921
Ni	60	3	He	509.826	4.3954	304553.28	0.0086	0.002921
Ni	60	3	He	521.596	4.4968	303533.20	0.0086	0.002921
Cu	63	3	He	486.237	12.4907	874746.39	0.0257	0.004531
Cu	63	3	He	486.346	12.4935	865658.11	0.0257	0.004531
Cu	63	3	He	503.348	12.9301	872771.94	0.0257	0.004531
Zn	66	3	He	509.292	1.4745	103259.84	0.0029	0.002877
Zn	66	3	He	506.364	1.466	101577.90	0.0029	0.002877
Zn	66	3	He	525.702	1.5219	102726.46	0.0029	0.002877
As	75	3	He	498.697	1.0171	71227.91	0.002	0.0006798
As	75	3	He	502.385	1.0246	70992.91	0.002	0.0006798
As	75	3	He	515.537	1.0514	70968.88	0.002	0.0006798
Sr	88	3	He	48.838	0.4405	29892.47	0.009	0.001075
Sr	88	3	He	48.305	0.4357	30052.80	0.009	0.001075
Sr	88	3	He	48.645	0.4388	30022.74	0.009	0.001075
Mo	98	3	He	54.046	1.221	82855.51	0.0226	0.0005115
Mo	98	3	He	51.97	1.1741	80984.09	0.0226	0.0005115
Mo	98	3	He	52.355	1.1828	80933.34	0.0226	0.0005115
Ag	107	3	He	54.774	2.6666	180960.08	0.0487	0.0003023
Ag	107	3	He	53.786	2.6185	180614.98	0.0487	0.0003023
Ag	107	3	He	54.295	2.6433	180870.82	0.0487	0.0003023
Cd	111	3	He	53.003	0.2875	19511.62	0.0054	8.618E-06
Cd	111	3	He	53.292	0.2891	19940.28	0.0054	8.618E-06
Cd	111	3	He	53.24	0.2888	19762.01	0.0054	8.618E-06
Sn	120	3	He	53.354	0.8793	59669.54	0.0161	0.0177
Sn	120	3	He	51.581	0.8507	58674.96	0.0161	0.0177
Sn	120	3	He	52.75	0.8695	59498.50	0.0161	0.0177
Sb	121	3	He	51.062	0.7759	52650.78	0.0152	8.618E-05
Sb	121	3	He	51.444	0.7817	53915.56	0.0152	8.618E-05
Sb	121	3	He	51.645	0.7847	53695.24	0.0152	8.618E-05
Ba	137	3	He	508.889	2.5076	170166.76	0.0049	0.0001277
Ba	137	3	He	504.89	2.4879	171603.49	0.0049	0.0001277
Ba	137	3	He	507.325	2.4999	171056.05	0.0049	0.0001277
Tl	205	3	He	53.174	1.325	448741.71	0.0249	0.000171
Tl	205	3	He	52.244	1.3019	451693.39	0.0249	0.000171
Tl	205	3	He	52.856	1.3171	451201.09	0.0249	0.000171
Pb	208	3	He	53.283	1.7824	325228.14	0.0334	0.001456
Pb	208	3	He	51.568	1.725	320937.96	0.0334	0.001456
Pb	208	3	He	52.154	1.7446	318025.91	0.0334	0.001456
U	238	3	He	49.98	2.4659	682486.63	0.0493	0.0001028
U	238	3	He	50.927	2.5126	688172.41	0.0493	0.0001028
U	238	3	He	51.754	2.5534	694620.61	0.0493	0.0001028
Sc	45	1	No Gas			2310457.31		
Sc	45	1	No Gas			2260685.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2258740.28		
Ge	72	1	No Gas			1123239.05		
Ge	72	1	No Gas			1119722.25		
Ge	72	1	No Gas			1106622.95		
Sc	45	2	H2			127647.25		
Sc	45	2	H2			125571.16		
Sc	45	2	H2			126646.78		
Ge	72	2	H2			112158.72		
Ge	72	2	H2			112792.66		
Ge	72	2	H2			111422.28		
In	115	2	H2			317040.80		
In	115	2	H2			319204.25		
In	115	2	H2			316799.41		
Sc	45	3	He			38040.96		
Sc	45	3	He			36867.25		
Sc	45	3	He			37990.41		
Ge	72	3	He			70031.92		
Ge	72	3	He			69288.80		
Ge	72	3	He			67499.45		
In	115	3	He			68177.43		
In	115	3	He			69292.79		
In	115	3	He			68740.55		
Tb	159	3	He			338662.89		
Tb	159	3	He			346955.70		
Tb	159	3	He			342566.36		
Bi	209	3	He			276774.80		
Bi	209	3	He			273889.61		
Bi	209	3	He			272038.86		

Quantitation Report

Data File Name	300_CCB.d
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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

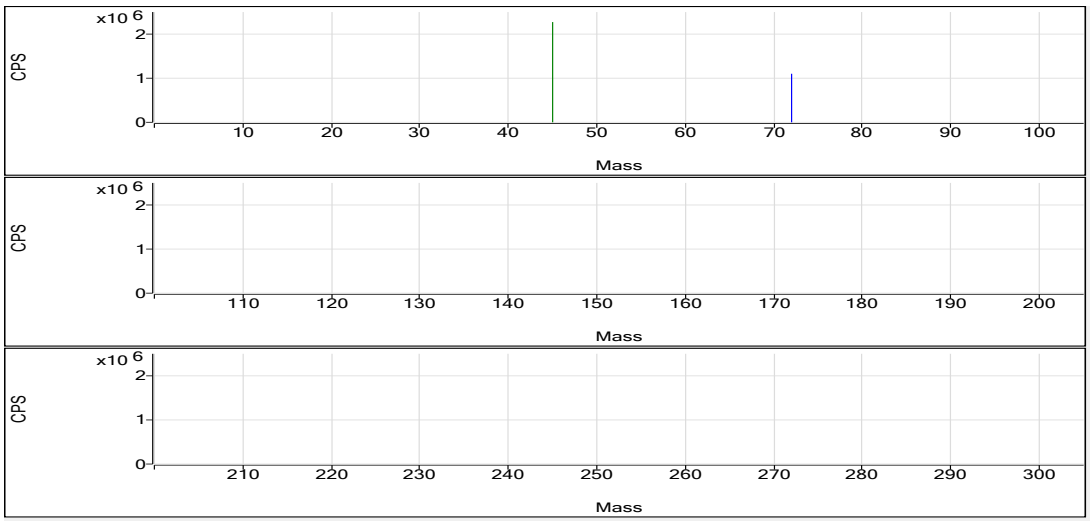
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.030	ppb	30.6	85.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.100	ppb	40.9	6.66	0.0000	Pulse	1.5000	3
Na	23	45	He	39.044	ppb	7.8	16366.20	0.4419	Pulse	0.1000	3
Mg	24	45	He	3.339	ppb	7.1	346.69	0.0094	Pulse	0.1000	3
Al	27	45	He	0.288	ppb	673.2	56.67	0.0015	Pulse	0.1000	3
K	39	45	He	6.605	ppb	100.9	14287.41	0.3858	Pulse	0.1000	3
Ca	44	45	He	-8.427	ppb	N/A	96.67	0.0026	Pulse	0.1000	3
Ti	47	45	He	1.176	ppb	49.8	23.33	0.0006	Pulse	0.1000	3
V	51	45	He	0.196	ppb	17.5	1080.05	0.0292	Pulse	0.5000	3
Cr	52	45	He	0.159	ppb	165.7	1713.50	0.0463	Pulse	0.1000	3
Mn	55	45	He	1.105	ppb	11.5	770.05	0.0208	Pulse	0.1000	3
Fe	57	45	He	2.184	ppb	7.5	126.67	0.0034	Pulse	0.1000	3
Co	59	45	He	0.173	ppb	13.2	476.70	0.0129	Pulse	0.1000	3
Ni	60	72	He	0.242	ppb	11.6	340.02	0.0050	Pulse	0.1000	3
Cu	63	72	He	0.167	ppb	33.3	600.03	0.0088	Pulse	0.1000	3
Zn	66	72	He	0.193	ppb	63.6	233.34	0.0034	Pulse	0.1000	3
As	75	72	He	0.128	ppb	9.0	64.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.022	ppb	47.7	86.67	0.0013	Pulse	0.1000	3
Mo	98	115	He	0.064	ppb	51.5	133.34	0.0020	Pulse	0.1000	3
Ag	107	115	He	0.017	ppb	46.1	76.67	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	27.7	9.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.088	ppb	77.6	1306.77	0.0191	Pulse	0.1000	3
Sb	121	115	He	0.065	ppb	43.2	73.33	0.0011	Pulse	0.1000	3
Ba	137	115	He	0.113	ppb	15.8	46.67	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.135	ppb	2.0	1203.43	0.0035	Pulse	0.1000	3
Pb	208	159	He	0.014	ppb	62.1	660.03	0.0019	Pulse	0.1000	3
U	238	209	He	0.063	ppb	10.1	873.40	0.0032	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2277384.24	1.7	94.6	Analog	0.1000	3
No Gas	Ge	72	1102870.92	0.5	94.9	Pulse	0.1000	3
H2	Sc	45	125105.11	1.3	76.1	Pulse	0.1000	3
H2	Ge	72	110532.07	1.3	76.0	Pulse	0.1000	3
H2	In	115	315704.99	1.1	87.7	Pulse	0.1000	3
He	Sc	45	37044.63	1.9	84.7	Pulse	0.1000	3
He	Ge	72	67961.96	0.7	88.8	Pulse	0.1000	3
He	In	115	68308.27	1.1	88.1	Pulse	0.1000	3
He	Tb	159	340540.45	1.0	91.8	Pulse	0.1000	3
He	Bi	209	273909.42	0.8	93.7	Pulse	0.1000	3

No Gas



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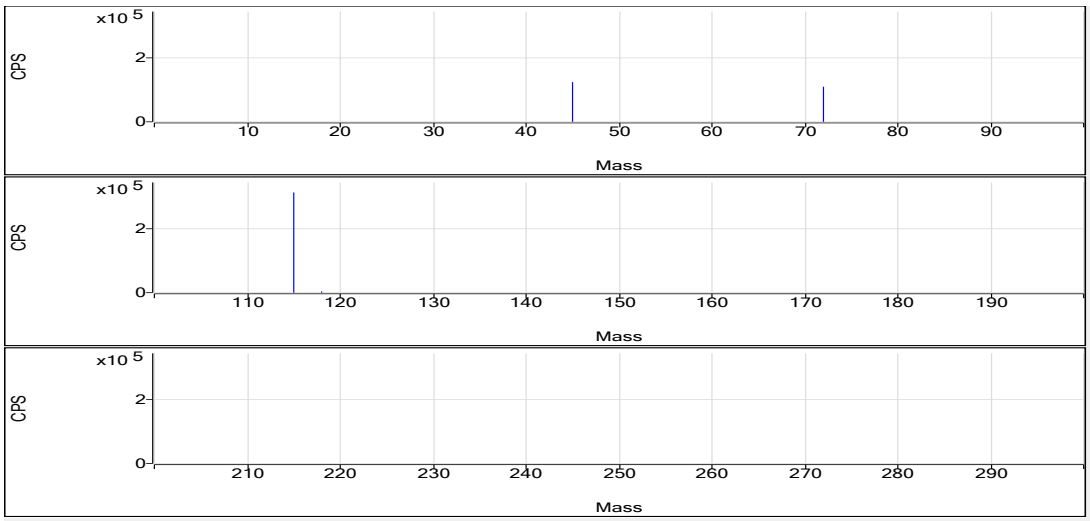
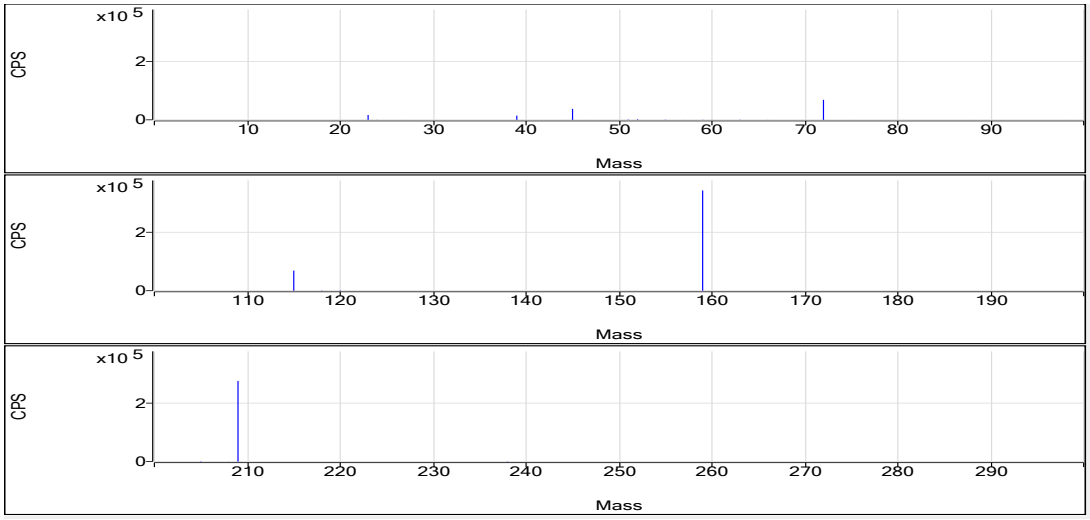


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	76.00	0.0007	1.523E-05
Be	9	1	No Gas	0.024	0	76.00	0.0007	1.523E-05
Be	9	1	No Gas	0.041	0	104.00	0.0007	1.523E-05
Se	78	2	H2	0.147	0	9.33	0.0002	3.71E-06
Se	78	2	H2	0.077	0	5.33	0.0002	3.71E-06
Se	78	2	H2	0.076	0	5.33	0.0002	3.71E-06
Na	23	3	He	41.461	0.4506	16780.15	0.0036	0.3007
Na	23	3	He	35.604	0.4294	16159.24	0.0036	0.3007
Na	23	3	He	40.067	0.4456	16159.20	0.0036	0.3007
Mg	24	3	He	3.066	0.0089	330.02	0.0018	0.003274
Mg	24	3	He	3.452	0.0096	360.02	0.0018	0.003274
Mg	24	3	He	3.499	0.0097	350.02	0.0018	0.003274
Al	27	3	He	1.8	0.0024	90.00	0.0006	0.00137
Al	27	3	He	-1.899	0.0003	10.00	0.0006	0.00137
Al	27	3	He	0.963	0.0019	70.00	0.0006	0.00137
K	39	3	He	3.447	0.3821	14227.39	0.0012	0.378
K	39	3	He	2.108	0.3805	14317.41	0.0012	0.378
K	39	3	He	14.258	0.3948	14317.44	0.0012	0.378
Ca	44	3	He	-15.158	0.0021	80.00	0.0001	0.003203
Ca	44	3	He	-11.658	0.0024	90.00	0.0001	0.003203
Ca	44	3	He	1.533	0.0033	120.01	0.0001	0.003203
Ti	47	3	He	0.5	0.0003	10.00	0.0005	0
Ti	47	3	He	1.485	0.0008	30.00	0.0005	0
Ti	47	3	He	1.541	0.0008	30.00	0.0005	0
V	51	3	He	0.233	0.03	1116.05	0.0224	0.02476
V	51	3	He	0.164	0.0284	1070.05	0.0224	0.02476
V	51	3	He	0.192	0.0291	1054.05	0.0224	0.02476
Cr	52	3	He	0.338	0.0516	1920.21	0.0293	0.04167
Cr	52	3	He	-0.143	0.0375	1410.11	0.0293	0.04167
Cr	52	3	He	0.282	0.0499	1810.17	0.0293	0.04167
Mn	55	3	He	1.222	0.0223	830.05	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.122	0.021	790.05	0.0129	0.006476
Mn	55	3	He	0.97	0.019	690.04	0.0129	0.006476
Fe	57	3	He	2.307	0.0035	130.01	0.0006	0.00213
Fe	57	3	He	2.246	0.0035	130.01	0.0006	0.00213
Fe	57	3	He	1.998	0.0033	120.00	0.0006	0.00213
Co	59	3	He	0.192	0.014	520.03	0.0572	0.00297
Co	59	3	He	0.148	0.0114	430.03	0.0572	0.00297
Co	59	3	He	0.179	0.0132	480.03	0.0572	0.00297
Ni	60	3	He	0.21	0.0047	320.01	0.0086	0.002921
Ni	60	3	He	0.254	0.0051	350.02	0.0086	0.002921
Ni	60	3	He	0.262	0.0052	350.02	0.0086	0.002921
Cu	63	3	He	0.232	0.0105	710.04	0.0257	0.004531
Cu	63	3	He	0.136	0.008	550.03	0.0257	0.004531
Cu	63	3	He	0.134	0.008	540.03	0.0257	0.004531
Zn	66	3	He	0.129	0.0032	220.01	0.0029	0.002877
Zn	66	3	He	0.116	0.0032	220.01	0.0029	0.002877
Zn	66	3	He	0.335	0.0038	260.01	0.0029	0.002877
As	75	3	He	0.13	0.0009	64.00	0.002	0.0006798
As	75	3	He	0.139	0.001	66.00	0.002	0.0006798
As	75	3	He	0.116	0.0009	62.00	0.002	0.0006798
Sr	88	3	He	0.029	0.0013	90.00	0.009	0.001075
Sr	88	3	He	0.01	0.0012	80.00	0.009	0.001075
Sr	88	3	He	0.026	0.0013	90.00	0.009	0.001075
Mo	98	3	He	0.056	0.0018	120.01	0.0226	0.0005115
Mo	98	3	He	0.1	0.0028	190.01	0.0226	0.0005115
Mo	98	3	He	0.035	0.0013	90.00	0.0226	0.0005115
Ag	107	3	He	0.024	0.0015	100.00	0.0487	0.0003023
Ag	107	3	He	0.018	0.0012	80.00	0.0487	0.0003023
Ag	107	3	He	0.009	0.0007	50.00	0.0487	0.0003023
Cd	111	3	He	0.031	0.0002	12.00	0.0054	8.618E-06
Cd	111	3	He	0.02	0.0001	8.00	0.0054	8.618E-06
Cd	111	3	He	0.02	0.0001	8.00	0.0054	8.618E-06
Sn	120	3	He	0.106	0.0194	1310.10	0.0161	0.0177
Sn	120	3	He	0.146	0.0201	1380.12	0.0161	0.0177
Sn	120	3	He	0.013	0.0179	1230.10	0.0161	0.0177
Sb	121	3	He	0.082	0.0013	90.00	0.0152	8.618E-05
Sb	121	3	He	0.08	0.0013	90.00	0.0152	8.618E-05
Sb	121	3	He	0.033	0.0006	40.00	0.0152	8.618E-05
Ba	137	3	He	0.124	0.0007	50.00	0.0049	0.0001277
Ba	137	3	He	0.122	0.0007	50.00	0.0049	0.0001277
Ba	137	3	He	0.092	0.0006	40.00	0.0049	0.0001277
Tl	205	3	He	0.133	0.0035	1200.10	0.0249	0.000171
Tl	205	3	He	0.134	0.0035	1190.10	0.0249	0.000171
Tl	205	3	He	0.138	0.0036	1220.09	0.0249	0.000171
Pb	208	3	He	0.012	0.0019	420.02	0.0334	0.001456
Pb	208	3	He	0.024	0.0023	440.03	0.0334	0.001456
Pb	208	3	He	0.007	0.0017	330.02	0.0334	0.001456
U	238	3	He	0.057	0.0029	810.06	0.0493	0.0001028
U	238	3	He	0.07	0.0035	970.08	0.0493	0.0001028
U	238	3	He	0.061	0.0031	840.06	0.0493	0.0001028
Sc	45	1	No Gas			2233621.06		
Sc	45	1	No Gas			2301107.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2297424.34		
Ge	72	1	No Gas			1097389.83		
Ge	72	1	No Gas			1102219.91		
Ge	72	1	No Gas			1109003.03		
Sc	45	2	H2			125357.87		
Sc	45	2	H2			123360.49		
Sc	45	2	H2			126596.98		
Ge	72	2	H2			112128.46		
Ge	72	2	H2			109950.14		
Ge	72	2	H2			109517.62		
In	115	2	H2			318889.10		
In	115	2	H2			312246.11		
In	115	2	H2			315979.76		
Sc	45	3	He			37238.48		
Sc	45	3	He			37629.40		
Sc	45	3	He			36266.00		
Ge	72	3	He			67710.88		
Ge	72	3	He			68524.85		
Ge	72	3	He			67650.14		
In	115	3	He			67474.37		
In	115	3	He			68780.86		
In	115	3	He			68690.49		
Tb	159	3	He			344559.80		
Tb	159	3	He			339278.51		
Tb	159	3	He			337783.04		
Bi	209	3	He			275928.18		
Bi	209	3	He			274416.01		
Bi	209	3	He			271384.06		

Quantitation Report

Data File Name	301SMPL.d
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Sample Type	Sample
Comment	I9 ICP
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

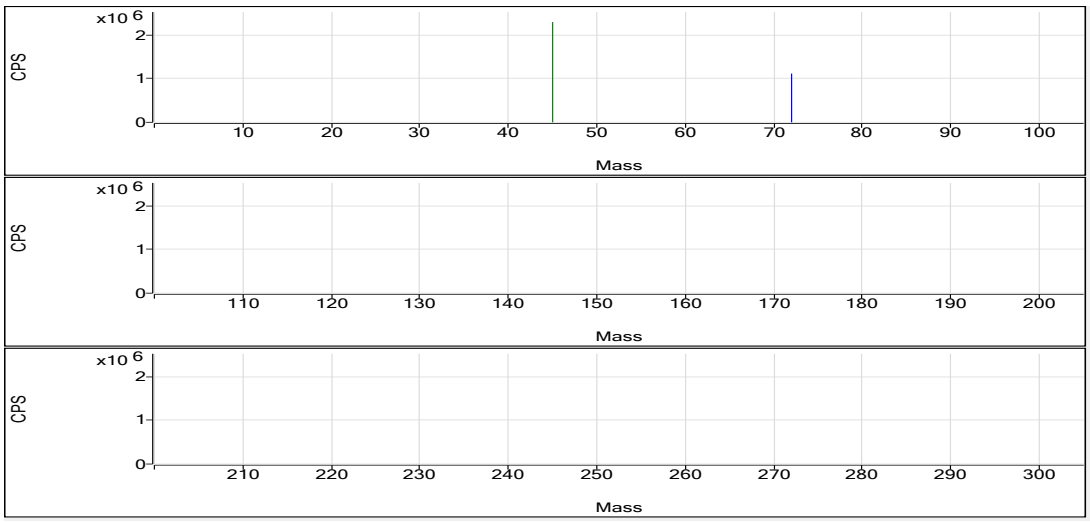
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.008	ppb	98.4	49.33	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.034	ppb	108.2	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	26.067	ppb	26.3	14844.57	0.3949	Pulse	0.1000	3
Mg	24	45	He	1.217	ppb	29.9	206.68	0.0055	Pulse	0.1000	3
Al	27	45	He	13.463	ppb	24.3	346.68	0.0092	Pulse	0.1000	3
K	39	45	He	-3.103	ppb	N/A	14080.44	0.3743	Pulse	0.1000	3
Ca	44	45	He	5.206	ppb	353.1	133.34	0.0036	Pulse	0.1000	3
Ti	47	45	He	0.328	ppb	86.7	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.077	ppb	N/A	866.70	0.0230	Pulse	0.5000	3
Cr	52	45	He	-0.132	ppb	N/A	1423.45	0.0378	Pulse	0.1000	3
Mn	55	45	He	0.598	ppb	33.4	533.36	0.0142	Pulse	0.1000	3
Fe	57	45	He	1.043	ppb	46.7	103.34	0.0027	Pulse	0.1000	3
Co	59	45	He	0.066	ppb	37.6	253.34	0.0067	Pulse	0.1000	3
Ni	60	72	He	0.006	ppb	2474.8	203.34	0.0030	Pulse	0.1000	3
Cu	63	72	He	0.092	ppb	62.1	473.36	0.0069	Pulse	0.1000	3
Zn	66	72	He	0.653	ppb	18.4	326.68	0.0048	Pulse	0.1000	3
As	75	72	He	-0.047	ppb	N/A	40.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.026	ppb	N/A	60.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.013	ppb	184.9	56.67	0.0008	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	92.9	50.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.005	ppb	112.4	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.129	ppb	N/A	1110.08	0.0156	Pulse	0.1000	3
Sb	121	115	He	0.010	ppb	54.8	16.67	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.022	ppb	74.9	16.67	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.044	ppb	5.0	440.02	0.0013	Pulse	0.1000	3
Pb	208	159	He	0.005	ppb	18.1	563.36	0.0016	Pulse	0.1000	3
U	238	209	He	0.014	ppb	22.3	223.34	0.0008	Pulse	0.1000	3

ISTD Table:

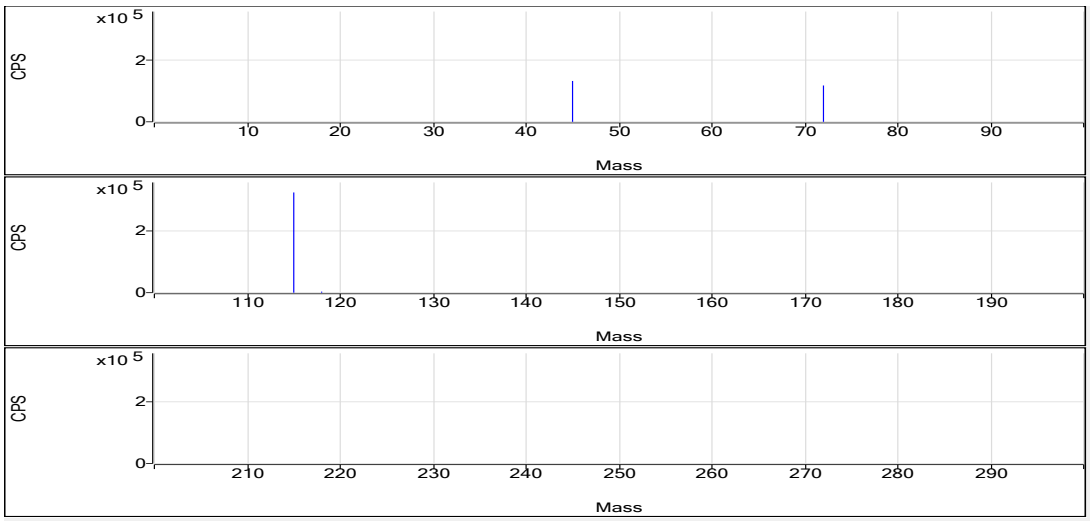
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2300004.97	0.5	95.5	Analog	0.1000	3
No Gas	Ge	72	1117986.78	0.6	96.2	Pulse	0.1000	3
H2	Sc	45	131907.57	0.8	80.2	Pulse	0.1000	3
H2	Ge	72	117281.70	1.3	80.7	Pulse	0.1000	3
H2	In	115	323594.92	1.3	89.9	Pulse	0.1000	3
He	Sc	45	37626.17	2.7	86.0	Pulse	0.1000	3
He	Ge	72	68564.83	0.6	89.6	Pulse	0.1000	3
He	In	115	71081.21	1.0	91.7	Pulse	0.1000	3
He	Tb	159	345952.29	0.8	93.3	Pulse	0.1000	3
He	Bi	209	279488.65	0.8	95.6	Pulse	0.1000	3

No Gas

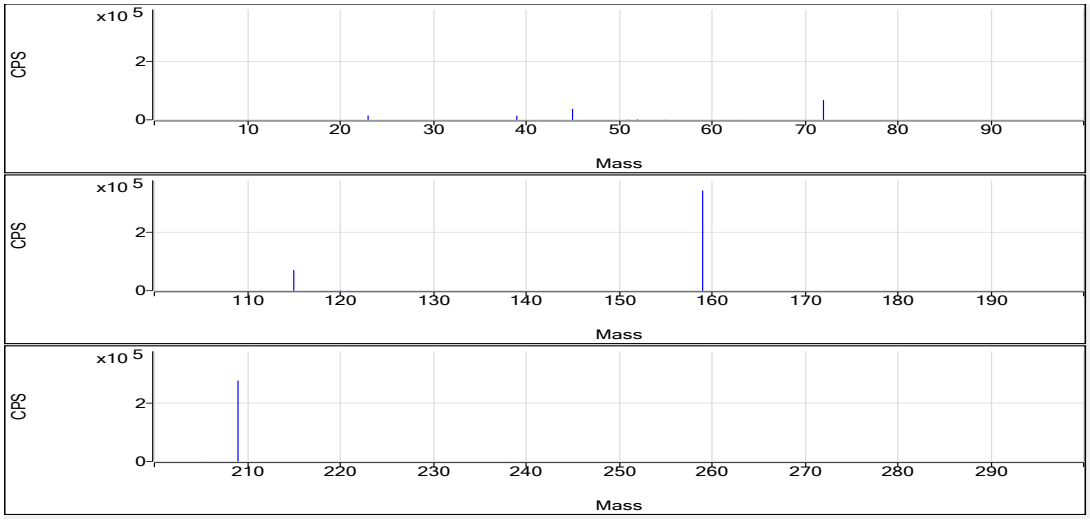


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	36.00	0.0007	1.523E-05
Be	9	1	No Gas	0.017	0	64.00	0.0007	1.523E-05
Be	9	1	No Gas	0.008	0	48.00	0.0007	1.523E-05
Se	78	2	H2	0.002	0	1.33	0.0002	3.71E-06
Se	78	2	H2	0.075	0	5.33	0.0002	3.71E-06
Se	78	2	H2	0.026	0	2.67	0.0002	3.71E-06
Na	23	3	He	32.137	0.4169	15478.49	0.0036	0.3007
Na	23	3	He	27.413	0.3998	14767.83	0.0036	0.3007
Na	23	3	He	18.65	0.3681	14287.39	0.0036	0.3007
Mg	24	3	He	1.602	0.0062	230.01	0.0018	0.003274
Mg	24	3	He	0.877	0.0049	180.01	0.0018	0.003274
Mg	24	3	He	1.172	0.0054	210.01	0.0018	0.003274
Al	27	3	He	9.687	0.007	260.01	0.0006	0.00137
Al	27	3	He	15.336	0.0103	380.02	0.0006	0.00137
Al	27	3	He	15.367	0.0103	400.02	0.0006	0.00137
K	39	3	He	7.383	0.3867	14357.34	0.0012	0.378
K	39	3	He	-5.879	0.3711	13706.80	0.0012	0.378
K	39	3	He	-10.814	0.3653	14177.18	0.0012	0.378
Ca	44	3	He	4.3	0.0035	130.01	0.0001	0.003203
Ca	44	3	He	24.023	0.0049	180.01	0.0001	0.003203
Ca	44	3	He	-12.706	0.0023	90.00	0.0001	0.003203
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.504	0.0003	10.00	0.0005	0
Ti	47	3	He	0.48	0.0003	10.00	0.0005	0
V	51	3	He	-0.088	0.0228	846.03	0.0224	0.02476
V	51	3	He	-0.076	0.0231	852.03	0.0224	0.02476
V	51	3	He	-0.068	0.0232	902.04	0.0224	0.02476
Cr	52	3	He	-0.236	0.0347	1290.10	0.0293	0.04167
Cr	52	3	He	-0.119	0.0382	1410.11	0.0293	0.04167
Cr	52	3	He	-0.041	0.0405	1570.13	0.0293	0.04167
Mn	55	3	He	0.811	0.017	630.04	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.567	0.0138	510.03	0.0129	0.006476
Mn	55	3	He	0.416	0.0119	460.02	0.0129	0.006476
Fe	57	3	He	0.498	0.0024	90.00	0.0006	0.00213
Fe	57	3	He	1.438	0.003	110.01	0.0006	0.00213
Fe	57	3	He	1.193	0.0028	110.00	0.0006	0.00213
Co	59	3	He	0.094	0.0083	310.01	0.0572	0.00297
Co	59	3	He	0.047	0.0057	210.01	0.0572	0.00297
Co	59	3	He	0.056	0.0062	240.01	0.0572	0.00297
Ni	60	3	He	0.153	0.0042	290.01	0.0086	0.002921
Ni	60	3	He	-0.121	0.0019	130.00	0.0086	0.002921
Ni	60	3	He	-0.016	0.0028	190.01	0.0086	0.002921
Cu	63	3	He	0.074	0.0064	440.02	0.0257	0.004531
Cu	63	3	He	0.156	0.0085	590.03	0.0257	0.004531
Cu	63	3	He	0.046	0.0057	390.02	0.0257	0.004531
Zn	66	3	He	0.522	0.0044	300.01	0.0029	0.002877
Zn	66	3	He	0.759	0.0051	350.02	0.0029	0.002877
Zn	66	3	He	0.678	0.0048	330.01	0.0029	0.002877
As	75	3	He	-0.147	0.0004	26.00	0.002	0.0006798
As	75	3	He	-0.078	0.0005	36.00	0.002	0.0006798
As	75	3	He	0.084	0.0009	58.00	0.002	0.0006798
Sr	88	3	He	-0.073	0.0004	30.00	0.009	0.001075
Sr	88	3	He	0.023	0.0013	90.00	0.009	0.001075
Sr	88	3	He	-0.027	0.0008	60.00	0.009	0.001075
Mo	98	3	He	-0.004	0.0004	30.00	0.0226	0.0005115
Mo	98	3	He	0.003	0.0006	40.00	0.0226	0.0005115
Mo	98	3	He	0.039	0.0014	100.00	0.0226	0.0005115
Ag	107	3	He	0.017	0.0011	80.00	0.0487	0.0003023
Ag	107	3	He	0.005	0.0006	40.00	0.0487	0.0003023
Ag	107	3	He	0.002	0.0004	30.00	0.0487	0.0003023
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Sn	120	3	He	-0.155	0.0152	1080.07	0.0161	0.0177
Sn	120	3	He	-0.032	0.0172	1210.09	0.0161	0.0177
Sn	120	3	He	-0.199	0.0145	1040.08	0.0161	0.0177
Sb	121	3	He	0.004	0.0001	10.00	0.0152	8.618E-05
Sb	121	3	He	0.013	0.0003	20.00	0.0152	8.618E-05
Sb	121	3	He	0.013	0.0003	20.00	0.0152	8.618E-05
Ba	137	3	He	0.031	0.0003	20.00	0.0049	0.0001277
Ba	137	3	He	0.003	0.0001	10.00	0.0049	0.0001277
Ba	137	3	He	0.031	0.0003	20.00	0.0049	0.0001277
Tl	205	3	He	0.043	0.0012	430.02	0.0249	0.000171
Tl	205	3	He	0.047	0.0013	460.03	0.0249	0.000171
Tl	205	3	He	0.043	0.0013	430.02	0.0249	0.000171
Pb	208	3	He	0.005	0.0016	320.01	0.0334	0.001456
Pb	208	3	He	0.004	0.0016	270.01	0.0334	0.001456
Pb	208	3	He	0.006	0.0017	260.01	0.0334	0.001456
U	238	3	He	0.012	0.0007	190.01	0.0493	0.0001028
U	238	3	He	0.018	0.001	270.01	0.0493	0.0001028
U	238	3	He	0.013	0.0008	210.01	0.0493	0.0001028
Sc	45	1	No Gas			2309925.59		
Sc	45	1	No Gas			2301340.75		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2288748.56		
Ge	72	1	No Gas			1112349.28		
Ge	72	1	No Gas			1125436.39		
Ge	72	1	No Gas			1116174.67		
Sc	45	2	H2			131863.95		
Sc	45	2	H2			130935.00		
Sc	45	2	H2			132923.76		
Ge	72	2	H2			118992.26		
Ge	72	2	H2			116763.83		
Ge	72	2	H2			116089.02		
In	115	2	H2			324590.93		
In	115	2	H2			319101.21		
In	115	2	H2			327092.63		
Sc	45	3	He			37128.31		
Sc	45	3	He			36937.46		
Sc	45	3	He			38812.75		
Ge	72	3	He			68404.05		
Ge	72	3	He			69057.11		
Ge	72	3	He			68233.34		
In	115	3	He			71062.12		
In	115	3	He			70378.41		
In	115	3	He			71817.37		
Tb	159	3	He			349182.38		
Tb	159	3	He			344743.86		
Tb	159	3	He			343930.62		
Bi	209	3	He			281912.53		
Bi	209	3	He			277356.81		
Bi	209	3	He			279196.60		

Quantitation Report

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Sample Name	LCS 410-402565/2-A
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

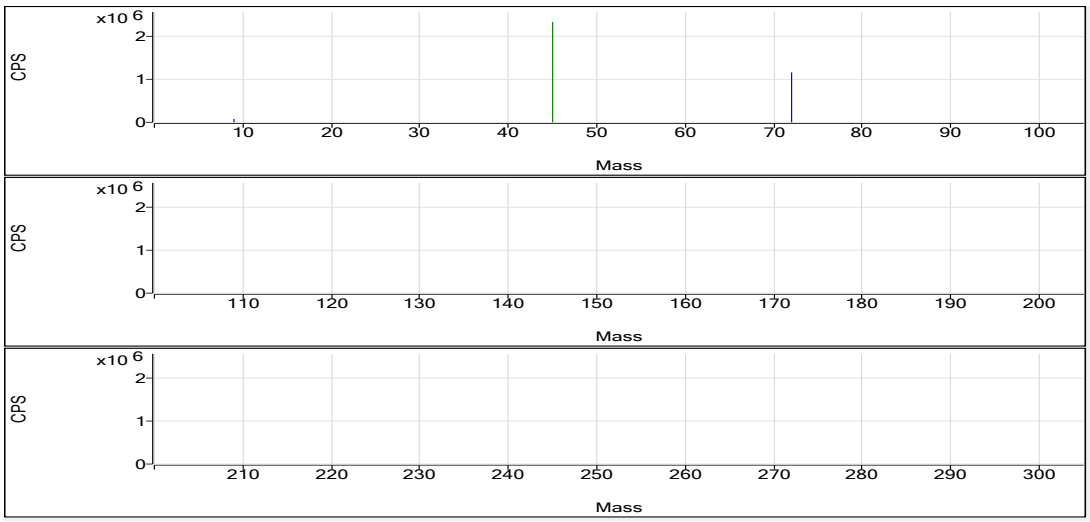
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.037	ppb	1.1	77367.82	0.0334	Pulse	0.5000	3
Se	78	115	H2	94.795	ppb	0.6	5366.57	0.0165	Pulse	1.5000	3
Na	23	45	He	5009.640	ppb	1.3	695274.83	18.4199	Pulse	0.1000	3
Mg	24	45	He	5137.158	ppb	2.2	353579.24	9.3682	Pulse	0.1000	3
Al	27	45	He	4909.382	ppb	0.6	107819.92	2.8563	Pulse	0.1000	3
K	39	45	He	4975.741	ppb	1.4	235390.77	6.2363	Pulse	0.1000	3
Ca	44	45	He	5002.409	ppb	2.7	13253.08	0.3511	Pulse	0.1000	3
Ti	47	45	He	514.256	ppb	1.8	10420.70	0.2760	Pulse	0.1000	3
V	51	45	He	519.291	ppb	0.7	439992.21	11.6562	Pulse	0.5000	3
Cr	52	45	He	514.288	ppb	0.7	570114.46	15.1033	Pulse	0.1000	3
Mn	55	45	He	503.961	ppb	0.5	246374.54	6.5263	Pulse	0.1000	3
Fe	57	45	He	5121.406	ppb	0.3	114135.47	3.0236	Pulse	0.1000	3
Co	59	45	He	512.128	ppb	1.3	1106173.81	29.3061	Pulse	0.1000	3
Ni	60	72	He	497.208	ppb	0.6	307878.50	4.2867	Pulse	0.1000	3
Cu	63	72	He	480.992	ppb	1.2	887354.65	12.3560	Pulse	0.1000	3
Zn	66	72	He	500.721	ppb	0.9	104116.42	1.4497	Pulse	0.1000	3
As	75	72	He	494.785	ppb	0.9	72471.49	1.0091	Pulse	0.5000	3
Sr	88	115	He	49.084	ppb	3.1	31231.90	0.4427	Pulse	0.1000	3
Mo	98	115	He	51.287	ppb	2.0	81748.19	1.1587	Pulse	0.1000	3
Ag	107	115	He	51.492	ppb	1.9	176865.88	2.5068	Pulse	0.1000	3
Cd	111	115	He	52.227	ppb	1.8	19988.99	0.2833	Pulse	0.5000	3
Sn	120	115	He	103.168	ppb	1.3	118797.05	1.6837	Pulse	0.1000	3
Sb	121	115	He	100.686	ppb	3.5	107913.20	1.5298	Pulse	0.1000	3
Ba	137	115	He	509.181	ppb	1.3	177032.27	2.5090	Pulse	0.1000	3
Tl	205	159	He	105.961	ppb	0.5	915143.84	2.6403	Pulse	0.1000	3
Pb	208	159	He	52.936	ppb	0.8	613748.05	1.7707	Pulse	0.1000	3
U	238	209	He	50.495	ppb	0.4	694484.26	2.4913	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2319586.89	0.4	96.3	Analog	0.1000	3
No Gas	Ge	72	1154729.12	0.2	99.4	Pulse	0.1000	3
H2	Sc	45	132587.39	1.1	80.6	Pulse	0.1000	3
H2	Ge	72	119120.96	0.6	82.0	Pulse	0.1000	3
H2	In	115	326003.30	0.3	90.6	Pulse	0.1000	3
He	Sc	45	37749.64	1.3	86.3	Pulse	0.1000	3
He	Ge	72	71824.18	1.5	93.9	Pulse	0.1000	3
He	In	115	70566.59	1.6	91.0	Pulse	0.1000	3
He	Tb	159	346618.59	0.7	93.4	Pulse	0.1000	3
He	Bi	209	278772.70	0.7	95.4	Pulse	0.1000	3

No Gas



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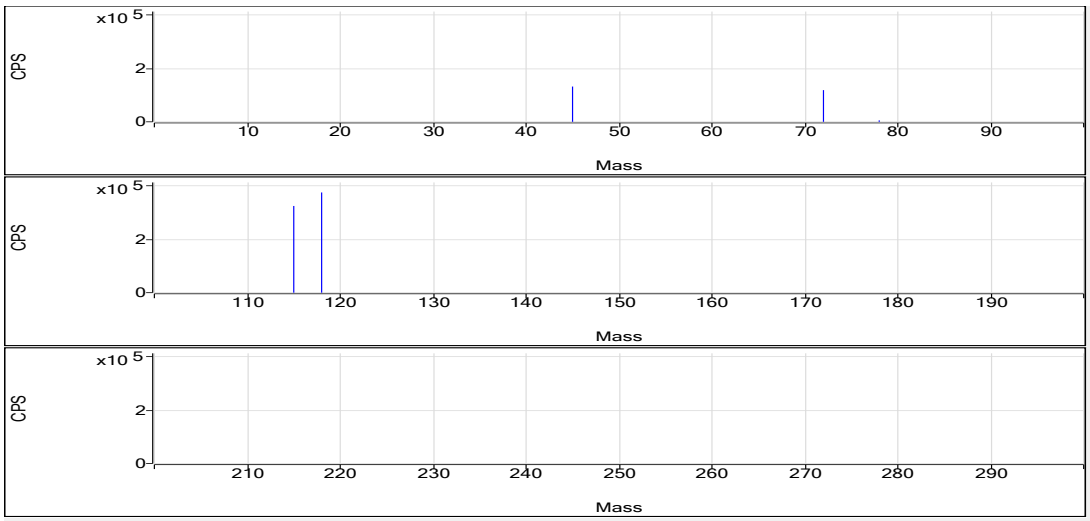
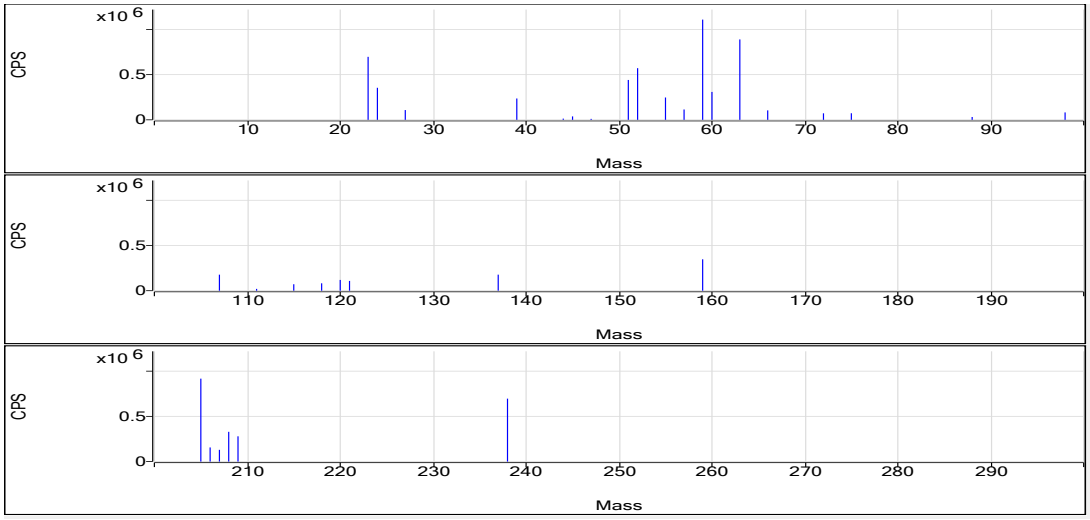


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.493	0.0337	77760.56	0.0007	1.523E-05
Be	9	1	No Gas	45.088	0.0334	77603.79	0.0007	1.523E-05
Be	9	1	No Gas	44.53	0.033	76739.12	0.0007	1.523E-05
Se	78	2	H2	94.916	0.0165	5355.68	0.0002	3.71E-06
Se	78	2	H2	94.207	0.0164	5347.01	0.0002	3.71E-06
Se	78	2	H2	95.263	0.0165	5397.03	0.0002	3.71E-06
Na	23	3	He	4985.88	18.334	698907.96	0.0036	0.3007
Na	23	3	He	4958.052	18.2333	691409.91	0.0036	0.3007
Na	23	3	He	5084.988	18.6924	695506.63	0.0036	0.3007
Mg	24	3	He	5069.647	9.2451	352431.13	0.0018	0.003274
Mg	24	3	He	5072.738	9.2507	350788.35	0.0018	0.003274
Mg	24	3	He	5269.088	9.6087	357518.24	0.0018	0.003274
Al	27	3	He	4903.773	2.853	108760.70	0.0006	0.00137
Al	27	3	He	4882.668	2.8408	107722.41	0.0006	0.00137
Al	27	3	He	4941.707	2.8751	106976.66	0.0006	0.00137
K	39	3	He	4939.902	6.1941	236123.43	0.0012	0.378
K	39	3	He	4929.021	6.1813	234393.88	0.0012	0.378
K	39	3	He	5058.301	6.3335	235655.00	0.0012	0.378
Ca	44	3	He	4848.058	0.3404	12976.08	0.0001	0.003203
Ca	44	3	He	5086.493	0.357	13536.58	0.0001	0.003203
Ca	44	3	He	5072.675	0.356	13246.58	0.0001	0.003203
Ti	47	3	He	524.111	0.2813	10724.24	0.0005	0
Ti	47	3	He	506.239	0.2717	10303.99	0.0005	0
Ti	47	3	He	512.418	0.275	10233.86	0.0005	0
V	51	3	He	517.257	11.6106	442607.31	0.0224	0.02476
V	51	3	He	517.398	11.6138	440395.88	0.0224	0.02476
V	51	3	He	523.217	11.7441	436973.44	0.0224	0.02476
Cr	52	3	He	512.173	15.0414	573391.98	0.0293	0.04167
Cr	52	3	He	512.539	15.0521	570777.80	0.0293	0.04167
Cr	52	3	He	518.151	15.2165	566173.59	0.0293	0.04167
Mn	55	3	He	505.556	6.5469	249573.49	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	505.442	6.5454	248203.14	0.0129	0.006476
Mn	55	3	He	500.883	6.4864	241346.99	0.0129	0.006476
Fe	57	3	He	5107.771	3.0155	114954.51	0.0006	0.00213
Fe	57	3	He	5116.417	3.0206	114542.43	0.0006	0.00213
Fe	57	3	He	5140.03	3.0346	112909.48	0.0006	0.00213
Co	59	3	He	507.275	29.0284	1106587.33	0.0572	0.00297
Co	59	3	He	509.567	29.1595	1105731.62	0.0572	0.00297
Co	59	3	He	519.543	29.7303	1106202.48	0.0572	0.00297
Ni	60	3	He	495.032	4.268	311803.96	0.0086	0.002921
Ni	60	3	He	500.801	4.3177	307755.48	0.0086	0.002921
Ni	60	3	He	495.792	4.2745	304076.05	0.0086	0.002921
Cu	63	3	He	474.478	12.1887	890470.53	0.0257	0.004531
Cu	63	3	He	483.021	12.4081	884427.33	0.0257	0.004531
Cu	63	3	He	485.479	12.4712	887166.08	0.0257	0.004531
Zn	66	3	He	496.845	1.4385	105092.89	0.0029	0.002877
Zn	66	3	He	499.3	1.4456	103039.75	0.0029	0.002877
Zn	66	3	He	506.018	1.465	104216.62	0.0029	0.002877
As	75	3	He	489.684	0.9987	72962.59	0.002	0.0006798
As	75	3	He	495.852	1.0113	72082.15	0.002	0.0006798
As	75	3	He	498.819	1.0173	72369.72	0.002	0.0006798
Sr	88	3	He	50.725	0.4575	31706.33	0.009	0.001075
Sr	88	3	He	48.828	0.4404	31465.73	0.009	0.001075
Sr	88	3	He	47.699	0.4302	30523.64	0.009	0.001075
Mo	98	3	He	52.171	1.1786	81687.13	0.0226	0.0005115
Mo	98	3	He	50.197	1.134	81024.58	0.0226	0.0005115
Mo	98	3	He	51.495	1.1633	82532.87	0.0226	0.0005115
Ag	107	3	He	52.448	2.5534	176968.32	0.0487	0.0003023
Ag	107	3	He	50.479	2.4575	175584.37	0.0487	0.0003023
Ag	107	3	He	51.55	2.5096	178044.94	0.0487	0.0003023
Cd	111	3	He	53.229	0.2887	20012.38	0.0054	8.618E-06
Cd	111	3	He	52.022	0.2822	20162.56	0.0054	8.618E-06
Cd	111	3	He	51.429	0.279	19792.04	0.0054	8.618E-06
Sn	120	3	He	104.678	1.7081	118383.48	0.0161	0.0177
Sn	120	3	He	102.419	1.6716	119432.37	0.0161	0.0177
Sn	120	3	He	102.406	1.6714	118575.29	0.0161	0.0177
Sb	121	3	He	104.715	1.591	110268.02	0.0152	8.618E-05
Sb	121	3	He	98.673	1.4992	107113.93	0.0152	8.618E-05
Sb	121	3	He	98.671	1.4992	106357.65	0.0152	8.618E-05
Ba	137	3	He	516.355	2.5444	176343.43	0.0049	0.0001277
Ba	137	3	He	508.159	2.504	178903.75	0.0049	0.0001277
Ba	137	3	He	503.029	2.4787	175849.63	0.0049	0.0001277
Tl	205	3	He	106.535	2.6546	912356.94	0.0249	0.000171
Tl	205	3	He	105.39	2.6261	914766.16	0.0249	0.000171
Tl	205	3	He	105.957	2.6402	918308.42	0.0249	0.000171
Pb	208	3	He	53.399	1.7862	327583.45	0.0334	0.001456
Pb	208	3	He	52.684	1.7623	327392.36	0.0334	0.001456
Pb	208	3	He	52.723	1.7636	329868.43	0.0334	0.001456
U	238	3	He	50.698	2.5013	691477.41	0.0493	0.0001028
U	238	3	He	50.315	2.4824	693559.91	0.0493	0.0001028
U	238	3	He	50.472	2.4901	698415.46	0.0493	0.0001028
Sc	45	1	No Gas			2307941.53		
Sc	45	1	No Gas			2323970.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2326849.03		
Ge	72	1	No Gas			1152385.37		
Ge	72	1	No Gas			1155182.33		
Ge	72	1	No Gas			1156619.67		
Sc	45	2	H2			131238.95		
Sc	45	2	H2			134145.19		
Sc	45	2	H2			132378.04		
Ge	72	2	H2			119637.77		
Ge	72	2	H2			119395.66		
Ge	72	2	H2			118329.46		
In	115	2	H2			324926.85		
In	115	2	H2			326841.42		
In	115	2	H2			326241.64		
Sc	45	3	He			38120.91		
Sc	45	3	He			37920.11		
Sc	45	3	He			37207.91		
Ge	72	3	He			73057.05		
Ge	72	3	He			71278.27		
Ge	72	3	He			71137.21		
In	115	3	He			69935.85		
In	115	3	He			72097.45		
In	115	3	He			71575.37		
Tb	159	3	He			343691.40		
Tb	159	3	He			348342.96		
Tb	159	3	He			347821.40		
Bi	209	3	He			276449.37		
Bi	209	3	He			279394.84		
Bi	209	3	He			280473.88		

Quantitation Report

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Acq Time	8/15/2023 12:17:56 AM
Sample Name	410-136607-H-2-A
Sample Type	Sample
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

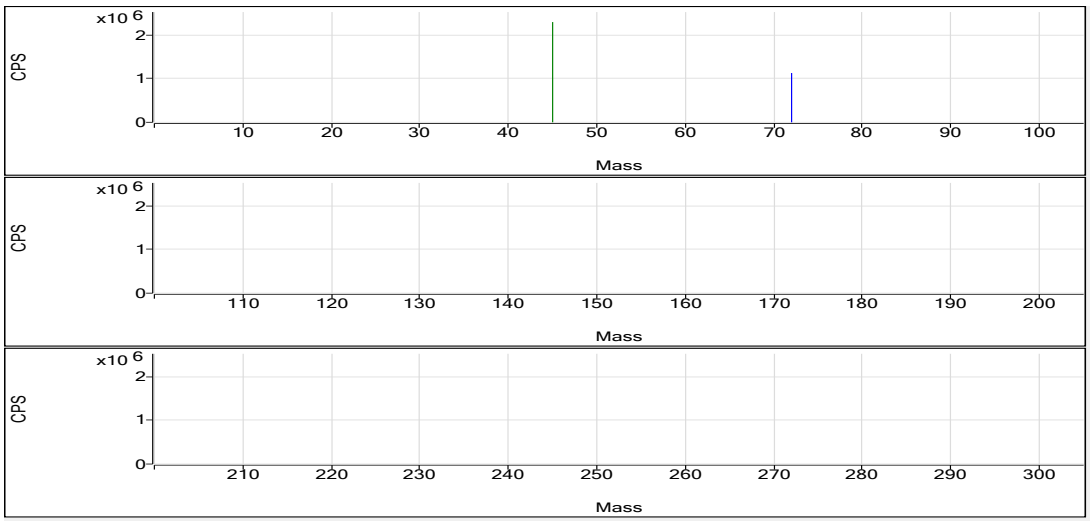
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.042	ppb	8.4	106.67	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.747	ppb	2.5	42.67	0.0001	Pulse	1.5000	3
Na	23	45	He	152664.785	ppb	2.4	20651516.77	552.4707	Analog	0.1000	3
Mg	24	45	He	8656.105	ppb	2.3	589982.19	15.7831	Pulse	0.1000	3
Al	27	45	He	265.677	ppb	2.9	5828.03	0.1559	Pulse	0.1000	3
K	39	45	He	27773.067	ppb	3.3	1236535.79	33.0770	Mix	0.1000	3
Ca	44	45	He	25279.039	ppb	1.1	65856.22	1.7614	Pulse	0.1000	3
Ti	47	45	He	4.960	ppb	34.3	100.00	0.0027	Pulse	0.1000	3
V	51	45	He	0.443	ppb	20.5	1296.73	0.0347	Pulse	0.5000	3
Cr	52	45	He	5.846	ppb	2.5	7962.45	0.2129	Pulse	0.1000	3
Mn	55	45	He	50.993	ppb	3.2	24898.80	0.6662	Pulse	0.1000	3
Fe	57	45	He	797.952	ppb	0.6	17684.77	0.4729	Pulse	0.1000	3
Co	59	45	He	0.772	ppb	9.8	1760.16	0.0471	Pulse	0.1000	3
Ni	60	72	He	13.922	ppb	2.3	8589.55	0.1229	Pulse	0.1000	3
Cu	63	72	He	66.620	ppb	1.3	119914.52	1.7153	Pulse	0.1000	3
Zn	66	72	He	232.977	ppb	1.8	47261.98	0.6761	Pulse	0.1000	3
As	75	72	He	1.013	ppb	10.9	192.00	0.0027	Pulse	0.5000	3
Sr	88	115	He	104.771	ppb	0.7	64450.80	0.9438	Pulse	0.1000	3
Mo	98	115	He	2.961	ppb	4.2	4600.93	0.0674	Pulse	0.1000	3
Ag	107	115	He	0.307	ppb	8.2	1040.08	0.0152	Pulse	0.1000	3
Cd	111	115	He	0.241	ppb	13.6	90.00	0.0013	Pulse	0.5000	3
Sn	120	115	He	24.284	ppb	1.2	27988.99	0.4099	Pulse	0.1000	3
Sb	121	115	He	1.007	ppb	17.6	1050.08	0.0154	Pulse	0.1000	3
Ba	137	115	He	44.427	ppb	1.7	14958.54	0.2190	Pulse	0.1000	3
Tl	205	159	He	0.242	ppb	11.6	2106.91	0.0062	Pulse	0.1000	3
Pb	208	159	He	2.658	ppb	1.3	30685.22	0.0903	Pulse	0.1000	3
U	238	209	He	0.332	ppb	5.8	4554.32	0.0165	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2293935.85	1.8	95.3	Analog	0.1000	3
No Gas	Ge	72	1127597.40	1.1	97.1	Pulse	0.1000	3
H2	Sc	45	132186.99	0.5	80.4	Pulse	0.1000	3
H2	Ge	72	119413.10	0.9	82.2	Pulse	0.1000	3
H2	In	115	319812.64	1.0	88.9	Pulse	0.1000	3
He	Sc	45	37395.45	2.6	85.5	Pulse	0.1000	3
He	Ge	72	69914.60	1.0	91.4	Pulse	0.1000	3
He	In	115	68291.50	0.4	88.1	Pulse	0.1000	3
He	Tb	159	339862.95	0.3	91.6	Pulse	0.1000	3
He	Bi	209	276186.98	1.0	94.5	Pulse	0.1000	3

No Gas



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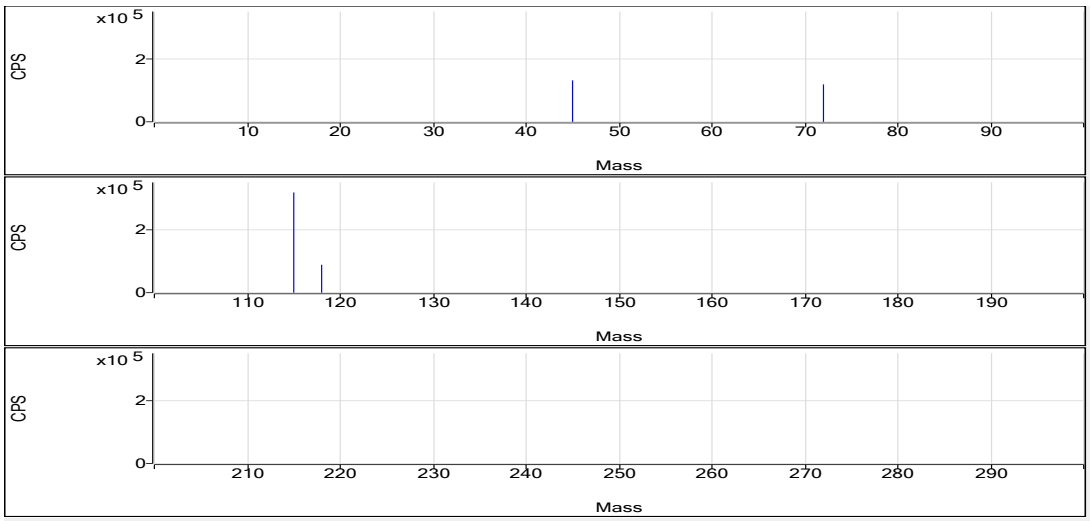
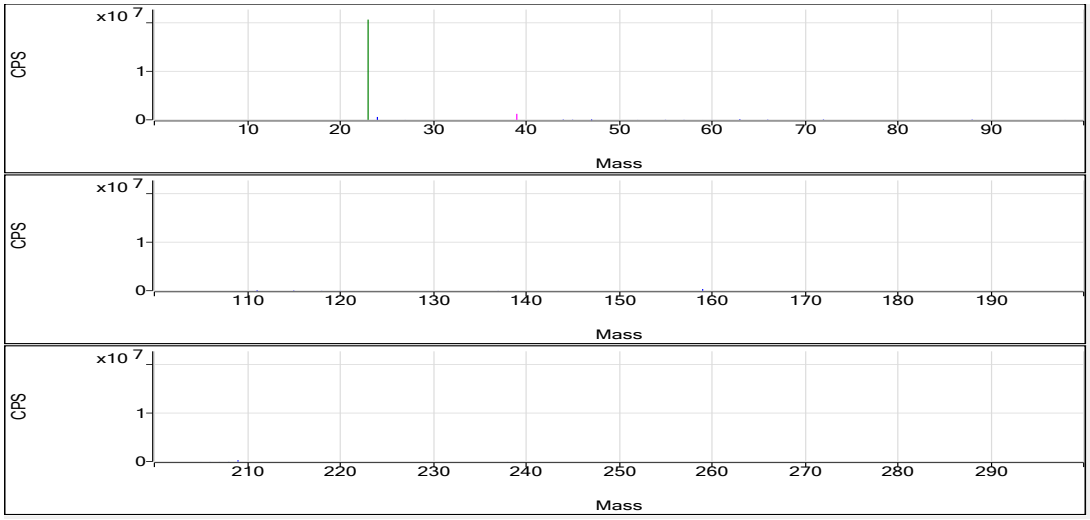


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.045	0	110.00	0.0007	1.523E-05
Be	9	1	No Gas	0.038	0	102.00	0.0007	1.523E-05
Be	9	1	No Gas	0.043	0	108.00	0.0007	1.523E-05
Se	78	2	H2	0.762	0.0001	44.00	0.0002	3.71E-06
Se	78	2	H2	0.753	0.0001	42.67	0.0002	3.71E-06
Se	78	2	H2	0.726	0.0001	41.33	0.0002	3.71E-06
Na	23	3	He	154684.192	559.7746	20682363.44	0.0036	0.3007
Na	23	3	He	148486.629	537.3588	20689163.44	0.0036	0.3007
Na	23	3	He	154823.534	560.2786	20583023.44	0.0036	0.3007
Mg	24	3	He	8790.194	16.0275	592179.76	0.0018	0.003274
Mg	24	3	He	8422.166	15.3566	591254.41	0.0018	0.003274
Mg	24	3	He	8755.956	15.9651	586512.41	0.0018	0.003274
Al	27	3	He	258.803	0.1519	5611.27	0.0006	0.00137
Al	27	3	He	264.347	0.1551	5971.41	0.0006	0.00137
Al	27	3	He	273.88	0.1606	5901.40	0.0006	0.00137
K	39	3	He	27215.537	32.4206	1197865.37	0.0012	0.378
K	39	3	He	27270.215	32.485	1250722.95	0.0012	0.378
K	39	3	He	28833.449	34.3255	1261019.04	0.0012	0.378
Ca	44	3	He	25461.297	1.7741	65547.97	0.0001	0.003203
Ca	44	3	He	24960.684	1.7393	66964.18	0.0001	0.003203
Ca	44	3	He	25415.136	1.7709	65056.51	0.0001	0.003203
Ti	47	3	He	5.547	0.003	110.00	0.0005	0
Ti	47	3	He	6.29	0.0034	130.00	0.0005	0
Ti	47	3	He	3.043	0.0016	60.00	0.0005	0
V	51	3	He	0.347	0.0325	1202.06	0.0224	0.02476
V	51	3	He	0.453	0.0349	1344.07	0.0224	0.02476
V	51	3	He	0.528	0.0366	1344.07	0.0224	0.02476
Cr	52	3	He	5.927	0.2152	7952.48	0.0293	0.04167
Cr	52	3	He	5.932	0.2154	8292.62	0.0293	0.04167
Cr	52	3	He	5.68	0.208	7642.24	0.0293	0.04167
Mn	55	3	He	51.366	0.671	24791.90	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	49.233	0.6434	24771.95	0.0129	0.006476
Mn	55	3	He	52.38	0.6841	25132.54	0.0129	0.006476
Fe	57	3	He	792.388	0.4696	17350.96	0.0006	0.00213
Fe	57	3	He	800.822	0.4746	18272.28	0.0006	0.00213
Fe	57	3	He	800.645	0.4745	17431.06	0.0006	0.00213
Co	59	3	He	0.762	0.0466	1720.16	0.0572	0.00297
Co	59	3	He	0.702	0.0431	1660.15	0.0572	0.00297
Co	59	3	He	0.852	0.0517	1900.18	0.0572	0.00297
Ni	60	3	He	13.611	0.1202	8492.84	0.0086	0.002921
Ni	60	3	He	14.241	0.1256	8772.96	0.0086	0.002921
Ni	60	3	He	13.915	0.1228	8502.85	0.0086	0.002921
Cu	63	3	He	65.653	1.6905	119455.07	0.0257	0.004531
Cu	63	3	He	67.187	1.7298	120813.77	0.0257	0.004531
Cu	63	3	He	67.02	1.7256	119474.71	0.0257	0.004531
Zn	66	3	He	228.196	0.6622	46797.32	0.0029	0.002877
Zn	66	3	He	236.416	0.686	47910.76	0.0029	0.002877
Zn	66	3	He	234.319	0.6799	47077.86	0.0029	0.002877
As	75	3	He	1.125	0.003	210.00	0.002	0.0006798
As	75	3	He	0.903	0.0025	176.00	0.002	0.0006798
As	75	3	He	1.013	0.0027	190.00	0.002	0.0006798
Sr	88	3	He	105.512	0.9504	65151.07	0.009	0.001075
Sr	88	3	He	104.107	0.9378	64015.05	0.009	0.001075
Sr	88	3	He	104.694	0.9431	64186.28	0.009	0.001075
Mo	98	3	He	2.878	0.0655	4490.88	0.0226	0.0005115
Mo	98	3	He	3.105	0.0706	4821.03	0.0226	0.0005115
Mo	98	3	He	2.899	0.066	4490.88	0.0226	0.0005115
Ag	107	3	He	0.32	0.0159	1090.10	0.0487	0.0003023
Ag	107	3	He	0.322	0.016	1090.09	0.0487	0.0003023
Ag	107	3	He	0.278	0.0138	940.06	0.0487	0.0003023
Cd	111	3	He	0.208	0.0011	78.00	0.0054	8.618E-06
Cd	111	3	He	0.274	0.0015	102.00	0.0054	8.618E-06
Cd	111	3	He	0.242	0.0013	90.00	0.0054	8.618E-06
Sn	120	3	He	23.998	0.4052	27778.43	0.0161	0.0177
Sn	120	3	He	24.258	0.4094	27948.97	0.0161	0.0177
Sn	120	3	He	24.597	0.4149	28239.57	0.0161	0.0177
Sb	121	3	He	0.83	0.0127	870.06	0.0152	8.618E-05
Sb	121	3	He	1.007	0.0154	1050.08	0.0152	8.618E-05
Sb	121	3	He	1.184	0.0181	1230.10	0.0152	8.618E-05
Ba	137	3	He	44.913	0.2214	15178.89	0.0049	0.0001277
Ba	137	3	He	44.804	0.2209	15078.64	0.0049	0.0001277
Ba	137	3	He	43.563	0.2148	14618.09	0.0049	0.0001277
Tl	205	3	He	0.25	0.0064	2180.26	0.0249	0.000171
Tl	205	3	He	0.211	0.0054	1840.19	0.0249	0.000171
Tl	205	3	He	0.265	0.0068	2300.28	0.0249	0.000171
Pb	208	3	He	2.662	0.0904	16621.15	0.0334	0.001456
Pb	208	3	He	2.691	0.0914	16631.17	0.0334	0.001456
Pb	208	3	He	2.62	0.089	15840.18	0.0334	0.001456
U	238	3	He	0.322	0.016	4370.96	0.0493	0.0001028
U	238	3	He	0.354	0.0176	4901.09	0.0493	0.0001028
U	238	3	He	0.319	0.0159	4390.91	0.0493	0.0001028
Sc	45	1	No Gas			2249558.87		
Sc	45	1	No Gas			2333605.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2298643.25		
Ge	72	1	No Gas			1119616.31		
Ge	72	1	No Gas			1141623.81		
Ge	72	1	No Gas			1121552.09		
Sc	45	2	H2			131724.11		
Sc	45	2	H2			131924.85		
Sc	45	2	H2			132912.01		
Ge	72	2	H2			118155.61		
Ge	72	2	H2			120051.66		
Ge	72	2	H2			120032.03		
In	115	2	H2			323590.46		
In	115	2	H2			317473.65		
In	115	2	H2			318373.82		
Sc	45	3	He			36947.66		
Sc	45	3	He			38501.58		
Sc	45	3	He			36737.12		
Ge	72	3	He			70664.47		
Ge	72	3	He			69840.98		
Ge	72	3	He			69238.36		
In	115	3	He			68700.89		
In	115	3	He			68408.58		
In	115	3	He			68217.61		
Tb	159	3	He			341167.85		
Tb	159	3	He			339401.05		
Tb	159	3	He			339019.96		
Bi	209	3	He			273069.57		
Bi	209	3	He			278708.04		
Bi	209	3	He			276783.34		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

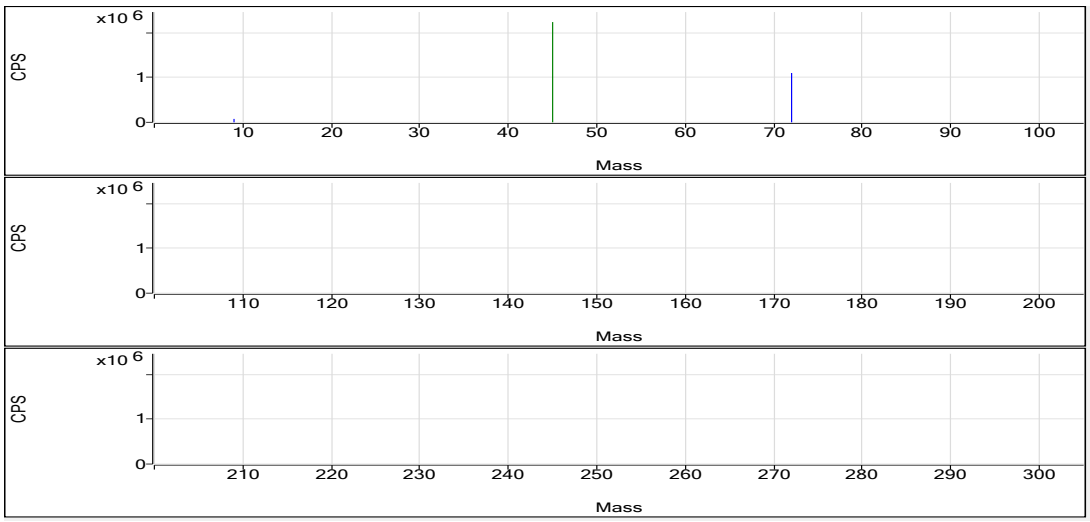
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	45.633	ppb	0.4	75817.17	0.0338	Pulse	0.5000	3
Se	78	115	H2	47.857	ppb	0.6	2557.35	0.0083	Pulse	1.5000	3
Na	23	45	He	5060.185	ppb	1.0	679675.35	18.6027	Pulse	0.1000	3
Mg	24	45	He	5099.851	ppb	0.4	339824.47	9.3001	Pulse	0.1000	3
Al	27	45	He	4889.076	ppb	1.0	103936.11	2.8445	Pulse	0.1000	3
K	39	45	He	4933.402	ppb	1.7	226018.57	6.1864	Pulse	0.1000	3
Ca	44	45	He	4968.551	ppb	1.2	12742.65	0.3488	Pulse	0.1000	3
Ti	47	45	He	4941.608	ppb	2.2	96902.14	2.6525	Pulse	0.1000	3
V	51	45	He	514.653	ppb	1.0	422081.91	11.5523	Pulse	0.5000	3
Cr	52	45	He	511.676	ppb	1.6	549004.81	15.0268	Pulse	0.1000	3
Mn	55	45	He	497.330	ppb	0.5	235322.60	6.4405	Pulse	0.1000	3
Fe	57	45	He	5060.509	ppb	2.2	109147.78	2.9876	Pulse	0.1000	3
Co	59	45	He	507.923	ppb	1.2	1061928.29	29.0654	Pulse	0.1000	3
Ni	60	72	He	520.776	ppb	0.5	299351.09	4.4898	Pulse	0.1000	3
Cu	63	72	He	497.072	ppb	0.9	851346.65	12.7689	Pulse	0.1000	3
Zn	66	72	He	516.530	ppb	0.4	99705.08	1.4954	Pulse	0.1000	3
As	75	72	He	508.822	ppb	1.0	69187.37	1.0377	Pulse	0.5000	3
Sr	88	115	He	49.319	ppb	4.4	29865.47	0.4448	Pulse	0.1000	3
Mo	98	115	He	52.956	ppb	2.2	80332.66	1.1964	Pulse	0.1000	3
Ag	107	115	He	54.266	ppb	0.3	177411.47	2.6419	Pulse	0.1000	3
Cd	111	115	He	53.151	ppb	0.7	19361.44	0.2883	Pulse	0.5000	3
Sn	120	115	He	52.706	ppb	0.9	58343.38	0.8688	Pulse	0.1000	3
Sb	121	115	He	51.183	ppb	1.5	52222.60	0.7777	Pulse	0.1000	3
Ba	137	115	He	510.575	ppb	0.9	168944.58	2.5159	Pulse	0.1000	3
Tl	205	159	He	53.272	ppb	0.4	443844.92	1.3275	Pulse	0.1000	3
Pb	208	159	He	52.974	ppb	1.3	592450.87	1.7720	Pulse	0.1000	3
U	238	209	He	51.072	ppb	0.5	682537.54	2.5197	Pulse	0.1000	3

ISTD Table:

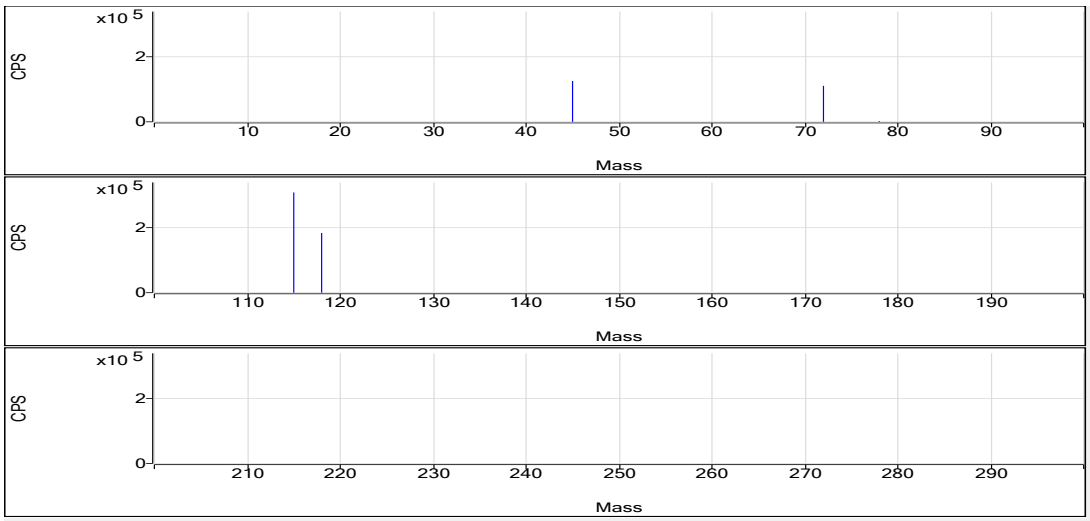
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2243381.74	0.1	93.2	Analog	0.1000	3
No Gas	Ge	72	1103134.51	0.3	95.0	Pulse	0.1000	3
H2	Sc	45	125482.32	1.5	76.3	Pulse	0.1000	3
H2	Ge	72	110398.99	1.2	76.0	Pulse	0.1000	3
H2	In	115	307651.44	0.4	85.5	Pulse	0.1000	3
He	Sc	45	36539.94	1.5	83.5	Pulse	0.1000	3
He	Ge	72	66675.67	0.6	87.2	Pulse	0.1000	3
He	In	115	67153.44	0.7	86.6	Pulse	0.1000	3
He	Tb	159	334358.09	1.1	90.1	Pulse	0.1000	3
He	Bi	209	270884.46	0.9	92.7	Pulse	0.1000	3

No Gas

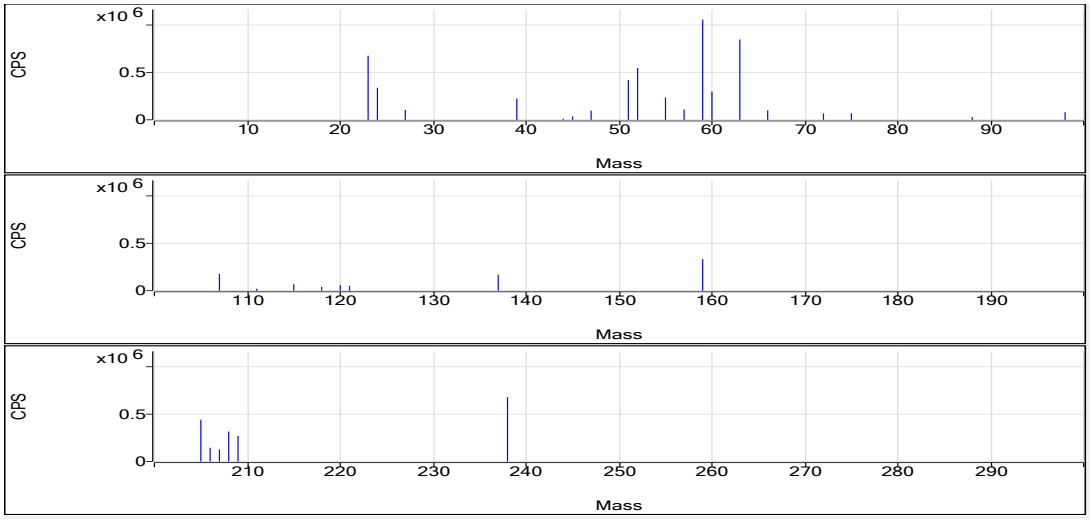


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	45.841	0.034	76073.88	0.0007	1.523E-05
Be	9	1	No Gas	45.453	0.0337	75607.42	0.0007	1.523E-05
Be	9	1	No Gas	45.604	0.0338	75770.22	0.0007	1.523E-05
Se	78	2	H2	47.57	0.0083	2536.90	0.0002	3.71E-06
Se	78	2	H2	48.174	0.0084	2567.57	0.0002	3.71E-06
Se	78	2	H2	47.827	0.0083	2567.57	0.0002	3.71E-06
Na	23	3	He	5046.914	18.5547	681830.07	0.0036	0.3007
Na	23	3	He	5016.17	18.4435	681447.80	0.0036	0.3007
Na	23	3	He	5117.471	18.8099	675748.19	0.0036	0.3007
Mg	24	3	He	5074.125	9.2533	340028.82	0.0018	0.003274
Mg	24	3	He	5116.701	9.3309	344754.84	0.0018	0.003274
Mg	24	3	He	5108.726	9.3163	334689.76	0.0018	0.003274
Al	27	3	He	4937.334	2.8726	105557.95	0.0006	0.00137
Al	27	3	He	4841.554	2.8169	104076.90	0.0006	0.00137
Al	27	3	He	4888.34	2.8441	102173.48	0.0006	0.00137
K	39	3	He	4936.591	6.1902	227469.88	0.0012	0.378
K	39	3	He	4849.585	6.0877	224928.20	0.0012	0.378
K	39	3	He	5014.028	6.2813	225657.63	0.0012	0.378
Ca	44	3	He	4952.754	0.3477	12775.98	0.0001	0.003203
Ca	44	3	He	4917.854	0.3452	12756.12	0.0001	0.003203
Ca	44	3	He	5035.045	0.3534	12695.85	0.0001	0.003203
Ti	47	3	He	4958.757	2.6617	97808.01	0.0005	0
Ti	47	3	He	4826.719	2.5908	95723.95	0.0005	0
Ti	47	3	He	5039.347	2.7049	97174.47	0.0005	0
V	51	3	He	514.618	11.5515	424482.31	0.0224	0.02476
V	51	3	He	509.688	11.4411	422722.94	0.0224	0.02476
V	51	3	He	519.653	11.6643	419040.47	0.0224	0.02476
Cr	52	3	He	513.384	15.0769	554028.66	0.0293	0.04167
Cr	52	3	He	502.789	14.7666	545591.91	0.0293	0.04167
Cr	52	3	He	518.855	15.2371	547393.86	0.0293	0.04167
Mn	55	3	He	496.222	6.4261	236140.91	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	495.505	6.4169	237088.73	0.0129	0.006476
Mn	55	3	He	500.264	6.4784	232738.16	0.0129	0.006476
Fe	57	3	He	5090.221	3.0052	110430.87	0.0006	0.00213
Fe	57	3	He	4934.919	2.9135	107649.16	0.0006	0.00213
Fe	57	3	He	5156.386	3.0442	109363.30	0.0006	0.00213
Co	59	3	He	504.814	28.8875	1061529.05	0.0572	0.00297
Co	59	3	He	504.238	28.8546	1066113.58	0.0572	0.00297
Co	59	3	He	514.716	29.4541	1058142.25	0.0572	0.00297
Ni	60	3	He	523.351	4.5119	299339.53	0.0086	0.002921
Ni	60	3	He	521.271	4.494	299194.16	0.0086	0.002921
Ni	60	3	He	517.706	4.4633	299519.57	0.0086	0.002921
Cu	63	3	He	500.717	12.8625	853348.27	0.0257	0.004531
Cu	63	3	He	498.186	12.7975	852007.41	0.0257	0.004531
Cu	63	3	He	492.314	12.6467	848684.28	0.0257	0.004531
Zn	66	3	He	515.807	1.4933	99070.91	0.0029	0.002877
Zn	66	3	He	518.819	1.502	99996.99	0.0029	0.002877
Zn	66	3	He	514.965	1.4909	100047.33	0.0029	0.002877
As	75	3	He	512.601	1.0454	69356.85	0.002	0.0006798
As	75	3	He	511.108	1.0424	69397.00	0.002	0.0006798
As	75	3	He	502.756	1.0254	68808.27	0.002	0.0006798
Sr	88	3	He	51.556	0.4649	31014.56	0.009	0.001075
Sr	88	3	He	47.229	0.426	28789.88	0.009	0.001075
Sr	88	3	He	49.171	0.4435	29791.97	0.009	0.001075
Mo	98	3	He	54.314	1.227	81847.82	0.0226	0.0005115
Mo	98	3	He	52.326	1.1821	79886.81	0.0226	0.0005115
Mo	98	3	He	52.229	1.1799	79263.36	0.0226	0.0005115
Ag	107	3	He	54.214	2.6393	176057.01	0.0487	0.0003023
Ag	107	3	He	54.452	2.6509	179146.27	0.0487	0.0003023
Ag	107	3	He	54.132	2.6353	177031.13	0.0487	0.0003023
Cd	111	3	He	53.579	0.2906	19387.47	0.0054	8.618E-06
Cd	111	3	He	52.881	0.2869	19385.47	0.0054	8.618E-06
Cd	111	3	He	52.994	0.2875	19311.37	0.0054	8.618E-06
Sn	120	3	He	53.095	0.8751	58374.03	0.0161	0.0177
Sn	120	3	He	52.827	0.8708	58845.40	0.0161	0.0177
Sn	120	3	He	52.196	0.8606	57810.72	0.0161	0.0177
Sb	121	3	He	51.491	0.7824	52188.79	0.0152	8.618E-05
Sb	121	3	He	50.289	0.7641	51637.22	0.0152	8.618E-05
Sb	121	3	He	51.77	0.7866	52841.80	0.0152	8.618E-05
Ba	137	3	He	515.98	2.5425	169599.41	0.0049	0.0001277
Ba	137	3	He	508.701	2.5066	169396.01	0.0049	0.0001277
Ba	137	3	He	507.044	2.4985	167838.32	0.0049	0.0001277
Tl	205	3	He	53.445	1.3318	440324.72	0.0249	0.000171
Tl	205	3	He	53.009	1.3209	446678.16	0.0249	0.000171
Tl	205	3	He	53.364	1.3298	444531.87	0.0249	0.000171
Pb	208	3	He	53.755	1.7981	319854.92	0.0334	0.001456
Pb	208	3	He	52.67	1.7619	320391.83	0.0334	0.001456
Pb	208	3	He	52.499	1.7561	313590.58	0.0334	0.001456
U	238	3	He	51.339	2.5329	679044.44	0.0493	0.0001028
U	238	3	He	51.024	2.5174	684224.91	0.0493	0.0001028
U	238	3	He	50.853	2.5089	684343.27	0.0493	0.0001028
Sc	45	1	No Gas			2240727.62		
Sc	45	1	No Gas			2246018.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2243399.03		
Ge	72	1	No Gas			1099973.26		
Ge	72	1	No Gas			1106195.30		
Ge	72	1	No Gas			1103234.98		
Sc	45	2	H2			123401.22		
Sc	45	2	H2			125811.40		
Sc	45	2	H2			127234.33		
Ge	72	2	H2			109215.99		
Ge	72	2	H2			110112.96		
Ge	72	2	H2			111868.01		
In	115	2	H2			307030.50		
In	115	2	H2			306847.16		
In	115	2	H2			309076.66		
Sc	45	3	He			36746.96		
Sc	45	3	He			36947.79		
Sc	45	3	He			35925.08		
Ge	72	3	He			66343.84		
Ge	72	3	He			66576.07		
Ge	72	3	He			67107.09		
In	115	3	He			67012.84		
In	115	3	He			67897.09		
In	115	3	He			67484.56		
Tb	159	3	He			330628.16		
Tb	159	3	He			338157.10		
Tb	159	3	He			334289.02		
Bi	209	3	He			268089.74		
Bi	209	3	He			271802.46		
Bi	209	3	He			272761.17		

Quantitation Report

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Sample Type	CCB
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/14/2023 7:25:47 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

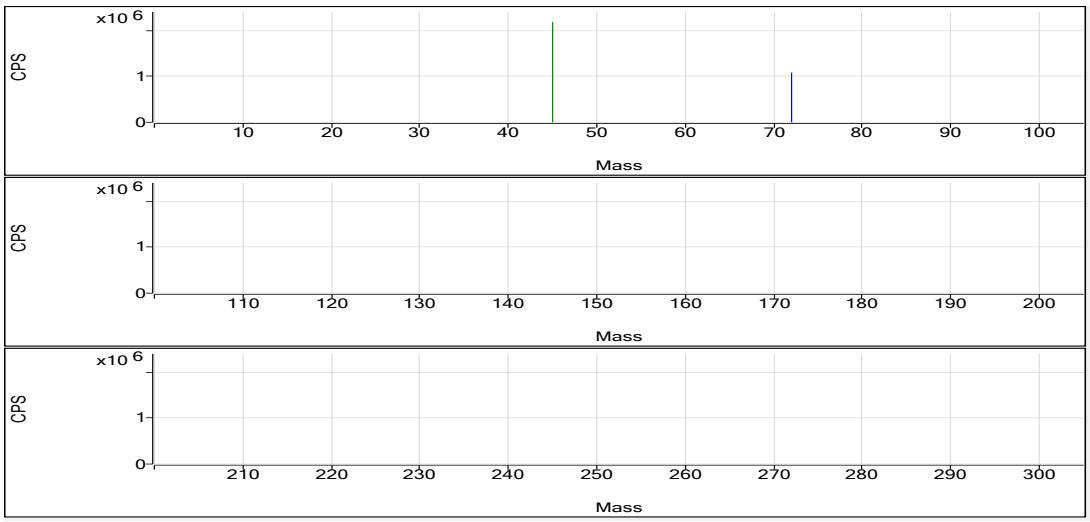
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.020	ppb	46.4	66.00	0.0000	Pulse	0.5000	3
Se	78	115	H2	0.082	ppb	54.9	5.55	0.0000	Pulse	1.5000	3
Na	23	45	He	38.502	ppb	6.1	15922.32	0.4399	Pulse	0.1000	3
Mg	24	45	He	2.544	ppb	30.7	286.68	0.0079	Pulse	0.1000	3
Al	27	45	He	0.334	ppb	293.5	56.67	0.0016	Pulse	0.1000	3
K	39	45	He	11.533	ppb	67.3	14170.65	0.3916	Pulse	0.1000	3
Ca	44	45	He	-3.684	ppb	N/A	106.67	0.0029	Pulse	0.1000	3
Ti	47	45	He	1.199	ppb	23.5	23.33	0.0006	Pulse	0.1000	3
V	51	45	He	0.173	ppb	29.9	1036.71	0.0286	Pulse	0.5000	3
Cr	52	45	He	0.232	ppb	37.5	1753.50	0.0485	Pulse	0.1000	3
Mn	55	45	He	0.134	ppb	101.6	296.68	0.0082	Pulse	0.1000	3
Fe	57	45	He	2.002	ppb	42.8	120.01	0.0033	Pulse	0.1000	3
Co	59	45	He	0.155	ppb	22.6	430.03	0.0119	Pulse	0.1000	3
Ni	60	72	He	0.144	ppb	180.1	276.68	0.0042	Pulse	0.1000	3
Cu	63	72	He	0.110	ppb	37.0	486.69	0.0073	Pulse	0.1000	3
Zn	66	72	He	0.172	ppb	111.0	223.34	0.0034	Pulse	0.1000	3
As	75	72	He	0.130	ppb	38.9	62.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.042	ppb	N/A	46.67	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.030	ppb	42.0	80.00	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.015	ppb	51.6	70.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	117.7	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.035	ppb	344.7	1223.43	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.044	ppb	23.7	50.00	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.186	ppb	28.0	70.00	0.0010	Pulse	0.1000	3
Tl	205	159	He	0.110	ppb	5.9	963.41	0.0029	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	82.2	626.70	0.0019	Pulse	0.1000	3
U	238	209	He	0.051	ppb	6.4	706.72	0.0026	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2187722.41	1.1	90.9	Analog	0.1000	3
No Gas	Ge	72	1083790.84	1.0	93.3	Pulse	0.1000	3
H2	Sc	45	123639.07	1.6	75.2	Pulse	0.1000	3
H2	Ge	72	107788.27	1.3	74.2	Pulse	0.1000	3
H2	In	115	309928.99	1.5	86.1	Pulse	0.1000	3
He	Sc	45	36192.40	1.5	82.7	Pulse	0.1000	3
He	Ge	72	66264.07	1.4	86.6	Pulse	0.1000	3
He	In	115	67024.51	1.1	86.4	Pulse	0.1000	3
He	Tb	159	331347.42	1.6	89.3	Pulse	0.1000	3
He	Bi	209	267478.27	0.8	91.5	Pulse	0.1000	3

No Gas



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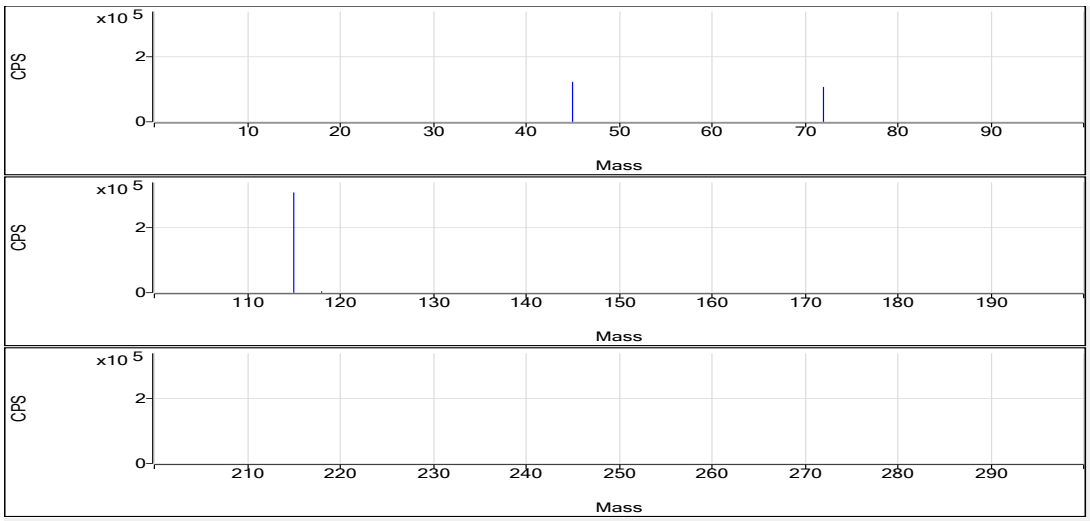
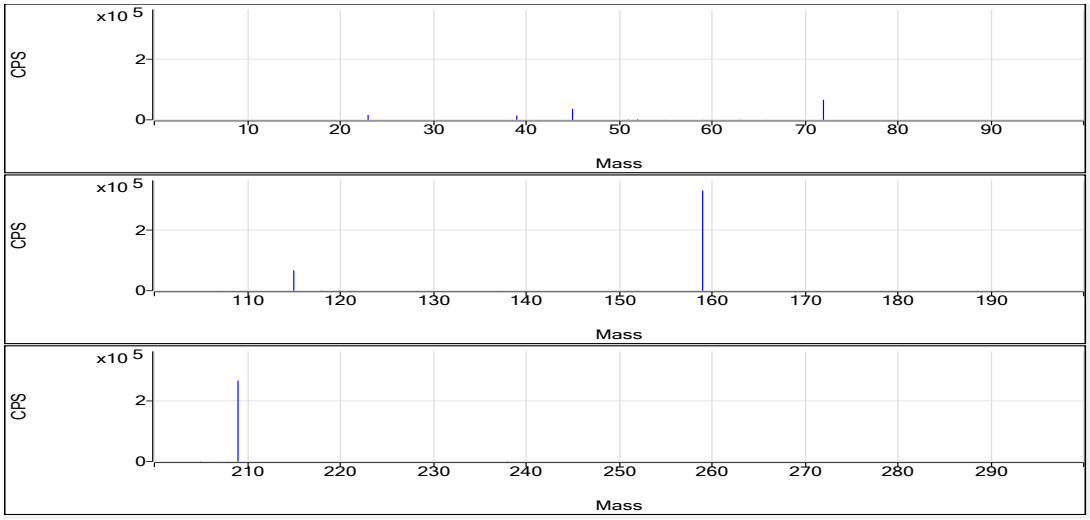


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.012	0	52.00	0.0007	1.523E-05
Be	9	1	No Gas	0.018	0	64.00	0.0007	1.523E-05
Be	9	1	No Gas	0.03	0	82.00	0.0007	1.523E-05
Se	78	2	H2	0.078	0	5.33	0.0002	3.71E-06
Se	78	2	H2	0.13	0	8.00	0.0002	3.71E-06
Se	78	2	H2	0.04	0	3.33	0.0002	3.71E-06
Na	23	3	He	41.171	0.4496	16299.42	0.0036	0.3007
Na	23	3	He	37.597	0.4366	16019.08	0.0036	0.3007
Na	23	3	He	36.737	0.4335	15448.47	0.0036	0.3007
Mg	24	3	He	1.987	0.0069	250.01	0.0018	0.003274
Mg	24	3	He	3.438	0.0095	350.02	0.0018	0.003274
Mg	24	3	He	2.207	0.0073	260.01	0.0018	0.003274
Al	27	3	He	1.438	0.0022	80.00	0.0006	0.00137
Al	27	3	He	-0.012	0.0014	50.00	0.0006	0.00137
Al	27	3	He	-0.426	0.0011	40.00	0.0006	0.00137
K	39	3	He	3.33	0.3819	13846.94	0.0012	0.378
K	39	3	He	12.495	0.3927	14407.56	0.0012	0.378
K	39	3	He	18.773	0.4001	14257.44	0.0012	0.378
Ca	44	3	He	-22.252	0.0017	60.00	0.0001	0.003203
Ca	44	3	He	8.825	0.0038	140.01	0.0001	0.003203
Ca	44	3	He	2.376	0.0034	120.01	0.0001	0.003203
Ti	47	3	He	1.028	0.0006	20.00	0.0005	0
Ti	47	3	He	1.523	0.0008	30.00	0.0005	0
Ti	47	3	He	1.046	0.0006	20.00	0.0005	0
V	51	3	He	0.19	0.029	1052.05	0.0224	0.02476
V	51	3	He	0.214	0.0295	1084.05	0.0224	0.02476
V	51	3	He	0.115	0.0273	974.04	0.0224	0.02476
Cr	52	3	He	0.131	0.0455	1650.15	0.0293	0.04167
Cr	52	3	He	0.281	0.0499	1830.20	0.0293	0.04167
Cr	52	3	He	0.283	0.05	1780.16	0.0293	0.04167
Mn	55	3	He	0.011	0.0066	240.01	0.0129	0.006476

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.11	0.0079	290.01	0.0129	0.006476
Mn	55	3	He	0.28	0.0101	360.02	0.0129	0.006476
Fe	57	3	He	2	0.0033	120.01	0.0006	0.00213
Fe	57	3	He	2.858	0.0038	140.01	0.0006	0.00213
Fe	57	3	He	1.146	0.0028	100.00	0.0006	0.00213
Co	59	3	He	0.175	0.013	470.03	0.0572	0.00297
Co	59	3	He	0.177	0.0131	480.03	0.0572	0.00297
Co	59	3	He	0.115	0.0095	340.02	0.0572	0.00297
Ni	60	3	He	0.421	0.0065	440.02	0.0086	0.002921
Ni	60	3	He	-0.094	0.0021	140.00	0.0086	0.002921
Ni	60	3	He	0.105	0.0038	250.01	0.0086	0.002921
Cu	63	3	He	0.073	0.0064	430.02	0.0257	0.004531
Cu	63	3	He	0.153	0.0085	560.03	0.0257	0.004531
Cu	63	3	He	0.103	0.0072	470.02	0.0257	0.004531
Zn	66	3	He	-0.017	0.0028	190.01	0.0029	0.002877
Zn	66	3	He	0.364	0.0039	260.01	0.0029	0.002877
Zn	66	3	He	0.169	0.0034	220.01	0.0029	0.002877
As	75	3	He	0.163	0.001	68.00	0.002	0.0006798
As	75	3	He	0.156	0.001	66.00	0.002	0.0006798
As	75	3	He	0.072	0.0008	54.00	0.002	0.0006798
Sr	88	3	He	-0.036	0.0008	50.00	0.009	0.001075
Sr	88	3	He	-0.005	0.001	70.00	0.009	0.001075
Sr	88	3	He	-0.086	0.0003	20.00	0.009	0.001075
Mo	98	3	He	0.017	0.0009	60.00	0.0226	0.0005115
Mo	98	3	He	0.043	0.0015	100.00	0.0226	0.0005115
Mo	98	3	He	0.03	0.0012	80.00	0.0226	0.0005115
Ag	107	3	He	0.009	0.0008	50.00	0.0487	0.0003023
Ag	107	3	He	0.024	0.0015	100.00	0.0487	0.0003023
Ag	107	3	He	0.012	0.0009	60.00	0.0487	0.0003023
Cd	111	3	He	0.021	0.0001	8.00	0.0054	8.618E-06
Cd	111	3	He	0.009	0.0001	4.00	0.0054	8.618E-06
Cd	111	3	He	-0.002	0	0.00	0.0054	8.618E-06
Sn	120	3	He	0.172	0.0205	1360.14	0.0161	0.0177
Sn	120	3	He	-0.028	0.0173	1170.08	0.0161	0.0177
Sn	120	3	He	-0.04	0.0171	1140.08	0.0161	0.0177
Sb	121	3	He	0.054	0.0009	60.00	0.0152	8.618E-05
Sb	121	3	He	0.033	0.0006	40.00	0.0152	8.618E-05
Sb	121	3	He	0.044	0.0007	50.00	0.0152	8.618E-05
Ba	137	3	He	0.219	0.0012	80.00	0.0049	0.0001277
Ba	137	3	He	0.213	0.0012	80.00	0.0049	0.0001277
Ba	137	3	He	0.126	0.0007	50.00	0.0049	0.0001277
Tl	205	3	He	0.116	0.0031	1020.08	0.0249	0.000171
Tl	205	3	He	0.103	0.0027	920.07	0.0249	0.000171
Tl	205	3	He	0.11	0.0029	950.07	0.0249	0.000171
Pb	208	3	He	0.025	0.0023	380.02	0.0334	0.001456
Pb	208	3	He	0.004	0.0016	290.01	0.0334	0.001456
Pb	208	3	He	0.011	0.0018	360.02	0.0334	0.001456
U	238	3	He	0.049	0.0025	670.04	0.0493	0.0001028
U	238	3	He	0.055	0.0028	760.06	0.0493	0.0001028
U	238	3	He	0.051	0.0026	690.05	0.0493	0.0001028
Sc	45	1	No Gas			2169778.87		
Sc	45	1	No Gas			2216101.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2177287.31		
Ge	72	1	No Gas			1072786.31		
Ge	72	1	No Gas			1093964.51		
Ge	72	1	No Gas			1084621.70		
Sc	45	2	H2			124983.51		
Sc	45	2	H2			121312.83		
Sc	45	2	H2			124620.87		
Ge	72	2	H2			107421.22		
Ge	72	2	H2			109387.20		
Ge	72	2	H2			106556.39		
In	115	2	H2			309840.52		
In	115	2	H2			305236.01		
In	115	2	H2			314710.44		
Sc	45	3	He			36255.80		
Sc	45	3	He			36687.15		
Sc	45	3	He			35634.24		
Ge	72	3	He			67228.43		
Ge	72	3	He			66183.53		
Ge	72	3	He			65380.26		
In	115	3	He			66408.86		
In	115	3	He			67825.28		
In	115	3	He			66861.63		
Tb	159	3	He			333044.84		
Tb	159	3	He			335583.47		
Tb	159	3	He			325413.94		
Bi	209	3	He			267600.39		
Bi	209	3	He			269506.95		
Bi	209	3	He			265327.46		

Quantitation Report

Data File Name	012CALB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 6:23:37 AM
Sample Name	ICIS 4654618
Sample Type	CalBlk
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

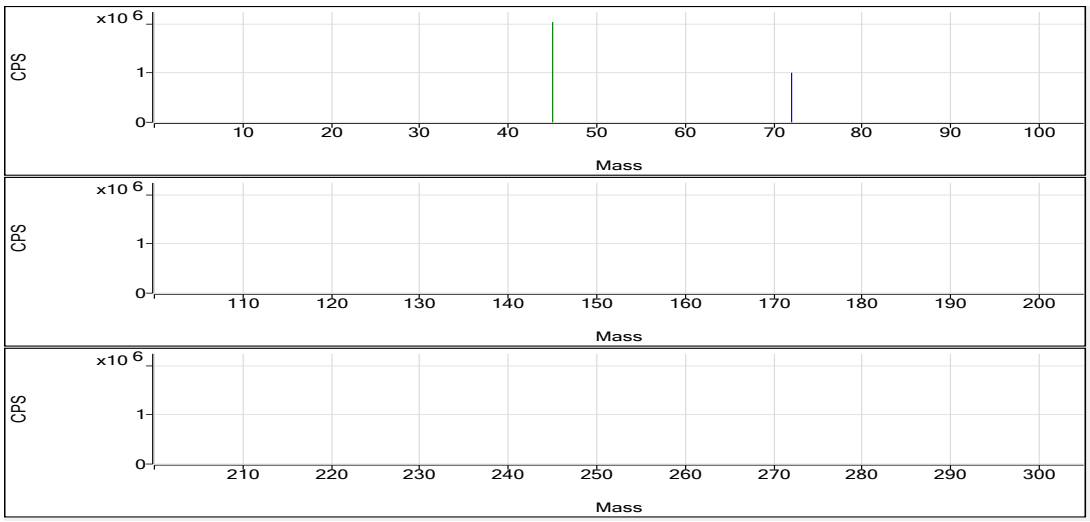
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	N/A	44.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.000	ppb	N/A	1.56	0.0000	Pulse	1.5000	3
Na	23	45	He	0.000	ppb	N/A	16316.19	0.4416	Pulse	0.1000	3
Mg	24	45	He	0.000	ppb	N/A	216.68	0.0059	Pulse	0.1000	3
Al	27	45	He	0.000	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
K	39	45	He	0.000	ppb	N/A	16459.76	0.4456	Pulse	0.1000	3
Ca	44	45	He	0.000	ppb	N/A	140.01	0.0038	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.000	ppb	N/A	1128.05	0.0305	Pulse	0.5000	3
Cr	52	45	He	0.000	ppb	N/A	1373.45	0.0371	Pulse	0.1000	3
Mn	55	45	He	0.000	ppb	N/A	163.34	0.0044	Pulse	0.1000	3
Fe	57	45	He	0.000	ppb	N/A	50.00	0.0014	Pulse	0.1000	3
Co	59	45	He	0.000	ppb	N/A	100.00	0.0027	Pulse	0.1000	3
Ni	60	72	He	0.000	ppb	N/A	253.35	0.0039	Pulse	0.1000	3
Cu	63	72	He	0.000	ppb	N/A	390.02	0.0060	Pulse	0.1000	3
Zn	66	72	He	0.000	ppb	N/A	226.68	0.0035	Pulse	0.1000	3
As	75	72	He	0.000	ppb	N/A	46.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	N/A	36.67	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.000	ppb	N/A	20.00	0.0003	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.000	ppb	N/A	1083.41	0.0171	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	16.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.000	ppb	N/A	10.00	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.000	ppb	N/A	73.33	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.000	ppb	N/A	416.68	0.0014	Pulse	0.1000	3
U	238	209	He	0.000	ppb	N/A	13.33	0.0001	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2032865.44	1.4	100.0	Analog	0.1000	3
No Gas	Ge	72	1005118.89	1.1	100.0	Pulse	0.1000	3
H2	Sc	45	132112.11	1.8	100.0	Pulse	0.1000	3
H2	Ge	72	111532.38	1.7	100.0	Pulse	0.1000	3
H2	In	115	293701.27	0.8	100.0	Pulse	0.1000	3
He	Sc	45	36951.17	1.5	100.0	Pulse	0.1000	3
He	Ge	72	64559.68	0.9	100.0	Pulse	0.1000	3
He	In	115	63192.12	1.6	100.0	Pulse	0.1000	3
He	Tb	159	292806.35	0.5	100.0	Pulse	0.1000	3
He	Bi	209	235824.97	0.5	100.0	Pulse	0.1000	3

No Gas



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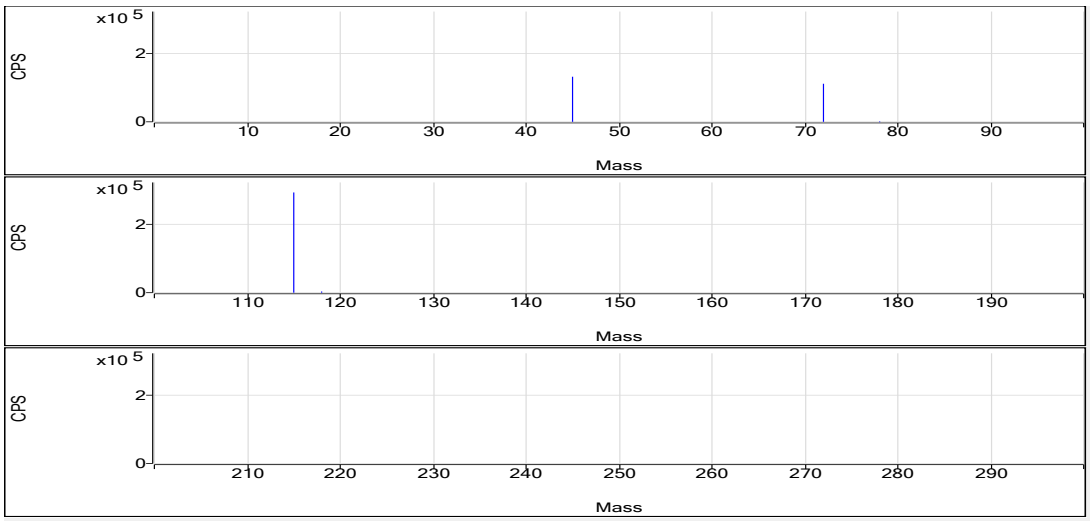
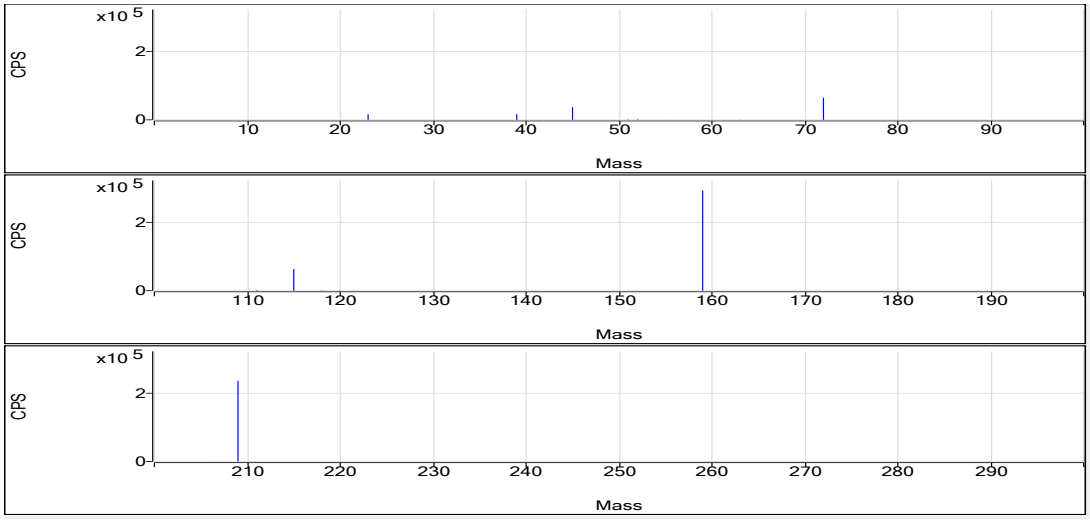


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.004	0	38.00	0.0008	2.195E-05
Be	9	1	No Gas	0.003	0	50.00	0.0008	2.195E-05
Se	78	2	H2	-0.018	0	0.67	0.0004	1.386E-05
Se	78	2	H2	-0.004	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.022	0	2.67	0.0004	1.386E-05
Na	23	3	He	1.855	0.4487	16299.46	0.0038	0.4416
Na	23	3	He	-3.444	0.4284	15928.98	0.0038	0.4416
Na	23	3	He	1.589	0.4477	16720.12	0.0038	0.4416
Mg	24	3	He	0.542	0.0069	250.01	0.0019	0.005872
Mg	24	3	He	-0.552	0.0048	180.01	0.0019	0.005872
Mg	24	3	He	0.01	0.0059	220.01	0.0019	0.005872
Al	27	3	He	-0.301	0.0003	10.00	0.0006	0.0004496
Al	27	3	He	0.153	0.0005	20.00	0.0006	0.0004496
Al	27	3	He	0.149	0.0005	20.00	0.0006	0.0004496
K	39	3	He	14.339	0.4622	16790.18	0.0012	0.4456
K	39	3	He	11.464	0.4589	17060.44	0.0012	0.4456
K	39	3	He	-25.803	0.4158	15528.66	0.0012	0.4456
Ca	44	3	He	-19.689	0.0025	90.00	0.0001	0.003779
Ca	44	3	He	16.089	0.0048	180.01	0.0001	0.003779
Ca	44	3	He	3.6	0.004	150.01	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.067	0.032	1164.05	0.0223	0.03054
V	51	3	He	-0.011	0.0303	1126.05	0.0223	0.03054
V	51	3	He	-0.056	0.0293	1094.05	0.0223	0.03054
Cr	52	3	He	-0.134	0.0333	1210.10	0.0285	0.03714
Cr	52	3	He	0.037	0.0382	1420.12	0.0285	0.03714
Cr	52	3	He	0.097	0.0399	1490.12	0.0285	0.03714
Mn	55	3	He	-0.068	0.0036	130.00	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.1	0.0056	210.01	0.0124	0.004415
Mn	55	3	He	-0.032	0.004	150.01	0.0124	0.004415
Fe	57	3	He	0.522	0.0017	60.00	0.0006	0.001356
Fe	57	3	He	-0.019	0.0013	50.00	0.0006	0.001356
Fe	57	3	He	-0.502	0.0011	40.00	0.0006	0.001356
Co	59	3	He	-0.018	0.0017	60.00	0.0581	0.002697
Co	59	3	He	0	0.0027	100.00	0.0581	0.002697
Co	59	3	He	0.018	0.0037	140.01	0.0581	0.002697
Ni	60	3	He	-0.079	0.0032	210.01	0.0087	0.003928
Ni	60	3	He	-0.027	0.0037	240.01	0.0087	0.003928
Ni	60	3	He	0.106	0.0048	310.02	0.0087	0.003928
Cu	63	3	He	0.005	0.0062	400.02	0.0261	0.006048
Cu	63	3	He	-0.055	0.0046	300.02	0.0261	0.006048
Cu	63	3	He	0.05	0.0074	470.03	0.0261	0.006048
Zn	66	3	He	0.068	0.0037	240.01	0.0029	0.003512
Zn	66	3	He	-0.098	0.0032	210.01	0.0029	0.003512
Zn	66	3	He	0.03	0.0036	230.01	0.0029	0.003512
As	75	3	He	0.053	0.0008	54.00	0.0021	0.0007233
As	75	3	He	-0.082	0.0006	36.00	0.0021	0.0007233
As	75	3	He	0.028	0.0008	50.00	0.0021	0.0007233
Sr	88	3	He	-0.011	0.0005	30.00	0.009	0.0005796
Sr	88	3	He	0.005	0.0006	40.00	0.009	0.0005796
Sr	88	3	He	0.006	0.0006	40.00	0.009	0.0005796
Mo	98	3	He	0	0.0003	20.00	0.0235	0.0003188
Mo	98	3	He	-0.014	0	0.00	0.0235	0.0003188
Mo	98	3	He	0.013	0.0006	40.00	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.095	0.0156	970.06	0.0164	0.01713
Sn	120	3	He	0.093	0.0187	1200.10	0.0164	0.01713
Sn	120	3	He	0.002	0.0172	1080.08	0.0164	0.01713
Sb	121	3	He	0.014	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.003	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Ba	137	3	He	-0.032	0	0.00	0.005	0.0001577
Ba	137	3	He	0	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0.032	0.0003	20.00	0.005	0.0001577
Tl	205	3	He	-0.003	0.0002	50.00	0.026	0.0002504
Tl	205	3	He	0.002	0.0003	90.00	0.026	0.0002504
Tl	205	3	He	0.001	0.0003	80.00	0.026	0.0002504
Pb	208	3	He	-0.001	0.0014	250.01	0.0349	0.001422
Pb	208	3	He	-0.005	0.0012	220.01	0.0349	0.001422
Pb	208	3	He	0.007	0.0017	220.01	0.0349	0.001422
U	238	3	He	-0.001	0	0.00	0.0502	5.657E-05
U	238	3	He	0.001	0.0001	20.00	0.0502	5.657E-05
U	238	3	He	0.001	0.0001	20.00	0.0502	5.657E-05
Sc	45	1	No Gas			2051133.25		
Sc	45	1	No Gas			1999403.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2048059.81		
Ge	72	1	No Gas			1011762.64		
Ge	72	1	No Gas			992760.14		
Ge	72	1	No Gas			1010833.89		
Sc	45	2	H2			132085.12		
Sc	45	2	H2			129755.43		
Sc	45	2	H2			134495.77		
Ge	72	2	H2			109979.94		
Ge	72	2	H2			111018.59		
Ge	72	2	H2			113598.62		
In	115	2	H2			291584.00		
In	115	2	H2			293387.53		
In	115	2	H2			296132.28		
Sc	45	3	He			36326.44		
Sc	45	3	He			37178.65		
Sc	45	3	He			37348.43		
Ge	72	3	He			64767.18		
Ge	72	3	He			64977.83		
Ge	72	3	He			63934.03		
In	115	3	He			62320.44		
In	115	3	He			64319.77		
In	115	3	He			62953.22		
Tb	159	3	He			291796.87		
Tb	159	3	He			292158.00		
Tb	159	3	He			294464.18		
Bi	209	3	He			236102.75		
Bi	209	3	He			236840.25		
Bi	209	3	He			234531.91		

Quantitation Report

Data File Name	013CALS.d
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Sample Type	CalStd
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

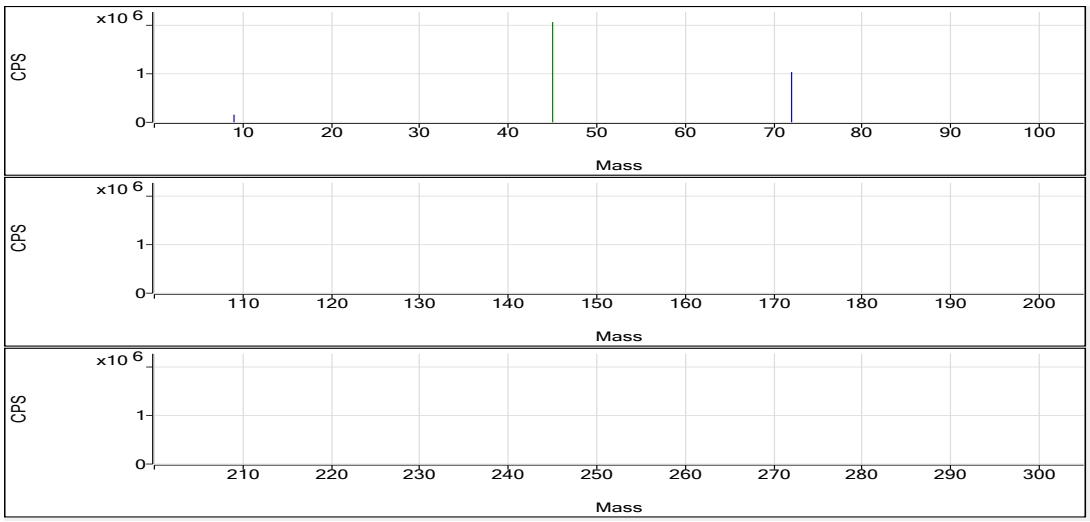
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	100.000	ppb	1.8	158732.76	0.0768	Pulse	0.5000	3
Se	78	72	H2	100.000	ppb	1.8	4907.96	0.0435	Pulse	1.5000	3
Na	23	45	He	10000.000	ppb	0.6	1428901.80	38.6559	Analog	0.1000	3
Mg	24	45	He	10000.000	ppb	0.9	689327.99	18.6486	Pulse	0.1000	3
Al	27	45	He	10000.000	ppb	1.4	213729.12	5.7822	Pulse	0.1000	3
K	39	45	He	10000.000	ppb	0.7	443954.08	12.0105	Pulse	0.1000	3
Ca	44	45	He	10000.000	ppb	2.9	24564.73	0.6646	Pulse	0.1000	3
Ti	47	45	He	10000.000	ppb	0.5	192060.84	5.1959	Pulse	0.1000	3
V	51	45	He	1000.000	ppb	0.2	825199.11	22.3244	Pulse	0.5000	3
Cr	52	45	He	1000.000	ppb	0.9	1053118.08	28.4905	Pulse	0.1000	3
Mn	55	45	He	1000.000	ppb	0.3	457937.78	12.3888	Pulse	0.1000	3
Fe	57	45	He	10000.000	ppb	0.4	209730.65	5.6739	Pulse	0.1000	3
Co	59	45	He	1000.000	ppb	0.7	2147536.22	58.0989	Analog	0.1000	3
Ni	60	72	He	1000.000	ppb	0.9	560068.68	8.6712	Pulse	0.1000	3
Cu	63	72	He	1000.000	ppb	1.3	1688474.66	26.1416	Analog	0.1000	3
Zn	66	72	He	1000.000	ppb	1.3	185302.91	2.8690	Pulse	0.1000	3
As	75	72	He	1000.000	ppb	0.4	133588.12	2.0682	Pulse	0.5000	3
Sr	88	115	He	100.000	ppb	3.9	55489.38	0.8959	Pulse	0.1000	3
Mo	98	115	He	100.000	ppb	3.6	145672.60	2.3519	Pulse	0.1000	3
Ag	107	115	He	100.000	ppb	3.7	308826.67	4.9861	Pulse	0.1000	3
Cd	111	115	He	100.000	ppb	3.2	34325.34	0.5541	Pulse	0.5000	3
Sn	120	115	He	100.000	ppb	3.3	102769.02	1.6591	Pulse	0.1000	3
Sb	121	115	He	100.000	ppb	3.5	95827.51	1.5471	Pulse	0.1000	3
Ba	137	115	He	1000.000	ppb	4.2	308340.51	4.9787	Pulse	0.1000	3
Tl	205	159	He	100.000	ppb	0.3	756396.05	2.6043	Pulse	0.1000	3
Pb	208	159	He	100.000	ppb	0.4	1015156.51	3.4952	Pulse	0.1000	3
U	238	209	He	100.000	ppb	1.1	1169414.31	5.0233	Pulse	0.1000	3

ISTD Table:

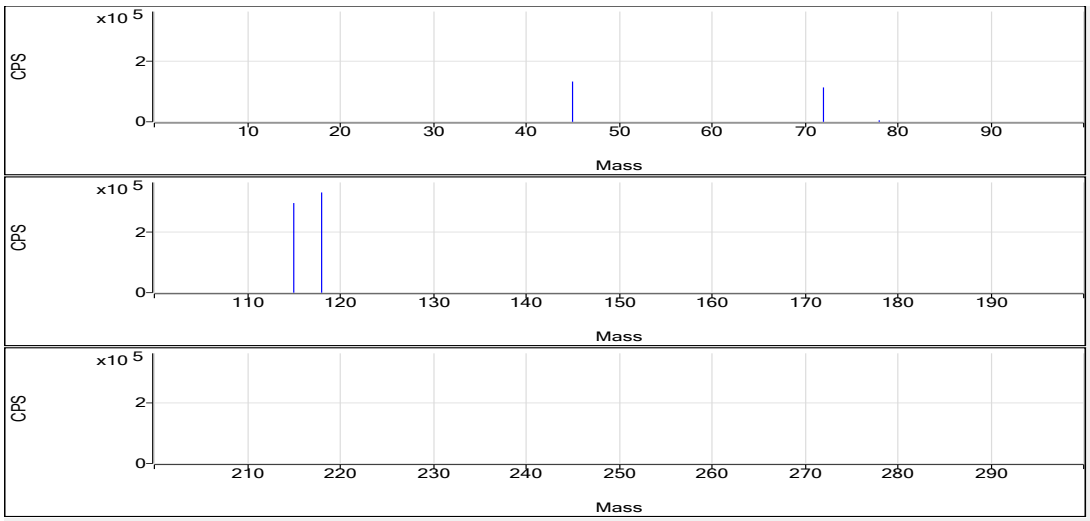
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2068545.13	1.8	101.8	Analog	0.1000	3
No Gas	Ge	72	1036502.17	1.0	103.1	Pulse	0.1000	3
H2	Sc	45	132182.02	0.6	100.1	Pulse	0.1000	3
H2	Ge	72	112850.72	1.6	101.2	Pulse	0.1000	3
H2	In	115	294139.27	0.3	100.1	Pulse	0.1000	3
He	Sc	45	36964.19	0.4	100.0	Pulse	0.1000	3
He	Ge	72	64592.98	0.9	100.1	Pulse	0.1000	3
He	In	115	61983.02	3.0	98.1	Pulse	0.1000	3
He	Tb	159	290447.25	0.5	99.2	Pulse	0.1000	3
He	Bi	209	232794.05	0.3	98.7	Pulse	0.1000	3

No Gas

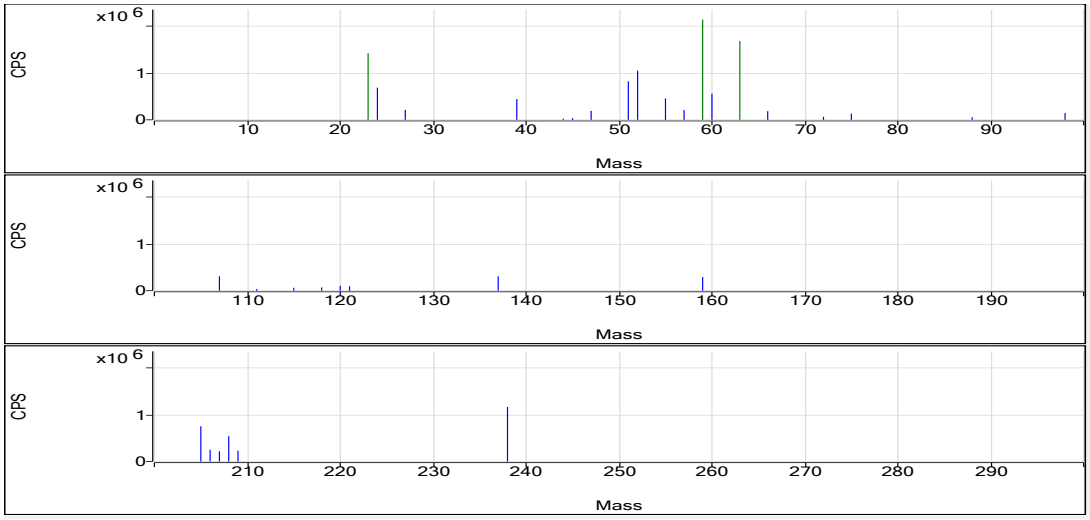


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	102.107	0.0784	158674.78	0.0008	2.195E-05
Be	9	1	No Gas	99.006	0.076	158614.42	0.0008	2.195E-05
Be	9	1	No Gas	98.887	0.0759	158909.09	0.0008	2.195E-05
Se	78	2	H2	101.896	0.0443	4924.85	0.0004	1.386E-05
Se	78	2	H2	98.265	0.0427	4906.18	0.0004	1.386E-05
Se	78	2	H2	99.839	0.0434	4892.85	0.0004	1.386E-05
Na	23	3	He	9991.228	38.6223	1430867.79	0.0038	0.4416
Na	23	3	He	10064.625	38.9028	1441657.32	0.0038	0.4416
Na	23	3	He	9944.147	38.4424	1414180.29	0.0038	0.4416
Mg	24	3	He	9910.305	18.4813	684690.85	0.0019	0.005872
Mg	24	3	He	10081.065	18.7997	696677.18	0.0019	0.005872
Mg	24	3	He	10008.63	18.6646	686615.93	0.0019	0.005872
Al	27	3	He	9843.765	5.6918	210869.33	0.0006	0.0004496
Al	27	3	He	10073.448	5.8246	215848.77	0.0006	0.0004496
Al	27	3	He	10082.787	5.83	214469.27	0.0006	0.0004496
K	39	3	He	9922.553	11.9209	441641.24	0.0012	0.4456
K	39	3	He	10048.998	12.0671	447182.34	0.0012	0.4456
K	39	3	He	10028.449	12.0434	443038.67	0.0012	0.4456
Ca	44	3	He	9668.863	0.6427	23810.14	0.0001	0.003779
Ca	44	3	He	10222.523	0.6793	25172.50	0.0001	0.003779
Ca	44	3	He	10108.614	0.6717	24711.56	0.0001	0.003779
Ti	47	3	He	9947.113	5.1684	191476.99	0.0005	0
Ti	47	3	He	10042.171	5.2178	193360.23	0.0005	0
Ti	47	3	He	10010.716	5.2014	191345.29	0.0005	0
V	51	3	He	997.52	22.2691	825017.88	0.0223	0.03054
V	51	3	He	1000.873	22.3438	828016.00	0.0223	0.03054
V	51	3	He	1001.606	22.3602	822563.44	0.0223	0.03054
Cr	52	3	He	1006.374	28.6718	1062225.45	0.0285	0.03714
Cr	52	3	He	989.95	28.2045	1045201.47	0.0285	0.03714
Cr	52	3	He	1003.676	28.5951	1051927.33	0.0285	0.03714
Mn	55	3	He	999.996	12.3887	458974.02	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	996.792	12.3491	457630.11	0.0124	0.004415
Mn	55	3	He	1003.212	12.4286	457209.21	0.0124	0.004415
Fe	57	3	He	9961.33	5.6519	209391.11	0.0006	0.001356
Fe	57	3	He	10048.188	5.7012	211274.84	0.0006	0.001356
Fe	57	3	He	9990.482	5.6685	208525.99	0.0006	0.001356
Co	59	3	He	997.381	57.9467	2146792.31	0.0581	0.002697
Co	59	3	He	994.576	57.7837	2141344.97	0.0581	0.002697
Co	59	3	He	1008.043	58.5661	2154471.37	0.0581	0.002697
Ni	60	3	He	991.126	8.5943	559820.77	0.0087	0.003928
Ni	60	3	He	999.034	8.6628	559848.12	0.0087	0.003928
Ni	60	3	He	1009.839	8.7565	560537.14	0.0087	0.003928
Cu	63	3	He	985.43	25.7609	1678026.85	0.0261	0.006048
Cu	63	3	He	1009.489	26.3897	1705468.41	0.0261	0.006048
Cu	63	3	He	1005.08	26.2744	1681928.72	0.0261	0.006048
Zn	66	3	He	986.872	2.8314	184431.79	0.0029	0.003512
Zn	66	3	He	1000.504	2.8704	185505.92	0.0029	0.003512
Zn	66	3	He	1012.624	2.9052	185971.01	0.0029	0.003512
As	75	3	He	995.079	2.058	134057.19	0.0021	0.0007233
As	75	3	He	1001.289	2.0709	133832.75	0.0021	0.0007233
As	75	3	He	1003.632	2.0757	132874.42	0.0021	0.0007233
Sr	88	3	He	96.907	0.8682	55549.58	0.009	0.0005796
Sr	88	3	He	104.356	0.9349	56393.06	0.009	0.0005796
Sr	88	3	He	98.737	0.8846	54525.49	0.009	0.0005796
Mo	98	3	He	96.39	2.267	145051.13	0.0235	0.0003188
Mo	98	3	He	103.492	2.434	146823.44	0.0235	0.0003188
Mo	98	3	He	100.117	2.3546	145143.22	0.0235	0.0003188
Ag	107	3	He	95.782	4.7758	305576.01	0.0499	0.0004754
Ag	107	3	He	102.785	5.1249	309147.91	0.0499	0.0004754
Ag	107	3	He	101.433	5.0575	311756.09	0.0499	0.0004754
Cd	111	3	He	96.984	0.5374	34386.19	0.0055	1.07E-05
Cd	111	3	He	103.321	0.5725	34536.51	0.0055	1.07E-05
Cd	111	3	He	99.695	0.5524	34053.32	0.0055	1.07E-05
Sn	120	3	He	96.806	1.6066	102799.12	0.0164	0.01713
Sn	120	3	He	103.387	1.7147	103434.52	0.0164	0.01713
Sn	120	3	He	99.807	1.6559	102073.41	0.0164	0.01713
Sb	121	3	He	96.85	1.4983	95870.69	0.0155	0.0002641
Sb	121	3	He	103.843	1.6065	96909.11	0.0155	0.0002641
Sb	121	3	He	99.306	1.5363	94702.74	0.0155	0.0002641
Ba	137	3	He	955.416	4.7568	304358.63	0.005	0.0001577
Ba	137	3	He	1037.595	5.1659	311619.86	0.005	0.0001577
Ba	137	3	He	1006.989	5.0135	309043.04	0.005	0.0001577
Tl	205	3	He	100.038	2.6053	756934.75	0.026	0.0002504
Tl	205	3	He	99.678	2.5959	757808.19	0.026	0.0002504
Tl	205	3	He	100.284	2.6117	754445.22	0.026	0.0002504
Pb	208	3	He	100.352	3.5075	545473.43	0.0349	0.001422
Pb	208	3	He	99.576	3.4804	544240.73	0.0349	0.001422
Pb	208	3	He	100.071	3.4977	542399.05	0.0349	0.001422
U	238	3	He	101.075	5.0773	1186276.94	0.0502	5.657E-05
U	238	3	He	98.955	4.9708	1155460.84	0.0502	5.657E-05
U	238	3	He	99.97	5.0218	1166505.14	0.0502	5.657E-05
Sc	45	1	No Gas			2024678.25		
Sc	45	1	No Gas			2087275.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2093681.69		
Ge	72	1	No Gas			1025036.86		
Ge	72	1	No Gas			1044659.36		
Ge	72	1	No Gas			1039810.30		
Sc	45	2	H2			131468.92		
Sc	45	2	H2			132991.95		
Sc	45	2	H2			132085.20		
Ge	72	2	H2			111110.53		
Ge	72	2	H2			114778.60		
Ge	72	2	H2			112663.03		
In	115	2	H2			294910.07		
In	115	2	H2			293342.57		
In	115	2	H2			294165.17		
Sc	45	3	He			37047.68		
Sc	45	3	He			37057.92		
Sc	45	3	He			36786.98		
Ge	72	3	He			65138.62		
Ge	72	3	He			64626.40		
Ge	72	3	He			64013.91		
In	115	3	He			64520.64		
In	115	3	He			60873.73		
In	115	3	He			62189.94		
Tb	159	3	He			290539.23		
Tb	159	3	He			291926.99		
Tb	159	3	He			288875.52		
Bi	209	3	He			233644.25		
Bi	209	3	He			232449.78		
Bi	209	3	He			232288.12		

Quantitation Report

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Sample Type	ICV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

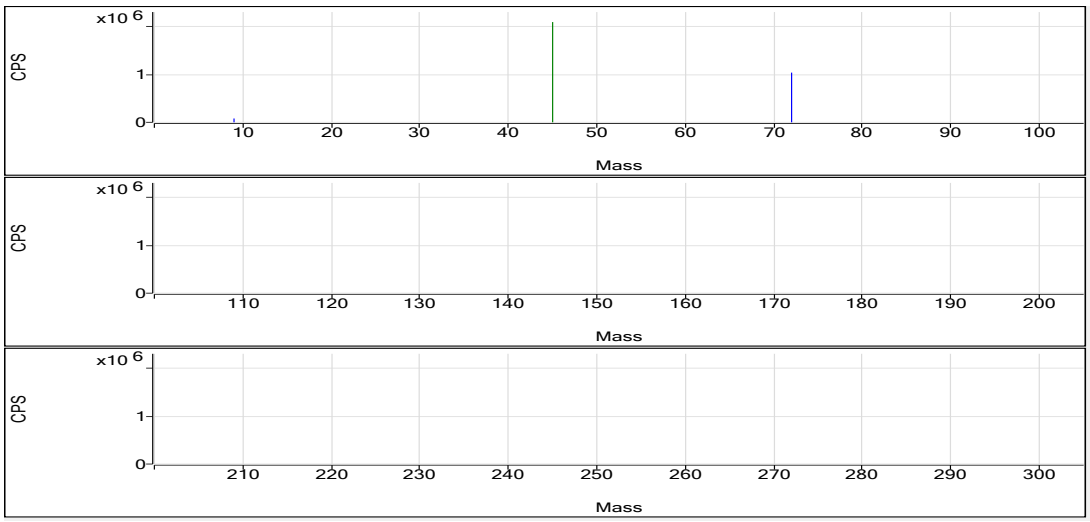
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.402	ppb	2.0	79584.59	0.0379	Pulse	0.5000	3
Se	78	72	H2	51.067	ppb	1.5	2433.77	0.0222	Pulse	1.5000	3
Na	23	45	He	4837.867	ppb	0.3	703181.84	18.9291	Pulse	0.1000	3
Mg	24	45	He	5078.387	ppb	1.7	351895.37	9.4733	Pulse	0.1000	3
Al	27	45	He	5029.266	ppb	1.1	108031.06	2.9082	Pulse	0.1000	3
K	39	45	He	5013.892	ppb	0.3	231957.75	6.2441	Pulse	0.1000	3
Ca	44	45	He	5119.558	ppb	4.0	12709.31	0.3421	Pulse	0.1000	3
Ti	47	45	He	5014.447	ppb	1.3	96788.24	2.6054	Pulse	0.1000	3
V	51	45	He	503.719	ppb	0.6	418295.54	11.2604	Pulse	0.5000	3
Cr	52	45	He	504.804	ppb	0.7	534938.53	14.4005	Pulse	0.1000	3
Mn	55	45	He	503.175	ppb	0.2	231651.47	6.2359	Pulse	0.1000	3
Fe	57	45	He	4990.260	ppb	0.4	105205.18	2.8321	Pulse	0.1000	3
Co	59	45	He	476.361	ppb	1.0	1028128.21	27.6775	Pulse	0.1000	3
Ni	60	72	He	503.543	ppb	0.9	285169.14	4.3683	Pulse	0.1000	3
Cu	63	72	He	479.435	ppb	1.3	818376.60	12.5364	Pulse	0.1000	3
Zn	66	72	He	504.725	ppb	3.1	94631.27	1.4498	Pulse	0.1000	3
As	75	72	He	489.838	ppb	1.2	66158.47	1.0135	Pulse	0.5000	3
Sr	88	115	He	50.507	ppb	0.8	28085.24	0.4528	Pulse	0.1000	3
Mo	98	115	He	49.499	ppb	1.2	72222.86	1.1643	Pulse	0.1000	3
Ag	107	115	He	49.302	ppb	0.5	152505.77	2.4585	Pulse	0.1000	3
Cd	111	115	He	54.597	ppb	1.6	18766.64	0.3025	Pulse	0.5000	3
Sn	120	115	He	49.987	ppb	3.0	51975.20	0.8379	Pulse	0.1000	3
Sb	121	115	He	53.265	ppb	2.7	51121.93	0.8242	Pulse	0.1000	3
Ba	137	115	He	501.046	ppb	0.7	154746.54	2.4946	Pulse	0.1000	3
Tl	205	159	He	50.160	ppb	0.2	381977.11	1.3064	Pulse	0.1000	3
Pb	208	159	He	50.124	ppb	0.5	512418.66	1.7526	Pulse	0.1000	3
U	238	209	He	51.032	ppb	1.3	599993.83	2.5635	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2098449.66	0.6	103.2	Analog	0.1000	3
No Gas	Ge	72	1040227.54	0.5	103.5	Pulse	0.1000	3
H2	Sc	45	129466.07	2.1	98.0	Pulse	0.1000	3
H2	Ge	72	109521.36	0.8	98.2	Pulse	0.1000	3
H2	In	115	293121.07	0.5	99.8	Pulse	0.1000	3
He	Sc	45	37148.17	0.6	100.5	Pulse	0.1000	3
He	Ge	72	65285.99	1.1	101.1	Pulse	0.1000	3
He	In	115	62032.37	0.3	98.2	Pulse	0.1000	3
He	Tb	159	292378.27	0.5	99.9	Pulse	0.1000	3
He	Bi	209	234076.71	1.4	99.3	Pulse	0.1000	3

No Gas



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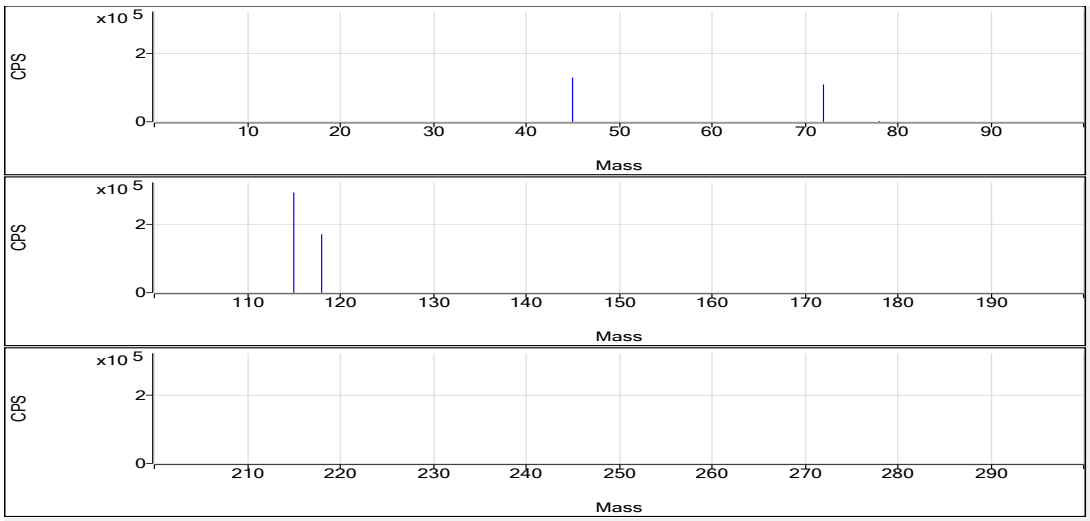
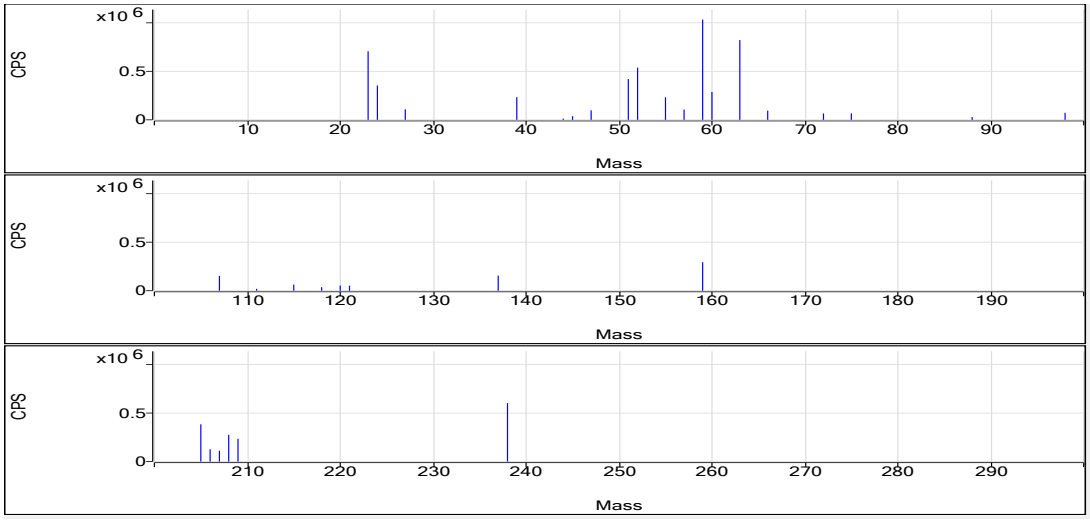


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.404	0.0372	78445.88	0.0008	2.195E-05
Be	9	1	No Gas	50.41	0.0387	80665.52	0.0008	2.195E-05
Be	9	1	No Gas	49.391	0.0379	79642.37	0.0008	2.195E-05
Se	78	2	H2	50.559	0.022	2409.54	0.0004	1.386E-05
Se	78	2	H2	51.934	0.0226	2494.89	0.0004	1.386E-05
Se	78	2	H2	50.708	0.0221	2396.87	0.0004	1.386E-05
Na	23	3	He	4827.485	18.8895	698678.97	0.0038	0.4416
Na	23	3	He	4831.752	18.9058	706861.16	0.0038	0.4416
Na	23	3	He	4854.364	18.9922	704005.38	0.0038	0.4416
Mg	24	3	He	5159.692	9.6249	356004.17	0.0019	0.005872
Mg	24	3	He	4987.367	9.3037	347851.13	0.0019	0.005872
Mg	24	3	He	5088.101	9.4915	351830.82	0.0019	0.005872
Al	27	3	He	5070.358	2.932	108447.59	0.0006	0.0004496
Al	27	3	He	4969.36	2.8736	107439.69	0.0006	0.0004496
Al	27	3	He	5048.08	2.9191	108205.89	0.0006	0.0004496
K	39	3	He	5022.319	6.2538	231315.70	0.0012	0.4456
K	39	3	He	5022.09	6.2536	233812.87	0.0012	0.4456
K	39	3	He	4997.268	6.2249	230744.68	0.0012	0.4456
Ca	44	3	He	4920.242	0.3289	12165.42	0.0001	0.003779
Ca	44	3	He	5332.796	0.3562	13316.53	0.0001	0.003779
Ca	44	3	He	5105.637	0.3412	12645.98	0.0001	0.003779
Ti	47	3	He	4951.071	2.5725	95151.47	0.0005	0
Ti	47	3	He	5012.976	2.6047	97385.34	0.0005	0
Ti	47	3	He	5079.294	2.6391	97827.91	0.0005	0
V	51	3	He	506.936	11.3321	419147.91	0.0223	0.03054
V	51	3	He	501.804	11.2177	419413.22	0.0223	0.03054
V	51	3	He	502.418	11.2314	416325.50	0.0223	0.03054
Cr	52	3	He	505.952	14.4332	533850.50	0.0285	0.03714
Cr	52	3	He	500.623	14.2816	533967.45	0.0285	0.03714
Cr	52	3	He	507.836	14.4868	536997.65	0.0285	0.03714
Mn	55	3	He	504.58	6.2533	231296.27	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	502.284	6.2249	232739.64	0.0124	0.004415
Mn	55	3	He	502.662	6.2296	230918.51	0.0124	0.004415
Fe	57	3	He	5005.903	2.841	105080.76	0.0006	0.001356
Fe	57	3	He	4965.502	2.818	105362.81	0.0006	0.001356
Fe	57	3	He	4999.376	2.8373	105171.96	0.0006	0.001356
Co	59	3	He	481.027	27.9486	1033753.73	0.0581	0.002697
Co	59	3	He	471.335	27.3854	1023903.58	0.0581	0.002697
Co	59	3	He	476.721	27.6984	1026727.33	0.0581	0.002697
Ni	60	3	He	503.559	4.3684	284553.26	0.0087	0.003928
Ni	60	3	He	499.031	4.3292	285952.73	0.0087	0.003928
Ni	60	3	He	508.039	4.4072	285001.42	0.0087	0.003928
Cu	63	3	He	479.674	12.5426	817011.94	0.0261	0.006048
Cu	63	3	He	473.282	12.3756	817438.03	0.0261	0.006048
Cu	63	3	He	485.349	12.6909	820679.83	0.0261	0.006048
Zn	66	3	He	501.124	1.4395	93765.60	0.0029	0.003512
Zn	66	3	He	490.988	1.4104	93162.41	0.0029	0.003512
Zn	66	3	He	522.063	1.4995	96965.79	0.0029	0.003512
As	75	3	He	491.285	1.0164	66209.98	0.0021	0.0007233
As	75	3	He	483.233	0.9998	66039.30	0.0021	0.0007233
As	75	3	He	494.996	1.0241	66226.13	0.0021	0.0007233
Sr	88	3	He	50.668	0.4542	28068.56	0.009	0.0005796
Sr	88	3	He	50.82	0.4556	28288.89	0.009	0.0005796
Sr	88	3	He	50.032	0.4485	27898.26	0.009	0.0005796
Mo	98	3	He	50.186	1.1805	72949.78	0.0235	0.0003188
Mo	98	3	He	49.071	1.1542	71673.61	0.0235	0.0003188
Mo	98	3	He	49.241	1.1582	72045.18	0.0235	0.0003188
Ag	107	3	He	49.158	2.4513	151484.75	0.0499	0.0004754
Ag	107	3	He	49.17	2.4519	152253.66	0.0499	0.0004754
Ag	107	3	He	49.578	2.4722	153778.89	0.0499	0.0004754
Cd	111	3	He	55.504	0.3076	19006.95	0.0055	1.07E-05
Cd	111	3	He	54.492	0.302	18750.62	0.0055	1.07E-05
Cd	111	3	He	53.794	0.2981	18542.35	0.0055	1.07E-05
Sn	120	3	He	50.747	0.8504	52550.41	0.0164	0.01713
Sn	120	3	He	48.264	0.8096	50272.76	0.0164	0.01713
Sn	120	3	He	50.95	0.8537	53102.43	0.0164	0.01713
Sb	121	3	He	54.864	0.8489	52459.90	0.0155	0.0002641
Sb	121	3	He	52.918	0.8188	50844.23	0.0155	0.0002641
Sb	121	3	He	52.014	0.8048	50061.65	0.0155	0.0002641
Ba	137	3	He	505.205	2.5154	155443.02	0.005	0.0001577
Ba	137	3	He	498.492	2.4819	154118.96	0.005	0.0001577
Ba	137	3	He	499.442	2.4867	154677.64	0.005	0.0001577
Tl	205	3	He	50.255	1.3089	384499.45	0.026	0.0002504
Tl	205	3	He	50.163	1.3065	382140.74	0.026	0.0002504
Tl	205	3	He	50.064	1.3039	379291.13	0.026	0.0002504
Pb	208	3	He	49.867	1.7436	274272.42	0.0349	0.001422
Pb	208	3	He	50.113	1.7523	275702.46	0.0349	0.001422
Pb	208	3	He	50.391	1.762	274025.86	0.0349	0.001422
U	238	3	He	50.879	2.5558	596366.44	0.0502	5.657E-05
U	238	3	He	51.741	2.5991	600755.89	0.0502	5.657E-05
U	238	3	He	50.477	2.5356	602859.17	0.0502	5.657E-05
Sc	45	1	No Gas			2110864.50		
Sc	45	1	No Gas			2084240.91		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2100243.56		
Ge	72	1	No Gas			1040594.36		
Ge	72	1	No Gas			1044880.45		
Ge	72	1	No Gas			1035207.80		
Sc	45	2	H2			126547.58		
Sc	45	2	H2			131782.95		
Sc	45	2	H2			130067.68		
Ge	72	2	H2			109526.59		
Ge	72	2	H2			110406.16		
Ge	72	2	H2			108631.32		
In	115	2	H2			293447.52		
In	115	2	H2			291479.04		
In	115	2	H2			294436.66		
Sc	45	3	He			36987.74		
Sc	45	3	He			37388.62		
Sc	45	3	He			37068.15		
Ge	72	3	He			65138.82		
Ge	72	3	He			66052.60		
Ge	72	3	He			64666.56		
In	115	3	He			62079.15		
In	115	3	He			62380.32		
In	115	3	He			62481.00		
Tb	159	3	He			293759.51		
Tb	159	3	He			292490.66		
Tb	159	3	He			290884.64		
Bi	209	3	He			233336.95		
Bi	209	3	He			231139.25		
Bi	209	3	He			237753.94		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 6:34:49 AM
Sample Name	ICB 4654618
Sample Type	ICB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

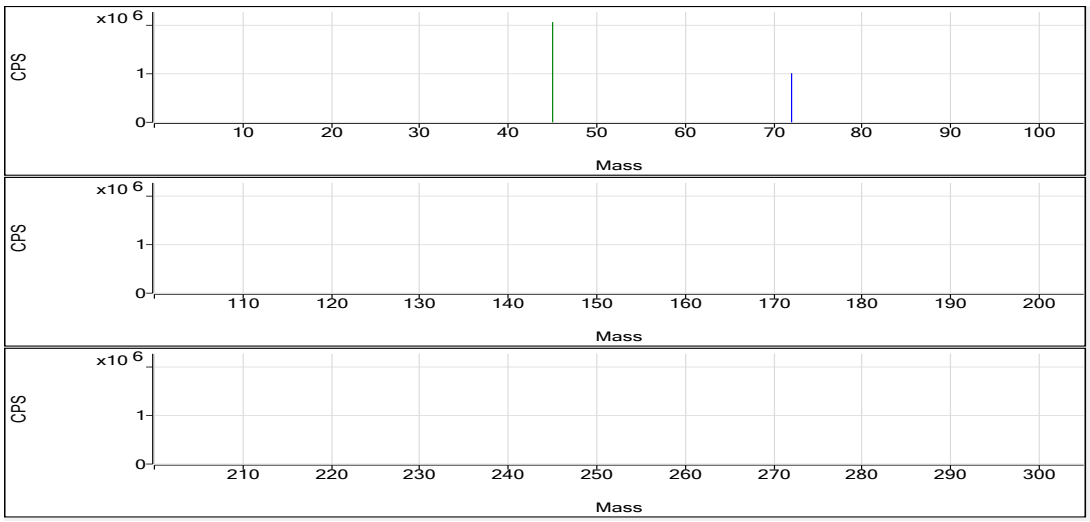
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.018	ppb	37.0	74.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.015	ppb	51.3	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	-1.372	ppb	N/A	15795.62	0.4364	Pulse	0.1000	3
Mg	24	45	He	0.190	ppb	630.7	223.34	0.0062	Pulse	0.1000	3
Al	27	45	He	2.403	ppb	50.2	66.67	0.0018	Pulse	0.1000	3
K	39	45	He	-2.756	ppb	N/A	16005.91	0.4424	Pulse	0.1000	3
Ca	44	45	He	-11.424	ppb	N/A	110.00	0.0030	Pulse	0.1000	3
Ti	47	45	He	1.052	ppb	46.7	20.00	0.0005	Pulse	0.1000	3
V	51	45	He	0.028	ppb	499.0	1126.05	0.0312	Pulse	0.5000	3
Cr	52	45	He	0.084	ppb	83.9	1430.11	0.0395	Pulse	0.1000	3
Mn	55	45	He	0.099	ppb	113.5	203.34	0.0056	Pulse	0.1000	3
Fe	57	45	He	1.326	ppb	113.4	76.67	0.0021	Pulse	0.1000	3
Co	59	45	He	0.090	ppb	48.7	286.68	0.0079	Pulse	0.1000	3
Ni	60	72	He	0.036	ppb	369.2	270.01	0.0042	Pulse	0.1000	3
Cu	63	72	He	0.053	ppb	108.8	473.36	0.0074	Pulse	0.1000	3
Zn	66	72	He	0.039	ppb	528.1	230.01	0.0036	Pulse	0.1000	3
As	75	72	He	0.062	ppb	116.0	54.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.036	ppb	144.9	56.67	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.043	ppb	9.8	83.33	0.0013	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	21.3	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	349.3	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.002	ppb	4942.4	1083.42	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.010	ppb	207.8	26.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.011	ppb	457.0	13.33	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.041	ppb	16.4	383.35	0.0013	Pulse	0.1000	3
Pb	208	159	He	0.001	ppb	165.3	430.02	0.0015	Pulse	0.1000	3
U	238	209	He	0.022	ppb	16.3	273.35	0.0012	Pulse	0.1000	3

ISTD Table:

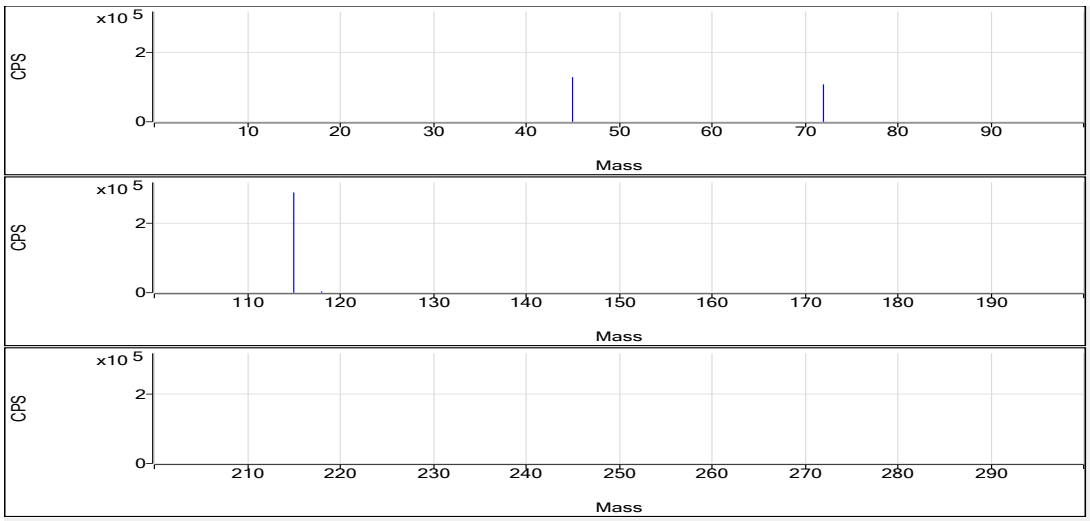
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2063954.40	0.7	101.5	Analog	0.1000	3
No Gas	Ge	72	1010146.37	0.3	100.5	Pulse	0.1000	3
H2	Sc	45	128936.99	0.2	97.6	Pulse	0.1000	3
H2	Ge	72	108015.99	1.2	96.8	Pulse	0.1000	3
H2	In	115	289408.63	0.7	98.5	Pulse	0.1000	3
He	Sc	45	36205.97	3.8	98.0	Pulse	0.1000	3
He	Ge	72	63552.14	1.3	98.4	Pulse	0.1000	3
He	In	115	63154.99	0.7	99.9	Pulse	0.1000	3
He	Tb	159	291568.78	0.5	99.6	Pulse	0.1000	3
He	Bi	209	233164.29	1.3	98.9	Pulse	0.1000	3

No Gas

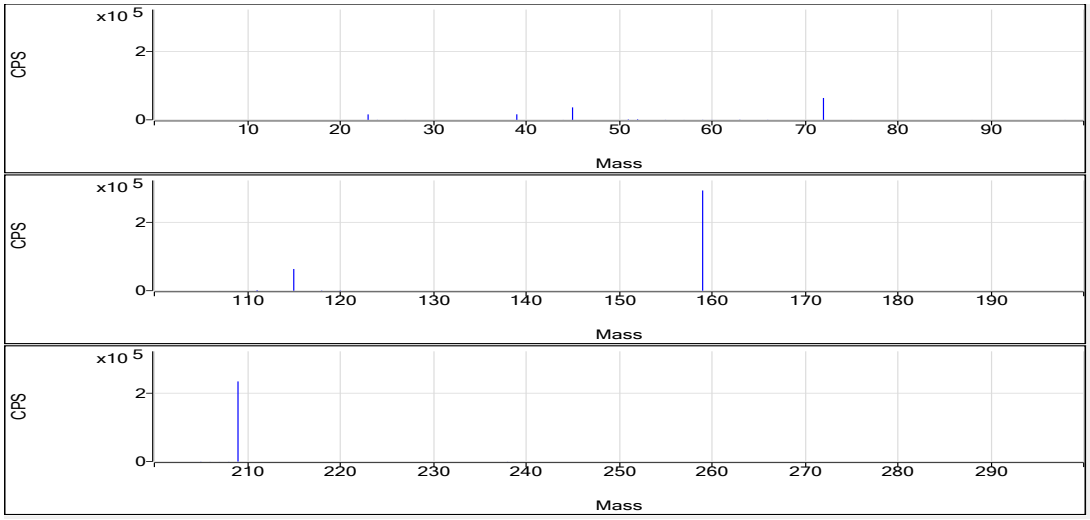


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	86.00	0.0008	2.195E-05
Be	9	1	No Gas	0.017	0	72.00	0.0008	2.195E-05
Be	9	1	No Gas	0.012	0	64.00	0.0008	2.195E-05
Se	78	2	H2	0.01	0	2.00	0.0004	1.386E-05
Se	78	2	H2	0.011	0	2.00	0.0004	1.386E-05
Se	78	2	H2	0.025	0	2.67	0.0004	1.386E-05
Na	23	3	He	-1.112	0.4374	15558.70	0.0038	0.4416
Na	23	3	He	-0.591	0.4393	15488.53	0.0038	0.4416
Na	23	3	He	-2.415	0.4324	16339.63	0.0038	0.4416
Mg	24	3	He	0.62	0.007	250.01	0.0019	0.005872
Mg	24	3	He	1.111	0.0079	280.01	0.0019	0.005872
Mg	24	3	He	-1.162	0.0037	140.01	0.0019	0.005872
Al	27	3	He	3.598	0.0025	90.00	0.0006	0.0004496
Al	27	3	He	1.185	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	2.426	0.0019	70.00	0.0006	0.0004496
K	39	3	He	16.943	0.4652	16549.71	0.0012	0.4456
K	39	3	He	-6.89	0.4377	15428.67	0.0012	0.4456
K	39	3	He	-18.321	0.4244	16039.34	0.0012	0.4456
Ca	44	3	He	-18.897	0.0025	90.00	0.0001	0.003779
Ca	44	3	He	-14.255	0.0028	100.00	0.0001	0.003779
Ca	44	3	He	-1.119	0.0037	140.00	0.0001	0.003779
Ti	47	3	He	1.082	0.0006	20.00	0.0005	0
Ti	47	3	He	0.546	0.0003	10.00	0.0005	0
Ti	47	3	He	1.528	0.0008	30.00	0.0005	0
V	51	3	He	0.163	0.0342	1216.06	0.0223	0.03054
V	51	3	He	0.037	0.0314	1106.05	0.0223	0.03054
V	51	3	He	-0.116	0.0279	1056.05	0.0223	0.03054
Cr	52	3	He	0.157	0.0416	1480.12	0.0285	0.03714
Cr	52	3	He	0.081	0.0394	1390.11	0.0285	0.03714
Cr	52	3	He	0.016	0.0376	1420.11	0.0285	0.03714
Mn	55	3	He	0.211	0.007	250.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.102	0.0057	200.01	0.0124	0.004415
Mn	55	3	He	-0.015	0.0042	160.01	0.0124	0.004415
Fe	57	3	He	-0.408	0.0011	40.00	0.0006	0.001356
Fe	57	3	He	2.11	0.0026	90.00	0.0006	0.001356
Fe	57	3	He	2.275	0.0026	100.00	0.0006	0.001356
Co	59	3	He	0.137	0.0107	380.02	0.0581	0.002697
Co	59	3	He	0.051	0.0057	200.01	0.0581	0.002697
Co	59	3	He	0.081	0.0074	280.01	0.0581	0.002697
Ni	60	3	He	0.18	0.0055	350.02	0.0087	0.003928
Ni	60	3	He	0.014	0.004	260.01	0.0087	0.003928
Ni	60	3	He	-0.085	0.0032	200.01	0.0087	0.003928
Cu	63	3	He	0.021	0.0066	420.02	0.0261	0.006048
Cu	63	3	He	0.12	0.0092	590.03	0.0261	0.006048
Cu	63	3	He	0.019	0.0065	410.02	0.0261	0.006048
Zn	66	3	He	-0.076	0.0033	210.01	0.0029	0.003512
Zn	66	3	He	-0.085	0.0033	210.01	0.0029	0.003512
Zn	66	3	He	0.278	0.0043	270.01	0.0029	0.003512
As	75	3	He	0.014	0.0008	48.00	0.0021	0.0007233
As	75	3	He	0.027	0.0008	50.00	0.0021	0.0007233
As	75	3	He	0.144	0.001	64.00	0.0021	0.0007233
Sr	88	3	He	0.006	0.0006	40.00	0.009	0.0005796
Sr	88	3	He	0.005	0.0006	40.00	0.009	0.0005796
Sr	88	3	He	0.095	0.0014	90.00	0.009	0.0005796
Mo	98	3	He	0.04	0.0013	80.00	0.0235	0.0003188
Mo	98	3	He	0.04	0.0013	80.00	0.0235	0.0003188
Mo	98	3	He	0.047	0.0014	90.00	0.0235	0.0003188
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0.009	0.0009	60.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	0.049	0.0179	1130.09	0.0164	0.01713
Sn	120	3	He	-0.115	0.0152	970.07	0.0164	0.01713
Sn	120	3	He	0.072	0.0183	1150.09	0.0164	0.01713
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.034	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Ba	137	3	He	-0.032	0	0.00	0.005	0.0001577
Ba	137	3	He	0.063	0.0005	30.00	0.005	0.0001577
Ba	137	3	He	0	0.0002	10.00	0.005	0.0001577
Tl	205	3	He	0.041	0.0013	390.02	0.026	0.0002504
Tl	205	3	He	0.047	0.0015	430.02	0.026	0.0002504
Tl	205	3	He	0.034	0.0011	330.02	0.026	0.0002504
Pb	208	3	He	0.002	0.0015	270.02	0.0349	0.001422
Pb	208	3	He	-0.001	0.0014	170.01	0.0349	0.001422
Pb	208	3	He	0.004	0.0015	250.01	0.0349	0.001422
U	238	3	He	0.022	0.0012	270.01	0.0502	5.657E-05
U	238	3	He	0.019	0.001	230.01	0.0502	5.657E-05
U	238	3	He	0.026	0.0014	320.02	0.0502	5.657E-05
Sc	45	1	No Gas			2078820.28		
Sc	45	1	No Gas			2062635.91		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2050407.00		
Ge	72	1	No Gas			1012642.80		
Ge	72	1	No Gas			1007020.14		
Ge	72	1	No Gas			1010776.16		
Sc	45	2	H2			129210.78		
Sc	45	2	H2			128926.44		
Sc	45	2	H2			128673.75		
Ge	72	2	H2			108711.65		
Ge	72	2	H2			106524.34		
Ge	72	2	H2			108811.97		
In	115	2	H2			291106.38		
In	115	2	H2			289841.64		
In	115	2	H2			287277.87		
Sc	45	3	He			35574.40		
Sc	45	3	He			35253.35		
Sc	45	3	He			37790.15		
Ge	72	3	He			63742.82		
Ge	72	3	He			64235.10		
Ge	72	3	He			62678.49		
In	115	3	He			63013.73		
In	115	3	He			63635.74		
In	115	3	He			62832.59		
Tb	159	3	He			293279.31		
Tb	159	3	He			290213.51		
Tb	159	3	He			291213.53		
Bi	209	3	He			230419.25		
Bi	209	3	He			232556.17		
Bi	209	3	He			236517.44		

Quantitation Report

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Sample Type	CRI
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

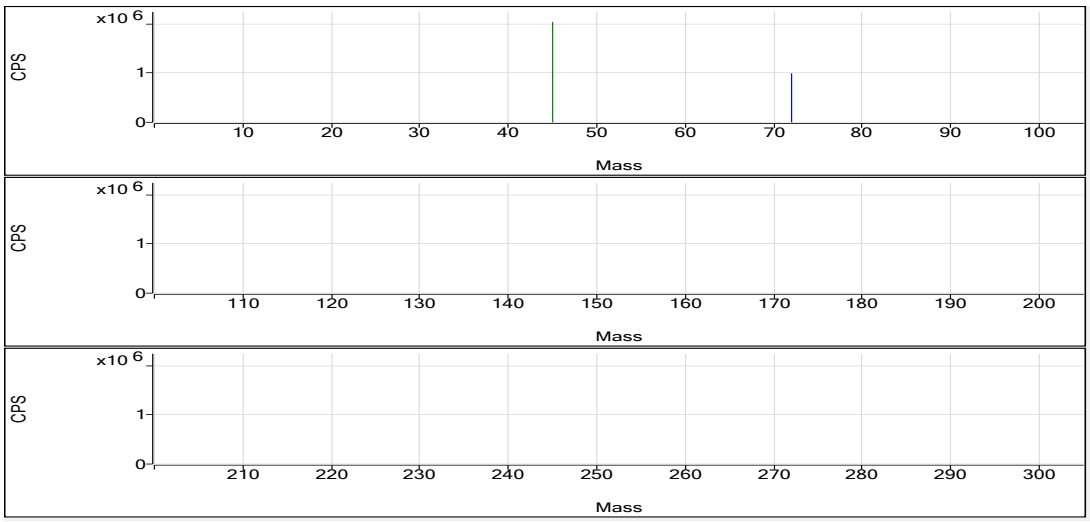
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.531	ppb	3.8	875.36	0.0004	Pulse	0.5000	3
Se	78	72	H2	1.131	ppb	7.8	54.67	0.0005	Pulse	1.5000	3
Na	23	45	He	198.466	ppb	3.3	43906.13	1.2000	Pulse	0.1000	3
Mg	24	45	He	51.893	ppb	3.0	3753.95	0.1026	Pulse	0.1000	3
Al	27	45	He	28.381	ppb	5.5	616.70	0.0169	Pulse	0.1000	3
K	39	45	He	185.980	ppb	12.6	24170.57	0.6607	Pulse	0.1000	3
Ca	44	45	He	80.800	ppb	30.7	333.35	0.0091	Pulse	0.1000	3
Ti	47	45	He	11.043	ppb	33.3	210.01	0.0057	Pulse	0.1000	3
V	51	45	He	1.976	ppb	5.9	2728.27	0.0746	Pulse	0.5000	3
Cr	52	45	He	2.278	ppb	2.4	3730.61	0.1020	Pulse	0.1000	3
Mn	55	45	He	1.941	ppb	18.6	1040.08	0.0285	Pulse	0.1000	3
Fe	57	45	He	55.748	ppb	10.2	1206.76	0.0330	Pulse	0.1000	3
Co	59	45	He	0.573	ppb	12.3	1316.78	0.0360	Pulse	0.1000	3
Ni	60	72	He	1.148	ppb	7.8	886.72	0.0139	Pulse	0.1000	3
Cu	63	72	He	1.058	ppb	9.4	2150.24	0.0337	Pulse	0.1000	3
Zn	66	72	He	11.342	ppb	7.9	2300.28	0.0360	Pulse	0.1000	3
As	75	72	He	1.983	ppb	4.2	308.01	0.0048	Pulse	0.5000	3
Sr	88	115	He	1.032	ppb	12.3	606.70	0.0098	Pulse	0.1000	3
Mo	98	115	He	0.518	ppb	11.6	770.05	0.0125	Pulse	0.1000	3
Ag	107	115	He	0.557	ppb	4.3	1743.50	0.0283	Pulse	0.1000	3
Cd	111	115	He	0.492	ppb	15.2	168.67	0.0027	Pulse	0.5000	3
Sn	120	115	He	2.011	ppb	7.7	3093.78	0.0502	Pulse	0.1000	3
Sb	121	115	He	0.961	ppb	9.8	933.40	0.0151	Pulse	0.1000	3
Ba	137	115	He	1.889	ppb	8.4	590.04	0.0096	Pulse	0.1000	3
Tl	205	159	He	0.519	ppb	5.3	4010.76	0.0138	Pulse	0.1000	3
Pb	208	159	He	0.484	ppb	4.4	5340.63	0.0183	Pulse	0.1000	3
U	238	209	He	1.008	ppb	2.3	11895.93	0.0507	Pulse	0.1000	3

ISTD Table:

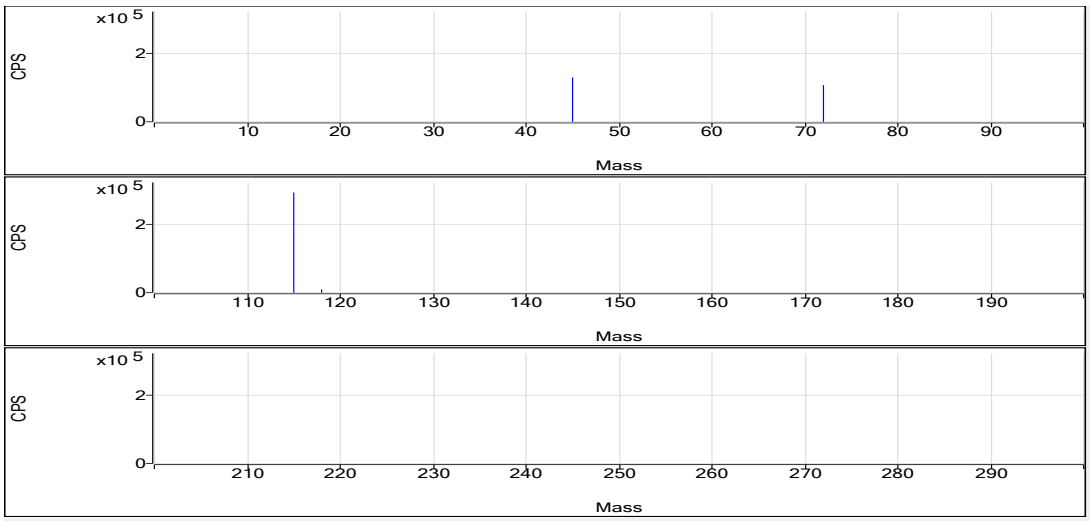
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2039524.60	0.3	100.3	Analog	0.1000	3
No Gas	Ge	72	996154.23	0.4	99.1	Pulse	0.1000	3
H2	Sc	45	130730.52	1.1	99.0	Pulse	0.1000	3
H2	Ge	72	108194.18	0.8	97.0	Pulse	0.1000	3
H2	In	115	295544.64	0.2	100.6	Pulse	0.1000	3
He	Sc	45	36586.72	0.9	99.0	Pulse	0.1000	3
He	Ge	72	63863.33	1.7	98.9	Pulse	0.1000	3
He	In	115	61721.89	1.9	97.7	Pulse	0.1000	3
He	Tb	159	291221.55	0.5	99.5	Pulse	0.1000	3
He	Bi	209	234594.26	0.2	99.5	Pulse	0.1000	3

No Gas

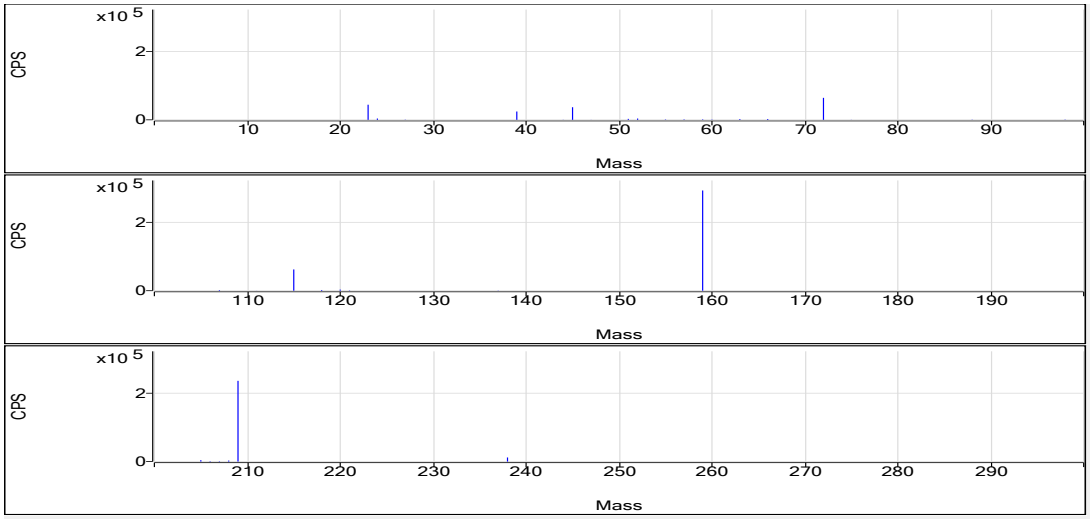


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.52	0.0004	862.03	0.0008	2.195E-05
Be	9	1	No Gas	0.554	0.0004	910.03	0.0008	2.195E-05
Be	9	1	No Gas	0.518	0.0004	854.03	0.0008	2.195E-05
Se	78	2	H2	1.05	0.0005	51.33	0.0004	1.386E-05
Se	78	2	H2	1.225	0.0005	58.67	0.0004	1.386E-05
Se	78	2	H2	1.116	0.0005	54.00	0.0004	1.386E-05
Na	23	3	He	192.115	1.1758	42722.46	0.0038	0.4416
Na	23	3	He	198.19	1.199	44287.15	0.0038	0.4416
Na	23	3	He	205.093	1.2254	44708.77	0.0038	0.4416
Mg	24	3	He	53.695	0.106	3850.66	0.0019	0.005872
Mg	24	3	He	51.171	0.1013	3740.62	0.0019	0.005872
Mg	24	3	He	50.813	0.1006	3670.56	0.0019	0.005872
Al	27	3	He	30.164	0.0179	650.04	0.0006	0.0004496
Al	27	3	He	27.787	0.0165	610.03	0.0006	0.0004496
Al	27	3	He	27.192	0.0162	590.03	0.0006	0.0004496
K	39	3	He	211.554	0.6903	25082.04	0.0012	0.4456
K	39	3	He	180.968	0.6549	24190.62	0.0012	0.4456
K	39	3	He	165.418	0.6369	23239.05	0.0012	0.4456
Ca	44	3	He	109.418	0.011	400.02	0.0001	0.003779
Ca	44	3	He	65.731	0.0081	300.01	0.0001	0.003779
Ca	44	3	He	67.251	0.0082	300.01	0.0001	0.003779
Ti	47	3	He	7.416	0.0039	140.01	0.0005	0
Ti	47	3	He	10.942	0.0057	210.01	0.0005	0
Ti	47	3	He	14.77	0.0077	280.01	0.0005	0
V	51	3	He	2.097	0.0773	2808.29	0.0223	0.03054
V	51	3	He	1.863	0.0721	2662.26	0.0223	0.03054
V	51	3	He	1.967	0.0744	2714.27	0.0223	0.03054
Cr	52	3	He	2.284	0.1021	3710.61	0.0285	0.03714
Cr	52	3	He	2.33	0.1034	3820.64	0.0285	0.03714
Cr	52	3	He	2.221	0.1003	3660.57	0.0285	0.03714
Mn	55	3	He	2.155	0.0311	1130.09	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.524	0.0233	860.05	0.0124	0.004415
Mn	55	3	He	2.144	0.031	1130.09	0.0124	0.004415
Fe	57	3	He	50.011	0.0297	1080.08	0.0006	0.001356
Fe	57	3	He	55.84	0.033	1220.09	0.0006	0.001356
Fe	57	3	He	61.393	0.0362	1320.12	0.0006	0.001356
Co	59	3	He	0.588	0.0369	1340.13	0.0581	0.002697
Co	59	3	He	0.634	0.0395	1460.12	0.0581	0.002697
Co	59	3	He	0.496	0.0315	1150.09	0.0581	0.002697
Ni	60	3	He	1.185	0.0142	900.06	0.0087	0.003928
Ni	60	3	He	1.046	0.013	820.05	0.0087	0.003928
Ni	60	3	He	1.212	0.0144	940.06	0.0087	0.003928
Cu	63	3	He	1.103	0.0349	2210.26	0.0261	0.006048
Cu	63	3	He	1.127	0.0355	2240.25	0.0261	0.006048
Cu	63	3	He	0.944	0.0307	2000.21	0.0261	0.006048
Zn	66	3	He	12.158	0.0384	2430.31	0.0029	0.003512
Zn	66	3	He	10.39	0.0333	2100.22	0.0029	0.003512
Zn	66	3	He	11.477	0.0364	2370.30	0.0029	0.003512
As	75	3	He	1.909	0.0047	296.01	0.0021	0.0007233
As	75	3	He	2.072	0.005	316.01	0.0021	0.0007233
As	75	3	He	1.968	0.0048	312.01	0.0021	0.0007233
Sr	88	3	He	0.988	0.0094	590.04	0.009	0.0005796
Sr	88	3	He	1.176	0.0111	690.04	0.009	0.0005796
Sr	88	3	He	0.934	0.0089	540.03	0.009	0.0005796
Mo	98	3	He	0.469	0.0113	710.05	0.0235	0.0003188
Mo	98	3	He	0.5	0.0121	750.05	0.0235	0.0003188
Mo	98	3	He	0.585	0.0141	850.06	0.0235	0.0003188
Ag	107	3	He	0.573	0.0291	1820.18	0.0499	0.0004754
Ag	107	3	He	0.53	0.0269	1670.15	0.0499	0.0004754
Ag	107	3	He	0.568	0.0288	1740.16	0.0499	0.0004754
Cd	111	3	He	0.413	0.0023	144.00	0.0055	1.07E-05
Cd	111	3	He	0.562	0.0031	194.00	0.0055	1.07E-05
Cd	111	3	He	0.5	0.0028	168.00	0.0055	1.07E-05
Sn	120	3	He	1.846	0.0474	2970.41	0.0164	0.01713
Sn	120	3	He	2.035	0.0505	3140.47	0.0164	0.01713
Sn	120	3	He	2.153	0.0525	3170.46	0.0164	0.01713
Sb	121	3	He	0.881	0.0139	870.06	0.0155	0.0002641
Sb	121	3	He	1.065	0.0167	1040.08	0.0155	0.0002641
Sb	121	3	He	0.936	0.0147	890.06	0.0155	0.0002641
Ba	137	3	He	2.021	0.0102	640.04	0.005	0.0001577
Ba	137	3	He	1.714	0.0087	540.03	0.005	0.0001577
Ba	137	3	He	1.93	0.0098	590.04	0.005	0.0001577
Tl	205	3	He	0.516	0.0137	3960.74	0.026	0.0002504
Tl	205	3	He	0.494	0.0131	3830.68	0.026	0.0002504
Tl	205	3	He	0.548	0.0145	4240.85	0.026	0.0002504
Pb	208	3	He	0.461	0.0175	2610.37	0.0349	0.001422
Pb	208	3	He	0.487	0.0184	3010.45	0.0349	0.001422
Pb	208	3	He	0.504	0.019	3020.46	0.0349	0.001422
U	238	3	He	0.986	0.0496	11605.71	0.0502	5.657E-05
U	238	3	He	1.008	0.0507	11915.91	0.0502	5.657E-05
U	238	3	He	1.032	0.0519	12166.18	0.0502	5.657E-05
Sc	45	1	No Gas			2047113.09		
Sc	45	1	No Gas			2034650.75		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2036809.97		
Ge	72	1	No Gas			996221.86		
Ge	72	1	No Gas			999869.59		
Ge	72	1	No Gas			992371.24		
Sc	45	2	H2			132196.37		
Sc	45	2	H2			129282.91		
Sc	45	2	H2			130712.27		
Ge	72	2	H2			109084.68		
Ge	72	2	H2			107320.44		
Ge	72	2	H2			108177.42		
In	115	2	H2			295306.28		
In	115	2	H2			295244.55		
In	115	2	H2			296083.10		
Sc	45	3	He			36336.12		
Sc	45	3	He			36937.58		
Sc	45	3	He			36486.46		
Ge	72	3	He			63371.52		
Ge	72	3	He			63099.35		
Ge	72	3	He			65119.12		
In	115	3	He			62641.66		
In	115	3	He			62149.50		
In	115	3	He			60422.41		
Tb	159	3	He			289650.46		
Tb	159	3	He			292195.27		
Tb	159	3	He			291818.92		
Bi	209	3	He			234133.49		
Bi	209	3	He			235140.11		
Bi	209	3	He			234509.18		

Quantitation Report

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Sample Type	ICSA
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

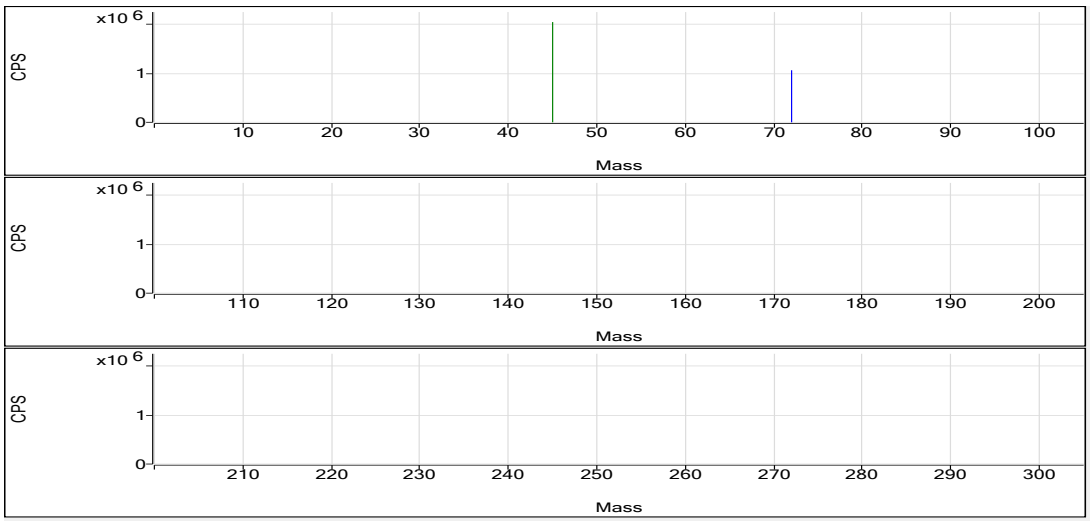
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	74.1	56.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.086	ppb	33.9	5.56	0.0001	Pulse	1.5000	3
Na	23	45	He	244522.802	ppb	2.7	34223133.66	934.8671	Analog	0.1000	3
Mg	24	45	He	101871.967	ppb	2.2	6953047.60	189.9226	Analog	0.1000	3
Al	27	45	He	103597.976	ppb	2.5	2192947.83	59.8979	Analog	0.1000	3
K	39	45	He	101467.777	ppb	2.2	4312347.75	117.7914	Analog	0.1000	3
Ca	44	45	He	294802.834	ppb	2.6	713271.84	19.4841	Pulse	0.1000	3
Ti	47	45	He	2033.465	ppb	3.2	38675.56	1.0566	Pulse	0.1000	3
V	51	45	He	-0.164	ppb	N/A	983.38	0.0269	Pulse	0.5000	3
Cr	52	45	He	3.263	ppb	9.6	4764.29	0.1300	Pulse	0.1000	3
Mn	55	45	He	0.605	ppb	12.9	436.69	0.0119	Pulse	0.1000	3
Fe	57	45	He	245307.474	ppb	2.4	5094291.70	139.1524	Analog	0.1000	3
Co	59	45	He	0.213	ppb	34.9	550.03	0.0151	Pulse	0.1000	3
Ni	60	72	He	0.463	ppb	17.5	533.36	0.0079	Pulse	0.1000	3
Cu	63	72	He	0.025	ppb	206.7	450.02	0.0067	Pulse	0.1000	3
Zn	66	72	He	1.480	ppb	27.5	520.03	0.0078	Pulse	0.1000	3
As	75	72	He	0.034	ppb	74.3	53.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	2.008	ppb	9.5	1103.41	0.0186	Pulse	0.1000	3
Mo	98	115	He	2165.045	ppb	0.9	3025946.73	50.9121	Analog	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.247	ppb	13.7	82.00	0.0014	Pulse	0.5000	3
Sn	120	115	He	0.162	ppb	27.1	1176.76	0.0198	Pulse	0.1000	3
Sb	121	115	He	0.164	ppb	37.2	166.68	0.0028	Pulse	0.1000	3
Ba	137	115	He	0.397	ppb	18.0	126.67	0.0021	Pulse	0.1000	3
Tl	205	159	He	0.026	ppb	35.4	263.35	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.066	ppb	14.5	1066.72	0.0037	Pulse	0.1000	3
U	238	209	He	0.056	ppb	21.7	633.37	0.0029	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2043287.47	1.6	100.5	Analog	0.1000	3
No Gas	Ge	72	1061362.77	0.3	105.6	Pulse	0.1000	3
H2	Sc	45	124828.39	0.7	94.5	Pulse	0.1000	3
H2	Ge	72	108801.78	0.5	97.6	Pulse	0.1000	3
H2	In	115	275270.16	0.4	93.7	Pulse	0.1000	3
He	Sc	45	36623.45	2.5	99.1	Pulse	0.1000	3
He	Ge	72	67155.02	1.3	104.0	Pulse	0.1000	3
He	In	115	59438.11	1.0	94.1	Pulse	0.1000	3
He	Tb	159	285010.74	0.6	97.3	Pulse	0.1000	3
He	Bi	209	219451.40	0.3	93.1	Pulse	0.1000	3

No Gas



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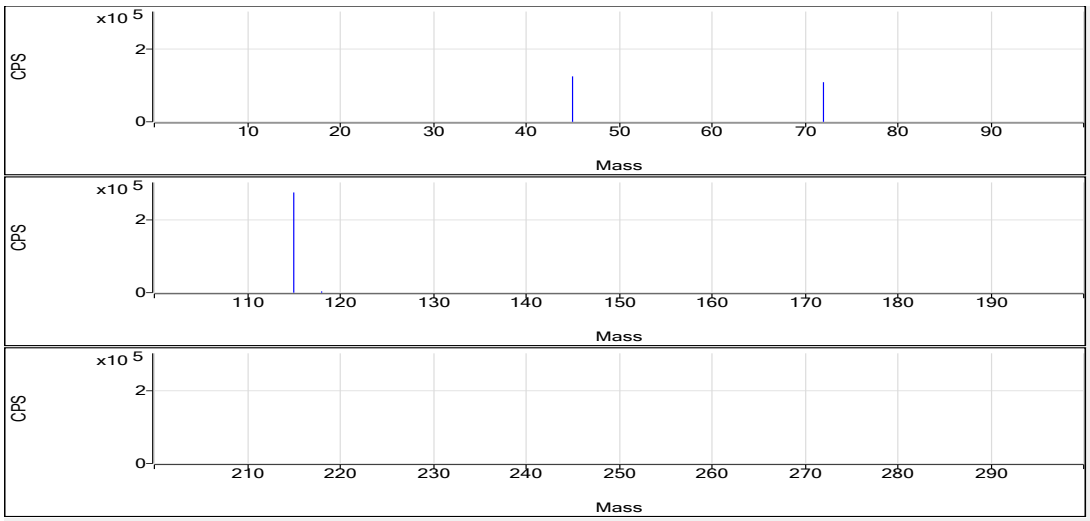
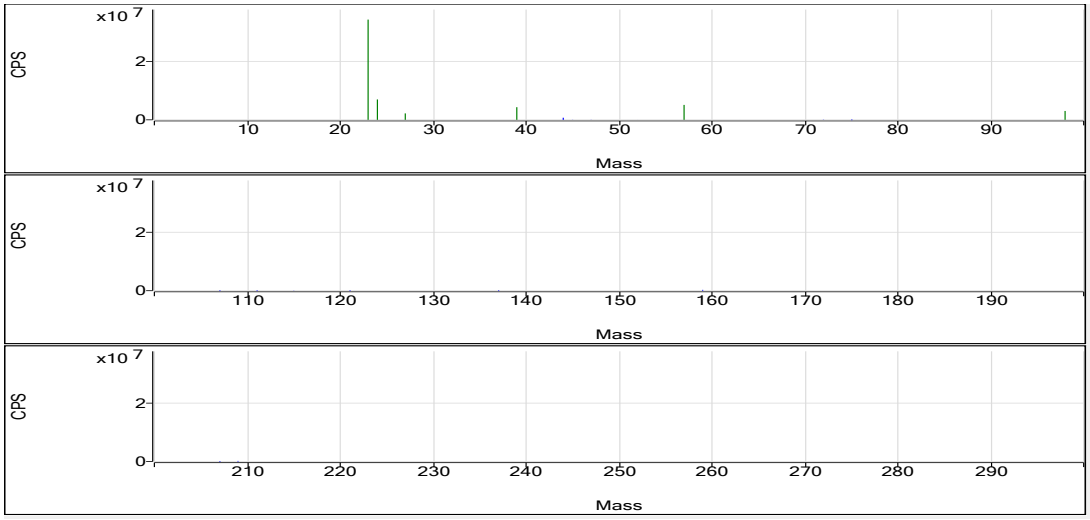


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	0.012	0	64.00	0.0008	2.195E-05
Be	9	1	No Gas	0.009	0	60.00	0.0008	2.195E-05
Se	78	2	H2	0.053	0	4.00	0.0004	1.386E-05
Se	78	2	H2	0.108	0.0001	6.67	0.0004	1.386E-05
Se	78	2	H2	0.095	0.0001	6.00	0.0004	1.386E-05
Na	23	3	He	248931.755	951.7156	34104479.49	0.0038	0.4416
Na	23	3	He	247631.534	946.7469	34467606.99	0.0038	0.4416
Na	23	3	He	237005.116	906.1388	34097314.49	0.0038	0.4416
Mg	24	3	He	103561.563	193.0724	6918700.52	0.0019	0.005872
Mg	24	3	He	102776.726	191.6093	6975796.77	0.0019	0.005872
Mg	24	3	He	99277.612	185.086	6964645.52	0.0019	0.005872
Al	27	3	He	104138.741	60.2105	2157628.56	0.0006	0.0004496
Al	27	3	He	105853.856	61.2022	2228147.78	0.0006	0.0004496
Al	27	3	He	100801.332	58.2809	2193067.15	0.0006	0.0004496
K	39	3	He	103250.356	119.853	4294899.31	0.0012	0.4456
K	39	3	He	102204.165	118.643	4319361.50	0.0012	0.4456
K	39	3	He	98948.809	114.8783	4322782.44	0.0012	0.4456
Ca	44	3	He	300570.29	19.8652	711864.83	0.0001	0.003779
Ca	44	3	He	297599.858	19.6689	716074.21	0.0001	0.003779
Ca	44	3	He	286238.355	18.9182	711876.47	0.0001	0.003779
Ti	47	3	He	2066.768	1.0739	38481.73	0.0005	0
Ti	47	3	He	2076.198	1.0788	39273.95	0.0005	0
Ti	47	3	He	1957.429	1.0171	38271.01	0.0005	0
V	51	3	He	-0.108	0.0281	1008.04	0.0223	0.03054
V	51	3	He	-0.093	0.0285	1036.05	0.0223	0.03054
V	51	3	He	-0.29	0.0241	906.04	0.0223	0.03054
Cr	52	3	He	2.903	0.1197	4290.80	0.0285	0.03714
Cr	52	3	He	3.474	0.136	4951.00	0.0285	0.03714
Cr	52	3	He	3.412	0.1342	5051.07	0.0285	0.03714
Mn	55	3	He	0.567	0.0114	410.02	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.553	0.0113	410.02	0.0124	0.004415
Mn	55	3	He	0.695	0.013	490.03	0.0124	0.004415
Fe	57	3	He	248937.826	141.2117	5060285.55	0.0006	0.001356
Fe	57	3	He	248409.064	140.9118	5130085.24	0.0006	0.001356
Fe	57	3	He	238575.532	135.3337	5092504.30	0.0006	0.001356
Co	59	3	He	0.285	0.0193	690.04	0.0581	0.002697
Co	59	3	He	0.218	0.0154	560.03	0.0581	0.002697
Co	59	3	He	0.137	0.0106	400.02	0.0581	0.002697
Ni	60	3	He	0.478	0.0081	550.03	0.0087	0.003928
Ni	60	3	He	0.376	0.0072	480.02	0.0087	0.003928
Ni	60	3	He	0.536	0.0086	570.03	0.0087	0.003928
Cu	63	3	He	-0.012	0.0057	390.02	0.0261	0.006048
Cu	63	3	He	0.003	0.0061	410.02	0.0261	0.006048
Cu	63	3	He	0.085	0.0083	550.03	0.0261	0.006048
Zn	66	3	He	1.028	0.0065	440.02	0.0029	0.003512
Zn	66	3	He	1.595	0.0081	540.03	0.0029	0.003512
Zn	66	3	He	1.819	0.0087	580.03	0.0029	0.003512
As	75	3	He	0.062	0.0009	58.00	0.0021	0.0007233
As	75	3	He	0.012	0.0007	50.00	0.0021	0.0007233
As	75	3	He	0.028	0.0008	52.00	0.0021	0.0007233
Sr	88	3	He	2.11	0.0195	1170.09	0.009	0.0005796
Sr	88	3	He	2.126	0.0196	1160.09	0.009	0.0005796
Sr	88	3	He	1.789	0.0166	980.06	0.009	0.0005796
Mo	98	3	He	2143.356	50.4021	3028881.83	0.0235	0.0003188
Mo	98	3	He	2168.642	50.9967	3016931.52	0.0235	0.0003188
Mo	98	3	He	2183.137	51.3376	3032026.83	0.0235	0.0003188
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Cd	111	3	He	0.208	0.0012	70.00	0.0055	1.07E-05
Cd	111	3	He	0.267	0.0015	88.00	0.0055	1.07E-05
Cd	111	3	He	0.267	0.0015	88.00	0.0055	1.07E-05
Sn	120	3	He	0.183	0.0201	1210.09	0.0164	0.01713
Sn	120	3	He	0.192	0.0203	1200.10	0.0164	0.01713
Sn	120	3	He	0.112	0.019	1120.09	0.0164	0.01713
Sb	121	3	He	0.123	0.0022	130.01	0.0155	0.0002641
Sb	121	3	He	0.136	0.0024	140.01	0.0155	0.0002641
Sb	121	3	He	0.235	0.0039	230.01	0.0155	0.0002641
Ba	137	3	He	0.369	0.002	120.00	0.005	0.0001577
Ba	137	3	He	0.478	0.0025	150.01	0.005	0.0001577
Ba	137	3	He	0.342	0.0019	110.01	0.005	0.0001577
Tl	205	3	He	0.016	0.0007	190.01	0.026	0.0002504
Tl	205	3	He	0.028	0.001	280.02	0.026	0.0002504
Tl	205	3	He	0.034	0.0011	320.02	0.026	0.0002504
Pb	208	3	He	0.059	0.0035	590.03	0.0349	0.001422
Pb	208	3	He	0.063	0.0036	540.03	0.0349	0.001422
Pb	208	3	He	0.077	0.0041	540.03	0.0349	0.001422
U	238	3	He	0.043	0.0022	480.03	0.0502	5.657E-05
U	238	3	He	0.061	0.0031	680.04	0.0502	5.657E-05
U	238	3	He	0.066	0.0034	740.05	0.0502	5.657E-05
Sc	45	1	No Gas			2005537.16		
Sc	45	1	No Gas			2055594.19		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2068731.06		
Ge	72	1	No Gas			1058391.39		
Ge	72	1	No Gas			1060247.80		
Ge	72	1	No Gas			1065449.12		
Sc	45	2	H2			125083.59		
Sc	45	2	H2			125576.88		
Sc	45	2	H2			123824.71		
Ge	72	2	H2			108510.04		
Ge	72	2	H2			109396.24		
Ge	72	2	H2			108499.06		
In	115	2	H2			275789.00		
In	115	2	H2			275963.82		
In	115	2	H2			274057.67		
Sc	45	3	He			35834.74		
Sc	45	3	He			36406.36		
Sc	45	3	He			37629.24		
Ge	72	3	He			68152.44		
Ge	72	3	He			66816.97		
Ge	72	3	He			66495.66		
In	115	3	He			60100.94		
In	115	3	He			59166.60		
In	115	3	He			59066.84		
Tb	159	3	He			286963.14		
Tb	159	3	He			284392.46		
Tb	159	3	He			283676.62		
Bi	209	3	He			218772.73		
Bi	209	3	He			219650.97		
Bi	209	3	He			219930.49		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 6:41:20 AM
Sample Name	ICSAB 4677744
Sample Type	ICSAB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

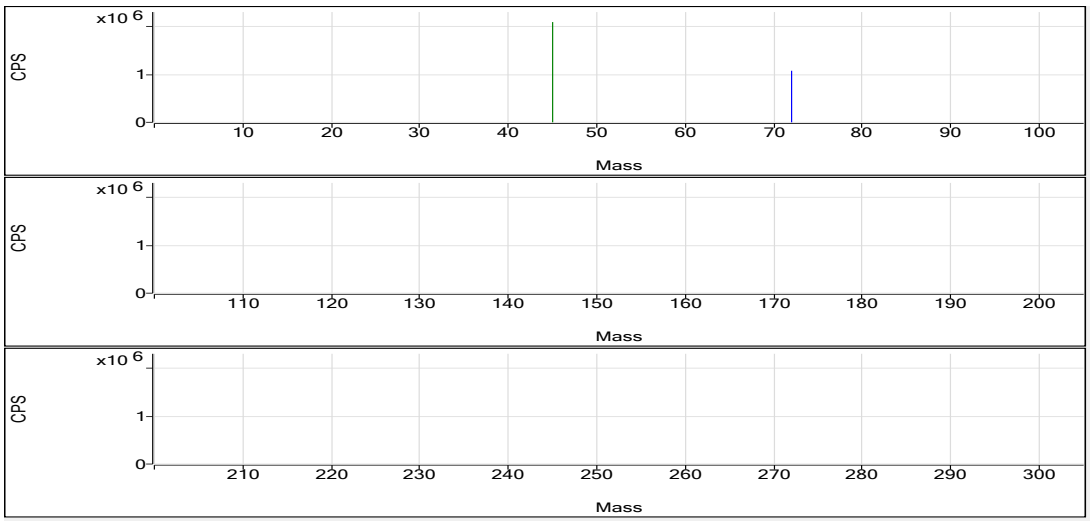
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	22.5	60.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	100.328	ppb	0.6	4800.59	0.0436	Pulse	1.5000	3
Na	23	45	He	242743.408	ppb	2.2	35095433.64	928.0673	Analog	0.1000	3
Mg	24	45	He	99617.301	ppb	2.5	7023062.81	185.7193	Analog	0.1000	3
Al	27	45	He	101800.524	ppb	2.8	2225577.16	58.8586	Analog	0.1000	3
K	39	45	He	99527.370	ppb	1.8	4369852.43	115.5474	Analog	0.1000	3
Ca	44	45	He	289750.509	ppb	2.3	724157.41	19.1503	Pulse	0.1000	3
Ti	47	45	He	1965.671	ppb	3.0	38618.73	1.0213	Pulse	0.1000	3
V	51	45	He	203.535	ppb	2.3	172743.12	4.5681	Pulse	0.5000	3
Cr	52	45	He	203.322	ppb	1.5	220197.13	5.8223	Pulse	0.1000	3
Mn	55	45	He	197.563	ppb	1.2	92703.28	2.4511	Pulse	0.1000	3
Fe	57	45	He	242128.454	ppb	2.5	5193668.78	137.3491	Analog	0.1000	3
Co	59	45	He	185.402	ppb	2.5	407399.03	10.7738	Pulse	0.1000	3
Ni	60	72	He	192.296	ppb	1.6	115060.34	1.6706	Pulse	0.1000	3
Cu	63	72	He	178.159	ppb	1.3	321106.80	4.6623	Pulse	0.1000	3
Zn	66	72	He	95.470	ppb	1.4	19086.64	0.2771	Pulse	0.1000	3
As	75	72	He	95.121	ppb	2.3	13593.84	0.1974	Pulse	0.5000	3
Sr	88	115	He	1.813	ppb	7.4	1010.07	0.0168	Pulse	0.1000	3
Mo	98	115	He	2163.520	ppb	2.5	3058887.76	50.8763	Analog	0.1000	3
Ag	107	115	He	50.306	ppb	2.0	150837.53	2.5085	Pulse	0.1000	3
Cd	111	115	He	102.575	ppb	3.2	34170.34	0.5684	Pulse	0.5000	3
Sn	120	115	He	0.131	ppb	35.0	1160.10	0.0193	Pulse	0.1000	3
Sb	121	115	He	0.194	ppb	13.2	196.68	0.0033	Pulse	0.1000	3
Ba	137	115	He	0.527	ppb	24.8	166.67	0.0028	Pulse	0.1000	3
Tl	205	159	He	0.024	ppb	30.0	250.01	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.070	ppb	4.3	1110.06	0.0039	Pulse	0.1000	3
U	238	209	He	0.062	ppb	3.4	693.38	0.0032	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2097265.23	1.3	103.2	Analog	0.1000	3
No Gas	Ge	72	1078635.84	0.6	107.3	Pulse	0.1000	3
H2	Sc	45	125659.58	1.0	95.1	Pulse	0.1000	3
H2	Ge	72	110001.52	0.7	98.6	Pulse	0.1000	3
H2	In	115	276737.10	0.7	94.2	Pulse	0.1000	3
He	Sc	45	37826.79	2.1	102.4	Pulse	0.1000	3
He	Ge	72	68879.50	1.1	106.7	Pulse	0.1000	3
He	In	115	60147.93	2.4	95.2	Pulse	0.1000	3
He	Tb	159	286730.84	0.8	97.9	Pulse	0.1000	3
He	Bi	209	218697.81	0.7	92.7	Pulse	0.1000	3

No Gas



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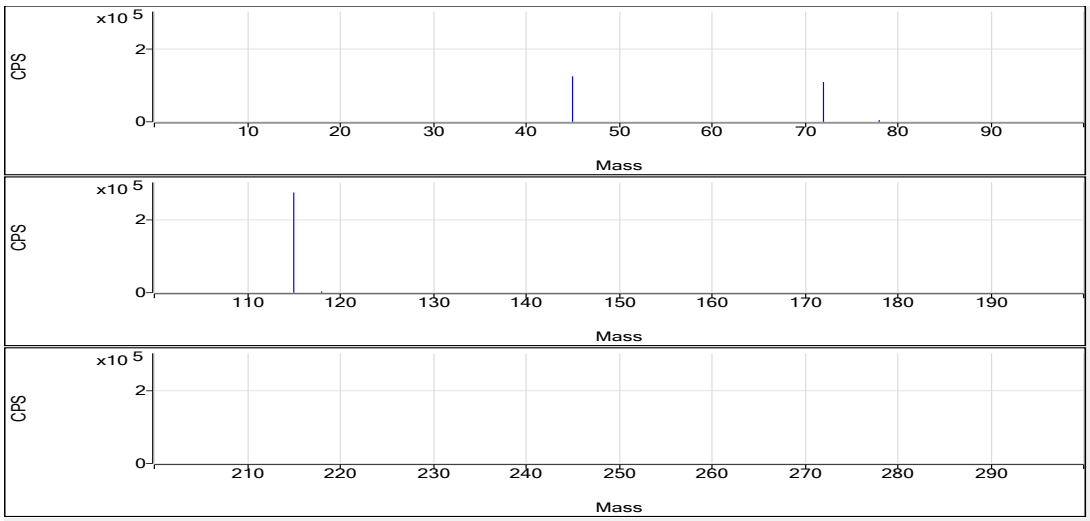
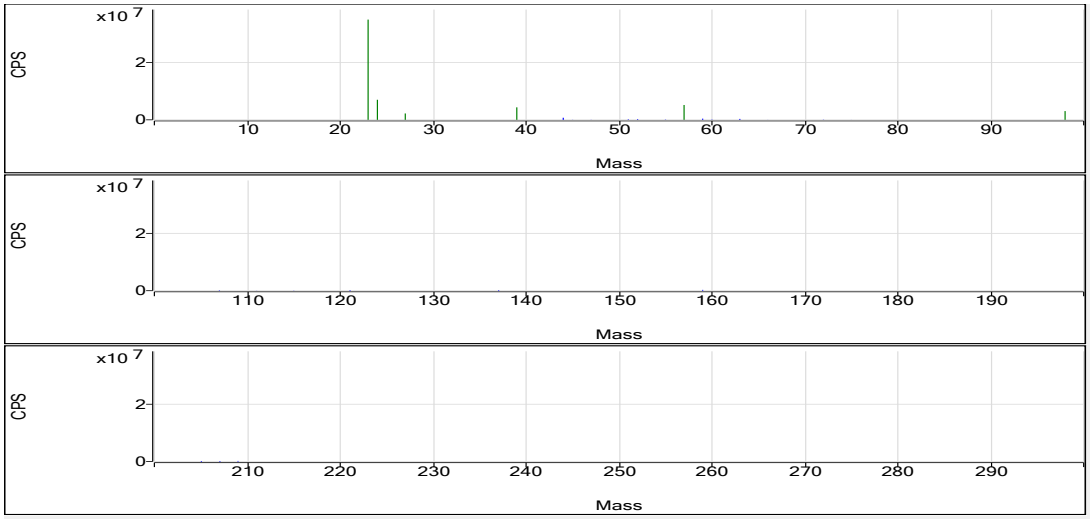


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0	62.00	0.0008	2.195E-05
Be	9	1	No Gas	0.009	0	62.00	0.0008	2.195E-05
Be	9	1	No Gas	0.006	0	56.00	0.0008	2.195E-05
Se	78	2	H2	99.716	0.0434	4806.81	0.0004	1.386E-05
Se	78	2	H2	100.884	0.0439	4821.49	0.0004	1.386E-05
Se	78	2	H2	100.385	0.0437	4773.47	0.0004	1.386E-05
Na	23	3	He	247694.792	946.9886	35321471.97	0.0038	0.4416
Na	23	3	He	243558.558	931.1823	34872096.98	0.0038	0.4416
Na	23	3	He	236976.872	906.0309	35092731.98	0.0038	0.4416
Mg	24	3	He	99909.843	186.2647	6947434.90	0.0019	0.005872
Mg	24	3	He	101926.297	190.0239	7116254.89	0.0019	0.005872
Mg	24	3	He	97015.762	180.8693	7005498.65	0.0019	0.005872
Al	27	3	He	103738.421	59.9791	2237143.25	0.0006	0.0004496
Al	27	3	He	103098.009	59.6088	2232306.22	0.0006	0.0004496
Al	27	3	He	98565.142	56.988	2207282.00	0.0006	0.0004496
K	39	3	He	101487.843	117.8146	4394336.18	0.0012	0.4456
K	39	3	He	99225.884	115.1987	4314107.75	0.0012	0.4456
K	39	3	He	97868.383	113.6288	4401113.37	0.0012	0.4456
Ca	44	3	He	294878.55	19.4891	726919.05	0.0001	0.003779
Ca	44	3	He	292344.99	19.3217	723583.35	0.0001	0.003779
Ca	44	3	He	282027.986	18.64	721969.83	0.0001	0.003779
Ti	47	3	He	2020.319	1.0497	39153.67	0.0005	0
Ti	47	3	He	1973.02	1.0252	38391.34	0.0005	0
Ti	47	3	He	1903.676	0.9891	38311.19	0.0005	0
V	51	3	He	206.816	4.6413	173113.34	0.0223	0.03054
V	51	3	He	205.495	4.6118	172708.77	0.0223	0.03054
V	51	3	He	198.293	4.4512	172407.25	0.0223	0.03054
Cr	52	3	He	205.994	5.8984	220001.07	0.0285	0.03714
Cr	52	3	He	203.827	5.8367	218580.47	0.0285	0.03714
Cr	52	3	He	200.144	5.7319	222009.86	0.0285	0.03714
Mn	55	3	He	197.9	2.4553	91579.02	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	199.839	2.4793	92847.55	0.0124	0.004415
Mn	55	3	He	194.949	2.4187	93683.27	0.0124	0.004415
Fe	57	3	He	246409.539	139.7776	5213525.23	0.0006	0.001356
Fe	57	3	He	244794.229	138.8613	5200253.05	0.0006	0.001356
Fe	57	3	He	235181.592	133.4085	5167228.05	0.0006	0.001356
Co	59	3	He	188.933	10.979	409502.30	0.0581	0.002697
Co	59	3	He	187.089	10.8719	407143.74	0.0581	0.002697
Co	59	3	He	180.182	10.4706	405551.05	0.0581	0.002697
Ni	60	3	He	193.931	1.6848	114602.64	0.0087	0.003928
Ni	60	3	He	188.796	1.6403	114130.06	0.0087	0.003928
Ni	60	3	He	194.159	1.6868	116448.33	0.0087	0.003928
Cu	63	3	He	180.916	4.7344	322042.81	0.0261	0.006048
Cu	63	3	He	176.511	4.6193	321407.32	0.0261	0.006048
Cu	63	3	He	177.05	4.6333	319870.27	0.0261	0.006048
Zn	66	3	He	94.008	0.2729	18562.56	0.0029	0.003512
Zn	66	3	He	95.643	0.2776	19313.63	0.0029	0.003512
Zn	66	3	He	96.76	0.2808	19383.74	0.0029	0.003512
As	75	3	He	97.511	0.2023	13762.66	0.0021	0.0007233
As	75	3	He	94.583	0.1963	13656.55	0.0021	0.0007233
As	75	3	He	93.268	0.1936	13362.31	0.0021	0.0007233
Sr	88	3	He	1.883	0.0174	1050.08	0.009	0.0005796
Sr	88	3	He	1.659	0.0154	950.06	0.009	0.0005796
Sr	88	3	He	1.897	0.0176	1030.07	0.009	0.0005796
Mo	98	3	He	2172.796	51.0944	3076638.70	0.0235	0.0003188
Mo	98	3	He	2105.748	49.5177	3049323.39	0.0235	0.0003188
Mo	98	3	He	2212.017	52.0167	3050701.20	0.0235	0.0003188
Ag	107	3	He	50.763	2.5313	152423.94	0.0499	0.0004754
Ag	107	3	He	49.127	2.4498	150858.08	0.0499	0.0004754
Ag	107	3	He	51.027	2.5445	149230.56	0.0499	0.0004754
Cd	111	3	He	102.833	0.5698	34312.00	0.0055	1.07E-05
Cd	111	3	He	99.196	0.5497	33848.91	0.0055	1.07E-05
Cd	111	3	He	105.697	0.5857	34350.10	0.0055	1.07E-05
Sn	120	3	He	0.15	0.0196	1180.10	0.0164	0.01713
Sn	120	3	He	0.164	0.0198	1220.10	0.0164	0.01713
Sn	120	3	He	0.078	0.0184	1080.09	0.0164	0.01713
Sb	121	3	He	0.165	0.0028	170.01	0.0155	0.0002641
Sb	121	3	He	0.203	0.0034	210.01	0.0155	0.0002641
Sb	121	3	He	0.214	0.0036	210.01	0.0155	0.0002641
Ba	137	3	He	0.535	0.0028	170.01	0.005	0.0001577
Ba	137	3	He	0.392	0.0021	130.00	0.005	0.0001577
Ba	137	3	He	0.653	0.0034	200.01	0.005	0.0001577
Tl	205	3	He	0.016	0.0007	190.01	0.026	0.0002504
Tl	205	3	He	0.028	0.001	280.01	0.026	0.0002504
Tl	205	3	He	0.028	0.001	280.01	0.026	0.0002504
Pb	208	3	He	0.07	0.0039	600.03	0.0349	0.001422
Pb	208	3	He	0.067	0.0038	650.05	0.0349	0.001422
Pb	208	3	He	0.073	0.004	580.03	0.0349	0.001422
U	238	3	He	0.06	0.0031	680.04	0.0502	5.657E-05
U	238	3	He	0.064	0.0033	720.05	0.0502	5.657E-05
U	238	3	He	0.061	0.0031	680.05	0.0502	5.657E-05
Sc	45	1	No Gas			2082593.88		
Sc	45	1	No Gas			2128306.69		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2080895.13		
Ge	72	1	No Gas			1074349.91		
Ge	72	1	No Gas			1086673.89		
Ge	72	1	No Gas			1074883.73		
Sc	45	2	H2			124469.93		
Sc	45	2	H2			125548.68		
Sc	45	2	H2			126960.12		
Ge	72	2	H2			110817.85		
Ge	72	2	H2			109870.43		
Ge	72	2	H2			109316.28		
In	115	2	H2			278976.36		
In	115	2	H2			275092.81		
In	115	2	H2			276142.14		
Sc	45	3	He			37298.73		
Sc	45	3	He			37449.27		
Sc	45	3	He			38732.38		
Ge	72	3	He			68022.11		
Ge	72	3	He			69579.80		
Ge	72	3	He			69036.60		
In	115	3	He			60221.53		
In	115	3	He			61586.99		
In	115	3	He			58654.23		
Tb	159	3	He			289081.09		
Tb	159	3	He			286800.58		
Tb	159	3	He			284310.84		
Bi	209	3	He			220286.38		
Bi	209	3	He			218742.99		
Bi	209	3	He			217064.06		

Quantitation Report

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Sample Type	LRC
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

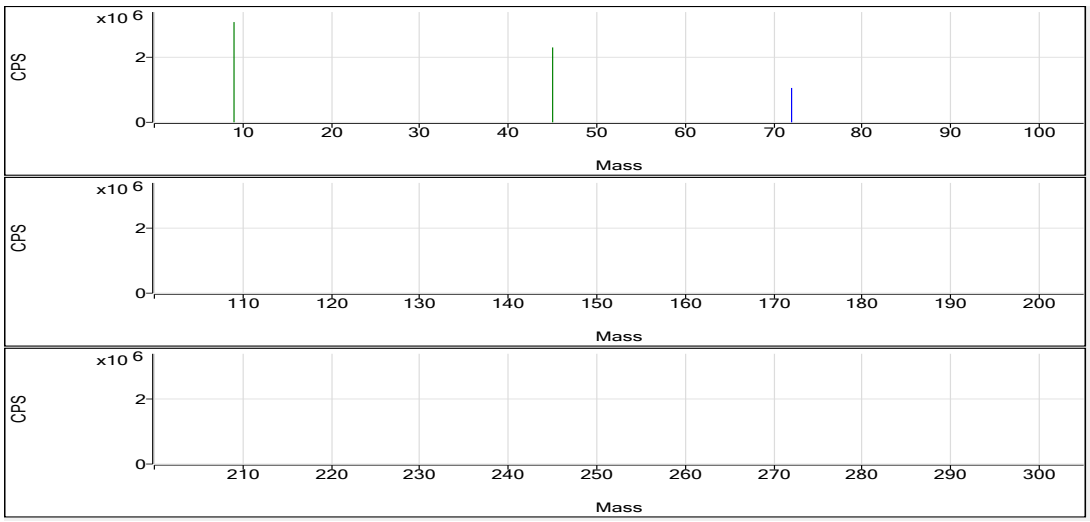
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	1744.873	ppb	0.3	3084198.58	1.3389	Analog	0.5000	3
Se	78	72	H2	2031.565	ppb	1.0	93659.05	0.8834	Pulse	1.5000	3
Na	23	45	He	180318.989	ppb	0.8	28388349.58	689.5170	Analog	0.1000	3
Mg	24	45	He	186234.922	ppb	0.4	14294803.54	347.1978	Analog	0.1000	3
Al	27	45	He	188110.755	ppb	0.3	4477881.29	108.7608	Analog	0.1000	3
K	39	45	He	188497.502	ppb	0.4	8993721.33	218.4399	Analog	0.1000	3
Ca	44	45	He	187187.663	ppb	0.2	509425.29	12.3730	Pulse	0.1000	3
Ti	47	45	He	1909.760	ppb	1.1	40854.83	0.9923	Pulse	0.1000	3
V	51	45	He	1904.258	ppb	0.3	1749135.54	42.4837	Analog	0.5000	3
Cr	52	45	He	1937.007	ppb	0.5	2270701.68	55.1515	Analog	0.1000	3
Mn	55	45	He	5622.711	ppb	0.2	2867141.31	69.6381	Analog	0.1000	3
Fe	57	45	He	145727.377	ppb	1.0	3403426.51	82.6654	Analog	0.1000	3
Co	59	45	He	1735.120	ppb	0.5	4150382.02	100.8065	Analog	0.1000	3
Ni	60	72	He	1938.850	ppb	1.3	1111484.59	16.8085	Pulse	0.1000	3
Cu	63	72	He	1918.224	ppb	1.4	3315550.78	50.1400	Analog	0.1000	3
Zn	66	72	He	1967.576	ppb	0.9	373062.94	5.6416	Pulse	0.1000	3
As	75	72	He	1970.120	ppb	0.3	269405.78	4.0739	Pulse	0.5000	3
Sr	88	115	He	1861.483	ppb	0.4	1120079.85	16.6661	Pulse	0.1000	3
Mo	98	115	He	1981.263	ppb	0.7	3131184.54	46.5904	Analog	0.1000	3
Ag	107	115	He	1865.675	ppb	0.3	6251324.91	93.0156	Analog	0.1000	3
Cd	111	115	He	1825.105	ppb	0.2	679682.19	10.1132	Pulse	0.5000	3
Sn	120	115	He	1962.564	ppb	0.7	2166831.06	32.2414	Analog	0.1000	3
Sb	121	115	He	1923.069	ppb	0.5	1999160.96	29.7463	Analog	0.1000	3
Ba	137	115	He	1812.897	ppb	0.9	606596.08	9.0258	Pulse	0.1000	3
Tl	205	159	He	2041.606	ppb	0.7	15233545.60	53.1641	Analog	0.1000	3
Pb	208	159	He	2032.461	ppb	0.1	20347755.33	71.0106	Analog	0.1000	3
U	238	209	He	217.991	ppb	0.5	2401530.12	10.9503	Analog	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2303566.95	1.6	113.3	Analog	0.1000	3
No Gas	Ge	72	1057119.59	1.3	105.2	Pulse	0.1000	3
H2	Sc	45	126429.07	1.1	95.7	Pulse	0.1000	3
H2	Ge	72	106015.34	0.7	95.1	Pulse	0.1000	3
H2	In	115	356772.27	0.9	121.5	Pulse	0.1000	3
He	Sc	45	41172.21	0.4	111.4	Pulse	0.1000	3
He	Ge	72	66130.37	0.7	102.4	Pulse	0.1000	3
He	In	115	67207.12	0.2	106.4	Pulse	0.1000	3
He	Tb	159	286544.63	0.5	97.9	Pulse	0.1000	3
He	Bi	209	219310.97	0.4	93.0	Pulse	0.1000	3

No Gas



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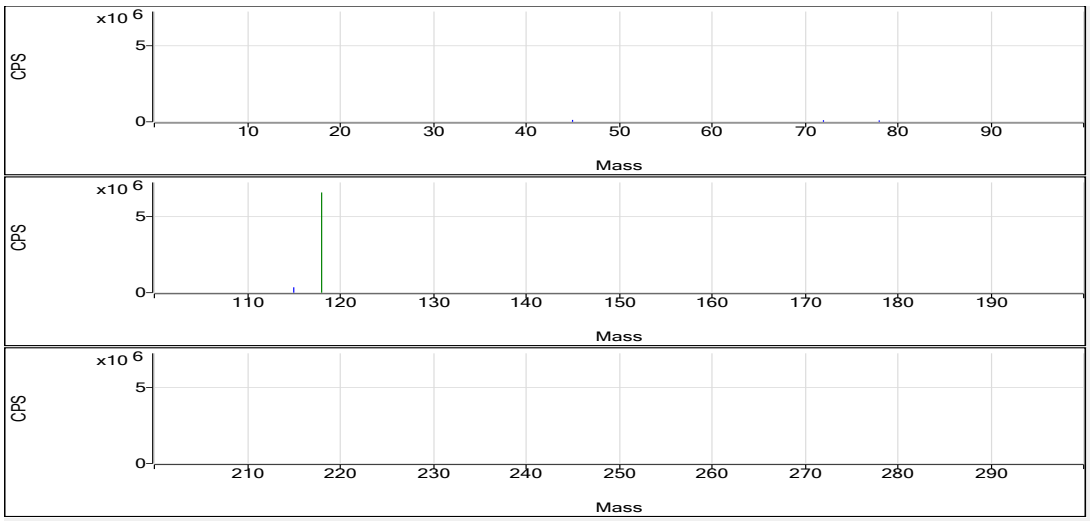
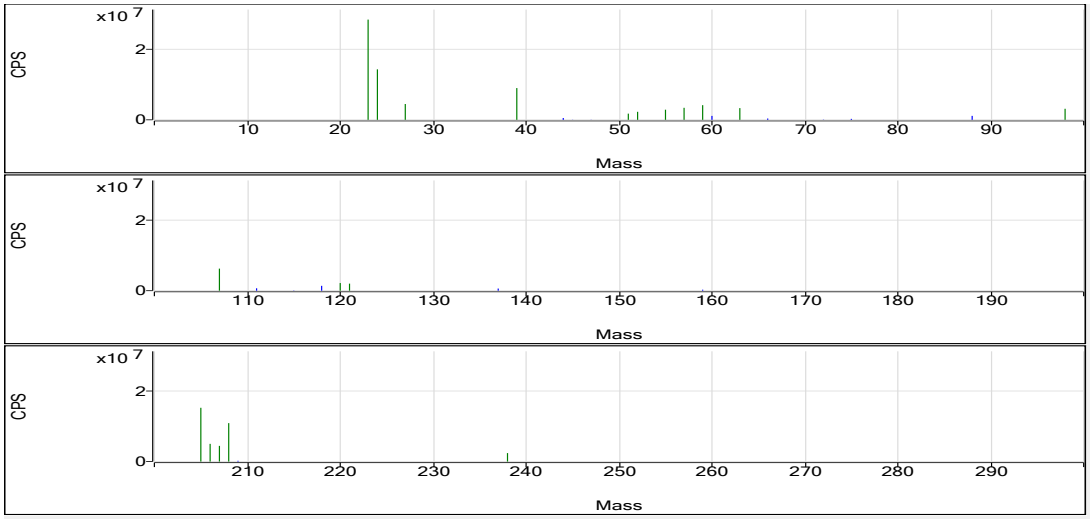


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1740.663	1.3357	3042410.25	0.0008	2.195E-05
Be	9	1	No Gas	1751.82	1.3442	3075593.50	0.0008	2.195E-05
Be	9	1	No Gas	1742.136	1.3368	3134592.00	0.0008	2.195E-05
Se	78	2	H2	2017.406	0.8773	92428.73	0.0004	1.386E-05
Se	78	2	H2	2021.915	0.8793	93857.69	0.0004	1.386E-05
Se	78	2	H2	2055.375	0.8938	94690.74	0.0004	1.386E-05
Na	23	3	He	181877.456	695.4726	28499417.08	0.0038	0.4416
Na	23	3	He	178926.49	684.1957	28243202.08	0.0038	0.4416
Na	23	3	He	180153.021	688.8828	28422429.58	0.0038	0.4416
Mg	24	3	He	186732.751	348.1259	14265672.29	0.0019	0.005872
Mg	24	3	He	185395.667	345.6332	14267537.29	0.0019	0.005872
Mg	24	3	He	186576.349	347.8343	14351201.04	0.0019	0.005872
Al	27	3	He	188824.212	109.1733	4473755.87	0.0006	0.0004496
Al	27	3	He	187637.928	108.4874	4478296.81	0.0006	0.0004496
Al	27	3	He	187870.125	108.6216	4481591.18	0.0006	0.0004496
K	39	3	He	187841.884	217.6817	8920265.49	0.0012	0.4456
K	39	3	He	188215.975	218.1143	9003631.12	0.0012	0.4456
K	39	3	He	189434.648	219.5237	9057267.37	0.0012	0.4456
Ca	44	3	He	186845.181	12.3504	506098.86	0.0001	0.003779
Ca	44	3	He	187193.707	12.3734	510766.13	0.0001	0.003779
Ca	44	3	He	187524.101	12.3952	511410.89	0.0001	0.003779
Ti	47	3	He	1907.658	0.9912	40617.67	0.0005	0
Ti	47	3	He	1931.607	1.0036	41429.62	0.0005	0
Ti	47	3	He	1890.015	0.982	40517.21	0.0005	0
V	51	3	He	1910.606	42.6252	1746718.38	0.0223	0.03054
V	51	3	He	1899.024	42.3671	1748887.50	0.0223	0.03054
V	51	3	He	1903.145	42.4589	1751800.75	0.0223	0.03054
Cr	52	3	He	1940.405	55.2482	2263987.00	0.0285	0.03714
Cr	52	3	He	1944.164	55.3551	2285027.93	0.0285	0.03714
Cr	52	3	He	1926.453	54.8512	2263090.12	0.0285	0.03714
Mn	55	3	He	5635.539	69.797	2860175.89	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5619.072	69.5931	2872761.52	0.0124	0.004415
Mn	55	3	He	5613.523	69.5244	2868486.52	0.0124	0.004415
Fe	57	3	He	147404.118	83.6166	3426480.89	0.0006	0.001356
Fe	57	3	He	144775.929	82.1257	3390102.45	0.0006	0.001356
Fe	57	3	He	145002.083	82.254	3393696.20	0.0006	0.001356
Co	59	3	He	1743.441	101.2899	4150709.00	0.0581	0.002697
Co	59	3	He	1734.364	100.7626	4159421.50	0.0581	0.002697
Co	59	3	He	1727.555	100.367	4141015.56	0.0581	0.002697
Ni	60	3	He	1931.399	16.7439	1107166.62	0.0087	0.003928
Ni	60	3	He	1918.97	16.6362	1108405.76	0.0087	0.003928
Ni	60	3	He	1966.182	17.0454	1118881.39	0.0087	0.003928
Cu	63	3	He	1917.381	50.1179	3313977.14	0.0261	0.006048
Cu	63	3	He	1892.43	49.4658	3295722.76	0.0261	0.006048
Cu	63	3	He	1944.861	50.8362	3336952.45	0.0261	0.006048
Zn	66	3	He	1963.477	5.6298	372263.59	0.0029	0.003512
Zn	66	3	He	1953.064	5.6	373105.35	0.0029	0.003512
Zn	66	3	He	1986.186	5.6949	373819.88	0.0029	0.003512
As	75	3	He	1972.387	4.0786	269691.13	0.0021	0.0007233
As	75	3	He	1964.296	4.0619	270626.75	0.0021	0.0007233
As	75	3	He	1973.678	4.0813	267899.47	0.0021	0.0007233
Sr	88	3	He	1867.537	16.7203	1122084.98	0.009	0.0005796
Sr	88	3	He	1854.293	16.6017	1114537.17	0.009	0.0005796
Sr	88	3	He	1862.618	16.6762	1123617.41	0.009	0.0005796
Mo	98	3	He	1977.314	46.4975	3120412.14	0.0235	0.0003188
Mo	98	3	He	1997.523	46.9728	3153463.08	0.0235	0.0003188
Mo	98	3	He	1968.952	46.3009	3119678.39	0.0235	0.0003188
Ag	107	3	He	1868.137	93.1383	6250436.16	0.0499	0.0004754
Ag	107	3	He	1858.799	92.6728	6221479.91	0.0499	0.0004754
Ag	107	3	He	1870.089	93.2356	6282058.66	0.0499	0.0004754
Cd	111	3	He	1821.537	10.0935	677363.38	0.0055	1.07E-05
Cd	111	3	He	1825.026	10.1128	678910.13	0.0055	1.07E-05
Cd	111	3	He	1828.751	10.1334	682773.06	0.0055	1.07E-05
Sn	120	3	He	1963.381	32.2548	2164592.31	0.0164	0.01713
Sn	120	3	He	1975.338	32.4511	2178568.09	0.0164	0.01713
Sn	120	3	He	1948.973	32.0182	2157332.78	0.0164	0.01713
Sb	121	3	He	1932.487	29.892	2006026.06	0.0155	0.0002641
Sb	121	3	He	1913.898	29.6044	1987459.97	0.0155	0.0002641
Sb	121	3	He	1922.821	29.7425	2003996.85	0.0155	0.0002641
Ba	137	3	He	1799.006	8.9566	601071.55	0.005	0.0001577
Ba	137	3	He	1830.15	9.1117	611701.79	0.005	0.0001577
Ba	137	3	He	1809.537	9.0091	607014.91	0.005	0.0001577
Tl	205	3	He	2049.732	53.3758	15251566.02	0.026	0.0002504
Tl	205	3	He	2049.848	53.3788	15250087.27	0.026	0.0002504
Tl	205	3	He	2025.237	52.7379	15198983.52	0.026	0.0002504
Pb	208	3	He	2031.823	70.9884	10849206.09	0.0349	0.001422
Pb	208	3	He	2031.771	70.9865	10800649.84	0.0349	0.001422
Pb	208	3	He	2033.789	71.057	11014396.09	0.0349	0.001422
U	238	3	He	217.932	10.9473	2389494.81	0.0502	5.657E-05
U	238	3	He	219.033	11.0026	2422745.59	0.0502	5.657E-05
U	238	3	He	217.009	10.9009	2392349.96	0.0502	5.657E-05
Sc	45	1	No Gas			2277829.50		
Sc	45	1	No Gas			2288009.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2344861.84		
Ge	72	1	No Gas			1047064.44		
Ge	72	1	No Gas			1051858.97		
Ge	72	1	No Gas			1072435.37		
Sc	45	2	H2			125781.16		
Sc	45	2	H2			125527.00		
Sc	45	2	H2			127979.05		
Ge	72	2	H2			105357.08		
Ge	72	2	H2			106747.32		
Ge	72	2	H2			105941.61		
In	115	2	H2			353730.07		
In	115	2	H2			356195.31		
In	115	2	H2			360391.44		
Sc	45	3	He			40978.49		
Sc	45	3	He			41279.42		
Sc	45	3	He			41258.73		
Ge	72	3	He			66123.57		
Ge	72	3	He			66626.23		
Ge	72	3	He			65641.32		
In	115	3	He			77748.32		
In	115	3	He			77979.66		
In	115	3	He			78130.40		
Tb	159	3	He			285739.59		
Tb	159	3	He			285695.80		
Tb	159	3	He			288198.51		
Bi	209	3	He			218272.13		
Bi	209	3	He			220197.77		
Bi	209	3	He			219463.00		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

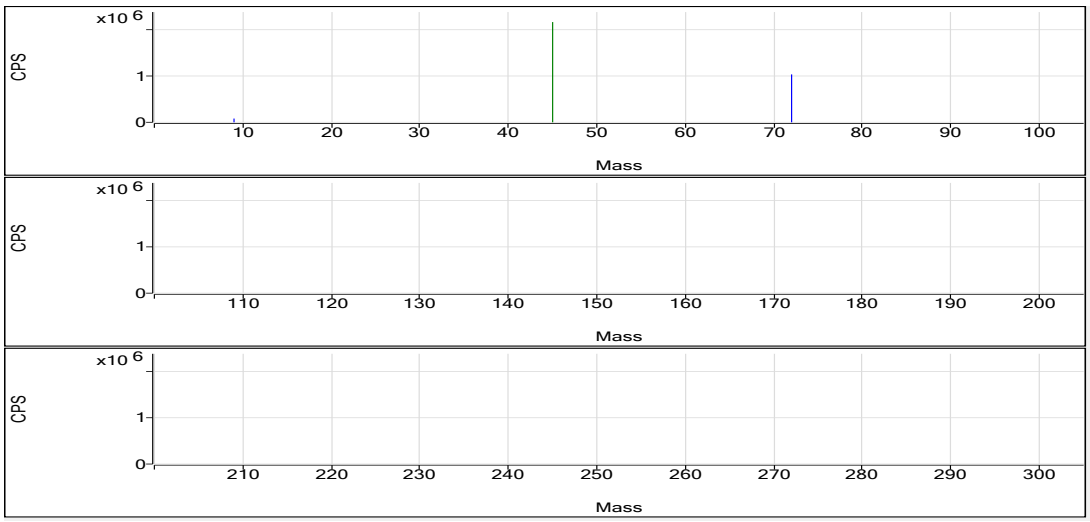
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.553	ppb	0.7	80750.10	0.0373	Pulse	0.5000	3
Se	78	72	H2	53.488	ppb	2.3	2387.31	0.0233	Pulse	1.5000	3
Na	23	45	He	4957.157	ppb	0.2	744351.16	19.3850	Pulse	0.1000	3
Mg	24	45	He	5113.147	ppb	0.7	366235.93	9.5382	Pulse	0.1000	3
Al	27	45	He	5036.133	ppb	1.3	111826.01	2.9122	Pulse	0.1000	3
K	39	45	He	5105.537	ppb	1.2	243815.54	6.3501	Pulse	0.1000	3
Ca	44	45	He	4942.438	ppb	3.7	12682.60	0.3304	Pulse	0.1000	3
Ti	47	45	He	5113.447	ppb	1.0	102016.90	2.6569	Pulse	0.1000	3
V	51	45	He	509.358	ppb	0.8	437184.07	11.3861	Pulse	0.5000	3
Cr	52	45	He	514.227	ppb	0.2	563243.69	14.6686	Pulse	0.1000	3
Mn	55	45	He	504.025	ppb	1.1	239836.88	6.2465	Pulse	0.1000	3
Fe	57	45	He	5007.900	ppb	1.6	109127.99	2.8421	Pulse	0.1000	3
Co	59	45	He	481.895	ppb	1.3	1075020.38	27.9990	Pulse	0.1000	3
Ni	60	72	He	531.993	ppb	0.2	298798.59	4.6149	Pulse	0.1000	3
Cu	63	72	He	503.970	ppb	0.2	853213.45	13.1776	Pulse	0.1000	3
Zn	66	72	He	521.627	ppb	1.4	97007.17	1.4982	Pulse	0.1000	3
As	75	72	He	526.406	ppb	0.2	70513.08	1.0891	Pulse	0.5000	3
Sr	88	115	He	51.551	ppb	2.4	28770.07	0.4621	Pulse	0.1000	3
Mo	98	115	He	52.316	ppb	2.4	76612.23	1.2306	Pulse	0.1000	3
Ag	107	115	He	53.083	ppb	1.5	164810.23	2.6470	Pulse	0.1000	3
Cd	111	115	He	51.121	ppb	2.6	17636.50	0.2833	Pulse	0.5000	3
Sn	120	115	He	50.876	ppb	0.7	53082.31	0.8525	Pulse	0.1000	3
Sb	121	115	He	51.047	ppb	1.6	49178.31	0.7899	Pulse	0.1000	3
Ba	137	115	He	507.082	ppb	0.4	157205.90	2.5247	Pulse	0.1000	3
Tl	205	159	He	51.426	ppb	1.2	389367.30	1.3394	Pulse	0.1000	3
Pb	208	159	He	50.998	ppb	0.5	518387.56	1.7832	Pulse	0.1000	3
U	238	209	He	50.022	ppb	0.5	588985.51	2.5128	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2166183.15	0.4	106.6	Analog	0.1000	3
No Gas	Ge	72	1035324.13	0.6	103.0	Pulse	0.1000	3
H2	Sc	45	122349.21	1.3	92.6	Pulse	0.1000	3
H2	Ge	72	102617.47	3.0	92.0	Pulse	0.1000	3
H2	In	115	288343.10	1.1	98.2	Pulse	0.1000	3
He	Sc	45	38398.32	1.0	103.9	Pulse	0.1000	3
He	Ge	72	64747.06	0.2	100.3	Pulse	0.1000	3
He	In	115	62268.78	1.1	98.5	Pulse	0.1000	3
He	Tb	159	290714.97	0.4	99.3	Pulse	0.1000	3
He	Bi	209	234399.42	0.7	99.4	Pulse	0.1000	3

No Gas



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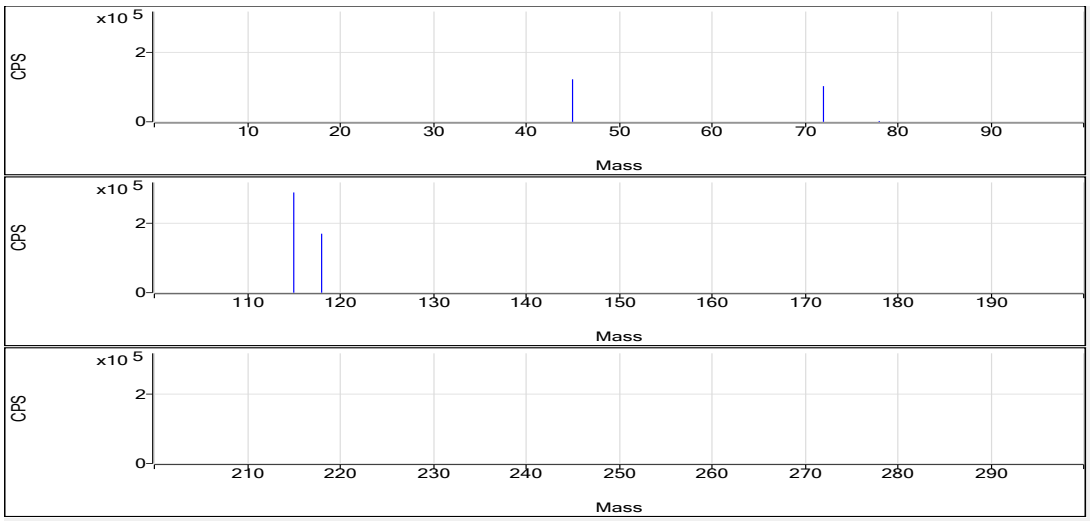
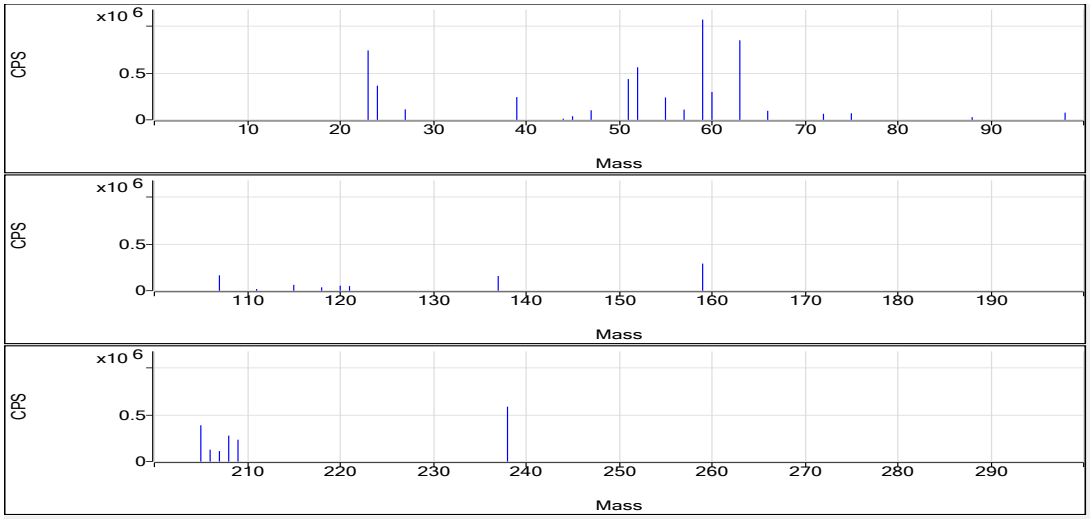


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.256	0.037	80434.27	0.0008	2.195E-05
Be	9	1	No Gas	48.496	0.0372	80319.91	0.0008	2.195E-05
Be	9	1	No Gas	48.908	0.0375	81496.11	0.0008	2.195E-05
Se	78	2	H2	52.074	0.0227	2398.87	0.0004	1.386E-05
Se	78	2	H2	53.971	0.0235	2342.86	0.0004	1.386E-05
Se	78	2	H2	54.418	0.0237	2420.21	0.0004	1.386E-05
Na	23	3	He	4945.336	19.3398	746375.61	0.0038	0.4416
Na	23	3	He	4967.475	19.4244	750599.75	0.0038	0.4416
Na	23	3	He	4958.66	19.3908	736078.11	0.0038	0.4416
Mg	24	3	He	5079.651	9.4757	365692.65	0.0019	0.005872
Mg	24	3	He	5113.402	9.5386	368591.91	0.0019	0.005872
Mg	24	3	He	5146.389	9.6001	364423.24	0.0019	0.005872
Al	27	3	He	4977.307	2.8782	111076.93	0.0006	0.0004496
Al	27	3	He	5109.383	2.9546	114169.82	0.0006	0.0004496
Al	27	3	He	5021.708	2.9039	110231.29	0.0006	0.0004496
K	39	3	He	5095.056	6.338	244599.02	0.0012	0.4456
K	39	3	He	5049.775	6.2856	242888.36	0.0012	0.4456
K	39	3	He	5171.782	6.4267	243959.25	0.0012	0.4456
Ca	44	3	He	4831.015	0.323	12465.74	0.0001	0.003779
Ca	44	3	He	4840.458	0.3236	12505.80	0.0001	0.003779
Ca	44	3	He	5155.84	0.3445	13076.26	0.0001	0.003779
Ti	47	3	He	5055.388	2.6267	101371.93	0.0005	0
Ti	47	3	He	5142.725	2.6721	103255.15	0.0005	0
Ti	47	3	He	5142.228	2.6718	101423.62	0.0005	0
V	51	3	He	506.775	11.3285	437196.56	0.0223	0.03054
V	51	3	He	507.315	11.3405	438220.81	0.0223	0.03054
V	51	3	He	513.986	11.4892	436134.84	0.0223	0.03054
Cr	52	3	He	514.543	14.6776	566448.04	0.0285	0.03714
Cr	52	3	He	512.878	14.6302	565342.26	0.0285	0.03714
Cr	52	3	He	515.26	14.698	557940.77	0.0285	0.03714
Mn	55	3	He	503.779	6.2434	240949.27	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	498.457	6.1775	238710.89	0.0124	0.004415
Mn	55	3	He	509.84	6.3185	239850.48	0.0124	0.004415
Fe	57	3	He	5075.634	2.8805	111166.82	0.0006	0.001356
Fe	57	3	He	4916.528	2.7903	107821.46	0.0006	0.001356
Fe	57	3	He	5031.538	2.8555	108395.68	0.0006	0.001356
Co	59	3	He	478.719	27.8145	1073433.66	0.0581	0.002697
Co	59	3	He	477.763	27.7589	1072659.20	0.0581	0.002697
Co	59	3	He	489.205	28.4236	1078968.27	0.0581	0.002697
Ni	60	3	He	532.876	4.6225	298921.07	0.0087	0.003928
Ni	60	3	He	531.157	4.6076	298096.58	0.0087	0.003928
Ni	60	3	He	531.947	4.6145	299378.12	0.0087	0.003928
Cu	63	3	He	503.152	13.1562	850765.85	0.0261	0.006048
Cu	63	3	He	503.431	13.1635	851634.99	0.0261	0.006048
Cu	63	3	He	505.326	13.213	857239.52	0.0261	0.006048
Zn	66	3	He	515.171	1.4797	95688.40	0.0029	0.003512
Zn	66	3	He	520.416	1.4948	96705.31	0.0029	0.003512
Zn	66	3	He	529.296	1.5202	98627.79	0.0029	0.003512
As	75	3	He	526.801	1.0899	70478.20	0.0021	0.0007233
As	75	3	He	527.307	1.0909	70578.80	0.0021	0.0007233
As	75	3	He	525.11	1.0864	70482.23	0.0021	0.0007233
Sr	88	3	He	50.407	0.4519	28479.28	0.009	0.0005796
Sr	88	3	He	51.372	0.4605	28559.70	0.009	0.0005796
Sr	88	3	He	52.873	0.4739	29271.23	0.009	0.0005796
Mo	98	3	He	50.889	1.197	75442.43	0.0235	0.0003188
Mo	98	3	He	53.033	1.2474	77362.34	0.0235	0.0003188
Mo	98	3	He	53.027	1.2473	77031.91	0.0235	0.0003188
Ag	107	3	He	52.225	2.6042	164134.84	0.0499	0.0004754
Ag	107	3	He	53.836	2.6845	166491.35	0.0499	0.0004754
Ag	107	3	He	53.188	2.6522	163804.50	0.0499	0.0004754
Cd	111	3	He	49.611	0.2749	17326.76	0.0055	1.07E-05
Cd	111	3	He	52.025	0.2883	17879.48	0.0055	1.07E-05
Cd	111	3	He	51.728	0.2866	17703.27	0.0055	1.07E-05
Sn	120	3	He	50.814	0.8515	53664.47	0.0164	0.01713
Sn	120	3	He	50.572	0.8475	52560.37	0.0164	0.01713
Sn	120	3	He	51.243	0.8585	53022.10	0.0164	0.01713
Sb	121	3	He	50.201	0.7768	48957.30	0.0155	0.0002641
Sb	121	3	He	51.059	0.79	48997.38	0.0155	0.0002641
Sb	121	3	He	51.882	0.8028	49580.25	0.0155	0.0002641
Ba	137	3	He	504.897	2.5138	158437.09	0.005	0.0001577
Ba	137	3	He	508.837	2.5334	157120.80	0.005	0.0001577
Ba	137	3	He	507.511	2.5268	156059.80	0.005	0.0001577
Tl	205	3	He	51.956	1.3532	392157.69	0.026	0.0002504
Tl	205	3	He	51.584	1.3435	389977.46	0.026	0.0002504
Tl	205	3	He	50.737	1.3215	385966.75	0.026	0.0002504
Pb	208	3	He	51.228	1.7912	278671.58	0.0349	0.001422
Pb	208	3	He	51.054	1.7851	277960.80	0.0349	0.001422
Pb	208	3	He	50.712	1.7732	278089.57	0.0349	0.001422
U	238	3	He	49.89	2.5062	584651.59	0.0502	5.657E-05
U	238	3	He	49.885	2.5059	591969.05	0.0502	5.657E-05
U	238	3	He	50.289	2.5262	590335.89	0.0502	5.657E-05
Sc	45	1	No Gas			2170997.78		
Sc	45	1	No Gas			2157186.69		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2170364.97		
Ge	72	1	No Gas			1041445.61		
Ge	72	1	No Gas			1029120.61		
Ge	72	1	No Gas			1035406.16		
Sc	45	2	H2			123976.13		
Sc	45	2	H2			120861.12		
Sc	45	2	H2			122210.38		
Ge	72	2	H2			105871.24		
Ge	72	2	H2			99767.45		
Ge	72	2	H2			102213.72		
In	115	2	H2			284741.09		
In	115	2	H2			290884.10		
In	115	2	H2			289404.12		
Sc	45	3	He			38592.66		
Sc	45	3	He			38642.03		
Sc	45	3	He			37960.27		
Ge	72	3	He			64666.38		
Ge	72	3	He			64696.55		
Ge	72	3	He			64878.26		
In	115	3	He			63314.20		
In	115	3	He			62300.45		
In	115	3	He			62039.43		
Tb	159	3	He			289803.00		
Tb	159	3	He			290267.20		
Tb	159	3	He			292074.70		
Bi	209	3	He			233285.27		
Bi	209	3	He			236228.88		
Bi	209	3	He			233684.12		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 7:05:57 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

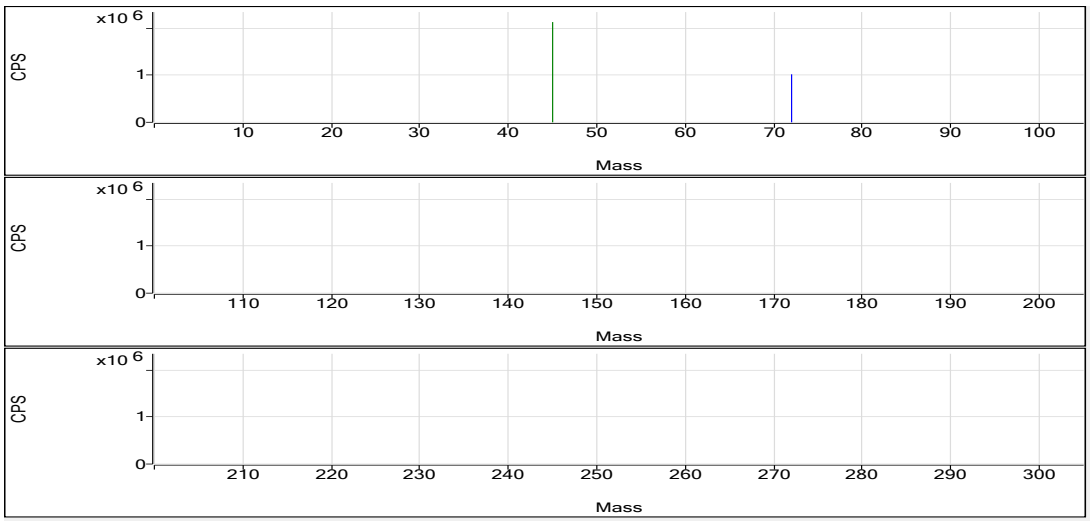
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.084	ppb	7.6	183.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.084	ppb	98.9	5.11	0.0001	Pulse	1.5000	3
Na	23	45	He	-0.855	ppb	N/A	16459.67	0.4383	Pulse	0.1000	3
Mg	24	45	He	2.224	ppb	47.8	376.68	0.0100	Pulse	0.1000	3
Al	27	45	He	3.214	ppb	54.4	86.67	0.0023	Pulse	0.1000	3
K	39	45	He	6.524	ppb	273.0	17013.76	0.4532	Pulse	0.1000	3
Ca	44	45	He	-2.161	ppb	N/A	136.67	0.0036	Pulse	0.1000	3
Ti	47	45	He	1.192	ppb	64.6	23.33	0.0006	Pulse	0.1000	3
V	51	45	He	0.014	ppb	377.3	1158.72	0.0309	Pulse	0.5000	3
Cr	52	45	He	0.120	ppb	117.3	1523.47	0.0406	Pulse	0.1000	3
Mn	55	45	He	0.053	ppb	297.7	190.01	0.0051	Pulse	0.1000	3
Fe	57	45	He	3.401	ppb	56.1	123.34	0.0033	Pulse	0.1000	3
Co	59	45	He	0.152	ppb	8.6	433.36	0.0115	Pulse	0.1000	3
Ni	60	72	He	0.014	ppb	477.7	260.01	0.0040	Pulse	0.1000	3
Cu	63	72	He	0.132	ppb	32.6	610.04	0.0095	Pulse	0.1000	3
Zn	66	72	He	0.208	ppb	33.6	263.34	0.0041	Pulse	0.1000	3
As	75	72	He	0.159	ppb	56.5	67.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.008	ppb	229.9	40.00	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.106	ppb	25.6	173.34	0.0028	Pulse	0.1000	3
Ag	107	115	He	0.012	ppb	57.1	66.67	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	18.7	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.006	ppb	995.5	1060.08	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.060	ppb	40.0	73.33	0.0012	Pulse	0.1000	3
Ba	137	115	He	0.164	ppb	39.1	60.00	0.0010	Pulse	0.1000	3
Tl	205	159	He	0.101	ppb	11.5	836.73	0.0029	Pulse	0.1000	3
Pb	208	159	He	0.024	ppb	25.6	653.37	0.0022	Pulse	0.1000	3
U	238	209	He	0.058	ppb	22.6	693.38	0.0030	Pulse	0.1000	3

ISTD Table:

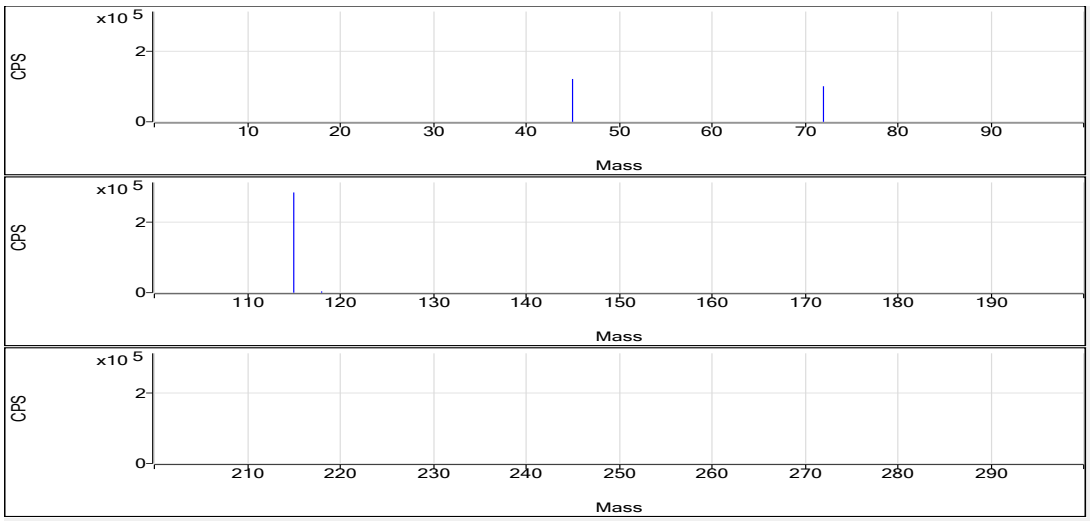
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2129733.14	1.1	104.8	Analog	0.1000	3
No Gas	Ge	72	1019889.28	0.1	101.5	Pulse	0.1000	3
H2	Sc	45	122384.82	2.1	92.6	Pulse	0.1000	3
H2	Ge	72	101603.87	0.4	91.1	Pulse	0.1000	3
H2	In	115	286319.59	0.1	97.5	Pulse	0.1000	3
He	Sc	45	37555.84	1.0	101.6	Pulse	0.1000	3
He	Ge	72	64141.10	1.2	99.4	Pulse	0.1000	3
He	In	115	61554.39	0.8	97.4	Pulse	0.1000	3
He	Tb	159	290667.12	0.7	99.3	Pulse	0.1000	3
He	Bi	209	232699.96	1.5	98.7	Pulse	0.1000	3

No Gas

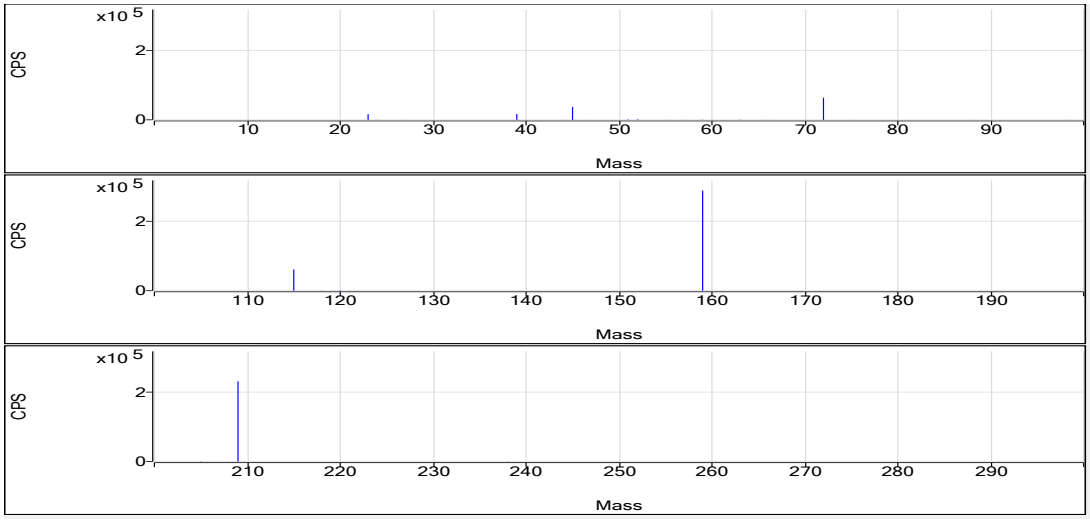


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.077	0.0001	170.00	0.0008	2.195E-05
Be	9	1	No Gas	0.085	0.0001	186.00	0.0008	2.195E-05
Be	9	1	No Gas	0.089	0.0001	194.00	0.0008	2.195E-05
Se	78	2	H2	0.029	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.179	0.0001	9.33	0.0004	1.386E-05
Se	78	2	H2	0.043	0	3.33	0.0004	1.386E-05
Na	23	3	He	-0.838	0.4384	16439.60	0.0038	0.4416
Na	23	3	He	-3.406	0.4286	16269.42	0.0038	0.4416
Na	23	3	He	1.678	0.448	16669.98	0.0038	0.4416
Mg	24	3	He	2.573	0.0107	400.02	0.0019	0.005872
Mg	24	3	He	3.068	0.0116	440.02	0.0019	0.005872
Mg	24	3	He	1.031	0.0078	290.01	0.0019	0.005872
Al	27	3	He	5.219	0.0035	130.01	0.0006	0.0004496
Al	27	3	He	2.412	0.0018	70.00	0.0006	0.0004496
Al	27	3	He	2.011	0.0016	60.00	0.0006	0.0004496
K	39	3	He	8.54	0.4555	17080.56	0.0012	0.4456
K	39	3	He	-12.211	0.4315	16379.79	0.0012	0.4456
K	39	3	He	23.243	0.4725	17580.94	0.0012	0.4456
Ca	44	3	He	-4.715	0.0035	130.01	0.0001	0.003779
Ca	44	3	He	6.607	0.0042	160.01	0.0001	0.003779
Ca	44	3	He	-8.377	0.0032	120.00	0.0001	0.003779
Ti	47	3	He	0.513	0.0003	10.00	0.0005	0
Ti	47	3	He	2.028	0.0011	40.00	0.0005	0
Ti	47	3	He	1.035	0.0005	20.00	0.0005	0
V	51	3	He	0.075	0.0322	1208.06	0.0223	0.03054
V	51	3	He	-0.016	0.0302	1146.05	0.0223	0.03054
V	51	3	He	-0.017	0.0302	1122.05	0.0223	0.03054
Cr	52	3	He	0.279	0.0451	1690.15	0.0285	0.03714
Cr	52	3	He	0.074	0.0393	1490.13	0.0285	0.03714
Cr	52	3	He	0.008	0.0374	1390.12	0.0285	0.03714
Mn	55	3	He	0.225	0.0072	270.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.08	0.0034	130.01	0.0124	0.004415
Mn	55	3	He	0.012	0.0046	170.01	0.0124	0.004415
Fe	57	3	He	5.602	0.0045	170.01	0.0006	0.001356
Fe	57	3	He	2.254	0.0026	100.01	0.0006	0.001356
Fe	57	3	He	2.348	0.0027	100.00	0.0006	0.001356
Co	59	3	He	0.165	0.0123	460.03	0.0581	0.002697
Co	59	3	He	0.153	0.0116	440.02	0.0581	0.002697
Co	59	3	He	0.139	0.0108	400.02	0.0581	0.002697
Ni	60	3	He	0.081	0.0046	300.01	0.0087	0.003928
Ni	60	3	He	0.013	0.004	260.01	0.0087	0.003928
Ni	60	3	He	-0.052	0.0035	220.01	0.0087	0.003928
Cu	63	3	He	0.182	0.0108	700.05	0.0261	0.006048
Cu	63	3	He	0.107	0.0089	570.03	0.0261	0.006048
Cu	63	3	He	0.107	0.0089	560.04	0.0261	0.006048
Zn	66	3	He	0.229	0.0042	270.01	0.0029	0.003512
Zn	66	3	He	0.13	0.0039	250.01	0.0029	0.003512
Zn	66	3	He	0.264	0.0043	270.01	0.0029	0.003512
As	75	3	He	0.113	0.001	62.00	0.0021	0.0007233
As	75	3	He	0.101	0.0009	60.00	0.0021	0.0007233
As	75	3	He	0.262	0.0013	80.00	0.0021	0.0007233
Sr	88	3	He	0.009	0.0007	40.00	0.009	0.0005796
Sr	88	3	He	0.026	0.0008	50.00	0.009	0.0005796
Sr	88	3	He	-0.011	0.0005	30.00	0.009	0.0005796
Mo	98	3	He	0.077	0.0021	130.01	0.0235	0.0003188
Mo	98	3	He	0.11	0.0029	180.01	0.0235	0.0003188
Mo	98	3	He	0.131	0.0034	210.01	0.0235	0.0003188
Ag	107	3	He	0.02	0.0015	90.00	0.0499	0.0004754
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	-0.025	0.0167	1020.08	0.0164	0.01713
Sn	120	3	He	0.069	0.0183	1130.09	0.0164	0.01713
Sn	120	3	He	-0.028	0.0167	1030.08	0.0164	0.01713
Sb	121	3	He	0.047	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.046	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.088	0.0016	100.00	0.0155	0.0002641
Ba	137	3	He	0.1	0.0007	40.00	0.005	0.0001577
Ba	137	3	He	0.228	0.0013	80.00	0.005	0.0001577
Ba	137	3	He	0.163	0.001	60.00	0.005	0.0001577
Tl	205	3	He	0.103	0.0029	860.06	0.026	0.0002504
Tl	205	3	He	0.088	0.0026	740.05	0.026	0.0002504
Tl	205	3	He	0.111	0.0032	910.07	0.026	0.0002504
Pb	208	3	He	0.03	0.0025	390.02	0.0349	0.001422
Pb	208	3	He	0.018	0.002	340.02	0.0349	0.001422
Pb	208	3	He	0.024	0.0023	390.02	0.0349	0.001422
U	238	3	He	0.044	0.0023	540.04	0.0502	5.657E-05
U	238	3	He	0.06	0.0031	710.04	0.0502	5.657E-05
U	238	3	He	0.07	0.0036	830.05	0.0502	5.657E-05
Sc	45	1	No Gas			2103641.22		
Sc	45	1	No Gas			2141767.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2143790.59		
Ge	72	1	No Gas			1019203.73		
Ge	72	1	No Gas			1021346.55		
Ge	72	1	No Gas			1019117.56		
Sc	45	2	H2			119861.10		
Sc	45	2	H2			124982.62		
Sc	45	2	H2			122310.75		
Ge	72	2	H2			101106.29		
Ge	72	2	H2			101791.88		
Ge	72	2	H2			101913.43		
In	115	2	H2			286141.85		
In	115	2	H2			286045.74		
In	115	2	H2			286771.19		
Sc	45	3	He			37498.80		
Sc	45	3	He			37960.37		
Sc	45	3	He			37208.34		
Ge	72	3	He			64777.17		
Ge	72	3	He			64385.40		
Ge	72	3	He			63260.73		
In	115	3	He			61004.13		
In	115	3	He			61888.02		
In	115	3	He			61788.33		
Tb	159	3	He			293063.26		
Tb	159	3	He			290052.52		
Tb	159	3	He			288885.58		
Bi	209	3	He			236717.81		
Bi	209	3	He			230567.65		
Bi	209	3	He			230814.43		

Quantitation Report

Data File Name	032SMPL.d
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Acq Time	8/16/2023 7:20:10 AM
Sample Name	MB 410-407044/1-A
Sample Type	Sample
Comment	A6
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

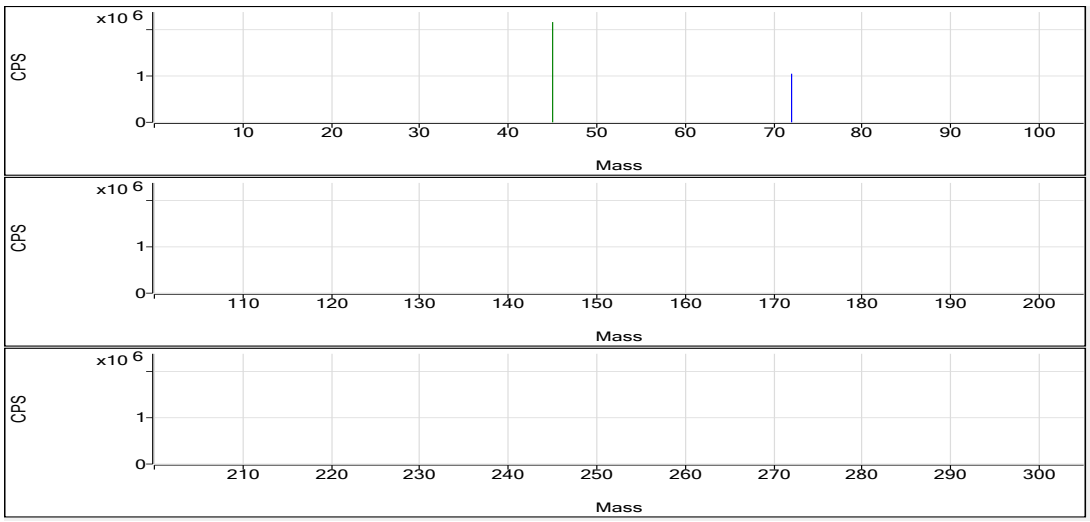
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.029	ppb	44.0	96.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.016	ppb	139.5	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	-11.317	ppb	N/A	15238.25	0.3984	Pulse	0.1000	3
Mg	24	45	He	-0.199	ppb	N/A	210.01	0.0055	Pulse	0.1000	3
Al	27	45	He	1.790	ppb	59.2	56.67	0.0015	Pulse	0.1000	3
K	39	45	He	-7.075	ppb	N/A	16730.04	0.4374	Pulse	0.1000	3
Ca	44	45	He	-10.946	ppb	N/A	116.67	0.0031	Pulse	0.1000	3
Ti	47	45	He	0.170	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.200	ppb	N/A	997.38	0.0261	Pulse	0.5000	3
Cr	52	45	He	-0.082	ppb	N/A	1330.11	0.0348	Pulse	0.1000	3
Mn	55	45	He	-0.004	ppb	N/A	166.68	0.0044	Pulse	0.1000	3
Fe	57	45	He	2.542	ppb	86.4	106.67	0.0028	Pulse	0.1000	3
Co	59	45	He	0.024	ppb	157.8	156.67	0.0041	Pulse	0.1000	3
Ni	60	72	He	-0.020	ppb	N/A	250.01	0.0038	Pulse	0.1000	3
Cu	63	72	He	0.069	ppb	70.3	523.36	0.0079	Pulse	0.1000	3
Zn	66	72	He	-0.386	ppb	N/A	160.01	0.0024	Pulse	0.1000	3
As	75	72	He	-0.016	ppb	N/A	46.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.006	ppb	277.8	40.00	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.065	ppb	30.5	116.67	0.0019	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	8436.5	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.129	ppb	N/A	943.40	0.0150	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	10917.4	16.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.000	ppb	17818.8	10.00	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.017	ppb	17.3	200.01	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	50.4	590.03	0.0020	Pulse	0.1000	3
U	238	209	He	0.003	ppb	38.6	53.33	0.0002	Pulse	0.1000	3

ISTD Table:

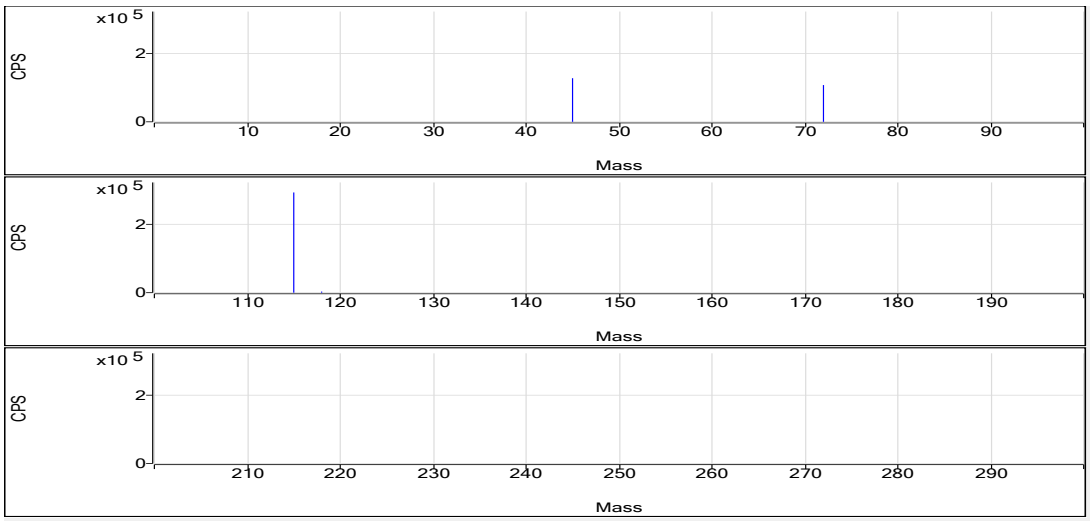
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2171075.59	0.6	106.8	Analog	0.1000	3
No Gas	Ge	72	1052190.79	0.7	104.7	Pulse	0.1000	3
H2	Sc	45	126860.60	1.0	96.0	Pulse	0.1000	3
H2	Ge	72	106904.31	0.7	95.9	Pulse	0.1000	3
H2	In	115	291567.80	0.5	99.3	Pulse	0.1000	3
He	Sc	45	38251.03	1.1	103.5	Pulse	0.1000	3
He	Ge	72	66578.85	0.5	103.1	Pulse	0.1000	3
He	In	115	62837.33	0.5	99.4	Pulse	0.1000	3
He	Tb	159	293036.95	0.9	100.1	Pulse	0.1000	3
He	Bi	209	235002.31	0.4	99.7	Pulse	0.1000	3

No Gas

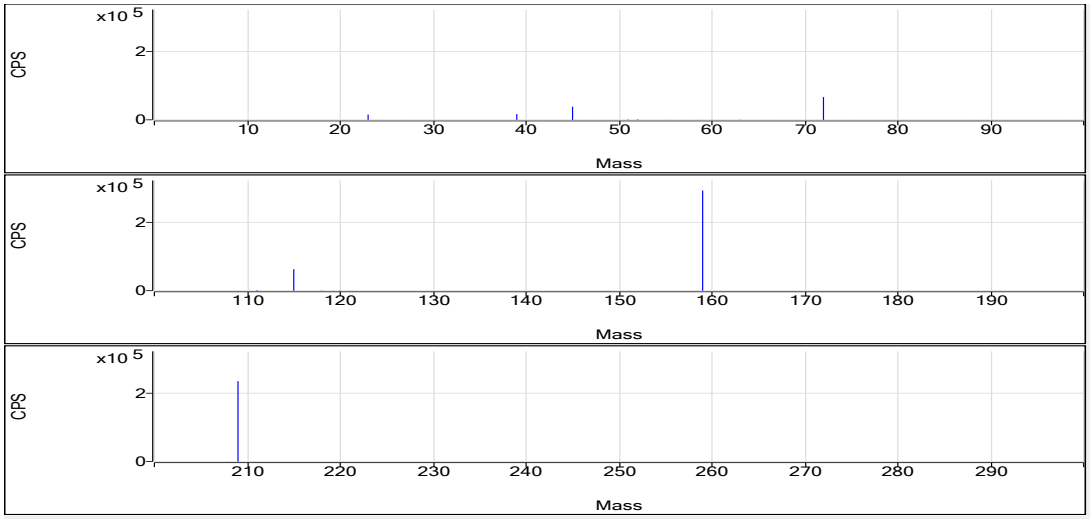


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.036	0	108.00	0.0008	2.195E-05
Be	9	1	No Gas	0.037	0	108.00	0.0008	2.195E-05
Be	9	1	No Gas	0.014	0	72.00	0.0008	2.195E-05
Se	78	2	H2	0.011	0	2.00	0.0004	1.386E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.04	0	3.33	0.0004	1.386E-05
Na	23	3	He	-12.578	0.3935	14867.96	0.0038	0.4416
Na	23	3	He	-12.572	0.3936	15188.22	0.0038	0.4416
Na	23	3	He	-8.801	0.408	15658.58	0.0038	0.4416
Mg	24	3	He	0.4	0.0066	250.01	0.0019	0.005872
Mg	24	3	He	-1.342	0.0034	130.01	0.0019	0.005872
Mg	24	3	He	0.344	0.0065	250.01	0.0019	0.005872
Al	27	3	He	2.427	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	0.567	0.0008	30.00	0.0006	0.0004496
Al	27	3	He	2.377	0.0018	70.00	0.0006	0.0004496
K	39	3	He	2.172	0.4481	16930.37	0.0012	0.4456
K	39	3	He	-10.243	0.4338	16740.07	0.0012	0.4456
K	39	3	He	-13.154	0.4304	16519.67	0.0012	0.4456
Ca	44	3	He	-1.1	0.0037	140.01	0.0001	0.003779
Ca	44	3	He	-25.812	0.0021	80.00	0.0001	0.003779
Ca	44	3	He	-5.925	0.0034	130.00	0.0001	0.003779
Ti	47	3	He	0.509	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.104	0.0282	1066.05	0.0223	0.03054
V	51	3	He	-0.215	0.0258	994.04	0.0223	0.03054
V	51	3	He	-0.281	0.0243	932.04	0.0223	0.03054
Cr	52	3	He	0.016	0.0376	1420.13	0.0285	0.03714
Cr	52	3	He	-0.194	0.0316	1220.10	0.0285	0.03714
Cr	52	3	He	-0.069	0.0352	1350.11	0.0285	0.03714
Mn	55	3	He	0.071	0.0053	200.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.001	0.0044	170.01	0.0124	0.004415
Mn	55	3	He	-0.083	0.0034	130.01	0.0124	0.004415
Fe	57	3	He	5.076	0.0042	160.01	0.0006	0.001356
Fe	57	3	He	1.264	0.0021	80.00	0.0006	0.001356
Fe	57	3	He	1.284	0.0021	80.00	0.0006	0.001356
Co	59	3	He	0.067	0.0066	250.01	0.0581	0.002697
Co	59	3	He	0.012	0.0034	130.00	0.0581	0.002697
Co	59	3	He	-0.006	0.0023	90.00	0.0581	0.002697
Ni	60	3	He	-0.017	0.0038	250.01	0.0087	0.003928
Ni	60	3	He	-0.038	0.0036	240.01	0.0087	0.003928
Ni	60	3	He	-0.004	0.0039	260.01	0.0087	0.003928
Cu	63	3	He	0.11	0.0089	590.04	0.0261	0.006048
Cu	63	3	He	0.015	0.0064	430.02	0.0261	0.006048
Cu	63	3	He	0.084	0.0082	550.03	0.0261	0.006048
Zn	66	3	He	-0.224	0.0029	190.01	0.0029	0.003512
Zn	66	3	He	-0.546	0.0019	130.00	0.0029	0.003512
Zn	66	3	He	-0.39	0.0024	160.01	0.0029	0.003512
As	75	3	He	-0.087	0.0005	36.00	0.0021	0.0007233
As	75	3	He	0.085	0.0009	60.00	0.0021	0.0007233
As	75	3	He	-0.046	0.0006	42.00	0.0021	0.0007233
Sr	88	3	He	0.006	0.0006	40.00	0.009	0.0005796
Sr	88	3	He	-0.011	0.0005	30.00	0.009	0.0005796
Sr	88	3	He	0.024	0.0008	50.00	0.009	0.0005796
Mo	98	3	He	0.054	0.0016	100.00	0.0235	0.0003188
Mo	98	3	He	0.089	0.0024	150.01	0.0235	0.0003188
Mo	98	3	He	0.054	0.0016	100.00	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.049	0.0163	1030.07	0.0164	0.01713
Sn	120	3	He	-0.137	0.0149	930.06	0.0164	0.01713
Sn	120	3	He	-0.201	0.0138	870.06	0.0164	0.01713
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.014	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Ba	137	3	He	0.032	0.0003	20.00	0.005	0.0001577
Ba	137	3	He	-0.032	0	0.00	0.005	0.0001577
Ba	137	3	He	0	0.0002	10.00	0.005	0.0001577
Tl	205	3	He	0.017	0.0007	200.01	0.026	0.0002504
Tl	205	3	He	0.014	0.0006	180.01	0.026	0.0002504
Tl	205	3	He	0.02	0.0008	220.01	0.026	0.0002504
Pb	208	3	He	0.015	0.0019	300.01	0.0349	0.001422
Pb	208	3	He	0.01	0.0018	320.02	0.0349	0.001422
Pb	208	3	He	0.026	0.0023	380.02	0.0349	0.001422
U	238	3	He	0.005	0.0003	70.00	0.0502	5.657E-05
U	238	3	He	0.002	0.0002	40.00	0.0502	5.657E-05
U	238	3	He	0.003	0.0002	50.00	0.0502	5.657E-05
Sc	45	1	No Gas			2164202.47		
Sc	45	1	No Gas			2161764.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2187259.81		
Ge	72	1	No Gas			1043888.03		
Ge	72	1	No Gas			1057540.77		
Ge	72	1	No Gas			1055143.58		
Sc	45	2	H2			125539.86		
Sc	45	2	H2			128201.09		
Sc	45	2	H2			126840.85		
Ge	72	2	H2			107391.60		
Ge	72	2	H2			107320.34		
Ge	72	2	H2			106000.99		
In	115	2	H2			291565.78		
In	115	2	H2			292975.72		
In	115	2	H2			290161.89		
Sc	45	3	He			37779.91		
Sc	45	3	He			38591.68		
Sc	45	3	He			38381.51		
Ge	72	3	He			66193.72		
Ge	72	3	He			66736.52		
Ge	72	3	He			66806.31		
In	115	3	He			63104.03		
In	115	3	He			62491.21		
In	115	3	He			62933.29		
Tb	159	3	He			293351.44		
Tb	159	3	He			295635.05		
Tb	159	3	He			290124.35		
Bi	209	3	He			234213.53		
Bi	209	3	He			236058.88		
Bi	209	3	He			234734.53		

Quantitation Report

Data File Name	033SMPL.d
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Sample Type	Sample
Comment	A6
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

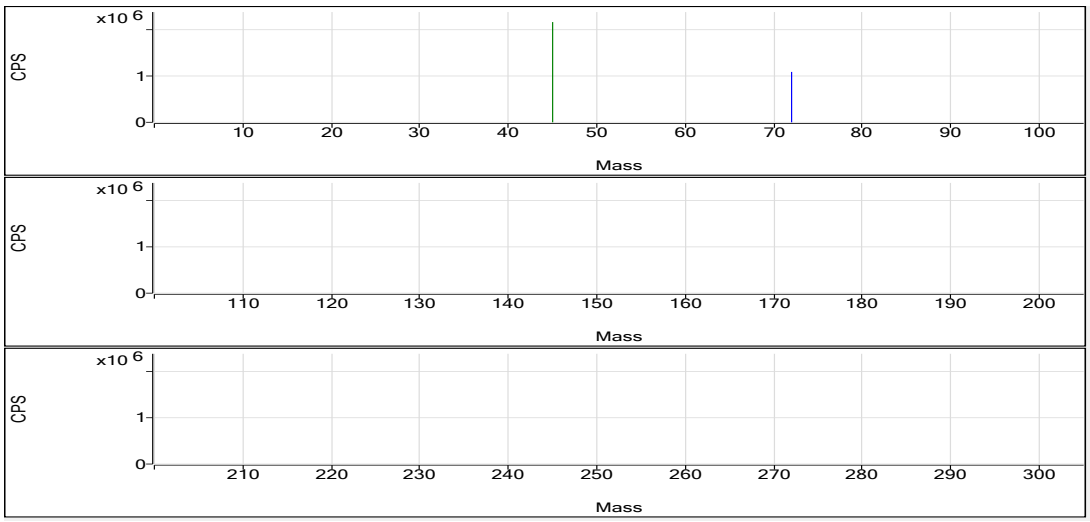
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	47.8	67.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.011	ppb	349.3	2.00	0.0000	Pulse	1.5000	3
Na	23	45	He	704.085	ppb	1.2	119654.99	3.1322	Pulse	0.1000	3
Mg	24	45	He	22.536	ppb	24.7	1826.85	0.0479	Pulse	0.1000	3
Al	27	45	He	16.290	ppb	12.6	376.69	0.0099	Pulse	0.1000	3
K	39	45	He	5.835	ppb	87.8	17280.78	0.4524	Pulse	0.1000	3
Ca	44	45	He	169.890	ppb	12.4	573.36	0.0150	Pulse	0.1000	3
Ti	47	45	He	0.335	ppb	86.6	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.125	ppb	N/A	1060.05	0.0278	Pulse	0.5000	3
Cr	52	45	He	0.087	ppb	43.6	1513.47	0.0396	Pulse	0.1000	3
Mn	55	45	He	0.087	ppb	48.0	210.01	0.0055	Pulse	0.1000	3
Fe	57	45	He	3.605	ppb	33.0	130.01	0.0034	Pulse	0.1000	3
Co	59	45	He	0.029	ppb	84.4	166.67	0.0044	Pulse	0.1000	3
Ni	60	72	He	-0.061	ppb	N/A	230.01	0.0034	Pulse	0.1000	3
Cu	63	72	He	0.082	ppb	56.8	553.36	0.0082	Pulse	0.1000	3
Zn	66	72	He	0.116	ppb	50.0	260.01	0.0038	Pulse	0.1000	3
As	75	72	He	0.051	ppb	227.3	56.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.931	ppb	11.7	563.36	0.0089	Pulse	0.1000	3
Mo	98	115	He	0.056	ppb	19.7	103.33	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	46.3	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	58.6	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.043	ppb	N/A	1036.73	0.0164	Pulse	0.1000	3
Sb	121	115	He	0.185	ppb	29.2	196.68	0.0031	Pulse	0.1000	3
Ba	137	115	He	1.348	ppb	9.0	433.35	0.0069	Pulse	0.1000	3
Tl	205	159	He	0.010	ppb	25.0	150.01	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	65.6	503.35	0.0017	Pulse	0.1000	3
U	238	209	He	0.003	ppb	88.4	53.33	0.0002	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2158483.56	1.1	106.2	Analog	0.1000	3
No Gas	Ge	72	1085089.65	0.5	108.0	Pulse	0.1000	3
H2	Sc	45	124745.71	1.0	94.4	Pulse	0.1000	3
H2	Ge	72	108378.80	1.7	97.2	Pulse	0.1000	3
H2	In	115	291604.16	0.4	99.3	Pulse	0.1000	3
He	Sc	45	38204.14	1.0	103.4	Pulse	0.1000	3
He	Ge	72	67643.72	0.5	104.8	Pulse	0.1000	3
He	In	115	63174.80	2.3	100.0	Pulse	0.1000	3
He	Tb	159	291128.04	1.3	99.4	Pulse	0.1000	3
He	Bi	209	236349.66	1.3	100.2	Pulse	0.1000	3

No Gas



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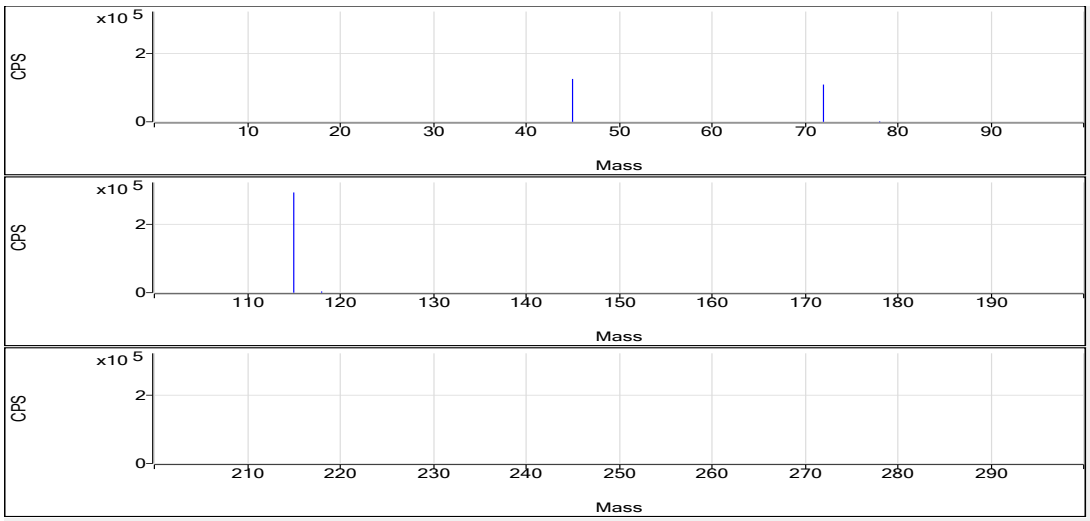
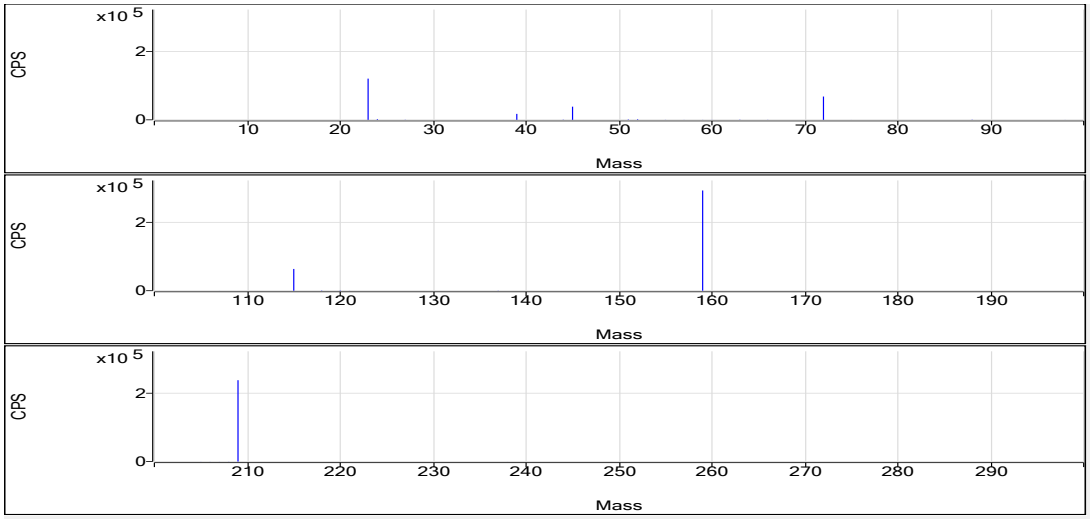


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0	74.00	0.0008	2.195E-05
Be	9	1	No Gas	0.015	0	72.00	0.0008	2.195E-05
Be	9	1	No Gas	0.005	0	56.00	0.0008	2.195E-05
Se	78	2	H2	0.055	0	4.00	0.0004	1.386E-05
Se	78	2	H2	-0.004	0	1.33	0.0004	1.386E-05
Se	78	2	H2	-0.018	0	0.67	0.0004	1.386E-05
Na	23	3	He	706.209	3.1403	119490.72	0.0038	0.4416
Na	23	3	He	711.475	3.1605	119813.28	0.0038	0.4416
Na	23	3	He	694.572	3.0959	119660.97	0.0038	0.4416
Mg	24	3	He	22.51	0.0478	1820.18	0.0019	0.005872
Mg	24	3	He	28.124	0.0583	2210.25	0.0019	0.005872
Mg	24	3	He	16.975	0.0375	1450.12	0.0019	0.005872
Al	27	3	He	16.951	0.0103	390.02	0.0006	0.0004496
Al	27	3	He	17.929	0.0108	410.02	0.0006	0.0004496
Al	27	3	He	13.99	0.0085	330.02	0.0006	0.0004496
K	39	3	He	8.974	0.456	17350.88	0.0012	0.4456
K	39	3	He	8.605	0.4556	17270.76	0.0012	0.4456
K	39	3	He	-0.075	0.4455	17220.70	0.0012	0.4456
Ca	44	3	He	145.666	0.0134	510.03	0.0001	0.003779
Ca	44	3	He	182.343	0.0158	600.03	0.0001	0.003779
Ca	44	3	He	181.662	0.0158	610.03	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.508	0.0003	10.00	0.0005	0
Ti	47	3	He	0.498	0.0003	10.00	0.0005	0
V	51	3	He	-0.028	0.0299	1138.06	0.0223	0.03054
V	51	3	He	-0.177	0.0266	1008.04	0.0223	0.03054
V	51	3	He	-0.17	0.0268	1034.04	0.0223	0.03054
Cr	52	3	He	0.044	0.0384	1460.12	0.0285	0.03714
Cr	52	3	He	0.104	0.0401	1520.14	0.0285	0.03714
Cr	52	3	He	0.113	0.0404	1560.14	0.0285	0.03714
Mn	55	3	He	0.132	0.006	230.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.048	0.005	190.01	0.0124	0.004415
Mn	55	3	He	0.082	0.0054	210.01	0.0124	0.004415
Fe	57	3	He	2.243	0.0026	100.00	0.0006	0.001356
Fe	57	3	He	4.121	0.0037	140.01	0.0006	0.001356
Fe	57	3	He	4.452	0.0039	150.01	0.0006	0.001356
Co	59	3	He	0.03	0.0045	170.01	0.0581	0.002697
Co	59	3	He	0.004	0.0029	110.00	0.0581	0.002697
Co	59	3	He	0.052	0.0057	220.01	0.0581	0.002697
Ni	60	3	He	0.027	0.0042	280.01	0.0087	0.003928
Ni	60	3	He	-0.062	0.0034	230.01	0.0087	0.003928
Ni	60	3	He	-0.147	0.0027	180.01	0.0087	0.003928
Cu	63	3	He	0.11	0.0089	600.03	0.0261	0.006048
Cu	63	3	He	0.028	0.0068	460.03	0.0261	0.006048
Cu	63	3	He	0.107	0.0088	600.03	0.0261	0.006048
Zn	66	3	He	0.176	0.004	270.01	0.0029	0.003512
Zn	66	3	He	0.112	0.0038	260.01	0.0029	0.003512
Zn	66	3	He	0.06	0.0037	250.01	0.0029	0.003512
As	75	3	He	0.182	0.0011	74.00	0.0021	0.0007233
As	75	3	He	-0.036	0.0006	44.00	0.0021	0.0007233
As	75	3	He	0.006	0.0007	50.00	0.0021	0.0007233
Sr	88	3	He	1.005	0.0096	620.03	0.009	0.0005796
Sr	88	3	He	0.806	0.0078	490.03	0.009	0.0005796
Sr	88	3	He	0.982	0.0094	580.03	0.009	0.0005796
Mo	98	3	He	0.046	0.0014	90.00	0.0235	0.0003188
Mo	98	3	He	0.068	0.0019	120.00	0.0235	0.0003188
Mo	98	3	He	0.055	0.0016	100.00	0.0235	0.0003188
Ag	107	3	He	0.009	0.0009	60.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.112	0.0153	990.06	0.0164	0.01713
Sn	120	3	He	0.013	0.0173	1090.07	0.0164	0.01713
Sn	120	3	He	-0.03	0.0166	1030.07	0.0164	0.01713
Sb	121	3	He	0.123	0.0022	140.01	0.0155	0.0002641
Sb	121	3	He	0.219	0.0037	230.01	0.0155	0.0002641
Sb	121	3	He	0.213	0.0036	220.01	0.0155	0.0002641
Ba	137	3	He	1.209	0.0062	400.02	0.005	0.0001577
Ba	137	3	He	1.406	0.0072	450.02	0.005	0.0001577
Ba	137	3	He	1.428	0.0073	450.02	0.005	0.0001577
Tl	205	3	He	0.013	0.0006	170.01	0.026	0.0002504
Tl	205	3	He	0.008	0.0004	130.01	0.026	0.0002504
Tl	205	3	He	0.01	0.0005	150.01	0.026	0.0002504
Pb	208	3	He	0.014	0.0019	270.01	0.0349	0.001422
Pb	208	3	He	0.002	0.0015	230.01	0.0349	0.001422
Pb	208	3	He	0.01	0.0018	260.01	0.0349	0.001422
U	238	3	He	0.003	0.0002	50.00	0.0502	5.657E-05
U	238	3	He	0.006	0.0004	90.00	0.0502	5.657E-05
U	238	3	He	0.001	0.0001	20.00	0.0502	5.657E-05
Sc	45	1	No Gas			2185340.59		
Sc	45	1	No Gas			2143596.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2146514.03		
Ge	72	1	No Gas			1090539.75		
Ge	72	1	No Gas			1079567.17		
Ge	72	1	No Gas			1085162.02		
Sc	45	2	H2			123360.29		
Sc	45	2	H2			125388.21		
Sc	45	2	H2			125488.63		
Ge	72	2	H2			106262.47		
Ge	72	2	H2			108973.45		
Ge	72	2	H2			109900.49		
In	115	2	H2			290340.66		
In	115	2	H2			291946.25		
In	115	2	H2			292525.56		
Sc	45	3	He			38050.37		
Sc	45	3	He			37910.13		
Sc	45	3	He			38651.93		
Ge	72	3	He			67238.32		
Ge	72	3	He			67821.42		
Ge	72	3	He			67871.42		
In	115	3	He			64760.90		
In	115	3	He			62863.31		
In	115	3	He			61918.21		
Tb	159	3	He			294452.52		
Tb	159	3	He			291720.33		
Tb	159	3	He			287211.27		
Bi	209	3	He			239844.23		
Bi	209	3	He			235273.53		
Bi	209	3	He			233931.23		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
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Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

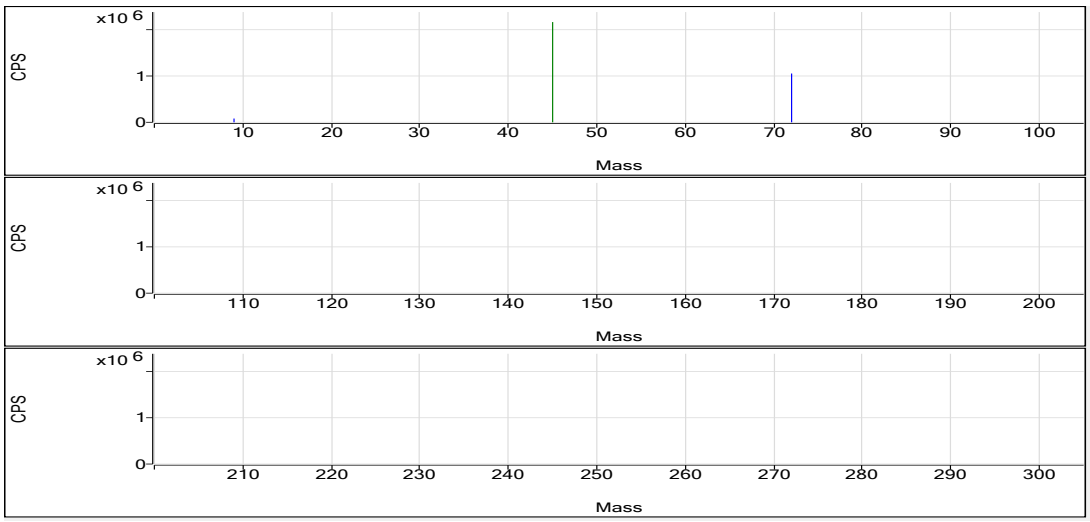
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.744	ppb	1.5	80523.45	0.0374	Pulse	0.5000	3
Se	78	72	H2	52.334	ppb	1.2	2387.09	0.0228	Pulse	1.5000	3
Na	23	45	He	5023.782	ppb	1.7	741895.88	19.6396	Pulse	0.1000	3
Mg	24	45	He	5207.379	ppb	2.4	366899.74	9.7138	Pulse	0.1000	3
Al	27	45	He	5126.992	ppb	1.4	111997.69	2.9647	Pulse	0.1000	3
K	39	45	He	5170.763	ppb	2.5	242705.20	6.4255	Pulse	0.1000	3
Ca	44	45	He	5333.079	ppb	5.7	13449.93	0.3562	Pulse	0.1000	3
Ti	47	45	He	5195.340	ppb	0.9	101980.90	2.6994	Pulse	0.1000	3
V	51	45	He	518.006	ppb	2.1	437363.19	11.5789	Pulse	0.5000	3
Cr	52	45	He	519.290	ppb	2.3	559504.51	14.8127	Pulse	0.1000	3
Mn	55	45	He	510.985	ppb	2.9	239175.44	6.3326	Pulse	0.1000	3
Fe	57	45	He	5113.105	ppb	3.1	109593.78	2.9018	Pulse	0.1000	3
Co	59	45	He	491.166	ppb	2.2	1077941.26	28.5375	Pulse	0.1000	3
Ni	60	72	He	523.368	ppb	1.4	298602.03	4.5401	Pulse	0.1000	3
Cu	63	72	He	492.910	ppb	0.6	847707.46	12.8886	Pulse	0.1000	3
Zn	66	72	He	519.747	ppb	1.1	98184.26	1.4928	Pulse	0.1000	3
As	75	72	He	514.492	ppb	0.7	70009.30	1.0644	Pulse	0.5000	3
Sr	88	115	He	50.654	ppb	2.2	28282.38	0.4541	Pulse	0.1000	3
Mo	98	115	He	52.543	ppb	1.5	76987.45	1.2359	Pulse	0.1000	3
Ag	107	115	He	52.993	ppb	1.2	164606.49	2.6425	Pulse	0.1000	3
Cd	111	115	He	52.069	ppb	1.9	17972.25	0.2885	Pulse	0.5000	3
Sn	120	115	He	50.216	ppb	0.6	52436.84	0.8416	Pulse	0.1000	3
Sb	121	115	He	51.249	ppb	1.5	49395.27	0.7930	Pulse	0.1000	3
Ba	137	115	He	505.608	ppb	1.7	156805.98	2.5174	Pulse	0.1000	3
Tl	205	159	He	50.967	ppb	0.2	385521.17	1.3274	Pulse	0.1000	3
Pb	208	159	He	50.420	ppb	0.1	512016.98	1.7630	Pulse	0.1000	3
U	238	209	He	50.198	ppb	0.5	584842.57	2.5216	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2151744.86	0.5	105.8	Analog	0.1000	3
No Gas	Ge	72	1047290.87	0.1	104.2	Pulse	0.1000	3
H2	Sc	45	124577.53	0.6	94.3	Pulse	0.1000	3
H2	Ge	72	104813.18	1.8	94.0	Pulse	0.1000	3
H2	In	115	289275.50	1.2	98.5	Pulse	0.1000	3
He	Sc	45	37783.33	2.0	102.3	Pulse	0.1000	3
He	Ge	72	65775.23	1.1	101.9	Pulse	0.1000	3
He	In	115	62299.71	1.5	98.6	Pulse	0.1000	3
He	Tb	159	290427.28	0.5	99.2	Pulse	0.1000	3
He	Bi	209	231934.91	0.5	98.4	Pulse	0.1000	3

No Gas



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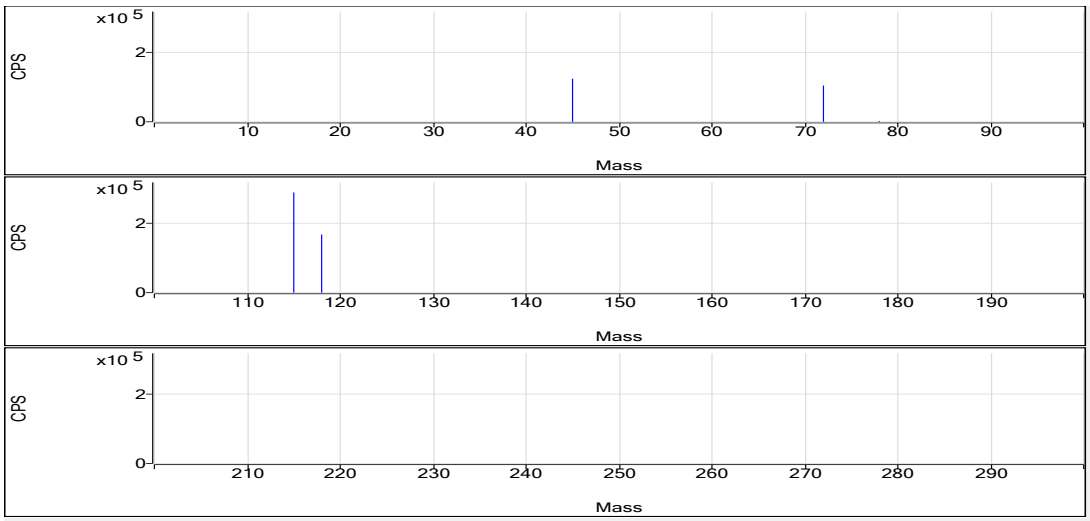
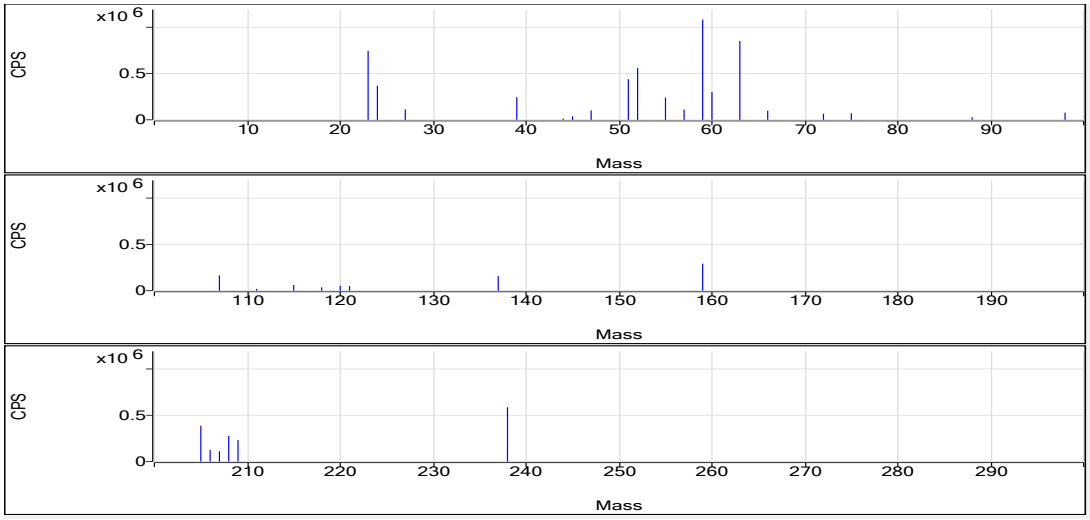


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.778	0.0374	80295.45	0.0008	2.195E-05
Be	9	1	No Gas	49.469	0.038	81542.27	0.0008	2.195E-05
Be	9	1	No Gas	47.985	0.0368	79732.63	0.0008	2.195E-05
Se	78	2	H2	52.391	0.0228	2381.54	0.0004	1.386E-05
Se	78	2	H2	51.679	0.0225	2318.86	0.0004	1.386E-05
Se	78	2	H2	52.932	0.023	2460.88	0.0004	1.386E-05
Na	23	3	He	4965.847	19.4182	748027.10	0.0038	0.4416
Na	23	3	He	4986.218	19.4961	737731.24	0.0038	0.4416
Na	23	3	He	5119.28	20.0045	739929.29	0.0038	0.4416
Mg	24	3	He	5082.405	9.4808	365220.23	0.0019	0.005872
Mg	24	3	He	5204.001	9.7075	367332.89	0.0019	0.005872
Mg	24	3	He	5335.732	9.9531	368146.09	0.0019	0.005872
Al	27	3	He	5075.601	2.935	113062.58	0.0006	0.0004496
Al	27	3	He	5099.362	2.9488	111580.97	0.0006	0.0004496
Al	27	3	He	5206.012	3.0104	111349.52	0.0006	0.0004496
K	39	3	He	5029.728	6.2624	241240.37	0.0012	0.4456
K	39	3	He	5204.267	6.4643	244607.98	0.0012	0.4456
K	39	3	He	5278.294	6.5499	242267.24	0.0012	0.4456
Ca	44	3	He	5233.162	0.3496	13466.56	0.0001	0.003779
Ca	44	3	He	5092.346	0.3403	12876.07	0.0001	0.003779
Ca	44	3	He	5673.729	0.3787	14007.15	0.0001	0.003779
Ti	47	3	He	5146.256	2.6739	103004.91	0.0005	0
Ti	47	3	He	5198.043	2.7008	102199.70	0.0005	0
Ti	47	3	He	5241.72	2.7235	100738.10	0.0005	0
V	51	3	He	506.746	11.3279	436370.78	0.0223	0.03054
V	51	3	He	518.503	11.5899	438563.78	0.0223	0.03054
V	51	3	He	528.769	11.8188	437155.00	0.0223	0.03054
Cr	52	3	He	506.48	14.4482	556572.34	0.0285	0.03714
Cr	52	3	He	521.575	14.8777	562972.65	0.0285	0.03714
Cr	52	3	He	529.815	15.1121	558968.55	0.0285	0.03714
Mn	55	3	He	497.212	6.1621	237374.84	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	509.407	6.3131	238887.73	0.0124	0.004415
Mn	55	3	He	526.336	6.5227	241263.75	0.0124	0.004415
Fe	57	3	He	4947.963	2.8081	108173.27	0.0006	0.001356
Fe	57	3	He	5131.972	2.9125	110208.09	0.0006	0.001356
Fe	57	3	He	5259.38	2.9847	110399.98	0.0006	0.001356
Co	59	3	He	479.438	27.8562	1073074.20	0.0581	0.002697
Co	59	3	He	493.981	28.7011	1086051.08	0.0581	0.002697
Co	59	3	He	500.078	29.0553	1074698.50	0.0581	0.002697
Ni	60	3	He	523.962	4.5453	296529.64	0.0087	0.003928
Ni	60	3	He	530.24	4.5997	301233.20	0.0087	0.003928
Ni	60	3	He	515.901	4.4754	298043.24	0.0087	0.003928
Cu	63	3	He	495.214	12.9488	844768.82	0.0261	0.006048
Cu	63	3	He	494.264	12.9239	846391.24	0.0261	0.006048
Cu	63	3	He	489.254	12.793	851962.33	0.0261	0.006048
Zn	66	3	He	521.83	1.4988	97781.23	0.0029	0.003512
Zn	66	3	He	524.123	1.5054	98587.30	0.0029	0.003512
Zn	66	3	He	513.287	1.4743	98184.26	0.0029	0.003512
As	75	3	He	517.895	1.0715	69901.52	0.0021	0.0007233
As	75	3	He	514.842	1.0651	69756.75	0.0021	0.0007233
As	75	3	He	510.738	1.0567	70369.63	0.0021	0.0007233
Sr	88	3	He	51.643	0.4629	28379.22	0.009	0.0005796
Sr	88	3	He	50.9	0.4563	28459.32	0.009	0.0005796
Sr	88	3	He	49.419	0.443	28008.61	0.009	0.0005796
Mo	98	3	He	53.415	1.2564	77021.57	0.0235	0.0003188
Mo	98	3	He	51.82	1.2189	76025.22	0.0235	0.0003188
Mo	98	3	He	52.395	1.2324	77915.55	0.0235	0.0003188
Ag	107	3	He	53.485	2.667	163498.20	0.0499	0.0004754
Ag	107	3	He	53.228	2.6542	165548.83	0.0499	0.0004754
Ag	107	3	He	52.265	2.6062	164772.44	0.0499	0.0004754
Cd	111	3	He	52.927	0.2933	17979.59	0.0055	1.07E-05
Cd	111	3	He	52.321	0.2899	18083.73	0.0055	1.07E-05
Cd	111	3	He	50.96	0.2824	17853.43	0.0055	1.07E-05
Sn	120	3	He	50.077	0.8394	51456.44	0.0164	0.01713
Sn	120	3	He	50.025	0.8385	52299.93	0.0164	0.01713
Sn	120	3	He	50.546	0.8471	53554.14	0.0164	0.01713
Sb	121	3	He	52.088	0.806	49409.00	0.0155	0.0002641
Sb	121	3	He	51.122	0.791	49338.14	0.0155	0.0002641
Sb	121	3	He	50.537	0.782	49438.67	0.0155	0.0002641
Ba	137	3	He	511.695	2.5477	156181.59	0.005	0.0001577
Ba	137	3	He	509.443	2.5365	158205.00	0.005	0.0001577
Ba	137	3	He	495.686	2.468	156031.36	0.005	0.0001577
Tl	205	3	He	51.083	1.3305	384167.57	0.026	0.0002504
Tl	205	3	He	50.897	1.3256	386671.40	0.026	0.0002504
Tl	205	3	He	50.92	1.3262	385724.53	0.026	0.0002504
Pb	208	3	He	50.404	1.7624	273824.16	0.0349	0.001422
Pb	208	3	He	50.39	1.7619	278396.30	0.0349	0.001422
Pb	208	3	He	50.467	1.7646	277700.54	0.0349	0.001422
U	238	3	He	49.944	2.5089	584374.25	0.0502	5.657E-05
U	238	3	He	50.429	2.5332	584583.62	0.0502	5.657E-05
U	238	3	He	50.221	2.5228	585569.84	0.0502	5.657E-05
Sc	45	1	No Gas			2144075.91		
Sc	45	1	No Gas			2146941.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2164216.84		
Ge	72	1	No Gas			1045925.92		
Ge	72	1	No Gas			1047378.34		
Ge	72	1	No Gas			1048568.34		
Sc	45	2	H2			123864.62		
Sc	45	2	H2			125246.04		
Sc	45	2	H2			124621.94		
Ge	72	2	H2			104470.76		
Ge	72	2	H2			103121.19		
Ge	72	2	H2			106847.60		
In	115	2	H2			285141.17		
In	115	2	H2			290944.70		
In	115	2	H2			291740.64		
Sc	45	3	He			38521.93		
Sc	45	3	He			37840.01		
Sc	45	3	He			36988.05		
Ge	72	3	He			65239.40		
Ge	72	3	He			65490.21		
Ge	72	3	He			66596.07		
In	115	3	He			61587.00		
In	115	3	He			62651.60		
In	115	3	He			63506.54		
Tb	159	3	He			288745.09		
Tb	159	3	He			291693.18		
Tb	159	3	He			290843.57		
Bi	209	3	He			232924.29		
Bi	209	3	He			230765.45		
Bi	209	3	He			232115.00		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

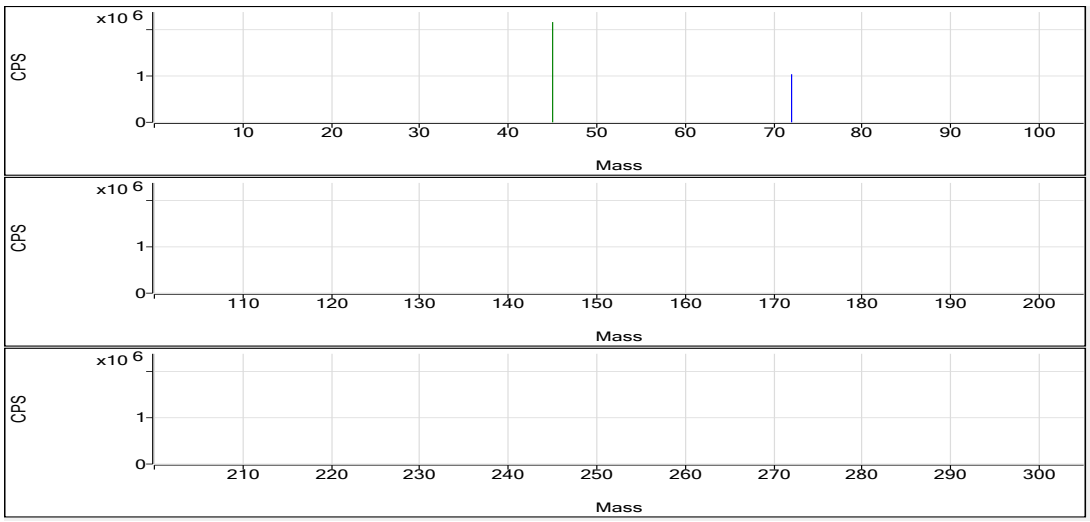
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.042	ppb	29.3	117.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.068	ppb	44.0	4.44	0.0000	Pulse	1.5000	3
Na	23	45	He	-6.007	ppb	N/A	15718.88	0.4187	Pulse	0.1000	3
Mg	24	45	He	0.375	ppb	233.7	246.68	0.0066	Pulse	0.1000	3
Al	27	45	He	1.681	ppb	42.4	53.33	0.0014	Pulse	0.1000	3
K	39	45	He	1.506	ppb	418.2	16796.79	0.4474	Pulse	0.1000	3
Ca	44	45	He	10.020	ppb	125.0	166.68	0.0044	Pulse	0.1000	3
Ti	47	45	He	1.028	ppb	87.0	20.00	0.0005	Pulse	0.1000	3
V	51	45	He	0.048	ppb	104.4	1186.72	0.0316	Pulse	0.5000	3
Cr	52	45	He	0.211	ppb	61.1	1620.14	0.0431	Pulse	0.1000	3
Mn	55	45	He	0.102	ppb	100.7	213.34	0.0057	Pulse	0.1000	3
Fe	57	45	He	2.778	ppb	30.4	110.00	0.0029	Pulse	0.1000	3
Co	59	45	He	0.128	ppb	6.6	380.02	0.0101	Pulse	0.1000	3
Ni	60	72	He	0.030	ppb	240.9	266.68	0.0042	Pulse	0.1000	3
Cu	63	72	He	0.052	ppb	109.5	473.36	0.0074	Pulse	0.1000	3
Zn	66	72	He	0.144	ppb	41.9	250.01	0.0039	Pulse	0.1000	3
As	75	72	He	0.088	ppb	150.4	58.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.018	ppb	143.0	46.67	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.074	ppb	8.4	130.00	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.024	ppb	12.0	106.67	0.0017	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	62.3	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.007	ppb	2038.8	1083.42	0.0172	Pulse	0.1000	3
Sb	121	115	He	0.038	ppb	16.3	53.33	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.086	ppb	58.3	36.67	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.081	ppb	15.4	686.71	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.016	ppb	53.7	573.37	0.0020	Pulse	0.1000	3
U	238	209	He	0.054	ppb	3.6	643.37	0.0028	Pulse	0.1000	3

ISTD Table:

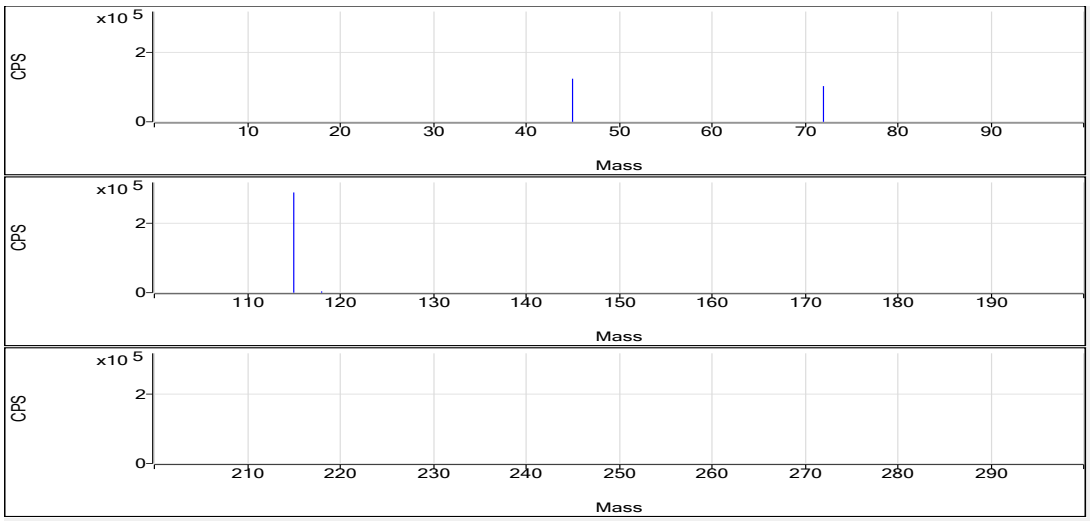
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2160865.38	0.9	106.3	Analog	0.1000	3
No Gas	Ge	72	1036578.06	1.0	103.1	Pulse	0.1000	3
H2	Sc	45	123333.09	0.9	93.4	Pulse	0.1000	3
H2	Ge	72	102146.82	1.2	91.6	Pulse	0.1000	3
H2	In	115	286748.07	0.6	97.6	Pulse	0.1000	3
He	Sc	45	37545.92	0.7	101.6	Pulse	0.1000	3
He	Ge	72	63719.28	3.0	98.7	Pulse	0.1000	3
He	In	115	62899.97	2.4	99.5	Pulse	0.1000	3
He	Tb	159	290161.66	0.9	99.1	Pulse	0.1000	3
He	Bi	209	231683.06	0.5	98.2	Pulse	0.1000	3

No Gas

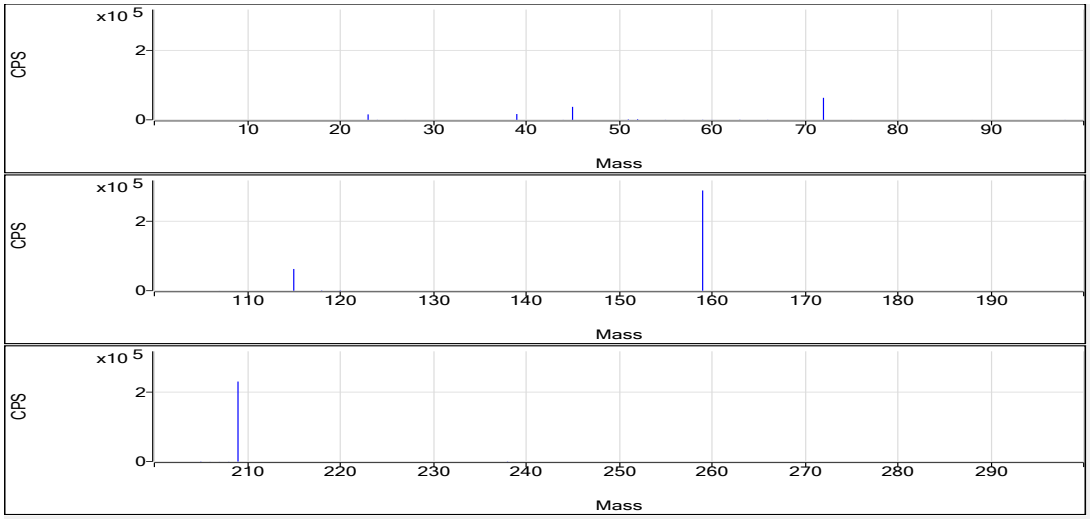


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.057	0.0001	140.00	0.0008	2.195E-05
Be	9	1	No Gas	0.035	0	106.00	0.0008	2.195E-05
Be	9	1	No Gas	0.035	0	106.00	0.0008	2.195E-05
Se	78	2	H2	0.101	0.0001	6.00	0.0004	1.386E-05
Se	78	2	H2	0.059	0	4.00	0.0004	1.386E-05
Se	78	2	H2	0.044	0	3.33	0.0004	1.386E-05
Na	23	3	He	-5.957	0.4188	15848.95	0.0038	0.4416
Na	23	3	He	-8.05	0.4108	15348.53	0.0038	0.4416
Na	23	3	He	-4.013	0.4263	15959.17	0.0038	0.4416
Mg	24	3	He	0.536	0.0069	260.01	0.0019	0.005872
Mg	24	3	He	1.158	0.008	300.01	0.0019	0.005872
Mg	24	3	He	-0.57	0.0048	180.01	0.0019	0.005872
Al	27	3	He	1.051	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	1.537	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	2.456	0.0019	70.00	0.0006	0.0004496
K	39	3	He	1.555	0.4474	16930.23	0.0012	0.4456
K	39	3	He	-4.816	0.44	16439.68	0.0012	0.4456
K	39	3	He	7.779	0.4546	17020.47	0.0012	0.4456
Ca	44	3	He	6.81	0.0042	160.01	0.0001	0.003779
Ca	44	3	He	23.838	0.0054	200.01	0.0001	0.003779
Ca	44	3	He	-0.589	0.0037	140.01	0.0001	0.003779
Ti	47	3	He	0.509	0.0003	10.00	0.0005	0
Ti	47	3	He	2.061	0.0011	40.00	0.0005	0
Ti	47	3	He	0.514	0.0003	10.00	0.0005	0
V	51	3	He	0.1	0.0328	1240.06	0.0223	0.03054
V	51	3	He	0.001	0.0306	1142.05	0.0223	0.03054
V	51	3	He	0.041	0.0315	1178.06	0.0223	0.03054
Cr	52	3	He	0.311	0.046	1740.16	0.0285	0.03714
Cr	52	3	He	0.257	0.0444	1660.14	0.0285	0.03714
Cr	52	3	He	0.066	0.039	1460.12	0.0285	0.03714
Mn	55	3	He	0.22	0.0071	270.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.054	0.0051	190.01	0.0124	0.004415
Mn	55	3	He	0.032	0.0048	180.01	0.0124	0.004415
Fe	57	3	He	1.803	0.0024	90.00	0.0006	0.001356
Fe	57	3	He	3.272	0.0032	120.00	0.0006	0.001356
Fe	57	3	He	3.26	0.0032	120.00	0.0006	0.001356
Co	59	3	He	0.122	0.0098	370.02	0.0581	0.002697
Co	59	3	He	0.124	0.0099	370.02	0.0581	0.002697
Co	59	3	He	0.137	0.0107	400.02	0.0581	0.002697
Ni	60	3	He	-0.015	0.0038	250.01	0.0087	0.003928
Ni	60	3	He	-0.008	0.0039	240.01	0.0087	0.003928
Ni	60	3	He	0.114	0.0049	310.01	0.0087	0.003928
Cu	63	3	He	0.094	0.0085	560.03	0.0261	0.006048
Cu	63	3	He	0.076	0.008	500.03	0.0261	0.006048
Cu	63	3	He	-0.013	0.0057	360.02	0.0261	0.006048
Zn	66	3	He	0.099	0.0038	250.01	0.0029	0.003512
Zn	66	3	He	0.121	0.0039	240.01	0.0029	0.003512
Zn	66	3	He	0.213	0.0041	260.01	0.0029	0.003512
As	75	3	He	0.223	0.0012	78.00	0.0021	0.0007233
As	75	3	He	0.086	0.0009	56.00	0.0021	0.0007233
As	75	3	He	-0.043	0.0006	40.00	0.0021	0.0007233
Sr	88	3	He	0.024	0.0008	50.00	0.009	0.0005796
Sr	88	3	He	-0.01	0.0005	30.00	0.009	0.0005796
Sr	88	3	He	0.039	0.0009	60.00	0.009	0.0005796
Mo	98	3	He	0.081	0.0022	140.00	0.0235	0.0003188
Mo	98	3	He	0.069	0.002	120.00	0.0235	0.0003188
Mo	98	3	He	0.072	0.002	130.01	0.0235	0.0003188
Ag	107	3	He	0.022	0.0016	100.00	0.0499	0.0004754
Ag	107	3	He	0.023	0.0016	100.00	0.0499	0.0004754
Ag	107	3	He	0.028	0.0019	120.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.131	0.015	940.07	0.0164	0.01713
Sn	120	3	He	0.145	0.0195	1200.09	0.0164	0.01713
Sn	120	3	He	0.006	0.0172	1110.10	0.0164	0.01713
Sb	121	3	He	0.045	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.035	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.033	0.0008	50.00	0.0155	0.0002641
Ba	137	3	He	0.128	0.0008	50.00	0.005	0.0001577
Ba	137	3	He	0.099	0.0007	40.00	0.005	0.0001577
Ba	137	3	He	0.031	0.0003	20.00	0.005	0.0001577
Tl	205	3	He	0.067	0.002	580.04	0.026	0.0002504
Tl	205	3	He	0.088	0.0025	740.05	0.026	0.0002504
Tl	205	3	He	0.089	0.0026	740.05	0.026	0.0002504
Pb	208	3	He	0.014	0.0019	230.01	0.0349	0.001422
Pb	208	3	He	0.008	0.0017	220.01	0.0349	0.001422
Pb	208	3	He	0.025	0.0023	400.02	0.0349	0.001422
U	238	3	He	0.056	0.0028	660.04	0.0502	5.657E-05
U	238	3	He	0.055	0.0028	650.04	0.0502	5.657E-05
U	238	3	He	0.052	0.0027	620.04	0.0502	5.657E-05
Sc	45	1	No Gas			2143388.56		
Sc	45	1	No Gas			2182708.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2156499.50		
Ge	72	1	No Gas			1025106.78		
Ge	72	1	No Gas			1043011.94		
Ge	72	1	No Gas			1041615.45		
Sc	45	2	H2			124670.20		
Sc	45	2	H2			122816.49		
Sc	45	2	H2			122512.57		
Ge	72	2	H2			103563.20		
Ge	72	2	H2			101730.07		
Ge	72	2	H2			101147.18		
In	115	2	H2			288862.42		
In	115	2	H2			285589.27		
In	115	2	H2			285792.53		
Sc	45	3	He			37839.86		
Sc	45	3	He			37358.70		
Sc	45	3	He			37439.21		
Ge	72	3	He			65862.18		
Ge	72	3	He			62215.82		
Ge	72	3	He			63079.83		
In	115	3	He			62741.98		
In	115	3	He			61506.75		
In	115	3	He			64470.05		
Tb	159	3	He			291074.55		
Tb	159	3	He			292341.97		
Tb	159	3	He			287068.47		
Bi	209	3	He			231983.36		
Bi	209	3	He			230316.05		
Bi	209	3	He			232749.76		

Quantitation Report

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Sample Type	Sample
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

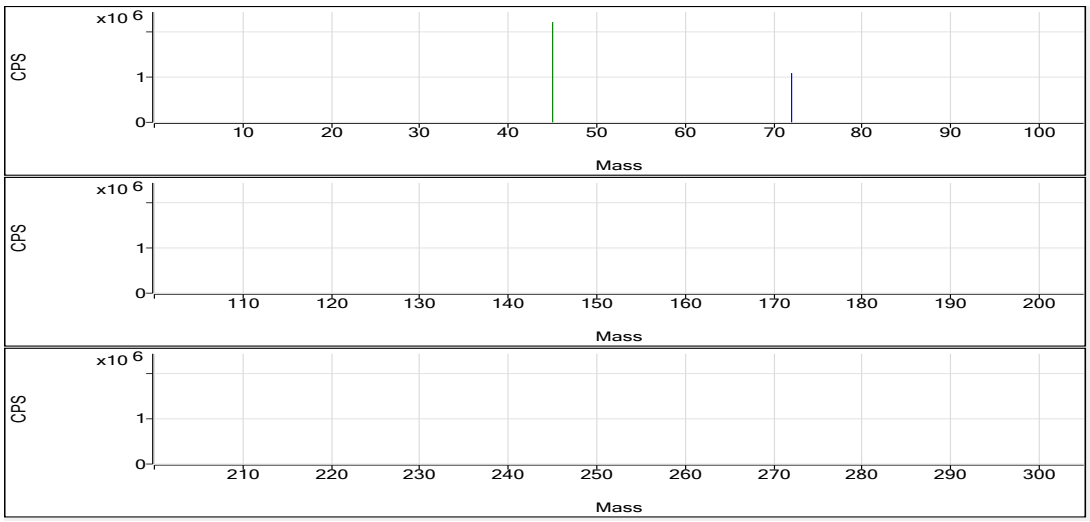
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.021	ppb	15.3	84.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.103	ppb	69.6	6.44	0.0001	Pulse	1.5000	3
Na	23	45	He	2053.295	ppb	0.9	321483.82	8.2881	Pulse	0.1000	3
Mg	24	45	He	10828.533	ppb	0.8	783270.19	20.1932	Pulse	0.1000	3
Al	27	45	He	11.562	ppb	12.1	276.68	0.0071	Pulse	0.1000	3
K	39	45	He	8366.326	ppb	0.5	392588.11	10.1211	Pulse	0.1000	3
Ca	44	45	He	118545.247	ppb	1.5	303990.72	7.8372	Pulse	0.1000	3
Ti	47	45	He	1.156	ppb	107.9	23.33	0.0006	Pulse	0.1000	3
V	51	45	He	-0.255	ppb	N/A	964.04	0.0249	Pulse	0.5000	3
Cr	52	45	He	0.039	ppb	74.0	1483.46	0.0382	Pulse	0.1000	3
Mn	55	45	He	2.301	ppb	8.7	1276.77	0.0329	Pulse	0.1000	3
Fe	57	45	He	5.489	ppb	13.1	173.34	0.0045	Pulse	0.1000	3
Co	59	45	He	0.128	ppb	20.8	393.35	0.0101	Pulse	0.1000	3
Ni	60	72	He	1.899	ppb	4.2	1396.78	0.0204	Pulse	0.1000	3
Cu	63	72	He	11.771	ppb	1.8	21486.64	0.3137	Pulse	0.1000	3
Zn	66	72	He	5.777	ppb	11.1	1373.45	0.0201	Pulse	0.1000	3
As	75	72	He	-0.011	ppb	N/A	48.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	260.696	ppb	0.8	150227.78	2.3345	Pulse	0.1000	3
Mo	98	115	He	0.064	ppb	16.7	116.67	0.0018	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	178.4	53.33	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.060	ppb	41.5	22.00	0.0003	Pulse	0.5000	3
Sn	120	115	He	-0.219	ppb	N/A	870.06	0.0135	Pulse	0.1000	3
Sb	121	115	He	0.030	ppb	18.7	46.67	0.0007	Pulse	0.1000	3
Ba	137	115	He	23.000	ppb	2.5	7378.92	0.1147	Pulse	0.1000	3
Tl	205	159	He	0.037	ppb	18.3	360.02	0.0012	Pulse	0.1000	3
Pb	208	159	He	0.003	ppb	183.8	453.35	0.0015	Pulse	0.1000	3
U	238	209	He	0.401	ppb	3.0	4847.77	0.0202	Pulse	0.1000	3

ISTD Table:

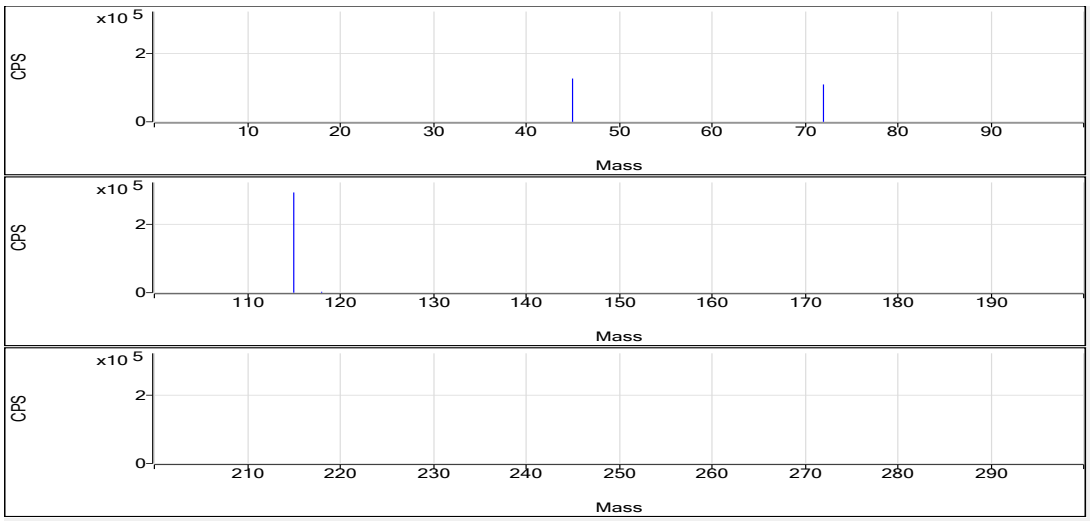
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2205607.63	1.3	108.5	Analog	0.1000	3
No Gas	Ge	72	1083054.20	0.8	107.8	Pulse	0.1000	3
H2	Sc	45	127612.87	0.8	96.6	Pulse	0.1000	3
H2	Ge	72	110155.95	1.0	98.8	Pulse	0.1000	3
H2	In	115	295499.51	0.8	100.6	Pulse	0.1000	3
He	Sc	45	38789.23	0.3	105.0	Pulse	0.1000	3
He	Ge	72	68491.21	1.1	106.1	Pulse	0.1000	3
He	In	115	64352.22	0.7	101.8	Pulse	0.1000	3
He	Tb	159	297945.55	1.2	101.8	Pulse	0.1000	3
He	Bi	209	239726.94	1.0	101.7	Pulse	0.1000	3

No Gas

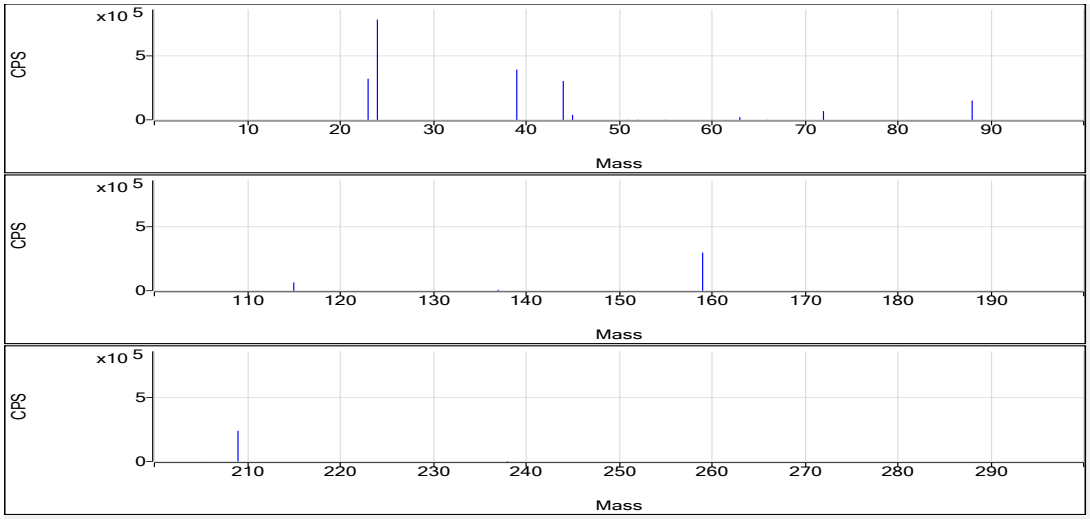


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	92.00	0.0008	2.195E-05
Be	9	1	No Gas	0.019	0	80.00	0.0008	2.195E-05
Be	9	1	No Gas	0.02	0	82.00	0.0008	2.195E-05
Se	78	2	H2	0.123	0.0001	7.33	0.0004	1.386E-05
Se	78	2	H2	0.023	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.162	0.0001	9.33	0.0004	1.386E-05
Na	23	3	He	2072.974	8.3633	323178.69	0.0038	0.4416
Na	23	3	He	2034.77	8.2173	319511.52	0.0038	0.4416
Na	23	3	He	2052.143	8.2837	321761.25	0.0038	0.4416
Mg	24	3	He	10866.826	20.2646	783071.00	0.0019	0.005872
Mg	24	3	He	10733.528	20.016	778277.25	0.0019	0.005872
Mg	24	3	He	10885.245	20.2989	788462.33	0.0019	0.005872
Al	27	3	He	13.098	0.008	310.01	0.0006	0.0004496
Al	27	3	He	11.233	0.0069	270.01	0.0006	0.0004496
Al	27	3	He	10.355	0.0064	250.01	0.0006	0.0004496
K	39	3	He	8406.672	10.1678	392908.08	0.0012	0.4456
K	39	3	He	8372.259	10.128	393803.51	0.0012	0.4456
K	39	3	He	8320.048	10.0676	391052.73	0.0012	0.4456
Ca	44	3	He	120055.903	7.937	306703.71	0.0001	0.003779
Ca	44	3	He	118933.777	7.8628	305727.53	0.0001	0.003779
Ca	44	3	He	116646.062	7.7117	299540.93	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.99	0.0005	20.00	0.0005	0
Ti	47	3	He	2.477	0.0013	50.00	0.0005	0
V	51	3	He	-0.316	0.0235	908.03	0.0223	0.03054
V	51	3	He	-0.279	0.0243	946.04	0.0223	0.03054
V	51	3	He	-0.171	0.0267	1038.05	0.0223	0.03054
Cr	52	3	He	0.014	0.0375	1450.12	0.0285	0.03714
Cr	52	3	He	0.033	0.0381	1480.13	0.0285	0.03714
Cr	52	3	He	0.07	0.0391	1520.14	0.0285	0.03714
Mn	55	3	He	2.089	0.0303	1170.08	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2.489	0.0352	1370.13	0.0124	0.004415
Mn	55	3	He	2.325	0.0332	1290.11	0.0124	0.004415
Fe	57	3	He	6.278	0.0049	190.01	0.0006	0.001356
Fe	57	3	He	4.864	0.0041	160.01	0.0006	0.001356
Fe	57	3	He	5.326	0.0044	170.01	0.0006	0.001356
Co	59	3	He	0.158	0.0119	460.02	0.0581	0.002697
Co	59	3	He	0.109	0.009	350.02	0.0581	0.002697
Co	59	3	He	0.118	0.0095	370.02	0.0581	0.002697
Ni	60	3	He	1.832	0.0198	1340.10	0.0087	0.003928
Ni	60	3	He	1.879	0.0202	1390.12	0.0087	0.003928
Ni	60	3	He	1.986	0.0211	1460.12	0.0087	0.003928
Cu	63	3	He	11.638	0.3102	20985.83	0.0261	0.006048
Cu	63	3	He	12.019	0.3202	22017.41	0.0261	0.006048
Cu	63	3	He	11.657	0.3107	21456.69	0.0261	0.006048
Zn	66	3	He	6.513	0.0222	1500.14	0.0029	0.003512
Zn	66	3	He	5.372	0.0189	1300.12	0.0029	0.003512
Zn	66	3	He	5.446	0.0191	1320.10	0.0029	0.003512
As	75	3	He	-0.021	0.0007	46.00	0.0021	0.0007233
As	75	3	He	0.03	0.0008	54.00	0.0021	0.0007233
As	75	3	He	-0.042	0.0006	44.00	0.0021	0.0007233
Sr	88	3	He	261.212	2.3392	149646.15	0.009	0.0005796
Sr	88	3	He	258.293	2.313	150018.13	0.009	0.0005796
Sr	88	3	He	262.581	2.3514	151019.06	0.009	0.0005796
Mo	98	3	He	0.073	0.002	130.00	0.0235	0.0003188
Mo	98	3	He	0.052	0.0015	100.00	0.0235	0.0003188
Mo	98	3	He	0.066	0.0019	120.00	0.0235	0.0003188
Ag	107	3	He	0.022	0.0016	100.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.088	0.0005	32.00	0.0055	1.07E-05
Cd	111	3	He	0.048	0.0003	18.00	0.0055	1.07E-05
Cd	111	3	He	0.043	0.0002	16.00	0.0055	1.07E-05
Sn	120	3	He	-0.12	0.0152	970.06	0.0164	0.01713
Sn	120	3	He	-0.283	0.0125	810.06	0.0164	0.01713
Sn	120	3	He	-0.256	0.0129	830.05	0.0164	0.01713
Sb	121	3	He	0.023	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.033	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.033	0.0008	50.00	0.0155	0.0002641
Ba	137	3	He	22.455	0.112	7162.10	0.005	0.0001577
Ba	137	3	He	22.924	0.1143	7412.28	0.005	0.0001577
Ba	137	3	He	23.619	0.1177	7562.38	0.005	0.0001577
Tl	205	3	He	0.036	0.0012	350.02	0.026	0.0002504
Tl	205	3	He	0.03	0.001	310.01	0.026	0.0002504
Tl	205	3	He	0.044	0.0014	420.02	0.026	0.0002504
Pb	208	3	He	0.009	0.0017	270.01	0.0349	0.001422
Pb	208	3	He	-0.001	0.0014	190.01	0.0349	0.001422
Pb	208	3	He	0.001	0.0015	260.01	0.0349	0.001422
U	238	3	He	0.39	0.0196	4651.04	0.0502	5.657E-05
U	238	3	He	0.4	0.0202	4861.05	0.0502	5.657E-05
U	238	3	He	0.414	0.0208	5031.21	0.0502	5.657E-05
Sc	45	1	No Gas			2228894.19		
Sc	45	1	No Gas			2173643.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2214285.44		
Ge	72	1	No Gas			1092566.00		
Ge	72	1	No Gas			1077582.95		
Ge	72	1	No Gas			1079013.66		
Sc	45	2	H2			127829.33		
Sc	45	2	H2			126515.86		
Sc	45	2	H2			128493.41		
Ge	72	2	H2			108982.82		
Ge	72	2	H2			111060.06		
Ge	72	2	H2			110424.96		
In	115	2	H2			296927.40		
In	115	2	H2			296807.67		
In	115	2	H2			292763.45		
Sc	45	3	He			38642.40		
Sc	45	3	He			38882.66		
Sc	45	3	He			38842.63		
Ge	72	3	He			67650.87		
Ge	72	3	He			68765.69		
Ge	72	3	He			69057.07		
In	115	3	He			63978.17		
In	115	3	He			64861.80		
In	115	3	He			64229.33		
Tb	159	3	He			294830.91		
Tb	159	3	He			297266.60		
Tb	159	3	He			301739.14		
Bi	209	3	He			236857.79		
Bi	209	3	He			241016.19		
Bi	209	3	He			241306.85		

Quantitation Report

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Acq Time	8/16/2023 7:32:27 AM
Sample Name	410-137128-K-1-A
Sample Type	Sample
Comment	F14
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

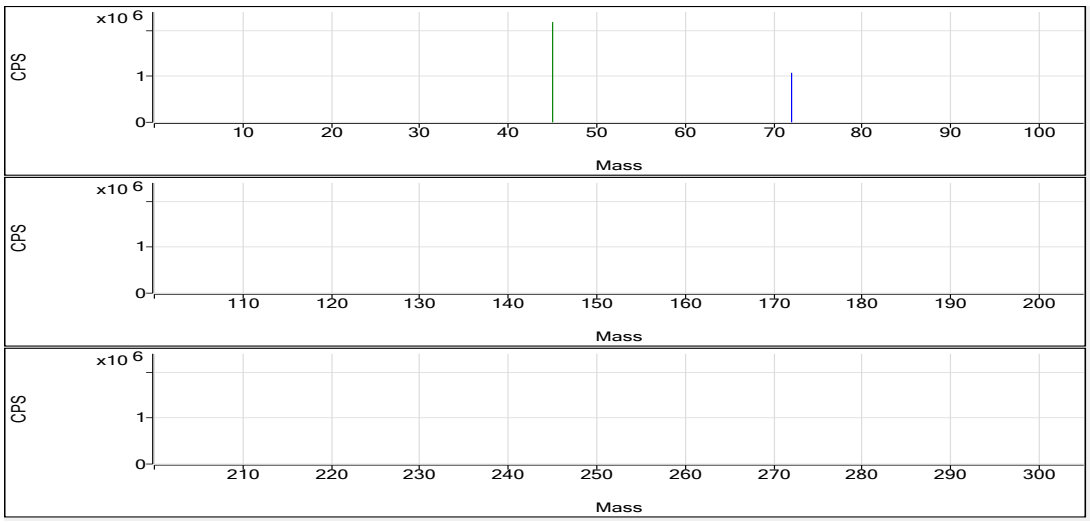
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	67.5	68.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.048	ppb	151.1	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	525.108	ppb	4.0	93143.32	2.4483	Pulse	0.1000	3
Mg	24	45	He	19.266	ppb	4.0	1590.14	0.0418	Pulse	0.1000	3
Al	27	45	He	14.057	ppb	12.7	326.68	0.0086	Pulse	0.1000	3
K	39	45	He	21.390	ppb	69.0	17894.80	0.4704	Pulse	0.1000	3
Ca	44	45	He	113.368	ppb	20.0	430.02	0.0113	Pulse	0.1000	3
Ti	47	45	He	0.513	ppb	99.7	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.224	ppb	N/A	973.37	0.0255	Pulse	0.5000	3
Cr	52	45	He	0.210	ppb	45.4	1640.16	0.0431	Pulse	0.1000	3
Mn	55	45	He	0.080	ppb	129.2	206.68	0.0054	Pulse	0.1000	3
Fe	57	45	He	3.482	ppb	17.4	126.67	0.0033	Pulse	0.1000	3
Co	59	45	He	0.038	ppb	38.8	186.68	0.0049	Pulse	0.1000	3
Ni	60	72	He	0.160	ppb	45.4	363.35	0.0053	Pulse	0.1000	3
Cu	63	72	He	0.527	ppb	8.2	1353.44	0.0198	Pulse	0.1000	3
Zn	66	72	He	0.412	ppb	62.7	320.02	0.0047	Pulse	0.1000	3
As	75	72	He	0.065	ppb	47.0	58.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.467	ppb	16.6	310.01	0.0048	Pulse	0.1000	3
Mo	98	115	He	0.032	ppb	81.7	70.00	0.0011	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	43.5	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.766	ppb	21.9	1936.87	0.0297	Pulse	0.1000	3
Sb	121	115	He	0.079	ppb	26.9	96.67	0.0015	Pulse	0.1000	3
Ba	137	115	He	0.881	ppb	30.3	296.68	0.0045	Pulse	0.1000	3
Tl	205	159	He	0.013	ppb	41.6	173.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.028	ppb	20.7	713.37	0.0024	Pulse	0.1000	3
U	238	209	He	0.006	ppb	54.7	80.00	0.0003	Pulse	0.1000	3

ISTD Table:

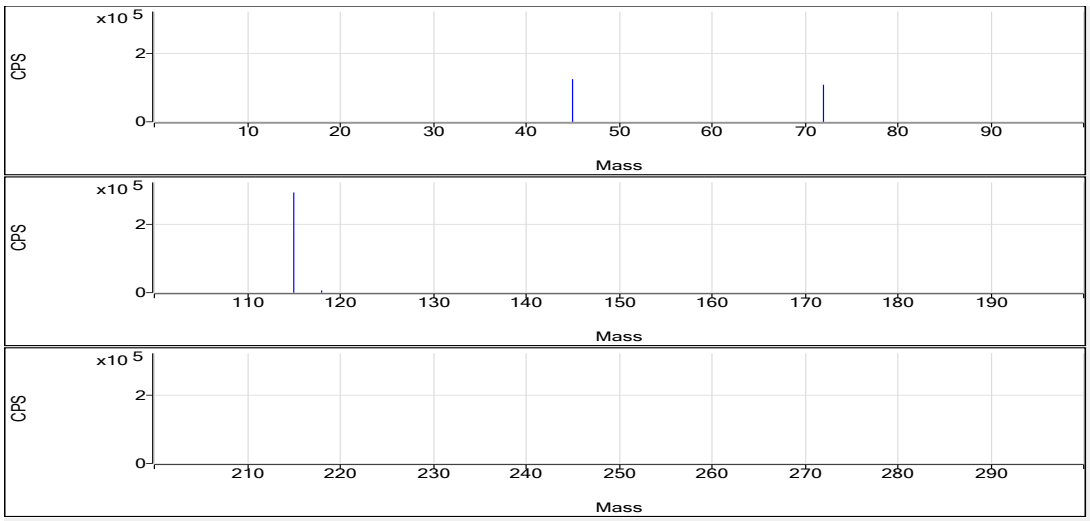
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2180899.86	0.6	107.3	Analog	0.1000	3
No Gas	Ge	72	1077022.25	0.7	107.2	Pulse	0.1000	3
H2	Sc	45	124897.33	0.5	94.5	Pulse	0.1000	3
H2	Ge	72	108685.13	0.8	97.4	Pulse	0.1000	3
H2	In	115	293581.64	1.1	100.0	Pulse	0.1000	3
He	Sc	45	38066.97	2.7	103.0	Pulse	0.1000	3
He	Ge	72	68323.86	2.1	105.8	Pulse	0.1000	3
He	In	115	65159.11	0.9	103.1	Pulse	0.1000	3
He	Tb	159	295047.65	0.7	100.8	Pulse	0.1000	3
He	Bi	209	240732.05	0.7	102.1	Pulse	0.1000	3

No Gas

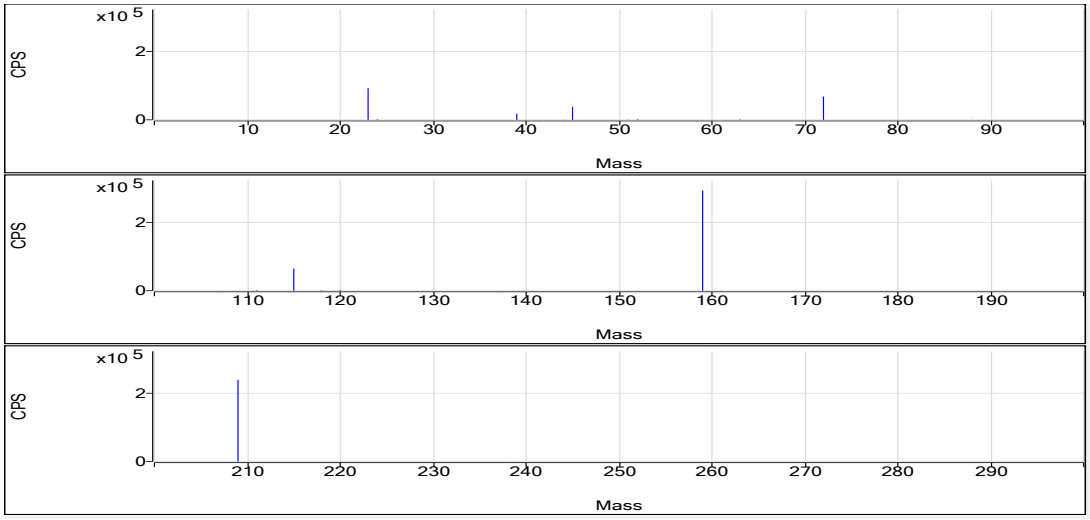


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.021	0	82.00	0.0008	2.195E-05
Be	9	1	No Gas	0.013	0	70.00	0.0008	2.195E-05
Be	9	1	No Gas	0.004	0	54.00	0.0008	2.195E-05
Se	78	2	H2	-0.032	0	0.00	0.0004	1.386E-05
Se	78	2	H2	0.066	0	4.67	0.0004	1.386E-05
Se	78	2	H2	0.11	0.0001	6.67	0.0004	1.386E-05
Na	23	3	He	501.179	2.3568	92489.69	0.0038	0.4416
Na	23	3	He	539.132	2.5019	93314.67	0.0038	0.4416
Na	23	3	He	535.012	2.4861	93625.60	0.0038	0.4416
Mg	24	3	He	18.859	0.041	1610.15	0.0019	0.005872
Mg	24	3	He	20.15	0.0434	1620.14	0.0019	0.005872
Mg	24	3	He	18.788	0.0409	1540.14	0.0019	0.005872
Al	27	3	He	14.208	0.0087	340.01	0.0006	0.0004496
Al	27	3	He	12.207	0.0075	280.01	0.0006	0.0004496
Al	27	3	He	15.757	0.0096	360.02	0.0006	0.0004496
K	39	3	He	8.239	0.4551	17861.52	0.0012	0.4456
K	39	3	He	37.35	0.4888	18231.86	0.0012	0.4456
K	39	3	He	18.582	0.4671	17591.03	0.0012	0.4456
Ca	44	3	He	139.499	0.013	510.03	0.0001	0.003779
Ca	44	3	He	101.06	0.0105	390.01	0.0001	0.003779
Ca	44	3	He	99.546	0.0104	390.02	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.516	0.0003	10.00	0.0005	0
Ti	47	3	He	1.022	0.0005	20.00	0.0005	0
V	51	3	He	-0.172	0.0267	1048.05	0.0223	0.03054
V	51	3	He	-0.312	0.0236	880.03	0.0223	0.03054
V	51	3	He	-0.188	0.0263	992.04	0.0223	0.03054
Cr	52	3	He	0.164	0.0418	1640.16	0.0285	0.03714
Cr	52	3	He	0.146	0.0413	1540.16	0.0285	0.03714
Cr	52	3	He	0.319	0.0462	1740.17	0.0285	0.03714
Mn	55	3	He	0.199	0.0069	270.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.012	0.0046	170.01	0.0124	0.004415
Mn	55	3	He	0.029	0.0048	180.01	0.0124	0.004415
Fe	57	3	He	3	0.0031	120.00	0.0006	0.001356
Fe	57	3	He	3.282	0.0032	120.00	0.0006	0.001356
Fe	57	3	He	4.163	0.0037	140.00	0.0006	0.001356
Co	59	3	He	0.054	0.0059	230.01	0.0581	0.002697
Co	59	3	He	0.027	0.0043	160.01	0.0581	0.002697
Co	59	3	He	0.031	0.0045	170.01	0.0581	0.002697
Ni	60	3	He	0.228	0.0059	410.02	0.0087	0.003928
Ni	60	3	He	0.083	0.0047	320.02	0.0087	0.003928
Ni	60	3	He	0.17	0.0054	360.02	0.0087	0.003928
Cu	63	3	He	0.479	0.0186	1290.10	0.0261	0.006048
Cu	63	3	He	0.564	0.0208	1430.12	0.0261	0.006048
Cu	63	3	He	0.537	0.0201	1340.11	0.0261	0.006048
Zn	66	3	He	0.432	0.0048	330.02	0.0029	0.003512
Zn	66	3	He	0.144	0.0039	270.01	0.0029	0.003512
Zn	66	3	He	0.659	0.0054	360.02	0.0029	0.003512
As	75	3	He	0.054	0.0008	58.00	0.0021	0.0007233
As	75	3	He	0.1	0.0009	64.00	0.0021	0.0007233
As	75	3	He	0.042	0.0008	54.00	0.0021	0.0007233
Sr	88	3	He	0.555	0.0056	360.02	0.009	0.0005796
Sr	88	3	He	0.41	0.0043	280.01	0.009	0.0005796
Sr	88	3	He	0.435	0.0045	290.01	0.009	0.0005796
Mo	98	3	He	0.006	0.0005	30.00	0.0235	0.0003188
Mo	98	3	He	0.032	0.0011	70.00	0.0235	0.0003188
Mo	98	3	He	0.059	0.0017	110.00	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	0.779	0.0299	1940.20	0.0164	0.01713
Sn	120	3	He	0.927	0.0324	2130.23	0.0164	0.01713
Sn	120	3	He	0.592	0.0269	1740.17	0.0164	0.01713
Sb	121	3	He	0.103	0.0019	120.01	0.0155	0.0002641
Sb	121	3	He	0.061	0.0012	80.00	0.0155	0.0002641
Sb	121	3	He	0.073	0.0014	90.00	0.0155	0.0002641
Ba	137	3	He	0.743	0.0039	250.01	0.005	0.0001577
Ba	137	3	He	1.189	0.0061	400.02	0.005	0.0001577
Ba	137	3	He	0.712	0.0037	240.01	0.005	0.0001577
Tl	205	3	He	0.007	0.0004	130.00	0.026	0.0002504
Tl	205	3	He	0.014	0.0006	180.01	0.026	0.0002504
Tl	205	3	He	0.018	0.0007	210.01	0.026	0.0002504
Pb	208	3	He	0.032	0.0026	420.02	0.0349	0.001422
Pb	208	3	He	0.031	0.0025	400.02	0.0349	0.001422
Pb	208	3	He	0.022	0.0022	280.02	0.0349	0.001422
U	238	3	He	0.008	0.0005	110.00	0.0502	5.657E-05
U	238	3	He	0.002	0.0002	40.00	0.0502	5.657E-05
U	238	3	He	0.006	0.0004	90.00	0.0502	5.657E-05
Sc	45	1	No Gas			2174758.56		
Sc	45	1	No Gas			2194924.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2173017.00		
Ge	72	1	No Gas			1069014.59		
Ge	72	1	No Gas			1083134.12		
Ge	72	1	No Gas			1078918.03		
Sc	45	2	H2			124430.94		
Sc	45	2	H2			125619.78		
Sc	45	2	H2			124641.26		
Ge	72	2	H2			108460.96		
Ge	72	2	H2			109689.03		
Ge	72	2	H2			107905.40		
In	115	2	H2			293555.99		
In	115	2	H2			296693.20		
In	115	2	H2			290495.74		
Sc	45	3	He			39243.37		
Sc	45	3	He			37298.16		
Sc	45	3	He			37659.39		
Ge	72	3	He			69469.61		
Ge	72	3	He			68816.21		
Ge	72	3	He			66685.77		
In	115	3	He			64851.23		
In	115	3	He			65846.11		
In	115	3	He			64811.97		
Tb	159	3	He			297326.79		
Tb	159	3	He			294230.39		
Tb	159	3	He			293585.78		
Bi	209	3	He			240513.02		
Bi	209	3	He			242625.80		
Bi	209	3	He			239057.32		

Quantitation Report

Data File Name	039SMPL.d
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Acq Time	8/16/2023 7:34:29 AM
Sample Name	410-137358-J-9-A
Sample Type	Sample
Comment	F14
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

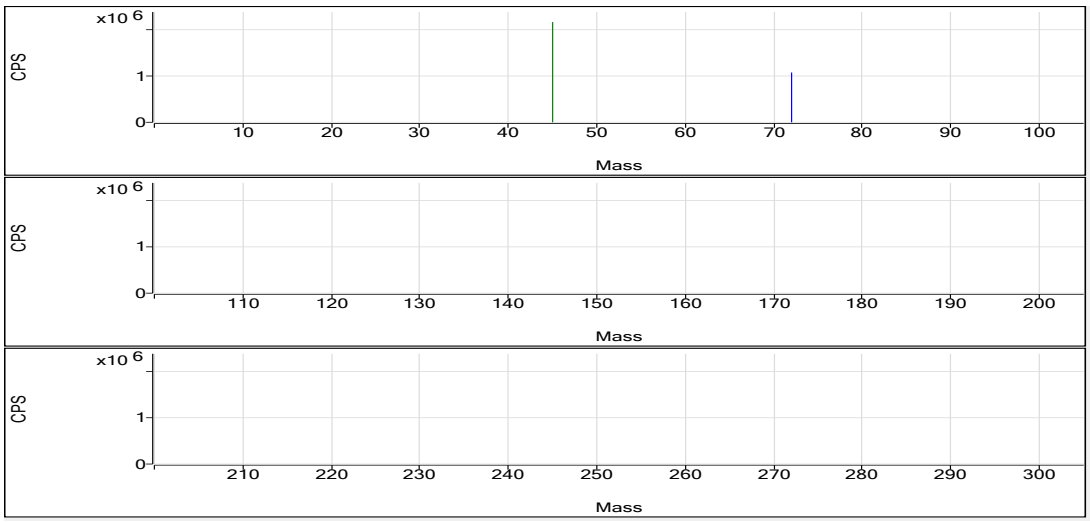
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	136.2	59.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.123	ppb	55.2	7.34	0.0001	Pulse	1.5000	3
Na	23	45	He	1672.230	ppb	2.7	260115.09	6.8319	Pulse	0.1000	3
Mg	24	45	He	5869.081	ppb	2.7	416797.20	10.9474	Pulse	0.1000	3
Al	27	45	He	13.600	ppb	24.9	316.69	0.0083	Pulse	0.1000	3
K	39	45	He	2839.496	ppb	3.9	141972.02	3.7294	Pulse	0.1000	3
Ca	44	45	He	58512.442	ppb	2.3	147369.32	3.8702	Pulse	0.1000	3
Ti	47	45	He	0.166	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.293	ppb	N/A	914.03	0.0240	Pulse	0.5000	3
Cr	52	45	He	-0.179	ppb	N/A	1220.10	0.0321	Pulse	0.1000	3
Mn	55	45	He	5.491	ppb	11.4	2757.02	0.0724	Pulse	0.1000	3
Fe	57	45	He	5.807	ppb	28.1	176.68	0.0046	Pulse	0.1000	3
Co	59	45	He	0.080	ppb	20.8	280.01	0.0074	Pulse	0.1000	3
Ni	60	72	He	1.826	ppb	13.8	1356.78	0.0198	Pulse	0.1000	3
Cu	63	72	He	7.242	ppb	7.1	13396.70	0.1953	Pulse	0.1000	3
Zn	66	72	He	23.476	ppb	3.6	4857.65	0.0708	Pulse	0.1000	3
As	75	72	He	-0.007	ppb	N/A	48.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	147.265	ppb	1.4	84368.25	1.3190	Pulse	0.1000	3
Mo	98	115	He	0.035	ppb	60.0	73.33	0.0011	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	26.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.162	ppb	21.3	58.00	0.0009	Pulse	0.5000	3
Sn	120	115	He	-0.345	ppb	N/A	733.39	0.0115	Pulse	0.1000	3
Sb	121	115	He	0.010	ppb	157.3	26.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	14.824	ppb	9.3	4731.00	0.0740	Pulse	0.1000	3
Tl	205	159	He	0.024	ppb	7.8	256.68	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.000	ppb	N/A	420.01	0.0014	Pulse	0.1000	3
U	238	209	He	0.183	ppb	5.7	2233.63	0.0093	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2177002.05	0.8	107.1	Analog	0.1000	3
No Gas	Ge	72	1081445.95	0.8	107.6	Pulse	0.1000	3
H2	Sc	45	128360.00	2.2	97.2	Pulse	0.1000	3
H2	Ge	72	109585.04	2.1	98.3	Pulse	0.1000	3
H2	In	115	295815.58	2.0	100.7	Pulse	0.1000	3
He	Sc	45	38090.56	2.7	103.1	Pulse	0.1000	3
He	Ge	72	68615.19	1.2	106.3	Pulse	0.1000	3
He	In	115	63962.98	1.1	101.2	Pulse	0.1000	3
He	Tb	159	295766.41	0.7	101.0	Pulse	0.1000	3
He	Bi	209	240885.11	0.4	102.1	Pulse	0.1000	3

No Gas



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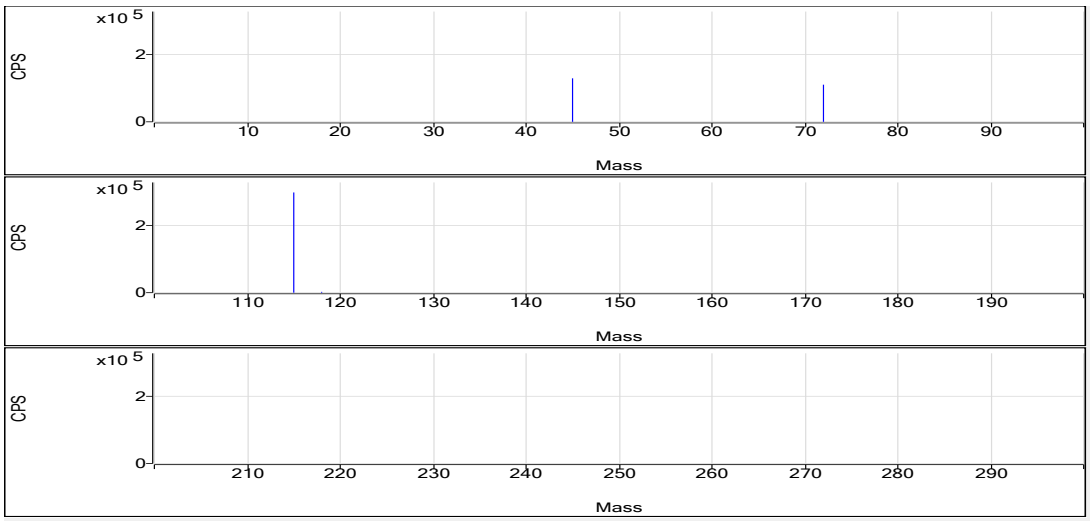
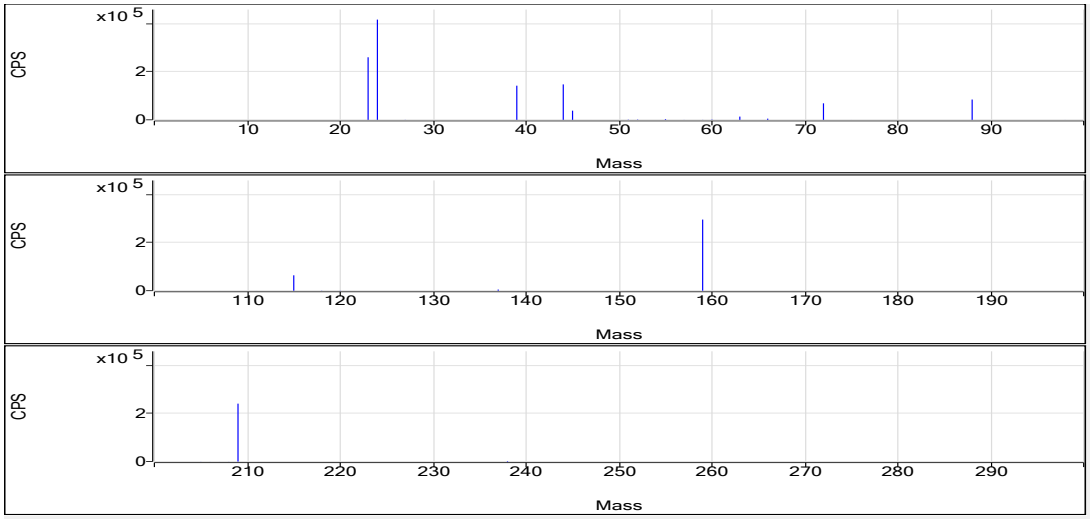


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.018	0	78.00	0.0008	2.195E-05
Be	9	1	No Gas	0.001	0	50.00	0.0008	2.195E-05
Be	9	1	No Gas	0.002	0	50.00	0.0008	2.195E-05
Se	78	2	H2	0.107	0.0001	6.67	0.0004	1.386E-05
Se	78	2	H2	0.197	0.0001	10.67	0.0004	1.386E-05
Se	78	2	H2	0.065	0	4.67	0.0004	1.386E-05
Na	23	3	He	1637.277	6.6983	258836.05	0.0038	0.4416
Na	23	3	He	1655.398	6.7676	262056.44	0.0038	0.4416
Na	23	3	He	1724.017	7.0298	259452.77	0.0038	0.4416
Mg	24	3	He	5738.783	10.7045	413641.83	0.0019	0.005872
Mg	24	3	He	5819.822	10.8556	420353.24	0.0019	0.005872
Mg	24	3	He	6048.639	11.2822	416396.52	0.0019	0.005872
Al	27	3	He	17.128	0.0104	400.04	0.0006	0.0004496
Al	27	3	He	10.389	0.0065	250.01	0.0006	0.0004496
Al	27	3	He	13.282	0.0081	300.02	0.0006	0.0004496
K	39	3	He	2751.21	3.6273	140167.46	0.0012	0.4456
K	39	3	He	2802.674	3.6869	142763.96	0.0012	0.4456
K	39	3	He	2964.603	3.8741	142984.65	0.0012	0.4456
Ca	44	3	He	58674.188	3.8809	149965.95	0.0001	0.003779
Ca	44	3	He	57107.057	3.7774	146268.33	0.0001	0.003779
Ca	44	3	He	59756.08	3.9524	145873.69	0.0001	0.003779
Ti	47	3	He	0.498	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.325	0.0233	900.03	0.0223	0.03054
V	51	3	He	-0.307	0.0237	918.03	0.0223	0.03054
V	51	3	He	-0.247	0.025	924.03	0.0223	0.03054
Cr	52	3	He	-0.241	0.0303	1170.10	0.0285	0.03714
Cr	52	3	He	-0.161	0.0325	1260.10	0.0285	0.03714
Cr	52	3	He	-0.134	0.0333	1230.10	0.0285	0.03714
Mn	55	3	He	5.997	0.0787	3040.41	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4.795	0.0638	2470.31	0.0124	0.004415
Mn	55	3	He	5.683	0.0748	2760.34	0.0124	0.004415
Fe	57	3	He	3.997	0.0036	140.01	0.0006	0.001356
Fe	57	3	He	6.26	0.0049	190.01	0.0006	0.001356
Fe	57	3	He	7.163	0.0054	200.01	0.0006	0.001356
Co	59	3	He	0.065	0.0065	250.01	0.0581	0.002697
Co	59	3	He	0.078	0.0072	280.01	0.0581	0.002697
Co	59	3	He	0.098	0.0084	310.01	0.0581	0.002697
Ni	60	3	He	1.564	0.0175	1190.09	0.0087	0.003928
Ni	60	3	He	2.068	0.0219	1520.14	0.0087	0.003928
Ni	60	3	He	1.847	0.0199	1360.10	0.0087	0.003928
Cu	63	3	He	7.13	0.1924	13096.39	0.0261	0.006048
Cu	63	3	He	6.796	0.1837	12776.06	0.0261	0.006048
Cu	63	3	He	7.8	0.2099	14317.66	0.0261	0.006048
Zn	66	3	He	23.746	0.0716	4870.99	0.0029	0.003512
Zn	66	3	He	24.166	0.0728	5061.06	0.0029	0.003512
Zn	66	3	He	22.517	0.068	4640.89	0.0029	0.003512
As	75	3	He	-0.122	0.0005	32.00	0.0021	0.0007233
As	75	3	He	0.053	0.0008	58.00	0.0021	0.0007233
As	75	3	He	0.047	0.0008	56.00	0.0021	0.0007233
Sr	88	3	He	149.348	1.3377	86152.29	0.009	0.0005796
Sr	88	3	He	145.091	1.2995	83566.71	0.009	0.0005796
Sr	88	3	He	147.355	1.3198	83385.74	0.009	0.0005796
Mo	98	3	He	0.026	0.0009	60.00	0.0235	0.0003188
Mo	98	3	He	0.059	0.0017	110.00	0.0235	0.0003188
Mo	98	3	He	0.02	0.0008	50.00	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Cd	111	3	He	0.2	0.0011	72.00	0.0055	1.07E-05
Cd	111	3	He	0.133	0.0007	48.00	0.0055	1.07E-05
Cd	111	3	He	0.152	0.0009	54.00	0.0055	1.07E-05
Sn	120	3	He	-0.41	0.0104	670.05	0.0164	0.01713
Sn	120	3	He	-0.248	0.0131	840.06	0.0164	0.01713
Sn	120	3	He	-0.378	0.0109	690.05	0.0164	0.01713
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.013	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.024	0.0006	40.00	0.0155	0.0002641
Ba	137	3	He	16.22	0.0809	5211.17	0.005	0.0001577
Ba	137	3	He	13.465	0.0672	4320.91	0.005	0.0001577
Ba	137	3	He	14.786	0.0738	4660.93	0.005	0.0001577
Tl	205	3	He	0.025	0.0009	270.01	0.026	0.0002504
Tl	205	3	He	0.024	0.0009	260.01	0.026	0.0002504
Tl	205	3	He	0.022	0.0008	240.01	0.026	0.0002504
Pb	208	3	He	0.004	0.0016	220.01	0.0349	0.001422
Pb	208	3	He	-0.004	0.0013	240.01	0.0349	0.001422
Pb	208	3	He	0	0.0014	240.01	0.0349	0.001422
U	238	3	He	0.176	0.0089	2130.27	0.0502	5.657E-05
U	238	3	He	0.179	0.0091	2190.30	0.0502	5.657E-05
U	238	3	He	0.195	0.0099	2380.31	0.0502	5.657E-05
Sc	45	1	No Gas			2196908.25		
Sc	45	1	No Gas			2173643.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2160454.66		
Ge	72	1	No Gas			1086751.31		
Ge	72	1	No Gas			1085852.09		
Ge	72	1	No Gas			1071734.44		
Sc	45	2	H2			129998.03		
Sc	45	2	H2			125136.27		
Sc	45	2	H2			129945.69		
Ge	72	2	H2			110606.27		
Ge	72	2	H2			106978.44		
Ge	72	2	H2			111170.40		
In	115	2	H2			297642.50		
In	115	2	H2			289056.38		
In	115	2	H2			300747.87		
Sc	45	3	He			38641.85		
Sc	45	3	He			38722.31		
Sc	45	3	He			36907.52		
Ge	72	3	He			68072.24		
Ge	72	3	He			69560.27		
Ge	72	3	He			68213.05		
In	115	3	He			64409.48		
In	115	3	He			64309.31		
In	115	3	He			63183.81		
Tb	159	3	He			295862.18		
Tb	159	3	He			297761.95		
Tb	159	3	He			293675.09		
Bi	209	3	He			239833.94		
Bi	209	3	He			241686.25		
Bi	209	3	He			241135.15		

Quantitation Report

Data File Name	040SMPL.d
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Sample Name	410-137358-I-1-A
Sample Type	Sample
Comment	F14
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

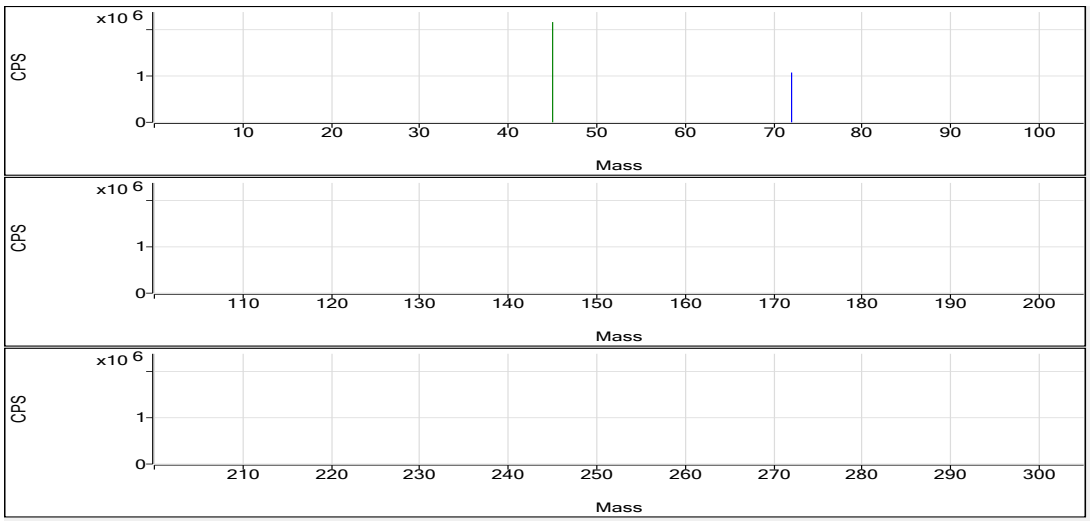
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.006	ppb	16.2	56.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.216	ppb	6.9	12.00	0.0001	Pulse	1.5000	3
Na	23	45	He	16360.238	ppb	1.1	2434032.00	62.9610	Analog	0.1000	3
Mg	24	45	He	6763.621	ppb	1.9	487659.84	12.6151	Pulse	0.1000	3
Al	27	45	He	9.665	ppb	17.8	233.34	0.0060	Pulse	0.1000	3
K	39	45	He	4288.526	ppb	1.1	208961.55	5.4052	Pulse	0.1000	3
Ca	44	45	He	66883.947	ppb	1.7	170998.14	4.4234	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.216	ppb	N/A	994.71	0.0257	Pulse	0.5000	3
Cr	52	45	He	-0.077	ppb	N/A	1350.12	0.0349	Pulse	0.1000	3
Mn	55	45	He	5.072	ppb	7.3	2600.33	0.0672	Pulse	0.1000	3
Fe	57	45	He	4.441	ppb	34.1	150.01	0.0039	Pulse	0.1000	3
Co	59	45	He	0.057	ppb	18.7	233.34	0.0060	Pulse	0.1000	3
Ni	60	72	He	0.222	ppb	33.4	396.69	0.0059	Pulse	0.1000	3
Cu	63	72	He	7.796	ppb	2.1	14220.89	0.2098	Pulse	0.1000	3
Zn	66	72	He	0.800	ppb	52.2	393.35	0.0058	Pulse	0.1000	3
As	75	72	He	-0.050	ppb	N/A	42.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	258.419	ppb	0.7	149590.77	2.3142	Pulse	0.1000	3
Mo	98	115	He	0.138	ppb	29.4	230.01	0.0036	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	26.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.019	ppb	46.6	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.214	ppb	N/A	880.06	0.0136	Pulse	0.1000	3
Sb	121	115	He	0.010	ppb	216.3	26.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	21.010	ppb	2.0	6771.90	0.1048	Pulse	0.1000	3
Tl	205	159	He	0.019	ppb	38.5	223.34	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.005	ppb	97.8	466.69	0.0016	Pulse	0.1000	3
U	238	209	He	0.300	ppb	2.6	3570.64	0.0151	Pulse	0.1000	3

ISTD Table:

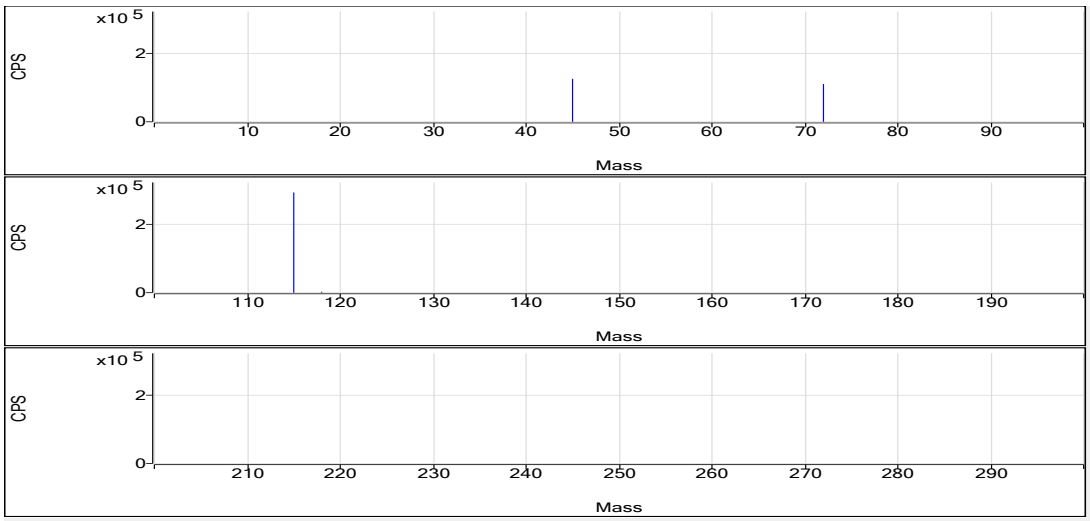
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2162793.30	0.8	106.4	Analog	0.1000	3
No Gas	Ge	72	1073952.51	0.7	106.8	Pulse	0.1000	3
H2	Sc	45	126668.08	1.0	95.9	Pulse	0.1000	3
H2	Ge	72	111549.71	0.4	100.0	Pulse	0.1000	3
H2	In	115	295472.01	0.5	100.6	Pulse	0.1000	3
He	Sc	45	38661.92	1.0	104.6	Pulse	0.1000	3
He	Ge	72	67780.84	0.6	105.0	Pulse	0.1000	3
He	In	115	64643.05	0.7	102.3	Pulse	0.1000	3
He	Tb	159	294624.04	0.4	100.6	Pulse	0.1000	3
He	Bi	209	236289.29	0.1	100.2	Pulse	0.1000	3

No Gas

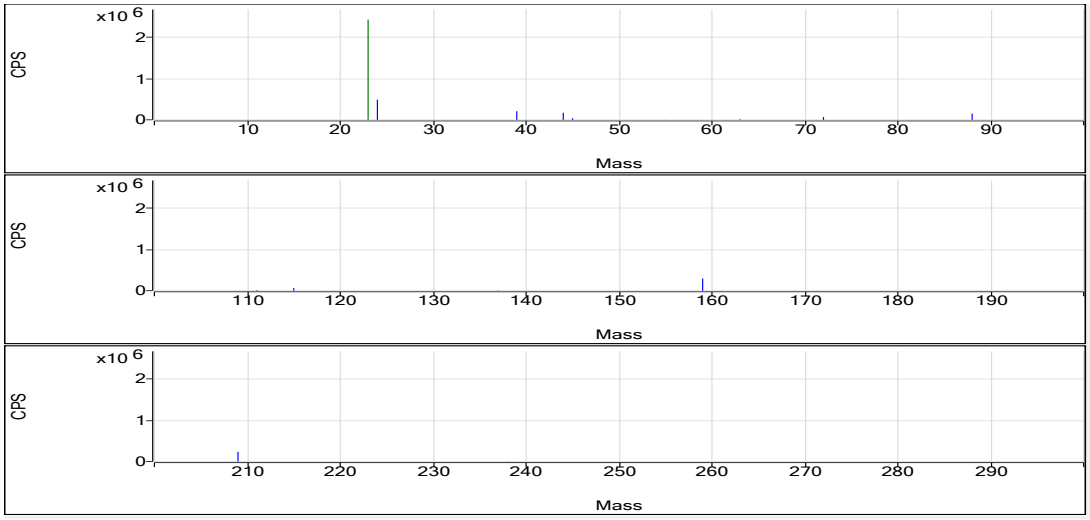


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0	56.00	0.0008	2.195E-05
Be	9	1	No Gas	0.007	0	58.00	0.0008	2.195E-05
Be	9	1	No Gas	0.005	0	56.00	0.0008	2.195E-05
Se	78	2	H2	0.201	0.0001	11.33	0.0004	1.386E-05
Se	78	2	H2	0.231	0.0001	12.67	0.0004	1.386E-05
Se	78	2	H2	0.215	0.0001	12.00	0.0004	1.386E-05
Na	23	3	He	16228.607	62.458	2417249.03	0.0038	0.4416
Na	23	3	He	16574.983	63.7817	2439062.15	0.0038	0.4416
Na	23	3	He	16277.124	62.6434	2445784.81	0.0038	0.4416
Mg	24	3	He	6737.168	12.5658	486320.03	0.0019	0.005872
Mg	24	3	He	6901.899	12.8729	492268.78	0.0019	0.005872
Mg	24	3	He	6651.796	12.4066	484390.70	0.0019	0.005872
Al	27	3	He	7.714	0.0049	190.01	0.0006	0.0004496
Al	27	3	He	10.982	0.0068	260.01	0.0006	0.0004496
Al	27	3	He	10.298	0.0064	250.01	0.0006	0.0004496
K	39	3	He	4282.066	5.3978	208903.96	0.0012	0.4456
K	39	3	He	4339.748	5.4645	208965.60	0.0012	0.4456
K	39	3	He	4243.764	5.3535	209015.08	0.0012	0.4456
Ca	44	3	He	66817.829	4.419	171025.86	0.0001	0.003779
Ca	44	3	He	68020.342	4.4985	172026.54	0.0001	0.003779
Ca	44	3	He	65813.671	4.3527	169942.01	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.227	0.0255	986.04	0.0223	0.03054
V	51	3	He	-0.204	0.026	994.04	0.0223	0.03054
V	51	3	He	-0.216	0.0257	1004.04	0.0223	0.03054
Cr	52	3	He	-0.052	0.0357	1380.13	0.0285	0.03714
Cr	52	3	He	0	0.0371	1420.12	0.0285	0.03714
Cr	52	3	He	-0.18	0.032	1250.10	0.0285	0.03714
Mn	55	3	He	5.257	0.0695	2690.33	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4.648	0.062	2370.29	0.0124	0.004415
Mn	55	3	He	5.311	0.0702	2740.37	0.0124	0.004415
Fe	57	3	He	3.532	0.0034	130.01	0.0006	0.001356
Fe	57	3	He	3.603	0.0034	130.00	0.0006	0.001356
Fe	57	3	He	6.189	0.0049	190.01	0.0006	0.001356
Co	59	3	He	0.069	0.0067	260.01	0.0581	0.002697
Co	59	3	He	0.048	0.0055	210.01	0.0581	0.002697
Co	59	3	He	0.055	0.0059	230.01	0.0581	0.002697
Ni	60	3	He	0.139	0.0051	350.02	0.0087	0.003928
Ni	60	3	He	0.283	0.0064	430.02	0.0087	0.003928
Ni	60	3	He	0.244	0.006	410.02	0.0087	0.003928
Cu	63	3	He	7.982	0.2147	14628.03	0.0261	0.006048
Cu	63	3	He	7.687	0.207	13947.22	0.0261	0.006048
Cu	63	3	He	7.717	0.2077	14087.42	0.0261	0.006048
Zn	66	3	He	0.362	0.0045	310.01	0.0029	0.003512
Zn	66	3	He	0.846	0.0059	400.02	0.0029	0.003512
Zn	66	3	He	1.193	0.0069	470.02	0.0029	0.003512
As	75	3	He	-0.08	0.0006	38.00	0.0021	0.0007233
As	75	3	He	-0.12	0.0005	32.00	0.0021	0.0007233
As	75	3	He	0.05	0.0008	56.00	0.0021	0.0007233
Sr	88	3	He	256.295	2.2951	149320.21	0.009	0.0005796
Sr	88	3	He	259.911	2.3275	150534.57	0.009	0.0005796
Sr	88	3	He	259.051	2.3198	148917.53	0.009	0.0005796
Mo	98	3	He	0.15	0.0038	250.01	0.0235	0.0003188
Mo	98	3	He	0.171	0.0043	280.02	0.0235	0.0003188
Mo	98	3	He	0.092	0.0025	160.01	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.009	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.02	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.026	0.0002	10.00	0.0055	1.07E-05
Sn	120	3	He	-0.257	0.0129	840.06	0.0164	0.01713
Sn	120	3	He	-0.271	0.0127	820.05	0.0164	0.01713
Sn	120	3	He	-0.113	0.0153	980.07	0.0164	0.01713
Sb	121	3	He	0.033	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.003	0.0003	20.00	0.0155	0.0002641
Ba	137	3	He	20.814	0.1038	6751.89	0.005	0.0001577
Ba	137	3	He	21.497	0.1072	6931.96	0.005	0.0001577
Ba	137	3	He	20.719	0.1033	6631.85	0.005	0.0001577
Tl	205	3	He	0.017	0.0007	200.01	0.026	0.0002504
Tl	205	3	He	0.028	0.001	290.01	0.026	0.0002504
Tl	205	3	He	0.014	0.0006	180.01	0.026	0.0002504
Pb	208	3	He	0.009	0.0017	290.01	0.0349	0.001422
Pb	208	3	He	0	0.0014	240.01	0.0349	0.001422
Pb	208	3	He	0.005	0.0016	210.01	0.0349	0.001422
U	238	3	He	0.309	0.0156	3670.67	0.0502	5.657E-05
U	238	3	He	0.294	0.0148	3500.62	0.0502	5.657E-05
U	238	3	He	0.297	0.015	3540.64	0.0502	5.657E-05
Sc	45	1	No Gas			2181333.40		
Sc	45	1	No Gas			2149367.00		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2157679.50		
Ge	72	1	No Gas			1081865.61		
Ge	72	1	No Gas			1066603.19		
Ge	72	1	No Gas			1073388.73		
Sc	45	2	H2			125275.97		
Sc	45	2	H2			127183.14		
Sc	45	2	H2			127545.13		
Ge	72	2	H2			111936.57		
Ge	72	2	H2			111017.73		
Ge	72	2	H2			111694.82		
In	115	2	H2			293801.30		
In	115	2	H2			296167.42		
In	115	2	H2			296447.30		
Sc	45	3	He			38701.99		
Sc	45	3	He			38240.81		
Sc	45	3	He			39042.97		
Ge	72	3	He			68142.25		
Ge	72	3	He			67389.16		
Ge	72	3	He			67811.10		
In	115	3	He			65063.83		
In	115	3	He			64680.85		
In	115	3	He			64198.37		
Tb	159	3	He			294044.49		
Tb	159	3	He			296004.62		
Tb	159	3	He			293823.00		
Bi	209	3	He			235887.65		
Bi	209	3	He			236504.53		
Bi	209	3	He			236475.68		

Quantitation Report

Data File Name	042_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 7:40:38 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

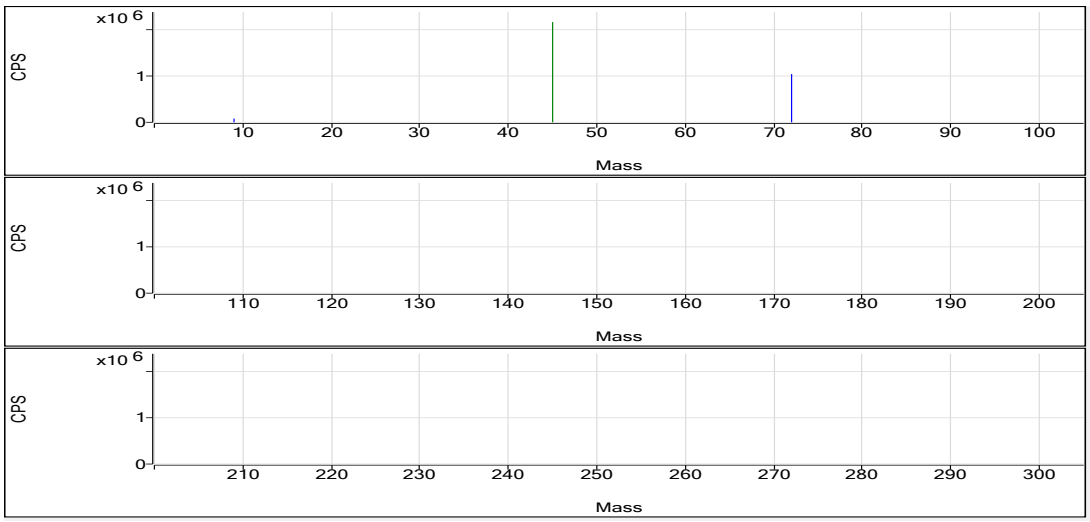
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.241	ppb	2.9	81307.65	0.0378	Pulse	0.5000	3
Se	78	72	H2	54.303	ppb	1.6	2405.54	0.0236	Pulse	1.5000	3
Na	23	45	He	5004.031	ppb	1.3	745224.96	19.5641	Pulse	0.1000	3
Mg	24	45	He	5158.696	ppb	2.0	366518.77	9.6231	Pulse	0.1000	3
Al	27	45	He	5066.201	ppb	2.5	111580.39	2.9296	Pulse	0.1000	3
K	39	45	He	5142.035	ppb	2.3	243465.17	6.3923	Pulse	0.1000	3
Ca	44	45	He	5009.990	ppb	1.9	12759.30	0.3348	Pulse	0.1000	3
Ti	47	45	He	5153.191	ppb	2.1	101980.05	2.6775	Pulse	0.1000	3
V	51	45	He	511.539	ppb	2.0	435518.14	11.4347	Pulse	0.5000	3
Cr	52	45	He	520.458	ppb	2.4	565419.26	14.8459	Pulse	0.1000	3
Mn	55	45	He	504.332	ppb	1.9	238060.49	6.2502	Pulse	0.1000	3
Fe	57	45	He	5050.577	ppb	1.6	109181.14	2.8663	Pulse	0.1000	3
Co	59	45	He	483.233	ppb	1.7	1069419.31	28.0767	Pulse	0.1000	3
Ni	60	72	He	526.416	ppb	2.1	299312.13	4.5665	Pulse	0.1000	3
Cu	63	72	He	495.820	ppb	1.8	849772.38	12.9646	Pulse	0.1000	3
Zn	66	72	He	519.306	ppb	2.0	97768.54	1.4916	Pulse	0.1000	3
As	75	72	He	517.280	ppb	1.5	70149.28	1.0702	Pulse	0.5000	3
Sr	88	115	He	51.155	ppb	0.8	28532.93	0.4586	Pulse	0.1000	3
Mo	98	115	He	52.377	ppb	1.1	76656.35	1.2320	Pulse	0.1000	3
Ag	107	115	He	52.952	ppb	1.1	164283.34	2.6404	Pulse	0.1000	3
Cd	111	115	He	51.357	ppb	1.2	17706.58	0.2846	Pulse	0.5000	3
Sn	120	115	He	51.388	ppb	1.8	53561.01	0.8609	Pulse	0.1000	3
Sb	121	115	He	50.550	ppb	1.8	48662.94	0.7822	Pulse	0.1000	3
Ba	137	115	He	503.630	ppb	0.3	156025.94	2.5075	Pulse	0.1000	3
Tl	205	159	He	50.777	ppb	0.4	385676.00	1.3225	Pulse	0.1000	3
Pb	208	159	He	50.999	ppb	0.2	520036.50	1.7832	Pulse	0.1000	3
U	238	209	He	50.051	ppb	0.4	586603.99	2.5142	Pulse	0.1000	3

ISTD Table:

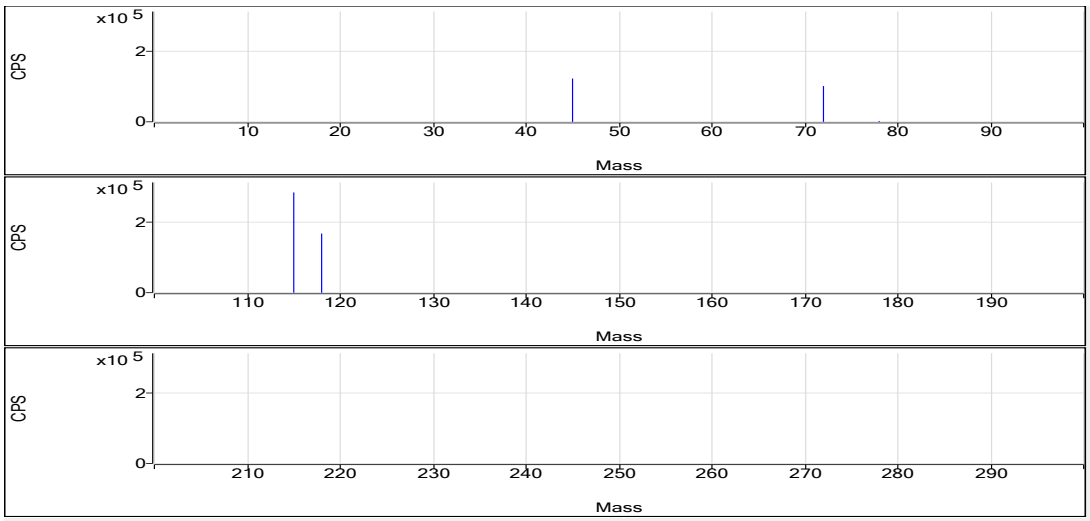
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2151757.36	2.6	105.8	Analog	0.1000	3
No Gas	Ge	72	1035576.47	0.6	103.0	Pulse	0.1000	3
H2	Sc	45	123196.14	1.6	93.3	Pulse	0.1000	3
H2	Ge	72	101807.90	0.2	91.3	Pulse	0.1000	3
H2	In	115	285166.94	0.7	97.1	Pulse	0.1000	3
He	Sc	45	38097.41	1.9	103.1	Pulse	0.1000	3
He	Ge	72	65560.63	2.0	101.6	Pulse	0.1000	3
He	In	115	62223.19	1.2	98.5	Pulse	0.1000	3
He	Tb	159	291630.97	0.2	99.6	Pulse	0.1000	3
He	Bi	209	233317.74	0.8	98.9	Pulse	0.1000	3

No Gas

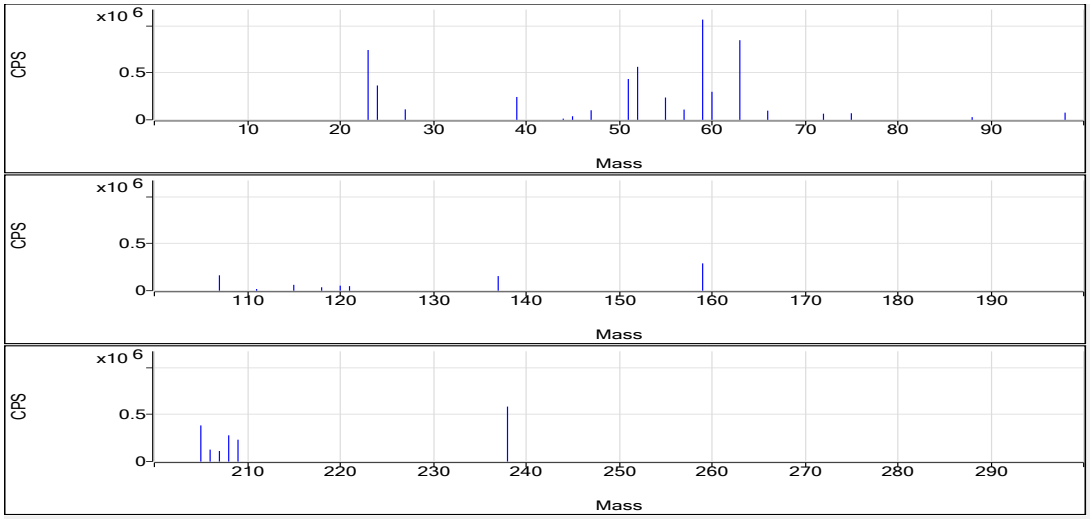


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.628	0.0389	81387.45	0.0008	2.195E-05
Be	9	1	No Gas	49.335	0.0379	81709.24	0.0008	2.195E-05
Be	9	1	No Gas	47.76	0.0367	80826.27	0.0008	2.195E-05
Se	78	2	H2	53.547	0.0233	2369.53	0.0004	1.386E-05
Se	78	2	H2	54.122	0.0235	2393.54	0.0004	1.386E-05
Se	78	2	H2	55.239	0.024	2453.55	0.0004	1.386E-05
Na	23	3	He	5058.247	19.7713	742792.49	0.0038	0.4416
Na	23	3	He	5019.644	19.6238	741391.16	0.0038	0.4416
Na	23	3	He	4934.204	19.2973	751491.24	0.0038	0.4416
Mg	24	3	He	5216.468	9.7308	365577.22	0.0019	0.005872
Mg	24	3	He	5222.147	9.7414	368030.50	0.0019	0.005872
Mg	24	3	He	5037.472	9.3971	365948.59	0.0019	0.005872
Al	27	3	He	5209.809	3.0126	113181.50	0.0006	0.0004496
Al	27	3	He	5026.72	2.9068	109817.89	0.0006	0.0004496
Al	27	3	He	4962.074	2.8694	111741.79	0.0006	0.0004496
K	39	3	He	5188.635	6.4462	242178.20	0.0012	0.4456
K	39	3	He	5231.692	6.496	245419.66	0.0012	0.4456
K	39	3	He	5005.779	6.2347	242797.65	0.0012	0.4456
Ca	44	3	He	4964.171	0.3318	12465.72	0.0001	0.003779
Ca	44	3	He	4948.146	0.3307	12495.73	0.0001	0.003779
Ca	44	3	He	5117.654	0.3419	13316.46	0.0001	0.003779
Ti	47	3	He	5207.571	2.7058	101654.27	0.0005	0
Ti	47	3	He	5223.146	2.7139	102530.97	0.0005	0
Ti	47	3	He	5028.857	2.6129	101754.90	0.0005	0
V	51	3	He	519.873	11.6205	436572.50	0.0223	0.03054
V	51	3	He	514.904	11.5097	434840.00	0.0223	0.03054
V	51	3	He	499.839	11.1739	435141.91	0.0223	0.03054
Cr	52	3	He	530.484	15.1312	568466.87	0.0285	0.03714
Cr	52	3	He	524.137	14.9506	564836.63	0.0285	0.03714
Cr	52	3	He	506.751	14.4559	562954.29	0.0285	0.03714
Mn	55	3	He	510.826	6.3307	237838.08	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	508.694	6.3043	238176.52	0.0124	0.004415
Mn	55	3	He	493.476	6.1158	238166.87	0.0124	0.004415
Fe	57	3	He	5046.61	2.8641	107600.20	0.0006	0.001356
Fe	57	3	He	5135.42	2.9144	110107.81	0.0006	0.001356
Fe	57	3	He	4969.702	2.8204	109835.41	0.0006	0.001356
Co	59	3	He	487.657	28.3337	1064475.06	0.0581	0.002697
Co	59	3	He	488.235	28.3673	1071722.25	0.0581	0.002697
Co	59	3	He	473.807	27.5291	1072060.61	0.0581	0.002697
Ni	60	3	He	528.874	4.5878	302530.97	0.0087	0.003928
Ni	60	3	He	535.8	4.6479	298039.74	0.0087	0.003928
Ni	60	3	He	514.576	4.4639	297365.68	0.0087	0.003928
Cu	63	3	He	490.209	12.818	845243.66	0.0261	0.006048
Cu	63	3	He	506.332	13.2393	848961.47	0.0261	0.006048
Cu	63	3	He	490.919	12.8365	855112.02	0.0261	0.006048
Zn	66	3	He	524.149	1.5054	99272.55	0.0029	0.003512
Zn	66	3	He	526.381	1.5118	96945.85	0.0029	0.003512
Zn	66	3	He	507.388	1.4574	97087.23	0.0029	0.003512
As	75	3	He	512.52	1.0603	69921.57	0.0021	0.0007233
As	75	3	He	526.149	1.0885	69800.80	0.0021	0.0007233
As	75	3	He	513.171	1.0617	70725.46	0.0021	0.0007233
Sr	88	3	He	51.123	0.4583	28900.43	0.009	0.0005796
Sr	88	3	He	50.784	0.4552	28148.87	0.009	0.0005796
Sr	88	3	He	51.558	0.4622	28549.48	0.009	0.0005796
Mo	98	3	He	52.263	1.2293	77524.63	0.0235	0.0003188
Mo	98	3	He	53.007	1.2468	77092.31	0.0235	0.0003188
Mo	98	3	He	51.86	1.2198	75352.11	0.0235	0.0003188
Ag	107	3	He	52.291	2.6075	164438.04	0.0499	0.0004754
Ag	107	3	He	53.323	2.659	164410.17	0.0499	0.0004754
Ag	107	3	He	53.242	2.6549	164001.81	0.0499	0.0004754
Cd	111	3	He	50.779	0.2814	17745.33	0.0055	1.07E-05
Cd	111	3	He	51.311	0.2843	17581.08	0.0055	1.07E-05
Cd	111	3	He	51.981	0.288	17793.32	0.0055	1.07E-05
Sn	120	3	He	50.434	0.8452	53303.38	0.0164	0.01713
Sn	120	3	He	52.25	0.875	54106.11	0.0164	0.01713
Sn	120	3	He	51.48	0.8624	53273.53	0.0164	0.01713
Sb	121	3	He	49.533	0.7664	48334.69	0.0155	0.0002641
Sb	121	3	He	51.149	0.7914	48937.05	0.0155	0.0002641
Sb	121	3	He	50.969	0.7886	48717.08	0.0155	0.0002641
Ba	137	3	He	503.952	2.5091	158234.69	0.005	0.0001577
Ba	137	3	He	502.121	2.5	154581.64	0.005	0.0001577
Ba	137	3	He	504.817	2.5134	155261.49	0.005	0.0001577
Tl	205	3	He	50.58	1.3174	384411.52	0.026	0.0002504
Tl	205	3	He	50.939	1.3267	386146.75	0.026	0.0002504
Tl	205	3	He	50.81	1.3233	386469.72	0.026	0.0002504
Pb	208	3	He	51.105	1.7869	282502.93	0.0349	0.001422
Pb	208	3	He	51.018	1.7839	279932.30	0.0349	0.001422
Pb	208	3	He	50.874	1.7788	277246.40	0.0349	0.001422
U	238	3	He	49.825	2.5029	589112.76	0.0502	5.657E-05
U	238	3	He	50.176	2.5205	586456.40	0.0502	5.657E-05
U	238	3	He	50.152	2.5193	584242.80	0.0502	5.657E-05
Sc	45	1	No Gas			2093863.25		
Sc	45	1	No Gas			2157186.69		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2204222.15		
Ge	72	1	No Gas			1028853.58		
Ge	72	1	No Gas			1041573.73		
Ge	72	1	No Gas			1036302.09		
Sc	45	2	H2			124076.02		
Sc	45	2	H2			120982.42		
Sc	45	2	H2			124529.97		
Ge	72	2	H2			101700.56		
Ge	72	2	H2			101640.17		
Ge	72	2	H2			102082.97		
In	115	2	H2			286779.96		
In	115	2	H2			285809.06		
In	115	2	H2			282911.81		
Sc	45	3	He			37569.20		
Sc	45	3	He			37780.21		
Sc	45	3	He			38942.83		
Ge	72	3	He			65942.12		
Ge	72	3	He			64124.11		
Ge	72	3	He			66615.67		
In	115	3	He			63345.19		
In	115	3	He			62119.26		
In	115	3	He			62059.03		
Tb	159	3	He			291800.58		
Tb	159	3	He			291052.34		
Tb	159	3	He			292039.98		
Bi	209	3	He			235373.20		
Bi	209	3	He			232674.29		
Bi	209	3	He			231905.72		

Quantitation Report

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Sample Type	CCB
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

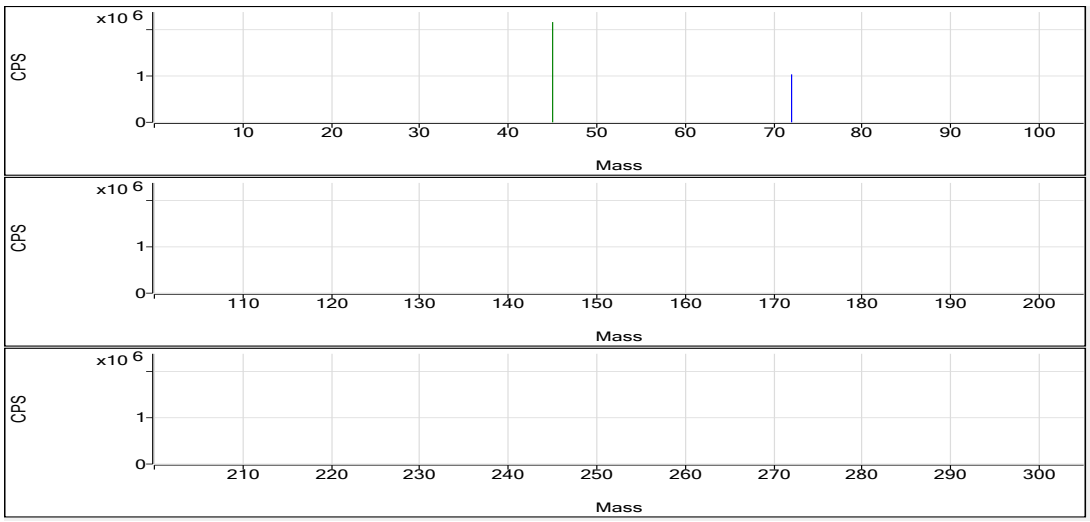
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.052	ppb	12.9	133.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.088	ppb	37.3	5.11	0.0001	Pulse	1.5000	3
Na	23	45	He	-11.585	ppb	N/A	15091.52	0.3973	Pulse	0.1000	3
Mg	24	45	He	1.280	ppb	42.5	313.35	0.0083	Pulse	0.1000	3
Al	27	45	He	2.259	ppb	30.7	66.67	0.0018	Pulse	0.1000	3
K	39	45	He	-17.356	ppb	N/A	16159.33	0.4255	Pulse	0.1000	3
Ca	44	45	He	-31.977	ppb	N/A	63.33	0.0017	Pulse	0.1000	3
Ti	47	45	He	1.861	ppb	68.4	36.67	0.0010	Pulse	0.1000	3
V	51	45	He	0.009	ppb	477.8	1167.39	0.0307	Pulse	0.5000	3
Cr	52	45	He	0.106	ppb	181.0	1526.79	0.0402	Pulse	0.1000	3
Mn	55	45	He	-0.016	ppb	N/A	160.01	0.0042	Pulse	0.1000	3
Fe	57	45	He	2.412	ppb	31.8	103.33	0.0027	Pulse	0.1000	3
Co	59	45	He	0.094	ppb	20.7	310.01	0.0082	Pulse	0.1000	3
Ni	60	72	He	0.083	ppb	138.0	296.68	0.0046	Pulse	0.1000	3
Cu	63	72	He	0.062	ppb	57.5	490.03	0.0077	Pulse	0.1000	3
Zn	66	72	He	0.233	ppb	48.9	266.68	0.0042	Pulse	0.1000	3
As	75	72	He	0.161	ppb	55.5	67.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.066	ppb	57.2	73.33	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.072	ppb	57.3	126.67	0.0020	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	89.4	70.00	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.015	ppb	38.2	6.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.035	ppb	190.8	1113.42	0.0177	Pulse	0.1000	3
Sb	121	115	He	0.024	ppb	86.4	40.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.128	ppb	49.8	50.00	0.0008	Pulse	0.1000	3
Tl	205	159	He	0.071	ppb	8.8	596.70	0.0021	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	38.7	520.02	0.0018	Pulse	0.1000	3
U	238	209	He	0.041	ppb	15.0	493.36	0.0021	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2156430.28	1.6	106.1	Analog	0.1000	3
No Gas	Ge	72	1031588.99	1.5	102.6	Pulse	0.1000	3
H2	Sc	45	121551.33	0.5	92.0	Pulse	0.1000	3
H2	Ge	72	98487.94	0.9	88.3	Pulse	0.1000	3
H2	In	115	284523.04	1.2	96.9	Pulse	0.1000	3
He	Sc	45	37980.35	1.2	102.8	Pulse	0.1000	3
He	Ge	72	63809.21	0.1	98.8	Pulse	0.1000	3
He	In	115	62880.45	0.7	99.5	Pulse	0.1000	3
He	Tb	159	285830.31	0.5	97.6	Pulse	0.1000	3
He	Bi	209	231235.44	0.1	98.1	Pulse	0.1000	3

No Gas



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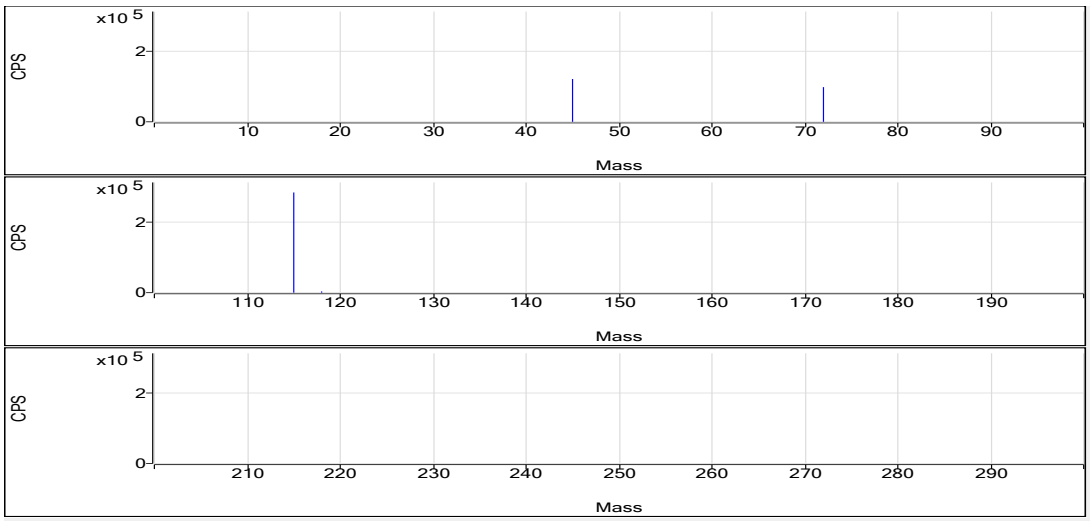
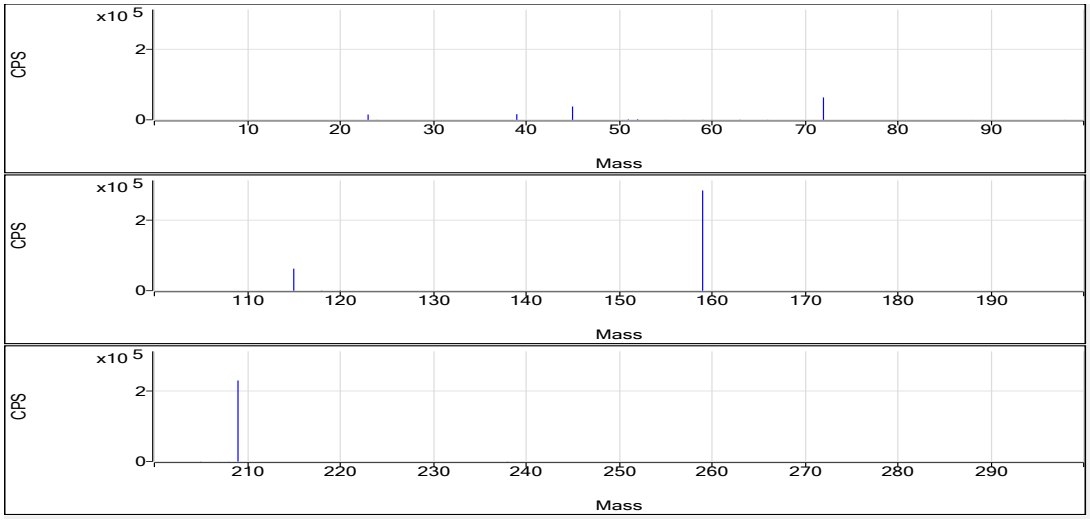


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.059	0.0001	142.00	0.0008	2.195E-05
Be	9	1	No Gas	0.052	0.0001	134.00	0.0008	2.195E-05
Be	9	1	No Gas	0.045	0.0001	124.00	0.0008	2.195E-05
Se	78	2	H2	0.124	0.0001	6.67	0.0004	1.386E-05
Se	78	2	H2	0.076	0	4.67	0.0004	1.386E-05
Se	78	2	H2	0.062	0	4.00	0.0004	1.386E-05
Na	23	3	He	-11.188	0.3989	15288.43	0.0038	0.4416
Na	23	3	He	-11.478	0.3977	15178.20	0.0038	0.4416
Na	23	3	He	-12.088	0.3954	14807.92	0.0038	0.4416
Mg	24	3	He	1.189	0.0081	310.02	0.0019	0.005872
Mg	24	3	He	0.786	0.0073	280.01	0.0019	0.005872
Mg	24	3	He	1.864	0.0093	350.02	0.0019	0.005872
Al	27	3	He	2.832	0.0021	80.00	0.0006	0.0004496
Al	27	3	He	1.489	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	2.455	0.0019	70.00	0.0006	0.0004496
K	39	3	He	-29.605	0.4114	15768.76	0.0012	0.4456
K	39	3	He	-13.493	0.43	16409.63	0.0012	0.4456
K	39	3	He	-8.97	0.4352	16299.60	0.0012	0.4456
Ca	44	3	He	-33.495	0.0016	60.00	0.0001	0.003779
Ca	44	3	He	-25.457	0.0021	80.00	0.0001	0.003779
Ca	44	3	He	-36.978	0.0013	50.00	0.0001	0.003779
Ti	47	3	He	0.502	0.0003	10.00	0.0005	0
Ti	47	3	He	3.026	0.0016	60.00	0.0005	0
Ti	47	3	He	2.056	0.0011	40.00	0.0005	0
V	51	3	He	0.048	0.0316	1212.06	0.0223	0.03054
V	51	3	He	-0.035	0.0298	1136.05	0.0223	0.03054
V	51	3	He	0.012	0.0308	1154.05	0.0223	0.03054
Cr	52	3	He	0.245	0.0441	1690.15	0.0285	0.03714
Cr	52	3	He	0.187	0.0425	1620.13	0.0285	0.03714
Cr	52	3	He	-0.113	0.0339	1270.09	0.0285	0.03714
Mn	55	3	He	0.002	0.0044	170.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.081	0.0034	130.00	0.0124	0.004415
Mn	55	3	He	0.032	0.0048	180.01	0.0124	0.004415
Fe	57	3	He	2.209	0.0026	100.00	0.0006	0.001356
Fe	57	3	He	1.767	0.0024	90.00	0.0006	0.001356
Fe	57	3	He	3.259	0.0032	120.00	0.0006	0.001356
Co	59	3	He	0.097	0.0083	320.01	0.0581	0.002697
Co	59	3	He	0.111	0.0092	350.02	0.0581	0.002697
Co	59	3	He	0.073	0.0069	260.01	0.0581	0.002697
Ni	60	3	He	0.017	0.0041	260.01	0.0087	0.003928
Ni	60	3	He	0.216	0.0058	370.02	0.0087	0.003928
Ni	60	3	He	0.017	0.0041	260.01	0.0087	0.003928
Cu	63	3	He	0.027	0.0067	430.02	0.0261	0.006048
Cu	63	3	He	0.098	0.0086	550.04	0.0261	0.006048
Cu	63	3	He	0.062	0.0077	490.03	0.0261	0.006048
Zn	66	3	He	0.198	0.0041	260.01	0.0029	0.003512
Zn	66	3	He	0.36	0.0045	290.01	0.0029	0.003512
Zn	66	3	He	0.141	0.0039	250.01	0.0029	0.003512
As	75	3	He	0.196	0.0011	72.00	0.0021	0.0007233
As	75	3	He	0.226	0.0012	76.00	0.0021	0.0007233
As	75	3	He	0.059	0.0008	54.00	0.0021	0.0007233
Sr	88	3	He	0.024	0.0008	50.00	0.009	0.0005796
Sr	88	3	He	0.096	0.0014	90.00	0.009	0.0005796
Sr	88	3	He	0.077	0.0013	80.00	0.009	0.0005796
Mo	98	3	He	0.034	0.0011	70.00	0.0235	0.0003188
Mo	98	3	He	0.116	0.003	190.01	0.0235	0.0003188
Mo	98	3	He	0.067	0.0019	120.00	0.0235	0.0003188
Ag	107	3	He	0.022	0.0016	100.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.016	0.0013	80.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	0.048	0.0179	1130.08	0.0164	0.01713
Sn	120	3	He	-0.037	0.0165	1030.08	0.0164	0.01713
Sn	120	3	He	0.094	0.0187	1180.09	0.0164	0.01713
Sb	121	3	He	0.003	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	0.045	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.024	0.0006	40.00	0.0155	0.0002641
Ba	137	3	He	0.191	0.0011	70.00	0.005	0.0001577
Ba	137	3	He	0.129	0.0008	50.00	0.005	0.0001577
Ba	137	3	He	0.064	0.0005	30.00	0.005	0.0001577
Tl	205	3	He	0.071	0.0021	600.03	0.026	0.0002504
Tl	205	3	He	0.076	0.0022	640.04	0.026	0.0002504
Tl	205	3	He	0.064	0.0019	550.03	0.026	0.0002504
Pb	208	3	He	0.014	0.0019	320.02	0.0349	0.001422
Pb	208	3	He	0.006	0.0016	280.01	0.0349	0.001422
Pb	208	3	He	0.014	0.0019	330.02	0.0349	0.001422
U	238	3	He	0.044	0.0023	530.03	0.0502	5.657E-05
U	238	3	He	0.034	0.0018	410.03	0.0502	5.657E-05
U	238	3	He	0.045	0.0023	540.03	0.0502	5.657E-05
Sc	45	1	No Gas			2119138.25		
Sc	45	1	No Gas			2164617.47		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2185535.12		
Ge	72	1	No Gas			1013901.16		
Ge	72	1	No Gas			1036766.23		
Ge	72	1	No Gas			1044099.59		
Sc	45	2	H2			120919.26		
Sc	45	2	H2			121615.68		
Sc	45	2	H2			122119.05		
Ge	72	2	H2			98176.19		
Ge	72	2	H2			99524.55		
Ge	72	2	H2			97763.09		
In	115	2	H2			284873.14		
In	115	2	H2			287770.52		
In	115	2	H2			280925.45		
Sc	45	3	He			38331.22		
Sc	45	3	He			38160.62		
Sc	45	3	He			37449.21		
Ge	72	3	He			63762.51		
Ge	72	3	He			63812.28		
Ge	72	3	He			63852.84		
In	115	3	He			63083.86		
In	115	3	He			62370.28		
In	115	3	He			63204.68		
Tb	159	3	He			284374.19		
Tb	159	3	He			286173.61		
Tb	159	3	He			286943.12		
Bi	209	3	He			231373.88		
Bi	209	3	He			230925.70		
Bi	209	3	He			231406.73		

Quantitation Report

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Sample Type	Sample
Comment	G3
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

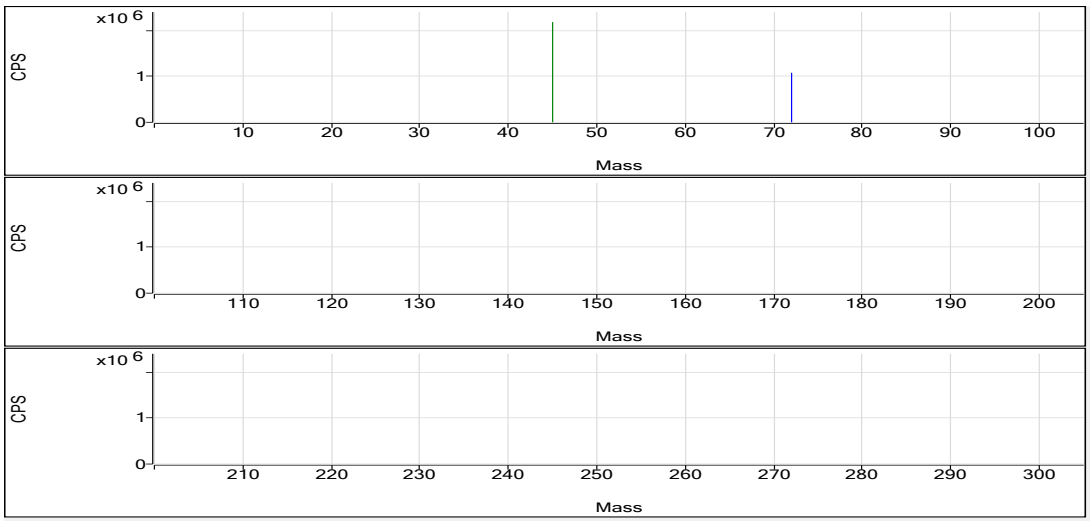
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.010	ppb	29.5	65.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.098	ppb	62.7	6.22	0.0001	Pulse	1.5000	3
Na	23	45	He	2152.381	ppb	2.3	324166.74	8.6668	Pulse	0.1000	3
Mg	24	45	He	11263.278	ppb	1.9	785696.40	21.0036	Pulse	0.1000	3
Al	27	45	He	16.645	ppb	12.9	376.69	0.0101	Pulse	0.1000	3
K	39	45	He	8662.833	ppb	1.8	391409.92	10.4640	Pulse	0.1000	3
Ca	44	45	He	121648.707	ppb	2.3	300801.09	8.0422	Pulse	0.1000	3
Ti	47	45	He	0.684	ppb	42.2	13.33	0.0004	Pulse	0.1000	3
V	51	45	He	-0.151	ppb	N/A	1016.71	0.0272	Pulse	0.5000	3
Cr	52	45	He	0.139	ppb	129.6	1536.80	0.0411	Pulse	0.1000	3
Mn	55	45	He	2.581	ppb	11.4	1360.11	0.0364	Pulse	0.1000	3
Fe	57	45	He	10.620	ppb	40.1	276.68	0.0074	Pulse	0.1000	3
Co	59	45	He	0.159	ppb	18.9	446.69	0.0119	Pulse	0.1000	3
Ni	60	72	He	1.660	ppb	5.7	1250.10	0.0183	Pulse	0.1000	3
Cu	63	72	He	12.326	ppb	1.1	22408.07	0.3282	Pulse	0.1000	3
Zn	66	72	He	5.147	ppb	11.8	1246.76	0.0183	Pulse	0.1000	3
As	75	72	He	0.099	ppb	96.2	63.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	270.271	ppb	1.7	151107.21	2.4203	Pulse	0.1000	3
Mo	98	115	He	0.084	ppb	31.5	143.34	0.0023	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	83.3	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.073	ppb	14.2	26.00	0.0004	Pulse	0.5000	3
Sn	120	115	He	-0.028	ppb	N/A	1040.08	0.0167	Pulse	0.1000	3
Sb	121	115	He	0.024	ppb	42.6	40.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	23.860	ppb	4.7	7428.92	0.1189	Pulse	0.1000	3
Tl	205	159	He	0.031	ppb	9.2	310.02	0.0011	Pulse	0.1000	3
Pb	208	159	He	0.057	ppb	16.1	993.39	0.0034	Pulse	0.1000	3
U	238	209	He	0.424	ppb	9.6	5041.16	0.0214	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2182582.67	0.2	107.4	Analog	0.1000	3
No Gas	Ge	72	1077704.91	0.2	107.2	Pulse	0.1000	3
H2	Sc	45	126708.33	0.5	95.9	Pulse	0.1000	3
H2	Ge	72	109578.16	1.1	98.2	Pulse	0.1000	3
H2	In	115	290251.64	0.5	98.8	Pulse	0.1000	3
He	Sc	45	37412.21	1.6	101.2	Pulse	0.1000	3
He	Ge	72	68276.98	0.8	105.8	Pulse	0.1000	3
He	In	115	62442.90	1.3	98.8	Pulse	0.1000	3
He	Tb	159	292192.22	0.6	99.8	Pulse	0.1000	3
He	Bi	209	236188.27	0.9	100.2	Pulse	0.1000	3

No Gas



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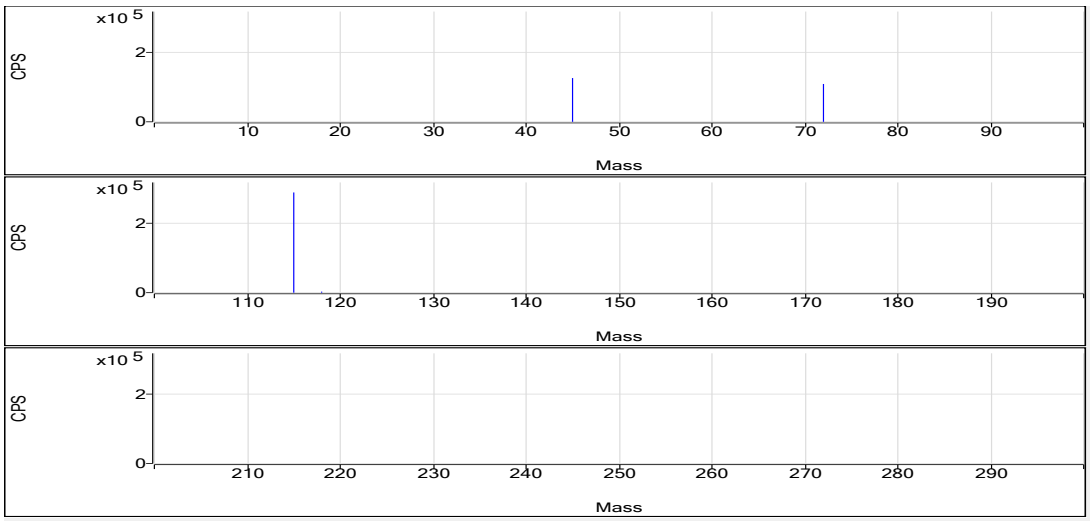
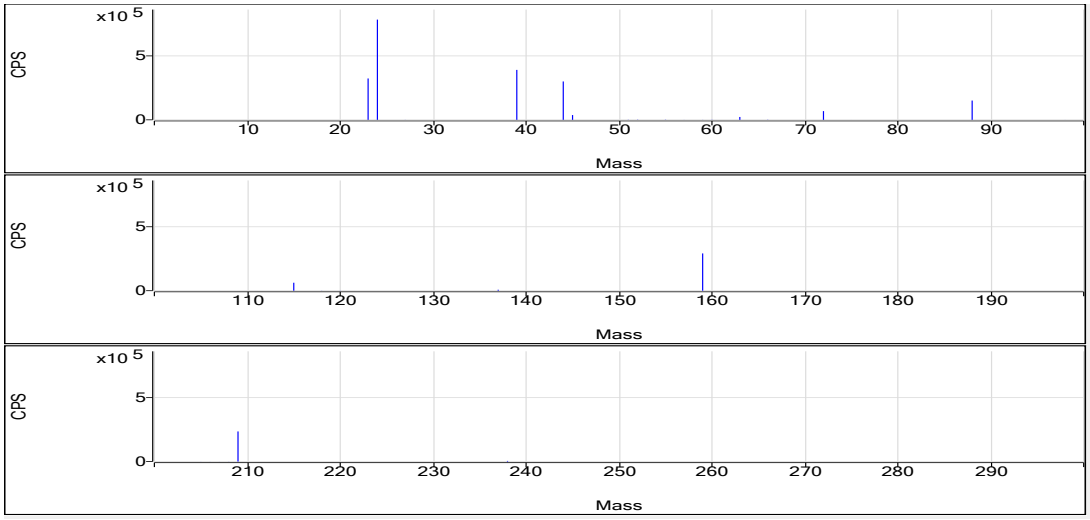


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0	66.00	0.0008	2.195E-05
Be	9	1	No Gas	0.007	0	60.00	0.0008	2.195E-05
Be	9	1	No Gas	0.013	0	70.00	0.0008	2.195E-05
Se	78	2	H2	0.094	0.0001	6.00	0.0004	1.386E-05
Se	78	2	H2	0.039	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.162	0.0001	9.33	0.0004	1.386E-05
Na	23	3	He	2113.586	8.5185	322424.29	0.0038	0.4416
Na	23	3	He	2207.054	8.8757	325800.33	0.0038	0.4416
Na	23	3	He	2136.503	8.6061	324275.60	0.0038	0.4416
Mg	24	3	He	11325.663	21.1199	799386.24	0.0019	0.005872
Mg	24	3	He	11433.546	21.3211	782633.04	0.0019	0.005872
Mg	24	3	He	11030.623	20.5699	775069.91	0.0019	0.005872
Al	27	3	He	14.303	0.0087	330.02	0.0006	0.0004496
Al	27	3	He	17.128	0.0104	380.02	0.0006	0.0004496
Al	27	3	He	18.502	0.0111	420.02	0.0006	0.0004496
K	39	3	He	8581.072	10.3695	392483.24	0.0012	0.4456
K	39	3	He	8843.178	10.6726	391759.64	0.0012	0.4456
K	39	3	He	8564.248	10.35	389986.87	0.0012	0.4456
Ca	44	3	He	119331.772	7.8891	298601.91	0.0001	0.003779
Ca	44	3	He	124804.103	8.2507	302859.74	0.0001	0.003779
Ca	44	3	He	120810.246	7.9868	300941.62	0.0001	0.003779
Ti	47	3	He	1.017	0.0005	20.00	0.0005	0
Ti	47	3	He	0.524	0.0003	10.00	0.0005	0
Ti	47	3	He	0.511	0.0003	10.00	0.0005	0
V	51	3	He	-0.133	0.0276	1044.05	0.0223	0.03054
V	51	3	He	-0.126	0.0277	1018.04	0.0223	0.03054
V	51	3	He	-0.194	0.0262	988.04	0.0223	0.03054
Cr	52	3	He	-0.061	0.0354	1340.11	0.0285	0.03714
Cr	52	3	He	0.189	0.0425	1560.13	0.0285	0.03714
Cr	52	3	He	0.29	0.0454	1710.17	0.0285	0.03714
Mn	55	3	He	2.246	0.0322	1220.10	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2.701	0.0379	1390.11	0.0124	0.004415
Mn	55	3	He	2.794	0.039	1470.11	0.0124	0.004415
Fe	57	3	He	9.254	0.0066	250.01	0.0006	0.001356
Fe	57	3	He	7.215	0.0054	200.01	0.0006	0.001356
Fe	57	3	He	15.389	0.0101	380.02	0.0006	0.001356
Co	59	3	He	0.154	0.0116	440.02	0.0581	0.002697
Co	59	3	He	0.132	0.0104	380.02	0.0581	0.002697
Co	59	3	He	0.191	0.0138	520.03	0.0581	0.002697
Ni	60	3	He	1.679	0.0185	1260.10	0.0087	0.003928
Ni	60	3	He	1.742	0.019	1290.11	0.0087	0.003928
Ni	60	3	He	1.558	0.0174	1200.10	0.0087	0.003928
Cu	63	3	He	12.188	0.3246	22127.63	0.0261	0.006048
Cu	63	3	He	12.448	0.3314	22468.21	0.0261	0.006048
Cu	63	3	He	12.343	0.3286	22628.37	0.0261	0.006048
Zn	66	3	He	5.839	0.0202	1380.11	0.0029	0.003512
Zn	66	3	He	4.694	0.017	1150.08	0.0029	0.003512
Zn	66	3	He	4.907	0.0176	1210.09	0.0029	0.003512
As	75	3	He	0.104	0.0009	64.00	0.0021	0.0007233
As	75	3	He	0.192	0.0011	76.00	0.0021	0.0007233
As	75	3	He	0.001	0.0007	50.00	0.0021	0.0007233
Sr	88	3	He	266.965	2.3907	150058.94	0.009	0.0005796
Sr	88	3	He	268.39	2.4034	151555.71	0.009	0.0005796
Sr	88	3	He	275.459	2.4667	151706.97	0.009	0.0005796
Mo	98	3	He	0.088	0.0024	150.01	0.0235	0.0003188
Mo	98	3	He	0.108	0.0029	180.01	0.0235	0.0003188
Mo	98	3	He	0.056	0.0016	100.00	0.0235	0.0003188
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.061	0.0004	22.00	0.0055	1.07E-05
Cd	111	3	He	0.078	0.0004	28.00	0.0055	1.07E-05
Cd	111	3	He	0.08	0.0005	28.00	0.0055	1.07E-05
Sn	120	3	He	-0.044	0.0164	1030.08	0.0164	0.01713
Sn	120	3	He	-0.087	0.0157	990.07	0.0164	0.01713
Sn	120	3	He	0.046	0.0179	1100.09	0.0164	0.01713
Sb	121	3	He	0.034	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.014	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.025	0.0007	40.00	0.0155	0.0002641
Ba	137	3	He	25.129	0.1253	7862.53	0.005	0.0001577
Ba	137	3	He	23.419	0.1168	7362.18	0.005	0.0001577
Ba	137	3	He	23.033	0.1148	7062.06	0.005	0.0001577
Tl	205	3	He	0.028	0.001	290.01	0.026	0.0002504
Tl	205	3	He	0.034	0.0011	330.02	0.026	0.0002504
Tl	205	3	He	0.031	0.0011	310.02	0.026	0.0002504
Pb	208	3	He	0.061	0.0035	550.04	0.0349	0.001422
Pb	208	3	He	0.046	0.003	500.03	0.0349	0.001422
Pb	208	3	He	0.063	0.0036	550.03	0.0349	0.001422
U	238	3	He	0.412	0.0208	4941.11	0.0502	5.657E-05
U	238	3	He	0.39	0.0197	4650.99	0.0502	5.657E-05
U	238	3	He	0.469	0.0236	5531.37	0.0502	5.657E-05
Sc	45	1	No Gas			2179958.87		
Sc	45	1	No Gas			2187169.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2180620.12		
Ge	72	1	No Gas			1076554.20		
Ge	72	1	No Gas			1079996.08		
Ge	72	1	No Gas			1076564.44		
Sc	45	2	H2			126728.98		
Sc	45	2	H2			127323.67		
Sc	45	2	H2			126072.34		
Ge	72	2	H2			109456.97		
Ge	72	2	H2			108459.89		
Ge	72	2	H2			110817.63		
In	115	2	H2			289025.31		
In	115	2	H2			289977.44		
In	115	2	H2			291752.18		
Sc	45	3	He			37849.82		
Sc	45	3	He			36707.02		
Sc	45	3	He			37679.78		
Ge	72	3	He			68173.28		
Ge	72	3	He			67801.01		
Ge	72	3	He			68856.66		
In	115	3	He			62772.95		
In	115	3	He			63063.62		
In	115	3	He			61506.24		
Tb	159	3	He			293400.50		
Tb	159	3	He			290063.12		
Tb	159	3	He			293113.04		
Bi	209	3	He			238064.51		
Bi	209	3	He			236461.25		
Bi	209	3	He			234039.06		

Quantitation Report

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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

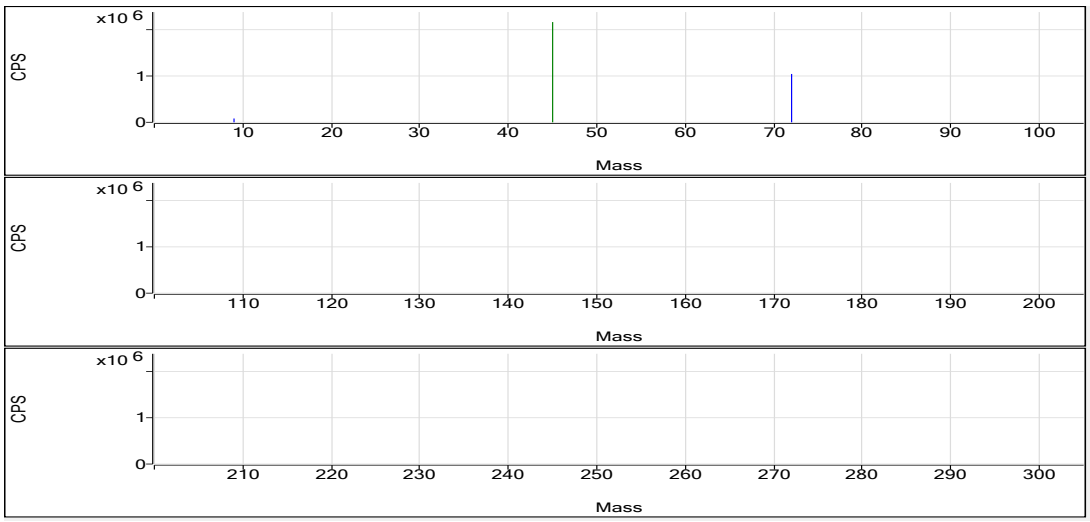
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.372	ppb	0.7	81731.29	0.0379	Pulse	0.5000	3
Se	78	72	H2	53.864	ppb	0.9	2407.32	0.0234	Pulse	1.5000	3
Na	23	45	He	5095.691	ppb	0.3	742108.84	19.9144	Pulse	0.1000	3
Mg	24	45	He	5242.420	ppb	1.0	364414.67	9.7792	Pulse	0.1000	3
Al	27	45	He	5124.926	ppb	1.0	110435.09	2.9635	Pulse	0.1000	3
K	39	45	He	5195.164	ppb	0.4	240496.67	6.4537	Pulse	0.1000	3
Ca	44	45	He	5208.089	ppb	1.6	12966.18	0.3479	Pulse	0.1000	3
Ti	47	45	He	5227.980	ppb	0.5	101227.63	2.7164	Pulse	0.1000	3
V	51	45	He	516.392	ppb	0.9	430134.48	11.5429	Pulse	0.5000	3
Cr	52	45	He	524.439	ppb	1.5	557427.67	14.9592	Pulse	0.1000	3
Mn	55	45	He	509.733	ppb	1.2	235402.78	6.3171	Pulse	0.1000	3
Fe	57	45	He	5125.718	ppb	1.1	108398.28	2.9089	Pulse	0.1000	3
Co	59	45	He	491.400	ppb	1.4	1063912.35	28.5511	Pulse	0.1000	3
Ni	60	72	He	531.805	ppb	1.5	297205.91	4.6132	Pulse	0.1000	3
Cu	63	72	He	499.647	ppb	0.9	841711.50	13.0646	Pulse	0.1000	3
Zn	66	72	He	525.113	ppb	0.3	97170.87	1.5082	Pulse	0.1000	3
As	75	72	He	521.620	ppb	1.4	69524.35	1.0792	Pulse	0.5000	3
Sr	88	115	He	50.642	ppb	0.9	28225.65	0.4540	Pulse	0.1000	3
Mo	98	115	He	51.590	ppb	1.6	75452.44	1.2135	Pulse	0.1000	3
Ag	107	115	He	52.549	ppb	0.9	162923.99	2.6204	Pulse	0.1000	3
Cd	111	115	He	50.974	ppb	1.0	17562.40	0.2825	Pulse	0.5000	3
Sn	120	115	He	50.192	ppb	0.6	52306.38	0.8412	Pulse	0.1000	3
Sb	121	115	He	49.874	ppb	1.3	47983.89	0.7717	Pulse	0.1000	3
Ba	137	115	He	508.689	ppb	1.3	157470.62	2.5327	Pulse	0.1000	3
Tl	205	159	He	50.936	ppb	0.4	383717.91	1.3266	Pulse	0.1000	3
Pb	208	159	He	50.768	ppb	0.3	513431.20	1.7751	Pulse	0.1000	3
U	238	209	He	50.182	ppb	1.0	584033.37	2.5208	Pulse	0.1000	3

ISTD Table:

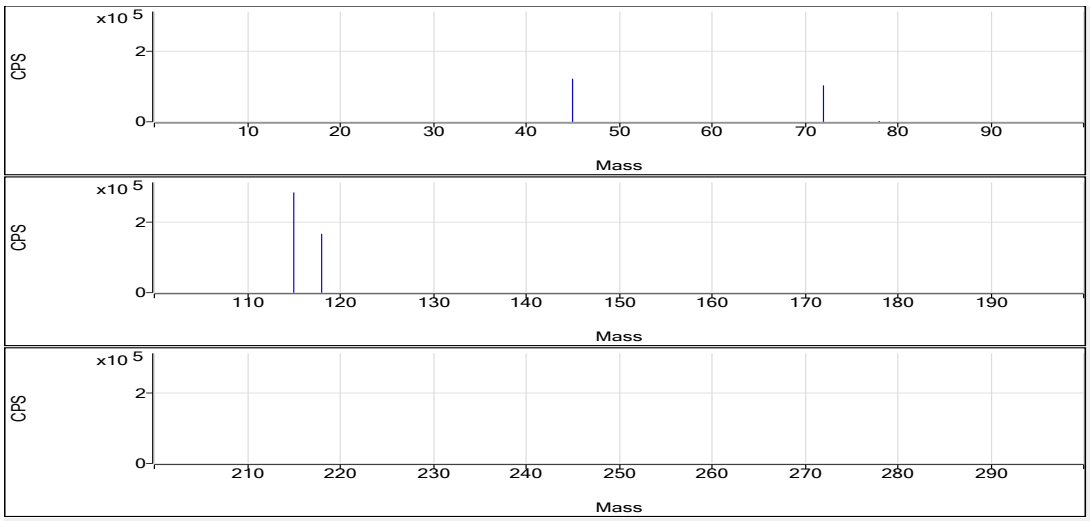
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2156218.46	0.7	106.1	Analog	0.1000	3
No Gas	Ge	72	1039783.24	0.5	103.4	Pulse	0.1000	3
H2	Sc	45	121370.66	0.7	91.9	Pulse	0.1000	3
H2	Ge	72	102721.02	1.4	92.1	Pulse	0.1000	3
H2	In	115	282304.60	0.8	96.1	Pulse	0.1000	3
He	Sc	45	37265.23	0.5	100.8	Pulse	0.1000	3
He	Ge	72	64428.66	0.7	99.8	Pulse	0.1000	3
He	In	115	62177.11	0.4	98.4	Pulse	0.1000	3
He	Tb	159	289236.89	0.6	98.8	Pulse	0.1000	3
He	Bi	209	231702.55	1.5	98.3	Pulse	0.1000	3

No Gas

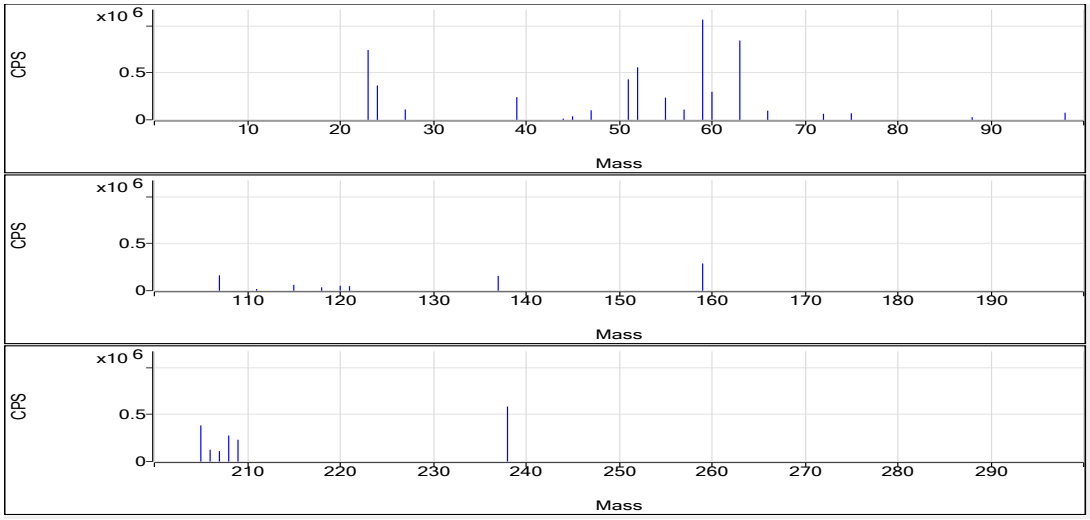


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.996	0.0376	81745.29	0.0008	2.195E-05
Be	9	1	No Gas	49.62	0.0381	81675.14	0.0008	2.195E-05
Be	9	1	No Gas	49.501	0.038	81773.45	0.0008	2.195E-05
Se	78	2	H2	54.351	0.0236	2392.20	0.0004	1.386E-05
Se	78	2	H2	53.402	0.0232	2394.21	0.0004	1.386E-05
Se	78	2	H2	53.84	0.0234	2435.55	0.0004	1.386E-05
Na	23	3	He	5095.95	19.9154	745017.25	0.0038	0.4416
Na	23	3	He	5080.372	19.8559	741595.07	0.0038	0.4416
Na	23	3	He	5110.75	19.972	739714.21	0.0038	0.4416
Mg	24	3	He	5261.359	9.8145	367150.15	0.0019	0.005872
Mg	24	3	He	5180.468	9.6637	360927.06	0.0019	0.005872
Mg	24	3	He	5285.434	9.8593	365166.79	0.0019	0.005872
Al	27	3	He	5150.128	2.9781	111408.38	0.0006	0.0004496
Al	27	3	He	5065.148	2.929	109394.05	0.0006	0.0004496
Al	27	3	He	5159.501	2.9835	110502.83	0.0006	0.0004496
K	39	3	He	5178.107	6.434	240690.74	0.0012	0.4456
K	39	3	He	5186.928	6.4442	240684.49	0.0012	0.4456
K	39	3	He	5220.457	6.483	240114.78	0.0012	0.4456
Ca	44	3	He	5232.665	0.3495	13076.31	0.0001	0.003779
Ca	44	3	He	5277.674	0.3525	13166.35	0.0001	0.003779
Ca	44	3	He	5113.929	0.3417	12655.87	0.0001	0.003779
Ti	47	3	He	5215.352	2.7098	101372.35	0.0005	0
Ti	47	3	He	5255.39	2.7306	101986.23	0.0005	0
Ti	47	3	He	5213.198	2.7087	100324.30	0.0005	0
V	51	3	He	512.915	11.4654	428909.25	0.0223	0.03054
V	51	3	He	514.471	11.5001	429514.75	0.0223	0.03054
V	51	3	He	521.791	11.6633	431979.44	0.0223	0.03054
Cr	52	3	He	520.454	14.8458	555368.39	0.0285	0.03714
Cr	52	3	He	519.112	14.8076	553048.51	0.0285	0.03714
Cr	52	3	He	533.751	15.2241	563866.12	0.0285	0.03714
Mn	55	3	He	502.487	6.2274	232961.60	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	513.204	6.3601	237543.69	0.0124	0.004415
Mn	55	3	He	513.507	6.3639	235703.04	0.0124	0.004415
Fe	57	3	He	5066.667	2.8754	107567.30	0.0006	0.001356
Fe	57	3	He	5135.824	2.9147	108859.41	0.0006	0.001356
Fe	57	3	He	5174.662	2.9367	108768.14	0.0006	0.001356
Co	59	3	He	485.406	28.2029	1055047.17	0.0581	0.002697
Co	59	3	He	489.844	28.4607	1062978.27	0.0581	0.002697
Co	59	3	He	498.949	28.9897	1073711.62	0.0581	0.002697
Ni	60	3	He	531.124	4.6073	295674.33	0.0087	0.003928
Ni	60	3	He	540.104	4.6852	300475.66	0.0087	0.003928
Ni	60	3	He	524.188	4.5472	295467.75	0.0087	0.003928
Cu	63	3	He	498.022	13.0221	835692.49	0.0261	0.006048
Cu	63	3	He	504.476	13.1908	845973.97	0.0261	0.006048
Cu	63	3	He	496.443	12.9809	843468.03	0.0261	0.006048
Zn	66	3	He	525.035	1.508	96774.75	0.0029	0.003512
Zn	66	3	He	526.744	1.5129	97026.64	0.0029	0.003512
Zn	66	3	He	523.561	1.5038	97711.22	0.0029	0.003512
As	75	3	He	526.674	1.0896	69925.55	0.0021	0.0007233
As	75	3	He	524.848	1.0858	69638.41	0.0021	0.0007233
As	75	3	He	513.339	1.062	69009.08	0.0021	0.0007233
Sr	88	3	He	50.924	0.4565	28429.33	0.009	0.0005796
Sr	88	3	He	50.911	0.4564	28239.13	0.009	0.0005796
Sr	88	3	He	50.09	0.449	28008.49	0.009	0.0005796
Mo	98	3	He	51.068	1.2012	74809.18	0.0235	0.0003188
Mo	98	3	He	51.157	1.2033	74456.82	0.0235	0.0003188
Mo	98	3	He	52.544	1.2359	77091.31	0.0235	0.0003188
Ag	107	3	He	52.028	2.5944	161573.00	0.0499	0.0004754
Ag	107	3	He	52.868	2.6363	163124.01	0.0499	0.0004754
Ag	107	3	He	52.751	2.6304	164074.96	0.0499	0.0004754
Cd	111	3	He	51.048	0.2829	17617.15	0.0055	1.07E-05
Cd	111	3	He	51.455	0.2851	17643.15	0.0055	1.07E-05
Cd	111	3	He	50.418	0.2794	17426.90	0.0055	1.07E-05
Sn	120	3	He	49.886	0.8362	52079.13	0.0164	0.01713
Sn	120	3	He	50.226	0.8418	52088.59	0.0164	0.01713
Sn	120	3	He	50.463	0.8457	52751.43	0.0164	0.01713
Sb	121	3	He	49.439	0.765	47642.30	0.0155	0.0002641
Sb	121	3	He	49.551	0.7667	47442.23	0.0155	0.0002641
Sb	121	3	He	50.631	0.7834	48867.13	0.0155	0.0002641
Ba	137	3	He	509.789	2.5382	158073.21	0.005	0.0001577
Ba	137	3	He	514.908	2.5637	158631.26	0.005	0.0001577
Ba	137	3	He	501.372	2.4963	155707.39	0.005	0.0001577
Tl	205	3	He	50.736	1.3214	379721.75	0.026	0.0002504
Tl	205	3	He	51.1	1.3309	386628.31	0.026	0.0002504
Tl	205	3	He	50.972	1.3276	384803.67	0.026	0.0002504
Pb	208	3	He	50.854	1.7781	276214.16	0.0349	0.001422
Pb	208	3	He	50.596	1.7691	276387.75	0.0349	0.001422
Pb	208	3	He	50.855	1.7782	276948.59	0.0349	0.001422
U	238	3	He	50.38	2.5308	578441.94	0.0502	5.657E-05
U	238	3	He	50.535	2.5386	587096.51	0.0502	5.657E-05
U	238	3	He	49.631	2.4931	586561.67	0.0502	5.657E-05
Sc	45	1	No Gas			2173059.81		
Sc	45	1	No Gas			2143920.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2151675.28		
Ge	72	1	No Gas			1037030.22		
Ge	72	1	No Gas			1036835.38		
Ge	72	1	No Gas			1045484.13		
Sc	45	2	H2			120335.11		
Sc	45	2	H2			122029.67		
Sc	45	2	H2			121747.19		
Ge	72	2	H2			101156.59		
Ge	72	2	H2			103039.79		
Ge	72	2	H2			103966.67		
In	115	2	H2			282544.72		
In	115	2	H2			284453.88		
In	115	2	H2			279915.19		
Sc	45	3	He			37409.11		
Sc	45	3	He			37348.92		
Sc	45	3	He			37037.65		
Ge	72	3	He			64174.74		
Ge	72	3	He			64133.50		
Ge	72	3	He			64977.74		
In	115	3	He			62551.76		
In	115	3	He			62149.89		
In	115	3	He			62651.45		
Tb	159	3	He			287354.98		
Tb	159	3	He			290500.35		
Tb	159	3	He			289855.33		
Bi	209	3	He			228564.23		
Bi	209	3	He			231271.66		
Bi	209	3	He			235271.75		

Quantitation Report

Data File Name	047_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 7:50:56 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

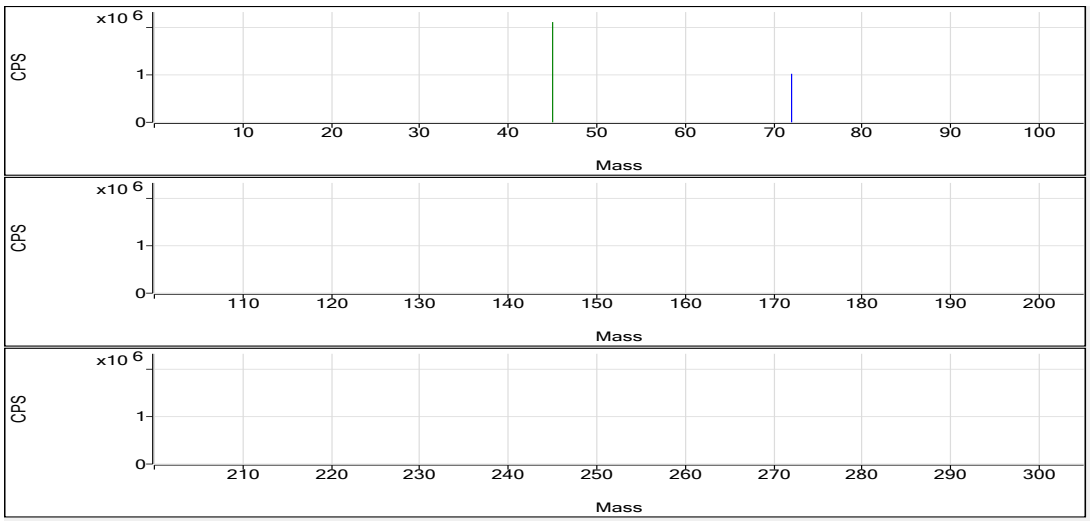
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.034	ppb	36.1	102.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.067	ppb	72.1	4.22	0.0000	Pulse	1.5000	3
Na	23	45	He	-13.568	ppb	N/A	14624.39	0.3898	Pulse	0.1000	3
Mg	24	45	He	1.143	ppb	39.3	300.01	0.0080	Pulse	0.1000	3
Al	27	45	He	2.160	ppb	63.7	63.33	0.0017	Pulse	0.1000	3
K	39	45	He	-8.635	ppb	N/A	16342.86	0.4356	Pulse	0.1000	3
Ca	44	45	He	-20.958	ppb	N/A	90.00	0.0024	Pulse	0.1000	3
Ti	47	45	He	1.205	ppb	50.6	23.33	0.0006	Pulse	0.1000	3
V	51	45	He	0.009	ppb	531.7	1153.39	0.0307	Pulse	0.5000	3
Cr	52	45	He	0.062	ppb	35.0	1460.12	0.0389	Pulse	0.1000	3
Mn	55	45	He	0.066	ppb	79.9	196.68	0.0052	Pulse	0.1000	3
Fe	57	45	He	2.608	ppb	60.5	106.67	0.0028	Pulse	0.1000	3
Co	59	45	He	0.119	ppb	29.8	360.02	0.0096	Pulse	0.1000	3
Ni	60	72	He	0.066	ppb	168.8	286.68	0.0045	Pulse	0.1000	3
Cu	63	72	He	0.073	ppb	33.3	506.69	0.0080	Pulse	0.1000	3
Zn	66	72	He	0.219	ppb	198.4	263.35	0.0041	Pulse	0.1000	3
As	75	72	He	0.156	ppb	114.8	66.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.014	ppb	198.2	43.33	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.076	ppb	34.4	130.00	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	107.1	53.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.014	ppb	66.4	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.104	ppb	123.5	1160.09	0.0188	Pulse	0.1000	3
Sb	121	115	He	0.029	ppb	130.9	43.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.088	ppb	22.5	36.67	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.071	ppb	10.7	600.04	0.0021	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	25.8	490.02	0.0017	Pulse	0.1000	3
U	238	209	He	0.046	ppb	9.9	543.36	0.0024	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2121491.01	1.0	104.4	Analog	0.1000	3
No Gas	Ge	72	1026668.76	0.2	102.1	Pulse	0.1000	3
H2	Sc	45	119552.06	0.6	90.5	Pulse	0.1000	3
H2	Ge	72	97223.22	2.0	87.2	Pulse	0.1000	3
H2	In	115	280517.51	0.8	95.5	Pulse	0.1000	3
He	Sc	45	37532.55	2.2	101.6	Pulse	0.1000	3
He	Ge	72	63695.85	0.5	98.7	Pulse	0.1000	3
He	In	115	61571.58	1.4	97.4	Pulse	0.1000	3
He	Tb	159	286270.17	1.1	97.8	Pulse	0.1000	3
He	Bi	209	230919.84	1.1	97.9	Pulse	0.1000	3

No Gas



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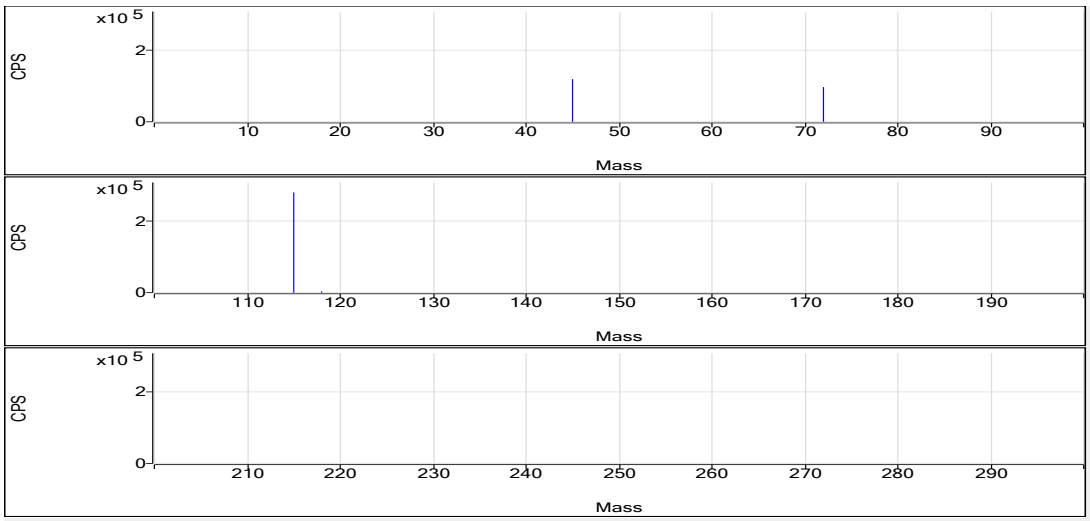
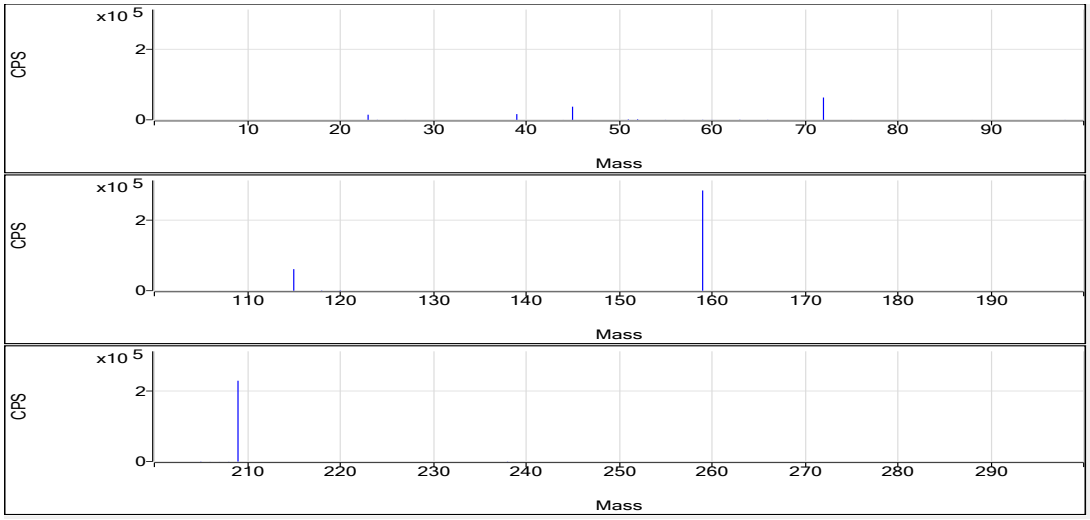


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.041	0.0001	114.00	0.0008	2.195E-05
Be	9	1	No Gas	0.041	0.0001	114.00	0.0008	2.195E-05
Be	9	1	No Gas	0.02	0	78.00	0.0008	2.195E-05
Se	78	2	H2	0.123	0.0001	6.67	0.0004	1.386E-05
Se	78	2	H2	0.047	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.033	0	2.67	0.0004	1.386E-05
Na	23	3	He	-10.855	0.4001	14948.10	0.0038	0.4416
Na	23	3	He	-16.463	0.3787	14557.62	0.0038	0.4416
Na	23	3	He	-13.387	0.3904	14367.45	0.0038	0.4416
Mg	24	3	He	0.871	0.0075	280.01	0.0019	0.005872
Mg	24	3	He	0.897	0.0075	290.01	0.0019	0.005872
Mg	24	3	He	1.661	0.009	330.02	0.0019	0.005872
Al	27	3	He	2.926	0.0021	80.00	0.0006	0.0004496
Al	27	3	He	0.572	0.0008	30.00	0.0006	0.0004496
Al	27	3	He	2.983	0.0022	80.00	0.0006	0.0004496
K	39	3	He	-2.268	0.443	16549.78	0.0012	0.4456
K	39	3	He	-22.742	0.4193	16119.23	0.0012	0.4456
K	39	3	He	-0.895	0.4446	16359.57	0.0012	0.4456
Ca	44	3	He	-28.827	0.0019	70.00	0.0001	0.003779
Ca	44	3	He	-13.879	0.0029	110.00	0.0001	0.003779
Ca	44	3	He	-20.169	0.0024	90.00	0.0001	0.003779
Ti	47	3	He	1.546	0.0008	30.00	0.0005	0
Ti	47	3	He	0.501	0.0003	10.00	0.0005	0
Ti	47	3	He	1.569	0.0008	30.00	0.0005	0
V	51	3	He	0.02	0.031	1158.06	0.0223	0.03054
V	51	3	He	-0.044	0.0296	1136.05	0.0223	0.03054
V	51	3	He	0.051	0.0317	1166.06	0.0223	0.03054
Cr	52	3	He	0.087	0.0396	1480.12	0.0285	0.03714
Cr	52	3	He	0.048	0.0385	1480.13	0.0285	0.03714
Cr	52	3	He	0.051	0.0386	1420.12	0.0285	0.03714
Mn	55	3	He	0.033	0.0048	180.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.127	0.006	230.01	0.0124	0.004415
Mn	55	3	He	0.039	0.0049	180.01	0.0124	0.004415
Fe	57	3	He	0.913	0.0019	70.00	0.0006	0.001356
Fe	57	3	He	4.031	0.0036	140.01	0.0006	0.001356
Fe	57	3	He	2.88	0.003	110.00	0.0006	0.001356
Co	59	3	He	0.106	0.0088	330.01	0.0581	0.002697
Co	59	3	He	0.092	0.0081	310.01	0.0581	0.002697
Co	59	3	He	0.159	0.012	440.03	0.0581	0.002697
Ni	60	3	He	0.185	0.0055	350.02	0.0087	0.003928
Ni	60	3	He	0.053	0.0044	280.01	0.0087	0.003928
Ni	60	3	He	-0.039	0.0036	230.01	0.0087	0.003928
Cu	63	3	He	0.101	0.0087	550.03	0.0261	0.006048
Cu	63	3	He	0.057	0.0075	480.02	0.0261	0.006048
Cu	63	3	He	0.062	0.0077	490.03	0.0261	0.006048
Zn	66	3	He	0.704	0.0055	350.02	0.0029	0.003512
Zn	66	3	He	0.088	0.0038	240.01	0.0029	0.003512
Zn	66	3	He	-0.135	0.0031	200.01	0.0029	0.003512
As	75	3	He	-0.044	0.0006	40.00	0.0021	0.0007233
As	75	3	He	0.211	0.0012	74.00	0.0021	0.0007233
As	75	3	He	0.3	0.0013	86.00	0.0021	0.0007233
Sr	88	3	He	-0.011	0.0005	30.00	0.009	0.0005796
Sr	88	3	He	0.043	0.001	60.00	0.009	0.0005796
Sr	88	3	He	0.009	0.0007	40.00	0.009	0.0005796
Mo	98	3	He	0.055	0.0016	100.00	0.0235	0.0003188
Mo	98	3	He	0.069	0.0019	120.00	0.0235	0.0003188
Mo	98	3	He	0.106	0.0028	170.01	0.0235	0.0003188
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.017	0.0013	80.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.022	0.0001	8.00	0.0055	1.07E-05
Sn	120	3	He	0.25	0.0212	1320.11	0.0164	0.01713
Sn	120	3	He	0.009	0.0173	1070.08	0.0164	0.01713
Sn	120	3	He	0.053	0.018	1090.08	0.0164	0.01713
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.025	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.068	0.0013	80.00	0.0155	0.0002641
Ba	137	3	He	0.065	0.0005	30.00	0.005	0.0001577
Ba	137	3	He	0.098	0.0006	40.00	0.005	0.0001577
Ba	137	3	He	0.101	0.0007	40.00	0.005	0.0001577
Tl	205	3	He	0.076	0.0022	640.04	0.026	0.0002504
Tl	205	3	He	0.075	0.0022	620.04	0.026	0.0002504
Tl	205	3	He	0.062	0.0019	540.03	0.026	0.0002504
Pb	208	3	He	0.009	0.0017	310.01	0.0349	0.001422
Pb	208	3	He	0.006	0.0016	250.02	0.0349	0.001422
Pb	208	3	He	0.01	0.0018	260.01	0.0349	0.001422
U	238	3	He	0.041	0.0021	490.03	0.0502	5.657E-05
U	238	3	He	0.05	0.0025	590.03	0.0502	5.657E-05
U	238	3	He	0.047	0.0024	550.03	0.0502	5.657E-05
Sc	45	1	No Gas			2125103.56		
Sc	45	1	No Gas			2139670.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2099698.87		
Ge	72	1	No Gas			1028308.89		
Ge	72	1	No Gas			1024752.80		
Ge	72	1	No Gas			1026944.59		
Sc	45	2	H2			120405.51		
Sc	45	2	H2			119347.13		
Sc	45	2	H2			118903.54		
Ge	72	2	H2			99042.06		
Ge	72	2	H2			97420.94		
Ge	72	2	H2			95206.65		
In	115	2	H2			280109.62		
In	115	2	H2			278600.29		
In	115	2	H2			282842.61		
Sc	45	3	He			37358.68		
Sc	45	3	He			38441.49		
Sc	45	3	He			36797.47		
Ge	72	3	He			63320.66		
Ge	72	3	He			63772.52		
Ge	72	3	He			63994.37		
In	115	3	He			62200.21		
In	115	3	He			61949.09		
In	115	3	He			60583.22		
Tb	159	3	He			287046.58		
Tb	159	3	He			282888.98		
Tb	159	3	He			288874.96		
Bi	209	3	He			232869.39		
Bi	209	3	He			231761.97		
Bi	209	3	He			228128.16		

Quantitation Report

Data File Name	048SMPL.d
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Sample Type	Sample
Comment	C2
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

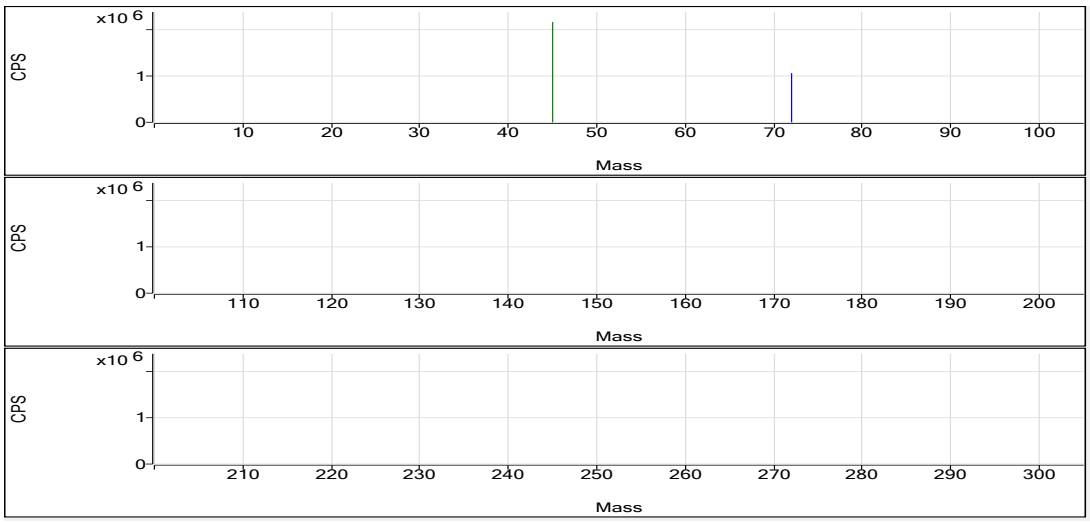
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	86.4	54.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.062	ppb	48.6	4.44	0.0000	Pulse	1.5000	3
Na	23	45	He	11411.321	ppb	1.9	1692466.59	44.0491	Analog	0.1000	3
Mg	24	45	He	13516.458	ppb	2.2	968356.06	25.2042	Pulse	0.1000	3
Al	27	45	He	18.587	ppb	23.6	430.02	0.0112	Pulse	0.1000	3
K	39	45	He	2828.175	ppb	2.8	142778.41	3.7164	Pulse	0.1000	3
Ca	44	45	He	122027.366	ppb	2.2	309946.34	8.0672	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.259	ppb	N/A	952.70	0.0248	Pulse	0.5000	3
Cr	52	45	He	-0.039	ppb	N/A	1383.45	0.0360	Pulse	0.1000	3
Mn	55	45	He	243.811	ppb	2.0	116180.62	3.0239	Pulse	0.1000	3
Fe	57	45	He	27.417	ppb	22.0	650.03	0.0169	Pulse	0.1000	3
Co	59	45	He	0.195	ppb	22.8	540.03	0.0140	Pulse	0.1000	3
Ni	60	72	He	0.596	ppb	26.7	610.04	0.0091	Pulse	0.1000	3
Cu	63	72	He	0.991	ppb	5.8	2143.57	0.0320	Pulse	0.1000	3
Zn	66	72	He	4.183	ppb	1.0	1040.08	0.0155	Pulse	0.1000	3
As	75	72	He	0.409	ppb	17.9	105.33	0.0016	Pulse	0.5000	3
Sr	88	115	He	442.508	ppb	1.4	249085.28	3.9623	Pulse	0.1000	3
Mo	98	115	He	0.336	ppb	17.9	516.69	0.0082	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	976.0	33.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.021	ppb	27.8	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.187	ppb	N/A	883.39	0.0141	Pulse	0.1000	3
Sb	121	115	He	0.103	ppb	29.6	116.67	0.0019	Pulse	0.1000	3
Ba	137	115	He	36.844	ppb	4.5	11538.60	0.1836	Pulse	0.1000	3
Tl	205	159	He	0.016	ppb	45.2	196.68	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.012	ppb	39.2	536.69	0.0018	Pulse	0.1000	3
U	238	209	He	0.526	ppb	4.3	6215.02	0.0265	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2164526.69	2.5	106.5	Analog	0.1000	3
No Gas	Ge	72	1062430.82	1.0	105.7	Pulse	0.1000	3
H2	Sc	45	126408.79	0.9	95.7	Pulse	0.1000	3
H2	Ge	72	109104.53	1.1	97.8	Pulse	0.1000	3
H2	In	115	290123.88	0.3	98.8	Pulse	0.1000	3
He	Sc	45	38431.61	2.0	104.0	Pulse	0.1000	3
He	Ge	72	67111.25	1.1	104.0	Pulse	0.1000	3
He	In	115	62868.30	1.0	99.5	Pulse	0.1000	3
He	Tb	159	293211.79	0.3	100.1	Pulse	0.1000	3
He	Bi	209	234549.29	0.9	99.5	Pulse	0.1000	3

No Gas



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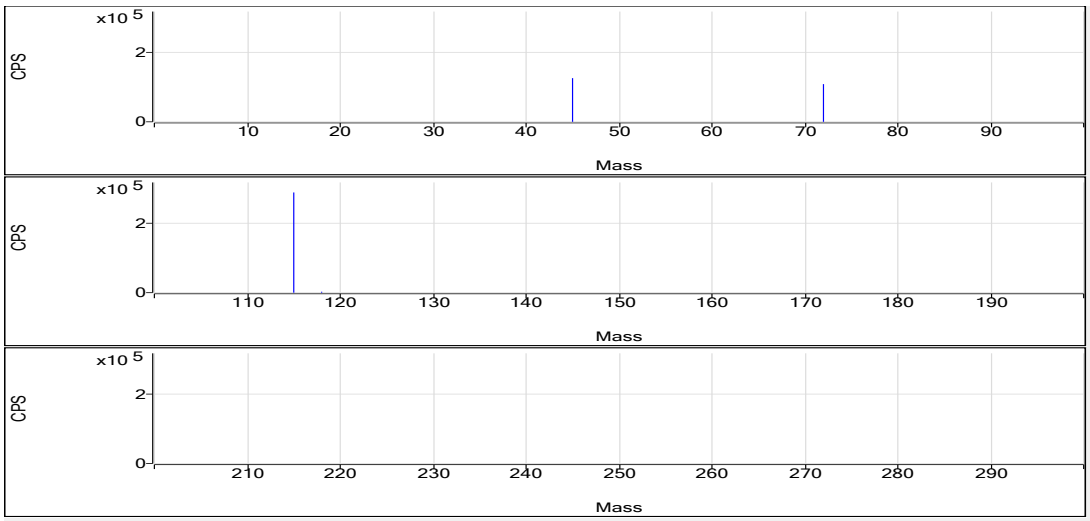
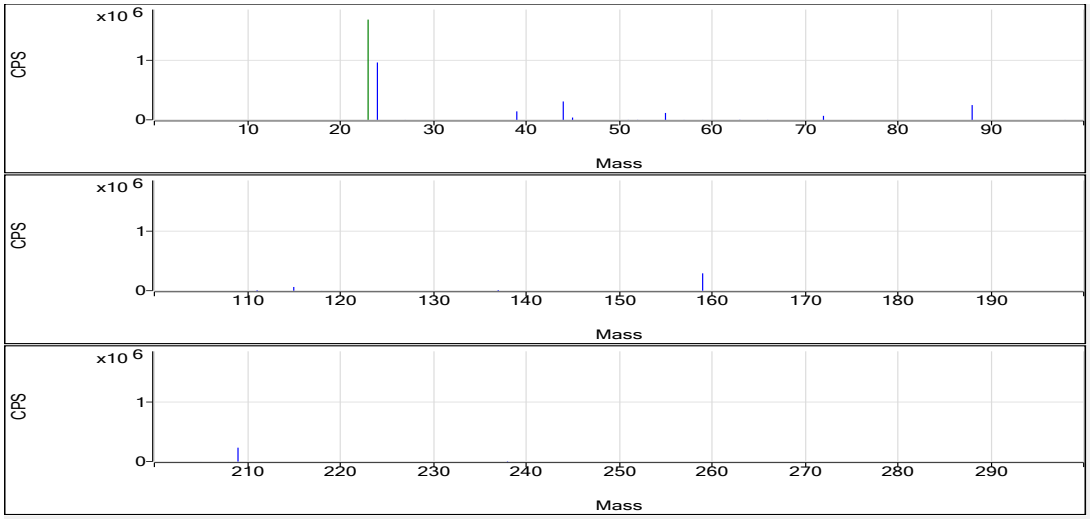


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.008	0	62.00	0.0008	2.195E-05
Be	9	1	No Gas	0.002	0	50.00	0.0008	2.195E-05
Be	9	1	No Gas	0.002	0	50.00	0.0008	2.195E-05
Se	78	2	H2	0.037	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.096	0.0001	6.00	0.0004	1.386E-05
Se	78	2	H2	0.053	0	4.00	0.0004	1.386E-05
Na	23	3	He	11486.64	44.3369	1705268.10	0.0038	0.4416
Na	23	3	He	11163.562	43.1023	1689338.88	0.0038	0.4416
Na	23	3	He	11583.761	44.7081	1682792.79	0.0038	0.4416
Mg	24	3	He	13523.282	25.2169	969881.63	0.0019	0.005872
Mg	24	3	He	13221.751	24.6548	966311.24	0.0019	0.005872
Mg	24	3	He	13804.341	25.7409	968875.30	0.0019	0.005872
Al	27	3	He	23.507	0.014	540.03	0.0006	0.0004496
Al	27	3	He	15.109	0.0092	360.01	0.0006	0.0004496
Al	27	3	He	17.144	0.0104	390.02	0.0006	0.0004496
K	39	3	He	2837.612	3.7273	143356.69	0.0012	0.4456
K	39	3	He	2744.458	3.6195	141863.11	0.0012	0.4456
K	39	3	He	2902.454	3.8023	143115.43	0.0012	0.4456
Ca	44	3	He	122301.035	8.0853	310974.49	0.0001	0.003779
Ca	44	3	He	119226.402	7.8822	308930.97	0.0001	0.003779
Ca	44	3	He	124554.662	8.2342	309933.55	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.204	0.026	1000.04	0.0223	0.03054
V	51	3	He	-0.241	0.0252	986.04	0.0223	0.03054
V	51	3	He	-0.331	0.0232	872.03	0.0223	0.03054
Cr	52	3	He	-0.117	0.0338	1300.11	0.0285	0.03714
Cr	52	3	He	-0.041	0.036	1410.12	0.0285	0.03714
Cr	52	3	He	0.04	0.0383	1440.12	0.0285	0.03714
Mn	55	3	He	244.58	3.0334	116668.47	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	238.527	2.9584	115951.33	0.0124	0.004415
Mn	55	3	He	248.327	3.0798	115922.06	0.0124	0.004415
Fe	57	3	He	20.528	0.013	500.02	0.0006	0.001356
Fe	57	3	He	31.796	0.0194	760.04	0.0006	0.001356
Fe	57	3	He	29.928	0.0183	690.04	0.0006	0.001356
Co	59	3	He	0.195	0.014	540.03	0.0581	0.002697
Co	59	3	He	0.239	0.0166	650.04	0.0581	0.002697
Co	59	3	He	0.15	0.0114	430.03	0.0581	0.002697
Ni	60	3	He	0.608	0.0092	610.04	0.0087	0.003928
Ni	60	3	He	0.431	0.0077	520.03	0.0087	0.003928
Ni	60	3	He	0.749	0.0104	700.04	0.0087	0.003928
Cu	63	3	He	1.032	0.033	2190.25	0.0261	0.006048
Cu	63	3	He	0.925	0.0302	2050.21	0.0261	0.006048
Cu	63	3	He	1.016	0.0326	2190.25	0.0261	0.006048
Zn	66	3	He	4.143	0.0154	1020.08	0.0029	0.003512
Zn	66	3	He	4.228	0.0156	1060.09	0.0029	0.003512
Zn	66	3	He	4.176	0.0155	1040.08	0.0029	0.003512
As	75	3	He	0.467	0.0017	112.00	0.0021	0.0007233
As	75	3	He	0.435	0.0016	110.00	0.0021	0.0007233
As	75	3	He	0.327	0.0014	94.00	0.0021	0.0007233
Sr	88	3	He	448.178	4.013	251888.57	0.009	0.0005796
Sr	88	3	He	443.427	3.9705	247465.02	0.009	0.0005796
Sr	88	3	He	435.919	3.9033	247902.24	0.009	0.0005796
Mo	98	3	He	0.379	0.0092	580.03	0.0235	0.0003188
Mo	98	3	He	0.362	0.0088	550.03	0.0235	0.0003188
Mo	98	3	He	0.268	0.0066	420.02	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Cd	111	3	He	0.027	0.0002	10.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	-0.15	0.0147	920.06	0.0164	0.01713
Sn	120	3	He	-0.115	0.0152	950.07	0.0164	0.01713
Sn	120	3	He	-0.295	0.0123	780.04	0.0164	0.01713
Sb	121	3	He	0.076	0.0014	90.00	0.0155	0.0002641
Sb	121	3	He	0.097	0.0018	110.00	0.0155	0.0002641
Sb	121	3	He	0.136	0.0024	150.01	0.0155	0.0002641
Ba	137	3	He	37.651	0.1876	11775.53	0.005	0.0001577
Ba	137	3	He	37.95	0.1891	11785.53	0.005	0.0001577
Ba	137	3	He	34.93	0.1741	11054.73	0.005	0.0001577
Tl	205	3	He	0.025	0.0009	260.01	0.026	0.0002504
Tl	205	3	He	0.013	0.0006	170.01	0.026	0.0002504
Tl	205	3	He	0.011	0.0005	160.01	0.026	0.0002504
Pb	208	3	He	0.01	0.0018	260.01	0.0349	0.001422
Pb	208	3	He	0.008	0.0017	310.01	0.0349	0.001422
Pb	208	3	He	0.017	0.002	340.02	0.0349	0.001422
U	238	3	He	0.548	0.0276	6531.82	0.0502	5.657E-05
U	238	3	He	0.503	0.0253	5921.58	0.0502	5.657E-05
U	238	3	He	0.529	0.0266	6191.66	0.0502	5.657E-05
Sc	45	1	No Gas			2225671.53		
Sc	45	1	No Gas			2137073.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2130835.44		
Ge	72	1	No Gas			1074540.06		
Ge	72	1	No Gas			1059338.11		
Ge	72	1	No Gas			1053414.28		
Sc	45	2	H2			126799.41		
Sc	45	2	H2			127262.08		
Sc	45	2	H2			125164.88		
Ge	72	2	H2			110444.10		
Ge	72	2	H2			108247.99		
Ge	72	2	H2			108621.49		
In	115	2	H2			290308.55		
In	115	2	H2			289218.34		
In	115	2	H2			290844.74		
Sc	45	3	He			38461.57		
Sc	45	3	He			39193.69		
Sc	45	3	He			37639.57		
Ge	72	3	He			66304.14		
Ge	72	3	He			67830.89		
Ge	72	3	He			67198.71		
In	115	3	He			62772.25		
In	115	3	He			62329.93		
In	115	3	He			63515.74		
Tb	159	3	He			292086.32		
Tb	159	3	He			293859.57		
Tb	159	3	He			293689.49		
Bi	209	3	He			236921.83		
Bi	209	3	He			234031.72		
Bi	209	3	He			232694.33		

Quantitation Report

Data File Name	049SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 7:55:05 AM
Sample Name	410-136848-Y-7-A @100
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

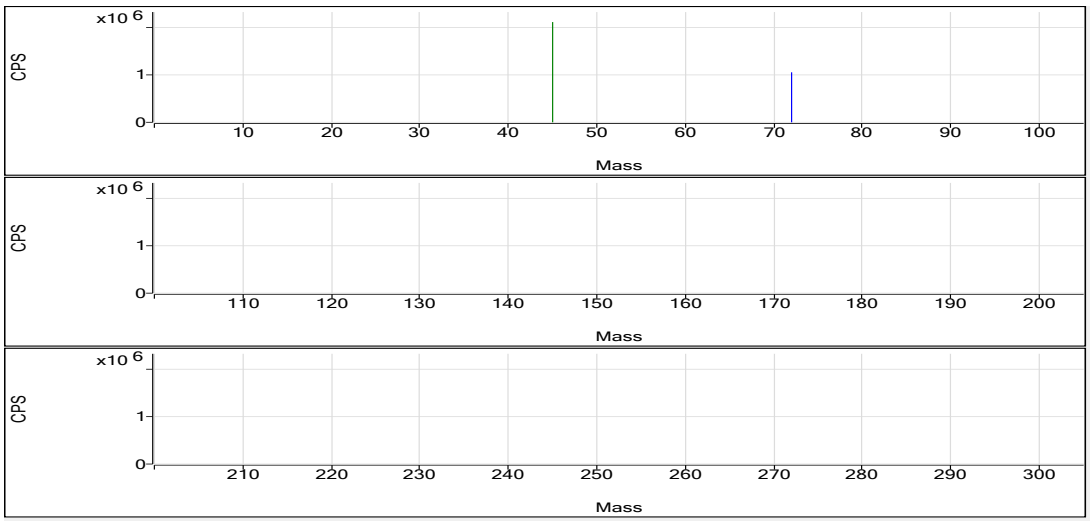
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	161.8	55.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.017	ppb	97.8	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	97.146	ppb	3.2	30548.94	0.8128	Pulse	0.1000	3
Mg	24	45	He	140.687	ppb	5.9	10077.13	0.2681	Pulse	0.1000	3
Al	27	45	He	2.755	ppb	58.9	76.67	0.0020	Pulse	0.1000	3
K	39	45	He	8.311	ppb	33.8	17110.51	0.4552	Pulse	0.1000	3
Ca	44	45	He	1275.905	ppb	2.5	3310.49	0.0881	Pulse	0.1000	3
Ti	47	45	He	0.172	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.085	ppb	N/A	1076.72	0.0286	Pulse	0.5000	3
Cr	52	45	He	0.076	ppb	13.6	1476.80	0.0393	Pulse	0.1000	3
Mn	55	45	He	2.809	ppb	16.6	1473.47	0.0392	Pulse	0.1000	3
Fe	57	45	He	13.233	ppb	23.3	333.35	0.0089	Pulse	0.1000	3
Co	59	45	He	0.050	ppb	31.7	210.01	0.0056	Pulse	0.1000	3
Ni	60	72	He	0.409	ppb	29.2	490.03	0.0075	Pulse	0.1000	3
Cu	63	72	He	0.216	ppb	19.3	766.71	0.0117	Pulse	0.1000	3
Zn	66	72	He	1.475	ppb	22.2	506.69	0.0077	Pulse	0.1000	3
As	75	72	He	0.074	ppb	229.7	57.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	4.695	ppb	3.5	2626.99	0.0426	Pulse	0.1000	3
Mo	98	115	He	0.037	ppb	27.8	73.33	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	75.4	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	0.0	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.190	ppb	N/A	863.39	0.0140	Pulse	0.1000	3
Sb	121	115	He	-0.003	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.381	ppb	20.9	126.67	0.0021	Pulse	0.1000	3
Tl	205	159	He	0.014	ppb	14.4	176.68	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.005	ppb	159.4	463.35	0.0016	Pulse	0.1000	3
U	238	209	He	0.013	ppb	24.6	163.34	0.0007	Pulse	0.1000	3

ISTD Table:

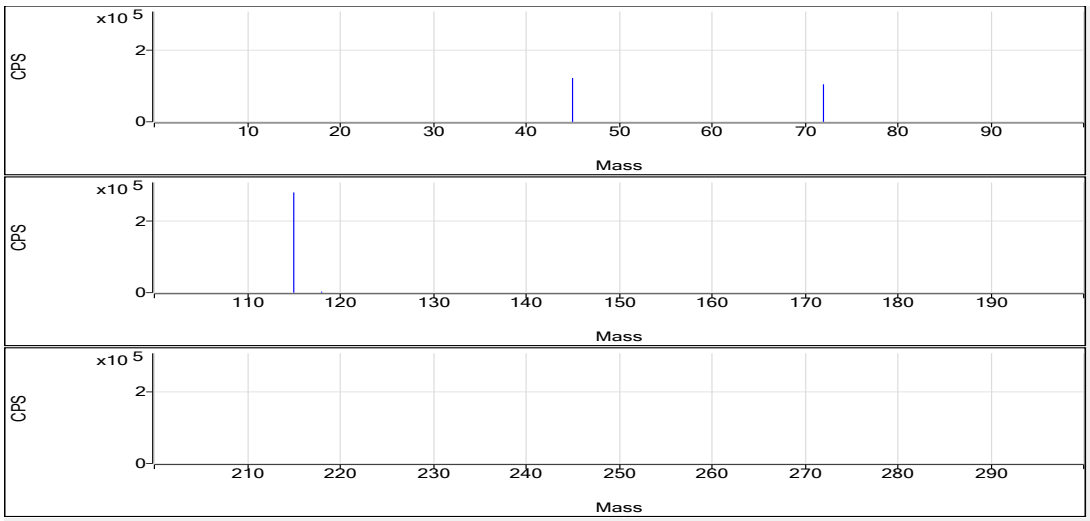
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2115354.55	1.8	104.1	Analog	0.1000	3
No Gas	Ge	72	1055206.94	1.3	105.0	Pulse	0.1000	3
H2	Sc	45	121944.95	0.9	92.3	Pulse	0.1000	3
H2	Ge	72	104574.42	1.3	93.8	Pulse	0.1000	3
H2	In	115	279313.75	1.2	95.1	Pulse	0.1000	3
He	Sc	45	37585.98	0.8	101.7	Pulse	0.1000	3
He	Ge	72	65517.33	0.7	101.5	Pulse	0.1000	3
He	In	115	61652.12	0.8	97.6	Pulse	0.1000	3
He	Tb	159	288559.93	0.3	98.5	Pulse	0.1000	3
He	Bi	209	231326.72	0.6	98.1	Pulse	0.1000	3

No Gas

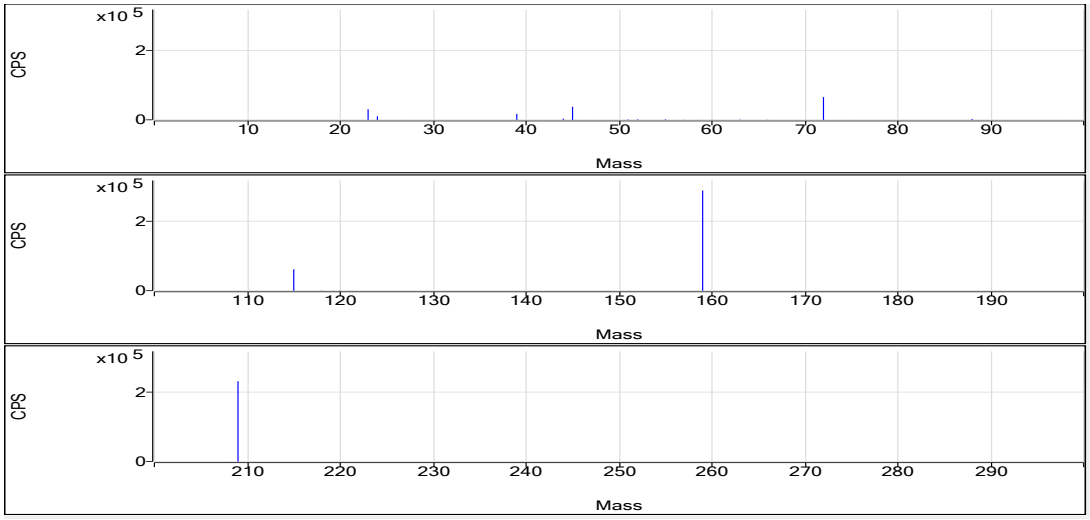


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0	72.00	0.0008	2.195E-05
Be	9	1	No Gas	0	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	0	0	48.00	0.0008	2.195E-05
Se	78	2	H2	-0.002	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.026	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.027	0	2.67	0.0004	1.386E-05
Na	23	3	He	94.061	0.8011	30351.93	0.0038	0.4416
Na	23	3	He	100.216	0.8246	30722.51	0.0038	0.4416
Na	23	3	He	97.16	0.8129	30572.38	0.0038	0.4416
Mg	24	3	He	132.239	0.2524	9563.45	0.0019	0.005872
Mg	24	3	He	141.015	0.2688	10013.74	0.0019	0.005872
Mg	24	3	He	148.807	0.2833	10654.21	0.0019	0.005872
Al	27	3	He	1.048	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	2.936	0.0021	80.00	0.0006	0.0004496
Al	27	3	He	4.281	0.0029	110.00	0.0006	0.0004496
K	39	3	He	10.871	0.4582	17360.91	0.0012	0.4456
K	39	3	He	8.751	0.4557	16980.27	0.0012	0.4456
K	39	3	He	5.31	0.4518	16990.34	0.0012	0.4456
Ca	44	3	He	1241.062	0.0858	3250.47	0.0001	0.003779
Ca	44	3	He	1303.7	0.0899	3350.53	0.0001	0.003779
Ca	44	3	He	1282.952	0.0886	3330.48	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.517	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.122	0.0278	1054.05	0.0223	0.03054
V	51	3	He	-0.12	0.0279	1038.05	0.0223	0.03054
V	51	3	He	-0.013	0.0303	1138.05	0.0223	0.03054
Cr	52	3	He	0.068	0.0391	1480.14	0.0285	0.03714
Cr	52	3	He	0.072	0.0392	1460.12	0.0285	0.03714
Cr	52	3	He	0.087	0.0396	1490.14	0.0285	0.03714
Mn	55	3	He	2.457	0.0348	1320.11	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2.635	0.037	1380.11	0.0124	0.004415
Mn	55	3	He	3.337	0.0457	1720.18	0.0124	0.004415
Fe	57	3	He	16.687	0.0108	410.02	0.0006	0.001356
Fe	57	3	He	12.278	0.0083	310.01	0.0006	0.001356
Fe	57	3	He	10.735	0.0074	280.01	0.0006	0.001356
Co	59	3	He	0.063	0.0063	240.01	0.0581	0.002697
Co	59	3	He	0.032	0.0046	170.01	0.0581	0.002697
Co	59	3	He	0.054	0.0058	220.01	0.0581	0.002697
Ni	60	3	He	0.531	0.0085	560.03	0.0087	0.003928
Ni	60	3	He	0.405	0.0074	490.03	0.0087	0.003928
Ni	60	3	He	0.292	0.0065	420.02	0.0087	0.003928
Cu	63	3	He	0.264	0.0129	850.05	0.0261	0.006048
Cu	63	3	He	0.198	0.0112	740.04	0.0261	0.006048
Cu	63	3	He	0.186	0.0109	710.04	0.0261	0.006048
Zn	66	3	He	1.592	0.0081	530.03	0.0029	0.003512
Zn	66	3	He	1.105	0.0067	440.02	0.0029	0.003512
Zn	66	3	He	1.726	0.0085	550.03	0.0029	0.003512
As	75	3	He	-0.114	0.0005	32.00	0.0021	0.0007233
As	75	3	He	0.12	0.001	64.00	0.0021	0.0007233
As	75	3	He	0.215	0.0012	76.00	0.0021	0.0007233
Sr	88	3	He	4.801	0.0436	2700.34	0.009	0.0005796
Sr	88	3	He	4.505	0.0409	2530.30	0.009	0.0005796
Sr	88	3	He	4.779	0.0434	2650.33	0.009	0.0005796
Mo	98	3	He	0.034	0.0011	70.00	0.0235	0.0003188
Mo	98	3	He	0.048	0.0015	90.00	0.0235	0.0003188
Mo	98	3	He	0.028	0.001	60.00	0.0235	0.0003188
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0.016	0.0013	80.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.326	0.0118	730.04	0.0164	0.01713
Sn	120	3	He	-0.186	0.0141	870.07	0.0164	0.01713
Sn	120	3	He	-0.057	0.0162	990.07	0.0164	0.01713
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.015	0.0005	30.00	0.0155	0.0002641
Ba	137	3	He	0.39	0.0021	130.01	0.005	0.0001577
Ba	137	3	He	0.455	0.0024	150.01	0.005	0.0001577
Ba	137	3	He	0.297	0.0016	100.00	0.005	0.0001577
Tl	205	3	He	0.012	0.0006	160.01	0.026	0.0002504
Tl	205	3	He	0.016	0.0007	190.01	0.026	0.0002504
Tl	205	3	He	0.014	0.0006	180.01	0.026	0.0002504
Pb	208	3	He	-0.003	0.0013	160.01	0.0349	0.001422
Pb	208	3	He	0.014	0.0019	290.01	0.0349	0.001422
Pb	208	3	He	0.005	0.0016	240.01	0.0349	0.001422
U	238	3	He	0.009	0.0005	120.01	0.0502	5.657E-05
U	238	3	He	0.014	0.0008	180.01	0.0502	5.657E-05
U	238	3	He	0.015	0.0008	190.01	0.0502	5.657E-05
Sc	45	1	No Gas			2116946.53		
Sc	45	1	No Gas			2075950.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2153166.69		
Ge	72	1	No Gas			1067795.14		
Ge	72	1	No Gas			1040566.47		
Ge	72	1	No Gas			1057259.20		
Sc	45	2	H2			121796.65		
Sc	45	2	H2			123067.70		
Sc	45	2	H2			120970.50		
Ge	72	2	H2			102989.94		
Ge	72	2	H2			105649.72		
Ge	72	2	H2			105083.60		
In	115	2	H2			282493.94		
In	115	2	H2			275718.73		
In	115	2	H2			279728.57		
Sc	45	3	He			37890.04		
Sc	45	3	He			37258.73		
Sc	45	3	He			37609.16		
Ge	72	3	He			65640.93		
Ge	72	3	He			65882.07		
Ge	72	3	He			65028.98		
In	115	3	He			61988.58		
In	115	3	He			61858.36		
In	115	3	He			61124.96		
Tb	159	3	He			288375.44		
Tb	159	3	He			289357.30		
Tb	159	3	He			287947.05		
Bi	209	3	He			229757.24		
Bi	209	3	He			231831.40		
Bi	209	3	He			232391.52		

Quantitation Report

Data File Name	050SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 7:57:09 AM
Sample Name	410-136848-Z-11-A
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

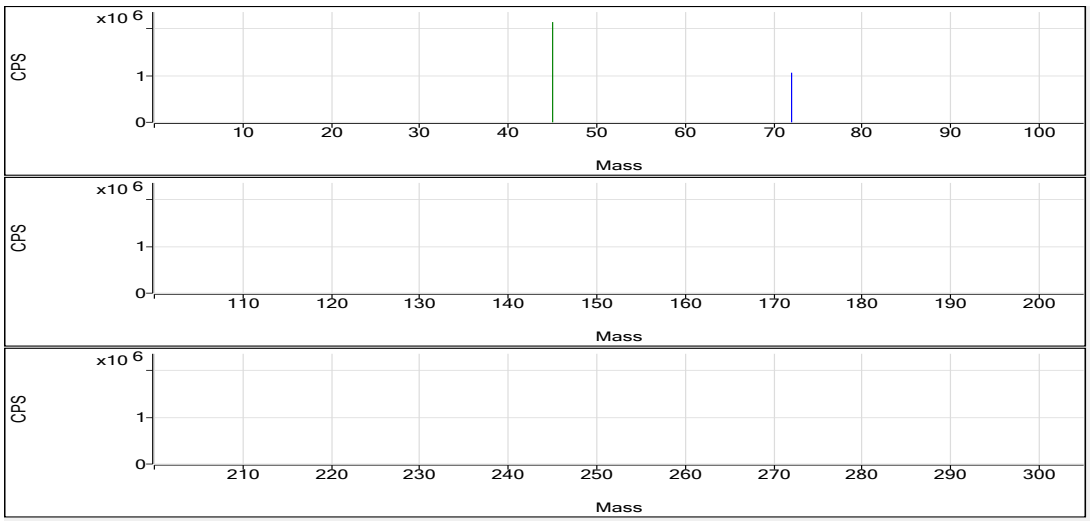
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	44.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	6.285	ppb	1.9	300.22	0.0027	Pulse	1.5000	3
Na	23	45	He	3930.614	ppb	1.1	588431.62	15.4622	Pulse	0.1000	3
Mg	24	45	He	6981.558	ppb	1.0	495538.05	13.0214	Pulse	0.1000	3
Al	27	45	He	21.202	ppb	21.5	483.36	0.0127	Pulse	0.1000	3
K	39	45	He	2664.510	ppb	1.5	134222.64	3.5271	Pulse	0.1000	3
Ca	44	45	He	67354.240	ppb	0.9	169523.23	4.4545	Pulse	0.1000	3
Ti	47	45	He	0.170	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.078	ppb	N/A	1096.05	0.0288	Pulse	0.5000	3
Cr	52	45	He	0.142	ppb	44.9	1566.81	0.0412	Pulse	0.1000	3
Mn	55	45	He	1147.069	ppb	0.5	540789.65	14.2101	Pulse	0.1000	3
Fe	57	45	He	38.218	ppb	7.5	876.72	0.0230	Pulse	0.1000	3
Co	59	45	He	0.638	ppb	6.9	1513.47	0.0398	Pulse	0.1000	3
Ni	60	72	He	1.071	ppb	19.1	890.07	0.0132	Pulse	0.1000	3
Cu	63	72	He	0.793	ppb	11.5	1803.50	0.0268	Pulse	0.1000	3
Zn	66	72	He	0.710	ppb	47.4	373.35	0.0055	Pulse	0.1000	3
As	75	72	He	0.086	ppb	106.4	60.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	215.438	ppb	1.2	122278.63	1.9294	Pulse	0.1000	3
Mo	98	115	He	4.014	ppb	4.3	6001.48	0.0947	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.042	ppb	29.8	15.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.029	ppb	266.9	1116.76	0.0176	Pulse	0.1000	3
Sb	121	115	He	0.123	ppb	22.6	136.68	0.0022	Pulse	0.1000	3
Ba	137	115	He	32.637	ppb	4.8	10304.28	0.1626	Pulse	0.1000	3
Tl	205	159	He	0.011	ppb	50.4	156.67	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.043	ppb	37.0	856.71	0.0029	Pulse	0.1000	3
U	238	209	He	0.883	ppb	3.3	10531.38	0.0444	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2141486.69	0.6	105.3	Analog	0.1000	3
No Gas	Ge	72	1059799.02	0.9	105.4	Pulse	0.1000	3
H2	Sc	45	126695.68	0.7	95.9	Pulse	0.1000	3
H2	Ge	72	109278.89	0.6	98.0	Pulse	0.1000	3
H2	In	115	292640.70	1.1	99.6	Pulse	0.1000	3
He	Sc	45	38057.21	0.7	103.0	Pulse	0.1000	3
He	Ge	72	67345.44	0.3	104.3	Pulse	0.1000	3
He	In	115	63385.82	1.7	100.3	Pulse	0.1000	3
He	Tb	159	293248.68	0.3	100.2	Pulse	0.1000	3
He	Bi	209	237139.05	0.4	100.6	Pulse	0.1000	3

No Gas



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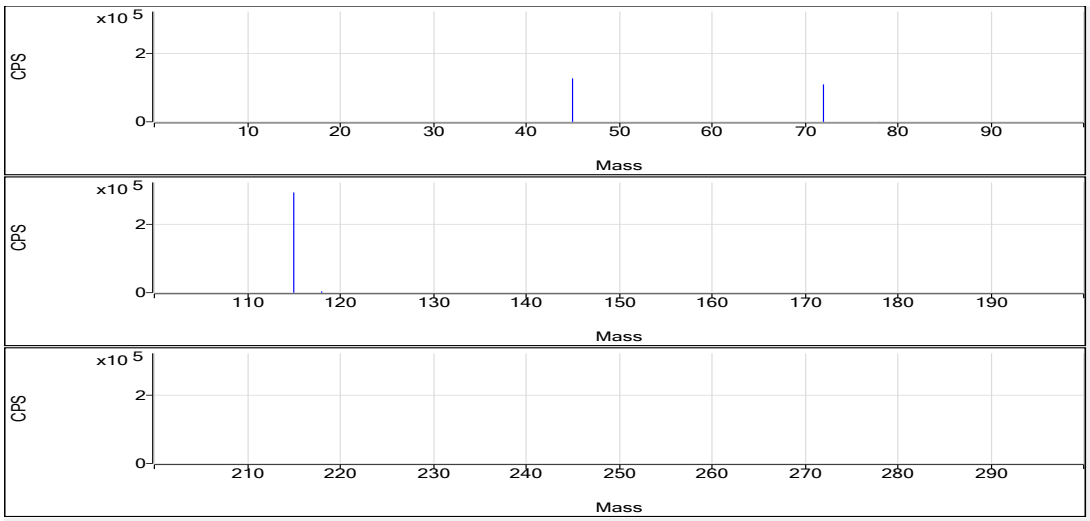
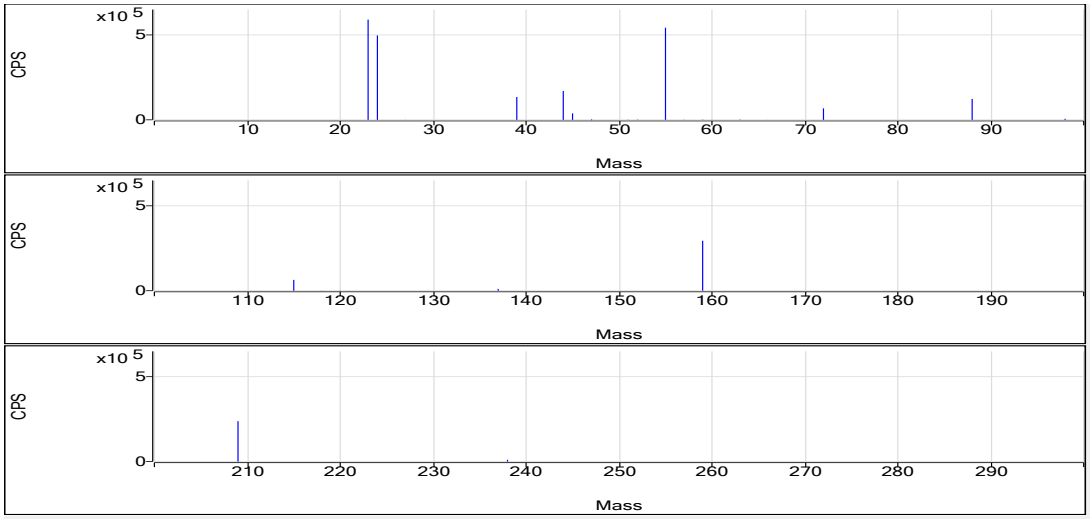


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	48.00	0.0008	2.195E-05
Be	9	1	No Gas	0	0	48.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.005	0	38.00	0.0008	2.195E-05
Se	78	2	H2	6.331	0.0028	302.67	0.0004	1.386E-05
Se	78	2	H2	6.15	0.0027	292.00	0.0004	1.386E-05
Se	78	2	H2	6.376	0.0028	306.00	0.0004	1.386E-05
Na	23	3	He	3882.127	15.2769	583592.88	0.0038	0.4416
Na	23	3	He	3952.418	15.5455	594004.25	0.0038	0.4416
Na	23	3	He	3957.298	15.5641	587697.73	0.0038	0.4416
Mg	24	3	He	6991.24	13.0394	498120.19	0.0019	0.005872
Mg	24	3	He	6904.544	12.8778	492070.27	0.0019	0.005872
Mg	24	3	He	7048.889	13.1469	496423.70	0.0019	0.005872
Al	27	3	He	15.975	0.0097	370.02	0.0006	0.0004496
Al	27	3	He	23.214	0.0139	530.03	0.0006	0.0004496
Al	27	3	He	24.417	0.0146	550.03	0.0006	0.0004496
K	39	3	He	2642.56	3.5017	133768.67	0.0012	0.4456
K	39	3	He	2638.827	3.4974	133637.50	0.0012	0.4456
K	39	3	He	2712.141	3.5822	135261.74	0.0012	0.4456
Ca	44	3	He	67786.212	4.483	171256.89	0.0001	0.003779
Ca	44	3	He	66703.273	4.4115	168565.80	0.0001	0.003779
Ca	44	3	He	67573.237	4.469	168746.99	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.51	0.0003	10.00	0.0005	0
V	51	3	He	-0.184	0.0264	1010.04	0.0223	0.03054
V	51	3	He	-0.072	0.0289	1106.05	0.0223	0.03054
V	51	3	He	0.022	0.031	1172.06	0.0223	0.03054
Cr	52	3	He	0.213	0.0432	1650.15	0.0285	0.03714
Cr	52	3	He	0.121	0.0406	1550.14	0.0285	0.03714
Cr	52	3	He	0.091	0.0397	1500.14	0.0285	0.03714
Mn	55	3	He	1140.609	14.1301	539786.67	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1148.715	14.2305	543758.78	0.0124	0.004415
Mn	55	3	He	1151.885	14.2698	538823.51	0.0124	0.004415
Fe	57	3	He	35.915	0.0217	830.05	0.0006	0.001356
Fe	57	3	He	41.442	0.0249	950.06	0.0006	0.001356
Fe	57	3	He	37.296	0.0225	850.06	0.0006	0.001356
Co	59	3	He	0.675	0.0419	1600.12	0.0581	0.002697
Co	59	3	He	0.589	0.0369	1410.13	0.0581	0.002697
Co	59	3	He	0.651	0.0405	1530.15	0.0581	0.002697
Ni	60	3	He	1.306	0.0153	1030.09	0.0087	0.003928
Ni	60	3	He	0.94	0.0121	810.06	0.0087	0.003928
Ni	60	3	He	0.967	0.0123	830.05	0.0087	0.003928
Cu	63	3	He	0.856	0.0284	1920.19	0.0261	0.006048
Cu	63	3	He	0.835	0.0279	1870.18	0.0261	0.006048
Cu	63	3	He	0.688	0.024	1620.14	0.0261	0.006048
Zn	66	3	He	0.325	0.0044	300.01	0.0029	0.003512
Zn	66	3	He	0.855	0.006	400.02	0.0029	0.003512
Zn	66	3	He	0.949	0.0062	420.02	0.0029	0.003512
As	75	3	He	0.123	0.001	66.00	0.0021	0.0007233
As	75	3	He	-0.018	0.0007	46.00	0.0021	0.0007233
As	75	3	He	0.152	0.001	70.00	0.0021	0.0007233
Sr	88	3	He	212.581	1.9038	122971.75	0.009	0.0005796
Sr	88	3	He	217.263	1.9457	122456.46	0.009	0.0005796
Sr	88	3	He	216.47	1.9386	121407.67	0.009	0.0005796
Mo	98	3	He	3.852	0.0909	5871.44	0.0235	0.0003188
Mo	98	3	He	4.197	0.099	6231.54	0.0235	0.0003188
Mo	98	3	He	3.994	0.0942	5901.47	0.0235	0.0003188
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.032	0.0002	12.00	0.0055	1.07E-05
Cd	111	3	He	0.038	0.0002	14.00	0.0055	1.07E-05
Cd	111	3	He	0.056	0.0003	20.00	0.0055	1.07E-05
Sn	120	3	He	0.069	0.0183	1180.09	0.0164	0.01713
Sn	120	3	He	0.079	0.0184	1160.10	0.0164	0.01713
Sn	120	3	He	-0.061	0.0161	1010.08	0.0164	0.01713
Sb	121	3	He	0.093	0.0017	110.01	0.0155	0.0002641
Sb	121	3	He	0.127	0.0022	140.01	0.0155	0.0002641
Sb	121	3	He	0.148	0.0026	160.01	0.0155	0.0002641
Ba	137	3	He	31.139	0.1552	10024.00	0.005	0.0001577
Ba	137	3	He	32.502	0.162	10194.11	0.005	0.0001577
Ba	137	3	He	34.269	0.1708	10694.72	0.005	0.0001577
Tl	205	3	He	0.013	0.0006	170.01	0.026	0.0002504
Tl	205	3	He	0.005	0.0004	110.00	0.026	0.0002504
Tl	205	3	He	0.015	0.0006	190.01	0.026	0.0002504
Pb	208	3	He	0.038	0.0028	400.02	0.0349	0.001422
Pb	208	3	He	0.06	0.0035	590.04	0.0349	0.001422
Pb	208	3	He	0.03	0.0025	340.02	0.0349	0.001422
U	238	3	He	0.879	0.0442	10434.64	0.0502	5.657E-05
U	238	3	He	0.914	0.0459	10915.04	0.0502	5.657E-05
U	238	3	He	0.856	0.0431	10244.45	0.0502	5.657E-05
Sc	45	1	No Gas			2142766.22		
Sc	45	1	No Gas			2153140.75		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2128553.09		
Ge	72	1	No Gas			1048752.17		
Ge	72	1	No Gas			1068237.09		
Ge	72	1	No Gas			1062407.80		
Sc	45	2	H2			125659.90		
Sc	45	2	H2			127264.50		
Sc	45	2	H2			127162.65		
Ge	72	2	H2			109396.53		
Ge	72	2	H2			108620.06		
Ge	72	2	H2			109820.09		
In	115	2	H2			295877.94		
In	115	2	H2			289329.14		
In	115	2	H2			292715.03		
Sc	45	3	He			38201.10		
Sc	45	3	He			38210.75		
Sc	45	3	He			37759.77		
Ge	72	3	He			67539.80		
Ge	72	3	He			67087.82		
Ge	72	3	He			67408.71		
In	115	3	He			64600.77		
In	115	3	He			62943.01		
In	115	3	He			62632.09		
Tb	159	3	He			292703.55		
Tb	159	3	He			294248.30		
Tb	159	3	He			292794.19		
Bi	209	3	He			236035.35		
Bi	209	3	He			237543.28		
Bi	209	3	He			237838.51		

Quantitation Report

Data File Name	051SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 7:59:13 AM
Sample Name	410-136848-Y-10-A
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

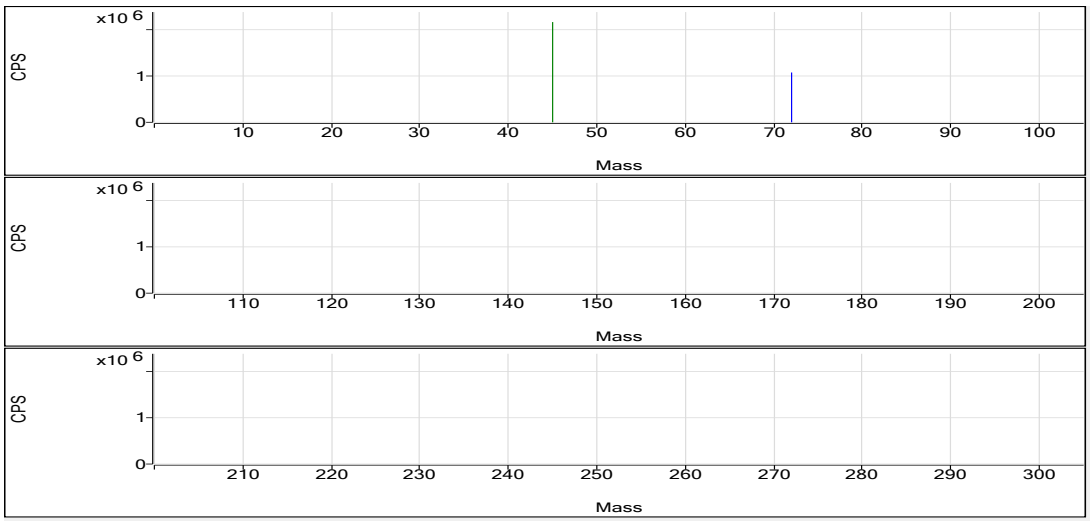
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	421.9	50.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.245	ppb	13.3	12.89	0.0001	Pulse	1.5000	3
Na	23	45	He	4202.014	ppb	2.2	614213.42	16.4993	Pulse	0.1000	3
Mg	24	45	He	7551.466	ppb	2.5	524279.25	14.0838	Pulse	0.1000	3
Al	27	45	He	2.477	ppb	38.4	70.00	0.0019	Pulse	0.1000	3
K	39	45	He	22959.697	ppb	2.1	1005059.67	26.9981	Pulse	0.1000	3
Ca	44	45	He	28174.109	ppb	1.8	69449.22	1.8655	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.079	ppb	N/A	1072.05	0.0288	Pulse	0.5000	3
Cr	52	45	He	0.159	ppb	39.5	1550.14	0.0416	Pulse	0.1000	3
Mn	55	45	He	515.124	ppb	1.3	237673.51	6.3839	Pulse	0.1000	3
Fe	57	45	He	4.571	ppb	58.9	146.67	0.0039	Pulse	0.1000	3
Co	59	45	He	0.596	ppb	5.0	1390.11	0.0374	Pulse	0.1000	3
Ni	60	72	He	1.596	ppb	8.7	1206.76	0.0178	Pulse	0.1000	3
Cu	63	72	He	0.760	ppb	2.3	1760.16	0.0259	Pulse	0.1000	3
Zn	66	72	He	1.187	ppb	33.5	470.03	0.0069	Pulse	0.1000	3
As	75	72	He	0.219	ppb	68.7	80.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	79.224	ppb	2.4	44851.93	0.7099	Pulse	0.1000	3
Mo	98	115	He	0.354	ppb	16.0	546.70	0.0086	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	146103.2	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.038	ppb	14.4	14.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.227	ppb	N/A	846.76	0.0134	Pulse	0.1000	3
Sb	121	115	He	0.140	ppb	11.7	153.34	0.0024	Pulse	0.1000	3
Ba	137	115	He	55.628	ppb	3.9	17508.54	0.2771	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	22.0	243.34	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	114.1	510.02	0.0018	Pulse	0.1000	3
U	238	209	He	0.045	ppb	18.3	546.70	0.0023	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2162460.44	0.8	106.4	Analog	0.1000	3
No Gas	Ge	72	1074621.26	0.6	106.9	Pulse	0.1000	3
H2	Sc	45	124079.55	0.8	93.9	Pulse	0.1000	3
H2	Ge	72	107203.82	1.4	96.1	Pulse	0.1000	3
H2	In	115	289953.03	1.1	98.7	Pulse	0.1000	3
He	Sc	45	37234.89	1.5	100.8	Pulse	0.1000	3
He	Ge	72	67945.65	0.9	105.2	Pulse	0.1000	3
He	In	115	63179.58	0.7	100.0	Pulse	0.1000	3
He	Tb	159	290266.37	1.3	99.1	Pulse	0.1000	3
He	Bi	209	234349.47	0.7	99.4	Pulse	0.1000	3

No Gas



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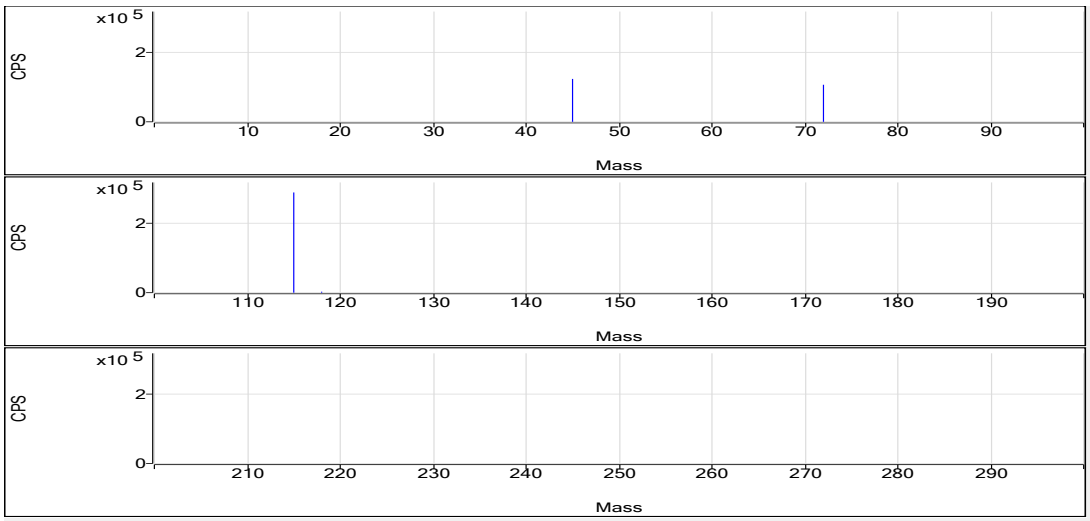
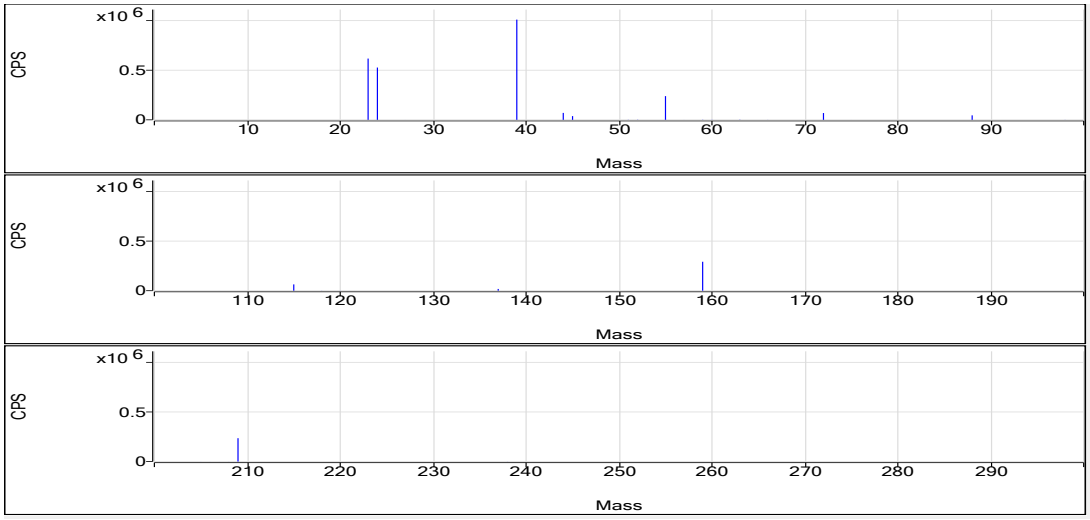


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	40.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.001	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	0.011	0	66.00	0.0008	2.195E-05
Se	78	2	H2	0.222	0.0001	12.00	0.0004	1.386E-05
Se	78	2	H2	0.282	0.0001	14.67	0.0004	1.386E-05
Se	78	2	H2	0.23	0.0001	12.00	0.0004	1.386E-05
Na	23	3	He	4279.351	16.7948	617833.86	0.0038	0.4416
Na	23	3	He	4229.693	16.6051	615178.27	0.0038	0.4416
Na	23	3	He	4096.997	16.098	609628.12	0.0038	0.4416
Mg	24	3	He	7702.995	14.3663	528496.24	0.0019	0.005872
Mg	24	3	He	7607.646	14.1886	525652.92	0.0019	0.005872
Mg	24	3	He	7343.755	13.6966	518688.59	0.0019	0.005872
Al	27	3	He	3.454	0.0024	90.00	0.0006	0.0004496
Al	27	3	He	1.557	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	2.419	0.0018	70.00	0.0006	0.0004496
K	39	3	He	23351.95	27.4518	1009872.41	0.0012	0.4456
K	39	3	He	23114.329	27.177	1006842.17	0.0012	0.4456
K	39	3	He	22412.814	26.3657	998464.44	0.0012	0.4456
Ca	44	3	He	28569.106	1.8916	69586.65	0.0001	0.003779
Ca	44	3	He	28343.16	1.8767	69526.24	0.0001	0.003779
Ca	44	3	He	27610.06	1.8282	69234.78	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.08	0.0288	1058.05	0.0223	0.03054
V	51	3	He	-0.082	0.0287	1064.05	0.0223	0.03054
V	51	3	He	-0.074	0.0289	1094.05	0.0223	0.03054
Cr	52	3	He	0.185	0.0424	1560.12	0.0285	0.03714
Cr	52	3	He	0.203	0.0429	1590.15	0.0285	0.03714
Cr	52	3	He	0.087	0.0396	1500.14	0.0285	0.03714
Mn	55	3	He	522.028	6.4694	237990.93	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	514.904	6.3812	236407.46	0.0124	0.004415
Mn	55	3	He	508.439	6.3011	238622.14	0.0124	0.004415
Fe	57	3	He	7.674	0.0057	210.01	0.0006	0.001356
Fe	57	3	He	2.844	0.003	110.00	0.0006	0.001356
Fe	57	3	He	3.196	0.0032	120.01	0.0006	0.001356
Co	59	3	He	0.618	0.0386	1420.11	0.0581	0.002697
Co	59	3	He	0.609	0.0381	1410.11	0.0581	0.002697
Co	59	3	He	0.563	0.0354	1340.11	0.0581	0.002697
Ni	60	3	He	1.737	0.019	1300.11	0.0087	0.003928
Ni	60	3	He	1.589	0.0177	1190.10	0.0087	0.003928
Ni	60	3	He	1.461	0.0166	1130.08	0.0087	0.003928
Cu	63	3	He	0.774	0.0263	1800.17	0.0261	0.006048
Cu	63	3	He	0.764	0.026	1750.17	0.0261	0.006048
Cu	63	3	He	0.74	0.0254	1730.15	0.0261	0.006048
Zn	66	3	He	1.17	0.0069	470.03	0.0029	0.003512
Zn	66	3	He	0.799	0.0058	390.02	0.0029	0.003512
Zn	66	3	He	1.593	0.0081	550.03	0.0029	0.003512
As	75	3	He	0.385	0.0015	104.00	0.0021	0.0007233
As	75	3	He	0.182	0.0011	74.00	0.0021	0.0007233
As	75	3	He	0.09	0.0009	62.00	0.0021	0.0007233
Sr	88	3	He	79.906	0.716	45082.53	0.009	0.0005796
Sr	88	3	He	77.096	0.6908	43437.54	0.009	0.0005796
Sr	88	3	He	80.669	0.7228	46035.71	0.009	0.0005796
Mo	98	3	He	0.371	0.0091	570.03	0.0235	0.0003188
Mo	98	3	He	0.291	0.0072	450.02	0.0235	0.0003188
Mo	98	3	He	0.4	0.0097	620.04	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	0.032	0.0002	12.00	0.0055	1.07E-05
Cd	111	3	He	0.038	0.0002	14.00	0.0055	1.07E-05
Cd	111	3	He	0.043	0.0003	16.00	0.0055	1.07E-05
Sn	120	3	He	-0.318	0.0119	750.05	0.0164	0.01713
Sn	120	3	He	-0.074	0.0159	1000.19	0.0164	0.01713
Sn	120	3	He	-0.288	0.0124	790.05	0.0164	0.01713
Sb	121	3	He	0.157	0.0027	170.01	0.0155	0.0002641
Sb	121	3	He	0.137	0.0024	150.01	0.0155	0.0002641
Sb	121	3	He	0.125	0.0022	140.01	0.0155	0.0002641
Ba	137	3	He	53.147	0.2648	16670.88	0.005	0.0001577
Ba	137	3	He	56.932	0.2836	17832.30	0.005	0.0001577
Ba	137	3	He	56.805	0.283	18022.45	0.005	0.0001577
Tl	205	3	He	0.018	0.0007	210.01	0.026	0.0002504
Tl	205	3	He	0.022	0.0008	240.01	0.026	0.0002504
Tl	205	3	He	0.028	0.001	280.01	0.026	0.0002504
Pb	208	3	He	0.009	0.0017	250.01	0.0349	0.001422
Pb	208	3	He	0.021	0.0022	370.02	0.0349	0.001422
Pb	208	3	He	-0.001	0.0014	180.01	0.0349	0.001422
U	238	3	He	0.054	0.0028	650.05	0.0502	5.657E-05
U	238	3	He	0.037	0.0019	450.03	0.0502	5.657E-05
U	238	3	He	0.045	0.0023	540.03	0.0502	5.657E-05
Sc	45	1	No Gas			2143959.19		
Sc	45	1	No Gas			2168897.00		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2174525.12		
Ge	72	1	No Gas			1068594.67		
Ge	72	1	No Gas			1082124.75		
Ge	72	1	No Gas			1073144.36		
Sc	45	2	H2			124752.28		
Sc	45	2	H2			124622.04		
Sc	45	2	H2			122864.33		
Ge	72	2	H2			108540.10		
Ge	72	2	H2			107523.83		
Ge	72	2	H2			105547.52		
In	115	2	H2			293652.89		
In	115	2	H2			288638.77		
In	115	2	H2			287567.44		
Sc	45	3	He			36787.16		
Sc	45	3	He			37047.64		
Sc	45	3	He			37869.87		
Ge	72	3	He			68484.38		
Ge	72	3	He			67239.27		
Ge	72	3	He			68113.30		
In	115	3	He			62973.35		
In	115	3	He			62883.49		
In	115	3	He			63696.42		
Tb	159	3	He			294545.23		
Tb	159	3	He			288213.92		
Tb	159	3	He			288039.96		
Bi	209	3	He			235098.18		
Bi	209	3	He			232403.32		
Bi	209	3	He			235546.91		

Quantitation Report

Data File Name	052SMPL.d
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Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

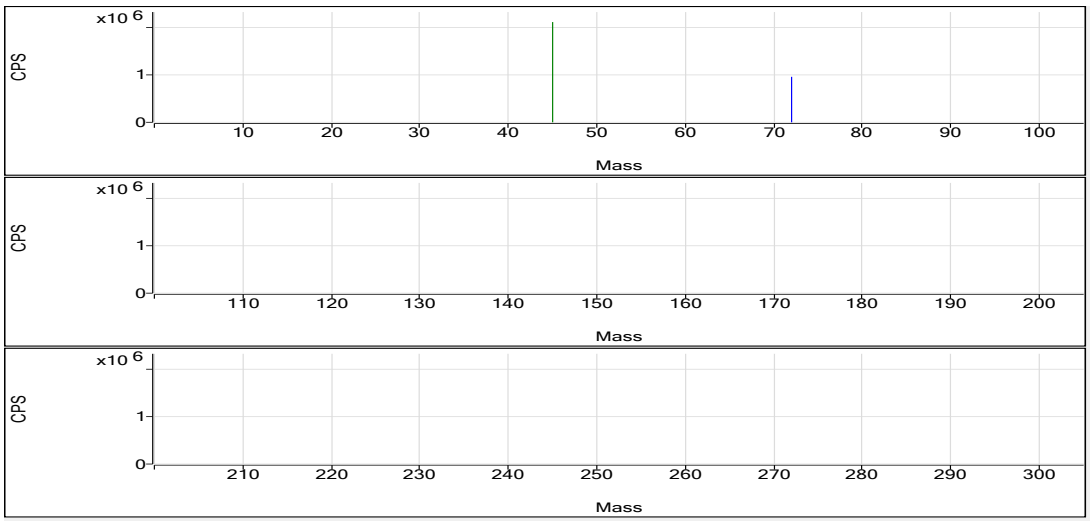
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.002	ppb	N/A	42.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.037	ppb	88.8	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	80666.724	ppb	0.3	11270748.16	308.7034	Analog	0.1000	3
Mg	24	45	He	1981.500	ppb	1.1	135083.04	3.6999	Pulse	0.1000	3
Al	27	45	He	1.749	ppb	31.4	53.33	0.0015	Pulse	0.1000	3
K	39	45	He	619.252	ppb	2.4	42415.75	1.1618	Pulse	0.1000	3
Ca	44	45	He	34799.978	ppb	1.5	84092.76	2.3033	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.072	ppb	N/A	1056.71	0.0289	Pulse	0.5000	3
Cr	52	45	He	-0.066	ppb	N/A	1286.77	0.0352	Pulse	0.1000	3
Mn	55	45	He	150.918	ppb	0.5	68399.66	1.8734	Pulse	0.1000	3
Fe	57	45	He	126.220	ppb	14.2	2663.66	0.0730	Pulse	0.1000	3
Co	59	45	He	0.422	ppb	7.7	993.40	0.0272	Pulse	0.1000	3
Ni	60	72	He	0.503	ppb	14.5	496.69	0.0083	Pulse	0.1000	3
Cu	63	72	He	0.326	ppb	4.3	873.40	0.0146	Pulse	0.1000	3
Zn	66	72	He	208.189	ppb	2.5	35959.22	0.6001	Pulse	0.1000	3
As	75	72	He	0.059	ppb	122.4	50.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	6842.232	ppb	1.3	3763725.05	61.2578	Analog	0.1000	3
Mo	98	115	He	0.215	ppb	17.2	330.01	0.0054	Pulse	0.1000	3
Ag	107	115	He	-0.006	ppb	N/A	10.00	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	52.2	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.227	ppb	N/A	823.38	0.0134	Pulse	0.1000	3
Sb	121	115	He	0.008	ppb	287.9	23.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	22698.232	ppb	2.4	6942286.15	113.0047	Analog	0.1000	3
Tl	205	159	He	0.003	ppb	52.3	93.33	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	58.4	490.02	0.0017	Pulse	0.1000	3
U	238	209	He	0.009	ppb	33.7	113.34	0.0005	Pulse	0.1000	3

ISTD Table:

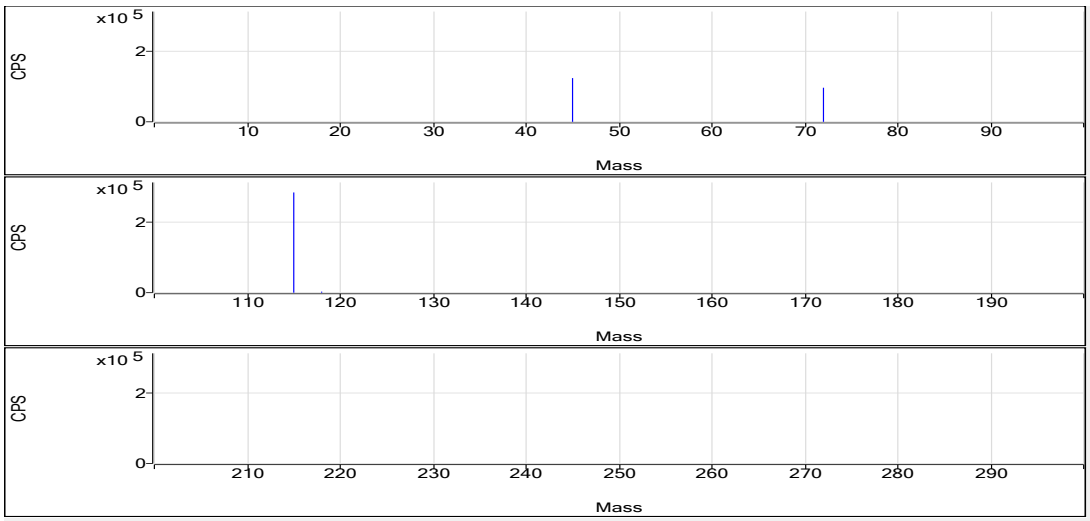
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2105472.37	1.0	103.6	Analog	0.1000	3
No Gas	Ge	72	955420.20	0.7	95.1	Pulse	0.1000	3
H2	Sc	45	123387.05	0.1	93.4	Pulse	0.1000	3
H2	Ge	72	96189.46	0.9	86.2	Pulse	0.1000	3
H2	In	115	282872.88	1.7	96.3	Pulse	0.1000	3
He	Sc	45	36509.95	0.2	98.8	Pulse	0.1000	3
He	Ge	72	59922.86	0.3	92.8	Pulse	0.1000	3
He	In	115	61448.75	1.5	97.2	Pulse	0.1000	3
He	Tb	159	284821.55	0.3	97.3	Pulse	0.1000	3
He	Bi	209	227377.33	1.4	96.4	Pulse	0.1000	3

No Gas

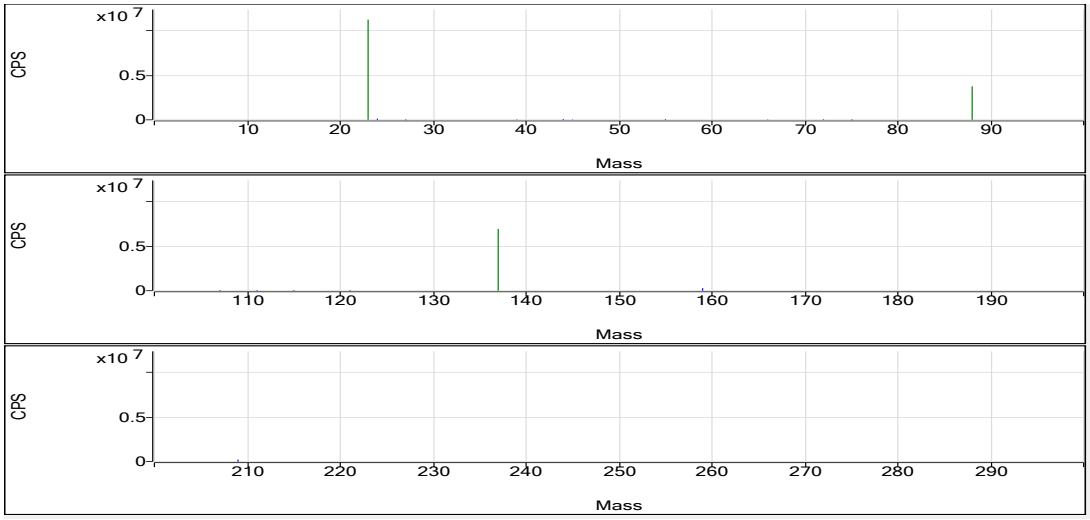


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	50.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.008	0	34.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.001	0	44.00	0.0008	2.195E-05
Se	78	2	H2	0	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.047	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.063	0	4.00	0.0004	1.386E-05
Na	23	3	He	80410.196	307.7231	11249292.33	0.0038	0.4416
Na	23	3	He	80662.42	308.687	11241277.33	0.0038	0.4416
Na	23	3	He	80927.556	309.7002	11321674.83	0.0038	0.4416
Mg	24	3	He	1997.328	3.7294	136334.96	0.0019	0.005872
Mg	24	3	He	1991.179	3.718	135394.97	0.0019	0.005872
Mg	24	3	He	1955.993	3.6524	133519.18	0.0019	0.005872
Al	27	3	He	2.061	0.0016	60.00	0.0006	0.0004496
Al	27	3	He	2.072	0.0016	60.00	0.0006	0.0004496
Al	27	3	He	1.115	0.0011	40.00	0.0006	0.0004496
K	39	3	He	602.218	1.1421	41750.30	0.0012	0.4456
K	39	3	He	629.604	1.1737	42743.66	0.0012	0.4456
K	39	3	He	625.933	1.1695	42753.29	0.0012	0.4456
Ca	44	3	He	34392.715	2.2764	83218.07	0.0001	0.003779
Ca	44	3	He	35381.936	2.3418	85279.55	0.0001	0.003779
Ca	44	3	He	34625.284	2.2918	83780.67	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.148	0.0272	996.04	0.0223	0.03054
V	51	3	He	-0.049	0.0294	1072.05	0.0223	0.03054
V	51	3	He	-0.018	0.0301	1102.05	0.0223	0.03054
Cr	52	3	He	-0.18	0.032	1170.09	0.0285	0.03714
Cr	52	3	He	0.027	0.0379	1380.12	0.0285	0.03714
Cr	52	3	He	-0.046	0.0358	1310.11	0.0285	0.03714
Mn	55	3	He	151.643	1.8824	68814.47	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	150.069	1.8629	67840.94	0.0124	0.004415
Mn	55	3	He	151.043	1.875	68543.56	0.0124	0.004415
Fe	57	3	He	145.676	0.084	3070.42	0.0006	0.001356
Fe	57	3	He	122.519	0.0709	2580.28	0.0006	0.001356
Fe	57	3	He	110.465	0.064	2340.28	0.0006	0.001356
Co	59	3	He	0.415	0.0268	980.07	0.0581	0.002697
Co	59	3	He	0.393	0.0255	930.06	0.0581	0.002697
Co	59	3	He	0.457	0.0293	1070.08	0.0581	0.002697
Ni	60	3	He	0.586	0.009	540.03	0.0087	0.003928
Ni	60	3	He	0.449	0.0078	470.02	0.0087	0.003928
Ni	60	3	He	0.474	0.008	480.03	0.0087	0.003928
Cu	63	3	He	0.311	0.0142	850.07	0.0261	0.006048
Cu	63	3	He	0.329	0.0146	880.06	0.0261	0.006048
Cu	63	3	He	0.339	0.0149	890.07	0.0261	0.006048
Zn	66	3	He	213.266	0.6146	36837.99	0.0029	0.003512
Zn	66	3	He	208.385	0.6006	36096.31	0.0029	0.003512
Zn	66	3	He	202.918	0.585	34943.35	0.0029	0.003512
As	75	3	He	0.134	0.001	60.00	0.0021	0.0007233
As	75	3	He	0.053	0.0008	50.00	0.0021	0.0007233
As	75	3	He	-0.01	0.0007	42.00	0.0021	0.0007233
Sr	88	3	He	6937.942	62.1147	3760959.63	0.009	0.0005796
Sr	88	3	He	6826.054	61.1129	3749394.32	0.009	0.0005796
Sr	88	3	He	6762.699	60.5457	3780821.19	0.009	0.0005796
Mo	98	3	He	0.176	0.0045	270.01	0.0235	0.0003188
Mo	98	3	He	0.25	0.0062	380.02	0.0235	0.0003188
Mo	98	3	He	0.218	0.0054	340.01	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	-0.01	0	0.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Cd	111	3	He	0.028	0.0002	10.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	-0.309	0.0121	730.04	0.0164	0.01713
Sn	120	3	He	-0.021	0.0168	1030.07	0.0164	0.01713
Sn	120	3	He	-0.351	0.0114	710.04	0.0164	0.01713
Sb	121	3	He	0.026	0.0007	40.00	0.0155	0.0002641
Sb	121	3	He	0.015	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Ba	137	3	He	23225	115.6273	7001077.40	0.005	0.0001577
Ba	137	3	He	22728.621	113.156	6942335.52	0.005	0.0001577
Ba	137	3	He	22141.075	110.2309	6883445.52	0.005	0.0001577
Tl	205	3	He	0.001	0.0003	80.00	0.026	0.0002504
Tl	205	3	He	0.004	0.0004	100.00	0.026	0.0002504
Tl	205	3	He	0.004	0.0004	100.00	0.026	0.0002504
Pb	208	3	He	0.014	0.0019	340.02	0.0349	0.001422
Pb	208	3	He	0.004	0.0015	290.01	0.0349	0.001422
Pb	208	3	He	0.008	0.0017	210.01	0.0349	0.001422
U	238	3	He	0.008	0.0004	100.00	0.0502	5.657E-05
U	238	3	He	0.007	0.0004	90.00	0.0502	5.657E-05
U	238	3	He	0.012	0.0007	150.01	0.0502	5.657E-05
Sc	45	1	No Gas			2091722.16		
Sc	45	1	No Gas			2129188.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2095506.38		
Ge	72	1	No Gas			948960.85		
Ge	72	1	No Gas			955052.64		
Ge	72	1	No Gas			962247.10		
Sc	45	2	H2			123279.89		
Sc	45	2	H2			123501.77		
Sc	45	2	H2			123379.50		
Ge	72	2	H2			95206.07		
Ge	72	2	H2			96867.50		
Ge	72	2	H2			96494.82		
In	115	2	H2			280089.96		
In	115	2	H2			280217.65		
In	115	2	H2			288311.03		
Sc	45	3	He			36556.54		
Sc	45	3	He			36416.43		
Sc	45	3	He			36556.89		
Ge	72	3	He			59936.13		
Ge	72	3	He			60096.98		
Ge	72	3	He			59735.46		
In	115	3	He			60553.18		
In	115	3	He			61355.86		
In	115	3	He			62451.16		
Tb	159	3	He			284708.94		
Tb	159	3	He			284085.70		
Tb	159	3	He			285670.00		
Bi	209	3	He			229024.63		
Bi	209	3	He			229393.40		
Bi	209	3	He			223713.96		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

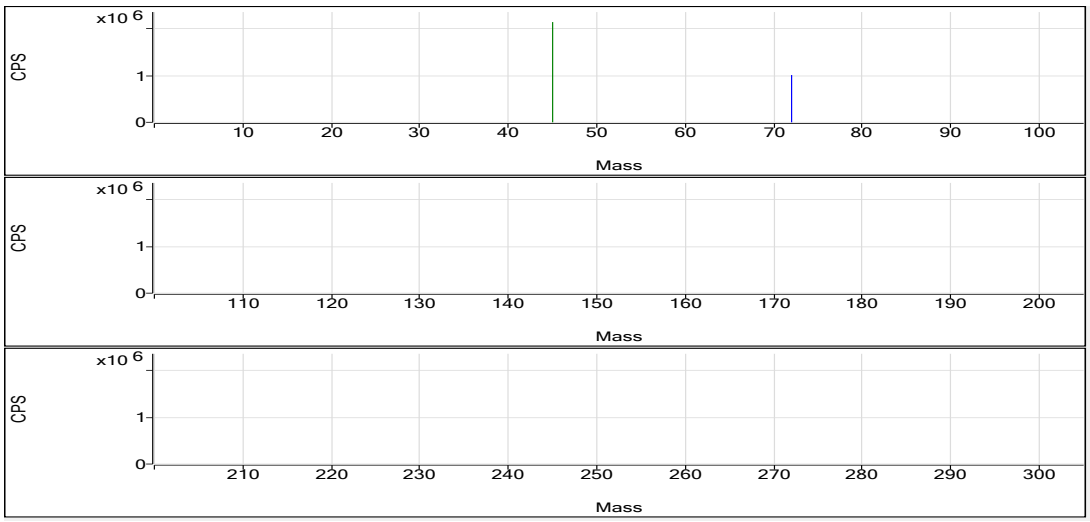
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	44.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.000	ppb	N/A	1.33	0.0000	Pulse	1.5000	3
Na	23	45	He	769.413	ppb	2.2	125828.83	3.3819	Pulse	0.1000	3
Mg	24	45	He	20.543	ppb	4.2	1643.49	0.0442	Pulse	0.1000	3
Al	27	45	He	0.777	ppb	93.8	33.33	0.0009	Pulse	0.1000	3
K	39	45	He	8.731	ppb	121.0	16960.35	0.4557	Pulse	0.1000	3
Ca	44	45	He	333.144	ppb	8.8	960.06	0.0258	Pulse	0.1000	3
Ti	47	45	He	1.041	ppb	87.6	20.00	0.0005	Pulse	0.1000	3
V	51	45	He	-0.066	ppb	N/A	1082.05	0.0291	Pulse	0.5000	3
Cr	52	45	He	-0.046	ppb	N/A	1333.44	0.0358	Pulse	0.1000	3
Mn	55	45	He	1.553	ppb	16.4	880.06	0.0236	Pulse	0.1000	3
Fe	57	45	He	2.826	ppb	45.2	110.00	0.0030	Pulse	0.1000	3
Co	59	45	He	0.017	ppb	39.1	136.67	0.0037	Pulse	0.1000	3
Ni	60	72	He	0.016	ppb	132.0	253.34	0.0041	Pulse	0.1000	3
Cu	63	72	He	0.014	ppb	239.7	400.02	0.0064	Pulse	0.1000	3
Zn	66	72	He	2.936	ppb	17.5	743.38	0.0119	Pulse	0.1000	3
As	75	72	He	-0.060	ppb	N/A	37.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	63.063	ppb	2.4	35649.12	0.5652	Pulse	0.1000	3
Mo	98	115	He	0.009	ppb	88.3	33.33	0.0005	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	113.6	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	151.5	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.084	ppb	N/A	993.41	0.0157	Pulse	0.1000	3
Sb	121	115	He	-0.014	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
Ba	137	115	He	215.134	ppb	0.4	67576.93	1.0712	Pulse	0.1000	3
Tl	205	159	He	0.000	ppb	901.4	73.33	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	91.3	483.35	0.0017	Pulse	0.1000	3
U	238	209	He	0.000	ppb	320.8	16.67	0.0001	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2141525.54	1.1	105.3	Analog	0.1000	3
No Gas	Ge	72	1009772.10	1.6	100.5	Pulse	0.1000	3
H2	Sc	45	118617.50	0.7	89.8	Pulse	0.1000	3
H2	Ge	72	97898.15	1.2	87.8	Pulse	0.1000	3
H2	In	115	280686.12	0.6	95.6	Pulse	0.1000	3
He	Sc	45	37211.82	1.0	100.7	Pulse	0.1000	3
He	Ge	72	62349.68	0.3	96.6	Pulse	0.1000	3
He	In	115	63085.40	1.1	99.8	Pulse	0.1000	3
He	Tb	159	283806.99	0.4	96.9	Pulse	0.1000	3
He	Bi	209	231025.03	0.6	98.0	Pulse	0.1000	3

No Gas



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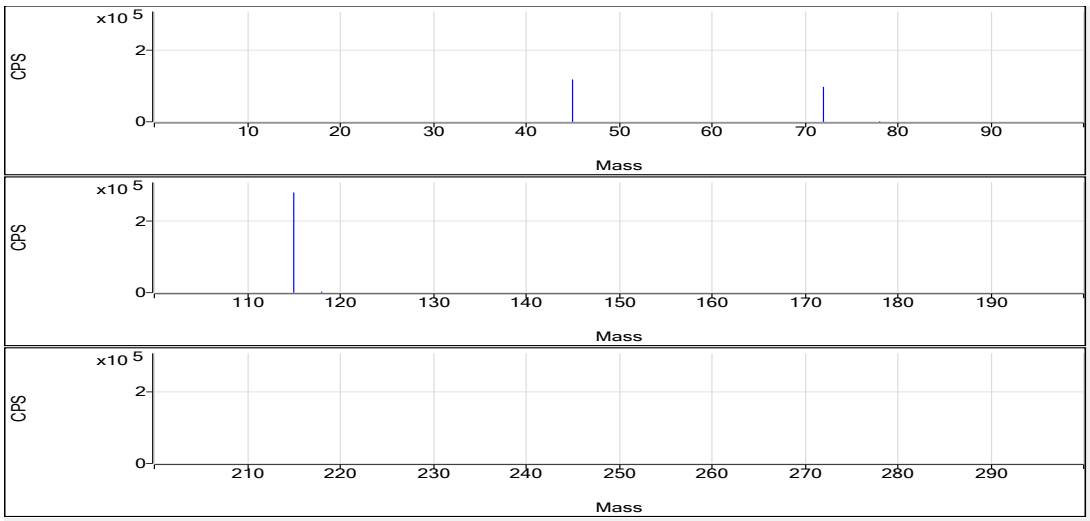
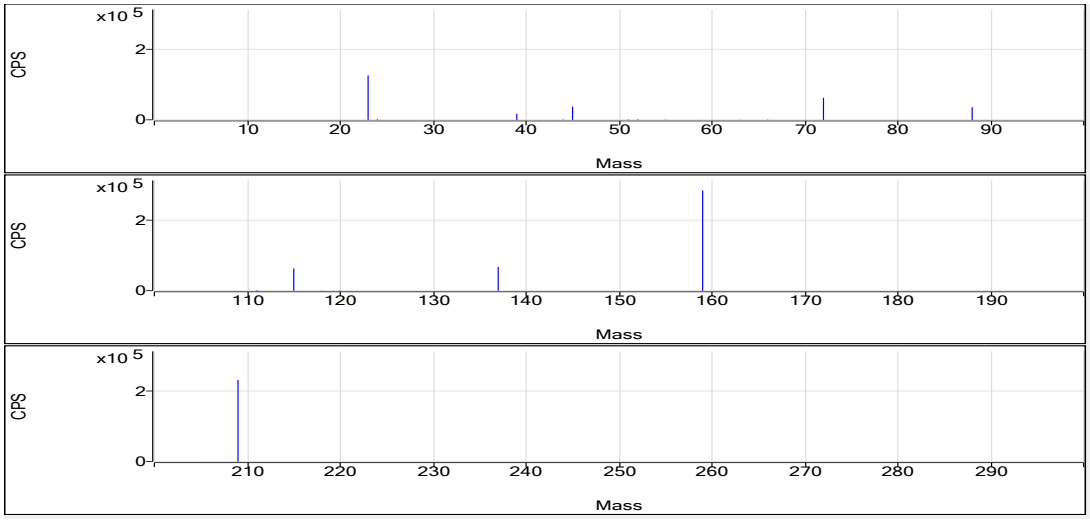


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.001	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.003	0	42.00	0.0008	2.195E-05
Se	78	2	H2	0.015	0	2.00	0.0004	1.386E-05
Se	78	2	H2	-0.016	0	0.67	0.0004	1.386E-05
Se	78	2	H2	0	0	1.33	0.0004	1.386E-05
Na	23	3	He	787.597	3.4513	126931.65	0.0038	0.4416
Na	23	3	He	754.755	3.3258	124783.31	0.0038	0.4416
Na	23	3	He	765.889	3.3684	125771.53	0.0038	0.4416
Mg	24	3	He	21.064	0.0451	1660.17	0.0019	0.005872
Mg	24	3	He	21.014	0.045	1690.17	0.0019	0.005872
Mg	24	3	He	19.551	0.0423	1580.14	0.0019	0.005872
Al	27	3	He	1.574	0.0014	50.00	0.0006	0.0004496
Al	27	3	He	0.144	0.0005	20.00	0.0006	0.0004496
Al	27	3	He	0.612	0.0008	30.00	0.0006	0.0004496
K	39	3	He	-1.86	0.4435	16309.63	0.0012	0.4456
K	39	3	He	8.785	0.4558	17100.50	0.0012	0.4456
K	39	3	He	19.269	0.4679	17470.92	0.0012	0.4456
Ca	44	3	He	321.408	0.025	920.06	0.0001	0.003779
Ca	44	3	He	366.362	0.028	1050.07	0.0001	0.003779
Ca	44	3	He	311.664	0.0244	910.06	0.0001	0.003779
Ti	47	3	He	2.093	0.0011	40.00	0.0005	0
Ti	47	3	He	0.513	0.0003	10.00	0.0005	0
Ti	47	3	He	0.515	0.0003	10.00	0.0005	0
V	51	3	He	-0.082	0.0287	1056.04	0.0223	0.03054
V	51	3	He	-0.043	0.0296	1110.05	0.0223	0.03054
V	51	3	He	-0.072	0.0289	1080.05	0.0223	0.03054
Cr	52	3	He	-0.005	0.037	1360.12	0.0285	0.03714
Cr	52	3	He	-0.04	0.036	1350.10	0.0285	0.03714
Cr	52	3	He	-0.091	0.0346	1290.10	0.0285	0.03714
Mn	55	3	He	1.532	0.0234	860.07	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.817	0.0269	1010.07	0.0124	0.004415
Mn	55	3	He	1.309	0.0206	770.04	0.0124	0.004415
Fe	57	3	He	3.362	0.0033	120.00	0.0006	0.001356
Fe	57	3	He	1.369	0.0021	80.00	0.0006	0.001356
Fe	57	3	He	3.748	0.0035	130.01	0.0006	0.001356
Co	59	3	He	0.01	0.0033	120.00	0.0581	0.002697
Co	59	3	He	0.018	0.0037	140.01	0.0581	0.002697
Co	59	3	He	0.023	0.004	150.01	0.0581	0.002697
Ni	60	3	He	0.029	0.0042	260.01	0.0087	0.003928
Ni	60	3	He	0.026	0.0042	260.01	0.0087	0.003928
Ni	60	3	He	-0.008	0.0039	240.01	0.0087	0.003928
Cu	63	3	He	-0.022	0.0055	340.01	0.0261	0.006048
Cu	63	3	He	0.044	0.0072	450.03	0.0261	0.006048
Cu	63	3	He	0.021	0.0066	410.02	0.0261	0.006048
Zn	66	3	He	2.475	0.0106	660.04	0.0029	0.003512
Zn	66	3	He	2.844	0.0117	730.04	0.0029	0.003512
Zn	66	3	He	3.487	0.0135	840.06	0.0029	0.003512
As	75	3	He	-0.039	0.0006	40.00	0.0021	0.0007233
As	75	3	He	-0.103	0.0005	32.00	0.0021	0.0007233
As	75	3	He	-0.039	0.0006	40.00	0.0021	0.0007233
Sr	88	3	He	64.531	0.5783	36027.01	0.009	0.0005796
Sr	88	3	He	61.523	0.5514	34973.90	0.009	0.0005796
Sr	88	3	He	63.135	0.5658	35946.44	0.009	0.0005796
Mo	98	3	He	0.014	0.0006	40.00	0.0235	0.0003188
Mo	98	3	He	0.013	0.0006	40.00	0.0235	0.0003188
Mo	98	3	He	0	0.0003	20.00	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.009	0.0009	60.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.009	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.105	0.0154	960.09	0.0164	0.01713
Sn	120	3	He	-0.073	0.0159	1010.07	0.0164	0.01713
Sn	120	3	He	-0.075	0.0159	1010.07	0.0164	0.01713
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Ba	137	3	He	215.748	1.0743	66923.28	0.005	0.0001577
Ba	137	3	He	214.22	1.0667	67657.75	0.005	0.0001577
Ba	137	3	He	215.434	1.0727	68149.77	0.005	0.0001577
Tl	205	3	He	-0.003	0.0002	50.00	0.026	0.0002504
Tl	205	3	He	0.003	0.0003	90.00	0.026	0.0002504
Tl	205	3	He	0.001	0.0003	80.00	0.026	0.0002504
Pb	208	3	He	0.01	0.0018	330.02	0.0349	0.001422
Pb	208	3	He	0	0.0014	200.01	0.0349	0.001422
Pb	208	3	He	0.014	0.0019	290.01	0.0349	0.001422
U	238	3	He	0	0	10.00	0.0502	5.657E-05
U	238	3	He	0.001	0.0001	30.00	0.0502	5.657E-05
U	238	3	He	0	0	10.00	0.0502	5.657E-05
Sc	45	1	No Gas			2121264.97		
Sc	45	1	No Gas			2136061.69		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2167249.97		
Ge	72	1	No Gas			991184.99		
Ge	72	1	No Gas			1020551.00		
Ge	72	1	No Gas			1017580.30		
Sc	45	2	H2			119598.77		
Sc	45	2	H2			118308.48		
Sc	45	2	H2			117945.25		
Ge	72	2	H2			97562.93		
Ge	72	2	H2			99254.08		
Ge	72	2	H2			96877.44		
In	115	2	H2			278741.21		
In	115	2	H2			281799.86		
In	115	2	H2			281517.30		
Sc	45	3	He			36777.42		
Sc	45	3	He			37519.29		
Sc	45	3	He			37338.74		
Ge	72	3	He			62246.14		
Ge	72	3	He			62597.75		
Ge	72	3	He			62205.14		
In	115	3	He			62300.93		
In	115	3	He			63434.78		
In	115	3	He			63535.07		
Tb	159	3	He			285188.84		
Tb	159	3	He			282715.66		
Tb	159	3	He			283516.48		
Bi	209	3	He			232533.96		
Bi	209	3	He			229835.74		
Bi	209	3	He			230705.39		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:05:20 AM
Sample Name	410-136848-Y-3-A
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

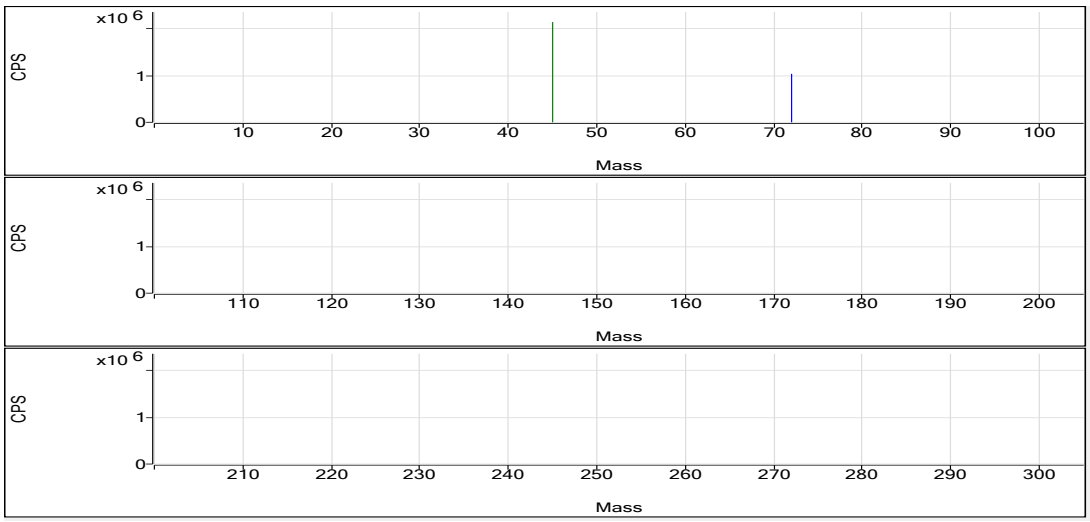
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.004	ppb	N/A	40.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.035	ppb	104.1	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	64974.000	ppb	1.6	9425807.57	248.7349	Analog	0.1000	3
Mg	24	45	He	11298.683	ppb	2.3	798328.42	21.0697	Pulse	0.1000	3
Al	27	45	He	12.783	ppb	11.4	296.68	0.0078	Pulse	0.1000	3
K	39	45	He	2159.605	ppb	3.8	111503.45	2.9432	Pulse	0.1000	3
Ca	44	45	He	86271.701	ppb	1.5	216171.54	5.7045	Pulse	0.1000	3
Ti	47	45	He	0.342	ppb	86.6	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.276	ppb	N/A	923.37	0.0244	Pulse	0.5000	3
Cr	52	45	He	-0.146	ppb	N/A	1250.10	0.0330	Pulse	0.1000	3
Mn	55	45	He	651.196	ppb	2.4	305731.31	8.0691	Pulse	0.1000	3
Fe	57	45	He	44.699	ppb	7.2	1013.40	0.0267	Pulse	0.1000	3
Co	59	45	He	0.120	ppb	17.9	366.69	0.0097	Pulse	0.1000	3
Ni	60	72	He	0.200	ppb	42.5	370.02	0.0057	Pulse	0.1000	3
Cu	63	72	He	0.542	ppb	18.8	1320.11	0.0202	Pulse	0.1000	3
Zn	66	72	He	3.754	ppb	19.7	933.40	0.0143	Pulse	0.1000	3
As	75	72	He	0.248	ppb	34.6	80.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	285.351	ppb	2.1	157637.47	2.5553	Pulse	0.1000	3
Mo	98	115	He	0.658	ppb	12.7	973.40	0.0158	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	80.1	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	58.3	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.383	ppb	N/A	670.04	0.0108	Pulse	0.1000	3
Sb	121	115	He	0.039	ppb	57.8	53.33	0.0009	Pulse	0.1000	3
Ba	137	115	He	25.225	ppb	4.7	7755.78	0.1257	Pulse	0.1000	3
Tl	205	159	He	0.004	ppb	48.3	103.34	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.024	ppb	37.4	660.03	0.0023	Pulse	0.1000	3
U	238	209	He	0.336	ppb	4.4	3880.74	0.0169	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2142693.09	2.8	105.4	Analog	0.1000	3
No Gas	Ge	72	1035773.97	2.7	103.0	Pulse	0.1000	3
H2	Sc	45	125380.49	1.5	94.9	Pulse	0.1000	3
H2	Ge	72	106679.78	1.1	95.6	Pulse	0.1000	3
H2	In	115	289662.22	0.2	98.6	Pulse	0.1000	3
He	Sc	45	37903.77	2.4	102.6	Pulse	0.1000	3
He	Ge	72	65313.14	1.5	101.2	Pulse	0.1000	3
He	In	115	61702.87	1.6	97.6	Pulse	0.1000	3
He	Tb	159	290888.68	0.5	99.3	Pulse	0.1000	3
He	Bi	209	229251.44	0.2	97.2	Pulse	0.1000	3

No Gas



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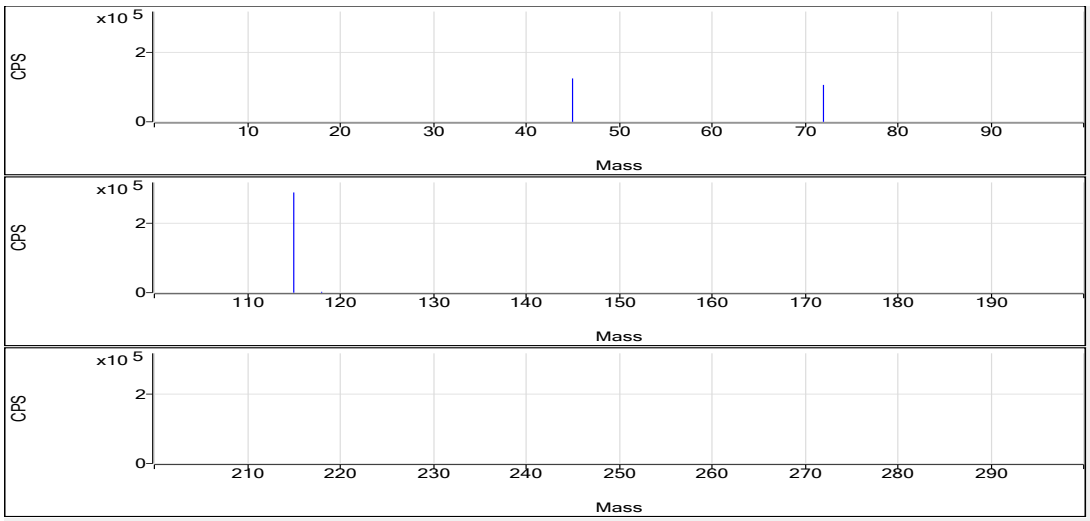
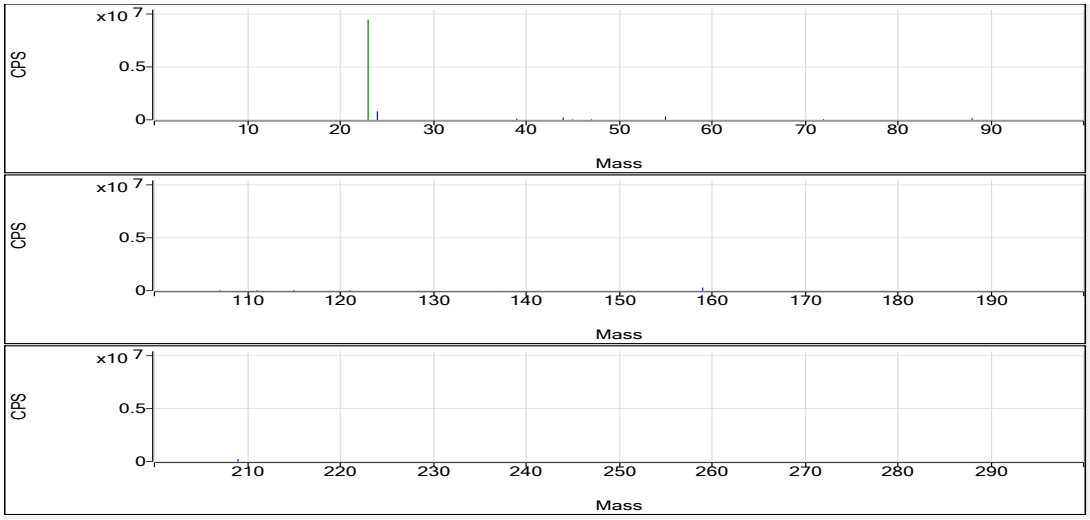


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.007	0	36.00	0.0008	2.195E-05
Be	9	1	No Gas	0.001	0	48.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.005	0	38.00	0.0008	2.195E-05
Se	78	2	H2	0.04	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.07	0	4.67	0.0004	1.386E-05
Se	78	2	H2	-0.004	0	1.33	0.0004	1.386E-05
Na	23	3	He	65224.806	249.6933	9488464.86	0.0038	0.4416
Na	23	3	He	63863.115	244.4897	9472171.11	0.0038	0.4416
Na	23	3	He	65834.079	252.0216	9316786.74	0.0038	0.4416
Mg	24	3	He	11290.485	21.0544	800076.08	0.0019	0.005872
Mg	24	3	He	11039.718	20.5869	797589.28	0.0019	0.005872
Mg	24	3	He	11565.848	21.5677	797319.91	0.0019	0.005872
Al	27	3	He	12.877	0.0079	300.01	0.0006	0.0004496
Al	27	3	He	11.276	0.007	270.01	0.0006	0.0004496
Al	27	3	He	14.195	0.0087	320.02	0.0006	0.0004496
K	39	3	He	2119.596	2.8969	110083.47	0.0012	0.4456
K	39	3	He	2104.412	2.8793	111553.05	0.0012	0.4456
K	39	3	He	2254.808	3.0533	112873.82	0.0012	0.4456
Ca	44	3	He	85951.833	5.6834	215972.11	0.0001	0.003779
Ca	44	3	He	85125.018	5.6288	218073.28	0.0001	0.003779
Ca	44	3	He	87738.253	5.8014	214469.22	0.0001	0.003779
Ti	47	3	He	0.506	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.521	0.0003	10.00	0.0005	0
V	51	3	He	-0.275	0.0244	928.04	0.0223	0.03054
V	51	3	He	-0.333	0.0231	896.04	0.0223	0.03054
V	51	3	He	-0.222	0.0256	946.04	0.0223	0.03054
Cr	52	3	He	-0.251	0.03	1140.08	0.0285	0.03714
Cr	52	3	He	-0.117	0.0338	1310.11	0.0285	0.03714
Cr	52	3	He	-0.069	0.0352	1300.10	0.0285	0.03714
Mn	55	3	He	650.366	8.0588	306237.91	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	635.725	7.8775	305193.92	0.0124	0.004415
Mn	55	3	He	667.497	8.2709	305762.10	0.0124	0.004415
Fe	57	3	He	46.788	0.0279	1060.07	0.0006	0.001356
Fe	57	3	He	46.301	0.0276	1070.08	0.0006	0.001356
Fe	57	3	He	41.007	0.0246	910.06	0.0006	0.001356
Co	59	3	He	0.103	0.0087	330.02	0.0581	0.002697
Co	59	3	He	0.114	0.0093	360.02	0.0581	0.002697
Co	59	3	He	0.144	0.0111	410.02	0.0581	0.002697
Ni	60	3	He	0.267	0.0062	410.02	0.0087	0.003928
Ni	60	3	He	0.104	0.0048	310.01	0.0087	0.003928
Ni	60	3	He	0.228	0.0059	390.02	0.0087	0.003928
Cu	63	3	He	0.427	0.0172	1130.07	0.0261	0.006048
Cu	63	3	He	0.58	0.0212	1360.12	0.0261	0.006048
Cu	63	3	He	0.62	0.0223	1470.13	0.0261	0.006048
Zn	66	3	He	3.874	0.0146	960.07	0.0029	0.003512
Zn	66	3	He	2.963	0.012	770.05	0.0029	0.003512
Zn	66	3	He	4.426	0.0162	1070.08	0.0029	0.003512
As	75	3	He	0.151	0.001	68.00	0.0021	0.0007233
As	75	3	He	0.314	0.0014	88.00	0.0021	0.0007233
As	75	3	He	0.28	0.0013	86.00	0.0021	0.0007233
Sr	88	3	He	280.598	2.5127	157793.74	0.009	0.0005796
Sr	88	3	He	283.281	2.5367	155810.23	0.009	0.0005796
Sr	88	3	He	292.174	2.6164	159308.45	0.009	0.0005796
Mo	98	3	He	0.582	0.014	880.06	0.0235	0.0003188
Mo	98	3	He	0.644	0.0155	950.07	0.0235	0.0003188
Mo	98	3	He	0.748	0.0179	1090.08	0.0235	0.0003188
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.267	0.0127	800.06	0.0164	0.01713
Sn	120	3	He	-0.418	0.0103	630.04	0.0164	0.01713
Sn	120	3	He	-0.463	0.0095	580.03	0.0164	0.01713
Sb	121	3	He	0.014	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.046	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.057	0.0011	70.00	0.0155	0.0002641
Ba	137	3	He	23.997	0.1196	7512.29	0.005	0.0001577
Ba	137	3	He	26.335	0.1313	8062.64	0.005	0.0001577
Ba	137	3	He	25.344	0.1263	7692.42	0.005	0.0001577
Tl	205	3	He	0.004	0.0003	100.00	0.026	0.0002504
Tl	205	3	He	0.002	0.0003	90.00	0.026	0.0002504
Tl	205	3	He	0.006	0.0004	120.01	0.026	0.0002504
Pb	208	3	He	0.027	0.0024	290.02	0.0349	0.001422
Pb	208	3	He	0.031	0.0025	310.02	0.0349	0.001422
Pb	208	3	He	0.014	0.0019	250.01	0.0349	0.001422
U	238	3	He	0.337	0.017	3890.75	0.0502	5.657E-05
U	238	3	He	0.321	0.0162	3700.67	0.0502	5.657E-05
U	238	3	He	0.35	0.0176	4050.79	0.0502	5.657E-05
Sc	45	1	No Gas			2204196.22		
Sc	45	1	No Gas			2082256.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2141626.22		
Ge	72	1	No Gas			1064715.37		
Ge	72	1	No Gas			1008028.50		
Ge	72	1	No Gas			1034578.03		
Sc	45	2	H2			123784.16		
Sc	45	2	H2			124974.19		
Sc	45	2	H2			127383.13		
Ge	72	2	H2			106505.30		
Ge	72	2	H2			105588.53		
Ge	72	2	H2			107945.51		
In	115	2	H2			289424.02		
In	115	2	H2			290441.60		
In	115	2	H2			289121.03		
Sc	45	3	He			38000.48		
Sc	45	3	He			38742.62		
Sc	45	3	He			36968.21		
Ge	72	3	He			65702.10		
Ge	72	3	He			64164.62		
Ge	72	3	He			66072.69		
In	115	3	He			62802.42		
In	115	3	He			61426.18		
In	115	3	He			60894.04		
Tb	159	3	He			290779.62		
Tb	159	3	He			289375.72		
Tb	159	3	He			292510.70		
Bi	209	3	He			229154.88		
Bi	209	3	He			228884.47		
Bi	209	3	He			229714.96		

Quantitation Report

Data File Name	055SMPL.d
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Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

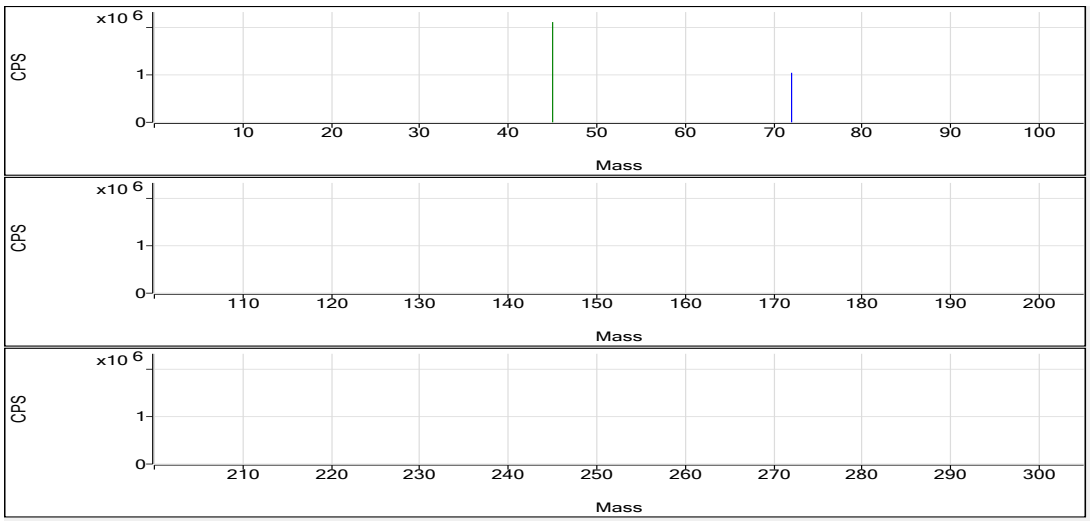
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	315.8	52.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.123	ppb	66.3	7.11	0.0001	Pulse	1.5000	3
Na	23	45	He	27386.502	ppb	2.3	3915867.44	105.0971	Analog	0.1000	3
Mg	24	45	He	6934.075	ppb	2.8	481814.20	12.9329	Pulse	0.1000	3
Al	27	45	He	84.958	ppb	14.7	1843.52	0.0496	Pulse	0.1000	3
K	39	45	He	2464.060	ppb	2.8	122772.41	3.2953	Pulse	0.1000	3
Ca	44	45	He	44682.986	ppb	3.1	110134.81	2.9564	Pulse	0.1000	3
Ti	47	45	He	2.266	ppb	98.4	43.34	0.0012	Pulse	0.1000	3
V	51	45	He	0.344	ppb	9.3	1423.41	0.0382	Pulse	0.5000	3
Cr	52	45	He	0.049	ppb	283.9	1433.45	0.0385	Pulse	0.1000	3
Mn	55	45	He	1154.228	ppb	2.8	532693.73	14.2988	Pulse	0.1000	3
Fe	57	45	He	3026.632	ppb	2.7	64012.36	1.7182	Pulse	0.1000	3
Co	59	45	He	0.501	ppb	6.1	1183.42	0.0318	Pulse	0.1000	3
Ni	60	72	He	0.348	ppb	50.2	456.69	0.0069	Pulse	0.1000	3
Cu	63	72	He	1.049	ppb	5.0	2203.58	0.0335	Pulse	0.1000	3
Zn	66	72	He	15.895	ppb	1.6	3230.49	0.0491	Pulse	0.1000	3
As	75	72	He	1.511	ppb	5.7	253.33	0.0038	Pulse	0.5000	3
Sr	88	115	He	149.755	ppb	1.0	83767.78	1.3413	Pulse	0.1000	3
Mo	98	115	He	1.094	ppb	3.9	1626.82	0.0260	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	68.3	46.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.035	ppb	25.9	12.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.247	ppb	N/A	816.72	0.0131	Pulse	0.1000	3
Sb	121	115	He	0.176	ppb	32.7	186.67	0.0030	Pulse	0.1000	3
Ba	137	115	He	19.831	ppb	5.6	6174.96	0.0989	Pulse	0.1000	3
Tl	205	159	He	-0.002	ppb	N/A	60.00	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.351	ppb	5.0	3967.05	0.0137	Pulse	0.1000	3
U	238	209	He	0.421	ppb	7.5	4957.83	0.0212	Pulse	0.1000	3

ISTD Table:

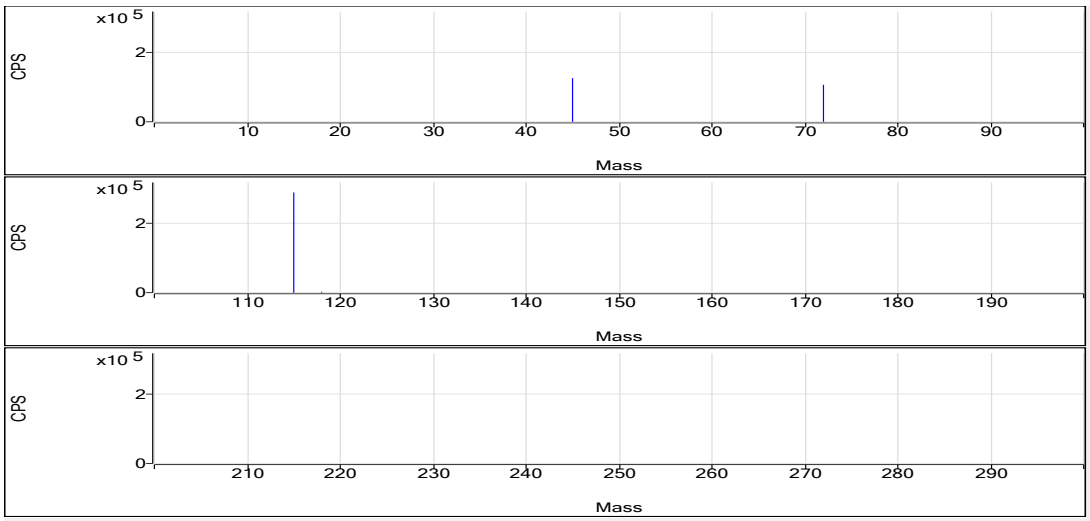
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2111357.31	1.6	103.9	Analog	0.1000	3
No Gas	Ge	72	1043033.19	0.5	103.8	Pulse	0.1000	3
H2	Sc	45	125111.38	0.9	94.7	Pulse	0.1000	3
H2	Ge	72	106229.91	1.5	95.2	Pulse	0.1000	3
H2	In	115	287465.48	0.6	97.9	Pulse	0.1000	3
He	Sc	45	37275.37	3.0	100.9	Pulse	0.1000	3
He	Ge	72	65852.48	1.2	102.0	Pulse	0.1000	3
He	In	115	62454.17	0.6	98.8	Pulse	0.1000	3
He	Tb	159	289701.17	0.7	98.9	Pulse	0.1000	3
He	Bi	209	233936.27	0.3	99.2	Pulse	0.1000	3

No Gas

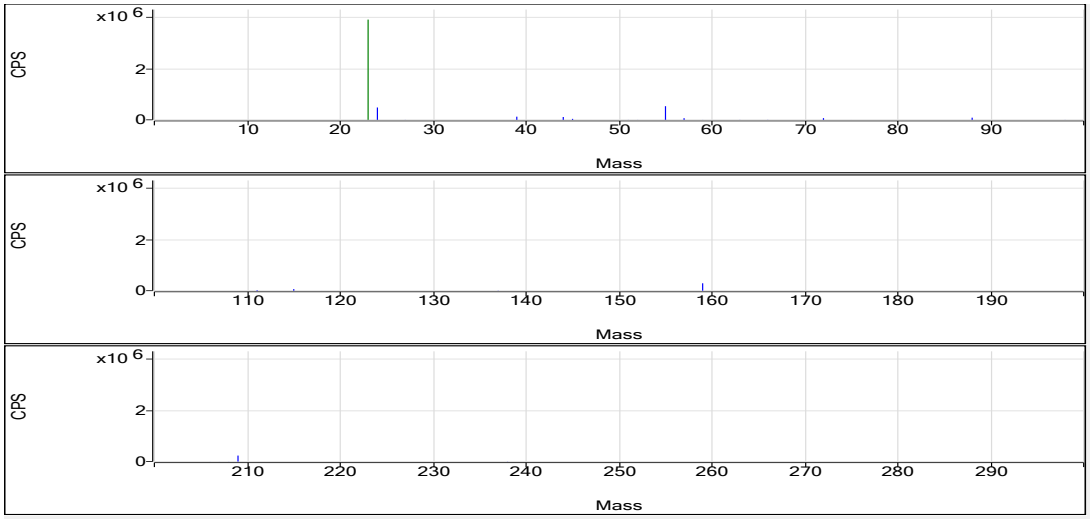


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0	72.00	0.0008	2.195E-05
Be	9	1	No Gas	0.005	0	54.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.009	0	32.00	0.0008	2.195E-05
Se	78	2	H2	0.082	0	5.33	0.0004	1.386E-05
Se	78	2	H2	0.216	0.0001	11.33	0.0004	1.386E-05
Se	78	2	H2	0.07	0	4.67	0.0004	1.386E-05
Na	23	3	He	26861.606	103.0912	3966116.82	0.0038	0.4416
Na	23	3	He	27215.892	104.4451	3874736.19	0.0038	0.4416
Na	23	3	He	28082.009	107.7549	3906749.32	0.0038	0.4416
Mg	24	3	He	6751.599	12.5927	484463.98	0.0019	0.005872
Mg	24	3	He	6912.418	12.8925	478289.02	0.0019	0.005872
Mg	24	3	He	7138.21	13.3134	482689.60	0.0019	0.005872
Al	27	3	He	77.906	0.0455	1750.18	0.0006	0.0004496
Al	27	3	He	77.554	0.0453	1680.15	0.0006	0.0004496
Al	27	3	He	99.415	0.0579	2100.24	0.0006	0.0004496
K	39	3	He	2390.398	3.2101	123497.76	0.0012	0.4456
K	39	3	He	2473.697	3.3064	122662.21	0.0012	0.4456
K	39	3	He	2528.085	3.3693	122157.26	0.0012	0.4456
Ca	44	3	He	43400.254	2.8716	110477.18	0.0001	0.003779
Ca	44	3	He	44507.79	2.9448	109247.72	0.0001	0.003779
Ca	44	3	He	46140.914	3.0527	110679.52	0.0001	0.003779
Ti	47	3	He	1.501	0.0008	30.00	0.0005	0
Ti	47	3	He	0.519	0.0003	10.00	0.0005	0
Ti	47	3	He	4.778	0.0025	90.01	0.0005	0
V	51	3	He	0.307	0.0374	1438.08	0.0223	0.03054
V	51	3	He	0.362	0.0386	1432.08	0.0223	0.03054
V	51	3	He	0.362	0.0386	1400.08	0.0223	0.03054
Cr	52	3	He	-0.099	0.0343	1320.10	0.0285	0.03714
Cr	52	3	He	0.069	0.0391	1450.13	0.0285	0.03714
Cr	52	3	He	0.178	0.0422	1530.13	0.0285	0.03714
Mn	55	3	He	1119.863	13.8732	533729.05	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1158.534	14.3521	532439.84	0.0124	0.004415
Mn	55	3	He	1184.287	14.6711	531912.30	0.0124	0.004415
Fe	57	3	He	2935.888	1.6667	64122.80	0.0006	0.001356
Fe	57	3	He	3046.595	1.7295	64163.08	0.0006	0.001356
Fe	57	3	He	3097.413	1.7584	63751.21	0.0006	0.001356
Co	59	3	He	0.473	0.0302	1160.09	0.0581	0.002697
Co	59	3	He	0.496	0.0315	1170.08	0.0581	0.002697
Co	59	3	He	0.533	0.0337	1220.10	0.0581	0.002697
Ni	60	3	He	0.357	0.007	460.02	0.0087	0.003928
Ni	60	3	He	0.169	0.0054	360.02	0.0087	0.003928
Ni	60	3	He	0.518	0.0084	550.03	0.0087	0.003928
Cu	63	3	He	1.089	0.0345	2260.26	0.0261	0.006048
Cu	63	3	He	0.99	0.0319	2130.22	0.0261	0.006048
Cu	63	3	He	1.069	0.034	2220.25	0.0261	0.006048
Zn	66	3	He	15.72	0.0486	3180.47	0.0029	0.003512
Zn	66	3	He	15.77	0.0487	3250.51	0.0029	0.003512
Zn	66	3	He	16.197	0.0499	3260.50	0.0029	0.003512
As	75	3	He	1.6	0.004	264.00	0.0021	0.0007233
As	75	3	He	1.505	0.0038	256.00	0.0021	0.0007233
As	75	3	He	1.428	0.0037	240.00	0.0021	0.0007233
Sr	88	3	He	148.934	1.334	83878.09	0.009	0.0005796
Sr	88	3	He	148.884	1.3335	83194.53	0.009	0.0005796
Sr	88	3	He	151.448	1.3565	84230.72	0.009	0.0005796
Mo	98	3	He	1.143	0.0272	1710.17	0.0235	0.0003188
Mo	98	3	He	1.07	0.0255	1590.14	0.0235	0.0003188
Mo	98	3	He	1.069	0.0254	1580.15	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	0.033	0.0002	12.00	0.0055	1.07E-05
Cd	111	3	He	0.027	0.0002	10.00	0.0055	1.07E-05
Cd	111	3	He	0.045	0.0003	16.00	0.0055	1.07E-05
Sn	120	3	He	-0.259	0.0129	810.05	0.0164	0.01713
Sn	120	3	He	-0.145	0.0147	920.06	0.0164	0.01713
Sn	120	3	He	-0.337	0.0116	720.04	0.0164	0.01713
Sb	121	3	He	0.117	0.0021	130.00	0.0155	0.0002641
Sb	121	3	He	0.232	0.0038	240.01	0.0155	0.0002641
Sb	121	3	He	0.181	0.0031	190.01	0.0155	0.0002641
Ba	137	3	He	19.395	0.0967	6081.58	0.005	0.0001577
Ba	137	3	He	19.001	0.0948	5911.45	0.005	0.0001577
Ba	137	3	He	21.097	0.1052	6531.85	0.005	0.0001577
Tl	205	3	He	-0.006	0.0001	30.00	0.026	0.0002504
Tl	205	3	He	0.001	0.0003	80.00	0.026	0.0002504
Tl	205	3	He	0	0.0002	70.00	0.026	0.0002504
Pb	208	3	He	0.358	0.0139	2170.25	0.0349	0.001422
Pb	208	3	He	0.331	0.013	2050.23	0.0349	0.001422
Pb	208	3	He	0.364	0.0141	2170.25	0.0349	0.001422
U	238	3	He	0.456	0.023	5361.33	0.0502	5.657E-05
U	238	3	He	0.396	0.0199	4680.99	0.0502	5.657E-05
U	238	3	He	0.41	0.0207	4831.16	0.0502	5.657E-05
Sc	45	1	No Gas			2103939.50		
Sc	45	1	No Gas			2082153.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2147979.34		
Ge	72	1	No Gas			1040524.83		
Ge	72	1	No Gas			1039195.22		
Ge	72	1	No Gas			1049379.52		
Sc	45	2	H2			125871.48		
Sc	45	2	H2			123823.35		
Sc	45	2	H2			125639.31		
Ge	72	2	H2			108046.69		
Ge	72	2	H2			105064.89		
Ge	72	2	H2			105578.15		
In	115	2	H2			285960.56		
In	115	2	H2			289505.19		
In	115	2	H2			286930.70		
Sc	45	3	He			38471.92		
Sc	45	3	He			37098.31		
Sc	45	3	He			36255.89		
Ge	72	3	He			65500.83		
Ge	72	3	He			66746.53		
Ge	72	3	He			65310.09		
In	115	3	He			62883.38		
In	115	3	He			62390.87		
In	115	3	He			62099.56		
Tb	159	3	He			288682.07		
Tb	159	3	He			288467.71		
Tb	159	3	He			291953.73		
Bi	209	3	He			233339.80		
Bi	209	3	He			234765.35		
Bi	209	3	He			233703.65		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

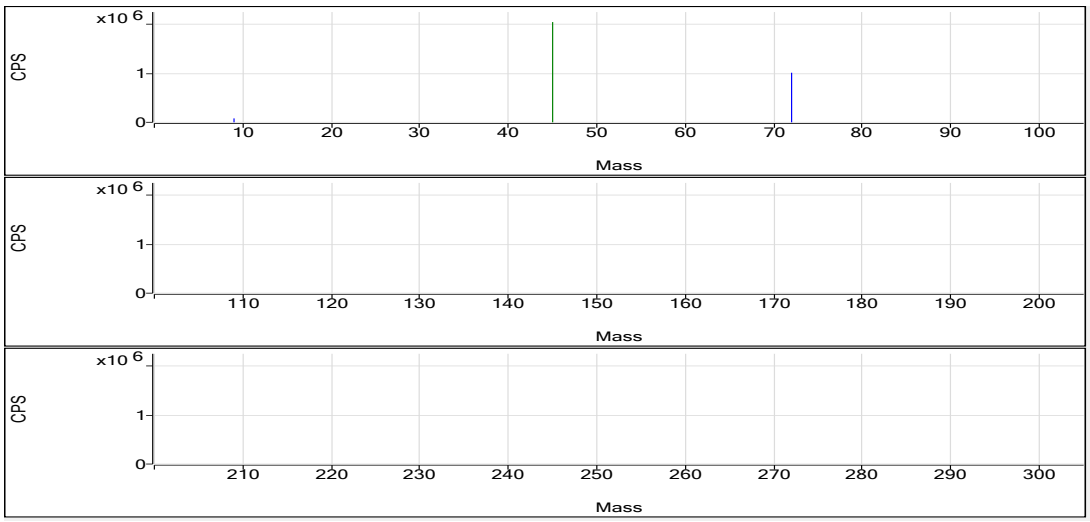
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.776	ppb	1.8	79816.45	0.0390	Pulse	0.5000	3
Se	78	72	H2	52.860	ppb	0.6	2344.87	0.0230	Pulse	1.5000	3
Na	23	45	He	5067.956	ppb	2.7	722498.84	19.8084	Pulse	0.1000	3
Mg	24	45	He	5203.039	ppb	2.1	354037.04	9.7057	Pulse	0.1000	3
Al	27	45	He	5119.431	ppb	1.7	107990.98	2.9604	Pulse	0.1000	3
K	39	45	He	5174.226	ppb	2.6	234520.54	6.4295	Pulse	0.1000	3
Ca	44	45	He	5362.248	ppb	6.1	13056.35	0.3581	Pulse	0.1000	3
Ti	47	45	He	5058.562	ppb	2.1	95874.97	2.6284	Pulse	0.1000	3
V	51	45	He	513.179	ppb	2.1	418441.94	11.4713	Pulse	0.5000	3
Cr	52	45	He	519.402	ppb	2.5	540413.17	14.8159	Pulse	0.1000	3
Mn	55	45	He	509.348	ppb	2.8	230235.05	6.3124	Pulse	0.1000	3
Fe	57	45	He	5048.195	ppb	1.5	104513.41	2.8650	Pulse	0.1000	3
Co	59	45	He	487.486	ppb	1.3	1033272.30	28.3238	Pulse	0.1000	3
Ni	60	72	He	527.395	ppb	0.3	286781.43	4.5750	Pulse	0.1000	3
Cu	63	72	He	497.624	ppb	0.9	815636.45	13.0118	Pulse	0.1000	3
Zn	66	72	He	524.775	ppb	0.7	94480.22	1.5072	Pulse	0.1000	3
As	75	72	He	519.993	ppb	0.2	67435.80	1.0758	Pulse	0.5000	3
Sr	88	115	He	51.194	ppb	1.5	27697.77	0.4589	Pulse	0.1000	3
Mo	98	115	He	51.790	ppb	1.3	73526.01	1.2182	Pulse	0.1000	3
Ag	107	115	He	53.268	ppb	2.0	160290.45	2.6562	Pulse	0.1000	3
Cd	111	115	He	51.470	ppb	0.2	17213.31	0.2852	Pulse	0.5000	3
Sn	120	115	He	50.144	ppb	1.7	50720.47	0.8405	Pulse	0.1000	3
Sb	121	115	He	50.680	ppb	0.3	47328.19	0.7842	Pulse	0.1000	3
Ba	137	115	He	513.250	ppb	0.8	154220.10	2.5554	Pulse	0.1000	3
Tl	205	159	He	51.373	ppb	1.3	380202.15	1.3380	Pulse	0.1000	3
Pb	208	159	He	51.458	ppb	1.3	511253.15	1.7992	Pulse	0.1000	3
U	238	209	He	50.162	ppb	1.3	577280.26	2.5198	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2047802.99	1.4	100.7	Analog	0.1000	3
No Gas	Ge	72	1012790.09	0.6	100.8	Pulse	0.1000	3
H2	Sc	45	120980.48	1.3	91.6	Pulse	0.1000	3
H2	Ge	72	101955.44	1.8	91.4	Pulse	0.1000	3
H2	In	115	279851.38	0.8	95.3	Pulse	0.1000	3
He	Sc	45	36486.50	1.9	98.7	Pulse	0.1000	3
He	Ge	72	62684.45	0.1	97.1	Pulse	0.1000	3
He	In	115	60353.64	1.0	95.5	Pulse	0.1000	3
He	Tb	159	284184.88	1.4	97.1	Pulse	0.1000	3
He	Bi	209	229118.90	1.4	97.2	Pulse	0.1000	3

No Gas



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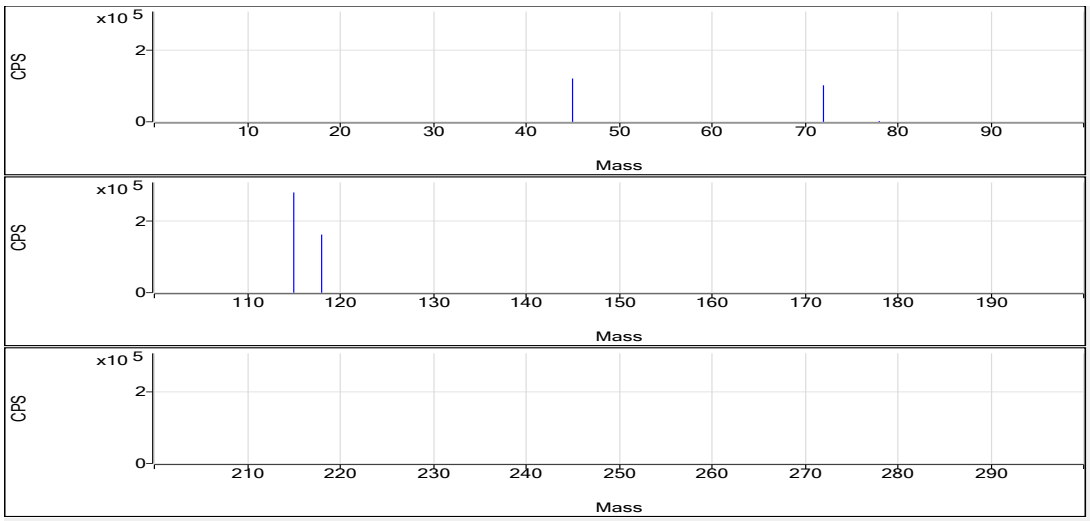
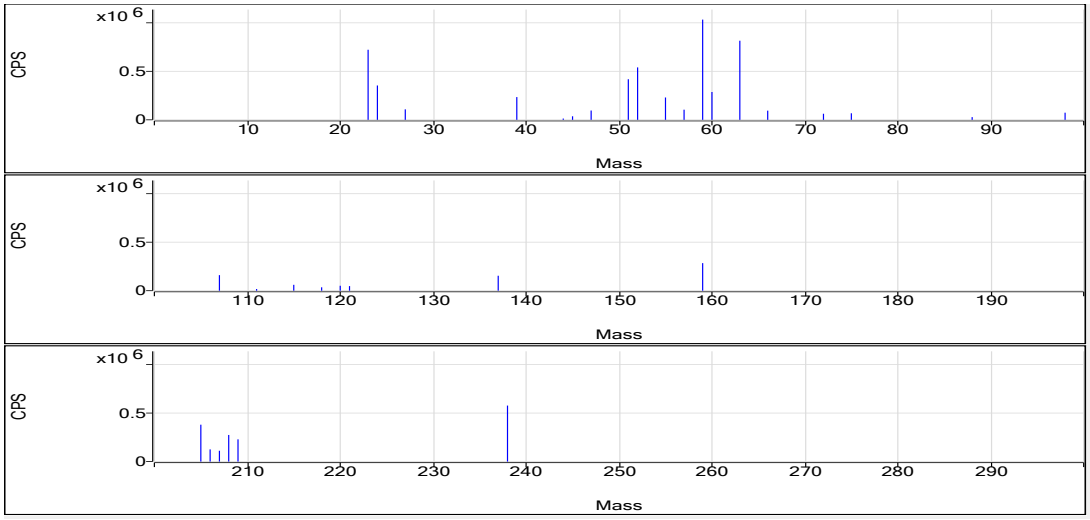


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.752	0.0382	79378.95	0.0008	2.195E-05
Be	9	1	No Gas	51.164	0.0393	80358.02	0.0008	2.195E-05
Be	9	1	No Gas	51.411	0.0395	79712.38	0.0008	2.195E-05
Se	78	2	H2	53.195	0.0231	2335.53	0.0004	1.386E-05
Se	78	2	H2	52.594	0.0229	2381.54	0.0004	1.386E-05
Se	78	2	H2	52.79	0.023	2317.53	0.0004	1.386E-05
Na	23	3	He	5155.628	20.1434	725674.83	0.0038	0.4416
Na	23	3	He	5138.678	20.0787	725957.41	0.0038	0.4416
Na	23	3	He	4909.563	19.2031	715864.29	0.0038	0.4416
Mg	24	3	He	5306.366	9.8984	356591.99	0.0019	0.005872
Mg	24	3	He	5218.48	9.7345	351957.81	0.0019	0.005872
Mg	24	3	He	5084.271	9.4843	353561.32	0.0019	0.005872
Al	27	3	He	5191.35	3.0019	108146.00	0.0006	0.0004496
Al	27	3	He	5141.751	2.9733	107500.28	0.0006	0.0004496
Al	27	3	He	5025.191	2.9059	108326.65	0.0006	0.0004496
K	39	3	He	5273.088	6.5439	235744.80	0.0012	0.4456
K	39	3	He	5226.549	6.49	234651.46	0.0012	0.4456
K	39	3	He	5023.041	6.2547	233165.35	0.0012	0.4456
Ca	44	3	He	5540.943	0.3699	13326.48	0.0001	0.003779
Ca	44	3	He	5562.751	0.3714	13426.78	0.0001	0.003779
Ca	44	3	He	4983.052	0.3331	12415.78	0.0001	0.003779
Ti	47	3	He	5156.384	2.6792	96518.82	0.0005	0
Ti	47	3	He	5077.268	2.6381	95381.61	0.0005	0
Ti	47	3	He	4942.035	2.5678	95724.47	0.0005	0
V	51	3	He	522.669	11.6828	420878.00	0.0223	0.03054
V	51	3	He	515.137	11.5149	416328.97	0.0223	0.03054
V	51	3	He	501.733	11.2161	418118.84	0.0223	0.03054
Cr	52	3	He	529.797	15.1116	544401.95	0.0285	0.03714
Cr	52	3	He	523.345	14.9281	539733.35	0.0285	0.03714
Cr	52	3	He	505.063	14.4079	537104.21	0.0285	0.03714
Mn	55	3	He	518.748	6.4288	231599.08	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	516.366	6.3993	231369.98	0.0124	0.004415
Mn	55	3	He	492.93	6.109	227736.09	0.0124	0.004415
Fe	57	3	He	5068.692	2.8766	103629.78	0.0006	0.001356
Fe	57	3	He	5113.342	2.9019	104920.30	0.0006	0.001356
Fe	57	3	He	4962.551	2.8164	104990.14	0.0006	0.001356
Co	59	3	He	493.399	28.6673	1032749.44	0.0581	0.002697
Co	59	3	He	488.426	28.3784	1026038.97	0.0581	0.002697
Co	59	3	He	480.634	27.9257	1041028.50	0.0581	0.002697
Ni	60	3	He	526.286	4.5654	286653.26	0.0087	0.003928
Ni	60	3	He	529.244	4.591	287525.15	0.0087	0.003928
Ni	60	3	He	526.655	4.5686	286165.87	0.0087	0.003928
Cu	63	3	He	498.261	13.0284	818029.44	0.0261	0.006048
Cu	63	3	He	492.802	12.8857	807000.69	0.0261	0.006048
Cu	63	3	He	501.811	13.1212	821879.21	0.0261	0.006048
Zn	66	3	He	520.545	1.4951	93876.22	0.0029	0.003512
Zn	66	3	He	525.872	1.5104	94591.73	0.0029	0.003512
Zn	66	3	He	527.909	1.5162	94972.71	0.0029	0.003512
As	75	3	He	519.427	1.0746	67473.98	0.0021	0.0007233
As	75	3	He	521.087	1.0781	67516.15	0.0021	0.0007233
As	75	3	He	519.466	1.0747	67317.26	0.0021	0.0007233
Sr	88	3	He	51.827	0.4646	28328.99	0.009	0.0005796
Sr	88	3	He	50.34	0.4513	27216.89	0.009	0.0005796
Sr	88	3	He	51.415	0.4609	27547.43	0.009	0.0005796
Mo	98	3	He	52.515	1.2352	75322.42	0.0235	0.0003188
Mo	98	3	He	51.16	1.2034	72577.75	0.0235	0.0003188
Mo	98	3	He	51.696	1.216	72677.87	0.0235	0.0003188
Ag	107	3	He	52.259	2.6059	158904.81	0.0499	0.0004754
Ag	107	3	He	53.173	2.6515	159915.94	0.0499	0.0004754
Ag	107	3	He	54.372	2.7112	162050.59	0.0499	0.0004754
Cd	111	3	He	51.325	0.2844	17342.81	0.0055	1.07E-05
Cd	111	3	He	51.532	0.2856	17222.66	0.0055	1.07E-05
Cd	111	3	He	51.552	0.2857	17074.46	0.0055	1.07E-05
Sn	120	3	He	49.137	0.8239	50242.22	0.0164	0.01713
Sn	120	3	He	50.725	0.85	51265.98	0.0164	0.01713
Sn	120	3	He	50.571	0.8475	50653.20	0.0164	0.01713
Sb	121	3	He	50.536	0.782	47682.78	0.0155	0.0002641
Sb	121	3	He	50.869	0.7871	47472.03	0.0155	0.0002641
Sb	121	3	He	50.636	0.7835	46829.77	0.0155	0.0002641
Ba	137	3	He	509.865	2.5386	154796.94	0.005	0.0001577
Ba	137	3	He	512.02	2.5493	153753.58	0.005	0.0001577
Ba	137	3	He	517.865	2.5784	154109.79	0.005	0.0001577
Tl	205	3	He	50.588	1.3176	379971.24	0.026	0.0002504
Tl	205	3	He	51.662	1.3455	377862.06	0.026	0.0002504
Tl	205	3	He	51.868	1.3509	382773.16	0.026	0.0002504
Pb	208	3	He	50.704	1.7729	273365.13	0.0349	0.001422
Pb	208	3	He	52.036	1.8194	274588.51	0.0349	0.001422
Pb	208	3	He	51.633	1.8054	274843.61	0.0349	0.001422
U	238	3	He	49.541	2.4886	579470.54	0.0502	5.657E-05
U	238	3	He	50.134	2.5184	571727.84	0.0502	5.657E-05
U	238	3	He	50.811	2.5524	580642.41	0.0502	5.657E-05
Sc	45	1	No Gas			2078132.94		
Sc	45	1	No Gas			2045733.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2019542.78		
Ge	72	1	No Gas			1016473.27		
Ge	72	1	No Gas			1015886.78		
Ge	72	1	No Gas			1006010.22		
Sc	45	2	H2			120052.75		
Sc	45	2	H2			122735.33		
Sc	45	2	H2			120153.36		
Ge	72	2	H2			100905.00		
Ge	72	2	H2			104066.81		
Ge	72	2	H2			100894.51		
In	115	2	H2			277322.63		
In	115	2	H2			281392.05		
In	115	2	H2			280839.45		
Sc	45	3	He			36025.35		
Sc	45	3	He			36155.64		
Sc	45	3	He			37278.52		
Ge	72	3	He			62788.24		
Ge	72	3	He			62627.50		
Ge	72	3	He			62637.62		
In	115	3	He			61245.56		
In	115	3	He			60593.03		
In	115	3	He			60040.68		
Tb	159	3	He			288387.52		
Tb	159	3	He			280823.88		
Tb	159	3	He			283343.24		
Bi	209	3	He			232849.16		
Bi	209	3	He			227017.93		
Bi	209	3	He			227489.61		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:13:34 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

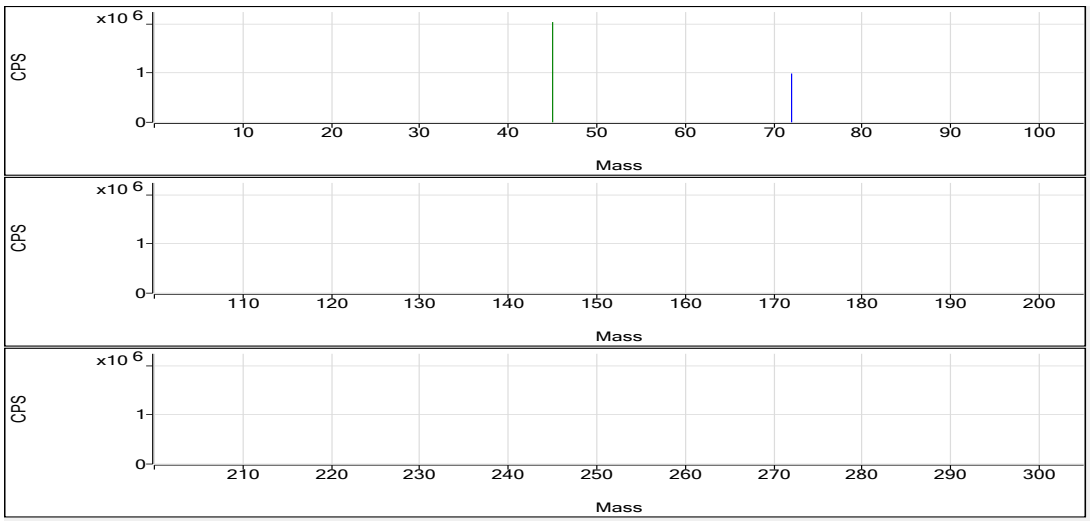
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.033	ppb	9.1	96.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.056	ppb	58.2	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	-9.645	ppb	N/A	14694.44	0.4047	Pulse	0.1000	3
Mg	24	45	He	0.596	ppb	99.6	253.34	0.0070	Pulse	0.1000	3
Al	27	45	He	2.877	ppb	11.5	76.67	0.0021	Pulse	0.1000	3
K	39	45	He	-4.843	ppb	N/A	15972.45	0.4400	Pulse	0.1000	3
Ca	44	45	He	-11.464	ppb	N/A	110.00	0.0030	Pulse	0.1000	3
Ti	47	45	He	2.130	ppb	51.6	40.00	0.0011	Pulse	0.1000	3
V	51	45	He	0.100	ppb	73.2	1190.06	0.0328	Pulse	0.5000	3
Cr	52	45	He	0.117	ppb	141.0	1470.13	0.0405	Pulse	0.1000	3
Mn	55	45	He	0.044	ppb	232.0	180.01	0.0050	Pulse	0.1000	3
Fe	57	45	He	1.173	ppb	104.2	73.33	0.0020	Pulse	0.1000	3
Co	59	45	He	0.138	ppb	18.7	390.02	0.0107	Pulse	0.1000	3
Ni	60	72	He	0.041	ppb	163.9	263.34	0.0043	Pulse	0.1000	3
Cu	63	72	He	0.036	ppb	89.6	430.02	0.0070	Pulse	0.1000	3
Zn	66	72	He	0.156	ppb	35.4	243.34	0.0040	Pulse	0.1000	3
As	75	72	He	0.170	ppb	44.6	66.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.071	ppb	75.1	73.33	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.059	ppb	17.8	103.33	0.0017	Pulse	0.1000	3
Ag	107	115	He	0.017	ppb	2.1	80.00	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	339.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.122	ppb	112.8	1150.09	0.0191	Pulse	0.1000	3
Sb	121	115	He	0.040	ppb	68.6	53.33	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.222	ppb	106.5	76.67	0.0013	Pulse	0.1000	3
Tl	205	159	He	0.081	ppb	17.2	670.04	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.007	ppb	91.7	470.02	0.0017	Pulse	0.1000	3
U	238	209	He	0.051	ppb	13.8	596.70	0.0026	Pulse	0.1000	3

ISTD Table:

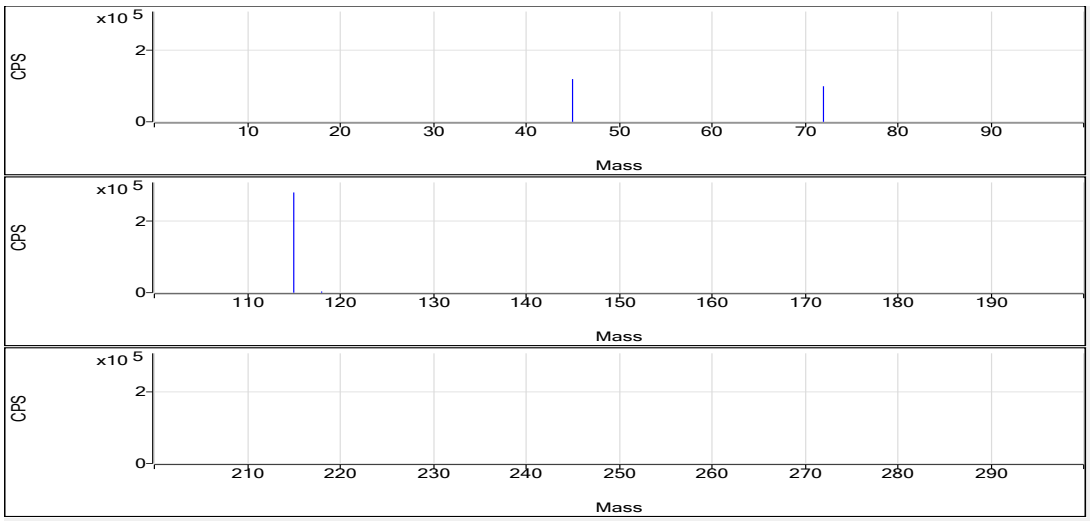
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2034992.21	1.6	100.1	Analog	0.1000	3
No Gas	Ge	72	989992.77	1.4	98.5	Pulse	0.1000	3
H2	Sc	45	118681.66	2.1	89.8	Pulse	0.1000	3
H2	Ge	72	98757.55	0.8	88.5	Pulse	0.1000	3
H2	In	115	278306.73	0.5	94.8	Pulse	0.1000	3
He	Sc	45	36322.66	2.0	98.3	Pulse	0.1000	3
He	Ge	72	61466.09	0.9	95.2	Pulse	0.1000	3
He	In	115	60175.67	1.4	95.2	Pulse	0.1000	3
He	Tb	159	283099.66	0.4	96.7	Pulse	0.1000	3
He	Bi	209	229761.02	1.3	97.4	Pulse	0.1000	3

No Gas

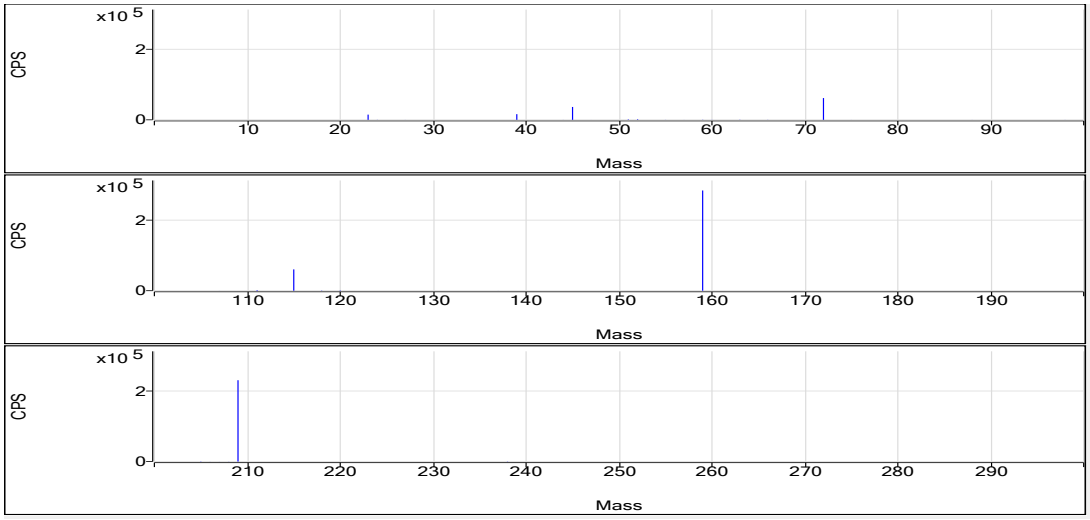


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.032	0	94.00	0.0008	2.195E-05
Be	9	1	No Gas	0.036	0	100.00	0.0008	2.195E-05
Be	9	1	No Gas	0.031	0	94.00	0.0008	2.195E-05
Se	78	2	H2	0.045	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.093	0.0001	5.33	0.0004	1.386E-05
Se	78	2	H2	0.031	0	2.67	0.0004	1.386E-05
Na	23	3	He	-4.944	0.4227	15007.96	0.0038	0.4416
Na	23	3	He	-12.415	0.3942	14397.46	0.0038	0.4416
Na	23	3	He	-11.575	0.3974	14677.89	0.0038	0.4416
Mg	24	3	He	1.081	0.0079	280.01	0.0019	0.005872
Mg	24	3	He	-0.065	0.0057	210.01	0.0019	0.005872
Mg	24	3	He	0.772	0.0073	270.01	0.0019	0.005872
Al	27	3	He	3.12	0.0023	80.00	0.0006	0.0004496
Al	27	3	He	3.011	0.0022	80.00	0.0006	0.0004496
Al	27	3	He	2.5	0.0019	70.00	0.0006	0.0004496
K	39	3	He	12.377	0.4599	16329.45	0.0012	0.4456
K	39	3	He	-0.648	0.4449	16249.56	0.0012	0.4456
K	39	3	He	-26.259	0.4153	15338.35	0.0012	0.4456
Ca	44	3	He	-18.821	0.0025	90.00	0.0001	0.003779
Ca	44	3	He	-15.752	0.0027	100.00	0.0001	0.003779
Ca	44	3	He	0.18	0.0038	140.01	0.0001	0.003779
Ti	47	3	He	3.252	0.0017	60.00	0.0005	0
Ti	47	3	He	1.054	0.0005	20.00	0.0005	0
Ti	47	3	He	2.084	0.0011	40.00	0.0005	0
V	51	3	He	0.123	0.0333	1182.06	0.0223	0.03054
V	51	3	He	0.018	0.0309	1130.05	0.0223	0.03054
V	51	3	He	0.158	0.0341	1258.06	0.0223	0.03054
Cr	52	3	He	0.13	0.0408	1450.15	0.0285	0.03714
Cr	52	3	He	-0.054	0.0356	1300.10	0.0285	0.03714
Cr	52	3	He	0.274	0.0449	1660.15	0.0285	0.03714
Mn	55	3	He	0.03	0.0048	170.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.152	0.0063	230.01	0.0124	0.004415
Mn	55	3	He	-0.05	0.0038	140.00	0.0124	0.004415
Fe	57	3	He	1.086	0.002	70.00	0.0006	0.001356
Fe	57	3	He	2.436	0.0027	100.00	0.0006	0.001356
Fe	57	3	He	-0.004	0.0014	50.00	0.0006	0.001356
Co	59	3	He	0.123	0.0099	350.02	0.0581	0.002697
Co	59	3	He	0.123	0.0099	360.02	0.0581	0.002697
Co	59	3	He	0.168	0.0125	460.02	0.0581	0.002697
Ni	60	3	He	-0.025	0.0037	230.01	0.0087	0.003928
Ni	60	3	He	0.039	0.0043	260.01	0.0087	0.003928
Ni	60	3	He	0.11	0.0049	300.01	0.0087	0.003928
Cu	63	3	He	0.065	0.0077	480.02	0.0261	0.006048
Cu	63	3	He	0.001	0.0061	370.02	0.0261	0.006048
Cu	63	3	He	0.042	0.0072	440.02	0.0261	0.006048
Zn	66	3	He	0.181	0.004	250.01	0.0029	0.003512
Zn	66	3	He	0.092	0.0038	230.01	0.0029	0.003512
Zn	66	3	He	0.194	0.0041	250.01	0.0029	0.003512
As	75	3	He	0.149	0.001	64.00	0.0021	0.0007233
As	75	3	He	0.254	0.0012	76.00	0.0021	0.0007233
As	75	3	He	0.107	0.0009	58.00	0.0021	0.0007233
Sr	88	3	He	0.1	0.0015	90.00	0.009	0.0005796
Sr	88	3	He	0.01	0.0007	40.00	0.009	0.0005796
Sr	88	3	He	0.105	0.0015	90.00	0.009	0.0005796
Mo	98	3	He	0.056	0.0016	100.00	0.0235	0.0003188
Mo	98	3	He	0.071	0.002	120.00	0.0235	0.0003188
Mo	98	3	He	0.051	0.0015	90.00	0.0235	0.0003188
Ag	107	3	He	0.017	0.0013	80.00	0.0499	0.0004754
Ag	107	3	He	0.017	0.0013	80.00	0.0499	0.0004754
Ag	107	3	He	0.017	0.0013	80.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	0.035	0.0177	1080.08	0.0164	0.01713
Sn	120	3	He	0.05	0.0179	1080.09	0.0164	0.01713
Sn	120	3	He	0.28	0.0217	1290.10	0.0164	0.01713
Sb	121	3	He	0.036	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.015	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.07	0.0013	80.00	0.0155	0.0002641
Ba	137	3	He	0.495	0.0026	160.01	0.005	0.0001577
Ba	137	3	He	0.068	0.0005	30.00	0.005	0.0001577
Ba	137	3	He	0.104	0.0007	40.00	0.005	0.0001577
Tl	205	3	He	0.088	0.0025	720.05	0.026	0.0002504
Tl	205	3	He	0.09	0.0026	740.05	0.026	0.0002504
Tl	205	3	He	0.065	0.0019	550.03	0.026	0.0002504
Pb	208	3	He	0.003	0.0015	230.01	0.0349	0.001422
Pb	208	3	He	0.004	0.0015	290.01	0.0349	0.001422
Pb	208	3	He	0.014	0.0019	260.01	0.0349	0.001422
U	238	3	He	0.043	0.0022	520.03	0.0502	5.657E-05
U	238	3	He	0.057	0.0029	670.04	0.0502	5.657E-05
U	238	3	He	0.051	0.0026	600.03	0.0502	5.657E-05
Sc	45	1	No Gas			2024522.63		
Sc	45	1	No Gas			2009479.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2070974.50		
Ge	72	1	No Gas			979551.86		
Ge	72	1	No Gas			985138.74		
Ge	72	1	No Gas			1005287.72		
Sc	45	2	H2			121555.11		
Sc	45	2	H2			117361.42		
Sc	45	2	H2			117128.46		
Ge	72	2	H2			99646.83		
Ge	72	2	H2			98187.68		
Ge	72	2	H2			98438.13		
In	115	2	H2			277734.08		
In	115	2	H2			279841.83		
In	115	2	H2			277344.27		
Sc	45	3	He			35503.97		
Sc	45	3	He			36526.54		
Sc	45	3	He			36937.48		
Ge	72	3	He			62024.92		
Ge	72	3	He			60900.61		
Ge	72	3	He			61472.74		
In	115	3	He			60994.48		
In	115	3	He			60181.15		
In	115	3	He			59367.22		
Tb	159	3	He			282552.46		
Tb	159	3	He			284330.23		
Tb	159	3	He			282416.28		
Bi	209	3	He			233155.56		
Bi	209	3	He			228941.77		
Bi	209	3	He			227185.74		

Quantitation Report

Data File Name	059SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:15:39 AM
Sample Name	410-136848-Y-8-A
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

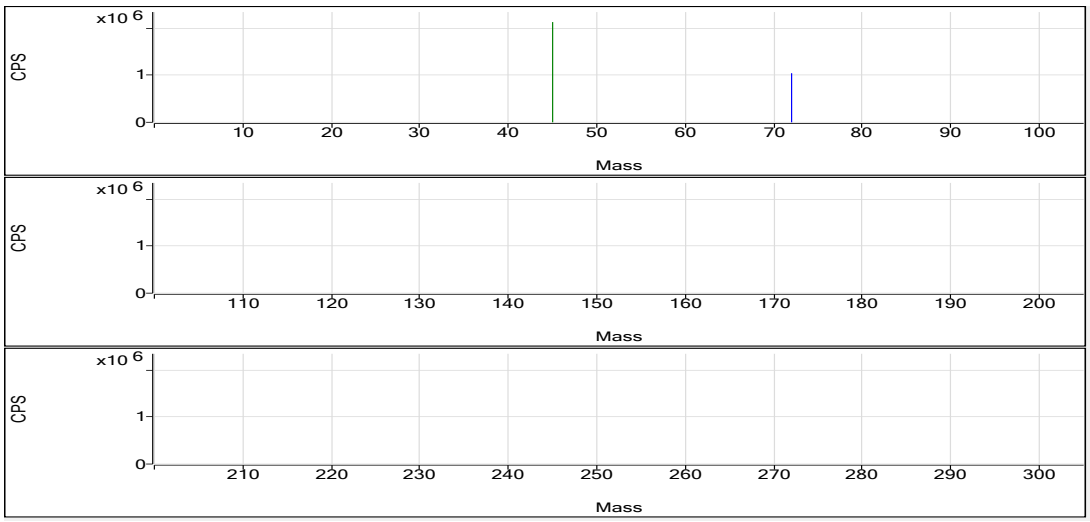
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	104.1	52.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.025	ppb	98.1	2.66	0.0000	Pulse	1.5000	3
Na	23	45	He	11650.331	ppb	2.7	1683134.98	44.9625	Analog	0.1000	3
Mg	24	45	He	17374.852	ppb	2.9	1212719.07	32.3973	Analog	0.1000	3
Al	27	45	He	3.215	ppb	27.3	86.67	0.0023	Pulse	0.1000	3
K	39	45	He	6257.706	ppb	3.3	287590.55	7.6826	Pulse	0.1000	3
Ca	44	45	He	98135.507	ppb	2.5	242894.80	6.4885	Pulse	0.1000	3
Ti	47	45	He	0.514	ppb	2.3	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.184	ppb	N/A	990.04	0.0264	Pulse	0.5000	3
Cr	52	45	He	0.099	ppb	98.5	1496.80	0.0399	Pulse	0.1000	3
Mn	55	45	He	176.663	ppb	0.6	82099.99	2.1923	Pulse	0.1000	3
Fe	57	45	He	94.985	ppb	5.8	2066.89	0.0552	Pulse	0.1000	3
Co	59	45	He	0.170	ppb	9.8	470.02	0.0126	Pulse	0.1000	3
Ni	60	72	He	0.550	ppb	10.4	566.70	0.0087	Pulse	0.1000	3
Cu	63	72	He	0.264	ppb	22.4	843.39	0.0129	Pulse	0.1000	3
Zn	66	72	He	0.202	ppb	85.4	266.68	0.0041	Pulse	0.1000	3
As	75	72	He	0.194	ppb	9.7	73.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	329.863	ppb	2.4	182057.14	2.9538	Pulse	0.1000	3
Mo	98	115	He	0.150	ppb	37.9	236.68	0.0038	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	27.4	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.295	ppb	N/A	756.72	0.0123	Pulse	0.1000	3
Sb	121	115	He	0.046	ppb	59.9	60.00	0.0010	Pulse	0.1000	3
Ba	137	115	He	41.338	ppb	4.7	12696.27	0.2060	Pulse	0.1000	3
Tl	205	159	He	0.015	ppb	18.3	186.68	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.004	ppb	149.1	456.68	0.0016	Pulse	0.1000	3
U	238	209	He	0.725	ppb	1.4	8439.73	0.0365	Pulse	0.1000	3

ISTD Table:

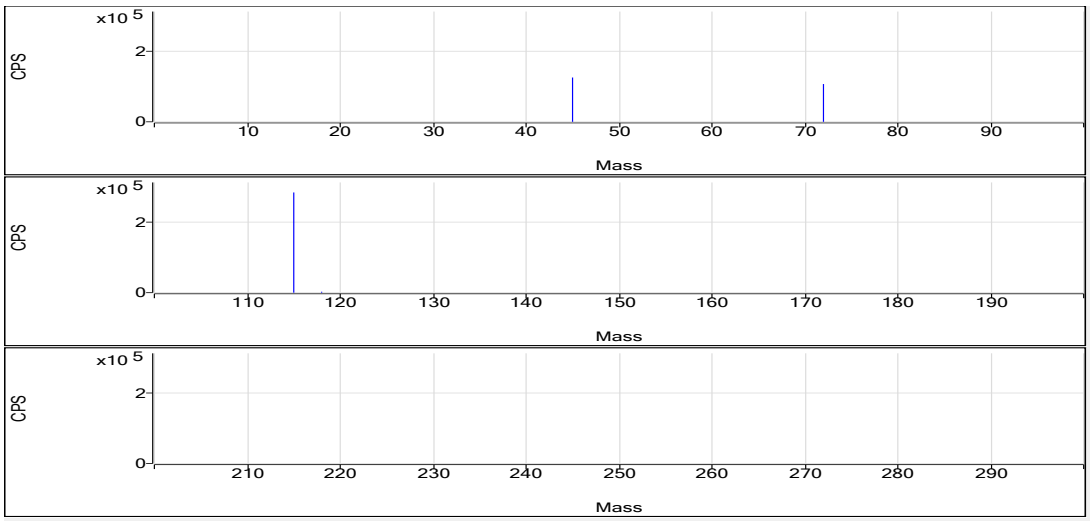
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2128998.35	1.2	104.7	Analog	0.1000	3
No Gas	Ge	72	1042827.93	0.6	103.8	Pulse	0.1000	3
H2	Sc	45	125649.61	0.3	95.1	Pulse	0.1000	3
H2	Ge	72	107112.91	0.5	96.0	Pulse	0.1000	3
H2	In	115	284232.24	0.9	96.8	Pulse	0.1000	3
He	Sc	45	37449.10	2.3	101.3	Pulse	0.1000	3
He	Ge	72	65189.19	0.4	101.0	Pulse	0.1000	3
He	In	115	61646.76	1.2	97.6	Pulse	0.1000	3
He	Tb	159	289672.90	0.4	98.9	Pulse	0.1000	3
He	Bi	209	231286.75	0.9	98.1	Pulse	0.1000	3

No Gas

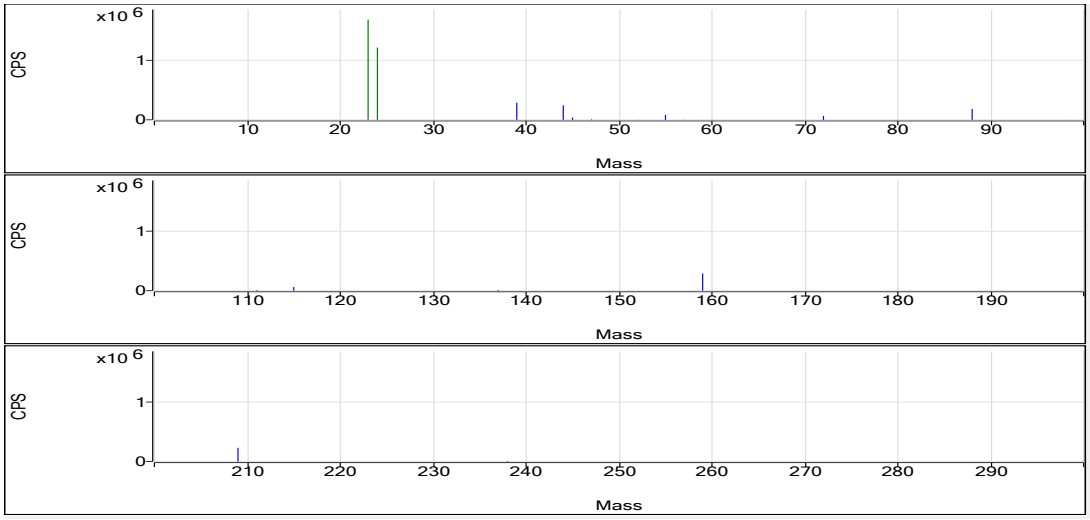


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	58.00	0.0008	2.195E-05
Be	9	1	No Gas	0.005	0	54.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.001	0	46.00	0.0008	2.195E-05
Se	78	2	H2	0.04	0	3.33	0.0004	1.386E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.039	0	3.33	0.0004	1.386E-05
Na	23	3	He	11641.232	44.9277	1676202.48	0.0038	0.4416
Na	23	3	He	11345.717	43.7984	1680618.10	0.0038	0.4416
Na	23	3	He	11964.044	46.1613	1692584.35	0.0038	0.4416
Mg	24	3	He	17367.399	32.3834	1208187.48	0.0019	0.005872
Mg	24	3	He	16878.158	31.4713	1207606.00	0.0019	0.005872
Mg	24	3	He	17878.998	33.3371	1222363.73	0.0019	0.005872
Al	27	3	He	2.468	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	4.181	0.0029	110.00	0.0006	0.0004496
Al	27	3	He	2.996	0.0022	80.00	0.0006	0.0004496
K	39	3	He	6154.662	7.5634	282181.46	0.0012	0.4456
K	39	3	He	6122.822	7.5266	288806.77	0.0012	0.4456
K	39	3	He	6495.635	7.9577	291783.43	0.0012	0.4456
Ca	44	3	He	98472.137	6.5107	242908.34	0.0001	0.003779
Ca	44	3	He	95521.958	6.3158	242347.44	0.0001	0.003779
Ca	44	3	He	100412.425	6.6389	243428.61	0.0001	0.003779
Ti	47	3	He	0.516	0.0003	10.00	0.0005	0
Ti	47	3	He	0.502	0.0003	10.00	0.0005	0
Ti	47	3	He	0.525	0.0003	10.00	0.0005	0
V	51	3	He	-0.184	0.0264	986.04	0.0223	0.03054
V	51	3	He	-0.166	0.0268	1030.04	0.0223	0.03054
V	51	3	He	-0.203	0.026	954.04	0.0223	0.03054
Cr	52	3	He	-0.005	0.037	1380.10	0.0285	0.03714
Cr	52	3	He	0.188	0.0425	1630.16	0.0285	0.03714
Cr	52	3	He	0.114	0.0404	1480.14	0.0285	0.03714
Mn	55	3	He	175.466	2.1774	81238.14	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	177.306	2.2002	84426.85	0.0124	0.004415
Mn	55	3	He	177.217	2.1991	80634.98	0.0124	0.004415
Fe	57	3	He	98.266	0.0571	2130.24	0.0006	0.001356
Fe	57	3	He	88.585	0.0516	1980.21	0.0006	0.001356
Fe	57	3	He	98.105	0.057	2090.22	0.0006	0.001356
Co	59	3	He	0.189	0.0137	510.03	0.0581	0.002697
Co	59	3	He	0.16	0.012	460.02	0.0581	0.002697
Co	59	3	He	0.16	0.012	440.02	0.0581	0.002697
Ni	60	3	He	0.595	0.0091	590.04	0.0087	0.003928
Ni	60	3	He	0.485	0.0081	530.02	0.0087	0.003928
Ni	60	3	He	0.569	0.0089	580.04	0.0087	0.003928
Cu	63	3	He	0.299	0.0139	900.06	0.0261	0.006048
Cu	63	3	He	0.297	0.0138	900.08	0.0261	0.006048
Cu	63	3	He	0.195	0.0112	730.04	0.0261	0.006048
Zn	66	3	He	0.332	0.0045	290.01	0.0029	0.003512
Zn	66	3	He	0.006	0.0035	230.01	0.0029	0.003512
Zn	66	3	He	0.268	0.0043	280.01	0.0029	0.003512
As	75	3	He	0.216	0.0012	76.00	0.0021	0.0007233
As	75	3	He	0.185	0.0011	72.00	0.0021	0.0007233
As	75	3	He	0.182	0.0011	72.00	0.0021	0.0007233
Sr	88	3	He	332.615	2.9784	182911.95	0.009	0.0005796
Sr	88	3	He	335.961	3.0084	183720.93	0.009	0.0005796
Sr	88	3	He	321.013	2.8745	179538.53	0.009	0.0005796
Mo	98	3	He	0.215	0.0054	330.01	0.0235	0.0003188
Mo	98	3	He	0.112	0.0029	180.01	0.0235	0.0003188
Mo	98	3	He	0.123	0.0032	200.01	0.0235	0.0003188
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	-0.25	0.013	800.06	0.0164	0.01713
Sn	120	3	He	-0.225	0.0134	820.06	0.0164	0.01713
Sn	120	3	He	-0.409	0.0104	650.04	0.0164	0.01713
Sb	121	3	He	0.015	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.057	0.0011	70.00	0.0155	0.0002641
Sb	121	3	He	0.066	0.0013	80.00	0.0155	0.0002641
Ba	137	3	He	39.268	0.1957	12015.62	0.005	0.0001577
Ba	137	3	He	43.11	0.2148	13116.70	0.005	0.0001577
Ba	137	3	He	41.636	0.2074	12956.48	0.005	0.0001577
Tl	205	3	He	0.013	0.0006	170.01	0.026	0.0002504
Tl	205	3	He	0.018	0.0007	210.01	0.026	0.0002504
Tl	205	3	He	0.014	0.0006	180.01	0.026	0.0002504
Pb	208	3	He	-0.002	0.0013	240.01	0.0349	0.001422
Pb	208	3	He	0.005	0.0016	260.01	0.0349	0.001422
Pb	208	3	He	0.011	0.0018	230.01	0.0349	0.001422
U	238	3	He	0.735	0.037	8533.13	0.0502	5.657E-05
U	238	3	He	0.726	0.0365	8533.12	0.0502	5.657E-05
U	238	3	He	0.715	0.036	8252.94	0.0502	5.657E-05
Sc	45	1	No Gas			2145839.66		
Sc	45	1	No Gas			2098544.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2142610.59		
Ge	72	1	No Gas			1036079.36		
Ge	72	1	No Gas			1044520.38		
Ge	72	1	No Gas			1047884.05		
Sc	45	2	H2			125559.42		
Sc	45	2	H2			126113.81		
Sc	45	2	H2			125275.60		
Ge	72	2	H2			106504.75		
Ge	72	2	H2			107330.80		
Ge	72	2	H2			107503.17		
In	115	2	H2			287048.00		
In	115	2	H2			283073.37		
In	115	2	H2			282575.35		
Sc	45	3	He			37308.89		
Sc	45	3	He			38371.67		
Sc	45	3	He			36666.74		
Ge	72	3	He			64967.70		
Ge	72	3	He			65158.87		
Ge	72	3	He			65441.01		
In	115	3	He			61416.57		
In	115	3	He			61074.77		
In	115	3	He			62461.03		
Tb	159	3	He			290747.73		
Tb	159	3	He			289731.69		
Tb	159	3	He			288539.29		
Bi	209	3	He			230843.90		
Bi	209	3	He			233553.38		
Bi	209	3	He			229462.97		

Quantitation Report

Data File Name	060SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
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Sample Name	410-136848-Y-8-A @10
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

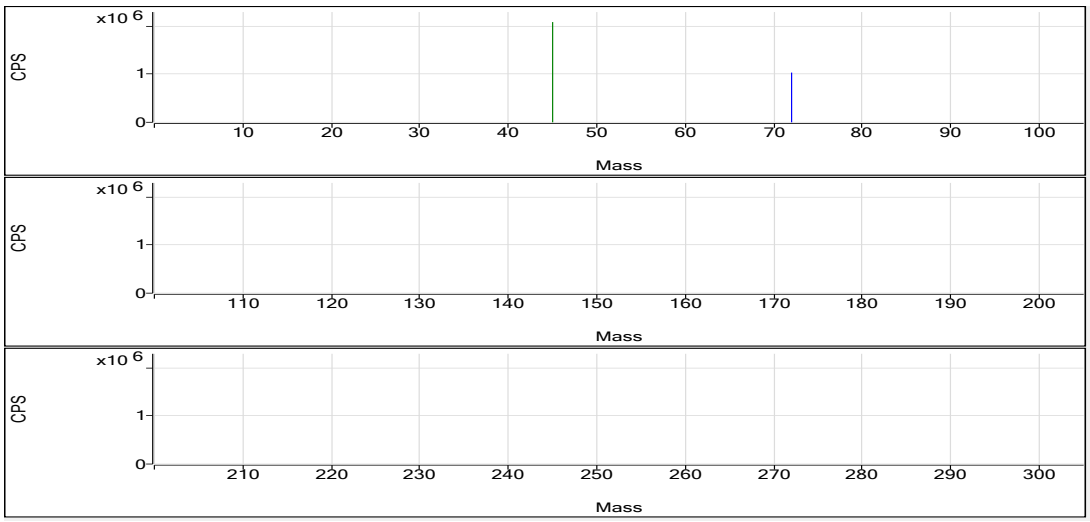
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.004	ppb	N/A	39.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.022	ppb	154.8	2.44	0.0000	Pulse	1.5000	3
Na	23	45	He	1062.404	ppb	1.9	166523.08	4.5015	Pulse	0.1000	3
Mg	24	45	He	1638.169	ppb	3.5	113171.72	3.0599	Pulse	0.1000	3
Al	27	45	He	2.028	ppb	2.6	60.00	0.0016	Pulse	0.1000	3
K	39	45	He	606.994	ppb	4.0	42449.19	1.1476	Pulse	0.1000	3
Ca	44	45	He	9597.248	ppb	4.4	23593.20	0.6380	Pulse	0.1000	3
Ti	47	45	He	0.170	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.070	ppb	N/A	1072.05	0.0290	Pulse	0.5000	3
Cr	52	45	He	0.113	ppb	63.1	1493.47	0.0404	Pulse	0.1000	3
Mn	55	45	He	17.348	ppb	0.1	8112.54	0.2193	Pulse	0.1000	3
Fe	57	45	He	12.848	ppb	33.8	320.02	0.0086	Pulse	0.1000	3
Co	59	45	He	0.057	ppb	52.1	223.34	0.0060	Pulse	0.1000	3
Ni	60	72	He	0.085	ppb	42.0	296.68	0.0047	Pulse	0.1000	3
Cu	63	72	He	0.115	ppb	24.3	576.70	0.0091	Pulse	0.1000	3
Zn	66	72	He	0.783	ppb	88.7	366.68	0.0058	Pulse	0.1000	3
As	75	72	He	-0.107	ppb	N/A	32.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	32.558	ppb	5.1	17728.29	0.2921	Pulse	0.1000	3
Mo	98	115	He	0.036	ppb	20.9	70.00	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	172.3	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	169.4	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.147	ppb	N/A	893.39	0.0147	Pulse	0.1000	3
Sb	121	115	He	-0.014	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
Ba	137	115	He	4.206	ppb	11.0	1280.11	0.0211	Pulse	0.1000	3
Tl	205	159	He	0.012	ppb	77.8	160.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.007	ppb	45.4	476.68	0.0017	Pulse	0.1000	3
U	238	209	He	0.078	ppb	17.4	926.74	0.0040	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2085930.70	1.6	102.6	Analog	0.1000	3
No Gas	Ge	72	1034721.26	1.4	102.9	Pulse	0.1000	3
H2	Sc	45	120715.12	1.6	91.4	Pulse	0.1000	3
H2	Ge	72	104729.07	1.1	93.9	Pulse	0.1000	3
H2	In	115	281225.83	1.8	95.8	Pulse	0.1000	3
He	Sc	45	37000.89	1.9	100.1	Pulse	0.1000	3
He	Ge	72	63625.50	0.8	98.6	Pulse	0.1000	3
He	In	115	60721.71	1.0	96.1	Pulse	0.1000	3
He	Tb	159	285256.47	1.0	97.4	Pulse	0.1000	3
He	Bi	209	231761.58	2.1	98.3	Pulse	0.1000	3

No Gas



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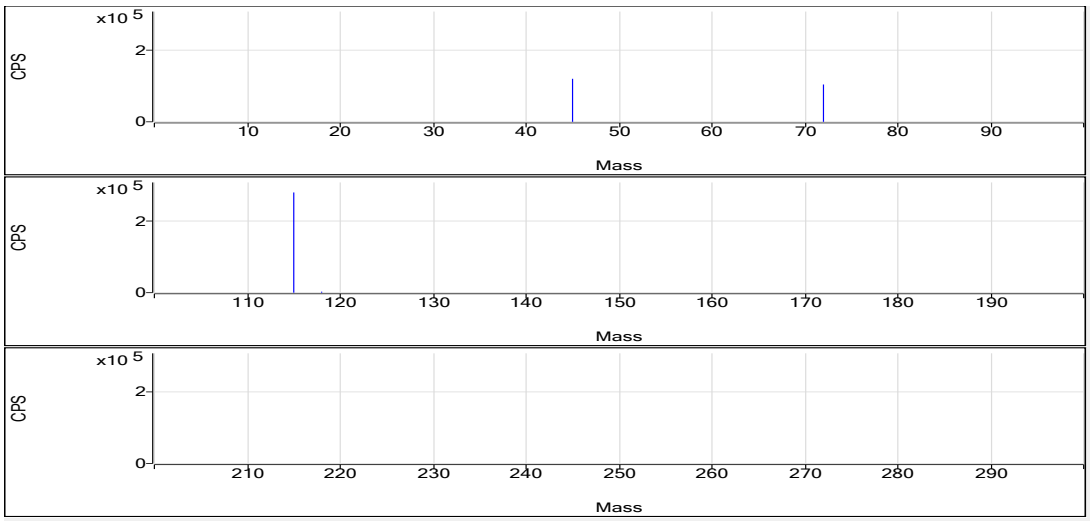
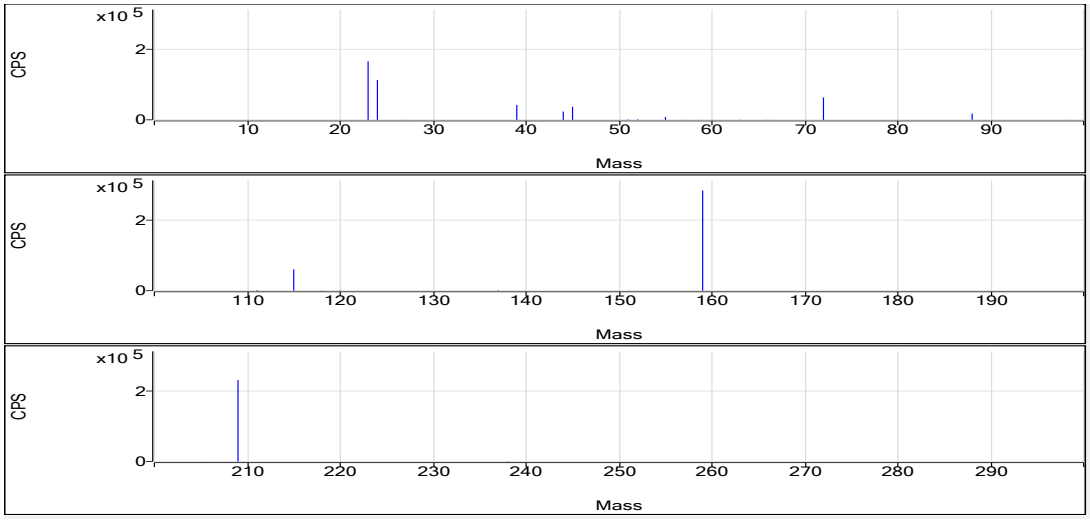


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.006	0	36.00	0.0008	2.195E-05
Be	9	1	No Gas	0	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.006	0	36.00	0.0008	2.195E-05
Se	78	2	H2	0.041	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.042	0	3.33	0.0004	1.386E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.386E-05
Na	23	3	He	1042.264	4.4245	167024.18	0.0038	0.4416
Na	23	3	He	1083.346	4.5815	166519.53	0.0038	0.4416
Na	23	3	He	1061.603	4.4984	166025.54	0.0038	0.4416
Mg	24	3	He	1593.386	2.9764	112356.55	0.0019	0.005872
Mg	24	3	He	1702.162	3.1792	115549.16	0.0019	0.005872
Mg	24	3	He	1618.959	3.024	111609.46	0.0019	0.005872
Al	27	3	He	1.971	0.0016	60.00	0.0006	0.0004496
Al	27	3	He	2.078	0.0017	60.00	0.0006	0.0004496
Al	27	3	He	2.034	0.0016	60.00	0.0006	0.0004496
K	39	3	He	583.651	1.1206	42302.16	0.0012	0.4456
K	39	3	He	631.8	1.1763	42753.09	0.0012	0.4456
K	39	3	He	605.531	1.1459	42292.31	0.0012	0.4456
Ca	44	3	He	9283.287	0.6172	23299.39	0.0001	0.003779
Ca	44	3	He	10077.717	0.6697	24341.02	0.0001	0.003779
Ca	44	3	He	9430.739	0.627	23139.20	0.0001	0.003779
Ti	47	3	He	0.51	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.091	0.0285	1076.05	0.0223	0.03054
V	51	3	He	-0.099	0.0283	1030.04	0.0223	0.03054
V	51	3	He	-0.021	0.0301	1110.05	0.0223	0.03054
Cr	52	3	He	0.101	0.04	1510.14	0.0285	0.03714
Cr	52	3	He	0.049	0.0385	1400.12	0.0285	0.03714
Cr	52	3	He	0.19	0.0425	1570.15	0.0285	0.03714
Mn	55	3	He	17.339	0.2191	8272.71	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	17.333	0.2191	7962.41	0.0124	0.004415
Mn	55	3	He	17.37	0.2195	8102.50	0.0124	0.004415
Fe	57	3	He	11.62	0.0079	300.01	0.0006	0.001356
Fe	57	3	He	9.251	0.0066	240.01	0.0006	0.001356
Fe	57	3	He	17.673	0.0114	420.03	0.0006	0.001356
Co	59	3	He	0.09	0.0079	300.01	0.0581	0.002697
Co	59	3	He	0.048	0.0055	200.01	0.0581	0.002697
Co	59	3	He	0.033	0.0046	170.01	0.0581	0.002697
Ni	60	3	He	0.059	0.0044	280.02	0.0087	0.003928
Ni	60	3	He	0.07	0.0045	290.01	0.0087	0.003928
Ni	60	3	He	0.125	0.005	320.02	0.0087	0.003928
Cu	63	3	He	0.108	0.0089	560.03	0.0261	0.006048
Cu	63	3	He	0.092	0.0084	540.03	0.0261	0.006048
Cu	63	3	He	0.146	0.0099	630.03	0.0261	0.006048
Zn	66	3	He	0.213	0.0041	260.01	0.0029	0.003512
Zn	66	3	He	1.557	0.008	510.02	0.0029	0.003512
Zn	66	3	He	0.579	0.0052	330.02	0.0029	0.003512
As	75	3	He	-0.135	0.0004	28.00	0.0021	0.0007233
As	75	3	He	-0.108	0.0005	32.00	0.0021	0.0007233
As	75	3	He	-0.077	0.0006	36.00	0.0021	0.0007233
Sr	88	3	He	30.673	0.2752	16910.71	0.009	0.0005796
Sr	88	3	He	33.25	0.2983	18001.84	0.009	0.0005796
Sr	88	3	He	33.75	0.3027	18272.33	0.009	0.0005796
Mo	98	3	He	0.028	0.001	60.00	0.0235	0.0003188
Mo	98	3	He	0.043	0.0013	80.00	0.0235	0.0003188
Mo	98	3	He	0.036	0.0012	70.00	0.0235	0.0003188
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.121	0.0151	930.07	0.0164	0.01713
Sn	120	3	He	-0.125	0.0151	910.06	0.0164	0.01713
Sn	120	3	He	-0.196	0.0139	840.05	0.0164	0.01713
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	-0.006	0.0002	10.00	0.0155	0.0002641
Ba	137	3	He	3.695	0.0186	1140.09	0.005	0.0001577
Ba	137	3	He	4.595	0.023	1390.13	0.005	0.0001577
Ba	137	3	He	4.328	0.0217	1310.11	0.005	0.0001577
Tl	205	3	He	0.003	0.0003	90.00	0.026	0.0002504
Tl	205	3	He	0.012	0.0006	160.01	0.026	0.0002504
Tl	205	3	He	0.021	0.0008	230.01	0.026	0.0002504
Pb	208	3	He	0.004	0.0016	230.01	0.0349	0.001422
Pb	208	3	He	0.01	0.0018	310.01	0.0349	0.001422
Pb	208	3	He	0.007	0.0017	270.01	0.0349	0.001422
U	238	3	He	0.064	0.0033	750.05	0.0502	5.657E-05
U	238	3	He	0.091	0.0046	1050.08	0.0502	5.657E-05
U	238	3	He	0.081	0.0041	980.08	0.0502	5.657E-05
Sc	45	1	No Gas			2091438.25		
Sc	45	1	No Gas			2115481.22		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2050872.63		
Ge	72	1	No Gas			1022544.28		
Ge	72	1	No Gas			1050989.12		
Ge	72	1	No Gas			1030630.38		
Sc	45	2	H2			121151.87		
Sc	45	2	H2			118661.48		
Sc	45	2	H2			122332.01		
Ge	72	2	H2			105336.78		
Ge	72	2	H2			103443.24		
Ge	72	2	H2			105407.18		
In	115	2	H2			285144.33		
In	115	2	H2			275436.64		
In	115	2	H2			283096.52		
Sc	45	3	He			37749.50		
Sc	45	3	He			36345.84		
Sc	45	3	He			36907.33		
Ge	72	3	He			63079.65		
Ge	72	3	He			63973.81		
Ge	72	3	He			63823.03		
In	115	3	He			61456.86		
In	115	3	He			60361.71		
In	115	3	He			60361.55		
Tb	159	3	He			282239.14		
Tb	159	3	He			285828.37		
Tb	159	3	He			287701.91		
Bi	209	3	He			230173.92		
Bi	209	3	He			227832.36		
Bi	209	3	He			237278.47		

Quantitation Report

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Sample Name	410-136848-Y-9-A @10
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

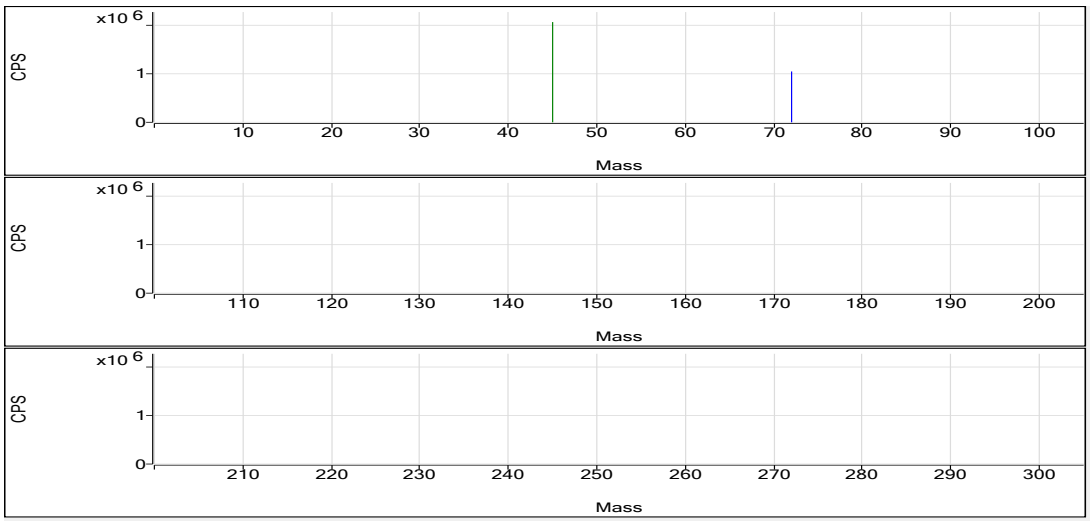
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.002	ppb	N/A	42.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.037	ppb	125.4	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	896.571	ppb	2.6	142945.91	3.8678	Pulse	0.1000	3
Mg	24	45	He	568.608	ppb	1.9	39396.65	1.0659	Pulse	0.1000	3
Al	27	45	He	2.828	ppb	52.8	76.67	0.0021	Pulse	0.1000	3
K	39	45	He	290.564	ppb	3.5	28892.77	0.7817	Pulse	0.1000	3
Ca	44	45	He	4357.286	ppb	2.5	10780.98	0.2917	Pulse	0.1000	3
Ti	47	45	He	0.175	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.097	ppb	N/A	1048.71	0.0284	Pulse	0.5000	3
Cr	52	45	He	0.049	ppb	168.7	1423.45	0.0385	Pulse	0.1000	3
Mn	55	45	He	1127.479	ppb	3.2	516148.09	13.9675	Pulse	0.1000	3
Fe	57	45	He	1681.622	ppb	2.8	35303.76	0.9553	Pulse	0.1000	3
Co	59	45	He	0.190	ppb	7.2	506.69	0.0137	Pulse	0.1000	3
Ni	60	72	He	0.217	ppb	48.3	376.68	0.0058	Pulse	0.1000	3
Cu	63	72	He	0.079	ppb	22.0	526.70	0.0081	Pulse	0.1000	3
Zn	66	72	He	1.518	ppb	24.0	510.03	0.0079	Pulse	0.1000	3
As	75	72	He	0.371	ppb	13.3	96.67	0.0015	Pulse	0.5000	3
Sr	88	115	He	15.903	ppb	1.1	8716.27	0.1430	Pulse	0.1000	3
Mo	98	115	He	0.038	ppb	43.8	73.33	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	73.3	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	256.2	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.085	ppb	N/A	960.07	0.0157	Pulse	0.1000	3
Sb	121	115	He	0.004	ppb	441.2	20.00	0.0003	Pulse	0.1000	3
Ba	137	115	He	10.587	ppb	1.6	3223.82	0.0529	Pulse	0.1000	3
Tl	205	159	He	0.009	ppb	28.2	140.01	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.048	ppb	36.8	880.04	0.0031	Pulse	0.1000	3
U	238	209	He	0.031	ppb	28.9	370.02	0.0016	Pulse	0.1000	3

ISTD Table:

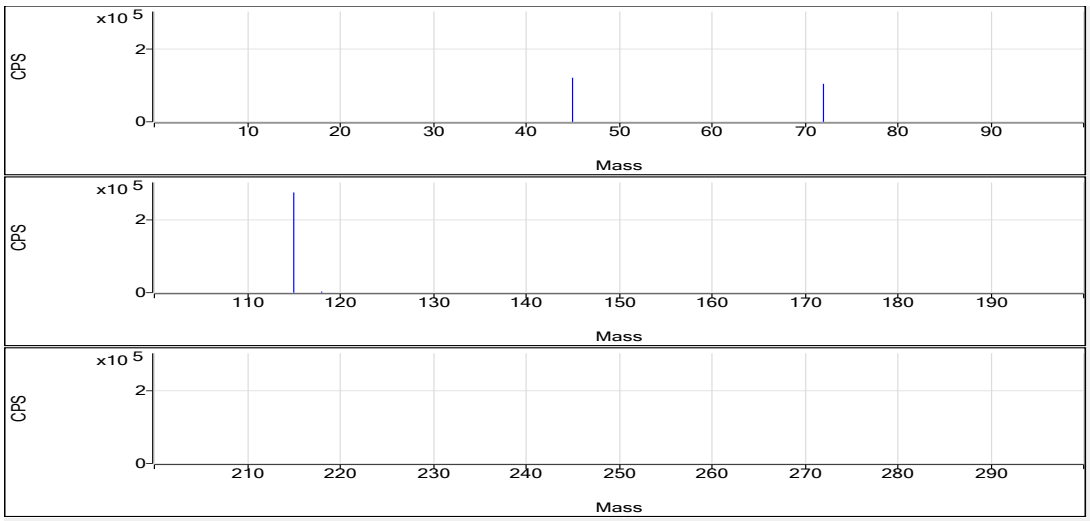
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2066334.08	1.7	101.6	Analog	0.1000	3
No Gas	Ge	72	1048225.74	0.5	104.3	Pulse	0.1000	3
H2	Sc	45	121756.90	1.3	92.2	Pulse	0.1000	3
H2	Ge	72	104997.79	2.2	94.1	Pulse	0.1000	3
H2	In	115	276715.94	1.2	94.2	Pulse	0.1000	3
He	Sc	45	36971.02	2.3	100.1	Pulse	0.1000	3
He	Ge	72	64890.62	0.6	100.5	Pulse	0.1000	3
He	In	115	60976.27	1.9	96.5	Pulse	0.1000	3
He	Tb	159	285303.96	0.6	97.4	Pulse	0.1000	3
He	Bi	209	230269.05	1.2	97.6	Pulse	0.1000	3

No Gas

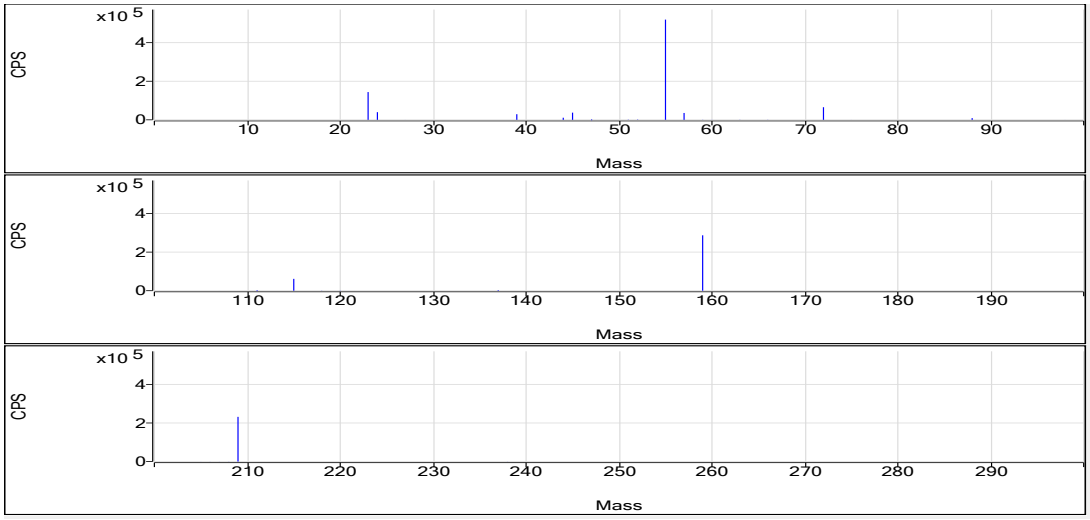


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.002	0	42.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.003	0	40.00	0.0008	2.195E-05
Se	78	2	H2	0.087	0.0001	5.33	0.0004	1.386E-05
Se	78	2	H2	0.027	0	2.67	0.0004	1.386E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Na	23	3	He	908.566	3.9136	143067.86	0.0038	0.4416
Na	23	3	He	869.672	3.765	142845.39	0.0038	0.4416
Na	23	3	He	911.476	3.9247	142924.48	0.0038	0.4416
Mg	24	3	He	572.969	1.074	39262.99	0.0019	0.005872
Mg	24	3	He	556.487	1.0433	39583.71	0.0019	0.005872
Mg	24	3	He	576.368	1.0804	39343.25	0.0019	0.005872
Al	27	3	He	2.534	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	1.502	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	4.447	0.003	110.00	0.0006	0.0004496
K	39	3	He	300.384	0.793	28989.54	0.0012	0.4456
K	39	3	He	279.938	0.7694	29189.98	0.0012	0.4456
K	39	3	He	291.37	0.7826	28498.79	0.0012	0.4456
Ca	44	3	He	4452.801	0.298	10894.39	0.0001	0.003779
Ca	44	3	He	4240.38	0.284	10774.30	0.0001	0.003779
Ca	44	3	He	4378.678	0.2931	10674.26	0.0001	0.003779
Ti	47	3	He	0.526	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.077	0.0288	1054.05	0.0223	0.03054
V	51	3	He	-0.145	0.0273	1036.04	0.0223	0.03054
V	51	3	He	-0.069	0.029	1056.05	0.0223	0.03054
Cr	52	3	He	0.137	0.041	1500.12	0.0285	0.03714
Cr	52	3	He	-0.027	0.0364	1380.12	0.0285	0.03714
Cr	52	3	He	0.036	0.0382	1390.12	0.0285	0.03714
Mn	55	3	He	1148.894	14.2327	520297.84	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1086.415	13.459	510639.25	0.0124	0.004415
Mn	55	3	He	1147.129	14.2109	517507.18	0.0124	0.004415
Fe	57	3	He	1726.672	0.9808	35855.00	0.0006	0.001356
Fe	57	3	He	1631.928	0.9271	35173.42	0.0006	0.001356
Fe	57	3	He	1686.265	0.9579	34882.85	0.0006	0.001356
Co	59	3	He	0.203	0.0145	530.03	0.0581	0.002697
Co	59	3	He	0.176	0.0129	490.02	0.0581	0.002697
Co	59	3	He	0.19	0.0137	500.02	0.0581	0.002697
Ni	60	3	He	0.253	0.0061	400.02	0.0087	0.003928
Ni	60	3	He	0.298	0.0065	420.02	0.0087	0.003928
Ni	60	3	He	0.098	0.0048	310.01	0.0087	0.003928
Cu	63	3	He	0.067	0.0078	510.03	0.0261	0.006048
Cu	63	3	He	0.071	0.0079	510.03	0.0261	0.006048
Cu	63	3	He	0.099	0.0086	560.03	0.0261	0.006048
Zn	66	3	He	1.125	0.0067	440.02	0.0029	0.003512
Zn	66	3	He	1.587	0.0081	520.03	0.0029	0.003512
Zn	66	3	He	1.843	0.0088	570.03	0.0029	0.003512
As	75	3	He	0.42	0.0016	104.00	0.0021	0.0007233
As	75	3	He	0.37	0.0015	96.00	0.0021	0.0007233
As	75	3	He	0.322	0.0014	90.00	0.0021	0.0007233
Sr	88	3	He	15.817	0.1422	8853.03	0.009	0.0005796
Sr	88	3	He	16.105	0.1448	8702.89	0.009	0.0005796
Sr	88	3	He	15.787	0.1419	8592.88	0.009	0.0005796
Mo	98	3	He	0.027	0.001	60.00	0.0235	0.0003188
Mo	98	3	He	0.029	0.001	60.00	0.0235	0.0003188
Mo	98	3	He	0.057	0.0017	100.00	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	-0.036	0.0165	1030.07	0.0164	0.01713
Sn	120	3	He	-0.223	0.0135	810.05	0.0164	0.01713
Sn	120	3	He	0.003	0.0172	1040.09	0.0164	0.01713
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	-0.006	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.026	0.0007	40.00	0.0155	0.0002641
Ba	137	3	He	10.648	0.0532	3310.51	0.005	0.0001577
Ba	137	3	He	10.395	0.0519	3120.46	0.005	0.0001577
Ba	137	3	He	10.718	0.0535	3240.50	0.005	0.0001577
Tl	205	3	He	0.007	0.0004	120.00	0.026	0.0002504
Tl	205	3	He	0.009	0.0005	140.01	0.026	0.0002504
Tl	205	3	He	0.012	0.0006	160.01	0.026	0.0002504
Pb	208	3	He	0.054	0.0033	510.03	0.0349	0.001422
Pb	208	3	He	0.028	0.0024	320.02	0.0349	0.001422
Pb	208	3	He	0.061	0.0036	440.02	0.0349	0.001422
U	238	3	He	0.04	0.0021	480.02	0.0502	5.657E-05
U	238	3	He	0.03	0.0016	360.02	0.0502	5.657E-05
U	238	3	He	0.022	0.0012	270.01	0.0502	5.657E-05
Sc	45	1	No Gas			2105664.34		
Sc	45	1	No Gas			2041679.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2051658.41		
Ge	72	1	No Gas			1053951.55		
Ge	72	1	No Gas			1046200.77		
Ge	72	1	No Gas			1044524.91		
Sc	45	2	H2			120032.90		
Sc	45	2	H2			123197.77		
Sc	45	2	H2			122040.04		
Ge	72	2	H2			102736.78		
Ge	72	2	H2			104892.98		
Ge	72	2	H2			107363.62		
In	115	2	H2			273369.25		
In	115	2	H2			276709.37		
In	115	2	H2			280069.21		
Sc	45	3	He			36556.39		
Sc	45	3	He			37940.43		
Sc	45	3	He			36416.25		
Ge	72	3	He			65329.33		
Ge	72	3	He			64515.62		
Ge	72	3	He			64826.91		
In	115	3	He			62270.09		
In	115	3	He			60120.88		
In	115	3	He			60552.43		
Tb	159	3	He			284557.03		
Tb	159	3	He			284184.84		
Tb	159	3	He			287170.02		
Bi	209	3	He			232656.56		
Bi	209	3	He			227252.79		
Bi	209	3	He			230897.81		

Quantitation Report

Data File Name	062SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:21:47 AM
Sample Name	410-136848-Z-5-A
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

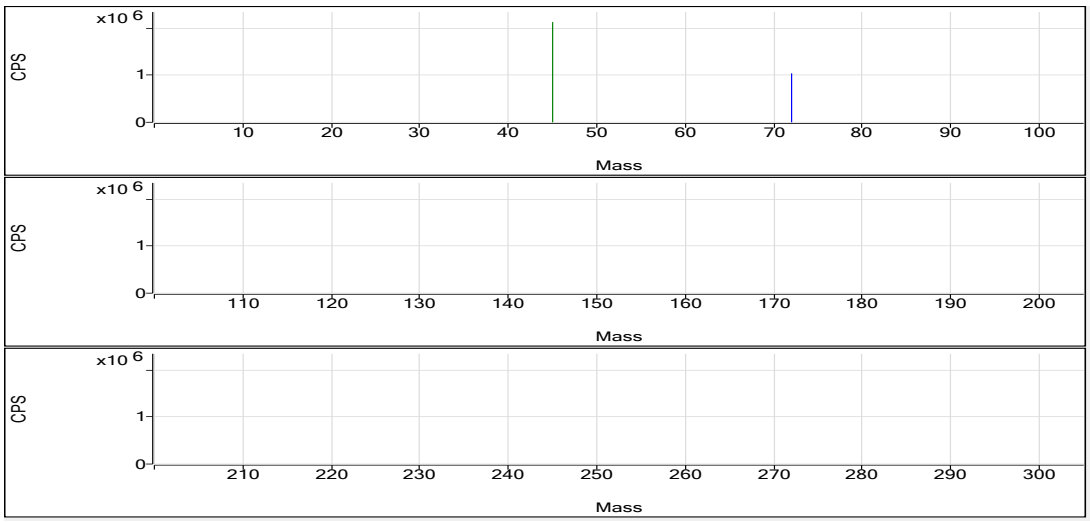
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.004	ppb	232.5	53.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.098	ppb	42.8	6.00	0.0001	Pulse	1.5000	3
Na	23	45	He	8466.086	ppb	1.8	1209328.84	32.7941	Analog	0.1000	3
Mg	24	45	He	14239.832	ppb	0.8	979186.26	26.5527	Pulse	0.1000	3
Al	27	45	He	4.539	ppb	60.7	113.34	0.0031	Pulse	0.1000	3
K	39	45	He	2003.040	ppb	2.0	101861.02	2.7621	Pulse	0.1000	3
Ca	44	45	He	137714.181	ppb	0.2	335724.97	9.1038	Pulse	0.1000	3
Ti	47	45	He	0.348	ppb	173.2	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.211	ppb	N/A	952.70	0.0258	Pulse	0.5000	3
Cr	52	45	He	0.144	ppb	77.6	1520.14	0.0412	Pulse	0.1000	3
Mn	55	45	He	2597.041	ppb	0.1	1186242.77	32.1671	Pulse	0.1000	3
Fe	57	45	He	5757.262	ppb	2.4	120479.65	3.2672	Pulse	0.1000	3
Co	59	45	He	0.634	ppb	13.3	1456.80	0.0395	Pulse	0.1000	3
Ni	60	72	He	1.247	ppb	19.3	983.40	0.0147	Pulse	0.1000	3
Cu	63	72	He	0.227	ppb	27.8	800.05	0.0120	Pulse	0.1000	3
Zn	66	72	He	5.083	ppb	15.9	1206.76	0.0181	Pulse	0.1000	3
As	75	72	He	0.983	ppb	20.0	184.00	0.0028	Pulse	0.5000	3
Sr	88	115	He	454.431	ppb	2.4	249421.21	4.0690	Pulse	0.1000	3
Mo	98	115	He	0.313	ppb	17.4	470.02	0.0077	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	107.8	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.027	ppb	56.3	10.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.186	ppb	N/A	863.39	0.0141	Pulse	0.1000	3
Sb	121	115	He	0.053	ppb	39.3	66.67	0.0011	Pulse	0.1000	3
Ba	137	115	He	79.168	ppb	1.6	24171.94	0.3943	Pulse	0.1000	3
Tl	205	159	He	0.001	ppb	206.9	80.00	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.020	ppb	22.4	610.03	0.0021	Pulse	0.1000	3
U	238	209	He	0.263	ppb	6.4	3087.16	0.0133	Pulse	0.1000	3

ISTD Table:

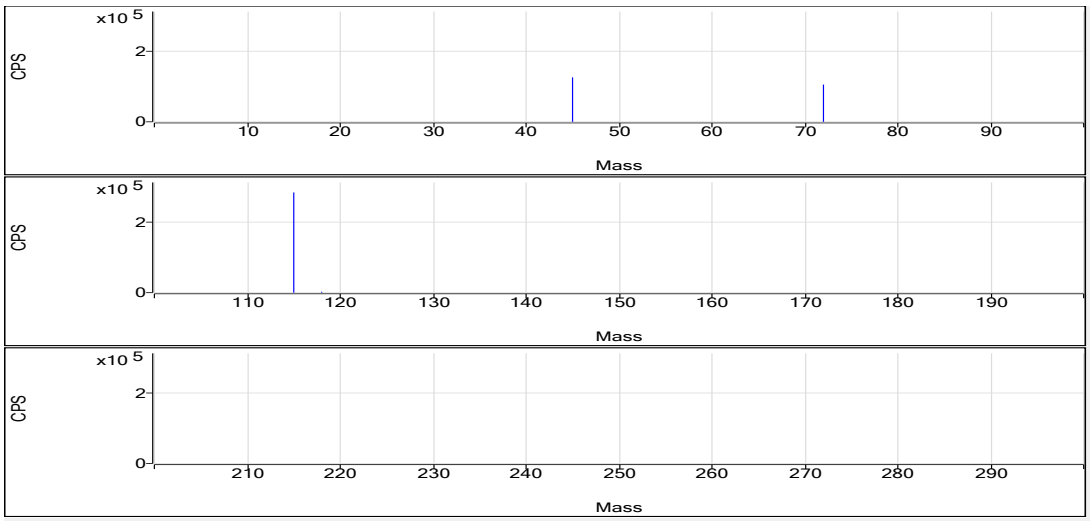
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2130219.45	0.9	104.8	Analog	0.1000	3
No Gas	Ge	72	1040392.35	0.8	103.5	Pulse	0.1000	3
H2	Sc	45	126401.99	0.6	95.7	Pulse	0.1000	3
H2	Ge	72	105870.54	1.6	94.9	Pulse	0.1000	3
H2	In	115	285004.42	1.0	97.0	Pulse	0.1000	3
He	Sc	45	36877.52	0.3	99.8	Pulse	0.1000	3
He	Ge	72	66806.63	1.3	103.5	Pulse	0.1000	3
He	In	115	61311.74	1.5	97.0	Pulse	0.1000	3
He	Tb	159	286800.92	1.0	97.9	Pulse	0.1000	3
He	Bi	209	232392.59	0.8	98.5	Pulse	0.1000	3

No Gas

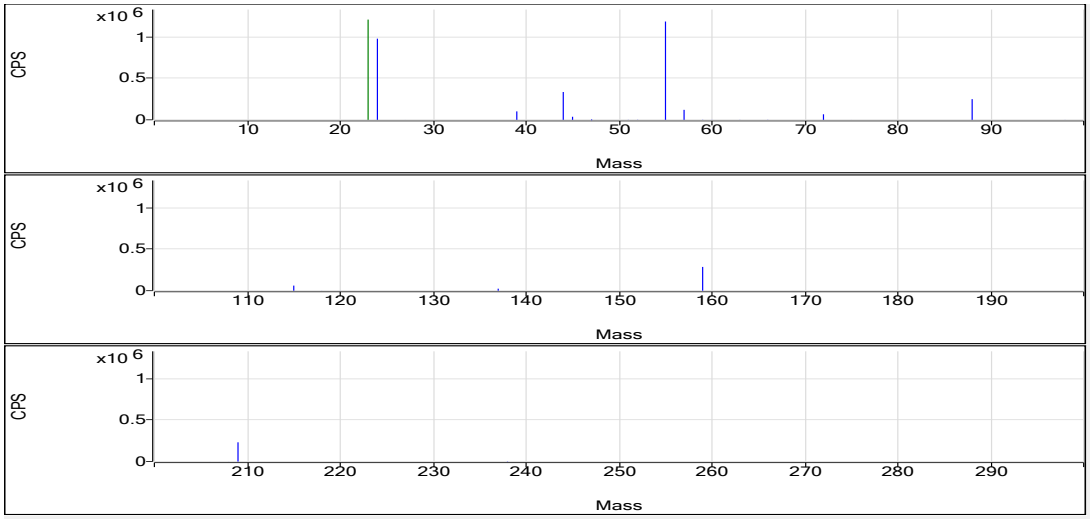


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.006	0	38.00	0.0008	2.195E-05
Be	9	1	No Gas	0.004	0	54.00	0.0008	2.195E-05
Be	9	1	No Gas	0.013	0	68.00	0.0008	2.195E-05
Se	78	2	H2	0.057	0	4.00	0.0004	1.386E-05
Se	78	2	H2	0.141	0.0001	8.00	0.0004	1.386E-05
Se	78	2	H2	0.097	0.0001	6.00	0.0004	1.386E-05
Na	23	3	He	8624.951	33.4012	1229417.56	0.0038	0.4416
Na	23	3	He	8314.483	32.2148	1191876.23	0.0038	0.4416
Na	23	3	He	8458.823	32.7664	1206692.72	0.0038	0.4416
Mg	24	3	He	14367.145	26.7901	986078.34	0.0019	0.005872
Mg	24	3	He	14130.393	26.3487	974844.91	0.0019	0.005872
Mg	24	3	He	14221.959	26.5194	976635.53	0.0019	0.005872
Al	27	3	He	2.512	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	3.43	0.0024	90.00	0.0006	0.0004496
Al	27	3	He	7.677	0.0049	180.01	0.0006	0.0004496
K	39	3	He	2023.077	2.7853	102519.22	0.0012	0.4456
K	39	3	He	2028.793	2.7919	103293.61	0.0012	0.4456
K	39	3	He	1957.25	2.7091	99770.22	0.0012	0.4456
Ca	44	3	He	137990.282	9.1221	335761.05	0.0001	0.003779
Ca	44	3	He	137401.556	9.0832	336057.03	0.0001	0.003779
Ca	44	3	He	137750.706	9.1062	335356.83	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.045	0.0005	20.00	0.0005	0
V	51	3	He	-0.115	0.028	1030.04	0.0223	0.03054
V	51	3	He	-0.242	0.0251	930.04	0.0223	0.03054
V	51	3	He	-0.276	0.0244	898.03	0.0223	0.03054
Cr	52	3	He	0.022	0.0378	1390.12	0.0285	0.03714
Cr	52	3	He	0.167	0.0419	1550.15	0.0285	0.03714
Cr	52	3	He	0.241	0.044	1620.15	0.0285	0.03714
Mn	55	3	He	2601.05	32.2168	1185821.70	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2596.058	32.155	1189662.79	0.0124	0.004415
Mn	55	3	He	2594.014	32.1296	1183243.81	0.0124	0.004415
Fe	57	3	He	5854.383	3.3223	122284.48	0.0006	0.001356
Fe	57	3	He	5596.088	3.1757	117495.63	0.0006	0.001356
Fe	57	3	He	5821.316	3.3035	121658.83	0.0006	0.001356
Co	59	3	He	0.702	0.0435	1600.16	0.0581	0.002697
Co	59	3	He	0.54	0.0341	1260.10	0.0581	0.002697
Co	59	3	He	0.659	0.041	1510.14	0.0581	0.002697
Ni	60	3	He	1.459	0.0166	1090.08	0.0087	0.003928
Ni	60	3	He	1.296	0.0152	1020.06	0.0087	0.003928
Ni	60	3	He	0.986	0.0125	840.06	0.0087	0.003928
Cu	63	3	He	0.251	0.0126	830.05	0.0261	0.006048
Cu	63	3	He	0.155	0.0101	680.04	0.0261	0.006048
Cu	63	3	He	0.274	0.0132	890.05	0.0261	0.006048
Zn	66	3	He	5.672	0.0198	1300.10	0.0029	0.003512
Zn	66	3	He	5.413	0.019	1280.11	0.0029	0.003512
Zn	66	3	He	4.164	0.0154	1040.07	0.0029	0.003512
As	75	3	He	1.077	0.0029	194.00	0.0021	0.0007233
As	75	3	He	0.757	0.0023	154.00	0.0021	0.0007233
As	75	3	He	1.115	0.003	204.00	0.0021	0.0007233
Sr	88	3	He	457.197	4.0938	250295.23	0.009	0.0005796
Sr	88	3	He	463.578	4.1509	251206.23	0.009	0.0005796
Sr	88	3	He	442.519	3.9624	246762.18	0.009	0.0005796
Mo	98	3	He	0.327	0.008	490.02	0.0235	0.0003188
Mo	98	3	He	0.359	0.0088	530.03	0.0235	0.0003188
Mo	98	3	He	0.253	0.0063	390.02	0.0235	0.0003188
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	0.039	0.0002	14.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.033	0.0002	12.00	0.0055	1.07E-05
Sn	120	3	He	-0.186	0.0141	860.05	0.0164	0.01713
Sn	120	3	He	-0.188	0.014	850.05	0.0164	0.01713
Sn	120	3	He	-0.183	0.0141	880.07	0.0164	0.01713
Sb	121	3	He	0.046	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.036	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.076	0.0014	90.00	0.0155	0.0002641
Ba	137	3	He	80.071	0.3988	24382.43	0.005	0.0001577
Ba	137	3	He	79.696	0.3969	24021.49	0.005	0.0001577
Ba	137	3	He	77.737	0.3872	24111.90	0.005	0.0001577
Tl	205	3	He	0.002	0.0003	90.00	0.026	0.0002504
Tl	205	3	He	-0.002	0.0002	60.00	0.026	0.0002504
Tl	205	3	He	0.002	0.0003	90.00	0.026	0.0002504
Pb	208	3	He	0.025	0.0023	440.03	0.0349	0.001422
Pb	208	3	He	0.017	0.002	360.02	0.0349	0.001422
Pb	208	3	He	0.019	0.0021	300.02	0.0349	0.001422
U	238	3	He	0.252	0.0127	2960.43	0.0502	5.657E-05
U	238	3	He	0.283	0.0143	3290.56	0.0502	5.657E-05
U	238	3	He	0.255	0.0129	3010.48	0.0502	5.657E-05
Sc	45	1	No Gas			2147875.59		
Sc	45	1	No Gas			2134518.41		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2108264.34		
Ge	72	1	No Gas			1042162.95		
Ge	72	1	No Gas			1047341.63		
Ge	72	1	No Gas			1031672.48		
Sc	45	2	H2			125840.78		
Sc	45	2	H2			126122.93		
Sc	45	2	H2			127242.26		
Ge	72	2	H2			103905.85		
Ge	72	2	H2			106655.70		
Ge	72	2	H2			107050.07		
In	115	2	H2			284982.03		
In	115	2	H2			287810.27		
In	115	2	H2			282220.97		
Sc	45	3	He			36807.58		
Sc	45	3	He			36997.81		
Sc	45	3	He			36827.18		
Ge	72	3	He			65781.68		
Ge	72	3	He			67289.54		
Ge	72	3	He			67348.66		
In	115	3	He			61145.00		
In	115	3	He			60522.66		
In	115	3	He			62280.11		
Tb	159	3	He			286334.57		
Tb	159	3	He			284198.18		
Tb	159	3	He			289870.00		
Bi	209	3	He			232394.35		
Bi	209	3	He			230591.48		
Bi	209	3	He			234191.95		

Quantitation Report

Data File Name	063SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:23:49 AM
Sample Name	410-136848-Z-5-A @100
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

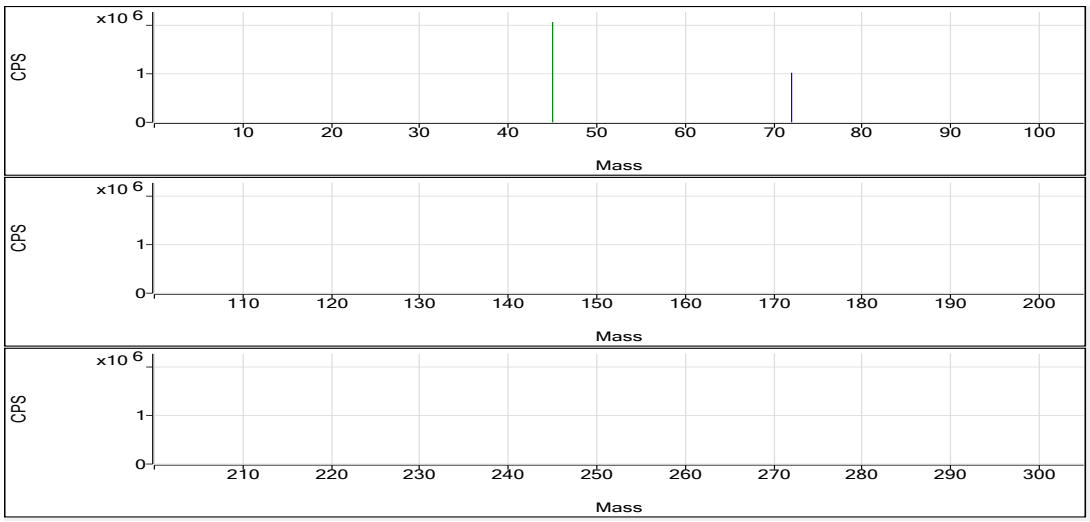
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.004	ppb	N/A	39.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.007	ppb	N/A	1.11	0.0000	Pulse	1.5000	3
Na	23	45	He	61.539	ppb	6.1	24891.64	0.6768	Pulse	0.1000	3
Mg	24	45	He	143.189	ppb	4.8	10033.75	0.2728	Pulse	0.1000	3
Al	27	45	He	2.202	ppb	44.7	63.33	0.0017	Pulse	0.1000	3
K	39	45	He	16.937	ppb	32.3	17110.51	0.4652	Pulse	0.1000	3
Ca	44	45	He	1362.455	ppb	5.7	3450.53	0.0938	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.117	ppb	N/A	1027.38	0.0279	Pulse	0.5000	3
Cr	52	45	He	-0.060	ppb	N/A	1303.45	0.0354	Pulse	0.1000	3
Mn	55	45	He	25.428	ppb	3.7	11745.14	0.3193	Pulse	0.1000	3
Fe	57	45	He	64.713	ppb	5.0	1400.12	0.0381	Pulse	0.1000	3
Co	59	45	He	0.011	ppb	127.2	123.34	0.0034	Pulse	0.1000	3
Ni	60	72	He	-0.055	ppb	N/A	226.68	0.0034	Pulse	0.1000	3
Cu	63	72	He	-0.003	ppb	N/A	393.36	0.0060	Pulse	0.1000	3
Zn	66	72	He	0.840	ppb	44.9	390.02	0.0059	Pulse	0.1000	3
As	75	72	He	-0.125	ppb	N/A	30.67	0.0005	Pulse	0.5000	3
Sr	88	115	He	4.511	ppb	7.7	2486.98	0.0410	Pulse	0.1000	3
Mo	98	115	He	0.012	ppb	65.4	36.67	0.0006	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	143.1	53.34	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	8967.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.117	ppb	N/A	923.40	0.0152	Pulse	0.1000	3
Sb	121	115	He	-0.003	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.994	ppb	9.6	310.02	0.0051	Pulse	0.1000	3
Tl	205	159	He	0.002	ppb	101.4	86.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.004	ppb	50.4	446.69	0.0016	Pulse	0.1000	3
U	238	209	He	0.009	ppb	14.5	113.34	0.0005	Pulse	0.1000	3

ISTD Table:

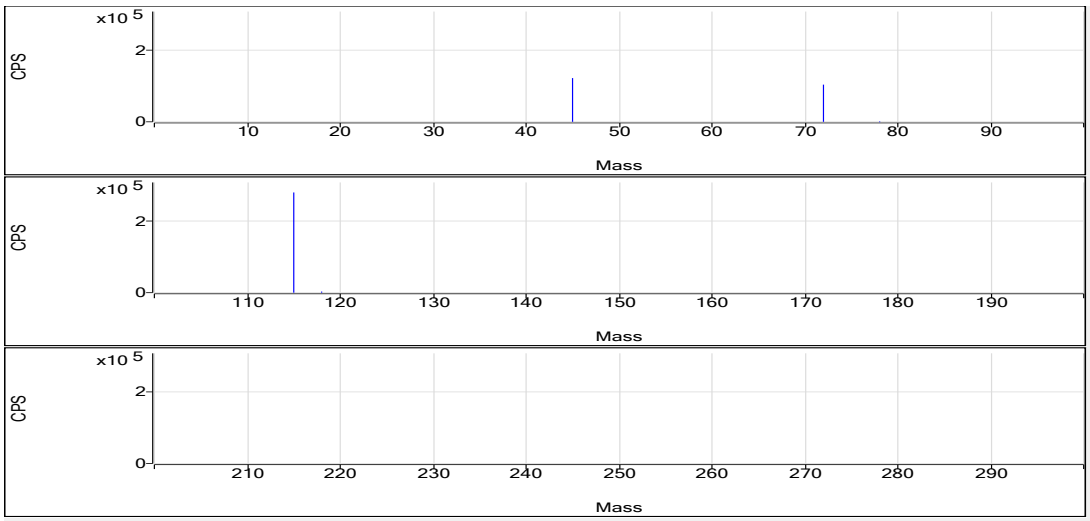
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2077640.54	1.0	102.2	Analog	0.1000	3
No Gas	Ge	72	1026682.40	0.6	102.1	Pulse	0.1000	3
H2	Sc	45	121921.56	1.9	92.3	Pulse	0.1000	3
H2	Ge	72	103664.61	1.4	92.9	Pulse	0.1000	3
H2	In	115	279470.89	0.4	95.2	Pulse	0.1000	3
He	Sc	45	36780.62	0.2	99.5	Pulse	0.1000	3
He	Ge	72	65832.13	2.4	102.0	Pulse	0.1000	3
He	In	115	60748.11	1.1	96.1	Pulse	0.1000	3
He	Tb	159	285056.61	0.6	97.4	Pulse	0.1000	3
He	Bi	209	231990.28	0.7	98.4	Pulse	0.1000	3

No Gas

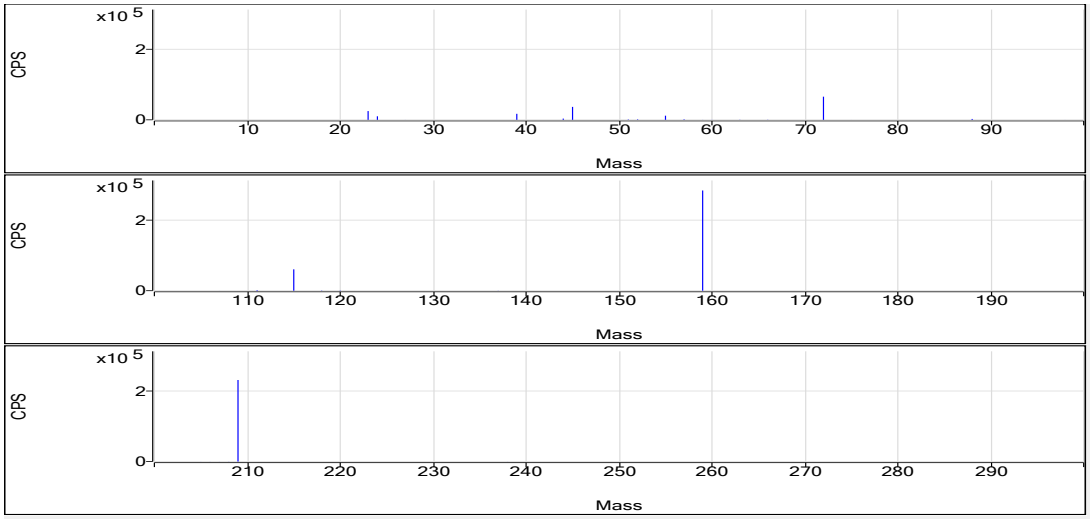


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.005	0	38.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.005	0	38.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.003	0	42.00	0.0008	2.195E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Se	78	2	H2	-0.002	0	1.33	0.0004	1.386E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.386E-05
Na	23	3	He	57.206	0.6602	24320.80	0.0038	0.4416
Na	23	3	He	63.748	0.6852	25152.08	0.0038	0.4416
Na	23	3	He	63.663	0.6849	25202.05	0.0038	0.4416
Mg	24	3	He	139.311	0.2656	9783.53	0.0019	0.005872
Mg	24	3	He	151.08	0.2875	10554.15	0.0019	0.005872
Mg	24	3	He	139.177	0.2653	9763.57	0.0019	0.005872
Al	27	3	He	1.1	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	2.992	0.0022	80.00	0.0006	0.0004496
Al	27	3	He	2.513	0.0019	70.00	0.0006	0.0004496
K	39	3	He	19.6	0.4683	17250.58	0.0012	0.4456
K	39	3	He	20.575	0.4694	17230.75	0.0012	0.4456
K	39	3	He	10.636	0.4579	16850.20	0.0012	0.4456
Ca	44	3	He	1450.744	0.0996	3670.60	0.0001	0.003779
Ca	44	3	He	1303.528	0.0899	3300.49	0.0001	0.003779
Ca	44	3	He	1333.093	0.0919	3380.50	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.155	0.0271	998.04	0.0223	0.03054
V	51	3	He	-0.075	0.0289	1060.05	0.0223	0.03054
V	51	3	He	-0.122	0.0278	1024.04	0.0223	0.03054
Cr	52	3	He	0.069	0.0391	1440.13	0.0285	0.03714
Cr	52	3	He	-0.156	0.0327	1200.12	0.0285	0.03714
Cr	52	3	He	-0.092	0.0345	1270.09	0.0285	0.03714
Mn	55	3	He	26.178	0.3286	12105.38	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	25.744	0.3232	11865.20	0.0124	0.004415
Mn	55	3	He	24.363	0.3061	11264.83	0.0124	0.004415
Fe	57	3	He	67.964	0.0399	1470.13	0.0006	0.001356
Fe	57	3	He	61.49	0.0362	1330.11	0.0006	0.001356
Fe	57	3	He	64.686	0.038	1400.11	0.0006	0.001356
Co	59	3	He	-0.004	0.0024	90.00	0.0581	0.002697
Co	59	3	He	0.024	0.0041	150.01	0.0581	0.002697
Co	59	3	He	0.014	0.0035	130.00	0.0581	0.002697
Ni	60	3	He	-0.077	0.0033	210.01	0.0087	0.003928
Ni	60	3	He	-0.145	0.0027	180.01	0.0087	0.003928
Ni	60	3	He	0.056	0.0044	290.01	0.0087	0.003928
Cu	63	3	He	-0.023	0.0054	350.02	0.0261	0.006048
Cu	63	3	He	0.058	0.0076	510.03	0.0261	0.006048
Cu	63	3	He	-0.045	0.0049	320.02	0.0261	0.006048
Zn	66	3	He	0.944	0.0062	400.02	0.0029	0.003512
Zn	66	3	He	1.154	0.0068	460.03	0.0029	0.003512
Zn	66	3	He	0.421	0.0047	310.01	0.0029	0.003512
As	75	3	He	-0.139	0.0004	28.00	0.0021	0.0007233
As	75	3	He	-0.12	0.0005	32.00	0.0021	0.0007233
As	75	3	He	-0.114	0.0005	32.00	0.0021	0.0007233
Sr	88	3	He	4.299	0.0391	2390.29	0.009	0.0005796
Sr	88	3	He	4.323	0.0393	2400.29	0.009	0.0005796
Sr	88	3	He	4.91	0.0445	2670.36	0.009	0.0005796
Mo	98	3	He	0.021	0.0008	50.00	0.0235	0.0003188
Mo	98	3	He	0.007	0.0005	30.00	0.0235	0.0003188
Mo	98	3	He	0.008	0.0005	30.00	0.0235	0.0003188
Ag	107	3	He	0.02	0.0015	90.01	0.0499	0.0004754
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.177	0.0142	870.06	0.0164	0.01713
Sn	120	3	He	-0.126	0.0151	920.06	0.0164	0.01713
Sn	120	3	He	-0.048	0.0163	980.08	0.0164	0.01713
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	-0.006	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	-0.006	0.0002	10.00	0.0155	0.0002641
Ba	137	3	He	1.019	0.0052	320.02	0.005	0.0001577
Ba	137	3	He	0.889	0.0046	280.02	0.005	0.0001577
Ba	137	3	He	1.074	0.0055	330.02	0.005	0.0001577
Tl	205	3	He	0.004	0.0004	100.01	0.026	0.0002504
Tl	205	3	He	0	0.0002	70.00	0.026	0.0002504
Tl	205	3	He	0.003	0.0003	90.00	0.026	0.0002504
Pb	208	3	He	0.005	0.0016	330.02	0.0349	0.001422
Pb	208	3	He	0.005	0.0016	220.01	0.0349	0.001422
Pb	208	3	He	0.002	0.0015	170.01	0.0349	0.001422
U	238	3	He	0.007	0.0004	100.00	0.0502	5.657E-05
U	238	3	He	0.01	0.0006	130.01	0.0502	5.657E-05
U	238	3	He	0.008	0.0005	110.00	0.0502	5.657E-05
Sc	45	1	No Gas			2060729.66		
Sc	45	1	No Gas			2071014.66		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2101177.31		
Ge	72	1	No Gas			1026384.98		
Ge	72	1	No Gas			1020395.84		
Ge	72	1	No Gas			1033266.39		
Sc	45	2	H2			122522.12		
Sc	45	2	H2			119347.12		
Sc	45	2	H2			123895.43		
Ge	72	2	H2			104620.46		
Ge	72	2	H2			102033.51		
Ge	72	2	H2			104339.86		
In	115	2	H2			280616.73		
In	115	2	H2			279167.91		
In	115	2	H2			278628.02		
Sc	45	3	He			36837.67		
Sc	45	3	He			36706.93		
Sc	45	3	He			36797.25		
Ge	72	3	He			64345.48		
Ge	72	3	He			67459.34		
Ge	72	3	He			65691.58		
In	115	3	He			61186.02		
In	115	3	He			61114.72		
In	115	3	He			59959.89		
Tb	159	3	He			285178.86		
Tb	159	3	He			286739.25		
Tb	159	3	He			283251.73		
Bi	209	3	He			231018.88		
Bi	209	3	He			233786.56		
Bi	209	3	He			231165.39		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:25:51 AM
Sample Name	410-136848-Z-5-A PDS
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

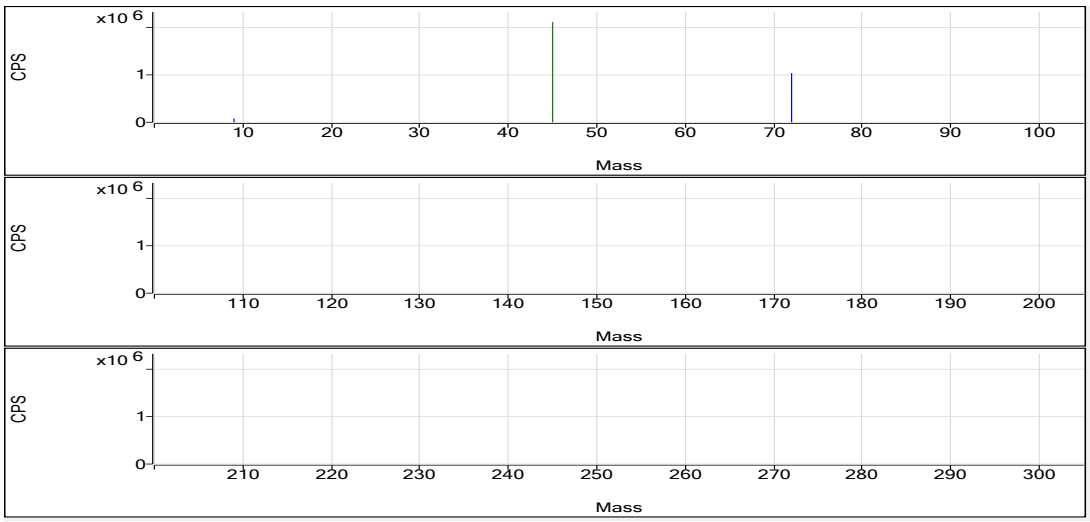
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.615	ppb	1.1	81815.17	0.0389	Pulse	0.5000	3
Se	78	72	H2	105.690	ppb	2.4	4856.83	0.0460	Pulse	1.5000	3
Na	23	45	He	13194.326	ppb	0.9	1907176.53	50.8627	Analog	0.1000	3
Mg	24	45	He	19549.440	ppb	0.4	1366756.28	36.4513	Analog	0.1000	3
Al	27	45	He	5117.664	ppb	0.4	110963.06	2.9593	Pulse	0.1000	3
K	39	45	He	6994.544	ppb	0.5	320019.02	8.5347	Pulse	0.1000	3
Ca	44	45	He	137218.833	ppb	0.2	340126.50	9.0711	Pulse	0.1000	3
Ti	47	45	He	515.257	ppb	5.1	10037.12	0.2677	Pulse	0.1000	3
V	51	45	He	509.651	ppb	0.2	427174.82	11.3926	Pulse	0.5000	3
Cr	52	45	He	508.716	ppb	0.5	544125.58	14.5118	Pulse	0.1000	3
Mn	55	45	He	3114.103	ppb	0.3	1446245.55	38.5706	Analog	0.1000	3
Fe	57	45	He	10437.951	ppb	0.7	222057.98	5.9223	Pulse	0.1000	3
Co	59	45	He	471.541	ppb	0.7	1027298.08	27.3974	Pulse	0.1000	3
Ni	60	72	He	505.273	ppb	1.1	284281.51	4.3833	Pulse	0.1000	3
Cu	63	72	He	475.778	ppb	1.7	806820.95	12.4408	Pulse	0.1000	3
Zn	66	72	He	519.374	ppb	0.7	96758.67	1.4918	Pulse	0.1000	3
As	75	72	He	518.317	ppb	1.0	69547.10	1.0723	Pulse	0.5000	3
Sr	88	115	He	494.366	ppb	1.6	274067.27	4.4265	Pulse	0.1000	3
Mo	98	115	He	51.384	ppb	0.7	74836.08	1.2086	Pulse	0.1000	3
Ag	107	115	He	56.927	ppb	1.9	175747.05	2.8386	Pulse	0.1000	3
Cd	111	115	He	50.340	ppb	1.2	17272.03	0.2790	Pulse	0.5000	3
Sn	120	115	He	101.897	ppb	2.5	104643.54	1.6902	Pulse	0.1000	3
Sb	121	115	He	98.978	ppb	1.1	94810.73	1.5313	Pulse	0.1000	3
Ba	137	115	He	568.799	ppb	1.3	175348.07	2.8320	Pulse	0.1000	3
Tl	205	159	He	102.490	ppb	0.6	772219.81	2.6691	Pulse	0.1000	3
Pb	208	159	He	50.454	ppb	0.6	510402.20	1.7642	Pulse	0.1000	3
U	238	209	He	50.679	ppb	1.5	592663.95	2.5458	Pulse	0.1000	3

ISTD Table:

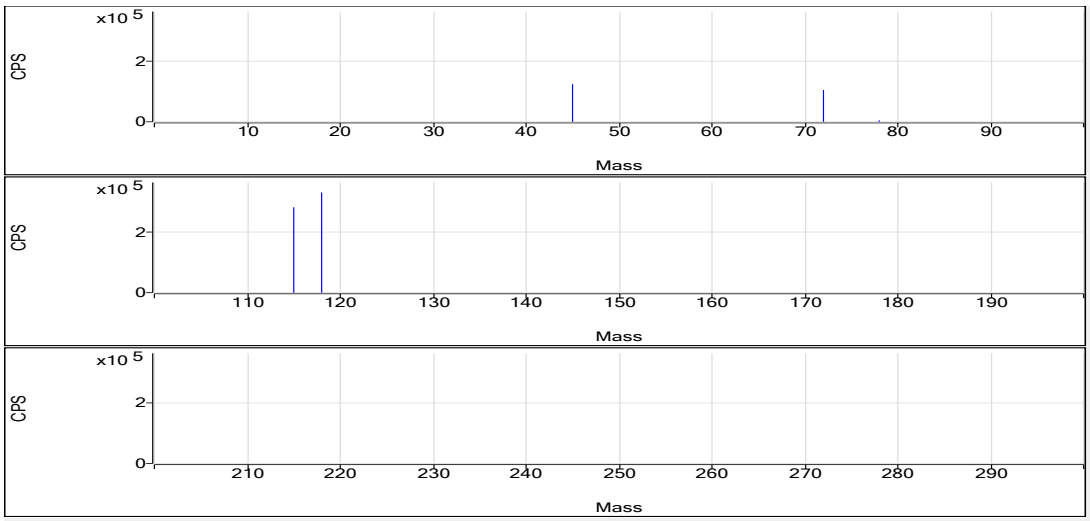
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2105567.05	2.0	103.6	Analog	0.1000	3
No Gas	Ge	72	1032328.03	1.7	102.7	Pulse	0.1000	3
H2	Sc	45	125064.47	0.4	94.7	Pulse	0.1000	3
H2	Ge	72	105655.86	0.8	94.7	Pulse	0.1000	3
H2	In	115	283760.56	1.3	96.6	Pulse	0.1000	3
He	Sc	45	37495.80	0.4	101.5	Pulse	0.1000	3
He	Ge	72	64860.88	1.1	100.5	Pulse	0.1000	3
He	In	115	61921.83	1.1	98.0	Pulse	0.1000	3
He	Tb	159	289318.10	0.1	98.8	Pulse	0.1000	3
He	Bi	209	232832.07	1.3	98.7	Pulse	0.1000	3

No Gas

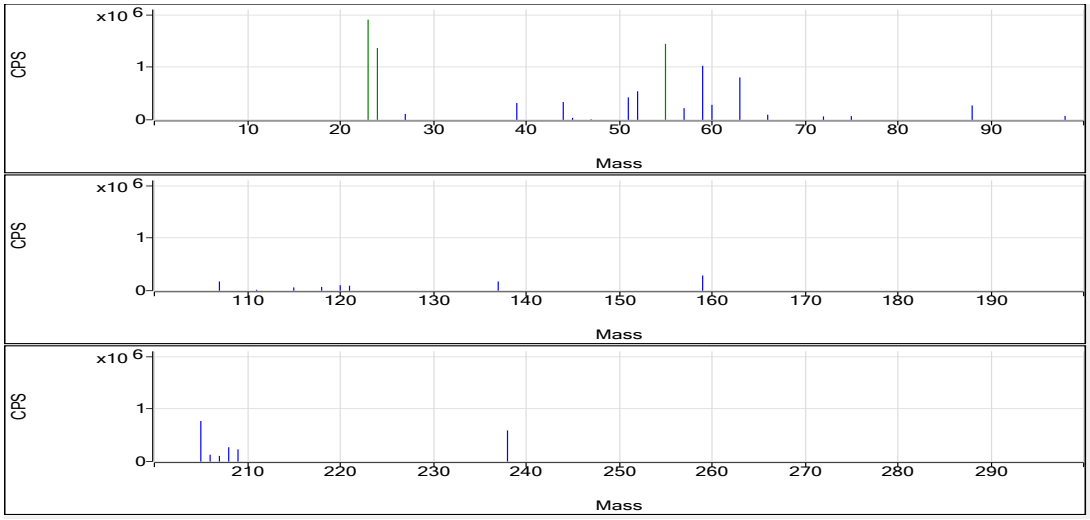


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	51.246	0.0393	82113.54	0.0008	2.195E-05
Be	9	1	No Gas	50.433	0.0387	80367.96	0.0008	2.195E-05
Be	9	1	No Gas	50.168	0.0385	82964.00	0.0008	2.195E-05
Se	78	2	H2	107.537	0.0468	4930.19	0.0004	1.386E-05
Se	78	2	H2	102.838	0.0447	4766.14	0.0004	1.386E-05
Se	78	2	H2	106.694	0.0464	4874.17	0.0004	1.386E-05
Na	23	3	He	13327.187	51.3704	1934084.03	0.0038	0.4416
Na	23	3	He	13138.833	50.6507	1892748.57	0.0038	0.4416
Na	23	3	He	13116.957	50.5671	1894697.00	0.0038	0.4416
Mg	24	3	He	19475.781	36.314	1367211.07	0.0019	0.005872
Mg	24	3	He	19636.155	36.6129	1368177.17	0.0019	0.005872
Mg	24	3	He	19536.384	36.4269	1364880.60	0.0019	0.005872
Al	27	3	He	5131.646	2.9674	111722.68	0.0006	0.0004496
Al	27	3	He	5127.322	2.9649	110795.24	0.0006	0.0004496
Al	27	3	He	5094.023	2.9457	110371.27	0.0006	0.0004496
K	39	3	He	7036.563	8.5833	323158.57	0.0012	0.4456
K	39	3	He	6972.11	8.5087	317960.74	0.0012	0.4456
K	39	3	He	6974.96	8.512	318937.75	0.0012	0.4456
Ca	44	3	He	137064.988	9.0609	341141.28	0.0001	0.003779
Ca	44	3	He	137461.192	9.0871	339572.96	0.0001	0.003779
Ca	44	3	He	137130.318	9.0652	339665.27	0.0001	0.003779
Ti	47	3	He	486.316	0.2527	9513.47	0.0005	0
Ti	47	3	He	536.869	0.279	10424.00	0.0005	0
Ti	47	3	He	522.585	0.2715	10173.90	0.0005	0
V	51	3	He	509.666	11.3929	428941.41	0.0223	0.03054
V	51	3	He	510.495	11.4114	426430.16	0.0223	0.03054
V	51	3	He	508.793	11.3735	426152.88	0.0223	0.03054
Cr	52	3	He	506.306	14.4432	543784.52	0.0285	0.03714
Cr	52	3	He	511.287	14.585	545021.40	0.0285	0.03714
Cr	52	3	He	508.554	14.5072	543570.81	0.0285	0.03714
Mn	55	3	He	3125.107	38.7069	1457304.20	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3110.929	38.5313	1439864.04	0.0124	0.004415
Mn	55	3	He	3106.273	38.4736	1441568.42	0.0124	0.004415
Fe	57	3	He	10351.664	5.8734	221130.23	0.0006	0.001356
Fe	57	3	He	10462.128	5.936	221821.03	0.0006	0.001356
Fe	57	3	He	10500.06	5.9575	223222.69	0.0006	0.001356
Co	59	3	He	474.501	27.5694	1037979.44	0.0581	0.002697
Co	59	3	He	472.3	27.4415	1025453.11	0.0581	0.002697
Co	59	3	He	467.824	27.1815	1018461.70	0.0581	0.002697
Ni	60	3	He	500.249	4.3397	283206.38	0.0087	0.003928
Ni	60	3	He	504.284	4.3747	285665.21	0.0087	0.003928
Ni	60	3	He	511.287	4.4354	283972.93	0.0087	0.003928
Cu	63	3	He	471.98	12.3415	805396.55	0.0261	0.006048
Cu	63	3	He	470.512	12.3032	803389.60	0.0261	0.006048
Cu	63	3	He	484.841	12.6777	811676.71	0.0261	0.006048
Zn	66	3	He	523.723	1.5042	98164.64	0.0029	0.003512
Zn	66	3	He	516.296	1.4829	96835.67	0.0029	0.003512
Zn	66	3	He	518.101	1.4881	95275.71	0.0029	0.003512
As	75	3	He	516.534	1.0686	69738.84	0.0021	0.0007233
As	75	3	He	513.995	1.0634	69439.20	0.0021	0.0007233
As	75	3	He	524.421	1.085	69463.25	0.0021	0.0007233
Sr	88	3	He	500.906	4.4851	275487.16	0.009	0.0005796
Sr	88	3	He	485.675	4.3487	272798.18	0.009	0.0005796
Sr	88	3	He	496.518	4.4458	273916.46	0.009	0.0005796
Mo	98	3	He	51.585	1.2134	74527.42	0.0235	0.0003188
Mo	98	3	He	50.973	1.199	75211.62	0.0235	0.0003188
Mo	98	3	He	51.593	1.2135	74769.20	0.0235	0.0003188
Ag	107	3	He	57.806	2.8825	177049.37	0.0499	0.0004754
Ag	107	3	He	55.727	2.7788	174315.88	0.0499	0.0004754
Ag	107	3	He	57.247	2.8546	175875.90	0.0499	0.0004754
Cd	111	3	He	50.406	0.2793	17156.56	0.0055	1.07E-05
Cd	111	3	He	49.712	0.2755	17280.71	0.0055	1.07E-05
Cd	111	3	He	50.902	0.2821	17378.83	0.0055	1.07E-05
Sn	120	3	He	104.564	1.734	106507.77	0.0164	0.01713
Sn	120	3	He	99.467	1.6503	103525.89	0.0164	0.01713
Sn	120	3	He	101.658	1.6863	103896.96	0.0164	0.01713
Sb	121	3	He	99.746	1.5431	94783.60	0.0155	0.0002641
Sb	121	3	He	97.75	1.5123	94864.98	0.0155	0.0002641
Sb	121	3	He	99.439	1.5384	94783.60	0.0155	0.0002641
Ba	137	3	He	577.065	2.8731	176474.70	0.005	0.0001577
Ba	137	3	He	563.774	2.8069	176080.47	0.005	0.0001577
Ba	137	3	He	565.557	2.8158	173489.04	0.005	0.0001577
Tl	205	3	He	103.149	2.6863	776849.44	0.026	0.0002504
Tl	205	3	He	102.157	2.6605	770735.77	0.026	0.0002504
Tl	205	3	He	102.163	2.6606	769074.21	0.026	0.0002504
Pb	208	3	He	50.783	1.7756	272536.30	0.0349	0.001422
Pb	208	3	He	50.259	1.7573	271566.77	0.0349	0.001422
Pb	208	3	He	50.32	1.7595	271935.86	0.0349	0.001422
U	238	3	He	50.219	2.5227	594382.18	0.0502	5.657E-05
U	238	3	He	51.527	2.5884	594146.98	0.0502	5.657E-05
U	238	3	He	50.29	2.5262	589462.69	0.0502	5.657E-05
Sc	45	1	No Gas			2087080.91		
Sc	45	1	No Gas			2075630.13		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2153990.12		
Ge	72	1	No Gas			1030013.03		
Ge	72	1	No Gas			1015948.50		
Ge	72	1	No Gas			1051022.56		
Sc	45	2	H2			124459.10		
Sc	45	2	H2			125438.05		
Sc	45	2	H2			125296.26		
Ge	72	2	H2			105398.39		
Ge	72	2	H2			106545.25		
Ge	72	2	H2			105023.94		
In	115	2	H2			280384.98		
In	115	2	H2			287894.88		
In	115	2	H2			283001.83		
Sc	45	3	He			37649.74		
Sc	45	3	He			37368.68		
Sc	45	3	He			37468.99		
Ge	72	3	He			65259.03		
Ge	72	3	He			65299.41		
Ge	72	3	He			64024.20		
In	115	3	He			61978.78		
In	115	3	He			63284.84		
In	115	3	He			62170.45		
Tb	159	3	He			289193.28		
Tb	159	3	He			289701.15		
Tb	159	3	He			289059.86		
Bi	209	3	He			235616.62		
Bi	209	3	He			229543.88		
Bi	209	3	He			233335.70		

Quantitation Report

Data File Name	065SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:27:55 AM
Sample Name	410-136848-Z-5-A PDS @100
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

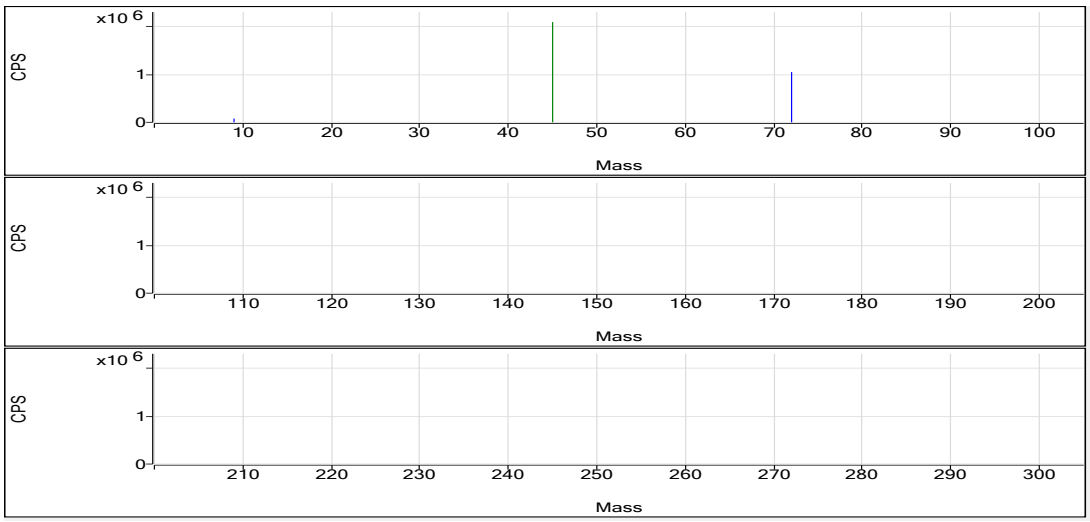
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.302	ppb	1.6	79147.57	0.0379	Pulse	0.5000	3
Se	78	72	H2	102.059	ppb	2.0	4650.10	0.0444	Pulse	1.5000	3
Na	23	45	He	5041.578	ppb	2.3	728252.80	19.7076	Pulse	0.1000	3
Mg	24	45	He	5326.439	ppb	2.7	367126.71	9.9358	Pulse	0.1000	3
Al	27	45	He	5006.397	ppb	2.5	106973.34	2.8950	Pulse	0.1000	3
K	39	45	He	5048.861	ppb	1.3	232261.94	6.2845	Pulse	0.1000	3
Ca	44	45	He	6537.039	ppb	1.7	16102.76	0.4357	Pulse	0.1000	3
Ti	47	45	He	518.661	ppb	3.0	9957.04	0.2695	Pulse	0.1000	3
V	51	45	He	506.774	ppb	2.0	418624.18	11.3285	Pulse	0.5000	3
Cr	52	45	He	512.472	ppb	2.6	540161.81	14.6187	Pulse	0.1000	3
Mn	55	45	He	529.769	ppb	0.8	242652.62	6.5653	Pulse	0.1000	3
Fe	57	45	He	5102.238	ppb	2.4	106997.95	2.8956	Pulse	0.1000	3
Co	59	45	He	481.177	ppb	2.1	1033108.63	27.9572	Pulse	0.1000	3
Ni	60	72	He	496.051	ppb	0.3	287205.37	4.3033	Pulse	0.1000	3
Cu	63	72	He	466.045	ppb	1.1	813306.50	12.1864	Pulse	0.1000	3
Zn	66	72	He	500.879	ppb	0.7	96020.34	1.4388	Pulse	0.1000	3
As	75	72	He	488.725	ppb	0.6	67482.05	1.0112	Pulse	0.5000	3
Sr	88	115	He	55.457	ppb	1.5	29848.78	0.4971	Pulse	0.1000	3
Mo	98	115	He	52.001	ppb	1.4	73445.25	1.2231	Pulse	0.1000	3
Ag	107	115	He	46.013	ppb	1.2	137781.52	2.2945	Pulse	0.1000	3
Cd	111	115	He	51.339	ppb	1.4	17082.49	0.2845	Pulse	0.5000	3
Sn	120	115	He	101.465	ppb	1.7	101064.50	1.6831	Pulse	0.1000	3
Sb	121	115	He	100.225	ppb	3.1	93088.86	1.5505	Pulse	0.1000	3
Ba	137	115	He	506.639	ppb	1.5	151463.33	2.5225	Pulse	0.1000	3
Tl	205	159	He	102.467	ppb	0.3	767402.72	2.6685	Pulse	0.1000	3
Pb	208	159	He	50.446	ppb	0.4	507255.60	1.7639	Pulse	0.1000	3
U	238	209	He	49.911	ppb	0.1	580265.49	2.5072	Pulse	0.1000	3

ISTD Table:

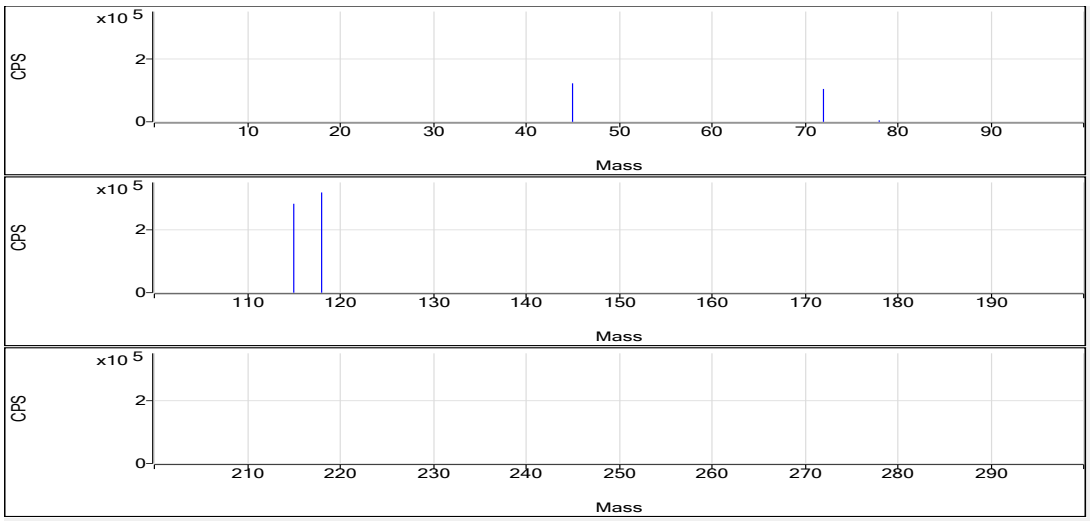
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2091490.13	2.4	102.9	Analog	0.1000	3
No Gas	Ge	72	1047587.28	1.2	104.2	Pulse	0.1000	3
H2	Sc	45	122667.22	1.3	92.9	Pulse	0.1000	3
H2	Ge	72	104742.58	0.9	93.9	Pulse	0.1000	3
H2	In	115	283374.57	0.5	96.5	Pulse	0.1000	3
He	Sc	45	36964.53	2.3	100.0	Pulse	0.1000	3
He	Ge	72	66739.30	0.7	103.4	Pulse	0.1000	3
He	In	115	60054.04	1.5	95.0	Pulse	0.1000	3
He	Tb	159	287576.74	0.5	98.2	Pulse	0.1000	3
He	Bi	209	231438.88	0.5	98.1	Pulse	0.1000	3

No Gas

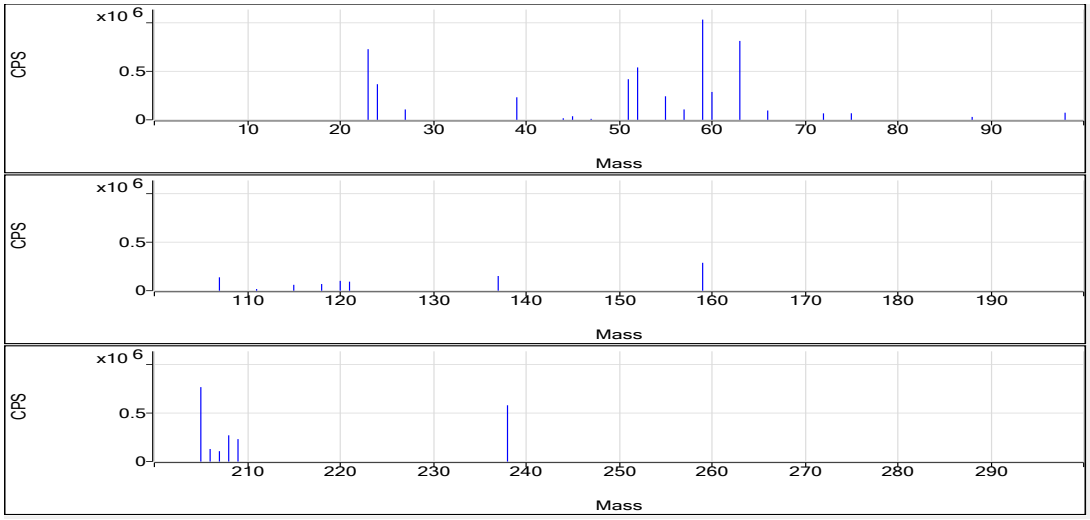


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.293	0.0378	79537.57	0.0008	2.195E-05
Be	9	1	No Gas	50.095	0.0385	78329.41	0.0008	2.195E-05
Be	9	1	No Gas	48.518	0.0373	79575.74	0.0008	2.195E-05
Se	78	2	H2	100.357	0.0437	4532.06	0.0004	1.386E-05
Se	78	2	H2	104.393	0.0454	4750.80	0.0004	1.386E-05
Se	78	2	H2	101.427	0.0441	4667.43	0.0004	1.386E-05
Na	23	3	He	4930.97	19.2849	731482.80	0.0038	0.4416
Na	23	3	He	5158.217	20.1533	731895.46	0.0038	0.4416
Na	23	3	He	5035.547	19.6846	721380.15	0.0038	0.4416
Mg	24	3	He	5161.713	9.6287	365218.82	0.0019	0.005872
Mg	24	3	He	5392.148	10.0583	365279.92	0.0019	0.005872
Mg	24	3	He	5425.456	10.1204	370881.40	0.0019	0.005872
Al	27	3	He	4878.635	2.8211	107006.54	0.0006	0.0004496
Al	27	3	He	5126.186	2.9643	107651.24	0.0006	0.0004496
Al	27	3	He	5014.371	2.8996	106262.24	0.0006	0.0004496
K	39	3	He	4978.068	6.2027	235269.04	0.0012	0.4456
K	39	3	He	5113.636	6.3595	230952.05	0.0012	0.4456
K	39	3	He	5054.881	6.2915	230564.74	0.0012	0.4456
Ca	44	3	He	6414.052	0.4276	16219.51	0.0001	0.003779
Ca	44	3	He	6634.943	0.4422	16059.45	0.0001	0.003779
Ca	44	3	He	6562.123	0.4374	16029.33	0.0001	0.003779
Ti	47	3	He	502.01	0.2608	9893.65	0.0005	0
Ti	47	3	He	532.807	0.2768	10053.81	0.0005	0
Ti	47	3	He	521.165	0.2708	9923.66	0.0005	0
V	51	3	He	494.881	11.0633	419635.47	0.0223	0.03054
V	51	3	He	512.388	11.4536	415953.97	0.0223	0.03054
V	51	3	He	513.051	11.4684	420283.09	0.0223	0.03054
Cr	52	3	He	497.801	14.2012	538657.02	0.0285	0.03714
Cr	52	3	He	522.896	14.9153	541668.39	0.0285	0.03714
Cr	52	3	He	516.72	14.7395	540160.03	0.0285	0.03714
Mn	55	3	He	524.833	6.5041	246703.69	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	532.088	6.594	239469.63	0.0124	0.004415
Mn	55	3	He	532.385	6.5977	241784.53	0.0124	0.004415
Fe	57	3	He	4964.32	2.8174	106863.76	0.0006	0.001356
Fe	57	3	He	5156.206	2.9262	106269.63	0.0006	0.001356
Fe	57	3	He	5186.187	2.9432	107860.47	0.0006	0.001356
Co	59	3	He	469.521	27.2801	1034739.75	0.0581	0.002697
Co	59	3	He	485.383	28.2016	1024177.80	0.0581	0.002697
Co	59	3	He	488.626	28.39	1040408.34	0.0581	0.002697
Ni	60	3	He	497.227	4.3135	290166.07	0.0087	0.003928
Ni	60	3	He	494.508	4.29	284786.40	0.0087	0.003928
Ni	60	3	He	496.419	4.3065	286663.65	0.0087	0.003928
Cu	63	3	He	463.934	12.1313	816054.68	0.0261	0.006048
Cu	63	3	He	462.129	12.0841	802191.00	0.0261	0.006048
Cu	63	3	He	472.073	12.344	821673.82	0.0261	0.006048
Zn	66	3	He	497.493	1.4291	96131.76	0.0029	0.003512
Zn	66	3	He	500.325	1.4372	95406.27	0.0029	0.003512
Zn	66	3	He	504.819	1.4501	96522.98	0.0029	0.003512
As	75	3	He	485.484	1.0045	67568.29	0.0021	0.0007233
As	75	3	He	488.915	1.0115	67150.66	0.0021	0.0007233
As	75	3	He	491.777	1.0175	67727.21	0.0021	0.0007233
Sr	88	3	He	54.835	0.4915	29441.26	0.009	0.0005796
Sr	88	3	He	55.161	0.4944	30172.75	0.009	0.0005796
Sr	88	3	He	56.377	0.5053	29932.33	0.009	0.0005796
Mo	98	3	He	51.783	1.218	72959.65	0.0235	0.0003188
Mo	98	3	He	51.395	1.2089	73773.60	0.0235	0.0003188
Mo	98	3	He	52.826	1.2425	73602.51	0.0235	0.0003188
Ag	107	3	He	45.709	2.2793	136532.43	0.0499	0.0004754
Ag	107	3	He	45.689	2.2783	139037.96	0.0499	0.0004754
Ag	107	3	He	46.642	2.3259	137774.18	0.0499	0.0004754
Cd	111	3	He	51.79	0.287	17190.60	0.0055	1.07E-05
Cd	111	3	He	50.538	0.2801	17090.51	0.0055	1.07E-05
Cd	111	3	He	51.688	0.2864	16966.36	0.0055	1.07E-05
Sn	120	3	He	102.854	1.7059	102186.28	0.0164	0.01713
Sn	120	3	He	99.509	1.651	100755.16	0.0164	0.01713
Sn	120	3	He	102.031	1.6924	100252.06	0.0164	0.01713
Sb	121	3	He	101.76	1.5743	94300.45	0.0155	0.0002641
Sb	121	3	He	96.704	1.4961	91300.09	0.0155	0.0002641
Sb	121	3	He	102.21	1.5812	93666.05	0.0155	0.0002641
Ba	137	3	He	510.564	2.542	152268.82	0.005	0.0001577
Ba	137	3	He	497.614	2.4776	151195.81	0.005	0.0001577
Ba	137	3	He	511.739	2.5479	150925.36	0.005	0.0001577
Tl	205	3	He	102.801	2.6772	769990.30	0.026	0.0002504
Tl	205	3	He	102.282	2.6637	762246.79	0.026	0.0002504
Tl	205	3	He	102.318	2.6646	769971.08	0.026	0.0002504
Pb	208	3	He	50.371	1.7613	269465.19	0.0349	0.001422
Pb	208	3	He	50.289	1.7584	268011.25	0.0349	0.001422
Pb	208	3	He	50.677	1.772	274398.41	0.0349	0.001422
U	238	3	He	49.923	2.5078	579245.19	0.0502	5.657E-05
U	238	3	He	49.969	2.5101	578838.66	0.0502	5.657E-05
U	238	3	He	49.842	2.5037	582712.61	0.0502	5.657E-05
Sc	45	1	No Gas			2101657.16		
Sc	45	1	No Gas			2036608.88		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2136204.34		
Ge	72	1	No Gas			1051999.05		
Ge	72	1	No Gas			1033909.91		
Ge	72	1	No Gas			1056852.87		
Sc	45	2	H2			124448.65		
Sc	45	2	H2			121524.11		
Sc	45	2	H2			122028.91		
Ge	72	2	H2			103816.71		
Ge	72	2	H2			104621.44		
Ge	72	2	H2			105789.59		
In	115	2	H2			282584.88		
In	115	2	H2			282646.77		
In	115	2	H2			284892.07		
Sc	45	3	He			37930.27		
Sc	45	3	He			36316.33		
Sc	45	3	He			36646.99		
Ge	72	3	He			67268.79		
Ge	72	3	He			66384.26		
Ge	72	3	He			66564.85		
In	115	3	He			60442.23		
In	115	3	He			61557.25		
In	115	3	He			59769.14		
Tb	159	3	He			287609.57		
Tb	159	3	He			286161.30		
Tb	159	3	He			288959.35		
Bi	209	3	He			230977.18		
Bi	209	3	He			230600.78		
Bi	209	3	He			232738.69		

Quantitation Report

Data File Name	066SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:29:57 AM
Sample Name	410-136848-Z-5-A SD @5
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

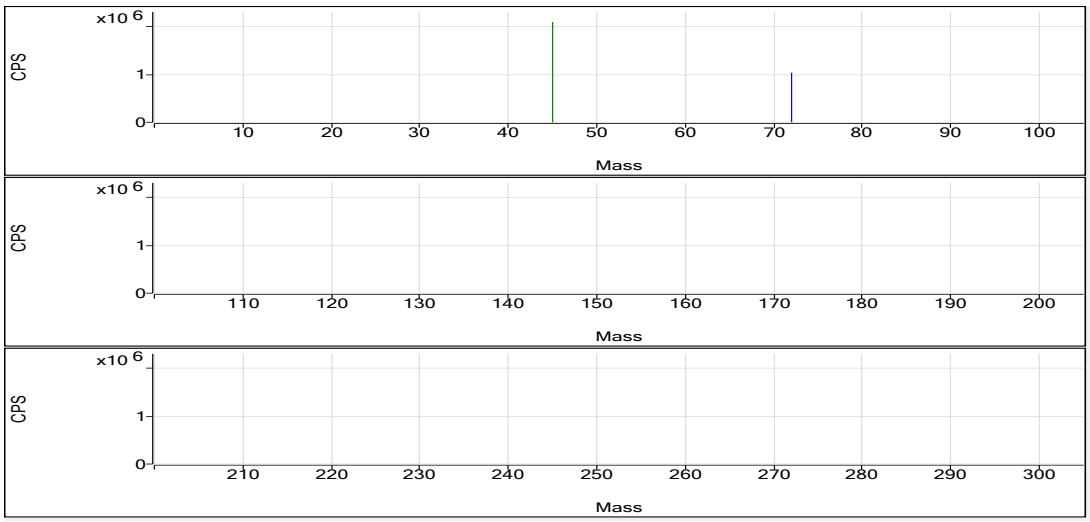
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.033	ppb	40.5	98.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.103	ppb	38.8	6.00	0.0001	Pulse	1.5000	3
Na	23	45	He	1625.547	ppb	0.9	244734.61	6.6535	Pulse	0.1000	3
Mg	24	45	He	2862.850	ppb	1.2	196522.81	5.3430	Pulse	0.1000	3
Al	27	45	He	3.761	ppb	30.4	96.67	0.0026	Pulse	0.1000	3
K	39	45	He	399.668	ppb	5.7	33388.72	0.9078	Pulse	0.1000	3
Ca	44	45	He	27471.164	ppb	1.0	66910.91	1.8191	Pulse	0.1000	3
Ti	47	45	He	0.174	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.001	ppb	9587.7	1124.05	0.0306	Pulse	0.5000	3
Cr	52	45	He	0.291	ppb	35.6	1670.16	0.0454	Pulse	0.1000	3
Mn	55	45	He	516.291	ppb	1.8	235331.70	6.3984	Pulse	0.1000	3
Fe	57	45	He	1153.785	ppb	0.2	24124.17	0.6558	Pulse	0.1000	3
Co	59	45	He	0.272	ppb	12.8	680.04	0.0185	Pulse	0.1000	3
Ni	60	72	He	0.421	ppb	28.0	496.69	0.0076	Pulse	0.1000	3
Cu	63	72	He	0.222	ppb	8.9	776.71	0.0119	Pulse	0.1000	3
Zn	66	72	He	6.498	ppb	6.2	1450.12	0.0221	Pulse	0.1000	3
As	75	72	He	0.398	ppb	37.0	101.33	0.0015	Pulse	0.5000	3
Sr	88	115	He	90.849	ppb	2.4	50002.34	0.8139	Pulse	0.1000	3
Mo	98	115	He	0.129	ppb	25.5	206.68	0.0034	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	81.1	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.022	ppb	26.9	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.070	ppb	120.7	1123.42	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.120	ppb	31.5	130.00	0.0021	Pulse	0.1000	3
Ba	137	115	He	17.166	ppb	1.8	5261.18	0.0856	Pulse	0.1000	3
Tl	205	159	He	0.173	ppb	6.6	1353.47	0.0047	Pulse	0.1000	3
Pb	208	159	He	0.076	ppb	9.2	1166.74	0.0041	Pulse	0.1000	3
U	238	209	He	0.118	ppb	2.4	1403.46	0.0060	Pulse	0.1000	3

ISTD Table:

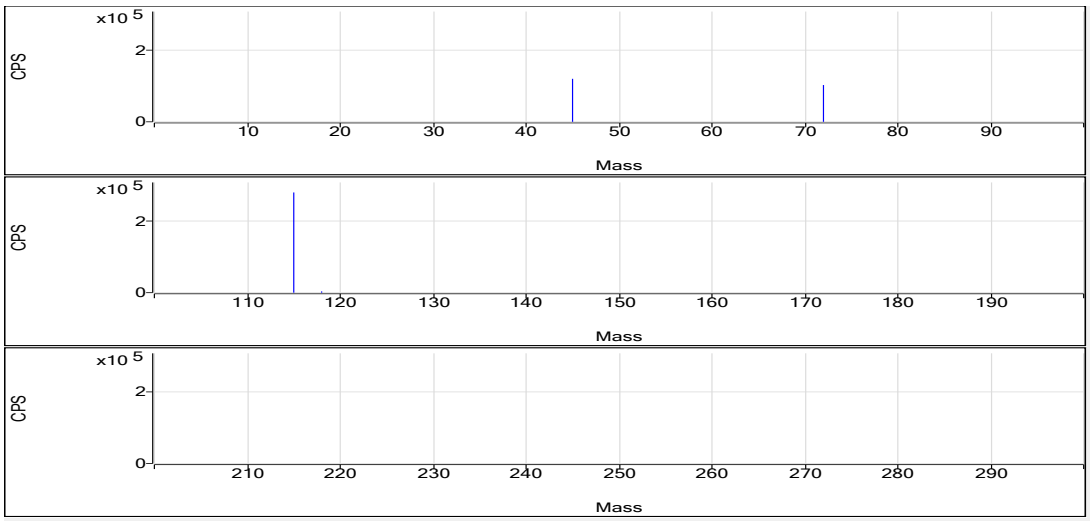
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2096125.39	1.6	103.1	Analog	0.1000	3
No Gas	Ge	72	1037289.88	0.4	103.2	Pulse	0.1000	3
H2	Sc	45	120060.08	0.8	90.9	Pulse	0.1000	3
H2	Ge	72	102670.65	0.4	92.1	Pulse	0.1000	3
H2	In	115	279818.85	1.1	95.3	Pulse	0.1000	3
He	Sc	45	36783.97	0.9	99.5	Pulse	0.1000	3
He	Ge	72	65517.60	0.3	101.5	Pulse	0.1000	3
He	In	115	61441.01	1.0	97.2	Pulse	0.1000	3
He	Tb	159	285034.46	0.8	97.3	Pulse	0.1000	3
He	Bi	209	233682.16	0.9	99.1	Pulse	0.1000	3

No Gas

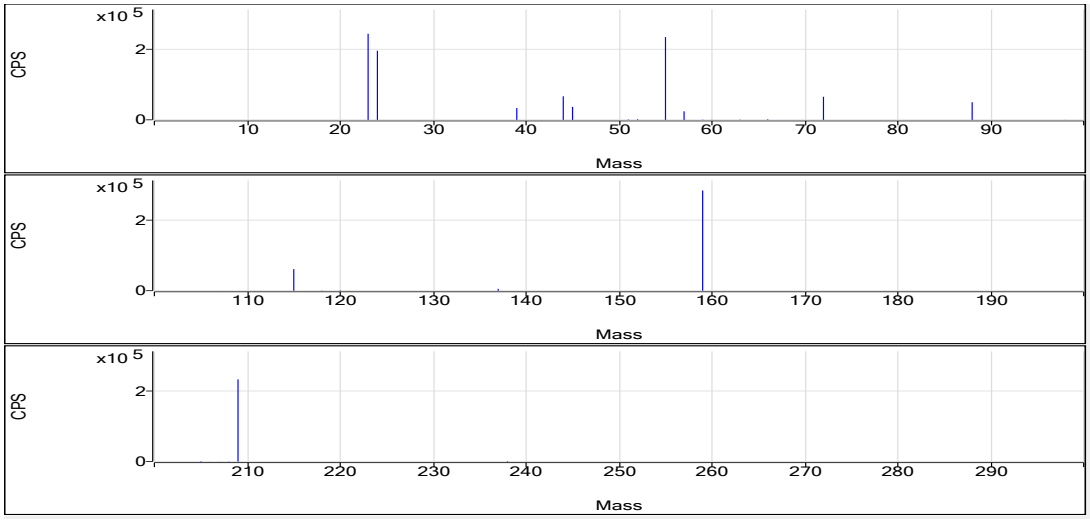


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.03	0	96.00	0.0008	2.195E-05
Be	9	1	No Gas	0.047	0.0001	120.00	0.0008	2.195E-05
Be	9	1	No Gas	0.021	0	80.00	0.0008	2.195E-05
Se	78	2	H2	0.058	0	4.00	0.0004	1.386E-05
Se	78	2	H2	0.133	0.0001	7.33	0.0004	1.386E-05
Se	78	2	H2	0.117	0.0001	6.67	0.0004	1.386E-05
Na	23	3	He	1639.104	6.7053	246537.44	0.0038	0.4416
Na	23	3	He	1627.817	6.6622	242946.17	0.0038	0.4416
Na	23	3	He	1609.72	6.593	244720.21	0.0038	0.4416
Mg	24	3	He	2867.51	5.3517	196767.58	0.0019	0.005872
Mg	24	3	He	2894.014	5.4011	196958.57	0.0019	0.005872
Mg	24	3	He	2827.025	5.2762	195842.28	0.0019	0.005872
Al	27	3	He	3.927	0.0027	100.00	0.0006	0.0004496
Al	27	3	He	2.542	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	4.814	0.0032	120.00	0.0006	0.0004496
K	39	3	He	415.224	0.9258	34040.01	0.0012	0.4456
K	39	3	He	410.431	0.9203	33559.20	0.0012	0.4456
K	39	3	He	373.347	0.8774	32566.96	0.0012	0.4456
Ca	44	3	He	27786.147	1.8399	67647.10	0.0001	0.003779
Ca	44	3	He	27370.219	1.8124	66091.05	0.0001	0.003779
Ca	44	3	He	27257.124	1.8049	66994.57	0.0001	0.003779
Ti	47	3	He	0.523	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.072	0.0321	1182.06	0.0223	0.03054
V	51	3	He	-0.051	0.0294	1072.05	0.0223	0.03054
V	51	3	He	-0.019	0.0301	1118.05	0.0223	0.03054
Cr	52	3	He	0.224	0.0435	1600.14	0.0285	0.03714
Cr	52	3	He	0.411	0.0488	1780.19	0.0285	0.03714
Cr	52	3	He	0.238	0.0439	1630.15	0.0285	0.03714
Mn	55	3	He	518.046	6.4201	236050.11	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	524.69	6.5024	237118.39	0.0124	0.004415
Mn	55	3	He	506.137	6.2726	232826.60	0.0124	0.004415
Fe	57	3	He	1153.647	0.6558	24110.76	0.0006	0.001356
Fe	57	3	He	1156.414	0.6573	23970.61	0.0006	0.001356
Fe	57	3	He	1151.295	0.6544	24291.14	0.0006	0.001356
Co	59	3	He	0.295	0.0199	730.04	0.0581	0.002697
Co	59	3	He	0.289	0.0195	710.04	0.0581	0.002697
Co	59	3	He	0.232	0.0162	600.03	0.0581	0.002697
Ni	60	3	He	0.288	0.0064	420.02	0.0087	0.003928
Ni	60	3	He	0.512	0.0084	550.03	0.0087	0.003928
Ni	60	3	He	0.463	0.0079	520.03	0.0087	0.003928
Cu	63	3	He	0.231	0.0121	790.05	0.0261	0.006048
Cu	63	3	He	0.199	0.0113	740.04	0.0261	0.006048
Cu	63	3	He	0.236	0.0122	800.05	0.0261	0.006048
Zn	66	3	He	6.034	0.0208	1360.10	0.0029	0.003512
Zn	66	3	He	6.741	0.0228	1500.13	0.0029	0.003512
Zn	66	3	He	6.719	0.0228	1490.13	0.0029	0.003512
As	75	3	He	0.42	0.0016	104.00	0.0021	0.0007233
As	75	3	He	0.533	0.0018	120.00	0.0021	0.0007233
As	75	3	He	0.241	0.0012	80.00	0.0021	0.0007233
Sr	88	3	He	89.513	0.802	49226.38	0.009	0.0005796
Sr	88	3	He	89.712	0.8038	49908.55	0.009	0.0005796
Sr	88	3	He	93.32	0.8361	50872.10	0.009	0.0005796
Mo	98	3	He	0.146	0.0037	230.01	0.0235	0.0003188
Mo	98	3	He	0.151	0.0039	240.01	0.0235	0.0003188
Mo	98	3	He	0.091	0.0025	150.01	0.0235	0.0003188
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Cd	111	3	He	0.027	0.0002	10.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	-0.001	0.0171	1050.08	0.0164	0.01713
Sn	120	3	He	0.163	0.0198	1230.10	0.0164	0.01713
Sn	120	3	He	0.048	0.0179	1090.09	0.0164	0.01713
Sb	121	3	He	0.099	0.0018	110.00	0.0155	0.0002641
Sb	121	3	He	0.097	0.0018	110.00	0.0155	0.0002641
Sb	121	3	He	0.164	0.0028	170.01	0.0155	0.0002641
Ba	137	3	He	17.283	0.0862	5291.19	0.005	0.0001577
Ba	137	3	He	17.408	0.0868	5391.22	0.005	0.0001577
Ba	137	3	He	16.807	0.0838	5101.12	0.005	0.0001577
Tl	205	3	He	0.167	0.0046	1300.12	0.026	0.0002504
Tl	205	3	He	0.165	0.0046	1310.12	0.026	0.0002504
Tl	205	3	He	0.186	0.0051	1450.16	0.026	0.0002504
Pb	208	3	He	0.078	0.0041	630.04	0.0349	0.001422
Pb	208	3	He	0.083	0.0043	750.05	0.0349	0.001422
Pb	208	3	He	0.069	0.0038	650.05	0.0349	0.001422
U	238	3	He	0.121	0.0061	1420.13	0.0502	5.657E-05
U	238	3	He	0.115	0.0058	1380.12	0.0502	5.657E-05
U	238	3	He	0.119	0.0061	1410.14	0.0502	5.657E-05
Sc	45	1	No Gas			2129032.94		
Sc	45	1	No Gas			2061326.22		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2098017.00		
Ge	72	1	No Gas			1041683.81		
Ge	72	1	No Gas			1036806.47		
Ge	72	1	No Gas			1033379.36		
Sc	45	2	H2			118933.90		
Sc	45	2	H2			120800.68		
Sc	45	2	H2			120445.65		
Ge	72	2	H2			102908.75		
Ge	72	2	H2			102213.75		
Ge	72	2	H2			102889.44		
In	115	2	H2			278976.17		
In	115	2	H2			283116.17		
In	115	2	H2			277364.21		
Sc	45	3	He			36767.44		
Sc	45	3	He			36466.44		
Sc	45	3	He			37118.02		
Ge	72	3	He			65380.47		
Ge	72	3	He			65711.52		
Ge	72	3	He			65460.82		
In	115	3	He			61385.72		
In	115	3	He			62099.32		
In	115	3	He			60853.13		
Tb	159	3	He			282854.49		
Tb	159	3	He			287438.73		
Tb	159	3	He			284810.15		
Bi	209	3	He			231883.61		
Bi	209	3	He			236120.07		
Bi	209	3	He			233042.81		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:32:02 AM
Sample Name	410-136848-Z-5-A SD @500
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

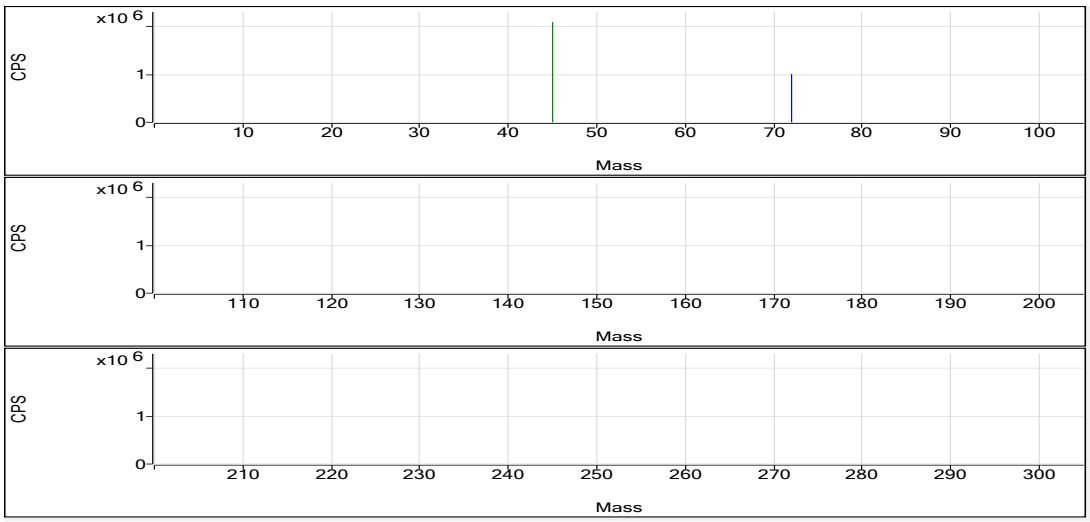
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.013	ppb	133.5	67.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.006	ppb	N/A	1.11	0.0000	Pulse	1.5000	3
Na	23	45	He	1.049	ppb	432.7	16145.96	0.4456	Pulse	0.1000	3
Mg	24	45	He	29.480	ppb	7.8	2203.57	0.0608	Pulse	0.1000	3
Al	27	45	He	2.405	ppb	57.2	66.67	0.0018	Pulse	0.1000	3
K	39	45	He	9.924	ppb	59.4	16559.87	0.4571	Pulse	0.1000	3
Ca	44	45	He	243.604	ppb	17.9	720.04	0.0199	Pulse	0.1000	3
Ti	47	45	He	0.532	ppb	99.8	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.011	ppb	N/A	1097.38	0.0303	Pulse	0.5000	3
Cr	52	45	He	0.169	ppb	50.7	1520.13	0.0420	Pulse	0.1000	3
Mn	55	45	He	5.276	ppb	3.6	2526.97	0.0698	Pulse	0.1000	3
Fe	57	45	He	17.563	ppb	8.5	410.02	0.0113	Pulse	0.1000	3
Co	59	45	He	0.045	ppb	15.4	193.34	0.0053	Pulse	0.1000	3
Ni	60	72	He	0.150	ppb	63.0	336.68	0.0052	Pulse	0.1000	3
Cu	63	72	He	0.014	ppb	331.6	413.35	0.0064	Pulse	0.1000	3
Zn	66	72	He	0.998	ppb	21.4	410.02	0.0064	Pulse	0.1000	3
As	75	72	He	0.041	ppb	76.9	52.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.885	ppb	9.8	513.36	0.0085	Pulse	0.1000	3
Mo	98	115	He	0.038	ppb	45.9	73.33	0.0012	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	788.3	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	42.4	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.065	ppb	N/A	970.07	0.0161	Pulse	0.1000	3
Sb	121	115	He	0.029	ppb	21.0	43.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.268	ppb	0.9	90.00	0.0015	Pulse	0.1000	3
Tl	205	159	He	0.064	ppb	26.7	550.03	0.0019	Pulse	0.1000	3
Pb	208	159	He	0.060	ppb	2.7	1003.39	0.0035	Pulse	0.1000	3
U	238	209	He	0.019	ppb	40.9	233.34	0.0010	Pulse	0.1000	3

ISTD Table:

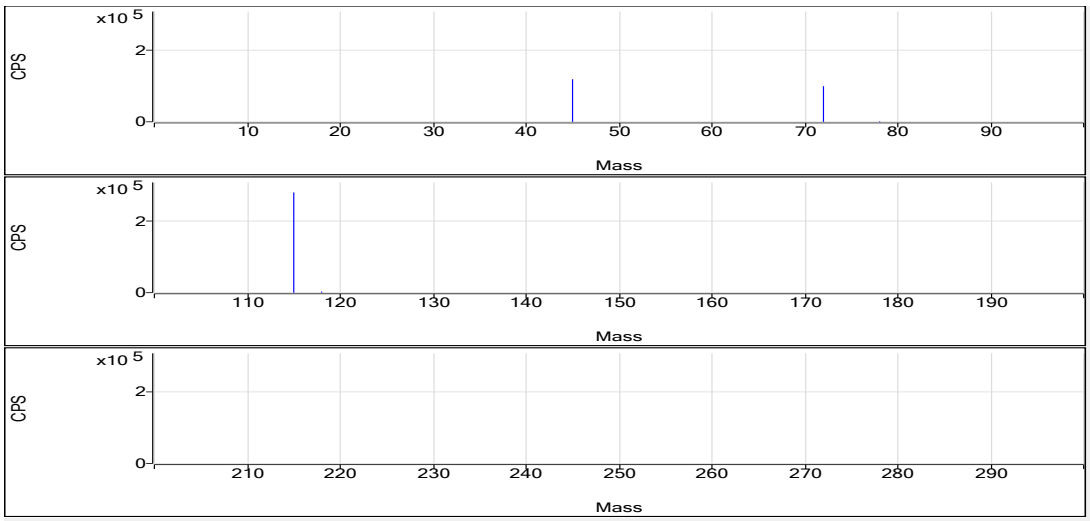
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2092155.75	3.4	102.9	Analog	0.1000	3
No Gas	Ge	72	1005020.22	1.5	100.0	Pulse	0.1000	3
H2	Sc	45	119061.74	0.7	90.1	Pulse	0.1000	3
H2	Ge	72	99686.59	1.8	89.4	Pulse	0.1000	3
H2	In	115	280487.87	0.6	95.5	Pulse	0.1000	3
He	Sc	45	36229.17	0.5	98.0	Pulse	0.1000	3
He	Ge	72	64385.51	0.9	99.7	Pulse	0.1000	3
He	In	115	60399.76	0.8	95.6	Pulse	0.1000	3
He	Tb	159	286142.24	0.6	97.7	Pulse	0.1000	3
He	Bi	209	230255.99	0.7	97.6	Pulse	0.1000	3

No Gas

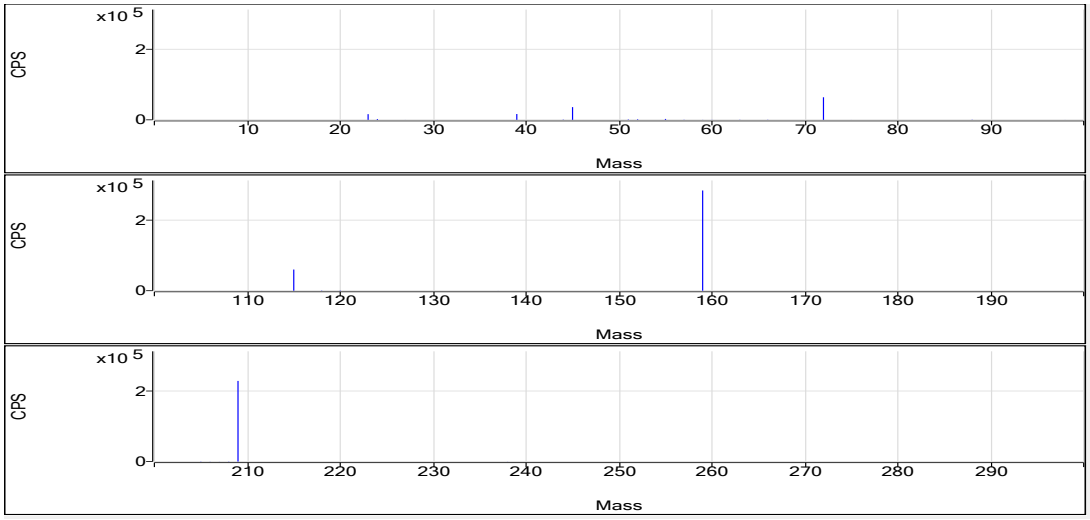


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.002	0	50.00	0.0008	2.195E-05
Be	9	1	No Gas	0.004	0	50.00	0.0008	2.195E-05
Be	9	1	No Gas	0.033	0	102.00	0.0008	2.195E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.386E-05
Se	78	2	H2	0.03	0	2.67	0.0004	1.386E-05
Se	78	2	H2	-0.032	0	0.00	0.0004	1.386E-05
Na	23	3	He	-1.985	0.434	15648.85	0.0038	0.4416
Na	23	3	He	-1.137	0.4373	15848.84	0.0038	0.4416
Na	23	3	He	6.269	0.4656	16940.19	0.0038	0.4416
Mg	24	3	He	29.732	0.0613	2210.23	0.0019	0.005872
Mg	24	3	He	31.632	0.0648	2350.26	0.0019	0.005872
Mg	24	3	He	27.075	0.0563	2050.23	0.0019	0.005872
Al	27	3	He	1.621	0.0014	50.00	0.0006	0.0004496
Al	27	3	He	3.994	0.0028	100.00	0.0006	0.0004496
Al	27	3	He	1.599	0.0014	50.00	0.0006	0.0004496
K	39	3	He	10.142	0.4573	16489.93	0.0012	0.4456
K	39	3	He	15.707	0.4638	16810.16	0.0012	0.4456
K	39	3	He	3.922	0.4502	16379.52	0.0012	0.4456
Ca	44	3	He	270.219	0.0216	780.04	0.0001	0.003779
Ca	44	3	He	193.347	0.0166	600.04	0.0001	0.003779
Ca	44	3	He	267.246	0.0214	780.05	0.0001	0.003779
Ti	47	3	He	0.534	0.0003	10.00	0.0005	0
Ti	47	3	He	1.062	0.0006	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.024	0.03	1082.05	0.0223	0.03054
V	51	3	He	0.038	0.0314	1138.05	0.0223	0.03054
V	51	3	He	-0.048	0.0295	1072.05	0.0223	0.03054
Cr	52	3	He	0.079	0.0394	1420.12	0.0285	0.03714
Cr	52	3	He	0.179	0.0422	1530.12	0.0285	0.03714
Cr	52	3	He	0.25	0.0443	1610.14	0.0285	0.03714
Mn	55	3	He	5.377	0.071	2560.30	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5.392	0.0712	2580.33	0.0124	0.004415
Mn	55	3	He	5.059	0.0671	2440.29	0.0124	0.004415
Fe	57	3	He	17.657	0.0114	410.02	0.0006	0.001356
Fe	57	3	He	19.011	0.0121	440.02	0.0006	0.001356
Fe	57	3	He	16.021	0.0104	380.02	0.0006	0.001356
Co	59	3	He	0.044	0.0053	190.01	0.0581	0.002697
Co	59	3	He	0.039	0.005	180.01	0.0581	0.002697
Co	59	3	He	0.053	0.0058	210.01	0.0581	0.002697
Ni	60	3	He	0.258	0.0062	400.02	0.0087	0.003928
Ni	60	3	He	0.108	0.0049	310.01	0.0087	0.003928
Ni	60	3	He	0.084	0.0047	300.01	0.0087	0.003928
Cu	63	3	He	0.063	0.0077	500.02	0.0261	0.006048
Cu	63	3	He	0.009	0.0063	400.03	0.0261	0.006048
Cu	63	3	He	-0.03	0.0053	340.01	0.0261	0.006048
Zn	66	3	He	0.764	0.0057	370.02	0.0029	0.003512
Zn	66	3	He	1.182	0.0069	440.02	0.0029	0.003512
Zn	66	3	He	1.049	0.0065	420.02	0.0029	0.003512
As	75	3	He	0.008	0.0007	48.00	0.0021	0.0007233
As	75	3	He	0.044	0.0008	52.00	0.0021	0.0007233
As	75	3	He	0.07	0.0009	56.00	0.0021	0.0007233
Sr	88	3	He	0.785	0.0076	460.02	0.009	0.0005796
Sr	88	3	He	0.942	0.009	540.03	0.009	0.0005796
Sr	88	3	He	0.927	0.0089	540.03	0.009	0.0005796
Mo	98	3	He	0.022	0.0008	50.00	0.0235	0.0003188
Mo	98	3	He	0.036	0.0012	70.00	0.0235	0.0003188
Mo	98	3	He	0.056	0.0016	100.00	0.0235	0.0003188
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	-0.136	0.0149	900.06	0.0164	0.01713
Sn	120	3	He	-0.077	0.0159	950.06	0.0164	0.01713
Sn	120	3	He	0.018	0.0174	1060.08	0.0164	0.01713
Sb	121	3	He	0.036	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.026	0.0007	40.00	0.0155	0.0002641
Sb	121	3	He	0.025	0.0007	40.00	0.0155	0.0002641
Ba	137	3	He	0.267	0.0015	90.00	0.005	0.0001577
Ba	137	3	He	0.27	0.0015	90.00	0.005	0.0001577
Ba	137	3	He	0.266	0.0015	90.00	0.005	0.0001577
Tl	205	3	He	0.075	0.0022	630.04	0.026	0.0002504
Tl	205	3	He	0.074	0.0022	620.04	0.026	0.0002504
Tl	205	3	He	0.044	0.0014	400.02	0.026	0.0002504
Pb	208	3	He	0.058	0.0034	550.03	0.0349	0.001422
Pb	208	3	He	0.06	0.0035	510.03	0.0349	0.001422
Pb	208	3	He	0.061	0.0036	560.03	0.0349	0.001422
U	238	3	He	0.01	0.0006	130.00	0.0502	5.657E-05
U	238	3	He	0.023	0.0012	280.01	0.0502	5.657E-05
U	238	3	He	0.024	0.0013	290.01	0.0502	5.657E-05
Sc	45	1	No Gas			2113172.78		
Sc	45	1	No Gas			2012124.97		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2151169.50		
Ge	72	1	No Gas			1007356.31		
Ge	72	1	No Gas			989073.89		
Ge	72	1	No Gas			1018630.45		
Sc	45	2	H2			119267.20		
Sc	45	2	H2			118137.15		
Sc	45	2	H2			119780.88		
Ge	72	2	H2			101549.93		
Ge	72	2	H2			99595.62		
Ge	72	2	H2			97914.21		
In	115	2	H2			281382.44		
In	115	2	H2			278492.96		
In	115	2	H2			281588.20		
Sc	45	3	He			36055.49		
Sc	45	3	He			36245.64		
Sc	45	3	He			36386.37		
Ge	72	3	He			64918.08		
Ge	72	3	He			63782.59		
Ge	72	3	He			64455.85		
In	115	3	He			60461.94		
In	115	3	He			59919.67		
In	115	3	He			60834.13		
Tb	159	3	He			287605.48		
Tb	159	3	He			286413.75		
Tb	159	3	He			284407.48		
Bi	209	3	He			230969.78		
Bi	209	3	He			231423.20		
Bi	209	3	He			228375.00		

Quantitation Report

Data File Name	069_CCV.d
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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

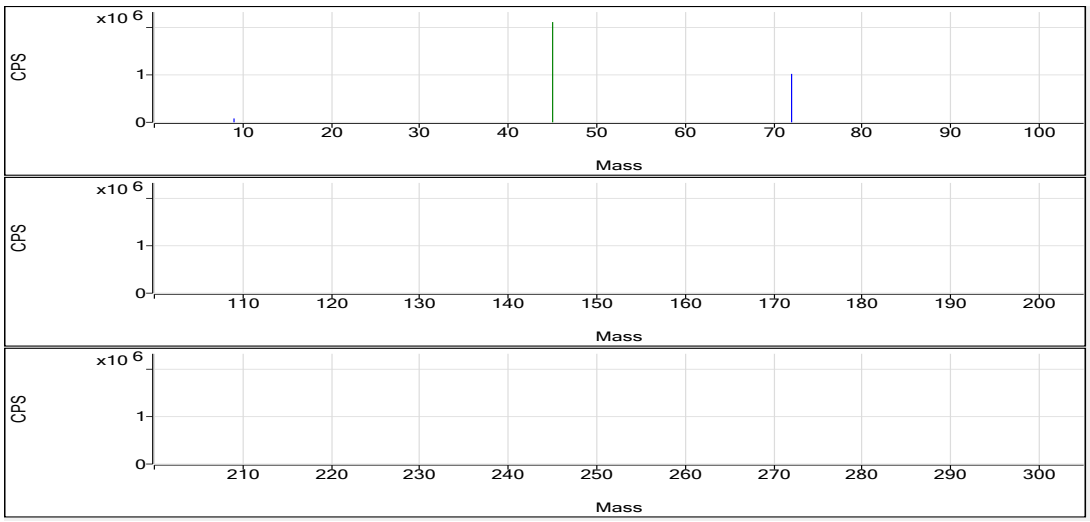
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.168	ppb	1.0	81091.13	0.0385	Pulse	0.5000	3
Se	78	72	H2	54.660	ppb	0.4	2370.65	0.0238	Pulse	1.5000	3
Na	23	45	He	5130.848	ppb	1.3	737923.27	20.0488	Pulse	0.1000	3
Mg	24	45	He	5258.744	ppb	1.6	361046.65	9.8096	Pulse	0.1000	3
Al	27	45	He	5134.795	ppb	1.5	109287.05	2.9692	Pulse	0.1000	3
K	39	45	He	5226.717	ppb	1.3	238890.75	6.4902	Pulse	0.1000	3
Ca	44	45	He	5324.270	ppb	2.4	13089.64	0.3556	Pulse	0.1000	3
Ti	47	45	He	5252.318	ppb	1.3	100452.17	2.7290	Pulse	0.1000	3
V	51	45	He	518.527	ppb	1.2	426608.17	11.5905	Pulse	0.5000	3
Cr	52	45	He	522.459	ppb	1.6	548508.68	14.9029	Pulse	0.1000	3
Mn	55	45	He	510.948	ppb	2.1	233054.73	6.3322	Pulse	0.1000	3
Fe	57	45	He	5183.143	ppb	1.0	108268.22	2.9415	Pulse	0.1000	3
Co	59	45	He	490.313	ppb	0.9	1048572.82	28.4880	Pulse	0.1000	3
Ni	60	72	He	521.720	ppb	1.5	291520.98	4.5258	Pulse	0.1000	3
Cu	63	72	He	489.262	ppb	1.9	824005.33	12.7932	Pulse	0.1000	3
Zn	66	72	He	514.549	ppb	2.1	95192.21	1.4779	Pulse	0.1000	3
As	75	72	He	515.779	ppb	1.9	68730.56	1.0671	Pulse	0.5000	3
Sr	88	115	He	51.726	ppb	2.0	28001.86	0.4637	Pulse	0.1000	3
Mo	98	115	He	52.897	ppb	0.9	75144.64	1.2442	Pulse	0.1000	3
Ag	107	115	He	53.534	ppb	1.4	161217.60	2.6694	Pulse	0.1000	3
Cd	111	115	He	52.490	ppb	1.0	17567.08	0.2909	Pulse	0.5000	3
Sn	120	115	He	51.461	ppb	2.3	52062.17	0.8621	Pulse	0.1000	3
Sb	121	115	He	51.281	ppb	0.4	47927.08	0.7935	Pulse	0.1000	3
Ba	137	115	He	512.135	ppb	1.9	153997.62	2.5499	Pulse	0.1000	3
Tl	205	159	He	51.611	ppb	0.4	384396.15	1.3442	Pulse	0.1000	3
Pb	208	159	He	51.290	ppb	0.5	512837.01	1.7934	Pulse	0.1000	3
U	238	209	He	49.922	ppb	1.4	581779.39	2.5078	Pulse	0.1000	3

ISTD Table:

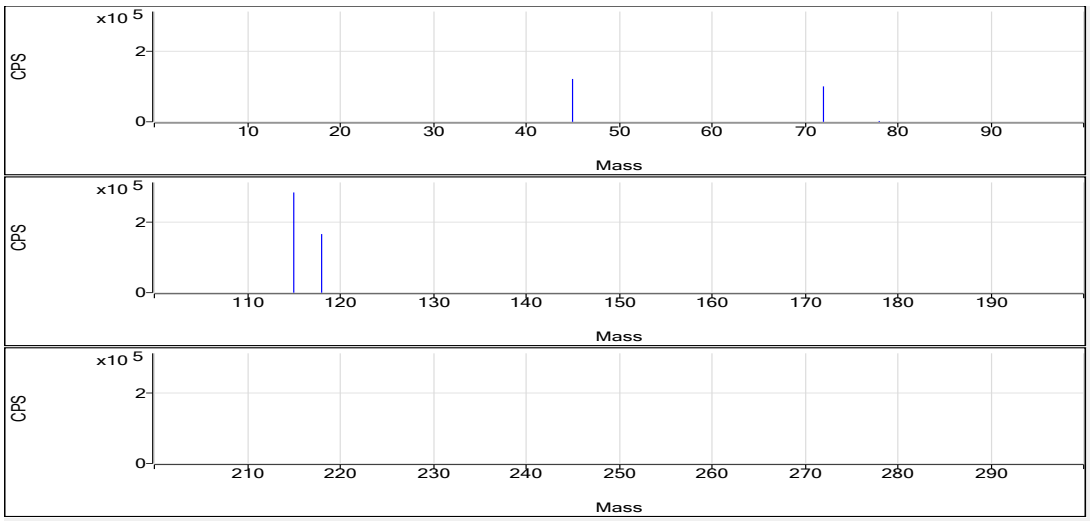
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2105474.08	1.0	103.6	Analog	0.1000	3
No Gas	Ge	72	1016975.66	0.9	101.2	Pulse	0.1000	3
H2	Sc	45	120613.63	0.2	91.3	Pulse	0.1000	3
H2	Ge	72	99679.70	0.4	89.4	Pulse	0.1000	3
H2	In	115	282039.18	0.6	96.0	Pulse	0.1000	3
He	Sc	45	36810.51	1.3	99.6	Pulse	0.1000	3
He	Ge	72	64425.70	2.0	99.8	Pulse	0.1000	3
He	In	115	60399.21	1.0	95.6	Pulse	0.1000	3
He	Tb	159	285963.07	0.2	97.7	Pulse	0.1000	3
He	Bi	209	231996.61	0.3	98.4	Pulse	0.1000	3

No Gas

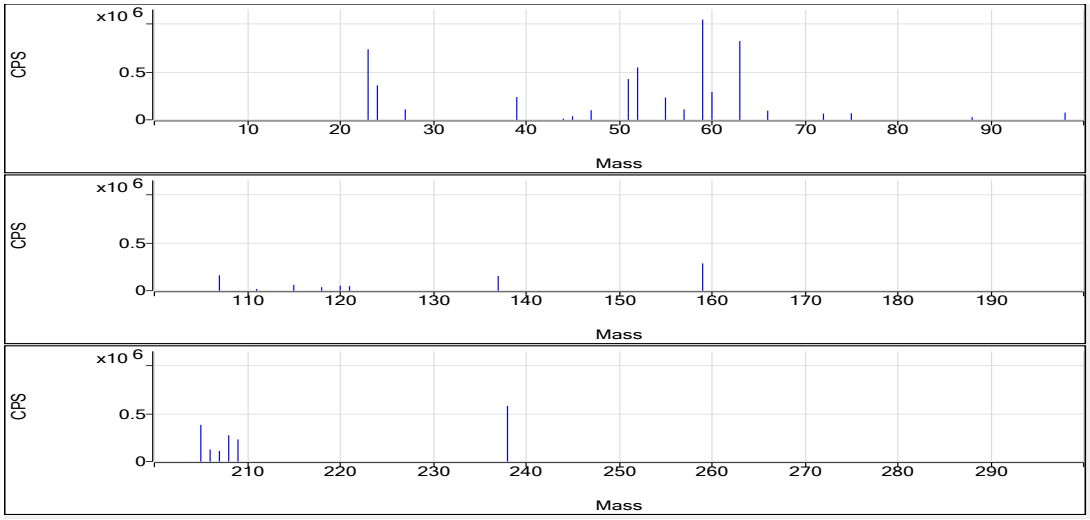


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.607	0.0381	81043.38	0.0008	2.195E-05
Be	9	1	No Gas	50.457	0.0387	80862.52	0.0008	2.195E-05
Be	9	1	No Gas	50.439	0.0387	81367.50	0.0008	2.195E-05
Se	78	2	H2	54.492	0.0237	2372.87	0.0004	1.386E-05
Se	78	2	H2	54.873	0.0239	2370.20	0.0004	1.386E-05
Se	78	2	H2	54.614	0.0238	2368.87	0.0004	1.386E-05
Na	23	3	He	5189.687	20.2736	736253.82	0.0038	0.4416
Na	23	3	He	5144.047	20.0992	740002.25	0.0038	0.4416
Na	23	3	He	5058.81	19.7735	737513.74	0.0038	0.4416
Mg	24	3	He	5329.803	9.9421	361054.49	0.0019	0.005872
Mg	24	3	He	5278.047	9.8456	362489.29	0.0019	0.005872
Mg	24	3	He	5168.383	9.6411	359596.17	0.0019	0.005872
Al	27	3	He	5226.118	3.022	109748.17	0.0006	0.0004496
Al	27	3	He	5080.987	2.9381	108174.73	0.0006	0.0004496
Al	27	3	He	5097.279	2.9476	109938.24	0.0006	0.0004496
K	39	3	He	5302.564	6.5779	238883.94	0.0012	0.4456
K	39	3	He	5168.728	6.4232	236485.06	0.0012	0.4456
K	39	3	He	5208.857	6.4696	241303.24	0.0012	0.4456
Ca	44	3	He	5262.597	0.3515	12766.00	0.0001	0.003779
Ca	44	3	He	5474.056	0.3655	13456.79	0.0001	0.003779
Ca	44	3	He	5236.157	0.3498	13046.13	0.0001	0.003779
Ti	47	3	He	5316.33	2.7623	100315.27	0.0005	0
Ti	47	3	He	5182.788	2.6929	99146.27	0.0005	0
Ti	47	3	He	5257.834	2.7319	101894.96	0.0005	0
V	51	3	He	525.151	11.7382	426281.81	0.0223	0.03054
V	51	3	He	517.319	11.5636	425741.31	0.0223	0.03054
V	51	3	He	513.112	11.4698	427801.38	0.0223	0.03054
Cr	52	3	He	531.493	15.1599	550545.15	0.0285	0.03714
Cr	52	3	He	520.062	14.8346	546174.33	0.0285	0.03714
Cr	52	3	He	515.823	14.714	548806.55	0.0285	0.03714
Mn	55	3	He	516.764	6.4042	232574.57	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	517.297	6.4108	236030.13	0.0124	0.004415
Mn	55	3	He	498.783	6.1815	230559.49	0.0124	0.004415
Fe	57	3	He	5234.047	2.9704	107871.87	0.0006	0.001356
Fe	57	3	He	5188.737	2.9447	108415.60	0.0006	0.001356
Fe	57	3	He	5126.643	2.9095	108517.19	0.0006	0.001356
Co	59	3	He	495.193	28.7715	1044862.33	0.0581	0.002697
Co	59	3	He	489.469	28.439	1047052.80	0.0581	0.002697
Co	59	3	He	486.277	28.2535	1053803.34	0.0581	0.002697
Ni	60	3	He	528.839	4.5875	290299.41	0.0087	0.003928
Ni	60	3	He	513.226	4.4522	293008.84	0.0087	0.003928
Ni	60	3	He	523.096	4.5377	291254.70	0.0087	0.003928
Cu	63	3	He	497.393	13.0057	823003.35	0.0261	0.006048
Cu	63	3	He	479.224	12.5309	824682.49	0.0261	0.006048
Cu	63	3	He	491.17	12.8431	824330.14	0.0261	0.006048
Zn	66	3	He	520.993	1.4964	94692.92	0.0029	0.003512
Zn	66	3	He	501.859	1.4416	94873.34	0.0029	0.003512
Zn	66	3	He	520.796	1.4958	96010.37	0.0029	0.003512
As	75	3	He	523.235	1.0825	68500.77	0.0021	0.0007233
As	75	3	He	504.628	1.044	68709.91	0.0021	0.0007233
As	75	3	He	519.473	1.0747	68980.99	0.0021	0.0007233
Sr	88	3	He	51.123	0.4583	27768.13	0.009	0.0005796
Sr	88	3	He	51.142	0.4584	27908.29	0.009	0.0005796
Sr	88	3	He	52.913	0.4743	28329.17	0.009	0.0005796
Mo	98	3	He	52.878	1.2438	75362.30	0.0235	0.0003188
Mo	98	3	He	52.427	1.2332	75070.77	0.0235	0.0003188
Mo	98	3	He	53.385	1.2557	75000.86	0.0235	0.0003188
Ag	107	3	He	53.426	2.6641	161422.19	0.0499	0.0004754
Ag	107	3	He	52.826	2.6342	160360.43	0.0499	0.0004754
Ag	107	3	He	54.349	2.7101	161870.19	0.0499	0.0004754
Cd	111	3	He	52.057	0.2885	17478.97	0.0055	1.07E-05
Cd	111	3	He	52.313	0.2899	17647.20	0.0055	1.07E-05
Cd	111	3	He	53.1	0.2942	17575.08	0.0055	1.07E-05
Sn	120	3	He	51.656	0.8653	52430.20	0.0164	0.01713
Sn	120	3	He	50.205	0.8415	51226.02	0.0164	0.01713
Sn	120	3	He	52.52	0.8795	52530.29	0.0164	0.01713
Sb	121	3	He	51.265	0.7932	48064.27	0.0155	0.0002641
Sb	121	3	He	51.495	0.7968	48505.69	0.0155	0.0002641
Sb	121	3	He	51.084	0.7904	47211.29	0.0155	0.0002641
Ba	137	3	He	501.85	2.4986	151399.41	0.005	0.0001577
Ba	137	3	He	513.823	2.5583	155737.84	0.005	0.0001577
Ba	137	3	He	520.732	2.5927	154855.61	0.005	0.0001577
Tl	205	3	He	51.688	1.3462	385190.54	0.026	0.0002504
Tl	205	3	He	51.763	1.3482	384504.10	0.026	0.0002504
Tl	205	3	He	51.383	1.3383	383493.82	0.026	0.0002504
Pb	208	3	He	51.351	1.7955	275092.61	0.0349	0.001422
Pb	208	3	He	51.518	1.8013	276877.89	0.0349	0.001422
Pb	208	3	He	51.002	1.7833	274050.50	0.0349	0.001422
U	238	3	He	49.761	2.4997	580218.62	0.0502	5.657E-05
U	238	3	He	49.334	2.4782	576554.80	0.0502	5.657E-05
U	238	3	He	50.673	2.5455	588564.76	0.0502	5.657E-05
Sc	45	1	No Gas			2127878.72		
Sc	45	1	No Gas			2087379.19		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2101164.34		
Ge	72	1	No Gas			1014362.48		
Ge	72	1	No Gas			1009562.72		
Ge	72	1	No Gas			1027001.78		
Sc	45	2	H2			120404.49		
Sc	45	2	H2			120929.82		
Sc	45	2	H2			120506.58		
Ge	72	2	H2			100079.12		
Ge	72	2	H2			99273.34		
Ge	72	2	H2			99686.64		
In	115	2	H2			282311.99		
In	115	2	H2			280247.77		
In	115	2	H2			283557.77		
Sc	45	3	He			36315.88		
Sc	45	3	He			36817.51		
Sc	45	3	He			37298.15		
Ge	72	3	He			63280.14		
Ge	72	3	He			65812.09		
Ge	72	3	He			64184.86		
In	115	3	He			60884.46		
In	115	3	He			61155.09		
In	115	3	He			60010.01		
Tb	159	3	He			286129.08		
Tb	159	3	He			285203.63		
Tb	159	3	He			286556.50		
Bi	209	3	He			232119.37		
Bi	209	3	He			232648.98		
Bi	209	3	He			231221.48		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

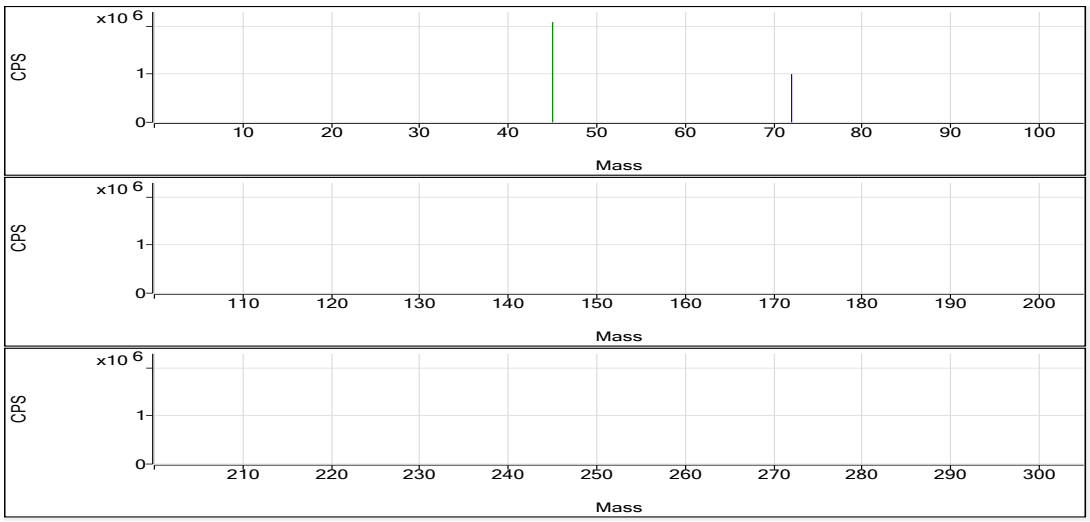
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.032	ppb	35.7	96.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.057	ppb	55.0	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	-16.218	ppb	N/A	14040.41	0.3796	Pulse	0.1000	3
Mg	24	45	He	0.278	ppb	105.9	236.68	0.0064	Pulse	0.1000	3
Al	27	45	He	2.162	ppb	73.3	63.34	0.0017	Pulse	0.1000	3
K	39	45	He	-5.854	ppb	N/A	16236.15	0.4388	Pulse	0.1000	3
Ca	44	45	He	-12.374	ppb	N/A	110.00	0.0030	Pulse	0.1000	3
Ti	47	45	He	2.248	ppb	56.7	43.33	0.0012	Pulse	0.1000	3
V	51	45	He	0.033	ppb	61.3	1156.72	0.0313	Pulse	0.5000	3
Cr	52	45	He	0.074	ppb	281.7	1453.47	0.0392	Pulse	0.1000	3
Mn	55	45	He	0.161	ppb	103.8	236.68	0.0064	Pulse	0.1000	3
Fe	57	45	He	3.001	ppb	77.1	113.34	0.0031	Pulse	0.1000	3
Co	59	45	He	0.135	ppb	40.0	390.02	0.0105	Pulse	0.1000	3
Ni	60	72	He	0.057	ppb	283.5	276.68	0.0044	Pulse	0.1000	3
Cu	63	72	He	-0.004	ppb	N/A	373.35	0.0059	Pulse	0.1000	3
Zn	66	72	He	-0.041	ppb	N/A	213.34	0.0034	Pulse	0.1000	3
As	75	72	He	0.163	ppb	70.0	66.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.045	ppb	110.0	60.00	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.058	ppb	17.5	103.33	0.0017	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	106.5	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	149.4	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.034	ppb	192.3	1086.75	0.0177	Pulse	0.1000	3
Sb	121	115	He	0.025	ppb	111.1	40.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.055	ppb	89.7	26.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.090	ppb	18.7	743.39	0.0026	Pulse	0.1000	3
Pb	208	159	He	0.007	ppb	58.8	483.35	0.0017	Pulse	0.1000	3
U	238	209	He	0.057	ppb	20.4	666.71	0.0029	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2081216.69	1.0	102.4	Analog	0.1000	3
No Gas	Ge	72	1001284.10	0.9	99.6	Pulse	0.1000	3
H2	Sc	45	119888.79	1.6	90.7	Pulse	0.1000	3
H2	Ge	72	97850.62	1.5	87.7	Pulse	0.1000	3
H2	In	115	281112.35	1.1	95.7	Pulse	0.1000	3
He	Sc	45	36994.77	2.1	100.1	Pulse	0.1000	3
He	Ge	72	62838.96	2.3	97.3	Pulse	0.1000	3
He	In	115	61456.71	0.7	97.3	Pulse	0.1000	3
He	Tb	159	286856.67	0.9	98.0	Pulse	0.1000	3
He	Bi	209	229833.60	1.7	97.5	Pulse	0.1000	3

No Gas



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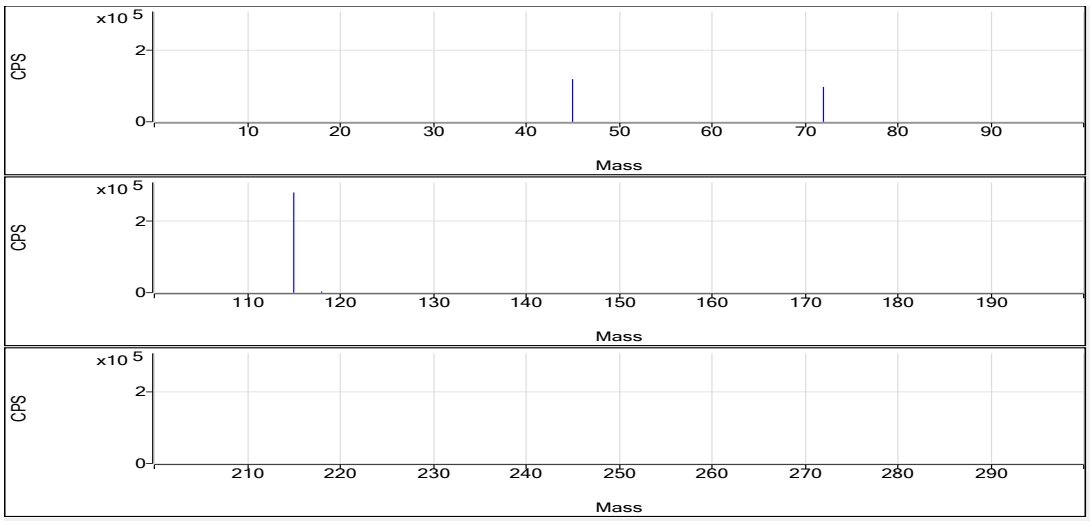
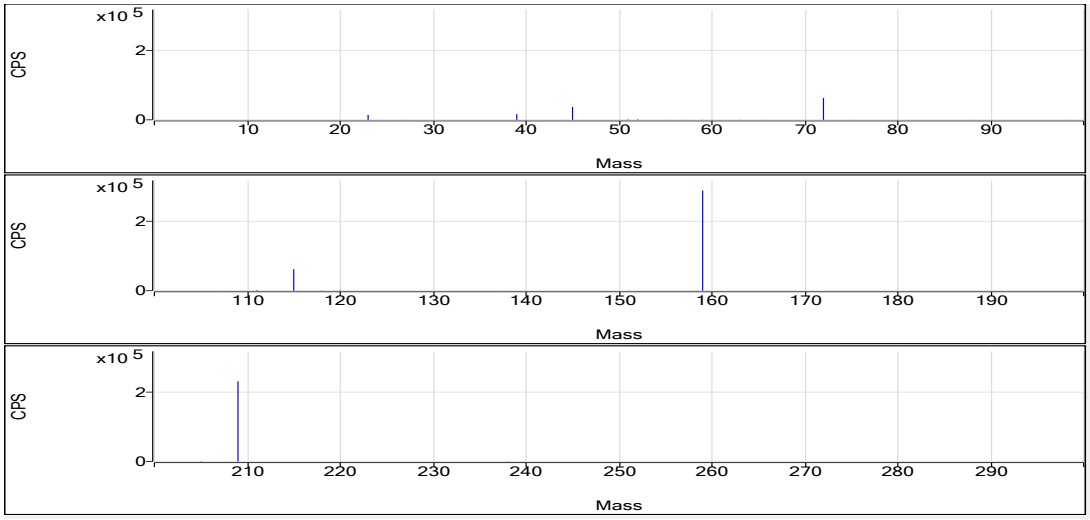


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.044	0.0001	116.00	0.0008	2.195E-05
Be	9	1	No Gas	0.031	0	96.00	0.0008	2.195E-05
Be	9	1	No Gas	0.021	0	78.00	0.0008	2.195E-05
Se	78	2	H2	0.046	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.032	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.092	0.0001	5.33	0.0004	1.386E-05
Na	23	3	He	-19.393	0.3675	13666.73	0.0038	0.4416
Na	23	3	He	-13.256	0.3909	14127.20	0.0038	0.4416
Na	23	3	He	-16.006	0.3804	14327.31	0.0038	0.4416
Mg	24	3	He	0.312	0.0065	240.01	0.0019	0.005872
Mg	24	3	He	-0.032	0.0058	210.01	0.0019	0.005872
Mg	24	3	He	0.554	0.0069	260.01	0.0019	0.005872
Al	27	3	He	2.013	0.0016	60.00	0.0006	0.0004496
Al	27	3	He	0.658	0.0008	30.00	0.0006	0.0004496
Al	27	3	He	3.816	0.0027	100.01	0.0006	0.0004496
K	39	3	He	-0.749	0.4448	16539.80	0.0012	0.4456
K	39	3	He	-9.184	0.435	15718.98	0.0012	0.4456
K	39	3	He	-7.63	0.4368	16449.68	0.0012	0.4456
Ca	44	3	He	-20.559	0.0024	90.00	0.0001	0.003779
Ca	44	3	He	-23.679	0.0022	80.00	0.0001	0.003779
Ca	44	3	He	7.116	0.0042	160.01	0.0001	0.003779
Ti	47	3	He	1.035	0.0005	20.00	0.0005	0
Ti	47	3	He	2.13	0.0011	40.00	0.0005	0
Ti	47	3	He	3.577	0.0019	70.00	0.0005	0
V	51	3	He	0.01	0.0308	1144.05	0.0223	0.03054
V	51	3	He	0.048	0.0316	1142.05	0.0223	0.03054
V	51	3	He	0.04	0.0314	1184.06	0.0223	0.03054
Cr	52	3	He	0.302	0.0457	1700.17	0.0285	0.03714
Cr	52	3	He	-0.109	0.034	1230.10	0.0285	0.03714
Cr	52	3	He	0.029	0.038	1430.13	0.0285	0.03714
Mn	55	3	He	0.338	0.0086	320.02	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.135	0.0061	220.01	0.0124	0.004415
Mn	55	3	He	0.008	0.0045	170.01	0.0124	0.004415
Fe	57	3	He	5.669	0.0046	170.01	0.0006	0.001356
Fe	57	3	He	1.513	0.0022	80.00	0.0006	0.001356
Fe	57	3	He	1.823	0.0024	90.00	0.0006	0.001356
Co	59	3	He	0.19	0.0137	510.03	0.0581	0.002697
Co	59	3	He	0.082	0.0075	270.01	0.0581	0.002697
Co	59	3	He	0.132	0.0104	390.02	0.0581	0.002697
Ni	60	3	He	0.245	0.006	370.02	0.0087	0.003928
Ni	60	3	He	-0.038	0.0036	230.01	0.0087	0.003928
Ni	60	3	He	-0.035	0.0036	230.01	0.0087	0.003928
Cu	63	3	He	0	0.006	370.02	0.0261	0.006048
Cu	63	3	He	-0.004	0.0059	380.02	0.0261	0.006048
Cu	63	3	He	-0.008	0.0058	370.02	0.0261	0.006048
Zn	66	3	He	-0.142	0.0031	190.01	0.0029	0.003512
Zn	66	3	He	-0.242	0.0028	180.01	0.0029	0.003512
Zn	66	3	He	0.259	0.0043	270.01	0.0029	0.003512
As	75	3	He	0.14	0.001	62.00	0.0021	0.0007233
As	75	3	He	0.286	0.0013	84.00	0.0021	0.0007233
As	75	3	He	0.062	0.0009	54.00	0.0021	0.0007233
Sr	88	3	He	0.008	0.0006	40.00	0.009	0.0005796
Sr	88	3	He	0.1	0.0015	90.00	0.009	0.0005796
Sr	88	3	He	0.026	0.0008	50.00	0.009	0.0005796
Mo	98	3	He	0.055	0.0016	100.00	0.0235	0.0003188
Mo	98	3	He	0.049	0.0015	90.00	0.0235	0.0003188
Mo	98	3	He	0.069	0.0019	120.00	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.02	0.0015	90.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	0.094	0.0187	1150.10	0.0164	0.01713
Sn	120	3	He	-0.034	0.0166	1010.07	0.0164	0.01713
Sn	120	3	He	0.041	0.0178	1100.08	0.0164	0.01713
Sb	121	3	He	0.035	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	-0.006	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.046	0.001	60.00	0.0155	0.0002641
Ba	137	3	He	0.001	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0.067	0.0005	30.00	0.005	0.0001577
Ba	137	3	He	0.098	0.0006	40.00	0.005	0.0001577
Tl	205	3	He	0.095	0.0027	790.06	0.026	0.0002504
Tl	205	3	He	0.104	0.0029	840.07	0.026	0.0002504
Tl	205	3	He	0.071	0.0021	600.04	0.026	0.0002504
Pb	208	3	He	0.011	0.0018	270.01	0.0349	0.001422
Pb	208	3	He	0.002	0.0015	250.01	0.0349	0.001422
Pb	208	3	He	0.009	0.0018	310.01	0.0349	0.001422
U	238	3	He	0.044	0.0023	530.03	0.0502	5.657E-05
U	238	3	He	0.066	0.0034	770.05	0.0502	5.657E-05
U	238	3	He	0.06	0.0031	700.05	0.0502	5.657E-05
Sc	45	1	No Gas			2096158.56		
Sc	45	1	No Gas			2089791.22		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2057700.28		
Ge	72	1	No Gas			1000650.53		
Ge	72	1	No Gas			1010286.47		
Ge	72	1	No Gas			992915.30		
Sc	45	2	H2			119861.61		
Sc	45	2	H2			118027.07		
Sc	45	2	H2			121777.68		
Ge	72	2	H2			97965.27		
Ge	72	2	H2			96293.59		
Ge	72	2	H2			99292.99		
In	115	2	H2			284414.53		
In	115	2	H2			278292.67		
In	115	2	H2			280629.84		
Sc	45	3	He			37188.69		
Sc	45	3	He			36135.69		
Sc	45	3	He			37659.92		
Ge	72	3	He			61171.74		
Ge	72	3	He			63883.63		
Ge	72	3	He			63461.52		
In	115	3	He			61586.93		
In	115	3	He			60974.44		
In	115	3	He			61829.11		
Tb	159	3	He			289875.84		
Tb	159	3	He			285090.23		
Tb	159	3	He			285603.94		
Bi	209	3	He			234456.32		
Bi	209	3	He			227324.10		
Bi	209	3	He			227720.39		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:40:15 AM
Sample Name	410-136848-AC-5-A DU
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

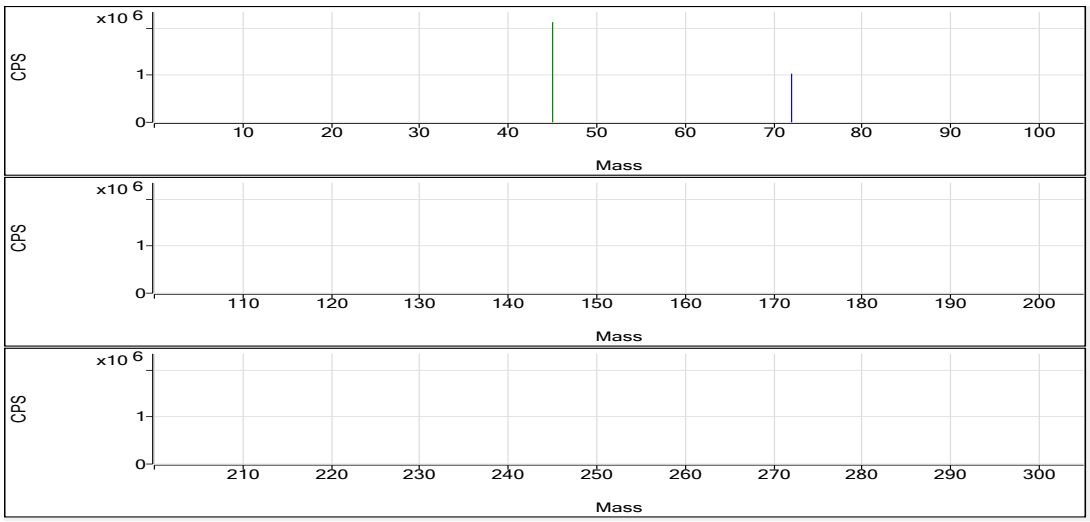
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.006	ppb	128.3	56.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.121	ppb	85.1	7.11	0.0001	Pulse	1.5000	3
Na	23	45	He	8301.079	ppb	2.1	1216009.62	32.1636	Analog	0.1000	3
Mg	24	45	He	14088.019	ppb	2.0	993171.08	26.2697	Pulse	0.1000	3
Al	27	45	He	4.266	ppb	33.5	110.00	0.0029	Pulse	0.1000	3
K	39	45	He	1958.211	ppb	1.2	102474.53	2.7103	Pulse	0.1000	3
Ca	44	45	He	135955.332	ppb	1.7	339803.37	8.9876	Pulse	0.1000	3
Ti	47	45	He	0.505	ppb	99.2	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.320	ppb	N/A	885.37	0.0234	Pulse	0.5000	3
Cr	52	45	He	0.143	ppb	68.0	1556.81	0.0412	Pulse	0.1000	3
Mn	55	45	He	2558.955	ppb	1.3	1198372.33	31.6955	Pulse	0.1000	3
Fe	57	45	He	5645.286	ppb	0.8	121132.55	3.2037	Pulse	0.1000	3
Co	59	45	He	0.694	ppb	6.0	1626.82	0.0430	Pulse	0.1000	3
Ni	60	72	He	1.513	ppb	22.9	1123.41	0.0170	Pulse	0.1000	3
Cu	63	72	He	0.185	ppb	14.4	716.71	0.0109	Pulse	0.1000	3
Zn	66	72	He	4.532	ppb	4.4	1086.74	0.0165	Pulse	0.1000	3
As	75	72	He	0.933	ppb	8.1	174.67	0.0027	Pulse	0.5000	3
Sr	88	115	He	460.993	ppb	0.6	256239.49	4.1278	Pulse	0.1000	3
Mo	98	115	He	0.340	ppb	6.8	516.70	0.0083	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	47.8	53.33	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.043	ppb	20.7	15.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.252	ppb	N/A	806.72	0.0130	Pulse	0.1000	3
Sb	121	115	He	0.059	ppb	20.3	73.33	0.0012	Pulse	0.1000	3
Ba	137	115	He	79.566	ppb	2.6	24599.58	0.3963	Pulse	0.1000	3
Tl	205	159	He	0.020	ppb	23.2	226.68	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.023	ppb	21.1	646.70	0.0022	Pulse	0.1000	3
U	238	209	He	0.297	ppb	3.2	3507.27	0.0150	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2128661.17	1.4	104.7	Analog	0.1000	3
No Gas	Ge	72	1032245.92	0.8	102.7	Pulse	0.1000	3
H2	Sc	45	126370.03	1.6	95.7	Pulse	0.1000	3
H2	Ge	72	106709.86	0.9	95.7	Pulse	0.1000	3
H2	In	115	283392.43	0.6	96.5	Pulse	0.1000	3
He	Sc	45	37813.34	1.4	102.3	Pulse	0.1000	3
He	Ge	72	65861.73	0.8	102.0	Pulse	0.1000	3
He	In	115	62078.09	0.5	98.2	Pulse	0.1000	3
He	Tb	159	290395.80	0.9	99.2	Pulse	0.1000	3
He	Bi	209	233844.46	0.6	99.2	Pulse	0.1000	3

No Gas



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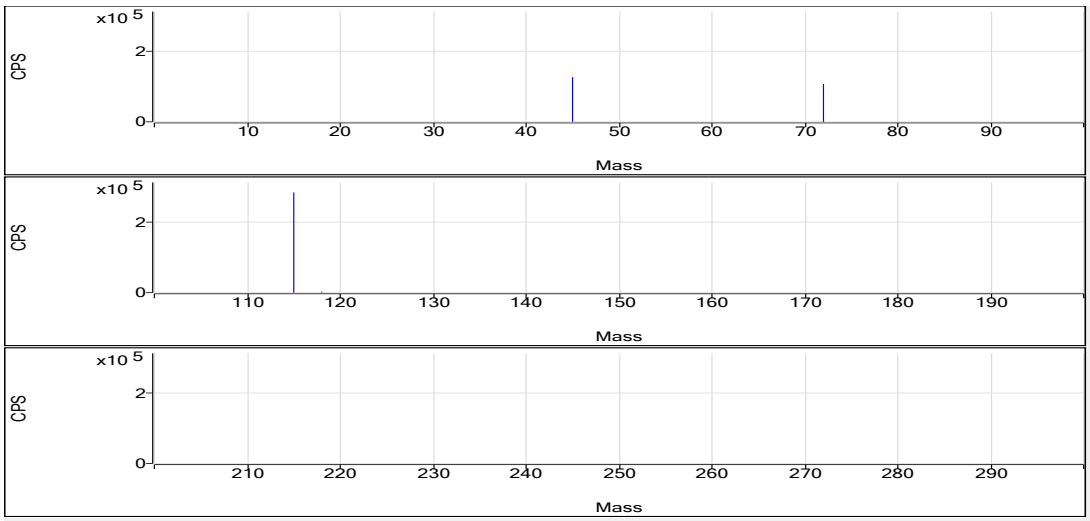
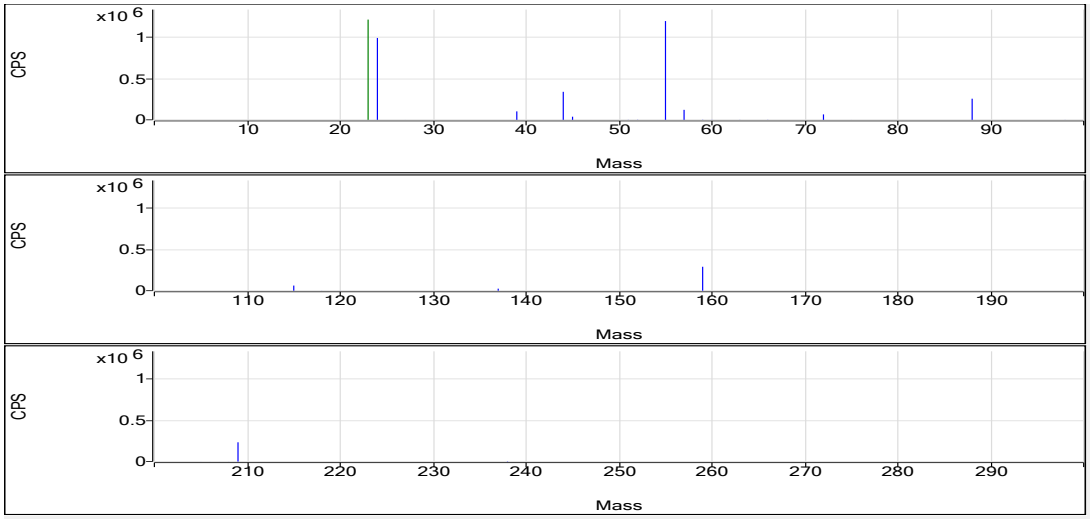


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.003	0	42.00	0.0008	2.195E-05
Be	9	1	No Gas	0.01	0	62.00	0.0008	2.195E-05
Be	9	1	No Gas	0.011	0	66.00	0.0008	2.195E-05
Se	78	2	H2	0.068	0	4.67	0.0004	1.386E-05
Se	78	2	H2	0.055	0	4.00	0.0004	1.386E-05
Se	78	2	H2	0.24	0.0001	12.67	0.0004	1.386E-05
Na	23	3	He	8476.328	32.8333	1231222.40	0.0038	0.4416
Na	23	3	He	8299.568	32.1578	1206860.53	0.0038	0.4416
Na	23	3	He	8127.342	31.4996	1209945.92	0.0038	0.4416
Mg	24	3	He	14323.706	26.7091	1001571.47	0.0019	0.005872
Mg	24	3	He	14163.462	26.4104	991163.97	0.0019	0.005872
Mg	24	3	He	13776.889	25.6897	986777.80	0.0019	0.005872
Al	27	3	He	5.68	0.0037	140.01	0.0006	0.0004496
Al	27	3	He	4.292	0.0029	110.00	0.0006	0.0004496
Al	27	3	He	2.825	0.0021	80.00	0.0006	0.0004496
K	39	3	He	1971.886	2.7261	102225.70	0.0012	0.4456
K	39	3	He	1971.65	2.7258	102297.49	0.0012	0.4456
K	39	3	He	1931.097	2.6789	102900.41	0.0012	0.4456
Ca	44	3	He	138088.995	9.1286	342315.11	0.0001	0.003779
Ca	44	3	He	136200.93	9.0038	337907.65	0.0001	0.003779
Ca	44	3	He	133576.072	8.8304	339187.34	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.513	0.0003	10.00	0.0005	0
Ti	47	3	He	1.002	0.0005	20.00	0.0005	0
V	51	3	He	-0.253	0.0249	934.04	0.0223	0.03054
V	51	3	He	-0.387	0.0219	822.03	0.0223	0.03054
V	51	3	He	-0.319	0.0234	900.03	0.0223	0.03054
Cr	52	3	He	0.204	0.0429	1610.16	0.0285	0.03714
Cr	52	3	He	0.193	0.0426	1600.14	0.0285	0.03714
Cr	52	3	He	0.031	0.038	1460.13	0.0285	0.03714
Mn	55	3	He	2587.44	32.0482	1201784.20	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2567.601	31.8025	1193528.11	0.0124	0.004415
Mn	55	3	He	2521.824	31.2356	1199804.67	0.0124	0.004415
Fe	57	3	He	5655.825	3.2096	120358.78	0.0006	0.001356
Fe	57	3	He	5684.013	3.2256	121055.47	0.0006	0.001356
Fe	57	3	He	5596.018	3.1757	121983.40	0.0006	0.001356
Co	59	3	He	0.711	0.044	1650.16	0.0581	0.002697
Co	59	3	He	0.646	0.0402	1510.12	0.0581	0.002697
Co	59	3	He	0.724	0.0448	1720.17	0.0581	0.002697
Ni	60	3	He	1.521	0.0171	1120.07	0.0087	0.003928
Ni	60	3	He	1.163	0.014	920.06	0.0087	0.003928
Ni	60	3	He	1.856	0.02	1330.11	0.0087	0.003928
Cu	63	3	He	0.201	0.0113	740.04	0.0261	0.006048
Cu	63	3	He	0.2	0.0113	740.05	0.0261	0.006048
Cu	63	3	He	0.154	0.0101	670.04	0.0261	0.006048
Zn	66	3	He	4.427	0.0162	1060.07	0.0029	0.003512
Zn	66	3	He	4.407	0.0161	1060.07	0.0029	0.003512
Zn	66	3	He	4.762	0.0172	1140.08	0.0029	0.003512
As	75	3	He	1.01	0.0028	184.00	0.0021	0.0007233
As	75	3	He	0.932	0.0026	174.00	0.0021	0.0007233
As	75	3	He	0.858	0.0025	166.00	0.0021	0.0007233
Sr	88	3	He	459.327	4.1128	256459.51	0.009	0.0005796
Sr	88	3	He	459.516	4.1145	255450.54	0.009	0.0005796
Sr	88	3	He	464.135	4.1559	256808.41	0.009	0.0005796
Mo	98	3	He	0.341	0.0083	520.03	0.0235	0.0003188
Mo	98	3	He	0.363	0.0089	550.04	0.0235	0.0003188
Mo	98	3	He	0.317	0.0078	480.02	0.0235	0.0003188
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	0.05	0.0003	18.00	0.0055	1.07E-05
Cd	111	3	He	0.033	0.0002	12.00	0.0055	1.07E-05
Cd	111	3	He	0.045	0.0003	16.00	0.0055	1.07E-05
Sn	120	3	He	-0.223	0.0135	840.06	0.0164	0.01713
Sn	120	3	He	-0.307	0.0121	750.04	0.0164	0.01713
Sn	120	3	He	-0.225	0.0134	830.06	0.0164	0.01713
Sb	121	3	He	0.066	0.0013	80.00	0.0155	0.0002641
Sb	121	3	He	0.045	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.067	0.0013	80.00	0.0155	0.0002641
Ba	137	3	He	77.542	0.3862	24082.05	0.005	0.0001577
Ba	137	3	He	81.737	0.4071	25274.03	0.005	0.0001577
Ba	137	3	He	79.419	0.3956	24442.65	0.005	0.0001577
Tl	205	3	He	0.026	0.0009	270.01	0.026	0.0002504
Tl	205	3	He	0.018	0.0007	210.01	0.026	0.0002504
Tl	205	3	He	0.017	0.0007	200.01	0.026	0.0002504
Pb	208	3	He	0.029	0.0024	380.02	0.0349	0.001422
Pb	208	3	He	0.02	0.0021	330.02	0.0349	0.001422
Pb	208	3	He	0.021	0.0021	350.02	0.0349	0.001422
U	238	3	He	0.303	0.0153	3600.63	0.0502	5.657E-05
U	238	3	He	0.303	0.0153	3550.60	0.0502	5.657E-05
U	238	3	He	0.286	0.0144	3370.58	0.0502	5.657E-05
Sc	45	1	No Gas			2129123.72		
Sc	45	1	No Gas			2098933.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2157925.91		
Ge	72	1	No Gas			1031858.42		
Ge	72	1	No Gas			1024326.31		
Ge	72	1	No Gas			1040553.03		
Sc	45	2	H2			126367.92		
Sc	45	2	H2			128373.75		
Sc	45	2	H2			124368.42		
Ge	72	2	H2			107400.56		
Ge	72	2	H2			105558.82		
Ge	72	2	H2			107170.20		
In	115	2	H2			281874.90		
In	115	2	H2			283178.96		
In	115	2	H2			285123.43		
Sc	45	3	He			37499.25		
Sc	45	3	He			37529.35		
Sc	45	3	He			38411.43		
Ge	72	3	He			65449.82		
Ge	72	3	He			65681.11		
Ge	72	3	He			66454.26		
In	115	3	He			62360.28		
In	115	3	He			62089.38		
In	115	3	He			61798.03		
Tb	159	3	He			293395.43		
Tb	159	3	He			289171.91		
Tb	159	3	He			288620.07		
Bi	209	3	He			235386.79		
Bi	209	3	He			232717.38		
Bi	209	3	He			233429.22		

Quantitation Report

Data File Name	072SMPL.d
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Acq Time	8/16/2023 8:42:18 AM
Sample Name	410-136848-AC-5-A DU @100
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

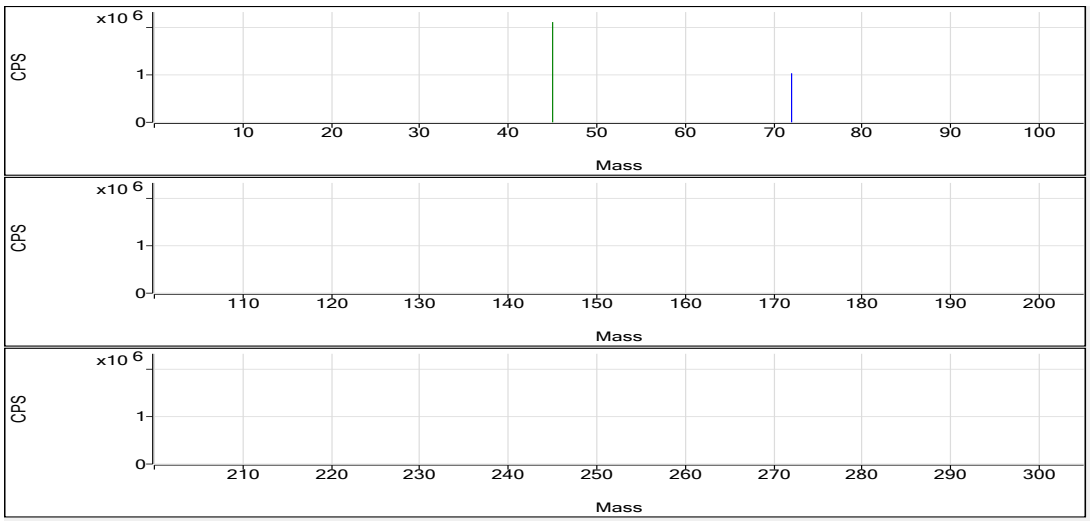
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	45.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.043	ppb	36.1	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	65.640	ppb	3.6	25566.18	0.6924	Pulse	0.1000	3
Mg	24	45	He	142.430	ppb	1.5	10020.34	0.2714	Pulse	0.1000	3
Al	27	45	He	1.255	ppb	57.6	43.33	0.0012	Pulse	0.1000	3
K	39	45	He	17.340	ppb	18.7	17193.95	0.4657	Pulse	0.1000	3
Ca	44	45	He	1394.112	ppb	3.6	3540.55	0.0959	Pulse	0.1000	3
Ti	47	45	He	0.351	ppb	173.2	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.057	ppb	N/A	1080.72	0.0293	Pulse	0.5000	3
Cr	52	45	He	0.094	ppb	117.8	1470.13	0.0398	Pulse	0.1000	3
Mn	55	45	He	25.308	ppb	1.7	11735.14	0.3178	Pulse	0.1000	3
Fe	57	45	He	56.838	ppb	8.4	1240.10	0.0336	Pulse	0.1000	3
Co	59	45	He	0.051	ppb	68.0	210.01	0.0057	Pulse	0.1000	3
Ni	60	72	He	-0.036	ppb	N/A	236.68	0.0036	Pulse	0.1000	3
Cu	63	72	He	0.006	ppb	268.9	406.69	0.0062	Pulse	0.1000	3
Zn	66	72	He	0.888	ppb	58.7	396.69	0.0061	Pulse	0.1000	3
As	75	72	He	0.069	ppb	112.8	56.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	4.491	ppb	6.5	2480.31	0.0408	Pulse	0.1000	3
Mo	98	115	He	0.038	ppb	74.8	73.34	0.0012	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	0.0	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.220	ppb	N/A	820.05	0.0135	Pulse	0.1000	3
Sb	121	115	He	-0.007	ppb	N/A	10.00	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.862	ppb	8.4	270.01	0.0044	Pulse	0.1000	3
Tl	205	159	He	0.018	ppb	17.2	206.68	0.0007	Pulse	0.1000	3
Pb	208	159	He	0.002	ppb	244.4	423.35	0.0015	Pulse	0.1000	3
U	238	209	He	0.012	ppb	88.6	150.01	0.0007	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2113760.75	1.5	104.0	Analog	0.1000	3
No Gas	Ge	72	1034429.59	0.5	102.9	Pulse	0.1000	3
H2	Sc	45	121000.51	0.9	91.6	Pulse	0.1000	3
H2	Ge	72	102986.59	0.7	92.3	Pulse	0.1000	3
H2	In	115	278278.02	0.4	94.7	Pulse	0.1000	3
He	Sc	45	36924.37	1.1	99.9	Pulse	0.1000	3
He	Ge	72	65487.10	1.3	101.4	Pulse	0.1000	3
He	In	115	60778.11	1.9	96.2	Pulse	0.1000	3
He	Tb	159	284350.62	0.1	97.1	Pulse	0.1000	3
He	Bi	209	227628.61	1.3	96.5	Pulse	0.1000	3

No Gas



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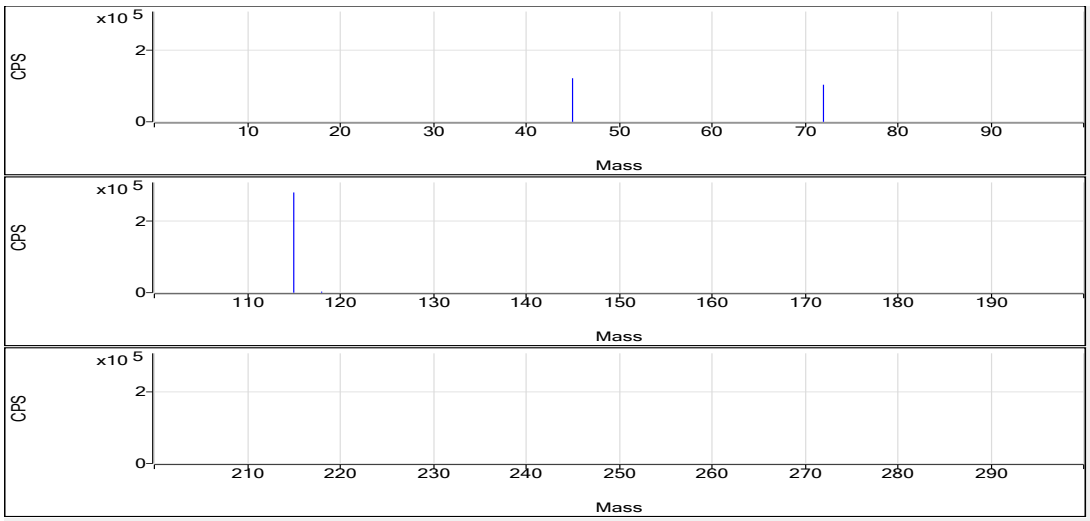
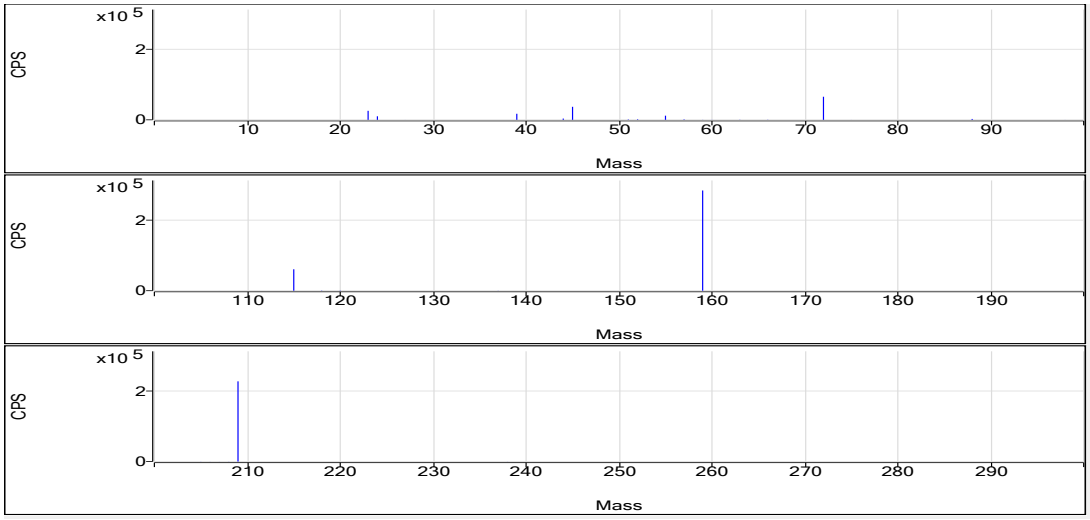


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.001	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.002	0	44.00	0.0008	2.195E-05
Se	78	2	H2	0.027	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.042	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.058	0	4.00	0.0004	1.386E-05
Na	23	3	He	64.244	0.6871	25662.93	0.0038	0.4416
Na	23	3	He	64.318	0.6874	25342.48	0.0038	0.4416
Na	23	3	He	68.359	0.7028	25693.14	0.0038	0.4416
Mg	24	3	He	139.947	0.2668	9963.65	0.0019	0.005872
Mg	24	3	He	144.001	0.2743	10113.77	0.0019	0.005872
Mg	24	3	He	143.343	0.2731	9983.61	0.0019	0.005872
Al	27	3	He	0.612	0.0008	30.00	0.0006	0.0004496
Al	27	3	He	2.037	0.0016	60.00	0.0006	0.0004496
Al	27	3	He	1.115	0.0011	40.00	0.0006	0.0004496
K	39	3	He	13.828	0.4616	17240.75	0.0012	0.4456
K	39	3	He	20.214	0.469	17290.73	0.0012	0.4456
K	39	3	He	17.978	0.4664	17050.36	0.0012	0.4456
Ca	44	3	He	1344.989	0.0927	3460.55	0.0001	0.003779
Ca	44	3	He	1445.405	0.0993	3660.57	0.0001	0.003779
Ca	44	3	He	1391.941	0.0958	3500.54	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.053	0.0005	20.00	0.0005	0
V	51	3	He	-0.114	0.028	1046.05	0.0223	0.03054
V	51	3	He	-0.068	0.029	1070.05	0.0223	0.03054
V	51	3	He	0.012	0.0308	1126.05	0.0223	0.03054
Cr	52	3	He	0.097	0.0399	1490.13	0.0285	0.03714
Cr	52	3	He	-0.018	0.0366	1350.11	0.0285	0.03714
Cr	52	3	He	0.204	0.043	1570.14	0.0285	0.03714
Mn	55	3	He	25.166	0.3161	11805.10	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	24.973	0.3137	11565.10	0.0124	0.004415
Mn	55	3	He	25.785	0.3238	11835.21	0.0124	0.004415
Fe	57	3	He	55.198	0.0327	1220.08	0.0006	0.001356
Fe	57	3	He	53.082	0.0315	1160.10	0.0006	0.001356
Fe	57	3	He	62.235	0.0367	1340.11	0.0006	0.001356
Co	59	3	He	0.055	0.0059	220.01	0.0581	0.002697
Co	59	3	He	0.084	0.0076	280.01	0.0581	0.002697
Co	59	3	He	0.015	0.0036	130.00	0.0581	0.002697
Ni	60	3	He	-0.052	0.0035	230.01	0.0087	0.003928
Ni	60	3	He	-0.032	0.0037	240.01	0.0087	0.003928
Ni	60	3	He	-0.024	0.0037	240.01	0.0087	0.003928
Cu	63	3	He	0	0.006	400.02	0.0261	0.006048
Cu	63	3	He	0.025	0.0067	440.02	0.0261	0.006048
Cu	63	3	He	-0.006	0.0059	380.02	0.0261	0.006048
Zn	66	3	He	0.514	0.005	330.01	0.0029	0.003512
Zn	66	3	He	1.484	0.0078	510.03	0.0029	0.003512
Zn	66	3	He	0.666	0.0054	350.02	0.0029	0.003512
As	75	3	He	0.074	0.0009	58.00	0.0021	0.0007233
As	75	3	He	-0.011	0.0007	46.00	0.0021	0.0007233
As	75	3	He	0.145	0.001	66.00	0.0021	0.0007233
Sr	88	3	He	4.195	0.0381	2310.28	0.009	0.0005796
Sr	88	3	He	4.499	0.0409	2440.31	0.009	0.0005796
Sr	88	3	He	4.78	0.0434	2690.35	0.009	0.0005796
Mo	98	3	He	0.064	0.0018	110.01	0.0235	0.0003188
Mo	98	3	He	0.008	0.0005	30.00	0.0235	0.0003188
Mo	98	3	He	0.041	0.0013	80.00	0.0235	0.0003188
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.178	0.0142	860.07	0.0164	0.01713
Sn	120	3	He	-0.166	0.0144	860.05	0.0164	0.01713
Sn	120	3	He	-0.317	0.0119	740.04	0.0164	0.01713
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	-0.006	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Ba	137	3	He	0.897	0.0046	280.01	0.005	0.0001577
Ba	137	3	He	0.91	0.0047	280.01	0.005	0.0001577
Ba	137	3	He	0.778	0.004	250.01	0.005	0.0001577
Tl	205	3	He	0.02	0.0008	220.01	0.026	0.0002504
Tl	205	3	He	0.015	0.0006	180.01	0.026	0.0002504
Tl	205	3	He	0.02	0.0008	220.01	0.026	0.0002504
Pb	208	3	He	0.005	0.0016	230.01	0.0349	0.001422
Pb	208	3	He	0.005	0.0016	290.02	0.0349	0.001422
Pb	208	3	He	-0.003	0.0013	180.01	0.0349	0.001422
U	238	3	He	0.001	0.0001	30.00	0.0502	5.657E-05
U	238	3	He	0.012	0.0007	150.01	0.0502	5.657E-05
U	238	3	He	0.023	0.0012	270.01	0.0502	5.657E-05
Sc	45	1	No Gas			2078781.38		
Sc	45	1	No Gas			2141067.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2121433.56		
Ge	72	1	No Gas			1028495.61		
Ge	72	1	No Gas			1035328.89		
Ge	72	1	No Gas			1039464.28		
Sc	45	2	H2			119810.22		
Sc	45	2	H2			121121.34		
Sc	45	2	H2			122069.98		
Ge	72	2	H2			103745.23		
Ge	72	2	H2			103010.02		
Ge	72	2	H2			102204.53		
In	115	2	H2			279385.27		
In	115	2	H2			278198.77		
In	115	2	H2			277250.02		
Sc	45	3	He			37349.03		
Sc	45	3	He			36867.54		
Sc	45	3	He			36556.53		
Ge	72	3	He			66203.81		
Ge	72	3	He			65691.13		
Ge	72	3	He			64566.35		
In	115	3	He			60582.43		
In	115	3	He			59728.87		
In	115	3	He			62038.38		
Tb	159	3	He			284015.66		
Tb	159	3	He			284731.64		
Tb	159	3	He			284304.57		
Bi	209	3	He			228758.81		
Bi	209	3	He			229930.29		
Bi	209	3	He			224196.72		

Quantitation Report

Data File Name	073SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:44:20 AM
Sample Name	410-136848-AA-5-A MS
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

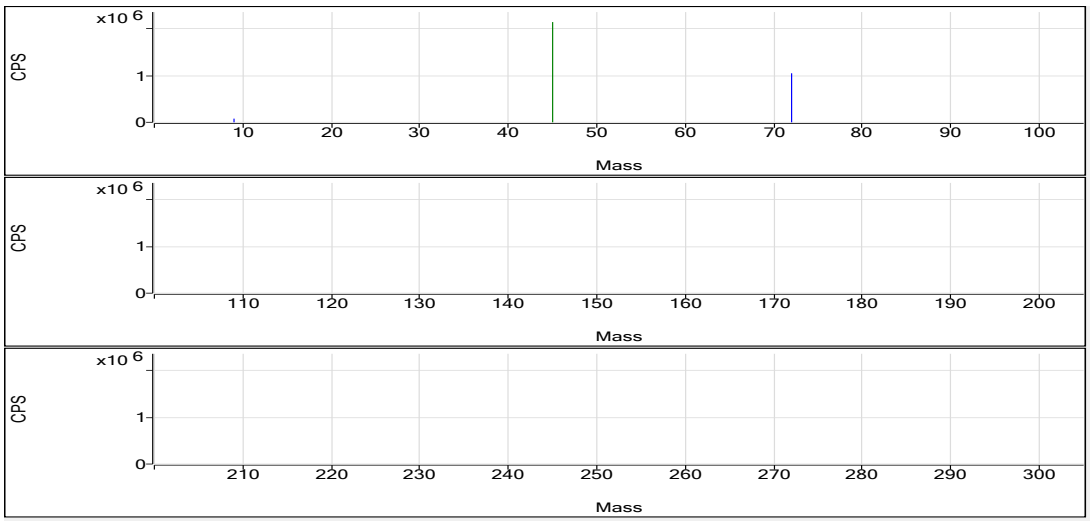
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.532	ppb	0.2	78396.92	0.0365	Pulse	0.5000	3
Se	78	72	H2	98.492	ppb	2.9	4524.28	0.0428	Pulse	1.5000	3
Na	23	45	He	13059.482	ppb	0.7	1906968.67	50.3474	Analog	0.1000	3
Mg	24	45	He	19405.864	ppb	1.7	1370368.16	36.1836	Analog	0.1000	3
Al	27	45	He	4823.589	ppb	0.9	105643.86	2.7893	Pulse	0.1000	3
K	39	45	He	6739.420	ppb	0.4	312082.64	8.2396	Pulse	0.1000	3
Ca	44	45	He	137648.467	ppb	0.6	344650.08	9.0995	Pulse	0.1000	3
Ti	47	45	He	491.861	ppb	1.4	9680.20	0.2556	Pulse	0.1000	3
V	51	45	He	489.795	ppb	0.8	414727.49	10.9499	Pulse	0.5000	3
Cr	52	45	He	486.955	ppb	1.2	526180.08	13.8926	Pulse	0.1000	3
Mn	55	45	He	3120.342	ppb	0.6	1463816.39	38.6479	Analog	0.1000	3
Fe	57	45	He	10270.555	ppb	1.3	220710.02	5.8273	Pulse	0.1000	3
Co	59	45	He	449.949	ppb	0.8	990181.65	26.1430	Pulse	0.1000	3
Ni	60	72	He	468.900	ppb	1.6	274857.82	4.0680	Pulse	0.1000	3
Cu	63	72	He	440.626	ppb	1.4	778490.17	11.5221	Pulse	0.1000	3
Zn	66	72	He	470.938	ppb	1.9	91410.68	1.3530	Pulse	0.1000	3
As	75	72	He	477.650	ppb	1.3	66772.70	0.9883	Pulse	0.5000	3
Sr	88	115	He	498.963	ppb	1.7	277971.54	4.4677	Pulse	0.1000	3
Mo	98	115	He	48.720	ppb	1.5	71301.23	1.1460	Pulse	0.1000	3
Ag	107	115	He	48.107	ppb	1.4	149261.14	2.3989	Pulse	0.1000	3
Cd	111	115	He	48.662	ppb	1.2	16778.11	0.2697	Pulse	0.5000	3
Sn	120	115	He	98.934	ppb	2.3	102135.37	1.6416	Pulse	0.1000	3
Sb	121	115	He	97.438	ppb	2.5	93780.33	1.5074	Pulse	0.1000	3
Ba	137	115	He	557.367	ppb	1.4	172662.29	2.7750	Pulse	0.1000	3
Tl	205	159	He	97.328	ppb	1.0	734808.06	2.5347	Pulse	0.1000	3
Pb	208	159	He	48.590	ppb	1.0	492541.09	1.6990	Pulse	0.1000	3
U	238	209	He	48.168	ppb	0.4	566861.53	2.4196	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2148195.44	0.1	105.7	Analog	0.1000	3
No Gas	Ge	72	1050615.25	0.7	104.5	Pulse	0.1000	3
H2	Sc	45	125138.44	0.4	94.7	Pulse	0.1000	3
H2	Ge	72	105625.85	1.7	94.7	Pulse	0.1000	3
H2	In	115	288200.27	0.9	98.1	Pulse	0.1000	3
He	Sc	45	37876.69	0.9	102.5	Pulse	0.1000	3
He	Ge	72	67573.72	1.4	104.7	Pulse	0.1000	3
He	In	115	62229.18	1.7	98.5	Pulse	0.1000	3
He	Tb	159	289904.19	0.6	99.0	Pulse	0.1000	3
He	Bi	209	234277.99	0.8	99.3	Pulse	0.1000	3

No Gas



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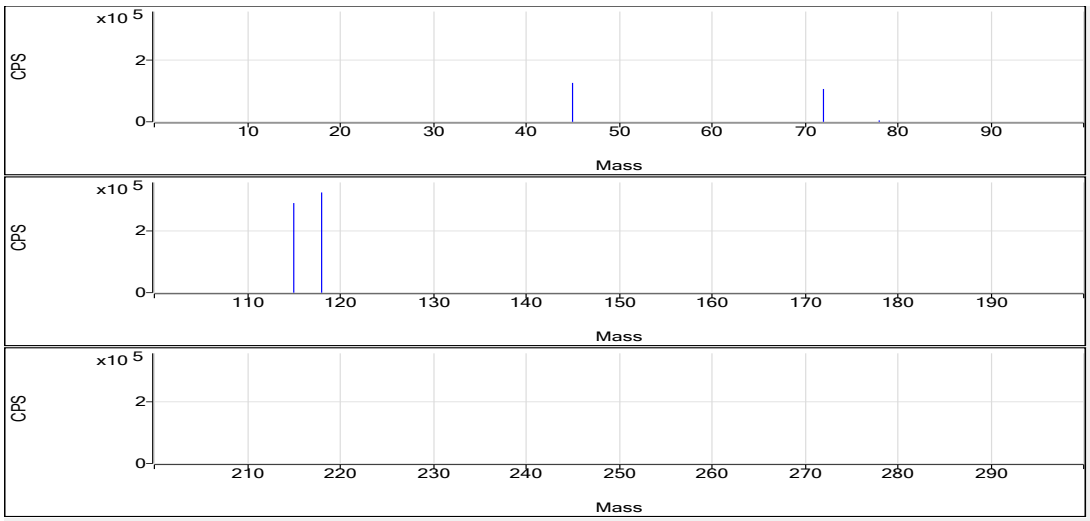
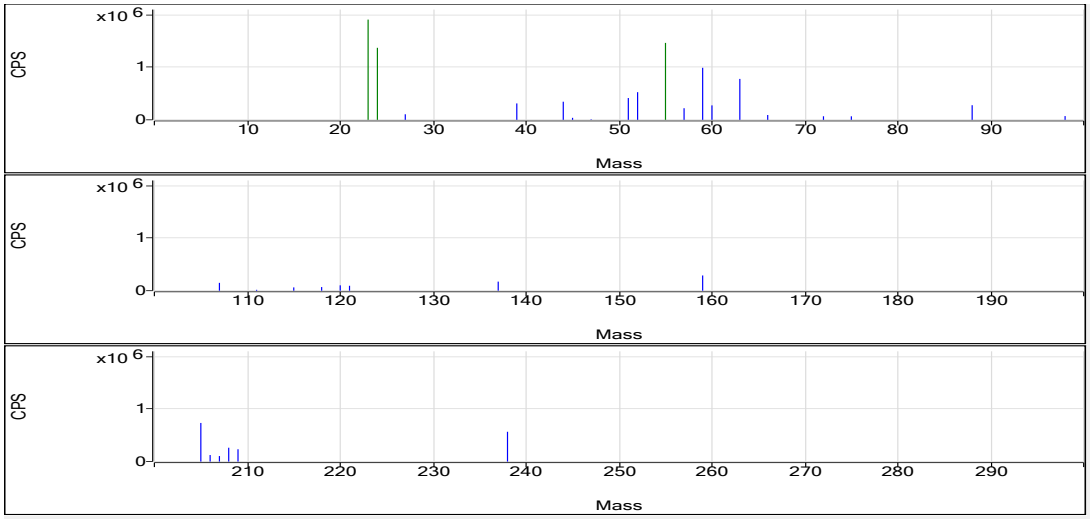


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.64	0.0366	78546.30	0.0008	2.195E-05
Be	9	1	No Gas	47.462	0.0364	78359.53	0.0008	2.195E-05
Be	9	1	No Gas	47.496	0.0365	78284.92	0.0008	2.195E-05
Se	78	2	H2	98.496	0.0428	4462.70	0.0004	1.386E-05
Se	78	2	H2	101.324	0.0441	4629.43	0.0004	1.386E-05
Se	78	2	H2	95.655	0.0416	4480.71	0.0004	1.386E-05
Na	23	3	He	13040.881	50.2764	1886329.50	0.0038	0.4416
Na	23	3	He	12983.367	50.0566	1913706.07	0.0038	0.4416
Na	23	3	He	13154.198	50.7094	1920870.44	0.0038	0.4416
Mg	24	3	He	19711.419	36.7532	1378953.26	0.0019	0.005872
Mg	24	3	He	19044.24	35.5095	1357557.17	0.0019	0.005872
Mg	24	3	He	19461.933	36.2881	1374594.04	0.0019	0.005872
Al	27	3	He	4869.86	2.8161	105656.56	0.0006	0.0004496
Al	27	3	He	4781.508	2.765	105707.69	0.0006	0.0004496
Al	27	3	He	4819.399	2.7869	105567.33	0.0006	0.0004496
K	39	3	He	6768.755	8.2736	310418.00	0.0012	0.4456
K	39	3	He	6710.852	8.2066	313745.80	0.0012	0.4456
K	39	3	He	6738.654	8.2388	312084.12	0.0012	0.4456
Ca	44	3	He	138545.838	9.1588	343630.03	0.0001	0.003779
Ca	44	3	He	137544.086	9.0926	347617.18	0.0001	0.003779
Ca	44	3	He	136855.476	9.0471	342703.04	0.0001	0.003779
Ti	47	3	He	485.948	0.2525	9473.32	0.0005	0
Ti	47	3	He	490.005	0.2546	9733.60	0.0005	0
Ti	47	3	He	499.629	0.2596	9833.67	0.0005	0
V	51	3	He	494.328	11.051	414625.00	0.0223	0.03054
V	51	3	He	486.722	10.8814	416006.53	0.0223	0.03054
V	51	3	He	488.335	10.9174	413550.94	0.0223	0.03054
Cr	52	3	He	493.287	14.0728	528000.62	0.0285	0.03714
Cr	52	3	He	485.437	13.8495	529476.71	0.0285	0.03714
Cr	52	3	He	482.14	13.7556	521062.92	0.0285	0.03714
Mn	55	3	He	3126.497	38.7241	1452898.42	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3100.764	38.4054	1468272.79	0.0124	0.004415
Mn	55	3	He	3133.765	38.8141	1470277.95	0.0124	0.004415
Fe	57	3	He	10408.237	5.9054	221567.67	0.0006	0.001356
Fe	57	3	He	10254.009	5.818	222425.62	0.0006	0.001356
Fe	57	3	He	10149.419	5.7586	218136.77	0.0006	0.001356
Co	59	3	He	453.614	26.3559	988854.36	0.0581	0.002697
Co	59	3	He	449.58	26.1216	998650.53	0.0581	0.002697
Co	59	3	He	446.652	25.9514	983040.06	0.0581	0.002697
Ni	60	3	He	476.076	4.1302	274516.07	0.0087	0.003928
Ni	60	3	He	461.538	4.0042	272578.06	0.0087	0.003928
Ni	60	3	He	469.086	4.0696	277479.33	0.0087	0.003928
Cu	63	3	He	447.346	11.6977	777491.39	0.0261	0.006048
Cu	63	3	He	438.999	11.4796	781446.63	0.0261	0.006048
Cu	63	3	He	435.533	11.389	776532.49	0.0261	0.006048
Zn	66	3	He	480	1.3789	91651.90	0.0029	0.003512
Zn	66	3	He	470.392	1.3514	91994.54	0.0029	0.003512
Zn	66	3	He	462.42	1.3286	90585.60	0.0029	0.003512
As	75	3	He	483.857	1.0011	66537.73	0.0021	0.0007233
As	75	3	He	478.033	0.989	67327.27	0.0021	0.0007233
As	75	3	He	471.06	0.9746	66453.10	0.0021	0.0007233
Sr	88	3	He	508.189	4.5503	279180.74	0.009	0.0005796
Sr	88	3	He	491.301	4.3991	278978.14	0.009	0.0005796
Sr	88	3	He	497.399	4.4537	275755.74	0.009	0.0005796
Mo	98	3	He	49.26	1.1587	71090.17	0.0235	0.0003188
Mo	98	3	He	47.906	1.1269	71461.85	0.0235	0.0003188
Mo	98	3	He	48.992	1.1524	71351.68	0.0235	0.0003188
Ag	107	3	He	48.832	2.435	149400.60	0.0499	0.0004754
Ag	107	3	He	47.516	2.3694	150263.12	0.0499	0.0004754
Ag	107	3	He	47.974	2.3923	148119.70	0.0499	0.0004754
Cd	111	3	He	49.22	0.2727	16734.06	0.0055	1.07E-05
Cd	111	3	He	48.023	0.2661	16876.21	0.0055	1.07E-05
Cd	111	3	He	48.744	0.2701	16724.05	0.0055	1.07E-05
Sn	120	3	He	101.511	1.6839	103313.85	0.0164	0.01713
Sn	120	3	He	97.633	1.6202	102749.10	0.0164	0.01713
Sn	120	3	He	97.659	1.6206	100343.16	0.0164	0.01713
Sb	121	3	He	99.39	1.5376	94340.55	0.0155	0.0002641
Sb	121	3	He	94.772	1.4662	92981.60	0.0155	0.0002641
Sb	121	3	He	98.153	1.5185	94018.84	0.0155	0.0002641
Ba	137	3	He	564.411	2.8101	172412.60	0.005	0.0001577
Ba	137	3	He	549.417	2.7355	173475.17	0.005	0.0001577
Ba	137	3	He	558.273	2.7796	172099.10	0.005	0.0001577
Tl	205	3	He	96.49	2.5129	732950.69	0.026	0.0002504
Tl	205	3	He	98.385	2.5622	742056.71	0.026	0.0002504
Tl	205	3	He	97.11	2.529	729416.79	0.026	0.0002504
Pb	208	3	He	48.04	1.6798	259987.98	0.0349	0.001422
Pb	208	3	He	48.702	1.703	264906.17	0.0349	0.001422
Pb	208	3	He	49.029	1.7144	265191.68	0.0349	0.001422
U	238	3	He	48.122	2.4173	562926.79	0.0502	5.657E-05
U	238	3	He	48.355	2.429	567179.84	0.0502	5.657E-05
U	238	3	He	48.026	2.4125	570477.96	0.0502	5.657E-05
Sc	45	1	No Gas			2147434.66		
Sc	45	1	No Gas			2150365.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2146786.22		
Ge	72	1	No Gas			1041717.88		
Ge	72	1	No Gas			1056056.16		
Ge	72	1	No Gas			1054071.70		
Sc	45	2	H2			125175.56		
Sc	45	2	H2			124621.22		
Sc	45	2	H2			125618.53		
Ge	72	2	H2			104158.77		
Ge	72	2	H2			105034.85		
Ge	72	2	H2			107683.94		
In	115	2	H2			287716.60		
In	115	2	H2			285885.23		
In	115	2	H2			290998.98		
Sc	45	3	He			37519.22		
Sc	45	3	He			38230.87		
Sc	45	3	He			37879.98		
Ge	72	3	He			66465.36		
Ge	72	3	He			68072.91		
Ge	72	3	He			68182.90		
In	115	3	He			61888.26		
In	115	3	He			63958.18		
In	115	3	He			62460.68		
Tb	159	3	He			291679.39		
Tb	159	3	He			289614.98		
Tb	159	3	He			288418.20		
Bi	209	3	He			232869.94		
Bi	209	3	He			233500.23		
Bi	209	3	He			236463.81		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:46:22 AM
Sample Name	410-136848-AA-5-A MS @100
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

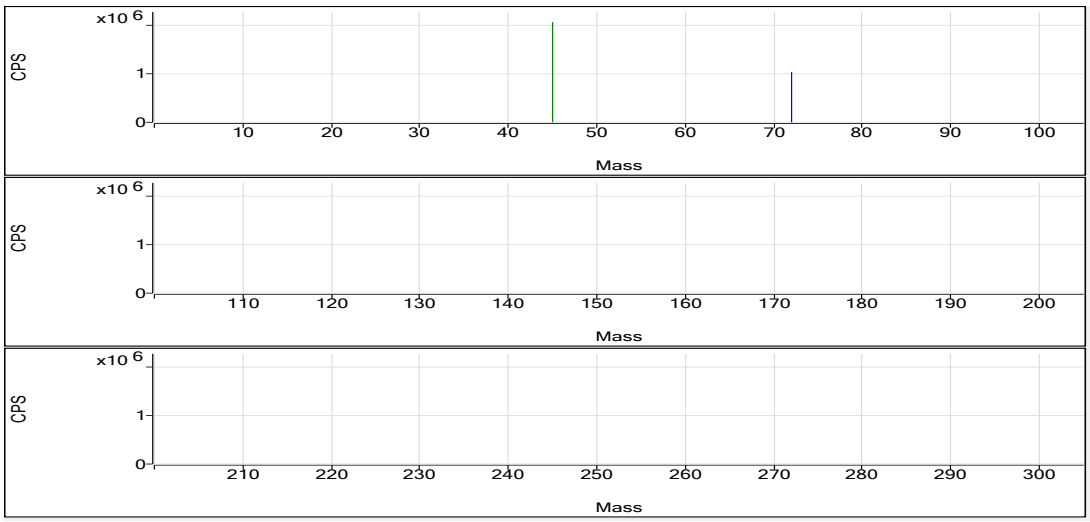
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.504	ppb	5.1	842.70	0.0004	Pulse	0.5000	3
Se	78	72	H2	1.185	ppb	7.4	55.78	0.0005	Pulse	1.5000	3
Na	23	45	He	108.586	ppb	2.0	31684.78	0.8566	Pulse	0.1000	3
Mg	24	45	He	189.753	ppb	1.6	13303.03	0.3596	Pulse	0.1000	3
Al	27	45	He	50.966	ppb	10.0	1106.75	0.0299	Pulse	0.1000	3
K	39	45	He	62.083	ppb	11.1	19139.70	0.5174	Pulse	0.1000	3
Ca	44	45	He	1463.505	ppb	4.6	3717.28	0.1005	Pulse	0.1000	3
Ti	47	45	He	5.898	ppb	13.6	113.34	0.0031	Pulse	0.1000	3
V	51	45	He	4.702	ppb	2.9	5007.56	0.1354	Pulse	0.5000	3
Cr	52	45	He	4.967	ppb	4.2	6601.75	0.1785	Pulse	0.1000	3
Mn	55	45	He	30.219	ppb	0.8	14007.14	0.3787	Pulse	0.1000	3
Fe	57	45	He	103.575	ppb	8.2	2223.59	0.0601	Pulse	0.1000	3
Co	59	45	He	4.698	ppb	2.6	10197.31	0.2757	Pulse	0.1000	3
Ni	60	72	He	4.797	ppb	7.5	2970.42	0.0455	Pulse	0.1000	3
Cu	63	72	He	4.530	ppb	1.6	8119.27	0.1244	Pulse	0.1000	3
Zn	66	72	He	5.874	ppb	4.3	1326.77	0.0203	Pulse	0.1000	3
As	75	72	He	4.602	ppb	2.2	668.02	0.0102	Pulse	0.5000	3
Sr	88	115	He	5.113	ppb	4.8	2823.72	0.0464	Pulse	0.1000	3
Mo	98	115	He	0.640	ppb	3.6	936.73	0.0154	Pulse	0.1000	3
Ag	107	115	He	0.511	ppb	2.3	1580.14	0.0259	Pulse	0.1000	3
Cd	111	115	He	0.488	ppb	10.5	165.33	0.0027	Pulse	0.5000	3
Sn	120	115	He	1.028	ppb	20.7	2070.25	0.0340	Pulse	0.1000	3
Sb	121	115	He	1.102	ppb	9.5	1053.42	0.0173	Pulse	0.1000	3
Ba	137	115	He	5.765	ppb	6.0	1756.84	0.0289	Pulse	0.1000	3
Tl	205	159	He	1.215	ppb	1.3	9106.80	0.0319	Pulse	0.1000	3
Pb	208	159	He	0.513	ppb	8.8	5527.30	0.0194	Pulse	0.1000	3
U	238	209	He	0.619	ppb	1.6	7128.89	0.0312	Pulse	0.1000	3

ISTD Table:

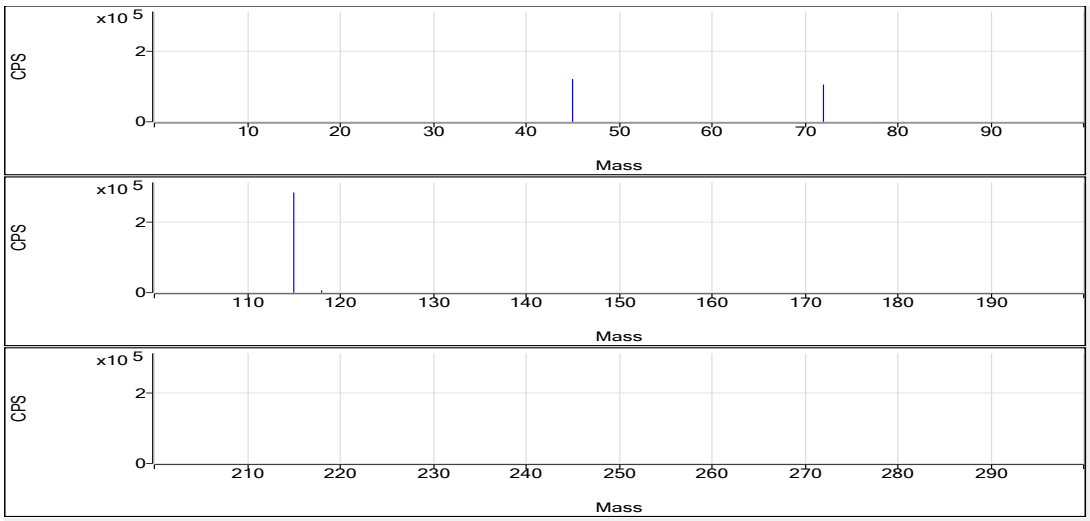
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2063773.72	0.8	101.5	Analog	0.1000	3
No Gas	Ge	72	1032912.30	0.6	102.8	Pulse	0.1000	3
H2	Sc	45	120761.99	0.3	91.4	Pulse	0.1000	3
H2	Ge	72	105360.42	1.5	94.5	Pulse	0.1000	3
H2	In	115	283095.43	1.1	96.4	Pulse	0.1000	3
He	Sc	45	36991.23	0.2	100.1	Pulse	0.1000	3
He	Ge	72	65236.07	1.6	101.0	Pulse	0.1000	3
He	In	115	60900.40	1.6	96.4	Pulse	0.1000	3
He	Tb	159	285674.29	1.1	97.6	Pulse	0.1000	3
He	Bi	209	228682.15	0.9	97.0	Pulse	0.1000	3

No Gas

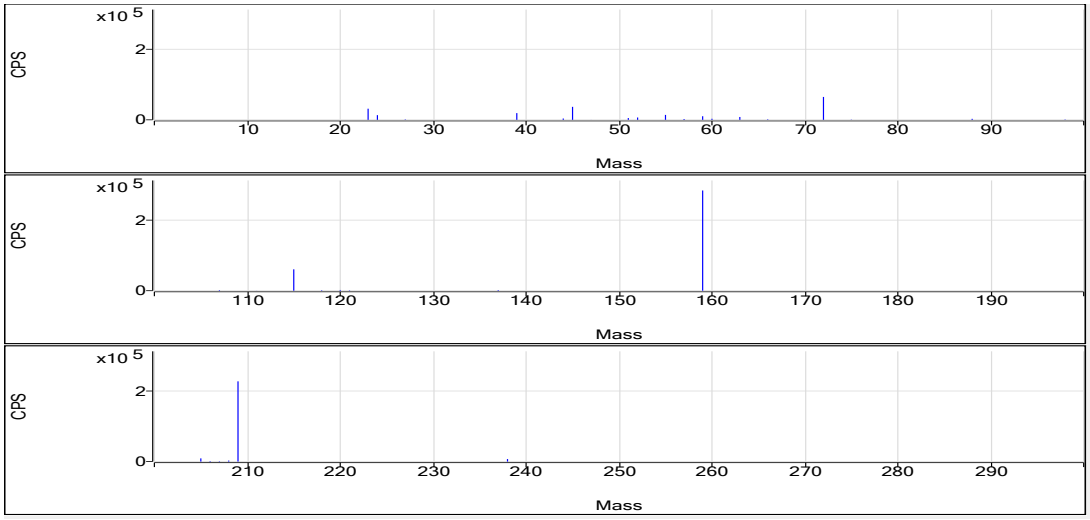


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.49	0.0004	824.03	0.0008	2.195E-05
Be	9	1	No Gas	0.488	0.0004	822.03	0.0008	2.195E-05
Be	9	1	No Gas	0.533	0.0004	882.03	0.0008	2.195E-05
Se	78	2	H2	1.095	0.0005	51.33	0.0004	1.386E-05
Se	78	2	H2	1.19	0.0005	55.33	0.0004	1.386E-05
Se	78	2	H2	1.269	0.0006	60.67	0.0004	1.386E-05
Na	23	3	He	107.595	0.8528	31584.69	0.0038	0.4416
Na	23	3	He	107.074	0.8508	31494.14	0.0038	0.4416
Na	23	3	He	111.088	0.8661	31975.51	0.0038	0.4416
Mg	24	3	He	193.041	0.3658	13546.62	0.0019	0.005872
Mg	24	3	He	188.94	0.3581	13256.30	0.0019	0.005872
Mg	24	3	He	187.277	0.355	13106.17	0.0019	0.005872
Al	27	3	He	50.594	0.0297	1100.08	0.0006	0.0004496
Al	27	3	He	56.229	0.033	1220.10	0.0006	0.0004496
Al	27	3	He	46.075	0.0271	1000.07	0.0006	0.0004496
K	39	3	He	54.114	0.5082	18822.59	0.0012	0.4456
K	39	3	He	66.045	0.522	19323.30	0.0012	0.4456
K	39	3	He	66.091	0.5221	19273.21	0.0012	0.4456
Ca	44	3	He	1507.996	0.1034	3830.65	0.0001	0.003779
Ca	44	3	He	1496.562	0.1027	3800.63	0.0001	0.003779
Ca	44	3	He	1385.956	0.0954	3520.57	0.0001	0.003779
Ti	47	3	He	5.716	0.003	110.01	0.0005	0
Ti	47	3	He	5.199	0.0027	100.00	0.0005	0
Ti	47	3	He	6.778	0.0035	130.01	0.0005	0
V	51	3	He	4.561	0.1322	4896.86	0.0223	0.03054
V	51	3	He	4.714	0.1356	5020.89	0.0223	0.03054
V	51	3	He	4.833	0.1383	5104.93	0.0223	0.03054
Cr	52	3	He	4.893	0.1764	6531.68	0.0285	0.03714
Cr	52	3	He	5.2	0.1851	6851.90	0.0285	0.03714
Cr	52	3	He	4.808	0.1739	6421.68	0.0285	0.03714
Mn	55	3	He	30.246	0.379	14037.17	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	30.459	0.3816	14127.27	0.0124	0.004415
Mn	55	3	He	29.951	0.3753	13856.97	0.0124	0.004415
Fe	57	3	He	99.479	0.0578	2140.24	0.0006	0.001356
Fe	57	3	He	113.347	0.0657	2430.29	0.0006	0.001356
Fe	57	3	He	97.898	0.0569	2100.23	0.0006	0.001356
Co	59	3	He	4.817	0.2825	10464.20	0.0581	0.002697
Co	59	3	He	4.703	0.2759	10214.00	0.0581	0.002697
Co	59	3	He	4.576	0.2685	9913.72	0.0581	0.002697
Ni	60	3	He	5.191	0.0489	3230.50	0.0087	0.003928
Ni	60	3	He	4.715	0.0448	2940.42	0.0087	0.003928
Ni	60	3	He	4.484	0.0428	2740.35	0.0087	0.003928
Cu	63	3	He	4.603	0.1263	8342.76	0.0261	0.006048
Cu	63	3	He	4.527	0.1244	8162.65	0.0261	0.006048
Cu	63	3	He	4.461	0.1226	7852.39	0.0261	0.006048
Zn	66	3	He	5.857	0.0203	1340.11	0.0029	0.003512
Zn	66	3	He	5.633	0.0197	1290.10	0.0029	0.003512
Zn	66	3	He	6.132	0.0211	1350.11	0.0029	0.003512
As	75	3	He	4.719	0.0105	692.02	0.0021	0.0007233
As	75	3	He	4.543	0.0101	664.02	0.0021	0.0007233
As	75	3	He	4.545	0.0101	648.02	0.0021	0.0007233
Sr	88	3	He	5.398	0.0489	3000.42	0.009	0.0005796
Sr	88	3	He	4.963	0.045	2690.36	0.009	0.0005796
Sr	88	3	He	4.979	0.0452	2780.38	0.009	0.0005796
Mo	98	3	He	0.666	0.016	980.07	0.0235	0.0003188
Mo	98	3	He	0.62	0.0149	890.06	0.0235	0.0003188
Mo	98	3	He	0.636	0.0153	940.07	0.0235	0.0003188
Ag	107	3	He	0.52	0.0264	1620.14	0.0499	0.0004754
Ag	107	3	He	0.497	0.0253	1510.14	0.0499	0.0004754
Ag	107	3	He	0.515	0.0261	1610.15	0.0499	0.0004754
Cd	111	3	He	0.439	0.0024	150.00	0.0055	1.07E-05
Cd	111	3	He	0.542	0.003	180.00	0.0055	1.07E-05
Cd	111	3	He	0.485	0.0027	166.00	0.0055	1.07E-05
Sn	120	3	He	0.783	0.03	1840.20	0.0164	0.01713
Sn	120	3	He	1.168	0.0363	2170.26	0.0164	0.01713
Sn	120	3	He	1.133	0.0357	2200.29	0.0164	0.01713
Sb	121	3	He	1.163	0.0183	1120.09	0.0155	0.0002641
Sb	121	3	He	1.162	0.0182	1090.09	0.0155	0.0002641
Sb	121	3	He	0.98	0.0154	950.07	0.0155	0.0002641
Ba	137	3	He	5.37	0.0269	1650.15	0.005	0.0001577
Ba	137	3	He	6.018	0.0301	1800.18	0.005	0.0001577
Ba	137	3	He	5.906	0.0296	1820.20	0.005	0.0001577
Tl	205	3	He	1.208	0.0317	9113.46	0.026	0.0002504
Tl	205	3	He	1.203	0.0316	8903.30	0.026	0.0002504
Tl	205	3	He	1.233	0.0324	9303.63	0.026	0.0002504
Pb	208	3	He	0.51	0.0192	2700.37	0.0349	0.001422
Pb	208	3	He	0.56	0.021	3090.45	0.0349	0.001422
Pb	208	3	He	0.47	0.0178	2630.37	0.0349	0.001422
U	238	3	He	0.63	0.0317	7312.31	0.0502	5.657E-05
U	238	3	He	0.611	0.0308	7042.20	0.0502	5.657E-05
U	238	3	He	0.617	0.0311	7032.17	0.0502	5.657E-05
Sc	45	1	No Gas			2070380.59		
Sc	45	1	No Gas			2075202.16		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2045738.41		
Ge	72	1	No Gas			1033773.19		
Ge	72	1	No Gas			1038522.72		
Ge	72	1	No Gas			1026441.00		
Sc	45	2	H2			120869.71		
Sc	45	2	H2			120355.23		
Sc	45	2	H2			121061.02		
Ge	72	2	H2			104732.20		
Ge	72	2	H2			104138.09		
Ge	72	2	H2			107210.97		
In	115	2	H2			279527.75		
In	115	2	H2			285333.73		
In	115	2	H2			284424.80		
Sc	45	3	He			37037.68		
Sc	45	3	He			37017.85		
Sc	45	3	He			36918.17		
Ge	72	3	He			66032.77		
Ge	72	3	He			65641.17		
Ge	72	3	He			64034.28		
In	115	3	He			61367.04		
In	115	3	He			59779.20		
In	115	3	He			61586.39		
Tb	159	3	He			287499.78		
Tb	159	3	He			282016.11		
Tb	159	3	He			287506.99		
Bi	209	3	He			230602.48		
Bi	209	3	He			228993.55		
Bi	209	3	He			226450.43		

Quantitation Report

Data File Name	075SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:48:24 AM
Sample Name	410-136848-AB-5-A MSD
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

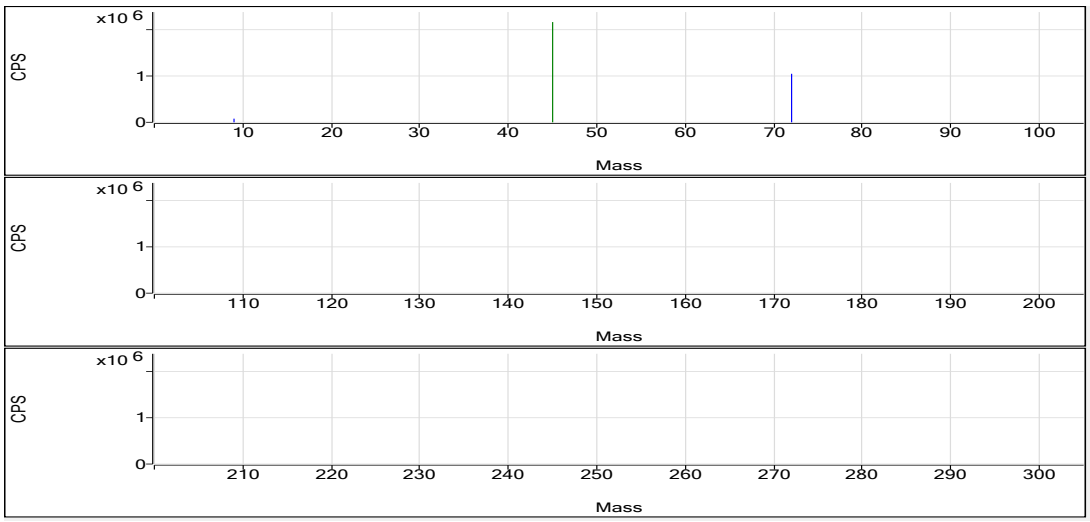
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	47.227	ppb	0.5	78236.27	0.0363	Pulse	0.5000	3
Se	78	72	H2	97.520	ppb	2.9	4522.50	0.0424	Pulse	1.5000	3
Na	23	45	He	13143.778	ppb	0.8	1905327.47	50.6696	Analog	0.1000	3
Mg	24	45	He	19587.325	ppb	0.2	1373322.43	36.5219	Analog	0.1000	3
Al	27	45	He	4812.115	ppb	0.9	104636.59	2.7827	Pulse	0.1000	3
K	39	45	He	6772.108	ppb	0.2	311254.14	8.2775	Pulse	0.1000	3
Ca	44	45	He	139529.266	ppb	0.7	346843.13	9.2238	Pulse	0.1000	3
Ti	47	45	He	486.899	ppb	3.1	9513.39	0.2530	Pulse	0.1000	3
V	51	45	He	488.741	ppb	0.3	410866.61	10.9264	Pulse	0.5000	3
Cr	52	45	He	487.692	ppb	1.2	523198.96	13.9136	Pulse	0.1000	3
Mn	55	45	He	3130.236	ppb	1.6	1457841.34	38.7704	Analog	0.1000	3
Fe	57	45	He	10376.387	ppb	1.6	221375.54	5.8874	Pulse	0.1000	3
Co	59	45	He	452.942	ppb	0.2	989589.02	26.3169	Pulse	0.1000	3
Ni	60	72	He	470.879	ppb	1.5	273345.50	4.0852	Pulse	0.1000	3
Cu	63	72	He	443.236	ppb	0.9	775538.61	11.5903	Pulse	0.1000	3
Zn	66	72	He	475.426	ppb	1.5	91390.12	1.3658	Pulse	0.1000	3
As	75	72	He	482.082	ppb	0.2	66741.16	0.9974	Pulse	0.5000	3
Sr	88	115	He	508.442	ppb	1.5	280340.73	4.5526	Pulse	0.1000	3
Mo	98	115	He	49.073	ppb	1.5	71080.30	1.1543	Pulse	0.1000	3
Ag	107	115	He	48.183	ppb	1.4	147963.36	2.4027	Pulse	0.1000	3
Cd	111	115	He	48.309	ppb	1.7	16484.43	0.2677	Pulse	0.5000	3
Sn	120	115	He	97.974	ppb	4.2	100087.31	1.6258	Pulse	0.1000	3
Sb	121	115	He	96.304	ppb	2.4	91746.64	1.4899	Pulse	0.1000	3
Ba	137	115	He	563.344	ppb	1.4	172717.21	2.8048	Pulse	0.1000	3
Tl	205	159	He	96.615	ppb	1.1	733793.97	2.5161	Pulse	0.1000	3
Pb	208	159	He	47.986	ppb	1.4	489344.20	1.6780	Pulse	0.1000	3
U	238	209	He	48.422	ppb	1.1	566907.91	2.4324	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2157683.82	0.5	106.1	Analog	0.1000	3
No Gas	Ge	72	1044245.43	0.7	103.9	Pulse	0.1000	3
H2	Sc	45	125393.58	1.1	94.9	Pulse	0.1000	3
H2	Ge	72	106629.83	1.1	95.6	Pulse	0.1000	3
H2	In	115	290594.00	0.1	98.9	Pulse	0.1000	3
He	Sc	45	37602.81	0.3	101.8	Pulse	0.1000	3
He	Ge	72	66914.17	0.4	103.6	Pulse	0.1000	3
He	In	115	61588.59	1.6	97.5	Pulse	0.1000	3
He	Tb	159	291650.76	0.7	99.6	Pulse	0.1000	3
He	Bi	209	233077.71	0.9	98.8	Pulse	0.1000	3

No Gas



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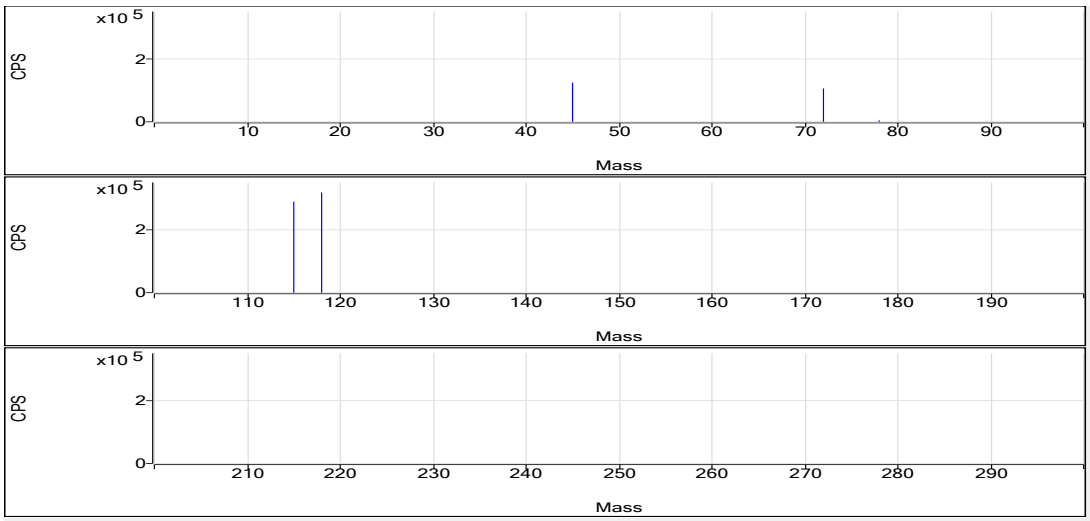
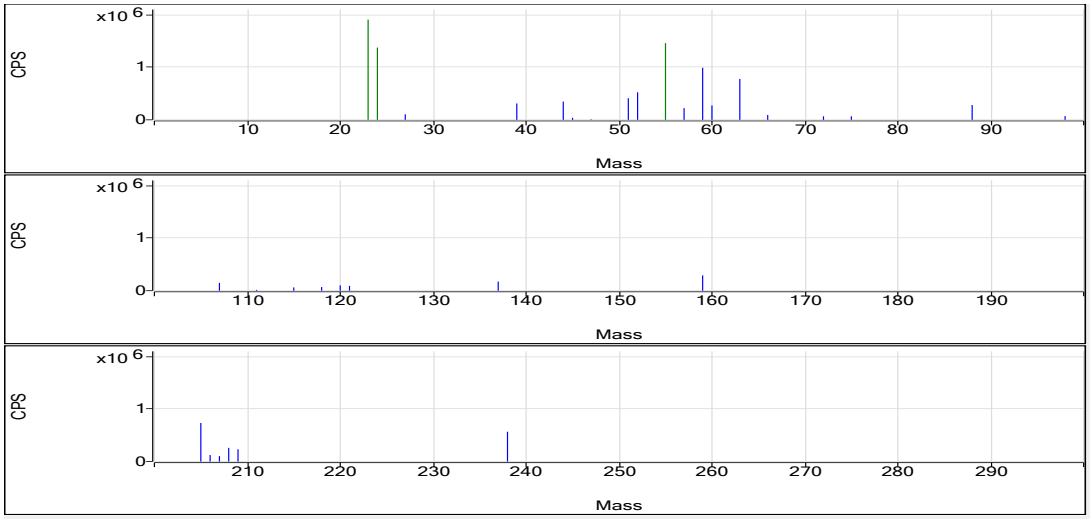


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.441	0.0364	78132.30	0.0008	2.195E-05
Be	9	1	No Gas	47.239	0.0363	78492.36	0.0008	2.195E-05
Be	9	1	No Gas	47	0.0361	78084.16	0.0008	2.195E-05
Se	78	2	H2	99.863	0.0434	4613.42	0.0004	1.386E-05
Se	78	2	H2	98.309	0.0428	4522.72	0.0004	1.386E-05
Se	78	2	H2	94.389	0.0411	4431.36	0.0004	1.386E-05
Na	23	3	He	13023.562	50.2102	1884353.41	0.0038	0.4416
Na	23	3	He	13167.146	50.7589	1914622.32	0.0038	0.4416
Na	23	3	He	13240.625	51.0397	1917006.69	0.0038	0.4416
Mg	24	3	He	19617.544	36.5782	1372756.54	0.0019	0.005872
Mg	24	3	He	19553.26	36.4584	1375209.35	0.0019	0.005872
Mg	24	3	He	19591.171	36.5291	1372001.39	0.0019	0.005872
Al	27	3	He	4771.584	2.7592	103552.57	0.0006	0.0004496
Al	27	3	He	4806.1	2.7792	104831.35	0.0006	0.0004496
Al	27	3	He	4858.661	2.8096	105525.85	0.0006	0.0004496
K	39	3	He	6786.595	8.2942	311275.84	0.0012	0.4456
K	39	3	He	6753.916	8.2564	311431.52	0.0012	0.4456
K	39	3	He	6775.814	8.2817	311055.07	0.0012	0.4456
Ca	44	3	He	139288.953	9.2079	345565.39	0.0001	0.003779
Ca	44	3	He	140587.439	9.2937	350557.26	0.0001	0.003779
Ca	44	3	He	138711.406	9.1697	344406.75	0.0001	0.003779
Ti	47	3	He	469.4	0.2439	9153.19	0.0005	0
Ti	47	3	He	497.15	0.2583	9743.55	0.0005	0
Ti	47	3	He	494.148	0.2568	9643.43	0.0005	0
V	51	3	He	487.565	10.9002	409078.50	0.0223	0.03054
V	51	3	He	490.015	10.9548	413216.50	0.0223	0.03054
V	51	3	He	488.641	10.9242	410304.84	0.0223	0.03054
Cr	52	3	He	489.148	13.955	523723.35	0.0285	0.03714
Cr	52	3	He	492.897	14.0617	530407.18	0.0285	0.03714
Cr	52	3	He	481.032	13.7241	515466.36	0.0285	0.03714
Mn	55	3	He	3183.875	39.4347	1479957.17	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3086.903	38.2338	1442175.92	0.0124	0.004415
Mn	55	3	He	3119.931	38.6428	1451390.92	0.0124	0.004415
Fe	57	3	He	10519.474	5.9685	223995.39	0.0006	0.001356
Fe	57	3	He	10191.6	5.7826	218117.81	0.0006	0.001356
Fe	57	3	He	10418.088	5.911	222013.41	0.0006	0.001356
Co	59	3	He	451.936	26.2584	985461.16	0.0581	0.002697
Co	59	3	He	452.95	26.3174	992690.61	0.0581	0.002697
Co	59	3	He	453.939	26.3748	990615.30	0.0581	0.002697
Ni	60	3	He	462.998	4.0169	269808.37	0.0087	0.003928
Ni	60	3	He	472.817	4.102	274573.71	0.0087	0.003928
Ni	60	3	He	476.823	4.1367	275654.43	0.0087	0.003928
Cu	63	3	He	438.514	11.4669	770217.64	0.0261	0.006048
Cu	63	3	He	445.612	11.6524	779976.39	0.0261	0.006048
Cu	63	3	He	445.582	11.6516	776421.79	0.0261	0.006048
Zn	66	3	He	469.208	1.348	90544.98	0.0029	0.003512
Zn	66	3	He	473.563	1.3605	91067.71	0.0029	0.003512
Zn	66	3	He	483.508	1.389	92557.67	0.0029	0.003512
As	75	3	He	481.228	0.9957	66877.02	0.0021	0.0007233
As	75	3	He	482.404	0.9981	66808.85	0.0021	0.0007233
As	75	3	He	482.613	0.9985	66537.63	0.0021	0.0007233
Sr	88	3	He	517.246	4.6314	279916.11	0.009	0.0005796
Sr	88	3	He	504.389	4.5163	281170.00	0.009	0.0005796
Sr	88	3	He	503.69	4.51	279936.07	0.009	0.0005796
Mo	98	3	He	49.801	1.1714	70798.70	0.0235	0.0003188
Mo	98	3	He	48.326	1.1367	70768.40	0.0235	0.0003188
Mo	98	3	He	49.092	1.1547	71673.80	0.0235	0.0003188
Ag	107	3	He	48.73	2.43	146864.02	0.0499	0.0004754
Ag	107	3	He	48.401	2.4136	150261.99	0.0499	0.0004754
Ag	107	3	He	47.417	2.3645	146764.06	0.0499	0.0004754
Cd	111	3	He	49.176	0.2725	16469.75	0.0055	1.07E-05
Cd	111	3	He	47.554	0.2635	16405.67	0.0055	1.07E-05
Cd	111	3	He	48.198	0.2671	16577.88	0.0055	1.07E-05
Sn	120	3	He	102.658	1.7027	102910.91	0.0164	0.01713
Sn	120	3	He	96.201	1.5967	99405.19	0.0164	0.01713
Sn	120	3	He	95.062	1.578	97945.83	0.0164	0.01713
Sb	121	3	He	98.031	1.5166	91662.30	0.0155	0.0002641
Sb	121	3	He	97.259	1.5047	93676.35	0.0155	0.0002641
Sb	121	3	He	93.621	1.4484	89901.28	0.0155	0.0002641
Ba	137	3	He	572.496	2.8504	172273.26	0.005	0.0001577
Ba	137	3	He	557.27	2.7746	172735.80	0.005	0.0001577
Ba	137	3	He	560.267	2.7895	173142.56	0.005	0.0001577
Tl	205	3	He	95.354	2.4833	730074.91	0.026	0.0002504
Tl	205	3	He	97.181	2.5309	736271.55	0.026	0.0002504
Tl	205	3	He	97.311	2.5343	735035.46	0.026	0.0002504
Pb	208	3	He	47.259	1.6525	260049.64	0.0349	0.001422
Pb	208	3	He	48.128	1.6829	259822.71	0.0349	0.001422
Pb	208	3	He	48.573	1.6984	261660.00	0.0349	0.001422
U	238	3	He	48.095	2.416	564425.62	0.0502	5.657E-05
U	238	3	He	48.149	2.4187	568142.88	0.0502	5.657E-05
U	238	3	He	49.023	2.4626	568155.23	0.0502	5.657E-05
Sc	45	1	No Gas			2145048.56		
Sc	45	1	No Gas			2164176.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2163826.37		
Ge	72	1	No Gas			1038654.75		
Ge	72	1	No Gas			1040942.17		
Ge	72	1	No Gas			1053139.36		
Sc	45	2	H2			124479.48		
Sc	45	2	H2			124721.20		
Sc	45	2	H2			126980.06		
Ge	72	2	H2			106203.03		
Ge	72	2	H2			105760.51		
Ge	72	2	H2			107925.96		
In	115	2	H2			290806.75		
In	115	2	H2			290288.41		
In	115	2	H2			290686.83		
Sc	45	3	He			37529.32		
Sc	45	3	He			37719.96		
Sc	45	3	He			37559.16		
Ge	72	3	He			67168.98		
Ge	72	3	He			66937.07		
Ge	72	3	He			66636.45		
In	115	3	He			60974.32		
In	115	3	He			62792.58		
In	115	3	He			62601.66		
Tb	159	3	He			293995.99		
Tb	159	3	He			290917.05		
Tb	159	3	He			290039.25		
Bi	209	3	He			233623.26		
Bi	209	3	He			234898.06		
Bi	209	3	He			230711.81		

Quantitation Report

Data File Name	077SMPL.d
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Acq Time	8/16/2023 8:52:32 AM
Sample Name	410-136848-AB-5-A MSD @100
Sample Type	Sample
Comment	C2
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

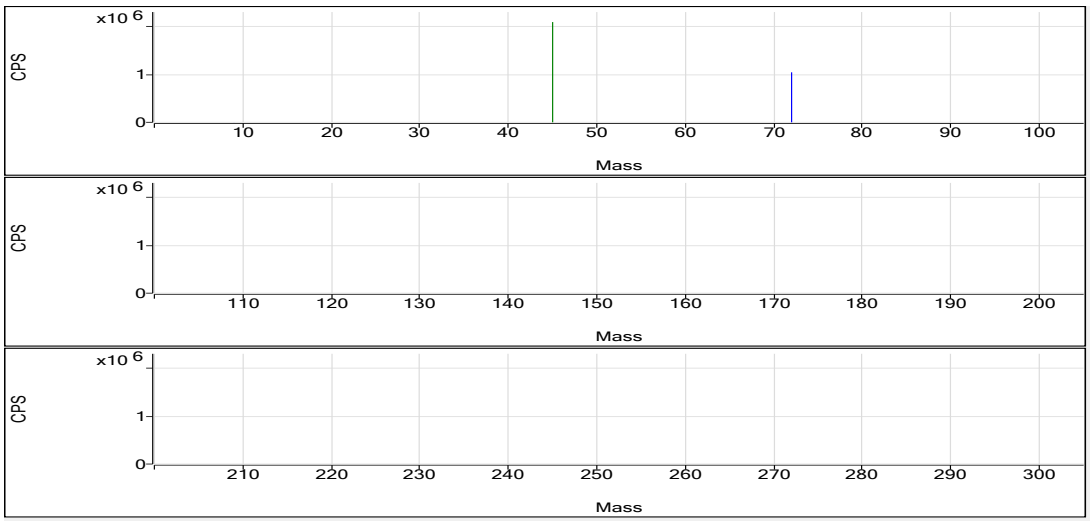
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.467	ppb	4.5	796.03	0.0004	Pulse	0.5000	3
Se	78	72	H2	1.131	ppb	14.1	53.55	0.0005	Pulse	1.5000	3
Na	23	45	He	108.870	ppb	6.5	32088.85	0.8576	Pulse	0.1000	3
Mg	24	45	He	183.302	ppb	4.4	13009.39	0.3476	Pulse	0.1000	3
Al	27	45	He	51.231	ppb	16.6	1123.41	0.0301	Pulse	0.1000	3
K	39	45	He	43.976	ppb	8.2	18582.37	0.4965	Pulse	0.1000	3
Ca	44	45	He	1385.996	ppb	13.2	3563.91	0.0954	Pulse	0.1000	3
Ti	47	45	He	4.110	ppb	11.1	80.00	0.0021	Pulse	0.1000	3
V	51	45	He	4.603	ppb	3.5	4982.21	0.1332	Pulse	0.5000	3
Cr	52	45	He	4.730	ppb	3.5	6425.00	0.1717	Pulse	0.1000	3
Mn	55	45	He	29.685	ppb	4.8	13923.85	0.3720	Pulse	0.1000	3
Fe	57	45	He	107.064	ppb	3.2	2323.62	0.0621	Pulse	0.1000	3
Co	59	45	He	4.385	ppb	2.9	9633.57	0.2574	Pulse	0.1000	3
Ni	60	72	He	4.666	ppb	6.9	2970.42	0.0444	Pulse	0.1000	3
Cu	63	72	He	4.297	ppb	2.2	7919.11	0.1183	Pulse	0.1000	3
Zn	66	72	He	5.266	ppb	24.2	1243.44	0.0186	Pulse	0.1000	3
As	75	72	He	4.651	ppb	11.2	692.02	0.0103	Pulse	0.5000	3
Sr	88	115	He	4.749	ppb	5.0	2653.67	0.0431	Pulse	0.1000	3
Mo	98	115	He	0.475	ppb	6.4	706.71	0.0115	Pulse	0.1000	3
Ag	107	115	He	0.484	ppb	9.7	1516.81	0.0246	Pulse	0.1000	3
Cd	111	115	He	0.529	ppb	8.4	181.33	0.0029	Pulse	0.5000	3
Sn	120	115	He	0.807	ppb	25.6	1870.21	0.0304	Pulse	0.1000	3
Sb	121	115	He	1.044	ppb	8.3	1010.07	0.0164	Pulse	0.1000	3
Ba	137	115	He	5.264	ppb	7.3	1623.49	0.0264	Pulse	0.1000	3
Tl	205	159	He	1.009	ppb	2.6	7695.80	0.0265	Pulse	0.1000	3
Pb	208	159	He	0.462	ppb	2.6	5090.57	0.0175	Pulse	0.1000	3
U	238	209	He	0.497	ppb	1.3	5801.53	0.0250	Pulse	0.1000	3

ISTD Table:

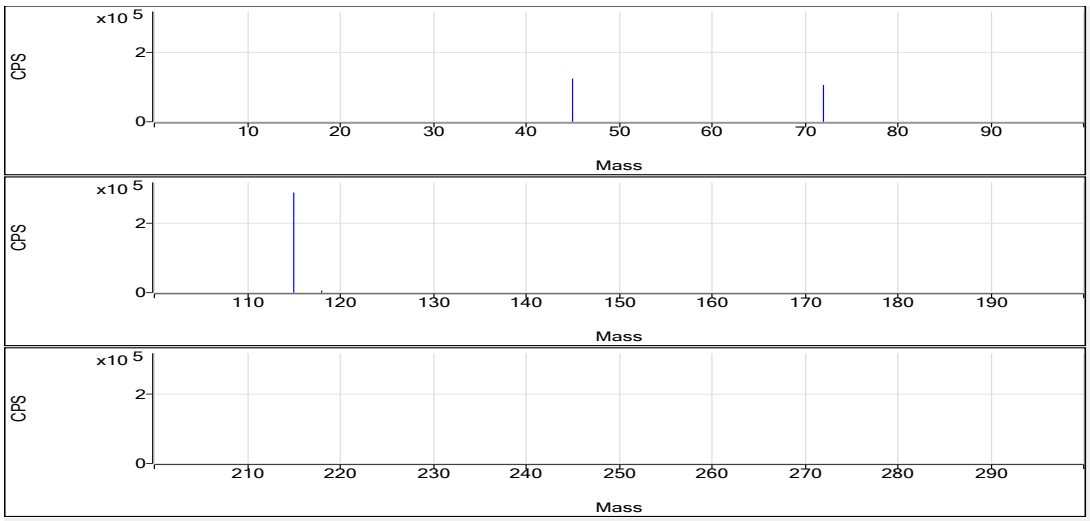
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2092282.00	1.4	102.9	Analog	0.1000	3
No Gas	Ge	72	1043478.63	1.5	103.8	Pulse	0.1000	3
H2	Sc	45	124402.82	1.2	94.2	Pulse	0.1000	3
H2	Ge	72	105900.37	0.7	95.0	Pulse	0.1000	3
H2	In	115	288473.31	0.6	98.2	Pulse	0.1000	3
He	Sc	45	37425.33	1.7	101.3	Pulse	0.1000	3
He	Ge	72	66923.78	1.0	103.7	Pulse	0.1000	3
He	In	115	61556.58	1.1	97.4	Pulse	0.1000	3
He	Tb	159	290104.87	0.6	99.1	Pulse	0.1000	3
He	Bi	209	231659.51	0.5	98.2	Pulse	0.1000	3

No Gas

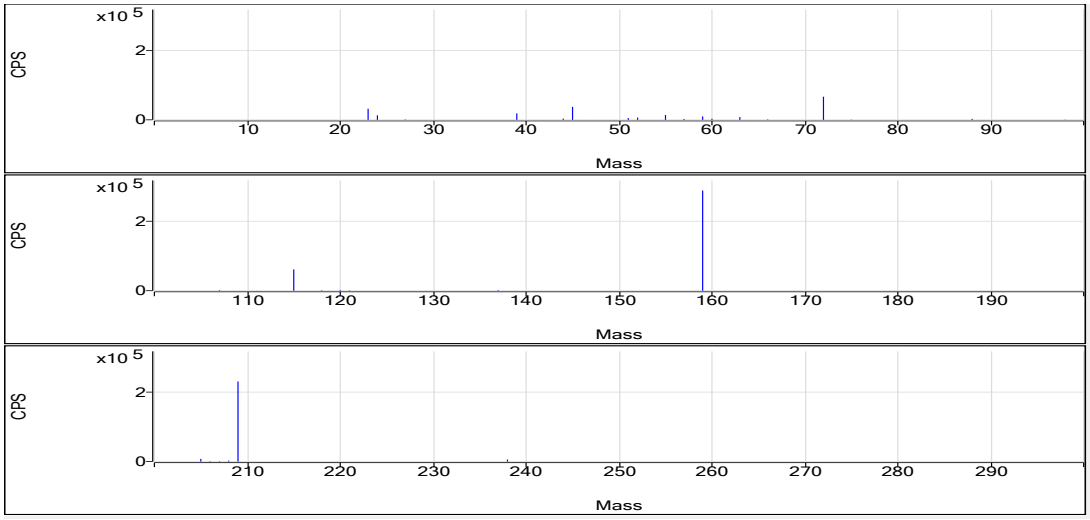


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.485	0.0004	826.03	0.0008	2.195E-05
Be	9	1	No Gas	0.444	0.0004	768.02	0.0008	2.195E-05
Be	9	1	No Gas	0.473	0.0004	794.03	0.0008	2.195E-05
Se	78	2	H2	0.959	0.0004	45.33	0.0004	1.386E-05
Se	78	2	H2	1.16	0.0005	55.33	0.0004	1.386E-05
Se	78	2	H2	1.273	0.0006	60.00	0.0004	1.386E-05
Na	23	3	He	116.711	0.8876	32857.24	0.0038	0.4416
Na	23	3	He	103.019	0.8353	31875.01	0.0038	0.4416
Na	23	3	He	106.879	0.85	31534.31	0.0038	0.4416
Mg	24	3	He	190.678	0.3613	13376.26	0.0019	0.005872
Mg	24	3	He	184.595	0.35	13356.47	0.0019	0.005872
Mg	24	3	He	174.634	0.3314	12295.44	0.0019	0.005872
Al	27	3	He	53.425	0.0313	1160.08	0.0006	0.0004496
Al	27	3	He	41.83	0.0246	940.06	0.0006	0.0004496
Al	27	3	He	58.438	0.0342	1270.10	0.0006	0.0004496
K	39	3	He	40.316	0.4922	18221.79	0.0012	0.4456
K	39	3	He	47.541	0.5006	19103.21	0.0012	0.4456
K	39	3	He	44.07	0.4966	18422.10	0.0012	0.4456
Ca	44	3	He	1508.845	0.1035	3830.67	0.0001	0.003779
Ca	44	3	He	1176.324	0.0815	3110.44	0.0001	0.003779
Ca	44	3	He	1472.819	0.1011	3750.61	0.0001	0.003779
Ti	47	3	He	4.159	0.0022	80.00	0.0005	0
Ti	47	3	He	4.539	0.0024	90.00	0.0005	0
Ti	47	3	He	3.632	0.0019	70.00	0.0005	0
V	51	3	He	4.779	0.1371	5074.90	0.0223	0.03054
V	51	3	He	4.468	0.1302	4966.88	0.0223	0.03054
V	51	3	He	4.561	0.1322	4904.85	0.0223	0.03054
Cr	52	3	He	4.716	0.1713	6341.59	0.0285	0.03714
Cr	52	3	He	4.572	0.1672	6381.67	0.0285	0.03714
Cr	52	3	He	4.902	0.1766	6551.74	0.0285	0.03714
Mn	55	3	He	31.049	0.3889	14397.77	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	29.791	0.3734	14247.46	0.0124	0.004415
Mn	55	3	He	28.214	0.3538	13126.32	0.0124	0.004415
Fe	57	3	He	110.489	0.064	2370.29	0.0006	0.001356
Fe	57	3	He	107.109	0.0621	2370.29	0.0006	0.001356
Fe	57	3	He	103.593	0.0601	2230.28	0.0006	0.001356
Co	59	3	He	4.531	0.2659	9843.65	0.0581	0.002697
Co	59	3	He	4.321	0.2538	9683.59	0.0581	0.002697
Co	59	3	He	4.303	0.2527	9373.47	0.0581	0.002697
Ni	60	3	He	4.533	0.0432	2910.40	0.0087	0.003928
Ni	60	3	He	4.432	0.0423	2800.38	0.0087	0.003928
Ni	60	3	He	5.034	0.0476	3200.47	0.0087	0.003928
Cu	63	3	He	4.208	0.116	7812.48	0.0261	0.006048
Cu	63	3	He	4.393	0.1209	7992.42	0.0261	0.006048
Cu	63	3	He	4.29	0.1182	7952.42	0.0261	0.006048
Zn	66	3	He	3.905	0.0147	990.08	0.0029	0.003512
Zn	66	3	He	6.427	0.0219	1450.14	0.0029	0.003512
Zn	66	3	He	5.464	0.0192	1290.10	0.0029	0.003512
As	75	3	He	5.21	0.0115	774.03	0.0021	0.0007233
As	75	3	He	4.565	0.0102	672.02	0.0021	0.0007233
As	75	3	He	4.178	0.0094	630.02	0.0021	0.0007233
Sr	88	3	He	4.998	0.0453	2820.38	0.009	0.0005796
Sr	88	3	He	4.529	0.0411	2530.30	0.009	0.0005796
Sr	88	3	He	4.721	0.0428	2610.32	0.009	0.0005796
Mo	98	3	He	0.479	0.0116	720.05	0.0235	0.0003188
Mo	98	3	He	0.443	0.0107	660.04	0.0235	0.0003188
Mo	98	3	He	0.503	0.0121	740.05	0.0235	0.0003188
Ag	107	3	He	0.522	0.0265	1650.16	0.0499	0.0004754
Ag	107	3	He	0.499	0.0254	1560.15	0.0499	0.0004754
Ag	107	3	He	0.432	0.022	1340.12	0.0499	0.0004754
Cd	111	3	He	0.578	0.0032	200.00	0.0055	1.07E-05
Cd	111	3	He	0.491	0.0027	168.00	0.0055	1.07E-05
Cd	111	3	He	0.519	0.0029	176.00	0.0055	1.07E-05
Sn	120	3	He	0.954	0.0328	2040.27	0.0164	0.01713
Sn	120	3	He	0.571	0.0265	1630.16	0.0164	0.01713
Sn	120	3	He	0.896	0.0318	1940.21	0.0164	0.01713
Sb	121	3	He	0.949	0.0149	930.06	0.0155	0.0002641
Sb	121	3	He	1.065	0.0167	1030.08	0.0155	0.0002641
Sb	121	3	He	1.118	0.0176	1070.08	0.0155	0.0002641
Ba	137	3	He	5.682	0.0284	1770.17	0.005	0.0001577
Ba	137	3	He	4.932	0.0247	1520.13	0.005	0.0001577
Ba	137	3	He	5.178	0.0259	1580.16	0.005	0.0001577
Tl	205	3	He	0.983	0.0258	7512.36	0.026	0.0002504
Tl	205	3	He	1.036	0.0272	7942.65	0.026	0.0002504
Tl	205	3	He	1.008	0.0265	7632.40	0.026	0.0002504
Pb	208	3	He	0.474	0.018	2630.36	0.0349	0.001422
Pb	208	3	He	0.45	0.0171	2600.37	0.0349	0.001422
Pb	208	3	He	0.46	0.0175	2630.36	0.0349	0.001422
U	238	3	He	0.501	0.0252	5811.48	0.0502	5.657E-05
U	238	3	He	0.49	0.0247	5741.51	0.0502	5.657E-05
U	238	3	He	0.502	0.0253	5851.59	0.0502	5.657E-05
Sc	45	1	No Gas			2096962.63		
Sc	45	1	No Gas			2118852.94		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2061030.44		
Ge	72	1	No Gas			1055221.16		
Ge	72	1	No Gas			1049252.95		
Ge	72	1	No Gas			1025961.78		
Sc	45	2	H2			125730.64		
Sc	45	2	H2			122868.05		
Sc	45	2	H2			124609.76		
Ge	72	2	H2			105205.85		
Ge	72	2	H2			106716.13		
Ge	72	2	H2			105779.14		
In	115	2	H2			287401.99		
In	115	2	H2			287493.75		
In	115	2	H2			290524.18		
Sc	45	3	He			37017.80		
Sc	45	3	He			38160.65		
Sc	45	3	He			37097.55		
Ge	72	3	He			67339.12		
Ge	72	3	He			66133.06		
Ge	72	3	He			67299.17		
In	115	3	He			62239.79		
In	115	3	He			61527.01		
In	115	3	He			60933.84		
Tb	159	3	He			290619.43		
Tb	159	3	He			291602.65		
Tb	159	3	He			288092.53		
Bi	209	3	He			230550.90		
Bi	209	3	He			232687.18		
Bi	209	3	He			231740.45		

Quantitation Report

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Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

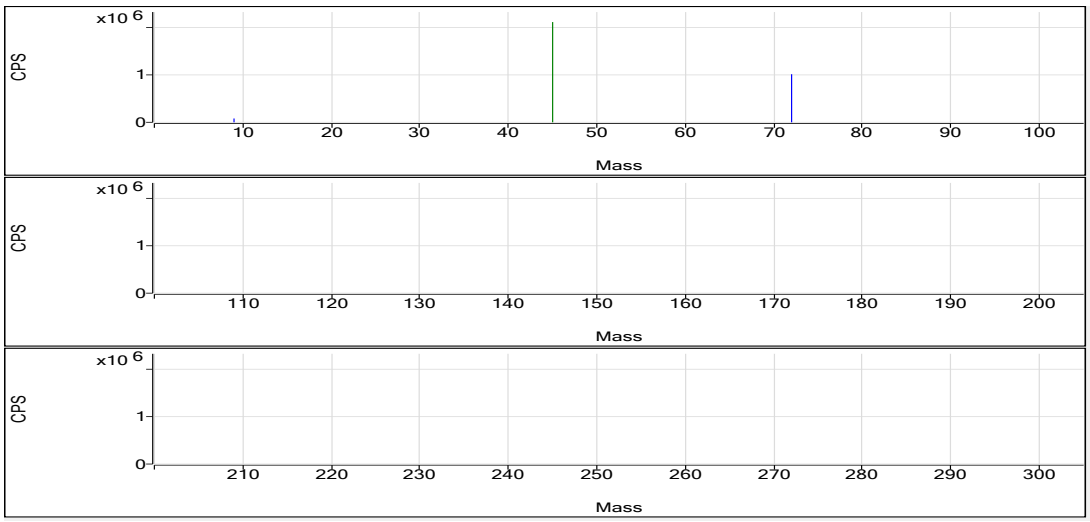
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.433	ppb	0.4	80701.86	0.0380	Pulse	0.5000	3
Se	78	72	H2	54.007	ppb	0.7	2386.20	0.0235	Pulse	1.5000	3
Na	23	45	He	5040.647	ppb	1.4	733700.30	19.7041	Pulse	0.1000	3
Mg	24	45	He	5252.967	ppb	1.5	364889.57	9.7988	Pulse	0.1000	3
Al	27	45	He	5094.701	ppb	1.8	109693.03	2.9461	Pulse	0.1000	3
K	39	45	He	5183.553	ppb	1.6	239805.58	6.4403	Pulse	0.1000	3
Ca	44	45	He	5149.488	ppb	2.6	12809.38	0.3441	Pulse	0.1000	3
Ti	47	45	He	5197.608	ppb	1.6	100567.02	2.7006	Pulse	0.1000	3
V	51	45	He	517.101	ppb	1.8	430376.12	11.5587	Pulse	0.5000	3
Cr	52	45	He	526.131	ppb	2.2	558757.06	15.0073	Pulse	0.1000	3
Mn	55	45	He	513.547	ppb	2.5	236950.20	6.3644	Pulse	0.1000	3
Fe	57	45	He	5152.178	ppb	1.7	108878.15	2.9239	Pulse	0.1000	3
Co	59	45	He	490.218	ppb	2.0	1060480.71	28.4825	Pulse	0.1000	3
Ni	60	72	He	526.124	ppb	4.2	294117.49	4.5640	Pulse	0.1000	3
Cu	63	72	He	496.880	ppb	3.3	837416.34	12.9923	Pulse	0.1000	3
Zn	66	72	He	529.476	ppb	5.0	97987.33	1.5207	Pulse	0.1000	3
As	75	72	He	519.935	ppb	3.6	69331.40	1.0757	Pulse	0.5000	3
Sr	88	115	He	50.104	ppb	1.8	28436.09	0.4491	Pulse	0.1000	3
Mo	98	115	He	50.918	ppb	1.0	75827.89	1.1977	Pulse	0.1000	3
Ag	107	115	He	51.340	ppb	0.7	162092.79	2.5601	Pulse	0.1000	3
Cd	111	115	He	50.933	ppb	1.8	17868.78	0.2822	Pulse	0.5000	3
Sn	120	115	He	50.059	ppb	2.9	53119.08	0.8391	Pulse	0.1000	3
Sb	121	115	He	49.516	ppb	1.0	48512.55	0.7662	Pulse	0.1000	3
Ba	137	115	He	495.302	ppb	0.9	156135.21	2.4660	Pulse	0.1000	3
Tl	205	159	He	50.823	ppb	0.4	386136.38	1.3237	Pulse	0.1000	3
Pb	208	159	He	50.529	ppb	0.3	515374.38	1.7668	Pulse	0.1000	3
U	238	209	He	49.516	ppb	0.8	587172.48	2.4874	Pulse	0.1000	3

ISTD Table:

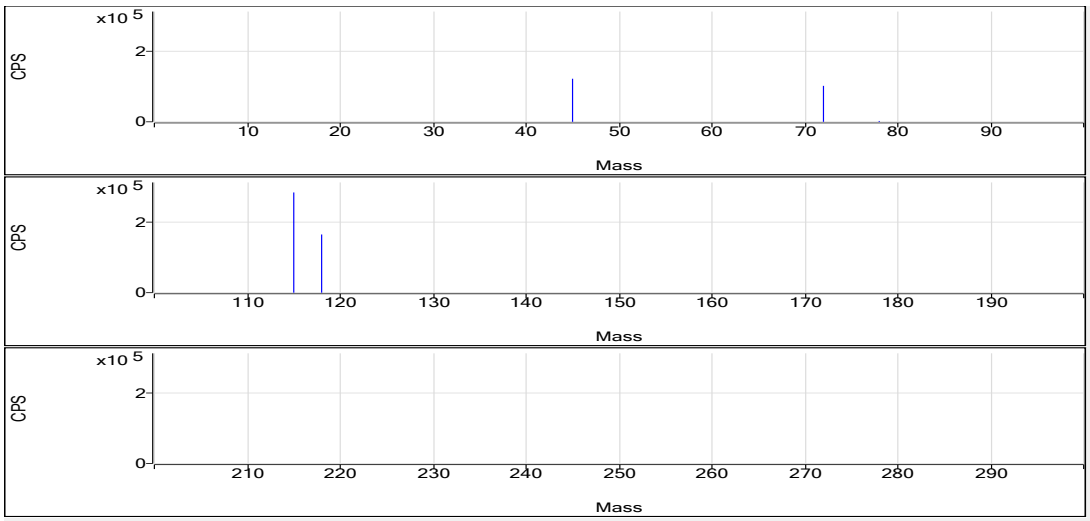
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2126447.94	1.6	104.6	Analog	0.1000	3
No Gas	Ge	72	1019949.88	1.2	101.5	Pulse	0.1000	3
H2	Sc	45	121639.75	0.4	92.1	Pulse	0.1000	3
H2	Ge	72	101549.62	1.1	91.0	Pulse	0.1000	3
H2	In	115	283049.63	0.3	96.4	Pulse	0.1000	3
He	Sc	45	37241.52	1.7	100.8	Pulse	0.1000	3
He	Ge	72	64499.44	3.1	99.9	Pulse	0.1000	3
He	In	115	63316.45	0.9	100.2	Pulse	0.1000	3
He	Tb	159	291706.48	0.5	99.6	Pulse	0.1000	3
He	Bi	209	236067.54	0.5	100.1	Pulse	0.1000	3

No Gas

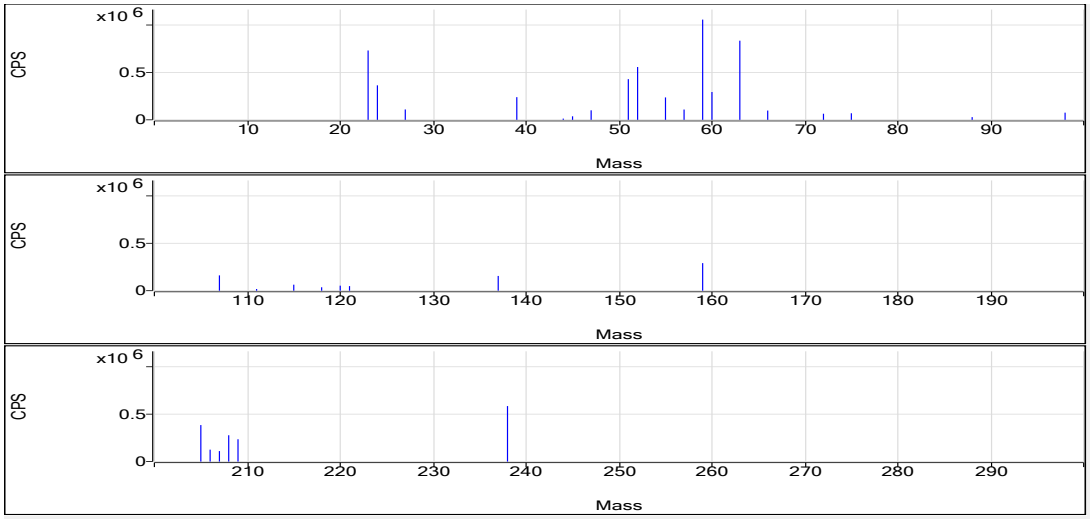


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.613	0.0381	80800.34	0.0008	2.195E-05
Be	9	1	No Gas	49.246	0.0378	81757.48	0.0008	2.195E-05
Be	9	1	No Gas	49.439	0.038	79547.75	0.0008	2.195E-05
Se	78	2	H2	54.387	0.0237	2373.53	0.0004	1.386E-05
Se	78	2	H2	54.016	0.0235	2396.87	0.0004	1.386E-05
Se	78	2	H2	53.619	0.0233	2388.21	0.0004	1.386E-05
Na	23	3	He	5117.364	19.9972	732435.38	0.0038	0.4416
Na	23	3	He	4982.462	19.4817	738744.60	0.0038	0.4416
Na	23	3	He	5022.115	19.6332	729920.93	0.0038	0.4416
Mg	24	3	He	5335.747	9.9531	364552.03	0.0019	0.005872
Mg	24	3	He	5242.485	9.7793	370829.10	0.0019	0.005872
Mg	24	3	He	5180.67	9.664	359287.57	0.0019	0.005872
Al	27	3	He	5179.264	2.995	109695.72	0.0006	0.0004496
Al	27	3	He	4998.08	2.8902	109596.06	0.0006	0.0004496
Al	27	3	He	5106.759	2.953	109787.32	0.0006	0.0004496
K	39	3	He	5267.937	6.5379	239462.75	0.0012	0.4456
K	39	3	He	5101.147	6.345	240602.26	0.0012	0.4456
K	39	3	He	5181.576	6.438	239351.72	0.0012	0.4456
Ca	44	3	He	5246.394	0.3505	12836.10	0.0001	0.003779
Ca	44	3	He	4997.591	0.334	12665.83	0.0001	0.003779
Ca	44	3	He	5204.477	0.3477	12926.21	0.0001	0.003779
Ti	47	3	He	5280.105	2.7435	100484.87	0.0005	0
Ti	47	3	He	5197.766	2.7007	102410.04	0.0005	0
Ti	47	3	He	5114.953	2.6577	98806.14	0.0005	0
V	51	3	He	526.411	11.7662	430960.50	0.0223	0.03054
V	51	3	He	508.114	11.3583	430707.53	0.0223	0.03054
V	51	3	He	516.779	11.5515	429460.34	0.0223	0.03054
Cr	52	3	He	539.133	15.3773	563221.75	0.0285	0.03714
Cr	52	3	He	516.034	14.72	558182.30	0.0285	0.03714
Cr	52	3	He	523.226	14.9247	554867.14	0.0285	0.03714
Mn	55	3	He	526.417	6.5238	238944.59	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	500.709	6.2054	235307.30	0.0124	0.004415
Mn	55	3	He	513.515	6.364	236598.71	0.0124	0.004415
Fe	57	3	He	5249.145	2.9789	109109.25	0.0006	0.001356
Fe	57	3	He	5126.343	2.9093	110319.71	0.0006	0.001356
Fe	57	3	He	5081.047	2.8836	107205.48	0.0006	0.001356
Co	59	3	He	499.083	28.9975	1062086.39	0.0581	0.002697
Co	59	3	He	479.425	27.8555	1056276.31	0.0581	0.002697
Co	59	3	He	492.145	28.5945	1063079.44	0.0581	0.002697
Ni	60	3	He	545.864	4.7351	296311.40	0.0087	0.003928
Ni	60	3	He	502.181	4.3565	290165.48	0.0087	0.003928
Ni	60	3	He	530.327	4.6004	295875.58	0.0087	0.003928
Cu	63	3	He	512.699	13.4057	838901.00	0.0261	0.006048
Cu	63	3	He	479.773	12.5452	835580.14	0.0261	0.006048
Cu	63	3	He	498.17	13.026	837767.88	0.0261	0.006048
Zn	66	3	He	548.078	1.574	98498.52	0.0029	0.003512
Zn	66	3	He	498.867	1.433	95446.12	0.0029	0.003512
Zn	66	3	He	541.482	1.5551	100017.34	0.0029	0.003512
As	75	3	He	540.435	1.1181	69965.81	0.0021	0.0007233
As	75	3	He	504.273	1.0433	69489.48	0.0021	0.0007233
As	75	3	He	515.097	1.0657	68538.91	0.0021	0.0007233
Sr	88	3	He	49.2	0.4411	28048.75	0.009	0.0005796
Sr	88	3	He	50.966	0.4569	28639.63	0.009	0.0005796
Sr	88	3	He	50.145	0.4495	28619.89	0.009	0.0005796
Mo	98	3	He	50.745	1.1936	75905.58	0.0235	0.0003188
Mo	98	3	He	51.499	1.2113	75935.35	0.0235	0.0003188
Mo	98	3	He	50.51	1.1881	75642.73	0.0235	0.0003188
Ag	107	3	He	50.955	2.5409	161586.43	0.0499	0.0004754
Ag	107	3	He	51.477	2.5669	160910.68	0.0499	0.0004754
Ag	107	3	He	51.587	2.5724	163781.27	0.0499	0.0004754
Cd	111	3	He	50.822	0.2816	17909.48	0.0055	1.07E-05
Cd	111	3	He	51.909	0.2876	18031.68	0.0055	1.07E-05
Cd	111	3	He	50.07	0.2775	17665.19	0.0055	1.07E-05
Sn	120	3	He	49.908	0.8366	53202.43	0.0164	0.01713
Sn	120	3	He	51.582	0.8641	54166.50	0.0164	0.01713
Sn	120	3	He	48.687	0.8165	51988.30	0.0164	0.01713
Sb	121	3	He	50.08	0.7749	49278.81	0.0155	0.0002641
Sb	121	3	He	49.272	0.7624	47792.88	0.0155	0.0002641
Sb	121	3	He	49.196	0.7612	48465.97	0.0155	0.0002641
Ba	137	3	He	490.839	2.4438	155413.26	0.005	0.0001577
Ba	137	3	He	499.44	2.4867	155880.01	0.005	0.0001577
Ba	137	3	He	495.626	2.4677	157112.36	0.005	0.0001577
Tl	205	3	He	50.942	1.3268	388887.42	0.026	0.0002504
Tl	205	3	He	50.595	1.3178	382689.41	0.026	0.0002504
Tl	205	3	He	50.933	1.3266	386832.30	0.026	0.0002504
Pb	208	3	He	50.421	1.763	279324.43	0.0349	0.001422
Pb	208	3	He	50.691	1.7724	277865.95	0.0349	0.001422
Pb	208	3	He	50.474	1.7649	278080.74	0.0349	0.001422
U	238	3	He	49.767	2.5	589552.30	0.0502	5.657E-05
U	238	3	He	49.04	2.4634	584923.66	0.0502	5.657E-05
U	238	3	He	49.742	2.4987	587041.48	0.0502	5.657E-05
Sc	45	1	No Gas			2121264.97		
Sc	45	1	No Gas			2162361.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2095717.78		
Ge	72	1	No Gas			1011849.91		
Ge	72	1	No Gas			1033752.02		
Ge	72	1	No Gas			1014247.72		
Sc	45	2	H2			121111.62		
Sc	45	2	H2			122180.14		
Sc	45	2	H2			121627.48		
Ge	72	2	H2			100300.20		
Ge	72	2	H2			101982.55		
Ge	72	2	H2			102366.11		
In	115	2	H2			282690.74		
In	115	2	H2			283931.56		
In	115	2	H2			282526.58		
Sc	45	3	He			36626.85		
Sc	45	3	He			37919.91		
Sc	45	3	He			37177.81		
Ge	72	3	He			62577.79		
Ge	72	3	He			66605.60		
Ge	72	3	He			64314.94		
In	115	3	He			63876.97		
In	115	3	He			62972.68		
In	115	3	He			63947.67		
Tb	159	3	He			293104.35		
Tb	159	3	He			290410.43		
Tb	159	3	He			291604.66		
Bi	209	3	He			235823.18		
Bi	209	3	He			237442.03		
Bi	209	3	He			234937.40		

Quantitation Report

Data File Name	080_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 8:58:43 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

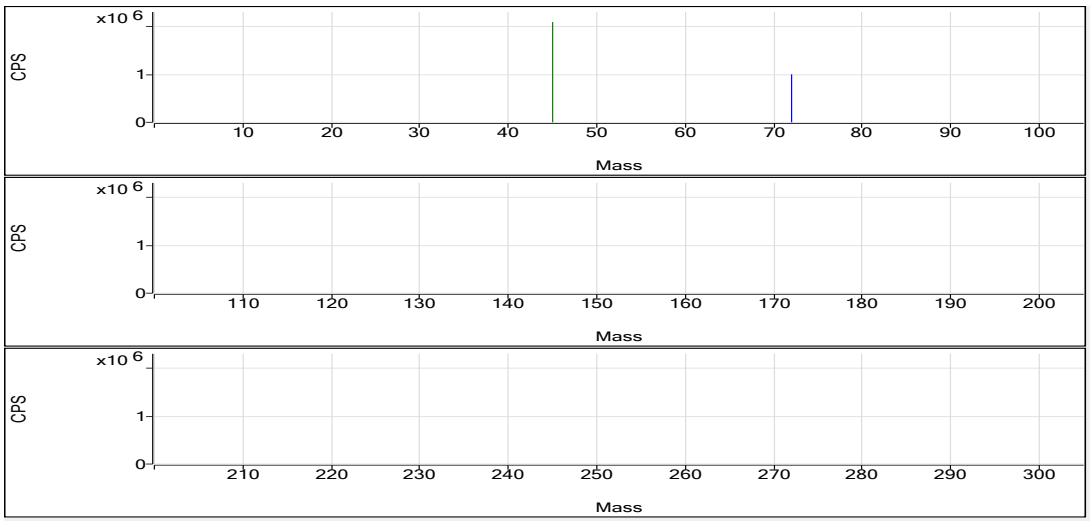
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.035	ppb	23.1	102.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.057	ppb	41.4	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	-18.081	ppb	N/A	13917.01	0.3725	Pulse	0.1000	3
Mg	24	45	He	0.295	ppb	172.8	240.01	0.0064	Pulse	0.1000	3
Al	27	45	He	2.462	ppb	67.8	70.00	0.0019	Pulse	0.1000	3
K	39	45	He	-7.522	ppb	N/A	16322.91	0.4369	Pulse	0.1000	3
Ca	44	45	He	2.259	ppb	558.7	146.67	0.0039	Pulse	0.1000	3
Ti	47	45	He	0.514	ppb	99.8	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.023	ppb	N/A	1122.05	0.0300	Pulse	0.5000	3
Cr	52	45	He	0.191	ppb	134.6	1590.15	0.0426	Pulse	0.1000	3
Mn	55	45	He	0.241	ppb	52.1	276.68	0.0074	Pulse	0.1000	3
Fe	57	45	He	2.323	ppb	105.1	100.01	0.0027	Pulse	0.1000	3
Co	59	45	He	0.173	ppb	24.3	476.69	0.0128	Pulse	0.1000	3
Ni	60	72	He	0.145	ppb	29.6	333.35	0.0052	Pulse	0.1000	3
Cu	63	72	He	0.036	ppb	199.5	450.02	0.0070	Pulse	0.1000	3
Zn	66	72	He	0.059	ppb	173.6	236.68	0.0037	Pulse	0.1000	3
As	75	72	He	0.112	ppb	40.2	61.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.048	ppb	92.1	63.33	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.041	ppb	59.4	80.00	0.0013	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	131.1	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.027	ppb	36.2	10.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.017	ppb	250.5	1093.42	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.041	ppb	160.3	56.67	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.118	ppb	63.3	46.67	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.075	ppb	11.4	630.04	0.0022	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	31.0	533.36	0.0019	Pulse	0.1000	3
U	238	209	He	0.039	ppb	11.6	470.02	0.0020	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2090249.45	1.5	102.8	Analog	0.1000	3
No Gas	Ge	72	999629.93	1.5	99.5	Pulse	0.1000	3
H2	Sc	45	119394.48	1.3	90.4	Pulse	0.1000	3
H2	Ge	72	97757.11	1.8	87.6	Pulse	0.1000	3
H2	In	115	282519.55	1.5	96.2	Pulse	0.1000	3
He	Sc	45	37361.96	0.4	101.1	Pulse	0.1000	3
He	Ge	72	64278.44	1.3	99.6	Pulse	0.1000	3
He	In	115	62811.02	1.2	99.4	Pulse	0.1000	3
He	Tb	159	286315.52	0.2	97.8	Pulse	0.1000	3
He	Bi	209	232596.56	0.0	98.6	Pulse	0.1000	3

No Gas



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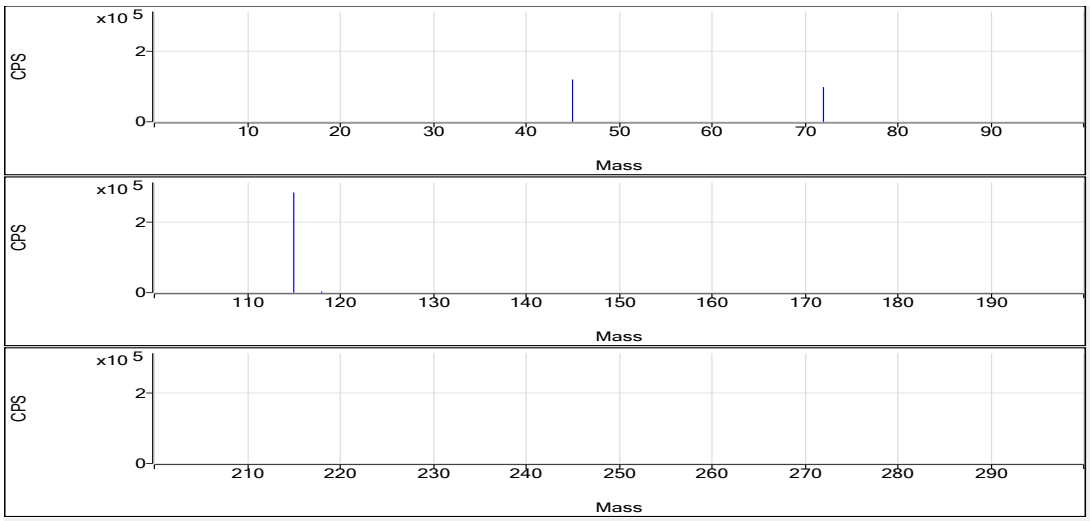
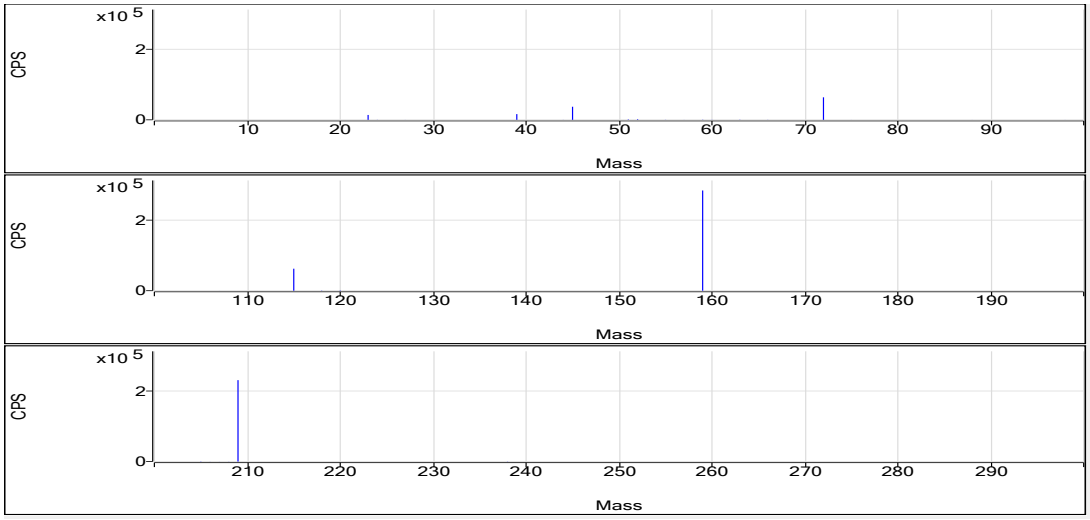


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.039	0.0001	110.00	0.0008	2.195E-05
Be	9	1	No Gas	0.026	0	88.00	0.0008	2.195E-05
Be	9	1	No Gas	0.041	0.0001	110.00	0.0008	2.195E-05
Se	78	2	H2	0.076	0	4.67	0.0004	1.386E-05
Se	78	2	H2	0.031	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.064	0	4.00	0.0004	1.386E-05
Na	23	3	He	-16.832	0.3773	14087.16	0.0038	0.4416
Na	23	3	He	-20.335	0.3639	13656.73	0.0038	0.4416
Na	23	3	He	-17.076	0.3764	14007.13	0.0038	0.4416
Mg	24	3	He	0.729	0.0072	270.01	0.0019	0.005872
Mg	24	3	He	0.424	0.0067	250.01	0.0019	0.005872
Mg	24	3	He	-0.267	0.0054	200.01	0.0019	0.005872
Al	27	3	He	4.318	0.0029	110.00	0.0006	0.0004496
Al	27	3	He	1.988	0.0016	60.00	0.0006	0.0004496
Al	27	3	He	1.081	0.0011	40.00	0.0006	0.0004496
K	39	3	He	-6.926	0.4376	16339.61	0.0012	0.4456
K	39	3	He	-18.537	0.4242	15919.18	0.0012	0.4456
K	39	3	He	2.898	0.449	16709.95	0.0012	0.4456
Ca	44	3	He	-0.44	0.0037	140.00	0.0001	0.003779
Ca	44	3	He	-8.794	0.0032	120.00	0.0001	0.003779
Ca	44	3	He	16.011	0.0048	180.01	0.0001	0.003779
Ti	47	3	He	0.515	0.0003	10.00	0.0005	0
Ti	47	3	He	1.026	0.0005	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.046	0.0295	1102.05	0.0223	0.03054
V	51	3	He	-0.067	0.029	1090.05	0.0223	0.03054
V	51	3	He	0.045	0.0315	1174.05	0.0223	0.03054
Cr	52	3	He	-0.1	0.0343	1280.10	0.0285	0.03714
Cr	52	3	He	0.287	0.0453	1700.16	0.0285	0.03714
Cr	52	3	He	0.385	0.0481	1790.18	0.0285	0.03714
Mn	55	3	He	0.098	0.0056	210.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.332	0.0085	320.01	0.0124	0.004415
Mn	55	3	He	0.294	0.0081	300.01	0.0124	0.004415
Fe	57	3	He	3.748	0.0035	130.01	0.0006	0.001356
Fe	57	3	He	3.717	0.0035	130.01	0.0006	0.001356
Fe	57	3	He	-0.496	0.0011	40.00	0.0006	0.001356
Co	59	3	He	0.138	0.0107	400.02	0.0581	0.002697
Co	59	3	He	0.22	0.0155	580.03	0.0581	0.002697
Co	59	3	He	0.162	0.0121	450.02	0.0581	0.002697
Ni	60	3	He	0.153	0.0053	340.02	0.0087	0.003928
Ni	60	3	He	0.184	0.0055	350.02	0.0087	0.003928
Ni	60	3	He	0.099	0.0048	310.01	0.0087	0.003928
Cu	63	3	He	0.094	0.0085	550.03	0.0261	0.006048
Cu	63	3	He	-0.044	0.0049	310.01	0.0261	0.006048
Cu	63	3	He	0.058	0.0076	490.02	0.0261	0.006048
Zn	66	3	He	0.176	0.004	260.01	0.0029	0.003512
Zn	66	3	He	-0.013	0.0035	220.01	0.0029	0.003512
Zn	66	3	He	0.014	0.0036	230.01	0.0029	0.003512
As	75	3	He	0.068	0.0009	56.00	0.0021	0.0007233
As	75	3	He	0.108	0.0009	60.00	0.0021	0.0007233
As	75	3	He	0.158	0.0011	68.00	0.0021	0.0007233
Sr	88	3	He	0.041	0.0009	60.00	0.009	0.0005796
Sr	88	3	He	0.094	0.0014	90.00	0.009	0.0005796
Sr	88	3	He	0.007	0.0006	40.00	0.009	0.0005796
Mo	98	3	He	0.027	0.0009	60.00	0.0235	0.0003188
Mo	98	3	He	0.027	0.0009	60.00	0.0235	0.0003188
Mo	98	3	He	0.069	0.0019	120.00	0.0235	0.0003188
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Cd	111	3	He	0.032	0.0002	12.00	0.0055	1.07E-05
Cd	111	3	He	0.032	0.0002	12.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	-0.004	0.0171	1080.08	0.0164	0.01713
Sn	120	3	He	-0.011	0.0169	1070.09	0.0164	0.01713
Sn	120	3	He	0.067	0.0182	1130.09	0.0164	0.01713
Sb	121	3	He	0.116	0.0021	130.01	0.0155	0.0002641
Sb	121	3	He	0.014	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Ba	137	3	He	0.032	0.0003	20.00	0.005	0.0001577
Ba	137	3	He	0.159	0.0009	60.00	0.005	0.0001577
Ba	137	3	He	0.163	0.001	60.00	0.005	0.0001577
Tl	205	3	He	0.082	0.0024	680.04	0.026	0.0002504
Tl	205	3	He	0.078	0.0023	650.04	0.026	0.0002504
Tl	205	3	He	0.065	0.002	560.03	0.026	0.0002504
Pb	208	3	He	0.015	0.002	180.01	0.0349	0.001422
Pb	208	3	He	0.014	0.0019	290.01	0.0349	0.001422
Pb	208	3	He	0.008	0.0017	280.01	0.0349	0.001422
U	238	3	He	0.041	0.0021	490.02	0.0502	5.657E-05
U	238	3	He	0.034	0.0018	410.02	0.0502	5.657E-05
U	238	3	He	0.043	0.0022	510.03	0.0502	5.657E-05
Sc	45	1	No Gas			2116311.06		
Sc	45	1	No Gas			2098026.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2056411.22		
Ge	72	1	No Gas			999213.58		
Ge	72	1	No Gas			1014645.92		
Ge	72	1	No Gas			985030.30		
Sc	45	2	H2			118660.86		
Sc	45	2	H2			121152.81		
Sc	45	2	H2			118369.76		
Ge	72	2	H2			99274.09		
Ge	72	2	H2			98096.31		
Ge	72	2	H2			95900.94		
In	115	2	H2			285288.77		
In	115	2	H2			284607.57		
In	115	2	H2			277662.30		
Sc	45	3	He			37338.37		
Sc	45	3	He			37529.20		
Sc	45	3	He			37218.31		
Ge	72	3	He			64747.35		
Ge	72	3	He			63341.01		
Ge	72	3	He			64746.97		
In	115	3	He			63295.24		
In	115	3	He			63174.13		
In	115	3	He			61978.67		
Tb	159	3	He			285790.80		
Tb	159	3	He			286038.24		
Tb	159	3	He			287117.53		
Bi	209	3	He			232506.09		
Bi	209	3	He			232618.63		
Bi	209	3	He			232664.96		

Quantitation Report

Data File Name	081SMPL.d
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Sample Type	Sample
Comment	F16
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

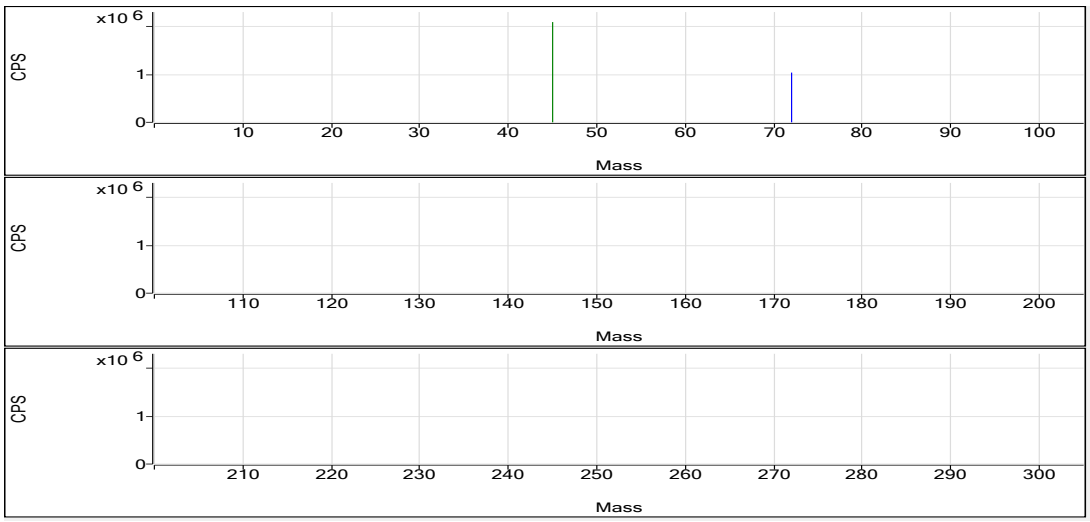
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.010	ppb	49.6	62.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.028	ppb	94.7	2.66	0.0000	Pulse	1.5000	3
Na	23	45	He	-13.387	ppb	N/A	14317.39	0.3905	Pulse	0.1000	3
Mg	24	45	He	0.652	ppb	33.7	260.01	0.0071	Pulse	0.1000	3
Al	27	45	He	41.706	ppb	14.5	900.06	0.0246	Pulse	0.1000	3
K	39	45	He	-2.602	ppb	N/A	16236.17	0.4426	Pulse	0.1000	3
Ca	44	45	He	4.609	ppb	379.8	150.01	0.0041	Pulse	0.1000	3
Ti	47	45	He	0.348	ppb	173.2	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.024	ppb	N/A	1100.05	0.0300	Pulse	0.5000	3
Cr	52	45	He	-0.053	ppb	N/A	1306.77	0.0356	Pulse	0.1000	3
Mn	55	45	He	0.156	ppb	101.2	233.34	0.0064	Pulse	0.1000	3
Fe	57	45	He	1.458	ppb	35.3	80.00	0.0022	Pulse	0.1000	3
Co	59	45	He	0.085	ppb	48.0	280.01	0.0076	Pulse	0.1000	3
Ni	60	72	He	0.007	ppb	938.2	260.01	0.0040	Pulse	0.1000	3
Cu	63	72	He	-0.016	ppb	N/A	366.69	0.0056	Pulse	0.1000	3
Zn	66	72	He	-0.333	ppb	N/A	166.68	0.0026	Pulse	0.1000	3
As	75	72	He	-0.004	ppb	N/A	46.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.045	ppb	162.7	60.00	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.017	ppb	87.0	43.33	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	1032.1	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	148.6	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.177	ppb	13.1	1223.44	0.0200	Pulse	0.1000	3
Sb	121	115	He	0.011	ppb	144.8	26.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.023	ppb	82.2	16.67	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.028	ppb	30.0	286.68	0.0010	Pulse	0.1000	3
Pb	208	159	He	0.004	ppb	168.6	456.69	0.0016	Pulse	0.1000	3
U	238	209	He	0.011	ppb	42.4	140.01	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2091899.08	1.1	102.9	Analog	0.1000	3
No Gas	Ge	72	1037437.41	1.1	103.2	Pulse	0.1000	3
H2	Sc	45	121972.20	1.2	92.3	Pulse	0.1000	3
H2	Ge	72	103107.10	1.2	92.4	Pulse	0.1000	3
H2	In	115	286165.37	0.9	97.4	Pulse	0.1000	3
He	Sc	45	36673.83	0.9	99.2	Pulse	0.1000	3
He	Ge	72	65212.81	0.5	101.0	Pulse	0.1000	3
He	In	115	61081.65	0.3	96.7	Pulse	0.1000	3
He	Tb	159	290603.12	1.0	99.2	Pulse	0.1000	3
He	Bi	209	235561.45	0.7	99.9	Pulse	0.1000	3

No Gas



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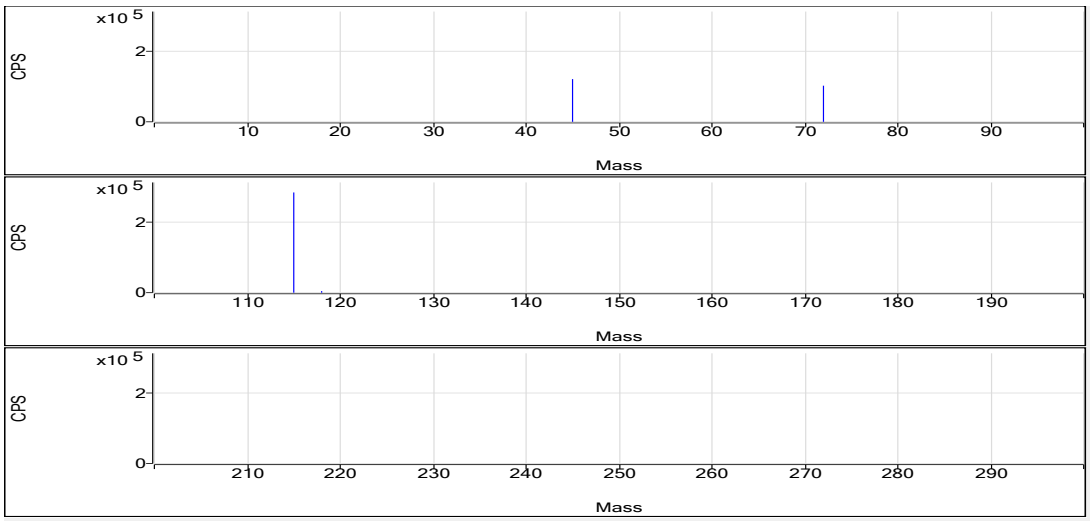
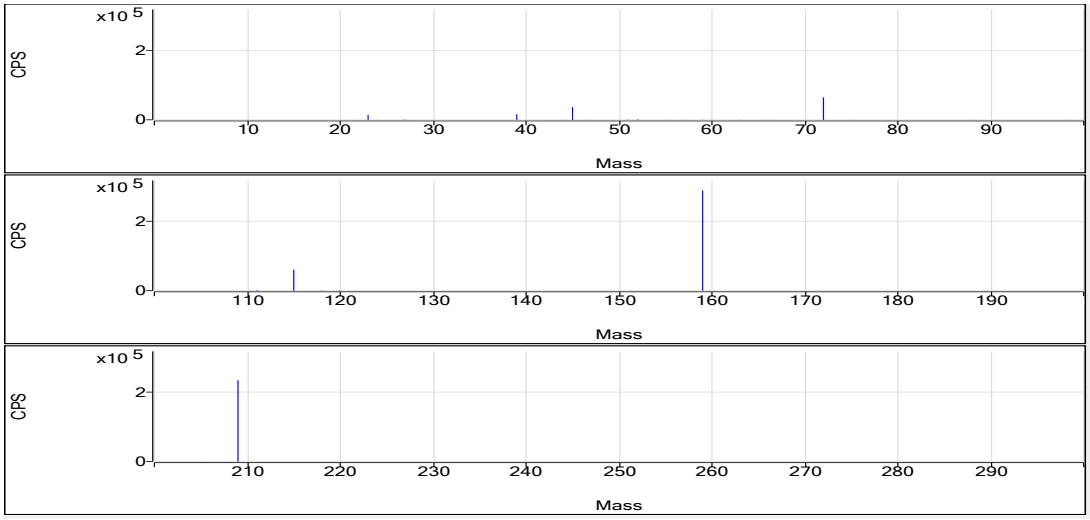


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0	62.00	0.0008	2.195E-05
Be	9	1	No Gas	0.005	0	54.00	0.0008	2.195E-05
Be	9	1	No Gas	0.015	0	70.00	0.0008	2.195E-05
Se	78	2	H2	0.043	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.042	0	3.33	0.0004	1.386E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Na	23	3	He	-16.56	0.3783	13967.01	0.0038	0.4416
Na	23	3	He	-11.153	0.399	14477.57	0.0038	0.4416
Na	23	3	He	-12.447	0.394	14507.60	0.0038	0.4416
Mg	24	3	He	0.774	0.0073	270.01	0.0019	0.005872
Mg	24	3	He	0.398	0.0066	240.01	0.0019	0.005872
Mg	24	3	He	0.784	0.0073	270.01	0.0019	0.005872
Al	27	3	He	35.767	0.0211	780.05	0.0006	0.0004496
Al	27	3	He	47.845	0.0281	1020.08	0.0006	0.0004496
Al	27	3	He	41.504	0.0244	900.05	0.0006	0.0004496
K	39	3	He	7.467	0.4543	16770.23	0.0012	0.4456
K	39	3	He	-20.046	0.4224	15328.46	0.0012	0.4456
K	39	3	He	4.772	0.4511	16609.81	0.0012	0.4456
Ca	44	3	He	16.606	0.0049	180.01	0.0001	0.003779
Ca	44	3	He	-15.477	0.0028	100.00	0.0001	0.003779
Ca	44	3	He	12.697	0.0046	170.01	0.0001	0.003779
Ti	47	3	He	1.043	0.0005	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.172	0.0267	986.04	0.0223	0.03054
V	51	3	He	0.027	0.0311	1130.05	0.0223	0.03054
V	51	3	He	0.073	0.0322	1184.06	0.0223	0.03054
Cr	52	3	He	-0.02	0.0366	1350.11	0.0285	0.03714
Cr	52	3	He	-0.133	0.0333	1210.09	0.0285	0.03714
Cr	52	3	He	-0.007	0.0369	1360.11	0.0285	0.03714
Mn	55	3	He	0.278	0.0079	290.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.023	0.0041	150.01	0.0124	0.004415
Mn	55	3	He	0.214	0.0071	260.01	0.0124	0.004415
Fe	57	3	He	0.952	0.0019	70.00	0.0006	0.001356
Fe	57	3	He	1.982	0.0025	90.00	0.0006	0.001356
Fe	57	3	He	1.44	0.0022	80.00	0.0006	0.001356
Co	59	3	He	0.131	0.0103	380.02	0.0581	0.002697
Co	59	3	He	0.053	0.0058	210.01	0.0581	0.002697
Co	59	3	He	0.07	0.0068	250.01	0.0581	0.002697
Ni	60	3	He	0.023	0.0041	270.01	0.0087	0.003928
Ni	60	3	He	-0.062	0.0034	220.01	0.0087	0.003928
Ni	60	3	He	0.058	0.0044	290.02	0.0087	0.003928
Cu	63	3	He	-0.032	0.0052	340.02	0.0261	0.006048
Cu	63	3	He	-0.048	0.0048	310.01	0.0261	0.006048
Cu	63	3	He	0.032	0.0069	450.03	0.0261	0.006048
Zn	66	3	He	-0.424	0.0023	150.01	0.0029	0.003512
Zn	66	3	He	-0.149	0.0031	200.01	0.0029	0.003512
Zn	66	3	He	-0.426	0.0023	150.01	0.0029	0.003512
As	75	3	He	-0.024	0.0007	44.00	0.0021	0.0007233
As	75	3	He	0.008	0.0007	48.00	0.0021	0.0007233
As	75	3	He	0.005	0.0007	48.00	0.0021	0.0007233
Sr	88	3	He	-0.028	0.0003	20.00	0.009	0.0005796
Sr	88	3	He	0.118	0.0016	100.00	0.009	0.0005796
Sr	88	3	He	0.045	0.001	60.00	0.009	0.0005796
Mo	98	3	He	0	0.0003	20.00	0.0235	0.0003188
Mo	98	3	He	0.028	0.001	60.00	0.0235	0.0003188
Mo	98	3	He	0.021	0.0008	50.00	0.0235	0.0003188
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	0.198	0.0204	1240.11	0.0164	0.01713
Sn	120	3	He	0.152	0.0196	1200.09	0.0164	0.01713
Sn	120	3	He	0.18	0.0201	1230.11	0.0164	0.01713
Sb	121	3	He	-0.006	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.015	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.025	0.0007	40.00	0.0155	0.0002641
Ba	137	3	He	0.034	0.0003	20.00	0.005	0.0001577
Ba	137	3	He	0.001	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0.034	0.0003	20.00	0.005	0.0001577
Tl	205	3	He	0.018	0.0007	210.01	0.026	0.0002504
Tl	205	3	He	0.034	0.0011	330.02	0.026	0.0002504
Tl	205	3	He	0.032	0.0011	320.01	0.026	0.0002504
Pb	208	3	He	-0.002	0.0014	250.01	0.0349	0.001422
Pb	208	3	He	0.002	0.0015	220.01	0.0349	0.001422
Pb	208	3	He	0.012	0.0018	280.01	0.0349	0.001422
U	238	3	He	0.009	0.0005	120.01	0.0502	5.657E-05
U	238	3	He	0.007	0.0004	100.00	0.0502	5.657E-05
U	238	3	He	0.016	0.0009	200.01	0.0502	5.657E-05
Sc	45	1	No Gas			2064563.09		
Sc	45	1	No Gas			2105404.97		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2105729.19		
Ge	72	1	No Gas			1025888.81		
Ge	72	1	No Gas			1049163.66		
Ge	72	1	No Gas			1037259.75		
Sc	45	2	H2			120244.30		
Sc	45	2	H2			123027.66		
Sc	45	2	H2			122644.64		
Ge	72	2	H2			101912.17		
Ge	72	2	H2			102999.07		
Ge	72	2	H2			104410.07		
In	115	2	H2			283650.02		
In	115	2	H2			286239.68		
In	115	2	H2			288606.40		
Sc	45	3	He			36918.08		
Sc	45	3	He			36285.81		
Sc	45	3	He			36817.61		
Ge	72	3	He			65349.99		
Ge	72	3	He			64827.95		
Ge	72	3	He			65460.49		
In	115	3	He			60863.54		
In	115	3	He			61155.61		
In	115	3	He			61245.75		
Tb	159	3	He			287234.02		
Tb	159	3	He			291714.12		
Tb	159	3	He			292861.21		
Bi	209	3	He			237502.81		
Bi	209	3	He			235080.17		
Bi	209	3	He			234101.36		

Quantitation Report

Data File Name	082SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:02:50 AM
Sample Name	LCS 410-402447/2-A
Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

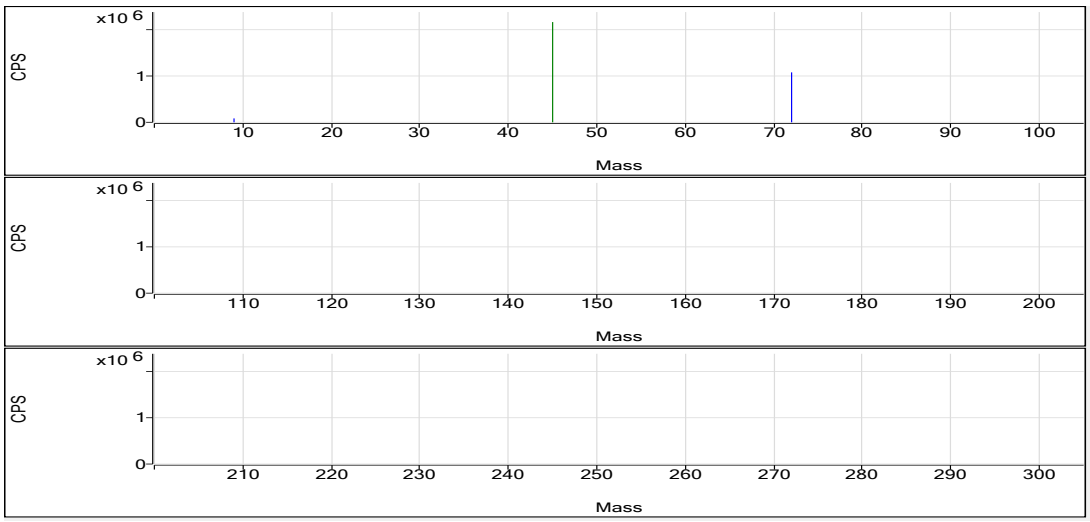
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.606	ppb	2.1	84171.35	0.0389	Pulse	0.5000	3
Se	78	72	H2	108.445	ppb	0.5	4953.97	0.0472	Pulse	1.5000	3
Na	23	45	He	5036.621	ppb	4.5	763609.83	19.6887	Pulse	0.1000	3
Mg	24	45	He	5234.073	ppb	4.4	378681.48	9.7636	Pulse	0.1000	3
Al	27	45	He	5107.255	ppb	4.1	114556.80	2.9533	Pulse	0.1000	3
K	39	45	He	5181.134	ppb	4.7	249696.17	6.4375	Pulse	0.1000	3
Ca	44	45	He	5145.955	ppb	4.1	13336.48	0.3438	Pulse	0.1000	3
Ti	47	45	He	523.476	ppb	5.7	10547.48	0.2720	Pulse	0.1000	3
V	51	45	He	520.644	ppb	4.5	451341.86	11.6377	Pulse	0.5000	3
Cr	52	45	He	528.181	ppb	4.6	584275.60	15.0657	Pulse	0.1000	3
Mn	55	45	He	512.796	ppb	4.5	246473.71	6.3551	Pulse	0.1000	3
Fe	57	45	He	5257.645	ppb	4.4	115721.24	2.9838	Pulse	0.1000	3
Co	59	45	He	494.798	ppb	4.4	1114976.89	28.7486	Pulse	0.1000	3
Ni	60	72	He	523.498	ppb	1.4	310488.85	4.5412	Pulse	0.1000	3
Cu	63	72	He	493.679	ppb	1.3	882586.39	12.9087	Pulse	0.1000	3
Zn	66	72	He	515.836	ppb	1.2	101302.93	1.4816	Pulse	0.1000	3
As	75	72	He	516.718	ppb	1.0	73092.58	1.0690	Pulse	0.5000	3
Sr	88	115	He	53.552	ppb	0.6	29999.30	0.4800	Pulse	0.1000	3
Mo	98	115	He	53.333	ppb	0.4	78398.67	1.2545	Pulse	0.1000	3
Ag	107	115	He	53.196	ppb	1.1	165774.65	2.6526	Pulse	0.1000	3
Cd	111	115	He	54.201	ppb	1.8	18771.30	0.3003	Pulse	0.5000	3
Sn	120	115	He	104.694	ppb	0.8	108500.45	1.7361	Pulse	0.1000	3
Sb	121	115	He	104.059	ppb	1.3	100604.30	1.6098	Pulse	0.1000	3
Ba	137	115	He	525.744	ppb	0.9	163586.52	2.6176	Pulse	0.1000	3
Tl	205	159	He	105.936	ppb	1.1	807320.95	2.7589	Pulse	0.1000	3
Pb	208	159	He	52.407	ppb	0.7	536210.54	1.8324	Pulse	0.1000	3
U	238	209	He	52.222	ppb	0.5	612704.46	2.6233	Pulse	0.1000	3

ISTD Table:

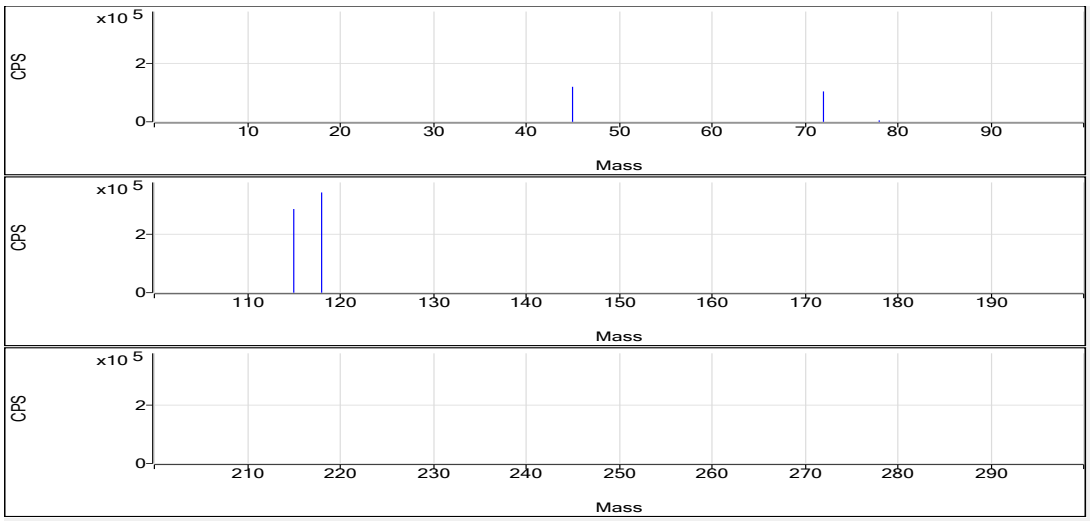
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2167228.40	2.6	106.6	Analog	0.1000	3
No Gas	Ge	72	1079638.42	1.2	107.4	Pulse	0.1000	3
H2	Sc	45	120967.39	0.6	91.6	Pulse	0.1000	3
H2	Ge	72	105024.12	1.2	94.2	Pulse	0.1000	3
H2	In	115	289073.11	0.6	98.4	Pulse	0.1000	3
He	Sc	45	38836.04	4.5	105.1	Pulse	0.1000	3
He	Ge	72	68376.98	0.9	105.9	Pulse	0.1000	3
He	In	115	62497.17	0.8	98.9	Pulse	0.1000	3
He	Tb	159	292633.21	0.5	99.9	Pulse	0.1000	3
He	Bi	209	233550.97	1.7	99.0	Pulse	0.1000	3

No Gas

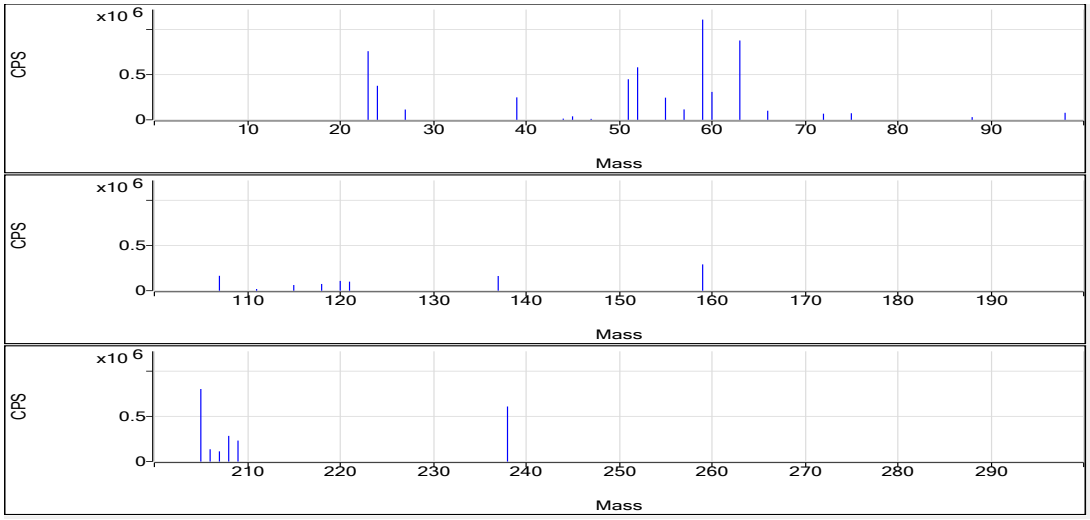


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.748	0.0382	84222.89	0.0008	2.195E-05
Be	9	1	No Gas	51.823	0.0398	83603.52	0.0008	2.195E-05
Be	9	1	No Gas	50.246	0.0386	84687.63	0.0008	2.195E-05
Se	78	2	H2	108.72	0.0473	4909.51	0.0004	1.386E-05
Se	78	2	H2	108.742	0.0473	4961.53	0.0004	1.386E-05
Se	78	2	H2	107.872	0.0469	4990.88	0.0004	1.386E-05
Na	23	3	He	5299.367	20.6927	761441.08	0.0038	0.4416
Na	23	3	He	4887.92	19.1204	760714.83	0.0038	0.4416
Na	23	3	He	4922.577	19.2529	768673.58	0.0038	0.4416
Mg	24	3	He	5496.703	10.2532	377292.22	0.0019	0.005872
Mg	24	3	He	5086.451	9.4884	377499.68	0.0019	0.005872
Mg	24	3	He	5119.063	9.5492	381252.53	0.0019	0.005872
Al	27	3	He	5343.808	3.0901	113707.53	0.0006	0.0004496
Al	27	3	He	4953.782	2.8646	113968.89	0.0006	0.0004496
Al	27	3	He	5024.175	2.9053	115993.98	0.0006	0.0004496
K	39	3	He	5448.415	6.7466	248258.80	0.0012	0.4456
K	39	3	He	4980.233	6.2052	246875.80	0.0012	0.4456
K	39	3	He	5114.755	6.3607	253953.92	0.0012	0.4456
Ca	44	3	He	5386.427	0.3597	13236.40	0.0001	0.003779
Ca	44	3	He	4992.786	0.3337	13276.32	0.0001	0.003779
Ca	44	3	He	5058.653	0.3381	13496.71	0.0001	0.003779
Ti	47	3	He	553.578	0.2876	10584.14	0.0005	0
Ti	47	3	He	493.61	0.2565	10203.91	0.0005	0
Ti	47	3	He	523.239	0.2719	10854.39	0.0005	0
V	51	3	He	547.881	12.2449	450581.59	0.0223	0.03054
V	51	3	He	508.112	11.3583	451895.59	0.0223	0.03054
V	51	3	He	505.94	11.3099	451548.41	0.0223	0.03054
Cr	52	3	He	556.266	15.8648	583784.09	0.0285	0.03714
Cr	52	3	He	514.759	14.6838	584200.42	0.0285	0.03714
Cr	52	3	He	513.519	14.6485	584842.30	0.0285	0.03714
Mn	55	3	He	538.921	6.6786	245756.05	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	503.588	6.241	248302.54	0.0124	0.004415
Mn	55	3	He	495.879	6.1456	245362.54	0.0124	0.004415
Fe	57	3	He	5527.569	3.1369	115429.27	0.0006	0.001356
Fe	57	3	He	5131.903	2.9124	115872.59	0.0006	0.001356
Fe	57	3	He	5113.464	2.902	115861.86	0.0006	0.001356
Co	59	3	He	520.151	30.2215	1112074.83	0.0581	0.002697
Co	59	3	He	483.156	28.0722	1116866.55	0.0581	0.002697
Co	59	3	He	481.087	27.952	1115989.28	0.0581	0.002697
Ni	60	3	He	531.669	4.6121	312099.33	0.0087	0.003928
Ni	60	3	He	521.358	4.5227	310095.64	0.0087	0.003928
Ni	60	3	He	517.467	4.489	309271.58	0.0087	0.003928
Cu	63	3	He	500.194	13.0789	885054.13	0.0261	0.006048
Cu	63	3	He	493.224	12.8967	884258.81	0.0261	0.006048
Cu	63	3	He	487.621	12.7503	878446.24	0.0261	0.006048
Zn	66	3	He	520.756	1.4957	101216.35	0.0029	0.003512
Zn	66	3	He	517.788	1.4872	101970.77	0.0029	0.003512
Zn	66	3	He	508.963	1.4619	100721.68	0.0029	0.003512
As	75	3	He	522.509	1.081	73151.60	0.0021	0.0007233
As	75	3	He	513.718	1.0628	72872.06	0.0021	0.0007233
As	75	3	He	513.926	1.0633	73254.08	0.0021	0.0007233
Sr	88	3	He	53.895	0.4831	29982.54	0.009	0.0005796
Sr	88	3	He	53.398	0.4786	29872.40	0.009	0.0005796
Sr	88	3	He	53.363	0.4783	30142.95	0.009	0.0005796
Mo	98	3	He	53.366	1.2552	77905.97	0.0235	0.0003188
Mo	98	3	He	53.543	1.2594	78600.18	0.0235	0.0003188
Mo	98	3	He	53.089	1.2487	78689.86	0.0235	0.0003188
Ag	107	3	He	53.13	2.6493	164428.34	0.0499	0.0004754
Ag	107	3	He	53.824	2.6839	167505.00	0.0499	0.0004754
Ag	107	3	He	52.633	2.6246	165390.60	0.0499	0.0004754
Cd	111	3	He	54.736	0.3033	18824.72	0.0055	1.07E-05
Cd	111	3	He	53.1	0.2942	18364.08	0.0055	1.07E-05
Cd	111	3	He	54.769	0.3035	19125.10	0.0055	1.07E-05
Sn	120	3	He	105.58	1.7507	108655.56	0.0164	0.01713
Sn	120	3	He	104.477	1.7326	108130.97	0.0164	0.01713
Sn	120	3	He	104.026	1.7252	108714.83	0.0164	0.01713
Sb	121	3	He	105.586	1.6335	101380.47	0.0155	0.0002641
Sb	121	3	He	103.676	1.6039	100101.40	0.0155	0.0002641
Sb	121	3	He	102.914	1.5921	100331.02	0.0155	0.0002641
Ba	137	3	He	527.818	2.6279	163101.21	0.005	0.0001577
Ba	137	3	He	528.959	2.6336	164364.94	0.005	0.0001577
Ba	137	3	He	520.454	2.5913	163293.40	0.005	0.0001577
Tl	205	3	He	105.096	2.737	798191.63	0.026	0.0002504
Tl	205	3	He	105.395	2.7447	808208.82	0.026	0.0002504
Tl	205	3	He	107.318	2.7948	815562.41	0.026	0.0002504
Pb	208	3	He	52.472	1.8347	283772.36	0.0349	0.001422
Pb	208	3	He	52.034	1.8194	285695.62	0.0349	0.001422
Pb	208	3	He	52.716	1.8432	287568.51	0.0349	0.001422
U	238	3	He	51.936	2.6089	597043.86	0.0502	5.657E-05
U	238	3	He	52.456	2.6351	622314.21	0.0502	5.657E-05
U	238	3	He	52.274	2.6259	618755.30	0.0502	5.657E-05
Sc	45	1	No Gas			2205091.06		
Sc	45	1	No Gas			2101281.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2195313.09		
Ge	72	1	No Gas			1084577.02		
Ge	72	1	No Gas			1064902.25		
Ge	72	1	No Gas			1089436.00		
Sc	45	2	H2			121726.47		
Sc	45	2	H2			120457.63		
Sc	45	2	H2			120718.06		
Ge	72	2	H2			103814.83		
Ge	72	2	H2			104893.20		
Ge	72	2	H2			106364.33		
In	115	2	H2			290484.92		
In	115	2	H2			289668.80		
In	115	2	H2			287065.62		
Sc	45	3	He			36797.50		
Sc	45	3	He			39785.46		
Sc	45	3	He			39925.16		
Ge	72	3	He			67670.34		
Ge	72	3	He			68564.50		
Ge	72	3	He			68896.09		
In	115	3	He			62651.84		
In	115	3	He			62992.92		
In	115	3	He			63596.34		
Tb	159	3	He			291633.30		
Tb	159	3	He			294456.34		
Tb	159	3	He			291810.00		
Bi	209	3	He			228848.63		
Bi	209	3	He			236166.83		
Bi	209	3	He			235637.44		

Quantitation Report

Data File Name	084_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:06:58 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

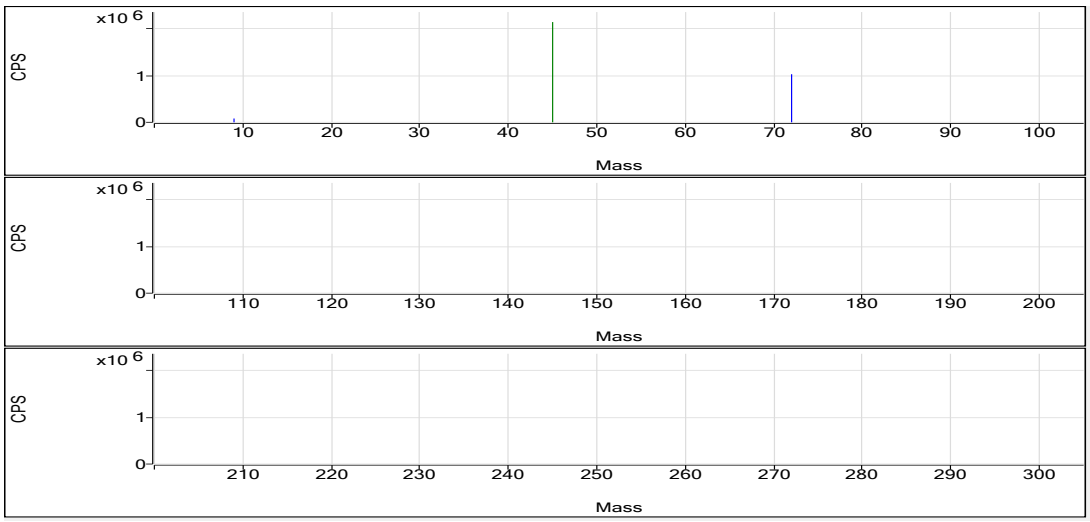
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.186	ppb	1.1	81101.90	0.0378	Pulse	0.5000	3
Se	78	72	H2	53.260	ppb	3.4	2397.54	0.0232	Pulse	1.5000	3
Na	23	45	He	4982.591	ppb	1.2	725932.07	19.4822	Pulse	0.1000	3
Mg	24	45	He	5209.073	ppb	1.1	362074.84	9.7170	Pulse	0.1000	3
Al	27	45	He	5076.746	ppb	1.1	109387.69	2.9357	Pulse	0.1000	3
K	39	45	He	5131.010	ppb	1.9	237695.28	6.3795	Pulse	0.1000	3
Ca	44	45	He	5272.333	ppb	1.2	13122.98	0.3522	Pulse	0.1000	3
Ti	47	45	He	5173.294	ppb	2.2	100147.17	2.6880	Pulse	0.1000	3
V	51	45	He	515.003	ppb	1.4	428938.20	11.5119	Pulse	0.5000	3
Cr	52	45	He	522.107	ppb	1.5	554905.16	14.8928	Pulse	0.1000	3
Mn	55	45	He	508.436	ppb	2.0	234766.97	6.3011	Pulse	0.1000	3
Fe	57	45	He	5174.101	ppb	0.4	109422.22	2.9364	Pulse	0.1000	3
Co	59	45	He	488.100	ppb	1.5	1056666.91	28.3595	Pulse	0.1000	3
Ni	60	72	He	528.020	ppb	1.3	295706.23	4.5804	Pulse	0.1000	3
Cu	63	72	He	495.235	ppb	1.4	835978.69	12.9493	Pulse	0.1000	3
Zn	66	72	He	518.798	ppb	1.9	96194.88	1.4901	Pulse	0.1000	3
As	75	72	He	518.607	ppb	0.6	69271.73	1.0729	Pulse	0.5000	3
Sr	88	115	He	50.867	ppb	2.5	28182.20	0.4560	Pulse	0.1000	3
Mo	98	115	He	52.071	ppb	1.4	75690.64	1.2248	Pulse	0.1000	3
Ag	107	115	He	53.357	ppb	1.5	164424.56	2.6606	Pulse	0.1000	3
Cd	111	115	He	52.150	ppb	1.6	17858.78	0.2890	Pulse	0.5000	3
Sn	120	115	He	52.585	ppb	1.2	54417.65	0.8805	Pulse	0.1000	3
Sb	121	115	He	50.972	ppb	1.1	48743.05	0.7887	Pulse	0.1000	3
Ba	137	115	He	511.432	ppb	1.1	157364.72	2.5464	Pulse	0.1000	3
Tl	205	159	He	51.403	ppb	1.3	389437.01	1.3388	Pulse	0.1000	3
Pb	208	159	He	51.013	ppb	0.7	518860.02	1.7837	Pulse	0.1000	3
U	238	209	He	50.148	ppb	0.4	588085.67	2.5191	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2147795.18	0.9	105.7	Analog	0.1000	3
No Gas	Ge	72	1030297.95	0.9	102.5	Pulse	0.1000	3
H2	Sc	45	122479.23	0.8	92.7	Pulse	0.1000	3
H2	Ge	72	103486.65	1.3	92.8	Pulse	0.1000	3
H2	In	115	285645.47	0.3	97.3	Pulse	0.1000	3
He	Sc	45	37265.43	1.5	100.9	Pulse	0.1000	3
He	Ge	72	64566.64	1.5	100.0	Pulse	0.1000	3
He	In	115	61801.53	0.4	97.8	Pulse	0.1000	3
He	Tb	159	290896.88	0.5	99.3	Pulse	0.1000	3
He	Bi	209	233449.56	0.4	99.0	Pulse	0.1000	3

No Gas



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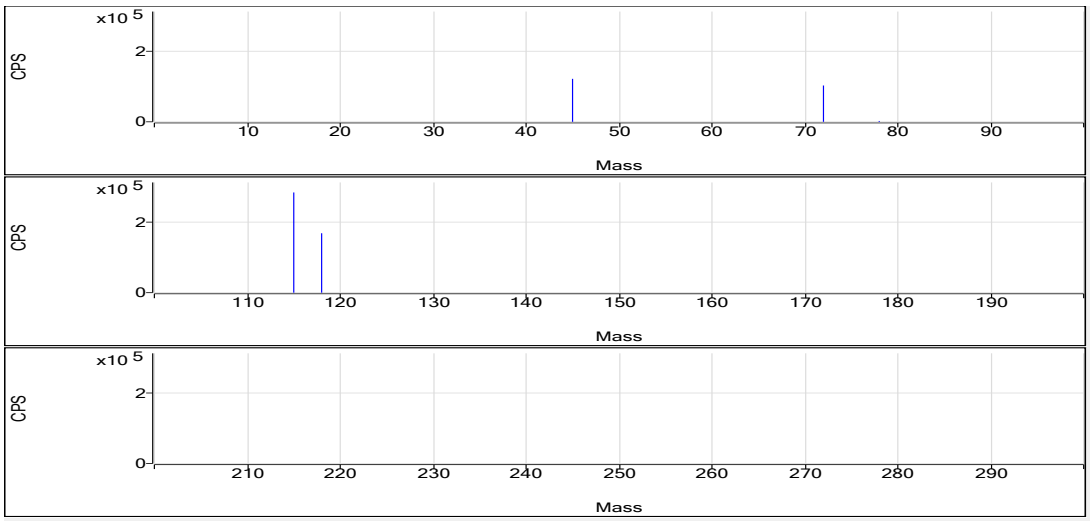
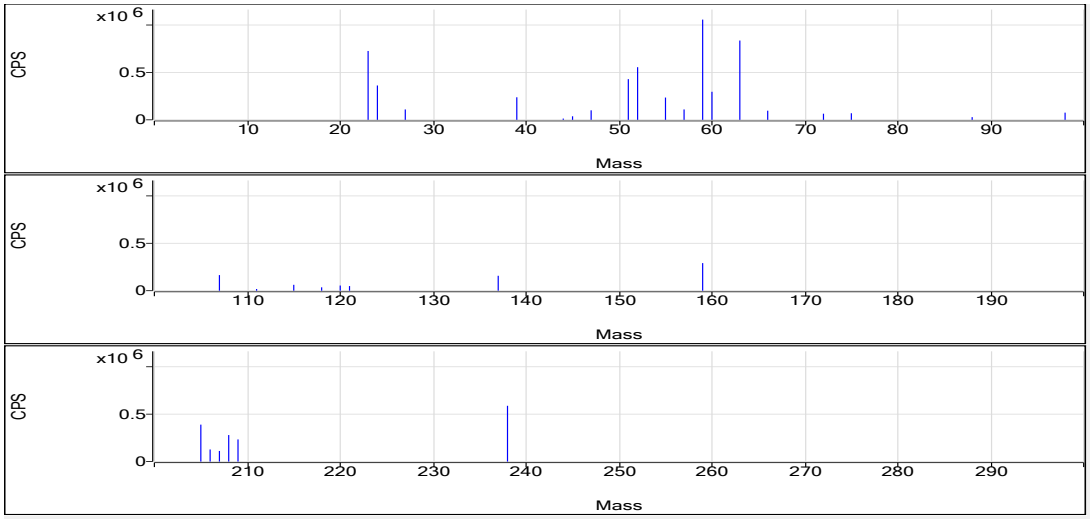


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.907	0.0375	80858.49	0.0008	2.195E-05
Be	9	1	No Gas	48.854	0.0375	81146.15	0.0008	2.195E-05
Be	9	1	No Gas	49.797	0.0382	81301.05	0.0008	2.195E-05
Se	78	2	H2	55.107	0.024	2451.55	0.0004	1.386E-05
Se	78	2	H2	53.156	0.0231	2390.21	0.0004	1.386E-05
Se	78	2	H2	51.517	0.0224	2350.86	0.0004	1.386E-05
Na	23	3	He	4938.31	19.313	730808.74	0.0038	0.4416
Na	23	3	He	4956.722	19.3833	721805.93	0.0038	0.4416
Na	23	3	He	5052.741	19.7503	725181.55	0.0038	0.4416
Mg	24	3	He	5177.223	9.6576	365446.52	0.0019	0.005872
Mg	24	3	He	5176.769	9.6568	359602.85	0.0019	0.005872
Mg	24	3	He	5273.227	9.8366	361175.15	0.0019	0.005872
Al	27	3	He	5020.587	2.9032	109858.32	0.0006	0.0004496
Al	27	3	He	5081.117	2.9382	109414.33	0.0006	0.0004496
Al	27	3	He	5128.535	2.9656	108890.41	0.0006	0.0004496
K	39	3	He	5043.929	6.2788	237593.06	0.0012	0.4456
K	39	3	He	5113.059	6.3588	236791.46	0.0012	0.4456
K	39	3	He	5236.042	6.501	238701.31	0.0012	0.4456
Ca	44	3	He	5268.473	0.3519	13316.56	0.0001	0.003779
Ca	44	3	He	5212.131	0.3482	12966.13	0.0001	0.003779
Ca	44	3	He	5336.396	0.3564	13086.25	0.0001	0.003779
Ti	47	3	He	5071.417	2.635	99710.79	0.0005	0
Ti	47	3	He	5154.928	2.6784	99740.79	0.0005	0
Ti	47	3	He	5293.537	2.7505	100989.92	0.0005	0
V	51	3	He	508.679	11.3709	430279.31	0.0223	0.03054
V	51	3	He	513.523	11.4789	427457.72	0.0223	0.03054
V	51	3	He	522.807	11.6859	429077.56	0.0223	0.03054
Cr	52	3	He	514.104	14.6651	554932.57	0.0285	0.03714
Cr	52	3	He	522.73	14.9106	555246.01	0.0285	0.03714
Cr	52	3	He	529.486	15.1028	554536.91	0.0285	0.03714
Mn	55	3	He	497.365	6.164	233246.05	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	511.295	6.3365	235960.66	0.0124	0.004415
Mn	55	3	He	516.648	6.4028	235094.20	0.0124	0.004415
Fe	57	3	He	5167.113	2.9324	110963.18	0.0006	0.001356
Fe	57	3	He	5159.141	2.9279	109029.99	0.0006	0.001356
Fe	57	3	He	5196.048	2.9488	108273.50	0.0006	0.001356
Co	59	3	He	479.753	27.8745	1054778.81	0.0581	0.002697
Co	59	3	He	490.184	28.4805	1060570.84	0.0581	0.002697
Co	59	3	He	494.364	28.7234	1054651.08	0.0581	0.002697
Ni	60	3	He	522.589	4.5334	295162.09	0.0087	0.003928
Ni	60	3	He	535.701	4.647	294906.19	0.0087	0.003928
Ni	60	3	He	525.771	4.5609	297050.41	0.0087	0.003928
Cu	63	3	He	491.035	12.8396	835969.68	0.0261	0.006048
Cu	63	3	He	503.156	13.1563	834923.27	0.0261	0.006048
Cu	63	3	He	491.512	12.852	837043.11	0.0261	0.006048
Zn	66	3	He	510.471	1.4663	95466.42	0.0029	0.003512
Zn	66	3	He	529.514	1.5208	96514.00	0.0029	0.003512
Zn	66	3	He	516.408	1.4833	96604.22	0.0029	0.003512
As	75	3	He	517.485	1.0706	69706.45	0.0021	0.0007233
As	75	3	He	522.074	1.0801	68545.02	0.0021	0.0007233
As	75	3	He	516.263	1.0681	69563.73	0.0021	0.0007233
Sr	88	3	He	51.402	0.4608	28549.49	0.009	0.0005796
Sr	88	3	He	49.401	0.4429	27237.07	0.009	0.0005796
Sr	88	3	He	51.797	0.4643	28760.03	0.009	0.0005796
Mo	98	3	He	51.642	1.2147	75262.38	0.0235	0.0003188
Mo	98	3	He	52.935	1.2451	76578.15	0.0235	0.0003188
Mo	98	3	He	51.636	1.2146	75231.39	0.0235	0.0003188
Ag	107	3	He	52.869	2.6363	163345.78	0.0499	0.0004754
Ag	107	3	He	54.268	2.706	166430.84	0.0499	0.0004754
Ag	107	3	He	52.934	2.6395	163497.07	0.0499	0.0004754
Cd	111	3	He	51.369	0.2847	17637.17	0.0055	1.07E-05
Cd	111	3	He	52.984	0.2936	18057.70	0.0055	1.07E-05
Cd	111	3	He	52.096	0.2887	17881.47	0.0055	1.07E-05
Sn	120	3	He	51.953	0.8702	53915.45	0.0164	0.01713
Sn	120	3	He	53.182	0.8904	54759.46	0.0164	0.01713
Sn	120	3	He	52.62	0.8811	54578.04	0.0164	0.01713
Sb	121	3	He	51.631	0.7989	49498.96	0.0155	0.0002641
Sb	121	3	He	50.696	0.7844	48244.62	0.0155	0.0002641
Sb	121	3	He	50.588	0.7828	48485.57	0.0155	0.0002641
Ba	137	3	He	505.879	2.5187	156058.70	0.005	0.0001577
Ba	137	3	He	516.738	2.5728	158233.81	0.005	0.0001577
Ba	137	3	He	511.681	2.5476	157801.66	0.005	0.0001577
Tl	205	3	He	50.68	1.32	386029.53	0.026	0.0002504
Tl	205	3	He	51.585	1.3435	389790.19	0.026	0.0002504
Tl	205	3	He	51.944	1.3529	392491.32	0.026	0.0002504
Pb	208	3	He	50.672	1.7718	279438.77	0.0349	0.001422
Pb	208	3	He	50.989	1.7829	279437.93	0.0349	0.001422
Pb	208	3	He	51.378	1.7964	279672.36	0.0349	0.001422
U	238	3	He	49.976	2.5105	583696.83	0.0502	5.657E-05
U	238	3	He	50.119	2.5176	590020.62	0.0502	5.657E-05
U	238	3	He	50.349	2.5292	590539.56	0.0502	5.657E-05
Sc	45	1	No Gas			2153425.91		
Sc	45	1	No Gas			2163425.75		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2126533.87		
Ge	72	1	No Gas			1021296.31		
Ge	72	1	No Gas			1040002.95		
Ge	72	1	No Gas			1029594.59		
Sc	45	2	H2			121534.81		
Sc	45	2	H2			123409.73		
Sc	45	2	H2			122493.15		
Ge	72	2	H2			102243.94		
Ge	72	2	H2			103342.52		
Ge	72	2	H2			104873.49		
In	115	2	H2			286686.81		
In	115	2	H2			284805.31		
In	115	2	H2			285444.29		
Sc	45	3	He			37840.28		
Sc	45	3	He			37238.46		
Sc	45	3	He			36717.54		
Ge	72	3	He			65108.93		
Ge	72	3	He			63461.67		
Ge	72	3	He			65129.32		
In	115	3	He			62240.12		
In	115	3	He			61777.82		
In	115	3	He			62219.31		
Tb	159	3	He			292453.43		
Tb	159	3	He			290122.11		
Tb	159	3	He			290115.11		
Bi	209	3	He			232505.15		
Bi	209	3	He			234354.86		
Bi	209	3	He			233488.67		

Quantitation Report

Data File Name	085_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

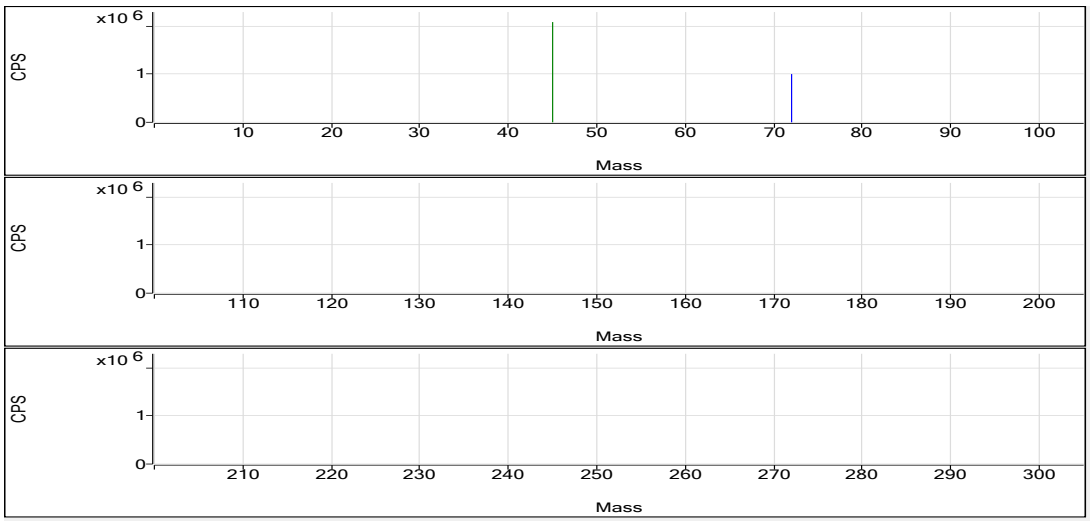
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.032	ppb	24.2	97.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.044	ppb	3.9	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	-20.261	ppb	N/A	13663.39	0.3642	Pulse	0.1000	3
Mg	24	45	He	0.425	ppb	62.6	250.01	0.0067	Pulse	0.1000	3
Al	27	45	He	1.833	ppb	38.2	56.67	0.0015	Pulse	0.1000	3
K	39	45	He	-10.262	ppb	N/A	16276.26	0.4338	Pulse	0.1000	3
Ca	44	45	He	-11.519	ppb	N/A	113.34	0.0030	Pulse	0.1000	3
Ti	47	45	He	1.544	ppb	120.1	30.00	0.0008	Pulse	0.1000	3
V	51	45	He	0.028	ppb	188.1	1169.39	0.0312	Pulse	0.5000	3
Cr	52	45	He	0.053	ppb	24.9	1450.13	0.0386	Pulse	0.1000	3
Mn	55	45	He	0.195	ppb	82.5	256.68	0.0068	Pulse	0.1000	3
Fe	57	45	He	2.456	ppb	76.0	103.34	0.0027	Pulse	0.1000	3
Co	59	45	He	0.152	ppb	13.3	433.35	0.0116	Pulse	0.1000	3
Ni	60	72	He	0.105	ppb	121.3	310.01	0.0048	Pulse	0.1000	3
Cu	63	72	He	0.093	ppb	32.6	543.37	0.0085	Pulse	0.1000	3
Zn	66	72	He	-0.011	ppb	N/A	223.34	0.0035	Pulse	0.1000	3
As	75	72	He	0.219	ppb	26.9	75.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.019	ppb	191.0	46.67	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.053	ppb	41.1	96.67	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.010	ppb	56.7	60.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	59.2	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.082	ppb	129.8	1143.42	0.0185	Pulse	0.1000	3
Sb	121	115	He	0.039	ppb	158.7	53.34	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.141	ppb	26.5	53.33	0.0009	Pulse	0.1000	3
Tl	205	159	He	0.104	ppb	13.0	856.73	0.0030	Pulse	0.1000	3
Pb	208	159	He	0.006	ppb	46.1	473.35	0.0016	Pulse	0.1000	3
U	238	209	He	0.047	ppb	8.3	556.70	0.0024	Pulse	0.1000	3

ISTD Table:

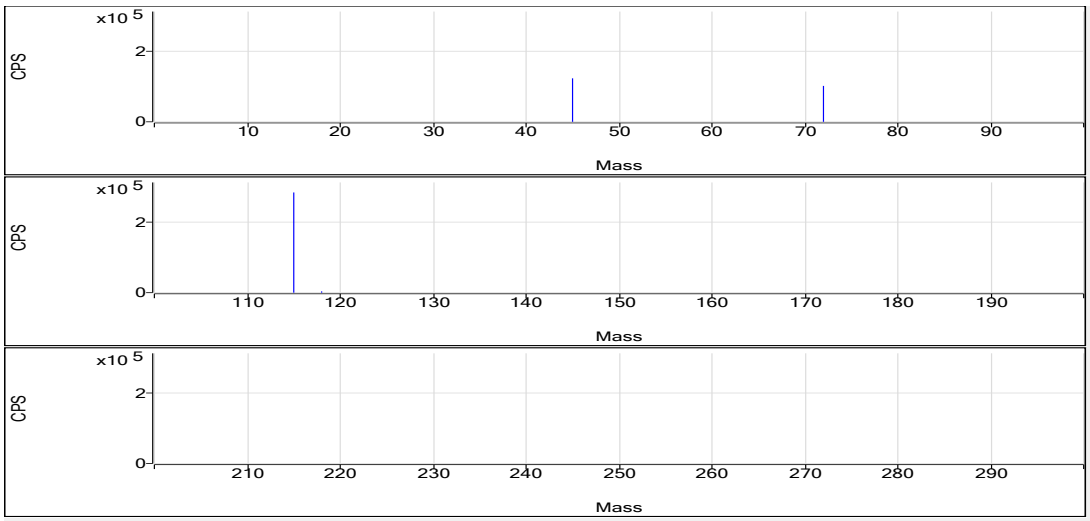
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2083752.42	0.5	102.5	Analog	0.1000	3
No Gas	Ge	72	1002787.90	0.8	99.8	Pulse	0.1000	3
H2	Sc	45	122856.34	2.0	93.0	Pulse	0.1000	3
H2	Ge	72	101455.29	2.3	91.0	Pulse	0.1000	3
H2	In	115	283185.45	0.3	96.4	Pulse	0.1000	3
He	Sc	45	37525.97	0.7	101.6	Pulse	0.1000	3
He	Ge	72	64114.28	0.5	99.3	Pulse	0.1000	3
He	In	115	61899.31	0.8	98.0	Pulse	0.1000	3
He	Tb	159	290098.29	0.6	99.1	Pulse	0.1000	3
He	Bi	209	232098.00	0.5	98.4	Pulse	0.1000	3

No Gas

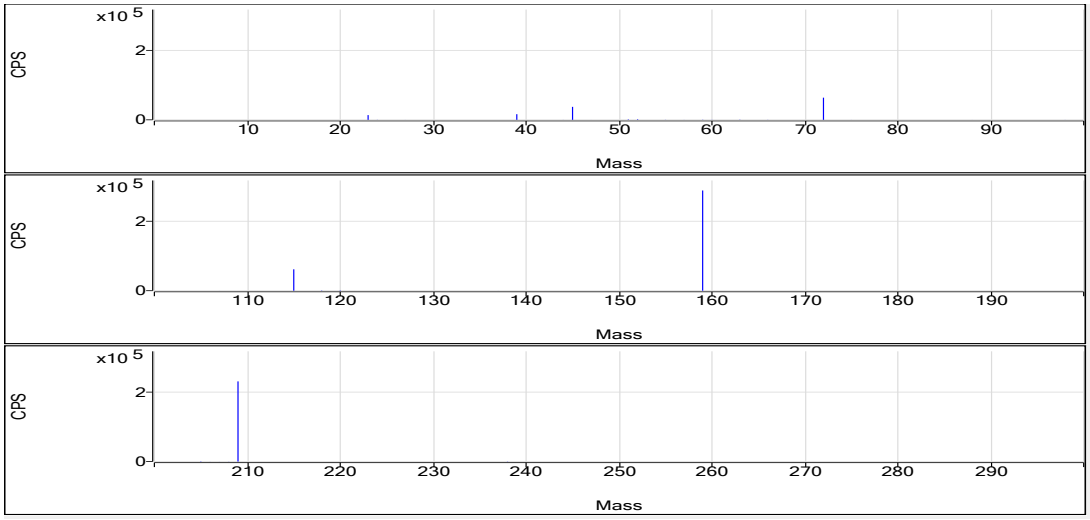


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	86.00	0.0008	2.195E-05
Be	9	1	No Gas	0.032	0	96.00	0.0008	2.195E-05
Be	9	1	No Gas	0.04	0.0001	110.00	0.0008	2.195E-05
Se	78	2	H2	0.044	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.042	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.045	0	3.33	0.0004	1.386E-05
Na	23	3	He	-18.961	0.3691	13816.92	0.0038	0.4416
Na	23	3	He	-16.921	0.3769	14067.07	0.0038	0.4416
Na	23	3	He	-24.901	0.3464	13106.19	0.0038	0.4416
Mg	24	3	He	0.29	0.0064	240.01	0.0019	0.005872
Mg	24	3	He	0.731	0.0072	270.01	0.0019	0.005872
Mg	24	3	He	0.254	0.0063	240.01	0.0019	0.005872
Al	27	3	He	2.457	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	1.076	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	1.966	0.0016	60.00	0.0006	0.0004496
K	39	3	He	7.187	0.4539	16990.31	0.0012	0.4456
K	39	3	He	-20.408	0.422	15749.14	0.0012	0.4456
K	39	3	He	-17.565	0.4253	16089.33	0.0012	0.4456
Ca	44	3	He	-16.751	0.0027	100.00	0.0001	0.003779
Ca	44	3	He	-16.631	0.0027	100.00	0.0001	0.003779
Ca	44	3	He	-1.174	0.0037	140.01	0.0001	0.003779
Ti	47	3	He	3.599	0.0019	70.00	0.0005	0
Ti	47	3	He	1.031	0.0005	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.032	0.0298	1116.05	0.0223	0.03054
V	51	3	He	0.06	0.0319	1190.06	0.0223	0.03054
V	51	3	He	0.055	0.0318	1202.06	0.0223	0.03054
Cr	52	3	He	0.038	0.0382	1430.16	0.0285	0.03714
Cr	52	3	He	0.061	0.0389	1450.11	0.0285	0.03714
Cr	52	3	He	0.061	0.0389	1470.13	0.0285	0.03714
Mn	55	3	He	0.312	0.0083	310.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.011	0.0046	170.01	0.0124	0.004415
Mn	55	3	He	0.263	0.0077	290.01	0.0124	0.004415
Fe	57	3	He	2.791	0.0029	110.00	0.0006	0.001356
Fe	57	3	He	0.444	0.0016	60.00	0.0006	0.001356
Fe	57	3	He	4.134	0.0037	140.01	0.0006	0.001356
Co	59	3	He	0.147	0.0112	420.02	0.0581	0.002697
Co	59	3	He	0.175	0.0129	480.02	0.0581	0.002697
Co	59	3	He	0.136	0.0106	400.02	0.0581	0.002697
Ni	60	3	He	0.25	0.0061	390.02	0.0087	0.003928
Ni	60	3	He	0.016	0.0041	260.01	0.0087	0.003928
Ni	60	3	He	0.048	0.0043	280.01	0.0087	0.003928
Cu	63	3	He	0.074	0.008	510.03	0.0261	0.006048
Cu	63	3	He	0.128	0.0094	600.04	0.0261	0.006048
Cu	63	3	He	0.077	0.0081	520.03	0.0261	0.006048
Zn	66	3	He	-0.025	0.0034	220.01	0.0029	0.003512
Zn	66	3	He	-0.406	0.0023	150.01	0.0029	0.003512
Zn	66	3	He	0.398	0.0047	300.01	0.0029	0.003512
As	75	3	He	0.285	0.0013	84.00	0.0021	0.0007233
As	75	3	He	0.195	0.0011	72.00	0.0021	0.0007233
As	75	3	He	0.175	0.0011	70.00	0.0021	0.0007233
Sr	88	3	He	0.008	0.0007	40.00	0.009	0.0005796
Sr	88	3	He	0.061	0.0011	70.00	0.009	0.0005796
Sr	88	3	He	-0.011	0.0005	30.00	0.009	0.0005796
Mo	98	3	He	0.028	0.001	60.00	0.0235	0.0003188
Mo	98	3	He	0.068	0.0019	120.00	0.0235	0.0003188
Mo	98	3	He	0.062	0.0018	110.00	0.0235	0.0003188
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	-0.012	0.0169	1040.08	0.0164	0.01713
Sn	120	3	He	0.06	0.0181	1130.09	0.0164	0.01713
Sn	120	3	He	0.197	0.0204	1260.10	0.0164	0.01713
Sb	121	3	He	0.109	0.002	120.01	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.014	0.0005	30.00	0.0155	0.0002641
Ba	137	3	He	0.164	0.001	60.00	0.005	0.0001577
Ba	137	3	He	0.162	0.001	60.00	0.005	0.0001577
Ba	137	3	He	0.098	0.0006	40.00	0.005	0.0001577
Tl	205	3	He	0.107	0.003	880.06	0.026	0.0002504
Tl	205	3	He	0.116	0.0033	950.07	0.026	0.0002504
Tl	205	3	He	0.089	0.0026	740.05	0.026	0.0002504
Pb	208	3	He	0.006	0.0016	260.01	0.0349	0.001422
Pb	208	3	He	0.003	0.0015	250.01	0.0349	0.001422
Pb	208	3	He	0.009	0.0017	290.01	0.0349	0.001422
U	238	3	He	0.051	0.0026	610.04	0.0502	5.657E-05
U	238	3	He	0.045	0.0023	540.03	0.0502	5.657E-05
U	238	3	He	0.043	0.0022	520.03	0.0502	5.657E-05
Sc	45	1	No Gas			2094382.00		
Sc	45	1	No Gas			2080908.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2075967.16		
Ge	72	1	No Gas			1011219.05		
Ge	72	1	No Gas			1000655.38		
Ge	72	1	No Gas			996489.28		
Sc	45	2	H2			124287.09		
Sc	45	2	H2			124197.37		
Sc	45	2	H2			120084.56		
Ge	72	2	H2			101287.59		
Ge	72	2	H2			103844.79		
Ge	72	2	H2			99233.48		
In	115	2	H2			282914.59		
In	115	2	H2			284239.86		
In	115	2	H2			282401.91		
Sc	45	3	He			37429.24		
Sc	45	3	He			37318.63		
Sc	45	3	He			37830.05		
Ge	72	3	He			63953.99		
Ge	72	3	He			63903.21		
Ge	72	3	He			64485.64		
In	115	3	He			61437.08		
In	115	3	He			62380.34		
In	115	3	He			61898.85		
Tb	159	3	He			290663.39		
Tb	159	3	He			291489.43		
Tb	159	3	He			288142.05		
Bi	209	3	He			233215.97		
Bi	209	3	He			230977.32		
Bi	209	3	He			232100.70		

Quantitation Report

Data File Name	086SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:11:06 AM
Sample Name	410-136525-I-1-A
Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

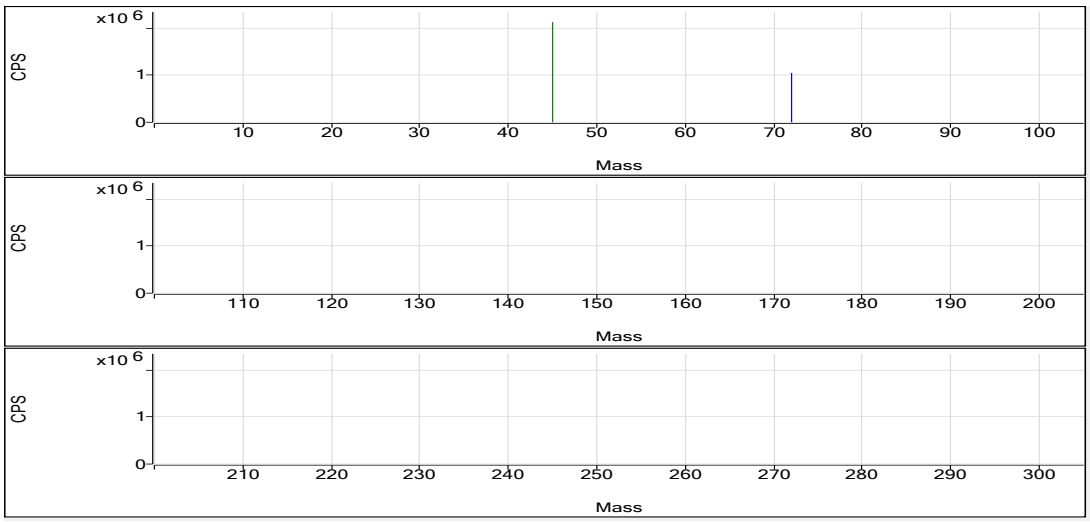
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	41.3	66.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.189	ppb	20.8	10.00	0.0001	Pulse	1.5000	3
Na	23	45	He	69263.911	ppb	1.7	9899394.44	265.1284	Analog	0.1000	3
Mg	24	45	He	55442.323	ppb	1.6	3859500.98	103.3653	Analog	0.1000	3
Al	27	45	He	119.509	ppb	1.1	2597.00	0.0695	Pulse	0.1000	3
K	39	45	He	4255.367	ppb	0.7	200408.35	5.3669	Pulse	0.1000	3
Ca	44	45	He	294597.394	ppb	1.4	727009.26	19.4705	Pulse	0.1000	3
Ti	47	45	He	8.586	ppb	16.8	166.68	0.0045	Pulse	0.1000	3
V	51	45	He	0.864	ppb	9.5	1860.13	0.0498	Pulse	0.5000	3
Cr	52	45	He	1.538	ppb	1.9	3020.42	0.0809	Pulse	0.1000	3
Mn	55	45	He	302.390	ppb	0.3	140006.78	3.7493	Pulse	0.1000	3
Fe	57	45	He	7207.864	ppb	1.8	152717.59	4.0900	Pulse	0.1000	3
Co	59	45	He	0.399	ppb	11.8	966.73	0.0259	Pulse	0.1000	3
Ni	60	72	He	2.096	ppb	9.5	1456.80	0.0221	Pulse	0.1000	3
Cu	63	72	He	2.356	ppb	2.5	4460.84	0.0676	Pulse	0.1000	3
Zn	66	72	He	43.476	ppb	4.2	8449.43	0.1281	Pulse	0.1000	3
As	75	72	He	3.466	ppb	5.2	520.68	0.0079	Pulse	0.5000	3
Sr	88	115	He	1388.295	ppb	0.9	762457.80	12.4297	Pulse	0.1000	3
Mo	98	115	He	2.281	ppb	8.6	3307.17	0.0540	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	5.5	40.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.033	ppb	69.8	12.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.168	ppb	24.8	1220.10	0.0199	Pulse	0.1000	3
Sb	121	115	He	0.222	ppb	31.3	226.68	0.0037	Pulse	0.1000	3
Ba	137	115	He	212.175	ppb	1.4	64807.19	1.0565	Pulse	0.1000	3
Tl	205	159	He	0.030	ppb	16.7	300.02	0.0010	Pulse	0.1000	3
Pb	208	159	He	1.294	ppb	0.4	13449.90	0.0466	Pulse	0.1000	3
U	238	209	He	35.772	ppb	0.7	405655.76	1.7970	Pulse	0.1000	3

ISTD Table:

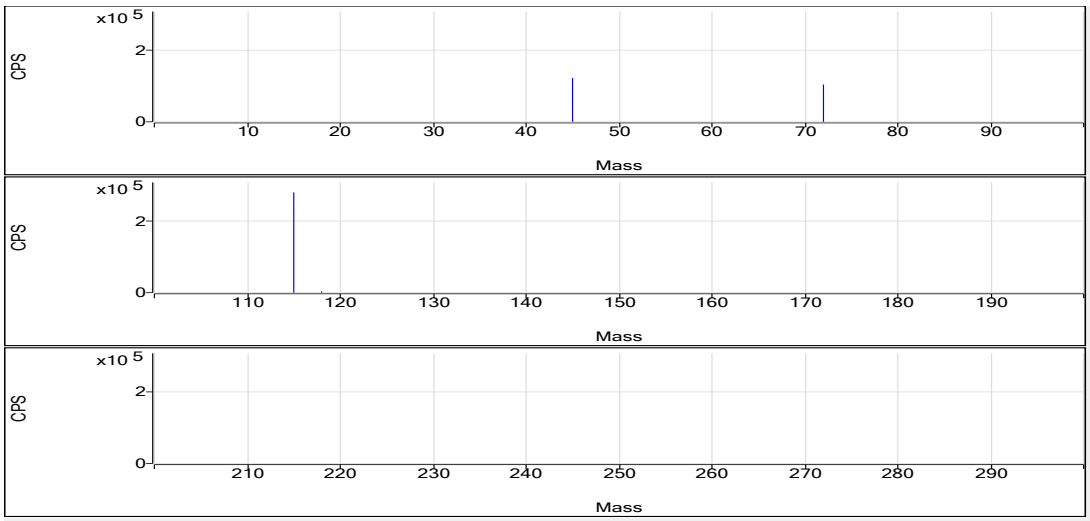
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2127092.05	1.2	104.6	Analog	0.1000	3
No Gas	Ge	72	1047725.32	0.3	104.2	Pulse	0.1000	3
H2	Sc	45	122859.98	2.2	93.0	Pulse	0.1000	3
H2	Ge	72	104366.58	0.5	93.6	Pulse	0.1000	3
H2	In	115	280649.99	0.8	95.6	Pulse	0.1000	3
He	Sc	45	37342.09	0.9	101.1	Pulse	0.1000	3
He	Ge	72	65973.00	1.8	102.2	Pulse	0.1000	3
He	In	115	61346.84	1.5	97.1	Pulse	0.1000	3
He	Tb	159	288483.17	1.3	98.5	Pulse	0.1000	3
He	Bi	209	225749.87	0.5	95.7	Pulse	0.1000	3

No Gas

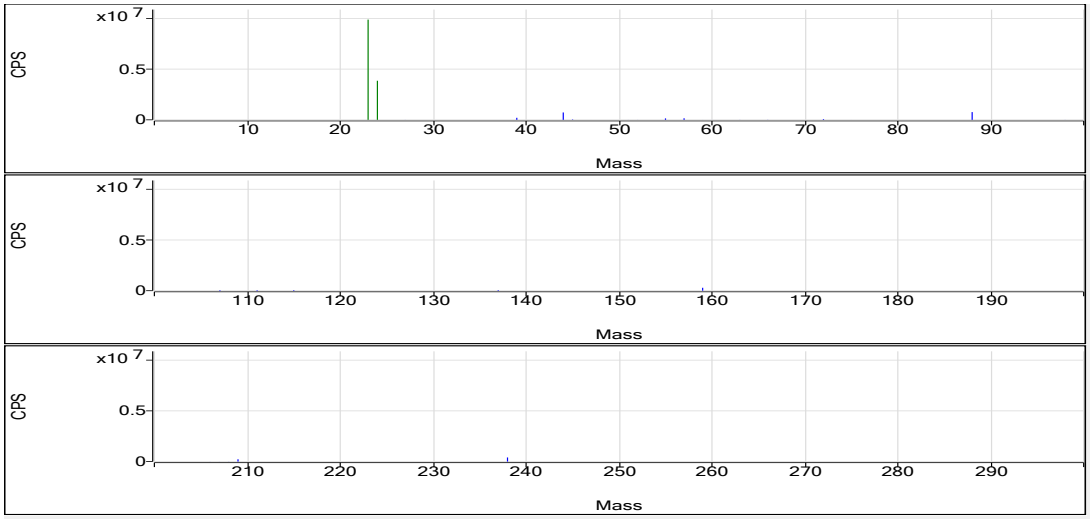


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	58.00	0.0008	2.195E-05
Be	9	1	No Gas	0.016	0	72.00	0.0008	2.195E-05
Be	9	1	No Gas	0.015	0	70.00	0.0008	2.195E-05
Se	78	2	H2	0.173	0.0001	9.33	0.0004	1.386E-05
Se	78	2	H2	0.16	0.0001	8.67	0.0004	1.386E-05
Se	78	2	H2	0.233	0.0001	12.00	0.0004	1.386E-05
Na	23	3	He	70618.118	270.3034	9984335.48	0.0038	0.4416
Na	23	3	He	68804.866	263.3742	9884344.85	0.0038	0.4416
Na	23	3	He	68368.749	261.7076	9829502.98	0.0038	0.4416
Mg	24	3	He	56437.85	105.2212	3886608.38	0.0019	0.005872
Mg	24	3	He	54838.163	102.2389	3836992.44	0.0019	0.005872
Mg	24	3	He	55050.955	102.6356	3854902.13	0.0019	0.005872
Al	27	3	He	119.576	0.0696	2570.30	0.0006	0.0004496
Al	27	3	He	118.14	0.0688	2580.34	0.0006	0.0004496
Al	27	3	He	120.81	0.0703	2640.35	0.0006	0.0004496
K	39	3	He	4266.038	5.3792	198695.04	0.0012	0.4456
K	39	3	He	4223.5	5.33	200034.12	0.0012	0.4456
K	39	3	He	4276.563	5.3914	202495.90	0.0012	0.4456
Ca	44	3	He	299136.603	19.7705	730272.25	0.0001	0.003779
Ca	44	3	He	292943.991	19.3613	726622.10	0.0001	0.003779
Ca	44	3	He	291711.589	19.2798	724133.43	0.0001	0.003779
Ti	47	3	He	7.816	0.0041	150.01	0.0005	0
Ti	47	3	He	7.693	0.004	150.01	0.0005	0
Ti	47	3	He	10.249	0.0053	200.01	0.0005	0
V	51	3	He	0.823	0.0489	1806.12	0.0223	0.03054
V	51	3	He	0.958	0.0519	1948.15	0.0223	0.03054
V	51	3	He	0.811	0.0486	1826.13	0.0223	0.03054
Cr	52	3	He	1.559	0.0815	3010.41	0.0285	0.03714
Cr	52	3	He	1.505	0.0799	3000.40	0.0285	0.03714
Cr	52	3	He	1.549	0.0812	3050.44	0.0285	0.03714
Mn	55	3	He	302.763	3.7539	138661.31	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	301.409	3.7372	140255.11	0.0124	0.004415
Mn	55	3	He	302.998	3.7569	141103.92	0.0124	0.004415
Fe	57	3	He	7313.357	4.1499	153285.84	0.0006	0.001356
Fe	57	3	He	7243.568	4.1103	154257.46	0.0006	0.001356
Fe	57	3	He	7066.665	4.0099	150609.47	0.0006	0.001356
Co	59	3	He	0.452	0.029	1070.08	0.0581	0.002697
Co	59	3	He	0.362	0.0237	890.05	0.0581	0.002697
Co	59	3	He	0.384	0.025	940.07	0.0581	0.002697
Ni	60	3	He	2.097	0.0221	1480.13	0.0087	0.003928
Ni	60	3	He	1.898	0.0204	1350.11	0.0087	0.003928
Ni	60	3	He	2.294	0.0238	1540.15	0.0087	0.003928
Cu	63	3	He	2.392	0.0686	4590.89	0.0261	0.006048
Cu	63	3	He	2.287	0.0658	4360.79	0.0261	0.006048
Cu	63	3	He	2.389	0.0685	4430.83	0.0261	0.006048
Zn	66	3	He	41.677	0.1229	8232.66	0.0029	0.003512
Zn	66	3	He	45.346	0.1335	8842.96	0.0029	0.003512
Zn	66	3	He	43.404	0.1279	8272.66	0.0029	0.003512
As	75	3	He	3.42	0.0078	522.01	0.0021	0.0007233
As	75	3	He	3.665	0.0083	550.01	0.0021	0.0007233
As	75	3	He	3.314	0.0076	490.01	0.0021	0.0007233
Sr	88	3	He	1401.98	12.5522	757101.16	0.009	0.0005796
Sr	88	3	He	1386.576	12.4143	766601.39	0.009	0.0005796
Sr	88	3	He	1376.33	12.3226	763670.85	0.009	0.0005796
Mo	98	3	He	2.504	0.0592	3570.57	0.0235	0.0003188
Mo	98	3	He	2.204	0.0522	3220.48	0.0235	0.0003188
Mo	98	3	He	2.135	0.0505	3130.47	0.0235	0.0003188
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	0.034	0.0002	12.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.056	0.0003	20.00	0.0055	1.07E-05
Sn	120	3	He	0.199	0.0204	1230.10	0.0164	0.01713
Sn	120	3	He	0.121	0.0191	1180.09	0.0164	0.01713
Sn	120	3	He	0.185	0.0202	1250.12	0.0164	0.01713
Sb	121	3	He	0.208	0.0035	210.01	0.0155	0.0002641
Sb	121	3	He	0.297	0.0049	300.01	0.0155	0.0002641
Sb	121	3	He	0.16	0.0027	170.01	0.0155	0.0002641
Ba	137	3	He	213.6	1.0636	64150.87	0.005	0.0001577
Ba	137	3	He	214.125	1.0662	65838.89	0.005	0.0001577
Ba	137	3	He	208.798	1.0397	64431.81	0.005	0.0001577
Tl	205	3	He	0.034	0.0011	320.02	0.026	0.0002504
Tl	205	3	He	0.025	0.0009	260.01	0.026	0.0002504
Tl	205	3	He	0.033	0.0011	320.02	0.026	0.0002504
Pb	208	3	He	1.288	0.0464	7012.12	0.0349	0.001422
Pb	208	3	He	1.297	0.0467	7322.29	0.0349	0.001422
Pb	208	3	He	1.296	0.0467	7312.29	0.0349	0.001422
U	238	3	He	35.493	1.783	404423.08	0.0502	5.657E-05
U	238	3	He	35.9	1.8034	407295.35	0.0502	5.657E-05
U	238	3	He	35.922	1.8045	405248.86	0.0502	5.657E-05
Sc	45	1	No Gas			2156304.97		
Sc	45	1	No Gas			2119138.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2105832.94		
Ge	72	1	No Gas			1044162.41		
Ge	72	1	No Gas			1048552.33		
Ge	72	1	No Gas			1050461.23		
Sc	45	2	H2			124560.61		
Sc	45	2	H2			119801.23		
Sc	45	2	H2			124218.11		
Ge	72	2	H2			104974.17		
Ge	72	2	H2			104017.84		
Ge	72	2	H2			104107.72		
In	115	2	H2			278555.35		
In	115	2	H2			280193.63		
In	115	2	H2			283200.99		
Sc	45	3	He			36937.51		
Sc	45	3	He			37529.66		
Sc	45	3	He			37559.10		
Ge	72	3	He			66967.46		
Ge	72	3	He			66263.90		
Ge	72	3	He			64687.63		
In	115	3	He			60322.42		
In	115	3	He			61757.54		
In	115	3	He			61978.66		
Tb	159	3	He			285013.75		
Tb	159	3	He			292481.69		
Tb	159	3	He			287954.08		
Bi	209	3	He			226825.35		
Bi	209	3	He			225848.22		
Bi	209	3	He			224576.05		

Quantitation Report

Data File Name	087SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:13:08 AM
Sample Name	410-136525-I-1-B DU
Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

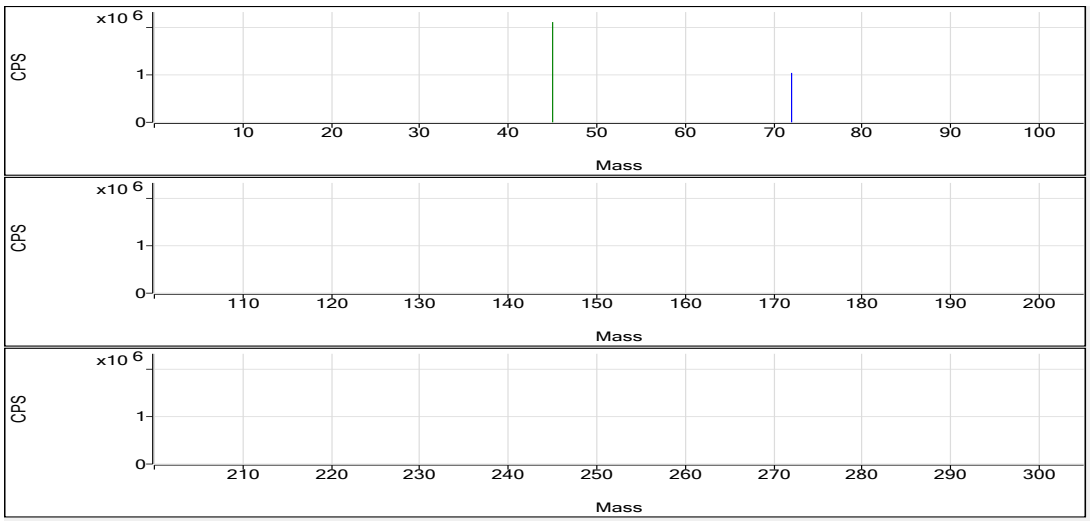
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.017	ppb	57.0	74.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.166	ppb	10.5	8.89	0.0001	Pulse	1.5000	3
Na	23	45	He	67887.300	ppb	0.8	9694190.90	259.8678	Analog	0.1000	3
Mg	24	45	He	54744.809	ppb	0.5	3807476.92	102.0649	Analog	0.1000	3
Al	27	45	He	123.080	ppb	9.2	2670.34	0.0716	Pulse	0.1000	3
K	39	45	He	4198.277	ppb	1.4	197738.70	5.3009	Pulse	0.1000	3
Ca	44	45	He	289105.603	ppb	1.3	712789.23	19.1076	Pulse	0.1000	3
Ti	47	45	He	6.547	ppb	41.1	126.67	0.0034	Pulse	0.1000	3
V	51	45	He	0.890	ppb	6.3	1880.14	0.0504	Pulse	0.5000	3
Cr	52	45	He	0.457	ppb	27.4	1870.18	0.0501	Pulse	0.1000	3
Mn	55	45	He	299.260	ppb	1.1	138417.81	3.7106	Pulse	0.1000	3
Fe	57	45	He	7006.248	ppb	0.4	148315.39	3.9757	Pulse	0.1000	3
Co	59	45	He	0.332	ppb	19.5	820.05	0.0220	Pulse	0.1000	3
Ni	60	72	He	1.203	ppb	27.1	943.40	0.0144	Pulse	0.1000	3
Cu	63	72	He	2.404	ppb	4.0	4520.87	0.0689	Pulse	0.1000	3
Zn	66	72	He	45.186	ppb	0.8	8729.57	0.1330	Pulse	0.1000	3
As	75	72	He	3.241	ppb	5.2	487.34	0.0074	Pulse	0.5000	3
Sr	88	115	He	1373.076	ppb	2.0	755589.83	12.2935	Pulse	0.1000	3
Mo	98	115	He	1.848	ppb	7.9	2690.36	0.0438	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	115.9	46.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.045	ppb	11.2	16.00	0.0003	Pulse	0.5000	3
Sn	120	115	He	0.144	ppb	103.4	1196.77	0.0195	Pulse	0.1000	3
Sb	121	115	He	0.207	ppb	32.9	213.34	0.0035	Pulse	0.1000	3
Ba	137	115	He	215.075	ppb	3.0	65815.53	1.0709	Pulse	0.1000	3
Tl	205	159	He	0.020	ppb	29.0	220.01	0.0008	Pulse	0.1000	3
Pb	208	159	He	1.305	ppb	2.2	13519.84	0.0470	Pulse	0.1000	3
U	238	209	He	34.239	ppb	2.1	393703.42	1.7200	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2118545.96	2.4	104.2	Analog	0.1000	3
No Gas	Ge	72	1044169.26	0.8	103.9	Pulse	0.1000	3
H2	Sc	45	122335.00	0.6	92.6	Pulse	0.1000	3
H2	Ge	72	103120.47	0.3	92.5	Pulse	0.1000	3
H2	In	115	279847.75	1.0	95.3	Pulse	0.1000	3
He	Sc	45	37305.43	0.7	101.0	Pulse	0.1000	3
He	Ge	72	65641.04	0.8	101.7	Pulse	0.1000	3
He	In	115	61476.74	1.8	97.3	Pulse	0.1000	3
He	Tb	159	287527.40	0.3	98.2	Pulse	0.1000	3
He	Bi	209	228930.28	0.8	97.1	Pulse	0.1000	3

No Gas



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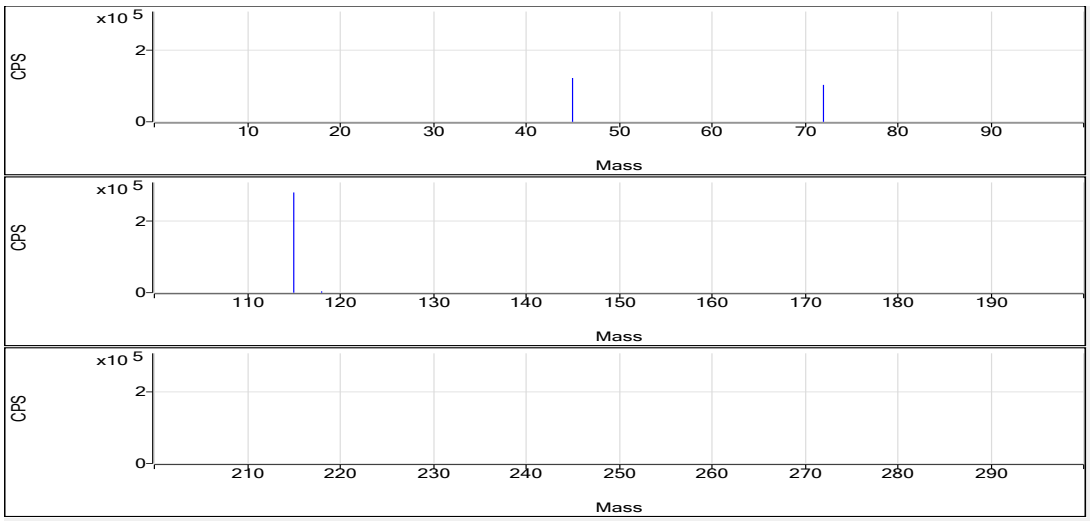
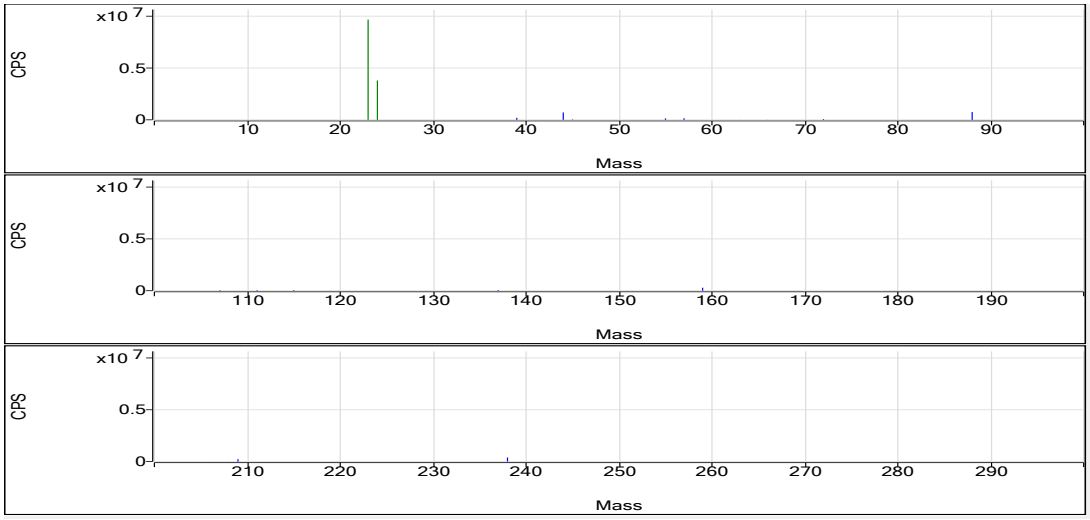


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.013	0	68.00	0.0008	2.195E-05
Be	9	1	No Gas	0.028	0	90.00	0.0008	2.195E-05
Be	9	1	No Gas	0.01	0	64.00	0.0008	2.195E-05
Se	78	2	H2	0.177	0.0001	9.33	0.0004	1.386E-05
Se	78	2	H2	0.146	0.0001	8.00	0.0004	1.386E-05
Se	78	2	H2	0.176	0.0001	9.33	0.0004	1.386E-05
Na	23	3	He	67439.077	258.155	9644312.98	0.0038	0.4416
Na	23	3	He	67756.634	259.3685	9739192.98	0.0038	0.4416
Na	23	3	He	68466.189	262.08	9699066.73	0.0038	0.4416
Mg	24	3	He	54662.944	101.9123	3807302.13	0.0019	0.005872
Mg	24	3	He	54505.699	101.6191	3815761.82	0.0019	0.005872
Mg	24	3	He	55065.784	102.6633	3799366.82	0.0019	0.005872
Al	27	3	He	116.832	0.068	2540.33	0.0006	0.0004496
Al	27	3	He	116.232	0.0677	2540.30	0.0006	0.0004496
Al	27	3	He	136.176	0.0792	2930.39	0.0006	0.0004496
K	39	3	He	4170.456	5.2687	196830.70	0.0012	0.4456
K	39	3	He	4158.492	5.2548	197317.58	0.0012	0.4456
K	39	3	He	4265.883	5.379	199067.81	0.0012	0.4456
Ca	44	3	He	285378.259	18.8613	704633.58	0.0001	0.003779
Ca	44	3	He	289045.83	19.1037	717336.63	0.0001	0.003779
Ca	44	3	He	292892.72	19.3579	716397.49	0.0001	0.003779
Ti	47	3	He	7.213	0.0037	140.01	0.0005	0
Ti	47	3	He	3.588	0.0019	70.00	0.0005	0
Ti	47	3	He	8.841	0.0046	170.01	0.0005	0
V	51	3	He	0.938	0.0515	1922.14	0.0223	0.03054
V	51	3	He	0.905	0.0507	1904.14	0.0223	0.03054
V	51	3	He	0.829	0.049	1814.13	0.0223	0.03054
Cr	52	3	He	0.595	0.0541	2020.21	0.0285	0.03714
Cr	52	3	He	0.352	0.0471	1770.17	0.0285	0.03714
Cr	52	3	He	0.423	0.0492	1820.17	0.0285	0.03714
Mn	55	3	He	300.476	3.7256	139183.86	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	295.629	3.6656	137641.74	0.0124	0.004415
Mn	55	3	He	301.676	3.7405	138427.84	0.0124	0.004415
Fe	57	3	He	7034.452	3.9917	149122.91	0.0006	0.001356
Fe	57	3	He	7003.935	3.9743	149235.37	0.0006	0.001356
Fe	57	3	He	6980.356	3.961	146587.88	0.0006	0.001356
Co	59	3	He	0.281	0.019	710.05	0.0581	0.002697
Co	59	3	He	0.311	0.0208	780.06	0.0581	0.002697
Co	59	3	He	0.405	0.0262	970.05	0.0581	0.002697
Ni	60	3	He	1.555	0.0174	1150.09	0.0087	0.003928
Ni	60	3	He	1.143	0.0138	910.06	0.0087	0.003928
Ni	60	3	He	0.912	0.0118	770.05	0.0087	0.003928
Cu	63	3	He	2.346	0.0674	4450.85	0.0261	0.006048
Cu	63	3	He	2.352	0.0675	4440.85	0.0261	0.006048
Cu	63	3	He	2.515	0.0718	4670.91	0.0261	0.006048
Zn	66	3	He	45.262	0.1332	8802.93	0.0029	0.003512
Zn	66	3	He	44.799	0.1319	8672.88	0.0029	0.003512
Zn	66	3	He	45.497	0.1339	8712.91	0.0029	0.003512
As	75	3	He	3.398	0.0077	512.01	0.0021	0.0007233
As	75	3	He	3.063	0.0071	464.01	0.0021	0.0007233
As	75	3	He	3.262	0.0075	486.01	0.0021	0.0007233
Sr	88	3	He	1351.691	12.102	757160.54	0.009	0.0005796
Sr	88	3	He	1363.614	12.2088	750831.16	0.009	0.0005796
Sr	88	3	He	1403.922	12.5696	758777.80	0.009	0.0005796
Mo	98	3	He	1.917	0.0454	2840.39	0.0235	0.0003188
Mo	98	3	He	1.681	0.0398	2450.29	0.0235	0.0003188
Mo	98	3	He	1.945	0.0461	2780.40	0.0235	0.0003188
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Cd	111	3	He	0.05	0.0003	18.00	0.0055	1.07E-05
Cd	111	3	He	0.045	0.0003	16.00	0.0055	1.07E-05
Cd	111	3	He	0.04	0.0002	14.00	0.0055	1.07E-05
Sn	120	3	He	-0.021	0.0168	1050.08	0.0164	0.01713
Sn	120	3	He	0.185	0.0202	1240.12	0.0164	0.01713
Sn	120	3	He	0.268	0.0215	1300.10	0.0164	0.01713
Sb	121	3	He	0.221	0.0037	230.01	0.0155	0.0002641
Sb	121	3	He	0.267	0.0044	270.01	0.0155	0.0002641
Sb	121	3	He	0.133	0.0023	140.01	0.0155	0.0002641
Ba	137	3	He	211.019	1.0507	65738.66	0.005	0.0001577
Ba	137	3	He	211.589	1.0536	64793.58	0.005	0.0001577
Ba	137	3	He	222.618	1.1085	66914.36	0.005	0.0001577
Tl	205	3	He	0.017	0.0007	200.01	0.026	0.0002504
Tl	205	3	He	0.016	0.0007	190.01	0.026	0.0002504
Tl	205	3	He	0.026	0.0009	270.01	0.026	0.0002504
Pb	208	3	He	1.297	0.0467	7022.10	0.0349	0.001422
Pb	208	3	He	1.281	0.0462	6781.98	0.0349	0.001422
Pb	208	3	He	1.337	0.0481	7182.21	0.0349	0.001422
U	238	3	He	35.03	1.7597	399048.82	0.0502	5.657E-05
U	238	3	He	33.641	1.6899	389299.10	0.0502	5.657E-05
U	238	3	He	34.046	1.7102	392762.34	0.0502	5.657E-05
Sc	45	1	No Gas			2119851.37		
Sc	45	1	No Gas			2067252.63		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2168533.87		
Ge	72	1	No Gas			1036932.72		
Ge	72	1	No Gas			1042305.22		
Ge	72	1	No Gas			1053269.83		
Sc	45	2	H2			122514.73		
Sc	45	2	H2			121494.26		
Sc	45	2	H2			122996.00		
Ge	72	2	H2			102807.89		
Ge	72	2	H2			103331.12		
Ge	72	2	H2			103222.41		
In	115	2	H2			278177.24		
In	115	2	H2			278290.27		
In	115	2	H2			283075.74		
Sc	45	3	He			37358.62		
Sc	45	3	He			37549.64		
Sc	45	3	He			37008.04		
Ge	72	3	He			66083.02		
Ge	72	3	He			65761.53		
Ge	72	3	He			65078.57		
In	115	3	He			62571.79		
In	115	3	He			61506.33		
In	115	3	He			60371.67		
Tb	159	3	He			287587.91		
Tb	159	3	He			286548.08		
Tb	159	3	He			288446.21		
Bi	209	3	He			226772.46		
Bi	209	3	He			230366.15		
Bi	209	3	He			229652.22		

Quantitation Report

Data File Name	088SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:15:12 AM
Sample Name	410-136525-I-1-C MS
Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

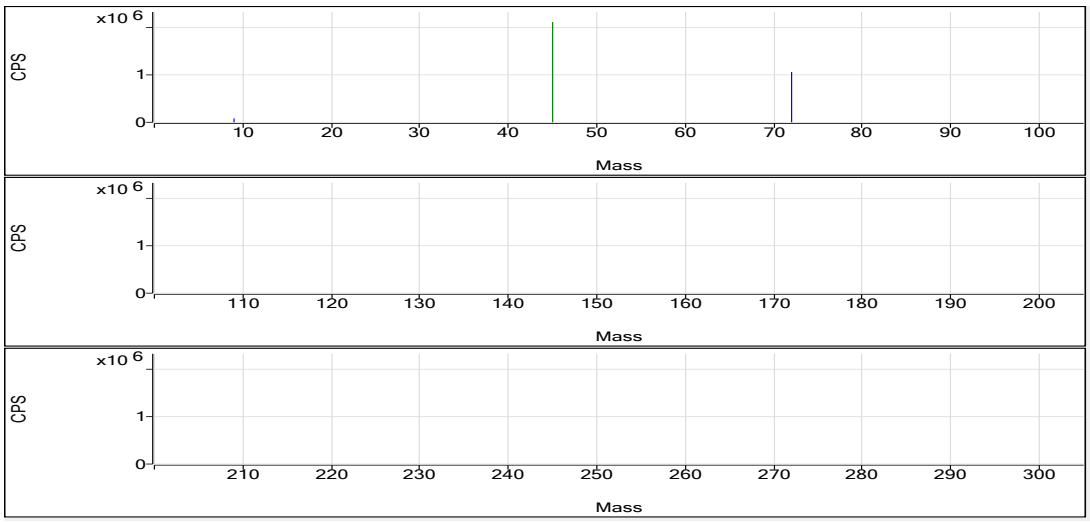
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.831	ppb	0.8	80767.47	0.0383	Pulse	0.5000	3
Se	78	72	H2	108.914	ppb	0.9	4906.63	0.0474	Pulse	1.5000	3
Na	23	45	He	71895.081	ppb	2.3	10319317.14	275.1832	Analog	0.1000	3
Mg	24	45	He	58565.128	ppb	2.7	4094211.29	109.1870	Analog	0.1000	3
Al	27	45	He	5327.459	ppb	2.1	115527.39	3.0806	Pulse	0.1000	3
K	39	45	He	9441.190	ppb	2.4	426151.48	11.3642	Pulse	0.1000	3
Ca	44	45	He	288860.861	ppb	1.9	715954.99	19.0915	Pulse	0.1000	3
Ti	47	45	He	534.780	ppb	2.9	10420.75	0.2779	Pulse	0.1000	3
V	51	45	He	532.425	ppb	1.8	446269.37	11.9003	Pulse	0.5000	3
Cr	52	45	He	527.215	ppb	1.3	563977.00	15.0382	Pulse	0.1000	3
Mn	55	45	He	835.628	ppb	1.6	388259.20	10.3531	Pulse	0.1000	3
Fe	57	45	He	13365.548	ppb	2.5	284341.36	7.5830	Pulse	0.1000	3
Co	59	45	He	485.271	ppb	2.1	1057290.77	28.1951	Pulse	0.1000	3
Ni	60	72	He	503.006	ppb	1.2	292854.33	4.3636	Pulse	0.1000	3
Cu	63	72	He	477.002	ppb	0.4	837101.16	12.4728	Pulse	0.1000	3
Zn	66	72	He	563.581	ppb	0.3	108622.40	1.6184	Pulse	0.1000	3
As	75	72	He	523.790	ppb	1.1	72728.79	1.0836	Pulse	0.5000	3
Sr	88	115	He	1445.094	ppb	1.9	788452.70	12.9382	Pulse	0.1000	3
Mo	98	115	He	56.504	ppb	2.6	80986.75	1.3290	Pulse	0.1000	3
Ag	107	115	He	51.755	ppb	1.9	157274.07	2.5808	Pulse	0.1000	3
Cd	111	115	He	52.980	ppb	0.9	17892.81	0.2936	Pulse	0.5000	3
Sn	120	115	He	107.927	ppb	0.9	109044.19	1.7892	Pulse	0.1000	3
Sb	121	115	He	107.666	ppb	1.7	101511.31	1.6656	Pulse	0.1000	3
Ba	137	115	He	745.916	ppb	2.9	226298.08	3.7137	Pulse	0.1000	3
Tl	205	159	He	104.972	ppb	0.6	780931.29	2.7338	Pulse	0.1000	3
Pb	208	159	He	53.658	ppb	0.3	535946.57	1.8761	Pulse	0.1000	3
U	238	209	He	87.738	ppb	1.0	1000159.65	4.4073	Pulse	0.1000	3

ISTD Table:

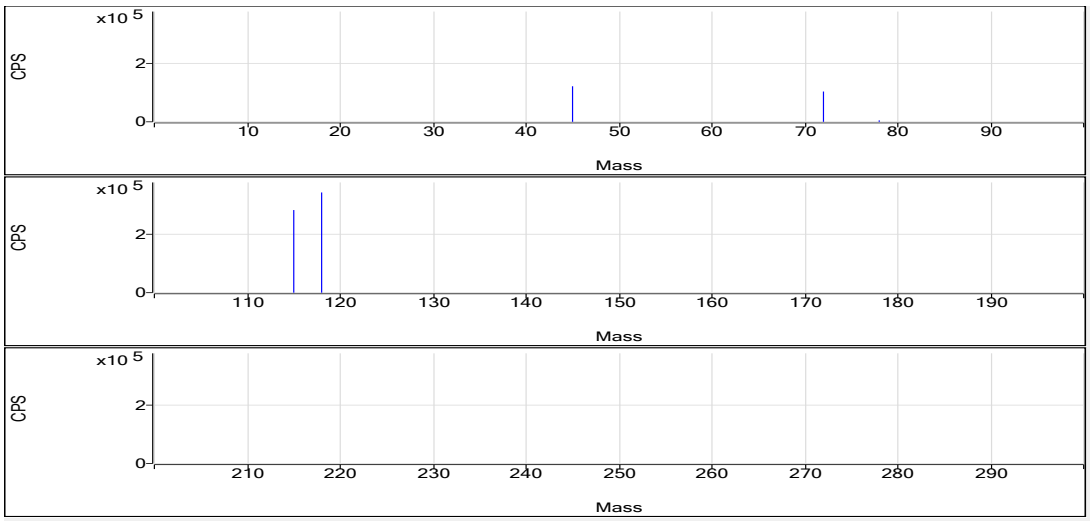
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2111127.37	0.7	103.8	Analog	0.1000	3
No Gas	Ge	72	1059128.16	1.1	105.4	Pulse	0.1000	3
H2	Sc	45	121571.91	1.5	92.0	Pulse	0.1000	3
H2	Ge	72	103567.25	0.3	92.9	Pulse	0.1000	3
H2	In	115	282547.26	1.4	96.2	Pulse	0.1000	3
He	Sc	45	37509.20	1.9	101.5	Pulse	0.1000	3
He	Ge	72	67114.89	0.5	104.0	Pulse	0.1000	3
He	In	115	60949.22	1.2	96.5	Pulse	0.1000	3
He	Tb	159	285668.01	0.7	97.6	Pulse	0.1000	3
He	Bi	209	226954.00	1.4	96.2	Pulse	0.1000	3

No Gas

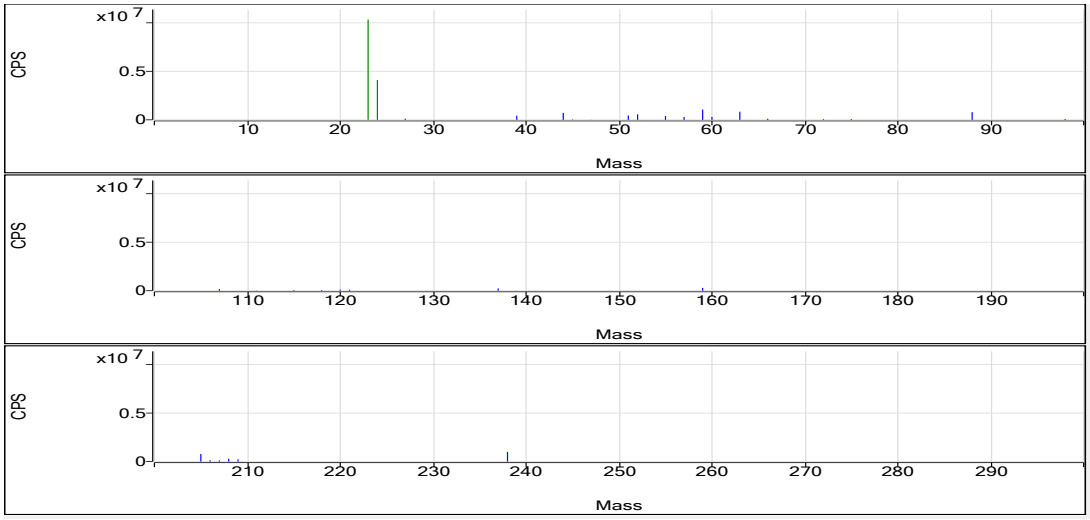


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.221	0.0386	80878.91	0.0008	2.195E-05
Be	9	1	No Gas	49.403	0.0379	80030.23	0.0008	2.195E-05
Be	9	1	No Gas	49.871	0.0383	81393.26	0.0008	2.195E-05
Se	78	2	H2	109.99	0.0478	4963.54	0.0004	1.386E-05
Se	78	2	H2	108.016	0.047	4847.50	0.0004	1.386E-05
Se	78	2	H2	108.736	0.0473	4908.85	0.0004	1.386E-05
Na	23	3	He	71654.682	274.2646	10422163.59	0.0038	0.4416
Na	23	3	He	70408.522	269.5025	10197984.22	0.0038	0.4416
Na	23	3	He	73622.04	281.7827	10337803.60	0.0038	0.4416
Mg	24	3	He	58106.535	108.3321	4116661.50	0.0019	0.005872
Mg	24	3	He	57265.587	106.7643	4039965.56	0.0019	0.005872
Mg	24	3	He	60323.262	112.4646	4126006.81	0.0019	0.005872
Al	27	3	He	5331.919	3.0832	117163.39	0.0006	0.0004496
Al	27	3	He	5210.834	3.0132	114019.86	0.0006	0.0004496
Al	27	3	He	5439.623	3.1455	115398.91	0.0006	0.0004496
K	39	3	He	9394.611	11.3103	429797.14	0.0012	0.4456
K	39	3	He	9245.566	11.138	421460.97	0.0012	0.4456
K	39	3	He	9683.393	11.6443	427196.32	0.0012	0.4456
Ca	44	3	He	288018.115	19.0358	723367.18	0.0001	0.003779
Ca	44	3	He	283891.902	18.7631	709997.26	0.0001	0.003779
Ca	44	3	He	294672.566	19.4755	714500.54	0.0001	0.003779
Ti	47	3	He	517.302	0.2688	10213.88	0.0005	0
Ti	47	3	He	545.967	0.2837	10734.36	0.0005	0
Ti	47	3	He	541.072	0.2811	10314.01	0.0005	0
V	51	3	He	527.465	11.7898	448015.75	0.0223	0.03054
V	51	3	He	526.157	11.7606	445020.91	0.0223	0.03054
V	51	3	He	543.652	12.1506	445771.44	0.0223	0.03054
Cr	52	3	He	523.058	14.9199	566961.71	0.0285	0.03714
Cr	52	3	He	523.453	14.9311	564995.03	0.0285	0.03714
Cr	52	3	He	535.134	15.2635	559974.25	0.0285	0.03714
Mn	55	3	He	828.244	10.2617	389948.51	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	827.447	10.2518	387929.33	0.0124	0.004415
Mn	55	3	He	851.194	10.5459	386899.76	0.0124	0.004415
Fe	57	3	He	13180.768	7.4782	284173.34	0.0006	0.001356
Fe	57	3	He	13161.94	7.4675	282570.00	0.0006	0.001356
Fe	57	3	He	13753.936	7.8033	286280.74	0.0006	0.001356
Co	59	3	He	478.144	27.781	1055690.30	0.0581	0.002697
Co	59	3	He	480.651	27.9267	1056747.80	0.0581	0.002697
Co	59	3	He	497.018	28.8775	1059434.20	0.0581	0.002697
Ni	60	3	He	501.41	4.3498	291601.99	0.0087	0.003928
Ni	60	3	He	497.72	4.3178	291234.68	0.0087	0.003928
Ni	60	3	He	509.889	4.4233	295726.32	0.0087	0.003928
Cu	63	3	He	476.848	12.4688	835882.10	0.0261	0.006048
Cu	63	3	He	475.296	12.4282	838277.10	0.0261	0.006048
Cu	63	3	He	478.864	12.5214	837144.28	0.0261	0.006048
Zn	66	3	He	561.908	1.6136	108175.92	0.0029	0.003512
Zn	66	3	He	565.508	1.624	109535.92	0.0029	0.003512
Zn	66	3	He	563.328	1.6177	108155.37	0.0029	0.003512
As	75	3	He	530.094	1.0967	73519.50	0.0021	0.0007233
As	75	3	He	521.422	1.0788	72761.47	0.0021	0.0007233
As	75	3	He	519.855	1.0755	71905.40	0.0021	0.0007233
Sr	88	3	He	1462.357	13.0928	792786.47	0.009	0.0005796
Sr	88	3	He	1459.307	13.0655	790144.91	0.009	0.0005796
Sr	88	3	He	1413.618	12.6564	782426.71	0.009	0.0005796
Mo	98	3	He	57.363	1.3492	81697.13	0.0235	0.0003188
Mo	98	3	He	57.314	1.3481	81526.49	0.0235	0.0003188
Mo	98	3	He	54.836	1.2898	79736.64	0.0235	0.0003188
Ag	107	3	He	51.66	2.576	155982.59	0.0499	0.0004754
Ag	107	3	He	52.785	2.6321	159178.88	0.0499	0.0004754
Ag	107	3	He	50.819	2.5341	156660.74	0.0499	0.0004754
Cd	111	3	He	53.477	0.2963	17943.56	0.0055	1.07E-05
Cd	111	3	He	52.875	0.293	17719.26	0.0055	1.07E-05
Cd	111	3	He	52.59	0.2914	18015.62	0.0055	1.07E-05
Sn	120	3	He	108.547	1.7994	108957.14	0.0164	0.01713
Sn	120	3	He	108.48	1.7983	108754.74	0.0164	0.01713
Sn	120	3	He	106.754	1.77	109420.68	0.0164	0.01713
Sb	121	3	He	109.699	1.6971	102761.01	0.0155	0.0002641
Sb	121	3	He	106.95	1.6546	100060.97	0.0155	0.0002641
Sb	121	3	He	106.35	1.6453	101711.95	0.0155	0.0002641
Ba	137	3	He	762.134	3.7945	229761.68	0.005	0.0001577
Ba	137	3	He	753.939	3.7537	227007.28	0.005	0.0001577
Ba	137	3	He	721.677	3.5931	222125.27	0.005	0.0001577
Tl	205	3	He	105.528	2.7482	778938.82	0.026	0.0002504
Tl	205	3	He	105.068	2.7362	784992.57	0.026	0.0002504
Tl	205	3	He	104.321	2.7168	778862.49	0.026	0.0002504
Pb	208	3	He	53.603	1.8742	284074.14	0.0349	0.001422
Pb	208	3	He	53.509	1.8709	286958.14	0.0349	0.001422
Pb	208	3	He	53.862	1.8832	288125.19	0.0349	0.001422
U	238	3	He	88.723	4.4568	995063.81	0.0502	5.657E-05
U	238	3	He	86.899	4.3652	1001983.27	0.0502	5.657E-05
U	238	3	He	87.59	4.3999	1003431.86	0.0502	5.657E-05
Sc	45	1	No Gas			2097624.03		
Sc	45	1	No Gas			2109967.16		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2125790.91		
Ge	72	1	No Gas			1071458.34		
Ge	72	1	No Gas			1048718.19		
Ge	72	1	No Gas			1057207.95		
Sc	45	2	H2			121767.53		
Sc	45	2	H2			119638.07		
Sc	45	2	H2			123310.14		
Ge	72	2	H2			103745.09		
Ge	72	2	H2			103171.39		
Ge	72	2	H2			103785.26		
In	115	2	H2			278841.64		
In	115	2	H2			286512.50		
In	115	2	H2			282287.63		
Sc	45	3	He			38000.40		
Sc	45	3	He			37840.04		
Sc	45	3	He			36687.15		
Ge	72	3	He			67038.14		
Ge	72	3	He			67449.69		
Ge	72	3	He			66856.85		
In	115	3	He			61115.49		
In	115	3	He			61053.99		
In	115	3	He			62390.20		
Tb	159	3	He			283434.16		
Tb	159	3	He			286886.46		
Tb	159	3	He			286683.41		
Bi	209	3	He			223266.62		
Bi	209	3	He			229538.00		
Bi	209	3	He			228057.38		

Quantitation Report

Data File Name	089SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:17:13 AM
Sample Name	410-136525-E-1-A MSD
Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

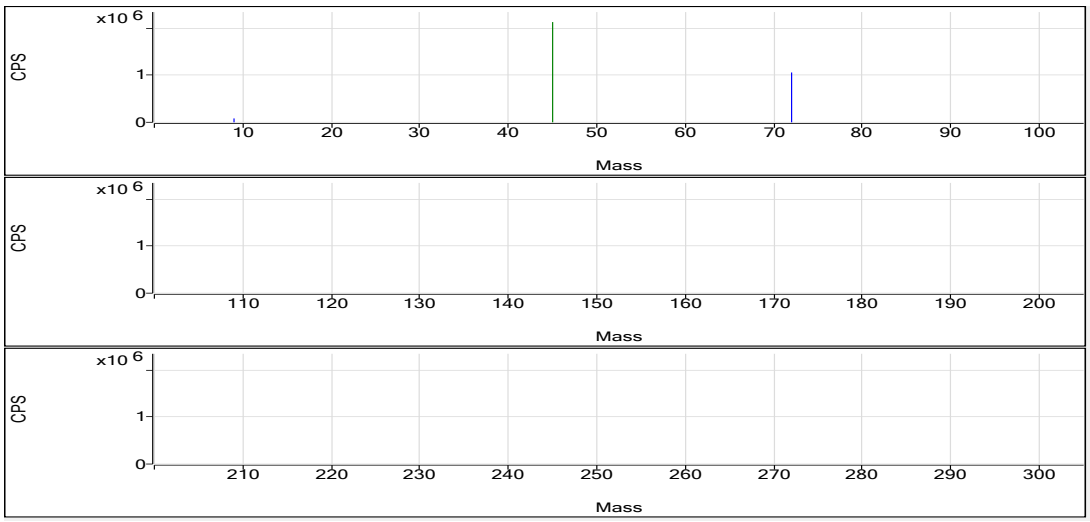
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.309	ppb	0.6	82174.36	0.0386	Pulse	0.5000	3
Se	78	72	H2	108.380	ppb	2.5	4912.63	0.0471	Pulse	1.5000	3
Na	23	45	He	71843.706	ppb	1.8	10423907.97	274.9869	Analog	0.1000	3
Mg	24	45	He	58638.996	ppb	2.2	4143908.69	109.3247	Analog	0.1000	3
Al	27	45	He	5408.324	ppb	1.9	118548.27	3.1274	Pulse	0.1000	3
K	39	45	He	9469.255	ppb	2.1	431995.63	11.3967	Pulse	0.1000	3
Ca	44	45	He	289874.203	ppb	2.4	726177.36	19.1584	Pulse	0.1000	3
Ti	47	45	He	559.719	ppb	5.8	11017.85	0.2908	Pulse	0.1000	3
V	51	45	He	537.615	ppb	2.1	455471.96	12.0160	Pulse	0.5000	3
Cr	52	45	He	528.366	ppb	1.9	571283.15	15.0709	Pulse	0.1000	3
Mn	55	45	He	835.398	ppb	1.2	392381.49	10.3503	Pulse	0.1000	3
Fe	57	45	He	12948.103	ppb	2.2	278454.91	7.3462	Pulse	0.1000	3
Co	59	45	He	491.378	ppb	2.2	1082163.86	28.5499	Pulse	0.1000	3
Ni	60	72	He	523.971	ppb	1.2	298748.44	4.5453	Pulse	0.1000	3
Cu	63	72	He	496.041	ppb	1.4	852493.17	12.9704	Pulse	0.1000	3
Zn	66	72	He	578.783	ppb	0.6	109247.30	1.6620	Pulse	0.1000	3
As	75	72	He	546.466	ppb	1.4	74304.70	1.1305	Pulse	0.5000	3
Sr	88	115	He	1477.502	ppb	1.1	798679.96	13.2284	Pulse	0.1000	3
Mo	98	115	He	57.804	ppb	1.9	82082.97	1.3596	Pulse	0.1000	3
Ag	107	115	He	54.232	ppb	1.9	163261.67	2.7043	Pulse	0.1000	3
Cd	111	115	He	55.121	ppb	2.3	18439.53	0.3054	Pulse	0.5000	3
Sn	120	115	He	111.291	ppb	2.1	111352.53	1.8445	Pulse	0.1000	3
Sb	121	115	He	109.220	ppb	1.7	102011.88	1.6897	Pulse	0.1000	3
Ba	137	115	He	766.350	ppb	0.6	230380.58	3.8155	Pulse	0.1000	3
Tl	205	159	He	106.575	ppb	0.8	797808.69	2.7755	Pulse	0.1000	3
Pb	208	159	He	54.325	ppb	1.0	545985.26	1.8994	Pulse	0.1000	3
U	238	209	He	90.019	ppb	0.5	1016697.41	4.5219	Pulse	0.1000	3

ISTD Table:

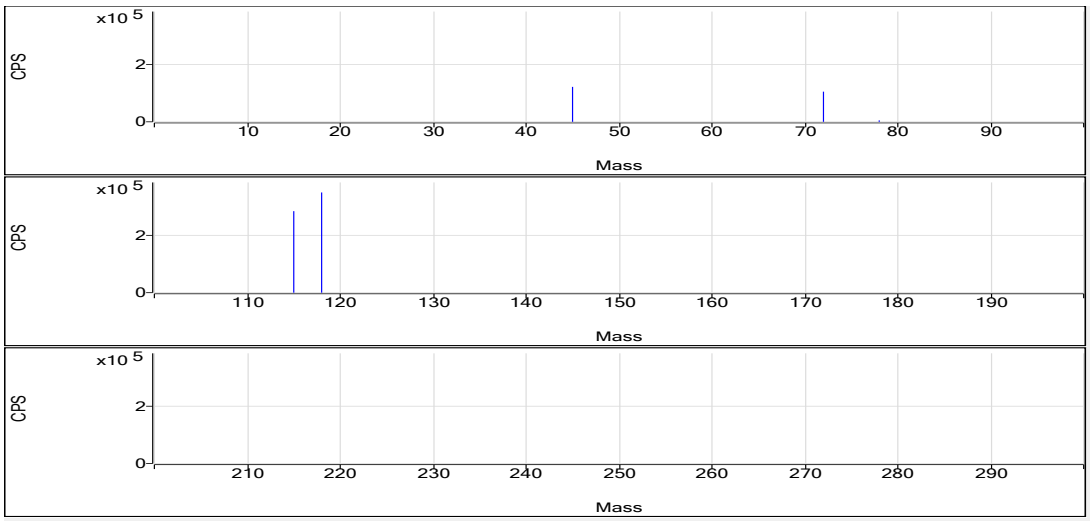
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2127472.83	0.3	104.7	Analog	0.1000	3
No Gas	Ge	72	1057567.95	0.4	105.2	Pulse	0.1000	3
H2	Sc	45	120745.85	2.0	91.4	Pulse	0.1000	3
H2	Ge	72	104212.78	1.4	93.4	Pulse	0.1000	3
H2	In	115	281757.12	0.4	95.9	Pulse	0.1000	3
He	Sc	45	37916.73	2.2	102.6	Pulse	0.1000	3
He	Ge	72	65731.78	1.1	101.8	Pulse	0.1000	3
He	In	115	60381.86	1.3	95.6	Pulse	0.1000	3
He	Tb	159	287454.96	0.4	98.2	Pulse	0.1000	3
He	Bi	209	224839.77	0.3	95.3	Pulse	0.1000	3

No Gas

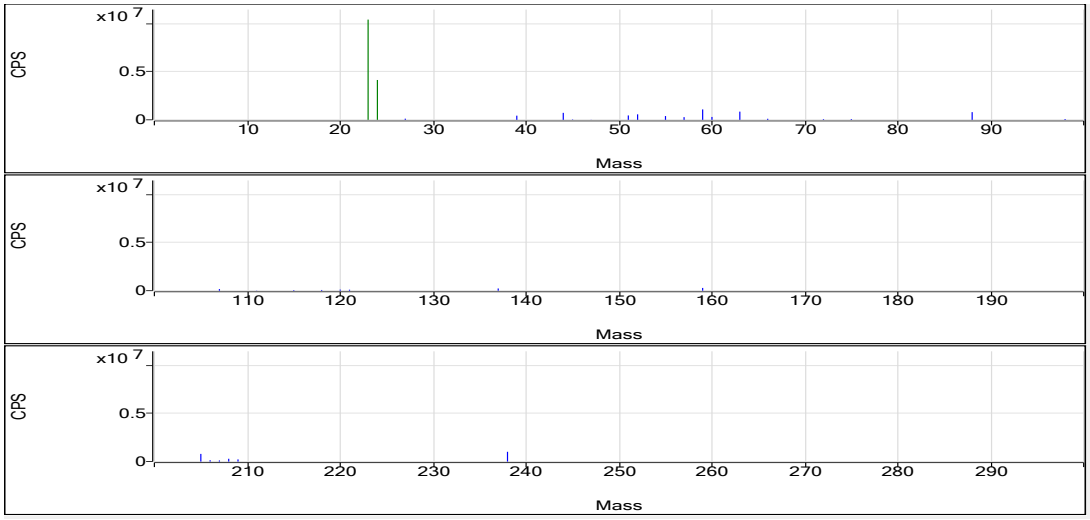


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.014	0.0384	81431.74	0.0008	2.195E-05
Be	9	1	No Gas	50.291	0.0386	82398.81	0.0008	2.195E-05
Be	9	1	No Gas	50.624	0.0389	82692.52	0.0008	2.195E-05
Se	78	2	H2	108.329	0.0471	4986.88	0.0004	1.386E-05
Se	78	2	H2	105.662	0.046	4768.80	0.0004	1.386E-05
Se	78	2	H2	111.148	0.0483	4982.21	0.0004	1.386E-05
Na	23	3	He	70907.055	271.4076	10436006.72	0.0038	0.4416
Na	23	3	He	73284.446	280.4926	10363491.72	0.0038	0.4416
Na	23	3	He	71339.617	273.0606	10472225.47	0.0038	0.4416
Mg	24	3	He	57497.594	107.1968	4121870.25	0.0019	0.005872
Mg	24	3	He	60078.045	112.0075	4138393.06	0.0019	0.005872
Mg	24	3	He	58341.35	108.7698	4171462.75	0.0019	0.005872
Al	27	3	He	5372.243	3.1065	119450.44	0.0006	0.0004496
Al	27	3	He	5524.469	3.1945	118030.22	0.0006	0.0004496
Al	27	3	He	5328.261	3.0811	118164.15	0.0006	0.0004496
K	39	3	He	9318.367	11.2222	431507.85	0.0012	0.4456
K	39	3	He	9695.493	11.6583	430744.56	0.0012	0.4456
K	39	3	He	9393.905	11.3095	433734.49	0.0012	0.4456
Ca	44	3	He	284125.157	18.7785	722061.32	0.0001	0.003779
Ca	44	3	He	297467.538	19.6602	726394.21	0.0001	0.003779
Ca	44	3	He	288029.916	19.0366	730076.55	0.0001	0.003779
Ti	47	3	He	546.802	0.2841	10924.48	0.0005	0
Ti	47	3	He	596.684	0.31	11454.81	0.0005	0
Ti	47	3	He	535.672	0.2783	10674.25	0.0005	0
V	51	3	He	528.6	11.815	454305.44	0.0223	0.03054
V	51	3	He	550.082	12.294	454230.81	0.0223	0.03054
V	51	3	He	534.164	11.9391	457879.63	0.0223	0.03054
Cr	52	3	He	521.486	14.8752	571971.20	0.0285	0.03714
Cr	52	3	He	539.672	15.3926	568717.84	0.0285	0.03714
Cr	52	3	He	523.941	14.945	573160.42	0.0285	0.03714
Mn	55	3	He	826.465	10.2397	393729.53	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	846.433	10.4869	387466.17	0.0124	0.004415
Mn	55	3	He	833.296	10.3243	395948.78	0.0124	0.004415
Fe	57	3	He	12759.723	7.2393	278362.46	0.0006	0.001356
Fe	57	3	He	13268.02	7.5277	278128.02	0.0006	0.001356
Fe	57	3	He	12816.568	7.2716	278874.25	0.0006	0.001356
Co	59	3	He	484.504	28.1505	1082426.86	0.0581	0.002697
Co	59	3	He	503.931	29.2791	1081790.45	0.0581	0.002697
Co	59	3	He	485.7	28.22	1082274.28	0.0581	0.002697
Ni	60	3	He	516.853	4.4836	297913.12	0.0087	0.003928
Ni	60	3	He	526.19	4.5646	299852.14	0.0087	0.003928
Ni	60	3	He	528.87	4.5878	298480.07	0.0087	0.003928
Cu	63	3	He	491.445	12.8503	853828.66	0.0261	0.006048
Cu	63	3	He	492.888	12.888	846626.63	0.0261	0.006048
Cu	63	3	He	503.79	13.1729	857024.21	0.0261	0.006048
Zn	66	3	He	581.124	1.6687	110876.69	0.0029	0.003512
Zn	66	3	He	575.053	1.6513	108476.99	0.0029	0.003512
Zn	66	3	He	580.172	1.666	108388.22	0.0029	0.003512
As	75	3	He	538.491	1.114	74021.92	0.0021	0.0007233
As	75	3	He	547.526	1.1327	74409.88	0.0021	0.0007233
As	75	3	He	553.383	1.1448	74482.31	0.0021	0.0007233
Sr	88	3	He	1487.524	13.3181	794675.14	0.009	0.0005796
Sr	88	3	He	1486.099	13.3053	801290.46	0.009	0.0005796
Sr	88	3	He	1458.882	13.0617	800074.28	0.009	0.0005796
Mo	98	3	He	58.182	1.3685	81656.64	0.0235	0.0003188
Mo	98	3	He	58.677	1.3801	83116.12	0.0235	0.0003188
Mo	98	3	He	56.551	1.3301	81476.15	0.0235	0.0003188
Ag	107	3	He	55.3	2.7575	164538.40	0.0499	0.0004754
Ag	107	3	He	54.155	2.7004	162627.38	0.0499	0.0004754
Ag	107	3	He	53.241	2.6549	162619.23	0.0499	0.0004754
Cd	111	3	He	56.321	0.3121	18622.45	0.0055	1.07E-05
Cd	111	3	He	55.275	0.3063	18446.20	0.0055	1.07E-05
Cd	111	3	He	53.767	0.2979	18249.95	0.0055	1.07E-05
Sn	120	3	He	112.791	1.8691	111526.90	0.0164	0.01713
Sn	120	3	He	112.498	1.8643	112272.76	0.0164	0.01713
Sn	120	3	He	108.584	1.8	110257.93	0.0164	0.01713
Sb	121	3	He	111.234	1.7208	102680.21	0.0155	0.0002641
Sb	121	3	He	108.76	1.6826	101329.64	0.0155	0.0002641
Sb	121	3	He	107.665	1.6656	102025.78	0.0155	0.0002641
Ba	137	3	He	764.74	3.8075	227186.93	0.005	0.0001577
Ba	137	3	He	771.914	3.8432	231448.79	0.005	0.0001577
Ba	137	3	He	762.396	3.7958	232506.03	0.005	0.0001577
Tl	205	3	He	106.284	2.7679	796925.69	0.026	0.0002504
Tl	205	3	He	107.504	2.7997	801310.30	0.026	0.0002504
Tl	205	3	He	105.936	2.7588	795190.07	0.026	0.0002504
Pb	208	3	He	53.752	1.8794	287947.50	0.0349	0.001422
Pb	208	3	He	54.847	1.9177	292558.49	0.0349	0.001422
Pb	208	3	He	54.376	1.9012	293439.08	0.0349	0.001422
U	238	3	He	89.605	4.5011	1014341.08	0.0502	5.657E-05
U	238	3	He	90.561	4.5492	1019098.34	0.0502	5.657E-05
U	238	3	He	89.891	4.5155	1016652.80	0.0502	5.657E-05
Sc	45	1	No Gas			2120720.28		
Sc	45	1	No Gas			2134091.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2127606.37		
Ge	72	1	No Gas			1059801.47		
Ge	72	1	No Gas			1053033.58		
Ge	72	1	No Gas			1059868.81		
Sc	45	2	H2			123551.53		
Sc	45	2	H2			119447.78		
Sc	45	2	H2			119238.25		
Ge	72	2	H2			105830.74		
Ge	72	2	H2			103756.72		
Ge	72	2	H2			103050.88		
In	115	2	H2			282739.37		
In	115	2	H2			280730.25		
In	115	2	H2			281801.73		
Sc	45	3	He			38451.42		
Sc	45	3	He			36947.47		
Sc	45	3	He			38351.29		
Ge	72	3	He			66444.48		
Ge	72	3	He			65691.25		
Ge	72	3	He			65059.60		
In	115	3	He			60250.77		
In	115	3	He			60823.76		
In	115	3	He			61838.05		
Tb	159	3	He			287917.36		
Tb	159	3	He			286214.39		
Tb	159	3	He			288233.12		
Bi	209	3	He			225353.20		
Bi	209	3	He			224018.32		
Bi	209	3	He			225147.79		

Quantitation Report

Data File Name	090SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:19:17 AM
Sample Name	410-136487-F-2-A
Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

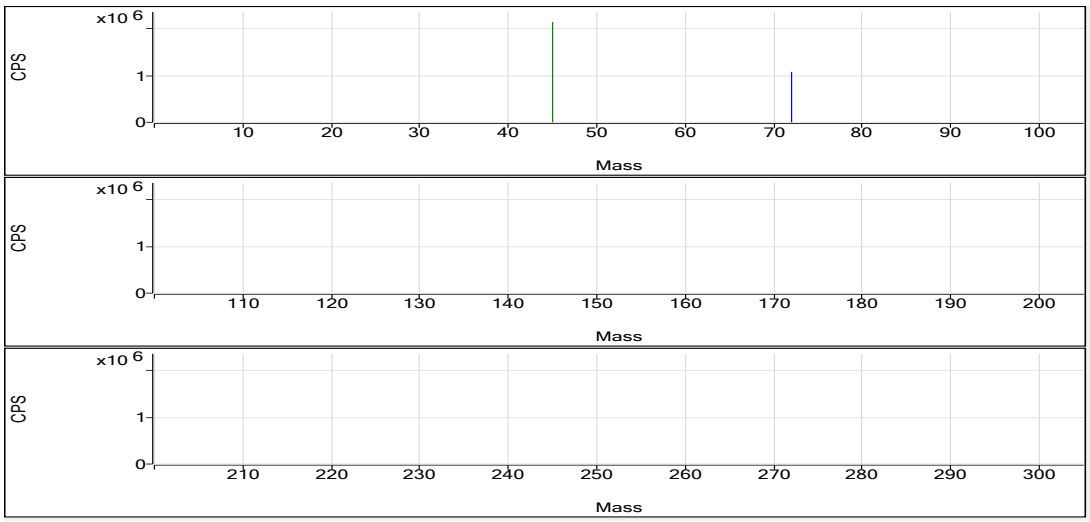
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.100	ppb	5.0	212.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.595	ppb	6.9	28.45	0.0003	Pulse	1.5000	3
Na	23	45	He	43158.643	ppb	3.8	6128049.07	165.3691	Analog	0.1000	3
Mg	24	45	He	18070.051	ppb	2.8	1248784.38	33.6933	Analog	0.1000	3
Al	27	45	He	638.008	ppb	5.2	13683.43	0.3693	Pulse	0.1000	3
K	39	45	He	4597.536	ppb	3.2	213574.20	5.7626	Pulse	0.1000	3
Ca	44	45	He	86974.608	ppb	3.4	213122.91	5.7510	Pulse	0.1000	3
Ti	47	45	He	13.165	ppb	9.7	253.34	0.0068	Pulse	0.1000	3
V	51	45	He	5.207	ppb	1.9	5436.38	0.1466	Pulse	0.5000	3
Cr	52	45	He	2.027	ppb	5.0	3513.88	0.0948	Pulse	0.1000	3
Mn	55	45	He	209.142	ppb	2.9	96162.48	2.5945	Pulse	0.1000	3
Fe	57	45	He	1129.302	ppb	2.0	23796.96	0.6420	Pulse	0.1000	3
Co	59	45	He	0.672	ppb	17.7	1543.46	0.0418	Pulse	0.1000	3
Ni	60	72	He	5.691	ppb	7.9	3617.26	0.0533	Pulse	0.1000	3
Cu	63	72	He	20.572	ppb	2.1	36938.37	0.5437	Pulse	0.1000	3
Zn	66	72	He	9.225	ppb	7.6	2033.55	0.0299	Pulse	0.1000	3
As	75	72	He	1.463	ppb	7.5	254.67	0.0037	Pulse	0.5000	3
Sr	88	115	He	395.071	ppb	1.8	216787.11	3.5376	Pulse	0.1000	3
Mo	98	115	He	3.998	ppb	6.0	5781.40	0.0943	Pulse	0.1000	3
Ag	107	115	He	0.051	ppb	41.5	183.34	0.0030	Pulse	0.1000	3
Cd	111	115	He	0.065	ppb	50.4	22.67	0.0004	Pulse	0.5000	3
Sn	120	115	He	0.189	ppb	45.9	1240.11	0.0202	Pulse	0.1000	3
Sb	121	115	He	0.837	ppb	6.2	810.05	0.0132	Pulse	0.1000	3
Ba	137	115	He	113.034	ppb	1.4	34500.85	0.5629	Pulse	0.1000	3
Tl	205	159	He	0.170	ppb	5.1	1363.45	0.0047	Pulse	0.1000	3
Pb	208	159	He	2.524	ppb	2.4	26144.47	0.0896	Pulse	0.1000	3
U	238	209	He	0.818	ppb	2.2	9477.14	0.0411	Pulse	0.1000	3

ISTD Table:

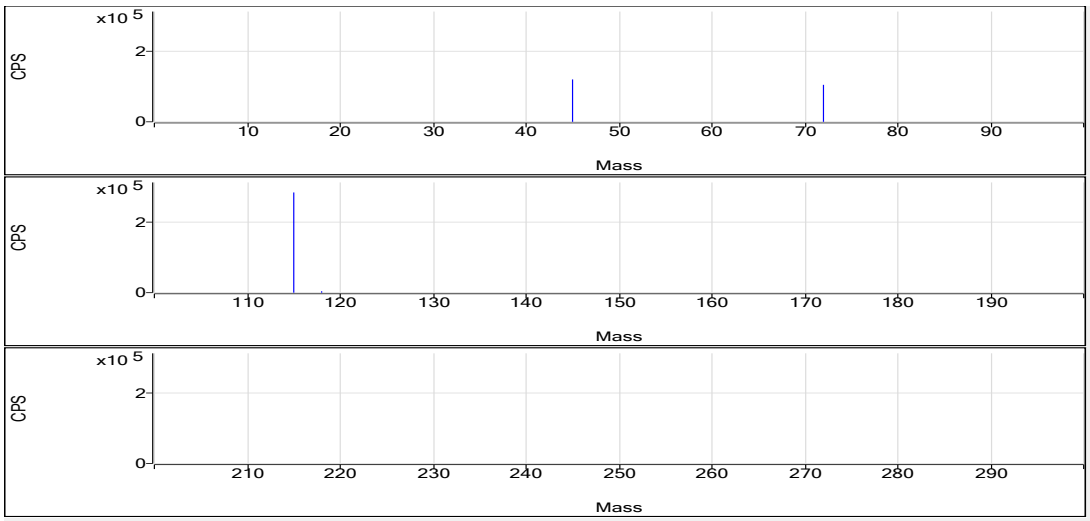
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2142612.73	0.9	105.4	Analog	0.1000	3
No Gas	Ge	72	1077608.34	1.0	107.2	Pulse	0.1000	3
H2	Sc	45	119625.40	0.8	90.5	Pulse	0.1000	3
H2	Ge	72	104379.66	1.5	93.6	Pulse	0.1000	3
H2	In	115	282856.69	0.6	96.3	Pulse	0.1000	3
He	Sc	45	37084.72	3.1	100.4	Pulse	0.1000	3
He	Ge	72	67942.34	1.2	105.2	Pulse	0.1000	3
He	In	115	61286.52	0.8	97.0	Pulse	0.1000	3
He	Tb	159	291784.54	0.8	99.7	Pulse	0.1000	3
He	Bi	209	230337.18	0.4	97.7	Pulse	0.1000	3

No Gas

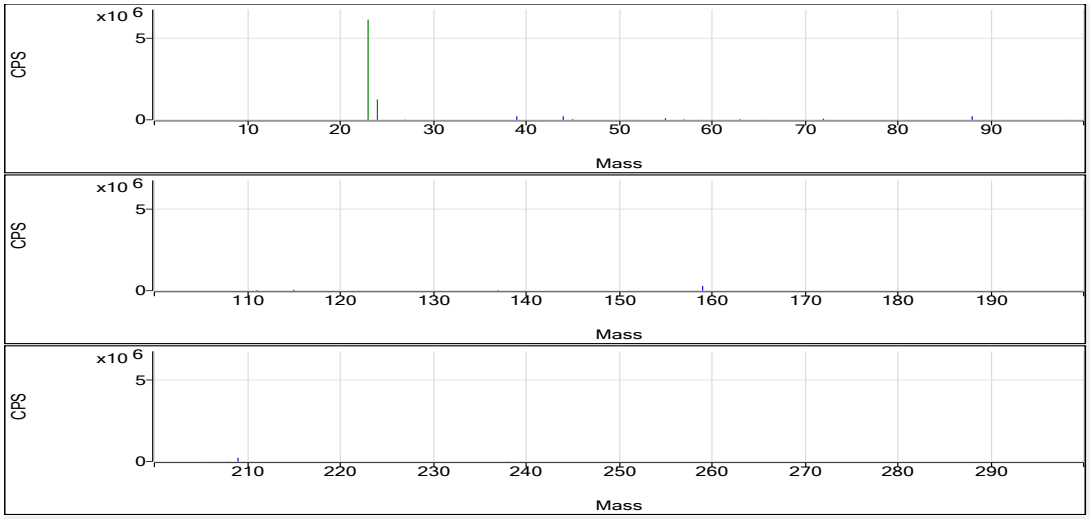


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.106	0.0001	220.00	0.0008	2.195E-05
Be	9	1	No Gas	0.098	0.0001	210.00	0.0008	2.195E-05
Be	9	1	No Gas	0.097	0.0001	206.00	0.0008	2.195E-05
Se	78	2	H2	0.549	0.0003	26.67	0.0004	1.386E-05
Se	78	2	H2	0.626	0.0003	30.00	0.0004	1.386E-05
Se	78	2	H2	0.611	0.0003	28.67	0.0004	1.386E-05
Na	23	3	He	42639.452	163.3851	6184134.28	0.0038	0.4416
Na	23	3	He	45000.759	172.4086	6162708.03	0.0038	0.4416
Na	23	3	He	41835.72	160.3137	6037304.91	0.0038	0.4416
Mg	24	3	He	17858.581	33.2991	1260371.54	0.0019	0.005872
Mg	24	3	He	18656.083	34.7858	1243411.47	0.0019	0.005872
Mg	24	3	He	17695.489	32.995	1242570.14	0.0019	0.005872
Al	27	3	He	603.156	0.3492	13216.39	0.0006	0.0004496
Al	27	3	He	669.714	0.3877	13856.79	0.0006	0.0004496
Al	27	3	He	641.153	0.3711	13977.12	0.0006	0.0004496
K	39	3	He	4512.269	5.664	214382.11	0.0012	0.4456
K	39	3	He	4765.179	5.9565	212912.73	0.0012	0.4456
K	39	3	He	4515.16	5.6673	213427.77	0.0012	0.4456
Ca	44	3	He	84564.586	5.5917	211647.57	0.0001	0.003779
Ca	44	3	He	90313.471	5.9716	213454.18	0.0001	0.003779
Ca	44	3	He	86045.766	5.6896	214266.97	0.0001	0.003779
Ti	47	3	He	11.696	0.0061	230.01	0.0005	0
Ti	47	3	He	14	0.0073	260.01	0.0005	0
Ti	47	3	He	13.799	0.0072	270.01	0.0005	0
V	51	3	He	5.116	0.1446	5473.06	0.0223	0.03054
V	51	3	He	5.31	0.1489	5323.00	0.0223	0.03054
V	51	3	He	5.197	0.1464	5513.07	0.0223	0.03054
Cr	52	3	He	1.917	0.0917	3470.56	0.0285	0.03714
Cr	52	3	He	2.117	0.0974	3480.51	0.0285	0.03714
Cr	52	3	He	2.046	0.0953	3590.56	0.0285	0.03714
Mn	55	3	He	203.195	2.5209	95414.45	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	215.364	2.6716	95494.41	0.0124	0.004415
Mn	55	3	He	208.866	2.5911	97578.59	0.0124	0.004415
Fe	57	3	He	1118.716	0.6359	24070.71	0.0006	0.001356
Fe	57	3	He	1155.114	0.6566	23469.89	0.0006	0.001356
Fe	57	3	He	1114.075	0.6333	23850.29	0.0006	0.001356
Co	59	3	He	0.577	0.0362	1370.11	0.0581	0.002697
Co	59	3	He	0.806	0.0495	1770.15	0.0581	0.002697
Co	59	3	He	0.635	0.0396	1490.12	0.0581	0.002697
Ni	60	3	He	5.211	0.0491	3340.51	0.0087	0.003928
Ni	60	3	He	6.102	0.0568	3810.67	0.0087	0.003928
Ni	60	3	He	5.76	0.0539	3700.59	0.0087	0.003928
Cu	63	3	He	20.095	0.5312	36146.38	0.0261	0.006048
Cu	63	3	He	20.927	0.553	37088.64	0.0261	0.006048
Cu	63	3	He	20.694	0.5469	37580.10	0.0261	0.006048
Zn	66	3	He	9.136	0.0297	2020.21	0.0029	0.003512
Zn	66	3	He	9.963	0.0321	2150.24	0.0029	0.003512
Zn	66	3	He	8.577	0.0281	1930.19	0.0029	0.003512
As	75	3	He	1.342	0.0035	238.00	0.0021	0.0007233
As	75	3	He	1.554	0.0039	264.00	0.0021	0.0007233
As	75	3	He	1.494	0.0038	262.00	0.0021	0.0007233
Sr	88	3	He	388.4	3.4779	213925.86	0.009	0.0005796
Sr	88	3	He	402.696	3.6058	218934.24	0.009	0.0005796
Sr	88	3	He	394.116	3.529	217501.23	0.009	0.0005796
Mo	98	3	He	3.734	0.0881	5421.27	0.0235	0.0003188
Mo	98	3	He	4.057	0.0957	5811.36	0.0235	0.0003188
Mo	98	3	He	4.203	0.0992	6111.56	0.0235	0.0003188
Ag	107	3	He	0.026	0.0018	110.00	0.0499	0.0004754
Ag	107	3	He	0.063	0.0036	220.01	0.0499	0.0004754
Ag	107	3	He	0.062	0.0036	220.01	0.0499	0.0004754
Cd	111	3	He	0.08	0.0005	28.00	0.0055	1.07E-05
Cd	111	3	He	0.087	0.0005	30.00	0.0055	1.07E-05
Cd	111	3	He	0.027	0.0002	10.00	0.0055	1.07E-05
Sn	120	3	He	0.274	0.0216	1330.13	0.0164	0.01713
Sn	120	3	He	0.1	0.0188	1140.09	0.0164	0.01713
Sn	120	3	He	0.192	0.0203	1250.10	0.0164	0.01713
Sb	121	3	He	0.782	0.0124	760.05	0.0155	0.0002641
Sb	121	3	He	0.845	0.0133	810.06	0.0155	0.0002641
Sb	121	3	He	0.885	0.014	860.05	0.0155	0.0002641
Ba	137	3	He	113.95	0.5675	34905.24	0.005	0.0001577
Ba	137	3	He	111.262	0.5541	33641.95	0.005	0.0001577
Ba	137	3	He	113.889	0.5672	34955.35	0.005	0.0001577
Tl	205	3	He	0.179	0.0049	1440.12	0.026	0.0002504
Tl	205	3	He	0.162	0.0045	1310.10	0.026	0.0002504
Tl	205	3	He	0.168	0.0046	1340.12	0.026	0.0002504
Pb	208	3	He	2.481	0.0881	13887.78	0.0349	0.001422
Pb	208	3	He	2.498	0.0887	14108.03	0.0349	0.001422
Pb	208	3	He	2.594	0.0921	13947.86	0.0349	0.001422
U	238	3	He	0.822	0.0413	9533.90	0.0502	5.657E-05
U	238	3	He	0.834	0.0419	9613.84	0.0502	5.657E-05
U	238	3	He	0.799	0.0402	9283.67	0.0502	5.657E-05
Sc	45	1	No Gas			2128151.06		
Sc	45	1	No Gas			2165642.00		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2134045.12		
Ge	72	1	No Gas			1070400.06		
Ge	72	1	No Gas			1089940.45		
Ge	72	1	No Gas			1072484.52		
Sc	45	2	H2			120636.58		
Sc	45	2	H2			119528.76		
Sc	45	2	H2			118710.85		
Ge	72	2	H2			105618.29		
Ge	72	2	H2			104893.54		
Ge	72	2	H2			102627.16		
In	115	2	H2			284817.77		
In	115	2	H2			281535.54		
In	115	2	H2			282216.77		
Sc	45	3	He			37850.06		
Sc	45	3	He			35744.78		
Sc	45	3	He			37659.33		
Ge	72	3	He			68042.52		
Ge	72	3	He			67068.99		
Ge	72	3	He			68715.50		
In	115	3	He			61517.36		
In	115	3	He			60723.25		
In	115	3	He			61637.42		
Tb	159	3	He			293105.64		
Tb	159	3	He			293055.50		
Tb	159	3	He			289192.48		
Bi	209	3	He			230612.09		
Bi	209	3	He			229300.50		
Bi	209	3	He			231098.94		

Quantitation Report

Data File Name	091SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:21:21 AM
Sample Name	410-136487-F-1-A
Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

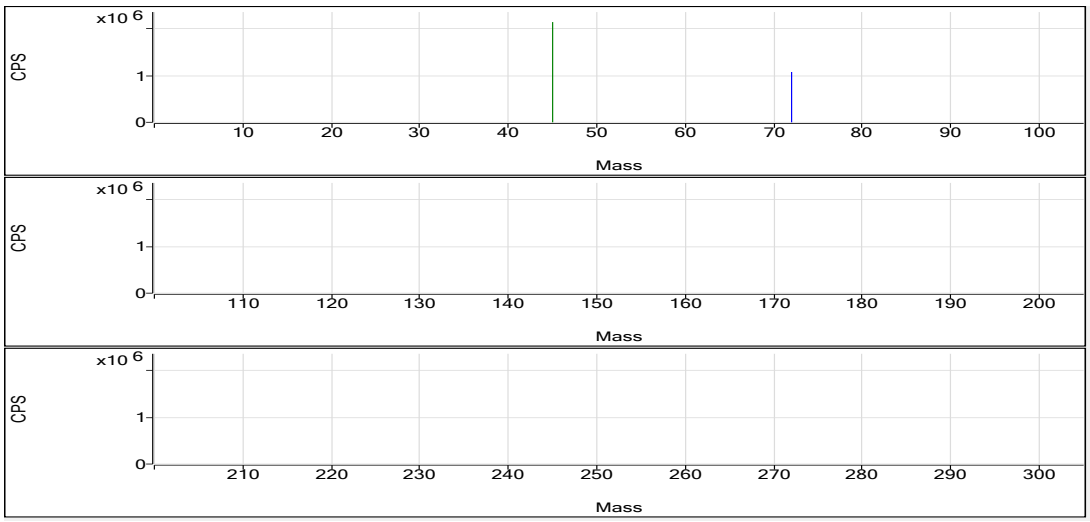
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.025	ppb	1.4	88.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.007	ppb	125.3	1.78	0.0000	Pulse	1.5000	3
Na	23	45	He	846.821	ppb	1.1	138457.00	3.6777	Pulse	0.1000	3
Mg	24	45	He	40.167	ppb	7.7	3040.42	0.0808	Pulse	0.1000	3
Al	27	45	He	36.444	ppb	6.3	810.05	0.0215	Pulse	0.1000	3
K	39	45	He	1.557	ppb	675.0	16846.88	0.4474	Pulse	0.1000	3
Ca	44	45	He	276.219	ppb	28.8	830.06	0.0220	Pulse	0.1000	3
Ti	47	45	He	0.342	ppb	86.6	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	0.047	ppb	26.8	1189.39	0.0316	Pulse	0.5000	3
Cr	52	45	He	0.407	ppb	47.7	1833.52	0.0487	Pulse	0.1000	3
Mn	55	45	He	0.223	ppb	63.1	270.01	0.0072	Pulse	0.1000	3
Fe	57	45	He	5.254	ppb	36.7	163.34	0.0043	Pulse	0.1000	3
Co	59	45	He	0.091	ppb	17.5	300.01	0.0080	Pulse	0.1000	3
Ni	60	72	He	0.032	ppb	164.7	283.35	0.0042	Pulse	0.1000	3
Cu	63	72	He	0.223	ppb	48.0	800.05	0.0119	Pulse	0.1000	3
Zn	66	72	He	0.397	ppb	38.8	313.35	0.0046	Pulse	0.1000	3
As	75	72	He	0.224	ppb	18.0	80.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	1.497	ppb	12.3	883.40	0.0140	Pulse	0.1000	3
Mo	98	115	He	0.040	ppb	33.6	80.00	0.0013	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	230.1	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	57.8	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.213	ppb	28.1	1303.45	0.0206	Pulse	0.1000	3
Sb	121	115	He	0.229	ppb	9.1	240.01	0.0038	Pulse	0.1000	3
Ba	137	115	He	2.629	ppb	24.5	836.73	0.0132	Pulse	0.1000	3
Tl	205	159	He	0.059	ppb	24.8	520.03	0.0018	Pulse	0.1000	3
Pb	208	159	He	0.027	ppb	24.3	683.37	0.0024	Pulse	0.1000	3
U	238	209	He	0.027	ppb	11.3	336.69	0.0014	Pulse	0.1000	3

ISTD Table:

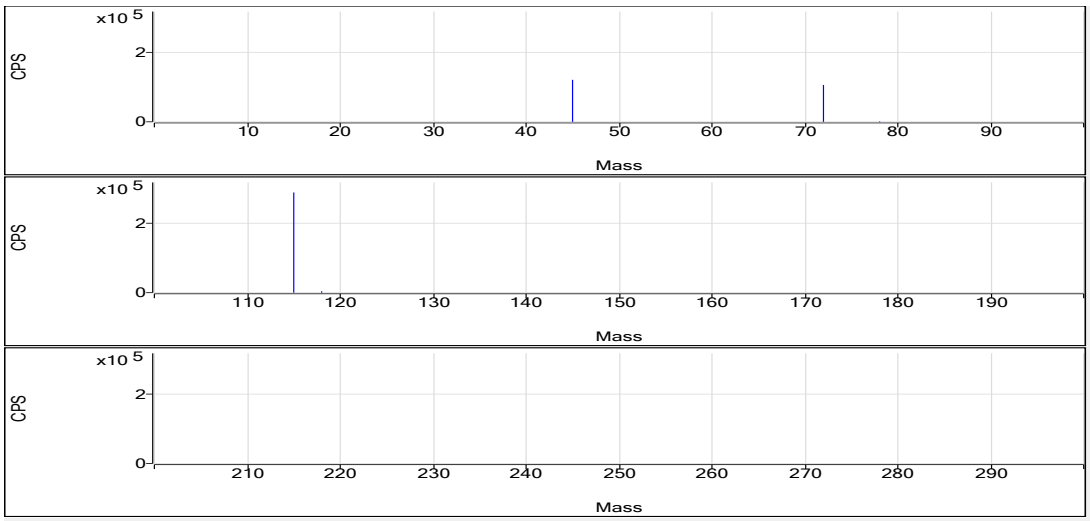
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2139146.32	1.6	105.2	Analog	0.1000	3
No Gas	Ge	72	1073675.25	1.0	106.8	Pulse	0.1000	3
H2	Sc	45	120444.23	0.7	91.2	Pulse	0.1000	3
H2	Ge	72	105666.22	1.1	94.7	Pulse	0.1000	3
H2	In	115	287453.36	1.0	97.9	Pulse	0.1000	3
He	Sc	45	37649.42	0.6	101.9	Pulse	0.1000	3
He	Ge	72	67395.95	0.6	104.4	Pulse	0.1000	3
He	In	115	63176.72	0.2	100.0	Pulse	0.1000	3
He	Tb	159	290111.96	1.0	99.1	Pulse	0.1000	3
He	Bi	209	237240.36	1.6	100.6	Pulse	0.1000	3

No Gas

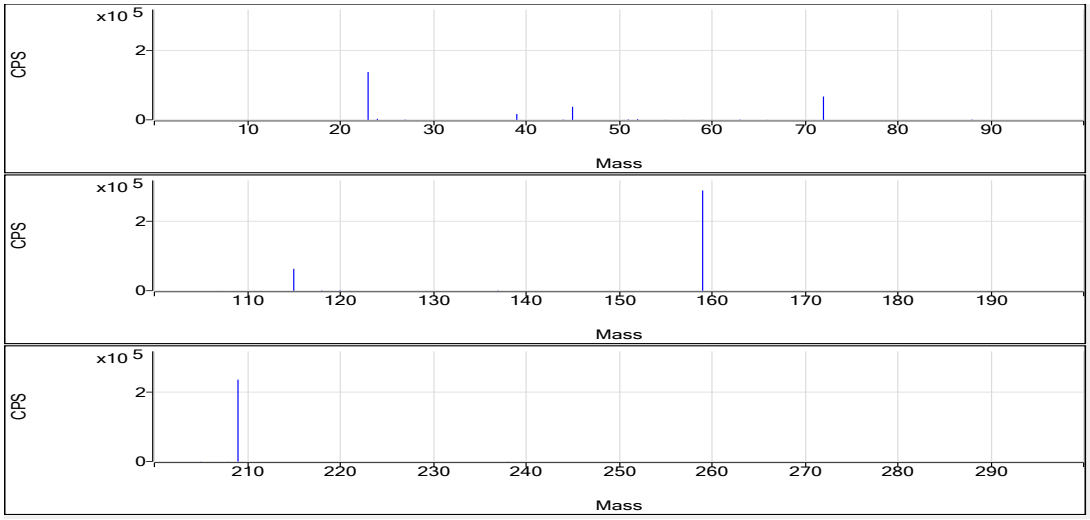


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0	88.00	0.0008	2.195E-05
Be	9	1	No Gas	0.025	0	86.00	0.0008	2.195E-05
Be	9	1	No Gas	0.025	0	90.00	0.0008	2.195E-05
Se	78	2	H2	0.012	0	2.00	0.0004	1.386E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.011	0	2.00	0.0004	1.386E-05
Na	23	3	He	836.978	3.6401	137666.38	0.0038	0.4416
Na	23	3	He	847.445	3.6801	138847.62	0.0038	0.4416
Na	23	3	He	856.039	3.7129	138857.01	0.0038	0.4416
Mg	24	3	He	37.703	0.0762	2880.40	0.0019	0.005872
Mg	24	3	He	43.631	0.0872	3290.48	0.0019	0.005872
Mg	24	3	He	39.168	0.0789	2950.39	0.0019	0.005872
Al	27	3	He	35.811	0.0212	800.05	0.0006	0.0004496
Al	27	3	He	34.523	0.0204	770.05	0.0006	0.0004496
Al	27	3	He	38.998	0.023	860.05	0.0006	0.0004496
K	39	3	He	8.399	0.4553	17220.64	0.0012	0.4456
K	39	3	He	6.815	0.4535	17110.48	0.0012	0.4456
K	39	3	He	-10.543	0.4334	16209.52	0.0012	0.4456
Ca	44	3	He	367.001	0.028	1060.08	0.0001	0.003779
Ca	44	3	He	243.661	0.0199	750.05	0.0001	0.003779
Ca	44	3	He	217.996	0.0182	680.04	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.51	0.0003	10.00	0.0005	0
Ti	47	3	He	0.515	0.0003	10.00	0.0005	0
V	51	3	He	0.041	0.0315	1190.06	0.0223	0.03054
V	51	3	He	0.062	0.0319	1204.06	0.0223	0.03054
V	51	3	He	0.038	0.0314	1174.06	0.0223	0.03054
Cr	52	3	He	0.489	0.051	1930.19	0.0285	0.03714
Cr	52	3	He	0.185	0.0424	1600.15	0.0285	0.03714
Cr	52	3	He	0.546	0.0527	1970.21	0.0285	0.03714
Mn	55	3	He	0.092	0.0056	210.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.371	0.009	340.02	0.0124	0.004415
Mn	55	3	He	0.205	0.007	260.01	0.0124	0.004415
Fe	57	3	He	4.602	0.004	150.01	0.0006	0.001356
Fe	57	3	He	7.422	0.0056	210.01	0.0006	0.001356
Fe	57	3	He	3.738	0.0035	130.01	0.0006	0.001356
Co	59	3	He	0.095	0.0082	310.01	0.0581	0.002697
Co	59	3	He	0.104	0.0087	330.02	0.0581	0.002697
Co	59	3	He	0.073	0.007	260.01	0.0581	0.002697
Ni	60	3	He	-0.006	0.0039	260.01	0.0087	0.003928
Ni	60	3	He	0.091	0.0047	320.02	0.0087	0.003928
Ni	60	3	He	0.009	0.004	270.01	0.0087	0.003928
Cu	63	3	He	0.322	0.0145	970.07	0.0261	0.006048
Cu	63	3	He	0.237	0.0122	830.05	0.0261	0.006048
Cu	63	3	He	0.11	0.0089	600.03	0.0261	0.006048
Zn	66	3	He	0.441	0.0048	320.02	0.0029	0.003512
Zn	66	3	He	0.524	0.005	340.02	0.0029	0.003512
Zn	66	3	He	0.226	0.0042	280.01	0.0029	0.003512
As	75	3	He	0.271	0.0013	86.00	0.0021	0.0007233
As	75	3	He	0.206	0.0011	78.00	0.0021	0.0007233
As	75	3	He	0.196	0.0011	76.00	0.0021	0.0007233
Sr	88	3	He	1.683	0.0156	990.07	0.009	0.0005796
Sr	88	3	He	1.315	0.0123	780.06	0.009	0.0005796
Sr	88	3	He	1.493	0.0139	880.06	0.009	0.0005796
Mo	98	3	He	0.027	0.0009	60.00	0.0235	0.0003188
Mo	98	3	He	0.04	0.0013	80.00	0.0235	0.0003188
Mo	98	3	He	0.054	0.0016	100.00	0.0235	0.0003188
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	0.009	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	0.199	0.0204	1290.12	0.0164	0.01713
Sn	120	3	He	0.162	0.0198	1250.12	0.0164	0.01713
Sn	120	3	He	0.28	0.0217	1370.11	0.0164	0.01713
Sb	121	3	He	0.208	0.0035	220.01	0.0155	0.0002641
Sb	121	3	He	0.229	0.0038	240.01	0.0155	0.0002641
Sb	121	3	He	0.249	0.0041	260.01	0.0155	0.0002641
Ba	137	3	He	2.222	0.0112	710.05	0.005	0.0001577
Ba	137	3	He	3.371	0.0169	1070.09	0.005	0.0001577
Ba	137	3	He	2.293	0.0116	730.05	0.005	0.0001577
Tl	205	3	He	0.058	0.0018	510.03	0.026	0.0002504
Tl	205	3	He	0.075	0.0022	630.04	0.026	0.0002504
Tl	205	3	He	0.045	0.0014	420.02	0.026	0.0002504
Pb	208	3	He	0.034	0.0026	420.02	0.0349	0.001422
Pb	208	3	He	0.024	0.0023	320.01	0.0349	0.001422
Pb	208	3	He	0.022	0.0022	360.02	0.0349	0.001422
U	238	3	He	0.024	0.0012	300.02	0.0502	5.657E-05
U	238	3	He	0.028	0.0015	340.02	0.0502	5.657E-05
U	238	3	He	0.03	0.0015	370.02	0.0502	5.657E-05
Sc	45	1	No Gas			2140543.41		
Sc	45	1	No Gas			2103304.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2173591.53		
Ge	72	1	No Gas			1065647.72		
Ge	72	1	No Gas			1069626.86		
Ge	72	1	No Gas			1085751.16		
Sc	45	2	H2			121121.97		
Sc	45	2	H2			120791.54		
Sc	45	2	H2			119419.19		
Ge	72	2	H2			104409.46		
Ge	72	2	H2			106063.26		
Ge	72	2	H2			106525.94		
In	115	2	H2			290600.54		
In	115	2	H2			285366.34		
In	115	2	H2			286393.20		
Sc	45	3	He			37819.88		
Sc	45	3	He			37729.79		
Sc	45	3	He			37398.58		
Ge	72	3	He			67027.76		
Ge	72	3	He			67830.97		
Ge	72	3	He			67329.12		
In	115	3	He			63284.63		
In	115	3	He			63174.15		
In	115	3	He			63093.55		
Tb	159	3	He			290881.62		
Tb	159	3	He			286761.99		
Tb	159	3	He			292692.28		
Bi	209	3	He			240076.95		
Bi	209	3	He			232863.18		
Bi	209	3	He			238780.95		

Quantitation Report

Data File Name	092SMPL.d
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Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

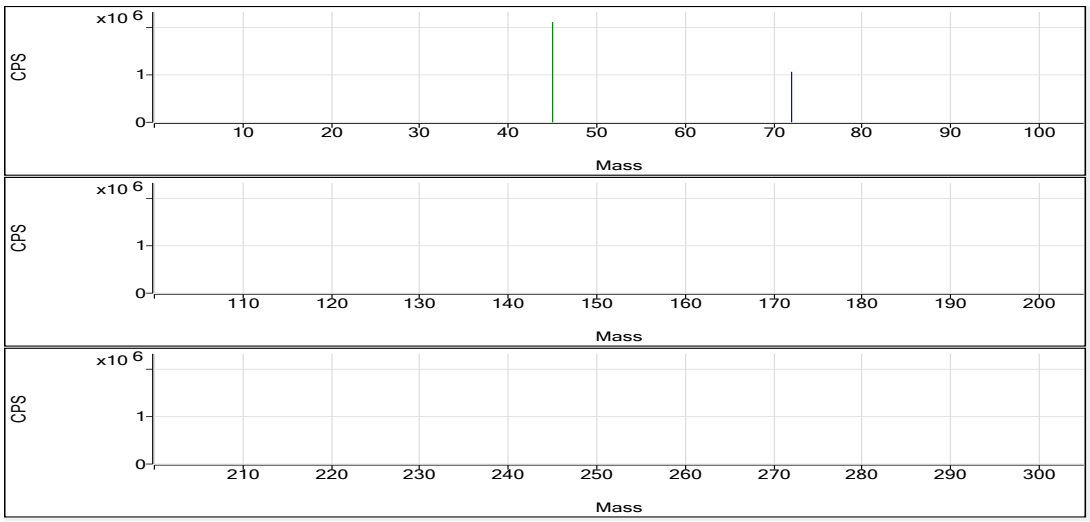
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	25.4	66.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.017	ppb	53.5	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	5432.053	ppb	1.8	787144.52	21.1998	Pulse	0.1000	3
Mg	24	45	He	16845.242	ppb	1.7	1166268.37	31.4099	Analog	0.1000	3
Al	27	45	He	8.063	ppb	16.1	190.01	0.0051	Pulse	0.1000	3
K	39	45	He	1070.622	ppb	2.6	62517.62	1.6838	Pulse	0.1000	3
Ca	44	45	He	95203.102	ppb	1.6	233725.92	6.2947	Pulse	0.1000	3
Ti	47	45	He	0.682	ppb	173.2	13.33	0.0004	Pulse	0.1000	3
V	51	45	He	0.000	ppb	44485.5	1134.05	0.0305	Pulse	0.5000	3
Cr	52	45	He	0.282	ppb	17.0	1676.82	0.0452	Pulse	0.1000	3
Mn	55	45	He	6105.295	ppb	1.7	2807592.15	75.6146	Analog	0.1000	3
Fe	57	45	He	43.195	ppb	12.9	960.07	0.0259	Pulse	0.1000	3
Co	59	45	He	2.488	ppb	6.7	5464.55	0.1472	Pulse	0.1000	3
Ni	60	72	He	0.661	ppb	20.6	646.70	0.0097	Pulse	0.1000	3
Cu	63	72	He	0.294	ppb	11.5	920.06	0.0137	Pulse	0.1000	3
Zn	66	72	He	0.442	ppb	70.8	320.01	0.0048	Pulse	0.1000	3
As	75	72	He	0.257	ppb	49.6	84.00	0.0013	Pulse	0.5000	3
Sr	88	115	He	273.513	ppb	0.7	153401.21	2.4493	Pulse	0.1000	3
Mo	98	115	He	0.179	ppb	6.7	283.35	0.0045	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	26.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.031	ppb	28.2	11.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.055	ppb	N/A	1016.74	0.0162	Pulse	0.1000	3
Sb	121	115	He	0.034	ppb	51.1	50.00	0.0008	Pulse	0.1000	3
Ba	137	115	He	7.990	ppb	9.1	2500.33	0.0399	Pulse	0.1000	3
Tl	205	159	He	0.046	ppb	15.9	416.69	0.0014	Pulse	0.1000	3
Pb	208	159	He	0.020	ppb	27.9	616.70	0.0021	Pulse	0.1000	3
U	238	209	He	1.355	ppb	0.9	15770.24	0.0681	Pulse	0.1000	3

ISTD Table:

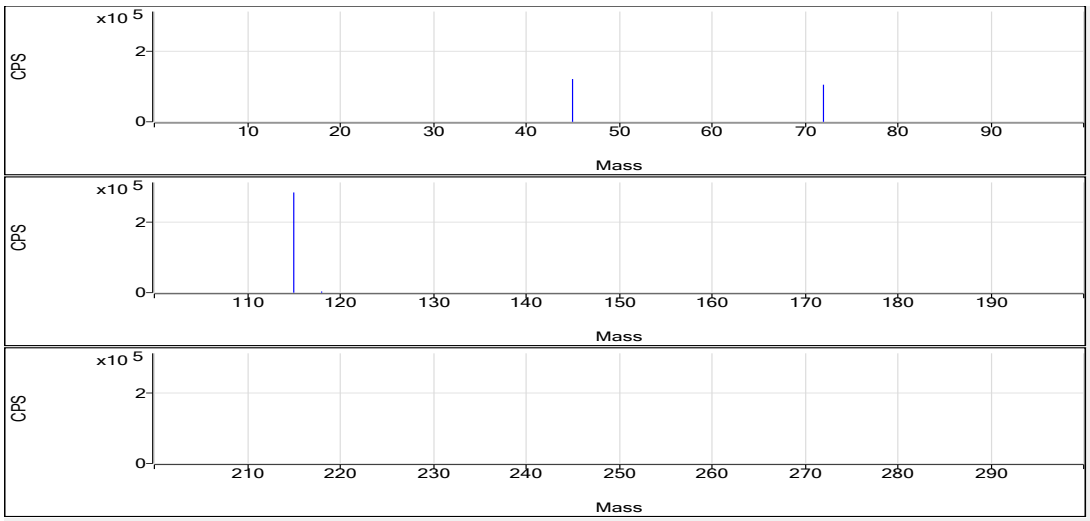
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2107998.56	0.6	103.7	Analog	0.1000	3
No Gas	Ge	72	1061728.81	0.4	105.6	Pulse	0.1000	3
H2	Sc	45	121874.50	0.2	92.3	Pulse	0.1000	3
H2	Ge	72	105723.42	1.2	94.8	Pulse	0.1000	3
H2	In	115	285525.20	0.8	97.2	Pulse	0.1000	3
He	Sc	45	37135.08	1.2	100.5	Pulse	0.1000	3
He	Ge	72	66964.05	0.7	103.7	Pulse	0.1000	3
He	In	115	62632.77	0.8	99.1	Pulse	0.1000	3
He	Tb	159	289358.84	0.5	98.8	Pulse	0.1000	3
He	Bi	209	231579.63	0.5	98.2	Pulse	0.1000	3

No Gas

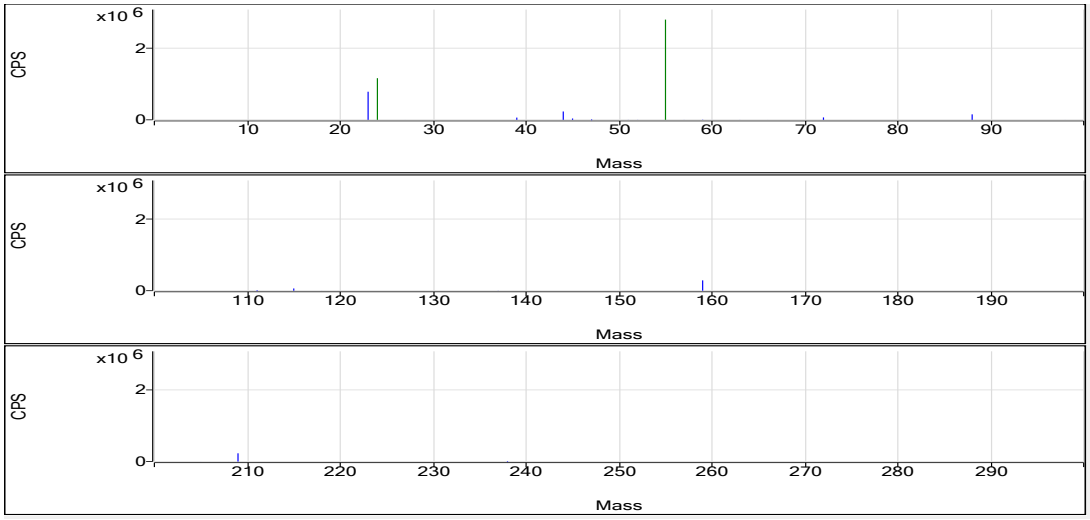


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0	62.00	0.0008	2.195E-05
Be	9	1	No Gas	0.016	0	72.00	0.0008	2.195E-05
Be	9	1	No Gas	0.011	0	64.00	0.0008	2.195E-05
Se	78	2	H2	0.027	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.011	0	2.00	0.0004	1.386E-05
Se	78	2	H2	0.012	0	2.00	0.0004	1.386E-05
Na	23	3	He	5508.942	21.4936	792844.29	0.0038	0.4416
Na	23	3	He	5468.755	21.34	786762.96	0.0038	0.4416
Na	23	3	He	5318.461	20.7657	781826.32	0.0038	0.4416
Mg	24	3	He	17109.175	31.902	1176781.94	0.0019	0.005872
Mg	24	3	He	16879.565	31.4739	1160377.72	0.0019	0.005872
Mg	24	3	He	16546.985	30.8539	1161645.45	0.0019	0.005872
Al	27	3	He	8.132	0.0052	190.01	0.0006	0.0004496
Al	27	3	He	6.729	0.0043	160.01	0.0006	0.0004496
Al	27	3	He	9.329	0.0058	220.01	0.0006	0.0004496
K	39	3	He	1081.278	1.6961	62564.75	0.0012	0.4456
K	39	3	He	1091.939	1.7084	62986.20	0.0012	0.4456
K	39	3	He	1038.651	1.6468	62001.91	0.0012	0.4456
Ca	44	3	He	95581.456	6.3197	233118.38	0.0001	0.003779
Ca	44	3	He	96520.816	6.3818	235283.49	0.0001	0.003779
Ca	44	3	He	93507.034	6.1826	232775.89	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	2.045	0.0011	40.00	0.0005	0
V	51	3	He	0.043	0.0315	1162.05	0.0223	0.03054
V	51	3	He	-0.01	0.0303	1118.05	0.0223	0.03054
V	51	3	He	-0.033	0.0298	1122.05	0.0223	0.03054
Cr	52	3	He	0.324	0.0464	1710.16	0.0285	0.03714
Cr	52	3	He	0.23	0.0437	1610.15	0.0285	0.03714
Cr	52	3	He	0.291	0.0454	1710.16	0.0285	0.03714
Mn	55	3	He	6191.55	76.6828	2828634.02	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	6133.785	75.9675	2800762.46	0.0124	0.004415
Mn	55	3	He	5990.55	74.1936	2793379.96	0.0124	0.004415
Fe	57	3	He	38.235	0.023	850.06	0.0006	0.001356
Fe	57	3	He	49.255	0.0293	1080.08	0.0006	0.001356
Fe	57	3	He	42.095	0.0252	950.07	0.0006	0.001356
Co	59	3	He	2.647	0.1565	5771.32	0.0581	0.002697
Co	59	3	He	2.503	0.1481	5461.28	0.0581	0.002697
Co	59	3	He	2.313	0.1371	5161.06	0.0581	0.002697
Ni	60	3	He	0.818	0.011	740.04	0.0087	0.003928
Ni	60	3	He	0.575	0.0089	600.04	0.0087	0.003928
Ni	60	3	He	0.589	0.009	600.03	0.0087	0.003928
Cu	63	3	He	0.332	0.0147	990.06	0.0261	0.006048
Cu	63	3	He	0.269	0.0131	880.06	0.0261	0.006048
Cu	63	3	He	0.281	0.0134	890.07	0.0261	0.006048
Zn	66	3	He	0.749	0.0057	380.02	0.0029	0.003512
Zn	66	3	He	0.123	0.0039	260.01	0.0029	0.003512
Zn	66	3	He	0.456	0.0048	320.01	0.0029	0.003512
As	75	3	He	0.399	0.0015	104.00	0.0021	0.0007233
As	75	3	He	0.153	0.001	70.00	0.0021	0.0007233
As	75	3	He	0.218	0.0012	78.00	0.0021	0.0007233
Sr	88	3	He	274.887	2.4616	154011.32	0.009	0.0005796
Sr	88	3	He	271.459	2.4309	153606.50	0.009	0.0005796
Sr	88	3	He	274.194	2.4554	152585.82	0.009	0.0005796
Mo	98	3	He	0.177	0.0045	280.01	0.0235	0.0003188
Mo	98	3	He	0.168	0.0043	270.01	0.0235	0.0003188
Mo	98	3	He	0.192	0.0048	300.02	0.0235	0.0003188
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.038	0.0002	14.00	0.0055	1.07E-05
Cd	111	3	He	0.033	0.0002	12.00	0.0055	1.07E-05
Sn	120	3	He	-0.187	0.0141	880.06	0.0164	0.01713
Sn	120	3	He	-0.002	0.0171	1080.09	0.0164	0.01713
Sn	120	3	He	0.025	0.0175	1090.08	0.0164	0.01713
Sb	121	3	He	0.045	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.044	0.0009	60.00	0.0155	0.0002641
Sb	121	3	He	0.014	0.0005	30.00	0.0155	0.0002641
Ba	137	3	He	7.61	0.038	2380.30	0.005	0.0001577
Ba	137	3	He	7.535	0.0377	2380.32	0.005	0.0001577
Ba	137	3	He	8.826	0.0441	2740.36	0.005	0.0001577
Tl	205	3	He	0.043	0.0014	400.02	0.026	0.0002504
Tl	205	3	He	0.054	0.0017	480.03	0.026	0.0002504
Tl	205	3	He	0.04	0.0013	370.02	0.026	0.0002504
Pb	208	3	He	0.02	0.0021	380.02	0.0349	0.001422
Pb	208	3	He	0.026	0.0023	410.02	0.0349	0.001422
Pb	208	3	He	0.015	0.0019	340.02	0.0349	0.001422
U	238	3	He	1.342	0.0675	15600.03	0.0502	5.657E-05
U	238	3	He	1.356	0.0682	15870.27	0.0502	5.657E-05
U	238	3	He	1.366	0.0687	15840.41	0.0502	5.657E-05
Sc	45	1	No Gas			2092851.69		
Sc	45	1	No Gas			2116194.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2114949.50		
Ge	72	1	No Gas			1056525.84		
Ge	72	1	No Gas			1063051.00		
Ge	72	1	No Gas			1065609.59		
Sc	45	2	H2			121544.35		
Sc	45	2	H2			122110.28		
Sc	45	2	H2			121968.86		
Ge	72	2	H2			104742.64		
Ge	72	2	H2			107210.86		
Ge	72	2	H2			105216.76		
In	115	2	H2			287345.93		
In	115	2	H2			282915.97		
In	115	2	H2			286313.69		
Sc	45	3	He			36887.44		
Sc	45	3	He			36867.92		
Sc	45	3	He			37649.88		
Ge	72	3	He			67178.24		
Ge	72	3	He			67309.02		
Ge	72	3	He			66404.88		
In	115	3	He			62571.54		
In	115	3	He			63194.12		
In	115	3	He			62149.33		
Tb	159	3	He			289252.01		
Tb	159	3	He			290817.94		
Tb	159	3	He			288006.58		
Bi	209	3	He			231201.73		
Bi	209	3	He			232867.67		
Bi	209	3	He			230669.49		

Quantitation Report

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Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

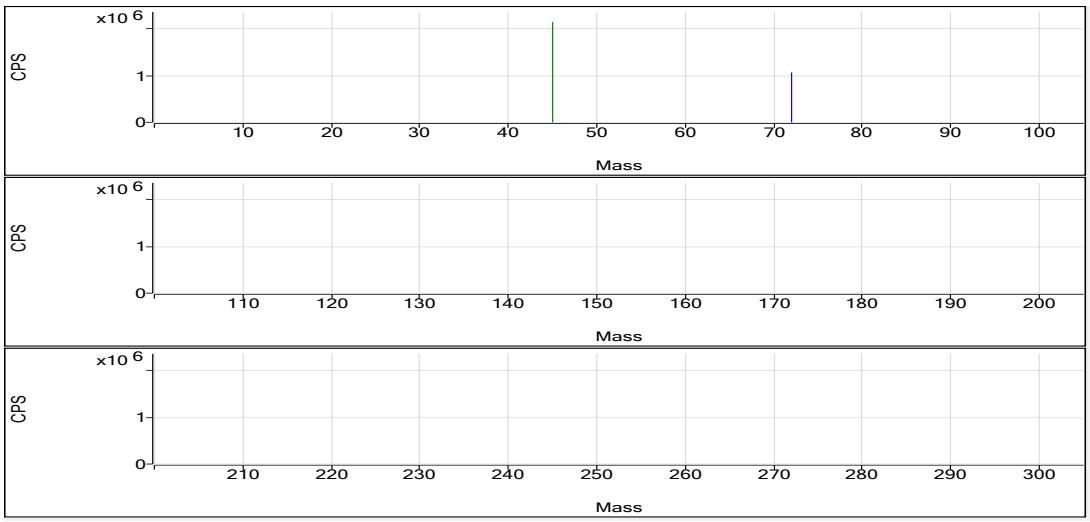
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.097	ppb	5.4	206.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.090	ppb	8.3	5.55	0.0001	Pulse	1.5000	3
Na	23	45	He	11116.683	ppb	1.0	1613843.36	42.9232	Analog	0.1000	3
Mg	24	45	He	14634.681	ppb	1.0	1025999.88	27.2888	Pulse	0.1000	3
Al	27	45	He	2783.340	ppb	1.2	60521.47	1.6097	Pulse	0.1000	3
K	39	45	He	3252.107	ppb	2.3	158141.63	4.2066	Pulse	0.1000	3
Ca	44	45	He	101452.519	ppb	0.7	252203.33	6.7077	Pulse	0.1000	3
Ti	47	45	He	23.217	ppb	15.0	453.36	0.0121	Pulse	0.1000	3
V	51	45	He	3.837	ppb	1.8	4364.68	0.1161	Pulse	0.5000	3
Cr	52	45	He	5.424	ppb	5.9	7195.37	0.1915	Pulse	0.1000	3
Mn	55	45	He	17221.918	ppb	1.5	8018644.46	213.2870	Analog	0.1000	3
Fe	57	45	He	14560.519	ppb	1.6	310580.86	8.2608	Pulse	0.1000	3
Co	59	45	He	2.775	ppb	6.5	6168.19	0.1639	Pulse	0.1000	3
Ni	60	72	He	4.386	ppb	3.5	2817.04	0.0419	Pulse	0.1000	3
Cu	63	72	He	5.144	ppb	4.4	9436.73	0.1405	Pulse	0.1000	3
Zn	66	72	He	20.790	ppb	1.9	4237.45	0.0631	Pulse	0.1000	3
As	75	72	He	10.958	ppb	1.8	1570.10	0.0234	Pulse	0.5000	3
Sr	88	115	He	419.427	ppb	1.2	232177.57	3.7556	Pulse	0.1000	3
Mo	98	115	He	1.032	ppb	4.6	1520.14	0.0246	Pulse	0.1000	3
Ag	107	115	He	0.029	ppb	30.5	120.00	0.0019	Pulse	0.1000	3
Cd	111	115	He	0.121	ppb	35.0	42.00	0.0007	Pulse	0.5000	3
Sn	120	115	He	0.592	ppb	9.0	1660.16	0.0268	Pulse	0.1000	3
Sb	121	115	He	0.157	ppb	28.8	166.68	0.0027	Pulse	0.1000	3
Ba	137	115	He	69.838	ppb	3.2	21504.15	0.3479	Pulse	0.1000	3
Tl	205	159	He	0.076	ppb	3.1	653.38	0.0022	Pulse	0.1000	3
Pb	208	159	He	4.846	ppb	0.5	49762.15	0.1707	Pulse	0.1000	3
U	238	209	He	0.679	ppb	3.0	7959.42	0.0342	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2145839.66	0.1	105.6	Analog	0.1000	3
No Gas	Ge	72	1065445.82	0.1	106.0	Pulse	0.1000	3
H2	Sc	45	121473.95	1.4	91.9	Pulse	0.1000	3
H2	Ge	72	104440.70	1.4	93.6	Pulse	0.1000	3
H2	In	115	281006.04	0.2	95.7	Pulse	0.1000	3
He	Sc	45	37602.60	1.9	101.8	Pulse	0.1000	3
He	Ge	72	67161.58	1.2	104.0	Pulse	0.1000	3
He	In	115	61826.15	1.2	97.8	Pulse	0.1000	3
He	Tb	159	291449.65	0.5	99.5	Pulse	0.1000	3
He	Bi	209	232934.83	0.4	98.8	Pulse	0.1000	3

No Gas



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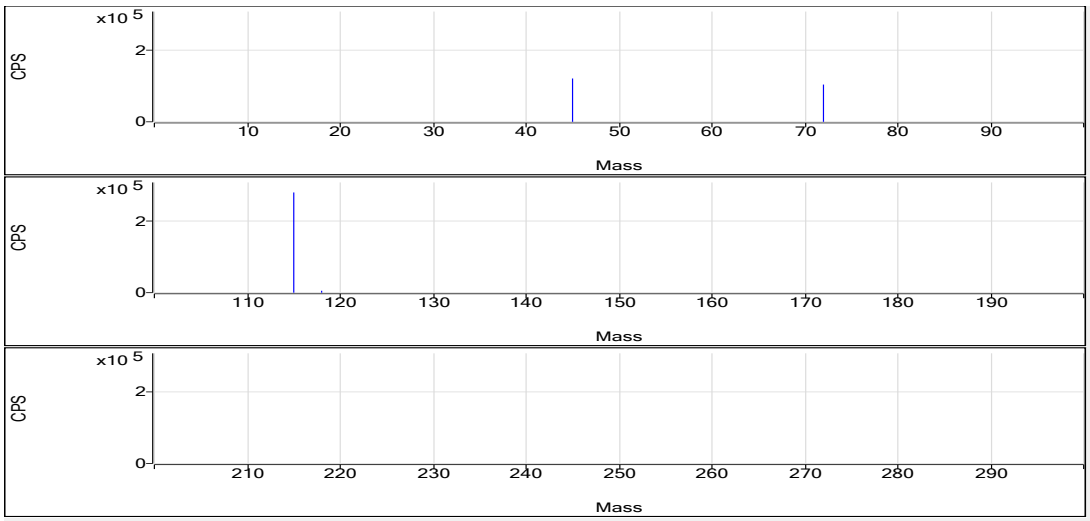
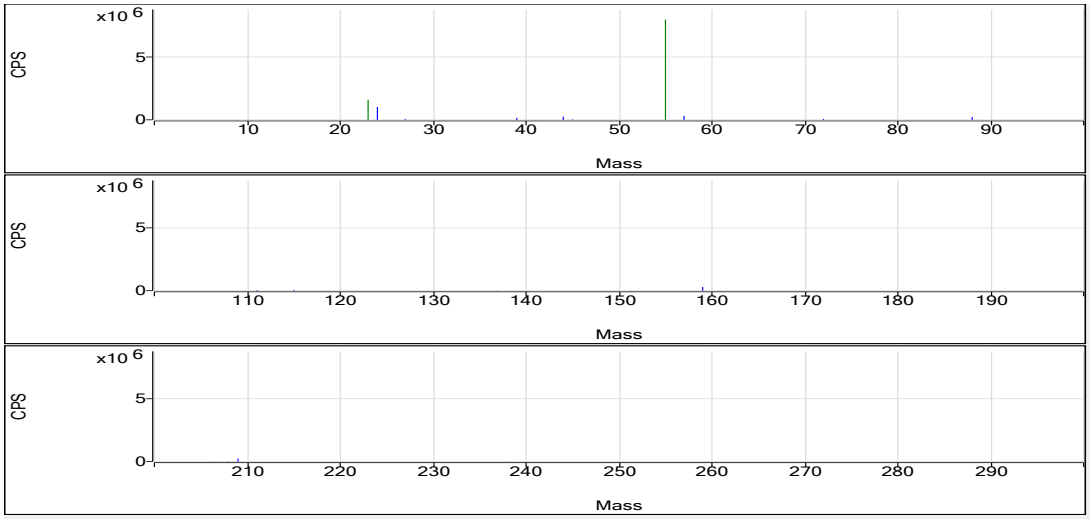


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.1	0.0001	212.00	0.0008	2.195E-05
Be	9	1	No Gas	0.091	0.0001	196.00	0.0008	2.195E-05
Be	9	1	No Gas	0.099	0.0001	210.00	0.0008	2.195E-05
Se	78	2	H2	0.087	0.0001	5.33	0.0004	1.386E-05
Se	78	2	H2	0.099	0.0001	6.00	0.0004	1.386E-05
Se	78	2	H2	0.085	0.0001	5.33	0.0004	1.386E-05
Na	23	3	He	10998.298	42.4708	1616029.04	0.0038	0.4416
Na	23	3	He	11124.959	42.9548	1631439.51	0.0038	0.4416
Na	23	3	He	11226.792	43.3439	1594061.54	0.0038	0.4416
Mg	24	3	He	14556.148	27.1424	1032780.14	0.0019	0.005872
Mg	24	3	He	14541.788	27.1157	1029863.42	0.0019	0.005872
Mg	24	3	He	14806.107	27.6084	1015356.08	0.0019	0.005872
Al	27	3	He	2748.126	1.5893	60474.92	0.0006	0.0004496
Al	27	3	He	2788.834	1.6129	61257.59	0.0006	0.0004496
Al	27	3	He	2813.061	1.6269	59831.89	0.0006	0.0004496
K	39	3	He	3233.37	4.185	159239.27	0.0012	0.4456
K	39	3	He	3188.954	4.1336	156995.40	0.0012	0.4456
K	39	3	He	3333.997	4.3013	158190.23	0.0012	0.4456
Ca	44	3	He	100937.555	6.6736	253934.88	0.0001	0.003779
Ca	44	3	He	101138.875	6.687	253972.98	0.0001	0.003779
Ca	44	3	He	102281.126	6.7624	248702.13	0.0001	0.003779
Ti	47	3	He	25.798	0.0134	510.03	0.0005	0
Ti	47	3	He	19.257	0.01	380.02	0.0005	0
Ti	47	3	He	24.597	0.0128	470.02	0.0005	0
V	51	3	He	3.771	0.1146	4360.68	0.0223	0.03054
V	51	3	He	3.834	0.116	4406.69	0.0223	0.03054
V	51	3	He	3.907	0.1176	4326.67	0.0223	0.03054
Cr	52	3	He	5.292	0.1877	7142.06	0.0285	0.03714
Cr	52	3	He	5.193	0.1849	7021.92	0.0285	0.03714
Cr	52	3	He	5.788	0.2018	7422.12	0.0285	0.03714
Mn	55	3	He	17122.883	212.0605	8068983.00	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	17024.66	210.8441	8007938.01	0.0124	0.004415
Mn	55	3	He	17518.212	216.9564	7979012.38	0.0124	0.004415
Fe	57	3	He	14604.398	8.2857	315274.92	0.0006	0.001356
Fe	57	3	He	14303.479	8.115	308211.79	0.0006	0.001356
Fe	57	3	He	14773.682	8.3817	308255.87	0.0006	0.001356
Co	59	3	He	2.759	0.163	6201.52	0.0581	0.002697
Co	59	3	He	2.964	0.1749	6641.73	0.0581	0.002697
Co	59	3	He	2.603	0.1539	5661.31	0.0581	0.002697
Ni	60	3	He	4.447	0.0425	2890.40	0.0087	0.003928
Ni	60	3	He	4.209	0.0404	2700.35	0.0087	0.003928
Ni	60	3	He	4.502	0.0429	2860.37	0.0087	0.003928
Cu	63	3	He	5.326	0.1452	9883.73	0.0261	0.006048
Cu	63	3	He	4.889	0.1338	8943.08	0.0261	0.006048
Cu	63	3	He	5.216	0.1424	9483.39	0.0261	0.006048
Zn	66	3	He	21.24	0.0644	4380.84	0.0029	0.003512
Zn	66	3	He	20.607	0.0626	4180.78	0.0029	0.003512
Zn	66	3	He	20.522	0.0623	4150.74	0.0029	0.003512
As	75	3	He	10.824	0.0231	1572.10	0.0021	0.0007233
As	75	3	He	11.188	0.0239	1594.10	0.0021	0.0007233
As	75	3	He	10.863	0.0232	1544.09	0.0021	0.0007233
Sr	88	3	He	425.284	3.8081	232700.09	0.009	0.0005796
Sr	88	3	He	416.623	3.7305	233277.61	0.009	0.0005796
Sr	88	3	He	416.375	3.7283	230555.02	0.009	0.0005796
Mo	98	3	He	1.058	0.0252	1540.15	0.0235	0.0003188
Mo	98	3	He	1.061	0.0253	1580.14	0.0235	0.0003188
Mo	98	3	He	0.977	0.0233	1440.13	0.0235	0.0003188
Ag	107	3	He	0.036	0.0023	140.00	0.0499	0.0004754
Ag	107	3	He	0.019	0.0014	90.00	0.0499	0.0004754
Ag	107	3	He	0.033	0.0021	130.01	0.0499	0.0004754
Cd	111	3	He	0.11	0.0006	38.00	0.0055	1.07E-05
Cd	111	3	He	0.085	0.0005	30.00	0.0055	1.07E-05
Cd	111	3	He	0.167	0.0009	58.00	0.0055	1.07E-05
Sn	120	3	He	0.532	0.0259	1580.16	0.0164	0.01713
Sn	120	3	He	0.632	0.0275	1720.16	0.0164	0.01713
Sn	120	3	He	0.612	0.0272	1680.16	0.0164	0.01713
Sb	121	3	He	0.11	0.002	120.01	0.0155	0.0002641
Sb	121	3	He	0.2	0.0034	210.01	0.0155	0.0002641
Sb	121	3	He	0.161	0.0027	170.01	0.0155	0.0002641
Ba	137	3	He	71.915	0.3582	21888.01	0.005	0.0001577
Ba	137	3	He	70.115	0.3492	21838.00	0.005	0.0001577
Ba	137	3	He	67.485	0.3361	20786.45	0.005	0.0001577
Tl	205	3	He	0.074	0.0022	640.04	0.026	0.0002504
Tl	205	3	He	0.076	0.0022	650.05	0.026	0.0002504
Tl	205	3	He	0.079	0.0023	670.04	0.026	0.0002504
Pb	208	3	He	4.838	0.1704	26507.35	0.0349	0.001422
Pb	208	3	He	4.875	0.1717	26186.93	0.0349	0.001422
Pb	208	3	He	4.826	0.17	26818.34	0.0349	0.001422
U	238	3	He	0.658	0.0331	7742.65	0.0502	5.657E-05
U	238	3	He	0.698	0.0351	8152.84	0.0502	5.657E-05
U	238	3	He	0.682	0.0343	7982.77	0.0502	5.657E-05
Sc	45	1	No Gas			2145645.12		
Sc	45	1	No Gas			2142999.66		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2148874.19		
Ge	72	1	No Gas			1064445.61		
Ge	72	1	No Gas			1066152.64		
Ge	72	1	No Gas			1065739.20		
Sc	45	2	H2			119841.12		
Sc	45	2	H2			121321.51		
Sc	45	2	H2			123259.22		
Ge	72	2	H2			102747.95		
Ge	72	2	H2			105518.51		
Ge	72	2	H2			105055.64		
In	115	2	H2			281507.95		
In	115	2	H2			281066.11		
In	115	2	H2			280444.06		
Sc	45	3	He			38050.38		
Sc	45	3	He			37980.38		
Sc	45	3	He			36777.03		
Ge	72	3	He			68052.71		
Ge	72	3	He			66826.79		
Ge	72	3	He			66605.24		
In	115	3	He			61114.90		
In	115	3	He			62541.42		
In	115	3	He			61848.03		
Tb	159	3	He			292991.52		
Tb	159	3	He			291080.54		
Tb	159	3	He			290276.89		
Bi	209	3	He			234010.54		
Bi	209	3	He			232230.74		
Bi	209	3	He			232563.20		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:29:31 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

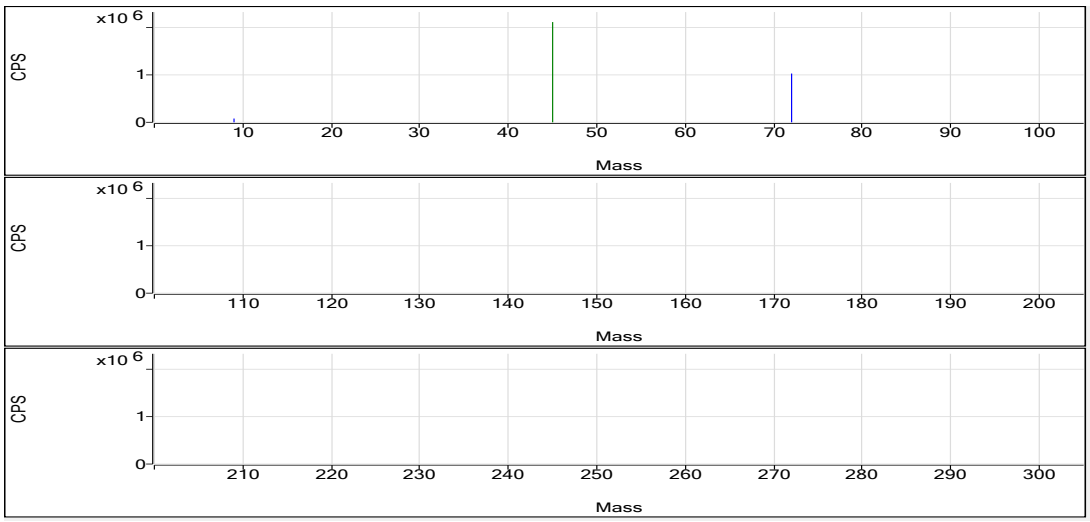
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.766	ppb	0.7	78833.93	0.0374	Pulse	0.5000	3
Se	78	72	H2	55.212	ppb	1.9	2435.99	0.0240	Pulse	1.5000	3
Na	23	45	He	5061.512	ppb	1.0	739023.37	19.7838	Pulse	0.1000	3
Mg	24	45	He	5235.561	ppb	1.3	364811.67	9.7664	Pulse	0.1000	3
Al	27	45	He	5047.244	ppb	1.2	109028.59	2.9186	Pulse	0.1000	3
K	39	45	He	5230.575	ppb	1.4	242601.87	6.4947	Pulse	0.1000	3
Ca	44	45	He	5340.289	ppb	1.2	13323.17	0.3567	Pulse	0.1000	3
Ti	47	45	He	5171.271	ppb	1.5	100365.42	2.6869	Pulse	0.1000	3
V	51	45	He	524.038	ppb	1.9	437516.34	11.7134	Pulse	0.5000	3
Cr	52	45	He	530.184	ppb	1.4	564881.48	15.1226	Pulse	0.1000	3
Mn	55	45	He	518.769	ppb	1.3	240151.67	6.4290	Pulse	0.1000	3
Fe	57	45	He	5174.597	ppb	1.5	109694.80	2.9367	Pulse	0.1000	3
Co	59	45	He	495.379	ppb	1.8	1075077.15	28.7823	Pulse	0.1000	3
Ni	60	72	He	528.141	ppb	2.3	298422.79	4.5815	Pulse	0.1000	3
Cu	63	72	He	497.227	ppb	2.5	846797.85	13.0014	Pulse	0.1000	3
Zn	66	72	He	525.699	ppb	3.2	98332.18	1.5099	Pulse	0.1000	3
As	75	72	He	521.026	ppb	1.0	70220.99	1.0779	Pulse	0.5000	3
Sr	88	115	He	52.036	ppb	1.4	28853.49	0.4665	Pulse	0.1000	3
Mo	98	115	He	52.808	ppb	1.9	76820.32	1.2421	Pulse	0.1000	3
Ag	107	115	He	53.775	ppb	1.4	165851.34	2.6815	Pulse	0.1000	3
Cd	111	115	He	52.211	ppb	1.8	17893.49	0.2893	Pulse	0.5000	3
Sn	120	115	He	51.696	ppb	1.7	53557.62	0.8660	Pulse	0.1000	3
Sb	121	115	He	51.596	ppb	1.1	49385.67	0.7983	Pulse	0.1000	3
Ba	137	115	He	510.327	ppb	2.4	157149.23	2.5409	Pulse	0.1000	3
Tl	205	159	He	51.488	ppb	0.6	392249.28	1.3410	Pulse	0.1000	3
Pb	208	159	He	50.767	ppb	0.9	519203.60	1.7751	Pulse	0.1000	3
U	238	209	He	49.954	ppb	0.7	589183.81	2.5093	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2105513.41	0.7	103.6	Analog	0.1000	3
No Gas	Ge	72	1024148.53	0.9	101.9	Pulse	0.1000	3
H2	Sc	45	122338.73	2.8	92.6	Pulse	0.1000	3
H2	Ge	72	101412.04	1.4	90.9	Pulse	0.1000	3
H2	In	115	288564.15	0.5	98.3	Pulse	0.1000	3
He	Sc	45	37358.89	1.6	101.1	Pulse	0.1000	3
He	Ge	72	65152.64	2.0	100.9	Pulse	0.1000	3
He	In	115	61855.73	1.3	97.9	Pulse	0.1000	3
He	Tb	159	292505.67	0.8	99.9	Pulse	0.1000	3
He	Bi	209	234800.71	0.7	99.6	Pulse	0.1000	3

No Gas



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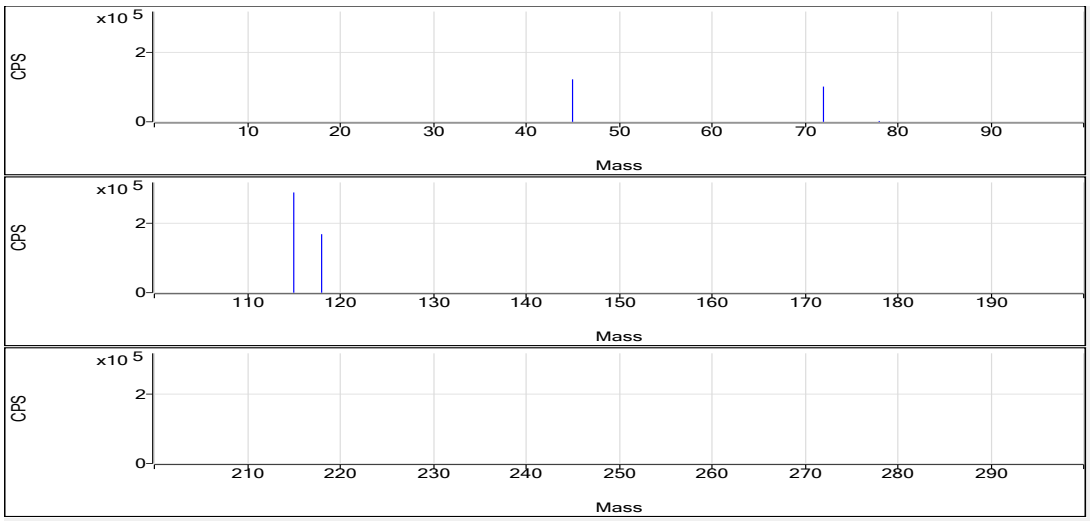
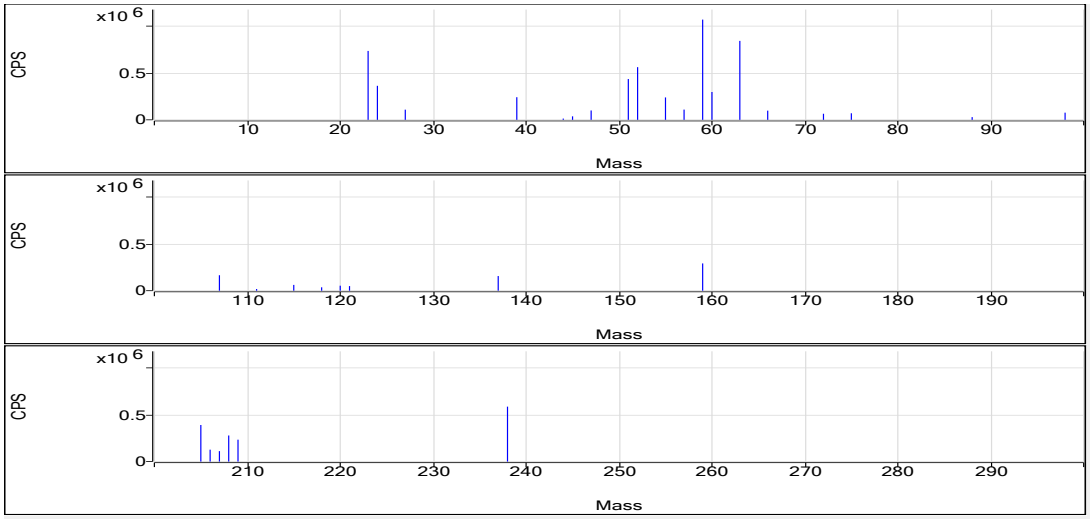


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.405	0.0372	78331.29	0.0008	2.195E-05
Be	9	1	No Gas	48.758	0.0374	78269.03	0.0008	2.195E-05
Be	9	1	No Gas	49.136	0.0377	79901.48	0.0008	2.195E-05
Se	78	2	H2	54.838	0.0239	2394.87	0.0004	1.386E-05
Se	78	2	H2	54.409	0.0237	2438.88	0.0004	1.386E-05
Se	78	2	H2	56.389	0.0245	2474.22	0.0004	1.386E-05
Na	23	3	He	5004.981	19.5678	744371.00	0.0038	0.4416
Na	23	3	He	5105.419	19.9516	736773.50	0.0038	0.4416
Na	23	3	He	5074.138	19.832	735925.61	0.0038	0.4416
Mg	24	3	He	5160.006	9.6255	366160.89	0.0019	0.005872
Mg	24	3	He	5280.774	9.8507	363765.70	0.0019	0.005872
Mg	24	3	He	5265.904	9.8229	364508.43	0.0019	0.005872
Al	27	3	He	4999.117	2.8908	109967.91	0.0006	0.0004496
Al	27	3	He	5026.724	2.9068	107341.05	0.0006	0.0004496
Al	27	3	He	5115.891	2.9583	109776.81	0.0006	0.0004496
K	39	3	He	5147.761	6.3989	243419.27	0.0012	0.4456
K	39	3	He	5271.875	6.5425	241600.33	0.0012	0.4456
K	39	3	He	5272.088	6.5427	242786.01	0.0012	0.4456
Ca	44	3	He	5292.162	0.3535	13446.63	0.0001	0.003779
Ca	44	3	He	5412.314	0.3614	13346.54	0.0001	0.003779
Ca	44	3	He	5316.393	0.3551	13176.33	0.0001	0.003779
Ti	47	3	He	5091.066	2.6453	100627.22	0.0005	0
Ti	47	3	He	5242.369	2.7239	100587.23	0.0005	0
Ti	47	3	He	5180.377	2.6917	99881.81	0.0005	0
V	51	3	He	512.915	11.4654	436151.13	0.0223	0.03054
V	51	3	He	527.437	11.7891	435349.84	0.0223	0.03054
V	51	3	He	531.762	11.8856	441048.06	0.0223	0.03054
Cr	52	3	He	521.735	14.8822	566130.42	0.0285	0.03714
Cr	52	3	He	535.471	15.2731	564006.09	0.0285	0.03714
Cr	52	3	He	533.345	15.2126	564507.92	0.0285	0.03714
Mn	55	3	He	511.313	6.3367	241052.50	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	521.035	6.4571	238448.32	0.0124	0.004415
Mn	55	3	He	523.961	6.4933	240954.18	0.0124	0.004415
Fe	57	3	He	5090.465	2.8889	109896.86	0.0006	0.001356
Fe	57	3	He	5189.533	2.9451	108757.86	0.0006	0.001356
Fe	57	3	He	5243.794	2.9759	110429.67	0.0006	0.001356
Co	59	3	He	485.349	28.1996	1072732.02	0.0581	0.002697
Co	59	3	He	500.089	29.0559	1072979.91	0.0581	0.002697
Co	59	3	He	500.698	29.0914	1079519.52	0.0581	0.002697
Ni	60	3	He	527.807	4.5786	302751.91	0.0087	0.003928
Ni	60	3	He	515.98	4.4761	293906.32	0.0087	0.003928
Ni	60	3	He	540.635	4.6898	298610.15	0.0087	0.003928
Cu	63	3	He	490.9	12.836	848761.47	0.0261	0.006048
Cu	63	3	He	489.096	12.7889	839737.25	0.0261	0.006048
Cu	63	3	He	511.686	13.3793	851894.83	0.0261	0.006048
Zn	66	3	He	514.518	1.4779	97720.78	0.0029	0.003512
Zn	66	3	He	517.775	1.4872	97650.99	0.0029	0.003512
Zn	66	3	He	544.804	1.5646	99624.76	0.0029	0.003512
As	75	3	He	517.905	1.0715	70850.06	0.0021	0.0007233
As	75	3	He	518.101	1.0719	70381.80	0.0021	0.0007233
As	75	3	He	527.073	1.0904	69431.10	0.0021	0.0007233
Sr	88	3	He	52.679	0.4722	29000.60	0.009	0.0005796
Sr	88	3	He	51.24	0.4593	28178.58	0.009	0.0005796
Sr	88	3	He	52.191	0.4678	29381.30	0.009	0.0005796
Mo	98	3	He	53.742	1.2641	77634.84	0.0235	0.0003188
Mo	98	3	He	52.93	1.245	76378.02	0.0235	0.0003188
Mo	98	3	He	51.751	1.2173	76448.11	0.0235	0.0003188
Ag	107	3	He	54.63	2.7241	167301.58	0.0499	0.0004754
Ag	107	3	He	53.545	2.67	163801.55	0.0499	0.0004754
Ag	107	3	He	53.151	2.6504	166450.90	0.0499	0.0004754
Cd	111	3	He	53.172	0.2946	18095.73	0.0055	1.07E-05
Cd	111	3	He	52.217	0.2894	17751.29	0.0055	1.07E-05
Cd	111	3	He	51.243	0.284	17833.44	0.0055	1.07E-05
Sn	120	3	He	51.527	0.8632	53012.61	0.0164	0.01713
Sn	120	3	He	52.66	0.8818	54095.94	0.0164	0.01713
Sn	120	3	He	50.901	0.8529	53564.31	0.0164	0.01713
Sb	121	3	He	51.772	0.8011	49198.47	0.0155	0.0002641
Sb	121	3	He	50.982	0.7889	48395.44	0.0155	0.0002641
Sb	121	3	He	52.033	0.8051	50563.09	0.0155	0.0002641
Ba	137	3	He	524.398	2.6109	160350.07	0.005	0.0001577
Ba	137	3	He	503.971	2.5092	153936.41	0.005	0.0001577
Ba	137	3	He	502.612	2.5024	157161.20	0.005	0.0001577
Tl	205	3	He	51.237	1.3345	393486.32	0.026	0.0002504
Tl	205	3	He	51.404	1.3388	388308.04	0.026	0.0002504
Tl	205	3	He	51.822	1.3497	394953.47	0.026	0.0002504
Pb	208	3	He	50.538	1.7671	281462.34	0.0349	0.001422
Pb	208	3	He	51.284	1.7932	280028.65	0.0349	0.001422
Pb	208	3	He	50.479	1.765	277771.32	0.0349	0.001422
U	238	3	He	49.698	2.4965	591020.54	0.0502	5.657E-05
U	238	3	He	49.785	2.5009	584562.14	0.0502	5.657E-05
U	238	3	He	50.378	2.5307	591968.74	0.0502	5.657E-05
Sc	45	1	No Gas			2107726.22		
Sc	45	1	No Gas			2090802.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2118011.22		
Ge	72	1	No Gas			1021751.86		
Ge	72	1	No Gas			1016747.25		
Ge	72	1	No Gas			1033946.47		
Sc	45	2	H2			118429.99		
Sc	45	2	H2			125115.37		
Sc	45	2	H2			123470.84		
Ge	72	2	H2			100370.83		
Ge	72	2	H2			103019.56		
Ge	72	2	H2			100845.72		
In	115	2	H2			287260.25		
In	115	2	H2			290179.00		
In	115	2	H2			288253.20		
Sc	45	3	He			38040.68		
Sc	45	3	He			36928.08		
Sc	45	3	He			37107.91		
Ge	72	3	He			66123.51		
Ge	72	3	He			65661.63		
Ge	72	3	He			63672.79		
In	115	3	He			61698.09		
In	115	3	He			61627.28		
In	115	3	He			63093.87		
Tb	159	3	He			294860.66		
Tb	159	3	He			290036.25		
Tb	159	3	He			292620.09		
Bi	209	3	He			236740.07		
Bi	209	3	He			233744.63		
Bi	209	3	He			233917.44		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

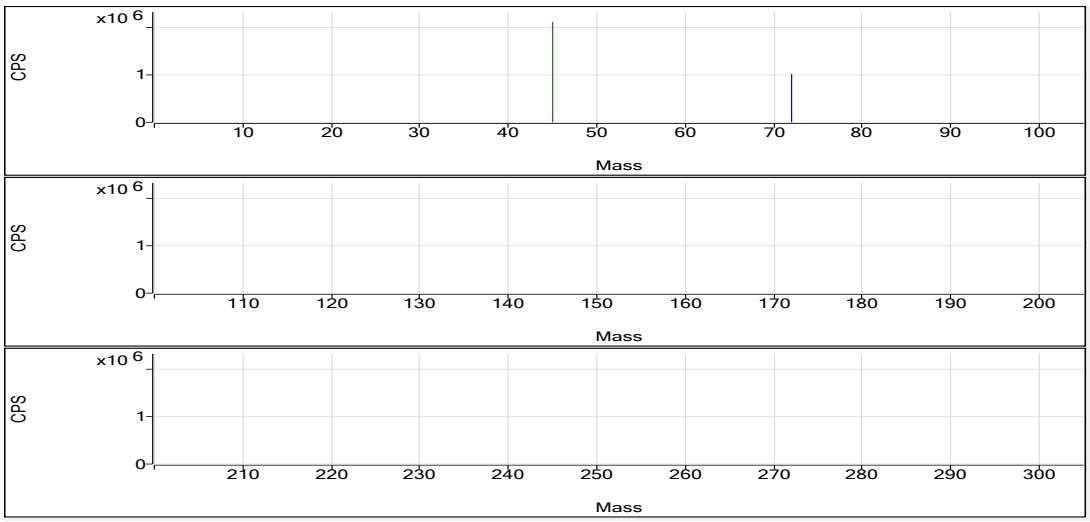
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.037	ppb	3.6	107.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.046	ppb	90.6	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	-12.159	ppb	N/A	14904.59	0.3951	Pulse	0.1000	3
Mg	24	45	He	2.024	ppb	59.2	363.35	0.0096	Pulse	0.1000	3
Al	27	45	He	1.361	ppb	19.3	46.67	0.0012	Pulse	0.1000	3
K	39	45	He	-11.056	ppb	N/A	16332.90	0.4328	Pulse	0.1000	3
Ca	44	45	He	10.871	ppb	86.8	170.01	0.0045	Pulse	0.1000	3
Ti	47	45	He	0.669	ppb	113.6	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	0.014	ppb	385.3	1164.05	0.0309	Pulse	0.5000	3
Cr	52	45	He	0.056	ppb	229.5	1463.46	0.0387	Pulse	0.1000	3
Mn	55	45	He	1.143	ppb	8.3	700.04	0.0186	Pulse	0.1000	3
Fe	57	45	He	3.089	ppb	75.2	116.67	0.0031	Pulse	0.1000	3
Co	59	45	He	0.182	ppb	4.5	500.02	0.0132	Pulse	0.1000	3
Ni	60	72	He	0.122	ppb	32.3	323.35	0.0050	Pulse	0.1000	3
Cu	63	72	He	0.087	ppb	53.8	540.03	0.0083	Pulse	0.1000	3
Zn	66	72	He	0.371	ppb	88.6	296.68	0.0046	Pulse	0.1000	3
As	75	72	He	0.073	ppb	54.1	56.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.096	ppb	19.2	90.00	0.0014	Pulse	0.1000	3
Mo	98	115	He	0.056	ppb	37.8	103.34	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	43.3	70.00	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	57.8	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.018	ppb	536.8	1093.41	0.0174	Pulse	0.1000	3
Sb	121	115	He	0.031	ppb	69.8	46.67	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.107	ppb	17.4	43.33	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.084	ppb	15.6	706.71	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.011	ppb	92.1	520.03	0.0018	Pulse	0.1000	3
U	238	209	He	0.046	ppb	34.9	560.03	0.0024	Pulse	0.1000	3

ISTD Table:

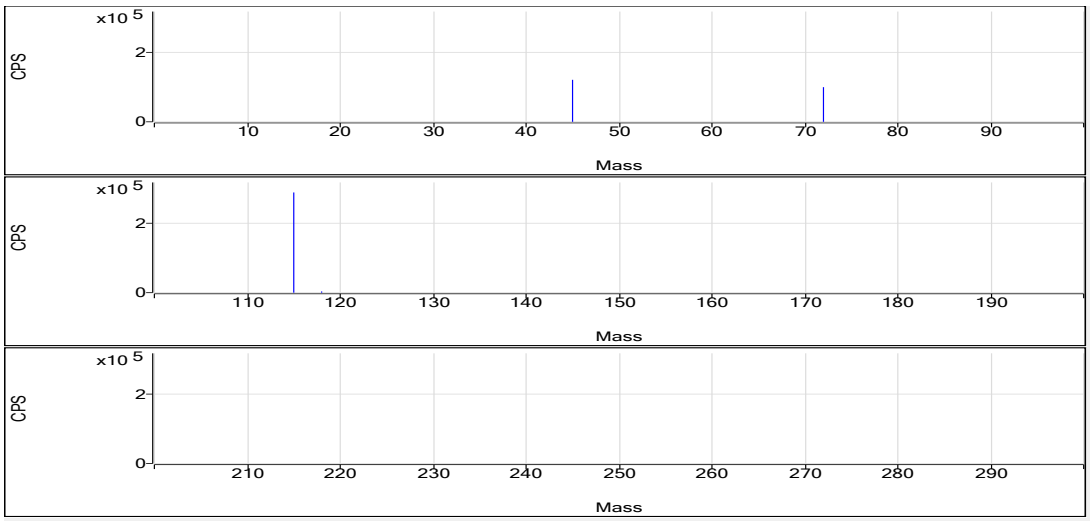
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2125316.64	1.1	104.5	Analog	0.1000	3
No Gas	Ge	72	1018746.89	0.2	101.4	Pulse	0.1000	3
H2	Sc	45	120183.31	0.8	91.0	Pulse	0.1000	3
H2	Ge	72	99145.76	1.3	88.9	Pulse	0.1000	3
H2	In	115	286803.07	0.0	97.7	Pulse	0.1000	3
He	Sc	45	37742.96	2.1	102.1	Pulse	0.1000	3
He	Ge	72	64884.61	0.4	100.5	Pulse	0.1000	3
He	In	115	62729.63	0.6	99.3	Pulse	0.1000	3
He	Tb	159	288977.67	0.6	98.7	Pulse	0.1000	3
He	Bi	209	234925.03	0.1	99.6	Pulse	0.1000	3

No Gas

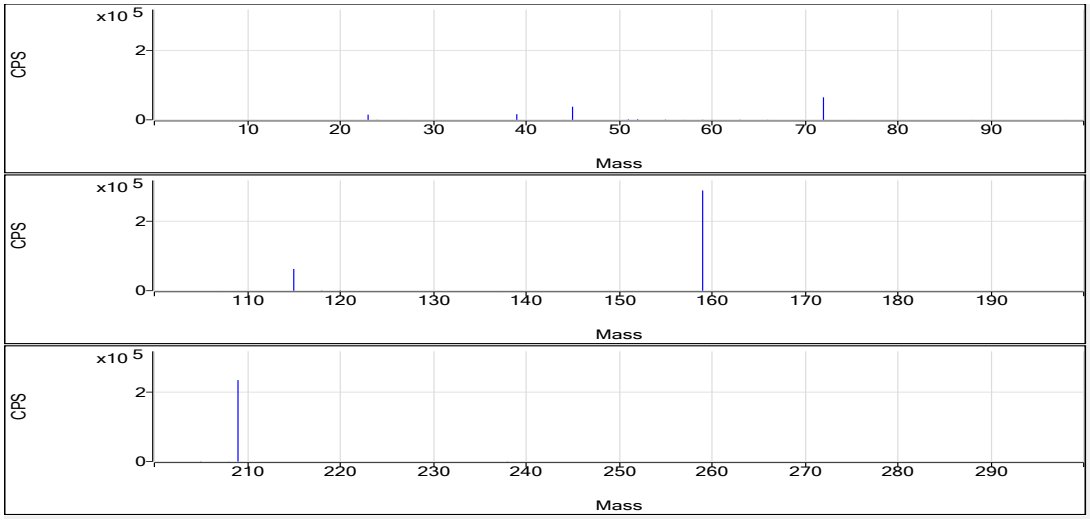


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.036	0	106.00	0.0008	2.195E-05
Be	9	1	No Gas	0.038	0.0001	108.00	0.0008	2.195E-05
Be	9	1	No Gas	0.037	0.0001	108.00	0.0008	2.195E-05
Se	78	2	H2	0.029	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.092	0.0001	5.33	0.0004	1.386E-05
Se	78	2	H2	0.015	0	2.00	0.0004	1.386E-05
Na	23	3	He	-16.196	0.3797	14657.70	0.0038	0.4416
Na	23	3	He	-6.524	0.4167	15428.53	0.0038	0.4416
Na	23	3	He	-13.756	0.389	14627.55	0.0038	0.4416
Mg	24	3	He	0.88	0.0075	290.01	0.0019	0.005872
Mg	24	3	He	1.921	0.0095	350.02	0.0019	0.005872
Mg	24	3	He	3.271	0.012	450.02	0.0019	0.005872
Al	27	3	He	1.463	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	1.558	0.0014	50.00	0.0006	0.0004496
Al	27	3	He	1.062	0.0011	40.00	0.0006	0.0004496
K	39	3	He	-17.967	0.4248	16399.68	0.0012	0.4456
K	39	3	He	-7.259	0.4372	16189.38	0.0012	0.4456
K	39	3	He	-7.942	0.4364	16409.64	0.0012	0.4456
Ca	44	3	He	17.308	0.0049	190.01	0.0001	0.003779
Ca	44	3	He	0.036	0.0038	140.00	0.0001	0.003779
Ca	44	3	He	15.269	0.0048	180.01	0.0001	0.003779
Ti	47	3	He	1.496	0.0008	30.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.512	0.0003	10.00	0.0005	0
V	51	3	He	-0.022	0.0301	1160.05	0.0223	0.03054
V	51	3	He	0.077	0.0322	1194.06	0.0223	0.03054
V	51	3	He	-0.012	0.0303	1138.05	0.0223	0.03054
Cr	52	3	He	0.152	0.0415	1600.14	0.0285	0.03714
Cr	52	3	He	-0.09	0.0346	1280.10	0.0285	0.03714
Cr	52	3	He	0.106	0.0402	1510.13	0.0285	0.03714
Mn	55	3	He	1.045	0.0174	670.04	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.236	0.0197	730.04	0.0124	0.004415
Mn	55	3	He	1.147	0.0186	700.05	0.0124	0.004415
Fe	57	3	He	1.263	0.0021	80.00	0.0006	0.001356
Fe	57	3	He	5.704	0.0046	170.01	0.0006	0.001356
Fe	57	3	He	2.298	0.0027	100.00	0.0006	0.001356
Co	59	3	He	0.185	0.0135	520.03	0.0581	0.002697
Co	59	3	He	0.172	0.0127	470.02	0.0581	0.002697
Co	59	3	He	0.187	0.0136	510.02	0.0581	0.002697
Ni	60	3	He	0.078	0.0046	300.01	0.0087	0.003928
Ni	60	3	He	0.134	0.0051	330.01	0.0087	0.003928
Ni	60	3	He	0.154	0.0053	340.02	0.0087	0.003928
Cu	63	3	He	0.068	0.0078	510.03	0.0261	0.006048
Cu	63	3	He	0.14	0.0097	630.04	0.0261	0.006048
Cu	63	3	He	0.053	0.0074	480.03	0.0261	0.006048
Zn	66	3	He	0.327	0.0044	290.01	0.0029	0.003512
Zn	66	3	He	0.066	0.0037	240.01	0.0029	0.003512
Zn	66	3	He	0.719	0.0056	360.02	0.0029	0.003512
As	75	3	He	0.036	0.0008	52.00	0.0021	0.0007233
As	75	3	He	0.068	0.0009	56.00	0.0021	0.0007233
As	75	3	He	0.114	0.001	62.00	0.0021	0.0007233
Sr	88	3	He	0.096	0.0014	90.00	0.009	0.0005796
Sr	88	3	He	0.113	0.0016	100.00	0.009	0.0005796
Sr	88	3	He	0.077	0.0013	80.00	0.009	0.0005796
Mo	98	3	He	0.041	0.0013	80.00	0.0235	0.0003188
Mo	98	3	He	0.048	0.0014	90.00	0.0235	0.0003188
Mo	98	3	He	0.081	0.0022	140.01	0.0235	0.0003188
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.019	0.0014	90.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	-0.038	0.0165	1030.07	0.0164	0.01713
Sn	120	3	He	0.133	0.0193	1210.10	0.0164	0.01713
Sn	120	3	He	-0.04	0.0165	1040.07	0.0164	0.01713
Sb	121	3	He	0.055	0.0011	70.00	0.0155	0.0002641
Sb	121	3	He	0.014	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.024	0.0006	40.00	0.0155	0.0002641
Ba	137	3	He	0.097	0.0006	40.00	0.005	0.0001577
Ba	137	3	He	0.129	0.0008	50.00	0.005	0.0001577
Ba	137	3	He	0.096	0.0006	40.00	0.005	0.0001577
Tl	205	3	He	0.098	0.0028	810.05	0.026	0.0002504
Tl	205	3	He	0.083	0.0024	700.05	0.026	0.0002504
Tl	205	3	He	0.072	0.0021	610.04	0.026	0.0002504
Pb	208	3	He	0	0.0014	200.01	0.0349	0.001422
Pb	208	3	He	0.019	0.0021	410.03	0.0349	0.001422
Pb	208	3	He	0.013	0.0019	420.02	0.0349	0.001422
U	238	3	He	0.029	0.0015	360.02	0.0502	5.657E-05
U	238	3	He	0.062	0.0032	740.04	0.0502	5.657E-05
U	238	3	He	0.048	0.0025	580.04	0.0502	5.657E-05
Sc	45	1	No Gas			2145597.16		
Sc	45	1	No Gas			2099543.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2130809.50		
Ge	72	1	No Gas			1017949.13		
Ge	72	1	No Gas			1016766.23		
Ge	72	1	No Gas			1021525.30		
Sc	45	2	H2			119871.05		
Sc	45	2	H2			119386.71		
Sc	45	2	H2			121292.17		
Ge	72	2	H2			100592.60		
Ge	72	2	H2			98629.08		
Ge	72	2	H2			98215.60		
In	115	2	H2			286829.21		
In	115	2	H2			286880.44		
In	115	2	H2			286699.57		
Sc	45	3	He			38601.97		
Sc	45	3	He			37027.58		
Sc	45	3	He			37599.33		
Ge	72	3	He			65179.14		
Ge	72	3	He			64847.90		
Ge	72	3	He			64626.78		
In	115	3	He			62400.24		
In	115	3	He			62672.65		
In	115	3	He			63133.55		
Tb	159	3	He			288965.97		
Tb	159	3	He			290623.28		
Tb	159	3	He			287343.77		
Bi	209	3	He			234609.12		
Bi	209	3	He			234876.03		
Bi	209	3	He			235289.94		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
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Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

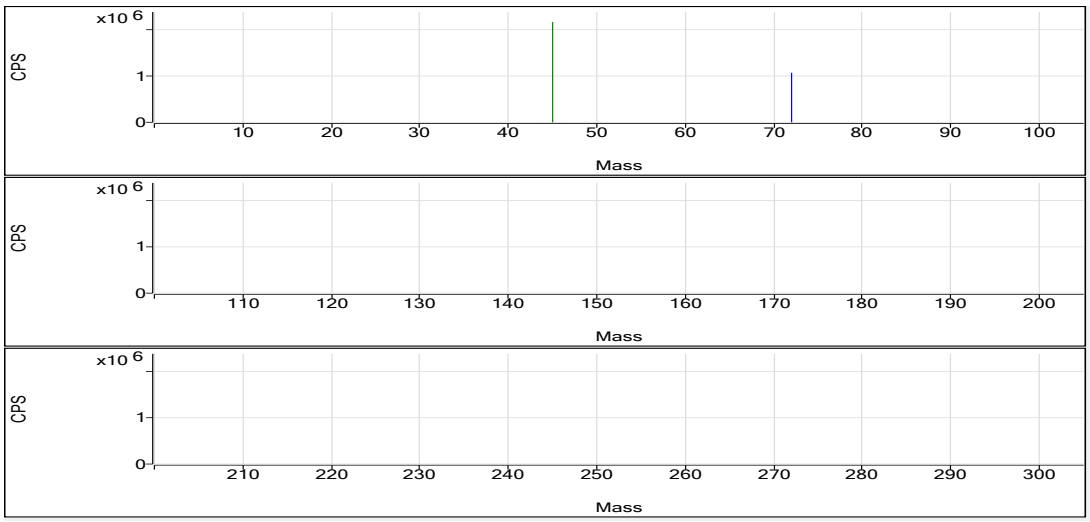
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.018	ppb	65.5	78.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.141	ppb	35.4	8.00	0.0001	Pulse	1.5000	3
Na	23	45	He	2989.447	ppb	2.0	449616.29	11.8656	Pulse	0.1000	3
Mg	24	45	He	9431.130	ppb	1.7	666454.13	17.5880	Pulse	0.1000	3
Al	27	45	He	7.903	ppb	13.0	190.01	0.0050	Pulse	0.1000	3
K	39	45	He	906.328	ppb	3.4	56600.31	1.4938	Pulse	0.1000	3
Ca	44	45	He	70457.548	ppb	1.3	176576.76	4.6596	Pulse	0.1000	3
Ti	47	45	He	2.383	ppb	69.0	46.67	0.0012	Pulse	0.1000	3
V	51	45	He	0.068	ppb	31.6	1215.39	0.0321	Pulse	0.5000	3
Cr	52	45	He	0.374	ppb	19.5	1810.17	0.0478	Pulse	0.1000	3
Mn	55	45	He	348.333	ppb	1.8	163629.93	4.3183	Pulse	0.1000	3
Fe	57	45	He	18.054	ppb	11.6	440.02	0.0116	Pulse	0.1000	3
Co	59	45	He	0.128	ppb	18.9	383.35	0.0101	Pulse	0.1000	3
Ni	60	72	He	0.682	ppb	25.4	663.38	0.0098	Pulse	0.1000	3
Cu	63	72	He	1.050	ppb	2.4	2256.92	0.0335	Pulse	0.1000	3
Zn	66	72	He	9.670	ppb	5.2	2103.56	0.0312	Pulse	0.1000	3
As	75	72	He	0.219	ppb	51.9	79.33	0.0012	Pulse	0.5000	3
Sr	88	115	He	166.605	ppb	3.1	94504.86	1.4922	Pulse	0.1000	3
Mo	98	115	He	0.074	ppb	11.8	130.00	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	355.8	40.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.235	ppb	4.2	83.33	0.0013	Pulse	0.5000	3
Sn	120	115	He	-0.072	ppb	N/A	1010.07	0.0159	Pulse	0.1000	3
Sb	121	115	He	0.064	ppb	46.4	80.00	0.0013	Pulse	0.1000	3
Ba	137	115	He	9.224	ppb	7.7	2917.09	0.0461	Pulse	0.1000	3
Tl	205	159	He	0.027	ppb	13.5	280.01	0.0010	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	35.1	583.36	0.0020	Pulse	0.1000	3
U	238	209	He	0.309	ppb	3.0	3653.99	0.0156	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2172688.04	1.0	106.9	Analog	0.1000	3
No Gas	Ge	72	1074568.32	1.0	106.9	Pulse	0.1000	3
H2	Sc	45	122361.39	0.8	92.6	Pulse	0.1000	3
H2	Ge	72	106475.41	1.2	95.5	Pulse	0.1000	3
H2	In	115	290099.74	0.3	98.8	Pulse	0.1000	3
He	Sc	45	37900.14	1.8	102.6	Pulse	0.1000	3
He	Ge	72	67382.46	0.9	104.4	Pulse	0.1000	3
He	In	115	63363.27	2.3	100.3	Pulse	0.1000	3
He	Tb	159	291941.46	0.8	99.7	Pulse	0.1000	3
He	Bi	209	234945.89	1.2	99.6	Pulse	0.1000	3

No Gas



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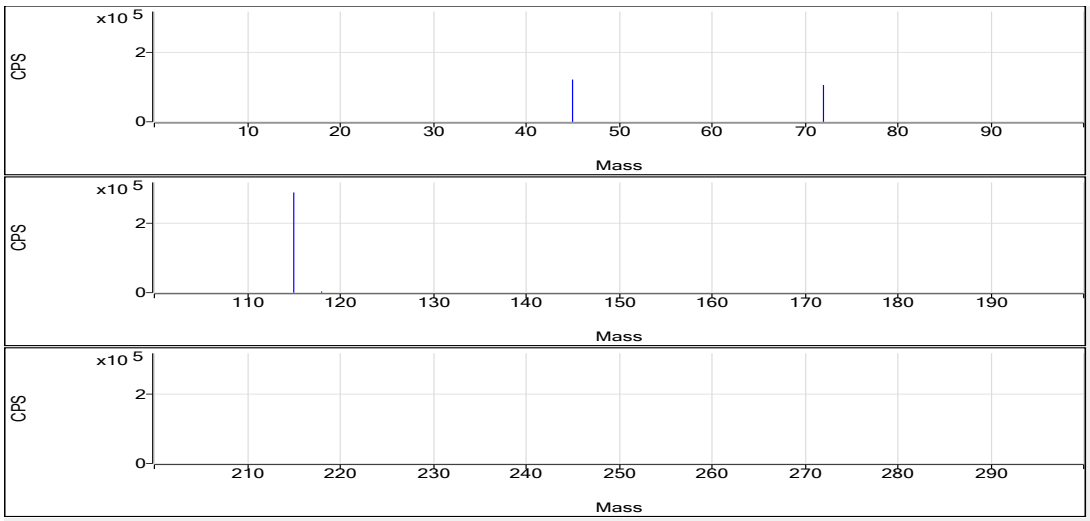
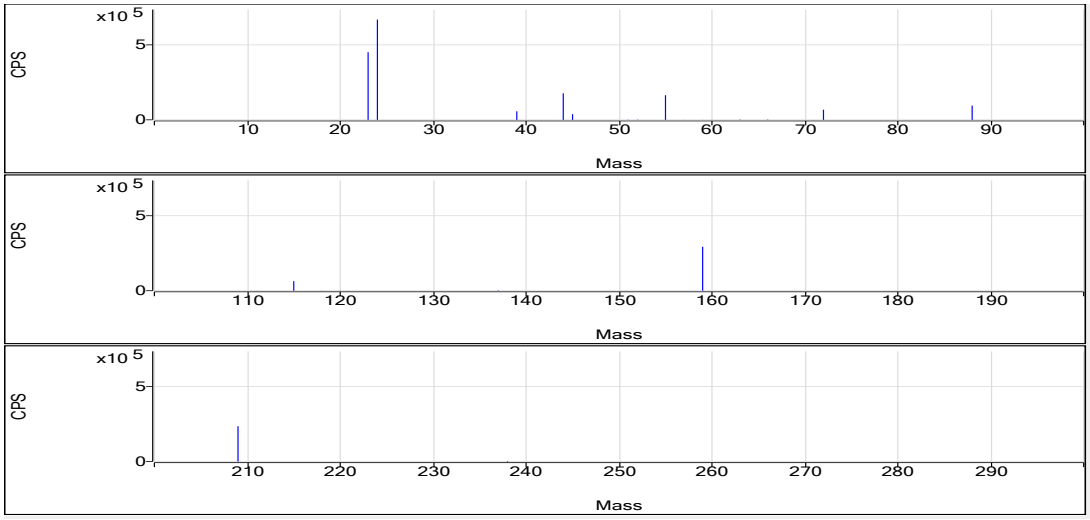


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0	66.00	0.0008	2.195E-05
Be	9	1	No Gas	0.032	0	100.00	0.0008	2.195E-05
Be	9	1	No Gas	0.012	0	68.00	0.0008	2.195E-05
Se	78	2	H2	0.098	0.0001	6.00	0.0004	1.386E-05
Se	78	2	H2	0.195	0.0001	10.67	0.0004	1.386E-05
Se	78	2	H2	0.128	0.0001	7.33	0.0004	1.386E-05
Na	23	3	He	2919.83	11.5995	446712.73	0.0038	0.4416
Na	23	3	He	3016.622	11.9694	455203.70	0.0038	0.4416
Na	23	3	He	3031.89	12.0277	446932.45	0.0038	0.4416
Mg	24	3	He	9291.179	17.3271	667290.62	0.0019	0.005872
Mg	24	3	He	9399.856	17.5297	666666.40	0.0019	0.005872
Mg	24	3	He	9602.354	17.9072	665405.38	0.0019	0.005872
Al	27	3	He	7.756	0.0049	190.01	0.0006	0.0004496
Al	27	3	He	6.954	0.0045	170.01	0.0006	0.0004496
Al	27	3	He	8.998	0.0057	210.01	0.0006	0.0004496
K	39	3	He	894.984	1.4807	57021.95	0.0012	0.4456
K	39	3	He	882.636	1.4664	55767.10	0.0012	0.4456
K	39	3	He	941.363	1.5343	57011.87	0.0012	0.4456
Ca	44	3	He	69435.062	4.592	176843.65	0.0001	0.003779
Ca	44	3	He	70949.175	4.692	178441.25	0.0001	0.003779
Ca	44	3	He	70988.408	4.6946	174445.37	0.0001	0.003779
Ti	47	3	He	0.5	0.0003	10.00	0.0005	0
Ti	47	3	He	3.542	0.0018	70.00	0.0005	0
Ti	47	3	He	3.108	0.0016	60.00	0.0005	0
V	51	3	He	0.088	0.0325	1252.06	0.0223	0.03054
V	51	3	He	0.045	0.0316	1200.06	0.0223	0.03054
V	51	3	He	0.071	0.0321	1194.06	0.0223	0.03054
Cr	52	3	He	0.292	0.0454	1750.17	0.0285	0.03714
Cr	52	3	He	0.432	0.0494	1880.18	0.0285	0.03714
Cr	52	3	He	0.397	0.0484	1800.17	0.0285	0.03714
Mn	55	3	He	341.765	4.237	163170.75	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	348.986	4.3264	164535.19	0.0124	0.004415
Mn	55	3	He	354.249	4.3916	163183.85	0.0124	0.004415
Fe	57	3	He	19.125	0.0122	470.02	0.0006	0.001356
Fe	57	3	He	19.397	0.0124	470.02	0.0006	0.001356
Fe	57	3	He	15.639	0.0102	380.02	0.0006	0.001356
Co	59	3	He	0.101	0.0086	330.01	0.0581	0.002697
Co	59	3	He	0.148	0.0113	430.02	0.0581	0.002697
Co	59	3	He	0.134	0.0105	390.02	0.0581	0.002697
Ni	60	3	He	0.861	0.0114	770.05	0.0087	0.003928
Ni	60	3	He	0.515	0.0084	560.04	0.0087	0.003928
Ni	60	3	He	0.669	0.0097	660.04	0.0087	0.003928
Cu	63	3	He	1.076	0.0342	2310.27	0.0261	0.006048
Cu	63	3	He	1.048	0.0334	2230.24	0.0261	0.006048
Cu	63	3	He	1.027	0.0329	2230.24	0.0261	0.006048
Zn	66	3	He	9.099	0.0296	2000.20	0.0029	0.003512
Zn	66	3	He	10.024	0.0322	2150.24	0.0029	0.003512
Zn	66	3	He	9.888	0.0318	2160.23	0.0029	0.003512
As	75	3	He	0.137	0.001	68.00	0.0021	0.0007233
As	75	3	He	0.172	0.0011	72.00	0.0021	0.0007233
As	75	3	He	0.349	0.0014	98.00	0.0021	0.0007233
Sr	88	3	He	166.303	1.4895	95209.31	0.009	0.0005796
Sr	88	3	He	161.559	1.447	93267.12	0.009	0.0005796
Sr	88	3	He	171.951	1.54	95038.15	0.009	0.0005796
Mo	98	3	He	0.073	0.002	130.00	0.0235	0.0003188
Mo	98	3	He	0.066	0.0019	120.00	0.0235	0.0003188
Mo	98	3	He	0.083	0.0023	140.00	0.0235	0.0003188
Ag	107	3	He	0.012	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	-0.01	0	0.00	0.0499	0.0004754
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Cd	111	3	He	0.247	0.0014	88.00	0.0055	1.07E-05
Cd	111	3	He	0.228	0.0013	82.00	0.0055	1.07E-05
Cd	111	3	He	0.232	0.0013	80.00	0.0055	1.07E-05
Sn	120	3	He	-0.148	0.0147	940.06	0.0164	0.01713
Sn	120	3	He	-0.032	0.0166	1070.08	0.0164	0.01713
Sn	120	3	He	-0.036	0.0165	1020.07	0.0164	0.01713
Sb	121	3	He	0.033	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.093	0.0017	110.00	0.0155	0.0002641
Sb	121	3	He	0.067	0.0013	80.00	0.0155	0.0002641
Ba	137	3	He	8.517	0.0426	2720.37	0.005	0.0001577
Ba	137	3	He	9.225	0.0461	2970.43	0.005	0.0001577
Ba	137	3	He	9.93	0.0496	3060.46	0.005	0.0001577
Tl	205	3	He	0.026	0.0009	270.01	0.026	0.0002504
Tl	205	3	He	0.031	0.0011	310.02	0.026	0.0002504
Tl	205	3	He	0.025	0.0009	260.01	0.026	0.0002504
Pb	208	3	He	0.01	0.0018	350.02	0.0349	0.001422
Pb	208	3	He	0.02	0.0021	300.02	0.0349	0.001422
Pb	208	3	He	0.019	0.0021	390.02	0.0349	0.001422
U	238	3	He	0.298	0.015	3530.64	0.0502	5.657E-05
U	238	3	He	0.31	0.0156	3720.67	0.0502	5.657E-05
U	238	3	He	0.317	0.016	3710.66	0.0502	5.657E-05
Sc	45	1	No Gas			2182721.06		
Sc	45	1	No Gas			2148848.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2186494.81		
Ge	72	1	No Gas			1072236.16		
Ge	72	1	No Gas			1065561.31		
Ge	72	1	No Gas			1085907.48		
Sc	45	2	H2			123310.30		
Sc	45	2	H2			121422.79		
Sc	45	2	H2			122351.09		
Ge	72	2	H2			105891.25		
Ge	72	2	H2			107985.92		
Ge	72	2	H2			105549.07		
In	115	2	H2			289156.44		
In	115	2	H2			290801.85		
In	115	2	H2			290340.93		
Sc	45	3	He			38511.33		
Sc	45	3	He			38030.62		
Sc	45	3	He			37158.46		
Ge	72	3	He			67609.75		
Ge	72	3	He			66705.95		
Ge	72	3	He			67831.69		
In	115	3	He			63927.04		
In	115	3	He			64460.03		
In	115	3	He			61717.48		
Tb	159	3	He			294332.14		
Tb	159	3	He			290009.88		
Tb	159	3	He			291482.36		
Bi	209	3	He			234610.54		
Bi	209	3	He			237938.90		
Bi	209	3	He			232288.22		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:35:38 AM
Sample Name	410-132088-B-7-A
Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

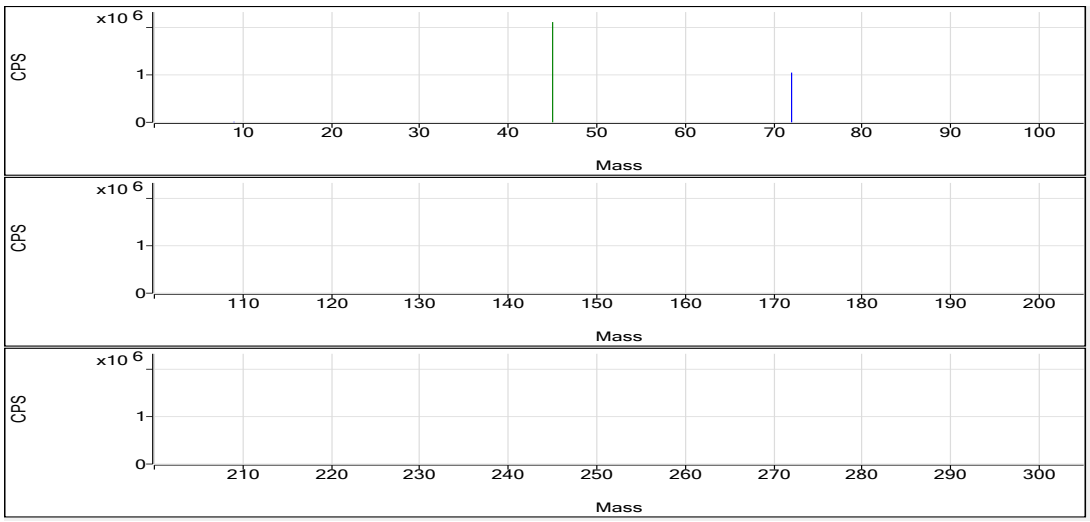
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	7.165	ppb	2.1	11721.96	0.0055	Pulse	0.5000	3
Se	78	72	H2	21.900	ppb	4.1	980.48	0.0095	Pulse	1.5000	3
Na	23	45	He	-12.269	ppb	N/A	15118.18	0.3947	Pulse	0.1000	3
Mg	24	45	He	519.535	ppb	1.2	37324.57	0.9744	Pulse	0.1000	3
Al	27	45	He	421.850	ppb	0.9	9359.94	0.2444	Pulse	0.1000	3
K	39	45	He	411.898	ppb	6.4	35313.38	0.9220	Pulse	0.1000	3
Ca	44	45	He	693.501	ppb	2.1	1900.19	0.0496	Pulse	0.1000	3
Ti	47	45	He	0.669	ppb	86.6	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	9.623	ppb	1.8	9387.73	0.2451	Pulse	0.5000	3
Cr	52	45	He	10.054	ppb	2.2	12379.02	0.3232	Pulse	0.1000	3
Mn	55	45	He	6.773	ppb	7.4	3383.84	0.0883	Pulse	0.1000	3
Fe	57	45	He	359.210	ppb	3.5	7855.75	0.2051	Pulse	0.1000	3
Co	59	45	He	7.174	ppb	1.7	16069.42	0.4195	Pulse	0.1000	3
Ni	60	72	He	15.338	ppb	4.4	9109.88	0.1369	Pulse	0.1000	3
Cu	63	72	He	25.933	ppb	1.5	45519.72	0.6838	Pulse	0.1000	3
Zn	66	72	He	7.181	ppb	2.9	1603.48	0.0241	Pulse	0.1000	3
As	75	72	He	0.043	ppb	191.1	54.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.129	ppb	23.6	110.00	0.0017	Pulse	0.1000	3
Mo	98	115	He	0.034	ppb	74.3	70.00	0.0011	Pulse	0.1000	3
Ag	107	115	He	4.264	ppb	1.8	13486.93	0.2130	Pulse	0.1000	3
Cd	111	115	He	5.539	ppb	6.0	1942.81	0.0307	Pulse	0.5000	3
Sn	120	115	He	0.013	ppb	1050.0	1096.75	0.0173	Pulse	0.1000	3
Sb	121	115	He	9.404	ppb	3.4	9223.37	0.1457	Pulse	0.1000	3
Ba	137	115	He	38.636	ppb	4.9	12182.46	0.1925	Pulse	0.1000	3
Tl	205	159	He	8.748	ppb	0.9	66307.87	0.2280	Pulse	0.1000	3
Pb	208	159	He	5.407	ppb	2.1	55334.27	0.1903	Pulse	0.1000	3
U	238	209	He	0.007	ppb	18.9	93.33	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2124213.09	2.0	104.5	Analog	0.1000	3
No Gas	Ge	72	1053420.09	0.3	104.8	Pulse	0.1000	3
H2	Sc	45	121504.65	0.9	92.0	Pulse	0.1000	3
H2	Ge	72	102821.72	0.6	92.2	Pulse	0.1000	3
H2	In	115	286998.21	2.1	97.7	Pulse	0.1000	3
He	Sc	45	38307.84	1.2	103.7	Pulse	0.1000	3
He	Ge	72	66568.65	0.5	103.1	Pulse	0.1000	3
He	In	115	63312.10	1.6	100.2	Pulse	0.1000	3
He	Tb	159	290769.95	0.8	99.3	Pulse	0.1000	3
He	Bi	209	236423.86	0.6	100.3	Pulse	0.1000	3

No Gas



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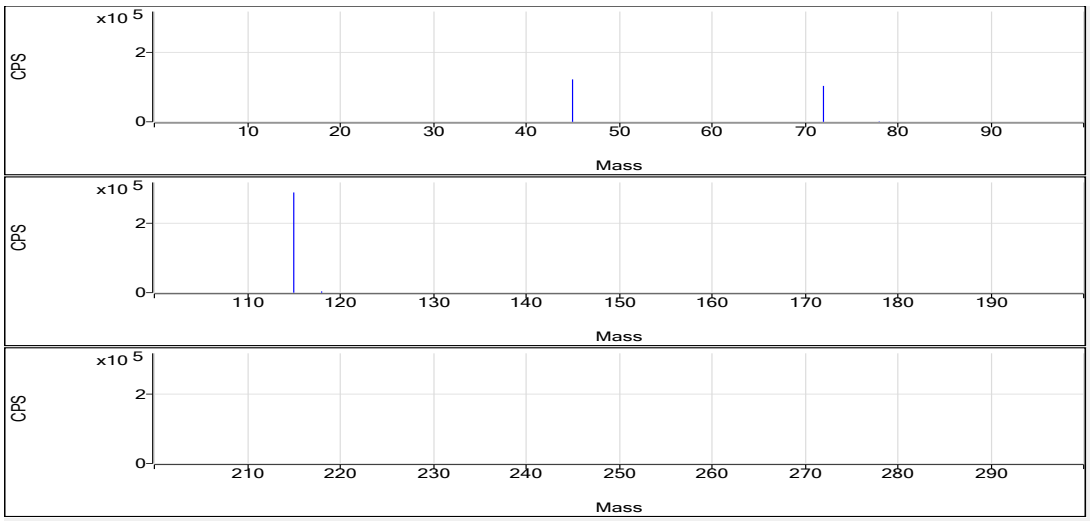
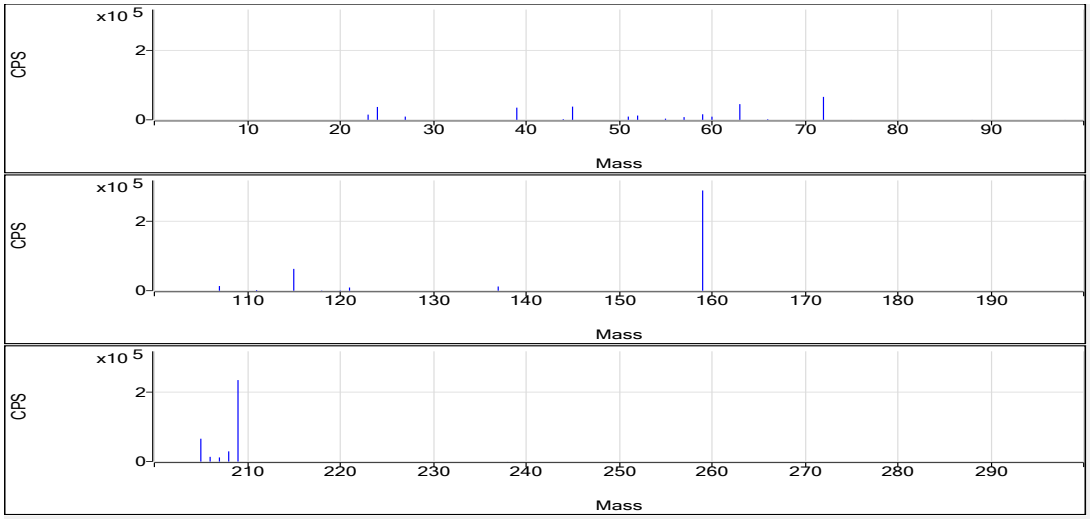


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	7.187	0.0055	11642.56	0.0008	2.195E-05
Be	9	1	No Gas	7.002	0.0054	11722.63	0.0008	2.195E-05
Be	9	1	No Gas	7.306	0.0056	11800.69	0.0008	2.195E-05
Se	78	2	H2	21.117	0.0092	950.70	0.0004	1.386E-05
Se	78	2	H2	22.868	0.01	1018.04	0.0004	1.386E-05
Se	78	2	H2	21.715	0.0095	972.70	0.0004	1.386E-05
Na	23	3	He	-12.312	0.3946	15088.21	0.0038	0.4416
Na	23	3	He	-14.659	0.3856	14957.92	0.0038	0.4416
Na	23	3	He	-9.836	0.404	15308.41	0.0038	0.4416
Mg	24	3	He	520.445	0.9761	37327.75	0.0019	0.005872
Mg	24	3	He	512.868	0.962	37318.10	0.0019	0.005872
Mg	24	3	He	525.292	0.9852	37327.85	0.0019	0.005872
Al	27	3	He	422.261	0.2446	9353.31	0.0006	0.0004496
Al	27	3	He	418.028	0.2421	9393.25	0.0006	0.0004496
Al	27	3	He	425.261	0.2463	9333.25	0.0006	0.0004496
K	39	3	He	389.828	0.8964	34281.02	0.0012	0.4456
K	39	3	He	404.945	0.9139	35453.55	0.0012	0.4456
K	39	3	He	440.922	0.9555	36205.57	0.0012	0.4456
Ca	44	3	He	710.627	0.0507	1940.20	0.0001	0.003779
Ca	44	3	He	684.1	0.049	1900.18	0.0001	0.003779
Ca	44	3	He	685.777	0.0491	1860.19	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.992	0.0005	20.00	0.0005	0
Ti	47	3	He	1.016	0.0005	20.00	0.0005	0
V	51	3	He	9.746	0.2478	9477.12	0.0223	0.03054
V	51	3	He	9.431	0.2408	9341.05	0.0223	0.03054
V	51	3	He	9.693	0.2466	9345.03	0.0223	0.03054
Cr	52	3	He	10.179	0.3268	12495.76	0.0285	0.03714
Cr	52	3	He	9.798	0.3159	12255.67	0.0285	0.03714
Cr	52	3	He	10.183	0.3269	12385.62	0.0285	0.03714
Mn	55	3	He	6.338	0.0829	3170.44	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	7.326	0.0951	3690.62	0.0124	0.004415
Mn	55	3	He	6.656	0.0868	3290.47	0.0124	0.004415
Fe	57	3	He	353.603	0.2019	7722.29	0.0006	0.001356
Fe	57	3	He	350.365	0.2001	7762.39	0.0006	0.001356
Fe	57	3	He	373.661	0.2133	8082.58	0.0006	0.001356
Co	59	3	He	7.038	0.4116	15739.00	0.0581	0.002697
Co	59	3	He	7.262	0.4246	16469.80	0.0581	0.002697
Co	59	3	He	7.222	0.4223	15999.47	0.0581	0.002697
Ni	60	3	He	16.052	0.1431	9473.45	0.0087	0.003928
Ni	60	3	He	15.252	0.1361	9073.19	0.0087	0.003928
Ni	60	3	He	14.711	0.1314	8783.01	0.0087	0.003928
Cu	63	3	He	26.354	0.6948	46014.77	0.0261	0.006048
Cu	63	3	He	25.589	0.6748	44981.28	0.0261	0.006048
Cu	63	3	He	25.856	0.6818	45563.10	0.0261	0.006048
Zn	66	3	He	7.101	0.0239	1580.14	0.0029	0.003512
Zn	66	3	He	7.414	0.0248	1650.16	0.0029	0.003512
Zn	66	3	He	7.026	0.0236	1580.15	0.0029	0.003512
As	75	3	He	0.059	0.0008	56.00	0.0021	0.0007233
As	75	3	He	0.115	0.001	64.00	0.0021	0.0007233
As	75	3	He	-0.046	0.0006	42.00	0.0021	0.0007233
Sr	88	3	He	0.164	0.0021	130.00	0.009	0.0005796
Sr	88	3	He	0.115	0.0016	100.00	0.009	0.0005796
Sr	88	3	He	0.109	0.0016	100.00	0.009	0.0005796
Mo	98	3	He	0.013	0.0006	40.00	0.0235	0.0003188
Mo	98	3	He	0.062	0.0018	110.01	0.0235	0.0003188
Mo	98	3	He	0.026	0.0009	60.00	0.0235	0.0003188
Ag	107	3	He	4.339	0.2168	13737.24	0.0499	0.0004754
Ag	107	3	He	4.27	0.2134	13286.70	0.0499	0.0004754
Ag	107	3	He	4.182	0.209	13436.84	0.0499	0.0004754
Cd	111	3	He	5.358	0.0297	1882.14	0.0055	1.07E-05
Cd	111	3	He	5.922	0.0328	2044.16	0.0055	1.07E-05
Cd	111	3	He	5.337	0.0296	1902.14	0.0055	1.07E-05
Sn	120	3	He	0.139	0.0194	1230.09	0.0164	0.01713
Sn	120	3	He	0.023	0.0175	1090.09	0.0164	0.01713
Sn	120	3	He	-0.124	0.0151	970.07	0.0164	0.01713
Sb	121	3	He	9.219	0.1429	9053.17	0.0155	0.0002641
Sb	121	3	He	9.776	0.1515	9433.52	0.0155	0.0002641
Sb	121	3	He	9.217	0.1428	9183.42	0.0155	0.0002641
Ba	137	3	He	39.482	0.1967	12466.03	0.005	0.0001577
Ba	137	3	He	39.951	0.1991	12395.96	0.005	0.0001577
Ba	137	3	He	36.476	0.1818	11685.40	0.005	0.0001577
Tl	205	3	He	8.741	0.2279	65755.15	0.026	0.0002504
Tl	205	3	He	8.831	0.2302	66850.85	0.026	0.0002504
Tl	205	3	He	8.672	0.2261	66317.60	0.026	0.0002504
Pb	208	3	He	5.443	0.1916	29674.42	0.0349	0.001422
Pb	208	3	He	5.497	0.1935	30265.45	0.0349	0.001422
Pb	208	3	He	5.28	0.1859	28912.71	0.0349	0.001422
U	238	3	He	0.006	0.0003	80.00	0.0502	5.657E-05
U	238	3	He	0.007	0.0004	90.00	0.0502	5.657E-05
U	238	3	He	0.008	0.0005	110.00	0.0502	5.657E-05
Sc	45	1	No Gas			2102733.56		
Sc	45	1	No Gas			2172982.00		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2096923.72		
Ge	72	1	No Gas			1052383.89		
Ge	72	1	No Gas			1056915.92		
Ge	72	1	No Gas			1050960.45		
Sc	45	2	H2			120205.90		
Sc	45	2	H2			121977.55		
Sc	45	2	H2			122330.50		
Ge	72	2	H2			103372.58		
Ge	72	2	H2			102234.16		
Ge	72	2	H2			102858.41		
In	115	2	H2			288014.53		
In	115	2	H2			292464.72		
In	115	2	H2			280515.37		
Sc	45	3	He			38240.92		
Sc	45	3	He			38792.36		
Sc	45	3	He			37890.25		
Ge	72	3	He			66223.82		
Ge	72	3	He			66655.89		
Ge	72	3	He			66826.24		
In	115	3	He			63374.80		
In	115	3	He			62279.86		
In	115	3	He			64299.35		
Tb	159	3	He			288568.78		
Tb	159	3	He			290390.58		
Tb	159	3	He			293350.50		
Bi	209	3	He			237267.67		
Bi	209	3	He			234816.07		
Bi	209	3	He			237187.85		

Quantitation Report

Data File Name	099SMPL.d
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Sample Type	Sample
Comment	F16
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

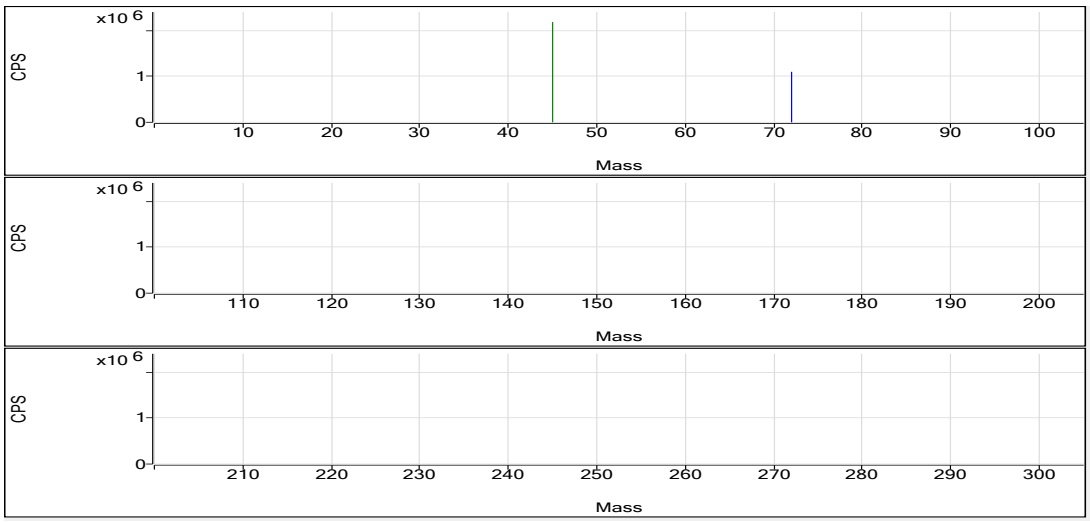
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.007	ppb	117.8	59.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	1.063	ppb	10.2	51.11	0.0005	Pulse	1.5000	3
Na	23	45	He	61770.545	ppb	1.9	8992641.74	236.4931	Analog	0.1000	3
Mg	24	45	He	1267.819	ppb	1.8	90097.78	2.3694	Pulse	0.1000	3
Al	27	45	He	6.207	ppb	31.7	153.34	0.0040	Pulse	0.1000	3
K	39	45	He	2919.525	ppb	2.6	145326.89	3.8220	Pulse	0.1000	3
Ca	44	45	He	3603.211	ppb	3.1	9196.59	0.2419	Pulse	0.1000	3
Ti	47	45	He	1.350	ppb	21.7	26.67	0.0007	Pulse	0.1000	3
V	51	45	He	-0.008	ppb	N/A	1154.72	0.0304	Pulse	0.5000	3
Cr	52	45	He	0.378	ppb	24.0	1820.17	0.0479	Pulse	0.1000	3
Mn	55	45	He	21.128	ppb	2.5	10117.19	0.2661	Pulse	0.1000	3
Fe	57	45	He	1309.010	ppb	1.1	28288.32	0.7439	Pulse	0.1000	3
Co	59	45	He	1.401	ppb	1.6	3197.14	0.0841	Pulse	0.1000	3
Ni	60	72	He	0.229	ppb	43.0	406.69	0.0059	Pulse	0.1000	3
Cu	63	72	He	3.521	ppb	0.4	6745.16	0.0981	Pulse	0.1000	3
Zn	66	72	He	3.662	ppb	14.7	963.41	0.0140	Pulse	0.1000	3
As	75	72	He	0.105	ppb	134.7	64.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	35.367	ppb	1.0	20185.06	0.3172	Pulse	0.1000	3
Mo	98	115	He	0.256	ppb	19.0	403.35	0.0063	Pulse	0.1000	3
Ag	107	115	He	0.012	ppb	58.9	66.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.019	ppb	46.6	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.077	ppb	172.9	1170.09	0.0184	Pulse	0.1000	3
Sb	121	115	He	0.014	ppb	201.3	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	2.008	ppb	14.8	646.71	0.0102	Pulse	0.1000	3
Tl	205	159	He	0.029	ppb	22.3	296.68	0.0010	Pulse	0.1000	3
Pb	208	159	He	0.022	ppb	28.1	643.37	0.0022	Pulse	0.1000	3
U	238	209	He	0.038	ppb	11.6	463.36	0.0020	Pulse	0.1000	3

ISTD Table:

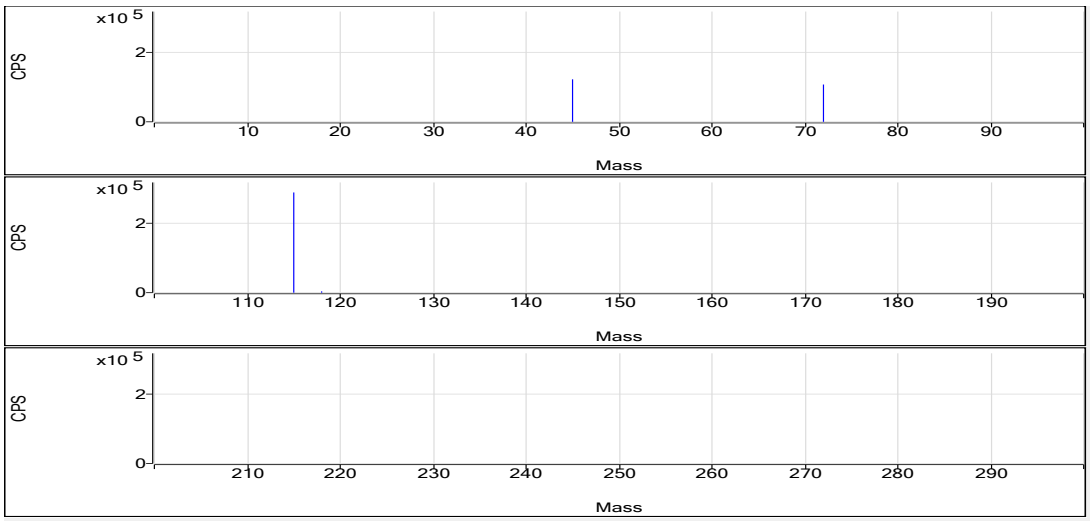
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2182496.27	1.4	107.4	Analog	0.1000	3
No Gas	Ge	72	1099178.40	0.7	109.4	Pulse	0.1000	3
H2	Sc	45	122375.19	0.7	92.6	Pulse	0.1000	3
H2	Ge	72	107385.50	0.4	96.3	Pulse	0.1000	3
H2	In	115	288601.84	0.6	98.3	Pulse	0.1000	3
He	Sc	45	38030.49	1.2	102.9	Pulse	0.1000	3
He	Ge	72	68786.02	0.7	106.5	Pulse	0.1000	3
He	In	115	63636.81	1.0	100.7	Pulse	0.1000	3
He	Tb	159	293592.91	1.5	100.3	Pulse	0.1000	3
He	Bi	209	236510.93	0.2	100.3	Pulse	0.1000	3

No Gas

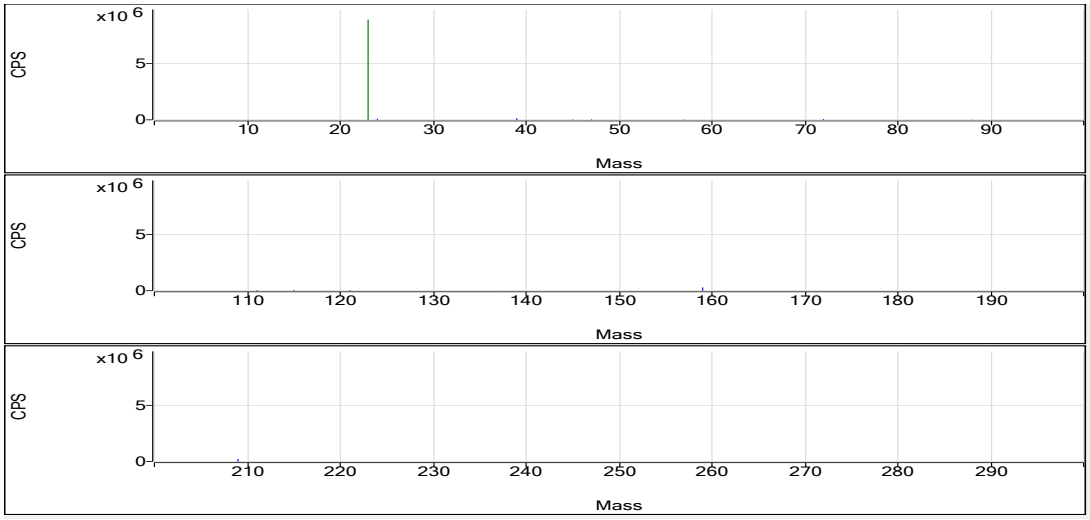


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.002	0	52.00	0.0008	2.195E-05
Be	9	1	No Gas	0.016	0	74.00	0.0008	2.195E-05
Be	9	1	No Gas	0.002	0	52.00	0.0008	2.195E-05
Se	78	2	H2	0.965	0.0004	46.67	0.0004	1.386E-05
Se	78	2	H2	1.044	0.0005	50.00	0.0004	1.386E-05
Se	78	2	H2	1.179	0.0005	56.67	0.0004	1.386E-05
Na	23	3	He	63024.75	241.2859	9067460.49	0.0038	0.4416
Na	23	3	He	60782.129	232.7159	8959940.49	0.0038	0.4416
Na	23	3	He	61504.757	235.4774	8950524.24	0.0038	0.4416
Mg	24	3	He	1287.868	2.4068	90446.99	0.0019	0.005872
Mg	24	3	He	1243.906	2.3248	89510.32	0.0019	0.005872
Mg	24	3	He	1271.683	2.3766	90336.02	0.0019	0.005872
Al	27	3	He	8.428	0.0053	200.01	0.0006	0.0004496
Al	27	3	He	5.512	0.0036	140.00	0.0006	0.0004496
Al	27	3	He	4.683	0.0032	120.00	0.0006	0.0004496
K	39	3	He	2973.696	3.8846	145984.07	0.0012	0.4456
K	39	3	He	2831.312	3.72	143225.43	0.0012	0.4456
K	39	3	He	2953.567	3.8614	146771.17	0.0012	0.4456
Ca	44	3	He	3673.169	0.2465	9263.35	0.0001	0.003779
Ca	44	3	He	3473.71	0.2333	8983.14	0.0001	0.003779
Ca	44	3	He	3662.753	0.2458	9343.28	0.0001	0.003779
Ti	47	3	He	1.536	0.0008	30.00	0.0005	0
Ti	47	3	He	1.5	0.0008	30.00	0.0005	0
Ti	47	3	He	1.013	0.0005	20.00	0.0005	0
V	51	3	He	-0.016	0.0302	1134.05	0.0223	0.03054
V	51	3	He	-0.03	0.0299	1150.05	0.0223	0.03054
V	51	3	He	0.023	0.031	1180.06	0.0223	0.03054
Cr	52	3	He	0.444	0.0498	1870.18	0.0285	0.03714
Cr	52	3	He	0.274	0.0449	1730.15	0.0285	0.03714
Cr	52	3	He	0.415	0.0489	1860.18	0.0285	0.03714
Mn	55	3	He	21.741	0.2737	10284.07	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	20.855	0.2627	10113.81	0.0124	0.004415
Mn	55	3	He	20.789	0.2619	9953.69	0.0124	0.004415
Fe	57	3	He	1326.033	0.7536	28318.22	0.0006	0.001356
Fe	57	3	He	1298.825	0.7381	28418.68	0.0006	0.001356
Fe	57	3	He	1302.173	0.74	28128.07	0.0006	0.001356
Co	59	3	He	1.383	0.083	3120.46	0.0581	0.002697
Co	59	3	He	1.393	0.0836	3220.49	0.0581	0.002697
Co	59	3	He	1.426	0.0855	3250.46	0.0581	0.002697
Ni	60	3	He	0.196	0.0056	390.02	0.0087	0.003928
Ni	60	3	He	0.152	0.0052	360.02	0.0087	0.003928
Ni	60	3	He	0.34	0.0069	470.03	0.0087	0.003928
Cu	63	3	He	3.518	0.098	6791.83	0.0261	0.006048
Cu	63	3	He	3.508	0.0977	6711.86	0.0261	0.006048
Cu	63	3	He	3.536	0.0985	6731.78	0.0261	0.006048
Zn	66	3	He	4.011	0.015	1040.08	0.0029	0.003512
Zn	66	3	He	3.043	0.0122	840.06	0.0029	0.003512
Zn	66	3	He	3.931	0.0148	1010.08	0.0029	0.003512
As	75	3	He	0.153	0.001	72.00	0.0021	0.0007233
As	75	3	He	-0.054	0.0006	42.00	0.0021	0.0007233
As	75	3	He	0.216	0.0012	80.00	0.0021	0.0007233
Sr	88	3	He	35.254	0.3162	20285.09	0.009	0.0005796
Sr	88	3	He	35.082	0.3147	20085.09	0.009	0.0005796
Sr	88	3	He	35.764	0.3208	20185.01	0.009	0.0005796
Mo	98	3	He	0.298	0.0073	470.02	0.0235	0.0003188
Mo	98	3	He	0.266	0.0066	420.02	0.0235	0.0003188
Mo	98	3	He	0.203	0.0051	320.02	0.0235	0.0003188
Ag	107	3	He	0.009	0.0009	60.00	0.0499	0.0004754
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0.019	0.0014	90.00	0.0499	0.0004754
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.009	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.027	0.0002	10.00	0.0055	1.07E-05
Sn	120	3	He	-0.075	0.0159	1020.08	0.0164	0.01713
Sn	120	3	He	0.13	0.0193	1230.10	0.0164	0.01713
Sn	120	3	He	0.176	0.02	1260.10	0.0164	0.01713
Sb	121	3	He	0.003	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	0.045	0.001	60.00	0.0155	0.0002641
Ba	137	3	He	2.317	0.0117	750.05	0.005	0.0001577
Ba	137	3	He	1.982	0.01	640.04	0.005	0.0001577
Ba	137	3	He	1.724	0.0087	550.03	0.005	0.0001577
Tl	205	3	He	0.022	0.0008	240.01	0.026	0.0002504
Tl	205	3	He	0.032	0.0011	320.02	0.026	0.0002504
Tl	205	3	He	0.034	0.0011	330.02	0.026	0.0002504
Pb	208	3	He	0.015	0.0019	250.01	0.0349	0.001422
Pb	208	3	He	0.026	0.0023	340.02	0.0349	0.001422
Pb	208	3	He	0.025	0.0023	360.02	0.0349	0.001422
U	238	3	He	0.037	0.0019	450.02	0.0502	5.657E-05
U	238	3	He	0.034	0.0018	420.02	0.0502	5.657E-05
U	238	3	He	0.043	0.0022	520.03	0.0502	5.657E-05
Sc	45	1	No Gas			2199592.62		
Sc	45	1	No Gas			2148290.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2199605.59		
Ge	72	1	No Gas			1107945.06		
Ge	72	1	No Gas			1093193.19		
Ge	72	1	No Gas			1096396.94		
Sc	45	2	H2			123300.05		
Sc	45	2	H2			122149.36		
Sc	45	2	H2			121676.16		
Ge	72	2	H2			107633.55		
Ge	72	2	H2			106889.11		
Ge	72	2	H2			107633.84		
In	115	2	H2			289668.57		
In	115	2	H2			289585.39		
In	115	2	H2			286551.56		
Sc	45	3	He			37579.73		
Sc	45	3	He			38501.62		
Sc	45	3	He			38010.12		
Ge	72	3	He			69308.41		
Ge	72	3	He			68685.11		
Ge	72	3	He			68364.54		
In	115	3	He			64158.07		
In	115	3	He			63837.45		
In	115	3	He			62933.23		
Tb	159	3	He			293177.69		
Tb	159	3	He			298306.81		
Tb	159	3	He			289294.23		
Bi	209	3	He			236983.39		
Bi	209	3	He			236604.33		
Bi	209	3	He			235945.07		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

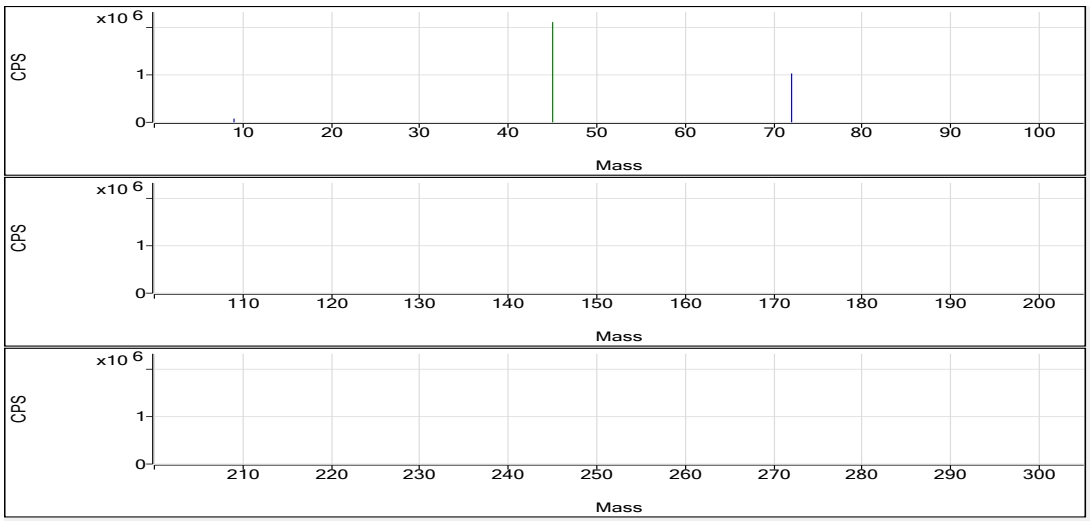
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.368	ppb	1.5	78761.54	0.0371	Pulse	0.5000	3
Se	78	72	H2	53.794	ppb	1.1	2418.65	0.0234	Pulse	1.5000	3
Na	23	45	He	4841.033	ppb	0.3	731416.47	18.9412	Pulse	0.1000	3
Mg	24	45	He	4988.299	ppb	1.4	359313.33	9.3054	Pulse	0.1000	3
Al	27	45	He	4965.091	ppb	1.1	110865.53	2.8711	Pulse	0.1000	3
K	39	45	He	5024.855	ppb	0.4	241604.53	6.2568	Pulse	0.1000	3
Ca	44	45	He	5021.987	ppb	1.9	12959.48	0.3356	Pulse	0.1000	3
Ti	47	45	He	5006.452	ppb	1.1	100445.60	2.6013	Pulse	0.1000	3
V	51	45	He	503.828	ppb	0.4	434910.50	11.2628	Pulse	0.5000	3
Cr	52	45	He	509.796	ppb	0.9	561547.56	14.5425	Pulse	0.1000	3
Mn	55	45	He	494.859	ppb	1.0	236819.61	6.1329	Pulse	0.1000	3
Fe	57	45	He	4930.414	ppb	0.7	108052.03	2.7981	Pulse	0.1000	3
Co	59	45	He	477.089	ppb	0.8	1070389.98	27.7197	Pulse	0.1000	3
Ni	60	72	He	516.695	ppb	2.1	296174.42	4.4823	Pulse	0.1000	3
Cu	63	72	He	487.956	ppb	1.3	843162.36	12.7591	Pulse	0.1000	3
Zn	66	72	He	511.571	ppb	2.0	97094.41	1.4694	Pulse	0.1000	3
As	75	72	He	516.416	ppb	2.0	70596.82	1.0684	Pulse	0.5000	3
Sr	88	115	He	50.467	ppb	0.5	28820.13	0.4524	Pulse	0.1000	3
Mo	98	115	He	50.954	ppb	2.5	76351.02	1.1985	Pulse	0.1000	3
Ag	107	115	He	51.550	ppb	0.5	163757.76	2.5705	Pulse	0.1000	3
Cd	111	115	He	50.899	ppb	0.8	17968.25	0.2821	Pulse	0.5000	3
Sn	120	115	He	49.987	ppb	1.3	53377.15	0.8379	Pulse	0.1000	3
Sb	121	115	He	50.040	ppb	0.9	49325.22	0.7743	Pulse	0.1000	3
Ba	137	115	He	507.798	ppb	0.4	161063.45	2.5283	Pulse	0.1000	3
Tl	205	159	He	50.656	ppb	0.9	385802.18	1.3194	Pulse	0.1000	3
Pb	208	159	He	50.684	ppb	0.7	518223.55	1.7722	Pulse	0.1000	3
U	238	209	He	49.779	ppb	1.2	587886.93	2.5006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2121142.63	1.0	104.3	Analog	0.1000	3
No Gas	Ge	72	1033816.44	0.2	102.9	Pulse	0.1000	3
H2	Sc	45	123470.78	0.8	93.5	Pulse	0.1000	3
H2	Ge	72	103338.45	0.9	92.7	Pulse	0.1000	3
H2	In	115	288788.95	0.9	98.3	Pulse	0.1000	3
He	Sc	45	38615.35	0.5	104.5	Pulse	0.1000	3
He	Ge	72	66093.58	1.8	102.4	Pulse	0.1000	3
He	In	115	63705.38	0.3	100.8	Pulse	0.1000	3
He	Tb	159	292442.07	1.6	99.9	Pulse	0.1000	3
He	Bi	209	235106.20	0.7	99.7	Pulse	0.1000	3

No Gas



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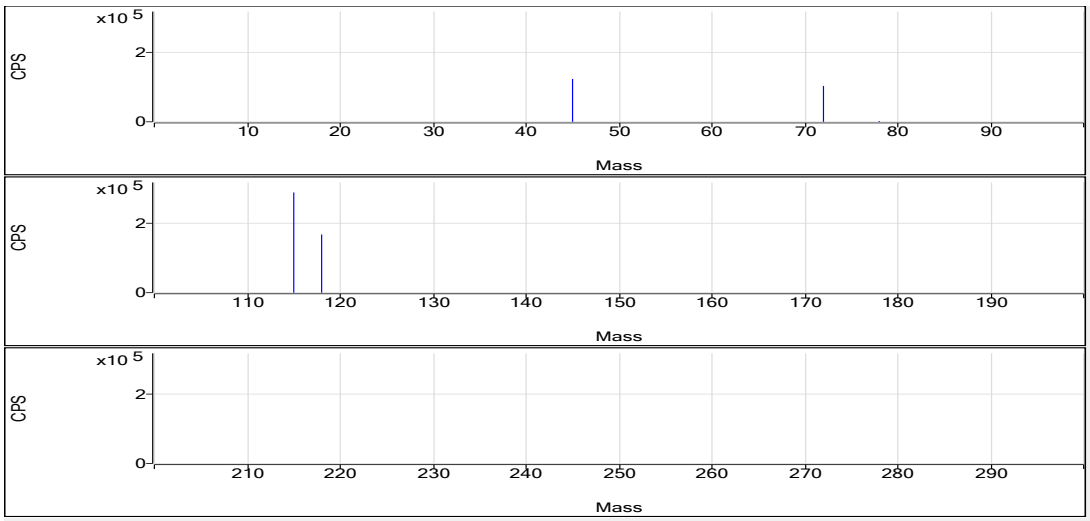
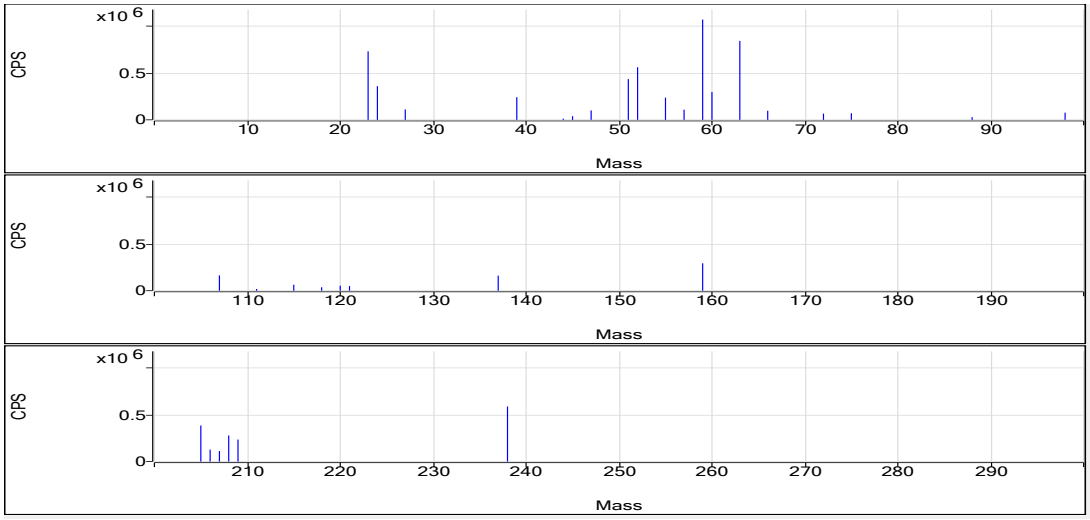


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.411	0.0372	78572.70	0.0008	2.195E-05
Be	9	1	No Gas	47.617	0.0366	78441.77	0.0008	2.195E-05
Be	9	1	No Gas	49.075	0.0377	79270.16	0.0008	2.195E-05
Se	78	2	H2	53.563	0.0233	2428.21	0.0004	1.386E-05
Se	78	2	H2	54.495	0.0237	2426.21	0.0004	1.386E-05
Se	78	2	H2	53.325	0.0232	2401.54	0.0004	1.386E-05
Na	23	3	He	4825.079	18.8803	732413.27	0.0038	0.4416
Na	23	3	He	4846.166	18.9609	733259.29	0.0038	0.4416
Na	23	3	He	4851.854	18.9826	728576.86	0.0038	0.4416
Mg	24	3	He	4923.809	9.1852	356315.85	0.0019	0.005872
Mg	24	3	He	4979.921	9.2898	359256.75	0.0019	0.005872
Mg	24	3	He	5061.168	9.4412	362367.38	0.0019	0.005872
Al	27	3	He	4940.014	2.8566	110815.66	0.0006	0.0004496
Al	27	3	He	4930.097	2.8509	110250.43	0.0006	0.0004496
Al	27	3	He	5025.161	2.9059	111530.51	0.0006	0.0004496
K	39	3	He	5005.838	6.2348	241863.02	0.0012	0.4456
K	39	3	He	5022.552	6.2541	241860.82	0.0012	0.4456
K	39	3	He	5046.176	6.2814	241089.76	0.0012	0.4456
Ca	44	3	He	4930.739	0.3296	12785.92	0.0001	0.003779
Ca	44	3	He	5012.863	0.335	12956.15	0.0001	0.003779
Ca	44	3	He	5122.36	0.3423	13136.38	0.0001	0.003779
Ti	47	3	He	4958.366	2.5763	99941.26	0.0005	0
Ti	47	3	He	4993.396	2.5945	100335.35	0.0005	0
Ti	47	3	He	5067.595	2.6331	101060.18	0.0005	0
V	51	3	He	502.454	11.2322	435723.25	0.0223	0.03054
V	51	3	He	503.056	11.2456	434892.06	0.0223	0.03054
V	51	3	He	505.973	11.3106	434116.19	0.0223	0.03054
Cr	52	3	He	506.187	14.4399	560158.39	0.0285	0.03714
Cr	52	3	He	508.403	14.5029	560860.27	0.0285	0.03714
Cr	52	3	He	514.798	14.6849	563624.02	0.0285	0.03714
Mn	55	3	He	494.79	6.1321	237878.45	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	490.049	6.0734	234870.50	0.0124	0.004415
Mn	55	3	He	499.74	6.1934	237709.88	0.0124	0.004415
Fe	57	3	He	4963.777	2.8171	109281.03	0.0006	0.001356
Fe	57	3	He	4898.389	2.78	107507.87	0.0006	0.001356
Fe	57	3	He	4929.078	2.7974	107367.20	0.0006	0.001356
Co	59	3	He	478.037	27.7748	1077453.58	0.0581	0.002697
Co	59	3	He	472.8	27.4705	1062347.95	0.0581	0.002697
Co	59	3	He	480.43	27.9138	1071368.42	0.0581	0.002697
Ni	60	3	He	516.5	4.4806	297127.46	0.0087	0.003928
Ni	60	3	He	527.531	4.5762	296435.33	0.0087	0.003928
Ni	60	3	He	506.055	4.39	294960.46	0.0087	0.003928
Cu	63	3	He	488.538	12.7743	847120.38	0.0261	0.006048
Cu	63	3	He	493.966	12.9161	836679.68	0.0261	0.006048
Cu	63	3	He	481.364	12.5868	845687.02	0.0261	0.006048
Zn	66	3	He	510.125	1.4653	97168.19	0.0029	0.003512
Zn	66	3	He	522.525	1.5008	97218.29	0.0029	0.003512
Zn	66	3	He	502.063	1.4422	96896.74	0.0029	0.003512
As	75	3	He	513.802	1.063	70492.21	0.0021	0.0007233
As	75	3	He	528.01	1.0924	70761.55	0.0021	0.0007233
As	75	3	He	507.434	1.0498	70536.70	0.0021	0.0007233
Sr	88	3	He	50.763	0.4551	28900.39	0.009	0.0005796
Sr	88	3	He	50.322	0.4511	28769.85	0.009	0.0005796
Sr	88	3	He	50.316	0.451	28790.16	0.009	0.0005796
Mo	98	3	He	51.721	1.2166	77263.14	0.0235	0.0003188
Mo	98	3	He	49.506	1.1645	74266.29	0.0235	0.0003188
Mo	98	3	He	51.635	1.2145	77523.64	0.0235	0.0003188
Ag	107	3	He	51.476	2.5669	163022.20	0.0499	0.0004754
Ag	107	3	He	51.312	2.5587	163184.20	0.0499	0.0004754
Ag	107	3	He	51.861	2.5861	165066.87	0.0499	0.0004754
Cd	111	3	He	51.048	0.2829	17965.57	0.0055	1.07E-05
Cd	111	3	He	50.461	0.2796	17833.40	0.0055	1.07E-05
Cd	111	3	He	51.189	0.2837	18105.77	0.0055	1.07E-05
Sn	120	3	He	50.487	0.8461	53735.36	0.0164	0.01713
Sn	120	3	He	49.245	0.8257	52661.14	0.0164	0.01713
Sn	120	3	He	50.228	0.8419	53734.94	0.0164	0.01713
Sb	121	3	He	50.452	0.7807	49579.55	0.0155	0.0002641
Sb	121	3	He	50.119	0.7755	49458.96	0.0155	0.0002641
Sb	121	3	He	49.549	0.7667	48937.14	0.0155	0.0002641
Ba	137	3	He	508.826	2.5334	160894.86	0.005	0.0001577
Ba	137	3	He	505.519	2.5169	160520.84	0.005	0.0001577
Ba	137	3	He	509.048	2.5345	161774.64	0.005	0.0001577
Tl	205	3	He	50.154	1.3063	388908.94	0.026	0.0002504
Tl	205	3	He	50.761	1.3221	382139.41	0.026	0.0002504
Tl	205	3	He	51.055	1.3297	386358.20	0.026	0.0002504
Pb	208	3	He	50.286	1.7583	282053.98	0.0349	0.001422
Pb	208	3	He	51.041	1.7847	275866.21	0.0349	0.001422
Pb	208	3	He	50.725	1.7736	277234.61	0.0349	0.001422
U	238	3	He	50.22	2.5227	593883.86	0.0502	5.657E-05
U	238	3	He	49.995	2.5114	586271.28	0.0502	5.657E-05
U	238	3	He	49.124	2.4676	583505.66	0.0502	5.657E-05
Sc	45	1	No Gas			2113950.91		
Sc	45	1	No Gas			2145606.22		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2103870.75		
Ge	72	1	No Gas			1032500.45		
Ge	72	1	No Gas			1032314.36		
Ge	72	1	No Gas			1036634.52		
Sc	45	2	H2			124319.29		
Sc	45	2	H2			122421.49		
Sc	45	2	H2			123671.55		
Ge	72	2	H2			104187.93		
Ge	72	2	H2			102324.22		
Ge	72	2	H2			103503.19		
In	115	2	H2			290691.30		
In	115	2	H2			289658.92		
In	115	2	H2			286016.62		
Sc	45	3	He			38792.50		
Sc	45	3	He			38672.25		
Sc	45	3	He			38381.30		
Ge	72	3	He			66314.47		
Ge	72	3	He			64777.80		
Ge	72	3	He			67188.48		
In	115	3	He			63806.79		
In	115	3	He			64058.07		
In	115	3	He			64109.20		
Tb	159	3	He			297723.63		
Tb	159	3	He			289047.24		
Tb	159	3	He			290555.33		
Bi	209	3	He			235415.27		
Bi	209	3	He			233441.11		
Bi	209	3	He			236462.22		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:43:49 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

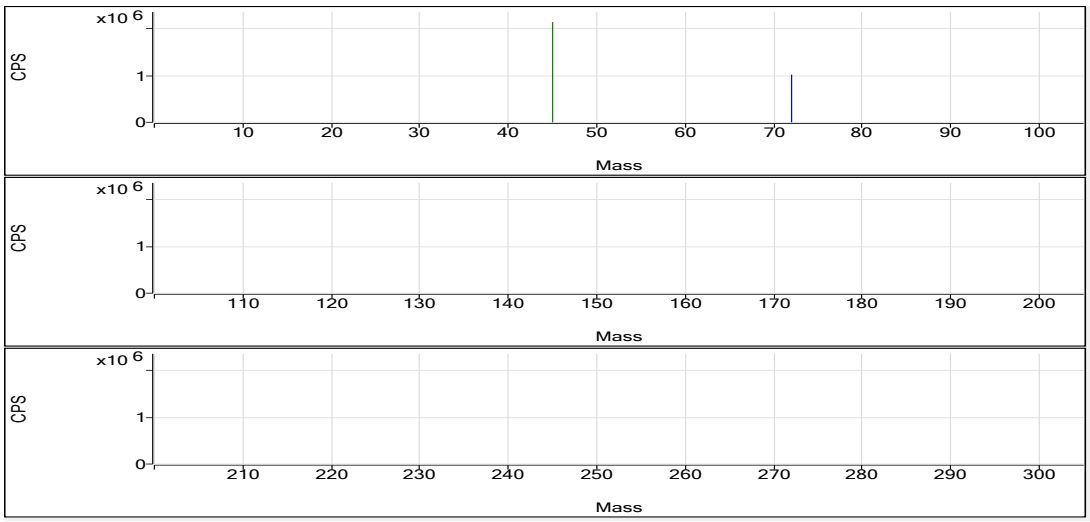
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.036	ppb	44.2	106.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.061	ppb	94.0	4.00	0.0000	Pulse	1.5000	3
Na	23	45	He	-14.991	ppb	N/A	14370.77	0.3843	Pulse	0.1000	3
Mg	24	45	He	1.725	ppb	42.4	340.02	0.0091	Pulse	0.1000	3
Al	27	45	He	2.139	ppb	65.4	63.33	0.0017	Pulse	0.1000	3
K	39	45	He	-11.409	ppb	N/A	16166.14	0.4324	Pulse	0.1000	3
Ca	44	45	He	-10.018	ppb	N/A	116.67	0.0031	Pulse	0.1000	3
Ti	47	45	He	1.358	ppb	55.3	26.67	0.0007	Pulse	0.1000	3
V	51	45	He	0.046	ppb	147.5	1180.06	0.0316	Pulse	0.5000	3
Cr	52	45	He	0.001	ppb	9238.1	1393.45	0.0372	Pulse	0.1000	3
Mn	55	45	He	0.283	ppb	19.6	296.68	0.0079	Pulse	0.1000	3
Fe	57	45	He	2.322	ppb	19.8	100.00	0.0027	Pulse	0.1000	3
Co	59	45	He	0.135	ppb	29.8	393.35	0.0105	Pulse	0.1000	3
Ni	60	72	He	0.254	ppb	34.9	393.35	0.0061	Pulse	0.1000	3
Cu	63	72	He	0.059	ppb	66.7	486.69	0.0076	Pulse	0.1000	3
Zn	66	72	He	0.189	ppb	115.0	260.01	0.0041	Pulse	0.1000	3
As	75	72	He	0.153	ppb	32.7	66.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.057	ppb	105.5	70.00	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.060	ppb	36.0	110.00	0.0017	Pulse	0.1000	3
Ag	107	115	He	0.005	ppb	95.5	46.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	158.4	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.512	ppb	142.3	1636.19	0.0255	Pulse	0.1000	3
Sb	121	115	He	0.023	ppb	72.9	40.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.043	ppb	175.3	23.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.078	ppb	3.9	660.05	0.0023	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	126.5	543.36	0.0019	Pulse	0.1000	3
U	238	209	He	0.051	ppb	17.2	610.04	0.0026	Pulse	0.1000	3

ISTD Table:

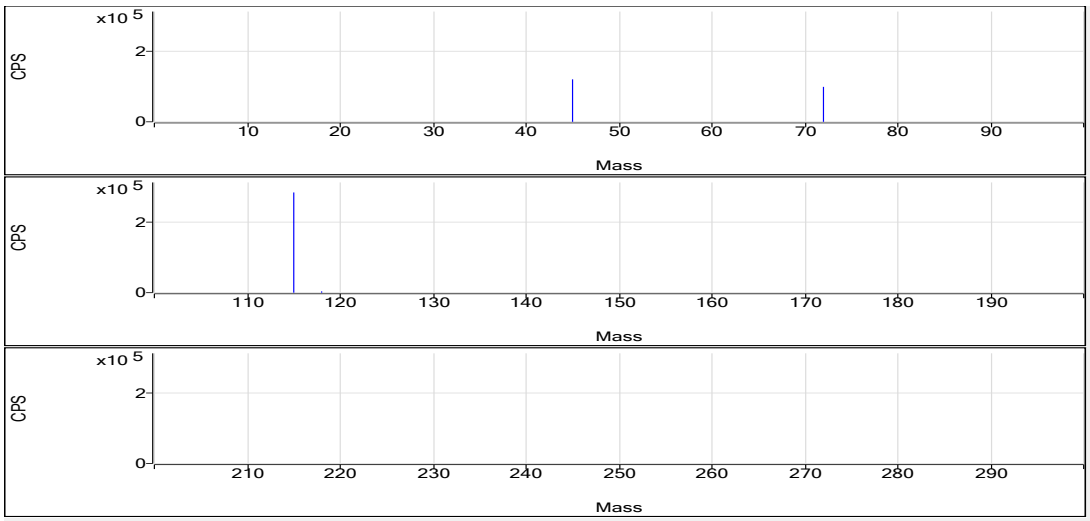
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2150901.48	1.5	105.8	Analog	0.1000	3
No Gas	Ge	72	1022802.64	0.8	101.8	Pulse	0.1000	3
H2	Sc	45	121118.87	1.8	91.7	Pulse	0.1000	3
H2	Ge	72	99666.24	1.6	89.4	Pulse	0.1000	3
H2	In	115	285782.98	0.6	97.3	Pulse	0.1000	3
He	Sc	45	37412.36	3.1	101.2	Pulse	0.1000	3
He	Ge	72	64127.74	0.5	99.3	Pulse	0.1000	3
He	In	115	63717.35	2.3	100.8	Pulse	0.1000	3
He	Tb	159	289099.39	0.6	98.7	Pulse	0.1000	3
He	Bi	209	231865.51	0.7	98.3	Pulse	0.1000	3

No Gas

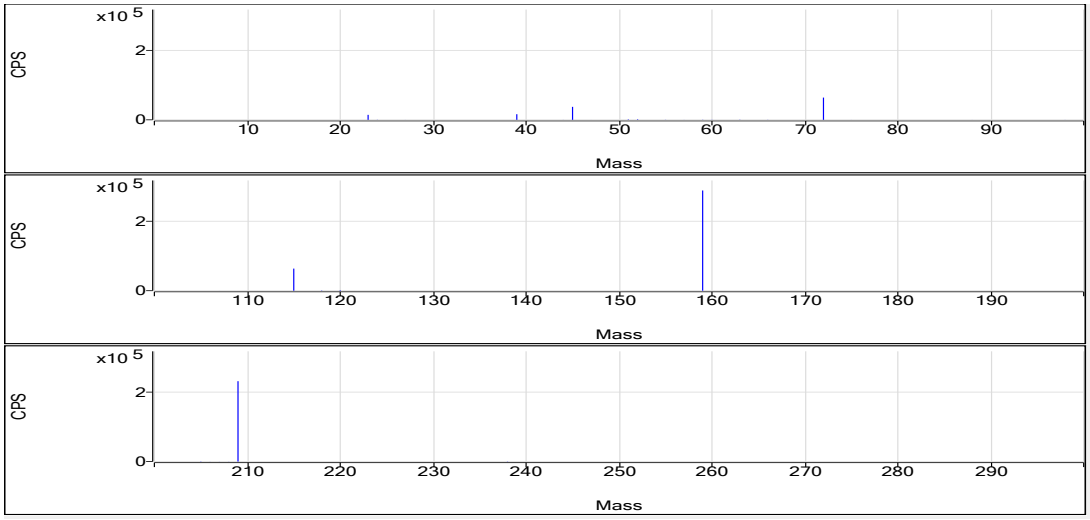


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.048	0.0001	124.00	0.0008	2.195E-05
Be	9	1	No Gas	0.018	0	78.00	0.0008	2.195E-05
Be	9	1	No Gas	0.043	0.0001	118.00	0.0008	2.195E-05
Se	78	2	H2	0.044	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.125	0.0001	6.67	0.0004	1.386E-05
Se	78	2	H2	0.014	0	2.00	0.0004	1.386E-05
Na	23	3	He	-16.537	0.3784	14637.75	0.0038	0.4416
Na	23	3	He	-18.992	0.369	13686.72	0.0038	0.4416
Na	23	3	He	-9.444	0.4055	14787.83	0.0038	0.4416
Mg	24	3	He	1.982	0.0096	370.02	0.0019	0.005872
Mg	24	3	He	0.9	0.0075	280.01	0.0019	0.005872
Mg	24	3	He	2.293	0.0101	370.02	0.0019	0.005872
Al	27	3	He	2.352	0.0018	70.00	0.0006	0.0004496
Al	27	3	He	3.42	0.0024	90.00	0.0006	0.0004496
Al	27	3	He	0.645	0.0008	30.00	0.0006	0.0004496
K	39	3	He	-24.769	0.417	16129.43	0.0012	0.4456
K	39	3	He	-13.474	0.43	15949.30	0.0012	0.4456
K	39	3	He	4.017	0.4503	16419.68	0.0012	0.4456
Ca	44	3	He	-10.232	0.0031	120.01	0.0001	0.003779
Ca	44	3	He	-4.138	0.0035	130.00	0.0001	0.003779
Ca	44	3	He	-15.684	0.0027	100.00	0.0001	0.003779
Ti	47	3	He	1.99	0.001	40.00	0.0005	0
Ti	47	3	He	1.557	0.0008	30.00	0.0005	0
Ti	47	3	He	0.528	0.0003	10.00	0.0005	0
V	51	3	He	-0.02	0.0301	1164.05	0.0223	0.03054
V	51	3	He	0.043	0.0315	1168.06	0.0223	0.03054
V	51	3	He	0.116	0.0331	1208.06	0.0223	0.03054
Cr	52	3	He	0.14	0.0411	1590.15	0.0285	0.03714
Cr	52	3	He	-0.035	0.0361	1340.10	0.0285	0.03714
Cr	52	3	He	-0.1	0.0343	1250.10	0.0285	0.03714
Mn	55	3	He	0.312	0.0083	320.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.318	0.0084	310.01	0.0124	0.004415
Mn	55	3	He	0.219	0.0071	260.01	0.0124	0.004415
Fe	57	3	He	2.167	0.0026	100.00	0.0006	0.001356
Fe	57	3	He	2.839	0.003	110.01	0.0006	0.001356
Fe	57	3	He	1.961	0.0025	90.00	0.0006	0.001356
Co	59	3	He	0.114	0.0093	360.02	0.0581	0.002697
Co	59	3	He	0.181	0.0132	490.03	0.0581	0.002697
Co	59	3	He	0.109	0.009	330.01	0.0581	0.002697
Ni	60	3	He	0.178	0.0055	350.01	0.0087	0.003928
Ni	60	3	He	0.352	0.007	450.02	0.0087	0.003928
Ni	60	3	He	0.233	0.0059	380.02	0.0087	0.003928
Cu	63	3	He	0.014	0.0064	410.02	0.0261	0.006048
Cu	63	3	He	0.077	0.0081	520.03	0.0261	0.006048
Cu	63	3	He	0.086	0.0083	530.03	0.0261	0.006048
Zn	66	3	He	0.411	0.0047	300.02	0.0029	0.003512
Zn	66	3	He	0.181	0.004	260.01	0.0029	0.003512
Zn	66	3	He	-0.024	0.0034	220.01	0.0029	0.003512
As	75	3	He	0.21	0.0012	74.00	0.0021	0.0007233
As	75	3	He	0.115	0.001	62.00	0.0021	0.0007233
As	75	3	He	0.135	0.001	64.00	0.0021	0.0007233
Sr	88	3	He	0.124	0.0017	110.00	0.009	0.0005796
Sr	88	3	He	0.043	0.001	60.00	0.009	0.0005796
Sr	88	3	He	0.005	0.0006	40.00	0.009	0.0005796
Mo	98	3	He	0.084	0.0023	150.01	0.0235	0.0003188
Mo	98	3	He	0.048	0.0014	90.00	0.0235	0.0003188
Mo	98	3	He	0.047	0.0014	90.00	0.0235	0.0003188
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0.009	0.0009	60.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	1.347	0.0392	2558.37	0.0164	0.01713
Sn	120	3	He	0.18	0.0201	1250.11	0.0164	0.01713
Sn	120	3	He	0.008	0.0173	1100.08	0.0164	0.01713
Sb	121	3	He	0.033	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	0.034	0.0008	50.00	0.0155	0.0002641
Ba	137	3	He	-0.001	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0.13	0.0008	50.00	0.005	0.0001577
Ba	137	3	He	0	0.0002	10.00	0.005	0.0001577
Tl	205	3	He	0.079	0.0023	670.05	0.026	0.0002504
Tl	205	3	He	0.075	0.0022	630.05	0.026	0.0002504
Tl	205	3	He	0.08	0.0023	680.04	0.026	0.0002504
Pb	208	3	He	0.007	0.0017	230.01	0.0349	0.001422
Pb	208	3	He	0.032	0.0025	320.02	0.0349	0.001422
Pb	208	3	He	0.001	0.0014	190.01	0.0349	0.001422
U	238	3	He	0.06	0.0031	710.05	0.0502	5.657E-05
U	238	3	He	0.042	0.0022	500.03	0.0502	5.657E-05
U	238	3	He	0.052	0.0027	620.04	0.0502	5.657E-05
Sc	45	1	No Gas			2120357.16		
Sc	45	1	No Gas			2184744.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2147603.25		
Ge	72	1	No Gas			1017684.44		
Ge	72	1	No Gas			1032188.27		
Ge	72	1	No Gas			1018535.22		
Sc	45	2	H2			121534.63		
Sc	45	2	H2			123038.28		
Sc	45	2	H2			118783.69		
Ge	72	2	H2			100813.92		
Ge	72	2	H2			97874.42		
Ge	72	2	H2			100310.37		
In	115	2	H2			287627.91		
In	115	2	H2			284411.81		
In	115	2	H2			285309.23		
Sc	45	3	He			38682.07		
Sc	45	3	He			37088.25		
Sc	45	3	He			36466.75		
Ge	72	3	He			63963.72		
Ge	72	3	He			64515.87		
Ge	72	3	He			63903.63		
In	115	3	He			65193.67		
In	115	3	He			62260.27		
In	115	3	He			63717.14		
Tb	159	3	He			289802.61		
Tb	159	3	He			287263.36		
Tb	159	3	He			290232.20		
Bi	209	3	He			232279.96		
Bi	209	3	He			229979.63		
Bi	209	3	He			233336.93		

Quantitation Report

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Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

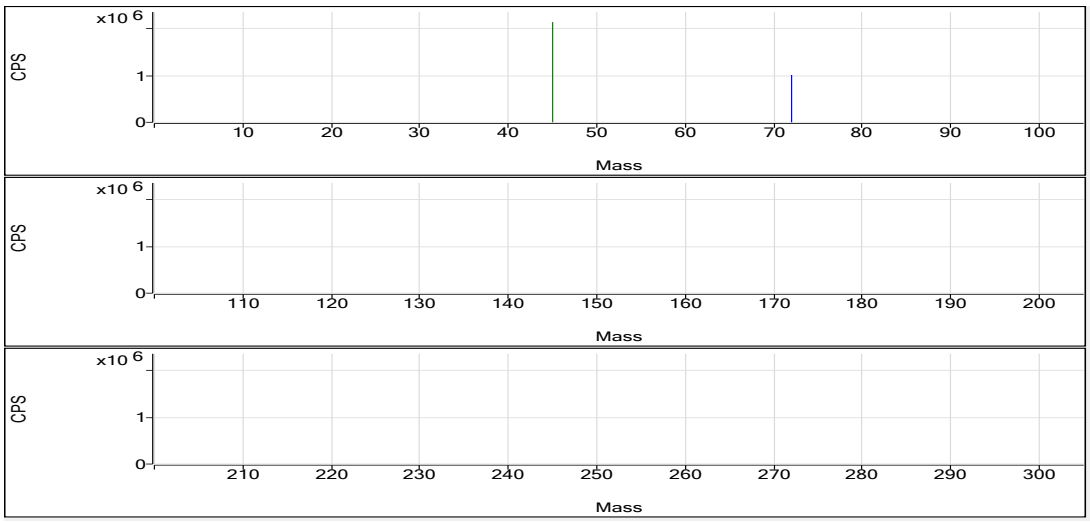
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	66.3	50.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.002	ppb	1386.2	1.56	0.0000	Pulse	1.5000	3
Na	23	45	He	-23.182	ppb	N/A	13293.06	0.3530	Pulse	0.1000	3
Mg	24	45	He	0.085	ppb	498.0	226.68	0.0060	Pulse	0.1000	3
Al	27	45	He	1.365	ppb	85.6	46.67	0.0012	Pulse	0.1000	3
K	39	45	He	-11.031	ppb	N/A	16296.30	0.4329	Pulse	0.1000	3
Ca	44	45	He	-14.039	ppb	N/A	106.67	0.0029	Pulse	0.1000	3
Ti	47	45	He	0.691	ppb	114.6	13.33	0.0004	Pulse	0.1000	3
V	51	45	He	-0.296	ppb	N/A	902.04	0.0240	Pulse	0.5000	3
Cr	52	45	He	-0.208	ppb	N/A	1173.42	0.0312	Pulse	0.1000	3
Mn	55	45	He	0.337	ppb	25.6	323.35	0.0086	Pulse	0.1000	3
Fe	57	45	He	1.965	ppb	87.7	93.34	0.0025	Pulse	0.1000	3
Co	59	45	He	0.059	ppb	38.7	230.01	0.0061	Pulse	0.1000	3
Ni	60	72	He	0.028	ppb	231.4	270.01	0.0042	Pulse	0.1000	3
Cu	63	72	He	-0.006	ppb	N/A	380.02	0.0059	Pulse	0.1000	3
Zn	66	72	He	-0.180	ppb	N/A	193.34	0.0030	Pulse	0.1000	3
As	75	72	He	-0.076	ppb	N/A	36.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.017	ppb	210.8	46.67	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.044	ppb	23.7	86.67	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	182.9	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.004	ppb	150.9	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.270	ppb	N/A	806.72	0.0127	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	16.67	0.0003	Pulse	0.1000	3
Ba	137	115	He	0.010	ppb	173.7	13.33	0.0002	Pulse	0.1000	3
Tl	205	159	He	0.013	ppb	56.7	173.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	-0.006	ppb	N/A	356.68	0.0012	Pulse	0.1000	3
U	238	209	He	0.010	ppb	11.7	136.68	0.0006	Pulse	0.1000	3

ISTD Table:

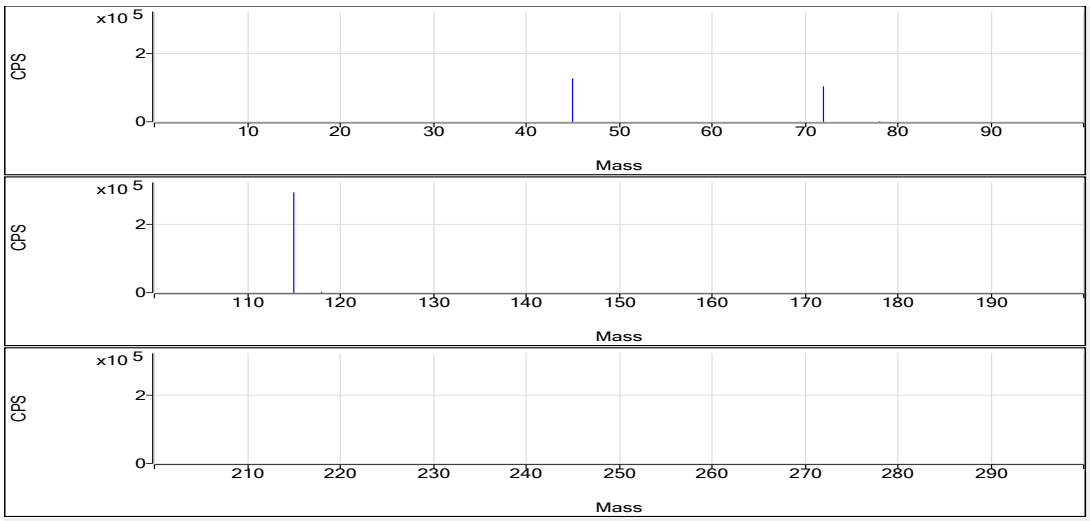
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2140565.96	0.2	105.3	Analog	0.1000	3
No Gas	Ge	72	1010006.00	0.1	100.5	Pulse	0.1000	3
H2	Sc	45	127555.12	2.1	96.6	Pulse	0.1000	3
H2	Ge	72	104353.75	0.7	93.6	Pulse	0.1000	3
H2	In	115	294738.05	1.2	100.4	Pulse	0.1000	3
He	Sc	45	37659.75	2.3	101.9	Pulse	0.1000	3
He	Ge	72	64717.26	1.6	100.2	Pulse	0.1000	3
He	In	115	63585.74	0.8	100.6	Pulse	0.1000	3
He	Tb	159	293717.97	1.4	100.3	Pulse	0.1000	3
He	Bi	209	235757.56	0.9	100.0	Pulse	0.1000	3

No Gas

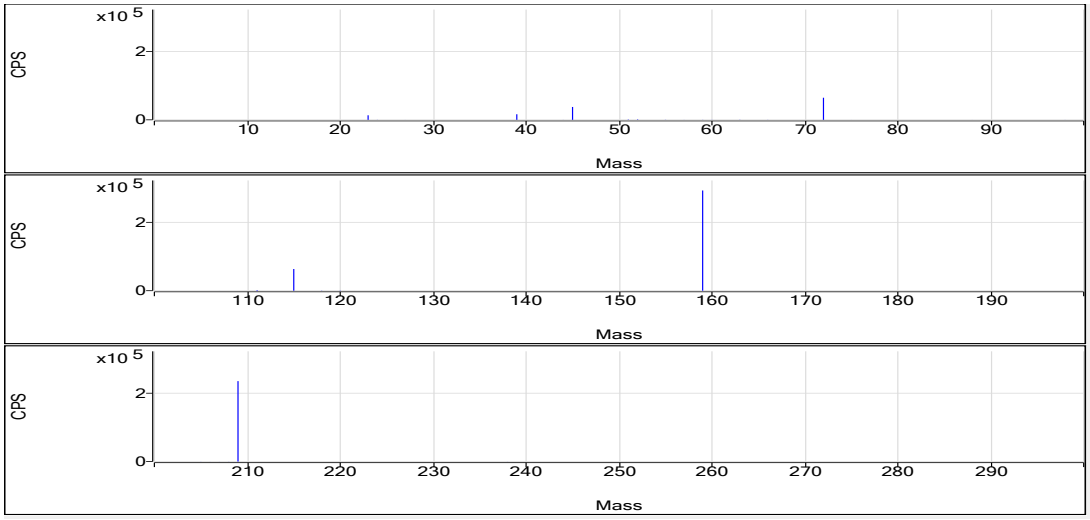


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	52.00	0.0008	2.195E-05
Be	9	1	No Gas	0.001	0	48.00	0.0008	2.195E-05
Be	9	1	No Gas	0.002	0	50.00	0.0008	2.195E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.386E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.386E-05
Se	78	2	H2	0.042	0	3.33	0.0004	1.386E-05
Na	23	3	He	-24.007	0.3499	13526.61	0.0038	0.4416
Na	23	3	He	-21.953	0.3577	13306.32	0.0038	0.4416
Na	23	3	He	-23.585	0.3515	13046.26	0.0038	0.4416
Mg	24	3	He	-0.375	0.0052	200.01	0.0019	0.005872
Mg	24	3	He	0.167	0.0062	230.01	0.0019	0.005872
Mg	24	3	He	0.463	0.0067	250.01	0.0019	0.005872
Al	27	3	He	1.459	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	0.152	0.0005	20.00	0.0006	0.0004496
Al	27	3	He	2.484	0.0019	70.00	0.0006	0.0004496
K	39	3	He	-20.107	0.4224	16329.73	0.0012	0.4456
K	39	3	He	-4.105	0.4409	16399.70	0.0012	0.4456
K	39	3	He	-8.881	0.4353	16159.46	0.0012	0.4456
Ca	44	3	He	-33.698	0.0016	60.00	0.0001	0.003779
Ca	44	3	He	-28.705	0.0019	70.00	0.0001	0.003779
Ca	44	3	He	20.285	0.0051	190.01	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.517	0.0003	10.00	0.0005	0
Ti	47	3	He	1.556	0.0008	30.00	0.0005	0
V	51	3	He	-0.286	0.0242	934.04	0.0223	0.03054
V	51	3	He	-0.338	0.023	856.03	0.0223	0.03054
V	51	3	He	-0.263	0.0247	916.04	0.0223	0.03054
Cr	52	3	He	-0.351	0.0272	1050.08	0.0285	0.03714
Cr	52	3	He	-0.086	0.0347	1290.10	0.0285	0.03714
Cr	52	3	He	-0.188	0.0318	1180.09	0.0285	0.03714
Mn	55	3	He	0.333	0.0085	330.02	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.425	0.0097	360.02	0.0124	0.004415
Mn	55	3	He	0.253	0.0075	280.01	0.0124	0.004415
Fe	57	3	He	3.082	0.0031	120.01	0.0006	0.001356
Fe	57	3	He	-0.021	0.0013	50.00	0.0006	0.001356
Fe	57	3	He	2.834	0.003	110.00	0.0006	0.001356
Co	59	3	He	0.038	0.0049	190.01	0.0581	0.002697
Co	59	3	He	0.055	0.0059	220.01	0.0581	0.002697
Co	59	3	He	0.083	0.0075	280.01	0.0581	0.002697
Ni	60	3	He	0.076	0.0046	300.01	0.0087	0.003928
Ni	60	3	He	0.055	0.0044	280.01	0.0087	0.003928
Ni	60	3	He	-0.046	0.0035	230.01	0.0087	0.003928
Cu	63	3	He	-0.032	0.0052	340.01	0.0261	0.006048
Cu	63	3	He	0.033	0.0069	440.02	0.0261	0.006048
Cu	63	3	He	-0.02	0.0055	360.02	0.0261	0.006048
Zn	66	3	He	-0.318	0.0026	170.01	0.0029	0.003512
Zn	66	3	He	0.147	0.0039	250.01	0.0029	0.003512
Zn	66	3	He	-0.369	0.0025	160.01	0.0029	0.003512
As	75	3	He	-0.084	0.0006	36.00	0.0021	0.0007233
As	75	3	He	-0.106	0.0005	32.00	0.0021	0.0007233
As	75	3	He	-0.038	0.0006	42.00	0.0021	0.0007233
Sr	88	3	He	0.058	0.0011	70.00	0.009	0.0005796
Sr	88	3	He	0.006	0.0006	40.00	0.009	0.0005796
Sr	88	3	He	-0.012	0.0005	30.00	0.009	0.0005796
Mo	98	3	He	0.046	0.0014	90.00	0.0235	0.0003188
Mo	98	3	He	0.054	0.0016	100.00	0.0235	0.0003188
Mo	98	3	He	0.033	0.0011	70.00	0.0235	0.0003188
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.009	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.243	0.0131	840.06	0.0164	0.01713
Sn	120	3	He	-0.241	0.0132	830.05	0.0164	0.01713
Sn	120	3	He	-0.328	0.0118	750.05	0.0164	0.01713
Sb	121	3	He	0.003	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	0.003	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Ba	137	3	He	0	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0.031	0.0003	20.00	0.005	0.0001577
Tl	205	3	He	0.005	0.0004	110.00	0.026	0.0002504
Tl	205	3	He	0.018	0.0007	210.01	0.026	0.0002504
Tl	205	3	He	0.016	0.0007	200.01	0.026	0.0002504
Pb	208	3	He	-0.016	0.0009	190.01	0.0349	0.001422
Pb	208	3	He	-0.002	0.0013	190.01	0.0349	0.001422
Pb	208	3	He	0	0.0014	220.01	0.0349	0.001422
U	238	3	He	0.011	0.0006	150.01	0.0502	5.657E-05
U	238	3	He	0.009	0.0005	120.01	0.0502	5.657E-05
U	238	3	He	0.011	0.0006	140.01	0.0502	5.657E-05
Sc	45	1	No Gas			2142818.09		
Sc	45	1	No Gas			2142792.16		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2136087.62		
Ge	72	1	No Gas			1010365.69		
Ge	72	1	No Gas			1008686.70		
Ge	72	1	No Gas			1010965.61		
Sc	45	2	H2			127423.84		
Sc	45	2	H2			130277.95		
Sc	45	2	H2			124963.57		
Ge	72	2	H2			103684.78		
Ge	72	2	H2			105065.32		
Ge	72	2	H2			104311.14		
In	115	2	H2			294398.94		
In	115	2	H2			298562.14		
In	115	2	H2			291253.06		
Sc	45	3	He			38662.46		
Sc	45	3	He			37198.32		
Sc	45	3	He			37118.47		
Ge	72	3	He			65380.19		
Ge	72	3	He			63551.89		
Ge	72	3	He			65219.69		
In	115	3	He			63908.09		
In	115	3	He			63023.71		
In	115	3	He			63837.14		
Tb	159	3	He			297426.69		
Tb	159	3	He			289142.73		
Tb	159	3	He			294584.49		
Bi	209	3	He			238115.60		
Bi	209	3	He			234634.92		
Bi	209	3	He			234522.16		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
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Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

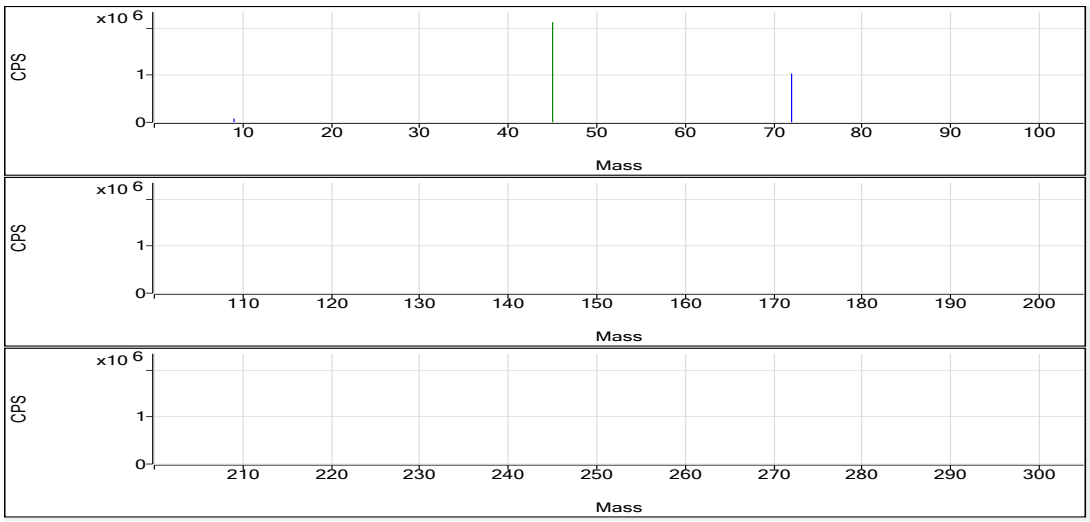
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.505	ppb	0.5	79253.39	0.0372	Pulse	0.5000	3
Se	78	72	H2	53.702	ppb	1.6	2377.98	0.0234	Pulse	1.5000	3
Na	23	45	He	5072.325	ppb	0.1	729181.50	19.8251	Pulse	0.1000	3
Mg	24	45	He	5234.111	ppb	0.7	359118.30	9.7637	Pulse	0.1000	3
Al	27	45	He	5153.735	ppb	0.8	109615.60	2.9802	Pulse	0.1000	3
K	39	45	He	5204.983	ppb	0.8	237791.74	6.4651	Pulse	0.1000	3
Ca	44	45	He	5131.150	ppb	4.4	12609.26	0.3428	Pulse	0.1000	3
Ti	47	45	He	5188.681	ppb	0.5	99160.77	2.6960	Pulse	0.1000	3
V	51	45	He	523.649	ppb	0.1	430504.78	11.7047	Pulse	0.5000	3
Cr	52	45	He	531.759	ppb	0.4	557862.48	15.1675	Pulse	0.1000	3
Mn	55	45	He	518.257	ppb	0.5	236233.70	6.4227	Pulse	0.1000	3
Fe	57	45	He	5167.511	ppb	0.4	107864.21	2.9326	Pulse	0.1000	3
Co	59	45	He	499.840	ppb	0.7	1068158.78	29.0415	Pulse	0.1000	3
Ni	60	72	He	525.547	ppb	2.0	292690.64	4.5590	Pulse	0.1000	3
Cu	63	72	He	500.017	ppb	2.4	839334.83	13.0743	Pulse	0.1000	3
Zn	66	72	He	521.650	ppb	3.1	96178.02	1.4983	Pulse	0.1000	3
As	75	72	He	518.460	ppb	1.3	68869.13	1.0726	Pulse	0.5000	3
Sr	88	115	He	50.434	ppb	3.1	28479.35	0.4521	Pulse	0.1000	3
Mo	98	115	He	50.649	ppb	2.5	75053.65	1.1913	Pulse	0.1000	3
Ag	107	115	He	51.993	ppb	2.2	163334.41	2.5926	Pulse	0.1000	3
Cd	111	115	He	50.637	ppb	1.0	17680.56	0.2806	Pulse	0.5000	3
Sn	120	115	He	49.613	ppb	3.6	52393.14	0.8318	Pulse	0.1000	3
Sb	121	115	He	50.796	ppb	3.9	49505.89	0.7860	Pulse	0.1000	3
Ba	137	115	He	498.964	ppb	2.8	156497.57	2.4843	Pulse	0.1000	3
Tl	205	159	He	50.944	ppb	0.9	385645.75	1.3268	Pulse	0.1000	3
Pb	208	159	He	50.413	ppb	2.2	512275.05	1.7627	Pulse	0.1000	3
U	238	209	He	50.092	ppb	0.6	584384.99	2.5163	Pulse	0.1000	3

ISTD Table:

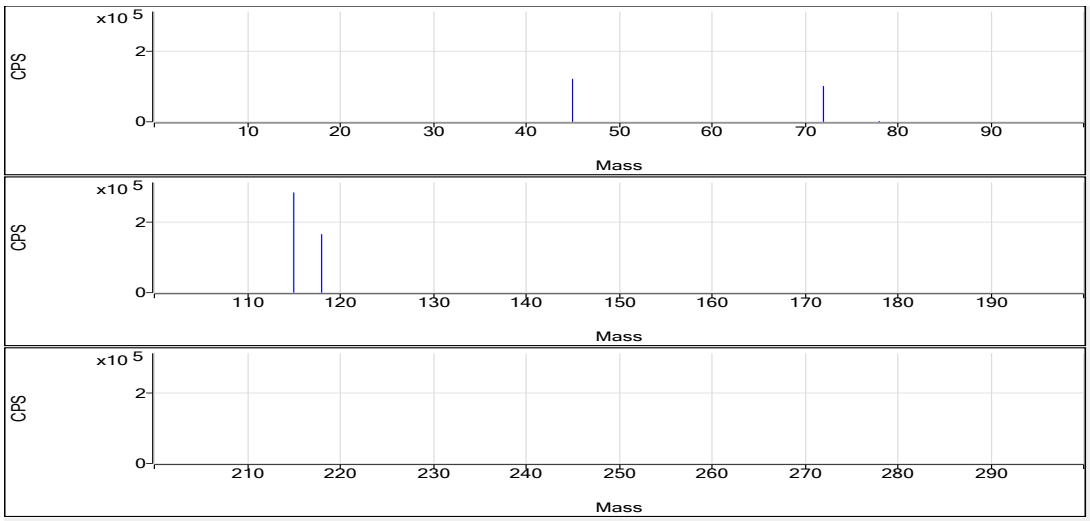
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2128216.74	0.8	104.7	Analog	0.1000	3
No Gas	Ge	72	1035743.71	1.0	103.0	Pulse	0.1000	3
H2	Sc	45	122395.91	0.8	92.6	Pulse	0.1000	3
H2	Ge	72	101764.81	1.2	91.2	Pulse	0.1000	3
H2	In	115	285304.50	0.8	97.1	Pulse	0.1000	3
He	Sc	45	36780.62	0.4	99.5	Pulse	0.1000	3
He	Ge	72	64215.16	1.8	99.5	Pulse	0.1000	3
He	In	115	63018.45	2.0	99.7	Pulse	0.1000	3
He	Tb	159	290667.18	1.3	99.3	Pulse	0.1000	3
He	Bi	209	232249.63	1.0	98.5	Pulse	0.1000	3

No Gas

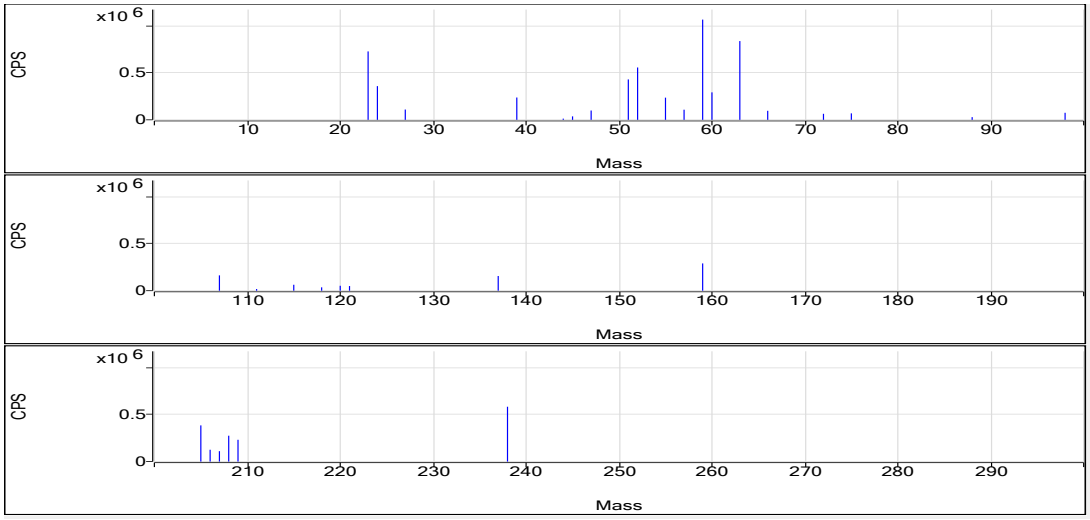


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.215	0.037	79489.36	0.0008	2.195E-05
Be	9	1	No Gas	48.699	0.0374	79095.12	0.0008	2.195E-05
Be	9	1	No Gas	48.601	0.0373	79175.68	0.0008	2.195E-05
Se	78	2	H2	53.068	0.0231	2364.87	0.0004	1.386E-05
Se	78	2	H2	54.671	0.0238	2438.88	0.0004	1.386E-05
Se	78	2	H2	53.366	0.0232	2330.19	0.0004	1.386E-05
Na	23	3	He	5070.927	19.8198	730901.08	0.0038	0.4416
Na	23	3	He	5067.533	19.8068	725069.60	0.0038	0.4416
Na	23	3	He	5078.515	19.8488	731573.82	0.0038	0.4416
Mg	24	3	He	5274.236	9.8385	362816.64	0.0019	0.005872
Mg	24	3	He	5206.262	9.7117	355518.74	0.0019	0.005872
Mg	24	3	He	5221.835	9.7408	359019.53	0.0019	0.005872
Al	27	3	He	5162.552	2.9853	110089.70	0.0006	0.0004496
Al	27	3	He	5108.289	2.9539	108134.36	0.0006	0.0004496
Al	27	3	He	5190.365	3.0014	110622.73	0.0006	0.0004496
K	39	3	He	5177.447	6.4333	237241.40	0.0012	0.4456
K	39	3	He	5187.506	6.4449	235928.53	0.0012	0.4456
K	39	3	He	5249.997	6.5172	240205.29	0.0012	0.4456
Ca	44	3	He	5267.899	0.3519	12976.30	0.0001	0.003779
Ca	44	3	He	5257.528	0.3512	12856.11	0.0001	0.003779
Ca	44	3	He	4868.024	0.3255	11995.37	0.0001	0.003779
Ti	47	3	He	5208.079	2.7061	99792.07	0.0005	0
Ti	47	3	He	5161.793	2.682	98180.32	0.0005	0
Ti	47	3	He	5196.169	2.6999	99509.92	0.0005	0
V	51	3	He	523.914	11.7106	431855.47	0.0223	0.03054
V	51	3	He	524.179	11.7165	428906.88	0.0223	0.03054
V	51	3	He	522.856	11.687	430752.00	0.0223	0.03054
Cr	52	3	He	530.409	15.129	557919.33	0.0285	0.03714
Cr	52	3	He	534.423	15.2433	558011.55	0.0285	0.03714
Cr	52	3	He	530.446	15.1301	557656.55	0.0285	0.03714
Mn	55	3	He	518.838	6.4299	237117.85	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	515.498	6.3885	233865.52	0.0124	0.004415
Mn	55	3	He	520.434	6.4497	237717.73	0.0124	0.004415
Fe	57	3	He	5187.498	2.944	108565.95	0.0006	0.001356
Fe	57	3	He	5167.086	2.9324	107346.43	0.0006	0.001356
Fe	57	3	He	5147.949	2.9215	107680.26	0.0006	0.001356
Co	59	3	He	502.574	29.2003	1076830.53	0.0581	0.002697
Co	59	3	He	501.051	29.1118	1065700.37	0.0581	0.002697
Co	59	3	He	495.895	28.8123	1061945.45	0.0581	0.002697
Ni	60	3	He	534.163	4.6337	295131.27	0.0087	0.003928
Ni	60	3	He	528.936	4.5884	291093.36	0.0087	0.003928
Ni	60	3	He	513.541	4.4549	291847.28	0.0087	0.003928
Cu	63	3	He	506.132	13.2341	842918.27	0.0261	0.006048
Cu	63	3	He	507.566	13.2716	841972.25	0.0261	0.006048
Cu	63	3	He	486.352	12.7172	833113.97	0.0261	0.006048
Zn	66	3	He	529.464	1.5207	96856.39	0.0029	0.003512
Zn	66	3	He	532.392	1.5291	97006.71	0.0029	0.003512
Zn	66	3	He	503.093	1.4451	94670.96	0.0029	0.003512
As	75	3	He	524.314	1.0847	69089.57	0.0021	0.0007233
As	75	3	He	520.262	1.0764	68285.72	0.0021	0.0007233
As	75	3	He	510.804	1.0568	69232.09	0.0021	0.0007233
Sr	88	3	He	48.869	0.4381	28048.48	0.009	0.0005796
Sr	88	3	He	51.99	0.466	28689.80	0.009	0.0005796
Sr	88	3	He	50.442	0.4522	28699.77	0.009	0.0005796
Mo	98	3	He	50.337	1.184	75804.71	0.0235	0.0003188
Mo	98	3	He	52.066	1.2247	75392.44	0.0235	0.0003188
Mo	98	3	He	49.543	1.1653	73963.80	0.0235	0.0003188
Ag	107	3	He	51.291	2.5576	163749.45	0.0499	0.0004754
Ag	107	3	He	53.326	2.6591	163698.57	0.0499	0.0004754
Ag	107	3	He	51.361	2.5611	162555.22	0.0499	0.0004754
Cd	111	3	He	50.317	0.2788	17851.46	0.0055	1.07E-05
Cd	111	3	He	51.243	0.284	17480.97	0.0055	1.07E-05
Cd	111	3	He	50.352	0.279	17709.24	0.0055	1.07E-05
Sn	120	3	He	49.032	0.8222	52640.70	0.0164	0.01713
Sn	120	3	He	51.61	0.8645	53222.87	0.0164	0.01713
Sn	120	3	He	48.198	0.8085	51315.84	0.0164	0.01713
Sb	121	3	He	49.682	0.7687	49217.96	0.0155	0.0002641
Sb	121	3	He	53.061	0.821	50543.32	0.0155	0.0002641
Sb	121	3	He	49.646	0.7682	48756.39	0.0155	0.0002641
Ba	137	3	He	491.186	2.4456	156573.87	0.005	0.0001577
Ba	137	3	He	514.996	2.5641	157850.54	0.005	0.0001577
Ba	137	3	He	490.709	2.4432	155068.29	0.005	0.0001577
Tl	205	3	He	51.445	1.3399	384356.09	0.026	0.0002504
Tl	205	3	He	50.806	1.3233	389213.39	0.026	0.0002504
Tl	205	3	He	50.579	1.3173	383367.77	0.026	0.0002504
Pb	208	3	He	51.455	1.7991	277662.32	0.0349	0.001422
Pb	208	3	He	49.284	1.7233	271945.89	0.0349	0.001422
Pb	208	3	He	50.499	1.7657	277172.34	0.0349	0.001422
U	238	3	He	49.946	2.509	587813.19	0.0502	5.657E-05
U	238	3	He	50.437	2.5336	581928.55	0.0502	5.657E-05
U	238	3	He	49.892	2.5063	583413.23	0.0502	5.657E-05
Sc	45	1	No Gas			2147330.91		
Sc	45	1	No Gas			2115442.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2121877.00		
Ge	72	1	No Gas			1047354.13		
Ge	72	1	No Gas			1033667.72		
Ge	72	1	No Gas			1026209.28		
Sc	45	2	H2			122875.32		
Sc	45	2	H2			123108.11		
Sc	45	2	H2			121204.30		
Ge	72	2	H2			102417.04		
Ge	72	2	H2			102526.06		
Ge	72	2	H2			100351.34		
In	115	2	H2			285618.28		
In	115	2	H2			287365.99		
In	115	2	H2			282929.23		
Sc	45	3	He			36877.37		
Sc	45	3	He			36607.10		
Sc	45	3	He			36857.39		
Ge	72	3	He			63692.82		
Ge	72	3	He			63441.67		
Ge	72	3	He			65511.00		
In	115	3	He			64309.18		
In	115	3	He			61838.22		
In	115	3	He			63746.62		
Tb	159	3	He			286854.51		
Tb	159	3	He			294132.57		
Tb	159	3	He			291014.47		
Bi	209	3	He			234284.88		
Bi	209	3	He			229681.93		
Bi	209	3	He			232782.09		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

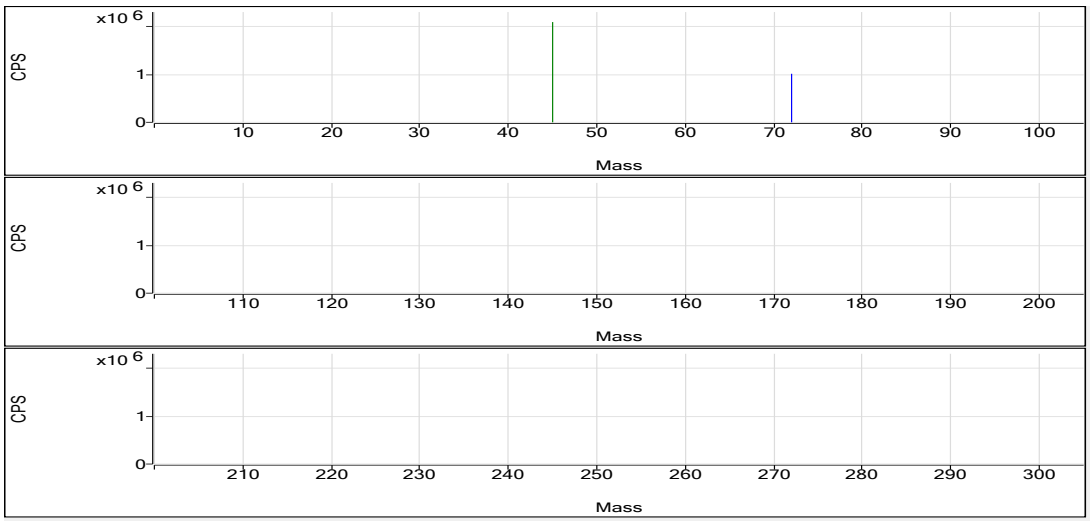
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.026	ppb	26.2	87.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.030	ppb	154.9	2.67	0.0000	Pulse	1.5000	3
Na	23	45	He	-18.044	ppb	N/A	14033.76	0.3727	Pulse	0.1000	3
Mg	24	45	He	1.790	ppb	11.7	346.68	0.0092	Pulse	0.1000	3
Al	27	45	He	1.816	ppb	118.0	56.67	0.0015	Pulse	0.1000	3
K	39	45	He	-11.121	ppb	N/A	16296.23	0.4328	Pulse	0.1000	3
Ca	44	45	He	15.230	ppb	99.2	180.01	0.0048	Pulse	0.1000	3
Ti	47	45	He	1.359	ppb	57.0	26.67	0.0007	Pulse	0.1000	3
V	51	45	He	0.038	ppb	155.4	1182.06	0.0314	Pulse	0.5000	3
Cr	52	45	He	0.032	ppb	360.4	1433.46	0.0380	Pulse	0.1000	3
Mn	55	45	He	0.315	ppb	20.0	313.35	0.0083	Pulse	0.1000	3
Fe	57	45	He	1.197	ppb	97.3	76.67	0.0020	Pulse	0.1000	3
Co	59	45	He	0.176	ppb	7.2	486.69	0.0129	Pulse	0.1000	3
Ni	60	72	He	0.198	ppb	21.8	360.02	0.0056	Pulse	0.1000	3
Cu	63	72	He	0.066	ppb	92.7	496.69	0.0078	Pulse	0.1000	3
Zn	66	72	He	-0.058	ppb	N/A	213.34	0.0033	Pulse	0.1000	3
As	75	72	He	0.215	ppb	83.8	74.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.062	ppb	52.0	70.00	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.053	ppb	29.2	96.67	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.010	ppb	3.2	60.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	44.0	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.093	ppb	181.0	1150.09	0.0187	Pulse	0.1000	3
Sb	121	115	He	0.025	ppb	40.2	40.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	0.120	ppb	55.2	46.67	0.0008	Pulse	0.1000	3
Tl	205	159	He	0.083	ppb	13.1	690.04	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	23.2	576.69	0.0020	Pulse	0.1000	3
U	238	209	He	0.056	ppb	22.3	663.38	0.0029	Pulse	0.1000	3

ISTD Table:

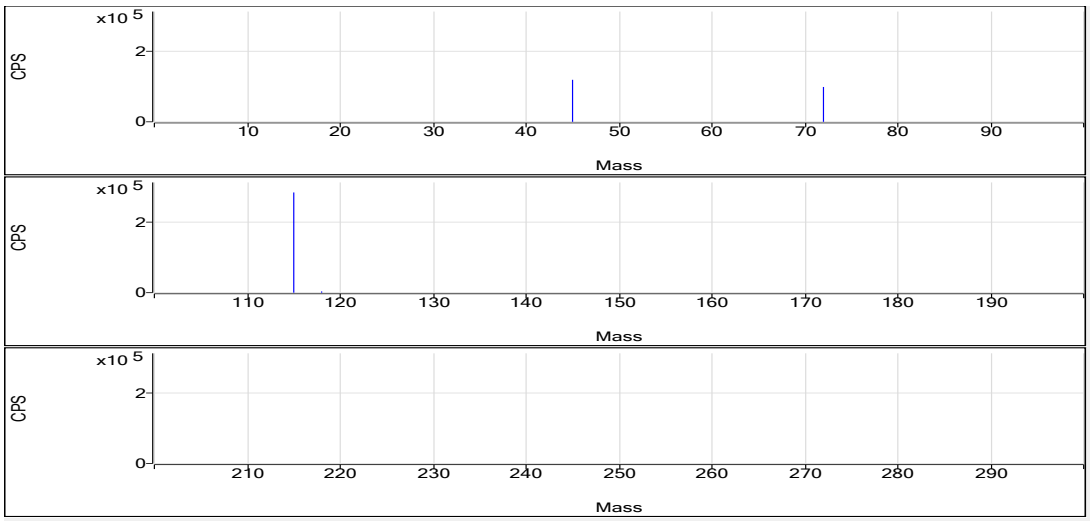
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2090055.39	1.0	102.8	Analog	0.1000	3
No Gas	Ge	72	1011627.38	0.3	100.6	Pulse	0.1000	3
H2	Sc	45	119981.59	0.6	90.8	Pulse	0.1000	3
H2	Ge	72	99502.64	0.0	89.2	Pulse	0.1000	3
H2	In	115	286245.41	0.5	97.5	Pulse	0.1000	3
He	Sc	45	37659.44	1.0	101.9	Pulse	0.1000	3
He	Ge	72	63779.54	1.1	98.8	Pulse	0.1000	3
He	In	115	61735.91	1.6	97.7	Pulse	0.1000	3
He	Tb	159	287345.85	0.7	98.1	Pulse	0.1000	3
He	Bi	209	229169.83	0.7	97.2	Pulse	0.1000	3

No Gas

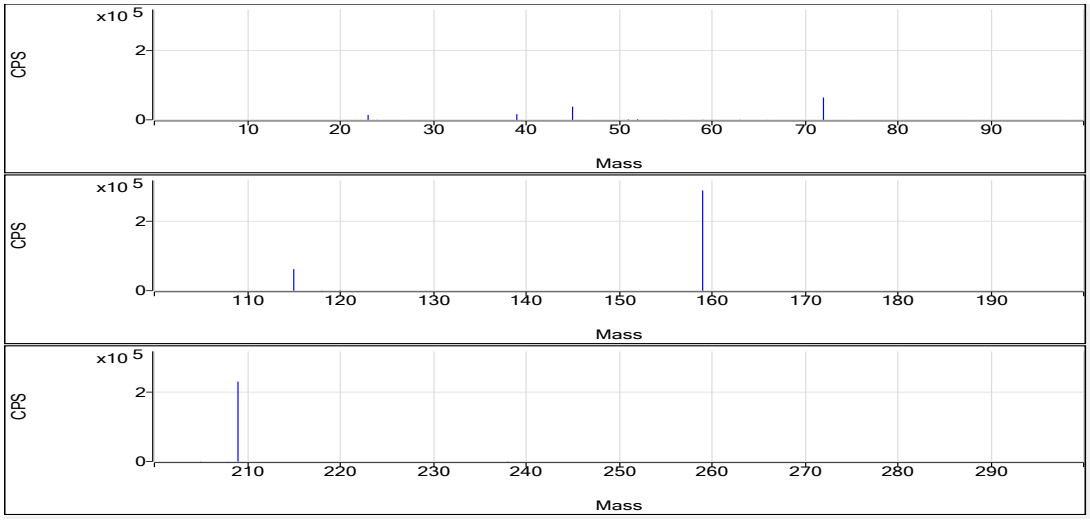


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.033	0	100.00	0.0008	2.195E-05
Be	9	1	No Gas	0.02	0	78.00	0.0008	2.195E-05
Be	9	1	No Gas	0.024	0	84.00	0.0008	2.195E-05
Se	78	2	H2	-0.016	0	0.67	0.0004	1.386E-05
Se	78	2	H2	0.076	0	4.67	0.0004	1.386E-05
Se	78	2	H2	0.03	0	2.67	0.0004	1.386E-05
Na	23	3	He	-19.054	0.3688	13906.95	0.0038	0.4416
Na	23	3	He	-17.586	0.3744	13957.09	0.0038	0.4416
Na	23	3	He	-17.493	0.3748	14237.23	0.0038	0.4416
Mg	24	3	He	1.687	0.009	340.01	0.0019	0.005872
Mg	24	3	He	2.031	0.0097	360.02	0.0019	0.005872
Mg	24	3	He	1.651	0.0089	340.01	0.0019	0.005872
Al	27	3	He	0.14	0.0005	20.00	0.0006	0.0004496
Al	27	3	He	1.078	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	4.23	0.0029	110.00	0.0006	0.0004496
K	39	3	He	-0.09	0.4455	16800.21	0.0012	0.4456
K	39	3	He	-11.193	0.4327	16129.36	0.0012	0.4456
K	39	3	He	-22.082	0.4201	15959.13	0.0012	0.4456
Ca	44	3	He	3.018	0.004	150.01	0.0001	0.003779
Ca	44	3	He	32.132	0.0059	220.01	0.0001	0.003779
Ca	44	3	He	10.54	0.0045	170.01	0.0001	0.003779
Ti	47	3	He	2.042	0.0011	40.00	0.0005	0
Ti	47	3	He	0.516	0.0003	10.00	0.0005	0
Ti	47	3	He	1.52	0.0008	30.00	0.0005	0
V	51	3	He	0.065	0.032	1206.06	0.0223	0.03054
V	51	3	He	-0.029	0.0299	1114.05	0.0223	0.03054
V	51	3	He	0.078	0.0323	1226.06	0.0223	0.03054
Cr	52	3	He	0.009	0.0374	1410.13	0.0285	0.03714
Cr	52	3	He	-0.07	0.0351	1310.11	0.0285	0.03714
Cr	52	3	He	0.157	0.0416	1580.14	0.0285	0.03714
Mn	55	3	He	0.243	0.0074	280.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.358	0.0089	330.02	0.0124	0.004415
Mn	55	3	He	0.345	0.0087	330.02	0.0124	0.004415
Fe	57	3	He	-0.053	0.0013	50.00	0.0006	0.001356
Fe	57	3	He	1.393	0.0021	80.00	0.0006	0.001356
Fe	57	3	He	2.25	0.0026	100.00	0.0006	0.001356
Co	59	3	He	0.186	0.0135	510.03	0.0581	0.002697
Co	59	3	He	0.18	0.0131	490.03	0.0581	0.002697
Co	59	3	He	0.162	0.0121	460.02	0.0581	0.002697
Ni	60	3	He	0.154	0.0053	340.02	0.0087	0.003928
Ni	60	3	He	0.2	0.0057	360.02	0.0087	0.003928
Ni	60	3	He	0.241	0.006	380.02	0.0087	0.003928
Cu	63	3	He	0.136	0.0096	620.03	0.0261	0.006048
Cu	63	3	He	0.021	0.0066	420.03	0.0261	0.006048
Cu	63	3	He	0.041	0.0071	450.02	0.0261	0.006048
Zn	66	3	He	-0.09	0.0033	210.01	0.0029	0.003512
Zn	66	3	He	0.037	0.0036	230.01	0.0029	0.003512
Zn	66	3	He	-0.121	0.0032	200.01	0.0029	0.003512
As	75	3	He	0.414	0.0016	102.00	0.0021	0.0007233
As	75	3	He	0.167	0.0011	68.00	0.0021	0.0007233
As	75	3	He	0.064	0.0009	54.00	0.0021	0.0007233
Sr	88	3	He	0.079	0.0013	80.00	0.009	0.0005796
Sr	88	3	He	0.025	0.0008	50.00	0.009	0.0005796
Sr	88	3	He	0.083	0.0013	80.00	0.009	0.0005796
Mo	98	3	He	0.048	0.0014	90.00	0.0235	0.0003188
Mo	98	3	He	0.041	0.0013	80.00	0.0235	0.0003188
Mo	98	3	He	0.071	0.002	120.01	0.0235	0.0003188
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	0.032	0.0177	1100.08	0.0164	0.01713
Sn	120	3	He	-0.036	0.0165	1030.07	0.0164	0.01713
Sn	120	3	He	0.284	0.0218	1320.12	0.0164	0.01713
Sb	121	3	He	0.024	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.035	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.015	0.0005	30.00	0.0155	0.0002641
Ba	137	3	He	0.194	0.0011	70.00	0.005	0.0001577
Ba	137	3	He	0.097	0.0006	40.00	0.005	0.0001577
Ba	137	3	He	0.068	0.0005	30.00	0.005	0.0001577
Tl	205	3	He	0.095	0.0027	780.05	0.026	0.0002504
Tl	205	3	He	0.075	0.0022	640.04	0.026	0.0002504
Tl	205	3	He	0.078	0.0023	650.04	0.026	0.0002504
Pb	208	3	He	0.018	0.0021	310.01	0.0349	0.001422
Pb	208	3	He	0.02	0.0021	360.02	0.0349	0.001422
Pb	208	3	He	0.012	0.0019	300.01	0.0349	0.001422
U	238	3	He	0.046	0.0024	540.04	0.0502	5.657E-05
U	238	3	He	0.053	0.0027	620.04	0.0502	5.657E-05
U	238	3	He	0.07	0.0036	830.06	0.0502	5.657E-05
Sc	45	1	No Gas			2108257.94		
Sc	45	1	No Gas			2094939.66		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2066968.56		
Ge	72	1	No Gas			1010227.17		
Ge	72	1	No Gas			1015367.02		
Ge	72	1	No Gas			1009287.95		
Sc	45	2	H2			120213.91		
Sc	45	2	H2			120505.91		
Sc	45	2	H2			119224.94		
Ge	72	2	H2			99525.96		
Ge	72	2	H2			99495.64		
Ge	72	2	H2			99486.33		
In	115	2	H2			285801.42		
In	115	2	H2			285174.12		
In	115	2	H2			287760.68		
Sc	45	3	He			37709.59		
Sc	45	3	He			37278.20		
Sc	45	3	He			37990.52		
Ge	72	3	He			64566.19		
Ge	72	3	He			63591.92		
Ge	72	3	He			63180.50		
In	115	3	He			62310.56		
In	115	3	He			62320.70		
In	115	3	He			60592.30		
Tb	159	3	He			286107.61		
Tb	159	3	He			289733.86		
Tb	159	3	He			286196.09		
Bi	209	3	He			227414.10		
Bi	209	3	He			229289.47		
Bi	209	3	He			230805.91		

Quantitation Report

Data File Name	107SMPL.d
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Acq Time	8/16/2023 9:54:07 AM
Sample Name	410-136992-W-1-A
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

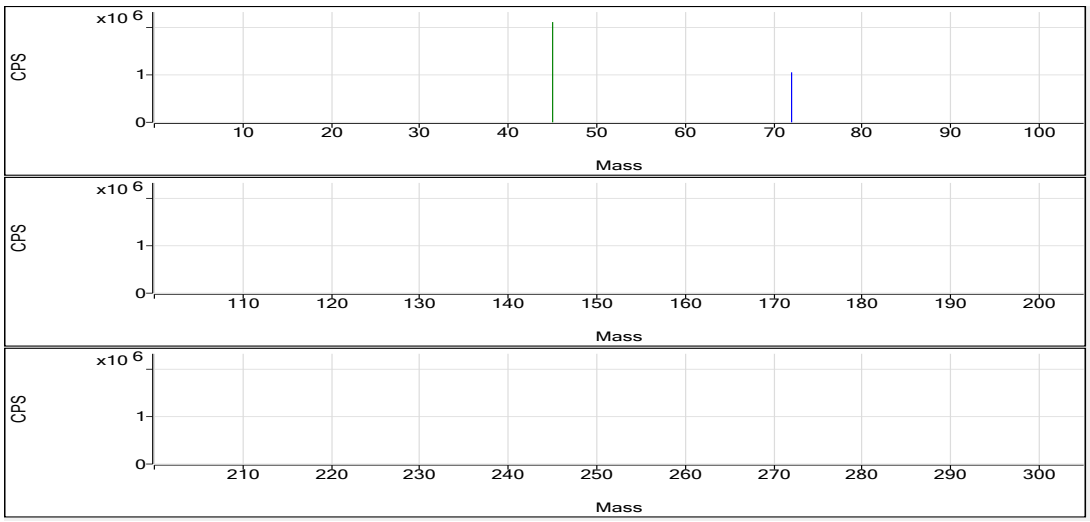
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.002	ppb	47.9	49.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.349	ppb	14.7	18.44	0.0002	Pulse	1.5000	3
Na	23	45	He	2025.760	ppb	1.2	308103.23	8.1829	Pulse	0.1000	3
Mg	24	45	He	9313.578	ppb	1.5	653937.25	17.3689	Pulse	0.1000	3
Al	27	45	He	5.641	ppb	19.8	140.01	0.0037	Pulse	0.1000	3
K	39	45	He	2028.186	ppb	2.9	105076.23	2.7912	Pulse	0.1000	3
Ca	44	45	He	46954.114	ppb	3.2	116936.92	3.1065	Pulse	0.1000	3
Ti	47	45	He	0.515	ppb	101.1	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.201	ppb	N/A	981.37	0.0261	Pulse	0.5000	3
Cr	52	45	He	0.008	ppb	2622.8	1406.79	0.0374	Pulse	0.1000	3
Mn	55	45	He	93.064	ppb	4.8	43543.13	1.1570	Pulse	0.1000	3
Fe	57	45	He	6359.364	ppb	2.9	135846.99	3.6087	Pulse	0.1000	3
Co	59	45	He	3.138	ppb	1.2	6965.25	0.1850	Pulse	0.1000	3
Ni	60	72	He	0.346	ppb	44.1	463.36	0.0069	Pulse	0.1000	3
Cu	63	72	He	0.077	ppb	17.8	540.03	0.0081	Pulse	0.1000	3
Zn	66	72	He	5.433	ppb	7.7	1276.77	0.0191	Pulse	0.1000	3
As	75	72	He	6.396	ppb	2.4	933.37	0.0139	Pulse	0.5000	3
Sr	88	115	He	147.591	ppb	0.5	82966.74	1.3219	Pulse	0.1000	3
Mo	98	115	He	1.057	ppb	2.2	1580.14	0.0252	Pulse	0.1000	3
Ag	107	115	He	0.010	ppb	66.8	60.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	153.5	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.153	ppb	N/A	916.73	0.0146	Pulse	0.1000	3
Sb	121	115	He	0.069	ppb	23.5	83.33	0.0013	Pulse	0.1000	3
Ba	137	115	He	265.753	ppb	1.7	83044.95	1.3232	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	29.8	246.68	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.005	ppb	115.5	470.02	0.0016	Pulse	0.1000	3
U	238	209	He	0.074	ppb	6.0	903.40	0.0038	Pulse	0.1000	3

ISTD Table:

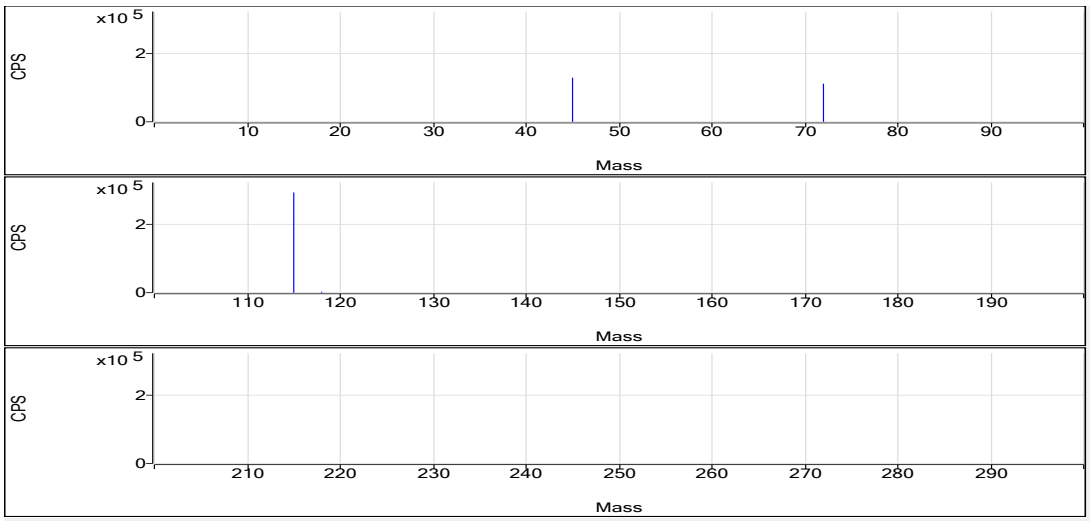
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2125566.12	0.9	104.6	Analog	0.1000	3
No Gas	Ge	72	1059846.37	1.1	105.4	Pulse	0.1000	3
H2	Sc	45	128605.92	0.6	97.3	Pulse	0.1000	3
H2	Ge	72	111324.97	0.4	99.8	Pulse	0.1000	3
H2	In	115	292387.19	0.7	99.6	Pulse	0.1000	3
He	Sc	45	37656.18	1.7	101.9	Pulse	0.1000	3
He	Ge	72	66920.54	0.6	103.7	Pulse	0.1000	3
He	In	115	62760.79	0.6	99.3	Pulse	0.1000	3
He	Tb	159	293919.55	0.5	100.4	Pulse	0.1000	3
He	Bi	209	238092.02	0.9	101.0	Pulse	0.1000	3

No Gas

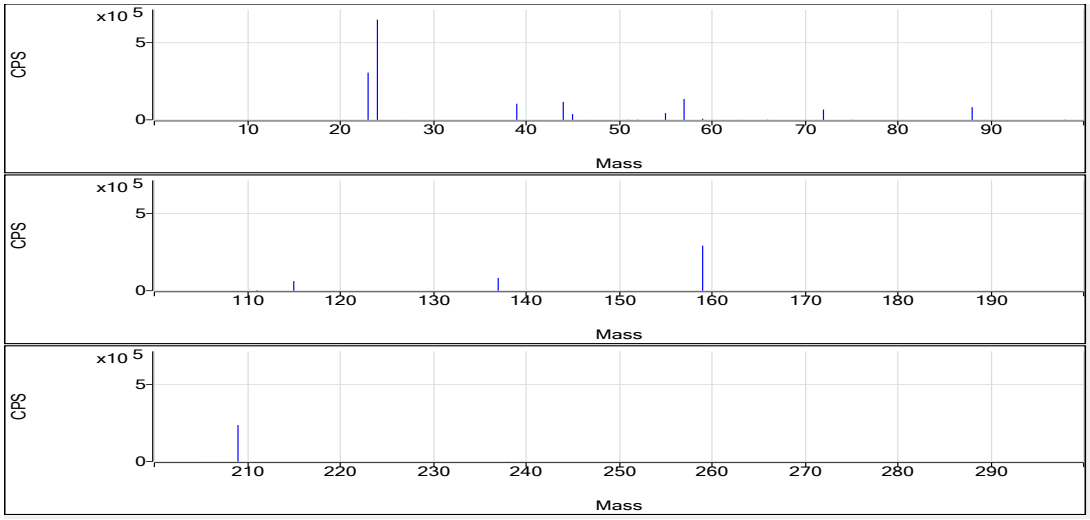


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.001	0	48.00	0.0008	2.195E-05
Be	9	1	No Gas	0.002	0	50.00	0.0008	2.195E-05
Be	9	1	No Gas	0.002	0	50.00	0.0008	2.195E-05
Se	78	2	H2	0.408	0.0002	21.33	0.0004	1.386E-05
Se	78	2	H2	0.312	0.0001	16.67	0.0004	1.386E-05
Se	78	2	H2	0.328	0.0002	17.33	0.0004	1.386E-05
Na	23	3	He	1998.79	8.0798	308819.59	0.0038	0.4416
Na	23	3	He	2035.293	8.2193	310606.95	0.0038	0.4416
Na	23	3	He	2043.196	8.2495	304883.14	0.0038	0.4416
Mg	24	3	He	9163.841	17.0897	653187.33	0.0019	0.005872
Mg	24	3	He	9331.091	17.4015	657601.08	0.0019	0.005872
Mg	24	3	He	9445.802	17.6154	651023.35	0.0019	0.005872
Al	27	3	He	6.463	0.0042	160.01	0.0006	0.0004496
Al	27	3	He	6.088	0.004	150.01	0.0006	0.0004496
Al	27	3	He	4.37	0.003	110.00	0.0006	0.0004496
K	39	3	He	1979.107	2.7344	104512.53	0.0012	0.4456
K	39	3	He	2012.067	2.7725	104773.89	0.0012	0.4456
K	39	3	He	2093.385	2.8666	105942.27	0.0012	0.4456
Ca	44	3	He	45943.486	3.0397	116179.97	0.0001	0.003779
Ca	44	3	He	46263.051	3.0608	115667.25	0.0001	0.003779
Ca	44	3	He	48655.805	3.2189	118963.53	0.0001	0.003779
Ti	47	3	He	0.504	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.042	0.0005	20.00	0.0005	0
V	51	3	He	-0.171	0.0267	1022.04	0.0223	0.03054
V	51	3	He	-0.264	0.0247	932.04	0.0223	0.03054
V	51	3	He	-0.168	0.0268	990.04	0.0223	0.03054
Cr	52	3	He	0.148	0.0413	1580.14	0.0285	0.03714
Cr	52	3	He	-0.236	0.0304	1150.08	0.0285	0.03714
Cr	52	3	He	0.112	0.0403	1490.14	0.0285	0.03714
Mn	55	3	He	89.183	1.1089	42382.96	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	92.112	1.1452	43275.60	0.0124	0.004415
Mn	55	3	He	97.898	1.2168	44970.82	0.0124	0.004415
Fe	57	3	He	6233.843	3.5375	135207.42	0.0006	0.001356
Fe	57	3	He	6273.917	3.5602	134541.10	0.0006	0.001356
Fe	57	3	He	6570.332	3.7284	137792.45	0.0006	0.001356
Co	59	3	He	3.093	0.1824	6971.90	0.0581	0.002697
Co	59	3	He	3.161	0.1863	7041.98	0.0581	0.002697
Co	59	3	He	3.159	0.1862	6881.86	0.0581	0.002697
Ni	60	3	He	0.378	0.0072	480.02	0.0087	0.003928
Ni	60	3	He	0.18	0.0055	370.03	0.0087	0.003928
Ni	60	3	He	0.48	0.0081	540.04	0.0087	0.003928
Cu	63	3	He	0.061	0.0077	510.03	0.0261	0.006048
Cu	63	3	He	0.087	0.0083	560.03	0.0261	0.006048
Cu	63	3	He	0.084	0.0082	550.03	0.0261	0.006048
Zn	66	3	He	5.06	0.018	1200.08	0.0029	0.003512
Zn	66	3	He	5.352	0.0188	1270.10	0.0029	0.003512
Zn	66	3	He	5.886	0.0204	1360.13	0.0029	0.003512
As	75	3	He	6.431	0.014	934.04	0.0021	0.0007233
As	75	3	He	6.526	0.0142	958.04	0.0021	0.0007233
As	75	3	He	6.23	0.0136	908.03	0.0021	0.0007233
Sr	88	3	He	147.963	1.3253	83023.76	0.009	0.0005796
Sr	88	3	He	146.772	1.3146	82118.48	0.009	0.0005796
Sr	88	3	He	148.037	1.3259	83757.97	0.009	0.0005796
Mo	98	3	He	1.039	0.0247	1550.14	0.0235	0.0003188
Mo	98	3	He	1.083	0.0258	1610.14	0.0235	0.0003188
Mo	98	3	He	1.05	0.025	1580.14	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.016	0.0013	80.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.0009	60.00	0.0499	0.0004754
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.217	0.0136	850.06	0.0164	0.01713
Sn	120	3	He	-0.068	0.016	1000.07	0.0164	0.01713
Sn	120	3	He	-0.175	0.0142	900.06	0.0164	0.01713
Sb	121	3	He	0.065	0.0013	80.00	0.0155	0.0002641
Sb	121	3	He	0.086	0.0016	100.00	0.0155	0.0002641
Sb	121	3	He	0.055	0.0011	70.00	0.0155	0.0002641
Ba	137	3	He	261.509	1.3021	81572.41	0.005	0.0001577
Ba	137	3	He	270.386	1.3463	84097.91	0.005	0.0001577
Ba	137	3	He	265.363	1.3213	83464.52	0.005	0.0001577
Tl	205	3	He	0.025	0.0009	260.01	0.026	0.0002504
Tl	205	3	He	0.015	0.0006	190.01	0.026	0.0002504
Tl	205	3	He	0.028	0.001	290.01	0.026	0.0002504
Pb	208	3	He	0.005	0.0016	300.02	0.0349	0.001422
Pb	208	3	He	-0.001	0.0014	210.01	0.0349	0.001422
Pb	208	3	He	0.011	0.0018	230.01	0.0349	0.001422
U	238	3	He	0.073	0.0037	900.07	0.0502	5.657E-05
U	238	3	He	0.071	0.0036	850.06	0.0502	5.657E-05
U	238	3	He	0.079	0.004	960.07	0.0502	5.657E-05
Sc	45	1	No Gas			2128293.72		
Sc	45	1	No Gas			2105949.66		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2142454.97		
Ge	72	1	No Gas			1066281.08		
Ge	72	1	No Gas			1045953.58		
Ge	72	1	No Gas			1067304.44		
Sc	45	2	H2			129372.55		
Sc	45	2	H2			128666.16		
Sc	45	2	H2			127779.06		
Ge	72	2	H2			111573.60		
Ge	72	2	H2			111553.59		
Ge	72	2	H2			110847.72		
In	115	2	H2			294219.47		
In	115	2	H2			290271.25		
In	115	2	H2			292670.84		
Sc	45	3	He			38221.04		
Sc	45	3	He			37789.84		
Sc	45	3	He			36957.66		
Ge	72	3	He			66625.87		
Ge	72	3	He			67389.48		
Ge	72	3	He			66746.28		
In	115	3	He			62651.30		
In	115	3	He			62470.49		
In	115	3	He			63174.16		
Tb	159	3	He			292167.28		
Tb	159	3	He			294892.69		
Tb	159	3	He			294698.69		
Bi	209	3	He			240461.38		
Bi	209	3	He			236221.31		
Bi	209	3	He			237593.38		

Quantitation Report

Data File Name	108SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 9:56:11 AM
Sample Name	410-136992-W-1-A PDS
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

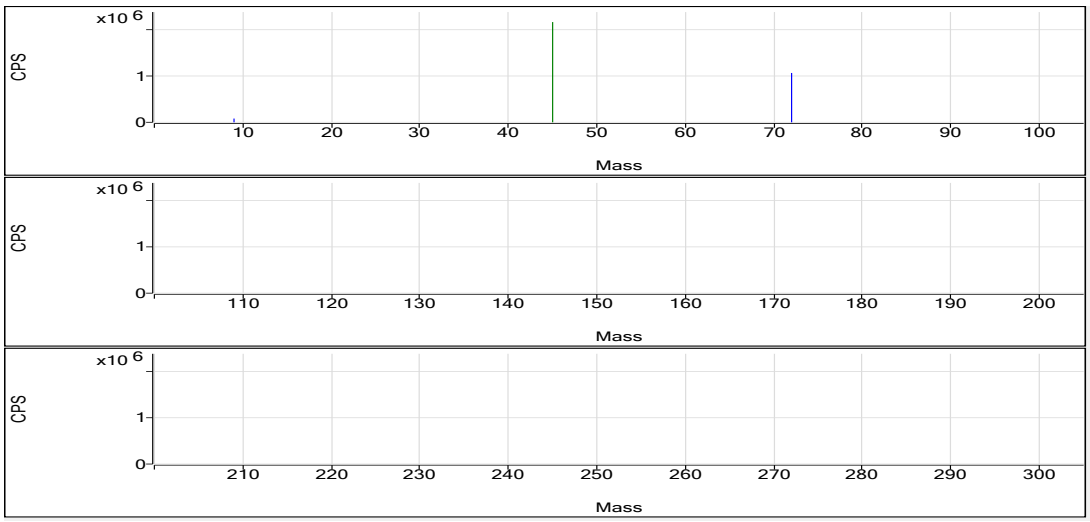
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.570	ppb	0.3	80597.21	0.0373	Pulse	0.5000	3
Se	78	72	H2	103.555	ppb	0.8	4824.60	0.0450	Pulse	1.5000	3
Na	23	45	He	6915.632	ppb	4.7	1041989.83	26.8692	Mix	0.1000	3
Mg	24	45	He	13934.129	ppb	2.4	1007997.88	25.9828	Pulse	0.1000	3
Al	27	45	He	4933.080	ppb	2.0	110673.76	2.8526	Pulse	0.1000	3
K	39	45	He	6959.233	ppb	2.9	329491.09	8.4939	Pulse	0.1000	3
Ca	44	45	He	49517.484	ppb	2.4	127084.35	3.2759	Pulse	0.1000	3
Ti	47	45	He	499.561	ppb	5.6	10067.16	0.2596	Pulse	0.1000	3
V	51	45	He	506.939	ppb	2.6	439606.85	11.3322	Pulse	0.5000	3
Cr	52	45	He	503.694	ppb	2.8	557393.12	14.3689	Pulse	0.1000	3
Mn	55	45	He	576.709	ppb	2.6	277238.11	7.1466	Pulse	0.1000	3
Fe	57	45	He	11027.707	ppb	2.7	242716.77	6.2568	Pulse	0.1000	3
Co	59	45	He	474.058	ppb	3.0	1068415.04	27.5437	Pulse	0.1000	3
Ni	60	72	He	495.546	ppb	2.1	292530.52	4.2990	Pulse	0.1000	3
Cu	63	72	He	469.294	ppb	2.2	835021.45	12.2713	Pulse	0.1000	3
Zn	66	72	He	503.127	ppb	2.8	98332.42	1.4452	Pulse	0.1000	3
As	75	72	He	508.433	ppb	2.4	71576.30	1.0519	Pulse	0.5000	3
Sr	88	115	He	197.851	ppb	1.3	110815.84	1.7719	Pulse	0.1000	3
Mo	98	115	He	51.876	ppb	1.1	76314.21	1.2202	Pulse	0.1000	3
Ag	107	115	He	52.040	ppb	0.8	162297.20	2.5950	Pulse	0.1000	3
Cd	111	115	He	51.402	ppb	0.8	17815.38	0.2848	Pulse	0.5000	3
Sn	120	115	He	102.200	ppb	2.4	106010.87	1.6952	Pulse	0.1000	3
Sb	121	115	He	97.808	ppb	1.1	94635.49	1.5132	Pulse	0.1000	3
Ba	137	115	He	766.067	ppb	1.0	238542.80	3.8141	Pulse	0.1000	3
Tl	205	159	He	101.611	ppb	0.9	777434.03	2.6462	Pulse	0.1000	3
Pb	208	159	He	50.321	ppb	0.1	516923.44	1.7595	Pulse	0.1000	3
U	238	209	He	49.827	ppb	0.5	590820.77	2.5030	Pulse	0.1000	3

ISTD Table:

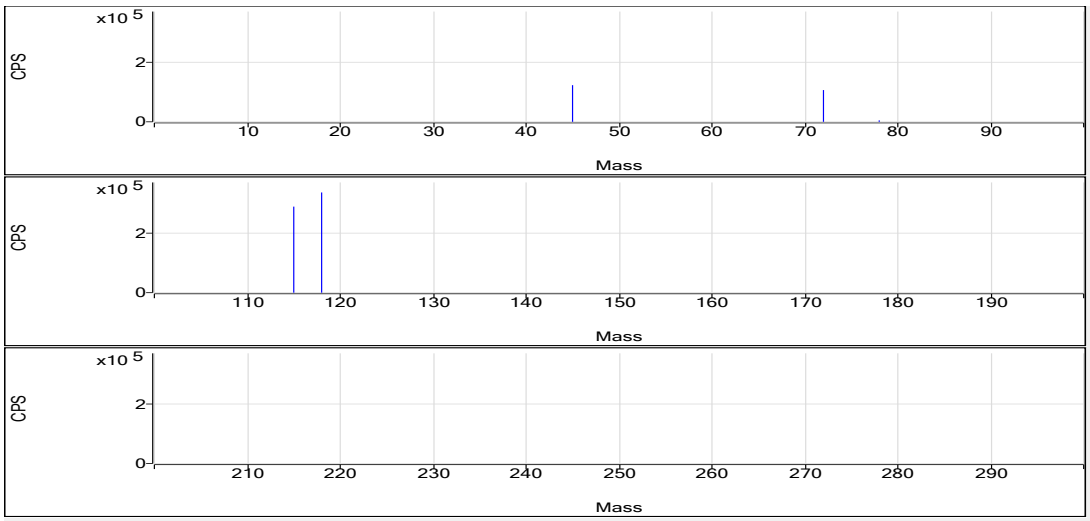
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2161335.23	0.3	106.3	Analog	0.1000	3
No Gas	Ge	72	1063761.18	0.8	105.8	Pulse	0.1000	3
H2	Sc	45	123665.95	0.8	93.6	Pulse	0.1000	3
H2	Ge	72	107110.74	1.4	96.0	Pulse	0.1000	3
H2	In	115	290383.25	0.3	98.9	Pulse	0.1000	3
He	Sc	45	38812.60	2.9	105.0	Pulse	0.1000	3
He	Ge	72	68069.18	2.3	105.4	Pulse	0.1000	3
He	In	115	62545.79	1.0	99.0	Pulse	0.1000	3
He	Tb	159	293784.06	0.4	100.3	Pulse	0.1000	3
He	Bi	209	236048.56	0.5	100.1	Pulse	0.1000	3

No Gas

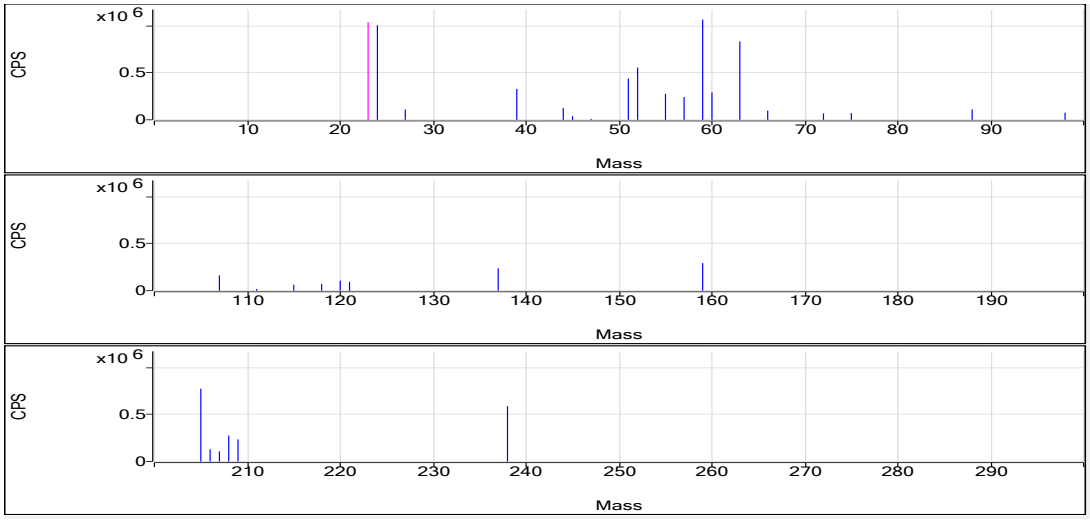


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.56	0.0373	80723.87	0.0008	2.195E-05
Be	9	1	No Gas	48.415	0.0372	80084.61	0.0008	2.195E-05
Be	9	1	No Gas	48.735	0.0374	80983.14	0.0008	2.195E-05
Se	78	2	H2	102.963	0.0448	4873.50	0.0004	1.386E-05
Se	78	2	H2	104.475	0.0454	4824.15	0.0004	1.386E-05
Se	78	2	H2	103.229	0.0449	4776.14	0.0004	1.386E-05
Na	23	3	He	7279.749	28.2606	1060035.45	0.0038	0.4416
Na	23	3	He	6663.385	25.9052	1017393.42	0.0038	0.4416
Na	23	3	He	6803.763	26.4417	1048540.61	0.0038	0.4416
Mg	24	3	He	14315.764	26.6943	1001283.97	0.0019	0.005872
Mg	24	3	He	13742.022	25.6247	1006375.69	0.0019	0.005872
Mg	24	3	He	13744.601	25.6295	1016333.97	0.0019	0.005872
Al	27	3	He	5042.619	2.9159	109375.17	0.0006	0.0004496
Al	27	3	He	4911.785	2.8403	111549.19	0.0006	0.0004496
Al	27	3	He	4844.836	2.8016	111096.91	0.0006	0.0004496
K	39	3	He	7195.074	8.7666	328828.98	0.0012	0.4456
K	39	3	He	6840.357	8.3564	328185.70	0.0012	0.4456
K	39	3	He	6842.268	8.3586	331458.59	0.0012	0.4456
Ca	44	3	He	50904.882	3.3675	126313.67	0.0001	0.003779
Ca	44	3	He	48856.925	3.2322	126940.51	0.0001	0.003779
Ca	44	3	He	48790.644	3.2278	127998.88	0.0001	0.003779
Ti	47	3	He	516.377	0.2683	10063.85	0.0005	0
Ti	47	3	He	514.755	0.2675	10504.14	0.0005	0
Ti	47	3	He	467.55	0.2429	9633.48	0.0005	0
V	51	3	He	522.245	11.6734	437860.44	0.0223	0.03054
V	51	3	He	499.741	11.1717	438752.84	0.0223	0.03054
V	51	3	He	498.832	11.1514	442207.28	0.0223	0.03054
Cr	52	3	He	519.358	14.8146	555685.15	0.0285	0.03714
Cr	52	3	He	499.239	14.2421	559341.44	0.0285	0.03714
Cr	52	3	He	492.487	14.0501	557152.77	0.0285	0.03714
Mn	55	3	He	593.599	7.3558	275909.47	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	570.292	7.0671	277551.71	0.0124	0.004415
Mn	55	3	He	566.235	7.0169	278253.16	0.0124	0.004415
Fe	57	3	He	11354.938	6.4425	241652.13	0.0006	0.001356
Fe	57	3	He	10954.309	6.2152	244093.90	0.0006	0.001356
Fe	57	3	He	10773.874	6.1129	242404.27	0.0006	0.001356
Co	59	3	He	490.505	28.4992	1068983.89	0.0581	0.002697
Co	59	3	He	466.236	27.0892	1063892.41	0.0581	0.002697
Co	59	3	He	465.433	27.0426	1072368.81	0.0581	0.002697
Ni	60	3	He	500.213	4.3394	292254.16	0.0087	0.003928
Ni	60	3	He	502.958	4.3632	292235.72	0.0087	0.003928
Ni	60	3	He	483.466	4.1943	293101.69	0.0087	0.003928
Cu	63	3	He	474.489	12.4071	835602.02	0.0261	0.006048
Cu	63	3	He	475.758	12.4403	833215.46	0.0261	0.006048
Cu	63	3	He	457.636	11.9666	836246.86	0.0261	0.006048
Zn	66	3	He	512.441	1.4719	99130.73	0.0029	0.003512
Zn	66	3	He	510.153	1.4653	98144.83	0.0029	0.003512
Zn	66	3	He	486.788	1.3984	97721.69	0.0029	0.003512
As	75	3	He	511.248	1.0577	71236.02	0.0021	0.0007233
As	75	3	He	518.758	1.0732	71883.14	0.0021	0.0007233
As	75	3	He	495.293	1.0247	71609.75	0.0021	0.0007233
Sr	88	3	He	196.774	1.7623	110237.61	0.009	0.0005796
Sr	88	3	He	200.767	1.798	111316.05	0.009	0.0005796
Sr	88	3	He	196.011	1.7554	110893.86	0.009	0.0005796
Mo	98	3	He	51.568	1.213	75875.87	0.0235	0.0003188
Mo	98	3	He	52.518	1.2353	76478.20	0.0235	0.0003188
Mo	98	3	He	51.544	1.2124	76588.57	0.0235	0.0003188
Ag	107	3	He	51.967	2.5913	162101.36	0.0499	0.0004754
Ag	107	3	He	52.492	2.6175	162051.84	0.0499	0.0004754
Ag	107	3	He	51.662	2.5761	162738.40	0.0499	0.0004754
Cd	111	3	He	51.874	0.2875	17981.59	0.0055	1.07E-05
Cd	111	3	He	51.217	0.2838	17571.05	0.0055	1.07E-05
Cd	111	3	He	51.116	0.2833	17893.51	0.0055	1.07E-05
Sn	120	3	He	103.094	1.7099	106960.92	0.0164	0.01713
Sn	120	3	He	104.108	1.7265	106890.66	0.0164	0.01713
Sn	120	3	He	99.397	1.6492	104181.04	0.0164	0.01713
Sb	121	3	He	97.128	1.5026	93997.37	0.0155	0.0002641
Sb	121	3	He	99.066	1.5326	94885.03	0.0155	0.0002641
Sb	121	3	He	97.23	1.5042	95024.06	0.0155	0.0002641
Ba	137	3	He	760.119	3.7845	236736.21	0.005	0.0001577
Ba	137	3	He	774.296	3.855	238668.24	0.005	0.0001577
Ba	137	3	He	763.784	3.8027	240223.94	0.005	0.0001577
Tl	205	3	He	100.534	2.6182	765747.88	0.026	0.0002504
Tl	205	3	He	101.91	2.654	781375.07	0.026	0.0002504
Tl	205	3	He	102.388	2.6665	785179.13	0.026	0.0002504
Pb	208	3	He	50.268	1.7577	278020.15	0.0349	0.001422
Pb	208	3	He	50.292	1.7585	276987.81	0.0349	0.001422
Pb	208	3	He	50.404	1.7624	277071.56	0.0349	0.001422
U	238	3	He	50.026	2.513	593485.81	0.0502	5.657E-05
U	238	3	He	49.552	2.4892	590620.62	0.0502	5.657E-05
U	238	3	He	49.904	2.5068	588355.89	0.0502	5.657E-05
Sc	45	1	No Gas			2165188.09		
Sc	45	1	No Gas			2154472.47		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2164345.12		
Ge	72	1	No Gas			1072590.77		
Ge	72	1	No Gas			1062818.11		
Ge	72	1	No Gas			1055874.67		
Sc	45	2	H2			122523.59		
Sc	45	2	H2			124326.27		
Sc	45	2	H2			124148.00		
Ge	72	2	H2			108813.57		
Ge	72	2	H2			106153.47		
Ge	72	2	H2			106365.18		
In	115	2	H2			291425.89		
In	115	2	H2			289667.12		
In	115	2	H2			290056.73		
Sc	45	3	He			37509.28		
Sc	45	3	He			39273.67		
Sc	45	3	He			39654.85		
Ge	72	3	He			67348.73		
Ge	72	3	He			66977.33		
Ge	72	3	He			69881.49		
In	115	3	He			63113.58		
In	115	3	He			62480.67		
In	115	3	He			63746.76		
Tb	159	3	He			292473.69		
Tb	159	3	He			294413.41		
Tb	159	3	He			294465.09		
Bi	209	3	He			236166.95		
Bi	209	3	He			237277.75		
Bi	209	3	He			234700.99		

Quantitation Report

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Acq Time	8/16/2023 9:58:13 AM
Sample Name	410-136992-W-1-A SD @5
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

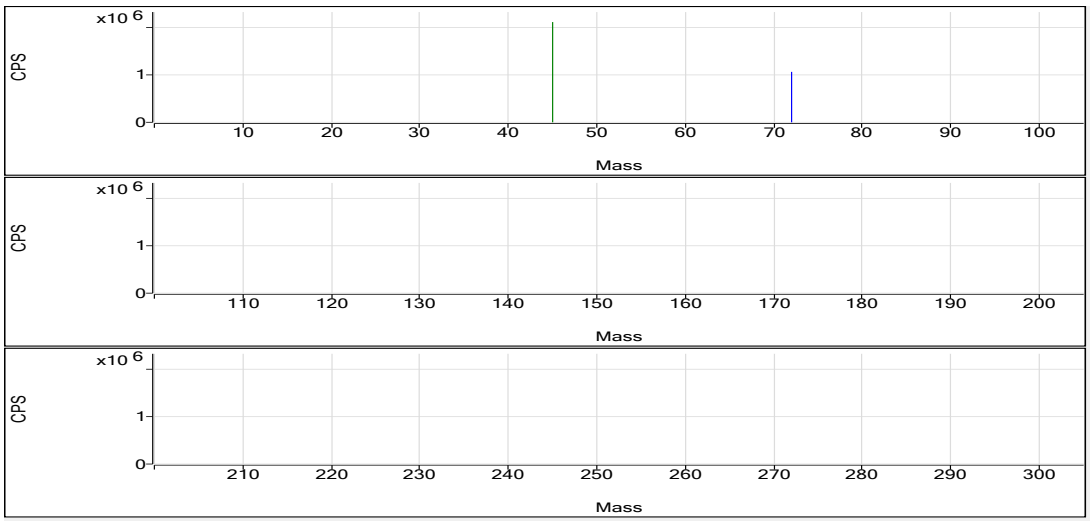
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.035	ppb	16.9	102.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.199	ppb	37.3	10.44	0.0001	Pulse	1.5000	3
Na	23	45	He	726.691	ppb	0.6	120895.01	3.2186	Pulse	0.1000	3
Mg	24	45	He	1803.307	ppb	1.4	126488.66	3.3677	Pulse	0.1000	3
Al	27	45	He	3.369	ppb	24.1	90.00	0.0024	Pulse	0.1000	3
K	39	45	He	377.608	ppb	5.8	33135.08	0.8823	Pulse	0.1000	3
Ca	44	45	He	9001.016	ppb	2.6	22484.63	0.5986	Pulse	0.1000	3
Ti	47	45	He	0.339	ppb	86.6	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.015	ppb	N/A	1134.72	0.0302	Pulse	0.5000	3
Cr	52	45	He	0.182	ppb	66.6	1590.14	0.0423	Pulse	0.1000	3
Mn	55	45	He	18.305	ppb	2.9	8679.55	0.2311	Pulse	0.1000	3
Fe	57	45	He	1229.308	ppb	3.0	26244.64	0.6987	Pulse	0.1000	3
Co	59	45	He	0.745	ppb	11.3	1726.83	0.0460	Pulse	0.1000	3
Ni	60	72	He	0.210	ppb	23.3	390.02	0.0058	Pulse	0.1000	3
Cu	63	72	He	0.180	ppb	34.3	730.04	0.0108	Pulse	0.1000	3
Zn	66	72	He	2.204	ppb	6.3	666.71	0.0098	Pulse	0.1000	3
As	75	72	He	1.295	ppb	1.9	230.67	0.0034	Pulse	0.5000	3
Sr	88	115	He	29.172	ppb	0.3	16293.19	0.2618	Pulse	0.1000	3
Mo	98	115	He	0.385	ppb	10.7	583.37	0.0094	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	130.2	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	103.3	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.040	ppb	315.6	1106.75	0.0178	Pulse	0.1000	3
Sb	121	115	He	0.433	ppb	16.3	433.36	0.0070	Pulse	0.1000	3
Ba	137	115	He	52.704	ppb	1.7	16343.59	0.2625	Pulse	0.1000	3
Tl	205	159	He	0.229	ppb	5.0	1783.53	0.0062	Pulse	0.1000	3
Pb	208	159	He	0.056	ppb	15.1	973.39	0.0034	Pulse	0.1000	3
U	238	209	He	0.157	ppb	6.8	1846.87	0.0079	Pulse	0.1000	3

ISTD Table:

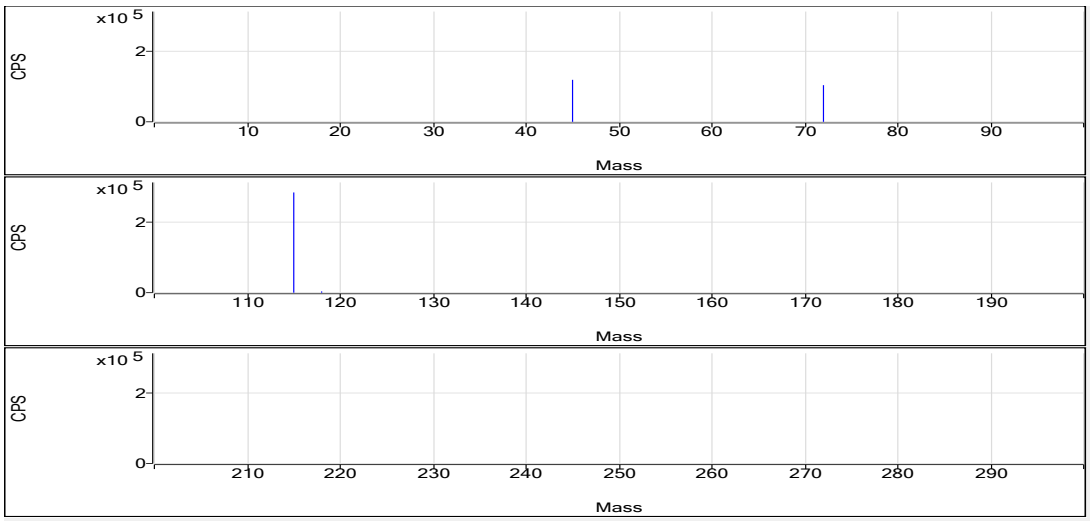
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2102845.85	1.2	103.4	Analog	0.1000	3
No Gas	Ge	72	1058222.59	0.8	105.3	Pulse	0.1000	3
H2	Sc	45	118950.08	2.3	90.0	Pulse	0.1000	3
H2	Ge	72	103825.67	1.4	93.1	Pulse	0.1000	3
H2	In	115	283918.61	1.3	96.7	Pulse	0.1000	3
He	Sc	45	37562.56	1.2	101.7	Pulse	0.1000	3
He	Ge	72	67841.22	1.1	105.1	Pulse	0.1000	3
He	In	115	62247.28	0.6	98.5	Pulse	0.1000	3
He	Tb	159	287419.75	1.1	98.2	Pulse	0.1000	3
He	Bi	209	233022.63	0.1	98.8	Pulse	0.1000	3

No Gas

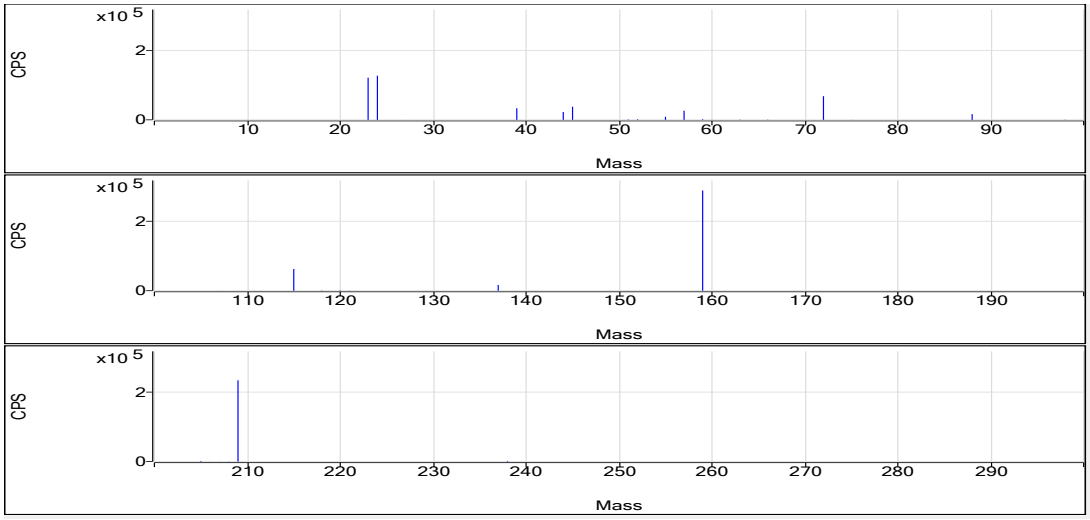


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.035	0	104.00	0.0008	2.195E-05
Be	9	1	No Gas	0.029	0	92.00	0.0008	2.195E-05
Be	9	1	No Gas	0.041	0.0001	112.00	0.0008	2.195E-05
Se	78	2	H2	0.216	0.0001	11.33	0.0004	1.386E-05
Se	78	2	H2	0.118	0.0001	6.67	0.0004	1.386E-05
Se	78	2	H2	0.263	0.0001	13.33	0.0004	1.386E-05
Na	23	3	He	721.697	3.1995	121294.02	0.0038	0.4416
Na	23	3	He	729.903	3.2309	119762.55	0.0038	0.4416
Na	23	3	He	728.473	3.2254	121628.47	0.0038	0.4416
Mg	24	3	He	1774.306	3.3137	125621.00	0.0019	0.005872
Mg	24	3	He	1823.144	3.4047	126205.97	0.0019	0.005872
Mg	24	3	He	1812.47	3.3848	127639.02	0.0019	0.005872
Al	27	3	He	3.785	0.0026	100.00	0.0006	0.0004496
Al	27	3	He	3.888	0.0027	100.00	0.0006	0.0004496
Al	27	3	He	2.433	0.0019	70.00	0.0006	0.0004496
K	39	3	He	367.327	0.8704	32997.99	0.0012	0.4456
K	39	3	He	402.669	0.9113	33780.17	0.0012	0.4456
K	39	3	He	362.827	0.8652	32627.09	0.0012	0.4456
Ca	44	3	He	9243.61	0.6146	23299.12	0.0001	0.003779
Ca	44	3	He	8988.775	0.5977	22157.46	0.0001	0.003779
Ca	44	3	He	8770.662	0.5833	21997.30	0.0001	0.003779
Ti	47	3	He	0.508	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.51	0.0003	10.00	0.0005	0
V	51	3	He	-0.023	0.03	1138.05	0.0223	0.03054
V	51	3	He	0.039	0.0314	1164.05	0.0223	0.03054
V	51	3	He	-0.059	0.0292	1102.05	0.0223	0.03054
Cr	52	3	He	0.29	0.0454	1720.16	0.0285	0.03714
Cr	52	3	He	0.051	0.0386	1430.11	0.0285	0.03714
Cr	52	3	He	0.205	0.043	1620.14	0.0285	0.03714
Mn	55	3	He	18.202	0.2298	8712.96	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	18.885	0.2383	8832.98	0.0124	0.004415
Mn	55	3	He	17.829	0.2252	8492.72	0.0124	0.004415
Fe	57	3	He	1261.354	0.7169	27176.26	0.0006	0.001356
Fe	57	3	He	1236.703	0.7029	26054.36	0.0006	0.001356
Fe	57	3	He	1189.868	0.6763	25503.29	0.0006	0.001356
Co	59	3	He	0.73	0.0451	1710.17	0.0581	0.002697
Co	59	3	He	0.836	0.0513	1900.20	0.0581	0.002697
Co	59	3	He	0.67	0.0416	1570.13	0.0581	0.002697
Ni	60	3	He	0.168	0.0054	370.02	0.0087	0.003928
Ni	60	3	He	0.264	0.0062	420.02	0.0087	0.003928
Ni	60	3	He	0.199	0.0057	380.02	0.0087	0.003928
Cu	63	3	He	0.186	0.0109	750.04	0.0261	0.006048
Cu	63	3	He	0.239	0.0123	830.06	0.0261	0.006048
Cu	63	3	He	0.116	0.0091	610.03	0.0261	0.006048
Zn	66	3	He	2.178	0.0098	670.04	0.0029	0.003512
Zn	66	3	He	2.08	0.0095	640.04	0.0029	0.003512
Zn	66	3	He	2.355	0.0103	690.04	0.0029	0.003512
As	75	3	He	1.27	0.0033	230.00	0.0021	0.0007233
As	75	3	He	1.297	0.0034	230.00	0.0021	0.0007233
As	75	3	He	1.319	0.0034	232.00	0.0021	0.0007233
Sr	88	3	He	29.056	0.2607	16340.00	0.009	0.0005796
Sr	88	3	He	29.236	0.2623	16259.74	0.009	0.0005796
Sr	88	3	He	29.225	0.2622	16279.84	0.009	0.0005796
Mo	98	3	He	0.353	0.0086	540.03	0.0235	0.0003188
Mo	98	3	He	0.371	0.009	560.03	0.0235	0.0003188
Mo	98	3	He	0.432	0.0105	650.04	0.0235	0.0003188
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.02	0.0015	90.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.013	0.0169	1060.07	0.0164	0.01713
Sn	120	3	He	-0.051	0.0163	1010.07	0.0164	0.01713
Sn	120	3	He	0.183	0.0201	1250.11	0.0164	0.01713
Sb	121	3	He	0.499	0.008	500.03	0.0155	0.0002641
Sb	121	3	He	0.358	0.0058	360.02	0.0155	0.0002641
Sb	121	3	He	0.441	0.0071	440.03	0.0155	0.0002641
Ba	137	3	He	53.138	0.2647	16590.47	0.005	0.0001577
Ba	137	3	He	51.654	0.2573	15949.76	0.005	0.0001577
Ba	137	3	He	53.321	0.2656	16490.53	0.005	0.0001577
Tl	205	3	He	0.238	0.0064	1840.21	0.026	0.0002504
Tl	205	3	He	0.232	0.0063	1800.18	0.026	0.0002504
Tl	205	3	He	0.216	0.0059	1710.19	0.026	0.0002504
Pb	208	3	He	0.048	0.0031	520.03	0.0349	0.001422
Pb	208	3	He	0.065	0.0037	540.03	0.0349	0.001422
Pb	208	3	He	0.057	0.0034	580.03	0.0349	0.001422
U	238	3	He	0.166	0.0084	1950.20	0.0502	5.657E-05
U	238	3	He	0.159	0.0081	1880.24	0.0502	5.657E-05
U	238	3	He	0.145	0.0073	1710.18	0.0502	5.657E-05
Sc	45	1	No Gas			2129292.31		
Sc	45	1	No Gas			2079520.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2099724.81		
Ge	72	1	No Gas			1065124.75		
Ge	72	1	No Gas			1060031.47		
Ge	72	1	No Gas			1049511.55		
Sc	45	2	H2			120707.31		
Sc	45	2	H2			115809.12		
Sc	45	2	H2			120333.80		
Ge	72	2	H2			105255.72		
Ge	72	2	H2			102395.72		
Ge	72	2	H2			103825.56		
In	115	2	H2			285950.21		
In	115	2	H2			279771.36		
In	115	2	H2			286034.27		
Sc	45	3	He			37910.10		
Sc	45	3	He			37068.14		
Sc	45	3	He			37709.44		
Ge	72	3	He			68694.99		
Ge	72	3	He			67569.87		
Ge	72	3	He			67258.79		
In	115	3	He			62681.20		
In	115	3	He			61988.68		
In	115	3	He			62090.05		
Tb	159	3	He			285505.84		
Tb	159	3	He			285658.98		
Tb	159	3	He			291094.43		
Bi	209	3	He			232821.32		
Bi	209	3	He			233144.49		
Bi	209	3	He			233102.07		

Quantitation Report

Data File Name	110SMPL.d
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Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

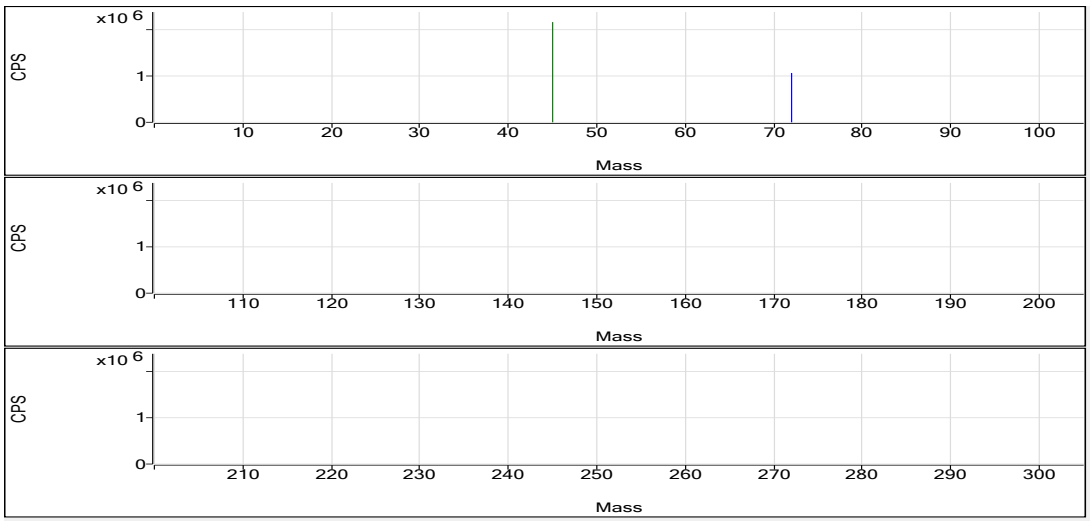
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.016	ppb	100.3	73.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.279	ppb	18.4	14.22	0.0001	Pulse	1.5000	3
Na	23	45	He	2045.564	ppb	1.4	308262.83	8.2586	Pulse	0.1000	3
Mg	24	45	He	9348.069	ppb	2.5	650641.74	17.4332	Pulse	0.1000	3
Al	27	45	He	5.708	ppb	42.6	140.00	0.0038	Pulse	0.1000	3
K	39	45	He	2037.543	ppb	3.3	104572.34	2.8020	Pulse	0.1000	3
Ca	44	45	He	46736.951	ppb	2.1	115408.33	3.0921	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.161	ppb	N/A	1006.04	0.0270	Pulse	0.5000	3
Cr	52	45	He	0.135	ppb	29.0	1530.14	0.0410	Pulse	0.1000	3
Mn	55	45	He	91.581	ppb	2.1	42496.67	1.1386	Pulse	0.1000	3
Fe	57	45	He	6336.287	ppb	1.5	134212.78	3.5956	Pulse	0.1000	3
Co	59	45	He	3.243	ppb	2.3	7135.31	0.1911	Pulse	0.1000	3
Ni	60	72	He	0.475	ppb	32.1	543.36	0.0080	Pulse	0.1000	3
Cu	63	72	He	0.091	ppb	28.4	570.03	0.0084	Pulse	0.1000	3
Zn	66	72	He	6.168	ppb	13.8	1433.46	0.0212	Pulse	0.1000	3
As	75	72	He	6.107	ppb	1.5	902.04	0.0134	Pulse	0.5000	3
Sr	88	115	He	149.311	ppb	2.6	83973.10	1.3373	Pulse	0.1000	3
Mo	98	115	He	1.093	ppb	3.5	1633.50	0.0260	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	129.5	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.017	ppb	50.8	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.216	ppb	N/A	853.39	0.0136	Pulse	0.1000	3
Sb	121	115	He	0.082	ppb	67.6	96.67	0.0015	Pulse	0.1000	3
Ba	137	115	He	261.132	ppb	3.5	81636.46	1.3002	Pulse	0.1000	3
Tl	205	159	He	0.042	ppb	21.3	390.02	0.0013	Pulse	0.1000	3
Pb	208	159	He	-0.003	ppb	N/A	380.02	0.0013	Pulse	0.1000	3
U	238	209	He	0.081	ppb	2.3	976.74	0.0041	Pulse	0.1000	3

ISTD Table:

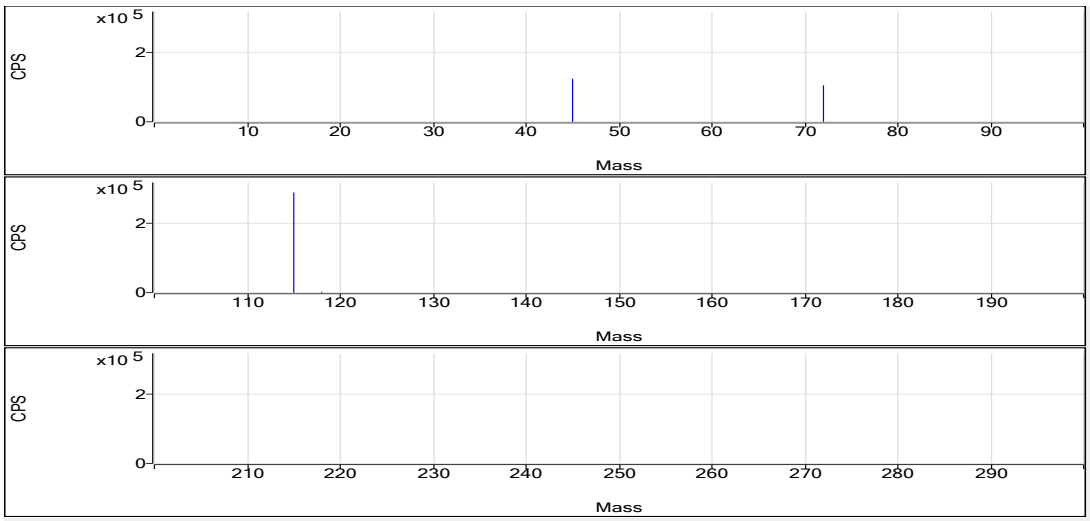
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2160034.55	1.1	106.3	Analog	0.1000	3
No Gas	Ge	72	1062925.92	0.9	105.8	Pulse	0.1000	3
H2	Sc	45	124518.90	1.2	94.3	Pulse	0.1000	3
H2	Ge	72	105332.61	0.5	94.4	Pulse	0.1000	3
H2	In	115	289508.45	0.8	98.6	Pulse	0.1000	3
He	Sc	45	37331.94	1.6	101.0	Pulse	0.1000	3
He	Ge	72	67567.14	1.8	104.7	Pulse	0.1000	3
He	In	115	62804.41	1.2	99.4	Pulse	0.1000	3
He	Tb	159	290646.52	0.5	99.3	Pulse	0.1000	3
He	Bi	209	236933.75	1.1	100.5	Pulse	0.1000	3

No Gas

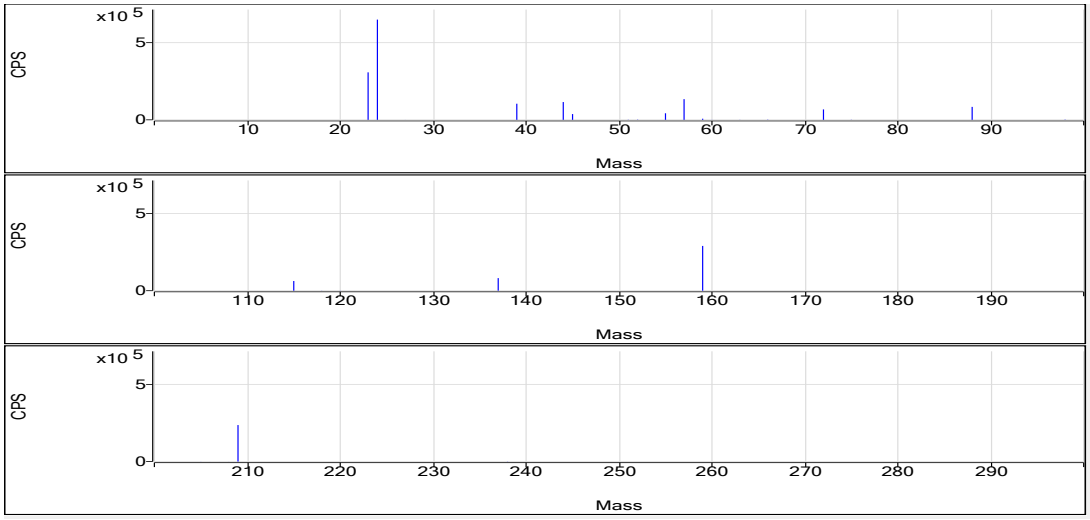


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0	46.00	0.0008	2.195E-05
Be	9	1	No Gas	0.031	0	98.00	0.0008	2.195E-05
Be	9	1	No Gas	0.017	0	76.00	0.0008	2.195E-05
Se	78	2	H2	0.272	0.0001	14.00	0.0004	1.386E-05
Se	78	2	H2	0.231	0.0001	12.00	0.0004	1.386E-05
Se	78	2	H2	0.333	0.0002	16.67	0.0004	1.386E-05
Na	23	3	He	2036.621	8.2244	308406.28	0.0038	0.4416
Na	23	3	He	2078.51	8.3845	307348.94	0.0038	0.4416
Na	23	3	He	2021.562	8.1669	309033.26	0.0038	0.4416
Mg	24	3	He	9220.687	17.1957	644821.01	0.0019	0.005872
Mg	24	3	He	9619.776	17.9397	657614.60	0.0019	0.005872
Mg	24	3	He	9203.745	17.1641	649489.60	0.0019	0.005872
Al	27	3	He	8.448	0.0053	200.01	0.0006	0.0004496
Al	27	3	He	4.884	0.0033	120.00	0.0006	0.0004496
Al	27	3	He	3.793	0.0026	100.00	0.0006	0.0004496
K	39	3	He	2019.967	2.7817	104310.01	0.0012	0.4456
K	39	3	He	2112.547	2.8887	105892.46	0.0012	0.4456
K	39	3	He	1980.115	2.7356	103514.56	0.0012	0.4456
Ca	44	3	He	46556.988	3.0802	115505.24	0.0001	0.003779
Ca	44	3	He	47802.625	3.1625	115928.82	0.0001	0.003779
Ca	44	3	He	45851.24	3.0336	114790.92	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.205	0.026	974.04	0.0223	0.03054
V	51	3	He	-0.1	0.0283	1038.05	0.0223	0.03054
V	51	3	He	-0.177	0.0266	1006.04	0.0223	0.03054
Cr	52	3	He	0.176	0.0421	1580.15	0.0285	0.03714
Cr	52	3	He	0.133	0.0409	1500.13	0.0285	0.03714
Cr	52	3	He	0.097	0.0399	1510.13	0.0285	0.03714
Mn	55	3	He	90.497	1.1252	42192.57	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	93.754	1.1655	42723.75	0.0124	0.004415
Mn	55	3	He	90.492	1.1251	42573.68	0.0124	0.004415
Fe	57	3	He	6264.245	3.5548	133299.72	0.0006	0.001356
Fe	57	3	He	6441.303	3.6552	133988.16	0.0006	0.001356
Fe	57	3	He	6303.312	3.5769	135350.45	0.0006	0.001356
Co	59	3	He	3.218	0.1897	7111.98	0.0581	0.002697
Co	59	3	He	3.185	0.1877	6881.84	0.0581	0.002697
Co	59	3	He	3.325	0.1959	7412.10	0.0581	0.002697
Ni	60	3	He	0.573	0.0089	590.03	0.0087	0.003928
Ni	60	3	He	0.552	0.0087	600.04	0.0087	0.003928
Ni	60	3	He	0.299	0.0065	440.02	0.0087	0.003928
Cu	63	3	He	0.063	0.0077	510.03	0.0261	0.006048
Cu	63	3	He	0.113	0.009	620.03	0.0261	0.006048
Cu	63	3	He	0.097	0.0086	580.03	0.0261	0.006048
Zn	66	3	He	5.401	0.019	1260.10	0.0029	0.003512
Zn	66	3	He	7.088	0.0238	1640.16	0.0029	0.003512
Zn	66	3	He	6.014	0.0207	1400.11	0.0029	0.003512
As	75	3	He	6.166	0.0135	894.03	0.0021	0.0007233
As	75	3	He	6.156	0.0135	926.04	0.0021	0.0007233
As	75	3	He	6	0.0131	886.04	0.0021	0.0007233
Sr	88	3	He	148.566	1.3307	83829.39	0.009	0.0005796
Sr	88	3	He	153.44	1.3743	85156.43	0.009	0.0005796
Sr	88	3	He	145.927	1.307	82933.48	0.009	0.0005796
Mo	98	3	He	1.127	0.0268	1690.15	0.0235	0.0003188
Mo	98	3	He	1.098	0.0261	1620.19	0.0235	0.0003188
Mo	98	3	He	1.052	0.0251	1590.15	0.0235	0.0003188
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.016	0.0013	80.00	0.0499	0.0004754
Cd	111	3	He	0.027	0.0002	10.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.009	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	-0.289	0.0124	780.06	0.0164	0.01713
Sn	120	3	He	-0.208	0.0137	850.05	0.0164	0.01713
Sn	120	3	He	-0.15	0.0147	930.06	0.0164	0.01713
Sb	121	3	He	0.044	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.056	0.0011	70.00	0.0155	0.0002641
Sb	121	3	He	0.146	0.0025	160.01	0.0155	0.0002641
Ba	137	3	He	257.359	1.2814	80727.93	0.005	0.0001577
Ba	137	3	He	271.599	1.3523	83795.50	0.005	0.0001577
Ba	137	3	He	254.437	1.2669	80385.96	0.005	0.0001577
Tl	205	3	He	0.037	0.0012	350.02	0.026	0.0002504
Tl	205	3	He	0.037	0.0012	350.02	0.026	0.0002504
Tl	205	3	He	0.052	0.0016	470.03	0.026	0.0002504
Pb	208	3	He	-0.008	0.0011	170.01	0.0349	0.001422
Pb	208	3	He	-0.004	0.0013	230.01	0.0349	0.001422
Pb	208	3	He	0.002	0.0015	180.01	0.0349	0.001422
U	238	3	He	0.08	0.0041	970.07	0.0502	5.657E-05
U	238	3	He	0.08	0.0041	970.08	0.0502	5.657E-05
U	238	3	He	0.083	0.0042	990.07	0.0502	5.657E-05
Sc	45	1	No Gas			2138499.66		
Sc	45	1	No Gas			2154904.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2186699.65		
Ge	72	1	No Gas			1060588.81		
Ge	72	1	No Gas			1055163.50		
Ge	72	1	No Gas			1073025.45		
Sc	45	2	H2			126203.01		
Sc	45	2	H2			123541.17		
Sc	45	2	H2			123812.51		
Ge	72	2	H2			105929.90		
Ge	72	2	H2			104932.46		
Ge	72	2	H2			105135.48		
In	115	2	H2			287322.09		
In	115	2	H2			292148.20		
In	115	2	H2			289055.05		
Sc	45	3	He			37498.95		
Sc	45	3	He			36656.91		
Sc	45	3	He			37839.95		
Ge	72	3	He			66364.04		
Ge	72	3	He			68847.33		
Ge	72	3	He			67490.06		
In	115	3	He			63003.45		
In	115	3	He			61968.50		
In	115	3	He			63455.48		
Tb	159	3	He			290603.30		
Tb	159	3	He			289200.29		
Tb	159	3	He			292135.97		
Bi	209	3	He			239297.52		
Bi	209	3	He			237340.15		
Bi	209	3	He			234163.57		

Quantitation Report

Data File Name	111SMPL.d
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Sample Name	410-136992-W-1-B MS
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

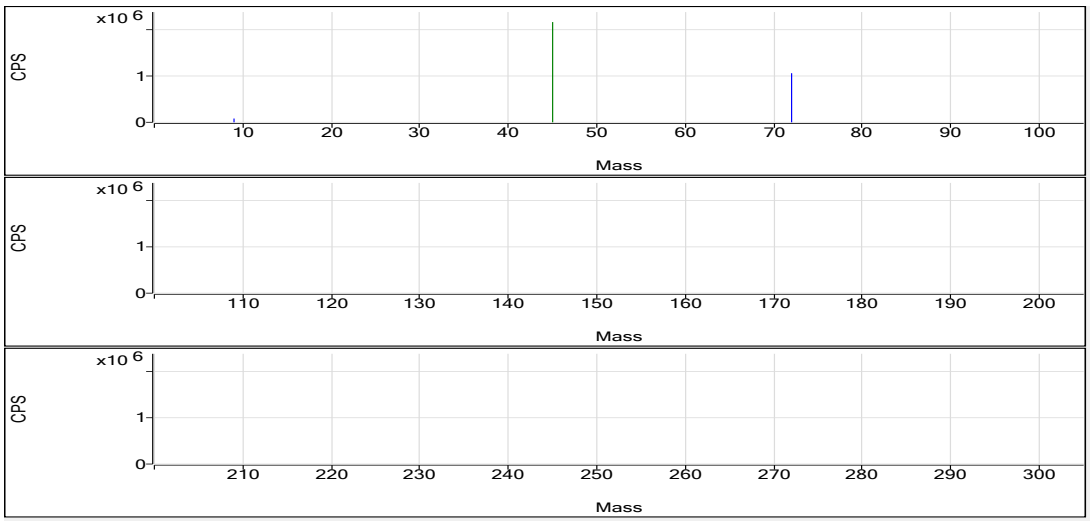
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.869	ppb	0.5	80941.13	0.0375	Pulse	0.5000	3
Se	78	72	H2	102.022	ppb	1.7	4701.66	0.0444	Pulse	1.5000	3
Na	23	45	He	6719.514	ppb	1.6	1007435.22	26.1197	Pulse	0.1000	3
Mg	24	45	He	13944.140	ppb	1.3	1002950.87	26.0015	Pulse	0.1000	3
Al	27	45	He	4895.440	ppb	1.2	109189.56	2.8309	Pulse	0.1000	3
K	39	45	He	6873.293	ppb	1.5	323782.72	8.3945	Pulse	0.1000	3
Ca	44	45	He	50142.813	ppb	2.2	127936.03	3.3172	Pulse	0.1000	3
Ti	47	45	He	497.650	ppb	4.5	9970.38	0.2586	Pulse	0.1000	3
V	51	45	He	498.224	ppb	1.9	429571.41	11.1378	Pulse	0.5000	3
Cr	52	45	He	496.940	ppb	2.0	546776.57	14.1768	Pulse	0.1000	3
Mn	55	45	He	576.161	ppb	1.9	275371.54	7.1398	Pulse	0.1000	3
Fe	57	45	He	11027.457	ppb	1.3	241332.93	6.2567	Pulse	0.1000	3
Co	59	45	He	466.237	ppb	1.6	1044865.09	27.0893	Pulse	0.1000	3
Ni	60	72	He	501.353	ppb	2.4	287765.56	4.3493	Pulse	0.1000	3
Cu	63	72	He	472.917	ppb	2.2	818199.50	12.3660	Pulse	0.1000	3
Zn	66	72	He	507.600	ppb	3.7	96453.43	1.4580	Pulse	0.1000	3
As	75	72	He	514.830	ppb	2.5	70472.30	1.0651	Pulse	0.5000	3
Sr	88	115	He	195.575	ppb	1.4	110680.80	1.7515	Pulse	0.1000	3
Mo	98	115	He	50.531	ppb	2.8	75094.11	1.1886	Pulse	0.1000	3
Ag	107	115	He	49.336	ppb	2.5	155443.40	2.4601	Pulse	0.1000	3
Cd	111	115	He	50.505	ppb	1.9	17683.89	0.2799	Pulse	0.5000	3
Sn	120	115	He	100.031	ppb	2.7	104852.67	1.6596	Pulse	0.1000	3
Sb	121	115	He	95.360	ppb	2.7	93216.97	1.4753	Pulse	0.1000	3
Ba	137	115	He	748.247	ppb	2.6	235370.18	3.7254	Pulse	0.1000	3
Tl	205	159	He	101.310	ppb	0.5	763141.79	2.6384	Pulse	0.1000	3
Pb	208	159	He	50.459	ppb	1.1	510308.53	1.7643	Pulse	0.1000	3
U	238	209	He	48.987	ppb	0.8	579281.58	2.4608	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2157256.37	0.5	106.1	Analog	0.1000	3
No Gas	Ge	72	1056540.17	0.5	105.1	Pulse	0.1000	3
H2	Sc	45	122758.88	0.4	92.9	Pulse	0.1000	3
H2	Ge	72	105961.70	1.5	95.0	Pulse	0.1000	3
H2	In	115	287743.73	0.6	98.0	Pulse	0.1000	3
He	Sc	45	38575.44	1.4	104.4	Pulse	0.1000	3
He	Ge	72	66183.55	1.9	102.5	Pulse	0.1000	3
He	In	115	63203.86	2.1	100.0	Pulse	0.1000	3
He	Tb	159	289253.59	0.8	98.8	Pulse	0.1000	3
He	Bi	209	235408.08	0.3	99.8	Pulse	0.1000	3

No Gas



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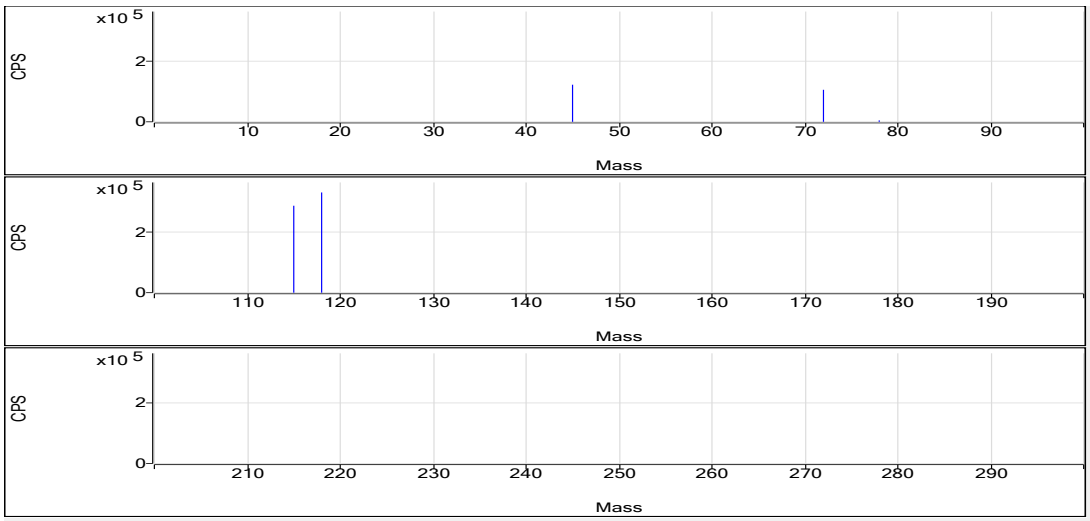
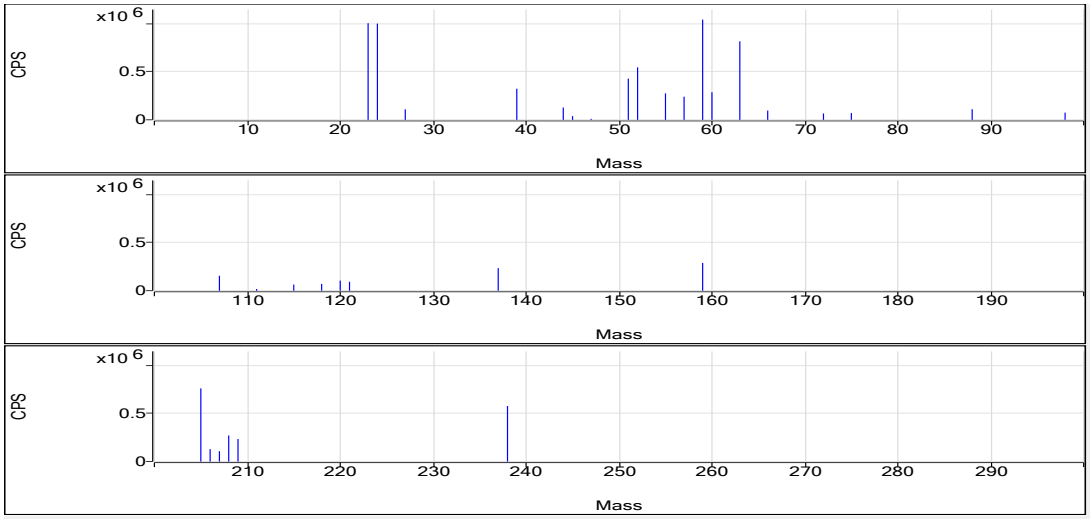


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.588	0.0373	80354.17	0.0008	2.195E-05
Be	9	1	No Gas	49.091	0.0377	81787.55	0.0008	2.195E-05
Be	9	1	No Gas	48.929	0.0376	80681.66	0.0008	2.195E-05
Se	78	2	H2	103.573	0.0451	4719.45	0.0004	1.386E-05
Se	78	2	H2	100.132	0.0436	4690.77	0.0004	1.386E-05
Se	78	2	H2	102.363	0.0445	4694.77	0.0004	1.386E-05
Na	23	3	He	6828.848	26.5375	1007646.08	0.0038	0.4416
Na	23	3	He	6717.424	26.1117	1011634.67	0.0038	0.4416
Na	23	3	He	6612.27	25.7099	1003024.91	0.0038	0.4416
Mg	24	3	He	14015.269	26.1341	992327.33	0.0019	0.005872
Mg	24	3	He	14074.739	26.245	1016796.31	0.0019	0.005872
Mg	24	3	He	13742.411	25.6254	999728.97	0.0019	0.005872
Al	27	3	He	4965.243	2.8712	109021.67	0.0006	0.0004496
Al	27	3	He	4854.584	2.8072	108759.31	0.0006	0.0004496
Al	27	3	He	4866.493	2.8141	109787.70	0.0006	0.0004496
K	39	3	He	6959.364	8.494	322522.63	0.0012	0.4456
K	39	3	He	6902.105	8.4278	326513.90	0.0012	0.4456
K	39	3	He	6758.41	8.2616	322311.62	0.0012	0.4456
Ca	44	3	He	51395.917	3.4	129099.22	0.0001	0.003779
Ca	44	3	He	49578.718	3.2799	127071.60	0.0001	0.003779
Ca	44	3	He	49453.803	3.2716	127637.28	0.0001	0.003779
Ti	47	3	He	522.779	0.2716	10313.93	0.0005	0
Ti	47	3	He	489.992	0.2546	9863.60	0.0005	0
Ti	47	3	He	480.18	0.2495	9733.60	0.0005	0
V	51	3	He	509.248	11.3836	432243.13	0.0223	0.03054
V	51	3	He	493.547	11.0336	427469.34	0.0223	0.03054
V	51	3	He	491.876	10.9963	429001.78	0.0223	0.03054
Cr	52	3	He	508.566	14.5075	550860.34	0.0285	0.03714
Cr	52	3	He	490.339	13.9889	541966.01	0.0285	0.03714
Cr	52	3	He	491.916	14.0338	547503.35	0.0285	0.03714
Mn	55	3	He	588.363	7.2909	276840.54	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	573.569	7.1077	275370.52	0.0124	0.004415
Mn	55	3	He	566.551	7.0208	273903.57	0.0124	0.004415
Fe	57	3	He	11117.505	6.3078	239510.11	0.0006	0.001356
Fe	57	3	He	11109.144	6.303	244195.54	0.0006	0.001356
Fe	57	3	He	10855.722	6.1593	240293.14	0.0006	0.001356
Co	59	3	He	470.929	27.3619	1038947.41	0.0581	0.002697
Co	59	3	He	470.225	27.321	1058483.03	0.0581	0.002697
Co	59	3	He	457.557	26.585	1037164.83	0.0581	0.002697
Ni	60	3	He	514.757	4.4655	289661.58	0.0087	0.003928
Ni	60	3	He	498.174	4.3217	286767.05	0.0087	0.003928
Ni	60	3	He	491.128	4.2607	286868.04	0.0087	0.003928
Cu	63	3	He	483.942	12.6542	820837.10	0.0261	0.006048
Cu	63	3	He	471.916	12.3398	818803.82	0.0261	0.006048
Cu	63	3	He	462.894	12.1041	814957.57	0.0261	0.006048
Zn	66	3	He	527.872	1.5161	98345.95	0.0029	0.003512
Zn	66	3	He	503.832	1.4472	96030.37	0.0029	0.003512
Zn	66	3	He	491.096	1.4107	94983.98	0.0029	0.003512
As	75	3	He	529.068	1.0946	71000.76	0.0021	0.0007233
As	75	3	He	510.651	1.0565	70102.48	0.0021	0.0007233
As	75	3	He	504.77	1.0443	70313.65	0.0021	0.0007233
Sr	88	3	He	192.62	1.7251	111556.71	0.009	0.0005796
Sr	88	3	He	198.168	1.7747	110016.91	0.009	0.0005796
Sr	88	3	He	195.938	1.7548	110468.79	0.009	0.0005796
Mo	98	3	He	49.24	1.1582	74900.04	0.0235	0.0003188
Mo	98	3	He	52.05	1.2243	75894.70	0.0235	0.0003188
Mo	98	3	He	50.303	1.1832	74487.60	0.0235	0.0003188
Ag	107	3	He	48.456	2.4163	156255.78	0.0499	0.0004754
Ag	107	3	He	50.726	2.5295	156801.62	0.0499	0.0004754
Ag	107	3	He	48.825	2.4347	153272.79	0.0499	0.0004754
Cd	111	3	He	49.419	0.2738	17709.24	0.0055	1.07E-05
Cd	111	3	He	51.28	0.2842	17615.13	0.0055	1.07E-05
Cd	111	3	He	50.817	0.2816	17727.29	0.0055	1.07E-05
Sn	120	3	He	97.283	1.6145	104403.63	0.0164	0.01713
Sn	120	3	He	102.636	1.7024	105529.74	0.0164	0.01713
Sn	120	3	He	100.175	1.6619	104624.64	0.0164	0.01713
Sb	121	3	He	93.954	1.4536	93998.24	0.0155	0.0002641
Sb	121	3	He	98.33	1.5212	94301.22	0.0155	0.0002641
Sb	121	3	He	93.796	1.4511	91351.45	0.0155	0.0002641
Ba	137	3	He	727.766	3.6234	234317.14	0.005	0.0001577
Ba	137	3	He	765.958	3.8135	236401.77	0.005	0.0001577
Ba	137	3	He	751.018	3.7391	235391.64	0.005	0.0001577
Tl	205	3	He	101.434	2.6416	760584.60	0.026	0.0002504
Tl	205	3	He	100.76	2.6241	766371.79	0.026	0.0002504
Tl	205	3	He	101.735	2.6495	762468.97	0.026	0.0002504
Pb	208	3	He	50.838	1.7776	271832.26	0.0349	0.001422
Pb	208	3	He	49.852	1.7431	271596.99	0.0349	0.001422
Pb	208	3	He	50.686	1.7723	272484.78	0.0349	0.001422
U	238	3	He	49.007	2.4618	578185.73	0.0502	5.657E-05
U	238	3	He	48.589	2.4408	576512.57	0.0502	5.657E-05
U	238	3	He	49.365	2.4798	583146.44	0.0502	5.657E-05
Sc	45	1	No Gas			2154023.87		
Sc	45	1	No Gas			2169999.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2147745.91		
Ge	72	1	No Gas			1050479.83		
Ge	72	1	No Gas			1058122.80		
Ge	72	1	No Gas			1061017.87		
Sc	45	2	H2			122431.96		
Sc	45	2	H2			123341.48		
Sc	45	2	H2			122503.20		
Ge	72	2	H2			104753.57		
Ge	72	2	H2			107694.12		
Ge	72	2	H2			105437.41		
In	115	2	H2			286293.41		
In	115	2	H2			289718.67		
In	115	2	H2			287219.10		
Sc	45	3	He			37970.60		
Sc	45	3	He			38742.53		
Sc	45	3	He			39013.18		
Ge	72	3	He			64866.92		
Ge	72	3	He			66354.46		
Ge	72	3	He			67329.26		
In	115	3	He			65224.19		
In	115	3	He			62551.49		
In	115	3	He			63505.28		
Tb	159	3	He			287924.55		
Tb	159	3	He			292054.06		
Tb	159	3	He			287782.16		
Bi	209	3	He			234865.62		
Bi	209	3	He			236198.14		
Bi	209	3	He			235160.47		

Quantitation Report

Data File Name	112SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 10:04:26 AM
Sample Name	410-136992-W-1-C MSD
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

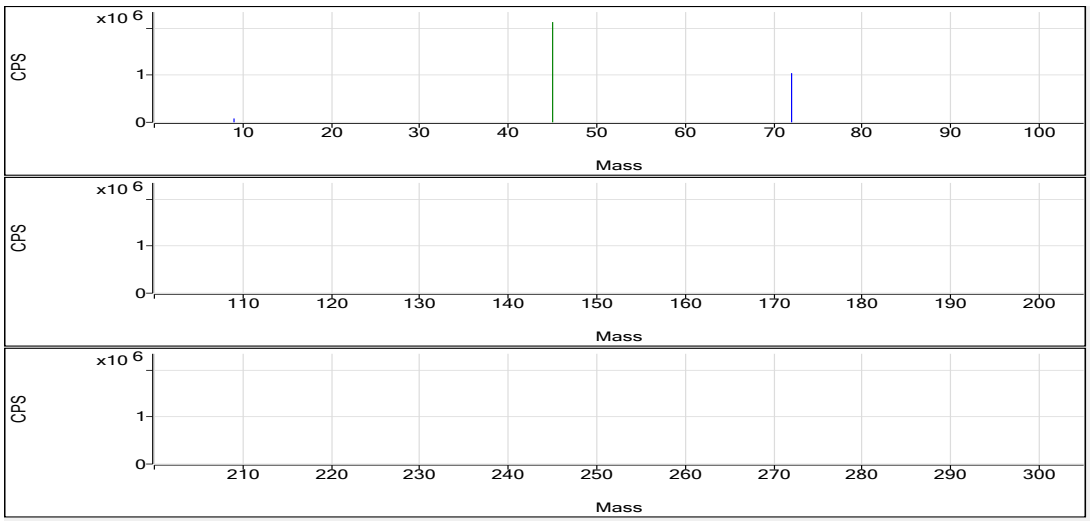
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.883	ppb	0.6	81594.45	0.0383	Pulse	0.5000	3
Se	78	72	H2	103.177	ppb	4.0	4722.57	0.0449	Pulse	1.5000	3
Na	23	45	He	7021.367	ppb	3.8	1044557.83	27.2732	Mix	0.1000	3
Mg	24	45	He	14129.881	ppb	0.6	1009134.98	26.3478	Pulse	0.1000	3
Al	27	45	He	4957.216	ppb	1.9	109800.59	2.8666	Pulse	0.1000	3
K	39	45	He	7004.253	ppb	0.9	327325.17	8.5459	Pulse	0.1000	3
Ca	44	45	He	50400.367	ppb	0.2	127702.65	3.3342	Pulse	0.1000	3
Ti	47	45	He	503.707	ppb	6.0	10027.12	0.2617	Pulse	0.1000	3
V	51	45	He	506.178	ppb	0.7	433372.15	11.3152	Pulse	0.5000	3
Cr	52	45	He	506.824	ppb	0.9	553739.59	14.4580	Pulse	0.1000	3
Mn	55	45	He	585.671	ppb	0.9	277964.50	7.2576	Pulse	0.1000	3
Fe	57	45	He	11099.111	ppb	1.4	241180.92	6.2973	Pulse	0.1000	3
Co	59	45	He	476.669	ppb	1.1	1060715.79	27.6953	Pulse	0.1000	3
Ni	60	72	He	491.430	ppb	0.5	289854.71	4.2633	Pulse	0.1000	3
Cu	63	72	He	465.690	ppb	0.7	827900.77	12.1771	Pulse	0.1000	3
Zn	66	72	He	503.701	ppb	0.2	98370.28	1.4469	Pulse	0.1000	3
As	75	72	He	507.609	ppb	0.5	71401.45	1.0502	Pulse	0.5000	3
Sr	88	115	He	200.138	ppb	2.4	110818.65	1.7924	Pulse	0.1000	3
Mo	98	115	He	52.379	ppb	1.1	76183.01	1.2320	Pulse	0.1000	3
Ag	107	115	He	51.003	ppb	1.3	157261.02	2.5433	Pulse	0.1000	3
Cd	111	115	He	51.407	ppb	1.6	17615.14	0.2849	Pulse	0.5000	3
Sn	120	115	He	103.466	ppb	0.4	106114.69	1.7160	Pulse	0.1000	3
Sb	121	115	He	99.141	ppb	1.0	94840.77	1.5338	Pulse	0.1000	3
Ba	137	115	He	768.969	ppb	0.8	236738.66	3.8285	Pulse	0.1000	3
Tl	205	159	He	101.627	ppb	0.6	776734.10	2.6466	Pulse	0.1000	3
Pb	208	159	He	50.077	ppb	0.3	513878.52	1.7510	Pulse	0.1000	3
U	238	209	He	49.641	ppb	1.4	586645.63	2.4936	Pulse	0.1000	3

ISTD Table:

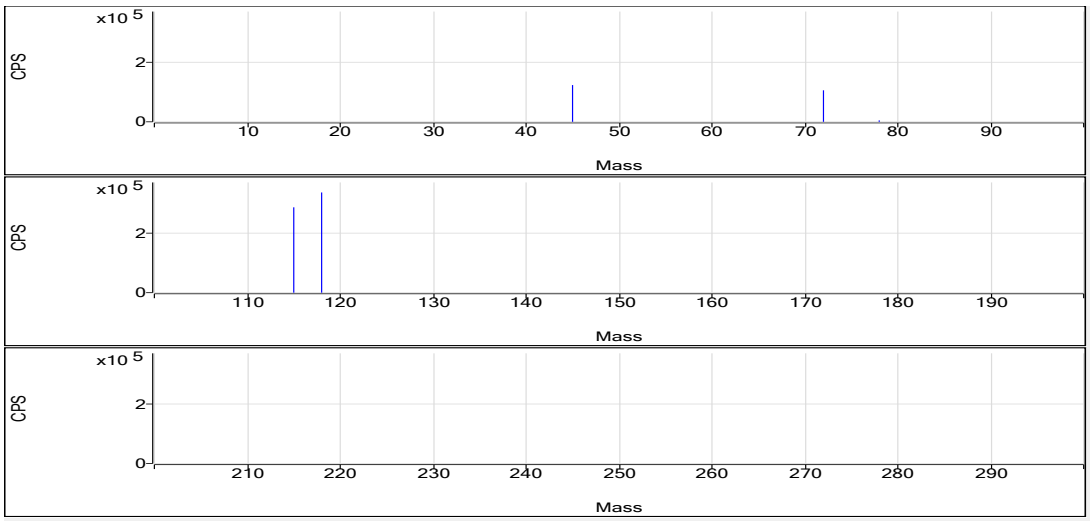
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2130577.78	1.0	104.8	Analog	0.1000	3
No Gas	Ge	72	1045208.11	0.2	104.0	Pulse	0.1000	3
H2	Sc	45	122741.49	1.4	92.9	Pulse	0.1000	3
H2	Ge	72	105238.75	0.7	94.4	Pulse	0.1000	3
H2	In	115	285141.62	1.3	97.1	Pulse	0.1000	3
He	Sc	45	38301.36	0.7	103.7	Pulse	0.1000	3
He	Ge	72	67988.83	0.2	105.3	Pulse	0.1000	3
He	In	115	61839.70	1.2	97.9	Pulse	0.1000	3
He	Tb	159	293479.29	0.2	100.2	Pulse	0.1000	3
He	Bi	209	235283.59	1.4	99.8	Pulse	0.1000	3

No Gas

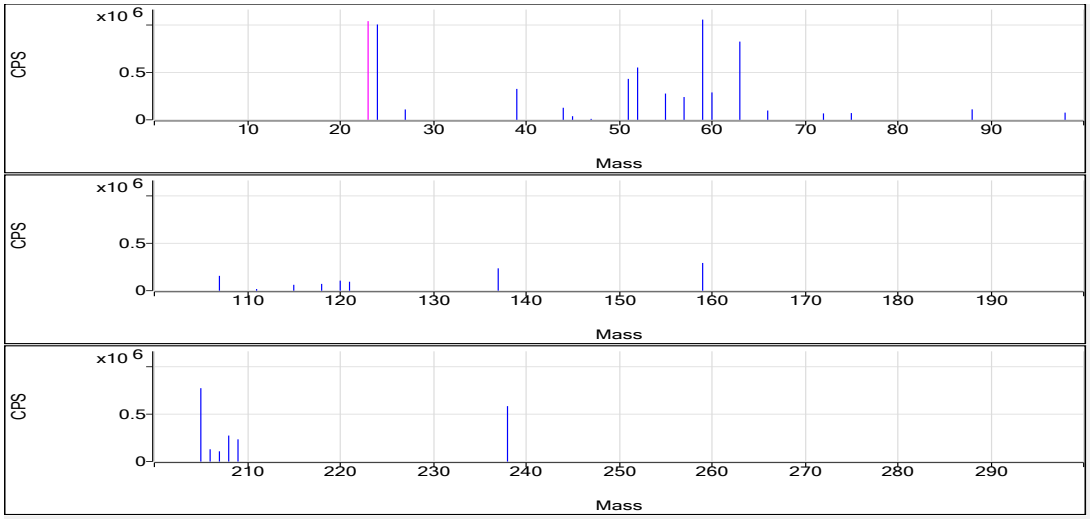


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.22	0.0386	81232.44	0.0008	2.195E-05
Be	9	1	No Gas	49.753	0.0382	81518.06	0.0008	2.195E-05
Be	9	1	No Gas	49.678	0.0381	82032.84	0.0008	2.195E-05
Se	78	2	H2	107.346	0.0467	4903.52	0.0004	1.386E-05
Se	78	2	H2	102.987	0.0448	4685.44	0.0004	1.386E-05
Se	78	2	H2	99.197	0.0432	4578.74	0.0004	1.386E-05
Na	23	3	He	6870.36	26.6962	1016077.88	0.0038	0.4416
Na	23	3	He	6862.752	26.6671	1029669.05	0.0038	0.4416
Na	23	3	He	7330.989	28.4564	1087926.55	0.0038	0.4416
Mg	24	3	He	14232.942	26.5399	1010129.98	0.0019	0.005872
Mg	24	3	He	14090.205	26.2738	1014483.11	0.0019	0.005872
Mg	24	3	He	14066.496	26.2296	1002791.86	0.0019	0.005872
Al	27	3	He	4955.347	2.8655	109062.92	0.0006	0.0004496
Al	27	3	He	5051.505	2.9211	112788.92	0.0006	0.0004496
Al	27	3	He	4864.797	2.8131	107549.93	0.0006	0.0004496
K	39	3	He	7034.391	8.5808	326591.28	0.0012	0.4456
K	39	3	He	7049.848	8.5987	332010.89	0.0012	0.4456
K	39	3	He	6928.52	8.4583	323373.35	0.0012	0.4456
Ca	44	3	He	50478.956	3.3394	127099.75	0.0001	0.003779
Ca	44	3	He	50256.413	3.3247	128372.48	0.0001	0.003779
Ca	44	3	He	50465.733	3.3385	127635.71	0.0001	0.003779
Ti	47	3	He	474.488	0.2465	9383.44	0.0005	0
Ti	47	3	He	534.544	0.2777	10724.18	0.0005	0
Ti	47	3	He	502.088	0.2609	9973.73	0.0005	0
V	51	3	He	508.254	11.3615	432426.56	0.0223	0.03054
V	51	3	He	501.971	11.2214	433280.44	0.0223	0.03054
V	51	3	He	508.308	11.3627	434409.44	0.0223	0.03054
Cr	52	3	He	508.475	14.505	552070.81	0.0285	0.03714
Cr	52	3	He	501.792	14.3148	552723.31	0.0285	0.03714
Cr	52	3	He	510.204	14.5542	556424.64	0.0285	0.03714
Mn	55	3	He	591.208	7.3261	278839.20	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	581.412	7.2048	278192.98	0.0124	0.004415
Mn	55	3	He	584.392	7.2417	276861.32	0.0124	0.004415
Fe	57	3	He	11198.819	6.3539	241834.72	0.0006	0.001356
Fe	57	3	He	10922.467	6.1971	239283.88	0.0006	0.001356
Fe	57	3	He	11176.045	6.341	242424.16	0.0006	0.001356
Co	59	3	He	482.738	28.0479	1067527.56	0.0581	0.002697
Co	59	3	He	472.139	27.4321	1059209.12	0.0581	0.002697
Co	59	3	He	475.13	27.6059	1055410.69	0.0581	0.002697
Ni	60	3	He	491.327	4.2624	289124.18	0.0087	0.003928
Ni	60	3	He	493.965	4.2853	291278.84	0.0087	0.003928
Ni	60	3	He	488.997	4.2422	289161.11	0.0087	0.003928
Cu	63	3	He	469.671	12.2812	833047.88	0.0261	0.006048
Cu	63	3	He	463.377	12.1167	823597.41	0.0261	0.006048
Cu	63	3	He	464.021	12.1335	827057.02	0.0261	0.006048
Zn	66	3	He	503.919	1.4475	98184.52	0.0029	0.003512
Zn	66	3	He	502.728	1.4441	98156.52	0.0029	0.003512
Zn	66	3	He	504.457	1.449	98769.81	0.0029	0.003512
As	75	3	He	506.075	1.047	71020.96	0.0021	0.0007233
As	75	3	He	510.318	1.0558	71764.67	0.0021	0.0007233
As	75	3	He	506.433	1.0478	71418.73	0.0021	0.0007233
Sr	88	3	He	197.404	1.7679	110046.08	0.009	0.0005796
Sr	88	3	He	197.335	1.7673	110096.63	0.009	0.0005796
Sr	88	3	He	205.675	1.8419	112313.23	0.009	0.0005796
Mo	98	3	He	52.475	1.2343	76830.00	0.0235	0.0003188
Mo	98	3	He	51.78	1.2179	75874.61	0.0235	0.0003188
Mo	98	3	He	52.882	1.2439	75844.42	0.0235	0.0003188
Ag	107	3	He	50.487	2.5176	156710.78	0.0499	0.0004754
Ag	107	3	He	50.802	2.5332	157813.42	0.0499	0.0004754
Ag	107	3	He	51.721	2.5791	157258.85	0.0499	0.0004754
Cd	111	3	He	50.482	0.2797	17412.92	0.0055	1.07E-05
Cd	111	3	He	51.938	0.2878	17929.53	0.0055	1.07E-05
Cd	111	3	He	51.801	0.2871	17502.97	0.0055	1.07E-05
Sn	120	3	He	103.777	1.7211	107132.47	0.0164	0.01713
Sn	120	3	He	103.003	1.7084	106427.53	0.0164	0.01713
Sn	120	3	He	103.617	1.7185	104784.06	0.0164	0.01713
Sb	121	3	He	98.645	1.5261	94994.87	0.0155	0.0002641
Sb	121	3	He	98.462	1.5233	94895.15	0.0155	0.0002641
Sb	121	3	He	100.318	1.552	94632.28	0.0155	0.0002641
Ba	137	3	He	765.091	3.8092	237110.93	0.005	0.0001577
Ba	137	3	He	765.566	3.8116	237450.35	0.005	0.0001577
Ba	137	3	He	776.248	3.8648	235654.70	0.005	0.0001577
Tl	205	3	He	102.054	2.6578	779027.49	0.026	0.0002504
Tl	205	3	He	101.863	2.6528	780253.35	0.026	0.0002504
Tl	205	3	He	100.963	2.6294	770921.47	0.026	0.0002504
Pb	208	3	He	50.241	1.7567	276644.62	0.0349	0.001422
Pb	208	3	He	50.044	1.7498	276720.91	0.0349	0.001422
Pb	208	3	He	49.946	1.7464	272345.41	0.0349	0.001422
U	238	3	He	48.871	2.455	584788.70	0.0502	5.657E-05
U	238	3	He	49.866	2.5049	590613.78	0.0502	5.657E-05
U	238	3	He	50.186	2.521	584534.41	0.0502	5.657E-05
Sc	45	1	No Gas			2106857.31		
Sc	45	1	No Gas			2134060.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2150815.44		
Ge	72	1	No Gas			1042486.94		
Ge	72	1	No Gas			1046672.33		
Ge	72	1	No Gas			1046465.06		
Sc	45	2	H2			124155.79		
Sc	45	2	H2			120879.60		
Sc	45	2	H2			123189.07		
Ge	72	2	H2			105014.30		
Ge	72	2	H2			104589.88		
Ge	72	2	H2			106112.07		
In	115	2	H2			285264.62		
In	115	2	H2			288780.33		
In	115	2	H2			281379.92		
Sc	45	3	He			38060.81		
Sc	45	3	He			38611.97		
Sc	45	3	He			38231.31		
Ge	72	3	He			67831.32		
Ge	72	3	He			67972.19		
Ge	72	3	He			68162.99		
In	115	3	He			62812.27		
In	115	3	He			62852.51		
In	115	3	He			61537.40		
Tb	159	3	He			293114.94		
Tb	159	3	He			294124.60		
Tb	159	3	He			293198.32		
Bi	209	3	He			238204.64		
Bi	209	3	He			235781.34		
Bi	209	3	He			231864.80		

Quantitation Report

Data File Name	114_CCV.d
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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

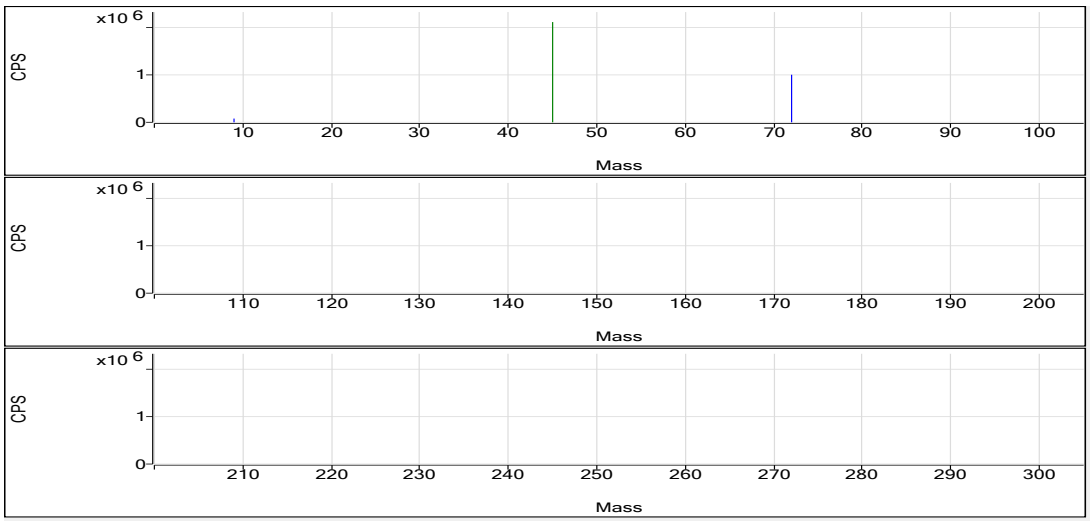
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.366	ppb	1.5	78829.87	0.0371	Pulse	0.5000	3
Se	78	72	H2	53.927	ppb	0.4	2297.52	0.0235	Pulse	1.5000	3
Na	23	45	He	4947.339	ppb	0.6	721823.43	19.3475	Pulse	0.1000	3
Mg	24	45	He	5145.804	ppb	1.0	358121.05	9.5990	Pulse	0.1000	3
Al	27	45	He	4980.314	ppb	1.4	107443.43	2.8799	Pulse	0.1000	3
K	39	45	He	5042.145	ppb	0.9	234180.91	6.2768	Pulse	0.1000	3
Ca	44	45	He	5171.082	ppb	0.5	12889.48	0.3455	Pulse	0.1000	3
Ti	47	45	He	5085.837	ppb	0.8	98589.84	2.6425	Pulse	0.1000	3
V	51	45	He	509.863	ppb	0.6	425216.04	11.3973	Pulse	0.5000	3
Cr	52	45	He	507.968	ppb	0.5	540618.71	14.4905	Pulse	0.1000	3
Mn	55	45	He	495.241	ppb	0.6	228986.29	6.1377	Pulse	0.1000	3
Fe	57	45	He	5016.373	ppb	0.8	106213.21	2.8469	Pulse	0.1000	3
Co	59	45	He	480.790	ppb	1.0	1042193.01	27.9347	Pulse	0.1000	3
Ni	60	72	He	526.008	ppb	1.1	290722.95	4.5630	Pulse	0.1000	3
Cu	63	72	He	493.563	ppb	0.9	822275.56	12.9056	Pulse	0.1000	3
Zn	66	72	He	519.108	ppb	1.6	94994.19	1.4910	Pulse	0.1000	3
As	75	72	He	513.456	ppb	1.0	67682.92	1.0623	Pulse	0.5000	3
Sr	88	115	He	51.056	ppb	2.3	27928.27	0.4577	Pulse	0.1000	3
Mo	98	115	He	51.554	ppb	3.4	73981.00	1.2126	Pulse	0.1000	3
Ag	107	115	He	52.665	ppb	3.2	160224.45	2.6261	Pulse	0.1000	3
Cd	111	115	He	51.069	ppb	1.2	17270.70	0.2830	Pulse	0.5000	3
Sn	120	115	He	51.783	ppb	3.5	52963.65	0.8674	Pulse	0.1000	3
Sb	121	115	He	50.310	ppb	2.8	47498.98	0.7785	Pulse	0.1000	3
Ba	137	115	He	504.740	ppb	2.3	153342.85	2.5130	Pulse	0.1000	3
Tl	205	159	He	51.075	ppb	1.5	380029.16	1.3303	Pulse	0.1000	3
Pb	208	159	He	51.009	ppb	0.6	509527.39	1.7835	Pulse	0.1000	3
U	238	209	He	50.117	ppb	1.3	577636.18	2.5175	Pulse	0.1000	3

ISTD Table:

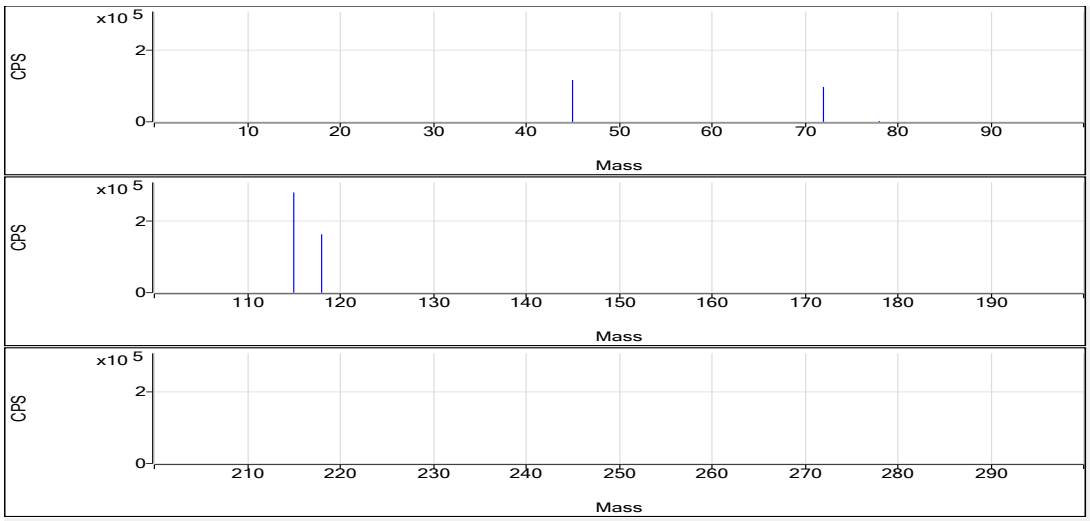
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2123089.19	1.4	104.4	Analog	0.1000	3
No Gas	Ge	72	1007317.77	0.5	100.2	Pulse	0.1000	3
H2	Sc	45	117220.19	0.3	88.7	Pulse	0.1000	3
H2	Ge	72	97914.88	1.0	87.8	Pulse	0.1000	3
H2	In	115	281324.25	2.1	95.8	Pulse	0.1000	3
He	Sc	45	37308.79	0.3	101.0	Pulse	0.1000	3
He	Ge	72	63719.14	1.2	98.7	Pulse	0.1000	3
He	In	115	61038.63	2.1	96.6	Pulse	0.1000	3
He	Tb	159	285687.73	0.4	97.6	Pulse	0.1000	3
He	Bi	209	229468.98	1.2	97.3	Pulse	0.1000	3

No Gas

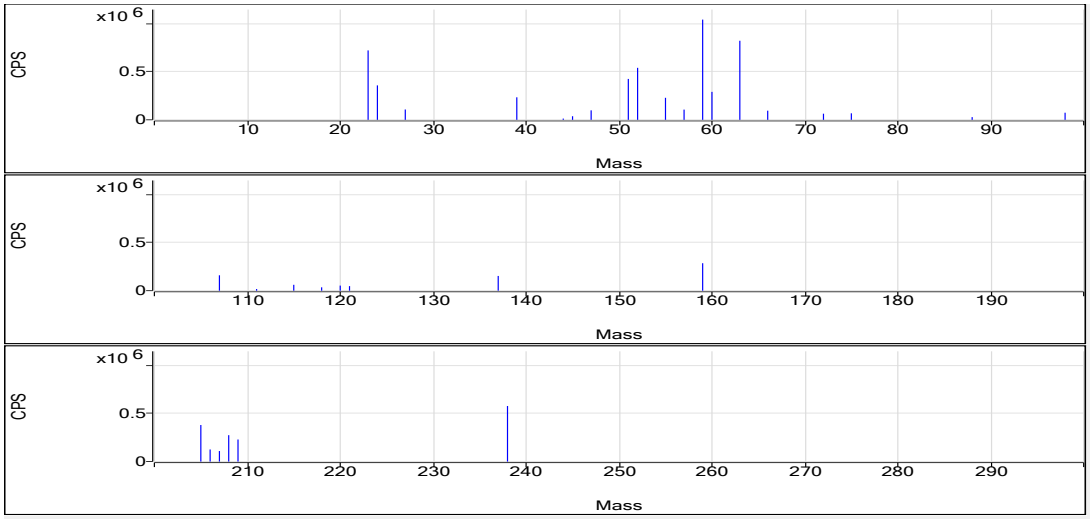


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.204	0.0378	79101.25	0.0008	2.195E-05
Be	9	1	No Gas	47.937	0.0368	79254.05	0.0008	2.195E-05
Be	9	1	No Gas	47.958	0.0368	78134.31	0.0008	2.195E-05
Se	78	2	H2	54.159	0.0236	2312.86	0.0004	1.386E-05
Se	78	2	H2	53.886	0.0234	2314.86	0.0004	1.386E-05
Se	78	2	H2	53.735	0.0234	2264.85	0.0004	1.386E-05
Na	23	3	He	4978.788	19.4677	723782.65	0.0038	0.4416
Na	23	3	He	4938.662	19.3143	721750.61	0.0038	0.4416
Na	23	3	He	4924.567	19.2605	719937.02	0.0038	0.4416
Mg	24	3	He	5206.117	9.7115	361059.88	0.0019	0.005872
Mg	24	3	He	5102.177	9.5177	355663.71	0.0019	0.005872
Mg	24	3	He	5129.119	9.5679	357639.56	0.0019	0.005872
Al	27	3	He	5063.083	2.9278	108851.09	0.0006	0.0004496
Al	27	3	He	4943.585	2.8587	106825.44	0.0006	0.0004496
Al	27	3	He	4934.273	2.8533	106653.75	0.0006	0.0004496
K	39	3	He	5013.716	6.2439	232140.07	0.0012	0.4456
K	39	3	He	5096.254	6.3394	236893.14	0.0012	0.4456
K	39	3	He	5016.465	6.2471	233509.53	0.0012	0.4456
Ca	44	3	He	5155.445	0.3444	12806.06	0.0001	0.003779
Ca	44	3	He	5201.903	0.3475	12986.21	0.0001	0.003779
Ca	44	3	He	5155.897	0.3445	12876.17	0.0001	0.003779
Ti	47	3	He	5087.167	2.6432	98271.76	0.0005	0
Ti	47	3	He	5045.163	2.6214	97958.29	0.0005	0
Ti	47	3	He	5125.181	2.663	99539.48	0.0005	0
V	51	3	He	513.188	11.4715	426494.38	0.0223	0.03054
V	51	3	He	509.304	11.3849	425437.94	0.0223	0.03054
V	51	3	He	507.097	11.3357	423715.81	0.0223	0.03054
Cr	52	3	He	511.03	14.5776	541977.92	0.0285	0.03714
Cr	52	3	He	506.356	14.4447	539778.27	0.0285	0.03714
Cr	52	3	He	506.519	14.4493	540099.95	0.0285	0.03714
Mn	55	3	He	498.366	6.1764	229629.35	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	493.07	6.1108	228351.40	0.0124	0.004415
Mn	55	3	He	494.287	6.1258	228978.12	0.0124	0.004415
Fe	57	3	He	5048.039	2.8649	106511.91	0.0006	0.001356
Fe	57	3	He	5028.081	2.8535	106633.07	0.0006	0.001356
Fe	57	3	He	4972.998	2.8223	105494.64	0.0006	0.001356
Co	59	3	He	485.521	28.2096	1048796.55	0.0581	0.002697
Co	59	3	He	481.166	27.9566	1044701.70	0.0581	0.002697
Co	59	3	He	475.682	27.638	1033080.77	0.0581	0.002697
Ni	60	3	He	519.212	4.5041	290948.00	0.0087	0.003928
Ni	60	3	He	528.284	4.5827	290457.61	0.0087	0.003928
Ni	60	3	He	530.527	4.6022	290763.24	0.0087	0.003928
Cu	63	3	He	488.375	12.77	824898.58	0.0261	0.006048
Cu	63	3	He	496.558	12.9839	822933.11	0.0261	0.006048
Cu	63	3	He	495.756	12.9629	818994.99	0.0261	0.006048
Zn	66	3	He	509.748	1.4642	94581.27	0.0029	0.003512
Zn	66	3	He	525.427	1.5091	95649.16	0.0029	0.003512
Zn	66	3	He	522.15	1.4997	94752.14	0.0029	0.003512
As	75	3	He	507.93	1.0509	67881.74	0.0021	0.0007233
As	75	3	He	517.815	1.0713	67899.97	0.0021	0.0007233
As	75	3	He	514.622	1.0647	67267.05	0.0021	0.0007233
Sr	88	3	He	51.331	0.4601	27607.76	0.009	0.0005796
Sr	88	3	He	52.05	0.4666	28278.77	0.009	0.0005796
Sr	88	3	He	49.788	0.4463	27898.29	0.009	0.0005796
Mo	98	3	He	52.795	1.2418	74507.60	0.0235	0.0003188
Mo	98	3	He	52.347	1.2313	74627.19	0.0235	0.0003188
Mo	98	3	He	49.52	1.1648	72808.22	0.0235	0.0003188
Ag	107	3	He	53.754	2.6805	160826.29	0.0499	0.0004754
Ag	107	3	He	53.485	2.667	161648.25	0.0499	0.0004754
Ag	107	3	He	50.755	2.5309	158198.80	0.0499	0.0004754
Cd	111	3	He	51.662	0.2863	17176.58	0.0055	1.07E-05
Cd	111	3	He	51.106	0.2832	17164.59	0.0055	1.07E-05
Cd	111	3	He	50.44	0.2795	17470.94	0.0055	1.07E-05
Sn	120	3	He	51.586	0.8641	51847.71	0.0164	0.01713
Sn	120	3	He	50.098	0.8397	50894.31	0.0164	0.01713
Sn	120	3	He	53.665	0.8983	56148.92	0.0164	0.01713
Sb	121	3	He	51.815	0.8017	48104.23	0.0155	0.0002641
Sb	121	3	He	50.021	0.774	46910.68	0.0155	0.0002641
Sb	121	3	He	49.093	0.7596	47482.02	0.0155	0.0002641
Ba	137	3	He	514.49	2.5616	153693.75	0.005	0.0001577
Ba	137	3	He	507.536	2.527	153157.71	0.005	0.0001577
Ba	137	3	He	492.192	2.4506	153177.10	0.005	0.0001577
Tl	205	3	He	51.356	1.3376	380328.00	0.026	0.0002504
Tl	205	3	He	51.668	1.3457	384643.16	0.026	0.0002504
Tl	205	3	He	50.202	1.3075	375116.32	0.026	0.0002504
Pb	208	3	He	51.25	1.792	273685.02	0.0349	0.001422
Pb	208	3	He	51.14	1.7881	276009.74	0.0349	0.001422
Pb	208	3	He	50.636	1.7705	273406.01	0.0349	0.001422
U	238	3	He	49.948	2.5091	575375.19	0.0502	5.657E-05
U	238	3	He	49.563	2.4897	578355.42	0.0502	5.657E-05
U	238	3	He	50.839	2.5538	579177.92	0.0502	5.657E-05
Sc	45	1	No Gas			2093902.16		
Sc	45	1	No Gas			2153361.22		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2122004.19		
Ge	72	1	No Gas			1011523.34		
Ge	72	1	No Gas			1008439.36		
Ge	72	1	No Gas			1001990.61		
Sc	45	2	H2			117120.07		
Sc	45	2	H2			117623.01		
Sc	45	2	H2			116917.48		
Ge	72	2	H2			98147.10		
Ge	72	2	H2			98729.85		
Ge	72	2	H2			96867.69		
In	115	2	H2			283087.36		
In	115	2	H2			286221.56		
In	115	2	H2			274663.84		
Sc	45	3	He			37178.70		
Sc	45	3	He			37368.66		
Sc	45	3	He			37379.00		
Ge	72	3	He			64596.52		
Ge	72	3	He			63381.13		
Ge	72	3	He			63179.76		
In	115	3	He			60271.76		
In	115	3	He			60883.68		
In	115	3	He			62782.38		
Tb	159	3	He			284339.37		
Tb	159	3	He			285832.20		
Tb	159	3	He			286891.62		
Bi	209	3	He			229319.61		
Bi	209	3	He			232299.25		
Bi	209	3	He			226788.08		

Quantitation Report

Data File Name	115_CCB.d
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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

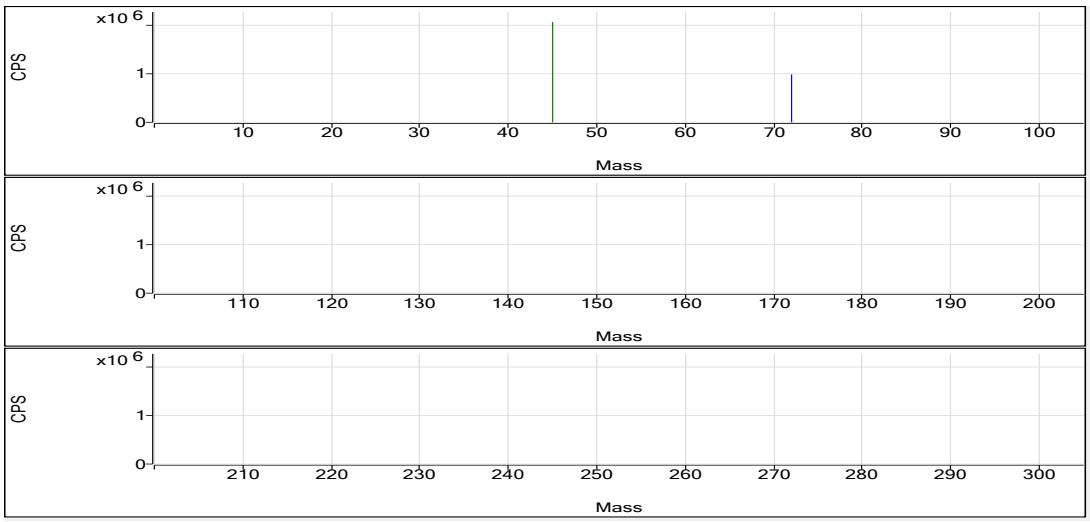
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.044	ppb	33.1	115.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.058	ppb	14.9	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	-16.781	ppb	N/A	13906.97	0.3775	Pulse	0.1000	3
Mg	24	45	He	0.800	ppb	189.3	273.35	0.0074	Pulse	0.1000	3
Al	27	45	He	2.348	ppb	21.8	66.67	0.0018	Pulse	0.1000	3
K	39	45	He	2.184	ppb	734.6	16516.48	0.4481	Pulse	0.1000	3
Ca	44	45	He	-13.319	ppb	N/A	106.67	0.0029	Pulse	0.1000	3
Ti	47	45	He	1.035	ppb	47.9	20.00	0.0005	Pulse	0.1000	3
V	51	45	He	0.018	ppb	468.3	1140.05	0.0309	Pulse	0.5000	3
Cr	52	45	He	0.027	ppb	135.1	1396.79	0.0379	Pulse	0.1000	3
Mn	55	45	He	0.425	ppb	18.2	356.68	0.0097	Pulse	0.1000	3
Fe	57	45	He	3.686	ppb	43.9	126.68	0.0034	Pulse	0.1000	3
Co	59	45	He	0.152	ppb	28.2	426.69	0.0115	Pulse	0.1000	3
Ni	60	72	He	0.211	ppb	91.8	360.02	0.0058	Pulse	0.1000	3
Cu	63	72	He	0.124	ppb	63.0	580.03	0.0093	Pulse	0.1000	3
Zn	66	72	He	-0.145	ppb	N/A	193.34	0.0031	Pulse	0.1000	3
As	75	72	He	0.223	ppb	76.8	74.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.045	ppb	37.2	60.00	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.061	ppb	57.7	106.67	0.0017	Pulse	0.1000	3
Ag	107	115	He	0.010	ppb	57.1	60.00	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	75.6	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.120	ppb	28.0	1160.09	0.0191	Pulse	0.1000	3
Sb	121	115	He	0.103	ppb	24.4	113.34	0.0019	Pulse	0.1000	3
Ba	137	115	He	0.089	ppb	84.7	36.67	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.100	ppb	1.5	810.06	0.0029	Pulse	0.1000	3
Pb	208	159	He	0.015	ppb	63.3	546.69	0.0019	Pulse	0.1000	3
U	238	209	He	0.057	ppb	7.3	660.04	0.0029	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2065307.42	0.8	101.6	Analog	0.1000	3
No Gas	Ge	72	986616.44	0.4	98.2	Pulse	0.1000	3
H2	Sc	45	115274.07	0.8	87.3	Pulse	0.1000	3
H2	Ge	72	96273.66	1.0	86.3	Pulse	0.1000	3
H2	In	115	276721.33	0.3	94.2	Pulse	0.1000	3
He	Sc	45	36874.07	3.0	99.8	Pulse	0.1000	3
He	Ge	72	62430.11	1.2	96.7	Pulse	0.1000	3
He	In	115	60737.65	1.4	96.1	Pulse	0.1000	3
He	Tb	159	282710.33	1.2	96.6	Pulse	0.1000	3
He	Bi	209	225260.10	0.6	95.5	Pulse	0.1000	3

No Gas



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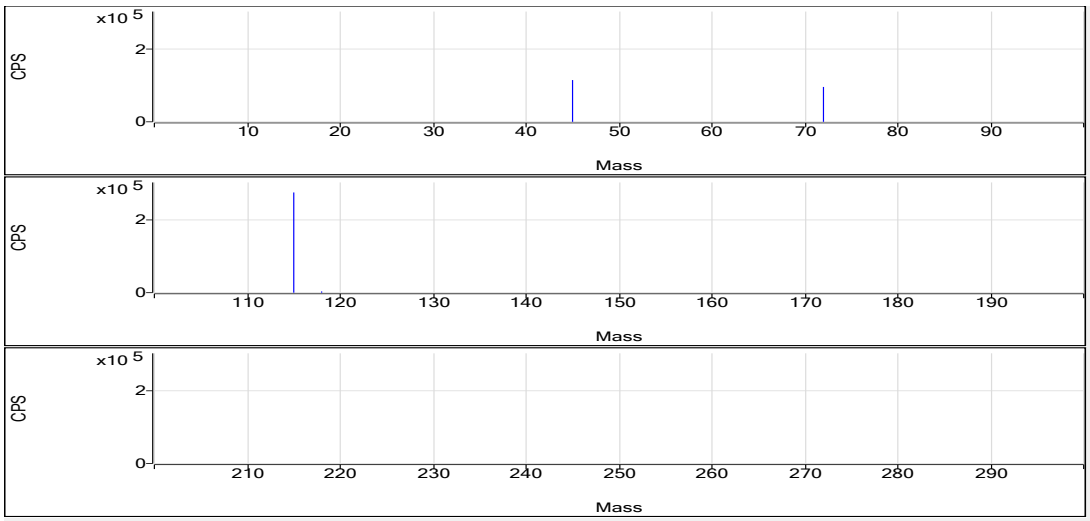
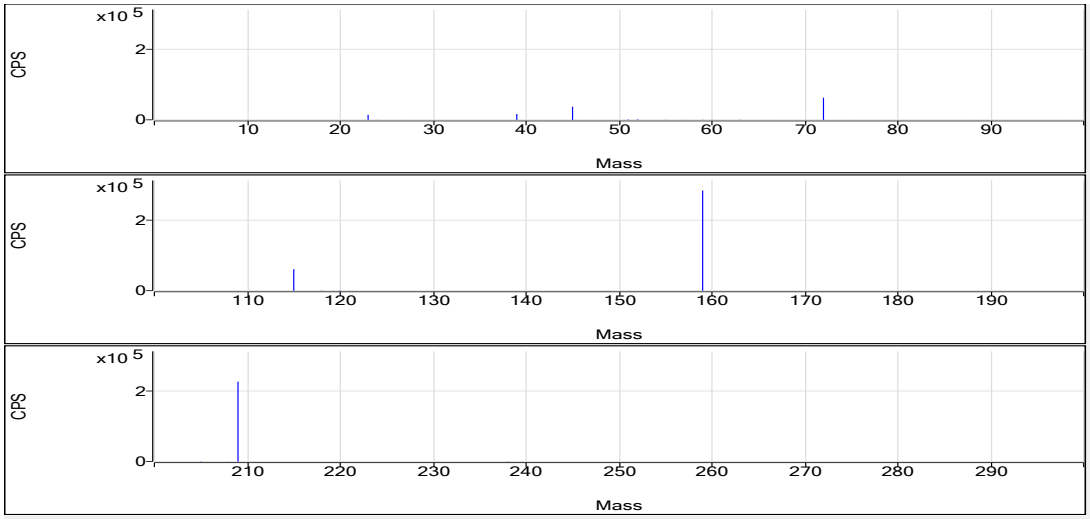


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.03	0	92.00	0.0008	2.195E-05
Be	9	1	No Gas	0.043	0.0001	114.00	0.0008	2.195E-05
Be	9	1	No Gas	0.059	0.0001	140.00	0.0008	2.195E-05
Se	78	2	H2	0.063	0	4.00	0.0004	1.386E-05
Se	78	2	H2	0.048	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.064	0	4.00	0.0004	1.386E-05
Na	23	3	He	-17.847	0.3734	14077.27	0.0038	0.4416
Na	23	3	He	-21.152	0.3608	13456.45	0.0038	0.4416
Na	23	3	He	-11.346	0.3982	14187.19	0.0038	0.4416
Mg	24	3	He	1.262	0.0082	310.02	0.0019	0.005872
Mg	24	3	He	2.028	0.0097	360.02	0.0019	0.005872
Mg	24	3	He	-0.891	0.0042	150.01	0.0019	0.005872
Al	27	3	He	1.975	0.0016	60.00	0.0006	0.0004496
Al	27	3	He	2.932	0.0021	80.00	0.0006	0.0004496
Al	27	3	He	2.135	0.0017	60.00	0.0006	0.0004496
K	39	3	He	5.751	0.4523	17050.41	0.0012	0.4456
K	39	3	He	-15.343	0.4279	15959.14	0.0012	0.4456
K	39	3	He	16.144	0.4643	16539.88	0.0012	0.4456
Ca	44	3	He	-25.069	0.0021	80.00	0.0001	0.003779
Ca	44	3	He	-4.433	0.0035	130.01	0.0001	0.003779
Ca	44	3	He	-10.454	0.0031	110.00	0.0001	0.003779
Ti	47	3	He	1.532	0.0008	30.00	0.0005	0
Ti	47	3	He	1.032	0.0005	20.00	0.0005	0
Ti	47	3	He	0.54	0.0003	10.00	0.0005	0
V	51	3	He	-0.078	0.0288	1086.05	0.0223	0.03054
V	51	3	He	0.047	0.0316	1178.05	0.0223	0.03054
V	51	3	He	0.086	0.0325	1156.06	0.0223	0.03054
Cr	52	3	He	0.019	0.0377	1420.13	0.0285	0.03714
Cr	52	3	He	-0.005	0.037	1380.11	0.0285	0.03714
Cr	52	3	He	0.066	0.039	1390.13	0.0285	0.03714
Mn	55	3	He	0.479	0.0103	390.02	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.336	0.0086	320.01	0.0124	0.004415
Mn	55	3	He	0.46	0.0101	360.02	0.0124	0.004415
Fe	57	3	He	1.819	0.0024	90.01	0.0006	0.001356
Fe	57	3	He	4.7	0.004	150.01	0.0006	0.001356
Fe	57	3	He	4.538	0.0039	140.01	0.0006	0.001356
Co	59	3	He	0.2	0.0143	540.03	0.0581	0.002697
Co	59	3	He	0.138	0.0107	400.02	0.0581	0.002697
Co	59	3	He	0.118	0.0095	340.01	0.0581	0.002697
Ni	60	3	He	0.264	0.0062	390.02	0.0087	0.003928
Ni	60	3	He	0.372	0.0072	450.02	0.0087	0.003928
Ni	60	3	He	-0.004	0.0039	240.01	0.0087	0.003928
Cu	63	3	He	0.214	0.0116	730.05	0.0261	0.006048
Cu	63	3	He	0.073	0.0079	500.02	0.0261	0.006048
Cu	63	3	He	0.085	0.0083	510.03	0.0261	0.006048
Zn	66	3	He	-0.28	0.0027	170.01	0.0029	0.003512
Zn	66	3	He	-0.061	0.0033	210.01	0.0029	0.003512
Zn	66	3	He	-0.092	0.0032	200.01	0.0029	0.003512
As	75	3	He	0.143	0.001	64.00	0.0021	0.0007233
As	75	3	He	0.419	0.0016	100.00	0.0021	0.0007233
As	75	3	He	0.106	0.0009	58.00	0.0021	0.0007233
Sr	88	3	He	0.029	0.0008	50.00	0.009	0.0005796
Sr	88	3	He	0.063	0.0011	70.00	0.009	0.0005796
Sr	88	3	He	0.045	0.001	60.00	0.009	0.0005796
Mo	98	3	He	0.022	0.0008	50.00	0.0235	0.0003188
Mo	98	3	He	0.09	0.0024	150.01	0.0235	0.0003188
Mo	98	3	He	0.07	0.002	120.00	0.0235	0.0003188
Ag	107	3	He	0.014	0.0012	70.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.022	0.0001	8.00	0.0055	1.07E-05
Sn	120	3	He	0.119	0.0191	1140.08	0.0164	0.01713
Sn	120	3	He	0.087	0.0186	1140.10	0.0164	0.01713
Sn	120	3	He	0.154	0.0197	1200.09	0.0164	0.01713
Sb	121	3	He	0.08	0.0015	90.00	0.0155	0.0002641
Sb	121	3	He	0.13	0.0023	140.01	0.0155	0.0002641
Sb	121	3	He	0.099	0.0018	110.00	0.0155	0.0002641
Ba	137	3	He	0.002	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0.132	0.0008	50.00	0.005	0.0001577
Ba	137	3	He	0.133	0.0008	50.00	0.005	0.0001577
Tl	205	3	He	0.101	0.0029	820.06	0.026	0.0002504
Tl	205	3	He	0.102	0.0029	810.07	0.026	0.0002504
Tl	205	3	He	0.099	0.0028	800.05	0.026	0.0002504
Pb	208	3	He	0.012	0.0019	300.02	0.0349	0.001422
Pb	208	3	He	0.025	0.0023	390.02	0.0349	0.001422
Pb	208	3	He	0.007	0.0017	260.01	0.0349	0.001422
U	238	3	He	0.061	0.0031	710.04	0.0502	5.657E-05
U	238	3	He	0.053	0.0027	610.04	0.0502	5.657E-05
U	238	3	He	0.057	0.0029	660.04	0.0502	5.657E-05
Sc	45	1	No Gas			2046309.03		
Sc	45	1	No Gas			2070857.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2078755.44		
Ge	72	1	No Gas			987346.94		
Ge	72	1	No Gas			982723.97		
Ge	72	1	No Gas			989778.42		
Sc	45	2	H2			116341.38		
Sc	45	2	H2			114759.98		
Sc	45	2	H2			114720.84		
Ge	72	2	H2			97371.14		
Ge	72	2	H2			95508.03		
Ge	72	2	H2			95941.81		
In	115	2	H2			277049.86		
In	115	2	H2			275860.76		
In	115	2	H2			277253.37		
Sc	45	3	He			37699.59		
Sc	45	3	He			37298.59		
Sc	45	3	He			35624.03		
Ge	72	3	He			62748.50		
Ge	72	3	He			62938.62		
Ge	72	3	He			61603.20		
In	115	3	He			59769.51		
In	115	3	He			61426.06		
In	115	3	He			61034.54		
Tb	159	3	He			285650.23		
Tb	159	3	He			279056.13		
Tb	159	3	He			283424.62		
Bi	209	3	He			226703.51		
Bi	209	3	He			224915.48		
Bi	209	3	He			224161.31		

Quantitation Report

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Acq Time	8/16/2023 10:12:40 AM
Sample Name	410-136992-W-3-A
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

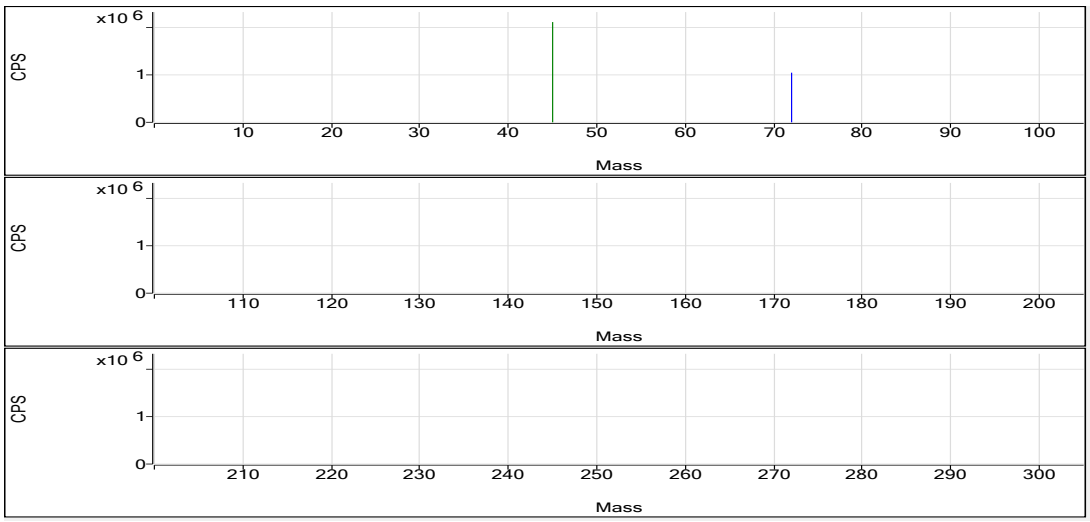
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.015	ppb	0.7	70.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	1.867	ppb	19.3	86.45	0.0008	Pulse	1.5000	3
Na	23	45	He	2161.324	ppb	1.7	324103.44	8.7009	Pulse	0.1000	3
Mg	24	45	He	13017.118	ppb	1.4	904161.81	24.2733	Pulse	0.1000	3
Al	27	45	He	2.480	ppb	68.7	70.00	0.0019	Pulse	0.1000	3
K	39	45	He	1904.949	ppb	3.5	98651.92	2.6487	Pulse	0.1000	3
Ca	44	45	He	45358.788	ppb	2.3	111780.34	3.0010	Pulse	0.1000	3
Ti	47	45	He	0.519	ppb	100.4	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	1.729	ppb	4.4	2573.58	0.0691	Pulse	0.5000	3
Cr	52	45	He	0.039	ppb	347.8	1423.45	0.0382	Pulse	0.1000	3
Mn	55	45	He	41.264	ppb	2.2	19200.08	0.5154	Pulse	0.1000	3
Fe	57	45	He	67.161	ppb	17.5	1470.13	0.0395	Pulse	0.1000	3
Co	59	45	He	0.693	ppb	8.1	1600.15	0.0429	Pulse	0.1000	3
Ni	60	72	He	1.390	ppb	26.3	1053.42	0.0160	Pulse	0.1000	3
Cu	63	72	He	0.752	ppb	6.8	1696.82	0.0257	Pulse	0.1000	3
Zn	66	72	He	253.467	ppb	1.9	48201.62	0.7298	Pulse	0.1000	3
As	75	72	He	0.621	ppb	14.7	132.67	0.0020	Pulse	0.5000	3
Sr	88	115	He	133.533	ppb	1.4	73041.69	1.1961	Pulse	0.1000	3
Mo	98	115	He	1.306	ppb	9.0	1893.54	0.0310	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	1495.0	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.237	ppb	11.0	80.67	0.0013	Pulse	0.5000	3
Sn	120	115	He	-0.279	ppb	N/A	766.72	0.0126	Pulse	0.1000	3
Sb	121	115	He	0.280	ppb	13.6	280.01	0.0046	Pulse	0.1000	3
Ba	137	115	He	103.588	ppb	1.7	31500.12	0.5159	Pulse	0.1000	3
Tl	205	159	He	0.045	ppb	14.8	406.69	0.0014	Pulse	0.1000	3
Pb	208	159	He	0.014	ppb	39.2	550.03	0.0019	Pulse	0.1000	3
U	238	209	He	0.248	ppb	2.4	2903.79	0.0125	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2116505.64	1.7	104.1	Analog	0.1000	3
No Gas	Ge	72	1047657.98	0.9	104.2	Pulse	0.1000	3
H2	Sc	45	121905.06	0.5	92.3	Pulse	0.1000	3
H2	Ge	72	104877.17	1.4	94.0	Pulse	0.1000	3
H2	In	115	283621.40	0.4	96.6	Pulse	0.1000	3
He	Sc	45	37251.63	0.8	100.8	Pulse	0.1000	3
He	Ge	72	66060.07	1.7	102.3	Pulse	0.1000	3
He	In	115	61076.76	2.1	96.7	Pulse	0.1000	3
He	Tb	159	287879.05	1.4	98.3	Pulse	0.1000	3
He	Bi	209	232477.62	0.2	98.6	Pulse	0.1000	3

No Gas



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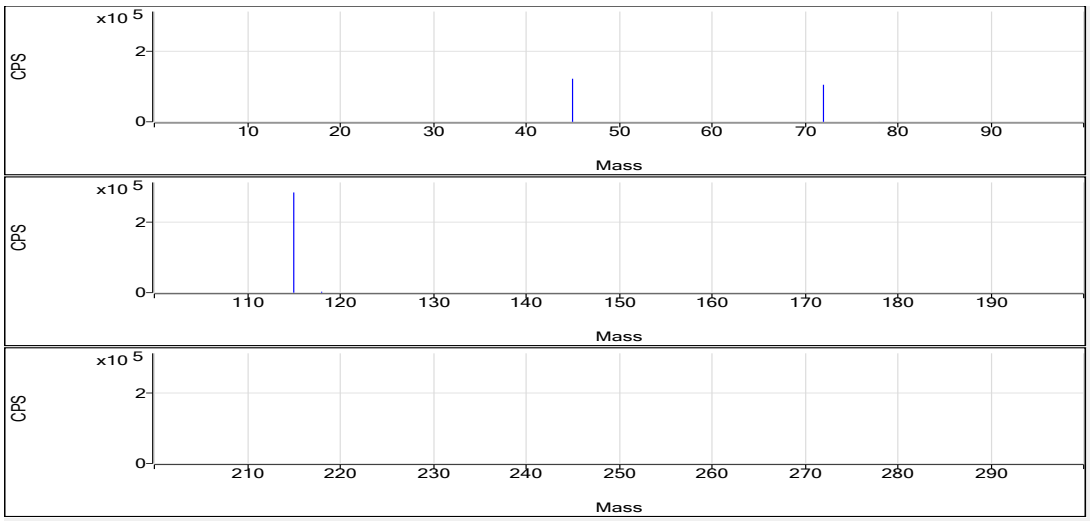
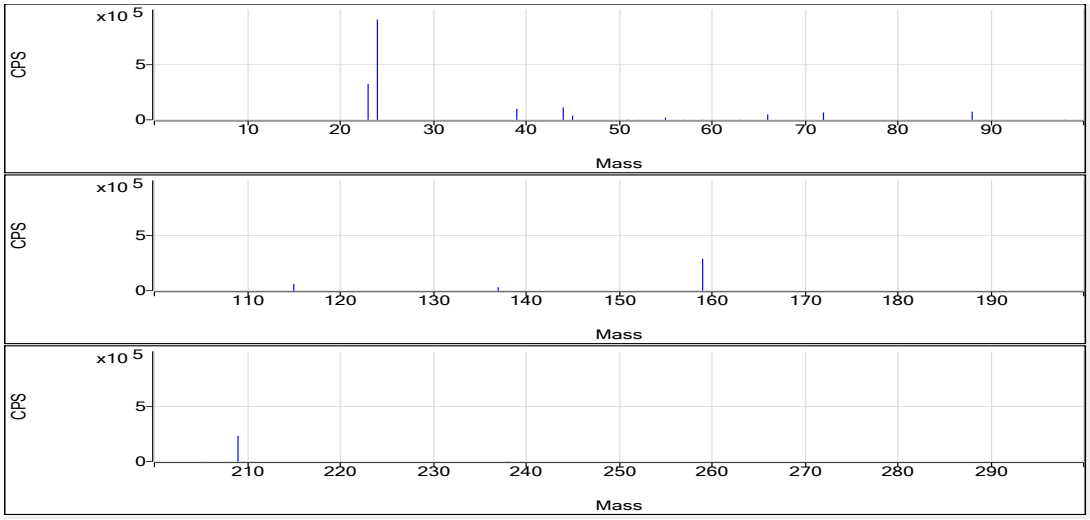


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.015	0	72.00	0.0008	2.195E-05
Be	9	1	No Gas	0.015	0	70.00	0.0008	2.195E-05
Be	9	1	No Gas	0.015	0	70.00	0.0008	2.195E-05
Se	78	2	H2	2.121	0.0009	96.67	0.0004	1.386E-05
Se	78	2	H2	2.024	0.0009	94.00	0.0004	1.386E-05
Se	78	2	H2	1.455	0.0006	68.67	0.0004	1.386E-05
Na	23	3	He	2198.507	8.843	326461.56	0.0038	0.4416
Na	23	3	He	2158.532	8.6903	325790.03	0.0038	0.4416
Na	23	3	He	2126.934	8.5695	320058.73	0.0038	0.4416
Mg	24	3	He	13216.789	24.6455	909847.64	0.0019	0.005872
Mg	24	3	He	12973.824	24.1926	906956.00	0.0019	0.005872
Mg	24	3	He	12860.741	23.9817	895681.78	0.0019	0.005872
Al	27	3	He	4.376	0.003	110.00	0.0006	0.0004496
Al	27	3	He	1.991	0.0016	60.00	0.0006	0.0004496
Al	27	3	He	1.075	0.0011	40.00	0.0006	0.0004496
K	39	3	He	1976.727	2.7317	100846.12	0.0012	0.4456
K	39	3	He	1847.607	2.5823	96809.68	0.0012	0.4456
K	39	3	He	1890.514	2.632	98299.97	0.0012	0.4456
Ca	44	3	He	46518.795	3.0777	113620.67	0.0001	0.003779
Ca	44	3	He	44503.019	2.9445	110386.53	0.0001	0.003779
Ca	44	3	He	45054.552	2.9809	111333.81	0.0001	0.003779
Ti	47	3	He	1.043	0.0005	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.515	0.0003	10.00	0.0005	0
V	51	3	He	1.789	0.0704	2600.25	0.0223	0.03054
V	51	3	He	1.643	0.0672	2518.23	0.0223	0.03054
V	51	3	He	1.755	0.0697	2602.25	0.0223	0.03054
Cr	52	3	He	0.18	0.0423	1560.13	0.0285	0.03714
Cr	52	3	He	-0.086	0.0347	1300.10	0.0285	0.03714
Cr	52	3	He	0.022	0.0378	1410.13	0.0285	0.03714
Mn	55	3	He	41.47	0.518	19123.20	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	40.251	0.5029	18853.16	0.0124	0.004415
Mn	55	3	He	42.07	0.5254	19623.87	0.0124	0.004415
Fe	57	3	He	59.693	0.0352	1300.11	0.0006	0.001356
Fe	57	3	He	61.098	0.036	1350.12	0.0006	0.001356
Fe	57	3	He	80.691	0.0471	1760.16	0.0006	0.001356
Co	59	3	He	0.63	0.0393	1450.13	0.0581	0.002697
Co	59	3	He	0.711	0.044	1650.15	0.0581	0.002697
Co	59	3	He	0.737	0.0455	1700.16	0.0581	0.002697
Ni	60	3	He	1.128	0.0137	910.07	0.0087	0.003928
Ni	60	3	He	1.234	0.0146	980.07	0.0087	0.003928
Ni	60	3	He	1.809	0.0196	1270.12	0.0087	0.003928
Cu	63	3	He	0.696	0.0243	1610.15	0.0261	0.006048
Cu	63	3	He	0.762	0.026	1740.16	0.0261	0.006048
Cu	63	3	He	0.796	0.0269	1740.16	0.0261	0.006048
Zn	66	3	He	251.022	0.7228	47990.90	0.0029	0.003512
Zn	66	3	He	250.491	0.7213	48332.02	0.0029	0.003512
Zn	66	3	He	258.889	0.7454	48281.94	0.0029	0.003512
As	75	3	He	0.685	0.0021	142.00	0.0021	0.0007233
As	75	3	He	0.661	0.0021	140.00	0.0021	0.0007233
As	75	3	He	0.516	0.0018	116.00	0.0021	0.0007233
Sr	88	3	He	134.906	1.2084	73832.22	0.009	0.0005796
Sr	88	3	He	134.246	1.2025	71852.00	0.009	0.0005796
Sr	88	3	He	131.447	1.1774	73440.85	0.009	0.0005796
Mo	98	3	He	1.212	0.0288	1760.18	0.0235	0.0003188
Mo	98	3	He	1.438	0.0341	2040.23	0.0235	0.0003188
Mo	98	3	He	1.268	0.0301	1880.21	0.0235	0.0003188
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Cd	111	3	He	0.264	0.0015	90.00	0.0055	1.07E-05
Cd	111	3	He	0.234	0.0013	78.00	0.0055	1.07E-05
Cd	111	3	He	0.212	0.0012	74.00	0.0055	1.07E-05
Sn	120	3	He	-0.345	0.0115	700.04	0.0164	0.01713
Sn	120	3	He	-0.258	0.0129	770.06	0.0164	0.01713
Sn	120	3	He	-0.233	0.0133	830.05	0.0164	0.01713
Sb	121	3	He	0.279	0.0046	280.01	0.0155	0.0002641
Sb	121	3	He	0.318	0.0052	310.01	0.0155	0.0002641
Sb	121	3	He	0.242	0.004	250.01	0.0155	0.0002641
Ba	137	3	He	103.642	0.5161	31536.89	0.005	0.0001577
Ba	137	3	He	105.372	0.5248	31356.56	0.005	0.0001577
Ba	137	3	He	101.749	0.5067	31606.92	0.005	0.0001577
Tl	205	3	He	0.052	0.0016	470.03	0.026	0.0002504
Tl	205	3	He	0.041	0.0013	380.02	0.026	0.0002504
Tl	205	3	He	0.04	0.0013	370.02	0.026	0.0002504
Pb	208	3	He	0.017	0.002	310.02	0.0349	0.001422
Pb	208	3	He	0.017	0.002	300.01	0.0349	0.001422
Pb	208	3	He	0.008	0.0017	290.01	0.0349	0.001422
U	238	3	He	0.253	0.0128	2970.48	0.0502	5.657E-05
U	238	3	He	0.241	0.0122	2830.43	0.0502	5.657E-05
U	238	3	He	0.248	0.0125	2910.46	0.0502	5.657E-05
Sc	45	1	No Gas			2157951.84		
Sc	45	1	No Gas			2100879.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2090686.06		
Ge	72	1	No Gas			1058584.36		
Ge	72	1	No Gas			1039338.81		
Ge	72	1	No Gas			1045050.77		
Sc	45	2	H2			122009.70		
Sc	45	2	H2			122413.24		
Sc	45	2	H2			121292.23		
Ge	72	2	H2			103262.53		
Ge	72	2	H2			105155.28		
Ge	72	2	H2			106213.70		
In	115	2	H2			284402.05		
In	115	2	H2			282430.82		
In	115	2	H2			284031.34		
Sc	45	3	He			36917.37		
Sc	45	3	He			37489.04		
Sc	45	3	He			37348.48		
Ge	72	3	He			66394.97		
Ge	72	3	He			67007.93		
Ge	72	3	He			64777.32		
In	115	3	He			61104.91		
In	115	3	He			59759.27		
In	115	3	He			62380.30		
Tb	159	3	He			292062.83		
Tb	159	3	He			287383.69		
Tb	159	3	He			284190.62		
Bi	209	3	He			232849.66		
Bi	209	3	He			232474.35		
Bi	209	3	He			232108.86		

Quantitation Report

Data File Name	117SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 10:14:46 AM
Sample Name	410-136992-W-4-A
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

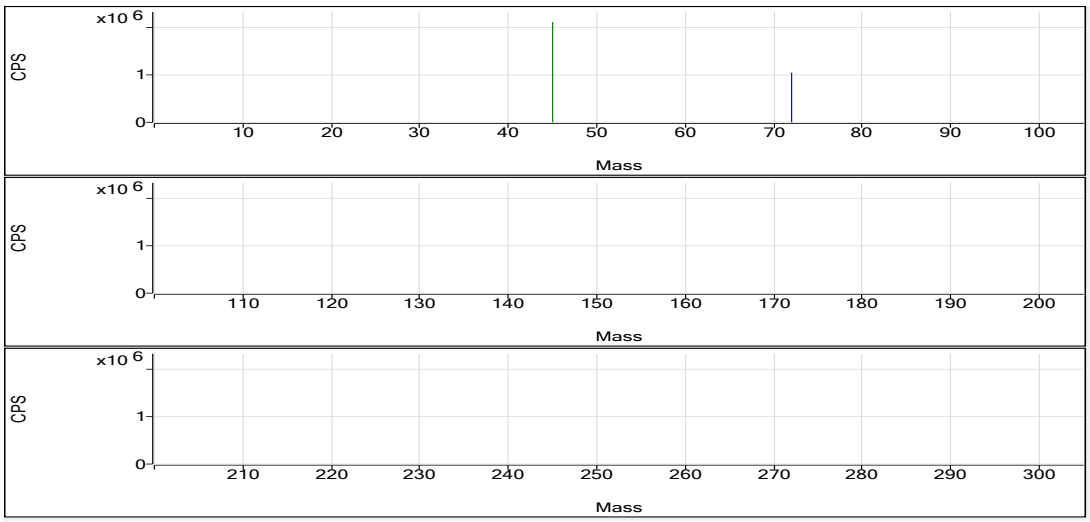
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	86.9	61.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	1.335	ppb	3.6	61.78	0.0006	Pulse	1.5000	3
Na	23	45	He	3303.216	ppb	0.8	484462.96	13.0646	Pulse	0.1000	3
Mg	24	45	He	11545.735	ppb	1.4	798324.91	21.5302	Pulse	0.1000	3
Al	27	45	He	4.361	ppb	29.3	110.01	0.0030	Pulse	0.1000	3
K	39	45	He	2264.809	ppb	1.3	113645.99	3.0648	Pulse	0.1000	3
Ca	44	45	He	44858.195	ppb	0.9	110067.55	2.9680	Pulse	0.1000	3
Ti	47	45	He	0.523	ppb	101.0	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	1.315	ppb	5.8	2219.52	0.0599	Pulse	0.5000	3
Cr	52	45	He	0.371	ppb	43.5	1770.17	0.0477	Pulse	0.1000	3
Mn	55	45	He	119.544	ppb	1.5	55058.88	1.4849	Pulse	0.1000	3
Fe	57	45	He	2032.347	ppb	1.6	42797.42	1.1542	Pulse	0.1000	3
Co	59	45	He	3.200	ppb	2.0	6995.27	0.1886	Pulse	0.1000	3
Ni	60	72	He	1.395	ppb	20.6	1060.08	0.0160	Pulse	0.1000	3
Cu	63	72	He	0.181	ppb	22.5	713.38	0.0108	Pulse	0.1000	3
Zn	66	72	He	15.400	ppb	9.9	3150.45	0.0476	Pulse	0.1000	3
As	75	72	He	2.424	ppb	3.4	379.34	0.0057	Pulse	0.5000	3
Sr	88	115	He	153.204	ppb	1.5	83412.63	1.3722	Pulse	0.1000	3
Mo	98	115	He	1.903	ppb	1.2	2740.36	0.0451	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	42.8	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.168	ppb	N/A	873.39	0.0144	Pulse	0.1000	3
Sb	121	115	He	0.174	ppb	52.1	180.01	0.0030	Pulse	0.1000	3
Ba	137	115	He	100.070	ppb	1.7	30294.12	0.4984	Pulse	0.1000	3
Tl	205	159	He	0.026	ppb	10.5	266.68	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.004	ppb	52.5	446.68	0.0016	Pulse	0.1000	3
U	238	209	He	0.151	ppb	19.0	1783.53	0.0077	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2121109.34	1.7	104.3	Analog	0.1000	3
No Gas	Ge	72	1046804.33	0.8	104.1	Pulse	0.1000	3
H2	Sc	45	121198.56	1.2	91.7	Pulse	0.1000	3
H2	Ge	72	103947.04	1.0	93.2	Pulse	0.1000	3
H2	In	115	280955.09	0.3	95.7	Pulse	0.1000	3
He	Sc	45	37084.75	1.6	100.4	Pulse	0.1000	3
He	Ge	72	66146.53	0.7	102.5	Pulse	0.1000	3
He	In	115	60789.37	0.3	96.2	Pulse	0.1000	3
He	Tb	159	285575.30	0.4	97.5	Pulse	0.1000	3
He	Bi	209	232999.40	1.4	98.8	Pulse	0.1000	3

No Gas



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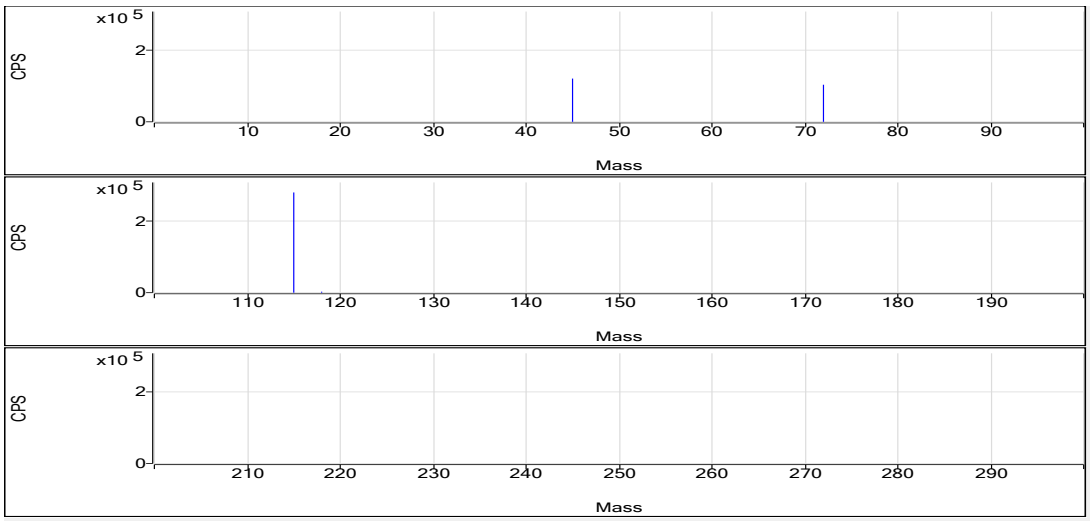
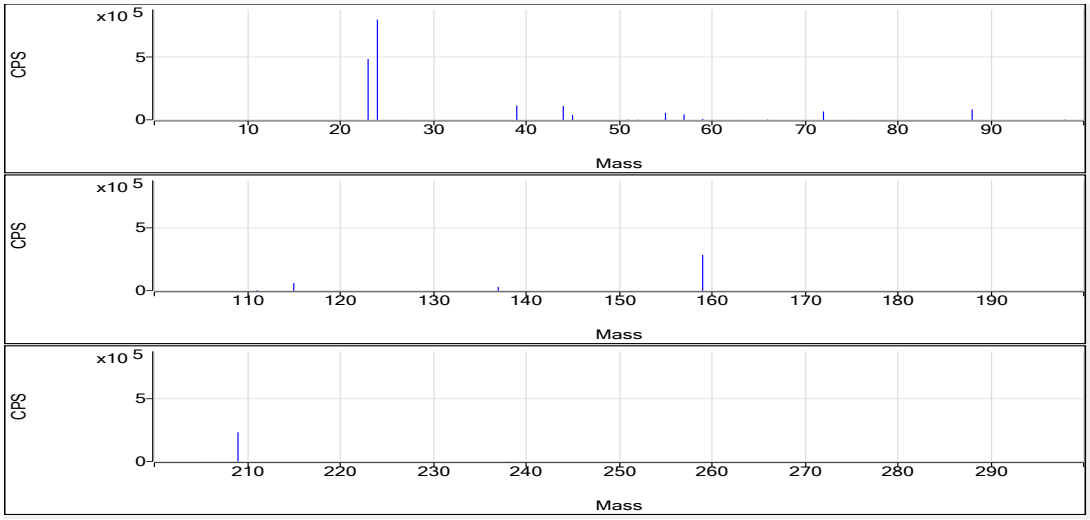


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0	0	48.00	0.0008	2.195E-05
Be	9	1	No Gas	0.011	0	64.00	0.0008	2.195E-05
Be	9	1	No Gas	0.016	0	72.00	0.0008	2.195E-05
Se	78	2	H2	1.385	0.0006	63.33	0.0004	1.386E-05
Se	78	2	H2	1.289	0.0006	60.00	0.0004	1.386E-05
Se	78	2	H2	1.331	0.0006	62.00	0.0004	1.386E-05
Na	23	3	He	3298.632	13.0471	489512.77	0.0038	0.4416
Na	23	3	He	3332.041	13.1747	479780.07	0.0038	0.4416
Na	23	3	He	3278.974	12.972	484096.05	0.0038	0.4416
Mg	24	3	He	11406.93	21.2715	798082.57	0.0019	0.005872
Mg	24	3	He	11725.385	21.8651	796254.83	0.0019	0.005872
Mg	24	3	He	11504.889	21.4541	800637.33	0.0019	0.005872
Al	27	3	He	4.755	0.0032	120.01	0.0006	0.0004496
Al	27	3	He	5.397	0.0036	130.01	0.0006	0.0004496
Al	27	3	He	2.93	0.0021	80.00	0.0006	0.0004496
K	39	3	He	2254.822	3.0533	114555.99	0.0012	0.4456
K	39	3	He	2298.853	3.1042	113044.72	0.0012	0.4456
K	39	3	He	2240.753	3.037	113337.27	0.0012	0.4456
Ca	44	3	He	44528.466	2.9462	110537.69	0.0001	0.003779
Ca	44	3	He	44730.599	2.9595	107776.49	0.0001	0.003779
Ca	44	3	He	45315.519	2.9982	111888.46	0.0001	0.003779
Ti	47	3	He	0.513	0.0003	10.00	0.0005	0
Ti	47	3	He	1.057	0.0005	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	1.275	0.059	2212.18	0.0223	0.03054
V	51	3	He	1.404	0.0618	2252.19	0.0223	0.03054
V	51	3	He	1.267	0.0588	2194.18	0.0223	0.03054
Cr	52	3	He	0.503	0.0514	1930.19	0.0285	0.03714
Cr	52	3	He	0.191	0.0426	1550.15	0.0285	0.03714
Cr	52	3	He	0.418	0.049	1830.18	0.0285	0.03714
Mn	55	3	He	117.807	1.4634	54904.69	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	121.34	1.5071	54884.97	0.0124	0.004415
Mn	55	3	He	119.485	1.4842	55386.99	0.0124	0.004415
Fe	57	3	He	2026.285	1.1508	43175.65	0.0006	0.001356
Fe	57	3	He	2066.787	1.1737	42743.81	0.0006	0.001356
Fe	57	3	He	2003.971	1.1381	42472.79	0.0006	0.001356
Co	59	3	He	3.244	0.1912	7172.02	0.0581	0.002697
Co	59	3	He	3.126	0.1843	6711.82	0.0581	0.002697
Co	59	3	He	3.229	0.1903	7101.97	0.0581	0.002697
Ni	60	3	He	1.074	0.0132	870.05	0.0087	0.003928
Ni	60	3	He	1.627	0.018	1190.09	0.0087	0.003928
Ni	60	3	He	1.484	0.0168	1120.09	0.0087	0.003928
Cu	63	3	He	0.164	0.0103	680.04	0.0261	0.006048
Cu	63	3	He	0.151	0.01	660.04	0.0261	0.006048
Cu	63	3	He	0.228	0.012	800.05	0.0261	0.006048
Zn	66	3	He	17.094	0.0525	3450.54	0.0029	0.003512
Zn	66	3	He	14.16	0.0441	2910.39	0.0029	0.003512
Zn	66	3	He	14.945	0.0463	3090.43	0.0029	0.003512
As	75	3	He	2.329	0.0055	364.01	0.0021	0.0007233
As	75	3	He	2.478	0.0058	386.01	0.0021	0.0007233
As	75	3	He	2.464	0.0058	388.01	0.0021	0.0007233
Sr	88	3	He	150.614	1.349	82208.80	0.009	0.0005796
Sr	88	3	He	154.305	1.382	83707.78	0.009	0.0005796
Sr	88	3	He	154.693	1.3855	84321.31	0.009	0.0005796
Mo	98	3	He	1.899	0.045	2740.36	0.0235	0.0003188
Mo	98	3	He	1.882	0.0446	2700.35	0.0235	0.0003188
Mo	98	3	He	1.929	0.0457	2780.36	0.0235	0.0003188
Ag	107	3	He	-0.01	0	0.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	-0.154	0.0146	890.06	0.0164	0.01713
Sn	120	3	He	-0.128	0.015	910.06	0.0164	0.01713
Sn	120	3	He	-0.223	0.0135	820.06	0.0164	0.01713
Sb	121	3	He	0.078	0.0015	90.00	0.0155	0.0002641
Sb	121	3	He	0.186	0.0031	190.01	0.0155	0.0002641
Sb	121	3	He	0.259	0.0043	260.01	0.0155	0.0002641
Ba	137	3	He	98.298	0.4895	29833.02	0.005	0.0001577
Ba	137	3	He	101.695	0.5065	30674.91	0.005	0.0001577
Ba	137	3	He	100.217	0.4991	30374.44	0.005	0.0001577
Tl	205	3	He	0.029	0.001	290.02	0.026	0.0002504
Tl	205	3	He	0.024	0.0009	250.01	0.026	0.0002504
Tl	205	3	He	0.026	0.0009	260.01	0.026	0.0002504
Pb	208	3	He	0.005	0.0016	300.02	0.0349	0.001422
Pb	208	3	He	0.005	0.0016	190.01	0.0349	0.001422
Pb	208	3	He	0.002	0.0015	290.01	0.0349	0.001422
U	238	3	He	0.126	0.0064	1500.14	0.0502	5.657E-05
U	238	3	He	0.145	0.0073	1680.20	0.0502	5.657E-05
U	238	3	He	0.183	0.0092	2170.26	0.0502	5.657E-05
Sc	45	1	No Gas			2160990.28		
Sc	45	1	No Gas			2090089.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2112248.25		
Ge	72	1	No Gas			1056037.09		
Ge	72	1	No Gas			1038986.55		
Ge	72	1	No Gas			1045389.36		
Sc	45	2	H2			119509.21		
Sc	45	2	H2			121886.80		
Sc	45	2	H2			122199.67		
Ge	72	2	H2			102757.96		
Ge	72	2	H2			104492.11		
Ge	72	2	H2			104591.06		
In	115	2	H2			279954.70		
In	115	2	H2			281692.03		
In	115	2	H2			281218.55		
Sc	45	3	He			37518.95		
Sc	45	3	He			36416.64		
Sc	45	3	He			37318.66		
Ge	72	3	He			65731.26		
Ge	72	3	He			66012.61		
Ge	72	3	He			66695.71		
In	115	3	He			60944.42		
In	115	3	He			60572.45		
In	115	3	He			60863.64		
Tb	159	3	He			286280.78		
Tb	159	3	He			286284.00		
Tb	159	3	He			284161.11		
Bi	209	3	He			234701.89		
Bi	209	3	He			229156.48		
Bi	209	3	He			235139.82		

Quantitation Report

Data File Name	118SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 10:16:48 AM
Sample Name	410-136992-W-5-A
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

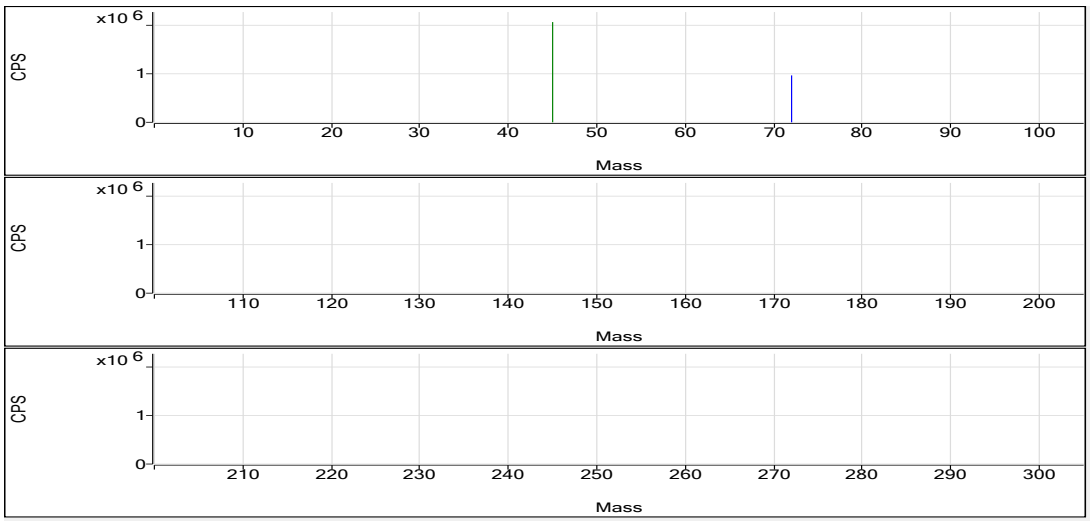
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.011	ppb	30.3	62.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.114	ppb	91.1	6.22	0.0001	Pulse	1.5000	3
Na	23	45	He	798926.273	ppb	2.5	109235868.37	3 053.4782	Analog	0.1000	3
Mg	24	45	He	88264.194	ppb	1.7	5887459.70	164.5540	Analog	0.1000	3
Al	27	45	He	14.042	ppb	2.1	306.68	0.0086	Pulse	0.1000	3
K	39	45	He	16480.037	ppb	2.1	697795.80	19.5045	Pulse	0.1000	3
Ca	44	45	He	161662.750	ppb	2.0	382322.54	10.6863	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.276	ppb	24.3	1312.74	0.0367	Pulse	0.5000	3
Cr	52	45	He	0.763	ppb	27.3	2103.56	0.0589	Pulse	0.1000	3
Mn	55	45	He	4359.967	ppb	2.7	1931762.78	53.9999	Analog	0.1000	3
Fe	57	45	He	32120.508	ppb	1.7	651932.28	18.2218	Pulse	0.1000	3
Co	59	45	He	0.236	ppb	34.9	586.71	0.0164	Pulse	0.1000	3
Ni	60	72	He	0.614	ppb	32.8	570.03	0.0093	Pulse	0.1000	3
Cu	63	72	He	0.449	ppb	15.2	1096.75	0.0178	Pulse	0.1000	3
Zn	66	72	He	12.662	ppb	11.5	2453.62	0.0398	Pulse	0.1000	3
As	75	72	He	1.669	ppb	4.2	257.33	0.0042	Pulse	0.5000	3
Sr	88	115	He	1512.813	ppb	0.2	807350.54	13.5445	Pulse	0.1000	3
Mo	98	115	He	0.441	ppb	7.1	636.70	0.0107	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	248.9	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	56.0	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.212	ppb	N/A	813.39	0.0136	Pulse	0.1000	3
Sb	121	115	He	0.387	ppb	25.8	373.35	0.0063	Pulse	0.1000	3
Ba	137	115	He	330.519	ppb	0.2	98093.31	1.6457	Pulse	0.1000	3
Tl	205	159	He	0.014	ppb	45.4	170.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.021	ppb	8.9	596.70	0.0022	Pulse	0.1000	3
U	238	209	He	0.612	ppb	2.9	6748.67	0.0308	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2056419.92	2.8	101.2	Analog	0.1000	3
No Gas	Ge	72	962185.32	1.6	95.7	Pulse	0.1000	3
H2	Sc	45	121438.13	1.4	91.9	Pulse	0.1000	3
H2	Ge	72	98145.40	2.2	88.0	Pulse	0.1000	3
H2	In	115	270127.68	1.1	92.0	Pulse	0.1000	3
He	Sc	45	35784.90	1.8	96.8	Pulse	0.1000	3
He	Ge	72	61639.85	0.4	95.5	Pulse	0.1000	3
He	In	115	59607.48	0.6	94.3	Pulse	0.1000	3
He	Tb	159	275716.39	0.5	94.2	Pulse	0.1000	3
He	Bi	209	219065.13	0.8	92.9	Pulse	0.1000	3

No Gas



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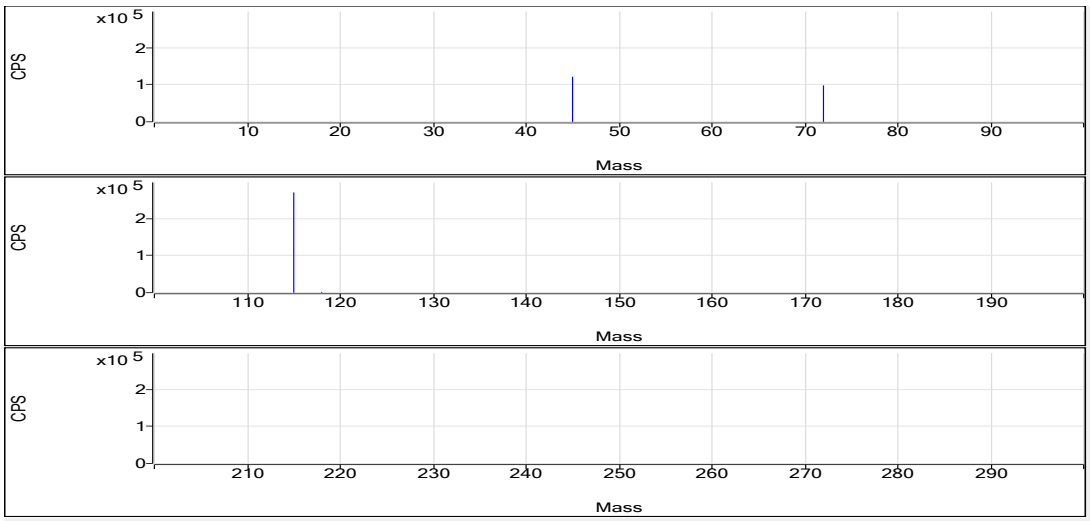
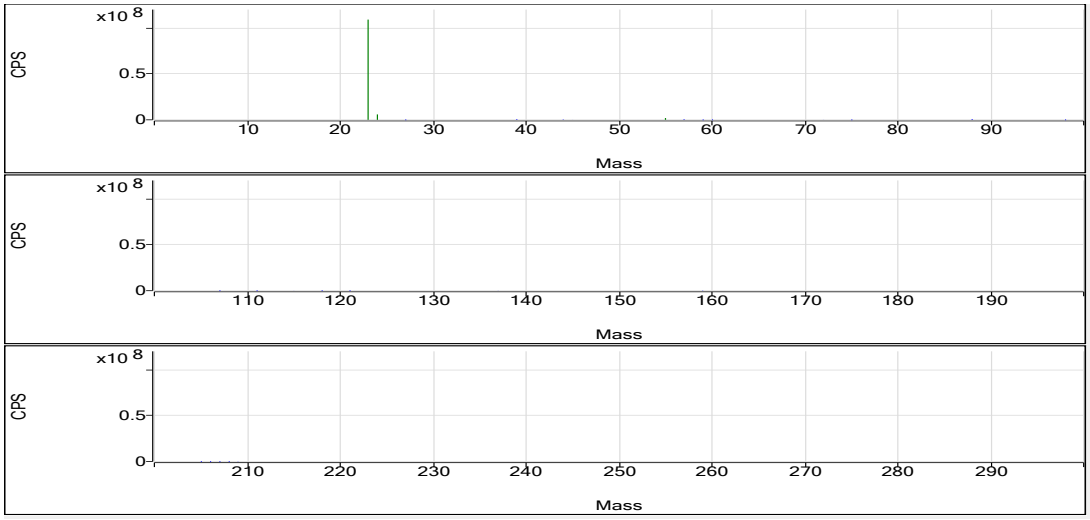


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.015	0	68.00	0.0008	2.195E-05
Be	9	1	No Gas	0.009	0	62.00	0.0008	2.195E-05
Be	9	1	No Gas	0.009	0	58.00	0.0008	2.195E-05
Se	78	2	H2	0.045	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.233	0.0001	11.33	0.0004	1.386E-05
Se	78	2	H2	0.064	0	4.00	0.0004	1.386E-05
Na	23	3	He	801916.873	3064.9065	108970238.38	0.0038	0.4416
Na	23	3	He	817307.6	3123.721	110216248.36	0.0038	0.4416
Na	23	3	He	777554.346	2971.807	108521118.38	0.0038	0.4416
Mg	24	3	He	89541.199	166.9347	5935226.79	0.0019	0.005872
Mg	24	3	He	88689.444	165.3468	5834037.41	0.0019	0.005872
Mg	24	3	He	86561.938	161.3806	5893114.91	0.0019	0.005872
Al	27	3	He	13.817	0.0084	300.02	0.0006	0.0004496
Al	27	3	He	13.929	0.0085	300.01	0.0006	0.0004496
Al	27	3	He	14.379	0.0088	320.01	0.0006	0.0004496
K	39	3	He	16638.251	19.6875	699972.26	0.0012	0.4456
K	39	3	He	16716.521	19.778	697839.83	0.0012	0.4456
K	39	3	He	16085.339	19.048	695575.30	0.0012	0.4456
Ca	44	3	He	163749.237	10.8242	384845.31	0.0001	0.003779
Ca	44	3	He	163212.778	10.7887	380666.17	0.0001	0.003779
Ca	44	3	He	158026.237	10.446	381456.13	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.28	0.0368	1308.07	0.0223	0.03054
V	51	3	He	0.341	0.0381	1346.07	0.0223	0.03054
V	51	3	He	0.207	0.0352	1284.07	0.0223	0.03054
Cr	52	3	He	0.899	0.0627	2230.25	0.0285	0.03714
Cr	52	3	He	0.867	0.0618	2180.23	0.0285	0.03714
Cr	52	3	He	0.524	0.052	1900.20	0.0285	0.03714
Mn	55	3	He	4428.522	54.8489	1950106.53	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4427.574	54.8371	1934853.25	0.0124	0.004415
Mn	55	3	He	4223.805	52.3136	1910328.57	0.0124	0.004415
Fe	57	3	He	32309.287	18.3288	651667.22	0.0006	0.001356
Fe	57	3	He	32538.086	18.4586	651287.88	0.0006	0.001356
Fe	57	3	He	31514.151	17.8778	652841.75	0.0006	0.001356
Co	59	3	He	0.331	0.0219	780.06	0.0581	0.002697
Co	59	3	He	0.188	0.0136	480.03	0.0581	0.002697
Co	59	3	He	0.189	0.0137	500.04	0.0581	0.002697
Ni	60	3	He	0.687	0.0099	610.03	0.0087	0.003928
Ni	60	3	He	0.769	0.0106	650.04	0.0087	0.003928
Ni	60	3	He	0.386	0.0073	450.02	0.0087	0.003928
Cu	63	3	He	0.525	0.0198	1220.10	0.0261	0.006048
Cu	63	3	He	0.392	0.0163	1000.08	0.0261	0.006048
Cu	63	3	He	0.431	0.0173	1070.08	0.0261	0.006048
Zn	66	3	He	13.024	0.0408	2520.30	0.0029	0.003512
Zn	66	3	He	11.064	0.0352	2160.24	0.0029	0.003512
Zn	66	3	He	13.897	0.0433	2680.32	0.0029	0.003512
As	75	3	He	1.594	0.004	248.00	0.0021	0.0007233
As	75	3	He	1.684	0.0042	258.00	0.0021	0.0007233
As	75	3	He	1.73	0.0043	266.00	0.0021	0.0007233
Sr	88	3	He	1509.961	13.519	811485.46	0.009	0.0005796
Sr	88	3	He	1511.419	13.532	802488.66	0.009	0.0005796
Sr	88	3	He	1517.06	13.5825	808077.49	0.009	0.0005796
Mo	98	3	He	0.404	0.0098	590.03	0.0235	0.0003188
Mo	98	3	He	0.46	0.0111	660.04	0.0235	0.0003188
Mo	98	3	He	0.458	0.0111	660.04	0.0235	0.0003188
Ag	107	3	He	0.011	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.001	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.201	0.0138	830.06	0.0164	0.01713
Sn	120	3	He	-0.16	0.0145	860.06	0.0164	0.01713
Sn	120	3	He	-0.275	0.0126	750.05	0.0164	0.01713
Sb	121	3	He	0.5	0.008	480.02	0.0155	0.0002641
Sb	121	3	He	0.354	0.0057	340.02	0.0155	0.0002641
Sb	121	3	He	0.309	0.005	300.01	0.0155	0.0002641
Ba	137	3	He	329.888	1.6425	98593.60	0.005	0.0001577
Ba	137	3	He	331.386	1.65	97848.73	0.005	0.0001577
Ba	137	3	He	330.284	1.6445	97837.60	0.005	0.0001577
Tl	205	3	He	0.021	0.0008	220.01	0.026	0.0002504
Tl	205	3	He	0.008	0.0005	130.01	0.026	0.0002504
Tl	205	3	He	0.013	0.0006	160.01	0.026	0.0002504
Pb	208	3	He	0.02	0.0021	290.02	0.0349	0.001422
Pb	208	3	He	0.023	0.0022	350.02	0.0349	0.001422
Pb	208	3	He	0.02	0.0021	340.02	0.0349	0.001422
U	238	3	He	0.612	0.0308	6711.93	0.0502	5.657E-05
U	238	3	He	0.63	0.0317	6922.12	0.0502	5.657E-05
U	238	3	He	0.594	0.0299	6611.96	0.0502	5.657E-05
Sc	45	1	No Gas			2031914.50		
Sc	45	1	No Gas			2121563.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2015782.00		
Ge	72	1	No Gas			953537.17		
Ge	72	1	No Gas			979925.92		
Ge	72	1	No Gas			953092.88		
Sc	45	2	H2			123270.31		
Sc	45	2	H2			121000.53		
Sc	45	2	H2			120043.56		
Ge	72	2	H2			100250.45		
Ge	72	2	H2			98265.75		
Ge	72	2	H2			95919.99		
In	115	2	H2			273385.97		
In	115	2	H2			267441.91		
In	115	2	H2			269555.17		
Sc	45	3	He			35554.18		
Sc	45	3	He			35283.64		
Sc	45	3	He			36516.88		
Ge	72	3	He			61723.84		
Ge	72	3	He			61341.71		
Ge	72	3	He			61854.00		
In	115	3	He			60030.43		
In	115	3	He			59307.27		
In	115	3	He			59498.09		
Tb	159	3	He			276010.48		
Tb	159	3	He			276884.76		
Tb	159	3	He			274253.94		
Bi	209	3	He			217763.45		
Bi	209	3	He			218292.77		
Bi	209	3	He			221139.18		

Quantitation Report

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Acq Time	8/16/2023 10:18:52 AM
Sample Name	410-136992-W-5-A @100
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

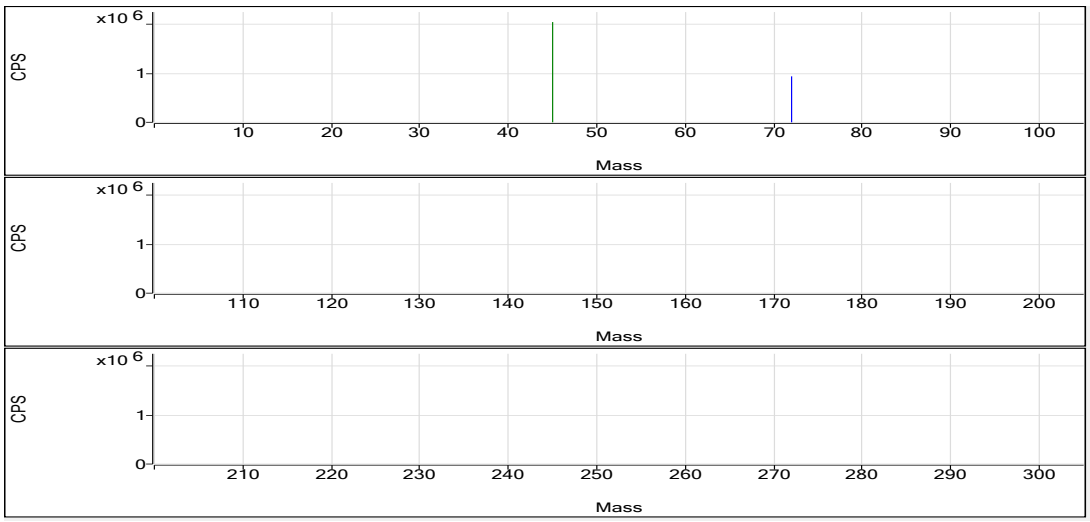
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.001	ppb	299.4	46.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.007	ppb	364.8	1.56	0.0000	Pulse	1.5000	3
Na	23	45	He	8343.145	ppb	2.6	1174211.26	32.3243	Analog	0.1000	3
Mg	24	45	He	874.530	ppb	3.7	59423.90	1.6362	Pulse	0.1000	3
Al	27	45	He	2.563	ppb	21.6	70.00	0.0019	Pulse	0.1000	3
K	39	45	He	165.109	ppb	12.1	23118.80	0.6366	Pulse	0.1000	3
Ca	44	45	He	1594.592	ppb	3.8	3964.01	0.1091	Pulse	0.1000	3
Ti	47	45	He	0.530	ppb	2.5	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.121	ppb	N/A	1011.37	0.0278	Pulse	0.5000	3
Cr	52	45	He	-0.036	ppb	N/A	1310.11	0.0361	Pulse	0.1000	3
Mn	55	45	He	42.175	ppb	3.7	19129.81	0.5267	Pulse	0.1000	3
Fe	57	45	He	326.666	ppb	4.8	6778.46	0.1867	Pulse	0.1000	3
Co	59	45	He	0.047	ppb	65.7	196.68	0.0054	Pulse	0.1000	3
Ni	60	72	He	0.123	ppb	94.8	296.68	0.0050	Pulse	0.1000	3
Cu	63	72	He	0.000	ppb	23079.4	360.02	0.0061	Pulse	0.1000	3
Zn	66	72	He	0.523	ppb	76.5	296.68	0.0050	Pulse	0.1000	3
As	75	72	He	0.030	ppb	260.5	46.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	14.917	ppb	3.6	8215.99	0.1341	Pulse	0.1000	3
Mo	98	115	He	0.042	ppb	33.2	80.00	0.0013	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	16.67	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	59.1	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.079	ppb	N/A	970.07	0.0158	Pulse	0.1000	3
Sb	121	115	He	0.028	ppb	166.7	43.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	3.290	ppb	12.0	1013.41	0.0165	Pulse	0.1000	3
Tl	205	159	He	0.025	ppb	17.4	256.68	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	92.7	490.02	0.0017	Pulse	0.1000	3
U	238	209	He	0.016	ppb	22.9	196.68	0.0009	Pulse	0.1000	3

ISTD Table:

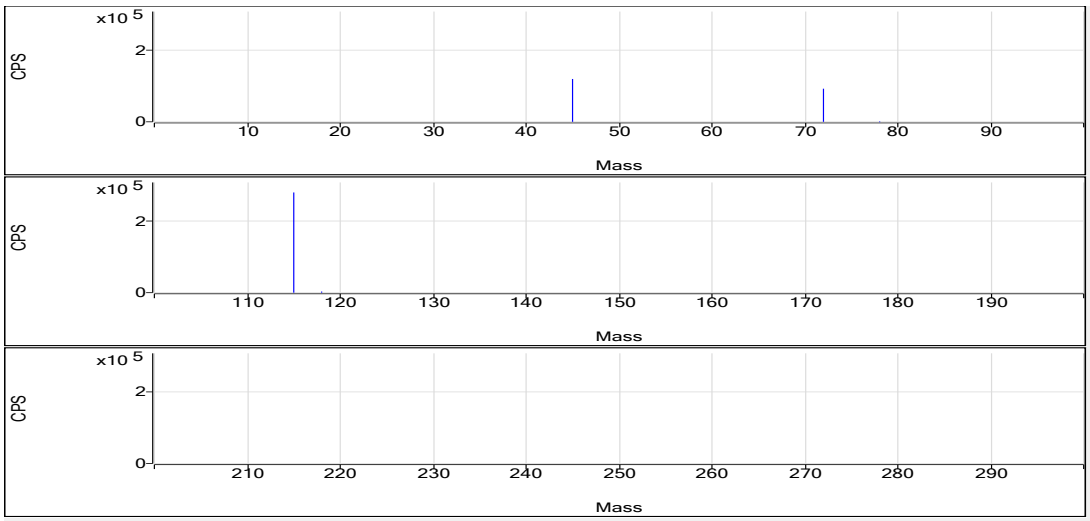
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2047937.00	1.4	100.7	Analog	0.1000	3
No Gas	Ge	72	938800.71	0.9	93.4	Pulse	0.1000	3
H2	Sc	45	119070.90	0.4	90.1	Pulse	0.1000	3
H2	Ge	72	92029.58	1.0	82.5	Pulse	0.1000	3
H2	In	115	278615.41	0.5	94.9	Pulse	0.1000	3
He	Sc	45	36339.60	2.5	98.3	Pulse	0.1000	3
He	Ge	72	59337.22	1.4	91.9	Pulse	0.1000	3
He	In	115	61243.97	0.9	96.9	Pulse	0.1000	3
He	Tb	159	284502.48	0.1	97.2	Pulse	0.1000	3
He	Bi	209	228593.56	0.9	96.9	Pulse	0.1000	3

No Gas

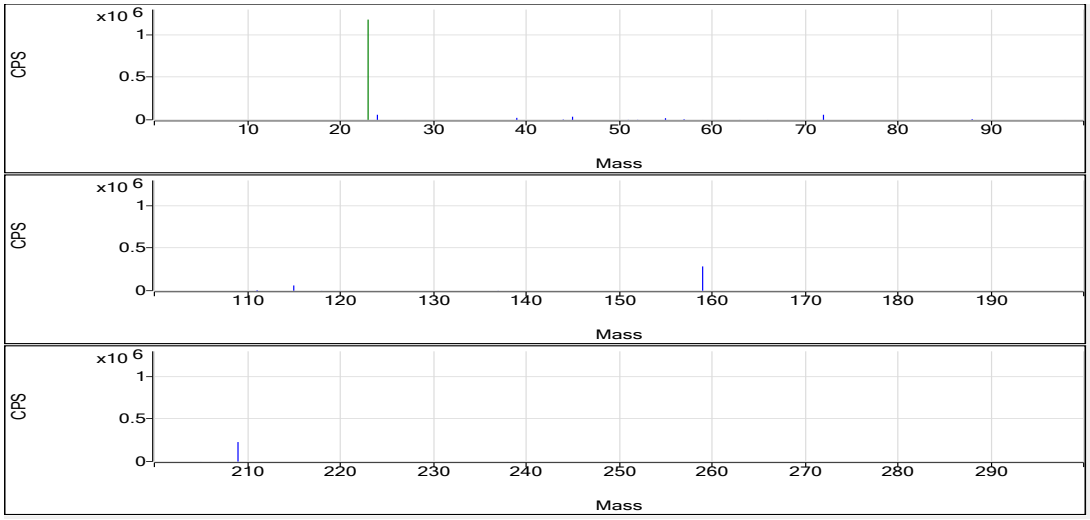


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	50.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.001	0	44.00	0.0008	2.195E-05
Be	9	1	No Gas	0	0	44.00	0.0008	2.195E-05
Se	78	2	H2	0.001	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.035	0	2.67	0.0004	1.386E-05
Se	78	2	H2	-0.015	0	0.67	0.0004	1.386E-05
Na	23	3	He	8156.67	31.6117	1180656.15	0.0038	0.4416
Na	23	3	He	8290.931	32.1248	1158275.76	0.0038	0.4416
Na	23	3	He	8581.835	33.2364	1183701.86	0.0038	0.4416
Mg	24	3	He	837.852	1.5679	58557.27	0.0019	0.005872
Mg	24	3	He	887.278	1.66	59852.04	0.0019	0.005872
Mg	24	3	He	898.459	1.6808	59862.40	0.0019	0.005872
Al	27	3	He	2.001	0.0016	60.00	0.0006	0.0004496
Al	27	3	He	2.58	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	3.108	0.0022	80.00	0.0006	0.0004496
K	39	3	He	143.892	0.612	22858.45	0.0012	0.4456
K	39	3	He	167.915	0.6398	23068.69	0.0012	0.4456
K	39	3	He	183.519	0.6579	23429.27	0.0012	0.4456
Ca	44	3	He	1527.386	0.1047	3910.67	0.0001	0.003779
Ca	44	3	He	1613.603	0.1104	3980.68	0.0001	0.003779
Ca	44	3	He	1642.788	0.1123	4000.68	0.0001	0.003779
Ti	47	3	He	0.515	0.0003	10.00	0.0005	0
Ti	47	3	He	0.534	0.0003	10.00	0.0005	0
Ti	47	3	He	0.54	0.0003	10.00	0.0005	0
V	51	3	He	-0.179	0.0266	992.04	0.0223	0.03054
V	51	3	He	-0.066	0.0291	1048.04	0.0223	0.03054
V	51	3	He	-0.118	0.0279	994.04	0.0223	0.03054
Cr	52	3	He	-0.148	0.0329	1230.10	0.0285	0.03714
Cr	52	3	He	-0.018	0.0366	1320.11	0.0285	0.03714
Cr	52	3	He	0.057	0.0388	1380.13	0.0285	0.03714
Mn	55	3	He	40.381	0.5045	18842.78	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	43.165	0.539	19433.57	0.0124	0.004415
Mn	55	3	He	42.978	0.5367	19113.09	0.0124	0.004415
Fe	57	3	He	309.217	0.1768	6601.75	0.0006	0.001356
Fe	57	3	He	339.956	0.1942	7001.85	0.0006	0.001356
Fe	57	3	He	330.826	0.189	6731.78	0.0006	0.001356
Co	59	3	He	0.046	0.0054	200.01	0.0581	0.002697
Co	59	3	He	0.078	0.0072	260.01	0.0581	0.002697
Co	59	3	He	0.016	0.0037	130.01	0.0581	0.002697
Ni	60	3	He	0.051	0.0044	260.01	0.0087	0.003928
Ni	60	3	He	0.06	0.0044	260.01	0.0087	0.003928
Ni	60	3	He	0.257	0.0062	370.02	0.0087	0.003928
Cu	63	3	He	0.052	0.0074	440.03	0.0261	0.006048
Cu	63	3	He	-0.068	0.0043	250.01	0.0261	0.006048
Cu	63	3	He	0.017	0.0065	390.02	0.0261	0.006048
Zn	66	3	He	0.3	0.0044	260.01	0.0029	0.003512
Zn	66	3	He	0.984	0.0063	370.02	0.0029	0.003512
Zn	66	3	He	0.284	0.0043	260.01	0.0029	0.003512
As	75	3	He	0.122	0.001	58.00	0.0021	0.0007233
As	75	3	He	-0.019	0.0007	40.00	0.0021	0.0007233
As	75	3	He	-0.012	0.0007	42.00	0.0021	0.0007233
Sr	88	3	He	14.631	0.1316	8082.61	0.009	0.0005796
Sr	88	3	He	14.589	0.1312	7952.51	0.009	0.0005796
Sr	88	3	He	15.532	0.1396	8612.86	0.009	0.0005796
Mo	98	3	He	0.056	0.0016	100.00	0.0235	0.0003188
Mo	98	3	He	0.043	0.0013	80.00	0.0235	0.0003188
Mo	98	3	He	0.028	0.001	60.00	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	0.038	0.0177	1090.09	0.0164	0.01713
Sn	120	3	He	-0.119	0.0152	920.06	0.0164	0.01713
Sn	120	3	He	-0.154	0.0146	900.06	0.0164	0.01713
Sb	121	3	He	0.078	0.0015	90.00	0.0155	0.0002641
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	0.025	0.0006	40.00	0.0155	0.0002641
Ba	137	3	He	3.075	0.0155	950.07	0.005	0.0001577
Ba	137	3	He	3.05	0.0153	930.06	0.005	0.0001577
Ba	137	3	He	3.746	0.0188	1160.09	0.005	0.0001577
Tl	205	3	He	0.028	0.001	280.01	0.026	0.0002504
Tl	205	3	He	0.027	0.0009	270.01	0.026	0.0002504
Tl	205	3	He	0.02	0.0008	220.01	0.026	0.0002504
Pb	208	3	He	0.006	0.0016	250.01	0.0349	0.001422
Pb	208	3	He	0.003	0.0015	180.01	0.0349	0.001422
Pb	208	3	He	0.018	0.002	200.01	0.0349	0.001422
U	238	3	He	0.012	0.0007	150.01	0.0502	5.657E-05
U	238	3	He	0.017	0.0009	210.01	0.0502	5.657E-05
U	238	3	He	0.019	0.001	230.01	0.0502	5.657E-05
Sc	45	1	No Gas			2067390.13		
Sc	45	1	No Gas			2060651.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2015769.03		
Ge	72	1	No Gas			943289.13		
Ge	72	1	No Gas			943712.95		
Ge	72	1	No Gas			929400.06		
Sc	45	2	H2			118518.88		
Sc	45	2	H2			119206.27		
Sc	45	2	H2			119487.56		
Ge	72	2	H2			92720.36		
Ge	72	2	H2			92327.48		
Ge	72	2	H2			91040.90		
In	115	2	H2			277417.11		
In	115	2	H2			278159.35		
In	115	2	H2			280269.78		
Sc	45	3	He			37348.70		
Sc	45	3	He			36055.53		
Sc	45	3	He			35614.58		
Ge	72	3	He			59474.23		
Ge	72	3	He			58430.52		
Ge	72	3	He			60106.90		
In	115	3	He			61436.19		
In	115	3	He			60623.09		
In	115	3	He			61687.53		
Tb	159	3	He			284108.61		
Tb	159	3	He			284657.75		
Tb	159	3	He			284741.09		
Bi	209	3	He			229897.54		
Bi	209	3	He			226176.40		
Bi	209	3	He			229706.75		

Quantitation Report

Data File Name	120SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 10:20:54 AM
Sample Name	410-136992-W-6-A
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

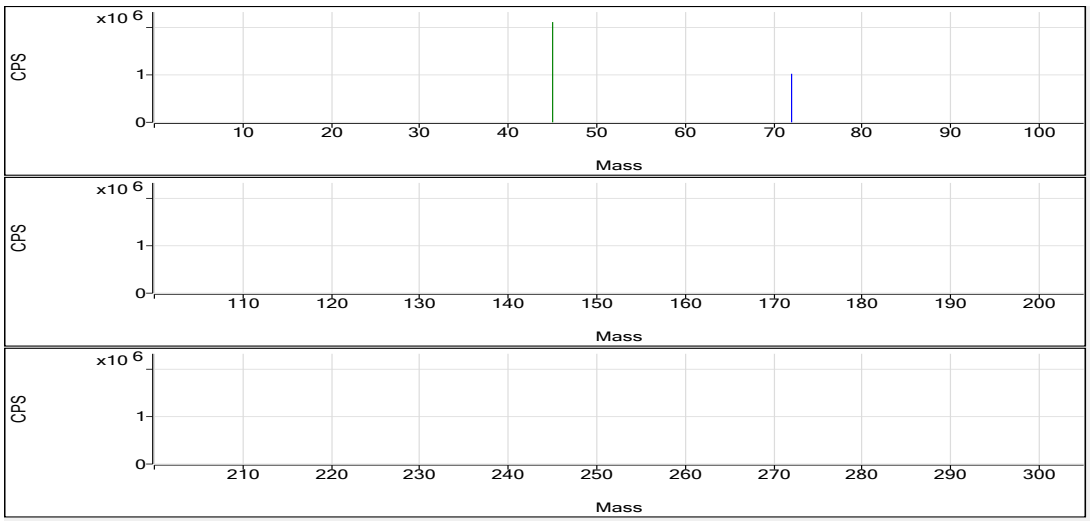
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	111.7	54.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.112	ppb	19.8	6.44	0.0001	Pulse	1.5000	3
Na	23	45	He	55975.317	ppb	1.1	7994177.17	214.3471	Analog	0.1000	3
Mg	24	45	He	10306.545	ppb	1.7	716788.04	19.2200	Pulse	0.1000	3
Al	27	45	He	22.106	ppb	10.2	493.36	0.0132	Pulse	0.1000	3
K	39	45	He	3883.110	ppb	1.2	184106.10	4.9364	Pulse	0.1000	3
Ca	44	45	He	33981.967	ppb	1.1	83888.06	2.2493	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.393	ppb	30.7	1466.08	0.0393	Pulse	0.5000	3
Cr	52	45	He	0.973	ppb	16.8	2416.96	0.0648	Pulse	0.1000	3
Mn	55	45	He	361.230	ppb	0.9	167012.22	4.4780	Pulse	0.1000	3
Fe	57	45	He	6300.960	ppb	2.5	133341.21	3.5756	Pulse	0.1000	3
Co	59	45	He	0.161	ppb	14.2	450.02	0.0121	Pulse	0.1000	3
Ni	60	72	He	0.105	ppb	104.8	313.35	0.0048	Pulse	0.1000	3
Cu	63	72	He	0.330	ppb	5.6	950.07	0.0147	Pulse	0.1000	3
Zn	66	72	He	5.022	ppb	6.0	1160.09	0.0179	Pulse	0.1000	3
As	75	72	He	2.532	ppb	3.9	386.01	0.0060	Pulse	0.5000	3
Sr	88	115	He	195.931	ppb	1.8	108843.39	1.7547	Pulse	0.1000	3
Mo	98	115	He	0.340	ppb	18.0	516.69	0.0083	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	16.67	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	171.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.290	ppb	N/A	766.71	0.0124	Pulse	0.1000	3
Sb	121	115	He	0.056	ppb	55.2	70.00	0.0011	Pulse	0.1000	3
Ba	137	115	He	58.480	ppb	2.2	18069.21	0.2913	Pulse	0.1000	3
Tl	205	159	He	0.013	ppb	9.7	170.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.184	ppb	8.2	2246.83	0.0078	Pulse	0.1000	3
U	238	209	He	0.058	ppb	7.4	683.38	0.0030	Pulse	0.1000	3

ISTD Table:

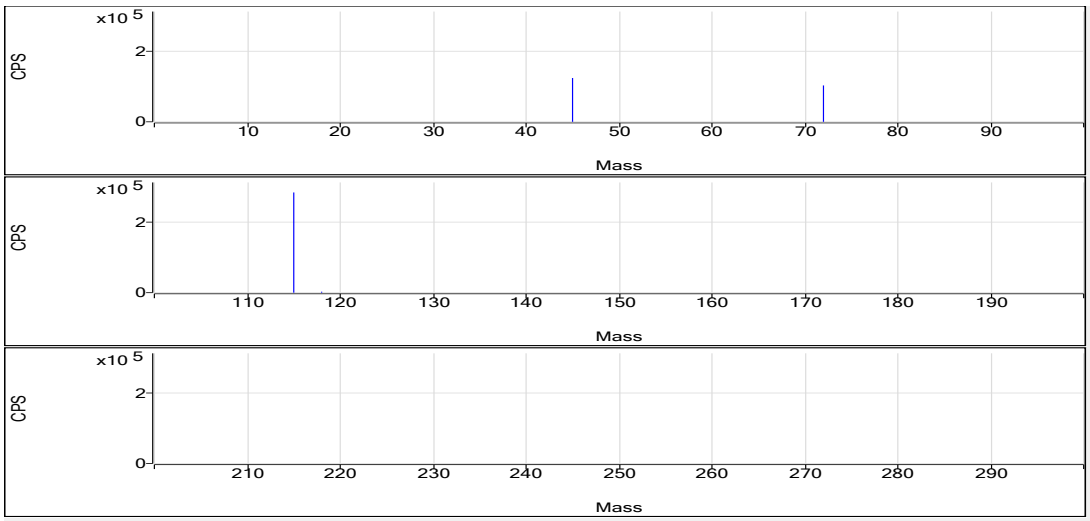
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2112731.90	1.8	103.9	Analog	0.1000	3
No Gas	Ge	72	1022581.34	0.9	101.7	Pulse	0.1000	3
H2	Sc	45	123867.86	0.8	93.8	Pulse	0.1000	3
H2	Ge	72	102861.81	0.6	92.2	Pulse	0.1000	3
H2	In	115	283474.88	0.2	96.5	Pulse	0.1000	3
He	Sc	45	37298.44	1.2	100.9	Pulse	0.1000	3
He	Ge	72	64800.64	0.5	100.4	Pulse	0.1000	3
He	In	115	62037.93	1.3	98.2	Pulse	0.1000	3
He	Tb	159	286768.67	0.3	97.9	Pulse	0.1000	3
He	Bi	209	230671.77	0.4	97.8	Pulse	0.1000	3

No Gas

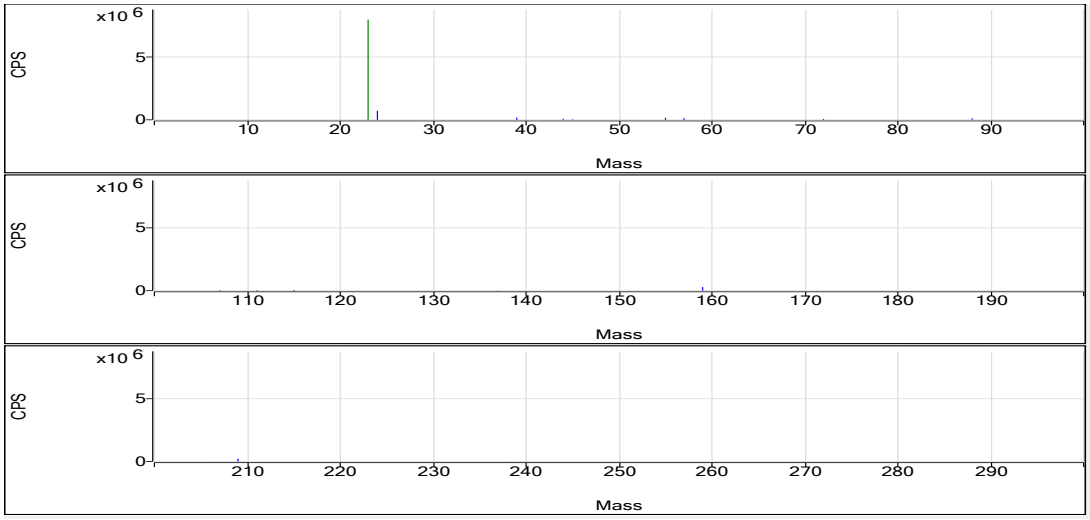


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	52.00	0.0008	2.195E-05
Be	9	1	No Gas	0.012	0	64.00	0.0008	2.195E-05
Be	9	1	No Gas	0.001	0	48.00	0.0008	2.195E-05
Se	78	2	H2	0.118	0.0001	6.67	0.0004	1.386E-05
Se	78	2	H2	0.131	0.0001	7.33	0.0004	1.386E-05
Se	78	2	H2	0.088	0.0001	5.33	0.0004	1.386E-05
Na	23	3	He	56613.323	216.7852	7977041.13	0.0038	0.4416
Na	23	3	He	55871.206	213.9492	8025027.38	0.0038	0.4416
Na	23	3	He	55441.424	212.3068	7980463.01	0.0038	0.4416
Mg	24	3	He	10488.448	19.5592	719718.04	0.0019	0.005872
Mg	24	3	He	10303.192	19.2138	720690.54	0.0019	0.005872
Mg	24	3	He	10127.996	18.8872	709955.54	0.0019	0.005872
Al	27	3	He	23.196	0.0139	510.03	0.0006	0.0004496
Al	27	3	He	19.512	0.0117	440.02	0.0006	0.0004496
Al	27	3	He	23.611	0.0141	530.03	0.0006	0.0004496
K	39	3	He	3924.555	4.9843	183407.32	0.0012	0.4456
K	39	3	He	3888.97	4.9431	185412.73	0.0012	0.4456
K	39	3	He	3835.804	4.8817	183498.24	0.0012	0.4456
Ca	44	3	He	34386.618	2.276	83750.61	0.0001	0.003779
Ca	44	3	He	33680.385	2.2294	83620.78	0.0001	0.003779
Ca	44	3	He	33878.899	2.2425	84292.79	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.417	0.0398	1466.09	0.0223	0.03054
V	51	3	He	0.5	0.0417	1564.09	0.0223	0.03054
V	51	3	He	0.263	0.0364	1368.07	0.0223	0.03054
Cr	52	3	He	1.102	0.0685	2520.32	0.0285	0.03714
Cr	52	3	He	1.028	0.0664	2490.31	0.0285	0.03714
Cr	52	3	He	0.789	0.0596	2240.24	0.0285	0.03714
Mn	55	3	He	364.873	4.5231	166437.69	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	358.817	4.4481	166845.35	0.0124	0.004415
Mn	55	3	He	360.001	4.4628	167753.63	0.0124	0.004415
Fe	57	3	He	6466.972	3.6698	135035.96	0.0006	0.001356
Fe	57	3	He	6146.94	3.4882	130839.64	0.0006	0.001356
Fe	57	3	He	6288.969	3.5688	134148.03	0.0006	0.001356
Co	59	3	He	0.164	0.0122	450.02	0.0581	0.002697
Co	59	3	He	0.137	0.0107	400.02	0.0581	0.002697
Co	59	3	He	0.183	0.0133	500.03	0.0581	0.002697
Ni	60	3	He	0.21	0.0057	370.02	0.0087	0.003928
Ni	60	3	He	-0.01	0.0038	250.01	0.0087	0.003928
Ni	60	3	He	0.115	0.0049	320.01	0.0087	0.003928
Cu	63	3	He	0.333	0.0148	950.07	0.0261	0.006048
Cu	63	3	He	0.31	0.0141	920.06	0.0261	0.006048
Cu	63	3	He	0.346	0.0151	980.07	0.0261	0.006048
Zn	66	3	He	5.116	0.0182	1170.09	0.0029	0.003512
Zn	66	3	He	5.267	0.0186	1210.10	0.0029	0.003512
Zn	66	3	He	4.685	0.0169	1100.09	0.0029	0.003512
As	75	3	He	2.64	0.0062	398.01	0.0021	0.0007233
As	75	3	He	2.446	0.0058	376.01	0.0021	0.0007233
As	75	3	He	2.51	0.0059	384.01	0.0021	0.0007233
Sr	88	3	He	193.407	1.7321	107971.09	0.009	0.0005796
Sr	88	3	He	199.902	1.7903	109440.97	0.009	0.0005796
Sr	88	3	He	194.486	1.7418	109118.12	0.009	0.0005796
Mo	98	3	He	0.409	0.0099	620.04	0.0235	0.0003188
Mo	98	3	He	0.293	0.0072	440.02	0.0235	0.0003188
Mo	98	3	He	0.319	0.0078	490.02	0.0235	0.0003188
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.271	0.0127	790.05	0.0164	0.01713
Sn	120	3	He	-0.246	0.0131	800.04	0.0164	0.01713
Sn	120	3	He	-0.353	0.0113	710.04	0.0164	0.01713
Sb	121	3	He	0.087	0.0016	100.00	0.0155	0.0002641
Sb	121	3	He	0.025	0.0007	40.00	0.0155	0.0002641
Sb	121	3	He	0.055	0.0011	70.00	0.0155	0.0002641
Ba	137	3	He	58.881	0.2933	18282.96	0.005	0.0001577
Ba	137	3	He	59.514	0.2965	18122.56	0.005	0.0001577
Ba	137	3	He	57.046	0.2842	17802.11	0.005	0.0001577
Tl	205	3	He	0.013	0.0006	170.01	0.026	0.0002504
Tl	205	3	He	0.014	0.0006	180.01	0.026	0.0002504
Tl	205	3	He	0.012	0.0006	160.01	0.026	0.0002504
Pb	208	3	He	0.186	0.0079	1200.10	0.0349	0.001422
Pb	208	3	He	0.197	0.0083	1310.10	0.0349	0.001422
Pb	208	3	He	0.168	0.0073	1080.09	0.0349	0.001422
U	238	3	He	0.059	0.003	700.05	0.0502	5.657E-05
U	238	3	He	0.053	0.0027	630.04	0.0502	5.657E-05
U	238	3	He	0.061	0.0031	720.04	0.0502	5.657E-05
Sc	45	1	No Gas			2119812.47		
Sc	45	1	No Gas			2070702.16		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2147681.06		
Ge	72	1	No Gas			1032512.80		
Ge	72	1	No Gas			1014074.28		
Ge	72	1	No Gas			1021156.94		
Sc	45	2	H2			124126.95		
Sc	45	2	H2			122735.75		
Sc	45	2	H2			124740.88		
Ge	72	2	H2			102485.37		
Ge	72	2	H2			103523.29		
Ge	72	2	H2			102576.77		
In	115	2	H2			284080.21		
In	115	2	H2			283270.72		
In	115	2	H2			283073.71		
Sc	45	3	He			36796.99		
Sc	45	3	He			37509.03		
Sc	45	3	He			37589.29		
Ge	72	3	He			64395.37		
Ge	72	3	He			65048.32		
Ge	72	3	He			64958.24		
In	115	3	He			62339.98		
In	115	3	He			61135.19		
In	115	3	He			62651.40		
Tb	159	3	He			287169.10		
Tb	159	3	He			287315.19		
Tb	159	3	He			285821.73		
Bi	209	3	He			230888.12		
Bi	209	3	He			231403.08		
Bi	209	3	He			229724.10		

Quantitation Report

Data File Name	121SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 10:22:58 AM
Sample Name	410-136992-W-7-A
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

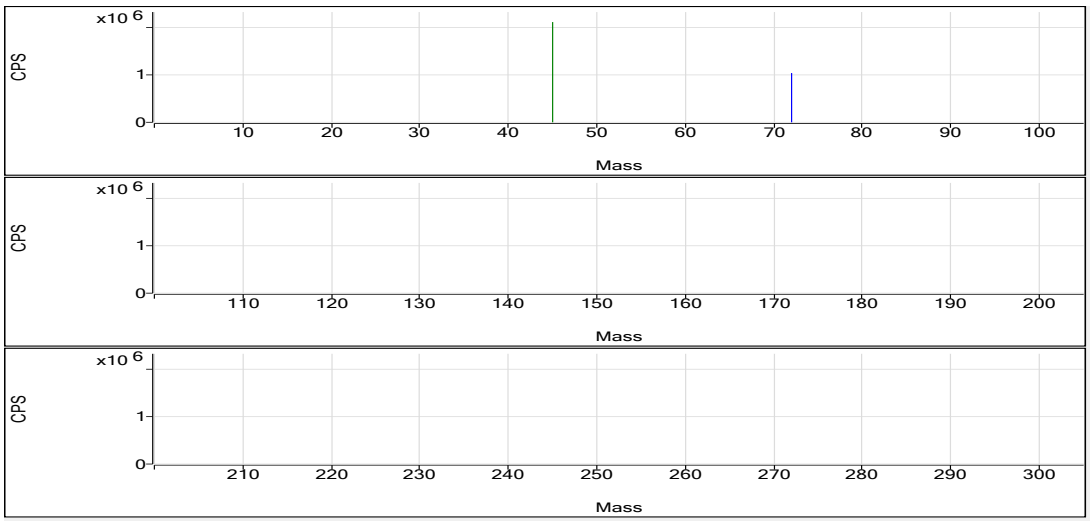
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.003	ppb	295.0	51.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	1.375	ppb	10.4	64.66	0.0006	Pulse	1.5000	3
Na	23	45	He	3435.664	ppb	2.3	494055.73	13.5707	Pulse	0.1000	3
Mg	24	45	He	11768.210	ppb	2.1	798922.98	21.9450	Pulse	0.1000	3
Al	27	45	He	4.601	ppb	38.9	113.34	0.0031	Pulse	0.1000	3
K	39	45	He	2293.918	ppb	2.4	112805.84	3.0985	Pulse	0.1000	3
Ca	44	45	He	45607.771	ppb	2.5	109849.32	3.0175	Pulse	0.1000	3
Ti	47	45	He	0.179	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	1.341	ppb	7.5	2200.18	0.0604	Pulse	0.5000	3
Cr	52	45	He	0.114	ppb	39.8	1470.12	0.0404	Pulse	0.1000	3
Mn	55	45	He	124.709	ppb	1.7	56390.96	1.5489	Pulse	0.1000	3
Fe	57	45	He	2028.299	ppb	2.4	41934.97	1.1519	Pulse	0.1000	3
Co	59	45	He	3.261	ppb	2.9	6995.27	0.1921	Pulse	0.1000	3
Ni	60	72	He	1.525	ppb	8.8	1133.42	0.0171	Pulse	0.1000	3
Cu	63	72	He	0.434	ppb	26.6	1150.09	0.0174	Pulse	0.1000	3
Zn	66	72	He	15.357	ppb	5.8	3140.45	0.0475	Pulse	0.1000	3
As	75	72	He	2.304	ppb	0.9	362.68	0.0055	Pulse	0.5000	3
Sr	88	115	He	154.867	ppb	3.0	84602.59	1.3871	Pulse	0.1000	3
Mo	98	115	He	1.906	ppb	6.0	2753.70	0.0451	Pulse	0.1000	3
Ag	107	115	He	-0.006	ppb	N/A	10.00	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	87.8	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.185	ppb	N/A	860.06	0.0141	Pulse	0.1000	3
Sb	121	115	He	0.138	ppb	31.2	146.67	0.0024	Pulse	0.1000	3
Ba	137	115	He	98.691	ppb	1.2	29983.58	0.4915	Pulse	0.1000	3
Tl	205	159	He	0.009	ppb	17.9	136.68	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.012	ppb	62.0	526.69	0.0018	Pulse	0.1000	3
U	238	209	He	0.131	ppb	4.7	1540.16	0.0067	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2107514.45	0.3	103.7	Analog	0.1000	3
No Gas	Ge	72	1035828.89	0.4	103.1	Pulse	0.1000	3
H2	Sc	45	123783.81	1.2	93.7	Pulse	0.1000	3
H2	Ge	72	105699.09	0.6	94.8	Pulse	0.1000	3
H2	In	115	286078.75	0.7	97.4	Pulse	0.1000	3
He	Sc	45	36416.38	2.1	98.6	Pulse	0.1000	3
He	Ge	72	66100.08	0.4	102.4	Pulse	0.1000	3
He	In	115	61010.91	1.5	96.5	Pulse	0.1000	3
He	Tb	159	286047.57	0.5	97.7	Pulse	0.1000	3
He	Bi	209	231370.71	0.7	98.1	Pulse	0.1000	3

No Gas



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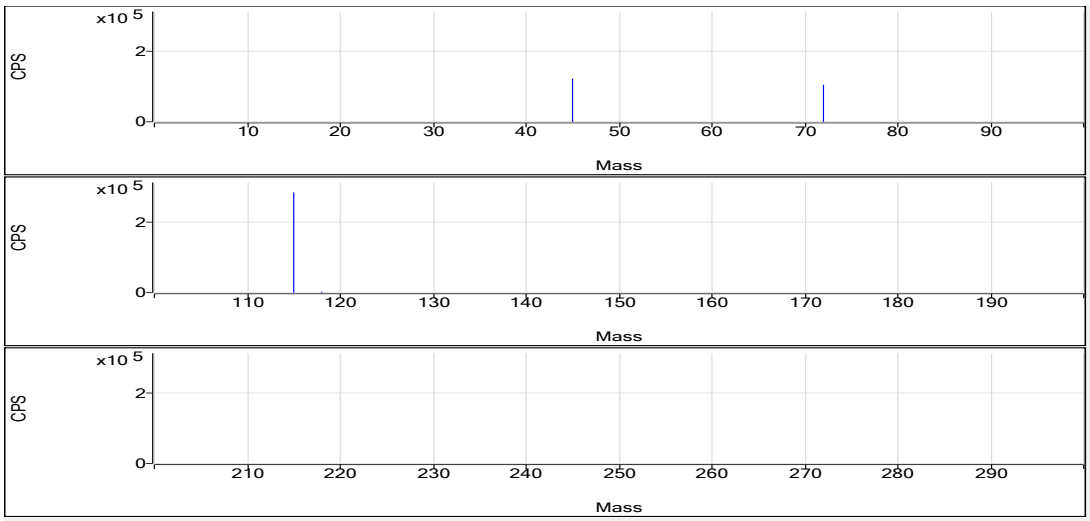
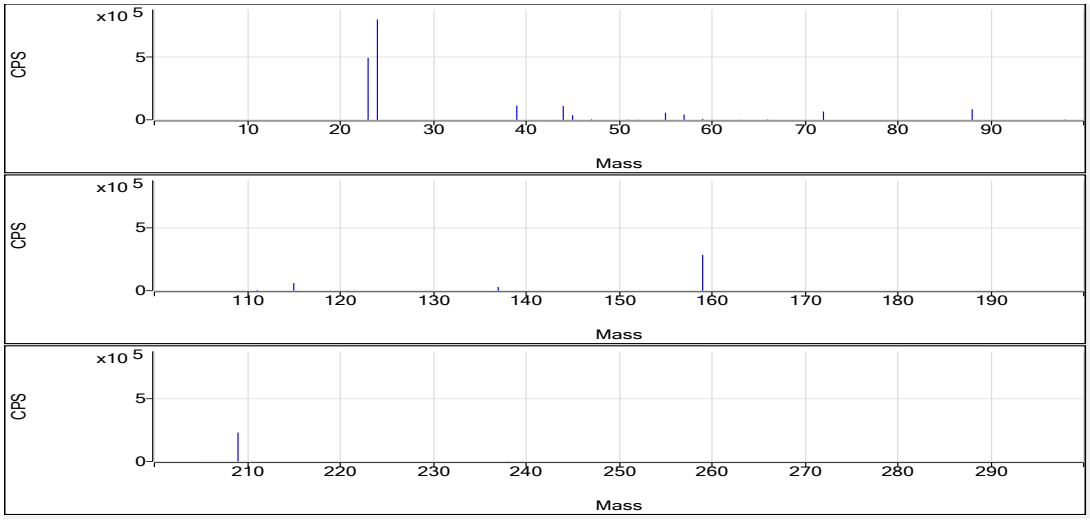


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.009	0	60.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.008	0	34.00	0.0008	2.195E-05
Be	9	1	No Gas	0.008	0	60.00	0.0008	2.195E-05
Se	78	2	H2	1.211	0.0005	57.33	0.0004	1.386E-05
Se	78	2	H2	1.443	0.0006	67.33	0.0004	1.386E-05
Se	78	2	H2	1.471	0.0007	69.33	0.0004	1.386E-05
Na	23	3	He	3347.245	13.2328	493301.28	0.0038	0.4416
Na	23	3	He	3462.871	13.6747	490714.33	0.0038	0.4416
Na	23	3	He	3496.876	13.8047	498151.59	0.0038	0.4416
Mg	24	3	He	11486.203	21.4192	798477.96	0.0019	0.005872
Mg	24	3	He	11964.008	22.31	800590.14	0.0019	0.005872
Mg	24	3	He	11854.418	22.1057	797700.85	0.0019	0.005872
Al	27	3	He	5.254	0.0035	130.01	0.0006	0.0004496
Al	27	3	He	5.971	0.0039	140.01	0.0006	0.0004496
Al	27	3	He	2.578	0.0019	70.00	0.0006	0.0004496
K	39	3	He	2237.03	3.0327	113054.91	0.0012	0.4456
K	39	3	He	2346.136	3.1589	113356.07	0.0012	0.4456
K	39	3	He	2298.587	3.1039	112006.53	0.0012	0.4456
Ca	44	3	He	44313.056	2.9319	109298.77	0.0001	0.003779
Ca	44	3	He	46325.019	3.0649	109983.30	0.0001	0.003779
Ca	44	3	He	46185.238	3.0557	110265.88	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.536	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	1.256	0.0585	2182.18	0.0223	0.03054
V	51	3	He	1.453	0.0629	2258.19	0.0223	0.03054
V	51	3	He	1.315	0.0599	2160.18	0.0223	0.03054
Cr	52	3	He	0.062	0.0389	1450.13	0.0285	0.03714
Cr	52	3	He	0.144	0.0412	1480.11	0.0285	0.03714
Cr	52	3	He	0.136	0.041	1480.13	0.0285	0.03714
Mn	55	3	He	122.31	1.5191	56631.44	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	125.63	1.5603	55989.79	0.0124	0.004415
Mn	55	3	He	126.186	1.5671	56551.64	0.0124	0.004415
Fe	57	3	He	1976.251	1.1224	41840.97	0.0006	0.001356
Fe	57	3	He	2073.809	1.1777	42262.53	0.0006	0.001356
Fe	57	3	He	2034.836	1.1556	41701.42	0.0006	0.001356
Co	59	3	He	3.224	0.19	7081.95	0.0581	0.002697
Co	59	3	He	3.37	0.1985	7122.03	0.0581	0.002697
Co	59	3	He	3.189	0.1879	6781.83	0.0581	0.002697
Ni	60	3	He	1.391	0.016	1060.07	0.0087	0.003928
Ni	60	3	He	1.658	0.0183	1210.09	0.0087	0.003928
Ni	60	3	He	1.527	0.0172	1130.09	0.0087	0.003928
Cu	63	3	He	0.478	0.0185	1230.10	0.0261	0.006048
Cu	63	3	He	0.521	0.0197	1300.10	0.0261	0.006048
Cu	63	3	He	0.303	0.014	920.07	0.0261	0.006048
Zn	66	3	He	14.98	0.0464	3080.44	0.0029	0.003512
Zn	66	3	He	14.715	0.0457	3020.42	0.0029	0.003512
Zn	66	3	He	16.374	0.0504	3320.50	0.0029	0.003512
As	75	3	He	2.319	0.0055	366.01	0.0021	0.0007233
As	75	3	He	2.313	0.0055	364.01	0.0021	0.0007233
As	75	3	He	2.28	0.0054	358.01	0.0021	0.0007233
Sr	88	3	He	159.192	1.4258	85628.78	0.009	0.0005796
Sr	88	3	He	155.363	1.3915	85065.43	0.009	0.0005796
Sr	88	3	He	150.047	1.3439	83113.57	0.009	0.0005796
Mo	98	3	He	1.984	0.047	2820.38	0.0235	0.0003188
Mo	98	3	He	1.774	0.042	2570.33	0.0235	0.0003188
Mo	98	3	He	1.96	0.0464	2870.39	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	-0.01	0	0.00	0.0499	0.0004754
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.151	0.0147	880.06	0.0164	0.01713
Sn	120	3	He	-0.246	0.0131	800.05	0.0164	0.01713
Sn	120	3	He	-0.157	0.0146	900.07	0.0164	0.01713
Sb	121	3	He	0.166	0.0028	170.01	0.0155	0.0002641
Sb	121	3	He	0.089	0.0016	100.00	0.0155	0.0002641
Sb	121	3	He	0.161	0.0027	170.01	0.0155	0.0002641
Ba	137	3	He	100.048	0.4983	29923.44	0.005	0.0001577
Ba	137	3	He	98.024	0.4882	29843.07	0.005	0.0001577
Ba	137	3	He	98.003	0.4881	30184.23	0.005	0.0001577
Tl	205	3	He	0.008	0.0005	130.01	0.026	0.0002504
Tl	205	3	He	0.011	0.0005	150.01	0.026	0.0002504
Tl	205	3	He	0.008	0.0005	130.01	0.026	0.0002504
Pb	208	3	He	0.012	0.0018	340.02	0.0349	0.001422
Pb	208	3	He	0.019	0.0021	230.01	0.0349	0.001422
Pb	208	3	He	0.005	0.0016	220.01	0.0349	0.001422
U	238	3	He	0.127	0.0064	1500.15	0.0502	5.657E-05
U	238	3	He	0.129	0.0065	1510.15	0.0502	5.657E-05
U	238	3	He	0.138	0.007	1610.17	0.0502	5.657E-05
Sc	45	1	No Gas			2106118.25		
Sc	45	1	No Gas			2101397.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2115027.31		
Ge	72	1	No Gas			1037046.00		
Ge	72	1	No Gas			1031116.78		
Ge	72	1	No Gas			1039323.89		
Sc	45	2	H2			122262.36		
Sc	45	2	H2			125347.09		
Sc	45	2	H2			123741.99		
Ge	72	2	H2			106061.31		
Ge	72	2	H2			104984.12		
Ge	72	2	H2			106051.84		
In	115	2	H2			284843.22		
In	115	2	H2			288438.39		
In	115	2	H2			284954.64		
Sc	45	3	He			37278.54		
Sc	45	3	He			35884.82		
Sc	45	3	He			36085.77		
Ge	72	3	He			66334.57		
Ge	72	3	He			66123.44		
Ge	72	3	He			65842.23		
In	115	3	He			60060.51		
In	115	3	He			61135.34		
In	115	3	He			61848.65		
Tb	159	3	He			287499.33		
Tb	159	3	He			285858.57		
Tb	159	3	He			284784.82		
Bi	209	3	He			233093.81		
Bi	209	3	He			231271.68		
Bi	209	3	He			229746.64		

Quantitation Report

Data File Name	122SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 10:25:01 AM
Sample Name	410-136992-W-2-A
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

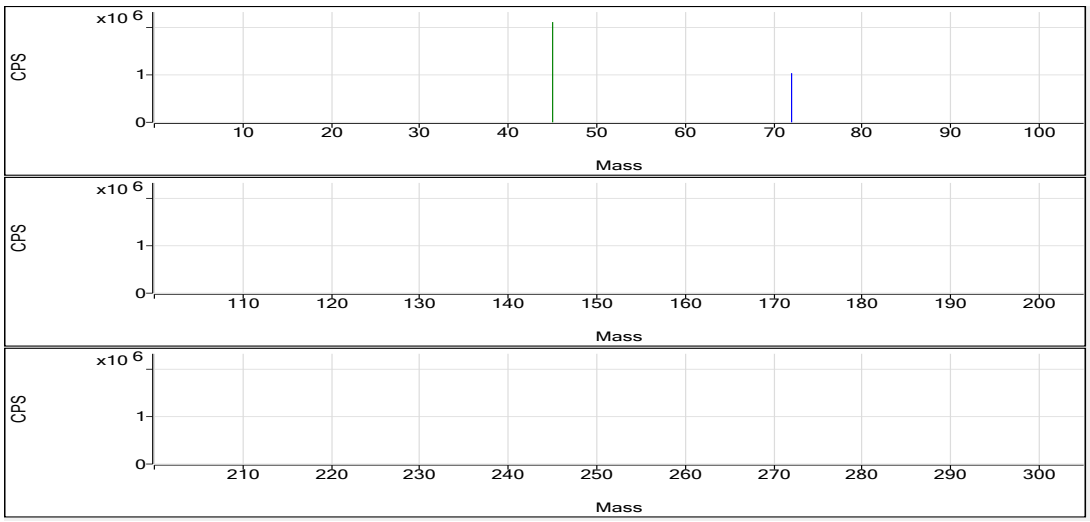
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	44.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	1.107	ppb	6.5	52.45	0.0005	Pulse	1.5000	3
Na	23	45	He	2267.452	ppb	0.4	333627.58	9.1065	Pulse	0.1000	3
Mg	24	45	He	16537.160	ppb	2.4	1129487.20	30.8356	Analog	0.1000	3
Al	27	45	He	2.845	ppb	35.1	76.67	0.0021	Pulse	0.1000	3
K	39	45	He	2169.469	ppb	1.7	108235.37	2.9546	Pulse	0.1000	3
Ca	44	45	He	50030.945	ppb	0.2	121258.14	3.3098	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	0.350	ppb	11.7	1404.74	0.0383	Pulse	0.5000	3
Cr	52	45	He	-0.030	ppb	N/A	1330.11	0.0363	Pulse	0.1000	3
Mn	55	45	He	207.012	ppb	1.8	94074.89	2.5681	Pulse	0.1000	3
Fe	57	45	He	454.625	ppb	1.6	9496.73	0.2592	Pulse	0.1000	3
Co	59	45	He	3.223	ppb	2.0	6958.57	0.1899	Pulse	0.1000	3
Ni	60	72	He	3.604	ppb	5.2	2330.25	0.0352	Pulse	0.1000	3
Cu	63	72	He	1.668	ppb	7.4	3290.48	0.0496	Pulse	0.1000	3
Zn	66	72	He	138.971	ppb	1.9	26622.07	0.4017	Pulse	0.1000	3
As	75	72	He	0.180	ppb	40.3	72.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	138.727	ppb	0.8	76778.46	1.2426	Pulse	0.1000	3
Mo	98	115	He	2.771	ppb	9.3	4047.39	0.0655	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	81.0	36.67	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.368	ppb	7.3	126.67	0.0020	Pulse	0.5000	3
Sn	120	115	He	-0.183	ppb	N/A	873.40	0.0141	Pulse	0.1000	3
Sb	121	115	He	0.123	ppb	18.5	133.34	0.0022	Pulse	0.1000	3
Ba	137	115	He	129.383	ppb	2.6	39808.59	0.6443	Pulse	0.1000	3
Tl	205	159	He	0.029	ppb	20.9	290.01	0.0010	Pulse	0.1000	3
Pb	208	159	He	0.009	ppb	59.2	503.36	0.0017	Pulse	0.1000	3
U	238	209	He	0.097	ppb	16.0	1146.76	0.0049	Pulse	0.1000	3

ISTD Table:

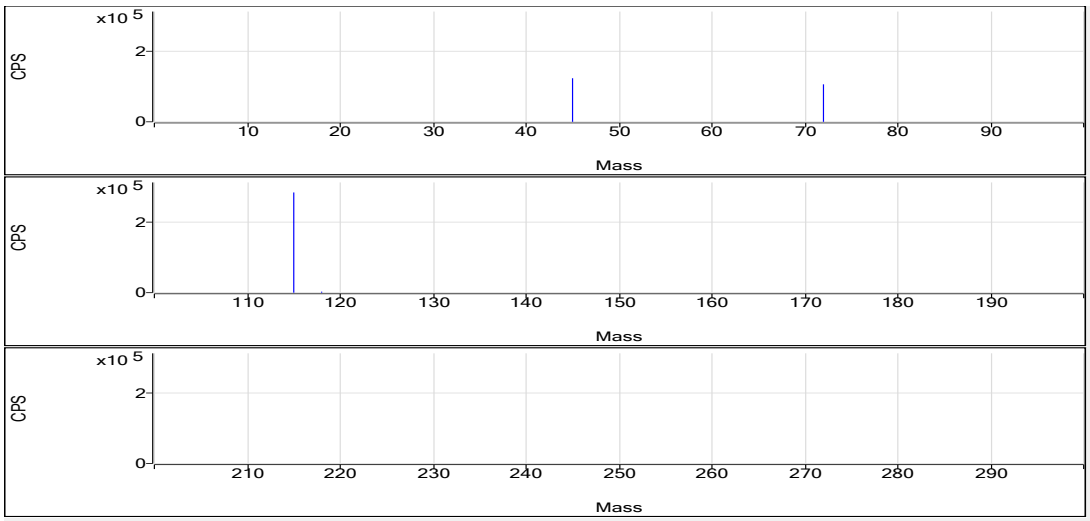
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2107632.83	1.3	103.7	Analog	0.1000	3
No Gas	Ge	72	1033696.11	1.0	102.8	Pulse	0.1000	3
H2	Sc	45	123006.86	1.3	93.1	Pulse	0.1000	3
H2	Ge	72	105837.01	0.6	94.9	Pulse	0.1000	3
H2	In	115	282943.01	0.2	96.3	Pulse	0.1000	3
He	Sc	45	36636.77	1.3	99.1	Pulse	0.1000	3
He	Ge	72	66270.72	0.3	102.7	Pulse	0.1000	3
He	In	115	61792.31	0.8	97.8	Pulse	0.1000	3
He	Tb	159	287689.55	0.3	98.3	Pulse	0.1000	3
He	Bi	209	233425.09	0.4	99.0	Pulse	0.1000	3

No Gas

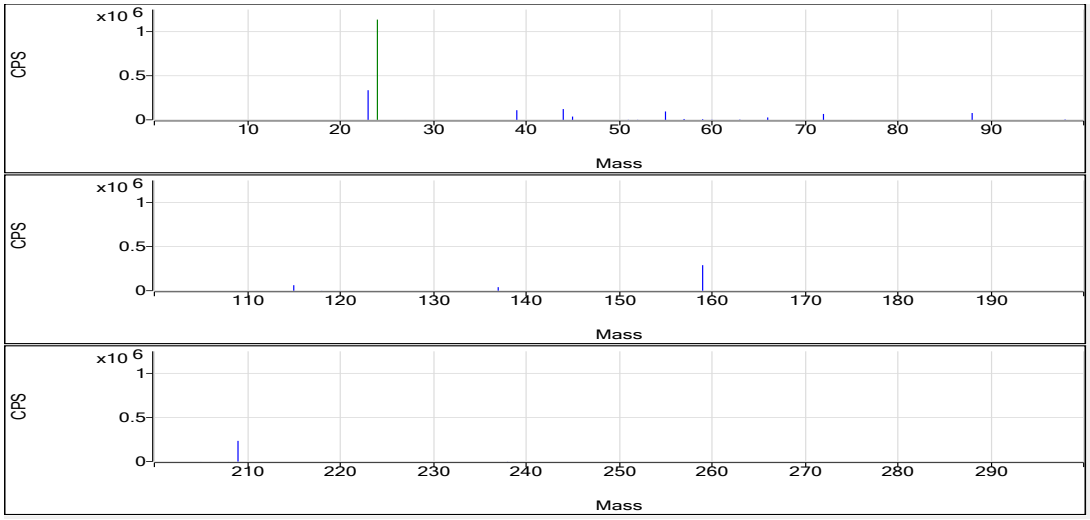


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0	58.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.009	0	32.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.003	0	42.00	0.0008	2.195E-05
Se	78	2	H2	1.191	0.0005	56.67	0.0004	1.386E-05
Se	78	2	H2	1.072	0.0005	50.67	0.0004	1.386E-05
Se	78	2	H2	1.059	0.0005	50.00	0.0004	1.386E-05
Na	23	3	He	2276.438	9.1408	331041.95	0.0038	0.4416
Na	23	3	He	2260.349	9.0794	331910.00	0.0038	0.4416
Na	23	3	He	2265.569	9.0993	337930.78	0.0038	0.4416
Mg	24	3	He	16934.675	31.5767	1143570.30	0.0019	0.005872
Mg	24	3	He	16540.143	30.8411	1127445.69	0.0019	0.005872
Mg	24	3	He	16136.663	30.0889	1117445.61	0.0019	0.005872
Al	27	3	He	2.565	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	3.954	0.0027	100.00	0.0006	0.0004496
Al	27	3	He	2.017	0.0016	60.00	0.0006	0.0004496
K	39	3	He	2211.765	3.0035	108773.45	0.0012	0.4456
K	39	3	He	2150.112	2.9322	107190.69	0.0012	0.4456
K	39	3	He	2146.529	2.928	108741.98	0.0012	0.4456
Ca	44	3	He	50121.169	3.3157	120081.96	0.0001	0.003779
Ca	44	3	He	50012.379	3.3086	120949.37	0.0001	0.003779
Ca	44	3	He	49959.286	3.305	122743.10	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.305	0.0373	1352.07	0.0223	0.03054
V	51	3	He	0.385	0.0391	1430.08	0.0223	0.03054
V	51	3	He	0.36	0.0386	1432.08	0.0223	0.03054
Cr	52	3	He	-0.131	0.0334	1210.09	0.0285	0.03714
Cr	52	3	He	0.06	0.0388	1420.13	0.0285	0.03714
Cr	52	3	He	-0.018	0.0366	1360.11	0.0285	0.03714
Mn	55	3	He	208.988	2.5926	93892.98	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	209.261	2.596	94900.29	0.0124	0.004415
Mn	55	3	He	202.785	2.5158	93431.40	0.0124	0.004415
Fe	57	3	He	457.288	0.2608	9443.35	0.0006	0.001356
Fe	57	3	He	460.24	0.2624	9593.46	0.0006	0.001356
Fe	57	3	He	446.346	0.2545	9453.37	0.0006	0.001356
Co	59	3	He	3.163	0.1864	6751.79	0.0581	0.002697
Co	59	3	He	3.293	0.194	7092.01	0.0581	0.002697
Co	59	3	He	3.213	0.1893	7031.92	0.0581	0.002697
Ni	60	3	He	3.772	0.0366	2420.27	0.0087	0.003928
Ni	60	3	He	3.401	0.0334	2220.23	0.0087	0.003928
Ni	60	3	He	3.639	0.0355	2350.26	0.0087	0.003928
Cu	63	3	He	1.645	0.049	3240.45	0.0261	0.006048
Cu	63	3	He	1.801	0.0531	3530.54	0.0261	0.006048
Cu	63	3	He	1.559	0.0468	3100.45	0.0261	0.006048
Zn	66	3	He	140.227	0.4053	26785.57	0.0029	0.003512
Zn	66	3	He	135.892	0.3929	26114.54	0.0029	0.003512
Zn	66	3	He	140.793	0.407	26966.09	0.0029	0.003512
As	75	3	He	0.192	0.0011	74.00	0.0021	0.0007233
As	75	3	He	0.247	0.0012	82.00	0.0021	0.0007233
As	75	3	He	0.103	0.0009	62.00	0.0021	0.0007233
Sr	88	3	He	139.958	1.2536	76708.42	0.009	0.0005796
Sr	88	3	He	138.251	1.2383	76878.80	0.009	0.0005796
Sr	88	3	He	137.973	1.2358	76748.16	0.009	0.0005796
Mo	98	3	He	2.496	0.059	3610.57	0.0235	0.0003188
Mo	98	3	He	2.809	0.0664	4120.75	0.0235	0.0003188
Mo	98	3	He	3.007	0.071	4410.84	0.0235	0.0003188
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	0.352	0.002	120.00	0.0055	1.07E-05
Cd	111	3	He	0.353	0.002	122.00	0.0055	1.07E-05
Cd	111	3	He	0.399	0.0022	138.00	0.0055	1.07E-05
Sn	120	3	He	-0.227	0.0134	820.06	0.0164	0.01713
Sn	120	3	He	-0.17	0.0143	890.06	0.0164	0.01713
Sn	120	3	He	-0.151	0.0147	910.07	0.0164	0.01713
Sb	121	3	He	0.141	0.0025	150.01	0.0155	0.0002641
Sb	121	3	He	0.097	0.0018	110.00	0.0155	0.0002641
Sb	121	3	He	0.129	0.0023	140.01	0.0155	0.0002641
Ba	137	3	He	132.156	0.6581	40270.03	0.005	0.0001577
Ba	137	3	He	130.352	0.6491	40299.87	0.005	0.0001577
Ba	137	3	He	125.641	0.6257	38855.88	0.005	0.0001577
Tl	205	3	He	0.024	0.0009	250.01	0.026	0.0002504
Tl	205	3	He	0.028	0.001	280.01	0.026	0.0002504
Tl	205	3	He	0.036	0.0012	340.02	0.026	0.0002504
Pb	208	3	He	0.011	0.0018	260.02	0.0349	0.001422
Pb	208	3	He	0.003	0.0015	190.01	0.0349	0.001422
Pb	208	3	He	0.014	0.0019	290.02	0.0349	0.001422
U	238	3	He	0.11	0.0056	1300.11	0.0502	5.657E-05
U	238	3	He	0.101	0.0051	1190.10	0.0502	5.657E-05
U	238	3	He	0.08	0.0041	950.08	0.0502	5.657E-05
Sc	45	1	No Gas			2126520.91		
Sc	45	1	No Gas			2076823.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2119554.50		
Ge	72	1	No Gas			1039989.13		
Ge	72	1	No Gas			1021179.91		
Ge	72	1	No Gas			1039919.28		
Sc	45	2	H2			121271.66		
Sc	45	2	H2			124519.01		
Sc	45	2	H2			123229.90		
Ge	72	2	H2			106595.15		
Ge	72	2	H2			105517.82		
Ge	72	2	H2			105398.06		
In	115	2	H2			282276.30		
In	115	2	H2			283621.69		
In	115	2	H2			282931.05		
Sc	45	3	He			36215.69		
Sc	45	3	He			36556.55		
Sc	45	3	He			37138.08		
Ge	72	3	He			66083.39		
Ge	72	3	He			66464.95		
Ge	72	3	He			66263.81		
In	115	3	He			61195.91		
In	115	3	He			62089.15		
In	115	3	He			62109.12		
Tb	159	3	He			288039.51		
Tb	159	3	He			286827.22		
Tb	159	3	He			288201.93		
Bi	209	3	He			233480.78		
Bi	209	3	He			232492.34		
Bi	209	3	He			234302.16		

Quantitation Report

Data File Name	123SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 10:27:03 AM
Sample Name	410-137866-C-3-A @100
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

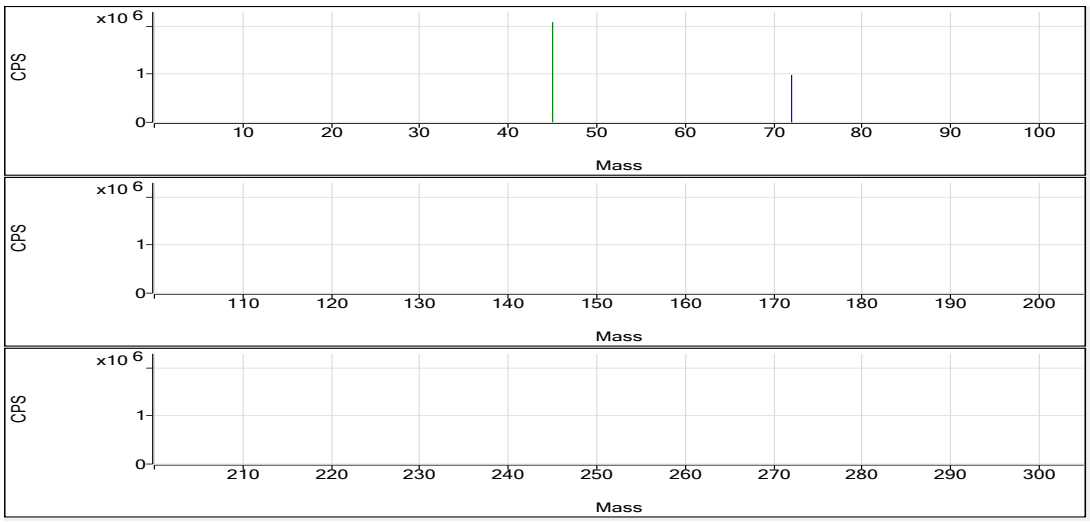
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.004	ppb	N/A	38.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.049	ppb	53.4	3.34	0.0000	Pulse	1.5000	3
Na	23	45	He	26589.488	ppb	0.9	3765340.05	102.0513	Analog	0.1000	3
Mg	24	45	He	707.203	ppb	1.6	48864.99	1.3243	Pulse	0.1000	3
Al	27	45	He	1.095	ppb	128.3	40.00	0.0011	Pulse	0.1000	3
K	39	45	He	397.221	ppb	1.1	33392.13	0.9050	Pulse	0.1000	3
Ca	44	45	He	87.791	ppb	18.4	353.35	0.0096	Pulse	0.1000	3
Ti	47	45	He	0.350	ppb	173.2	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	0.099	ppb	28.2	1208.06	0.0327	Pulse	0.5000	3
Cr	52	45	He	-0.013	ppb	N/A	1356.78	0.0368	Pulse	0.1000	3
Mn	55	45	He	4.472	ppb	8.4	2206.91	0.0598	Pulse	0.1000	3
Fe	57	45	He	1.275	ppb	79.3	76.67	0.0021	Pulse	0.1000	3
Co	59	45	He	0.070	ppb	18.3	250.01	0.0068	Pulse	0.1000	3
Ni	60	72	He	0.340	ppb	43.5	426.69	0.0069	Pulse	0.1000	3
Cu	63	72	He	0.036	ppb	103.1	433.35	0.0070	Pulse	0.1000	3
Zn	66	72	He	0.100	ppb	170.8	236.68	0.0038	Pulse	0.1000	3
As	75	72	He	0.033	ppb	204.2	49.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	1.057	ppb	22.1	620.03	0.0100	Pulse	0.1000	3
Mo	98	115	He	0.035	ppb	68.4	70.00	0.0011	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	168.3	40.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	173.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.072	ppb	126.3	1133.41	0.0183	Pulse	0.1000	3
Sb	121	115	He	0.014	ppb	126.1	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.596	ppb	6.5	193.34	0.0031	Pulse	0.1000	3
Tl	205	159	He	0.015	ppb	28.1	183.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.003	ppb	196.8	436.68	0.0015	Pulse	0.1000	3
U	238	209	He	0.012	ppb	18.8	153.34	0.0007	Pulse	0.1000	3

ISTD Table:

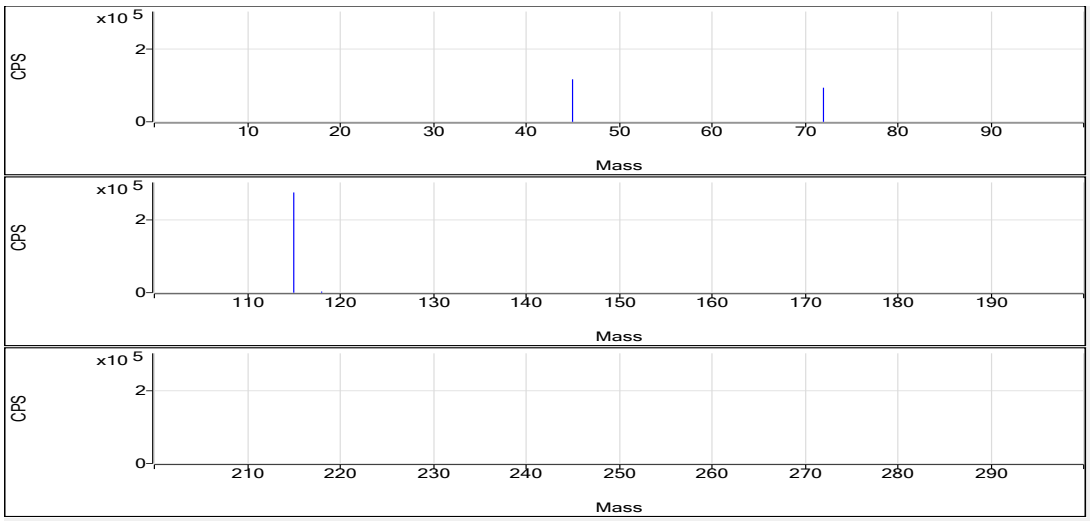
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2085628.46	1.6	102.6	Analog	0.1000	3
No Gas	Ge	72	985503.37	1.5	98.0	Pulse	0.1000	3
H2	Sc	45	117673.93	2.2	89.1	Pulse	0.1000	3
H2	Ge	72	94375.26	2.3	84.6	Pulse	0.1000	3
H2	In	115	277363.88	1.6	94.4	Pulse	0.1000	3
He	Sc	45	36897.61	0.5	99.9	Pulse	0.1000	3
He	Ge	72	62212.53	2.7	96.4	Pulse	0.1000	3
He	In	115	61829.23	1.9	97.8	Pulse	0.1000	3
He	Tb	159	283163.61	0.9	96.7	Pulse	0.1000	3
He	Bi	209	231194.61	0.7	98.0	Pulse	0.1000	3

No Gas

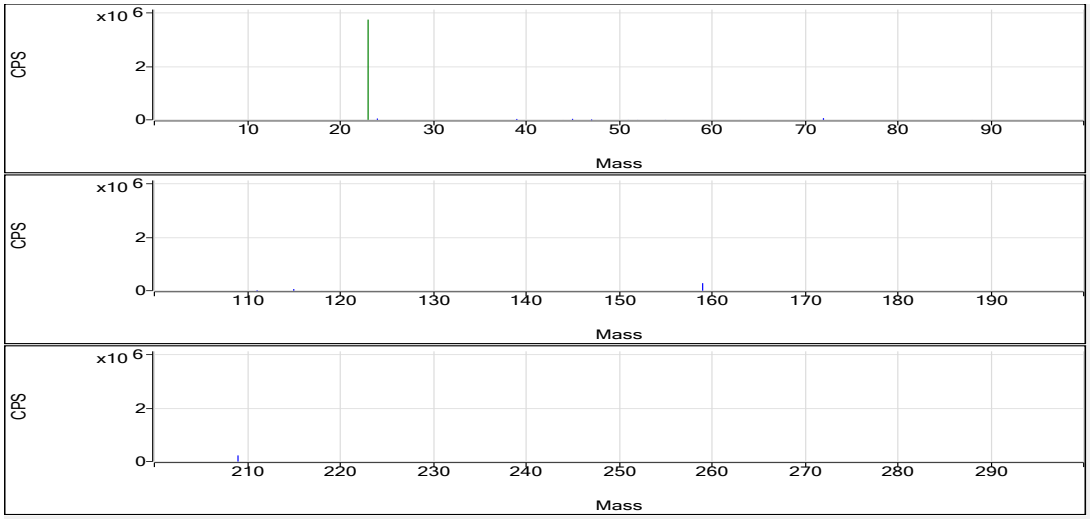


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.005	0	38.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.008	0	34.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.001	0	44.00	0.0008	2.195E-05
Se	78	2	H2	0.033	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.035	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.079	0	4.67	0.0004	1.386E-05
Na	23	3	He	26609.684	102.1285	3769314.01	0.0038	0.4416
Na	23	3	He	26346.123	101.1213	3749377.76	0.0038	0.4416
Na	23	3	He	26812.656	102.9042	3777328.38	0.0038	0.4416
Mg	24	3	He	715.882	1.3405	49473.40	0.0019	0.005872
Mg	24	3	He	710.981	1.3313	49363.09	0.0019	0.005872
Mg	24	3	He	694.746	1.3011	47758.49	0.0019	0.005872
Al	27	3	He	2.503	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	1.088	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	-0.306	0.0003	10.00	0.0006	0.0004496
K	39	3	He	392.465	0.8995	33198.31	0.0012	0.4456
K	39	3	He	398.704	0.9067	33619.17	0.0012	0.4456
K	39	3	He	400.493	0.9088	33358.91	0.0012	0.4456
Ca	44	3	He	94.538	0.01	370.02	0.0001	0.003779
Ca	44	3	He	69.347	0.0084	310.01	0.0001	0.003779
Ca	44	3	He	99.489	0.0104	380.02	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.049	0.0005	20.00	0.0005	0
V	51	3	He	0.086	0.0325	1198.06	0.0223	0.03054
V	51	3	He	0.079	0.0323	1198.06	0.0223	0.03054
V	51	3	He	0.131	0.0335	1228.06	0.0223	0.03054
Cr	52	3	He	0.095	0.0398	1470.13	0.0285	0.03714
Cr	52	3	He	-0.139	0.0332	1230.09	0.0285	0.03714
Cr	52	3	He	0.007	0.0373	1370.11	0.0285	0.03714
Mn	55	3	He	4.129	0.0556	2050.22	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4.871	0.0647	2400.27	0.0124	0.004415
Mn	55	3	He	4.418	0.0591	2170.23	0.0124	0.004415
Fe	57	3	He	0.476	0.0016	60.00	0.0006	0.001356
Fe	57	3	He	0.938	0.0019	70.00	0.0006	0.001356
Fe	57	3	He	2.412	0.0027	100.00	0.0006	0.001356
Co	59	3	He	0.075	0.007	260.01	0.0581	0.002697
Co	59	3	He	0.056	0.0059	220.01	0.0581	0.002697
Co	59	3	He	0.08	0.0074	270.01	0.0581	0.002697
Ni	60	3	He	0.189	0.0056	350.02	0.0087	0.003928
Ni	60	3	He	0.347	0.0069	440.02	0.0087	0.003928
Ni	60	3	He	0.484	0.0081	490.03	0.0087	0.003928
Cu	63	3	He	0	0.006	380.02	0.0261	0.006048
Cu	63	3	He	0.034	0.0069	440.02	0.0261	0.006048
Cu	63	3	He	0.073	0.008	480.02	0.0261	0.006048
Zn	66	3	He	0.273	0.0043	270.01	0.0029	0.003512
Zn	66	3	He	0.095	0.0038	240.01	0.0029	0.003512
Zn	66	3	He	-0.068	0.0033	200.01	0.0029	0.003512
As	75	3	He	0.112	0.001	60.00	0.0021	0.0007233
As	75	3	He	-0.014	0.0007	44.00	0.0021	0.0007233
As	75	3	He	0.003	0.0007	44.00	0.0021	0.0007233
Sr	88	3	He	0.806	0.0078	490.02	0.009	0.0005796
Sr	88	3	He	1.097	0.0104	630.04	0.009	0.0005796
Sr	88	3	He	1.267	0.0119	740.04	0.009	0.0005796
Mo	98	3	He	0.02	0.0008	50.00	0.0235	0.0003188
Mo	98	3	He	0.022	0.0008	50.00	0.0235	0.0003188
Mo	98	3	He	0.062	0.0018	110.00	0.0235	0.0003188
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	0.178	0.0201	1260.09	0.0164	0.01713
Sn	120	3	He	0.022	0.0175	1060.08	0.0164	0.01713
Sn	120	3	He	0.017	0.0174	1080.07	0.0164	0.01713
Sb	121	3	He	0.003	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	0.035	0.0008	50.00	0.0155	0.0002641
Ba	137	3	He	0.64	0.0033	210.01	0.005	0.0001577
Ba	137	3	He	0.565	0.003	180.01	0.005	0.0001577
Ba	137	3	He	0.583	0.0031	190.01	0.005	0.0001577
Tl	205	3	He	0.011	0.0005	150.01	0.026	0.0002504
Tl	205	3	He	0.019	0.0007	210.01	0.026	0.0002504
Tl	205	3	He	0.016	0.0007	190.01	0.026	0.0002504
Pb	208	3	He	0.006	0.0016	260.01	0.0349	0.001422
Pb	208	3	He	-0.004	0.0013	180.01	0.0349	0.001422
Pb	208	3	He	0.008	0.0017	290.02	0.0349	0.001422
U	238	3	He	0.012	0.0006	150.01	0.0502	5.657E-05
U	238	3	He	0.01	0.0006	130.01	0.0502	5.657E-05
U	238	3	He	0.015	0.0008	180.01	0.0502	5.657E-05
Sc	45	1	No Gas			2086445.44		
Sc	45	1	No Gas			2117971.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2052468.88		
Ge	72	1	No Gas			993518.66		
Ge	72	1	No Gas			994352.09		
Ge	72	1	No Gas			968639.36		
Sc	45	2	H2			117554.18		
Sc	45	2	H2			115113.20		
Sc	45	2	H2			120354.42		
Ge	72	2	H2			94240.39		
Ge	72	2	H2			92310.03		
Ge	72	2	H2			96575.37		
In	115	2	H2			275834.61		
In	115	2	H2			273926.28		
In	115	2	H2			282330.74		
Sc	45	3	He			36907.56		
Sc	45	3	He			37078.01		
Sc	45	3	He			36707.25		
Ge	72	3	He			62888.82		
Ge	72	3	He			63451.19		
Ge	72	3	He			60297.58		
In	115	3	He			62852.58		
In	115	3	He			60592.30		
In	115	3	He			62058.73		
Tb	159	3	He			285870.31		
Tb	159	3	He			282902.30		
Tb	159	3	He			280718.22		
Bi	209	3	He			232016.03		
Bi	209	3	He			232351.50		
Bi	209	3	He			229216.31		

Quantitation Report

Data File Name	125_CCV.d
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Acq Time	8/16/2023 10:31:11 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

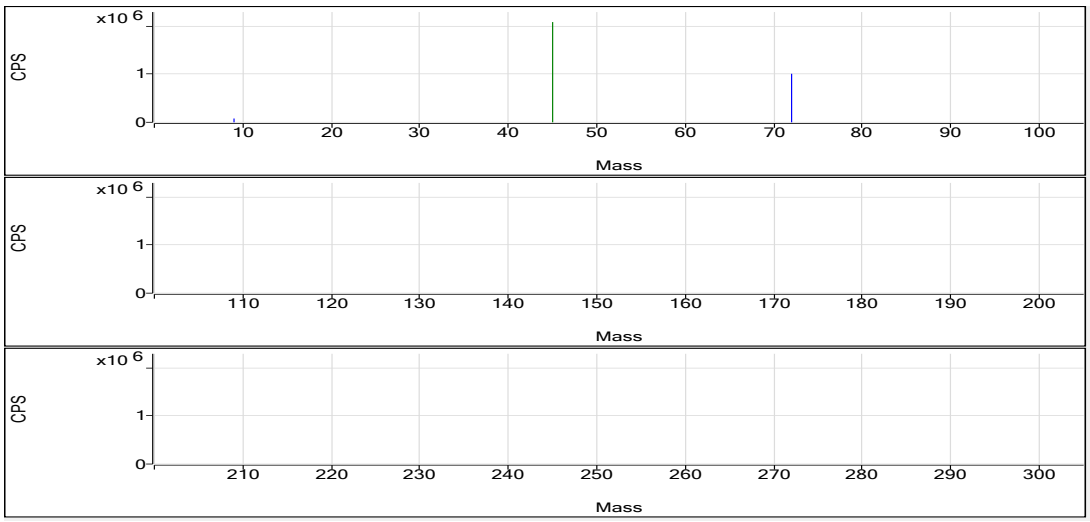
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	49.165	ppb	0.5	78634.87	0.0377	Pulse	0.5000	3
Se	78	72	H2	51.955	ppb	1.4	2247.96	0.0226	Pulse	1.5000	3
Na	23	45	He	5034.587	ppb	2.4	734350.93	19.6809	Pulse	0.1000	3
Mg	24	45	He	5181.502	ppb	2.3	360655.94	9.6656	Pulse	0.1000	3
Al	27	45	He	5038.437	ppb	2.7	108709.06	2.9135	Pulse	0.1000	3
K	39	45	He	5103.023	ppb	2.7	236829.25	6.3472	Pulse	0.1000	3
Ca	44	45	He	5031.531	ppb	0.6	12549.13	0.3363	Pulse	0.1000	3
Ti	47	45	He	5131.402	ppb	3.2	99475.44	2.6662	Pulse	0.1000	3
V	51	45	He	513.463	ppb	2.0	428277.55	11.4776	Pulse	0.5000	3
Cr	52	45	He	518.928	ppb	1.3	552378.56	14.8024	Pulse	0.1000	3
Mn	55	45	He	505.107	ppb	1.9	233583.93	6.2598	Pulse	0.1000	3
Fe	57	45	He	5016.129	ppb	0.7	106239.09	2.8468	Pulse	0.1000	3
Co	59	45	He	482.939	ppb	1.4	1047095.48	28.0596	Pulse	0.1000	3
Ni	60	72	He	522.298	ppb	0.8	293305.08	4.5308	Pulse	0.1000	3
Cu	63	72	He	487.162	ppb	0.3	824631.89	12.7383	Pulse	0.1000	3
Zn	66	72	He	514.014	ppb	1.3	95575.05	1.4764	Pulse	0.1000	3
As	75	72	He	513.442	ppb	1.2	68764.61	1.0623	Pulse	0.5000	3
Sr	88	115	He	50.447	ppb	1.4	27777.94	0.4522	Pulse	0.1000	3
Mo	98	115	He	51.475	ppb	2.1	74360.51	1.2108	Pulse	0.1000	3
Ag	107	115	He	53.007	ppb	1.8	162334.93	2.6432	Pulse	0.1000	3
Cd	111	115	He	51.281	ppb	2.2	17452.27	0.2842	Pulse	0.5000	3
Sn	120	115	He	50.237	ppb	1.3	51717.43	0.8420	Pulse	0.1000	3
Sb	121	115	He	50.205	ppb	1.2	47712.74	0.7768	Pulse	0.1000	3
Ba	137	115	He	508.115	ppb	1.4	155378.99	2.5298	Pulse	0.1000	3
Tl	205	159	He	50.630	ppb	1.4	380596.53	1.3187	Pulse	0.1000	3
Pb	208	159	He	50.327	ppb	0.2	507897.73	1.7597	Pulse	0.1000	3
U	238	209	He	50.262	ppb	1.0	574681.22	2.5248	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2083199.14	0.3	102.5	Analog	0.1000	3
No Gas	Ge	72	1008254.98	0.8	100.3	Pulse	0.1000	3
H2	Sc	45	118768.74	1.3	89.9	Pulse	0.1000	3
H2	Ge	72	99444.93	0.8	89.2	Pulse	0.1000	3
H2	In	115	279619.39	1.3	95.2	Pulse	0.1000	3
He	Sc	45	37322.00	1.6	101.0	Pulse	0.1000	3
He	Ge	72	64736.73	0.5	100.3	Pulse	0.1000	3
He	In	115	61424.72	1.1	97.2	Pulse	0.1000	3
He	Tb	159	288626.60	0.6	98.6	Pulse	0.1000	3
He	Bi	209	227626.48	1.0	96.5	Pulse	0.1000	3

No Gas



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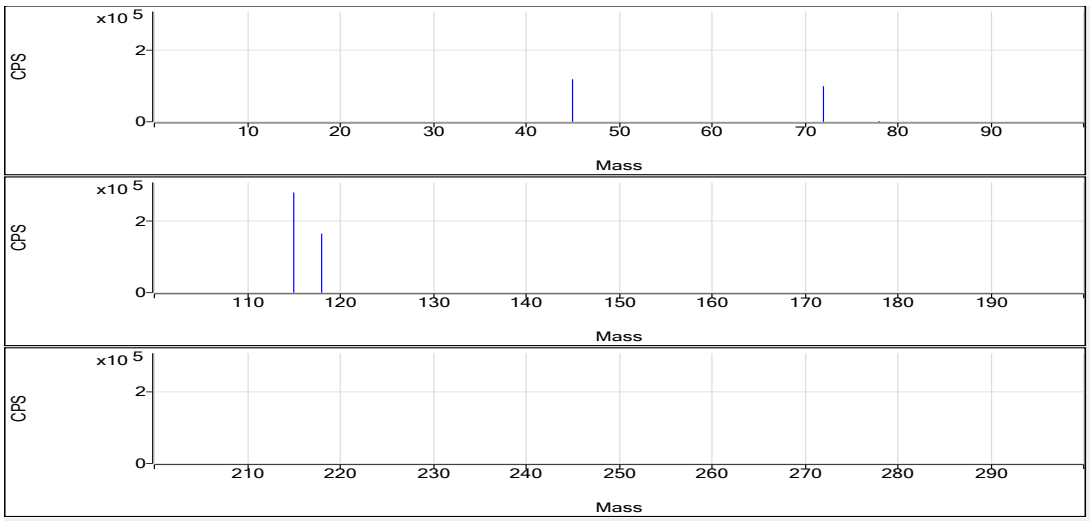
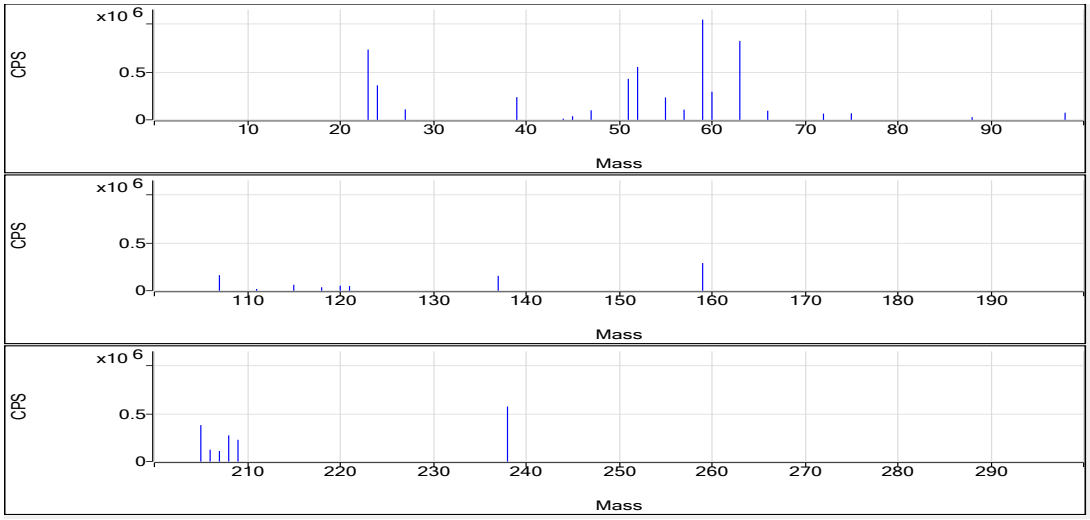


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.875	0.0375	77878.96	0.0008	2.195E-05
Be	9	1	No Gas	49.4	0.0379	79056.91	0.0008	2.195E-05
Be	9	1	No Gas	49.219	0.0378	78968.74	0.0008	2.195E-05
Se	78	2	H2	51.662	0.0225	2250.18	0.0004	1.386E-05
Se	78	2	H2	51.43	0.0224	2230.84	0.0004	1.386E-05
Se	78	2	H2	52.772	0.023	2262.85	0.0004	1.386E-05
Na	23	3	He	5067.708	19.8075	735811.24	0.0038	0.4416
Na	23	3	He	4900.084	19.1669	727772.10	0.0038	0.4416
Na	23	3	He	5135.969	20.0683	739469.44	0.0038	0.4416
Mg	24	3	He	5242.882	9.78	363309.56	0.0019	0.005872
Mg	24	3	He	5046.159	9.4133	357423.98	0.0019	0.005872
Mg	24	3	He	5255.466	9.8035	361234.29	0.0019	0.005872
Al	27	3	He	5060.134	2.9261	108698.38	0.0006	0.0004496
Al	27	3	He	4895.093	2.8307	107480.61	0.0006	0.0004496
Al	27	3	He	5160.083	2.9839	109948.18	0.0006	0.0004496
K	39	3	He	5120.3	6.3672	236528.41	0.0012	0.4456
K	39	3	He	4959.211	6.1809	234688.92	0.0012	0.4456
K	39	3	He	5229.558	6.4935	239270.43	0.0012	0.4456
Ca	44	3	He	5049.659	0.3375	12535.87	0.0001	0.003779
Ca	44	3	He	4998.882	0.3341	12685.88	0.0001	0.003779
Ca	44	3	He	5046.05	0.3372	12425.65	0.0001	0.003779
Ti	47	3	He	5200.344	2.702	100375.56	0.0005	0
Ti	47	3	He	4943.803	2.5687	97535.57	0.0005	0
Ti	47	3	He	5250.058	2.7279	100515.19	0.0005	0
V	51	3	He	517.061	11.5578	429351.41	0.0223	0.03054
V	51	3	He	501.807	11.2177	425940.16	0.0223	0.03054
V	51	3	He	521.521	11.6572	429541.09	0.0223	0.03054
Cr	52	3	He	521.544	14.8768	552646.24	0.0285	0.03714
Cr	52	3	He	511.128	14.5804	553622.88	0.0285	0.03714
Cr	52	3	He	524.111	14.9499	550866.55	0.0285	0.03714
Mn	55	3	He	507.216	6.286	233512.13	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	494.639	6.1302	232765.21	0.0124	0.004415
Mn	55	3	He	513.465	6.3634	234474.45	0.0124	0.004415
Fe	57	3	He	5015.344	2.8463	105735.48	0.0006	0.001356
Fe	57	3	He	4979.626	2.8261	107306.04	0.0006	0.001356
Fe	57	3	He	5053.417	2.8679	105675.74	0.0006	0.001356
Co	59	3	He	486.75	28.281	1050587.87	0.0581	0.002697
Co	59	3	He	475.226	27.6115	1048415.06	0.0581	0.002697
Co	59	3	He	486.842	28.2863	1042283.50	0.0581	0.002697
Ni	60	3	He	518.08	4.4943	291802.79	0.0087	0.003928
Ni	60	3	He	522.86	4.5357	294445.74	0.0087	0.003928
Ni	60	3	He	525.952	4.5625	293666.71	0.0087	0.003928
Cu	63	3	He	485.266	12.6888	823851.71	0.0261	0.006048
Cu	63	3	He	487.949	12.7589	828273.35	0.0261	0.006048
Cu	63	3	He	488.271	12.7673	821770.61	0.0261	0.006048
Zn	66	3	He	506.384	1.4545	94440.16	0.0029	0.003512
Zn	66	3	He	516.319	1.483	96273.30	0.0029	0.003512
Zn	66	3	He	519.34	1.4917	96011.70	0.0029	0.003512
As	75	3	He	513.721	1.0628	69007.15	0.0021	0.0007233
As	75	3	He	507.17	1.0493	68116.89	0.0021	0.0007233
As	75	3	He	519.435	1.0746	69169.79	0.0021	0.0007233
Sr	88	3	He	49.731	0.4458	27206.74	0.009	0.0005796
Sr	88	3	He	50.486	0.4526	28148.74	0.009	0.0005796
Sr	88	3	He	51.125	0.4583	27978.35	0.009	0.0005796
Mo	98	3	He	52.395	1.2324	75211.49	0.0235	0.0003188
Mo	98	3	He	50.255	1.1821	73522.27	0.0235	0.0003188
Mo	98	3	He	51.776	1.2178	74347.77	0.0235	0.0003188
Ag	107	3	He	53.511	2.6683	162840.39	0.0499	0.0004754
Ag	107	3	He	51.907	2.5884	160990.00	0.0499	0.0004754
Ag	107	3	He	53.602	2.6728	163174.41	0.0499	0.0004754
Cd	111	3	He	52.171	0.2891	17643.16	0.0055	1.07E-05
Cd	111	3	He	50.022	0.2772	17240.68	0.0055	1.07E-05
Cd	111	3	He	51.65	0.2862	17472.96	0.0055	1.07E-05
Sn	120	3	He	50.97	0.854	52118.88	0.0164	0.01713
Sn	120	3	He	49.922	0.8368	52048.68	0.0164	0.01713
Sn	120	3	He	49.82	0.8351	50984.74	0.0164	0.01713
Sb	121	3	He	50.729	0.7849	47903.41	0.0155	0.0002641
Sb	121	3	He	49.524	0.7663	47662.48	0.0155	0.0002641
Sb	121	3	He	50.361	0.7792	47572.33	0.0155	0.0002641
Ba	137	3	He	514.307	2.5607	156271.55	0.005	0.0001577
Ba	137	3	He	500.031	2.4896	154846.66	0.005	0.0001577
Ba	137	3	He	510.006	2.5393	155018.76	0.005	0.0001577
Tl	205	3	He	51.353	1.3375	386151.09	0.026	0.0002504
Tl	205	3	He	49.984	1.3018	378040.07	0.026	0.0002504
Tl	205	3	He	50.554	1.3167	377598.43	0.026	0.0002504
Pb	208	3	He	50.453	1.7641	274875.97	0.0349	0.001422
Pb	208	3	He	50.202	1.7554	274920.00	0.0349	0.001422
Pb	208	3	He	50.325	1.7596	271793.34	0.0349	0.001422
U	238	3	He	50.028	2.5131	571084.21	0.0502	5.657E-05
U	238	3	He	49.895	2.5064	576471.05	0.0502	5.657E-05
U	238	3	He	50.861	2.5549	576488.39	0.0502	5.657E-05
Sc	45	1	No Gas			2075422.63		
Sc	45	1	No Gas			2084435.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2089739.34		
Ge	72	1	No Gas			1000275.84		
Ge	72	1	No Gas			1007754.83		
Ge	72	1	No Gas			1016734.28		
Sc	45	2	H2			120456.36		
Sc	45	2	H2			117662.22		
Sc	45	2	H2			118187.63		
Ge	72	2	H2			100099.75		
Ge	72	2	H2			99686.42		
Ge	72	2	H2			98548.62		
In	115	2	H2			277882.11		
In	115	2	H2			277268.71		
In	115	2	H2			283707.34		
Sc	45	3	He			37148.17		
Sc	45	3	He			37970.24		
Sc	45	3	He			36847.59		
Ge	72	3	He			64927.63		
Ge	72	3	He			64917.30		
Ge	72	3	He			64365.26		
In	115	3	He			61305.81		
In	115	3	He			62480.92		
In	115	3	He			61326.02		
Tb	159	3	He			288709.76		
Tb	159	3	He			290388.55		
Tb	159	3	He			286781.50		
Bi	209	3	He			227242.38		
Bi	209	3	He			230001.17		
Bi	209	3	He			225635.90		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

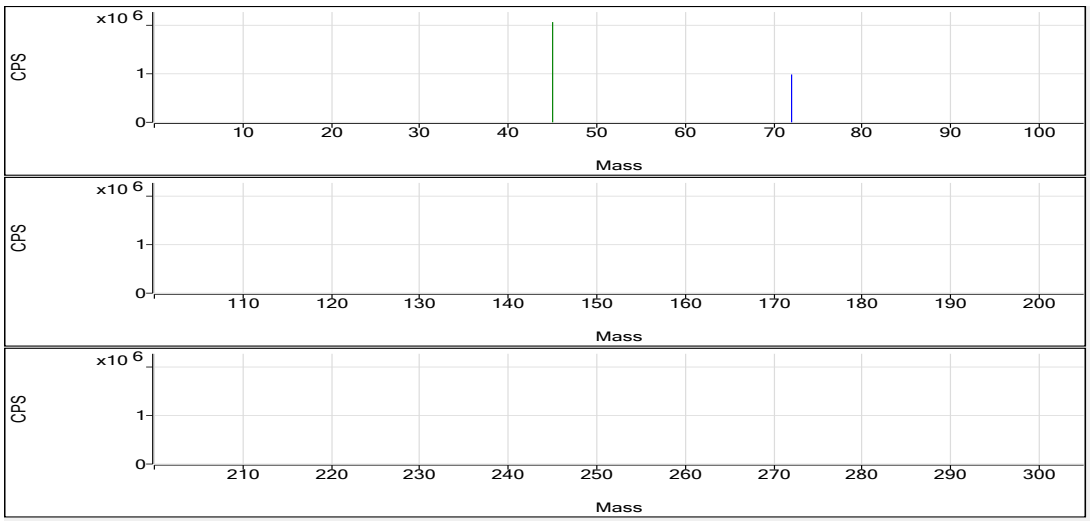
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.026	ppb	49.3	87.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.095	ppb	33.5	5.33	0.0001	Pulse	1.5000	3
Na	23	45	He	-10.805	ppb	N/A	15158.19	0.4003	Pulse	0.1000	3
Mg	24	45	He	1.096	ppb	55.1	300.01	0.0079	Pulse	0.1000	3
Al	27	45	He	3.489	ppb	16.2	93.33	0.0025	Pulse	0.1000	3
K	39	45	He	-18.004	ppb	N/A	16089.33	0.4248	Pulse	0.1000	3
Ca	44	45	He	-3.916	ppb	N/A	133.34	0.0035	Pulse	0.1000	3
Ti	47	45	He	2.037	ppb	50.3	40.00	0.0011	Pulse	0.1000	3
V	51	45	He	-0.054	ppb	N/A	1110.72	0.0293	Pulse	0.5000	3
Cr	52	45	He	0.155	ppb	56.6	1573.47	0.0415	Pulse	0.1000	3
Mn	55	45	He	0.176	ppb	87.0	250.01	0.0066	Pulse	0.1000	3
Fe	57	45	He	2.870	ppb	79.9	113.34	0.0030	Pulse	0.1000	3
Co	59	45	He	0.114	ppb	22.6	353.35	0.0093	Pulse	0.1000	3
Ni	60	72	He	0.096	ppb	103.0	300.01	0.0048	Pulse	0.1000	3
Cu	63	72	He	0.011	ppb	286.8	400.02	0.0063	Pulse	0.1000	3
Zn	66	72	He	0.152	ppb	364.7	250.01	0.0039	Pulse	0.1000	3
As	75	72	He	0.155	ppb	74.0	66.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.020	ppb	138.0	46.67	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.081	ppb	17.2	136.67	0.0022	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	34.2	46.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	58.3	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.065	ppb	68.7	1120.09	0.0182	Pulse	0.1000	3
Sb	121	115	He	0.032	ppb	19.5	46.67	0.0008	Pulse	0.1000	3
Ba	137	115	He	0.099	ppb	118.6	40.00	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.074	ppb	13.2	616.70	0.0022	Pulse	0.1000	3
Pb	208	159	He	0.001	ppb	137.8	413.35	0.0015	Pulse	0.1000	3
U	238	209	He	0.044	ppb	13.9	523.36	0.0023	Pulse	0.1000	3

ISTD Table:

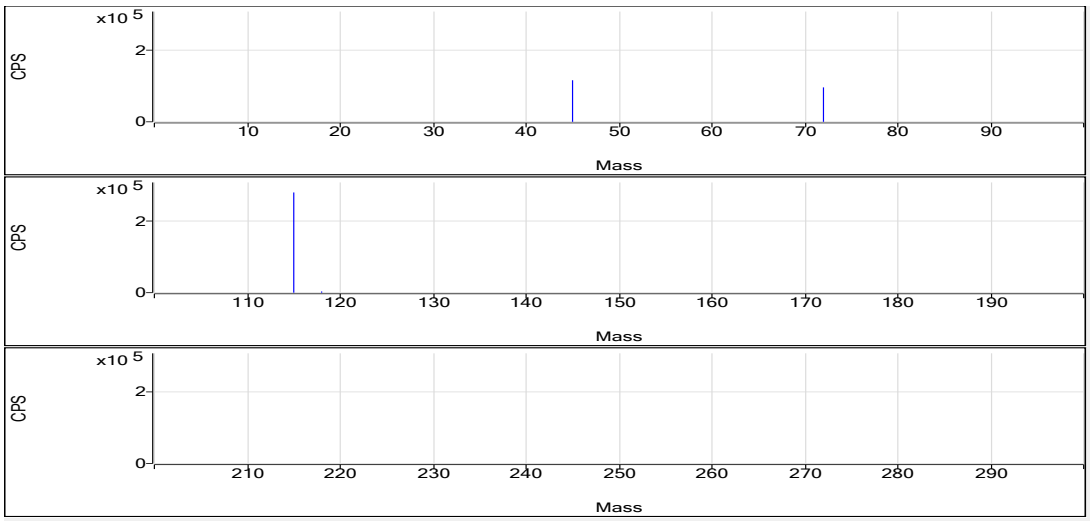
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2074873.56	1.7	102.1	Analog	0.1000	3
No Gas	Ge	72	990184.21	0.4	98.5	Pulse	0.1000	3
H2	Sc	45	116433.47	0.5	88.1	Pulse	0.1000	3
H2	Ge	72	96430.93	0.4	86.5	Pulse	0.1000	3
H2	In	115	280733.98	1.3	95.6	Pulse	0.1000	3
He	Sc	45	37870.10	1.0	102.5	Pulse	0.1000	3
He	Ge	72	63080.23	2.5	97.7	Pulse	0.1000	3
He	In	115	61564.43	0.6	97.4	Pulse	0.1000	3
He	Tb	159	284247.93	0.7	97.1	Pulse	0.1000	3
He	Bi	209	229908.27	1.1	97.5	Pulse	0.1000	3

No Gas

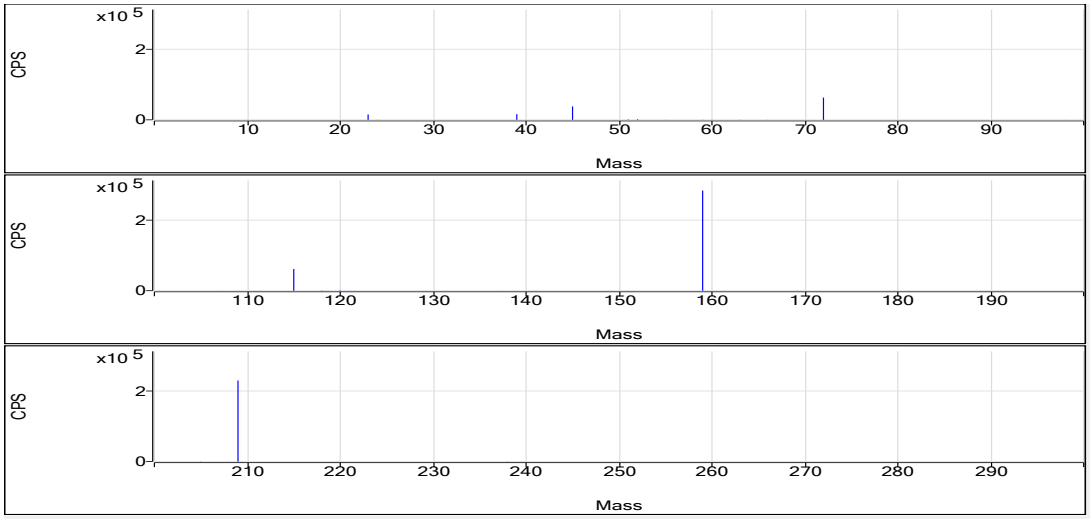


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.041	0.0001	110.00	0.0008	2.195E-05
Be	9	1	No Gas	0.017	0	74.00	0.0008	2.195E-05
Be	9	1	No Gas	0.021	0	78.00	0.0008	2.195E-05
Se	78	2	H2	0.095	0.0001	5.33	0.0004	1.386E-05
Se	78	2	H2	0.064	0	4.00	0.0004	1.386E-05
Se	78	2	H2	0.128	0.0001	6.67	0.0004	1.386E-05
Na	23	3	He	-10.778	0.4004	15328.48	0.0038	0.4416
Na	23	3	He	-15.458	0.3825	14467.39	0.0038	0.4416
Na	23	3	He	-6.179	0.418	15678.69	0.0038	0.4416
Mg	24	3	He	1.755	0.0091	350.01	0.0019	0.005872
Mg	24	3	He	0.964	0.0077	290.01	0.0019	0.005872
Mg	24	3	He	0.569	0.0069	260.01	0.0019	0.005872
Al	27	3	He	2.837	0.0021	80.00	0.0006	0.0004496
Al	27	3	He	3.796	0.0026	100.00	0.0006	0.0004496
Al	27	3	He	3.834	0.0027	100.00	0.0006	0.0004496
K	39	3	He	-7.879	0.4365	16710.03	0.0012	0.4456
K	39	3	He	-25.02	0.4167	15758.89	0.0012	0.4456
K	39	3	He	-21.112	0.4212	15799.06	0.0012	0.4456
Ca	44	3	He	2.119	0.0039	150.01	0.0001	0.003779
Ca	44	3	He	-13.167	0.0029	110.00	0.0001	0.003779
Ca	44	3	He	-0.699	0.0037	140.00	0.0001	0.003779
Ti	47	3	He	1.006	0.0005	20.00	0.0005	0
Ti	47	3	He	3.053	0.0016	60.00	0.0005	0
Ti	47	3	He	2.052	0.0011	40.00	0.0005	0
V	51	3	He	-0.041	0.0296	1134.05	0.0223	0.03054
V	51	3	He	-0.07	0.029	1096.05	0.0223	0.03054
V	51	3	He	-0.052	0.0294	1102.05	0.0223	0.03054
Cr	52	3	He	0.164	0.0418	1600.13	0.0285	0.03714
Cr	52	3	He	0.238	0.0439	1660.16	0.0285	0.03714
Cr	52	3	He	0.063	0.0389	1460.12	0.0285	0.03714
Mn	55	3	He	0.129	0.006	230.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.348	0.0087	330.02	0.0124	0.004415
Mn	55	3	He	0.053	0.0051	190.01	0.0124	0.004415
Fe	57	3	He	4.978	0.0042	160.01	0.0006	0.001356
Fe	57	3	He	3.203	0.0032	120.00	0.0006	0.001356
Fe	57	3	He	0.43	0.0016	60.00	0.0006	0.001356
Co	59	3	He	0.138	0.0107	410.02	0.0581	0.002697
Co	59	3	He	0.117	0.0095	360.02	0.0581	0.002697
Co	59	3	He	0.087	0.0077	290.01	0.0581	0.002697
Ni	60	3	He	0.006	0.004	250.01	0.0087	0.003928
Ni	60	3	He	0.081	0.0046	300.01	0.0087	0.003928
Ni	60	3	He	0.202	0.0057	350.02	0.0087	0.003928
Cu	63	3	He	0.049	0.0073	460.02	0.0261	0.006048
Cu	63	3	He	-0.007	0.0059	380.02	0.0261	0.006048
Cu	63	3	He	-0.008	0.0058	360.02	0.0261	0.006048
Zn	66	3	He	-0.393	0.0024	150.01	0.0029	0.003512
Zn	66	3	He	0.714	0.0056	360.02	0.0029	0.003512
Zn	66	3	He	0.134	0.0039	240.01	0.0029	0.003512
As	75	3	He	0.05	0.0008	52.00	0.0021	0.0007233
As	75	3	He	0.277	0.0013	84.00	0.0021	0.0007233
As	75	3	He	0.137	0.001	62.00	0.0021	0.0007233
Sr	88	3	He	0.026	0.0008	50.00	0.009	0.0005796
Sr	88	3	He	0.044	0.001	60.00	0.009	0.0005796
Sr	88	3	He	-0.01	0.0005	30.00	0.009	0.0005796
Mo	98	3	He	0.096	0.0026	160.01	0.0235	0.0003188
Mo	98	3	He	0.076	0.0021	130.01	0.0235	0.0003188
Mo	98	3	He	0.07	0.002	120.00	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	0.089	0.0186	1150.08	0.0164	0.01713
Sn	120	3	He	0.013	0.0173	1070.08	0.0164	0.01713
Sn	120	3	He	0.092	0.0186	1140.10	0.0164	0.01713
Sb	121	3	He	0.025	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.035	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.036	0.0008	50.00	0.0155	0.0002641
Ba	137	3	He	0.228	0.0013	80.00	0.005	0.0001577
Ba	137	3	He	0.001	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0.067	0.0005	30.00	0.005	0.0001577
Tl	205	3	He	0.063	0.0019	540.03	0.026	0.0002504
Tl	205	3	He	0.077	0.0023	640.04	0.026	0.0002504
Tl	205	3	He	0.082	0.0024	670.04	0.026	0.0002504
Pb	208	3	He	0.002	0.0015	230.01	0.0349	0.001422
Pb	208	3	He	0.001	0.0014	170.01	0.0349	0.001422
Pb	208	3	He	0	0.0014	210.01	0.0349	0.001422
U	238	3	He	0.05	0.0026	600.03	0.0502	5.657E-05
U	238	3	He	0.038	0.002	450.03	0.0502	5.657E-05
U	238	3	He	0.044	0.0023	520.03	0.0502	5.657E-05
Sc	45	1	No Gas			2054440.13		
Sc	45	1	No Gas			2114508.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2055672.00		
Ge	72	1	No Gas			986959.36		
Ge	72	1	No Gas			995264.99		
Ge	72	1	No Gas			988328.27		
Sc	45	2	H2			116825.73		
Sc	45	2	H2			116736.47		
Sc	45	2	H2			115738.20		
Ge	72	2	H2			96876.71		
Ge	72	2	H2			96253.74		
Ge	72	2	H2			96162.35		
In	115	2	H2			277045.68		
In	115	2	H2			280676.75		
In	115	2	H2			284479.51		
Sc	45	3	He			38281.18		
Sc	45	3	He			37819.76		
Sc	45	3	He			37509.35		
Ge	72	3	He			62859.29		
Ge	72	3	He			64777.60		
Ge	72	3	He			61603.81		
In	115	3	He			61847.99		
In	115	3	He			61687.45		
In	115	3	He			61175.17		
Tb	159	3	He			286254.88		
Tb	159	3	He			284342.98		
Tb	159	3	He			282145.93		
Bi	209	3	He			232706.36		
Bi	209	3	He			229265.70		
Bi	209	3	He			227752.75		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
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Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

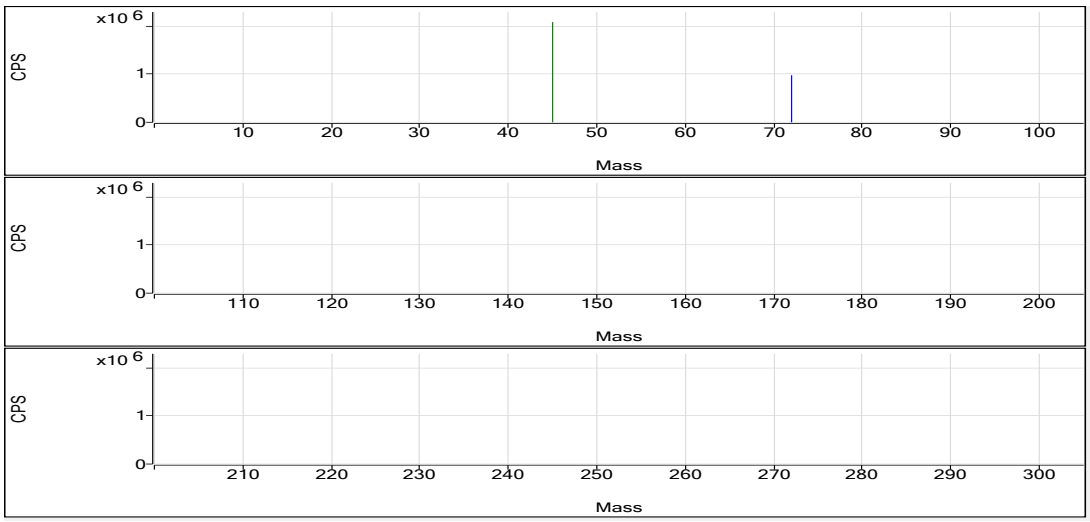
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.017	ppb	17.2	73.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.181	ppb	26.2	9.55	0.0001	Pulse	1.5000	3
Na	23	45	He	2532664.716	ppb	1.9	353209434.74	9 678.8290	Analog	0.1000	3
Mg	24	45	He	70518.280	ppb	2.0	4797693.26	131.4709	Analog	0.1000	3
Al	27	45	He	8.366	ppb	19.8	193.34	0.0053	Pulse	0.1000	3
K	39	45	He	8786.551	ppb	2.4	387065.79	10.6071	Pulse	0.1000	3
Ca	44	45	He	12532.422	ppb	1.9	30358.94	0.8319	Pulse	0.1000	3
Ti	47	45	He	1.232	ppb	25.5	23.33	0.0006	Pulse	0.1000	3
V	51	45	He	-0.211	ppb	N/A	943.37	0.0258	Pulse	0.5000	3
Cr	52	45	He	0.139	ppb	139.8	1496.80	0.0411	Pulse	0.1000	3
Mn	55	45	He	63.535	ppb	0.8	28882.76	0.7913	Pulse	0.1000	3
Fe	57	45	He	72.020	ppb	2.9	1540.14	0.0422	Pulse	0.1000	3
Co	59	45	He	1.102	ppb	5.1	2433.61	0.0667	Pulse	0.1000	3
Ni	60	72	He	42.796	ppb	2.0	23336.01	0.3749	Pulse	0.1000	3
Cu	63	72	He	4.311	ppb	5.2	7388.88	0.1187	Pulse	0.1000	3
Zn	66	72	He	2.939	ppb	17.8	743.38	0.0119	Pulse	0.1000	3
As	75	72	He	1.267	ppb	18.4	208.00	0.0033	Pulse	0.5000	3
Sr	88	115	He	268.388	ppb	2.0	144511.87	2.4034	Pulse	0.1000	3
Mo	98	115	He	0.703	ppb	3.7	1013.41	0.0169	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	701.9	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	56.1	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.008	ppb	N/A	1023.71	0.0170	Pulse	0.1000	3
Sb	121	115	He	0.055	ppb	30.8	66.67	0.0011	Pulse	0.1000	3
Ba	137	115	He	6.870	ppb	12.1	2066.90	0.0344	Pulse	0.1000	3
Tl	205	159	He	0.043	ppb	20.1	376.69	0.0014	Pulse	0.1000	3
Pb	208	159	He	0.131	ppb	2.3	1640.11	0.0060	Pulse	0.1000	3
U	238	209	He	0.109	ppb	4.7	1176.76	0.0055	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2079555.13	0.8	102.3	Analog	0.1000	3
No Gas	Ge	72	975821.86	1.0	97.1	Pulse	0.1000	3
H2	Sc	45	124667.90	0.4	94.4	Pulse	0.1000	3
H2	Ge	72	103466.16	1.2	92.8	Pulse	0.1000	3
H2	In	115	273136.84	0.8	93.0	Pulse	0.1000	3
He	Sc	45	36503.24	2.2	98.8	Pulse	0.1000	3
He	Ge	72	62246.44	0.9	96.4	Pulse	0.1000	3
He	In	115	60135.60	0.9	95.2	Pulse	0.1000	3
He	Tb	159	274045.02	1.2	93.6	Pulse	0.1000	3
He	Bi	209	212629.54	0.5	90.2	Pulse	0.1000	3

No Gas



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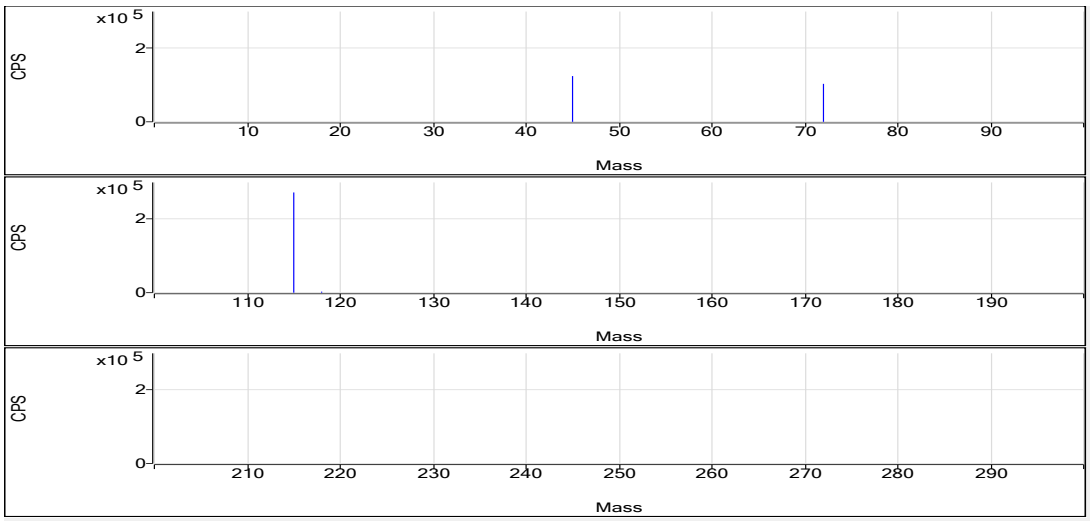
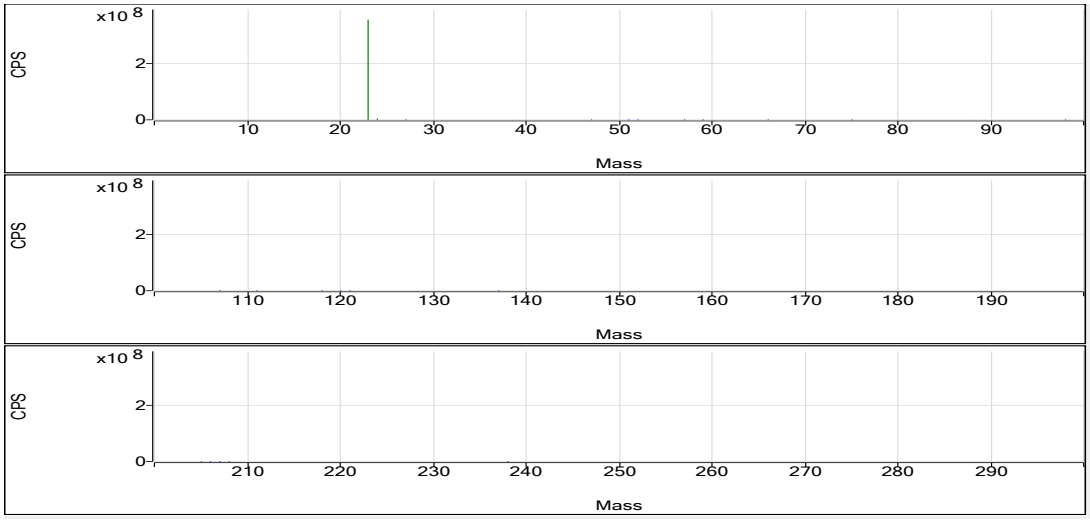


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0	72.00	0.0008	2.195E-05
Be	9	1	No Gas	0.021	0	78.00	0.0008	2.195E-05
Be	9	1	No Gas	0.015	0	70.00	0.0008	2.195E-05
Se	78	2	H2	0.223	0.0001	11.33	0.0004	1.386E-05
Se	78	2	H2	0.13	0.0001	7.33	0.0004	1.386E-05
Se	78	2	H2	0.19	0.0001	10.00	0.0004	1.386E-05
Na	23	3	He	2478538.739	9471.9907	354335994.72	0.0038	0.4416
Na	23	3	He	2547352.299	9734.9565	352657074.75	0.0038	0.4416
Na	23	3	He	2572103.11	9829.5399	352635234.75	0.0038	0.4416
Mg	24	3	He	68938.516	128.5258	4807997.74	0.0019	0.005872
Mg	24	3	He	70911.876	132.2047	4789225.87	0.0019	0.005872
Mg	24	3	He	71704.447	133.6822	4795856.18	0.0019	0.005872
Al	27	3	He	9.395	0.0059	220.01	0.0006	0.0004496
Al	27	3	He	9.249	0.0058	210.01	0.0006	0.0004496
Al	27	3	He	6.455	0.0042	150.01	0.0006	0.0004496
K	39	3	He	8541.014	10.3232	386177.26	0.0012	0.4456
K	39	3	He	8910.141	10.7501	389429.72	0.0012	0.4456
K	39	3	He	8908.497	10.7481	385590.38	0.0012	0.4456
Ca	44	3	He	12266.187	0.8143	30462.68	0.0001	0.003779
Ca	44	3	He	12597.323	0.8362	30292.03	0.0001	0.003779
Ca	44	3	He	12733.756	0.8452	30322.12	0.0001	0.003779
Ti	47	3	He	1.029	0.0005	20.00	0.0005	0
Ti	47	3	He	1.594	0.0008	30.00	0.0005	0
Ti	47	3	He	1.073	0.0006	20.00	0.0005	0
V	51	3	He	-0.221	0.0256	958.04	0.0223	0.03054
V	51	3	He	-0.213	0.0258	934.04	0.0223	0.03054
V	51	3	He	-0.197	0.0261	938.04	0.0223	0.03054
Cr	52	3	He	-0.065	0.0353	1320.12	0.0285	0.03714
Cr	52	3	He	0.16	0.0417	1510.12	0.0285	0.03714
Cr	52	3	He	0.321	0.0463	1660.15	0.0285	0.03714
Mn	55	3	He	63.278	0.7881	29480.88	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	64.127	0.7986	28929.47	0.0124	0.004415
Mn	55	3	He	63.201	0.7871	28237.93	0.0124	0.004415
Fe	57	3	He	69.718	0.0409	1530.15	0.0006	0.001356
Fe	57	3	He	72.559	0.0425	1540.14	0.0006	0.001356
Fe	57	3	He	73.783	0.0432	1550.13	0.0006	0.001356
Co	59	3	He	1.044	0.0634	2370.26	0.0581	0.002697
Co	59	3	He	1.156	0.0698	2530.29	0.0581	0.002697
Co	59	3	He	1.105	0.0669	2400.28	0.0581	0.002697
Ni	60	3	He	43.696	0.3827	24030.41	0.0087	0.003928
Ni	60	3	He	41.953	0.3676	22668.30	0.0087	0.003928
Ni	60	3	He	42.738	0.3743	23309.32	0.0087	0.003928
Cu	63	3	He	4.084	0.1128	7082.05	0.0261	0.006048
Cu	63	3	He	4.317	0.1189	7332.18	0.0261	0.006048
Cu	63	3	He	4.532	0.1245	7752.40	0.0261	0.006048
Zn	66	3	He	3.443	0.0134	840.05	0.0029	0.003512
Zn	66	3	He	2.396	0.0104	640.04	0.0029	0.003512
Zn	66	3	He	2.978	0.012	750.04	0.0029	0.003512
As	75	3	He	1.021	0.0028	178.00	0.0021	0.0007233
As	75	3	He	1.297	0.0034	210.00	0.0021	0.0007233
As	75	3	He	1.483	0.0038	236.00	0.0021	0.0007233
Sr	88	3	He	264.486	2.3685	143501.48	0.009	0.0005796
Sr	88	3	He	274.644	2.4594	146341.12	0.009	0.0005796
Sr	88	3	He	266.034	2.3823	143693.01	0.009	0.0005796
Mo	98	3	He	0.702	0.0168	1020.07	0.0235	0.0003188
Mo	98	3	He	0.73	0.0175	1040.08	0.0235	0.0003188
Mo	98	3	He	0.677	0.0162	980.08	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0.001	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	0.345	0.0228	1381.03	0.0164	0.01713
Sn	120	3	He	-0.194	0.0139	830.05	0.0164	0.01713
Sn	120	3	He	-0.175	0.0143	860.05	0.0164	0.01713
Sb	121	3	He	0.058	0.0012	70.00	0.0155	0.0002641
Sb	121	3	He	0.07	0.0013	80.00	0.0155	0.0002641
Sb	121	3	He	0.037	0.0008	50.00	0.0155	0.0002641
Ba	137	3	He	6.467	0.0324	1960.20	0.005	0.0001577
Ba	137	3	He	6.315	0.0316	1880.20	0.005	0.0001577
Ba	137	3	He	7.828	0.0391	2360.29	0.005	0.0001577
Tl	205	3	He	0.053	0.0016	450.03	0.026	0.0002504
Tl	205	3	He	0.036	0.0012	320.01	0.026	0.0002504
Tl	205	3	He	0.041	0.0013	360.02	0.026	0.0002504
Pb	208	3	He	0.132	0.006	930.08	0.0349	0.001422
Pb	208	3	He	0.127	0.0059	830.05	0.0349	0.001422
Pb	208	3	He	0.133	0.0061	890.06	0.0349	0.001422
U	238	3	He	0.103	0.0052	1110.08	0.0502	5.657E-05
U	238	3	He	0.113	0.0058	1230.10	0.0502	5.657E-05
U	238	3	He	0.11	0.0056	1190.11	0.0502	5.657E-05
Sc	45	1	No Gas			2081543.56		
Sc	45	1	No Gas			2061870.91		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2095250.91		
Ge	72	1	No Gas			983763.74		
Ge	72	1	No Gas			964747.95		
Ge	72	1	No Gas			978953.89		
Sc	45	2	H2			124208.05		
Sc	45	2	H2			124579.98		
Sc	45	2	H2			125215.67		
Ge	72	2	H2			102123.16		
Ge	72	2	H2			104409.76		
Ge	72	2	H2			103865.56		
In	115	2	H2			274057.61		
In	115	2	H2			270640.56		
In	115	2	H2			274712.36		
Sc	45	3	He			37408.82		
Sc	45	3	He			36225.85		
Sc	45	3	He			35875.05		
Ge	72	3	He			62798.95		
Ge	72	3	He			61673.93		
Ge	72	3	He			62266.45		
In	115	3	He			60592.79		
In	115	3	He			59507.97		
In	115	3	He			60321.57		
Tb	159	3	He			277575.03		
Tb	159	3	He			271099.61		
Tb	159	3	He			273460.41		
Bi	209	3	He			211466.72		
Bi	209	3	He			213760.31		
Bi	209	3	He			212661.60		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 10:37:25 AM
Sample Name	410-137866-C-9-A @100
Sample Type	Sample
Comment	F12
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

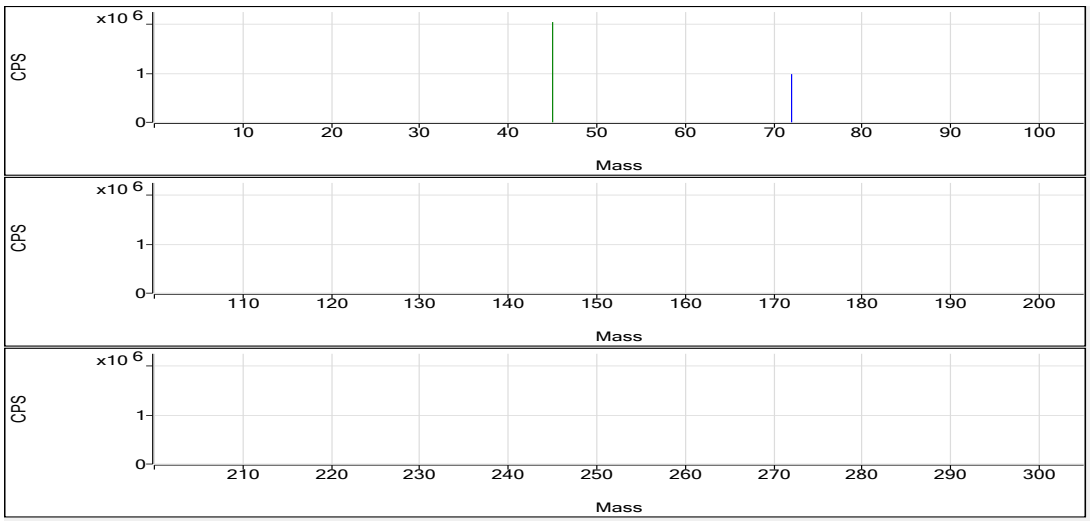
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	44.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.024	ppb	74.3	2.44	0.0000	Pulse	1.5000	3
Na	23	45	He	27487.009	ppb	2.1	3913681.92	105.4811	Analog	0.1000	3
Mg	24	45	He	729.754	ppb	1.0	50701.07	1.3663	Pulse	0.1000	3
Al	27	45	He	1.874	ppb	54.3	56.67	0.0015	Pulse	0.1000	3
K	39	45	He	91.348	ppb	10.7	20454.88	0.5513	Pulse	0.1000	3
Ca	44	45	He	123.549	ppb	8.7	443.36	0.0119	Pulse	0.1000	3
Ti	47	45	He	0.516	ppb	98.9	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	-0.060	ppb	N/A	1083.38	0.0292	Pulse	0.5000	3
Cr	52	45	He	-0.054	ppb	N/A	1323.44	0.0356	Pulse	0.1000	3
Mn	55	45	He	0.639	ppb	19.9	456.69	0.0123	Pulse	0.1000	3
Fe	57	45	He	1.740	ppb	89.9	86.67	0.0023	Pulse	0.1000	3
Co	59	45	He	0.049	ppb	12.5	206.68	0.0056	Pulse	0.1000	3
Ni	60	72	He	0.412	ppb	58.8	470.02	0.0075	Pulse	0.1000	3
Cu	63	72	He	0.062	ppb	26.6	480.02	0.0077	Pulse	0.1000	3
Zn	66	72	He	-0.037	ppb	N/A	213.34	0.0034	Pulse	0.1000	3
As	75	72	He	-0.025	ppb	N/A	42.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	2.433	ppb	5.8	1403.45	0.0224	Pulse	0.1000	3
Mo	98	115	He	0.016	ppb	88.7	43.33	0.0007	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	101.2	40.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	0.0	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.011	ppb	N/A	1063.41	0.0170	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	36.7	33.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.096	ppb	88.3	40.00	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.010	ppb	88.2	150.01	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.005	ppb	134.4	463.36	0.0016	Pulse	0.1000	3
U	238	209	He	0.008	ppb	6.3	103.34	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2050159.34	1.8	100.9	Analog	0.1000	3
No Gas	Ge	72	985692.87	0.7	98.1	Pulse	0.1000	3
H2	Sc	45	122277.43	0.5	92.6	Pulse	0.1000	3
H2	Ge	72	100052.42	1.3	89.7	Pulse	0.1000	3
H2	In	115	287199.29	1.6	97.8	Pulse	0.1000	3
He	Sc	45	37111.41	1.6	100.4	Pulse	0.1000	3
He	Ge	72	62647.66	1.4	97.0	Pulse	0.1000	3
He	In	115	62773.56	1.2	99.3	Pulse	0.1000	3
He	Tb	159	288544.38	1.2	98.5	Pulse	0.1000	3
He	Bi	209	235938.38	0.5	100.0	Pulse	0.1000	3

No Gas



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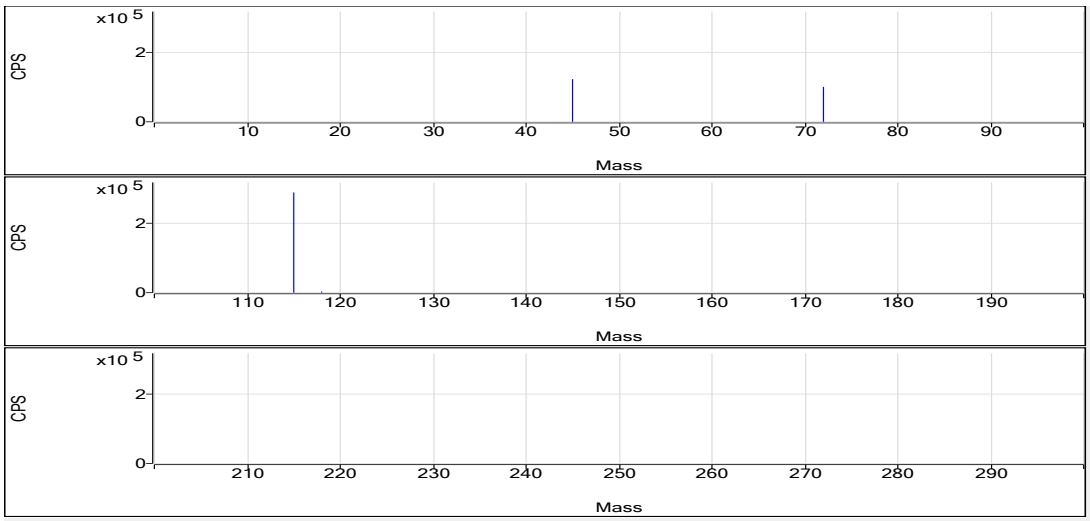
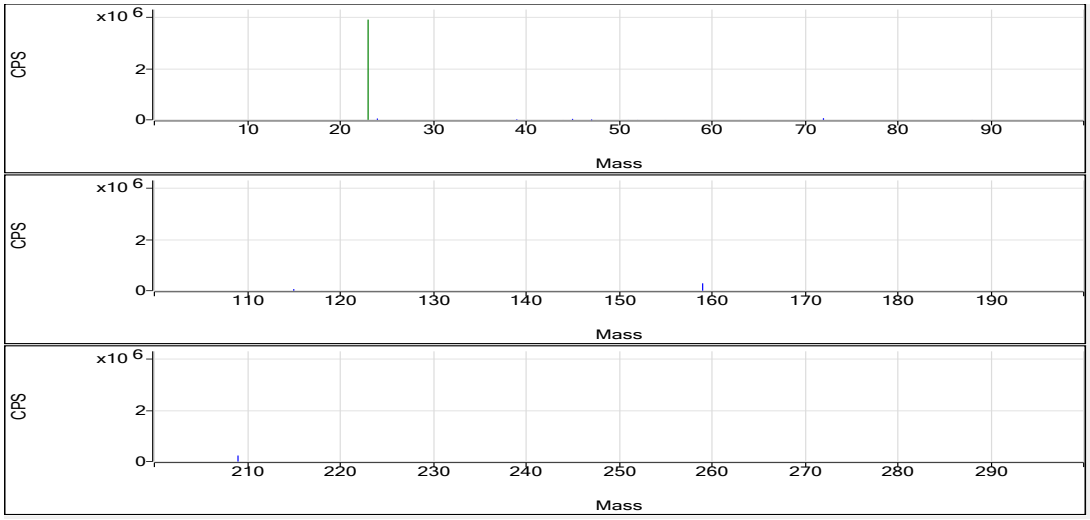


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.008	0	32.00	0.0008	2.195E-05
Be	9	1	No Gas	0.001	0	48.00	0.0008	2.195E-05
Be	9	1	No Gas	0.005	0	52.00	0.0008	2.195E-05
Se	78	2	H2	0.013	0	2.00	0.0004	1.386E-05
Se	78	2	H2	0.045	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.014	0	2.00	0.0004	1.386E-05
Na	23	3	He	28085.883	107.7697	3933220.88	0.0038	0.4416
Na	23	3	He	26952.133	103.4372	3899529.94	0.0038	0.4416
Na	23	3	He	27423.011	105.2366	3908294.94	0.0038	0.4416
Mg	24	3	He	735.634	1.3773	50266.33	0.0019	0.005872
Mg	24	3	He	721.193	1.3504	50908.24	0.0019	0.005872
Mg	24	3	He	732.436	1.3713	50928.64	0.0019	0.005872
Al	27	3	He	3.014	0.0022	80.00	0.0006	0.0004496
Al	27	3	He	1.058	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	1.551	0.0013	50.00	0.0006	0.0004496
K	39	3	He	102.149	0.5638	20575.04	0.0012	0.4456
K	39	3	He	88.893	0.5484	20675.26	0.0012	0.4456
K	39	3	He	83.001	0.5416	20114.35	0.0012	0.4456
Ca	44	3	He	112.833	0.0112	410.02	0.0001	0.003779
Ca	44	3	He	123.464	0.0119	450.02	0.0001	0.003779
Ca	44	3	He	134.349	0.0127	470.03	0.0001	0.003779
Ti	47	3	He	0.527	0.0003	10.00	0.0005	0
Ti	47	3	He	1.021	0.0005	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.05	0.0294	1074.05	0.0223	0.03054
V	51	3	He	-0.083	0.0287	1082.05	0.0223	0.03054
V	51	3	He	-0.049	0.0295	1094.05	0.0223	0.03054
Cr	52	3	He	-0.178	0.0321	1170.09	0.0285	0.03714
Cr	52	3	He	0.14	0.0411	1550.14	0.0285	0.03714
Cr	52	3	He	-0.122	0.0337	1250.09	0.0285	0.03714
Mn	55	3	He	0.75	0.0137	500.03	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.5	0.0106	400.02	0.0124	0.004415
Mn	55	3	He	0.665	0.0127	470.02	0.0124	0.004415
Fe	57	3	He	2.44	0.0027	100.00	0.0006	0.001356
Fe	57	3	He	-0.052	0.0013	50.00	0.0006	0.001356
Fe	57	3	He	2.831	0.003	110.00	0.0006	0.001356
Co	59	3	He	0.043	0.0052	190.01	0.0581	0.002697
Co	59	3	He	0.049	0.0056	210.01	0.0581	0.002697
Co	59	3	He	0.056	0.0059	220.01	0.0581	0.002697
Ni	60	3	He	0.519	0.0084	520.02	0.0087	0.003928
Ni	60	3	He	0.135	0.0051	320.01	0.0087	0.003928
Ni	60	3	He	0.583	0.009	570.03	0.0087	0.003928
Cu	63	3	He	0.079	0.0081	500.03	0.0261	0.006048
Cu	63	3	He	0.061	0.0076	480.02	0.0261	0.006048
Cu	63	3	He	0.046	0.0072	460.02	0.0261	0.006048
Zn	66	3	He	0.019	0.0036	220.01	0.0029	0.003512
Zn	66	3	He	-0.114	0.0032	200.01	0.0029	0.003512
Zn	66	3	He	-0.016	0.0035	220.01	0.0029	0.003512
As	75	3	He	0.058	0.0008	52.00	0.0021	0.0007233
As	75	3	He	-0.057	0.0006	38.00	0.0021	0.0007233
As	75	3	He	-0.076	0.0006	36.00	0.0021	0.0007233
Sr	88	3	He	2.494	0.0229	1420.13	0.009	0.0005796
Sr	88	3	He	2.534	0.0233	1460.12	0.009	0.0005796
Sr	88	3	He	2.273	0.0209	1330.11	0.009	0.0005796
Mo	98	3	He	0	0.0003	20.00	0.0235	0.0003188
Mo	98	3	He	0.027	0.001	60.00	0.0235	0.0003188
Mo	98	3	He	0.02	0.0008	50.00	0.0235	0.0003188
Ag	107	3	He	0.007	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	0.018	0.0174	1080.08	0.0164	0.01713
Sn	120	3	He	0.102	0.0188	1180.09	0.0164	0.01713
Sn	120	3	He	-0.152	0.0146	930.06	0.0164	0.01713
Sb	121	3	He	0.025	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.014	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.013	0.0005	30.00	0.0155	0.0002641
Ba	137	3	He	0.163	0.001	60.00	0.005	0.0001577
Ba	137	3	He	0	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0.126	0.0008	50.00	0.005	0.0001577
Tl	205	3	He	0.019	0.0008	220.01	0.026	0.0002504
Tl	205	3	He	0.001	0.0003	80.00	0.026	0.0002504
Tl	205	3	He	0.01	0.0005	150.01	0.026	0.0002504
Pb	208	3	He	0.009	0.0017	250.01	0.0349	0.001422
Pb	208	3	He	0.009	0.0018	210.01	0.0349	0.001422
Pb	208	3	He	-0.003	0.0013	150.01	0.0349	0.001422
U	238	3	He	0.007	0.0004	100.01	0.0502	5.657E-05
U	238	3	He	0.008	0.0005	110.00	0.0502	5.657E-05
U	238	3	He	0.007	0.0004	100.00	0.0502	5.657E-05
Sc	45	1	No Gas			2022901.53		
Sc	45	1	No Gas			2092394.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2035182.47		
Ge	72	1	No Gas			985715.84		
Ge	72	1	No Gas			992523.81		
Ge	72	1	No Gas			978838.97		
Sc	45	2	H2			122966.41		
Sc	45	2	H2			121786.92		
Sc	45	2	H2			122078.97		
Ge	72	2	H2			101499.14		
Ge	72	2	H2			99263.82		
Ge	72	2	H2			99394.30		
In	115	2	H2			287792.91		
In	115	2	H2			291433.61		
In	115	2	H2			282371.36		
Sc	45	3	He			36496.54		
Sc	45	3	He			37699.51		
Sc	45	3	He			37138.18		
Ge	72	3	He			61683.11		
Ge	72	3	He			62788.44		
Ge	72	3	He			63471.43		
In	115	3	He			62008.47		
In	115	3	He			62772.13		
In	115	3	He			63556.39		
Tb	159	3	He			292419.47		
Tb	159	3	He			285641.36		
Tb	159	3	He			287572.30		
Bi	209	3	He			236980.88		
Bi	209	3	He			236251.87		
Bi	209	3	He			234582.40		

Quantitation Report

Data File Name	130_CCV.d
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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

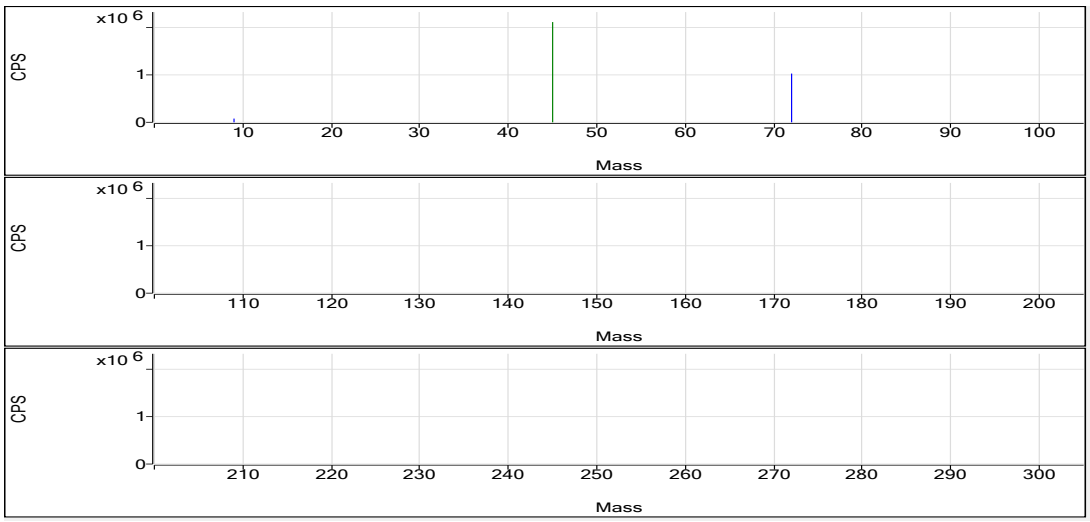
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.207	ppb	1.5	78423.11	0.0370	Pulse	0.5000	3
Se	78	72	H2	54.602	ppb	1.3	2404.43	0.0238	Pulse	1.5000	3
Na	23	45	He	5140.573	ppb	0.7	759087.20	20.0859	Pulse	0.1000	3
Mg	24	45	He	5194.144	ppb	0.4	366189.71	9.6892	Pulse	0.1000	3
Al	27	45	He	5073.638	ppb	1.2	110875.48	2.9339	Pulse	0.1000	3
K	39	45	He	5169.711	ppb	1.7	242778.23	6.4243	Pulse	0.1000	3
Ca	44	45	He	5136.627	ppb	2.2	12969.55	0.3432	Pulse	0.1000	3
Ti	47	45	He	5150.735	ppb	1.4	101141.07	2.6763	Pulse	0.1000	3
V	51	45	He	515.611	ppb	0.6	435572.73	11.5255	Pulse	0.5000	3
Cr	52	45	He	517.748	ppb	0.6	558147.07	14.7688	Pulse	0.1000	3
Mn	55	45	He	505.354	ppb	0.9	236687.15	6.2629	Pulse	0.1000	3
Fe	57	45	He	5094.909	ppb	1.0	109271.71	2.8915	Pulse	0.1000	3
Co	59	45	He	489.921	ppb	0.1	1075790.14	28.4652	Pulse	0.1000	3
Ni	60	72	He	525.940	ppb	3.0	298149.96	4.5624	Pulse	0.1000	3
Cu	63	72	He	495.666	ppb	1.2	847192.83	12.9606	Pulse	0.1000	3
Zn	66	72	He	523.957	ppb	2.0	98359.34	1.5049	Pulse	0.1000	3
As	75	72	He	520.210	ppb	2.9	70332.25	1.0762	Pulse	0.5000	3
Sr	88	115	He	50.865	ppb	2.5	28666.33	0.4560	Pulse	0.1000	3
Mo	98	115	He	52.052	ppb	0.9	76981.36	1.2243	Pulse	0.1000	3
Ag	107	115	He	52.863	ppb	1.6	165743.96	2.6360	Pulse	0.1000	3
Cd	111	115	He	51.471	ppb	1.3	17932.21	0.2852	Pulse	0.5000	3
Sn	120	115	He	49.816	ppb	1.1	52503.69	0.8351	Pulse	0.1000	3
Sb	121	115	He	50.293	ppb	2.1	48927.28	0.7782	Pulse	0.1000	3
Ba	137	115	He	510.658	ppb	1.9	159856.70	2.5425	Pulse	0.1000	3
Tl	205	159	He	51.404	ppb	0.3	390273.64	1.3388	Pulse	0.1000	3
Pb	208	159	He	50.711	ppb	1.6	516828.09	1.7731	Pulse	0.1000	3
U	238	209	He	50.056	ppb	1.5	586598.90	2.5145	Pulse	0.1000	3

ISTD Table:

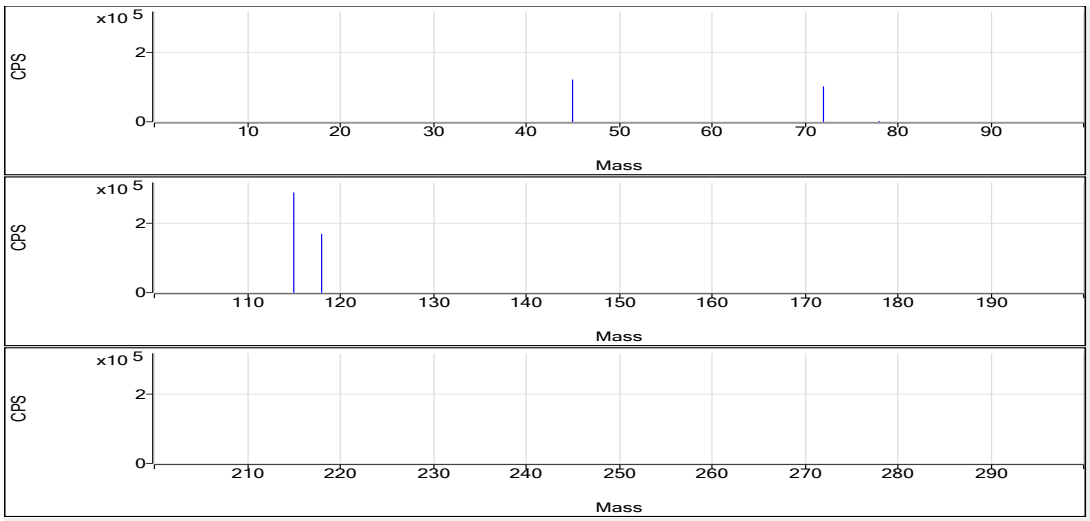
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2119198.66	1.8	104.2	Analog	0.1000	3
No Gas	Ge	72	1030160.92	0.7	102.5	Pulse	0.1000	3
H2	Sc	45	120913.59	0.9	91.5	Pulse	0.1000	3
H2	Ge	72	101207.02	1.1	90.7	Pulse	0.1000	3
H2	In	115	286469.06	0.7	97.5	Pulse	0.1000	3
He	Sc	45	37793.24	0.7	102.3	Pulse	0.1000	3
He	Ge	72	65379.89	2.4	101.3	Pulse	0.1000	3
He	In	115	62874.74	0.5	99.5	Pulse	0.1000	3
He	Tb	159	291503.76	1.0	99.6	Pulse	0.1000	3
He	Bi	209	233328.91	1.8	98.9	Pulse	0.1000	3

No Gas

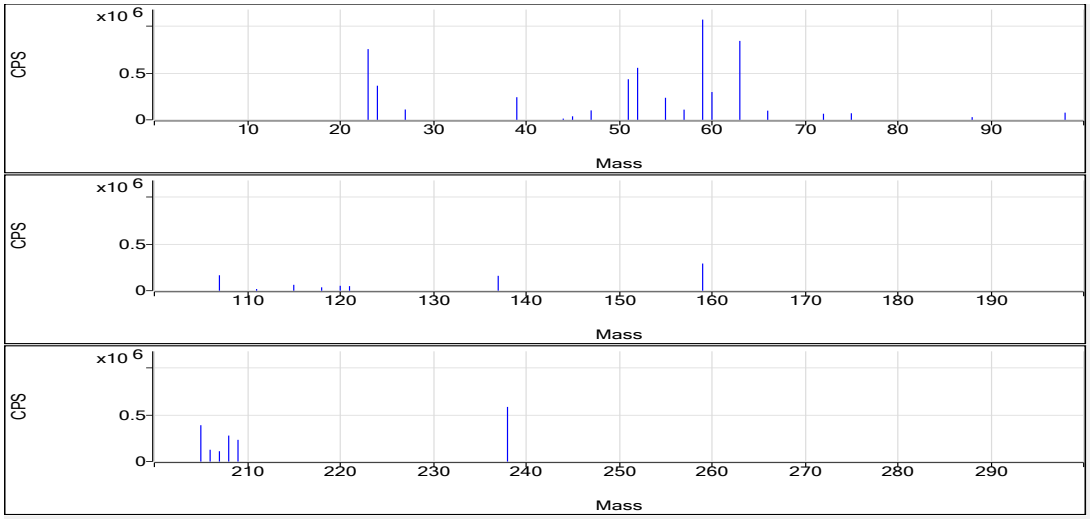


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.032	0.0376	78297.11	0.0008	2.195E-05
Be	9	1	No Gas	47.827	0.0367	77965.28	0.0008	2.195E-05
Be	9	1	No Gas	47.762	0.0367	79006.93	0.0008	2.195E-05
Se	78	2	H2	55.445	0.0241	2433.55	0.0004	1.386E-05
Se	78	2	H2	54.282	0.0236	2418.88	0.0004	1.386E-05
Se	78	2	H2	54.08	0.0235	2360.87	0.0004	1.386E-05
Na	23	3	He	5165.184	20.18	760574.05	0.0038	0.4416
Na	23	3	He	5099.049	19.9272	759439.21	0.0038	0.4416
Na	23	3	He	5157.486	20.1505	757248.35	0.0038	0.4416
Mg	24	3	He	5176.732	9.6567	363956.40	0.0019	0.005872
Mg	24	3	He	5213.822	9.7258	370657.57	0.0019	0.005872
Mg	24	3	He	5191.879	9.6849	363955.15	0.0019	0.005872
Al	27	3	He	5053.113	2.922	110129.53	0.0006	0.0004496
Al	27	3	He	5024.283	2.9053	110724.58	0.0006	0.0004496
Al	27	3	He	5143.518	2.9743	111772.32	0.0006	0.0004496
K	39	3	He	5154.562	6.4068	241468.92	0.0012	0.4456
K	39	3	He	5089.61	6.3317	241303.77	0.0012	0.4456
K	39	3	He	5264.961	6.5345	245561.99	0.0012	0.4456
Ca	44	3	He	5112.942	0.3416	12876.17	0.0001	0.003779
Ca	44	3	He	5039.879	0.3368	12836.02	0.0001	0.003779
Ca	44	3	He	5257.06	0.3512	13196.46	0.0001	0.003779
Ti	47	3	He	5096.297	2.648	99800.87	0.0005	0
Ti	47	3	He	5125.953	2.6634	101503.03	0.0005	0
Ti	47	3	He	5229.955	2.7174	102119.32	0.0005	0
V	51	3	He	517.721	11.5725	436163.09	0.0223	0.03054
V	51	3	He	511.956	11.444	436137.34	0.0223	0.03054
V	51	3	He	517.157	11.56	434417.75	0.0223	0.03054
Cr	52	3	He	517.537	14.7628	556403.23	0.0285	0.03714
Cr	52	3	He	514.944	14.689	559807.10	0.0285	0.03714
Cr	52	3	He	520.765	14.8546	558230.89	0.0285	0.03714
Mn	55	3	He	503.705	6.2425	235276.36	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	501.95	6.2208	237076.66	0.0124	0.004415
Mn	55	3	He	510.406	6.3255	237708.43	0.0124	0.004415
Fe	57	3	He	5120	2.9057	109513.94	0.0006	0.001356
Fe	57	3	He	5034.036	2.8569	108878.98	0.0006	0.001356
Fe	57	3	He	5130.693	2.9117	109422.21	0.0006	0.001356
Co	59	3	He	490.029	28.4715	1073078.58	0.0581	0.002697
Co	59	3	He	489.553	28.4439	1084013.42	0.0581	0.002697
Co	59	3	He	490.181	28.4803	1070278.42	0.0581	0.002697
Ni	60	3	He	533.467	4.6276	297765.72	0.0087	0.003928
Ni	60	3	He	507.934	4.4063	296009.41	0.0087	0.003928
Ni	60	3	He	536.419	4.6532	300674.74	0.0087	0.003928
Cu	63	3	He	500.227	13.0798	841619.21	0.0261	0.006048
Cu	63	3	He	488.634	12.7768	858320.07	0.0261	0.006048
Cu	63	3	He	498.136	13.0251	841639.21	0.0261	0.006048
Zn	66	3	He	531.07	1.5253	98144.40	0.0029	0.003512
Zn	66	3	He	512.125	1.471	98818.70	0.0029	0.003512
Zn	66	3	He	528.675	1.5184	98114.91	0.0029	0.003512
As	75	3	He	529.948	1.0964	70546.69	0.0021	0.0007233
As	75	3	He	502.708	1.0401	69869.37	0.0021	0.0007233
As	75	3	He	527.975	1.0923	70580.68	0.0021	0.0007233
Sr	88	3	He	51.614	0.4627	29070.46	0.009	0.0005796
Sr	88	3	He	49.381	0.4427	27988.14	0.009	0.0005796
Sr	88	3	He	51.6	0.4625	28940.39	0.009	0.0005796
Mo	98	3	He	52.421	1.233	77473.72	0.0235	0.0003188
Mo	98	3	He	52.239	1.2287	77685.46	0.0235	0.0003188
Mo	98	3	He	51.495	1.2112	75784.89	0.0235	0.0003188
Ag	107	3	He	53.578	2.6717	167867.58	0.0499	0.0004754
Ag	107	3	He	53.083	2.647	167352.13	0.0499	0.0004754
Ag	107	3	He	51.928	2.5894	162012.16	0.0499	0.0004754
Cd	111	3	He	51.34	0.2845	17875.46	0.0055	1.07E-05
Cd	111	3	He	50.868	0.2819	17821.40	0.0055	1.07E-05
Cd	111	3	He	52.204	0.2893	18099.77	0.0055	1.07E-05
Sn	120	3	He	50.273	0.8426	52942.01	0.0164	0.01713
Sn	120	3	He	49.22	0.8253	52178.90	0.0164	0.01713
Sn	120	3	He	49.953	0.8373	52390.16	0.0164	0.01713
Sb	121	3	He	49.179	0.761	47813.42	0.0155	0.0002641
Sb	121	3	He	50.373	0.7794	49278.54	0.0155	0.0002641
Sb	121	3	He	51.326	0.7942	49689.88	0.0155	0.0002641
Ba	137	3	He	500.084	2.4899	156443.86	0.005	0.0001577
Ba	137	3	He	512.675	2.5525	161382.08	0.005	0.0001577
Ba	137	3	He	519.216	2.5851	161744.17	0.005	0.0001577
Tl	205	3	He	51.505	1.3415	388596.24	0.026	0.0002504
Tl	205	3	He	51.498	1.3413	395381.28	0.026	0.0002504
Tl	205	3	He	51.208	1.3337	386843.39	0.026	0.0002504
Pb	208	3	He	50.956	1.7817	276996.64	0.0349	0.001422
Pb	208	3	He	49.804	1.7415	277864.35	0.0349	0.001422
Pb	208	3	He	51.373	1.7963	281930.68	0.0349	0.001422
U	238	3	He	50.413	2.5324	588872.92	0.0502	5.657E-05
U	238	3	He	49.189	2.4709	587653.62	0.0502	5.657E-05
U	238	3	He	50.566	2.5401	583270.15	0.0502	5.657E-05
Sc	45	1	No Gas			2079883.56		
Sc	45	1	No Gas			2123223.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2154489.34		
Ge	72	1	No Gas			1026981.94		
Ge	72	1	No Gas			1024533.11		
Ge	72	1	No Gas			1038967.72		
Sc	45	2	H2			120445.20		
Sc	45	2	H2			122171.64		
Sc	45	2	H2			120123.92		
Ge	72	2	H2			100874.69		
Ge	72	2	H2			102415.19		
Ge	72	2	H2			100331.18		
In	115	2	H2			285881.81		
In	115	2	H2			288721.81		
In	115	2	H2			284803.57		
Sc	45	3	He			37689.56		
Sc	45	3	He			38110.61		
Sc	45	3	He			37579.54		
Ge	72	3	He			64345.10		
Ge	72	3	He			67178.08		
Ge	72	3	He			64616.50		
In	115	3	He			63113.23		
In	115	3	He			63505.46		
In	115	3	He			62853.42		
Tb	159	3	He			289681.38		
Tb	159	3	He			294781.62		
Tb	159	3	He			290048.28		
Bi	209	3	He			232534.74		
Bi	209	3	He			237827.61		
Bi	209	3	He			229624.37		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

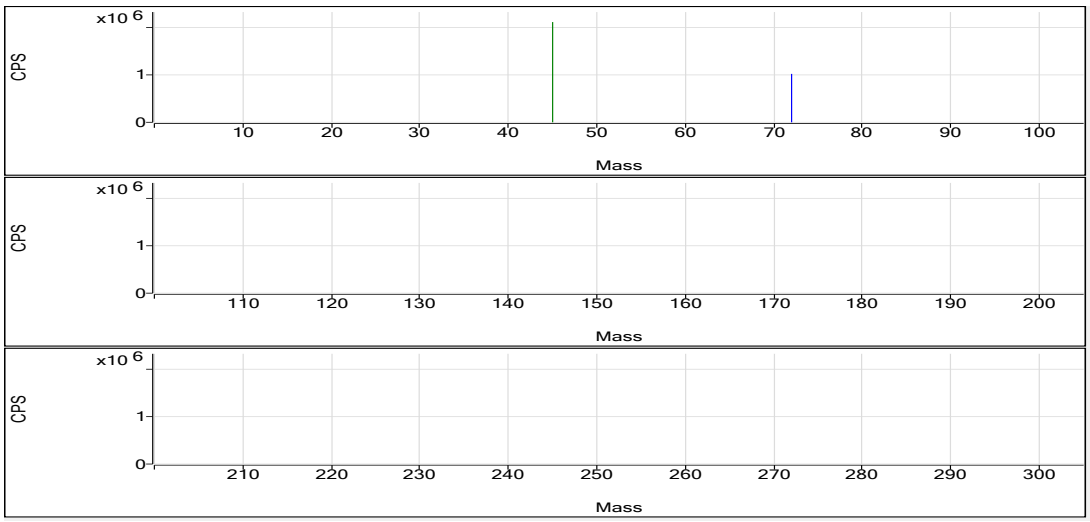
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.027	ppb	35.5	90.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.066	ppb	37.8	4.22	0.0000	Pulse	1.5000	3
Na	23	45	He	63.289	ppb	12.0	25893.36	0.6835	Pulse	0.1000	3
Mg	24	45	He	2.041	ppb	12.7	366.69	0.0097	Pulse	0.1000	3
Al	27	45	He	1.064	ppb	118.0	40.00	0.0011	Pulse	0.1000	3
K	39	45	He	-14.964	ppb	N/A	16229.61	0.4283	Pulse	0.1000	3
Ca	44	45	He	-5.310	ppb	N/A	130.01	0.0034	Pulse	0.1000	3
Ti	47	45	He	1.016	ppb	49.6	20.00	0.0005	Pulse	0.1000	3
V	51	45	He	-0.001	ppb	N/A	1156.72	0.0305	Pulse	0.5000	3
Cr	52	45	He	0.048	ppb	272.3	1460.12	0.0385	Pulse	0.1000	3
Mn	55	45	He	0.133	ppb	58.6	230.01	0.0061	Pulse	0.1000	3
Fe	57	45	He	3.536	ppb	78.7	126.67	0.0034	Pulse	0.1000	3
Co	59	45	He	0.146	ppb	29.8	423.36	0.0112	Pulse	0.1000	3
Ni	60	72	He	0.127	ppb	82.4	326.68	0.0050	Pulse	0.1000	3
Cu	63	72	He	0.100	ppb	59.7	563.37	0.0087	Pulse	0.1000	3
Zn	66	72	He	0.063	ppb	517.8	240.01	0.0037	Pulse	0.1000	3
As	75	72	He	0.285	ppb	13.5	85.33	0.0013	Pulse	0.5000	3
Sr	88	115	He	0.065	ppb	103.7	73.33	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.078	ppb	29.5	136.67	0.0022	Pulse	0.1000	3
Ag	107	115	He	0.012	ppb	160.5	66.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	65.1	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.026	ppb	229.0	1110.08	0.0176	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	68.5	33.33	0.0005	Pulse	0.1000	3
Ba	137	115	He	0.095	ppb	66.6	40.00	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.080	ppb	6.0	680.04	0.0023	Pulse	0.1000	3
Pb	208	159	He	0.017	ppb	65.2	586.69	0.0020	Pulse	0.1000	3
U	238	209	He	0.059	ppb	10.4	713.38	0.0030	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2104311.27	0.9	103.5	Analog	0.1000	3
No Gas	Ge	72	1016258.08	1.0	101.1	Pulse	0.1000	3
H2	Sc	45	120789.70	2.5	91.4	Pulse	0.1000	3
H2	Ge	72	99679.80	1.4	89.4	Pulse	0.1000	3
H2	In	115	286013.39	0.7	97.4	Pulse	0.1000	3
He	Sc	45	37906.66	1.9	102.6	Pulse	0.1000	3
He	Ge	72	64998.46	0.2	100.7	Pulse	0.1000	3
He	In	115	63265.42	0.9	100.1	Pulse	0.1000	3
He	Tb	159	290455.42	0.6	99.2	Pulse	0.1000	3
He	Bi	209	234532.09	0.7	99.5	Pulse	0.1000	3

No Gas



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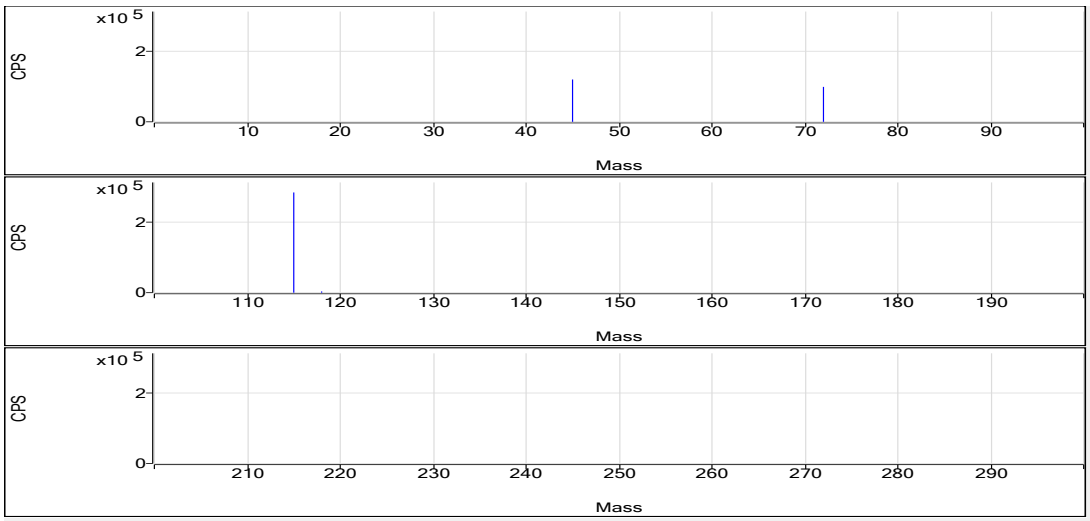
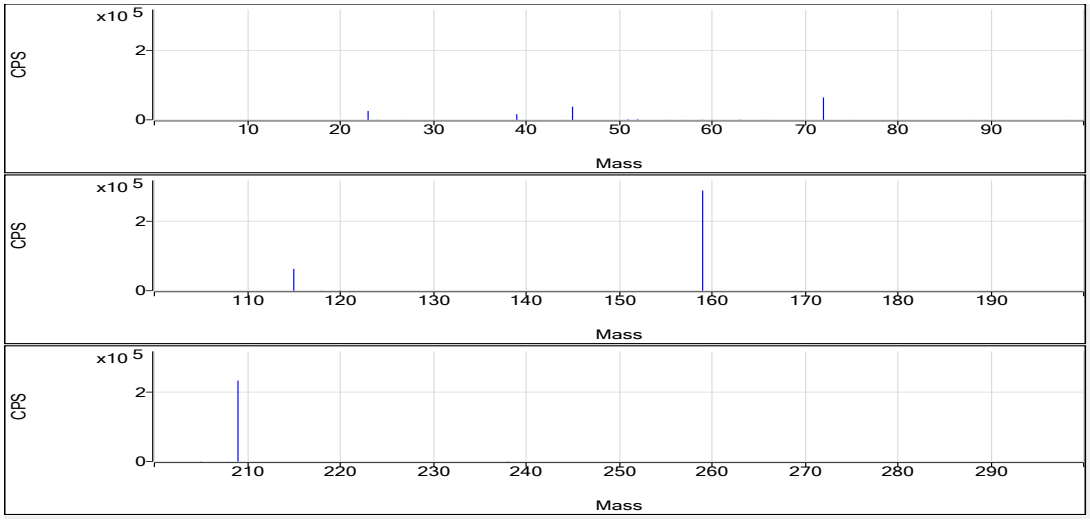


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.038	0.0001	108.00	0.0008	2.195E-05
Be	9	1	No Gas	0.02	0	78.00	0.0008	2.195E-05
Be	9	1	No Gas	0.023	0	84.00	0.0008	2.195E-05
Se	78	2	H2	0.045	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.093	0.0001	5.33	0.0004	1.386E-05
Se	78	2	H2	0.059	0	4.00	0.0004	1.386E-05
Na	23	3	He	72.025	0.7168	26564.61	0.0038	0.4416
Na	23	3	He	59.752	0.6699	25652.99	0.0038	0.4416
Na	23	3	He	58.088	0.6636	25462.49	0.0038	0.4416
Mg	24	3	He	2.206	0.01	370.02	0.0019	0.005872
Mg	24	3	He	2.174	0.0099	380.02	0.0019	0.005872
Mg	24	3	He	1.743	0.0091	350.02	0.0019	0.005872
Al	27	3	He	2.49	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	0.578	0.0008	30.00	0.0006	0.0004496
Al	27	3	He	0.124	0.0005	20.00	0.0006	0.0004496
K	39	3	He	-2.188	0.4431	16419.85	0.0012	0.4456
K	39	3	He	-19.28	0.4233	16209.52	0.0012	0.4456
K	39	3	He	-23.425	0.4185	16059.46	0.0012	0.4456
Ca	44	3	He	-8.174	0.0032	120.01	0.0001	0.003779
Ca	44	3	He	-1.848	0.0037	140.01	0.0001	0.003779
Ca	44	3	He	-5.908	0.0034	130.01	0.0001	0.003779
Ti	47	3	He	1.039	0.0005	20.00	0.0005	0
Ti	47	3	He	1.508	0.0008	30.00	0.0005	0
Ti	47	3	He	0.502	0.0003	10.00	0.0005	0
V	51	3	He	0.058	0.0318	1180.06	0.0223	0.03054
V	51	3	He	-0.011	0.0303	1160.06	0.0223	0.03054
V	51	3	He	-0.049	0.0295	1130.05	0.0223	0.03054
Cr	52	3	He	-0.034	0.0362	1340.10	0.0285	0.03714
Cr	52	3	He	-0.02	0.0366	1400.12	0.0285	0.03714
Cr	52	3	He	0.197	0.0427	1640.15	0.0285	0.03714
Mn	55	3	He	0.058	0.0051	190.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.213	0.0071	270.01	0.0124	0.004415
Mn	55	3	He	0.128	0.006	230.01	0.0124	0.004415
Fe	57	3	He	6.649	0.0051	190.01	0.0006	0.001356
Fe	57	3	He	2.674	0.0029	110.00	0.0006	0.001356
Fe	57	3	He	1.285	0.0021	80.00	0.0006	0.001356
Co	59	3	He	0.195	0.014	520.03	0.0581	0.002697
Co	59	3	He	0.111	0.0091	350.02	0.0581	0.002697
Co	59	3	He	0.133	0.0104	400.02	0.0581	0.002697
Ni	60	3	He	0.008	0.004	260.01	0.0087	0.003928
Ni	60	3	He	0.17	0.0054	350.02	0.0087	0.003928
Ni	60	3	He	0.203	0.0057	370.02	0.0087	0.003928
Cu	63	3	He	0.168	0.0104	680.04	0.0261	0.006048
Cu	63	3	He	0.075	0.008	520.03	0.0261	0.006048
Cu	63	3	He	0.057	0.0075	490.03	0.0261	0.006048
Zn	66	3	He	0.222	0.0041	270.01	0.0029	0.003512
Zn	66	3	He	0.282	0.0043	280.01	0.0029	0.003512
Zn	66	3	He	-0.314	0.0026	170.01	0.0029	0.003512
As	75	3	He	0.289	0.0013	86.00	0.0021	0.0007233
As	75	3	He	0.322	0.0014	90.00	0.0021	0.0007233
As	75	3	He	0.245	0.0012	80.00	0.0021	0.0007233
Sr	88	3	He	0.112	0.0016	100.00	0.009	0.0005796
Sr	88	3	He	-0.012	0.0005	30.00	0.009	0.0005796
Sr	88	3	He	0.095	0.0014	90.00	0.009	0.0005796
Mo	98	3	He	0.054	0.0016	100.00	0.0235	0.0003188
Mo	98	3	He	0.1	0.0027	170.01	0.0235	0.0003188
Mo	98	3	He	0.081	0.0022	140.01	0.0235	0.0003188
Ag	107	3	He	0.019	0.0014	90.00	0.0499	0.0004754
Ag	107	3	He	0.025	0.0017	110.00	0.0499	0.0004754
Ag	107	3	He	-0.01	0	0.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	0.065	0.0182	1150.09	0.0164	0.01713
Sn	120	3	He	-0.042	0.0164	1050.08	0.0164	0.01713
Sn	120	3	He	0.054	0.018	1130.08	0.0164	0.01713
Sb	121	3	He	0.024	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.023	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Ba	137	3	He	0.159	0.0009	60.00	0.005	0.0001577
Ba	137	3	He	0.094	0.0006	40.00	0.005	0.0001577
Ba	137	3	He	0.032	0.0003	20.00	0.005	0.0001577
Tl	205	3	He	0.075	0.0022	640.04	0.026	0.0002504
Tl	205	3	He	0.082	0.0024	690.04	0.026	0.0002504
Tl	205	3	He	0.084	0.0024	710.05	0.026	0.0002504
Pb	208	3	He	0.025	0.0023	310.01	0.0349	0.001422
Pb	208	3	He	0.022	0.0022	390.02	0.0349	0.001422
Pb	208	3	He	0.004	0.0016	290.02	0.0349	0.001422
U	238	3	He	0.062	0.0032	740.05	0.0502	5.657E-05
U	238	3	He	0.064	0.0033	770.05	0.0502	5.657E-05
U	238	3	He	0.052	0.0027	630.04	0.0502	5.657E-05
Sc	45	1	No Gas			2110216.06		
Sc	45	1	No Gas			2083864.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2118852.94		
Ge	72	1	No Gas			1024894.67		
Ge	72	1	No Gas			1005406.94		
Ge	72	1	No Gas			1018472.64		
Sc	45	2	H2			118883.94		
Sc	45	2	H2			124290.39		
Sc	45	2	H2			119194.78		
Ge	72	2	H2			100078.88		
Ge	72	2	H2			98135.73		
Ge	72	2	H2			100824.78		
In	115	2	H2			285523.32		
In	115	2	H2			284156.87		
In	115	2	H2			288359.98		
Sc	45	3	He			37057.64		
Sc	45	3	He			38291.16		
Sc	45	3	He			38371.19		
Ge	72	3	He			65088.99		
Ge	72	3	He			64837.93		
Ge	72	3	He			65068.45		
In	115	3	He			63184.59		
In	115	3	He			63886.96		
In	115	3	He			62742.11		
Tb	159	3	He			291051.97		
Tb	159	3	He			288355.00		
Tb	159	3	He			291959.29		
Bi	209	3	He			233031.09		
Bi	209	3	He			236169.49		
Bi	209	3	He			234395.68		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 10:47:10 AM
Sample Name	MB 410-406222/1-A
Sample Type	Sample
Comment	B26
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

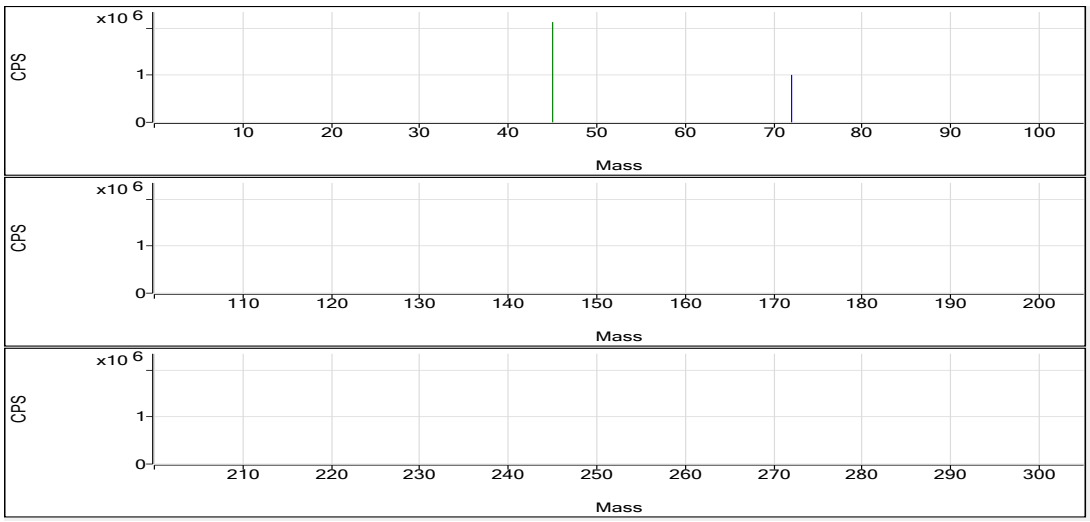
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	45.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	-0.002	ppb	N/A	1.33	0.0000	Pulse	1.5000	3
Na	23	45	He	26.520	ppb	25.4	20645.01	0.5429	Pulse	0.1000	3
Mg	24	45	He	0.897	ppb	95.4	286.68	0.0075	Pulse	0.1000	3
Al	27	45	He	2.095	ppb	53.8	63.33	0.0017	Pulse	0.1000	3
K	39	45	He	-12.367	ppb	N/A	16396.29	0.4313	Pulse	0.1000	3
Ca	44	45	He	-16.016	ppb	N/A	103.34	0.0027	Pulse	0.1000	3
Ti	47	45	He	0.661	ppb	173.2	13.33	0.0003	Pulse	0.1000	3
V	51	45	He	-0.298	ppb	N/A	908.70	0.0239	Pulse	0.5000	3
Cr	52	45	He	-0.187	ppb	N/A	1210.10	0.0318	Pulse	0.1000	3
Mn	55	45	He	0.244	ppb	62.3	283.35	0.0074	Pulse	0.1000	3
Fe	57	45	He	1.777	ppb	68.1	90.00	0.0024	Pulse	0.1000	3
Co	59	45	He	0.035	ppb	56.8	180.01	0.0047	Pulse	0.1000	3
Ni	60	72	He	-0.048	ppb	N/A	226.68	0.0035	Pulse	0.1000	3
Cu	63	72	He	0.172	ppb	29.9	680.04	0.0106	Pulse	0.1000	3
Zn	66	72	He	-0.341	ppb	N/A	163.34	0.0025	Pulse	0.1000	3
As	75	72	He	-0.049	ppb	N/A	40.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.007	ppb	N/A	33.33	0.0005	Pulse	0.1000	3
Mo	98	115	He	0.013	ppb	2.6	40.00	0.0006	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	122.1	43.33	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	232.0	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.269	ppb	N/A	813.38	0.0127	Pulse	0.1000	3
Sb	121	115	He	-0.014	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
Ba	137	115	He	-0.011	ppb	N/A	6.67	0.0001	Pulse	0.1000	3
Tl	205	159	He	0.013	ppb	36.9	170.01	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.006	ppb	13.2	473.35	0.0016	Pulse	0.1000	3
U	238	209	He	0.006	ppb	56.0	86.67	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2132238.19	2.1	104.9	Analog	0.1000	3
No Gas	Ge	72	1008245.56	1.3	100.3	Pulse	0.1000	3
H2	Sc	45	125296.36	0.7	94.8	Pulse	0.1000	3
H2	Ge	72	102703.85	0.8	92.1	Pulse	0.1000	3
H2	In	115	295081.05	0.4	100.5	Pulse	0.1000	3
He	Sc	45	38040.61	2.1	102.9	Pulse	0.1000	3
He	Ge	72	64492.82	0.8	99.9	Pulse	0.1000	3
He	In	115	64064.07	1.3	101.4	Pulse	0.1000	3
He	Tb	159	291946.14	1.0	99.7	Pulse	0.1000	3
He	Bi	209	236688.52	1.4	100.4	Pulse	0.1000	3

No Gas



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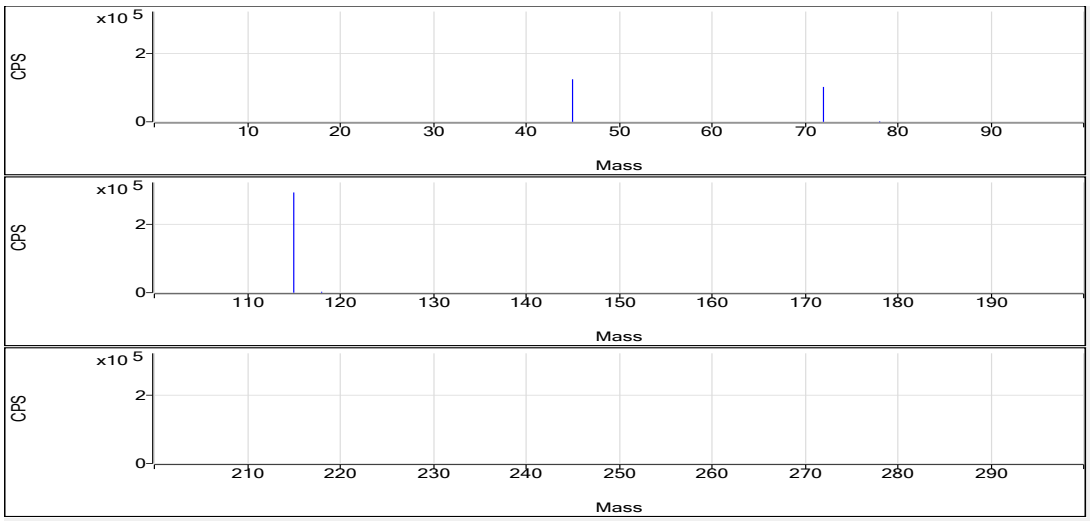
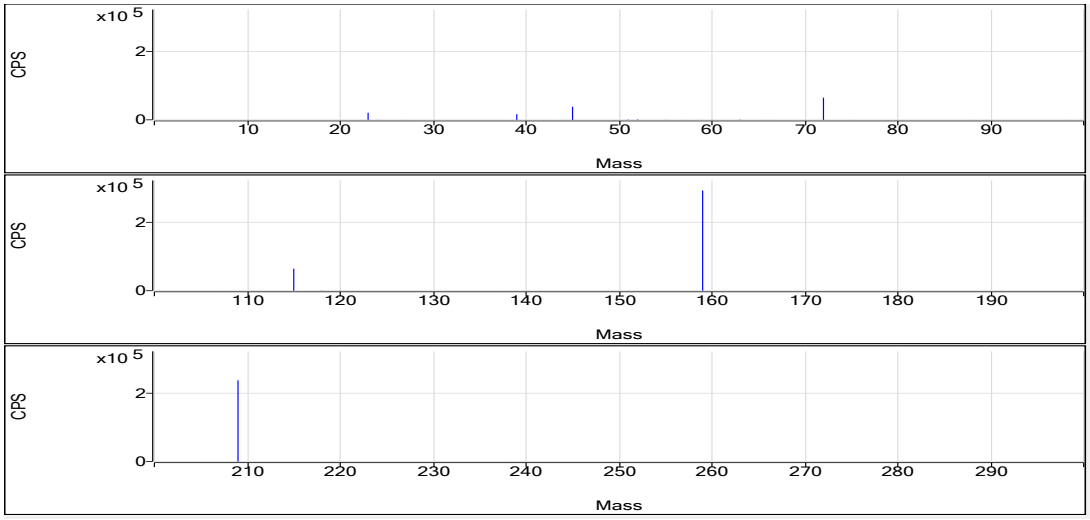


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0	54.00	0.0008	2.195E-05
Be	9	1	No Gas	0.004	0	52.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.011	0	30.00	0.0008	2.195E-05
Se	78	2	H2	-0.002	0	1.33	0.0004	1.386E-05
Se	78	2	H2	-0.017	0	0.67	0.0004	1.386E-05
Se	78	2	H2	0.013	0	2.00	0.0004	1.386E-05
Na	23	3	He	33.687	0.5703	21215.69	0.0038	0.4416
Na	23	3	He	25.554	0.5393	20935.58	0.0038	0.4416
Na	23	3	He	20.318	0.5193	19783.76	0.0038	0.4416
Mg	24	3	He	1.609	0.0089	330.01	0.0019	0.005872
Mg	24	3	He	1.134	0.008	310.02	0.0019	0.005872
Mg	24	3	He	-0.052	0.0058	220.01	0.0019	0.005872
Al	27	3	He	1.082	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	1.895	0.0015	60.00	0.0006	0.0004496
Al	27	3	He	3.308	0.0024	90.00	0.0006	0.0004496
K	39	3	He	2.177	0.4481	16670.00	0.0012	0.4456
K	39	3	He	-34.775	0.4054	15738.89	0.0012	0.4456
K	39	3	He	-4.502	0.4404	16779.99	0.0012	0.4456
Ca	44	3	He	-4.291	0.0035	130.01	0.0001	0.003779
Ca	44	3	He	-10.406	0.0031	120.00	0.0001	0.003779
Ca	44	3	He	-33.351	0.0016	60.00	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.983	0.001	40.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.248	0.025	930.04	0.0223	0.03054
V	51	3	He	-0.344	0.0229	888.03	0.0223	0.03054
V	51	3	He	-0.301	0.0238	908.04	0.0223	0.03054
Cr	52	3	He	-0.133	0.0333	1240.09	0.0285	0.03714
Cr	52	3	He	-0.155	0.0327	1270.11	0.0285	0.03714
Cr	52	3	He	-0.272	0.0294	1120.09	0.0285	0.03714
Mn	55	3	He	0.251	0.0075	280.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.392	0.0093	360.02	0.0124	0.004415
Mn	55	3	He	0.089	0.0055	210.01	0.0124	0.004415
Fe	57	3	He	0.927	0.0019	70.00	0.0006	0.001356
Fe	57	3	He	1.242	0.0021	80.00	0.0006	0.001356
Fe	57	3	He	3.162	0.0031	120.00	0.0006	0.001356
Co	59	3	He	0.014	0.0035	130.00	0.0581	0.002697
Co	59	3	He	0.038	0.0049	190.01	0.0581	0.002697
Co	59	3	He	0.053	0.0058	220.01	0.0581	0.002697
Ni	60	3	He	-0.093	0.0031	200.01	0.0087	0.003928
Ni	60	3	He	-0.094	0.0031	200.01	0.0087	0.003928
Ni	60	3	He	0.043	0.0043	280.01	0.0087	0.003928
Cu	63	3	He	0.216	0.0117	750.05	0.0261	0.006048
Cu	63	3	He	0.185	0.0109	700.05	0.0261	0.006048
Cu	63	3	He	0.116	0.0091	590.03	0.0261	0.006048
Zn	66	3	He	-0.3	0.0027	170.01	0.0029	0.003512
Zn	66	3	He	-0.194	0.003	190.01	0.0029	0.003512
Zn	66	3	He	-0.528	0.002	130.01	0.0029	0.003512
As	75	3	He	0.088	0.0009	58.00	0.0021	0.0007233
As	75	3	He	-0.109	0.0005	32.00	0.0021	0.0007233
As	75	3	He	-0.127	0.0005	30.00	0.0021	0.0007233
Sr	88	3	He	-0.013	0.0005	30.00	0.009	0.0005796
Sr	88	3	He	-0.029	0.0003	20.00	0.009	0.0005796
Sr	88	3	He	0.022	0.0008	50.00	0.009	0.0005796
Mo	98	3	He	0.013	0.0006	40.00	0.0235	0.0003188
Mo	98	3	He	0.013	0.0006	40.00	0.0235	0.0003188
Mo	98	3	He	0.013	0.0006	40.00	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.318	0.0119	770.04	0.0164	0.01713
Sn	120	3	He	-0.165	0.0144	910.05	0.0164	0.01713
Sn	120	3	He	-0.324	0.0118	760.04	0.0164	0.01713
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Ba	137	3	He	-0.032	0	0.00	0.005	0.0001577
Ba	137	3	He	-0.032	0	0.00	0.005	0.0001577
Ba	137	3	He	0.031	0.0003	20.00	0.005	0.0001577
Tl	205	3	He	0.011	0.0005	160.01	0.026	0.0002504
Tl	205	3	He	0.018	0.0007	210.01	0.026	0.0002504
Tl	205	3	He	0.009	0.0005	140.01	0.026	0.0002504
Pb	208	3	He	0.005	0.0016	250.01	0.0349	0.001422
Pb	208	3	He	0.006	0.0016	240.01	0.0349	0.001422
Pb	208	3	He	0.006	0.0016	270.01	0.0349	0.001422
U	238	3	He	0.003	0.0002	50.00	0.0502	5.657E-05
U	238	3	He	0.006	0.0003	80.00	0.0502	5.657E-05
U	238	3	He	0.01	0.0006	130.01	0.0502	5.657E-05
Sc	45	1	No Gas			2111934.34		
Sc	45	1	No Gas			2102201.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2182578.40		
Ge	72	1	No Gas			1009357.33		
Ge	72	1	No Gas			994630.77		
Ge	72	1	No Gas			1020748.58		
Sc	45	2	H2			125731.01		
Sc	45	2	H2			125860.87		
Sc	45	2	H2			124297.19		
Ge	72	2	H2			103593.90		
Ge	72	2	H2			102253.76		
Ge	72	2	H2			102263.89		
In	115	2	H2			294956.95		
In	115	2	H2			296438.88		
In	115	2	H2			293847.32		
Sc	45	3	He			37198.45		
Sc	45	3	He			38822.82		
Sc	45	3	He			38100.57		
Ge	72	3	He			64124.49		
Ge	72	3	He			64295.19		
Ge	72	3	He			65058.78		
In	115	3	He			64670.89		
In	115	3	He			63144.29		
In	115	3	He			64389.51		
Tb	159	3	He			295041.85		
Tb	159	3	He			291850.33		
Tb	159	3	He			288946.25		
Bi	209	3	He			235397.22		
Bi	209	3	He			240332.09		
Bi	209	3	He			234336.25		

Quantitation Report

Data File Name	134_CCV.d
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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

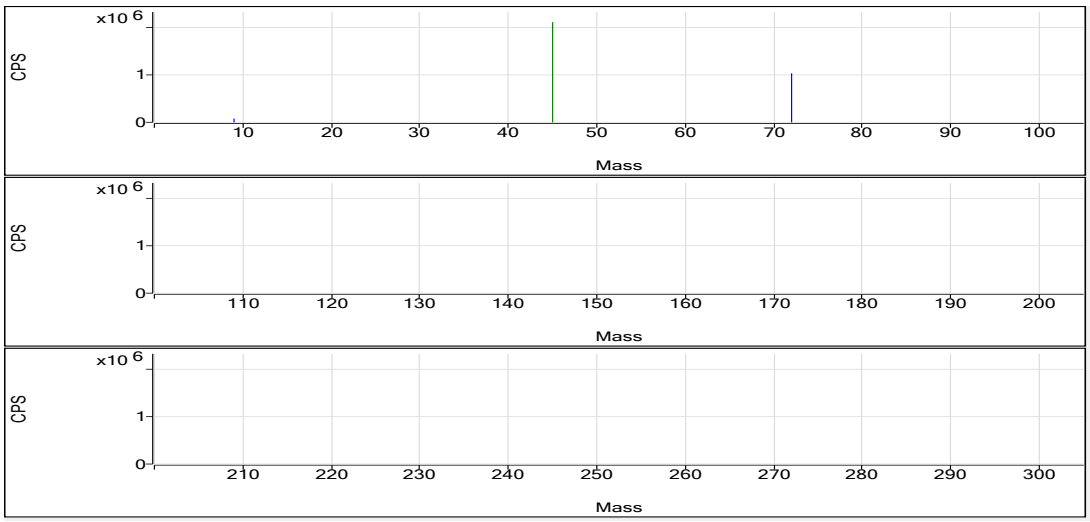
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.746	ppb	1.1	79526.23	0.0374	Pulse	0.5000	3
Se	78	72	H2	53.236	ppb	3.4	2335.09	0.0232	Pulse	1.5000	3
Na	23	45	He	5044.980	ppb	1.5	739783.01	19.7206	Pulse	0.1000	3
Mg	24	45	He	5165.255	ppb	1.2	361457.92	9.6353	Pulse	0.1000	3
Al	27	45	He	5044.432	ppb	1.1	109435.02	2.9170	Pulse	0.1000	3
K	39	45	He	5180.705	ppb	1.2	241482.09	6.4370	Pulse	0.1000	3
Ca	44	45	He	5038.893	ppb	4.2	12632.54	0.3367	Pulse	0.1000	3
Ti	47	45	He	5133.643	ppb	2.6	100049.52	2.6674	Pulse	0.1000	3
V	51	45	He	515.680	ppb	1.2	432426.85	11.5270	Pulse	0.5000	3
Cr	52	45	He	521.058	ppb	1.6	557553.96	14.8630	Pulse	0.1000	3
Mn	55	45	He	507.706	ppb	1.5	236038.06	6.2920	Pulse	0.1000	3
Fe	57	45	He	5017.655	ppb	1.7	106820.53	2.8476	Pulse	0.1000	3
Co	59	45	He	487.203	ppb	1.6	1061898.11	28.3073	Pulse	0.1000	3
Ni	60	72	He	521.199	ppb	0.5	294747.01	4.5213	Pulse	0.1000	3
Cu	63	72	He	490.354	ppb	1.3	835849.78	12.8217	Pulse	0.1000	3
Zn	66	72	He	511.230	ppb	0.7	95728.57	1.4684	Pulse	0.1000	3
As	75	72	He	517.803	ppb	1.3	69833.13	1.0713	Pulse	0.5000	3
Sr	88	115	He	50.860	ppb	4.4	28442.71	0.4559	Pulse	0.1000	3
Mo	98	115	He	52.481	ppb	0.5	77011.14	1.2344	Pulse	0.1000	3
Ag	107	115	He	52.788	ppb	1.5	164209.55	2.6323	Pulse	0.1000	3
Cd	111	115	He	51.542	ppb	2.1	17817.42	0.2856	Pulse	0.5000	3
Sn	120	115	He	51.230	ppb	1.0	53544.53	0.8583	Pulse	0.1000	3
Sb	121	115	He	50.714	ppb	1.8	48954.06	0.7847	Pulse	0.1000	3
Ba	137	115	He	508.090	ppb	0.3	157820.55	2.5297	Pulse	0.1000	3
Tl	205	159	He	51.117	ppb	0.2	385817.26	1.3314	Pulse	0.1000	3
Pb	208	159	He	50.993	ppb	0.6	516701.09	1.7830	Pulse	0.1000	3
U	238	209	He	50.666	ppb	1.1	588889.86	2.5451	Pulse	0.1000	3

ISTD Table:

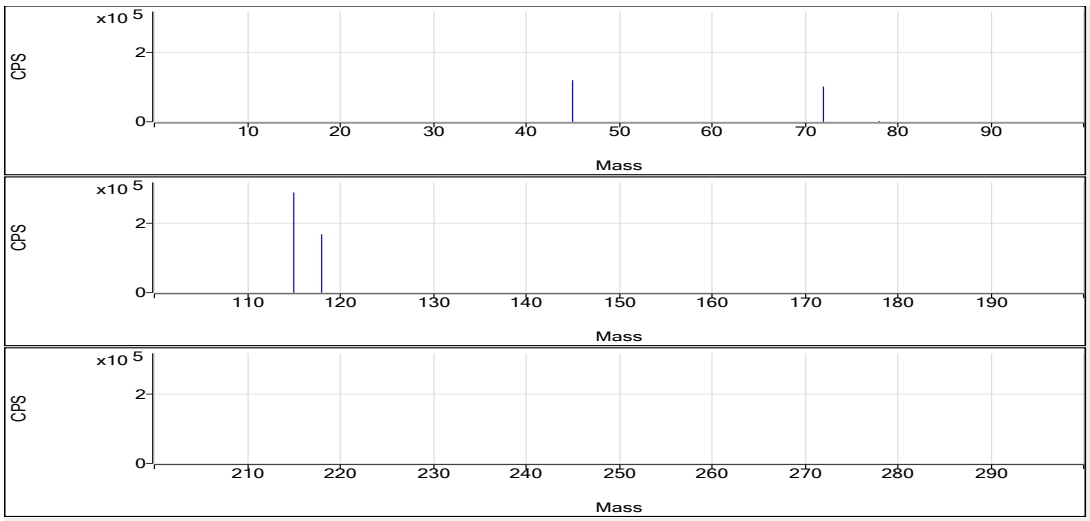
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2125125.18	1.4	104.5	Analog	0.1000	3
No Gas	Ge	72	1039366.05	1.1	103.4	Pulse	0.1000	3
H2	Sc	45	118941.13	0.6	90.0	Pulse	0.1000	3
H2	Ge	72	100814.35	0.5	90.4	Pulse	0.1000	3
H2	In	115	286530.85	1.1	97.6	Pulse	0.1000	3
He	Sc	45	37519.04	1.6	101.5	Pulse	0.1000	3
He	Ge	72	65192.72	1.0	101.0	Pulse	0.1000	3
He	In	115	62386.40	0.4	98.7	Pulse	0.1000	3
He	Tb	159	289792.21	0.5	99.0	Pulse	0.1000	3
He	Bi	209	231387.99	0.6	98.1	Pulse	0.1000	3

No Gas

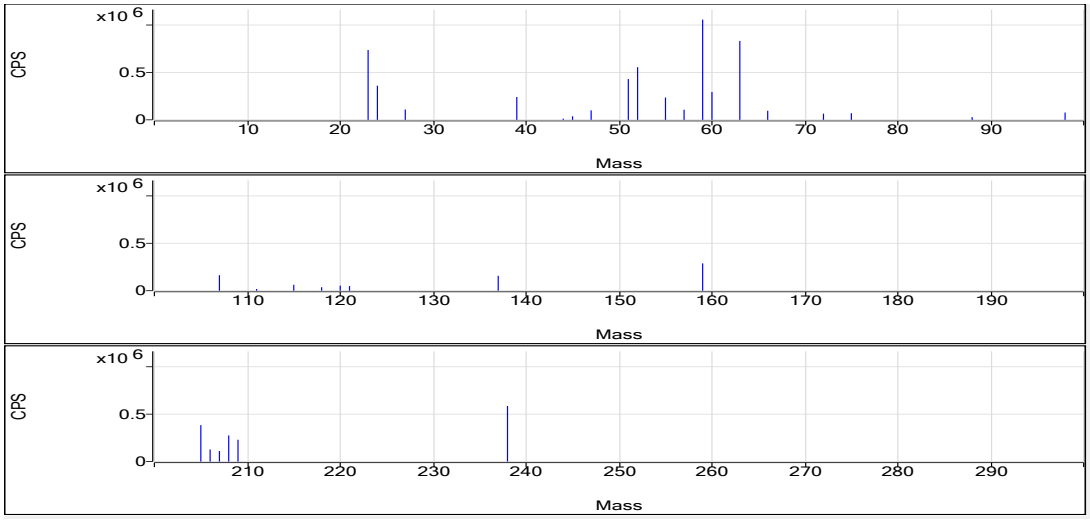


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.374	0.0379	79334.63	0.0008	2.195E-05
Be	9	1	No Gas	48.379	0.0371	79839.09	0.0008	2.195E-05
Be	9	1	No Gas	48.485	0.0372	79404.97	0.0008	2.195E-05
Se	78	2	H2	55.256	0.024	2412.88	0.0004	1.386E-05
Se	78	2	H2	52.619	0.0229	2320.86	0.0004	1.386E-05
Se	78	2	H2	51.834	0.0226	2271.52	0.0004	1.386E-05
Na	23	3	He	4959.86	19.3953	741496.16	0.0038	0.4416
Na	23	3	He	5078.047	19.847	737476.47	0.0038	0.4416
Na	23	3	He	5097.032	19.9195	740376.40	0.0038	0.4416
Mg	24	3	He	5091.278	9.4974	363090.93	0.0019	0.005872
Mg	24	3	He	5205.582	9.7105	360823.00	0.0019	0.005872
Mg	24	3	He	5198.905	9.698	360459.84	0.0019	0.005872
Al	27	3	He	5006.231	2.8949	110674.30	0.0006	0.0004496
Al	27	3	He	5109.934	2.9549	109797.37	0.0006	0.0004496
Al	27	3	He	5017.132	2.9012	107833.38	0.0006	0.0004496
K	39	3	He	5110.873	6.3563	243003.86	0.0012	0.4456
K	39	3	He	5212.97	6.4743	240574.06	0.0012	0.4456
K	39	3	He	5218.273	6.4805	240868.34	0.0012	0.4456
Ca	44	3	He	4964.452	0.3318	12685.90	0.0001	0.003779
Ca	44	3	He	5276.526	0.3524	13096.27	0.0001	0.003779
Ca	44	3	He	4875.703	0.326	12115.44	0.0001	0.003779
Ti	47	3	He	4983.18	2.5892	98986.66	0.0005	0
Ti	47	3	He	5230.693	2.7178	100988.40	0.0005	0
Ti	47	3	He	5187.055	2.6951	100173.50	0.0005	0
V	51	3	He	508.601	11.3692	434651.94	0.0223	0.03054
V	51	3	He	520.912	11.6437	432656.28	0.0223	0.03054
V	51	3	He	517.529	11.5682	429972.34	0.0223	0.03054
Cr	52	3	He	512.053	14.6068	558426.40	0.0285	0.03714
Cr	52	3	He	528.884	15.0856	560554.33	0.0285	0.03714
Cr	52	3	He	522.238	14.8966	553681.16	0.0285	0.03714
Mn	55	3	He	500.267	6.1999	237026.31	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	515.183	6.3846	237240.68	0.0124	0.004415
Mn	55	3	He	507.668	6.2916	233847.18	0.0124	0.004415
Fe	57	3	He	4919.784	2.7921	106744.19	0.0006	0.001356
Fe	57	3	He	5069.434	2.877	106903.91	0.0006	0.001356
Fe	57	3	He	5063.746	2.8738	106813.49	0.0006	0.001356
Co	59	3	He	479.207	27.8428	1064447.95	0.0581	0.002697
Co	59	3	He	494.371	28.7238	1067321.08	0.0581	0.002697
Co	59	3	He	488.031	28.3554	1053925.30	0.0581	0.002697
Ni	60	3	He	521.432	4.5233	293505.72	0.0087	0.003928
Ni	60	3	He	518.61	4.4989	296715.80	0.0087	0.003928
Ni	60	3	He	523.554	4.5417	294019.51	0.0087	0.003928
Cu	63	3	He	497.543	13.0096	844157.25	0.0261	0.006048
Cu	63	3	He	486.182	12.7127	838447.02	0.0261	0.006048
Cu	63	3	He	487.338	12.7429	824945.07	0.0261	0.006048
Zn	66	3	He	515.628	1.481	96099.91	0.0029	0.003512
Zn	66	3	He	508.61	1.4609	96352.89	0.0029	0.003512
Zn	66	3	He	509.452	1.4633	94732.92	0.0029	0.003512
As	75	3	He	520.424	1.0767	69863.28	0.0021	0.0007233
As	75	3	He	510.397	1.056	69644.19	0.0021	0.0007233
As	75	3	He	522.588	1.0812	69991.91	0.0021	0.0007233
Sr	88	3	He	51.843	0.4647	28850.20	0.009	0.0005796
Sr	88	3	He	52.415	0.4698	29421.26	0.009	0.0005796
Sr	88	3	He	48.322	0.4332	27056.68	0.009	0.0005796
Mo	98	3	He	52.608	1.2374	76820.42	0.0235	0.0003188
Mo	98	3	He	52.654	1.2385	77553.70	0.0235	0.0003188
Mo	98	3	He	52.181	1.2274	76659.30	0.0235	0.0003188
Ag	107	3	He	53.553	2.6704	165783.94	0.0499	0.0004754
Ag	107	3	He	51.94	2.59	162183.01	0.0499	0.0004754
Ag	107	3	He	52.87	2.6363	164661.70	0.0499	0.0004754
Cd	111	3	He	52.741	0.2923	18143.84	0.0055	1.07E-05
Cd	111	3	He	51.272	0.2841	17791.37	0.0055	1.07E-05
Cd	111	3	He	50.612	0.2805	17517.04	0.0055	1.07E-05
Sn	120	3	He	51.761	0.867	53825.74	0.0164	0.01713
Sn	120	3	He	51.229	0.8583	53745.09	0.0164	0.01713
Sn	120	3	He	50.699	0.8496	53062.77	0.0164	0.01713
Sb	121	3	He	51.373	0.7949	49348.88	0.0155	0.0002641
Sb	121	3	He	51.077	0.7903	49489.40	0.0155	0.0002641
Sb	121	3	He	49.692	0.7689	48023.91	0.0155	0.0002641
Ba	137	3	He	506.727	2.5229	156626.81	0.005	0.0001577
Ba	137	3	He	507.659	2.5276	158275.40	0.005	0.0001577
Ba	137	3	He	509.884	2.5386	158559.44	0.005	0.0001577
Tl	205	3	He	50.992	1.3281	383982.57	0.026	0.0002504
Tl	205	3	He	51.139	1.3319	388011.75	0.026	0.0002504
Tl	205	3	He	51.221	1.3341	385457.46	0.026	0.0002504
Pb	208	3	He	50.717	1.7733	275128.98	0.0349	0.001422
Pb	208	3	He	50.971	1.7822	277515.64	0.0349	0.001422
Pb	208	3	He	51.293	1.7935	277996.99	0.0349	0.001422
U	238	3	He	50.356	2.5296	587046.55	0.0502	5.657E-05
U	238	3	He	50.328	2.5282	587089.37	0.0502	5.657E-05
U	238	3	He	51.314	2.5777	592533.66	0.0502	5.657E-05
Sc	45	1	No Gas			2092864.66		
Sc	45	1	No Gas			2149431.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2133079.03		
Ge	72	1	No Gas			1030391.47		
Ge	72	1	No Gas			1052640.37		
Ge	72	1	No Gas			1035066.31		
Sc	45	2	H2			118176.80		
Sc	45	2	H2			119348.53		
Sc	45	2	H2			119298.05		
Ge	72	2	H2			100360.49		
Ge	72	2	H2			101367.56		
Ge	72	2	H2			100715.01		
In	115	2	H2			285288.77		
In	115	2	H2			289963.47		
In	115	2	H2			284340.31		
Sc	45	3	He			38230.64		
Sc	45	3	He			37158.12		
Sc	45	3	He			37168.37		
Ge	72	3	He			64887.11		
Ge	72	3	He			65953.47		
Ge	72	3	He			64737.57		
In	115	3	He			62371.06		
In	115	3	He			62902.59		
In	115	3	He			62742.03		
Tb	159	3	He			289124.02		
Tb	159	3	He			291317.12		
Tb	159	3	He			288935.50		
Bi	209	3	He			232075.43		
Bi	209	3	He			232218.67		
Bi	209	3	He			229869.86		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

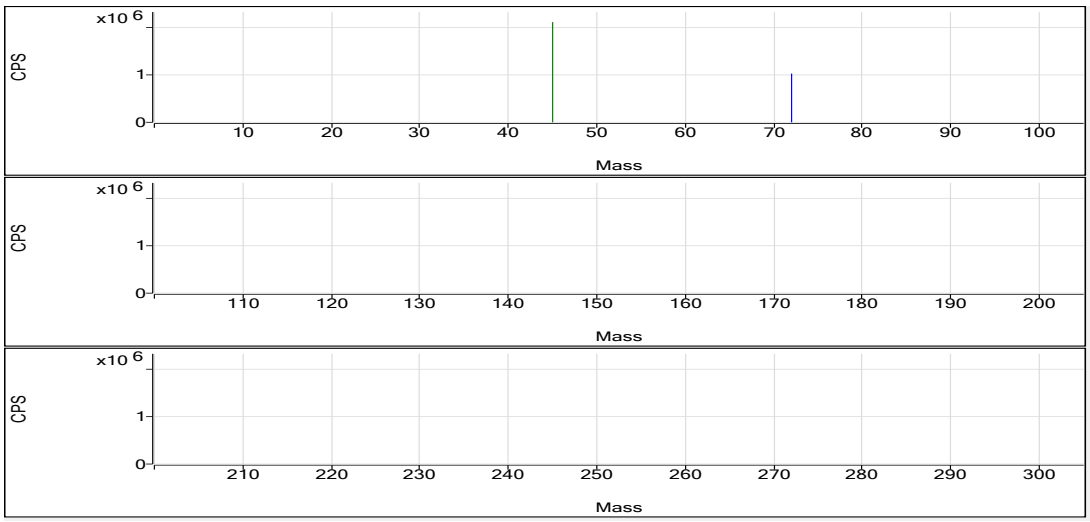
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.036	ppb	7.3	104.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.046	ppb	103.9	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	21.428	ppb	9.6	20030.73	0.5235	Pulse	0.1000	3
Mg	24	45	He	2.226	ppb	37.0	383.36	0.0100	Pulse	0.1000	3
Al	27	45	He	1.035	ppb	76.7	40.00	0.0010	Pulse	0.1000	3
K	39	45	He	-16.434	ppb	N/A	16323.01	0.4266	Pulse	0.1000	3
Ca	44	45	He	-3.119	ppb	N/A	136.67	0.0036	Pulse	0.1000	3
Ti	47	45	He	0.834	ppb	91.4	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	0.080	ppb	75.7	1236.73	0.0323	Pulse	0.5000	3
Cr	52	45	He	0.052	ppb	141.3	1476.79	0.0386	Pulse	0.1000	3
Mn	55	45	He	0.094	ppb	30.2	213.34	0.0056	Pulse	0.1000	3
Fe	57	45	He	1.760	ppb	160.0	90.00	0.0024	Pulse	0.1000	3
Co	59	45	He	0.134	ppb	33.1	400.02	0.0105	Pulse	0.1000	3
Ni	60	72	He	0.179	ppb	79.8	356.68	0.0055	Pulse	0.1000	3
Cu	63	72	He	0.049	ppb	168.2	476.69	0.0073	Pulse	0.1000	3
Zn	66	72	He	0.276	ppb	36.6	280.01	0.0043	Pulse	0.1000	3
As	75	72	He	0.245	ppb	17.3	80.00	0.0012	Pulse	0.5000	3
Sr	88	115	He	0.070	ppb	58.5	76.67	0.0012	Pulse	0.1000	3
Mo	98	115	He	0.056	ppb	61.4	103.34	0.0016	Pulse	0.1000	3
Ag	107	115	He	0.016	ppb	20.0	80.00	0.0013	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	115.5	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.056	ppb	78.5	1146.76	0.0180	Pulse	0.1000	3
Sb	121	115	He	0.044	ppb	23.1	60.00	0.0009	Pulse	0.1000	3
Ba	137	115	He	0.032	ppb	101.5	20.00	0.0003	Pulse	0.1000	3
Tl	205	159	He	0.092	ppb	7.4	763.38	0.0026	Pulse	0.1000	3
Pb	208	159	He	0.014	ppb	63.9	546.69	0.0019	Pulse	0.1000	3
U	238	209	He	0.047	ppb	6.8	563.37	0.0024	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2107233.04	1.4	103.7	Analog	0.1000	3
No Gas	Ge	72	1023775.56	1.2	101.9	Pulse	0.1000	3
H2	Sc	45	119118.56	1.4	90.2	Pulse	0.1000	3
H2	Ge	72	99330.35	1.4	89.1	Pulse	0.1000	3
H2	In	115	285349.67	0.5	97.2	Pulse	0.1000	3
He	Sc	45	38261.09	0.9	103.5	Pulse	0.1000	3
He	Ge	72	65085.27	0.6	100.8	Pulse	0.1000	3
He	In	115	63563.24	0.8	100.6	Pulse	0.1000	3
He	Tb	159	288298.80	0.4	98.5	Pulse	0.1000	3
He	Bi	209	234183.91	0.5	99.3	Pulse	0.1000	3

No Gas



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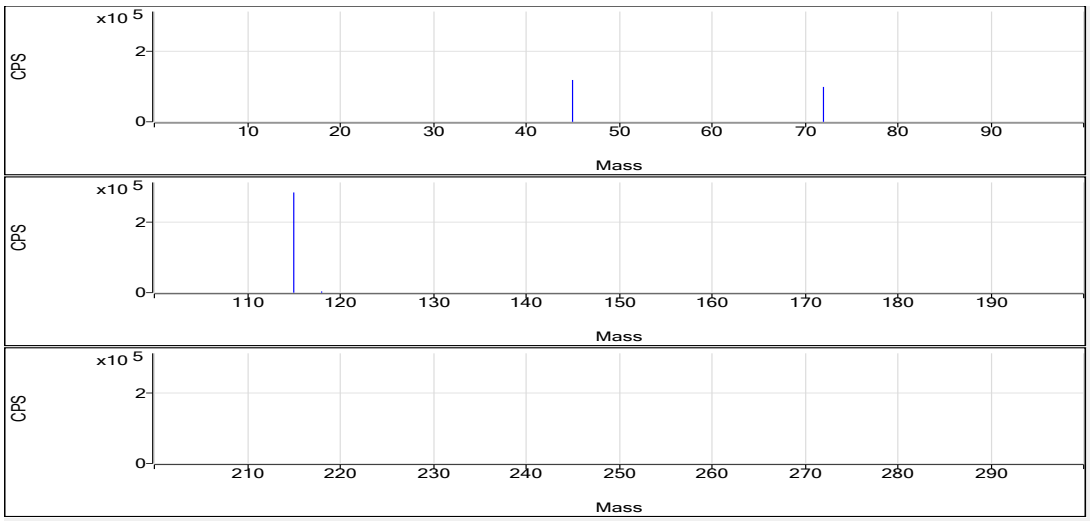
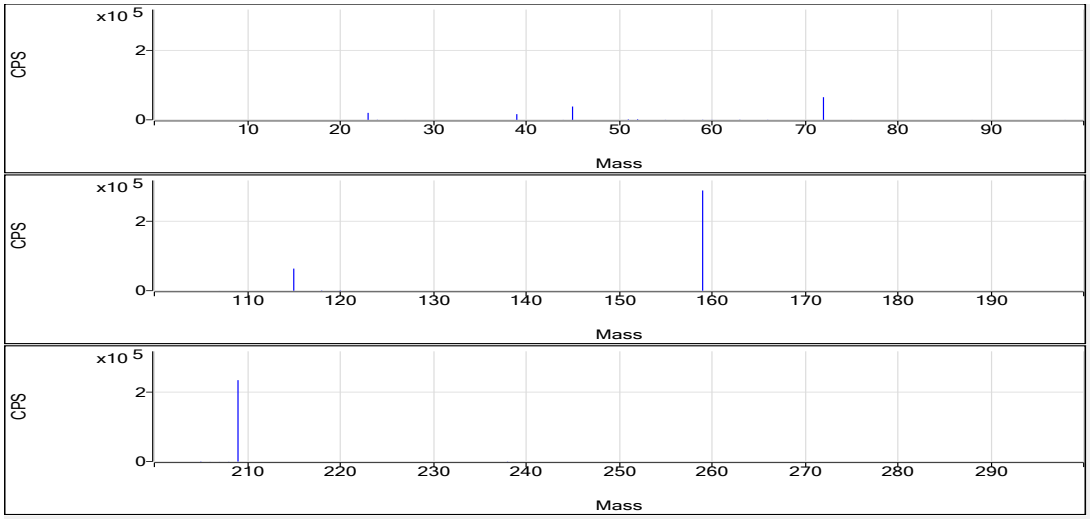


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.039	0.0001	108.00	0.0008	2.195E-05
Be	9	1	No Gas	0.034	0	102.00	0.0008	2.195E-05
Be	9	1	No Gas	0.035	0	104.00	0.0008	2.195E-05
Se	78	2	H2	0.093	0.0001	5.33	0.0004	1.386E-05
Se	78	2	H2	-0.001	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.045	0	3.33	0.0004	1.386E-05
Na	23	3	He	19.058	0.5144	19543.50	0.0038	0.4416
Na	23	3	He	22.369	0.5271	20114.12	0.0038	0.4416
Na	23	3	He	22.857	0.529	20434.56	0.0038	0.4416
Mg	24	3	He	1.793	0.0092	350.02	0.0019	0.005872
Mg	24	3	He	3.176	0.0118	450.03	0.0019	0.005872
Mg	24	3	He	1.71	0.0091	350.02	0.0019	0.005872
Al	27	3	He	1.499	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	1.489	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	0.118	0.0005	20.00	0.0006	0.0004496
K	39	3	He	-13.877	0.4296	16319.53	0.0012	0.4456
K	39	3	He	-21.657	0.4206	16049.42	0.0012	0.4456
K	39	3	He	-13.769	0.4297	16600.08	0.0012	0.4456
Ca	44	3	He	2.573	0.0039	150.01	0.0001	0.003779
Ca	44	3	He	-9.595	0.0031	120.00	0.0001	0.003779
Ca	44	3	He	-2.337	0.0036	140.01	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.009	0.0005	20.00	0.0005	0
Ti	47	3	He	1.495	0.0008	30.00	0.0005	0
V	51	3	He	0.035	0.0313	1190.06	0.0223	0.03054
V	51	3	He	0.149	0.0339	1292.07	0.0223	0.03054
V	51	3	He	0.056	0.0318	1228.06	0.0223	0.03054
Cr	52	3	He	0.129	0.0408	1550.15	0.0285	0.03714
Cr	52	3	He	-0.016	0.0367	1400.11	0.0285	0.03714
Cr	52	3	He	0.041	0.0383	1480.12	0.0285	0.03714
Mn	55	3	He	0.069	0.0053	200.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.088	0.0055	210.01	0.0124	0.004415
Mn	55	3	He	0.124	0.006	230.01	0.0124	0.004415
Fe	57	3	He	-0.07	0.0013	50.00	0.0006	0.001356
Fe	57	3	He	5.002	0.0042	160.01	0.0006	0.001356
Fe	57	3	He	0.348	0.0016	60.00	0.0006	0.001356
Co	59	3	He	0.162	0.0121	460.02	0.0581	0.002697
Co	59	3	He	0.157	0.0118	450.02	0.0581	0.002697
Co	59	3	He	0.083	0.0075	290.01	0.0581	0.002697
Ni	60	3	He	0.041	0.0043	280.01	0.0087	0.003928
Ni	60	3	He	0.171	0.0054	350.01	0.0087	0.003928
Ni	60	3	He	0.326	0.0068	440.03	0.0087	0.003928
Cu	63	3	He	0.114	0.009	590.03	0.0261	0.006048
Cu	63	3	He	0.076	0.008	520.03	0.0261	0.006048
Cu	63	3	He	-0.043	0.0049	320.01	0.0261	0.006048
Zn	66	3	He	0.215	0.0041	270.01	0.0029	0.003512
Zn	66	3	He	0.393	0.0046	300.02	0.0029	0.003512
Zn	66	3	He	0.221	0.0041	270.01	0.0029	0.003512
As	75	3	He	0.227	0.0012	78.00	0.0021	0.0007233
As	75	3	He	0.293	0.0013	86.00	0.0021	0.0007233
As	75	3	He	0.215	0.0012	76.00	0.0021	0.0007233
Sr	88	3	He	0.095	0.0014	90.00	0.009	0.0005796
Sr	88	3	He	0.093	0.0014	90.00	0.009	0.0005796
Sr	88	3	He	0.023	0.0008	50.00	0.009	0.0005796
Mo	98	3	He	0.047	0.0014	90.00	0.0235	0.0003188
Mo	98	3	He	0.026	0.0009	60.00	0.0235	0.0003188
Mo	98	3	He	0.093	0.0025	160.01	0.0235	0.0003188
Ag	107	3	He	0.016	0.0013	80.00	0.0499	0.0004754
Ag	107	3	He	0.019	0.0014	90.00	0.0499	0.0004754
Ag	107	3	He	0.012	0.0011	70.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.026	0.0002	10.00	0.0055	1.07E-05
Sn	120	3	He	0.089	0.0186	1170.09	0.0164	0.01713
Sn	120	3	He	0.072	0.0183	1170.10	0.0164	0.01713
Sn	120	3	He	0.006	0.0172	1100.08	0.0164	0.01713
Sb	121	3	He	0.045	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.034	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.054	0.0011	70.00	0.0155	0.0002641
Ba	137	3	He	0.064	0.0005	30.00	0.005	0.0001577
Ba	137	3	He	0.031	0.0003	20.00	0.005	0.0001577
Ba	137	3	He	0	0.0002	10.00	0.005	0.0001577
Tl	205	3	He	0.099	0.0028	810.05	0.026	0.0002504
Tl	205	3	He	0.085	0.0025	710.05	0.026	0.0002504
Tl	205	3	He	0.093	0.0027	770.05	0.026	0.0002504
Pb	208	3	He	0.012	0.0018	280.01	0.0349	0.001422
Pb	208	3	He	0.023	0.0022	380.02	0.0349	0.001422
Pb	208	3	He	0.006	0.0016	220.01	0.0349	0.001422
U	238	3	He	0.047	0.0024	570.04	0.0502	5.657E-05
U	238	3	He	0.043	0.0022	520.03	0.0502	5.657E-05
U	238	3	He	0.05	0.0025	600.05	0.0502	5.657E-05
Sc	45	1	No Gas			2076251.22		
Sc	45	1	No Gas			2109360.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2136087.62		
Ge	72	1	No Gas			1011141.16		
Ge	72	1	No Gas			1023556.86		
Ge	72	1	No Gas			1036628.66		
Sc	45	2	H2			117260.38		
Sc	45	2	H2			119427.92		
Sc	45	2	H2			120667.39		
Ge	72	2	H2			97833.90		
Ge	72	2	H2			100572.02		
Ge	72	2	H2			99585.14		
In	115	2	H2			284780.78		
In	115	2	H2			284354.41		
In	115	2	H2			286913.82		
Sc	45	3	He			37990.33		
Sc	45	3	He			38160.82		
Sc	45	3	He			38632.13		
Ge	72	3	He			65429.86		
Ge	72	3	He			64696.65		
Ge	72	3	He			65129.31		
In	115	3	He			62962.68		
In	115	3	He			63887.43		
In	115	3	He			63857.79		
Tb	159	3	He			287405.02		
Tb	159	3	He			287929.21		
Tb	159	3	He			289562.16		
Bi	209	3	He			234236.01		
Bi	209	3	He			232881.75		
Bi	209	3	He			235433.98		

Quantitation Report

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Sample Name	410-137226-V-2-A @100
Sample Type	Sample
Comment	B26
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

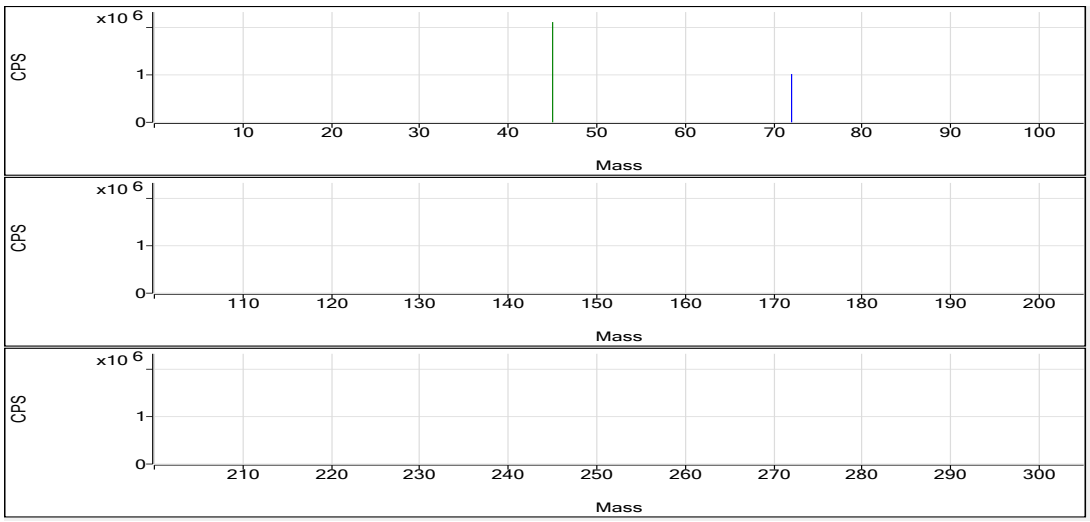
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.005	ppb	70.1	54.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.020	ppb	121.9	2.22	0.0000	Pulse	1.5000	3
Na	23	45	He	4689.638	ppb	1.6	693967.57	18.3627	Pulse	0.1000	3
Mg	24	45	He	549.269	ppb	1.1	38932.06	1.0299	Pulse	0.1000	3
Al	27	45	He	1.357	ppb	38.6	46.67	0.0012	Pulse	0.1000	3
K	39	45	He	113.477	ppb	10.6	21800.24	0.5769	Pulse	0.1000	3
Ca	44	45	He	738.497	ppb	5.4	1986.87	0.0526	Pulse	0.1000	3
Ti	47	45	He	0.680	ppb	86.7	13.33	0.0004	Pulse	0.1000	3
V	51	45	He	0.036	ppb	209.7	1184.72	0.0313	Pulse	0.5000	3
Cr	52	45	He	-0.059	ppb	N/A	1340.11	0.0355	Pulse	0.1000	3
Mn	55	45	He	14.149	ppb	4.2	6788.51	0.1796	Pulse	0.1000	3
Fe	57	45	He	55.665	ppb	9.7	1243.43	0.0329	Pulse	0.1000	3
Co	59	45	He	0.123	ppb	28.8	370.02	0.0098	Pulse	0.1000	3
Ni	60	72	He	0.091	ppb	26.6	306.68	0.0047	Pulse	0.1000	3
Cu	63	72	He	0.014	ppb	424.8	416.69	0.0064	Pulse	0.1000	3
Zn	66	72	He	0.440	ppb	36.5	310.02	0.0048	Pulse	0.1000	3
As	75	72	He	0.142	ppb	35.4	66.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	4.462	ppb	5.9	2560.33	0.0405	Pulse	0.1000	3
Mo	98	115	He	0.022	ppb	86.3	53.33	0.0008	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	0.0	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.035	ppb	N/A	1046.75	0.0165	Pulse	0.1000	3
Sb	121	115	He	0.024	ppb	2.7	40.00	0.0006	Pulse	0.1000	3
Ba	137	115	He	1.662	ppb	10.7	533.36	0.0084	Pulse	0.1000	3
Tl	205	159	He	0.020	ppb	45.6	220.01	0.0008	Pulse	0.1000	3
Pb	208	159	He	-0.002	ppb	N/A	396.68	0.0014	Pulse	0.1000	3
U	238	209	He	0.011	ppb	17.2	146.68	0.0006	Pulse	0.1000	3

ISTD Table:

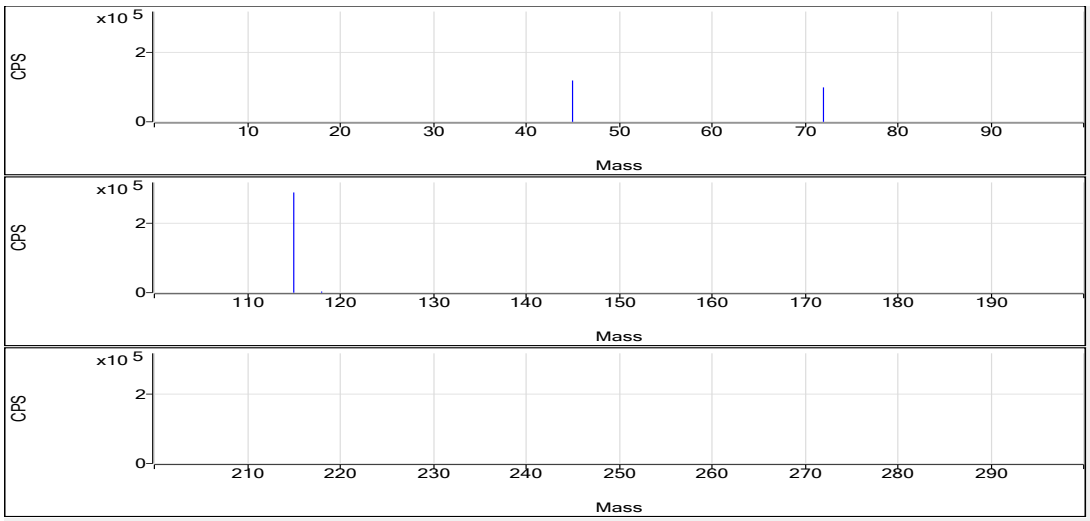
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2122090.59	0.3	104.4	Analog	0.1000	3
No Gas	Ge	72	1021858.21	0.4	101.7	Pulse	0.1000	3
H2	Sc	45	119366.50	1.8	90.4	Pulse	0.1000	3
H2	Ge	72	99418.16	1.4	89.1	Pulse	0.1000	3
H2	In	115	289485.43	1.5	98.6	Pulse	0.1000	3
He	Sc	45	37799.94	2.0	102.3	Pulse	0.1000	3
He	Ge	72	64954.64	0.6	100.6	Pulse	0.1000	3
He	In	115	63206.19	1.6	100.0	Pulse	0.1000	3
He	Tb	159	289489.12	1.1	98.9	Pulse	0.1000	3
He	Bi	209	232831.78	0.2	98.7	Pulse	0.1000	3

No Gas

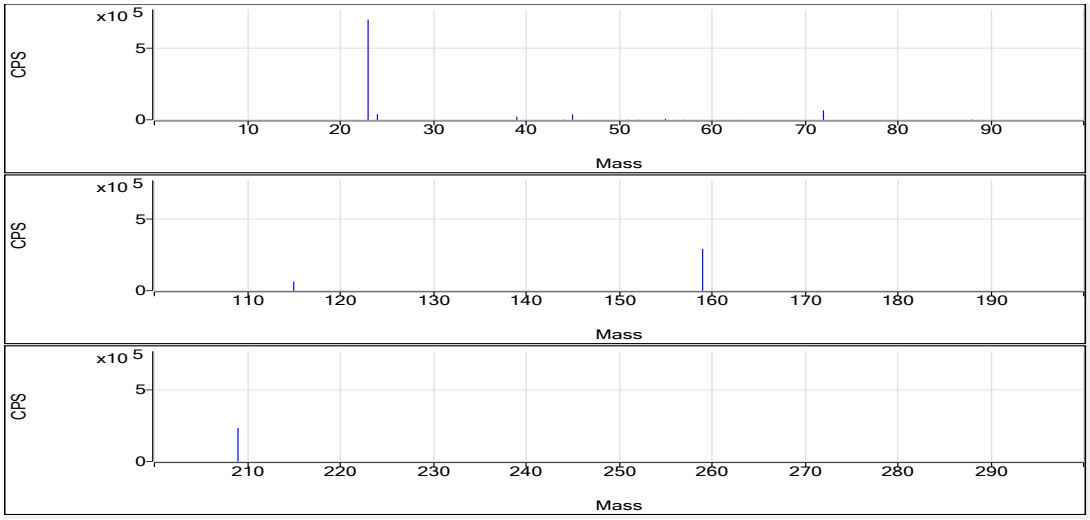


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	52.00	0.0008	2.195E-05
Be	9	1	No Gas	0.008	0	60.00	0.0008	2.195E-05
Be	9	1	No Gas	0.002	0	50.00	0.0008	2.195E-05
Se	78	2	H2	-0.002	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.046	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.015	0	2.00	0.0004	1.386E-05
Na	23	3	He	4627.504	18.1253	697671.16	0.0038	0.4416
Na	23	3	He	4772.918	18.681	691342.49	0.0038	0.4416
Na	23	3	He	4668.491	18.2819	692889.05	0.0038	0.4416
Mg	24	3	He	549.451	1.0302	39653.94	0.0019	0.005872
Mg	24	3	He	542.98	1.0181	37678.93	0.0019	0.005872
Mg	24	3	He	555.375	1.0412	39463.30	0.0019	0.005872
Al	27	3	He	1.02	0.001	40.00	0.0006	0.0004496
Al	27	3	He	1.092	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	1.961	0.0016	60.00	0.0006	0.0004496
K	39	3	He	111.752	0.5749	22127.25	0.0012	0.4456
K	39	3	He	126.306	0.5917	21897.18	0.0012	0.4456
K	39	3	He	102.375	0.564	21376.30	0.0012	0.4456
Ca	44	3	He	697.766	0.0499	1920.21	0.0001	0.003779
Ca	44	3	He	740.294	0.0527	1950.19	0.0001	0.003779
Ca	44	3	He	777.43	0.0552	2090.22	0.0001	0.003779
Ti	47	3	He	1	0.0005	20.00	0.0005	0
Ti	47	3	He	1.04	0.0005	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.012	0.0308	1186.06	0.0223	0.03054
V	51	3	He	-0.025	0.03	1110.05	0.0223	0.03054
V	51	3	He	0.119	0.0332	1258.06	0.0223	0.03054
Cr	52	3	He	-0.155	0.0327	1260.10	0.0285	0.03714
Cr	52	3	He	-0.099	0.0343	1270.11	0.0285	0.03714
Cr	52	3	He	0.077	0.0393	1490.12	0.0285	0.03714
Mn	55	3	He	14.227	0.1806	6951.91	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	14.703	0.1865	6901.90	0.0124	0.004415
Mn	55	3	He	13.517	0.1718	6511.71	0.0124	0.004415
Fe	57	3	He	52.573	0.0312	1200.09	0.0006	0.001356
Fe	57	3	He	61.923	0.0365	1350.11	0.0006	0.001356
Fe	57	3	He	52.5	0.0311	1180.09	0.0006	0.001356
Co	59	3	He	0.088	0.0078	300.01	0.0581	0.002697
Co	59	3	He	0.158	0.0119	440.02	0.0581	0.002697
Co	59	3	He	0.122	0.0098	370.02	0.0581	0.002697
Ni	60	3	He	0.065	0.0045	290.01	0.0087	0.003928
Ni	60	3	He	0.096	0.0048	310.02	0.0087	0.003928
Ni	60	3	He	0.113	0.0049	320.02	0.0087	0.003928
Cu	63	3	He	0.083	0.0082	530.03	0.0261	0.006048
Cu	63	3	He	-0.008	0.0058	380.02	0.0261	0.006048
Cu	63	3	He	-0.032	0.0052	340.02	0.0261	0.006048
Zn	66	3	He	0.451	0.0048	310.02	0.0029	0.003512
Zn	66	3	He	0.274	0.0043	280.01	0.0029	0.003512
Zn	66	3	He	0.595	0.0052	340.02	0.0029	0.003512
As	75	3	He	0.115	0.001	62.00	0.0021	0.0007233
As	75	3	He	0.11	0.001	62.00	0.0021	0.0007233
As	75	3	He	0.199	0.0011	74.00	0.0021	0.0007233
Sr	88	3	He	4.246	0.0386	2480.32	0.009	0.0005796
Sr	88	3	He	4.384	0.0398	2510.33	0.009	0.0005796
Sr	88	3	He	4.757	0.0432	2690.33	0.009	0.0005796
Mo	98	3	He	0.033	0.0011	70.00	0.0235	0.0003188
Mo	98	3	He	0.034	0.0011	70.00	0.0235	0.0003188
Mo	98	3	He	0	0.0003	20.00	0.0235	0.0003188
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	0.066	0.0182	1170.09	0.0164	0.01713
Sn	120	3	He	-0.096	0.0155	980.08	0.0164	0.01713
Sn	120	3	He	-0.076	0.0159	990.08	0.0164	0.01713
Sb	121	3	He	0.023	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.024	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.024	0.0006	40.00	0.0155	0.0002641
Ba	137	3	He	1.812	0.0092	590.03	0.005	0.0001577
Ba	137	3	He	1.466	0.0075	470.02	0.005	0.0001577
Ba	137	3	He	1.709	0.0087	540.03	0.005	0.0001577
Tl	205	3	He	0.029	0.001	290.01	0.026	0.0002504
Tl	205	3	He	0.011	0.0005	160.01	0.026	0.0002504
Tl	205	3	He	0.018	0.0007	210.01	0.026	0.0002504
Pb	208	3	He	-0.003	0.0013	210.01	0.0349	0.001422
Pb	208	3	He	0.007	0.0017	270.01	0.0349	0.001422
Pb	208	3	He	-0.009	0.0011	180.01	0.0349	0.001422
U	238	3	He	0.009	0.0005	120.01	0.0502	5.657E-05
U	238	3	He	0.013	0.0007	160.01	0.0502	5.657E-05
U	238	3	He	0.013	0.0007	160.01	0.0502	5.657E-05
Sc	45	1	No Gas			2114002.78		
Sc	45	1	No Gas			2127152.47		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2125116.53		
Ge	72	1	No Gas			1018425.06		
Ge	72	1	No Gas			1026110.77		
Ge	72	1	No Gas			1021038.81		
Sc	45	2	H2			121705.86		
Sc	45	2	H2			118820.88		
Sc	45	2	H2			117572.75		
Ge	72	2	H2			101004.83		
Ge	72	2	H2			98911.68		
Ge	72	2	H2			98337.97		
In	115	2	H2			294124.80		
In	115	2	H2			288947.52		
In	115	2	H2			285383.98		
Sc	45	3	He			38491.64		
Sc	45	3	He			37007.88		
Sc	45	3	He			37900.29		
Ge	72	3	He			64536.30		
Ge	72	3	He			65148.47		
Ge	72	3	He			65179.16		
In	115	3	He			64279.20		
In	115	3	He			63033.55		
In	115	3	He			62321.49		
Tb	159	3	He			287516.11		
Tb	159	3	He			293298.92		
Tb	159	3	He			287652.34		
Bi	209	3	He			232564.92		
Bi	209	3	He			232675.66		
Bi	209	3	He			233254.76		

Quantitation Report

Data File Name	137SMPL.d
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Acq Time	8/16/2023 10:57:43 AM
Sample Name	410-137226-V-1-A
Sample Type	Sample
Comment	B26
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

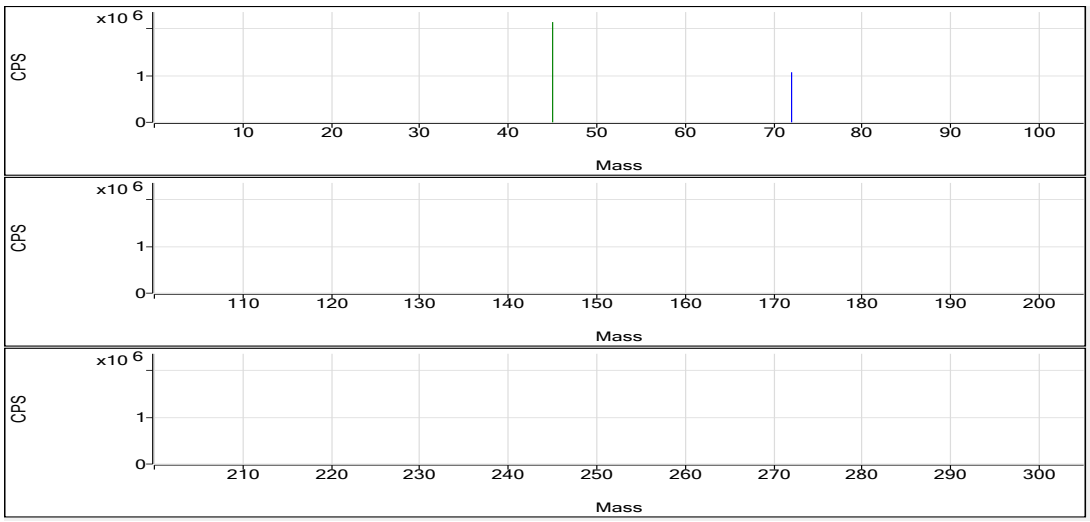
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.006	ppb	101.4	57.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.939	ppb	10.6	44.89	0.0004	Pulse	1.5000	3
Na	23	45	He	42878.603	ppb	1.8	6418580.32	164.2990	Analog	0.1000	3
Mg	24	45	He	16765.787	ppb	2.0	1221250.97	31.2618	Analog	0.1000	3
Al	27	45	He	2.618	ppb	10.9	76.67	0.0020	Pulse	0.1000	3
K	39	45	He	3539.875	ppb	2.1	177337.17	4.5394	Pulse	0.1000	3
Ca	44	45	He	51272.362	ppb	2.6	132498.99	3.3918	Pulse	0.1000	3
Ti	47	45	He	0.498	ppb	101.4	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	2.622	ppb	5.7	3475.77	0.0890	Pulse	0.5000	3
Cr	52	45	He	-0.001	ppb	N/A	1450.12	0.0371	Pulse	0.1000	3
Mn	55	45	He	254.474	ppb	2.6	123276.66	3.1559	Pulse	0.1000	3
Fe	57	45	He	468.935	ppb	3.1	10444.07	0.2674	Pulse	0.1000	3
Co	59	45	He	0.565	ppb	11.6	1390.12	0.0355	Pulse	0.1000	3
Ni	60	72	He	0.418	ppb	18.7	520.03	0.0076	Pulse	0.1000	3
Cu	63	72	He	1.544	ppb	1.4	3193.80	0.0464	Pulse	0.1000	3
Zn	66	72	He	0.718	ppb	12.3	383.35	0.0056	Pulse	0.1000	3
As	75	72	He	1.196	ppb	15.9	220.00	0.0032	Pulse	0.5000	3
Sr	88	115	He	178.913	ppb	3.4	102060.32	1.6024	Pulse	0.1000	3
Mo	98	115	He	1.131	ppb	5.3	1716.83	0.0269	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.011	ppb	114.5	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.241	ppb	N/A	840.06	0.0132	Pulse	0.1000	3
Sb	121	115	He	0.142	ppb	21.0	156.68	0.0025	Pulse	0.1000	3
Ba	137	115	He	80.235	ppb	2.5	25457.70	0.3996	Pulse	0.1000	3
Tl	205	159	He	0.032	ppb	13.5	316.68	0.0011	Pulse	0.1000	3
Pb	208	159	He	0.028	ppb	42.9	703.37	0.0024	Pulse	0.1000	3
U	238	209	He	0.445	ppb	2.7	5257.96	0.0224	Pulse	0.1000	3

ISTD Table:

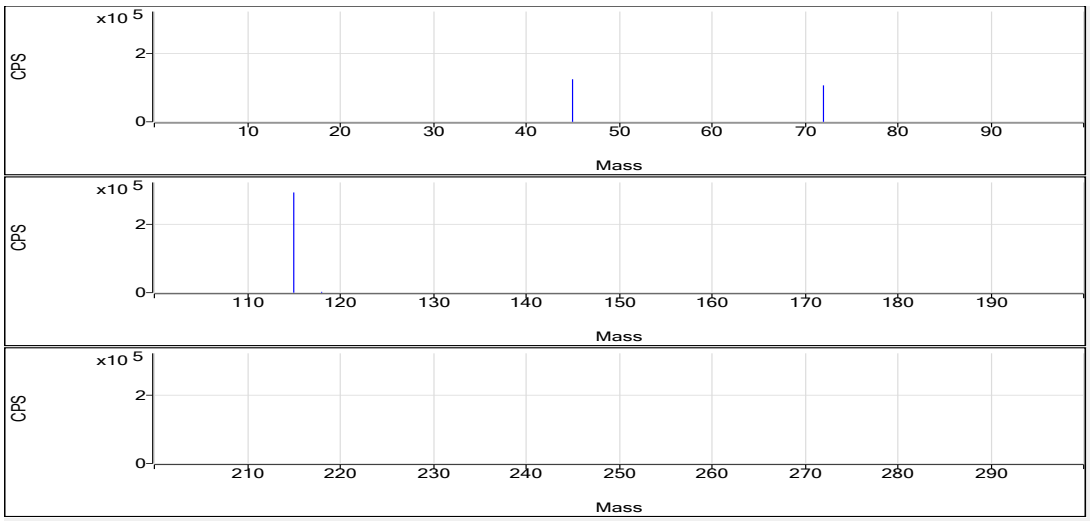
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2141331.01	0.8	105.3	Analog	0.1000	3
No Gas	Ge	72	1069258.11	0.9	106.4	Pulse	0.1000	3
H2	Sc	45	124183.31	0.7	94.0	Pulse	0.1000	3
H2	Ge	72	106320.66	1.3	95.3	Pulse	0.1000	3
H2	In	115	292354.33	1.0	99.5	Pulse	0.1000	3
He	Sc	45	39076.46	2.2	105.8	Pulse	0.1000	3
He	Ge	72	68829.49	0.9	106.6	Pulse	0.1000	3
He	In	115	63738.82	3.1	100.9	Pulse	0.1000	3
He	Tb	159	292116.34	1.0	99.8	Pulse	0.1000	3
He	Bi	209	234742.59	1.1	99.5	Pulse	0.1000	3

No Gas

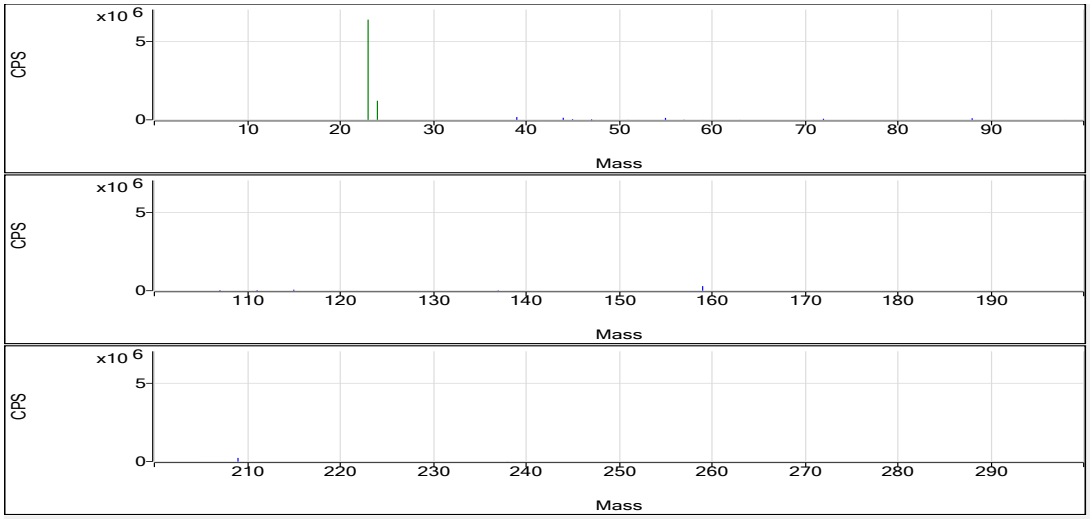


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	56.00	0.0008	2.195E-05
Be	9	1	No Gas	0	0	48.00	0.0008	2.195E-05
Be	9	1	No Gas	0.013	0	68.00	0.0008	2.195E-05
Se	78	2	H2	0.872	0.0004	41.33	0.0004	1.386E-05
Se	78	2	H2	0.892	0.0004	43.33	0.0004	1.386E-05
Se	78	2	H2	1.054	0.0005	50.00	0.0004	1.386E-05
Na	23	3	He	42588.561	163.1906	6420523.03	0.0038	0.4416
Na	23	3	He	42301.9	162.0951	6444080.53	0.0038	0.4416
Na	23	3	He	43745.347	167.6112	6391137.40	0.0038	0.4416
Mg	24	3	He	16722.386	31.1809	1226771.86	0.0019	0.005872
Mg	24	3	He	16451.917	30.6767	1219548.58	0.0019	0.005872
Mg	24	3	He	17123.057	31.9278	1217432.48	0.0019	0.005872
Al	27	3	He	2.3	0.0018	70.00	0.0006	0.0004496
Al	27	3	He	2.703	0.002	80.00	0.0006	0.0004496
Al	27	3	He	2.851	0.0021	80.00	0.0006	0.0004496
K	39	3	He	3530.304	4.5284	178162.40	0.0012	0.4456
K	39	3	He	3471.125	4.4599	177303.71	0.0012	0.4456
K	39	3	He	3618.195	4.63	176545.41	0.0012	0.4456
Ca	44	3	He	51715.121	3.4211	134597.63	0.0001	0.003779
Ca	44	3	He	49792.964	3.2941	130954.99	0.0001	0.003779
Ca	44	3	He	52309	3.4603	131944.34	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.484	0.0003	10.00	0.0005	0
Ti	47	3	He	1.009	0.0005	20.00	0.0005	0
V	51	3	He	2.632	0.0892	3510.45	0.0223	0.03054
V	51	3	He	2.467	0.0855	3400.41	0.0223	0.03054
V	51	3	He	2.767	0.0922	3516.45	0.0223	0.03054
Cr	52	3	He	0.035	0.0381	1500.13	0.0285	0.03714
Cr	52	3	He	0.003	0.0372	1480.13	0.0285	0.03714
Cr	52	3	He	-0.042	0.0359	1370.11	0.0285	0.03714
Mn	55	3	He	252.952	3.1371	123423.68	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	248.879	3.0866	122708.49	0.0124	0.004415
Mn	55	3	He	261.59	3.244	123697.80	0.0124	0.004415
Fe	57	3	He	476.345	0.2716	10684.30	0.0006	0.001356
Fe	57	3	He	452.309	0.2579	10253.94	0.0006	0.001356
Fe	57	3	He	478.151	0.2726	10393.98	0.0006	0.001356
Co	59	3	He	0.614	0.0384	1510.14	0.0581	0.002697
Co	59	3	He	0.59	0.037	1470.12	0.0581	0.002697
Co	59	3	He	0.491	0.0312	1190.09	0.0581	0.002697
Ni	60	3	He	0.343	0.0069	470.02	0.0087	0.003928
Ni	60	3	He	0.499	0.0083	570.03	0.0087	0.003928
Ni	60	3	He	0.413	0.0075	520.03	0.0087	0.003928
Cu	63	3	He	1.533	0.0461	3140.46	0.0261	0.006048
Cu	63	3	He	1.569	0.047	3250.47	0.0261	0.006048
Cu	63	3	He	1.53	0.046	3190.47	0.0261	0.006048
Zn	66	3	He	0.619	0.0053	360.02	0.0029	0.003512
Zn	66	3	He	0.745	0.0056	390.02	0.0029	0.003512
Zn	66	3	He	0.789	0.0058	400.02	0.0029	0.003512
As	75	3	He	1.099	0.003	204.00	0.0021	0.0007233
As	75	3	He	1.414	0.0036	252.00	0.0021	0.0007233
As	75	3	He	1.074	0.0029	204.00	0.0021	0.0007233
Sr	88	3	He	176.1	1.5772	102449.36	0.009	0.0005796
Sr	88	3	He	174.723	1.5648	101442.84	0.009	0.0005796
Sr	88	3	He	185.917	1.6651	102288.75	0.009	0.0005796
Mo	98	3	He	1.126	0.0268	1740.17	0.0235	0.0003188
Mo	98	3	He	1.194	0.0284	1840.19	0.0235	0.0003188
Mo	98	3	He	1.073	0.0256	1570.14	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	-0.01	0	0.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.026	0.0002	10.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.218	0.0135	880.06	0.0164	0.01713
Sn	120	3	He	-0.235	0.0133	860.06	0.0164	0.01713
Sn	120	3	He	-0.27	0.0127	780.06	0.0164	0.01713
Sb	121	3	He	0.142	0.0025	160.01	0.0155	0.0002641
Sb	121	3	He	0.113	0.002	130.01	0.0155	0.0002641
Sb	121	3	He	0.172	0.0029	180.01	0.0155	0.0002641
Ba	137	3	He	78.771	0.3923	25484.55	0.005	0.0001577
Ba	137	3	He	79.427	0.3956	25644.66	0.005	0.0001577
Ba	137	3	He	82.506	0.4109	25243.89	0.005	0.0001577
Tl	205	3	He	0.027	0.001	280.01	0.026	0.0002504
Tl	205	3	He	0.035	0.0012	340.02	0.026	0.0002504
Tl	205	3	He	0.034	0.0011	330.02	0.026	0.0002504
Pb	208	3	He	0.038	0.0028	400.02	0.0349	0.001422
Pb	208	3	He	0.031	0.0025	440.02	0.0349	0.001422
Pb	208	3	He	0.015	0.0019	290.01	0.0349	0.001422
U	238	3	He	0.431	0.0217	5121.24	0.0502	5.657E-05
U	238	3	He	0.451	0.0227	5261.33	0.0502	5.657E-05
U	238	3	He	0.452	0.0228	5391.32	0.0502	5.657E-05
Sc	45	1	No Gas			2137488.09		
Sc	45	1	No Gas			2161090.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2125414.81		
Ge	72	1	No Gas			1075018.89		
Ge	72	1	No Gas			1074981.23		
Ge	72	1	No Gas			1057774.20		
Sc	45	2	H2			125143.95		
Sc	45	2	H2			123895.44		
Sc	45	2	H2			123510.55		
Ge	72	2	H2			105194.53		
Ge	72	2	H2			107875.06		
Ge	72	2	H2			105892.40		
In	115	2	H2			293117.93		
In	115	2	H2			294674.74		
In	115	2	H2			289270.33		
Sc	45	3	He			39343.71		
Sc	45	3	He			39754.93		
Sc	45	3	He			38130.74		
Ge	72	3	He			68102.68		
Ge	72	3	He			69087.31		
Ge	72	3	He			69298.49		
In	115	3	He			64962.19		
In	115	3	He			64831.79		
In	115	3	He			61436.35		
Tb	159	3	He			293276.66		
Tb	159	3	He			294339.86		
Tb	159	3	He			288732.50		
Bi	209	3	He			235830.97		
Bi	209	3	He			231771.38		
Bi	209	3	He			236625.41		

Quantitation Report

Data File Name	138SMPL.d
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Sample Name	410-137654-V-1-A
Sample Type	Sample
Comment	B26
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

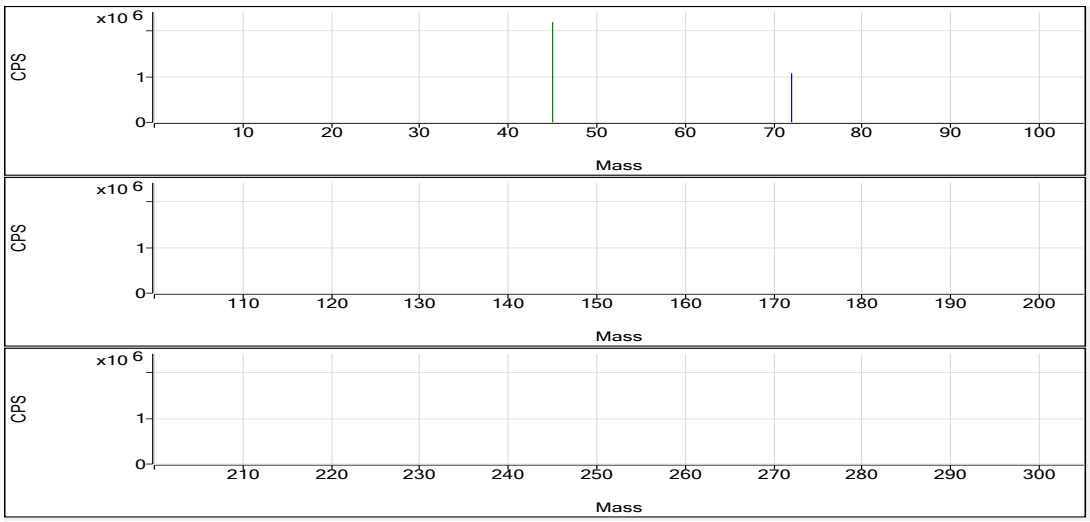
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	1599.9	48.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.031	ppb	152.2	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	6387.423	ppb	1.9	952042.51	24.8507	Pulse	0.1000	3
Mg	24	45	He	2809.857	ppb	1.5	200918.98	5.2442	Pulse	0.1000	3
Al	27	45	He	1.766	ppb	80.5	56.67	0.0015	Pulse	0.1000	3
K	39	45	He	1227.585	ppb	2.8	71458.43	1.8653	Pulse	0.1000	3
Ca	44	45	He	3491.949	ppb	0.8	8986.44	0.2345	Pulse	0.1000	3
Ti	47	45	He	0.170	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.266	ppb	N/A	942.70	0.0246	Pulse	0.5000	3
Cr	52	45	He	0.286	ppb	53.4	1733.50	0.0453	Pulse	0.1000	3
Mn	55	45	He	307.558	ppb	2.6	146081.81	3.8133	Pulse	0.1000	3
Fe	57	45	He	58911.051	ppb	1.5	1280340.58	33.4187	Pulse	0.1000	3
Co	59	45	He	0.374	ppb	1.8	936.73	0.0244	Pulse	0.1000	3
Ni	60	72	He	0.321	ppb	40.5	456.69	0.0067	Pulse	0.1000	3
Cu	63	72	He	0.160	ppb	16.0	696.71	0.0102	Pulse	0.1000	3
Zn	66	72	He	0.687	ppb	16.2	373.35	0.0055	Pulse	0.1000	3
As	75	72	He	19.700	ppb	2.4	2824.30	0.0415	Pulse	0.5000	3
Sr	88	115	He	31.722	ppb	3.6	17758.24	0.2846	Pulse	0.1000	3
Mo	98	115	He	1.729	ppb	3.5	2560.33	0.0410	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	26.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	174.5	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.251	ppb	N/A	813.39	0.0130	Pulse	0.1000	3
Sb	121	115	He	0.014	ppb	123.2	30.00	0.0005	Pulse	0.1000	3
Ba	137	115	He	56.017	ppb	6.1	17404.95	0.2790	Pulse	0.1000	3
Tl	205	159	He	0.005	ppb	74.2	110.00	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.000	ppb	N/A	413.35	0.0014	Pulse	0.1000	3
U	238	209	He	0.009	ppb	22.6	123.34	0.0005	Pulse	0.1000	3

ISTD Table:

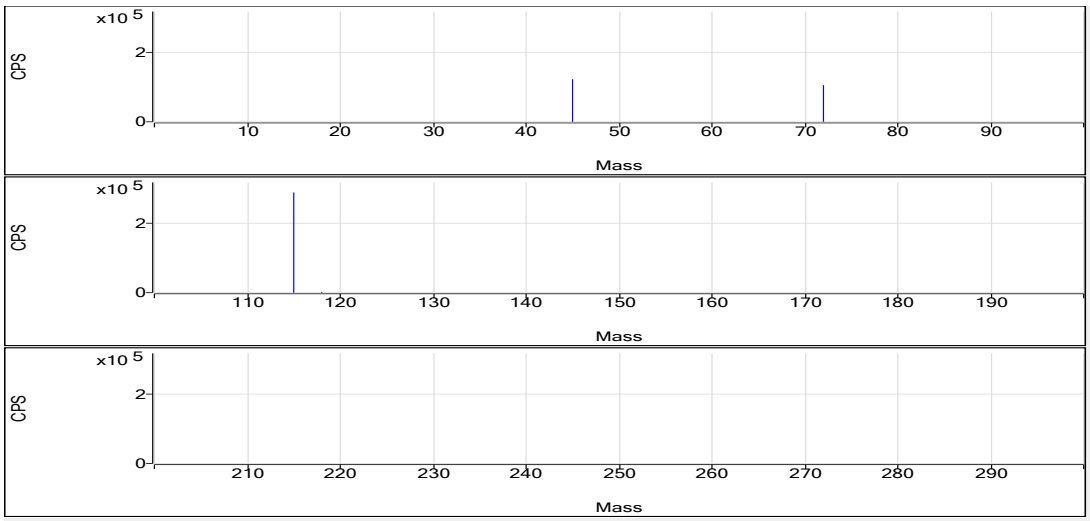
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2192477.41	0.9	107.9	Analog	0.1000	3
No Gas	Ge	72	1072472.48	0.8	106.7	Pulse	0.1000	3
H2	Sc	45	123094.62	0.2	93.2	Pulse	0.1000	3
H2	Ge	72	105824.06	1.3	94.9	Pulse	0.1000	3
H2	In	115	289576.28	0.9	98.6	Pulse	0.1000	3
He	Sc	45	38317.79	1.6	103.7	Pulse	0.1000	3
He	Ge	72	68125.95	0.8	105.5	Pulse	0.1000	3
He	In	115	62439.82	2.7	98.8	Pulse	0.1000	3
He	Tb	159	292726.10	0.9	100.0	Pulse	0.1000	3
He	Bi	209	238358.07	0.6	101.1	Pulse	0.1000	3

No Gas

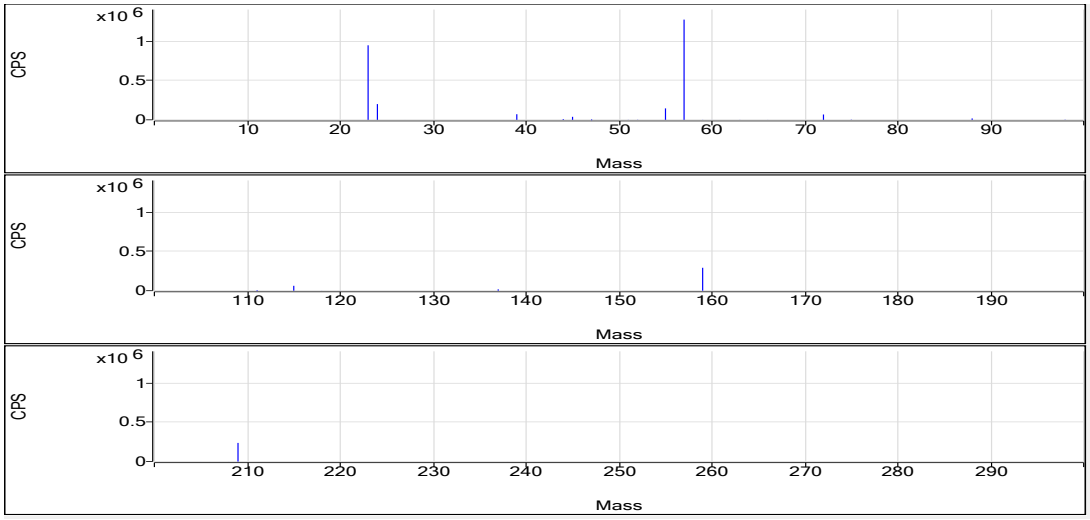


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	58.00	0.0008	2.195E-05
Be	9	1	No Gas	0	0	48.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.005	0	40.00	0.0008	2.195E-05
Se	78	2	H2	0.011	0	2.00	0.0004	1.386E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.085	0.0001	5.33	0.0004	1.386E-05
Na	23	3	He	6288.256	24.4717	952259.99	0.0038	0.4416
Na	23	3	He	6521.704	25.3638	956455.14	0.0038	0.4416
Na	23	3	He	6352.309	24.7165	947412.41	0.0038	0.4416
Mg	24	3	He	2785.229	5.1983	202279.33	0.0019	0.005872
Mg	24	3	He	2857.042	5.3322	201073.04	0.0019	0.005872
Mg	24	3	He	2787.3	5.2021	199404.57	0.0019	0.005872
Al	27	3	He	2.778	0.0021	80.00	0.0006	0.0004496
Al	27	3	He	0.14	0.0005	20.00	0.0006	0.0004496
Al	27	3	He	2.381	0.0018	70.00	0.0006	0.0004496
K	39	3	He	1191.785	1.8239	70972.83	0.0012	0.4456
K	39	3	He	1259.858	1.9026	71746.91	0.0012	0.4456
K	39	3	He	1231.111	1.8694	71655.55	0.0012	0.4456
Ca	44	3	He	3475.319	0.2334	9083.19	0.0001	0.003779
Ca	44	3	He	3475.563	0.2334	8802.93	0.0001	0.003779
Ca	44	3	He	3524.964	0.2367	9073.20	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.51	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.337	0.023	896.03	0.0223	0.03054
V	51	3	He	-0.226	0.0255	962.04	0.0223	0.03054
V	51	3	He	-0.235	0.0253	970.04	0.0223	0.03054
Cr	52	3	He	0.267	0.0447	1740.16	0.0285	0.03714
Cr	52	3	He	0.447	0.0499	1880.21	0.0285	0.03714
Cr	52	3	He	0.144	0.0412	1580.14	0.0285	0.03714
Mn	55	3	He	298.604	3.7024	144071.94	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	313.399	3.8857	146526.01	0.0124	0.004415
Mn	55	3	He	310.672	3.8519	147647.48	0.0124	0.004415
Fe	57	3	He	57960.051	32.8793	1279421.78	0.0006	0.001356
Fe	57	3	He	59651.672	33.8389	1276044.82	0.0006	0.001356
Fe	57	3	He	59121.428	33.5381	1285555.14	0.0006	0.001356
Co	59	3	He	0.378	0.0247	960.07	0.0581	0.002697
Co	59	3	He	0.378	0.0247	930.06	0.0581	0.002697
Co	59	3	He	0.367	0.024	920.06	0.0581	0.002697
Ni	60	3	He	0.171	0.0054	370.02	0.0087	0.003928
Ni	60	3	He	0.39	0.0073	500.03	0.0087	0.003928
Ni	60	3	He	0.401	0.0074	500.03	0.0087	0.003928
Cu	63	3	He	0.154	0.0101	690.04	0.0261	0.006048
Cu	63	3	He	0.138	0.0096	660.05	0.0261	0.006048
Cu	63	3	He	0.188	0.011	740.04	0.0261	0.006048
Zn	66	3	He	0.815	0.0058	400.02	0.0029	0.003512
Zn	66	3	He	0.61	0.0053	360.02	0.0029	0.003512
Zn	66	3	He	0.636	0.0053	360.02	0.0029	0.003512
As	75	3	He	19.883	0.0418	2862.30	0.0021	0.0007233
As	75	3	He	20.047	0.0422	2886.31	0.0021	0.0007233
As	75	3	He	19.168	0.0404	2724.28	0.0021	0.0007233
Sr	88	3	He	32.214	0.289	17851.62	0.009	0.0005796
Sr	88	3	He	30.429	0.273	17561.40	0.009	0.0005796
Sr	88	3	He	32.524	0.2918	17861.71	0.009	0.0005796
Mo	98	3	He	1.708	0.0405	2500.31	0.0235	0.0003188
Mo	98	3	He	1.798	0.0426	2740.37	0.0235	0.0003188
Mo	98	3	He	1.682	0.0399	2440.30	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.353	0.0113	700.05	0.0164	0.01713
Sn	120	3	He	-0.172	0.0143	920.08	0.0164	0.01713
Sn	120	3	He	-0.227	0.0134	820.05	0.0164	0.01713
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	0.033	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Ba	137	3	He	56.583	0.2819	17411.58	0.005	0.0001577
Ba	137	3	He	52.336	0.2607	16770.85	0.005	0.0001577
Ba	137	3	He	59.132	0.2945	18032.42	0.005	0.0001577
Tl	205	3	He	0.002	0.0003	90.00	0.026	0.0002504
Tl	205	3	He	0.004	0.0003	100.00	0.026	0.0002504
Tl	205	3	He	0.009	0.0005	140.01	0.026	0.0002504
Pb	208	3	He	0.007	0.0017	290.01	0.0349	0.001422
Pb	208	3	He	-0.001	0.0014	250.01	0.0349	0.001422
Pb	208	3	He	-0.006	0.0012	200.01	0.0349	0.001422
U	238	3	He	0.007	0.0004	100.00	0.0502	5.657E-05
U	238	3	He	0.009	0.0005	120.01	0.0502	5.657E-05
U	238	3	He	0.011	0.0006	150.01	0.0502	5.657E-05
Sc	45	1	No Gas			2170777.31		
Sc	45	1	No Gas			2210006.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2196648.87		
Ge	72	1	No Gas			1065870.53		
Ge	72	1	No Gas			1069062.87		
Ge	72	1	No Gas			1082484.05		
Sc	45	2	H2			123430.07		
Sc	45	2	H2			122827.16		
Sc	45	2	H2			123026.62		
Ge	72	2	H2			107341.16		
Ge	72	2	H2			105357.28		
Ge	72	2	H2			104773.73		
In	115	2	H2			292036.30		
In	115	2	H2			286718.32		
In	115	2	H2			289974.23		
Sc	45	3	He			38912.70		
Sc	45	3	He			37709.45		
Sc	45	3	He			38331.21		
Ge	72	3	He			68423.77		
Ge	72	3	He			68443.80		
Ge	72	3	He			67510.27		
In	115	3	He			61777.69		
In	115	3	He			64329.21		
In	115	3	He			61224.89		
Tb	159	3	He			295820.84		
Tb	159	3	He			291778.12		
Tb	159	3	He			290579.33		
Bi	209	3	He			238888.04		
Bi	209	3	He			236646.40		
Bi	209	3	He			239539.76		

Quantitation Report

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Acq Time	8/16/2023 11:02:06 AM
Sample Name	410-137226-V-7-A
Sample Type	Sample
Comment	B26
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

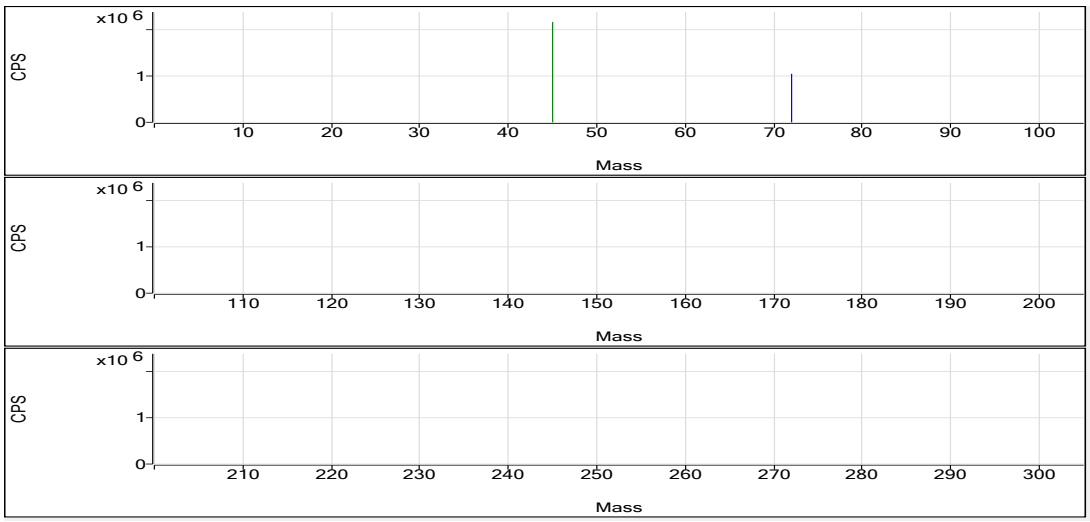
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	N/A	47.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.203	ppb	26.9	10.67	0.0001	Pulse	1.5000	3
Na	23	45	He	133914.084	ppb	2.6	19500718.04	512.1842	Analog	0.1000	3
Mg	24	45	He	33043.756	ppb	1.6	2345995.28	61.6083	Analog	0.1000	3
Al	27	45	He	4.360	ppb	59.2	113.34	0.0030	Pulse	0.1000	3
K	39	45	He	7979.852	ppb	2.5	368350.96	9.6742	Pulse	0.1000	3
Ca	44	45	He	66810.536	ppb	2.2	168242.66	4.4186	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.243	ppb	N/A	956.71	0.0251	Pulse	0.5000	3
Cr	52	45	He	0.291	ppb	33.6	1730.18	0.0454	Pulse	0.1000	3
Mn	55	45	He	601.136	ppb	3.0	283594.00	7.4491	Pulse	0.1000	3
Fe	57	45	He	3034.366	ppb	2.9	65589.53	1.7226	Pulse	0.1000	3
Co	59	45	He	1.800	ppb	2.5	4084.04	0.1073	Pulse	0.1000	3
Ni	60	72	He	3.517	ppb	1.8	2333.61	0.0344	Pulse	0.1000	3
Cu	63	72	He	2.172	ppb	6.3	4260.77	0.0628	Pulse	0.1000	3
Zn	66	72	He	5.549	ppb	3.3	1316.78	0.0194	Pulse	0.1000	3
As	75	72	He	2.259	ppb	7.8	366.01	0.0054	Pulse	0.5000	3
Sr	88	115	He	317.842	ppb	1.2	181721.77	2.8462	Pulse	0.1000	3
Mo	98	115	He	4.084	ppb	9.1	6151.55	0.0964	Pulse	0.1000	3
Ag	107	115	He	0.011	ppb	57.7	66.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.141	ppb	26.4	50.67	0.0008	Pulse	0.5000	3
Sn	120	115	He	-0.207	ppb	N/A	876.73	0.0137	Pulse	0.1000	3
Sb	121	115	He	0.233	ppb	39.2	246.68	0.0039	Pulse	0.1000	3
Ba	137	115	He	63.597	ppb	2.7	20225.58	0.3168	Pulse	0.1000	3
Tl	205	159	He	0.074	ppb	15.9	633.37	0.0022	Pulse	0.1000	3
Pb	208	159	He	0.075	ppb	9.1	1176.73	0.0041	Pulse	0.1000	3
U	238	209	He	0.866	ppb	1.7	9884.11	0.0435	Pulse	0.1000	3

ISTD Table:

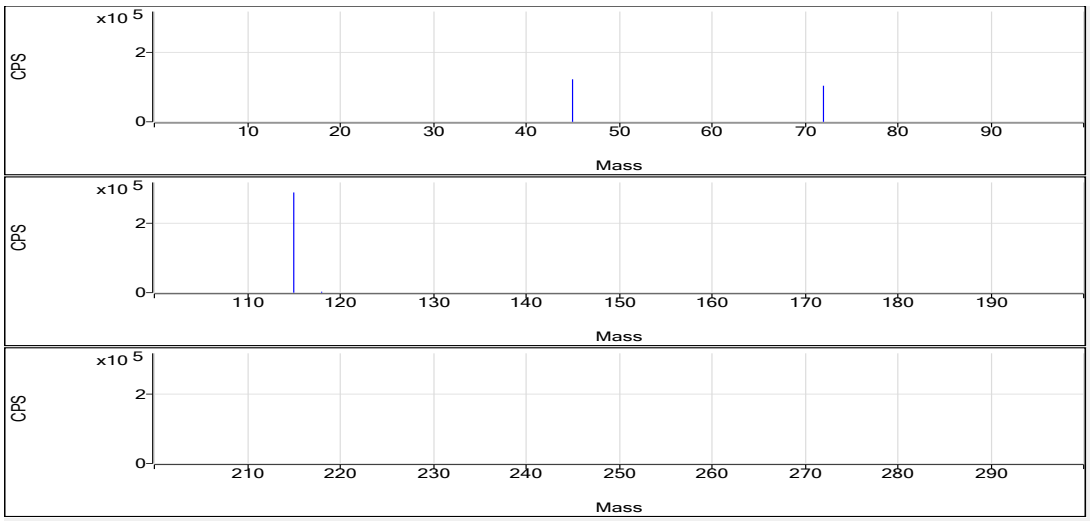
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2162330.80	0.6	106.4	Analog	0.1000	3
No Gas	Ge	72	1045646.57	0.7	104.0	Pulse	0.1000	3
H2	Sc	45	123029.70	0.6	93.1	Pulse	0.1000	3
H2	Ge	72	104376.06	0.8	93.6	Pulse	0.1000	3
H2	In	115	289938.57	0.2	98.7	Pulse	0.1000	3
He	Sc	45	38087.36	2.2	103.1	Pulse	0.1000	3
He	Ge	72	67821.42	1.3	105.1	Pulse	0.1000	3
He	In	115	63849.08	0.2	101.0	Pulse	0.1000	3
He	Tb	159	290395.42	0.8	99.2	Pulse	0.1000	3
He	Bi	209	226965.73	0.4	96.2	Pulse	0.1000	3

No Gas

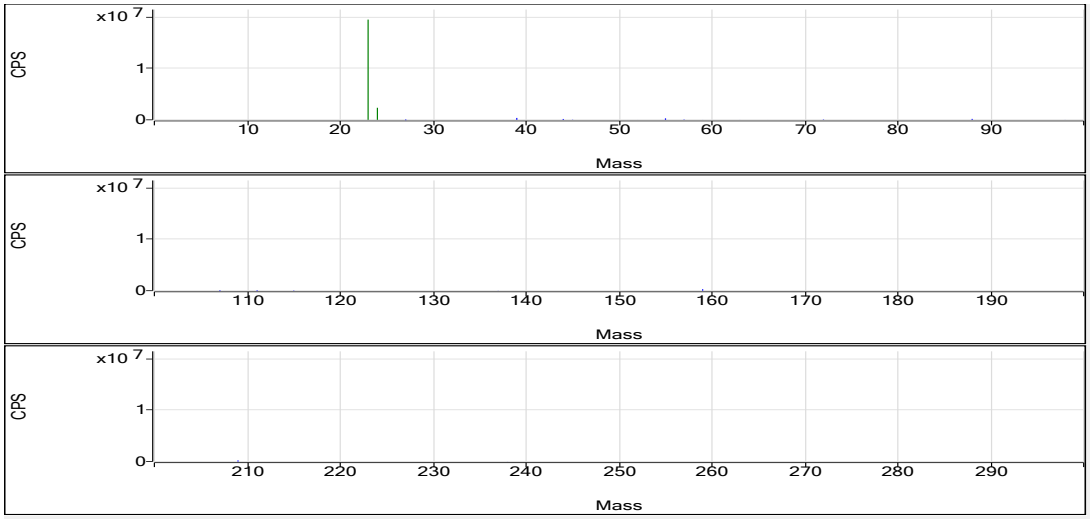


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.004	0	40.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.003	0	42.00	0.0008	2.195E-05
Be	9	1	No Gas	0.007	0	60.00	0.0008	2.195E-05
Se	78	2	H2	0.159	0.0001	8.67	0.0004	1.386E-05
Se	78	2	H2	0.264	0.0001	13.33	0.0004	1.386E-05
Se	78	2	H2	0.187	0.0001	10.00	0.0004	1.386E-05
Na	23	3	He	134779.649	515.4919	19407990.96	0.0038	0.4416
Na	23	3	He	136883.952	523.5333	19674162.21	0.0038	0.4416
Na	23	3	He	130078.652	497.5274	19420000.96	0.0038	0.4416
Mg	24	3	He	33513.325	62.4837	2352477.93	0.0019	0.005872
Mg	24	3	He	33152.853	61.8117	2322857.47	0.0019	0.005872
Mg	24	3	He	32465.089	60.5295	2362650.43	0.0019	0.005872
Al	27	3	He	6.573	0.0042	160.01	0.0006	0.0004496
Al	27	3	He	1.524	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	4.983	0.0033	130.01	0.0006	0.0004496
K	39	3	He	8155.753	9.8776	371886.79	0.0012	0.4456
K	39	3	He	8014.509	9.7143	365058.04	0.0012	0.4456
K	39	3	He	7769.295	9.4307	368108.04	0.0012	0.4456
Ca	44	3	He	68162.06	4.5079	169718.92	0.0001	0.003779
Ca	44	3	He	67046.842	4.4342	166634.57	0.0001	0.003779
Ca	44	3	He	65222.707	4.3136	168374.49	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.195	0.0262	986.04	0.0223	0.03054
V	51	3	He	-0.262	0.0247	928.04	0.0223	0.03054
V	51	3	He	-0.271	0.0245	956.04	0.0223	0.03054
Cr	52	3	He	0.179	0.0422	1590.15	0.0285	0.03714
Cr	52	3	He	0.332	0.0466	1750.18	0.0285	0.03714
Cr	52	3	He	0.361	0.0474	1850.20	0.0285	0.03714
Mn	55	3	He	609.626	7.5542	284413.24	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	613.475	7.6019	285676.93	0.0124	0.004415
Mn	55	3	He	580.306	7.1911	280691.83	0.0124	0.004415
Fe	57	3	He	3132.273	1.7781	66946.11	0.0006	0.001356
Fe	57	3	He	3013.66	1.7109	64293.37	0.0006	0.001356
Fe	57	3	He	2957.164	1.6788	65529.10	0.0006	0.001356
Co	59	3	He	1.842	0.1097	4130.73	0.0581	0.002697
Co	59	3	He	1.804	0.1075	4040.71	0.0581	0.002697
Co	59	3	He	1.753	0.1045	4080.69	0.0581	0.002697
Ni	60	3	He	3.56	0.0348	2390.29	0.0087	0.003928
Ni	60	3	He	3.446	0.0338	2290.26	0.0087	0.003928
Ni	60	3	He	3.544	0.0346	2320.28	0.0087	0.003928
Cu	63	3	He	2.118	0.0614	4220.74	0.0261	0.006048
Cu	63	3	He	2.327	0.0669	4530.85	0.0261	0.006048
Cu	63	3	He	2.072	0.0602	4030.71	0.0261	0.006048
Zn	66	3	He	5.681	0.0198	1360.12	0.0029	0.003512
Zn	66	3	He	5.624	0.0196	1330.11	0.0029	0.003512
Zn	66	3	He	5.341	0.0188	1260.12	0.0029	0.003512
As	75	3	He	2.451	0.0058	398.01	0.0021	0.0007233
As	75	3	He	2.22	0.0053	360.01	0.0021	0.0007233
As	75	3	He	2.106	0.0051	340.01	0.0021	0.0007233
Sr	88	3	He	320.017	2.8656	182574.72	0.009	0.0005796
Sr	88	3	He	320.073	2.8661	182951.74	0.009	0.0005796
Sr	88	3	He	313.437	2.8067	179638.86	0.009	0.0005796
Mo	98	3	He	4.333	0.1022	6511.71	0.0235	0.0003188
Mo	98	3	He	4.265	0.1006	6421.72	0.0235	0.0003188
Mo	98	3	He	3.655	0.0863	5521.23	0.0235	0.0003188
Ag	107	3	He	0.019	0.0014	90.00	0.0499	0.0004754
Ag	107	3	He	0.009	0.0009	60.00	0.0499	0.0004754
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Cd	111	3	He	0.117	0.0007	42.00	0.0055	1.07E-05
Cd	111	3	He	0.122	0.0007	44.00	0.0055	1.07E-05
Cd	111	3	He	0.184	0.001	66.00	0.0055	1.07E-05
Sn	120	3	He	-0.145	0.0148	940.06	0.0164	0.01713
Sn	120	3	He	-0.299	0.0122	780.06	0.0164	0.01713
Sn	120	3	He	-0.177	0.0142	910.06	0.0164	0.01713
Sb	121	3	He	0.338	0.0055	350.02	0.0155	0.0002641
Sb	121	3	He	0.175	0.003	190.01	0.0155	0.0002641
Sb	121	3	He	0.185	0.0031	200.01	0.0155	0.0002641
Ba	137	3	He	65.564	0.3266	20806.57	0.005	0.0001577
Ba	137	3	He	62.509	0.3114	19874.81	0.005	0.0001577
Ba	137	3	He	62.72	0.3124	19995.35	0.005	0.0001577
Tl	205	3	He	0.076	0.0022	650.04	0.026	0.0002504
Tl	205	3	He	0.062	0.0019	540.03	0.026	0.0002504
Tl	205	3	He	0.085	0.0025	710.05	0.026	0.0002504
Pb	208	3	He	0.078	0.0041	550.03	0.0349	0.001422
Pb	208	3	He	0.067	0.0038	550.04	0.0349	0.001422
Pb	208	3	He	0.081	0.0042	610.03	0.0349	0.001422
U	238	3	He	0.881	0.0443	10064.29	0.0502	5.657E-05
U	238	3	He	0.851	0.0428	9753.95	0.0502	5.657E-05
U	238	3	He	0.865	0.0435	9834.09	0.0502	5.657E-05
Sc	45	1	No Gas			2151273.25		
Sc	45	1	No Gas			2158989.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2176729.81		
Ge	72	1	No Gas			1036866.63		
Ge	72	1	No Gas			1051572.09		
Ge	72	1	No Gas			1048501.00		
Sc	45	2	H2			122895.59		
Sc	45	2	H2			122371.21		
Sc	45	2	H2			123822.31		
Ge	72	2	H2			104651.82		
Ge	72	2	H2			103472.64		
Ge	72	2	H2			105003.71		
In	115	2	H2			290036.77		
In	115	2	H2			290355.74		
In	115	2	H2			289423.20		
Sc	45	3	He			37649.46		
Sc	45	3	He			37579.58		
Sc	45	3	He			39033.03		
Ge	72	3	He			68725.58		
Ge	72	3	He			67771.21		
Ge	72	3	He			66967.48		
In	115	3	He			63717.01		
In	115	3	He			63836.95		
In	115	3	He			64008.18		
Tb	159	3	He			292239.78		
Tb	159	3	He			290979.12		
Tb	159	3	He			287967.36		
Bi	209	3	He			227082.07		
Bi	209	3	He			227883.53		
Bi	209	3	He			225931.58		

Quantitation Report

Data File Name	140SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:04:08 AM
Sample Name	410-137226-V-7-A @100
Sample Type	Sample
Comment	B26
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

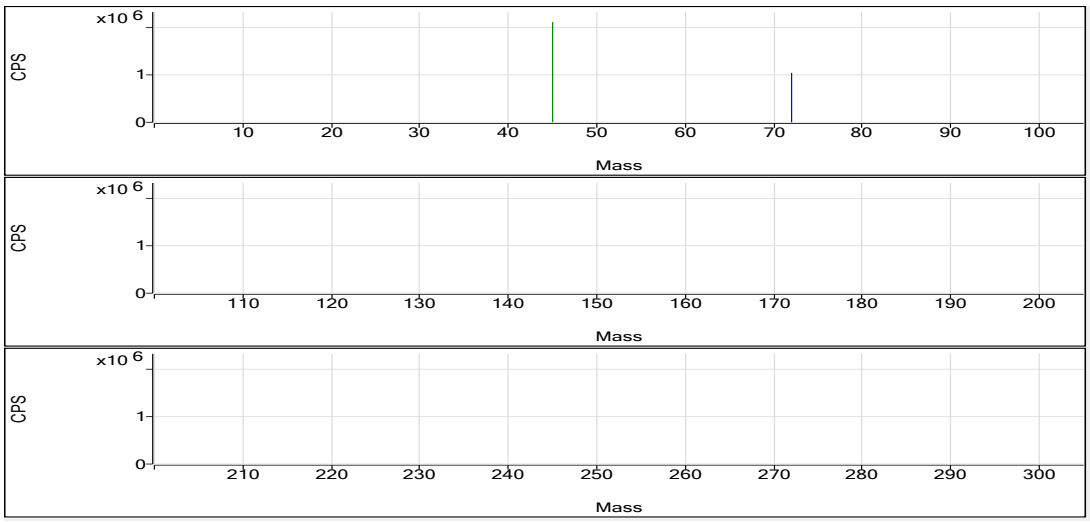
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.010	ppb	N/A	30.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.029	ppb	91.3	2.66	0.0000	Pulse	1.5000	3
Na	23	45	He	1351.472	ppb	0.3	209367.95	5.6062	Pulse	0.1000	3
Mg	24	45	He	330.058	ppb	0.3	23198.84	0.6212	Pulse	0.1000	3
Al	27	45	He	1.845	ppb	28.2	56.67	0.0015	Pulse	0.1000	3
K	39	45	He	76.778	ppb	2.2	19957.46	0.5344	Pulse	0.1000	3
Ca	44	45	He	676.496	ppb	4.1	1810.19	0.0485	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.050	ppb	N/A	1098.72	0.0294	Pulse	0.5000	3
Cr	52	45	He	-0.010	ppb	N/A	1376.78	0.0369	Pulse	0.1000	3
Mn	55	45	He	5.951	ppb	3.5	2917.07	0.0781	Pulse	0.1000	3
Fe	57	45	He	35.842	ppb	11.4	810.05	0.0217	Pulse	0.1000	3
Co	59	45	He	0.050	ppb	63.0	210.01	0.0056	Pulse	0.1000	3
Ni	60	72	He	0.031	ppb	395.6	283.35	0.0042	Pulse	0.1000	3
Cu	63	72	He	0.036	ppb	204.3	473.36	0.0070	Pulse	0.1000	3
Zn	66	72	He	0.151	ppb	61.3	266.68	0.0039	Pulse	0.1000	3
As	75	72	He	0.032	ppb	250.2	53.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	3.261	ppb	5.1	1860.19	0.0298	Pulse	0.1000	3
Mo	98	115	He	0.077	ppb	24.8	133.34	0.0021	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	26.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	172.5	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.051	ppb	N/A	1016.74	0.0163	Pulse	0.1000	3
Sb	121	115	He	-0.003	ppb	N/A	13.33	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.536	ppb	16.5	176.68	0.0028	Pulse	0.1000	3
Tl	205	159	He	0.008	ppb	3.4	130.01	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.004	ppb	N/A	373.35	0.0013	Pulse	0.1000	3
U	238	209	He	0.020	ppb	24.5	243.34	0.0011	Pulse	0.1000	3

ISTD Table:

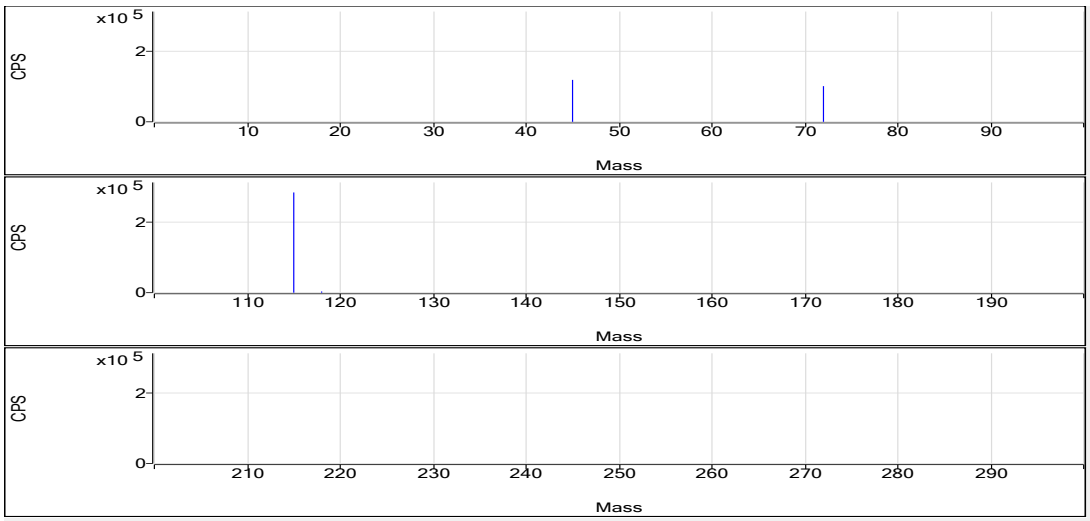
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2124394.60	0.6	104.5	Analog	0.1000	3
No Gas	Ge	72	1047698.58	0.4	104.2	Pulse	0.1000	3
H2	Sc	45	118530.83	0.2	89.7	Pulse	0.1000	3
H2	Ge	72	100847.37	0.8	90.4	Pulse	0.1000	3
H2	In	115	283328.61	0.6	96.5	Pulse	0.1000	3
He	Sc	45	37345.43	0.9	101.1	Pulse	0.1000	3
He	Ge	72	67560.10	1.1	104.6	Pulse	0.1000	3
He	In	115	62525.96	2.1	98.9	Pulse	0.1000	3
He	Tb	159	287474.14	1.5	98.2	Pulse	0.1000	3
He	Bi	209	231228.86	0.8	98.1	Pulse	0.1000	3

No Gas

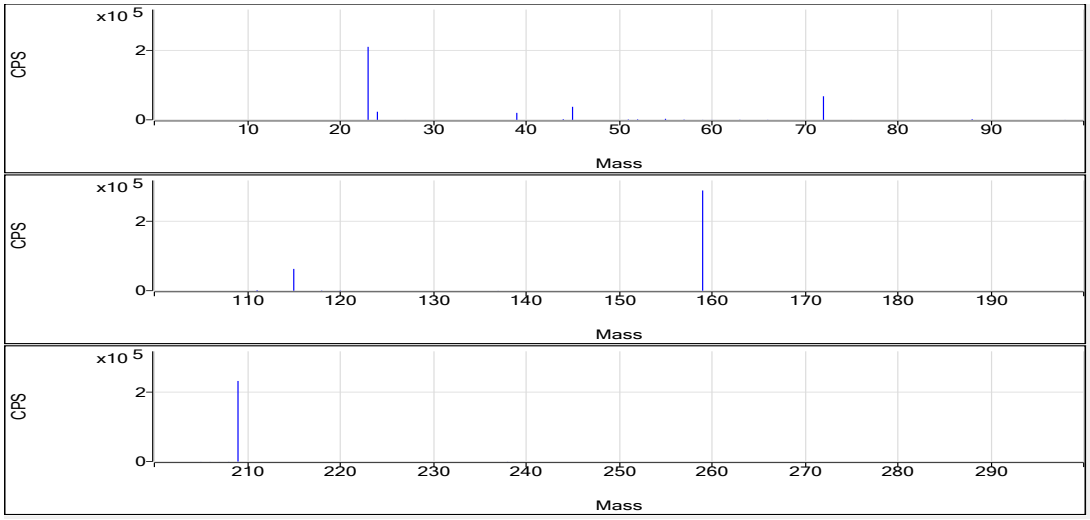


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.009	0	32.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.008	0	34.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.014	0	24.00	0.0008	2.195E-05
Se	78	2	H2	0.043	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.045	0	3.33	0.0004	1.386E-05
Se	78	2	H2	-0.002	0	1.33	0.0004	1.386E-05
Na	23	3	He	1353.426	5.6136	210673.43	0.0038	0.4416
Na	23	3	He	1354.595	5.6181	210956.52	0.0038	0.4416
Na	23	3	He	1346.394	5.5867	206473.90	0.0038	0.4416
Mg	24	3	He	331.293	0.6235	23398.99	0.0019	0.005872
Mg	24	3	He	329.684	0.6205	23299.11	0.0019	0.005872
Mg	24	3	He	329.197	0.6196	22898.41	0.0019	0.005872
Al	27	3	He	1.527	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	2.447	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	1.562	0.0014	50.00	0.0006	0.0004496
K	39	3	He	76.74	0.5344	20054.29	0.0012	0.4456
K	39	3	He	75.101	0.5325	19994.07	0.0012	0.4456
K	39	3	He	78.494	0.5364	19824.02	0.0012	0.4456
Ca	44	3	He	648.564	0.0466	1750.17	0.0001	0.003779
Ca	44	3	He	676.398	0.0485	1820.19	0.0001	0.003779
Ca	44	3	He	704.526	0.0503	1860.20	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.038	0.0297	1114.05	0.0223	0.03054
V	51	3	He	-0.14	0.0274	1030.04	0.0223	0.03054
V	51	3	He	0.028	0.0312	1152.06	0.0223	0.03054
Cr	52	3	He	-0.05	0.0357	1340.10	0.0285	0.03714
Cr	52	3	He	0.052	0.0386	1450.12	0.0285	0.03714
Cr	52	3	He	-0.031	0.0363	1340.11	0.0285	0.03714
Mn	55	3	He	5.712	0.0752	2820.36	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	6.096	0.0799	3000.45	0.0124	0.004415
Mn	55	3	He	6.046	0.0793	2930.40	0.0124	0.004415
Fe	57	3	He	32.372	0.0197	740.04	0.0006	0.001356
Fe	57	3	He	40.336	0.0242	910.06	0.0006	0.001356
Fe	57	3	He	34.818	0.0211	780.05	0.0006	0.001356
Co	59	3	He	0.082	0.0075	280.02	0.0581	0.002697
Co	59	3	He	0.05	0.0056	210.01	0.0581	0.002697
Co	59	3	He	0.019	0.0038	140.00	0.0581	0.002697
Ni	60	3	He	0.151	0.0052	350.02	0.0087	0.003928
Ni	60	3	He	0.037	0.0042	290.01	0.0087	0.003928
Ni	60	3	He	-0.094	0.0031	210.01	0.0087	0.003928
Cu	63	3	He	-0.003	0.006	400.02	0.0261	0.006048
Cu	63	3	He	0.121	0.0092	630.04	0.0261	0.006048
Cu	63	3	He	-0.01	0.0058	390.02	0.0261	0.006048
Zn	66	3	He	0.079	0.0037	250.01	0.0029	0.003512
Zn	66	3	He	0.256	0.0042	290.02	0.0029	0.003512
Zn	66	3	He	0.119	0.0039	260.01	0.0029	0.003512
As	75	3	He	0.041	0.0008	54.00	0.0021	0.0007233
As	75	3	He	-0.052	0.0006	42.00	0.0021	0.0007233
As	75	3	He	0.109	0.0009	64.00	0.0021	0.0007233
Sr	88	3	He	3.194	0.0292	1840.20	0.009	0.0005796
Sr	88	3	He	3.138	0.0287	1820.19	0.009	0.0005796
Sr	88	3	He	3.449	0.0315	1920.19	0.009	0.0005796
Mo	98	3	He	0.081	0.0022	140.00	0.0235	0.0003188
Mo	98	3	He	0.094	0.0025	160.01	0.0235	0.0003188
Mo	98	3	He	0.056	0.0016	100.00	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.155	0.0146	920.07	0.0164	0.01713
Sn	120	3	He	-0.074	0.0159	1010.07	0.0164	0.01713
Sn	120	3	He	0.074	0.0184	1120.09	0.0164	0.01713
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	0.015	0.0005	30.00	0.0155	0.0002641
Ba	137	3	He	0.637	0.0033	210.01	0.005	0.0001577
Ba	137	3	He	0.475	0.0025	160.01	0.005	0.0001577
Ba	137	3	He	0.495	0.0026	160.01	0.005	0.0001577
Tl	205	3	He	0.008	0.0004	130.00	0.026	0.0002504
Tl	205	3	He	0.008	0.0005	130.01	0.026	0.0002504
Tl	205	3	He	0.008	0.0005	130.01	0.026	0.0002504
Pb	208	3	He	-0.007	0.0012	170.01	0.0349	0.001422
Pb	208	3	He	-0.004	0.0013	190.01	0.0349	0.001422
Pb	208	3	He	0.001	0.0015	220.01	0.0349	0.001422
U	238	3	He	0.022	0.0012	270.01	0.0502	5.657E-05
U	238	3	He	0.014	0.0008	180.01	0.0502	5.657E-05
U	238	3	He	0.023	0.0012	280.01	0.0502	5.657E-05
Sc	45	1	No Gas			2124455.12		
Sc	45	1	No Gas			2111318.41		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2137410.28		
Ge	72	1	No Gas			1042704.44		
Ge	72	1	No Gas			1049616.70		
Ge	72	1	No Gas			1050774.59		
Sc	45	2	H2			118531.67		
Sc	45	2	H2			118257.83		
Sc	45	2	H2			118802.99		
Ge	72	2	H2			101650.55		
Ge	72	2	H2			99947.67		
Ge	72	2	H2			100943.89		
In	115	2	H2			281312.46		
In	115	2	H2			284167.26		
In	115	2	H2			284506.11		
Sc	45	3	He			37528.97		
Sc	45	3	He			37549.51		
Sc	45	3	He			36957.80		
Ge	72	3	He			66867.08		
Ge	72	3	He			68313.65		
Ge	72	3	He			67499.57		
In	115	3	He			63073.42		
In	115	3	He			63476.05		
In	115	3	He			61045.11		
Tb	159	3	He			290882.94		
Tb	159	3	He			288885.95		
Tb	159	3	He			282653.53		
Bi	209	3	He			231894.82		
Bi	209	3	He			232667.38		
Bi	209	3	He			229124.37		

Quantitation Report

Data File Name	141SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:06:13 AM
Sample Name	410-137226-V-4-A
Sample Type	Sample
Comment	B26
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

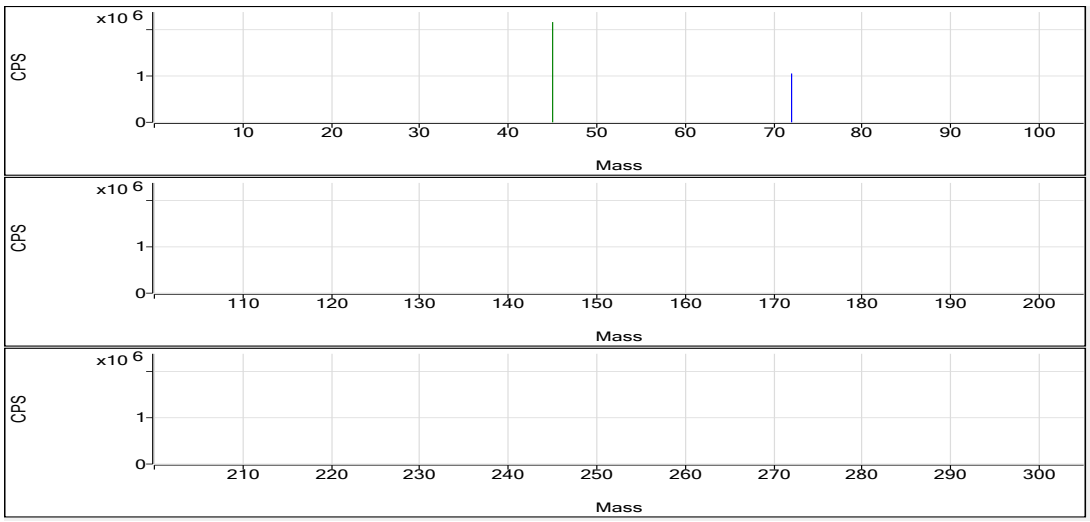
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.006	ppb	N/A	36.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.156	ppb	34.8	8.89	0.0001	Pulse	1.5000	3
Na	23	45	He	63514.251	ppb	1.7	9327733.82	243.1565	Analog	0.1000	3
Mg	24	45	He	19144.665	ppb	1.1	1369464.30	35.6967	Analog	0.1000	3
Al	27	45	He	4.802	ppb	37.1	123.34	0.0032	Pulse	0.1000	3
K	39	45	He	5401.106	ppb	1.5	256729.30	6.6919	Pulse	0.1000	3
Ca	44	45	He	29150.176	ppb	2.1	74034.84	1.9300	Pulse	0.1000	3
Ti	47	45	He	0.333	ppb	86.6	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.128	ppb	N/A	1062.71	0.0277	Pulse	0.5000	3
Cr	52	45	He	0.264	ppb	34.3	1713.51	0.0446	Pulse	0.1000	3
Mn	55	45	He	1044.652	ppb	1.4	496475.76	12.9418	Pulse	0.1000	3
Fe	57	45	He	8011.431	ppb	1.3	174391.87	4.5459	Pulse	0.1000	3
Co	59	45	He	1.717	ppb	2.0	3930.67	0.1024	Pulse	0.1000	3
Ni	60	72	He	0.597	ppb	9.1	620.04	0.0091	Pulse	0.1000	3
Cu	63	72	He	0.201	ppb	27.1	770.05	0.0113	Pulse	0.1000	3
Zn	66	72	He	2.668	ppb	16.8	760.05	0.0112	Pulse	0.1000	3
As	75	72	He	17.227	ppb	2.4	2474.90	0.0363	Pulse	0.5000	3
Sr	88	115	He	175.660	ppb	0.8	99877.86	1.5732	Pulse	0.1000	3
Mo	98	115	He	1.667	ppb	9.0	2510.32	0.0395	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	103.2	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.294	ppb	N/A	780.05	0.0123	Pulse	0.1000	3
Sb	121	115	He	0.082	ppb	51.5	96.67	0.0015	Pulse	0.1000	3
Ba	137	115	He	21.320	ppb	4.1	6748.53	0.1063	Pulse	0.1000	3
Tl	205	159	He	0.001	ppb	416.9	83.34	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.021	ppb	37.5	630.04	0.0022	Pulse	0.1000	3
U	238	209	He	0.211	ppb	2.8	2500.34	0.0107	Pulse	0.1000	3

ISTD Table:

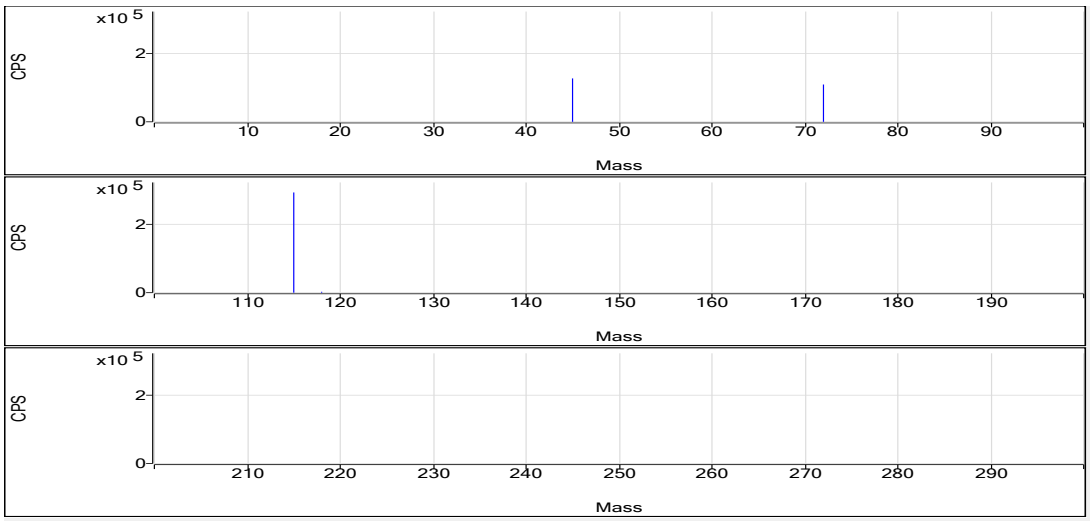
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2164773.09	0.8	106.5	Analog	0.1000	3
No Gas	Ge	72	1054392.59	0.5	104.9	Pulse	0.1000	3
H2	Sc	45	126452.28	1.4	95.7	Pulse	0.1000	3
H2	Ge	72	108701.76	1.5	97.5	Pulse	0.1000	3
H2	In	115	292029.83	0.9	99.4	Pulse	0.1000	3
He	Sc	45	38368.05	1.6	103.8	Pulse	0.1000	3
He	Ge	72	68109.19	0.4	105.5	Pulse	0.1000	3
He	In	115	63488.03	1.1	100.5	Pulse	0.1000	3
He	Tb	159	293070.18	1.0	100.1	Pulse	0.1000	3
He	Bi	209	234547.18	1.9	99.5	Pulse	0.1000	3

No Gas

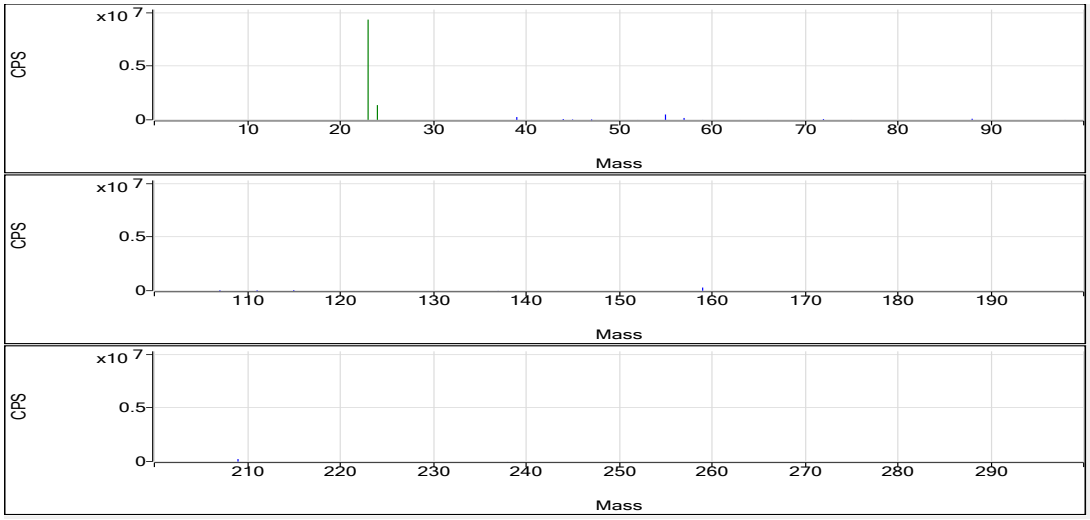


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.005	0	40.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.014	0	24.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.001	0	46.00	0.0008	2.195E-05
Se	78	2	H2	0.183	0.0001	10.00	0.0004	1.386E-05
Se	78	2	H2	0.094	0.0001	6.00	0.0004	1.386E-05
Se	78	2	H2	0.192	0.0001	10.67	0.0004	1.386E-05
Na	23	3	He	62313.948	238.5697	9321699.24	0.0038	0.4416
Na	23	3	He	63805.192	244.2683	9314115.49	0.0038	0.4416
Na	23	3	He	64423.614	246.6316	9347386.74	0.0038	0.4416
Mg	24	3	He	18950.154	35.334	1380617.17	0.0019	0.005872
Mg	24	3	He	19106.554	35.6256	1358428.73	0.0019	0.005872
Mg	24	3	He	19377.286	36.1303	1369347.01	0.0019	0.005872
Al	27	3	He	2.764	0.002	80.00	0.0006	0.0004496
Al	27	3	He	5.573	0.0037	140.01	0.0006	0.0004496
Al	27	3	He	6.068	0.004	150.01	0.0006	0.0004496
K	39	3	He	5326.69	6.6058	258112.18	0.0012	0.4456
K	39	3	He	5485	6.7889	258866.50	0.0012	0.4456
K	39	3	He	5391.627	6.6809	253209.21	0.0012	0.4456
Ca	44	3	He	28454.999	1.8841	73616.46	0.0001	0.003779
Ca	44	3	He	29650.222	1.963	74852.06	0.0001	0.003779
Ca	44	3	He	29345.309	1.9429	73636.01	0.0001	0.003779
Ti	47	3	He	0.493	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.508	0.0003	10.00	0.0005	0
V	51	3	He	-0.13	0.0276	1080.05	0.0223	0.03054
V	51	3	He	-0.123	0.0278	1060.05	0.0223	0.03054
V	51	3	He	-0.13	0.0277	1048.04	0.0223	0.03054
Cr	52	3	He	0.305	0.0458	1790.19	0.0285	0.03714
Cr	52	3	He	0.326	0.0464	1770.19	0.0285	0.03714
Cr	52	3	He	0.16	0.0417	1580.16	0.0285	0.03714
Mn	55	3	He	1027.323	12.7272	497291.71	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1054.124	13.0591	497951.20	0.0124	0.004415
Mn	55	3	He	1052.511	13.0391	494184.37	0.0124	0.004415
Fe	57	3	He	7889.452	4.4767	174917.79	0.0006	0.001356
Fe	57	3	He	8090.135	4.5905	175038.75	0.0006	0.001356
Fe	57	3	He	8054.705	4.5704	173219.08	0.0006	0.001356
Co	59	3	He	1.751	0.1044	4080.77	0.0581	0.002697
Co	59	3	He	1.683	0.1005	3830.60	0.0581	0.002697
Co	59	3	He	1.716	0.1024	3880.65	0.0581	0.002697
Ni	60	3	He	0.629	0.0094	640.03	0.0087	0.003928
Ni	60	3	He	0.628	0.0094	640.04	0.0087	0.003928
Ni	60	3	He	0.534	0.0086	580.04	0.0087	0.003928
Cu	63	3	He	0.155	0.0101	690.04	0.0261	0.006048
Cu	63	3	He	0.261	0.0129	880.06	0.0261	0.006048
Cu	63	3	He	0.186	0.0109	740.05	0.0261	0.006048
Zn	66	3	He	2.303	0.0101	690.05	0.0029	0.003512
Zn	66	3	He	3.168	0.0126	860.06	0.0029	0.003512
Zn	66	3	He	2.534	0.0108	730.05	0.0029	0.003512
As	75	3	He	16.804	0.0355	2420.22	0.0021	0.0007233
As	75	3	He	17.239	0.0364	2484.23	0.0021	0.0007233
As	75	3	He	17.637	0.0372	2520.24	0.0021	0.0007233
Sr	88	3	He	177.073	1.5859	100434.52	0.009	0.0005796
Sr	88	3	He	174.308	1.5611	100325.34	0.009	0.0005796
Sr	88	3	He	175.601	1.5727	98873.71	0.009	0.0005796
Mo	98	3	He	1.565	0.0371	2350.28	0.0235	0.0003188
Mo	98	3	He	1.84	0.0436	2800.39	0.0235	0.0003188
Mo	98	3	He	1.597	0.0379	2380.28	0.0235	0.0003188
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	-0.01	0	0.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.303	0.0122	770.05	0.0164	0.01713
Sn	120	3	He	-0.389	0.0107	690.04	0.0164	0.01713
Sn	120	3	He	-0.191	0.014	880.06	0.0164	0.01713
Sb	121	3	He	0.044	0.0009	60.00	0.0155	0.0002641
Sb	121	3	He	0.073	0.0014	90.00	0.0155	0.0002641
Sb	121	3	He	0.127	0.0022	140.01	0.0155	0.0002641
Ba	137	3	He	20.367	0.1016	6431.70	0.005	0.0001577
Ba	137	3	He	21.478	0.1071	6881.91	0.005	0.0001577
Ba	137	3	He	22.115	0.1103	6931.97	0.005	0.0001577
Tl	205	3	He	-0.003	0.0002	50.00	0.026	0.0002504
Tl	205	3	He	0.007	0.0004	130.01	0.026	0.0002504
Tl	205	3	He	0	0.0002	70.00	0.026	0.0002504
Pb	208	3	He	0.012	0.0018	250.01	0.0349	0.001422
Pb	208	3	He	0.025	0.0023	420.03	0.0349	0.001422
Pb	208	3	He	0.025	0.0023	330.02	0.0349	0.001422
U	238	3	He	0.211	0.0106	2530.37	0.0502	5.657E-05
U	238	3	He	0.217	0.011	2590.35	0.0502	5.657E-05
U	238	3	He	0.205	0.0104	2380.30	0.0502	5.657E-05
Sc	45	1	No Gas			2163878.25		
Sc	45	1	No Gas			2181514.97		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2148926.06		
Ge	72	1	No Gas			1060916.23		
Ge	72	1	No Gas			1050040.22		
Ge	72	1	No Gas			1052221.31		
Sc	45	2	H2			124751.29		
Sc	45	2	H2			128281.11		
Sc	45	2	H2			126324.43		
Ge	72	2	H2			106847.82		
Ge	72	2	H2			109800.53		
Ge	72	2	H2			109456.93		
In	115	2	H2			291022.94		
In	115	2	H2			294990.82		
In	115	2	H2			290075.74		
Sc	45	3	He			39073.28		
Sc	45	3	He			38130.67		
Sc	45	3	He			37900.20		
Ge	72	3	He			68243.06		
Ge	72	3	He			68313.32		
Ge	72	3	He			67771.19		
In	115	3	He			63334.94		
In	115	3	He			64269.37		
In	115	3	He			62873.11		
Tb	159	3	He			294291.75		
Tb	159	3	He			295233.61		
Tb	159	3	He			289685.17		
Bi	209	3	He			237978.00		
Bi	209	3	He			236169.49		
Bi	209	3	He			229494.06		

Quantitation Report

Data File Name	143_CCV.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:10:27 AM
Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

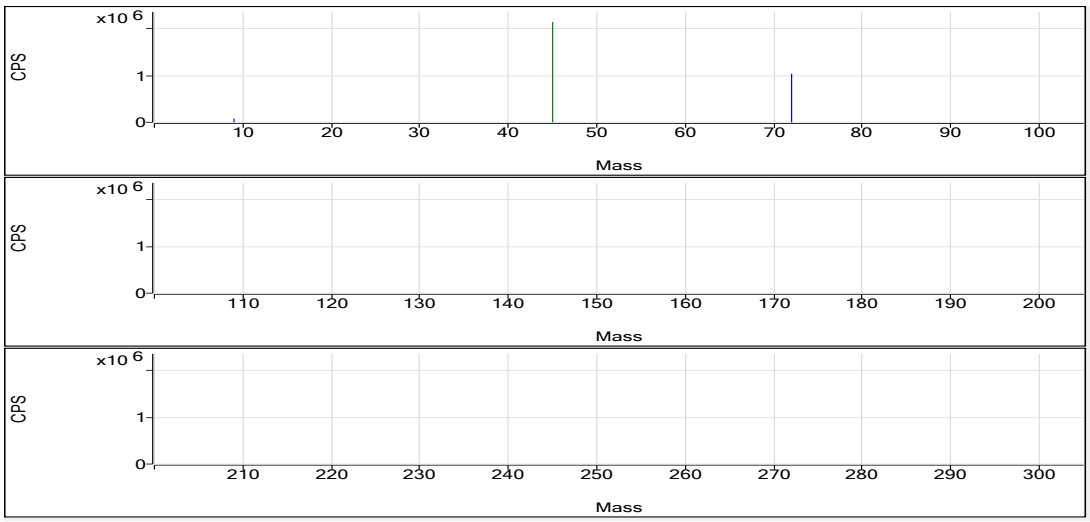
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.357	ppb	1.0	79813.71	0.0371	Pulse	0.5000	3
Se	78	72	H2	52.761	ppb	1.2	2345.98	0.0230	Pulse	1.5000	3
Na	23	45	He	4998.359	ppb	0.6	739533.30	19.5425	Pulse	0.1000	3
Mg	24	45	He	5115.692	ppb	1.6	361113.64	9.5429	Pulse	0.1000	3
Al	27	45	He	4975.759	ppb	1.3	108883.39	2.8773	Pulse	0.1000	3
K	39	45	He	5142.140	ppb	1.1	241919.33	6.3924	Pulse	0.1000	3
Ca	44	45	He	5070.424	ppb	1.0	12822.79	0.3388	Pulse	0.1000	3
Ti	47	45	He	5077.940	ppb	0.3	99845.62	2.6384	Pulse	0.1000	3
V	51	45	He	509.967	ppb	0.9	431383.23	11.3997	Pulse	0.5000	3
Cr	52	45	He	515.022	ppb	1.1	555936.28	14.6912	Pulse	0.1000	3
Mn	55	45	He	504.121	ppb	0.8	236422.09	6.2476	Pulse	0.1000	3
Fe	57	45	He	5045.922	ppb	1.1	108365.48	2.8637	Pulse	0.1000	3
Co	59	45	He	482.346	ppb	0.4	1060543.92	28.0252	Pulse	0.1000	3
Ni	60	72	He	522.108	ppb	0.9	295968.31	4.5292	Pulse	0.1000	3
Cu	63	72	He	489.115	ppb	0.8	835746.60	12.7894	Pulse	0.1000	3
Zn	66	72	He	518.177	ppb	1.1	97268.25	1.4883	Pulse	0.1000	3
As	75	72	He	516.586	ppb	1.6	69837.14	1.0688	Pulse	0.5000	3
Sr	88	115	He	50.766	ppb	5.1	28626.47	0.4551	Pulse	0.1000	3
Mo	98	115	He	51.521	ppb	0.6	76249.95	1.2119	Pulse	0.1000	3
Ag	107	115	He	51.495	ppb	0.5	161569.26	2.5678	Pulse	0.1000	3
Cd	111	115	He	50.563	ppb	0.8	17630.49	0.2802	Pulse	0.5000	3
Sn	120	115	He	49.569	ppb	1.5	52286.09	0.8310	Pulse	0.1000	3
Sb	121	115	He	49.818	ppb	1.2	48505.75	0.7708	Pulse	0.1000	3
Ba	137	115	He	502.620	ppb	0.9	157452.23	2.5025	Pulse	0.1000	3
Tl	205	159	He	50.149	ppb	1.4	381533.11	1.3061	Pulse	0.1000	3
Pb	208	159	He	50.190	ppb	1.2	512637.11	1.7549	Pulse	0.1000	3
U	238	209	He	50.097	ppb	1.2	582684.55	2.5165	Pulse	0.1000	3

ISTD Table:

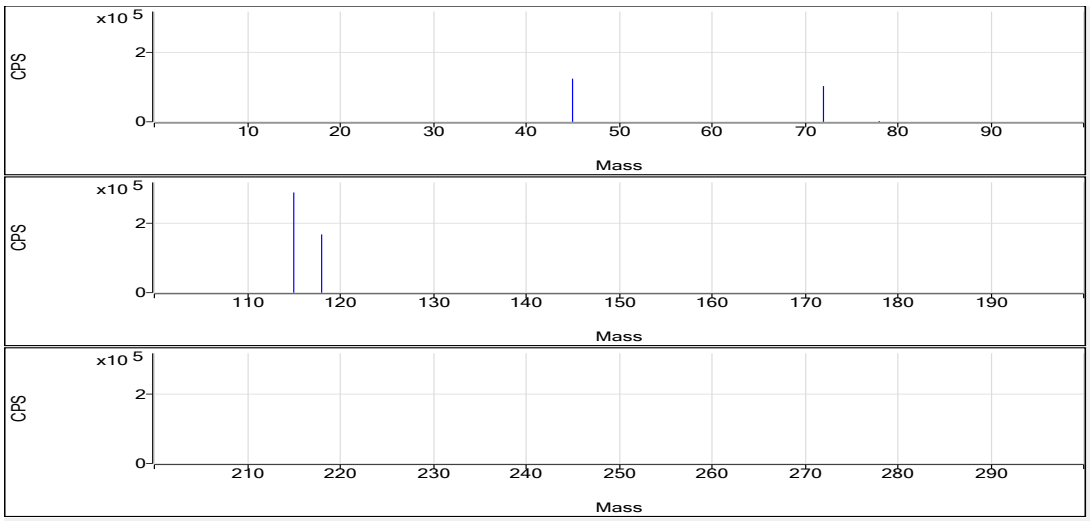
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2149858.04	1.0	105.8	Analog	0.1000	3
No Gas	Ge	72	1040832.51	1.1	103.6	Pulse	0.1000	3
H2	Sc	45	123327.26	1.1	93.4	Pulse	0.1000	3
H2	Ge	72	102194.17	1.3	91.6	Pulse	0.1000	3
H2	In	115	286456.92	1.6	97.5	Pulse	0.1000	3
He	Sc	45	37843.10	0.6	102.4	Pulse	0.1000	3
He	Ge	72	65350.08	0.8	101.2	Pulse	0.1000	3
He	In	115	62921.40	0.8	99.6	Pulse	0.1000	3
He	Tb	159	292135.79	1.1	99.8	Pulse	0.1000	3
He	Bi	209	231564.18	1.2	98.2	Pulse	0.1000	3

No Gas

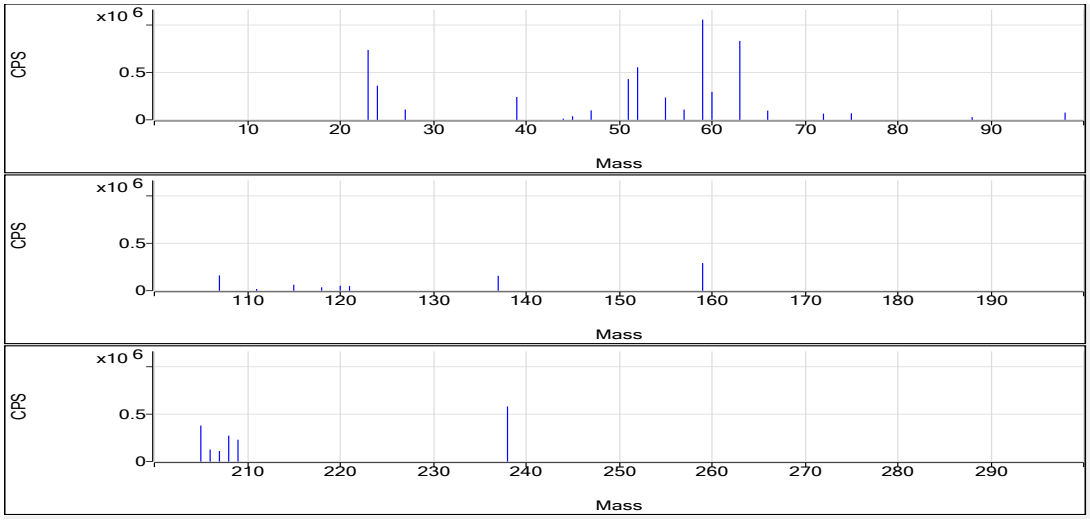


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.692	0.0374	80054.33	0.0008	2.195E-05
Be	9	1	No Gas	47.83	0.0367	79825.14	0.0008	2.195E-05
Be	9	1	No Gas	48.551	0.0373	79561.65	0.0008	2.195E-05
Se	78	2	H2	52.207	0.0227	2354.20	0.0004	1.386E-05
Se	78	2	H2	53.411	0.0232	2368.20	0.0004	1.386E-05
Se	78	2	H2	52.665	0.0229	2315.53	0.0004	1.386E-05
Na	23	3	He	4963.204	19.4081	738486.24	0.0038	0.4416
Na	23	3	He	5016.227	19.6107	737151.55	0.0038	0.4416
Na	23	3	He	5015.647	19.6085	742962.10	0.0038	0.4416
Mg	24	3	He	5020.06	9.3646	356327.03	0.0019	0.005872
Mg	24	3	He	5166.986	9.6385	362304.10	0.0019	0.005872
Mg	24	3	He	5160.03	9.6256	364709.80	0.0019	0.005872
Al	27	3	He	4995.59	2.8888	109918.35	0.0006	0.0004496
Al	27	3	He	5026.268	2.9065	109252.78	0.0006	0.0004496
Al	27	3	He	4905.421	2.8366	107479.03	0.0006	0.0004496
K	39	3	He	5184.296	6.4412	245089.06	0.0012	0.4456
K	39	3	He	5075.337	6.3152	237381.79	0.0012	0.4456
K	39	3	He	5166.786	6.4209	243287.13	0.0012	0.4456
Ca	44	3	He	5123.625	0.3423	13026.30	0.0001	0.003779
Ca	44	3	He	5025.982	0.3359	12625.88	0.0001	0.003779
Ca	44	3	He	5061.665	0.3382	12816.18	0.0001	0.003779
Ti	47	3	He	5062.252	2.6303	100083.22	0.0005	0
Ti	47	3	He	5086.271	2.6428	99339.25	0.0005	0
Ti	47	3	He	5085.296	2.6423	100114.38	0.0005	0
V	51	3	He	506.676	11.3263	430969.13	0.0223	0.03054
V	51	3	He	515.075	11.5135	432784.28	0.0223	0.03054
V	51	3	He	508.151	11.3592	430396.28	0.0223	0.03054
Cr	52	3	He	509.865	14.5445	553423.90	0.0285	0.03714
Cr	52	3	He	521.306	14.87	558952.69	0.0285	0.03714
Cr	52	3	He	513.895	14.6592	555432.26	0.0285	0.03714
Mn	55	3	He	500.334	6.2007	235940.35	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	508.355	6.3001	236814.66	0.0124	0.004415
Mn	55	3	He	503.673	6.2421	236511.27	0.0124	0.004415
Fe	57	3	He	4983.688	2.8284	107620.19	0.0006	0.001356
Fe	57	3	He	5090.205	2.8888	108586.98	0.0006	0.001356
Fe	57	3	He	5063.872	2.8738	108889.27	0.0006	0.001356
Co	59	3	He	479.943	27.8855	1061054.83	0.0581	0.002697
Co	59	3	He	483.724	28.1052	1056452.09	0.0581	0.002697
Co	59	3	He	483.372	28.0848	1064124.83	0.0581	0.002697
Ni	60	3	He	523.082	4.5376	295304.84	0.0087	0.003928
Ni	60	3	He	516.949	4.4845	295897.67	0.0087	0.003928
Ni	60	3	He	526.295	4.5655	296702.42	0.0087	0.003928
Cu	63	3	He	491.431	12.8499	836259.68	0.0261	0.006048
Cu	63	3	He	484.413	12.6665	835768.66	0.0261	0.006048
Cu	63	3	He	491.501	12.8517	835211.47	0.0261	0.006048
Zn	66	3	He	512.807	1.473	95858.40	0.0029	0.003512
Zn	66	3	He	524.142	1.5054	99332.41	0.0029	0.003512
Zn	66	3	He	517.583	1.4866	96613.93	0.0029	0.003512
As	75	3	He	522.412	1.0808	70337.53	0.0021	0.0007233
As	75	3	He	507.181	1.0493	69236.36	0.0021	0.0007233
As	75	3	He	520.166	1.0762	69937.54	0.0021	0.0007233
Sr	88	3	He	48.017	0.4305	27286.98	0.009	0.0005796
Sr	88	3	He	53.181	0.4767	29742.30	0.009	0.0005796
Sr	88	3	He	51.099	0.4581	28850.14	0.009	0.0005796
Mo	98	3	He	51.501	1.2114	76788.93	0.0235	0.0003188
Mo	98	3	He	51.846	1.2195	76086.24	0.0235	0.0003188
Mo	98	3	He	51.216	1.2047	75874.68	0.0235	0.0003188
Ag	107	3	He	51.286	2.5574	162111.03	0.0499	0.0004754
Ag	107	3	He	51.446	2.5654	160059.43	0.0499	0.0004754
Ag	107	3	He	51.753	2.5807	162537.32	0.0499	0.0004754
Cd	111	3	He	50.992	0.2826	17911.53	0.0055	1.07E-05
Cd	111	3	He	50.167	0.278	17344.79	0.0055	1.07E-05
Cd	111	3	He	50.529	0.28	17635.14	0.0055	1.07E-05
Sn	120	3	He	49.196	0.8249	52289.38	0.0164	0.01713
Sn	120	3	He	50.4	0.8447	52700.83	0.0164	0.01713
Sn	120	3	He	49.112	0.8235	51868.05	0.0164	0.01713
Sb	121	3	He	50.446	0.7806	49479.40	0.0155	0.0002641
Sb	121	3	He	49.277	0.7625	47572.28	0.0155	0.0002641
Sb	121	3	He	49.731	0.7695	48465.57	0.0155	0.0002641
Ba	137	3	He	499.44	2.4866	157627.10	0.005	0.0001577
Ba	137	3	He	508.08	2.5297	157830.97	0.005	0.0001577
Ba	137	3	He	500.34	2.4911	156898.62	0.005	0.0001577
Tl	205	3	He	49.866	1.2988	381856.79	0.026	0.0002504
Tl	205	3	He	49.652	1.2932	380231.99	0.026	0.0002504
Tl	205	3	He	50.929	1.3265	382510.54	0.026	0.0002504
Pb	208	3	He	49.831	1.7424	274251.81	0.0349	0.001422
Pb	208	3	He	49.873	1.7438	275200.37	0.0349	0.001422
Pb	208	3	He	50.867	1.7786	273973.02	0.0349	0.001422
U	238	3	He	50.753	2.5495	583196.91	0.0502	5.657E-05
U	238	3	He	49.559	2.4895	583233.04	0.0502	5.657E-05
U	238	3	He	49.979	2.5106	581623.70	0.0502	5.657E-05
Sc	45	1	No Gas			2141417.47		
Sc	45	1	No Gas			2173739.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2134417.31		
Ge	72	1	No Gas			1027862.56		
Ge	72	1	No Gas			1050833.27		
Ge	72	1	No Gas			1043801.70		
Sc	45	2	H2			124811.93		
Sc	45	2	H2			122816.54		
Sc	45	2	H2			122353.32		
Ge	72	2	H2			103634.11		
Ge	72	2	H2			101901.90		
Ge	72	2	H2			101046.51		
In	115	2	H2			291379.59		
In	115	2	H2			285658.63		
In	115	2	H2			282332.53		
Sc	45	3	He			38050.38		
Sc	45	3	He			37589.18		
Sc	45	3	He			37889.75		
Ge	72	3	He			65079.17		
Ge	72	3	He			65982.78		
Ge	72	3	He			64988.29		
In	115	3	He			63666.37		
In	115	3	He			62671.62		
In	115	3	He			63264.27		
Tb	159	3	He			294015.05		
Tb	159	3	He			294023.90		
Tb	159	3	He			288368.41		
Bi	209	3	He			228749.94		
Bi	209	3	He			234275.02		
Bi	209	3	He			231667.59		

Quantitation Report

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Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

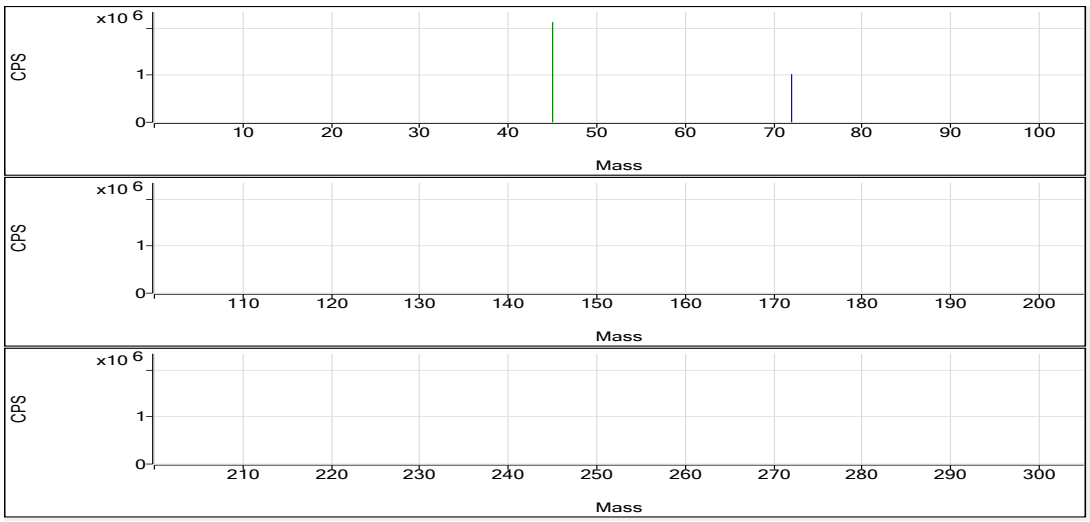
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.025	ppb	4.6	87.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.035	ppb	22.3	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	8.094	ppb	23.0	17757.84	0.4725	Pulse	0.1000	3
Mg	24	45	He	0.753	ppb	14.0	273.34	0.0073	Pulse	0.1000	3
Al	27	45	He	2.288	ppb	9.5	66.67	0.0018	Pulse	0.1000	3
K	39	45	He	-12.945	ppb	N/A	16186.14	0.4306	Pulse	0.1000	3
Ca	44	45	He	-14.405	ppb	N/A	106.67	0.0028	Pulse	0.1000	3
Ti	47	45	He	0.342	ppb	86.6	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.028	ppb	N/A	1124.72	0.0299	Pulse	0.5000	3
Cr	52	45	He	0.010	ppb	1307.6	1406.78	0.0374	Pulse	0.1000	3
Mn	55	45	He	0.217	ppb	25.0	266.68	0.0071	Pulse	0.1000	3
Fe	57	45	He	2.613	ppb	57.4	106.67	0.0028	Pulse	0.1000	3
Co	59	45	He	0.125	ppb	33.7	373.35	0.0100	Pulse	0.1000	3
Ni	60	72	He	0.125	ppb	140.0	320.02	0.0050	Pulse	0.1000	3
Cu	63	72	He	0.037	ppb	41.6	446.69	0.0070	Pulse	0.1000	3
Zn	66	72	He	-0.012	ppb	N/A	220.01	0.0035	Pulse	0.1000	3
As	75	72	He	0.095	ppb	83.8	58.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	0.061	ppb	50.9	70.00	0.0011	Pulse	0.1000	3
Mo	98	115	He	0.073	ppb	24.3	126.67	0.0020	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	122.6	46.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	28.1	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.031	ppb	N/A	1030.07	0.0166	Pulse	0.1000	3
Sb	121	115	He	0.056	ppb	48.7	70.00	0.0011	Pulse	0.1000	3
Ba	137	115	He	0.152	ppb	62.4	56.67	0.0009	Pulse	0.1000	3
Tl	205	159	He	0.057	ppb	24.6	496.69	0.0017	Pulse	0.1000	3
Pb	208	159	He	-0.002	ppb	N/A	390.01	0.0014	Pulse	0.1000	3
U	238	209	He	0.050	ppb	6.4	590.04	0.0026	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2131211.53	1.1	104.8	Analog	0.1000	3
No Gas	Ge	72	1023066.37	0.6	101.8	Pulse	0.1000	3
H2	Sc	45	118937.89	2.4	90.0	Pulse	0.1000	3
H2	Ge	72	98626.29	1.6	88.4	Pulse	0.1000	3
H2	In	115	283352.50	0.2	96.5	Pulse	0.1000	3
He	Sc	45	37582.68	1.9	101.7	Pulse	0.1000	3
He	Ge	72	63642.53	2.3	98.6	Pulse	0.1000	3
He	In	115	62009.89	0.7	98.1	Pulse	0.1000	3
He	Tb	159	285614.05	0.2	97.5	Pulse	0.1000	3
He	Bi	209	229204.26	0.5	97.2	Pulse	0.1000	3

No Gas



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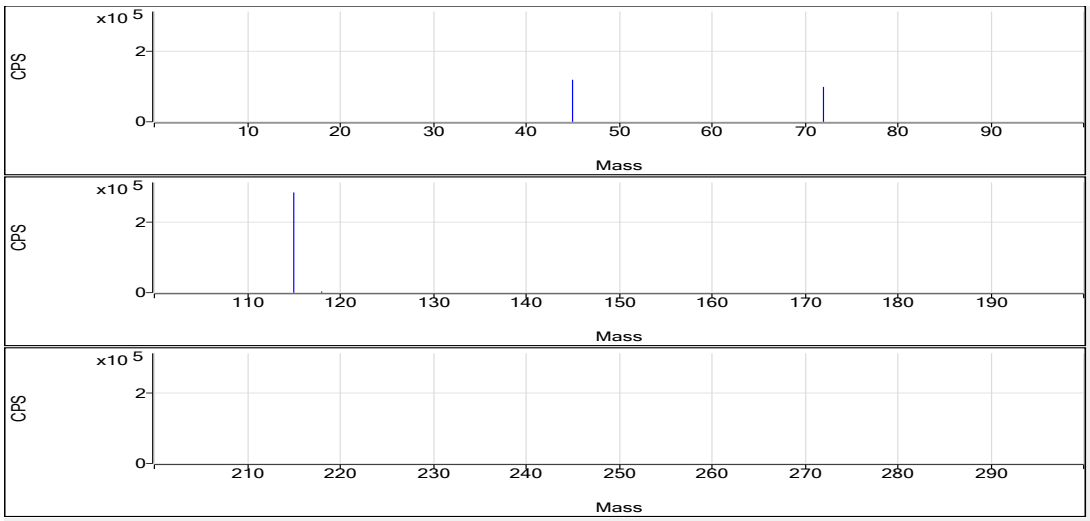
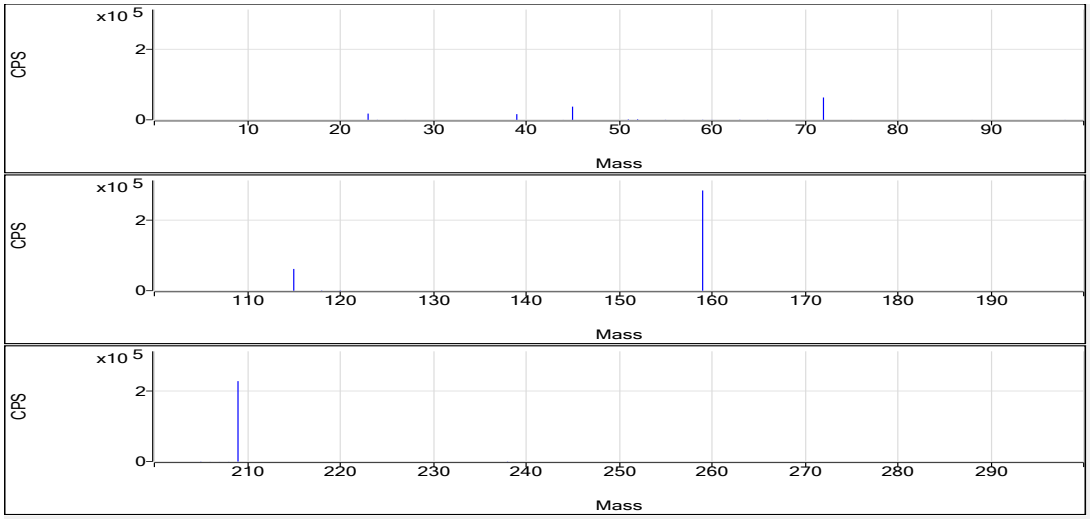


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.024	0	86.00	0.0008	2.195E-05
Be	9	1	No Gas	0.025	0	86.00	0.0008	2.195E-05
Be	9	1	No Gas	0.026	0	90.00	0.0008	2.195E-05
Se	78	2	H2	0.031	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.045	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.03	0	2.67	0.0004	1.386E-05
Na	23	3	He	6.257	0.4655	17811.24	0.0038	0.4416
Na	23	3	He	9.976	0.4797	18061.61	0.0038	0.4416
Na	23	3	He	8.049	0.4724	17400.66	0.0038	0.4416
Mg	24	3	He	0.636	0.0071	270.01	0.0019	0.005872
Mg	24	3	He	0.84	0.0074	280.01	0.0019	0.005872
Mg	24	3	He	0.782	0.0073	270.01	0.0019	0.005872
Al	27	3	He	2.387	0.0018	70.00	0.0006	0.0004496
Al	27	3	He	2.438	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	2.04	0.0016	60.00	0.0006	0.0004496
K	39	3	He	-15.149	0.4281	16379.62	0.0012	0.4456
K	39	3	He	-5.226	0.4396	16549.84	0.0012	0.4456
K	39	3	He	-18.461	0.4243	15628.96	0.0012	0.4456
Ca	44	3	He	10.061	0.0044	170.01	0.0001	0.003779
Ca	44	3	He	-33.066	0.0016	60.00	0.0001	0.003779
Ca	44	3	He	-20.209	0.0024	90.00	0.0001	0.003779
Ti	47	3	He	0.503	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.522	0.0003	10.00	0.0005	0
V	51	3	He	0.098	0.0327	1252.06	0.0223	0.03054
V	51	3	He	-0.143	0.0274	1030.04	0.0223	0.03054
V	51	3	He	-0.04	0.0296	1092.05	0.0223	0.03054
Cr	52	3	He	0.128	0.0408	1560.13	0.0285	0.03714
Cr	52	3	He	-0.129	0.0335	1260.10	0.0285	0.03714
Cr	52	3	He	0.031	0.038	1400.12	0.0285	0.03714
Mn	55	3	He	0.192	0.0068	260.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.18	0.0066	250.01	0.0124	0.004415
Mn	55	3	He	0.279	0.0079	290.01	0.0124	0.004415
Fe	57	3	He	3.6	0.0034	130.01	0.0006	0.001356
Fe	57	3	He	0.887	0.0019	70.00	0.0006	0.001356
Fe	57	3	He	3.353	0.0033	120.00	0.0006	0.001356
Co	59	3	He	0.107	0.0089	340.02	0.0581	0.002697
Co	59	3	He	0.095	0.0082	310.01	0.0581	0.002697
Co	59	3	He	0.173	0.0128	470.03	0.0581	0.002697
Ni	60	3	He	0.114	0.0049	320.02	0.0087	0.003928
Ni	60	3	He	-0.044	0.0035	220.01	0.0087	0.003928
Ni	60	3	He	0.306	0.0066	420.02	0.0087	0.003928
Cu	63	3	He	0.051	0.0074	480.02	0.0261	0.006048
Cu	63	3	He	0.04	0.0071	440.03	0.0261	0.006048
Cu	63	3	He	0.02	0.0066	420.02	0.0261	0.006048
Zn	66	3	He	-0.582	0.0018	120.00	0.0029	0.003512
Zn	66	3	He	0.405	0.0047	290.01	0.0029	0.003512
Zn	66	3	He	0.142	0.0039	250.01	0.0029	0.003512
As	75	3	He	0.111	0.001	62.00	0.0021	0.0007233
As	75	3	He	0.009	0.0007	46.00	0.0021	0.0007233
As	75	3	He	0.166	0.0011	68.00	0.0021	0.0007233
Sr	88	3	He	0.08	0.0013	80.00	0.009	0.0005796
Sr	88	3	He	0.078	0.0013	80.00	0.009	0.0005796
Sr	88	3	He	0.025	0.0008	50.00	0.009	0.0005796
Mo	98	3	He	0.09	0.0024	150.01	0.0235	0.0003188
Mo	98	3	He	0.055	0.0016	100.00	0.0235	0.0003188
Mo	98	3	He	0.076	0.0021	130.01	0.0235	0.0003188
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	0.075	0.0184	1130.08	0.0164	0.01713
Sn	120	3	He	-0.077	0.0159	990.07	0.0164	0.01713
Sn	120	3	He	-0.091	0.0156	970.07	0.0164	0.01713
Sb	121	3	He	0.025	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.076	0.0014	90.00	0.0155	0.0002641
Sb	121	3	He	0.066	0.0013	80.00	0.0155	0.0002641
Ba	137	3	He	0.262	0.0015	90.00	0.005	0.0001577
Ba	137	3	He	0.097	0.0006	40.00	0.005	0.0001577
Ba	137	3	He	0.098	0.0006	40.00	0.005	0.0001577
Tl	205	3	He	0.069	0.002	580.03	0.026	0.0002504
Tl	205	3	He	0.041	0.0013	380.02	0.026	0.0002504
Tl	205	3	He	0.062	0.0019	530.03	0.026	0.0002504
Pb	208	3	He	-0.002	0.0014	140.01	0.0349	0.001422
Pb	208	3	He	0.001	0.0015	260.01	0.0349	0.001422
Pb	208	3	He	-0.005	0.0013	140.01	0.0349	0.001422
U	238	3	He	0.053	0.0027	630.04	0.0502	5.657E-05
U	238	3	He	0.047	0.0024	550.04	0.0502	5.657E-05
U	238	3	He	0.05	0.0026	590.03	0.0502	5.657E-05
Sc	45	1	No Gas			2140989.50		
Sc	45	1	No Gas			2104315.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2148329.50		
Ge	72	1	No Gas			1023918.11		
Ge	72	1	No Gas			1016976.16		
Ge	72	1	No Gas			1028304.83		
Sc	45	2	H2			116232.25		
Sc	45	2	H2			121879.36		
Sc	45	2	H2			118702.06		
Ge	72	2	H2			97049.68		
Ge	72	2	H2			100179.55		
Ge	72	2	H2			98649.63		
In	115	2	H2			282558.75		
In	115	2	H2			283645.95		
In	115	2	H2			283852.81		
Sc	45	3	He			38261.17		
Sc	45	3	He			37649.56		
Sc	45	3	He			36837.32		
Ge	72	3	He			65048.53		
Ge	72	3	He			62076.63		
Ge	72	3	He			63802.42		
In	115	3	He			61577.40		
In	115	3	He			62440.95		
In	115	3	He			62028.57		
Tb	159	3	He			285070.02		
Tb	159	3	He			285763.41		
Tb	159	3	He			286008.71		
Bi	209	3	He			230274.16		
Bi	209	3	He			228038.98		
Bi	209	3	He			229299.65		

Quantitation Report

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Sample Type	Sample
Comment	E9
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

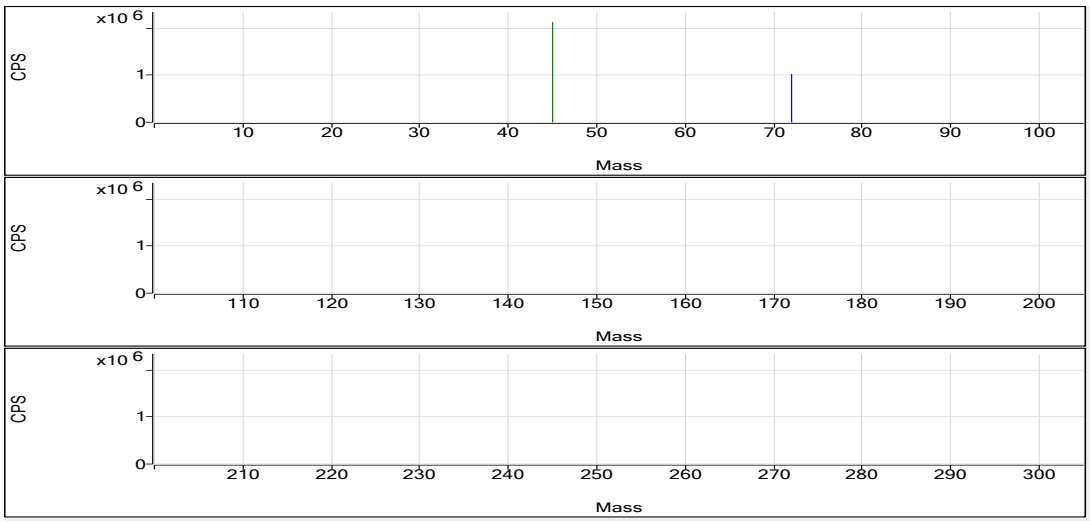
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	44.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.003	ppb	334.9	1.55	0.0000	Pulse	1.5000	3
Na	23	45	He	-5.158	ppb	N/A	16029.12	0.4219	Pulse	0.1000	3
Mg	24	45	He	-0.276	ppb	N/A	203.34	0.0054	Pulse	0.1000	3
Al	27	45	He	2.402	ppb	31.5	70.00	0.0018	Pulse	0.1000	3
K	39	45	He	-17.289	ppb	N/A	16172.77	0.4256	Pulse	0.1000	3
Ca	44	45	He	-14.673	ppb	N/A	106.67	0.0028	Pulse	0.1000	3
Ti	47	45	He	0.170	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.286	ppb	N/A	918.03	0.0242	Pulse	0.5000	3
Cr	52	45	He	-0.266	ppb	N/A	1123.42	0.0296	Pulse	0.1000	3
Mn	55	45	He	0.019	ppb	242.6	176.68	0.0046	Pulse	0.1000	3
Fe	57	45	He	2.126	ppb	115.2	96.67	0.0026	Pulse	0.1000	3
Co	59	45	He	0.033	ppb	46.1	176.68	0.0046	Pulse	0.1000	3
Ni	60	72	He	-0.006	ppb	N/A	250.01	0.0039	Pulse	0.1000	3
Cu	63	72	He	-0.012	ppb	N/A	370.02	0.0057	Pulse	0.1000	3
Zn	66	72	He	-0.053	ppb	N/A	216.68	0.0034	Pulse	0.1000	3
As	75	72	He	-0.100	ppb	N/A	33.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	195303.3	36.67	0.0006	Pulse	0.1000	3
Mo	98	115	He	0.015	ppb	89.0	43.33	0.0007	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.171	ppb	N/A	906.73	0.0143	Pulse	0.1000	3
Sb	121	115	He	-0.010	ppb	N/A	6.67	0.0001	Pulse	0.1000	3
Ba	137	115	He	0.042	ppb	40.7	23.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.012	ppb	125.4	163.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	-0.006	ppb	N/A	353.35	0.0012	Pulse	0.1000	3
U	238	209	He	0.008	ppb	13.3	103.33	0.0004	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2130385.85	1.9	104.8	Analog	0.1000	3
No Gas	Ge	72	1023139.28	0.6	101.8	Pulse	0.1000	3
H2	Sc	45	123949.03	1.7	93.8	Pulse	0.1000	3
H2	Ge	72	103550.82	1.2	92.8	Pulse	0.1000	3
H2	In	115	291553.87	0.5	99.3	Pulse	0.1000	3
He	Sc	45	38003.79	2.0	102.8	Pulse	0.1000	3
He	Ge	72	64459.22	1.1	99.8	Pulse	0.1000	3
He	In	115	63368.52	1.4	100.3	Pulse	0.1000	3
He	Tb	159	290022.14	0.4	99.0	Pulse	0.1000	3
He	Bi	209	236233.53	1.1	100.2	Pulse	0.1000	3

No Gas



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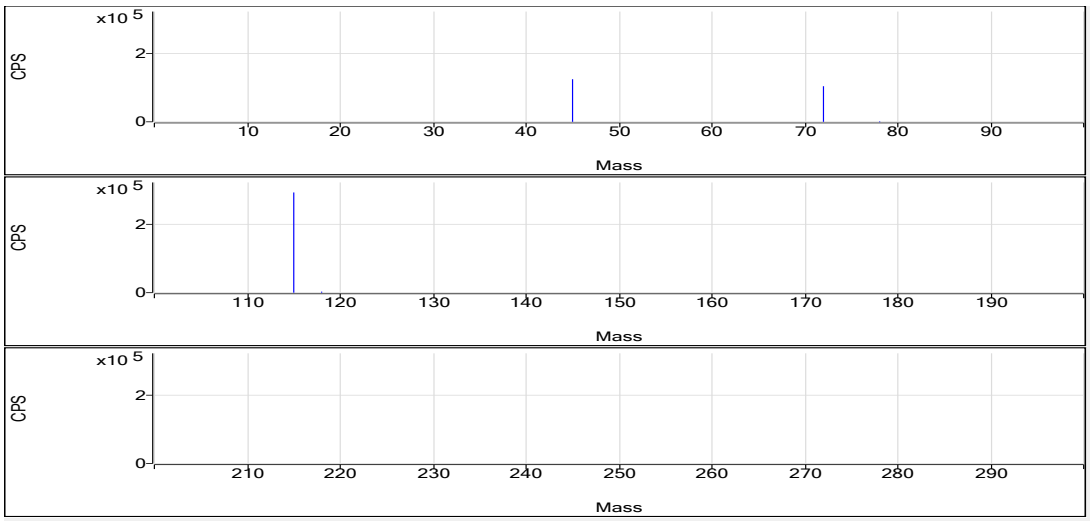
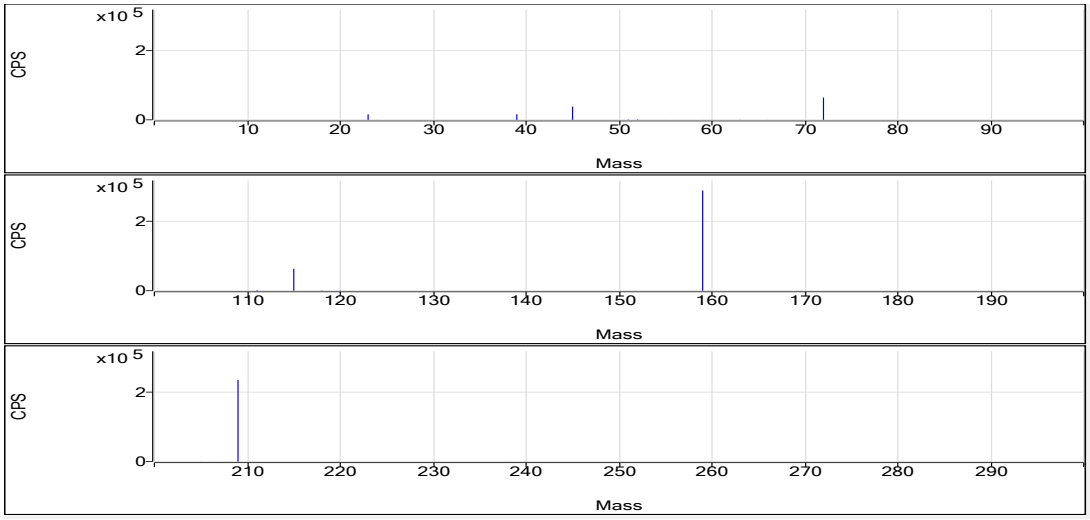


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0	50.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.005	0	40.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.002	0	44.00	0.0008	2.195E-05
Se	78	2	H2	0.013	0	2.00	0.0004	1.386E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Se	78	2	H2	-0.002	0	1.33	0.0004	1.386E-05
Na	23	3	He	-7.454	0.4131	16059.15	0.0038	0.4416
Na	23	3	He	-1.735	0.435	16289.42	0.0038	0.4416
Na	23	3	He	-6.284	0.4176	15738.78	0.0038	0.4416
Mg	24	3	He	-0.666	0.0046	180.01	0.0019	0.005872
Mg	24	3	He	-0.571	0.0048	180.01	0.0019	0.005872
Mg	24	3	He	0.409	0.0066	250.01	0.0019	0.005872
Al	27	3	He	2.782	0.0021	80.00	0.0006	0.0004496
Al	27	3	He	1.532	0.0013	50.00	0.0006	0.0004496
Al	27	3	He	2.894	0.0021	80.00	0.0006	0.0004496
K	39	3	He	-22.752	0.4193	16299.59	0.0012	0.4456
K	39	3	He	-16.367	0.4267	15979.21	0.0012	0.4456
K	39	3	He	-12.748	0.4309	16239.52	0.0012	0.4456
Ca	44	3	He	-18.252	0.0026	100.00	0.0001	0.003779
Ca	44	3	He	-16.772	0.0027	100.00	0.0001	0.003779
Ca	44	3	He	-8.996	0.0032	120.01	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.511	0.0003	10.00	0.0005	0
V	51	3	He	-0.32	0.0234	910.03	0.0223	0.03054
V	51	3	He	-0.225	0.0255	956.04	0.0223	0.03054
V	51	3	He	-0.313	0.0236	888.03	0.0223	0.03054
Cr	52	3	He	-0.302	0.0286	1110.08	0.0285	0.03714
Cr	52	3	He	-0.329	0.0278	1040.07	0.0285	0.03714
Cr	52	3	He	-0.167	0.0324	1220.10	0.0285	0.03714
Mn	55	3	He	0.038	0.0049	190.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.033	0.004	150.01	0.0124	0.004415
Mn	55	3	He	0.051	0.005	190.01	0.0124	0.004415
Fe	57	3	He	-0.576	0.001	40.00	0.0006	0.001356
Fe	57	3	He	4.2	0.0037	140.00	0.0006	0.001356
Fe	57	3	He	2.755	0.0029	110.01	0.0006	0.001356
Co	59	3	He	0.051	0.0057	220.01	0.0581	0.002697
Co	59	3	He	0.023	0.004	150.01	0.0581	0.002697
Co	59	3	He	0.027	0.0042	160.01	0.0581	0.002697
Ni	60	3	He	0.042	0.0043	280.01	0.0087	0.003928
Ni	60	3	He	0.034	0.0042	270.01	0.0087	0.003928
Ni	60	3	He	-0.094	0.0031	200.01	0.0087	0.003928
Cu	63	3	He	-0.003	0.006	390.02	0.0261	0.006048
Cu	63	3	He	-0.004	0.0059	380.02	0.0261	0.006048
Cu	63	3	He	-0.029	0.0053	340.02	0.0261	0.006048
Zn	66	3	He	-0.049	0.0034	220.01	0.0029	0.003512
Zn	66	3	He	-0.08	0.0033	210.01	0.0029	0.003512
Zn	66	3	He	-0.029	0.0034	220.01	0.0029	0.003512
As	75	3	He	-0.083	0.0006	36.00	0.0021	0.0007233
As	75	3	He	-0.062	0.0006	38.00	0.0021	0.0007233
As	75	3	He	-0.154	0.0004	26.00	0.0021	0.0007233
Sr	88	3	He	0.059	0.0011	70.00	0.009	0.0005796
Sr	88	3	He	-0.03	0.0003	20.00	0.009	0.0005796
Sr	88	3	He	-0.029	0.0003	20.00	0.009	0.0005796
Mo	98	3	He	0	0.0003	20.00	0.0235	0.0003188
Mo	98	3	He	0.026	0.0009	60.00	0.0235	0.0003188
Mo	98	3	He	0.02	0.0008	50.00	0.0235	0.0003188
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	0.006	0.0008	50.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.136	0.0149	940.07	0.0164	0.01713
Sn	120	3	He	-0.239	0.0132	850.05	0.0164	0.01713
Sn	120	3	He	-0.139	0.0148	930.06	0.0164	0.01713
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	-0.017	0	0.00	0.0155	0.0002641
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Ba	137	3	He	0.032	0.0003	20.00	0.005	0.0001577
Ba	137	3	He	0.062	0.0005	30.00	0.005	0.0001577
Ba	137	3	He	0.032	0.0003	20.00	0.005	0.0001577
Tl	205	3	He	0.029	0.001	290.01	0.026	0.0002504
Tl	205	3	He	0.008	0.0004	130.00	0.026	0.0002504
Tl	205	3	He	0	0.0002	70.00	0.026	0.0002504
Pb	208	3	He	-0.014	0.0009	90.00	0.0349	0.001422
Pb	208	3	He	-0.007	0.0012	150.01	0.0349	0.001422
Pb	208	3	He	0.003	0.0015	310.02	0.0349	0.001422
U	238	3	He	0.008	0.0005	110.00	0.0502	5.657E-05
U	238	3	He	0.008	0.0005	110.00	0.0502	5.657E-05
U	238	3	He	0.006	0.0004	90.00	0.0502	5.657E-05
Sc	45	1	No Gas			2086756.69		
Sc	45	1	No Gas			2167094.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2137306.53		
Ge	72	1	No Gas			1015889.44		
Ge	72	1	No Gas			1025181.08		
Ge	72	1	No Gas			1028347.33		
Sc	45	2	H2			124257.82		
Sc	45	2	H2			125891.90		
Sc	45	2	H2			121697.37		
Ge	72	2	H2			102295.01		
Ge	72	2	H2			104854.26		
Ge	72	2	H2			103503.18		
In	115	2	H2			290218.04		
In	115	2	H2			292966.73		
In	115	2	H2			291476.83		
Sc	45	3	He			38872.71		
Sc	45	3	He			37449.15		
Sc	45	3	He			37689.51		
Ge	72	3	He			65259.60		
Ge	72	3	He			63953.13		
Ge	72	3	He			64164.93		
In	115	3	He			63093.68		
In	115	3	He			64379.42		
In	115	3	He			62651.57		
Tb	159	3	He			289740.64		
Tb	159	3	He			288898.86		
Tb	159	3	He			291426.93		
Bi	209	3	He			238276.97		
Bi	209	3	He			233298.51		
Bi	209	3	He			237125.11		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:18:45 AM
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Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

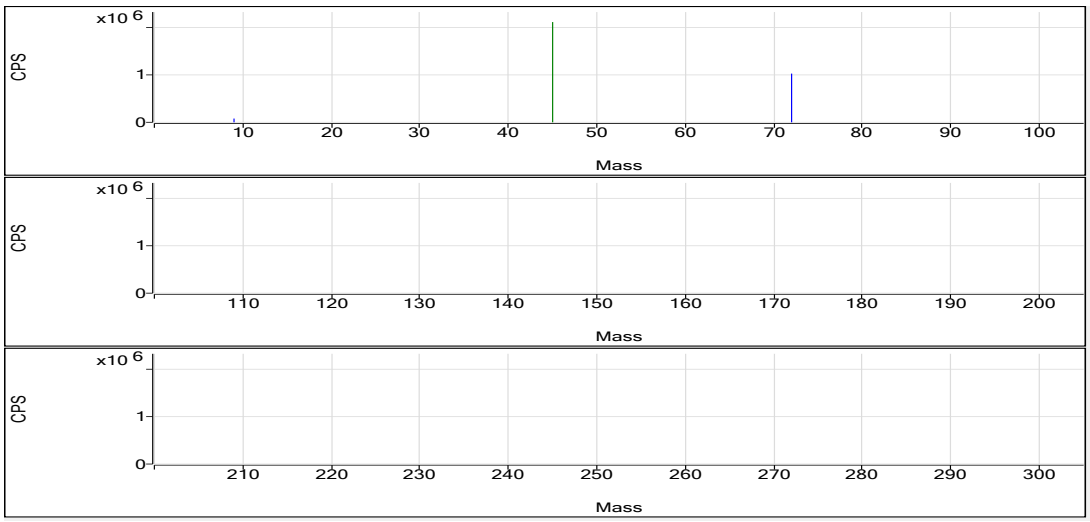
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.573	ppb	2.5	78921.07	0.0373	Pulse	0.5000	3
Se	78	72	H2	52.884	ppb	1.7	2339.97	0.0230	Pulse	1.5000	3
Na	23	45	He	5051.823	ppb	0.6	733669.81	19.7468	Pulse	0.1000	3
Mg	24	45	He	5173.545	ppb	1.5	358566.58	9.6507	Pulse	0.1000	3
Al	27	45	He	5112.021	ppb	0.9	109831.02	2.9561	Pulse	0.1000	3
K	39	45	He	5234.114	ppb	1.9	241445.85	6.4988	Pulse	0.1000	3
Ca	44	45	He	5391.228	ppb	0.9	13376.53	0.3600	Pulse	0.1000	3
Ti	47	45	He	5107.854	ppb	0.3	98606.87	2.6540	Pulse	0.1000	3
V	51	45	He	516.094	ppb	0.5	428618.58	11.5363	Pulse	0.5000	3
Cr	52	45	He	520.028	ppb	1.1	551117.54	14.8337	Pulse	0.1000	3
Mn	55	45	He	509.334	ppb	2.6	234504.37	6.3122	Pulse	0.1000	3
Fe	57	45	He	5164.529	ppb	0.6	108895.65	2.9309	Pulse	0.1000	3
Co	59	45	He	485.118	ppb	0.4	1047233.08	28.1862	Pulse	0.1000	3
Ni	60	72	He	527.899	ppb	1.0	293315.98	4.5794	Pulse	0.1000	3
Cu	63	72	He	495.075	ppb	0.8	829175.72	12.9451	Pulse	0.1000	3
Zn	66	72	He	521.682	ppb	1.8	95967.18	1.4984	Pulse	0.1000	3
As	75	72	He	522.355	ppb	1.8	69214.77	1.0807	Pulse	0.5000	3
Sr	88	115	He	50.886	ppb	3.4	28355.83	0.4561	Pulse	0.1000	3
Mo	98	115	He	51.310	ppb	1.3	75043.83	1.2069	Pulse	0.1000	3
Ag	107	115	He	51.959	ppb	0.9	161082.97	2.5909	Pulse	0.1000	3
Cd	111	115	He	51.639	ppb	0.2	17791.35	0.2861	Pulse	0.5000	3
Sn	120	115	He	50.868	ppb	0.8	52992.37	0.8523	Pulse	0.1000	3
Sb	121	115	He	49.716	ppb	2.2	47823.44	0.7693	Pulse	0.1000	3
Ba	137	115	He	504.153	ppb	1.4	156053.73	2.5101	Pulse	0.1000	3
Tl	205	159	He	51.079	ppb	1.3	382726.57	1.3304	Pulse	0.1000	3
Pb	208	159	He	51.154	ppb	2.0	514538.23	1.7886	Pulse	0.1000	3
U	238	209	He	49.813	ppb	0.9	579331.02	2.5023	Pulse	0.1000	3

ISTD Table:

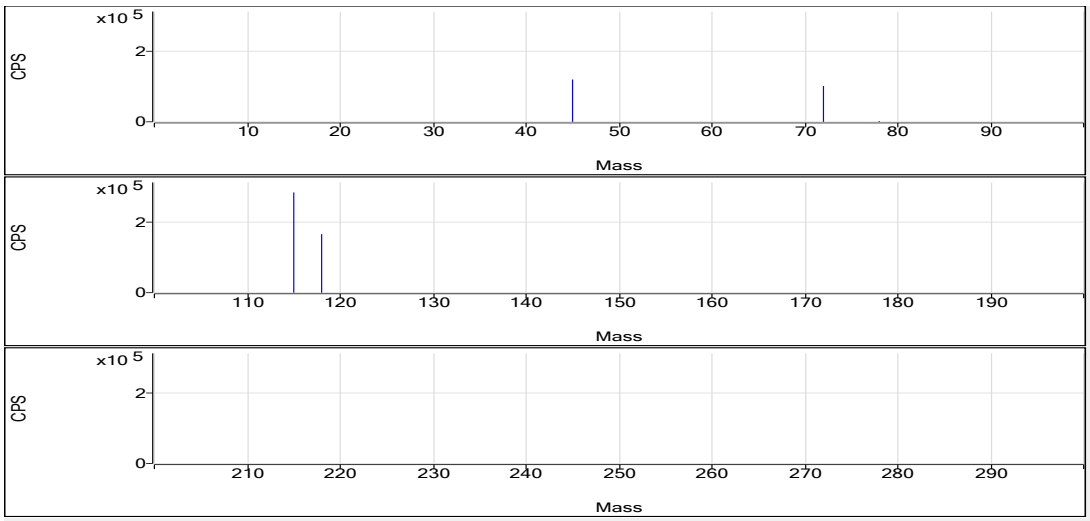
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2116540.23	0.8	104.1	Analog	0.1000	3
No Gas	Ge	72	1028233.63	0.5	102.3	Pulse	0.1000	3
H2	Sc	45	120200.94	1.0	91.0	Pulse	0.1000	3
H2	Ge	72	101703.95	1.2	91.2	Pulse	0.1000	3
H2	In	115	284663.64	1.6	96.9	Pulse	0.1000	3
He	Sc	45	37154.70	0.6	100.6	Pulse	0.1000	3
He	Ge	72	64057.33	1.3	99.2	Pulse	0.1000	3
He	In	115	62175.44	1.0	98.4	Pulse	0.1000	3
He	Tb	159	287714.21	1.1	98.3	Pulse	0.1000	3
He	Bi	209	231526.24	0.4	98.2	Pulse	0.1000	3

No Gas

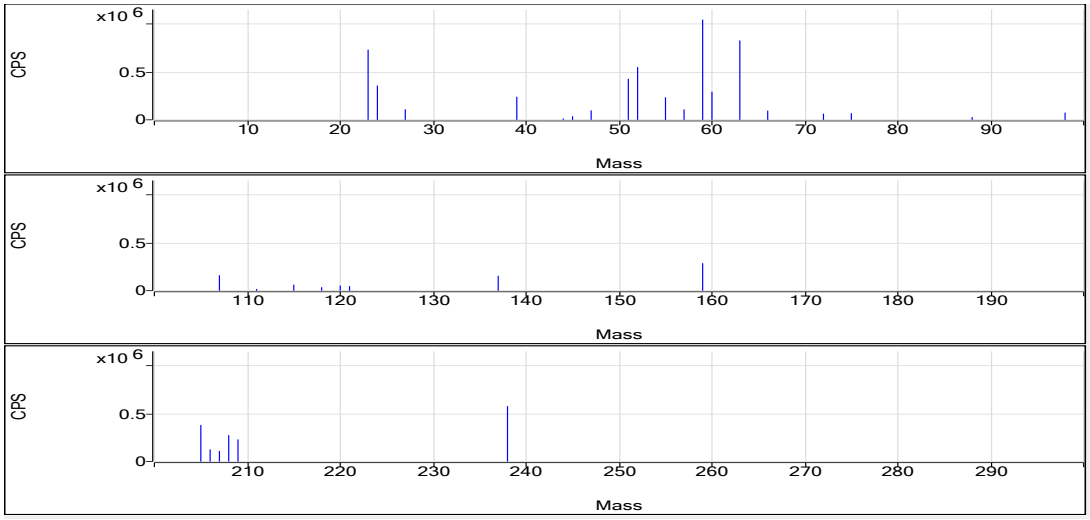


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.527	0.0365	77693.94	0.0008	2.195E-05
Be	9	1	No Gas	49.87	0.0383	80275.55	0.0008	2.195E-05
Be	9	1	No Gas	48.321	0.0371	78793.73	0.0008	2.195E-05
Se	78	2	H2	52.111	0.0227	2337.53	0.0004	1.386E-05
Se	78	2	H2	53.862	0.0234	2358.20	0.0004	1.386E-05
Se	78	2	H2	52.679	0.0229	2324.19	0.0004	1.386E-05
Na	23	3	He	5078.07	19.8471	732704.52	0.0038	0.4416
Na	23	3	He	5017.319	19.6149	732391.00	0.0038	0.4416
Na	23	3	He	5060.081	19.7783	735913.90	0.0038	0.4416
Mg	24	3	He	5217.5	9.7327	359306.91	0.0019	0.005872
Mg	24	3	He	5221.283	9.7397	363667.30	0.0019	0.005872
Mg	24	3	He	5081.85	9.4798	352725.54	0.0019	0.005872
Al	27	3	He	5111.617	2.9558	109122.35	0.0006	0.0004496
Al	27	3	He	5068.021	2.9306	109425.50	0.0006	0.0004496
Al	27	3	He	5156.425	2.9817	110945.20	0.0006	0.0004496
K	39	3	He	5347.492	6.6299	244759.68	0.0012	0.4456
K	39	3	He	5196.674	6.4555	241038.06	0.0012	0.4456
K	39	3	He	5158.176	6.411	238539.80	0.0012	0.4456
Ca	44	3	He	5393.361	0.3602	13296.49	0.0001	0.003779
Ca	44	3	He	5344.058	0.3569	13326.46	0.0001	0.003779
Ca	44	3	He	5436.264	0.363	13506.63	0.0001	0.003779
Ti	47	3	He	5122.635	2.6617	98261.73	0.0005	0
Ti	47	3	He	5104.774	2.6524	99035.67	0.0005	0
Ti	47	3	He	5096.154	2.6479	98523.20	0.0005	0
V	51	3	He	519.028	11.6017	428304.47	0.0223	0.03054
V	51	3	He	514.858	11.5087	429717.16	0.0223	0.03054
V	51	3	He	514.397	11.4984	427834.13	0.0223	0.03054
Cr	52	3	He	526.235	15.0103	554142.30	0.0285	0.03714
Cr	52	3	He	514.968	14.6897	548491.20	0.0285	0.03714
Cr	52	3	He	518.881	14.8011	550719.13	0.0285	0.03714
Mn	55	3	He	523.319	6.4854	239424.31	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	497.374	6.1641	230157.11	0.0124	0.004415
Mn	55	3	He	507.309	6.2871	233931.70	0.0124	0.004415
Fe	57	3	He	5201.604	2.952	108979.55	0.0006	0.001356
Fe	57	3	He	5139.141	2.9165	108899.23	0.0006	0.001356
Fe	57	3	He	5152.842	2.9243	108808.16	0.0006	0.001356
Co	59	3	He	487.37	28.317	1045393.58	0.0581	0.002697
Co	59	3	He	483.772	28.108	1049511.00	0.0581	0.002697
Co	59	3	He	484.211	28.1335	1046794.67	0.0581	0.002697
Ni	60	3	He	534.059	4.6328	292749.19	0.0087	0.003928
Ni	60	3	He	526.276	4.5653	292517.03	0.0087	0.003928
Ni	60	3	He	523.362	4.5401	294681.73	0.0087	0.003928
Cu	63	3	He	497.986	13.0212	822824.36	0.0261	0.006048
Cu	63	3	He	496.586	12.9846	831974.68	0.0261	0.006048
Cu	63	3	He	490.652	12.8295	832728.11	0.0261	0.006048
Zn	66	3	He	530.061	1.5224	96201.50	0.0029	0.003512
Zn	66	3	He	523.456	1.5035	96332.84	0.0029	0.003512
Zn	66	3	He	511.529	1.4693	95367.20	0.0029	0.003512
As	75	3	He	532.402	1.1015	69602.01	0.0021	0.0007233
As	75	3	He	520.388	1.0766	68982.95	0.0021	0.0007233
As	75	3	He	514.273	1.064	69059.36	0.0021	0.0007233
Sr	88	3	He	51.364	0.4604	28740.07	0.009	0.0005796
Sr	88	3	He	48.949	0.4388	27487.35	0.009	0.0005796
Sr	88	3	He	52.344	0.4692	28840.06	0.009	0.0005796
Mo	98	3	He	51.082	1.2015	75000.17	0.0235	0.0003188
Mo	98	3	He	52.049	1.2243	76689.00	0.0235	0.0003188
Mo	98	3	He	50.798	1.1949	73442.33	0.0235	0.0003188
Ag	107	3	He	51.861	2.5861	161423.43	0.0499	0.0004754
Ag	107	3	He	51.526	2.5694	160947.59	0.0499	0.0004754
Ag	107	3	He	52.489	2.6174	160877.90	0.0499	0.0004754
Cd	111	3	He	51.749	0.2868	17899.48	0.0055	1.07E-05
Cd	111	3	He	51.503	0.2854	17877.45	0.0055	1.07E-05
Cd	111	3	He	51.665	0.2863	17597.13	0.0055	1.07E-05
Sn	120	3	He	50.896	0.8528	53233.22	0.0164	0.01713
Sn	120	3	He	50.43	0.8452	52941.88	0.0164	0.01713
Sn	120	3	He	51.276	0.8591	52802.02	0.0164	0.01713
Sb	121	3	He	48.797	0.7551	47131.06	0.0155	0.0002641
Sb	121	3	He	49.454	0.7652	47933.76	0.0155	0.0002641
Sb	121	3	He	50.896	0.7875	48405.51	0.0155	0.0002641
Ba	137	3	He	498.998	2.4844	155079.72	0.005	0.0001577
Ba	137	3	He	501.328	2.4961	156354.21	0.005	0.0001577
Ba	137	3	He	512.132	2.5498	156727.27	0.005	0.0001577
Tl	205	3	He	51.372	1.338	382389.72	0.026	0.0002504
Tl	205	3	He	51.533	1.3422	383841.21	0.026	0.0002504
Tl	205	3	He	50.331	1.3109	381948.78	0.026	0.0002504
Pb	208	3	He	51.521	1.8014	276838.00	0.0349	0.001422
Pb	208	3	He	51.928	1.8157	279214.20	0.0349	0.001422
Pb	208	3	He	50.013	1.7488	273042.91	0.0349	0.001422
U	238	3	He	49.793	2.5013	579165.81	0.0502	5.657E-05
U	238	3	He	50.252	2.5243	582108.82	0.0502	5.657E-05
U	238	3	He	49.394	2.4812	576718.43	0.0502	5.657E-05
Sc	45	1	No Gas			2129162.62		
Sc	45	1	No Gas			2096612.47		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2123845.59		
Ge	72	1	No Gas			1022695.22		
Ge	72	1	No Gas			1029025.53		
Ge	72	1	No Gas			1032980.14		
Sc	45	2	H2			119892.32		
Sc	45	2	H2			119155.09		
Sc	45	2	H2			121555.40		
Ge	72	2	H2			103090.50		
Ge	72	2	H2			100622.65		
Ge	72	2	H2			101398.71		
In	115	2	H2			279425.78		
In	115	2	H2			287542.59		
In	115	2	H2			287022.55		
Sc	45	3	He			36917.52		
Sc	45	3	He			37338.48		
Sc	45	3	He			37208.10		
Ge	72	3	He			63191.03		
Ge	72	3	He			64073.88		
Ge	72	3	He			64907.09		
In	115	3	He			62701.65		
In	115	3	He			62912.51		
In	115	3	He			61757.76		
Tb	159	3	He			285794.33		
Tb	159	3	He			285981.93		
Tb	159	3	He			291366.36		
Bi	209	3	He			231548.10		
Bi	209	3	He			230599.49		
Bi	209	3	He			232431.13		

Quantitation Report

Data File Name	148_CCB.d
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Acq Time	8/16/2023 11:20:49 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

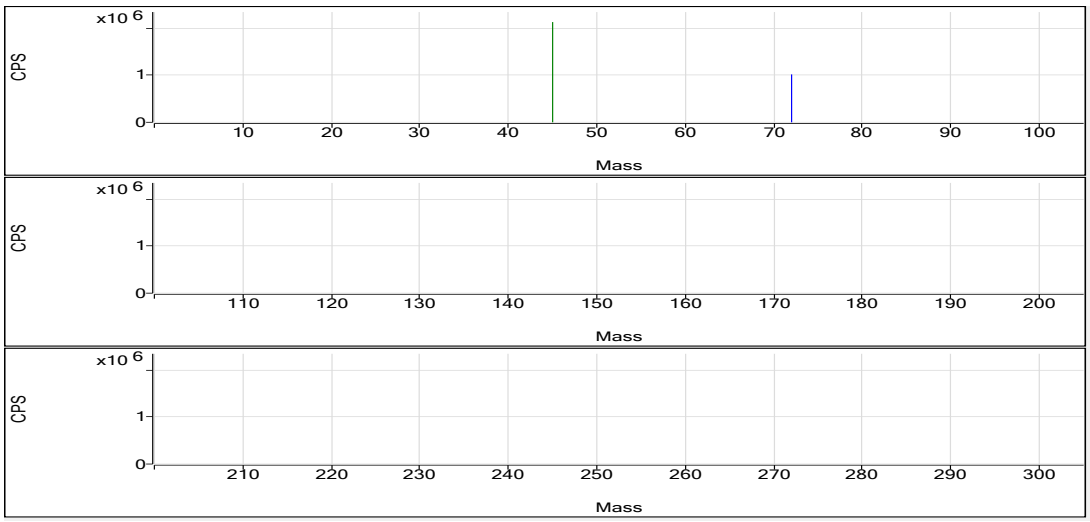
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.025	ppb	28.8	87.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.071	ppb	32.9	4.44	0.0000	Pulse	1.5000	3
Na	23	45	He	1.303	ppb	326.5	16299.42	0.4466	Pulse	0.1000	3
Mg	24	45	He	0.957	ppb	43.3	280.01	0.0077	Pulse	0.1000	3
Al	27	45	He	1.118	ppb	5.0	40.00	0.0011	Pulse	0.1000	3
K	39	45	He	-4.408	ppb	N/A	16082.66	0.4405	Pulse	0.1000	3
Ca	44	45	He	3.554	ppb	148.7	146.68	0.0040	Pulse	0.1000	3
Ti	47	45	He	0.890	ppb	72.1	16.67	0.0005	Pulse	0.1000	3
V	51	45	He	0.083	ppb	107.2	1183.39	0.0324	Pulse	0.5000	3
Cr	52	45	He	0.064	ppb	220.2	1420.11	0.0390	Pulse	0.1000	3
Mn	55	45	He	0.154	ppb	88.3	230.01	0.0063	Pulse	0.1000	3
Fe	57	45	He	2.583	ppb	33.8	103.34	0.0028	Pulse	0.1000	3
Co	59	45	He	0.135	ppb	29.2	386.68	0.0105	Pulse	0.1000	3
Ni	60	72	He	0.053	ppb	246.1	276.68	0.0044	Pulse	0.1000	3
Cu	63	72	He	0.050	ppb	10.8	463.35	0.0073	Pulse	0.1000	3
Zn	66	72	He	0.104	ppb	338.7	240.01	0.0038	Pulse	0.1000	3
As	75	72	He	0.202	ppb	34.4	72.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.027	ppb	273.2	50.00	0.0008	Pulse	0.1000	3
Mo	98	115	He	0.079	ppb	26.1	133.34	0.0022	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	270.7	33.33	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	27.9	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.004	ppb	N/A	1043.41	0.0171	Pulse	0.1000	3
Sb	121	115	He	0.029	ppb	23.8	43.33	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.188	ppb	61.2	66.67	0.0011	Pulse	0.1000	3
Tl	205	159	He	0.078	ppb	2.6	653.38	0.0023	Pulse	0.1000	3
Pb	208	159	He	0.006	ppb	85.3	463.35	0.0016	Pulse	0.1000	3
U	238	209	He	0.045	ppb	11.9	533.37	0.0023	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2127576.11	0.4	104.7	Analog	0.1000	3
No Gas	Ge	72	1016689.44	0.2	101.2	Pulse	0.1000	3
H2	Sc	45	119566.23	0.4	90.5	Pulse	0.1000	3
H2	Ge	72	99086.34	0.5	88.8	Pulse	0.1000	3
H2	In	115	279808.17	0.9	95.3	Pulse	0.1000	3
He	Sc	45	36513.28	2.9	98.8	Pulse	0.1000	3
He	Ge	72	63059.57	0.6	97.7	Pulse	0.1000	3
He	In	115	61105.53	1.5	96.7	Pulse	0.1000	3
He	Tb	159	286728.56	1.6	97.9	Pulse	0.1000	3
He	Bi	209	231596.73	0.7	98.2	Pulse	0.1000	3

No Gas



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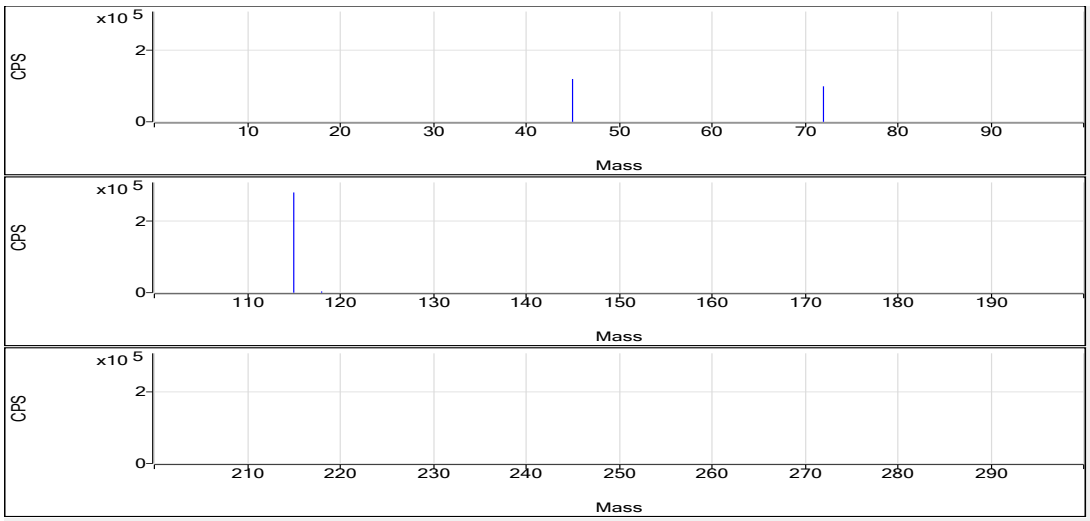
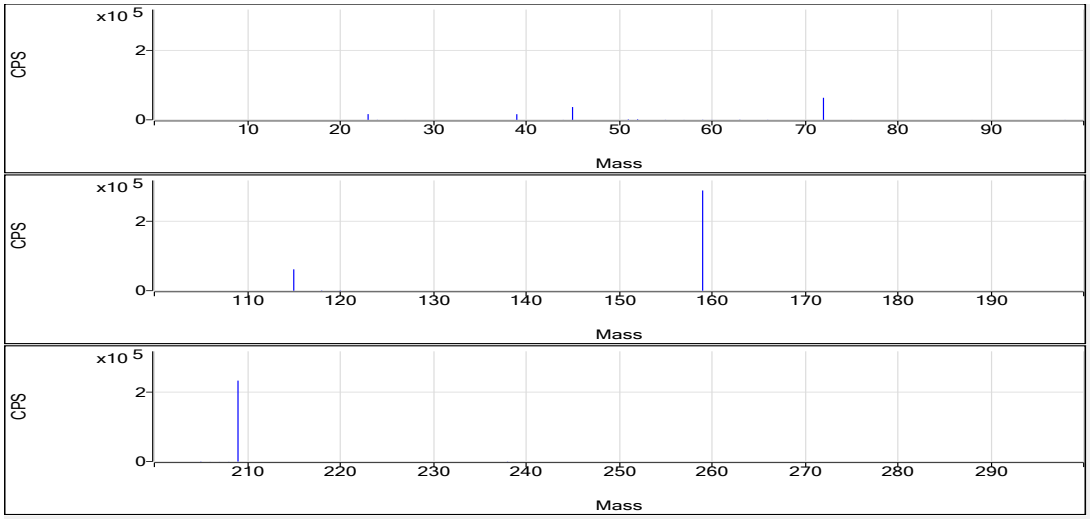


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.028	0	92.00	0.0008	2.195E-05
Be	9	1	No Gas	0.017	0	74.00	0.0008	2.195E-05
Be	9	1	No Gas	0.03	0	96.00	0.0008	2.195E-05
Se	78	2	H2	0.046	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.092	0.0001	5.33	0.0004	1.386E-05
Se	78	2	H2	0.076	0	4.67	0.0004	1.386E-05
Na	23	3	He	-3.344	0.4288	16089.16	0.0038	0.4416
Na	23	3	He	5	0.4607	16869.95	0.0038	0.4416
Na	23	3	He	2.251	0.4502	15939.15	0.0038	0.4416
Mg	24	3	He	1.426	0.0085	320.01	0.0019	0.005872
Mg	24	3	He	0.806	0.0074	270.02	0.0019	0.005872
Mg	24	3	He	0.638	0.0071	250.01	0.0019	0.005872
Al	27	3	He	1.066	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	1.112	0.0011	40.00	0.0006	0.0004496
Al	27	3	He	1.177	0.0011	40.00	0.0006	0.0004496
K	39	3	He	-5.517	0.4392	16479.81	0.0012	0.4456
K	39	3	He	-7.271	0.4372	16009.29	0.0012	0.4456
K	39	3	He	-0.435	0.4451	15758.89	0.0012	0.4456
Ca	44	3	He	3.324	0.004	150.01	0.0001	0.003779
Ca	44	3	He	8.947	0.0044	160.01	0.0001	0.003779
Ca	44	3	He	-1.61	0.0037	130.01	0.0001	0.003779
Ti	47	3	He	0.513	0.0003	10.00	0.0005	0
Ti	47	3	He	0.526	0.0003	10.00	0.0005	0
Ti	47	3	He	1.631	0.0008	30.00	0.0005	0
V	51	3	He	0.175	0.0344	1292.07	0.0223	0.03054
V	51	3	He	-0.003	0.0305	1116.05	0.0223	0.03054
V	51	3	He	0.077	0.0323	1142.05	0.0223	0.03054
Cr	52	3	He	-0.087	0.0347	1300.10	0.0285	0.03714
Cr	52	3	He	0.087	0.0396	1450.11	0.0285	0.03714
Cr	52	3	He	0.194	0.0427	1510.12	0.0285	0.03714
Mn	55	3	He	0.117	0.0059	220.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.04	0.0049	180.01	0.0124	0.004415
Mn	55	3	He	0.305	0.0082	290.01	0.0124	0.004415
Fe	57	3	He	3.248	0.0032	120.00	0.0006	0.001356
Fe	57	3	He	2.906	0.003	110.01	0.0006	0.001356
Fe	57	3	He	1.593	0.0023	80.00	0.0006	0.001356
Co	59	3	He	0.16	0.012	450.02	0.0581	0.002697
Co	59	3	He	0.156	0.0117	430.02	0.0581	0.002697
Co	59	3	He	0.09	0.0079	280.01	0.0581	0.002697
Ni	60	3	He	-0.07	0.0033	210.01	0.0087	0.003928
Ni	60	3	He	0.192	0.0056	350.02	0.0087	0.003928
Ni	60	3	He	0.039	0.0043	270.01	0.0087	0.003928
Cu	63	3	He	0.053	0.0074	470.02	0.0261	0.006048
Cu	63	3	He	0.044	0.0072	450.02	0.0261	0.006048
Cu	63	3	He	0.053	0.0074	470.02	0.0261	0.006048
Zn	66	3	He	-0.288	0.0027	170.01	0.0029	0.003512
Zn	66	3	He	0.39	0.0046	290.01	0.0029	0.003512
Zn	66	3	He	0.209	0.0041	260.01	0.0029	0.003512
As	75	3	He	0.139	0.001	64.00	0.0021	0.0007233
As	75	3	He	0.191	0.0011	70.00	0.0021	0.0007233
As	75	3	He	0.277	0.0013	82.00	0.0021	0.0007233
Sr	88	3	He	0.026	0.0008	50.00	0.009	0.0005796
Sr	88	3	He	-0.047	0.0002	10.00	0.009	0.0005796
Sr	88	3	He	0.103	0.0015	90.00	0.009	0.0005796
Mo	98	3	He	0.055	0.0016	100.00	0.0235	0.0003188
Mo	98	3	He	0.09	0.0024	150.01	0.0235	0.0003188
Mo	98	3	He	0.093	0.0025	150.01	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0.004	0.0007	40.00	0.0499	0.0004754
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	0.005	0.0172	1060.08	0.0164	0.01713
Sn	120	3	He	0.033	0.0177	1090.08	0.0164	0.01713
Sn	120	3	He	-0.049	0.0163	980.08	0.0164	0.01713
Sb	121	3	He	0.025	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.025	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.037	0.0008	50.00	0.0155	0.0002641
Ba	137	3	He	0.294	0.0016	100.01	0.005	0.0001577
Ba	137	3	He	0.066	0.0005	30.00	0.005	0.0001577
Ba	137	3	He	0.203	0.0012	70.00	0.005	0.0001577
Tl	205	3	He	0.079	0.0023	670.05	0.026	0.0002504
Tl	205	3	He	0.079	0.0023	650.04	0.026	0.0002504
Tl	205	3	He	0.076	0.0022	640.04	0.026	0.0002504
Pb	208	3	He	0.004	0.0016	240.01	0.0349	0.001422
Pb	208	3	He	0.002	0.0015	210.01	0.0349	0.001422
Pb	208	3	He	0.011	0.0018	230.01	0.0349	0.001422
U	238	3	He	0.047	0.0024	560.04	0.0502	5.657E-05
U	238	3	He	0.048	0.0025	580.04	0.0502	5.657E-05
U	238	3	He	0.039	0.002	460.03	0.0502	5.657E-05
Sc	45	1	No Gas			2137008.25		
Sc	45	1	No Gas			2124805.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2120914.81		
Ge	72	1	No Gas			1016437.95		
Ge	72	1	No Gas			1014977.17		
Ge	72	1	No Gas			1018653.19		
Sc	45	2	H2			119710.70		
Sc	45	2	H2			119961.91		
Sc	45	2	H2			119026.07		
Ge	72	2	H2			98630.07		
Ge	72	2	H2			99052.29		
Ge	72	2	H2			99576.66		
In	115	2	H2			278193.51		
In	115	2	H2			278642.77		
In	115	2	H2			282588.22		
Sc	45	3	He			37518.95		
Sc	45	3	He			36616.93		
Sc	45	3	He			35403.97		
Ge	72	3	He			63290.75		
Ge	72	3	He			62627.51		
Ge	72	3	He			63260.45		
In	115	3	He			61617.15		
In	115	3	He			61686.99		
In	115	3	He			60030.48		
Tb	159	3	He			290011.27		
Tb	159	3	He			281543.86		
Tb	159	3	He			288630.54		
Bi	209	3	He			230824.43		
Bi	209	3	He			233397.44		
Bi	209	3	He			230568.32		

Quantitation Report

Data File Name	149SMPL.d
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Sample Type	Sample
Comment	D29
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

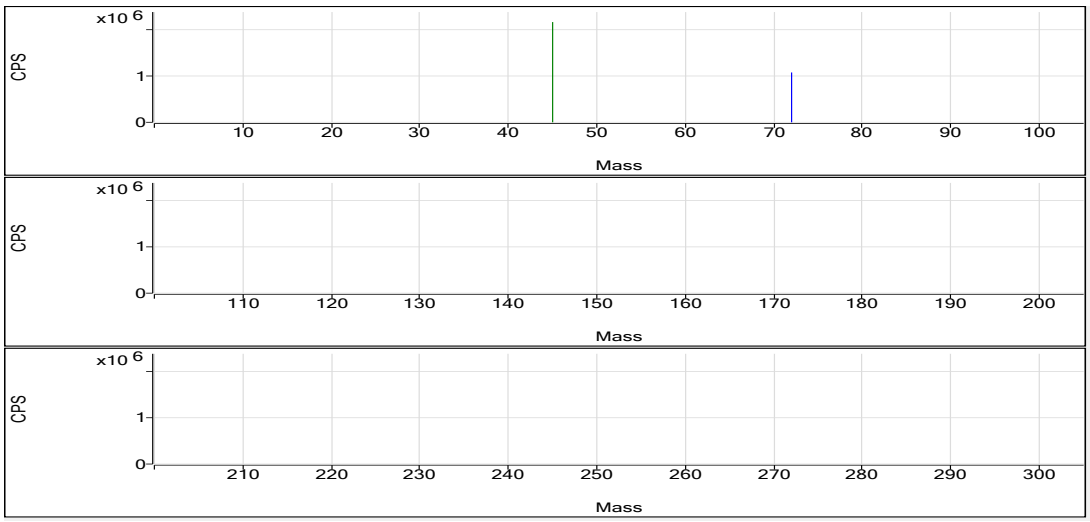
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.028	ppb	43.5	94.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.032	ppb	146.0	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	9721.621	ppb	3.9	1411966.18	37.5920	Analog	0.1000	3
Mg	24	45	He	42765.060	ppb	2.0	2995344.12	79.7314	Analog	0.1000	3
Al	27	45	He	5.670	ppb	29.3	140.01	0.0037	Pulse	0.1000	3
K	39	45	He	2993.290	ppb	1.9	146793.99	3.9073	Pulse	0.1000	3
Ca	44	45	He	113741.248	ppb	2.2	282493.15	7.5197	Pulse	0.1000	3
Ti	47	45	He	0.343	ppb	86.6	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.040	ppb	N/A	1114.05	0.0297	Pulse	0.5000	3
Cr	52	45	He	0.245	ppb	55.5	1656.81	0.0441	Pulse	0.1000	3
Mn	55	45	He	3917.342	ppb	1.1	1822923.77	48.5182	Analog	0.1000	3
Fe	57	45	He	8940.870	ppb	1.7	190590.56	5.0731	Pulse	0.1000	3
Co	59	45	He	14.330	ppb	2.2	31378.12	0.8352	Pulse	0.1000	3
Ni	60	72	He	13.655	ppb	3.5	8279.34	0.1223	Pulse	0.1000	3
Cu	63	72	He	0.130	ppb	24.3	640.03	0.0094	Pulse	0.1000	3
Zn	66	72	He	12.530	ppb	9.0	2673.67	0.0394	Pulse	0.1000	3
As	75	72	He	4.948	ppb	6.3	742.69	0.0110	Pulse	0.5000	3
Sr	88	115	He	107.481	ppb	2.6	58438.03	0.9628	Pulse	0.1000	3
Mo	98	115	He	0.727	ppb	7.0	1056.75	0.0174	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	182.5	40.00	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	49.1	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	1.392	ppb	3.1	2426.97	0.0400	Pulse	0.1000	3
Sb	121	115	He	0.050	ppb	30.1	63.33	0.0010	Pulse	0.1000	3
Ba	137	115	He	514.109	ppb	2.0	155369.33	2.5597	Pulse	0.1000	3
Tl	205	159	He	0.084	ppb	5.8	706.71	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.018	ppb	8.5	586.70	0.0020	Pulse	0.1000	3
U	238	209	He	0.766	ppb	5.2	8796.68	0.0385	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2176640.28	1.2	107.1	Analog	0.1000	3
No Gas	Ge	72	1082338.13	0.6	107.7	Pulse	0.1000	3
H2	Sc	45	118746.59	2.1	89.9	Pulse	0.1000	3
H2	Ge	72	103375.75	2.0	92.7	Pulse	0.1000	3
H2	In	115	275540.31	0.9	93.8	Pulse	0.1000	3
He	Sc	45	37576.08	1.7	101.7	Pulse	0.1000	3
He	Ge	72	67741.12	2.4	104.9	Pulse	0.1000	3
He	In	115	60711.87	1.7	96.1	Pulse	0.1000	3
He	Tb	159	288444.36	0.2	98.5	Pulse	0.1000	3
He	Bi	209	228372.71	0.6	96.8	Pulse	0.1000	3

No Gas



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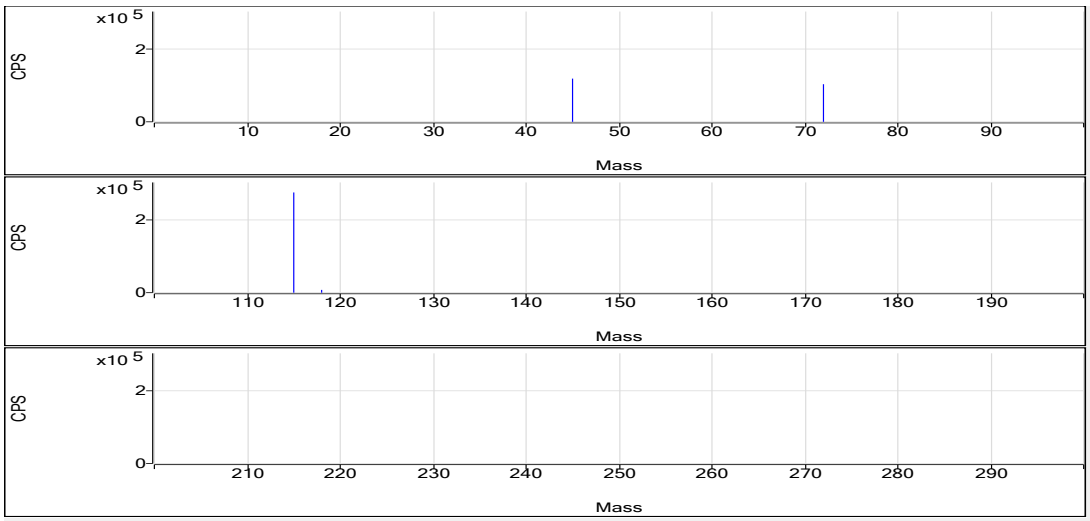
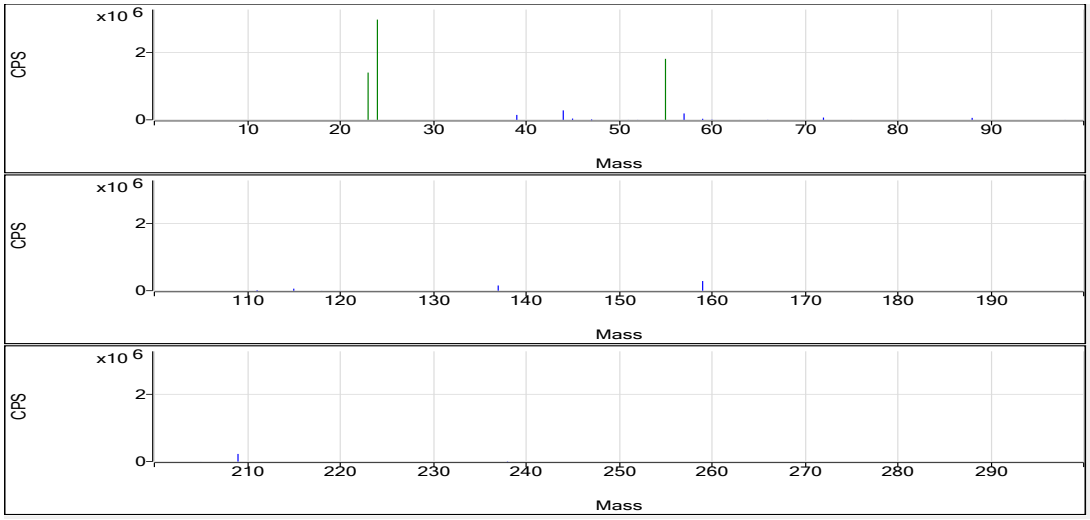


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.017	0	76.00	0.0008	2.195E-05
Be	9	1	No Gas	0.041	0.0001	116.00	0.0008	2.195E-05
Be	9	1	No Gas	0.026	0	92.00	0.0008	2.195E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.086	0.0001	5.33	0.0004	1.386E-05
Se	78	2	H2	0.014	0	2.00	0.0004	1.386E-05
Na	23	3	He	10161.167	39.2717	1447461.70	0.0038	0.4416
Na	23	3	He	9537.04	36.8867	1402444.67	0.0038	0.4416
Na	23	3	He	9466.657	36.6177	1385992.17	0.0038	0.4416
Mg	24	3	He	43694.387	81.4639	3002564.64	0.0019	0.005872
Mg	24	3	He	42032.667	78.366	2979504.64	0.0019	0.005872
Mg	24	3	He	42568.127	79.3643	3003963.08	0.0019	0.005872
Al	27	3	He	6.262	0.0041	150.01	0.0006	0.0004496
Al	27	3	He	6.956	0.0045	170.01	0.0006	0.0004496
Al	27	3	He	3.792	0.0026	100.01	0.0006	0.0004496
K	39	3	He	3058.433	3.9826	146790.75	0.0012	0.4456
K	39	3	He	2955.606	3.8637	146900.31	0.0012	0.4456
K	39	3	He	2965.831	3.8756	146690.90	0.0012	0.4456
Ca	44	3	He	116590.334	7.708	284097.26	0.0001	0.003779
Ca	44	3	He	112227.213	7.4197	282098.08	0.0001	0.003779
Ca	44	3	He	112406.197	7.4315	281284.10	0.0001	0.003779
Ti	47	3	He	0.522	0.0003	10.00	0.0005	0
Ti	47	3	He	0.506	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0	0.0306	1126.05	0.0223	0.03054
V	51	3	He	-0.013	0.0302	1150.05	0.0223	0.03054
V	51	3	He	-0.107	0.0282	1066.05	0.0223	0.03054
Cr	52	3	He	0.297	0.0456	1680.15	0.0285	0.03714
Cr	52	3	He	0.091	0.0397	1510.12	0.0285	0.03714
Cr	52	3	He	0.348	0.047	1780.17	0.0285	0.03714
Mn	55	3	He	3959.139	49.0358	1807343.25	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3875.271	47.9972	1824870.44	0.0124	0.004415
Mn	55	3	He	3917.615	48.5216	1836557.63	0.0124	0.004415
Fe	57	3	He	9107.888	5.1678	190473.38	0.0006	0.001356
Fe	57	3	He	8800.552	4.9935	189853.96	0.0006	0.001356
Fe	57	3	He	8914.17	5.0579	191444.33	0.0006	0.001356
Co	59	3	He	14.531	0.8469	31214.56	0.0581	0.002697
Co	59	3	He	13.972	0.8144	30963.73	0.0581	0.002697
Co	59	3	He	14.486	0.8443	31956.08	0.0581	0.002697
Ni	60	3	He	13.717	0.1228	8182.60	0.0087	0.003928
Ni	60	3	He	14.101	0.1261	8452.79	0.0087	0.003928
Ni	60	3	He	13.146	0.1179	8202.64	0.0087	0.003928
Cu	63	3	He	0.142	0.0098	650.03	0.0261	0.006048
Cu	63	3	He	0.094	0.0085	570.03	0.0261	0.006048
Cu	63	3	He	0.153	0.0101	700.04	0.0261	0.006048
Zn	66	3	He	11.714	0.0371	2470.28	0.0029	0.003512
Zn	66	3	He	12.057	0.0381	2550.30	0.0029	0.003512
Zn	66	3	He	13.821	0.0431	3000.43	0.0029	0.003512
As	75	3	He	4.805	0.0107	710.02	0.0021	0.0007233
As	75	3	He	4.732	0.0105	704.02	0.0021	0.0007233
As	75	3	He	5.308	0.0117	814.03	0.0021	0.0007233
Sr	88	3	He	104.758	0.9385	57899.72	0.009	0.0005796
Sr	88	3	He	110.275	0.9878	58862.94	0.009	0.0005796
Sr	88	3	He	107.409	0.9622	58551.42	0.009	0.0005796
Mo	98	3	He	0.703	0.0169	1040.09	0.0235	0.0003188
Mo	98	3	He	0.786	0.0188	1120.08	0.0235	0.0003188
Mo	98	3	He	0.692	0.0166	1010.07	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.011	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	0.027	0.0002	10.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	1.346	0.0392	2420.31	0.0164	0.01713
Sn	120	3	He	1.431	0.0406	2420.31	0.0164	0.01713
Sn	120	3	He	1.399	0.0401	2440.29	0.0164	0.01713
Sb	121	3	He	0.067	0.0013	80.00	0.0155	0.0002641
Sb	121	3	He	0.037	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.047	0.001	60.00	0.0155	0.0002641
Ba	137	3	He	502.319	2.501	154301.63	0.005	0.0001577
Ba	137	3	He	522.377	2.6008	154976.66	0.005	0.0001577
Ba	137	3	He	517.633	2.5772	156829.69	0.005	0.0001577
Tl	205	3	He	0.09	0.0026	750.05	0.026	0.0002504
Tl	205	3	He	0.082	0.0024	690.04	0.026	0.0002504
Tl	205	3	He	0.081	0.0024	680.04	0.026	0.0002504
Pb	208	3	He	0.019	0.0021	360.01	0.0349	0.001422
Pb	208	3	He	0.016	0.002	270.01	0.0349	0.001422
Pb	208	3	He	0.018	0.002	340.02	0.0349	0.001422
U	238	3	He	0.801	0.0403	9143.59	0.0502	5.657E-05
U	238	3	He	0.774	0.0389	8913.42	0.0502	5.657E-05
U	238	3	He	0.722	0.0363	8333.02	0.0502	5.657E-05
Sc	45	1	No Gas			2161608.87		
Sc	45	1	No Gas			2162711.22		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2205600.75		
Ge	72	1	No Gas			1077963.97		
Ge	72	1	No Gas			1079225.06		
Ge	72	1	No Gas			1089825.37		
Sc	45	2	H2			120327.27		
Sc	45	2	H2			120033.18		
Sc	45	2	H2			115879.31		
Ge	72	2	H2			104841.89		
Ge	72	2	H2			104269.30		
Ge	72	2	H2			101016.07		
In	115	2	H2			277976.93		
In	115	2	H2			275479.39		
In	115	2	H2			273164.62		
Sc	45	3	He			36857.59		
Sc	45	3	He			38020.35		
Sc	45	3	He			37850.31		
Ge	72	3	He			66625.66		
Ge	72	3	He			67007.52		
Ge	72	3	He			69590.17		
In	115	3	He			61707.78		
In	115	3	He			59599.15		
In	115	3	He			60863.78		
Tb	159	3	He			288997.46		
Tb	159	3	He			288471.44		
Tb	159	3	He			287864.19		
Bi	209	3	He			226894.22		
Bi	209	3	He			228914.66		
Bi	209	3	He			229309.25		

Quantitation Report

Data File Name	150SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:24:54 AM
Sample Name	410-136864-K-4-A PDS
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

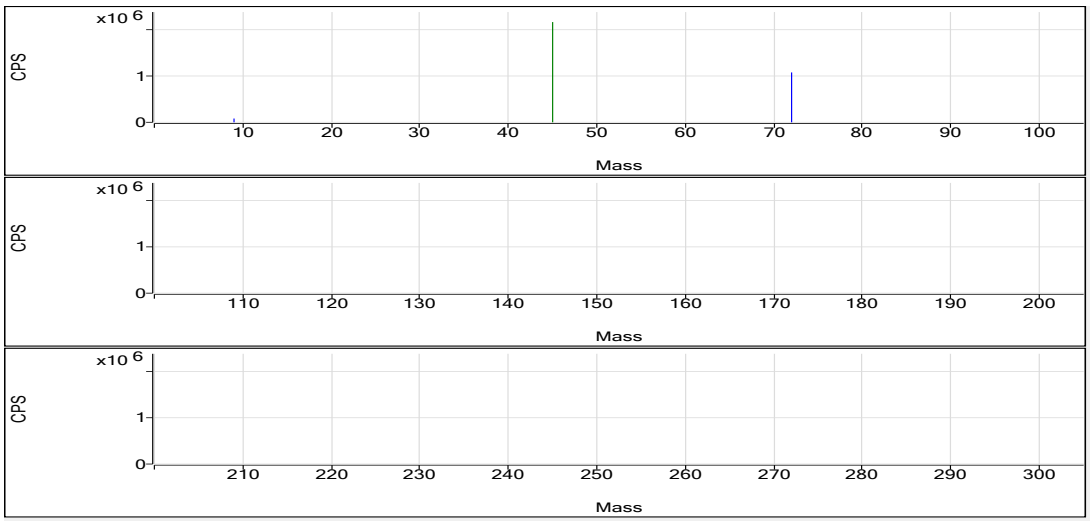
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.879	ppb	0.9	81010.77	0.0375	Pulse	0.5000	3
Se	78	72	H2	104.151	ppb	1.1	4680.99	0.0453	Pulse	1.5000	3
Na	23	45	He	14811.006	ppb	0.3	2170586.79	57.0407	Analog	0.1000	3
Mg	24	45	He	47157.578	ppb	1.4	3345374.22	87.9203	Analog	0.1000	3
Al	27	45	He	4966.306	ppb	1.7	109276.92	2.8718	Pulse	0.1000	3
K	39	45	He	8057.252	ppb	0.9	371523.20	9.7637	Pulse	0.1000	3
Ca	44	45	He	116870.909	ppb	0.6	294011.63	7.7265	Pulse	0.1000	3
Ti	47	45	He	506.429	ppb	4.0	10010.42	0.2631	Pulse	0.1000	3
V	51	45	He	517.877	ppb	1.1	440477.72	11.5760	Pulse	0.5000	3
Cr	52	45	He	519.161	ppb	0.4	563525.75	14.8090	Pulse	0.1000	3
Mn	55	45	He	4373.059	ppb	1.0	2061107.00	54.1620	Analog	0.1000	3
Fe	57	45	He	13845.465	ppb	0.8	298904.88	7.8552	Pulse	0.1000	3
Co	59	45	He	488.965	ppb	0.4	1081091.55	28.4097	Pulse	0.1000	3
Ni	60	72	He	517.680	ppb	2.3	297822.76	4.4908	Pulse	0.1000	3
Cu	63	72	He	479.005	ppb	1.3	830749.86	12.5251	Pulse	0.1000	3
Zn	66	72	He	523.694	ppb	2.7	99752.53	1.5041	Pulse	0.1000	3
As	75	72	He	523.142	ppb	1.7	71783.39	1.0823	Pulse	0.5000	3
Sr	88	115	He	160.657	ppb	1.4	87144.61	1.4389	Pulse	0.1000	3
Mo	98	115	He	54.145	ppb	0.9	77121.53	1.2735	Pulse	0.1000	3
Ag	107	115	He	54.876	ppb	0.8	165713.68	2.7364	Pulse	0.1000	3
Cd	111	115	He	52.093	ppb	2.2	17478.96	0.2887	Pulse	0.5000	3
Sn	120	115	He	107.152	ppb	1.5	107575.83	1.7765	Pulse	0.1000	3
Sb	121	115	He	104.143	ppb	0.6	97566.34	1.6111	Pulse	0.1000	3
Ba	137	115	He	1040.322	ppb	1.1	313641.36	5.1795	Pulse	0.1000	3
Tl	205	159	He	103.991	ppb	0.4	772463.76	2.7082	Pulse	0.1000	3
Pb	208	159	He	51.329	ppb	0.5	511917.78	1.7947	Pulse	0.1000	3
U	238	209	He	52.190	ppb	1.0	597367.57	2.6217	Pulse	0.1000	3

ISTD Table:

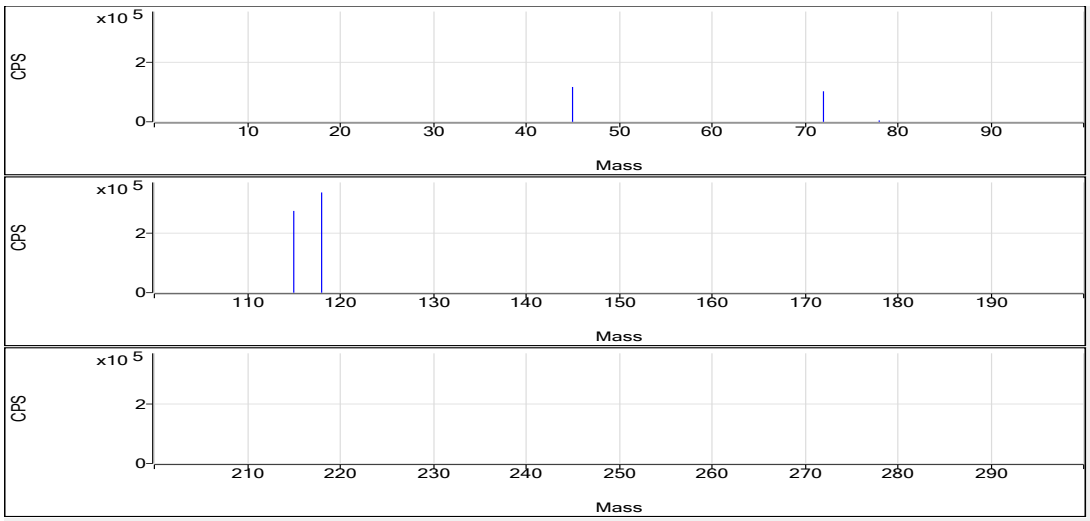
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2158868.30	1.3	106.2	Analog	0.1000	3
No Gas	Ge	72	1074101.99	1.0	106.9	Pulse	0.1000	3
H2	Sc	45	117888.88	0.2	89.2	Pulse	0.1000	3
H2	Ge	72	103332.53	1.2	92.6	Pulse	0.1000	3
H2	In	115	276717.52	1.5	94.2	Pulse	0.1000	3
He	Sc	45	38053.89	1.1	103.0	Pulse	0.1000	3
He	Ge	72	66337.49	1.9	102.8	Pulse	0.1000	3
He	In	115	60558.54	0.8	95.8	Pulse	0.1000	3
He	Tb	159	285230.31	0.4	97.4	Pulse	0.1000	3
He	Bi	209	227859.12	0.5	96.6	Pulse	0.1000	3

No Gas

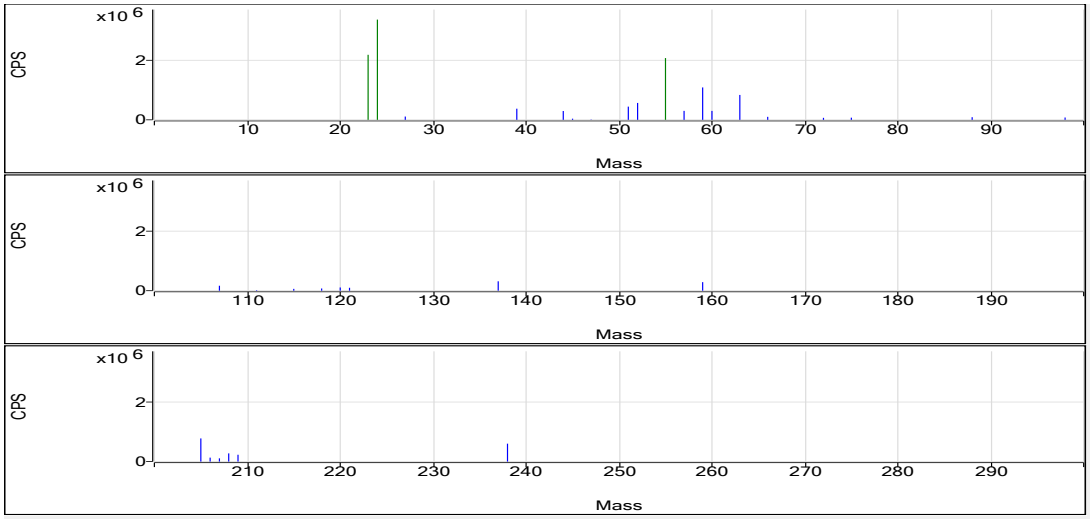


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.373	0.0371	81407.58	0.0008	2.195E-05
Be	9	1	No Gas	49.069	0.0377	80834.53	0.0008	2.195E-05
Be	9	1	No Gas	49.195	0.0378	80790.20	0.0008	2.195E-05
Se	78	2	H2	104.488	0.0455	4665.43	0.0004	1.386E-05
Se	78	2	H2	102.833	0.0447	4686.11	0.0004	1.386E-05
Se	78	2	H2	105.132	0.0457	4691.44	0.0004	1.386E-05
Na	23	3	He	14825.826	57.0974	2151960.44	0.0038	0.4416
Na	23	3	He	14841.196	57.1561	2170229.81	0.0038	0.4416
Na	23	3	He	14765.996	56.8687	2189570.12	0.0038	0.4416
Mg	24	3	He	47874.109	89.2561	3363998.70	0.0019	0.005872
Mg	24	3	He	47072.981	87.7625	3332362.45	0.0019	0.005872
Mg	24	3	He	46525.642	86.7422	3339761.51	0.0019	0.005872
Al	27	3	He	4955.565	2.8656	108003.10	0.0006	0.0004496
Al	27	3	He	5053.882	2.9225	110966.47	0.0006	0.0004496
Al	27	3	He	4889.472	2.8274	108861.20	0.0006	0.0004496
K	39	3	He	8113.321	9.8285	370430.85	0.0012	0.4456
K	39	3	He	8086.363	9.7974	372008.00	0.0012	0.4456
K	39	3	He	7972.072	9.6652	372130.74	0.0012	0.4456
Ca	44	3	He	117258.552	7.7521	292172.24	0.0001	0.003779
Ca	44	3	He	117322.17	7.7563	294509.51	0.0001	0.003779
Ca	44	3	He	116032.005	7.6711	295353.14	0.0001	0.003779
Ti	47	3	He	525.658	0.2731	10293.90	0.0005	0
Ti	47	3	He	508.077	0.264	10023.77	0.0005	0
Ti	47	3	He	485.552	0.2523	9713.58	0.0005	0
V	51	3	He	523.477	11.7008	440996.34	0.0223	0.03054
V	51	3	He	517.882	11.5761	439547.06	0.0223	0.03054
V	51	3	He	512.272	11.451	440889.75	0.0223	0.03054
Cr	52	3	He	521.451	14.8742	560597.30	0.0285	0.03714
Cr	52	3	He	518.519	14.7907	561607.18	0.0285	0.03714
Cr	52	3	He	517.512	14.7621	568372.76	0.0285	0.03714
Mn	55	3	He	4395.896	54.4448	2051986.69	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4323.404	53.547	2033192.31	0.0124	0.004415
Mn	55	3	He	4399.878	54.4941	2098142.00	0.0124	0.004415
Fe	57	3	He	13951.779	7.9155	298330.58	0.0006	0.001356
Fe	57	3	He	13849.379	7.8574	298348.57	0.0006	0.001356
Fe	57	3	He	13735.236	7.7927	300035.48	0.0006	0.001356
Co	59	3	He	488.101	28.3595	1068849.67	0.0581	0.002697
Co	59	3	He	491.138	28.5359	1083515.61	0.0581	0.002697
Co	59	3	He	487.657	28.3337	1090909.36	0.0581	0.002697
Ni	60	3	He	506.13	4.3907	296546.79	0.0087	0.003928
Ni	60	3	He	530.203	4.5993	299317.79	0.0087	0.003928
Ni	60	3	He	516.705	4.4824	297603.69	0.0087	0.003928
Cu	63	3	He	472.784	12.3625	834961.55	0.0261	0.006048
Cu	63	3	He	485.449	12.6936	826075.38	0.0261	0.006048
Cu	63	3	He	478.782	12.5193	831212.64	0.0261	0.006048
Zn	66	3	He	507.663	1.4582	98487.15	0.0029	0.003512
Zn	66	3	He	532.58	1.5296	99544.49	0.0029	0.003512
Zn	66	3	He	530.837	1.5246	101225.94	0.0029	0.003512
As	75	3	He	513.659	1.0627	71774.67	0.0021	0.0007233
As	75	3	He	530.545	1.0976	71430.93	0.0021	0.0007233
As	75	3	He	525.22	1.0866	72144.56	0.0021	0.0007233
Sr	88	3	He	162.653	1.4568	88677.27	0.009	0.0005796
Sr	88	3	He	158.31	1.4179	85024.74	0.009	0.0005796
Sr	88	3	He	161.008	1.4421	87731.83	0.009	0.0005796
Mo	98	3	He	54.271	1.2765	77704.64	0.0235	0.0003188
Mo	98	3	He	54.536	1.2827	76920.54	0.0235	0.0003188
Mo	98	3	He	53.627	1.2614	76739.42	0.0235	0.0003188
Ag	107	3	He	55.364	2.7607	168050.41	0.0499	0.0004754
Ag	107	3	He	54.685	2.7269	163516.92	0.0499	0.0004754
Ag	107	3	He	54.579	2.7215	165573.71	0.0499	0.0004754
Cd	111	3	He	51.313	0.2843	17308.76	0.0055	1.07E-05
Cd	111	3	He	53.397	0.2959	17743.27	0.0055	1.07E-05
Cd	111	3	He	51.568	0.2858	17384.85	0.0055	1.07E-05
Sn	120	3	He	107.394	1.7805	108381.79	0.0164	0.01713
Sn	120	3	He	108.574	1.7998	107928.56	0.0164	0.01713
Sn	120	3	He	105.488	1.7492	106417.15	0.0164	0.01713
Sb	121	3	He	104.349	1.6143	98267.56	0.0155	0.0002641
Sb	121	3	He	104.592	1.6181	97029.84	0.0155	0.0002641
Sb	121	3	He	103.487	1.601	97401.63	0.0155	0.0002641
Ba	137	3	He	1032.958	5.1428	313052.87	0.005	0.0001577
Ba	137	3	He	1053.484	5.245	314518.24	0.005	0.0001577
Ba	137	3	He	1034.523	5.1506	313352.98	0.005	0.0001577
Tl	205	3	He	103.709	2.7009	773176.39	0.026	0.0002504
Tl	205	3	He	103.769	2.7024	767026.94	0.026	0.0002504
Tl	205	3	He	104.496	2.7213	777187.96	0.026	0.0002504
Pb	208	3	He	51.588	1.8038	273820.17	0.0349	0.001422
Pb	208	3	He	51.278	1.7929	271525.21	0.0349	0.001422
Pb	208	3	He	51.122	1.7875	273963.53	0.0349	0.001422
U	238	3	He	52.706	2.6476	600754.91	0.0502	5.657E-05
U	238	3	He	51.671	2.5956	590906.28	0.0502	5.657E-05
U	238	3	He	52.194	2.6219	600441.51	0.0502	5.657E-05
Sc	45	1	No Gas			2191967.31		
Sc	45	1	No Gas			2145645.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2138992.47		
Ge	72	1	No Gas			1082752.56		
Ge	72	1	No Gas			1077816.16		
Ge	72	1	No Gas			1061737.25		
Sc	45	2	H2			117826.59		
Sc	45	2	H2			118157.17		
Sc	45	2	H2			117682.87		
Ge	72	2	H2			102647.73		
Ge	72	2	H2			104761.87		
Ge	72	2	H2			102587.99		
In	115	2	H2			278627.53		
In	115	2	H2			279598.73		
In	115	2	H2			271926.30		
Sc	45	3	He			37689.30		
Sc	45	3	He			37970.21		
Sc	45	3	He			38502.17		
Ge	72	3	He			67539.70		
Ge	72	3	He			65078.34		
Ge	72	3	He			66394.42		
In	115	3	He			61446.71		
In	115	3	He			60542.04		
In	115	3	He			61416.39		
Tb	159	3	He			286270.80		
Tb	159	3	He			283830.19		
Tb	159	3	He			285589.94		
Bi	209	3	He			226906.72		
Bi	209	3	He			227657.50		
Bi	209	3	He			229013.14		

Quantitation Report

Data File Name	151SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:26:56 AM
Sample Name	410-136864-K-4-A SD @5
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

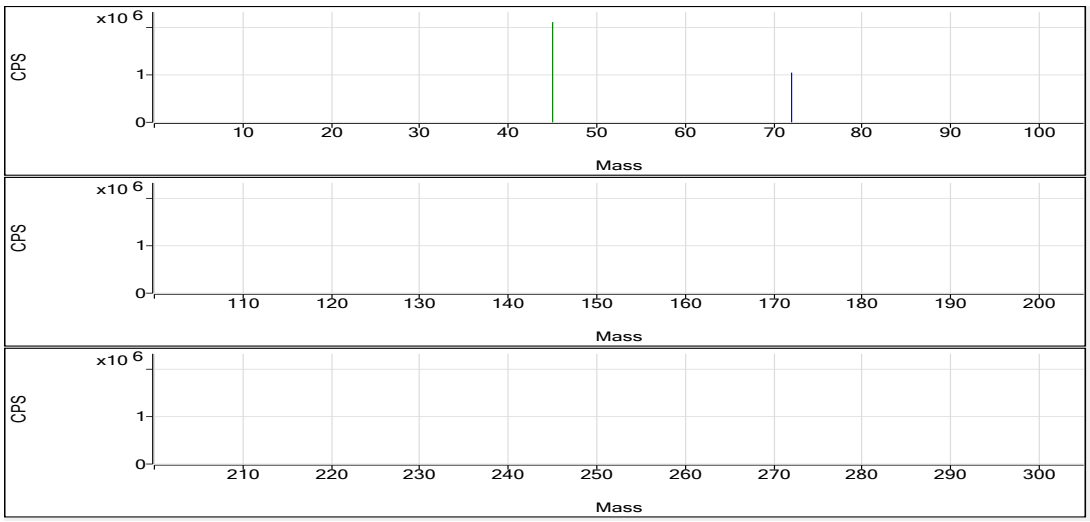
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.053	ppb	26.6	132.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.182	ppb	25.1	9.56	0.0001	Pulse	1.5000	3
Na	23	45	He	1830.613	ppb	0.2	275627.14	7.4372	Pulse	0.1000	3
Mg	24	45	He	8193.062	ppb	0.8	566272.79	15.2799	Pulse	0.1000	3
Al	27	45	He	9.954	ppb	20.3	230.01	0.0062	Pulse	0.1000	3
K	39	45	He	592.247	ppb	1.6	41897.77	1.1305	Pulse	0.1000	3
Ca	44	45	He	22017.513	ppb	1.5	54064.11	1.4587	Pulse	0.1000	3
Ti	47	45	He	0.522	ppb	173.2	10.00	0.0003	Pulse	0.1000	3
V	51	45	He	0.235	ppb	47.7	1326.07	0.0358	Pulse	0.5000	3
Cr	52	45	He	1.021	ppb	58.8	2455.83	0.0662	Pulse	0.1000	3
Mn	55	45	He	734.454	ppb	0.5	337267.21	9.1002	Pulse	0.1000	3
Fe	57	45	He	1742.748	ppb	2.7	36687.43	0.9899	Pulse	0.1000	3
Co	59	45	He	3.015	ppb	3.6	6591.73	0.1779	Pulse	0.1000	3
Ni	60	72	He	3.621	ppb	3.0	2356.93	0.0353	Pulse	0.1000	3
Cu	63	72	He	0.864	ppb	19.1	1910.19	0.0286	Pulse	0.1000	3
Zn	66	72	He	8.289	ppb	7.3	1820.17	0.0273	Pulse	0.1000	3
As	75	72	He	1.443	ppb	12.1	247.33	0.0037	Pulse	0.5000	3
Sr	88	115	He	20.652	ppb	5.0	11368.25	0.1855	Pulse	0.1000	3
Mo	98	115	He	0.202	ppb	28.3	310.01	0.0051	Pulse	0.1000	3
Ag	107	115	He	0.035	ppb	9.1	136.68	0.0022	Pulse	0.1000	3
Cd	111	115	He	0.049	ppb	26.1	17.33	0.0003	Pulse	0.5000	3
Sn	120	115	He	0.464	ppb	14.2	1516.81	0.0247	Pulse	0.1000	3
Sb	121	115	He	0.081	ppb	36.6	93.33	0.0015	Pulse	0.1000	3
Ba	137	115	He	100.883	ppb	2.4	30781.90	0.5024	Pulse	0.1000	3
Tl	205	159	He	0.216	ppb	12.9	1683.50	0.0059	Pulse	0.1000	3
Pb	208	159	He	0.079	ppb	4.9	1200.07	0.0042	Pulse	0.1000	3
U	238	209	He	0.237	ppb	6.7	2757.06	0.0120	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2113107.99	0.9	103.9	Analog	0.1000	3
No Gas	Ge	72	1047172.43	0.3	104.2	Pulse	0.1000	3
H2	Sc	45	120549.60	1.0	91.2	Pulse	0.1000	3
H2	Ge	72	102677.41	1.3	92.1	Pulse	0.1000	3
H2	In	115	278595.56	0.3	94.9	Pulse	0.1000	3
He	Sc	45	37061.19	0.7	100.3	Pulse	0.1000	3
He	Ge	72	66746.37	0.8	103.4	Pulse	0.1000	3
He	In	115	61277.79	1.3	97.0	Pulse	0.1000	3
He	Tb	159	286642.46	0.4	97.9	Pulse	0.1000	3
He	Bi	209	230042.21	0.1	97.5	Pulse	0.1000	3

No Gas



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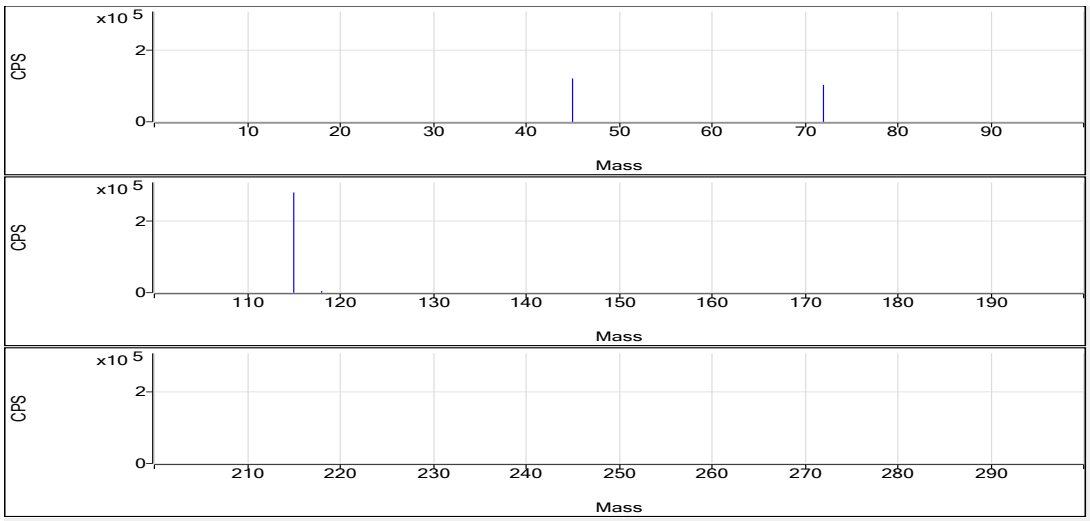
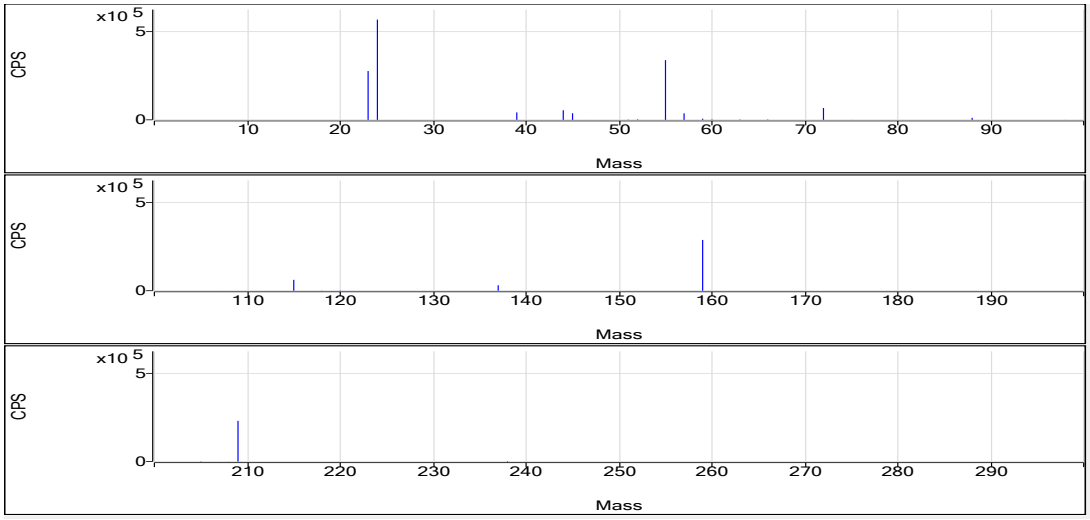


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.069	0.0001	160.00	0.0008	2.195E-05
Be	9	1	No Gas	0.046	0.0001	122.00	0.0008	2.195E-05
Be	9	1	No Gas	0.044	0.0001	116.00	0.0008	2.195E-05
Se	78	2	H2	0.161	0.0001	8.67	0.0004	1.386E-05
Se	78	2	H2	0.234	0.0001	12.00	0.0004	1.386E-05
Se	78	2	H2	0.15	0.0001	8.00	0.0004	1.386E-05
Na	23	3	He	1832.896	7.4459	274583.75	0.0038	0.4416
Na	23	3	He	1825.742	7.4185	277148.14	0.0038	0.4416
Na	23	3	He	1833.202	7.4471	275149.53	0.0038	0.4416
Mg	24	3	He	8228.748	15.3465	565935.81	0.0019	0.005872
Mg	24	3	He	8121.007	15.1456	565822.57	0.0019	0.005872
Mg	24	3	He	8229.432	15.3477	567059.99	0.0019	0.005872
Al	27	3	He	11.417	0.0071	260.01	0.0006	0.0004496
Al	27	3	He	10.797	0.0067	250.01	0.0006	0.0004496
Al	27	3	He	7.649	0.0049	180.01	0.0006	0.0004496
K	39	3	He	592.459	1.1308	41700.41	0.0012	0.4456
K	39	3	He	582.884	1.1197	41831.26	0.0012	0.4456
K	39	3	He	601.397	1.1411	42161.65	0.0012	0.4456
Ca	44	3	He	21806.66	1.4447	53278.24	0.0001	0.003779
Ca	44	3	He	22398.609	1.4839	55435.31	0.0001	0.003779
Ca	44	3	He	21847.27	1.4474	53478.78	0.0001	0.003779
Ti	47	3	He	1.566	0.0008	30.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	0.345	0.0382	1410.08	0.0223	0.03054
V	51	3	He	0.239	0.0359	1340.07	0.0223	0.03054
V	51	3	He	0.121	0.0332	1228.06	0.0223	0.03054
Cr	52	3	He	0.792	0.0597	2200.26	0.0285	0.03714
Cr	52	3	He	1.702	0.0856	3197.02	0.0285	0.03714
Cr	52	3	He	0.569	0.0533	1970.20	0.0285	0.03714
Mn	55	3	He	735.835	9.1173	336219.72	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	737.205	9.1342	341244.25	0.0124	0.004415
Mn	55	3	He	730.323	9.049	334337.65	0.0124	0.004415
Fe	57	3	He	1790.235	1.0169	37499.36	0.0006	0.001356
Fe	57	3	He	1742.527	0.9898	36978.06	0.0006	0.001356
Fe	57	3	He	1695.483	0.9631	35584.87	0.0006	0.001356
Co	59	3	He	2.979	0.1758	6481.65	0.0581	0.002697
Co	59	3	He	2.931	0.173	6461.68	0.0581	0.002697
Co	59	3	He	3.136	0.1849	6831.85	0.0581	0.002697
Ni	60	3	He	3.748	0.0364	2420.29	0.0087	0.003928
Ni	60	3	He	3.563	0.0348	2310.24	0.0087	0.003928
Ni	60	3	He	3.553	0.0347	2340.27	0.0087	0.003928
Cu	63	3	He	0.834	0.0278	1850.18	0.0261	0.006048
Cu	63	3	He	1.043	0.0333	2210.24	0.0261	0.006048
Cu	63	3	He	0.717	0.0248	1670.15	0.0261	0.006048
Zn	66	3	He	8.488	0.0278	1850.17	0.0029	0.003512
Zn	66	3	He	7.608	0.0253	1680.15	0.0029	0.003512
Zn	66	3	He	8.77	0.0286	1930.19	0.0029	0.003512
As	75	3	He	1.644	0.0041	274.00	0.0021	0.0007233
As	75	3	He	1.341	0.0035	232.00	0.0021	0.0007233
As	75	3	He	1.344	0.0035	236.00	0.0021	0.0007233
Sr	88	3	He	21	0.1886	11725.23	0.009	0.0005796
Sr	88	3	He	21.462	0.1927	11765.19	0.009	0.0005796
Sr	88	3	He	19.495	0.1751	10614.33	0.009	0.0005796
Mo	98	3	He	0.178	0.0045	280.01	0.0235	0.0003188
Mo	98	3	He	0.161	0.0041	250.01	0.0235	0.0003188
Mo	98	3	He	0.267	0.0066	400.02	0.0235	0.0003188
Ag	107	3	He	0.039	0.0024	150.01	0.0499	0.0004754
Ag	107	3	He	0.033	0.0021	130.01	0.0499	0.0004754
Ag	107	3	He	0.033	0.0021	130.01	0.0499	0.0004754
Cd	111	3	He	0.039	0.0002	14.00	0.0055	1.07E-05
Cd	111	3	He	0.045	0.0003	16.00	0.0055	1.07E-05
Cd	111	3	He	0.064	0.0004	22.00	0.0055	1.07E-05
Sn	120	3	He	0.524	0.0257	1600.15	0.0164	0.01713
Sn	120	3	He	0.394	0.0236	1440.14	0.0164	0.01713
Sn	120	3	He	0.474	0.0249	1510.13	0.0164	0.01713
Sb	121	3	He	0.097	0.0018	110.00	0.0155	0.0002641
Sb	121	3	He	0.099	0.0018	110.00	0.0155	0.0002641
Sb	121	3	He	0.047	0.001	60.00	0.0155	0.0002641
Ba	137	3	He	98.422	0.4902	30474.42	0.005	0.0001577
Ba	137	3	He	103.339	0.5146	31416.68	0.005	0.0001577
Ba	137	3	He	100.887	0.5024	30454.59	0.005	0.0001577
Tl	205	3	He	0.234	0.0063	1810.17	0.026	0.0002504
Tl	205	3	He	0.23	0.0062	1790.19	0.026	0.0002504
Tl	205	3	He	0.184	0.005	1450.13	0.026	0.0002504
Pb	208	3	He	0.075	0.004	620.04	0.0349	0.001422
Pb	208	3	He	0.081	0.0043	630.04	0.0349	0.001422
Pb	208	3	He	0.082	0.0043	750.05	0.0349	0.001422
U	238	3	He	0.24	0.0121	2790.42	0.0502	5.657E-05
U	238	3	He	0.22	0.0111	2560.34	0.0502	5.657E-05
U	238	3	He	0.252	0.0127	2920.43	0.0502	5.657E-05
Sc	45	1	No Gas			2127359.97		
Sc	45	1	No Gas			2119903.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2092060.75		
Ge	72	1	No Gas			1051103.50		
Ge	72	1	No Gas			1045684.44		
Ge	72	1	No Gas			1044729.36		
Sc	45	2	H2			121412.83		
Sc	45	2	H2			119224.98		
Sc	45	2	H2			121010.99		
Ge	72	2	H2			103130.32		
Ge	72	2	H2			103735.54		
Ge	72	2	H2			101166.37		
In	115	2	H2			279180.00		
In	115	2	H2			279106.52		
In	115	2	H2			277500.17		
Sc	45	3	He			36877.27		
Sc	45	3	He			37358.85		
Sc	45	3	He			36947.45		
Ge	72	3	He			66474.86		
Ge	72	3	He			66374.46		
Ge	72	3	He			67389.78		
In	115	3	He			62179.74		
In	115	3	He			61055.04		
In	115	3	He			60622.68		
Tb	159	3	He			285321.60		
Tb	159	3	He			287008.63		
Tb	159	3	He			287597.14		
Bi	209	3	He			230165.66		
Bi	209	3	He			230039.66		
Bi	209	3	He			229921.32		

Quantitation Report

Data File Name	152SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:28:59 AM
Sample Name	410-136864-C-4-A DU
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

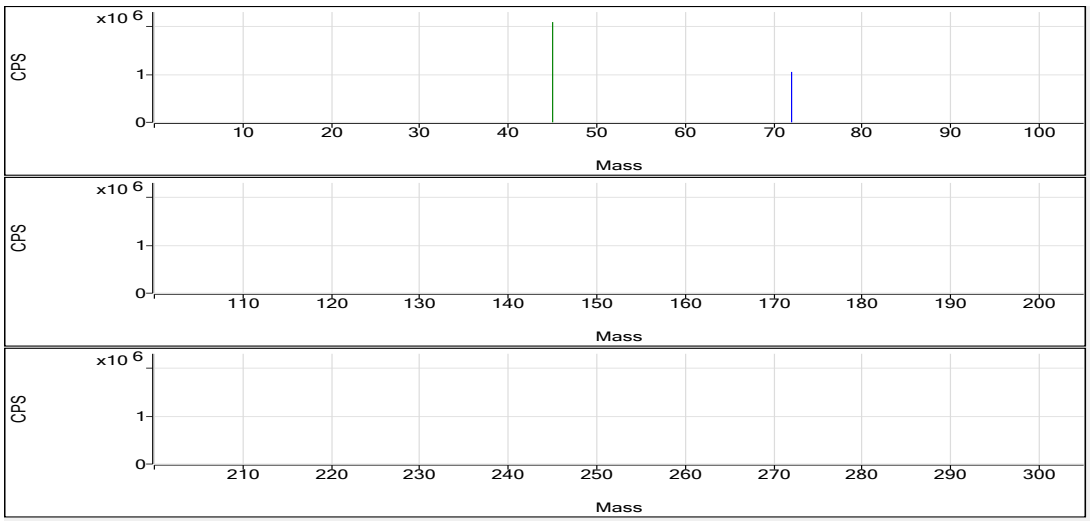
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.034	ppb	25.5	100.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.057	ppb	78.2	4.00	0.0000	Pulse	1.5000	3
Na	23	45	He	9624.415	ppb	0.9	1407285.24	37.2206	Analog	0.1000	3
Mg	24	45	He	42937.747	ppb	0.9	3026708.39	80.0534	Analog	0.1000	3
Al	27	45	He	7.141	ppb	38.0	173.34	0.0046	Pulse	0.1000	3
K	39	45	He	2969.015	ppb	0.9	146669.73	3.8792	Pulse	0.1000	3
Ca	44	45	He	113362.970	ppb	1.0	283362.73	7.4947	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.1000	3
V	51	45	He	-0.114	ppb	N/A	1058.71	0.0280	Pulse	0.5000	3
Cr	52	45	He	0.186	ppb	42.9	1603.47	0.0424	Pulse	0.1000	3
Mn	55	45	He	3915.884	ppb	1.4	1833685.23	48.5002	Analog	0.1000	3
Fe	57	45	He	8976.890	ppb	1.2	192576.70	5.0935	Pulse	0.1000	3
Co	59	45	He	14.148	ppb	1.3	31177.66	0.8246	Pulse	0.1000	3
Ni	60	72	He	14.086	ppb	4.6	8346.05	0.1260	Pulse	0.1000	3
Cu	63	72	He	0.077	ppb	55.2	533.36	0.0081	Pulse	0.1000	3
Zn	66	72	He	12.047	ppb	8.0	2516.98	0.0380	Pulse	0.1000	3
As	75	72	He	5.402	ppb	5.6	787.36	0.0119	Pulse	0.5000	3
Sr	88	115	He	109.794	ppb	0.7	60128.47	0.9835	Pulse	0.1000	3
Mo	98	115	He	0.661	ppb	9.7	970.07	0.0159	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	26.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	18.9	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	1.574	ppb	6.5	2627.00	0.0430	Pulse	0.1000	3
Sb	121	115	He	0.008	ppb	212.0	23.33	0.0004	Pulse	0.1000	3
Ba	137	115	He	515.963	ppb	0.6	157051.92	2.5689	Pulse	0.1000	3
Tl	205	159	He	0.088	ppb	9.8	730.05	0.0026	Pulse	0.1000	3
Pb	208	159	He	0.024	ppb	37.4	646.70	0.0023	Pulse	0.1000	3
U	238	209	He	0.779	ppb	3.7	8930.07	0.0392	Pulse	0.1000	3

ISTD Table:

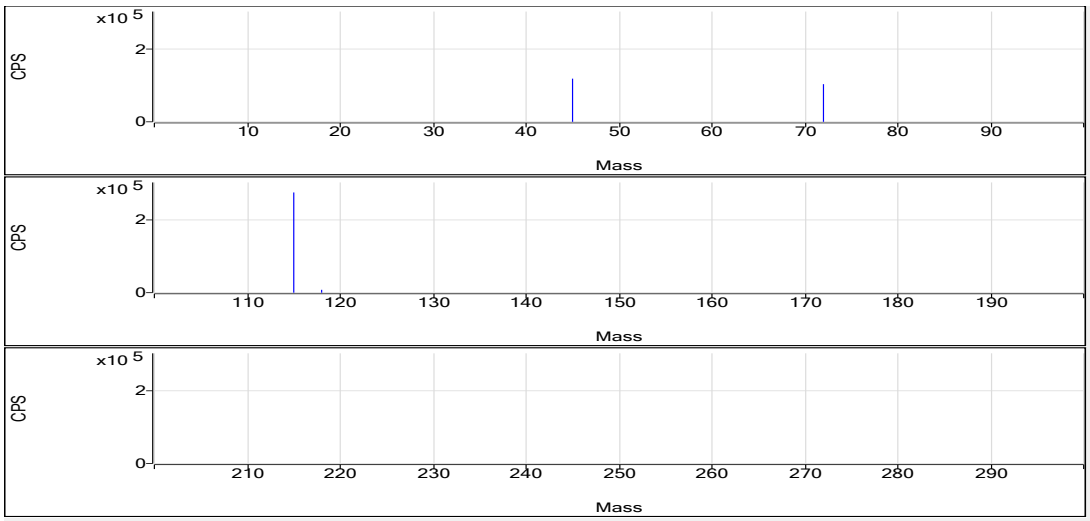
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2093453.93	1.8	103.0	Analog	0.1000	3
No Gas	Ge	72	1052467.69	1.6	104.7	Pulse	0.1000	3
H2	Sc	45	118560.29	1.1	89.7	Pulse	0.1000	3
H2	Ge	72	103429.78	0.4	92.7	Pulse	0.1000	3
H2	In	115	275335.53	0.9	93.7	Pulse	0.1000	3
He	Sc	45	37809.88	0.6	102.3	Pulse	0.1000	3
He	Ge	72	66210.21	1.0	102.6	Pulse	0.1000	3
He	In	115	61135.44	0.5	96.7	Pulse	0.1000	3
He	Tb	159	285871.62	0.8	97.6	Pulse	0.1000	3
He	Bi	209	227962.95	0.6	96.7	Pulse	0.1000	3

No Gas

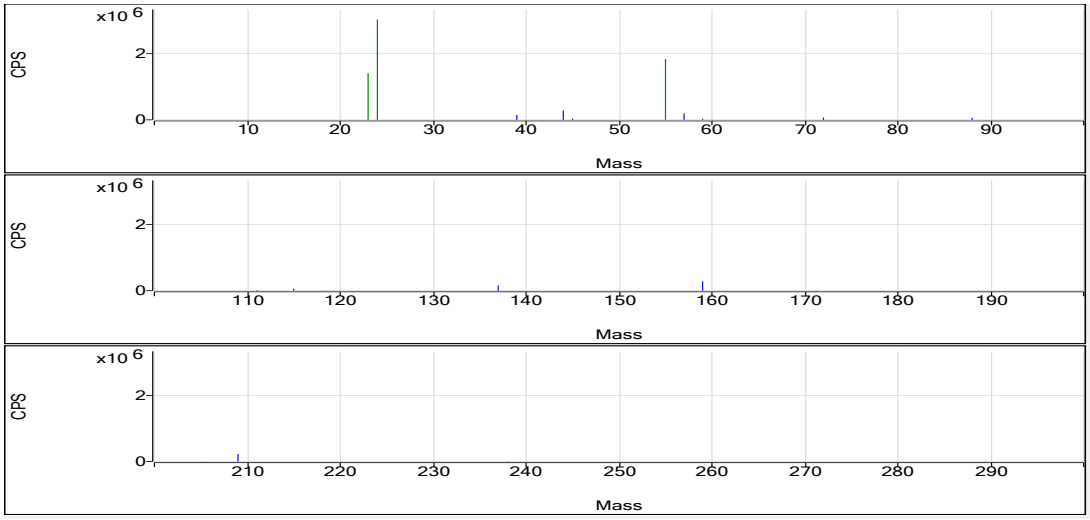


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.043	0.0001	116.00	0.0008	2.195E-05
Be	9	1	No Gas	0.031	0	94.00	0.0008	2.195E-05
Be	9	1	No Gas	0.027	0	90.00	0.0008	2.195E-05
Se	78	2	H2	0.102	0.0001	6.00	0.0004	1.386E-05
Se	78	2	H2	0.013	0	2.00	0.0004	1.386E-05
Se	78	2	H2	0.057	0	4.00	0.0004	1.386E-05
Na	23	3	He	9717.433	37.576	1419615.76	0.0038	0.4416
Na	23	3	He	9551.777	36.943	1405687.95	0.0038	0.4416
Na	23	3	He	9604.033	37.1427	1396552.01	0.0038	0.4416
Mg	24	3	He	43171.853	80.4898	3040889.33	0.0019	0.005872
Mg	24	3	He	42489.226	79.2172	3014228.71	0.0019	0.005872
Mg	24	3	He	43152.161	80.4531	3025007.14	0.0019	0.005872
Al	27	3	He	7.463	0.0048	180.01	0.0006	0.0004496
Al	27	3	He	9.678	0.006	230.01	0.0006	0.0004496
Al	27	3	He	4.282	0.0029	110.00	0.0006	0.0004496
K	39	3	He	2992.838	3.9068	147597.66	0.0012	0.4456
K	39	3	He	2938.091	3.8435	146244.84	0.0012	0.4456
K	39	3	He	2976.117	3.8874	146166.69	0.0012	0.4456
Ca	44	3	He	113576.579	7.5088	283681.99	0.0001	0.003779
Ca	44	3	He	112135.364	7.4136	282088.47	0.0001	0.003779
Ca	44	3	He	114376.966	7.5617	284317.73	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.062	0.0292	1102.05	0.0223	0.03054
V	51	3	He	-0.132	0.0276	1050.05	0.0223	0.03054
V	51	3	He	-0.148	0.0272	1024.04	0.0223	0.03054
Cr	52	3	He	0.267	0.0447	1690.15	0.0285	0.03714
Cr	52	3	He	0.108	0.0402	1530.13	0.0285	0.03714
Cr	52	3	He	0.181	0.0423	1590.14	0.0285	0.03714
Mn	55	3	He	3914.392	48.4817	1831628.88	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3862.72	47.8418	1820387.47	0.0124	0.004415
Mn	55	3	He	3970.54	49.177	1849039.35	0.0124	0.004415
Fe	57	3	He	8930.34	5.0671	191434.27	0.0006	0.001356
Fe	57	3	He	8897.885	5.0487	192103.75	0.0006	0.001356
Fe	57	3	He	9102.445	5.1647	194192.07	0.0006	0.001356
Co	59	3	He	14.235	0.8297	31344.76	0.0581	0.002697
Co	59	3	He	13.929	0.8119	30893.83	0.0581	0.002697
Co	59	3	He	14.28	0.8323	31294.39	0.0581	0.002697
Ni	60	3	He	13.416	0.1202	7872.40	0.0087	0.003928
Ni	60	3	He	14.712	0.1314	8772.99	0.0087	0.003928
Ni	60	3	He	14.131	0.1264	8392.76	0.0087	0.003928
Cu	63	3	He	0.102	0.0087	570.03	0.0261	0.006048
Cu	63	3	He	0.101	0.0087	580.04	0.0261	0.006048
Cu	63	3	He	0.028	0.0068	450.02	0.0261	0.006048
Zn	66	3	He	13.164	0.0412	2700.33	0.0029	0.003512
Zn	66	3	He	11.429	0.0363	2420.28	0.0029	0.003512
Zn	66	3	He	11.549	0.0366	2430.32	0.0029	0.003512
As	75	3	He	5.352	0.0118	772.03	0.0021	0.0007233
As	75	3	He	5.129	0.0113	756.03	0.0021	0.0007233
As	75	3	He	5.726	0.0126	834.03	0.0021	0.0007233
Sr	88	3	He	110.415	0.9891	60148.77	0.009	0.0005796
Sr	88	3	He	108.959	0.9761	59846.88	0.009	0.0005796
Sr	88	3	He	110.007	0.9855	60389.76	0.009	0.0005796
Mo	98	3	He	0.735	0.0176	1070.07	0.0235	0.0003188
Mo	98	3	He	0.618	0.0148	910.07	0.0235	0.0003188
Mo	98	3	He	0.632	0.0152	930.06	0.0235	0.0003188
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Ag	107	3	He	0	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.022	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Sn	120	3	He	1.461	0.0411	2500.30	0.0164	0.01713
Sn	120	3	He	1.659	0.0444	2720.35	0.0164	0.01713
Sn	120	3	He	1.601	0.0434	2660.34	0.0164	0.01713
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	0.025	0.0007	40.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Ba	137	3	He	515.876	2.5685	156192.10	0.005	0.0001577
Ba	137	3	He	519.03	2.5842	158446.74	0.005	0.0001577
Ba	137	3	He	512.984	2.5541	156516.91	0.005	0.0001577
Tl	205	3	He	0.098	0.0028	810.05	0.026	0.0002504
Tl	205	3	He	0.085	0.0025	700.05	0.026	0.0002504
Tl	205	3	He	0.082	0.0024	680.05	0.026	0.0002504
Pb	208	3	He	0.015	0.0019	290.01	0.0349	0.001422
Pb	208	3	He	0.024	0.0023	400.02	0.0349	0.001422
Pb	208	3	He	0.033	0.0026	390.02	0.0349	0.001422
U	238	3	He	0.757	0.0381	8623.17	0.0502	5.657E-05
U	238	3	He	0.811	0.0408	9343.69	0.0502	5.657E-05
U	238	3	He	0.768	0.0386	8823.34	0.0502	5.657E-05
Sc	45	1	No Gas			2105560.59		
Sc	45	1	No Gas			2051600.13		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2123201.06		
Ge	72	1	No Gas			1062070.37		
Ge	72	1	No Gas			1032872.09		
Ge	72	1	No Gas			1062460.61		
Sc	45	2	H2			117904.92		
Sc	45	2	H2			120040.63		
Sc	45	2	H2			117735.31		
Ge	72	2	H2			103130.34		
Ge	72	2	H2			103281.55		
Ge	72	2	H2			103877.45		
In	115	2	H2			277454.84		
In	115	2	H2			275793.43		
In	115	2	H2			272758.32		
Sc	45	3	He			37779.81		
Sc	45	3	He			38050.18		
Sc	45	3	He			37599.64		
Ge	72	3	He			65490.39		
Ge	72	3	He			66745.92		
Ge	72	3	He			66394.33		
In	115	3	He			60823.68		
In	115	3	He			61326.22		
In	115	3	He			61295.80		
Tb	159	3	He			288274.51		
Tb	159	3	He			285354.12		
Tb	159	3	He			283986.23		
Bi	209	3	He			226452.15		
Bi	209	3	He			228962.20		
Bi	209	3	He			228474.49		

Quantitation Report

Data File Name	153SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:31:01 AM
Sample Name	410-136864-K-4-B MS
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

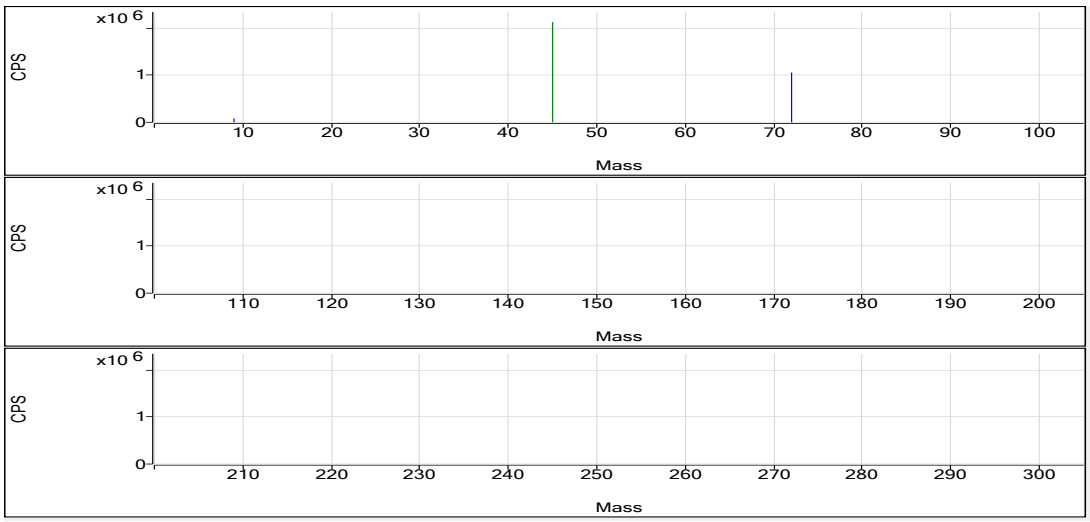
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.043	ppb	1.5	82053.11	0.0384	Pulse	0.5000	3
Se	78	72	H2	105.961	ppb	1.0	4703.22	0.0461	Pulse	1.5000	3
Na	23	45	He	14904.702	ppb	1.9	2192907.62	57.3988	Analog	0.1000	3
Mg	24	45	He	47306.257	ppb	1.1	3369859.74	88.1974	Analog	0.1000	3
Al	27	45	He	5192.229	ppb	2.6	114700.73	3.0024	Pulse	0.1000	3
K	39	45	He	8087.411	ppb	1.2	374374.05	9.7986	Pulse	0.1000	3
Ca	44	45	He	116538.172	ppb	1.5	294359.04	7.7045	Pulse	0.1000	3
Ti	47	45	He	515.548	ppb	3.8	10233.87	0.2679	Pulse	0.1000	3
V	51	45	He	522.989	ppb	1.4	446631.43	11.6900	Pulse	0.5000	3
Cr	52	45	He	520.268	ppb	1.8	566984.64	14.8405	Pulse	0.1000	3
Mn	55	45	He	4405.693	ppb	2.7	2084548.88	54.5661	Analog	0.1000	3
Fe	57	45	He	13903.162	ppb	1.5	301368.29	7.8879	Pulse	0.1000	3
Co	59	45	He	493.918	ppb	1.6	1096407.64	28.6974	Pulse	0.1000	3
Ni	60	72	He	517.166	ppb	1.3	302991.13	4.4864	Pulse	0.1000	3
Cu	63	72	He	480.845	ppb	1.0	849154.39	12.5732	Pulse	0.1000	3
Zn	66	72	He	566.030	ppb	2.6	109768.63	1.6255	Pulse	0.1000	3
As	75	72	He	521.801	ppb	1.4	72906.17	1.0795	Pulse	0.5000	3
Sr	88	115	He	160.987	ppb	2.8	87724.75	1.4419	Pulse	0.1000	3
Mo	98	115	He	54.229	ppb	2.1	77608.23	1.2755	Pulse	0.1000	3
Ag	107	115	He	53.107	ppb	1.6	161127.91	2.6482	Pulse	0.1000	3
Cd	111	115	He	53.822	ppb	1.6	18147.14	0.2982	Pulse	0.5000	3
Sn	120	115	He	108.587	ppb	1.5	109527.23	1.8001	Pulse	0.1000	3
Sb	121	115	He	106.825	ppb	1.2	100560.31	1.6526	Pulse	0.1000	3
Ba	137	115	He	1046.820	ppb	1.5	317116.35	5.2118	Pulse	0.1000	3
Tl	205	159	He	106.123	ppb	0.2	791384.52	2.7637	Pulse	0.1000	3
Pb	208	159	He	52.197	ppb	0.9	522575.88	1.8250	Pulse	0.1000	3
U	238	209	He	54.190	ppb	0.6	615423.59	2.7221	Pulse	0.1000	3

ISTD Table:

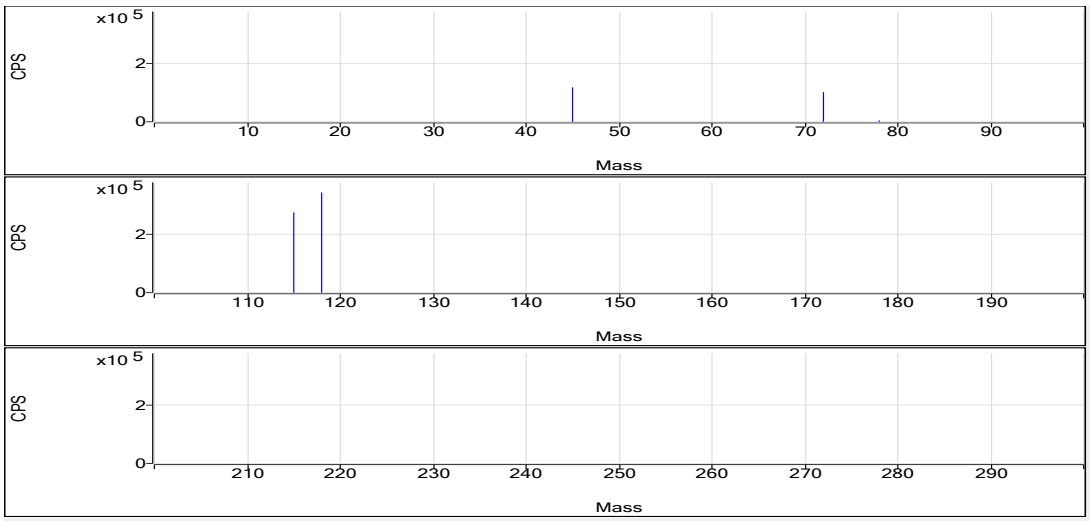
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2135931.95	1.9	105.1	Analog	0.1000	3
No Gas	Ge	72	1059431.00	1.6	105.4	Pulse	0.1000	3
H2	Sc	45	118583.77	0.4	89.8	Pulse	0.1000	3
H2	Ge	72	102052.58	1.7	91.5	Pulse	0.1000	3
H2	In	115	276248.43	0.6	94.1	Pulse	0.1000	3
He	Sc	45	38210.98	1.3	103.4	Pulse	0.1000	3
He	Ge	72	67540.18	0.9	104.6	Pulse	0.1000	3
He	In	115	60850.89	0.9	96.3	Pulse	0.1000	3
He	Tb	159	286351.21	0.9	97.8	Pulse	0.1000	3
He	Bi	209	226087.21	1.1	95.9	Pulse	0.1000	3

No Gas

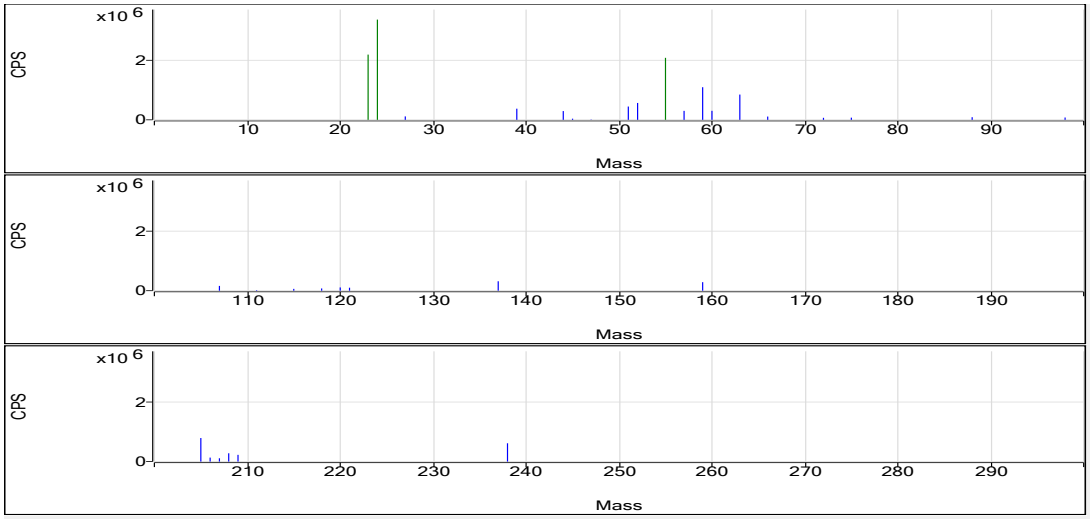


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.008	0.0384	80812.62	0.0008	2.195E-05
Be	9	1	No Gas	49.313	0.0379	82569.80	0.0008	2.195E-05
Be	9	1	No Gas	50.808	0.039	82776.91	0.0008	2.195E-05
Se	78	2	H2	105.335	0.0458	4752.13	0.0004	1.386E-05
Se	78	2	H2	107.196	0.0466	4670.77	0.0004	1.386E-05
Se	78	2	H2	105.35	0.0458	4686.77	0.0004	1.386E-05
Na	23	3	He	15119.742	58.2206	2196657.15	0.0038	0.4416
Na	23	3	He	14574.646	56.1375	2174336.37	0.0038	0.4416
Na	23	3	He	15019.717	57.8383	2207729.34	0.0038	0.4416
Mg	24	3	He	47885.679	89.2776	3368438.07	0.0019	0.005872
Mg	24	3	He	47042.318	87.7054	3397033.07	0.0019	0.005872
Mg	24	3	He	46990.774	87.6093	3344108.08	0.0019	0.005872
Al	27	3	He	5324.823	3.0791	116174.64	0.0006	0.0004496
Al	27	3	He	5057.903	2.9248	113283.76	0.0006	0.0004496
Al	27	3	He	5193.96	3.0035	114643.80	0.0006	0.0004496
K	39	3	He	8183.801	9.91	373905.39	0.0012	0.4456
K	39	3	He	7982.243	9.677	374810.78	0.0012	0.4456
K	39	3	He	8096.188	9.8087	374405.97	0.0012	0.4456
Ca	44	3	He	118306.566	7.8214	295100.00	0.0001	0.003779
Ca	44	3	He	114821.382	7.5911	294020.17	0.0001	0.003779
Ca	44	3	He	116486.569	7.7011	293956.95	0.0001	0.003779
Ti	47	3	He	536.325	0.2787	10514.10	0.0005	0
Ti	47	3	He	513.49	0.2668	10333.90	0.0005	0
Ti	47	3	He	496.829	0.2581	9853.62	0.0005	0
V	51	3	He	530.974	11.868	447778.44	0.0223	0.03054
V	51	3	He	516.344	11.5418	447041.25	0.0223	0.03054
V	51	3	He	521.65	11.6601	445074.59	0.0223	0.03054
Cr	52	3	He	527.681	15.0514	567888.86	0.0285	0.03714
Cr	52	3	He	509.914	14.5459	563396.91	0.0285	0.03714
Cr	52	3	He	523.21	14.9242	569668.16	0.0285	0.03714
Mn	55	3	He	4531.846	56.1285	2117722.31	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4299.145	53.2466	2062364.66	0.0124	0.004415
Mn	55	3	He	4386.087	54.3233	2073559.66	0.0124	0.004415
Fe	57	3	He	14135.491	8.0197	302583.98	0.0006	0.001356
Fe	57	3	He	13728.837	7.7891	301688.37	0.0006	0.001356
Fe	57	3	He	13845.159	7.855	299832.52	0.0006	0.001356
Co	59	3	He	502.115	29.1736	1100719.28	0.0581	0.002697
Co	59	3	He	486.599	28.2722	1095048.34	0.0581	0.002697
Co	59	3	He	493.04	28.6465	1093455.30	0.0581	0.002697
Ni	60	3	He	524.761	4.5522	305167.38	0.0087	0.003928
Ni	60	3	He	513.938	4.4584	300448.08	0.0087	0.003928
Ni	60	3	He	512.799	4.4485	303357.94	0.0087	0.003928
Cu	63	3	He	485.992	12.7077	851896.16	0.0261	0.006048
Cu	63	3	He	479.682	12.5428	845256.24	0.0261	0.006048
Cu	63	3	He	476.862	12.4691	850310.77	0.0261	0.006048
Zn	66	3	He	582.633	1.673	112156.30	0.0029	0.003512
Zn	66	3	He	561.901	1.6136	108741.68	0.0029	0.003512
Zn	66	3	He	553.556	1.5897	108407.91	0.0029	0.003512
As	75	3	He	527.485	1.0913	73157.41	0.0021	0.0007233
As	75	3	He	524.296	1.0847	73097.12	0.0021	0.0007233
As	75	3	He	513.622	1.0626	72463.99	0.0021	0.0007233
Sr	88	3	He	163.31	1.4627	88596.73	0.009	0.0005796
Sr	88	3	He	155.805	1.3955	85769.13	0.009	0.0005796
Sr	88	3	He	163.847	1.4675	88808.39	0.009	0.0005796
Mo	98	3	He	54.35	1.2784	77433.57	0.0235	0.0003188
Mo	98	3	He	53.019	1.2471	76649.08	0.0235	0.0003188
Mo	98	3	He	55.318	1.3011	78742.03	0.0235	0.0003188
Ag	107	3	He	53.581	2.6718	161838.24	0.0499	0.0004754
Ag	107	3	He	52.151	2.6005	159835.20	0.0499	0.0004754
Ag	107	3	He	53.587	2.6721	161710.30	0.0499	0.0004754
Cd	111	3	He	53.888	0.2986	18087.73	0.0055	1.07E-05
Cd	111	3	He	52.943	0.2934	18031.65	0.0055	1.07E-05
Cd	111	3	He	54.635	0.3028	18322.05	0.0055	1.07E-05
Sn	120	3	He	109.937	1.8222	110376.69	0.0164	0.01713
Sn	120	3	He	106.821	1.7711	108855.04	0.0164	0.01713
Sn	120	3	He	109.003	1.8069	109349.96	0.0164	0.01713
Sb	121	3	He	108.305	1.6755	101490.57	0.0155	0.0002641
Sb	121	3	He	105.962	1.6393	100754.39	0.0155	0.0002641
Sb	121	3	He	106.208	1.6431	99435.98	0.0155	0.0002641
Ba	137	3	He	1058.486	5.2699	319209.27	0.005	0.0001577
Ba	137	3	He	1028.78	5.122	314811.30	0.005	0.0001577
Ba	137	3	He	1053.193	5.2435	317328.47	0.005	0.0001577
Tl	205	3	He	105.903	2.758	797037.18	0.026	0.0002504
Tl	205	3	He	106.287	2.768	785331.16	0.026	0.0002504
Tl	205	3	He	106.178	2.7651	791785.22	0.026	0.0002504
Pb	208	3	He	51.689	1.8073	277947.30	0.0349	0.001422
Pb	208	3	He	52.576	1.8383	278795.07	0.0349	0.001422
Pb	208	3	He	52.324	1.8295	279015.58	0.0349	0.001422
U	238	3	He	54.406	2.733	619805.42	0.0502	5.657E-05
U	238	3	He	54.36	2.7307	610010.23	0.0502	5.657E-05
U	238	3	He	53.803	2.7027	616455.11	0.0502	5.657E-05
Sc	45	1	No Gas			2104847.31		
Sc	45	1	No Gas			2180905.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2122043.09		
Ge	72	1	No Gas			1040781.08		
Ge	72	1	No Gas			1072716.55		
Ge	72	1	No Gas			1064795.37		
Sc	45	2	H2			118398.79		
Sc	45	2	H2			119104.47		
Sc	45	2	H2			118248.05		
Ge	72	2	H2			103714.65		
Ge	72	2	H2			100169.68		
Ge	72	2	H2			102273.40		
In	115	2	H2			274498.04		
In	115	2	H2			276567.69		
In	115	2	H2			277679.57		
Sc	45	3	He			37729.92		
Sc	45	3	He			38732.32		
Sc	45	3	He			38170.70		
Ge	72	3	He			67037.64		
Ge	72	3	He			67389.59		
Ge	72	3	He			68193.30		
In	115	3	He			61165.45		
In	115	3	He			62049.15		
In	115	3	He			61105.39		
Tb	159	3	He			288990.86		
Tb	159	3	He			283717.98		
Tb	159	3	He			286344.80		
Bi	209	3	He			226785.11		
Bi	209	3	He			223389.20		
Bi	209	3	He			228087.32		

Quantitation Report

Data File Name	154SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:33:03 AM
Sample Name	410-136864-J-4-A MSD
Sample Type	Sample
Comment	D29
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

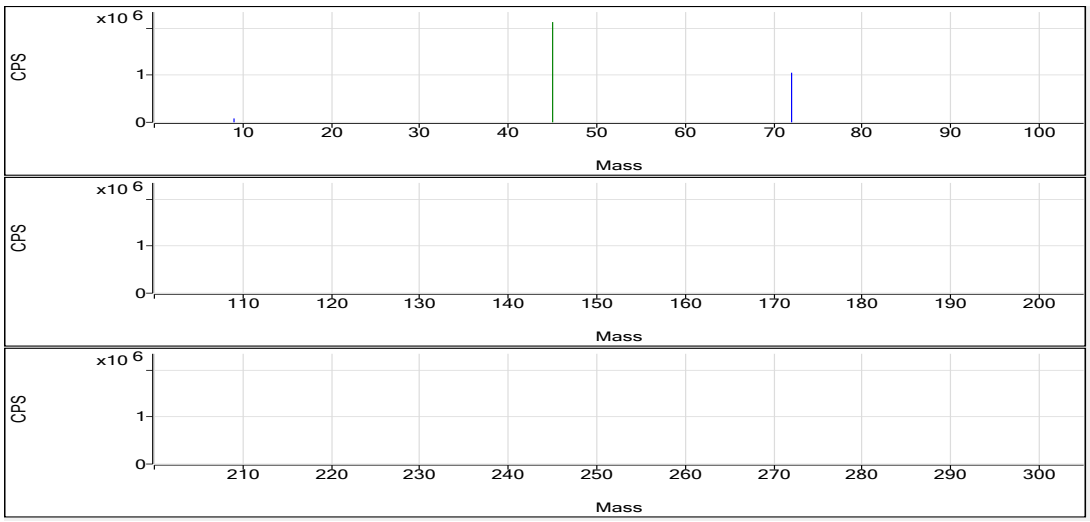
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.314	ppb	2.0	82377.60	0.0386	Pulse	0.5000	3
Se	78	72	H2	109.406	ppb	1.9	4773.47	0.0476	Pulse	1.5000	3
Na	23	45	He	15284.248	ppb	2.3	2175716.27	58.8492	Analog	0.1000	3
Mg	24	45	He	49039.879	ppb	1.8	3380506.09	91.4294	Analog	0.1000	3
Al	27	45	He	5207.038	ppb	2.6	111318.35	3.0110	Pulse	0.1000	3
K	39	45	He	8359.552	ppb	2.3	373907.83	10.1133	Pulse	0.1000	3
Ca	44	45	He	119955.792	ppb	3.7	293126.24	7.9304	Pulse	0.1000	3
Ti	47	45	He	543.698	ppb	3.5	10444.13	0.2825	Pulse	0.1000	3
V	51	45	He	542.011	ppb	2.8	447843.41	12.1140	Pulse	0.5000	3
Cr	52	45	He	542.527	ppb	2.5	572072.21	15.4739	Pulse	0.1000	3
Mn	55	45	He	4548.524	ppb	2.8	2082606.38	56.3350	Analog	0.1000	3
Fe	57	45	He	14425.769	ppb	3.3	302536.43	8.1844	Pulse	0.1000	3
Co	59	45	He	513.622	ppb	2.9	1103194.15	29.8422	Pulse	0.1000	3
Ni	60	72	He	524.406	ppb	1.3	302968.02	4.5491	Pulse	0.1000	3
Cu	63	72	He	486.721	ppb	1.1	847546.06	12.7268	Pulse	0.1000	3
Zn	66	72	He	529.444	ppb	1.9	101259.62	1.5206	Pulse	0.1000	3
As	75	72	He	530.231	ppb	1.7	73048.27	1.0970	Pulse	0.5000	3
Sr	88	115	He	159.896	ppb	1.1	87537.46	1.4321	Pulse	0.1000	3
Mo	98	115	He	54.995	ppb	4.1	79025.74	1.2936	Pulse	0.1000	3
Ag	107	115	He	52.987	ppb	3.0	161450.49	2.6422	Pulse	0.1000	3
Cd	111	115	He	53.584	ppb	3.7	18141.15	0.2969	Pulse	0.5000	3
Sn	120	115	He	109.217	ppb	4.9	110589.54	1.8104	Pulse	0.1000	3
Sb	121	115	He	105.451	ppb	2.8	99685.21	1.6314	Pulse	0.1000	3
Ba	137	115	He	1040.112	ppb	4.0	316361.99	5.1784	Pulse	0.1000	3
Tl	205	159	He	106.046	ppb	1.7	791009.13	2.7617	Pulse	0.1000	3
Pb	208	159	He	51.868	ppb	1.7	519450.00	1.8136	Pulse	0.1000	3
U	238	209	He	53.075	ppb	0.3	610625.90	2.6661	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2132854.19	1.2	104.9	Analog	0.1000	3
No Gas	Ge	72	1055358.01	0.9	105.0	Pulse	0.1000	3
H2	Sc	45	116036.92	0.9	87.8	Pulse	0.1000	3
H2	Ge	72	100317.48	1.0	89.9	Pulse	0.1000	3
H2	In	115	276747.30	1.5	94.2	Pulse	0.1000	3
He	Sc	45	36984.65	2.4	100.1	Pulse	0.1000	3
He	Ge	72	66602.21	1.5	103.2	Pulse	0.1000	3
He	In	115	61135.81	2.7	96.7	Pulse	0.1000	3
He	Tb	159	286449.10	0.9	97.8	Pulse	0.1000	3
He	Bi	209	229033.60	0.4	97.1	Pulse	0.1000	3

No Gas



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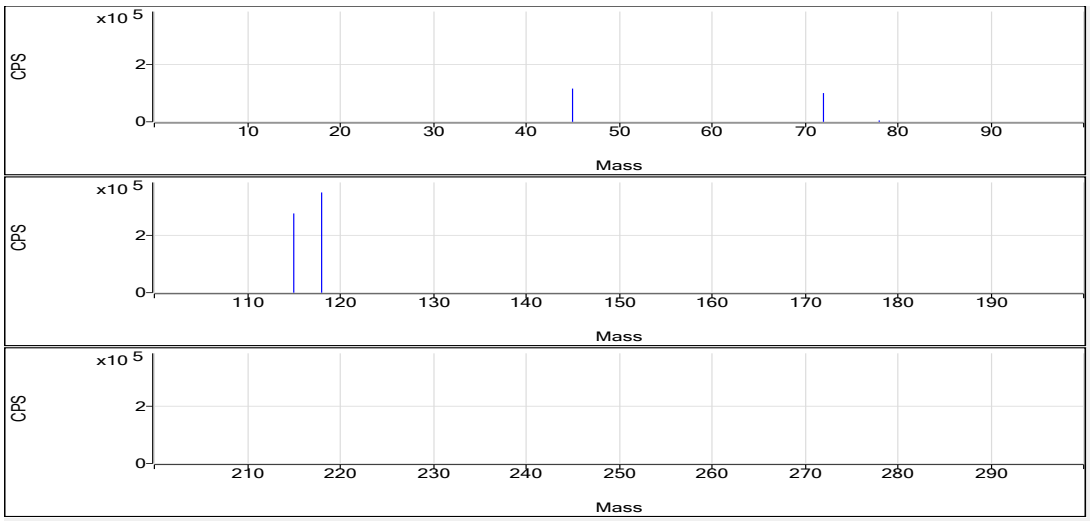
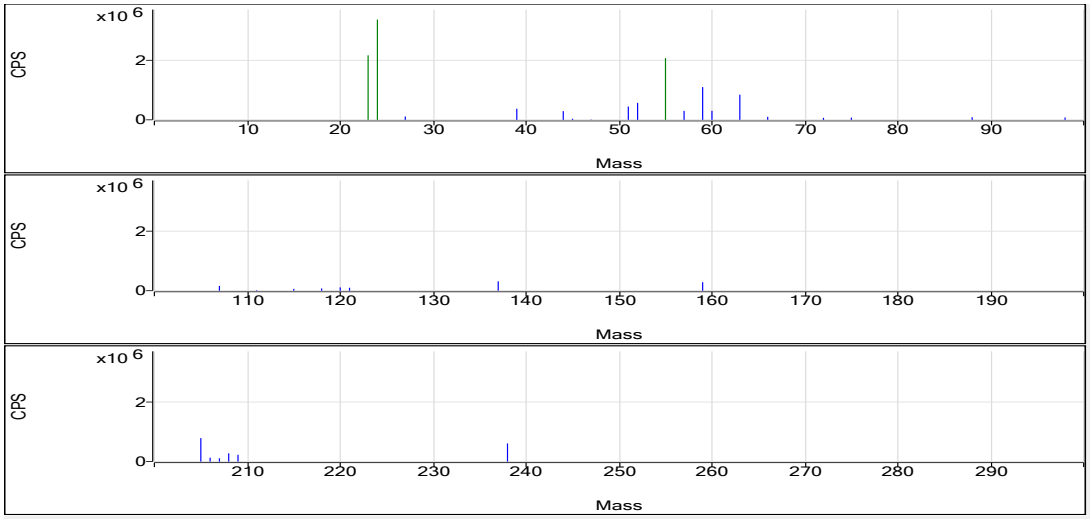


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.171	0.0378	81616.56	0.0008	2.195E-05
Be	9	1	No Gas	51.119	0.0392	83374.58	0.0008	2.195E-05
Be	9	1	No Gas	50.652	0.0389	82141.67	0.0008	2.195E-05
Se	78	2	H2	107.59	0.0468	4718.12	0.0004	1.386E-05
Se	78	2	H2	108.975	0.0474	4788.81	0.0004	1.386E-05
Se	78	2	H2	111.652	0.0486	4813.48	0.0004	1.386E-05
Na	23	3	He	15404.283	59.3079	2179403.25	0.0038	0.4416
Na	23	3	He	14886.266	57.3283	2176798.09	0.0038	0.4416
Na	23	3	He	15562.195	59.9114	2170947.47	0.0038	0.4416
Mg	24	3	He	49204.716	91.7367	3371071.51	0.0019	0.005872
Mg	24	3	He	48084.385	89.6481	3404001.20	0.0019	0.005872
Mg	24	3	He	49830.534	92.9034	3366445.57	0.0019	0.005872
Al	27	3	He	5291.732	3.06	112445.87	0.0006	0.0004496
Al	27	3	He	5053.792	2.9224	110965.95	0.0006	0.0004496
Al	27	3	He	5275.591	3.0506	110543.22	0.0006	0.0004496
K	39	3	He	8382.334	10.1397	372604.37	0.0012	0.4456
K	39	3	He	8159.678	9.8822	375232.34	0.0012	0.4456
K	39	3	He	8536.643	10.3181	373886.79	0.0012	0.4456
Ca	44	3	He	120654.972	7.9766	293116.71	0.0001	0.003779
Ca	44	3	He	115161.453	7.6136	289091.99	0.0001	0.003779
Ca	44	3	He	124050.952	8.201	297170.02	0.0001	0.003779
Ti	47	3	He	562.728	0.2924	10744.40	0.0005	0
Ti	47	3	He	524.812	0.2727	10354.06	0.0005	0
Ti	47	3	He	543.555	0.2824	10233.93	0.0005	0
V	51	3	He	550.847	12.311	452396.78	0.0223	0.03054
V	51	3	He	524.685	11.7278	445311.66	0.0223	0.03054
V	51	3	He	550.5	12.3033	445821.78	0.0223	0.03054
Cr	52	3	He	549.082	15.6604	575475.58	0.0285	0.03714
Cr	52	3	He	527.039	15.0332	570820.03	0.0285	0.03714
Cr	52	3	He	551.46	15.728	569921.01	0.0285	0.03714
Mn	55	3	He	4591.934	56.8726	2089912.63	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	4406.624	54.5777	2072353.09	0.0124	0.004415
Mn	55	3	He	4647.014	57.5548	2085553.41	0.0124	0.004415
Fe	57	3	He	14481.75	8.2162	301921.05	0.0006	0.001356
Fe	57	3	He	13919.614	7.8973	299865.27	0.0006	0.001356
Fe	57	3	He	14875.943	8.4398	305822.98	0.0006	0.001356
Co	59	3	He	517.73	30.0808	1105387.95	0.0581	0.002697
Co	59	3	He	497.293	28.8935	1097107.17	0.0581	0.002697
Co	59	3	He	525.843	30.5521	1107087.33	0.0581	0.002697
Ni	60	3	He	532.114	4.6159	305033.08	0.0087	0.003928
Ni	60	3	He	519.548	4.507	297430.66	0.0087	0.003928
Ni	60	3	He	521.556	4.5244	306440.31	0.0087	0.003928
Cu	63	3	He	491.179	12.8433	848724.13	0.0261	0.006048
Cu	63	3	He	488.174	12.7648	842386.16	0.0261	0.006048
Cu	63	3	He	480.809	12.5723	851527.88	0.0261	0.006048
Zn	66	3	He	538.022	1.5452	102111.72	0.0029	0.003512
Zn	66	3	He	531.732	1.5272	100783.19	0.0029	0.003512
Zn	66	3	He	518.579	1.4895	100883.96	0.0029	0.003512
As	75	3	He	533.86	1.1045	72986.63	0.0021	0.0007233
As	75	3	He	536.798	1.1105	73288.11	0.0021	0.0007233
As	75	3	He	520.034	1.0759	72870.09	0.0021	0.0007233
Sr	88	3	He	161.891	1.45	86666.01	0.009	0.0005796
Sr	88	3	He	158.465	1.4193	89331.65	0.009	0.0005796
Sr	88	3	He	159.333	1.4271	86614.72	0.009	0.0005796
Mo	98	3	He	57.11	1.3433	80290.07	0.0235	0.0003188
Mo	98	3	He	52.649	1.2384	77945.59	0.0235	0.0003188
Mo	98	3	He	55.226	1.299	78841.56	0.0235	0.0003188
Ag	107	3	He	54.014	2.6934	160988.22	0.0499	0.0004754
Ag	107	3	He	51.171	2.5517	160604.28	0.0499	0.0004754
Ag	107	3	He	53.777	2.6816	162758.98	0.0499	0.0004754
Cd	111	3	He	54.997	0.3048	18215.89	0.0055	1.07E-05
Cd	111	3	He	51.349	0.2845	17909.50	0.0055	1.07E-05
Cd	111	3	He	54.405	0.3015	18298.05	0.0055	1.07E-05
Sn	120	3	He	112.267	1.8605	111204.27	0.0164	0.01713
Sn	120	3	He	103.059	1.7093	107586.15	0.0164	0.01713
Sn	120	3	He	112.323	1.8614	112978.20	0.0164	0.01713
Sb	121	3	He	107.972	1.6704	99840.52	0.0155	0.0002641
Sb	121	3	He	102.15	1.5803	99467.53	0.0155	0.0002641
Sb	121	3	He	106.23	1.6434	99747.58	0.0155	0.0002641
Ba	137	3	He	1075.792	5.3561	320139.23	0.005	0.0001577
Ba	137	3	He	994.43	4.951	311621.81	0.005	0.0001577
Ba	137	3	He	1050.114	5.2282	317324.94	0.005	0.0001577
Tl	205	3	He	106.086	2.7628	792076.39	0.026	0.0002504
Tl	205	3	He	104.236	2.7146	784308.35	0.026	0.0002504
Tl	205	3	He	107.816	2.8078	796642.64	0.026	0.0002504
Pb	208	3	He	52.218	1.8258	280737.30	0.0349	0.001422
Pb	208	3	He	50.881	1.7791	274568.86	0.0349	0.001422
Pb	208	3	He	52.506	1.8358	277846.15	0.0349	0.001422
U	238	3	He	52.893	2.657	611026.16	0.0502	5.657E-05
U	238	3	He	53.12	2.6684	610879.13	0.0502	5.657E-05
U	238	3	He	53.211	2.673	609972.41	0.0502	5.657E-05
Sc	45	1	No Gas			2161920.12		
Sc	45	1	No Gas			2124403.25		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2112239.19		
Ge	72	1	No Gas			1061974.52		
Ge	72	1	No Gas			1059733.34		
Ge	72	1	No Gas			1044366.16		
Sc	45	2	H2			116493.35		
Sc	45	2	H2			116806.77		
Sc	45	2	H2			114810.64		
Ge	72	2	H2			100814.69		
Ge	72	2	H2			101025.50		
Ge	72	2	H2			99112.25		
In	115	2	H2			272158.22		
In	115	2	H2			280382.18		
In	115	2	H2			277701.50		
Sc	45	3	He			36747.26		
Sc	45	3	He			37970.71		
Sc	45	3	He			36235.99		
Ge	72	3	He			66083.04		
Ge	72	3	He			65993.07		
Ge	72	3	He			67730.52		
In	115	3	He			60362.29		
In	115	3	He			63535.74		
In	115	3	He			61285.59		
Tb	159	3	He			286696.79		
Tb	159	3	He			288924.88		
Tb	159	3	He			283725.62		
Bi	209	3	He			229968.88		
Bi	209	3	He			228931.83		
Bi	209	3	He			228200.09		

Quantitation Report

Data File Name	157_CCV.d
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Sample Name	CCV 4621649
Sample Type	CCV
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

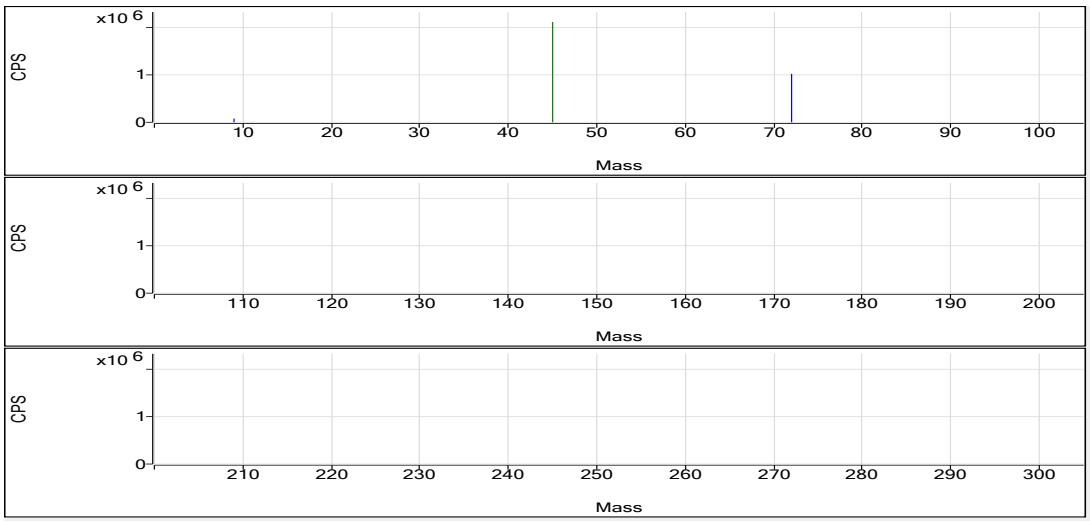
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.804	ppb	1.2	78805.16	0.0375	Pulse	0.5000	3
Se	78	72	H2	54.196	ppb	0.5	2308.64	0.0236	Pulse	1.5000	3
Na	23	45	He	5078.451	ppb	2.8	736528.24	19.8485	Pulse	0.1000	3
Mg	24	45	He	5223.693	ppb	4.0	361495.65	9.7442	Pulse	0.1000	3
Al	27	45	He	5093.717	ppb	4.1	109270.22	2.9455	Pulse	0.1000	3
K	39	45	He	5187.574	ppb	3.2	239146.49	6.4450	Pulse	0.1000	3
Ca	44	45	He	5110.844	ppb	2.6	12672.53	0.3415	Pulse	0.1000	3
Ti	47	45	He	5165.078	ppb	3.8	99566.83	2.6837	Pulse	0.1000	3
V	51	45	He	519.259	ppb	2.9	430686.01	11.6068	Pulse	0.5000	3
Cr	52	45	He	524.385	ppb	3.2	555002.13	14.9576	Pulse	0.1000	3
Mn	55	45	He	511.183	ppb	3.7	235032.91	6.3351	Pulse	0.1000	3
Fe	57	45	He	5148.206	ppb	2.6	108428.42	2.9217	Pulse	0.1000	3
Co	59	45	He	493.899	ppb	3.5	1064689.54	28.6963	Pulse	0.1000	3
Ni	60	72	He	524.088	ppb	0.4	294470.73	4.5464	Pulse	0.1000	3
Cu	63	72	He	493.212	ppb	0.9	835308.37	12.8964	Pulse	0.1000	3
Zn	66	72	He	516.259	ppb	1.5	96040.58	1.4828	Pulse	0.1000	3
As	75	72	He	516.986	ppb	0.7	69276.47	1.0696	Pulse	0.5000	3
Sr	88	115	He	50.950	ppb	2.0	28238.97	0.4567	Pulse	0.1000	3
Mo	98	115	He	52.092	ppb	1.1	75747.87	1.2253	Pulse	0.1000	3
Ag	107	115	He	52.957	ppb	0.8	163254.94	2.6407	Pulse	0.1000	3
Cd	111	115	He	50.864	ppb	0.6	17425.56	0.2819	Pulse	0.5000	3
Sn	120	115	He	51.041	ppb	1.0	52871.63	0.8552	Pulse	0.1000	3
Sb	121	115	He	50.364	ppb	1.8	48178.05	0.7793	Pulse	0.1000	3
Ba	137	115	He	505.862	ppb	0.3	155709.72	2.5186	Pulse	0.1000	3
Tl	205	159	He	51.084	ppb	1.3	381993.54	1.3305	Pulse	0.1000	3
Pb	208	159	He	51.109	ppb	1.6	513051.75	1.7870	Pulse	0.1000	3
U	238	209	He	50.008	ppb	1.2	576342.14	2.5121	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2103321.84	1.1	103.5	Analog	0.1000	3
No Gas	Ge	72	1016418.76	0.4	101.1	Pulse	0.1000	3
H2	Sc	45	119060.85	0.8	90.1	Pulse	0.1000	3
H2	Ge	72	97901.75	0.4	87.8	Pulse	0.1000	3
H2	In	115	283920.62	0.6	96.7	Pulse	0.1000	3
He	Sc	45	37128.37	3.1	100.5	Pulse	0.1000	3
He	Ge	72	64770.74	0.4	100.3	Pulse	0.1000	3
He	In	115	61823.92	0.6	97.8	Pulse	0.1000	3
He	Tb	159	287137.67	1.3	98.1	Pulse	0.1000	3
He	Bi	209	229436.84	0.6	97.3	Pulse	0.1000	3

No Gas



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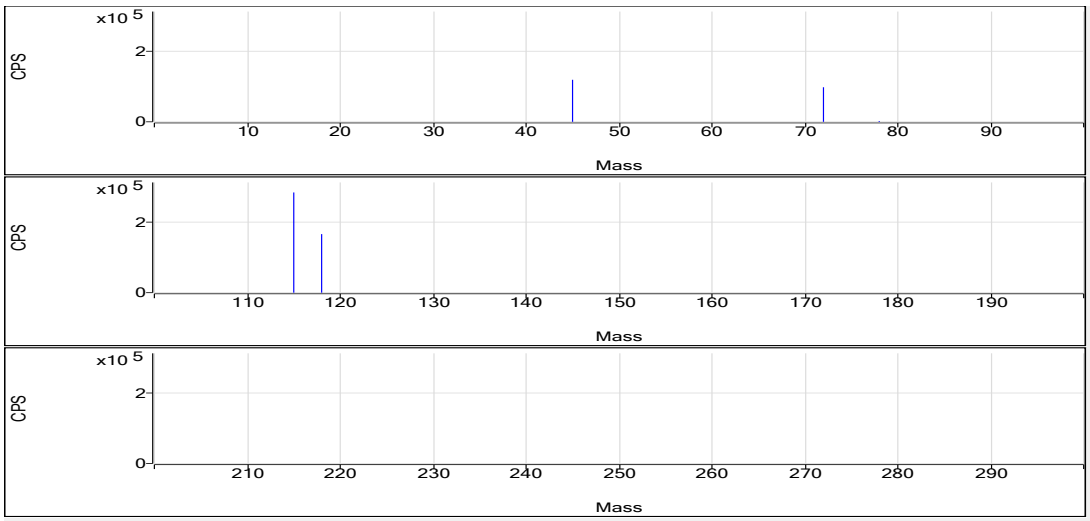
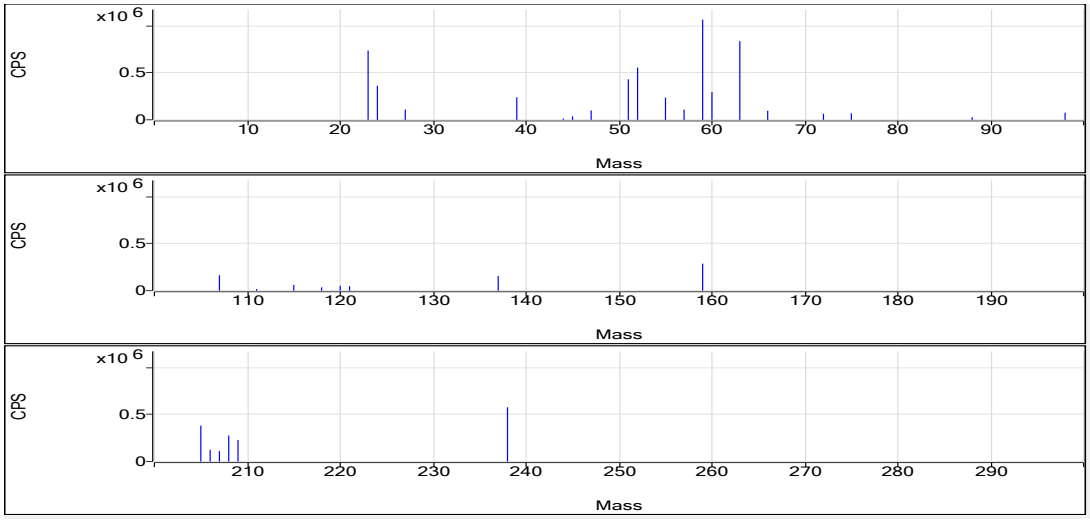


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.165	0.037	78723.31	0.0008	2.195E-05
Be	9	1	No Gas	49.276	0.0378	78888.37	0.0008	2.195E-05
Be	9	1	No Gas	48.972	0.0376	78803.80	0.0008	2.195E-05
Se	78	2	H2	53.894	0.0234	2294.19	0.0004	1.386E-05
Se	78	2	H2	54.423	0.0237	2308.86	0.0004	1.386E-05
Se	78	2	H2	54.271	0.0236	2322.86	0.0004	1.386E-05
Na	23	3	He	4915.557	19.226	737731.32	0.0038	0.4416
Na	23	3	He	5131.516	20.0513	739857.33	0.0038	0.4416
Na	23	3	He	5188.281	20.2682	731996.08	0.0038	0.4416
Mg	24	3	He	4984.601	9.2985	356797.38	0.0019	0.005872
Mg	24	3	He	5312.37	9.9096	365644.88	0.0019	0.005872
Mg	24	3	He	5374.107	10.0247	362044.68	0.0019	0.005872
Al	27	3	He	4864.376	2.8129	107934.89	0.0006	0.0004496
Al	27	3	He	5150.624	2.9784	109897.43	0.0006	0.0004496
Al	27	3	He	5266.151	3.0452	109978.34	0.0006	0.0004496
K	39	3	He	5002.269	6.2307	239079.61	0.0012	0.4456
K	39	3	He	5242.811	6.5088	240164.70	0.0012	0.4456
K	39	3	He	5317.641	6.5954	238195.17	0.0012	0.4456
Ca	44	3	He	4969.665	0.3322	12745.85	0.0001	0.003779
Ca	44	3	He	5125.285	0.3425	12635.91	0.0001	0.003779
Ca	44	3	He	5237.581	0.3499	12635.84	0.0001	0.003779
Ti	47	3	He	4942.185	2.5679	98533.96	0.0005	0
Ti	47	3	He	5254.953	2.7304	100747.12	0.0005	0
Ti	47	3	He	5298.095	2.7528	99419.41	0.0005	0
V	51	3	He	502.216	11.2269	430791.22	0.0223	0.03054
V	51	3	He	524.324	11.7197	432437.03	0.0223	0.03054
V	51	3	He	531.238	11.8739	428829.78	0.0223	0.03054
Cr	52	3	He	504.777	14.3997	552539.25	0.0285	0.03714
Cr	52	3	He	533.651	15.2213	561639.13	0.0285	0.03714
Cr	52	3	He	534.725	15.2519	550828.00	0.0285	0.03714
Mn	55	3	He	491.205	6.0877	233593.38	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	513.411	6.3627	234771.50	0.0124	0.004415
Mn	55	3	He	528.933	6.5549	236733.86	0.0124	0.004415
Fe	57	3	He	4997.443	2.8362	108827.75	0.0006	0.001356
Fe	57	3	He	5251.985	2.9806	109977.05	0.0006	0.001356
Fe	57	3	He	5195.191	2.9483	106480.45	0.0006	0.001356
Co	59	3	He	474.292	27.5572	1057411.23	0.0581	0.002697
Co	59	3	He	500.341	29.0706	1072652.09	0.0581	0.002697
Co	59	3	He	507.065	29.4612	1064005.30	0.0581	0.002697
Ni	60	3	He	522.618	4.5336	292540.21	0.0087	0.003928
Ni	60	3	He	526.172	4.5644	295438.63	0.0087	0.003928
Ni	60	3	He	523.475	4.541	295433.34	0.0087	0.003928
Cu	63	3	He	490.813	12.8337	828122.88	0.0261	0.006048
Cu	63	3	He	498.414	13.0324	843542.72	0.0261	0.006048
Cu	63	3	He	490.409	12.8232	834259.52	0.0261	0.006048
Zn	66	3	He	523.523	1.5037	97026.38	0.0029	0.003512
Zn	66	3	He	517.568	1.4866	96222.05	0.0029	0.003512
Zn	66	3	He	507.685	1.4583	94873.31	0.0029	0.003512
As	75	3	He	518.074	1.0718	69161.98	0.0021	0.0007233
As	75	3	He	520.034	1.0759	69638.17	0.0021	0.0007233
As	75	3	He	512.85	1.061	69029.26	0.0021	0.0007233
Sr	88	3	He	51.169	0.4587	28389.65	0.009	0.0005796
Sr	88	3	He	51.867	0.4649	28890.00	0.009	0.0005796
Sr	88	3	He	49.815	0.4466	27437.27	0.009	0.0005796
Mo	98	3	He	52.077	1.2249	75815.00	0.0235	0.0003188
Mo	98	3	He	51.514	1.2117	75292.21	0.0235	0.0003188
Mo	98	3	He	52.683	1.2392	76136.39	0.0235	0.0003188
Ag	107	3	He	52.503	2.6181	162040.30	0.0499	0.0004754
Ag	107	3	He	52.995	2.6426	164205.92	0.0499	0.0004754
Ag	107	3	He	53.372	2.6614	163518.61	0.0499	0.0004754
Cd	111	3	He	50.519	0.2799	17326.80	0.0055	1.07E-05
Cd	111	3	He	51.111	0.2832	17599.07	0.0055	1.07E-05
Cd	111	3	He	50.962	0.2824	17350.82	0.0055	1.07E-05
Sn	120	3	He	50.46	0.8457	52339.98	0.0164	0.01713
Sn	120	3	He	51.388	0.8609	53493.62	0.0164	0.01713
Sn	120	3	He	51.276	0.8591	52781.29	0.0164	0.01713
Sb	121	3	He	49.318	0.7631	47231.74	0.0155	0.0002641
Sb	121	3	He	50.867	0.7871	48906.66	0.0155	0.0002641
Sb	121	3	He	50.906	0.7877	48395.74	0.0155	0.0002641
Ba	137	3	He	504.625	2.5125	155504.36	0.005	0.0001577
Ba	137	3	He	505.35	2.5161	156342.92	0.005	0.0001577
Ba	137	3	He	507.612	2.5273	155281.87	0.005	0.0001577
Tl	205	3	He	51.868	1.3509	382796.44	0.026	0.0002504
Tl	205	3	He	50.677	1.3199	383985.23	0.026	0.0002504
Tl	205	3	He	50.707	1.3207	379198.94	0.026	0.0002504
Pb	208	3	He	51.884	1.8141	277312.83	0.0349	0.001422
Pb	208	3	He	50.243	1.7568	276549.20	0.0349	0.001422
Pb	208	3	He	51.199	1.7902	276356.87	0.0349	0.001422
U	238	3	He	50.18	2.5207	575737.37	0.0502	5.657E-05
U	238	3	He	50.526	2.5381	581048.00	0.0502	5.657E-05
U	238	3	He	49.32	2.4775	572241.05	0.0502	5.657E-05
Sc	45	1	No Gas			2128838.41		
Sc	45	1	No Gas			2085213.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2095913.56		
Ge	72	1	No Gas			1014872.88		
Ge	72	1	No Gas			1013750.92		
Ge	72	1	No Gas			1020632.48		
Sc	45	2	H2			118035.01		
Sc	45	2	H2			119135.15		
Sc	45	2	H2			120012.40		
Ge	72	2	H2			97833.99		
Ge	72	2	H2			97502.62		
Ge	72	2	H2			98368.64		
In	115	2	H2			284240.33		
In	115	2	H2			285568.12		
In	115	2	H2			281953.41		
Sc	45	3	He			38371.47		
Sc	45	3	He			36898.21		
Sc	45	3	He			36115.44		
Ge	72	3	He			64527.00		
Ge	72	3	He			64726.55		
Ge	72	3	He			65058.67		
In	115	3	He			62169.86		
In	115	3	He			62411.01		
In	115	3	He			61717.59		
Tb	159	3	He			283365.50		
Tb	159	3	He			290919.59		
Tb	159	3	He			287127.93		
Bi	209	3	He			228403.38		
Bi	209	3	He			228932.15		
Bi	209	3	He			230974.98		

Quantitation Report

Data File Name	158_CCB.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:41:18 AM
Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

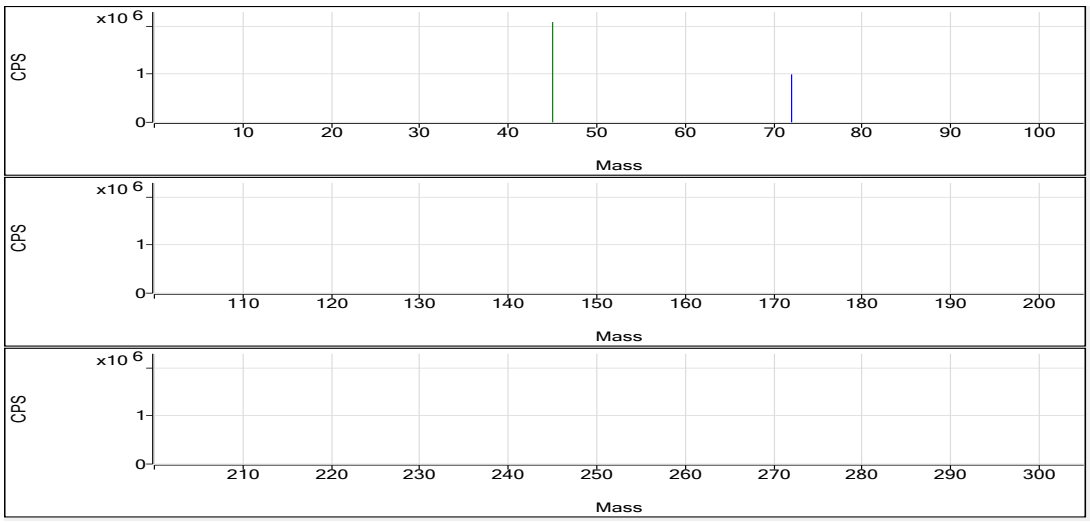
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.037	ppb	23.8	104.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.064	ppb	66.9	4.00	0.0000	Pulse	1.5000	3
Na	23	45	He	-5.328	ppb	N/A	15732.17	0.4212	Pulse	0.1000	3
Mg	24	45	He	1.169	ppb	72.9	300.01	0.0081	Pulse	0.1000	3
Al	27	45	He	1.683	ppb	68.0	53.33	0.0014	Pulse	0.1000	3
K	39	45	He	-18.862	ppb	N/A	15825.74	0.4238	Pulse	0.1000	3
Ca	44	45	He	-7.345	ppb	N/A	123.34	0.0033	Pulse	0.1000	3
Ti	47	45	He	1.878	ppb	83.2	36.67	0.0010	Pulse	0.1000	3
V	51	45	He	-0.029	ppb	N/A	1116.72	0.0299	Pulse	0.5000	3
Cr	52	45	He	0.092	ppb	193.6	1483.46	0.0398	Pulse	0.1000	3
Mn	55	45	He	0.523	ppb	25.7	406.69	0.0109	Pulse	0.1000	3
Fe	57	45	He	-0.035	ppb	N/A	50.00	0.0013	Pulse	0.1000	3
Co	59	45	He	0.157	ppb	23.6	440.02	0.0118	Pulse	0.1000	3
Ni	60	72	He	0.155	ppb	57.5	336.69	0.0053	Pulse	0.1000	3
Cu	63	72	He	0.055	ppb	67.8	476.69	0.0075	Pulse	0.1000	3
Zn	66	72	He	0.072	ppb	290.5	236.68	0.0037	Pulse	0.1000	3
As	75	72	He	0.152	ppb	42.8	66.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.050	ppb	41.6	63.33	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.078	ppb	38.1	133.34	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.007	ppb	127.3	50.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	119.3	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.035	ppb	N/A	1023.41	0.0166	Pulse	0.1000	3
Sb	121	115	He	0.046	ppb	47.4	60.00	0.0010	Pulse	0.1000	3
Ba	137	115	He	0.098	ppb	32.8	40.00	0.0006	Pulse	0.1000	3
Tl	205	159	He	0.096	ppb	18.2	790.05	0.0028	Pulse	0.1000	3
Pb	208	159	He	-0.001	ppb	N/A	400.02	0.0014	Pulse	0.1000	3
U	238	209	He	0.051	ppb	4.6	600.04	0.0026	Pulse	0.1000	3

ISTD Table:

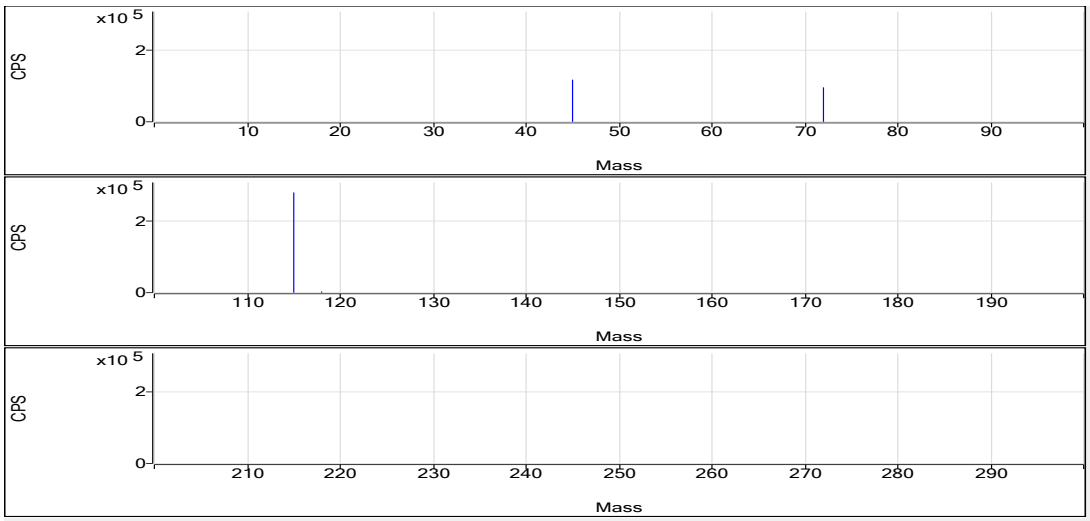
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2081800.75	1.0	102.4	Analog	0.1000	3
No Gas	Ge	72	995170.12	0.9	99.0	Pulse	0.1000	3
H2	Sc	45	117304.33	0.5	88.8	Pulse	0.1000	3
H2	Ge	72	95964.91	0.6	86.0	Pulse	0.1000	3
H2	In	115	278976.08	1.5	95.0	Pulse	0.1000	3
He	Sc	45	37358.46	2.2	101.1	Pulse	0.1000	3
He	Ge	72	63729.20	2.0	98.7	Pulse	0.1000	3
He	In	115	61835.47	1.4	97.9	Pulse	0.1000	3
He	Tb	159	286993.01	0.9	98.0	Pulse	0.1000	3
He	Bi	209	230366.36	0.6	97.7	Pulse	0.1000	3

No Gas

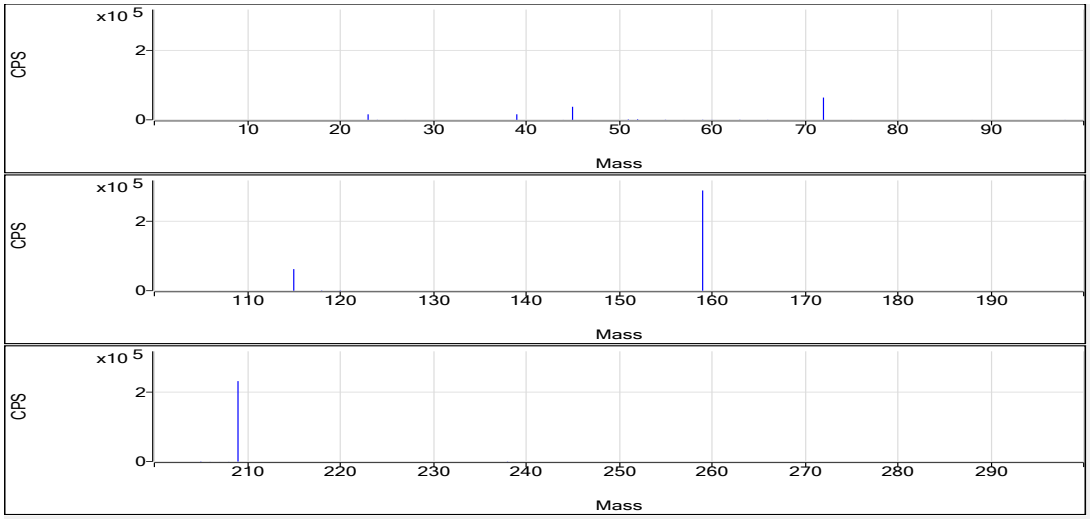


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.04	0.0001	110.00	0.0008	2.195E-05
Be	9	1	No Gas	0.027	0	88.00	0.0008	2.195E-05
Be	9	1	No Gas	0.044	0.0001	116.00	0.0008	2.195E-05
Se	78	2	H2	0.048	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.113	0.0001	6.00	0.0004	1.386E-05
Se	78	2	H2	0.032	0	2.67	0.0004	1.386E-05
Na	23	3	He	-3.654	0.4276	15598.70	0.0038	0.4416
Na	23	3	He	-3.094	0.4298	16129.19	0.0038	0.4416
Na	23	3	He	-9.235	0.4063	15468.61	0.0038	0.4416
Mg	24	3	He	2.145	0.0099	360.02	0.0019	0.005872
Mg	24	3	He	0.567	0.0069	260.01	0.0019	0.005872
Mg	24	3	He	0.796	0.0074	280.01	0.0019	0.005872
Al	27	3	He	0.645	0.0008	30.00	0.0006	0.0004496
Al	27	3	He	2.909	0.0021	80.00	0.0006	0.0004496
Al	27	3	He	1.494	0.0013	50.00	0.0006	0.0004496
K	39	3	He	-6.051	0.4386	15999.23	0.0012	0.4456
K	39	3	He	-23.146	0.4189	15719.01	0.0012	0.4456
K	39	3	He	-27.391	0.4139	15758.97	0.0012	0.4456
Ca	44	3	He	-15.694	0.0027	100.00	0.0001	0.003779
Ca	44	3	He	-8.789	0.0032	120.01	0.0001	0.003779
Ca	44	3	He	2.448	0.0039	150.01	0.0001	0.003779
Ti	47	3	He	0.528	0.0003	10.00	0.0005	0
Ti	47	3	He	3.59	0.0019	70.00	0.0005	0
Ti	47	3	He	1.517	0.0008	30.00	0.0005	0
V	51	3	He	-0.01	0.0303	1106.05	0.0223	0.03054
V	51	3	He	-0.036	0.0297	1116.05	0.0223	0.03054
V	51	3	He	-0.041	0.0296	1128.05	0.0223	0.03054
Cr	52	3	He	0.285	0.0452	1650.15	0.0285	0.03714
Cr	52	3	He	-0.069	0.0352	1320.11	0.0285	0.03714
Cr	52	3	He	0.061	0.0389	1480.13	0.0285	0.03714
Mn	55	3	He	0.529	0.011	400.02	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.655	0.0125	470.02	0.0124	0.004415
Mn	55	3	He	0.386	0.0092	350.02	0.0124	0.004415
Fe	57	3	He	-0.457	0.0011	40.00	0.0006	0.001356
Fe	57	3	He	0.428	0.0016	60.00	0.0006	0.001356
Fe	57	3	He	-0.075	0.0013	50.00	0.0006	0.001356
Co	59	3	He	0.199	0.0143	520.03	0.0581	0.002697
Co	59	3	He	0.142	0.0109	410.02	0.0581	0.002697
Co	59	3	He	0.13	0.0102	390.02	0.0581	0.002697
Ni	60	3	He	0.259	0.0062	400.03	0.0087	0.003928
Ni	60	3	He	0.106	0.0048	310.01	0.0087	0.003928
Ni	60	3	He	0.102	0.0048	300.02	0.0087	0.003928
Cu	63	3	He	0.034	0.0069	450.02	0.0261	0.006048
Cu	63	3	He	0.097	0.0086	550.03	0.0261	0.006048
Cu	63	3	He	0.032	0.0069	430.02	0.0261	0.006048
Zn	66	3	He	0.066	0.0037	240.01	0.0029	0.003512
Zn	66	3	He	-0.135	0.0031	200.01	0.0029	0.003512
Zn	66	3	He	0.285	0.0043	270.01	0.0029	0.003512
As	75	3	He	0.098	0.0009	60.00	0.0021	0.0007233
As	75	3	He	0.134	0.001	64.00	0.0021	0.0007233
As	75	3	He	0.224	0.0012	74.00	0.0021	0.0007233
Sr	88	3	He	0.026	0.0008	50.00	0.009	0.0005796
Sr	88	3	He	0.06	0.0011	70.00	0.009	0.0005796
Sr	88	3	He	0.063	0.0011	70.00	0.009	0.0005796
Mo	98	3	He	0.076	0.0021	130.01	0.0235	0.0003188
Mo	98	3	He	0.108	0.0029	180.01	0.0235	0.0003188
Mo	98	3	He	0.049	0.0015	90.00	0.0235	0.0003188
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	-0.045	0.0164	1010.08	0.0164	0.01713
Sn	120	3	He	-0.083	0.0158	990.07	0.0164	0.01713
Sn	120	3	He	0.024	0.0175	1070.08	0.0164	0.01713
Sb	121	3	He	0.046	0.001	60.00	0.0155	0.0002641
Sb	121	3	He	0.024	0.0006	40.00	0.0155	0.0002641
Sb	121	3	He	0.068	0.0013	80.00	0.0155	0.0002641
Ba	137	3	He	0.131	0.0008	50.00	0.005	0.0001577
Ba	137	3	He	0.096	0.0006	40.00	0.005	0.0001577
Ba	137	3	He	0.067	0.0005	30.00	0.005	0.0001577
Tl	205	3	He	0.076	0.0022	640.04	0.026	0.0002504
Tl	205	3	He	0.103	0.0029	850.06	0.026	0.0002504
Tl	205	3	He	0.109	0.0031	880.06	0.026	0.0002504
Pb	208	3	He	-0.002	0.0014	190.01	0.0349	0.001422
Pb	208	3	He	-0.005	0.0012	140.01	0.0349	0.001422
Pb	208	3	He	0.005	0.0016	260.01	0.0349	0.001422
U	238	3	He	0.049	0.0025	570.03	0.0502	5.657E-05
U	238	3	He	0.053	0.0027	630.04	0.0502	5.657E-05
U	238	3	He	0.05	0.0026	600.04	0.0502	5.657E-05
Sc	45	1	No Gas			2100314.97		
Sc	45	1	No Gas			2060859.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2084227.94		
Ge	72	1	No Gas			1004786.63		
Ge	72	1	No Gas			988050.14		
Ge	72	1	No Gas			992673.58		
Sc	45	2	H2			118006.14		
Sc	45	2	H2			116949.09		
Sc	45	2	H2			116957.77		
Ge	72	2	H2			95951.88		
Ge	72	2	H2			95357.14		
Ge	72	2	H2			96585.71		
In	115	2	H2			282698.92		
In	115	2	H2			279707.03		
In	115	2	H2			274522.28		
Sc	45	3	He			36476.14		
Sc	45	3	He			37528.82		
Sc	45	3	He			38070.42		
Ge	72	3	He			64837.82		
Ge	72	3	He			63983.82		
Ge	72	3	He			62365.95		
In	115	3	He			61636.77		
In	115	3	He			62802.24		
In	115	3	He			61085.33		
Tb	159	3	He			286464.16		
Tb	159	3	He			289662.89		
Tb	159	3	He			284851.97		
Bi	209	3	He			228656.77		
Bi	209	3	He			231019.61		
Bi	209	3	He			231422.69		

Quantitation Report

Data File Name	159SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:43:21 AM
Sample Name	MB 410-404121/1-A
Sample Type	Sample
Comment	E7
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

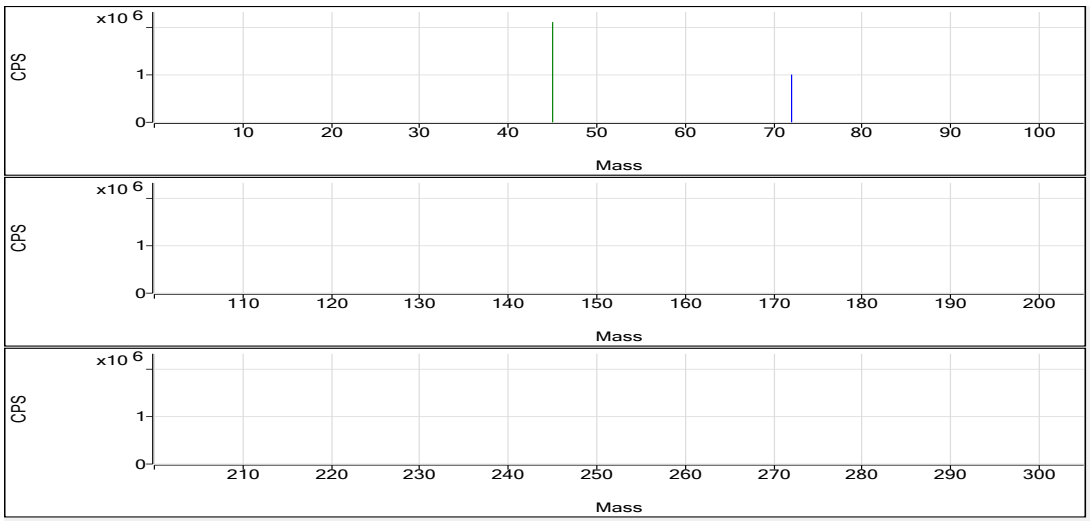
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.010	ppb	69.7	62.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.053	ppb	79.0	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	-12.699	ppb	N/A	14921.33	0.3931	Pulse	0.1000	3
Mg	24	45	He	1.044	ppb	51.8	296.68	0.0078	Pulse	0.1000	3
Al	27	45	He	18.912	ppb	17.9	433.36	0.0114	Pulse	0.1000	3
K	39	45	He	-25.876	ppb	N/A	15788.95	0.4157	Pulse	0.1000	3
Ca	44	45	He	-14.569	ppb	N/A	106.67	0.0028	Pulse	0.1000	3
Ti	47	45	He	0.165	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.256	ppb	N/A	943.37	0.0248	Pulse	0.5000	3
Cr	52	45	He	-0.104	ppb	N/A	1300.10	0.0342	Pulse	0.1000	3
Mn	55	45	He	0.445	ppb	34.9	376.69	0.0099	Pulse	0.1000	3
Fe	57	45	He	2.564	ppb	59.0	106.67	0.0028	Pulse	0.1000	3
Co	59	45	He	0.080	ppb	24.3	280.01	0.0074	Pulse	0.1000	3
Ni	60	72	He	-0.026	ppb	N/A	240.01	0.0037	Pulse	0.1000	3
Cu	63	72	He	0.143	ppb	4.6	633.37	0.0098	Pulse	0.1000	3
Zn	66	72	He	0.519	ppb	46.2	323.35	0.0050	Pulse	0.1000	3
As	75	72	He	-0.081	ppb	N/A	36.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.011	ppb	N/A	30.00	0.0005	Pulse	0.1000	3
Mo	98	115	He	0.011	ppb	91.9	36.67	0.0006	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	23.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.002	ppb	349.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.037	ppb	381.1	1116.75	0.0177	Pulse	0.1000	3
Sb	121	115	He	0.010	ppb	115.8	26.67	0.0004	Pulse	0.1000	3
Ba	137	115	He	0.054	ppb	124.7	26.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.036	ppb	26.9	340.02	0.0012	Pulse	0.1000	3
Pb	208	159	He	0.014	ppb	118.0	550.03	0.0019	Pulse	0.1000	3
U	238	209	He	0.011	ppb	42.0	146.67	0.0006	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2120295.80	0.8	104.3	Analog	0.1000	3
No Gas	Ge	72	1009652.30	0.9	100.5	Pulse	0.1000	3
H2	Sc	45	124465.97	0.7	94.2	Pulse	0.1000	3
H2	Ge	72	101580.08	1.3	91.1	Pulse	0.1000	3
H2	In	115	288182.17	0.7	98.1	Pulse	0.1000	3
He	Sc	45	37980.37	2.2	102.8	Pulse	0.1000	3
He	Ge	72	64730.25	0.9	100.3	Pulse	0.1000	3
He	In	115	62924.39	0.5	99.6	Pulse	0.1000	3
He	Tb	159	288870.16	0.7	98.7	Pulse	0.1000	3
He	Bi	209	236730.44	0.8	100.4	Pulse	0.1000	3

No Gas



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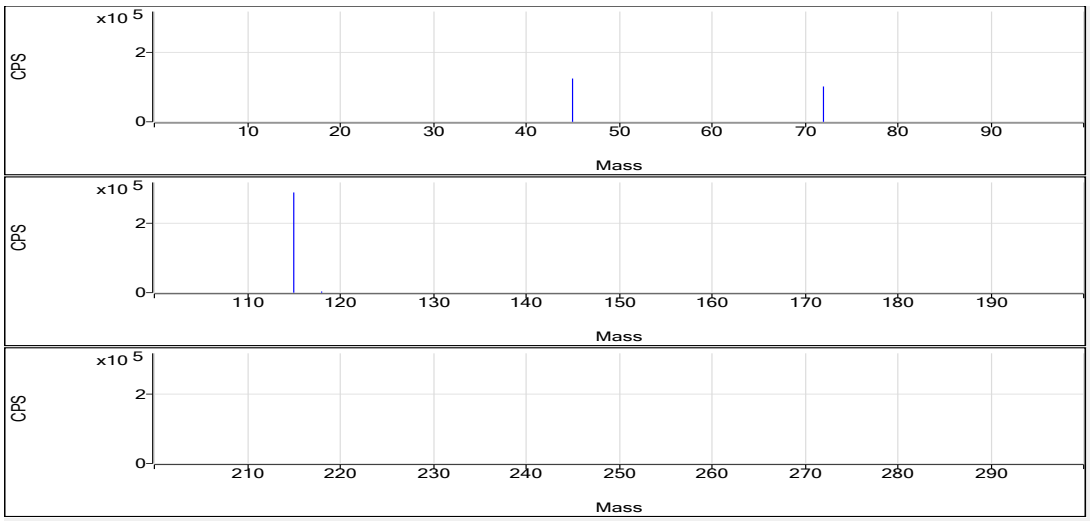
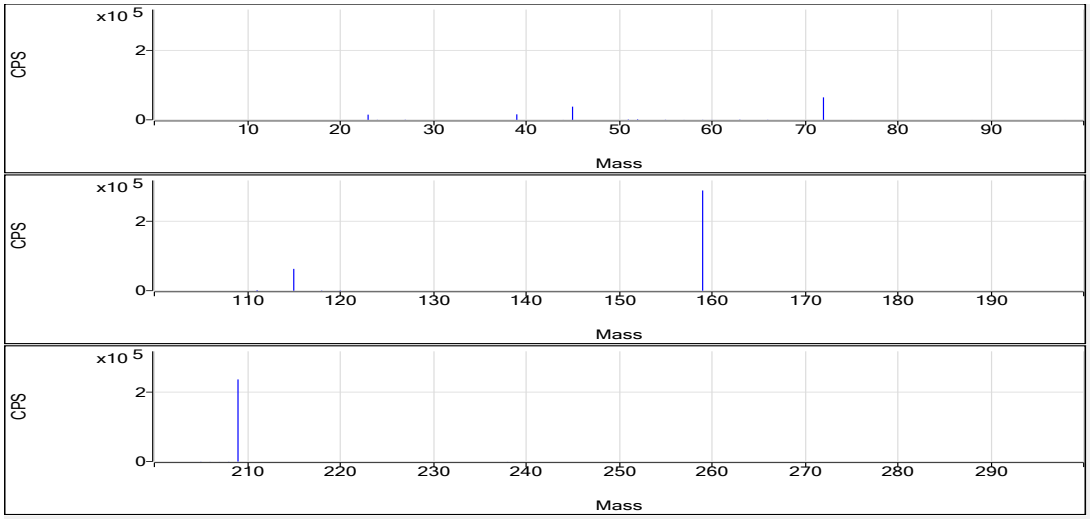


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.002	0	50.00	0.0008	2.195E-05
Be	9	1	No Gas	0.014	0	68.00	0.0008	2.195E-05
Be	9	1	No Gas	0.013	0	68.00	0.0008	2.195E-05
Se	78	2	H2	0.102	0.0001	6.00	0.0004	1.386E-05
Se	78	2	H2	0.029	0	2.67	0.0004	1.386E-05
Se	78	2	H2	0.029	0	2.67	0.0004	1.386E-05
Na	23	3	He	-12.214	0.3949	14968.02	0.0038	0.4416
Na	23	3	He	-16.676	0.3779	14677.85	0.0038	0.4416
Na	23	3	He	-9.208	0.4064	15118.13	0.0038	0.4416
Mg	24	3	He	0.53	0.0069	260.01	0.0019	0.005872
Mg	24	3	He	0.993	0.0077	300.01	0.0019	0.005872
Mg	24	3	He	1.609	0.0089	330.02	0.0019	0.005872
Al	27	3	He	17.021	0.0103	390.02	0.0006	0.0004496
Al	27	3	He	22.824	0.0136	530.03	0.0006	0.0004496
Al	27	3	He	16.892	0.0102	380.02	0.0006	0.0004496
K	39	3	He	-15.962	0.4272	16189.44	0.0012	0.4456
K	39	3	He	-28.935	0.4122	16009.19	0.0012	0.4456
K	39	3	He	-32.731	0.4078	15168.23	0.0012	0.4456
Ca	44	3	He	-33.225	0.0016	60.00	0.0001	0.003779
Ca	44	3	He	-14.326	0.0028	110.00	0.0001	0.003779
Ca	44	3	He	3.846	0.004	150.01	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.495	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.229	0.0254	964.04	0.0223	0.03054
V	51	3	He	-0.28	0.0243	944.04	0.0223	0.03054
V	51	3	He	-0.258	0.0248	922.04	0.0223	0.03054
Cr	52	3	He	-0.072	0.0351	1330.10	0.0285	0.03714
Cr	52	3	He	0.007	0.0373	1450.11	0.0285	0.03714
Cr	52	3	He	-0.247	0.0301	1120.08	0.0285	0.03714
Mn	55	3	He	0.624	0.0121	460.02	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.35	0.0088	340.02	0.0124	0.004415
Mn	55	3	He	0.36	0.0089	330.02	0.0124	0.004415
Fe	57	3	He	0.866	0.0018	70.00	0.0006	0.001356
Fe	57	3	He	3.056	0.0031	120.00	0.0006	0.001356
Fe	57	3	He	3.771	0.0035	130.00	0.0006	0.001356
Co	59	3	He	0.099	0.0084	320.01	0.0581	0.002697
Co	59	3	He	0.082	0.0075	290.01	0.0581	0.002697
Co	59	3	He	0.06	0.0062	230.01	0.0581	0.002697
Ni	60	3	He	0.078	0.0046	300.01	0.0087	0.003928
Ni	60	3	He	-0.08	0.0032	210.01	0.0087	0.003928
Ni	60	3	He	-0.075	0.0033	210.01	0.0087	0.003928
Cu	63	3	He	0.139	0.0097	630.04	0.0261	0.006048
Cu	63	3	He	0.14	0.0097	630.04	0.0261	0.006048
Cu	63	3	He	0.151	0.01	640.03	0.0261	0.006048
Zn	66	3	He	0.436	0.0048	310.01	0.0029	0.003512
Zn	66	3	He	0.332	0.0045	290.01	0.0029	0.003512
Zn	66	3	He	0.789	0.0058	370.02	0.0029	0.003512
As	75	3	He	-0.157	0.0004	26.00	0.0021	0.0007233
As	75	3	He	-0.037	0.0006	42.00	0.0021	0.0007233
As	75	3	He	-0.048	0.0006	40.00	0.0021	0.0007233
Sr	88	3	He	-0.047	0.0002	10.00	0.009	0.0005796
Sr	88	3	He	0.042	0.001	60.00	0.009	0.0005796
Sr	88	3	He	-0.029	0.0003	20.00	0.009	0.0005796
Mo	98	3	He	0.013	0.0006	40.00	0.0235	0.0003188
Mo	98	3	He	0.02	0.0008	50.00	0.0235	0.0003188
Mo	98	3	He	0	0.0003	20.00	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	-0.003	0.0003	20.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	-0.002	0	0.00	0.0055	1.07E-05
Sn	120	3	He	0.073	0.0183	1160.09	0.0164	0.01713
Sn	120	3	He	0.159	0.0197	1240.09	0.0164	0.01713
Sn	120	3	He	-0.12	0.0152	950.06	0.0164	0.01713
Sb	121	3	He	0.003	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Sb	121	3	He	0.024	0.0006	40.00	0.0155	0.0002641
Ba	137	3	He	0	0.0002	10.00	0.005	0.0001577
Ba	137	3	He	0.032	0.0003	20.00	0.005	0.0001577
Ba	137	3	He	0.129	0.0008	50.00	0.005	0.0001577
Tl	205	3	He	0.031	0.0011	310.01	0.026	0.0002504
Tl	205	3	He	0.029	0.001	290.01	0.026	0.0002504
Tl	205	3	He	0.047	0.0015	420.03	0.026	0.0002504
Pb	208	3	He	0.023	0.0022	420.03	0.0349	0.001422
Pb	208	3	He	-0.005	0.0012	160.01	0.0349	0.001422
Pb	208	3	He	0.023	0.0022	310.01	0.0349	0.001422
U	238	3	He	0.008	0.0005	110.00	0.0502	5.657E-05
U	238	3	He	0.009	0.0005	120.01	0.0502	5.657E-05
U	238	3	He	0.017	0.0009	210.01	0.0502	5.657E-05
Sc	45	1	No Gas			2139031.37		
Sc	45	1	No Gas			2104351.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2117504.19		
Ge	72	1	No Gas			1018996.94		
Ge	72	1	No Gas			1009703.97		
Ge	72	1	No Gas			1000256.00		
Sc	45	2	H2			124923.22		
Sc	45	2	H2			123420.80		
Sc	45	2	H2			125053.90		
Ge	72	2	H2			103080.76		
Ge	72	2	H2			100884.74		
Ge	72	2	H2			100774.73		
In	115	2	H2			290477.42		
In	115	2	H2			287829.62		
In	115	2	H2			286239.47		
Sc	45	3	He			37900.26		
Sc	45	3	He			38842.52		
Sc	45	3	He			37198.33		
Ge	72	3	He			65128.65		
Ge	72	3	He			64968.43		
Ge	72	3	He			64093.66		
In	115	3	He			63314.69		
In	115	3	He			62812.42		
In	115	3	He			62662.60		
Tb	159	3	He			291143.45		
Tb	159	3	He			288531.21		
Tb	159	3	He			286935.82		
Bi	209	3	He			236136.44		
Bi	209	3	He			238794.23		
Bi	209	3	He			235260.66		

Quantitation Report

Data File Name	160SMPL.d
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:45:23 AM
Sample Name	410-137176-P-1-A
Sample Type	Sample
Comment	E7
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

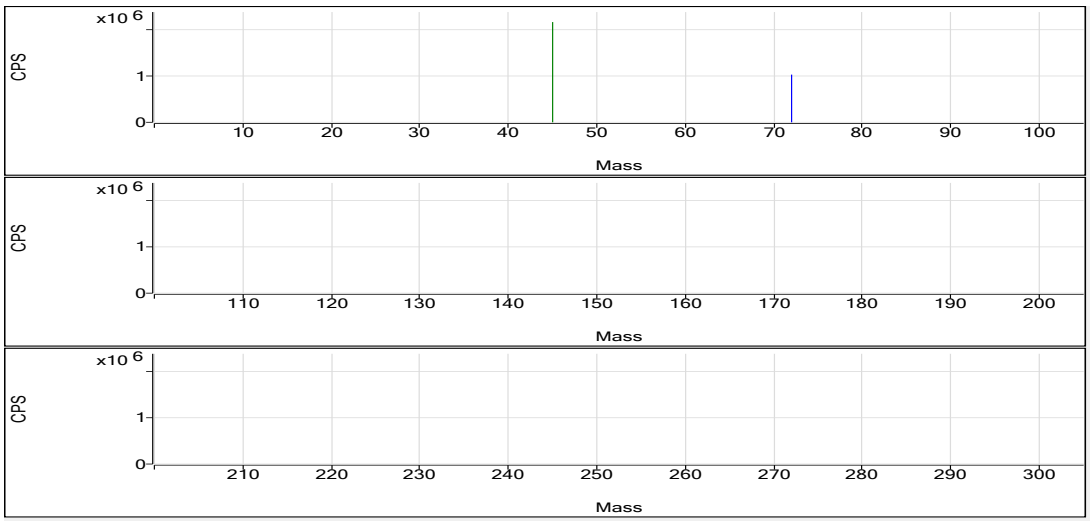
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.042	ppb	15.0	117.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.545	ppb	22.9	26.67	0.0003	Pulse	1.5000	3
Na	23	45	He	467391.236	ppb	1.5	67949967.32	1 786.5420	Analog	0.1000	3
Mg	24	45	He	7081.153	ppb	1.8	502298.09	13.2070	Pulse	0.1000	3
Al	27	45	He	17639.501	ppb	1.5	387914.50	10.1991	Pulse	0.1000	3
K	39	45	He	23624.835	ppb	1.1	1056155.40	27.7674	Pulse	0.1000	3
Ca	44	45	He	49332.888	ppb	0.6	124142.49	3.2637	Pulse	0.1000	3
Ti	47	45	He	29.218	ppb	12.2	576.70	0.0152	Pulse	0.1000	3
V	51	45	He	8.785	ppb	2.1	8609.92	0.2264	Pulse	0.5000	3
Cr	52	45	He	16.188	ppb	3.5	18929.62	0.4977	Pulse	0.1000	3
Mn	55	45	He	163.860	ppb	0.9	77357.16	2.0337	Pulse	0.1000	3
Fe	57	45	He	5318.230	ppb	2.7	114776.75	3.0181	Pulse	0.1000	3
Co	59	45	He	3.114	ppb	3.5	6981.91	0.1836	Pulse	0.1000	3
Ni	60	72	He	30.430	ppb	1.2	17601.21	0.2677	Pulse	0.1000	3
Cu	63	72	He	77.936	ppb	1.1	134339.28	2.0429	Pulse	0.1000	3
Zn	66	72	He	678.281	ppb	0.7	128044.13	1.9471	Pulse	0.1000	3
As	75	72	He	2.402	ppb	4.6	374.01	0.0057	Pulse	0.5000	3
Sr	88	115	He	330.979	ppb	0.7	182268.47	2.9638	Pulse	0.1000	3
Mo	98	115	He	22.232	ppb	2.1	32167.61	0.5231	Pulse	0.1000	3
Ag	107	115	He	0.182	ppb	18.7	586.70	0.0095	Pulse	0.1000	3
Cd	111	115	He	2.368	ppb	4.1	807.36	0.0131	Pulse	0.5000	3
Sn	120	115	He	12.898	ppb	6.2	14071.01	0.2289	Pulse	0.1000	3
Sb	121	115	He	22.189	ppb	1.5	21123.48	0.3435	Pulse	0.1000	3
Ba	137	115	He	145.333	ppb	1.7	44503.05	0.7237	Pulse	0.1000	3
Tl	205	159	He	0.077	ppb	13.7	650.04	0.0023	Pulse	0.1000	3
Pb	208	159	He	8.515	ppb	0.8	85906.87	0.2989	Pulse	0.1000	3
U	238	209	He	0.589	ppb	3.1	7319.01	0.0296	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2169796.16	0.7	106.7	Analog	0.1000	3
No Gas	Ge	72	1032306.16	0.4	102.7	Pulse	0.1000	3
H2	Sc	45	126119.81	1.0	95.5	Pulse	0.1000	3
H2	Ge	72	106468.54	1.3	95.5	Pulse	0.1000	3
H2	In	115	283239.16	0.7	96.4	Pulse	0.1000	3
He	Sc	45	38040.52	1.8	102.9	Pulse	0.1000	3
He	Ge	72	65761.43	0.9	101.9	Pulse	0.1000	3
He	In	115	61502.69	1.3	97.3	Pulse	0.1000	3
He	Tb	159	287380.19	0.5	98.1	Pulse	0.1000	3
He	Bi	209	246942.15	0.7	104.7	Pulse	0.1000	3

No Gas



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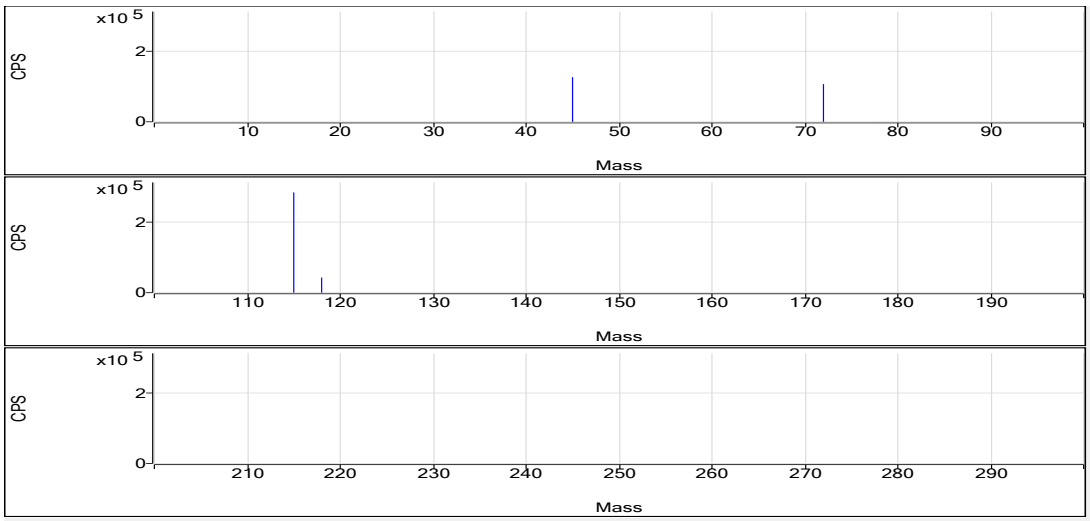
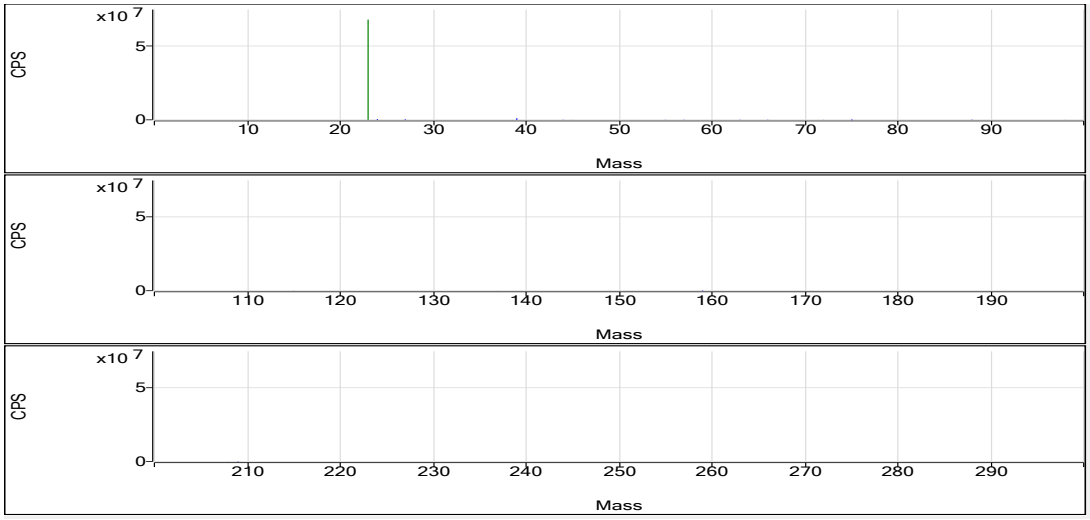


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.036	0	108.00	0.0008	2.195E-05
Be	9	1	No Gas	0.041	0.0001	116.00	0.0008	2.195E-05
Be	9	1	No Gas	0.049	0.0001	128.00	0.0008	2.195E-05
Se	78	2	H2	0.573	0.0003	28.00	0.0004	1.386E-05
Se	78	2	H2	0.409	0.0002	20.67	0.0004	1.386E-05
Se	78	2	H2	0.654	0.0003	31.33	0.0004	1.386E-05
Na	23	3	He	474600.552	1814.0919	67590123.99	0.0038	0.4416
Na	23	3	He	467039.105	1785.1964	68553753.98	0.0038	0.4416
Na	23	3	He	460534.051	1760.3378	67706023.99	0.0038	0.4416
Mg	24	3	He	7224.254	13.4738	502012.73	0.0019	0.005872
Mg	24	3	He	7019.956	13.093	502785.73	0.0019	0.005872
Mg	24	3	He	6999.249	13.0544	502095.81	0.0019	0.005872
Al	27	3	He	17929.928	10.367	386258.63	0.0006	0.0004496
Al	27	3	He	17437.406	10.0823	387171.48	0.0006	0.0004496
Al	27	3	He	17551.169	10.148	390313.39	0.0006	0.0004496
K	39	3	He	23907.231	28.0939	1046734.59	0.0012	0.4456
K	39	3	He	23544.084	27.674	1062714.52	0.0012	0.4456
K	39	3	He	23423.188	27.5341	1059017.09	0.0012	0.4456
Ca	44	3	He	49666.976	3.2857	122421.03	0.0001	0.003779
Ca	44	3	He	49184.474	3.2538	124951.80	0.0001	0.003779
Ca	44	3	He	49147.212	3.2514	125054.64	0.0001	0.003779
Ti	47	3	He	33.062	0.0172	640.04	0.0005	0
Ti	47	3	He	28.569	0.0148	570.04	0.0005	0
Ti	47	3	He	26.022	0.0135	520.03	0.0005	0
V	51	3	He	8.994	0.2311	8608.58	0.0223	0.03054
V	51	3	He	8.641	0.2232	8570.56	0.0223	0.03054
V	51	3	He	8.719	0.2249	8650.61	0.0223	0.03054
Cr	52	3	He	16.62	0.51	19002.95	0.0285	0.03714
Cr	52	3	He	15.546	0.4795	18412.39	0.0285	0.03714
Cr	52	3	He	16.398	0.5037	19373.51	0.0285	0.03714
Mn	55	3	He	165.223	2.0506	76401.83	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	162.262	2.0139	77337.34	0.0124	0.004415
Mn	55	3	He	164.094	2.0366	78332.31	0.0124	0.004415
Fe	57	3	He	5475.83	3.1075	115781.49	0.0006	0.001356
Fe	57	3	He	5199.382	2.9507	113311.05	0.0006	0.001356
Fe	57	3	He	5279.479	2.9961	115237.71	0.0006	0.001356
Co	59	3	He	3.198	0.1885	7021.94	0.0581	0.002697
Co	59	3	He	2.989	0.1763	6771.80	0.0581	0.002697
Co	59	3	He	3.154	0.186	7152.00	0.0581	0.002697
Ni	60	3	He	30.844	0.2713	17661.28	0.0087	0.003928
Ni	60	3	He	30.108	0.2649	17491.00	0.0087	0.003928
Ni	60	3	He	30.337	0.2669	17651.36	0.0087	0.003928
Cu	63	3	He	78.795	2.0654	134473.93	0.0261	0.006048
Cu	63	3	He	77.863	2.041	134775.99	0.0261	0.006048
Cu	63	3	He	77.15	2.0224	133767.92	0.0261	0.006048
Zn	66	3	He	679.652	1.951	127028.56	0.0029	0.003512
Zn	66	3	He	672.728	1.9312	127522.92	0.0029	0.003512
Zn	66	3	He	682.463	1.9591	129580.91	0.0029	0.003512
As	75	3	He	2.503	0.0059	384.01	0.0021	0.0007233
As	75	3	He	2.419	0.0057	378.01	0.0021	0.0007233
As	75	3	He	2.283	0.0054	360.01	0.0021	0.0007233
Sr	88	3	He	328.737	2.9437	183650.52	0.009	0.0005796
Sr	88	3	He	333.489	2.9862	181471.66	0.009	0.0005796
Sr	88	3	He	330.71	2.9614	181683.24	0.009	0.0005796
Mo	98	3	He	21.838	0.5138	32057.39	0.0235	0.0003188
Mo	98	3	He	22.763	0.5356	32548.45	0.0235	0.0003188
Mo	98	3	He	22.096	0.5199	31896.99	0.0235	0.0003188
Ag	107	3	He	0.177	0.0093	580.03	0.0499	0.0004754
Ag	107	3	He	0.218	0.0114	690.04	0.0499	0.0004754
Ag	107	3	He	0.151	0.008	490.03	0.0499	0.0004754
Cd	111	3	He	2.278	0.0126	788.03	0.0055	1.07E-05
Cd	111	3	He	2.356	0.0131	794.03	0.0055	1.07E-05
Cd	111	3	He	2.469	0.0137	840.03	0.0055	1.07E-05
Sn	120	3	He	11.996	0.2141	13356.83	0.0164	0.01713
Sn	120	3	He	13.537	0.2394	14548.29	0.0164	0.01713
Sn	120	3	He	13.16	0.2332	14307.90	0.0164	0.01713
Sb	121	3	He	21.907	0.3391	21156.96	0.0155	0.0002641
Sb	121	3	He	22.096	0.3421	20786.21	0.0155	0.0002641
Sb	121	3	He	22.562	0.3493	21427.27	0.0155	0.0002641
Ba	137	3	He	142.701	0.7106	44332.87	0.005	0.0001577
Ba	137	3	He	147.761	0.7358	44713.67	0.005	0.0001577
Ba	137	3	He	145.537	0.7247	44462.61	0.005	0.0001577
Tl	205	3	He	0.088	0.0025	730.05	0.026	0.0002504
Tl	205	3	He	0.077	0.0022	650.04	0.026	0.0002504
Tl	205	3	He	0.067	0.002	570.04	0.026	0.0002504
Pb	208	3	He	8.584	0.3013	46252.60	0.0349	0.001422
Pb	208	3	He	8.516	0.2989	46613.93	0.0349	0.001422
Pb	208	3	He	8.446	0.2965	45208.87	0.0349	0.001422
U	238	3	He	0.607	0.0306	7502.46	0.0502	5.657E-05
U	238	3	He	0.588	0.0296	7302.31	0.0502	5.657E-05
U	238	3	He	0.571	0.0287	7152.25	0.0502	5.657E-05
Sc	45	1	No Gas			2166134.81		
Sc	45	1	No Gas			2186598.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2156655.12		
Ge	72	1	No Gas			1036390.53		
Ge	72	1	No Gas			1032837.17		
Ge	72	1	No Gas			1027690.77		
Sc	45	2	H2			127484.46		
Sc	45	2	H2			125921.40		
Sc	45	2	H2			124953.56		
Ge	72	2	H2			106506.32		
Ge	72	2	H2			107794.41		
Ge	72	2	H2			105104.88		
In	115	2	H2			285445.19		
In	115	2	H2			282715.43		
In	115	2	H2			281556.87		
Sc	45	3	He			37258.38		
Sc	45	3	He			38401.24		
Sc	45	3	He			38461.95		
Ge	72	3	He			65108.14		
Ge	72	3	He			66032.96		
Ge	72	3	He			66143.20		
In	115	3	He			62460.86		
In	115	3	He			60844.16		
In	115	3	He			61426.14		
Tb	159	3	He			286985.74		
Tb	159	3	He			289066.38		
Tb	159	3	He			286088.45		
Bi	209	3	He			245470.89		
Bi	209	3	He			246547.18		
Bi	209	3	He			248808.38		

Quantitation Report

Data File Name	161SMPL.d
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Sample Type	Sample
Comment	E7
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

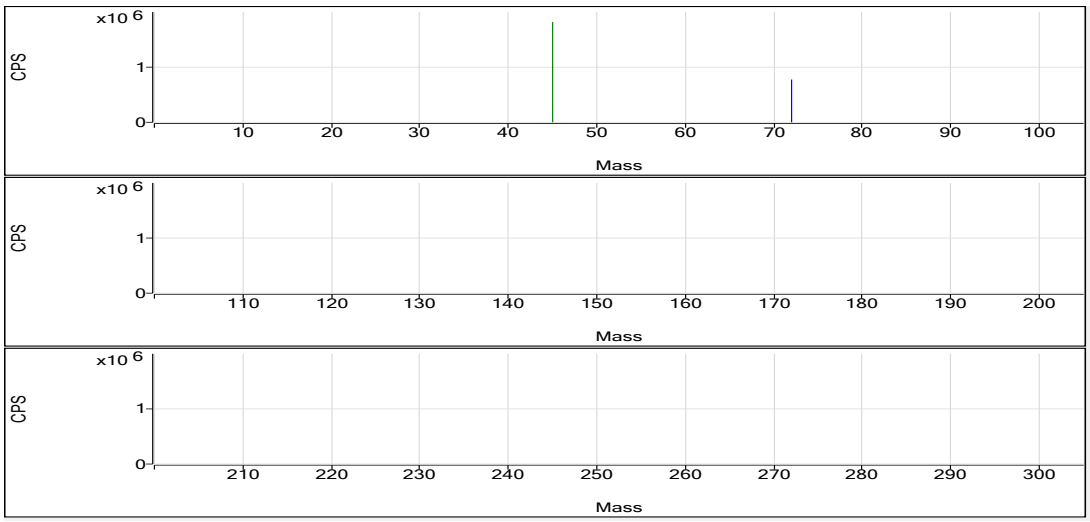
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.089	ppb	5.9	163.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.714	ppb	11.5	30.45	0.0003	Pulse	1.5000	3
Na	23	45	He	7156.903	ppb	0.9	995242.36	27.7912	Pulse	0.1000	3
Mg	24	45	He	1004.279	ppb	2.3	67250.12	1.8781	Pulse	0.1000	3
Al	27	45	He	174.497	ppb	6.8	3630.56	0.1013	Pulse	0.1000	3
K	39	45	He	8490755.258	ppb	1.5	351642781.43	9 819.8638	Analog	0.1000	3
Ca	44	45	He	11381799.948	ppb	1.5	26932240.43	752.1037	Analog	0.1000	3
Ti	47	45	He	17.173	ppb	19.5	320.01	0.0089	Pulse	0.1000	3
V	51	45	He	0.162	ppb	67.2	1222.06	0.0341	Pulse	0.5000	3
Cr	52	45	He	36.968	ppb	1.6	39000.00	1.0890	Pulse	0.1000	3
Mn	55	45	He	3.837	ppb	6.2	1860.18	0.0519	Pulse	0.1000	3
Fe	57	45	He	603.993	ppb	3.2	12315.62	0.3440	Pulse	0.1000	3
Co	59	45	He	0.218	ppb	8.9	550.03	0.0154	Pulse	0.1000	3
Ni	60	72	He	3.606	ppb	7.6	1966.86	0.0352	Pulse	0.1000	3
Cu	63	72	He	2.526	ppb	7.0	4027.36	0.0721	Pulse	0.1000	3
Zn	66	72	He	6.373	ppb	8.6	1216.76	0.0218	Pulse	0.1000	3
As	75	72	He	2389.991	ppb	0.9	276237.69	4.9420	Pulse	0.5000	3
Sr	88	115	He	22049.450	ppb	1.6	10737657.76	197.4051	Analog	0.1000	3
Mo	98	115	He	15.721	ppb	3.3	20121.76	0.3700	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	89.1	60.00	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.027	ppb	63.3	8.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.160	ppb	72.1	1073.41	0.0198	Pulse	0.1000	3
Sb	121	115	He	210.122	ppb	2.0	176799.35	3.2504	Pulse	0.1000	3
Ba	137	115	He	8822.118	ppb	1.7	2389126.94	43.9216	Analog	0.1000	3
Tl	205	159	He	0.811	ppb	7.3	5094.51	0.0214	Pulse	0.1000	3
Pb	208	159	He	0.739	ppb	5.4	6494.19	0.0272	Pulse	0.1000	3
U	238	209	He	0.064	ppb	8.2	550.03	0.0033	Pulse	0.1000	3

ISTD Table:

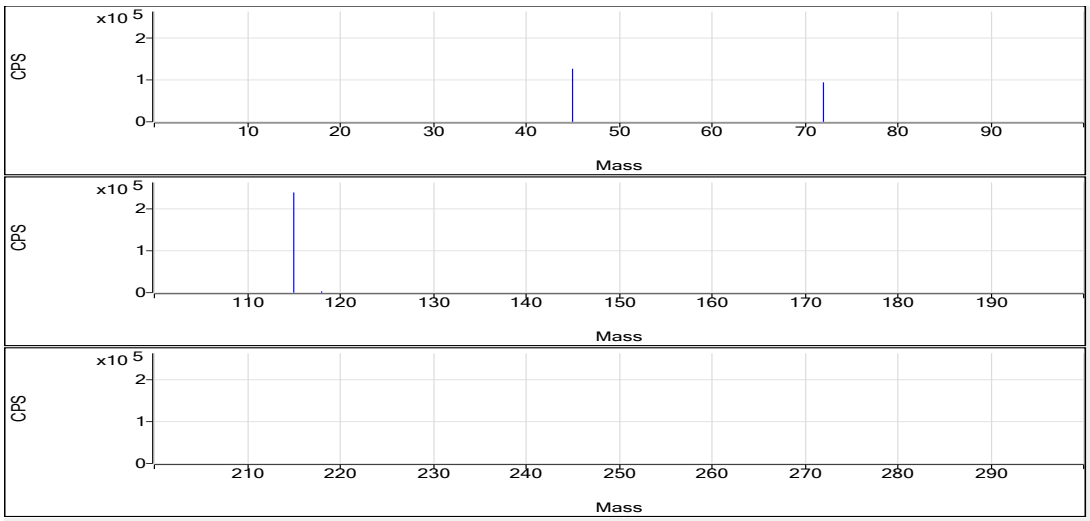
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1805127.89	1.6	88.8	Analog	0.1000	3
No Gas	Ge	72	769697.31	0.8	76.6	Pulse	0.1000	3
H2	Sc	45	126220.96	2.1	95.5	Pulse	0.1000	3
H2	Ge	72	93873.80	1.2	84.2	Pulse	0.1000	3
H2	In	115	238448.34	1.7	81.2	Pulse	0.1000	3
He	Sc	45	35814.84	1.6	96.9	Pulse	0.1000	3
He	Ge	72	55900.12	1.2	86.6	Pulse	0.1000	3
He	In	115	54407.86	2.4	86.1	Pulse	0.1000	3
He	Tb	159	238439.83	0.9	81.4	Pulse	0.1000	3
He	Bi	209	169031.95	0.3	71.7	Pulse	0.1000	3

No Gas

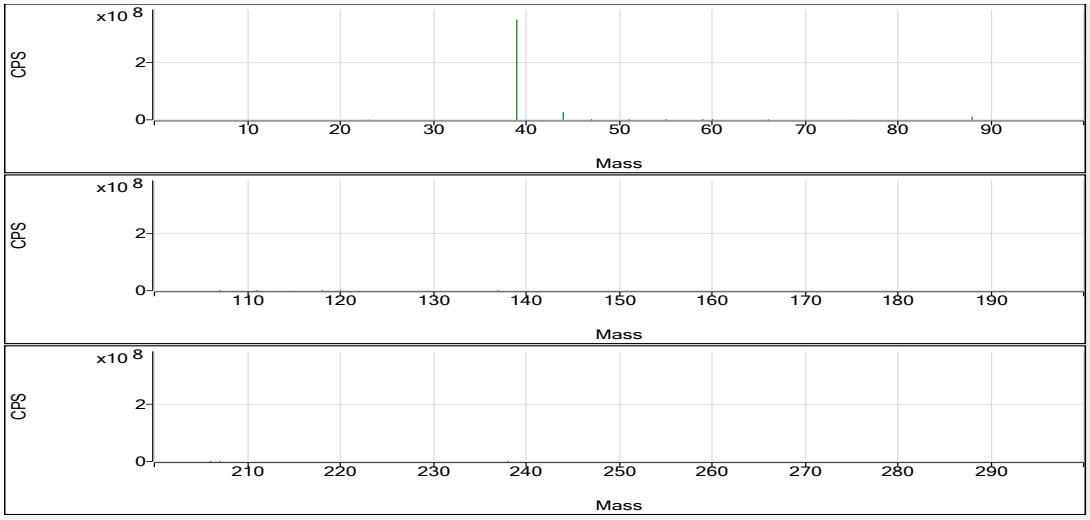


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.084	0.0001	154.00	0.0008	2.195E-05
Be	9	1	No Gas	0.095	0.0001	170.00	0.0008	2.195E-05
Be	9	1	No Gas	0.089	0.0001	166.00	0.0008	2.195E-05
Se	78	2	H2	0.778	0.0004	32.67	0.0004	1.386E-05
Se	78	2	H2	0.621	0.0003	26.67	0.0004	1.386E-05
Se	78	2	H2	0.743	0.0003	32.00	0.0004	1.386E-05
Na	23	3	He	7138.771	27.7219	999801.63	0.0038	0.4416
Na	23	3	He	7103.537	27.5872	999369.99	0.0038	0.4416
Na	23	3	He	7228.4	28.0644	986555.45	0.0038	0.4416
Mg	24	3	He	983.671	1.8397	66349.53	0.0019	0.005872
Mg	24	3	He	1000.269	1.8706	67765.54	0.0019	0.005872
Mg	24	3	He	1028.896	1.924	67635.29	0.0019	0.005872
Al	27	3	He	165.179	0.096	3460.52	0.0006	0.0004496
Al	27	3	He	187.845	0.1091	3950.65	0.0006	0.0004496
Al	27	3	He	170.469	0.099	3480.52	0.0006	0.0004496
K	39	3	He	8405327.939	9721.0685	350594514.78	0.0012	0.4456
K	39	3	He	8432636.861	9752.6508	353297674.74	0.0012	0.4456
K	39	3	He	8634300.973	9985.872	351036154.77	0.0012	0.4456
Ca	44	3	He	11264811.074	744.3732	26846139.60	0.0001	0.003779
Ca	44	3	He	11302056.66	746.8344	27054679.60	0.0001	0.003779
Ca	44	3	He	11578532.111	765.1036	26895902.10	0.0001	0.003779
Ti	47	3	He	20.813	0.0108	390.02	0.0005	0
Ti	47	3	He	16.47	0.0086	310.01	0.0005	0
Ti	47	3	He	14.235	0.0074	260.01	0.0005	0
V	51	3	He	0.06	0.0319	1150.05	0.0223	0.03054
V	51	3	He	0.148	0.0338	1226.06	0.0223	0.03054
V	51	3	He	0.276	0.0367	1290.07	0.0223	0.03054
Cr	52	3	He	37.436	1.1023	39755.34	0.0285	0.03714
Cr	52	3	He	36.311	1.0703	38772.70	0.0285	0.03714
Cr	52	3	He	37.158	1.0944	38471.97	0.0285	0.03714
Mn	55	3	He	4.099	0.0552	1990.21	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3.634	0.0494	1790.17	0.0124	0.004415
Mn	55	3	He	3.779	0.0512	1800.17	0.0124	0.004415
Fe	57	3	He	586.391	0.334	12045.38	0.0006	0.001356
Fe	57	3	He	600.832	0.3422	12395.70	0.0006	0.001356
Fe	57	3	He	624.756	0.3557	12505.77	0.0006	0.001356
Co	59	3	He	0.24	0.0166	600.04	0.0581	0.002697
Co	59	3	He	0.21	0.0149	540.03	0.0581	0.002697
Co	59	3	He	0.203	0.0145	510.03	0.0581	0.002697
Ni	60	3	He	3.431	0.0337	1860.17	0.0087	0.003928
Ni	60	3	He	3.464	0.034	1920.19	0.0087	0.003928
Ni	60	3	He	3.924	0.0379	2120.21	0.0087	0.003928
Cu	63	3	He	2.504	0.0715	3950.69	0.0261	0.006048
Cu	63	3	He	2.36	0.0677	3830.63	0.0261	0.006048
Cu	63	3	He	2.713	0.077	4300.77	0.0261	0.006048
Zn	66	3	He	6.922	0.0233	1290.10	0.0029	0.003512
Zn	66	3	He	6.365	0.0218	1230.10	0.0029	0.003512
Zn	66	3	He	5.831	0.0202	1130.09	0.0029	0.003512
As	75	3	He	2410.725	4.9848	275449.94	0.0021	0.0007233
As	75	3	He	2366.834	4.8941	276775.41	0.0021	0.0007233
As	75	3	He	2392.414	4.947	276487.72	0.0021	0.0007233
Sr	88	3	He	22252.162	199.22	10687693.59	0.009	0.0005796
Sr	88	3	He	21639.375	193.7338	10829198.59	0.009	0.0005796
Sr	88	3	He	22256.814	199.2616	10696081.09	0.009	0.0005796
Mo	98	3	He	15.701	0.3695	19824.86	0.0235	0.0003188
Mo	98	3	He	15.213	0.3581	20014.85	0.0235	0.0003188
Mo	98	3	He	16.247	0.3824	20525.57	0.0235	0.0003188
Ag	107	3	He	0.002	0.0006	30.00	0.0499	0.0004754
Ag	107	3	He	0.012	0.0011	60.00	0.0499	0.0004754
Ag	107	3	He	0.024	0.0017	90.00	0.0499	0.0004754
Cd	111	3	He	0.012	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.024	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.045	0.0003	14.00	0.0055	1.07E-05
Sn	120	3	He	0.138	0.0194	1040.07	0.0164	0.01713
Sn	120	3	He	0.057	0.0181	1010.07	0.0164	0.01713
Sn	120	3	He	0.284	0.0218	1170.10	0.0164	0.01713
Sb	121	3	He	210.23	3.2521	174467.44	0.0155	0.0002641
Sb	121	3	He	205.786	3.1834	177941.19	0.0155	0.0002641
Sb	121	3	He	214.35	3.3158	177989.43	0.0155	0.0002641
Ba	137	3	He	8972.213	44.6689	2396382.93	0.005	0.0001577
Ba	137	3	He	8673.479	43.1816	2413736.37	0.005	0.0001577
Ba	137	3	He	8820.662	43.9144	2357261.53	0.005	0.0001577
Tl	205	3	He	0.874	0.023	5441.36	0.026	0.0002504
Tl	205	3	He	0.755	0.0199	4791.05	0.026	0.0002504
Tl	205	3	He	0.805	0.0212	5051.12	0.026	0.0002504
Pb	208	3	He	0.776	0.0285	3320.55	0.0349	0.001422
Pb	208	3	He	0.744	0.0274	3530.61	0.0349	0.001422
Pb	208	3	He	0.696	0.0258	3230.47	0.0349	0.001422
U	238	3	He	0.058	0.003	500.03	0.0502	5.657E-05
U	238	3	He	0.068	0.0035	590.03	0.0502	5.657E-05
U	238	3	He	0.065	0.0033	560.03	0.0502	5.657E-05
Sc	45	1	No Gas			1780560.60		
Sc	45	1	No Gas			1797860.13		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1836962.94		
Ge	72	1	No Gas			762963.35		
Ge	72	1	No Gas			773504.52		
Ge	72	1	No Gas			772624.05		
Sc	45	2	H2			123279.85		
Sc	45	2	H2			126939.66		
Sc	45	2	H2			128443.38		
Ge	72	2	H2			92759.20		
Ge	72	2	H2			93907.98		
Ge	72	2	H2			94954.22		
In	115	2	H2			236289.98		
In	115	2	H2			236013.36		
In	115	2	H2			243041.68		
Sc	45	3	He			36065.43		
Sc	45	3	He			36225.81		
Sc	45	3	He			35153.28		
Ge	72	3	He			55257.43		
Ge	72	3	He			56552.83		
Ge	72	3	He			55890.09		
In	115	3	He			53654.33		
In	115	3	He			55902.77		
In	115	3	He			53684.12		
Tb	159	3	He			236603.32		
Tb	159	3	He			240631.36		
Tb	159	3	He			238084.82		
Bi	209	3	He			168401.35		
Bi	209	3	He			169333.61		
Bi	209	3	He			169360.88		

Quantitation Report

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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

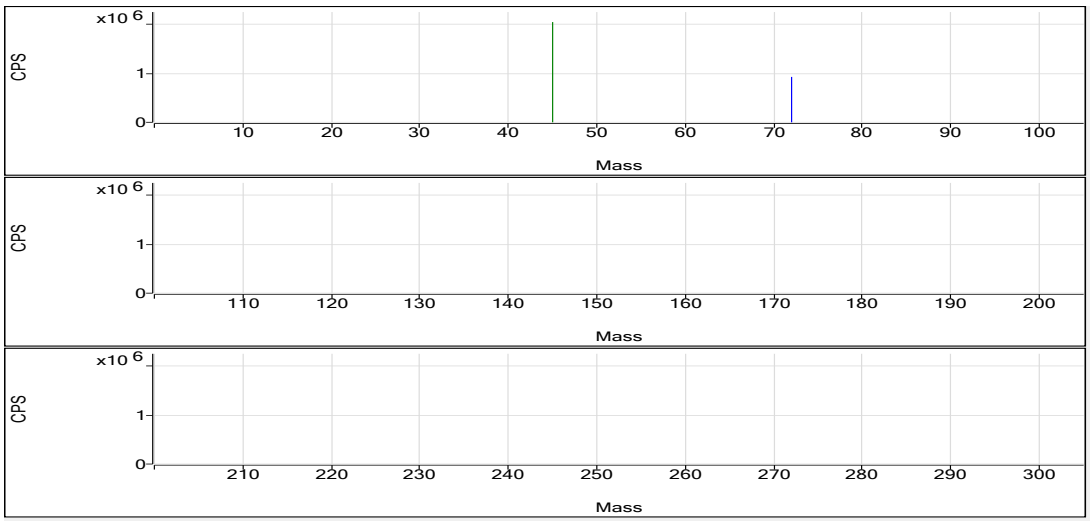
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.010	ppb	102.2	61.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.095	ppb	27.2	6.00	0.0001	Pulse	1.5000	3
Na	23	45	He	1052.186	ppb	1.4	171676.80	4.4625	Pulse	0.1000	3
Mg	24	45	He	116.247	ppb	6.1	8559.44	0.2226	Pulse	0.1000	3
Al	27	45	He	42.180	ppb	14.8	956.73	0.0248	Pulse	0.1000	3
K	39	45	He	840103.970	ppb	1.8	37391858.61	972.0120	Analog	0.1000	3
Ca	44	45	He	1163706.486	ppb	1.8	2958262.56	76.9005	Analog	0.1000	3
Ti	47	45	He	2.840	ppb	21.8	56.67	0.0015	Pulse	0.1000	3
V	51	45	He	0.011	ppb	480.5	1184.06	0.0308	Pulse	0.5000	3
Cr	52	45	He	4.305	ppb	3.1	6141.48	0.1596	Pulse	0.1000	3
Mn	55	45	He	16.023	ppb	1.4	7805.77	0.2029	Pulse	0.1000	3
Fe	57	45	He	67.870	ppb	1.7	1533.48	0.0399	Pulse	0.1000	3
Co	59	45	He	0.092	ppb	22.2	310.01	0.0081	Pulse	0.1000	3
Ni	60	72	He	0.988	ppb	11.0	766.71	0.0125	Pulse	0.1000	3
Cu	63	72	He	1.132	ppb	8.1	2186.91	0.0356	Pulse	0.1000	3
Zn	66	72	He	2.946	ppb	13.5	733.38	0.0120	Pulse	0.1000	3
As	75	72	He	238.643	ppb	0.6	30326.09	0.4941	Pulse	0.5000	3
Sr	88	115	He	2024.648	ppb	0.9	1143064.65	18.1269	Pulse	0.1000	3
Mo	98	115	He	1.644	ppb	7.6	2460.30	0.0390	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	59.9	56.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	58.7	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.071	ppb	115.0	1153.42	0.0183	Pulse	0.1000	3
Sb	121	115	He	21.090	ppb	5.0	20579.29	0.3265	Pulse	0.1000	3
Ba	137	115	He	824.201	ppb	1.7	258741.17	4.1035	Pulse	0.1000	3
Tl	205	159	He	0.107	ppb	5.9	880.06	0.0030	Pulse	0.1000	3
Pb	208	159	He	0.152	ppb	3.5	1946.80	0.0067	Pulse	0.1000	3
U	238	209	He	0.014	ppb	22.4	170.01	0.0008	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2047342.26	0.8	100.7	Analog	0.1000	3
No Gas	Ge	72	927113.87	1.0	92.2	Pulse	0.1000	3
H2	Sc	45	139598.90	1.0	105.7	Pulse	0.1000	3
H2	Ge	72	108957.31	1.2	97.7	Pulse	0.1000	3
H2	In	115	291358.76	0.4	99.2	Pulse	0.1000	3
He	Sc	45	38474.91	1.4	104.1	Pulse	0.1000	3
He	Ge	72	61375.75	0.5	95.1	Pulse	0.1000	3
He	In	115	63064.56	1.5	99.8	Pulse	0.1000	3
He	Tb	159	289127.10	0.9	98.7	Pulse	0.1000	3
He	Bi	209	218988.03	0.5	92.9	Pulse	0.1000	3

No Gas



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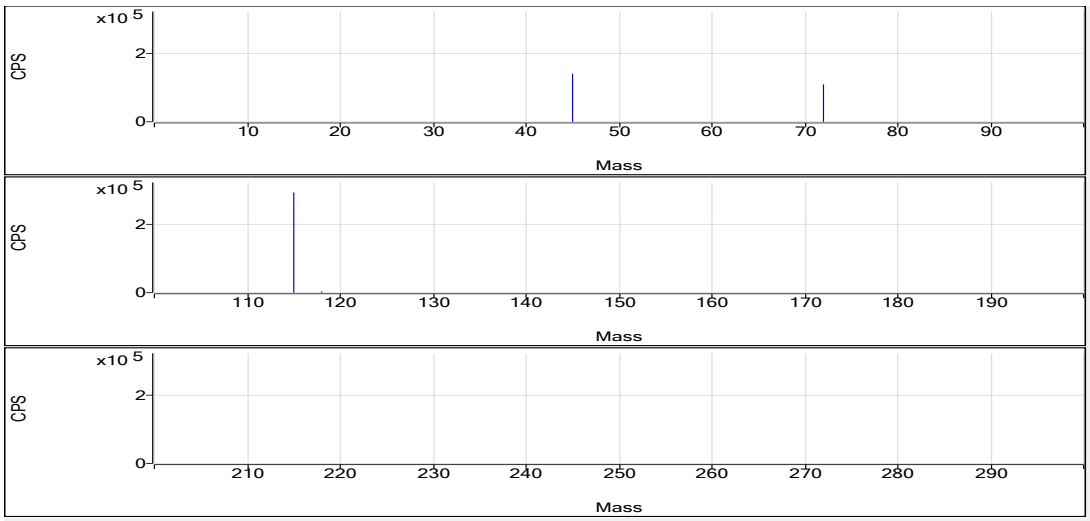
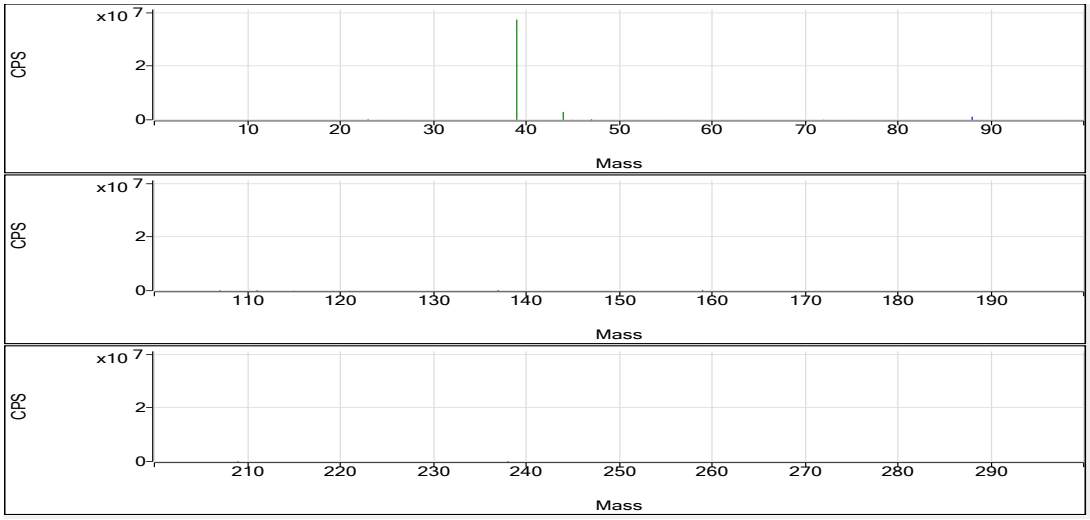


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0	54.00	0.0008	2.195E-05
Be	9	1	No Gas	0.023	0	80.00	0.0008	2.195E-05
Be	9	1	No Gas	0.003	0	50.00	0.0008	2.195E-05
Se	78	2	H2	0.081	0	5.33	0.0004	1.386E-05
Se	78	2	H2	0.125	0.0001	7.33	0.0004	1.386E-05
Se	78	2	H2	0.079	0	5.33	0.0004	1.386E-05
Na	23	3	He	1067.128	4.5196	171200.66	0.0038	0.4416
Na	23	3	He	1038.75	4.4111	170676.66	0.0038	0.4416
Na	23	3	He	1050.68	4.4567	173153.08	0.0038	0.4416
Mg	24	3	He	124.481	0.2379	9013.06	0.0019	0.005872
Mg	24	3	He	112.646	0.2159	8352.67	0.0019	0.005872
Mg	24	3	He	111.616	0.214	8312.58	0.0019	0.005872
Al	27	3	He	36.209	0.0214	810.05	0.0006	0.0004496
Al	27	3	He	41.691	0.0246	950.06	0.0006	0.0004496
Al	27	3	He	48.64	0.0286	1110.09	0.0006	0.0004496
K	39	3	He	857869.453	992.5575	37598056.94	0.0012	0.4456
K	39	3	He	832895.055	963.675	37286926.94	0.0012	0.4456
K	39	3	He	829547.401	959.8035	37290591.94	0.0012	0.4456
Ca	44	3	He	1188390.289	78.5316	2974776.52	0.0001	0.003779
Ca	44	3	He	1149583.459	75.9673	2939359.64	0.0001	0.003779
Ca	44	3	He	1153145.708	76.2027	2960651.52	0.0001	0.003779
Ti	47	3	He	3.557	0.0018	70.00	0.0005	0
Ti	47	3	He	2.487	0.0013	50.00	0.0005	0
Ti	47	3	He	2.477	0.0013	50.00	0.0005	0
V	51	3	He	0.07	0.0321	1216.06	0.0223	0.03054
V	51	3	He	-0.03	0.0299	1156.06	0.0223	0.03054
V	51	3	He	-0.008	0.0304	1180.06	0.0223	0.03054
Cr	52	3	He	4.402	0.1624	6151.53	0.0285	0.03714
Cr	52	3	He	4.155	0.1554	6011.40	0.0285	0.03714
Cr	52	3	He	4.359	0.1612	6261.51	0.0285	0.03714
Mn	55	3	He	15.785	0.1999	7572.35	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	16.072	0.2035	7872.42	0.0124	0.004415
Mn	55	3	He	16.213	0.2052	7972.54	0.0124	0.004415
Fe	57	3	He	67.423	0.0396	1500.12	0.0006	0.001356
Fe	57	3	He	69.149	0.0406	1570.16	0.0006	0.001356
Fe	57	3	He	67.039	0.0394	1530.15	0.0006	0.001356
Co	59	3	He	0.099	0.0084	320.01	0.0581	0.002697
Co	59	3	He	0.069	0.0067	260.01	0.0581	0.002697
Co	59	3	He	0.109	0.009	350.02	0.0581	0.002697
Ni	60	3	He	0.879	0.0115	710.04	0.0087	0.003928
Ni	60	3	He	1.097	0.0134	820.05	0.0087	0.003928
Ni	60	3	He	0.989	0.0125	770.05	0.0087	0.003928
Cu	63	3	He	1.237	0.0384	2360.28	0.0261	0.006048
Cu	63	3	He	1.073	0.0341	2080.22	0.0261	0.006048
Cu	63	3	He	1.085	0.0344	2120.22	0.0261	0.006048
Zn	66	3	He	3.031	0.0122	750.04	0.0029	0.003512
Zn	66	3	He	3.293	0.0129	790.05	0.0029	0.003512
Zn	66	3	He	2.513	0.0107	660.04	0.0029	0.003512
As	75	3	He	237.554	0.4919	30245.88	0.0021	0.0007233
As	75	3	He	240.14	0.4972	30340.08	0.0021	0.0007233
As	75	3	He	238.236	0.4933	30392.30	0.0021	0.0007233
Sr	88	3	He	2011.297	18.0073	1152160.14	0.009	0.0005796
Sr	88	3	He	2044.509	18.3047	1135839.75	0.009	0.0005796
Sr	88	3	He	2018.138	18.0686	1141194.05	0.009	0.0005796
Mo	98	3	He	1.781	0.0422	2700.35	0.0235	0.0003188
Mo	98	3	He	1.535	0.0364	2260.28	0.0235	0.0003188
Mo	98	3	He	1.616	0.0383	2420.28	0.0235	0.0003188
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.0009	60.00	0.0499	0.0004754
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.009	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	0.099	0.0188	1200.10	0.0164	0.01713
Sn	120	3	He	0.135	0.0193	1200.10	0.0164	0.01713
Sn	120	3	He	-0.021	0.0168	1060.07	0.0164	0.01713
Sb	121	3	He	19.964	0.3091	19774.52	0.0155	0.0002641
Sb	121	3	He	22.057	0.3414	21187.16	0.0155	0.0002641
Sb	121	3	He	21.249	0.329	20776.18	0.0155	0.0002641
Ba	137	3	He	808.505	4.0254	257553.32	0.005	0.0001577
Ba	137	3	He	836.436	4.1644	258409.20	0.005	0.0001577
Ba	137	3	He	827.662	4.1207	260260.99	0.005	0.0001577
Tl	205	3	He	0.108	0.0031	880.06	0.026	0.0002504
Tl	205	3	He	0.1	0.0029	830.06	0.026	0.0002504
Tl	205	3	He	0.113	0.0032	930.07	0.026	0.0002504
Pb	208	3	He	0.154	0.0068	1080.09	0.0349	0.001422
Pb	208	3	He	0.156	0.0069	1040.08	0.0349	0.001422
Pb	208	3	He	0.146	0.0065	1110.09	0.0349	0.001422
U	238	3	He	0.018	0.001	210.01	0.0502	5.657E-05
U	238	3	He	0.013	0.0007	160.01	0.0502	5.657E-05
U	238	3	He	0.012	0.0006	140.01	0.0502	5.657E-05
Sc	45	1	No Gas			2061806.06		
Sc	45	1	No Gas			2028387.16		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2051833.56		
Ge	72	1	No Gas			936456.86		
Ge	72	1	No Gas			917905.69		
Ge	72	1	No Gas			926979.05		
Sc	45	2	H2			138062.62		
Sc	45	2	H2			139796.18		
Sc	45	2	H2			140937.91		
Ge	72	2	H2			108841.92		
Ge	72	2	H2			107684.98		
Ge	72	2	H2			110345.04		
In	115	2	H2			292799.41		
In	115	2	H2			290239.23		
In	115	2	H2			291037.65		
Sc	45	3	He			37879.98		
Sc	45	3	He			38692.43		
Sc	45	3	He			38852.32		
Ge	72	3	He			61492.68		
Ge	72	3	He			61020.80		
Ge	72	3	He			61613.76		
In	115	3	He			63987.48		
In	115	3	He			62058.90		
In	115	3	He			63164.30		
Tb	159	3	He			286484.39		
Tb	159	3	He			289550.19		
Tb	159	3	He			291346.73		
Bi	209	3	He			219961.21		
Bi	209	3	He			219256.64		
Bi	209	3	He			217746.23		

Quantitation Report

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Sample Type	CCV
Comment	---
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

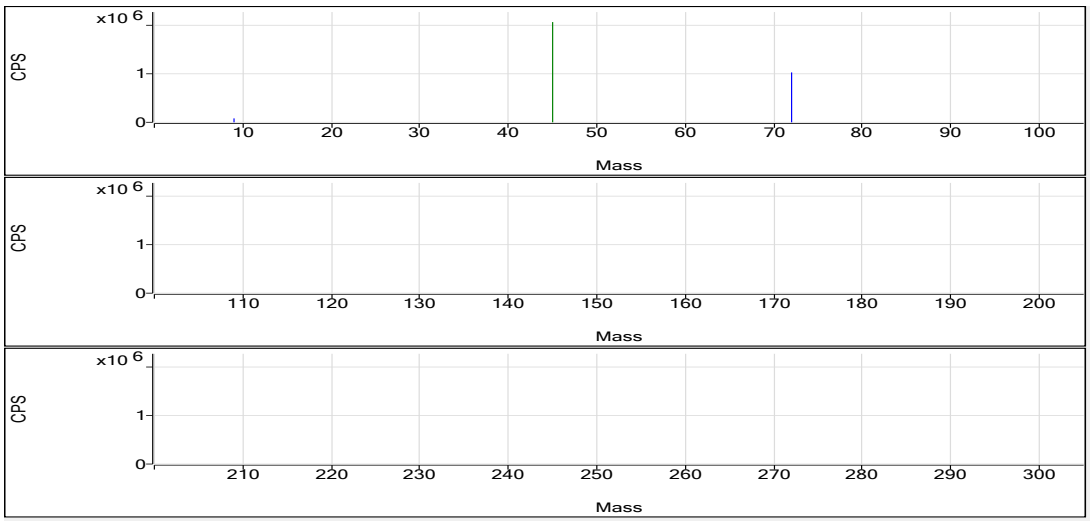
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.840	ppb	1.7	81093.86	0.0390	Pulse	0.5000	3
Se	78	72	H2	51.815	ppb	2.3	2517.56	0.0225	Pulse	1.5000	3
Na	23	45	He	5007.991	ppb	1.0	751797.10	19.5793	Pulse	0.1000	3
Mg	24	45	He	5052.930	ppb	1.1	361941.13	9.4259	Pulse	0.1000	3
Al	27	45	He	5055.146	ppb	0.9	112245.05	2.9232	Pulse	0.1000	3
K	39	45	He	5381.893	ppb	0.5	256115.68	6.6697	Pulse	0.1000	3
Ca	44	45	He	5405.416	ppb	0.9	13860.36	0.3610	Pulse	0.1000	3
Ti	47	45	He	5110.523	ppb	0.9	101963.09	2.6554	Pulse	0.1000	3
V	51	45	He	509.050	ppb	0.8	436940.92	11.3792	Pulse	0.5000	3
Cr	52	45	He	511.511	ppb	0.8	560292.31	14.5914	Pulse	0.1000	3
Mn	55	45	He	511.817	ppb	0.1	243575.41	6.3429	Pulse	0.1000	3
Fe	57	45	He	5031.346	ppb	1.0	109643.82	2.8554	Pulse	0.1000	3
Co	59	45	He	481.770	ppb	0.9	1074841.55	27.9917	Pulse	0.1000	3
Ni	60	72	He	520.565	ppb	1.7	296989.21	4.5158	Pulse	0.1000	3
Cu	63	72	He	491.115	ppb	1.6	844548.74	12.8416	Pulse	0.1000	3
Zn	66	72	He	515.565	ppb	1.5	97392.71	1.4809	Pulse	0.1000	3
As	75	72	He	521.941	ppb	1.5	71015.53	1.0798	Pulse	0.5000	3
Sr	88	115	He	52.360	ppb	2.1	30152.79	0.4694	Pulse	0.1000	3
Mo	98	115	He	50.074	ppb	2.8	75667.32	1.1778	Pulse	0.1000	3
Ag	107	115	He	51.576	ppb	2.1	165233.98	2.5719	Pulse	0.1000	3
Cd	111	115	He	50.942	ppb	0.9	18136.47	0.2823	Pulse	0.5000	3
Sn	120	115	He	51.095	ppb	2.8	54996.50	0.8561	Pulse	0.1000	3
Sb	121	115	He	51.095	ppb	1.0	50794.22	0.7906	Pulse	0.1000	3
Ba	137	115	He	509.132	ppb	1.9	162855.55	2.5349	Pulse	0.1000	3
Tl	205	159	He	50.574	ppb	0.4	388773.39	1.3172	Pulse	0.1000	3
Pb	208	159	He	50.278	ppb	1.4	518821.65	1.7580	Pulse	0.1000	3
U	238	209	He	50.301	ppb	0.3	591314.25	2.5268	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2077869.19	1.2	102.2	Analog	0.1000	3
No Gas	Ge	72	1034209.65	0.9	102.9	Pulse	0.1000	3
H2	Sc	45	133339.92	1.6	100.9	Pulse	0.1000	3
H2	Ge	72	111651.13	1.5	100.1	Pulse	0.1000	3
H2	In	115	296941.43	0.3	101.1	Pulse	0.1000	3
He	Sc	45	38401.37	1.5	103.9	Pulse	0.1000	3
He	Ge	72	65771.88	1.0	101.9	Pulse	0.1000	3
He	In	115	64250.64	0.8	101.7	Pulse	0.1000	3
He	Tb	159	295162.58	1.6	100.8	Pulse	0.1000	3
He	Bi	209	234020.94	0.4	99.2	Pulse	0.1000	3

No Gas



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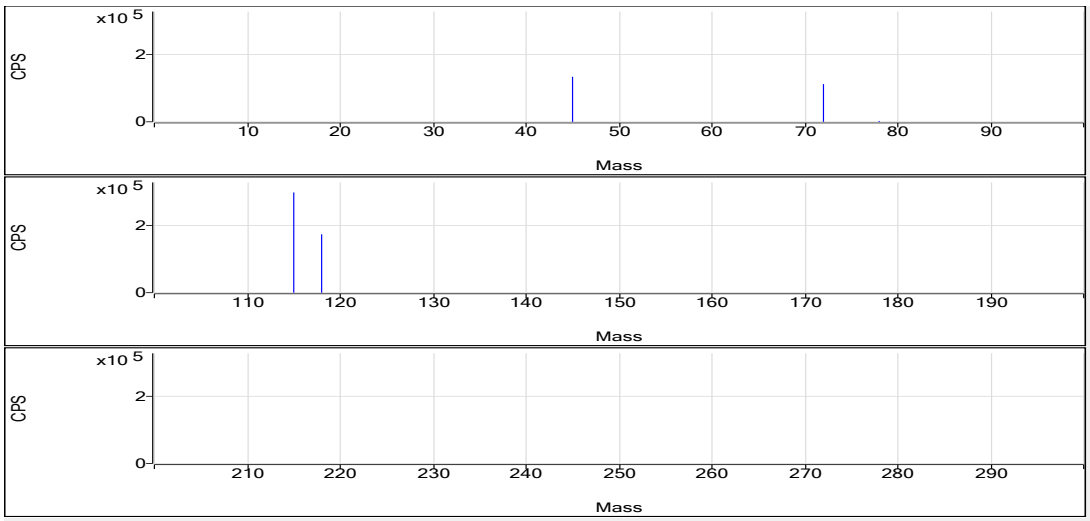
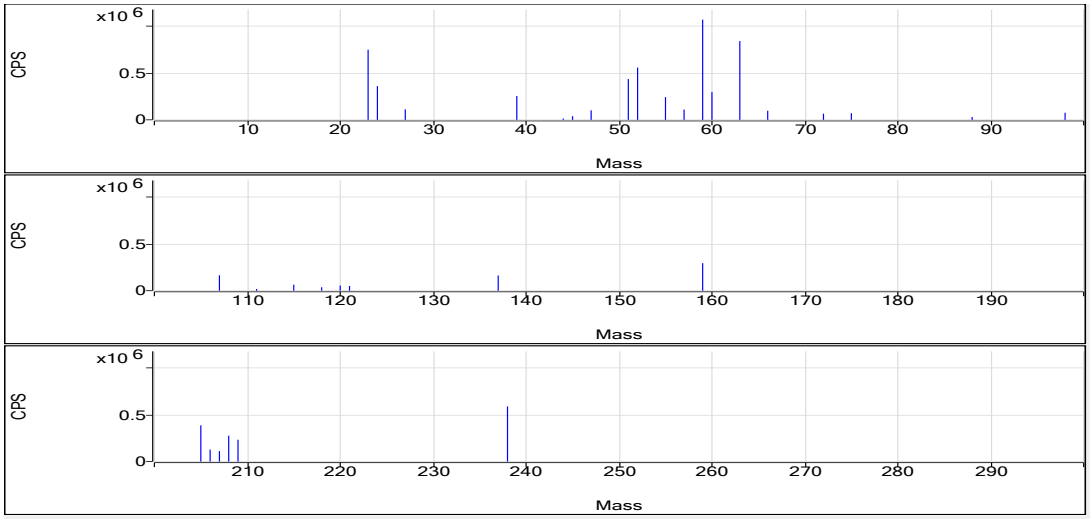


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	51.073	0.0392	80800.23	0.0008	2.195E-05
Be	9	1	No Gas	49.905	0.0383	80729.94	0.0008	2.195E-05
Be	9	1	No Gas	51.542	0.0396	81751.41	0.0008	2.195E-05
Se	78	2	H2	51.722	0.0225	2549.57	0.0004	1.386E-05
Se	78	2	H2	50.652	0.022	2421.54	0.0004	1.386E-05
Se	78	2	H2	53.07	0.0231	2581.57	0.0004	1.386E-05
Na	23	3	He	4947.449	19.3479	755404.13	0.0038	0.4416
Na	23	3	He	5040.004	19.7016	753406.40	0.0038	0.4416
Na	23	3	He	5036.519	19.6883	746580.77	0.0038	0.4416
Mg	24	3	He	5000.233	9.3276	364181.13	0.0019	0.005872
Mg	24	3	He	5107.205	9.5271	364323.59	0.0019	0.005872
Mg	24	3	He	5051.352	9.4229	357318.67	0.0019	0.005872
Al	27	3	He	5003.322	2.8932	112960.89	0.0006	0.0004496
Al	27	3	He	5082.29	2.9389	112385.56	0.0006	0.0004496
Al	27	3	He	5079.826	2.9375	111388.69	0.0006	0.0004496
K	39	3	He	5363.381	6.6483	259570.11	0.0012	0.4456
K	39	3	He	5369.595	6.6555	254510.84	0.0012	0.4456
K	39	3	He	5412.703	6.7053	254266.09	0.0012	0.4456
Ca	44	3	He	5352.664	0.3575	13957.09	0.0001	0.003779
Ca	44	3	He	5426.573	0.3624	13857.04	0.0001	0.003779
Ca	44	3	He	5437.01	0.3631	13766.94	0.0001	0.003779
Ti	47	3	He	5085.351	2.6423	103163.18	0.0005	0
Ti	47	3	He	5082.176	2.6406	100980.15	0.0005	0
Ti	47	3	He	5164.041	2.6832	101745.95	0.0005	0
V	51	3	He	504.267	11.2726	440117.84	0.0223	0.03054
V	51	3	He	510.646	11.4148	436511.63	0.0223	0.03054
V	51	3	He	512.236	11.4502	434193.31	0.0223	0.03054
Cr	52	3	He	507.174	14.4679	564874.29	0.0285	0.03714
Cr	52	3	He	515.013	14.691	561796.24	0.0285	0.03714
Cr	52	3	He	512.347	14.6151	554206.40	0.0285	0.03714
Mn	55	3	He	511.143	6.3346	247323.06	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	512.514	6.3516	242889.94	0.0124	0.004415
Mn	55	3	He	511.792	6.3426	240513.24	0.0124	0.004415
Fe	57	3	He	5006.499	2.8413	110933.42	0.0006	0.001356
Fe	57	3	He	4998.763	2.8369	108485.99	0.0006	0.001356
Fe	57	3	He	5088.776	2.888	109512.05	0.0006	0.001356
Co	59	3	He	478.825	27.8206	1086205.69	0.0581	0.002697
Co	59	3	He	479.695	27.8712	1065817.17	0.0581	0.002697
Co	59	3	He	486.788	28.2832	1072501.78	0.0581	0.002697
Ni	60	3	He	528.723	4.5865	301249.06	0.0087	0.003928
Ni	60	3	He	522.213	4.5301	295267.67	0.0087	0.003928
Ni	60	3	He	510.76	4.4308	294450.91	0.0087	0.003928
Cu	63	3	He	497.311	13.0036	854093.27	0.0261	0.006048
Cu	63	3	He	493.61	12.9068	841256.55	0.0261	0.006048
Cu	63	3	He	482.424	12.6145	838296.39	0.0261	0.006048
Zn	66	3	He	523.129	1.5025	98688.26	0.0029	0.003512
Zn	66	3	He	515.74	1.4814	96553.24	0.0029	0.003512
Zn	66	3	He	507.827	1.4587	96936.63	0.0029	0.003512
As	75	3	He	525.181	1.0865	71364.52	0.0021	0.0007233
As	75	3	He	527.531	1.0914	71135.38	0.0021	0.0007233
As	75	3	He	513.111	1.0616	70546.68	0.0021	0.0007233
Sr	88	3	He	53.257	0.4774	30483.12	0.009	0.0005796
Sr	88	3	He	51.13	0.4583	29722.09	0.009	0.0005796
Sr	88	3	He	52.694	0.4723	30253.17	0.009	0.0005796
Mo	98	3	He	51.608	1.2139	77513.90	0.0235	0.0003188
Mo	98	3	He	48.933	1.151	74638.92	0.0235	0.0003188
Mo	98	3	He	49.682	1.1686	74849.14	0.0235	0.0003188
Ag	107	3	He	52.809	2.6333	168151.83	0.0499	0.0004754
Ag	107	3	He	51.153	2.5508	165408.98	0.0499	0.0004754
Ag	107	3	He	50.766	2.5315	162141.14	0.0499	0.0004754
Cd	111	3	He	51.287	0.2842	18147.80	0.0055	1.07E-05
Cd	111	3	He	50.425	0.2794	18119.79	0.0055	1.07E-05
Cd	111	3	He	51.115	0.2832	18141.82	0.0055	1.07E-05
Sn	120	3	He	51.683	0.8657	55281.11	0.0164	0.01713
Sn	120	3	He	49.481	0.8296	53795.33	0.0164	0.01713
Sn	120	3	He	52.123	0.873	55913.05	0.0164	0.01713
Sb	121	3	He	51.501	0.7969	50884.67	0.0155	0.0002641
Sb	121	3	He	50.532	0.7819	50703.58	0.0155	0.0002641
Sb	121	3	He	51.253	0.793	50794.42	0.0155	0.0002641
Ba	137	3	He	520.276	2.5904	165409.12	0.005	0.0001577
Ba	137	3	He	501.566	2.4972	161938.47	0.005	0.0001577
Ba	137	3	He	505.554	2.5171	161219.06	0.005	0.0001577
Tl	205	3	He	50.366	1.3118	394376.32	0.026	0.0002504
Tl	205	3	He	50.623	1.3185	385994.53	0.026	0.0002504
Tl	205	3	He	50.732	1.3213	385949.33	0.026	0.0002504
Pb	208	3	He	49.494	1.7306	279062.09	0.0349	0.001422
Pb	208	3	He	50.717	1.7734	277487.83	0.0349	0.001422
Pb	208	3	He	50.621	1.77	276374.59	0.0349	0.001422
U	238	3	He	50.26	2.5247	590633.82	0.0502	5.657E-05
U	238	3	He	50.158	2.5196	592227.65	0.0502	5.657E-05
U	238	3	He	50.485	2.536	591081.28	0.0502	5.657E-05
Sc	45	1	No Gas			2060651.84		
Sc	45	1	No Gas			2107025.91		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2065929.81		
Ge	72	1	No Gas			1023646.70		
Ge	72	1	No Gas			1041636.16		
Ge	72	1	No Gas			1037346.08		
Sc	45	2	H2			135707.77		
Sc	45	2	H2			132730.97		
Sc	45	2	H2			131581.02		
Ge	72	2	H2			113287.06		
Ge	72	2	H2			109870.07		
Ge	72	2	H2			111796.26		
In	115	2	H2			297580.97		
In	115	2	H2			297357.91		
In	115	2	H2			295885.41		
Sc	45	3	He			39043.19		
Sc	45	3	He			38240.87		
Sc	45	3	He			37920.05		
Ge	72	3	He			65681.47		
Ge	72	3	He			65179.08		
Ge	72	3	He			66455.10		
In	115	3	He			64138.59		
In	115	3	He			65142.74		
In	115	3	He			64339.20		
Tb	159	3	He			300640.23		
Tb	159	3	He			292754.94		
Tb	159	3	He			292092.57		
Bi	209	3	He			233940.04		
Bi	209	3	He			235048.45		
Bi	209	3	He			233074.33		

Quantitation Report

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Sample Type	CCB
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

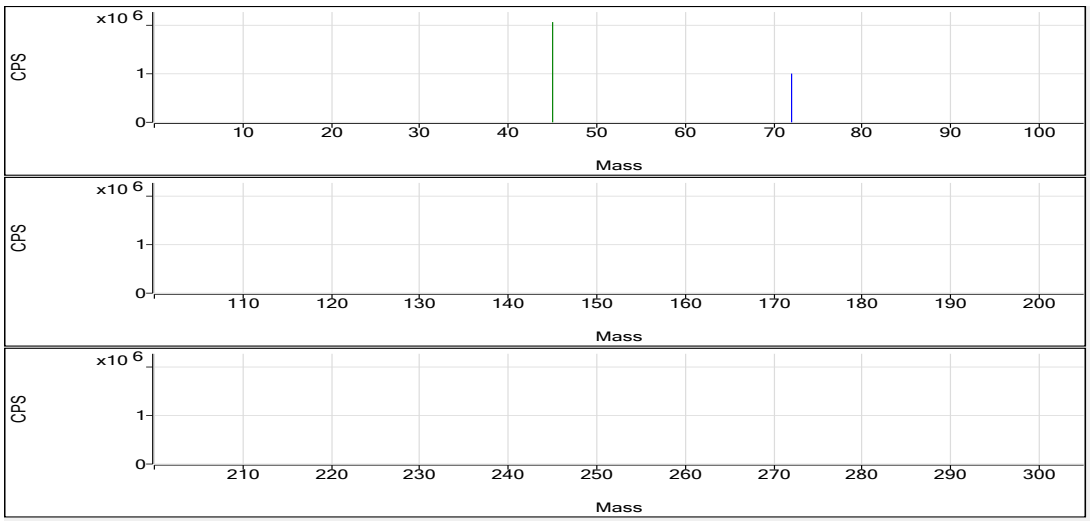
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.037	ppb	26.3	104.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.049	ppb	15.7	3.78	0.0000	Pulse	1.5000	3
Na	23	45	He	122.654	ppb	4.5	33294.91	0.9103	Pulse	0.1000	3
Mg	24	45	He	3.291	ppb	29.7	440.02	0.0120	Pulse	0.1000	3
Al	27	45	He	2.850	ppb	19.9	76.67	0.0021	Pulse	0.1000	3
K	39	45	He	175.235	ppb	9.7	23706.51	0.6483	Pulse	0.1000	3
Ca	44	45	He	104.072	ppb	3.6	390.02	0.0107	Pulse	0.1000	3
Ti	47	45	He	1.243	ppb	67.7	23.33	0.0006	Pulse	0.1000	3
V	51	45	He	0.065	ppb	32.5	1170.72	0.0320	Pulse	0.5000	3
Cr	52	45	He	0.130	ppb	17.3	1493.47	0.0408	Pulse	0.1000	3
Mn	55	45	He	0.188	ppb	89.4	246.68	0.0067	Pulse	0.1000	3
Fe	57	45	He	3.556	ppb	9.5	123.34	0.0034	Pulse	0.1000	3
Co	59	45	He	0.146	ppb	19.4	410.02	0.0112	Pulse	0.1000	3
Ni	60	72	He	0.208	ppb	26.0	366.69	0.0057	Pulse	0.1000	3
Cu	63	72	He	0.360	ppb	26.6	986.75	0.0154	Pulse	0.1000	3
Zn	66	72	He	0.559	ppb	60.9	326.68	0.0051	Pulse	0.1000	3
As	75	72	He	0.265	ppb	36.8	81.33	0.0013	Pulse	0.5000	3
Sr	88	115	He	0.472	ppb	11.3	306.68	0.0048	Pulse	0.1000	3
Mo	98	115	He	0.047	ppb	29.4	90.00	0.0014	Pulse	0.1000	3
Ag	107	115	He	0.020	ppb	63.9	93.34	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.025	ppb	26.6	9.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.069	ppb	N/A	1020.08	0.0160	Pulse	0.1000	3
Sb	121	115	He	0.058	ppb	42.9	73.33	0.0012	Pulse	0.1000	3
Ba	137	115	He	0.200	ppb	60.4	73.33	0.0012	Pulse	0.1000	3
Tl	205	159	He	0.089	ppb	16.6	746.71	0.0026	Pulse	0.1000	3
Pb	208	159	He	0.020	ppb	63.5	620.03	0.0021	Pulse	0.1000	3
U	238	209	He	0.056	ppb	8.2	673.38	0.0029	Pulse	0.1000	3

ISTD Table:

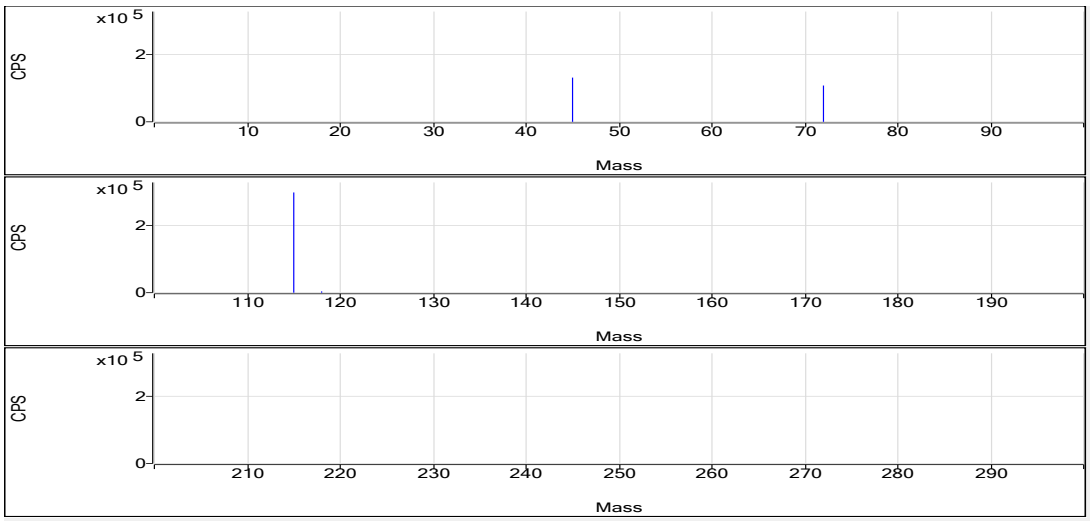
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2066078.15	1.6	101.6	Analog	0.1000	3
No Gas	Ge	72	1003648.13	0.5	99.9	Pulse	0.1000	3
H2	Sc	45	130598.94	1.3	98.9	Pulse	0.1000	3
H2	Ge	72	107180.32	0.8	96.1	Pulse	0.1000	3
H2	In	115	296074.84	0.8	100.8	Pulse	0.1000	3
He	Sc	45	36586.76	2.9	99.0	Pulse	0.1000	3
He	Ge	72	63926.54	0.7	99.0	Pulse	0.1000	3
He	In	115	63707.64	1.6	100.8	Pulse	0.1000	3
He	Tb	159	291694.56	1.0	99.6	Pulse	0.1000	3
He	Bi	209	233325.80	0.8	98.9	Pulse	0.1000	3

No Gas

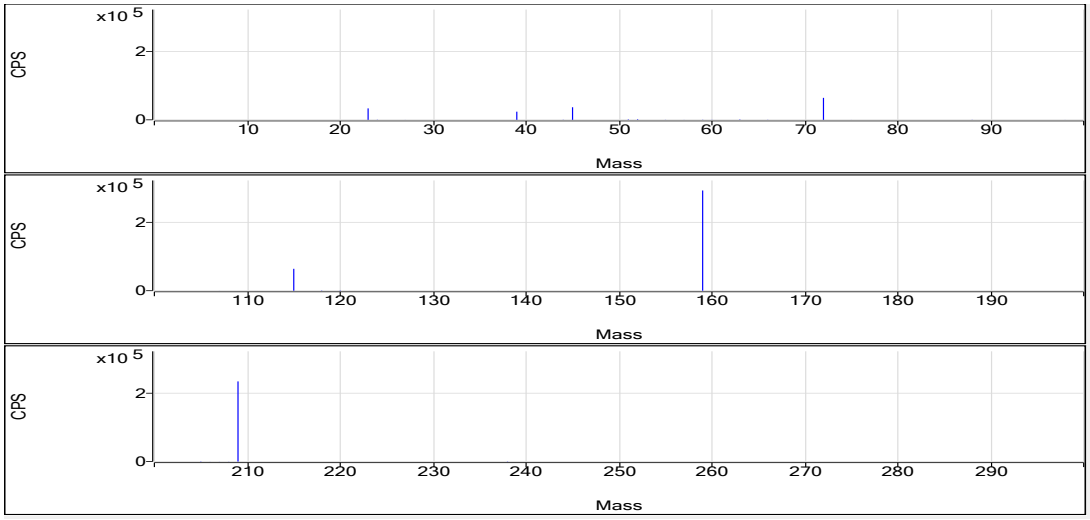


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.044	0.0001	114.00	0.0008	2.195E-05
Be	9	1	No Gas	0.026	0	88.00	0.0008	2.195E-05
Be	9	1	No Gas	0.041	0.0001	110.00	0.0008	2.195E-05
Se	78	2	H2	0.04	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.054	0	4.00	0.0004	1.386E-05
Se	78	2	H2	0.053	0	4.00	0.0004	1.386E-05
Na	23	3	He	128.962	0.9344	33288.25	0.0038	0.4416
Na	23	3	He	120.092	0.9005	33949.72	0.0038	0.4416
Na	23	3	He	118.906	0.896	32646.77	0.0038	0.4416
Mg	24	3	He	3.325	0.0121	430.02	0.0019	0.005872
Mg	24	3	He	4.25	0.0138	520.03	0.0019	0.005872
Mg	24	3	He	2.298	0.0102	370.02	0.0019	0.005872
Al	27	3	He	2.621	0.002	70.00	0.0006	0.0004496
Al	27	3	He	2.434	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	3.495	0.0025	90.00	0.0006	0.0004496
K	39	3	He	194.791	0.6709	23900.07	0.0012	0.4456
K	39	3	He	163.547	0.6348	23930.24	0.0012	0.4456
K	39	3	He	167.367	0.6392	23289.21	0.0012	0.4456
Ca	44	3	He	100.003	0.0104	370.02	0.0001	0.003779
Ca	44	3	He	107.407	0.0109	410.02	0.0001	0.003779
Ca	44	3	He	104.807	0.0107	390.02	0.0001	0.003779
Ti	47	3	He	2.161	0.0011	40.00	0.0005	0
Ti	47	3	He	0.511	0.0003	10.00	0.0005	0
Ti	47	3	He	1.056	0.0005	20.00	0.0005	0
V	51	3	He	0.058	0.0318	1134.06	0.0223	0.03054
V	51	3	He	0.089	0.0325	1226.06	0.0223	0.03054
V	51	3	He	0.048	0.0316	1152.05	0.0223	0.03054
Cr	52	3	He	0.155	0.0415	1480.13	0.0285	0.03714
Cr	52	3	He	0.112	0.0403	1520.14	0.0285	0.03714
Cr	52	3	He	0.123	0.0406	1480.13	0.0285	0.03714
Mn	55	3	He	0.052	0.0051	180.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.136	0.0061	230.01	0.0124	0.004415
Mn	55	3	He	0.375	0.0091	330.02	0.0124	0.004415
Fe	57	3	He	3.548	0.0034	120.00	0.0006	0.001356
Fe	57	3	He	3.221	0.0032	120.00	0.0006	0.001356
Fe	57	3	He	3.9	0.0036	130.01	0.0006	0.001356
Co	59	3	He	0.157	0.0118	420.02	0.0581	0.002697
Co	59	3	He	0.168	0.0125	470.02	0.0581	0.002697
Co	59	3	He	0.114	0.0093	340.02	0.0581	0.002697
Ni	60	3	He	0.147	0.0052	330.02	0.0087	0.003928
Ni	60	3	He	0.25	0.0061	390.02	0.0087	0.003928
Ni	60	3	He	0.228	0.0059	380.02	0.0087	0.003928
Cu	63	3	He	0.426	0.0172	1090.10	0.0261	0.006048
Cu	63	3	He	0.403	0.0166	1060.09	0.0261	0.006048
Cu	63	3	He	0.25	0.0126	810.06	0.0261	0.006048
Zn	66	3	He	0.865	0.006	380.02	0.0029	0.003512
Zn	66	3	He	0.193	0.0041	260.01	0.0029	0.003512
Zn	66	3	He	0.618	0.0053	340.02	0.0029	0.003512
As	75	3	He	0.245	0.0012	78.00	0.0021	0.0007233
As	75	3	He	0.179	0.0011	70.00	0.0021	0.0007233
As	75	3	He	0.371	0.0015	96.00	0.0021	0.0007233
Sr	88	3	He	0.523	0.0053	340.01	0.009	0.0005796
Sr	88	3	He	0.478	0.0049	310.02	0.009	0.0005796
Sr	88	3	He	0.416	0.0043	270.01	0.009	0.0005796
Mo	98	3	He	0.032	0.0011	70.00	0.0235	0.0003188
Mo	98	3	He	0.06	0.0017	110.00	0.0235	0.0003188
Mo	98	3	He	0.048	0.0014	90.00	0.0235	0.0003188
Ag	107	3	He	0.012	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0.034	0.0022	140.01	0.0499	0.0004754
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Cd	111	3	He	0.02	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.032	0.0002	12.00	0.0055	1.07E-05
Cd	111	3	He	0.021	0.0001	8.00	0.0055	1.07E-05
Sn	120	3	He	-0.064	0.0161	1040.08	0.0164	0.01713
Sn	120	3	He	0.026	0.0176	1120.09	0.0164	0.01713
Sn	120	3	He	-0.169	0.0144	900.06	0.0164	0.01713
Sb	121	3	He	0.043	0.0009	60.00	0.0155	0.0002641
Sb	121	3	He	0.044	0.0009	60.00	0.0155	0.0002641
Sb	121	3	He	0.086	0.0016	100.00	0.0155	0.0002641
Ba	137	3	He	0.062	0.0005	30.00	0.005	0.0001577
Ba	137	3	He	0.283	0.0016	100.00	0.005	0.0001577
Ba	137	3	He	0.257	0.0014	90.00	0.005	0.0001577
Tl	205	3	He	0.105	0.003	880.06	0.026	0.0002504
Tl	205	3	He	0.077	0.0023	660.04	0.026	0.0002504
Tl	205	3	He	0.084	0.0024	700.04	0.026	0.0002504
Pb	208	3	He	0.034	0.0026	390.02	0.0349	0.001422
Pb	208	3	He	0.009	0.0017	270.02	0.0349	0.001422
Pb	208	3	He	0.017	0.002	280.01	0.0349	0.001422
U	238	3	He	0.051	0.0026	610.03	0.0502	5.657E-05
U	238	3	He	0.059	0.003	710.05	0.0502	5.657E-05
U	238	3	He	0.059	0.003	700.05	0.0502	5.657E-05
Sc	45	1	No Gas			2036677.63		
Sc	45	1	No Gas			2100645.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2060911.22		
Ge	72	1	No Gas			1005271.31		
Ge	72	1	No Gas			1007414.28		
Ge	72	1	No Gas			998258.81		
Sc	45	2	H2			132449.72		
Sc	45	2	H2			129199.91		
Sc	45	2	H2			130147.18		
Ge	72	2	H2			106192.43		
Ge	72	2	H2			107523.17		
Ge	72	2	H2			107825.35		
In	115	2	H2			296976.38		
In	115	2	H2			297804.94		
In	115	2	H2			293443.20		
Sc	45	3	He			35624.29		
Sc	45	3	He			37699.73		
Sc	45	3	He			36436.25		
Ge	72	3	He			63431.53		
Ge	72	3	He			63972.92		
Ge	72	3	He			64375.16		
In	115	3	He			64671.08		
In	115	3	He			63787.06		
In	115	3	He			62681.40		
Tb	159	3	He			294410.91		
Tb	159	3	He			292019.37		
Tb	159	3	He			288653.41		
Bi	209	3	He			232891.27		
Bi	209	3	He			235405.66		
Bi	209	3	He			231680.48		

Quantitation Report

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Auto Dilution	1.0000
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Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

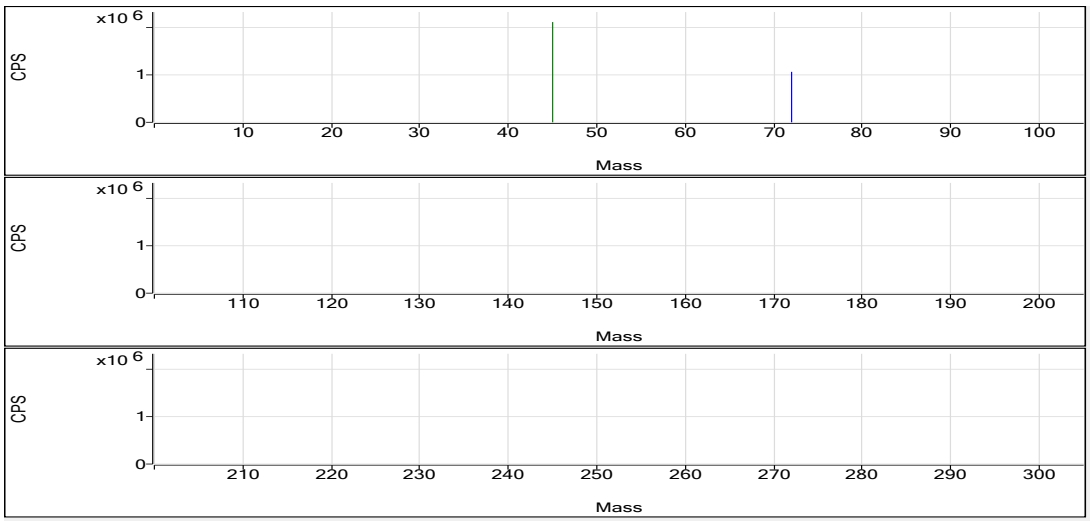
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.031	ppb	27.4	96.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.035	ppb	135.1	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	1436.855	ppb	2.6	227646.01	5.9324	Pulse	0.1000	3
Mg	24	45	He	4327.175	ppb	1.9	309803.11	8.0729	Pulse	0.1000	3
Al	27	45	He	6.737	ppb	16.0	166.68	0.0043	Pulse	0.1000	3
K	39	45	He	1708.580	ppb	1.8	92938.30	2.4216	Pulse	0.1000	3
Ca	44	45	He	17360.367	ppb	3.4	44157.70	1.1509	Pulse	0.1000	3
Ti	47	45	He	0.843	ppb	91.0	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	-0.300	ppb	N/A	915.37	0.0239	Pulse	0.5000	3
Cr	52	45	He	-0.095	ppb	N/A	1320.11	0.0344	Pulse	0.1000	3
Mn	55	45	He	268.028	ppb	2.3	127545.29	3.3238	Pulse	0.1000	3
Fe	57	45	He	6093.618	ppb	1.2	132722.78	3.4580	Pulse	0.1000	3
Co	59	45	He	5.138	ppb	0.6	11561.67	0.3012	Pulse	0.1000	3
Ni	60	72	He	2.487	ppb	15.8	1736.84	0.0255	Pulse	0.1000	3
Cu	63	72	He	8.755	ppb	4.4	15989.42	0.2349	Pulse	0.1000	3
Zn	66	72	He	9.774	ppb	8.9	2146.91	0.0315	Pulse	0.1000	3
As	75	72	He	0.995	ppb	16.5	189.33	0.0028	Pulse	0.5000	3
Sr	88	115	He	65.054	ppb	1.7	37173.01	0.5830	Pulse	0.1000	3
Mo	98	115	He	0.173	ppb	23.1	280.01	0.0044	Pulse	0.1000	3
Ag	107	115	He	0.015	ppb	46.6	76.67	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.062	ppb	44.6	22.67	0.0004	Pulse	0.5000	3
Sn	120	115	He	-0.216	ppb	N/A	866.73	0.0136	Pulse	0.1000	3
Sb	121	115	He	0.068	ppb	63.6	83.34	0.0013	Pulse	0.1000	3
Ba	137	115	He	51.521	ppb	3.4	16360.31	0.2567	Pulse	0.1000	3
Tl	205	159	He	0.070	ppb	9.3	606.71	0.0021	Pulse	0.1000	3
Pb	208	159	He	0.029	ppb	48.7	716.70	0.0024	Pulse	0.1000	3
U	238	209	He	0.047	ppb	10.2	570.03	0.0024	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2109375.33	0.7	103.8	Analog	0.1000	3
No Gas	Ge	72	1062069.39	0.7	105.7	Pulse	0.1000	3
H2	Sc	45	131688.23	1.1	99.7	Pulse	0.1000	3
H2	Ge	72	115161.41	2.3	103.3	Pulse	0.1000	3
H2	In	115	299430.89	1.0	102.0	Pulse	0.1000	3
He	Sc	45	38388.17	2.5	103.9	Pulse	0.1000	3
He	Ge	72	68099.27	1.1	105.5	Pulse	0.1000	3
He	In	115	63765.62	1.5	100.9	Pulse	0.1000	3
He	Tb	159	294301.91	0.1	100.5	Pulse	0.1000	3
He	Bi	209	237858.86	0.8	100.9	Pulse	0.1000	3

No Gas



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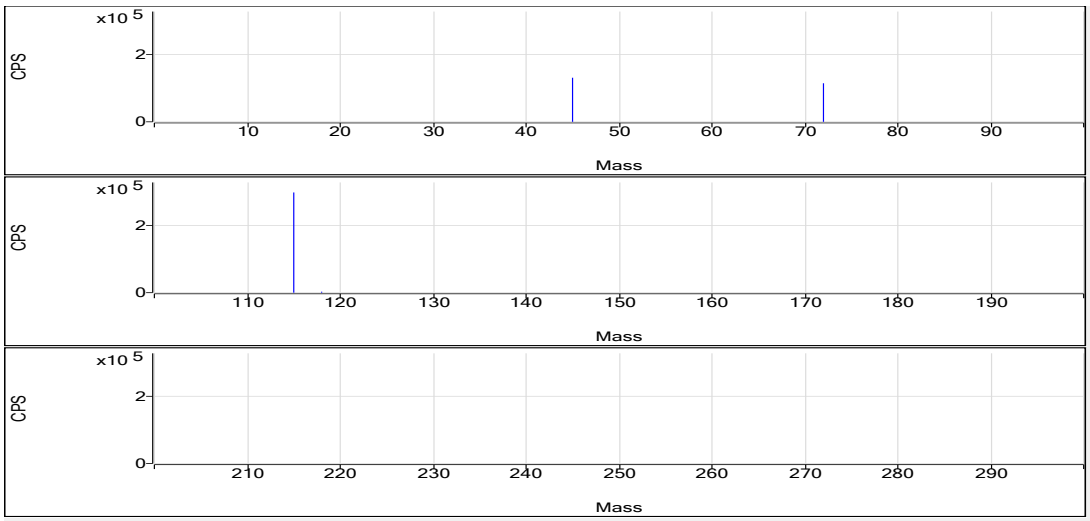
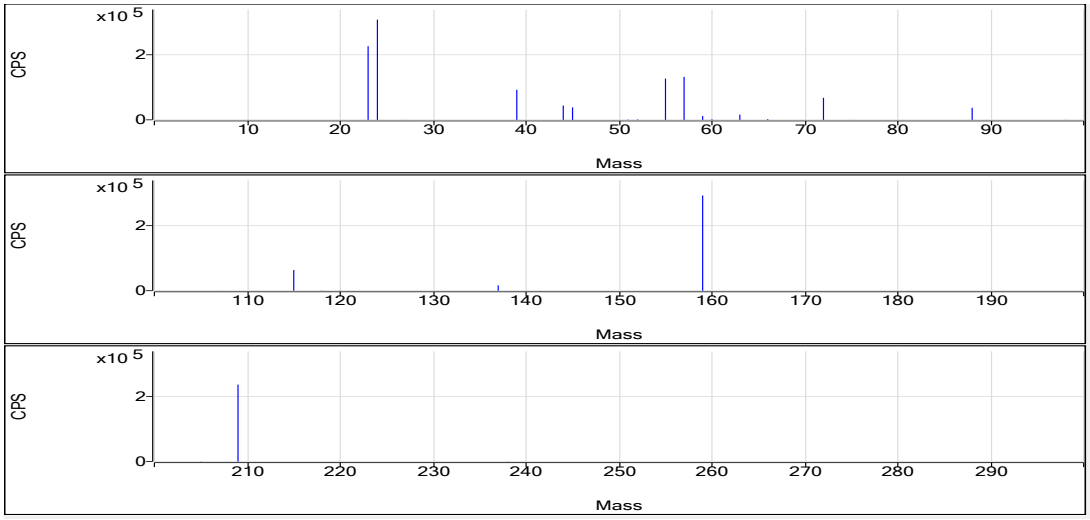


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.036	0	106.00	0.0008	2.195E-05
Be	9	1	No Gas	0.021	0	80.00	0.0008	2.195E-05
Be	9	1	No Gas	0.035	0	102.00	0.0008	2.195E-05
Se	78	2	H2	0.007	0	2.00	0.0004	1.386E-05
Se	78	2	H2	0.008	0	2.00	0.0004	1.386E-05
Se	78	2	H2	0.09	0.0001	6.00	0.0004	1.386E-05
Na	23	3	He	1438.931	5.9404	228535.41	0.0038	0.4416
Na	23	3	He	1472.611	6.0691	226916.99	0.0038	0.4416
Na	23	3	He	1399.022	5.7879	227485.64	0.0038	0.4416
Mg	24	3	He	4315.535	8.0512	309741.75	0.0019	0.005872
Mg	24	3	He	4416.462	8.2393	308061.15	0.0019	0.005872
Mg	24	3	He	4249.526	7.9281	311606.42	0.0019	0.005872
Al	27	3	He	5.517	0.0036	140.01	0.0006	0.0004496
Al	27	3	He	7.55	0.0048	180.01	0.0006	0.0004496
Al	27	3	He	7.144	0.0046	180.01	0.0006	0.0004496
K	39	3	He	1692.405	2.4029	92441.67	0.0012	0.4456
K	39	3	He	1744.177	2.4627	92079.17	0.0012	0.4456
K	39	3	He	1689.157	2.3991	94294.05	0.0012	0.4456
Ca	44	3	He	17210.379	1.141	43897.06	0.0001	0.003779
Ca	44	3	He	18010.636	1.1939	44639.02	0.0001	0.003779
Ca	44	3	He	16860.086	1.1179	43937.01	0.0001	0.003779
Ti	47	3	He	1.501	0.0008	30.00	0.0005	0
Ti	47	3	He	1.03	0.0005	20.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.33	0.0232	892.03	0.0223	0.03054
V	51	3	He	-0.247	0.025	936.04	0.0223	0.03054
V	51	3	He	-0.322	0.0234	918.04	0.0223	0.03054
Cr	52	3	He	-0.191	0.0317	1220.10	0.0285	0.03714
Cr	52	3	He	0.067	0.0391	1460.13	0.0285	0.03714
Cr	52	3	He	-0.16	0.0326	1280.11	0.0285	0.03714
Mn	55	3	He	267.077	3.312	127417.56	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	274.536	3.4044	127286.22	0.0124	0.004415
Mn	55	3	He	262.471	3.2549	127932.10	0.0124	0.004415
Fe	57	3	He	6135.504	3.4817	133947.58	0.0006	0.001356
Fe	57	3	He	6137.15	3.4827	130213.45	0.0006	0.001356
Fe	57	3	He	6008.2	3.4095	134007.31	0.0006	0.001356
Co	59	3	He	5.101	0.2991	11504.97	0.0581	0.002697
Co	59	3	He	5.153	0.3021	11294.85	0.0581	0.002697
Co	59	3	He	5.159	0.3024	11885.19	0.0581	0.002697
Ni	60	3	He	2.391	0.0247	1680.16	0.0087	0.003928
Ni	60	3	He	2.151	0.0226	1520.12	0.0087	0.003928
Ni	60	3	He	2.918	0.0292	2010.23	0.0087	0.003928
Cu	63	3	He	8.52	0.2287	15589.00	0.0261	0.006048
Cu	63	3	He	9.195	0.2464	16590.12	0.0261	0.006048
Cu	63	3	He	8.549	0.2295	15789.14	0.0261	0.006048
Zn	66	3	He	8.914	0.0291	1980.21	0.0029	0.003512
Zn	66	3	He	9.763	0.0315	2120.25	0.0029	0.003512
Zn	66	3	He	10.644	0.034	2340.27	0.0029	0.003512
As	75	3	He	1.183	0.0032	216.00	0.0021	0.0007233
As	75	3	He	0.886	0.0026	172.00	0.0021	0.0007233
As	75	3	He	0.915	0.0026	180.00	0.0021	0.0007233
Sr	88	3	He	64.22	0.5755	36407.83	0.009	0.0005796
Sr	88	3	He	64.677	0.5796	37610.64	0.009	0.0005796
Sr	88	3	He	66.265	0.5938	37500.56	0.009	0.0005796
Mo	98	3	He	0.128	0.0033	210.01	0.0235	0.0003188
Mo	98	3	He	0.203	0.0051	330.02	0.0235	0.0003188
Mo	98	3	He	0.188	0.0048	300.01	0.0235	0.0003188
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0.009	0.0009	60.00	0.0499	0.0004754
Ag	107	3	He	0.022	0.0016	100.00	0.0499	0.0004754
Cd	111	3	He	0.067	0.0004	24.00	0.0055	1.07E-05
Cd	111	3	He	0.087	0.0005	32.00	0.0055	1.07E-05
Cd	111	3	He	0.032	0.0002	12.00	0.0055	1.07E-05
Sn	120	3	He	-0.283	0.0125	790.05	0.0164	0.01713
Sn	120	3	He	-0.161	0.0145	940.07	0.0164	0.01713
Sn	120	3	He	-0.204	0.0138	870.06	0.0164	0.01713
Sb	121	3	He	0.034	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.053	0.0011	70.00	0.0155	0.0002641
Sb	121	3	He	0.116	0.0021	130.01	0.0155	0.0002641
Ba	137	3	He	52.678	0.2624	16600.69	0.005	0.0001577
Ba	137	3	He	49.496	0.2466	15999.76	0.005	0.0001577
Ba	137	3	He	52.388	0.261	16480.47	0.005	0.0001577
Tl	205	3	He	0.073	0.0021	630.04	0.026	0.0002504
Tl	205	3	He	0.074	0.0022	640.04	0.026	0.0002504
Tl	205	3	He	0.062	0.0019	550.04	0.026	0.0002504
Pb	208	3	He	0.024	0.0023	360.02	0.0349	0.001422
Pb	208	3	He	0.018	0.002	280.01	0.0349	0.001422
Pb	208	3	He	0.045	0.003	430.02	0.0349	0.001422
U	238	3	He	0.045	0.0023	550.03	0.0502	5.657E-05
U	238	3	He	0.043	0.0022	530.03	0.0502	5.657E-05
U	238	3	He	0.052	0.0027	630.04	0.0502	5.657E-05
Sc	45	1	No Gas			2125317.47		
Sc	45	1	No Gas			2101125.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2101683.09		
Ge	72	1	No Gas			1056816.08		
Ge	72	1	No Gas			1070122.72		
Ge	72	1	No Gas			1059269.36		
Sc	45	2	H2			132165.57		
Sc	45	2	H2			132830.74		
Sc	45	2	H2			130068.39		
Ge	72	2	H2			118176.22		
Ge	72	2	H2			114092.97		
Ge	72	2	H2			113215.03		
In	115	2	H2			301527.61		
In	115	2	H2			300756.89		
In	115	2	H2			296008.16		
Sc	45	3	He			38471.56		
Sc	45	3	He			37389.04		
Sc	45	3	He			39303.90		
Ge	72	3	He			68152.74		
Ge	72	3	He			67339.27		
Ge	72	3	He			68805.79		
In	115	3	He			63264.22		
In	115	3	He			64892.08		
In	115	3	He			63154.37		
Tb	159	3	He			294411.25		
Tb	159	3	He			293979.88		
Tb	159	3	He			294514.60		
Bi	209	3	He			239497.91		
Bi	209	3	He			238172.73		
Bi	209	3	He			235905.93		

Quantitation Report

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Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\23H16A00.b
Acq Time	8/16/2023 11:59:46 AM
Sample Name	410-136831-C-2-A
Sample Type	Sample
Comment	C24
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

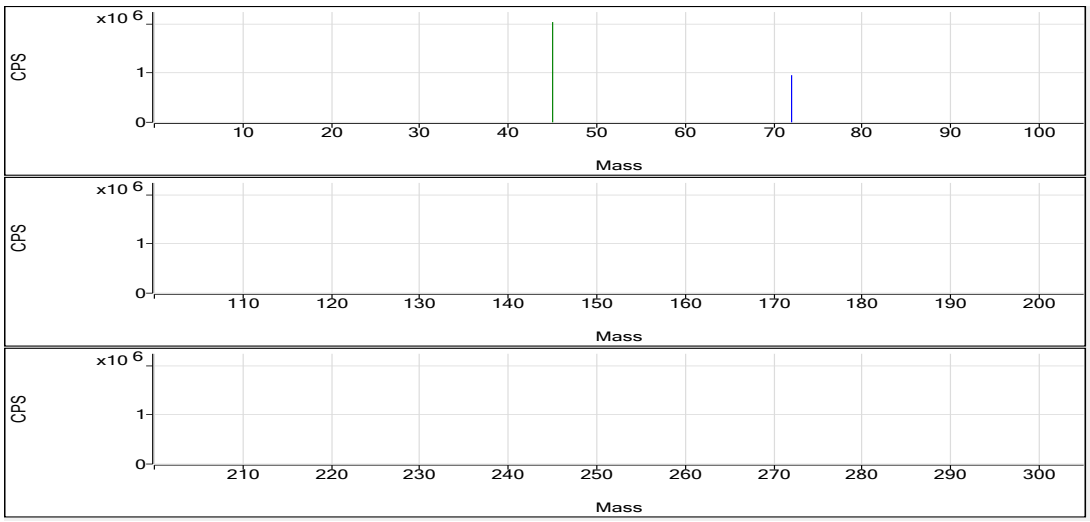
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.006	ppb	165.3	53.33	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.178	ppb	26.1	9.78	0.0001	Pulse	1.5000	3
Na	23	45	He	2528797.577	ppb	2.3	348984981.47	9 664.0511	Analog	0.1000	3
Mg	24	45	He	71513.047	ppb	1.9	4814853.37	133.3254	Analog	0.1000	3
Al	27	45	He	8.635	ppb	4.4	196.68	0.0054	Pulse	0.1000	3
K	39	45	He	8973.636	ppb	2.4	390862.65	10.8235	Pulse	0.1000	3
Ca	44	45	He	21471.583	ppb	1.4	51378.16	1.4226	Pulse	0.1000	3
Ti	47	45	He	0.354	ppb	86.6	6.67	0.0002	Pulse	0.1000	3
V	51	45	He	-0.277	ppb	N/A	880.03	0.0244	Pulse	0.5000	3
Cr	52	45	He	0.079	ppb	213.8	1420.12	0.0394	Pulse	0.1000	3
Mn	55	45	He	43.792	ppb	1.4	19747.44	0.5467	Pulse	0.1000	3
Fe	57	45	He	39.258	ppb	12.4	853.39	0.0236	Pulse	0.1000	3
Co	59	45	He	1.115	ppb	5.9	2436.96	0.0675	Pulse	0.1000	3
Ni	60	72	He	44.087	ppb	2.1	24184.23	0.3860	Pulse	0.1000	3
Cu	63	72	He	2.269	ppb	4.4	4094.07	0.0654	Pulse	0.1000	3
Zn	66	72	He	2.668	ppb	25.9	700.05	0.0112	Pulse	0.1000	3
As	75	72	He	0.979	ppb	8.4	172.00	0.0027	Pulse	0.5000	3
Sr	88	115	He	488.311	ppb	2.5	258768.10	4.3723	Pulse	0.1000	3
Mo	98	115	He	0.723	ppb	5.7	1026.74	0.0173	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	971.6	30.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.014	ppb	66.1	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.178	ppb	N/A	840.06	0.0142	Pulse	0.1000	3
Sb	121	115	He	0.026	ppb	38.1	40.00	0.0007	Pulse	0.1000	3
Ba	137	115	He	7.154	ppb	5.1	2116.91	0.0358	Pulse	0.1000	3
Tl	205	159	He	0.044	ppb	7.0	383.35	0.0014	Pulse	0.1000	3
Pb	208	159	He	0.048	ppb	3.4	843.37	0.0031	Pulse	0.1000	3
U	238	209	He	0.110	ppb	7.6	1180.10	0.0056	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2037381.32	0.7	100.2	Analog	0.1000	3
No Gas	Ge	72	957734.15	1.0	95.3	Pulse	0.1000	3
H2	Sc	45	128352.15	0.7	97.2	Pulse	0.1000	3
H2	Ge	72	107495.45	2.3	96.4	Pulse	0.1000	3
H2	In	115	273396.83	0.7	93.1	Pulse	0.1000	3
He	Sc	45	36122.17	1.9	97.8	Pulse	0.1000	3
He	Ge	72	62657.92	1.4	97.1	Pulse	0.1000	3
He	In	115	59202.35	1.9	93.7	Pulse	0.1000	3
He	Tb	159	272315.29	0.4	93.0	Pulse	0.1000	3
He	Bi	209	212236.02	0.4	90.0	Pulse	0.1000	3

No Gas



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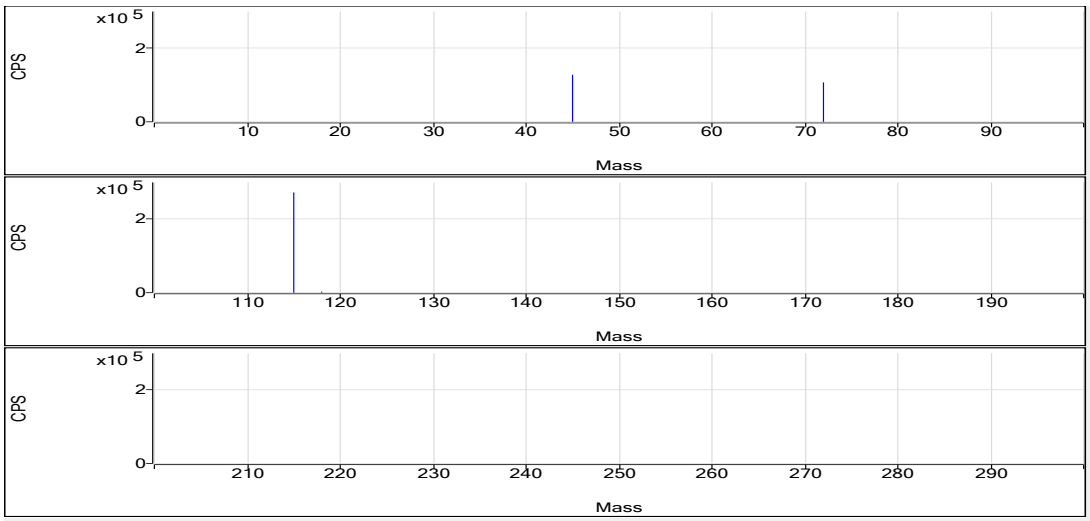
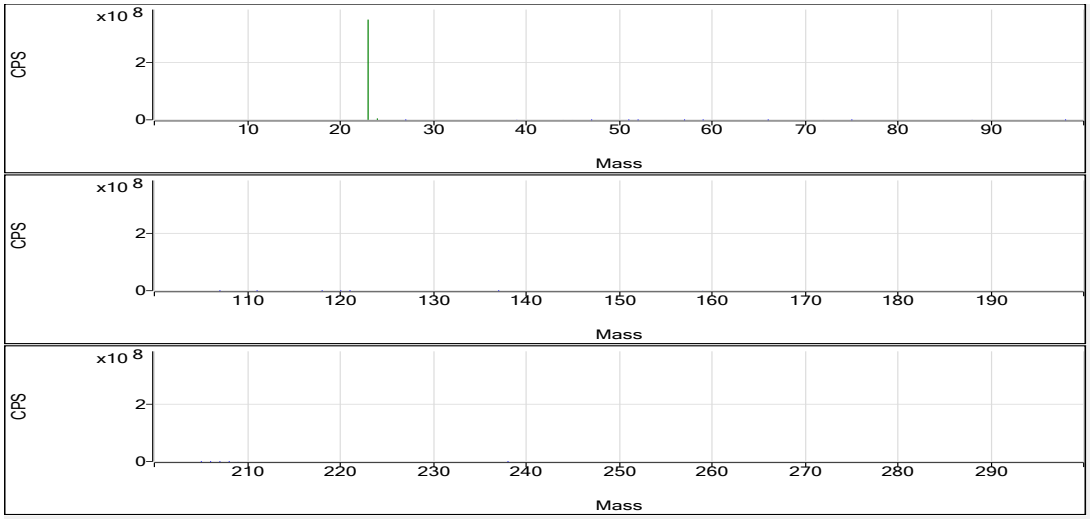


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.004	0	52.00	0.0008	2.195E-05
Be	9	1	No Gas	0.015	0	68.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.003	0	40.00	0.0008	2.195E-05
Se	78	2	H2	0.141	0.0001	8.00	0.0004	1.386E-05
Se	78	2	H2	0.23	0.0001	12.00	0.0004	1.386E-05
Se	78	2	H2	0.163	0.0001	9.33	0.0004	1.386E-05
Na	23	3	He	2547005.888	9733.6327	349680074.79	0.0038	0.4416
Na	23	3	He	2574622.004	9839.1656	349725074.79	0.0038	0.4416
Na	23	3	He	2464764.839	9419.3548	347549794.82	0.0038	0.4416
Mg	24	3	He	71863.073	133.9779	4813148.05	0.0019	0.005872
Mg	24	3	He	72628.689	135.4053	4812868.68	0.0019	0.005872
Mg	24	3	He	70047.379	130.593	4818543.37	0.0019	0.005872
Al	27	3	He	8.37	0.0053	190.01	0.0006	0.0004496
Al	27	3	He	8.468	0.0053	190.01	0.0006	0.0004496
Al	27	3	He	9.067	0.0057	210.01	0.0006	0.0004496
K	39	3	He	9125.834	10.9995	395156.09	0.0012	0.4456
K	39	3	He	9065.563	10.9298	388490.54	0.0012	0.4456
K	39	3	He	8729.511	10.5412	388941.32	0.0012	0.4456
Ca	44	3	He	21591.346	1.4305	51391.22	0.0001	0.003779
Ca	44	3	He	21699.421	1.4377	51100.39	0.0001	0.003779
Ca	44	3	He	21123.984	1.3996	51642.87	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0.541	0.0003	10.00	0.0005	0
Ti	47	3	He	0.522	0.0003	10.00	0.0005	0
V	51	3	He	-0.284	0.0242	870.03	0.0223	0.03054
V	51	3	He	-0.219	0.0257	912.03	0.0223	0.03054
V	51	3	He	-0.327	0.0233	858.03	0.0223	0.03054
Cr	52	3	He	0.055	0.0387	1390.12	0.0285	0.03714
Cr	52	3	He	0.257	0.0445	1580.16	0.0285	0.03714
Cr	52	3	He	-0.076	0.035	1290.09	0.0285	0.03714
Mn	55	3	He	44.404	0.5543	19914.40	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	43.769	0.5465	19423.60	0.0124	0.004415
Mn	55	3	He	43.203	0.5395	19904.32	0.0124	0.004415
Fe	57	3	He	44.722	0.0267	960.07	0.0006	0.001356
Fe	57	3	He	35.306	0.0214	760.05	0.0006	0.001356
Fe	57	3	He	37.746	0.0228	840.06	0.0006	0.001356
Co	59	3	He	1.18	0.0713	2560.33	0.0581	0.002697
Co	59	3	He	1.048	0.0636	2260.25	0.0581	0.002697
Co	59	3	He	1.115	0.0675	2490.30	0.0581	0.002697
Ni	60	3	He	43.148	0.3779	23940.42	0.0087	0.003928
Ni	60	3	He	45.035	0.3943	24331.24	0.0087	0.003928
Ni	60	3	He	44.079	0.386	24281.04	0.0087	0.003928
Cu	63	3	He	2.209	0.0638	4040.72	0.0261	0.006048
Cu	63	3	He	2.385	0.0684	4220.79	0.0261	0.006048
Cu	63	3	He	2.214	0.0639	4020.71	0.0261	0.006048
Zn	66	3	He	3.457	0.0134	850.05	0.0029	0.003512
Zn	66	3	He	2.168	0.0097	600.05	0.0029	0.003512
Zn	66	3	He	2.381	0.0103	650.04	0.0029	0.003512
As	75	3	He	0.887	0.0026	162.00	0.0021	0.0007233
As	75	3	He	1.045	0.0029	178.00	0.0021	0.0007233
As	75	3	He	1.003	0.0028	176.00	0.0021	0.0007233
Sr	88	3	He	477.897	4.2791	258017.24	0.009	0.0005796
Sr	88	3	He	502.018	4.495	260707.85	0.009	0.0005796
Sr	88	3	He	485.017	4.3428	257579.21	0.009	0.0005796
Mo	98	3	He	0.748	0.0179	1080.09	0.0235	0.0003188
Mo	98	3	He	0.676	0.0162	940.06	0.0235	0.0003188
Mo	98	3	He	0.747	0.0179	1060.08	0.0235	0.0003188
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Ag	107	3	He	0.008	0.0009	50.00	0.0499	0.0004754
Ag	107	3	He	0.001	0.0005	30.00	0.0499	0.0004754
Cd	111	3	He	0.016	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.023	0.0001	8.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	-0.215	0.0136	820.05	0.0164	0.01713
Sn	120	3	He	-0.077	0.0159	920.07	0.0164	0.01713
Sn	120	3	He	-0.242	0.0132	780.05	0.0164	0.01713
Sb	121	3	He	0.037	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.016	0.0005	30.00	0.0155	0.0002641
Sb	121	3	He	0.027	0.0007	40.00	0.0155	0.0002641
Ba	137	3	He	6.731	0.0337	2030.22	0.005	0.0001577
Ba	137	3	He	7.346	0.0367	2130.24	0.005	0.0001577
Ba	137	3	He	7.386	0.0369	2190.26	0.005	0.0001577
Tl	205	3	He	0.041	0.0013	360.02	0.026	0.0002504
Tl	205	3	He	0.047	0.0015	400.02	0.026	0.0002504
Tl	205	3	He	0.046	0.0014	390.02	0.026	0.0002504
Pb	208	3	He	0.047	0.0031	380.02	0.0349	0.001422
Pb	208	3	He	0.05	0.0032	420.02	0.0349	0.001422
Pb	208	3	He	0.047	0.0031	390.02	0.0349	0.001422
U	238	3	He	0.117	0.0059	1260.10	0.0502	5.657E-05
U	238	3	He	0.111	0.0056	1190.11	0.0502	5.657E-05
U	238	3	He	0.101	0.0051	1090.08	0.0502	5.657E-05
Sc	45	1	No Gas			2052741.22		
Sc	45	1	No Gas			2023364.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2036038.25		
Ge	72	1	No Gas			960386.86		
Ge	72	1	No Gas			947200.77		
Ge	72	1	No Gas			965614.83		
Sc	45	2	H2			129138.35		
Sc	45	2	H2			128494.14		
Sc	45	2	H2			127423.96		
Ge	72	2	H2			106676.25		
Ge	72	2	H2			105547.98		
Ge	72	2	H2			110262.12		
In	115	2	H2			275579.45		
In	115	2	H2			273070.25		
In	115	2	H2			271540.78		
Sc	45	3	He			35924.93		
Sc	45	3	He			35544.18		
Sc	45	3	He			36897.41		
Ge	72	3	He			63350.99		
Ge	72	3	He			61714.17		
Ge	72	3	He			62908.61		
In	115	3	He			60301.75		
In	115	3	He			58001.61		
In	115	3	He			59316.49		
Tb	159	3	He			273568.98		
Tb	159	3	He			272003.53		
Tb	159	3	He			271373.37		
Bi	209	3	He			212131.72		
Bi	209	3	He			211362.07		
Bi	209	3	He			213214.27		

Quantitation Report

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Sample Type	Sample
Comment	C24
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

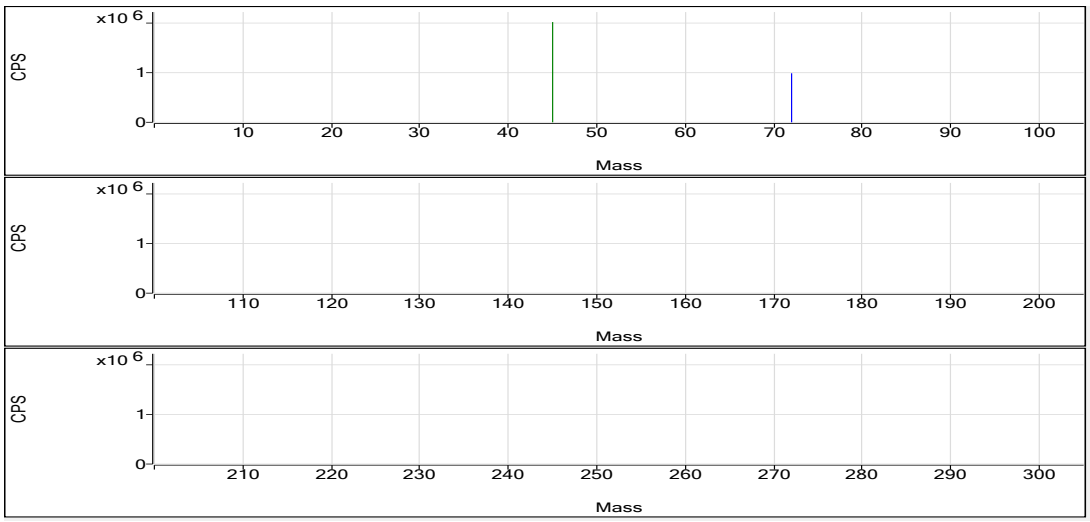
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	-0.001	ppb	N/A	42.67	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.040	ppb	107.8	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	3360.964	ppb	2.6	478889.42	13.2853	Pulse	0.1000	3
Mg	24	45	He	90.230	ppb	5.1	6274.90	0.1741	Pulse	0.1000	3
Al	27	45	He	2.743	ppb	66.4	73.33	0.0020	Pulse	0.1000	3
K	39	45	He	87.494	ppb	22.8	19710.51	0.5468	Pulse	0.1000	3
Ca	44	45	He	46.373	ppb	22.5	246.68	0.0068	Pulse	0.1000	3
Ti	47	45	He	0.178	ppb	173.2	3.33	0.0001	Pulse	0.1000	3
V	51	45	He	-0.130	ppb	N/A	996.71	0.0277	Pulse	0.5000	3
Cr	52	45	He	0.041	ppb	28.2	1380.12	0.0383	Pulse	0.1000	3
Mn	55	45	He	0.151	ppb	47.8	226.68	0.0063	Pulse	0.1000	3
Fe	57	45	He	3.316	ppb	8.8	116.67	0.0032	Pulse	0.1000	3
Co	59	45	He	0.044	ppb	28.8	190.01	0.0053	Pulse	0.1000	3
Ni	60	72	He	0.008	ppb	1122.8	253.34	0.0040	Pulse	0.1000	3
Cu	63	72	He	0.149	ppb	14.3	630.04	0.0100	Pulse	0.1000	3
Zn	66	72	He	0.375	ppb	73.4	290.01	0.0046	Pulse	0.1000	3
As	75	72	He	0.001	ppb	4960.2	46.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.891	ppb	4.2	530.03	0.0086	Pulse	0.1000	3
Mo	98	115	He	0.023	ppb	15.3	53.33	0.0009	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	187.4	46.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	44.2	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.012	ppb	540.8	1073.41	0.0173	Pulse	0.1000	3
Sb	121	115	He	-0.007	ppb	N/A	10.00	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.120	ppb	83.6	46.67	0.0008	Pulse	0.1000	3
Tl	205	159	He	0.020	ppb	10.2	223.34	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.023	ppb	11.5	640.03	0.0022	Pulse	0.1000	3
U	238	209	He	0.007	ppb	18.7	93.33	0.0004	Pulse	0.1000	3

ISTD Table:

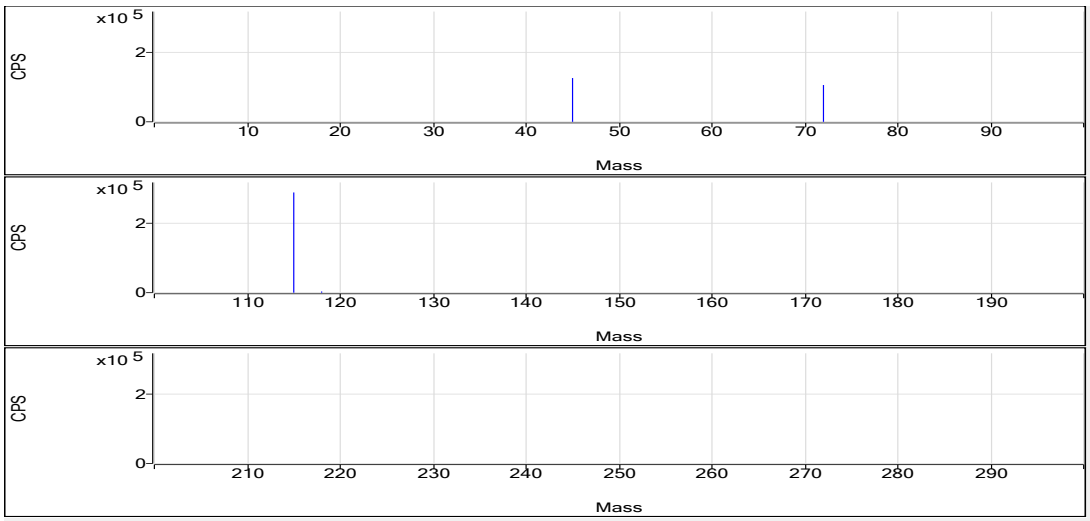
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2014600.23	2.1	99.1	Analog	0.1000	3
No Gas	Ge	72	985125.84	1.4	98.0	Pulse	0.1000	3
H2	Sc	45	126025.82	0.5	95.4	Pulse	0.1000	3
H2	Ge	72	105934.83	1.3	95.0	Pulse	0.1000	3
H2	In	115	288628.58	1.0	98.3	Pulse	0.1000	3
He	Sc	45	36045.52	0.2	97.5	Pulse	0.1000	3
He	Ge	72	63323.78	1.5	98.1	Pulse	0.1000	3
He	In	115	61935.80	1.2	98.0	Pulse	0.1000	3
He	Tb	159	286202.99	0.6	97.7	Pulse	0.1000	3
He	Bi	209	232373.28	0.4	98.5	Pulse	0.1000	3

No Gas

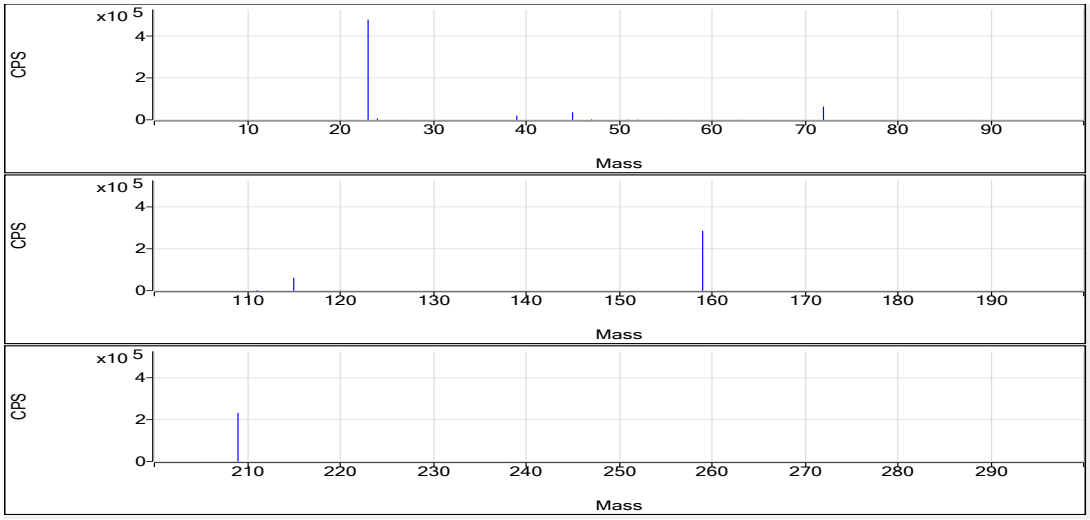


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.002	0	40.00	0.0008	2.195E-05
Be	9	1	No Gas	-0.006	0	36.00	0.0008	2.195E-05
Be	9	1	No Gas	0.005	0	52.00	0.0008	2.195E-05
Se	78	2	H2	-0.003	0	1.33	0.0004	1.386E-05
Se	78	2	H2	0.039	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.084	0.0001	5.33	0.0004	1.386E-05
Na	23	3	He	3435.246	13.5691	489922.10	0.0038	0.4416
Na	23	3	He	3384.246	13.3742	482216.83	0.0038	0.4416
Na	23	3	He	3263.4	12.9124	464529.33	0.0038	0.4416
Mg	24	3	He	92.253	0.1779	6421.59	0.0019	0.005872
Mg	24	3	He	84.944	0.1642	5921.41	0.0019	0.005872
Mg	24	3	He	93.495	0.1802	6481.69	0.0019	0.005872
Al	27	3	He	0.66	0.0008	30.00	0.0006	0.0004496
Al	27	3	He	3.54	0.0025	90.00	0.0006	0.0004496
Al	27	3	He	4.03	0.0028	100.00	0.0006	0.0004496
K	39	3	He	88.958	0.5485	19803.83	0.0012	0.4456
K	39	3	He	106.672	0.569	20515.06	0.0012	0.4456
K	39	3	He	66.851	0.5229	18812.63	0.0012	0.4456
Ca	44	3	He	47.607	0.0069	250.01	0.0001	0.003779
Ca	44	3	He	56.146	0.0075	270.01	0.0001	0.003779
Ca	44	3	He	35.366	0.0061	220.01	0.0001	0.003779
Ti	47	3	He	0.533	0.0003	10.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	0	0	0.00	0.0005	0
V	51	3	He	-0.13	0.0276	998.04	0.0223	0.03054
V	51	3	He	-0.116	0.028	1008.04	0.0223	0.03054
V	51	3	He	-0.143	0.0274	984.04	0.0223	0.03054
Cr	52	3	He	0.038	0.0382	1380.12	0.0285	0.03714
Cr	52	3	He	0.03	0.038	1370.12	0.0285	0.03714
Cr	52	3	He	0.053	0.0386	1390.11	0.0285	0.03714
Mn	55	3	He	0.18	0.0066	240.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.069	0.0053	190.01	0.0124	0.004415
Mn	55	3	He	0.205	0.0069	250.01	0.0124	0.004415
Fe	57	3	He	2.981	0.003	110.00	0.0006	0.001356
Fe	57	3	He	3.478	0.0033	120.01	0.0006	0.001356
Fe	57	3	He	3.49	0.0033	120.00	0.0006	0.001356
Co	59	3	He	0.03	0.0044	160.01	0.0581	0.002697
Co	59	3	He	0.049	0.0055	200.01	0.0581	0.002697
Co	59	3	He	0.054	0.0058	210.01	0.0581	0.002697
Ni	60	3	He	-0.084	0.0032	200.01	0.0087	0.003928
Ni	60	3	He	0.013	0.004	260.01	0.0087	0.003928
Ni	60	3	He	0.094	0.0047	300.01	0.0087	0.003928
Cu	63	3	He	0.167	0.0104	650.05	0.0261	0.006048
Cu	63	3	He	0.155	0.0101	650.04	0.0261	0.006048
Cu	63	3	He	0.126	0.0093	590.03	0.0261	0.006048
Zn	66	3	He	0.619	0.0053	330.02	0.0029	0.003512
Zn	66	3	He	0.077	0.0037	240.01	0.0029	0.003512
Zn	66	3	He	0.43	0.0047	300.01	0.0029	0.003512
As	75	3	He	-0.055	0.0006	38.00	0.0021	0.0007233
As	75	3	He	-0.019	0.0007	44.00	0.0021	0.0007233
As	75	3	He	0.079	0.0009	56.00	0.0021	0.0007233
Sr	88	3	He	0.881	0.0085	520.03	0.009	0.0005796
Sr	88	3	He	0.861	0.0083	520.03	0.009	0.0005796
Sr	88	3	He	0.932	0.0089	550.03	0.009	0.0005796
Mo	98	3	He	0.021	0.0008	50.00	0.0235	0.0003188
Mo	98	3	He	0.027	0.001	60.00	0.0235	0.0003188
Mo	98	3	He	0.021	0.0008	50.00	0.0235	0.0003188
Ag	107	3	He	0.013	0.0011	70.00	0.0499	0.0004754
Ag	107	3	He	0.01	0.001	60.00	0.0499	0.0004754
Ag	107	3	He	-0.006	0.0002	10.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Sn	120	3	He	-0.062	0.0161	990.07	0.0164	0.01713
Sn	120	3	He	0.034	0.0177	1110.08	0.0164	0.01713
Sn	120	3	He	0.064	0.0182	1120.09	0.0164	0.01713
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Sb	121	3	He	-0.007	0.0002	10.00	0.0155	0.0002641
Ba	137	3	He	0.23	0.0013	80.00	0.005	0.0001577
Ba	137	3	He	0.032	0.0003	20.00	0.005	0.0001577
Ba	137	3	He	0.099	0.0006	40.00	0.005	0.0001577
Tl	205	3	He	0.023	0.0008	240.01	0.026	0.0002504
Tl	205	3	He	0.018	0.0007	210.01	0.026	0.0002504
Tl	205	3	He	0.02	0.0008	220.01	0.026	0.0002504
Pb	208	3	He	0.026	0.0023	280.01	0.0349	0.001422
Pb	208	3	He	0.021	0.0022	330.02	0.0349	0.001422
Pb	208	3	He	0.023	0.0022	340.02	0.0349	0.001422
U	238	3	He	0.006	0.0003	80.00	0.0502	5.657E-05
U	238	3	He	0.007	0.0004	90.00	0.0502	5.657E-05
U	238	3	He	0.008	0.0005	110.00	0.0502	5.657E-05
Sc	45	1	No Gas			1966554.97		
Sc	45	1	No Gas			2050329.19		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2026916.53		
Ge	72	1	No Gas			968670.84		
Ge	72	1	No Gas			993253.42		
Ge	72	1	No Gas			993453.27		
Sc	45	2	H2			126094.40		
Sc	45	2	H2			125376.11		
Sc	45	2	H2			126606.94		
Ge	72	2	H2			104803.54		
Ge	72	2	H2			107472.36		
Ge	72	2	H2			105528.60		
In	115	2	H2			287647.91		
In	115	2	H2			291742.57		
In	115	2	H2			286495.27		
Sc	45	3	He			36105.61		
Sc	45	3	He			36055.62		
Sc	45	3	He			35975.32		
Ge	72	3	He			62426.41		
Ge	72	3	He			64315.10		
Ge	72	3	He			63229.83		
In	115	3	He			61436.00		
In	115	3	He			62772.36		
In	115	3	He			61617.22		
Tb	159	3	He			286537.48		
Tb	159	3	He			287801.89		
Tb	159	3	He			284269.61		
Bi	209	3	He			232451.27		
Bi	209	3	He			231372.20		
Bi	209	3	He			233296.36		

Quantitation Report

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Sample Type	CCV
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Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

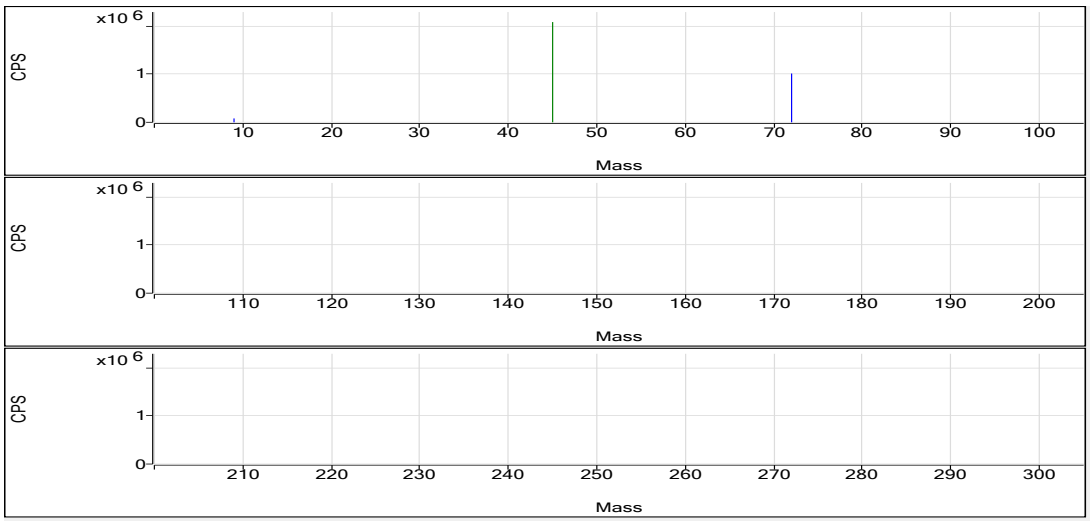
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	50.255	ppb	0.8	80175.64	0.0386	Pulse	0.5000	3
Se	78	72	H2	52.197	ppb	2.4	2429.10	0.0227	Pulse	1.5000	3
Na	23	45	He	5137.529	ppb	2.2	752196.37	20.0743	Pulse	0.1000	3
Mg	24	45	He	5085.153	ppb	1.7	355464.32	9.4860	Pulse	0.1000	3
Al	27	45	He	5032.289	ppb	2.2	109038.69	2.9100	Pulse	0.1000	3
K	39	45	He	5151.225	ppb	1.8	239936.67	6.4029	Pulse	0.1000	3
Ca	44	45	He	5148.373	ppb	6.0	12882.82	0.3440	Pulse	0.1000	3
Ti	47	45	He	5000.335	ppb	2.1	97354.81	2.5981	Pulse	0.1000	3
V	51	45	He	504.948	ppb	2.8	422915.38	11.2878	Pulse	0.5000	3
Cr	52	45	He	510.421	ppb	2.6	545543.79	14.5603	Pulse	0.1000	3
Mn	55	45	He	502.091	ppb	1.9	233165.84	6.2225	Pulse	0.1000	3
Fe	57	45	He	5015.707	ppb	1.8	106665.53	2.8465	Pulse	0.1000	3
Co	59	45	He	478.778	ppb	2.5	1042282.33	27.8178	Pulse	0.1000	3
Ni	60	72	He	520.708	ppb	1.2	289448.84	4.5171	Pulse	0.1000	3
Cu	63	72	He	487.652	ppb	1.1	817087.39	12.7511	Pulse	0.1000	3
Zn	66	72	He	519.861	ppb	1.1	95681.75	1.4932	Pulse	0.1000	3
As	75	72	He	516.781	ppb	1.0	68512.77	1.0692	Pulse	0.5000	3
Sr	88	115	He	51.008	ppb	0.6	28412.71	0.4572	Pulse	0.1000	3
Mo	98	115	He	52.062	ppb	0.5	76092.72	1.2246	Pulse	0.1000	3
Ag	107	115	He	52.312	ppb	0.7	162087.85	2.6085	Pulse	0.1000	3
Cd	111	115	He	50.479	ppb	1.6	17382.19	0.2797	Pulse	0.5000	3
Sn	120	115	He	50.571	ppb	0.1	52660.80	0.8475	Pulse	0.1000	3
Sb	121	115	He	50.484	ppb	1.1	48539.19	0.7812	Pulse	0.1000	3
Ba	137	115	He	508.175	ppb	1.3	157216.03	2.5301	Pulse	0.1000	3
Tl	205	159	He	51.086	ppb	1.3	385566.28	1.3305	Pulse	0.1000	3
Pb	208	159	He	50.770	ppb	1.0	514434.43	1.7752	Pulse	0.1000	3
U	238	209	He	50.424	ppb	0.9	583682.19	2.5330	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2078050.80	0.8	102.2	Analog	0.1000	3
No Gas	Ge	72	1010975.61	1.8	100.6	Pulse	0.1000	3
H2	Sc	45	125602.46	0.2	95.1	Pulse	0.1000	3
H2	Ge	72	106938.78	0.8	95.9	Pulse	0.1000	3
H2	In	115	286488.14	0.3	97.5	Pulse	0.1000	3
He	Sc	45	37482.43	2.3	101.4	Pulse	0.1000	3
He	Ge	72	64084.16	1.0	99.3	Pulse	0.1000	3
He	In	115	62138.87	0.3	98.3	Pulse	0.1000	3
He	Tb	159	289809.60	1.2	99.0	Pulse	0.1000	3
He	Bi	209	230441.85	0.9	97.7	Pulse	0.1000	3

No Gas



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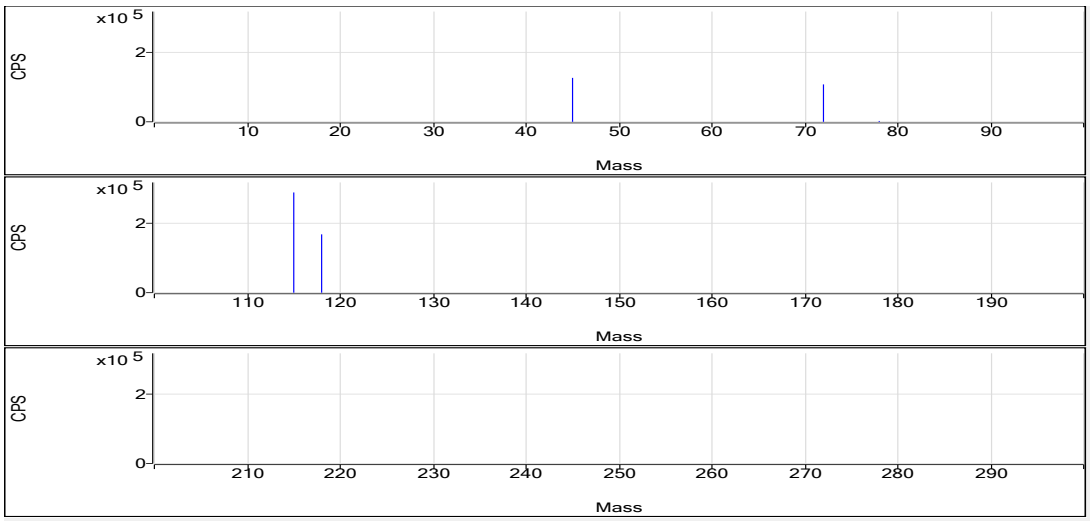
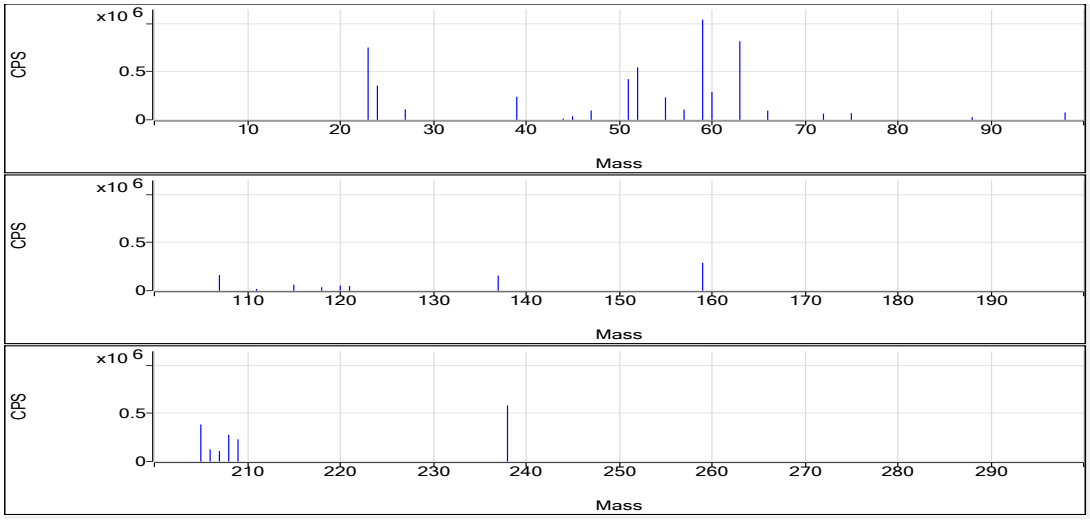


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	50.68	0.0389	80291.50	0.0008	2.195E-05
Be	9	1	No Gas	50.148	0.0385	79853.34	0.0008	2.195E-05
Be	9	1	No Gas	49.937	0.0383	80382.09	0.0008	2.195E-05
Se	78	2	H2	52.648	0.0229	2462.22	0.0004	1.386E-05
Se	78	2	H2	53.135	0.0231	2482.89	0.0004	1.386E-05
Se	78	2	H2	50.809	0.0221	2342.20	0.0004	1.386E-05
Na	23	3	He	5038.917	19.6974	750681.40	0.0038	0.4416
Na	23	3	He	5116.654	19.9945	756390.61	0.0038	0.4416
Na	23	3	He	5257.016	20.5309	749517.10	0.0038	0.4416
Mg	24	3	He	5018.672	9.362	356792.26	0.0019	0.005872
Mg	24	3	He	5053.079	9.4262	356591.05	0.0019	0.005872
Mg	24	3	He	5183.709	9.6697	353009.64	0.0019	0.005872
Al	27	3	He	4917.242	2.8435	108365.94	0.0006	0.0004496
Al	27	3	He	5037.175	2.9128	110191.02	0.0006	0.0004496
Al	27	3	He	5142.45	2.9737	108559.10	0.0006	0.0004496
K	39	3	He	5099.124	6.3427	241722.98	0.0012	0.4456
K	39	3	He	5095.67	6.3387	239791.62	0.0012	0.4456
K	39	3	He	5258.88	6.5274	238295.41	0.0012	0.4456
Ca	44	3	He	5075.675	0.3392	12926.16	0.0001	0.003779
Ca	44	3	He	4881.565	0.3263	12345.73	0.0001	0.003779
Ca	44	3	He	5487.88	0.3664	13376.57	0.0001	0.003779
Ti	47	3	He	4890.546	2.5411	96841.51	0.0005	0
Ti	47	3	He	5008.244	2.6022	98441.75	0.0005	0
Ti	47	3	He	5102.214	2.651	96781.17	0.0005	0
V	51	3	He	493.991	11.0435	420874.31	0.0223	0.03054
V	51	3	He	500.196	11.1818	423007.72	0.0223	0.03054
V	51	3	He	520.656	11.6379	424864.13	0.0223	0.03054
Cr	52	3	He	498.28	14.2149	541737.10	0.0285	0.03714
Cr	52	3	He	508.217	14.4976	548443.08	0.0285	0.03714
Cr	52	3	He	524.766	14.9685	546451.20	0.0285	0.03714
Mn	55	3	He	494.096	6.1235	233369.55	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	499.242	6.1872	234061.68	0.0124	0.004415
Mn	55	3	He	512.936	6.3568	232066.29	0.0124	0.004415
Fe	57	3	He	4970.652	2.821	107508.67	0.0006	0.001356
Fe	57	3	He	4954.051	2.8115	106360.65	0.0006	0.001356
Fe	57	3	He	5122.419	2.9071	106127.28	0.0006	0.001356
Co	59	3	He	469.118	27.2567	1038767.80	0.0581	0.002697
Co	59	3	He	474.959	27.596	1043954.83	0.0581	0.002697
Co	59	3	He	492.255	28.6008	1044124.36	0.0581	0.002697
Ni	60	3	He	528.022	4.5804	290223.47	0.0087	0.003928
Ni	60	3	He	516.729	4.4826	288204.64	0.0087	0.003928
Ni	60	3	He	517.373	4.4881	289918.41	0.0087	0.003928
Cu	63	3	He	493.887	12.9141	818254.05	0.0261	0.006048
Cu	63	3	He	483.959	12.6546	813622.18	0.0261	0.006048
Cu	63	3	He	485.109	12.6847	819385.93	0.0261	0.006048
Zn	66	3	He	526.139	1.5112	95748.70	0.0029	0.003512
Zn	66	3	He	516.082	1.4823	95306.05	0.0029	0.003512
Zn	66	3	He	517.362	1.486	95990.51	0.0029	0.003512
As	75	3	He	521.796	1.0795	68400.23	0.0021	0.0007233
As	75	3	He	511.905	1.0591	68092.89	0.0021	0.0007233
As	75	3	He	516.641	1.0689	69045.19	0.0021	0.0007233
Sr	88	3	He	51.322	0.4601	28529.60	0.009	0.0005796
Sr	88	3	He	50.718	0.4547	28198.93	0.009	0.0005796
Sr	88	3	He	50.984	0.457	28509.60	0.009	0.0005796
Mo	98	3	He	52.362	1.2316	76377.86	0.0235	0.0003188
Mo	98	3	He	51.879	1.2203	75684.56	0.0235	0.0003188
Mo	98	3	He	51.944	1.2218	76215.75	0.0235	0.0003188
Ag	107	3	He	52.424	2.6141	162110.87	0.0499	0.0004754
Ag	107	3	He	52.619	2.6239	162739.94	0.0499	0.0004754
Ag	107	3	He	51.892	2.5876	161412.75	0.0499	0.0004754
Cd	111	3	He	49.984	0.277	17176.60	0.0055	1.07E-05
Cd	111	3	He	50.046	0.2773	17200.63	0.0055	1.07E-05
Cd	111	3	He	51.406	0.2849	17769.33	0.0055	1.07E-05
Sn	120	3	He	50.517	0.8466	52500.14	0.0164	0.01713
Sn	120	3	He	50.647	0.8487	52640.70	0.0164	0.01713
Sn	120	3	He	50.548	0.8471	52841.57	0.0164	0.01713
Sb	121	3	He	51.052	0.7899	48987.28	0.0155	0.0002641
Sb	121	3	He	50.428	0.7803	48395.23	0.0155	0.0002641
Sb	121	3	He	49.973	0.7732	48235.06	0.0155	0.0002641
Ba	137	3	He	508.75	2.533	157081.14	0.005	0.0001577
Ba	137	3	He	514.344	2.5609	158832.05	0.005	0.0001577
Ba	137	3	He	501.431	2.4966	155734.89	0.005	0.0001577
Tl	205	3	He	50.387	1.3123	384877.06	0.026	0.0002504
Tl	205	3	He	51.119	1.3314	385530.74	0.026	0.0002504
Tl	205	3	He	51.753	1.3479	386291.05	0.026	0.0002504
Pb	208	3	He	50.279	1.758	278915.78	0.0349	0.001422
Pb	208	3	He	50.718	1.7734	277539.78	0.0349	0.001422
Pb	208	3	He	51.314	1.7942	277992.26	0.0349	0.001422
U	238	3	He	50.911	2.5574	585527.84	0.0502	5.657E-05
U	238	3	He	50.053	2.5143	585440.69	0.0502	5.657E-05
U	238	3	He	50.309	2.5272	580078.04	0.0502	5.657E-05
Sc	45	1	No Gas			2063537.31		
Sc	45	1	No Gas			2074041.53		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2096573.56		
Ge	72	1	No Gas			1002780.30		
Ge	72	1	No Gas			998511.31		
Ge	72	1	No Gas			1031635.22		
Sc	45	2	H2			125256.01		
Sc	45	2	H2			125830.53		
Sc	45	2	H2			125720.84		
Ge	72	2	H2			107481.93		
Ge	72	2	H2			107391.68		
Ge	72	2	H2			105942.73		
In	115	2	H2			285364.10		
In	115	2	H2			287025.19		
In	115	2	H2			287075.13		
Sc	45	3	He			38110.59		
Sc	45	3	He			37829.91		
Sc	45	3	He			36506.79		
Ge	72	3	He			63361.39		
Ge	72	3	He			64294.55		
Ge	72	3	He			64596.53		
In	115	3	He			62290.40		
In	115	3	He			62300.54		
In	115	3	He			62662.39		
Tb	159	3	He			293275.05		
Tb	159	3	He			289568.94		
Tb	159	3	He			286584.80		
Bi	209	3	He			228951.36		
Bi	209	3	He			232840.23		
Bi	209	3	He			229533.96		

Quantitation Report

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Sample Name	CCB 4654618
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins22323
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/16/2023 6:26:51 AM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

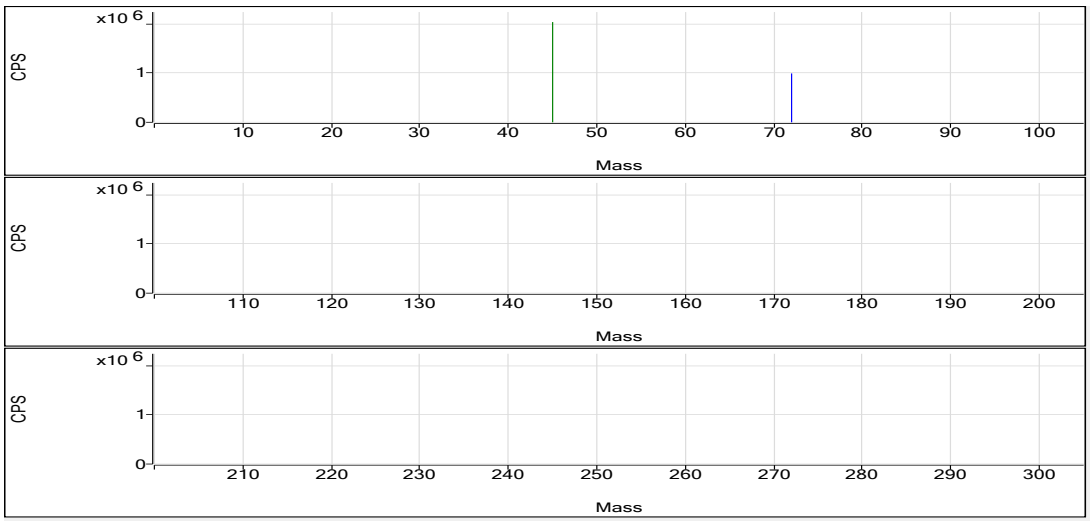
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.027	ppb	25.7	86.00	0.0000	Pulse	0.5000	3
Se	78	72	H2	0.044	ppb	1.1	3.33	0.0000	Pulse	1.5000	3
Na	23	45	He	169.110	ppb	1.6	40285.58	1.0878	Pulse	0.1000	3
Mg	24	45	He	2.021	ppb	28.0	356.69	0.0096	Pulse	0.1000	3
Al	27	45	He	1.705	ppb	78.1	53.33	0.0014	Pulse	0.1000	3
K	39	45	He	36.468	ppb	30.8	18061.71	0.4878	Pulse	0.1000	3
Ca	44	45	He	8.268	ppb	138.5	160.01	0.0043	Pulse	0.1000	3
Ti	47	45	He	0.860	ppb	91.4	16.67	0.0004	Pulse	0.1000	3
V	51	45	He	0.027	ppb	380.5	1152.72	0.0311	Pulse	0.5000	3
Cr	52	45	He	0.100	ppb	162.6	1480.12	0.0400	Pulse	0.1000	3
Mn	55	45	He	0.159	ppb	90.5	236.68	0.0064	Pulse	0.1000	3
Fe	57	45	He	4.113	ppb	11.8	136.67	0.0037	Pulse	0.1000	3
Co	59	45	He	0.132	ppb	48.2	383.35	0.0104	Pulse	0.1000	3
Ni	60	72	He	0.109	ppb	156.5	306.68	0.0049	Pulse	0.1000	3
Cu	63	72	He	0.109	ppb	25.3	560.03	0.0089	Pulse	0.1000	3
Zn	66	72	He	0.200	ppb	241.1	256.68	0.0041	Pulse	0.1000	3
As	75	72	He	0.126	ppb	96.4	62.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.192	ppb	2.6	140.01	0.0023	Pulse	0.1000	3
Mo	98	115	He	0.096	ppb	10.9	156.68	0.0026	Pulse	0.1000	3
Ag	107	115	He	0.020	ppb	83.3	90.00	0.0015	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	57.8	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.023	ppb	499.2	1066.75	0.0175	Pulse	0.1000	3
Sb	121	115	He	0.025	ppb	71.8	40.00	0.0007	Pulse	0.1000	3
Ba	137	115	He	0.144	ppb	70.4	53.33	0.0009	Pulse	0.1000	3
Tl	205	159	He	0.072	ppb	17.8	603.37	0.0021	Pulse	0.1000	3
Pb	208	159	He	0.021	ppb	40.6	616.70	0.0022	Pulse	0.1000	3
U	238	209	He	0.047	ppb	15.1	556.70	0.0024	Pulse	0.1000	3

ISTD Table:

Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	2032868.46	1.3	100.0	Analog	0.1000	3
No Gas	Ge	72	990930.22	0.6	98.6	Pulse	0.1000	3
H2	Sc	45	122848.97	1.9	93.0	Pulse	0.1000	3
H2	Ge	72	100471.90	0.7	90.1	Pulse	0.1000	3
H2	In	115	284425.93	0.3	96.8	Pulse	0.1000	3
He	Sc	45	37034.64	1.1	100.2	Pulse	0.1000	3
He	Ge	72	62955.97	1.0	97.5	Pulse	0.1000	3
He	In	115	60968.16	2.0	96.5	Pulse	0.1000	3
He	Tb	159	285211.94	0.2	97.4	Pulse	0.1000	3
He	Bi	209	229068.88	0.6	97.1	Pulse	0.1000	3

No Gas



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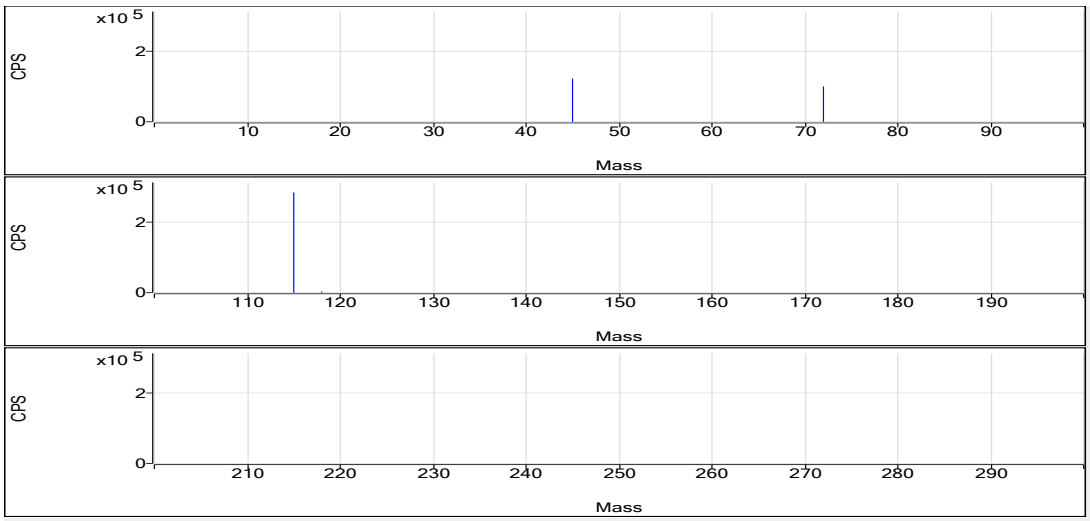
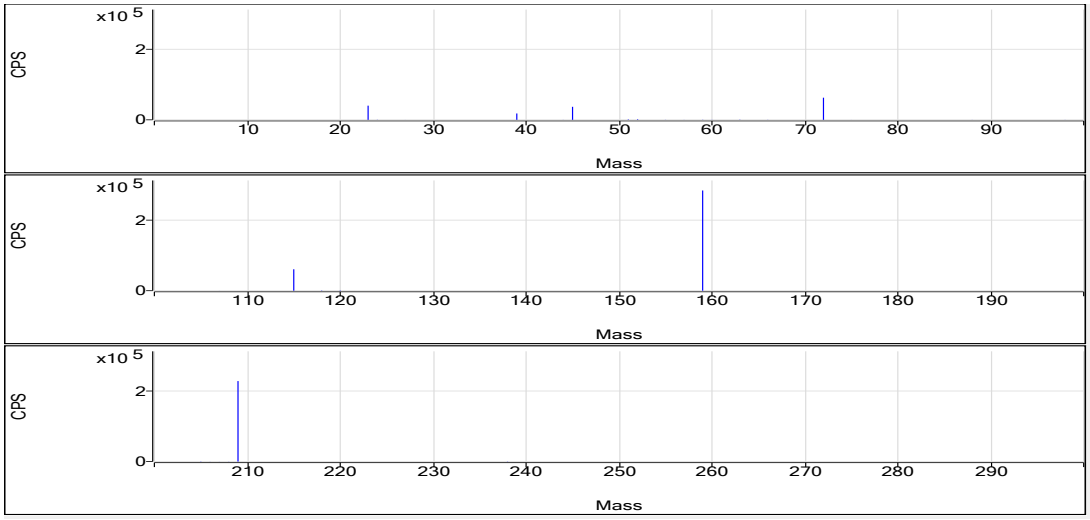


Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.034	0	98.00	0.0008	2.195E-05
Be	9	1	No Gas	0.025	0	82.00	0.0008	2.195E-05
Be	9	1	No Gas	0.021	0	78.00	0.0008	2.195E-05
Se	78	2	H2	0.044	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.044	0	3.33	0.0004	1.386E-05
Se	78	2	H2	0.045	0	3.33	0.0004	1.386E-05
Na	23	3	He	172.269	1.0999	40275.46	0.0038	0.4416
Na	23	3	He	167.626	1.0822	40526.54	0.0038	0.4416
Na	23	3	He	167.435	1.0814	40054.75	0.0038	0.4416
Mg	24	3	He	2.564	0.0107	390.02	0.0019	0.005872
Mg	24	3	He	1.434	0.0085	320.02	0.0019	0.005872
Mg	24	3	He	2.064	0.0097	360.02	0.0019	0.005872
Al	27	3	He	0.167	0.0005	20.00	0.0006	0.0004496
Al	27	3	He	2.455	0.0019	70.00	0.0006	0.0004496
Al	27	3	He	2.491	0.0019	70.00	0.0006	0.0004496
K	39	3	He	46.871	0.4998	18301.96	0.0012	0.4456
K	39	3	He	24.551	0.474	17751.34	0.0012	0.4456
K	39	3	He	37.982	0.4895	18131.84	0.0012	0.4456
Ca	44	3	He	21.347	0.0052	190.01	0.0001	0.003779
Ca	44	3	He	3.437	0.004	150.01	0.0001	0.003779
Ca	44	3	He	0.02	0.0038	140.00	0.0001	0.003779
Ti	47	3	He	0	0	0.00	0.0005	0
Ti	47	3	He	1.542	0.0008	30.00	0.0005	0
Ti	47	3	He	1.039	0.0005	20.00	0.0005	0
V	51	3	He	0.122	0.0333	1218.06	0.0223	0.03054
V	51	3	He	0.036	0.0314	1174.05	0.0223	0.03054
V	51	3	He	-0.079	0.0288	1066.05	0.0223	0.03054
Cr	52	3	He	0.164	0.0418	1530.13	0.0285	0.03714
Cr	52	3	He	-0.085	0.0347	1300.10	0.0285	0.03714
Cr	52	3	He	0.223	0.0435	1610.14	0.0285	0.03714
Mn	55	3	He	-0.004	0.0044	160.01	0.0124	0.004415

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.269	0.0077	290.01	0.0124	0.004415
Mn	55	3	He	0.21	0.007	260.01	0.0124	0.004415
Fe	57	3	He	3.869	0.0036	130.00	0.0006	0.001356
Fe	57	3	He	4.671	0.004	150.01	0.0006	0.001356
Fe	57	3	He	3.798	0.0035	130.01	0.0006	0.001356
Co	59	3	He	0.203	0.0145	530.03	0.0581	0.002697
Co	59	3	He	0.114	0.0093	350.01	0.0581	0.002697
Co	59	3	He	0.079	0.0073	270.01	0.0581	0.002697
Ni	60	3	He	0.299	0.0065	410.02	0.0087	0.003928
Ni	60	3	He	-0.028	0.0037	230.01	0.0087	0.003928
Ni	60	3	He	0.055	0.0044	280.01	0.0087	0.003928
Cu	63	3	He	0.109	0.0089	560.03	0.0261	0.006048
Cu	63	3	He	0.137	0.0096	600.04	0.0261	0.006048
Cu	63	3	He	0.081	0.0082	520.03	0.0261	0.006048
Zn	66	3	He	0.384	0.0046	290.01	0.0029	0.003512
Zn	66	3	He	0.565	0.0051	320.02	0.0029	0.003512
Zn	66	3	He	-0.347	0.0025	160.01	0.0029	0.003512
As	75	3	He	0.265	0.0013	80.00	0.0021	0.0007233
As	75	3	He	0.038	0.0008	50.00	0.0021	0.0007233
As	75	3	He	0.076	0.0009	56.00	0.0021	0.0007233
Sr	88	3	He	0.195	0.0023	140.01	0.009	0.0005796
Sr	88	3	He	0.186	0.0022	140.01	0.009	0.0005796
Sr	88	3	He	0.194	0.0023	140.01	0.009	0.0005796
Mo	98	3	He	0.085	0.0023	140.01	0.0235	0.0003188
Mo	98	3	He	0.096	0.0026	160.01	0.0235	0.0003188
Mo	98	3	He	0.106	0.0028	170.01	0.0235	0.0003188
Ag	107	3	He	0.037	0.0023	140.01	0.0499	0.0004754
Ag	107	3	He	0.003	0.0006	40.00	0.0499	0.0004754
Ag	107	3	He	0.02	0.0015	90.00	0.0499	0.0004754
Cd	111	3	He	0.01	0.0001	4.00	0.0055	1.07E-05
Cd	111	3	He	0.015	0.0001	6.00	0.0055	1.07E-05
Cd	111	3	He	0.004	0	2.00	0.0055	1.07E-05
Sn	120	3	He	0.141	0.0194	1170.10	0.0164	0.01713
Sn	120	3	He	0.012	0.0173	1080.09	0.0164	0.01713
Sn	120	3	He	-0.085	0.0157	950.06	0.0164	0.01713
Sb	121	3	He	0.037	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.035	0.0008	50.00	0.0155	0.0002641
Sb	121	3	He	0.004	0.0003	20.00	0.0155	0.0002641
Ba	137	3	He	0.235	0.0013	80.00	0.005	0.0001577
Ba	137	3	He	0.162	0.001	60.00	0.005	0.0001577
Ba	137	3	He	0.035	0.0003	20.00	0.005	0.0001577
Tl	205	3	He	0.083	0.0024	690.04	0.026	0.0002504
Tl	205	3	He	0.058	0.0018	500.03	0.026	0.0002504
Tl	205	3	He	0.074	0.0022	620.05	0.026	0.0002504
Pb	208	3	He	0.03	0.0025	340.02	0.0349	0.001422
Pb	208	3	He	0.02	0.0021	290.02	0.0349	0.001422
Pb	208	3	He	0.013	0.0019	280.01	0.0349	0.001422
U	238	3	He	0.039	0.002	460.02	0.0502	5.657E-05
U	238	3	He	0.051	0.0026	600.04	0.0502	5.657E-05
U	238	3	He	0.052	0.0027	610.04	0.0502	5.657E-05
Sc	45	1	No Gas			2037802.00		
Sc	45	1	No Gas			2003475.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			2057328.09		
Ge	72	1	No Gas			991566.86		
Ge	72	1	No Gas			996118.58		
Ge	72	1	No Gas			985105.22		
Sc	45	2	H2			124317.00		
Sc	45	2	H2			120224.64		
Sc	45	2	H2			124005.26		
Ge	72	2	H2			100321.03		
Ge	72	2	H2			101196.58		
Ge	72	2	H2			99898.08		
In	115	2	H2			283932.81		
In	115	2	H2			285277.46		
In	115	2	H2			284067.53		
Sc	45	3	He			36616.70		
Sc	45	3	He			37449.08		
Sc	45	3	He			37038.13		
Ge	72	3	He			62888.63		
Ge	72	3	He			62386.97		
Ge	72	3	He			63592.32		
In	115	3	He			60190.84		
In	115	3	He			62360.41		
In	115	3	He			60371.96		
Tb	159	3	He			285666.73		
Tb	159	3	He			284401.99		
Tb	159	3	He			285567.09		
Bi	209	3	He			228118.61		
Bi	209	3	He			230509.68		
Bi	209	3	He			228578.36		

US EPA Tune Check Report

Operator Name	us19_usr_ins22323
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA_ICPMS.b
Acq. Date-Time	8/16/2023 5:48:18 AM
Report Comment	E09 Tune Report
Instrument Name	G8403A SG20064740

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9	10.00	4089	40894.81			0.563	5.000
24	10.00	16612	166117.94			0.414	5.000
25	10.00	2260	22596.30			0.484	5.000
26	10.00	2621	26214.01			0.610	5.000
59	10.00	27477	274771.87			0.245	5.000
115	10.00	48679	486785.35			0.336	5.000
206	10.00	13448	134484.70			0.399	5.000
207	10.00	11757	117573.07			0.395	5.000
208	10.00	28658	286580.89			0.592	5.000

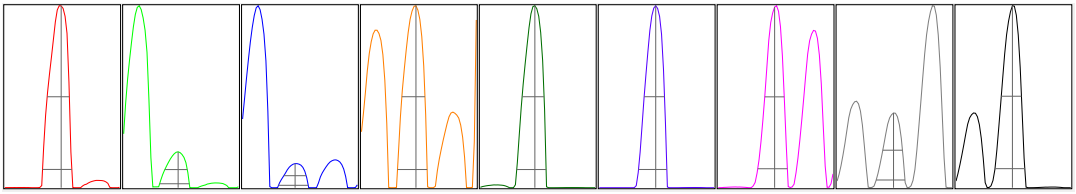
Mass	RSD% (Flag)
9	
24	
25	
26	
59	
115	
206	
207	
208	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	4097	4120	4091	4057	4082
24	16697	16673	16568	16541	16580
25	2268	2273	2251	2259	2247
26	2647	2615	2608	2627	2611
59	27502	27570	27470	27384	27460
115	48533	48765	48509	48902	48683
206	13405	13431	13413	13456	13538
207	11717	11750	11761	11724	11834
208	28391	28630	28681	28742	28846

Integration Time [sec] 0.1

Resolution/Axis

US EPA Tune Check Report



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	7562.52	9.00	8.90 - 9.10	
24	30679.67	23.95	23.90 - 24.10	
25	4061.72	24.90	24.90 - 25.10	
26	4692.79	25.95	25.90 - 26.10	
59	51452.34	58.95	58.90 - 59.10	
115	95704.35	115.00	114.90 - 115.10	
206	26457.33	206.00	205.90 - 206.10	
207	23026.13	207.00	206.90 - 207.10	
208	56053.41	208.00	207.90 - 208.10	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
9	0.57	0.753	0.900	
24	0.58	0.763	0.900	
25	0.57	0.764	0.900	
26	0.59	0.762	0.900	
59	0.56	0.755	0.900	
115	0.52	0.729	0.900	
206	0.50	0.762	0.900	
207	0.51	0.740	0.900	
208	0.52	0.766	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	235
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.05 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	0.90 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.2 V	Deflect	12.8 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.5 V

US EPA Tune Check Report

He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	170 V		

QP Parameters

Mass Gain	131	Axis Gain	1.0007	QP Bias	-2.5 V
Mass Offset	124	Axis Offset	-0.03		

Hardware Settings

Torch

Torch H	-0.7 mm	Torch V	-0.7 mm		

EM

Discriminator	3.9 mV	Analog HV	2186 V	Pulse HV	1743 V

EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL (ELLE), Mercury RAW Data Report

Please note that this is RAW data as received from the instrument, which does not account for weights, volumes, and dilution factors.

Seq ID	Sample ID	µ Abs.	R% / Conc.	%RE	Std Conc	Units	Type	SLOPE	INTERCEPT	CORR COEFF	Curve Type	INSTR.	Date	Ele
3	blank - 1	-44	NA		0	ppb	Std	0.0003708	0.0079599	0.9999610	-	Instrument 07	8/4/2023 8:07	Hg
4	0.2 std - 1	534	103.0%	2.99%	0.2	ppb	Std	0.0003708	0.0079599	0.9999610	-	Instrument 07	8/4/2023 8:09	Hg
5	0.5 std - 1	1288	97.1%	-2.88%	0.5	ppb	Std	0.0003708	0.0079599	0.9999610	-	Instrument 07	8/4/2023 8:11	Hg
6	1.0 std - 1	2678	100.1%	0.11%	1	ppb	Std	0.0003708	0.0079599	0.9999610	-	Instrument 07	8/4/2023 8:13	Hg
7	2.5 std - 1	6801	101.2%	1.20%	2.5	ppb	Std	0.0003708	0.0079599	0.9999610	-	Instrument 07	8/4/2023 8:15	Hg
8	5.0 std - 1	13423	99.7%	-0.29%	5	ppb	Std	0.0003708	0.0079599	0.9999610	-	Instrument 07	8/4/2023 8:17	Hg
9	ICV - 1	6587	98.0% 2.4507		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:19	Hg
10	ICB - 1	-54	-0.0121		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:21	Hg
11	CRA - 1	435	84.6% 0.1693		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:23	Hg
12	CCV - 1	2842	106.2% 1.0619		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:26	Hg
13	CCB - 1	-105	-0.031		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:28	Hg
14	MB 410-403451/1-A - 1	-32	-0.0039		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:30	Hg
15	LCS 410-403451/2-A - 1	2592	0.9692		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:32	Hg
16	410-136715-I-8-A - 1	-2	0.0072		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:34	Hg
17	410-136715-L-8-A DU - 1	16	0.0139		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:36	Hg
18	410-136715-J-8-A MS - 1	2827	1.0563		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:38	Hg
19	410-136715-K-8-A MSD - 1	2866	1.0708		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:40	Hg
20	410-136715-I-7-A - 1	-10	0.0043		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:42	Hg
21	410-136715-I-3-A - 1	-8	0.005		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:44	Hg
22	410-136715-i-14-a - 1	11	0.012		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:46	Hg
23	410-136693-I-10-A - 1	52	0.0272		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:48	Hg
24	CCV - 1	2725	101.8% 1.0185		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:50	Hg
25	CCB - 1	23	0.0165		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:52	Hg
26	410-136715-I-4-A - 1	58	0.0295		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:54	Hg
27	410-136715-i-12-a - 1	-2	0.0072		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:56	Hg
28	410-136685-H-9-A - 1	21	0.0157		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 8:58	Hg
29	410-136715-I-10-A - 1	87	0.0402		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:00	Hg
30	410-136736-I-2-A - 1	58	0.0295		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:02	Hg
31	410-136715-I-2-A - 1	71	0.0343		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:04	Hg
32	410-136736-I-3-A - 1	81	0.038		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:06	Hg
33	410-136715-I-11-A - 1	15	0.0135		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:08	Hg
34	410-136715-i-15-a - 1	23	0.0165		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:10	Hg
35	410-136715-I-5-A - 1	1	0.0083		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:12	Hg
36	CCV - 1	2829	105.7% 1.0571		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:14	Hg
37	CCB - 1	7	0.0106		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:16	Hg
38	410-136736-I-4-A - 1	20	0.0154		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:18	Hg
39	410-136736-I-1-A - 1	16	0.0139		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:20	Hg
40	410-136715-i-13-a - 1	108	0.048		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:22	Hg
41	410-136715-I-6-A - 1	44	0.0243		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:24	Hg
42	410-136736-I-5-A - 1	5	0.0098		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:26	Hg

43	MB 410-403849/1-A - 1	21	0.0157		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:28	Hg
44	LCS 410-403849/2-A - 1	2684	1.0033		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:31	Hg
45	410-136864-L-4-A - 1	55	0.0284		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:33	Hg
46	410-136864-D-4-A DU - 1	109	0.0484		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:35	Hg
47	410-136864-L-4-B MS - 1	2613	0.977		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:37	Hg
48	CCV - 1	2710	101.3% 1.0129		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:39	Hg
49	CCB - 1	-9	0.0046		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:41	Hg
50	410-136864-K-4-C MSD - 1	2380	0.8906		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:43	Hg
51	410-136514-H-2-A - 1	88	0.0406		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:45	Hg
52	410-136514-H-3-A - 1	112	0.0495		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:47	Hg
53	410-136914-T-2-A - 1	43	0.0239		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:49	Hg
54	410-136914-T-3-A - 1	94	0.0428		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:51	Hg
55	410-136914-T-1-A - 1	88	0.0406		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:53	Hg
56	410-136914-T-8-A - 1	118	0.0517		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:55	Hg
57	410-136914-T-4-A - 1	122	0.0532		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:57	Hg
58	410-136914-T-5-A - 1	178	0.074		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 9:59	Hg
59	410-136914-T-6-A - 1	119	0.0521		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:01	Hg
60	CCV - 1	2754	102.9% 1.0292		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:03	Hg
61	CCB - 1	19	0.015		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:05	Hg
62	410-136514-H-4-A - 1	135	0.058		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:07	Hg
63	410-136514-H-1-A - 1	110	0.0488		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:09	Hg
64	410-136864-Q-3-A - 1	171	0.0714		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:11	Hg
65	410-136848-V-4-A - 1	69	0.0335		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:13	Hg
66	410-136848-X-8-A - 1	-8	0.005		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:15	Hg
67	410-136848-X-7-A - 1	59	0.0298		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:17	Hg
68	410-136848-Y-11-A - 1	87	0.0402		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:19	Hg
69	410-136848-X-10-A - 1	70	0.0339		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:21	Hg
70	410-136848-X-3-A - 1	80	0.0376		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:24	Hg
71	410-136848-V-5-A - 1	65	0.0321		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:26	Hg
72	CCV - 1	2750	102.8% 1.0278		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:28	Hg
73	CCB - 1	-74	-0.0195		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:30	Hg
74	MB 410-403850/1-A - 1	-22	-0.0002		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:32	Hg
75	LCS 410-403850/2-A - 1	2568	0.9603		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:34	Hg
76	410-136815-AI-1-B - 1	65	0.0321		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:36	Hg
77	410-136815-AJ-1-A DU - 1	211	0.0862		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:38	Hg
78	410-136815-AI-1-C MS - 1	2542	0.9506		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:40	Hg
79	410-136815-AF-1-A MSD - 1	2458	0.9195		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:42	Hg
80	410-136709-L-27-A - 1	134	0.0577		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:44	Hg
81	410-136736-I-6-A - 1	106	0.0473		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:46	Hg
82	410-136709-I-26-a - 1	99	0.0447		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:48	Hg
83	410-136877-M-2-A - 1	127	0.0551		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:50	Hg
85	CCV - 1	2844	106.3% 1.0626		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 10:58	Hg
86	CCB - 1	18	0.0146		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:00	Hg

87	410-136837-J-2-A - 1	172	0.0717		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:02	Hg
88	410-136837-I-4-A - 1	891	0.3384		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:04	Hg
89	410-136837-J-3-A - 1	-19	0.0009		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:06	Hg
90	410-136848-Z-3-A - 1	222	0.0903		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:08	Hg
91	410-136848-Z-2-A - 1	173	0.0721		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:10	Hg
92	410-136848-AD-5-A - 1	44	0.0243		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:12	Hg
93	410-136848-AA-6-A - 1	72	0.0347		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:14	Hg
94	410-136848-Z-9-A - 1	164	0.0688		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:16	Hg
95	410-136848-X-4-A - 1	182	0.0755		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:18	Hg
96	410-136848-Z-7-A - 1	215	0.0877		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:20	Hg
97	CCV - 1	2887	107.9% 1.0786		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:22	Hg
98	CCB - 1	-17	0.0017		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:24	Hg
99	410-136848-Y-1-A - 1	209	0.0855		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:26	Hg
100	410-136848-AA-11-A - 1	182	0.0755		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:28	Hg
101	410-136848-Z-10-A - 1	61	0.0306		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:30	Hg
102	410-136815-AI-7-A - 1	21	0.0157		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:32	Hg
103	410-136822-T-4-A - 1	156	0.0658		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:34	Hg
104	lot check 4656037 - 1	26	0.0176		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:36	Hg
105	lot check 4656062 - 1	-20	0.0005		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:38	Hg
106	lot check 4656105 - 1	37	0.0217		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:40	Hg
107	lot check 4556133 - 1	9	0.0113		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:42	Hg
108	MB 410-403851/1-A - 1	175	0.0729		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:44	Hg
109	CCV - 1	2913	108.8% 1.0882		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:47	Hg
110	CCB - 1	36	0.0213		-	ppb	CK STND	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:49	Hg
111	LCS 410-403851/2-A - 1	2649	0.9903		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:51	Hg
112	410-136839-V-2-A - 1	79	0.0373		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:53	Hg
113	410-136839-H-2-A DU - 1	-8	0.005		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:55	Hg
114	410-136839-V-2-B MS - 1	2611	0.9762		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:57	Hg
115	410-136839-V-2-C MSD - 1	2619	0.9792		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 11:59	Hg
116	630-68172-K-13-A - 1	49	0.0261		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:01	Hg
117	630-68175-N-7-A - 1	89	0.041		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:03	Hg
118	410-136839-V-1-A - 1	62	0.031		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:05	Hg
119	410-136864-L-2-A - 1	192	0.0792		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:07	Hg
120	410-136864-L-6-A - 1	641	0.2457		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:09	Hg
121	CCV - 1	2749	102.7% 1.0274		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 12:11	Hg
122	CCB - 1	21	0.0157		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 12:13	Hg
123	410-136839-V-4-A - 1	235	0.0951		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:15	Hg
124	410-136839-V-3-A - 1	306	0.1214		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:17	Hg
125	410-136864-N-1-A - 1	144	0.0614		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:19	Hg
126	410-136864-L-5-A - 1	130	0.0562		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:21	Hg
127	410-136514-H-5-A - 1	83	0.0387		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:23	Hg
128	410-136848-X-9-A - 1	81	0.038		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:25	Hg
129	410-136848-Y-6-A - 1	162	0.068		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:27	Hg

130	410-136815-AI-5-A - 1	163	0.0684		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:29	Hg
131	410-136815-AI-9-A - 1	167	0.0699		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:31	Hg
132	410-136848-X-2-A - 1	114	0.0502		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:33	Hg
133	CCV - 1	2923	109.2% 1.0919		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 12:35	Hg
134	CCB - 1	39	0.0224		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 12:37	Hg
135	410-136815-AI-2-A - 1	82	0.0384		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:39	Hg
136	410-136822-U-1-A - 1	212	0.0866		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:41	Hg
137	410-136822-U-3-A - 1	103	0.0462		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:44	Hg
138	410-136848-W-1-A - 1	88	0.0406		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:46	Hg
139	MB 410-404451/1-A - 1	175	0.0729		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:48	Hg
140	LCS 410-404451/2-A - 1	2770	1.0352		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:50	Hg
141	410-136992-V-1-A - 1	188	0.0777		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:52	Hg
142	410-136992-B-1-A DU - 1	238	0.0962		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:54	Hg
143	410-136992-V-1-B MS - 1	2610	0.9758		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:56	Hg
144	410-136992-V-1-C MSD - 1	2549	0.9532		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 12:58	Hg
145	CCV - 1	2863	107.0% 1.0697		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 13:00	Hg
146	CCB - 1	-32	-0.0039		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 13:02	Hg
147	410-136992-V-7-A - 1	327	0.1292		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:04	Hg
148	410-136992-V-6-A - 1	67	0.0328		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:06	Hg
149	410-136992-V-5-A - 1	151	0.064		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:08	Hg
150	410-136992-V-2-A - 1	163	0.0684		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:10	Hg
151	410-136992-V-4-A - 1	185	0.0766		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:12	Hg
152	410-136992-V-3-A - 1	91	0.0417		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:14	Hg
153	410-137071-M-2-A - 1	57	0.0291		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:16	Hg
154	410-136848-Z-8-A - 1	48	0.0258		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:18	Hg
155	630-68172-K-14-A - 1	112	0.0495		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:20	Hg
156	630-68175-K-8-A - 1	153	0.0647		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:22	Hg
162	CCV - 1	2833	105.9% 1.0585		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 13:34	Hg
163	CCB - 1	13	0.0128		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 13:36	Hg
164	410-136815-AM-11-A - 1	101	0.0454		-	ppb	SMPL	0.0003708	0.0079599	0.9999610	Linear	Instrument 07	8/4/2023 13:38	Hg
165	CRA - 1	612	117.5% 0.2349		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 13:41	Hg
166	CCV - 1	2834	105.9% 1.0589		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 13:43	Hg
167	CCB - 1	-114	-0.0343		-	ppb	CK STND	-	-	-	Linear	Instrument 07	8/4/2023 13:45	Hg

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG No.:

Project: RFAAP, Radford HWMU16

Client Sample ID	Lab Sample ID
16C1	410-136864-1
16MW8	410-136864-2
16MW9	410-136864-3
16WC1A	410-136864-4
16WDUP	410-136864-5
16WC1B	410-136864-6

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 16C1 | Lab Sample ID: 410-136864-1

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG ID.:

Matrix: Water | Date Sampled: 07/27/2023 12:45

Reporting Basis: WET | Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	7.5	20	5.0	ug/L	J		1	9012B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 16MW8 | Lab Sample ID: 410-136864-2

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG ID.:

Matrix: Water | Date Sampled: 07/26/2023 10:05

Reporting Basis: WET | Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	20	5.0	ug/L			1	9012B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 16MW9 | Lab Sample ID: 410-136864-3

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-136864-1

SDG ID.:

Matrix: Water | Date Sampled: 07/27/2023 11:25

Reporting Basis: WET | Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	6.7	20	5.0	ug/L	J		1	9012B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 16WC1A
Lab Sample ID: 410-136864-4
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1
SDG ID.:
Matrix: Water
Date Sampled: 07/27/2023 09:55
Reporting Basis: WET
Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	20	5.0	ug/L		cn	1	9012B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 16WDUP
Lab Sample ID: 410-136864-5
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1
SDG ID.:
Matrix: Water
Date Sampled: 07/27/2023 10:20
Reporting Basis: WET
Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	20	5.0	ug/L		cn	1	9012B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 16WC1B
Lab Sample ID: 410-136864-6
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-136864-1
SDG ID.:
Matrix: Water
Date Sampled: 07/26/2023 12:05
Reporting Basis: WET
Date Received: 07/28/2023 09:25

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	20	5.0	ug/L		cn	1	9012B

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Analyst: JCG7 Batch Start Date: 08/09/2023

Reporting Units: mg/L Analytical Batch No.: 406396

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	12:41	Cyanide, Total	0.150	0.150	100	90-110		WC_FL_CCVCN_00586
9	ICB	12:42	Cyanide, Total	ND					
34	CCV	13:11	Cyanide, Total	0.148	0.150	98	90-110		WC_FL_CCVCN_00586
35	CCB	13:12	Cyanide, Total	ND					
46	CCV	13:17	Cyanide, Total	0.151	0.150	101	90-110		WC_FL_CCVCN_00586
47	CCB	13:17	Cyanide, Total	ND					
58	CCV	13:22	Cyanide, Total	0.147	0.150	98	90-110		WC_FL_CCVCN_00586
59	CCB	13:23	Cyanide, Total	ND					
70	CCV	13:28	Cyanide, Total	0.149	0.150	99	90-110		WC_FL_CCVCN_00586
71	CCB	13:28	Cyanide, Total	ND					
77	CCV	13:31	Cyanide, Total	0.150	0.150	100	90-110		WC_FL_CCVCN_00586
78	CCB	13:31	Cyanide, Total	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Analyst: JCG7 Batch Start Date: 08/10/2023

Reporting Units: mg/L Analytical Batch No.: 406800

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	10:19	Cyanide, Total	0.136	0.150	90	90-110		WC_FL_CCVCN_00587
9	ICB	10:20	Cyanide, Total	ND					
58	CCV	11:01	Cyanide, Total	0.136	0.150	91	90-110		WC_FL_CCVCN_00587
59	CCB	11:01	Cyanide, Total	ND					
70	CCV	11:06	Cyanide, Total	0.136	0.150	91	90-110		WC_FL_CCVCN_00587
71	CCB	11:06	Cyanide, Total	ND					
83	CCB	11:31	Cyanide, Total	ND					
87	CCV	11:36	Cyanide, Total	0.136	0.150	91	90-110		WC_FL_CCVCN_00587
93	CCB	11:38	Cyanide, Total	ND					
97	CCB	11:40	Cyanide, Total	ND					
103	CCV	11:43	Cyanide, Total	0.134	0.150	90	90-110		WC_FL_CCVCN_00587
112	CCB	11:47	Cyanide, Total	ND					
157	CCV	12:34	Cyanide, Total	0.153	0.150	102	90-110		WC_FL_CCVCN_00587
158	CCB	12:34	Cyanide, Total	ND					
169	CCV	12:39	Cyanide, Total	0.146	0.150	97	90-110		WC_FL_CCVCN_00587
170	CCB	12:40	Cyanide, Total	ND					
181	CCV	12:44	Cyanide, Total	0.148	0.150	99	90-110		WC_FL_CCVCN_00587
182	CCB	12:45	Cyanide, Total	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 406396	Date: 08/09/2023 13:16	Prep Batch: 405892	Date: 08/08/2023 16:00				
9012B	MB 410-405892/2-A	Cyanide, Total	ND		ug/L	20	1
Batch ID: 406800	Date: 08/10/2023 11:43	Prep Batch: 406365	Date: 08/09/2023 14:30				
9012B	MB 410-406365/2-A	Cyanide, Total	ND		ug/L	20	1
Batch ID: 406800	Date: 08/10/2023 12:40	Prep Batch: 406706	Date: 08/10/2023 09:15				
9012B	MB 410-406706/3-A	Cyanide, Total	ND		ug/L	20	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 406800	Date: 08/10/2023 12:42		Prep Batch: 406706		Date: 08/10/2023 09:15						
9012B	410-136864-4	Cyanide, Total	ND		ug/L						cn
9012B	410-136864-4 MS	Cyanide, Total	195		ug/L	200	97	72-114			cn

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 406800	Date: 08/10/2023 12:41		Prep Batch: 406706	Date: 08/10/2023 09:15				
9012B	16WC1A	410-136864-4	Cyanide, Total	ND	ug/L			
9012B	16WC1A	410-136864-4 DU	Cyanide, Total	ND	ug/L	NC	20	cn

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 406396	Date: 08/09/2023 13:16		Prep Batch: 405892			Date: 08/08/2023 16:00					
						LCS Source: WC-PR20mg/lQC_00940					
9012B	LCS 410-405892/1-A	Cyanide, Total	215		ug/L	200	107	90-110			
Batch ID: 406800	Date: 08/10/2023 11:38		Prep Batch: 406365			Date: 08/09/2023 14:30					
						LCS Source: WC-PR20mg/lQC_00941					
9012B	LCS 410-406365/1-A	Cyanide, Total	204		ug/L	200	102	90-110			
Batch ID: 406800	Date: 08/10/2023 12:38		Prep Batch: 406706			Date: 08/10/2023 09:15					
						LCS Source: WC-PR20mg/lQC_00942					
9012B	LCS 410-406706/1-A	Cyanide, Total	234		ug/L	200	117	90-110			*+

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG Number:

Matrix: Water Instrument ID: 27769

Method: 9012B XMDL Date: 11/07/2018 12:39

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Cyanide, Total		0.01	0.005

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-136864-1

SDG Number:

Matrix: Water Instrument ID: 27769

Method: 9012B MDL Date: 01/01/2018 13:01

Prep Method: 9012B

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Cyanide, Total		20	5

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Prep Method: 9012B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 410-405892/1-A	08/08/2023 16:00	405892		50	50
MB 410-405892/2-A	08/08/2023 16:00	405892		50	50
410-136864-2	08/08/2023 16:00	405892		50	50
410-136864-6	08/08/2023 16:00	405892		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Prep Method: 9012B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 410-406365/1-A	08/09/2023 14:30	406365		50	50
MB 410-406365/2-A	08/09/2023 14:30	406365		50	50
410-136864-1	08/09/2023 14:30	406365		50	50
410-136864-3	08/09/2023 14:30	406365		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Prep Method: 9012B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 410-406706/1-A	08/10/2023 09:15	406706		50	50
MB 410-406706/3-A	08/10/2023 09:15	406706		50	50
410-136864-4	08/10/2023 09:15	406706		50	50
410-136864-4 DU	08/10/2023 09:15	406706		50	50
410-136864-4 MS	08/10/2023 09:15	406706		50	50
410-136864-5	08/10/2023 09:15	406706		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/09/2023 12:37 End Date: 08/09/2023 16:01

Lab Sample Id	D/F	Type	Time	Analytes																										
				CN																										
IC 410-406396/1			12:37	X																										
IC 410-406396/2			12:38	X																										
IC 410-406396/3			12:38	X																										
IC 410-406396/4			12:39	X																										
IC 410-406396/5			12:40	X																										
IC 410-406396/6			12:41	X																										
IC 410-406396/7			12:41	X																										
ICV 410-406396/8	1		12:41	X																										
ICB 410-406396/9	1		12:42	X																										
CCV 410-406396/10			13:01																											
CCB 410-406396/11			13:01																											
ZZZZZZ			13:02																											
ZZZZZZ			13:02																											
ZZZZZZ			13:02																											
ZZZZZZ			13:02																											
ZZZZZZ			13:03																											
ZZZZZZ			13:04																											
ZZZZZZ			13:04																											
ZZZZZZ			13:05																											
ZZZZZZ			13:05																											
ZZZZZZ			13:05																											
CCV 410-406396/22			13:06																											
CCB 410-406396/23			13:06																											
ZZZZZZ			13:07																											
ZZZZZZ			13:07																											
ZZZZZZ			13:08																											
ZZZZZZ			13:08																											
ZZZZZZ			13:09																											
ZZZZZZ			13:09																											
ZZZZZZ			13:09																											
ZZZZZZ			13:10																											
ZZZZZZ			13:10																											
ZZZZZZ			13:11																											
CCV 410-406396/34	1		13:11	X																										
CCB 410-406396/35	1		13:12	X																										
ZZZZZZ			13:12																											
ZZZZZZ			13:13																											
ZZZZZZ			13:13																											
ZZZZZZ			13:13																											
ZZZZZZ			13:14																											
ZZZZZZ			13:14																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/09/2023 12:37 End Date: 08/09/2023 16:01

Lab Sample Id	D/F	Type	Time	Analytes
				CN
ZZZZZZ			13:15	
ZZZZZZ			13:15	
LCS 410-405892/1-A	1	T	13:16	X
MB 410-405892/2-A	1	T	13:16	X
CCV 410-406396/46	1		13:17	X
CCB 410-406396/47	1		13:17	X
ZZZZZZ			13:17	
ZZZZZZ			13:18	
ZZZZZZ			13:19	
ZZZZZZ			13:19	
ZZZZZZ			13:19	
ZZZZZZ			13:20	
ZZZZZZ			13:20	
ZZZZZZ			13:21	
ZZZZZZ			13:21	
ZZZZZZ			13:22	
CCV 410-406396/58	1		13:22	X
CCB 410-406396/59	1		13:23	X
ZZZZZZ			13:23	
ZZZZZZ			13:23	
ZZZZZZ			13:24	
ZZZZZZ			13:24	
ZZZZZZ			13:25	
ZZZZZZ			13:25	
ZZZZZZ			13:26	
ZZZZZZ			13:26	
ZZZZZZ			13:27	
ZZZZZZ			13:27	
CCV 410-406396/70	1		13:28	X
CCB 410-406396/71	1		13:28	X
ZZZZZZ			13:28	
410-136864-2	1	T	13:29	X
410-136864-6	1	T	13:29	X
ZZZZZZ			13:30	
ZZZZZZ			13:30	
CCV 410-406396/77	1		13:31	X
CCB 410-406396/78	1		13:31	X
ZZZZZZ			13:40	
CCV 410-406396/80			13:40	
CCB 410-406396/81			13:40	
IC 410-406396/82			14:24	X

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/09/2023 12:37 End Date: 08/09/2023 16:01

Lab Sample Id	D/F	Type	Time	Analytes
				CN
IC 410-406396/83			14:24	X
IC 410-406396/84			14:25	X
IC 410-406396/85			14:25	X
IC 410-406396/86			14:26	X
IC 410-406396/87			14:26	X
IC 410-406396/88			14:27	X
ICV 410-406396/89			14:27	
ICB 410-406396/90			14:27	
CCV 410-406396/91			14:46	
CCB 410-406396/92			14:46	
ZZZZZZ			14:46	
ZZZZZZ			14:46	
ZZZZZZ			14:46	
ZZZZZZ			14:46	
ZZZZZZ			14:46	
ZZZZZZ			14:47	
ZZZZZZ			14:47	
ZZZZZZ			14:47	
CCV 410-406396/101			14:47	
CCB 410-406396/102			14:47	
ZZZZZZ			14:47	
ZZZZZZ			14:47	
ZZZZZZ			14:50	
ZZZZZZ			14:50	
ZZZZZZ			14:50	
ZZZZZZ			14:50	
ZZZZZZ			14:50	
ZZZZZZ			14:51	
CCV 410-406396/111			14:51	
CCB 410-406396/112			14:51	
ZZZZZZ			14:51	
ZZZZZZ			14:51	
ZZZZZZ			14:51	
ZZZZZZ			14:51	
ZZZZZZ			14:52	
ZZZZZZ			14:52	
ZZZZZZ			14:54	
ZZZZZZ			14:54	
CCV 410-406396/121			14:54	
CCB 410-406396/122			14:54	
ZZZZZZ			14:55	

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/09/2023 12:37 End Date: 08/09/2023 16:01

Lab Sample Id	D/F	Type	Time	Analytes
				CN
ZZZZZZ			14:55	
ZZZZZZ			14:55	
ZZZZZZ			14:55	
ZZZZZZ			14:55	
ZZZZZZ			14:55	
ZZZZZZ			14:55	
ZZZZZZ			14:56	
CCV 410-406396/131			14:56	
CCB 410-406396/132			14:56	
ZZZZZZ			14:58	
ZZZZZZ			14:58	
ZZZZZZ			14:58	
ZZZZZZ			14:59	
ZZZZZZ			14:59	
ZZZZZZ			14:59	
ZZZZZZ			14:59	
ZZZZZZ			14:59	
CCV 410-406396/141			14:59	
CCB 410-406396/142			14:59	
ZZZZZZ			15:00	
ZZZZZZ			15:00	
ZZZZZZ			15:00	
ZZZZZZ			15:00	
ZZZZZZ			15:02	
ZZZZZZ			15:02	
ZZZZZZ			15:03	
ZZZZZZ			15:03	
CCV 410-406396/151			15:03	
CCB 410-406396/152			15:03	
ZZZZZZ			15:03	
ZZZZZZ			15:03	
ZZZZZZ			15:04	
ZZZZZZ			15:04	
ZZZZZZ			15:04	
ZZZZZZ			15:04	
ZZZZZZ			15:04	
ZZZZZZ			15:04	
CCV 410-406396/161			15:07	
CCB 410-406396/162			15:07	
ZZZZZZ			15:07	
ZZZZZZ			15:07	

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/09/2023 12:37 End Date: 08/09/2023 16:01

Lab Sample Id	D/F	Type	Time	Analytes
				CN
ZZZZZZ			15:08	
ZZZZZZ			15:08	
ZZZZZZ			15:08	
ZZZZZZ			15:08	
ZZZZZZ			15:09	
ZZZZZZ			15:09	
CCV 410-406396/171			15:09	
CCB 410-406396/172			15:10	
ZZZZZZ			15:11	
ZZZZZZ			15:11	
ZZZZZZ			15:11	
ZZZZZZ			15:11	
ZZZZZZ			15:12	
ZZZZZZ			15:13	
ZZZZZZ			15:13	
ZZZZZZ			15:13	
CCV 410-406396/181			15:14	
CCB 410-406396/182			15:14	
ZZZZZZ			15:16	
CCV 410-406396/184			15:16	
CCB 410-406396/185			15:16	
ZZZZZZ			15:17	
ZZZZZZ			15:18	
CCV 410-406396/188			15:18	
CCB 410-406396/189			15:18	
ZZZZZZ			15:20	
ZZZZZZ			15:21	
CCV 410-406396/192			15:21	
CCB 410-406396/193			15:21	
ZZZZZZ			15:22	
ZZZZZZ			15:22	
CCV 410-406396/196			15:22	
CCB 410-406396/197			15:23	
ZZZZZZ			15:26	
CCV 410-406396/199			15:26	
CCB 410-406396/200			15:26	
ZZZZZZ			15:29	
CCV 410-406396/202			15:30	
CCB 410-406396/203			15:30	
ZZZZZZ			15:34	
CCV 410-406396/205			15:34	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/09/2023 12:37 End Date: 08/09/2023 16:01

Lab Sample Id	D/F	Type	Time	Analytes																									
				CN																									
CCB 410-406396/206			15:34																										
ZZZZZZ			15:34																										
CCV 410-406396/208			15:35																										
CCB 410-406396/209			15:35																										
ZZZZZZ			15:35																										
CCV 410-406396/211			15:35																										
CCB 410-406396/212			15:35																										
ZZZZZZ			15:36																										
CCV 410-406396/214			15:36																										
CCB 410-406396/215			15:36																										
ZZZZZZ			15:47																										
CCV 410-406396/217			15:47																										
CCB 410-406396/218			15:47																										
ZZZZZZ			15:48																										
CCV 410-406396/220			15:48																										
CCB 410-406396/221			15:48																										
ZZZZZZ			15:48																										
CCV 410-406396/223			15:49																										
CCB 410-406396/224			15:49																										
ZZZZZZ			15:49																										
CCV 410-406396/226			15:49																										
CCB 410-406396/227			15:50																										
ZZZZZZ			16:01																										
CCV 410-406396/229			16:01																										
CCB 410-406396/230			16:01																										
ZZZZZZ			16:01																										
CCV 410-406396/232			16:01																										
CCB 410-406396/233			16:01																										

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/10/2023 10:15 End Date: 08/10/2023 13:23

Lab Sample Id	D/F	Type	Time	Analytes																										
				CN																										
IC 410-406800/1			10:15	X																										
IC 410-406800/2			10:16	X																										
IC 410-406800/3			10:16	X																										
IC 410-406800/4			10:17	X																										
IC 410-406800/5			10:18	X																										
IC 410-406800/6			10:19	X																										
IC 410-406800/7			10:19	X																										
ICV 410-406800/8	1		10:19	X																										
ICB 410-406800/9	1		10:20	X																										
CCV 410-406800/10			10:39																											
CCB 410-406800/11			10:40																											
ZZZZZZ			10:40																											
ZZZZZZ			10:40																											
ZZZZZZ			10:41																											
ZZZZZZ			10:41																											
ZZZZZZ			10:41																											
ZZZZZZ			10:42																											
ZZZZZZ			10:43																											
ZZZZZZ			10:43																											
ZZZZZZ			10:43																											
ZZZZZZ			10:44																											
CCV 410-406800/22			10:44																											
CCB 410-406800/23			10:45																											
ZZZZZZ			10:45																											
ZZZZZZ			10:46																											
ZZZZZZ			10:46																											
ZZZZZZ			10:47																											
ZZZZZZ			10:47																											
ZZZZZZ			10:47																											
ZZZZZZ			10:48																											
ZZZZZZ			10:48																											
ZZZZZZ			10:49																											
ZZZZZZ			10:49																											
CCV 410-406800/34			10:50																											
CCB 410-406800/35			10:50																											
ZZZZZZ			10:51																											
ZZZZZZ			10:51																											
ZZZZZZ			10:51																											
ZZZZZZ			10:52																											
ZZZZZZ			10:52																											
ZZZZZZ			10:53																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/10/2023 10:15 End Date: 08/10/2023 13:23

Lab Sample Id	D/F	Type	Time	Analytes
				CN
ZZZZZZ			10:53	
ZZZZZZ			10:54	
ZZZZZZ			10:54	
ZZZZZZ			10:55	
CCV 410-406800/46			10:55	
CCB 410-406800/47			10:55	
ZZZZZZ			10:56	
ZZZZZZ			10:56	
ZZZZZZ			10:57	
ZZZZZZ			10:57	
ZZZZZZ			10:58	
ZZZZZZ			10:58	
ZZZZZZ			10:59	
ZZZZZZ			10:59	
ZZZZZZ			10:59	
ZZZZZZ			11:00	
CCV 410-406800/58	1		11:01	X
CCB 410-406800/59	1		11:01	X
ZZZZZZ			11:01	
ZZZZZZ			11:02	
ZZZZZZ			11:02	
ZZZZZZ			11:03	
ZZZZZZ			11:03	
ZZZZZZ			11:04	
ZZZZZZ			11:04	
ZZZZZZ			11:05	
410-136864-1	1	T	11:05	X
410-136864-3	1	T	11:05	X
CCV 410-406800/70	1		11:06	X
CCB 410-406800/71	1		11:06	X
ZZZZZZ			11:07	
ZZZZZZ			11:07	
CCV 410-406800/74			11:08	
CCB 410-406800/75			11:08	
ZZZZZZ			11:13	
ZZZZZZ			11:13	
CCV 410-406800/78			11:13	
CCB 410-406800/79			11:14	
CCV 410-406800/80			11:24	
CCB 410-406800/81			11:24	
CCV 410-406800/82			11:31	

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/10/2023 10:15 End Date: 08/10/2023 13:23

Lab Sample Id	D/F	Type	Time	Analytes
				CN
CCB 410-406800/83	1		11:31	X
ZZZZZZ			11:31	
ZZZZZZ			11:35	
ZZZZZZ			11:35	
CCV 410-406800/87	1		11:36	X
ZZZZZZ			11:36	
ZZZZZZ			11:37	
ZZZZZZ			11:37	
LCS 410-406365/1-A	1	T	11:38	X
ZZZZZZ			11:38	
CCB 410-406800/93	1		11:38	X
ZZZZZZ			11:39	
ZZZZZZ			11:39	
ZZZZZZ			11:40	
CCB 410-406800/97	1		11:40	X
ZZZZZZ			11:41	
ZZZZZZ			11:41	
ZZZZZZ			11:42	
ZZZZZZ			11:42	
MB 410-406365/2-A	1	T	11:43	X
CCV 410-406800/103	1		11:43	X
ZZZZZZ			11:43	
ZZZZZZ			11:44	
ZZZZZZ			11:44	
ZZZZZZ			11:45	
ZZZZZZ			11:45	
ZZZZZZ			11:46	
ZZZZZZ			11:46	
CCV 410-406800/111			11:46	
CCB 410-406800/112	1		11:47	X
ZZZZZZ			11:47	
ZZZZZZ			11:48	
ZZZZZZ			11:48	
ZZZZZZ			11:49	
ZZZZZZ			11:49	
ZZZZZZ			11:50	
ZZZZZZ			11:50	
CCV 410-406800/120			11:50	
CCB 410-406800/121			11:51	
ZZZZZZ			12:03	
ZZZZZZ			12:04	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/10/2023 10:15 End Date: 08/10/2023 13:23

Lab Sample Id	D/F	Type	Time	Analytes																										
				CN																										
ZZZZZZ			12:04																											
ZZZZZZ			12:04																											
ZZZZZZ			12:04																											
ZZZZZZ			12:05																											
ZZZZZZ			12:05																											
ZZZZZZ			12:06																											
ZZZZZZ			12:06																											
ZZZZZZ			12:07																											
CCV 410-406800/132			12:07																											
CCB 410-406800/133			12:08																											
ZZZZZZ			12:08																											
ZZZZZZ			12:08																											
ZZZZZZ			12:09																											
ZZZZZZ			12:09																											
ZZZZZZ			12:10																											
ZZZZZZ			12:10																											
ZZZZZZ			12:11																											
ZZZZZZ			12:11																											
ZZZZZZ			12:12																											
CCV 410-406800/143			12:12																											
CCB 410-406800/144			12:13																											
CCV 410-406800/145			12:29																											
CCB 410-406800/146			12:29																											
ZZZZZZ			12:29																											
ZZZZZZ			12:30																											
ZZZZZZ			12:30																											
ZZZZZZ			12:30																											
ZZZZZZ			12:31																											
ZZZZZZ			12:31																											
ZZZZZZ			12:32																											
ZZZZZZ			12:32																											
ZZZZZZ			12:33																											
ZZZZZZ			12:33																											
CCV 410-406800/157	1		12:34	X																										
CCB 410-406800/158	1		12:34	X																										
ZZZZZZ			12:34																											
ZZZZZZ			12:35																											
ZZZZZZ			12:36																											
ZZZZZZ			12:36																											
ZZZZZZ			12:36																											
ZZZZZZ			12:37																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/10/2023 10:15 End Date: 08/10/2023 13:23

Lab Sample Id	D/F	Type	Time	Analytes
				CN
ZZZZZZ			12:37	
ZZZZZZ			12:38	
ZZZZZZ			12:38	
LCS 410-406706/1-A	1	T	12:38	X
CCV 410-406800/169	1		12:39	X
CCB 410-406800/170	1		12:40	X
ZZZZZZ			12:40	
MB 410-406706/3-A	1	T	12:40	X
410-136864-4	1	T	12:41	X
410-136864-4 DU	1	T	12:41	X
410-136864-4 MS	1	T	12:42	X
ZZZZZZ			12:42	
ZZZZZZ			12:43	
ZZZZZZ			12:43	
410-136864-5	1	T	12:44	X
ZZZZZZ			12:44	
CCV 410-406800/181	1		12:44	X
CCB 410-406800/182	1		12:45	X
ZZZZZZ			12:45	
ZZZZZZ			12:46	
ZZZZZZ			12:46	
ZZZZZZ			12:47	
ZZZZZZ			12:47	
ZZZZZZ			12:48	
CCV 410-406800/189			12:48	
CCB 410-406800/190			12:48	
ZZZZZZ			13:00	
ZZZZZZ			13:01	
ZZZZZZ			13:01	
ZZZZZZ			13:01	
CCV 410-406800/195			13:02	
CCB 410-406800/196			13:02	
CCV 410-406800/197			13:18	
CCB 410-406800/198			13:18	
ZZZZZZ			13:19	
ZZZZZZ			13:19	
ZZZZZZ			13:19	
ZZZZZZ			13:19	
ZZZZZZ			13:20	
ZZZZZZ			13:20	
ZZZZZZ			13:21	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-136864-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 08/10/2023 10:15 End Date: 08/10/2023 13:23

Lab Sample Id	D/F	Type	Time	Analytes																								
				CN																								
ZZZZZZ			13:22																									
ZZZZZZ			13:22																									
ZZZZZZ			13:22																									
CCV 410-406800/209			13:23																									
CCB 410-406800/210			13:23																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 405892 Batch Start Date: 08/08/23 16:00 Batch Analyst: Schmertz, Thomas

Batch Method: 9012B Batch End Date: 08/08/23 17:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC-PR20mg/lQC 00940			
LCS 410-405892/1		9012B, 9012B		50 mL	50 mL	0.5 mL			
MB 410-405892/2		9012B, 9012B		50 mL	50 mL				
410-136864-J-2	16MW8	9012B, 9012B	T	50 mL	50 mL				
410-136864-J-6	16WC1B	9012B, 9012B	T	50 mL	50 mL				

Batch Notes	
Pipette/Syringe/Dispenser ID	PREP
Sodium Hydroxide ID	4248768
Magnesium Chloride Reagent ID Number	4308943
Sulfamic Acid ID	4308894
Sulfuric Acid Reagent ID Number	4308942
Distillation Start Time	08/08/2023 16:00
Distillation End Time	08/08/2023 17:45

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 406365 Batch Start Date: 08/09/23 14:30 Batch Analyst: Schmertz, Thomas

Batch Method: 9012B Batch End Date: 08/09/23 16:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC-PR20mg/lQC 00941			
LCS 410-406365/1		9012B, 9012B		50 mL	50 mL	0.5 mL			
MB 410-406365/2		9012B, 9012B		50 mL	50 mL				
410-136864-L-1	16C1	9012B, 9012B	T	50 mL	50 mL				
410-136864-L-3	16MW9	9012B, 9012B	T	50 mL	50 mL				

Batch Notes	
Pipette/Syringe/Dispenser ID	prep
Sodium Hydroxide ID	4248768
Magnesium Chloride Reagent ID Number	4308943
Sulfamic Acid ID	4308894
Sulfuric Acid Reagent ID Number	4308942
Distillation Start Time	08/09/2023 14:30
Distillation End Time	08/09/2023 16:15

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 406396 Batch Start Date: 08/09/23 12:37 Batch Analyst: Hess, Elena

Batch Method: 9012B Batch End Date: 08/09/23 13:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC_FL_CCVCN 00586					
ICV 410-406396/8		9012B		# mL					
CCV 410-406396/34		9012B		# mL					
CCV 410-406396/46		9012B		# mL					
CCV 410-406396/58		9012B		# mL					
CCV 410-406396/70		9012B		# mL					
CCV 410-406396/77		9012B		# mL					

Batch Notes	
Pipette/Syringe/Dispenser ID	H13525
Buffer Reagent ID	4538404
Chloramine-T ID	4681397
Pyridine-Barbituric Acid ID	4646652

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 406706 Batch Start Date: 08/10/23 09:15 Batch Analyst: McKenzie, Joseph E

Batch Method: 9012B Batch End Date: 08/10/23 11:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC-PR20mg/lQC 00942			
LCS 410-406706/1		9012B, 9012B		50 mL	50 mL	0.5 mL			
MB 410-406706/3		9012B, 9012B		50 mL	50 mL				
410-136864-J-4	16WC1A	9012B, 9012B	T	50 mL	50 mL				
410-136864-B-4 DU	16WC1A	9012B, 9012B	T	50 mL	50 mL				
410-136864-J-4 MS	16WC1A	9012B, 9012B	T	50 mL	50 mL	0.5 mL			
410-136864-J-5	16WDUP	9012B, 9012B	T	50 mL	50 mL				

Batch Notes	
Pipette/Syringe/Dispenser ID	Class A
Sodium Hydroxide ID	4248768
Magnesium Chloride Reagent ID Number	4308943
Sulfamic Acid ID	4308894
Sulfuric Acid Reagent ID Number	4308942
Distillation Start Time	08/10/2023 09:15
Distillation End Time	08/10/2023 11:00

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-136864-1

SDG No.:

Batch Number: 406800 Batch Start Date: 08/10/23 10:15 Batch Analyst: Hess, Elena

Batch Method: 9012B Batch End Date: 08/10/23 13:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC_FL_CCVCN 00587					
ICV 410-406800/8		9012B		# mL					
CCV 410-406800/58		9012B		# mL					
CCV 410-406800/70		9012B		# mL					
CCV 410-406800/87		9012B		# mL					
CCV 410-406800/103		9012B		# mL					
CCV 410-406800/157		9012B		# mL					
CCV 410-406800/169		9012B		# mL					
CCV 410-406800/181		9012B		# mL					

Batch Notes	
Pipette/Syringe/Dispenser ID	H13525
Buffer Reagent ID	4538404
Chloramine-T ID	4687604
Pyridine-Barbituric Acid ID	4646652

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Calibration results

CN Version number 1.2

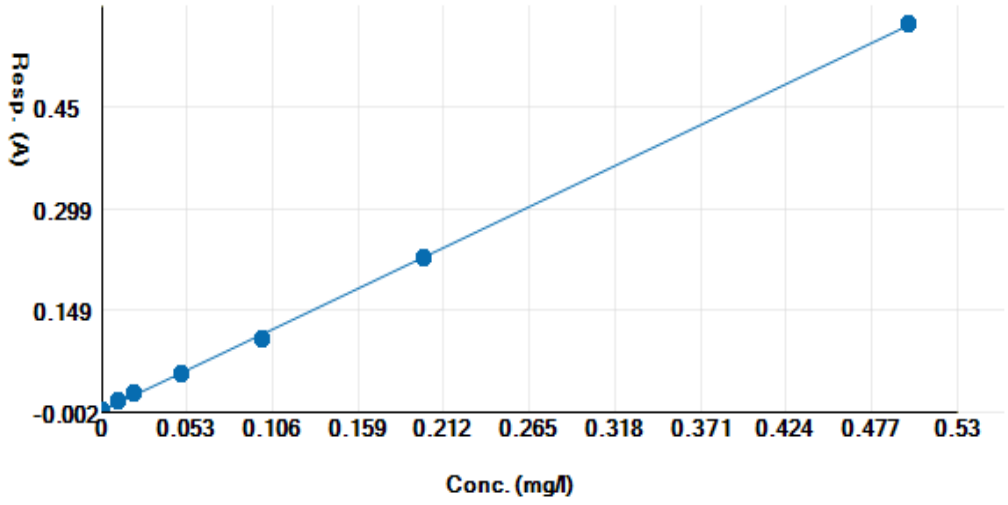
Date 8/9/2023 **User** Gallery

Time 4:06:07PM **Software version: 7.0**

Analyzer name Analyzer 1

Test	CN	**Coeff. of deter.**	0.999668
Status	Accepted	**Total factor**	0.874
Accepted	8/9/2023 12:46 PM		
Checked	8/9/2023 12:46 PM		
User name	Gallery		
Comment			
Errors			
Factor	0.874		
Bias	-0.002		

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
CN-0	0.001	0.0019136	0.0000000	Default	
CN-CAL	0.013	0.0125912	0.0100000	Default	
CN-CAL	0.024	0.0224426	0.0200000	Default	
CN-CAL	0.054	0.0487895	0.0500000	Default	
CN-CAL	0.105	0.0934433	0.1000000	Default	
CN-CAL	0.226	0.1992283	0.2000000	Default	
CN-CAL	0.572	0.5015916	0.5000000	Default	
1CN ICV	0.170	0.150109	0.150000	Default	
2CN ICB	0.002	0.002675	0.000000	Default	Test limit Low



ThermoFisher Gallery Discrete Analyzer

Date 8/9/2023 Time 4:05:20 PM Software Version: 6.0.1

Analyte: CN

Cup	Result Time	Sample Name	Response	Sample Result	Dilution
1	8/9/2023 12:37	CN-0	0.00065	0.00191	1
2	8/9/2023 12:38	CN-CAL	0.01286	0.01259	100
3	8/9/2023 12:38	CN-CAL	0.02413	0.02244	50
4	8/9/2023 12:39	CN-CAL	0.05427	0.04879	20
5	8/9/2023 12:40	CN-CAL	0.10535	0.09344	10
6	8/9/2023 12:41	CN-CAL	0.22635	0.19923	5
7	8/9/2023 12:41	CN-CAL	0.57221	0.50159	2
8	8/9/2023 12:41	1CN ICV	0.17016	0.15011	1
9	8/9/2023 12:42	2CN ICB	0.00152	0.00267	1
10	8/9/2023 13:01	1CN CCV	0.16352	0.1443	1
11	8/9/2023 13:01	2CN CCB	0.00074	0.002	1
12	8/9/2023 13:02	lcs 410-405898/1-a	0.24431	0.21493	1
13	8/9/2023 13:02	mb 410-405898/2-a	0.0019	0.00301	1
14	8/9/2023 13:02	410-136557-a-4-d	0.00427	0.00508	1
15	8/9/2023 13:02	410-136557-a-4-e ms	0.24026	0.21139	1
16	8/9/2023 13:03	410-136557-a-4-f msd	0.24563	0.21608	1
17	8/9/2023 13:04	410-136557-a-5-d	0.00285	0.00383	1
18	8/9/2023 13:04	410-136557-a-7-d	0.00555	0.0062	1
19	8/9/2023 13:05	410-136709-a-9-a	0.00577	0.00639	1
20	8/9/2023 13:05	410-136709-a-10-a	0.00375	0.00463	1
21	8/9/2023 13:05	410-136709-a-11-a	0.00417	0.00499	1
22	8/9/2023 13:06	1CN CCV	0.16561	0.14613	1
23	8/9/2023 13:06	2CN CCB	0.00119	0.00238	1
24	8/9/2023 13:07	410-136709-a-12-a	0.00465	0.00541	1
25	8/9/2023 13:07	410-136709-a-13-a	0.00424	0.00505	1
26	8/9/2023 13:08	410-136709-a-14-a	0.00229	0.00334	1
27	8/9/2023 13:08	410-135552-a-1-b	9.36781	8.19104	1
28	8/9/2023 13:09	lcs 410-405918/1-a	0.22991	0.20234	1
29	8/9/2023 13:09	mb 410-405918/2-a	0.00338	0.0043	1
30	8/9/2023 13:09	620-12993-h-1-a	0.07393	0.06598	1
31	8/9/2023 13:10	620-12993-h-1-b ms	0.29953	0.26321	1
32	8/9/2023 13:10	620-12993-h-1-c msd	0.30136	0.26481	1
33	8/9/2023 13:11	620-12993-h-2-a	0.01411	0.01368	1
34	8/9/2023 13:11	1CN CCV	0.16724	0.14755	1
35	8/9/2023 13:12	2CN CCB	0.00099	0.00221	1
36	8/9/2023 13:12	620-12993-h-4-a	0.01998	0.01881	1
37	8/9/2023 13:13	620-12993-h-5-a	0.0076	0.00799	1
38	8/9/2023 13:13	630-67882-a-2-a	0.04206	0.03812	1
39	8/9/2023 13:13	630-68120-a-2-a	0.00178	0.0029	1
40	8/9/2023 13:14	630-68120-a-4-a	0.00373	0.00461	1
41	8/9/2023 13:14	630-68120-a-6-a	0.00185	0.00296	1

42	8/9/2023 13:15	620-12992-l-1-a	0.00314	0.00409	1
43	8/9/2023 13:15	410-136429-a-1-a	0.00432	0.00513	1
44	8/9/2023 13:16	lcs 410-405892/1-a	0.244	0.21466	1
45	8/9/2023 13:16	mb 410-405892/2-a	0.00293	0.0039	1
46	8/9/2023 13:17	1CN CCV	0.17139	0.15118	1
47	8/9/2023 13:17	2CN CCB	0.00089	0.00212	1
48	8/9/2023 13:17	410-136625-b-2-a	0.00246	0.00349	1
49	8/9/2023 13:18	410-136625-b-2-b ms	0.2322	0.20434	1
50	8/9/2023 13:19	410-136625-b-2-c msd	0.2073	0.18257	1
51	8/9/2023 13:19	410-136625-b-3-a	0.00363	0.00452	1
52	8/9/2023 13:19	410-136625-b-4-a	0.00542	0.00608	1
53	8/9/2023 13:20	410-136625-b-5-a	0.00229	0.00334	1
54	8/9/2023 13:20	410-136625-b-7-a	0.00352	0.00442	1
55	8/9/2023 13:21	410-136625-b-8-a	0.00223	0.00329	1
56	8/9/2023 13:21	410-136625-b-9-a	0.00139	0.00256	1
57	8/9/2023 13:22	410-136625-b-10-a	0.00296	0.00393	1
58	8/9/2023 13:22	1CN CCV	0.16691	0.14727	1
59	8/9/2023 13:23	2CN CCB	0.00118	0.00238	1
60	8/9/2023 13:23	410-136693-b-6-a	0.00884	0.00908	1
61	8/9/2023 13:23	410-136693-b-7-a	0.00271	0.00371	1
62	8/9/2023 13:24	410-136693-b-8-a	0.00981	0.00992	1
63	8/9/2023 13:24	410-136693-b-8-b ms	0.25204	0.22169	1
64	8/9/2023 13:25	410-136693-b-8-c msd	0.24228	0.21315	1
65	8/9/2023 13:25	410-136693-b-9-a	0.00678	0.00728	1
66	8/9/2023 13:26	410-136693-b-10-a	0.00223	0.00329	1
67	8/9/2023 13:26	410-136693-b-11-a	0.00265	0.00367	1
68	8/9/2023 13:27	410-135552-a-1-b	0.96431	4.22189	5
69	8/9/2023 13:27	410-136693-b-12-a	0.01159	0.01148	1
70	8/9/2023 13:28	1CN CCV	0.16913	0.1492	1
71	8/9/2023 13:28	2CN CCB	0.00084	0.00208	1
72	8/9/2023 13:28	410-136693-b-13-a	0.00442	0.00521	1
73	8/9/2023 13:29	410-136864-j-2-a	0.002	0.00309	1
74	8/9/2023 13:29	410-136864-j-6-a	0.00096	0.00218	1
75	8/9/2023 13:30	580-130088-b-7-a	0.00146	0.00262	1
76	8/9/2023 13:30	580-130088-b-8-a	0.00247	0.0035	1
77	8/9/2023 13:31	1CN CCV	0.17027	0.1502	1
78	8/9/2023 13:31	2CN CCB	0.00094	0.00217	1
79	8/9/2023 13:40	410-135552-a-1-b	0.50113	4.39451	10
80	8/9/2023 13:40	1CN CCV	0.17173	0.15148	1
81	8/9/2023 13:40	2CN CCB	0.00079	0.00204	1
82	8/9/2023 14:24	TOTPO4-0	0.00439	0.00503	1
83	8/9/2023 14:24	TOTPO4	0.01295	0.09391	200
84	8/9/2023 14:25	TOTPO4	0.02343	0.20284	100
85	8/9/2023 14:25	TOTPO4	0.04153	0.39099	50
86	8/9/2023 14:26	TOTPO4	0.10086	1.00752	20
87	8/9/2023 14:26	TOTPO4	0.19697	2.00629	10
88	8/9/2023 14:27	TOTPO4	0.24385	2.49342	8

89	8/9/2023 14:27	1TPO4 ICV	0.16024	1.62458	1
90	8/9/2023 14:27	2TPO4 ICB	0.00427	0.00373	1
91	8/9/2023 14:46	1TPO4 CCV	0.15993	1.62139	1
92	8/9/2023 14:46	2TPO4 CCB	0.00422	0.00327	1
93	8/9/2023 14:46	mb 410-405694/1-a	0.00454	0.00657	1
94	8/9/2023 14:46	lcs 410-405694/2-a	0.14183	1.43328	1
95	8/9/2023 14:46	180-160297-g-1-a	0.01351	0.09973	1
96	8/9/2023 14:46	180-160297-g-1-b du	0.01317	0.09625	1
97	8/9/2023 14:46	580-130104-b-6-a	0.76624	7.92207	1
98	8/9/2023 14:47	580-130104-b-6-b ms	0.87054	9.00599	1
99	8/9/2023 14:47	410-137240-g-2-a	0.27408	2.80757	1
100	8/9/2023 14:47	410-137245-s-1-a	0.00701	0.03225	1
101	8/9/2023 14:47	1TPO4 CCV	0.16068	1.62918	1
102	8/9/2023 14:47	2TPO4 CCB	0.0041	0.00199	1
103	8/9/2023 14:47	630-68434-i-2-a	0.02108	0.17848	1
104	8/9/2023 14:47	410-137219-t-1-a	0.00528	0.01426	1
105	8/9/2023 14:50	580-130168-b-1-a	0.01089	0.07254	1
106	8/9/2023 14:50	460-285495-f-1-a	0.00446	0.00573	1
107	8/9/2023 14:50	410-137281-d-2-a	0.02107	0.17834	1
108	8/9/2023 14:50	410-137293-j-1-a	0.00731	0.03538	1
109	8/9/2023 14:50	410-137293-h-2-a	0.00752	0.03752	1
110	8/9/2023 14:51	410-137293-h-2-b du	0.00762	0.03852	1
111	8/9/2023 14:51	1TPO4 CCV	0.15951	1.61704	1
112	8/9/2023 14:51	2TPO4 CCB	0.00399	0.0008	1
113	8/9/2023 14:51	410-137293-h-3-a	0.02391	0.20789	1
114	8/9/2023 14:51	410-137293-h-3-b ms	0.22011	2.24675	1
115	8/9/2023 14:51	630-68529-h-2-a	0.06816	0.6677	1
116	8/9/2023 14:51	630-68550-e-1-a	0.72022	7.44382	1
117	8/9/2023 14:52	630-68550-g-2-a	0.32439	3.33037	1
118	8/9/2023 14:52	630-68565-d-1-a	0.5415	5.58665	1
119	8/9/2023 14:54	410-137358-h-1-a	0.00502	0.01149	1
120	8/9/2023 14:54	410-137358-h-3-a	0.0044	0.00509	1
121	8/9/2023 14:54	1TPO4 CCV	0.16045	1.62674	1
122	8/9/2023 14:54	2TPO4 CCB	0.00396	0.00053	1
123	8/9/2023 14:55	410-137358-h-5-a	0.00102	-0.03002	1
124	8/9/2023 14:55	410-137358-h-7-a	0.00443	0.00541	1
125	8/9/2023 14:55	mb 410-405696/1-a	0.00461	0.00729	1
126	8/9/2023 14:55	lcs 410-405696/2-a	0.13626	1.37534	1
127	8/9/2023 14:55	410-137358-h-9-a	0.00422	0.0032	1
128	8/9/2023 14:55	410-137358-h-9-b du	0.0042	0.00303	1
129	8/9/2023 14:55	410-137380-n-5-a	0.0154	0.11936	1
130	8/9/2023 14:56	410-137380-n-5-b ms	0.22835	2.33233	1
131	8/9/2023 14:56	1TPO4 CCV	0.16015	1.62368	1
132	8/9/2023 14:56	2TPO4 CCB	0.00408	0.00182	1
133	8/9/2023 14:58	630-68565-l-2-a	0.314	3.22245	1
134	8/9/2023 14:58	630-68567-h-2-a	0.07049	0.69191	1
135	8/9/2023 14:58	630-68598-e-1-a	0.54724	5.64629	1

136	8/9/2023 14:59	410-137452-f-2-a	0.10599	1.06085	1
137	8/9/2023 14:59	580-130174-g-1-a	0.4298	4.42579	1
138	8/9/2023 14:59	410-136524-p-1-a	0.0358	0.3314	1
139	8/9/2023 14:59	410-137546-k-1-a	0.00718	0.03399	1
140	8/9/2023 14:59	410-137546-k-2-a	0.00633	0.02515	1
141	8/9/2023 14:59	1TPO4 CCV	0.15945	1.61638	1
142	8/9/2023 14:59	2TPO4 CCB	0.00417	0.00266	1
143	8/9/2023 15:00	410-137546-k-3-a	0.00771	0.03945	1
144	8/9/2023 15:00	410-137546-k-3-b du	0.00789	0.04132	1
145	8/9/2023 15:00	410-137723-j-1-a	0.02782	0.24847	1
146	8/9/2023 15:00	410-137723-j-1-b ms	0.21779	2.2226	1
147	8/9/2023 15:02	410-137738-k-1-a	0.00753	0.0376	1
148	8/9/2023 15:02	410-137738-k-2-a	0.00749	0.03716	1
149	8/9/2023 15:03	410-137738-k-3-a	0.0074	0.03629	1
150	8/9/2023 15:03	410-136775-p-1-a	0.92918	9.61542	1
151	8/9/2023 15:03	1TPO4 CCV	0.16008	1.62293	1
152	8/9/2023 15:03	2TPO4 CCB	0.00434	0.00448	1
153	8/9/2023 15:03	410-136856-o-1-a	0.01142	0.0781	1
154	8/9/2023 15:03	410-136430-f-1-a	0.00425	0.00359	1
155	8/9/2023 15:04	mb 410-405673/1-a	0.20264	2.06519	1
156	8/9/2023 15:04	lcs 410-405673/2-a	0.00725	0.03468	1
157	8/9/2023 15:04	630-68287-r-1-c	0.1098	1.10043	1
158	8/9/2023 15:04	630-68287-r-1-d du	-0.04103	-0.467	1
159	8/9/2023 15:04	630-68287-r-1-e ms	0.29601	3.03553	1
160	8/9/2023 15:04	630-68764-b-1-a	0.38846	3.99619	1
161	8/9/2023 15:07	1TPO4 CCV	0.16079	1.63029	1
162	8/9/2023 15:07	2TPO4 CCB	0.00444	0.00548	1
163	8/9/2023 15:07	580-129421-b-2-a	2.10152	21.79826	1
164	8/9/2023 15:07	180-160187-f-1-a	1.67762	17.39313	1
165	8/9/2023 15:08	580-130104-b-6-a	0.18699	9.51275	5
166	8/9/2023 15:08	580-130104-b-6-b ms	0.23265	11.8851	5
167	8/9/2023 15:08	410-137240-g-2-a	0.05563	2.6872	5
168	8/9/2023 15:08	180-160188-h-1-a	1.96274	20.35602	1
169	8/9/2023 15:09	180-160188-h-2-a	1.76169	18.26676	1
170	8/9/2023 15:09	630-68550-e-1-a	0.17292	8.78162	5
171	8/9/2023 15:09	1TPO4 CCV	0.16104	1.6329	1
172	8/9/2023 15:10	2TPO4 CCB	0.00452	0.00633	1
173	8/9/2023 15:11	630-68550-g-2-a	0.06524	3.18671	5
174	8/9/2023 15:11	630-68565-d-1-a	0.10998	5.51127	5
175	8/9/2023 15:11	lcs 410-404656/2-a	0.14027	1.41706	1
176	8/9/2023 15:11	lcs 410-404656/2-a	0.14006	1.41488	1
177	8/9/2023 15:12	580-129969-h-8-a	0.29152	2.98888	1
178	8/9/2023 15:13	630-68565-l-2-a	0.06379	3.11151	5
179	8/9/2023 15:13	630-68598-e-1-a	0.11171	5.6011	5
180	8/9/2023 15:13	580-130174-g-1-a	0.08661	4.29731	5
181	8/9/2023 15:14	1TPO4 CCV	0.16077	1.63008	1
182	8/9/2023 15:14	2TPO4 CCB	0.00375	-0.00167	1

183	8/9/2023 15:16	410-136775-p-1-a	0.24642	12.60087	5
184	8/9/2023 15:16	1TPO4 CCV	0.1607	1.62938	1
185	8/9/2023 15:16	2TPO4 CCB	0.00418	0.00281	1
186	8/9/2023 15:17	630-68287-r-1-e ms	0.0601	2.91947	5
187	8/9/2023 15:18	630-68764-b-1-a	0.07213	3.54466	5
188	8/9/2023 15:18	1TPO4 CCV	0.16052	1.62747	1
189	8/9/2023 15:18	2TPO4 CCB	0.00461	0.00733	1
190	8/9/2023 15:20	580-129421-b-2-a	1.07234	55.51531	5
191	8/9/2023 15:21	180-160187-f-1-a	1.25919	65.22408	5
192	8/9/2023 15:21	1TPO4 CCV	0.16162	1.63896	1
193	8/9/2023 15:21	2TPO4 CCB	0.00424	0.00342	1
194	8/9/2023 15:22	180-160188-h-1-a	0.7647	39.53071	5
195	8/9/2023 15:22	180-160188-h-2-a	0.60776	31.37597	5
196	8/9/2023 15:22	1TPO4 CCV	0.16135	1.63609	1
197	8/9/2023 15:23	2TPO4 CCB	0.00426	0.00364	1
198	8/9/2023 15:26	580-129969-h-8-a	0.05932	2.87897	5
199	8/9/2023 15:26	1TPO4 CCV	0.16073	1.62967	1
200	8/9/2023 15:26	2TPO4 CCB	0.00418	0.00278	1
201	8/9/2023 15:29	410-136775-p-1-a	0.12756	12.84962	10
202	8/9/2023 15:30	1TPO4 CCV	0.1607	1.62934	1
203	8/9/2023 15:30	2TPO4 CCB	0.00386	-0.00055	1
204	8/9/2023 15:34	580-129421-b-2-a	0.68594	70.87591	10
205	8/9/2023 15:34	1TPO4 CCV	0.16077	1.63009	1
206	8/9/2023 15:34	2TPO4 CCB	0.00414	0.00244	1
207	8/9/2023 15:34	180-160187-f-1-a	0.80049	82.77977	10
208	8/9/2023 15:35	1TPO4 CCV	0.16106	1.63311	1
209	8/9/2023 15:35	2TPO4 CCB	0.00422	0.00324	1
210	8/9/2023 15:35	180-160188-h-1-a	0.50795	52.37941	10
211	8/9/2023 15:35	1TPO4 CCV	0.16052	1.62744	1
212	8/9/2023 15:35	2TPO4 CCB	0.00416	0.00265	1
213	8/9/2023 15:36	180-160188-h-2-a	0.3456	35.50834	10
214	8/9/2023 15:36	1TPO4 CCV	0.16136	1.63623	1
215	8/9/2023 15:36	2TPO4 CCB	0.00405	0.00145	1
216	8/9/2023 15:47	580-129421-b-2-a	0.33767	86.71141	25
217	8/9/2023 15:47	1TPO4 CCV	0.16103	1.63276	1
218	8/9/2023 15:47	2TPO4 CCB	0.00409	0.00188	1
219	8/9/2023 15:48	180-160187-f-1-a	0.44039	113.3968	25
220	8/9/2023 15:48	1TPO4 CCV	0.16	1.62205	1
221	8/9/2023 15:48	2TPO4 CCB	0.00429	0.004	1
222	8/9/2023 15:48	180-160188-h-1-a	0.21343	54.43258	25
223	8/9/2023 15:49	1TPO4 CCV	0.16074	1.62977	1
224	8/9/2023 15:49	2TPO4 CCB	0.00415	0.00251	1
225	8/9/2023 15:49	180-160188-h-2-a	0.14586	36.87917	25
226	8/9/2023 15:49	1TPO4 CCV	0.16108	1.63329	1
227	8/9/2023 15:50	2TPO4 CCB	0.00456	0.00671	1
228	8/9/2023 16:01	580-129421-b-2-a	0.17876	90.85104	50
229	8/9/2023 16:01	1TPO4 CCV	0.16093	1.63179	1

230	8/9/2023 16:01	2TPO4 CCB	0.00419	0.00291	1
231	8/9/2023 16:01	180-160187-f-1-a	0.23284	118.9506	50
232	8/9/2023 16:01	1TPO4 CCV	0.16271	1.6502	1
233	8/9/2023 16:01	2TPO4 CCB	0.00383	-0.00081	1

Calibration results

CN Version number 1.2

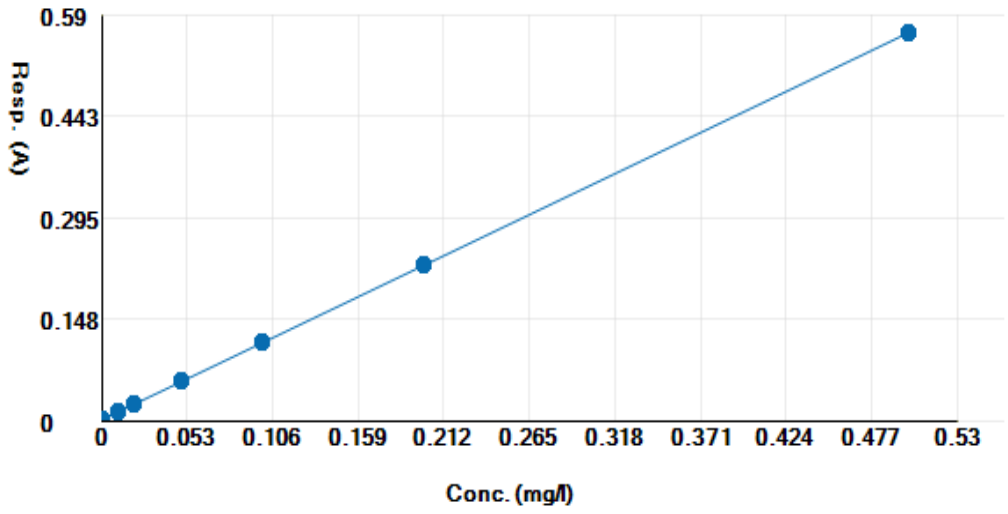
Date 8/10/2023 **User** Gallery

Time 1:25:00PM **Software version: 7.0**

Analyzer name Analyzer 1

Test	CN	**Coeff. of deter.**	0.999976
Status	Accepted	**Total factor**	0.891
Accepted	8/10/2023 10:24 AM		
Checked	8/10/2023 10:24 AM		
User name	Gallery		
Comment			
Errors			
Factor	0.891		
Bias	0.002		

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
CN-0	0.001	-0.0010285	0.0000000	Default	
CN-CAL	0.014	0.0107978	0.0100000	Default	
CN-CAL	0.025	0.0210374	0.0200000	Default	
CN-CAL	0.057	0.0493259	0.0500000	Default	
CN-CAL	0.115	0.1005573	0.1000000	Default	
CN-CAL	0.225	0.1990192	0.2000000	Default	
CN-CAL	0.563	0.5002908	0.5000000	Default	
1CN ICV	0.154	0.135515	0.150000	Default	
2CN ICB	0.001	-0.000728	0.000000	Default	Test limit Low



ThermoFisher Gallery Discrete Analyzer

Date 8/10/2023 Time 1:25:19 PM Software Version: 6.0.1

Analyte: CN

Cup	Result Time	Sample Name	Response	Sample Result	Dilution
1	8/10/2023 10:15	CN-0	0.00055	-0.00103	1
2	8/10/2023 10:16	CN-CAL	0.01382	0.0108	100
3	8/10/2023 10:16	CN-CAL	0.02532	0.02104	50
4	8/10/2023 10:17	CN-CAL	0.05707	0.04933	20
5	8/10/2023 10:18	CN-CAL	0.11457	0.10056	10
6	8/10/2023 10:19	CN-CAL	0.22509	0.19902	5
7	8/10/2023 10:19	CN-CAL	0.56326	0.50029	2
8	8/10/2023 10:19	1CN ICV	0.15381	0.13552	1
9	8/10/2023 10:20	2CN ICB	0.00088	-0.00073	1
10	8/10/2023 10:39	1CN CCV	0.15545	0.13698	1
11	8/10/2023 10:40	2CN CCB	0.00071	-0.00089	1
12	8/10/2023 10:40	lcs 410-406400/1-a	0.25275	0.22365	1
13	8/10/2023 10:40	mb 410-406400/2-a	0.00353	0.00162	1
14	8/10/2023 10:41	410-136597-a-1-h	0.00323	0.00136	1
15	8/10/2023 10:41	410-136597-a-1-i ms	0.24885	0.22019	1
16	8/10/2023 10:41	410-136597-a-1-j msd	0.24625	0.21787	1
17	8/10/2023 10:42	410-136597-a-3-f	0.00727	0.00496	1
18	8/10/2023 10:43	410-136597-a-5-c	0.0076	0.00526	1
19	8/10/2023 10:43	410-136597-a-9-e	0.0063	0.00409	1
20	8/10/2023 10:43	410-136597-a-10-e	0.0062	0.00401	1
21	8/10/2023 10:44	410-136597-a-11-e	0.00231	0.00054	1
22	8/10/2023 10:44	1CN CCV	0.15589	0.13737	1
23	8/10/2023 10:45	2CN CCB	0.00077	-0.00083	1
24	8/10/2023 10:45	410-136597-a-12-g	0.00293	0.0011	1
25	8/10/2023 10:46	410-136597-a-13-g	0.00277	0.00095	1
26	8/10/2023 10:46	410-136597-a-17-e	0.00251	0.00072	1
27	8/10/2023 10:47	410-136597-a-18-e	0.00414	0.00217	1
28	8/10/2023 10:47	410-136709-a-15-a	0.00763	0.00528	1
29	8/10/2023 10:47	410-136709-a-15-b ms	0.24733	0.21883	1
30	8/10/2023 10:48	410-136709-a-15-c ms	0.25843	0.22872	1
31	8/10/2023 10:48	410-136709-a-16-a	0.00727	0.00496	1
32	8/10/2023 10:49	410-136709-a-17-a	0.00178	0.00007	1
33	8/10/2023 10:49	410-136709-a-18-a	0.00288	0.00105	1
34	8/10/2023 10:50	1CN CCV	0.14697	0.12942	1
35	8/10/2023 10:50	2CN CCB	0.00097	-0.00065	1
36	8/10/2023 10:51	410-136709-a-19-a	0.00212	0.00037	1
37	8/10/2023 10:51	410-136709-a-20-a	0.0021	0.00035	1
38	8/10/2023 10:51	410-136709-a-21-a	0.00394	0.002	1
39	8/10/2023 10:52	410-136709-a-22-a	0.00403	0.00208	1
40	8/10/2023 10:52	410-136709-a-23-a	0.00316	0.0013	1
41	8/10/2023 10:53	410-136597-a-19-i	0.00225	0.00049	1

42	8/10/2023 10:53	lcs 410-406365/1-a	0.22791	0.20153	1
43	8/10/2023 10:54	mb 410-406365/2-a	0.00278	0.00096	1
44	8/10/2023 10:54	410-136715-a-2-a	0.00514	0.00306	1
45	8/10/2023 10:55	410-136715-a-2-b ms	0.24736	0.21886	1
46	8/10/2023 10:55	1CN CCV	0.14794	0.13028	1
47	8/10/2023 10:55	2CN CCB	0.00095	-0.00067	1
48	8/10/2023 10:56	410-136715-a-2-c msd	0.243	0.21497	1
49	8/10/2023 10:56	410-136715-a-3-a	0.01065	0.00797	1
50	8/10/2023 10:57	410-136715-a-4-a	0.00449	0.00249	1
51	8/10/2023 10:57	410-136715-a-5-a	0.00497	0.00291	1
52	8/10/2023 10:58	410-136715-a-6-a	0.00257	0.00078	1
53	8/10/2023 10:58	410-136715-a-10-a	0.00773	0.00537	1
54	8/10/2023 10:59	410-136715-a-11-a	0.00367	0.00175	1
55	8/10/2023 10:59	410-136715-a-12-a	0.00401	0.00205	1
56	8/10/2023 10:59	410-136775-j-1-a	0.00597	0.00381	1
57	8/10/2023 11:00	410-136709-b-27-a	0.00268	0.00087	1
58	8/10/2023 11:01	1CN CCV	0.1543	0.13595	1
59	8/10/2023 11:01	2CN CCB	0.00091	-0.0007	1
60	8/10/2023 11:01	410-136693-b-19-b	0.00923	0.0067	1
61	8/10/2023 11:02	410-136693-b-19-c du	0.00749	0.00516	1
62	8/10/2023 11:02	410-136693-b-19-d ms	0.24838	0.21976	1
63	8/10/2023 11:03	410-136693-b-15-a	0.00623	0.00403	1
64	8/10/2023 11:03	410-136693-b-16-a	0.00256	0.00077	1
65	8/10/2023 11:04	410-136693-b-17-a	0.00625	0.00405	1
66	8/10/2023 11:04	410-136693-b-18-a	0.004	0.00205	1
67	8/10/2023 11:05	410-136693-b-20-a	0.01339	0.01042	1
68	8/10/2023 11:05	410-136864-l-1-a	0.01015	0.00752	1
69	8/10/2023 11:05	410-136864-l-3-a	0.00926	0.00673	1
70	8/10/2023 11:06	1CN CCV	0.15458	0.1362	1
71	8/10/2023 11:06	2CN CCB	0.00078	-0.00082	1
72	8/10/2023 11:07	570-146580-s-1-a	0.00719	0.00489	1
73	8/10/2023 11:07	570-146580-s-2-a	0.00594	0.00378	1
74	8/10/2023 11:08	1CN CCV	0.15558	0.13709	1
75	8/10/2023 11:08	2CN CCB	0.00091	-0.00071	1
76	8/10/2023 11:13	lcs 410-406400/1-a	0.24821	0.21962	1
77	8/10/2023 11:13	lcs 410-406400/1-a	0.24829	0.21968	1
78	8/10/2023 11:13	1CN CCV	0.15389	0.13558	1
79	8/10/2023 11:14	2CN CCB	0.00058	-0.001	1
80	8/10/2023 11:24	1CN CCV	0	0	1
81	8/10/2023 11:24	2CN CCB	0	0	1
82	8/10/2023 11:31	1CN CCV	0.15704	0.13839	1
83	8/10/2023 11:31	2CN CCB	0.00082	-0.00079	1
84	8/10/2023 11:31	410-136709-a-15-c ms	0.25619	0.22672	1
85	8/10/2023 11:35	410-136709-a-16-a	0.00698	0.0047	1
86	8/10/2023 11:35	410-136709-a-17-a	0.00179	0.00007	1
87	8/10/2023 11:36	1CN CCV	0.15416	0.13582	1
88	8/10/2023 11:36	410-136709-a-18-a	0.00366	0.00175	1

89	8/10/2023 11:37	410-136709-a-21-a	0.00508	0.00301	1
90	8/10/2023 11:37	410-136709-a-23-a	0.00494	0.00289	1
91	8/10/2023 11:38	lcs 410-406365/1-a	0.23078	0.20409	1
92	8/10/2023 11:38	410-136715-a-2-a	0.00669	0.00445	1
93	8/10/2023 11:38	2CN CCB	0.00135	-0.00032	1
94	8/10/2023 11:39	410-136715-a-2-c msd	0.24131	0.21347	1
95	8/10/2023 11:39	410-136715-a-4-a	0.00593	0.00377	1
96	8/10/2023 11:40	410-136715-a-5-a	0.00686	0.00459	1
97	8/10/2023 11:40	2CN CCB	0.00101	-0.00062	1
98	8/10/2023 11:41	410-136709-a-19-a	0.0022	0.00044	1
99	8/10/2023 11:41	410-136709-a-20-a	-0.00679	-0.00756	1
100	8/10/2023 11:42	410-136709-a-22-a	0.00358	0.00167	1
101	8/10/2023 11:42	410-136597-a-19-i	0.0021	0.00036	1
102	8/10/2023 11:43	mb 410-406365/2-a	0.00694	0.00466	1
103	8/10/2023 11:43	1CN CCV	0.15265	0.13448	1
104	8/10/2023 11:43	410-136715-a-2-b ms	0.24008	0.21237	1
105	8/10/2023 11:44	410-136715-a-3-a	0.01299	0.01005	1
106	8/10/2023 11:44	410-136715-a-6-a	0.00301	0.00117	1
107	8/10/2023 11:45	410-136715-a-10-a	0.00796	0.00558	1
108	8/10/2023 11:45	410-136715-a-11-a	0.004	0.00205	1
109	8/10/2023 11:46	410-136715-a-12-a	0.00403	0.00208	1
110	8/10/2023 11:46	410-136775-j-1-a	0.00694	0.00466	1
111	8/10/2023 11:46	1CN CCV	0.15554	0.13705	1
112	8/10/2023 11:47	2CN CCB	0.00099	-0.00064	1
113	8/10/2023 11:47	410-136709-b-27-a	0.00479	0.00275	1
114	8/10/2023 11:48	410-136597-a-12-g	0.00301	0.00116	1
115	8/10/2023 11:48	410-136597-a-13-g	0.00304	0.00119	1
116	8/10/2023 11:49	410-136597-a-17-e	0.00274	0.00093	1
117	8/10/2023 11:49	410-136597-a-18-e	0.00421	0.00224	1
118	8/10/2023 11:50	410-136709-a-15-a	0.00756	0.00522	1
119	8/10/2023 11:50	410-136709-a-15-b ms	0.25481	0.22549	1
120	8/10/2023 11:50	1CN CCV	0.15043	0.1325	1
121	8/10/2023 11:51	2CN CCB	0.00102	-0.0006	1
122	8/10/2023 12:03	410-136709-a-19-a	0.00249	0.0007	1
123	8/10/2023 12:04	410-136709-a-20-a	0.00224	0.00048	1
124	8/10/2023 12:04	410-136709-a-22-a	0.00359	0.00168	1
125	8/10/2023 12:04	410-136597-a-19-i	0.00222	0.00046	1
126	8/10/2023 12:04	mb 410-406365/2-a	0.00327	0.00139	1
127	8/10/2023 12:05	410-136715-a-2-b ms	0.25077	0.22189	1
128	8/10/2023 12:05	410-136715-a-3-a	0.01267	0.00977	1
129	8/10/2023 12:06	410-136715-a-6-a	0.00256	0.00076	1
130	8/10/2023 12:06	410-136715-a-10-a	0.00817	0.00576	1
131	8/10/2023 12:07	410-136715-a-11-a	0.00371	0.00179	1
132	8/10/2023 12:07	1CN CCV	0.15092	0.13294	1
133	8/10/2023 12:08	2CN CCB	0.00103	-0.0006	1
134	8/10/2023 12:08	410-136715-a-12-a	0.0043	0.00232	1
135	8/10/2023 12:08	410-136775-j-1-a	0.00677	0.00451	1

136	8/10/2023 12:09	410-136709-b-27-a	0.00469	0.00266	1
137	8/10/2023 12:09	410-136597-a-12-g	0.00285	0.00102	1
138	8/10/2023 12:10	410-136597-a-13-g	0.00307	0.00122	1
139	8/10/2023 12:10	410-136597-a-17-e	0.00279	0.00097	1
140	8/10/2023 12:11	410-136597-a-18-e	0.00427	0.00229	1
141	8/10/2023 12:11	410-136709-a-15-a	0.00756	0.00521	1
142	8/10/2023 12:12	410-136709-a-15-b ms	0.2499	0.22112	1
143	8/10/2023 12:12	1CN CCV	0.15253	0.13437	1
144	8/10/2023 12:13	2CN CCB	0.00137	-0.00029	1
145	8/10/2023 12:29	1CN CCV	0.1689	0.14895	1
146	8/10/2023 12:29	2CN CCB	0.00093	-0.00069	1
147	8/10/2023 12:29	410-136709-a-19-a	0.00214	0.00039	1
148	8/10/2023 12:30	410-136709-a-20-a	0.00242	0.00064	1
149	8/10/2023 12:30	410-136709-a-22-a	0.0036	0.00169	1
150	8/10/2023 12:30	410-136597-a-19-i	0.01266	0.00976	1
151	8/10/2023 12:31	mb 410-406365/2-a	0.00324	0.00137	1
152	8/10/2023 12:31	410-136715-a-2-b ms	0.24064	0.21287	1
153	8/10/2023 12:32	410-136715-a-3-a	0.01193	0.00911	1
154	8/10/2023 12:32	410-136715-a-6-a	0.00247	0.00069	1
155	8/10/2023 12:33	410-136715-a-10-a	0.0081	0.0057	1
156	8/10/2023 12:33	410-136715-a-11-a	0.00362	0.00171	1
157	8/10/2023 12:34	1CN CCV	0.17301	0.15262	1
158	8/10/2023 12:34	2CN CCB	0.0006	-0.00098	1
159	8/10/2023 12:34	410-136715-a-12-a	0.00333	0.00145	1
160	8/10/2023 12:35	410-136775-j-1-a	0.00597	0.00381	1
161	8/10/2023 12:36	410-136709-b-27-a	0.00482	0.00278	1
162	8/10/2023 12:36	410-136597-a-12-g	0.0031	0.00124	1
163	8/10/2023 12:36	410-136597-a-13-g	0.00301	0.00116	1
164	8/10/2023 12:37	410-136597-a-17-e	0.00279	0.00097	1
165	8/10/2023 12:37	410-136597-a-18-e	0.00452	0.00251	1
166	8/10/2023 12:38	410-136709-a-15-a	0.00774	0.00538	1
167	8/10/2023 12:38	410-136709-a-15-b ms	0.24716	0.21867	1
168	8/10/2023 12:38	lcs 410-406706/1-a	0.26421	0.23386	1
169	8/10/2023 12:39	1CN CCV	0.16578	0.14617	1
170	8/10/2023 12:40	2CN CCB	0.00395	0.00201	1
171	8/10/2023 12:40	lcsd 410-406706/2-a	0.11089	0.09727	1
172	8/10/2023 12:40	mb 410-406706/3-a	0.00554	0.00342	1
173	8/10/2023 12:41	410-136864-j-4-b	0.00629	0.00409	1
174	8/10/2023 12:41	410-136864-b-4-a du	0.00242	0.00064	1
175	8/10/2023 12:42	410-136864-j-4-c ms	0.2202	0.19466	1
176	8/10/2023 12:42	410-137448-f-5-a	0.00279	0.00097	1
177	8/10/2023 12:43	410-136443-f-1-a	0.07206	0.06268	1
178	8/10/2023 12:43	410-136524-f-1-a	0.00135	-0.00031	1
179	8/10/2023 12:44	410-136864-j-5-a	0.00201	0.00027	1
180	8/10/2023 12:44	410-137858-a-1-a	0.0022	0.00044	1
181	8/10/2023 12:44	1CN CCV	0.16798	0.14814	1
182	8/10/2023 12:45	2CN CCB	0.00081	-0.0008	1

183	8/10/2023 12:45	410-137208-e-1-a	0.00003	-0.00149	1
184	8/10/2023 12:46	410-137208-a-1-a du	-0.00184	-0.00315	1
185	8/10/2023 12:46	410-137208-a-1-b ms	0.00096	-0.00066	1
186	8/10/2023 12:47	410-137208-a-1-c msd	0.00021	-0.00133	1
187	8/10/2023 12:47	410-136864-J-4-B PDS	0.22795	0.20156	1
188	8/10/2023 12:48	410-137208-E-1-A PDS	0.00178	0.00007	1
189	8/10/2023 12:48	1CN CCV	0.17281	0.15244	1
190	8/10/2023 12:48	2CN CCB	0.00866	0.0062	1
191	8/10/2023 13:00	lcs 410-406706/1-a	0.25622	0.22675	1
192	8/10/2023 13:01	lcs 410-406706/1-a	0.26776	0.23703	1
193	8/10/2023 13:01	lcsd 410-406706/2-a	0.10938	0.09593	1
194	8/10/2023 13:01	lcsd 410-406706/2-a	0.09916	0.08682	1
195	8/10/2023 13:02	1CN CCV	0.17266	0.15231	1
196	8/10/2023 13:02	2CN CCB	0.00097	-0.00065	1
197	8/10/2023 13:18	1CN CCV	0.1752	0.15456	1
198	8/10/2023 13:18	2CN CCB	0.00097	-0.00066	1
199	8/10/2023 13:19	lcs 410-406706/1-a	0.26733	0.23665	1
200	8/10/2023 13:19	lcs 410-406706/1-a	0.25461	0.22532	1
201	8/10/2023 13:19	lcsd 410-406706/2-a	0.1128	0.09898	1
202	8/10/2023 13:19	lcsd 410-406706/2-a	0.10015	0.0877	1
203	8/10/2023 13:20	410-137208-e-1-a	0.00041	-0.00115	1
204	8/10/2023 13:20	410-137208-a-1-a du	0.00034	-0.00121	1
205	8/10/2023 13:21	410-137208-a-1-b ms	0.00117	-0.00047	1
206	8/10/2023 13:22	410-137208-a-1-c msd	0.00025	-0.0013	1
207	8/10/2023 13:22	410-136864-J-4-B PDS	0.23427	0.20719	1
208	8/10/2023 13:22	410-137208-E-1-A PDS	0.00184	0.00012	1
209	8/10/2023 13:23	1CN CCV	0.17112	0.15094	1
210	8/10/2023 13:23	2CN CCB	0.00114	-0.0005	1

Shipping and Receiving Documents

CHAIN OF CUSTODY RECORD

410-136864-01 Chain of Custody

Environmental (ELLE), 2425 New Holland Pike, Lancaster, PA, 17605-2425/ Barb Weyandt, Manager/ (717) 656-2300 x1576

Consultant:	TRC Engineers Inc (formerly Draper Aden Assoc)	Sample Site:	RFAAP, Radford, Virginia
Attn:	Janet C. Frazier	Location:	HWMU16
Address:	2200 South Main Street Suite 1 Blacksburg, Virginia 24060	Event:	3Q 2023 Annual GW Monitoring Event
Phone:	(540) 552-0444	DAA JN:	547076
Fax:	(540) 552-0291	Lab JN:	

Project Specific (PS) QC: YES as indicated — YES
Sample Collection for Project Complete? — YES
WB-12.75Y-02X-70-7513-5028
" - " - " - 11 7578-4238
Carrier:
Tracking Number:

Box 1: Matrix
SW Surface Water; GW Groundwater; L Leachate; S Soil; T Trip Blank; E Equipment Blank; P Product; O Other

Box 2: Preservative
A HCL; B HNO_3; C H_2SO_4; D $Na_2S_2O_3$; E NaOH; F ZnAc; G Other (Specify); H None

Box 3: Filtered/Unfiltered
F Filtered; U Unfiltered

Box 4: Sample Type
G Grab; C Composite

Box 5: Sample Container Type
P Plastic; AG Amber Glass; V VOA; CG Clear Glass

Invoice
Copy to Consultant: YES
Bill: CLIENT OTHER
Preserved and shipped on Ice: YES

Box 4 - Sample Type	G	G	G	G	G	G	G
Box 3 - Filtered/Unfiltered	U	U	U	U	U	U	U
Required pH of Sample	<2	<2		<2	<2	<2	>12
Box 2 - Preservative	A	A	H	A	B	B	E
Box 5 - Sample Container Type	3-40mL VOA	3-40mL VOA	2-250mL AG	2-40mL VOA	1-500 mL P		1-500 mL P

Sample ID	Date: 2023	Time	Box 1: Matrix	Number of Bottles	8260D/5030C 25 ml purge volume	8250C/5030C 25 ml purge Dimethylether only CAS NO 115-10-6 permit	8260D/5030C 5 ml purge volume for 2-propanol ONLY	8270d/3510C (Semivolatiles)	Additional Aliquot 8260D/5030C 25 ml purge volume	ICP/MS 6020B/3005A (Metals-Total)	7470A (Mercury-Total)	9012B (Cyanide)	
16C1	7/27	1245	GW	12	X	X	X	X	X	X	X	X	Additional VOA Aliquot if dilution is required.
16MW8	7/21	1005	GW	10	X	X	X	X		X	X	X	
16MW9	7/27	1125	GW	12	X	X	X	X	X	X	X	X	Additional VOA aliquot if dilution is required.
16WC1A	7/27	0955	GW	30	X	X	X	X		X	X	X	USE FOR QC
16WDUP	7/27	1020	GW	10	X	X	X	X		X	X	X	
16WC1B	7/26	1205	GW	10	X	X	X	X		X	X	X	
16-2	7/26	0930	GW	6	X	X		X		X	X		
16-3	7/26	~~0930~~ 1115	GW	6	X	X		X		X	X		sample time is 1115
16-5	7/26	0745	GW	6	X	X		X		X	X		
16WC2B	7/26	0840	GW	6	X	X		X		X	X		
16SPRING	7/26	0800	GW	6	X	X		X		X	X		
Trip Blank 1	7/26	—	T	2	X	X	X						one trip blank required per day per permit. Delete if not required.
Trip Blank 2	7/26	—	T	2	X	X	X						
Trip Blank 3	—	—	T	2	X	X	X						

GENERAL NOTES:
1. Report results to detection limit, with J flags, for italicized wells.
2. Report results at or greater than QL for non-italicized wells.
3. VELAP accreditation required.
4. FULL/Comprehensive Deliverable with EDD and ERIS EDD.
5. For 2- propanol report to QL 100 ug/l and DL of 50 ug/l.
6. See Atached target analytes. Report to these Permit Specified QLs and DLs.

Per ELLE - A single 25 ml purge volume analysis will be performed where requested

However, lab to report 8260D for all 25 ml purge requested analytes except for Dimethylether to be reported as 8260C (VELAP), 2-propanol to be analyzed via 5 ml purge as noted.

* Barb—report preliminary results. JVE 7/25/23

Clients Special Instructions:

Received by lab in Good Condition ____ Yes ____ No Custody Seal Intact ____ Yes ____ No Temperature upon arrival ____ Received on Ice ____ Yes ____ No
Describe problems, if any:

0.9/0.9 1.8/1.8

Sampler Name (Print): Ken Coddington	Date: 7/26/23	#1 Relinquished by (Signature):	Date: 7/27/23	#2 Relinquished by (Signature):	Date:	Sample Storage
Sampler Signature:	Time: 0700	Company Name: DAA/TRC	Time: 1700	Company Name:	Time:	Time Requested:
Sampler Name (Print): Alexa Prater	Date: 7/26/23	#1 Received by (Signature):	Date:	#2 Received by (Signature):	Date: 7/28/23	30 DYS ORG/8 MTHS INORG
Sampler Signature:	Time: 0700	Company Name:	Time:	Company Name: ELLET	Time: 0925	AEH

11/14/2023
11:12 AM

410-136864-02 Chain of Custody

HWMU16
Radford Army Ammunition Plant
Annual Appendix IX Groundwater Monitoring Event

JCF 7/25/23

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ANALYTICAL METHOD: 8260D/5030C
TYPE METHOD: GCMS
CLASS: VOLATILE

THIS APPLIES TO WELLS 16-2, 16-3, 16-5, 16WC2B, 16SPRING ✓

1.	Carbon tetrachloride	56-23-5	1
2.	chloromethane ; (Methyl chloride)	74-87-3	1
3.	2-butanone (methyl ethyl ketone - MEK)	78-93-3	10
4.	1,1-dichloroethane	75-34-3	1
5.	Dichlorodifluoromethane	75-71-8	1
6.	Ethylbenzene	100-41-4	1
7.	Tetrachloroethene	127-18-4	1
8.	Toluene (methyl benzene)	108-88-3	1
9.	1,1,1-trichloroethane (methyl chloroform)	71-55-6	1
10.	Trichloroethene	79-01-6	1
11.	Trichlorofluoromethane (CFC-11)	75-69-4	1
12.	Xylenes (total)	1330-20-7	3
13	Chloroethane	75-00-3	1
14	Diethyl ether	60-29-7	12.5-report to 10 ug/l due to rounding issues
15	Dimethyl ether	115-10-6	12.5- report to 10 due to rounding issues
16	Methylene chloride	75-09-2	1
17	1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1
18	Benzene	71-43-2	1
19	1,1-Dichloroethene	75-35-4	1
20	Tetrahydrofuran		25
21	Vinyl chloride		1

Notes
13-16 added 10/03. JCF
Revised 10/31/03 JCF
17 added 0704. Revised 7/28/2004
10/2008 JCF
18 added 04 2011. JCF
19 added 04 2014. KPO, location 16-1 removed 2014
20 added 04 2016 JCF
21 added 8-2020 JCF

Current as of 2021 Permit Mod. JCF 9-13-2021

OK JCF 7/25/23

Report to at or above the QL for these wells and analytes. JCF 9-13-2021 ✓

25 ml purge volume

t:\environmental\bbg\databases\raap\sample event set up\semi-annual events\hwmu-16\hwmu16-target analtye list-annual rev 9-2021.doc

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ANALYTICAL METHOD: 8270D/3510C
TYPE METHOD: GCMS
CLASS: SEMIVOLATILE

THIS APPLIES TO WELLS 16-2, 16-3, 16-5, 16WC2B, 16SPRING ✓

No.	PARAMETER	CAS RN	Required LOQ (µg/l)
1.	2,4-dinitrotoluene	121-14-2	10
2.	2,6-dinitrotoluene	606-20-2	10
3.	Diethylphthate		5

Report to at or above the QL.
10/13- diethylphthate added 10/13.

Current as of 2021 Permit Mod. JCF 9-13-2021

Report to at or above the QL for these wells and analytes. JCF 9-13-2021 ✓

JCF 7/25/23

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ANALYTICAL METHOD: SEE BELOW
TYPE METHOD: SEE BELOW
CLASS: TOTAL

Method SW 846-6020B/3005A (ICP/MS)

THIS APPLIES TO WELLS 16-2, 16-3,16-5, 16WC2B, 16SPRING

No.	PARAMETER	CAS RN	Required QL/ LOQ (µg/l)
1.	Arsenic	7440-38-2	10
2.	Barium	7440-39-3	10
3.	Beryllium	7440-41-7	1
4.	Cadmium	7440-43-9	1
5.	Chromium	7440-47-3	5
6.	Cobalt	7440-48-4	5
7.	Copper	7440-50-8	5
8.	Lead	7440-92-1	3
9.	Nickel	7440-02-0	10
10.	Vanadium	7440-62-2	10
11.	Zinc	7440-66-6	30

Report to at or above the QL.

Updated 4/8/2013 jcf
Zinc QL updated 10 2016 – JCF
Current as of 2021 Permit Mod. JCF 9-13-2021

OK JCF 7/23/25

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ANALYTICAL METHOD: 7470A

THIS APPLIES TO ALL WELLS AND QC

	Method SW 7470A/CVAA	CAS#	Required LOQ
1	Mercury	7439-97-6	2 / 0.2 ug/l

Report to permit DL (0.2 ug/l) for 16C1, 16MW8, 16MW9, 16WC1A, 16WDUP, 16WC1B, QC. (Appendix IX wells)-jcf 9-13-2021 JCF 7/25/23

Report to at or above QL for remaining wells. jcf 9-13-2021 JCF 7/25/23

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ANALYTICAL METHOD: 9012B
TYPE METHOD: CLO
CLASS: CYANIDE

THIS APPLIES TO 16C1, 16MW8, 16MW9,16WC1A, 16WDUP, 16WC1B AND QC

No.	PARAMETER	CAS RN	Required LOQ/DL (µg/l)
1	Cyanide	57-12-5	20 / 5

These are Appendix IX wells. Report estimated results.

Current as of 2021 Permit Mod. JCF 9-13-2021

OK JCF 7/25/23

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ANALYTICAL METHOD: 8260D/ 5030C
GCMS/ Volatile

THIS APPLIES TO WELLS 16C1, 16MW8, 16MW9,16WC1A, 16WDUP, 16WC1B & QC

SEE attached list. Report only analytes.

For these wells and analytes, report to permit MDL with J flag.

* Note- 8260C/5030C 25 ml purge Dimethylether only CAS N0 115-10-6 permit limits are QL: 12.5 ug/l and MDL: 1.11 ug/l- However, please report to 10 ug/l due to rounding issues. (instead of 12.5 ug/l) JVR 7-19-23

\# For 2-propanol report to QL 100 ug/l and DL at 50 ug/l. (5ml purge) JVR 7/25/23

JCF 7-19-23

* nok addition of Chloro methane + chloroethane (page 4/8 / page 13/17) JVR 7/25/23

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ANALYTICAL METHOD: 8270E/ GCMS/ Semivolatile
THIS APPLIES TO WELLS 16C1, 16MW8, 16MW9,16WC1A, 16WDUP, 16WC1B & QC

SEE attached list. Report only analytes.

Report diethylphthalate to 5 ug/l to be consistent with routine semiannual limit. JCF 7-19-23

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INORGANICS

THIS APPLIES TO WELLS 16C1, 16MW8, 16MW9,16WC1A, 16WDUP, 16WC1B & QC

Report to QL, DL listed below and provide estimated results ("J"). ✓

6020B JVR 11/29/23

HWMU 16

Analyte	Method Ref	LOQ/QL	LOD/ MDL	CAS#	Units
ANTIMONY	6020A	2	0.6	7440-36-0	UG/L
ARSENIC	6020A	10	2	7440-38-2	UG/L
BARIUM	6020A	10	1.3	7440-39-3	UG/L
BERYLLIUM	6020A	1	0.3	7440-41-7	UG/L
CADMIUM	6020A	1	0.2	7440-43-9	UG/L
CHROMIUM	6020A	5	1	7440-47-3	UG/L
COBALT	6020A	5	1	7440-48-4	UG/L
COPPER	6020A	5	1.7	7440-50-8	UG/L
LEAD	6020A	3	1	7439-92-1	UG/L
NICKEL	6020A	10	2	7440-02-0	UG/L
SELENIUM	6020A	10	3	7782-49-2	UG/L
SILVER	6020A	2	0.3	7440-22-4	UG/L
THALLIUM	6020A	1	0.2	7440-28-0	UG/L
VANADIUM	6020A	10	2.5	7440-62-2	UG/L
ZINC	6020A	30	7.3	7440-66-6	UG/L

15 analytes

These are Appendix IX wells. Report to permit MDL with estimated results. ✓

Rev 2021 Class 1 Permit Mod -JCF

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7-25-2023

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Barb

- See notes on COC
- report the analytes on attached list in Yellow highlight. note isofrole + Pronamide no longer w/ ELE as lab could not meet Permit MDL. Report to Permit MDL.
- report preliminary data so we can confirm project QL/dL is met.

HAZARDOUS WASTE MANAGEMENT
POST-CLOSURE CARE PERMIT

ATTACHMENT 1

APPENDIX I

ANNUAL GROUNDWATER SAMPLING CONSTITUENT LIST

(APPENDIX IX 40 CFR PART 264)

APPENDIX IX METHOD/DETECTION LIMITS

Analyte	CAS Number	METHOD	PQL (ug/l)	MDL (ug/1)
1,1,1,2-Tetrachloroethane	630-20-6	8260	1	0.3
1,1,1 -Trichloroethane	71-55-6	8260	1	0.3
1,1,2,2-Tetrachloroethane	79-34-5	8260	1	0.3
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260	1	0.4
1,1,2-Trichloroethane	79-00-5	8260	1	0.3
1,1 -Dichloroethane	75-34-3	8260	1	0.3
1,1 -Dichloroethene	75-35-4	8260	1	0.3
1,2,3-Trichloropropane	96-18-4	8260	1	0.3
1,2,4,5-Tetrachlorobenzene	95-94-3	8270	10	2
1,2,4-Trichlorobenzene	120-82-1	8260	1	0.6
1,2,4-Trichlorobenzene (dup-8260)	120-82-1	8270	10	0.43
1,2-dibromo-3-chloropropane	96-12-8	8260	1	0.4
1,2-dibromoethane	106-93-4	8260	1	0.3
1,2-Dichlorobenzene	95-50-1	8260	1	0.4
1,2-Dichlorobenzene (dup 8260)	95-50-1	8270	10	0.48
1,2-Dichloroethane	107-06-2	8260	1	0.3
1,2-Dichloropropane	78-87-5	8260	1	0.4
1,3-Dichlorobenzene	541-73-1	8260	1	0.4
1,3-Dichlorobenzene (dup 8260)	541-73-1	8270	10	0.52
1,3-Dichloropropane	142-28-9	8260	1	0.4
1,3-Dinitrobenzene	99-65-0	8270	10	2.3
1,4-Dichlorobenzene	106-46-7	8260	1	0.4
1,4-Dichlorobenzene (dup 8260)	106-46-7	8270	10	0.37
1,4-Dioxane	123-91-1	8260	200	45.48
1,4-Napthoquinone	130-15-4	8270	10	3.0
1 -Naphthylamine	134-32-7	8270	10	3.0
2,3,4,6-Tetrachlorophenol	58-90-2	8270	10	1.8
2,4,5-Trichlorophenol	95-95-4	8270	10	2.0
2,4,6-Trichlorophenol	88-06-2	8270	10	1.8
2,4-Dichlorophenol	120-83-2	8270	10	1.59
2,4-Dimethylphenol	105-67-9	8270	10	3.0

Analyte	CAS Number	METHOD	PQL (ug/l)	MDL (ug/l)
2,4-Dinitrophenol	51-28-5	8270	10	6.2
2,4-Dinitrotoluene	121-14-2	8270	10	2.1
2,6-Dichlorophenol	87-65-0	8270	10	1.4
2,6-Dinitrotoluene	606-20-2	8270	10	2.1
2-Acetylaminofluorene	53-96-3	8270	10	3.0
2-Butanone	78-93-3	8260	10	1.7
2-Chloronaphthalene	91-58-7	8270	10	0.5
2-Chlorophenol	95-57-8	8270	10	1.0
2-Hexanone	591-78-6	8260	10	2.0
2-Methylnaphthalene	91-57-6	8270	10	0.29
2-Naphthylamine	91-59-8	8270	10	7.0
2-Nitroaniline	88-74-4	8270	10	1.0
2-Nitrophenol	88-75-5	8270	10	1.27
2-Picoline	109-06-8	8270	10	1.0
2-Propanol - 5 ml purge	67-63-0	8260	100	50
3,3 `-Dichlorobenzidine	91-94-1	8270	10	3.0
3,3 `-Dimethylbenzidine	119-93-7	8270	10	3.3
3-Methylcholanthrene	56-49-5	8270	10	1.0
3-Nitroaniline	99-09-2	8270	10	2.0
4,6-Dinitro-2-methylphenol	534-52-1	8270	10	3.0
4-Aminobiphenyl	92-67-1	8270	10	3.0
4-Bromophenyl phenyl ether	101-55-3	8270	10	0.56
4-Chloro-3-methylphenol	59-50-7	8270	10	1.0
4-Chloroaniline	106-47-8	8270	10	3.3
4-Chlorophenyl phenyl ether	7005-72-3	8270	10	0.6
4-Methyl-2-pentanone	108-10-1	8260	10	2.0
4-Nitroaniline	106-44-5	8270	10	1.5
4-Nitrophenol	100-01-6	8270	10	3.0
4-Nitroquinoline-1 -oxide	100-02-7	8270	50	5
5-Nitro-o-toluidine	56-57-5	8270	10	2.0
7,12-Dimethylbenz(a)anthracene	99-55-8	8270	10	1.8
a,a-Dimethylphenethylamine	57-97-6	8270	50	5
Acenaphthene	122-09-8	8270	10	0.35

Analyte	CAS Number	METHOD	PQL(ug/l)	MDL(ug/l)
Acenaphthylene	208-96-8	8270	10	0.48
Acetone	67-64-1	8260	10	2.0
Acetonitrile	75-05-8	8260	100	31.67
Acetophenone	98-86-2	8270	10	1.0
Acrolein	107-02-8	8260	10	3.4
Acrylonitrile	107-13-1	8260	10	1.1
Allyl chloride/ (3-Chloropropene)	107-05-1	8260	10	1.0
Aniline	62-53-3	8270	10	1.1
Anthracene	120-12-7	8270	10	0.52
Antimony	7440-36-0	6020 /6010	2	0.6
Aramite	140-57-8	8270	10	3.7
Arsenic	7440-38-2	6020/ 6010	10	2
Barium	7440-39-3	6020/ 6010	10	1.3
Benzene	71-43-2	8260	1	0.3
Benzo(a)anthracene	56-55-3	8270	10	0.45
Benzo(a)pyrene	50-32-8	8270	10	1.5
Benzo(b)fluoranthene	205-99-2	8270	10	1.2
Benzo(g,h,i)perylene	191-24-2	8270	10	0.42
Benzo(k)fluoranthene	207-08-9	8270	10	1.6
Benzyl alcohol	100-51-6	8270	10	3.0
Beryllium	7440-41-7	6020/ 6010	1	0.3
Bis(2-chlorethoxy)methane	111-91-1	8270	1	0.5
Bis(2-chloroethyl)ether	111-44-4	8270	1	0.5
Bis(2-chloroisopropyl)ether	108-60-1	8270	10	0.6
Bis(2-ethylhexyl)phthalate	117-81-7	8270	10	2.0
Bromodichloromethane	75-27-4	8260	1	0.3
Bromoform	75-25-2	8260	1	0.4
Bromomethane	74-83-9	8260	1	0.542
Butyl benzyl phthalate	85-68-7	8270	10	0.7
Cadmium	7440-43-9	6020/6010	1	0.2
Carbon disulfide	75-15-0	8260	10	0.4
Chloroethane (required as compliance well not App IX		8260	1	
Chloromethane (required as compliance well not App IX		8260	1	
Carbon tetrachloride	56-23-5	8260	1	0.3
Chlorobenzilate	510-15-6	8270	10	3.0

Analyte	CAS Number	METHOD	PQL(ug/l)	MDL(ug/l)
Chloroform	67-66-3	8260	1	0.3
Chloroprene/ (2-Chloro-1,3-butadiene	126-99-8	8260	10	0.46
Chromium	7440-47-3	6020/6010	5	1.0
Chrysene	218-01-9	8270	10	0.31
Cobalt	7440-48-4	6020/6010	5	1.0
Copper	7440-50-8	6020/6010	5	1.7
Cyanide	57-12-5	9010	20	5
Diallate	2303-16-4	8270	10	3.0
Dibenzo(a,h)anthracene	53-70-3	8270	10	0.38
Dibenzofuran	132-64-9	8270	10	0.6
Dibromochloromethane	124-48-1	8260	1	0.4
Dibromomethane/ (methylene bromide)	74-95-3	8260	1	0.3
Dichlorodifluoromethane	75-71-8	8260	1	0.4
Diethyl ether/ (ethyl ether)	60-29-7	8260	12.5	1.11
Diethyl phthalate	84-66-2	8270	10	2.0
Dimethoate	60-51-5	8270	10	3.0
Dimethyl ether (8260C)	115-10-6	8260	12.5	1.11
Dimethyl phthalate – GEL 1/0.3	131-11-3	8270	10	0.5
Di-n-butyl phthalate	84-74-2	8270	10	1.8
Di-n-octyl phthalate-GEL 1/0.3	117-84-0	8270	10	0.8
Diphenylamine (as n-nitrosodiphenylamine	86-30-6	8270	10	0.58
Disulfoton	298-04-4	8270	10	3.0
Ethyl methacrylate	97-63-2	8260	10	0.81
Ethyl methacrylate (DUP	97-63-2	8270	10	0.2
Ethyl methanesulfonate	62-50-0	8270	10	1.1
Ethylbenzene	100-41-4	8260	1	0.3
Famphur	52-85-7	8270	10	5.0
Fluoranthene	206-44-0	8270	10	0.42
Fluorene	86-73-7	8270	10	0.38

Analyte	CAS Number	METHOD	PQL (ug/l)	MDL (ug/l)
Heaxachloroethane	67-72-1	8260/8270	10	0.4
Hexachlorobenzene	118-74-1	8270	10	0.87
Hexachlorobutadiene	87-68-3	8260	1	0.4
Hexachlorocyclopentadiene	77-47-4	8270	10	3.0
Hexachlorophene – GEL 500/167	70-30-4	8270	500	185
Hexachloropropene	1888-71-7	8270	10	2
Indeno(1 ,2,3-cd)pyrene	193-39-5	8270	10	0.15
Iodomethane/ (methyl iodide)	74-88-4	8260	10	0.58
Isobutyl alcohol	78-83-1	8260	200	11.6
Isodrin	465-73-6	8270	10	1.1
Isophorone	78-59-1	8270	10	0.5
Isosafrole (Pace WC -)	120-58-1	8270	10	1.6
Kepone	143-50-0	8270	50	25
Lead	7439-92-1	6020/6010	3	1.0
m,p-Cresol	106-44-5	8270	20	2.47
m,p-Xylene	179601-23-1	8260	2	0.4
Mercury	7439-97-6	7470	2	0.2
Methacrylonitrile	126-98-7	8260	100	9.75
Methapyrilene	91-80-5	8270	10	3.0
Methyl methacrylate	80-62-6	8260	10	3.58
Methyl methanesulfonate	66-27-3	8270	10	1.0
Methyl parathion	298-00-0	8270	10	3.2
Methylene chloride	75-09-2	8260	1	0.7
Naphthalene	91-20-3	8260	1	0.4
Nickel	7440-02-0	6020/6010	10	2.0
Nitrobenzene	98-95-3	8270	10	0.6
N-Nitrosodiethylamine	55-18-5	8270	10	3.0
N-Nitrosodimethylamine	62-75-9	8270	10	2.0
N-Nitroso-di-n-butylamine	924-16-3	8270	10	3.0
N-Nitrosodi-n-propylamine	621-64-7	8270	10	0.5
N-Nitrosodiphenylamine (as diphenylamine)	86-30-6	8270	10	0.58
n-Nitrosomethylethylamine	10595-95-6	8270	10	1.0

Analyte	CAS Number	METHOD	PQL(ug /I)	MDL (ug/1)
N-Nitrosomorpholine	59-89-2	8270	10	3.0
N-Nitrosopiperidine	100-75-4	8270	10	1.1
N-Nitrosopyrrolidine	930-55-2	8270	10	0.5
o,o,o-Triethylphosphorothioate	126-68-1	8270	10	2.6
o,o-Diethyl-o-2-pyrazinyl phosphorothioate/ (Thionazin)	297-97-2	8270	10	2.4
o-Cresol/ (2-methylphenol)	95-48-7	8270	10	0.96
o-Toluidine	95-53-4	8270	10	4.0
o-Xylene	95-47-6	8260	1	0.4
Parathion/ (Ethyl parathion)	56-38-2	8270	10	3.0
p-Dimethylaminoazobenzene	60-11-7	8270	10	3.0
Pentachlorobenzene	608-93-5	8270	10	1.6
Pentachloroethane	76-01-7	8260	10	1.7
Pentachloroethane (DUP)	76-01-7	8270	10	2.7
Pentachloronitrobenzene (PACE W.Columbia – 10/1)	82-68-8	8270	10	1.0
Pentachlorophenol	87-86-5	8270	10	3.0
Phenacetin	62-44-2	8270	10	1.4
Phenanthrene	85-01-8	8270	10	0.52
Phenol	108-95-2	8270	10	0.77
Phorate	298-02-2	8270	10	2.5
p-Phenylenediamine	106-50-3	8270	150	26.4
Pronamide (pace WC)	23950-58-5	8270	10	1.5
Propionitrile	107-12-0	8260	100	10.22
Pyrene	129-00-0	8270	10	0.41
Pyridine	110-86-1	8270	10	2.0
Safrole	94-59-7	8270	10	2.2
Selenium	7782-49-2	6020/6010	10	3.0
Silver	7440-22-4	6020/6010	2	0.3
Styrene	100-42-5	8260	1	0.3
Sulfotep	3689-24-5	8270	10	2.4
sym-Trinitrobenzene (1,3.5-trinitrobenzene)	99-35-4	8270	10	3.0
Tetrachloroethene	127-18-4	8260	1	0.3
Tetrahydrofuran	109-99-9	8260	25	2
Thallium	7440-28-0	6020/6010	1	0.2
Toluene	108-88-3	8260	1	0.3

Analyte	CAS Number	METHOD	PQL (ug/l)	MDL (ug/l)
trans-1,2-Dichloroethene	156-60-5	8260	1	0.3
trans-1,3-Dichloropropene	10061-02-6	8260	1	0.4
trans-1,4-Dichloro-2-butene	110-57-6	8260	10	1.5
Trichloroethene	79-01-6	8260	1	0.3
Trichlorofluoromethane	75-69-4	8260	1	0.4
Vanadium	7440-62-2	6020/6010	10	2.5
Vinyl acetate	108-05-4	8260	10	3.29
Vinyl chloride	75-01-4	8260	1	0.2
Xylenes, Total	1330-20-7	8260	3	0.4
Zinc	7440-66-6	6020/6010	30	7.3

Notes:
ug/l = micrograms per liter
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
CAS = Chemical Abstracts Service Registry Number

Purple – GEL
Yellow – ELLE
Blue – Eurofins Test America- Canton
Pace – West Columbia – moved Isofrole and pronamide from ELLE to Paces WC

VOCs – ELLE and ETA
SVOCs – ELLE, TA, GEL, PACE WC….Final 7-25-23 JCF

Login Sample Receipt Checklist

Client: TRC, Engineers, Inc. Job Number: 410-136864-1

Login Number: 136864 **List Source: Eurofins Lancaster Laboratories Environment Testing, LLC**
List Number: 1
Creator: Hess, Anna

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

Sample Preservation Checks (performed by the laboratory)

Question	Answer	Comment
Did the sample containers checked meet expected preservation conditions?	False	Refer to Job Narrative for details.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Janet Frazier
TRC, Engineers, Inc.
2200 South Main Street
Suite A
Blacksburg VA 24060

Generated 10/18/2023 4:15 AM

JOB DESCRIPTION

RFAAP, Radford, VA HWMU16

JOB NUMBER

410-146032-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Barb Weyandt

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10/18/2023 4:15 AM

Authorized for release by
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Designee for
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Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Qualifiers

General Chemistry

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
cn	Refer to Case Narrative for further detail

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-146032-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/6/2023 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C

General Chemistry
Method 9012B: The laboratory control sample duplicate (LCSD) for preparation batch 410-430204 and analytical batch 410-430598 recovered outside control limits for the following analytes: cyanides. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: TRC, Engineers, Inc. Job ID: 410-146032-1
Project/Site: RFAAP, Radford, VA HWMU16

Client Sample ID: 16MW9 Lab Sample ID: 410-146032-1

No Detections.

Client Sample ID: 16DUP1 Lab Sample ID: 410-146032-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: TRC, Engineers, Inc.
Job ID: 410-146032-1
Project/Site: RFAAP, Radford, VA HWMU16

Client Sample ID: 16MW9
Lab Sample ID: 410-146032-1
Date Collected: 10/05/23 14:40
Matrix: Water
Date Received: 10/06/23 09:35

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND		20	5.0	ug/L		10/16/23 15:00	10/17/23 11:48	1

Client Sample ID: 16DUP1
Lab Sample ID: 410-146032-2
Date Collected: 10/05/23 14:45
Matrix: Water
Date Received: 10/06/23 09:35

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND	*+ cn	20	5.0	ug/L		10/11/23 17:15	10/12/23 12:42	1

Default Detection Limits

Client: TRC, Engineers, Inc.
Job ID: 410-146032-1
Project/Site: RFAAP, Radford, VA HWMU16

General Chemistry

Prep: 9012B

Analyte	RL	MDL	Units
Cyanide, Total	20	5.0	ug/L

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 410-430204/2-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 430598
Prep Batch: 430204

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		20	5.0	ug/L		10/11/23 17:15	10/12/23 12:36	1

Lab Sample ID: LCS 410-430204/1-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 430598
Prep Batch: 430204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	214		ug/L		107	90 - 110

Lab Sample ID: MB 410-431835/2-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 432209
Prep Batch: 431835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		20	5.0	ug/L		10/16/23 15:00	10/17/23 11:45	1

Lab Sample ID: LCS 410-431835/1-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 432209
Prep Batch: 431835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	199		ug/L		100	90 - 110

General Chemistry

Prep Batch: 430204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-146032-2	16DUP1	Total/NA	Water	9012B	
MB 410-430204/2-A	Method Blank	Total/NA	Water	9012B	
LCS 410-430204/1-A	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 430598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-146032-2	16DUP1	Total/NA	Water	9012B	430204
MB 410-430204/2-A	Method Blank	Total/NA	Water	9012B	430204
LCS 410-430204/1-A	Lab Control Sample	Total/NA	Water	9012B	430204

Prep Batch: 431835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-146032-1	16MW9	Total/NA	Water	9012B	
MB 410-431835/2-A	Method Blank	Total/NA	Water	9012B	
LCS 410-431835/1-A	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 432209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-146032-1	16MW9	Total/NA	Water	9012B	431835
MB 410-431835/2-A	Method Blank	Total/NA	Water	9012B	431835
LCS 410-431835/1-A	Lab Control Sample	Total/NA	Water	9012B	431835

Lab Chronicle

Client: TRC, Engineers, Inc.
Job ID: 410-146032-1
Project/Site: RFAAP, Radford, VA HWMU16

Client Sample ID: 16MW9
Lab Sample ID: 410-146032-1

Date Collected: 10/05/23 14:40
Matrix: Water
Date Received: 10/06/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	9012B			431835	NLE3	ELLE	10/16/23 15:00 - 10/16/23 16:45 [1]
Total/NA	Analysis	9012B		1	432209	JCG7	ELLE	10/17/23 11:48

Client Sample ID: 16DUP1
Lab Sample ID: 410-146032-2

Date Collected: 10/05/23 14:45
Matrix: Water
Date Received: 10/06/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	9012B			430204	NLE3	ELLE	10/11/23 17:15 - 10/11/23 19:00 [1]
Total/NA	Analysis	9012B		1	430598	JCG7	ELLE	10/12/23 12:42

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: TRC, Engineers, Inc. Job ID: 410-146032-1
Project/Site: RFAAP, Radford, VA HWMU16

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460182	06-14-25

Method Summary

Client: TRC, Engineers, Inc. Job ID: 410-146032-1
Project/Site: RFAAP, Radford, VA HWMU16

Method	Method Description	Protocol	Laboratory
9012B	Cyanide, Total andor Amenable	SW846	ELLE
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: TRC, Engineers, Inc.
Job ID: 410-146032-1
Project/Site: RFAAP, Radford, VA HWMU16

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-146032-1	16MW9	Water	10/05/23 14:40	10/06/23 09:35
410-146032-2	16DUP1	Water	10/05/23 14:45	10/06/23 09:35

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WC-PR20mg/lQC_00983	10/12/23	10/11/23	Sodium Hyroxide, Lot in house	25 mL	WC_FL_CNVeriS_00024	0.5 mL	Cyanide, Amenable	20 mg/L
							Cyanide, Available	20 mg/L
							Cyanide, Free	20 mg/L
							Cyanide, Non-amenable	20 mg/L
							Cyanide, Reactive	20 mg/L
							Cyanide, Total	20 mg/L
							Cyanide, Weak Acid Dissociable	20 mg/L
							Potassium hydroxide	0.04 mg/L
.WC_FL_CNVeriS_00024	11/30/23		RICCA, Lot 4305N37		(Purchased Reagent)		Cyanide, Amenable	1000 mg/L
							Cyanide, Available	1000 mg/L
							Cyanide, Free	1000 mg/L
							Cyanide, Non-amenable	1000 mg/L
							Cyanide, Reactive	1000 mg/L
							Cyanide, Total	1000 mg/L
							Cyanide, Weak Acid Dissociable	1000 mg/L
							Potassium hydroxide	2 mg/L
WC-PR20mg/lQC_00986	10/17/23	10/16/23	Sodium Hyroxide, Lot in house	25 mL	WC_FL_CNVeriS_00024	0.5 mL	Cyanide, Amenable	20 mg/L
							Cyanide, Available	20 mg/L
							Cyanide, Free	20 mg/L
							Cyanide, Non-amenable	20 mg/L
							Cyanide, Reactive	20 mg/L
							Cyanide, Total	20 mg/L
							Cyanide, Weak Acid Dissociable	20 mg/L
							Potassium hydroxide	0.04 mg/L
.WC_FL_CNVeriS_00024	11/30/23		RICCA, Lot 4305N37		(Purchased Reagent)		Cyanide, Amenable	1000 mg/L
							Cyanide, Available	1000 mg/L
							Cyanide, Free	1000 mg/L
							Cyanide, Non-amenable	1000 mg/L
							Cyanide, Reactive	1000 mg/L
							Cyanide, Total	1000 mg/L
							Cyanide, Weak Acid Dissociable	1000 mg/L
							Potassium hydroxide	2 mg/L
WC_FL_CCVCN_00623	10/13/23	10/12/23	Sodium Hyroxide, Lot 31238	100 mL	WC_FL_Q_10 CN_00614	1.5 mL	Cyanide, Total	0.15 mg/L
.WC_FL_Q_10 CN_00614	10/13/23	10/12/23	NaOH, Lot 13347	50 mL	WC_FL_CNVeriS_00024	0.5 mL	Cyanide, Total	10 mg/L
..WC_FL_CNVeriS_00024	11/30/23		RICCA, Lot 4305N37		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WC_FL_CCVCN_00625	10/18/23	10/17/23	Sodium Hyroxide, Lot 31238	100 mL	WC_FL_Q_10 CN_00616	1.5 mL	Cyanide, Total	0.15 mg/L
.WC_FL_Q_10 CN_00616	10/18/23	10/17/23	NaOH, Lot 13347	50 mL	WC_FL_CNVeriS_00024	0.5 mL	Cyanide, Total	10 mg/L
..WC_FL_CNVeriS_00024	11/30/23		RICCA, Lot 4305N37		(Purchased Reagent)		Cyanide, Total	1000 mg/L

Reagent

WC_FL_CNVeriS_00024

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Cyanide Standard, 1000 ppm CN^-

Lot Number: 4305N37 **Product Number:** 2543

Manufacture Date: MAY 24, 2023
Expiration Date: NOV 2023

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.
Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Hydroxide	1310-73-2	Reagent
Potassium Cyanide	151-50-8	ACS

Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN^-)	995-1005 ppm	1005 ppm

Specification	Reference
Stock Standard Cyanide Solution	APHA (4500-CN- F)
Stock Cyanide Solution	APHA (4500-CN- E)
Stock Cyanide Solution	APHA (4500-CN- K)
Stock Cyanide Solution	APHA (4500-CN- H)
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846) (7.3.3.2)
Cyanide Calibration Stock Solution (1,000 mg/L CN-)	EPA (SW-846) (9213)
Stock Cyanide Solution	EPA (335.3)
Stock Cyanide Solution	EPA (335.2)
Cyanide Solution Stock	ASTM (D 4282)
Simple Cyanide Solution, Stock (1.0 g/L CN)	ASTM (D 4374)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
2543-4	120 mL amber poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

Sample Container Check Report

Client: TRC, Engineers, Inc. Job ID: 410-146032-1

Project/Site: RFAAP, Radford, VA HWMU16

Sample Container Checks and Verifications

Lab Sample ID: 410-146032-1 **Client Sample ID: 16MW9**

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
A	pH Check	USWF	10/06/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
A	Chlorine Check	USWF	10/06/2023	N	N/A	N/A	N/A	N/A	N/A	N/A
A	Sulfide Check	USWF	10/06/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-146032-2 **Client Sample ID: 16DUP1**

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
A	pH Check	USWF	10/06/2023	>12	>12	N/A	N/A	N/A	N/A	N/A
A	Chlorine Check	USWF	10/06/2023	N	N/A	N/A	N/A	N/A	N/A	N/A
A	Sulfide Check	USWF	10/06/2023	N	N/A	N/A	N/A	N/A	N/A	N/A

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-146032-1

SDG No.:

Project: RFAAP, Radford, VA HWMU16

Client Sample ID	Lab Sample ID
16MW9	410-146032-1
16DUP1	410-146032-2

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 16MW9 | Lab Sample ID: 410-146032-1

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-146032-1

SDG ID.:

Matrix: Water | Date Sampled: 10/05/2023 14:40

Reporting Basis: WET | Date Received: 10/06/2023 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	20	5.0	ug/L			1	9012B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 16DUP1 | Lab Sample ID: 410-146032-2

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC | Job No.: 410-146032-1

SDG ID.:

Matrix: Water | Date Sampled: 10/05/2023 14:45

Reporting Basis: WET | Date Received: 10/06/2023 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	20	5.0	ug/L		*+ cn	1	9012B

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Analyst: JCG7 Batch Start Date: 10/12/2023

Reporting Units: mg/L Analytical Batch No.: 430598

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	12:01	Cyanide, Total	0.156	0.150	104	90-110		WC_FL_CCVCN_00623
9	ICB	12:01	Cyanide, Total	ND					
10	CCV	12:35	Cyanide, Total	0.153	0.150	102	90-110		WC_FL_CCVCN_00623
11	CCB	12:36	Cyanide, Total	ND					
22	CCV	12:40	Cyanide, Total	0.153	0.150	102	90-110		WC_FL_CCVCN_00623
23	CCB	12:41	Cyanide, Total	ND					
34	CCV	12:46	Cyanide, Total	0.153	0.150	102	90-110		WC_FL_CCVCN_00623
35	CCB	12:46	Cyanide, Total	ND					
43	CCV	12:50	Cyanide, Total	0.152	0.150	101	90-110		WC_FL_CCVCN_00623
44	CCB	12:50	Cyanide, Total	ND					
47	CCV	12:54	Cyanide, Total	0.154	0.150	103	90-110		WC_FL_CCVCN_00623
48	CCB	12:54	Cyanide, Total	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Analyst: JCG7 Batch Start Date: 10/17/2023

Reporting Units: mg/L Analytical Batch No.: 432209

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
53	ICV	11:22	Cyanide, Total	0.157					
54	ICB	11:22	Cyanide, Total	ND					
55	CCV	11:41	Cyanide, Total	0.154	0.150	103	90-110		WC_FL_CCVCN_00625
56	CCB	11:41	Cyanide, Total	ND					
67	CCV	11:45	Cyanide, Total	0.143	0.150	96	90-110		WC_FL_CCVCN_00625
68	CCB	11:46	Cyanide, Total	ND					
79	CCV	11:51	Cyanide, Total	0.154	0.150	102	90-110		WC_FL_CCVCN_00625
80	CCB	11:51	Cyanide, Total	ND					
91	CCV	11:56	Cyanide, Total	0.157	0.150	105	90-110		WC_FL_CCVCN_00625
92	CCB	11:57	Cyanide, Total	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 430598	Date: 10/12/2023 12:36	Prep Batch: 430204	Date: 10/11/2023 17:15				
9012B	MB 410-430204/2-A	Cyanide, Total	ND		ug/L	20	1
Batch ID: 432209	Date: 10/17/2023 11:45	Prep Batch: 431835	Date: 10/16/2023 15:00				
9012B	MB 410-431835/2-A	Cyanide, Total	ND		ug/L	20	1

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 430598	Date: 10/12/2023 12:53		Prep Batch: 430204			Date: 10/11/2023 17:15					
						LCS Source: WC-PR20mg/lQC_00983					
9012B	LCS 410-430204/1-A	Cyanide, Total	214		ug/L	200	107	90-110			
Batch ID: 432209	Date: 10/17/2023 11:45		Prep Batch: 431835			Date: 10/16/2023 15:00					
						LCS Source: WC-PR20mg/lQC_00986					
9012B	LCS 410-431835/1-A	Cyanide, Total	199		ug/L	200	100	90-110			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-146032-1

SDG Number:

Matrix: Water Instrument ID: 27769

Method: 9012B XMDL Date: 11/07/2018 12:39

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Cyanide, Total		0.01	0.005

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job Number: 410-146032-1

SDG Number:

Matrix: Water Instrument ID: 27769

Method: 9012B MDL Date: 08/31/2023 13:58

Prep Method: 9012B

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Cyanide, Total		20	5

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Prep Method: 9012B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 410-430204/1-A	10/11/2023 17:15	430204		50	50
MB 410-430204/2-A	10/11/2023 17:15	430204		50	50
410-146032-2	10/11/2023 17:15	430204		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Prep Method: 9012B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 410-431835/1-A	10/16/2023 15:00	431835		50	50
MB 410-431835/2-A	10/16/2023 15:00	431835		50	50
410-146032-1	10/16/2023 15:00	431835		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 10/12/2023 11:57 End Date: 10/12/2023 14:24

Lab Sample Id	D/F	Type	Time	Analytes
				CN
IC 410-430598/1			11:57	X
IC 410-430598/2			11:57	X
IC 410-430598/3			11:58	X
IC 410-430598/4			11:58	X
IC 410-430598/5			11:59	X
IC 410-430598/6			12:00	X
IC 410-430598/7			12:01	X
ICV 410-430598/8	1		12:01	X
ICB 410-430598/9	1		12:01	X
CCV 410-430598/10	1		12:35	X
CCB 410-430598/11	1		12:36	X
ZZZZZZ			12:36	
MB 410-430204/2-A	1	T	12:36	X
ZZZZZZ			12:37	
ZZZZZZ			12:37	
ZZZZZZ			12:37	
ZZZZZZ			12:38	
ZZZZZZ			12:39	
ZZZZZZ			12:39	
ZZZZZZ			12:40	
ZZZZZZ			12:40	
CCV 410-430598/22	1		12:40	X
CCB 410-430598/23	1		12:41	X
ZZZZZZ			12:41	
410-146032-2	1	T	12:42	X
ZZZZZZ			12:42	
ZZZZZZ			12:43	
ZZZZZZ			12:43	
ZZZZZZ			12:44	
ZZZZZZ			12:44	
ZZZZZZ			12:44	
ZZZZZZ			12:45	
ZZZZZZ			12:45	
CCV 410-430598/34	1		12:46	X
CCB 410-430598/35	1		12:46	X
ZZZZZZ			12:47	
ZZZZZZ			12:47	
ZZZZZZ			12:47	
ZZZZZZ			12:48	
ZZZZZZ			12:48	
ZZZZZZ			12:49	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 10/12/2023 11:57 End Date: 10/12/2023 14:24

Lab Sample Id	D/F	Type	Time	Analytes
				CN
ZZZZZZ			12:49	
CCV 410-430598/43	1		12:50	X
CCB 410-430598/44	1		12:50	X
LCS 410-430204/1-A	1	T	12:53	X
ZZZZZZ			12:53	
CCV 410-430598/47	1		12:54	X
CCB 410-430598/48	1		12:54	X
ZZZZZZ			13:05	
ZZZZZZ			13:05	
CCV 410-430598/51			13:05	
CCB 410-430598/52			13:05	
IC 410-430598/53			13:40	X
IC 410-430598/54			13:41	X
IC 410-430598/55			13:41	X
IC 410-430598/56			13:42	X
IC 410-430598/57			13:42	X
IC 410-430598/58			13:43	X
IC 410-430598/59			13:43	X
ICV 410-430598/60			13:43	
ICB 410-430598/61			13:43	
CCV 410-430598/62			14:01	
CCB 410-430598/63			14:01	
ZZZZZZ			14:01	
ZZZZZZ			14:01	
ZZZZZZ			14:01	
ZZZZZZ			14:01	
ZZZZZZ			14:01	
ZZZZZZ			14:02	
ZZZZZZ			14:02	
ZZZZZZ			14:02	
CCV 410-430598/72			14:02	
CCB 410-430598/73			14:02	
ZZZZZZ			14:02	
ZZZZZZ			14:02	
ZZZZZZ			14:05	
ZZZZZZ			14:05	
ZZZZZZ			14:05	
ZZZZZZ			14:05	
ZZZZZZ			14:05	
ZZZZZZ			14:05	
CCV 410-430598/82			14:06	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 10/12/2023 11:57 End Date: 10/12/2023 14:24

Lab Sample Id	D/F	Type	Time	Analytes
				CN
CCB 410-430598/83			14:06	
ZZZZZZ			14:06	
ZZZZZZ			14:06	
ZZZZZZ			14:06	
ZZZZZZ			14:06	
ZZZZZZ			14:07	
ZZZZZZ			14:07	
ZZZZZZ			14:09	
ZZZZZZ			14:09	
CCV 410-430598/92			14:09	
CCB 410-430598/93			14:09	
ZZZZZZ			14:10	
ZZZZZZ			14:10	
ZZZZZZ			14:10	
ZZZZZZ			14:10	
ZZZZZZ			14:10	
ZZZZZZ			14:10	
ZZZZZZ			14:10	
ZZZZZZ			14:11	
CCV 410-430598/102			14:11	
CCB 410-430598/103			14:11	
ZZZZZZ			14:13	
ZZZZZZ			14:13	
ZZZZZZ			14:13	
CCV 410-430598/107			14:14	
CCB 410-430598/108			14:14	
ZZZZZZ			14:16	
CCV 410-430598/110			14:16	
CCB 410-430598/111			14:16	
ZZZZZZ			14:20	
CCV 410-430598/113			14:20	
CCB 410-430598/114			14:20	
ZZZZZZ			14:23	
CCV 410-430598/116			14:23	
CCB 410-430598/117			14:23	
ZZZZZZ			14:24	
ZZZZZZ			14:24	
CCV 410-430598/120			14:24	
CCB 410-430598/121			14:24	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 10/12/2023 11:57 End Date: 10/12/2023 14:24

Lab Sample Id	D/F	Type	Time	Analytes																								
				CN																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 10/16/2023 13:30 End Date: 10/17/2023 12:04

Lab Sample Id	D/F	Type	Time	Analytes
				CN
IC 410-432209/1			13:30	X
IC 410-432209/2			13:31	X
IC 410-432209/3			13:31	X
IC 410-432209/4			13:32	X
IC 410-432209/5			13:32	X
IC 410-432209/6			13:33	X
IC 410-432209/7			13:33	X
ICV 410-432209/8			13:34	
ICB 410-432209/9			13:34	
ZZZZZZ			13:34	
CCV 410-432209/11			10:12	
CCB 410-432209/12			10:12	
ZZZZZZ			10:12	
ZZZZZZ			10:12	
ZZZZZZ			10:12	
ZZZZZZ			10:13	
ZZZZZZ			10:13	
ZZZZZZ			10:13	
ZZZZZZ			10:13	
ZZZZZZ			10:15	
ZZZZZZ			10:15	
ZZZZZZ			10:15	
CCV 410-432209/23			10:15	
CCB 410-432209/24			10:15	
ZZZZZZ			10:15	
ZZZZZZ			10:15	
ZZZZZZ			10:16	
ZZZZZZ			10:16	
ZZZZZZ			10:17	
ZZZZZZ			10:17	
ZZZZZZ			10:18	
CCV 410-432209/32			10:18	
CCB 410-432209/33			10:18	
ZZZZZZ			10:24	
ZZZZZZ			10:25	
ZZZZZZ			10:25	
ZZZZZZ			10:26	
CCV 410-432209/38			10:26	
CCB 410-432209/39			10:26	
ZZZZZZ			10:28	
CCV 410-432209/41			10:28	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 10/16/2023 13:30 End Date: 10/17/2023 12:04

Lab Sample Id	D/F	Type	Time	Analytes
				CN
CCB 410-432209/42			10:28	
ZZZZZZ			10:30	
CCV 410-432209/44			10:30	
CCB 410-432209/45			10:30	
IC 410-432209/46			11:18	X
IC 410-432209/47			11:18	X
IC 410-432209/48			11:19	X
IC 410-432209/49			11:19	X
IC 410-432209/50			11:20	X
IC 410-432209/51			11:21	X
IC 410-432209/52			11:22	X
ICV 410-432209/53	1		11:22	X
ICB 410-432209/54	1		11:22	X
CCV 410-432209/55	1		11:41	X
CCB 410-432209/56	1		11:41	X
ZZZZZZ			11:41	
ZZZZZZ			11:41	
ZZZZZZ			11:42	
ZZZZZZ			11:42	
ZZZZZZ			11:42	
ZZZZZZ			11:43	
ZZZZZZ			11:44	
ZZZZZZ			11:44	
LCS 410-431835/1-A	1	T	11:45	X
MB 410-431835/2-A	1	T	11:45	X
CCV 410-432209/67	1		11:45	X
CCB 410-432209/68	1		11:46	X
ZZZZZZ			11:46	
ZZZZZZ			11:47	
ZZZZZZ			11:47	
ZZZZZZ			11:48	
410-146032-1	1	T	11:48	X
ZZZZZZ			11:49	
ZZZZZZ			11:49	
ZZZZZZ			11:49	
ZZZZZZ			11:50	
ZZZZZZ			11:50	
CCV 410-432209/79	1		11:51	X
CCB 410-432209/80	1		11:51	X
ZZZZZZ			11:52	
ZZZZZZ			11:52	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-146032-1

SDG No.:

Instrument ID: 27769 Analysis Method: 9012B

Start Date: 10/16/2023 13:30 End Date: 10/17/2023 12:04

Lab Sample Id	D/F	Type	Time	Analytes																								
				CN																								
ZZZZZZ			11:53																									
ZZZZZZ			11:53																									
ZZZZZZ			11:53																									
ZZZZZZ			11:54																									
ZZZZZZ			11:54																									
ZZZZZZ			11:55																									
ZZZZZZ			11:55																									
ZZZZZZ			11:56																									
CCV 410-432209/91	1		11:56	X																								
CCB 410-432209/92	1		11:57	X																								
ZZZZZZ			11:57																									
ZZZZZZ			11:57																									
ZZZZZZ			11:58																									
ZZZZZZ			11:59																									
CCV 410-432209/97			11:59																									
CCB 410-432209/98			11:59																									
ZZZZZZ			12:03																									
ZZZZZZ			12:03																									
CCV 410-432209/101			12:04																									
CCB 410-432209/102			12:04																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-146032-1

SDG No.:

Batch Number: 430204 Batch Start Date: 10/11/23 17:15 Batch Analyst: Schmertz, Thomas

Batch Method: 9012B Batch End Date: 10/11/23 19:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC-PR20mg/lQC 00983			
LCS 410-430204/1		9012B, 9012B		50 mL	50 mL	0.5 mL			
MB 410-430204/2		9012B, 9012B		50 mL	50 mL				
410-146032-A-2	16DUP1	9012B, 9012B	T	50 mL	50 mL				

Batch Notes	
Pipette/Syringe/Dispenser ID	PREP
Sodium Hydroxide ID	4248768
Magnesium Chloride Reagent ID Number	4308943
Sulfamic Acid ID	4308894
Sulfuric Acid Reagent ID Number	4308942
Distillation Start Time	10/11/2023 17:15
Distillation End Time	10/11/2023 19:00

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-146032-1

SDG No.:

Batch Number: 430598 Batch Start Date: 10/12/23 11:57 Batch Analyst: Hess, Elena

Batch Method: 9012B Batch End Date: 10/12/23 14:24

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC_FL_CCVCN 00623					
ICV 410-430598/8		9012B		# mL					
CCV 410-430598/10		9012B		# mL					
CCV 410-430598/22		9012B		# mL					
CCV 410-430598/34		9012B		# mL					
CCV 410-430598/43		9012B		# mL					
CCV 410-430598/47		9012B		# mL					

Batch Notes	
Pipette/Syringe/Dispenser ID	H13525
Buffer Reagent ID	4974905
Chloramine-T ID	4994863
Pyridine-Barbituric Acid ID	4936216

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-146032-1

SDG No.:

Batch Number: 431835 Batch Start Date: 10/16/23 15:00 Batch Analyst: Schmertz, Thomas

Batch Method: 9012B Batch End Date: 10/16/23 16:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC-PR20mg/lQC 00986			
LCS 410-431835/1		9012B, 9012B		50 mL	50 mL	0.5 mL			
MB 410-431835/2		9012B, 9012B		50 mL	50 mL				
410-146032-A-1	16MW9	9012B, 9012B	T	50 mL	50 mL				

Batch Notes	
Pipette/Syringe/Dispenser ID	PREP
Sodium Hydroxide ID	4248768
Magnesium Chloride Reagent ID Number	4308943
Sulfamic Acid ID	4308894
Sulfuric Acid Reagent ID Number	4308942
Distillation Start Time	10/16/2023 15:00
Distillation End Time	10/16/2023 16:45

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-146032-1

SDG No.:

Batch Number: 432209 Batch Start Date: 10/16/23 13:30 Batch Analyst: Hess, Elena

Batch Method: 9012B Batch End Date: 10/17/23 12:04

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC_FL_CCVCN 00625					
CCV 410-432209/55		9012B		# mL					
CCV 410-432209/67		9012B		# mL					
CCV 410-432209/79		9012B		# mL					
CCV 410-432209/91		9012B		# mL					

Batch Notes	
Pipette/Syringe/Dispenser ID	H13525
Buffer Reagent ID	4974905
Chloramine-T ID	5017635
Pyridine-Barbituric Acid ID	5016995

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Calibration results

CN Version number 1.2

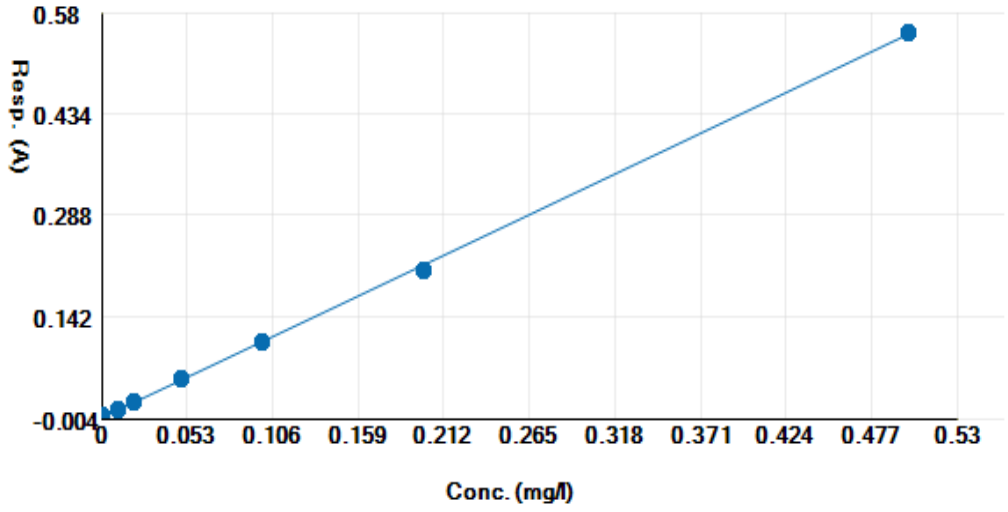
Date 10/12/2023 **User** Gallery

Time 2:27:51PM **Software version: 7.0**

Analyzer name Analyzer 1

Test	CN	**Coeff. of deter.**	0.999515
Status	Accepted	**Total factor**	0.908
Accepted	10/12/2023 12:22 PM		
Checked	10/12/2023 12:22 PM		
User name	Gallery		
Comment			
Errors			
Factor	0.908		
Bias	-0.004		

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
CN-0	0.000	0.0035992	0.0000000	Default	
CN-CAL	0.009	0.0113462	0.0100000	Default	
CN-CAL	0.019	0.0205798	0.0200000	Default	
CN-CAL	0.052	0.0505216	0.0500000	Default	
CN-CAL	0.105	0.0985905	0.1000000	Default	
CN-CAL	0.208	0.1919717	0.2000000	Default	
CN-CAL	0.551	0.5033909	0.5000000	Default	
1CN ICV	0.168	0.156004	0.150000	Default	
2CN ICB	0.000	0.003651	0.000000	Default	Test limit Low



ThermoFisher Gallery Discrete Analyzer

Date 10/12/2023 Time 2:28:44 PM Software Version: 6.0.1

Analyte: CN

Cup	Result Time	Sample Name	Response	Sample Result	Dilution
1	10/12/2023 11:57	CN-0	0.00043	0.0036	1
2	10/12/2023 11:57	CN-CAL	0.00896	0.01135	100
3	10/12/2023 11:58	CN-CAL	0.01913	0.02058	50
4	10/12/2023 11:58	CN-CAL	0.05212	0.05052	20
5	10/12/2023 11:59	CN-CAL	0.10508	0.09859	10
6	10/12/2023 12:00	CN-CAL	0.20796	0.19197	5
7	10/12/2023 12:01	CN-CAL	0.55105	0.50339	2
8	10/12/2023 12:01	1CN ICV	0.16833	0.156	1
9	10/12/2023 12:01	2CN ICB	0.00048	0.00365	1
10	10/12/2023 12:35	1CN CCV	0.16487	0.15286	1
11	10/12/2023 12:36	2CN CCB	0.00055	0.00371	1
12	10/12/2023 12:36	lcs 410-430204/1-a	0.24379	0.22449	1
13	10/12/2023 12:36	mb 410-430204/2-a	0.00125	0.00434	1
14	10/12/2023 12:37	410-145908-a-1-a	0.00106	0.00417	1
15	10/12/2023 12:37	410-145908-a-1-b ms	0.15786	0.1465	1
16	10/12/2023 12:37	410-145908-a-1-c msd	0.24196	0.22284	1
17	10/12/2023 12:38	410-145908-a-2-a	0.00086	0.00399	1
18	10/12/2023 12:39	410-145998-a-2-a	0.0069	0.00947	1
19	10/12/2023 12:39	410-145805-a-2-a	0.00077	0.00391	1
20	10/12/2023 12:40	410-145805-a-1-a	0.001	0.00412	1
21	10/12/2023 12:40	630-73631-e-1-a	0.0022	0.00521	1
22	10/12/2023 12:40	1CN CCV	0.16502	0.153	1
23	10/12/2023 12:41	2CN CCB	0.00065	0.0038	1
24	10/12/2023 12:41	410-146032-a-1-a	0.0021	0.00511	1
25	10/12/2023 12:42	410-146032-a-2-a	0.00123	0.00433	1
26	10/12/2023 12:42	410-146112-a-1-a	0.00182	0.00486	1
27	10/12/2023 12:43	410-146112-a-2-a	0.00222	0.00522	1
28	10/12/2023 12:43	410-146112-a-7-a	0.00111	0.00422	1
29	10/12/2023 12:44	410-146112-a-7-b du	0.00367	0.00654	1
30	10/12/2023 12:44	410-146112-a-7-c ms	0.18304	0.16935	1
31	10/12/2023 12:44	410-146112-a-3-a	0.0018	0.00485	1
32	10/12/2023 12:45	410-146112-a-4-a	0.0011	0.00421	1
33	10/12/2023 12:45	410-146112-a-5-a	0.0017	0.00476	1
34	10/12/2023 12:46	1CN CCV	0.16481	0.1528	1
35	10/12/2023 12:46	2CN CCB	0.00078	0.00392	1
36	10/12/2023 12:47	410-146112-a-6-a	0.00561	0.0083	1
37	10/12/2023 12:47	410-146112-a-8-a	0.05593	0.05398	1
38	10/12/2023 12:47	410-146112-a-9-a	0.02125	0.0225	1
39	10/12/2023 12:48	410-146112-a-10-a	0.01645	0.01814	1
40	10/12/2023 12:48	410-146001-a-2-a	0.00501	0.00776	1
41	10/12/2023 12:49	630-73577-a-2-a	0.00018	0.00337	1

42	10/12/2023 12:49	lcsd 410-430204/27-a	0.24834	0.22863	1
43	10/12/2023 12:50	1CN CCV	0.16414	0.1522	1
44	10/12/2023 12:50	2CN CCB	0.00056	0.00372	1
45	10/12/2023 12:53	lcs 410-430204/1-a	0.2318	0.21361	1
46	10/12/2023 12:53	lcs 410-430204/1-a	0.2417	0.2226	1
47	10/12/2023 12:54	1CN CCV	0.16595	0.15384	1
48	10/12/2023 12:54	2CN CCB	0.00032	0.0035	1
49	10/12/2023 13:05	lcsd 410-430204/27-a	0.2526	0.23249	1
50	10/12/2023 13:05	lcsd 410-430204/27-a	0.2462	0.22668	1
51	10/12/2023 13:05	1CN CCV	0.16627	0.15413	1
52	10/12/2023 13:05	2CN CCB	0.00048	0.00365	1
53	10/12/2023 13:40	TOTPO4-0	0.00049	0.00844	1
54	10/12/2023 13:41	TOTPO4	0.00827	0.08794	200
55	10/12/2023 13:41	TOTPO4	0.01942	0.20188	100
56	10/12/2023 13:42	TOTPO4	0.03899	0.40173	50
57	10/12/2023 13:42	TOTPO4	0.09825	1.00713	20
58	10/12/2023 13:43	TOTPO4	0.19333	1.97838	10
59	10/12/2023 13:43	TOTPO4	0.24581	2.5145	8
60	10/12/2023 13:43	1TPO4 ICV	0.15387	1.57527	1
61	10/12/2023 13:43	2TPO4 ICB	0.00022	0.00576	1
62	10/12/2023 14:01	1TPO4 CCV	0.15407	1.57739	1
63	10/12/2023 14:01	2TPO4 CCB	0.00034	0.00694	1
64	10/12/2023 14:01	mb 410-428982/1-a	0.00139	0.01761	1
65	10/12/2023 14:01	lcs 410-428982/2-a	0.13534	1.38605	1
66	10/12/2023 14:01	410-145925-k-4-a	0.00258	0.02978	1
67	10/12/2023 14:01	410-145925-k-4-b du	0.00304	0.03451	1
68	10/12/2023 14:01	410-145925-k-5-a	0.00162	0.01999	1
69	10/12/2023 14:02	410-145925-k-5-b ms	0.2006	2.05272	1
70	10/12/2023 14:02	410-146033-i-1-a	0.00077	0.01134	1
71	10/12/2023 14:02	410-146033-i-3-a	0.00555	0.06017	1
72	10/12/2023 14:02	1TPO4 CCV	0.1555	1.59194	1
73	10/12/2023 14:02	2TPO4 CCB	0.00034	0.00694	1
74	10/12/2023 14:02	410-145683-h-2-a	0.25295	2.58744	1
75	10/12/2023 14:02	mb 410-428976/1-a	0.00062	0.00981	1
76	10/12/2023 14:05	lcs 410-428976/2-a	0.13634	1.39625	1
77	10/12/2023 14:05	630-73487-k-2-a	0.16531	1.69219	1
78	10/12/2023 14:05	630-73487-k-2-b du	0.17669	1.80842	1
79	10/12/2023 14:05	410-145760-l-2-a	0.05355	0.55054	1
80	10/12/2023 14:05	410-145760-l-2-b ms	0.24094	2.46471	1
81	10/12/2023 14:05	410-145764-h-1-a	0.00115	0.01516	1
82	10/12/2023 14:06	1TPO4 CCV	0.1549	1.58579	1
83	10/12/2023 14:06	2TPO4 CCB	0.0002	0.00551	1
84	10/12/2023 14:06	410-145764-h-3-a	0.00095	0.01312	1
85	10/12/2023 14:06	410-145764-h-5-a	0.00061	0.00967	1
86	10/12/2023 14:06	410-145764-h-7-a	0.00074	0.011	1
87	10/12/2023 14:06	410-145764-h-9-a	0.00082	0.01179	1
88	10/12/2023 14:07	410-145772-d-1-a	0.01392	0.14567	1

89	10/12/2023 14:07	630-73502-j-1-a	0.30982	3.16843	1
90	10/12/2023 14:09	630-73507-d-1-a	0.46764	4.78057	1
91	10/12/2023 14:09	630-73507-l-2-a	0.03747	0.38621	1
92	10/12/2023 14:09	1TPO4 CCV	0.15427	1.57934	1
93	10/12/2023 14:09	2TPO4 CCB	0.00064	0.00997	1
94	10/12/2023 14:10	630-73507-l-2-b du	0.04087	0.42097	1
95	10/12/2023 14:10	630-73508-f-1-a	0.01154	0.12132	1
96	10/12/2023 14:10	630-73508-f-1-b ms	0.20262	2.07328	1
97	10/12/2023 14:10	630-73518-j-2-a	0.04185	0.43102	1
98	10/12/2023 14:10	630-73538-e-1-a	0.66979	6.84559	1
99	10/12/2023 14:10	630-73538-g-2-a	0.51031	5.21652	1
100	10/12/2023 14:10	410-145904-h-1-a	0.24135	2.46894	1
101	10/12/2023 14:11	410-145904-h-2-a	0.06317	0.6488	1
102	10/12/2023 14:11	1TPO4 CCV	0.15456	1.58232	1
103	10/12/2023 14:11	2TPO4 CCB	0.00036	0.00709	1
104	10/12/2023 14:13	410-145925-k-1-a	0.00276	0.03163	1
105	10/12/2023 14:13	410-145925-k-2-a	0.00297	0.03385	1
106	10/12/2023 14:13	410-145925-k-3-a	0.00291	0.03316	1
107	10/12/2023 14:14	1TPO4 CCV	0.15455	1.58224	1
108	10/12/2023 14:14	2TPO4 CCB	0.00053	0.00891	1
109	10/12/2023 14:16	410-145683-h-2-a	0.04741	2.43912	5
110	10/12/2023 14:16	1TPO4 CCV	0.15346	1.57108	1
111	10/12/2023 14:16	2TPO4 CCB	-0.00022	0.00116	1
112	10/12/2023 14:20	630-73502-j-1-a	0.05989	3.07648	5
113	10/12/2023 14:20	1TPO4 CCV	0.15442	1.58094	1
114	10/12/2023 14:20	2TPO4 CCB	0.00041	0.00763	1
115	10/12/2023 14:23	630-73507-d-1-a	0.09035	4.63236	5
116	10/12/2023 14:23	1TPO4 CCV	0.15411	1.57776	1
117	10/12/2023 14:23	2TPO4 CCB	0.00016	0.00509	1
118	10/12/2023 14:24	630-73538-e-1-a	0.15143	7.75171	5
119	10/12/2023 14:24	630-73538-g-2-a	0.0978	5.01264	5
120	10/12/2023 14:24	1TPO4 CCV	0.1536	1.57254	1
121	10/12/2023 14:24	2TPO4 CCB	0.00014	0.00484	1

eurofins | Environment Testing

Method:	335.4/9012
Analyte:	Cyanide
Date:	10/12/2023
Run ID:	23285CN
Instrument ID:	27769

Curve Type: Linear

				Percent Error		
Cal Point	**Xi = True Value**	**Units**	**X'I = Measured Value**	**(X'i - (Xi / Xi)) x 100**	**Criteria**	**Pass/Fail**
LOW	0.01	mg/L	0.0113462	-13%	50%	PASS
MID	0.2	mg/L	0.1919717	4%	10%	PASS

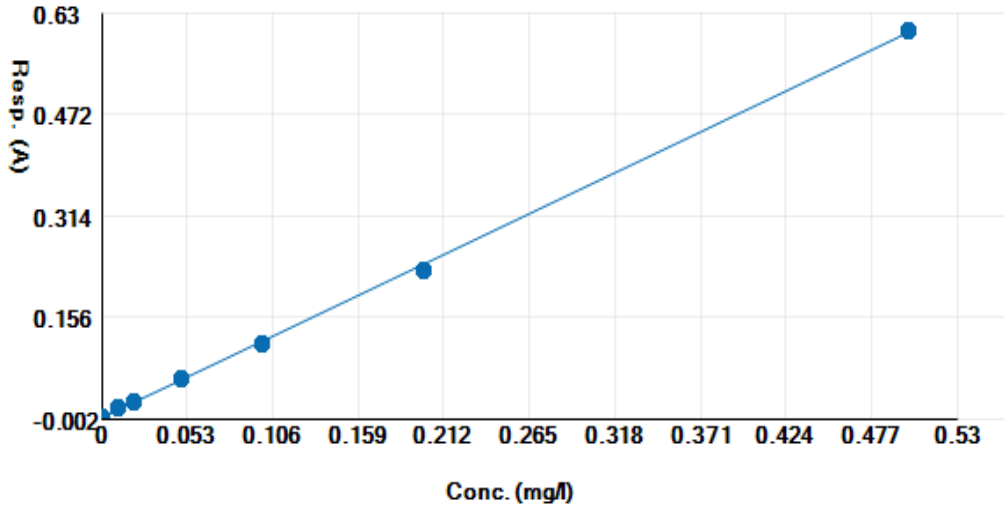
Calibration results

CN Version number 1.2

Date	10/17/2023	**User**	Gallery
Time	12:10:37PM	**Software version: 7.0**	
Analyzer name	Analyzer 1		

Test	CN	**Coeff. of deter.**	0.999584
Status	Accepted	**Total factor**	0.834
Accepted	10/17/2023 11:26 AM		
Checked	10/17/2023 11:26 AM		
User name	Gallery		
Comment			
Errors			
Factor	0.834		
Bias	-0.002		

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
CN-0	0.000	0.0016507	0.0000000	Default	
CN-CAL	0.013	0.0125986	0.0100000	Default	
CN-CAL	0.024	0.0216988	0.0200000	Default	
CN-CAL	0.059	0.0506959	0.0500000	Default	
CN-CAL	0.115	0.0971957	0.1000000	Default	
CN-CAL	0.230	0.1929816	0.2000000	Default	
CN-CAL	0.602	0.5031787	0.5000000	Default	
1CN ICV	0.186	0.156697	0.150000	Default	
2CN ICB	0.000	0.001642	0.000000	Default	Test limit Low



ThermoFisher Gallery Discrete Analyzer

Date 10/17/2023 Time 12:10:16 PM Software Version: 6.0.1

Analyte: FE+2

Cup	Result Time	Sample Name	Response	Sample Result	Dilution
1	10/16/2023 13:30	Fe2+-0	0.00246	0.00268	1
2	10/16/2023 13:31	Fe+2 CAL	0.01288	0.09112	100
3	10/16/2023 13:31	Fe+2 CAL	0.02517	0.19536	50
4	10/16/2023 13:32	Fe+2 CAL	0.06182	0.50631	20
5	10/16/2023 13:32	Fe+2 CAL	0.12051	1.00426	10
6	10/16/2023 13:33	Fe+2 CAL	0.15044	1.25819	8
7	10/16/2023 13:33	Fe+2 CAL	0.23695	1.99208	5
8	10/16/2023 13:34	1Fe+2 ICV	0.11256	0.93682	1
9	10/16/2023 13:34	2Fe+2 ICB	0.00195	-0.00163	1
10	10/16/2023 13:34	LRV	0.0131	0.09301	1
11	10/17/2023 10:12	1Fe+2 CCV	0.11713	0.97559	1
12	10/17/2023 10:12	2Fe+2 CCB	0.00218	0.00034	1
13	10/17/2023 10:12	LCS	0.11505	0.95789	1
14	10/17/2023 10:12	MB	0.00358	0.01225	1
15	10/17/2023 10:12	410-146423-d-2	0.78354	6.62936	1
16	10/17/2023 10:13	410-146423-d-2 du	0.78369	6.63058	1
17	10/17/2023 10:13	410-146423-d-2 msd	0.87431	7.39939	1
18	10/17/2023 10:13	410-146423-d-2 ms	0.88209	7.46541	1
19	10/17/2023 10:13	410-146423-d-1	0.01112	0.07622	1
20	10/17/2023 10:15	410-146423-d-3	0.02525	0.19609	1
21	10/17/2023 10:15	410-146423-d-4	0.01162	0.08041	1
22	10/17/2023 10:15	410-146423-d-5	0.01763	0.1314	1
23	10/17/2023 10:15	1Fe+2 CCV	0.1133	0.94305	1
24	10/17/2023 10:15	2Fe+2 CCB	0.00081	-0.0113	1
25	10/17/2023 10:15	410-146423-d-6	0.03494	0.27828	1
26	10/17/2023 10:15	410-146423-d-7	0.02989	0.23541	1
27	10/17/2023 10:16	410-146423-d-8	0.81872	6.92782	1
28	10/17/2023 10:16	410-146423-d-9	0.03088	0.24385	1
29	10/17/2023 10:17	410-146423-d-10	0.00367	0.01295	1
30	10/17/2023 10:17	410-146423-d-11	0.03102	0.24507	1
31	10/17/2023 10:18	410-144048-b-15	0.57213	4.83573	1
32	10/17/2023 10:18	1Fe+2 CCV	0.11359	0.94552	1
33	10/17/2023 10:18	2Fe+2 CCB	0.00197	-0.00146	1
34	10/17/2023 10:24	410-146423-d-2	0.15498	6.48332	5
35	10/17/2023 10:25	410-146423-d-2 du	0.15483	6.47723	5
36	10/17/2023 10:25	410-146423-d-2 msd	0.17226	7.21644	5
37	10/17/2023 10:26	410-146423-d-2 ms	0.17388	7.28539	5
38	10/17/2023 10:26	1Fe+2 CCV	0.11398	0.94888	1
39	10/17/2023 10:26	2Fe+2 CCB	0.001	-0.0097	1
40	10/17/2023 10:28	410-146423-d-8	0.1621	6.7853	5
41	10/17/2023 10:28	1Fe+2 CCV	0.11393	0.94839	1

42	10/17/2023 10:28	2Fe+2 CCB	0.00175	-0.0033	1
43	10/17/2023 10:30	410-144048-b-15	0.11383	4.73772	5
44	10/17/2023 10:30	1Fe+2 CCV	0.11279	0.93877	1
45	10/17/2023 10:30	2Fe+2 CCB	0.00214	0	1
46	10/17/2023 11:18	CN-0	0.00017	0.00165	1
47	10/17/2023 11:18	CN-CAL	0.0133	0.0126	100
48	10/17/2023 11:19	CN-CAL	0.02422	0.0217	50
49	10/17/2023 11:19	CN-CAL	0.059	0.0507	20
50	10/17/2023 11:20	CN-CAL	0.11477	0.0972	10
51	10/17/2023 11:21	CN-CAL	0.22966	0.19298	5
52	10/17/2023 11:22	CN-CAL	0.60172	0.50318	2
53	10/17/2023 11:22	1CN ICV	0.18614	0.1567	1
54	10/17/2023 11:22	2CN ICB	0.00016	0.00164	1
55	10/17/2023 11:41	1CN CCV	0.1827	0.15383	1
56	10/17/2023 11:41	2CN CCB	0.00031	0.00176	1
57	10/17/2023 11:41	lcs 410-431883/1-a	0.20148	0.16949	1
58	10/17/2023 11:41	mb 410-431883/2-a	0.00044	0.00187	1
59	10/17/2023 11:42	560-113323-a-1-a	0.00068	0.00207	1
60	10/17/2023 11:42	560-113323-a-1-b ms	0.19753	0.16619	1
61	10/17/2023 11:42	560-113323-a-1-c msd	0.21516	0.18089	1
62	10/17/2023 11:43	560-113324-a-1-a	-0.05149	-0.04142	1
63	10/17/2023 11:44	560-113325-a-1-a	0.00566	0.00622	1
64	10/17/2023 11:44	560-113326-a-1-a	0.00193	0.00312	1
65	10/17/2023 11:45	lcs 410-431835/1-a	0.23735	0.19939	1
66	10/17/2023 11:45	mb 410-431835/2-a	0.00067	0.00206	1
67	10/17/2023 11:45	1CN CCV	0.17016	0.14338	1
68	10/17/2023 11:46	2CN CCB	0.00037	0.00182	1
69	10/17/2023 11:46	410-145676-a-1-a	0.0013	0.00259	1
70	10/17/2023 11:47	410-145676-a-1-b ms	0.22488	0.18899	1
71	10/17/2023 11:47	410-145676-a-1-c msd	0.22518	0.18925	1
72	10/17/2023 11:48	410-145998-a-2-b	0.01841	0.01686	1
73	10/17/2023 11:48	410-146032-a-1-b	0.0006	0.00201	1
74	10/17/2023 11:49	410-146001-a-2-b	0.00184	0.00304	1
75	10/17/2023 11:49	630-73631-e-1-b	0.00103	0.00237	1
76	10/17/2023 11:49	410-146112-a-2-b	0.00065	0.00205	1
77	10/17/2023 11:50	410-146112-a-6-b	0.00096	0.0023	1
78	10/17/2023 11:50	410-146112-a-8-b	0.03525	0.03089	1
79	10/17/2023 11:51	1CN CCV	0.18255	0.1537	1
80	10/17/2023 11:51	2CN CCB	0.00016	0.00164	1
81	10/17/2023 11:52	410-146112-a-9-b	0.00588	0.00641	1
82	10/17/2023 11:52	410-146112-a-10-b	0.00073	0.00212	1
83	10/17/2023 11:53	410-146423-a-2-a	0.00854	0.00863	1
84	10/17/2023 11:53	410-146423-a-2-b du	0.00784	0.00804	1
85	10/17/2023 11:53	410-146423-a-2-c ms	0.18474	0.15553	1
86	10/17/2023 11:54	410-146423-a-1-a	0.00402	0.00486	1
87	10/17/2023 11:54	410-146423-a-3-a	0.00347	0.0044	1
88	10/17/2023 11:55	410-146423-a-4-a	0.00054	0.00195	1

89	10/17/2023 11:55	410-146423-a-5-a	0.00113	0.00245	1
90	10/17/2023 11:56	410-146423-a-6-a	0.00192	0.00311	1
91	10/17/2023 11:56	1CN CCV	0.18671	0.15717	1
92	10/17/2023 11:57	2CN CCB	0.00023	0.0017	1
93	10/17/2023 11:57	410-146423-a-7-a	0.00247	0.00357	1
94	10/17/2023 11:57	410-146423-a-8-a	0.0017	0.00293	1
95	10/17/2023 11:58	410-146423-a-9-a	0.00233	0.00345	1
96	10/17/2023 11:59	410-146086-d-1-a	0.00094	0.00229	1
97	10/17/2023 11:59	1CN CCV	0.18288	0.15398	1
98	10/17/2023 11:59	2CN CCB	0.00079	0.00217	1
99	10/17/2023 12:03	lcs 410-431883/1-a	0.2104	0.17692	1
100	10/17/2023 12:03	lcs 410-431883/1-a	0.21303	0.17912	1
101	10/17/2023 12:04	1CN CCV	0.17949	0.15115	1
102	10/17/2023 12:04	2CN CCB	0.00011	0.0016	1

eurofins | Environment Testing

Method:	335.4/9012
Analyte:	Cyanide
Date:	10/17/2023
Run ID:	23290CN
Instrument ID:	27769

Curve Type: Linear

				Percent Error		
Cal Point	**Xi = True Value**	**Units**	**X'I = Measured Value**	**(X'i - (Xi / Xi)) x 100**	**Criteria**	**Pass/Fail**
LOW	0.01	mg/L	0.0125986	-26%	50%	PASS
MID	0.2	mg/L	0.1929816	4%	10%	PASS

Shipping and Receiving Documents

410-146032 Chain of Custody

CHAIN OF CUSTODY RECORD

nvironmental (ELLE), 2425 New Holland Pike, Lancaster, PA, 17605-2425/ Barb Weyandt, Manager/ (717) 656-2300 x1576

Consultant:	TRC Engineers Inc (formerly Draper Aden Assoc)	Sample Site:	RFAAP, Radford, Virginia
Attn:	Janet C. Frazier	Location:	HWMU16
Address:	2200 South Main Street Suite 1 Blacksburg, Virginia 24060	Event:	3Q 2023 Annual GW Monitoring Event
Phone:	(540) 552-0444	DAA JN:	547076
Fax:		Lab JN:	VERIFICATION EVENT
Fax:	0		

Project Specific (PS) QC: No - batch QC
Sample Collection for Project Complete? YES
WPS: 12-754-02X-Y0-7314-4638
Carrier:
Tracking Number:

Box 1: Matrix
SW Surface Water; GW Groundwater; L Leachate; S Soil; T Trip Blank; E Equipment Blank; P Product; O Other

Box 2: Preservative
A HCL; B HNO_3; C H_2SO_4; D $Na_2S_2O_3$; E NaOH; F ZnAc; G Other (Specify); H None

Box 3: Filtered/Unfiltered
F Filtered; U Unfiltered

Box 4: Sample Type
G Grab; C Composite

Box 5: Sample Container Type
P Plastic; AG Amber Glass; V VOA; CG Clear Glass

Invoice
Copy to Consultant: YES
Bill: CLIENT OTHER
Preserved and shipped on ice: YES

Box 4 - Sample Type									G		G				
Box 3 - Filtered/Unfiltered									U		U				
Required pH of Sample									<2		>12				
Box 2 - Preservative									B		E				
Box 5 - Sample Container Type									1-250 ml P		1-500 mL P				
Sample ID	Date: 2023	Time	Box 1: Matrix	Number of Bottles					ICP/MS 6020B/3005A (Metals- Total Silver only		9012B (Cyanide)				
16MW9	10/5	1440	GW	1							X				
16DUP1	10/5	1445	GW	1							X				
16WC1A	10/5	1400	GW	1					X						
16DUP2	10/5	1405	GW	1					X						

GENERAL NOTES:

1. Report results to detection limit, with J flags. Permit limits listed below for cyanide and silver.
2. VELAP accreditation required.
3. FULL/Comprehensive Deliverable with EDD and ERIS EDD.
4. BATCH QC
5. Cyanide QL 20 ug/l and MDL 5 ug/l
6. Total Silver QL 2 ug/l and MDL is 0.3 ug/l.

Clients Special Instructions:

Received by lab in Good Condition ____ Yes ____ No Custody Seal Intact ____ Yes ____ No Temperature upon arrival ____ Received on Ice ____ Yes ____ No
Describe problems, if any:

Sampler Name (Print): Ken Coddington	Date: 10/5/23	#1 Relinquished by (Signature):	Date: 10/05/23	#2 Relinquished by (Signature):	Date:	Sample Storage
Sampler Signature:	Time: 0800	Company Name: TRC	Time: 1700	Company Name:	Time:	Time Requested
Sampler Name (Print): Steve Whitlock	Date: 10-05-23	#1 Received by (Signature):	Date:	#2 Received by (Signature):	Date: 10/6/23	30 DYS ORG/6 MTHS INORG
Sampler Signature:	Time: 0800	Company Name:	Time:	Company Name: ELLE	Time: 0935	

RF

rev: 2.3 cor: 2.4

KO 9/28/23

DVR 9/29/23

10/18/2023 1/1

Login Sample Receipt Checklist

Client: TRC, Engineers, Inc.

Job Number: 410-146032-1

Login Number: 146032

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Jeremiah, Cory T

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	